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"*ESTUDIO DE MÉTODO DE CONTORNO DE CARGA*"

TESIS

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PRESENTA:

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Capítulo 1

Introducción

Dentro de la ingeniería civil, una de las actividades más interesantes es el diseño de las distintas obras que pretenden una función para el usuario. Entre éstas se incluyen edificios, puentes, silos, presas, túneles, etc. En un gran número de estas construcciones, las columnas están presentes ya que son miembros estructurales que permiten crear espacios útiles transmitiendo con eficiencia las cargas localizadas por arriba de ellas hacia el suelo a través de la cimentación. En este capítulo se describen las principales particularidades de las columnas de concreto reforzado y se incluyen de manera general las consideraciones fundamentales para su diseño. Se presentan dos métodos para el diseño de columnas sujetas a carga axial y flexión alrededor de dos ejes horizontales ortogonales: el método de la carga recíproca y el método de contorno de carga. Se destaca su comportamiento a flexión biaxial por ser el tema fundamental de este trabajo. Finalmente, se plantea el problema de estudio que se aborda puntualizando objetivos, hipótesis, alcances y limitaciones del trabajo.

1.1 Columnas de concreto reforzado

Una columna es un elemento estructural con su dimensión axial más grande que sus otras dos dimensiones transversales, que soporta cargas, principalmente de compresión. Las columnas también transmiten simultáneamente momentos de flexión, respecto a uno o dos ejes, así como fuerzas cortantes.

En este trabajo sólo se aborda el estudio de columnas de concreto reforzado. Las columnas metálicas que consisten simplemente de perfiles de acero quedan fuera del alcance de este estudio. Existen varias formas de construir columnas con concreto reforzado. Las más comunes se ilustran en la Fig. 1.1.1. Las dos primeras (casos a y b) son las más comunes e incluyen sólo concreto, varillas longitudinales y refuerzo transversal. Este último usualmente es en la forma de anillos cerrados los cuales se adaptan mejor a columnas con secciones cuadradas o rectangulares. En columnas circulares se usan frecuentemente espirales en lugar de anillos individuales. Este tipo de refuerzo en espiral ha demostrado ventajas en el caso de estructuras ubicadas en zonas sísmicas.

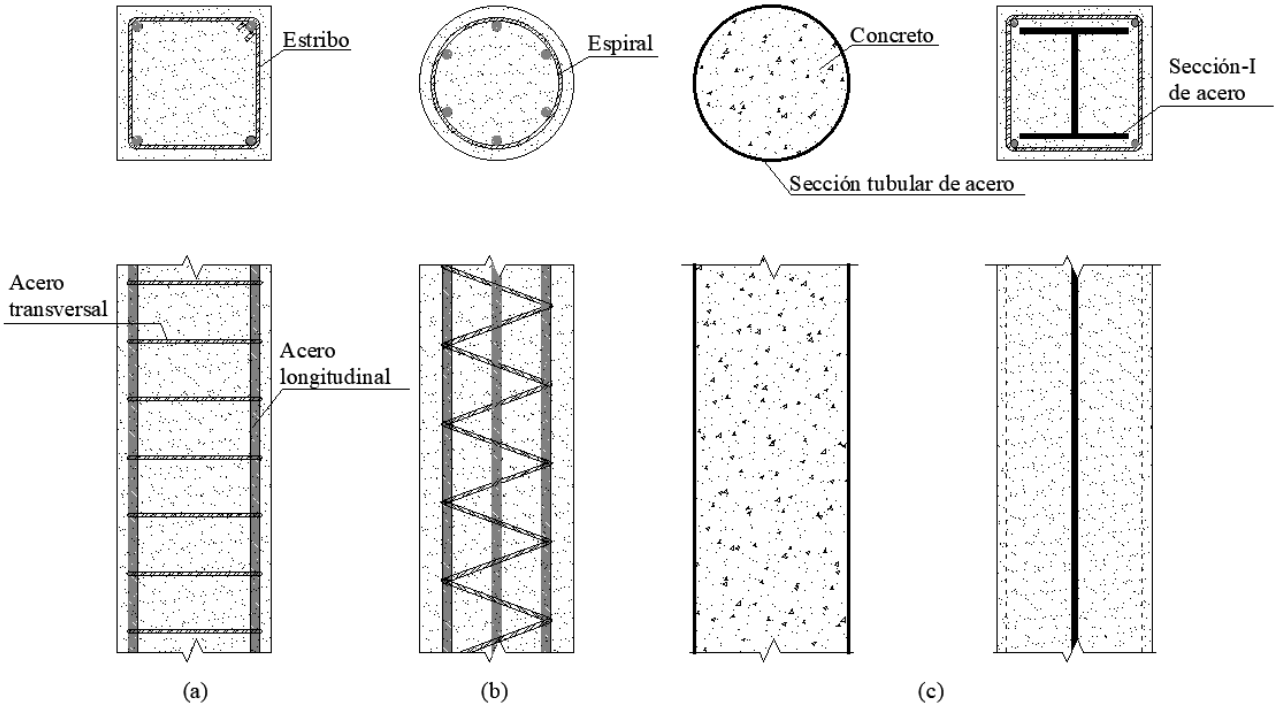


Figura 1.1.1. Tipos de columnas con concreto reforzado

En los casos *c* de la misma figura se muestran opciones de columnas que incluyen perfiles estructurales. Estas soluciones usualmente buscan acelerar los tiempos de construcción y mejorar el comportamiento de las columnas ante fuerzas sísmicas. El estudio de estas columnas también queda fuera del alcance de este trabajo. Así, en este trabajo sólo se consideran columnas de secciones cuadradas y rectangulares de concreto reforzado con varillas y estribos. Las columnas circulares tampoco se estudian ya que en ellas la flexión biaxial se puede reducir a flexión alrededor de un solo eje.

1.2 Diseño de columnas y flexión biaxial

Las columnas se diseñan principalmente para que transmitan cargas axiales, momentos de flexión y fuerzas cortantes. Los estribos se proponen para evitar el pandeo de las varillas longitudinales y para tomar las fuerzas cortantes. Así, para resistir las cargas axiales y los momentos de flexión se tiene al concreto y las varillas longitudinales. En la Fig. 1.2.1 se ilustra una columna típica de un edificio. Esta columna se construye de forma continua con las trabes que llegan a ella en sus dos extremos. Las trabes le transmiten momentos de flexión alrededor de dos ejes ortogonales. De esta forma, la columna debe transferir simultáneamente la carga axial de compresión (P_n) y los momentos de flexión (M_{nx} y M_{ny}). A esta combinación de efectos se le conoce como flexo-compresión biaxial y es la condición que en la mayoría de los casos rige el diseño de columnas.

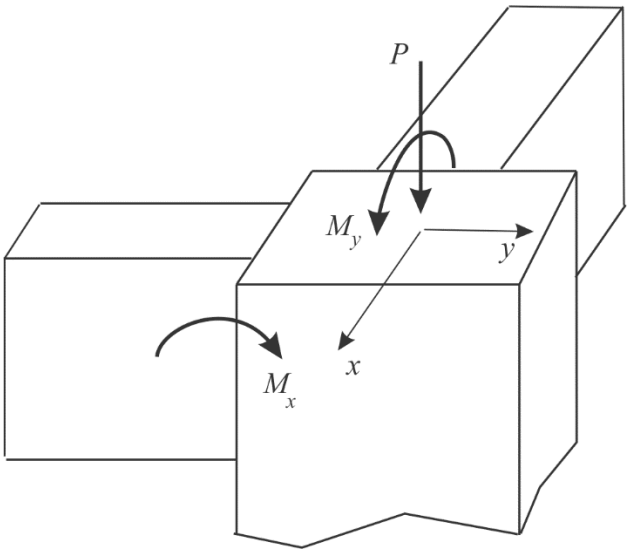


Figura 1.2.1. Carga de compresión y flexión biaxial alrededor de ambos ejes (*x* y *y*)

Un aspecto adicional que debe considerarse durante el cálculo de la tríada (P_n, M_{nx} y M_{ny}) es que estos valores deben obtenerse en la condición deformada de la estructura para incorporar los posibles efectos $P\Delta$. Estos efectos se refieren a que la interacción entre desplazamientos y cargas puede llevar a valores mayores que los obtenidos de un análisis de primer orden en el que el equilibrio de las ecuaciones se plantea en la configuración original de la estructura. Los efectos de esbeltez suelen ser críticos en aquellas estructuras altas o esbeltas y en las cuales los desplazamientos laterales son significativos.

Los reglamentos de diseño dan al diseñador dos opciones para el cálculo de estos momentos. Si el análisis que realiza el ingeniero es de primer orden, el reglamento solicita amplificar los momentos de flexión así obtenidos con la ayuda de factores de amplificación. La segunda opción, consiste en obtener los valores de la tríada empleando un análisis de segundo orden (McGuire, 2000; Rosenblueth, 1965; Archundia, 1999). En este segundo caso, los valores obtenidos de dicho análisis son consistentes con el equilibrio de la estructura planteado en la configuración deformada de la estructura y, por tanto, incorpora los efectos de esbeltez.

De aquí en adelante, en este trabajo se asume que los valores de P_n, M_{nx} y M_{ny} ya incluyen los posibles efectos de esbeltez. Además, considerando que los estribos resisten las fuerzas cortantes en la columna, la revisión de la capacidad (por flexo-compresión biaxial) se reduce a determinar la capacidad de la sección transversal, dejando fuera la longitud de la columna y sus condiciones de frontera.

La capacidad de una columna por flexión y carga axial se describe inicialmente considerando el caso *plano* en el cual sólo se tiene flexión alrededor de un eje, además de la carga axial. Como se sabe hay una infinidad de combinaciones de momentos de flexión y de valores de carga axial que pueden hacer fallar la sección transversal de una columna. Cuando estas combinaciones (*e.g.*, P_n *y* M_{nx} o simplemente P y M por ahora) se grafican, colocando M en las abscisas y P en las ordenadas, se obtiene una curva como la que se ilustra en la Fig. 1.2.2, la cual corresponde a la sección transversal de la Fig. 1.2.3 flexionada alrededor de cualquiera de sus ejes principales. Esta curva se conoce como diagrama de interacción.

El cálculo de las combinaciones de valores de P y M que hacen fallar la sección transversal de una columna se realiza considerando el equilibrio de fuerzas, la compatibilidad de deformaciones y las curvas esfuerzo-deformación de ambos materiales (Wight, 2016). En el Apéndice A se describe con detalle cómo se puede realizar este cálculo. Por ahora, sólo se presentan (Tabla 1.2.1) las suposiciones que proponen tanto el ACI-318 (2019) como el reglamento de la Ciudad de México (NTC-CDMX, 2023) para llevar a cabo el cálculo de estos diagramas de interacción.

Tabla 1.2.1 Suposiciones empleadas para el cálculo de diagramas de interacción

Característica	**ACI-318-19**	**Normas Cd Mx**
Variación de deformaciones unitarias ε en la sección transversal	Lineal	Lineal
Valor de la deformación unitaria máxima (en la falla) de compresión en el concreto, ε_{cu}	0.003	0.003
Variación de los esfuerzos de compresión en el concreto	Rectangular u otra	Rectangular u otra
Esfuerzos de tensión en el concreto	Se desprecian	Se desprecian
Modelo esfuerzo vs deformaciones unitarias del acero (varillas longitudinales)	Elasto-plástico	Elasto-plástico

En la Fig. 1.2.2 se presenta un diagrama de interacción con los pares de valores de P y M teóricos (nominales) que hacen fallar la sección transversal que se ilustra en la Fig. 1.2.3. El diagrama que se muestra no se calculó empleando las hipótesis de algún reglamento, sino que se obtuvo de manera más precisa como se indica en el Capítulo 2. Este diagrama no incorpora factores de reducción de la resistencia o limitaciones adicionales impuestas por los reglamentos. Por ejemplo, el ACI-318 (2019) limita el valor de la carga permitida al 80% de la carga máxima. Asimismo, algunos diagramas de interacción presentados en libros (*e.g.*, Wight, 2016) incorporan las reducciones debidas al factor de reducción (ϕ o F_R) en los diagramas. En este trabajo estos factores o limitaciones no se incluyen ya que sólo se pretende evaluar fórmulas o métodos que estiman valores nominales.

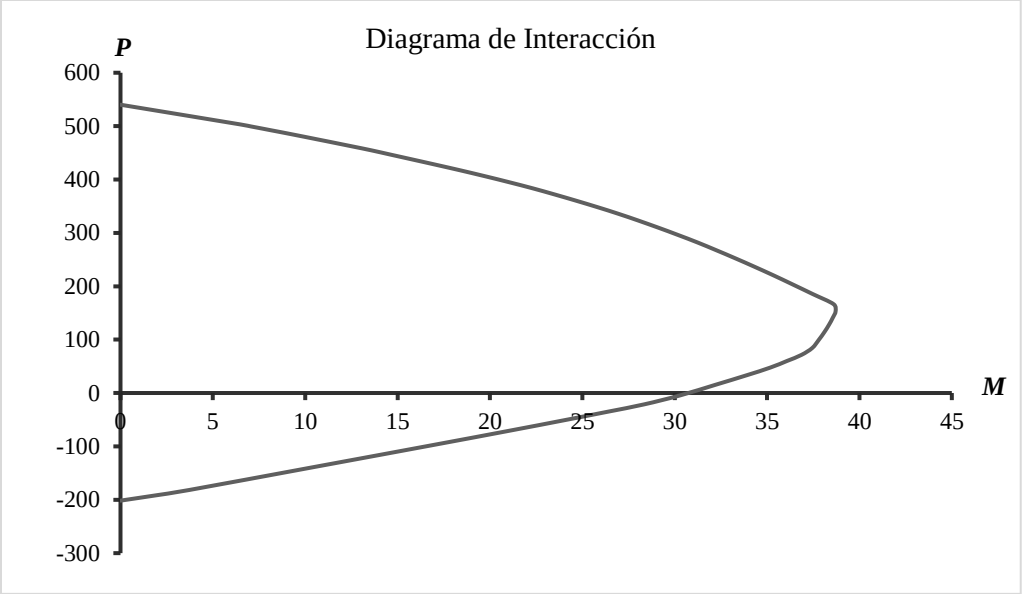


Figura 1.2.2. Diagrama correspondiente a las posibles combinaciones de carga axial *P* [t] y momento flexionante *M* [t-m] que hacen fallar la sección de la Fig. 1.2.3

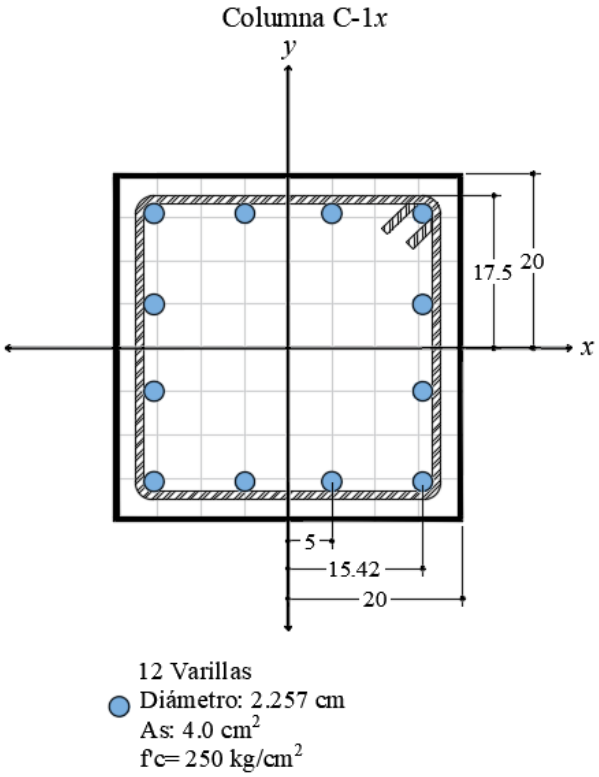


Figura 1.2.3. Sección transversal asociada al diagrama de la Fig. 1.2.2

Sabiendo que los diagramas de interacción representan las combinaciones de valores de P y M que conducen a la falla de una sección transversal, es claro que pares de valores menores, ubicados en la parte interior del diagrama, no conducen a la falla. Asimismo, si del análisis estructural se obtiene que, para una combinación de cargas o acciones, una columna necesita trasmitir un par de valores de P_u y M_u entonces basta con ubicar este punto con relación al diagrama para saber si la sección puede soportar estos efectos aplicados simultáneamente. Si el punto de coordenadas (P_u, M_u) se ubica sobre el diagrama o fuera de él, se entiende que la sección transversal asociada al diagrama de interacción falla. Solamente si el punto se ubica dentro del diagrama, la sección teóricamente resiste la aplicación de P_u y M_u. Esto se ilustra en la Fig. 1.2.4.

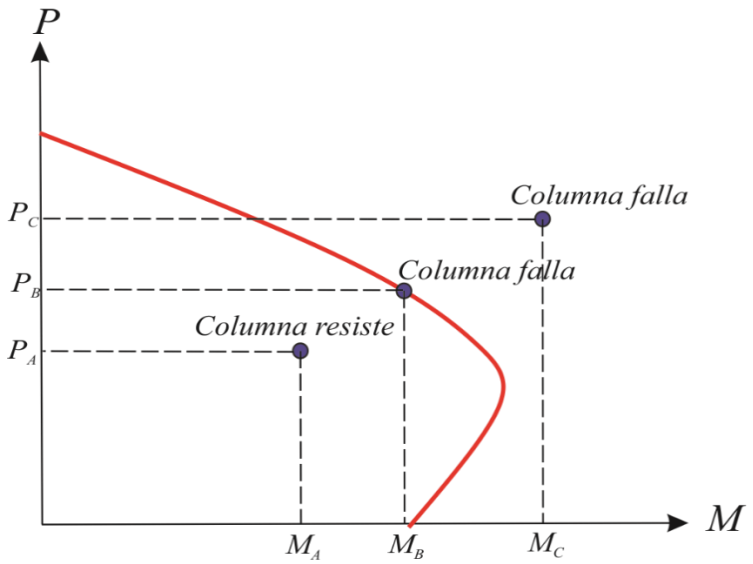


Figura 1.2.4. Zonas de un diagrama de interacción

El caso plano o uniaxial presentado anteriormente, en el cual sólo actúa un momento de flexión, no es el caso general ya que la mayoría de las columnas transmiten flexión alrededor de dos ejes ortogonales como se ilustró en la Fig. 1.2.1. Así, en el caso biaxial (flexo-compresión biaxial) interactúan dos momentos (M_{nx} y M_{ny}) además de la carga axial (P_n). Desde el punto de vista gráfico, el diagrama en el plano $M - P$ que se presentó para el caso uniaxial se extiende a una superficie para el caso biaxial. Si en un sistema de referencia se asocian los momentos de flexión a los ejes horizontales ortogonales y la carga axial al eje vertical, las tríadas de valores que conducen a la falla de la sección transversal forman una superficie de interacción. De manera similar al caso plano, una tríada de valores ubicada en la superficie o fuera de ella representa una combinación de efectos que hace fallar la sección transversal de la columna. Sólo las triadas localizadas dentro de la superficie corresponden a casos que no ocasionan falla. En la Fig. 1.2.5 se ilustra una superficie de falla.

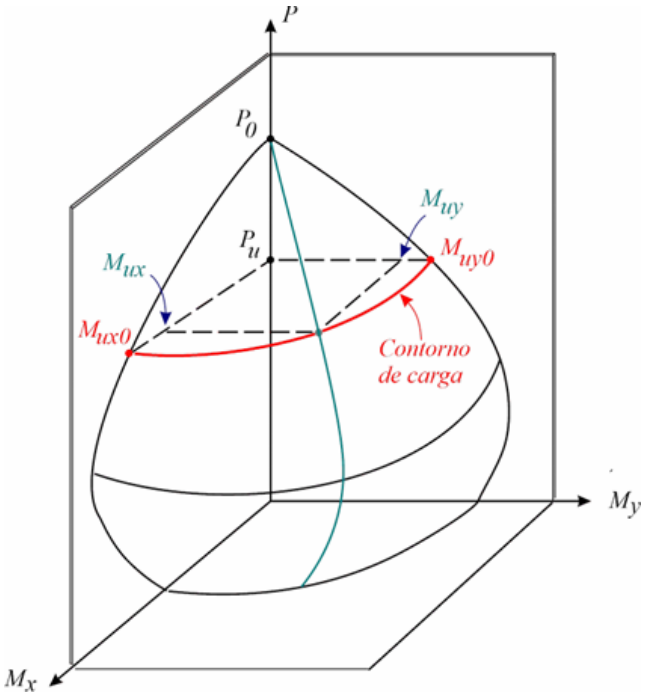


Figura 1.2.5. Superficie de interacción

De lo anterior, parece que el diseño de columnas de concreto reforzado (Sección 2.2) requiere calcular una superficie de falla para cada sección transversal de columna que se revisa. Dado el trabajo numérico que esto implica (Capítulo 2 y Apéndice A) esta tarea no es inmediata o simple. Para resolver este problema se han propuesto algunos métodos que simplifican el problema de cálculo. Entre los más sobresalientes, están los propuestos por Bresler (1960) ya que son relativamente simples y precisos. Ambos métodos se presentan por separado en las secciones siguientes.

1.3 Método de la carga recíproca

El método de la carga recíproca se basa en la ecuación siguiente:

$$\frac{1}{P_{xy}} = \frac{1}{P_x} + \frac{1}{P_y} - \frac{1}{P_0} \tag{1.3.1}$$

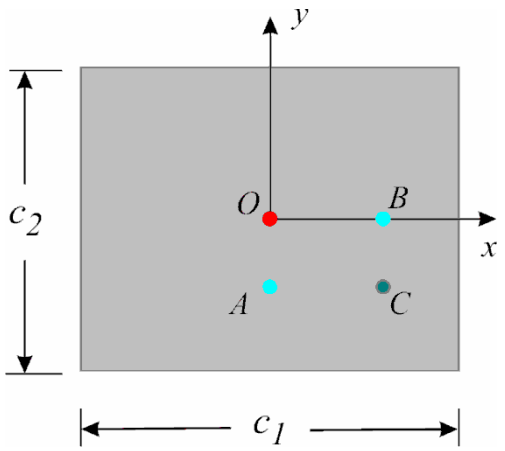
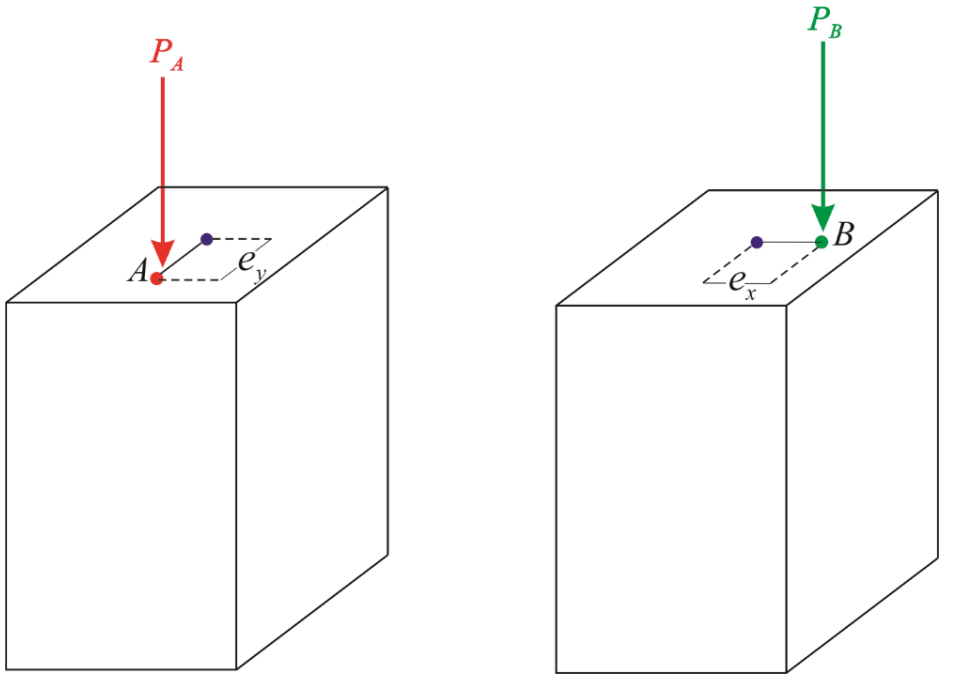


Figura 1.3.1. Ubicación de puntos de aplicación de cargas

En esencia esta ecuación contiene cuatro valores de carga axial, y curiosamente, no contiene los momentos de la tríada (M_{nx} y M_{ny}). El significado de estas cargas queda claro con la imagen de la sección transversal que se ilustra en la Fig. 1.3.1, en la cual no se muestran las varillas. En ella se ubican cuatro puntos que pueden identificarse con las letras *O*, *A*, *B* y *C*. La ecuación anterior parte de conocer las cargas axiales que hacen fallar la sección si éstas se aplican, sin momentos de flexión, en los puntos *O*, *A* y *B*. Conociendo estos valores (P_O, P_A y P_B), la ecuación predice la carga axial que resiste la sección si ésta se aplica en *C*. Una forma alternativa de la ecuación anterior sería:

$$\frac{1}{P_C} = \frac{1}{P_A} + \frac{1}{P_B} - \frac{1}{P_O} \tag{1.3.2}$$

De estos tres valores necesarios para estimar P_C, el valor de P_O es el más simple de calcular y por ahora sólo se comenta que es la resistencia de la sección si la carga se aplica de forma concéntrica, *i.e.*, sin excentricidad. Los otros dos valores (P_A y P_B) se obtienen a partir de M_{nx} y M_{ny}. Para ello, es necesario relacionar estos momentos con excentricidades. En la Fig. 1.3.2a se ilustra la excentricidad e_y en donde se aplica P_A. Como se sabe de estática, es equivalente aplicar la carga P_A en el punto *A* sin momento de flexión (Fig. 1.3.2a) o bien aplicar la misma carga en *O* junto con el momento $M_{nx} = P_A\, e_y$. Así, de esta relación se conoce la excentricidad e_y. Similarmente, se obtiene la excentricidad e_x (Fig. 1.3.2b). Teniendo los diagramas de interacción planos (uno para flexión alrededor del eje *x* y otro para flexión alrededor del eje *y*) los valores de P_A y P_B se obtienen de la intersección de la línea radial correspondiente a cada excentricidad (Fig. 1.3.3).



a) Carga P_A con excentricidad e_y b) Carga P_B con excentricidad e_x

Figura 1.3.2 Cargas axiales aplicadas con excentricidades e_y y e_x

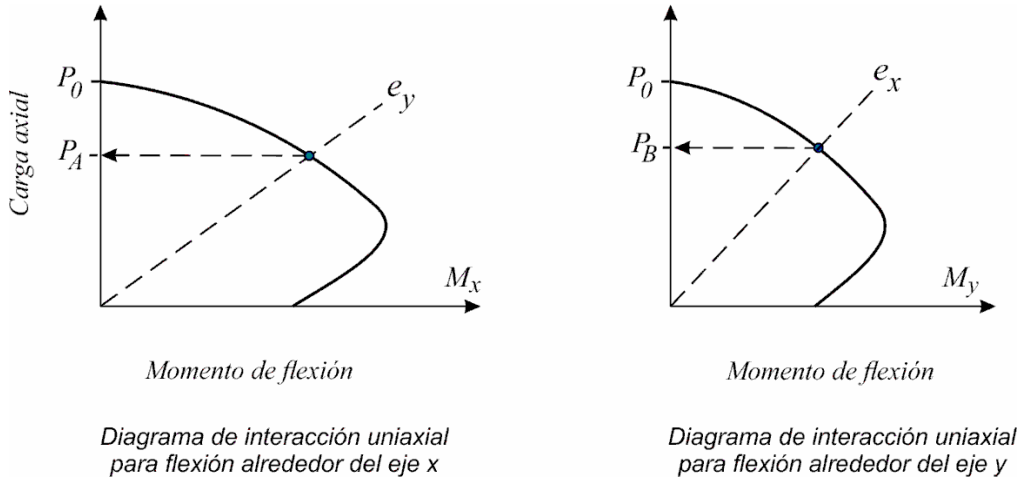


Figura 1.3.3. Obtención de cargas axiales a partir de excentricidades

Calculadas las cargas resistentes P_A y P_B con ayuda de los diagramas planos y de las correspondientes excentricidades, las Ecs. 1.3.1 o 1.3.2 conducen a aproximaciones del valor de la máxima carga que la columna resiste si se aplica con doble excentricidad (sin momentos de flexión). Esta carga es equivalente a aplicar la carga sin excentricidades (en *O*), pero actuando simultáneamente con los momentos M_{nx} y M_{ny}.

La propuesta original de Bresler (1960) de este método (Método A en su artículo) es como se explica a continuación. El método de la carga reciproca describe a la ordenada $1/P_{xy}$ de la superficie $S_2(1/P_{xy}, x, y)$ la cual se puede aproximar con el plano $S_2'(1/P_n, x, y)$ y que se pueden observar en la Fig. 1.3.4. El plano se define por tres puntos característicos *A, B y C*. El punto *A* del plano *x* que contiene a la ordenada $1/P_x$, *B* del plano *y* que contiene a $1/P_y$ y el punto *C* que contiene a la ordenada $1/P_0$. Así, la ecuación es:

$$\frac{1}{P_{xy}} = \frac{1}{P_x} + \frac{1}{P_y} - \frac{1}{P_0} \tag{1.3.1}$$

Una columna consta del valor P_0 que representa la carga máxima que la columna puede resistir en compresión pura, es decir, sin excentricidad, P_x representa la carga que la columna resiste en compresión uniaxial, es decir, con excentricidad *y* y P_y la carga que la columna soporta en compresión uniaxial, pero con excentricidad *x*. Por tanto, para una columna el punto *C* es independiente de excentricidades, el punto *A* depende de una excentricidad en *y* y el punto *B* depende de una excentricidad en *x*. Como se puede entender las cargas P_0, P_x y P_y se pueden estimar mediante los métodos conocidos (Wight,2016).

Para cada punto de la superficie S_2 existe un plano correspondiente S_2'. La aproximación para la superficie S_2 involucra un numero infinito de planos en donde cada uno es aplicable a valores específicos de excentricidades *x* y *y*, por lo que cada plano define únicamente un punto $1/P_n$ que corresponde a la aproximación de $1/P_{xy}$.

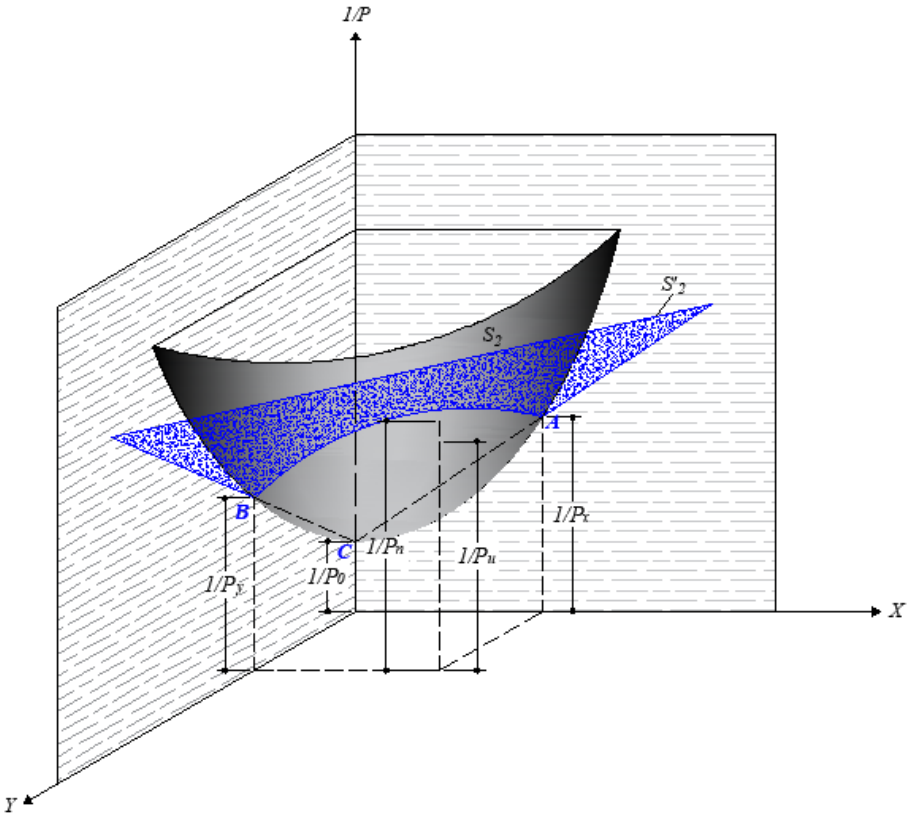


Figura 1.3.4. Representación gráfica del método de la carga recíproca de Bresler (1960) – Método A

Un objetivo de este trabajo es comparar la aproximación obtenida con estas fórmulas con el valor calculado de forma precisa con el procedimiento del Apéndice A. Estas comparaciones se llevan a cabo para distintos niveles de carga axial (P_{xy}/P_0), secciones transversales, distintos armados, propiedades de los materiales y relaciones de excentricidades.

1.3.1 Método de la carga recíproca modificada

Se realiza una modificación de la Ec. 1.3.1 para el método de la carga recíproca con el propósito de hacer que no exista gran diferencia entre P_{xym} obtenido con la Ec. modificada 1.3.3 y la carga P_n obtenida con el programa de cálculo.

$$\frac{1}{P_{xym}} = \frac{1}{P_x} + \frac{1}{P_y} - \frac{1.05}{P_0} \tag{1.3.3}$$

1.4 Método del contorno de carga

El método de contorno de carga se basa en suponer formas de las intersecciones de la superficie de falla con planos horizontales correspondientes a distintos valores de la carga axial P_n o de su relación P_n/P_0. Una ilustración de estas líneas, las cuales se pueden visualizar como *curvas de nivel*, se muestra en la Fig. 1.4.1. Si se conociera matemáticamente la superficie de falla, sería posible determinar las ecuaciones correspondientes a cada una de las curvas o *contornos de carga*. Debido a la presencia de dos materiales en una sección transversal y por la complejidad de sus propiedades en la etapa de falla, es sumamente difícil (o imposible) obtener una ecuación de la superficie de falla o de los contornos de carga. Generalmente, tanto la superficie de falla como los contornos de carga sólo se pueden aproximar mediante colecciones de puntos obtenidos numéricamente con ayuda de programas de cómputo especialmente elaborados para ello. Observar que el cambio de una dimensión de la sección o de una varilla (área o posición) conduce a otra superficie o contorno. Los contornos de cargas también dependen del cociente P_n/P_0 y de la relación M_{nx}/M_{ny}.

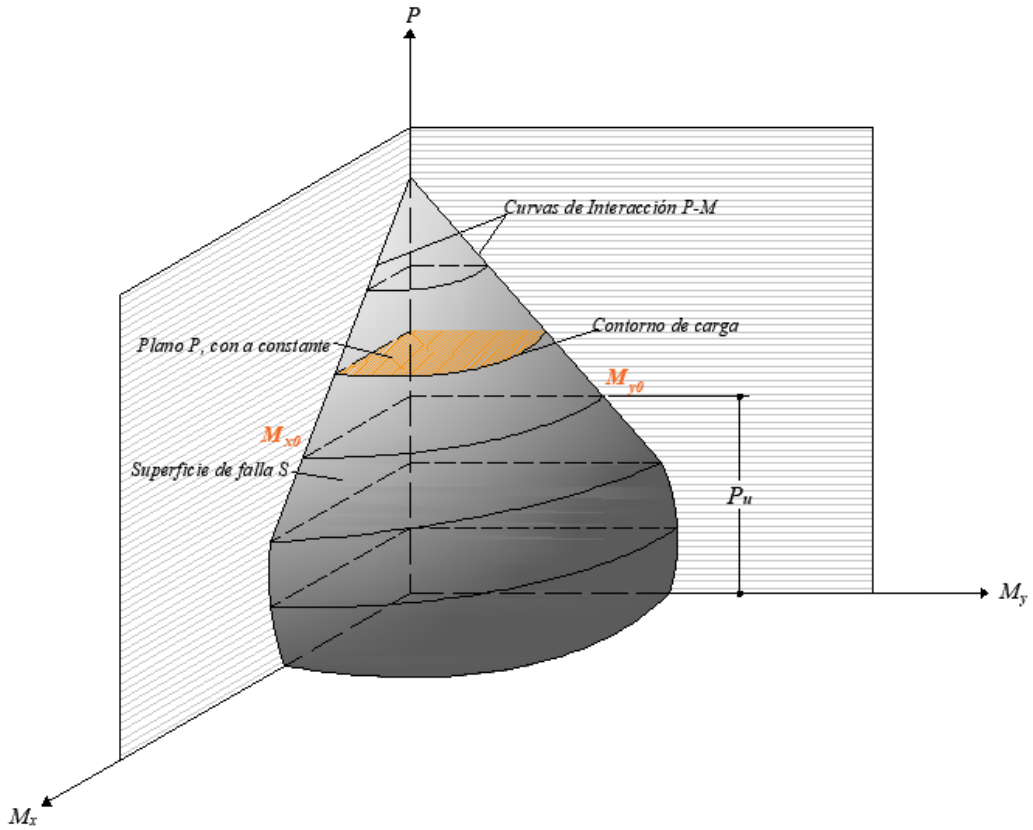


Figura 1.4.1 Representación gráfica del método del contorno de carga de Bresler (1960) – Método B

De la observación de las distintas geometrías de los contornos de carga a partir de valores numéricos correspondientes a un valor de carga axial para distintas geometrías o armados de la sección transversal de una columna, se han supuesto algunas ecuaciones de las curvas de interacción. Una forma conveniente de estas curvas se obtiene empleando valores normalizados de los momentos de flexión de la tríada (P_n, M_{nx} y M_{ny}). Si los valores de los momentos se normalizan con respecto a las capacidades de la misma sección de los casos planos (M_{nx0} y M_{ny0}) calculados también para P_n, las ecuaciones de los contornos se suelen expresar como:

$$\left(\frac{M_{nx}}{M_{nx0}}\right)^{\alpha_1} + \left(\frac{M_{ny}}{M_{ny0}}\right)^{\alpha_2} = 1.0 \tag{1.4.1}$$

Los exponentes α_1 y α_2 se proponen para ajustar las curvas anteriores a los datos que pueden obtenerse numéricamente (para distintos niveles de carga axial, geometrías de la sección transversal o relaciones de M_{nx}/M_{ny}).

De manera similar al caso del método de la carga recíproca, la ecuación anterior se usa en el diseño para revisar si una cierta sección es aceptable para resistir una tríada de valores que resultan de un análisis estructural. En este caso, se supone que los valores de los exponentes son conocidos e iguales entre sí. Usualmente se emplea el valor de $\alpha = \alpha_1 = \alpha_2 = 1.4$, aun cuando hay recomendaciones más precisas (PCA, 2012; India, 2023), como se discute posteriormente.

Considerando por ahora esta simplificación, la ecuación se emplea de la siguiente manera en la revisión de una sección de columna propuesta. Del análisis estructural se obtiene una tríada de valores (P_n, M_{nx} y M_{ny}) los cuales usualmente resultan de una combinación de acciones (o cargas). Si el análisis es de segundo orden no es necesario amplificar estos momentos por esbeltez. Los reglamentos generalmente usan el subíndice *u* para referirse a cantidades de diseño que incluyen factores de carga. Estos valores formarían el conjunto de valores de diseño (P_u, M_{ux} y M_{uy}) que se desea revisar para determinar si una sección transversal se acepta o no para diseño.

Como en el caso del método de la carga recíproca, en este método del contorno de carga también se usan los diagramas de interacción planos (uniaxiales). Con el valor de P_u, se usa el primer diagrama de interacción asociado a la flexión alrededor del eje *x* para determinar el valor del momento de flexión plano. Este valor se identifica como M_{ux0}, en donde el subíndice 0 indica que se determina del diagrama de interacción plano. Similarmente, con el valor de P_u y el diagrama de interacción plano asociado a la flexión alrededor del eje *y*, se obtiene M_{uy0}. Se asume que los valores planos son mayores que los valores sobre la superficie de interacción para un valor dado de carga axial. Con esto en mente, los cocientes $\left(\frac{M_{nx}}{M_{nx0}}\right)$ y $\left(\frac{M_{ny}}{M_{ny0}}\right)$ resultan menores que la unidad.

La revisión de la sección de columna propuesta concluye sustituyendo los valores que provienen del análisis (M_{ux} y M_{uy}) y los estimados con los diagramas de interacción planos (M_{ux0} y M_{uy0}) (todos correspondientes al mismo valor de carga axial) en la ecuación siguiente para algún valor de los exponentes α:

$$\left(\frac{M_{nx}}{M_{nx0}}\right)^{\alpha_1} + \left(\frac{M_{ny}}{M_{ny0}}\right)^{\alpha_2} = r_2 \tag{1.4.2}$$

Si $r_2 < 1.0$, se entiende que la sección que se revisa es adecuada, ya que se trata de una tríada (P_u, M_{ux} y M_{uy}) que se ubica dentro de la superficie de falla. En el caso contrario, se entiende que la tríada está sobre o fuera de la superficie y, por tanto, es una falla de la sección.

Estudios numéricos revelan que en algunos casos donde alguno de los momentos es pequeño en comparación al ortogonal, haciendo el trabajo estructural casi plano, el momento sobre la superficie de interacción puede resultar mayor que el momento de flexión plano. Esto se ilustra en la Fig. 1.4.2 en donde cada punto corresponde a una tríada sobre la superficie de interacción. En el Capítulo 3 se analiza con más detalle la dependencia de estos cocientes del tipo M_n/M_{n0} con el nivel de carga axial y con la relación M_{nx}/M_{ny} para determinar en qué parte de la superficie de falla es posible encontrar que los cocientes de la Ecs. (1.4.1 o 1.4.2) suelen resultar mayores que la unidad.

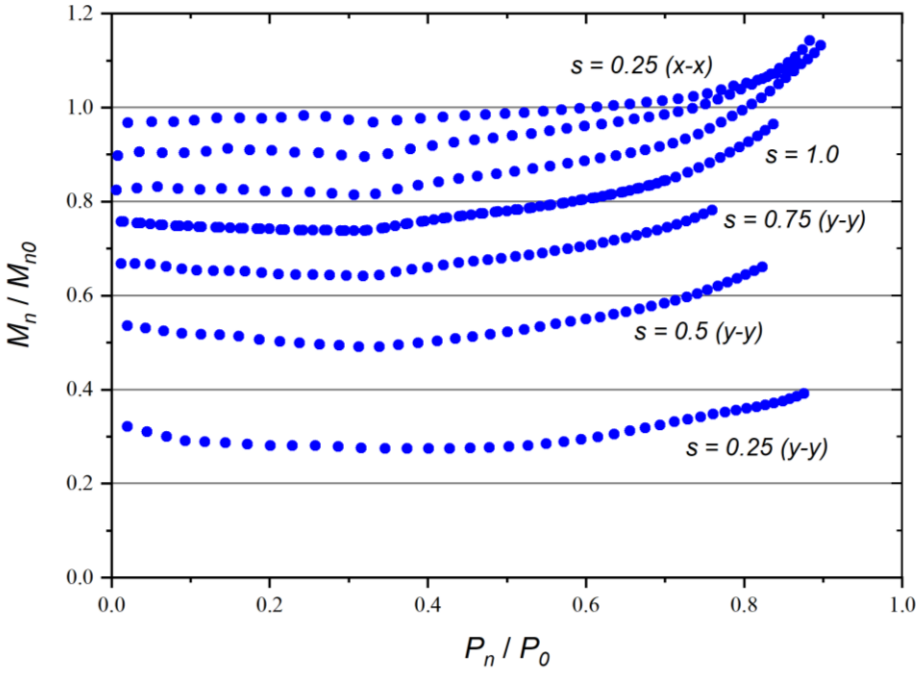


Figura 1.4.2 Cocientes de momentos de flexión biaxial/uniaxial

La figura anterior muestra que la forma de la Ec. 1.4.1 no sería aplicable a estos casos donde (M_n/M_{n0}) es mayor que la unidad. Una alternativa sería proponer una fórmula en donde se incorpore la relación (M_{nx}/M_{ny}) o $(M_{ny})/M_{nx}$.

La propuesta original de Bresler (1960) de este método (Método B en su artículo) es como se describe a continuación.

El método de contorno de carga aproxima la superficie $S_3 = (P_u, M_x, M_y)$, para un grupo de curvas que corresponden a valores constantes de Pu, como se muestra en la Figura 1.4.1, y son llamadas contornos de carga.

La forma de aproximar estos contornos es a través de la ecuación de interacción 1.4.1., donde:

$M_{nx} = P_u y$, $M_{nx0} = P_u y_0$ cuando $x = M_y = 0$;

$M_{ny} = P_u x$, $M_{ny0} = P_u x_0$ cuando $y = M_x = 0$;

α_1 y α_2, son exponentes que dependen de las dimensiones de la columna, el armado y la distribución del acero de refuerzo, la resistencia del concreto, las características de esfuerzo-deformación del acero y el concreto, así como de la distribución de estribos y/o espirales, que rodean la columna. Investigaciones posteriores al trabajo de Bresler (1960) han mostrado que también los exponentes resultan estar en función de la intensidad de la carga axial.

La ecuación 1.4.1. puede escribirse en forma de excentricidades en lugar de momentos, esto simplifica y transforma la expresión y es conveniente para diseño.

$$\left(\frac{Y}{Y_0}\right)^{\alpha_1} + \left(\frac{X}{X_0}\right)^{\alpha_2} = 1.0 \tag{1.4.3}$$

Asumiendo que $\alpha_1 = \alpha_2$, las formas de tales curvas de interacción para diferentes valores de α se muestra en la Figura 1.4.3.

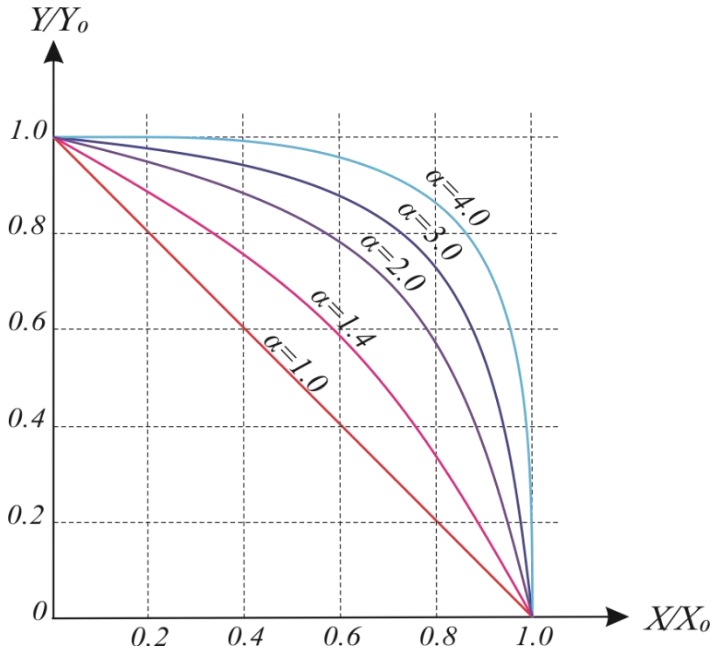


Figura 1.4.3 Curvas de interacción

Otro objetivo de este trabajo es comparar la aproximación obtenida con la Ec. (1.4.2) con el valor calculado de forma precisa con el procedimiento del Apéndice A. Estas comparaciones se llevan a cabo para distintos niveles de carga axial (P_n/P_0), secciones transversales, armados, propiedades de los materiales constitutivos y relaciones de excentricidades (o de momentos M_{nx}/M_{ny}).

1.5 Estudios numéricos previos

Tanto el método de la carga recíproca como el de contorno de caga fueron propuestos en 1960 por Bresler (1960). Su objetivo fue proponer fórmulas sencillas que ayuden al ingeniero a diseñar columnas (secciones transversales). En los apartados siguientes se describen los estudios numéricos relacionados con cada uno de los métodos presentados en las secciones anteriores.

1.5.1 Bresler (1960) – Método de carga recíproca

Para este método, Bresler (1960) eligió las columnas A, B, C y E de la Tabla 1.5.1, utilizando un recubrimiento de 2 in, donde a partir de valores de excentricidades seleccionadas calculo los valores de P_u, P_0, P_x y P_y con ayuda del modelo esfuerzo-deformación de Jensen (1943).

Utilizando la Ec. (1.3.1) calculó los valores de P_{xy} para las 4 columnas seleccionadas y los resultados los comparó con los valores de P_u obtenidos directamente con las bases del esfuerzo-deformación.

Para terminar de comprobar su teoría, probó 8 columnas en laboratorio de 6 x 8 in (15.2 x 20.3 cm) de 4 ft (122 cm) de largo reforzadas con 4 varillas del #5, con un f_y=53.5 ksi (3760 kg/cm^2), f'_c= 3 ksi (210 kg/cm^2) y estribos de barras planas de #2, espaciados a 4 in (10.16 cm). Obtuvo los valores de P_u, con la carga puesta a diferentes excentricidades y los comparo con los valores P_{xy} que obtuvo con la Ec. (1.3.1).
Verificó que la resistencia P_{xy} predicha (Ec. 1.3.1) concuerda con los valores de los resultados de las pruebas, con una desviación media de 3.3%.

1.5.2 Bresler (1960) – Método de contorno de carga

Bresler (1960) comprobó el método a partir de cálculos analíticos de P_u, M_x y M_y para un grupo de 5 columnas que se muestra en la Tabla 1.5.1 con diferentes posiciones del eje neutro, utilizando el modelo esfuerzo-deformación trapezoidal de Jensen (Jensen, 1943) y el modelo convencional esfuerzo-deformación para el acero de refuerzo y encontró que los criterios de resistencia se aproximan en muy buena forma con la Ec. (1.5.1).

$$\left(\frac{Y}{Y_0}\right)^{\alpha} + \left(\frac{X}{X_0}\right)^{\alpha} = 1.0 \tag{1.5.1}$$

Tabla 1.5.1 Características de columnas

Columna	Tamaño (in.)	Varillas	ρ (%)
A	15x15	4 # 7	1.07
B	15x15	8 # 7	2.14
C	15x15	8 # 13	4.49
D	12x20	4 # 7	1.0
E	12x20	8 # 7	2.0

Todas las columnas se hicieron con f'_c= 210 kg/cm^2 y f_y= 3500 kg/cm^2.

A partir de las secciones de columnas utilizadas (Tabla 1.5.2) se obtuvieron los resultados de α que van desde 1.15 a 1.55 (Bresler, 1960) y proporcionan una buena aproximación en resultados analíticos.

1.5.3 Eom y Nam (2017) – Método de contorno de carga para muros en forma de L

Eom y Nam (2017) extendieron las ideas del método de contorno de carga para secciones asimétricas como lo son los muros en forma de L, demostrando que el comportamiento biaxial y la forma del contorno de carga de una sección asimétrica es diferente al de un muro en L. Para columnas rectangulares y circulares, el contorno de carga es el mismo en todos los cuadrantes del plano M_{nx} y M_{ny} a una carga axial P_n constante. En un muro L donde la geometría es asimétrica, la forma del contorno es cercana a un triángulo y es diferente en cada cuadrante del plano.

En un estudio previo Hsu (1985) concluyo que el método de contorno de carga es conveniente para paredes en forma de L, C y H. Con base en lo anterior Eom y Nam (2017) desarrollaron un programa de análisis de secciones y propusieron ecuaciones de contorno elípticas (Ec. 1.5.2) para paredes en forma de L.

$$(m_x)^{\alpha} + (m_y)^{\alpha} = 1 \tag{1.5.2}$$

El programa de análisis está basado en la compatibilidad de deformaciones, en el que se dan datos de entrada como la distribución del acero, resistencia del concreto, espesor, base y peralte de la sección, se establece la profundidad y ángulo de inclinación del eje neutro y se va variando en cada iteración posteriormente se obtiene la distribución de deformaciones y se determinan los esfuerzos en el acero y el concreto, finalmente se obtiene P_n, M_{nx} y M_{ny}.

Eom y Nam (2017) analizaron 5 secciones que se muestran en la Fig. 1.5.3, todas con un porcentaje de refuerzo ρ =0.01. Utilizando el programa de análisis obtuvieron las superficies de interacción (P_n, M_{nx} ,M_{ny}) de los muros (Fig. 1.5.3). Observaron que la forma de los contornos cambia respecto a la profundidad e inclinación del eje neutro.

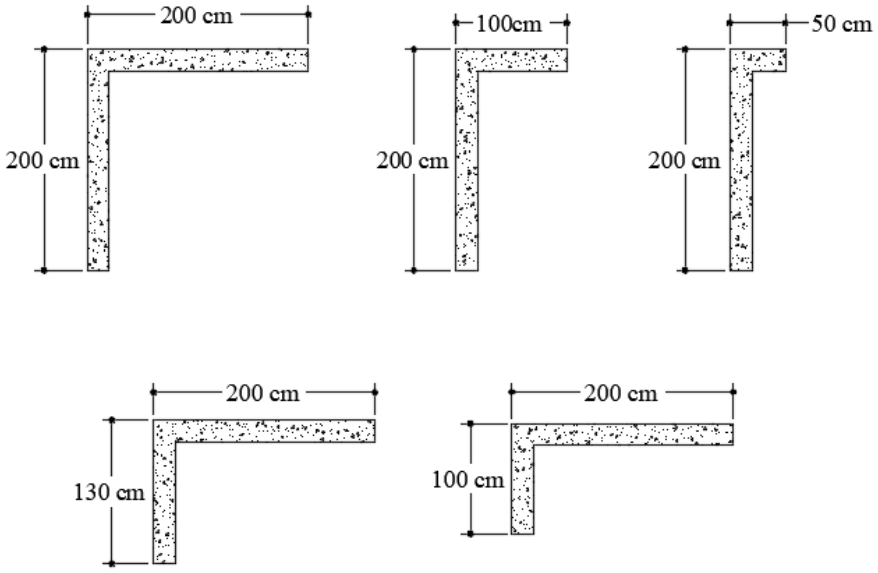


Figura 1.5.3. Secciones transversales de muros en forma de L

Se obtuvieron contornos de carga (Eom y Nam, 2017) utilizando la Ec. (1.5.2), con niveles de carga axial que van de $0 \leq P_n/A_g f_c' \leq 0.5$. proponiendo los valores de α para muros en forma de L (Ec. 1.5.3). El valor de α se elige dependiendo del cuadrante del plano M_{nx} y M_{ny}, en el que se quiera calcular el contorno.

$$\text{Cuadrantes I y III: } \alpha = 3n + 1.05$$
$$\text{Cuadrantes II y IV: } \alpha = 3 - 2.5n \tag{1.5.3}$$

Los contornos de carga obtenidos con el programa de análisis se compararon gráficamente con los contornos calculados con la Ec. 1.5.3 y se obtuvo una muy buena aproximación.

1.5.4 Portland Cement Association (PCA, 2012) – Método de contorno de carga

La Asociación del Cemento Portland publicó una breve monografía donde presenta una extensión del método de contorno de carga (Bresler, 1960). En las notas (PCA, 2012), se relacionan los momentos biaxiales M_{nx} y M_{ny}, con los momentos uniaxiales M_{n0x} y M_{n0y} de tal manera que tengan la misma proporción (Ec. 1.5.3).

$$\frac{M_{nx}}{M_{ny}} = \frac{M_{n0x}}{M_{n0y}} \tag{1.5.3}$$

La ventaja de expresar la relación de momentos es que los contornos de carga de la superficie de falla pueden considerarse simétricos si se toman como adimensionales para

fines de diseño, respecto al plano P_n/P_0. Esto no solamente funciona para secciones cuadradas sino también para secciones rectangulares con diferente refuerzo en las caras de la sección transversal.

Las notas de PCA (2012) proponen una variable β que depende primordialmente de la relación carga axial nominal y máxima que resiste la sección (P_n/P_0) y en menor medida del porcentaje y distribución del acero de refuerzo y resistencia del concreto. Se relaciona el exponente α de la Ec. (1.4.1) con β de la siguiente manera:

$$\alpha = \frac{\log 0.5}{\log \beta} \tag{1.5.4}$$

Con lo que la Ec. (1.4.1) de Bresler (1960) queda de acuerdo con la Ec. (1.5.5) para cualquier valor de β.

$$\left(\frac{M_{nx}}{M_{nx0}}\right)^{\frac{\log 0.5}{\log \beta}} + \left(\frac{M_{ny}}{M_{ny0}}\right)^{\frac{\log 0.5}{\log \beta}} = 1.0 \tag{1.5.5}$$

β varía entre 0.55 y 0.70 y es elegido conforme a gráficos constantes de diseño biaxial (ACI-318, 2011), aunque las notas recomiendan a β=0.65 para un buen análisis de flexión biaxial.

El ACI-318 (2011), presento un manual de procedimiento de diseño para columnas y muros con flexión biaxial donde incluyo estudios numéricos de una columna de acuerdo con la monografía de PCA (2012).

El manual ACI-318 (2011) analiza una columna cuadrada de 24x24 in, reforzada con 4 varillas del #11, con un f_y=60 ksi (4200 kg/cm^2), una resistencia del concreto f_c'= 5 ksi (350 kg/cm^2), un recubrimiento de 2 in. Mediante la Ec. 1.5.5 se logra estimar la capacidad de la columna antes mencionada a carga axial y flexión biaxial.

Mediante el uso del software *StructurePoint* que es un programa que realiza el análisis y diseño de secciones de concreto reforzado sometidas a carga axial y flexión biaxial se logra graficar los contornos de carga de la columna analizada y se compara con los contornos obtenidos con la monografía de PCA (2012) y se aprecia una muy buena concordancia.

1.6 Planteamiento del problema

Como se señaló antes, el diseño de columnas de concreto reforzado requiere la revisión de la capacidad de una sección transversal que generalmente propone el ingeniero ante la aplicación simultánea de una carga axial y dos momentos flexionantes. Para ello, se dispone de alguna de las

opciones siguientes, generalmente aceptadas:

a) Contar con un programa que calcule puntos de la superficie de falla de la sección y verificar que las tríadas de valores de diseño (P_u, M_{ux} y M_{uy}) de todas las posibles combinaciones de cargas se ubiquen por dentro de la superficie (reducida por factores de carga). Si esto se cumple, la sección transversal propuesta se considera aceptable; de lo contrario se debe proponer otra sección o armado de varillas.

b) Usar la fórmula de la carga recíproca (Ecs. 1.3.1 o 1.3.2) para estimar la capacidad a flexión biaxial de una sección a partir de las capacidades correspondientes a los casos uniaxiales y la capacidad concéntrica.

c) Usar la fórmula de contorno de carga (Ec. 1.4.1 o 1.4.2) para determinar si los momentos flexionantes de diseño que se obtienen de una combinación de carga (M_{ux} y M_{uy}) correspondientes a la carga axial de diseño P_u, y normalizados respecto a los respectivos momentos de flexión uniaxiales (M_{ux0} y M_{uy0}) son aceptables (conducen a un valor de r_2 < 1.0).

Los reglamentos de diseño (ACI-318, 2019; NTC-CDMX, 2023) aceptan cualquiera de estas opciones y ofrecen pocas recomendaciones respecto a su uso o a los límites de su aplicación. Por ejemplo, las NTC-CDMX (2023) indica que para secciones rectangulares o cuadradas se puede usar la ecuación de la carga recíproca para valores de la carga axial mayores del 10% de la máxima. Para cargas menores, el reglamento recomienda el uso del método de la carga recíproca con α = 1.0.

Por su parte el ACI-318- (2019), en su capítulo 22 (resistencia de secciones transversales) sólo menciona las suposiciones que deben tomarse en cuenta para el cálculo de las capacidades. Las principales suposiciones son las siguientes y son las mismas que marca el reglamento de la Ciudad de México de 2023:

a) Se debe cumplir el equilibrio de fuerzas y momentos de flexión en cada sección.
b) Las deformaciones unitarias en el concreto y en el refuerzo se deben suponer proporcionales a la distancia del eje neutro.
c) La máxima deformación unitaria en la fibra extrema de compresión en el concreto debe ser igual a ε_{cu} = 0.003.
d) La resistencia a tensión del concreto debe despreciarse en los cálculos de las resistencias a flexión y carga axial.
e) Que se puede sustituir la distribución de esfuerzos en el concreto por una forma rectangular, trapezoidal o parabólica.
f) La máxima resistencia a compresión axial es de 0.80 de la máxima para columnas con estribos o de 0.85 par columnas con espirales.

Es interesante destacar que el ACI-318 (2019) no presenta, en el cuerpo de sus especificaciones, fórmulas específicas para el diseño de columnas. Por tanto, queda abierto al diseñador la elección de alguna de las opciones presentadas al inicio de esta sección (programa de cálculo, fórmula de la carga recíproca o fórmula de contorno de carga). Tampoco ofrece recomendaciones particulares respecto al uso de alguna fórmula o al valor de algún exponente α. La limitación marcada por las NTC-CDMX (2023) respecto al uso de una fórmula u otra dependiendo del nivel de carga axial no

aparece en las especificaciones del ACI-318 (2019).

Como se aprecia del breve análisis anterior, hace falta revisar las fórmulas de los métodos descritos anteriormente para conocer su aplicabilidad. Por ejemplo, Silva et al., (2001) indica que el método de la carga recíproca conduce a aproximaciones muy conservadoras en la mayoría de los casos.

Por lo anterior, se considera conveniente llevar a cabo un estudio donde se comparen los dos métodos ante valores "exactos" obtenidos con un programa de computadora. Se buscará determinar para qué condiciones (nivel de carga axial P_n/P_0, relación de momentos M_{nx}/M_{ny}, porcentajes de refuerzo ρ, relación de aspecto de la sección, resistencia de materiales) los métodos son conservadores o no.

1.7 Objetivos

Comparar las capacidades de columnas obtenidas con el método de contorno de carga y las obtenidas con el método de la carga reciproca contra las capacidades calculadas con un programa de cómputo que emplea suposiciones del comportamiento estructural de las columnas más realista.

Determinar los valores de α, en el método de contorno de carga, que conducen a los mejores resultados para diferentes valores de la carga axial.

1.8 Hipótesis

a) El método de contorno de carga, para α = 1.4, conduce a resultados más precisos que el método de la carga recíproca.

b) Estadísticamente el método de contorno de carga conduce a resultados más precisos cuando se usa α = 1.4.

1.9 Alcances y limitaciones

Este estudio soló se realizará para columnas de sección cuadrada y/o rectangular. El trabajo se limitará a concretos con resistencias f_c' = 250 kg/cm^2 y f_c' = 400 kg/cm^2 y un acero con un esfuerzo de fluencia f_y = 4200 kg/cm^2. Se consideran dos porcentajes de refuerzo (ρ = 0.03 y 0.06). El análisis que se propone en este estudio es a nivel de sección transversal sin tomar en cuenta la longitud de la columna. En el capítulo 2 se indican las secciones transversales que se emplearon en este estudio.

Capítulo 2

Metodología

Para alcanzar los objetivos planteados en el capítulo anterior y para corroborar o refutar las hipótesis planteadas, en este capítulo se analizan los métodos de la carga recíproca y el del contorno de carga, ante los resultados teóricos de tríadas (P_n, M_{nx} y M_{ny}) calculadas de forma precisa con un programa de cálculo elaborado específicamente para esta tesis (Apéndice A). Ambos métodos se analizan para distintas secciones transversales y condiciones particulares para observar sus bondades y limitaciones.

2.1 Metodología

Los dos métodos presentados en el capítulo anterior usan una ecuación. El método de la carga recíproca usa la siguiente fórmula que calcula de forma aproximada la carga axial P_{xy} que resiste la sección de una columna (aplicada concéntricamente) junto con los momentos de flexión $M_{nx} = P_{xy}\, e_y$ y $M_{ny} = P_{xy}\, e_x$. Considerando por ahora sólo valores nominales, la fórmula es

$$\frac{1}{P_{xy}} = \frac{1}{P_x} + \frac{1}{P_y} - \frac{1}{P_0} \tag{1.3.1}$$

Con esta expresión se estima la fuerza axial P_{xy} que hace fallar la sección. Ya que esta es sólo una aproximación, no implica que la tríada (P_{xy}, M_{nx} y M_{ny}) se localice sobre la superficie de interacción. El valor "exacto" de la carga que hace fallar la columna junto con los momentos de flexión es P_n y se calcula aquí con un programa de cómputo (Apéndice A). La forma de valorar la fórmula será comparando el valor obtenido de la ecuación (P_{xy}) con el valor calculado con el programa (P_n).

Para facilitar la comparación se evalúa el cociente de ambas fuerzas, el cual se define como

$$r_1 = P_n / P_{xy} \tag{2.1.1}$$

La definición de este cociente es inversa a la definición usada por Bresler (1960). Bresler ubica el valor obtenido de la fórmula en el numerador y el valor correcto en el denominador. La selección de la forma dada por la Ec. (2.1.1) obedece a que en el método del contorno de carga se calcula un valor r_2 definido de esta forma. Así en ambos métodos la interpretación de los parámetros r_1 y r_2 es similar.

De acuerdo con la Ec. 2.1.1, si el cociente es igual a la unidad (r_1 = 1.0), se concluye que el valor obtenido con la fórmula (P_{xy}) es correcto. Si r_1 < 1.0, se concluye que la fórmula sobreestima el valor exacto de la carga axial resistente. En este caso, el diseñador concluye que la sección de columna propuesta resiste más que lo teóricamente es correcto. En otras palabras, la fórmula estaría fallando del lado no conservador. Finalmente, si r_1 > 1.0, se entendería que la capacidad de carga axial predicha por la fórmula es menor que la correcta. En este caso, la fórmula estaría fallando

del lado conservador ya que haría pensar al diseñador que la columna resiste menos que lo teóricamente es correcto. Así, el análisis de la ecuación (1.3.1) y, por tanto, del método de carga recíproca, se hace a través del análisis de r_1.

Por lo que se refiere al método del contorno de carga, la fórmula que se emplea es la Ec. (1.4.2) la cual se presenta nuevamente aquí:

$$r_2 = \left(\frac{M_{nx}}{M_{nx0}}\right)^{\alpha_1} + \left(\frac{M_{ny}}{M_{ny0}}\right)^{\alpha_2} \tag{1.4.2}$$

Como se indicó antes, si $r_2 = 1.0$, se concluye que la sección de la columna resiste los momentos M_{nx} y M_{ny} junto con la carga axial P_n que sirvió para evaluar los momentos uniaxiales M_{nx0} y M_{ny0}. En otras palabras, si $r_2 = 1.0$ la Ec. (1.4.2) predice correctamente la capacidad pero que, a diferencia del método de la carga recíproca, su evaluación se hace con un cociente de momentos de flexión y no con un cociente de cargas axiales.

Si $r_2 < 1.0$, se concluye que la fórmula indica que la sección de la columna resiste la tríada (P_n, M_{nx} y M_{ny}). En este caso la fórmula hace pensar al ingeniero que la sección es adecuada y hasta podría buscar una sección con menores dimensiones o refuerzo. Sin embargo, los valores de la tríada (obtenidos de forma precisa con un programa de cómputo) corresponden a la falla, lo que lleva a concluir que la fórmula está errando no conservadoramente. Finalmente, si $r_2 > 1.0$, se entendería que la sección de la columna no resiste; sin embargo, como los puntos de la tríada corresponden a la falla, se concluye que la Ec. (1.4.2) falla del lado conservador.

Es importante observar dos aspectos importantes en los cocientes de ambos métodos. Primero, el cociente r_1 se estima con base en cargas axiales y el cociente r_2 se evalúa con base en momentos de flexión. Segundo, las conclusiones respecto a los valores de los cocientes diferentes de 1.0 son en el mismo sentido; esto es, cuando los cocientes son menores que la unidad, implican resultados no conservadores y viceversa. Esto último se resume en la Tabla 2.1.1.

Tabla 2.1.1 Resumen de posibles valores de los cocientes r_1 y r_2

Método /Ecuación	**Resultado**	**Interpretación**	**Conclusión**
Método de carga recíproca*	$r_1 = 1.0$	$P_n = P_{xy}$	Preciso
$\frac{1}{P_{xy}} = \frac{1}{P_x} + \frac{1}{P_y} - \frac{1}{P_0}$	$r_1 < 1.0$	$P_n < P_{xy}$	No conservador
	$r_1 > 1.0$	$P_n > P_{xy}$	Conservador
Método de contorno de carga**	$r_2 = 1.0$	M_{nx} y M_{ny} llevan a la falla	Preciso
$r_2 = \left(\frac{M_{nx}}{M_{nx0}}\right)^{\alpha_1} + \left(\frac{M_{ny}}{M_{ny0}}\right)^{\alpha_2}$	$r_2 < 1.0$	$M_{nx} < M_{nx0}$ y $M_{ny} < M_{ny0}$	No conservador
	$r_2 > 1.0$	$M_{nx} > M_{nx0}$ o $M_{ny} > M_{ny0}$	Conservador

* $r_1 = P_n / P_{xy}$

** Se supone que los valores (P_n, M_{nx} y M_{ny}) corresponden a la falla.

Con base en lo anterior, la forma de evaluar los métodos se lleva a cabo a través del cálculo de los cocientes r_1 y r_2. Es claro que los valores de estos cocientes pueden cambiar con algunas variables o características de las secciones transversales. En este trabajo se analiza cómo resultan los cocientes de acuerdo con las siguientes variables:

a) Relación de ancho a peralte de la sección transversal. En la sección 2.2 se presentan las secciones transversales que se analizan en este trabajo.
b) Resistencias de los materiales constitutivos y porcentajes de refuerzo. En la sección 2.3 se resumen las resistencias de los materiales considerados.
c) Otras variables como el exponente usado en la expresión para r_2. También resulta interesante observar cómo cambian los resultados (valores de r_1 y r_2) con el nivel de la carga axial definido por el cociente P_n/P_0, o con los valores relativos de los momentos de flexión a través de algún cociente de momentos (*e.g.*, M_{nx}/M_{ny}). Observar que el primer cociente (P_n/P_0) indica que tan arriba o abajo se ubica la tríada que se analiza con respecto a la superficie de interacción. Por ejemplo P_n/P_0 cercano a 1.0 indica que la tríada se ubica en la parte alta de la superficie de interacción. Por su parte valores cercanos a cero del cociente M_{nx}/M_{ny} indican que las triadas se ubican cerca del plano uniaxial de momentos M_y. Estas variables y los valores empleados en este trabajo se presentan en la sección 2.4. En esa misma sección se presenta un estimado del número de tríadas que se calculan para cada sección, material y porcentaje de refuerzo.

El análisis de los cocientes r_1 y r_2 ante las distintas variantes (secciones, porcentajes de refuerzo, valores de α, etc.) permitirá visualizar cómo resultan los métodos. Es claro que el uso de gráficas y tablas será de gran utilidad. Estos resultados también se complementarán con algunas estadísticas.

2.2 Secciones transversales

En este trabajo se calculan tríadas de valores (P_n, M_{nx} y M_{ny}) que corresponden a la falla de una sección transversal. Se estudian las secciones transversales que se muestran como 24 casos diferentes que se presentan en las Figs. 2.2.1 a 2.2.12. La Tabla 2.2.1 muestra un resumen de sus propiedades. Para alcanzar los porcentajes de refuerzo de 3% y 6% así como para obtener arreglos uniformes de varillas fue necesario asignar áreas de acero especificas en los puntos donde se localizan las varillas, lo cual condujo a que las áreas de cada una de ellas no correspondan a varillas comerciales. Esta suposición, sin embargo, no afecta el desarrollo de la investigación.

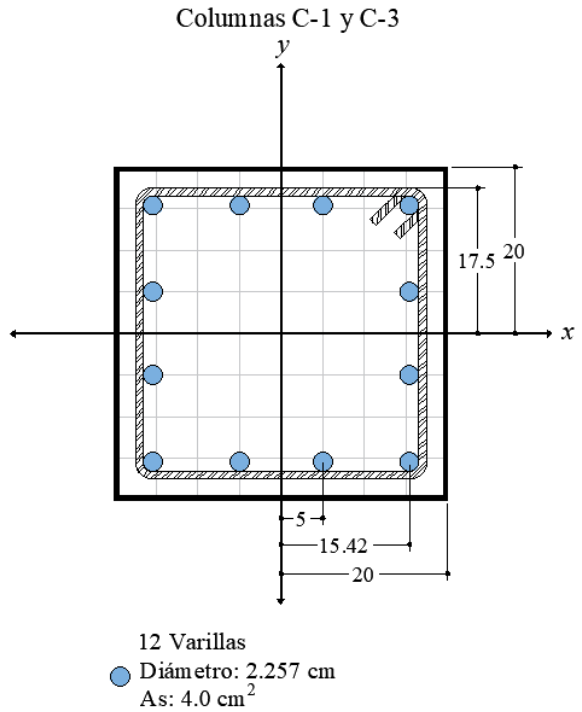


Figura 2.2.1. Secciones transversales del caso 1 (f_c'= 250 kg/cm^2) y del caso 3 (f_c'= 400 kg/cm^2)

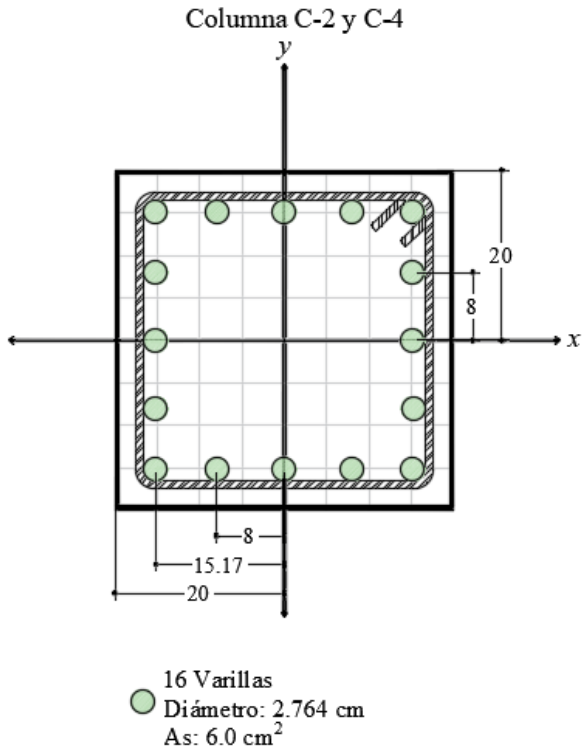


Figura 2.2.2. Secciones transversales del caso 2 (f_c'= 250 kg/cm^2) y del caso 4 (f_c'= 400 kg/cm^2)

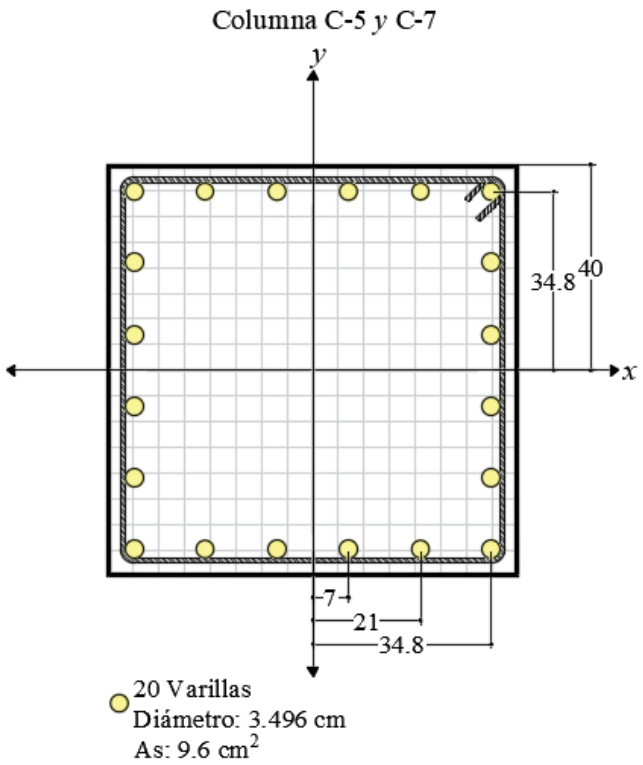


Figura 2.2.3. Secciones transversales del caso 5 (f_c'= 250 kg/cm^2) y del caso 7 (f_c'= 400 kg/cm^2)

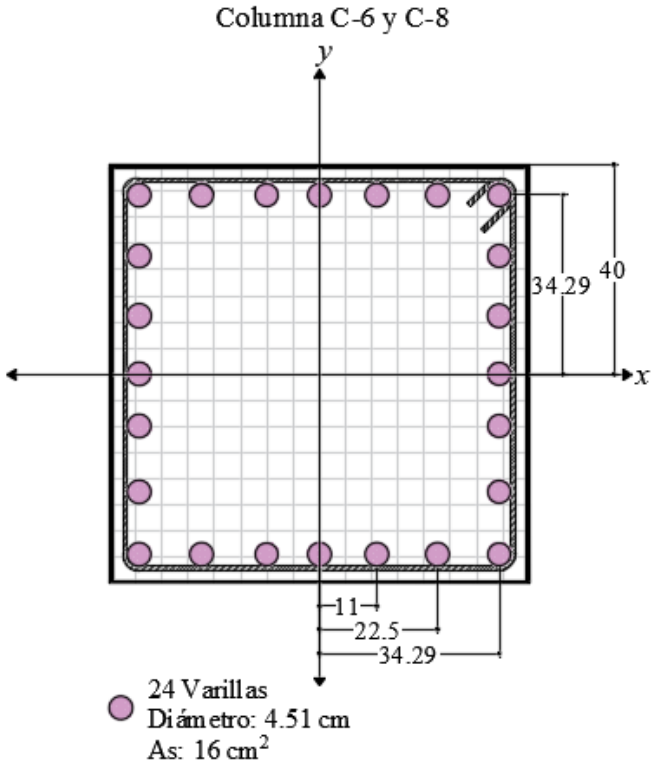


Figura 2.2.4. Secciones transversales del caso 6 (f_c'= 250 kg/cm^2) y del caso 8 (f_c'= 400 kg/cm^2)

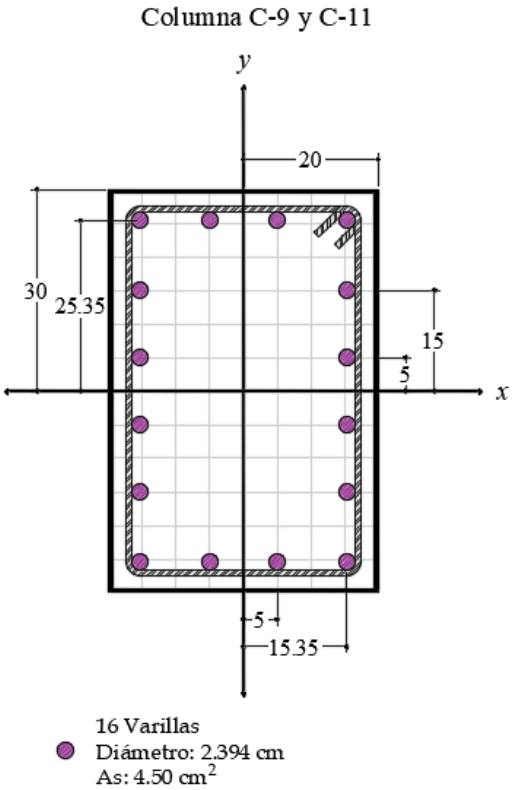


Figura 2.2.5. Secciones transversales del caso 9 (f_c'= 250 kg/cm^2) y del caso 11 (f_c'= 400 kg/cm^2)

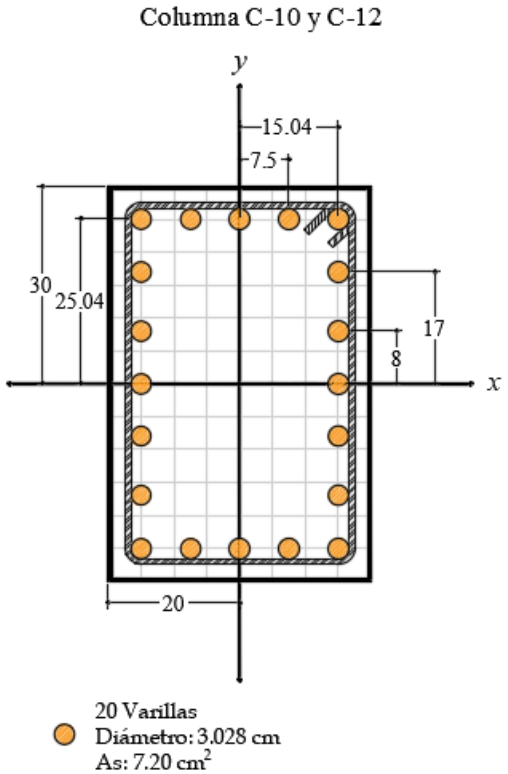


Figura 2.2.6. Secciones transversales del caso 10 (f_c'= 250 kg/cm^2) y del caso 12 (f_c'= 400 kg/cm^2)

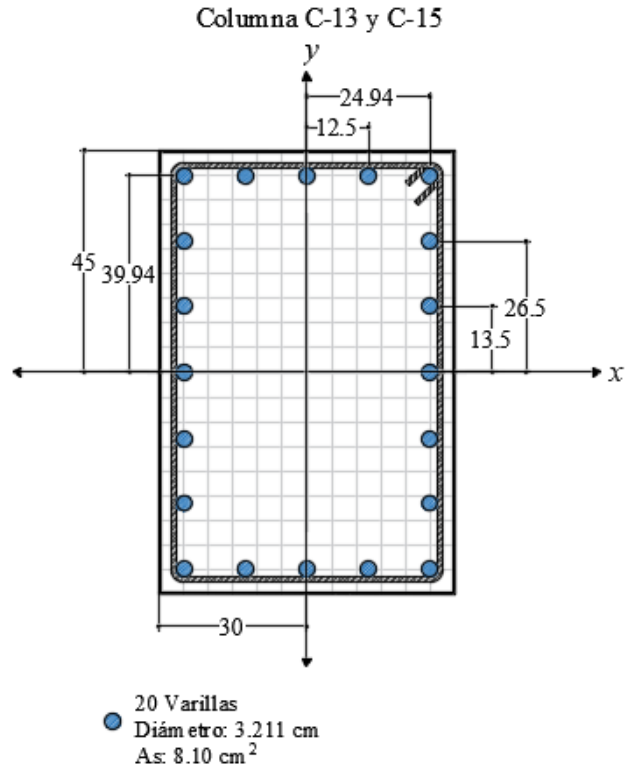


Figura 2.2.7. Secciones transversales del caso 13 (f_c'= 250 kg/cm^2) y del caso 15 (f_c'= 400 kg/cm^2)

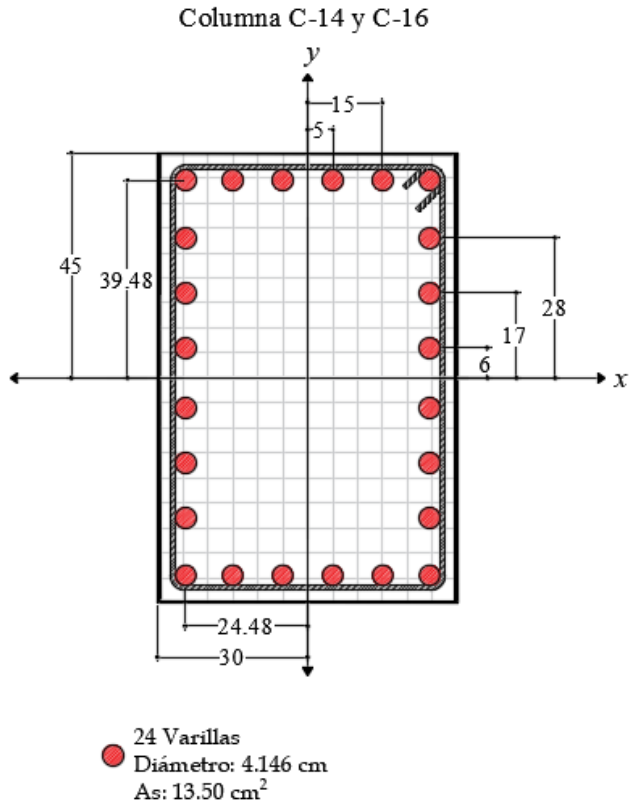


Figura 2.2.8. Secciones transversales del caso 14 (f_c'= 250 kg/cm^2) y del caso 16 (f_c'= 400 kg/cm^2)

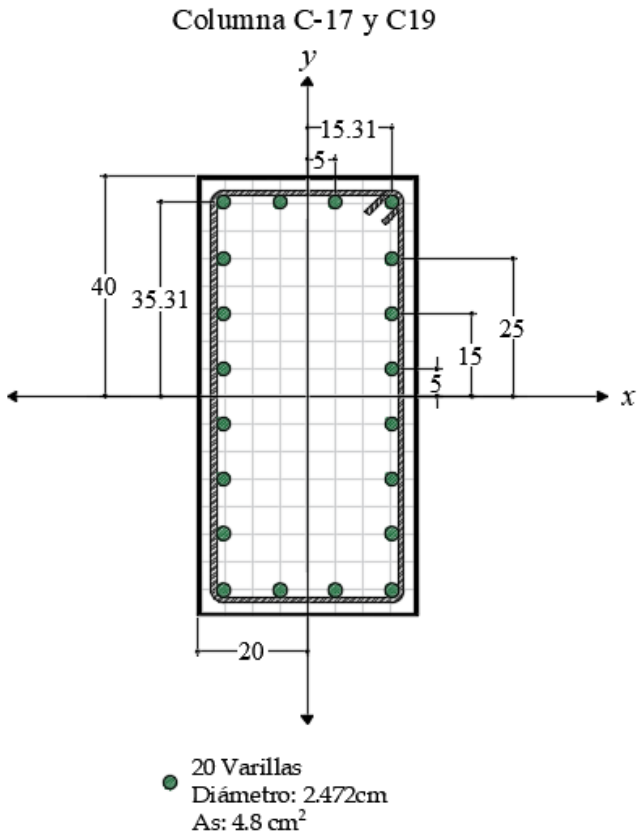


Figura 2.2.9. Secciones transversales del caso 17 (f_c'= 250 kg/cm^2) y del caso 19 (f_c'= 400 kg/cm^2)

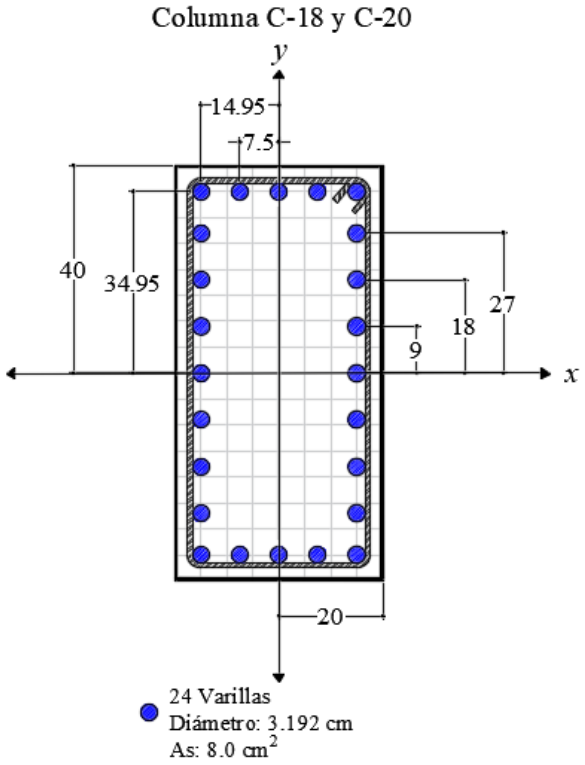


Figura 2.2.10. Secciones transversales del caso 18 (f_c'= 250 kg/cm^2) y del caso 20 (f_c'= 400 kg/cm^2)

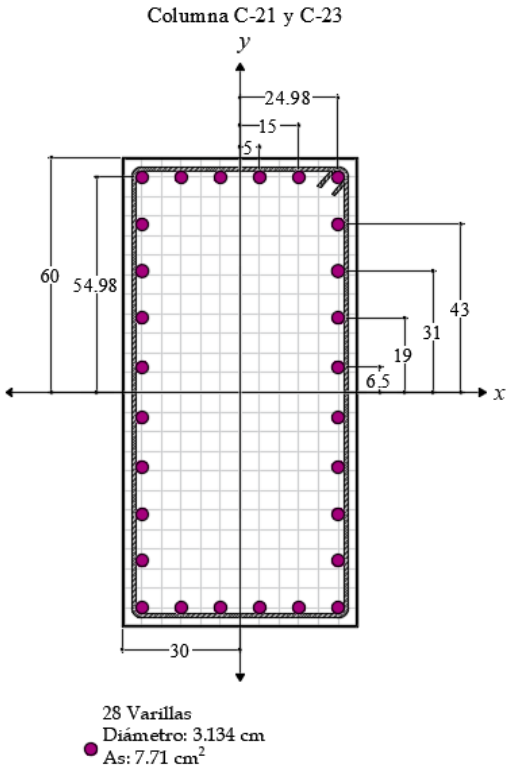


Figura 2.2.11. Secciones transversales del caso 21 (f_c'= 250 kg/cm^2) y del caso 23 (f_c'= 400 kg/cm^2)

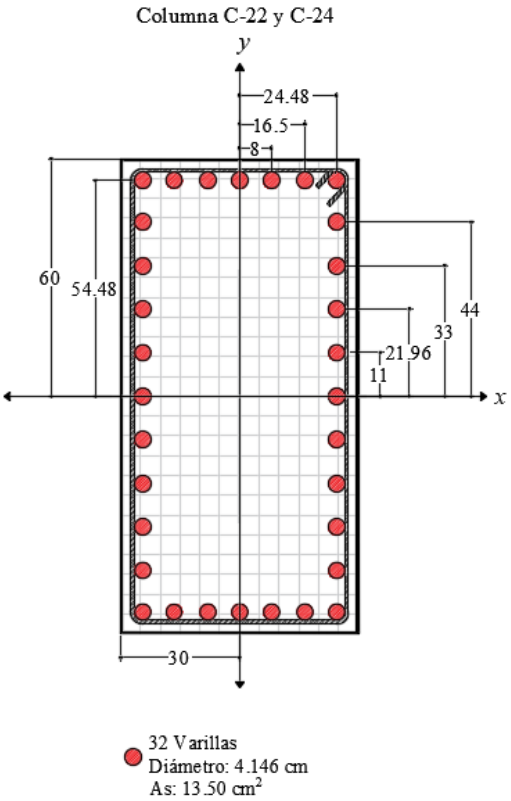


Figura 2.2.12. Secciones transversales del caso 22 (f_c'= 250 kg/cm^2) y del caso 24 (f_c'= 400 kg/cm^2)

Tabla 2.2.1 Propiedades de secciones transversales y materiales de los casos estudiados

No.	Peralte total (h)	Ancho (b)	Relación (h/b)	f'_c (kg/cm²)	$\rho = As/(bh)$
1	40	40	1	250	0.03
2					0.06
3				400	0.03
4					0.06
5	80	80	1	250	0.03
6					0.06
7				400	0.03
8					0.06
9	40	60	1.5	250	0.03
10					0.06
11				400	0.03
12					0.06
13	60	90	1.5	250	0.03
14					0.06
15				400	0.03
16					0.06
17	40	80	2	250	0.03
18					0.06
19				400	0.03
20					0.06
21	60	120	2	250	0.03
22					0.06
23				400	0.03
24					0.06

2.3 Materiales

Los materiales que se consideran en este trabajo son los indicados en la Tabla 2.2.1, con concreto de dos distintas resistencias: 250 kg/cm^2 *y* 400 kg/cm^2. En todos los casos el acero de refuerzo tiene f_y *=4200* kg/cm^2 con porcentajes de refuerzo de 3% y 6%.

2.4 Otras variables

Otras variables que pueden influir en el cálculo de los cocientes r_1 y r_2 son las profundidades e inclinaciones del eje neutro, intensidad de la carga axial, seis valores distintos de α: 1.0, 1.2, 1.4, 1.6, 1.8 y 2.0. Además, se revisa la variación de r_2 de acuerdo con las recomendaciones de diseño siguientes: PCA (2012), Eurocode (1992) e India (2023).

2.5 Cálculo de tríadas P_n, M_{nx} y M_{ny} y de cocientes r_1 y r_2

Una tríada es un grupo de tres elementos especialmente vinculados entre sí. En este caso los tres elementos son los valores nominales de una carga axial (P_n) y dos momentos de flexión (M_{nx} y M_{ny}) los cuales hacen fallar una sección de una columna cuando actúan simultáneamente sobre ella (Fig. 2.5.1). La falla se asume cuando la deformación unitaria máxima en algún punto extremo de la sección transversal alcanza el valor ε_{cu} = 0.003. Este número corresponde a un acuerdo entre especialistas y surge del estudio de los diagramas esfuerzo-deformación de pruebas experimentales en núcleos de concreto, así como en vigas y columnas de concreto simple y concreto reforzado. Este valor ha sido también adoptado por algunos reglamentos de diseño (ACI-318, 2019; NTC-CDMX, 2023).

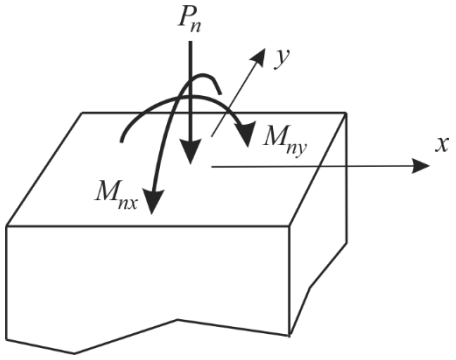


Figura 2.5.1. Columna sujeta a una carga axial y dos momentos de flexión

Para determinar los valores de P_n, M_{nx} y M_{ny} que llevan a la falla de la sección transversal se emplean las suposiciones conocidas de cursos de concreto reforzado (*e.g.*, Wight, 2016) y que marcan los reglamentos de diseño en sus normas para diseño de estructuras de concreto. Estas hipótesis se listan en la Sección 1.6 del Capítulo 1. En la mayoría de estas suposiciones se permite el uso de diagramas simplificados de esfuerzo del concreto que facilitan el cálculo, particularmente cuando éste se hace de forma manual. En este trabajo se emplea el modelo de Kent y Park (Kent, Park, 1971) el cual ha demostrado ser preciso para estimar el esfuerzo en el concreto (σ_c) a partir de su deformación unitaria (ε_c). Este modelo es aplicable a concreto no confinado y para los cálculos efectuados aquí es el modelo apropiado ya que usualmente el diseño de columnas se basa en diagramas de interacción obtenidos sin considerar el tipo de refuerzo transversal o el nivel de confinamiento.

El cálculo de las triadas P_n, M_{nx} y M_{ny} se puede llevar a cabo de manera relativamente sencilla empleando un programa de cómputo como el desarrollado para este trabajo. El cálculo procede como se indica a continuación. Primero se considera la sección transversal para la cual se desea obtener los valores de la tríada. Esta sección se divide en pequeños elementos, los cuales se pueden identificar como fibras o área diferenciales. Por ejemplo, para este trabajo se divide tanto el ancho (b) como el peralte total (h) entre 36 partes. Así, cada sección se compone de 36 x 36 = 1,296 pequeñas áreas. Esto se ilustra en la Fig. 2.5.2, en la cual también se incluye un eje neutro que pasa a una ordenada al origen del sistema de referencia *c0* y con una pendiente *a*. En el programa desarrollado se evalúan las triadas en 52 valores diferentes de *c0* y en 10 valores de la pendiente *a*. El número y los valores de *c0* se seleccionaron para cubrir todas las zonas de un diagrama de

interacción, desde la carga axial máxima (P_0) hasta la mayor carga axial negativa. Los valores de la pendiente a se seleccionan desde a = 0 hasta a = 1.0 en incrementos de 0.1, lo cual cubre inclinaciones del eje neutro de 0º a 45º. Para inclinaciones de 45º a 90º se emplea la sección en una posición rotada 90º y se procede con otro conjunto de cálculos. De esta manera, para cada una de las dos posiciones (sección transversal horizontal y sección transversal vertical) se tienen 52 x 11 = 572 tríadas. Por tanto, para cada sección transversal se calculan aproximadamente 1,000 puntos de su superficie de interacción.

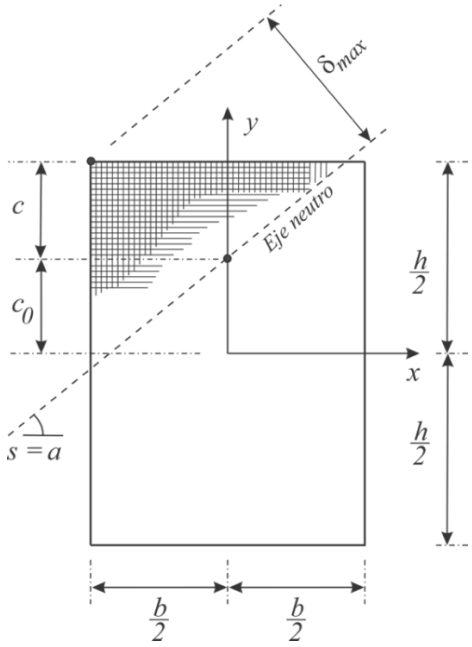


Figura 2.5.2. Sección transversal discretizada con eje neutro y punto más distante a este eje

Para una cierta posición del eje neutro, es fácil determinar las coordenadas de cada uno de los centros de los distintos diferenciales. El sistema de referencia (x, y) se ubica al centro de la sección transversal. En la Fig. 2.5.3 se muestran las coordenadas de un pequeño diferencial de dimensiones dx y dy. Con las coordenadas de estos puntos es posible determinar la distancia δ al eje neutro de cada diferencial.

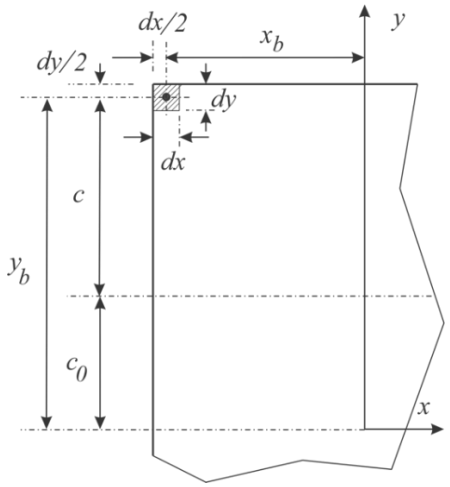


Figura 2.5.3. Coordenadas del centro de un elemento diferencial

Sabiendo que al diferencial extremo le corresponde en la falla la deformación unitaria máxima $\varepsilon_{cu} = 0.003$, y que este diferencial se ubica a una distancia $\delta_{máx}$ del eje neutro, es simple determinar la deformación unitaria (ε_c) que le corresponde a cada diferencial ubicado a una distancia δ del eje neutro. En este cálculo simplemente se recurre a la suposición de que la variación de deformaciones unitaria a través de la sección transversal es lineal. Conocido el valor de ε_c, se calcula el esfuerzo correspondiente con ayuda del modelo de Kent y Park (1971), el cual se ilustra en la Fig. 2.5.4. En el modelo, la rama ascendente no lineal está dada por la Ec. (2.5.1) con $\varepsilon_0 = 0.002$. Para definir la rama descendente se requiere el valor de ε_{50u}, el cual está dada por la Ec. (2.5.2), en la cual f_c' debe insertarse en lb/plg^2.

$$f_c = f_c' \left[\frac{2\,\varepsilon_c}{\varepsilon_0} - \left(\frac{\varepsilon_c}{\varepsilon_0} \right)^2 \right] \tag{2.5.1}$$

$$\varepsilon_{50u} = \frac{3 + 0.002 f_c'}{f_c' - 1000} \tag{2.5.2}$$

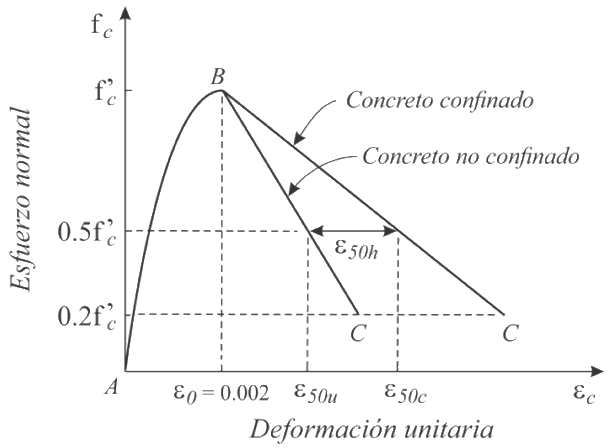


Figura 2.5.4. Modelo para el concreto no confinado de Kent y Park (1971)

En el caso de que en dicha pequeña área se ubique una varilla, se hace el ajuste correspondiente de áreas para evitar su duplicidad. Para tomar en cuenta la aportación a la capacidad de la sección de las varillas, su cálculo de deformación unitaria es similar pero el valor del esfuerzo (ε_s) se obtiene del modelo elasto-plástico de acero (Fig. 2.5.5).

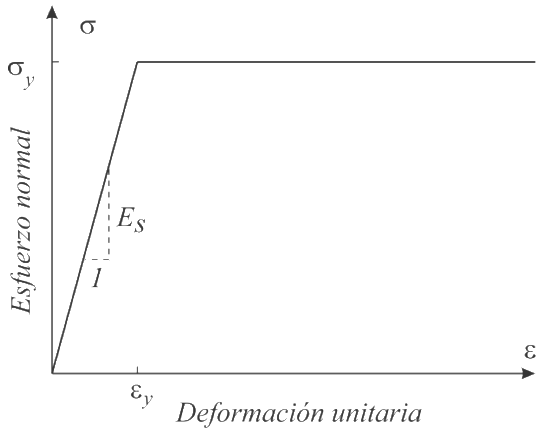


Figura 2.5.5. Modelo elasto-plástico del acero de refuerzo

Con los valores de los esfuerzos y las áreas correspondientes se determinan los valores de las fuerzas para cada uno de los diferenciales. Al final, el valor de la carga axial P_n es igual a la suma de las contribuciones de todas las áreas de concreto y de todas las varillas. De forma similar, los momentos flexionantes M_{nx} y M_{ny} se obtiene de la suma de los productos de las fuerzas por cada uno de los brazos de palanca o coordenadas (x, y).

Además del cálculo de las tríadas, ambos métodos requieren el cálculo de los diagramas de interacción correspondientes a los casos uniaxiales asociados a los ejes principales de la sección transversal. Estos diagramas se obtienen fácilmente para cuando la pendiente a = 0.0 en las posiciones horizontal y vertical de la sección transversal.

Un aspecto que es necesario para calcular los cocientes r_1 y r_2 es el uso de los diagramas de interacción planos. El uso de estos diagramas de interacción planos se explica por separado para cada método.

Para el método de la carga recíproca, es necesario calcular los valores de las cargas axiales que la sección resiste en las posiciones *A* y *B* de la Fig. 1.3.1. Esto se hace con ayuda de los diagramas de interacción planos, sin embargo, es necesario entrar a ellos con los valores de las excentricidades e_y y e_x. Para lograr esto, se hace una interpolación mediante *splines cúbicos* (Burden *et al*., 2010), para determinar los valores de las cargas P_A y P_B para los valores de e_y y e_x. Para esto basta recordar que, en un diagrama de interacción, una excentricidad corresponde a una línea radial en el mismo diagrama y que la intersección de esta línea con el diagrama de interacción conduce al valor de la carga axial resistente.

En el método del contorno de carga, es necesario calcular los valores de los momentos de flexión resistentes en los planos correspondientes a la flexión uniaxial (M_{nx0} y M_{ny0}) para la carga P_n. Esta tarea requiere de interpolaciones y también se hace con ayuda de *splines cúbicos*. En este método, sin embargo, en lugar de entrar a los diagramas de interacción planos con excentricidades para obtener valores de cargas axiales, se entra con la carga axial P_n para determinar M_{nx0} y M_{ny0}.

Ya que el cálculo de las triadas es un proceso separado al cálculo de los valores de r_1 y r_2, se decidió completar las tareas con programas diferentes. Así, para el cálculo de los valores de P_n, M_{nx} y M_{ny} se preparó un programa en lenguaje *C* (Kernighan y Ritchie, 1988) el cual proporciona tablas con los diferentes valores de estas cantidades para cada ordenada *c0* y cada pendiente *a*. Como se indicó antes, para cada sección transversal este programa calcula tablas con los valores

de P_n, M_{nx} y M_{ny} que resultan para cada distancia *c0* y pendiente a. Posteriormente, el cálculo de los valores de r_1 y r_2 se completa con un *script* de Matlab, ya que con este programa es más simple llevar a cabo las interpolaciones con *splines* cúbicos.

Un aspecto importante para el cálculo de los valores del cociente r_2 (método del contorno de carga) es el valor de los coeficientes α_1 y α_2, como se observa en la Ec. 1.4.2. El primer coeficiente afecta el cociente de momentos alrededor de x (M_{nx}/M_{nx0}), mientras que el segundo afecta al cociente de momentos alrededor de y (M_{ny}/M_{ny0}). Ya que en teoría ambos cocientes son menores que la unidad, entre mayor sea el coeficiente α, menor será la contribución del cociente. Por ejemplo, si un cociente fuera 0.7, $(0.7)^{1.0} > (0.7)^{1.5}$. Por tanto, entre mayor sean los valores de los coeficientes, menor resultará el valor de r_2.

Esta observación también indica que el cociente que tenga el coeficiente menor tendrá mayor importancia en el resultado de la ecuación, aun cuando ambos cocientes fueran iguales. Observar que, en una sección cuadrada con armado uniformemente repartido en los cuatro lados, no habría razones para que los exponentes fueran diferentes. Por otro lado, en una sección rectangular pudiera sospecharse que los exponentes pudieran diferentes; sin embargo, dado que se trata de valores normalizados, no hay evidencia que indique como seleccionar el valor relativo de ambos exponentes. Por ello, generalmente se consideran iguales, *i.e.*, $\alpha_1 = \alpha_2 = \alpha$.

En este trabajo sólo se trabaja con un valor del exponente α para ambos cocientes. De esta manera, el coeficiente sólo afecta la forma del contorno de carga, como se ilustra en la Fig. 2.5.6 en donde se ha usado $\alpha = n$.

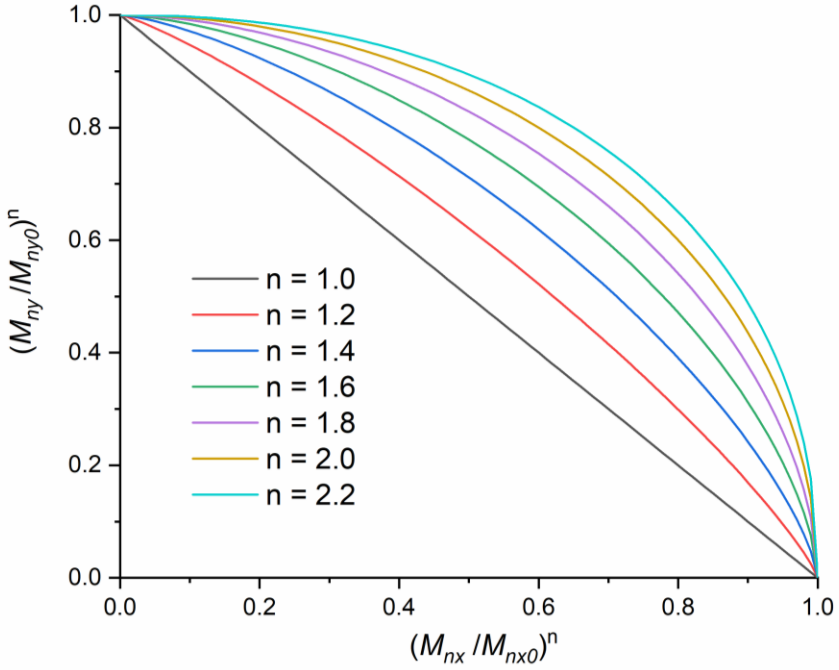


Figura 2.5.6. Forma de los contornos de carga para distintos valores comunes de $\alpha = n$.

Los valores del coeficiente α generalmente varían entre 1.0 y 2.0, en donde el primer valor se asocia a una línea recta y el segundo a una circunferencia (Fig. 2.5.6). Se han llevado a cabo estudios para determinar el mejor valor de este exponente.

Otros estudios han mostrado que el valor del exponente debe ser función del nivel de carga

axial, expresado en términos del cociente P_n/P_0. Por ejemplo, la Asociación del Cemento Portland (PCA, 2012) ofrece gráficos para seleccionar el valor de α no sólo en función de P_n/P_0 sino también en función de la geometría.

La metodología de la Asociación del Cemento Portland (PCA, 2012) señala que el exponente α se obtenga a partir del coeficiente (β) con la expresión siguiente que emplea logaritmos base 10:

$$\alpha = \log 0.5 \,/\, \log \beta \tag{2.5.3}$$

El parámetro beta debe seleccionarse de un conjunto de gráficos preparados a partir del análisis de un conjunto de cálculos efectuados para distintas cargas, secciones transversales y armados. Para fines de diseño, el uso de estas gráficas no es simple; sin embargo, esta variable puede estimarse con las siguientes relaciones que se ajustan a dichos gráficos

$$\begin{aligned} &\text{Si } \ P/P_0 \leq 0.2\text{: } \ \beta = 0.6 \\ &\text{Si } \ P/P_0 > 0.2\text{: } \ \beta = (4 + \ P/P_0)/7 \end{aligned} \tag{2.5.4}$$

Por su parte, el reglamento europeo (Bebby y Narayanan, 2009) también especifica el uso del exponente α en términos de la intensidad de la carga axial P_n/P_0. La variación que propone es la indicada en la Tabla 2.5.1. Para otros valores de la intensidad de la carga axial se debe interpolar linealmente resultando en las ecuaciones de la Tabla 2.5.2.

Tabla 2.5.1 Valores del exponente α para distintas intensidades de carga axial (Eurocode 2)

Carga axial normalizada P/P_0 o P_n/P_0	α
$P_n/P_0 \leq 0.1$	1.0
$P_n/P_0 = 0.7$	1.5
$P_n/P_0 = 1.0$	2.0

Tabla 2.5.2 Ecuaciones para calcular el exponente α en términos de la carga axial (Eurocode 2)

Carga axial normalizada P_n/P_0	**Recomendación del código Europeo**
$0.0 < P_n/P_0 \leq 0.1$	1.0
$0.1 < P_n/P_0 \leq 0.7$	$0.917 + 0.833(P_n/P_0)$
$0.7 < P_n/P_0 \leq 1.0$	$0.333 + 1.667(P_n/P_0)$

El código de diseño de la India (BIS, 2000) recomienda que el valor de α debe tomar los valores indicados en la Tabla 2.5.3, dependiendo del valor normalizado de la carga axial P_n/P_0.

Tabla 2.5.3 Valores del exponente α recomendados por el código de India (2000).

Carga axial normalizada P_n/P_0	**Recomendación del código de India**
$0.0 < P_n/P_0 \leq 0.2$	1.0
$0.2 < P_n/P_0 \leq 0.8$	$0.667 + 1.667(P_n/P_0)$
$0.8 < P_n/P_0 \leq 1.0$	2.0

Un trabajo reciente (Meena, *et al*., 2023) revisó las recomendaciones del reglamento de la India de 2000 y en base a un estudio similar al de esta tesis (basado en 12 secciones transversales con relaciones de aspecto de 1.0, 2.0 y 4.0, porcentajes de refuerzo entre 0.8% y 6%, dos resistencias de concreto y dos resistencias del acero), recomienda los valores indicados en la Tabla 2.5.4. En dicho trabajo se buscó que los valores de α llevaran a la misma seguridad de columnas independientemente del valor de P_n/P_0. Como se observa en la tabla, el trabajo de Meena, *et al*., (2023) destaca que el valor de α también varía con el porcentaje de refuerzo (ρ). Aun cuando es un trabajo actual el uso de la tabla no lo hace tan práctico como en el caso de ecuaciones que recomiendan otros estudios.

Tabla 2.5.4 Valores del exponente α recomendados por Meena, *et al*. (2023) para distintos cocientes de P_{uR}/P_{u0}

f_y	p_c	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
500	0.8	1.96	1.63	1.44	1.32	1.33	1.42	1.49	1.55	1.75	2.06
	1	1.83	1.53	1.39	1.27	1.31	1.40	1.48	1.54	1.73	2.00
	2	1.50	1.34	1.22	1.18	1.26	1.35	1.43	1.49	1.66	1.85
	3	1.33	1.26	1.15	1.16	1.23	1.32	1.40	1.47	1.64	1.78
	4	1.28	1.20	1.13	1.15	1.22	1.30	1.39	1.46	1.62	1.73
	5	1.26	1.16	1.11	1.15	1.22	1.29	1.38	1.44	1.62	1.70
	6	1.24	1.12	1.10	1.14	1.21	1.28	1.37	1.43	1.61	1.67
Minimum		**1.24**	**1.12**	**1.10**	**1.14**	**1.21**	**1.28**	**1.37**	**1.43**	**1.61**	**1.67**
550	0.8	1.85	1.56	1.39	1.29	1.30	1.38	1.44	1.48	1.65	1.85
	1	1.73	1.48	1.34	1.24	1.28	1.35	1.42	1.46	1.62	1.78
	2	1.42	1.29	1.19	1.16	1.22	1.28	1.34	1.39	1.52	1.60
	3	1.31	1.20	1.12	1.15	1.19	1.24	1.30	1.35	1.47	1.51
	4	1.25	1.15	1.10	1.14	1.16	1.21	1.27	1.32	1.44	1.46
	5	1.21	1.12	1.10	1.13	1.15	1.19	1.25	1.31	1.43	1.42
	6	1.18	1.10	1.10	1.12	1.14	1.18	1.24	1.30	1.42	1.39
Minimum		**1.18**	**1.10**	**1.10**	**1.12**	**1.14**	**1.18**	**1.24**	**1.30**	**1.42**	**1.39**
Overall minimum		**1.18**	**1.10**	**1.10**	**1.12**	**1.14**	**1.18**	**1.24**	**1.30**	**1.42**	**1.39**

Los valores de f_y están expresados en N/mm^2.

Con base en los trabajos anteriores, en esta tesis se estudian varias secciones transversales, distintos porcentajes de refuerzo, dos resistencias de concreto y varios niveles de carga axial.

Del análisis de estos trabajos, en esta tesis se propone la siguiente relación para calcular el exponente alfa en función de la carga axial (Tabla 2.5.5), la cual es similar a la propuesta por el estándar de India.

Tabla 2.5.5 Valores del exponente α recomendados en este trabajo (Recomendación J)

Carga axial normalizada P_n/P_0	α
$0.0 < P_n/P_0 \leq 0.3$	1.2
$0.3 < P_n/P_0 \leq 0.8$	$0.72 + 1.6(P_n/P_0)$
$0.8 < P_n/P_0$	2.0

En el resto de esta sección se comparan los valores del parámetro r_2 calculados con la recomendación de PCA, la recomendación del Eurocode, del estándar de India y la propuesta que se propone en este trabajo (propuesta simplemente identificada con la letra *J*).

Capítulo 3

Análisis del método de la carga recíproca

El método de la carga recíproca utiliza una ecuación de un plano para aproximar la capacidad de una sección transversal de una columna sujeta a flexión biaxial. En este caso, el método se evalúa con ayuda de un cociente (r_1) el cual ha sido definido en este trabajo como $r_1 = P_n/P_{xy}$, donde P_n es el valor "exacto" y P_{xy} es el valor estimado con la fórmula de este método. El término exacto se usa para referirse al valor de carga axial calculado de forma precisa usando las hipótesis básicas de la teoría de flexión (Wight, 2015) y la curva esfuerzo-deformación propuesta por Kent y Park (Kent y Park, 1971) para concreto no confinado (Secc. 2.5). Así, si el método de la carga recíproca fuera preciso, el valor de r_1 debiera ser 1.0. Cuando r_2 > 1.0, el método indica que la sección transversal no resiste la aplicación simultánea de los efectos P_n, M_{nx} y M_{ny}. Aquí se analiza la bondad del método de la carga recíproca ante distintas variables, como la magnitud de la carga axial (P_n/P_0), la relación de aspecto de la sección transversal, el porcentaje de refuerzo ρ, etc. En las secciones siguientes se analiza el efecto de cada una de estas variantes estimando en todos los casos el valor de r_1 cuando se emplean en su cálculo tríadas de valores nominales (P_n, M_{nx} y M_{ny}) que corresponden a la falla teórica de la sección transversal. Como se explicó en el Capítulo 2, si r_1 < 1.0 sugiere que la estimación de la carga axial hecha por el método de la carga recíproca es mayor que la "exacta", implicando que el método de la carga es no conservador.

3.1 Efecto de la carga axial

El efecto de la carga axial se estudia monitoreando la influencia del cociente P_n/P_0 en el valor de r_1, donde P_n es la carga nominal que actúa simultáneamente con M_{nx} y M_{ny} para ocasionar la falla de la sección de la columna. La carga P_0 es la fuerza de compresión concéntrica máxima que resiste la sección sin la aplicación de momentos. Se presenta nuevamente la ecuación de r_1, en donde a la ecuación usada para estimar de la fuerza con este método P_{xy} también se le conoce como la fuerza obtenida con la "fórmula de Bresler" :

$$r_1 = \frac{Estimación\ "exacta"\ de\ la\ carga\ \ axial}{Estimación\ de\ la\ carga\ axial\ con\ el\ método\ de\ carga\ recíproca} = P_n/P_{xy} \tag{3.1.1}$$

Es conveniente aclarar dos puntos antes de continuar con el análisis de los valores de r_1. Primero, se aclara que usualmente a la fórmula que usa este método de la carga recíproca para estimar la carga axial se le conoce comúnmente como la "fórmula de Bresler". Sin embargo, esto no es del todo correcto ya que Bresler propuso en su trabajo (Bresler, 1960) dos fórmulas, una para este método y otra para el método del contorno de carga que se analiza en el capítulo 4. Aquí se presenta nuevamente la "fórmula de Bresler".

$$\frac{1}{P_{xy}} = \frac{1}{P_x} + \frac{1}{P_y} - \frac{1}{P_0} \tag{1.3.1}$$

El segundo aspecto por aclarar es el que se refiere al punto de aplicación de las cargas. Como se sabe, la "fórmula de Bresler" estima la carga que resiste una sección de una columna si la acción se aplica con doble excentricidad; por ello, se le denota usualmente como P_{xy}. Se debe observar que esta carga actúa sin la aplicación simultánea de momentos flexionantes. Para que esta carga se pueda comparar con P_n (la cual actúa concentricamente en la sección simultáneamente con momentos flexionantes M_{nx} y M_{ny}) se debe transladar P_{xy} al mismo punto central de la sección. Al hacer esto, P_{xy} resulta ser equivalente a un sistema formado por esta carga actuando en el centro de la sección y por dos momentos flexionantes $M_x = (P_{xy}\, e_y)$ y $M_y = \left(P_{xy}\, e_{yx}\right)$. Más aún, si $P_{xy} = P_n$, entonces $M_x = M_{nx}$ y $M_y = M_{ny}$. Si $P_{xy} < P_n$, entonces $M_x < M_{nx}$ y $M_y < M_{ny}$ (y viceversa).

En la Tabla 3.1.1 se muestran los valores de $r_1 = (P_n/P_{xy})$ calculados para la sección 1 (40 x 40 cm con $\rho = 0.03$) para una pendiente del eje neutro $s = 0.25$. La columna se identifica con números en color azul. Los valores se han tabulado para cargas menores de $0.9P_0$ en la tabla $P_ratio = P_n/P_0$. También se identifican los valores de r_1 calculados con la "fórmula de Bresler" modificada que se presentó en el Capítulo 1 (Ec.1.3.3). Estos valores se identifican con color rojo. Observar que todos los valores de r_1 calculados con ambas aproximaciones resultaron mayor que 1.0, lo cual indica que el método de la carga recíproca es conservador para el caso 1, para todos los valores de carga axial estudiados ($0.0 < P_n/P_0 < 0.9$).

Se observa que para $s = 0.25$, el error (del lado conservador) puede llegar a ser hasta del 7.5% aproximadamente para el caso de la "fórmula de Bresler". En el caso de la ecuación modificada el error resulto ligeramente menor.

Tabla 3.1.1 Valores r_1 de la sección 1 para eje neutro con pendiente $s = 0.25$

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn /Pxym
0.25	0.890	0.018	0.005	482.031	527.653	464.791	1.053	485.298	1.008
0.25	0.882	0.020	0.005	477.954	526.221	459.906	1.055	479.974	1.010
0.25	0.873	0.021	0.005	473.606	524.704	454.740	1.056	474.351	1.012
0.25	0.864	0.023	0.006	468.941	523.098	449.253	1.058	468.383	1.015
0.25	0.854	0.025	0.006	463.947	521.396	443.438	1.059	462.065	1.017
0.25	0.844	0.027	0.006	458.622	519.589	437.291	1.061	455.396	1.019
0.25	0.832	0.029	0.007	452.882	517.666	430.739	1.063	448.294	1.021
0.25	0.820	0.031	0.008	446.548	515.618	423.624	1.065	440.593	1.024
0.25	0.807	0.034	0.008	439.558	513.431	415.894	1.068	432.237	1.027
0.25	0.793	0.036	0.009	432.146	511.130	407.790	1.070	423.490	1.030
0.25	0.778	0.039	0.010	424.333	508.789	399.384	1.072	414.432	1.033
0.25	0.763	0.043	0.010	416.140	506.556	390.791	1.073	405.186	1.035
0.25	0.746	0.046	0.011	407.503	504.486	381.979	1.074	395.721	1.037
0.25	0.728	0.050	0.011	398.349	502.498	372.831	1.074	385.911	1.038
0.25	0.710	0.054	0.012	388.733	500.596	363.394	1.075	375.809	1.039
0.25	0.691	0.059	0.013	378.586	498.708	353.563	1.075	365.305	1.040
0.25	0.671	0.063	0.013	368.054	496.874	343.485	1.075	354.557	1.041
0.25	0.651	0.068	0.014	357.225	495.015	333.193	1.075	343.601	1.042
0.25	0.630	0.073	0.015	346.214	493.045	322.751	1.074	332.508	1.043
0.25	0.609	0.079	0.015	335.067	490.778	312.128	1.073	321.244	1.043

0.25	0.587	0.085	0.016	323.715	488.060	301.220	1.072	309.701	1.043
0.25	0.565	0.091	0.017	312.193	485.023	290.136	1.070	297.996	1.042
0.25	0.542	0.098	0.018	300.345	481.720	278.772	1.069	286.021	1.041
0.25	0.518	0.105	0.020	288.115	478.070	267.070	1.067	273.715	1.041
0.25	0.494	0.113	0.021	275.612	473.938	255.100	1.064	261.156	1.039
0.25	0.468	0.122	0.023	262.694	469.080	242.701	1.061	248.177	1.038
0.25	0.443	0.132	0.025	249.324	463.514	229.883	1.059	234.789	1.037
0.25	0.415	0.144	0.027	235.487	456.982	216.612	1.055	220.964	1.034
0.25	0.387	0.157	0.030	221.084	449.095	202.772	1.051	206.581	1.031
0.25	0.358	0.173	0.034	206.040	439.390	188.286	1.046	191.565	1.028
0.25	0.328	0.193	0.038	190.108	427.862	173.037	1.042	175.802	1.025
0.25	0.297	0.216	0.043	174.285	415.317	158.045	1.033	160.349	1.019
0.25	0.267	0.243	0.048	158.138	403.701	143.217	1.025	145.106	1.011
0.25	0.238	0.274	0.053	139.618	391.210	126.577	1.032	128.050	1.020
0.25	0.209	0.312	0.06	121.744	376.021	110.435	1.039	111.555	1.028
0.25	0.180	0.358	0.069	105.202	355.800	95.257	1.040	96.089	1.031
0.25	0.152	0.415	0.083	89.836	326.459	80.800	1.038	81.397	1.031
0.25	0.125	0.495	0.105	74.402	287.177	66.206	1.039	66.607	1.033
0.25	0.100	0.601	0.131	59.746	250.320	52.870	1.041	53.125	1.036
0.25	0.074	0.788	0.177	44.09	202.665	38.764	1.048	38.901	1.044
0.25	0.046	1.212	0.282	27.566	135.641	23.906	1.064	23.958	1.061

En las Tablas 3.1.2, 3.1.3 y 3.1.4 se incluyen los cálculos de la misma sección cuadrada 1 para pendientes del eje neutro s = 0.5, 0,75 y 1.0, respectivamente.

Se observa que el valor de r_1 resulta menor que 1.0 para algunos casos para s = 0.75 y 1.0. Estos casos con r_1 < 1.0 se identifican en todas las tablas de este capítulo y del Apéndice B con un sombreado de las celdas en azul. Estos fallos no conservadores se presentan para cargas axiales P_n menores a $0.2P_0$. Las cuatro tablas dan una imagen preliminar del efecto de la carga axial en secciones cuadradas. Por lo que se refiere a los errores (conservadores) de las cuatro tablas (s = 0.25, 0.5, 0.75 y 1.0), éstos son aproximadamente del 10%, sin embargo, en un caso resultó hasta de 21%.

Tabla 3.1.2 Valores r_1 de la sección 1 para eje neutro con pendiente s = 0.5

s	P ratio	ey	ex	Px CR	Py CR	Pxy CR	Pn/Pxy	Pxy CR m	Pn/Pxym
0.5	0.863	0.023	0.011	469.043	504.894	435.848	1.089	453.831	1.046
0.5	0.854	0.024	0.011	464.938	502.636	430.645	1.090	448.192	1.048
0.5	0.844	0.026	0.012	460.585	500.259	425.192	1.092	442.289	1.050
0.5	0.834	0.028	0.013	455.956	497.742	419.458	1.093	436.087	1.051
0.5	0.823	0.030	0.014	450.973	495.075	413.380	1.094	429.522	1.053
0.5	0.811	0.031	0.015	445.552	492.264	406.901	1.096	422.532	1.056
0.5	0.799	0.034	0.016	439.747	489.302	400.077	1.098	415.177	1.058
0.5	0.786	0.036	0.017	433.720	486.173	393.039	1.100	407.603	1.060
0.5	0.772	0.038	0.018	427.468	482.907	385.816	1.101	399.840	1.062
0.5	0.758	0.041	0.019	420.973	479.539	378.422	1.102	391.905	1.064
0.5	0.743	0.044	0.020	414.237	476.074	370.871	1.102	383.812	1.065
0.5	0.728	0.046	0.022	407.117	472.436	363.010	1.103	375.399	1.066
0.5	0.712	0.050	0.023	399.617	468.672	354.881	1.103	366.713	1.068
0.5	0.695	0.053	0.024	391.762	464.901	346.581	1.103	357.857	1.068
0.5	0.677	0.056	0.026	383.615	460.997	338.094	1.101	348.815	1.068
0.5	0.659	0.060	0.027	375.070	456.984	329.360	1.100	339.526	1.067
0.5	0.639	0.064	0.029	366.080	452.776	320.307	1.098	329.914	1.066
0.5	0.620	0.068	0.030	356.737	448.313	310.991	1.096	320.039	1.065

0.5	0.599	0.073	0.032	347.062	443.530	301.410	1.093	309.902	1.063
0.5	0.578	0.078	0.034	337.006	438.478	291.572	1.090	299.511	1.062
0.5	0.556	0.083	0.036	326.600	433.197	281.529	1.087	288.924	1.059
0.5	0.534	0.089	0.038	315.750	427.486	271.144	1.084	277.997	1.057
0.5	0.511	0.095	0.041	304.561	421.315	260.505	1.080	266.825	1.054
0.5	0.488	0.102	0.043	292.988	414.571	249.563	1.075	255.357	1.051
0.5	0.464	0.109	0.047	281.113	407.042	238.334	1.071	243.612	1.048
0.5	0.440	0.118	0.050	268.940	398.551	226.801	1.066	231.576	1.044
0.5	0.415	0.127	0.054	256.239	389.035	214.830	1.061	219.110	1.041
0.5	0.389	0.137	0.059	243.011	378.141	202.375	1.057	206.168	1.037
0.5	0.362	0.149	0.064	229.221	365.623	189.415	1.052	192.734	1.034
0.5	0.335	0.164	0.071	214.787	351.209	175.906	1.047	178.765	1.030
0.5	0.306	0.181	0.079	199.578	334.512	161.766	1.041	164.181	1.026
0.5	0.278	0.200	0.088	184.800	317.413	148.291	1.032	150.318	1.019
0.5	0.251	0.223	0.098	170.307	298.961	135.164	1.019	136.845	1.007
0.5	0.222	0.252	0.112	152.415	277.294	119.774	1.017	121.092	1.006
0.5	0.193	0.288	0.129	132.472	253.691	103.387	1.027	104.368	1.017
0.5	0.165	0.334	0.151	113.181	227.865	87.675	1.035	88.380	1.027
0.5	0.136	0.402	0.183	92.929	197.830	71.442	1.044	71.909	1.038
0.5	0.108	0.497	0.228	74.159	167.085	56.653	1.049	56.947	1.044
0.5	0.083	0.632	0.293	56.431	130.231	42.407	1.074	42.571	1.070
0.5	0.057	0.899	0.419	37.862	89.013	27.911	1.118	27.983	1.115
0.5	0.031	1.583	0.753	25.375	46.409	16.910	1.013	16.936	1.012

Tabla 3.1.3 Valores r_1 de la sección 1 para eje neutro con pendiente $s = 0.75$

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
0.75	0.825	0.026	0.019	460.133	480.266	410.302	1.105	426.200	1.064
0.75	0.814	0.028	0.020	456.155	477.123	404.875	1.106	420.347	1.065
0.75	0.803	0.029	0.021	451.956	473.832	399.231	1.107	414.266	1.067
0.75	0.792	0.031	0.022	447.478	470.387	393.326	1.108	407.912	1.068
0.75	0.780	0.033	0.024	442.707	466.799	387.170	1.109	401.295	1.070
0.75	0.768	0.034	0.025	437.747	463.081	380.861	1.110	394.521	1.071
0.75	0.756	0.036	0.026	432.658	459.245	374.456	1.110	387.652	1.072
0.75	0.743	0.038	0.028	427.376	455.232	367.876	1.110	380.606	1.073
0.75	0.729	0.040	0.030	421.905	451.014	361.116	1.110	373.374	1.073
0.75	0.715	0.043	0.031	416.265	446.552	354.176	1.110	365.959	1.074
0.75	0.700	0.045	0.033	410.405	441.852	347.032	1.109	358.337	1.074
0.75	0.685	0.048	0.035	404.265	437.014	339.715	1.108	350.541	1.074
0.75	0.669	0.050	0.036	397.855	432.072	332.262	1.107	342.611	1.074
0.75	0.653	0.053	0.038	391.163	426.983	324.649	1.106	334.522	1.073
0.75	0.636	0.056	0.041	384.145	421.729	316.843	1.104	326.240	1.073
0.75	0.619	0.059	0.043	376.715	416.373	308.834	1.102	317.756	1.071
0.75	0.601	0.063	0.045	368.935	410.806	300.616	1.099	309.062	1.069
0.75	0.582	0.066	0.047	360.797	404.873	292.114	1.096	300.084	1.067
0.75	0.563	0.070	0.050	352.301	398.567	283.348	1.093	290.839	1.064
0.75	0.543	0.075	0.053	343.441	391.891	274.333	1.089	281.350	1.062
0.75	0.523	0.079	0.056	334.147	384.764	265.009	1.085	271.551	1.059
0.75	0.502	0.084	0.059	324.424	377.122	255.375	1.082	261.445	1.057
0.75	0.481	0.090	0.063	314.221	368.912	245.404	1.078	251.004	1.054
0.75	0.459	0.096	0.067	303.581	360.056	235.121	1.073	240.257	1.050
0.75	0.436	0.102	0.071	292.376	350.509	224.466	1.068	229.143	1.046
0.75	0.413	0.110	0.076	280.661	340.123	213.452	1.063	217.676	1.043
0.75	0.389	0.118	0.082	268.425	328.736	202.054	1.058	205.835	1.039
0.75	0.364	0.127	0.089	255.588	316.161	190.213	1.054	193.560	1.036
0.75	0.339	0.138	0.096	242.096	302.255	177.910	1.049	180.835	1.032

0.75	0.314	0.151	0.106	227.927	286.845	165.144	1.045	167.661	1.030
0.75	0.288	0.166	0.117	212.937	270.017	151.942	1.042	154.070	1.027
0.75	0.263	0.181	0.128	199.227	254.393	140.211	1.032	142.022	1.019
0.75	0.238	0.200	0.142	184.579	237.209	127.956	1.022	129.462	1.011
0.75	0.212	0.224	0.160	169.384	218.334	115.398	1.011	116.622	1.000
0.75	0.186	0.256	0.183	150.234	197.599	101.022	1.011	101.959	1.002
0.75	0.160	0.296	0.214	128.773	175.786	85.939	1.021	86.616	1.013
0.75	0.134	0.347	0.253	108.641	151.583	71.513	1.033	71.981	1.026
0.75	0.110	0.416	0.305	89.673	124.761	57.641	1.053	57.945	1.048
0.75	0.086	0.522	0.383	70.125	97.918	44.141	1.078	44.319	1.074
0.75	0.062	0.715	0.524	49.171	69.869	30.458	1.122	30.543	1.119
0.75	0.039	1.099	0.813	30.174	42.551	18.240	1.187	18.270	1.185
0.75	0.017	2.544	1.903	28.322	27.777	14.390	0.631	14.409	0.63

Tabla 3.1.4 Valores r_1 de la sección 1 para eje neutro con pendiente s = 1.0

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
1	0.781	0.028	0.028	454.599	454.599	387.410	1.109	401.553	1.070
1	0.771	0.030	0.030	450.852	450.852	381.999	1.110	395.743	1.071
1	0.760	0.031	0.031	446.899	446.899	376.357	1.110	389.691	1.072
1	0.748	0.033	0.033	442.717	442.717	370.464	1.111	383.376	1.074
1	0.737	0.034	0.034	438.370	438.370	364.416	1.112	376.903	1.075
1	0.724	0.036	0.036	433.933	433.933	358.325	1.112	370.391	1.076
1	0.712	0.038	0.038	429.391	429.391	352.172	1.112	363.820	1.076
1	0.699	0.039	0.039	424.720	424.720	345.931	1.111	357.164	1.076
1	0.685	0.041	0.041	419.946	419.946	339.641	1.110	350.462	1.076
1	0.672	0.043	0.043	415.037	415.037	333.265	1.109	343.678	1.075
1	0.658	0.045	0.045	409.945	409.945	326.748	1.107	336.751	1.074
1	0.643	0.047	0.047	404.630	404.630	320.046	1.105	329.637	1.073
1	0.628	0.050	0.050	399.094	399.094	313.175	1.104	322.352	1.072
1	0.613	0.052	0.052	393.283	393.283	306.077	1.102	314.838	1.071
1	0.597	0.055	0.055	387.141	387.141	298.700	1.100	307.038	1.070
1	0.581	0.058	0.058	380.694	380.694	291.093	1.098	299.006	1.069
1	0.564	0.061	0.061	373.933	373.933	283.261	1.096	290.749	1.067
1	0.547	0.064	0.064	366.933	366.933	275.304	1.092	282.372	1.065
1	0.529	0.067	0.067	359.647	359.647	267.182	1.088	273.834	1.062
1	0.510	0.071	0.071	352.019	352.019	258.848	1.084	265.086	1.059
1	0.491	0.074	0.074	343.997	343.997	250.264	1.080	256.091	1.055
1	0.472	0.079	0.079	335.509	335.509	241.380	1.076	246.796	1.052
1	0.452	0.083	0.083	326.541	326.541	232.204	1.072	237.211	1.049
1	0.432	0.088	0.088	317.020	317.020	222.692	1.067	227.294	1.046
1	0.411	0.094	0.094	306.864	306.864	212.797	1.063	216.995	1.042
1	0.390	0.100	0.100	296.018	296.018	202.507	1.059	206.305	1.040
1	0.368	0.107	0.107	284.478	284.478	191.859	1.055	195.264	1.037
1	0.346	0.115	0.115	272.245	272.245	180.894	1.052	183.919	1.034
1	0.323	0.124	0.124	259.309	259.309	169.647	1.048	172.305	1.032
1	0.300	0.135	0.135	245.508	245.508	158.024	1.045	160.327	1.030
1	0.277	0.147	0.147	231.680	231.680	146.749	1.040	148.733	1.026
1	0.255	0.160	0.160	218.362	218.362	136.224	1.031	137.932	1.018
1	0.233	0.175	0.175	204.202	204.202	125.376	1.022	126.822	1.011
1	0.210	0.194	0.194	188.916	188.916	114.045	1.014	115.240	1.003
1	0.187	0.218	0.218	172.882	172.882	102.560	1.002	103.525	0.993
1	0.163	0.250	0.250	153.777	153.777	89.385	1.004	90.117	0.996
1	0.140	0.291	0.291	130.996	130.996	74.353	1.033	74.859	1.026
1	0.119	0.336	0.336	112.542	112.542	62.685	1.048	63.044	1.042
1	0.099	0.399	0.399	93.683	93.683	51.203	1.065	51.442	1.060

1	0.078	0.497	0.497	74.048	74.048	39.696	1.086	39.840	1.082
1	0.057	0.670	0.670	52.823	52.823	27.744	1.135	27.814	1.132
1	0.036	1.059	1.059	31.371	31.371	16.146	1.214	16.170	1.212
1	0.014	2.615	2.615	26.986	26.986	13.832	0.563	13.850	0.562

Los errores varían con el valor de P_n/P_0. Un ejemplo, se ilustra en la Fig. 3.1.1, donde se observa la variación de r_1 en términos de P_n/P_0 para todos los valores de s estudiados. En la gráfica sólo se presentan los valores de r_1 para relaciones $P_n/P_0 \geq 0.1$. Para estos casos los valores de r_1 en la figura varian entre 1.0 y 1.15 para este caso, sin embargo, para relaciones $P_n/P_0 < 0.1$, r_1 puede resultar con valores menores de 0.7 (ver tablas para s = 0.75 y 1.0, los cuales no aparecen en la figura).

Ya que los valores de r_1 son en su mayoría mayores que 1.0, se puede anticipar que el método es conservador, aun cuando ésto depende de la relación P_n/P_0.

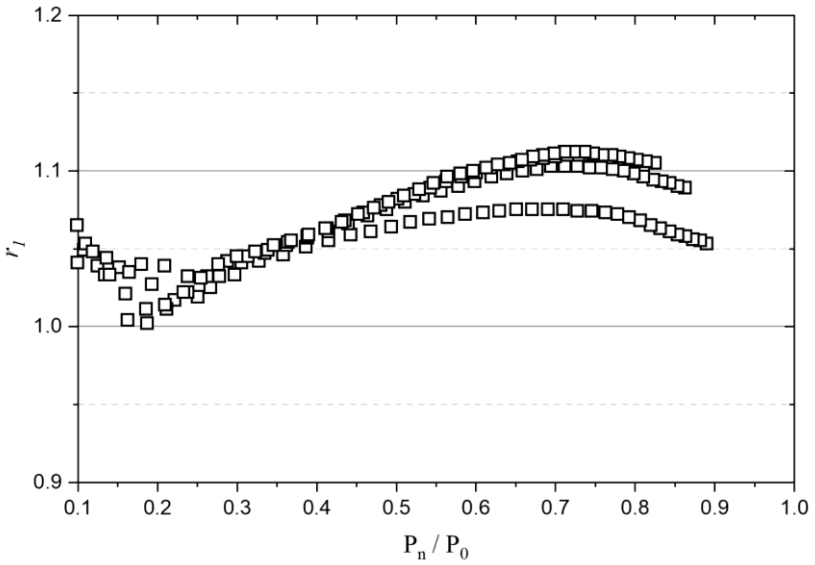


Figura 3.1.1 Variación del cociente r_1 en función de P_n/P_0 para el Caso 1.

Un análisis de los valores de r_1 para la sección cuadrada 5 (80 x 80 cm, ρ = 0.03 y mismo valor de f_c' = 250 kg/cm^2) conduce a resultados muy similares que los observados para la sección 1. Esto sugiere que el tamaño de la sección parece no tener un efecto en las variaciones de r_1. Las tablas de los valores de r_1 para las secciones 2 a 8 se presentan en el Apéndice B.

Ahora se considera la sección 9, la cual es rectangular (b = 40 cm, h = 60 cm, ρ = 0.03 y mismo valor de f_c'). En la Tabla 3.1.5 se muestran los valores de r_1 que se obtienen para distintos valores de P_n/P_0 , cuando la inclinación del eje neutro es s = 0.25 respecto al eje de mayor momento de inercia (eje x-x). En las Tablas 3.1.6, 3.1.7 y 3.1.8 se muestran los valores de r_1 para s = 0.5, s = 0.75 y s = 1.0, respectivamente.

En las Tablas 3.1.9 a 4.1.12 se listan los correspondientes valores de r_1 que se obtienen para cuando la inclinación del eje neutro se toma con respecto al eje de menor momento de inercia (eje *y*-*y*).

Tabla 3.1.5 Valores r_1 de la sección 9 con pendiente de eje neutro *s* = 0.25 respecto al eje *x*-*x*

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
0.25	0.897	0.025	0.003	731.310	802.650	713.713	1.037	745.982	0.992
0.25	0.889	0.027	0.003	725.223	801.094	706.704	1.038	738.328	0.994
0.25	0.881	0.030	0.003	718.582	799.437	699.129	1.040	730.064	0.996
0.25	0.872	0.032	0.004	711.289	797.673	690.901	1.041	721.096	0.998
0.25	0.863	0.035	0.004	703.484	795.775	682.140	1.043	711.558	1.000
0.25	0.853	0.038	0.004	695.126	793.778	672.845	1.045	701.450	1.003
0.25	0.841	0.041	0.005	686.199	791.861	663.134	1.047	690.902	1.005
0.25	0.829	0.044	0.005	676.630	789.784	652.775	1.048	679.665	1.007
0.25	0.817	0.048	0.005	666.315	787.532	641.675	1.050	667.640	1.009
0.25	0.803	0.052	0.006	655.202	785.097	629.796	1.051	654.790	1.011
0.25	0.787	0.057	0.006	643.311	782.305	617.066	1.053	641.040	1.013
0.25	0.771	0.062	0.007	630.695	779.296	603.645	1.054	626.569	1.015
0.25	0.754	0.067	0.007	617.355	776.397	589.743	1.055	611.603	1.017
0.25	0.736	0.073	0.008	603.147	773.690	575.268	1.055	596.050	1.018
0.25	0.717	0.079	0.008	588.118	771.127	560.229	1.056	579.920	1.020
0.25	0.697	0.086	0.009	572.456	768.734	544.798	1.056	563.401	1.021
0.25	0.677	0.093	0.009	556.351	766.369	529.066	1.056	546.593	1.022
0.25	0.656	0.101	0.010	539.962	763.866	513.096	1.055	529.564	1.023
0.25	0.635	0.109	0.010	523.293	761.190	496.883	1.055	512.311	1.023
0.25	0.614	0.117	0.011	506.205	758.406	480.335	1.054	494.738	1.024
0.25	0.592	0.126	0.011	488.726	755.309	463.405	1.054	476.796	1.024
0.25	0.569	0.136	0.012	470.880	751.844	446.112	1.053	458.509	1.024
0.25	0.546	0.147	0.013	452.638	748.042	428.461	1.052	439.884	1.024
0.25	0.522	0.158	0.014	433.859	743.829	410.318	1.050	420.782	1.024
0.25	0.498	0.171	0.015	414.419	739.079	391.559	1.049	401.077	1.025
0.25	0.473	0.185	0.016	394.043	733.828	371.975	1.049	380.555	1.025
0.25	0.447	0.201	0.018	372.904	728.272	351.790	1.047	359.454	1.025
0.25	0.419	0.219	0.019	350.932	721.521	330.758	1.046	337.524	1.025
0.25	0.391	0.241	0.021	328.117	713.523	308.925	1.044	314.820	1.024
0.25	0.361	0.266	0.023	304.258	703.936	286.114	1.042	291.163	1.024
0.25	0.331	0.298	0.026	279.769	692.403	262.711	1.038	266.961	1.022
0.25	0.300	0.333	0.029	254.172	682.647	238.830	1.038	242.338	1.023
0.25	0.271	0.372	0.031	227.862	673.201	214.504	1.042	217.330	1.029
0.25	0.243	0.416	0.034	203.661	660.238	191.844	1.044	194.101	1.031
0.25	0.215	0.466	0.040	181.726	637.732	170.686	1.041	172.471	1.031
0.25	0.190	0.524	0.046	160.421	618.133	150.620	1.038	152.008	1.029
0.25	0.162	0.603	0.053	137.222	592.248	128.803	1.039	129.817	1.031
0.25	0.133	0.722	0.064	112.635	554.485	105.601	1.041	106.282	1.034
0.25	0.105	0.893	0.085	89.441	491.852	83.323	1.041	83.745	1.036
0.25	0.079	1.155	0.114	67.369	421.602	62.487	1.042	62.725	1.038
0.25	0.051	1.718	0.174	43.217	318.203	39.889	1.060	39.986	1.058
0.25	0.021	4.023	0.423	46.912	139.204	36.646	0.473	36.728	0.472

Tabla 3.1.6 Valores r_1 de la sección 9 con pendiente de eje neutro *s* = 0.5 respecto al eje *x-x*

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
0.5	0.883	0.030	0.007	716.969	779.249	682.180	1.067	711.602	1.023
0.5	0.874	0.032	0.007	710.500	776.606	674.330	1.069	703.064	1.026
0.5	0.865	0.035	0.008	703.627	773.825	666.076	1.072	694.096	1.028
0.5	0.856	0.037	0.008	696.304	770.893	657.379	1.074	684.657	1.031
0.5	0.845	0.040	0.009	688.515	767.793	648.224	1.076	674.732	1.033
0.5	0.834	0.043	0.010	680.224	764.506	638.578	1.078	664.288	1.036
0.5	0.823	0.046	0.010	671.355	761.018	628.380	1.080	653.259	1.039
0.5	0.810	0.050	0.011	661.855	757.496	617.709	1.082	641.735	1.041
0.5	0.796	0.053	0.012	651.801	753.836	606.575	1.083	629.726	1.043
0.5	0.782	0.057	0.013	641.239	750.079	595.056	1.084	617.320	1.045
0.5	0.767	0.062	0.013	630.189	746.260	583.199	1.085	604.568	1.047
0.5	0.751	0.067	0.014	618.574	742.360	570.933	1.085	591.397	1.048
0.5	0.735	0.072	0.015	606.262	738.412	558.176	1.086	577.720	1.049
0.5	0.717	0.077	0.016	593.268	734.443	544.960	1.086	563.574	1.050
0.5	0.699	0.083	0.017	579.617	730.421	531.295	1.085	548.973	1.051
0.5	0.680	0.089	0.018	565.310	726.308	517.168	1.085	533.903	1.051
0.5	0.661	0.096	0.019	550.452	722.124	502.681	1.085	518.477	1.052
0.5	0.641	0.103	0.020	535.226	717.554	487.844	1.083	502.707	1.051
0.5	0.620	0.111	0.021	519.376	712.698	472.512	1.082	486.443	1.051
0.5	0.598	0.119	0.023	503.072	707.513	456.823	1.080	469.831	1.050
0.5	0.576	0.128	0.024	486.450	701.821	440.836	1.078	452.938	1.049
0.5	0.554	0.137	0.025	469.504	695.599	424.564	1.076	435.777	1.048
0.5	0.531	0.147	0.027	452.156	688.759	407.938	1.074	418.280	1.047
0.5	0.507	0.158	0.029	434.316	681.169	390.873	1.071	400.357	1.045
0.5	0.483	0.170	0.031	415.848	672.550	373.212	1.068	381.849	1.044
0.5	0.459	0.183	0.034	396.534	662.474	354.713	1.066	362.506	1.043
0.5	0.433	0.198	0.037	376.578	650.966	335.625	1.065	342.594	1.043
0.5	0.406	0.215	0.040	355.890	638.162	315.986	1.061	322.156	1.040
0.5	0.378	0.234	0.044	334.305	623.531	295.605	1.056	300.998	1.037
0.5	0.350	0.258	0.049	311.654	606.366	274.296	1.051	278.933	1.034
0.5	0.320	0.285	0.055	288.824	586.924	252.912	1.045	256.849	1.029
0.5	0.291	0.317	0.061	265.855	566.590	231.791	1.036	235.094	1.022
0.5	0.262	0.355	0.068	238.507	542.076	207.239	1.041	209.875	1.028
0.5	0.232	0.400	0.077	211.654	514.613	183.293	1.045	185.353	1.033
0.5	0.203	0.458	0.089	184.778	481.635	159.337	1.048	160.891	1.038
0.5	0.175	0.523	0.102	160.544	448.987	138.047	1.048	139.212	1.039
0.5	0.147	0.614	0.120	134.522	407.745	115.286	1.055	116.097	1.048
0.5	0.120	0.737	0.149	110.241	355.106	93.678	1.058	94.213	1.052
0.5	0.092	0.940	0.197	84.600	291.159	71.211	1.062	71.520	1.057
0.5	0.064	1.299	0.277	59.215	219.275	49.417	1.073	49.565	1.069
0.5	0.035	2.274	0.494	31.223	117.175	25.413	1.150	25.453	1.148
0.5	0.008	9.443	2.167	278.597	45.111	40.742	0.165	40.842	0.165

Tabla 3.1.7 Valores r_1 de la sección 9 con pendiente de eje neutro *s* = 0.75 respecto al eje *x-x*

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
0.75	0.863	0.035	0.011	704.153	755.656	653.023	1.090	679.933	1.046
0.75	0.853	0.037	0.012	697.604	752.376	644.978	1.092	671.216	1.049
0.75	0.844	0.039	0.013	690.677	748.899	636.542	1.093	662.085	1.051
0.75	0.833	0.042	0.014	683.469	745.061	627.692	1.095	652.516	1.053
0.75	0.822	0.044	0.015	675.820	741.001	618.410	1.097	642.491	1.056
0.75	0.810	0.047	0.016	667.723	736.731	608.711	1.098	632.028	1.058
0.75	0.798	0.051	0.017	659.217	732.240	598.636	1.100	621.174	1.060
0.75	0.785	0.054	0.018	650.340	727.501	588.212	1.101	609.957	1.062

0.75	0.771	0.057	0.019	641.095	722.637	577.536	1.102	598.485	1.063
0.75	0.757	0.061	0.020	631.422	717.583	566.529	1.102	586.673	1.064
0.75	0.742	0.065	0.021	621.369	712.379	555.267	1.102	574.604	1.065
0.75	0.726	0.070	0.023	610.833	707.013	543.670	1.102	562.195	1.065
0.75	0.710	0.075	0.024	599.730	701.459	531.672	1.101	549.375	1.066
0.75	0.693	0.079	0.025	588.073	695.722	519.301	1.100	536.176	1.066
0.75	0.675	0.085	0.027	575.785	689.784	506.501	1.099	522.542	1.066
0.75	0.657	0.090	0.028	562.922	683.638	493.328	1.098	508.533	1.065
0.75	0.638	0.097	0.030	549.503	677.218	479.778	1.096	494.147	1.065
0.75	0.618	0.103	0.032	535.538	670.455	465.843	1.095	479.378	1.064
0.75	0.598	0.110	0.034	521.072	663.154	451.486	1.092	464.188	1.062
0.75	0.577	0.118	0.036	505.959	655.346	436.643	1.090	448.513	1.061
0.75	0.555	0.126	0.038	490.306	647.145	421.472	1.086	432.521	1.059
0.75	0.533	0.134	0.040	474.204	638.431	406.012	1.083	416.255	1.056
0.75	0.510	0.144	0.043	457.560	628.909	390.106	1.079	399.553	1.053
0.75	0.487	0.154	0.046	440.351	618.492	373.749	1.075	382.411	1.050
0.75	0.463	0.165	0.049	422.436	606.946	356.805	1.071	364.691	1.047
0.75	0.439	0.178	0.053	403.739	593.951	339.175	1.067	346.294	1.045
0.75	0.414	0.192	0.057	384.319	579.279	320.911	1.063	327.276	1.043
0.75	0.388	0.208	0.062	364.204	562.516	301.998	1.060	307.629	1.041
0.75	0.362	0.226	0.068	343.209	543.482	282.366	1.056	287.282	1.038
0.75	0.334	0.248	0.075	321.179	521.558	261.869	1.052	266.092	1.036
0.75	0.307	0.272	0.083	299.306	498.343	241.806	1.046	245.402	1.031
0.75	0.279	0.300	0.092	277.703	473.579	222.203	1.037	225.236	1.023
0.75	0.251	0.336	0.104	251.926	444.841	199.790	1.036	202.239	1.024
0.75	0.222	0.379	0.118	223.571	412.430	175.891	1.043	177.786	1.032
0.75	0.194	0.431	0.135	196.759	378.828	153.612	1.044	155.055	1.034
0.75	0.167	0.497	0.156	169.948	343.238	131.832	1.044	132.894	1.036
0.75	0.139	0.587	0.187	141.497	302.607	109.173	1.052	109.900	1.045
0.75	0.112	0.717	0.232	113.595	257.189	87.114	1.058	87.576	1.053
0.75	0.084	0.931	0.305	85.489	197.852	64.352	1.078	64.604	1.074
0.75	0.058	1.319	0.437	58.247	134.396	42.741	1.114	42.852	1.111
0.75	0.032	2.279	0.777	31.168	69.66	22.11	1.202	22.140	1.200
0.75	0.006	12.129	4.259	259.100	214.501	136.811	0.035	137.955	0.035

Tabla 3.1.8 Valores r_1 de la sección 9 con pendiente de eje neutro s = 1.0 respecto al eje x-x

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
1	0.837	0.038	0.017	694.541	730.989	626.704	1.102	651.448	1.060
1	0.827	0.040	0.018	688.115	726.691	618.357	1.103	642.434	1.062
1	0.817	0.042	0.019	681.378	722.135	609.668	1.105	633.060	1.064
1	0.806	0.045	0.020	674.324	717.371	600.678	1.107	623.372	1.066
1	0.794	0.048	0.021	666.946	712.405	591.397	1.108	613.383	1.068
1	0.782	0.050	0.023	659.261	707.223	581.844	1.109	603.113	1.070
1	0.770	0.054	0.024	651.258	701.775	571.988	1.110	592.529	1.072
1	0.757	0.057	0.025	642.966	696.089	561.883	1.111	581.692	1.073
1	0.743	0.060	0.027	634.401	690.206	551.580	1.111	570.657	1.074
1	0.729	0.064	0.028	625.621	684.174	541.163	1.111	559.514	1.074
1	0.714	0.067	0.030	616.549	677.956	530.562	1.110	548.190	1.074
1	0.698	0.071	0.032	607.027	671.456	519.611	1.108	536.507	1.074
1	0.682	0.076	0.033	597.042	664.600	508.277	1.107	524.433	1.073
1	0.665	0.080	0.035	586.465	657.310	496.444	1.105	511.845	1.072
1	0.648	0.085	0.037	575.391	649.797	484.324	1.104	498.971	1.071
1	0.630	0.090	0.039	563.811	642.048	471.921	1.101	485.816	1.070
1	0.612	0.096	0.041	551.736	634.021	459.234	1.099	472.382	1.068

1	0.593	0.101	0.044	539.139	625.673	446.243	1.096	458.648	1.066
1	0.573	0.108	0.046	525.982	616.927	432.903	1.092	444.567	1.064
1	0.553	0.114	0.049	512.173	607.613	419.095	1.089	430.018	1.061
1	0.532	0.122	0.052	497.612	597.587	404.721	1.085	414.899	1.058
1	0.511	0.130	0.055	482.430	586.831	389.902	1.081	399.338	1.056
1	0.489	0.139	0.058	466.626	575.191	374.611	1.077	383.314	1.053
1	0.467	0.148	0.062	450.170	562.529	358.821	1.073	366.797	1.050
1	0.444	0.159	0.066	432.965	548.679	342.459	1.069	349.718	1.047
1	0.420	0.170	0.071	414.917	533.519	325.488	1.065	332.038	1.044
1	0.396	0.183	0.077	395.781	516.801	307.742	1.062	313.591	1.043
1	0.372	0.198	0.083	375.843	498.171	289.363	1.060	294.528	1.041
1	0.346	0.215	0.091	355.075	477.452	270.373	1.057	274.877	1.040
1	0.320	0.235	0.100	333.383	454.478	250.770	1.054	254.640	1.038
1	0.295	0.257	0.109	312.459	431.258	232.177	1.047	235.491	1.032
1	0.269	0.282	0.121	291.145	406.285	213.498	1.038	216.297	1.025
1	0.242	0.314	0.135	268.010	378.452	193.746	1.030	196.049	1.018
1	0.214	0.354	0.154	239.244	347.144	170.989	1.035	172.780	1.024
1	0.188	0.400	0.175	211.770	316.631	149.966	1.036	151.341	1.027
1	0.163	0.457	0.202	185.437	285.349	130.124	1.033	131.158	1.025
1	0.137	0.536	0.239	156.372	251.098	109.106	1.036	109.833	1.029
1	0.110	0.656	0.295	125.024	204.611	85.663	1.062	86.110	1.057
1	0.086	0.830	0.377	96.898	157.414	64.680	1.090	64.935	1.086
1	0.062	1.122	0.515	69.590	111.776	45.240	1.123	45.365	1.120
1	0.037	1.813	0.839	40.472	63.794	25.529	1.199	25.568	1.197
1	0.012	5.558	2.594	106.078	68.798	43.956	0.221	44.073	0.220

Tabla 3.1.9 Valores r_1 de la sección 9 con pendiente de eje neutro s = 0.25 respecto al eje *y-y*

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
0.25	0.876	0.011	0.022	775.883	709.733	673.095	1.073	701.721	1.029
0.25	0.867	0.012	0.024	773.273	703.457	665.515	1.075	693.487	1.032
0.25	0.858	0.013	0.025	770.519	696.761	657.514	1.077	684.804	1.034
0.25	0.849	0.013	0.027	767.607	689.640	649.089	1.078	675.669	1.036
0.25	0.838	0.014	0.029	764.524	682.075	640.221	1.080	666.066	1.038
0.25	0.827	0.015	0.031	761.250	673.944	630.806	1.082	655.881	1.041
0.25	0.816	0.016	0.033	757.773	665.067	620.692	1.084	644.954	1.043
0.25	0.803	0.018	0.036	753.928	655.591	609.916	1.086	633.328	1.046
0.25	0.790	0.019	0.038	749.921	645.682	598.779	1.088	621.327	1.049
0.25	0.776	0.020	0.041	745.806	635.327	587.314	1.089	608.992	1.051
0.25	0.761	0.022	0.044	741.597	624.523	575.538	1.091	596.340	1.053
0.25	0.745	0.023	0.047	737.300	613.232	563.430	1.091	583.350	1.054
0.25	0.729	0.025	0.050	732.817	601.243	550.764	1.092	569.784	1.056
0.25	0.712	0.026	0.054	728.216	588.644	537.669	1.093	555.780	1.057
0.25	0.694	0.028	0.058	723.669	575.406	524.221	1.092	541.423	1.058
0.25	0.675	0.030	0.062	718.764	561.569	510.245	1.092	526.528	1.058
0.25	0.656	0.031	0.067	713.642	547.155	495.849	1.091	511.213	1.058
0.25	0.636	0.033	0.072	708.317	532.177	481.066	1.090	495.514	1.058
0.25	0.615	0.035	0.077	702.784	516.775	466.020	1.089	479.565	1.058
0.25	0.594	0.037	0.082	696.948	500.876	450.619	1.087	463.271	1.057
0.25	0.572	0.039	0.088	690.695	484.527	434.873	1.085	446.645	1.056
0.25	0.550	0.042	0.094	683.875	467.935	418.910	1.083	429.823	1.055
0.25	0.527	0.044	0.101	676.162	450.868	402.460	1.079	412.522	1.053
0.25	0.503	0.047	0.108	667.523	433.299	385.536	1.076	394.760	1.051
0.25	0.478	0.051	0.117	657.896	415.292	368.218	1.072	376.623	1.048

0.25	0.454	0.055	0.126	647.304	396.636	350.396	1.068	357.999	1.045
0.25	0.428	0.060	0.136	635.420	377.299	332.003	1.063	338.821	1.041
0.25	0.401	0.065	0.148	621.956	357.189	312.959	1.058	319.010	1.038
0.25	0.374	0.072	0.161	606.313	336.233	293.145	1.052	298.448	1.034
0.25	0.346	0.080	0.177	587.819	314.315	272.437	1.047	277.011	1.030
0.25	0.316	0.089	0.197	565.672	291.123	250.587	1.041	254.452	1.025
0.25	0.287	0.100	0.219	543.028	268.471	229.665	1.031	232.907	1.017
0.25	0.258	0.112	0.246	517.463	245.817	208.838	1.018	211.515	1.005
0.25	0.229	0.126	0.277	489.859	218.843	185.229	1.020	187.332	1.008
0.25	0.201	0.143	0.316	458.573	190.422	160.771	1.029	162.353	1.019
0.25	0.172	0.166	0.366	421.629	162.432	136.687	1.038	137.828	1.030
0.25	0.144	0.197	0.432	377.420	136.052	113.798	1.046	114.588	1.039
0.25	0.118	0.238	0.517	330.399	111.189	92.523	1.054	93.044	1.048
0.25	0.093	0.297	0.639	279.810	87.130	72.261	1.065	72.579	1.060
0.25	0.070	0.400	0.825	211.924	65.022	52.949	1.086	53.120	1.083
0.25	0.045	0.618	1.222	133.577	40.495	32.291	1.156	32.354	1.154
0.25	0.020	1.417	2.671	53.899	74.166	32.442	0.504	32.506	0.503

Tabla 3.1.10 Valores r_2 de la sección 9 con pendiente de eje neutro s = 0.5 respecto al eje y-y

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
0.5	0.823	0.029	0.027	721.832	687.835	614.612	1.105	638.393	1.064
0.5	0.813	0.030	0.029	716.969	681.755	606.279	1.106	629.407	1.065
0.5	0.802	0.032	0.031	711.808	675.363	597.586	1.108	620.043	1.067
0.5	0.791	0.034	0.032	706.437	668.597	588.559	1.109	610.330	1.069
0.5	0.779	0.036	0.034	700.813	661.524	579.234	1.110	600.309	1.071
0.5	0.767	0.038	0.036	694.952	654.130	569.627	1.111	589.996	1.073
0.5	0.754	0.040	0.038	688.857	646.485	559.801	1.112	579.462	1.074
0.5	0.741	0.042	0.040	682.578	638.608	549.819	1.112	568.772	1.075
0.5	0.728	0.044	0.042	676.097	630.472	539.656	1.112	557.904	1.076
0.5	0.713	0.047	0.045	669.408	622.078	529.321	1.112	546.865	1.076
0.5	0.699	0.049	0.047	662.481	613.339	518.743	1.111	535.581	1.076
0.5	0.683	0.052	0.050	655.316	604.143	507.857	1.110	523.985	1.076
0.5	0.668	0.055	0.052	647.955	594.536	496.736	1.109	512.155	1.075
0.5	0.651	0.058	0.055	640.374	584.506	485.372	1.107	500.084	1.075
0.5	0.635	0.061	0.059	632.564	574.011	473.746	1.105	487.750	1.074
0.5	0.618	0.064	0.062	624.434	562.959	461.761	1.103	475.057	1.072
0.5	0.600	0.068	0.065	615.846	551.303	449.336	1.101	461.915	1.071
0.5	0.581	0.072	0.069	606.786	539.158	436.565	1.098	448.430	1.069
0.5	0.562	0.076	0.073	597.281	526.503	423.474	1.095	434.629	1.067
0.5	0.542	0.080	0.078	587.279	513.395	410.100	1.091	420.553	1.064
0.5	0.522	0.084	0.083	576.618	499.606	396.249	1.087	405.999	1.061
0.5	0.501	0.089	0.088	565.213	485.088	381.888	1.082	390.937	1.057
0.5	0.479	0.095	0.093	552.986	469.946	367.093	1.078	375.446	1.054
0.5	0.457	0.101	0.100	539.807	454.091	351.796	1.073	359.460	1.050
0.5	0.435	0.108	0.107	525.548	437.411	335.932	1.068	342.913	1.046
0.5	0.412	0.116	0.114	509.939	419.901	319.451	1.063	325.758	1.042
0.5	0.388	0.124	0.123	492.715	401.502	302.292	1.058	307.934	1.039
0.5	0.363	0.134	0.133	473.855	382.236	284.545	1.054	289.539	1.036
0.5	0.339	0.146	0.145	453.086	362.002	266.146	1.050	270.509	1.033
0.5	0.313	0.160	0.158	430.091	340.798	247.083	1.046	250.839	1.03
0.5	0.288	0.176	0.173	406.619	320.002	228.722	1.040	231.937	1.025
0.5	0.263	0.194	0.190	381.844	298.765	210.357	1.033	213.074	1.020
0.5	0.238	0.216	0.211	354.745	275.986	191.199	1.026	193.441	1.014
0.5	0.213	0.242	0.236	326.778	253.737	172.738	1.015	174.566	1.005
0.5	0.187	0.274	0.267	297.518	227.959	153.005	1.010	154.437	1.001

0.5	0.161	0.318	0.308	264.828	195.821	130.368	1.021	131.407	1.013
0.5	0.137	0.373	0.360	226.930	165.464	108.247	1.041	108.962	1.034
0.5	0.113	0.444	0.428	190.723	137.348	88.403	1.056	88.879	1.050
0.5	0.089	0.554	0.534	150.864	107.078	67.772	1.087	68.052	1.082
0.5	0.066	0.736	0.708	110.373	77.372	48.140	1.132	48.281	1.128
0.5	0.043	1.104	1.057	70.825	48.44	29.805	1.196	29.859	1.194
0.5	0.020	2.380	2.268	30.004	49.746	19.15	0.846	19.173	0.845

Tabla 3.1.11 Valores r_2 de la sección 9 con pendiente de eje neutro s = 0.75 respecto al eje y-y

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
0.75	0.760	0.049	0.030	661.955	676.569	562.884	1.113	582.766	1.075
0.75	0.749	0.052	0.032	655.887	671.146	554.791	1.114	574.094	1.076
0.75	0.738	0.054	0.033	649.669	665.472	546.514	1.114	565.237	1.077
0.75	0.727	0.057	0.035	643.298	659.563	538.072	1.114	556.211	1.078
0.75	0.715	0.059	0.036	636.768	653.495	529.519	1.114	547.077	1.078
0.75	0.703	0.062	0.038	630.073	647.299	520.877	1.113	537.857	1.078
0.75	0.690	0.065	0.039	623.183	640.943	512.109	1.112	528.513	1.078
0.75	0.677	0.068	0.041	616.031	634.381	503.151	1.111	518.977	1.077
0.75	0.664	0.071	0.043	608.587	627.731	494.064	1.109	509.315	1.076
0.75	0.651	0.074	0.045	600.781	620.886	484.745	1.107	499.417	1.075
0.75	0.636	0.078	0.047	592.661	613.790	475.202	1.105	489.294	1.073
0.75	0.622	0.081	0.049	584.225	606.399	465.422	1.103	478.932	1.072
0.75	0.607	0.085	0.051	575.453	598.698	455.395	1.100	468.321	1.070
0.75	0.592	0.089	0.054	566.330	590.678	445.124	1.098	457.466	1.068
0.75	0.577	0.093	0.056	556.812	582.233	434.536	1.095	446.290	1.066
0.75	0.561	0.098	0.059	546.900	573.355	423.649	1.092	434.813	1.064
0.75	0.545	0.103	0.062	536.578	564.035	412.466	1.089	423.041	1.062
0.75	0.528	0.108	0.065	525.814	554.249	400.979	1.086	410.966	1.060
0.75	0.511	0.113	0.068	514.565	543.980	389.176	1.083	398.577	1.058
0.75	0.493	0.119	0.071	502.693	533.201	376.990	1.080	385.805	1.055
0.75	0.476	0.126	0.075	490.261	521.870	364.464	1.077	372.697	1.053
0.75	0.458	0.133	0.079	477.273	509.880	351.577	1.074	359.232	1.051
0.75	0.439	0.140	0.083	463.676	497.080	338.265	1.070	345.345	1.048
0.75	0.420	0.148	0.088	449.493	483.468	324.574	1.067	331.087	1.046
0.75	0.400	0.158	0.094	434.555	469.038	310.456	1.063	316.410	1.043
0.75	0.380	0.168	0.100	418.778	453.671	295.860	1.060	301.262	1.041
0.75	0.360	0.179	0.107	401.987	437.215	280.687	1.057	285.545	1.039
0.75	0.339	0.192	0.115	384.293	419.692	265.061	1.055	269.388	1.038
0.75	0.318	0.206	0.123	365.767	401.050	249.049	1.052	252.866	1.037
0.75	0.297	0.222	0.133	347.395	382.230	233.501	1.048	236.853	1.034
0.75	0.276	0.239	0.144	329.196	363.177	218.387	1.042	221.316	1.029
0.75	0.255	0.260	0.157	309.951	342.851	202.804	1.036	205.328	1.023
0.75	0.233	0.284	0.172	289.889	321.161	186.876	1.029	189.017	1.017
0.75	0.211	0.313	0.191	268.148	297.967	170.265	1.022	172.040	1.012
0.75	0.190	0.347	0.212	243.886	275.407	153.395	1.021	154.835	1.012
0.75	0.169	0.387	0.237	218.847	252.951	136.788	1.020	137.932	1.012
0.75	0.149	0.435	0.267	194.944	227.206	120.209	1.023	121.092	1.016
0.75	0.129	0.498	0.308	169.451	195.598	102.022	1.041	102.657	1.034
0.75	0.108	0.584	0.363	142.316	164.196	84.000	1.065	84.430	1.059
0.75	0.089	0.703	0.437	116.038	134.407	67.359	1.088	67.635	1.083
0.75	0.069	0.893	0.555	89.463	102.411	50.684	1.121	50.840	1.118
0.75	0.049	1.231	0.768	62.804	70.540	34.618	1.170	34.691	1.168
0.75	0.030	1.962	1.236	36.775	39.952	19.604	1.266	19.627	1.265
0.75	0.012	4.689	2.961	68.896	96.346	42.227	0.240	42.335	0.240

Tabla 3.1.12 Valores r_1 de la sección 9 con pendiente de eje neutro *s* = 1.0 respecto al eje *y-y*

s	P_ratio	ey	ex	Px_CR	Py_CR	Pxy_CR	Pn/Pxy	Pxy_CR_m	Pn/Pxym
1	0.701	0.071	0.031	608.464	672.437	521.253	1.109	538.258	1.074
1	0.690	0.074	0.032	601.909	667.951	513.785	1.108	530.299	1.073
1	0.679	0.076	0.034	595.126	663.276	506.118	1.107	522.134	1.073
1	0.668	0.079	0.035	588.062	658.407	498.217	1.106	513.729	1.072
1	0.656	0.083	0.036	580.778	653.432	490.184	1.105	505.193	1.072
1	0.645	0.086	0.037	573.279	648.376	482.042	1.103	496.549	1.071
1	0.633	0.089	0.039	565.563	643.215	473.781	1.102	487.787	1.070
1	0.621	0.093	0.040	557.619	637.926	465.385	1.100	478.893	1.069
1	0.608	0.097	0.042	549.445	632.502	456.854	1.098	469.864	1.068
1	0.596	0.101	0.043	541.032	626.925	448.180	1.096	460.694	1.066
1	0.583	0.105	0.045	532.383	621.191	439.368	1.094	451.388	1.065
1	0.570	0.109	0.046	523.487	615.258	430.395	1.092	441.923	1.063
1	0.556	0.113	0.048	514.284	609.050	421.196	1.089	432.230	1.061
1	0.542	0.118	0.050	504.704	602.505	411.703	1.087	422.239	1.060
1	0.528	0.123	0.052	494.835	595.647	402.000	1.084	412.039	1.058
1	0.514	0.129	0.054	484.709	588.471	392.118	1.082	401.663	1.056
1	0.500	0.134	0.056	474.322	580.923	382.042	1.079	391.098	1.054
1	0.485	0.140	0.059	463.647	572.938	371.741	1.076	380.309	1.052
1	0.470	0.147	0.061	452.657	564.478	361.198	1.074	369.282	1.050
1	0.455	0.153	0.064	441.333	555.491	350.396	1.071	357.998	1.048
1	0.440	0.161	0.067	429.683	545.965	339.356	1.068	346.482	1.046
1	0.424	0.168	0.070	417.661	535.856	328.051	1.066	334.706	1.045
1	0.408	0.177	0.074	405.148	525.077	316.400	1.064	322.586	1.043
1	0.392	0.186	0.078	392.144	513.506	304.384	1.062	310.105	1.042
1	0.375	0.196	0.082	378.832	501.046	292.111	1.060	297.376	1.041
1	0.359	0.207	0.087	365.172	487.688	279.582	1.058	284.401	1.040
1	0.342	0.219	0.092	351.137	473.389	266.797	1.057	271.183	1.040
1	0.324	0.232	0.098	336.678	458.060	253.732	1.055	257.695	1.038
1	0.307	0.246	0.105	322.398	442.401	240.965	1.051	244.536	1.036
1	0.290	0.261	0.111	308.553	426.811	228.742	1.045	231.958	1.031
1	0.273	0.278	0.119	294.329	410.143	216.283	1.040	219.156	1.026
1	0.255	0.298	0.128	279.651	392.258	203.539	1.033	206.081	1.021
1	0.237	0.320	0.138	263.111	372.930	189.754	1.030	191.961	1.018
1	0.219	0.347	0.151	243.742	352.006	174.477	1.033	176.342	1.023
1	0.200	0.378	0.165	224.027	330.446	159.292	1.037	160.844	1.027
1	0.184	0.409	0.180	206.963	311.091	146.325	1.036	147.634	1.026
1	0.167	0.447	0.197	189.450	290.240	133.126	1.034	134.209	1.025
1	0.150	0.494	0.220	170.850	267.865	119.415	1.034	120.286	1.026
1	0.132	0.555	0.248	150.659	244.050	105.01	1.038	105.683	1.031
1	0.114	0.635	0.285	129.686	212.297	89.213	1.057	89.698	1.051
1	0.097	0.742	0.335	109.397	178.577	73.917	1.079	74.250	1.075
1	0.081	0.870	0.396	92.022	149.238	61.142	1.094	61.369	1.090
1	0.065	1.064	0.488	73.779	118.944	48.195	1.116	48.336	1.113
1	0.049	1.391	0.641	54.973	86.740	35.079	1.152	35.153	1.150
1	0.032	2.063	0.956	34.663	54.825	21.798	1.228	21.827	1.226
1	0.015	4.223	1.968	52.798	38.017	22.711	0.564	22.742	0.564

Los valores de r_1 para las demás secciones transversales (casos 10 a 24) se incluyen en el Apéndice B. Los casos estudiados indican que la tendencia observada es la misma, en el sentido de que el método (a través del parámetro r_1) es conservador para valores de $P_n/P_0 > 0.1$, y que el error (del lado conservador) es aproximadamente del 10%. El parámetro r_{1m} calculado con la

fórmula modificada de Bresler conduce también en general a resultados conservadores, pero en menor grado como se observa en la Fig. 3.1.2 para el Caso 9.

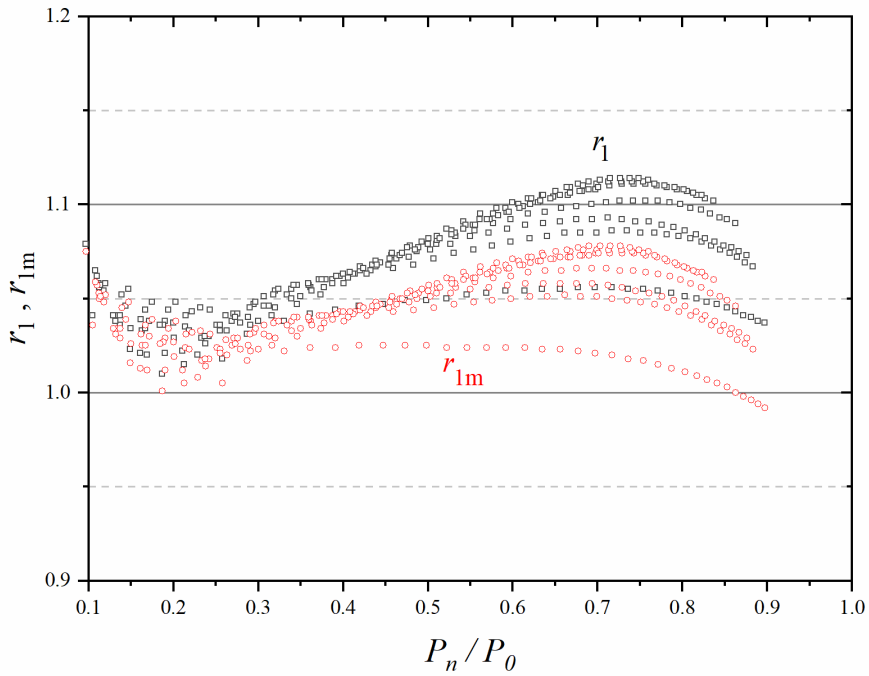


Figura 3.1.2 Comparación de los cocientes r_1 y r_{1m} para el Caso 9.

Para complementar el análisis de los cocientes r_1 y r_{1m}, se presenta un resumen de los principales parámetros estadísticos calculados para todas las secciones. En la Tabla 3.1.13 se listan los valores máximos, mínimos, y promedios (μ) para cada caso. También se incluyen la desviación estándar (σ) y el coeficiente de variación (c.o.v.).

Se observa que el cociente r_{1m} conduce a valores más cercanos a 1.0 que el cociente r_1, lo cual indica que la "fórmula de Bresler" modificada condiuce a valores de P_{xy} más precisos que la fórmula original. En la tabla se observa un menor número de valores de la media que rebasan el valor de 1.0 para r_{1m} que para r_1. Los coeficientes de variación son del mismo orden para ambos cocientes.

Tabla 3.1.13 Parámetros estadísticos de r_1 y r_{1m}

Secc.	f'_c	ρ	r_1					r_{1m}				
cm	kg/c		Máx.	Mín.	μ	σ	c.o.v.	Máx.	Mín.	μ	σ	c.o.v.
1: 40 x 40	250	0.03	1.214	0.563	1.069	0.061	0.057	1.212	0.562	1.044	0.057	0.055
2: 40 x 40	250	0.06	> 4.0	0.118	1.100	0.307	0.279	> 4.0	0.118	1.076	0.309	0.287
3: 40 x 40	400	0.03	1.353	0.031	1.093	0.130	0.119	1.352	0.031	1.068	0.125	0.117
4: 40 x 40	400	0.06	1.240	0.312	1.090	0.088	0.081	1.237	0.311	1.064	0.083	0.078
5: 80 x 80	250	0.03	1.264	0.334	1.078	0.068	0.063	1.262	0.334	1.054	0.066	0.063
6: 80 x 80	250	0.06	> 4.0	0.578	1.494	4.259	2.850	> 4.0	0.575	1.471	4.260	2.897
7: 80 x 80	400	0.03	1.321	1.023	1.112	0.046	0.041	1.320	1.011	1.087	0.043	0.039
8: 80 x 80	400	0.06	1.747	0.175	1.097	0.123	0.112	1.744	0.175	1.072	0.121	0.113

9: 40 x 60	250	0.03	1.266	0.035	1.060	0.116	0.110	1.265	0.035	1.036	0.113	0.109
10: 40 x 60	250	0.06	> 4.0	0.150	1.094	0.787	0.719	> 4.0	0.148	1.070	0.788	0.736
11:40 x 60	400	0.03	1.363	0.409	1.103	0.070	0.063	1.362	0.409	1.078	0.066	0.061
12: 40 x 60	400	0.06	2.836	0.082	1.113	0.180	0.161	2.833	0.082	1.088	0.181	0.166
13: 60 x 90	250	0.03	1.820	0.110	1.063	0.117	0.110	1.819	0.110	1.039	0.114	0.109
14: 60 x 90	250	0.06	> 4.0	0.103	1.168	0.929	0.796	> 4.0	0.103	1.144	0.931	0.814
15: 60 x 90	400	0.03	1.280	0.661	1.102	0.061	0.055	1.278	0.660	1.078	0.056	0.052
16: 60 x 90	400	0.06	2.806	0.101	1.090	0.147	0.135	2.803	0.100	1.065	0.145	0.136
17: 40 x 80	250	0.03	1.214	0.885	1.069	0.030	0.028	1.212	0.884	1.046	0.029	0.028
18: 40 x 80	250	0.06	2.022	0.011	1.064	0.107	0.101	2.019	0.011	1.041	0.106	0.102
19: 40 x 80	400	0.03	1.287	0.905	1.099	0.042	0.039	1.286	0.904	1.076	0.038	0.036
20: 40 x 80	400	0.06	2.057	0.004	1.093	0.138	0.127	2.053	0.004	1.068	0.137	0.129
21: 60 x 120	250	0.03	1.257	0.586	1.070	0.052	0.049	1.256	0.585	1.047	0.051	0.049
22: 60 x 120	250	0.06	2.598	0.162	1.086	0.169	0.155	2.595	0.162	1.062	0.170	0.160
23: 60 x 120	400	0.03	1.280	0.691	1.097	0.052	0.047	1.278	0.690	1.074	0.048	0.044
24: 60 x 120	400	0.06	> 4.0	0.640	1.207	1.331	1.103	> 4.0	0.636	1.183	1.333	1.127

3.2 Efecto de la relación de aspecto de la sección transversal

En el Capítulo 2 se presentan las secciones estudiadas. Se consideraron tres relaciones de aspecto: h/b = 1.0, 1.5 y 2.0, donde h designa el peralte de la sección y b su ancho. La información de cada sección se resume en la Tabla 2.2.1.

En laTabla 3.1.3 se observa que los valores de la media para los casos con mismos valores de f'_c y ρ pero con diferente sección transversal no cambian significativamente. Esto se resume en las Tablas 3.2.1 (para f'_c = 250 kg/cm^2 y ρ = 0.03) y 3.1.15 (para f'_c = 400 kg/cm^2 y ρ = 0.03).

Tabla 3.2.1 Valores de μ y c.o.v. de r_1 para secciones con f'_c = 250 kg/cm^2 y ρ = 0.03

Sección (cm)	$\boldsymbol{\mu}$	**c.o.v.**
3 (40 x 40)	1.069	0.057
7 (80 x 80)	1.078	0.063
11 (40 x 60)	1.060	0.110
15 (60 x 90)	1.063	0.110
19 (40 x 80)	1.069	0.028
23 (60 x120)	1.070	0.049

Tabla 3.2.2 Valores de μ y c.o.v. de r_1 para secciones con f'_c = 400 kg/cm^2 y ρ = 0.03

Sección (cm)	$\boldsymbol{\mu}$	**c.o.v.**
1 (40 x 40)	1.093	0.119
5 (80 x 80)	1.112	0.041
9 (40 x 60)	1.103	0.063
13 (60 x 90)	1.102	0.095
17 (40 x 80)	1.099	0.039
21 (60 x120)	1.097	0.047

3.3 Efecto de f_c'

El efecto de la resistencia del concreto se puede observar a partir del análisis de secciones de igual tamaño e porcentaje de refuerzo, pero con diferente valor de f_c'. En la Tabla 3.3.1 se listan los valores de μ y c.o.v. de r_1 para estas secciones con ρ = 0.03. En la Tabla 3.3.2 se presentan los correspondientes valores para ρ = 0.06.

Para los casos con ρ = 0.03 (Tabla 3.3.1) se observa que los valores de μ son mayores para f_c' = 400 kg/cm^2 que para los correspondientes casos con f_c' = 250 kg/cm^2. Esto sugiere que el método de la carga recíproca parece ser más conservador entre más grande es el valor de f_c' (para secciones con ρ = 0.03). La variación de los valores del c.o.v. no muestra una clara tendencia respecto a la dispersión entre ambos conjuntos de valores de f_c'.

Tabla 3.3.1 Comparación de μ y c.o.v. de r_1 para secciones con f_c' = 250 kg/cm^2 y f_c' = 400 kg/cm^2. Casos con ρ = 0.03

Dimensiones	f_c' = 250 kg/cm^2			f_c' = 400 kg/cm^2		
cm	Sección	μ	c.o.v.	Sección	μ	c.o.v.
40 x 40	1	1.069	0.057	3	1.093	0.119
80 x 80	5	1.078	0.063	7	1.112	0.041
40 x 60	9	1.060	0.110	11	1.103	0.063
60 x 90	13	1.063	0.110	15	1.102	0.055
40 x 80	17	1.069	0.028	19	1.099	0.039
60 x 120	21	1.070	0.049	23	1.097	0.047

Para los casos con ρ = 0.06 (Tabla 3.3.6) no hay una clara tendencia de cómo cambian los valores de μ con f_c'. Para esta cuantía de refuerzo se aprecia en la tabla que la dispersión es mayor para f_c' = 250 kg/cm^2 que para f_c' = 400 kg/cm^2.

Tabla 3.3.2 Comparación de μ y c.o.v. de r_1 para secciones con f_c' = 250 kg/cm^2 y f_c' = 400 kg/cm^2. Casos con ρ = 0.06

Dimensiones	f_c' = 250 kg/cm^2			f_c' = 400 kg/cm^2		
cm	Sección	μ	c.o.v.	Sección	μ	c.o.v.
40 x 40	2	1.100	0.279	4	1.090	0.081
80 x 80	6	1.494	2.850	8	1.097	0.112
40 x 60	10	1.094	0.719	12	1.113	0.161
60 x 90	14	1.168	0.796	16	1.090	0.135
40 x 80	18	1.064	0.101	20	1.093	0.127
60 x 120	22	1.086	0.155	24	1.207	1.103

3.4 Efecto de la cuantía de refuerzo

El efecto de ρ se puede analizar al comparar los valores correspondientes entre las Tablas 3.3.1 (ρ = 0.03) y 3.3.2 (ρ = 0.06). Se observa que tanto la media (μ) como el c.o.v. son, en general, mayores para ρ = 0.06 que para ρ = 0.03. Esto claramente indica que el método de la carga recíproca ("fórmula de Bresler") conduce a mayores errores en la medida que la cuantía de refuerzo se incrementa. Esta observación es independiente de si se usa la fórmula original o la fórmula modificada.

3.5 Resumen y conclusiones generales

En este capítulo se estudió el método de la carga recíproca a través de lo que comúnmente se conoce como la "fórmula de Bresler". La presentación de este método para estimar la capacidad de una columna en flexocompresión biaxial se presentó en el Capítulo 1. La evaluación del método se hizo con ayuda del cociente r_1 el cual se presentó al inicio del capítulo y se re-escribe aquí

$$r_1 = \frac{Estimación\ "exacta"\ de\ la\ carga\ \ axial}{Estimación\ de\ la\ carga\ axial\ con\ el\ método\ de\ carga\ recíproca} = P_n/P_{xy}$$

Como se señaló anteriormente P_n es el valor "preciso" de la carga que resiste la sección y P_{xy} es la estimación que se hace con ayuda de la "fórmula de Bresler".

El estudio de este cociente se llevó a cabo para un conjunto de casos (Capítulo 2) variando las dimensiones de la sección transversal, el valor de f'_c y el porcentaje de refuerzo ρ. Todo esto se hizo variando la profundidad del eje neutro de la sección, así como su inclinación respecto a los ejes pricipales de la misma. Con estas variaciónes se obtuvieron varios valores de P_n así como de momentos flexionantes M_{nx} y M_{ny}. Cuando estos tres valores actuan simultáneamente en una sección se alcanza su falla. Se podría decir que con todas estas variaciones del eje neutro se pudieron generar (para cada uno de los 24 casos) un conjunto de tríadas que cubren prácticamente la totalidad de la superficie de falla de cada sección.

Adicionalmente, el método se estudió con ayuda de una "fórmula de Bresler" modificada la cual se presentó también en el Capítulo 1. Esta fórmula se propuso tratando de reducir el error al que la fórmula original puede llevar.

Los principales resultados obtenidos en este capítulo conducen a las siguientes conclusiones:

a) La precisión de la "fórmula de Bresler" no es uniforme con la intensidad de carga axial, la cual en términos relativos se ha expresado como P_n/P_0.
b) El método de la carga recíproca (fórmula de Bresler) generalmente conduce a valores de la capacidad P_{xy} menores que los estimados de forma precisa (teóricamente exactos) para $P_n/P_0 > 1.0$. Para cargas axiales de baja intensidad ($P_n/P_0 < 1.0$) el método conduce a cargas P_{xy} mayores que las teóricamente precisas (P_n).
c) Para $P_n/P_0 > 1.0$, La fórmula de Bresler es conservadora, conduciendo a capacidades aproximadamente 90% menores que las precisas. Para $P_n/P_0 < 1.0$ el método lleva a valores inseguros.
d) La fórmula de Bresler modificada conduce a resultados similares que los de la fórmula original, pero es menos conservadora que la original (Fig. 3.1.2). En promedio, los valores

de r_1 son del orden de 1.10 cuando se usa la fórmula de Bresler si $P_n/P_0 > 1.0$. En el caso de la fórmula modificada el promedio se reduce a aproximadamente 1.05 si $P_n/P_0 > 1.0$.

e) Los resultados indican que la relación de aspecto de la sección transversal no afecta las predicciones de las fórmulas de Bresler (original o modificada).

f) Respecto a la resistencia del concreto, los valores de la media (μ) de r_1 son mayores para f_c' = 400 kg/cm^2 que para los correspondientes casos con f_c' = 250 kg/cm^2 cuando ρ = 0.03. En otras palabras, el método de la carga recíproca parece ser más conservador entre más grande es el valor de f_c' (para ρ = 0.03). Para ρ = 0.06, no se observó una tendencia.

g) La media (μ) y el c.o.v. de r_1 son, en general, mayores para ρ = 0.06 que para ρ = 0.03.

Capítulo 4

Análisis del método de contorno de carga

Como se indicó en el Capítulo 2, el método de contorno de carga se usa para revisar una sección transversal de una columna sujeta a flexión biaxial a través de un valor (r_2) igual a la suma de dos cocientes de momentos del tipo (M_n/M_{n0}) elevados a un exponente (α). Cuando r_2 > 1.0, el método indica que la sección transversal no resiste la aplicación simultánea de los efectos P_n, M_{nx} y M_{ny}. Similarmente al método de la carga recíproca analizado en el capítulo anterior, en este capítulo se analiza la bondad del método del contorno de carga ante distintas variables, como la magnitud de la carga axial (P_n/P_0), la relación de aspecto de la sección transversal, el valor del exponente α, etc. En las secciones siguientes se analiza el efecto de cada una de estas variantes estimando en todos los casos el valor de r_2 cuando se emplean en su cálculo tríadas de valores nominales (P_n, M_{nx} y M_{ny}) que corresponden a la falla de la sección transversal. Es claro que, si el método fuera perfecto, el valor de r_2 debiera ser 1.0. Sin embargo, como se explicó en el Capítulo 2, si r_2 < 1.0 se concluye que el método de contorno de carga es no conservador, y viceversa.

4.1 Efecto de la carga axial

El efecto de la carga axial se estudia con el cociente P_n/P_0, donde P_n es la carga nominal la cual, actuando simultáneamente con M_{nx} y M_{ny} conduce a la falla de la columna. La carga P_0 es la fuerza de compresión concéntrica máxima que resiste la sección sin la aplicación de momentos. Es pertinente recordar que en la ecuación del método de contorno de carga no aparece de forma explícita el valor de P_n. La carga axial participa en la fórmula del método de manera implícita en los valores de los momentos de los diagramas de interacción uniaxiales M_{nx0} y M_{ny0} correspondientes a P_n. Por conveniencia se presenta nuevamente la ecuación de r_2 (con $\alpha_1 = \alpha_1 = \alpha$):

$$r_2 = \left(\frac{M_{nx}}{M_{nx0}}\right)^{\alpha} + \left(\frac{M_{ny}}{M_{ny0}}\right)^{\alpha} \tag{4.1.1}$$

En la Fig. 4.1.1 se muestra la participación de la carga axial P_n en la evaluación de r_2. Al igual que el método de la carga recíproca, este método también recurre a los diagramas de interacción uniaxiales correspondientes a la flexión alrededor de cada uno de los ejes principales de la sección. Con el valor de la carga axial se entra a estos diagramas y se obtienen los valores de los momentos flexionantes uniaxiales M_{nx0} y M_{ny0}.

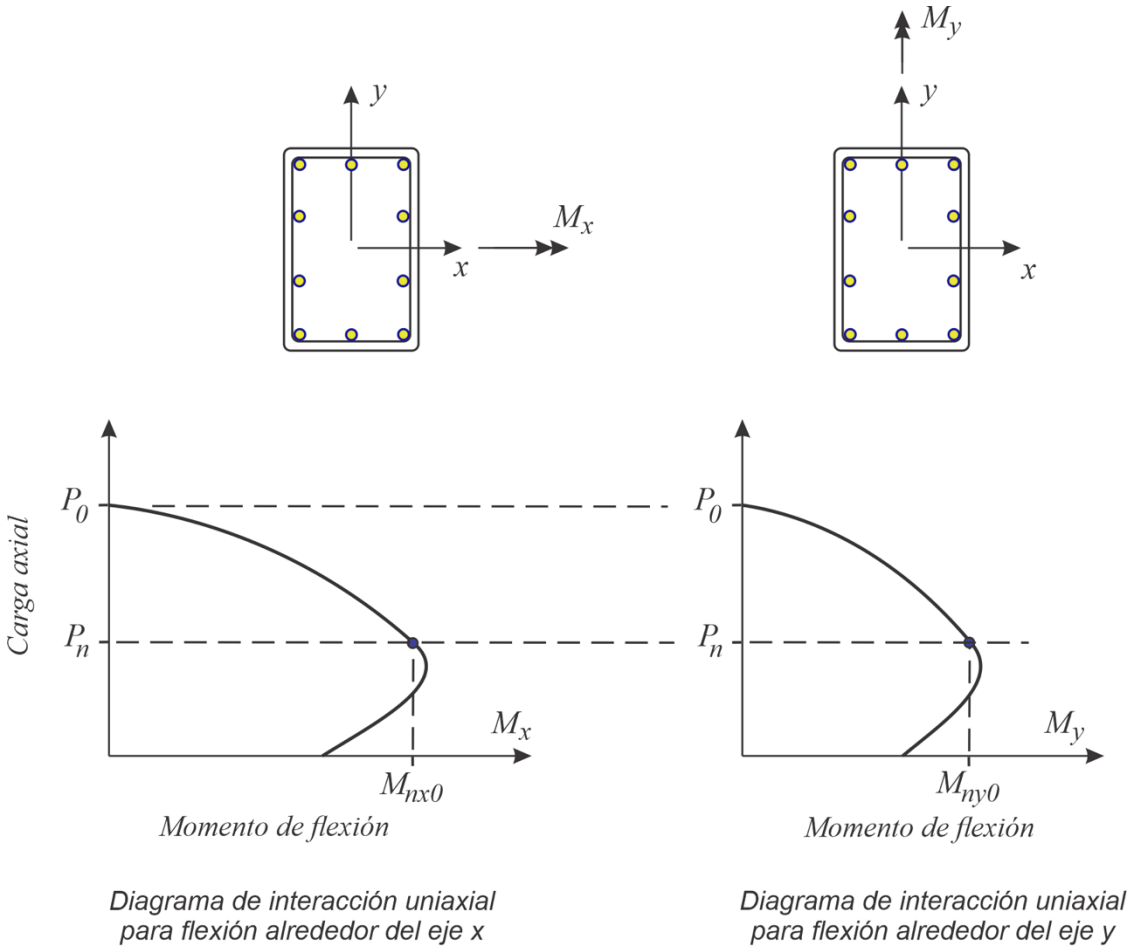


Figura 4.1.1. Incorporación de la carga axial en el método del contorno de carga.

En la siguiente sección se analiza el efecto del valor del exponente α el cual puede ser constante o dependiente del valor de la carga axial. Por sencillez en la presentación, en esta sección sólo se revisa el efecto de la carga axial considerando valores fijos de α.

El reglamento de la CdMx recomienda el valor de α = 1.0 para cargas axiales menores de $0.1P_0$, por lo que este valor se estudia en esta sección. Como se sabe, α = 1.0 corresponde a una línea de interacción recta en el plano de momentos normalizados (Fig. 2.5.6). Fossetti y Papia (2012) observaron en su estudio de secciones rectangulares que se obtienen buenos resultados con α = 1.75, por lo que aquí se estudia el valor de α = 1.8. Otro valor de interés, intermedio a los valores anteriores, es α = 1.4. Este valor también se encuentra cercano al centro del intervalo de 1.15 y 1.55 sugerido por Bresler (1960). En resumen, en esta sección se estudia el efecto de la carga axial para seis valores de α: 1.0, 1.2, 1.4, 1.6, 1.8 y 2.0. Los valores de 1.2, 1.6 y 2.0 se incluyen en este estudio para tener el intervalo completo de 1.0 a 2.0 en incrementos de 0.2.

Primero se considera la sección transversal No. 1 (ver Sección 2.2). Ésta es una sección cuadrada de 40 x 40 cm con un porcentaje de refuerzo ρ = 0.03 (Fig. 2.2.1). Por ser una sección cuadrada, su diagrama de interacción para ambos ejes principales es igual (Fig. 4.1.2). Considerando sólo cargas axiales de compresión, se pueden generar otros diagramas de interacción para distintas pendientes *s* del eje neutro (Fig. 4.1.3). Observar que los valores de los momentos nominales resistentes se reducen al incrementar la inclinación del eje neutro hasta θ = 45º

(pendiente $a = s = 1.0$). Para pendientes mayores, los momentos M_{nx} siguen disminuyendo hasta llegar a ser nulos para una inclinación $\theta = 90°$.

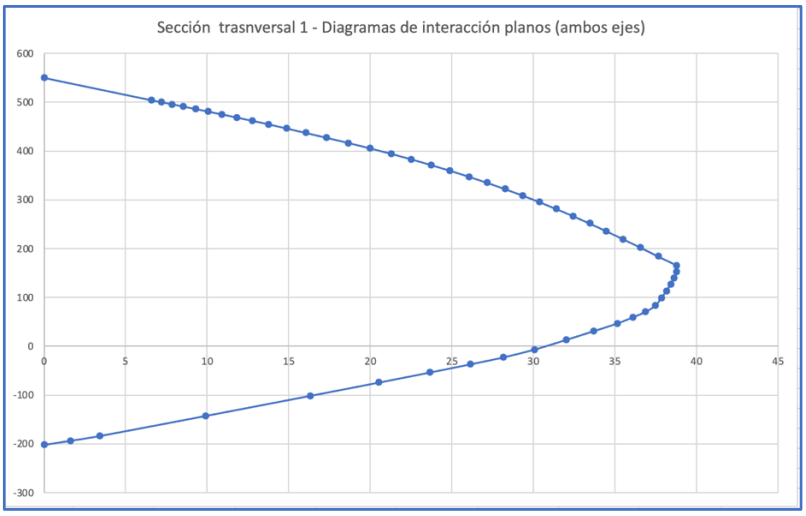


Figura 4.1.2. Diagramas de interacción planos para ambos ejes principales de la sección l

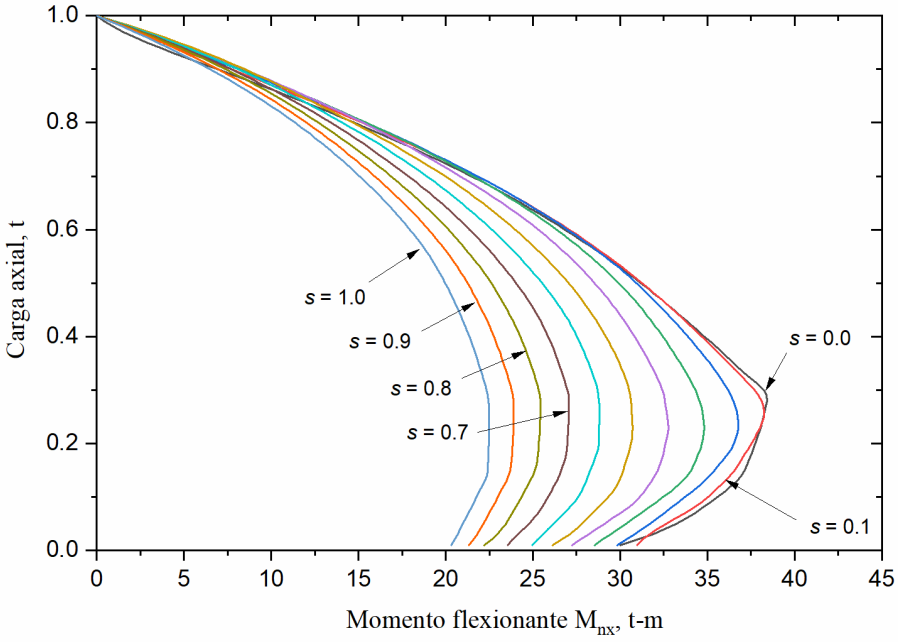


Figura 4.1.3. Diagramas de interacción para distintas pendientes *s* del eje neutro

Los valores de r_2 se obtienen directamente de la Ec. 4.1.1, al sustituir en ella los distintos valores de α. En la Tabla 4.1.1 se muestran los valores de r_2 de la sección 1 (40 x 40 cm con $\rho = 0.03$) para una pendiente del eje neutro $s = 0.25$. Los valores se han tabulado para cargas menores de $0.9P_0$.

Recordar que el ACI-318-19 por ejemplo, limita la carga axial a $0.8P_0$ (estribos) o $0.85P_0$ (espirales). La tabla muestra que para cargas menores de $0.8P_0$ la mayoría de los valores de r_2 son mayores que la unidad, lo cual indica que el método de contorno de carga es ligeramente conservador para este caso.

En la tabla también se identifican los valores de r_2 menores que 1.0, los cuales resultan en aproximaciones no conservadoras. Para esta sección, sólo dos casos con $r_2 < 1.0$ se presentan para $\alpha = 1.4$. En cambio, para $\alpha = 1.6$, $\alpha = 1.8$ y $\alpha = 2.0$ hay varios casos que r_2 resulta menor que la unidad. Así, se observa que $\alpha = 1.4$ es el mayor exponente que lleva a mejores resultados (más cercanos a 1.0) para esta sección 1 con una pendiente del eje neutro $s = 0.25$. Estos fallos no conservadores se identifican en las tablas con un sombreado en verde.

En las Tablas 4.1.2, 4.1.3 y 4.1.4 se incluyen los cálculos de la misma sección cuadrada 1 para $s = 0.5$, 0,75 y 1.0, respectivamente. Se observa que, para estas inclinaciones del eje neutro, el valor de r_2 se presenta en un mayor número de casos con valores menores que 1.0 para el coeficiente $\alpha = 1.4$. Así, con $\alpha = 1.4$ se tienen varios fallos no conservadores – a diferencia del caso para $s = 0.25$. Sin embargo, en todos estos casos analizados los fallos se presentan para cargas axiales P_n menores a $0.4P_0$.

El coeficiente $\alpha = 1.2$ no presenta ningún fallo para esta sección en las inclinaciones del eje neutro estudiadas.

Estas cuatro tablas dan una imagen preliminar del efecto de la carga axial para distintos valores constantes de α cuando el eje neutro de la sección tiene diferentes inclinaciones.

Tabla 4.1.1 Valores r_2 de la sección 1 para eje neutro con pendiente $a = s = 0.25$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
489.407	0.890	1.444	1.415	1.402	1.400	1.409	1.424
484.976	0.882	1.419	1.387	1.369	1.363	1.367	1.377
480.244	0.873	1.397	1.361	1.339	1.329	1.329	1.335
475.185	0.864	1.376	1.337	1.312	1.298	1.294	1.297
469.775	0.854	1.358	1.316	1.288	1.271	1.264	1.263
463.984	0.844	1.342	1.297	1.266	1.247	1.237	1.233
457.778	0.832	1.326	1.279	1.246	1.224	1.212	1.205
451.121	0.820	1.313	1.264	1.229	1.205	1.190	1.182
443.973	0.807	1.305	1.254	1.218	1.194	1.177	1.168
436.319	0.793	1.298	1.247	1.210	1.184	1.167	1.157
428.177	0.778	1.290	1.238	1.200	1.173	1.155	1.144
419.482	0.763	1.279	1.225	1.186	1.159	1.140	1.127
410.247	0.746	1.265	1.210	1.171	1.142	1.122	1.108
400.584	0.728	1.252	1.197	1.157	1.128	1.107	1.093
390.521	0.710	1.240	1.185	1.145	1.116	1.095	1.080
380.039	0.691	1.230	1.175	1.135	1.106	1.085	1.070
369.233	0.671	1.221	1.166	1.126	1.097	1.077	1.062
358.104	0.651	1.212	1.157	1.118	1.089	1.069	1.054
346.718	0.630	1.203	1.149	1.110	1.081	1.061	1.047
335.048	0.609	1.195	1.141	1.101	1.073	1.053	1.038
322.940	0.587	1.187	1.132	1.092	1.064	1.043	1.027
310.572	0.565	1.179	1.124	1.083	1.054	1.032	1.016
297.875	0.542	1.172	1.116	1.075	1.045	1.023	1.006
284.832	0.518	1.165	1.109	1.067	1.036	1.013	0.996
271.446	0.494	1.159	1.101	1.059	1.027	1.003	0.985

257.609	0.468	1.152	1.094	1.051	1.018	0.993	0.974
243.362	0.443	1.146	1.087	1.043	1.009	0.984	0.963
228.519	0.415	1.140	1.079	1.033	0.999	0.972	0.950
213.021	0.387	1.132	1.070	1.023	0.986	0.958	0.935
196.963	0.358	1.125	1.061	1.012	0.974	0.945	0.920
180.265	0.328	1.117	1.052	1.001	0.962	0.930	0.904
163.323	0.297	1.105	1.038	0.985	0.944	0.911	0.883
146.758	0.267	1.113	1.047	0.996	0.956	0.924	0.898
130.664	0.238	1.121	1.057	1.008	0.970	0.940	0.915
114.725	0.209	1.126	1.063	1.016	0.979	0.950	0.927
99.030	0.180	1.126	1.063	1.015	0.978	0.949	0.926
83.883	0.152	1.125	1.059	1.009	0.970	0.939	0.913
68.785	0.125	1.131	1.063	1.011	0.969	0.936	0.909
55.030	0.100	1.133	1.064	1.011	0.969	0.934	0.906
40.623	0.074	1.138	1.069	1.014	0.971	0.936	0.907
25.431	0.046	1.151	1.081	1.026	0.983	0.948	0.919
9.327	0.017	1.164	1.094	1.039	0.995	0.960	0.931

Tabla 4.1.2 Valores r_2 de la sección 1 para eje neutro con pendiente $a = s = 0.5$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
474.681	0.863	1.606	1.562	1.527	1.498	1.477	1.461
469.603	0.854	1.576	1.526	1.486	1.452	1.425	1.404
464.222	0.844	1.548	1.494	1.449	1.411	1.380	1.355
458.506	0.834	1.522	1.464	1.415	1.373	1.338	1.309
452.442	0.823	1.499	1.437	1.385	1.339	1.301	1.268
446.038	0.811	1.481	1.416	1.361	1.313	1.272	1.237
439.283	0.799	1.465	1.399	1.341	1.291	1.248	1.211
432.191	0.786	1.449	1.380	1.320	1.269	1.224	1.185
424.752	0.772	1.433	1.361	1.299	1.245	1.199	1.158
416.971	0.758	1.415	1.342	1.278	1.222	1.173	1.131
408.861	0.743	1.399	1.323	1.257	1.200	1.150	1.106
400.356	0.728	1.384	1.307	1.239	1.180	1.129	1.084
391.519	0.712	1.371	1.292	1.223	1.163	1.111	1.065
382.237	0.695	1.357	1.277	1.207	1.146	1.093	1.046
372.384	0.677	1.342	1.260	1.189	1.126	1.072	1.025
362.205	0.659	1.328	1.244	1.172	1.109	1.054	1.005
351.631	0.639	1.314	1.229	1.156	1.092	1.036	0.987
340.726	0.620	1.301	1.215	1.140	1.076	1.019	0.970
329.490	0.599	1.288	1.201	1.126	1.061	1.004	0.954
317.931	0.578	1.276	1.188	1.112	1.047	0.989	0.939
306.084	0.556	1.264	1.175	1.099	1.033	0.975	0.924
293.808	0.534	1.253	1.164	1.087	1.020	0.961	0.910
281.234	0.511	1.243	1.152	1.074	1.007	0.948	0.896
268.375	0.488	1.232	1.141	1.062	0.994	0.934	0.882
255.233	0.464	1.222	1.129	1.049	0.980	0.920	0.868
241.820	0.440	1.212	1.118	1.037	0.967	0.906	0.853
228.017	0.415	1.201	1.106	1.024	0.954	0.892	0.838
213.861	0.389	1.190	1.094	1.011	0.940	0.877	0.822
199.317	0.362	1.179	1.082	0.998	0.925	0.862	0.806
184.101	0.335	1.168	1.068	0.983	0.909	0.845	0.788
168.447	0.306	1.151	1.050	0.962	0.887	0.821	0.764
153.106	0.278	1.148	1.046	0.959	0.883	0.817	0.759
137.743	0.251	1.157	1.056	0.969	0.894	0.828	0.770
121.853	0.222	1.168	1.068	0.981	0.906	0.840	0.783
106.191	0.193	1.175	1.075	0.989	0.914	0.849	0.791

90.735	0.165	1.178	1.078	0.992	0.917	0.851	0.793
74.620	0.136	1.185	1.086	1.000	0.925	0.859	0.801
59.443	0.108	1.200	1.102	1.017	0.942	0.877	0.819
45.566	0.083	1.209	1.111	1.026	0.952	0.887	0.829
31.204	0.057	1.225	1.128	1.045	0.971	0.907	0.850
17.133	0.031	1.242	1.146	1.063	0.990	0.925	0.868
3.648	0.007	1.254	1.158	1.074	1.000	0.934	0.876

Tabla 4.1.3 Valores r_2 de la sección 1 para eje neutro con pendiente $a = s = 0.75$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
453.535	0.825	1.579	1.511	1.447	1.387	1.331	1.279
447.857	0.814	1.556	1.484	1.417	1.354	1.295	1.240
441.924	0.803	1.536	1.462	1.392	1.327	1.266	1.209
435.733	0.792	1.517	1.440	1.368	1.301	1.238	1.179
429.286	0.780	1.498	1.418	1.343	1.274	1.209	1.149
422.577	0.768	1.478	1.396	1.319	1.248	1.181	1.119
415.608	0.756	1.459	1.374	1.295	1.222	1.154	1.090
408.345	0.743	1.441	1.354	1.273	1.198	1.128	1.064
400.800	0.729	1.425	1.336	1.253	1.176	1.106	1.040
392.991	0.715	1.410	1.319	1.235	1.157	1.085	1.019
384.914	0.700	1.397	1.304	1.218	1.139	1.067	0.999
376.566	0.685	1.384	1.290	1.203	1.123	1.050	0.982
367.953	0.669	1.373	1.277	1.189	1.109	1.035	0.966
359.068	0.653	1.362	1.265	1.176	1.095	1.020	0.951
349.911	0.636	1.351	1.253	1.163	1.081	1.006	0.937
340.302	0.619	1.339	1.240	1.149	1.066	0.990	0.921
330.381	0.601	1.328	1.227	1.136	1.052	0.975	0.905
320.141	0.582	1.316	1.215	1.122	1.038	0.961	0.891
309.594	0.563	1.305	1.203	1.109	1.024	0.947	0.876
298.765	0.543	1.295	1.191	1.097	1.012	0.934	0.863
287.649	0.523	1.285	1.180	1.085	0.999	0.921	0.850
276.246	0.502	1.274	1.169	1.073	0.987	0.908	0.837
264.522	0.481	1.264	1.157	1.061	0.974	0.895	0.823
252.294	0.459	1.251	1.144	1.047	0.959	0.880	0.808
239.778	0.436	1.239	1.130	1.032	0.944	0.864	0.792
226.967	0.413	1.227	1.117	1.018	0.929	0.849	0.777
213.864	0.389	1.214	1.103	1.003	0.913	0.833	0.760
200.435	0.364	1.200	1.088	0.988	0.897	0.816	0.744
186.690	0.339	1.188	1.075	0.973	0.883	0.801	0.728
172.652	0.314	1.171	1.056	0.954	0.862	0.780	0.707
158.262	0.288	1.164	1.048	0.945	0.853	0.771	0.698
144.684	0.263	1.169	1.053	0.950	0.859	0.777	0.703
130.824	0.238	1.176	1.061	0.958	0.867	0.785	0.711
116.642	0.212	1.184	1.069	0.967	0.876	0.794	0.720
102.138	0.186	1.193	1.079	0.977	0.886	0.804	0.731
87.717	0.160	1.199	1.086	0.984	0.893	0.811	0.737
73.852	0.134	1.205	1.092	0.991	0.900	0.818	0.744
60.707	0.110	1.216	1.104	1.003	0.913	0.831	0.757
47.582	0.086	1.230	1.119	1.019	0.929	0.847	0.774
34.170	0.062	1.250	1.141	1.043	0.954	0.873	0.800
21.645	0.039	1.267	1.160	1.063	0.974	0.894	0.821
9.081	0.017	1.283	1.177	1.081	0.993	0.913	0.840

Tabla 4.1.4 Valores r_2 de la sección 1 para eje neutro con pendiente $a = s = 1.0$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
429.808	0.781	1.509	1.426	1.348	1.274	1.204	1.138
423.961	0.771	1.492	1.407	1.326	1.251	1.180	1.112
417.907	0.760	1.474	1.387	1.305	1.228	1.155	1.087
411.628	0.748	1.457	1.368	1.284	1.205	1.131	1.062
405.125	0.737	1.442	1.351	1.266	1.186	1.111	1.040
398.418	0.724	1.429	1.336	1.249	1.167	1.091	1.020
391.489	0.712	1.415	1.321	1.233	1.150	1.073	1.002
384.356	0.699	1.404	1.308	1.218	1.135	1.057	0.985
377.041	0.685	1.393	1.295	1.205	1.121	1.043	0.970
369.501	0.672	1.382	1.284	1.192	1.108	1.029	0.955
361.753	0.658	1.372	1.273	1.180	1.095	1.015	0.942
353.800	0.643	1.363	1.262	1.169	1.083	1.003	0.929
345.626	0.628	1.353	1.251	1.157	1.070	0.990	0.916
337.186	0.613	1.344	1.242	1.147	1.059	0.978	0.904
328.474	0.597	1.336	1.232	1.137	1.049	0.967	0.892
319.540	0.581	1.328	1.223	1.127	1.038	0.957	0.881
310.374	0.564	1.319	1.214	1.117	1.028	0.946	0.870
300.690	0.547	1.308	1.202	1.104	1.014	0.932	0.856
290.804	0.529	1.298	1.190	1.092	1.001	0.918	0.842
280.666	0.510	1.287	1.178	1.079	0.988	0.905	0.828
270.292	0.491	1.276	1.166	1.066	0.974	0.891	0.814
259.683	0.472	1.265	1.154	1.053	0.961	0.877	0.800
248.825	0.452	1.254	1.142	1.041	0.948	0.863	0.786
237.664	0.432	1.243	1.130	1.028	0.934	0.850	0.773
226.188	0.411	1.232	1.118	1.015	0.921	0.836	0.759
214.459	0.390	1.220	1.105	1.001	0.907	0.822	0.744
202.461	0.368	1.208	1.092	0.987	0.893	0.807	0.729
190.213	0.346	1.197	1.080	0.975	0.879	0.794	0.716
177.792	0.323	1.183	1.065	0.959	0.863	0.777	0.699
165.107	0.300	1.168	1.049	0.942	0.846	0.760	0.682
152.579	0.277	1.169	1.050	0.944	0.848	0.761	0.684
140.468	0.255	1.175	1.056	0.950	0.854	0.768	0.690
128.166	0.233	1.181	1.063	0.957	0.861	0.775	0.697
115.617	0.210	1.187	1.070	0.964	0.868	0.782	0.705
102.802	0.187	1.195	1.078	0.972	0.877	0.791	0.714
89.773	0.163	1.202	1.085	0.980	0.885	0.800	0.722
76.817	0.140	1.210	1.095	0.990	0.896	0.810	0.733
65.702	0.119	1.215	1.099	0.995	0.901	0.815	0.738
54.519	0.099	1.225	1.111	1.007	0.913	0.828	0.750
43.119	0.078	1.237	1.124	1.021	0.928	0.843	0.765
31.489	0.057	1.256	1.145	1.043	0.951	0.866	0.789
19.597	0.036	1.279	1.170	1.070	0.978	0.894	0.818
7.790	0.014	1.300	1.192	1.094	1.004	0.921	0.845

A continuación, se presentan resultados similares a los de las tablas anteriores, pero para una sección de mayores dimensiones. En las Tablas 4.1.5, 4.1.6, 4.1.7 y 4.1.8 se incluyen los cálculos de la sección cuadrada 5 (80 x 80 cm, $\rho = 0.03$) para $s = 0.25$, 0.5, 0,75 y 1.0, respectivamente.

En estas tablas se observa un panorama similar al de la sección 1. Ningún fallo no conservador cuando se usa $\alpha = 1.4$ para s = 0.25 y algunos fallos para pendientes de 0.5, 0,75 y 1.0. Nuevamente, en estos casos analizados los fallos se presentan para cargas axiales P_n menores a $0.4P_0$. Asimismo, no se obtuvieron fallos para $\alpha \leq 1.2$.

Tabla 4.1.5 Valores r_2 de la sección 5 para eje neutro con pendiente $a = s = 0.25$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
1946.284	0.885	1.421	1.390	1.374	1.370	1.376	1.388
1928.630	0.877	1.401	1.367	1.348	1.340	1.342	1.351
1909.769	0.868	1.382	1.345	1.323	1.312	1.311	1.316
1889.387	0.859	1.366	1.327	1.302	1.289	1.285	1.287
1867.450	0.849	1.354	1.312	1.285	1.269	1.263	1.263
1843.979	0.838	1.342	1.298	1.269	1.251	1.243	1.240
1818.842	0.827	1.331	1.285	1.254	1.235	1.224	1.219
1791.886	0.815	1.320	1.273	1.240	1.218	1.206	1.199
1762.750	0.801	1.309	1.260	1.225	1.202	1.188	1.179
1731.365	0.787	1.297	1.246	1.210	1.186	1.169	1.159
1698.005	0.772	1.285	1.233	1.195	1.169	1.151	1.139
1662.744	0.756	1.272	1.218	1.179	1.151	1.132	1.119
1625.523	0.739	1.258	1.204	1.163	1.134	1.114	1.100
1586.524	0.721	1.246	1.191	1.150	1.120	1.099	1.083
1545.832	0.703	1.235	1.179	1.138	1.107	1.085	1.070
1503.565	0.683	1.225	1.168	1.127	1.096	1.074	1.058
1459.915	0.664	1.215	1.158	1.116	1.086	1.063	1.047
1415.031	0.643	1.205	1.148	1.106	1.076	1.053	1.037
1369.063	0.622	1.196	1.139	1.097	1.067	1.044	1.027
1321.971	0.601	1.188	1.131	1.089	1.058	1.036	1.018
1273.863	0.579	1.181	1.124	1.082	1.051	1.027	1.010
1224.595	0.557	1.174	1.116	1.074	1.042	1.019	1.001
1174.242	0.534	1.167	1.109	1.067	1.035	1.011	0.993
1122.643	0.510	1.161	1.103	1.060	1.028	1.003	0.984
1069.225	0.486	1.154	1.095	1.051	1.018	0.993	0.973
1014.117	0.461	1.149	1.089	1.044	1.010	0.984	0.963
957.275	0.435	1.145	1.084	1.038	1.003	0.976	0.955
898.494	0.408	1.140	1.079	1.032	0.996	0.969	0.946
837.584	0.381	1.136	1.073	1.026	0.989	0.961	0.938
773.627	0.352	1.130	1.066	1.018	0.980	0.950	0.926
709.455	0.323	1.119	1.054	1.004	0.965	0.934	0.908
646.382	0.294	1.127	1.064	1.015	0.978	0.948	0.924
584.561	0.266	1.133	1.071	1.024	0.988	0.960	0.937
523.786	0.238	1.136	1.075	1.029	0.993	0.966	0.944
466.612	0.212	1.136	1.075	1.029	0.994	0.967	0.945
412.614	0.188	1.139	1.077	1.031	0.996	0.968	0.947
358.495	0.163	1.141	1.078	1.031	0.994	0.966	0.943
302.053	0.137	1.142	1.078	1.029	0.992	0.962	0.938
245.116	0.111	1.146	1.081	1.032	0.993	0.963	0.938
190.569	0.087	1.151	1.085	1.035	0.996	0.965	0.940
135.486	0.062	1.156	1.088	1.036	0.995	0.962	0.936
77.264	0.035	1.161	1.091	1.037	0.994	0.959	0.930
16.747	0.008	1.172	1.101	1.045	1.000	0.964	0.934

Tabla 4.1.6 Valores r_2 de la sección 5 para eje neutro con pendiente $a = s = 0.5$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
1887.428	0.858	1.587	1.539	1.500	1.468	1.443	1.424
1867.180	0.849	1.565	1.513	1.471	1.436	1.407	1.384
1845.613	0.839	1.544	1.489	1.443	1.405	1.373	1.347
1822.704	0.829	1.524	1.467	1.418	1.376	1.342	1.313
1798.407	0.818	1.505	1.445	1.393	1.349	1.312	1.280
1772.748	0.806	1.488	1.424	1.370	1.324	1.284	1.250
1745.683	0.793	1.470	1.404	1.348	1.299	1.257	1.221

1717.234	0.781	1.453	1.385	1.326	1.275	1.231	1.193
1687.300	0.767	1.436	1.365	1.304	1.251	1.205	1.165
1655.985	0.753	1.418	1.345	1.282	1.227	1.179	1.137
1623.342	0.738	1.401	1.326	1.260	1.204	1.154	1.111
1589.013	0.722	1.385	1.307	1.240	1.182	1.131	1.086
1552.738	0.706	1.368	1.288	1.220	1.160	1.107	1.061
1515.080	0.689	1.352	1.271	1.201	1.139	1.086	1.039
1475.869	0.671	1.337	1.255	1.183	1.121	1.066	1.018
1435.234	0.652	1.323	1.239	1.167	1.103	1.048	0.999
1393.263	0.633	1.310	1.225	1.151	1.087	1.031	0.981
1349.993	0.614	1.297	1.211	1.137	1.072	1.015	0.965
1305.289	0.593	1.286	1.198	1.123	1.058	1.000	0.950
1259.251	0.572	1.274	1.186	1.110	1.044	0.986	0.936
1212.056	0.551	1.263	1.174	1.097	1.030	0.972	0.921
1163.488	0.529	1.252	1.162	1.085	1.018	0.959	0.908
1113.246	0.506	1.241	1.150	1.072	1.004	0.945	0.893
1061.770	0.483	1.230	1.138	1.058	0.990	0.930	0.877
1009.152	0.459	1.219	1.126	1.046	0.976	0.916	0.863
955.247	0.434	1.210	1.116	1.035	0.965	0.904	0.850
900.084	0.409	1.201	1.106	1.024	0.953	0.891	0.836
843.521	0.383	1.192	1.095	1.012	0.940	0.878	0.823
785.367	0.357	1.183	1.085	1.001	0.928	0.865	0.809
726.694	0.330	1.169	1.070	0.985	0.911	0.846	0.789
668.184	0.304	1.171	1.072	0.987	0.912	0.848	0.791
609.080	0.277	1.182	1.084	0.999	0.925	0.861	0.804
549.781	0.250	1.189	1.091	1.007	0.933	0.869	0.813
489.482	0.223	1.192	1.095	1.010	0.937	0.873	0.816
432.328	0.197	1.199	1.102	1.019	0.946	0.882	0.826
373.942	0.170	1.208	1.112	1.028	0.956	0.893	0.837
316.736	0.144	1.213	1.117	1.034	0.961	0.898	0.842
258.233	0.117	1.221	1.126	1.043	0.971	0.907	0.852
205.134	0.093	1.229	1.133	1.051	0.978	0.915	0.859
150.198	0.068	1.238	1.144	1.061	0.989	0.926	0.870
98.144	0.045	1.245	1.150	1.067	0.994	0.929	0.872
44.559	0.020	1.256	1.161	1.077	1.003	0.938	0.880

Tabla 4.1.7 Valores r_2 de la sección 5 para eje neutro con pendiente $a = s = 0.75$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
1802.991	0.820	1.583	1.516	1.452	1.393	1.337	1.284
1780.442	0.809	1.563	1.492	1.426	1.364	1.305	1.251
1756.877	0.799	1.543	1.469	1.401	1.336	1.276	1.220
1732.221	0.787	1.524	1.448	1.376	1.310	1.248	1.190
1706.494	0.776	1.505	1.426	1.353	1.284	1.220	1.160
1679.722	0.763	1.486	1.405	1.329	1.258	1.193	1.132
1651.906	0.751	1.467	1.383	1.305	1.233	1.166	1.103
1623.056	0.738	1.449	1.363	1.283	1.209	1.140	1.077
1593.085	0.724	1.433	1.345	1.263	1.187	1.117	1.053
1561.957	0.710	1.418	1.327	1.244	1.167	1.096	1.030
1529.347	0.695	1.402	1.310	1.226	1.147	1.075	1.009
1495.632	0.680	1.388	1.294	1.208	1.129	1.056	0.988
1460.838	0.664	1.375	1.279	1.192	1.111	1.038	0.969
1424.863	0.648	1.362	1.265	1.176	1.095	1.020	0.952
1387.743	0.631	1.350	1.251	1.162	1.079	1.004	0.935
1349.172	0.613	1.337	1.237	1.147	1.064	0.988	0.918
1309.386	0.595	1.325	1.224	1.132	1.048	0.972	0.902

1268.379	0.577	1.313	1.211	1.118	1.034	0.957	0.886
1226.213	0.557	1.301	1.198	1.105	1.020	0.942	0.871
1182.811	0.538	1.290	1.186	1.092	1.006	0.928	0.857
1138.208	0.517	1.279	1.174	1.079	0.993	0.914	0.843
1092.440	0.497	1.268	1.162	1.066	0.979	0.900	0.829
1045.547	0.475	1.257	1.150	1.053	0.965	0.886	0.814
997.490	0.453	1.247	1.139	1.041	0.953	0.873	0.801
948.120	0.431	1.237	1.128	1.030	0.942	0.862	0.790
897.253	0.408	1.227	1.117	1.018	0.929	0.849	0.777
844.956	0.384	1.216	1.105	1.005	0.916	0.835	0.763
791.559	0.360	1.205	1.093	0.993	0.903	0.822	0.749
737.283	0.335	1.191	1.078	0.977	0.886	0.804	0.731
684.188	0.311	1.185	1.071	0.969	0.878	0.797	0.723
629.957	0.286	1.194	1.081	0.980	0.889	0.808	0.735
574.396	0.261	1.203	1.091	0.990	0.899	0.818	0.745
520.498	0.237	1.207	1.095	0.994	0.904	0.823	0.749
468.299	0.213	1.211	1.100	0.999	0.909	0.827	0.754
415.193	0.189	1.224	1.113	1.013	0.923	0.842	0.769
363.633	0.165	1.232	1.122	1.023	0.933	0.852	0.779
310.776	0.141	1.240	1.130	1.031	0.942	0.861	0.788
259.322	0.118	1.247	1.138	1.039	0.950	0.870	0.797
209.889	0.095	1.257	1.149	1.051	0.963	0.882	0.810
160.702	0.073	1.269	1.162	1.065	0.977	0.897	0.824
110.488	0.050	1.281	1.175	1.079	0.992	0.912	0.840
62.906	0.029	1.289	1.184	1.088	1.001	0.922	0.849
17.427	0.008	1.298	1.194	1.099	1.012	0.933	0.861

Tabla 4.1.8 Valores r_2 de la sección 5 para eje neutro con pendiente $a = s = 1.0$

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
1710.053	0.777	105.738	1.443	1.366	1.294	1.225	1.160
1686.462	0.767	109.278	1.422	1.343	1.269	1.199	1.132
1662.036	0.755	112.849	1.401	1.320	1.244	1.172	1.105
1636.777	0.744	116.442	1.381	1.298	1.220	1.147	1.078
1610.724	0.732	120.057	1.362	1.277	1.198	1.124	1.054
1583.802	0.720	123.695	1.345	1.259	1.178	1.103	1.032
1555.820	0.707	127.375	1.329	1.241	1.159	1.083	1.011
1527.012	0.694	131.055	1.314	1.225	1.142	1.065	0.993
1497.463	0.681	134.706	1.300	1.209	1.126	1.048	0.975
1467.003	0.667	138.326	1.286	1.195	1.110	1.031	0.958
1435.701	0.653	141.920	1.273	1.181	1.095	1.016	0.942
1403.562	0.638	145.485	1.261	1.167	1.081	1.001	0.927
1370.389	0.623	149.031	1.249	1.155	1.067	0.987	0.912
1336.201	0.607	152.552	1.238	1.143	1.055	0.974	0.899
1301.139	0.591	156.027	1.227	1.131	1.043	0.961	0.886
1265.177	0.575	159.446	1.217	1.120	1.031	0.949	0.874
1228.248	0.558	162.794	1.206	1.109	1.019	0.937	0.861
1190.423	0.541	166.080	1.196	1.098	1.008	0.925	0.849
1151.480	0.523	169.194	1.185	1.086	0.996	0.912	0.836
1111.199	0.505	172.145	1.173	1.074	0.982	0.899	0.822
1069.768	0.486	175.046	1.161	1.061	0.969	0.885	0.808
1027.331	0.467	177.879	1.149	1.048	0.956	0.871	0.794
983.886	0.447	180.622	1.139	1.037	0.944	0.859	0.783
939.436	0.427	183.275	1.129	1.026	0.933	0.848	0.771
894.022	0.406	185.850	1.118	1.015	0.921	0.836	0.759
847.620	0.385	188.344	1.107	1.003	0.909	0.824	0.746

800.134	0.364	190.747	1.096	0.992	0.897	0.812	0.734
751.382	0.342	193.099	1.083	0.978	0.883	0.797	0.720
703.726	0.320	194.755	1.071	0.965	0.870	0.784	0.706
655.657	0.298	196.118	1.077	0.971	0.876	0.790	0.713
606.744	0.276	197.400	1.085	0.980	0.885	0.799	0.721
557.024	0.253	198.613	1.093	0.989	0.894	0.809	0.731
509.686	0.232	198.859	1.095	0.991	0.896	0.811	0.733
463.506	0.211	198.464	1.100	0.996	0.902	0.816	0.739
416.617	0.189	197.969	1.112	1.008	0.914	0.829	0.751
369.110	0.168	197.384	1.123	1.020	0.927	0.842	0.765
323.263	0.147	196.197	1.132	1.029	0.936	0.851	0.774
280.088	0.127	194.228	1.135	1.033	0.940	0.855	0.778
236.716	0.108	192.169	1.145	1.044	0.951	0.867	0.790
191.947	0.087	189.821	1.160	1.059	0.967	0.883	0.807
146.811	0.067	186.981	1.173	1.074	0.982	0.899	0.822
105.700	0.048	183.315	1.178	1.079	0.988	0.904	0.828
63.736	0.029	179.485	1.185	1.086	0.995	0.912	0.836
20.780	0.009	175.492	1.199	1.101	1.011	0.928	0.852

De las tablas anteriores para dos secciones cuadradas con $\rho = 0.03$ se observa que $\alpha \leq 1.2$ conduce, para todos los valores de la carga axial y pendientes del eje neutro, a valores conservadores ($r_2 > 1.0$).

Ahora se considera la sección 9, la cual es rectangular ($b = 40$ cm, $h = 60$ cm y $\rho = 0.03$). En la Tabla 4.1.9 se muestran los valores de r_2 que se obtienen para distintos valores de α cuando la inclinación del eje neutro es $a = s = 0.25$ respecto al eje de mayor momento de inercia (eje x-x). En las Tablas 4.1.10, 4.1.11 y 1.4.12 se muestran los valores de r_2 para $s = 0.5$, $s = 0.75$ y $s = 1.0$, respectivamente.

En las Tablas 4.1.13 a 4.1.16 se muestran los correspondientes valores de r_2 que se obtienen para distintos valores de α cuando la inclinación del eje neutro se toma con respecto al eje de menor momento de inercia (eje y-y). Se observa que $\alpha = 1.4$ conduce a algunos fallos no conservadores pero que, para todas las pendientes del eje neutro estudiadas, el valor de r_2 no resultó menor de 0.95, lo cual hace a $\alpha = 1.4$ un buen exponente para usar en la Ec. 4.1.1. En todos los fallos de estas tablas examinadas los fallos no conservadores para $\alpha = 1.4$ se presentan para $P_n/P_0 < 0.4$.

Tabla 4.1.9 Valores r_2 de la sección 9 con pendiente de eje neutro $s = 0.25$ respecto al eje x-x

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
739.953	0.897	1.333	1.307	1.296	1.296	1.306	1.322
733.595	0.889	1.313	1.284	1.270	1.267	1.273	1.285
726.790	0.881	1.297	1.264	1.248	1.242	1.245	1.254
719.499	0.872	1.283	1.249	1.230	1.223	1.224	1.231
711.685	0.863	1.274	1.238	1.219	1.210	1.210	1.215
703.274	0.853	1.264	1.228	1.208	1.198	1.196	1.201
694.074	0.841	1.252	1.215	1.194	1.183	1.180	1.183
684.187	0.829	1.241	1.203	1.180	1.169	1.164	1.166
673.551	0.817	1.231	1.192	1.168	1.155	1.150	1.150
662.100	0.803	1.222	1.182	1.158	1.144	1.137	1.136
649.655	0.787	1.214	1.173	1.147	1.132	1.124	1.121
636.232	0.771	1.204	1.161	1.134	1.117	1.108	1.104
622.012	0.754	1.193	1.149	1.121	1.103	1.092	1.087

607.060	0.736	1.182	1.138	1.109	1.090	1.078	1.072
591.416	0.717	1.173	1.128	1.099	1.080	1.068	1.061
575.210	0.697	1.164	1.120	1.090	1.071	1.059	1.051
558.559	0.677	1.156	1.112	1.082	1.063	1.051	1.043
541.552	0.656	1.149	1.104	1.075	1.056	1.043	1.035
524.202	0.635	1.142	1.098	1.068	1.048	1.036	1.027
506.443	0.614	1.136	1.091	1.062	1.042	1.029	1.020
488.267	0.592	1.130	1.086	1.056	1.036	1.023	1.014
469.634	0.569	1.125	1.081	1.051	1.030	1.016	1.007
450.563	0.546	1.121	1.076	1.045	1.024	1.010	1.000
431.000	0.522	1.117	1.071	1.040	1.019	1.004	0.994
410.922	0.498	1.114	1.068	1.037	1.015	1.000	0.989
390.162	0.473	1.111	1.066	1.034	1.013	0.997	0.986
368.416	0.447	1.107	1.061	1.030	1.008	0.992	0.981
345.835	0.419	1.104	1.057	1.025	1.003	0.987	0.975
322.391	0.391	1.100	1.053	1.020	0.997	0.981	0.968
298.024	0.361	1.096	1.048	1.015	0.992	0.975	0.962
272.701	0.331	1.091	1.043	1.009	0.985	0.967	0.953
247.792	0.300	1.092	1.046	1.014	0.991	0.975	0.962
223.556	0.271	1.095	1.051	1.022	1.001	0.986	0.976
200.201	0.243	1.097	1.053	1.024	1.004	0.990	0.979
177.749	0.215	1.098	1.053	1.022	1.000	0.984	0.972
156.355	0.190	1.097	1.051	1.019	0.997	0.981	0.969
133.833	0.162	1.099	1.053	1.021	0.999	0.982	0.970
109.903	0.133	1.101	1.054	1.022	0.999	0.983	0.971
86.761	0.105	1.106	1.056	1.021	0.996	0.978	0.964
65.113	0.079	1.108	1.056	1.020	0.994	0.974	0.959
42.292	0.051	1.113	1.061	1.024	0.996	0.976	0.960
17.325	0.021	1.117	1.064	1.025	0.996	0.975	0.958

Tabla 4.1.10 Valores r_2 de la sección 9 con pendiente de eje neutro $s = 0.5$ respecto al eje *x-x*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
728.110	0.883	1.525	1.489	1.466	1.453	1.448	1.452
721.133	0.874	1.498	1.458	1.430	1.412	1.403	1.402
713.701	0.865	1.476	1.432	1.401	1.380	1.368	1.363
705.777	0.856	1.456	1.410	1.376	1.353	1.338	1.330
697.321	0.845	1.439	1.390	1.353	1.327	1.310	1.299
688.295	0.834	1.422	1.371	1.332	1.304	1.284	1.271
678.649	0.823	1.406	1.353	1.312	1.282	1.260	1.245
668.166	0.810	1.389	1.333	1.290	1.258	1.234	1.217
657.013	0.796	1.373	1.315	1.271	1.236	1.210	1.191
645.211	0.782	1.357	1.297	1.251	1.214	1.186	1.165
632.769	0.767	1.341	1.279	1.230	1.192	1.162	1.139
619.665	0.751	1.324	1.260	1.210	1.170	1.139	1.114
605.933	0.735	1.308	1.243	1.192	1.151	1.118	1.092
591.609	0.717	1.294	1.228	1.176	1.134	1.101	1.074
576.697	0.699	1.282	1.215	1.161	1.119	1.085	1.058
561.201	0.680	1.270	1.202	1.148	1.106	1.072	1.044
545.188	0.661	1.258	1.190	1.136	1.094	1.059	1.031
528.476	0.641	1.247	1.178	1.124	1.080	1.045	1.017
511.169	0.620	1.236	1.167	1.112	1.068	1.033	1.004
493.447	0.598	1.226	1.156	1.101	1.057	1.022	0.992
475.353	0.576	1.217	1.146	1.091	1.046	1.010	0.981
456.856	0.554	1.208	1.137	1.081	1.035	0.999	0.969
437.932	0.531	1.200	1.128	1.071	1.025	0.988	0.957

418.561	0.507	1.192	1.120	1.062	1.016	0.978	0.947
398.693	0.483	1.186	1.113	1.055	1.008	0.970	0.938
378.273	0.459	1.180	1.107	1.048	1.000	0.961	0.929
357.277	0.433	1.175	1.100	1.041	0.992	0.953	0.920
335.191	0.406	1.167	1.091	1.030	0.981	0.940	0.906
312.200	0.378	1.158	1.081	1.019	0.968	0.927	0.891
288.409	0.350	1.148	1.069	1.006	0.954	0.910	0.874
264.203	0.320	1.139	1.060	0.995	0.942	0.898	0.861
240.249	0.291	1.139	1.060	0.997	0.945	0.902	0.865
215.695	0.262	1.147	1.069	1.006	0.955	0.912	0.876
191.555	0.232	1.151	1.073	1.010	0.959	0.916	0.880
167.042	0.203	1.158	1.080	1.017	0.966	0.923	0.887
144.666	0.175	1.160	1.082	1.020	0.968	0.926	0.890
121.617	0.147	1.164	1.087	1.024	0.973	0.931	0.896
99.115	0.120	1.167	1.088	1.023	0.971	0.926	0.889
75.629	0.092	1.176	1.095	1.029	0.975	0.929	0.890
53.007	0.064	1.184	1.103	1.036	0.981	0.935	0.895
29.224	0.035	1.194	1.113	1.046	0.990	0.943	0.903
6.723	0.008	1.203	1.119	1.049	0.991	0.941	0.898

Tabla 4.1.11 Valores r_2 de la sección 9 con pendiente de eje neutro $s = 0.75$ respecto al eje x-x

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
711.541	0.863	1.605	1.558	1.519	1.486	1.460	1.439
704.025	0.853	1.580	1.529	1.487	1.451	1.422	1.398
696.040	0.844	1.557	1.503	1.457	1.419	1.386	1.360
687.412	0.833	1.534	1.476	1.427	1.385	1.350	1.320
678.264	0.822	1.512	1.451	1.399	1.354	1.316	1.283
668.606	0.810	1.492	1.428	1.373	1.326	1.285	1.249
658.424	0.798	1.474	1.407	1.349	1.299	1.256	1.218
647.736	0.785	1.456	1.386	1.326	1.274	1.228	1.188
636.385	0.771	1.435	1.363	1.300	1.245	1.197	1.156
624.415	0.757	1.414	1.339	1.274	1.217	1.167	1.123
611.937	0.742	1.394	1.317	1.250	1.191	1.139	1.093
598.939	0.726	1.376	1.297	1.228	1.167	1.114	1.067
585.436	0.710	1.360	1.279	1.208	1.146	1.092	1.044
571.405	0.693	1.345	1.262	1.190	1.127	1.072	1.023
556.806	0.675	1.331	1.247	1.174	1.110	1.054	1.005
541.688	0.657	1.318	1.233	1.159	1.095	1.038	0.988
526.038	0.638	1.306	1.220	1.145	1.080	1.022	0.972
509.906	0.618	1.294	1.207	1.132	1.066	1.008	0.958
493.148	0.598	1.283	1.195	1.118	1.052	0.994	0.943
475.754	0.577	1.271	1.182	1.105	1.038	0.980	0.928
457.922	0.555	1.259	1.169	1.092	1.024	0.965	0.914
439.654	0.533	1.248	1.157	1.079	1.011	0.952	0.900
420.890	0.510	1.238	1.146	1.067	0.999	0.939	0.887
401.675	0.487	1.229	1.137	1.057	0.988	0.928	0.875
381.965	0.463	1.220	1.127	1.047	0.977	0.917	0.864
361.846	0.439	1.212	1.118	1.037	0.966	0.905	0.852
341.269	0.414	1.203	1.108	1.026	0.955	0.893	0.839
320.177	0.388	1.194	1.098	1.015	0.943	0.881	0.826
298.285	0.362	1.183	1.086	1.002	0.929	0.866	0.810
275.602	0.334	1.171	1.073	0.987	0.914	0.849	0.793
252.996	0.307	1.165	1.066	0.981	0.907	0.843	0.786
230.383	0.279	1.166	1.067	0.982	0.909	0.845	0.789
207.045	0.251	1.175	1.076	0.992	0.919	0.855	0.798

183.392	0.222	1.181	1.083	0.998	0.924	0.860	0.803
160.397	0.194	1.186	1.088	1.003	0.930	0.865	0.808
137.673	0.167	1.192	1.094	1.010	0.936	0.872	0.816
114.860	0.139	1.199	1.101	1.017	0.943	0.879	0.822
92.197	0.112	1.206	1.108	1.023	0.948	0.883	0.826
69.393	0.084	1.219	1.122	1.036	0.962	0.896	0.838
47.613	0.058	1.232	1.135	1.050	0.976	0.910	0.852
26.566	0.032	1.243	1.145	1.059	0.984	0.917	0.858
4.795	0.006	1.255	1.157	1.071	0.994	0.926	0.866

Tabla 4.1.12 Valores r_2 de la sección 9 con pendiente de eje neutro s = 1.0 respecto al eje *x-x*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
690.524	0.837	1.601	1.539	1.481	1.429	1.380	1.335
682.323	0.827	1.577	1.511	1.451	1.395	1.344	1.296
673.703	0.817	1.555	1.486	1.423	1.365	1.311	1.261
664.666	0.806	1.535	1.463	1.397	1.337	1.281	1.229
655.209	0.794	1.516	1.442	1.373	1.310	1.252	1.199
645.330	0.782	1.497	1.420	1.349	1.284	1.224	1.169
634.990	0.770	1.478	1.398	1.325	1.258	1.197	1.140
624.211	0.757	1.459	1.377	1.302	1.233	1.169	1.111
613.005	0.743	1.441	1.356	1.279	1.209	1.144	1.084
601.182	0.729	1.422	1.336	1.257	1.184	1.118	1.057
588.783	0.714	1.404	1.315	1.234	1.160	1.093	1.031
575.943	0.698	1.387	1.296	1.214	1.138	1.070	1.007
562.658	0.682	1.371	1.279	1.195	1.118	1.049	0.985
548.813	0.665	1.357	1.263	1.178	1.100	1.030	0.965
534.514	0.648	1.344	1.248	1.162	1.083	1.012	0.947
519.759	0.630	1.331	1.234	1.146	1.067	0.995	0.929
504.562	0.612	1.318	1.220	1.132	1.052	0.979	0.913
488.916	0.593	1.307	1.208	1.118	1.038	0.965	0.898
472.816	0.573	1.295	1.195	1.105	1.024	0.950	0.884
456.223	0.553	1.284	1.183	1.092	1.010	0.936	0.869
439.094	0.532	1.273	1.171	1.080	0.997	0.923	0.856
421.506	0.511	1.263	1.160	1.068	0.985	0.911	0.843
403.464	0.489	1.254	1.150	1.057	0.974	0.899	0.832
385.005	0.467	1.244	1.140	1.047	0.963	0.888	0.820
366.106	0.444	1.235	1.130	1.036	0.952	0.877	0.809
346.774	0.420	1.225	1.119	1.025	0.940	0.865	0.797
326.927	0.396	1.215	1.108	1.013	0.928	0.852	0.784
306.619	0.372	1.205	1.097	1.001	0.916	0.840	0.771
285.855	0.346	1.194	1.085	0.988	0.902	0.825	0.756
264.324	0.320	1.184	1.074	0.977	0.890	0.813	0.744
243.082	0.295	1.177	1.067	0.970	0.883	0.806	0.738
221.642	0.269	1.180	1.070	0.972	0.886	0.809	0.740
199.648	0.242	1.187	1.077	0.979	0.893	0.816	0.747
176.897	0.214	1.195	1.086	0.988	0.901	0.824	0.755
155.377	0.188	1.201	1.092	0.995	0.908	0.831	0.762
134.457	0.163	1.206	1.097	1.000	0.913	0.836	0.766
113.015	0.137	1.214	1.105	1.008	0.922	0.844	0.774
90.990	0.110	1.227	1.119	1.022	0.936	0.858	0.788
70.495	0.086	1.239	1.132	1.036	0.949	0.871	0.801
50.819	0.062	1.252	1.146	1.050	0.963	0.885	0.815
30.598	0.037	1.266	1.161	1.065	0.979	0.901	0.831
9.696	0.012	1.282	1.177	1.083	0.997	0.919	0.849

Tabla 4.1.13 Valores r_2 de la sección 9 con pendiente de eje neutro s = 0.25 respecto al eje y-y

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
722.340	0.876	1.549	1.517	1.497	1.487	1.487	1.494
715.357	0.867	1.524	1.487	1.462	1.448	1.443	1.445
707.922	0.858	1.501	1.460	1.431	1.413	1.403	1.400
699.998	0.849	1.480	1.435	1.403	1.381	1.367	1.361
691.547	0.838	1.461	1.413	1.377	1.352	1.335	1.325
682.530	0.827	1.442	1.392	1.353	1.325	1.305	1.292
672.907	0.816	1.426	1.373	1.332	1.301	1.278	1.263
662.511	0.803	1.412	1.356	1.313	1.279	1.254	1.236
651.488	0.790	1.398	1.340	1.295	1.259	1.232	1.212
639.864	0.776	1.383	1.323	1.276	1.238	1.209	1.187
627.648	0.761	1.368	1.306	1.256	1.217	1.186	1.162
614.856	0.745	1.352	1.288	1.237	1.196	1.163	1.137
601.433	0.729	1.338	1.272	1.219	1.177	1.143	1.116
587.453	0.712	1.325	1.258	1.204	1.160	1.125	1.097
572.696	0.694	1.311	1.243	1.188	1.143	1.107	1.078
557.162	0.675	1.297	1.228	1.172	1.126	1.089	1.059
541.112	0.656	1.284	1.214	1.157	1.111	1.073	1.042
524.494	0.636	1.271	1.200	1.143	1.096	1.058	1.026
507.403	0.615	1.259	1.187	1.129	1.082	1.043	1.011
489.843	0.594	1.248	1.175	1.117	1.069	1.029	0.997
471.837	0.572	1.237	1.164	1.104	1.056	1.016	0.983
453.483	0.550	1.227	1.153	1.092	1.043	1.003	0.969
434.430	0.527	1.217	1.142	1.081	1.031	0.990	0.955
414.831	0.503	1.207	1.131	1.068	1.018	0.975	0.940
394.759	0.478	1.198	1.120	1.056	1.004	0.961	0.924
374.085	0.454	1.188	1.109	1.045	0.991	0.947	0.909
352.849	0.428	1.179	1.099	1.033	0.978	0.932	0.893
330.999	0.401	1.170	1.088	1.021	0.965	0.918	0.877
308.493	0.374	1.161	1.077	1.008	0.951	0.902	0.861
285.224	0.346	1.151	1.066	0.996	0.937	0.887	0.845
260.866	0.316	1.141	1.053	0.981	0.920	0.868	0.824
236.885	0.287	1.132	1.043	0.969	0.906	0.853	0.807
212.657	0.258	1.143	1.055	0.981	0.920	0.867	0.822
188.876	0.229	1.152	1.065	0.993	0.933	0.881	0.837
165.463	0.201	1.159	1.073	1.002	0.943	0.892	0.849
141.935	0.172	1.165	1.080	1.010	0.951	0.901	0.858
119.010	0.144	1.173	1.089	1.019	0.960	0.910	0.868
97.509	0.118	1.181	1.098	1.029	0.971	0.922	0.880
76.939	0.093	1.188	1.105	1.037	0.979	0.931	0.890
57.503	0.070	1.198	1.114	1.045	0.987	0.938	0.896
37.333	0.045	1.208	1.124	1.054	0.995	0.945	0.902
16.341	0.020	1.218	1.134	1.063	1.003	0.952	0.907

Tabla 4.1.14 Valores r_2 de la sección 9 con pendiente de eje neutro s = 0.5 respecto al eje y-y

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
678.989	0.823	1.585	1.518	1.456	1.397	1.343	1.291
670.600	0.813	1.563	1.493	1.428	1.366	1.309	1.255
661.834	0.802	1.544	1.471	1.403	1.339	1.280	1.224
652.688	0.791	1.525	1.450	1.379	1.314	1.252	1.195
643.017	0.779	1.505	1.426	1.353	1.285	1.222	1.163
632.928	0.767	1.484	1.403	1.327	1.257	1.192	1.131
622.410	0.754	1.464	1.380	1.302	1.230	1.163	1.100

611.500	0.741	1.445	1.358	1.278	1.204	1.135	1.072
600.192	0.728	1.427	1.339	1.257	1.181	1.111	1.046
588.489	0.713	1.411	1.321	1.237	1.160	1.089	1.023
576.363	0.699	1.397	1.304	1.219	1.141	1.068	1.002
563.792	0.683	1.383	1.289	1.203	1.123	1.050	0.983
550.820	0.668	1.371	1.275	1.187	1.107	1.033	0.965
537.437	0.651	1.359	1.262	1.173	1.092	1.017	0.949
523.653	0.635	1.347	1.249	1.159	1.077	1.002	0.933
509.410	0.618	1.336	1.237	1.146	1.063	0.987	0.918
494.666	0.600	1.326	1.225	1.134	1.050	0.974	0.904
479.516	0.581	1.315	1.214	1.122	1.038	0.961	0.891
463.849	0.562	1.305	1.202	1.109	1.024	0.947	0.877
447.478	0.542	1.292	1.189	1.095	1.009	0.931	0.861
430.636	0.522	1.281	1.176	1.081	0.995	0.917	0.845
413.304	0.501	1.269	1.163	1.067	0.981	0.902	0.831
395.544	0.479	1.258	1.151	1.054	0.967	0.888	0.816
377.338	0.457	1.247	1.139	1.041	0.953	0.874	0.802
358.710	0.435	1.236	1.126	1.028	0.939	0.859	0.787
339.588	0.412	1.224	1.114	1.015	0.925	0.845	0.772
319.923	0.388	1.212	1.101	1.001	0.911	0.830	0.757
299.842	0.363	1.200	1.087	0.987	0.896	0.815	0.742
279.325	0.339	1.188	1.074	0.972	0.881	0.800	0.726
258.393	0.313	1.177	1.062	0.959	0.868	0.785	0.712
237.837	0.288	1.171	1.055	0.952	0.860	0.777	0.703
217.252	0.263	1.177	1.062	0.959	0.866	0.784	0.709
196.190	0.238	1.186	1.072	0.969	0.877	0.795	0.721
175.395	0.213	1.194	1.080	0.978	0.886	0.804	0.730
154.531	0.187	1.201	1.088	0.986	0.895	0.813	0.739
133.125	0.161	1.211	1.099	0.997	0.906	0.825	0.751
112.641	0.137	1.221	1.109	1.009	0.918	0.837	0.763
93.340	0.113	1.229	1.118	1.018	0.928	0.847	0.774
73.645	0.089	1.243	1.133	1.035	0.946	0.865	0.793
54.483	0.066	1.260	1.152	1.055	0.967	0.887	0.815
35.653	0.043	1.275	1.169	1.073	0.986	0.907	0.835
16.206	0.020	1.291	1.187	1.093	1.007	0.929	0.858

Tabla 4.1.15 Valores r_2 de la sección 9 con pendiente de eje neutro $s = 0.75$ respecto al eje *y-y*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
626.689	0.760	1.480	1.395	1.314	1.238	1.167	1.099
617.835	0.749	1.464	1.376	1.293	1.216	1.143	1.075
608.713	0.738	1.448	1.358	1.274	1.195	1.121	1.052
599.321	0.727	1.434	1.342	1.257	1.176	1.102	1.032
589.652	0.715	1.421	1.327	1.240	1.159	1.083	1.013
579.710	0.703	1.408	1.313	1.225	1.143	1.066	0.995
569.481	0.690	1.396	1.300	1.211	1.128	1.050	0.978
558.944	0.677	1.386	1.288	1.198	1.114	1.036	0.963
548.013	0.664	1.374	1.275	1.184	1.099	1.020	0.948
536.724	0.651	1.363	1.263	1.170	1.085	1.006	0.932
525.135	0.636	1.352	1.251	1.158	1.071	0.991	0.918
513.255	0.622	1.342	1.240	1.145	1.058	0.978	0.904
501.084	0.607	1.332	1.229	1.134	1.046	0.965	0.891
488.620	0.592	1.323	1.218	1.122	1.034	0.953	0.878
475.813	0.577	1.314	1.208	1.111	1.023	0.941	0.866
462.693	0.561	1.304	1.198	1.101	1.011	0.929	0.854
449.274	0.545	1.295	1.188	1.090	1.000	0.918	0.843

435.557	0.528	1.287	1.179	1.080	0.990	0.907	0.832
421.539	0.511	1.278	1.169	1.070	0.979	0.897	0.821
407.165	0.493	1.270	1.161	1.061	0.970	0.887	0.811
392.471	0.476	1.262	1.152	1.052	0.960	0.877	0.801
377.449	0.458	1.254	1.143	1.042	0.951	0.867	0.791
362.068	0.439	1.246	1.134	1.033	0.941	0.857	0.781
346.197	0.420	1.237	1.124	1.022	0.929	0.845	0.769
330.010	0.400	1.227	1.114	1.011	0.918	0.834	0.757
313.503	0.380	1.217	1.103	1.000	0.906	0.822	0.745
296.685	0.360	1.207	1.092	0.988	0.894	0.809	0.733
279.556	0.339	1.196	1.080	0.975	0.881	0.796	0.719
262.123	0.318	1.188	1.071	0.966	0.871	0.786	0.710
244.825	0.297	1.182	1.065	0.960	0.866	0.781	0.704
227.654	0.276	1.183	1.066	0.961	0.866	0.781	0.705
210.069	0.255	1.188	1.071	0.966	0.872	0.787	0.711
192.213	0.233	1.193	1.077	0.972	0.878	0.793	0.717
174.072	0.211	1.201	1.085	0.981	0.886	0.802	0.725
156.668	0.190	1.207	1.092	0.988	0.894	0.809	0.733
139.548	0.169	1.213	1.098	0.995	0.901	0.816	0.740
123.006	0.149	1.217	1.103	0.999	0.906	0.821	0.745
106.158	0.129	1.225	1.111	1.008	0.915	0.830	0.754
89.438	0.108	1.234	1.121	1.018	0.925	0.841	0.764
73.270	0.089	1.245	1.132	1.030	0.938	0.854	0.777
56.824	0.069	1.260	1.149	1.048	0.956	0.872	0.796
40.505	0.049	1.276	1.166	1.066	0.975	0.892	0.815
24.827	0.030	1.287	1.179	1.080	0.989	0.906	0.830
10.147	0.012	1.294	1.186	1.087	0.997	0.914	0.838

Tabla 4.1.16 Valores r_2 de la sección 9 con pendiente de eje neutro s = 1.0 respecto al eje y-y

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
577.871	0.701	1.389	1.299	1.217	1.141	1.073	1.010
569.115	0.690	1.379	1.287	1.204	1.128	1.058	0.995
560.133	0.679	1.369	1.276	1.192	1.115	1.045	0.981
550.894	0.668	1.359	1.265	1.180	1.103	1.032	0.968
541.448	0.656	1.350	1.255	1.169	1.091	1.020	0.955
531.809	0.645	1.341	1.245	1.159	1.080	1.009	0.943
521.976	0.633	1.332	1.236	1.148	1.069	0.997	0.932
511.937	0.621	1.324	1.227	1.139	1.059	0.987	0.921
501.700	0.608	1.316	1.218	1.129	1.049	0.977	0.911
491.254	0.596	1.308	1.210	1.120	1.040	0.967	0.901
480.619	0.583	1.301	1.201	1.111	1.030	0.957	0.891
469.792	0.570	1.293	1.193	1.103	1.021	0.948	0.881
458.731	0.556	1.286	1.185	1.094	1.012	0.938	0.871
447.402	0.542	1.279	1.177	1.086	1.003	0.929	0.862
435.862	0.528	1.272	1.169	1.078	0.995	0.921	0.854
424.134	0.514	1.265	1.162	1.070	0.987	0.912	0.845
412.214	0.500	1.258	1.155	1.062	0.979	0.905	0.837
400.090	0.485	1.252	1.148	1.055	0.972	0.897	0.830
387.772	0.470	1.246	1.141	1.048	0.965	0.890	0.822
375.248	0.455	1.240	1.135	1.041	0.957	0.882	0.814
362.548	0.440	1.233	1.128	1.034	0.950	0.874	0.807
349.670	0.424	1.227	1.121	1.026	0.942	0.866	0.799
336.568	0.408	1.220	1.114	1.019	0.934	0.858	0.790
323.200	0.392	1.213	1.106	1.011	0.926	0.850	0.782
309.642	0.375	1.207	1.099	1.003	0.918	0.842	0.773

295.900	0.359	1.200	1.091	0.995	0.909	0.832	0.764
281.966	0.342	1.192	1.083	0.986	0.899	0.822	0.753
267.593	0.324	1.185	1.075	0.978	0.891	0.814	0.745
253.223	0.307	1.180	1.070	0.972	0.886	0.809	0.740
239.138	0.290	1.177	1.067	0.969	0.883	0.806	0.737
224.840	0.273	1.179	1.069	0.972	0.885	0.808	0.739
210.319	0.255	1.183	1.074	0.976	0.890	0.813	0.744
195.501	0.237	1.188	1.078	0.981	0.894	0.817	0.748
180.311	0.219	1.193	1.084	0.986	0.900	0.822	0.753
165.246	0.200	1.200	1.091	0.994	0.907	0.830	0.761
151.529	0.184	1.202	1.093	0.996	0.909	0.832	0.762
137.599	0.167	1.205	1.096	0.999	0.912	0.835	0.765
123.420	0.150	1.209	1.100	1.004	0.917	0.840	0.770
108.985	0.132	1.216	1.107	1.010	0.924	0.846	0.776
94.275	0.114	1.224	1.116	1.019	0.933	0.855	0.785
79.784	0.097	1.235	1.127	1.031	0.945	0.867	0.797
66.900	0.081	1.241	1.134	1.038	0.952	0.874	0.803
53.792	0.065	1.250	1.143	1.048	0.961	0.883	0.813
40.415	0.049	1.259	1.153	1.058	0.972	0.894	0.823
26.758	0.032	1.269	1.163	1.068	0.982	0.904	0.834
12.818	0.015	1.279	1.174	1.080	0.994	0.916	0.846

La sección 17 también es rectangular, pero con b = 40 cm, h = 80 cm y ρ = 0.03. En las tablas 4.1.17 a 4.1.20 se muestran los correspondientes valores de r_2 para las mismas inclinaciones anteriores del eje neutro con respecto al eje *x*-*x*. Para esta misma sección 17, en las Tablas 4.1.21 a 4.1.24 se muestran los valores de r_2 que se obtienen para distintos valores de α cuando la inclinación del eje neutro se toma con respecto al eje de menor momento de inercia (eje *y*-*y*). Estas tablas también confirman las observaciones anteriores. En todos los casos ningún valor de r_2 resultó menor que 0.95 para cuando se usa α = 1.4 (independientemente de la inclinación del eje neutro). Nuevamente, se observa que los fallos no conservadores de α = 1.4 se presentan para $P_n/P_0 < 0.4$. Además, ningún valor de r_2 resultó menor que 1.0 para $\alpha \leq 1.2$.

Tabla 4.1.17 Valores r_2 de la sección 17 con pendiente de eje neutro s = 0.25 respecto al eje *x*-*x*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
982.076	0.893	1.254	1.228	1.217	1.216	1.224	1.236
973.186	0.885	1.245	1.217	1.205	1.203	1.209	1.220
963.466	0.876	1.232	1.203	1.190	1.187	1.192	1.201
953.032	0.866	1.220	1.190	1.176	1.172	1.175	1.183
941.822	0.856	1.209	1.179	1.163	1.158	1.160	1.166
929.689	0.845	1.199	1.168	1.151	1.145	1.145	1.150
916.515	0.833	1.190	1.157	1.139	1.131	1.130	1.133
902.324	0.820	1.181	1.147	1.127	1.118	1.115	1.117
887.025	0.806	1.173	1.138	1.117	1.107	1.103	1.103
870.512	0.791	1.166	1.130	1.108	1.096	1.091	1.090
852.684	0.775	1.159	1.122	1.099	1.086	1.080	1.078
833.655	0.758	1.151	1.113	1.089	1.075	1.068	1.065
813.603	0.740	1.142	1.104	1.080	1.066	1.057	1.053
792.674	0.721	1.135	1.096	1.073	1.058	1.050	1.045
771.067	0.701	1.127	1.089	1.066	1.051	1.043	1.038
749.012	0.681	1.122	1.084	1.061	1.047	1.038	1.034
726.501	0.660	1.118	1.081	1.058	1.045	1.036	1.032
703.223	0.639	1.113	1.077	1.054	1.041	1.032	1.028

679.351	0.618	1.109	1.073	1.051	1.037	1.029	1.024
654.967	0.595	1.105	1.069	1.047	1.034	1.026	1.021
629.896	0.573	1.101	1.065	1.043	1.029	1.021	1.016
603.997	0.549	1.097	1.061	1.038	1.024	1.016	1.010
577.344	0.525	1.093	1.057	1.034	1.020	1.011	1.005
549.867	0.500	1.090	1.053	1.030	1.015	1.006	0.999
521.485	0.474	1.086	1.049	1.026	1.010	1.000	0.993
492.170	0.447	1.083	1.045	1.021	1.005	0.995	0.987
461.817	0.420	1.080	1.042	1.017	1.000	0.989	0.981
430.176	0.391	1.076	1.037	1.012	0.995	0.983	0.974
397.068	0.361	1.073	1.033	1.007	0.989	0.976	0.967
363.379	0.330	1.070	1.031	1.004	0.986	0.973	0.964
330.742	0.301	1.074	1.036	1.012	0.996	0.985	0.977
299.601	0.272	1.075	1.039	1.015	1.000	0.989	0.982
269.448	0.245	1.075	1.037	1.013	0.997	0.986	0.978
239.335	0.218	1.076	1.040	1.016	1.001	0.990	0.983
207.700	0.189	1.078	1.042	1.019	1.004	0.994	0.987
177.832	0.162	1.078	1.041	1.017	1.001	0.990	0.982
147.608	0.134	1.081	1.043	1.019	1.003	0.993	0.985
115.458	0.105	1.084	1.046	1.022	1.006	0.995	0.987
85.064	0.077	1.087	1.047	1.020	1.002	0.990	0.981
54.779	0.050	1.092	1.051	1.024	1.006	0.993	0.984
21.737	0.020	1.097	1.055	1.027	1.007	0.994	0.984

Tabla 4.1.18 Valores r_2 de la sección 17 con pendiente de eje neutro $s = 0.5$ respecto al eje *x-x*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
980.177	0.891	1.456	1.425	1.407	1.402	1.406	1.418
971.283	0.883	1.434	1.400	1.379	1.371	1.372	1.380
961.783	0.874	1.414	1.377	1.354	1.343	1.340	1.345
951.617	0.865	1.396	1.355	1.330	1.316	1.311	1.312
940.572	0.855	1.375	1.333	1.305	1.288	1.280	1.279
928.758	0.844	1.358	1.313	1.282	1.264	1.253	1.250
916.108	0.833	1.341	1.294	1.262	1.241	1.228	1.223
902.544	0.821	1.325	1.277	1.243	1.220	1.205	1.198
887.991	0.807	1.312	1.261	1.225	1.201	1.185	1.175
872.414	0.793	1.299	1.247	1.210	1.184	1.166	1.155
855.842	0.778	1.286	1.233	1.194	1.166	1.147	1.134
838.111	0.762	1.271	1.216	1.175	1.146	1.125	1.110
819.447	0.745	1.257	1.200	1.158	1.126	1.104	1.088
799.870	0.727	1.244	1.186	1.142	1.110	1.087	1.069
779.503	0.709	1.231	1.173	1.129	1.096	1.072	1.054
758.324	0.689	1.220	1.161	1.117	1.084	1.060	1.041
736.478	0.669	1.212	1.153	1.109	1.076	1.052	1.033
713.954	0.649	1.204	1.145	1.102	1.069	1.045	1.026
690.874	0.628	1.197	1.138	1.095	1.063	1.038	1.020
667.141	0.607	1.189	1.131	1.087	1.055	1.031	1.012
642.843	0.584	1.182	1.123	1.080	1.047	1.023	1.004
618.014	0.562	1.174	1.116	1.072	1.040	1.015	0.996
592.597	0.539	1.168	1.109	1.065	1.032	1.007	0.988
566.484	0.515	1.162	1.103	1.059	1.025	1.000	0.980
539.667	0.491	1.156	1.096	1.051	1.018	0.992	0.971
512.049	0.466	1.150	1.089	1.044	1.010	0.983	0.962
483.427	0.440	1.144	1.082	1.036	1.001	0.974	0.952
453.650	0.412	1.137	1.075	1.028	0.992	0.963	0.940
422.822	0.384	1.131	1.067	1.019	0.981	0.952	0.928

390.889	0.355	1.124	1.059	1.010	0.971	0.940	0.915
358.716	0.326	1.119	1.053	1.003	0.964	0.933	0.907
326.081	0.296	1.122	1.058	1.009	0.972	0.942	0.918
293.899	0.267	1.125	1.062	1.013	0.976	0.947	0.923
262.440	0.239	1.129	1.066	1.018	0.981	0.952	0.928
230.801	0.210	1.133	1.070	1.023	0.986	0.957	0.934
199.758	0.182	1.133	1.069	1.021	0.983	0.953	0.929
168.449	0.153	1.135	1.071	1.021	0.983	0.952	0.927
136.603	0.124	1.142	1.077	1.028	0.989	0.959	0.934
105.439	0.096	1.148	1.081	1.029	0.989	0.956	0.930
74.237	0.068	1.156	1.088	1.034	0.992	0.959	0.931
42.426	0.039	1.166	1.097	1.044	1.001	0.967	0.939
11.278	0.010	1.176	1.104	1.048	1.003	0.966	0.936

Tabla 4.1.19 Valores r_2 de la sección 17 con pendiente de eje neutro s = 0.75 respecto al eje *x-x*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
966.287	0.878	1.569	1.532	1.505	1.488	1.480	1.478
956.728	0.870	1.541	1.499	1.469	1.447	1.434	1.428
946.559	0.861	1.515	1.470	1.435	1.410	1.393	1.383
935.731	0.851	1.492	1.443	1.406	1.377	1.357	1.344
924.154	0.840	1.471	1.419	1.378	1.346	1.323	1.307
911.664	0.829	1.448	1.393	1.349	1.315	1.289	1.269
898.345	0.817	1.428	1.370	1.323	1.286	1.258	1.236
884.189	0.804	1.409	1.349	1.300	1.261	1.230	1.205
869.214	0.790	1.392	1.329	1.278	1.236	1.203	1.176
853.427	0.776	1.374	1.308	1.255	1.212	1.176	1.148
836.819	0.761	1.355	1.288	1.232	1.187	1.150	1.120
819.374	0.745	1.338	1.268	1.211	1.164	1.126	1.094
801.155	0.728	1.322	1.251	1.192	1.144	1.104	1.071
782.184	0.711	1.307	1.235	1.175	1.126	1.086	1.052
762.439	0.693	1.294	1.220	1.160	1.110	1.069	1.034
741.849	0.674	1.283	1.209	1.148	1.098	1.056	1.022
720.369	0.655	1.272	1.198	1.137	1.086	1.045	1.010
698.224	0.635	1.262	1.187	1.126	1.075	1.033	0.998
675.393	0.614	1.253	1.178	1.116	1.065	1.023	0.988
651.917	0.593	1.244	1.168	1.106	1.056	1.014	0.978
627.678	0.571	1.234	1.158	1.095	1.044	1.002	0.966
602.885	0.548	1.224	1.147	1.085	1.034	0.991	0.955
577.477	0.525	1.215	1.138	1.075	1.023	0.980	0.944
551.503	0.501	1.207	1.129	1.065	1.013	0.969	0.932
524.913	0.477	1.198	1.119	1.055	1.002	0.957	0.920
497.580	0.452	1.190	1.110	1.045	0.991	0.946	0.907
469.447	0.427	1.182	1.101	1.035	0.980	0.934	0.895
440.290	0.400	1.172	1.090	1.023	0.967	0.920	0.880
410.115	0.373	1.163	1.079	1.011	0.953	0.905	0.864
378.963	0.344	1.154	1.069	0.999	0.940	0.891	0.848
348.058	0.316	1.148	1.063	0.993	0.934	0.884	0.842
316.351	0.288	1.149	1.064	0.995	0.937	0.888	0.846
284.192	0.258	1.154	1.070	1.000	0.942	0.893	0.851
253.117	0.230	1.160	1.076	1.007	0.949	0.900	0.858
221.782	0.202	1.167	1.083	1.014	0.957	0.908	0.866
190.345	0.173	1.170	1.086	1.016	0.958	0.908	0.866
158.956	0.144	1.177	1.093	1.023	0.965	0.916	0.874
128.837	0.117	1.185	1.100	1.030	0.971	0.921	0.878
97.491	0.089	1.194	1.108	1.037	0.976	0.925	0.880

66.045	0.060	1.206	1.120	1.048	0.987	0.935	0.890
35.892	0.033	1.218	1.131	1.058	0.996	0.942	0.896
4.660	0.004	1.232	1.144	1.069	1.005	0.949	0.901

Tabla 4.1.20 Valores r_2 de la sección 17 con pendiente de eje neutro *s* = 1.0 respecto al eje *x-x*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
948.481	0.862	1.611	1.563	1.523	1.490	1.462	1.440
938.368	0.853	1.584	1.532	1.488	1.451	1.420	1.394
927.649	0.843	1.559	1.504	1.457	1.416	1.382	1.353
916.261	0.833	1.536	1.478	1.427	1.384	1.347	1.315
904.184	0.822	1.515	1.453	1.400	1.354	1.314	1.280
891.237	0.810	1.493	1.428	1.372	1.323	1.280	1.244
877.423	0.798	1.471	1.403	1.344	1.292	1.247	1.208
862.924	0.784	1.449	1.378	1.316	1.262	1.215	1.173
847.712	0.771	1.428	1.354	1.290	1.233	1.183	1.140
831.743	0.756	1.407	1.330	1.263	1.205	1.153	1.107
815.098	0.741	1.387	1.308	1.239	1.178	1.125	1.078
797.759	0.725	1.369	1.288	1.217	1.155	1.100	1.052
779.747	0.709	1.353	1.270	1.198	1.134	1.078	1.029
760.979	0.692	1.338	1.253	1.180	1.115	1.058	1.008
741.444	0.674	1.325	1.240	1.166	1.100	1.043	0.992
721.262	0.656	1.314	1.228	1.153	1.087	1.029	0.978
700.420	0.637	1.303	1.216	1.141	1.075	1.017	0.965
678.937	0.617	1.293	1.206	1.129	1.063	1.005	0.953
656.778	0.597	1.284	1.195	1.119	1.052	0.994	0.942
633.854	0.576	1.274	1.185	1.108	1.042	0.983	0.932
610.212	0.555	1.264	1.175	1.097	1.030	0.971	0.920
585.653	0.532	1.253	1.163	1.085	1.018	0.958	0.907
560.519	0.510	1.243	1.152	1.073	1.005	0.945	0.893
534.736	0.486	1.232	1.140	1.061	0.992	0.932	0.879
508.281	0.462	1.221	1.128	1.048	0.979	0.918	0.865
481.271	0.438	1.211	1.117	1.036	0.966	0.905	0.851
453.634	0.412	1.200	1.105	1.023	0.952	0.890	0.836
425.299	0.387	1.190	1.093	1.010	0.938	0.876	0.820
396.093	0.360	1.178	1.081	0.997	0.924	0.860	0.804
365.918	0.333	1.170	1.071	0.986	0.913	0.848	0.792
336.412	0.306	1.165	1.066	0.981	0.908	0.844	0.788
306.098	0.278	1.165	1.067	0.982	0.909	0.845	0.789
274.811	0.250	1.174	1.076	0.991	0.918	0.853	0.797
245.378	0.223	1.181	1.083	0.998	0.924	0.860	0.804
215.294	0.196	1.188	1.090	1.005	0.931	0.867	0.810
183.998	0.167	1.195	1.097	1.012	0.939	0.874	0.818
154.458	0.140	1.201	1.104	1.019	0.945	0.880	0.823
124.390	0.113	1.211	1.114	1.029	0.954	0.889	0.831
93.039	0.085	1.225	1.127	1.042	0.967	0.901	0.843
63.874	0.058	1.238	1.140	1.055	0.979	0.913	0.854
34.492	0.031	1.252	1.155	1.069	0.993	0.926	0.866
4.014	0.004	1.270	1.173	1.087	1.010	0.942	0.881

Tabla 4.1.21 Valores r_2 de la sección 17 con pendiente de eje neutro *s* = 0.25 respecto al eje *y-y*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
946.250	0.860	1.605	1.566	1.535	1.513	1.497	1.488
936.272	0.851	1.579	1.534	1.499	1.472	1.452	1.438
925.592	0.842	1.554	1.505	1.465	1.433	1.409	1.390

914.176	0.831	1.530	1.477	1.433	1.397	1.368	1.345
902.067	0.820	1.508	1.450	1.403	1.363	1.330	1.303
889.278	0.808	1.488	1.427	1.376	1.333	1.297	1.267
875.786	0.796	1.470	1.406	1.352	1.307	1.268	1.236
861.622	0.783	1.452	1.386	1.330	1.282	1.241	1.206
846.768	0.770	1.434	1.365	1.306	1.256	1.213	1.176
831.209	0.756	1.415	1.344	1.283	1.230	1.185	1.146
814.753	0.741	1.396	1.322	1.259	1.204	1.157	1.116
797.609	0.725	1.379	1.303	1.237	1.181	1.132	1.089
779.740	0.709	1.363	1.285	1.218	1.160	1.109	1.065
761.173	0.692	1.349	1.269	1.201	1.141	1.089	1.044
741.929	0.674	1.337	1.255	1.185	1.125	1.072	1.026
721.978	0.656	1.325	1.243	1.172	1.110	1.056	1.009
701.324	0.638	1.313	1.230	1.158	1.095	1.041	0.993
679.679	0.618	1.300	1.216	1.142	1.079	1.024	0.975
657.270	0.598	1.288	1.202	1.128	1.063	1.007	0.958
634.208	0.577	1.276	1.188	1.113	1.048	0.992	0.942
610.403	0.555	1.264	1.175	1.099	1.034	0.976	0.926
586.010	0.533	1.252	1.163	1.086	1.020	0.962	0.911
560.972	0.510	1.242	1.151	1.073	1.006	0.947	0.896
535.350	0.487	1.231	1.139	1.060	0.992	0.933	0.881
509.142	0.463	1.220	1.127	1.047	0.978	0.918	0.865
482.054	0.438	1.208	1.114	1.033	0.963	0.902	0.848
454.328	0.413	1.197	1.101	1.019	0.948	0.886	0.831
425.808	0.387	1.185	1.088	1.005	0.932	0.869	0.814
396.474	0.360	1.173	1.075	0.990	0.916	0.852	0.796
366.276	0.333	1.163	1.063	0.977	0.902	0.837	0.779
335.514	0.305	1.153	1.051	0.962	0.886	0.819	0.760
305.020	0.277	1.150	1.047	0.958	0.881	0.813	0.753
274.539	0.250	1.159	1.057	0.969	0.893	0.826	0.767
243.753	0.222	1.170	1.070	0.982	0.907	0.840	0.782
213.315	0.194	1.179	1.079	0.993	0.918	0.852	0.794
183.220	0.167	1.186	1.087	1.001	0.927	0.861	0.804
153.215	0.139	1.201	1.104	1.019	0.946	0.881	0.824
125.486	0.114	1.212	1.117	1.034	0.962	0.899	0.843
98.293	0.089	1.225	1.131	1.050	0.980	0.918	0.864
71.245	0.065	1.241	1.149	1.069	1.000	0.940	0.887
44.624	0.041	1.254	1.163	1.084	1.015	0.955	0.903
18.802	0.017	1.267	1.177	1.098	1.029	0.968	0.915

Tabla 4.1.22 Valores r_2 de la sección 17 con pendiente de eje neutro $s = 0.5$ respecto al eje *y-y*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
858.021	0.780	1.515	1.434	1.356	1.283	1.214	1.149
846.277	0.769	1.497	1.412	1.333	1.258	1.187	1.120
834.099	0.758	1.478	1.391	1.310	1.233	1.160	1.092
821.506	0.747	1.460	1.371	1.287	1.209	1.135	1.066
808.515	0.735	1.443	1.352	1.267	1.187	1.112	1.042
795.104	0.723	1.428	1.335	1.248	1.167	1.091	1.020
781.207	0.710	1.414	1.319	1.230	1.148	1.071	0.999
766.901	0.697	1.400	1.304	1.214	1.131	1.053	0.981
752.229	0.684	1.388	1.291	1.200	1.115	1.037	0.964
736.983	0.670	1.377	1.278	1.186	1.100	1.021	0.948
721.282	0.656	1.365	1.265	1.172	1.086	1.006	0.932
705.083	0.641	1.355	1.253	1.159	1.073	0.992	0.918
688.389	0.626	1.345	1.242	1.147	1.060	0.979	0.904

671.239	0.610	1.335	1.231	1.136	1.047	0.966	0.891
653.652	0.594	1.326	1.221	1.124	1.036	0.954	0.879
635.600	0.578	1.316	1.211	1.113	1.024	0.942	0.866
617.013	0.561	1.307	1.200	1.102	1.013	0.930	0.854
597.973	0.544	1.298	1.191	1.092	1.002	0.919	0.843
578.567	0.526	1.290	1.181	1.082	0.991	0.908	0.832
558.668	0.508	1.281	1.172	1.072	0.980	0.897	0.820
538.312	0.489	1.272	1.162	1.061	0.969	0.885	0.809
517.406	0.470	1.263	1.152	1.051	0.958	0.874	0.797
495.967	0.451	1.254	1.142	1.040	0.947	0.863	0.786
473.990	0.431	1.244	1.132	1.029	0.936	0.851	0.774
451.216	0.410	1.233	1.119	1.016	0.923	0.837	0.760
427.884	0.389	1.221	1.107	1.003	0.909	0.823	0.746
403.958	0.367	1.209	1.094	0.989	0.894	0.809	0.731
379.536	0.345	1.198	1.081	0.976	0.881	0.795	0.717
354.771	0.323	1.189	1.072	0.966	0.871	0.785	0.707
330.278	0.300	1.181	1.063	0.957	0.861	0.775	0.698
305.749	0.278	1.178	1.060	0.954	0.858	0.772	0.695
280.697	0.255	1.184	1.066	0.960	0.865	0.779	0.701
255.891	0.233	1.192	1.075	0.969	0.874	0.788	0.710
231.272	0.210	1.200	1.083	0.978	0.883	0.797	0.720
206.327	0.188	1.208	1.092	0.987	0.893	0.807	0.730
182.414	0.166	1.213	1.098	0.993	0.899	0.813	0.736
159.286	0.145	1.221	1.106	1.002	0.908	0.822	0.745
135.809	0.123	1.233	1.119	1.016	0.923	0.837	0.760
112.983	0.103	1.245	1.133	1.030	0.937	0.853	0.775
90.117	0.082	1.258	1.147	1.045	0.953	0.868	0.792
66.719	0.061	1.276	1.166	1.066	0.975	0.891	0.815
44.455	0.040	1.291	1.182	1.083	0.993	0.910	0.834
23.225	0.021	1.301	1.194	1.096	1.006	0.923	0.847
1.484	0.001	1.315	1.210	1.113	1.024	0.942	0.867

Tabla 4.1.23 Valores r_2 de la sección 17 con pendiente de eje neutro s = 0.75 respecto al eje *y*-*y*

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
769.569	0.700	1.383	1.291	1.207	1.131	1.061	0.998
757.874	0.689	1.372	1.280	1.195	1.118	1.048	0.983
745.895	0.678	1.363	1.269	1.184	1.106	1.036	0.971
733.623	0.667	1.355	1.260	1.174	1.096	1.025	0.960
721.076	0.655	1.347	1.251	1.164	1.086	1.014	0.949
708.275	0.644	1.339	1.242	1.155	1.076	1.004	0.938
695.217	0.632	1.331	1.234	1.146	1.067	0.994	0.928
681.871	0.620	1.323	1.226	1.137	1.057	0.985	0.919
668.229	0.608	1.316	1.218	1.129	1.049	0.976	0.910
654.307	0.595	1.309	1.211	1.121	1.041	0.968	0.901
640.132	0.582	1.303	1.203	1.113	1.032	0.959	0.893
625.701	0.569	1.296	1.195	1.105	1.024	0.950	0.884
610.981	0.555	1.289	1.188	1.097	1.016	0.942	0.875
595.961	0.542	1.282	1.181	1.090	1.008	0.934	0.867
580.635	0.528	1.276	1.174	1.083	1.001	0.927	0.860
565.039	0.514	1.270	1.167	1.076	0.993	0.919	0.852
549.038	0.499	1.262	1.159	1.067	0.985	0.910	0.843
532.757	0.484	1.255	1.152	1.059	0.976	0.901	0.834
516.215	0.469	1.248	1.144	1.050	0.967	0.892	0.825
499.396	0.454	1.240	1.136	1.042	0.958	0.883	0.816
482.337	0.439	1.233	1.128	1.034	0.950	0.874	0.807

465.038	0.423	1.226	1.120	1.025	0.941	0.865	0.797
447.444	0.407	1.218	1.111	1.016	0.931	0.856	0.788
429.514	0.391	1.210	1.103	1.007	0.922	0.846	0.778
411.322	0.374	1.202	1.094	0.998	0.912	0.836	0.768
392.882	0.357	1.194	1.085	0.989	0.903	0.826	0.757
374.182	0.340	1.188	1.078	0.981	0.894	0.817	0.749
355.252	0.323	1.183	1.073	0.976	0.890	0.813	0.744
336.896	0.306	1.179	1.069	0.971	0.885	0.808	0.740
318.165	0.289	1.176	1.066	0.969	0.883	0.806	0.738
299.053	0.272	1.178	1.068	0.971	0.884	0.808	0.739
279.481	0.254	1.183	1.073	0.975	0.889	0.812	0.743
259.999	0.236	1.189	1.080	0.982	0.896	0.819	0.750
240.759	0.219	1.196	1.086	0.989	0.903	0.826	0.757
222.121	0.202	1.199	1.090	0.993	0.907	0.829	0.760
203.310	0.185	1.202	1.093	0.996	0.909	0.832	0.762
184.196	0.168	1.206	1.097	1.000	0.913	0.836	0.766
165.751	0.151	1.212	1.103	1.006	0.919	0.841	0.772
146.829	0.134	1.220	1.112	1.015	0.929	0.851	0.781
127.435	0.116	1.230	1.122	1.026	0.939	0.862	0.792
108.789	0.099	1.238	1.131	1.034	0.947	0.869	0.799
90.524	0.082	1.246	1.139	1.043	0.956	0.877	0.806
72.660	0.066	1.255	1.148	1.052	0.965	0.887	0.816
54.505	0.050	1.266	1.160	1.064	0.978	0.900	0.829
35.914	0.033	1.278	1.172	1.077	0.991	0.913	0.842
16.897	0.015	1.291	1.187	1.092	1.006	0.928	0.857

Tabla 4.1.24 Valores r_2 de la sección 17 con pendiente de eje neutro s = 1.0 respecto al eje y-y

Pn	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0
694.509	0.631	1.301	1.213	1.137	1.071	1.013	0.962
683.748	0.622	1.296	1.208	1.132	1.066	1.007	0.956
672.814	0.612	1.291	1.203	1.126	1.060	1.002	0.950
661.753	0.602	1.286	1.198	1.121	1.055	0.996	0.945
650.474	0.591	1.281	1.193	1.116	1.049	0.991	0.939
639.019	0.581	1.276	1.188	1.111	1.044	0.985	0.934
627.414	0.570	1.272	1.183	1.106	1.039	0.980	0.929
615.620	0.560	1.267	1.177	1.100	1.033	0.974	0.923
603.472	0.549	1.261	1.171	1.094	1.027	0.968	0.916
591.166	0.537	1.256	1.166	1.088	1.020	0.961	0.909
578.715	0.526	1.250	1.160	1.082	1.014	0.955	0.903
566.126	0.515	1.245	1.154	1.076	1.008	0.948	0.896
553.373	0.503	1.240	1.148	1.070	1.001	0.942	0.890
540.496	0.491	1.234	1.142	1.063	0.995	0.935	0.883
527.447	0.479	1.229	1.137	1.057	0.988	0.928	0.876
514.235	0.468	1.224	1.131	1.051	0.982	0.921	0.868
500.874	0.455	1.218	1.125	1.045	0.975	0.915	0.861
487.365	0.443	1.213	1.119	1.039	0.969	0.908	0.854
473.689	0.431	1.208	1.114	1.033	0.962	0.901	0.847
459.838	0.418	1.203	1.108	1.026	0.955	0.894	0.840
445.819	0.405	1.197	1.102	1.020	0.948	0.886	0.832
431.623	0.392	1.192	1.096	1.013	0.941	0.879	0.824
417.223	0.379	1.186	1.090	1.006	0.934	0.871	0.816
402.635	0.366	1.181	1.083	1.000	0.927	0.864	0.808
387.799	0.353	1.176	1.077	0.993	0.920	0.856	0.800
372.728	0.339	1.171	1.073	0.988	0.914	0.850	0.794
357.806	0.325	1.168	1.069	0.984	0.910	0.846	0.790

343.074	0.312	1.165	1.066	0.982	0.908	0.844	0.788
328.116	0.298	1.164	1.065	0.981	0.907	0.844	0.788
312.920	0.284	1.164	1.066	0.981	0.908	0.844	0.788
297.489	0.271	1.167	1.068	0.984	0.910	0.847	0.791
281.810	0.256	1.171	1.073	0.988	0.915	0.851	0.795
266.358	0.242	1.176	1.078	0.993	0.920	0.856	0.800
251.878	0.229	1.179	1.081	0.996	0.923	0.859	0.802
237.118	0.216	1.183	1.085	1.000	0.927	0.862	0.806
222.097	0.202	1.186	1.088	1.003	0.930	0.866	0.809
206.822	0.188	1.189	1.091	1.007	0.933	0.869	0.812
191.215	0.174	1.193	1.095	1.010	0.937	0.872	0.816
175.575	0.160	1.197	1.099	1.014	0.941	0.876	0.819
161.004	0.146	1.200	1.102	1.017	0.943	0.878	0.821
146.188	0.133	1.204	1.106	1.021	0.947	0.883	0.825
131.112	0.119	1.209	1.111	1.026	0.952	0.887	0.829
115.742	0.105	1.215	1.117	1.032	0.957	0.892	0.834
100.086	0.091	1.221	1.123	1.038	0.963	0.897	0.839
84.495	0.077	1.229	1.131	1.046	0.971	0.905	0.847
70.314	0.064	1.235	1.137	1.052	0.976	0.910	0.851
55.878	0.051	1.242	1.144	1.059	0.983	0.916	0.857
41.179	0.037	1.249	1.151	1.066	0.990	0.923	0.863
26.193	0.024	1.256	1.159	1.073	0.997	0.929	0.869
10.900	0.010	1.265	1.168	1.082	1.005	0.938	0.877

En el Apéndice C se muestran los valores de r_2 calculados para las demás secciones transversales indicadas en el Capítulo 2. Los casos de este capítulo y del Apéndice C corroboran que α = 1.4 es un exponente aceptable siempre y cuando P_n/P_0 no sea menor de 0.4. Debajo de este nivel de carga sólo se presentaron los 5 casos (de aprox. 7,400 casos) indicados en la Tabla 4.1.25 fuera de esta regla.

Tabla 4.1.25 Casos donde el valor de r_2 es menor que 1.0 para $P_n/P_0 > 0.4$

Caso	**Sección**	**Valor de P_n/P_0**	**r_2**
Sección 2, s = 1.0	Cuadrada	0.411	0.996
Sección 10, s = 1.0, x-x	Rectangular	0.401	0.992
Sección 10, s = 0.75, y-y	Rectangular	0.415	0.996
Sección 10, s = 1.0, y-y	Rectangular	0.412	0.998
Sección 18, s = 0.5, y-y	Rectangular	0.407	0.994

Como se aprecia en las tablas de los casos presentados, para distintos valores del exponente α, los resultados que se obtienen de aplicar el método del contorno de carga son dependientes de la magnitud de la carga axial. Para alcanzar valores de r_2 más uniformes independientemente del nivel de carga axial, y así obtener niveles de seguridad uniformes con este método, el exponente α se relaciona con la intensidad de la carga axial.

4.2 Valores del exponente α en función de la carga axial

Al final de esta sección y en el Apéndice C se muestran los valores calculados de r_2 usando las recomendaciones de PCA, Eurocode, India y la recomendación J (Cap. 2).

En la Tabla 4.2.1 se presentan los valores de r_2 de la sección 1 para distintas relaciones del exponente *a* en función de P_n/P_0 para el eje neutro con una pendiente *s* = 0.25 respecto al eje *x-x*. En las Tablas 4.2.2 a 4.2.4 se presentan los correspondientes valores de r_2 de la sección 1 para el eje neutro con pendientes *s* = 0. 5, 1.75 y 1.0. Para simplificar la cantidad de información que se presenta en este capítulo, las demás secciones se presentan en el Apéndice C. Del análisis de estas tablas es claro que cuando *a* es función de P_n/P_0 se obtienen valores de r_2 mas cercanos a 1.0.

Tabla 4.2.1 Valores r_2 de la sección 1 para distintas relaciones del exponente α en función de P_n/P_0 para el eje neutro con una pendiente *s* = 0.25 respecto al eje *x-x.*

Pn	Pn/P0	PCA	EuroCode	India	J
489.407	0.890	1.418	1.410	1.424	1.424
484.976	0.882	1.372	1.367	1.377	1.377
480.244	0.873	1.332	1.329	1.335	1.335
475.185	0.864	1.295	1.294	1.297	1.297
469.775	0.854	1.263	1.265	1.263	1.263
463.984	0.844	1.235	1.239	1.233	1.233
457.778	0.832	1.209	1.216	1.205	1.205
451.121	0.820	1.187	1.197	1.182	1.182
443.973	0.807	1.175	1.186	1.168	1.168
436.319	0.793	1.165	1.179	1.157	1.157
428.177	0.778	1.154	1.170	1.145	1.145
419.482	0.763	1.140	1.158	1.130	1.130
410.247	0.746	1.123	1.145	1.113	1.113
400.584	0.728	1.110	1.135	1.100	1.100
390.521	0.710	1.099	1.127	1.090	1.090
380.039	0.691	1.091	1.120	1.082	1.083
369.233	0.671	1.085	1.114	1.077	1.077
358.104	0.651	1.079	1.108	1.072	1.072
346.718	0.630	1.073	1.103	1.068	1.068
335.048	0.609	1.066	1.097	1.063	1.063
322.940	0.587	1.059	1.091	1.057	1.057
310.572	0.565	1.051	1.086	1.052	1.051
297.875	0.542	1.045	1.081	1.048	1.047
284.832	0.518	1.039	1.077	1.045	1.043
271.446	0.494	1.032	1.073	1.042	1.040
257.609	0.468	1.026	1.069	1.040	1.038
243.362	0.443	1.021	1.066	1.040	1.037
228.519	0.415	1.014	1.063	1.040	1.036
213.021	0.387	1.006	1.059	1.039	1.036
196.963	0.358	0.999	1.057	1.041	1.037
180.265	0.328	0.992	1.054	1.045	1.039
163.323	0.297	0.981	1.048	1.046	1.038
146.758	0.267	0.996	1.065	1.071	1.047
130.664	0.238	1.012	1.082	1.096	1.057
114.725	0.209	1.024	1.096	1.118	1.063
99.030	0.180	1.025	1.103	1.126	1.063
83.883	0.152	1.019	1.109	1.125	1.059
68.785	0.125	1.021	1.123	1.131	1.063
55.030	0.100	1.021	1.133	1.133	1.064
40.623	0.074	1.025	1.138	1.138	1.069
25.431	0.046	1.037	1.151	1.151	1.081
9.327	0.017	1.050	1.164	1.164	1.094

Tabla 4.2.2 Valores r_2 de la sección 1 para distintas relaciones del exponente *a* en función de P_n/P_0 para el eje neutro con una pendiente *s* = 0.5 respecto al eje *x-x.*

Pn	Pn/P0	PCA	EuroCode	India	J
474.681	0.863	1.468	1.479	1.461	1.461
469.603	0.854	1.415	1.431	1.404	1.404
464.222	0.844	1.369	1.389	1.355	1.355
458.506	0.834	1.327	1.351	1.309	1.309
452.442	0.823	1.291	1.319	1.268	1.268
446.038	0.811	1.263	1.295	1.237	1.237
439.283	0.799	1.241	1.277	1.210	1.212
432.191	0.786	1.219	1.258	1.187	1.189
424.752	0.772	1.197	1.240	1.165	1.166
416.971	0.758	1.174	1.223	1.143	1.145
408.861	0.743	1.154	1.207	1.123	1.125
400.356	0.728	1.137	1.195	1.108	1.109
391.519	0.712	1.123	1.186	1.095	1.097
382.237	0.695	1.109	1.176	1.084	1.085
372.384	0.677	1.093	1.162	1.071	1.071
362.205	0.659	1.080	1.150	1.060	1.060
351.631	0.639	1.067	1.139	1.051	1.051
340.726	0.620	1.056	1.129	1.044	1.044
329.490	0.599	1.046	1.121	1.039	1.038
317.931	0.578	1.037	1.113	1.034	1.033
306.084	0.556	1.028	1.106	1.031	1.029
293.808	0.534	1.021	1.100	1.030	1.028
281.234	0.511	1.014	1.095	1.030	1.027
268.375	0.488	1.007	1.091	1.030	1.026
255.233	0.464	1.000	1.086	1.031	1.027
241.820	0.440	0.993	1.083	1.033	1.028
228.017	0.415	0.987	1.079	1.037	1.031
213.861	0.389	0.980	1.076	1.041	1.034
199.317	0.362	0.973	1.073	1.046	1.038
184.101	0.335	0.965	1.070	1.053	1.043
168.447	0.306	0.952	1.063	1.055	1.045
153.106	0.278	0.956	1.071	1.075	1.046
137.743	0.251	0.973	1.092	1.107	1.056
121.853	0.222	0.993	1.115	1.143	1.068
106.191	0.193	1.007	1.134	1.175	1.075
90.735	0.165	1.009	1.149	1.178	1.078
74.620	0.136	1.017	1.169	1.185	1.086
59.443	0.108	1.034	1.197	1.200	1.102
45.566	0.083	1.043	1.209	1.209	1.111
31.204	0.057	1.062	1.225	1.225	1.128
17.133	0.031	1.080	1.242	1.242	1.146
3.648	0.007	1.091	1.254	1.254	1.158

Tabla 4.2.3 Valores r_2 de la sección 1 para distintas relaciones del exponente *a* en función de P_n/P_0 para el eje neutro con una pendiente *s* = 0.75 respecto al eje *x-x.*

Pn	Pn/P0	PCA	EuroCode	India	J
453.535	0.825	1.315	1.357	1.279	1.279
447.857	0.814	1.281	1.327	1.240	1.240
441.924	0.803	1.254	1.304	1.209	1.209
435.733	0.792	1.229	1.283	1.180	1.183
429.286	0.780	1.204	1.263	1.155	1.158

422.577	0.768	1.179	1.243	1.132	1.135
415.608	0.756	1.156	1.224	1.110	1.112
408.345	0.743	1.135	1.208	1.091	1.093
400.800	0.729	1.117	1.196	1.075	1.077
392.991	0.715	1.101	1.186	1.062	1.064
384.914	0.700	1.088	1.178	1.051	1.053
376.566	0.685	1.076	1.168	1.043	1.044
367.953	0.669	1.067	1.159	1.037	1.038
359.068	0.653	1.058	1.151	1.032	1.033
349.911	0.636	1.049	1.143	1.029	1.028
340.302	0.619	1.040	1.135	1.024	1.024
330.381	0.601	1.032	1.128	1.021	1.020
320.141	0.582	1.024	1.122	1.019	1.018
309.594	0.563	1.017	1.116	1.018	1.016
298.765	0.543	1.010	1.111	1.019	1.016
287.649	0.523	1.005	1.107	1.020	1.017
276.246	0.502	0.999	1.103	1.023	1.019
264.522	0.481	0.993	1.099	1.025	1.021
252.294	0.459	0.986	1.094	1.028	1.022
239.778	0.436	0.979	1.090	1.031	1.024
226.967	0.413	0.971	1.086	1.034	1.027
213.864	0.389	0.964	1.081	1.039	1.031
200.435	0.364	0.956	1.077	1.044	1.035
186.690	0.339	0.950	1.075	1.052	1.042
172.652	0.314	0.938	1.068	1.056	1.044
158.262	0.288	0.938	1.072	1.072	1.048
144.684	0.263	0.952	1.089	1.100	1.053
130.824	0.238	0.968	1.108	1.132	1.061
116.642	0.212	0.984	1.129	1.165	1.069
102.138	0.186	0.998	1.151	1.193	1.079
87.717	0.160	1.005	1.169	1.199	1.086
73.852	0.134	1.012	1.188	1.205	1.092
60.707	0.110	1.024	1.211	1.216	1.104
47.582	0.086	1.040	1.230	1.230	1.119
34.170	0.062	1.063	1.250	1.250	1.141
21.645	0.039	1.083	1.267	1.267	1.160
9.081	0.017	1.101	1.283	1.283	1.177

Tabla 4.2.4 Valores r_2 de la sección 1 para distintas relaciones del exponente *a* en función de P_n/P_0 para el eje neutro con una pendiente *s* = 1.0 respecto al eje *x-x.*

Pn	Pn/P0	PCA	EuroCode	India	J
429.808	0.781	1.198	1.261	1.145	1.148
423.961	0.771	1.177	1.244	1.125	1.128
417.907	0.760	1.156	1.228	1.105	1.108
411.628	0.748	1.136	1.213	1.088	1.090
405.125	0.737	1.120	1.201	1.073	1.075
398.418	0.724	1.105	1.191	1.061	1.063
391.489	0.712	1.092	1.183	1.050	1.052
384.356	0.699	1.080	1.176	1.042	1.043
377.041	0.685	1.071	1.167	1.035	1.036
369.501	0.672	1.062	1.159	1.030	1.031
361.753	0.658	1.054	1.152	1.026	1.026
353.800	0.643	1.046	1.145	1.022	1.022

345.626	0.628	1.039	1.139	1.020	1.019
337.186	0.613	1.033	1.134	1.018	1.018
328.474	0.597	1.028	1.130	1.018	1.017
319.540	0.581	1.024	1.127	1.019	1.018
310.374	0.564	1.019	1.123	1.020	1.018
300.690	0.547	1.012	1.117	1.019	1.017
290.804	0.529	1.005	1.112	1.019	1.016
280.666	0.510	0.998	1.107	1.020	1.016
270.292	0.491	0.991	1.102	1.021	1.016
259.683	0.472	0.985	1.097	1.023	1.018
248.825	0.452	0.978	1.093	1.026	1.019
237.664	0.432	0.972	1.090	1.029	1.022
226.188	0.411	0.966	1.086	1.033	1.026
214.459	0.390	0.960	1.083	1.038	1.029
202.461	0.368	0.953	1.079	1.043	1.034
190.213	0.346	0.948	1.077	1.051	1.040
177.792	0.323	0.939	1.072	1.056	1.044
165.107	0.300	0.931	1.068	1.062	1.049
152.579	0.277	0.940	1.080	1.085	1.050
140.468	0.255	0.954	1.097	1.112	1.056
128.166	0.233	0.968	1.114	1.141	1.063
115.617	0.210	0.982	1.132	1.170	1.070
102.802	0.187	0.994	1.151	1.195	1.078
89.773	0.163	1.002	1.170	1.202	1.085
76.817	0.140	1.012	1.190	1.210	1.095
65.702	0.119	1.017	1.205	1.215	1.099
54.519	0.099	1.028	1.225	1.225	1.111
43.119	0.078	1.042	1.237	1.237	1.124
31.489	0.057	1.064	1.256	1.256	1.145
19.597	0.036	1.090	1.279	1.279	1.170
7.790	0.014	1.115	1.300	1.300	1.192

Un resumen estadístico de estos resultados para todas las secciones se muestra en la Tabla 4.2.5. Se observa que el código europeo conduce a promedios mayores que 1.0, con los menores valores del coeficiente de variación (COV). En la tabla se aprecia que los valores promedio de r_2 disminuyen al aumentar el valor (constante) de α.

En la Tabla 4.2.6 se muestra un resumen de los fallos no conservadores a los que conduce cada recomendación.

Tabla 4.2.5 Resumen estadístico de los valores de r_2 calculados con exponente a constante o dependiente de P_n/P_0, para cada caso. Parámetros tomados para todos los valores de P_n/P_0.

Parámetro	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
Caso 1: 40 x 40 cm, ρ = 0.03, f'_c = 250 kg/cm^2										
Promedio	1.283	1.196	1.120	1.053	0.995	0.943	1.070	1.161	1.116	1.092
COV	0.091	0.104	0.120	0.139	0.162	0.187	0.099	0.072	0.086	0.079
Caso 2: 40 x 40 cm, ρ = 0.06, f'_c = 250 kg/cm^2										
Promedio	1.234	1.141	1.060	0.989	0.926	0.871	1.005	1.102	1.052	1.027
COV	0.075	0.085	0.099	0.117	0.140	0.166	0.069	0.043	0.065	0.050
Caso 3: 40 x 40 cm, ρ = 0.03, f'_c = 400 kg/cm^2										
Promedio	1.438	1.375	1.321	1.275	1.237	1.205	1.314	1.385	1.368	1.343
COV	0.193	0.231	0.271	0.314	0.359	0.406	0.317	0.266	0.294	0.306
Caso 4: 40 x 40 cm, ρ = 0.06, f'_c = 400 kg/cm^2										

Promedio	1.359	1.283	1.219	1.163	1.115	1.074	1.189	1.269	1.237	1.214
COV	0.150	0.179	0.210	0.245	0.283	0.323	0.230	0.182	0.204	0.214
Caso 5: 80 x 80 cm, ρ = 0.03, f'_c = 250 kg/cm^2										
Promedio	1.289	1.202	1.127	1.060	1.002	0.950	1.078	1.170	1.127	1.101
COV	0.087	0.099	0.113	0.130	0.151	0.176	0.093	0.072	0.088	0.076
Caso 6: 80 x 80 cm, ρ = 0.06, f'_c = 250 kg/cm^2										
Promedio	1.250	1.158	1.078	1.007	0.945	0.890	1.026	1.122	1.074	1.049
COV	0.070	0.077	0.087	0.102	0.122	0.145	0.055	0.042	0.063	0.038
Caso 7: 80 x 80 cm, ρ = 0.03, f'_c = 400 kg/cm^2										
Promedio	1.436	1.371	1.316	1.270	1.231	1.198	1.308	1.380	1.363	1.338
COV	0.188	0.224	0.263	0.304	0.348	0.395	0.307	0.257	0.285	0.296
Caso 8: 80 x 80 cm, ρ = 0.06, f'_c = 400 kg/cm^2										
Promedio	1.361	1.285	1.220	1.164	1.115	1.072	1.188	1.268	1.236	1.212
COV	0.135	0.160	0.188	0.218	0.251	0.286	0.198	0.155	0.172	0.181
Caso 9: 40 x 60 cm, ρ = 0.03, f'_c = 250 kg/cm^2										
Promedio	1.273	1.188	1.115	1.052	0.996	0.947	1.071	1.158	1.119	1.094
COV	0.090	0.101	0.116	0.135	0.157	0.182	0.099	0.076	0.090	0.082
Caso 10: 40 x 60 cm, ρ = 0.06, f'_c = 250 kg/cm^2										
Promedio	1.229	1.139	1.061	0.994	0.934	0.882	1.012	1.106	1.061	1.036
COV	0.073	0.080	0.092	0.109	0.130	0.154	0.062	0.044	0.062	0.043
Caso 11: 40 x 60 cm, ρ = 0.03, f'_c = 400 kg/cm^2										
Promedio	1.412	1.348	1.295	1.251	1.215	1.185	1.291	1.361	1.346	1.321
COV	0.186	0.223	0.262	0.304	0.350	0.398	0.313	0.262	0.292	0.303
Caso 12: 40 x 60 cm, ρ = 0.06, f'_c = 400 kg/cm^2										
Promedio	1.344	1.271	1.209	1.156	1.111	1.073	1.184	1.260	1.233	1.210
COV	0.146	0.173	0.203	0.237	0.274	0.313	0.225	0.180	0.201	0.211
Caso 13: 60 x 90 cm, ρ = 0.03, f'_c = 250 kg/cm^2										
Promedio	1.276	1.191	1.118	1.054	0.999	0.950	1.074	1.163	1.124	1.098
COV	0.087	0.098	0.112	0.129	0.150	0.175	0.095	0.075	0.091	0.080
Caso 14: 60 x 90 cm, ρ = 0.06, f'_c = 250 kg/cm^2										
Promedio	1.235	1.145	1.068	1.001	0.941	0.889	1.020	1.114	1.070	1.045
COV	0.070	0.076	0.086	0.101	0.121	0.145	0.056	0.043	0.063	0.039
Caso 15: 60 x 90 cm, ρ = 0.03, f'_c = 400 kg/cm^2										
Promedio	1.407	1.342	1.288	1.242	1.205	1.173	1.280	1.352	1.336	1.311
COV	0.179	0.213	0.250	0.290	0.333	0.379	0.296	0.247	0.275	0.286
Caso 16: 60 x 90 cm, ρ = 0.06, f'_c = 400 kg/cm^2										
Promedio	1.344	1.270	1.207	1.154	1.108	1.069	1.181	1.258	1.230	1.207
COV	0.137	0.162	0.190	0.221	0.256	0.293	0.206	0.163	0.182	0.191
Caso 17: 40 x 80 cm, ρ = 0.03, f'_c = 250 kg/cm^2										
Promedio	1.251	1.170	1.102	1.043	0.992	0.948	1.065	1.148	1.115	1.090
COV	0.088	0.097	0.110	0.126	0.147	0.171	0.096	0.077	0.091	0.082
Caso 18: 40 x 80 cm, ρ = 0.06, f'_c = 250 kg/cm^2										
Promedio	1.209	1.123	1.051	0.988	0.934	0.887	1.010	1.099	1.062	1.036
COV	0.070	0.075	0.084	0.100	0.120	0.144	0.058	0.045	0.062	0.041
Caso 19: 40 x 80 cm, ρ = 0.03, f'_c = 400 kg/cm^2										
Promedio	1.361	1.297	1.244	1.201	1.165	1.136	1.237	1.305	1.291	1.267
COV	0.160	0.189	0.221	0.256	0.295	0.337	0.261	0.218	0.243	0.252
Caso 20: 40 x 80 cm, ρ = 0.06, f'_c = 400 kg/cm^2										
Promedio	1.311	1.240	1.182	1.133	1.092	1.058	1.163	1.236	1.214	1.190

COV	0.140	0.165	0.192	0.223	0.258	0.295	0.214	0.173	0.193	0.201
Caso 21: 60 x 120 cm, ρ = 0.03, f_c' = 250 kg/cm^2										
Promedio	1.253	1.173	1.104	1.046	0.995	0.951	1.068	1.152	1.120	1.094
COV	0.086	0.093	0.105	0.121	0.141	0.164	0.091	0.074	0.088	0.078
Caso 22: 60 x 120 cm, ρ = 0.06, f_c' = 250 kg/cm^2										
Promedio	1.216	1.131	1.059	0.997	0.943	0.896	1.019	1.108	1.072	1.046
COV	0.537	0.069	0.072	0.080	0.093	0.112	0.135	0.052	0.044	0.061
Caso 23: 60 x 120 cm, ρ = 0.03, f_c' = 400 kg/cm^2										
Promedio	1.360	1.296	1.243	1.199	1.164	1.135	1.236	1.304	1.290	1.266
COV	0.159	0.187	0.219	0.253	0.292	0.333	0.258	0.216	0.241	0.249
Caso 24: 60 x 120 cm, ρ = 0.06, f_c' = 400 kg/cm^2										
Promedio	1.311	1.240	1.181	1.132	1.090	1.056	1.161	1.234	1.212	1.188
COV	0.133	0.155	0.181	0.210	0.241	0.276	0.197	0.158	0.176	0.184

Tabla 4.2.6 Análisis de los valores de $r_2 < 1.0$ en % (fallos no conservadores) así como valores máximo y mínimo de r_2 calculados con exponentes a constantes o dependientes de P_n/P_0. Parámetros tomados respecto a los valores de P_n/P_0.

	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
Caso 1: 40 x 40 cm, ρ = 0.03, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	18.93	46.15	57.99	66.86	25.44	0.00	0.00	0.00
Max	1.606	1.562	1.527	1.498	1.477	1.461	1.468	1.479	1.461	1.461
Min	1.105	1.038	0.942	0.846	0.760	0.682	0.931	1.048	1.018	1.016
Caso 2: 40 x 40 cm, ρ = 0.06, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	36.13	57.42	71.61	80.00	61.94	0.00	27.10	28.39
Max	1.462	1.396	1.340	1.291	1.250	1.214	1.238	1.267	1.214	1.214
Min	1.093	1.010	0.901	0.804	0.718	0.640	0.917	1.050	0.950	0.949
Caso 3: 40 x 40 cm, ρ = 0.03, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	0.00	20.12	39.64	49.11	0.00	0.00	0.00	0.00
Max	2.589	2.735	2.892	3.061	3.244	3.442	3.380	3.270	3.442	3.442
Min	1.148	1.090	1.045	1.008	0.977	0.952	1.039	1.090	1.077	1.073
Caso 4: 40 x 40 cm, ρ = 0.06, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	14.81	37.65	48.15	54.32	13.58	0.00	0.00	0.00
Max	2.096	2.152	2.222	2.305	2.402	2.513	2.471	2.408	2.513	2.513
Min	1.121	1.056	0.956	0.860	0.774	0.696	0.958	1.073	1.059	1.056
Caso 5: 80 x 80 cm, r = 0.03, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	10.47	45.93	59.30	68.02	19.19	0.00	0.00	0.00
Max	1.587	1.539	1.500	1.468	1.443	1.424	1.433	1.447	1.424	1.424
Min	1.119	1.054	0.965	0.870	0.784	0.706	0.947	1.058	1.016	1.013
Caso 6: 80 x 80 cm, ρ = 0.06, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	24.20	52.23	66.88	78.34	35.03	0.00	4.46	6.37
Max	1.454	1.379	1.319	1.268	1.224	1.186	1.213	1.246	1.240	1.186
Min	1.110	1.039	0.931	0.835	0.749	0.671	0.937	1.058	0.994	0.993
Caso 7: 80 x 80 cm, ρ = 0.03, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	0.00	17.34	39.31	50.87	0.00	0.00	0.00	0.00
Max	2.470	2.585	2.708	2.839	3.004	3.219	3.155	3.037	3.219	3.219
Min	1.159	1.103	1.041	0.949	0.864	0.787	1.008	1.096	1.081	1.077
Caso 8: 80 x 80 cm, ρ = 0.06, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	5.49	34.76	46.95	53.05	7.32	0.00	0.00	0.00
Max	1.980	2.010	2.051	2.102	2.163	2.235	2.206	2.164	2.235	2.235
Min	1.138	1.075	0.980	0.885	0.799	0.722	0.972	1.081	1.069	1.064
Caso 9: 40 x 60 cm, ρ = 0.03, f_c' = 250 kg/cm^2										

Fallos (%)	0.00	0.00	14.91	48.25	61.40	69.30	23.98	0.00	0.00	0.00
Max	1.605	1.558	1.519	1.487	1.487	1.494	1.490	1.487	1.494	1.494
Min	1.091	1.043	0.952	0.860	0.777	0.703	0.944	1.044	1.006	1.004
Caso 10: 40 x 60 cm, ρ = 0.06, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	34.08	55.73	71.34	78.66	50.32	0.00	18.47	21.34
Max	1.460	1.378	1.316	1.280	1.255	1.237	1.247	1.263	1.237	1.237
Min	1.081	1.019	0.914	0.819	0.736	0.660	0.927	1.034	0.976	0.975
Caso 11: 40 x 60 cm, ρ = 0.03, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	0.00	18.71	40.35	48.83	0.00	0.00	0.00	0.00
Max	2.571	2.718	2.879	3.055	3.247	3.457	3.395	3.279	3.457	3.457
Min	1.118	1.076	1.028	0.939	0.858	0.783	1.005	1.080	1.070	1.068
Caso 12: 40 x 60 cm, ρ = 0.06, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	10.98	35.98	47.26	54.27	11.28	0.00	0.00	0.00
Max	2.039	2.102	2.194	2.307	2.441	2.595	2.548	2.463	2.595	2.595
Min	1.101	1.057	0.964	0.872	0.789	0.714	0.965	1.063	1.052	1.050
Caso 13: 60 x 90 cm, ρ = 0.03, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	11.24	43.80	61.96	70.03	18.73	0.00	0.00	0.00
Max	1.608	1.562	1.523	1.490	1.478	1.483	1.480	1.478	1.483	1.483
Min	1.091	1.042	0.969	0.874	0.789	0.712	0.952	1.042	1.012	1.010
Caso 14: 60 x 90 cm, ρ = 0.06, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	26.58	55.38	70.25	78.48	41.77	0.00	13.29	14.56
Max	1.458	1.376	1.305	1.251	1.209	1.187	1.201	1.229	1.229	1.187
Min	1.081	1.029	0.932	0.836	0.750	0.674	0.937	1.037	0.985	0.984
Caso 15: 60 x 90 cm, ρ = 0.03, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	0.00	15.61	39.31	49.42	0.00	0.00	0.00	0.00
Max	2.529	2.665	2.813	2.976	3.152	3.345	3.286	3.179	3.345	3.345
Min	1.120	1.079	1.042	0.951	0.867	0.792	1.013	1.076	1.066	1.064
Caso 16: 60 x 90 cm, ρ = 0.06, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	6.02	36.75	46.99	55.12	7.23	0.00	0.00	0.00
Max	1.967	1.992	2.028	2.095	2.190	2.300	2.264	2.202	2.300	2.300
Min	1.103	1.057	0.982	0.888	0.803	0.727	0.975	1.061	1.054	1.052
Caso 17: 40 x 80 cm, ρ = 0.03, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	13.75	45.27	63.61	72.21	21.49	0.00	0.00	0.00
Max	1.611	1.566	1.535	1.513	1.497	1.488	1.492	1.499	1.488	1.488
Min	1.070	1.031	0.954	0.858	0.772	0.695	0.945	1.031	1.007	1.005
Caso 18: 40 x 80 cm, ρ = 0.06, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	32.40	60.75	73.52	80.06	52.34	0.00	14.64	15.89
Max	1.462	1.398	1.345	1.300	1.262	1.230	1.251	1.279	1.230	1.230
Min	1.061	1.018	0.918	0.822	0.735	0.658	0.930	1.026	0.971	0.970
Caso 19: 40 x 80 cm, ρ = 0.03, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	0.00	17.20	37.61	47.81	0.00	0.00	0.00	0.00
Max	2.320	2.428	2.553	2.695	2.858	3.041	2.978	2.874	3.041	3.041
Min	1.094	1.062	1.025	0.935	0.851	0.774	1.008	1.061	1.054	1.052
Caso 20: 40 x 80 cm, ρ = 0.06, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	8.66	36.42	46.57	55.52	8.96	0.00	0.00	0.00
Max	2.056	1.399	1.422	1.458	1.504	1.558	1.541	1.512	1.558	1.558
Min	1.079	1.044	0.968	0.873	0.787	0.710	0.970	1.047	1.042	1.040
Caso 21: 60 x 120 cm, ρ = 0.03, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	8.76	44.35	64.12	71.19	18.64	0.00	0.00	0.00
Max	1.597	1.548	1.512	1.486	1.466	1.452	1.458	1.469	1.452	1.452
Min	1.074	1.035	0.970	0.875	0.789	0.712	0.954	1.033	1.011	1.008
Caso 22: 60 x 120 cm, ρ = 0.06, f_c' = 250 kg/cm^2										
Fallos (%)	0.00	0.00	26.01	57.89	72.14	79.26	39.32	0.00	6.50	7.74
Max	1.447	1.381	1.325	1.277	1.237	1.202	1.226	1.256	1.232	1.202
Min	1.068	1.026	0.937	0.841	0.754	0.677	0.942	1.027	0.988	0.987

Caso 23: 60 x 120 cm, ρ = 0.03, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	0.00	15.52	37.64	48.28	0.00	0.00	0.00	0.00
Max	2.384	2.516	2.669	2.845	3.047	3.277	3.208	3.082	3.277	3.277
Min	1.093	1.061	1.042	0.950	0.865	0.788	1.015	1.063	1.055	1.054
Caso 24: 60 x 120 cm, ρ = 0.06, f_c' = 400 kg/cm^2										
Fallos (%)	0.00	0.00	3.25	34.32	46.15	55.33	4.73	0.00	0.00	0.00
Max	1.975	2.009	2.054	2.112	2.181	2.264	2.233	2.181	2.264	2.264
Min	1.082	1.048	0.983	0.888	0.803	0.725	0.978	1.050	1.042	1.040

4.3 Efecto de la relación de aspecto de la sección transversal

En este trabajo se analizaron secciones con tres relaciones de aspecto: h/b = 1.0, 1.5 y 2.0, donde h designa el peralte de la sección y b su ancho. La información de cada sección se resume en la Tabla 2.2.1 del Capítulo 2, aun cuando en la Tabla 4.2.5 también se incluyen las dimensiones de las secciones transversales, el porcentaje de refuerzo y el valor de f_c'.

En la Tabla 4.2.5 se indican con azul las secciones 1, 5, 9, 13, 17 y 21 las cuales tienen diferente sección, pero el mismo f_c' y el mismo valor de ρ. Así, una comparación entre estos casos sólo revelará el efecto de la relación de aspecto sin influencia de los materiales o de ρ. Algo similar se tiene para el grupo de secciones: 2, 6, 10,14, 18 y 22, etc.

Para fines de comparación se seleccionan los valores del promedio de r_2 calculados con un valor constante de α = 1.4. En la Fig. 4.3.1 se muestran los valores promedio para secciones con f_c' = 250 kg/cm^2 y dos valores de ρ (0.03 y 0.06). En la misma figura se presentan los casos para f_c' = 400 kg/cm^2. Se observa que un cambio de relación de aspecto no cambia significativamente el valor del promedio. Esta observación es independiente del valor constante de α usado.

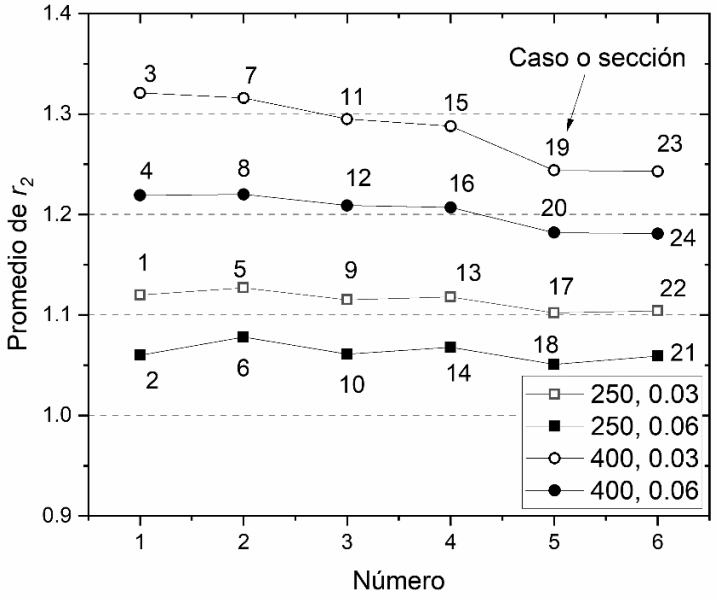


Figura 4.3.1 Valores promedio de r_2 para secciones de diferente relación de aspecto y calculados con α = 1.4

4.4 Efecto de f_c'

En la Fig. 4.3.1 se pueden observar los promedios de r_2 calculados para los dos valores de f_c' estudiados. Se observa que los valores promedios son mayores para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. Esto indica que el método de contorno de carga es más conservador para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. Esta tendencia se mantiene independientemente del valor constante de α usado.

4.5 Efecto de la cuantía de refuerzo

En la misma Fig. 4.3.1 se distinguen los promedios de r_2 para los dos porcentajes de refuerzo ($\rho = 0.03$ y 0.06) estudiados. Los resultados indican que los valores promedio de r_2 son menores para $\rho = 0.06$ que para $\rho = 0.03$, independientemente del valor constante de α empleado.

Para el caso de fallos no conservadores, los resultados comentados en el párrafo anterior son consistentes con la observación de que, para un valor constante de α, el porcentaje de error (no conservador) aumenta al crecer el porcentaje de refuerzo; *i.e.*, los errores (diferencia vs 1.0) para ρ = 0.06 son aproximadamente 15% mayores que para ρ = 0.03. Esto es una simple consecuencia de que las líneas en la Fig. 4.3.1 para ρ = 0.06 se ubican por debajo de las líneas para ρ = 0.03. En otras palabras, las líneas de los casos por debajo de 1.0 para un mismo valor de f_c' , estárán más abajo para ρ = 0.06 que para ρ = 0.03. Esto se observa para los dos valores de f_c' estudiados.

En la Fig. 4.3.1 es claro que para α = 1.4, los promedios de r_2 más cercanos a 1.0 se dieron para el caso donde f_c' = 250 kg/cm^2 y ρ = 0.03.

4.6 Resumen y conclusiones

En esta sección se estudió el método del contorno de carga a través del análisis del cociente r_2. Este cociente se calculó para valores constantes del exponente α así como para valores que cambian con la intensidad de la carga axial. Se analizaron 24 casos diferentes en donde se estudiaron diferentes secciones trasnversales, dos valores de f_c' y dos porcentajes de refuerzo. Las principales conclusiones son las siguientes:

a) Los valores promedio de r_2 disminuyen al aumentar el valor de α.
b) No se registró ningún fallo para cuando el coeficiente α = 1.0 o 1.2.
c) El valor del exponente α = 1.4 prácticamente no conduce a fallos no conservadores para cuando P_n/P_0 es mayor de 0.4. Para α = 1.4, los promedios de r_2 más cercanos a 1.0 se obtuvieron para el caso donde f_c' = 250 kg/cm^2 y ρ = 0.03.
d) Para un valor constante del coeficiente α, el valor promedio de r_2 no se modifica significativamente con la relación de aspecto de la sección transversal de la columna.
e) Para un valor constante del coeficiente α, se observa que los valores promedios son mayores para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. Esto indica que el método de contorno de carga es más conservador para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. En términos de los casos no conservadores esta observación se puede expresar como sigue. Para un valor dado de ρ, el porcentaje de fallos no conservadores disminuye al aumentar el valor de f_c'.
f) Los valores promedio de r_2 resultaron menores para ρ = 0.06 que para ρ = 0.03,

independientemente del valor constante de α empleado.

g) No se registró ningún fallo cuando el coeficiente α se estimó con la recomendación del Eurocode (1992).
h) El código de India sólo falló para los casos con f_c' = 250 kg/cm^2 y ρ = 0.06. Para esta combinación el máximo porcentaje de fallos fue de 27.1% para el caso 2.
i) Los errores de la propuesta *J* fueron ligeramente mayores que para el caso del reglamento de India. La propuesta *J* también falló sólo para los casos con f_c' = 250 kg/cm^2 y ρ = 0.06.
j) El número de fallos aumentó con la pendiente del eje neutro (s).
k) Los valores promedio de r_2 resultaron mayores para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. Sin embargo, la dispersión también resultó mayor para f_c' = 400 kg/cm^2.
l) El mayor número de fallos se observó para α = 2.0.
m) El mayor porcentaje de fallos no conservadores obtenidos para PCA fue de 61.94% para el caso 2 con f_c' = 250 kg/cm^2 y ρ = 0.06.
n) En la mayoría de los casos estudiados, la menor dispersión (menor COV) para las recomendaciones de α en función de P_n/P_0, se registró para el Eurocode (1992).

Capítulo 5

Resumen, conclusiones y recomendaciones.

En este último capítulo se presenta un resumen y las conclusiones de la tesis. Al final se ofrecen algunas recomendaciones derivadas del estudio de este tema.

5.1 Resumen

Esta tesis estudia numéricamente la capacidad de secciones transversales de columnas de concreto reforzado. En particular se revisaron dos métodos propuestos por Bresler (1960) para estimar de manera aproximada la resistencia de secciones de columnas sujetas a flexión biaxial. Como se sabe, para columnas cortas la capacidad queda definida por una carga axial y dos momentos flexionantes alrededor de los ejes principales de la sección. Estas cantidades usualmente se denotan como P_n, M_{nx} y M_{ny}.

El primer método, identificado como el método de carga recíproca propone una fórmula para aproximar la carga axial actuando con doble excentricidad (e_x, e_y) a partir, de las cargas axiales resistentes P_0, P_x y P_y donde P_0es la carga axial máxima que resiste la columna si esta actúa concéntricamente, P_x y P_y son las cargas axiales que resiste la sección en flexión uniaxial.

Para evaluar el método de la carga recíproca en este trabajo se hace uso del valor r_1, el cual se define como el cociente de P_n/P_{xy}, en donde $P_n$es la resistencia a carga axial de una sección de una columna cuando al mismo instante actúan M_{nx} y M_{ny}, para este cociente, los valores de P_n, P_{nx} y P_{ny}, forman una tríada de valores que hacen fallar la columna y que en este trabajo se cálculan de forma "precisa" utilizando un programa de cómputo (*lenguaje C*) que se basa en el equilibrio de la sección y emplea las principales hipótesis de la teoría del concreto reforzado que se citan en los libros de concreto reforzado (González, 2005; Wigth, 2016) y en los principales reglamentos de diseño (ACI-318, 2019; NTC-CDMX, 2023). Es importante destacar que en este programa de cálculo la curva esfuerzo-deformación del concreto se basa en el modelo de Kent y Park (1971) en lugar de emplear el bloque equivalente de esfuerzos. El acero de refuerzo se mantiene utilizando el modelo elastoplástico. Los detalles de cómo se calcula estas tríadas y los detalles del programa de cómputo se presentan en el capítulo 2 y en el apéndice A, respectivamente. Se aclara que este método de la carga reciproca hace uso de lo que comúnmente se conoce como la fórmula de Bresler (1960).

Otro método que se estudia en este trabajo es el método de contorno de carga también propuesto por Bresler (1960). A diferencia del anterior este método se basa en aproximaciones de las curvas de interacción entre los momentos normalizados $M_x/\ M_{nx0}$ y $M_y/\ M_{ny0}$ para un nivel de carga axial, que se identifican como contornos de carga. En esta expresión M_x y M_y son los valores de los momentos que actúan junto con la carga axial P_n en la sección y para los cuales se quiere revisar si cuando ambos actúan simultáneamente la columna falla. Por otro lado, M_{nx0} y M_{ny0} son los momentos flexionantes que resiste la sección alrededor de sus ejes principales para el mismo nivel de carga axial, pero actuando de forma independiente.

Un aspecto sobresaliente de este método de contorno de carga es que la revisión de la columna

se hace con la suma de los momentos flexionantes normalizados que se indicaron antes, pero elevados a un exponente alfa, esta suma se identifica en este trabajo con el cociente r_2, el cual se expresa como:

$$\left(\frac{M_x}{M_{nx0}}\right)^{\alpha_1} + \left(\frac{M_y}{M_{ny0}}\right)^{\alpha_2} = r_2$$

Al calcular esta expresión un valor de r_2 < 1.0 indica que la sección resiste los momentos flexionantes M_x y M_y actuando simultáneamente con la carga axial. En caso contrario (r_2>1.0) se concluye que la sección de la columna no resiste.

Como se explicó el uso de la ecuación anterior con los valores de M_x y M_y sirve para evaluar la sección de la columna, pero no indica la precisión del método. Para evaluar el método se emplean M_{nx} y M_{ny}en lugar de M_x y M_y. Por tanto, si se emplean los valores nominales obtenidos de la triada P_n, M_{nx}, M_{ny}el método debiera conducir a r_2 = 1.0 y una diferencia indicaría que el método es incorrecto. En particular si r_2 < 1.0 empleando los valores obtenidos de una triada indicaría que la sección aun no falla, lo cual sería una estimación no conservadora por parte del método y viceversa.

Ambos métodos se evaluaron ante un conjunto de secciones transversales que se muestran en la Tabla 2.2.1 la cual se repite aquí, en donde se variaron las dimensiones de las secciones transversales, la relación de aspecto, los porcentajes de refuerzo y los valores de f_c'.

Tabla 2.2.1 Propiedades de secciones transversales y materiales de los casos estudiados

No.	Peralte total (h)	Ancho (b)	Relación (h/b)	f_c' (kg/cm²)	$\rho = As/(bh)$
1	40	40	1	250	0.03
2					0.06
3				400	0.03
4					0.06
5	80	80	1	250	0.03
6					0.06
7				400	0.03
8					0.06
9	40	60	1.5	250	0.03
10					0.06
11				400	0.03
12					0.06
13	60	90	1.5	250	0.03
14					0.06
15				400	0.03
16					0.06

17	40	80	2	250	0.03
18					0.06
19				400	0.03
20					0.06
21	60	120	2	250	0.03
22					0.06
23				400	0.03
24					0.06

Estas cantidades definen las principales variables que se estudiaron en este trabajo. Además, se evaluaron los métodos para distintos niveles de carga axial y posiciones del eje neutro (profundidad e inclinación). El método de contorno de carga también se evalúa ante distintos valores constantes del exponente α y antes distintas recomendaciones que expresan este exponente en función de la intensidad de la carga axial, las recomendaciones son las sugeridas por PCA (2012), Eurocode (1992) e India (2023). Para ambos métodos se proponen modificaciones tanto a la fórmula de Bresler (1960), como al método de contorno de carga con la idea de obtener mejores resultados.

Adicionalmente al programa para el cálculo de las triadas se realizó un procedimiento en Matlab (*archivo tipo Script*) para el cálculo de los cocientes r_1 y r_2 ante las distintas variables.

Finalmente se calcularon algunos valores estadísticos de los cocientes r_1 y r_2 para facilitar el análisis ante las distintas variables. Las conclusiones de este trabajo se presentan en la siguiente sección.

5.2 Conclusiones

Las principales conclusiones de este trabajo son las siguientes:

5.2.1 Conclusiones del método de la carga recíproca

Del capítulo 3, en donde se analizó el método de la carga recíproca con ayuda del parámetro r_1 se obtienen las siguientes conclusiones:

a) La exactitud de la "fórmula de Bresler" no es uniforme con la intensidad de carga axial, la cual en términos relativos se ha expresado como P_n/P_0. Entre mas alta es la carga, la fórmula de Bresler es mas conservadora. Para valores de P_n/P_0 cercanos a 0.8 la carga nominal exacta es 10% mayor que la que se predice con la ecuación de Bresler, mientras que para valores de P_n/P_0 del orden de 0.3 o menos el valor de P_n exacto es 5% mayor que lo que estima la fórmula.
b) El método de la carga recíproca (fórmula de Bresler) generalmente conduce a valores de la capacidad P_{xy} menores que los estimados de forma precisa (teóricamente exactos) para $P_n/P_0 > 0.1$. Para cargas axiales de baja intensidad ($P_n/P_0 < 0.1$) el método conduce a cargas P_{xy} mayores que las teóricamente precisas (P_n).
c) Para $P_n/P_0 > 0.1$, La fórmula de Bresler es conservadora, conduciendo a capacidades aproximadamente del 90% respecto a las precisas. Para $P_n/P_0 < 0.1$ el método lleva a valores inseguros.

d) La fórmula de Bresler modificada conduce a resultados similares que los de la fórmula original, pero es menos conservadora que la original (Fig. 3.1.2). En promedio, los valores de r_1 son del orden de 1.10 cuando se usa la fórmula de Bresler si $P_n/P_0 > 0.1$. En el caso de la fórmula modificada el promedio se reduce a aproximadamente 1.05 si $P_n/P_0 > 0.1$.
e) Los resultados indican que la relación de aspecto de la sección transversal no afecta las predicciones de las fórmulas de Bresler (original o modificada).
f) Respecto a la resistencia del concreto, los valores de la media (μ) de r_1 son mayores para f_c' = 400 kg/cm^2 que para los correspondientes casos con f_c' = 250 kg/cm^2 cuando ρ = 0.03. En otras palabras, el método de la carga recíproca parece ser más conservador entre más grande es el valor de f_c' (para ρ = 0.03). Para ρ = 0.06, no se observó una tendencia.
g) La media (μ) y el c.o.v. de r_1 son, en general, mayores para ρ = 0.06 que para ρ = 0.03.

5.2.2 Conclusiones del método de contorno de carga

En el capítulo 4, se estudió el método de contorno de carga con ayuda del cociente r_2 y se obtuvieron las conclusiones:

a) Los valores promedio de r_2 disminuyen al aumentar el valor de α.
b) No se registró ningún fallo para cuando el coeficiente α = 1.0 o 1.2.
c) El valor del exponente α = 1.4 prácticamente no conduce a fallos no conservadores para cuando P_n/P_0 es mayor de 0.4. Para α = 1.4, los promedios de r_2 más cercanos a 1.0 se obtuvieron para el caso donde f_c' = 250 kg/cm^2 y ρ = 0.03.
d) Para un valor constante del coeficiente α, el valor promedio de r_2 no se modifica significativamente con la relación de aspecto de la sección transversal de la columna.
e) Para un valor constante del coeficiente α, se observa que los valores promedios son mayores para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. Esto indica que el método de contorno de carga es más conservador para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. En términos de los casos no conservadores esta observación se puede expresar como sigue. Para un valor dado de ρ, el porcentaje de fallos no conservadores disminuye al aumentar el valor de f_c'.
f) Los valores promedio de r_2 resultaron menores para $\rho = 0.06$ que para $\rho = 0.03$, independientemente del valor constante de α empleado.
g) No se registró ningún fallo cuando el coeficiente α se estimó con la recomendación del Eurocode (1992).
h) El código de India sólo falló para los casos con f_c' = 250 kg/cm^2 y ρ = 0.06. Para esta combinación el máximo porcentaje de fallos fue de 27.1% para el caso 2.
i) Los errores de la propuesta *J* fueron ligeramente mayores que para el caso del reglamento de India. La propuesta *J* también falló sólo para los casos con f_c' = 250 kg/cm^2 y ρ = 0.06.
j) El número de fallos aumentó con la pendiente del eje neutro (s).
k) Los valores promedio de r_2 resultaron mayores para f_c' = 400 kg/cm^2 que para f_c' = 250 kg/cm^2. Sin embargo, la dispersión también resultó mayor para f_c' = 400 kg/cm^2.
l) El mayor número de fallos se observó para α = 2.0.
m) El mayor porcentaje de fallos no conservadores obtenidos para PCA fue de 61.94% para el caso 2 con f_c' = 250 kg/cm^2 y ρ = 0.06.
n) En la mayoría de los casos estudiados, la menor dispersión (menor COV) para las recomendaciones de α en función de P_n/P_0, se registró para el Eurocode (1992).

5.3 Recomendaciones para trabajos similares

5.3.1 De las secciones transversales y sus propiedades

Estudiar variaciones en el armado del refuerzo, es decir, que no estuviese uniformemente distribuido.

Explorar si los métodos estudiados en el trabajo conducen a las mismas conclusiones cuando se emplean columnas compuestas como las que incluyen perfiles estructurales.

Analizar si ambos métodos llevan a las mismas conclusiones para columnas con otras geometrías de secciones transversales.

Estudiar ambos métodos para muros, en particular para muros L, C, H o similares.

Verificar si las conclusiones obtenidas en esta tesis se mantienen cuando se incorpora el confinamiento del concreto.

5.3.2 Metodología de cálculo

Buscar en formas más generales de definir las fronteras de una sección transversal dentro del método de cálculo de las tríadas que permita analizar geometrías de secciones más generales.

Estudiar cómo afecta dentro de la sección transversal el confinamiento del concreto, emplear una curva esfuerzo deformación del concreto que incluya este efecto (Mander, 1988).

5.3.3 Método de la carga recíproca

Sabiendo que el método de la carga recíproca utiliza un plano de aproximación a la superficie de interacción, sería conveniente explorar si se pudiera utilizar otra función simple que ajuste mejor a la superficie de falla

5.3.4 Método de contorno de carga

Verificar los resultados de Meena (2023), ya que esto no se revisó en este trabajo.

Buscar una fórmula que proporcione los valores del exponente α pero que no solo dependa de la relación P_n/P_0 sino que también incorpore el valor de f_c' y del porcentaje de refuerzo.

5.4 Recomendaciones prácticas

5.4.1 Del método de la carga recíproca

Si la intensidad de la carga axial P_n es mayor del 10% de la carga axial concéntrica P_0, se recomienda usar la fórmula de Bresler (Ecs. 1.3.1 o 1.3.2 del método de carga recíproca), sabiendo que la predicción de la carga axial P_{xy} con esta fórmula será conservadora en aproximadamente 10% respecto a una estimación exacta.

Si la intensidad de la carga axial P_n es menor del 10% de la carga axial concéntrica P_0, no se recomienda usar la fórmula de Bresler sino el método de contorno de carga con $\alpha = 1.0, 1.2$. En estos casos ($P_n < 0.1P_0$) la fórmula de Bresler es insegura.

5.4.2 Del método del contorno de carga

Si la carga axial P_n es mayor del 40% de la carga axial concéntrica P_0 se recomienda usar el método del contorno de carga con $\alpha = 1.4$.

Para cualquier intensidad de la carga axial, se recomienda usar la fórmula del contorno de carga con exponente $\alpha = 1.2$, sabiendo que el valor de r_2 (Ec.4.1.1) será conservador. El error predicho por esta fórmula resulta función de P_n/P_0. Para P_n/P_0 = 0.10, el cociente r_2 es 10% mayor que el exacto, mientras que para P_n/P_0 = 0.80 el cociente r_2 puede ser 20% mayor que el exacto.

Apéndice A

Programa para el cálculo de tríadas (P_n, M_{nx} y M_{nx})

En este apéndice se describe el programa que calcula las tríadas de valores P_n, M_{nx} y M_{ny}, los cuales cuando actúan simultáneamente sobre una sección transversal de una columna la hacen fallar. Primero, se resumen las principales suposiciones en las que se basa el cálculo de la falla de una sección, las cuales se presentaron en el Capítulo 2. Posteriormente se describe el programa de cálculo y al final se incluye un listado el mismo. En este apéndice también se presenta el *script* de *Matlab* que se usa en una subsecuente etapa para el cálculo de los coeficientes r_1 y r_2 descritos en el Capítulo 2 para el estudio de los métodos de la *carga recíproca* y del *contorno de carga*, respectivamente.

A.1 Suposiciones para el cálculo de las tríadas P_n, M_{nx} y M_{ny}

Como se mencionó en el Capítulo 2, una tríada es un grupo de tres elementos especialmente vinculados entre sí. Los tres elementos son los valores nominales de una carga axial (P_n) y de dos momentos de flexión (M_{nx} y M_{ny}) los cuales hacen fallar una sección de una columna cuando actúan simultáneamente sobre ella. Para determinar estos valores es necesario precisar las condiciones que definen la falla. Recordar que es una falla teórica – no experimental. Estas condiciones son las mismas que se establecen en los cursos de concreto reforzado, particularmente en la teoría de flexión de vigas y/o columnas (Wight, 2016; MacGregor, 1997). Las suposiciones básicas son las siguientes:

a) Las secciones (planos) perpendiculares al eje del miembro (trabe o columna) las cuales son planas antes de la flexión, permanecen planas después de la flexión. Esta suposición conduce a una distribución lineal (plana) de deformaciones unitarias a través de la sección transversal.

b) La deformación unitaria en el refuerzo (ε_s) es igual a la deformación unitaria en el concreto (ε_c) en puntos localizados a la misma distancia del eje neutro. Esta suposición indica que no hay deslizamiento relativo entre el acero de refuerzo y el concreto que lo rodea.

c) Los esfuerzos en el concreto y en el refuerzo se pueden calcular a partir de las deformaciones unitarias de las curvas esfuerzo-deformación del concreto y del acero. Observar que esta suposición indica solamente cómo se obtienen los esfuerzos, pero no especifica cuáles son las relaciones entre esfuerzos y deformaciones.

Estas tres suposiciones son, en principio, suficientes para calcular la resistencia de una sección. Sin embargo, es necesario introducir algunos otros puntos en el cálculo de la resistencia (falla). Estos puntos, los cuales en los textos usualmente se identifican como suposiciones adicionales para simplificar el diseño, se describen a continuación.

d) La falla de la sección queda definida por el aplastamiento del concreto. Esta suposición cubre dos aspectos del comportamiento de una sección de concreto reforzado. El primer aspecto es que el acero de refuerzo tiene capacidad ilimitada de deformación y que éste no

define la falla. Así, la falla de la sección no queda en función de la ruptura o del pandeo de las varillas de refuerzo. El segundo aspecto implica que la falla de la sección se asocia al aplastamiento del conceto y, ésta última se debe definir con un parámetro del comportamiento del concreto. De pruebas de elementos a compresión y flexión se puede establecer que el parámetro que define el aplastamiento del concreto es la deformación unitaria y que este valor es ε_{cu} = 0.003. Este número corresponde a un acuerdo entre especialistas y surge del estudio de los diagramas esfuerzo-deformación de pruebas experimentales en núcleos de concreto, así como en vigas y columnas de concreto simple y concreto reforzado. Este valor ha sido también adoptado por algunos reglamentos de diseño (ACI-318, 2019; NTC-CDMX, 2023).

e) Otra suposición conveniente consiste en suponer que el concreto a tensión se puede despreciar sin error significativo en la estimación de la capacidad de un miembro.

f) La suposición más elaborada es la que se hace en varios reglamentos de diseño, la cual consiste en cambiar la distribución real de esfuerzos de compresión por una distribución más simple. La distribución que recomienda tanto el ACI como el reglamento de la Ciudad de México es una distribución rectangular. Para los fines de esta tesis, este cambio no se hace, ya que el uso de una relación entre esfuerzos y deformaciones realista es fácil de implementar en el cálculo. Como se explicó en la Sección 2.5, aquí se usa el modelo de Kent y Park (Kent y Park, 1971) para establecer la relación entre esfuerzos y deformaciones en el concreto suponiéndolo no confinado. Este modelo se ilustró en la Fig. 2.5.4. Por otro lado, el modelo para el acero de refuerzo es el elastoplástico (Fig. 2.5.5).

A.2 Cálculo de las tríadas P_n, M_{nx} y M_{ny}

Una sección trasnversal se define por su ancho (b) y su peralte total (h), así como por las áreas de refuerzo (A_s) y sus posiciones en la sección (x_i, y_i), referidas a un sistema de referencia, usualmente ubicado en el centroide de la sección. Las propiedades de los materiales (f'_c y f_y) complementan la definición de una sección.

Definida una sección transversal, se hace variar tanto la profundiad del eje neutro (distancia *c* en la Fig. 2.5.2) como la inclinación de éste (pendiente *s* en la misma figura). En el programa esto se logra facilmente estableciendo un vector con una serie de valores de los cocientes (c/h) y variando *s* de 0.0 a 1.0. Es claro que esta variación de pendientes sólo lleva a inclinaciones del eje neutro de 0º a 45º con respecto al eje *x*. Las demás inclinaciones del eje neutro se hacen girando la sección 90º y nuevamente variando *s* de 0.0 a 1.0.

Para cada inclinación (s) y profundidad (c) del eje neutro, se hace una retícula de puntos en el área contenida por la sección en la parte superior del eje neutro (Fig. 2.5.2). Para cada pequeño rectángulo de esta área se determinan las coordenadas de su centroide y se calcula su distancia δ al eje neutro. Estableciendo que para el pequeño rectángulo mas alejado del eje neutro la deformación unitaria máxima es ε_{cu} = 0.003, se determina la deformación unitaria que le corresponde a cada pequeña área.

Con el valor de ε_c de cada pequeña área, se calcula el esfuerzo (f_c) correspondiente con el modelo de Kent y Park (Fig. 2.5.4) si dicha área es de concreto. Si el área es de acero se hace un cálculo similar, pero usando el modelo de la Fig. 2.5.5. En este segundo caso las cantidades se identifican como e_s y f_s.

Los valores de los esfuerzos y de las áreas conducen a las fuerzas F_i en cada una de las pequeñas áreas. Al final, las tríadas se obtienen con las expresiones siguientes:

$$P_n = \sum_i F_i\,, \quad M_{nx} = -\sum_i F_i\, y_i \quad \text{y} \quad M_{ny} = \sum_i F_i\, x_i \tag{A.2.1}$$

A.3 Programa de cálculo de las tríadas P_n, M_{nx} y M_{ny}

El programa de cálculo se hizo en lenguaje C (ANSI) y se lista al final de esta sección. Este programa se identifica con el nombre "*Surface*". Como se mencionó anteriormente, el programa requiere de un archivo simple de datos (ASCII) preparado por el usuario. Como ejemplo del archivo de datos se muestra en la Fig. A.3.1 el caso de la sección 1 cuando ésta se flexiona alrededor del eje *x*-*x*. En este archivo la primera línea (renglón) es sólo un texto que identifica el caso. El segundo renglón contiene un nombre de archivo donde se imprime un reporte del cálculo (*reporte.txt*). El tercer renglón es otro nombre de archivo donde se incluyen los valores de P_n, M_{nx} y M_{ny} calculados. El formato de este archivo (*tabla.txt*) se muestra en la Fig. A.3.2, en donde se puede observar que el programa también calcula el cociente P_n/P_0 y los valores de α de cada una de las recomendaciones estudiadas. En total este archivo contiene 11 columnas. Un fragmento de este archivo para el caso 1 se muestra en la Fig. A.3.3, donde P_0 es la máxima carga axial nominal de la columna y los valores se expresan en toneladas y metros.

```
Caso_1: Columna prueba 1 en flexión biaxial (X)
Reporte_C1X.txt
Tabla_C1X.txt
Diagrama_C1X.txt
40.0, 40.0
250.0, 4200.0
12
1,  4.0, -15.42,  15.42
2,  4.0,  -5.00,  15.42
3,  4.0,   5.00,  15.42
4,  4.0,  15.42,  15.42

5,  4.0, -15.42,   5.00
6,  4.0,  15.42,   5.00

7,  4.0, -15.42,  -5.00
8,  4.0,  15.42,  -5.00

9,  4.0, -15.42, -15.42
10, 4.0,  -5.00, -15.42
11, 4.0,   5.00, -15.42
12, 4.0,  15.42, -15.42
```

Figura A.3.1. Ejemplo de un archivo de datos (sección 1 flexionada al rededor del eje *x*-*x*)

/--- c ---//--- s ---//--- P_n ---//--- P_n/P_0 ---//--- M_{nx} ---//--- M_{ny} ---//--- M_{nx}/M_{ny} ---/ ⋯

⋯ /--- α_{PCA} ---//--- α_{Euro} ---//--- α_{India} ---//--- α_J ---/

Figura A.3.2. Formato de salida del archvio *tabla.txt*

```
-9999.90,  0.0000,  549.9830,  1.0000,   0.0000,   0.0000, 99.9900,  2.0000,  2.0000,  2.0000,  2.0000
-32.5556,  0.0000,  497.0997,  0.9038,   6.5811,  -0.0000, 99.9000,  1.9476,  1.8397,  2.0000,  2.0000
-31.5556,  0.0000,  493.1968,  0.8967,   7.1806,  -0.0000, 99.9000,  1.9397,  1.8279,  2.0000,  2.0000
-30.5556,  0.0000,  489.0146,  0.8891,   7.8184,  -0.0000, 99.9000,  1.9313,  1.8152,  2.0000,  2.0000
-29.5556,  0.0000,  484.4691,  0.8809,   8.4961,  -0.0000, 99.9000,  1.9223,  1.8014,  2.0000,  2.0000
-28.5556,  0.0000,  479.5870,  0.8720,   9.2187,  -0.0000, 99.9000,  1.9126,  1.7866,  2.0000,  2.0000
-27.5556,  0.0000,  474.3372,  0.8625,   9.9902,  -0.0000, 99.9000,  1.9023,  1.7707,  2.0000,  2.0000
-26.5556,  0.0000,  468.6435,  0.8521,  10.8135,  -0.0000, 99.9000,  1.8913,  1.7535,  2.0000,  2.0000
-25.5556,  0.0000,  462.4832,  0.8409,  11.6940,  -0.0000, 99.9000,  1.8794,  1.7348,  2.0000,  2.0000
-24.5556,  0.0000,  455.8325,  0.8288,  12.6379,  -0.0000, 99.9000,  1.8668,  1.7146,  2.0000,  2.0000
-23.5556,  0.0000,  448.4939,  0.8155,  13.6440,  -0.0000, 99.9000,  1.8530,  1.6924,  2.0000,  2.0000
-22.5556,  0.0000,  440.2475,  0.8005,  14.7109,  -0.0000, 99.9000,  1.8376,  1.6674,  2.0000,  2.0000
-21.5556,  0.0000,  431.3184,  0.7842,  15.8606,  -0.0000, 99.9000,  1.8213,  1.6403,  1.9843,  1.9748
-20.5556,  0.0000,  421.6337,  0.7666,  17.1017,  -0.0000, 99.9000,  1.8038,  1.6110,  1.9550,  1.9466
-19.5556,  0.0000,  411.0364,  0.7474,  18.4394,  -0.0000, 99.9000,  1.7850,  1.5789,  1.9229,  1.9158
```

Figura A.3.3. Ejemplo de un archivo (*tabla.txt*) con los valores de las tríadas y de las α (fragmento)

El cuarto renglón del archivo de datos contiene los valores de M_{nx0} y de P_n correspondientes al caso uniaxial donde s = 0.0. Un fragmento de este archivo (*diagrama.txt*) se muestra en la Fig. A.3.4. La primera columna contiene el momento M_{nx0} y la segunda la carga P_n. Los valores de aste archivo del diagrama de interacción uniaxial están en t-m y t. Los demás valores del archivo de datos contienen las dimensiones de la sección, los parámetros de los materiales, el número de varillas, así como sus áreas y sus ubicaciones. Las unidades para este archivo de datos se deben introducir en cm y kg.

```
 0.0000,   549.9830
 6.5811,   497.0997
 7.1806,   493.1968
 7.8184,   489.0146
 8.4961,   484.4691
 9.2187,   479.5870
 9.9902,   474.3372
10.8135,   468.6435
11.6940,   462.4832
12.6379,   455.8325
13.6440,   448.4939
14.7109,   440.2475
15.8606,   431.3184
```

Figura A.3.4. Ejemplo de un archivo (*diagrama.txt*) con los valores de M_{nx0} y de P_n (fragmento)

El listado del programa de cálculo está escrito en lenguaje C (ANSI) y es el siguiente:

```
// Programa para calcular Pn, Mnx y Mny en varios puntos de la superficie
// interacccion de una seccion rectangular de concreto reforzado

// Usa modelo de Kent y Park (1971) para el concreto (no confinado).
// Usa modelo elasto-plastico para el acero de refuerzo.
// Programa elaborado por Jazmin Martínez y Jaime De la Colina M.

// Ultima revisión: 31 de Diciembre de 2023.
// El programa incluye el cálclulo y reporte del cociente P/Pmax y el valor del
// exponente alfa (variable aa) en la formula del contorno de carga de acuerdo
// con el reglamento de diseño de India.
//                                        29 de dic:
// Reporta valor usado de ec para calculo de P0 (en archivo reporte)
// Reporta cociente ratio_M = Mnx/Mny en archivo de Tabla

#include <stdio.h>
#include <math.h>
#include <string.h>
#include <stdlib.h>
#include <float.h>

#define format1f "%f"
#define format2f "%f,%f"
#define format3f "%f,%f,%f"
#define format1d3f "%d,%f,%f,%f"
#define formatc "%[^\n] "
#define format1d "%d"

//            Variables externas:
float h;                // Peralte de la columna
float b;                // Ancho de la columna
float fc;               // Resistencia del concreto
float fy;               // Fluencia del acero
double ey;              // Deformacion unitaria de fluencia
double e50u;            // Para modelo de Kent y Park
double fc_psi;          // Esfuerzo del concreto en lb/in2

double ecu;       // Supuesto igual a e50u

double Es = 2100000.0;     //Modulo de Elasticidad, kg/cm2

double small = 0.001;
double large = 100000.0;
double ratio_M;

FILE *fp1; // Archivo de Lectura
FILE *fp2; // Archivo de Reporte
FILE *fp3; // Resultados Condensados (para graficar)
FILE *fp4; // Resultados / diagrama de interaccion - eje horizontal (alfa = 0.0)

//------------------------- Funciones:  -------------------------
double kent_park (double e);
double Esf_acero(double es);
double delta_f(double xsi,double eta,double c0,double slope);
```

```
   int main() {

     int n;              // Numero de varillas
     float x_As[50];     // Coordenada x del refuerzo i
     float y_As[50];     // Coordenada y del refuerzo i
     float As[50];       // Area de las varillas del nivel i
     float Ast = 0.0;          // Suma de las areas del acero
     float Ag;           // Area bruta de la sección
     double ro;          // Cociente As/(bh)

     int Nx = 36;    // Numero de divisiones del area en compresion paralelas a x
     int Ny = 36;    // Numero de divisiones del area en compresion paralelas a y

     int i, j;              // Indices
     int i_dummy = 0;
     int ii, jj;

     int k;            //Indice - punto del diagrama de interaccion en un plano vertical
     int k_max = 52;
     float ch[] = {0.0,  1.3, 1.275, 1.250, 1.225, 1.2, 1.175, 1.150, 1.125, 1.1, 1.075,
       1.05, 1.025, 1.0, 0.975, 0.95, 0.925, 0.9, 0.875, 0.85, 0.825, 0.8, 0.775,
       0.75, 0.725, 0.7, 0.675, 0.65, 0.625, 0.6, 0.575, 0.55, 0.525, 0.5, 0.475,
       0.45, 0.425, 0.4, 0.375, 0.35, 0.325, 0.3, 0.275, 0.25, 0.225, 0.2, 0.175,
       0.15, 0.125, 0.1, 0.075, 0.05, 0.025};
     float c;          // Distancia al eje neutro desde el centro del cuadrito mas alejado
     double cb;        // Dist c al eje neutro para el caso balancedado
     double c0;         // Ordenada al origen de la intersección de eje neutro
     double db;          // Dist del centro de cuadritos superiores a las varillas con mayor
tension (ultima varilla)

     int i_alfa;       // Indice - numero de plano vertical
     int alf_max = 11;   // El valor para el indice 1 debe ser 0.0 para generar diagramas planos
     float alfa[] = {0.0,  0.0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0};
     int i_case;
     int i_print = 0;  // Control de impresion


     double slope;
     double dx, dy;     // Dmensiones de cada pequeña area de concreto
     double dA;         // Area
     double xsi_i, xsi_f, xsi;   // Abscisas (inicial,final,central) de cada dA
     double eta_i, eta_f, eta;   // Abscisas (inicial,final,central) de cada dA
     double y_row;       // Ordenada del renglon que se analiza
     double x_lim;       // Abscisa límite de la seccion definida por el eje neutro
     double x_b, y_b;   // Coordenadas para calcular delta_max (punto mas alejado del e.n.)
                        //  Punto extremo en la esquina superior izquierda (al centro del
cuadrito)

     double Ac;          // Area del concreto en compresión
     double es;          // Esfuerzo en varilla
     double fs;          // Esfuerzo en las varillas del nivel i
     double Fs;          // Fuerza en las varillas del nivel i
     double Cc;          // Fuerza en el concreto
     double Pn;          // Resultante de las fuerzas
     double Pn0;         // Carga axial maxima que resiste la columna en compresion
     double Pnn;         // Máxima negativa (tensión)
     double Mnx;         // Momento nominal paralelo al eje x
     double Mny;         // Momento nominal paralelo al eje y
     double ratio_M;     // Cociente Mnx/Mny
     double Pnbx;
     double Pnby;
```

```
      double Mnbx;
      double Mnby;
      double P_ratio;     // Cociente de la carga axial entre la carga axial maxima
      double beta;        // Coeficiente en PCA method (aproximacion)
      double alfa_PCA;    // Alfa de acuerdo con PCA (Portland Cement Association)
      double alfa_India;  // Exponente de acuerdo a norma de India (Meena, et al, 2023)
      double alfa_J;      // Una propuesta (propuesta J)

      double delta;       // Distancia normal desde dA el eje neutro
      double delta_max;
      double ec;          // Deformacion unitaria del concreto
      double esf;         // Esfuerzo en el concreto
      double dC;          // Fuerza en el concreto en dA
      double ec_max = 0.0024; // Deformacion unitaria para calcular carga axial máxima con Kent-
Park

      float As_x_max = 0.0;     // Abscisa maxima del conjunto de varillas
      float As_x_min = 0.0;
      float As_y_max = 0.0;     // Ordenada máxima
      float As_y_min = 0.0;

      char titulo[60];
      char file1[24];
      char file2[24];
      char file3[24];
      char file4[24];

      printf("\n--- Programa Surf v23.4\n");
      printf("\n--- Nombre del archivo a procesar = ");
            scanf("%s",file1);

      if ((fp1 = fopen(file1,"r")) == NULL) {
          printf("\n**** No puede accesar el archivo %s",file1);
          return 0;
      }
        // Lee información de la seccion
        fscanf(fp1,formatc,titulo);
        fscanf(fp1,"%s",file2);
        fscanf(fp1,"%s",file3);
        fscanf(fp1,"%s",file4);
        fprintf(stderr,"\n ID: %s\n",titulo);
        fprintf(stderr," Archivo de resultados generales (reporte):   %s\n",file2);
        fprintf(stderr," Archivo de diagramas de interaccion (tabla): %s\n",file3);
        fprintf(stderr," Archivo / diagrama de interaccion plano x-x: %s\n",file4);
        fscanf(fp1,format2f,&b,&h);
        fscanf(fp1,format2f,&fc,&fy);
        fscanf(fp1,format1d,&n);
        for(i = 1; i <= n; i++){
            fscanf(fp1,format1d3f, &i_dummy, &As[i], &x_As[i], &y_As[i]);
            if (fabs(x_As[i]) > b/2.0) printf("\n*** Varillas fuera de sección (x)\n");
            if (fabs(y_As[i]) > h/2.0) printf("\n*** Varillas fuera de sección (y)\n");
        }
        fp2 = fopen(file2,"w");
        fp3 = fopen(file3,"w");
        fp4 = fopen(file4,"w");

        for (i = 1; i <= n; i++)  {   Ast += As[i];   }
        Ag = b*h;
        ro = Ast/Ag;
        ey = fy/Es;
        dx = b/Nx;  // ancho de cada diferencial de area
```

```
        dy = h/Ny;  // altura de cada diferencial de area
        dA = dx * dy;

        // Reporta datos generales:
        fprintf(fp2,"\n ID: %s\n\n",titulo);
        fprintf(fp2,"Sección:\n");
        fprintf(fp2,"   Ancho b   (x) = %6.2f cm\n",b);
        fprintf(fp2,"   Peralte h (y) = %6.2f cm\n\n",h);
        fprintf(fp2,"Materiales: fc = %6.2f,    fy = %6.2f kg/cm2\n\n",fc,fy);
        fprintf(fp2,"Número total de varillas = %d\n",n);
        fprintf(fp2,"/-- i --//--- As ---//--- x_As ---//--- y_As ---/\n");
        fprintf(fp2,"/       //  [cm2]  //     [cm]     //   [cm]    /\n");
        for (i = 1; i <= n; i++) {
            fprintf(fp2," %4d      %6.2f       %6.2f       %6.2f\n",i,As[i],x_As[i],y_As[i]);
            if (x_As[i] > As_x_max) As_x_max = x_As[i];
            if (x_As[i] < As_x_min) As_x_min = x_As[i];
            if (y_As[i] > As_y_max) As_y_max = y_As[i];
            if (y_As[i] < As_y_min) As_y_min = y_As[i];
        }
        printf("\n*** Abscisas y ordenadas extremas de varillas:\n");
        printf("   As_x_max = %8.4f cm \n", As_x_max);
        printf("   As_x_min = %8.4f cm \n", As_x_min);
        printf("   As_y_max = %8.4f cm \n", As_y_max);
        printf("   As_y_min = %8.4f cm \n", As_y_min);
        fprintf(fp2,"------------------------\n");
        fprintf(fp2,"Area de refuerzo total = %8.2f cm2\n", Ast);
        fprintf(fp2,"Cuantia de refuerzo    = %8.4f = (%7.4f  /100)\n", ro, ro*100.0);
        if (ro > 0.08 || ro < 0.01)
        printf("\n*** Porcentaje de refuerzo fuera de los limites permitidos de ACI\n");

   // Calcula algunos parametros del modelo de Kent y Park
        fc_psi = fc*(2.54*2.54)/0.454;
        e50u = (3.0 + 0.002*fc_psi)/(fc_psi - 1000.0); //Deformación unitaria maxima segun Kent
y Park
        ecu = 0.003;
        fprintf(fp2,"\nParametros del modelo de Kent-Park del concreto:\n");
        fprintf(fp2,"   fc_psi = %8.2f psi\n", fc_psi);
        fprintf(fp2,"   e50u = %8.5f\n", e50u);
        fprintf(fp2,"   ecu  = %8.5f\n\n", ecu);

        // ---------------- Calculo de la carga axial máxima ---------------------
                                    // Contribución del concreto:
        esf = kent_park(ec_max);
        Cc = (b*h - Ast) * esf;
        Pn0 = Cc;
                                        // Contribución del acero:
        fs = fy;
        Fs = fs * Ast;
        Pn0 += Fs;   Pn0 = Pn0/1000.0;    // Cargas en toneladas (t)
        Pnn = -Fs;   Pnn = Pnn/1000.0;
        printf("\n*** Cargas axiales extremas:\n");
        printf("   Carga axial nominal maxima, Pn0  = %8.4f t\n", Pn0);
        printf("   Carga axial nominal minima, Pnm  = %8.4f t\n", Pnn);
        fprintf(fp2,"Deformacion ec para estimar carga axial maxima (Kent-Park) = %8.5f\n",ec);
        fprintf(fp2,"Carga axial nominal maxima, Pn0  = %8.4f t\n",Pn0);
        fprintf(fp2,"Carga axial nominal minima, Pnn  = %8.4f t\n",Pnn);

        // --------------- Calculo de momentos uniaxiales balanceados -------------
        //                     xxxxxx    Mnx_bal:    xxxxxxx
        //      Ancho = b;     Perlte total = h
        db = (h/2.0) - As_y_min - dy/2.0;          // Ok
```

```
      cb = (ecu / (ecu + ey)) * db;             // Ok
      delta_max = cb;                           // Ok
      c0 = h/2.0 - cb - dy/2.0;                 // Ok
      printf("\n*** Caso balanceado en dirección x:\n");
      printf("   db = %8.3f cm \n", db);
      printf("   cb = %8.3f cm \n", cb);
      printf("   c0 = %8.3f cm \n", c0);
      Cc = 0.0;   Pnbx = 0.0;   Mnbx = 0.0;     // Ok
                                // Contribución del concreto:
      for (ii = 1; ii <= Ny; ii++) {         // Para cada renglon de pequeñas areas     *** 18-
Dic: Ny
          for (jj = 1; jj <= Nx; jj++) {     // Para cada columna de pequeñas areas     *** 18-
Dic: Nx
              xsi_f = jj*dx - b/2.0;     xsi_i = xsi_f - dx;  xsi = (xsi_i + xsi_f)/2.0; // Ok
              eta_f = h/2.0 - (ii-1)*dy; eta_i = eta_f - dy;  eta = (eta_i + eta_f)/2.0; // Ok
              if (eta > c0) {   // -------- If 1
                  delta = eta - c0;             // Ok
                  Ac = dA;
                  for (i = 1; i <= n; i++) {
                      if ((xsi_i < x_As[i]) && (x_As[i] <= xsi_f) && (eta_i < y_As[i]) &&
(y_As[i] <= eta_f)) {
                         if (As[i] < dA) Ac -= As[i];
                         else            Ac -= dA;
                       }
                   }
                  if (Ac > 0.0) {   // -------- If 2
                      ec = (delta / delta_max) * ecu;   // Ok
                      esf = kent_park(ec);
                      dC = esf * Ac;
                      Pnbx += dC;   Mnbx += (dC * eta);   // Ok
                  }  // Fin de If 2
              }  // Fin de If
          }   // Next jj
      }   // Next ii
                                // Contribución de varillas:

      for (i = 1; i <= n; i++) {
          delta = y_As[i] - c0;
          es = (delta / delta_max) * ecu;
          fs = Esf_acero(es);  Fs = fs * As[i];
          Pnbx += Fs;    Mnbx += (Fs * y_As[i]);         // Ok
   }  // Next i
      printf("   Pnbx = %8.3f t \n", Pnbx/1000.0);
      printf("   Mnbx = %8.3f t \n", Mnbx/100000.0);
      fprintf(fp2,"\n");
      fprintf(fp2,"Carga axial nominal balanceada (x), Pnbx  = %8.3f t\n",Pnbx/1000.0);
      fprintf(fp2,"Momento nominal balanceado (x), Mnbx  = %8.3f t-m\n",Mnbx/100000.0);

      //          yyyyy      Mny_bal:       yyyyy
      //     Ancho = h;    Perlte total = b;  Los ejes de referencia no cambian
      db = b/2.0 + As_x_max - dx/2.0;    // Medida paralela a b
      cb = (ecu / (ecu + ey)) * db;
      delta_max = cb;
      c0 = b/2.0 - cb - dx/2.0;          // Corrección: 30 de dic 2023
      printf("\n*** Caso balanceado en dirección y:\n");
      printf("   db = %8.3f cm \n", db);
      printf("   cb = %8.3f cm \n", cb);
      printf("   c0 = %8.3f cm \n", c0);
      Cc = 0.0;   Pnby = 0.0;   Mnby = 0.0;
                                // Contribución del concreto:
      for (ii = 1; ii <= Ny; ii++) {         // Para cada columna de la seccion rotada
```

```
          for (jj = 1; jj <= Nx; jj++) {     // Para cada renglon de la seccion rotada
              //  xsi y eta siguen siendo paralelos a los ejes x y y, respectivamente
              xsi_f = jj*dx - b/2.0;      xsi_i = xsi_f - dx;    xsi = (xsi_i + xsi_f)/2.0;
              eta_f = h/2.0 - (ii-1)*dy;  eta_i = eta_f - dy;    eta = (eta_i + eta_f)/2.0;
              if (xsi > c0) {   // -------- If 1          // Ok
                  delta = (xsi - c0);                    // Ok
                  // printf("\n*** delta = %8.4f\n",delta);
                  dA = dx * dy;
                  Ac = dA;
                  for (i = 1; i <= n; i++) {
                      if ((xsi_i < x_As[i]) && (x_As[i] <= xsi_f) && (eta_i < y_As[i]) &&
(y_As[i] <= eta_f)) {
                        if (As[i] < dA) Ac -= As[i];
                        else            Ac -= dA;
                       }
                   }
                  if (Ac > 0.0) {   // -------- If 2
                      ec = (delta / delta_max) * ecu;   // Ok
                      esf = kent_park(ec);
                      dC = esf * Ac;
                      Pnby += dC;   Mnby -= (dC * xsi);
                  }  // Fin de If 2
              }  // Fin de If
          }   // Next jj
      }   // Next ii
                                // Contribución de varillas:
      for (i = 1; i <= n; i++) {
          delta = x_As[i] - c0;   //
          es = (delta / delta_max) * ecu;
          fs = Esf_acero(es);  Fs = fs * As[i];
          Pnby += Fs;    Mnby -= (Fs * x_As[i]);
  }  // Next i
      printf("   Pnby = %8.3f t \n", Pnby/1000.0);
      printf("   Mnby = %8.3f t \n", Mnby/100000.0);
      fprintf(fp2,"\n");
      fprintf(fp2,"Carga axial nominal balanceada (y), Pnby  = %8.3f t\n",Pnby/1000.0);
      fprintf(fp2,"Momento nominal balanceado (y), Mnby  = %8.3f t-m\n",Mnby/100000.0);

  // ------------------------------------------------------------------------------------
  // Imprime las resistencias nominales para cada punto de la superficie de interacción,
  // el cociente de carga axial, ytres valores de alfa
      // fprintf(fp3,"/--- c0 --//-- slope --//-- Pn --//--- Pn/Pn0 --//-- Mnx --//-- Mny --
/");
      // fprintf(fp3,"/-- Mnx/Mny --//-- alfa_PCA --//-- alfa_India --//-- alfa-J --/\n");
  // Imprime Mn y Pn del diagrama plano:
      // fprintf(fp4,"/--- Mn ---//--- Pn ---/\n");
      // fprintf(fp4,"/    t-m          t    /\n");

      i_dummy = 1;
      fprintf(fp2,"-----------------------\n");

      for (i_alfa = 1; i_alfa <= alf_max; i_alfa++) {   // Para cada pendiente del eje neutro
             slope = alfa[i_alfa];
      // --- Valores extremos: ---//
             fprintf(fp3," %8.2f, %8.4f, %10.4f, %8.4f, %10.4f, %10.4f, %8.4f, %8.4f, %8.4f,
%8.4f\n",
                 -9999.9,slope,Pn0,1.0,0.0,0.0,99.99,2.0,2.0,2.0);
      // --- Diagrama plano ---//
             if (slope == 0.0)  fprintf(fp4,"%10.4f,     %10.4f \n",0.0,Pn0);
      // ----------------------//
          for (k = 1; k <= k_max; k++) {  // Para cada punto del diagrama en el plano vertical
```

```
                    // Calcula ecuacion del eje neutro:
               c = ch[k]*h;   // Distancia del origen del eje neutro al centro del diferencial
superior
               c0 = h/2.0 - c - dy/2.0;                                          // *** 18-Dic,
ok
               x_b = dx/2.0 - b/2.0;    // Abscisa a la primera columna de diferenciales de area
               y_b = h/2 - dy/2.0;   // Ordenada al primer renglón de diferenciales de area
               delta_max = delta_f(x_b,y_b,c0,slope);
               if (i_print == 1) {
                 fprintf(fp2,"\n");
                 fprintf(fp2,"-----------------------\n");
                 fprintf(fp2,"Distancia, c  = %8.4f cm\n",c);
                 fprintf(fp2,"Distancia, c0 = %8.4f cm\n",c0);
                 fprintf(fp2,"Pendiente del eje neutro, alfa = %8.4f \n",slope);
                 fprintf(fp2,"Delta_max  = %8.4f cm\n",delta_max);
               }

               Cc = 0.0;   Pn = 0.0;   Mnx = 0.0;  Mny = 0.0;
               for (ii = 1; ii <= Ny; ii++) {         // Para cada renglón de pequeñas areas o
diferenciales: Ny
                 y_row = h/2.0 - dy*ii + dy/2.0;      // Ordenada del renglon
                 if (slope < small) x_lim = b/2.0;    // Abscisa maxima que limita el eje neutro
para el renglon ii
                 else               x_lim = (y_row - c0)/slope;
                   for (jj = 1; jj <= Nx; jj++) {     // Para cada columna de pequeñas areas:
Nx
                       xsi_f = jj*dx - b/2.0;       xsi_i = xsi_f - dx;    // Abscisas de bordes
del diferencial
                       xsi = (xsi_i + xsi_f)/2.0;    // Abscisa del punto central del diferencial
                       eta_f = h/2.0 - (ii-1.0)*dy;  eta_i = eta_f - dy;     // Ordenadas de
bordes del diferencial
                       eta = (eta_i + eta_f)/2.0;       // Ordenada del punto central del
diferencial
                                   // Contribución del concreto:
                       if (xsi < x_lim) {       // If 1
                           if (i_print == 1) {
                               fprintf(fp2,"\nPoint: i_alfa = %4d, k = %4d, ii = %4d, jj = %4d",
                                   i_alfa,k,ii,jj);
                               fprintf(fp2,", %6.3f, %6.3f, %6.3f ",  xsi_i,xsi_f,xsi);
                               fprintf(fp2,", %6.3f, %6.3f, %6.3f [cm]\n",eta_i,eta_f,eta);
                           }
                           delta = delta_f(xsi,eta,c0,slope);
                           dA = dx * dy;
                           Ac = dA;
                           for (i = 1; i <= n; i++) {   // Revisa que no se traslapen areas de
concreto y acero
                               if ((xsi_i < x_As[i]) && (x_As[i] <= xsi_f) && (eta_i < y_As[i])
&& (y_As[i] <= eta_f)) {
                                 if (As[i] < dA) Ac -= As[i];
                                 else            Ac -= dA;
                                }
                            }
                           if (Ac > 0.0) {   // -------- If 2
                               if (delta > delta_max) printf("\n*** Variable delta mayor que
delta_max (concreto)\n");
                               ec = (delta / delta_max) * ecu;
                               esf = kent_park(ec);
                               dC = esf * Ac;            // ***** Tenia dA en lugar de Ac
                               Cc += dC;     // Fuerza debida solo al concreto
                               Pn += dC;     // Fuerza axial total en la seccion
                               Mnx += (dC * eta);
```

```
                            Mny -= (dC * xsi);
                        }  // Fin de If 2
                    }  // Fin de If 1
                }   // Next jj
            }   // Next ii
                                // Contribución de varillas:
            fprintf(fp2,"\n");
            for (i = 1; i <= n; i++) {
                xsi = x_As[i];   eta = y_As[i];
                delta = delta_f(xsi,eta,c0,slope);
                if (delta > delta_max) printf("\n*** Variable delta mayor que delta_max
(varillas)\n");
                es = (delta / delta_max) * ecu;
                fs = Esf_acero(es);  Fs = fs * As[i];
                Pn += Fs;
                Mnx += (Fs * y_As[i]);
                Mny -= (Fs * x_As[i]);
                // fprintf(fp2,"i = %3d, delta = %8.4f, es = %9.6f, fs = %8.4f, Fs = %8.4f
\n",i, delta, es, fs, Fs);
                // fprintf(fp2,"Pn  = %8.4f, Mnx = %8.4f, Mny = %8.4f \n",Pn, Mnx, Mny);
            }  // Next i
            Pn = Pn/1000.0;      // Toneladas
            Mnx = Mnx/100000.0;  // Toneladas-m
            Mny = Mny/100000.0;
            if (fabs(Mny) > small)  ratio_M = Mnx/Mny;
              else                  ratio_M = 99.9;
            P_ratio = Pn/Pn0;
            if (P_ratio > 0.0) { // Solamente reporta resultados para PN > 0.0
               // ---------------------------- PCA Aprox -------------------------//
               if (P_ratio <= 0.2) beta = 0.6;
               if (P_ratio > 0.2)  beta = (4.0 + P_ratio)/7.0;
               alfa_PCA = -0.301030/log10(beta);
               // -------------------------- India code -------------------------//
               if (P_ratio <= 0.2) alfa_India = 1.0;
               if ((P_ratio > 0.2) && (P_ratio <= 0.8)) alfa_India = 0.677 + 1.667*P_ratio;
               if (P_ratio > 0.8) alfa_India = 2.0;
               // ---------------------------- J proposal ------------------------//
               if (P_ratio <= 0.3) alfa_J = 1.2;
               if ((P_ratio > 0.3) && (P_ratio <= 0.8)) alfa_J = 0.72 + 1.6*P_ratio;
               if (P_ratio > 0.8) alfa_J = 2.0;
               // ----------------------------
               if (P_ratio > 1.0) printf("\n**** Valor del cociente P/Pmax = %10.4f\n",
P_ratio);
               // En el caso de que P_ratio > 1.0, se recomienda revisar el valor de ec con
el que se calcula Pn0

               fprintf(fp3," %8.4f, %8.4f, %10.4f, %8.4f, %10.4f, %10.4f, %8.4f, %8.4f,
%8.4f, %8.4f \n",
                c0,slope,Pn,P_ratio,Mnx,Mny,ratio_M,alfa_PCA,alfa_India,alfa_J);
            }
            // --- Diagrama plano ---//
            if (slope == 0.0) fprintf(fp4,"%10.4f,     %10.4f \n",Mnx,Pn);
            // ----------------------//

         }   // Next k
         // --- Valores extremos ---//
         //fprintf(fp3," %8.4f, %8.4f, %8.3f, %8.3f, %8.3f, %8.4f, %8.3f, %8.3f, %8.3f, %8.3f
\n",  **** 14/dic/2023
         //    9999.9,slope,Pnn,1.0,0.0,0.0,0.0,1.4,1.0,1.2);
         // --- Diagrama plano ---//
         if (slope == 0.0) fprintf(fp4,"%10.4f,     %10.4f \n",0.0,Pnn);
```

```
        // --------------------//
    }   // Next i_alfa

    fclose(fp1);
    fclose(fp2);
    fclose(fp3);
    fclose(fp4);
    return 0;

}   //Fin del programa principal

// ------------------------------ FUNCIONES  ------------------------------

double kent_park (double ec)   {
    double e_cero = 0.002;
    double esf;
    if(ec < 0.0 ) {
        // printf("\n*** Deformacion unitaria negativa para el concreto (tension?)\n");
        return 0.0;
    }
    if(ec <= e_cero)    esf = fc*((2.0*ec/e_cero)-(ec/e_cero)*(ec/e_cero));
    else  {
        esf = ((0.5*fc/(e50u-e_cero))*(e50u-ec))+0.5*fc;
        if (esf < (0.2*fc)) esf = 0.0;  // Esto parece no aplicar ya que ec < ecu
    }
    return esf;
}

double Esf_acero(double es)  {
    double signo;
    double esfuerzo;
    ey = fy/Es;
    signo = es/fabs(es);
    if (fabs(es) <= ey)  esfuerzo = es*Es;
    else                 esfuerzo = signo*fy;
    return esfuerzo;
}

double delta_f(double xp,double yp,double c0,double slope) {
    double xq, yq;
    double delta;
    double signo;
    signo = 1.0;
    xq = ((yp - c0) * slope + xp)/(slope * slope + 1.0);
    yq = (slope * xq) + c0;
    if (yp < yq) signo = -1.0;
    delta = sqrt((yp - yq)*(yp - yq) + (xp -xq)*(xp -xq));
    delta *= signo;
    return delta;
}
```

A.4 *Script de Matlab para el cálculo de los cocientes r_1 y r_2*

Además del programa *Surface* que calcula las triadas de valores nominales correspondientes a la falla. Se preparó un archivo *script* de *Matlab* para calcular los valores de r_1 y r_2. Este *script* identificado con el nombre de "*Contorno*", requiere como datos los archivos *tabla* y *diagrama* que *Surface* genera para cada eje de flexión. Así, el *script* requiere de 4 archivos: *tabla-x, diagrama-x, tabla-y y diagrama-y*. El diagrama de la Fig. A.4.1 ilustra la interacción del programa *Surface* con

el *script Contorno*, el cual se da a través de los archivos indicados. El listado del script se muestra al final de esta sección.

El script *Contorno* reporta por separado dos archivos ASCII (del tipo CSV, con valores separados por comas). Un primer archivo identificado como "*Summary_CR.txt*" (o simplemente "*Summary_CR* sin la extensión) y otro identificado como "*Summary_CC.txt* ". El primero reporta los valores de r_1 relacionados con el método de la carga recíproca (CR) y el segundo reporta los valores de r_2 relacionados con el método del contorno de carga (CC).

Los resultados del archivo "*Summary_CR"* son como se describe en la Figura A.4.2. Los valores de P_{xCR}, P_{yCR}, P_{0CR} y P_{xyCR} son los que corresponden a las ubicaciones que se indican en la Fig. 1.3.1 del Capítulo 1. Los últimos valores de este mismo archivo son los que se refieren a la fórmula de Bresler modificada.

Los resultados del archivo "*Summary_CC* " son como se describe en la Figuras A.4.3. Se observa que se incluyen los valores de r_2 calculados con distintos valores del exponente α y con las distintas recomendaciones (PCA, Eurocode, reglamento de India y la propuesta *J*).

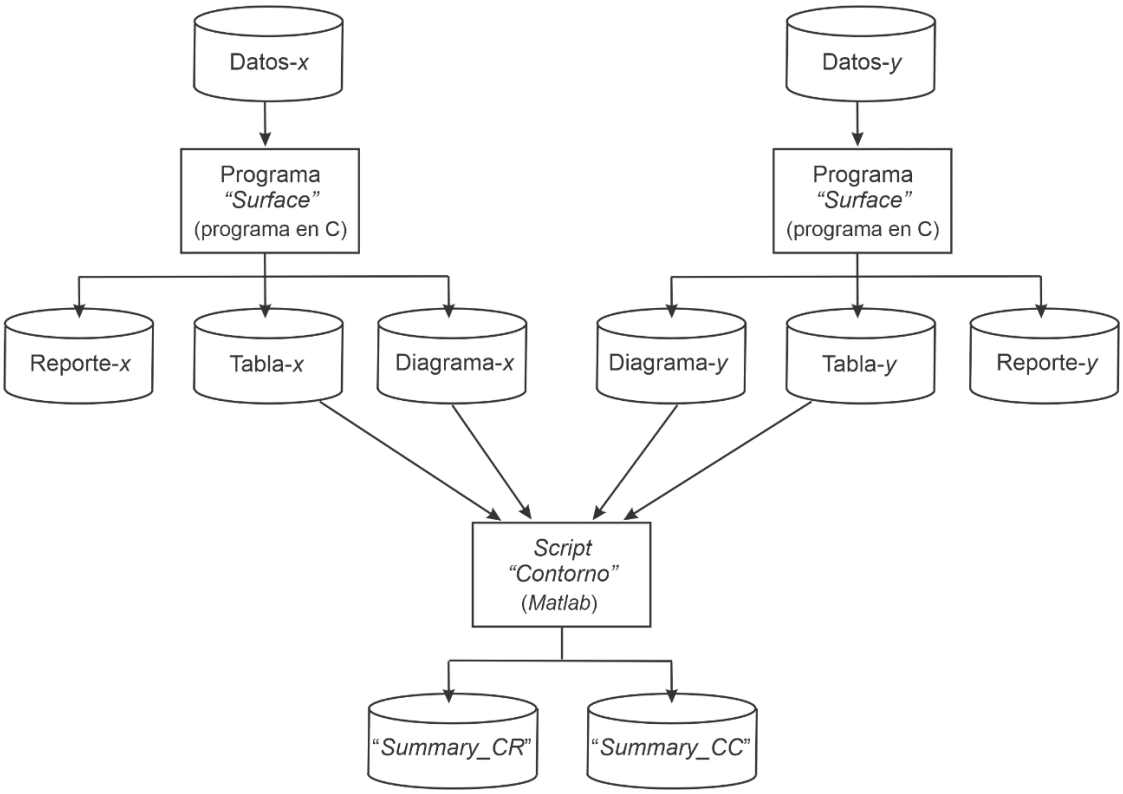


Figura A.4.1. Interacción entre el programa *Surface* y el *script Contorno*

$$/\text{--- } s \text{ ---//--- } P_n \text{ ---//--- } P_n/P_0 \text{ ---//--- } e_y \text{ ---//--- } e_x \text{ ---//--- } P_{xCR} \text{ ---//--- } P_{yCR} \text{ ---// } \cdots$$

$$\cdots \text{ /--- } P_{0CR} \text{ ---//--- } P_{xyCR} \text{ ---//--- } P_n/P_{xyCR} \text{ ---//--- } P_{xyCR-m} \text{ ---//--- } P_n/P_{xyCR-m} \text{ ---/}$$

Figura A.4.2. Formato de salida del archvio *Summary_CR.txt*

$$/\text{--- } s \text{ ---//--- } P_n \text{ ---//--- } P_n/P_0 \text{ ---//--- } M_{nx} \text{ ---//--- } M_{ny} \text{ ---//--- } M_{nx0} \text{ ---//--- } M_{ny0} \text{ ---/ } \cdots$$

$$\cdots /\text{--- } M_{nx}/M_{nx0} \text{ ---//--- } M_{ny}/M_{ny0} \text{ ---//--- } r_2|_{\alpha=1.0} \text{ ---//--- } r_2|_{\alpha=1.2} \text{ ---/ } \cdots$$

$$\cdots /\text{--- } r_2|_{\alpha=1.4} \text{ ---//--- } r_2|_{\alpha=1.6} \text{ ---//--- } r_2|_{\alpha=1.8} \text{ ---//--- } r_{21}|_{\alpha=2.0} \text{ ---/ } \cdots$$

$$\cdots /\text{--- } r_{2-PCA} \text{ ---//--- } r_{2-Euro} \text{ ---//--- } r_{2-India} \text{ ---//--- } r_{2-J} \text{ ---/}$$

Figura A.4.3. Formato de salida del archvio *Summary_CC.txt*

El listado del archivo script "*Contorno.m*" (o simplemente "*Contorno*") es el siguiente:

```
% Script para calcular la ecuacion de interaccion del metodo de contorno
% de carga r2 = (Mnx/Mnx0)^alfa + (Mny/Mny0)^alfa para valores
% seleccionados de alfa.
% La ecuacion se evalua en los puntos contenidos en el archivo de datos.
% Para el calculo de r2 se requiere interpolaciones de diagramas planos
% los cuales se leen de dos archivos (uno para flexion alrededor de x y
% otro para flexion alrededor de y).
%                         Algunas variables:
%    alfa = pendiente del eje neutro
%    aa = exponente de la ecuaciòn de interaccion
%    r2 = valor de la ecuacion de interaccion (para cada caso)
%    r1 = Pn/Pxy     ******** 7-Enero-2024

% Programa elaborado por Jazmin Martínez García y Jaime De la Colina Martínez
% Ultima revision: 3 de Febrero de 2024

% El script puede usar los valores de aa calculados con el reglamento
% Europeo y el de
% India o bien un valor constante (independiente del nivel de carga axial)
% Tambien se incluye otra propuesta para calcular el exp. alfa (propuesta J)

% También calcula cociente r1 para evaluar metodo de carga reciproca de Bresler
% 3 Feb: Agrega valor de slope y encabezados a archivos Summary_CC.txt y Summary_CR.txt

%
clc
fprintf('***** Programa Contour v24.4 (3 Feb 2024)...\n\n');
PromptX = "Nombre del archivo (Tabla X) con los puntos (P,Mx,My) sobre superficie de falla =
";
PromptY = "Nombre del archivo (Tabla Y) con los puntos (P,Mx,My) sobre superficie de falla =
";
```

```
   Table_X = input(PromptX,"s");
   Table_Y = input(PromptY,"s");
   Points_X = load(Table_X);   % Estos conjuntos de datos NO incluyen cargas negativas
   Points_Y = load(Table_Y);
   fprintf('\n');

   fout_CC = fopen('Summary_CC.txt','w');  % Archivo resumen para evaluar m. de contorno de
carga
   fout_CR = fopen('Summary_CR.txt','w');  % Archivo resumen para evaluar m. de carga reciproca

   SMALL = 0.001;
   SMALL2 = 0.01;
   Fraction = 0.9;  % Fraccion de P0 que define hasta que valores de Pn reportar

   P0X = Points_X(1,3); % Valor de la carga axial maxima
   P0Y = Points_Y(1,3);


   if (abs(P0X - P0Y) < SMALL2)
       P0 = P0X;
   else
       fprintf('***** Error en la lectura de la carga axial maxima\n');
   end
   P_max = Fraction * P0;
   Factor_modif = 1.05;    % 1 de dic - Factor para modificar la aecuación de carga reciproca

   PromptX = "Nombre del archivo con puntos (P,Mx) del diagrama plano X = ";
   PromptY = "Nombre del archivo con puntos (P,My) del diagrama plano Y = ";
   Diagrama_X = input(PromptX',"s");
   Diagrama_Y = input(PromptY',"s");
   fprintf('\n');
   %           ----- Diagrama plano X ------
   Dx = load(Diagrama_X);
   Mnx = Dx(:,1);                  % Vector de momentos en diagrama de interaccion
   Pnx = Dx(:,2);                  % Vector de cargas axiales
   rx = Mnx';      sx = Pnx';      % Vectores transpuestos (para graficar)
   sz = size(Dx);  NDx = sz(1,1);  % Numero de puntos del diagrama (x)


   %           ----- Diagrama plano Y ------
   Dy = load(Diagrama_Y);
   Mny = Dy(:,1);
   Pny = Dy(:,2);
   ry = Mny';      sy = Pny';
   sz = size(Dy);  NDy = sz(1,1);

   plot(rx, sx, "-b", ry, sy,'--r');
   xlabel('Bending moment, t-m'); ylabel('Axial force, t');

   k0 = 0;
   for kk = 1 : NDx
       if (Pnx(kk) > 0.0)                    % Solo considera compresiones
           k0 = k0 + 1;
           Mnxx(k0) = Mnx(kk);
           Pxx(k0) = Pnx(kk);                % Vector de cargas positivas
           vector_ey(k0) = Mnx(kk)/Pnx(kk);  % Vector de excentricidades ey = Mx/P
       end
   end
   % Observar que k0 resulta menor que Ndx ya que solo se consideran cargas de compresión

   k0 = 0;
```

```
   for kk = 1 : NDy
       if (Pny(kk) > 0.0)
           k0 = k0 + 1;
           Mnyy(k0) = Mny(kk);
           Pyy(k0) = Pny(kk);
           vector_ex(k0) = Mny(kk)/Pny(kk);   % Vector de excentricidades ex = My/P
       end
   end

   % Organizacion de informacion de archivo Summary_CC.txt:

   % fprintf(fout_CC,'/--- Pn ---//--- Pratio---//--- Mnx ---//--- Mny ---//--- Mnx0 ---//---
Mny0 ---/
   %               /-- Mnx/Mnx0 --//-- Mny/Mny0 --//-- r2 para 1.0 --/.../-- r2 para 2.0 --/
   %               /--- r2 PCA ---//--- r2 Euro ---//--- r2 India ---//--- r2 J ---/\n');

   % Organización de información de archivo Summary_CR.txt:
   % fprintf(fout_CR,'/--- Pn ---//--- Pratio---//--- ey ---//--- ex ---//-- Px-plano --//-- Py-
plano --/
   %               /--- P0 ---//-- Pxy Bresler --//--- r1 ---//-- Pxy Modif --//--- r1 Modif -
--/\n');

   %           ----- Puntos de Tabla_X -----
   sz = size(Points_X);
   N = sz(1,1);
   % Encabezados
   fprintf(fout_CC,[' Slope, Pn, Pn/P0, Mnx, Mny, Mnx0, Mny0, Mnx/Mnx0, Mny/Mny0, ' ...
       'a=1.0, a=1.2, a=1.4, a=1.6, a=1.8, a=2.0, r2-PCA, r2-Euro, r2-India, r2-J\n']);
   fprintf(fout_CR,' Slope, Pn, Pn/P0, ey, ex, Px_CR, Py_CR, P0_CR, Pxy_CR, Pn/Pxy_CR, Pxy_CR_m,
Pn/Pxy_CR_m\n');
   for i = 1 : N
       i_print = 1;
       alfa = Points_X(i,2);                   % Angulo del eje neutro
       if (alfa > 0.0)
          %  ***** Esta seccion de instrucciones es para el metodo de contorno de carga ****
           Slope = Points_X(i,2);
           Pn = Points_X(i,3);                 % Carga axial
           if (Pn > 0.0) && (Pn <= P_max)
           P_ratio = Points_X(i,4);            % Relacion de carga axial
           Mnx = Points_X(i,5);
           Mny = Points_X(i,6);
           Mnx0 = spline(sx,rx,Pn);
           Mny0 = spline(sy,ry,Pn);

           if (Mnx0 > SMALL && Mny0 > SMALL)
               ratio1 = Mnx/Mnx0;    ratio2 = Mny/Mny0;

               fprintf(fout_CC,'  %8.3f,  %8.3f, %8.3f,    %8.3f, %8.3f, %8.3f, %8.3f,     %6.4f,
%6.4f,   ', ...
                   Slope, Pn, P_ratio, Mnx, Mny, Mnx0, Mny0, ratio1, ratio2);

               for (aa = 1.0 : 0.2 : 2.0)  % Son 6 valores distintos de r2 para cada exponente
aa
                   r2 = ratio1^aa + ratio2^aa;
                   fprintf(fout_CC,' %6.3f,',r2);
               end

               aa = Points_X(i,8);         % Exponente alfa segun PCA
               r2_PCA = ratio1^aa + ratio2^aa;
               fprintf(fout_CC,'      %6.3f,',r2_PCA);
```

```
            aa = Points_X(i,9);         % Exponente alfa segun reglamento Europeo
            r2_Euro = ratio1^aa + ratio2^aa;
            fprintf(fout_CC,' %6.3f,',r2_Euro);

            aa = Points_X(i,10);        % Exponente alfa segun reglamento de India
            r2_India = ratio1^aa + ratio2^aa;
            fprintf(fout_CC,' %6.3f,',r2_India);

            aa = Points_X(i,11);        % Exponente alfa segun propuesta propia (J)
            r2_J = ratio1^aa + ratio2^aa;
            fprintf(fout_CC,' %6.3f',r2_J);

            fprintf(fout_CC,'\n');

        %  ***** Esta seccion de instrucciones es para el metodo de carga reciproca ****

          ey = Mnx/Pn;                          % Valor puntual de ey
          ex = Mny/Pn;
          Px_cr = spline(vector_ey,Pxx,ey);     % Valor interpolado de P para ey en diagrama
plano
          if (Px_cr < 0.0)
              i_print = 0;   % Error de interpolacion. En este caso no imprime este registro
          end
          Py_cr = spline(vector_ex,Pyy,ex);
          if (Py_cr < 0.0)
              i_print = 0;
          end
          Pxy_cr = 1/(1.0/Px_cr + 1.0/Py_cr - 1.0/P0);

          r1 = Pn/Pxy_cr;  % 7_Ene-24: Un valor de r1 > 1.0 indica que Bresler es seguro

          % Propuesta alterna a formula de carga reciproca:
          Pxy_cr_m = 1/(1.0/Px_cr + 1.0/Py_cr - Factor_modif/P0);
          r1m = Pn/Pxy_cr_m;    % 7_Ene-24:
          %
          if (i_print == 1)
          fprintf(fout_CR,'   %8.3f, %8.3f, %8.3f, %8.3f, %8.3f, %8.3f, %8.3f, %8.3f, %8.3f,
%8.3f, %8.3f, %8.3f \n', ...
              Slope, Pn, P_ratio, ey, ex, Px_cr, Py_cr, P0, Pxy_cr, r1, Pxy_cr_m, r1m);
          end

          end
          end
      end
  end

  %           ----- Puntos de Tabla_Y (dirección ortogonal) -----
  sz = size(Points_Y);
  N = sz(1,1);
  for i = 1 : N
      i_print = 1;
      alfa = Points_Y(i,2);
      if (alfa > 0.0)

        %  ***** Esta seccion de instrucciones es para el metodo de contorno de carga ****
         Slope = Points_Y(i,2);
         Pn = Points_Y(i,3);
         if (Pn > 0.0) && (Pn <= P_max)
         P_ratio = Points_Y(i,4);
         Mnx = Points_Y(i,6);   % Eje x de la orientacion original
         Mny = Points_Y(i,5);   % Eje y de la orientacion original
```

```
            Mnx0 = spline(sx,rx,Pn);
            Mny0 = spline(sy,ry,Pn);

            if (Mnx0 > SMALL && Mny0 > SMALL)
                ratio1 = Mnx/Mnx0;  ratio2 = Mny/Mny0;

                fprintf(fout_CC,'  %8.3f,  %8.3f, %8.3f,    %8.3f, %8.3f, %8.3f, %8.3f,     %6.4f,
%6.4f,   ', ...
                    Slope, Pn, P_ratio, Mnx, Mny, Mnx0, Mny0, ratio1, ratio2);

                for (aa = 1.0 : 0.2 : 2.0)
                    r2 = ratio1^aa + ratio2^aa;
                    fprintf(fout_CC,' %6.3f,',r2);
                end

                aa = Points_Y(i,8);                     % PCA
                r2_PCA = ratio1^aa + ratio2^aa;
                fprintf(fout_CC,'      %6.3f,',r2_PCA);

                aa = Points_Y(i,9);                     % Eurocode
                r2_Euro = ratio1^aa + ratio2^aa;
                fprintf(fout_CC,' %6.3f,',r2_Euro);

                aa = Points_Y(i,10);                    % India
                r2_India = ratio1^aa + ratio2^aa;
                fprintf(fout_CC,' %6.3f,',r2_India);

                aa = Points_Y(i,11);                    % Propuesta J
                r2_J = ratio1^aa + ratio2^aa;
                fprintf(fout_CC,' %6.3f',r2_J);

                fprintf(fout_CC,'\n');

        %  ***** Esta seccion de instrucciones es para el metodo de carga reciproca ****

            ey = Mnx/Pn;
            ex = Mny/Pn;
            Px_cr = spline(vector_ey,Pxx,ey);
            if (Px_cr < 0.0)
                i_print = 0;   % Error de interpolacion. En este caso no imprime este registro
            end
            Py_cr = spline(vector_ex,Pyy,ex);
            if (Py_cr < 0.0)
                i_print = 0;
            end
            Pxy_cr = 1/(1.0/Px_cr + 1.0/Py_cr - 1.0/P0);

            r1 = Pn/Pxy_cr;  % 7_Ene-24:
            %
            Pxy_cr_m = 1/(1.0/Px_cr + 1.0/Py_cr - Factor_modif/P0);
            r1m = Pn/Pxy_cr_m;  % 7_Ene-24:
            %
            if (i_print == 1)
            fprintf(fout_CR,' %8.3f,   %8.3f, %8.3f, %8.3f, %8.3f, %8.3f, %8.3f, %8.3f, %8.3f,
%8.3f, %8.3f, %8.3f \n', ...
                Slope, Pn, P_ratio, ey, ex, Px_cr, Py_cr, P0, Pxy_cr, r1, Pxy_cr_m, r1m);
            end

            end
            end
        end
```

```
end

fprintf('Archivo con resultados del metodo de carga reciproca   = Summary_CR.txt \n');
fprintf('Archivo con resultados del metodo de contorno de carga = Summary_CC.txt \n\n');
fprintf('***** Fin de programa Contorno. \n');
fclose(fout_CC);
fclose(fout_CR);
```

Apéndice B

Tablas de parámetros calculados r_1

Excepto por los casos 1 y 9 que se presentan en el Capítulo 3, los demás casos se incluyen en este apéndice. En las tablas $r_1 = P_n/P_{xy}$, en donde P_{xy} se calcula con la "fórmula de Bresler" del método de la carga recíproca. Además, $r_{1m} = P_n/P_{xym}$, en donde P_{xym} se calcula con la "fórmula de Bresler" modificada como se explica en el Capítulo 2.

Tabla B.1 Valores de r_1 de la sección 2 (40 cm x 40 cm con ρ = 0.06 y f'_c = 250 kg/cm^2)

s	Ej	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.857	0.023	0.005	628.66	709.071	605.656	1.048	631.469	1.005
0.25	x-x	0.849	0.024	0.006	622.792	707.265	598.912	1.049	624.142	1.007
0.25	x-x	0.839	0.026	0.006	616.594	705.335	591.82	1.051	616.444	1.009
0.25	x-x	0.83	0.028	0.006	610.012	703.273	584.331	1.052	608.323	1.010
0.25	x-x	0.82	0.03	0.007	603.021	701.067	576.424	1.053	599.757	1.012
0.25	x-x	0.809	0.032	0.007	595.611	698.7	568.084	1.055	590.734	1.014
0.25	x-x	0.797	0.034	0.008	587.746	696.154	559.283	1.056	581.223	1.016
0.25	x-x	0.785	0.036	0.008	579.367	693.41	549.966	1.057	571.168	1.018
0.25	x-x	0.772	0.039	0.009	570.414	690.447	540.082	1.059	560.513	1.020
0.25	x-x	0.758	0.041	0.01	560.914	687.281	529.679	1.060	549.317	1.023
0.25	x-x	0.744	0.045	0.01	550.909	683.988	518.855	1.062	537.685	1.024
0.25	x-x	0.728	0.048	0.011	540.419	680.632	507.676	1.063	525.688	1.026
0.25	x-x	0.712	0.051	0.012	529.387	677.257	496.119	1.063	513.307	1.028
0.25	x-x	0.695	0.055	0.012	517.718	673.89	484.121	1.064	500.475	1.029
0.25	x-x	0.678	0.06	0.013	505.46	670.521	471.721	1.064	487.233	1.030
0.25	x-x	0.659	0.064	0.014	492.51	667.023	458.771	1.064	473.431	1.032
0.25	x-x	0.64	0.069	0.015	478.968	663.42	445.377	1.065	459.18	1.033
0.25	x-x	0.62	0.074	0.015	464.823	659.636	431.505	1.065	444.45	1.034
0.25	x-x	0.6	0.08	0.016	449.931	655.588	417.009	1.066	429.085	1.036
0.25	x-x	0.579	0.086	0.018	434.584	650.646	401.912	1.067	413.119	1.038
0.25	x-x	0.556	0.093	0.019	418.828	645.499	386.559	1.066	396.915	1.038
0.25	x-x	0.533	0.1	0.02	402.437	639.867	370.671	1.065	380.182	1.039
0.25	x-x	0.509	0.108	0.022	385.334	633.516	354.137	1.064	362.809	1.039
0.25	x-x	0.484	0.117	0.023	367.475	626.367	336.938	1.063	344.779	1.039
0.25	x-x	0.457	0.128	0.026	348.986	618.016	319.117	1.061	326.142	1.039
0.25	x-x	0.43	0.14	0.028	329.725	608.152	300.546	1.059	306.768	1.037
0.25	x-x	0.401	0.154	0.031	309.508	596.676	281.135	1.056	286.572	1.036
0.25	x-x	0.371	0.171	0.035	288.237	583.233	260.819	1.053	265.493	1.035
0.25	x-x	0.34	0.192	0.04	265.77	567.204	239.474	1.050	243.408	1.033
0.25	x-x	0.306	0.218	0.045	241.792	548.147	216.909	1.047	220.131	1.032
0.25	x-x	0.271	0.253	0.053	216.004	523.986	192.748	1.043	195.289	1.029
0.25	x-x	0.234	0.301	0.064	188.64	492.699	167.2	1.037	169.108	1.026
0.25	x-x	0.198	0.363	0.076	161.402	459.523	142.409	1.030	143.791	1.020
0.25	x-x	0.163	0.445	0.092	132.13	421.284	116.386	1.038	117.307	1.030
0.25	x-x	0.129	0.566	0.114	104.022	373.48	91.399	1.047	91.967	1.040
0.25	x-x	0.096	0.759	0.153	77.287	310.686	67.533	1.055	67.842	1.050
0.25	x-x	0.068	1.065	0.217	54.715	243.111	47.528	1.054	47.681	1.051
0.25	x-x	0.04	1.774	0.37	32.236	158.222	27.784	1.060	27.836	1.058
0.25	x-x	0.009	7.306	1.565	657.027	59.662	59.055	0.118	59.292	0.118
0.5	x-x	0.827	0.027	0.012	612.402	672.998	565.314	1.083	587.74	1.042

0.5	x-x	0.817	0.029	0.013	606.618	669.744	558.124	1.085	579.971	1.044
0.5	x-x	0.807	0.03	0.014	600.51	666.299	550.599	1.086	571.851	1.046
0.5	x-x	0.797	0.032	0.015	594.064	662.645	542.727	1.087	563.364	1.048
0.5	x-x	0.786	0.034	0.016	587.267	658.777	534.504	1.089	554.509	1.049
0.5	x-x	0.774	0.036	0.017	580.109	654.711	525.948	1.090	545.306	1.051
0.5	x-x	0.762	0.038	0.018	572.595	650.464	517.084	1.091	535.783	1.053
0.5	x-x	0.749	0.04	0.019	564.742	646.045	507.944	1.092	525.976	1.055
0.5	x-x	0.736	0.043	0.02	556.61	641.411	498.56	1.093	515.921	1.056
0.5	x-x	0.721	0.045	0.021	548.266	636.453	488.934	1.093	505.62	1.057
0.5	x-x	0.706	0.048	0.022	539.591	631.272	479.046	1.092	495.052	1.057
0.5	x-x	0.691	0.051	0.024	530.42	625.792	468.736	1.092	484.049	1.057
0.5	x-x	0.675	0.054	0.025	520.739	620.108	458.066	1.091	472.679	1.057
0.5	x-x	0.658	0.058	0.027	510.569	614.196	447.054	1.090	460.963	1.057
0.5	x-x	0.64	0.061	0.028	499.801	607.967	435.588	1.089	448.782	1.057
0.5	x-x	0.622	0.066	0.03	488.435	601.432	423.697	1.088	436.17	1.057
0.5	x-x	0.604	0.07	0.032	476.528	594.605	411.451	1.087	423.204	1.056
0.5	x-x	0.584	0.075	0.034	463.937	587.386	398.717	1.085	409.743	1.056
0.5	x-x	0.564	0.08	0.036	450.409	579.617	385.267	1.084	395.552	1.056
0.5	x-x	0.543	0.085	0.038	436.044	571.297	371.213	1.083	380.753	1.056
0.5	x-x	0.521	0.092	0.041	421.186	562.366	356.815	1.082	365.62	1.056
0.5	x-x	0.498	0.098	0.044	405.834	552.666	342.044	1.079	350.127	1.054
0.5	x-x	0.474	0.106	0.047	389.785	542.385	326.867	1.075	334.241	1.052
0.5	x-x	0.45	0.115	0.051	372.884	530.991	311.023	1.071	317.692	1.049
0.5	x-x	0.424	0.124	0.055	355.27	518.072	294.54	1.067	300.515	1.046
0.5	x-x	0.398	0.135	0.06	336.909	503.38	277.404	1.063	282.697	1.043
0.5	x-x	0.371	0.148	0.066	317.431	486.512	259.346	1.059	263.966	1.041
0.5	x-x	0.343	0.164	0.073	296.785	466.804	240.281	1.056	244.242	1.039
0.5	x-x	0.313	0.183	0.082	274.914	443.371	220.115	1.054	223.435	1.038
0.5	x-x	0.282	0.207	0.094	251.655	416.078	198.918	1.052	201.625	1.038
0.5	x-x	0.251	0.238	0.109	226.804	384.495	176.677	1.051	178.81	1.038
0.5	x-x	0.219	0.277	0.127	201.433	350.346	154.586	1.048	156.216	1.037
0.5	x-x	0.187	0.328	0.151	175.939	314.281	133.053	1.040	134.259	1.030
0.5	x-x	0.154	0.402	0.185	146.148	273.16	109.249	1.041	110.061	1.034
0.5	x-x	0.121	0.513	0.235	114.663	228.444	85.115	1.052	85.607	1.046
0.5	x-x	0.087	0.715	0.328	82.15	176.038	60.593	1.063	60.842	1.058
0.5	x-x	0.057	1.081	0.493	53.801	115.571	38.625	1.093	38.726	1.090
0.5	x-x	0.026	2.347	1.064	60.535	37.903	24.066	0.800	24.105	0.799
0.75	x-x	0.786	0.03	0.022	602.392	633.689	529.596	1.100	549.227	1.060
0.75	x-x	0.776	0.031	0.023	596.807	629.243	522.216	1.100	541.294	1.062
0.75	x-x	0.765	0.033	0.024	590.992	624.613	514.619	1.101	533.137	1.063
0.75	x-x	0.754	0.034	0.025	584.94	619.798	506.809	1.102	524.759	1.064
0.75	x-x	0.742	0.036	0.026	578.641	614.789	498.782	1.102	516.158	1.065
0.75	x-x	0.73	0.038	0.028	572.091	609.571	490.534	1.102	507.331	1.066
0.75	x-x	0.718	0.04	0.029	565.305	604.153	482.092	1.102	498.306	1.067
0.75	x-x	0.704	0.042	0.031	558.228	598.475	473.391	1.102	489.015	1.067
0.75	x-x	0.691	0.045	0.032	550.878	592.566	464.472	1.102	479.505	1.067
0.75	x-x	0.677	0.047	0.034	543.275	586.446	455.374	1.101	469.814	1.067
0.75	x-x	0.662	0.049	0.036	535.38	580.093	446.067	1.100	459.913	1.067
0.75	x-x	0.647	0.052	0.038	527.247	573.426	436.554	1.098	449.807	1.066
0.75	x-x	0.631	0.055	0.04	518.63	566.452	426.684	1.096	439.336	1.064
0.75	x-x	0.615	0.058	0.042	509.551	559.177	416.497	1.094	428.544	1.063
0.75	x-x	0.598	0.061	0.044	499.923	551.488	405.892	1.091	417.325	1.061
0.75	x-x	0.58	0.065	0.047	489.776	543.452	394.95	1.088	405.767	1.059
0.75	x-x	0.562	0.069	0.05	479.095	535.002	383.65	1.085	393.848	1.057
0.75	x-x	0.543	0.073	0.053	467.807	526.011	371.905	1.082	381.481	1.055
0.75	x-x	0.524	0.078	0.056	455.731	516.392	359.594	1.080	368.538	1.054
0.75	x-x	0.504	0.083	0.059	442.684	506.058	346.605	1.078	354.907	1.052

0.75	x-x	0.484	0.088	0.063	428.985	494.91	333.136	1.075	340.799	1.051
0.75	x-x	0.462	0.094	0.068	414.595	482.865	319.174	1.073	326.201	1.050
0.75	x-x	0.441	0.101	0.072	399.477	469.757	304.678	1.071	311.075	1.049
0.75	x-x	0.418	0.109	0.078	383.468	455.167	289.444	1.069	295.211	1.048
0.75	x-x	0.394	0.118	0.084	366.47	439.106	273.507	1.067	278.651	1.048
0.75	x-x	0.369	0.128	0.091	348.408	421.596	256.92	1.065	261.453	1.047
0.75	x-x	0.344	0.14	0.1	329.337	402.423	239.724	1.064	243.666	1.047
0.75	x-x	0.318	0.154	0.11	309.151	381.371	221.882	1.062	225.255	1.046
0.75	x-x	0.291	0.172	0.123	287.748	358.153	203.356	1.061	206.186	1.047
0.75	x-x	0.263	0.193	0.138	264.939	332.554	184.107	1.059	186.424	1.046
0.75	x-x	0.234	0.22	0.158	240.347	304.188	163.983	1.057	165.818	1.046
0.75	x-x	0.206	0.253	0.182	216.153	275.821	144.885	1.051	146.316	1.041
0.75	x-x	0.177	0.296	0.214	190.848	245.431	125.559	1.043	126.633	1.034
0.75	x-x	0.147	0.359	0.26	162.712	211.488	104.994	1.036	105.743	1.029
0.75	x-x	0.117	0.451	0.328	130.389	175.971	83.318	1.043	83.789	1.037
0.75	x-x	0.089	0.592	0.432	99.304	136.979	62.42	1.058	62.684	1.053
0.75	x-x	0.061	0.857	0.623	68.224	124.306	46.833	0.970	46.982	0.966
0.75	x-x	0.032	1.622	1.177	31.354	57.163	20.817	1.147	20.846	1.145
1	x-x	0.744	0.031	0.031	595.682	595.682	498.103	1.107	515.431	1.069
1	x-x	0.733	0.033	0.033	590.543	590.543	490.957	1.107	507.784	1.070
1	x-x	0.722	0.034	0.034	585.26	585.26	483.698	1.106	500.022	1.070
1	x-x	0.711	0.036	0.036	579.758	579.758	476.228	1.106	492.043	1.070
1	x-x	0.699	0.038	0.038	574.014	574.014	468.524	1.105	483.824	1.070
1	x-x	0.686	0.039	0.039	568.077	568.077	460.665	1.104	475.448	1.070
1	x-x	0.674	0.041	0.041	561.957	561.957	452.67	1.103	466.936	1.069
1	x-x	0.661	0.043	0.043	555.64	555.64	444.528	1.101	458.278	1.068
1	x-x	0.647	0.045	0.045	549.138	549.138	436.263	1.099	449.499	1.067
1	x-x	0.634	0.047	0.047	542.423	542.423	427.847	1.097	440.57	1.065
1	x-x	0.619	0.05	0.05	535.324	535.324	419.08	1.095	431.279	1.064
1	x-x	0.604	0.052	0.052	527.846	527.846	409.986	1.092	421.654	1.062
1	x-x	0.589	0.055	0.055	519.988	519.988	400.582	1.090	411.713	1.060
1	x-x	0.574	0.057	0.057	511.74	511.74	390.876	1.087	401.468	1.058
1	x-x	0.557	0.06	0.06	503.059	503.059	380.837	1.084	390.884	1.057
1	x-x	0.541	0.064	0.064	493.894	493.894	370.428	1.082	379.927	1.055
1	x-x	0.524	0.067	0.067	484.23	484.23	359.662	1.079	368.61	1.053
1	x-x	0.506	0.071	0.071	474.009	474.009	348.498	1.077	356.893	1.051
1	x-x	0.488	0.075	0.075	463.161	463.161	336.896	1.074	344.735	1.050
1	x-x	0.47	0.079	0.079	451.309	451.309	324.498	1.073	331.764	1.049
1	x-x	0.451	0.084	0.084	438.624	438.624	311.542	1.072	318.234	1.049
1	x-x	0.431	0.09	0.09	425.235	425.235	298.204	1.071	304.329	1.050
1	x-x	0.411	0.096	0.096	411.052	411.052	284.44	1.070	290.007	1.050
1	x-x	0.39	0.103	0.103	396.027	396.027	270.25	1.070	275.271	1.050
1	x-x	0.369	0.111	0.111	380.039	380.039	255.575	1.069	260.061	1.051
1	x-x	0.346	0.12	0.12	362.998	362.998	240.397	1.068	244.362	1.050
1	x-x	0.323	0.13	0.13	344.825	344.825	224.711	1.065	228.171	1.049
1	x-x	0.299	0.143	0.143	325.195	325.195	208.321	1.063	211.292	1.048
1	x-x	0.274	0.158	0.158	304.219	304.219	191.412	1.062	193.917	1.048
1	x-x	0.249	0.177	0.177	281.713	281.713	173.927	1.060	175.993	1.047
1	x-x	0.223	0.2	0.2	257.841	257.841	156.083	1.058	157.745	1.046
1	x-x	0.198	0.227	0.227	234.998	235	139.649	1.050	140.978	1.041
1	x-x	0.172	0.262	0.262	210.237	210.228	122.498	1.043	123.519	1.035
1	x-x	0.146	0.312	0.312	183.489	183.54	104.729	1.034	105.475	1.027
1	x-x	0.119	0.385	0.385	152.418	152.264	84.9	1.038	85.389	1.032
1	x-x	0.095	0.484	0.484	121.644	118.862	65.428	1.071	65.718	1.066
1	x-x	0.07	0.645	0.645	91.164	112.086	53.934	0.969	54.131	0.965
1	x-x	0.046	0.99	0.99	58.994	36.911	23.423	1.446	23.46	1.444
1	x-x	0.02	2.221	2.221	55.255	4.164	3.893	3.856	3.894	3.855

0.25	y-y	0.857	0.005	0.023	709.071	628.66	605.656	1.048	631.469	1.005
0.25	y-y	0.849	0.006	0.024	707.265	622.792	598.912	1.049	624.142	1.007
0.25	y-y	0.839	0.006	0.026	705.335	616.594	591.82	1.051	616.444	1.009
0.25	y-y	0.83	0.006	0.028	703.273	610.012	584.331	1.052	608.323	1.010
0.25	y-y	0.82	0.007	0.03	701.067	603.021	576.424	1.053	599.757	1.012
0.25	y-y	0.809	0.007	0.032	698.7	595.611	568.084	1.055	590.734	1.014
0.25	y-y	0.797	0.008	0.034	696.154	587.746	559.283	1.056	581.223	1.016
0.25	y-y	0.785	0.008	0.036	693.41	579.367	549.966	1.057	571.168	1.018
0.25	y-y	0.772	0.009	0.039	690.447	570.414	540.082	1.059	560.513	1.020
0.25	y-y	0.758	0.01	0.041	687.281	560.914	529.679	1.060	549.317	1.023
0.25	y-y	0.744	0.01	0.045	683.988	550.909	518.855	1.062	537.685	1.024
0.25	y-y	0.728	0.011	0.048	680.632	540.419	507.676	1.063	525.688	1.026
0.25	y-y	0.712	0.012	0.051	677.257	529.387	496.119	1.063	513.307	1.028
0.25	y-y	0.695	0.012	0.055	673.89	517.718	484.121	1.064	500.475	1.029
0.25	y-y	0.678	0.013	0.06	670.521	505.46	471.721	1.064	487.233	1.030
0.25	y-y	0.659	0.014	0.064	667.023	492.51	458.771	1.064	473.431	1.032
0.25	y-y	0.64	0.015	0.069	663.42	478.968	445.377	1.065	459.18	1.033
0.25	y-y	0.62	0.015	0.074	659.636	464.823	431.505	1.065	444.45	1.034
0.25	y-y	0.6	0.016	0.08	655.588	449.931	417.009	1.066	429.085	1.036
0.25	y-y	0.579	0.018	0.086	650.646	434.584	401.912	1.067	413.119	1.038
0.25	y-y	0.556	0.019	0.093	645.499	418.828	386.559	1.066	396.915	1.038
0.25	y-y	0.533	0.02	0.1	639.867	402.437	370.671	1.065	380.182	1.039
0.25	y-y	0.509	0.022	0.108	633.516	385.334	354.137	1.064	362.809	1.039
0.25	y-y	0.484	0.023	0.117	626.367	367.475	336.938	1.063	344.779	1.039
0.25	y-y	0.457	0.026	0.128	618.016	348.986	319.117	1.061	326.142	1.039
0.25	y-y	0.43	0.028	0.14	608.152	329.725	300.546	1.059	306.768	1.037
0.25	y-y	0.401	0.031	0.154	596.676	309.508	281.135	1.056	286.572	1.036
0.25	y-y	0.371	0.035	0.171	583.233	288.237	260.819	1.053	265.493	1.035
0.25	y-y	0.34	0.04	0.192	567.204	265.769	239.474	1.050	243.408	1.033
0.25	y-y	0.306	0.045	0.218	548.147	241.793	216.91	1.047	220.132	1.032
0.25	y-y	0.271	0.053	0.253	523.986	215.997	192.743	1.043	195.284	1.029
0.25	y-y	0.234	0.064	0.301	492.699	188.674	167.226	1.037	169.135	1.026
0.25	y-y	0.198	0.076	0.363	459.523	161.293	142.325	1.030	143.705	1.020
0.25	y-y	0.163	0.092	0.445	421.284	132.681	116.813	1.034	117.741	1.026
0.25	y-y	0.129	0.114	0.566	373.48	114.99	99.76	0.959	100.436	0.953
0.25	y-y	0.096	0.153	0.759	310.686	84.185	72.741	0.979	73.1	0.975
0.25	y-y	0.068	0.217	1.065	243.11	37.936	34.337	1.460	34.416	1.456
0.25	y-y	0.04	0.37	1.774	158.372	31.573	27.295	1.079	27.345	1.077
0.5	y-y	0.827	0.012	0.027	672.998	612.402	565.314	1.083	587.74	1.042
0.5	y-y	0.817	0.013	0.029	669.744	606.618	558.124	1.085	579.971	1.044
0.5	y-y	0.807	0.014	0.03	666.299	600.51	550.599	1.086	571.851	1.046
0.5	y-y	0.797	0.015	0.032	662.645	594.064	542.727	1.087	563.364	1.048
0.5	y-y	0.786	0.016	0.034	658.777	587.267	534.504	1.089	554.509	1.049
0.5	y-y	0.774	0.017	0.036	654.711	580.109	525.948	1.090	545.306	1.051
0.5	y-y	0.762	0.018	0.038	650.464	572.595	517.084	1.091	535.783	1.053
0.5	y-y	0.749	0.019	0.04	646.045	564.742	507.944	1.092	525.976	1.055
0.5	y-y	0.736	0.02	0.043	641.411	556.61	498.56	1.093	515.921	1.056
0.5	y-y	0.721	0.021	0.045	636.453	548.266	488.934	1.093	505.62	1.057
0.5	y-y	0.706	0.022	0.048	631.272	539.591	479.046	1.092	495.052	1.057
0.5	y-y	0.691	0.024	0.051	625.792	530.42	468.736	1.092	484.049	1.057
0.5	y-y	0.675	0.025	0.054	620.108	520.739	458.066	1.091	472.679	1.057
0.5	y-y	0.658	0.027	0.058	614.196	510.569	447.054	1.090	460.963	1.057
0.5	y-y	0.64	0.028	0.061	607.967	499.801	435.588	1.089	448.782	1.057
0.5	y-y	0.622	0.03	0.066	601.432	488.435	423.697	1.088	436.17	1.057
0.5	y-y	0.604	0.032	0.07	594.605	476.528	411.451	1.087	423.204	1.056
0.5	y-y	0.584	0.034	0.075	587.386	463.937	398.717	1.085	409.743	1.056
0.5	y-y	0.564	0.036	0.08	579.617	450.409	385.267	1.084	395.552	1.056

0.5	y-y	0.543	0.038	0.085	571.297	436.044	371.213	1.083	380.753	1.056
0.5	y-y	0.521	0.041	0.092	562.366	421.186	356.815	1.082	365.62	1.056
0.5	y-y	0.498	0.044	0.098	552.666	405.834	342.044	1.079	350.127	1.054
0.5	y-y	0.474	0.047	0.106	542.385	389.785	326.867	1.075	334.241	1.052
0.5	y-y	0.45	0.051	0.115	530.991	372.884	311.023	1.071	317.692	1.049
0.5	y-y	0.424	0.055	0.124	518.072	355.27	294.54	1.067	300.515	1.046
0.5	y-y	0.398	0.06	0.135	503.38	336.909	277.404	1.063	282.697	1.043
0.5	y-y	0.371	0.066	0.148	486.512	317.431	259.346	1.059	263.966	1.041
0.5	y-y	0.343	0.073	0.164	466.804	296.785	240.281	1.056	244.242	1.039
0.5	y-y	0.313	0.082	0.183	443.371	274.914	220.115	1.054	223.434	1.038
0.5	y-y	0.282	0.094	0.207	416.078	251.656	198.918	1.052	201.625	1.038
0.5	y-y	0.251	0.109	0.238	384.495	226.803	176.677	1.051	178.809	1.038
0.5	y-y	0.219	0.127	0.277	350.346	201.429	154.584	1.048	156.214	1.037
0.5	y-y	0.187	0.151	0.328	314.281	175.993	133.084	1.039	134.291	1.030
0.5	y-y	0.154	0.185	0.402	273.16	146.214	109.286	1.041	110.098	1.033
0.5	y-y	0.121	0.235	0.513	228.444	110.174	82.616	1.084	83.08	1.078
0.5	y-y	0.087	0.328	0.715	175.983	75.58	56.936	1.131	57.156	1.126
0.5	y-y	0.057	0.493	1.081	119.301	39.72	31.048	1.360	31.113	1.357
0.5	y-y	0.026	1.064	2.347	54.735	4.587	4.256	4.523	4.258	4.522
0.75	y-y	0.786	0.022	0.03	633.689	602.392	529.596	1.100	549.227	1.060
0.75	y-y	0.776	0.023	0.031	629.243	596.807	522.216	1.100	541.294	1.062
0.75	y-y	0.765	0.024	0.033	624.613	590.992	514.619	1.101	533.137	1.063
0.75	y-y	0.754	0.025	0.034	619.798	584.94	506.809	1.102	524.759	1.064
0.75	y-y	0.742	0.026	0.036	614.789	578.641	498.782	1.102	516.158	1.065
0.75	y-y	0.73	0.028	0.038	609.571	572.091	490.534	1.102	507.331	1.066
0.75	y-y	0.718	0.029	0.04	604.153	565.305	482.092	1.102	498.306	1.067
0.75	y-y	0.704	0.031	0.042	598.475	558.228	473.391	1.102	489.015	1.067
0.75	y-y	0.691	0.032	0.045	592.566	550.878	464.472	1.102	479.505	1.067
0.75	y-y	0.677	0.034	0.047	586.446	543.275	455.374	1.101	469.814	1.067
0.75	y-y	0.662	0.036	0.049	580.093	535.38	446.067	1.100	459.913	1.067
0.75	y-y	0.647	0.038	0.052	573.426	527.247	436.554	1.098	449.807	1.066
0.75	y-y	0.631	0.04	0.055	566.452	518.63	426.684	1.096	439.336	1.064
0.75	y-y	0.615	0.042	0.058	559.177	509.551	416.497	1.094	428.544	1.063
0.75	y-y	0.598	0.044	0.061	551.488	499.923	405.892	1.091	417.325	1.061
0.75	y-y	0.58	0.047	0.065	543.452	489.776	394.95	1.088	405.767	1.059
0.75	y-y	0.562	0.05	0.069	535.002	479.095	383.65	1.085	393.848	1.057
0.75	y-y	0.543	0.053	0.073	526.011	467.807	371.905	1.082	381.481	1.055
0.75	y-y	0.524	0.056	0.078	516.392	455.731	359.594	1.080	368.538	1.054
0.75	y-y	0.504	0.059	0.083	506.058	442.684	346.605	1.078	354.907	1.052
0.75	y-y	0.484	0.063	0.088	494.91	428.985	333.136	1.075	340.799	1.051
0.75	y-y	0.462	0.068	0.094	482.865	414.595	319.174	1.073	326.201	1.050
0.75	y-y	0.441	0.072	0.101	469.757	399.477	304.678	1.071	311.075	1.049
0.75	y-y	0.418	0.078	0.109	455.167	383.468	289.444	1.069	295.211	1.048
0.75	y-y	0.394	0.084	0.118	439.106	366.47	273.507	1.067	278.651	1.048
0.75	y-y	0.369	0.091	0.128	421.596	348.408	256.92	1.065	261.453	1.047
0.75	y-y	0.344	0.1	0.14	402.423	329.337	239.724	1.064	243.666	1.047
0.75	y-y	0.318	0.11	0.154	381.371	309.151	221.882	1.062	225.255	1.046
0.75	y-y	0.291	0.123	0.172	358.153	287.748	203.356	1.061	206.186	1.047
0.75	y-y	0.263	0.138	0.193	332.554	264.939	184.107	1.059	186.424	1.046
0.75	y-y	0.234	0.158	0.22	304.188	240.349	163.983	1.057	165.819	1.046
0.75	y-y	0.206	0.182	0.253	275.821	216.146	144.882	1.051	146.313	1.041
0.75	y-y	0.177	0.214	0.296	245.43	190.874	125.57	1.043	126.644	1.034
0.75	y-y	0.147	0.26	0.359	211.496	162.624	104.959	1.036	105.708	1.029
0.75	y-y	0.117	0.328	0.451	175.917	130.711	83.437	1.041	83.909	1.035
0.75	y-y	0.089	0.432	0.592	136.297	123.566	71.023	0.929	71.365	0.925
0.75	y-y	0.061	0.623	0.857	94.38	72.363	43.356	1.047	43.484	1.044
0.75	y-y	0.032	1.177	1.622	48.718	52.174	26.08	0.915	26.126	0.914

1	y-y	0.744	0.031	0.031	595.682	595.682	498.103	1.107	515.431	1.069
1	y-y	0.733	0.033	0.033	590.543	590.543	490.957	1.107	507.784	1.070
1	y-y	0.722	0.034	0.034	585.26	585.26	483.698	1.106	500.022	1.070
1	y-y	0.711	0.036	0.036	579.758	579.758	476.228	1.106	492.043	1.070
1	y-y	0.699	0.038	0.038	574.014	574.014	468.524	1.105	483.824	1.070
1	y-y	0.686	0.039	0.039	568.077	568.077	460.665	1.104	475.448	1.070
1	y-y	0.674	0.041	0.041	561.957	561.957	452.67	1.103	466.936	1.069
1	y-y	0.661	0.043	0.043	555.64	555.64	444.528	1.101	458.278	1.068
1	y-y	0.647	0.045	0.045	549.138	549.138	436.263	1.099	449.499	1.067
1	y-y	0.634	0.047	0.047	542.423	542.423	427.847	1.097	440.57	1.065
1	y-y	0.619	0.05	0.05	535.324	535.324	419.08	1.095	431.279	1.064
1	y-y	0.604	0.052	0.052	527.846	527.846	409.986	1.092	421.654	1.062
1	y-y	0.589	0.055	0.055	519.988	519.988	400.582	1.090	411.713	1.060
1	y-y	0.574	0.057	0.057	511.74	511.74	390.876	1.087	401.468	1.058
1	y-y	0.557	0.06	0.06	503.059	503.059	380.837	1.084	390.884	1.057
1	y-y	0.541	0.064	0.064	493.894	493.894	370.428	1.082	379.927	1.055
1	y-y	0.524	0.067	0.067	484.23	484.23	359.662	1.079	368.61	1.053
1	y-y	0.506	0.071	0.071	474.009	474.009	348.498	1.077	356.893	1.051
1	y-y	0.488	0.075	0.075	463.161	463.161	336.896	1.074	344.735	1.050
1	y-y	0.47	0.079	0.079	451.309	451.309	324.498	1.073	331.764	1.049
1	y-y	0.451	0.084	0.084	438.624	438.624	311.542	1.072	318.234	1.049
1	y-y	0.431	0.09	0.09	425.235	425.235	298.204	1.071	304.329	1.050
1	y-y	0.411	0.096	0.096	411.052	411.052	284.44	1.070	290.007	1.050
1	y-y	0.39	0.103	0.103	396.027	396.027	270.25	1.070	275.271	1.050
1	y-y	0.369	0.111	0.111	380.039	380.039	255.575	1.069	260.061	1.051
1	y-y	0.346	0.12	0.12	362.998	362.998	240.397	1.068	244.362	1.050
1	y-y	0.323	0.13	0.13	344.825	344.825	224.711	1.065	228.171	1.049
1	y-y	0.299	0.143	0.143	325.195	325.195	208.321	1.063	211.292	1.048
1	y-y	0.274	0.158	0.158	304.219	304.219	191.412	1.062	193.917	1.048
1	y-y	0.249	0.177	0.177	281.713	281.713	173.927	1.060	175.993	1.047
1	y-y	0.223	0.2	0.2	257.841	257.841	156.083	1.058	157.745	1.046
1	y-y	0.198	0.227	0.227	234.998	235	139.649	1.050	140.978	1.041
1	y-y	0.172	0.262	0.262	210.237	210.228	122.498	1.043	123.519	1.035
1	y-y	0.146	0.312	0.312	183.489	183.54	104.729	1.034	105.475	1.027
1	y-y	0.119	0.385	0.385	152.418	152.264	84.9	1.038	85.389	1.032
1	y-y	0.095	0.484	0.484	121.644	118.862	65.428	1.071	65.718	1.066
1	y-y	0.07	0.645	0.645	91.164	112.086	53.934	0.969	54.131	0.965
1	y-y	0.046	0.99	0.99	58.994	36.911	23.423	1.446	23.46	1.444
1	y-y	0.02	2.221	2.221	55.255	4.164	3.893	3.856	3.894	3.855

Tabla B.2 Valores de r_1 de la sección 3 (40 cm x 40 cm con ρ = 0.03 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn /Pxym
0.25	x-x	0.894	0.022	0.005	604.929	665.637	574.997	1.098	599.403	1.054
0.25	x-x	0.882	0.025	0.006	596.528	663.825	566.085	1.100	589.725	1.056
0.25	x-x	0.869	0.027	0.006	587.542	661.787	556.546	1.102	579.379	1.059
0.25	x-x	0.854	0.03	0.007	577.977	659.521	546.401	1.104	568.393	1.061
0.25	x-x	0.839	0.033	0.008	567.799	657.122	535.702	1.105	556.825	1.063
0.25	x-x	0.822	0.037	0.008	556.97	654.752	524.533	1.107	544.768	1.066
0.25	x-x	0.805	0.04	0.009	545.484	652.508	512.948	1.107	532.283	1.067
0.25	x-x	0.786	0.044	0.01	533.393	650.364	500.971	1.108	519.397	1.069
0.25	x-x	0.767	0.048	0.01	520.637	648.342	488.555	1.108	506.063	1.070
0.25	x-x	0.747	0.052	0.011	507.153	646.358	475.589	1.109	492.164	1.072
0.25	x-x	0.726	0.057	0.011	493.256	644.471	462.377	1.109	478.029	1.073
0.25	x-x	0.705	0.062	0.012	479.071	642.588	448.972	1.109	463.715	1.074

0.25	x-x	0.683	0.067	0.012	464.664	640.604	435.379	1.108	449.229	1.074
0.25	x-x	0.661	0.072	0.013	450.113	638.333	421.589	1.108	434.563	1.075
0.25	x-x	0.639	0.077	0.014	435.46	635.661	407.611	1.107	419.726	1.075
0.25	x-x	0.616	0.083	0.015	420.754	632.704	393.556	1.105	404.838	1.074
0.25	x-x	0.592	0.089	0.015	405.601	629.524	379.116	1.103	389.575	1.073
0.25	x-x	0.568	0.095	0.016	390.145	626.039	364.401	1.101	374.054	1.072
0.25	x-x	0.544	0.102	0.018	374.572	622.126	349.548	1.098	358.42	1.071
0.25	x-x	0.518	0.11	0.019	358.591	617.521	334.247	1.095	342.35	1.069
0.25	x-x	0.492	0.118	0.02	342.162	612.25	318.507	1.092	325.857	1.067
0.25	x-x	0.466	0.127	0.022	325.379	605.984	302.364	1.088	308.979	1.064
0.25	x-x	0.438	0.138	0.024	308.161	598.453	285.734	1.083	291.634	1.061
0.25	x-x	0.41	0.149	0.027	290.387	589.678	268.583	1.077	273.79	1.057
0.25	x-x	0.38	0.163	0.03	271.699	579.436	250.621	1.072	255.149	1.053
0.25	x-x	0.351	0.179	0.033	253.443	568.371	233.165	1.062	237.079	1.045
0.25	x-x	0.322	0.196	0.036	234.264	558.38	215.364	1.054	218.699	1.038
0.25	x-x	0.293	0.216	0.039	212.337	547.959	195.382	1.059	198.123	1.044
0.25	x-x	0.265	0.238	0.043	191.018	535.735	175.888	1.062	178.106	1.049
0.25	x-x	0.236	0.263	0.048	171.222	519.541	157.508	1.060	159.285	1.048
0.25	x-x	0.209	0.291	0.056	152.701	495.748	139.867	1.055	141.266	1.045
0.25	x-x	0.182	0.327	0.067	134.434	463.925	122.282	1.050	123.35	1.041
0.25	x-x	0.156	0.368	0.078	116.712	433.821	105.742	1.044	106.54	1.037
0.25	x-x	0.13	0.427	0.093	97.364	394.353	87.794	1.047	88.344	1.040
0.25	x-x	0.103	0.519	0.118	76.806	341.729	68.824	1.055	69.161	1.049
0.25	x-x	0.074	0.686	0.164	55.054	271.161	48.934	1.071	49.104	1.067
0.25	x-x	0.045	1.061	0.271	31.975	165.695	27.86	1.150	27.915	1.148
0.25	x-x	0.017	2.681	0.755	72.141	49.362	30.577	0.387	30.644	0.386
0.5	x-x	0.892	0.024	0.011	597.534	644.722	552.995	1.139	575.532	1.094
0.5	x-x	0.88	0.026	0.012	590.524	641.357	544.562	1.141	566.404	1.097
0.5	x-x	0.867	0.029	0.013	583.234	637.783	535.836	1.143	556.97	1.099
0.5	x-x	0.854	0.031	0.014	575.613	634.017	526.8	1.144	547.213	1.101
0.5	x-x	0.839	0.033	0.015	567.641	630.096	517.473	1.145	537.156	1.103
0.5	x-x	0.825	0.036	0.016	559.277	626.054	507.856	1.146	526.801	1.105
0.5	x-x	0.809	0.039	0.018	550.493	621.928	497.961	1.147	516.162	1.107
0.5	x-x	0.793	0.041	0.019	541.22	617.622	487.68	1.148	505.124	1.108
0.5	x-x	0.776	0.044	0.02	531.509	613.18	477.097	1.148	493.78	1.109
0.5	x-x	0.758	0.048	0.021	521.292	608.676	466.211	1.148	482.128	1.110
0.5	x-x	0.739	0.051	0.023	510.66	603.961	455.017	1.147	470.166	1.110
0.5	x-x	0.72	0.055	0.024	499.58	599.095	443.538	1.146	457.92	1.110
0.5	x-x	0.699	0.059	0.025	488.024	594.094	431.771	1.144	445.388	1.109
0.5	x-x	0.679	0.063	0.027	476.078	589.006	419.815	1.141	432.677	1.107
0.5	x-x	0.657	0.067	0.028	463.688	583.795	407.617	1.138	419.732	1.106
0.5	x-x	0.635	0.071	0.03	450.822	578.408	395.134	1.135	406.509	1.103
0.5	x-x	0.613	0.076	0.032	437.669	572.79	382.496	1.131	393.145	1.100
0.5	x-x	0.59	0.081	0.034	424.067	566.701	369.488	1.127	379.415	1.097
0.5	x-x	0.566	0.087	0.036	410.013	560.115	356.122	1.122	365.335	1.094
0.5	x-x	0.542	0.093	0.038	395.586	552.886	342.428	1.117	350.938	1.090
0.5	x-x	0.517	0.099	0.04	381.03	544.861	328.566	1.111	336.392	1.085
0.5	x-x	0.492	0.106	0.043	366.28	535.935	314.487	1.105	321.65	1.080
0.5	x-x	0.467	0.114	0.046	350.953	526.049	299.933	1.099	306.441	1.075
0.5	x-x	0.441	0.122	0.05	335.135	514.798	284.891	1.092	290.757	1.070
0.5	x-x	0.414	0.131	0.054	318.848	501.976	269.386	1.086	274.624	1.065
0.5	x-x	0.387	0.141	0.059	302.045	487.364	253.398	1.077	258.028	1.058
0.5	x-x	0.359	0.154	0.064	284.503	470.649	236.778	1.069	240.816	1.051
0.5	x-x	0.331	0.167	0.071	267.429	453.19	220.769	1.058	224.275	1.042
0.5	x-x	0.303	0.181	0.078	250.88	434.321	205.248	1.043	208.276	1.028
0.5	x-x	0.275	0.199	0.086	230.827	412.379	187.233	1.037	189.749	1.023
0.5	x-x	0.247	0.22	0.096	207.823	387.913	167.409	1.041	169.417	1.029

0.5	x-x	0.219	0.244	0.108	185.331	361.153	148.184	1.044	149.755	1.033
0.5	x-x	0.191	0.277	0.125	161.522	329.911	128.107	1.050	129.28	1.040
0.5	x-x	0.163	0.316	0.145	139.477	297.334	109.69	1.051	110.549	1.042
0.5	x-x	0.138	0.364	0.169	118.387	264.921	92.547	1.052	93.158	1.045
0.5	x-x	0.112	0.434	0.204	95.38	225.177	74.024	1.068	74.414	1.062
0.5	x-x	0.087	0.54	0.26	73.099	173.024	55.422	1.103	55.64	1.098
0.5	x-x	0.062	0.718	0.362	52.271	119.231	38.311	1.144	38.416	1.141
0.5	x-x	0.037	1.138	0.601	29.162	64.263	20.646	1.271	20.676	1.269
0.5	x-x	0.013	3.066	1.685	103.363	24.739	20.542	0.448	20.572	0.447
0.75	x-x	0.896	0.022	0.016	607.015	628.768	548.983	1.153	571.188	1.108
0.75	x-x	0.886	0.023	0.017	601.73	624.878	541.736	1.154	563.347	1.110
0.75	x-x	0.875	0.025	0.018	596.164	620.828	534.224	1.156	555.228	1.112
0.75	x-x	0.863	0.027	0.019	590.411	616.6	526.52	1.157	546.911	1.114
0.75	x-x	0.851	0.028	0.02	584.481	612.175	518.626	1.158	538.399	1.116
0.75	x-x	0.838	0.03	0.022	578.356	607.519	510.514	1.159	529.661	1.117
0.75	x-x	0.825	0.032	0.023	572.014	602.606	502.159	1.159	520.674	1.118
0.75	x-x	0.811	0.034	0.024	565.38	597.435	493.516	1.160	511.388	1.119
0.75	x-x	0.796	0.036	0.026	558.451	592.114	484.669	1.160	501.895	1.120
0.75	x-x	0.781	0.038	0.028	551.234	586.692	475.666	1.160	492.247	1.120
0.75	x-x	0.766	0.041	0.029	543.727	581.147	466.499	1.159	482.436	1.121
0.75	x-x	0.75	0.043	0.031	535.931	575.463	457.169	1.158	472.464	1.120
0.75	x-x	0.733	0.046	0.033	527.811	569.621	447.647	1.156	462.302	1.119
0.75	x-x	0.716	0.048	0.035	519.305	563.588	437.881	1.154	451.893	1.119
0.75	x-x	0.698	0.051	0.036	510.403	557.334	427.858	1.152	441.226	1.117
0.75	x-x	0.68	0.054	0.038	501.04	550.893	417.569	1.150	430.292	1.116
0.75	x-x	0.661	0.057	0.04	491.332	544.224	407.084	1.146	419.167	1.113
0.75	x-x	0.641	0.061	0.043	481.246	537.201	396.327	1.142	407.771	1.110
0.75	x-x	0.621	0.064	0.045	470.744	529.798	385.276	1.138	396.082	1.107
0.75	x-x	0.6	0.068	0.048	459.766	521.982	373.898	1.134	384.067	1.104
0.75	x-x	0.579	0.072	0.05	448.313	513.693	362.187	1.129	371.721	1.100
0.75	x-x	0.558	0.077	0.053	436.457	504.905	350.204	1.124	359.11	1.096
0.75	x-x	0.535	0.081	0.056	424.094	495.589	337.895	1.119	346.178	1.092
0.75	x-x	0.512	0.087	0.059	411.161	485.665	325.213	1.112	332.879	1.087
0.75	x-x	0.489	0.092	0.063	397.597	475.054	312.123	1.106	319.178	1.082
0.75	x-x	0.465	0.098	0.067	383.59	463.56	298.695	1.099	305.149	1.076
0.75	x-x	0.441	0.105	0.071	369.103	451.003	284.877	1.092	290.742	1.070
0.75	x-x	0.416	0.112	0.076	353.992	437.177	270.559	1.085	275.844	1.065
0.75	x-x	0.391	0.12	0.082	338.225	421.988	255.749	1.078	260.466	1.059
0.75	x-x	0.365	0.129	0.089	321.848	405.066	240.412	1.072	244.576	1.054
0.75	x-x	0.339	0.14	0.097	304.665	386.498	224.55	1.065	228.178	1.048
0.75	x-x	0.314	0.15	0.105	288.849	369.035	210.282	1.054	213.461	1.038
0.75	x-x	0.289	0.163	0.114	272.065	349.801	195.385	1.043	198.126	1.029
0.75	x-x	0.263	0.178	0.125	254.827	328.638	180.153	1.031	182.481	1.018
0.75	x-x	0.237	0.196	0.139	235.086	305.598	163.672	1.022	165.591	1.011
0.75	x-x	0.211	0.217	0.156	210.696	281.177	145.214	1.027	146.723	1.016
0.75	x-x	0.186	0.242	0.176	187.2	256.579	127.828	1.029	128.995	1.020
0.75	x-x	0.163	0.272	0.199	164.687	230.825	111.257	1.032	112.141	1.024
0.75	x-x	0.139	0.311	0.229	141.868	198.691	93.76	1.047	94.387	1.040
0.75	x-x	0.115	0.367	0.271	116.933	165.18	75.817	1.074	76.226	1.068
0.75	x-x	0.093	0.443	0.33	93.112	132.716	59.318	1.105	59.568	1.101
0.75	x-x	0.071	0.564	0.426	69.434	97.649	43.054	1.157	43.186	1.154
0.75	x-x	0.048	0.8	0.612	46.126	62.965	27.666	1.225	27.72	1.222
0.75	x-x	0.027	1.377	1.051	23.966	32.413	14.053	1.353	14.067	1.352
0.75	x-x	0.006	5.464	4.152	302.175	205.344	147.864	0.031	149.429	0.031
1	x-x	0.852	0.024	0.024	597.906	597.906	518.473	1.161	538.234	1.118
1	x-x	0.841	0.026	0.026	593.068	593.068	511.241	1.162	530.445	1.120
1	x-x	0.83	0.027	0.027	588.13	588.13	503.945	1.162	522.595	1.121

1	x-x	0.818	0.029	0.029	583.044	583.044	496.524	1.163	514.618	1.122
1	x-x	0.805	0.03	0.03	577.777	577.777	488.931	1.163	506.467	1.122
1	x-x	0.792	0.032	0.032	572.358	572.358	481.221	1.162	498.198	1.123
1	x-x	0.779	0.034	0.034	566.784	566.784	473.392	1.162	489.812	1.123
1	x-x	0.765	0.035	0.035	561.02	561.02	465.404	1.161	481.265	1.123
1	x-x	0.751	0.037	0.037	555.083	555.083	457.29	1.160	472.593	1.122
1	x-x	0.737	0.039	0.039	548.952	548.952	449.027	1.158	463.774	1.121
1	x-x	0.722	0.041	0.041	542.612	542.612	440.605	1.156	454.795	1.120
1	x-x	0.706	0.043	0.043	536.054	536.054	432.022	1.154	445.656	1.119
1	x-x	0.691	0.045	0.045	529.257	529.257	423.26	1.152	436.338	1.117
1	x-x	0.674	0.047	0.047	522.102	522.102	414.182	1.150	426.697	1.116
1	x-x	0.657	0.05	0.05	514.534	514.534	404.736	1.147	416.678	1.114
1	x-x	0.64	0.052	0.052	506.64	506.64	395.052	1.144	406.422	1.112
1	x-x	0.623	0.055	0.055	498.435	498.435	385.165	1.142	395.964	1.110
1	x-x	0.604	0.058	0.058	490.007	490.007	375.191	1.137	385.431	1.107
1	x-x	0.586	0.061	0.061	481.308	481.308	365.086	1.132	374.775	1.103
1	x-x	0.566	0.064	0.064	472.246	472.246	354.76	1.127	363.901	1.099
1	x-x	0.547	0.067	0.067	462.72	462.72	344.115	1.122	352.71	1.094
1	x-x	0.527	0.071	0.071	452.681	452.681	333.127	1.116	341.176	1.090
1	x-x	0.506	0.075	0.075	442.176	442.176	321.873	1.110	329.38	1.085
1	x-x	0.485	0.079	0.079	431.113	431.113	310.281	1.104	317.251	1.080
1	x-x	0.464	0.083	0.083	419.346	419.346	298.234	1.098	304.669	1.075
1	x-x	0.442	0.088	0.088	406.754	406.754	285.657	1.092	291.554	1.070
1	x-x	0.42	0.094	0.094	393.402	393.402	272.658	1.086	278.026	1.066
1	x-x	0.397	0.1	0.1	379.36	379.36	259.351	1.081	264.204	1.061
1	x-x	0.374	0.107	0.107	364.623	364.623	245.769	1.075	250.122	1.056
1	x-x	0.351	0.115	0.115	348.906	348.906	231.699	1.069	235.564	1.052
1	x-x	0.328	0.123	0.123	333.071	333.071	217.938	1.062	221.355	1.046
1	x-x	0.306	0.132	0.132	317.751	317.751	205.003	1.053	208.023	1.037
1	x-x	0.283	0.142	0.142	301.632	301.632	191.779	1.042	194.419	1.028
1	x-x	0.26	0.154	0.154	284.428	284.428	178.082	1.032	180.356	1.019
1	x-x	0.237	0.168	0.168	265.934	265.934	163.817	1.023	165.739	1.011
1	x-x	0.214	0.185	0.185	246.898	246.898	149.605	1.010	151.207	1.000
1	x-x	0.191	0.206	0.206	223.029	223.029	132.43	1.019	133.683	1.009
1	x-x	0.171	0.227	0.227	201.028	201.028	117.198	1.029	118.178	1.020
1	x-x	0.151	0.253	0.253	178.513	178.513	102.172	1.041	102.917	1.033
1	x-x	0.13	0.287	0.287	155.099	155.099	87.118	1.056	87.659	1.049
1	x-x	0.11	0.335	0.335	130.795	130.795	72.073	1.075	72.442	1.070
1	x-x	0.089	0.404	0.404	103.959	103.959	56.11	1.120	56.334	1.115
1	x-x	0.069	0.514	0.514	77.663	77.663	41.092	1.177	41.211	1.174
1	x-x	0.051	0.67	0.67	56.552	56.552	29.456	1.223	29.517	1.221
1	x-x	0.033	0.999	0.999	34.695	34.695	17.785	1.317	17.807	1.315
1	x-x	0.015	2.126	2.126	38.408	38.408	19.741	0.539	19.768	0.538
0.25	y-y	0.894	0.005	0.022	665.637	604.929	574.997	1.098	599.403	1.054
0.25	y-y	0.882	0.006	0.025	663.825	596.528	566.085	1.100	589.725	1.056
0.25	y-y	0.869	0.006	0.027	661.787	587.542	556.546	1.102	579.379	1.059
0.25	y-y	0.854	0.007	0.03	659.521	577.977	546.401	1.104	568.393	1.061
0.25	y-y	0.839	0.008	0.033	657.122	567.799	535.702	1.105	556.825	1.063
0.25	y-y	0.822	0.008	0.037	654.752	556.97	524.533	1.107	544.768	1.066
0.25	y-y	0.805	0.009	0.04	652.508	545.484	512.948	1.107	532.283	1.067
0.25	y-y	0.786	0.01	0.044	650.364	533.393	500.971	1.108	519.397	1.069
0.25	y-y	0.767	0.01	0.048	648.342	520.637	488.555	1.108	506.063	1.070
0.25	y-y	0.747	0.011	0.052	646.358	507.153	475.589	1.109	492.164	1.072
0.25	y-y	0.726	0.011	0.057	644.471	493.256	462.377	1.109	478.029	1.073
0.25	y-y	0.705	0.012	0.062	642.588	479.071	448.972	1.109	463.715	1.074
0.25	y-y	0.683	0.012	0.067	640.604	464.664	435.379	1.108	449.229	1.074
0.25	y-y	0.661	0.013	0.072	638.333	450.113	421.589	1.108	434.563	1.075

0.25	y-y	0.639	0.014	0.077	635.661	435.46	407.611	1.107	419.726	1.075
0.25	y-y	0.616	0.015	0.083	632.704	420.754	393.556	1.105	404.838	1.074
0.25	y-y	0.592	0.015	0.089	629.524	405.601	379.116	1.103	389.575	1.073
0.25	y-y	0.568	0.016	0.095	626.039	390.145	364.401	1.101	374.054	1.072
0.25	y-y	0.544	0.018	0.102	622.126	374.572	349.548	1.098	358.42	1.071
0.25	y-y	0.518	0.019	0.11	617.521	358.591	334.247	1.095	342.35	1.069
0.25	y-y	0.492	0.02	0.118	612.25	342.162	318.507	1.092	325.857	1.067
0.25	y-y	0.466	0.022	0.127	605.984	325.379	302.364	1.088	308.979	1.064
0.25	y-y	0.438	0.024	0.138	598.453	308.161	285.734	1.083	291.634	1.061
0.25	y-y	0.41	0.027	0.149	589.678	290.387	268.583	1.077	273.79	1.057
0.25	y-y	0.38	0.03	0.163	579.436	271.699	250.621	1.072	255.149	1.053
0.25	y-y	0.351	0.033	0.179	568.371	253.443	233.165	1.062	237.079	1.045
0.25	y-y	0.322	0.036	0.196	558.38	234.264	215.364	1.054	218.699	1.038
0.25	y-y	0.293	0.039	0.216	547.959	212.337	195.382	1.059	198.123	1.044
0.25	y-y	0.265	0.043	0.238	535.735	191.018	175.888	1.062	178.106	1.049
0.25	y-y	0.236	0.048	0.263	519.541	171.222	157.508	1.060	159.285	1.048
0.25	y-y	0.209	0.056	0.291	495.748	152.701	139.867	1.055	141.266	1.045
0.25	y-y	0.182	0.067	0.327	463.925	134.434	122.282	1.050	123.35	1.041
0.25	y-y	0.156	0.078	0.368	433.821	116.712	105.742	1.044	106.54	1.037
0.25	y-y	0.13	0.093	0.427	394.353	97.364	87.794	1.047	88.344	1.040
0.25	y-y	0.103	0.118	0.519	341.729	76.806	68.824	1.055	69.161	1.049
0.25	y-y	0.074	0.164	0.686	271.161	55.054	48.934	1.071	49.104	1.067
0.25	y-y	0.045	0.271	1.061	165.695	31.975	27.86	1.150	27.915	1.148
0.25	y-y	0.017	0.755	2.681	49.362	72.141	30.577	0.387	30.644	0.386
0.5	y-y	0.892	0.011	0.024	644.722	597.534	552.995	1.139	575.532	1.094
0.5	y-y	0.88	0.012	0.026	641.357	590.524	544.562	1.141	566.404	1.097
0.5	y-y	0.867	0.013	0.029	637.783	583.234	535.836	1.143	556.97	1.099
0.5	y-y	0.854	0.014	0.031	634.017	575.613	526.8	1.144	547.213	1.101
0.5	y-y	0.839	0.015	0.033	630.096	567.641	517.473	1.145	537.156	1.103
0.5	y-y	0.825	0.016	0.036	626.054	559.277	507.856	1.146	526.801	1.105
0.5	y-y	0.809	0.018	0.039	621.928	550.493	497.961	1.147	516.162	1.107
0.5	y-y	0.793	0.019	0.041	617.622	541.22	487.68	1.148	505.124	1.108
0.5	y-y	0.776	0.02	0.044	613.18	531.509	477.097	1.148	493.78	1.109
0.5	y-y	0.758	0.021	0.048	608.676	521.292	466.211	1.148	482.128	1.110
0.5	y-y	0.739	0.023	0.051	603.961	510.66	455.017	1.147	470.166	1.110
0.5	y-y	0.72	0.024	0.055	599.095	499.58	443.538	1.146	457.92	1.110
0.5	y-y	0.699	0.025	0.059	594.094	488.024	431.771	1.144	445.388	1.109
0.5	y-y	0.679	0.027	0.063	589.006	476.078	419.815	1.141	432.677	1.107
0.5	y-y	0.657	0.028	0.067	583.795	463.688	407.617	1.138	419.732	1.106
0.5	y-y	0.635	0.03	0.071	578.408	450.822	395.134	1.135	406.509	1.103
0.5	y-y	0.613	0.032	0.076	572.79	437.669	382.496	1.131	393.145	1.100
0.5	y-y	0.59	0.034	0.081	566.701	424.067	369.488	1.127	379.415	1.097
0.5	y-y	0.566	0.036	0.087	560.115	410.013	356.122	1.122	365.335	1.094
0.5	y-y	0.542	0.038	0.093	552.886	395.586	342.428	1.117	350.938	1.090
0.5	y-y	0.517	0.04	0.099	544.861	381.03	328.566	1.111	336.392	1.085
0.5	y-y	0.492	0.043	0.106	535.935	366.28	314.487	1.105	321.65	1.080
0.5	y-y	0.467	0.046	0.114	526.049	350.953	299.933	1.099	306.441	1.075
0.5	y-y	0.441	0.05	0.122	514.798	335.135	284.891	1.092	290.757	1.070
0.5	y-y	0.414	0.054	0.131	501.976	318.848	269.386	1.086	274.624	1.065
0.5	y-y	0.387	0.059	0.141	487.364	302.045	253.398	1.077	258.028	1.058
0.5	y-y	0.359	0.064	0.154	470.649	284.503	236.778	1.069	240.816	1.051
0.5	y-y	0.331	0.071	0.167	453.19	267.429	220.769	1.058	224.275	1.042
0.5	y-y	0.303	0.078	0.181	434.321	250.88	205.248	1.043	208.276	1.028
0.5	y-y	0.275	0.086	0.199	412.379	230.827	187.233	1.037	189.749	1.023
0.5	y-y	0.247	0.096	0.22	387.913	207.823	167.409	1.041	169.417	1.029
0.5	y-y	0.219	0.108	0.244	361.153	185.331	148.184	1.044	149.755	1.033
0.5	y-y	0.191	0.125	0.277	329.911	161.522	128.107	1.050	129.28	1.040

0.5	y-y	0.163	0.145	0.316	297.334	139.477	109.69	1.051	110.549	1.042
0.5	y-y	0.138	0.169	0.364	264.921	118.387	92.547	1.052	93.158	1.045
0.5	y-y	0.112	0.204	0.434	225.177	95.38	74.024	1.068	74.414	1.062
0.5	y-y	0.087	0.26	0.54	173.024	73.099	55.422	1.103	55.64	1.098
0.5	y-y	0.062	0.362	0.718	119.231	52.271	38.311	1.144	38.416	1.141
0.5	y-y	0.037	0.601	1.138	64.263	29.162	20.646	1.271	20.676	1.269
0.5	y-y	0.013	1.685	3.066	24.739	103.363	20.542	0.448	20.572	0.447
0.75	y-y	0.896	0.016	0.022	628.768	607.015	548.983	1.153	571.188	1.108
0.75	y-y	0.886	0.017	0.023	624.878	601.73	541.736	1.154	563.347	1.110
0.75	y-y	0.875	0.018	0.025	620.828	596.164	534.224	1.156	555.228	1.112
0.75	y-y	0.863	0.019	0.027	616.6	590.411	526.52	1.157	546.911	1.114
0.75	y-y	0.851	0.02	0.028	612.175	584.481	518.626	1.158	538.399	1.116
0.75	y-y	0.838	0.022	0.03	607.519	578.356	510.514	1.159	529.661	1.117
0.75	y-y	0.825	0.023	0.032	602.606	572.014	502.159	1.159	520.674	1.118
0.75	y-y	0.811	0.024	0.034	597.435	565.38	493.516	1.160	511.388	1.119
0.75	y-y	0.796	0.026	0.036	592.114	558.451	484.669	1.160	501.895	1.120
0.75	y-y	0.781	0.028	0.038	586.692	551.234	475.666	1.160	492.247	1.120
0.75	y-y	0.766	0.029	0.041	581.147	543.727	466.499	1.159	482.436	1.121
0.75	y-y	0.75	0.031	0.043	575.463	535.931	457.169	1.158	472.464	1.120
0.75	y-y	0.733	0.033	0.046	569.621	527.811	447.647	1.156	462.302	1.119
0.75	y-y	0.716	0.035	0.048	563.588	519.305	437.881	1.154	451.893	1.119
0.75	y-y	0.698	0.036	0.051	557.334	510.403	427.858	1.152	441.226	1.117
0.75	y-y	0.68	0.038	0.054	550.893	501.04	417.569	1.150	430.292	1.116
0.75	y-y	0.661	0.04	0.057	544.224	491.332	407.084	1.146	419.167	1.113
0.75	y-y	0.641	0.043	0.061	537.201	481.246	396.327	1.142	407.771	1.110
0.75	y-y	0.621	0.045	0.064	529.798	470.744	385.276	1.138	396.082	1.107
0.75	y-y	0.6	0.048	0.068	521.982	459.766	373.898	1.134	384.067	1.104
0.75	y-y	0.579	0.05	0.072	513.693	448.313	362.187	1.129	371.721	1.100
0.75	y-y	0.558	0.053	0.077	504.905	436.457	350.204	1.124	359.11	1.096
0.75	y-y	0.535	0.056	0.081	495.589	424.094	337.895	1.119	346.178	1.092
0.75	y-y	0.512	0.059	0.087	485.665	411.161	325.213	1.112	332.879	1.087
0.75	y-y	0.489	0.063	0.092	475.054	397.597	312.123	1.106	319.178	1.082
0.75	y-y	0.465	0.067	0.098	463.56	383.59	298.695	1.099	305.149	1.076
0.75	y-y	0.441	0.071	0.105	451.003	369.103	284.877	1.092	290.742	1.070
0.75	y-y	0.416	0.076	0.112	437.177	353.992	270.559	1.085	275.844	1.065
0.75	y-y	0.391	0.082	0.12	421.988	338.225	255.749	1.078	260.466	1.059
0.75	y-y	0.365	0.089	0.129	405.066	321.848	240.412	1.072	244.576	1.054
0.75	y-y	0.339	0.097	0.14	386.498	304.665	224.55	1.065	228.178	1.048
0.75	y-y	0.314	0.105	0.15	369.035	288.849	210.282	1.054	213.461	1.038
0.75	y-y	0.289	0.114	0.163	349.801	272.065	195.385	1.043	198.126	1.029
0.75	y-y	0.263	0.125	0.178	328.638	254.827	180.153	1.031	182.481	1.018
0.75	y-y	0.237	0.139	0.196	305.598	235.086	163.672	1.022	165.591	1.011
0.75	y-y	0.211	0.156	0.217	281.177	210.696	145.214	1.027	146.723	1.016
0.75	y-y	0.186	0.176	0.242	256.579	187.2	127.828	1.029	128.995	1.020
0.75	y-y	0.163	0.199	0.272	230.825	164.687	111.257	1.032	112.141	1.024
0.75	y-y	0.139	0.229	0.311	198.691	141.868	93.76	1.047	94.387	1.040
0.75	y-y	0.115	0.271	0.367	165.18	116.933	75.817	1.074	76.226	1.068
0.75	y-y	0.093	0.33	0.443	132.716	93.112	59.318	1.105	59.568	1.101
0.75	y-y	0.071	0.426	0.564	97.649	69.434	43.054	1.157	43.186	1.154
0.75	y-y	0.048	0.612	0.8	62.965	46.126	27.666	1.225	27.72	1.222
0.75	y-y	0.027	1.051	1.377	32.413	23.966	14.053	1.353	14.067	1.352
0.75	y-y	0.006	4.152	5.464	205.344	302.175	147.864	0.031	149.429	0.031
1	y-y	0.852	0.024	0.024	597.906	597.906	518.473	1.161	538.234	1.118
1	y-y	0.841	0.026	0.026	593.068	593.068	511.241	1.162	530.445	1.120
1	y-y	0.83	0.027	0.027	588.13	588.13	503.945	1.162	522.595	1.121
1	y-y	0.818	0.029	0.029	583.044	583.044	496.524	1.163	514.618	1.122
1	y-y	0.805	0.03	0.03	577.777	577.777	488.931	1.163	506.467	1.122

1	y-y	0.792	0.032	0.032	572.358	572.358	481.221	1.162	498.198	1.123
1	y-y	0.779	0.034	0.034	566.784	566.784	473.392	1.162	489.812	1.123
1	y-y	0.765	0.035	0.035	561.02	561.02	465.404	1.161	481.265	1.123
1	y-y	0.751	0.037	0.037	555.083	555.083	457.29	1.160	472.593	1.122
1	y-y	0.737	0.039	0.039	548.952	548.952	449.027	1.158	463.774	1.121
1	y-y	0.722	0.041	0.041	542.612	542.612	440.605	1.156	454.795	1.120
1	y-y	0.706	0.043	0.043	536.054	536.054	432.022	1.154	445.656	1.119
1	y-y	0.691	0.045	0.045	529.257	529.257	423.26	1.152	436.338	1.117
1	y-y	0.674	0.047	0.047	522.102	522.102	414.182	1.150	426.697	1.116
1	y-y	0.657	0.05	0.05	514.534	514.534	404.736	1.147	416.678	1.114
1	y-y	0.64	0.052	0.052	506.64	506.64	395.052	1.144	406.422	1.112
1	y-y	0.623	0.055	0.055	498.435	498.435	385.165	1.142	395.964	1.110
1	y-y	0.604	0.058	0.058	490.007	490.007	375.191	1.137	385.431	1.107
1	y-y	0.586	0.061	0.061	481.308	481.308	365.086	1.132	374.775	1.103
1	y-y	0.566	0.064	0.064	472.246	472.246	354.76	1.127	363.901	1.099
1	y-y	0.547	0.067	0.067	462.72	462.72	344.115	1.122	352.71	1.094
1	y-y	0.527	0.071	0.071	452.681	452.681	333.127	1.116	341.176	1.090
1	y-y	0.506	0.075	0.075	442.176	442.176	321.873	1.110	329.38	1.085
1	y-y	0.485	0.079	0.079	431.113	431.113	310.281	1.104	317.251	1.080
1	y-y	0.464	0.083	0.083	419.346	419.346	298.234	1.098	304.669	1.075
1	y-y	0.442	0.088	0.088	406.754	406.754	285.657	1.092	291.554	1.070
1	y-y	0.42	0.094	0.094	393.402	393.402	272.658	1.086	278.026	1.066
1	y-y	0.397	0.1	0.1	379.36	379.36	259.351	1.081	264.204	1.061
1	y-y	0.374	0.107	0.107	364.623	364.623	245.769	1.075	250.122	1.056
1	y-y	0.351	0.115	0.115	348.906	348.906	231.699	1.069	235.564	1.052
1	y-y	0.328	0.123	0.123	333.071	333.071	217.938	1.062	221.355	1.046
1	y-y	0.306	0.132	0.132	317.751	317.751	205.003	1.053	208.023	1.037
1	y-y	0.283	0.142	0.142	301.632	301.632	191.779	1.042	194.419	1.028
1	y-y	0.26	0.154	0.154	284.428	284.428	178.082	1.032	180.356	1.019
1	y-y	0.237	0.168	0.168	265.934	265.934	163.817	1.023	165.739	1.011
1	y-y	0.214	0.185	0.185	246.898	246.898	149.605	1.010	151.207	1.000
1	y-y	0.191	0.206	0.206	223.029	223.029	132.43	1.019	133.683	1.009
1	y-y	0.171	0.227	0.227	201.028	201.028	117.198	1.029	118.178	1.020
1	y-y	0.151	0.253	0.253	178.513	178.513	102.172	1.041	102.917	1.033
1	y-y	0.13	0.287	0.287	155.099	155.099	87.118	1.056	87.659	1.049
1	y-y	0.11	0.335	0.335	130.795	130.795	72.073	1.075	72.442	1.070
1	y-y	0.089	0.404	0.404	103.959	103.959	56.11	1.120	56.334	1.115
1	y-y	0.069	0.514	0.514	77.663	77.663	41.092	1.177	41.211	1.174
1	y-y	0.051	0.67	0.67	56.552	56.552	29.456	1.223	29.517	1.221
1	y-y	0.033	0.999	0.999	34.695	34.695	17.785	1.317	17.807	1.315
1	y-y	0.015	2.126	2.126	38.408	38.408	19.741	0.539	19.768	0.538

Tabla B.3 Valores de r_1 de la sección 4 (40 cm x 40 cm con ρ = 0.06 y f_c' = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn /Pxym
0.25	x-x	0.893	0.02	0.004	770.216	848.188	737.277	1.080	769.057	1.036
0.25	x-x	0.883	0.021	0.005	762.436	845.364	728.05	1.083	759.023	1.038
0.25	x-x	0.873	0.023	0.005	754.158	842.437	718.371	1.085	748.509	1.041
0.25	x-x	0.863	0.025	0.006	745.348	839.395	708.21	1.087	737.484	1.044
0.25	x-x	0.851	0.027	0.006	735.91	836.232	697.484	1.089	725.86	1.046
0.25	x-x	0.839	0.03	0.007	725.738	832.945	686.112	1.091	713.552	1.049
0.25	x-x	0.826	0.032	0.007	714.839	829.524	674.104	1.092	700.574	1.051
0.25	x-x	0.811	0.035	0.008	703.262	826.009	661.547	1.094	687.021	1.053
0.25	x-x	0.796	0.038	0.009	691.023	822.511	648.532	1.095	672.995	1.055
0.25	x-x	0.78	0.042	0.009	678.052	819.1	635.047	1.096	658.484	1.057

0.25	x-x	0.763	0.045	0.01	664.314	815.808	621.074	1.096	643.474	1.058
0.25	x-x	0.746	0.049	0.011	649.85	812.639	606.649	1.096	628.003	1.059
0.25	x-x	0.727	0.053	0.011	634.634	809.563	591.727	1.096	612.025	1.060
0.25	x-x	0.708	0.058	0.012	618.514	806.397	576.075	1.096	595.296	1.061
0.25	x-x	0.688	0.062	0.013	601.691	803.155	559.88	1.096	578.019	1.062
0.25	x-x	0.667	0.067	0.013	584.201	799.731	543.129	1.096	560.181	1.063
0.25	x-x	0.646	0.073	0.014	566.002	796.042	525.758	1.097	541.722	1.064
0.25	x-x	0.624	0.078	0.015	547.489	791.566	507.908	1.097	522.79	1.065
0.25	x-x	0.602	0.084	0.016	528.639	786.91	489.844	1.096	503.672	1.066
0.25	x-x	0.578	0.091	0.017	509.228	781.776	471.272	1.094	484.058	1.065
0.25	x-x	0.553	0.098	0.018	489.012	776.008	451.955	1.092	463.701	1.064
0.25	x-x	0.528	0.106	0.02	468.015	769.531	431.929	1.090	442.645	1.064
0.25	x-x	0.502	0.115	0.021	446.575	761.98	411.411	1.088	421.122	1.063
0.25	x-x	0.474	0.125	0.023	424.48	753.161	390.231	1.084	398.957	1.061
0.25	x-x	0.446	0.136	0.026	401.458	742.987	368.207	1.081	375.967	1.059
0.25	x-x	0.417	0.15	0.029	377.48	731.077	345.302	1.077	352.117	1.056
0.25	x-x	0.387	0.165	0.032	352.431	716.973	321.418	1.073	327.315	1.053
0.25	x-x	0.355	0.184	0.036	325.891	700.603	296.308	1.068	301.312	1.050
0.25	x-x	0.321	0.208	0.041	297.54	680.12	269.524	1.062	273.658	1.046
0.25	x-x	0.285	0.239	0.048	267.769	654.365	241.442	1.055	244.754	1.041
0.25	x-x	0.251	0.276	0.055	238.263	628.282	214.238	1.045	216.842	1.032
0.25	x-x	0.217	0.321	0.063	205.856	599.796	185.047	1.048	186.986	1.037
0.25	x-x	0.185	0.379	0.073	174.125	563.879	156.361	1.054	157.744	1.045
0.25	x-x	0.153	0.456	0.089	144.738	515.529	129.403	1.054	130.348	1.046
0.25	x-x	0.125	0.55	0.109	112.896	462.136	101.004	1.102	101.579	1.096
0.25	x-x	0.097	0.69	0.14	160.356	394.628	130.733	0.663	131.698	0.658
0.5	x-x	0.887	0.022	0.01	759.946	815.967	704.004	1.124	732.925	1.079
0.5	x-x	0.877	0.023	0.011	753.173	812.623	695.738	1.125	723.969	1.081
0.5	x-x	0.867	0.025	0.011	746.003	809.088	687.068	1.126	714.587	1.083
0.5	x-x	0.857	0.027	0.012	738.387	805.294	677.916	1.127	704.692	1.084
0.5	x-x	0.845	0.029	0.013	730.273	801.183	668.213	1.128	694.213	1.086
0.5	x-x	0.833	0.031	0.014	721.681	796.754	657.994	1.130	683.19	1.088
0.5	x-x	0.821	0.033	0.015	712.704	792.084	647.408	1.131	671.785	1.090
0.5	x-x	0.807	0.035	0.016	703.345	787.233	636.508	1.132	660.056	1.091
0.5	x-x	0.793	0.038	0.017	693.631	782.172	625.312	1.132	648.024	1.092
0.5	x-x	0.779	0.04	0.018	683.58	776.799	613.782	1.132	635.65	1.093
0.5	x-x	0.763	0.043	0.019	673.036	771.209	601.868	1.131	622.88	1.093
0.5	x-x	0.747	0.046	0.021	661.829	765.27	589.374	1.131	609.508	1.094
0.5	x-x	0.73	0.049	0.022	650.076	759.132	576.503	1.130	595.753	1.094
0.5	x-x	0.713	0.052	0.024	637.742	752.82	563.255	1.129	581.617	1.093
0.5	x-x	0.695	0.056	0.025	624.632	746.244	549.448	1.128	566.906	1.093
0.5	x-x	0.676	0.06	0.027	610.831	739.395	535.162	1.126	551.71	1.092
0.5	x-x	0.656	0.064	0.028	596.427	732.269	520.483	1.124	536.123	1.091
0.5	x-x	0.636	0.068	0.03	581.227	724.747	505.226	1.122	519.95	1.091
0.5	x-x	0.615	0.073	0.032	565.053	716.7	489.224	1.121	503.017	1.090
0.5	x-x	0.593	0.078	0.034	548.054	708.21	472.663	1.119	485.526	1.089
0.5	x-x	0.57	0.084	0.036	530.551	699.192	455.772	1.116	467.72	1.088
0.5	x-x	0.547	0.09	0.039	512.654	689.453	438.581	1.112	449.634	1.085
0.5	x-x	0.523	0.096	0.041	494.05	679.089	420.934	1.107	431.104	1.081
0.5	x-x	0.497	0.104	0.044	474.496	667.584	402.501	1.103	411.791	1.078
0.5	x-x	0.472	0.112	0.048	454.394	654.657	383.543	1.097	391.969	1.074
0.5	x-x	0.446	0.121	0.052	433.704	640.055	364.019	1.092	371.601	1.070
0.5	x-x	0.418	0.131	0.056	411.85	623.355	343.488	1.086	350.23	1.065
0.5	x-x	0.39	0.143	0.062	388.834	603.867	321.874	1.081	327.788	1.061
0.5	x-x	0.361	0.157	0.068	364.693	581.162	299.245	1.076	304.349	1.058
0.5	x-x	0.331	0.174	0.076	339.279	554.335	275.451	1.072	279.77	1.055
0.5	x-x	0.3	0.195	0.086	312.357	523.213	250.516	1.068	254.084	1.053

0.5	x-x	0.269	0.22	0.098	284.945	489.512	225.666	1.062	228.557	1.049
0.5	x-x	0.238	0.251	0.112	257.72	453.515	201.442	1.053	203.742	1.041
0.5	x-x	0.206	0.291	0.131	226.476	412.905	174.937	1.048	176.669	1.038
0.5	x-x	0.174	0.344	0.155	191.694	368.518	146.859	1.056	148.078	1.047
0.5	x-x	0.141	0.423	0.191	155.147	317.128	117.955	1.067	118.74	1.060
0.5	x-x	0.112	0.528	0.238	123.118	268.098	93.185	1.070	93.675	1.064
0.5	x-x	0.082	0.713	0.322	170.75	205.058	104.034	0.699	104.644	0.695
0.5	x-x	0.051	1.106	0.504	86.371	131.818	55.422	0.829	55.595	0.826
0.5	x-x	0.022	2.553	1.182	108.48	125.169	62.164	0.312	62.381	0.311
0.75	x-x	0.848	0.025	0.018	744.893	776.572	662.599	1.142	688.155	1.099
0.75	x-x	0.837	0.027	0.019	738.375	771.546	653.831	1.142	678.703	1.101
0.75	x-x	0.826	0.028	0.021	731.541	766.273	644.738	1.143	668.91	1.102
0.75	x-x	0.815	0.03	0.022	724.393	760.776	635.35	1.144	658.811	1.103
0.75	x-x	0.803	0.032	0.023	716.978	755.08	625.732	1.144	648.475	1.104
0.75	x-x	0.79	0.034	0.024	709.317	749.188	615.912	1.144	637.934	1.105
0.75	x-x	0.777	0.036	0.026	701.409	743.089	605.892	1.144	627.192	1.105
0.75	x-x	0.763	0.038	0.027	693.145	736.678	595.533	1.144	616.098	1.105
0.75	x-x	0.749	0.04	0.029	684.518	729.974	584.858	1.143	604.68	1.105
0.75	x-x	0.735	0.042	0.03	675.53	723.033	573.92	1.142	592.995	1.105
0.75	x-x	0.72	0.045	0.032	666.142	715.88	562.719	1.141	581.045	1.105
0.75	x-x	0.704	0.047	0.034	656.482	708.476	551.337	1.138	568.917	1.103
0.75	x-x	0.687	0.05	0.036	646.297	700.782	539.585	1.136	556.413	1.102
0.75	x-x	0.67	0.053	0.038	635.551	692.775	527.445	1.133	543.513	1.100
0.75	x-x	0.652	0.056	0.04	624.137	684.273	514.763	1.130	530.056	1.098
0.75	x-x	0.634	0.059	0.042	612.164	675.357	501.688	1.127	516.203	1.095
0.75	x-x	0.615	0.063	0.045	599.607	665.959	488.192	1.124	501.926	1.093
0.75	x-x	0.596	0.067	0.047	586.39	656.047	474.236	1.120	487.186	1.090
0.75	x-x	0.576	0.071	0.05	572.345	645.556	459.713	1.117	471.871	1.088
0.75	x-x	0.555	0.075	0.053	557.344	634.31	444.491	1.114	455.848	1.086
0.75	x-x	0.533	0.08	0.057	541.663	622.228	428.758	1.110	439.315	1.083
0.75	x-x	0.512	0.086	0.06	525.281	609.258	412.523	1.106	422.287	1.081
0.75	x-x	0.489	0.091	0.064	508.203	595.237	395.766	1.103	404.745	1.078
0.75	x-x	0.466	0.098	0.069	490.127	579.728	378.178	1.099	386.368	1.076
0.75	x-x	0.442	0.105	0.074	470.984	562.783	359.826	1.095	367.232	1.073
0.75	x-x	0.417	0.113	0.079	450.758	544.305	340.749	1.091	347.383	1.071
0.75	x-x	0.391	0.123	0.086	429.575	524.129	321.044	1.087	326.927	1.068
0.75	x-x	0.365	0.133	0.094	407.275	502.069	300.65	1.084	305.803	1.065
0.75	x-x	0.339	0.146	0.103	383.782	477.552	279.433	1.081	283.879	1.064
0.75	x-x	0.311	0.161	0.113	359.025	450.542	257.474	1.077	261.244	1.061
0.75	x-x	0.282	0.179	0.127	332.507	420.724	234.558	1.073	237.683	1.059
0.75	x-x	0.254	0.2	0.142	306.482	390.57	212.666	1.066	215.231	1.053
0.75	x-x	0.226	0.226	0.161	279.324	358.391	190.5	1.057	192.556	1.046
0.75	x-x	0.197	0.26	0.187	250.297	322.898	167.47	1.047	169.057	1.037
0.75	x-x	0.168	0.304	0.22	217.027	285.542	143.085	1.047	144.242	1.038
0.75	x-x	0.14	0.362	0.262	182.352	248.698	119.277	1.050	120.08	1.043
0.75	x-x	0.113	0.444	0.322	147.962	204.817	95.058	1.063	95.567	1.057
0.75	x-x	0.085	0.586	0.425	99.498	154.394	64.908	1.169	65.145	1.165
1	x-x	0.805	0.028	0.028	735.142	735.142	625.161	1.149	647.862	1.108
1	x-x	0.794	0.029	0.029	729.174	729.174	616.579	1.149	638.649	1.109
1	x-x	0.782	0.03	0.03	723.029	723.029	607.842	1.148	629.281	1.109
1	x-x	0.77	0.032	0.032	716.652	716.652	598.882	1.148	619.682	1.109
1	x-x	0.758	0.034	0.034	710.027	710.027	589.686	1.147	609.842	1.109
1	x-x	0.745	0.035	0.035	703.217	703.217	580.352	1.146	599.864	1.108
1	x-x	0.732	0.037	0.037	696.218	696.218	570.878	1.144	589.748	1.107
1	x-x	0.718	0.039	0.039	688.982	688.982	561.213	1.142	579.439	1.106
1	x-x	0.705	0.041	0.041	681.514	681.514	551.37	1.140	568.953	1.105
1	x-x	0.69	0.043	0.043	673.77	673.77	541.303	1.137	558.24	1.103

1	x-x	0.675	0.045	0.045	665.517	665.517	530.727	1.135	546.999	1.101
1	x-x	0.66	0.047	0.047	656.855	656.855	519.796	1.132	535.394	1.099
1	x-x	0.644	0.05	0.05	647.833	647.833	508.585	1.129	523.508	1.097
1	x-x	0.627	0.052	0.052	638.382	638.382	497.032	1.126	511.275	1.095
1	x-x	0.611	0.055	0.055	628.428	628.428	485.068	1.123	498.624	1.092
1	x-x	0.593	0.058	0.058	617.969	617.969	472.717	1.120	485.582	1.090
1	x-x	0.576	0.061	0.061	606.998	606.998	459.997	1.117	472.171	1.088
1	x-x	0.558	0.064	0.064	595.445	595.445	446.857	1.113	458.336	1.085
1	x-x	0.539	0.068	0.068	583.262	583.262	433.273	1.110	444.057	1.083
1	x-x	0.52	0.072	0.072	570.033	570.033	418.832	1.107	428.9	1.081
1	x-x	0.5	0.076	0.076	555.99	555.99	403.843	1.105	413.195	1.080
1	x-x	0.48	0.08	0.08	541.186	541.186	388.408	1.102	397.052	1.078
1	x-x	0.459	0.085	0.085	525.581	525.581	372.532	1.099	380.476	1.076
1	x-x	0.438	0.091	0.091	509.135	509.135	356.22	1.097	363.477	1.075
1	x-x	0.416	0.097	0.097	491.64	491.64	339.323	1.094	345.902	1.073
1	x-x	0.394	0.104	0.104	472.983	472.983	321.801	1.091	327.712	1.071
1	x-x	0.37	0.112	0.112	453.201	453.201	303.76	1.087	309.021	1.069
1	x-x	0.346	0.122	0.122	431.877	431.877	284.903	1.083	289.526	1.066
1	x-x	0.321	0.132	0.132	409.175	409.175	265.47	1.080	269.48	1.064
1	x-x	0.296	0.145	0.145	384.863	384.863	245.358	1.077	248.779	1.062
1	x-x	0.271	0.161	0.161	359.2	359.2	224.873	1.073	227.744	1.060
1	x-x	0.246	0.178	0.178	334.686	334.686	205.982	1.065	208.388	1.053
1	x-x	0.221	0.199	0.199	308.367	308.367	186.4	1.057	188.368	1.046
1	x-x	0.195	0.226	0.226	279.848	279.848	165.954	1.049	167.512	1.040
1	x-x	0.169	0.262	0.262	249.144	249.144	144.791	1.040	145.975	1.031
1	x-x	0.145	0.303	0.303	217.7	217.7	123.978	1.042	124.845	1.035
1	x-x	0.121	0.36	0.36	183.347	183.347	102.173	1.059	102.762	1.053
1	x-x	0.097	0.445	0.445	147.745	147.745	80.542	1.076	80.907	1.072
1	x-x	0.073	0.589	0.589	98.856	98.856	52.327	1.240	52.481	1.237
0.25	y-y	0.893	0.004	0.02	848.188	770.216	737.277	1.080	769.057	1.036
0.25	y-y	0.883	0.005	0.021	845.364	762.436	728.05	1.083	759.023	1.038
0.25	y-y	0.873	0.005	0.023	842.437	754.158	718.371	1.085	748.509	1.041
0.25	y-y	0.863	0.006	0.025	839.395	745.348	708.21	1.087	737.484	1.044
0.25	y-y	0.851	0.006	0.027	836.232	735.91	697.484	1.089	725.86	1.046
0.25	y-y	0.839	0.007	0.03	832.945	725.738	686.112	1.091	713.552	1.049
0.25	y-y	0.826	0.007	0.032	829.524	714.839	674.104	1.092	700.574	1.051
0.25	y-y	0.811	0.008	0.035	826.009	703.262	661.547	1.094	687.021	1.053
0.25	y-y	0.796	0.009	0.038	822.511	691.023	648.532	1.095	672.995	1.055
0.25	y-y	0.78	0.009	0.042	819.1	678.052	635.047	1.096	658.484	1.057
0.25	y-y	0.763	0.01	0.045	815.808	664.314	621.074	1.096	643.474	1.058
0.25	y-y	0.746	0.011	0.049	812.639	649.85	606.649	1.096	628.003	1.059
0.25	y-y	0.727	0.011	0.053	809.563	634.634	591.727	1.096	612.025	1.060
0.25	y-y	0.708	0.012	0.058	806.397	618.514	576.075	1.096	595.296	1.061
0.25	y-y	0.688	0.013	0.062	803.155	601.691	559.88	1.096	578.019	1.062
0.25	y-y	0.667	0.013	0.067	799.731	584.201	543.129	1.096	560.181	1.063
0.25	y-y	0.646	0.014	0.073	796.042	566.002	525.758	1.097	541.722	1.064
0.25	y-y	0.624	0.015	0.078	791.566	547.489	507.908	1.097	522.79	1.065
0.25	y-y	0.602	0.016	0.084	786.91	528.639	489.844	1.096	503.672	1.066
0.25	y-y	0.578	0.017	0.091	781.776	509.228	471.272	1.094	484.058	1.065
0.25	y-y	0.553	0.018	0.098	776.008	489.012	451.955	1.092	463.701	1.064
0.25	y-y	0.528	0.02	0.106	769.531	468.015	431.929	1.090	442.645	1.064
0.25	y-y	0.502	0.021	0.115	761.98	446.575	411.411	1.088	421.122	1.063
0.25	y-y	0.474	0.023	0.125	753.161	424.48	390.231	1.084	398.957	1.061
0.25	y-y	0.446	0.026	0.136	742.987	401.458	368.207	1.081	375.967	1.059
0.25	y-y	0.417	0.029	0.15	731.077	377.48	345.302	1.077	352.117	1.056
0.25	y-y	0.387	0.032	0.165	716.973	352.431	321.418	1.073	327.315	1.053
0.25	y-y	0.355	0.036	0.184	700.603	325.891	296.308	1.068	301.312	1.050

0.25	y-y	0.321	0.041	0.208	680.12	297.54	269.524	1.062	273.658	1.046
0.25	y-y	0.285	0.048	0.239	654.365	267.769	241.442	1.055	244.754	1.041
0.25	y-y	0.251	0.055	0.276	628.282	238.263	214.238	1.045	216.842	1.032
0.25	y-y	0.217	0.063	0.321	599.796	205.856	185.047	1.048	186.986	1.037
0.25	y-y	0.185	0.073	0.379	563.879	174.125	156.361	1.054	157.744	1.045
0.25	y-y	0.153	0.089	0.456	515.529	144.738	129.403	1.054	130.348	1.046
0.25	y-y	0.125	0.109	0.55	462.136	112.896	101.004	1.102	101.579	1.096
0.25	y-y	0.097	0.14	0.69	394.628	160.356	130.733	0.663	131.698	0.658
0.5	y-y	0.887	0.01	0.022	815.967	759.946	704.004	1.124	732.925	1.079
0.5	y-y	0.877	0.011	0.023	812.623	753.173	695.738	1.125	723.969	1.081
0.5	y-y	0.867	0.011	0.025	809.088	746.003	687.068	1.126	714.587	1.083
0.5	y-y	0.857	0.012	0.027	805.294	738.387	677.916	1.127	704.692	1.084
0.5	y-y	0.845	0.013	0.029	801.183	730.273	668.213	1.128	694.213	1.086
0.5	y-y	0.833	0.014	0.031	796.754	721.681	657.994	1.130	683.19	1.088
0.5	y-y	0.821	0.015	0.033	792.084	712.704	647.408	1.131	671.785	1.090
0.5	y-y	0.807	0.016	0.035	787.233	703.345	636.508	1.132	660.056	1.091
0.5	y-y	0.793	0.017	0.038	782.172	693.631	625.312	1.132	648.024	1.092
0.5	y-y	0.779	0.018	0.04	776.799	683.58	613.782	1.132	635.65	1.093
0.5	y-y	0.763	0.019	0.043	771.209	673.036	601.868	1.131	622.88	1.093
0.5	y-y	0.747	0.021	0.046	765.27	661.829	589.374	1.131	609.508	1.094
0.5	y-y	0.73	0.022	0.049	759.132	650.076	576.503	1.130	595.753	1.094
0.5	y-y	0.713	0.024	0.052	752.82	637.742	563.255	1.129	581.617	1.093
0.5	y-y	0.695	0.025	0.056	746.244	624.632	549.448	1.128	566.906	1.093
0.5	y-y	0.676	0.027	0.06	739.395	610.831	535.162	1.126	551.71	1.092
0.5	y-y	0.656	0.028	0.064	732.269	596.427	520.483	1.124	536.123	1.091
0.5	y-y	0.636	0.03	0.068	724.747	581.227	505.226	1.122	519.95	1.091
0.5	y-y	0.615	0.032	0.073	716.7	565.053	489.224	1.121	503.017	1.090
0.5	y-y	0.593	0.034	0.078	708.21	548.054	472.663	1.119	485.526	1.089
0.5	y-y	0.57	0.036	0.084	699.192	530.551	455.772	1.116	467.72	1.088
0.5	y-y	0.547	0.039	0.09	689.453	512.654	438.581	1.112	449.634	1.085
0.5	y-y	0.523	0.041	0.096	679.089	494.05	420.934	1.107	431.104	1.081
0.5	y-y	0.497	0.044	0.104	667.584	474.496	402.501	1.103	411.791	1.078
0.5	y-y	0.472	0.048	0.112	654.657	454.394	383.543	1.097	391.969	1.074
0.5	y-y	0.446	0.052	0.121	640.055	433.704	364.019	1.092	371.601	1.070
0.5	y-y	0.418	0.056	0.131	623.355	411.85	343.488	1.086	350.23	1.065
0.5	y-y	0.39	0.062	0.143	603.867	388.834	321.874	1.081	327.788	1.061
0.5	y-y	0.361	0.068	0.157	581.162	364.693	299.245	1.076	304.349	1.058
0.5	y-y	0.331	0.076	0.174	554.335	339.279	275.451	1.072	279.77	1.055
0.5	y-y	0.3	0.086	0.195	523.213	312.357	250.516	1.068	254.084	1.053
0.5	y-y	0.269	0.098	0.22	489.512	284.945	225.666	1.062	228.557	1.049
0.5	y-y	0.238	0.112	0.251	453.515	257.72	201.442	1.053	203.742	1.041
0.5	y-y	0.206	0.131	0.291	412.905	226.476	174.937	1.048	176.669	1.038
0.5	y-y	0.174	0.155	0.344	368.518	191.694	146.859	1.056	148.078	1.047
0.5	y-y	0.141	0.191	0.423	317.128	155.147	117.955	1.067	118.74	1.060
0.5	y-y	0.112	0.238	0.528	268.098	123.118	93.185	1.070	93.675	1.064
0.5	y-y	0.082	0.322	0.713	205.058	170.75	104.034	0.699	104.644	0.695
0.5	y-y	0.051	0.504	1.106	131.818	86.371	55.422	0.829	55.595	0.826
0.5	y-y	0.022	1.182	2.553	125.169	108.48	62.164	0.312	62.381	0.311
0.75	y-y	0.848	0.018	0.025	776.572	744.893	662.599	1.142	688.155	1.099
0.75	y-y	0.837	0.019	0.027	771.546	738.375	653.831	1.142	678.703	1.101
0.75	y-y	0.826	0.021	0.028	766.273	731.541	644.738	1.143	668.91	1.102
0.75	y-y	0.815	0.022	0.03	760.776	724.393	635.35	1.144	658.811	1.103
0.75	y-y	0.803	0.023	0.032	755.08	716.978	625.732	1.144	648.475	1.104
0.75	y-y	0.79	0.024	0.034	749.188	709.317	615.912	1.144	637.934	1.105
0.75	y-y	0.777	0.026	0.036	743.089	701.409	605.892	1.144	627.192	1.105
0.75	y-y	0.763	0.027	0.038	736.678	693.145	595.533	1.144	616.098	1.105
0.75	y-y	0.749	0.029	0.04	729.974	684.518	584.858	1.143	604.68	1.105

0.75	y-y	0.735	0.03	0.042	723.033	675.53	573.92	1.142	592.995	1.105
0.75	y-y	0.72	0.032	0.045	715.88	666.142	562.719	1.141	581.045	1.105
0.75	y-y	0.704	0.034	0.047	708.476	656.482	551.337	1.138	568.917	1.103
0.75	y-y	0.687	0.036	0.05	700.782	646.297	539.585	1.136	556.413	1.102
0.75	y-y	0.67	0.038	0.053	692.775	635.551	527.445	1.133	543.513	1.100
0.75	y-y	0.652	0.04	0.056	684.273	624.137	514.763	1.130	530.056	1.098
0.75	y-y	0.634	0.042	0.059	675.357	612.164	501.688	1.127	516.203	1.095
0.75	y-y	0.615	0.045	0.063	665.959	599.607	488.192	1.124	501.926	1.093
0.75	y-y	0.596	0.047	0.067	656.047	586.39	474.236	1.120	487.186	1.090
0.75	y-y	0.576	0.05	0.071	645.556	572.345	459.713	1.117	471.871	1.088
0.75	y-y	0.555	0.053	0.075	634.31	557.344	444.491	1.114	455.848	1.086
0.75	y-y	0.533	0.057	0.08	622.228	541.663	428.758	1.110	439.315	1.083
0.75	y-y	0.512	0.06	0.086	609.258	525.281	412.523	1.106	422.287	1.081
0.75	y-y	0.489	0.064	0.091	595.237	508.203	395.766	1.103	404.745	1.078
0.75	y-y	0.466	0.069	0.098	579.728	490.127	378.178	1.099	386.368	1.076
0.75	y-y	0.442	0.074	0.105	562.783	470.984	359.826	1.095	367.232	1.073
0.75	y-y	0.417	0.079	0.113	544.305	450.758	340.749	1.091	347.383	1.071
0.75	y-y	0.391	0.086	0.123	524.129	429.575	321.044	1.087	326.927	1.068
0.75	y-y	0.365	0.094	0.133	502.069	407.275	300.65	1.084	305.803	1.065
0.75	y-y	0.339	0.103	0.146	477.552	383.782	279.433	1.081	283.879	1.064
0.75	y-y	0.311	0.113	0.161	450.542	359.025	257.474	1.077	261.244	1.061
0.75	y-y	0.282	0.127	0.179	420.724	332.507	234.558	1.073	237.683	1.059
0.75	y-y	0.254	0.142	0.2	390.57	306.482	212.666	1.066	215.231	1.053
0.75	y-y	0.226	0.161	0.226	358.391	279.324	190.5	1.057	192.556	1.046
0.75	y-y	0.197	0.187	0.26	322.898	250.297	167.47	1.047	169.057	1.037
0.75	y-y	0.168	0.22	0.304	285.542	217.027	143.085	1.047	144.242	1.038
0.75	y-y	0.14	0.262	0.362	248.698	182.352	119.277	1.050	120.08	1.043
0.75	y-y	0.113	0.322	0.444	204.817	147.962	95.058	1.063	95.567	1.057
0.75	y-y	0.085	0.425	0.586	154.394	99.498	64.908	1.169	65.145	1.165
1	y-y	0.805	0.028	0.028	735.142	735.142	625.161	1.149	647.862	1.108
1	y-y	0.794	0.029	0.029	729.174	729.174	616.579	1.149	638.649	1.109
1	y-y	0.782	0.03	0.03	723.029	723.029	607.842	1.148	629.281	1.109
1	y-y	0.77	0.032	0.032	716.652	716.652	598.882	1.148	619.682	1.109
1	y-y	0.758	0.034	0.034	710.027	710.027	589.686	1.147	609.842	1.109
1	y-y	0.745	0.035	0.035	703.217	703.217	580.352	1.146	599.864	1.108
1	y-y	0.732	0.037	0.037	696.218	696.218	570.878	1.144	589.748	1.107
1	y-y	0.718	0.039	0.039	688.982	688.982	561.213	1.142	579.439	1.106
1	y-y	0.705	0.041	0.041	681.514	681.514	551.37	1.140	568.953	1.105
1	y-y	0.69	0.043	0.043	673.77	673.77	541.303	1.137	558.24	1.103
1	y-y	0.675	0.045	0.045	665.517	665.517	530.727	1.135	546.999	1.101
1	y-y	0.66	0.047	0.047	656.855	656.855	519.796	1.132	535.394	1.099
1	y-y	0.644	0.05	0.05	647.833	647.833	508.585	1.129	523.508	1.097
1	y-y	0.627	0.052	0.052	638.382	638.382	497.032	1.126	511.275	1.095
1	y-y	0.611	0.055	0.055	628.428	628.428	485.068	1.123	498.624	1.092
1	y-y	0.593	0.058	0.058	617.969	617.969	472.717	1.120	485.582	1.090
1	y-y	0.576	0.061	0.061	606.998	606.998	459.997	1.117	472.171	1.088
1	y-y	0.558	0.064	0.064	595.445	595.445	446.857	1.113	458.336	1.085
1	y-y	0.539	0.068	0.068	583.262	583.262	433.273	1.110	444.057	1.083
1	y-y	0.52	0.072	0.072	570.033	570.033	418.832	1.107	428.9	1.081
1	y-y	0.5	0.076	0.076	555.99	555.99	403.843	1.105	413.195	1.080
1	y-y	0.48	0.08	0.08	541.186	541.186	388.408	1.102	397.052	1.078
1	y-y	0.459	0.085	0.085	525.581	525.581	372.532	1.099	380.476	1.076
1	y-y	0.438	0.091	0.091	509.135	509.135	356.22	1.097	363.477	1.075
1	y-y	0.416	0.097	0.097	491.64	491.64	339.323	1.094	345.902	1.073
1	y-y	0.394	0.104	0.104	472.983	472.983	321.801	1.091	327.712	1.071
1	y-y	0.37	0.112	0.112	453.201	453.201	303.76	1.087	309.021	1.069
1	y-y	0.346	0.122	0.122	431.877	431.877	284.903	1.083	289.526	1.066

1	y-y	0.321	0.132	0.132	409.175	409.175	265.47	1.080	269.48	1.064
1	y-y	0.296	0.145	0.145	384.863	384.863	245.358	1.077	248.779	1.062
1	y-y	0.271	0.161	0.161	359.2	359.2	224.873	1.073	227.744	1.060
1	y-y	0.246	0.178	0.178	334.686	334.686	205.982	1.065	208.388	1.053
1	y-y	0.221	0.199	0.199	308.367	308.367	186.4	1.057	188.368	1.046
1	y-y	0.195	0.226	0.226	279.848	279.848	165.954	1.049	167.512	1.040
1	y-y	0.169	0.262	0.262	249.144	249.144	144.791	1.040	145.975	1.031
1	y-y	0.145	0.303	0.303	217.7	217.7	123.978	1.042	124.845	1.035
1	y-y	0.121	0.36	0.36	183.347	183.347	102.173	1.059	102.762	1.053
1	y-y	0.097	0.445	0.445	147.745	147.745	80.542	1.076	80.907	1.072
1	y-y	0.073	0.589	0.589	98.856	98.856	52.327	1.240	52.481	1.237

Tabla B.4 Valores de r_1 de la sección 5 (80 cm x 80 cm con ρ = 0.03 y f'_c = 250 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.885	0.042	0.01	1916.794	2113.163	1850.586	1.052	1931.839	1.007
0.25	x-x	0.877	0.045	0.011	1900.109	2108.027	1831.155	1.053	1910.674	1.009
0.25	x-x	0.868	0.048	0.012	1881.785	2102.554	1810.076	1.055	1887.737	1.012
0.25	x-x	0.859	0.052	0.012	1862.225	2096.403	1787.502	1.057	1863.197	1.014
0.25	x-x	0.849	0.056	0.013	1841.404	2089.652	1763.504	1.059	1837.138	1.016
0.25	x-x	0.838	0.06	0.014	1819.199	2082.447	1738.111	1.061	1809.597	1.019
0.25	x-x	0.827	0.064	0.015	1795.489	2074.739	1711.215	1.063	1780.462	1.022
0.25	x-x	0.815	0.069	0.017	1770.05	2066.482	1682.622	1.065	1749.528	1.024
0.25	x-x	0.801	0.075	0.018	1742.684	2057.875	1652.33	1.067	1716.803	1.027
0.25	x-x	0.787	0.08	0.019	1713.497	2048.996	1620.52	1.068	1682.488	1.029
0.25	x-x	0.772	0.087	0.021	1682.662	2039.864	1587.388	1.070	1646.802	1.031
0.25	x-x	0.756	0.094	0.022	1650.254	2030.706	1553.163	1.071	1609.996	1.033
0.25	x-x	0.739	0.102	0.024	1615.923	2021.468	1517.515	1.071	1571.724	1.034
0.25	x-x	0.721	0.11	0.025	1579.511	2012.385	1480.449	1.072	1531.997	1.036
0.25	x-x	0.703	0.119	0.027	1541.199	2003.473	1442.129	1.072	1490.999	1.037
0.25	x-x	0.683	0.128	0.028	1501.145	1994.728	1402.682	1.072	1448.872	1.038
0.25	x-x	0.664	0.138	0.03	1459.658	1986.04	1362.31	1.072	1405.839	1.038
0.25	x-x	0.643	0.149	0.031	1416.994	1977.247	1321.155	1.071	1362.054	1.039
0.25	x-x	0.622	0.16	0.033	1373.358	1967.861	1279.183	1.070	1317.487	1.039
0.25	x-x	0.601	0.172	0.035	1328.612	1957.514	1236.158	1.069	1271.893	1.039
0.25	x-x	0.579	0.185	0.037	1282.928	1946.183	1192.273	1.068	1225.482	1.039
0.25	x-x	0.557	0.199	0.039	1236.29	1933.679	1147.498	1.067	1178.226	1.039
0.25	x-x	0.534	0.215	0.041	1188.678	1919.719	1101.782	1.066	1130.08	1.039
0.25	x-x	0.51	0.231	0.044	1139.69	1904.092	1054.789	1.064	1080.697	1.039
0.25	x-x	0.486	0.25	0.048	1089.764	1884.848	1006.424	1.062	1029.984	1.038
0.25	x-x	0.461	0.27	0.052	1038.356	1862.313	956.509	1.060	977.765	1.037
0.25	x-x	0.435	0.293	0.057	984.23	1836.323	904.135	1.059	923.104	1.037
0.25	x-x	0.408	0.32	0.062	927.661	1806.761	849.692	1.057	866.424	1.037
0.25	x-x	0.381	0.351	0.069	868.937	1772.508	793.371	1.056	807.94	1.037
0.25	x-x	0.352	0.389	0.077	807.312	1731.791	734.454	1.053	746.922	1.036
0.25	x-x	0.323	0.431	0.085	747.619	1692.066	678.42	1.046	689.044	1.030
0.25	x-x	0.294	0.48	0.093	685.024	1653.174	621.064	1.041	629.956	1.026
0.25	x-x	0.266	0.535	0.102	614.657	1611.518	557.756	1.048	564.918	1.035
0.25	x-x	0.238	0.599	0.114	548.829	1560.961	497.975	1.052	503.675	1.040
0.25	x-x	0.212	0.669	0.127	490.366	1507.156	444.794	1.049	449.336	1.038
0.25	x-x	0.188	0.747	0.143	433.949	1439.361	392.987	1.050	396.529	1.041
0.25	x-x	0.163	0.846	0.167	378.281	1348.905	341.26	1.051	343.927	1.042
0.25	x-x	0.137	0.985	0.201	319.723	1232.606	286.991	1.052	288.875	1.046
0.25	x-x	0.111	1.188	0.247	260.282	1095.514	232.545	1.054	233.781	1.048
0.25	x-x	0.087	1.486	0.317	202.117	934.015	179.736	1.060	180.473	1.056

0.25	x-x	0.062	2.019	0.453	144.311	720.354	127.176	1.065	127.545	1.062
0.25	x-x	0.035	3.402	0.807	80.306	398.518	68.932	1.121	69.04	1.119
0.5	x-x	0.858	0.051	0.024	1866.117	2019.108	1734.362	1.088	1805.534	1.045
0.5	x-x	0.849	0.054	0.025	1848.757	2010.174	1712.875	1.090	1782.259	1.048
0.5	x-x	0.839	0.058	0.027	1830.435	2000.601	1690.307	1.092	1757.839	1.050
0.5	x-x	0.829	0.061	0.029	1811.023	1990.451	1666.63	1.094	1732.246	1.052
0.5	x-x	0.818	0.065	0.031	1790.448	1979.699	1641.801	1.095	1705.439	1.055
0.5	x-x	0.806	0.069	0.033	1768.688	1968.395	1615.876	1.097	1677.483	1.057
0.5	x-x	0.793	0.074	0.035	1745.798	1956.565	1588.955	1.099	1648.488	1.059
0.5	x-x	0.781	0.079	0.037	1721.834	1944.122	1561.067	1.100	1618.491	1.061
0.5	x-x	0.767	0.084	0.039	1696.789	1930.874	1532.123	1.101	1587.399	1.063
0.5	x-x	0.753	0.089	0.042	1670.765	1917.133	1502.447	1.102	1555.565	1.065
0.5	x-x	0.738	0.095	0.045	1643.735	1902.877	1472.036	1.103	1522.99	1.066
0.5	x-x	0.722	0.102	0.047	1615.399	1887.597	1440.389	1.103	1489.139	1.067
0.5	x-x	0.706	0.108	0.05	1585.719	1871.735	1407.791	1.103	1454.324	1.068
0.5	x-x	0.689	0.115	0.053	1554.605	1855.346	1374.243	1.102	1418.549	1.068
0.5	x-x	0.671	0.123	0.056	1521.837	1838.243	1339.515	1.102	1381.576	1.068
0.5	x-x	0.652	0.131	0.06	1487.507	1820.493	1303.767	1.101	1343.58	1.068
0.5	x-x	0.633	0.14	0.063	1451.802	1802.145	1267.212	1.099	1304.791	1.068
0.5	x-x	0.614	0.149	0.067	1414.659	1783.023	1229.755	1.098	1265.115	1.067
0.5	x-x	0.593	0.16	0.071	1375.884	1762.96	1191.222	1.096	1224.371	1.066
0.5	x-x	0.572	0.171	0.075	1335.481	1741.807	1151.608	1.093	1182.56	1.065
0.5	x-x	0.551	0.182	0.079	1293.644	1719.468	1111.079	1.091	1139.864	1.063
0.5	x-x	0.529	0.195	0.084	1250.381	1695.429	1069.498	1.088	1096.142	1.061
0.5	x-x	0.506	0.209	0.09	1205.822	1669.247	1026.88	1.084	1051.419	1.059
0.5	x-x	0.483	0.224	0.096	1159.789	1640.534	983.068	1.080	1005.535	1.056
0.5	x-x	0.459	0.241	0.103	1112.395	1608.529	938.009	1.076	958.442	1.053
0.5	x-x	0.434	0.26	0.111	1063.525	1572.725	891.624	1.071	910.066	1.050
0.5	x-x	0.409	0.281	0.121	1012.606	1532.362	843.47	1.067	859.956	1.047
0.5	x-x	0.383	0.305	0.131	958.806	1486.566	792.962	1.064	807.515	1.045
0.5	x-x	0.357	0.333	0.144	902.761	1434.328	740.552	1.061	753.229	1.043
0.5	x-x	0.33	0.365	0.159	846.271	1377.558	688.223	1.056	699.159	1.039
0.5	x-x	0.304	0.4	0.176	789.695	1317.172	636.555	1.050	645.9	1.035
0.5	x-x	0.277	0.443	0.195	733.094	1250.471	585.062	1.041	592.946	1.027
0.5	x-x	0.25	0.493	0.218	667.224	1178.582	528.355	1.041	534.777	1.028
0.5	x-x	0.223	0.553	0.246	594.064	1100.118	467.781	1.046	472.808	1.035
0.5	x-x	0.197	0.623	0.277	527.33	1022.827	413.314	1.046	417.233	1.036
0.5	x-x	0.17	0.714	0.318	456.491	931.947	355.987	1.050	358.891	1.042
0.5	x-x	0.144	0.832	0.374	385.247	831.169	299.016	1.059	301.062	1.052
0.5	x-x	0.117	1.005	0.456	312.819	716.843	241.71	1.068	243.046	1.062
0.5	x-x	0.093	1.236	0.567	248.806	580.211	189.102	1.085	189.918	1.080
0.5	x-x	0.068	1.646	0.763	180.432	424.253	134.323	1.118	134.734	1.115
0.5	x-x	0.045	2.436	1.164	117.067	266.33	84.443	1.162	84.606	1.160
0.5	x-x	0.02	5.17	2.552	78.899	110.823	47.074	0.947	47.124	0.946
0.75	x-x	0.82	0.058	0.042	1831.246	1917.077	1630.938	1.105	1693.721	1.065
0.75	x-x	0.809	0.061	0.044	1814.396	1904.423	1608.54	1.107	1669.578	1.066
0.75	x-x	0.799	0.064	0.047	1796.824	1890.837	1585.177	1.108	1644.422	1.068
0.75	x-x	0.787	0.068	0.049	1778.421	1876.372	1560.84	1.110	1618.247	1.070
0.75	x-x	0.776	0.071	0.052	1759.189	1861.254	1535.729	1.111	1591.271	1.072
0.75	x-x	0.763	0.075	0.055	1739.224	1845.558	1510.001	1.112	1563.665	1.074
0.75	x-x	0.751	0.079	0.058	1718.591	1829.314	1483.756	1.113	1535.538	1.076
0.75	x-x	0.738	0.084	0.061	1697.315	1812.563	1457.065	1.114	1506.97	1.077
0.75	x-x	0.724	0.088	0.064	1675.26	1795.204	1429.792	1.114	1477.815	1.078
0.75	x-x	0.71	0.093	0.068	1652.467	1777.195	1401.973	1.114	1448.115	1.079
0.75	x-x	0.695	0.099	0.071	1628.917	1758.249	1373.451	1.114	1417.706	1.079
0.75	x-x	0.68	0.104	0.075	1604.264	1738.649	1344.197	1.113	1386.557	1.079
0.75	x-x	0.664	0.11	0.079	1578.486	1718.452	1314.271	1.112	1354.738	1.078

0.75	x-x	0.648	0.116	0.084	1551.45	1697.555	1283.563	1.110	1322.134	1.078
0.75	x-x	0.631	0.123	0.088	1523.15	1675.933	1252.102	1.108	1288.777	1.077
0.75	x-x	0.613	0.13	0.093	1493.535	1653.789	1220.01	1.106	1254.804	1.075
0.75	x-x	0.595	0.137	0.098	1462.577	1630.639	1187.054	1.103	1219.968	1.073
0.75	x-x	0.577	0.145	0.104	1430.209	1606.05	1153.024	1.100	1184.053	1.071
0.75	x-x	0.557	0.154	0.11	1396.373	1579.975	1117.939	1.097	1147.085	1.069
0.75	x-x	0.538	0.164	0.116	1360.805	1552.316	1081.668	1.094	1108.93	1.067
0.75	x-x	0.517	0.174	0.123	1323.425	1522.858	1044.151	1.090	1069.533	1.064
0.75	x-x	0.497	0.185	0.13	1284.288	1491.392	1005.433	1.087	1028.946	1.062
0.75	x-x	0.475	0.197	0.139	1243.477	1457.703	965.579	1.083	987.245	1.059
0.75	x-x	0.453	0.211	0.148	1200.795	1421.462	924.451	1.079	944.291	1.056
0.75	x-x	0.431	0.226	0.158	1155.728	1382.215	881.7	1.075	899.73	1.054
0.75	x-x	0.408	0.243	0.169	1108.551	1339.268	837.384	1.071	853.63	1.051
0.75	x-x	0.384	0.262	0.183	1059.476	1292.231	791.666	1.067	806.172	1.048
0.75	x-x	0.36	0.283	0.198	1007.646	1240.944	744.219	1.064	757.024	1.046
0.75	x-x	0.335	0.308	0.216	953.062	1185.326	695.246	1.060	706.408	1.044
0.75	x-x	0.311	0.334	0.235	900.308	1129.931	648.853	1.054	658.565	1.039
0.75	x-x	0.286	0.365	0.257	844.84	1069.574	600.944	1.048	609.266	1.034
0.75	x-x	0.261	0.403	0.285	785.984	1002.571	550.914	1.043	557.899	1.030
0.75	x-x	0.237	0.445	0.317	730.252	934.045	503.666	1.033	509.498	1.022
0.75	x-x	0.213	0.493	0.352	666.335	867.131	454.666	1.030	459.414	1.019
0.75	x-x	0.189	0.554	0.397	593.238	794.221	401.574	1.034	405.273	1.024
0.75	x-x	0.165	0.627	0.453	523.546	720.23	351.625	1.034	354.458	1.026
0.75	x-x	0.141	0.726	0.528	448.008	622.683	295.552	1.052	297.551	1.044
0.75	x-x	0.118	0.86	0.625	371.381	525.179	241.417	1.074	242.749	1.068
0.75	x-x	0.095	1.045	0.763	299.843	424.235	190.923	1.099	191.756	1.095
0.75	x-x	0.073	1.338	0.982	227.43	320.965	141.683	1.134	142.141	1.131
0.75	x-x	0.05	1.908	1.405	153.436	215.303	93.393	1.183	93.592	1.181
0.75	x-x	0.029	3.269	2.417	83.473	118.115	50.021	1.258	50.078	1.256
1	x-x	0.777	0.062	0.062	1808.173	1808.173	1534.851	1.114	1590.328	1.075
1	x-x	0.767	0.065	0.065	1792.615	1792.615	1512.564	1.115	1566.414	1.077
1	x-x	0.755	0.068	0.068	1776.537	1776.537	1489.811	1.116	1542.024	1.078
1	x-x	0.744	0.071	0.071	1759.916	1759.916	1466.58	1.116	1517.15	1.079
1	x-x	0.732	0.075	0.075	1742.763	1742.763	1442.911	1.116	1491.835	1.080
1	x-x	0.72	0.078	0.078	1725.073	1725.073	1418.819	1.116	1466.096	1.080
1	x-x	0.707	0.082	0.082	1706.717	1706.717	1394.153	1.116	1439.774	1.081
1	x-x	0.694	0.086	0.086	1687.831	1687.831	1369.125	1.115	1413.097	1.081
1	x-x	0.681	0.09	0.09	1668.478	1668.478	1343.837	1.114	1386.174	1.080
1	x-x	0.667	0.094	0.094	1648.547	1648.547	1318.166	1.113	1358.877	1.080
1	x-x	0.653	0.099	0.099	1627.887	1627.887	1291.944	1.111	1331.028	1.079
1	x-x	0.638	0.104	0.104	1606.329	1606.329	1264.998	1.110	1302.444	1.078
1	x-x	0.623	0.109	0.109	1583.692	1583.692	1237.145	1.108	1272.937	1.077
1	x-x	0.607	0.114	0.114	1559.959	1559.959	1208.422	1.106	1242.549	1.075
1	x-x	0.591	0.12	0.12	1535.165	1535.165	1178.923	1.104	1211.381	1.074
1	x-x	0.575	0.126	0.126	1509.242	1509.242	1148.621	1.101	1179.41	1.073
1	x-x	0.558	0.133	0.133	1482.139	1482.139	1117.516	1.099	1146.639	1.071
1	x-x	0.541	0.14	0.14	1453.766	1453.766	1085.567	1.097	1113.028	1.070
1	x-x	0.523	0.147	0.147	1424.289	1424.289	1053.02	1.094	1078.84	1.067
1	x-x	0.505	0.155	0.155	1393.417	1393.417	1019.617	1.090	1043.806	1.065
1	x-x	0.486	0.164	0.164	1360.666	1360.666	984.922	1.086	1007.475	1.062
1	x-x	0.467	0.173	0.173	1325.965	1325.965	948.968	1.083	969.887	1.059
1	x-x	0.447	0.184	0.184	1289.297	1289.297	911.849	1.079	931.146	1.057
1	x-x	0.427	0.195	0.195	1250.61	1250.61	873.622	1.075	891.32	1.054
1	x-x	0.406	0.208	0.208	1209.712	1209.712	834.218	1.072	850.341	1.051
1	x-x	0.385	0.222	0.222	1166.204	1166.204	793.395	1.068	807.964	1.049
1	x-x	0.364	0.238	0.238	1119.983	1119.983	751.212	1.065	764.26	1.047
1	x-x	0.342	0.257	0.257	1070.851	1070.851	707.657	1.062	719.225	1.045

1	x-x	0.32	0.277	0.277	1022.504	1022.504	666.035	1.057	676.272	1.041
1	x-x	0.298	0.299	0.299	971.458	971.458	623.363	1.052	632.322	1.037
1	x-x	0.276	0.325	0.325	917.239	917.239	579.409	1.047	587.141	1.033
1	x-x	0.253	0.357	0.357	859.877	859.877	534.372	1.042	540.942	1.030
1	x-x	0.232	0.39	0.39	805.124	805.124	492.725	1.034	498.305	1.023
1	x-x	0.211	0.428	0.428	751.696	751.696	453.291	1.023	458.009	1.012
1	x-x	0.189	0.475	0.475	690.978	690.978	409.855	1.017	413.708	1.007
1	x-x	0.168	0.535	0.535	614.464	614.464	357.103	1.034	360.025	1.025
1	x-x	0.147	0.607	0.607	541.145	541.145	308.517	1.048	310.696	1.040
1	x-x	0.127	0.693	0.693	471.753	471.753	264.205	1.060	265.801	1.054
1	x-x	0.108	0.812	0.812	395.866	395.866	217.502	1.088	218.583	1.083
1	x-x	0.087	0.989	0.989	318.41	318.41	171.625	1.118	172.297	1.114
1	x-x	0.067	1.274	1.274	240.591	240.591	127.254	1.154	127.623	1.150
1	x-x	0.048	1.734	1.734	170.357	170.357	88.609	1.193	88.788	1.190
1	x-x	0.029	2.816	2.816	98.603	98.603	50.432	1.264	50.49	1.262
1	x-x	0.009	8.445	8.445	121.007	121.007	62.214	0.334	62.303	0.334
0.25	y-y	0.885	0.01	0.042	2113.163	1916.794	1850.586	1.052	1931.839	1.007
0.25	y-y	0.877	0.011	0.045	2108.027	1900.109	1831.155	1.053	1910.674	1.009
0.25	y-y	0.868	0.012	0.048	2102.554	1881.785	1810.076	1.055	1887.737	1.012
0.25	y-y	0.859	0.012	0.052	2096.403	1862.225	1787.502	1.057	1863.197	1.014
0.25	y-y	0.849	0.013	0.056	2089.652	1841.404	1763.504	1.059	1837.138	1.016
0.25	y-y	0.838	0.014	0.06	2082.447	1819.199	1738.111	1.061	1809.597	1.019
0.25	y-y	0.827	0.015	0.064	2074.739	1795.489	1711.215	1.063	1780.462	1.022
0.25	y-y	0.815	0.017	0.069	2066.482	1770.05	1682.622	1.065	1749.528	1.024
0.25	y-y	0.801	0.018	0.075	2057.875	1742.684	1652.33	1.067	1716.803	1.027
0.25	y-y	0.787	0.019	0.08	2048.996	1713.497	1620.52	1.068	1682.488	1.029
0.25	y-y	0.772	0.021	0.087	2039.864	1682.662	1587.388	1.070	1646.802	1.031
0.25	y-y	0.756	0.022	0.094	2030.706	1650.254	1553.163	1.071	1609.996	1.033
0.25	y-y	0.739	0.024	0.102	2021.468	1615.923	1517.515	1.071	1571.724	1.034
0.25	y-y	0.721	0.025	0.11	2012.385	1579.511	1480.449	1.072	1531.997	1.036
0.25	y-y	0.703	0.027	0.119	2003.473	1541.199	1442.129	1.072	1490.999	1.037
0.25	y-y	0.683	0.028	0.128	1994.728	1501.145	1402.682	1.072	1448.872	1.038
0.25	y-y	0.664	0.03	0.138	1986.04	1459.658	1362.31	1.072	1405.839	1.038
0.25	y-y	0.643	0.031	0.149	1977.247	1416.994	1321.155	1.071	1362.054	1.039
0.25	y-y	0.622	0.033	0.16	1967.861	1373.358	1279.183	1.070	1317.487	1.039
0.25	y-y	0.601	0.035	0.172	1957.514	1328.612	1236.158	1.069	1271.893	1.039
0.25	y-y	0.579	0.037	0.185	1946.183	1282.928	1192.273	1.068	1225.482	1.039
0.25	y-y	0.557	0.039	0.199	1933.679	1236.29	1147.498	1.067	1178.226	1.039
0.25	y-y	0.534	0.041	0.215	1919.719	1188.678	1101.782	1.066	1130.08	1.039
0.25	y-y	0.51	0.044	0.231	1904.092	1139.69	1054.789	1.064	1080.697	1.039
0.25	y-y	0.486	0.048	0.25	1884.848	1089.764	1006.424	1.062	1029.984	1.038
0.25	y-y	0.461	0.052	0.27	1862.313	1038.356	956.509	1.060	977.765	1.037
0.25	y-y	0.435	0.057	0.293	1836.323	984.23	904.135	1.059	923.104	1.037
0.25	y-y	0.408	0.062	0.32	1806.761	927.661	849.692	1.057	866.424	1.037
0.25	y-y	0.381	0.069	0.351	1772.508	868.937	793.371	1.056	807.94	1.037
0.25	y-y	0.352	0.077	0.389	1731.791	807.312	734.454	1.053	746.922	1.036
0.25	y-y	0.323	0.085	0.431	1692.066	747.619	678.42	1.046	689.044	1.030
0.25	y-y	0.294	0.093	0.48	1653.174	685.024	621.064	1.041	629.956	1.026
0.25	y-y	0.266	0.102	0.535	1611.518	614.657	557.756	1.048	564.918	1.035
0.25	y-y	0.238	0.114	0.599	1560.961	548.829	497.975	1.052	503.675	1.040
0.25	y-y	0.212	0.127	0.669	1507.156	490.366	444.794	1.049	449.336	1.038
0.25	y-y	0.188	0.143	0.747	1439.361	433.949	392.987	1.050	396.529	1.041
0.25	y-y	0.163	0.167	0.846	1348.905	378.281	341.26	1.051	343.927	1.042
0.25	y-y	0.137	0.201	0.985	1232.606	319.723	286.991	1.052	288.875	1.046
0.25	y-y	0.111	0.247	1.188	1095.514	260.282	232.545	1.054	233.781	1.048
0.25	y-y	0.087	0.317	1.486	934.015	202.117	179.736	1.060	180.473	1.056
0.25	y-y	0.062	0.453	2.019	720.354	144.311	127.176	1.065	127.545	1.062

0.25	y-y	0.035	0.807	3.402	398.518	80.306	68.932	1.121	69.04	1.119
0.5	y-y	0.858	0.024	0.051	2019.108	1866.117	1734.362	1.088	1805.534	1.045
0.5	y-y	0.849	0.025	0.054	2010.174	1848.757	1712.875	1.090	1782.259	1.048
0.5	y-y	0.839	0.027	0.058	2000.601	1830.435	1690.307	1.092	1757.839	1.050
0.5	y-y	0.829	0.029	0.061	1990.451	1811.023	1666.63	1.094	1732.246	1.052
0.5	y-y	0.818	0.031	0.065	1979.699	1790.448	1641.801	1.095	1705.439	1.055
0.5	y-y	0.806	0.033	0.069	1968.395	1768.688	1615.876	1.097	1677.483	1.057
0.5	y-y	0.793	0.035	0.074	1956.565	1745.798	1588.955	1.099	1648.488	1.059
0.5	y-y	0.781	0.037	0.079	1944.122	1721.834	1561.067	1.100	1618.491	1.061
0.5	y-y	0.767	0.039	0.084	1930.874	1696.789	1532.123	1.101	1587.399	1.063
0.5	y-y	0.753	0.042	0.089	1917.133	1670.765	1502.447	1.102	1555.565	1.065
0.5	y-y	0.738	0.045	0.095	1902.877	1643.735	1472.036	1.103	1522.99	1.066
0.5	y-y	0.722	0.047	0.102	1887.597	1615.399	1440.389	1.103	1489.139	1.067
0.5	y-y	0.706	0.05	0.108	1871.735	1585.719	1407.791	1.103	1454.324	1.068
0.5	y-y	0.689	0.053	0.115	1855.346	1554.605	1374.243	1.102	1418.549	1.068
0.5	y-y	0.671	0.056	0.123	1838.243	1521.837	1339.515	1.102	1381.576	1.068
0.5	y-y	0.652	0.06	0.131	1820.493	1487.507	1303.767	1.101	1343.58	1.068
0.5	y-y	0.633	0.063	0.14	1802.145	1451.802	1267.212	1.099	1304.791	1.068
0.5	y-y	0.614	0.067	0.149	1783.023	1414.659	1229.755	1.098	1265.115	1.067
0.5	y-y	0.593	0.071	0.16	1762.96	1375.884	1191.222	1.096	1224.371	1.066
0.5	y-y	0.572	0.075	0.171	1741.807	1335.481	1151.608	1.093	1182.56	1.065
0.5	y-y	0.551	0.079	0.182	1719.468	1293.644	1111.079	1.091	1139.864	1.063
0.5	y-y	0.529	0.084	0.195	1695.429	1250.381	1069.498	1.088	1096.142	1.061
0.5	y-y	0.506	0.09	0.209	1669.247	1205.822	1026.88	1.084	1051.419	1.059
0.5	y-y	0.483	0.096	0.224	1640.534	1159.789	983.068	1.080	1005.535	1.056
0.5	y-y	0.459	0.103	0.241	1608.529	1112.395	938.009	1.076	958.442	1.053
0.5	y-y	0.434	0.111	0.26	1572.725	1063.525	891.624	1.071	910.066	1.050
0.5	y-y	0.409	0.121	0.281	1532.362	1012.606	843.47	1.067	859.956	1.047
0.5	y-y	0.383	0.131	0.305	1486.566	958.806	792.962	1.064	807.515	1.045
0.5	y-y	0.357	0.144	0.333	1434.328	902.761	740.552	1.061	753.229	1.043
0.5	y-y	0.33	0.159	0.365	1377.558	846.271	688.223	1.056	699.159	1.039
0.5	y-y	0.304	0.176	0.4	1317.172	789.695	636.555	1.050	645.9	1.035
0.5	y-y	0.277	0.195	0.443	1250.471	733.094	585.062	1.041	592.946	1.027
0.5	y-y	0.25	0.218	0.493	1178.582	667.224	528.355	1.041	534.777	1.028
0.5	y-y	0.223	0.246	0.553	1100.118	594.064	467.781	1.046	472.808	1.035
0.5	y-y	0.197	0.277	0.623	1022.827	527.33	413.314	1.046	417.233	1.036
0.5	y-y	0.17	0.318	0.714	931.947	456.491	355.987	1.050	358.891	1.042
0.5	y-y	0.144	0.374	0.832	831.169	385.247	299.016	1.059	301.062	1.052
0.5	y-y	0.117	0.456	1.005	716.843	312.819	241.71	1.068	243.046	1.062
0.5	y-y	0.093	0.567	1.236	580.211	248.806	189.102	1.085	189.918	1.080
0.5	y-y	0.068	0.763	1.646	424.253	180.432	134.323	1.118	134.734	1.115
0.5	y-y	0.045	1.164	2.436	266.33	117.067	84.443	1.162	84.606	1.160
0.5	y-y	0.02	2.552	5.17	110.823	78.899	47.074	0.947	47.124	0.946
0.75	y-y	0.82	0.042	0.058	1917.077	1831.246	1630.938	1.105	1693.721	1.065
0.75	y-y	0.809	0.044	0.061	1904.423	1814.396	1608.54	1.107	1669.578	1.066
0.75	y-y	0.799	0.047	0.064	1890.837	1796.824	1585.177	1.108	1644.422	1.068
0.75	y-y	0.787	0.049	0.068	1876.372	1778.421	1560.84	1.110	1618.247	1.070
0.75	y-y	0.776	0.052	0.071	1861.254	1759.189	1535.729	1.111	1591.271	1.072
0.75	y-y	0.763	0.055	0.075	1845.558	1739.224	1510.001	1.112	1563.665	1.074
0.75	y-y	0.751	0.058	0.079	1829.314	1718.591	1483.756	1.113	1535.538	1.076
0.75	y-y	0.738	0.061	0.084	1812.563	1697.315	1457.065	1.114	1506.97	1.077
0.75	y-y	0.724	0.064	0.088	1795.204	1675.26	1429.792	1.114	1477.815	1.078
0.75	y-y	0.71	0.068	0.093	1777.195	1652.467	1401.973	1.114	1448.115	1.079
0.75	y-y	0.695	0.071	0.099	1758.249	1628.917	1373.451	1.114	1417.706	1.079
0.75	y-y	0.68	0.075	0.104	1738.649	1604.264	1344.197	1.113	1386.557	1.079
0.75	y-y	0.664	0.079	0.11	1718.452	1578.486	1314.271	1.112	1354.738	1.078
0.75	y-y	0.648	0.084	0.116	1697.555	1551.45	1283.563	1.110	1322.134	1.078

0.75	y-y	0.631	0.088	0.123	1675.933	1523.15	1252.102	1.108	1288.777	1.077
0.75	y-y	0.613	0.093	0.13	1653.789	1493.535	1220.01	1.106	1254.804	1.075
0.75	y-y	0.595	0.098	0.137	1630.639	1462.577	1187.054	1.103	1219.968	1.073
0.75	y-y	0.577	0.104	0.145	1606.05	1430.209	1153.024	1.100	1184.053	1.071
0.75	y-y	0.557	0.11	0.154	1579.975	1396.373	1117.939	1.097	1147.085	1.069
0.75	y-y	0.538	0.116	0.164	1552.316	1360.805	1081.668	1.094	1108.93	1.067
0.75	y-y	0.517	0.123	0.174	1522.858	1323.425	1044.151	1.090	1069.533	1.064
0.75	y-y	0.497	0.13	0.185	1491.392	1284.288	1005.433	1.087	1028.946	1.062
0.75	y-y	0.475	0.139	0.197	1457.703	1243.477	965.579	1.083	987.245	1.059
0.75	y-y	0.453	0.148	0.211	1421.462	1200.795	924.451	1.079	944.291	1.056
0.75	y-y	0.431	0.158	0.226	1382.215	1155.728	881.7	1.075	899.73	1.054
0.75	y-y	0.408	0.169	0.243	1339.268	1108.551	837.384	1.071	853.63	1.051
0.75	y-y	0.384	0.183	0.262	1292.231	1059.476	791.666	1.067	806.172	1.048
0.75	y-y	0.36	0.198	0.283	1240.944	1007.646	744.219	1.064	757.024	1.046
0.75	y-y	0.335	0.216	0.308	1185.326	953.062	695.246	1.060	706.408	1.044
0.75	y-y	0.311	0.235	0.334	1129.931	900.308	648.853	1.054	658.565	1.039
0.75	y-y	0.286	0.257	0.365	1069.574	844.84	600.944	1.048	609.266	1.034
0.75	y-y	0.261	0.285	0.403	1002.571	785.984	550.914	1.043	557.899	1.030
0.75	y-y	0.237	0.317	0.445	934.045	730.252	503.666	1.033	509.498	1.022
0.75	y-y	0.213	0.352	0.493	867.131	666.335	454.666	1.030	459.414	1.019
0.75	y-y	0.189	0.397	0.554	794.221	593.238	401.574	1.034	405.273	1.024
0.75	y-y	0.165	0.453	0.627	720.23	523.546	351.625	1.034	354.458	1.026
0.75	y-y	0.141	0.528	0.726	622.683	448.008	295.552	1.052	297.551	1.044
0.75	y-y	0.118	0.625	0.86	525.179	371.381	241.417	1.074	242.749	1.068
0.75	y-y	0.095	0.763	1.045	424.235	299.843	190.923	1.099	191.756	1.095
0.75	y-y	0.073	0.982	1.338	320.965	227.43	141.683	1.134	142.141	1.131
0.75	y-y	0.05	1.405	1.908	215.303	153.436	93.393	1.183	93.592	1.181
0.75	y-y	0.029	2.417	3.269	118.115	83.473	50.021	1.258	50.078	1.256
1	y-y	0.777	0.062	0.062	1808.173	1808.173	1534.851	1.114	1590.328	1.075
1	y-y	0.767	0.065	0.065	1792.615	1792.615	1512.564	1.115	1566.414	1.077
1	y-y	0.755	0.068	0.068	1776.537	1776.537	1489.811	1.116	1542.024	1.078
1	y-y	0.744	0.071	0.071	1759.916	1759.916	1466.58	1.116	1517.15	1.079
1	y-y	0.732	0.075	0.075	1742.763	1742.763	1442.911	1.116	1491.835	1.080
1	y-y	0.72	0.078	0.078	1725.073	1725.073	1418.819	1.116	1466.096	1.080
1	y-y	0.707	0.082	0.082	1706.717	1706.717	1394.153	1.116	1439.774	1.081
1	y-y	0.694	0.086	0.086	1687.831	1687.831	1369.125	1.115	1413.097	1.081
1	y-y	0.681	0.09	0.09	1668.478	1668.478	1343.837	1.114	1386.174	1.080
1	y-y	0.667	0.094	0.094	1648.547	1648.547	1318.166	1.113	1358.877	1.080
1	y-y	0.653	0.099	0.099	1627.887	1627.887	1291.944	1.111	1331.028	1.079
1	y-y	0.638	0.104	0.104	1606.329	1606.329	1264.998	1.110	1302.444	1.078
1	y-y	0.623	0.109	0.109	1583.692	1583.692	1237.145	1.108	1272.937	1.077
1	y-y	0.607	0.114	0.114	1559.959	1559.959	1208.422	1.106	1242.549	1.075
1	y-y	0.591	0.12	0.12	1535.165	1535.165	1178.923	1.104	1211.381	1.074
1	y-y	0.575	0.126	0.126	1509.242	1509.242	1148.621	1.101	1179.41	1.073
1	y-y	0.558	0.133	0.133	1482.139	1482.139	1117.516	1.099	1146.639	1.071
1	y-y	0.541	0.14	0.14	1453.766	1453.766	1085.567	1.097	1113.028	1.070
1	y-y	0.523	0.147	0.147	1424.289	1424.289	1053.02	1.094	1078.84	1.067
1	y-y	0.505	0.155	0.155	1393.417	1393.417	1019.617	1.090	1043.806	1.065
1	y-y	0.486	0.164	0.164	1360.666	1360.666	984.922	1.086	1007.475	1.062
1	y-y	0.467	0.173	0.173	1325.965	1325.965	948.968	1.083	969.887	1.059
1	y-y	0.447	0.184	0.184	1289.297	1289.297	911.849	1.079	931.146	1.057
1	y-y	0.427	0.195	0.195	1250.61	1250.61	873.622	1.075	891.32	1.054
1	y-y	0.406	0.208	0.208	1209.712	1209.712	834.218	1.072	850.341	1.051
1	y-y	0.385	0.222	0.222	1166.204	1166.204	793.395	1.068	807.964	1.049
1	y-y	0.364	0.238	0.238	1119.983	1119.983	751.212	1.065	764.26	1.047
1	y-y	0.342	0.257	0.257	1070.851	1070.851	707.657	1.062	719.225	1.045
1	y-y	0.32	0.277	0.277	1022.504	1022.504	666.035	1.057	676.272	1.041

1	y-y	0.298	0.299	0.299	971.458	971.458	623.363	1.052	632.322	1.037
1	y-y	0.276	0.325	0.325	917.239	917.239	579.409	1.047	587.141	1.033
1	y-y	0.253	0.357	0.357	859.877	859.877	534.372	1.042	540.942	1.030
1	y-y	0.232	0.39	0.39	805.124	805.124	492.725	1.034	498.305	1.023
1	y-y	0.211	0.428	0.428	751.696	751.696	453.291	1.023	458.009	1.012
1	y-y	0.189	0.475	0.475	690.978	690.978	409.855	1.017	413.708	1.007
1	y-y	0.168	0.535	0.535	614.464	614.464	357.103	1.034	360.025	1.025
1	y-y	0.147	0.607	0.607	541.145	541.145	308.517	1.048	310.696	1.040
1	y-y	0.127	0.693	0.693	471.753	471.753	264.205	1.060	265.801	1.054
1	y-y	0.108	0.812	0.812	395.866	395.866	217.502	1.088	218.583	1.083
1	y-y	0.087	0.989	0.989	318.41	318.41	171.625	1.118	172.297	1.114
1	y-y	0.067	1.274	1.274	240.591	240.591	127.254	1.154	127.623	1.150
1	y-y	0.048	1.734	1.734	170.357	170.357	88.609	1.193	88.788	1.190
1	y-y	0.029	2.816	2.816	98.603	98.603	50.432	1.264	50.49	1.262
1	y-y	0.009	8.445	8.445	121.007	121.007	62.214	0.334	62.303	0.334

Tabla B.5 Valores de r_1 de la sección 6 (80 cm x 80 cm con ρ = 0.06 y f'_c = 250 kg/cm^2)

s	Ejee	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.849	0.053	0.013	2495.376	2831.956	2401.625	1.047	2503.058	1.005
0.25	x-x	0.84	0.057	0.013	2471.609	2825.308	2374.907	1.048	2474.049	1.006
0.25	x-x	0.831	0.06	0.014	2446.546	2818.195	2346.827	1.050	2443.591	1.008
0.25	x-x	0.822	0.064	0.015	2419.964	2810.575	2317.179	1.051	2411.464	1.010
0.25	x-x	0.812	0.068	0.016	2391.725	2802.4	2285.839	1.052	2377.541	1.012
0.25	x-x	0.801	0.073	0.017	2361.838	2793.453	2252.711	1.053	2341.722	1.013
0.25	x-x	0.789	0.077	0.018	2330.361	2783.016	2217.437	1.055	2303.629	1.015
0.25	x-x	0.777	0.082	0.019	2296.833	2771.784	2180.115	1.056	2263.376	1.017
0.25	x-x	0.764	0.088	0.021	2261.13	2759.632	2140.618	1.057	2220.834	1.019
0.25	x-x	0.75	0.094	0.022	2222.26	2746.609	2098.158	1.059	2175.166	1.021
0.25	x-x	0.735	0.101	0.024	2180.686	2732.974	2053.372	1.061	2127.07	1.024
0.25	x-x	0.72	0.108	0.025	2137.199	2718.939	2007.132	1.062	2077.491	1.026
0.25	x-x	0.703	0.116	0.027	2091.243	2704.253	1958.852	1.064	2025.81	1.028
0.25	x-x	0.686	0.125	0.029	2042.513	2689.141	1908.434	1.065	1971.934	1.031
0.25	x-x	0.668	0.134	0.03	1991.248	2674.434	1856.53	1.066	1916.569	1.032
0.25	x-x	0.649	0.144	0.032	1937.581	2659.65	1803.012	1.066	1859.586	1.034
0.25	x-x	0.629	0.156	0.034	1881.803	2644.407	1747.969	1.067	1801.091	1.035
0.25	x-x	0.609	0.168	0.036	1823.839	2628.251	1691.172	1.067	1740.849	1.036
0.25	x-x	0.588	0.181	0.038	1763.811	2610.564	1632.536	1.066	1678.78	1.037
0.25	x-x	0.566	0.195	0.041	1701.869	2591.311	1572.265	1.066	1615.113	1.038
0.25	x-x	0.543	0.21	0.043	1637.808	2570.269	1510.193	1.066	1549.682	1.039
0.25	x-x	0.52	0.228	0.046	1571.591	2547.205	1446.308	1.066	1482.487	1.040
0.25	x-x	0.496	0.247	0.05	1503.293	2521.322	1380.54	1.065	1413.466	1.040
0.25	x-x	0.471	0.269	0.054	1432.362	2490.845	1312.08	1.064	1341.787	1.040
0.25	x-x	0.445	0.294	0.059	1358.605	2454.503	1240.704	1.063	1267.233	1.041
0.25	x-x	0.418	0.322	0.065	1281.694	2412.387	1166.486	1.062	1189.907	1.041
0.25	x-x	0.39	0.356	0.072	1200.546	2363.818	1088.697	1.060	1109.07	1.041
0.25	x-x	0.36	0.398	0.081	1116.123	2306.893	1008.092	1.058	1025.536	1.040
0.25	x-x	0.329	0.448	0.092	1022.079	2236.665	919.099	1.060	933.577	1.043
0.25	x-x	0.296	0.513	0.106	942.303	2149.175	841.004	1.043	853.11	1.028
0.25	x-x	0.263	0.594	0.123	774.611	2051.574	693.995	1.121	702.218	1.108
0.25	x-x	0.23	0.693	0.142	811.809	1949.678	710.604	0.957	719.228	0.946
0.25	x-x	0.197	0.821	0.165	10.873	1835.301	10.848	53.769	10.85	53.759
0.25	x-x	0.165	0.987	0.195	562.615	1699.551	493.015	0.993	497.151	0.985
0.25	x-x	0.137	1.191	0.231	463.663	1558.139	406.329	0.999	409.134	0.992
0.25	x-x	0.11	1.475	0.29	58.469	1368.793	57.155	5.691	57.21	5.686

0.25	x-x	0.082	1.946	0.395	272.697	1120.109	236.834	1.028	237.784	1.024
0.25	x-x	0.054	2.894	0.6	385.79	752.65	279.076	0.578	280.397	0.575
0.25	x-x	0.026	5.972	1.25	83.367	527.608	73.784	1.040	73.876	1.039
0.5	x-x	0.819	0.062	0.029	2433.87	2685.708	2243.459	1.082	2331.726	1.041
0.5	x-x	0.81	0.065	0.031	2410.567	2672.718	2214.732	1.084	2300.71	1.043
0.5	x-x	0.8	0.069	0.032	2385.931	2658.935	2184.624	1.085	2268.236	1.045
0.5	x-x	0.789	0.073	0.034	2359.932	2644.272	2153.095	1.086	2234.266	1.047
0.5	x-x	0.778	0.077	0.036	2332.513	2628.714	2120.14	1.088	2198.8	1.049
0.5	x-x	0.766	0.081	0.038	2303.645	2612.327	2085.828	1.089	2161.917	1.051
0.5	x-x	0.754	0.086	0.04	2273.47	2595.163	2050.36	1.090	2123.838	1.052
0.5	x-x	0.742	0.091	0.043	2241.44	2577.169	2013.307	1.091	2084.107	1.054
0.5	x-x	0.728	0.097	0.045	2207.027	2558.208	1974.226	1.093	2042.258	1.056
0.5	x-x	0.714	0.103	0.048	2171.232	2538.367	1934.038	1.094	1999.283	1.058
0.5	x-x	0.699	0.109	0.051	2134.293	2517.071	1892.659	1.095	1955.097	1.060
0.5	x-x	0.684	0.116	0.054	2095.595	2494.625	1849.851	1.095	1909.452	1.061
0.5	x-x	0.667	0.123	0.057	2054.878	2471.264	1805.611	1.095	1862.351	1.062
0.5	x-x	0.651	0.13	0.06	2011.878	2446.642	1759.627	1.096	1813.471	1.063
0.5	x-x	0.633	0.139	0.064	1966.537	2420.586	1711.854	1.096	1762.772	1.064
0.5	x-x	0.615	0.148	0.068	1919.29	2393.207	1662.77	1.096	1710.768	1.065
0.5	x-x	0.596	0.158	0.072	1869.946	2364.401	1612.265	1.096	1657.352	1.066
0.5	x-x	0.577	0.169	0.077	1818.181	2334.389	1560.285	1.095	1602.474	1.066
0.5	x-x	0.556	0.18	0.082	1764.249	2302.488	1506.803	1.094	1546.112	1.066
0.5	x-x	0.535	0.193	0.087	1707.664	2268.199	1451.37	1.092	1487.805	1.065
0.5	x-x	0.512	0.208	0.093	1648.398	2230.144	1393.569	1.090	1427.127	1.064
0.5	x-x	0.49	0.224	0.1	1586.795	2188.128	1333.789	1.088	1364.498	1.063
0.5	x-x	0.466	0.241	0.107	1522.369	2142.5	1272.028	1.085	1299.929	1.062
0.5	x-x	0.442	0.262	0.116	1455.03	2092.039	1208.015	1.083	1233.151	1.061
0.5	x-x	0.416	0.284	0.126	1384.783	2035.151	1141.514	1.081	1163.933	1.060
0.5	x-x	0.39	0.311	0.138	1311.041	1970.835	1072.176	1.079	1091.93	1.059
0.5	x-x	0.363	0.342	0.152	1233.469	1897.55	999.753	1.077	1016.907	1.059
0.5	x-x	0.335	0.379	0.17	1151.926	1813.645	924.199	1.074	938.84	1.057
0.5	x-x	0.306	0.425	0.191	1064.396	1717.481	844.396	1.073	856.601	1.058
0.5	x-x	0.276	0.481	0.218	973.046	1609.53	762.468	1.071	772.405	1.057
0.5	x-x	0.246	0.549	0.249	896.355	1496.217	691.318	1.053	699.477	1.040
0.5	x-x	0.215	0.637	0.289	662.949	1370.65	526.171	1.211	530.884	1.200
0.5	x-x	0.184	0.752	0.342	826.126	1232.894	593.789	0.919	599.799	0.910
0.5	x-x	0.155	0.902	0.409	888.249	1093.462	587.244	0.781	593.122	0.773
0.5	x-x	0.125	1.119	0.506	358.196	948.457	285.011	1.302	286.388	1.295
0.5	x-x	0.096	1.462	0.661	105.097	667.036	93.662	3.024	93.81	3.019
0.5	x-x	0.066	2.107	0.953	73.45	754.193	68.478	2.853	68.558	2.850
0.5	x-x	0.038	3.644	1.647	149.714	57.724	42.255	2.643	42.285	2.641
0.75	x-x	0.779	0.068	0.049	2394.719	2526.625	2101.277	1.099	2178.518	1.060
0.75	x-x	0.769	0.071	0.052	2372.056	2508.488	2071.455	1.101	2146.48	1.062
0.75	x-x	0.759	0.075	0.054	2348.468	2489.486	2040.693	1.102	2113.468	1.064
0.75	x-x	0.748	0.078	0.057	2323.771	2469.581	2008.868	1.103	2079.351	1.066
0.75	x-x	0.736	0.082	0.06	2298.06	2449.121	1976.323	1.104	2044.502	1.067
0.75	x-x	0.724	0.086	0.063	2271.622	2427.66	1943.015	1.104	2008.877	1.068
0.75	x-x	0.711	0.091	0.066	2243.824	2405.266	1908.568	1.104	1972.077	1.069
0.75	x-x	0.698	0.096	0.07	2214.243	2381.903	1872.713	1.105	1933.82	1.070
0.75	x-x	0.684	0.101	0.073	2183.268	2357.52	1835.757	1.105	1894.438	1.071
0.75	x-x	0.67	0.106	0.077	2151.063	2331.918	1797.757	1.105	1853.997	1.071
0.75	x-x	0.655	0.112	0.081	2117.629	2305.259	1758.867	1.104	1812.664	1.072
0.75	x-x	0.64	0.118	0.085	2082.663	2277.58	1718.958	1.104	1770.306	1.072
0.75	x-x	0.625	0.124	0.09	2045.837	2248.469	1677.64	1.103	1726.514	1.072
0.75	x-x	0.608	0.131	0.095	2007.025	2217.276	1634.562	1.103	1680.924	1.072
0.75	x-x	0.592	0.139	0.1	1966.444	2184.503	1590.247	1.102	1634.095	1.073
0.75	x-x	0.574	0.147	0.106	1923.985	2150.197	1544.738	1.101	1586.079	1.073

0.75	x-x	0.556	0.156	0.112	1879.388	2113.881	1497.718	1.100	1536.549	1.073
0.75	x-x	0.537	0.166	0.119	1832.757	2074.991	1449.094	1.099	1485.414	1.072
0.75	x-x	0.518	0.176	0.127	1783.783	2033.382	1398.741	1.097	1432.552	1.071
0.75	x-x	0.498	0.188	0.135	1732.328	1988.88	1346.649	1.096	1377.959	1.071
0.75	x-x	0.477	0.201	0.144	1677.688	1941.472	1292.553	1.094	1321.372	1.070
0.75	x-x	0.456	0.215	0.154	1619.903	1890.493	1236.378	1.092	1262.721	1.069
0.75	x-x	0.433	0.231	0.165	1559.159	1835.413	1178.219	1.090	1202.118	1.068
0.75	x-x	0.41	0.249	0.178	1495.119	1775.727	1117.914	1.088	1139.407	1.067
0.75	x-x	0.387	0.27	0.193	1427.399	1710.837	1055.281	1.086	1074.412	1.066
0.75	x-x	0.362	0.295	0.21	1355.512	1639.842	990.026	1.084	1006.846	1.066
0.75	x-x	0.337	0.323	0.23	1279.493	1562.04	922.272	1.082	936.851	1.066
0.75	x-x	0.311	0.357	0.255	1198.813	1476.938	851.959	1.081	864.385	1.065
0.75	x-x	0.284	0.399	0.285	1114.158	1383.466	779.489	1.079	789.878	1.065
0.75	x-x	0.257	0.446	0.319	1025.421	1289.176	707.499	1.078	716.047	1.065
0.75	x-x	0.23	0.506	0.363	948.262	1186.646	641.106	1.062	648.118	1.051
0.75	x-x	0.202	0.583	0.419	808.391	1075.367	546.606	1.094	551.694	1.084
0.75	x-x	0.175	0.679	0.489	724.609	964.471	480.902	1.076	484.837	1.068
0.75	x-x	0.121	0.987	0.713	563.238	935.937	398.974	0.898	401.679	0.892
0.75	x-x	0.094	1.272	0.922	537.855	880.944	376.376	0.738	378.782	0.733
0.75	x-x	0.067	1.765	1.278	293.404	538.958	202.995	0.983	203.693	0.980
0.75	x-x	0.042	2.809	2.039	378.174	155.108	114.234	1.088	114.455	1.086
0.75	x-x	0.015	7.674	5.578	200.585	20.381	18.617	2.421	18.623	2.421
1	x-x	0.737	0.071	0.071	2370.473	2370.473	1975.332	1.105	2043.441	1.068
1	x-x	0.726	0.074	0.074	2349.199	2349.199	1945.962	1.106	2012.027	1.070
1	x-x	0.715	0.078	0.078	2327.196	2327.196	1915.951	1.106	1979.961	1.071
1	x-x	0.704	0.081	0.081	2304.436	2304.436	1885.291	1.107	1947.235	1.072
1	x-x	0.693	0.085	0.085	2280.825	2280.825	1853.889	1.107	1913.755	1.072
1	x-x	0.68	0.089	0.089	2256.026	2256.026	1821.343	1.107	1879.092	1.073
1	x-x	0.668	0.093	0.093	2229.872	2229.872	1787.491	1.108	1843.081	1.074
1	x-x	0.655	0.097	0.097	2202.644	2202.644	1752.755	1.107	1806.172	1.075
1	x-x	0.641	0.102	0.102	2174.648	2174.648	1717.564	1.107	1768.827	1.075
1	x-x	0.628	0.107	0.107	2145.73	2145.73	1681.762	1.106	1730.879	1.075
1	x-x	0.613	0.112	0.112	2115.704	2115.704	1645.163	1.105	1692.136	1.074
1	x-x	0.599	0.118	0.118	2084.024	2084.024	1607.168	1.104	1651.967	1.074
1	x-x	0.583	0.123	0.123	2050.606	2050.606	1567.762	1.103	1610.362	1.073
1	x-x	0.568	0.13	0.13	2015.52	2015.52	1527.112	1.101	1567.503	1.073
1	x-x	0.551	0.137	0.137	1978.717	1978.717	1485.252	1.100	1523.431	1.073
1	x-x	0.535	0.144	0.144	1940.159	1940.159	1442.222	1.099	1478.195	1.072
1	x-x	0.518	0.152	0.152	1899.659	1899.659	1397.915	1.098	1431.685	1.072
1	x-x	0.5	0.161	0.161	1856.652	1856.652	1351.829	1.096	1383.384	1.071
1	x-x	0.482	0.17	0.17	1811.509	1811.509	1304.49	1.095	1333.85	1.071
1	x-x	0.464	0.181	0.181	1763.873	1763.873	1255.652	1.094	1282.831	1.071
1	x-x	0.444	0.192	0.192	1713.482	1713.482	1205.191	1.093	1230.208	1.070
1	x-x	0.425	0.205	0.205	1659.763	1659.763	1152.708	1.092	1175.573	1.070
1	x-x	0.404	0.219	0.219	1602.736	1602.736	1098.422	1.091	1119.165	1.070
1	x-x	0.383	0.236	0.236	1542.38	1542.38	1042.505	1.089	1061.171	1.070
1	x-x	0.361	0.255	0.255	1478.107	1478.107	984.627	1.087	1001.262	1.069
1	x-x	0.339	0.276	0.276	1409.494	1409.494	924.659	1.086	939.314	1.069
1	x-x	0.316	0.302	0.302	1336.484	1336.484	862.817	1.084	875.564	1.068
1	x-x	0.292	0.332	0.332	1258.57	1258.57	798.954	1.082	809.872	1.067
1	x-x	0.268	0.367	0.367	1178.263	1178.263	735.324	1.079	744.562	1.066
1	x-x	0.244	0.408	0.408	1097.002	1097.002	673.092	1.073	680.824	1.061
1	x-x	0.219	0.459	0.459	1004.527	1004.527	604.771	1.074	611.006	1.063
1	x-x	0.194	0.525	0.525	930.305	930.305	551.765	1.041	556.951	1.031
1	x-x	0.171	0.599	0.599	755.286	755.286	432.801	1.168	435.984	1.159
1	x-x	0.147	0.699	0.699	850.866	850.866	496.752	0.875	500.951	0.868
1	x-x	0.122	0.842	0.842	316.982	316.982	167.447	2.163	167.922	2.157

1	x-x	0.099	1.046	1.046	357.853	357.853	190.425	1.533	191.039	1.529
1	x-x	0.076	1.354	1.354	475.688	475.688	258.601	0.869	259.734	0.865
1	x-x	0.052	1.949	1.949	268.993	268.993	140.891	1.104	141.227	1.102
1	x-x	0.029	3.491	3.491	215.667	215.667	111.906	0.773	112.118	0.771
0.25	y-y	0.849	0.013	0.053	2831.956	2495.376	2401.625	1.047	2503.058	1.005
0.25	y-y	0.84	0.013	0.057	2825.308	2471.609	2374.907	1.048	2474.049	1.006
0.25	y-y	0.831	0.014	0.06	2818.195	2446.546	2346.827	1.050	2443.591	1.008
0.25	y-y	0.822	0.015	0.064	2810.575	2419.964	2317.179	1.051	2411.464	1.010
0.25	y-y	0.812	0.016	0.068	2802.4	2391.725	2285.839	1.052	2377.541	1.012
0.25	y-y	0.801	0.017	0.073	2793.453	2361.838	2252.711	1.053	2341.722	1.013
0.25	y-y	0.789	0.018	0.077	2783.016	2330.361	2217.437	1.055	2303.629	1.015
0.25	y-y	0.777	0.019	0.082	2771.784	2296.833	2180.115	1.056	2263.376	1.017
0.25	y-y	0.764	0.021	0.088	2759.632	2261.13	2140.618	1.057	2220.834	1.019
0.25	y-y	0.75	0.022	0.094	2746.609	2222.26	2098.158	1.059	2175.166	1.021
0.25	y-y	0.735	0.024	0.101	2732.974	2180.686	2053.372	1.061	2127.07	1.024
0.25	y-y	0.72	0.025	0.108	2718.939	2137.199	2007.132	1.062	2077.491	1.026
0.25	y-y	0.703	0.027	0.116	2704.253	2091.243	1958.852	1.064	2025.81	1.028
0.25	y-y	0.686	0.029	0.125	2689.141	2042.513	1908.434	1.065	1971.934	1.031
0.25	y-y	0.668	0.03	0.134	2674.434	1991.248	1856.53	1.066	1916.569	1.032
0.25	y-y	0.649	0.032	0.144	2659.65	1937.581	1803.012	1.066	1859.586	1.034
0.25	y-y	0.629	0.034	0.156	2644.407	1881.803	1747.969	1.067	1801.091	1.035
0.25	y-y	0.609	0.036	0.168	2628.251	1823.839	1691.172	1.067	1740.849	1.036
0.25	y-y	0.588	0.038	0.181	2610.564	1763.811	1632.536	1.066	1678.78	1.037
0.25	y-y	0.566	0.041	0.195	2591.311	1701.869	1572.265	1.066	1615.113	1.038
0.25	y-y	0.543	0.043	0.21	2570.269	1637.808	1510.193	1.066	1549.682	1.039
0.25	y-y	0.52	0.046	0.228	2547.205	1571.591	1446.308	1.066	1482.487	1.040
0.25	y-y	0.496	0.05	0.247	2521.322	1503.293	1380.54	1.065	1413.466	1.040
0.25	y-y	0.471	0.054	0.269	2490.845	1432.362	1312.08	1.064	1341.787	1.040
0.25	y-y	0.445	0.059	0.294	2454.503	1358.605	1240.704	1.063	1267.233	1.041
0.25	y-y	0.418	0.065	0.322	2412.387	1281.694	1166.486	1.062	1189.907	1.041
0.25	y-y	0.39	0.072	0.356	2363.818	1200.546	1088.697	1.060	1109.07	1.041
0.25	y-y	0.36	0.081	0.398	2306.893	1116.123	1008.092	1.058	1025.536	1.040
0.25	y-y	0.329	0.092	0.448	2236.665	1022.079	919.099	1.060	933.577	1.043
0.25	y-y	0.296	0.106	0.513	2149.175	942.303	841.004	1.043	853.11	1.028
0.25	y-y	0.263	0.123	0.594	2051.574	774.611	693.995	1.121	702.218	1.108
0.25	y-y	0.23	0.142	0.693	1949.678	811.809	710.604	0.957	719.228	0.946
0.25	y-y	0.197	0.165	0.821	1835.301	10.873	10.848	53.769	10.85	53.759
0.25	y-y	0.165	0.195	0.987	1699.551	562.615	493.015	0.993	497.151	0.985
0.25	y-y	0.137	0.231	1.191	1558.139	463.663	406.329	0.999	409.134	0.992
0.25	y-y	0.11	0.29	1.475	1368.793	58.469	57.155	5.691	57.21	5.686
0.25	y-y	0.082	0.395	1.946	1120.109	272.697	236.834	1.028	237.784	1.024
0.25	y-y	0.054	0.6	2.894	752.65	385.79	279.076	0.578	280.397	0.575
0.25	y-y	0.026	1.25	5.972	527.608	83.367	73.784	1.040	73.876	1.039
0.5	y-y	0.819	0.029	0.062	2685.708	2433.87	2243.459	1.082	2331.726	1.041
0.5	y-y	0.81	0.031	0.065	2672.718	2410.567	2214.732	1.084	2300.71	1.043
0.5	y-y	0.8	0.032	0.069	2658.935	2385.931	2184.624	1.085	2268.236	1.045
0.5	y-y	0.789	0.034	0.073	2644.272	2359.932	2153.095	1.086	2234.266	1.047
0.5	y-y	0.778	0.036	0.077	2628.714	2332.513	2120.14	1.088	2198.8	1.049
0.5	y-y	0.766	0.038	0.081	2612.327	2303.645	2085.828	1.089	2161.917	1.051
0.5	y-y	0.754	0.04	0.086	2595.163	2273.47	2050.36	1.090	2123.838	1.052
0.5	y-y	0.742	0.043	0.091	2577.169	2241.44	2013.307	1.091	2084.107	1.054
0.5	y-y	0.728	0.045	0.097	2558.208	2207.027	1974.226	1.093	2042.258	1.056
0.5	y-y	0.714	0.048	0.103	2538.367	2171.232	1934.038	1.094	1999.283	1.058
0.5	y-y	0.699	0.051	0.109	2517.071	2134.293	1892.659	1.095	1955.097	1.060
0.5	y-y	0.684	0.054	0.116	2494.625	2095.595	1849.851	1.095	1909.452	1.061
0.5	y-y	0.667	0.057	0.123	2471.264	2054.878	1805.611	1.095	1862.351	1.062
0.5	y-y	0.651	0.06	0.13	2446.642	2011.878	1759.627	1.096	1813.471	1.063

0.5	y-y	0.633	0.064	0.139	2420.586	1966.537	1711.854	1.096	1762.772	1.064
0.5	y-y	0.615	0.068	0.148	2393.207	1919.29	1662.77	1.096	1710.768	1.065
0.5	y-y	0.596	0.072	0.158	2364.401	1869.946	1612.265	1.096	1657.352	1.066
0.5	y-y	0.577	0.077	0.169	2334.389	1818.181	1560.285	1.095	1602.474	1.066
0.5	y-y	0.556	0.082	0.18	2302.488	1764.249	1506.803	1.094	1546.112	1.066
0.5	y-y	0.535	0.087	0.193	2268.199	1707.664	1451.37	1.092	1487.805	1.065
0.5	y-y	0.512	0.093	0.208	2230.144	1648.398	1393.569	1.090	1427.127	1.064
0.5	y-y	0.49	0.1	0.224	2188.128	1586.795	1333.789	1.088	1364.498	1.063
0.5	y-y	0.466	0.107	0.241	2142.5	1522.369	1272.028	1.085	1299.929	1.062
0.5	y-y	0.442	0.116	0.262	2092.039	1455.03	1208.015	1.083	1233.151	1.061
0.5	y-y	0.416	0.126	0.284	2035.151	1384.783	1141.514	1.081	1163.933	1.060
0.5	y-y	0.39	0.138	0.311	1970.835	1311.041	1072.176	1.079	1091.93	1.059
0.5	y-y	0.363	0.152	0.342	1897.55	1233.469	999.753	1.077	1016.907	1.059
0.5	y-y	0.335	0.17	0.379	1813.645	1151.926	924.199	1.074	938.84	1.057
0.5	y-y	0.306	0.191	0.425	1717.481	1064.396	844.396	1.073	856.601	1.058
0.5	y-y	0.276	0.218	0.481	1609.53	973.046	762.468	1.071	772.405	1.057
0.5	y-y	0.246	0.249	0.549	1496.217	896.355	691.318	1.053	699.477	1.040
0.5	y-y	0.215	0.289	0.637	1370.65	662.949	526.171	1.211	530.884	1.200
0.5	y-y	0.184	0.342	0.752	1232.894	826.126	593.789	0.919	599.799	0.910
0.5	y-y	0.155	0.409	0.902	1093.462	888.249	587.244	0.781	593.122	0.773
0.5	y-y	0.125	0.506	1.119	948.457	358.196	285.011	1.302	286.388	1.295
0.5	y-y	0.096	0.661	1.462	667.036	105.097	93.662	3.024	93.81	3.019
0.5	y-y	0.066	0.953	2.107	754.193	73.45	68.478	2.853	68.558	2.850
0.5	y-y	0.038	1.647	3.644	57.724	149.714	42.255	2.643	42.285	2.641
0.75	y-y	0.779	0.049	0.068	2526.625	2394.719	2101.277	1.099	2178.518	1.060
0.75	y-y	0.769	0.052	0.071	2508.488	2372.056	2071.455	1.101	2146.48	1.062
0.75	y-y	0.759	0.054	0.075	2489.486	2348.468	2040.693	1.102	2113.468	1.064
0.75	y-y	0.748	0.057	0.078	2469.581	2323.771	2008.868	1.103	2079.351	1.066
0.75	y-y	0.736	0.06	0.082	2449.121	2298.06	1976.323	1.104	2044.502	1.067
0.75	y-y	0.724	0.063	0.086	2427.66	2271.622	1943.015	1.104	2008.877	1.068
0.75	y-y	0.711	0.066	0.091	2405.266	2243.824	1908.568	1.104	1972.077	1.069
0.75	y-y	0.698	0.07	0.096	2381.903	2214.243	1872.713	1.105	1933.82	1.070
0.75	y-y	0.684	0.073	0.101	2357.52	2183.268	1835.757	1.105	1894.438	1.071
0.75	y-y	0.67	0.077	0.106	2331.918	2151.063	1797.757	1.105	1853.997	1.071
0.75	y-y	0.655	0.081	0.112	2305.259	2117.629	1758.867	1.104	1812.664	1.072
0.75	y-y	0.64	0.085	0.118	2277.58	2082.663	1718.958	1.104	1770.306	1.072
0.75	y-y	0.625	0.09	0.124	2248.469	2045.837	1677.64	1.103	1726.514	1.072
0.75	y-y	0.608	0.095	0.131	2217.276	2007.025	1634.562	1.103	1680.924	1.072
0.75	y-y	0.592	0.1	0.139	2184.503	1966.444	1590.247	1.102	1634.095	1.073
0.75	y-y	0.574	0.106	0.147	2150.197	1923.985	1544.738	1.101	1586.079	1.073
0.75	y-y	0.556	0.112	0.156	2113.881	1879.388	1497.718	1.100	1536.549	1.073
0.75	y-y	0.537	0.119	0.166	2074.991	1832.757	1449.094	1.099	1485.414	1.072
0.75	y-y	0.518	0.127	0.176	2033.382	1783.783	1398.741	1.097	1432.552	1.071
0.75	y-y	0.498	0.135	0.188	1988.88	1732.328	1346.649	1.096	1377.959	1.071
0.75	y-y	0.477	0.144	0.201	1941.472	1677.688	1292.553	1.094	1321.372	1.070
0.75	y-y	0.456	0.154	0.215	1890.493	1619.903	1236.378	1.092	1262.721	1.069
0.75	y-y	0.433	0.165	0.231	1835.413	1559.159	1178.219	1.090	1202.118	1.068
0.75	y-y	0.41	0.178	0.249	1775.727	1495.119	1117.914	1.088	1139.407	1.067
0.75	y-y	0.387	0.193	0.27	1710.837	1427.399	1055.281	1.086	1074.412	1.066
0.75	y-y	0.362	0.21	0.295	1639.842	1355.512	990.026	1.084	1006.846	1.066
0.75	y-y	0.337	0.23	0.323	1562.04	1279.493	922.272	1.082	936.851	1.066
0.75	y-y	0.311	0.255	0.357	1476.938	1198.813	851.959	1.081	864.385	1.065
0.75	y-y	0.284	0.285	0.399	1383.466	1114.158	779.489	1.079	789.878	1.065
0.75	y-y	0.257	0.319	0.446	1289.176	1025.421	707.499	1.078	716.047	1.065
0.75	y-y	0.23	0.363	0.506	1186.646	948.262	641.106	1.062	648.118	1.051
0.75	y-y	0.202	0.419	0.583	1075.367	808.391	546.606	1.094	551.694	1.084
0.75	y-y	0.175	0.489	0.679	964.471	724.609	480.902	1.076	484.837	1.068

0.75	y-y	0.121	0.713	0.987	935.937	563.238	398.974	0.898	401.679	0.892
0.75	y-y	0.094	0.922	1.272	880.944	537.855	376.376	0.738	378.782	0.733
0.75	y-y	0.067	1.278	1.765	538.958	293.404	202.995	0.983	203.693	0.980
0.75	y-y	0.042	2.039	2.809	155.108	378.174	114.234	1.088	114.455	1.086
0.75	y-y	0.015	5.578	7.674	20.381	200.585	18.617	2.421	18.623	2.421
1	y-y	0.737	0.071	0.071	2370.473	2370.473	1975.332	1.105	2043.441	1.068
1	y-y	0.726	0.074	0.074	2349.199	2349.199	1945.962	1.106	2012.027	1.070
1	y-y	0.715	0.078	0.078	2327.196	2327.196	1915.951	1.106	1979.961	1.071
1	y-y	0.704	0.081	0.081	2304.436	2304.436	1885.291	1.107	1947.235	1.072
1	y-y	0.693	0.085	0.085	2280.825	2280.825	1853.889	1.107	1913.755	1.072
1	y-y	0.68	0.089	0.089	2256.026	2256.026	1821.343	1.107	1879.092	1.073
1	y-y	0.668	0.093	0.093	2229.872	2229.872	1787.491	1.108	1843.081	1.074
1	y-y	0.655	0.097	0.097	2202.644	2202.644	1752.755	1.107	1806.172	1.075
1	y-y	0.641	0.102	0.102	2174.648	2174.648	1717.564	1.107	1768.827	1.075
1	y-y	0.628	0.107	0.107	2145.73	2145.73	1681.762	1.106	1730.879	1.075
1	y-y	0.613	0.112	0.112	2115.704	2115.704	1645.163	1.105	1692.136	1.074
1	y-y	0.599	0.118	0.118	2084.024	2084.024	1607.168	1.104	1651.967	1.074
1	y-y	0.583	0.123	0.123	2050.606	2050.606	1567.762	1.103	1610.362	1.073
1	y-y	0.568	0.13	0.13	2015.52	2015.52	1527.112	1.101	1567.503	1.073
1	y-y	0.551	0.137	0.137	1978.717	1978.717	1485.252	1.100	1523.431	1.073
1	y-y	0.535	0.144	0.144	1940.159	1940.159	1442.222	1.099	1478.195	1.072
1	y-y	0.518	0.152	0.152	1899.659	1899.659	1397.915	1.098	1431.685	1.072
1	y-y	0.5	0.161	0.161	1856.652	1856.652	1351.829	1.096	1383.384	1.071
1	y-y	0.482	0.17	0.17	1811.509	1811.509	1304.49	1.095	1333.85	1.071
1	y-y	0.464	0.181	0.181	1763.873	1763.873	1255.652	1.094	1282.831	1.071
1	y-y	0.444	0.192	0.192	1713.482	1713.482	1205.191	1.093	1230.208	1.070
1	y-y	0.425	0.205	0.205	1659.763	1659.763	1152.708	1.092	1175.573	1.070
1	y-y	0.404	0.219	0.219	1602.736	1602.736	1098.422	1.091	1119.165	1.070
1	y-y	0.383	0.236	0.236	1542.38	1542.38	1042.505	1.089	1061.171	1.070
1	y-y	0.361	0.255	0.255	1478.107	1478.107	984.627	1.087	1001.262	1.069
1	y-y	0.339	0.276	0.276	1409.494	1409.494	924.659	1.086	939.314	1.069
1	y-y	0.316	0.302	0.302	1336.484	1336.484	862.817	1.084	875.564	1.068
1	y-y	0.292	0.332	0.332	1258.57	1258.57	798.954	1.082	809.872	1.067
1	y-y	0.268	0.367	0.367	1178.263	1178.263	735.324	1.079	744.562	1.066
1	y-y	0.244	0.408	0.408	1097.002	1097.002	673.092	1.073	680.824	1.061
1	y-y	0.219	0.459	0.459	1004.527	1004.527	604.771	1.074	611.006	1.063
1	y-y	0.194	0.525	0.525	930.305	930.305	551.765	1.041	556.951	1.031
1	y-y	0.171	0.599	0.599	755.286	755.286	432.801	1.168	435.984	1.159
1	y-y	0.147	0.699	0.699	850.866	850.866	496.752	0.875	500.951	0.868
1	y-y	0.122	0.842	0.842	316.982	316.982	167.447	2.163	167.922	2.157
1	y-y	0.099	1.046	1.046	357.853	357.853	190.425	1.533	191.039	1.529
1	y-y	0.076	1.354	1.354	475.688	475.688	258.601	0.869	259.734	0.865
1	y-y	0.052	1.949	1.949	268.993	268.993	140.891	1.104	141.227	1.102
1	y-y	0.029	3.491	3.491	215.667	215.667	111.906	0.773	112.118	0.771

Tabla B.6 Valores de r_1 de la sección 7 (80 cm x 80 cm con ρ = 0.03 y f'_c = 400 kg/cm^2)

s	Ejee	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.891	0.05	0.011	2407.562	2670.527	2294.9	1.096	2392.084	1.052
0.25	x-x	0.878	0.054	0.013	2374.58	2662.288	2258.984	1.098	2353.088	1.054
0.25	x-x	0.865	0.06	0.014	2339.151	2653.946	2221.057	1.100	2311.964	1.056
0.25	x-x	0.85	0.066	0.015	2301.367	2645.355	2181.127	1.101	2268.730	1.058
0.25	x-x	0.834	0.072	0.016	2261.188	2636.362	2139.087	1.102	2223.281	1.060
0.25	x-x	0.818	0.079	0.018	2218.386	2627.131	2094.878	1.102	2175.562	1.061
0.25	x-x	0.8	0.086	0.019	2172.73	2617.562	2048.263	1.103	2125.330	1.063
0.25	x-x	0.781	0.094	0.021	2124.553	2608.055	1999.808	1.103	2073.207	1.064

0.25	x-x	0.762	0.103	0.022	2073.83	2598.82	1949.612	1.104	2019.307	1.066
0.25	x-x	0.742	0.112	0.023	2020.74	2589.949	1897.86	1.104	1963.842	1.067
0.25	x-x	0.721	0.122	0.025	1965.987	2581.275	1845.056	1.104	1907.358	1.068
0.25	x-x	0.7	0.132	0.026	1910.022	2572.574	1791.463	1.103	1850.140	1.068
0.25	x-x	0.678	0.142	0.027	1852.98	2563.192	1736.886	1.102	1791.988	1.068
0.25	x-x	0.656	0.154	0.029	1794.605	2552.669	1680.939	1.102	1732.495	1.069
0.25	x-x	0.633	0.165	0.03	1735.673	2541.136	1624.423	1.101	1672.521	1.069
0.25	x-x	0.61	0.178	0.032	1676.162	2528.632	1567.386	1.099	1612.119	1.069
0.25	x-x	0.587	0.191	0.034	1615.486	2514.706	1509.2	1.098	1550.630	1.068
0.25	x-x	0.563	0.205	0.036	1553.594	2499.201	1449.843	1.096	1488.036	1.068
0.25	x-x	0.538	0.221	0.039	1491.51	2481.013	1389.939	1.093	1425.004	1.067
0.25	x-x	0.513	0.237	0.042	1427.907	2460.033	1328.45	1.091	1360.445	1.065
0.25	x-x	0.487	0.256	0.045	1361.503	2435.894	1264.315	1.088	1293.261	1.064
0.25	x-x	0.461	0.276	0.049	1293.107	2408.57	1198.397	1.086	1224.372	1.063
0.25	x-x	0.433	0.3	0.054	1222.844	2377.045	1130.724	1.082	1153.821	1.061
0.25	x-x	0.405	0.326	0.06	1149.915	2340.21	1060.586	1.078	1080.881	1.058
0.25	x-x	0.377	0.356	0.065	1079.702	2304.519	993.992	1.070	1011.796	1.051
0.25	x-x	0.348	0.388	0.071	1003.249	2269.754	923.13	1.066	938.467	1.049
0.25	x-x	0.321	0.424	0.077	919.635	2232.905	846.62	1.070	859.502	1.054
0.25	x-x	0.293	0.463	0.084	840.224	2188.658	773.399	1.072	784.135	1.057
0.25	x-x	0.267	0.505	0.091	768.911	2142.318	707.585	1.067	716.561	1.054
0.25	x-x	0.242	0.549	0.101	699.64	2083.941	643.046	1.064	650.451	1.052
0.25	x-x	0.217	0.6	0.115	630.182	2006.56	577.654	1.062	583.622	1.051
0.25	x-x	0.191	0.667	0.132	557.746	1909.644	509.549	1.061	514.187	1.051
0.25	x-x	0.165	0.753	0.153	484.857	1796.575	441.499	1.058	444.977	1.049
0.25	x-x	0.14	0.861	0.181	412.274	1662.923	374.132	1.058	376.626	1.051
0.25	x-x	0.115	1.012	0.225	339.197	1475.449	305.639	1.060	307.302	1.054
0.25	x-x	0.088	1.259	0.297	262.152	1228.833	233.957	1.064	234.930	1.060
0.25	x-x	0.061	1.737	0.435	181.542	896.221	159.487	1.076	159.939	1.073
0.25	x-x	0.035	2.896	0.757	101.577	481.497	86.449	1.126	86.581	1.124
0.5	x-x	0.9	0.049	0.022	2408.369	2595.455	2239.939	1.135	2332.430	1.090
0.5	x-x	0.888	0.053	0.024	2382.091	2582.86	2207.992	1.136	2297.811	1.092
0.5	x-x	0.876	0.057	0.026	2354.311	2569.29	2174.394	1.138	2261.446	1.095
0.5	x-x	0.864	0.062	0.028	2325.308	2554.731	2139.43	1.140	2223.650	1.097
0.5	x-x	0.85	0.067	0.031	2294.969	2539.277	2103.13	1.142	2184.462	1.099
0.5	x-x	0.836	0.072	0.033	2263.082	2522.936	2065.382	1.143	2143.767	1.101
0.5	x-x	0.821	0.077	0.035	2229.603	2505.994	2026.397	1.144	2101.797	1.103
0.5	x-x	0.805	0.083	0.038	2194.471	2488.597	1986.268	1.145	2058.658	1.105
0.5	x-x	0.789	0.089	0.04	2157.566	2470.666	1944.892	1.146	2014.245	1.106
0.5	x-x	0.772	0.095	0.043	2119.116	2452.417	1902.628	1.145	1968.947	1.107
0.5	x-x	0.754	0.102	0.046	2078.853	2433.701	1859.205	1.145	1922.482	1.107
0.5	x-x	0.735	0.109	0.049	2036.406	2414.229	1814.207	1.144	1874.408	1.107
0.5	x-x	0.715	0.117	0.051	1992.071	2394.03	1767.944	1.143	1825.066	1.107
0.5	x-x	0.695	0.125	0.055	1946.24	2373.296	1720.877	1.141	1774.951	1.106
0.5	x-x	0.674	0.134	0.058	1898.751	2351.99	1672.892	1.139	1723.949	1.105
0.5	x-x	0.653	0.143	0.061	1849.191	2330.049	1623.678	1.136	1671.731	1.103
0.5	x-x	0.631	0.153	0.065	1797.559	2307.298	1573.192	1.133	1618.261	1.102
0.5	x-x	0.609	0.164	0.068	1744.595	2283.498	1521.939	1.130	1564.081	1.099
0.5	x-x	0.586	0.175	0.073	1690.363	2257.897	1469.698	1.126	1508.959	1.096
0.5	x-x	0.562	0.187	0.077	1634.541	2230.027	1416.128	1.121	1452.544	1.093
0.5	x-x	0.538	0.2	0.082	1577.091	2199.374	1361.124	1.116	1394.732	1.089
0.5	x-x	0.513	0.214	0.088	1518.902	2165.381	1305.286	1.111	1336.162	1.085
0.5	x-x	0.488	0.229	0.094	1459.501	2127.9	1248.368	1.104	1276.581	1.080
0.5	x-x	0.463	0.245	0.101	1397.864	2085.943	1189.471	1.099	1215.057	1.076
0.5	x-x	0.437	0.264	0.109	1333.668	2038.5	1128.284	1.093	1151.280	1.071
0.5	x-x	0.41	0.284	0.118	1267.601	1984.681	1065.321	1.087	1085.799	1.067
0.5	x-x	0.383	0.307	0.129	1201.319	1926.117	1002.475	1.080	1020.588	1.061

0.5	x-x	0.357	0.332	0.14	1135.252	1863.787	940.436	1.071	956.358	1.053
0.5	x-x	0.33	0.36	0.154	1069.409	1794.475	878.507	1.060	892.385	1.044
0.5	x-x	0.303	0.392	0.169	992.468	1719.718	809.708	1.056	821.483	1.041
0.5	x-x	0.276	0.429	0.186	907.042	1638.53	735.986	1.058	745.703	1.044
0.5	x-x	0.249	0.47	0.205	827.576	1556.328	668.083	1.055	676.079	1.042
0.5	x-x	0.223	0.519	0.228	745.368	1462.53	598.337	1.052	604.743	1.041
0.5	x-x	0.197	0.578	0.257	659.141	1355.288	526.064	1.057	531.009	1.047
0.5	x-x	0.17	0.654	0.296	570.639	1233.209	452.643	1.063	456.299	1.055
0.5	x-x	0.146	0.743	0.342	492.254	1111.471	388.031	1.062	390.715	1.054
0.5	x-x	0.121	0.871	0.408	406.518	955.365	317.201	1.075	318.993	1.069
0.5	x-x	0.097	1.045	0.506	326.257	766.551	249.032	1.098	250.135	1.093
0.5	x-x	0.072	1.339	0.671	244.348	553.698	180.359	1.135	180.937	1.132
0.5	x-x	0.049	1.886	0.969	165.408	357.06	117.755	1.180	118.000	1.178
0.5	x-x	0.025	3.473	1.825	91.128	171.705	60.815	1.181	60.880	1.180
0.75	x-x	0.893	0.047	0.034	2422.656	2514.293	2190.919	1.151	2279.327	1.107
0.75	x-x	0.882	0.05	0.036	2401.586	2498.273	2161.689	1.153	2247.707	1.109
0.75	x-x	0.871	0.054	0.039	2379.472	2481.562	2131.44	1.155	2215.021	1.111
0.75	x-x	0.86	0.057	0.041	2356.347	2464.084	2100.182	1.156	2181.283	1.113
0.75	x-x	0.847	0.061	0.044	2332.35	2445.87	2068.091	1.157	2146.686	1.115
0.75	x-x	0.835	0.065	0.047	2307.571	2426.956	2035.301	1.158	2111.377	1.117
0.75	x-x	0.821	0.069	0.05	2281.947	2407.303	2001.77	1.159	2075.315	1.118
0.75	x-x	0.807	0.073	0.053	2255.374	2386.928	1967.47	1.159	2038.471	1.119
0.75	x-x	0.793	0.077	0.056	2227.574	2365.841	1932.238	1.159	2000.675	1.120
0.75	x-x	0.778	0.082	0.059	2198.582	2344.158	1896.223	1.159	1962.089	1.120
0.75	x-x	0.763	0.087	0.062	2168.47	2321.603	1859.342	1.158	1922.629	1.120
0.75	x-x	0.746	0.092	0.066	2137.14	2298.458	1821.751	1.157	1882.462	1.120
0.75	x-x	0.73	0.098	0.07	2104.566	2274.649	1783.426	1.156	1841.569	1.119
0.75	x-x	0.712	0.104	0.074	2070.401	2249.94	1744.021	1.154	1799.583	1.118
0.75	x-x	0.695	0.11	0.078	2034.694	2224.279	1703.602	1.151	1756.580	1.117
0.75	x-x	0.676	0.116	0.082	1997.539	2197.858	1662.406	1.149	1712.815	1.115
0.75	x-x	0.657	0.123	0.087	1958.929	2170.26	1620.246	1.145	1668.093	1.112
0.75	x-x	0.637	0.13	0.092	1918.78	2141.219	1576.985	1.141	1622.276	1.110
0.75	x-x	0.617	0.138	0.097	1876.945	2110.764	1532.624	1.137	1575.368	1.107
0.75	x-x	0.597	0.146	0.102	1832.948	2078.667	1486.812	1.133	1527.005	1.103
0.75	x-x	0.575	0.155	0.108	1786.843	2044.691	1439.572	1.129	1477.219	1.100
0.75	x-x	0.553	0.165	0.114	1738.995	2008.716	1391.191	1.124	1426.320	1.096
0.75	x-x	0.531	0.175	0.121	1689.539	1970.554	1341.774	1.118	1374.422	1.092
0.75	x-x	0.509	0.186	0.128	1637.864	1929.861	1290.895	1.113	1321.086	1.087
0.75	x-x	0.485	0.198	0.136	1583.255	1886.063	1238.009	1.107	1265.751	1.083
0.75	x-x	0.462	0.212	0.145	1526.667	1838.249	1183.501	1.101	1208.828	1.078
0.75	x-x	0.437	0.227	0.155	1468.349	1785.984	1127.541	1.095	1150.507	1.073
0.75	x-x	0.412	0.243	0.167	1407.162	1729.231	1069.662	1.089	1090.308	1.068
0.75	x-x	0.387	0.261	0.18	1343.205	1667.965	1010.148	1.083	1028.541	1.064
0.75	x-x	0.363	0.28	0.193	1281.228	1605.891	953.16	1.075	969.520	1.057
0.75	x-x	0.338	0.302	0.209	1216.855	1537.898	894.485	1.067	908.877	1.050
0.75	x-x	0.312	0.327	0.228	1149.099	1463.484	833.694	1.058	846.183	1.043
0.75	x-x	0.288	0.354	0.249	1084.962	1386.541	775.889	1.047	786.695	1.033
0.75	x-x	0.264	0.383	0.271	1015.762	1309.631	717.365	1.038	726.593	1.025
0.75	x-x	0.239	0.419	0.298	930.501	1227.069	651.222	1.038	658.818	1.026
0.75	x-x	0.216	0.459	0.33	848.588	1141.693	588.148	1.036	594.336	1.025
0.75	x-x	0.192	0.508	0.369	762.761	1050.962	523.98	1.033	528.887	1.024
0.75	x-x	0.168	0.569	0.415	670.11	939.435	453.989	1.047	457.668	1.039
0.75	x-x	0.146	0.644	0.472	581.335	824.105	387.665	1.062	390.344	1.055
0.75	x-x	0.124	0.742	0.548	493.378	701.072	322.668	1.082	324.521	1.075
0.75	x-x	0.101	0.884	0.657	399.241	567.639	255.6	1.117	256.762	1.112
0.75	x-x	0.08	1.088	0.813	311.257	441.922	195.253	1.155	195.930	1.151
0.75	x-x	0.059	1.413	1.063	229.73	319.966	140.367	1.196	140.716	1.193

0.75	x-x	0.039	2.101	1.589	145.903	200.965	87.14	1.250	87.275	1.248
0.75	x-x	0.018	4.3	3.29	96.976	92.825	48.238	1.059	48.279	1.058
1	x-x	0.85	0.053	0.053	2387.036	2387.036	2067.002	1.161	2145.513	1.118
1	x-x	0.838	0.055	0.055	2367.68	2367.68	2038.147	1.162	2114.440	1.120
1	x-x	0.827	0.058	0.058	2347.81	2347.81	2008.876	1.162	2082.954	1.121
1	x-x	0.815	0.062	0.062	2327.435	2327.435	1979.226	1.162	2051.094	1.122
1	x-x	0.802	0.065	0.065	2306.517	2306.517	1949.161	1.162	2018.824	1.122
1	x-x	0.789	0.068	0.068	2284.949	2284.949	1918.553	1.162	1986.008	1.122
1	x-x	0.776	0.072	0.072	2262.479	2262.479	1887.08	1.161	1952.302	1.122
1	x-x	0.762	0.076	0.076	2239.211	2239.211	1854.927	1.160	1917.908	1.122
1	x-x	0.748	0.079	0.079	2215.232	2215.232	1822.246	1.159	1882.992	1.122
1	x-x	0.733	0.083	0.083	2190.447	2190.447	1788.945	1.158	1847.455	1.121
1	x-x	0.718	0.088	0.088	2164.767	2164.767	1754.94	1.156	1811.212	1.120
1	x-x	0.703	0.092	0.092	2138.16	2138.16	1720.233	1.154	1774.266	1.119
1	x-x	0.687	0.097	0.097	2110.393	2110.393	1684.568	1.151	1736.350	1.117
1	x-x	0.67	0.102	0.102	2081.335	2081.335	1647.841	1.149	1697.357	1.115
1	x-x	0.653	0.107	0.107	2051.034	2051.034	1610.173	1.146	1657.419	1.113
1	x-x	0.636	0.112	0.112	2019.501	2019.501	1571.643	1.143	1616.623	1.111
1	x-x	0.618	0.118	0.118	1986.758	1986.758	1532.336	1.140	1575.063	1.109
1	x-x	0.6	0.124	0.124	1952.685	1952.685	1492.173	1.136	1532.660	1.106
1	x-x	0.582	0.13	0.13	1917.524	1917.524	1451.495	1.132	1489.777	1.103
1	x-x	0.563	0.137	0.137	1880.886	1880.886	1409.917	1.127	1446.010	1.099
1	x-x	0.543	0.145	0.145	1842.027	1842.027	1366.692	1.122	1400.579	1.095
1	x-x	0.523	0.152	0.152	1800.928	1800.928	1321.927	1.117	1353.605	1.091
1	x-x	0.502	0.161	0.161	1757.815	1757.815	1275.983	1.112	1305.472	1.087
1	x-x	0.481	0.17	0.17	1712.686	1712.686	1228.97	1.106	1256.303	1.082
1	x-x	0.46	0.18	0.18	1665.22	1665.22	1180.672	1.101	1205.877	1.078
1	x-x	0.439	0.191	0.191	1614.633	1614.633	1130.448	1.095	1153.534	1.074
1	x-x	0.416	0.204	0.204	1560.964	1560.964	1078.525	1.090	1099.518	1.069
1	x-x	0.394	0.217	0.217	1504.174	1504.174	1025.045	1.085	1043.990	1.065
1	x-x	0.372	0.232	0.232	1448.376	1448.376	973.909	1.078	990.995	1.059
1	x-x	0.349	0.248	0.248	1389.596	1389.596	921.489	1.070	936.771	1.053
1	x-x	0.327	0.266	0.266	1326.97	1326.97	867.208	1.064	880.729	1.048
1	x-x	0.304	0.287	0.287	1261.139	1261.139	811.819	1.057	823.657	1.042
1	x-x	0.282	0.308	0.308	1198.263	1198.263	760.448	1.048	770.825	1.034
1	x-x	0.261	0.332	0.332	1135.646	1135.646	710.709	1.036	719.765	1.023
1	x-x	0.239	0.36	0.36	1070.641	1070.641	660.514	1.023	668.329	1.011
1	x-x	0.218	0.393	0.393	990.537	990.537	600.587	1.023	607.041	1.012
1	x-x	0.197	0.431	0.431	903.869	903.869	538.027	1.032	543.201	1.022
1	x-x	0.177	0.473	0.473	821.519	821.519	480.666	1.039	484.791	1.030
1	x-x	0.157	0.525	0.525	735.907	735.907	423.071	1.049	426.264	1.041
1	x-x	0.137	0.593	0.593	639.796	639.796	360.76	1.073	363.079	1.067
1	x-x	0.117	0.682	0.682	543.629	543.629	300.76	1.099	302.370	1.093
1	x-x	0.099	0.792	0.792	456.098	456.098	248.08	1.121	249.174	1.116
1	x-x	0.08	0.955	0.955	363.484	363.484	194.241	1.159	194.911	1.155
1	x-x	0.061	1.221	1.221	271.671	271.671	142.699	1.203	143.060	1.200
1	x-x	0.042	1.734	1.734	181.895	181.895	93.973	1.252	94.130	1.250
1	x-x	0.025	2.819	2.819	104.19	104.19	53.074	1.321	53.124	1.320
0.25	y-y	0.891	0.011	0.05	2670.527	2407.562	2294.9	1.096	2392.084	1.052
0.25	y-y	0.878	0.013	0.054	2662.288	2374.58	2258.984	1.098	2353.088	1.054
0.25	y-y	0.865	0.014	0.06	2653.946	2339.151	2221.057	1.100	2311.964	1.056
0.25	y-y	0.85	0.015	0.066	2645.355	2301.367	2181.127	1.101	2268.730	1.058
0.25	y-y	0.834	0.016	0.072	2636.362	2261.188	2139.087	1.102	2223.281	1.060
0.25	y-y	0.818	0.018	0.079	2627.131	2218.386	2094.878	1.102	2175.562	1.061
0.25	y-y	0.8	0.019	0.086	2617.562	2172.73	2048.263	1.103	2125.330	1.063
0.25	y-y	0.781	0.021	0.094	2608.055	2124.553	1999.808	1.103	2073.207	1.064
0.25	y-y	0.762	0.022	0.103	2598.82	2073.83	1949.612	1.104	2019.307	1.066

0.25	y-y	0.742	0.023	0.112	2589.949	2020.74	1897.86	1.104	1963.842	1.067
0.25	y-y	0.721	0.025	0.122	2581.275	1965.987	1845.056	1.104	1907.358	1.068
0.25	y-y	0.7	0.026	0.132	2572.574	1910.022	1791.463	1.103	1850.140	1.068
0.25	y-y	0.678	0.027	0.142	2563.192	1852.98	1736.886	1.102	1791.988	1.068
0.25	y-y	0.656	0.029	0.154	2552.669	1794.605	1680.939	1.102	1732.495	1.069
0.25	y-y	0.633	0.03	0.165	2541.136	1735.673	1624.423	1.101	1672.521	1.069
0.25	y-y	0.61	0.032	0.178	2528.632	1676.162	1567.386	1.099	1612.119	1.069
0.25	y-y	0.587	0.034	0.191	2514.706	1615.486	1509.2	1.098	1550.630	1.068
0.25	y-y	0.563	0.036	0.205	2499.201	1553.594	1449.843	1.096	1488.036	1.068
0.25	y-y	0.538	0.039	0.221	2481.013	1491.51	1389.939	1.093	1425.004	1.067
0.25	y-y	0.513	0.042	0.237	2460.033	1427.907	1328.45	1.091	1360.445	1.065
0.25	y-y	0.487	0.045	0.256	2435.894	1361.503	1264.315	1.088	1293.261	1.064
0.25	y-y	0.461	0.049	0.276	2408.57	1293.107	1198.397	1.086	1224.372	1.063
0.25	y-y	0.433	0.054	0.3	2377.045	1222.844	1130.724	1.082	1153.821	1.061
0.25	y-y	0.405	0.06	0.326	2340.21	1149.915	1060.586	1.078	1080.881	1.058
0.25	y-y	0.377	0.065	0.356	2304.519	1079.702	993.992	1.070	1011.796	1.051
0.25	y-y	0.348	0.071	0.388	2269.754	1003.249	923.13	1.066	938.467	1.049
0.25	y-y	0.321	0.077	0.424	2232.905	919.635	846.62	1.070	859.502	1.054
0.25	y-y	0.293	0.084	0.463	2188.658	840.224	773.399	1.072	784.135	1.057
0.25	y-y	0.267	0.091	0.505	2142.318	768.911	707.585	1.067	716.561	1.054
0.25	y-y	0.242	0.101	0.549	2083.941	699.64	643.046	1.064	650.451	1.052
0.25	y-y	0.217	0.115	0.6	2006.56	630.182	577.654	1.062	583.622	1.051
0.25	y-y	0.191	0.132	0.667	1909.644	557.746	509.549	1.061	514.187	1.051
0.25	y-y	0.165	0.153	0.753	1796.575	484.857	441.499	1.058	444.977	1.049
0.25	y-y	0.14	0.181	0.861	1662.923	412.274	374.132	1.058	376.626	1.051
0.25	y-y	0.115	0.225	1.012	1475.449	339.197	305.639	1.060	307.302	1.054
0.25	y-y	0.088	0.297	1.259	1228.833	262.152	233.957	1.064	234.930	1.060
0.25	y-y	0.061	0.435	1.737	896.221	181.542	159.487	1.076	159.939	1.073
0.25	y-y	0.035	0.757	2.896	481.497	101.577	86.449	1.126	86.581	1.124
0.5	y-y	0.9	0.022	0.049	2595.455	2408.369	2239.939	1.135	2332.430	1.090
0.5	y-y	0.888	0.024	0.053	2582.86	2382.091	2207.992	1.136	2297.811	1.092
0.5	y-y	0.876	0.026	0.057	2569.29	2354.311	2174.394	1.138	2261.446	1.095
0.5	y-y	0.864	0.028	0.062	2554.731	2325.308	2139.43	1.140	2223.650	1.097
0.5	y-y	0.85	0.031	0.067	2539.277	2294.969	2103.13	1.142	2184.462	1.099
0.5	y-y	0.836	0.033	0.072	2522.936	2263.082	2065.382	1.143	2143.767	1.101
0.5	y-y	0.821	0.035	0.077	2505.994	2229.603	2026.397	1.144	2101.797	1.103
0.5	y-y	0.805	0.038	0.083	2488.597	2194.471	1986.268	1.145	2058.658	1.105
0.5	y-y	0.789	0.04	0.089	2470.666	2157.566	1944.892	1.146	2014.245	1.106
0.5	y-y	0.772	0.043	0.095	2452.417	2119.116	1902.628	1.145	1968.947	1.107
0.5	y-y	0.754	0.046	0.102	2433.701	2078.853	1859.205	1.145	1922.482	1.107
0.5	y-y	0.735	0.049	0.109	2414.229	2036.406	1814.207	1.144	1874.408	1.107
0.5	y-y	0.715	0.051	0.117	2394.03	1992.071	1767.944	1.143	1825.066	1.107
0.5	y-y	0.695	0.055	0.125	2373.296	1946.24	1720.877	1.141	1774.951	1.106
0.5	y-y	0.674	0.058	0.134	2351.99	1898.751	1672.892	1.139	1723.949	1.105
0.5	y-y	0.653	0.061	0.143	2330.049	1849.191	1623.678	1.136	1671.731	1.103
0.5	y-y	0.631	0.065	0.153	2307.298	1797.559	1573.192	1.133	1618.261	1.102
0.5	y-y	0.609	0.068	0.164	2283.498	1744.595	1521.939	1.130	1564.081	1.099
0.5	y-y	0.586	0.073	0.175	2257.897	1690.363	1469.698	1.126	1508.959	1.096
0.5	y-y	0.562	0.077	0.187	2230.027	1634.541	1416.128	1.121	1452.544	1.093
0.5	y-y	0.538	0.082	0.2	2199.374	1577.091	1361.124	1.116	1394.732	1.089
0.5	y-y	0.513	0.088	0.214	2165.381	1518.902	1305.286	1.111	1336.162	1.085
0.5	y-y	0.488	0.094	0.229	2127.9	1459.501	1248.368	1.104	1276.581	1.080
0.5	y-y	0.463	0.101	0.245	2085.943	1397.864	1189.471	1.099	1215.057	1.076
0.5	y-y	0.437	0.109	0.264	2038.5	1333.668	1128.284	1.093	1151.280	1.071
0.5	y-y	0.41	0.118	0.284	1984.681	1267.601	1065.321	1.087	1085.799	1.067
0.5	y-y	0.383	0.129	0.307	1926.117	1201.319	1002.475	1.080	1020.588	1.061
0.5	y-y	0.357	0.14	0.332	1863.787	1135.252	940.436	1.071	956.358	1.053

0.5	y-y	0.33	0.154	0.36	1794.475	1069.409	878.507	1.060	892.385	1.044
0.5	y-y	0.303	0.169	0.392	1719.718	992.468	809.708	1.056	821.483	1.041
0.5	y-y	0.276	0.186	0.429	1638.53	907.042	735.986	1.058	745.703	1.044
0.5	y-y	0.249	0.205	0.47	1556.328	827.576	668.083	1.055	676.079	1.042
0.5	y-y	0.223	0.228	0.519	1462.53	745.368	598.337	1.052	604.743	1.041
0.5	y-y	0.197	0.257	0.578	1355.288	659.141	526.064	1.057	531.009	1.047
0.5	y-y	0.17	0.296	0.654	1233.209	570.639	452.643	1.063	456.299	1.055
0.5	y-y	0.146	0.342	0.743	1111.471	492.254	388.031	1.062	390.715	1.054
0.5	y-y	0.121	0.408	0.871	955.365	406.518	317.201	1.075	318.993	1.069
0.5	y-y	0.097	0.506	1.045	766.551	326.257	249.032	1.098	250.135	1.093
0.5	y-y	0.072	0.671	1.339	553.698	244.348	180.359	1.135	180.937	1.132
0.5	y-y	0.049	0.969	1.886	357.06	165.408	117.755	1.180	118.000	1.178
0.5	y-y	0.025	1.825	3.473	171.705	91.128	60.815	1.181	60.880	1.180
0.75	y-y	0.893	0.034	0.047	2514.293	2422.656	2190.919	1.151	2279.327	1.107
0.75	y-y	0.882	0.036	0.05	2498.273	2401.586	2161.689	1.153	2247.707	1.109
0.75	y-y	0.871	0.039	0.054	2481.562	2379.472	2131.44	1.155	2215.021	1.111
0.75	y-y	0.86	0.041	0.057	2464.084	2356.347	2100.182	1.156	2181.283	1.113
0.75	y-y	0.847	0.044	0.061	2445.87	2332.35	2068.091	1.157	2146.686	1.115
0.75	y-y	0.835	0.047	0.065	2426.956	2307.571	2035.301	1.158	2111.377	1.117
0.75	y-y	0.821	0.05	0.069	2407.303	2281.947	2001.77	1.159	2075.315	1.118
0.75	y-y	0.807	0.053	0.073	2386.928	2255.374	1967.47	1.159	2038.471	1.119
0.75	y-y	0.793	0.056	0.077	2365.841	2227.574	1932.238	1.159	2000.675	1.120
0.75	y-y	0.778	0.059	0.082	2344.158	2198.582	1896.223	1.159	1962.089	1.120
0.75	y-y	0.763	0.062	0.087	2321.603	2168.47	1859.342	1.158	1922.629	1.120
0.75	y-y	0.746	0.066	0.092	2298.458	2137.14	1821.751	1.157	1882.462	1.120
0.75	y-y	0.73	0.07	0.098	2274.649	2104.566	1783.426	1.156	1841.569	1.119
0.75	y-y	0.712	0.074	0.104	2249.94	2070.401	1744.021	1.154	1799.583	1.118
0.75	y-y	0.695	0.078	0.11	2224.279	2034.694	1703.602	1.151	1756.580	1.117
0.75	y-y	0.676	0.082	0.116	2197.858	1997.539	1662.406	1.149	1712.815	1.115
0.75	y-y	0.657	0.087	0.123	2170.26	1958.929	1620.246	1.145	1668.093	1.112
0.75	y-y	0.637	0.092	0.13	2141.219	1918.78	1576.985	1.141	1622.276	1.110
0.75	y-y	0.617	0.097	0.138	2110.764	1876.945	1532.624	1.137	1575.368	1.107
0.75	y-y	0.597	0.102	0.146	2078.667	1832.948	1486.812	1.133	1527.005	1.103
0.75	y-y	0.575	0.108	0.155	2044.691	1786.843	1439.572	1.129	1477.219	1.100
0.75	y-y	0.553	0.114	0.165	2008.716	1738.995	1391.191	1.124	1426.320	1.096
0.75	y-y	0.531	0.121	0.175	1970.554	1689.539	1341.774	1.118	1374.422	1.092
0.75	y-y	0.509	0.128	0.186	1929.861	1637.864	1290.895	1.113	1321.086	1.087
0.75	y-y	0.485	0.136	0.198	1886.063	1583.255	1238.009	1.107	1265.751	1.083
0.75	y-y	0.462	0.145	0.212	1838.249	1526.667	1183.501	1.101	1208.828	1.078
0.75	y-y	0.437	0.155	0.227	1785.984	1468.349	1127.541	1.095	1150.507	1.073
0.75	y-y	0.412	0.167	0.243	1729.231	1407.162	1069.662	1.089	1090.308	1.068
0.75	y-y	0.387	0.18	0.261	1667.965	1343.205	1010.148	1.083	1028.541	1.064
0.75	y-y	0.363	0.193	0.28	1605.891	1281.228	953.16	1.075	969.520	1.057
0.75	y-y	0.338	0.209	0.302	1537.898	1216.855	894.485	1.067	908.877	1.050
0.75	y-y	0.312	0.228	0.327	1463.484	1149.099	833.694	1.058	846.183	1.043
0.75	y-y	0.288	0.249	0.354	1386.541	1084.962	775.889	1.047	786.695	1.033
0.75	y-y	0.264	0.271	0.383	1309.631	1015.762	717.365	1.038	726.593	1.025
0.75	y-y	0.239	0.298	0.419	1227.069	930.501	651.222	1.038	658.818	1.026
0.75	y-y	0.216	0.33	0.459	1141.693	848.588	588.148	1.036	594.336	1.025
0.75	y-y	0.192	0.369	0.508	1050.962	762.761	523.98	1.033	528.887	1.024
0.75	y-y	0.168	0.415	0.569	939.435	670.11	453.989	1.047	457.668	1.039
0.75	y-y	0.146	0.472	0.644	824.105	581.335	387.665	1.062	390.344	1.055
0.75	y-y	0.124	0.548	0.742	701.072	493.378	322.668	1.082	324.521	1.075
0.75	y-y	0.101	0.657	0.884	567.639	399.241	255.6	1.117	256.762	1.112
0.75	y-y	0.08	0.813	1.088	441.922	311.257	195.253	1.155	195.930	1.151
0.75	y-y	0.059	1.063	1.413	319.966	229.73	140.367	1.196	140.716	1.193
0.75	y-y	0.039	1.589	2.101	200.965	145.903	87.14	1.250	87.275	1.248

0.75	y-y	0.018	3.29	4.3	92.825	96.976	48.238	1.059	48.279	1.058
1	y-y	0.85	0.053	0.053	2387.036	2387.036	2067.002	1.161	2145.513	1.118
1	y-y	0.838	0.055	0.055	2367.68	2367.68	2038.147	1.162	2114.440	1.120
1	y-y	0.827	0.058	0.058	2347.81	2347.81	2008.876	1.162	2082.954	1.121
1	y-y	0.815	0.062	0.062	2327.435	2327.435	1979.226	1.162	2051.094	1.122
1	y-y	0.802	0.065	0.065	2306.517	2306.517	1949.161	1.162	2018.824	1.122
1	y-y	0.789	0.068	0.068	2284.949	2284.949	1918.553	1.162	1986.008	1.122
1	y-y	0.776	0.072	0.072	2262.479	2262.479	1887.08	1.161	1952.302	1.122
1	y-y	0.762	0.076	0.076	2239.211	2239.211	1854.927	1.160	1917.908	1.122
1	y-y	0.748	0.079	0.079	2215.232	2215.232	1822.246	1.159	1882.992	1.122
1	y-y	0.733	0.083	0.083	2190.447	2190.447	1788.945	1.158	1847.455	1.121
1	y-y	0.718	0.088	0.088	2164.767	2164.767	1754.94	1.156	1811.212	1.120
1	y-y	0.703	0.092	0.092	2138.16	2138.16	1720.233	1.154	1774.266	1.119
1	y-y	0.687	0.097	0.097	2110.393	2110.393	1684.568	1.151	1736.350	1.117
1	y-y	0.67	0.102	0.102	2081.335	2081.335	1647.841	1.149	1697.357	1.115
1	y-y	0.653	0.107	0.107	2051.034	2051.034	1610.173	1.146	1657.419	1.113
1	y-y	0.636	0.112	0.112	2019.501	2019.501	1571.643	1.143	1616.623	1.111
1	y-y	0.618	0.118	0.118	1986.758	1986.758	1532.336	1.140	1575.063	1.109
1	y-y	0.6	0.124	0.124	1952.685	1952.685	1492.173	1.136	1532.660	1.106
1	y-y	0.582	0.13	0.13	1917.524	1917.524	1451.495	1.132	1489.777	1.103
1	y-y	0.563	0.137	0.137	1880.886	1880.886	1409.917	1.127	1446.010	1.099
1	y-y	0.543	0.145	0.145	1842.027	1842.027	1366.692	1.122	1400.579	1.095
1	y-y	0.523	0.152	0.152	1800.928	1800.928	1321.927	1.117	1353.605	1.091
1	y-y	0.502	0.161	0.161	1757.815	1757.815	1275.983	1.112	1305.472	1.087
1	y-y	0.481	0.17	0.17	1712.686	1712.686	1228.97	1.106	1256.303	1.082
1	y-y	0.46	0.18	0.18	1665.22	1665.22	1180.672	1.101	1205.877	1.078
1	y-y	0.439	0.191	0.191	1614.633	1614.633	1130.448	1.095	1153.534	1.074
1	y-y	0.416	0.204	0.204	1560.964	1560.964	1078.525	1.090	1099.518	1.069
1	y-y	0.394	0.217	0.217	1504.174	1504.174	1025.045	1.085	1043.990	1.065
1	y-y	0.372	0.232	0.232	1448.376	1448.376	973.909	1.078	990.995	1.059
1	y-y	0.349	0.248	0.248	1389.596	1389.596	921.489	1.070	936.771	1.053
1	y-y	0.327	0.266	0.266	1326.97	1326.97	867.208	1.064	880.729	1.048
1	y-y	0.304	0.287	0.287	1261.139	1261.139	811.819	1.057	823.657	1.042
1	y-y	0.282	0.308	0.308	1198.263	1198.263	760.448	1.048	770.825	1.034
1	y-y	0.261	0.332	0.332	1135.646	1135.646	710.709	1.036	719.765	1.023
1	y-y	0.239	0.36	0.36	1070.641	1070.641	660.514	1.023	668.329	1.011
1	y-y	0.218	0.393	0.393	990.537	990.537	600.587	1.023	607.041	1.012
1	y-y	0.197	0.431	0.431	903.869	903.869	538.027	1.032	543.201	1.022
1	y-y	0.177	0.473	0.473	821.519	821.519	480.666	1.039	484.791	1.030
1	y-y	0.157	0.525	0.525	735.907	735.907	423.071	1.049	426.264	1.041
1	y-y	0.137	0.593	0.593	639.796	639.796	360.76	1.073	363.079	1.067
1	y-y	0.117	0.682	0.682	543.629	543.629	300.76	1.099	302.370	1.093
1	y-y	0.099	0.792	0.792	456.098	456.098	248.08	1.121	249.174	1.116
1	y-y	0.08	0.955	0.955	363.484	363.484	194.241	1.159	194.911	1.155
1	y-y	0.061	1.221	1.221	271.671	271.671	142.699	1.203	143.060	1.200
1	y-y	0.042	1.734	1.734	181.895	181.895	93.973	1.252	94.130	1.250
1	y-y	0.025	2.819	2.819	104.19	104.19	53.074	1.321	53.124	1.320

Tabla B7 Valores de r_1 de la sección 8 (80 cm x 80 cm con ρ = 0.06 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.896	0.042	0.01	3096.33	3410.858	2977.077	1.074	3106.673	1.029
0.25	x-x	0.887	0.046	0.011	3067.178	3401.315	2942.975	1.075	3069.556	1.031
0.25	x-x	0.878	0.049	0.011	3035.926	3391.263	2906.809	1.077	3030.233	1.034
0.25	x-x	0.868	0.053	0.012	3002.638	3380.684	2868.664	1.079	2988.803	1.036
0.25	x-x	0.857	0.058	0.013	2967.283	3369.371	2828.409	1.081	2945.131	1.038

0.25	x-x	0.845	0.062	0.014	2929.702	3356.653	2785.491	1.083	2898.627	1.041
0.25	x-x	0.833	0.067	0.015	2889.39	3343.334	2740.085	1.085	2849.490	1.043
0.25	x-x	0.82	0.073	0.017	2845.59	3329.276	2691.484	1.087	2796.968	1.046
0.25	x-x	0.805	0.079	0.018	2798.041	3314.618	2639.619	1.089	2741.001	1.048
0.25	x-x	0.79	0.086	0.019	2747.831	3299.796	2585.796	1.090	2683.009	1.051
0.25	x-x	0.774	0.093	0.021	2694.752	3285.126	2530.047	1.092	2623.038	1.053
0.25	x-x	0.757	0.1	0.023	2638.145	3270.246	2471.593	1.093	2560.262	1.055
0.25	x-x	0.739	0.109	0.024	2578.187	3255.43	2410.776	1.094	2495.060	1.057
0.25	x-x	0.72	0.118	0.026	2515.27	3241.435	2348.34	1.094	2428.243	1.058
0.25	x-x	0.7	0.127	0.027	2449.357	3227.757	2283.946	1.094	2359.456	1.059
0.25	x-x	0.68	0.138	0.029	2381.035	3214.018	2217.894	1.094	2289.032	1.060
0.25	x-x	0.659	0.149	0.03	2310.389	3199.616	2149.979	1.093	2216.761	1.060
0.25	x-x	0.637	0.161	0.032	2237.576	3183.652	2079.985	1.093	2142.427	1.061
0.25	x-x	0.615	0.174	0.034	2162.734	3165.986	2008.07	1.092	2066.208	1.061
0.25	x-x	0.592	0.188	0.037	2085.924	3146.647	1934.393	1.091	1988.286	1.062
0.25	x-x	0.568	0.203	0.039	2007.364	3125.7	1859.255	1.090	1908.989	1.061
0.25	x-x	0.543	0.219	0.042	1926.889	3102.291	1782.311	1.088	1827.963	1.061
0.25	x-x	0.518	0.237	0.045	1843.71	3074.958	1702.568	1.087	1744.178	1.061
0.25	x-x	0.492	0.258	0.049	1758.238	3041.983	1620.116	1.084	1657.749	1.060
0.25	x-x	0.466	0.281	0.053	1669.94	3003.848	1534.953	1.082	1568.693	1.059
0.25	x-x	0.438	0.307	0.059	1577.409	2960.647	1446.193	1.079	1476.105	1.058
0.25	x-x	0.408	0.338	0.065	1480.864	2910.344	1353.841	1.077	1380.021	1.056
0.25	x-x	0.378	0.375	0.073	1379.408	2848.734	1256.696	1.073	1279.222	1.054
0.25	x-x	0.346	0.42	0.082	1271.467	2773.239	1153.618	1.071	1172.573	1.054
0.25	x-x	0.314	0.474	0.093	1163.341	2690.176	1051.446	1.066	1067.168	1.050
0.25	x-x	0.282	0.537	0.105	1054.537	2606.069	950.788	1.059	963.626	1.045
0.25	x-x	0.251	0.612	0.118	929.954	2513.868	838.314	1.066	848.278	1.054
0.25	x-x	0.22	0.702	0.134	813.827	2406.645	733.12	1.070	740.729	1.059
0.25	x-x	0.192	0.803	0.151	710.682	2296.201	640.059	1.069	645.851	1.059
0.25	x-x	0.165	0.927	0.177	610.816	2142.216	548.331	1.071	552.577	1.062
0.25	x-x	0.137	1.097	0.218	516.628	1934.192	460.322	1.062	463.310	1.055
0.25	x-x	0.109	1.35	0.275	369.096	1692.559	331.137	1.179	332.681	1.173
0.25	x-x	0.081	1.783	0.368	291.223	1397.579	258.46	1.120	259.399	1.116
0.25	x-x	0.053	2.631	0.569	238.964	998.784	203.844	0.936	204.428	0.933
0.25	x-x	0.025	5.445	1.231	236.236	495.479	167.474	0.533	167.868	0.532
0.5	x-x	0.881	0.05	0.023	3031.939	3267.755	2812.163	1.118	2927.521	1.074
0.5	x-x	0.872	0.053	0.024	3004.723	3254.037	2778.738	1.120	2891.315	1.076
0.5	x-x	0.862	0.057	0.026	2975.941	3239.623	2743.772	1.121	2853.478	1.078
0.5	x-x	0.851	0.06	0.028	2945.405	3224.342	2707.031	1.122	2813.761	1.080
0.5	x-x	0.84	0.064	0.029	2913.005	3208.1	2668.412	1.123	2772.060	1.081
0.5	x-x	0.828	0.069	0.031	2878.728	3190.817	2627.909	1.124	2728.376	1.083
0.5	x-x	0.816	0.073	0.034	2842.22	3172.312	2585.176	1.126	2682.342	1.085
0.5	x-x	0.802	0.078	0.036	2803.377	3152.609	2540.225	1.127	2633.979	1.087
0.5	x-x	0.788	0.084	0.038	2762.67	3131.833	2493.603	1.128	2583.886	1.089
0.5	x-x	0.774	0.089	0.041	2720.288	3110.236	2445.689	1.129	2532.475	1.090
0.5	x-x	0.758	0.095	0.043	2675.996	3087.265	2396.015	1.129	2479.253	1.091
0.5	x-x	0.742	0.102	0.046	2629.357	3063.115	2344.436	1.129	2424.069	1.092
0.5	x-x	0.725	0.108	0.049	2580.446	3037.972	2291.2	1.129	2367.199	1.093
0.5	x-x	0.708	0.116	0.052	2528.945	3011.523	2235.959	1.129	2308.279	1.094
0.5	x-x	0.689	0.124	0.056	2474.609	2983.818	2178.645	1.129	2247.248	1.095
0.5	x-x	0.67	0.132	0.059	2418.066	2955.053	2119.934	1.128	2184.835	1.095
0.5	x-x	0.651	0.141	0.063	2359.221	2924.961	2059.693	1.127	2120.904	1.095
0.5	x-x	0.63	0.151	0.067	2297.702	2893.76	1997.826	1.126	2055.363	1.094
0.5	x-x	0.609	0.162	0.071	2233.806	2860.668	1934.27	1.123	1988.156	1.093
0.5	x-x	0.587	0.173	0.076	2166.727	2824.792	1868.147	1.121	1918.364	1.091
0.5	x-x	0.564	0.186	0.081	2096.824	2785.694	1799.712	1.118	1846.272	1.090
0.5	x-x	0.54	0.199	0.086	2024.916	2743.749	1729.9	1.114	1772.874	1.087

0.5	x-x	0.516	0.214	0.092	1950.113	2698.095	1657.884	1.111	1697.314	1.085
0.5	x-x	0.491	0.231	0.099	1872.115	2647.446	1583.196	1.107	1619.115	1.083
0.5	x-x	0.466	0.25	0.107	1791.634	2590.674	1506.239	1.103	1538.715	1.080
0.5	x-x	0.439	0.271	0.116	1707.854	2526.786	1426.441	1.099	1455.534	1.077
0.5	x-x	0.412	0.295	0.127	1620.542	2453.807	1343.43	1.095	1369.205	1.074
0.5	x-x	0.384	0.322	0.139	1528.982	2370.506	1256.855	1.091	1279.387	1.071
0.5	x-x	0.355	0.355	0.155	1432.72	2275.376	1166.566	1.086	1185.952	1.069
0.5	x-x	0.326	0.394	0.173	1331.929	2168.121	1073.22	1.082	1089.606	1.066
0.5	x-x	0.296	0.439	0.194	1229.996	2054.152	980.791	1.077	994.458	1.062
0.5	x-x	0.266	0.495	0.219	1127.35	1928.487	888.626	1.068	899.831	1.054
0.5	x-x	0.236	0.563	0.25	1009.774	1789.182	788.027	1.067	796.826	1.055
0.5	x-x	0.206	0.644	0.287	885.986	1648.169	687.202	1.072	693.884	1.062
0.5	x-x	0.177	0.749	0.334	762.293	1494.079	587.925	1.077	592.809	1.068
0.5	x-x	0.148	0.891	0.398	638.286	1321.936	489.496	1.081	492.876	1.073
0.5	x-x	0.119	1.097	0.494	516.567	1128.664	393.451	1.081	395.632	1.075
0.5	x-x	0.091	1.412	0.638	263.693	893.999	215.954	1.507	216.610	1.503
0.5	x-x	0.064	1.989	0.909	156.429	623.992	129.618	1.747	129.854	1.744
0.5	x-x	0.035	3.498	1.626	134.424	342.979	99.26	1.267	99.398	1.265
0.5	x-x	0.01	12.078	5.745	1748.909	213.845	201.295	0.175	201.865	0.175
0.75	x-x	0.843	0.057	0.041	2973.954	3107.755	2647.015	1.137	2748.976	1.095
0.75	x-x	0.833	0.06	0.043	2947.689	3087.545	2611.741	1.138	2710.952	1.096
0.75	x-x	0.822	0.064	0.046	2920.238	3066.256	2575.168	1.139	2671.568	1.098
0.75	x-x	0.811	0.067	0.049	2891.417	3043.73	2537.098	1.140	2630.618	1.100
0.75	x-x	0.799	0.071	0.051	2861.132	3020.452	2497.852	1.141	2588.449	1.101
0.75	x-x	0.786	0.075	0.054	2829.387	2996.198	2457.332	1.141	2544.962	1.102
0.75	x-x	0.773	0.079	0.057	2796.247	2971.061	2415.704	1.141	2500.339	1.103
0.75	x-x	0.759	0.084	0.06	2761.909	2944.878	2373.06	1.141	2454.683	1.103
0.75	x-x	0.745	0.088	0.064	2726.058	2917.533	2329.151	1.141	2407.731	1.104
0.75	x-x	0.73	0.093	0.067	2688.421	2888.787	2283.693	1.141	2359.186	1.104
0.75	x-x	0.715	0.099	0.071	2649.117	2858.705	2236.893	1.140	2309.275	1.104
0.75	x-x	0.699	0.105	0.075	2608.04	2827.045	2188.607	1.139	2257.849	1.104
0.75	x-x	0.682	0.111	0.079	2564.991	2794.018	2138.908	1.138	2204.994	1.104
0.75	x-x	0.665	0.117	0.084	2519.754	2759.734	2087.798	1.137	2150.716	1.104
0.75	x-x	0.648	0.124	0.089	2472.567	2724.077	2035.456	1.135	2095.214	1.103
0.75	x-x	0.629	0.131	0.094	2423.283	2686.518	1981.58	1.134	2038.172	1.102
0.75	x-x	0.611	0.139	0.099	2371.637	2646.562	1925.839	1.132	1979.250	1.101
0.75	x-x	0.591	0.148	0.105	2317.759	2604.037	1868.37	1.129	1918.599	1.099
0.75	x-x	0.571	0.157	0.111	2261.358	2558.949	1809.126	1.126	1856.180	1.098
0.75	x-x	0.55	0.167	0.118	2202.201	2511.025	1747.975	1.123	1791.863	1.096
0.75	x-x	0.529	0.178	0.126	2139.381	2460.134	1684.459	1.120	1725.178	1.094
0.75	x-x	0.506	0.19	0.134	2073.321	2405.488	1618.674	1.117	1656.240	1.091
0.75	x-x	0.484	0.203	0.143	2004.388	2346.722	1550.899	1.113	1585.351	1.089
0.75	x-x	0.46	0.218	0.153	1931.936	2283.319	1480.758	1.109	1512.132	1.086
0.75	x-x	0.436	0.235	0.165	1855.384	2214.531	1407.875	1.105	1436.208	1.083
0.75	x-x	0.411	0.254	0.178	1774.528	2139.111	1331.966	1.102	1357.298	1.081
0.75	x-x	0.386	0.275	0.193	1689.631	2056.299	1253.272	1.098	1275.674	1.079
0.75	x-x	0.359	0.301	0.211	1600.199	1966.113	1171.927	1.094	1191.493	1.076
0.75	x-x	0.333	0.33	0.232	1505.852	1866.391	1087.4	1.091	1104.225	1.075
0.75	x-x	0.306	0.363	0.256	1412.066	1765.342	1005.631	1.085	1020.004	1.070
0.75	x-x	0.279	0.402	0.285	1312.779	1656.273	921.435	1.079	933.488	1.065
0.75	x-x	0.251	0.45	0.32	1208.087	1537.509	834.785	1.073	844.665	1.060
0.75	x-x	0.224	0.506	0.361	1107.508	1417.148	752.827	1.062	760.853	1.051
0.75	x-x	0.197	0.575	0.411	988.368	1291.256	664.026	1.060	670.263	1.051
0.75	x-x	0.171	0.663	0.477	861.029	1158.832	573.364	1.063	578.007	1.054
0.75	x-x	0.144	0.783	0.565	729.229	1004.755	479.31	1.072	482.550	1.065
0.75	x-x	0.118	0.949	0.686	594.162	832.228	383.967	1.097	386.044	1.091
0.75	x-x	0.093	1.191	0.865	506.714	658.466	311.339	1.065	312.703	1.061

0.75	x-x	0.067	1.634	1.191	346.399	506.587	218.312	1.092	218.982	1.089
0.75	x-x	0.042	2.549	1.865	267.68	215.464	123.507	1.217	123.721	1.214
0.75	x-x	0.018	5.789	4.247	210.093	240.649	115.808	0.560	115.996	0.559
1	x-x	0.8	0.061	0.061	2938.111	2938.111	2497.097	1.143	2587.638	1.103
1	x-x	0.789	0.064	0.064	2913.666	2913.666	2461.986	1.143	2549.954	1.104
1	x-x	0.777	0.068	0.068	2888.393	2888.393	2426.111	1.144	2511.490	1.105
1	x-x	0.766	0.071	0.071	2862.086	2862.086	2389.219	1.144	2471.977	1.105
1	x-x	0.754	0.074	0.074	2834.319	2834.319	2350.77	1.144	2430.841	1.106
1	x-x	0.741	0.078	0.078	2805.054	2805.054	2310.779	1.144	2388.104	1.107
1	x-x	0.728	0.082	0.082	2774.99	2774.99	2270.256	1.144	2344.849	1.108
1	x-x	0.714	0.086	0.086	2744.198	2744.198	2229.326	1.143	2301.210	1.108
1	x-x	0.7	0.09	0.09	2712.456	2712.456	2187.73	1.142	2256.915	1.107
1	x-x	0.686	0.095	0.095	2679.492	2679.492	2145.16	1.141	2211.638	1.106
1	x-x	0.671	0.099	0.099	2645.144	2645.144	2101.466	1.139	2165.224	1.106
1	x-x	0.655	0.104	0.104	2608.891	2608.891	2056.069	1.138	2117.062	1.105
1	x-x	0.639	0.11	0.11	2570.861	2570.861	2009.221	1.136	2067.427	1.104
1	x-x	0.623	0.115	0.115	2531.153	2531.153	1961.132	1.134	2016.547	1.103
1	x-x	0.606	0.121	0.121	2489.631	2489.631	1911.726	1.132	1964.346	1.101
1	x-x	0.589	0.128	0.128	2446.226	2446.226	1861.014	1.130	1910.842	1.100
1	x-x	0.571	0.135	0.135	2400.806	2400.806	1808.943	1.127	1855.987	1.098
1	x-x	0.553	0.142	0.142	2352.619	2352.619	1754.779	1.124	1799.014	1.097
1	x-x	0.534	0.15	0.15	2302.297	2302.297	1699.37	1.122	1740.823	1.095
1	x-x	0.515	0.159	0.159	2249.372	2249.372	1642.326	1.119	1681.010	1.093
1	x-x	0.495	0.168	0.168	2193.423	2193.423	1583.35	1.116	1619.276	1.091
1	x-x	0.475	0.179	0.179	2133.694	2133.694	1521.845	1.114	1555.005	1.090
1	x-x	0.454	0.191	0.191	2070.451	2070.451	1458.303	1.111	1488.723	1.088
1	x-x	0.432	0.203	0.203	2003.878	2003.878	1393.106	1.108	1420.842	1.086
1	x-x	0.41	0.218	0.218	1933.248	1933.248	1325.76	1.104	1350.855	1.084
1	x-x	0.387	0.234	0.234	1857.647	1857.647	1255.672	1.101	1278.160	1.082
1	x-x	0.364	0.253	0.253	1777.529	1777.529	1183.554	1.098	1203.513	1.079
1	x-x	0.34	0.275	0.275	1692.56	1692.56	1109.389	1.094	1126.906	1.077
1	x-x	0.316	0.299	0.299	1604.852	1604.852	1035.222	1.090	1050.459	1.074
1	x-x	0.292	0.327	0.327	1515.228	1515.228	961.826	1.084	974.966	1.069
1	x-x	0.268	0.36	0.36	1419.444	1419.444	885.93	1.078	897.066	1.064
1	x-x	0.242	0.401	0.401	1316.135	1316.135	806.87	1.073	816.097	1.060
1	x-x	0.219	0.444	0.444	1219.885	1219.885	735.697	1.063	743.361	1.052
1	x-x	0.196	0.499	0.499	1120.122	1120.122	664.33	1.050	670.573	1.041
1	x-x	0.171	0.57	0.57	997.631	997.631	579.877	1.055	584.627	1.046
1	x-x	0.148	0.658	0.658	867.006	867.006	493.451	1.070	496.886	1.063
1	x-x	0.126	0.772	0.772	739.906	739.906	412.745	1.085	415.146	1.079
1	x-x	0.103	0.938	0.938	602.414	602.414	328.976	1.113	330.500	1.108
1	x-x	0.08	1.195	1.195	505.978	505.978	272.294	1.048	273.337	1.044
1	x-x	0.059	1.604	1.604	327.67	327.67	171.719	1.222	172.134	1.219
1	x-x	0.037	2.506	2.506	279.505	279.505	145.449	0.911	145.746	0.909
1	x-x	0.014	6.382	6.382	153.405	153.405	78.387	0.654	78.473	0.653
0.25	y-y	0.896	0.01	0.042	3410.858	3096.33	2977.077	1.074	3106.673	1.029
0.25	y-y	0.887	0.011	0.046	3401.315	3067.178	2942.975	1.075	3069.556	1.031
0.25	y-y	0.878	0.011	0.049	3391.263	3035.926	2906.809	1.077	3030.233	1.034
0.25	y-y	0.868	0.012	0.053	3380.684	3002.638	2868.664	1.079	2988.803	1.036
0.25	y-y	0.857	0.013	0.058	3369.371	2967.283	2828.409	1.081	2945.131	1.038
0.25	y-y	0.845	0.014	0.062	3356.653	2929.702	2785.491	1.083	2898.627	1.041
0.25	y-y	0.833	0.015	0.067	3343.334	2889.39	2740.085	1.085	2849.490	1.043
0.25	y-y	0.82	0.017	0.073	3329.276	2845.59	2691.484	1.087	2796.968	1.046
0.25	y-y	0.805	0.018	0.079	3314.618	2798.041	2639.619	1.089	2741.001	1.048
0.25	y-y	0.79	0.019	0.086	3299.796	2747.831	2585.796	1.090	2683.009	1.051
0.25	y-y	0.774	0.021	0.093	3285.126	2694.752	2530.047	1.092	2623.038	1.053
0.25	y-y	0.757	0.023	0.1	3270.246	2638.145	2471.593	1.093	2560.262	1.055

0.25	y-y	0.739	0.024	0.109	3255.43	2578.187	2410.776	1.094	2495.060	1.057
0.25	y-y	0.72	0.026	0.118	3241.435	2515.27	2348.34	1.094	2428.243	1.058
0.25	y-y	0.7	0.027	0.127	3227.757	2449.357	2283.946	1.094	2359.456	1.059
0.25	y-y	0.68	0.029	0.138	3214.018	2381.035	2217.894	1.094	2289.032	1.060
0.25	y-y	0.659	0.03	0.149	3199.616	2310.389	2149.979	1.093	2216.761	1.060
0.25	y-y	0.637	0.032	0.161	3183.652	2237.576	2079.985	1.093	2142.427	1.061
0.25	y-y	0.615	0.034	0.174	3165.986	2162.734	2008.07	1.092	2066.208	1.061
0.25	y-y	0.592	0.037	0.188	3146.647	2085.924	1934.393	1.091	1988.286	1.062
0.25	y-y	0.568	0.039	0.203	3125.7	2007.364	1859.255	1.090	1908.989	1.061
0.25	y-y	0.543	0.042	0.219	3102.291	1926.889	1782.311	1.088	1827.963	1.061
0.25	y-y	0.518	0.045	0.237	3074.958	1843.71	1702.568	1.087	1744.178	1.061
0.25	y-y	0.492	0.049	0.258	3041.983	1758.238	1620.116	1.084	1657.749	1.060
0.25	y-y	0.466	0.053	0.281	3003.848	1669.94	1534.953	1.082	1568.693	1.059
0.25	y-y	0.438	0.059	0.307	2960.647	1577.409	1446.193	1.079	1476.105	1.058
0.25	y-y	0.408	0.065	0.338	2910.344	1480.864	1353.841	1.077	1380.021	1.056
0.25	y-y	0.378	0.073	0.375	2848.734	1379.408	1256.696	1.073	1279.222	1.054
0.25	y-y	0.346	0.082	0.42	2773.239	1271.467	1153.618	1.071	1172.573	1.054
0.25	y-y	0.314	0.093	0.474	2690.176	1163.341	1051.446	1.066	1067.168	1.050
0.25	y-y	0.282	0.105	0.537	2606.069	1054.537	950.788	1.059	963.626	1.045
0.25	y-y	0.251	0.118	0.612	2513.868	929.954	838.314	1.066	848.278	1.054
0.25	y-y	0.22	0.134	0.702	2406.645	813.827	733.12	1.070	740.729	1.059
0.25	y-y	0.192	0.151	0.803	2296.201	710.682	640.059	1.069	645.851	1.059
0.25	y-y	0.165	0.177	0.927	2142.216	610.816	548.331	1.071	552.577	1.062
0.25	y-y	0.137	0.218	1.097	1934.192	516.628	460.322	1.062	463.310	1.055
0.25	y-y	0.109	0.275	1.35	1692.559	369.096	331.137	1.179	332.681	1.173
0.25	y-y	0.081	0.368	1.783	1397.579	291.223	258.46	1.120	259.399	1.116
0.25	y-y	0.053	0.569	2.631	998.784	238.964	203.844	0.936	204.428	0.933
0.25	y-y	0.025	1.231	5.445	495.479	236.236	167.474	0.533	167.868	0.532
0.5	y-y	0.881	0.023	0.05	3267.755	3031.939	2812.163	1.118	2927.521	1.074
0.5	y-y	0.872	0.024	0.053	3254.037	3004.723	2778.738	1.120	2891.315	1.076
0.5	y-y	0.862	0.026	0.057	3239.623	2975.941	2743.772	1.121	2853.478	1.078
0.5	y-y	0.851	0.028	0.06	3224.342	2945.405	2707.031	1.122	2813.761	1.080
0.5	y-y	0.84	0.029	0.064	3208.1	2913.005	2668.412	1.123	2772.060	1.081
0.5	y-y	0.828	0.031	0.069	3190.817	2878.728	2627.909	1.124	2728.376	1.083
0.5	y-y	0.816	0.034	0.073	3172.312	2842.22	2585.176	1.126	2682.342	1.085
0.5	y-y	0.802	0.036	0.078	3152.609	2803.377	2540.225	1.127	2633.979	1.087
0.5	y-y	0.788	0.038	0.084	3131.833	2762.67	2493.603	1.128	2583.886	1.089
0.5	y-y	0.774	0.041	0.089	3110.236	2720.288	2445.689	1.129	2532.475	1.090
0.5	y-y	0.758	0.043	0.095	3087.265	2675.996	2396.015	1.129	2479.253	1.091
0.5	y-y	0.742	0.046	0.102	3063.115	2629.357	2344.436	1.129	2424.069	1.092
0.5	y-y	0.725	0.049	0.108	3037.972	2580.446	2291.2	1.129	2367.199	1.093
0.5	y-y	0.708	0.052	0.116	3011.523	2528.945	2235.959	1.129	2308.279	1.094
0.5	y-y	0.689	0.056	0.124	2983.818	2474.609	2178.645	1.129	2247.248	1.095
0.5	y-y	0.67	0.059	0.132	2955.053	2418.066	2119.934	1.128	2184.835	1.095
0.5	y-y	0.651	0.063	0.141	2924.961	2359.221	2059.693	1.127	2120.904	1.095
0.5	y-y	0.63	0.067	0.151	2893.76	2297.702	1997.826	1.126	2055.363	1.094
0.5	y-y	0.609	0.071	0.162	2860.668	2233.806	1934.27	1.123	1988.156	1.093
0.5	y-y	0.587	0.076	0.173	2824.792	2166.727	1868.147	1.121	1918.364	1.091
0.5	y-y	0.564	0.081	0.186	2785.694	2096.824	1799.712	1.118	1846.272	1.090
0.5	y-y	0.54	0.086	0.199	2743.749	2024.916	1729.9	1.114	1772.874	1.087
0.5	y-y	0.516	0.092	0.214	2698.095	1950.113	1657.884	1.111	1697.314	1.085
0.5	y-y	0.491	0.099	0.231	2647.446	1872.115	1583.196	1.107	1619.115	1.083
0.5	y-y	0.466	0.107	0.25	2590.674	1791.634	1506.239	1.103	1538.715	1.080
0.5	y-y	0.439	0.116	0.271	2526.786	1707.854	1426.441	1.099	1455.534	1.077
0.5	y-y	0.412	0.127	0.295	2453.807	1620.542	1343.43	1.095	1369.205	1.074
0.5	y-y	0.384	0.139	0.322	2370.506	1528.982	1256.855	1.091	1279.387	1.071
0.5	y-y	0.355	0.155	0.355	2275.376	1432.72	1166.566	1.086	1185.952	1.069

0.5	y-y	0.326	0.173	0.394	2168.121	1331.929	1073.22	1.082	1089.606	1.066
0.5	y-y	0.296	0.194	0.439	2054.152	1229.996	980.791	1.077	994.458	1.062
0.5	y-y	0.266	0.219	0.495	1928.487	1127.35	888.626	1.068	899.831	1.054
0.5	y-y	0.236	0.25	0.563	1789.182	1009.774	788.027	1.067	796.826	1.055
0.5	y-y	0.206	0.287	0.644	1648.169	885.986	687.202	1.072	693.884	1.062
0.5	y-y	0.177	0.334	0.749	1494.079	762.293	587.925	1.077	592.809	1.068
0.5	y-y	0.148	0.398	0.891	1321.936	638.286	489.496	1.081	492.876	1.073
0.5	y-y	0.119	0.494	1.097	1128.664	516.567	393.451	1.081	395.632	1.075
0.5	y-y	0.091	0.638	1.412	893.999	263.693	215.954	1.507	216.610	1.503
0.5	y-y	0.064	0.909	1.989	623.992	156.429	129.618	1.747	129.854	1.744
0.5	y-y	0.035	1.626	3.498	342.979	134.424	99.26	1.267	99.398	1.265
0.5	y-y	0.01	5.745	12.078	213.845	1748.909	201.295	0.175	201.865	0.175
0.75	y-y	0.843	0.041	0.057	3107.755	2973.954	2647.015	1.137	2748.976	1.095
0.75	y-y	0.833	0.043	0.06	3087.545	2947.689	2611.741	1.138	2710.952	1.096
0.75	y-y	0.822	0.046	0.064	3066.256	2920.238	2575.168	1.139	2671.568	1.098
0.75	y-y	0.811	0.049	0.067	3043.73	2891.417	2537.098	1.140	2630.618	1.100
0.75	y-y	0.799	0.051	0.071	3020.452	2861.132	2497.852	1.141	2588.449	1.101
0.75	y-y	0.786	0.054	0.075	2996.198	2829.387	2457.332	1.141	2544.962	1.102
0.75	y-y	0.773	0.057	0.079	2971.061	2796.247	2415.704	1.141	2500.339	1.103
0.75	y-y	0.759	0.06	0.084	2944.878	2761.909	2373.06	1.141	2454.683	1.103
0.75	y-y	0.745	0.064	0.088	2917.533	2726.058	2329.151	1.141	2407.731	1.104
0.75	y-y	0.73	0.067	0.093	2888.787	2688.421	2283.693	1.141	2359.186	1.104
0.75	y-y	0.715	0.071	0.099	2858.705	2649.117	2236.893	1.140	2309.275	1.104
0.75	y-y	0.699	0.075	0.105	2827.045	2608.04	2188.607	1.139	2257.849	1.104
0.75	y-y	0.682	0.079	0.111	2794.018	2564.991	2138.908	1.138	2204.994	1.104
0.75	y-y	0.665	0.084	0.117	2759.734	2519.754	2087.798	1.137	2150.716	1.104
0.75	y-y	0.648	0.089	0.124	2724.077	2472.567	2035.456	1.135	2095.214	1.103
0.75	y-y	0.629	0.094	0.131	2686.518	2423.283	1981.58	1.134	2038.172	1.102
0.75	y-y	0.611	0.099	0.139	2646.562	2371.637	1925.839	1.132	1979.250	1.101
0.75	y-y	0.591	0.105	0.148	2604.037	2317.759	1868.37	1.129	1918.599	1.099
0.75	y-y	0.571	0.111	0.157	2558.949	2261.358	1809.126	1.126	1856.180	1.098
0.75	y-y	0.55	0.118	0.167	2511.025	2202.201	1747.975	1.123	1791.863	1.096
0.75	y-y	0.529	0.126	0.178	2460.134	2139.381	1684.459	1.120	1725.178	1.094
0.75	y-y	0.506	0.134	0.19	2405.488	2073.321	1618.674	1.117	1656.240	1.091
0.75	y-y	0.484	0.143	0.203	2346.722	2004.388	1550.899	1.113	1585.351	1.089
0.75	y-y	0.46	0.153	0.218	2283.319	1931.936	1480.758	1.109	1512.132	1.086
0.75	y-y	0.436	0.165	0.235	2214.531	1855.384	1407.875	1.105	1436.208	1.083
0.75	y-y	0.411	0.178	0.254	2139.111	1774.528	1331.966	1.102	1357.298	1.081
0.75	y-y	0.386	0.193	0.275	2056.299	1689.631	1253.272	1.098	1275.674	1.079
0.75	y-y	0.359	0.211	0.301	1966.113	1600.199	1171.927	1.094	1191.493	1.076
0.75	y-y	0.333	0.232	0.33	1866.391	1505.852	1087.4	1.091	1104.225	1.075
0.75	y-y	0.306	0.256	0.363	1765.342	1412.066	1005.631	1.085	1020.004	1.070
0.75	y-y	0.279	0.285	0.402	1656.273	1312.779	921.435	1.079	933.488	1.065
0.75	y-y	0.251	0.32	0.45	1537.509	1208.087	834.785	1.073	844.665	1.060
0.75	y-y	0.224	0.361	0.506	1417.148	1107.508	752.827	1.062	760.853	1.051
0.75	y-y	0.197	0.411	0.575	1291.256	988.368	664.026	1.060	670.263	1.051
0.75	y-y	0.171	0.477	0.663	1158.832	861.029	573.364	1.063	578.007	1.054
0.75	y-y	0.144	0.565	0.783	1004.755	729.229	479.31	1.072	482.550	1.065
0.75	y-y	0.118	0.686	0.949	832.228	594.162	383.967	1.097	386.044	1.091
0.75	y-y	0.093	0.865	1.191	658.466	506.714	311.339	1.065	312.703	1.061
0.75	y-y	0.067	1.191	1.634	506.587	346.399	218.312	1.092	218.982	1.089
0.75	y-y	0.042	1.865	2.549	215.464	267.68	123.507	1.217	123.721	1.214
0.75	y-y	0.018	4.247	5.789	240.649	210.093	115.808	0.560	115.996	0.559
1	y-y	0.8	0.061	0.061	2938.111	2938.111	2497.097	1.143	2587.638	1.103
1	y-y	0.789	0.064	0.064	2913.666	2913.666	2461.986	1.143	2549.954	1.104
1	y-y	0.777	0.068	0.068	2888.393	2888.393	2426.111	1.144	2511.490	1.105
1	y-y	0.766	0.071	0.071	2862.086	2862.086	2389.219	1.144	2471.977	1.105

1	y-y	0.754	0.074	0.074	2834.319	2834.319	2350.77	1.144	2430.841	1.106
1	y-y	0.741	0.078	0.078	2805.054	2805.054	2310.779	1.144	2388.104	1.107
1	y-y	0.728	0.082	0.082	2774.99	2774.99	2270.256	1.144	2344.849	1.108
1	y-y	0.714	0.086	0.086	2744.198	2744.198	2229.326	1.143	2301.210	1.108
1	y-y	0.7	0.09	0.09	2712.456	2712.456	2187.73	1.142	2256.915	1.107
1	y-y	0.686	0.095	0.095	2679.492	2679.492	2145.16	1.141	2211.638	1.106
1	y-y	0.671	0.099	0.099	2645.144	2645.144	2101.466	1.139	2165.224	1.106
1	y-y	0.655	0.104	0.104	2608.891	2608.891	2056.069	1.138	2117.062	1.105
1	y-y	0.639	0.11	0.11	2570.861	2570.861	2009.221	1.136	2067.427	1.104
1	y-y	0.623	0.115	0.115	2531.153	2531.153	1961.132	1.134	2016.547	1.103
1	y-y	0.606	0.121	0.121	2489.631	2489.631	1911.726	1.132	1964.346	1.101
1	y-y	0.589	0.128	0.128	2446.226	2446.226	1861.014	1.130	1910.842	1.100
1	y-y	0.571	0.135	0.135	2400.806	2400.806	1808.943	1.127	1855.987	1.098
1	y-y	0.553	0.142	0.142	2352.619	2352.619	1754.779	1.124	1799.014	1.097
1	y-y	0.534	0.15	0.15	2302.297	2302.297	1699.37	1.122	1740.823	1.095
1	y-y	0.515	0.159	0.159	2249.372	2249.372	1642.326	1.119	1681.010	1.093
1	y-y	0.495	0.168	0.168	2193.423	2193.423	1583.35	1.116	1619.276	1.091
1	y-y	0.475	0.179	0.179	2133.694	2133.694	1521.845	1.114	1555.005	1.090
1	y-y	0.454	0.191	0.191	2070.451	2070.451	1458.303	1.111	1488.723	1.088
1	y-y	0.432	0.203	0.203	2003.878	2003.878	1393.106	1.108	1420.842	1.086
1	y-y	0.41	0.218	0.218	1933.248	1933.248	1325.76	1.104	1350.855	1.084
1	y-y	0.387	0.234	0.234	1857.647	1857.647	1255.672	1.101	1278.160	1.082
1	y-y	0.364	0.253	0.253	1777.529	1777.529	1183.554	1.098	1203.513	1.079
1	y-y	0.34	0.275	0.275	1692.56	1692.56	1109.389	1.094	1126.906	1.077
1	y-y	0.316	0.299	0.299	1604.852	1604.852	1035.222	1.090	1050.459	1.074
1	y-y	0.292	0.327	0.327	1515.228	1515.228	961.826	1.084	974.966	1.069
1	y-y	0.268	0.36	0.36	1419.444	1419.444	885.93	1.078	897.066	1.064
1	y-y	0.242	0.401	0.401	1316.135	1316.135	806.87	1.073	816.097	1.060
1	y-y	0.219	0.444	0.444	1219.885	1219.885	735.697	1.063	743.361	1.052
1	y-y	0.196	0.499	0.499	1120.122	1120.122	664.33	1.050	670.573	1.041
1	y-y	0.171	0.57	0.57	997.631	997.631	579.877	1.055	584.627	1.046
1	y-y	0.148	0.658	0.658	867.006	867.006	493.451	1.070	496.886	1.063
1	y-y	0.126	0.772	0.772	739.906	739.906	412.745	1.085	415.146	1.079
1	y-y	0.103	0.938	0.938	602.414	602.414	328.976	1.113	330.500	1.108
1	y-y	0.08	1.195	1.195	505.978	505.978	272.294	1.048	273.337	1.044
1	y-y	0.059	1.604	1.604	327.67	327.67	171.719	1.222	172.134	1.219
1	y-y	0.037	2.506	2.506	279.505	279.505	145.449	0.911	145.746	0.909
1	y-y	0.014	6.382	6.382	153.405	153.405	78.387	0.654	78.473	0.653

Tabla B.8 Valores de r_1 de la sección 10 (40 cm x 60 cm con ρ = 0.06 y f'_c = 250 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.864	0.033	0.004	952.712	1079	928.935	1.033	969.457	0.990
0.25	x-x	0.855	0.036	0.004	943.923	1077.058	919.164	1.034	958.82	0.991
0.25	x-x	0.846	0.038	0.004	934.639	1074.984	908.876	1.035	947.63	0.992
0.25	x-x	0.837	0.041	0.004	924.813	1072.765	898.027	1.036	935.842	0.994
0.25	x-x	0.827	0.043	0.005	914.35	1070.377	886.52	1.037	923.353	0.995
0.25	x-x	0.817	0.046	0.005	903.209	1067.808	874.322	1.038	910.128	0.997
0.25	x-x	0.805	0.05	0.005	891.364	1065.041	861.409	1.039	896.143	0.999
0.25	x-x	0.793	0.053	0.006	878.77	1062.043	847.732	1.040	881.35	1.000
0.25	x-x	0.781	0.057	0.006	865.26	1058.79	833.14	1.041	865.589	1.002
0.25	x-x	0.767	0.061	0.007	850.499	1055.253	817.326	1.043	848.532	1.004
0.25	x-x	0.752	0.066	0.007	834.372	1051.393	800.187	1.045	830.074	1.007
0.25	x-x	0.737	0.071	0.008	817.377	1047.489	782.368	1.047	810.915	1.010
0.25	x-x	0.72	0.077	0.008	799.513	1043.94	764.086	1.047	791.291	1.011
0.25	x-x	0.703	0.083	0.008	780.567	1040.509	745.007	1.048	770.847	1.013

0.25	x-x	0.684	0.09	0.009	760.546	1036.9	724.984	1.049	749.432	1.015
0.25	x-x	0.665	0.097	0.009	739.693	1032.911	704.16	1.049	727.201	1.016
0.25	x-x	0.645	0.105	0.01	718.136	1028.819	682.797	1.049	704.439	1.017
0.25	x-x	0.624	0.113	0.011	695.957	1024.405	660.883	1.049	681.138	1.018
0.25	x-x	0.603	0.122	0.011	673.092	1019.653	638.37	1.049	657.249	1.019
0.25	x-x	0.581	0.132	0.012	649.303	1014.464	615.03	1.049	632.535	1.020
0.25	x-x	0.558	0.143	0.013	624.696	1008.617	590.906	1.049	607.047	1.021
0.25	x-x	0.534	0.155	0.014	599.352	1002.11	566.109	1.048	580.906	1.022
0.25	x-x	0.51	0.168	0.015	573.179	994.838	540.562	1.048	554.038	1.022
0.25	x-x	0.484	0.183	0.016	545.93	986.637	514.043	1.047	526.214	1.023
0.25	x-x	0.458	0.2	0.018	517.539	977.464	486.533	1.046	497.422	1.023
0.25	x-x	0.43	0.22	0.019	487.881	967.03	457.905	1.045	467.538	1.023
0.25	x-x	0.402	0.243	0.021	456.647	954.454	427.775	1.043	436.171	1.023
0.25	x-x	0.371	0.271	0.024	423.842	939.312	396.187	1.042	403.378	1.024
0.25	x-x	0.34	0.306	0.027	389.111	920.969	362.864	1.041	368.887	1.024
0.25	x-x	0.307	0.351	0.031	351.841	898.558	327.314	1.041	332.206	1.026
0.25	x-x	0.271	0.409	0.037	312.084	870.164	289.557	1.039	293.379	1.026
0.25	x-x	0.235	0.483	0.042	271.669	842.017	251.975	1.037	254.864	1.025
0.25	x-x	0.201	0.574	0.048	230.781	813.815	214.502	1.043	216.592	1.033
0.25	x-x	0.169	0.69	0.057	193.216	775.776	179.705	1.045	181.17	1.037
0.25	x-x	0.141	0.826	0.069	160.824	724.877	149.307	1.047	150.317	1.040
0.25	x-x	0.112	1.034	0.087	125.762	654.979	116.572	1.063	117.187	1.057
0.25	x-x	0.08	1.428	0.122	184.764	548.648	157.852	0.564	158.981	0.560
0.25	x-x	0.049	2.3	0.207	825.651	388.198	346.35	0.157	351.833	0.155
0.5	x-x	0.847	0.038	0.008	934.507	1044.334	886.751	1.061	923.603	1.019
0.5	x-x	0.838	0.04	0.008	925.81	1040.751	876.377	1.062	912.354	1.020
0.5	x-x	0.828	0.043	0.009	916.589	1036.954	865.467	1.064	900.536	1.022
0.5	x-x	0.818	0.045	0.009	906.807	1032.915	853.982	1.065	888.108	1.024
0.5	x-x	0.808	0.048	0.01	896.449	1028.609	841.906	1.066	875.055	1.026
0.5	x-x	0.797	0.051	0.011	885.48	1024.01	829.211	1.068	861.349	1.028
0.5	x-x	0.785	0.055	0.011	873.839	1019.089	815.844	1.069	846.934	1.030
0.5	x-x	0.772	0.058	0.012	861.347	1013.824	801.656	1.071	831.655	1.032
0.5	x-x	0.759	0.062	0.013	847.838	1008.283	786.573	1.073	815.434	1.035
0.5	x-x	0.745	0.067	0.014	833.417	1002.519	770.744	1.074	798.434	1.037
0.5	x-x	0.731	0.071	0.015	818.43	996.574	754.505	1.076	781.021	1.040
0.5	x-x	0.715	0.076	0.016	802.712	990.388	737.7	1.077	763.028	1.042
0.5	x-x	0.699	0.081	0.017	786.113	984.105	720.297	1.078	744.424	1.044
0.5	x-x	0.682	0.087	0.018	768.587	977.958	702.391	1.079	725.314	1.045
0.5	x-x	0.664	0.094	0.019	750.075	971.601	683.756	1.079	705.46	1.046
0.5	x-x	0.646	0.1	0.02	730.814	965.093	664.633	1.079	685.122	1.047
0.5	x-x	0.626	0.108	0.021	710.748	958.207	644.884	1.079	664.156	1.048
0.5	x-x	0.606	0.116	0.022	689.838	950.381	624.256	1.078	642.297	1.048
0.5	x-x	0.585	0.124	0.024	668.155	942.02	603.031	1.077	619.85	1.048
0.5	x-x	0.563	0.134	0.025	645.56	933.035	581.093	1.076	596.695	1.048
0.5	x-x	0.54	0.144	0.027	622.266	923.167	558.554	1.075	572.953	1.048
0.5	x-x	0.517	0.155	0.029	598.208	912.313	535.373	1.074	548.589	1.048
0.5	x-x	0.493	0.168	0.031	573.311	900.248	511.472	1.072	523.521	1.047
0.5	x-x	0.469	0.182	0.034	547.346	886.612	486.625	1.070	497.519	1.046
0.5	x-x	0.443	0.198	0.037	520.385	870.697	460.779	1.067	470.534	1.045
0.5	x-x	0.416	0.217	0.04	492.307	852.387	433.932	1.064	442.573	1.044
0.5	x-x	0.388	0.238	0.045	462.79	831.457	405.91	1.061	413.462	1.042
0.5	x-x	0.358	0.265	0.05	431.504	807.471	376.507	1.058	382.996	1.040
0.5	x-x	0.328	0.297	0.056	398.25	778.627	345.377	1.054	350.83	1.038
0.5	x-x	0.296	0.337	0.065	362.515	743.529	312.156	1.052	316.603	1.038
0.5	x-x	0.262	0.389	0.075	324.569	699.89	277.017	1.052	280.514	1.039
0.5	x-x	0.229	0.454	0.088	286.897	654.039	243.036	1.046	245.723	1.035
0.5	x-x	0.195	0.54	0.104	244.685	600.127	206.046	1.051	207.974	1.042

0.5	x-x	0.16	0.664	0.127	200.557	535.279	167.944	1.061	169.222	1.053
0.5	x-x	0.129	0.829	0.157	160.329	469.314	133.904	1.067	134.716	1.061
0.5	x-x	0.097	1.094	0.206	98.588	388.889	84.64	1.274	84.964	1.270
0.5	x-x	0.065	1.615	0.306	414.263	288.099	200.6	0.361	202.427	0.358
0.5	x-x	0.035	2.948	0.575	217.445	160.405	100.673	0.388	101.131	0.386
0.75	x-x	0.825	0.042	0.013	919.59	1007.039	847.075	1.082	880.64	1.041
0.75	x-x	0.815	0.044	0.014	910.792	1002.341	836.336	1.083	869.039	1.042
0.75	x-x	0.805	0.047	0.015	901.56	997.286	825.088	1.085	856.901	1.044
0.75	x-x	0.795	0.05	0.015	891.972	991.691	813.292	1.086	844.184	1.046
0.75	x-x	0.784	0.052	0.016	881.86	985.778	800.977	1.087	830.924	1.048
0.75	x-x	0.772	0.055	0.017	871.204	979.57	788.162	1.088	817.141	1.050
0.75	x-x	0.76	0.059	0.018	859.904	973.083	774.795	1.089	802.782	1.051
0.75	x-x	0.747	0.062	0.02	847.819	966.327	760.789	1.091	787.756	1.053
0.75	x-x	0.733	0.066	0.021	835.015	959.283	746.207	1.092	772.133	1.055
0.75	x-x	0.719	0.07	0.022	821.656	951.839	731.136	1.093	756.008	1.057
0.75	x-x	0.704	0.074	0.023	807.812	944.051	715.687	1.094	739.501	1.058
0.75	x-x	0.689	0.079	0.025	793.347	935.964	699.799	1.094	722.551	1.060
0.75	x-x	0.673	0.084	0.026	778.073	927.562	683.339	1.095	705.016	1.061
0.75	x-x	0.656	0.089	0.028	761.921	918.821	666.264	1.095	686.856	1.062
0.75	x-x	0.639	0.095	0.029	745.13	909.574	648.699	1.094	668.203	1.062
0.75	x-x	0.62	0.101	0.031	727.565	899.816	630.569	1.093	648.983	1.062
0.75	x-x	0.601	0.108	0.033	709.165	889.589	611.881	1.091	629.204	1.061
0.75	x-x	0.581	0.116	0.035	689.824	878.793	592.54	1.090	608.771	1.061
0.75	x-x	0.56	0.124	0.037	669.614	867.327	572.591	1.088	587.734	1.060
0.75	x-x	0.539	0.132	0.04	648.473	855.063	551.977	1.086	566.035	1.059
0.75	x-x	0.517	0.142	0.042	626.243	841.941	530.606	1.083	543.584	1.057
0.75	x-x	0.494	0.153	0.045	603.057	827.569	508.476	1.080	520.382	1.056
0.75	x-x	0.471	0.165	0.049	578.963	811.865	485.663	1.077	496.513	1.054
0.75	x-x	0.447	0.178	0.053	553.777	794.498	461.996	1.074	471.804	1.052
0.75	x-x	0.421	0.194	0.057	527.373	774.974	437.323	1.071	446.102	1.050
0.75	x-x	0.395	0.211	0.062	499.866	752.505	411.605	1.067	419.372	1.048
0.75	x-x	0.368	0.232	0.069	470.946	726.376	384.591	1.064	391.363	1.045
0.75	x-x	0.34	0.257	0.076	440.394	695.365	356.015	1.061	361.811	1.044
0.75	x-x	0.311	0.287	0.086	407.991	659.937	326.114	1.059	330.971	1.043
0.75	x-x	0.28	0.324	0.098	373.071	619.057	294.473	1.058	298.427	1.044
0.75	x-x	0.249	0.372	0.113	336.464	573.87	262.142	1.057	265.271	1.044
0.75	x-x	0.218	0.43	0.131	299.919	525.73	230.604	1.052	233.022	1.041
0.75	x-x	0.185	0.513	0.156	257.221	469.954	195.478	1.055	197.213	1.045
0.75	x-x	0.154	0.623	0.191	213.384	411.031	160.788	1.063	161.959	1.055
0.75	x-x	0.123	0.782	0.238	169.288	349.417	127.08	1.074	127.811	1.068
0.75	x-x	0.092	1.036	0.316	124.917	280.71	93.74	1.095	94.137	1.091
0.75	x-x	0.061	1.57	0.48	373.398	192.185	143.235	0.471	144.164	0.468
1	x-x	0.798	0.045	0.019	908.598	968.03	810.567	1.095	841.249	1.055
1	x-x	0.788	0.047	0.02	899.985	962.023	799.56	1.096	829.399	1.056
1	x-x	0.778	0.05	0.021	890.971	955.72	788.156	1.097	817.135	1.058
1	x-x	0.767	0.052	0.022	881.606	949.064	776.37	1.098	804.473	1.059
1	x-x	0.755	0.055	0.024	871.992	941.927	764.214	1.098	791.428	1.061
1	x-x	0.743	0.058	0.025	861.874	934.494	751.63	1.099	777.94	1.062
1	x-x	0.731	0.061	0.026	851.063	926.706	738.457	1.099	763.838	1.063
1	x-x	0.718	0.065	0.028	839.588	918.566	724.744	1.100	749.175	1.064
1	x-x	0.704	0.068	0.029	827.697	910.074	710.699	1.101	734.177	1.065
1	x-x	0.69	0.072	0.031	815.441	901.243	696.383	1.101	718.91	1.066
1	x-x	0.675	0.076	0.033	802.725	892.087	681.754	1.100	703.329	1.067
1	x-x	0.66	0.08	0.034	789.327	882.531	666.627	1.100	687.242	1.067
1	x-x	0.644	0.085	0.036	775.061	872.422	650.814	1.099	670.448	1.067
1	x-x	0.627	0.09	0.038	760.115	861.878	634.546	1.099	653.196	1.068
1	x-x	0.611	0.095	0.041	744.479	850.886	617.837	1.098	635.504	1.068

1	x-x	0.593	0.101	0.043	728.118	839.594	600.767	1.096	617.459	1.067
1	x-x	0.574	0.108	0.045	710.965	827.767	583.196	1.094	598.912	1.066
1	x-x	0.555	0.114	0.048	692.879	815.306	565.014	1.092	579.753	1.064
1	x-x	0.535	0.122	0.051	673.902	802.017	546.199	1.089	559.961	1.063
1	x-x	0.515	0.13	0.054	654.062	787.556	526.665	1.086	539.449	1.060
1	x-x	0.493	0.139	0.058	633.204	771.893	506.363	1.083	518.169	1.058
1	x-x	0.471	0.149	0.062	611.138	754.89	485.185	1.079	496.013	1.056
1	x-x	0.449	0.16	0.066	587.978	736.324	463.194	1.076	473.053	1.054
1	x-x	0.425	0.173	0.071	563.536	715.092	439.945	1.073	448.83	1.052
1	x-x	0.401	0.188	0.077	537.77	691.466	415.66	1.071	423.582	1.051
1	x-x	0.376	0.204	0.084	510.715	665.553	390.529	1.068	397.514	1.050
1	x-x	0.35	0.224	0.092	482.101	636.856	364.358	1.066	370.432	1.049
1	x-x	0.323	0.247	0.102	451.805	604.989	337.115	1.064	342.307	1.048
1	x-x	0.295	0.275	0.114	419.676	569.368	308.718	1.063	313.066	1.048
1	x-x	0.267	0.311	0.129	385.27	529.386	278.967	1.062	282.514	1.048
1	x-x	0.238	0.353	0.148	349.983	487.616	249.491	1.060	252.324	1.048
1	x-x	0.209	0.406	0.171	314.114	443.555	220.354	1.055	222.561	1.045
1	x-x	0.179	0.479	0.202	273.693	394.185	189.011	1.054	190.633	1.045
1	x-x	0.149	0.578	0.245	229.136	342.613	156.665	1.061	157.777	1.053
1	x-x	0.121	0.715	0.303	186.164	290.569	126.371	1.063	127.094	1.057
1	x-x	0.091	0.948	0.402	146.734	228.963	97.251	1.039	97.678	1.034
1	x-x	0.061	1.408	0.601	154.951	153.568	82.881	0.817	83.191	0.814
1	x-x	0.033	2.606	1.116	945.199	21.12	21.05	1.718	21.07	1.716
0.25	y-y	0.841	0.014	0.026	1037.881	926.668	875.106	1.067	910.977	1.025
0.25	y-y	0.832	0.014	0.028	1034.367	917.802	864.74	1.069	899.749	1.027
0.25	y-y	0.823	0.015	0.03	1030.624	908.414	853.834	1.071	887.948	1.029
0.25	y-y	0.813	0.016	0.031	1026.63	898.489	842.372	1.072	875.559	1.031
0.25	y-y	0.802	0.017	0.033	1022.361	888.006	830.338	1.074	862.565	1.034
0.25	y-y	0.791	0.018	0.035	1017.793	876.916	817.688	1.075	848.922	1.036
0.25	y-y	0.78	0.019	0.038	1012.676	865.253	804.314	1.077	834.516	1.038
0.25	y-y	0.767	0.02	0.04	1007.087	852.987	790.267	1.078	819.404	1.040
0.25	y-y	0.754	0.022	0.043	1001.24	840.101	775.689	1.080	803.742	1.042
0.25	y-y	0.74	0.023	0.046	995.172	826.629	760.65	1.081	787.606	1.044
0.25	y-y	0.725	0.025	0.049	988.912	812.574	745.184	1.082	771.037	1.045
0.25	y-y	0.71	0.026	0.052	982.485	797.899	729.288	1.082	754.031	1.047
0.25	y-y	0.694	0.028	0.055	975.566	782.415	712.645	1.082	736.254	1.047
0.25	y-y	0.677	0.03	0.059	968.28	766.168	695.392	1.082	717.853	1.048
0.25	y-y	0.659	0.031	0.063	960.661	749.046	677.477	1.082	698.779	1.049
0.25	y-y	0.641	0.033	0.068	952.706	730.974	658.865	1.081	678.995	1.049
0.25	y-y	0.622	0.036	0.072	944.319	711.452	639.132	1.082	658.057	1.051
0.25	y-y	0.602	0.038	0.078	935.464	690.992	618.71	1.082	636.428	1.052
0.25	y-y	0.582	0.04	0.083	926.061	669.817	597.776	1.082	614.299	1.053
0.25	y-y	0.56	0.043	0.089	915.686	647.951	576.207	1.081	591.544	1.053
0.25	y-y	0.538	0.046	0.096	904.105	625.153	553.785	1.080	567.937	1.053
0.25	y-y	0.515	0.05	0.103	891.654	601.587	530.824	1.078	543.813	1.052
0.25	y-y	0.491	0.053	0.112	878.045	577.189	507.225	1.076	519.072	1.051
0.25	y-y	0.466	0.058	0.121	862.85	551.589	482.631	1.073	493.344	1.050
0.25	y-y	0.44	0.063	0.131	845.315	524.963	457.045	1.071	466.642	1.049
0.25	y-y	0.413	0.069	0.143	825.308	496.995	430.322	1.067	438.818	1.047
0.25	y-y	0.385	0.076	0.158	802.593	467.581	402.461	1.063	409.884	1.044
0.25	y-y	0.356	0.085	0.175	775.846	436.473	373.122	1.060	379.493	1.042
0.25	y-y	0.325	0.096	0.196	743.764	403.449	342.088	1.056	347.436	1.040
0.25	y-y	0.293	0.11	0.222	705.55	368.323	309.365	1.054	313.733	1.039
0.25	y-y	0.26	0.128	0.256	659.489	330.719	274.716	1.051	278.154	1.038
0.25	y-y	0.226	0.151	0.301	607.962	292.088	239.892	1.046	242.51	1.035
0.25	y-y	0.192	0.179	0.359	552.181	253.183	205.728	1.037	207.65	1.027
0.25	y-y	0.158	0.219	0.442	489.424	209.043	168.719	1.039	170.01	1.031

0.25	y-y	0.124	0.277	0.564	418.128	163.328	131.331	1.052	132.112	1.045
0.25	y-y	0.091	0.377	0.77	333.057	116.514	93.587	1.082	93.983	1.078
0.25	y-y	0.061	0.548	1.137	241.335	4.73	4.658	14.623	4.659	14.620
0.25	y-y	0.032	1.042	2.169	122.842	52.989	38.296	0.921	38.362	0.919
0.5	y-y	0.785	0.034	0.031	951.899	900.706	793.114	1.099	822.465	1.060
0.5	y-y	0.774	0.035	0.032	945.021	892.419	781.978	1.101	810.496	1.062
0.5	y-y	0.764	0.037	0.034	937.856	883.793	770.517	1.102	798.19	1.063
0.5	y-y	0.753	0.039	0.036	930.624	874.767	758.845	1.102	785.672	1.065
0.5	y-y	0.741	0.041	0.038	923.116	865.368	746.855	1.103	772.826	1.065
0.5	y-y	0.729	0.043	0.04	915.245	855.55	734.471	1.103	759.574	1.066
0.5	y-y	0.716	0.045	0.042	906.972	845.3	721.676	1.103	745.897	1.067
0.5	y-y	0.703	0.048	0.044	898.395	834.698	708.609	1.103	731.947	1.068
0.5	y-y	0.69	0.05	0.046	889.506	823.725	695.266	1.102	717.719	1.068
0.5	y-y	0.676	0.053	0.049	880.289	812.342	681.626	1.101	703.193	1.068
0.5	y-y	0.661	0.056	0.051	870.596	800.488	667.575	1.100	688.249	1.067
0.5	y-y	0.646	0.059	0.054	860.365	788.175	653.111	1.099	672.885	1.066
0.5	y-y	0.63	0.062	0.057	849.515	775.235	638.099	1.097	656.961	1.065
0.5	y-y	0.614	0.065	0.06	837.939	761.601	622.467	1.095	640.404	1.065
0.5	y-y	0.597	0.069	0.064	825.834	747.275	606.364	1.093	623.372	1.063
0.5	y-y	0.579	0.073	0.067	813.181	731.992	589.638	1.091	605.708	1.062
0.5	y-y	0.561	0.077	0.071	799.871	715.448	572.079	1.090	587.194	1.062
0.5	y-y	0.542	0.082	0.076	785.714	697.957	553.844	1.088	567.999	1.061
0.5	y-y	0.523	0.087	0.081	770.526	679.567	534.925	1.086	548.118	1.060
0.5	y-y	0.503	0.092	0.086	754.282	660.29	515.375	1.085	527.611	1.059
0.5	y-y	0.482	0.098	0.092	736.906	639.98	495.134	1.083	506.416	1.059
0.5	y-y	0.461	0.105	0.098	718.074	618.568	474.083	1.081	484.417	1.058
0.5	y-y	0.439	0.113	0.105	697.689	595.982	452.225	1.079	461.618	1.057
0.5	y-y	0.416	0.121	0.113	675.534	572.138	429.512	1.077	437.977	1.056
0.5	y-y	0.393	0.131	0.123	651.407	546.902	405.894	1.075	413.444	1.055
0.5	y-y	0.368	0.143	0.133	625.132	520.234	381.395	1.072	388.054	1.054
0.5	y-y	0.343	0.156	0.146	596.542	491.972	355.992	1.070	361.788	1.052
0.5	y-y	0.316	0.172	0.161	565.138	461.814	329.496	1.067	334.455	1.051
0.5	y-y	0.289	0.192	0.179	530.205	429.603	301.762	1.065	305.915	1.050
0.5	y-y	0.261	0.217	0.201	491.844	395.319	273.011	1.062	276.407	1.049
0.5	y-y	0.233	0.248	0.229	451.321	359.944	244.259	1.059	246.973	1.047
0.5	y-y	0.205	0.285	0.263	409.742	323.983	216.112	1.052	218.234	1.042
0.5	y-y	0.175	0.336	0.31	363.145	285.059	186.503	1.046	188.081	1.037
0.5	y-y	0.147	0.403	0.371	315.722	246.081	157.95	1.036	159.081	1.029
0.5	y-y	0.118	0.506	0.465	260.447	198.498	125.353	1.048	126.064	1.042
0.5	y-y	0.09	0.661	0.609	201.449	151.547	93.785	1.071	94.182	1.066
0.5	y-y	0.063	0.942	0.868	147.542	111.247	67.264	1.041	67.468	1.038
0.5	y-y	0.035	1.704	1.571	456.224	384.305	256.8	0.150	259.802	0.148
0.5	y-y	0.007	8.213	7.548	38.298	34.86	18.554	0.426	18.569	0.426
0.75	y-y	0.721	0.056	0.033	867.653	888.308	725.504	1.104	749.987	1.068
0.75	y-y	0.71	0.059	0.035	859.27	880.863	714.74	1.104	738.49	1.068
0.75	y-y	0.699	0.061	0.036	850.486	873.187	703.676	1.104	726.684	1.069
0.75	y-y	0.688	0.064	0.038	841.307	865.264	692.317	1.104	714.577	1.070
0.75	y-y	0.676	0.067	0.039	831.849	857.081	680.747	1.104	702.258	1.070
0.75	y-y	0.664	0.07	0.041	822.121	848.583	668.949	1.104	689.709	1.070
0.75	y-y	0.652	0.073	0.043	812.082	839.788	656.918	1.103	676.927	1.070
0.75	y-y	0.639	0.076	0.045	801.72	830.618	644.611	1.102	663.866	1.070
0.75	y-y	0.626	0.08	0.047	790.976	821.133	632.043	1.100	650.544	1.069
0.75	y-y	0.612	0.084	0.049	779.752	811.324	619.159	1.099	636.903	1.068
0.75	y-y	0.598	0.087	0.051	768.037	801.139	605.941	1.097	622.925	1.067
0.75	y-y	0.584	0.092	0.054	755.823	790.501	592.36	1.096	608.581	1.066
0.75	y-y	0.569	0.096	0.056	743.106	779.326	578.387	1.094	593.842	1.065
0.75	y-y	0.554	0.101	0.059	729.796	767.464	563.914	1.092	578.595	1.064

0.75	y-y	0.538	0.106	0.062	715.847	755.151	549.068	1.089	562.977	1.062
0.75	y-y	0.522	0.111	0.065	701.147	742.181	533.704	1.087	546.836	1.061
0.75	y-y	0.505	0.117	0.068	685.756	728.283	517.754	1.084	530.104	1.059
0.75	y-y	0.488	0.124	0.072	669.62	713.206	501.106	1.083	512.665	1.058
0.75	y-y	0.47	0.131	0.076	652.617	697.064	483.802	1.081	494.568	1.057
0.75	y-y	0.452	0.138	0.08	634.734	680.078	465.991	1.079	475.971	1.056
0.75	y-y	0.434	0.147	0.085	615.959	662.109	447.65	1.077	456.852	1.055
0.75	y-y	0.415	0.156	0.091	596.154	642.984	428.679	1.075	437.11	1.054
0.75	y-y	0.395	0.167	0.097	575.247	622.629	409.072	1.073	416.742	1.054
0.75	y-y	0.375	0.179	0.104	553.144	600.989	388.825	1.072	395.748	1.053
0.75	y-y	0.354	0.192	0.111	529.818	577.732	367.86	1.070	374.051	1.052
0.75	y-y	0.333	0.208	0.12	505.246	552.749	346.206	1.069	351.684	1.052
0.75	y-y	0.311	0.226	0.131	479.294	526.068	323.9	1.068	328.69	1.052
0.75	y-y	0.289	0.247	0.143	451.823	497.574	300.925	1.067	305.055	1.052
0.75	y-y	0.266	0.272	0.158	422.758	467.022	277.26	1.066	280.762	1.052
0.75	y-y	0.242	0.303	0.176	392.305	434.882	253.254	1.064	256.174	1.052
0.75	y-y	0.22	0.338	0.196	362.133	402.996	230.26	1.059	232.671	1.048
0.75	y-y	0.196	0.381	0.222	329.819	368.577	206.391	1.055	208.325	1.045
0.75	y-y	0.172	0.439	0.256	295.267	331.181	181.609	1.050	183.105	1.041
0.75	y-y	0.148	0.513	0.299	257.202	293.018	156.229	1.050	157.335	1.042
0.75	y-y	0.125	0.607	0.355	218.611	255.423	131.761	1.051	132.547	1.045
0.75	y-y	0.101	0.744	0.437	178.293	211.431	105.949	1.064	106.456	1.058
0.75	y-y	0.077	0.971	0.571	143.048	161.319	81.369	1.059	81.668	1.055
0.75	y-y	0.054	1.391	0.818	131.135	111.69	63.779	0.940	63.963	0.937
0.75	y-y	0.031	2.425	1.426	1047.545	158.244	156.886	0.218	158.002	0.216
0.75	y-y	0.008	8.756	5.17	58.139	152.351	43.737	0.214	43.823	0.213
1	y-y	0.662	0.08	0.034	791.373	883.986	668.919	1.100	689.678	1.067
1	y-y	0.652	0.083	0.035	782.022	877.346	658.493	1.100	678.599	1.067
1	y-y	0.641	0.086	0.037	772.353	870.51	647.846	1.099	667.298	1.067
1	y-y	0.63	0.089	0.038	762.374	863.472	636.987	1.099	655.783	1.068
1	y-y	0.619	0.093	0.039	752.086	856.209	625.917	1.099	644.056	1.068
1	y-y	0.607	0.097	0.041	741.498	848.827	614.704	1.098	632.19	1.067
1	y-y	0.595	0.1	0.042	730.592	841.301	603.329	1.097	620.165	1.067
1	y-y	0.583	0.104	0.044	719.352	833.54	591.742	1.095	607.929	1.066
1	y-y	0.571	0.109	0.046	707.68	825.51	579.871	1.094	595.406	1.065
1	y-y	0.558	0.113	0.048	695.605	817.187	567.734	1.092	582.617	1.064
1	y-y	0.545	0.118	0.049	683.153	808.565	555.357	1.091	569.591	1.063
1	y-y	0.532	0.123	0.052	670.308	799.426	542.644	1.089	556.225	1.062
1	y-y	0.518	0.129	0.054	657.074	789.779	529.617	1.087	542.546	1.061
1	y-y	0.504	0.135	0.056	643.378	779.6	516.239	1.084	528.516	1.059
1	y-y	0.489	0.141	0.059	629.21	768.84	502.504	1.082	514.128	1.058
1	y-y	0.475	0.148	0.061	614.469	757.493	488.365	1.080	499.338	1.056
1	y-y	0.46	0.155	0.064	599.272	745.506	473.901	1.078	484.227	1.055
1	y-y	0.444	0.163	0.067	583.566	732.616	458.998	1.075	468.678	1.053
1	y-y	0.428	0.171	0.071	567.246	718.41	443.469	1.074	452.499	1.052
1	y-y	0.412	0.18	0.074	550.323	703.089	427.443	1.072	435.825	1.051
1	y-y	0.396	0.19	0.079	532.85	686.843	411.063	1.070	418.809	1.051
1	y-y	0.379	0.202	0.083	514.816	669.56	394.316	1.069	401.438	1.050
1	y-y	0.362	0.214	0.088	496.116	651.052	377.114	1.067	383.624	1.049
1	y-y	0.345	0.228	0.094	476.62	631.204	359.394	1.066	365.301	1.048
1	y-y	0.327	0.243	0.101	456.389	609.906	341.205	1.064	346.525	1.048
1	y-y	0.309	0.261	0.108	435.396	587.084	322.563	1.063	327.313	1.048
1	y-y	0.29	0.281	0.117	413.495	562.293	303.313	1.062	307.51	1.048
1	y-y	0.271	0.305	0.127	390.545	535.591	283.471	1.062	287.133	1.048
1	y-y	0.251	0.332	0.139	366.462	507.13	263.105	1.062	266.258	1.049
1	y-y	0.233	0.362	0.152	343.484	479.81	244.165	1.059	246.878	1.047
1	y-y	0.214	0.397	0.167	319.582	450.388	224.746	1.056	227.042	1.045

1	y-y	0.194	0.441	0.186	294.131	418.686	204.568	1.053	206.468	1.044
1	y-y	0.174	0.496	0.209	265.3	384.414	182.79	1.055	184.306	1.047
1	y-y	0.154	0.563	0.238	235.291	349.764	161.051	1.060	162.227	1.053
1	y-y	0.135	0.641	0.271	207.455	316.409	141.226	1.061	142.129	1.054
1	y-y	0.115	0.748	0.317	177.293	280.196	120.345	1.066	121.001	1.060
1	y-y	0.096	0.904	0.383	151.832	239.343	101.374	1.046	101.839	1.042
1	y-y	0.075	1.149	0.488	71.391	188.894	54.344	1.533	54.477	1.529
1	y-y	0.055	1.544	0.66	344.676	139.22	108.882	0.566	109.418	0.563
1	y-y	0.037	2.316	0.991	870.815	99.956	97.534	0.418	97.964	0.416

Tabla B.9 Valores de r_1 de la sección 11 (40 cm x 60 cm con ρ = 0.03 y f_c' = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.899	0.03	0.003	920.193	1012.727	884.969	1.076	923.553	1.031
0.25	x-x	0.887	0.034	0.004	907.853	1009.958	871.488	1.078	908.882	1.034
0.25	x-x	0.874	0.037	0.004	894.413	1007.18	857.086	1.080	893.228	1.036
0.25	x-x	0.86	0.042	0.004	879.93	1004.428	841.845	1.082	876.687	1.039
0.25	x-x	0.844	0.046	0.005	864.374	1001.559	825.647	1.083	859.135	1.041
0.25	x-x	0.827	0.051	0.005	847.679	998.749	808.561	1.084	840.65	1.042
0.25	x-x	0.809	0.057	0.006	829.783	996.225	790.673	1.084	821.331	1.044
0.25	x-x	0.79	0.063	0.006	810.761	993.975	772.027	1.084	801.229	1.045
0.25	x-x	0.77	0.069	0.007	790.694	991.878	752.603	1.084	780.328	1.046
0.25	x-x	0.75	0.076	0.007	769.738	989.955	732.54	1.084	758.781	1.047
0.25	x-x	0.729	0.083	0.008	748.279	988.074	712.103	1.084	736.875	1.048
0.25	x-x	0.707	0.09	0.008	726.618	986.042	691.46	1.084	714.793	1.048
0.25	x-x	0.686	0.098	0.008	704.708	983.821	670.558	1.083	692.48	1.049
0.25	x-x	0.663	0.106	0.009	682.281	981.511	649.211	1.082	669.738	1.049
0.25	x-x	0.641	0.114	0.009	659.574	978.862	627.531	1.082	646.689	1.050
0.25	x-x	0.618	0.123	0.01	636.654	975.818	605.578	1.081	623.401	1.050
0.25	x-x	0.594	0.133	0.01	613.296	972.456	583.199	1.079	599.71	1.050
0.25	x-x	0.57	0.142	0.011	589.429	968.711	560.325	1.078	575.55	1.050
0.25	x-x	0.546	0.153	0.012	565.059	964.44	536.936	1.077	550.901	1.050
0.25	x-x	0.521	0.165	0.013	539.882	959.756	512.817	1.076	525.541	1.050
0.25	x-x	0.495	0.178	0.014	513.951	954.894	488.098	1.074	499.61	1.049
0.25	x-x	0.468	0.192	0.015	487.266	948.953	462.56	1.072	472.886	1.049
0.25	x-x	0.441	0.209	0.016	459.887	941.925	436.315	1.069	445.491	1.047
0.25	x-x	0.412	0.228	0.018	431.557	933.678	409.158	1.067	417.217	1.046
0.25	x-x	0.383	0.25	0.02	402.636	924.032	381.437	1.062	388.431	1.043
0.25	x-x	0.354	0.274	0.021	371.818	915.974	352.48	1.063	358.445	1.045
0.25	x-x	0.325	0.299	0.023	340.526	908.497	323.292	1.065	328.303	1.049
0.25	x-x	0.298	0.327	0.025	311.302	898.406	295.751	1.066	299.939	1.051
0.25	x-x	0.271	0.357	0.028	284.724	880.328	269.983	1.062	273.469	1.049
0.25	x-x	0.245	0.389	0.031	258.767	865.12	245.325	1.057	248.2	1.045
0.25	x-x	0.218	0.43	0.035	230.532	846.363	218.572	1.056	220.851	1.046
0.25	x-x	0.19	0.485	0.041	200.82	821.151	190.36	1.056	192.086	1.047
0.25	x-x	0.162	0.552	0.05	172.965	779.69	163.401	1.052	164.672	1.044
0.25	x-x	0.136	0.638	0.059	146.04	736.053	137.706	1.047	138.607	1.040
0.25	x-x	0.109	0.768	0.074	116.823	673.575	109.885	1.048	110.458	1.043
0.25	x-x	0.079	1.008	0.102	85.326	573.52	79.877	1.052	80.179	1.048
0.25	x-x	0.051	1.498	0.168	54.535	410.136	50.427	1.061	50.547	1.058
0.25	x-x	0.024	3.01	0.363	35.728	185.567	30.832	0.811	30.877	0.810
0.5	x-x	0.9	0.034	0.007	906.1	989.614	854.739	1.115	890.679	1.070
0.5	x-x	0.888	0.037	0.008	894.633	986.06	841.938	1.117	876.788	1.073
0.5	x-x	0.875	0.041	0.009	882.401	982.255	828.392	1.119	862.106	1.075
0.5	x-x	0.861	0.045	0.009	869.475	978.174	814.163	1.120	846.707	1.077
0.5	x-x	0.846	0.049	0.01	855.825	973.919	799.32	1.121	830.665	1.079

0.5	x-x	0.831	0.053	0.011	841.363	969.568	783.849	1.122	813.97	1.081
0.5	x-x	0.814	0.058	0.012	825.97	965.105	767.651	1.123	796.516	1.082
0.5	x-x	0.796	0.063	0.013	809.698	960.59	750.82	1.124	778.411	1.084
0.5	x-x	0.778	0.069	0.014	792.598	956.062	733.432	1.124	759.738	1.085
0.5	x-x	0.759	0.074	0.014	774.59	951.516	715.42	1.124	740.427	1.086
0.5	x-x	0.74	0.081	0.015	755.753	946.969	696.861	1.124	720.566	1.087
0.5	x-x	0.719	0.087	0.016	736.29	942.447	677.944	1.123	700.359	1.087
0.5	x-x	0.698	0.094	0.017	716.404	937.65	658.684	1.122	679.824	1.087
0.5	x-x	0.676	0.101	0.018	695.684	932.628	638.776	1.121	658.638	1.087
0.5	x-x	0.653	0.109	0.019	674.449	927.353	618.486	1.119	637.088	1.086
0.5	x-x	0.631	0.117	0.02	653.089	921.603	598.06	1.117	615.436	1.086
0.5	x-x	0.608	0.125	0.021	631.535	915.338	577.448	1.114	593.631	1.084
0.5	x-x	0.584	0.134	0.023	609.495	908.394	556.369	1.112	571.376	1.083
0.5	x-x	0.56	0.144	0.024	587.059	900.563	534.861	1.109	548.716	1.081
0.5	x-x	0.535	0.154	0.026	564.122	891.69	512.833	1.106	525.557	1.079
0.5	x-x	0.51	0.165	0.028	540.518	881.636	490.159	1.103	501.77	1.077
0.5	x-x	0.485	0.177	0.03	516.337	870.423	466.983	1.100	477.51	1.075
0.5	x-x	0.458	0.19	0.033	491.569	857.963	443.326	1.095	452.803	1.072
0.5	x-x	0.431	0.205	0.036	466.053	843.85	419.016	1.089	427.472	1.067
0.5	x-x	0.402	0.222	0.039	439.526	827.435	393.77	1.082	401.228	1.062
0.5	x-x	0.374	0.242	0.043	413.063	809.168	368.651	1.074	375.18	1.055
0.5	x-x	0.345	0.263	0.047	385.8	790.233	343.255	1.065	348.909	1.048
0.5	x-x	0.316	0.288	0.052	353.973	767.646	314.112	1.066	318.84	1.050
0.5	x-x	0.287	0.316	0.058	322.606	742.316	285.493	1.066	289.393	1.052
0.5	x-x	0.258	0.349	0.065	291.084	712.635	256.772	1.066	259.923	1.053
0.5	x-x	0.231	0.384	0.072	262.472	683.003	230.953	1.061	233.499	1.049
0.5	x-x	0.204	0.429	0.081	231.263	646.064	202.933	1.063	204.896	1.053
0.5	x-x	0.176	0.483	0.095	201.897	597.362	175.968	1.062	177.442	1.053
0.5	x-x	0.148	0.557	0.114	171.365	537.224	148.088	1.061	149.131	1.054
0.5	x-x	0.121	0.658	0.138	140.538	472.954	120.69	1.063	121.381	1.056
0.5	x-x	0.093	0.826	0.178	107.329	392.792	91.585	1.073	91.982	1.068
0.5	x-x	0.066	1.109	0.254	76.506	279.596	63.681	1.092	63.873	1.089
0.5	x-x	0.038	1.821	0.442	43.13	144.882	34.313	1.167	34.368	1.165
0.5	x-x	0.011	5.81	1.468	68.53	47.423	28.789	0.409	28.829	0.409
0.75	x-x	0.892	0.037	0.012	896.134	966.342	828.805	1.140	862.554	1.095
0.75	x-x	0.88	0.04	0.013	885.786	961.278	816.297	1.141	849.015	1.097
0.75	x-x	0.867	0.043	0.014	874.988	955.899	803.323	1.143	834.989	1.100
0.75	x-x	0.853	0.046	0.015	863.71	950.218	789.885	1.144	820.48	1.102
0.75	x-x	0.839	0.05	0.016	851.891	944.373	776.045	1.145	805.558	1.103
0.75	x-x	0.824	0.054	0.017	839.376	938.281	761.637	1.146	790.043	1.104
0.75	x-x	0.808	0.058	0.018	826.222	932.041	746.79	1.146	774.081	1.106
0.75	x-x	0.791	0.062	0.019	812.463	925.671	731.559	1.146	757.728	1.106
0.75	x-x	0.774	0.067	0.021	798.059	919.135	715.901	1.145	740.942	1.107
0.75	x-x	0.756	0.072	0.022	782.934	912.394	699.748	1.145	723.653	1.107
0.75	x-x	0.738	0.077	0.023	766.984	905.362	682.986	1.144	705.741	1.107
0.75	x-x	0.718	0.082	0.025	750.355	898.015	665.739	1.143	687.341	1.107
0.75	x-x	0.698	0.088	0.026	733.111	890.418	648.114	1.141	668.57	1.106
0.75	x-x	0.678	0.094	0.028	715.224	882.664	630.152	1.139	649.473	1.105
0.75	x-x	0.656	0.101	0.029	696.677	874.642	611.797	1.136	629.992	1.103
0.75	x-x	0.634	0.108	0.031	677.297	866.304	592.906	1.133	609.98	1.101
0.75	x-x	0.612	0.115	0.033	657.437	857.59	573.744	1.129	589.717	1.099
0.75	x-x	0.589	0.123	0.035	637.225	848.352	554.36	1.125	569.258	1.095
0.75	x-x	0.565	0.131	0.037	616.352	838.209	534.39	1.120	548.221	1.092
0.75	x-x	0.541	0.14	0.039	594.89	827.064	513.901	1.115	526.679	1.088
0.75	x-x	0.516	0.15	0.042	572.805	814.815	492.881	1.110	504.623	1.084
0.75	x-x	0.491	0.16	0.045	550.099	801.204	471.299	1.105	482.023	1.080
0.75	x-x	0.466	0.171	0.048	526.828	785.923	449.163	1.099	458.894	1.076

0.75	x-x	0.44	0.184	0.052	502.898	768.543	426.356	1.094	435.113	1.072
0.75	x-x	0.414	0.198	0.056	478.27	748.925	402.911	1.088	410.723	1.067
0.75	x-x	0.386	0.213	0.061	452.682	726.4	378.568	1.081	385.457	1.062
0.75	x-x	0.359	0.231	0.067	427.372	702.625	354.743	1.072	360.785	1.054
0.75	x-x	0.332	0.25	0.073	402.338	677.081	331.321	1.061	336.586	1.044
0.75	x-x	0.304	0.273	0.081	372.653	647.632	304.565	1.057	309.008	1.041
0.75	x-x	0.276	0.3	0.09	340.207	614.509	276.051	1.057	279.696	1.044
0.75	x-x	0.248	0.329	0.1	308.938	579.36	248.833	1.056	251.791	1.043
0.75	x-x	0.221	0.365	0.112	278.05	542.255	222.398	1.051	224.758	1.040
0.75	x-x	0.193	0.408	0.127	244.929	499.298	194.498	1.053	196.3	1.044
0.75	x-x	0.166	0.464	0.148	211.324	450.973	166.519	1.057	167.838	1.049
0.75	x-x	0.139	0.54	0.175	177.596	397.855	138.888	1.060	139.805	1.053
0.75	x-x	0.113	0.644	0.213	144.428	338.787	111.965	1.067	112.56	1.061
0.75	x-x	0.087	0.797	0.272	111.93	258.75	84.354	1.098	84.692	1.093
0.75	x-x	0.061	1.082	0.382	78.686	173.816	57.085	1.142	57.239	1.139
0.75	x-x	0.036	1.765	0.641	44.752	91.9	30.977	1.229	31.022	1.227
0.75	x-x	0.011	5.274	1.956	71.124	32.82	22.944	0.527	22.969	0.526
1	x-x	0.899	0.033	0.015	908.763	951.407	828.299	1.149	862.007	1.105
1	x-x	0.888	0.036	0.016	900.25	945.833	817.065	1.151	849.846	1.107
1	x-x	0.877	0.038	0.017	891.33	939.977	805.415	1.153	837.25	1.109
1	x-x	0.865	0.041	0.018	882.066	933.871	793.44	1.154	824.317	1.111
1	x-x	0.852	0.044	0.019	872.467	927.538	781.177	1.156	811.089	1.113
1	x-x	0.839	0.047	0.02	862.457	920.905	768.529	1.156	797.462	1.114
1	x-x	0.825	0.05	0.022	852.015	913.954	755.483	1.157	783.424	1.116
1	x-x	0.811	0.053	0.023	841.123	906.67	742.035	1.158	768.973	1.117
1	x-x	0.796	0.057	0.025	829.819	899.073	728.247	1.158	754.175	1.118
1	x-x	0.78	0.06	0.026	818.082	891.255	714.181	1.157	739.1	1.118
1	x-x	0.764	0.064	0.028	805.849	883.276	699.84	1.156	723.752	1.118
1	x-x	0.747	0.068	0.029	793.085	875.135	685.213	1.154	708.119	1.117
1	x-x	0.729	0.073	0.031	779.536	866.659	670.02	1.153	691.906	1.116
1	x-x	0.711	0.077	0.033	765.388	857.942	654.481	1.150	675.347	1.115
1	x-x	0.692	0.082	0.035	750.671	848.929	638.603	1.148	658.454	1.113
1	x-x	0.673	0.087	0.037	735.423	839.594	622.419	1.145	641.261	1.111
1	x-x	0.653	0.093	0.039	719.593	829.869	605.875	1.141	623.715	1.108
1	x-x	0.632	0.099	0.041	703.091	819.691	588.899	1.137	605.739	1.105
1	x-x	0.611	0.105	0.043	685.765	808.978	571.371	1.133	587.211	1.102
1	x-x	0.589	0.111	0.046	667.607	797.597	553.258	1.128	568.096	1.099
1	x-x	0.567	0.118	0.048	648.86	785.457	534.722	1.123	548.57	1.095
1	x-x	0.544	0.126	0.051	629.46	772.389	515.685	1.118	528.552	1.091
1	x-x	0.521	0.134	0.054	609.248	758.322	496.059	1.112	507.954	1.086
1	x-x	0.497	0.143	0.058	588.287	743.097	475.875	1.107	486.812	1.082
1	x-x	0.473	0.153	0.061	566.552	726.578	455.125	1.101	465.118	1.077
1	x-x	0.449	0.163	0.066	543.792	708.44	433.592	1.096	442.653	1.073
1	x-x	0.423	0.175	0.071	520.222	688.222	411.337	1.090	419.482	1.069
1	x-x	0.398	0.188	0.076	495.873	665.688	388.399	1.085	395.654	1.065
1	x-x	0.372	0.202	0.083	470.779	640.875	364.92	1.079	371.317	1.060
1	x-x	0.346	0.217	0.09	446.594	615.632	342.543	1.069	348.174	1.052
1	x-x	0.32	0.235	0.097	422.104	588.031	319.949	1.059	324.856	1.043
1	x-x	0.293	0.255	0.107	396.088	557.533	296.373	1.048	300.579	1.034
1	x-x	0.266	0.28	0.119	364.11	523.163	269.274	1.047	272.741	1.034
1	x-x	0.24	0.306	0.131	332.604	489.034	243.472	1.045	246.303	1.033
1	x-x	0.215	0.337	0.146	301.83	454.188	218.786	1.040	221.07	1.029
1	x-x	0.189	0.376	0.165	269.039	415.621	193.095	1.037	194.871	1.028
1	x-x	0.163	0.428	0.191	232.083	373.71	165.55	1.043	166.854	1.034
1	x-x	0.138	0.491	0.222	197.85	324.066	138.967	1.055	139.885	1.048
1	x-x	0.115	0.575	0.263	165.14	268.596	113.194	1.074	113.803	1.068
1	x-x	0.091	0.704	0.326	129.644	210.839	86.864	1.106	87.222	1.102

1	x-x	0.066	0.933	0.437	93.234	147.096	60.314	1.163	60.487	1.160
1	x-x	0.043	1.369	0.649	60.558	90.621	37.589	1.223	37.655	1.221
1	x-x	0.022	2.569	1.237	33.334	48.344	20.104	1.165	20.124	1.163
0.25	y-y	0.894	0.012	0.025	986.161	898.199	845.17	1.121	880.294	1.076
0.25	y-y	0.882	0.013	0.027	982.246	886.611	832.094	1.123	866.117	1.079
0.25	y-y	0.869	0.014	0.029	977.874	874.513	818.37	1.125	851.257	1.082
0.25	y-y	0.856	0.016	0.032	973.214	861.807	804.054	1.127	835.779	1.084
0.25	y-y	0.841	0.017	0.035	968.308	848.418	789.132	1.129	819.668	1.086
0.25	y-y	0.825	0.018	0.038	963.209	834.283	773.603	1.130	802.927	1.089
0.25	y-y	0.809	0.02	0.041	957.997	819.376	757.515	1.131	785.609	1.091
0.25	y-y	0.792	0.021	0.044	952.596	803.627	740.772	1.132	767.617	1.093
0.25	y-y	0.774	0.023	0.048	947.153	787.084	723.521	1.133	749.108	1.094
0.25	y-y	0.755	0.024	0.052	941.838	769.613	705.751	1.133	730.076	1.095
0.25	y-y	0.735	0.026	0.056	936.344	751.377	687.429	1.133	710.487	1.096
0.25	y-y	0.715	0.027	0.06	930.84	732.547	668.798	1.132	690.603	1.096
0.25	y-y	0.694	0.029	0.065	925.236	713.093	649.786	1.131	670.349	1.096
0.25	y-y	0.672	0.03	0.069	919.483	693.077	630.426	1.129	649.764	1.096
0.25	y-y	0.65	0.032	0.074	913.483	672.447	610.636	1.127	628.761	1.095
0.25	y-y	0.627	0.034	0.08	907.077	651.494	590.599	1.125	607.538	1.093
0.25	y-y	0.604	0.036	0.085	900.071	630.476	570.468	1.122	586.256	1.091
0.25	y-y	0.58	0.038	0.091	892.157	608.802	549.671	1.118	564.314	1.089
0.25	y-y	0.556	0.041	0.098	883.392	586.734	528.493	1.114	542.016	1.086
0.25	y-y	0.531	0.043	0.105	873.725	564.478	507.127	1.109	519.566	1.083
0.25	y-y	0.506	0.047	0.112	863.194	541.605	485.278	1.104	496.656	1.078
0.25	y-y	0.48	0.05	0.12	851.37	518.045	462.806	1.098	473.144	1.074
0.25	y-y	0.453	0.054	0.13	837.93	493.817	439.699	1.092	449.02	1.069
0.25	y-y	0.426	0.059	0.14	822.475	468.9	415.919	1.085	424.249	1.064
0.25	y-y	0.398	0.065	0.152	804.569	443.16	391.352	1.078	398.718	1.058
0.25	y-y	0.369	0.071	0.165	783.487	416.139	365.603	1.070	372.024	1.051
0.25	y-y	0.341	0.078	0.18	761.927	389.922	340.959	1.058	346.537	1.041
0.25	y-y	0.312	0.087	0.197	737.729	363.776	316.428	1.044	321.227	1.028
0.25	y-y	0.283	0.095	0.217	711.858	332.43	288.288	1.041	292.266	1.027
0.25	y-y	0.255	0.106	0.239	682.363	298.864	258.577	1.046	261.772	1.033
0.25	y-y	0.227	0.119	0.266	648.111	265.529	229.103	1.050	231.608	1.039
0.25	y-y	0.2	0.135	0.298	607.45	233.611	200.696	1.054	202.615	1.044
0.25	y-y	0.173	0.154	0.335	562.657	204.07	174.417	1.053	175.865	1.044
0.25	y-y	0.148	0.179	0.381	512.501	174.389	148.338	1.057	149.384	1.050
0.25	y-y	0.124	0.214	0.438	451.252	146.461	123.462	1.063	124.186	1.057
0.25	y-y	0.099	0.269	0.525	378.049	116.955	97.549	1.076	98	1.071
0.25	y-y	0.074	0.362	0.673	280.135	86.754	70.659	1.105	70.896	1.101
0.25	y-y	0.047	0.567	0.994	167.922	55.224	43.254	1.156	43.343	1.154
0.25	y-y	0.021	1.237	2.072	67.775	21.511	16.584	1.363	16.597	1.362
0.5	y-y	0.895	0.024	0.023	943.785	909.142	822.826	1.152	856.08	1.108
0.5	y-y	0.885	0.025	0.024	937.787	901.22	811.841	1.154	844.195	1.110
0.5	y-y	0.874	0.027	0.026	931.551	892.851	800.443	1.156	831.878	1.112
0.5	y-y	0.862	0.029	0.027	925.07	884.173	788.755	1.158	819.261	1.115
0.5	y-y	0.85	0.031	0.029	918.3	875.328	776.868	1.159	806.444	1.116
0.5	y-y	0.837	0.033	0.031	911.229	866.167	764.671	1.160	793.308	1.118
0.5	y-y	0.824	0.035	0.033	903.818	856.625	752.099	1.160	779.786	1.119
0.5	y-y	0.81	0.037	0.035	896.166	846.725	739.259	1.160	765.991	1.120
0.5	y-y	0.795	0.039	0.037	888.315	836.426	726.158	1.160	751.935	1.120
0.5	y-y	0.78	0.041	0.04	880.293	825.706	712.813	1.160	737.636	1.121
0.5	y-y	0.765	0.044	0.042	872.059	814.518	699.177	1.159	723.043	1.121
0.5	y-y	0.749	0.046	0.044	863.575	802.829	685.216	1.157	708.123	1.120
0.5	y-y	0.732	0.049	0.047	854.851	790.664	670.971	1.156	692.92	1.119
0.5	y-y	0.715	0.052	0.05	845.832	777.918	656.352	1.154	677.34	1.118
0.5	y-y	0.697	0.055	0.053	836.502	764.598	641.374	1.152	661.4	1.117

0.5	y-y	0.679	0.058	0.056	826.742	750.657	625.956	1.149	645.017	1.115
0.5	y-y	0.66	0.061	0.059	816.45	736.064	610.049	1.146	628.139	1.113
0.5	y-y	0.641	0.064	0.063	805.73	720.971	593.842	1.143	610.97	1.111
0.5	y-y	0.621	0.068	0.066	794.58	705.298	577.304	1.139	593.479	1.108
0.5	y-y	0.6	0.072	0.07	782.907	689.025	560.4	1.134	575.629	1.104
0.5	y-y	0.579	0.076	0.075	770.557	671.971	542.964	1.129	557.248	1.100
0.5	y-y	0.557	0.08	0.079	757.481	654.182	525.041	1.123	538.386	1.095
0.5	y-y	0.534	0.085	0.084	743.614	635.799	506.732	1.117	519.151	1.090
0.5	y-y	0.511	0.09	0.089	728.82	616.548	487.844	1.110	499.344	1.085
0.5	y-y	0.488	0.095	0.095	712.944	596.339	468.307	1.104	478.894	1.080
0.5	y-y	0.464	0.101	0.101	695.628	575.363	448.148	1.097	457.835	1.074
0.5	y-y	0.44	0.108	0.108	676.541	553.499	427.238	1.091	436.032	1.069
0.5	y-y	0.415	0.116	0.116	655.761	530.741	405.692	1.084	413.613	1.063
0.5	y-y	0.39	0.125	0.125	633.022	506.99	383.44	1.077	390.509	1.057
0.5	y-y	0.364	0.135	0.134	607.762	482.372	360.452	1.071	366.692	1.052
0.5	y-y	0.339	0.146	0.144	581.904	458.304	338.264	1.062	343.753	1.045
0.5	y-y	0.314	0.158	0.156	554.518	433.853	316.044	1.053	320.831	1.037
0.5	y-y	0.289	0.173	0.17	524.318	407.757	292.783	1.044	296.886	1.029
0.5	y-y	0.263	0.189	0.185	492.843	382.249	270.2	1.032	273.691	1.019
0.5	y-y	0.238	0.209	0.203	460.11	355.313	247.302	1.020	250.224	1.008
0.5	y-y	0.213	0.233	0.225	424.281	319.528	220.149	1.023	222.462	1.012
0.5	y-y	0.188	0.262	0.25	387.61	283.747	193.798	1.028	195.588	1.018
0.5	y-y	0.165	0.294	0.281	346.314	249.951	168.232	1.037	169.579	1.028
0.5	y-y	0.141	0.338	0.321	301.305	214.791	142.239	1.051	143.201	1.044
0.5	y-y	0.118	0.395	0.374	254.353	178.535	116.434	1.076	117.078	1.070
0.5	y-y	0.096	0.478	0.449	204.25	142.292	91.078	1.115	91.472	1.110
0.5	y-y	0.073	0.613	0.572	153.065	105.333	66.301	1.167	66.509	1.163
0.5	y-y	0.051	0.845	0.783	104.399	72.084	44.43	1.228	44.524	1.226
0.5	y-y	0.032	1.332	1.229	62.421	48.436	27.994	1.197	28.031	1.195
0.75	y-y	0.83	0.043	0.026	873.552	891.033	755.934	1.162	783.91	1.121
0.75	y-y	0.818	0.046	0.027	866.069	884.196	745.47	1.163	772.663	1.122
0.75	y-y	0.807	0.048	0.029	858.383	877.224	734.882	1.163	761.294	1.122
0.75	y-y	0.795	0.05	0.03	850.463	870.103	724.144	1.162	749.776	1.123
0.75	y-y	0.782	0.053	0.032	842.294	862.817	713.241	1.162	738.094	1.123
0.75	y-y	0.77	0.056	0.033	833.857	855.336	702.149	1.161	726.222	1.122
0.75	y-y	0.756	0.058	0.035	825.122	847.622	690.829	1.160	714.119	1.122
0.75	y-y	0.743	0.061	0.037	816.061	839.621	679.24	1.159	701.742	1.121
0.75	y-y	0.729	0.064	0.038	806.709	831.451	667.494	1.157	689.212	1.120
0.75	y-y	0.715	0.067	0.04	796.948	822.998	655.446	1.155	676.375	1.119
0.75	y-y	0.7	0.07	0.042	786.807	814.251	643.126	1.152	663.264	1.117
0.75	y-y	0.684	0.074	0.044	776.292	805.227	630.564	1.150	649.91	1.116
0.75	y-y	0.669	0.077	0.046	765.402	795.9	617.755	1.147	636.313	1.113
0.75	y-y	0.653	0.081	0.048	754.14	786.201	604.677	1.144	622.446	1.111
0.75	y-y	0.637	0.085	0.05	742.458	775.972	591.225	1.141	608.2	1.109
0.75	y-y	0.62	0.089	0.053	730.363	765.271	577.457	1.137	593.641	1.106
0.75	y-y	0.603	0.093	0.055	717.82	754.128	563.392	1.133	578.786	1.103
0.75	y-y	0.585	0.098	0.058	704.774	742.543	549.016	1.129	563.624	1.100
0.75	y-y	0.568	0.103	0.061	691.156	730.496	534.301	1.125	548.126	1.097
0.75	y-y	0.549	0.108	0.063	676.825	717.941	519.162	1.121	532.206	1.093
0.75	y-y	0.531	0.113	0.067	661.935	704.792	503.676	1.116	515.945	1.090
0.75	y-y	0.512	0.119	0.07	646.496	690.877	487.791	1.111	499.289	1.086
0.75	y-y	0.492	0.126	0.074	630.398	676.056	471.412	1.106	482.142	1.082
0.75	y-y	0.473	0.132	0.078	613.581	660.431	454.595	1.101	464.565	1.077
0.75	y-y	0.452	0.14	0.082	595.937	643.99	437.317	1.096	446.536	1.073
0.75	y-y	0.432	0.148	0.087	577.495	626.566	419.562	1.090	428.04	1.069
0.75	y-y	0.411	0.156	0.092	558.067	607.856	401.148	1.085	408.892	1.065
0.75	y-y	0.39	0.166	0.098	537.656	587.913	382.164	1.081	389.186	1.061

0.75	y-y	0.369	0.177	0.104	516.32	566.827	362.738	1.076	369.058	1.058
0.75	y-y	0.347	0.188	0.111	495.046	545.426	343.729	1.070	349.399	1.053
0.75	y-y	0.326	0.2	0.118	474.011	523.566	325.155	1.062	330.224	1.046
0.75	y-y	0.305	0.214	0.127	452.056	500.282	306.109	1.054	310.598	1.039
0.75	y-y	0.283	0.23	0.137	429.104	475.562	286.612	1.046	290.544	1.032
0.75	y-y	0.261	0.248	0.149	405.31	449.366	266.779	1.038	270.181	1.024
0.75	y-y	0.24	0.267	0.161	379.782	423.906	247.04	1.030	249.956	1.018
0.75	y-y	0.22	0.29	0.175	351.595	397.746	226.543	1.027	228.992	1.016
0.75	y-y	0.2	0.315	0.191	323.815	372.47	207.091	1.022	209.136	1.012
0.75	y-y	0.18	0.345	0.211	294.67	341.439	185.935	1.023	187.581	1.014
0.75	y-y	0.16	0.382	0.235	264.239	304.286	163.221	1.036	164.489	1.028
0.75	y-y	0.14	0.427	0.263	232.377	268.333	141.126	1.053	142.072	1.046
0.75	y-y	0.121	0.487	0.301	199.601	231.08	119.142	1.074	119.816	1.068
0.75	y-y	0.102	0.568	0.352	167.574	192.51	97.868	1.099	98.322	1.094
0.75	y-y	0.083	0.676	0.423	136.132	153.144	77.331	1.138	77.614	1.134
0.75	y-y	0.066	0.833	0.523	106.211	117.54	58.897	1.181	59.061	1.178
0.75	y-y	0.048	1.105	0.695	76.793	83.508	41.575	1.227	41.657	1.224
0.75	y-y	0.03	1.702	1.07	46.758	51.958	25.196	1.277	25.226	1.275
1	y-y	0.766	0.064	0.027	807.688	884.463	701.975	1.156	726.035	1.118
1	y-y	0.755	0.066	0.029	799.305	879.079	692.299	1.155	715.69	1.117
1	y-y	0.744	0.069	0.03	790.633	873.588	682.438	1.154	705.156	1.117
1	y-y	0.732	0.072	0.031	781.581	867.93	672.294	1.153	694.33	1.116
1	y-y	0.72	0.075	0.032	772.261	862.163	661.991	1.152	683.347	1.116
1	y-y	0.707	0.078	0.033	762.697	856.29	651.556	1.150	672.233	1.115
1	y-y	0.695	0.081	0.034	752.892	850.288	640.982	1.148	660.984	1.113
1	y-y	0.682	0.085	0.036	742.842	844.138	630.261	1.146	649.589	1.112
1	y-y	0.669	0.088	0.037	732.539	837.827	619.386	1.144	638.043	1.110
1	y-y	0.656	0.092	0.038	721.967	831.327	608.339	1.142	626.326	1.109
1	y-y	0.642	0.096	0.04	711.119	824.646	597.123	1.139	614.444	1.107
1	y-y	0.628	0.1	0.041	699.961	817.761	585.712	1.136	602.368	1.105
1	y-y	0.614	0.104	0.043	688.416	810.623	574.036	1.133	590.025	1.103
1	y-y	0.6	0.108	0.044	676.426	803.165	562.033	1.130	577.352	1.100
1	y-y	0.585	0.113	0.046	664.162	795.402	549.842	1.127	564.495	1.098
1	y-y	0.57	0.117	0.048	651.66	787.305	537.484	1.124	551.477	1.095
1	y-y	0.555	0.122	0.05	638.904	778.81	524.931	1.120	538.271	1.093
1	y-y	0.54	0.127	0.052	625.805	769.877	512.118	1.117	524.806	1.090
1	y-y	0.524	0.133	0.054	612.299	760.477	499.008	1.113	511.047	1.087
1	y-y	0.509	0.139	0.056	598.445	750.561	485.636	1.110	497.031	1.084
1	y-y	0.493	0.145	0.058	584.313	740.129	472.066	1.106	482.826	1.081
1	y-y	0.477	0.151	0.061	569.84	729.12	458.25	1.102	468.382	1.078
1	y-y	0.461	0.158	0.064	554.915	717.418	444.092	1.098	453.602	1.075
1	y-y	0.444	0.165	0.067	539.485	704.868	429.526	1.095	438.416	1.072
1	y-y	0.427	0.173	0.07	523.743	691.343	414.66	1.091	422.939	1.070
1	y-y	0.41	0.181	0.073	507.672	676.817	399.505	1.088	407.184	1.067
1	y-y	0.393	0.19	0.077	491.289	661.279	384.098	1.084	391.191	1.064
1	y-y	0.376	0.2	0.082	474.573	644.723	368.455	1.080	374.978	1.061
1	y-y	0.358	0.21	0.086	458.093	627.842	353.164	1.074	359.152	1.056
1	y-y	0.341	0.22	0.091	442.084	610.72	338.381	1.067	343.875	1.050
1	y-y	0.324	0.232	0.096	425.74	592.282	323.305	1.060	328.316	1.044
1	y-y	0.306	0.245	0.102	409.06	572.623	307.996	1.053	312.54	1.038
1	y-y	0.288	0.259	0.109	390.701	551.5	291.668	1.047	295.74	1.033
1	y-y	0.27	0.276	0.117	369.178	528.526	273.478	1.047	277.055	1.033
1	y-y	0.252	0.294	0.125	346.834	504.62	255.054	1.047	258.163	1.035
1	y-y	0.235	0.312	0.134	326.977	482.792	238.924	1.044	241.65	1.032
1	y-y	0.219	0.332	0.144	306.472	459.577	222.485	1.041	224.847	1.030
1	y-y	0.202	0.356	0.156	285.364	434.772	205.754	1.038	207.772	1.027
1	y-y	0.184	0.384	0.169	262.473	407.995	188.085	1.038	189.77	1.029

1	y-y	0.167	0.419	0.186	237.707	380.037	169.664	1.041	171.034	1.033
1	y-y	0.15	0.46	0.207	213.081	348.999	151.189	1.048	152.276	1.041
1	y-y	0.134	0.504	0.228	191.947	314	134.223	1.058	135.079	1.051
1	y-y	0.118	0.56	0.256	170.209	277.039	117.088	1.070	117.739	1.064
1	y-y	0.102	0.634	0.292	147.016	238.977	99.579	1.089	100.049	1.084
1	y-y	0.086	0.737	0.342	122.851	199.301	81.878	1.115	82.196	1.111
1	y-y	0.07	0.889	0.416	98.543	156.546	64.137	1.154	64.332	1.150
1	y-y	0.054	1.131	0.532	74.851	115.098	47.385	1.199	47.491	1.196
1	y-y	0.04	1.491	0.709	54.831	81.473	33.821	1.237	33.875	1.235
1	y-y	0.025	2.262	1.086	34.902	51.414	21.205	1.263	21.227	1.262

Tabla B.10 Valores de r_1 de la sección 12 (40 cm x 60 cm con ρ = 0.06 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P	ey	ex	Px_CR	Py_CR	Pxy	Pn/Px	Pxym	Pn/Pxym
0.25	x-x	0.897	0.028	0.003	1171.045	1293.865	1137.012	1.055	1187.461	1.010
0.25	x-x	0.888	0.03	0.003	1159.55	1290.519	1123.637	1.057	1172.882	1.013
0.25	x-x	0.878	0.033	0.003	1147.172	1286.977	1109.379	1.059	1157.354	1.015
0.25	x-x	0.868	0.036	0.004	1133.936	1283.24	1094.28	1.061	1140.931	1.018
0.25	x-x	0.857	0.039	0.004	1119.808	1279.304	1078.322	1.063	1123.595	1.020
0.25	x-x	0.845	0.043	0.004	1104.644	1275.132	1061.364	1.065	1105.195	1.022
0.25	x-x	0.832	0.047	0.005	1088.113	1270.713	1043.119	1.067	1085.425	1.025
0.25	x-x	0.818	0.051	0.005	1069.947	1266.048	1023.367	1.069	1064.055	1.028
0.25	x-x	0.803	0.056	0.006	1050.337	1261.095	1002.287	1.072	1041.284	1.031
0.25	x-x	0.786	0.061	0.006	1029.537	1256.25	980.38	1.073	1017.66	1.034
0.25	x-x	0.769	0.066	0.007	1007.398	1252.015	957.808	1.075	993.36	1.036
0.25	x-x	0.751	0.073	0.007	983.889	1248.175	934.382	1.076	968.185	1.038
0.25	x-x	0.732	0.079	0.008	959.093	1244.386	909.965	1.076	941.995	1.040
0.25	x-x	0.712	0.086	0.008	933.243	1240.508	884.693	1.076	914.938	1.041
0.25	x-x	0.691	0.094	0.008	906.604	1236.761	858.913	1.076	887.393	1.042
0.25	x-x	0.67	0.102	0.009	879.413	1232.844	832.683	1.076	859.423	1.043
0.25	x-x	0.648	0.11	0.01	851.573	1228.768	805.93	1.075	830.954	1.043
0.25	x-x	0.625	0.119	0.01	822.667	1224.447	778.249	1.075	801.559	1.043
0.25	x-x	0.602	0.129	0.011	792.997	1219.623	749.824	1.074	771.438	1.044
0.25	x-x	0.578	0.139	0.012	762.824	1214.323	720.927	1.073	740.885	1.044
0.25	x-x	0.553	0.151	0.012	731.876	1208.434	691.299	1.071	709.63	1.043
0.25	x-x	0.528	0.164	0.013	699.827	1201.741	660.619	1.070	677.339	1.043
0.25	x-x	0.502	0.178	0.014	666.821	1194.161	629.033	1.068	644.174	1.043
0.25	x-x	0.475	0.194	0.016	632.65	1185.509	596.355	1.066	609.947	1.042
0.25	x-x	0.447	0.213	0.017	596.828	1174.992	562.026	1.064	574.082	1.041
0.25	x-x	0.417	0.235	0.019	559.526	1162.53	526.288	1.061	536.845	1.041
0.25	x-x	0.387	0.261	0.021	520.422	1147.427	488.827	1.059	497.922	1.040
0.25	x-x	0.355	0.292	0.024	478.837	1129.339	449.126	1.058	456.792	1.040
0.25	x-x	0.321	0.332	0.028	434.983	1106.834	407.315	1.055	413.61	1.039
0.25	x-x	0.287	0.379	0.031	390.017	1085.452	365.237	1.052	370.29	1.037
0.25	x-x	0.255	0.433	0.034	344.059	1065.226	322.796	1.055	326.737	1.042
0.25	x-x	0.224	0.497	0.039	301.199	1038.834	282.857	1.057	285.878	1.046
0.25	x-x	0.196	0.565	0.045	265.04	1004.258	248.666	1.052	250.999	1.043
0.25	x-x	0.167	0.655	0.053	225.685	961.156	211.683	1.056	213.37	1.047
0.25	x-x	0.136	0.794	0.065	186.965	896.341	174.919	1.043	176.07	1.037
0.25	x-x	0.106	1.004	0.086	129.149	792.822	121.11	1.173	121.66	1.168
0.25	x-x	0.077	1.342	0.119	86.018	666.393	80.783	1.284	81.028	1.280
0.25	x-x	0.047	2.161	0.2	61.588	472.599	56.8	1.103	56.921	1.101
0.25	x-x	0.014	6.924	0.669	55.353	88.367	34.922	0.543	34.968	0.542
0.5	x-x	0.895	0.031	0.006	1154.182	1255.547	1092.225	1.096	1138.698	1.051
0.5	x-x	0.885	0.034	0.007	1143.307	1250.966	1079.075	1.098	1124.412	1.054
0.5	x-x	0.876	0.036	0.007	1131.764	1246.244	1065.338	1.100	1109.504	1.056
0.5	x-x	0.865	0.039	0.008	1119.514	1241.36	1050.978	1.102	1093.938	1.058

0.5	x-x	0.854	0.042	0.009	1106.45	1236.3	1035.906	1.103	1077.618	1.060
0.5	x-x	0.842	0.046	0.009	1092.341	1231.044	1019.923	1.105	1060.333	1.063
0.5	x-x	0.829	0.049	0.01	1076.994	1225.56	1002.863	1.107	1041.906	1.065
0.5	x-x	0.816	0.053	0.011	1060.536	1219.922	984.906	1.108	1022.537	1.067
0.5	x-x	0.801	0.057	0.012	1043.317	1214.162	966.393	1.110	1002.597	1.070
0.5	x-x	0.786	0.062	0.012	1025.243	1208.269	947.248	1.111	982.006	1.071
0.5	x-x	0.77	0.067	0.013	1006.034	1202.089	927.154	1.112	960.427	1.073
0.5	x-x	0.753	0.072	0.014	985.702	1195.695	906.19	1.112	937.95	1.075
0.5	x-x	0.736	0.078	0.015	964.335	1189.358	884.599	1.113	914.838	1.076
0.5	x-x	0.717	0.084	0.016	941.76	1182.853	862.116	1.113	890.812	1.077
0.5	x-x	0.698	0.09	0.017	918.298	1176.306	839.087	1.112	866.246	1.078
0.5	x-x	0.677	0.097	0.018	893.913	1169.507	815.381	1.112	841.005	1.078
0.5	x-x	0.656	0.105	0.019	868.554	1161.867	790.699	1.111	814.771	1.078
0.5	x-x	0.634	0.113	0.02	842.363	1153.825	765.404	1.109	787.939	1.077
0.5	x-x	0.612	0.122	0.022	815.119	1145.237	739.275	1.108	760.276	1.077
0.5	x-x	0.589	0.131	0.023	787.333	1135.805	712.644	1.106	732.14	1.076
0.5	x-x	0.565	0.141	0.025	758.978	1125.556	685.546	1.103	703.568	1.075
0.5	x-x	0.541	0.152	0.026	729.771	1114.266	657.711	1.100	674.282	1.073
0.5	x-x	0.516	0.164	0.028	699.489	1101.438	628.851	1.098	643.983	1.072
0.5	x-x	0.49	0.177	0.031	668.451	1086.348	599.092	1.094	612.81	1.070
0.5	x-x	0.463	0.192	0.034	636.488	1069.104	568.451	1.090	580.787	1.067
0.5	x-x	0.435	0.209	0.037	603.104	1049.614	536.624	1.085	547.605	1.064
0.5	x-x	0.406	0.23	0.041	567.938	1027.491	503.351	1.080	513	1.060
0.5	x-x	0.376	0.253	0.045	530.895	1000.876	468.293	1.075	476.633	1.057
0.5	x-x	0.345	0.282	0.051	491.435	968.931	431.108	1.071	438.166	1.054
0.5	x-x	0.313	0.317	0.058	449.912	930.737	392.194	1.067	398.027	1.052
0.5	x-x	0.281	0.359	0.066	408.808	889.78	354.272	1.060	359.025	1.046
0.5	x-x	0.248	0.41	0.076	362.709	842.328	312.803	1.060	316.503	1.048
0.5	x-x	0.215	0.477	0.088	313.353	785.349	269.014	1.067	271.745	1.057
0.5	x-x	0.184	0.556	0.102	269.209	727.687	230.336	1.066	232.336	1.057
0.5	x-x	0.153	0.663	0.122	223.248	657.009	190.329	1.074	191.692	1.066
0.5	x-x	0.122	0.823	0.153	164.427	568.448	140.973	1.155	141.719	1.149
0.5	x-x	0.092	1.066	0.205	185.787	463.032	147.17	0.838	147.984	0.834
0.75	x-x	0.885	0.034	0.01	1141.999	1222.829	1056.954	1.121	1100.414	1.077
0.75	x-x	0.876	0.036	0.011	1131.74	1217.926	1044.555	1.122	1086.981	1.078
0.75	x-x	0.866	0.039	0.012	1120.945	1212.699	1031.573	1.123	1072.93	1.080
0.75	x-x	0.855	0.041	0.013	1109.65	1206.938	1017.906	1.124	1058.152	1.082
0.75	x-x	0.844	0.044	0.014	1097.576	1200.745	1003.415	1.126	1042.502	1.083
0.75	x-x	0.832	0.047	0.015	1084.63	1194.075	988.022	1.127	1025.896	1.085
0.75	x-x	0.819	0.051	0.016	1070.83	1186.992	971.815	1.128	1008.434	1.087
0.75	x-x	0.806	0.054	0.017	1056.336	1179.616	955.033	1.129	990.375	1.089
0.75	x-x	0.792	0.058	0.018	1041.297	1171.936	937.812	1.130	971.868	1.091
0.75	x-x	0.777	0.062	0.019	1025.433	1163.811	919.857	1.131	952.599	1.092
0.75	x-x	0.762	0.066	0.02	1008.794	1155.345	901.301	1.132	932.713	1.093
0.75	x-x	0.746	0.071	0.022	991.352	1146.559	882.161	1.132	912.231	1.095
0.75	x-x	0.73	0.075	0.023	973.003	1137.451	862.376	1.132	891.09	1.095
0.75	x-x	0.712	0.081	0.024	953.648	1128.03	841.901	1.132	869.246	1.096
0.75	x-x	0.694	0.086	0.026	933.509	1118.188	820.874	1.130	846.85	1.096
0.75	x-x	0.674	0.092	0.027	912.471	1107.885	799.215	1.129	823.817	1.095
0.75	x-x	0.654	0.098	0.029	890.513	1097.154	776.953	1.127	800.183	1.094
0.75	x-x	0.634	0.105	0.031	867.501	1085.855	753.948	1.125	775.804	1.093
0.75	x-x	0.612	0.112	0.033	843.531	1073.982	730.306	1.122	750.794	1.091
0.75	x-x	0.59	0.12	0.035	818.498	1061.487	705.962	1.119	725.089	1.089
0.75	x-x	0.568	0.129	0.037	792.301	1048.308	680.853	1.115	698.627	1.087
0.75	x-x	0.544	0.139	0.04	765.248	1033.866	655.012	1.111	671.445	1.084
0.75	x-x	0.52	0.149	0.042	737.295	1018.042	628.429	1.107	643.541	1.081
0.75	x-x	0.495	0.16	0.046	708.164	1000.499	600.859	1.103	614.659	1.078

0.75	x-x	0.47	0.173	0.049	677.924	980.975	572.355	1.098	584.863	1.075
0.75	x-x	0.443	0.187	0.053	646.784	958.617	542.899	1.093	554.14	1.071
0.75	x-x	0.416	0.204	0.058	614.296	932.793	512.135	1.087	522.126	1.067
0.75	x-x	0.388	0.222	0.064	580.223	902.276	479.739	1.083	488.496	1.063
0.75	x-x	0.359	0.244	0.071	544.43	867.247	445.923	1.078	453.479	1.060
0.75	x-x	0.329	0.271	0.079	506.186	827.076	410.287	1.074	416.675	1.058
0.75	x-x	0.299	0.303	0.089	466.274	782.373	373.761	1.070	379.055	1.056
0.75	x-x	0.269	0.34	0.101	426.65	734.592	338.086	1.063	342.412	1.049
0.75	x-x	0.237	0.389	0.116	380.885	678.795	298.388	1.062	301.752	1.050
0.75	x-x	0.206	0.449	0.134	332.516	619.974	258.196	1.067	260.711	1.057
0.75	x-x	0.176	0.525	0.157	285.112	558.698	219.783	1.069	221.602	1.060
0.75	x-x	0.146	0.628	0.189	235.669	491.048	180.754	1.080	181.983	1.072
0.75	x-x	0.115	0.789	0.239	189.809	412.129	143.935	1.069	144.714	1.063
0.75	x-x	0.085	1.052	0.322	175.398	320.755	123.891	0.917	124.467	0.913
1	x-x	0.861	0.038	0.016	1125.74	1184.55	1015.033	1.135	1055.049	1.092
1	x-x	0.851	0.04	0.017	1115.739	1177.809	1002.022	1.136	1040.998	1.093
1	x-x	0.84	0.043	0.018	1105.213	1170.73	988.482	1.137	1026.392	1.095
1	x-x	0.829	0.045	0.019	1094.117	1163.271	974.368	1.138	1011.184	1.097
1	x-x	0.817	0.048	0.02	1082.526	1155.296	959.669	1.139	995.361	1.098
1	x-x	0.804	0.051	0.021	1070.277	1146.937	944.37	1.139	978.913	1.099
1	x-x	0.791	0.054	0.023	1057.386	1138.153	928.482	1.140	961.852	1.101
1	x-x	0.777	0.057	0.024	1044.044	1129.005	912.216	1.140	944.407	1.102
1	x-x	0.763	0.061	0.026	1030.203	1119.544	895.588	1.140	926.596	1.102
1	x-x	0.749	0.064	0.027	1015.76	1109.754	878.529	1.140	908.347	1.103
1	x-x	0.733	0.068	0.029	1000.672	1099.609	861.012	1.139	889.634	1.103
1	x-x	0.717	0.072	0.03	984.772	1088.986	842.864	1.139	870.273	1.103
1	x-x	0.701	0.077	0.032	967.889	1077.736	823.908	1.138	850.078	1.103
1	x-x	0.683	0.081	0.034	950.278	1066.132	804.521	1.137	829.456	1.103
1	x-x	0.666	0.087	0.036	931.887	1054.16	784.685	1.135	808.388	1.102
1	x-x	0.647	0.092	0.038	912.703	1041.923	764.472	1.133	786.952	1.100
1	x-x	0.628	0.098	0.04	892.668	1029.146	743.716	1.130	764.975	1.098
1	x-x	0.608	0.104	0.043	871.602	1015.672	722.249	1.127	742.282	1.096
1	x-x	0.588	0.111	0.045	849.55	1001.262	700.028	1.123	718.831	1.094
1	x-x	0.566	0.118	0.048	826.496	985.667	676.979	1.119	694.548	1.091
1	x-x	0.544	0.126	0.051	802.368	968.979	653.165	1.115	669.505	1.087
1	x-x	0.521	0.134	0.055	776.978	951.039	628.456	1.110	643.569	1.084
1	x-x	0.498	0.144	0.058	750.513	931.435	602.876	1.105	616.77	1.080
1	x-x	0.474	0.155	0.062	722.587	909.147	575.861	1.101	588.525	1.077
1	x-x	0.449	0.167	0.067	693.31	884.589	547.793	1.097	559.24	1.074
1	x-x	0.424	0.18	0.073	662.887	857.749	518.92	1.092	529.181	1.071
1	x-x	0.398	0.195	0.079	630.921	828.11	488.941	1.088	498.041	1.068
1	x-x	0.371	0.213	0.086	597.248	795.074	457.713	1.084	465.678	1.065
1	x-x	0.343	0.233	0.095	561.809	758.2	425.25	1.080	432.116	1.063
1	x-x	0.315	0.258	0.105	524.257	716.472	391.256	1.077	397.061	1.061
1	x-x	0.287	0.286	0.118	485.947	672.512	357.465	1.073	362.304	1.058
1	x-x	0.258	0.32	0.132	447.055	626.248	324.007	1.067	327.978	1.054
1	x-x	0.229	0.364	0.151	404.239	574.385	288.395	1.062	291.537	1.051
1	x-x	0.2	0.418	0.174	356.492	520.579	251.336	1.063	253.719	1.053
1	x-x	0.172	0.484	0.203	308.975	466.88	215.933	1.063	217.689	1.055
1	x-x	0.142	0.579	0.244	257.84	405.642	178.69	1.066	179.891	1.059
1	x-x	0.113	0.722	0.307	211.91	335.83	143.898	1.053	144.676	1.047
1	x-x	0.086	0.941	0.403	85.845	254.826	67.45	1.697	67.62	1.693
1	x-x	0.058	1.376	0.592	36.208	173.296	30.636	2.514	30.671	2.511
0.25	y-y	0.899	0.01	0.02	1253.496	1154.346	1090.82	1.102	1137.17	1.057
0.25	y-y	0.89	0.011	0.022	1249.274	1143.949	1078.387	1.104	1123.665	1.060
0.25	y-y	0.881	0.012	0.024	1244.896	1132.928	1065.383	1.106	1109.553	1.062
0.25	y-y	0.871	0.013	0.025	1240.347	1121.27	1051.797	1.108	1094.825	1.065

0.25	y-y	0.861	0.014	0.027	1235.609	1108.882	1037.551	1.110	1079.398	1.067
0.25	y-y	0.849	0.015	0.029	1230.656	1095.635	1022.528	1.111	1063.148	1.069
0.25	y-y	0.837	0.016	0.032	1225.285	1081.542	1006.619	1.113	1045.961	1.071
0.25	y-y	0.824	0.017	0.034	1219.552	1066.717	989.99	1.114	1028.019	1.073
0.25	y-y	0.811	0.018	0.037	1213.606	1051.167	972.767	1.115	1009.459	1.075
0.25	y-y	0.796	0.02	0.039	1207.428	1034.875	954.938	1.116	990.273	1.076
0.25	y-y	0.781	0.021	0.042	1200.971	1017.741	936.409	1.116	970.362	1.077
0.25	y-y	0.765	0.022	0.046	1194.251	999.697	917.154	1.117	949.7	1.078
0.25	y-y	0.749	0.024	0.049	1187.048	980.619	896.964	1.117	928.069	1.079
0.25	y-y	0.731	0.026	0.053	1179.577	960.685	876.142	1.116	905.796	1.080
0.25	y-y	0.713	0.027	0.057	1171.817	939.629	854.477	1.116	882.659	1.080
0.25	y-y	0.693	0.029	0.061	1163.794	917.103	831.718	1.116	858.395	1.081
0.25	y-y	0.674	0.031	0.065	1155.428	893.245	807.966	1.116	833.118	1.082
0.25	y-y	0.653	0.033	0.07	1146.643	868.591	783.648	1.115	807.287	1.082
0.25	y-y	0.632	0.035	0.076	1137.398	843.118	758.751	1.114	780.891	1.082
0.25	y-y	0.61	0.037	0.081	1127.361	816.817	733.152	1.112	753.802	1.082
0.25	y-y	0.587	0.04	0.087	1116.193	789.612	706.699	1.111	725.867	1.081
0.25	y-y	0.563	0.043	0.094	1104.127	761.834	679.811	1.108	697.529	1.080
0.25	y-y	0.538	0.046	0.101	1090.751	733.27	652.215	1.104	668.507	1.078
0.25	y-y	0.513	0.049	0.109	1075.743	703.412	623.475	1.101	638.346	1.076
0.25	y-y	0.487	0.054	0.118	1058.784	672.778	593.988	1.098	607.471	1.073
0.25	y-y	0.46	0.058	0.127	1040.044	640.875	563.524	1.093	575.646	1.070
0.25	y-y	0.432	0.064	0.139	1018.654	607.575	531.842	1.088	542.625	1.066
0.25	y-y	0.403	0.07	0.152	993.584	572.655	498.656	1.082	508.123	1.062
0.25	y-y	0.373	0.078	0.167	963.628	535.949	463.763	1.077	471.941	1.058
0.25	y-y	0.342	0.088	0.186	928.033	497.308	427.158	1.072	434.086	1.055
0.25	y-y	0.31	0.1	0.209	885.427	456.257	388.526	1.067	394.25	1.052
0.25	y-y	0.277	0.114	0.238	838.058	414.339	349.724	1.060	354.354	1.046
0.25	y-y	0.244	0.131	0.272	786.572	372.619	311.747	1.048	315.421	1.036
0.25	y-y	0.211	0.152	0.317	729.349	325.359	270.468	1.045	273.229	1.034
0.25	y-y	0.179	0.179	0.375	663.787	273.641	226.572	1.056	228.506	1.047
0.25	y-y	0.147	0.219	0.456	586.629	222.991	183.762	1.067	185.033	1.060
0.25	y-y	0.117	0.269	0.565	509.025	189.899	154.245	1.016	155.139	1.011
0.25	y-y	0.088	0.353	0.74	414.592	162.154	127.687	0.922	128.299	0.918
0.25	y-y	0.059	0.521	1.075	287.17	30.204	27.899	2.836	27.928	2.833
0.25	y-y	0.032	0.99	1.947	114.768	44.232	32.708	1.292	32.748	1.290
0.5	y-y	0.847	0.028	0.026	1167.605	1115.607	994.521	1.140	1032.905	1.097
0.5	y-y	0.837	0.03	0.028	1159.92	1105.92	981.321	1.141	1018.674	1.099
0.5	y-y	0.826	0.032	0.029	1151.845	1095.769	967.628	1.142	1003.926	1.101
0.5	y-y	0.814	0.034	0.031	1143.616	1085.104	953.587	1.142	988.821	1.102
0.5	y-y	0.802	0.036	0.033	1135.091	1074.021	939.189	1.143	973.347	1.103
0.5	y-y	0.789	0.038	0.035	1126.207	1062.512	924.399	1.143	957.47	1.103
0.5	y-y	0.776	0.04	0.037	1116.887	1050.53	909.15	1.143	941.121	1.104
0.5	y-y	0.763	0.042	0.039	1107.231	1038.145	893.582	1.142	924.449	1.104
0.5	y-y	0.749	0.044	0.041	1097.166	1025.278	877.604	1.141	907.358	1.104
0.5	y-y	0.734	0.047	0.044	1086.615	1011.836	861.123	1.140	889.753	1.104
0.5	y-y	0.719	0.05	0.046	1075.413	997.722	843.995	1.139	871.479	1.103
0.5	y-y	0.703	0.052	0.049	1063.708	983.072	826.441	1.138	852.775	1.103
0.5	y-y	0.686	0.055	0.051	1051.664	967.788	808.512	1.136	833.699	1.101
0.5	y-y	0.669	0.058	0.054	1039.109	951.76	790.058	1.133	814.091	1.100
0.5	y-y	0.651	0.062	0.058	1025.929	934.821	770.932	1.131	793.799	1.098
0.5	y-y	0.633	0.065	0.061	1012.025	916.504	750.806	1.128	772.478	1.097
0.5	y-y	0.614	0.069	0.065	997.374	897.096	729.915	1.126	750.381	1.095
0.5	y-y	0.595	0.073	0.069	981.907	876.957	708.509	1.124	727.776	1.094
0.5	y-y	0.575	0.077	0.073	965.467	855.801	686.367	1.121	704.434	1.092
0.5	y-y	0.554	0.082	0.078	948.001	833.613	663.513	1.118	680.382	1.090
0.5	y-y	0.533	0.087	0.083	929.392	810.294	639.888	1.114	655.563	1.088

0.5	y-y	0.511	0.093	0.088	909.249	785.868	615.397	1.111	629.881	1.085
0.5	y-y	0.488	0.099	0.094	887.566	760.23	590.058	1.107	603.361	1.083
0.5	y-y	0.465	0.106	0.101	864.124	733.199	563.758	1.103	575.89	1.080
0.5	y-y	0.441	0.114	0.108	838.648	704.641	536.412	1.099	547.383	1.077
0.5	y-y	0.416	0.123	0.117	810.867	674.75	508.14	1.095	517.975	1.074
0.5	y-y	0.39	0.133	0.127	780.672	643.372	478.941	1.090	487.668	1.071
0.5	y-y	0.364	0.145	0.138	747.696	610.018	448.547	1.085	456.193	1.067
0.5	y-y	0.337	0.159	0.151	710.619	574.576	416.611	1.081	423.199	1.065
0.5	y-y	0.309	0.177	0.167	669.844	537.221	383.583	1.078	389.161	1.062
0.5	y-y	0.281	0.197	0.185	626.833	498.968	350.614	1.072	355.268	1.058
0.5	y-y	0.253	0.221	0.207	582.52	460.208	318.239	1.065	322.069	1.052
0.5	y-y	0.225	0.251	0.235	533.636	418.377	284.349	1.057	287.403	1.046
0.5	y-y	0.197	0.288	0.268	483.574	377.506	251.916	1.046	254.309	1.036
0.5	y-y	0.169	0.338	0.313	428.598	329.297	216.327	1.042	218.089	1.034
0.5	y-y	0.141	0.402	0.372	369.198	275.856	179.008	1.056	180.214	1.049
0.5	y-y	0.114	0.493	0.455	303.204	223.646	142.407	1.075	143.168	1.069
0.5	y-y	0.087	0.644	0.594	229.458	171.558	105.936	1.097	106.357	1.093
0.5	y-y	0.06	0.919	0.842	89.127	163.338	60.26	1.339	60.396	1.336
0.5	y-y	0.009	6.234	5.709	131.037	3639.473	139.687	0.082	140.419	0.082
0.75	y-y	0.781	0.05	0.029	1074.471	1097.141	913.382	1.145	945.656	1.106
0.75	y-y	0.77	0.052	0.031	1064.52	1088.545	900.309	1.145	931.651	1.107
0.75	y-y	0.759	0.055	0.032	1054.325	1079.693	887.039	1.145	917.448	1.107
0.75	y-y	0.747	0.057	0.033	1043.896	1070.609	873.607	1.145	903.087	1.107
0.75	y-y	0.735	0.06	0.035	1033.171	1061.302	859.982	1.144	888.535	1.107
0.75	y-y	0.723	0.063	0.037	1022.02	1051.677	846.025	1.143	873.643	1.107
0.75	y-y	0.71	0.066	0.038	1010.414	1041.73	831.728	1.142	858.405	1.106
0.75	y-y	0.696	0.069	0.04	998.335	1031.355	817.029	1.140	842.757	1.106
0.75	y-y	0.682	0.072	0.042	985.84	1020.603	802.016	1.139	826.793	1.105
0.75	y-y	0.668	0.075	0.044	972.866	1009.443	786.647	1.137	810.47	1.103
0.75	y-y	0.654	0.079	0.046	959.393	997.824	770.898	1.135	793.763	1.102
0.75	y-y	0.639	0.083	0.048	945.391	985.737	754.765	1.132	776.669	1.100
0.75	y-y	0.623	0.087	0.05	930.841	973.14	738.236	1.130	759.178	1.099
0.75	y-y	0.608	0.091	0.053	915.642	959.817	721.149	1.127	741.119	1.097
0.75	y-y	0.591	0.096	0.056	899.779	946.021	703.668	1.124	722.67	1.095
0.75	y-y	0.574	0.1	0.058	883.103	931.377	685.527	1.121	703.549	1.092
0.75	y-y	0.557	0.106	0.061	865.711	915.673	666.714	1.118	683.748	1.090
0.75	y-y	0.539	0.111	0.064	847.523	898.995	647.272	1.115	663.315	1.088
0.75	y-y	0.521	0.117	0.068	828.361	881.308	627.132	1.112	642.18	1.086
0.75	y-y	0.502	0.124	0.071	808.259	862.766	606.438	1.109	620.499	1.083
0.75	y-y	0.483	0.131	0.076	787.264	843.192	585.181	1.105	598.262	1.081
0.75	y-y	0.464	0.139	0.08	765.207	822.373	563.218	1.102	575.326	1.079
0.75	y-y	0.444	0.147	0.085	741.962	800.281	540.535	1.098	551.677	1.076
0.75	y-y	0.423	0.157	0.09	717.347	776.91	517.101	1.095	527.289	1.074
0.75	y-y	0.402	0.167	0.096	691.431	751.83	492.843	1.092	502.089	1.072
0.75	y-y	0.381	0.179	0.103	664.31	724.806	467.796	1.089	476.119	1.070
0.75	y-y	0.359	0.193	0.111	635.809	695.868	441.982	1.086	449.404	1.068
0.75	y-y	0.336	0.208	0.12	605.692	665.123	415.426	1.083	421.976	1.066
0.75	y-y	0.313	0.226	0.13	573.934	632.277	388.104	1.081	393.815	1.065
0.75	y-y	0.29	0.247	0.142	540.817	597.669	360.373	1.077	365.292	1.063
0.75	y-y	0.267	0.269	0.156	508.214	563.275	333.813	1.071	338.03	1.058
0.75	y-y	0.244	0.297	0.172	473.305	526.356	306.247	1.066	309.792	1.054
0.75	y-y	0.22	0.33	0.192	436.505	486.501	277.847	1.060	280.762	1.049
0.75	y-y	0.197	0.371	0.216	397.695	445.9	249.388	1.055	251.733	1.045
0.75	y-y	0.174	0.418	0.244	356.521	406.191	221.265	1.052	223.11	1.043
0.75	y-y	0.151	0.478	0.28	312.701	364.188	192.439	1.051	193.833	1.044
0.75	y-y	0.128	0.562	0.33	266.539	312.534	161.183	1.062	162.16	1.056
0.75	y-y	0.105	0.679	0.399	219.37	257.056	129.847	1.083	130.48	1.078

0.75	y-y	0.083	0.857	0.504	133.626	200.11	85.226	1.297	85.498	1.293
0.75	y-y	0.061	1.145	0.677	220.765	92	68.25	1.194	68.425	1.191
1	y-y	0.72	0.072	0.03	987.197	1090.608	845.616	1.139	873.207	1.103
1	y-y	0.709	0.075	0.031	976.116	1083.205	833.1	1.138	859.867	1.103
1	y-y	0.698	0.078	0.033	964.697	1075.623	820.365	1.138	846.307	1.103
1	y-y	0.686	0.081	0.034	952.936	1067.878	807.424	1.137	832.542	1.103
1	y-y	0.674	0.084	0.035	940.827	1059.945	794.268	1.136	818.562	1.102
1	y-y	0.662	0.087	0.037	928.385	1051.923	780.968	1.135	804.443	1.102
1	y-y	0.65	0.091	0.038	915.601	1043.77	767.504	1.133	790.164	1.101
1	y-y	0.637	0.095	0.039	902.463	1035.383	753.815	1.131	775.663	1.099
1	y-y	0.624	0.099	0.041	888.836	1026.707	739.79	1.129	760.821	1.098
1	y-y	0.611	0.103	0.042	874.77	1017.705	725.457	1.127	745.67	1.096
1	y-y	0.598	0.107	0.044	860.302	1008.372	710.853	1.125	730.249	1.095
1	y-y	0.584	0.112	0.046	845.374	998.458	695.829	1.122	714.403	1.093
1	y-y	0.569	0.117	0.048	829.995	988.054	680.458	1.120	698.211	1.091
1	y-y	0.555	0.122	0.05	814.115	977.168	664.728	1.117	681.659	1.089
1	y-y	0.54	0.127	0.052	797.762	965.744	648.652	1.114	664.764	1.087
1	y-y	0.525	0.133	0.054	780.795	953.778	632.155	1.111	647.449	1.084
1	y-y	0.509	0.139	0.056	763.408	941.136	615.33	1.107	629.811	1.082
1	y-y	0.493	0.146	0.059	745.48	927.513	597.996	1.104	611.664	1.080
1	y-y	0.477	0.153	0.062	726.824	912.607	579.948	1.102	592.794	1.078
1	y-y	0.461	0.161	0.065	707.529	896.655	561.386	1.099	573.414	1.076
1	y-y	0.444	0.169	0.068	687.75	879.791	542.496	1.096	553.72	1.074
1	y-y	0.427	0.178	0.072	667.482	861.894	523.263	1.093	533.698	1.072
1	y-y	0.41	0.187	0.076	646.572	842.781	503.563	1.090	513.22	1.070
1	y-y	0.393	0.198	0.08	624.815	822.257	483.25	1.087	492.137	1.068
1	y-y	0.375	0.21	0.085	602.323	800.164	462.392	1.084	470.522	1.066
1	y-y	0.357	0.223	0.09	579.105	776.543	441.064	1.082	448.455	1.064
1	y-y	0.338	0.237	0.096	555.032	750.878	419.085	1.079	425.752	1.062
1	y-y	0.319	0.254	0.104	529.994	723.001	396.413	1.077	402.374	1.061
1	y-y	0.3	0.273	0.112	503.882	693.089	373.122	1.076	378.397	1.061
1	y-y	0.281	0.292	0.12	478.873	664.3	351.338	1.072	356.012	1.058
1	y-y	0.263	0.315	0.13	452.948	633.419	329.037	1.068	333.133	1.054
1	y-y	0.243	0.341	0.141	425.707	600.105	305.989	1.063	309.528	1.051
1	y-y	0.223	0.373	0.155	395.416	564.184	281.363	1.062	284.352	1.051
1	y-y	0.204	0.409	0.171	363.249	528.019	256.444	1.064	258.925	1.053
1	y-y	0.185	0.449	0.188	332.116	493.497	233.098	1.063	235.146	1.054
1	y-y	0.166	0.499	0.209	299.915	456.137	209.236	1.063	210.885	1.055
1	y-y	0.147	0.563	0.237	266.038	415.153	184.492	1.065	185.773	1.057
1	y-y	0.127	0.648	0.274	228.164	370.908	157.938	1.075	158.876	1.069
1	y-y	0.108	0.755	0.322	204.141	320.569	137.538	1.050	138.249	1.045
1	y-y	0.09	0.901	0.385	98.219	266.423	75.83	1.581	76.045	1.577
1	y-y	0.071	1.121	0.482	215.116	209.37	115.24	0.827	115.738	0.823
1	y-y	0.034	2.313	1.001	22.698	58.937	16.59	2.714	16.6	2.712

Tabla B.11 Valores de r_1 de la sección 13 (60 cm x 90 cm con ρ = 0.03 y f'_c = 250 kg/cm^2)

s	Eje	Pn/P	ey	ex	Px_CR	Py_CR	Pxy	Pn/Px	Pxym	Pn/Pxym
0.25	x-x	0.893	0.041	0.005	1637.156	1807.96	1599.52	1.037	1671.541	0.992
0.25	x-x	0.885	0.045	0.005	1623.101	1804.74	1583.62	1.038	1654.188	0.994
0.25	x-x	0.877	0.048	0.006	1608.163	1801.30	1566.8	1.039	1635.84	0.995
0.25	x-x	0.868	0.052	0.006	1592.216	1797.62	1548.92	1.040	1616.366	0.997
0.25	x-x	0.858	0.056	0.006	1575.067	1793.66	1529.81	1.041	1595.563	0.999
0.25	x-x	0.848	0.06	0.007	1556.665	1789.40	1509.41	1.043	1573.388	1.000
0.25	x-x	0.837	0.065	0.007	1536.966	1784.81	1487.70	1.044	1549.809	1.002
0.25	x-x	0.825	0.071	0.008	1515.828	1779.84	1464.52	1.045	1524.674	1.004

0.25	x-x	0.812	0.076	0.009	1493.021	1774.45	1439.68	1.047	1497.764	1.006
0.25	x-x	0.798	0.083	0.009	1468.424	1768.60	1413.06	1.048	1468.978	1.008
0.25	x-x	0.783	0.09	0.01	1441.955	1762.23	1384.60	1.050	1438.248	1.011
0.25	x-x	0.767	0.098	0.011	1413.471	1755.66	1354.41	1.051	1405.703	1.013
0.25	x-x	0.75	0.107	0.012	1382.91	1749.29	1322.68	1.053	1371.556	1.015
0.25	x-x	0.732	0.116	0.012	1350.398	1743.25	1289.61	1.054	1336.025	1.017
0.25	x-x	0.713	0.126	0.013	1316.161	1737.81	1255.52	1.055	1299.468	1.019
0.25	x-x	0.694	0.137	0.014	1280.557	1732.45	1220.42	1.055	1261.906	1.020
0.25	x-x	0.673	0.148	0.015	1243.948	1727.01	1184.57	1.055	1223.614	1.021
0.25	x-x	0.652	0.16	0.015	1206.791	1721.19	1148.24	1.055	1184.888	1.022
0.25	x-x	0.631	0.172	0.016	1168.93	1714.95	1111.29	1.055	1145.589	1.023
0.25	x-x	0.61	0.186	0.017	1129.979	1708.20	1073.37	1.054	1105.33	1.024
0.25	x-x	0.587	0.2	0.018	1090.164	1700.77	1034.63	1.054	1064.299	1.024
0.25	x-x	0.565	0.216	0.019	1049.647	1692.60	995.255	1.053	1022.672	1.025
0.25	x-x	0.541	0.233	0.021	1008.246	1683.60	955.068	1.052	980.287	1.025
0.25	x-x	0.517	0.251	0.022	965.575	1673.60	913.719	1.051	936.776	1.025
0.25	x-x	0.493	0.271	0.024	921.765	1662.38	871.32	1.050	892.262	1.025
0.25	x-x	0.467	0.294	0.026	876.415	1649.53	827.468	1.048	846.332	1.025
0.25	x-x	0.441	0.32	0.028	829.432	1634.69	782.081	1.046	798.911	1.024
0.25	x-x	0.414	0.35	0.031	780.714	1617.14	735.017	1.045	749.863	1.024
0.25	x-x	0.385	0.385	0.034	730.064	1596.45	686.157	1.043	699.078	1.023
0.25	x-x	0.356	0.427	0.039	677.355	1571.67	635.381	1.040	646.445	1.022
0.25	x-x	0.327	0.476	0.042	623.563	1547.93	584.462	1.037	593.811	1.021
0.25	x-x	0.298	0.53	0.046	565.335	1527.70	530.587	1.042	538.281	1.027
0.25	x-x	0.27	0.589	0.05	509.974	1506.68	479.42	1.046	485.692	1.032
0.25	x-x	0.243	0.654	0.055	460.05	1473.28	432.209	1.045	437.3	1.033
0.25	x-x	0.219	0.722	0.062	414.442	1439.09	389.253	1.043	393.378	1.032
0.25	x-x	0.193	0.811	0.07	365.359	1396.33	343.117	1.043	346.318	1.033
0.25	x-x	0.166	0.935	0.081	313.527	1340.36	294.39	1.044	296.744	1.036
0.25	x-x	0.14	1.087	0.097	266.1	1264.78	249.383	1.041	251.07	1.034
0.25	x-x	0.114	1.301	0.12	216.269	1165.78	202.309	1.048	203.418	1.042
0.25	x-x	0.087	1.662	0.158	182.332	1017.21	168.667	0.958	169.437	0.953
0.25	x-x	0.034	3.939	0.413	229.377	514.204	173.441	0.367	174.255	0.365
0.25	x-x	0.007	17.95	1.983	57982.64	91.379	95.952	0.139	96.2	0.139
0.5	x-x	0.879	0.049	0.011	1605.394	1755.49	1529.51	1.067	1595.239	1.023
0.5	x-x	0.871	0.052	0.012	1591.272	1749.76	1512.41	1.069	1576.641	1.025
0.5	x-x	0.862	0.056	0.012	1576.171	1743.68	1494.30	1.070	1556.973	1.027
0.5	x-x	0.852	0.06	0.013	1560.054	1737.24	1475.16	1.072	1536.205	1.029
0.5	x-x	0.842	0.064	0.014	1542.893	1730.37	1454.95	1.074	1514.307	1.032
0.5	x-x	0.831	0.068	0.015	1524.599	1723.05	1433.61	1.075	1491.201	1.034
0.5	x-x	0.819	0.073	0.016	1505.011	1715.23	1410.99	1.077	1466.743	1.036
0.5	x-x	0.806	0.079	0.017	1483.992	1706.88	1386.99	1.079	1440.827	1.038
0.5	x-x	0.792	0.085	0.019	1461.72	1698.14	1361.90	1.080	1413.769	1.041
0.5	x-x	0.778	0.091	0.02	1438.233	1689.12	1335.85	1.081	1385.721	1.042
0.5	x-x	0.763	0.098	0.021	1413.372	1679.90	1308.79	1.082	1356.621	1.044
0.5	x-x	0.747	0.106	0.023	1386.858	1670.42	1280.46	1.083	1326.205	1.046
0.5	x-x	0.731	0.114	0.024	1358.842	1660.85	1251.12	1.084	1294.759	1.048
0.5	x-x	0.714	0.122	0.026	1329.272	1651.17	1220.72	1.085	1262.234	1.049
0.5	x-x	0.696	0.131	0.027	1298.186	1641.33	1189.30	1.085	1228.666	1.051
0.5	x-x	0.677	0.141	0.029	1265.796	1631.30	1157.02	1.086	1194.248	1.052
0.5	x-x	0.657	0.152	0.03	1231.929	1621.17	1123.80	1.086	1158.884	1.053
0.5	x-x	0.637	0.163	0.032	1196.795	1610.79	1089.75	1.085	1122.707	1.053
0.5	x-x	0.616	0.175	0.034	1160.869	1599.58	1055.02	1.084	1085.881	1.053
0.5	x-x	0.595	0.188	0.036	1123.826	1587.47	1019.35	1.083	1048.138	1.053
0.5	x-x	0.573	0.202	0.038	1086.004	1574.20	982.984	1.081	1009.72	1.052
0.5	x-x	0.55	0.217	0.04	1047.605	1559.59	946.062	1.079	970.802	1.052
0.5	x-x	0.527	0.233	0.043	1008.102	1543.30	908.113	1.077	930.884	1.051

0.5	x-x	0.503	0.25	0.046	967.4	1525.2	869.102	1.075	889.936	1.050
0.5	x-x	0.479	0.269	0.05	925.761	1504.95	829.239	1.072	848.185	1.048
0.5	x-x	0.454	0.291	0.054	883.036	1482.17	788.391	1.069	805.498	1.047
0.5	x-x	0.428	0.315	0.059	838.841	1456.13	746.193	1.066	761.5	1.045
0.5	x-x	0.402	0.342	0.064	792.749	1426.16	702.308	1.062	715.85	1.042
0.5	x-x	0.374	0.375	0.071	744.672	1391.63	656.721	1.058	668.547	1.039
0.5	x-x	0.346	0.413	0.079	694.69	1351.43	609.493	1.053	619.666	1.035
0.5	x-x	0.318	0.455	0.087	646.057	1310.91	564.354	1.045	573.066	1.029
0.5	x-x	0.289	0.505	0.097	592.131	1264.27	515.186	1.042	522.436	1.028
0.5	x-x	0.261	0.564	0.109	531.737	1211.81	461.446	1.049	467.254	1.036
0.5	x-x	0.233	0.632	0.122	476.161	1156.35	412.17	1.050	416.798	1.039
0.5	x-x	0.206	0.714	0.137	419.807	1095.04	362.776	1.053	366.356	1.042
0.5	x-x	0.179	0.813	0.157	364.44	1018.55	313.776	1.056	316.451	1.048
0.5	x-x	0.151	0.948	0.187	308.854	922.024	264.298	1.061	266.193	1.053
0.5	x-x	0.126	1.114	0.224	258.955	821.539	220.256	1.059	221.571	1.053
0.5	x-x	0.099	1.377	0.283	199.337	698.945	169.244	1.088	170.019	1.083
0.5	x-x	0.071	1.863	0.392	208.083	541.761	163.589	0.809	164.313	0.806
0.5	x-x	0.019	6.415	1.453	31.022	129.078	25.353	1.405	25.37	1.404
0.75	x-x	0.86	0.055	0.018	1578.543	1700.09	1464.21	1.090	1524.333	1.047
0.75	x-x	0.85	0.059	0.019	1564.138	1692.61	1446.35	1.091	1504.987	1.049
0.75	x-x	0.84	0.062	0.021	1548.852	1684.69	1427.59	1.093	1484.683	1.051
0.75	x-x	0.83	0.066	0.022	1532.757	1676.12	1407.86	1.094	1463.362	1.053
0.75	x-x	0.819	0.071	0.023	1515.814	1666.85	1387.14	1.096	1440.986	1.055
0.75	x-x	0.807	0.075	0.025	1497.867	1657.09	1365.47	1.097	1417.622	1.057
0.75	x-x	0.794	0.08	0.026	1478.968	1646.87	1342.96	1.098	1393.374	1.058
0.75	x-x	0.781	0.085	0.028	1459.216	1636.17	1319.70	1.099	1368.347	1.060
0.75	x-x	0.768	0.091	0.03	1438.488	1624.79	1295.50	1.100	1342.351	1.062
0.75	x-x	0.753	0.097	0.032	1416.697	1612.92	1270.44	1.101	1315.466	1.063
0.75	x-x	0.738	0.104	0.034	1393.754	1600.69	1244.58	1.101	1287.759	1.064
0.75	x-x	0.723	0.11	0.036	1369.653	1588.09	1217.93	1.101	1259.252	1.065
0.75	x-x	0.706	0.118	0.038	1344.209	1574.98	1190.30	1.102	1229.733	1.066
0.75	x-x	0.69	0.126	0.04	1317.485	1561.36	1161.78	1.102	1199.312	1.067
0.75	x-x	0.672	0.134	0.043	1289.397	1547.16	1132.29	1.101	1167.917	1.068
0.75	x-x	0.654	0.143	0.045	1260.105	1532.52	1102.09	1.101	1135.808	1.068
0.75	x-x	0.635	0.153	0.048	1229.715	1517.04	1071.08	1.100	1102.902	1.068
0.75	x-x	0.615	0.163	0.051	1198.083	1500.89	1039.28	1.098	1069.22	1.068
0.75	x-x	0.595	0.174	0.053	1165.172	1484.24	1006.79	1.096	1034.863	1.066
0.75	x-x	0.574	0.186	0.057	1130.842	1466.60	973.323	1.094	999.529	1.065
0.75	x-x	0.552	0.198	0.06	1095.121	1447.87	938.905	1.091	963.267	1.063
0.75	x-x	0.53	0.212	0.064	1058.265	1427.92	903.732	1.088	926.282	1.061
0.75	x-x	0.507	0.228	0.068	1020.35	1406.37	867.779	1.084	888.549	1.059
0.75	x-x	0.483	0.244	0.073	981.151	1382.78	830.805	1.080	849.824	1.056
0.75	x-x	0.46	0.262	0.078	940.727	1356.58	792.759	1.076	810.058	1.053
0.75	x-x	0.435	0.282	0.084	899.046	1326.90	753.474	1.072	769.083	1.050
0.75	x-x	0.41	0.305	0.091	855.966	1293.43	712.925	1.068	726.884	1.047
0.75	x-x	0.385	0.331	0.099	811.126	1255.24	670.792	1.064	683.136	1.045
0.75	x-x	0.358	0.361	0.109	764.401	1211.64	627.038	1.060	637.811	1.042
0.75	x-x	0.331	0.395	0.12	717.332	1164.25	583.351	1.054	592.664	1.037
0.75	x-x	0.304	0.433	0.132	670.309	1113.14	540.111	1.046	548.085	1.031
0.75	x-x	0.277	0.48	0.148	618.744	1053.77	493.484	1.040	500.133	1.027
0.75	x-x	0.249	0.534	0.166	560.76	990.446	443.616	1.044	448.981	1.031
0.75	x-x	0.223	0.597	0.186	502.966	925.441	395.251	1.046	399.505	1.035
0.75	x-x	0.196	0.675	0.211	445.287	854.275	347.513	1.048	350.797	1.038
0.75	x-x	0.17	0.774	0.245	384.699	775.256	298.454	1.055	300.873	1.046
0.75	x-x	0.142	0.911	0.289	322.596	688.401	249.143	1.061	250.827	1.054
0.75	x-x	0.117	1.086	0.349	266.247	598.923	204.631	1.063	205.766	1.057
0.75	x-x	0.091	1.367	0.445	201.55	476.11	153.3	1.103	153.935	1.098

0.75	x-x	0.065	1.867	0.62	208.372	334.226	137.886	0.874	138.4	0.871
0.75	x-x	0.016	7.253	2.515	20.346	69.678	15.883	1.820	15.89	1.819
1	x-x	0.834	0.06	0.027	1557.64	1642.40	1404.25	1.103	1459.457	1.061
1	x-x	0.825	0.064	0.029	1543.466	1632.43	1385.54	1.105	1439.261	1.063
1	x-x	0.814	0.067	0.03	1528.547	1622.07	1366.16	1.106	1418.364	1.065
1	x-x	0.803	0.071	0.032	1512.911	1611.20	1346.08	1.107	1396.734	1.067
1	x-x	0.791	0.076	0.034	1496.531	1599.89	1325.35	1.108	1374.418	1.069
1	x-x	0.779	0.08	0.036	1479.537	1587.92	1303.94	1.109	1351.417	1.070
1	x-x	0.766	0.085	0.038	1461.916	1575.31	1281.90	1.110	1327.748	1.071
1	x-x	0.753	0.09	0.04	1443.637	1562.17	1259.30	1.110	1303.521	1.072
1	x-x	0.739	0.095	0.042	1424.591	1548.55	1236.12	1.110	1278.7	1.073
1	x-x	0.725	0.101	0.045	1404.663	1534.48	1212.32	1.110	1253.253	1.074
1	x-x	0.71	0.106	0.047	1383.766	1519.96	1187.87	1.110	1227.141	1.074
1	x-x	0.695	0.113	0.05	1361.667	1504.74	1162.49	1.109	1200.072	1.074
1	x-x	0.678	0.119	0.053	1338.509	1488.93	1136.38	1.108	1172.271	1.074
1	x-x	0.662	0.127	0.056	1314.325	1472.56	1109.63	1.107	1143.827	1.074
1	x-x	0.645	0.134	0.059	1289.032	1455.62	1082.21	1.106	1114.71	1.074
1	x-x	0.627	0.142	0.062	1262.601	1438.06	1054.12	1.104	1084.929	1.073
1	x-x	0.609	0.151	0.065	1234.854	1419.78	1025.21	1.102	1054.327	1.072
1	x-x	0.59	0.16	0.069	1205.849	1400.59	995.486	1.100	1022.915	1.070
1	x-x	0.571	0.17	0.073	1175.574	1380.45	964.963	1.097	990.715	1.069
1	x-x	0.55	0.181	0.077	1143.956	1359.08	933.522	1.095	957.602	1.067
1	x-x	0.53	0.193	0.082	1110.874	1336.57	901.194	1.091	923.616	1.065
1	x-x	0.509	0.205	0.087	1076.383	1312.42	867.869	1.088	888.644	1.062
1	x-x	0.486	0.219	0.093	1040.484	1285.95	833.343	1.084	852.479	1.059
1	x-x	0.464	0.235	0.099	1003.043	1257.08	797.627	1.079	815.141	1.056
1	x-x	0.441	0.252	0.106	963.859	1225.62	760.648	1.075	776.559	1.053
1	x-x	0.417	0.271	0.114	923.196	1191.22	722.582	1.071	736.926	1.050
1	x-x	0.393	0.292	0.123	881.028	1153.09	683.28	1.066	696.091	1.047
1	x-x	0.368	0.316	0.133	836.851	1110.13	642.255	1.063	653.562	1.044
1	x-x	0.342	0.344	0.145	790.639	1062.27	599.721	1.060	609.568	1.042
1	x-x	0.317	0.374	0.159	745.571	1013.39	558.878	1.054	567.42	1.038
1	x-x	0.292	0.409	0.175	699.318	960.269	517.437	1.047	524.751	1.032
1	x-x	0.266	0.451	0.194	650.089	901.502	474.21	1.041	480.345	1.028
1	x-x	0.24	0.501	0.217	596.759	840.067	429.671	1.037	434.702	1.025
1	x-x	0.216	0.556	0.242	539.625	780.752	385.324	1.039	389.366	1.028
1	x-x	0.19	0.626	0.275	480.607	714.968	340.063	1.039	343.207	1.030
1	x-x	0.165	0.719	0.318	416.689	642.371	292.58	1.045	294.904	1.037
1	x-x	0.141	0.829	0.37	357.165	570.804	249.19	1.049	250.874	1.042
1	x-x	0.117	0.984	0.443	296.303	478.137	202.937	1.068	204.052	1.062
1	x-x	0.092	1.232	0.557	231.652	375.983	155.333	1.096	155.986	1.091
1	x-x	0.067	1.638	0.75	179.687	269.217	114.404	1.093	114.758	1.090
1	x-x	0.021	5.042	2.339	217.868	75.44	57.781	0.665	57.871	0.664
0.25	y-y	0.873	0.018	0.035	1745.174	1590.53	1508.31	1.074	1572.195	1.030
0.25	y-y	0.864	0.019	0.038	1739.301	1576.10	1491.02	1.075	1553.413	1.032
0.25	y-y	0.855	0.02	0.04	1733.073	1560.71	1472.74	1.077	1533.585	1.034
0.25	y-y	0.845	0.022	0.043	1726.453	1544.34	1453.47	1.079	1512.696	1.037
0.25	y-y	0.835	0.023	0.046	1719.406	1526.95	1433.16	1.081	1490.709	1.039
0.25	y-y	0.823	0.025	0.049	1711.884	1508.42	1411.71	1.083	1467.518	1.041
0.25	y-y	0.811	0.026	0.053	1703.848	1488.60	1389.00	1.084	1442.999	1.044
0.25	y-y	0.799	0.028	0.056	1695.387	1467.53	1365.16	1.086	1417.278	1.046
0.25	y-y	0.785	0.03	0.061	1686.605	1445.35	1340.41	1.088	1390.62	1.049
0.25	y-y	0.771	0.032	0.065	1677.592	1422.14	1314.89	1.089	1363.177	1.050
0.25	y-y	0.756	0.034	0.07	1667.927	1398.14	1288.58	1.090	1334.921	1.052
0.25	y-y	0.741	0.036	0.075	1657.923	1372.88	1261.32	1.090	1305.682	1.053
0.25	y-y	0.724	0.039	0.08	1647.724	1346.25	1233.10	1.090	1275.468	1.054
0.25	y-y	0.707	0.041	0.086	1637.133	1318.14	1203.75	1.090	1244.099	1.055

0.25	y-y	0.689	0.044	0.092	1626.279	1288.64	1173.47	1.090	1211.779	1.056
0.25	y-y	0.671	0.046	0.099	1615.196	1257.61	1142.14	1.090	1178.404	1.057
0.25	y-y	0.651	0.049	0.106	1603.75	1225.46	1110.09	1.089	1144.316	1.057
0.25	y-y	0.631	0.052	0.113	1591.607	1192.40	1077.35	1.088	1109.553	1.056
0.25	y-y	0.611	0.055	0.121	1578.802	1157.99	1043.60	1.086	1073.789	1.056
0.25	y-y	0.59	0.058	0.13	1565.037	1121.86	1008.47	1.085	1036.635	1.056
0.25	y-y	0.568	0.062	0.14	1550.256	1084.42	972.321	1.084	998.473	1.056
0.25	y-y	0.546	0.066	0.15	1534.111	1046.43	935.691	1.082	959.884	1.055
0.25	y-y	0.523	0.07	0.161	1516.421	1007.47	898.24	1.080	920.513	1.054
0.25	y-y	0.499	0.076	0.173	1496.486	967.496	859.778	1.078	880.162	1.053
0.25	y-y	0.475	0.081	0.186	1474.367	926.336	820.317	1.075	838.853	1.051
0.25	y-y	0.45	0.088	0.2	1450.344	883.945	780.003	1.071	796.743	1.049
0.25	y-y	0.424	0.095	0.217	1423.028	839.987	738.288	1.067	753.269	1.046
0.25	y-y	0.398	0.104	0.236	1391.302	794.206	694.862	1.063	708.117	1.043
0.25	y-y	0.37	0.115	0.258	1354.259	746.547	649.699	1.059	661.272	1.040
0.25	y-y	0.342	0.128	0.285	1310.606	696.673	602.532	1.054	612.473	1.037
0.25	y-y	0.314	0.142	0.315	1264.503	647.301	556.495	1.047	564.963	1.031
0.25	y-y	0.285	0.157	0.349	1214.938	598.075	511.148	1.037	518.284	1.022
0.25	y-y	0.257	0.175	0.391	1161.049	543.308	462.293	1.032	468.122	1.020
0.25	y-y	0.229	0.196	0.439	1101.648	482.089	409.283	1.040	413.845	1.029
0.25	y-y	0.202	0.222	0.499	1032.953	422.583	357.684	1.047	361.164	1.037
0.25	y-y	0.176	0.252	0.569	962.365	368.051	310.811	1.049	313.436	1.040
0.25	y-y	0.15	0.291	0.656	882.499	313.258	264.085	1.055	265.977	1.048
0.25	y-y	0.125	0.347	0.771	785.991	261.082	219.118	1.062	220.419	1.055
0.25	y-y	0.101	0.433	0.93	670.603	211.516	176.049	1.066	176.888	1.061
0.25	y-y	0.076	0.58	1.192	517.558	160.887	131.424	1.081	131.891	1.077
0.25	y-y	0.053	0.841	1.675	351.454	110.34	87.955	1.110	88.164	1.107
0.25	y-y	0.028	1.544	2.989	176.534	60.378	46.108	1.141	46.166	1.140
0.5	y-y	0.82	0.045	0.044	1619.838	1540.70	1374.26	1.108	1427.092	1.067
0.5	y-y	0.81	0.048	0.046	1608.949	1526.69	1355.39	1.109	1406.75	1.069
0.5	y-y	0.799	0.051	0.049	1597.461	1512.26	1335.97	1.111	1385.852	1.071
0.5	y-y	0.788	0.053	0.051	1585.443	1497.21	1315.94	1.112	1364.308	1.072
0.5	y-y	0.777	0.056	0.054	1572.854	1481.46	1295.24	1.113	1342.067	1.074
0.5	y-y	0.764	0.06	0.057	1559.871	1465.01	1274.00	1.114	1319.275	1.075
0.5	y-y	0.752	0.063	0.06	1546.559	1447.96	1252.37	1.114	1296.098	1.076
0.5	y-y	0.738	0.066	0.063	1532.822	1430.36	1230.35	1.114	1272.527	1.077
0.5	y-y	0.725	0.07	0.067	1518.597	1412.14	1207.86	1.114	1248.488	1.077
0.5	y-y	0.71	0.074	0.071	1503.817	1393.23	1184.84	1.113	1223.907	1.077
0.5	y-y	0.696	0.078	0.074	1488.507	1373.58	1161.30	1.112	1198.81	1.077
0.5	y-y	0.68	0.082	0.079	1472.706	1353.04	1137.19	1.110	1173.125	1.076
0.5	y-y	0.664	0.086	0.083	1456.321	1331.49	1112.39	1.109	1146.755	1.076
0.5	y-y	0.648	0.091	0.088	1439.235	1308.82	1086.81	1.107	1119.593	1.075
0.5	y-y	0.631	0.096	0.093	1421.458	1285.08	1060.53	1.105	1091.719	1.073
0.5	y-y	0.614	0.101	0.098	1402.763	1260.31	1033.49	1.102	1063.088	1.072
0.5	y-y	0.596	0.107	0.104	1383.042	1234.54	1005.71	1.099	1033.715	1.070
0.5	y-y	0.577	0.113	0.11	1362.253	1207.72	977.188	1.096	1003.605	1.067
0.5	y-y	0.558	0.119	0.116	1340.22	1179.54	947.695	1.093	972.521	1.065
0.5	y-y	0.538	0.126	0.123	1316.856	1149.86	917.168	1.089	940.401	1.063
0.5	y-y	0.518	0.133	0.131	1291.758	1118.25	885.23	1.086	906.854	1.060
0.5	y-y	0.497	0.141	0.139	1264.917	1084.99	852.159	1.083	872.179	1.058
0.5	y-y	0.476	0.15	0.149	1236.153	1050.20	818.048	1.080	836.481	1.056
0.5	y-y	0.454	0.16	0.159	1205.18	1013.79	782.837	1.077	799.7	1.054
0.5	y-y	0.432	0.172	0.17	1171.716	975.56	746.4	1.073	761.714	1.052
0.5	y-y	0.409	0.184	0.183	1135.3	935.608	708.762	1.070	722.557	1.050
0.5	y-y	0.385	0.198	0.197	1095.559	893.764	669.836	1.067	682.145	1.048
0.5	y-y	0.361	0.215	0.213	1052.279	850.016	629.712	1.065	640.577	1.046
0.5	y-y	0.337	0.234	0.232	1004.856	804.199	588.269	1.062	597.74	1.045

0.5	y-y	0.312	0.255	0.252	956.577	759.515	548.46	1.057	556.684	1.041
0.5	y-y	0.287	0.279	0.276	905.241	713.127	508.074	1.050	515.124	1.036
0.5	y-y	0.262	0.309	0.304	849.582	664.229	466.458	1.043	472.393	1.030
0.5	y-y	0.237	0.342	0.336	793.207	616.844	426.781	1.032	431.744	1.020
0.5	y-y	0.212	0.384	0.376	731.458	563.258	384.057	1.025	388.072	1.014
0.5	y-y	0.188	0.432	0.422	672.331	503.029	340.532	1.025	343.685	1.016
0.5	y-y	0.165	0.49	0.478	608.467	441.675	296.838	1.029	299.23	1.021
0.5	y-y	0.141	0.569	0.555	526.993	378.089	249.769	1.045	251.461	1.038
0.5	y-y	0.117	0.677	0.656	444.129	313.629	204.026	1.067	205.153	1.061
0.5	y-y	0.094	0.838	0.809	352.887	247.43	157.814	1.102	158.488	1.097
0.5	y-y	0.071	1.082	1.047	267.216	185.531	116.367	1.135	116.733	1.132
0.5	y-y	0.05	1.51	1.458	178.714	128.54	77.903	1.191	78.067	1.189
0.5	y-y	0.007	10.95	10.49	4107.593	67.506	68.879	0.178	69.007	0.177
0.75	y-y	0.757	0.078	0.048	1486.794	1515.22	1259.73	1.115	1303.981	1.077
0.75	y-y	0.746	0.082	0.05	1473.225	1503.03	1241.67	1.115	1284.637	1.078
0.75	y-y	0.735	0.085	0.052	1459.304	1490.47	1223.31	1.115	1265.002	1.078
0.75	y-y	0.724	0.089	0.055	1444.992	1477.52	1204.65	1.115	1245.053	1.079
0.75	y-y	0.712	0.093	0.057	1430.175	1464.14	1185.57	1.114	1224.688	1.079
0.75	y-y	0.7	0.098	0.06	1414.796	1450.36	1166.09	1.114	1203.912	1.079
0.75	y-y	0.687	0.102	0.062	1398.735	1436.17	1146.14	1.113	1182.657	1.078
0.75	y-y	0.674	0.107	0.065	1382.059	1421.61	1125.81	1.112	1161.02	1.078
0.75	y-y	0.661	0.112	0.068	1364.751	1406.65	1105.08	1.110	1138.992	1.077
0.75	y-y	0.647	0.117	0.071	1346.782	1391.24	1083.94	1.109	1116.548	1.077
0.75	y-y	0.634	0.122	0.074	1328.129	1375.22	1062.29	1.107	1093.592	1.075
0.75	y-y	0.619	0.128	0.078	1308.885	1358.41	1040.12	1.105	1070.103	1.074
0.75	y-y	0.604	0.134	0.081	1288.876	1340.87	1017.38	1.103	1046.049	1.073
0.75	y-y	0.589	0.141	0.085	1268.009	1322.57	994.036	1.100	1021.385	1.071
0.75	y-y	0.574	0.147	0.089	1246.204	1303.42	970.02	1.098	996.046	1.069
0.75	y-y	0.558	0.155	0.093	1223.512	1283.31	945.347	1.095	970.049	1.067
0.75	y-y	0.541	0.162	0.098	1199.884	1262.21	920.018	1.093	943.398	1.065
0.75	y-y	0.525	0.17	0.102	1175.251	1240.11	894.039	1.090	916.101	1.063
0.75	y-y	0.508	0.179	0.108	1149.468	1216.82	867.27	1.087	888.016	1.061
0.75	y-y	0.49	0.189	0.113	1122.467	1192.36	839.753	1.084	859.188	1.059
0.75	y-y	0.472	0.199	0.119	1094.243	1166.47	811.414	1.081	829.545	1.057
0.75	y-y	0.454	0.21	0.126	1064.734	1139.03	782.229	1.078	799.066	1.055
0.75	y-y	0.435	0.222	0.133	1033.823	1109.61	752.014	1.075	767.563	1.053
0.75	y-y	0.416	0.235	0.141	1001.222	1078.41	720.809	1.072	735.082	1.051
0.75	y-y	0.397	0.25	0.15	966.901	1045.27	688.62	1.069	701.635	1.049
0.75	y-y	0.377	0.267	0.16	931.013	1009.92	655.51	1.066	667.292	1.047
0.75	y-y	0.356	0.285	0.171	893.456	972.146	621.441	1.064	632.02	1.046
0.75	y-y	0.335	0.306	0.184	854.02	931.991	586.453	1.061	595.866	1.045
0.75	y-y	0.315	0.328	0.197	815.941	892.831	553.442	1.057	561.818	1.041
0.75	y-y	0.295	0.353	0.212	776.529	851.652	519.957	1.052	527.343	1.037
0.75	y-y	0.274	0.382	0.23	735.006	807.593	485.427	1.047	491.858	1.033
0.75	y-y	0.252	0.416	0.252	691.426	760.53	449.959	1.041	455.48	1.029
0.75	y-y	0.232	0.453	0.275	648.165	714.379	415.991	1.034	420.705	1.022
0.75	y-y	0.212	0.494	0.301	604.352	669.199	383.105	1.027	387.1	1.016
0.75	y-y	0.192	0.543	0.332	552.198	622.037	347.243	1.026	350.521	1.017
0.75	y-y	0.172	0.603	0.371	498.116	569.586	310.127	1.028	312.739	1.019
0.75	y-y	0.152	0.676	0.416	444.621	509.715	272.313	1.037	274.325	1.029
0.75	y-y	0.132	0.771	0.476	386.055	443.766	232.288	1.056	233.75	1.050
0.75	y-y	0.113	0.889	0.552	330.867	380.064	195.512	1.074	196.548	1.068
0.75	y-y	0.094	1.056	0.659	274.367	311.608	158.349	1.100	159.027	1.096
0.75	y-y	0.075	1.295	0.81	217.599	247.094	123.397	1.134	123.808	1.131
0.75	y-y	0.057	1.696	1.061	186.72	182.979	97.258	1.081	97.513	1.078
0.75	y-y	0.019	4.833	3.045	239.069	59.842	49.128	0.720	49.193	0.719
1	y-y	0.697	0.112	0.049	1365.176	1506.93	1166.35	1.109	1204.192	1.074

1	y-y	0.686	0.116	0.051	1349.969	1496.52	1149.11	1.108	1185.821	1.074
1	y-y	0.675	0.121	0.053	1334.294	1485.85	1131.55	1.108	1167.132	1.074
1	y-y	0.664	0.125	0.055	1318.138	1474.91	1113.69	1.107	1148.137	1.074
1	y-y	0.653	0.13	0.057	1301.487	1463.71	1095.52	1.106	1128.834	1.074
1	y-y	0.641	0.136	0.059	1284.358	1452.28	1077.08	1.105	1109.266	1.073
1	y-y	0.63	0.141	0.061	1266.743	1440.58	1058.36	1.104	1089.425	1.073
1	y-y	0.618	0.147	0.064	1248.518	1428.56	1039.27	1.103	1069.202	1.072
1	y-y	0.605	0.153	0.066	1229.7	1416.15	1019.77	1.102	1048.579	1.071
1	y-y	0.593	0.159	0.069	1210.322	1403.32	999.919	1.100	1027.597	1.070
1	y-y	0.58	0.165	0.071	1190.407	1390.12	979.746	1.098	1006.303	1.069
1	y-y	0.567	0.172	0.074	1169.928	1376.44	959.208	1.097	984.65	1.068
1	y-y	0.553	0.179	0.077	1148.829	1362.17	938.232	1.095	962.559	1.067
1	y-y	0.54	0.187	0.08	1127.053	1347.42	916.85	1.093	940.067	1.066
1	y-y	0.526	0.195	0.083	1104.622	1332.01	895.019	1.091	917.13	1.064
1	y-y	0.512	0.203	0.086	1081.615	1315.88	872.792	1.088	893.805	1.063
1	y-y	0.497	0.212	0.09	1058.01	1298.85	850.093	1.085	870.015	1.061
1	y-y	0.482	0.222	0.094	1033.805	1280.79	826.906	1.083	845.745	1.058
1	y-y	0.467	0.232	0.098	1008.814	1261.55	803.086	1.080	820.843	1.056
1	y-y	0.452	0.243	0.102	982.993	1241.12	778.642	1.077	795.323	1.054
1	y-y	0.436	0.255	0.107	956.509	1219.51	753.731	1.074	769.351	1.052
1	y-y	0.42	0.268	0.112	929.416	1196.58	728.373	1.071	742.95	1.050
1	y-y	0.404	0.281	0.118	901.636	1172.04	702.461	1.068	716.009	1.048
1	y-y	0.388	0.296	0.124	873.084	1145.58	675.882	1.066	688.416	1.046
1	y-y	0.371	0.312	0.131	843.558	1116.83	648.463	1.063	659.991	1.045
1	y-y	0.355	0.33	0.139	813.178	1085.93	620.396	1.061	630.94	1.043
1	y-y	0.338	0.349	0.148	781.89	1052.87	591.718	1.059	601.302	1.042
1	y-y	0.321	0.369	0.157	752.308	1020.85	564.949	1.054	573.679	1.038
1	y-y	0.304	0.391	0.167	721.893	986.613	537.612	1.050	545.512	1.035
1	y-y	0.287	0.416	0.178	690.462	949.815	509.579	1.046	516.671	1.031
1	y-y	0.27	0.445	0.191	657.63	910.586	480.753	1.041	487.061	1.028
1	y-y	0.252	0.477	0.206	622.247	868.643	450.539	1.039	456.074	1.026
1	y-y	0.236	0.51	0.221	586.704	829.582	421.74	1.037	426.587	1.025
1	y-y	0.219	0.547	0.238	548.198	789.93	391.948	1.038	396.131	1.027
1	y-y	0.203	0.59	0.258	509.293	747.517	361.987	1.039	365.551	1.029
1	y-y	0.186	0.641	0.282	469.084	701.879	331.365	1.040	334.349	1.030
1	y-y	0.168	0.704	0.311	425.817	653.009	299.306	1.044	301.739	1.035
1	y-y	0.152	0.772	0.344	385.371	606.054	269.819	1.047	271.795	1.039
1	y-y	0.136	0.853	0.381	346.016	555.6	240.896	1.051	242.47	1.044
1	y-y	0.12	0.958	0.43	305.329	492.534	209.787	1.064	210.98	1.058
1	y-y	0.104	1.098	0.495	263.186	425.67	178.25	1.081	179.11	1.076
1	y-y	0.087	1.296	0.587	217.223	355.532	145.402	1.109	145.973	1.104
1	y-y	0.071	1.567	0.717	176.061	283.513	115.363	1.137	115.723	1.134
1	y-y	0.055	1.965	0.903	206.738	218.653	112.717	0.912	113.061	0.909
1	y-y	0.024	4.35	2.016	258.414	89.677	69.05	0.648	69.179	0.646
1	y-y	0.008	12.74	5.922	10485.48	128.105	135.819	0.110	136.317	0.110

Tabla B.12 Valores de r_1 de la sección 14 (60 cm x 90 cm con ρ = 0.06 y f'_c = 250 kg/cm^2)

s	Ejee	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.859	0.055	0.006	2133.183	2424.837	2078.059	1.033	2168.162	0.990
0.25	x-x	0.851	0.058	0.006	2112.665	2420.715	2055.612	1.035	2143.737	0.992
0.25	x-x	0.842	0.062	0.007	2091.096	2416.103	2031.925	1.036	2117.989	0.994
0.25	x-x	0.833	0.066	0.007	2068.42	2410.649	2006.73	1.037	2090.629	0.996
0.25	x-x	0.823	0.071	0.008	2044.291	2405.27	1980.366	1.038	2062.03	0.997
0.25	x-x	0.812	0.075	0.008	2018.611	2399.731	1952.592	1.039	2031.935	0.999
0.25	x-x	0.8	0.081	0.009	1991.327	2393.76	1923.199	1.040	2000.124	1.000
0.25	x-x	0.788	0.086	0.009	1962.302	2387.288	1892.05	1.042	1966.455	1.002

0.25	x-x	0.775	0.092	0.01	1931.294	2380.259	1858.922	1.043	1930.695	1.004
0.25	x-x	0.761	0.099	0.011	1898.11	2372.612	1823.644	1.044	1892.669	1.006
0.25	x-x	0.747	0.107	0.011	1862.698	2364.265	1786.172	1.045	1852.338	1.008
0.25	x-x	0.731	0.115	0.012	1825.177	2355.533	1746.844	1.046	1810.077	1.009
0.25	x-x	0.714	0.124	0.013	1785.662	2346.794	1706.001	1.047	1766.26	1.011
0.25	x-x	0.697	0.134	0.014	1743.783	2338.139	1663.359	1.047	1720.593	1.012
0.25	x-x	0.678	0.145	0.015	1699.415	2329.39	1618.723	1.048	1672.876	1.014
0.25	x-x	0.659	0.156	0.016	1653.199	2320.571	1572.691	1.048	1623.76	1.015
0.25	x-x	0.639	0.168	0.017	1604.85	2311.436	1524.903	1.049	1572.869	1.017
0.25	x-x	0.619	0.182	0.018	1554.461	2300.762	1474.96	1.049	1519.788	1.018
0.25	x-x	0.598	0.196	0.019	1502.134	2288.374	1422.986	1.050	1464.666	1.020
0.25	x-x	0.575	0.212	0.02	1447.894	2276.28	1369.848	1.050	1408.431	1.021
0.25	x-x	0.552	0.23	0.022	1391.938	2262.911	1315.152	1.050	1350.676	1.022
0.25	x-x	0.528	0.249	0.023	1334.321	2248.021	1258.944	1.049	1291.458	1.023
0.25	x-x	0.504	0.27	0.025	1274.736	2231.358	1200.956	1.049	1230.509	1.023
0.25	x-x	0.478	0.295	0.027	1212.404	2212.592	1140.507	1.048	1167.127	1.024
0.25	x-x	0.451	0.323	0.03	1147.285	2190.955	1077.492	1.047	1101.22	1.024
0.25	x-x	0.423	0.356	0.033	1079.402	2165.951	1011.975	1.046	1032.878	1.025
0.25	x-x	0.394	0.395	0.036	1008.23	2136.613	943.481	1.045	961.625	1.025
0.25	x-x	0.364	0.441	0.041	933.453	2101.279	871.666	1.044	887.13	1.026
0.25	x-x	0.332	0.5	0.046	854.429	2055.781	795.645	1.043	808.51	1.026
0.25	x-x	0.298	0.575	0.053	770.351	1998.976	715.102	1.042	725.477	1.027
0.25	x-x	0.264	0.67	0.062	684.947	1937.044	634.415	1.039	642.568	1.026
0.25	x-x	0.231	0.783	0.069	598.229	1882.433	554.673	1.041	560.894	1.029
0.25	x-x	0.2	0.92	0.078	512.628	1819.376	476.098	1.048	480.675	1.038
0.25	x-x	0.171	1.079	0.091	439.151	1737.087	407.692	1.048	411.043	1.040
0.25	x-x	0.144	1.28	0.109	369.942	1631.275	342.914	1.048	345.282	1.041
0.25	x-x	0.115	1.597	0.137	296.608	1481.055	274.222	1.046	275.734	1.040
0.25	x-x	0.086	2.125	0.184	184.357	1280.153	172.252	1.241	172.848	1.237
0.25	x-x	0.058	3.08	0.273	148.567	1003.181	136.466	1.065	136.839	1.062
0.25	x-x	0.029	6.164	0.563	43.889	581.148	41.485	1.721	41.519	1.720
0.5	x-x	0.842	0.062	0.013	2093.164	2344.913	1983.194	1.061	2065.096	1.019
0.5	x-x	0.833	0.065	0.014	2072.78	2337.299	1959.537	1.063	2039.458	1.021
0.5	x-x	0.824	0.069	0.015	2051.296	2329.03	1934.624	1.065	2012.485	1.023
0.5	x-x	0.814	0.074	0.016	2028.743	2319.768	1908.287	1.066	1984.001	1.026
0.5	x-x	0.803	0.078	0.017	2004.869	2309.924	1880.629	1.068	1954.122	1.028
0.5	x-x	0.792	0.083	0.018	1979.613	2299.427	1851.589	1.070	1922.787	1.030
0.5	x-x	0.78	0.088	0.019	1952.781	2288.787	1821.364	1.071	1890.213	1.032
0.5	x-x	0.768	0.094	0.02	1924.228	2277.405	1789.48	1.073	1855.896	1.034
0.5	x-x	0.754	0.1	0.021	1894.045	2265.404	1756.144	1.074	1820.064	1.036
0.5	x-x	0.74	0.107	0.023	1862.378	2252.892	1721.59	1.075	1782.976	1.038
0.5	x-x	0.725	0.114	0.024	1829.248	2239.944	1685.917	1.076	1744.742	1.039
0.5	x-x	0.71	0.122	0.026	1794.401	2226.377	1648.844	1.076	1705.066	1.041
0.5	x-x	0.694	0.131	0.027	1757.721	2212.443	1610.451	1.077	1664.044	1.042
0.5	x-x	0.676	0.14	0.029	1718.781	2197.995	1570.342	1.077	1621.256	1.043
0.5	x-x	0.659	0.15	0.031	1678.008	2183.161	1528.975	1.077	1577.201	1.044
0.5	x-x	0.64	0.161	0.032	1635.115	2167.576	1485.975	1.077	1531.486	1.045
0.5	x-x	0.621	0.172	0.034	1589.573	2151.206	1440.939	1.077	1483.694	1.046
0.5	x-x	0.601	0.185	0.037	1541.53	2133.991	1394.023	1.077	1434	1.047
0.5	x-x	0.58	0.199	0.039	1492.086	2114.526	1345.608	1.077	1382.82	1.048
0.5	x-x	0.558	0.214	0.042	1440.816	2093.254	1295.651	1.077	1330.115	1.049
0.5	x-x	0.536	0.231	0.045	1387.808	2069.568	1244.106	1.077	1275.849	1.050
0.5	x-x	0.512	0.249	0.048	1332.977	2043.031	1190.893	1.076	1219.947	1.050
0.5	x-x	0.488	0.27	0.051	1276.035	2013.717	1135.966	1.075	1162.372	1.050
0.5	x-x	0.463	0.293	0.056	1216.775	1980.858	1079.083	1.074	1102.883	1.051
0.5	x-x	0.437	0.319	0.061	1155.345	1943.072	1020.171	1.072	1041.417	1.050
0.5	x-x	0.41	0.35	0.067	1091.258	1899.207	958.823	1.070	977.568	1.050

0.5	x-x	0.382	0.386	0.074	1023.532	1849.04	894.561	1.068	910.856	1.049
0.5	x-x	0.353	0.429	0.083	952.078	1791.168	827.359	1.066	841.279	1.048
0.5	x-x	0.322	0.482	0.094	876.746	1722.637	756.932	1.063	768.566	1.047
0.5	x-x	0.29	0.55	0.108	796.808	1639.519	682.604	1.062	692.051	1.047
0.5	x-x	0.258	0.631	0.124	717.731	1551.115	610.495	1.057	618.041	1.044
0.5	x-x	0.226	0.735	0.144	634.711	1450.101	536.146	1.052	541.957	1.041
0.5	x-x	0.193	0.872	0.17	539.692	1332.832	453.88	1.062	458.037	1.053
0.5	x-x	0.162	1.048	0.202	451.846	1211.397	378.978	1.067	381.873	1.059
0.5	x-x	0.132	1.291	0.248	366.001	1069.075	306.03	1.075	307.914	1.068
0.5	x-x	0.101	1.678	0.323	313.319	891.885	255.565	0.987	256.878	0.982
0.5	x-x	0.072	2.323	0.449	11.983	698.198	11.837	15.242	11.839	15.239
0.5	x-x	0.013	12.428	2.499	3352.097	135.812	137.713	0.237	138.093	0.236
0.75	x-x	0.82	0.068	0.022	2060.045	2261.183	1894.983	1.082	1969.625	1.041
0.75	x-x	0.811	0.071	0.023	2039.75	2250.565	1870.469	1.083	1943.154	1.043
0.75	x-x	0.801	0.075	0.024	2018.327	2239.336	1844.824	1.085	1915.492	1.045
0.75	x-x	0.79	0.08	0.026	1995.987	2227.079	1817.983	1.087	1886.571	1.047
0.75	x-x	0.779	0.084	0.027	1972.608	2213.882	1789.95	1.088	1856.401	1.049
0.75	x-x	0.768	0.089	0.029	1948.013	2200.012	1760.802	1.090	1825.068	1.052
0.75	x-x	0.755	0.094	0.03	1922.198	2185.507	1730.601	1.091	1792.643	1.053
0.75	x-x	0.743	0.1	0.032	1895.178	2170.524	1699.496	1.092	1759.289	1.055
0.75	x-x	0.729	0.106	0.034	1866.843	2155.085	1667.448	1.093	1724.968	1.056
0.75	x-x	0.715	0.112	0.036	1837.301	2138.933	1634.425	1.093	1689.652	1.057
0.75	x-x	0.7	0.119	0.038	1806.596	2122.088	1600.518	1.093	1653.441	1.058
0.75	x-x	0.684	0.127	0.04	1774.308	2104.286	1565.296	1.093	1615.878	1.059
0.75	x-x	0.668	0.135	0.043	1740.293	2085.345	1528.61	1.093	1576.812	1.060
0.75	x-x	0.651	0.143	0.045	1704.68	2064.34	1490.15	1.093	1535.921	1.060
0.75	x-x	0.633	0.153	0.048	1667.268	2042.021	1450.261	1.092	1493.579	1.060
0.75	x-x	0.615	0.163	0.051	1627.956	2018.634	1409.069	1.092	1449.926	1.061
0.75	x-x	0.596	0.173	0.054	1586.193	1994.036	1366.172	1.091	1404.546	1.061
0.75	x-x	0.577	0.185	0.057	1542.093	1968.094	1321.682	1.091	1357.564	1.062
0.75	x-x	0.556	0.198	0.061	1495.621	1940.266	1275.431	1.090	1308.814	1.062
0.75	x-x	0.535	0.212	0.065	1447.052	1910.357	1227.658	1.089	1258.557	1.063
0.75	x-x	0.513	0.228	0.07	1396.477	1878.237	1178.497	1.088	1206.942	1.063
0.75	x-x	0.49	0.246	0.075	1343.72	1843.678	1127.862	1.087	1153.888	1.063
0.75	x-x	0.467	0.265	0.08	1288.785	1806.25	1075.738	1.085	1099.389	1.062
0.75	x-x	0.442	0.287	0.087	1231.426	1764.27	1021.545	1.083	1042.849	1.060
0.75	x-x	0.417	0.312	0.095	1171.367	1717.024	965.118	1.080	984.112	1.059
0.75	x-x	0.391	0.341	0.104	1108.579	1663.59	906.452	1.077	923.187	1.058
0.75	x-x	0.363	0.375	0.114	1042.709	1602.628	845.272	1.075	859.806	1.057
0.75	x-x	0.335	0.416	0.127	973.179	1533.45	781.42	1.073	793.825	1.056
0.75	x-x	0.306	0.465	0.143	899.413	1453.775	714.42	1.071	724.775	1.056
0.75	x-x	0.276	0.527	0.163	821.989	1364.013	645.274	1.069	653.71	1.055
0.75	x-x	0.246	0.601	0.186	744.791	1270.079	578.019	1.064	584.779	1.051
0.75	x-x	0.215	0.697	0.216	663.618	1164.045	508.647	1.058	513.874	1.047
0.75	x-x	0.185	0.821	0.255	571.646	1048.303	434.161	1.065	437.964	1.055
0.75	x-x	0.155	0.985	0.306	480.009	927.097	362.061	1.070	364.702	1.062
0.75	x-x	0.125	1.223	0.38	388.754	792.116	291.138	1.073	292.843	1.067
0.75	x-x	0.095	1.614	0.503	298.902	638.865	221.686	1.067	222.673	1.062
0.75	x-x	0.066	2.295	0.714	21.491	461.857	20.705	7.978	20.714	7.975
0.75	x-x	0.007	19.984	6.29	10721.069	169.324	178.599	0.103	179.239	0.103
1	x-x	0.794	0.072	0.032	2035.19	2174.547	1814.036	1.094	1882.322	1.055
1	x-x	0.784	0.076	0.033	2015.469	2160.975	1789.06	1.096	1855.443	1.056
1	x-x	0.773	0.08	0.035	1994.981	2146.6	1763.21	1.097	1827.655	1.058
1	x-x	0.762	0.084	0.037	1973.594	2131.535	1736.498	1.098	1798.97	1.060
1	x-x	0.751	0.088	0.039	1951.28	2115.718	1708.895	1.099	1769.362	1.061
1	x-x	0.739	0.093	0.041	1927.907	2098.995	1680.243	1.099	1738.665	1.063
1	x-x	0.726	0.098	0.043	1903.445	2081.181	1650.448	1.100	1706.782	1.064

1	x-x	0.713	0.103	0.045	1878.083	2062.152	1619.631	1.101	1673.846	1.066
1	x-x	0.7	0.109	0.048	1851.808	2042.193	1588.01	1.102	1640.095	1.067
1	x-x	0.686	0.115	0.05	1824.373	2021.638	1555.65	1.102	1605.6	1.068
1	x-x	0.671	0.122	0.053	1795.618	2000.124	1522.263	1.102	1570.06	1.068
1	x-x	0.655	0.129	0.056	1765.526	1977.738	1487.945	1.101	1533.578	1.069
1	x-x	0.639	0.136	0.059	1733.865	1954.426	1452.555	1.101	1496.012	1.069
1	x-x	0.623	0.144	0.063	1700.588	1930.084	1416.069	1.100	1457.339	1.069
1	x-x	0.606	0.153	0.066	1665.719	1904.41	1378.408	1.099	1417.481	1.069
1	x-x	0.588	0.162	0.07	1629.29	1877.165	1339.55	1.097	1376.423	1.068
1	x-x	0.569	0.172	0.074	1590.401	1848.426	1299.023	1.096	1333.669	1.068
1	x-x	0.55	0.183	0.079	1549.265	1818.169	1257.059	1.094	1289.475	1.067
1	x-x	0.53	0.195	0.084	1505.784	1786.095	1213.559	1.093	1243.743	1.066
1	x-x	0.51	0.209	0.089	1460.132	1751.728	1168.537	1.091	1196.497	1.066
1	x-x	0.489	0.223	0.095	1412.055	1714.228	1121.608	1.090	1147.343	1.065
1	x-x	0.467	0.239	0.102	1361.71	1673.543	1073.029	1.088	1096.559	1.065
1	x-x	0.444	0.258	0.11	1308.863	1629.078	1022.597	1.086	1043.946	1.064
1	x-x	0.421	0.279	0.118	1253.143	1580.696	970.25	1.085	989.448	1.064
1	x-x	0.397	0.302	0.128	1194.333	1528.332	916.06	1.083	933.155	1.063
1	x-x	0.372	0.33	0.14	1132.569	1470.451	859.81	1.081	874.852	1.062
1	x-x	0.346	0.362	0.153	1067.589	1405.992	801.303	1.079	814.352	1.062
1	x-x	0.319	0.4	0.17	998.636	1334.663	740.381	1.078	751.508	1.062
1	x-x	0.291	0.447	0.19	925.565	1254.932	676.904	1.076	686.193	1.061
1	x-x	0.263	0.502	0.214	851.487	1170.573	613.973	1.072	621.606	1.059
1	x-x	0.235	0.57	0.244	775.242	1079.057	550.452	1.067	556.578	1.056
1	x-x	0.206	0.66	0.284	693.25	976.544	483.902	1.062	488.63	1.052
1	x-x	0.178	0.769	0.332	608.556	875.638	419.235	1.059	422.78	1.051
1	x-x	0.15	0.917	0.396	514.201	768.346	351.334	1.064	353.82	1.057
1	x-x	0.121	1.136	0.492	418.127	649.855	283.249	1.069	284.863	1.063
1	x-x	0.094	1.464	0.636	308.781	518.811	209.817	1.116	210.701	1.112
1	x-x	0.066	2.068	0.899	264.968	366.806	163.926	1.007	164.465	1.004
1	x-x	0.038	3.514	1.537	33.566	189.942	28.854	3.338	28.871	3.337
1	x-x	0.012	11.434	5.012	2379.726	176.201	175.574	0.167	176.193	0.166
0.25	y-y	0.835	0.022	0.044	2328.588	2075.849	1956.136	1.067	2035.774	1.025
0.25	y-y	0.826	0.023	0.046	2320.413	2055.335	1932.244	1.069	2009.91	1.027
0.25	y-y	0.817	0.025	0.049	2311.753	2033.662	1907.187	1.070	1982.812	1.030
0.25	y-y	0.807	0.026	0.052	2302.559	2010.787	1880.924	1.072	1954.44	1.032
0.25	y-y	0.796	0.027	0.055	2292.779	1986.614	1853.371	1.074	1924.708	1.034
0.25	y-y	0.785	0.029	0.058	2282.351	1961.083	1824.474	1.076	1893.562	1.037
0.25	y-y	0.774	0.031	0.062	2271.22	1934.033	1794.1	1.078	1860.865	1.039
0.25	y-y	0.761	0.033	0.066	2259.459	1905.437	1762.318	1.080	1826.697	1.042
0.25	y-y	0.748	0.035	0.07	2247.148	1875.427	1729.335	1.082	1791.284	1.044
0.25	y-y	0.735	0.037	0.075	2233.993	1844.312	1695.28	1.083	1754.772	1.047
0.25	y-y	0.72	0.039	0.08	2220.651	1811.945	1660.445	1.084	1717.476	1.048
0.25	y-y	0.704	0.042	0.085	2206.597	1777.93	1624.234	1.084	1678.763	1.049
0.25	y-y	0.688	0.044	0.091	2191.996	1742.071	1586.619	1.084	1638.611	1.050
0.25	y-y	0.671	0.047	0.097	2176.715	1704.201	1547.438	1.085	1596.854	1.051
0.25	y-y	0.654	0.05	0.103	2160.793	1664.423	1506.845	1.085	1553.663	1.052
0.25	y-y	0.635	0.053	0.111	2143.262	1622.792	1464.478	1.084	1508.662	1.053
0.25	y-y	0.616	0.056	0.118	2123.927	1579.276	1420.325	1.084	1461.847	1.053
0.25	y-y	0.596	0.06	0.127	2102.886	1533.979	1374.622	1.084	1413.478	1.054
0.25	y-y	0.575	0.064	0.136	2080.651	1486.856	1327.642	1.083	1363.853	1.054
0.25	y-y	0.554	0.068	0.146	2056.69	1437.788	1279.153	1.082	1312.733	1.054
0.25	y-y	0.531	0.073	0.158	2030.314	1386.825	1229.041	1.081	1260.011	1.054
0.25	y-y	0.508	0.079	0.17	2000.795	1334.364	1177.498	1.079	1205.894	1.054
0.25	y-y	0.484	0.085	0.184	1968.266	1279.826	1124.285	1.077	1150.144	1.053
0.25	y-y	0.46	0.092	0.199	1931.57	1222.788	1068.886	1.075	1092.233	1.052
0.25	y-y	0.434	0.101	0.217	1890.529	1162.67	1011.042	1.073	1031.906	1.051

0.25	y-y	0.407	0.111	0.237	1844.335	1099.115	950.516	1.071	968.934	1.051
0.25	y-y	0.379	0.123	0.261	1791.188	1032.101	887.136	1.069	903.159	1.050
0.25	y-y	0.35	0.137	0.29	1729.096	961.663	820.858	1.067	834.557	1.050
0.25	y-y	0.32	0.155	0.326	1655.699	887.232	751.251	1.066	762.71	1.050
0.25	y-y	0.289	0.178	0.37	1567.409	808.014	677.674	1.065	686.985	1.050
0.25	y-y	0.256	0.206	0.427	1467.853	725.938	602.834	1.062	610.19	1.049
0.25	y-y	0.224	0.24	0.498	1360.648	643.587	529.445	1.056	535.11	1.044
0.25	y-y	0.191	0.283	0.591	1242.316	556.802	454.348	1.051	458.515	1.041
0.25	y-y	0.159	0.341	0.719	1108.814	459.218	373.202	1.063	376.008	1.055
0.25	y-y	0.128	0.417	0.893	970.364	369.552	299.71	1.069	301.517	1.062
0.25	y-y	0.099	0.532	1.156	815.978	300.921	241.04	1.026	242.207	1.021
0.25	y-y	0.07	0.743	1.62	628.034	207.828	166.557	1.051	167.113	1.048
0.25	y-y	0.042	1.252	2.697	379.248	93.51	77.334	1.342	77.454	1.340
0.25	y-y	0.015	3.419	7.217	53.862	131.612	38.814	0.978	38.844	0.977
0.5	y-y	0.78	0.054	0.051	2140.119	2017.584	1776.38	1.098	1841.809	1.059
0.5	y-y	0.769	0.056	0.053	2124.694	1998.175	1750.856	1.099	1814.385	1.060
0.5	y-y	0.759	0.059	0.056	2108.322	1977.978	1724.393	1.100	1785.982	1.062
0.5	y-y	0.748	0.062	0.059	2091.384	1956.974	1697.27	1.101	1756.903	1.064
0.5	y-y	0.736	0.065	0.062	2073.695	1935.038	1669.301	1.103	1726.952	1.066
0.5	y-y	0.724	0.069	0.065	2055.146	1912.109	1640.413	1.104	1696.053	1.067
0.5	y-y	0.712	0.072	0.068	2035.836	1888.313	1610.803	1.104	1664.419	1.069
0.5	y-y	0.699	0.076	0.072	2015.772	1863.672	1580.529	1.105	1632.116	1.070
0.5	y-y	0.685	0.08	0.076	1994.707	1838.145	1549.451	1.105	1598.998	1.071
0.5	y-y	0.671	0.084	0.08	1972.769	1811.88	1517.794	1.105	1565.305	1.072
0.5	y-y	0.656	0.089	0.084	1949.728	1784.462	1485.175	1.105	1530.636	1.072
0.5	y-y	0.641	0.094	0.088	1925.699	1755.781	1451.641	1.104	1495.043	1.072
0.5	y-y	0.625	0.099	0.093	1900.525	1725.445	1416.897	1.104	1458.216	1.072
0.5	y-y	0.609	0.104	0.099	1874.309	1693.643	1381.197	1.103	1420.432	1.072
0.5	y-y	0.592	0.11	0.104	1847.017	1660.253	1344.506	1.102	1381.656	1.072
0.5	y-y	0.575	0.116	0.11	1818.888	1624.833	1306.727	1.100	1341.791	1.071
0.5	y-y	0.557	0.123	0.117	1789.188	1587.622	1267.713	1.098	1300.688	1.070
0.5	y-y	0.538	0.131	0.124	1757.377	1548.654	1227.313	1.096	1258.194	1.069
0.5	y-y	0.518	0.139	0.132	1723.305	1507.816	1185.498	1.093	1214.286	1.067
0.5	y-y	0.498	0.148	0.141	1686.821	1464.723	1142.086	1.091	1168.781	1.066
0.5	y-y	0.478	0.157	0.15	1647.696	1419.248	1097.041	1.089	1121.648	1.065
0.5	y-y	0.456	0.168	0.161	1604.967	1371.47	1050.148	1.086	1072.675	1.063
0.5	y-y	0.434	0.181	0.173	1558.138	1321.165	1001.266	1.084	1021.724	1.062
0.5	y-y	0.411	0.195	0.187	1506.925	1267.704	950.148	1.081	968.552	1.061
0.5	y-y	0.387	0.211	0.202	1451.055	1211.08	896.942	1.079	913.325	1.060
0.5	y-y	0.363	0.23	0.221	1390.109	1150.88	841.535	1.078	855.939	1.060
0.5	y-y	0.338	0.252	0.242	1323.773	1086.419	783.755	1.077	796.235	1.060
0.5	y-y	0.311	0.279	0.267	1251.225	1017.636	723.629	1.076	734.255	1.061
0.5	y-y	0.285	0.312	0.298	1171.605	944.817	661.388	1.076	670.253	1.062
0.5	y-y	0.258	0.351	0.334	1089.212	870.919	600.116	1.074	607.406	1.061
0.5	y-y	0.231	0.398	0.379	1002.391	794.784	538.835	1.071	544.705	1.059
0.5	y-y	0.203	0.459	0.436	908.338	714.331	475.996	1.066	480.57	1.056
0.5	y-y	0.175	0.537	0.509	810.813	632.497	414.181	1.058	417.641	1.049
0.5	y-y	0.148	0.64	0.607	710.39	543.591	351.206	1.053	353.69	1.046
0.5	y-y	0.122	0.777	0.737	602.578	448.032	286.405	1.064	288.055	1.058
0.5	y-y	0.095	1.001	0.95	472.551	344.888	216.652	1.090	217.594	1.086
0.5	y-y	0.068	1.396	1.323	328.836	181.051	122.483	1.379	122.784	1.375
0.5	y-y	0.041	2.265	2.152	35.658	117.147	27.639	3.731	27.655	3.729
0.5	y-y	0.015	5.998	5.718	57.538	180.705	44.417	0.866	44.457	0.865
0.75	y-y	0.717	0.09	0.054	1941.516	1991.035	1619.829	1.106	1674.058	1.070
0.75	y-y	0.706	0.094	0.057	1922.629	1973.493	1595.219	1.106	1647.785	1.071
0.75	y-y	0.695	0.098	0.059	1903.153	1955.412	1570.151	1.106	1621.052	1.072
0.75	y-y	0.683	0.102	0.062	1882.893	1936.522	1544.345	1.107	1593.56	1.072

0.75	y-y	0.672	0.107	0.064	1861.902	1916.893	1517.913	1.106	1565.433	1.073
0.75	y-y	0.66	0.112	0.067	1840.277	1896.606	1491.001	1.106	1536.825	1.073
0.75	y-y	0.647	0.117	0.07	1817.988	1875.697	1463.636	1.106	1507.768	1.073
0.75	y-y	0.634	0.122	0.073	1794.966	1854.145	1435.787	1.105	1478.232	1.073
0.75	y-y	0.621	0.127	0.077	1771.047	1831.925	1407.364	1.104	1448.121	1.073
0.75	y-y	0.608	0.133	0.08	1745.91	1809.082	1378.227	1.103	1417.29	1.072
0.75	y-y	0.594	0.14	0.084	1719.438	1785.232	1348.121	1.101	1385.473	1.071
0.75	y-y	0.579	0.146	0.088	1691.751	1760.298	1317.131	1.100	1352.764	1.071
0.75	y-y	0.564	0.154	0.092	1662.964	1734.127	1285.295	1.098	1319.203	1.070
0.75	y-y	0.549	0.161	0.096	1632.84	1706.667	1252.499	1.096	1284.677	1.069
0.75	y-y	0.533	0.17	0.101	1600.86	1677.635	1218.357	1.095	1248.783	1.068
0.75	y-y	0.517	0.178	0.106	1567.047	1646.894	1182.896	1.094	1211.556	1.068
0.75	y-y	0.501	0.188	0.112	1531.554	1614.498	1146.322	1.092	1173.217	1.067
0.75	y-y	0.484	0.199	0.118	1494.108	1580.417	1108.553	1.091	1133.686	1.067
0.75	y-y	0.466	0.21	0.125	1454.854	1544.581	1069.73	1.090	1093.115	1.067
0.75	y-y	0.449	0.223	0.132	1413.653	1506.762	1029.762	1.089	1051.414	1.067
0.75	y-y	0.43	0.237	0.14	1370.689	1466.33	988.561	1.087	1008.498	1.066
0.75	y-y	0.411	0.252	0.15	1325.626	1423.126	946.006	1.086	964.248	1.065
0.75	y-y	0.391	0.269	0.16	1278.229	1377.215	902.143	1.084	918.718	1.065
0.75	y-y	0.371	0.288	0.171	1228.068	1328.419	856.826	1.083	871.764	1.065
0.75	y-y	0.35	0.311	0.184	1175.037	1276.411	810.031	1.082	823.369	1.064
0.75	y-y	0.329	0.336	0.2	1119.078	1220.684	761.706	1.080	773.488	1.064
0.75	y-y	0.307	0.366	0.217	1059.838	1160.63	711.654	1.079	721.928	1.064
0.75	y-y	0.284	0.401	0.239	997.1	1095.587	659.762	1.078	668.584	1.064
0.75	y-y	0.262	0.441	0.263	933.942	1029.07	608.822	1.076	616.326	1.063
0.75	y-y	0.239	0.488	0.291	869.652	960.704	558.402	1.072	564.708	1.060
0.75	y-y	0.216	0.546	0.326	801.008	887.239	506.187	1.068	511.363	1.057
0.75	y-y	0.193	0.619	0.37	728.446	808.998	452.71	1.064	456.846	1.054
0.75	y-y	0.171	0.702	0.42	659.973	735.047	403.925	1.055	407.214	1.047
0.75	y-y	0.148	0.81	0.486	579.434	656.666	351.037	1.055	353.519	1.048
0.75	y-y	0.125	0.96	0.577	492.369	569.004	295.117	1.061	296.869	1.055
0.75	y-y	0.103	1.169	0.703	406.781	469.364	238.726	1.077	239.871	1.072
0.75	y-y	0.081	1.474	0.888	306.399	371.98	180.113	1.129	180.764	1.124
0.75	y-y	0.059	2.006	1.213	321.149	278.658	158.668	0.936	159.173	0.934
0.75	y-y	0.038	3.139	1.899	135.009	82.618	52.326	1.805	52.381	1.803
0.75	y-y	0.016	7.248	4.377	20.084	149.705	17.835	2.279	17.841	2.278
1	y-y	0.658	0.128	0.056	1770.09	1980.673	1492.853	1.102	1538.792	1.069
1	y-y	0.647	0.133	0.058	1749.334	1965.34	1469.507	1.101	1514	1.069
1	y-y	0.636	0.138	0.06	1727.865	1949.568	1445.673	1.101	1488.713	1.069
1	y-y	0.625	0.143	0.062	1705.661	1933.319	1421.334	1.100	1462.916	1.069
1	y-y	0.614	0.149	0.064	1682.632	1916.483	1396.389	1.100	1436.504	1.069
1	y-y	0.603	0.155	0.067	1659.14	1898.993	1371.078	1.099	1409.731	1.069
1	y-y	0.591	0.161	0.069	1634.867	1880.827	1345.192	1.098	1382.38	1.068
1	y-y	0.578	0.167	0.072	1609.453	1861.951	1318.502	1.097	1354.209	1.068
1	y-y	0.566	0.174	0.075	1582.959	1842.444	1291.119	1.096	1325.339	1.068
1	y-y	0.553	0.182	0.078	1555.488	1822.226	1263.103	1.095	1295.836	1.067
1	y-y	0.54	0.189	0.081	1527.005	1801.256	1234.444	1.094	1265.689	1.067
1	y-y	0.527	0.198	0.085	1497.518	1779.395	1205.114	1.093	1234.875	1.066
1	y-y	0.513	0.206	0.088	1467.066	1756.449	1175.089	1.092	1203.367	1.066
1	y-y	0.499	0.216	0.092	1435.506	1732.096	1144.178	1.091	1170.972	1.066
1	y-y	0.485	0.226	0.096	1402.884	1706.342	1112.468	1.090	1137.78	1.065
1	y-y	0.47	0.237	0.101	1369.298	1679.176	1080.068	1.088	1103.912	1.065
1	y-y	0.455	0.249	0.106	1334.708	1650.363	1046.911	1.087	1069.298	1.065
1	y-y	0.44	0.261	0.111	1298.794	1619.796	1012.819	1.086	1033.757	1.064
1	y-y	0.425	0.275	0.117	1261.59	1587.468	977.88	1.086	997.384	1.064
1	y-y	0.409	0.29	0.123	1222.988	1553.415	942.109	1.084	960.199	1.064
1	y-y	0.392	0.307	0.13	1183.11	1517.361	905.547	1.083	922.248	1.063

1	y-y	0.376	0.325	0.138	1141.941	1478.736	868.062	1.082	883.397	1.063
1	y-y	0.358	0.346	0.147	1099.315	1437.136	829.516	1.080	843.509	1.062
1	y-y	0.341	0.368	0.156	1055.134	1392.577	789.967	1.079	802.647	1.062
1	y-y	0.323	0.394	0.167	1009.067	1344.903	749.289	1.078	760.687	1.062
1	y-y	0.305	0.423	0.18	961.25	1293.629	707.53	1.077	717.685	1.062
1	y-y	0.286	0.457	0.195	911.552	1238.42	664.652	1.076	673.605	1.061
1	y-y	0.267	0.494	0.211	862.363	1182.386	622.903	1.073	630.76	1.060
1	y-y	0.249	0.535	0.229	812.667	1123.857	581.279	1.070	588.115	1.057
1	y-y	0.23	0.585	0.251	760.505	1060.098	538.138	1.067	543.992	1.055
1	y-y	0.21	0.645	0.278	705.801	991.637	493.754	1.063	498.678	1.053
1	y-y	0.191	0.714	0.308	650.324	922.42	450.078	1.060	454.166	1.050
1	y-y	0.172	0.792	0.342	591.492	856.158	406.721	1.061	410.057	1.052
1	y-y	0.154	0.891	0.385	528.407	784.49	361.372	1.064	364.002	1.056
1	y-y	0.135	1.021	0.442	463.276	706.711	315.101	1.068	317.1	1.061
1	y-y	0.116	1.186	0.515	400.999	626.456	270.996	1.069	272.473	1.064
1	y-y	0.098	1.404	0.611	326.076	539.893	221.287	1.104	222.27	1.099
1	y-y	0.08	1.721	0.749	326.049	440.77	202.601	0.981	203.425	0.977
1	y-y	0.061	2.244	0.977	47.86	334.406	42.581	3.570	42.617	3.567
1	y-y	0.043	3.185	1.393	122.267	135.376	65.938	1.614	66.025	1.612
1	y-y	0.024	5.509	2.419	86.765	146.055	55.641	1.098	55.703	1.097
1	y-y	0.007	19.752	8.665	10584.49	56.035	57.011	0.296	57.076	0.296

Tabla B.13 Valores de r_1 de la sección 15 (60 cm x 90 cm con ρ = 0.03 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.896	0.048	0.005	2064.777	2285.54	1991.19	1.072	2078.006	1.027
0.25	x-x	0.884	0.053	0.006	2037.408	2278.768	1960.713	1.074	2044.836	1.030
0.25	x-x	0.871	0.059	0.006	2007.552	2271.852	1928.069	1.076	2009.355	1.032
0.25	x-x	0.856	0.066	0.007	1975.351	2264.822	1893.437	1.078	1971.771	1.035
0.25	x-x	0.841	0.073	0.008	1940.502	2257.649	1856.547	1.079	1931.798	1.037
0.25	x-x	0.824	0.081	0.009	1902.63	2250.772	1817.371	1.081	1889.418	1.039
0.25	x-x	0.806	0.089	0.009	1861.819	2244.573	1776.219	1.082	1844.978	1.041
0.25	x-x	0.787	0.099	0.01	1818.532	2239.086	1733.492	1.083	1798.922	1.043
0.25	x-x	0.768	0.109	0.011	1773.028	2234.367	1689.4	1.083	1751.484	1.045
0.25	x-x	0.747	0.119	0.011	1725.573	2229.968	1643.873	1.083	1702.598	1.046
0.25	x-x	0.726	0.13	0.012	1676.955	2225.658	1597.471	1.083	1652.872	1.047
0.25	x-x	0.705	0.141	0.012	1628.036	2220.972	1550.735	1.083	1602.889	1.047
0.25	x-x	0.683	0.153	0.013	1578.463	2215.882	1503.352	1.082	1552.316	1.048
0.25	x-x	0.66	0.166	0.014	1527.518	2210.286	1454.646	1.081	1500.441	1.048
0.25	x-x	0.637	0.179	0.015	1475.949	2203.95	1405.232	1.081	1447.923	1.049
0.25	x-x	0.614	0.193	0.016	1424.165	2196.843	1355.51	1.080	1395.19	1.049
0.25	x-x	0.591	0.208	0.017	1371.339	2188.946	1304.767	1.079	1341.492	1.049
0.25	x-x	0.567	0.223	0.018	1317.312	2180.153	1252.866	1.078	1286.69	1.049
0.25	x-x	0.542	0.24	0.019	1262.627	2170.283	1200.287	1.076	1231.296	1.049
0.25	x-x	0.516	0.259	0.02	1206.435	2158.959	1146.211	1.074	1174.456	1.048
0.25	x-x	0.49	0.28	0.022	1148.573	2145.966	1090.511	1.072	1116.047	1.047
0.25	x-x	0.464	0.303	0.024	1089.238	2130.736	1033.314	1.070	1056.214	1.047
0.25	x-x	0.436	0.33	0.026	1028.363	2112.827	974.579	1.067	994.924	1.045
0.25	x-x	0.408	0.36	0.029	965.645	2091.782	914.073	1.064	931.947	1.043
0.25	x-x	0.379	0.394	0.032	900.948	2072.148	852.589	1.061	868.119	1.042
0.25	x-x	0.351	0.43	0.034	830.287	2055.607	786.632	1.065	799.833	1.047
0.25	x-x	0.324	0.469	0.036	763.649	2038.677	724.437	1.067	735.619	1.051
0.25	x-x	0.298	0.51	0.04	702.642	2011.471	666.349	1.065	675.798	1.050
0.25	x-x	0.273	0.551	0.044	646.232	1983.489	612.761	1.062	620.741	1.048
0.25	x-x	0.247	0.602	0.048	586.046	1949.871	555.688	1.061	562.244	1.048
0.25	x-x	0.221	0.666	0.054	522.699	1908.937	495.696	1.060	500.906	1.049
0.25	x-x	0.195	0.739	0.062	464.347	1854.473	439.916	1.055	444.014	1.045

0.25	x-x	0.169	0.83	0.072	404.064	1786.686	382.421	1.053	385.515	1.045
0.25	x-x	0.142	0.959	0.087	340.353	1692.032	321.595	1.053	323.78	1.046
0.25	x-x	0.115	1.149	0.11	275.421	1549.94	259.312	1.053	260.731	1.048
0.25	x-x	0.089	1.41	0.142	216.489	1370.957	202.883	1.051	203.75	1.047
0.25	x-x	0.063	1.919	0.206	151.623	1097.966	141.114	1.057	141.533	1.054
0.25	x-x	0.034	3.366	0.388	91.448	639.773	82.791	0.969	82.935	0.967
0.5	x-x	0.897	0.054	0.011	2034.799	2229.063	1921.476	1.112	2002.196	1.068
0.5	x-x	0.885	0.059	0.012	2009.345	2221.206	1893.059	1.114	1971.361	1.070
0.5	x-x	0.872	0.064	0.014	1982.133	2212.501	1862.72	1.116	1938.482	1.072
0.5	x-x	0.858	0.07	0.015	1953.279	2203.046	1830.691	1.117	1903.819	1.074
0.5	x-x	0.843	0.077	0.016	1922.596	2193.044	1797.002	1.118	1867.411	1.076
0.5	x-x	0.828	0.084	0.017	1889.784	2182.752	1761.608	1.120	1829.218	1.078
0.5	x-x	0.811	0.091	0.019	1854.79	2172.154	1724.488	1.121	1789.227	1.080
0.5	x-x	0.794	0.099	0.02	1817.983	2161.52	1686.162	1.122	1748.004	1.082
0.5	x-x	0.775	0.107	0.022	1779.217	2150.807	1646.492	1.122	1705.407	1.084
0.5	x-x	0.756	0.116	0.023	1738.383	2139.965	1605.369	1.123	1661.329	1.085
0.5	x-x	0.737	0.126	0.024	1695.909	2129.102	1563.23	1.123	1616.242	1.086
0.5	x-x	0.716	0.136	0.026	1651.681	2118.286	1520.014	1.123	1570.088	1.087
0.5	x-x	0.695	0.147	0.027	1605.989	2107.354	1475.877	1.122	1523.04	1.088
0.5	x-x	0.673	0.158	0.029	1559.305	2095.811	1430.986	1.121	1475.281	1.087
0.5	x-x	0.651	0.17	0.03	1511.249	2083.572	1385.013	1.120	1426.466	1.087
0.5	x-x	0.628	0.182	0.032	1462.816	2070.287	1338.683	1.118	1377.37	1.086
0.5	x-x	0.605	0.196	0.034	1414.267	2055.76	1292.185	1.115	1328.195	1.085
0.5	x-x	0.581	0.21	0.036	1364.201	2039.523	1244.236	1.113	1277.589	1.084
0.5	x-x	0.557	0.225	0.038	1313.187	2021.367	1195.335	1.110	1226.085	1.082
0.5	x-x	0.532	0.241	0.041	1261.785	2001.044	1145.958	1.107	1174.191	1.080
0.5	x-x	0.507	0.258	0.044	1209.532	1978.431	1095.792	1.103	1121.579	1.077
0.5	x-x	0.481	0.277	0.048	1155.829	1952.95	1044.288	1.098	1067.682	1.074
0.5	x-x	0.455	0.299	0.052	1100.382	1923.898	991.16	1.093	1012.21	1.070
0.5	x-x	0.427	0.323	0.057	1043.294	1890.343	936.441	1.087	955.21	1.066
0.5	x-x	0.399	0.35	0.062	984.602	1851.57	880.215	1.081	896.777	1.061
0.5	x-x	0.371	0.38	0.068	927.043	1812.726	825.955	1.072	840.521	1.053
0.5	x-x	0.344	0.414	0.075	862.672	1768.839	766.344	1.068	778.868	1.051
0.5	x-x	0.316	0.452	0.082	791.902	1719.526	701.901	1.071	712.392	1.056
0.5	x-x	0.288	0.494	0.09	725.997	1667.808	642.108	1.069	650.877	1.055
0.5	x-x	0.261	0.541	0.099	658.916	1612.672	582.039	1.068	589.235	1.055
0.5	x-x	0.234	0.596	0.111	592.569	1542.905	521.904	1.067	527.682	1.055
0.5	x-x	0.206	0.663	0.127	525.654	1453.871	460.707	1.067	465.204	1.057
0.5	x-x	0.181	0.738	0.145	464.864	1358.931	405.284	1.062	408.76	1.053
0.5	x-x	0.154	0.841	0.169	397.736	1242.775	344.917	1.064	347.432	1.057
0.5	x-x	0.127	0.992	0.206	326.931	1098.579	281.739	1.070	283.414	1.063
0.5	x-x	0.1	1.207	0.262	259.903	927.839	221.94	1.073	222.978	1.068
0.5	x-x	0.074	1.556	0.352	193.174	709.997	162.193	1.088	162.746	1.084
0.5	x-x	0.047	2.314	0.547	121.171	428.857	98.377	1.146	98.581	1.144
0.5	x-x	0.02	5.172	1.293	127.97	153.52	71.899	0.661	72.007	0.660
0.75	x-x	0.889	0.058	0.018	2013.81	2174.467	1862.825	1.138	1938.595	1.093
0.75	x-x	0.877	0.063	0.02	1990.748	2163.01	1834.837	1.139	1908.303	1.095
0.75	x-x	0.864	0.068	0.021	1966.634	2150.931	1805.826	1.140	1876.942	1.097
0.75	x-x	0.851	0.073	0.023	1941.322	2138.187	1775.682	1.142	1844.398	1.099
0.75	x-x	0.836	0.078	0.025	1914.494	2124.678	1744.118	1.143	1810.367	1.101
0.75	x-x	0.821	0.084	0.027	1886.048	2110.603	1711.237	1.144	1774.967	1.103
0.75	x-x	0.805	0.091	0.029	1856.155	2096.139	1677.343	1.144	1738.528	1.104
0.75	x-x	0.789	0.097	0.03	1824.947	2081.363	1642.627	1.145	1701.261	1.105
0.75	x-x	0.772	0.104	0.032	1792.093	2066.15	1606.777	1.145	1662.836	1.106
0.75	x-x	0.754	0.112	0.035	1757.595	2050.506	1569.837	1.144	1623.305	1.107
0.75	x-x	0.735	0.12	0.037	1721.311	2034.242	1531.625	1.144	1582.48	1.107
0.75	x-x	0.716	0.129	0.039	1683.599	2017.513	1492.558	1.143	1540.811	1.108

0.75	x-x	0.696	0.138	0.041	1644.611	2000.035	1452.637	1.142	1498.304	1.107
0.75	x-x	0.675	0.147	0.044	1604.173	1982.046	1411.894	1.140	1454.997	1.106
0.75	x-x	0.654	0.157	0.046	1562.152	1963.779	1370.37	1.137	1410.938	1.104
0.75	x-x	0.632	0.168	0.049	1518.355	1944.7	1327.685	1.134	1365.73	1.103
0.75	x-x	0.609	0.18	0.052	1473.196	1924.632	1284.123	1.131	1319.68	1.100
0.75	x-x	0.586	0.192	0.055	1427.136	1903.341	1239.985	1.126	1273.108	1.097
0.75	x-x	0.562	0.205	0.058	1379.743	1880.296	1194.788	1.122	1225.51	1.094
0.75	x-x	0.538	0.219	0.062	1330.992	1855.016	1148.418	1.117	1176.773	1.090
0.75	x-x	0.514	0.234	0.066	1281.482	1827.138	1101.302	1.112	1127.352	1.086
0.75	x-x	0.489	0.251	0.071	1230.955	1795.849	1053.095	1.106	1076.89	1.082
0.75	x-x	0.463	0.269	0.076	1179.075	1760.767	1003.591	1.100	1025.178	1.077
0.75	x-x	0.438	0.289	0.082	1125.535	1720.888	952.448	1.095	971.87	1.073
0.75	x-x	0.411	0.311	0.089	1070.425	1675.609	899.789	1.088	917.103	1.068
0.75	x-x	0.384	0.336	0.097	1015.381	1626.743	847.499	1.080	862.843	1.061
0.75	x-x	0.357	0.363	0.106	960.465	1574.847	795.855	1.070	809.37	1.052
0.75	x-x	0.33	0.394	0.116	900.574	1513.913	740.024	1.062	751.695	1.045
0.75	x-x	0.303	0.429	0.128	833.406	1448.203	679.915	1.061	689.755	1.045
0.75	x-x	0.276	0.468	0.141	765.814	1380.458	620.901	1.059	629.097	1.045
0.75	x-x	0.249	0.513	0.156	698.465	1304.709	562.262	1.057	568.974	1.044
0.75	x-x	0.223	0.566	0.175	627.378	1221.179	501.711	1.058	507.048	1.047
0.75	x-x	0.196	0.634	0.197	553.141	1129.282	439.804	1.061	443.9	1.051
0.75	x-x	0.17	0.711	0.225	485.244	1032.718	383.215	1.059	386.321	1.051
0.75	x-x	0.144	0.817	0.264	411.661	922.499	323.252	1.064	325.459	1.057
0.75	x-x	0.118	0.966	0.32	337.372	783.746	261.754	1.077	263.2	1.071
0.75	x-x	0.094	1.171	0.399	269.137	620.347	203.751	1.099	204.626	1.094
0.75	x-x	0.069	1.528	0.533	197.26	441.792	144.648	1.137	145.088	1.134
0.75	x-x	0.044	2.311	0.827	121.326	261.297	85.839	1.210	85.994	1.208
0.75	x-x	0.019	4.935	1.834	121.926	106.135	58.126	0.793	58.197	0.792
1	x-x	0.897	0.052	0.023	2042.509	2139.09	1860.647	1.149	1936.237	1.104
1	x-x	0.886	0.056	0.025	2023.59	2126.505	1835.564	1.151	1909.09	1.106
1	x-x	0.875	0.06	0.026	2003.706	2113.254	1809.482	1.152	1880.893	1.108
1	x-x	0.863	0.064	0.028	1983.009	2099.417	1782.62	1.153	1851.885	1.110
1	x-x	0.85	0.069	0.03	1961.584	2084.868	1754.99	1.154	1822.084	1.112
1	x-x	0.837	0.073	0.032	1939.249	2069.653	1726.514	1.155	1791.409	1.113
1	x-x	0.823	0.078	0.034	1915.867	2053.899	1697.214	1.155	1759.884	1.114
1	x-x	0.808	0.083	0.036	1891.306	2037.558	1666.99	1.156	1727.408	1.115
1	x-x	0.793	0.089	0.038	1865.622	2020.616	1635.916	1.155	1694.064	1.116
1	x-x	0.777	0.094	0.041	1838.848	2003.107	1604.085	1.155	1659.954	1.116
1	x-x	0.761	0.1	0.043	1810.647	1984.852	1571.166	1.154	1624.726	1.116
1	x-x	0.744	0.107	0.046	1781.186	1966.112	1537.5	1.153	1588.752	1.116
1	x-x	0.727	0.114	0.049	1750.445	1946.956	1503.147	1.152	1552.098	1.116
1	x-x	0.709	0.121	0.051	1718.352	1927.262	1468.021	1.150	1514.676	1.115
1	x-x	0.69	0.128	0.054	1684.968	1906.89	1432.127	1.148	1476.493	1.113
1	x-x	0.67	0.136	0.057	1650.086	1885.628	1395.242	1.145	1437.319	1.112
1	x-x	0.651	0.145	0.061	1613.778	1863.257	1357.361	1.142	1397.151	1.110
1	x-x	0.63	0.154	0.064	1575.94	1839.801	1318.489	1.139	1356.002	1.107
1	x-x	0.609	0.164	0.068	1536.405	1815.174	1278.533	1.135	1313.776	1.105
1	x-x	0.587	0.174	0.072	1495.325	1789.563	1237.759	1.131	1270.761	1.102
1	x-x	0.565	0.185	0.076	1452.926	1762.249	1196.046	1.126	1226.834	1.098
1	x-x	0.542	0.197	0.08	1408.997	1732.464	1153.001	1.121	1181.585	1.094
1	x-x	0.519	0.21	0.085	1363.041	1700.341	1108.48	1.115	1134.875	1.089
1	x-x	0.495	0.224	0.091	1315.365	1665.662	1062.731	1.110	1086.968	1.085
1	x-x	0.47	0.239	0.097	1266.492	1628.035	1016.069	1.103	1038.203	1.080
1	x-x	0.446	0.256	0.104	1216.283	1586.636	968.235	1.097	988.313	1.075
1	x-x	0.42	0.274	0.112	1163.909	1540.341	918.488	1.091	936.537	1.070
1	x-x	0.395	0.295	0.12	1109.621	1488.473	866.999	1.085	883.063	1.065
1	x-x	0.369	0.317	0.13	1056.787	1435.091	817.361	1.077	831.623	1.058

1	x-x	0.344	0.341	0.141	1003.122	1377.091	767.212	1.068	779.764	1.050
1	x-x	0.318	0.37	0.154	946.657	1312.012	714.846	1.059	725.731	1.043
1	x-x	0.292	0.401	0.169	886.549	1243.956	661.279	1.052	670.583	1.037
1	x-x	0.267	0.435	0.185	821.077	1177.408	606.943	1.048	614.772	1.035
1	x-x	0.242	0.476	0.205	752.296	1103.251	550.649	1.046	557.085	1.034
1	x-x	0.216	0.526	0.229	679.198	1021.845	492.293	1.046	497.431	1.035
1	x-x	0.192	0.582	0.256	608.611	942.55	437.751	1.046	441.809	1.036
1	x-x	0.168	0.652	0.29	535.511	857.289	382.525	1.046	385.62	1.038
1	x-x	0.143	0.748	0.336	457.772	743.515	321.562	1.061	323.746	1.054
1	x-x	0.119	0.874	0.399	379.801	619.96	261.347	1.086	262.788	1.080
1	x-x	0.096	1.048	0.484	306.453	496.426	205.85	1.114	206.743	1.109
1	x-x	0.073	1.335	0.622	230.792	367.544	150.738	1.155	151.216	1.152
1	x-x	0.05	1.865	0.882	156.803	241.639	99.047	1.211	99.253	1.209
1	x-x	0.029	3.101	1.491	93.15	129.403	55.421	1.247	55.486	1.246
0.25	y-y	0.892	0.019	0.039	2217.932	2015.24	1895.899	1.121	1974.441	1.076
0.25	y-y	0.879	0.021	0.043	2208.978	1989.654	1866.845	1.123	1942.949	1.079
0.25	y-y	0.867	0.022	0.046	2199.315	1962.577	1836.256	1.125	1909.838	1.081
0.25	y-y	0.853	0.024	0.05	2189.185	1934.11	1804.436	1.126	1875.441	1.083
0.25	y-y	0.838	0.026	0.055	2178.768	1904.111	1771.418	1.127	1839.799	1.085
0.25	y-y	0.822	0.028	0.059	2167.73	1872.648	1737.075	1.128	1802.78	1.087
0.25	y-y	0.806	0.031	0.064	2156.243	1839.264	1701.17	1.129	1764.139	1.089
0.25	y-y	0.788	0.033	0.069	2144.514	1804.234	1664.106	1.129	1724.312	1.090
0.25	y-y	0.77	0.035	0.075	2132.452	1767.291	1625.629	1.129	1683.035	1.091
0.25	y-y	0.752	0.037	0.081	2120.299	1728.343	1585.828	1.129	1640.41	1.092
0.25	y-y	0.732	0.04	0.087	2108.037	1687.559	1544.85	1.129	1596.602	1.093
0.25	y-y	0.712	0.042	0.094	2095.596	1645.618	1503.238	1.128	1552.195	1.093
0.25	y-y	0.691	0.045	0.101	2082.722	1602.528	1460.878	1.127	1507.072	1.092
0.25	y-y	0.669	0.047	0.109	2069.389	1557.546	1417.163	1.125	1460.593	1.092
0.25	y-y	0.647	0.05	0.117	2055.176	1510.59	1371.865	1.124	1412.524	1.091
0.25	y-y	0.624	0.053	0.125	2039.974	1462.825	1325.95	1.122	1363.895	1.090
0.25	y-y	0.601	0.056	0.134	2023.298	1414.846	1279.757	1.119	1315.069	1.089
0.25	y-y	0.578	0.06	0.143	2005.095	1365.617	1232.492	1.117	1265.21	1.088
0.25	y-y	0.553	0.064	0.154	1984.856	1315.516	1184.36	1.113	1214.541	1.086
0.25	y-y	0.529	0.068	0.165	1962.716	1264.653	1135.598	1.109	1163.316	1.083
0.25	y-y	0.503	0.073	0.176	1938.629	1212.86	1086.141	1.104	1111.47	1.079
0.25	y-y	0.477	0.079	0.19	1911.157	1159.472	1035.122	1.099	1058.102	1.075
0.25	y-y	0.451	0.086	0.204	1879.36	1104.412	982.395	1.093	1003.071	1.071
0.25	y-y	0.423	0.093	0.221	1842.797	1047.823	928.179	1.087	946.614	1.066
0.25	y-y	0.396	0.103	0.24	1800.466	989.184	872.059	1.081	888.313	1.061
0.25	y-y	0.367	0.112	0.26	1755.938	931.51	817.403	1.072	831.666	1.053
0.25	y-y	0.34	0.123	0.284	1708.211	873.73	763.189	1.060	775.609	1.043
0.25	y-y	0.311	0.135	0.31	1656.923	808.789	704.071	1.054	714.628	1.039
0.25	y-y	0.284	0.148	0.34	1600.996	736.454	639.863	1.057	648.571	1.043
0.25	y-y	0.256	0.164	0.374	1536.037	665.059	576.363	1.060	583.419	1.047
0.25	y-y	0.23	0.181	0.412	1468.632	599.358	518.209	1.058	523.905	1.046
0.25	y-y	0.204	0.202	0.456	1391.956	533.067	459.83	1.059	464.31	1.048
0.25	y-y	0.179	0.23	0.508	1296.714	467.926	401.827	1.062	405.244	1.053
0.25	y-y	0.154	0.269	0.572	1179.705	405.929	345.839	1.063	348.367	1.055
0.25	y-y	0.129	0.324	0.66	1039.987	342.798	289.093	1.065	290.858	1.059
0.25	y-y	0.105	0.399	0.783	891.371	279.327	233.521	1.069	234.671	1.064
0.25	y-y	0.08	0.516	0.979	693.056	213.243	175.047	1.091	175.693	1.087
0.25	y-y	0.055	0.745	1.363	460.102	144.002	114.967	1.137	115.245	1.134
0.25	y-y	0.03	1.363	2.354	225.368	103.369	73.037	0.977	73.149	0.976
0.5	y-y	0.893	0.037	0.036	2122.568	2040.453	1846.45	1.153	1920.867	1.108
0.5	y-y	0.883	0.039	0.038	2109.223	2022.826	1822.054	1.155	1894.48	1.111
0.5	y-y	0.872	0.042	0.041	2095.201	2004.498	1796.867	1.156	1867.265	1.113
0.5	y-y	0.86	0.045	0.043	2080.612	1985.422	1770.964	1.157	1839.309	1.114

0.5	y-y	0.848	0.048	0.046	2065.393	1965.616	1744.345	1.158	1810.612	1.116
0.5	y-y	0.835	0.051	0.049	2049.623	1945.044	1717.072	1.159	1781.245	1.117
0.5	y-y	0.822	0.054	0.052	2033.334	1923.738	1689.219	1.159	1751.289	1.118
0.5	y-y	0.808	0.057	0.055	2016.454	1901.628	1660.715	1.159	1720.671	1.119
0.5	y-y	0.793	0.061	0.058	1999.037	1878.55	1631.503	1.159	1689.332	1.119
0.5	y-y	0.778	0.065	0.062	1981.105	1854.398	1601.556	1.158	1657.246	1.119
0.5	y-y	0.763	0.068	0.066	1962.702	1829.267	1571.008	1.157	1624.558	1.119
0.5	y-y	0.747	0.072	0.07	1943.776	1803.166	1539.864	1.155	1591.277	1.118
0.5	y-y	0.73	0.076	0.074	1924.044	1775.901	1507.844	1.154	1557.107	1.117
0.5	y-y	0.713	0.081	0.078	1903.323	1747.08	1474.61	1.152	1521.691	1.116
0.5	y-y	0.695	0.085	0.083	1881.77	1716.957	1440.496	1.149	1485.39	1.115
0.5	y-y	0.676	0.09	0.088	1859.312	1685.776	1405.685	1.147	1448.404	1.113
0.5	y-y	0.657	0.095	0.093	1835.904	1653.585	1370.233	1.143	1410.794	1.110
0.5	y-y	0.638	0.1	0.098	1811.494	1620.227	1334.057	1.139	1372.474	1.107
0.5	y-y	0.618	0.106	0.104	1785.857	1585.11	1296.695	1.135	1332.961	1.104
0.5	y-y	0.597	0.112	0.11	1758.858	1548.097	1258.067	1.131	1292.176	1.101
0.5	y-y	0.576	0.118	0.117	1729.979	1509.037	1217.907	1.127	1249.845	1.098
0.5	y-y	0.554	0.125	0.124	1699.358	1468.548	1176.792	1.122	1206.584	1.094
0.5	y-y	0.532	0.132	0.132	1666.866	1426.421	1134.625	1.117	1162.295	1.090
0.5	y-y	0.509	0.14	0.14	1632.186	1382.373	1091.186	1.111	1116.754	1.086
0.5	y-y	0.486	0.149	0.149	1594.969	1336.113	1046.27	1.106	1069.754	1.082
0.5	y-y	0.462	0.159	0.159	1554.594	1288.271	1000.146	1.101	1021.584	1.078
0.5	y-y	0.438	0.17	0.17	1510.623	1238.544	952.613	1.095	972.042	1.074
0.5	y-y	0.413	0.182	0.183	1462.925	1186.824	903.74	1.090	921.208	1.069
0.5	y-y	0.388	0.196	0.196	1411	1132.937	853.428	1.085	868.989	1.065
0.5	y-y	0.364	0.212	0.211	1357.044	1080.475	804.648	1.077	818.466	1.059
0.5	y-y	0.339	0.229	0.227	1299.318	1026.54	755.204	1.068	767.363	1.051
0.5	y-y	0.313	0.249	0.246	1237.213	970.152	704.523	1.059	715.094	1.043
0.5	y-y	0.288	0.271	0.267	1173.598	915.555	655.876	1.047	665.027	1.033
0.5	y-y	0.263	0.297	0.291	1103.833	855.97	604.388	1.037	612.151	1.024
0.5	y-y	0.239	0.326	0.317	1036.539	789.997	552.199	1.030	558.672	1.019
0.5	y-y	0.215	0.359	0.348	967.554	717.457	498.079	1.029	503.34	1.018
0.5	y-y	0.191	0.4	0.386	888.631	641.777	441.723	1.031	445.855	1.022
0.5	y-y	0.168	0.451	0.432	792.551	567.867	384.159	1.041	387.28	1.033
0.5	y-y	0.144	0.518	0.492	691.088	486.217	324.249	1.062	326.47	1.055
0.5	y-y	0.122	0.6	0.571	587.501	407.473	267.62	1.087	269.131	1.081
0.5	y-y	0.101	0.71	0.672	486.133	335.33	216.471	1.112	217.459	1.107
0.5	y-y	0.08	0.88	0.83	376.744	260.189	164.526	1.152	165.096	1.148
0.5	y-y	0.058	1.169	1.094	269.658	187.191	115.863	1.200	116.145	1.197
0.5	y-y	0.038	1.77	1.633	166.6	117.176	70.837	1.265	70.942	1.264
0.5	y-y	0.018	3.593	3.304	92.339	135.487	56.209	0.759	56.275	0.758
0.75	y-y	0.828	0.068	0.041	1965.426	2000.922	1697.994	1.161	1760.723	1.120
0.75	y-y	0.816	0.071	0.043	1948.588	1985.819	1674.684	1.162	1735.671	1.121
0.75	y-y	0.805	0.075	0.045	1931.218	1970.375	1651.008	1.161	1710.253	1.121
0.75	y-y	0.793	0.079	0.048	1913.223	1954.583	1626.912	1.161	1684.411	1.121
0.75	y-y	0.78	0.083	0.05	1894.479	1938.33	1602.249	1.160	1657.988	1.121
0.75	y-y	0.767	0.087	0.052	1875.015	1921.589	1577.046	1.160	1631.015	1.121
0.75	y-y	0.754	0.091	0.055	1854.768	1904.292	1551.239	1.158	1603.427	1.121
0.75	y-y	0.741	0.095	0.057	1833.867	1886.469	1524.967	1.157	1575.373	1.120
0.75	y-y	0.727	0.1	0.06	1812.287	1868.085	1498.214	1.156	1546.839	1.119
0.75	y-y	0.712	0.105	0.063	1789.973	1849.095	1470.939	1.154	1517.782	1.118
0.75	y-y	0.698	0.11	0.066	1766.844	1829.372	1443.039	1.152	1488.095	1.117
0.75	y-y	0.682	0.115	0.069	1742.974	1808.845	1414.555	1.149	1457.823	1.115
0.75	y-y	0.667	0.121	0.072	1718.242	1787.619	1385.505	1.147	1426.988	1.113
0.75	y-y	0.651	0.126	0.075	1692.565	1765.509	1355.761	1.144	1395.456	1.111
0.75	y-y	0.634	0.133	0.079	1665.868	1742.348	1325.221	1.141	1363.123	1.109
0.75	y-y	0.618	0.139	0.083	1638.245	1718.181	1294.021	1.137	1330.135	1.106

0.75	y-y	0.601	0.146	0.086	1609.602	1693.076	1262.184	1.134	1296.519	1.104
0.75	y-y	0.583	0.153	0.091	1579.818	1667.022	1229.677	1.130	1262.244	1.101
0.75	y-y	0.565	0.161	0.095	1548.661	1639.698	1196.24	1.126	1227.038	1.098
0.75	y-y	0.547	0.169	0.1	1516.145	1611.099	1161.944	1.122	1190.979	1.094
0.75	y-y	0.528	0.177	0.105	1482.415	1580.902	1126.773	1.117	1154.057	1.091
0.75	y-y	0.509	0.186	0.11	1447.478	1549	1090.751	1.113	1116.298	1.087
0.75	y-y	0.49	0.196	0.116	1411.023	1515.089	1053.632	1.108	1077.451	1.083
0.75	y-y	0.47	0.207	0.122	1372.434	1479.426	1015.295	1.103	1037.394	1.080
0.75	y-y	0.45	0.219	0.129	1331.902	1441.712	975.809	1.098	996.205	1.076
0.75	y-y	0.429	0.232	0.137	1289.861	1401.636	935.371	1.094	954.096	1.072
0.75	y-y	0.408	0.246	0.145	1246.17	1358.649	893.776	1.089	910.857	1.068
0.75	y-y	0.387	0.261	0.154	1200.451	1312.871	851.01	1.084	866.481	1.065
0.75	y-y	0.366	0.277	0.164	1155.88	1267.981	810.266	1.078	824.28	1.060
0.75	y-y	0.346	0.295	0.175	1109.969	1220.934	769.032	1.071	781.644	1.054
0.75	y-y	0.324	0.315	0.187	1061.954	1170.531	726.565	1.064	737.813	1.048
0.75	y-y	0.303	0.337	0.201	1011.986	1116.544	682.994	1.057	692.924	1.042
0.75	y-y	0.282	0.361	0.216	962.779	1063.389	641.266	1.048	650.012	1.034
0.75	y-y	0.262	0.387	0.232	914.612	1011.277	601.477	1.038	609.165	1.025
0.75	y-y	0.242	0.416	0.251	858.877	956.564	558.633	1.032	565.258	1.020
0.75	y-y	0.222	0.45	0.273	795.445	899.369	512.975	1.030	518.556	1.019
0.75	y-y	0.202	0.488	0.297	734.252	840.339	468.979	1.026	473.64	1.016
0.75	y-y	0.182	0.535	0.327	667.792	767.159	419.93	1.034	423.663	1.025
0.75	y-y	0.163	0.588	0.361	601.759	690.032	371.558	1.046	374.478	1.038
0.75	y-y	0.144	0.654	0.404	533.854	611.407	323.718	1.061	325.932	1.053
0.75	y-y	0.126	0.735	0.456	467.182	533.546	278.155	1.078	279.788	1.071
0.75	y-y	0.107	0.844	0.524	395.882	450.912	231.262	1.106	232.39	1.101
0.75	y-y	0.089	1	0.622	323.733	367.749	185.578	1.139	186.303	1.135
0.75	y-y	0.071	1.221	0.764	256.406	287.63	143.738	1.174	144.172	1.170
0.75	y-y	0.054	1.564	0.981	191.988	212.848	105.405	1.216	105.639	1.213
0.75	y-y	0.037	2.227	1.399	126.826	139.553	68.349	1.280	68.447	1.278
0.75	y-y	0.019	4.087	2.571	99.967	109.421	53.411	0.865	53.471	0.865
1	y-y	0.763	0.099	0.043	1815.161	1987.438	1576.191	1.154	1630.1	1.116
1	y-y	0.752	0.104	0.045	1795.805	1975.051	1553.919	1.154	1606.29	1.116
1	y-y	0.741	0.108	0.046	1775.879	1962.46	1531.32	1.153	1582.154	1.116
1	y-y	0.729	0.112	0.048	1755.336	1949.666	1508.375	1.152	1557.673	1.116
1	y-y	0.717	0.117	0.05	1734.184	1936.629	1485.076	1.151	1532.838	1.115
1	y-y	0.705	0.122	0.052	1712.481	1923.353	1461.478	1.150	1507.711	1.114
1	y-y	0.693	0.127	0.054	1690.238	1909.778	1437.569	1.148	1482.278	1.113
1	y-y	0.68	0.132	0.056	1667.291	1895.822	1413.195	1.146	1456.379	1.112
1	y-y	0.667	0.138	0.058	1643.671	1881.357	1388.328	1.145	1429.983	1.111
1	y-y	0.653	0.143	0.06	1619.411	1866.394	1363.018	1.142	1403.146	1.110
1	y-y	0.64	0.149	0.062	1594.518	1850.992	1337.319	1.140	1375.926	1.108
1	y-y	0.626	0.156	0.065	1568.923	1835.099	1311.175	1.138	1348.267	1.107
1	y-y	0.612	0.162	0.067	1542.536	1818.66	1284.515	1.136	1320.094	1.105
1	y-y	0.598	0.169	0.07	1515.4	1801.814	1257.461	1.133	1291.536	1.103
1	y-y	0.583	0.176	0.072	1487.633	1784.328	1229.999	1.130	1262.583	1.101
1	y-y	0.568	0.183	0.075	1459.358	1766.086	1202.181	1.127	1233.289	1.098
1	y-y	0.553	0.191	0.078	1430.481	1746.897	1173.882	1.123	1203.525	1.096
1	y-y	0.538	0.199	0.081	1400.86	1726.705	1145.017	1.120	1173.202	1.093
1	y-y	0.522	0.208	0.085	1370.163	1705.315	1115.316	1.116	1142.041	1.090
1	y-y	0.506	0.217	0.088	1338.596	1682.717	1084.959	1.112	1110.233	1.087
1	y-y	0.49	0.227	0.092	1306.531	1658.973	1054.259	1.108	1078.107	1.084
1	y-y	0.474	0.237	0.096	1273.986	1633.901	1023.191	1.104	1045.639	1.080
1	y-y	0.458	0.248	0.1	1240.835	1607.197	991.596	1.100	1012.665	1.077
1	y-y	0.441	0.259	0.105	1206.892	1578.554	959.296	1.095	979.001	1.073
1	y-y	0.424	0.271	0.11	1171.872	1547.591	926.04	1.091	944.39	1.070
1	y-y	0.407	0.285	0.116	1136.058	1514.174	892.038	1.087	909.053	1.067

1	y-y	0.39	0.299	0.122	1099.451	1478.326	857.375	1.084	873.081	1.064
1	y-y	0.373	0.314	0.129	1064.711	1443.278	824.773	1.078	839.297	1.059
1	y-y	0.356	0.329	0.136	1029.271	1406.009	791.665	1.072	805.037	1.054
1	y-y	0.339	0.346	0.144	992.936	1365.581	757.709	1.066	769.949	1.049
1	y-y	0.322	0.365	0.152	955.272	1322.107	722.775	1.060	733.905	1.044
1	y-y	0.304	0.386	0.162	915.234	1275.842	686.446	1.055	696.477	1.040
1	y-y	0.287	0.407	0.172	875.32	1232.282	651.76	1.050	660.796	1.036
1	y-y	0.271	0.43	0.183	831.178	1187.799	615.244	1.048	623.29	1.035
1	y-y	0.254	0.456	0.195	785.535	1140.008	577.845	1.047	584.936	1.034
1	y-y	0.237	0.485	0.209	739.017	1088.608	539.922	1.046	546.109	1.034
1	y-y	0.22	0.519	0.225	689.719	1034.021	500.668	1.046	505.984	1.035
1	y-y	0.203	0.554	0.242	642.389	980.468	463.612	1.046	468.166	1.036
1	y-y	0.188	0.594	0.262	595.148	927.685	427.611	1.045	431.483	1.036
1	y-y	0.171	0.641	0.285	546.214	870.931	390.725	1.045	393.954	1.037
1	y-y	0.155	0.698	0.312	495.613	802.564	351.608	1.051	354.221	1.043
1	y-y	0.138	0.77	0.347	442.152	719.889	309.489	1.065	311.512	1.059
1	y-y	0.122	0.854	0.389	390.338	636.767	269.347	1.083	270.878	1.077
1	y-y	0.107	0.956	0.439	341.512	557.85	232.498	1.098	233.638	1.093
1	y-y	0.092	1.092	0.505	292.079	471.785	195.171	1.121	195.974	1.116
1	y-y	0.076	1.284	0.597	241.528	385.828	158.416	1.148	158.944	1.145
1	y-y	0.061	1.576	0.737	190.257	300.495	122.485	1.183	122.801	1.180
1	y-y	0.046	2.02	0.958	142.647	218.814	89.6	1.227	89.768	1.224
1	y-y	0.032	2.836	1.36	98.364	144.332	59.97	1.269	60.045	1.267
1	y-y	0.018	4.871	2.354	120.208	103.361	56.902	0.756	56.97	0.755

Tabla B.14 Valores de r_1 de la sección 16 (60 cm x 90 cm con ρ = 0.06 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.893	0.045	0.005	2623.922	2913.852	2550.007	1.055	2662.77	1.010
0.25	x-x	0.884	0.049	0.005	2597.547	2906.369	2519.469	1.057	2629.489	1.012
0.25	x-x	0.874	0.054	0.006	2569.171	2898.951	2487.305	1.058	2594.475	1.015
0.25	x-x	0.864	0.058	0.006	2538.833	2891.334	2453.377	1.060	2557.581	1.017
0.25	x-x	0.853	0.063	0.007	2506.463	2883.253	2417.458	1.062	2518.571	1.019
0.25	x-x	0.84	0.069	0.007	2471.711	2874.619	2379.203	1.063	2477.076	1.021
0.25	x-x	0.827	0.075	0.008	2434.137	2865.399	2338.233	1.065	2432.697	1.024
0.25	x-x	0.813	0.082	0.009	2393.732	2855.572	2294.584	1.067	2385.486	1.026
0.25	x-x	0.798	0.089	0.009	2350.487	2845.062	2248.259	1.068	2335.458	1.029
0.25	x-x	0.782	0.097	0.01	2304.372	2834.436	2199.638	1.070	2283.037	1.031
0.25	x-x	0.764	0.106	0.011	2255.28	2824.318	2149.012	1.071	2228.546	1.033
0.25	x-x	0.746	0.116	0.012	2203.138	2814.842	2096.364	1.072	2171.98	1.034
0.25	x-x	0.727	0.126	0.012	2148.033	2805.724	2041.587	1.072	2113.236	1.036
0.25	x-x	0.707	0.137	0.013	2090.617	2797.029	1985.275	1.072	2052.96	1.037
0.25	x-x	0.687	0.149	0.014	2030.605	2788.432	1926.979	1.073	1990.684	1.038
0.25	x-x	0.665	0.161	0.015	1968.923	2778.68	1866.948	1.073	1926.684	1.040
0.25	x-x	0.643	0.175	0.016	1905.315	2767.526	1804.925	1.073	1860.698	1.041
0.25	x-x	0.621	0.189	0.017	1839.606	2757.057	1741.679	1.073	1793.556	1.042
0.25	x-x	0.597	0.205	0.018	1772.402	2745.71	1677.095	1.072	1725.143	1.042
0.25	x-x	0.573	0.222	0.019	1704.033	2733.275	1611.44	1.071	1655.75	1.042
0.25	x-x	0.548	0.24	0.021	1633.846	2719.551	1544.118	1.069	1584.756	1.042
0.25	x-x	0.523	0.261	0.022	1560.643	2704.208	1474.026	1.068	1511.015	1.042
0.25	x-x	0.496	0.284	0.024	1484.944	2686.269	1401.447	1.067	1434.842	1.042
0.25	x-x	0.469	0.31	0.026	1406.8	2665.149	1326.427	1.065	1356.304	1.041
0.25	x-x	0.441	0.341	0.029	1325.368	2640.188	1248.242	1.063	1274.665	1.041
0.25	x-x	0.411	0.376	0.032	1240.543	2609.865	1166.7	1.061	1189.752	1.040
0.25	x-x	0.38	0.419	0.036	1151.688	2571.583	1081.064	1.059	1100.827	1.040
0.25	x-x	0.348	0.471	0.041	1057.742	2525.727	990.89	1.057	1007.468	1.040
0.25	x-x	0.315	0.535	0.046	962.73	2477.215	900.697	1.052	914.374	1.037

0.25	x-x	0.283	0.606	0.05	864.829	2436.612	810.003	1.053	821.048	1.039
0.25	x-x	0.253	0.687	0.055	766.984	2391.001	719.476	1.059	728.176	1.046
0.25	x-x	0.225	0.775	0.062	682.773	2331.738	640.476	1.057	647.362	1.046
0.25	x-x	0.198	0.877	0.071	601.532	2258.089	563.973	1.056	569.305	1.046
0.25	x-x	0.169	1.019	0.084	515.094	2158.137	482.482	1.057	486.379	1.048
0.25	x-x	0.141	1.214	0.101	428.9	2030.446	401.299	1.055	403.992	1.048
0.25	x-x	0.114	1.479	0.126	347.817	1855.511	324.479	1.054	326.237	1.048
0.25	x-x	0.085	1.947	0.172	229.435	1590.266	214.812	1.186	215.581	1.182
0.25	x-x	0.027	5.677	0.541	11522.186	678.53	814.053	0.101	825.209	0.100
0.5	x-x	0.899	0.047	0.01	2611.605	2837.917	2480.552	1.092	2587.128	1.047
0.5	x-x	0.891	0.051	0.011	2587.948	2828.563	2452.174	1.094	2556.274	1.049
0.5	x-x	0.882	0.055	0.011	2562.819	2818.665	2422.293	1.096	2523.82	1.052
0.5	x-x	0.872	0.059	0.012	2536.357	2807.944	2390.873	1.098	2489.728	1.055
0.5	x-x	0.862	0.063	0.013	2508.274	2796.834	2358.011	1.100	2454.113	1.057
0.5	x-x	0.851	0.068	0.014	2478.337	2785.254	2323.481	1.102	2416.734	1.060
0.5	x-x	0.838	0.073	0.015	2446.198	2773.638	2287.317	1.104	2377.633	1.062
0.5	x-x	0.826	0.079	0.016	2411.79	2761.456	2249.131	1.105	2336.399	1.064
0.5	x-x	0.812	0.085	0.018	2375.488	2748.891	2209.418	1.106	2293.574	1.066
0.5	x-x	0.797	0.091	0.019	2337.383	2736.067	2168.371	1.107	2249.372	1.067
0.5	x-x	0.782	0.098	0.02	2297.289	2723.024	2125.881	1.108	2203.682	1.068
0.5	x-x	0.766	0.106	0.022	2254.649	2709.442	2081.311	1.108	2155.826	1.070
0.5	x-x	0.749	0.114	0.023	2209.626	2695.546	2034.977	1.108	2106.154	1.070
0.5	x-x	0.731	0.123	0.025	2161.957	2681.046	1986.527	1.108	2054.299	1.071
0.5	x-x	0.713	0.133	0.026	2112.241	2666.076	1936.586	1.108	2000.939	1.072
0.5	x-x	0.693	0.143	0.028	2059.527	2650.306	1884.226	1.107	1945.091	1.073
0.5	x-x	0.673	0.154	0.03	2003.891	2633.725	1829.564	1.107	1886.895	1.074
0.5	x-x	0.652	0.166	0.031	1945.777	2616.23	1772.982	1.107	1826.77	1.075
0.5	x-x	0.63	0.179	0.033	1886.269	2596.665	1714.927	1.107	1765.2	1.075
0.5	x-x	0.608	0.193	0.036	1824.685	2575.602	1655.199	1.106	1701.983	1.076
0.5	x-x	0.585	0.207	0.038	1761.64	2552.73	1594.263	1.105	1637.621	1.076
0.5	x-x	0.561	0.223	0.041	1697.15	2527.506	1532.03	1.103	1572.027	1.075
0.5	x-x	0.537	0.241	0.043	1630.492	2499.886	1468.023	1.101	1504.707	1.074
0.5	x-x	0.512	0.261	0.047	1561.465	2469.012	1401.929	1.099	1435.347	1.073
0.5	x-x	0.486	0.282	0.051	1490.847	2433.379	1334.1	1.096	1364.327	1.072
0.5	x-x	0.459	0.306	0.055	1417.938	2392.033	1263.963	1.092	1291.063	1.070
0.5	x-x	0.431	0.334	0.061	1341.191	2345.235	1190.673	1.089	1214.692	1.067
0.5	x-x	0.402	0.367	0.067	1260.812	2291.482	1114.334	1.085	1135.345	1.065
0.5	x-x	0.371	0.406	0.075	1176.947	2228.304	1034.89	1.081	1052.987	1.062
0.5	x-x	0.34	0.453	0.084	1088.724	2152.82	951.591	1.077	966.87	1.060
0.5	x-x	0.309	0.507	0.095	1001.703	2072.494	870.573	1.070	883.344	1.055
0.5	x-x	0.278	0.573	0.107	910.612	1980.917	786.883	1.063	797.302	1.049
0.5	x-x	0.246	0.654	0.123	804.569	1876.402	692.667	1.070	700.728	1.057
0.5	x-x	0.216	0.749	0.14	706.114	1768.436	606.232	1.071	612.398	1.060
0.5	x-x	0.186	0.868	0.162	608.585	1643.969	521.024	1.075	525.571	1.065
0.5	x-x	0.156	1.029	0.194	509.994	1487.551	434.61	1.080	437.77	1.072
0.5	x-x	0.127	1.243	0.236	418.549	1314.161	354.861	1.081	356.964	1.074
0.5	x-x	0.099	1.568	0.305	321.453	1102.163	271.294	1.099	272.522	1.094
0.5	x-x	0.069	2.2	0.438	3727.649	833.527	880.402	0.236	893.465	0.233
0.75	x-x	0.882	0.055	0.017	2562.092	2753.581	2373.447	1.118	2470.838	1.074
0.75	x-x	0.872	0.058	0.018	2538.544	2742.344	2345.014	1.120	2440.038	1.076
0.75	x-x	0.862	0.062	0.019	2513.661	2730.571	2315.306	1.121	2407.89	1.078
0.75	x-x	0.852	0.066	0.021	2487.511	2717.86	2284.13	1.123	2374.19	1.080
0.75	x-x	0.841	0.071	0.022	2459.861	2704.157	2251.305	1.124	2338.745	1.082
0.75	x-x	0.829	0.076	0.024	2430.529	2689.573	2216.814	1.125	2301.545	1.084
0.75	x-x	0.816	0.081	0.025	2399.808	2674.006	2180.886	1.127	2262.842	1.086
0.75	x-x	0.803	0.086	0.027	2367.782	2657.63	2143.761	1.128	2222.899	1.087
0.75	x-x	0.789	0.092	0.029	2334.196	2640.468	2105.297	1.128	2181.571	1.089

0.75	x-x	0.774	0.098	0.031	2299.003	2622.216	2065.32	1.128	2138.674	1.090
0.75	x-x	0.759	0.105	0.033	2262.122	2603.004	2023.911	1.128	2094.303	1.091
0.75	x-x	0.742	0.112	0.035	2223.084	2582.827	1980.76	1.128	2048.133	1.091
0.75	x-x	0.726	0.119	0.037	2182.051	2561.708	1936.08	1.128	2000.398	1.092
0.75	x-x	0.708	0.128	0.039	2139.236	2539.096	1889.802	1.128	1951.033	1.092
0.75	x-x	0.689	0.136	0.042	2094.262	2515.599	1842.05	1.127	1900.179	1.092
0.75	x-x	0.67	0.146	0.044	2046.684	2491.179	1792.532	1.126	1847.53	1.092
0.75	x-x	0.65	0.156	0.047	1996.687	2465.71	1741.399	1.124	1793.26	1.092
0.75	x-x	0.63	0.166	0.05	1944.4	2438.891	1688.68	1.123	1737.404	1.092
0.75	x-x	0.609	0.178	0.053	1889.418	2410.173	1633.907	1.121	1679.479	1.091
0.75	x-x	0.587	0.191	0.057	1831.975	2379.683	1577.432	1.120	1619.867	1.090
0.75	x-x	0.564	0.205	0.06	1772.575	2347.329	1519.697	1.117	1559.044	1.089
0.75	x-x	0.541	0.22	0.065	1711.063	2312.747	1460.543	1.115	1496.85	1.088
0.75	x-x	0.517	0.237	0.069	1647.411	2275.15	1399.77	1.111	1433.083	1.086
0.75	x-x	0.492	0.255	0.074	1581.154	2232.728	1336.558	1.108	1366.898	1.083
0.75	x-x	0.466	0.275	0.08	1512.462	2185.368	1271.261	1.103	1298.678	1.080
0.75	x-x	0.439	0.298	0.087	1441.408	2132.145	1203.897	1.099	1228.458	1.077
0.75	x-x	0.412	0.325	0.095	1367.457	2071.343	1133.888	1.095	1155.649	1.074
0.75	x-x	0.384	0.355	0.104	1289.908	2002.305	1060.972	1.091	1080.001	1.071
0.75	x-x	0.355	0.391	0.116	1208.294	1923.17	984.788	1.087	1001.162	1.069
0.75	x-x	0.326	0.434	0.129	1123.125	1833.794	906.167	1.082	920.012	1.066
0.75	x-x	0.296	0.483	0.145	1038.474	1739.578	829.42	1.075	841.004	1.060
0.75	x-x	0.266	0.544	0.164	950.4	1633.972	750.721	1.068	760.199	1.054
0.75	x-x	0.236	0.617	0.187	850.695	1519.276	665.967	1.068	673.415	1.057
0.75	x-x	0.207	0.706	0.214	748.252	1397.808	581.493	1.071	587.163	1.061
0.75	x-x	0.177	0.821	0.251	644.573	1262.32	497.15	1.074	501.289	1.065
0.75	x-x	0.148	0.982	0.301	535.198	1110.738	410.403	1.083	413.219	1.076
0.75	x-x	0.119	1.2	0.37	433.98	954.429	331.141	1.086	332.972	1.080
0.75	x-x	0.09	1.563	0.485	323.116	756.539	244.826	1.112	245.826	1.107
0.75	x-x	0.062	2.238	0.704	4451.468	517.691	548.198	0.340	553.235	0.337
1	x-x	0.857	0.06	0.026	2525.59	2668.29	2280.099	1.132	2369.834	1.089
1	x-x	0.847	0.064	0.028	2502.773	2653.094	2250.56	1.133	2337.941	1.091
1	x-x	0.836	0.068	0.029	2478.919	2636.823	2219.734	1.134	2304.692	1.093
1	x-x	0.825	0.072	0.031	2453.826	2619.447	2187.488	1.136	2269.951	1.094
1	x-x	0.813	0.076	0.033	2427.514	2601.016	2153.93	1.137	2233.835	1.096
1	x-x	0.801	0.081	0.035	2400.017	2581.585	2119.177	1.138	2196.478	1.098
1	x-x	0.788	0.085	0.037	2371.365	2561.135	2083.297	1.138	2157.957	1.099
1	x-x	0.774	0.091	0.039	2341.724	2539.885	2046.609	1.139	2118.617	1.100
1	x-x	0.76	0.096	0.042	2310.95	2517.894	2009.088	1.139	2078.435	1.101
1	x-x	0.745	0.102	0.044	2278.596	2495.234	1970.484	1.139	2037.148	1.102
1	x-x	0.73	0.108	0.047	2244.402	2471.489	1930.406	1.138	1994.341	1.102
1	x-x	0.714	0.115	0.049	2208.582	2446.74	1889.128	1.138	1950.315	1.102
1	x-x	0.697	0.122	0.052	2171.082	2420.959	1846.661	1.137	1905.085	1.102
1	x-x	0.68	0.129	0.055	2131.903	2394.267	1803.142	1.135	1858.804	1.101
1	x-x	0.662	0.137	0.058	2090.769	2366.452	1758.319	1.133	1811.207	1.100
1	x-x	0.643	0.145	0.062	2047.504	2337.201	1711.976	1.131	1762.073	1.099
1	x-x	0.624	0.155	0.065	2001.768	2306.407	1663.916	1.129	1711.201	1.098
1	x-x	0.604	0.164	0.069	1953.911	2273.961	1614.429	1.127	1658.906	1.096
1	x-x	0.584	0.175	0.073	1903.48	2239.479	1563.124	1.124	1604.782	1.095
1	x-x	0.562	0.187	0.078	1850.545	2202.699	1510.053	1.121	1548.895	1.093
1	x-x	0.54	0.199	0.083	1794.953	2162.871	1454.916	1.118	1490.94	1.091
1	x-x	0.518	0.213	0.089	1737.163	2119.779	1398.098	1.115	1431.331	1.089
1	x-x	0.494	0.229	0.095	1676.832	2072.807	1339.3	1.112	1369.766	1.087
1	x-x	0.471	0.246	0.102	1613.207	2021.985	1278.273	1.109	1305.998	1.085
1	x-x	0.446	0.265	0.109	1546.389	1967.289	1215.303	1.105	1240.336	1.083
1	x-x	0.421	0.287	0.118	1476.878	1906.98	1150.282	1.101	1172.684	1.080
1	x-x	0.395	0.311	0.128	1404.331	1839.584	1082.787	1.097	1102.614	1.077

1	x-x	0.368	0.34	0.141	1327.593	1764.862	1012.435	1.094	1029.748	1.075
1	x-x	0.34	0.373	0.155	1246.943	1681.705	939.448	1.090	954.337	1.073
1	x-x	0.312	0.412	0.172	1165.694	1593.459	867.09	1.084	879.759	1.069
1	x-x	0.284	0.457	0.191	1082.623	1498.008	794.222	1.077	804.837	1.063
1	x-x	0.255	0.513	0.216	993.925	1390.447	717.791	1.071	726.45	1.058
1	x-x	0.228	0.577	0.244	904.881	1283.754	644.354	1.063	651.324	1.052
1	x-x	0.2	0.657	0.28	800.45	1171.098	564.635	1.066	569.98	1.056
1	x-x	0.172	0.763	0.326	693.633	1047.923	484.54	1.068	488.471	1.059
1	x-x	0.145	0.9	0.387	585.885	921.492	406.525	1.072	409.288	1.065
1	x-x	0.118	1.098	0.475	476.326	772.65	326.636	1.084	328.418	1.078
1	x-x	0.09	1.409	0.614	367.477	597.078	246.067	1.108	247.077	1.103
1	x-x	0.064	1.956	0.857	270.427	406.482	171.649	1.126	172.14	1.123
0.25	y-y	0.894	0.017	0.034	2821.424	2591.086	2449.611	1.099	2553.489	1.054
0.25	y-y	0.885	0.018	0.036	2811.71	2567.304	2421.145	1.101	2522.573	1.057
0.25	y-y	0.876	0.019	0.039	2801.646	2542.048	2391.342	1.103	2490.237	1.059
0.25	y-y	0.866	0.02	0.042	2791.189	2515.325	2360.207	1.105	2456.492	1.062
0.25	y-y	0.856	0.022	0.045	2780.297	2486.995	2327.616	1.107	2421.208	1.064
0.25	y-y	0.845	0.023	0.048	2768.898	2456.767	2293.304	1.109	2384.102	1.067
0.25	y-y	0.833	0.025	0.052	2756.916	2424.392	2257.045	1.111	2344.94	1.069
0.25	y-y	0.82	0.027	0.056	2744.419	2390.122	2219.15	1.113	2304.063	1.072
0.25	y-y	0.807	0.029	0.06	2731.429	2354.221	2179.902	1.114	2261.783	1.074
0.25	y-y	0.793	0.031	0.064	2717.696	2316.887	2139.354	1.115	2218.161	1.076
0.25	y-y	0.777	0.033	0.069	2703.592	2277.785	2097.492	1.116	2173.191	1.077
0.25	y-y	0.761	0.036	0.074	2688.221	2236.267	2053.28	1.116	2125.767	1.078
0.25	y-y	0.744	0.038	0.079	2671.857	2192.48	2007.087	1.117	2076.293	1.079
0.25	y-y	0.727	0.041	0.085	2654.925	2146.39	1959.187	1.117	2025.076	1.080
0.25	y-y	0.708	0.043	0.092	2637.749	2097.751	1909.597	1.117	1972.14	1.081
0.25	y-y	0.689	0.046	0.098	2619.385	2046.939	1858.177	1.117	1917.344	1.082
0.25	y-y	0.669	0.049	0.106	2599.915	1994.11	1805.173	1.116	1860.963	1.082
0.25	y-y	0.648	0.052	0.113	2579.116	1939.351	1750.624	1.115	1803.044	1.082
0.25	y-y	0.626	0.055	0.122	2557.151	1882.501	1694.55	1.113	1743.618	1.082
0.25	y-y	0.604	0.059	0.131	2533.755	1823.46	1636.828	1.112	1682.565	1.081
0.25	y-y	0.581	0.063	0.141	2508.386	1762.577	1577.604	1.109	1620.049	1.080
0.25	y-y	0.558	0.067	0.152	2480.068	1700.649	1517.257	1.107	1556.476	1.079
0.25	y-y	0.533	0.073	0.163	2448.766	1636.726	1455.173	1.103	1491.21	1.077
0.25	y-y	0.508	0.078	0.176	2413.266	1570.136	1390.584	1.100	1423.457	1.075
0.25	y-y	0.482	0.085	0.191	2374.031	1500.566	1323.63	1.097	1353.379	1.073
0.25	y-y	0.456	0.093	0.207	2330.064	1427.859	1254.106	1.093	1280.781	1.071
0.25	y-y	0.428	0.102	0.226	2279.439	1352.01	1181.75	1.090	1205.407	1.068
0.25	y-y	0.399	0.112	0.248	2220.633	1272.815	1106.389	1.086	1127.098	1.066
0.25	y-y	0.369	0.125	0.273	2151.528	1189.942	1027.726	1.082	1045.572	1.064
0.25	y-y	0.339	0.141	0.304	2070.172	1102.454	945.2	1.078	960.273	1.061
0.25	y-y	0.307	0.159	0.342	1978.15	1012.144	861.042	1.073	873.533	1.057
0.25	y-y	0.275	0.181	0.387	1878.911	921.773	778.242	1.065	788.432	1.051
0.25	y-y	0.243	0.206	0.442	1769.031	827.12	693.407	1.057	701.485	1.045
0.25	y-y	0.212	0.237	0.511	1646.036	718.257	599.651	1.065	605.682	1.054
0.25	y-y	0.182	0.273	0.595	1518.459	616.594	513.285	1.068	517.698	1.059
0.25	y-y	0.153	0.321	0.703	1377.603	517.975	430.227	1.072	433.324	1.064
0.25	y-y	0.125	0.391	0.856	1208.409	407.333	338.939	1.107	340.857	1.100
0.25	y-y	0.096	0.506	1.09	1004.236	400.978	316.702	0.915	318.376	0.910
0.25	y-y	0.07	0.697	1.467	756.658	256.9	204.833	1.025	205.532	1.022
0.25	y-y	0.044	1.113	2.272	469.706	273.049	183.177	0.719	183.736	0.717
0.5	y-y	0.843	0.045	0.043	2626.684	2505.09	2233.369	1.137	2319.395	1.095
0.5	y-y	0.833	0.047	0.045	2609.401	2482.701	2203.247	1.138	2286.925	1.096
0.5	y-y	0.822	0.05	0.048	2591.205	2459.266	2172.002	1.139	2253.279	1.098
0.5	y-y	0.81	0.053	0.051	2572.149	2434.726	2139.667	1.140	2218.498	1.100
0.5	y-y	0.798	0.056	0.053	2552.192	2409.036	2106.228	1.141	2182.571	1.101

0.5	y-y	0.786	0.059	0.056	2531.352	2382.305	2071.827	1.142	2145.652	1.103
0.5	y-y	0.773	0.063	0.06	2509.795	2354.699	2036.742	1.142	2108.045	1.104
0.5	y-y	0.759	0.066	0.063	2487.449	2326.146	2000.91	1.143	2069.684	1.105
0.5	y-y	0.745	0.07	0.067	2463.934	2296.397	1963.948	1.142	2030.163	1.105
0.5	y-y	0.731	0.074	0.07	2439.397	2265.589	1926.106	1.142	1989.752	1.105
0.5	y-y	0.715	0.078	0.074	2413.628	2233.199	1886.932	1.141	1947.974	1.105
0.5	y-y	0.699	0.083	0.078	2387.013	2199.341	1846.811	1.140	1905.246	1.105
0.5	y-y	0.683	0.087	0.083	2359.338	2163.716	1805.464	1.139	1861.272	1.104
0.5	y-y	0.666	0.092	0.088	2330.629	2126.378	1763.013	1.137	1816.189	1.104
0.5	y-y	0.648	0.098	0.093	2300.743	2087.122	1719.308	1.135	1769.842	1.103
0.5	y-y	0.63	0.103	0.098	2269.783	2045.755	1674.351	1.133	1722.239	1.101
0.5	y-y	0.611	0.109	0.104	2236.991	2002.532	1627.987	1.130	1673.225	1.099
0.5	y-y	0.591	0.116	0.111	2201.959	1957.481	1580.128	1.127	1622.71	1.097
0.5	y-y	0.571	0.123	0.118	2164.788	1910.367	1530.791	1.124	1570.722	1.095
0.5	y-y	0.55	0.13	0.125	2125.336	1860.684	1479.708	1.120	1516.985	1.093
0.5	y-y	0.529	0.138	0.133	2083.076	1808.293	1426.685	1.117	1461.308	1.090
0.5	y-y	0.507	0.148	0.142	2037.188	1753.596	1371.765	1.113	1403.743	1.087
0.5	y-y	0.484	0.158	0.152	1987.482	1696.413	1314.947	1.109	1344.303	1.084
0.5	y-y	0.461	0.169	0.163	1933.315	1635.73	1255.568	1.104	1282.305	1.081
0.5	y-y	0.436	0.182	0.176	1874.219	1571.588	1193.725	1.101	1217.869	1.079
0.5	y-y	0.412	0.196	0.19	1809.59	1503.994	1129.476	1.097	1151.067	1.077
0.5	y-y	0.386	0.213	0.206	1739.318	1432.311	1062.734	1.094	1081.827	1.075
0.5	y-y	0.36	0.232	0.225	1662.859	1355.967	993.331	1.091	1009.992	1.073
0.5	y-y	0.333	0.256	0.247	1578.247	1275.564	921.286	1.089	935.6	1.072
0.5	y-y	0.306	0.282	0.272	1490.276	1194.379	850.246	1.085	862.424	1.070
0.5	y-y	0.279	0.314	0.301	1397.523	1111.128	779.182	1.080	789.397	1.066
0.5	y-y	0.252	0.352	0.337	1296.854	1023.662	706.294	1.074	714.677	1.061
0.5	y-y	0.225	0.398	0.38	1192.642	935.46	634.789	1.065	641.553	1.053
0.5	y-y	0.198	0.455	0.433	1085.987	842.566	563.212	1.056	568.53	1.046
0.5	y-y	0.172	0.523	0.496	979.461	738.962	489.697	1.055	493.712	1.046
0.5	y-y	0.145	0.618	0.586	848.623	625.989	409.214	1.065	412.014	1.058
0.5	y-y	0.118	0.753	0.712	702.674	511.931	328.474	1.084	330.276	1.078
0.5	y-y	0.092	0.954	0.901	551.51	387.902	246.364	1.130	247.376	1.125
0.5	y-y	0.067	1.296	1.226	400.817	85.26	71.986	2.806	72.072	2.803
0.5	y-y	0.042	2.035	1.921	974.826	168.825	151.126	0.839	151.507	0.837
0.5	y-y	0.017	5.063	4.763	2749.724	50.016	49.937	1.005	49.979	1.004
0.75	y-y	0.778	0.079	0.047	2410.046	2465.316	2047.435	1.144	2119.502	1.106
0.75	y-y	0.767	0.083	0.049	2388.248	2445.386	2018.127	1.145	2088.11	1.106
0.75	y-y	0.756	0.086	0.052	2365.888	2424.799	1988.316	1.144	2056.213	1.107
0.75	y-y	0.744	0.09	0.054	2342.621	2403.294	1957.612	1.144	2023.393	1.107
0.75	y-y	0.732	0.095	0.057	2318.462	2381.084	1926.204	1.144	1989.857	1.107
0.75	y-y	0.719	0.099	0.059	2293.486	2358.279	1894.247	1.143	1955.772	1.107
0.75	y-y	0.706	0.104	0.062	2267.623	2334.865	1861.715	1.142	1921.111	1.107
0.75	y-y	0.693	0.109	0.065	2240.804	2310.751	1828.532	1.141	1885.797	1.106
0.75	y-y	0.679	0.114	0.068	2212.965	2285.83	1794.627	1.139	1849.756	1.105
0.75	y-y	0.665	0.119	0.071	2183.867	2260.028	1759.838	1.137	1812.819	1.104
0.75	y-y	0.65	0.125	0.074	2153.348	2232.954	1723.873	1.135	1774.68	1.103
0.75	y-y	0.635	0.131	0.078	2121.59	2204.713	1686.975	1.133	1735.599	1.101
0.75	y-y	0.62	0.137	0.082	2088.507	2175.323	1649.155	1.131	1695.593	1.100
0.75	y-y	0.604	0.144	0.085	2053.762	2144.63	1610.174	1.129	1654.413	1.098
0.75	y-y	0.587	0.152	0.09	2017.166	2112.079	1569.685	1.126	1611.698	1.097
0.75	y-y	0.571	0.159	0.094	1978.865	2077.684	1527.875	1.124	1567.652	1.096
0.75	y-y	0.553	0.168	0.099	1938.887	2041.7	1484.987	1.122	1522.535	1.094
0.75	y-y	0.536	0.177	0.104	1896.697	2004.044	1440.752	1.120	1476.069	1.093
0.75	y-y	0.518	0.186	0.11	1852.469	1964.645	1395.329	1.117	1428.43	1.091
0.75	y-y	0.499	0.197	0.116	1806.125	1923.2	1348.623	1.115	1379.52	1.090
0.75	y-y	0.48	0.208	0.122	1758.032	1878.964	1300.585	1.112	1329.297	1.088

0.75	y-y	0.461	0.221	0.13	1707.854	1831.641	1251.021	1.109	1277.563	1.086
0.75	y-y	0.441	0.234	0.138	1655.241	1781.453	1199.991	1.106	1224.391	1.084
0.75	y-y	0.42	0.25	0.147	1599.406	1728.351	1147.214	1.103	1169.495	1.082
0.75	y-y	0.399	0.267	0.157	1540.387	1671.976	1092.728	1.100	1112.924	1.080
0.75	y-y	0.378	0.286	0.168	1478.551	1611.505	1036.555	1.097	1054.711	1.078
0.75	y-y	0.355	0.308	0.181	1413.451	1546.423	978.473	1.094	994.636	1.076
0.75	y-y	0.333	0.333	0.196	1344.655	1476.595	918.461	1.091	932.687	1.074
0.75	y-y	0.31	0.361	0.213	1275.345	1404.729	859.224	1.087	871.662	1.072
0.75	y-y	0.288	0.392	0.231	1205.072	1330.572	800.486	1.082	811.271	1.068
0.75	y-y	0.265	0.43	0.254	1130.575	1251.205	739.867	1.077	749.071	1.064
0.75	y-y	0.241	0.475	0.281	1052.135	1167.085	677.901	1.072	685.619	1.060
0.75	y-y	0.219	0.523	0.31	979.195	1087.309	621.578	1.062	628.062	1.051
0.75	y-y	0.197	0.582	0.346	898.391	1003.269	562.524	1.055	567.829	1.045
0.75	y-y	0.175	0.656	0.392	801.694	912.804	497.329	1.057	501.47	1.048
0.75	y-y	0.152	0.749	0.448	706.128	816.974	433.264	1.060	436.404	1.052
0.75	y-y	0.131	0.866	0.519	609.992	706.596	367.315	1.075	369.569	1.069
0.75	y-y	0.11	1.027	0.618	510.652	592.784	301.833	1.094	303.353	1.088
0.75	y-y	0.088	1.263	0.761	411.613	476.844	238.41	1.117	239.358	1.113
0.75	y-y	0.068	1.641	0.988	294.973	412.929	182.491	1.113	183.046	1.110
0.75	y-y	0.047	2.328	1.408	6111.346	220.018	228.489	0.618	229.36	0.615
1	y-y	0.716	0.114	0.049	2214	2450.071	1895.083	1.138	1956.663	1.102
1	y-y	0.705	0.118	0.051	2189.379	2433.098	1867.038	1.137	1926.78	1.102
1	y-y	0.694	0.123	0.053	2164.007	2415.695	1838.492	1.136	1896.393	1.102
1	y-y	0.682	0.128	0.055	2137.869	2397.879	1809.466	1.136	1865.524	1.101
1	y-y	0.671	0.133	0.057	2110.761	2379.556	1779.778	1.135	1833.985	1.101
1	y-y	0.658	0.139	0.059	2082.96	2360.701	1749.636	1.133	1801.995	1.100
1	y-y	0.646	0.144	0.061	2054.122	2341.209	1718.761	1.132	1769.262	1.099
1	y-y	0.633	0.15	0.064	2024.098	2320.971	1687.023	1.130	1735.65	1.099
1	y-y	0.62	0.156	0.066	1993.084	2300.069	1654.634	1.129	1701.386	1.098
1	y-y	0.607	0.163	0.069	1961.125	2278.378	1621.59	1.127	1666.468	1.097
1	y-y	0.593	0.17	0.071	1928.087	2255.847	1587.806	1.125	1630.808	1.096
1	y-y	0.58	0.177	0.074	1893.899	2232.347	1553.208	1.123	1594.332	1.094
1	y-y	0.565	0.185	0.077	1858.59	2207.793	1517.815	1.122	1557.063	1.093
1	y-y	0.551	0.193	0.081	1822.026	2181.876	1481.439	1.120	1518.805	1.092
1	y-y	0.536	0.202	0.084	1784.387	2154.572	1444.243	1.118	1479.734	1.091
1	y-y	0.521	0.211	0.088	1745.841	2125.798	1406.351	1.116	1439.982	1.090
1	y-y	0.506	0.221	0.092	1706.34	2095.313	1367.683	1.113	1399.469	1.088
1	y-y	0.49	0.232	0.096	1665.356	2063.096	1327.952	1.111	1357.899	1.087
1	y-y	0.474	0.243	0.101	1622.859	2029.131	1287.205	1.109	1315.323	1.086
1	y-y	0.458	0.255	0.106	1578.861	1993.476	1245.543	1.107	1271.851	1.084
1	y-y	0.441	0.269	0.111	1533.707	1955.891	1203.153	1.104	1227.683	1.082
1	y-y	0.424	0.283	0.117	1487.399	1915.662	1159.842	1.102	1182.622	1.080
1	y-y	0.407	0.299	0.123	1439.704	1872.217	1115.359	1.099	1136.409	1.079
1	y-y	0.39	0.316	0.131	1390.46	1825.545	1069.717	1.097	1089.064	1.077
1	y-y	0.372	0.335	0.139	1339.171	1775.576	1022.718	1.094	1040.388	1.076
1	y-y	0.353	0.356	0.148	1286.233	1722.012	974.622	1.092	990.656	1.074
1	y-y	0.335	0.38	0.158	1231.571	1664.507	925.405	1.089	939.849	1.072
1	y-y	0.316	0.406	0.169	1177.623	1605.838	877.382	1.085	890.355	1.070
1	y-y	0.298	0.434	0.181	1123.325	1544.573	829.53	1.081	841.118	1.066
1	y-y	0.279	0.466	0.196	1066.618	1478.167	780.083	1.077	790.322	1.063
1	y-y	0.26	0.504	0.212	1007.383	1406.249	729.054	1.072	737.989	1.059
1	y-y	0.241	0.545	0.231	948.44	1333.219	679.216	1.067	686.965	1.055
1	y-y	0.223	0.59	0.25	886.764	1263.102	630.018	1.063	636.679	1.052
1	y-y	0.204	0.644	0.274	816.396	1187.831	576.494	1.066	582.066	1.055
1	y-y	0.185	0.709	0.303	744.365	1106.837	522.258	1.067	526.827	1.058
1	y-y	0.167	0.786	0.337	673.92	1023.712	469.803	1.069	473.497	1.060
1	y-y	0.149	0.877	0.377	602.105	939.972	417.962	1.072	420.884	1.064

1	y-y	0.131	0.992	0.428	529.752	849.918	366.016	1.076	368.255	1.069
1	y-y	0.113	1.146	0.497	455.361	738.642	310.776	1.089	312.388	1.084
1	y-y	0.095	1.352	0.589	383.696	622.64	257.722	1.104	258.83	1.099
1	y-y	0.077	1.65	0.723	291.053	503.679	196.501	1.175	197.144	1.171
1	y-y	0.059	2.109	0.926	2058.748	387.144	365.416	0.489	367.647	0.486
1	y-y	0.024	4.996	2.208	1450.797	265.773	242.734	0.302	243.716	0.301

Tabla B.15 Valores de r_1 de la sección 17 (40 cm x 80 cm con ρ = 0.03 y f_c' = 250 kg/cm^2)

s	Eje	Pn/P	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.893	0.034	0.002	972.327	1075.971	953.53	1.030	996.732	0.985
0.25	x-x	0.885	0.037	0.003	963.358	1074.246	943.572	1.031	985.856	0.987
0.25	x-x	0.876	0.041	0.003	953.813	1072.66	933.213	1.032	974.554	0.989
0.25	x-x	0.866	0.044	0.003	943.568	1070.955	922.139	1.034	962.484	0.990
0.25	x-x	0.856	0.048	0.003	932.544	1069.111	910.272	1.035	949.562	0.992
0.25	x-x	0.845	0.052	0.003	920.753	1066.986	897.531	1.036	935.706	0.994
0.25	x-x	0.833	0.056	0.004	908.139	1064.505	883.831	1.037	920.826	0.995
0.25	x-x	0.82	0.061	0.004	894.535	1061.813	869.137	1.038	904.887	0.997
0.25	x-x	0.806	0.067	0.004	879.816	1058.886	853.336	1.039	887.772	0.999
0.25	x-x	0.791	0.073	0.005	863.963	1055.692	836.411	1.041	869.468	1.001
0.25	x-x	0.775	0.08	0.005	846.89	1052.237	818.312	1.042	849.927	1.003
0.25	x-x	0.758	0.087	0.006	828.724	1048.866	799.382	1.043	829.525	1.005
0.25	x-x	0.74	0.095	0.006	809.397	1045.836	779.702	1.043	808.352	1.006
0.25	x-x	0.721	0.104	0.006	788.991	1043.148	759.325	1.044	786.471	1.008
0.25	x-x	0.701	0.113	0.007	767.905	1040.647	738.517	1.044	764.17	1.009
0.25	x-x	0.681	0.122	0.007	746.116	1037.994	717.076	1.045	741.237	1.010
0.25	x-x	0.66	0.133	0.007	723.602	1035.16	694.98	1.045	717.652	1.012
0.25	x-x	0.639	0.143	0.008	700.668	1032.58	672.704	1.045	693.923	1.013
0.25	x-x	0.618	0.154	0.008	677.131	1029.685	649.827	1.045	669.606	1.015
0.25	x-x	0.595	0.166	0.009	653.129	1026.533	626.517	1.045	644.883	1.016
0.25	x-x	0.573	0.179	0.009	628.777	1022.847	602.797	1.045	619.779	1.016
0.25	x-x	0.549	0.193	0.01	603.833	1018.549	578.45	1.044	594.071	1.017
0.25	x-x	0.525	0.208	0.011	578.012	1013.923	553.337	1.043	567.614	1.017
0.25	x-x	0.5	0.225	0.011	551.494	1008.661	527.551	1.042	540.512	1.017
0.25	x-x	0.474	0.244	0.012	524.142	1002.654	500.974	1.041	512.648	1.017
0.25	x-x	0.447	0.266	0.014	495.801	995.826	473.482	1.039	483.897	1.017
0.25	x-x	0.42	0.291	0.015	466.405	987.968	445.014	1.038	454.202	1.017
0.25	x-x	0.391	0.32	0.016	435.734	978.9	415.384	1.036	423.378	1.016
0.25	x-x	0.361	0.355	0.018	403.544	967.669	384.27	1.033	391.101	1.015
0.25	x-x	0.33	0.396	0.021	370.503	956.054	352.624	1.031	358.368	1.014
0.25	x-x	0.301	0.442	0.022	335.69	946.766	319.893	1.034	324.613	1.019
0.25	x-x	0.272	0.491	0.024	303.353	934.519	289.231	1.036	293.085	1.022
0.25	x-x	0.245	0.546	0.028	273.604	918.012	260.749	1.033	263.876	1.021
0.25	x-x	0.218	0.612	0.03	242.585	902.87	231.443	1.034	233.904	1.023
0.25	x-x	0.189	0.701	0.035	210.054	881.863	200.581	1.035	202.427	1.026
0.25	x-x	0.162	0.808	0.041	180.391	849.383	172.067	1.034	173.423	1.025
0.25	x-x	0.134	0.956	0.049	149.56	812.271	142.688	1.034	143.62	1.028
0.25	x-x	0.105	1.196	0.062	116.844	754.728	111.43	1.036	111.997	1.031
0.25	x-x	0.077	1.579	0.087	86.473	655.856	82.102	1.036	82.41	1.032
0.25	x-x	0.05	2.371	0.134	55.945	515.837	52.898	1.036	53.026	1.033
0.5	x-x	0.891	0.037	0.005	965.406	1054.129	929.917	1.054	970.96	1.009
0.5	x-x	0.883	0.039	0.005	956.944	1051.257	919.865	1.056	960.006	1.012
0.5	x-x	0.874	0.043	0.006	947.933	1048.213	909.246	1.058	948.446	1.014
0.5	x-x	0.865	0.046	0.006	938.281	1045.002	897.992	1.060	936.207	1.016
0.5	x-x	0.855	0.049	0.007	927.969	1041.798	886.225	1.061	923.424	1.019
0.5	x-x	0.844	0.053	0.007	916.971	1038.375	873.766	1.063	909.905	1.021
0.5	x-x	0.833	0.057	0.007	905.213	1034.714	860.553	1.065	895.586	1.023

0.5	x-x	0.821	0.062	0.008	892.583	1030.794	846.489	1.066	880.363	1.025
0.5	x-x	0.807	0.067	0.009	878.995	1026.587	831.5	1.068	864.162	1.028
0.5	x-x	0.793	0.073	0.009	864.508	1022.138	815.695	1.070	847.104	1.030
0.5	x-x	0.778	0.079	0.01	849.211	1017.581	799.253	1.071	829.386	1.032
0.5	x-x	0.762	0.085	0.011	833.238	1012.773	782.224	1.071	811.063	1.033
0.5	x-x	0.745	0.092	0.011	816.327	1008.013	764.567	1.072	792.095	1.035
0.5	x-x	0.727	0.1	0.012	798.317	1003.313	746.15	1.072	772.345	1.036
0.5	x-x	0.709	0.108	0.013	779.425	998.759	727.209	1.072	752.069	1.036
0.5	x-x	0.689	0.117	0.014	759.603	994.278	707.657	1.072	731.177	1.037
0.5	x-x	0.669	0.126	0.015	738.632	989.836	687.284	1.072	709.448	1.038
0.5	x-x	0.649	0.136	0.015	716.843	985.218	666.271	1.072	687.08	1.039
0.5	x-x	0.628	0.146	0.016	694.544	980.338	644.857	1.071	664.33	1.040
0.5	x-x	0.607	0.157	0.017	671.876	975.266	623.204	1.071	641.373	1.040
0.5	x-x	0.584	0.169	0.018	648.711	969.744	601.107	1.069	617.993	1.040
0.5	x-x	0.562	0.181	0.019	625.193	963.589	578.645	1.068	594.276	1.040
0.5	x-x	0.539	0.195	0.02	601.124	956.665	555.639	1.067	570.037	1.040
0.5	x-x	0.515	0.21	0.022	576.305	948.831	531.915	1.065	545.095	1.039
0.5	x-x	0.491	0.226	0.023	550.903	940.08	507.66	1.063	519.651	1.039
0.5	x-x	0.466	0.244	0.025	524.725	930.187	482.697	1.061	493.525	1.038
0.5	x-x	0.44	0.264	0.027	497.703	918.5	456.863	1.058	466.552	1.036
0.5	x-x	0.412	0.288	0.03	469.658	904.528	429.99	1.055	438.562	1.034
0.5	x-x	0.384	0.315	0.033	440.494	888.013	402.063	1.052	409.548	1.032
0.5	x-x	0.355	0.347	0.037	410.068	868.058	372.926	1.048	379.357	1.030
0.5	x-x	0.326	0.385	0.041	379.559	847.588	344.194	1.042	349.665	1.026
0.5	x-x	0.296	0.429	0.046	345.667	825.28	312.935	1.042	317.451	1.027
0.5	x-x	0.267	0.479	0.052	310.795	800.335	281.064	1.046	284.701	1.032
0.5	x-x	0.239	0.538	0.058	277.896	772.349	250.998	1.046	253.895	1.034
0.5	x-x	0.21	0.608	0.065	244.081	740.649	220.359	1.047	222.589	1.037
0.5	x-x	0.182	0.695	0.076	212.019	695.626	190.658	1.048	192.325	1.039
0.5	x-x	0.153	0.811	0.091	179.594	642.845	160.912	1.047	162.098	1.039
0.5	x-x	0.124	0.982	0.111	145.141	578.181	129.697	1.053	130.466	1.047
0.5	x-x	0.096	1.239	0.145	112.467	488.995	99.727	1.057	100.181	1.052
0.5	x-x	0.068	1.707	0.207	79.268	381.254	69.787	1.064	70.009	1.060
0.5	x-x	0.039	2.884	0.357	49.177	229.815	42.057	1.009	42.138	1.007
0.75	x-x	0.878	0.041	0.008	951.404	1030.376	898.894	1.075	937.187	1.031
0.75	x-x	0.87	0.044	0.009	942.911	1026.541	888.437	1.077	925.826	1.033
0.75	x-x	0.861	0.047	0.009	933.853	1022.509	877.424	1.079	913.873	1.036
0.75	x-x	0.851	0.051	0.01	924.222	1018.258	865.845	1.081	901.319	1.038
0.75	x-x	0.84	0.054	0.011	913.985	1013.805	853.699	1.083	888.165	1.041
0.75	x-x	0.829	0.058	0.011	903.064	1009.227	840.987	1.084	874.414	1.043
0.75	x-x	0.817	0.062	0.012	891.373	1004.362	827.539	1.086	859.884	1.045
0.75	x-x	0.804	0.067	0.013	878.937	999.26	813.432	1.087	844.663	1.047
0.75	x-x	0.79	0.072	0.014	865.859	993.974	798.808	1.088	828.906	1.049
0.75	x-x	0.776	0.077	0.015	852.174	988.543	783.736	1.089	812.688	1.050
0.75	x-x	0.761	0.083	0.016	837.867	982.965	768.216	1.089	796.013	1.051
0.75	x-x	0.745	0.089	0.017	822.825	977.212	752.147	1.089	778.773	1.052
0.75	x-x	0.728	0.096	0.018	806.919	971.319	735.461	1.089	760.899	1.053
0.75	x-x	0.711	0.103	0.019	790.166	965.253	718.166	1.089	742.401	1.054
0.75	x-x	0.693	0.111	0.02	772.598	959.041	700.318	1.089	723.344	1.054
0.75	x-x	0.674	0.119	0.021	754.021	952.585	681.72	1.088	703.521	1.054
0.75	x-x	0.655	0.128	0.022	734.432	945.706	662.301	1.088	682.858	1.055
0.75	x-x	0.635	0.137	0.024	714.093	938.571	642.381	1.087	661.703	1.055
0.75	x-x	0.614	0.147	0.025	692.983	931.088	621.917	1.086	640.01	1.055
0.75	x-x	0.593	0.157	0.027	671.181	923.199	600.968	1.085	617.846	1.055
0.75	x-x	0.571	0.169	0.028	648.868	914.898	579.695	1.083	595.384	1.054
0.75	x-x	0.548	0.181	0.03	626.168	905.712	558.035	1.080	572.559	1.053
0.75	x-x	0.525	0.194	0.032	602.821	895.607	535.817	1.078	549.193	1.052

0.75	x-x	0.501	0.208	0.034	578.813	884.21	512.95	1.075	525.196	1.050
0.75	x-x	0.477	0.224	0.037	554.273	871.339	489.547	1.072	500.688	1.048
0.75	x-x	0.452	0.241	0.039	529.012	856.872	465.499	1.069	475.562	1.046
0.75	x-x	0.427	0.26	0.043	502.784	840.703	440.667	1.065	449.674	1.044
0.75	x-x	0.4	0.283	0.047	475.561	822.262	414.969	1.061	422.947	1.041
0.75	x-x	0.373	0.308	0.052	447.276	800.729	388.274	1.056	395.25	1.038
0.75	x-x	0.344	0.339	0.057	417.717	775.36	360.416	1.051	366.419	1.034
0.75	x-x	0.316	0.373	0.063	388.795	748.544	333.46	1.044	338.592	1.028
0.75	x-x	0.288	0.414	0.071	357.049	717.249	304.337	1.039	308.606	1.025
0.75	x-x	0.258	0.463	0.08	321.01	681.323	272.199	1.044	275.609	1.031
0.75	x-x	0.23	0.52	0.09	287.341	644.078	242.502	1.044	245.205	1.032
0.75	x-x	0.202	0.591	0.103	251.88	601.499	211.706	1.048	213.763	1.038
0.75	x-x	0.173	0.681	0.12	216.317	550.459	180.819	1.053	182.317	1.044
0.75	x-x	0.144	0.805	0.143	181.066	494.345	150.679	1.055	151.718	1.048
0.75	x-x	0.117	0.972	0.176	146.72	428.633	121.365	1.062	122.038	1.056
0.75	x-x	0.089	1.253	0.233	111.117	348.929	91.272	1.068	91.652	1.064
0.75	x-x	0.06	1.795	0.339	74.891	243.038	60.393	1.094	60.559	1.091
0.75	x-x	0.033	3.181	0.62	47.647	122.998	35.45	1.012	35.507	1.011
1	x-x	0.862	0.045	0.012	939.422	1006.032	870.043	1.090	905.869	1.047
1	x-x	0.853	0.048	0.013	930.826	1001.566	859.378	1.092	894.314	1.049
1	x-x	0.843	0.052	0.013	921.714	996.855	848.197	1.094	882.211	1.052
1	x-x	0.833	0.055	0.014	912.056	991.864	836.465	1.095	869.526	1.054
1	x-x	0.822	0.059	0.015	901.811	986.584	824.158	1.097	856.235	1.056
1	x-x	0.81	0.063	0.016	891.091	980.93	811.331	1.098	842.399	1.058
1	x-x	0.798	0.067	0.017	879.849	975.058	798.072	1.099	828.114	1.060
1	x-x	0.784	0.071	0.018	868.105	968.871	784.348	1.100	813.347	1.061
1	x-x	0.771	0.076	0.019	855.871	962.35	770.176	1.101	798.118	1.062
1	x-x	0.756	0.081	0.021	843.085	955.523	755.544	1.101	782.416	1.063
1	x-x	0.741	0.087	0.022	829.792	948.49	740.571	1.101	766.369	1.064
1	x-x	0.725	0.092	0.023	815.863	941.238	725.159	1.100	749.877	1.064
1	x-x	0.709	0.099	0.025	801.178	933.725	709.208	1.099	732.833	1.064
1	x-x	0.692	0.105	0.026	785.697	925.885	692.672	1.099	715.191	1.064
1	x-x	0.674	0.112	0.028	769.413	917.735	675.579	1.097	696.983	1.064
1	x-x	0.656	0.12	0.029	752.232	909.344	657.916	1.096	678.198	1.063
1	x-x	0.637	0.128	0.031	734.023	900.647	639.571	1.095	658.721	1.063
1	x-x	0.617	0.136	0.033	715.043	891.504	620.695	1.094	638.716	1.063
1	x-x	0.597	0.146	0.035	695.28	881.755	601.232	1.092	618.125	1.063
1	x-x	0.576	0.156	0.037	674.536	871.309	581.03	1.091	596.792	1.062
1	x-x	0.555	0.166	0.039	653.144	860.338	560.453	1.089	575.104	1.061
1	x-x	0.532	0.178	0.041	631.279	848.703	539.597	1.085	553.165	1.059
1	x-x	0.51	0.19	0.044	608.749	836.136	518.249	1.082	530.753	1.056
1	x-x	0.486	0.204	0.047	585.375	822.295	496.205	1.078	507.655	1.053
1	x-x	0.462	0.219	0.05	561.242	806.888	473.491	1.073	483.906	1.050
1	x-x	0.438	0.236	0.054	536.488	789.55	450.166	1.069	459.57	1.047
1	x-x	0.412	0.254	0.058	510.914	769.98	426.095	1.065	434.511	1.044
1	x-x	0.387	0.275	0.064	484.317	747.617	401.087	1.060	408.535	1.041
1	x-x	0.36	0.3	0.07	456.491	722.038	375.027	1.056	381.531	1.038
1	x-x	0.333	0.329	0.077	427.283	692.611	347.819	1.052	353.406	1.035
1	x-x	0.306	0.36	0.085	399.296	662.664	322.129	1.044	326.915	1.029
1	x-x	0.278	0.398	0.095	369.197	628.313	294.896	1.038	298.903	1.024
1	x-x	0.25	0.445	0.107	333.104	588.539	263.708	1.042	266.908	1.030
1	x-x	0.223	0.497	0.121	299.914	549.534	235.577	1.042	238.127	1.030
1	x-x	0.196	0.564	0.138	264.818	505.709	206.42	1.043	208.376	1.033
1	x-x	0.167	0.655	0.162	225.684	454.781	174.803	1.053	176.204	1.044
1	x-x	0.14	0.767	0.192	190.852	403.414	146.856	1.052	147.843	1.045
1	x-x	0.113	0.934	0.236	153.582	345.121	117.653	1.057	118.285	1.052
1	x-x	0.085	1.221	0.313	114.255	265.026	86.085	1.081	86.423	1.077

1	x-x	0.058	1.726	0.45	78.305	178.317	57.243	1.116	57.392	1.113
1	x-x	0.031	3.086	0.823	48.025	88.313	32.014	1.077	32.061	1.076
0.25	y-y	0.86	0.021	0.025	1012.545	931.866	868.352	1.090	904.036	1.047
0.25	y-y	0.851	0.022	0.027	1008.521	923.471	858.146	1.091	892.979	1.048
0.25	y-y	0.842	0.024	0.028	1004.147	914.641	847.403	1.092	881.352	1.050
0.25	y-y	0.831	0.025	0.03	999.381	905.32	836.063	1.093	869.092	1.052
0.25	y-y	0.82	0.027	0.032	994.215	895.361	824.017	1.095	856.083	1.054
0.25	y-y	0.808	0.029	0.034	988.607	884.657	811.171	1.096	842.226	1.056
0.25	y-y	0.796	0.031	0.036	982.523	873.243	797.559	1.098	827.561	1.058
0.25	y-y	0.783	0.033	0.039	976.049	861.339	783.452	1.100	812.383	1.061
0.25	y-y	0.77	0.035	0.041	969.293	848.978	768.966	1.101	796.818	1.063
0.25	y-y	0.756	0.038	0.044	962.314	836.133	754.134	1.102	780.903	1.064
0.25	y-y	0.741	0.04	0.047	954.942	822.826	738.886	1.103	764.565	1.066
0.25	y-y	0.725	0.043	0.05	947.356	808.91	723.232	1.103	747.817	1.067
0.25	y-y	0.709	0.045	0.053	939.459	794.197	706.985	1.103	730.46	1.067
0.25	y-y	0.692	0.048	0.056	931.319	778.779	690.28	1.103	712.64	1.068
0.25	y-y	0.674	0.051	0.06	922.957	762.601	673.103	1.102	694.347	1.069
0.25	y-y	0.656	0.054	0.064	914.325	745.563	655.372	1.102	675.495	1.069
0.25	y-y	0.638	0.057	0.068	905.51	727.806	637.257	1.101	656.267	1.069
0.25	y-y	0.618	0.061	0.073	896.454	709.341	618.755	1.098	636.662	1.068
0.25	y-y	0.598	0.064	0.078	886.938	690.253	599.844	1.096	616.658	1.066
0.25	y-y	0.577	0.068	0.083	876.948	670.425	580.454	1.093	596.184	1.064
0.25	y-y	0.555	0.072	0.089	866.282	649.711	560.417	1.089	575.066	1.061
0.25	y-y	0.533	0.076	0.095	854.93	628.405	539.987	1.085	553.575	1.059
0.25	y-y	0.51	0.081	0.102	842.707	606.365	519.021	1.081	531.562	1.055
0.25	y-y	0.487	0.087	0.109	829.332	583.552	497.435	1.076	508.943	1.052
0.25	y-y	0.463	0.093	0.117	814.39	560.084	475.231	1.071	485.723	1.048
0.25	y-y	0.438	0.1	0.126	797.542	535.9	452.334	1.066	461.83	1.044
0.25	y-y	0.413	0.108	0.136	778.491	510.873	428.66	1.060	437.179	1.039
0.25	y-y	0.387	0.118	0.147	756.825	484.632	403.941	1.054	411.496	1.035
0.25	y-y	0.36	0.129	0.161	731.429	457.175	378.012	1.049	384.621	1.031
0.25	y-y	0.333	0.142	0.176	702.041	428.37	350.91	1.044	356.599	1.027
0.25	y-y	0.305	0.159	0.195	668.815	398.619	323.131	1.038	327.948	1.023
0.25	y-y	0.277	0.176	0.216	634.195	368.809	295.935	1.031	299.971	1.017
0.25	y-y	0.25	0.197	0.241	597.16	339.644	269.561	1.018	272.905	1.006
0.25	y-y	0.222	0.222	0.272	556.066	306.835	241.062	1.011	243.733	1.000
0.25	y-y	0.194	0.254	0.31	511.694	267.331	208.949	1.021	210.953	1.011
0.25	y-y	0.167	0.294	0.359	462.647	228.341	177.564	1.032	179.009	1.024
0.25	y-y	0.139	0.349	0.425	408.257	189.984	146.974	1.042	147.963	1.035
0.25	y-y	0.114	0.419	0.511	353.289	154.208	118.96	1.055	119.607	1.049
0.25	y-y	0.089	0.525	0.639	284.528	118.69	90.655	1.084	91.03	1.080
0.25	y-y	0.065	0.712	0.859	206.412	83.962	63.109	1.129	63.29	1.126
0.25	y-y	0.041	1.125	1.326	124.935	54.369	39.234	1.137	39.304	1.135
0.5	y-y	0.78	0.056	0.03	909.356	903.859	771.053	1.113	799.06	1.074
0.5	y-y	0.769	0.059	0.032	901.701	896.343	760.144	1.113	787.349	1.075
0.5	y-y	0.758	0.062	0.033	893.772	888.467	748.913	1.114	775.306	1.076
0.5	y-y	0.747	0.065	0.035	885.586	880.216	737.376	1.114	762.948	1.077
0.5	y-y	0.735	0.068	0.037	877.16	871.659	725.604	1.114	750.353	1.078
0.5	y-y	0.723	0.071	0.038	868.498	862.874	713.668	1.114	737.596	1.078
0.5	y-y	0.71	0.075	0.04	859.568	853.822	701.528	1.114	724.636	1.078
0.5	y-y	0.697	0.078	0.042	850.394	844.508	689.214	1.113	711.505	1.078
0.5	y-y	0.684	0.082	0.044	841.009	834.966	676.781	1.111	698.263	1.077
0.5	y-y	0.67	0.086	0.046	831.337	825.23	664.211	1.110	684.89	1.076
0.5	y-y	0.656	0.09	0.048	821.296	815.162	651.373	1.107	671.247	1.075
0.5	y-y	0.641	0.094	0.051	810.718	804.579	638.063	1.105	657.122	1.073
0.5	y-y	0.626	0.099	0.053	799.624	793.495	624.33	1.103	642.566	1.071
0.5	y-y	0.61	0.104	0.056	788.047	781.941	610.236	1.100	627.646	1.069

0.5	y-y	0.594	0.109	0.058	775.975	769.854	595.76	1.097	612.342	1.067
0.5	y-y	0.578	0.115	0.061	763.328	757.148	580.828	1.094	596.579	1.065
0.5	y-y	0.561	0.121	0.065	749.876	743.74	565.294	1.091	580.203	1.063
0.5	y-y	0.544	0.127	0.068	735.585	729.67	549.201	1.089	563.263	1.062
0.5	y-y	0.526	0.134	0.071	720.667	715.025	532.754	1.086	545.976	1.060
0.5	y-y	0.508	0.141	0.075	705.013	699.707	515.872	1.083	528.259	1.058
0.5	y-y	0.489	0.149	0.079	688.512	683.633	498.489	1.080	510.046	1.055
0.5	y-y	0.47	0.157	0.084	670.964	666.574	480.427	1.077	491.153	1.053
0.5	y-y	0.451	0.167	0.089	652.406	648.513	461.753	1.074	471.653	1.052
0.5	y-y	0.431	0.177	0.095	632.902	629.467	442.566	1.071	451.652	1.049
0.5	y-y	0.41	0.188	0.101	612.356	609.362	422.837	1.067	431.123	1.047
0.5	y-y	0.389	0.201	0.107	590.424	587.934	402.342	1.063	409.837	1.044
0.5	y-y	0.367	0.215	0.115	567.12	565.028	381.098	1.060	387.816	1.042
0.5	y-y	0.345	0.232	0.124	542.436	540.766	359.241	1.056	365.205	1.039
0.5	y-y	0.323	0.25	0.134	516.356	515.144	336.844	1.053	342.082	1.037
0.5	y-y	0.3	0.27	0.145	490.417	489.419	315.139	1.048	319.719	1.033
0.5	y-y	0.278	0.293	0.158	463.809	462.889	293.489	1.042	297.457	1.028
0.5	y-y	0.255	0.32	0.173	435.414	434.582	271.105	1.035	274.487	1.023
0.5	y-y	0.233	0.351	0.19	406.598	405.926	249.139	1.027	251.993	1.015
0.5	y-y	0.21	0.388	0.21	376.758	376.376	227.168	1.018	229.539	1.008
0.5	y-y	0.188	0.434	0.236	341.418	345.375	203.449	1.014	205.348	1.005
0.5	y-y	0.166	0.488	0.266	305.462	313.564	180.058	1.013	181.544	1.005
0.5	y-y	0.145	0.552	0.303	270.391	274.496	155.466	1.025	156.573	1.017
0.5	y-y	0.123	0.64	0.353	231.211	232.759	129.664	1.047	130.433	1.041
0.5	y-y	0.103	0.759	0.42	192.995	192.616	105.663	1.069	106.173	1.064
0.5	y-y	0.082	0.937	0.519	152.996	151.322	81.73	1.103	82.035	1.099
0.5	y-y	0.061	1.244	0.691	111.968	108.192	57.921	1.152	58.074	1.149
0.5	y-y	0.04	1.829	1.019	73.317	68.565	36.61	1.214	36.671	1.212
0.5	y-y	0.021	3.415	1.911	46.901	56.505	26.24	0.885	26.271	0.884
0.75	y-y	0.7	0.094	0.032	812.555	894.871	694.905	1.107	717.571	1.072
0.75	y-y	0.689	0.097	0.033	803.82	888.82	684.919	1.107	706.928	1.072
0.75	y-y	0.678	0.101	0.034	794.792	882.545	674.692	1.106	696.038	1.072
0.75	y-y	0.667	0.105	0.036	785.447	876.062	664.226	1.104	684.905	1.071
0.75	y-y	0.655	0.109	0.037	775.835	869.426	653.595	1.103	673.608	1.070
0.75	y-y	0.644	0.114	0.038	765.937	862.676	642.816	1.102	662.164	1.070
0.75	y-y	0.632	0.118	0.04	755.657	855.785	631.811	1.100	650.493	1.069
0.75	y-y	0.62	0.123	0.041	744.913	848.704	620.507	1.099	638.517	1.068
0.75	y-y	0.608	0.128	0.043	733.748	841.391	608.919	1.097	626.253	1.067
0.75	y-y	0.595	0.133	0.044	722.26	833.865	597.137	1.096	613.797	1.066
0.75	y-y	0.582	0.139	0.046	710.456	826.123	585.172	1.094	601.162	1.065
0.75	y-y	0.569	0.144	0.048	698.31	818.109	572.987	1.092	588.31	1.064
0.75	y-y	0.555	0.15	0.05	685.764	809.753	560.522	1.090	575.176	1.062
0.75	y-y	0.542	0.157	0.051	672.766	801.016	547.736	1.088	561.722	1.061
0.75	y-y	0.528	0.163	0.053	659.372	791.811	534.644	1.086	547.961	1.060
0.75	y-y	0.514	0.17	0.056	645.637	782.147	521.303	1.084	533.956	1.058
0.75	y-y	0.499	0.178	0.058	631.555	772.099	507.757	1.081	519.754	1.056
0.75	y-y	0.484	0.186	0.06	617.083	761.469	493.91	1.079	505.253	1.054
0.75	y-y	0.469	0.194	0.063	602.151	750.205	479.717	1.076	490.411	1.053
0.75	y-y	0.454	0.203	0.066	586.749	738.236	465.166	1.074	475.215	1.051
0.75	y-y	0.439	0.213	0.069	570.976	725.547	450.341	1.071	459.753	1.049
0.75	y-y	0.423	0.223	0.072	554.853	712.078	435.256	1.068	444.041	1.047
0.75	y-y	0.407	0.234	0.076	538.294	697.72	419.843	1.066	428.011	1.045
0.75	y-y	0.391	0.247	0.08	521.19	682.324	404.016	1.063	411.575	1.044
0.75	y-y	0.374	0.26	0.084	503.612	665.751	387.807	1.061	394.766	1.042
0.75	y-y	0.357	0.274	0.089	485.549	647.98	371.242	1.058	377.614	1.040
0.75	y-y	0.34	0.29	0.095	466.985	628.959	354.333	1.056	360.133	1.039
0.75	y-y	0.323	0.308	0.101	447.993	608.715	337.17	1.054	342.418	1.037

0.75	y-y	0.306	0.326	0.107	430.068	588.966	321.132	1.049	325.889	1.034
0.75	y-y	0.289	0.346	0.114	411.422	567.635	304.584	1.045	308.86	1.030
0.75	y-y	0.272	0.369	0.122	391.983	544.777	287.553	1.040	291.361	1.026
0.75	y-y	0.254	0.395	0.132	371.269	520.176	269.777	1.036	273.126	1.023
0.75	y-y	0.236	0.425	0.143	348.439	494.835	251.149	1.035	254.049	1.023
0.75	y-y	0.219	0.458	0.155	324.381	469.168	232.282	1.036	234.761	1.026
0.75	y-y	0.202	0.494	0.168	301.878	443.314	214.629	1.035	216.743	1.025
0.75	y-y	0.185	0.536	0.184	278.575	415.924	196.662	1.034	198.436	1.025
0.75	y-y	0.168	0.588	0.203	253.178	386.49	177.681	1.037	179.128	1.028
0.75	y-y	0.151	0.648	0.225	228.213	357.758	159.542	1.039	160.707	1.031
0.75	y-y	0.134	0.724	0.253	202.802	327.401	141.32	1.039	142.233	1.032
0.75	y-y	0.116	0.826	0.29	176.089	287.492	121.239	1.051	121.911	1.045
0.75	y-y	0.099	0.954	0.338	149.933	243.563	101.356	1.073	101.825	1.068
0.75	y-y	0.082	1.128	0.404	124.523	200.954	82.66	1.095	82.972	1.091
0.75	y-y	0.066	1.382	0.498	99.89	159.03	64.977	1.118	65.17	1.115
0.75	y-y	0.05	1.81	0.655	74.189	115.154	47.05	1.158	47.151	1.156
0.75	y-y	0.033	2.698	0.982	50.854	71.602	30.561	1.175	30.604	1.174
1	y-y	0.631	0.13	0.031	728.81	898.152	634.366	1.095	653.201	1.063
1	y-y	0.622	0.134	0.032	719.292	893.564	624.902	1.094	643.171	1.063
1	y-y	0.612	0.139	0.033	709.596	888.844	615.312	1.093	633.018	1.063
1	y-y	0.602	0.144	0.034	699.74	883.976	605.607	1.093	622.75	1.063
1	y-y	0.591	0.148	0.035	689.595	878.912	595.672	1.092	612.249	1.062
1	y-y	0.581	0.153	0.036	679.234	873.689	585.583	1.091	601.597	1.062
1	y-y	0.57	0.159	0.037	668.681	868.335	575.377	1.090	590.83	1.062
1	y-y	0.56	0.164	0.038	657.969	862.841	565.077	1.089	579.974	1.061
1	y-y	0.549	0.17	0.039	647.159	857.2	554.728	1.088	569.078	1.060
1	y-y	0.537	0.175	0.041	636.197	851.367	544.276	1.086	558.084	1.059
1	y-y	0.526	0.181	0.042	625.075	845.306	533.706	1.084	546.975	1.058
1	y-y	0.515	0.188	0.043	613.778	839.006	523.007	1.082	535.743	1.057
1	y-y	0.503	0.194	0.045	602.278	832.425	512.15	1.080	524.357	1.055
1	y-y	0.491	0.201	0.046	590.612	825.482	501.139	1.079	512.821	1.054
1	y-y	0.479	0.208	0.048	578.724	818.185	489.947	1.077	501.107	1.053
1	y-y	0.468	0.216	0.049	566.683	810.48	478.613	1.074	489.257	1.051
1	y-y	0.455	0.223	0.051	554.486	802.288	467.117	1.072	477.251	1.049
1	y-y	0.443	0.232	0.053	542.103	793.597	455.45	1.070	465.078	1.048
1	y-y	0.431	0.241	0.055	529.514	784.371	443.594	1.068	452.723	1.046
1	y-y	0.418	0.25	0.057	516.69	774.547	431.527	1.066	440.16	1.045
1	y-y	0.405	0.26	0.06	503.609	764.061	419.226	1.063	427.371	1.043
1	y-y	0.392	0.27	0.062	490.274	752.82	406.687	1.061	414.346	1.042
1	y-y	0.379	0.282	0.065	476.665	740.811	393.908	1.059	401.09	1.040
1	y-y	0.366	0.294	0.068	462.758	728.016	380.889	1.057	387.6	1.039
1	y-y	0.353	0.307	0.072	448.507	714.26	367.573	1.055	373.819	1.037
1	y-y	0.339	0.322	0.075	433.922	699.522	353.983	1.053	359.772	1.036
1	y-y	0.325	0.337	0.079	419.629	684.669	340.774	1.050	346.135	1.034
1	y-y	0.312	0.352	0.083	405.673	669.719	327.967	1.046	332.93	1.030
1	y-y	0.298	0.37	0.088	391.299	653.636	314.824	1.042	319.395	1.027
1	y-y	0.284	0.389	0.093	376.254	636.384	301.202	1.039	305.383	1.025
1	y-y	0.271	0.41	0.098	359.851	617.85	286.671	1.038	290.456	1.024
1	y-y	0.256	0.434	0.104	341.539	597.883	270.902	1.040	274.28	1.027
1	y-y	0.242	0.46	0.111	323.318	577.438	255.389	1.043	258.388	1.031
1	y-y	0.229	0.485	0.118	307.201	558.391	241.725	1.042	244.41	1.031
1	y-y	0.216	0.514	0.125	290.55	537.98	227.716	1.041	230.098	1.031
1	y-y	0.202	0.547	0.134	273.057	516.063	213.18	1.042	215.266	1.032
1	y-y	0.188	0.586	0.144	254.277	492.413	197.847	1.045	199.642	1.036
1	y-y	0.174	0.631	0.156	234.61	466.911	181.983	1.051	183.501	1.042
1	y-y	0.16	0.684	0.169	215.637	440.508	166.711	1.053	167.984	1.045
1	y-y	0.146	0.739	0.184	198.622	415.242	153.05	1.052	154.123	1.045

1	y-y	0.133	0.806	0.202	180.889	387.952	138.951	1.052	139.834	1.045
1	y-y	0.119	0.89	0.225	162.128	358.438	124.243	1.055	124.949	1.049
1	y-y	0.105	0.997	0.253	142.593	327.174	109.166	1.060	109.711	1.055
1	y-y	0.091	1.141	0.291	123.007	286.027	93.312	1.073	93.71	1.068
1	y-y	0.077	1.335	0.343	103.671	239.856	77.484	1.090	77.757	1.087
1	y-y	0.064	1.579	0.41	86.427	197.586	63.603	1.106	63.788	1.102
1	y-y	0.051	1.954	0.513	68.087	153.508	49.28	1.134	49.391	1.131
1	y-y	0.037	2.606	0.692	51.971	108.152	36.26	1.136	36.32	1.134
1	y-y	0.024	4.023	1.08	43.402	64.348	26.545	0.987	26.577	0.986

Tabla B.16 Valores de r_1 de la sección 18 (40 cm x 80 cm con ρ = 0.06 y f'_c = 250 kg/cm^2)

s	Ejee	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.866	0.044	0.003	1276.041	1449.44	1252.102	1.025	1307.344	0.982
0.25	x-x	0.858	0.047	0.003	1264.406	1447.427	1239.422	1.026	1293.526	0.983
0.25	x-x	0.85	0.05	0.003	1252.04	1445.273	1225.988	1.027	1278.9	0.984
0.25	x-x	0.84	0.053	0.003	1238.967	1442.963	1211.822	1.027	1263.493	0.985
0.25	x-x	0.831	0.057	0.003	1225.055	1440.476	1196.793	1.028	1247.164	0.987
0.25	x-x	0.82	0.061	0.004	1210.243	1437.797	1180.846	1.029	1229.856	0.988
0.25	x-x	0.809	0.065	0.004	1194.355	1434.899	1163.81	1.030	1211.388	0.990
0.25	x-x	0.797	0.07	0.004	1176.845	1431.759	1145.171	1.031	1191.206	0.992
0.25	x-x	0.785	0.075	0.005	1158.114	1428.386	1125.334	1.033	1169.757	0.994
0.25	x-x	0.771	0.081	0.005	1138.088	1425.169	1104.485	1.034	1147.246	0.996
0.25	x-x	0.756	0.088	0.005	1116.696	1421.619	1082.27	1.035	1123.297	0.997
0.25	x-x	0.74	0.095	0.006	1093.93	1417.266	1058.447	1.036	1097.654	0.999
0.25	x-x	0.723	0.102	0.006	1069.853	1412.782	1033.493	1.037	1070.841	1.001
0.25	x-x	0.705	0.111	0.006	1044.352	1408.543	1007.509	1.037	1042.971	1.002
0.25	x-x	0.687	0.12	0.007	1017.419	1404.487	980.445	1.038	1013.995	1.003
0.25	x-x	0.667	0.13	0.007	989.361	1400.389	952.47	1.038	984.102	1.005
0.25	x-x	0.647	0.14	0.008	960.514	1395.938	923.758	1.038	953.482	1.006
0.25	x-x	0.627	0.151	0.008	930.753	1391.092	894.198	1.038	922.022	1.007
0.25	x-x	0.605	0.164	0.009	899.852	1385.766	863.574	1.038	889.497	1.008
0.25	x-x	0.583	0.177	0.009	868.026	1379.942	832.107	1.038	856.148	1.009
0.25	x-x	0.56	0.192	0.01	835.181	1373.486	799.692	1.038	821.872	1.010
0.25	x-x	0.537	0.208	0.011	800.83	1366.413	765.926	1.039	786.249	1.012
0.25	x-x	0.512	0.226	0.012	764.459	1358.882	730.42	1.039	748.88	1.013
0.25	x-x	0.486	0.247	0.012	726.623	1350.631	693.633	1.039	710.258	1.014
0.25	x-x	0.459	0.27	0.014	687.355	1340.821	655.426	1.038	670.251	1.015
0.25	x-x	0.431	0.297	0.015	646.429	1328.617	615.504	1.038	628.56	1.016
0.25	x-x	0.401	0.33	0.017	603.22	1314.599	573.553	1.037	584.873	1.016
0.25	x-x	0.37	0.37	0.019	557.634	1297.538	529.369	1.035	538.998	1.017
0.25	x-x	0.337	0.419	0.021	509.554	1276.765	482.907	1.034	490.907	1.017
0.25	x-x	0.302	0.483	0.025	458.554	1250.54	433.749	1.033	440.192	1.018
0.25	x-x	0.266	0.566	0.029	405.562	1220.152	383.091	1.030	388.108	1.017
0.25	x-x	0.232	0.665	0.032	351.665	1195.149	332.735	1.033	336.514	1.021
0.25	x-x	0.2	0.783	0.037	301.879	1162.318	285.878	1.035	288.663	1.025
0.25	x-x	0.171	0.916	0.043	259.328	1122.258	245.565	1.033	247.617	1.025
0.25	x-x	0.141	1.112	0.052	213.917	1068.456	202.606	1.033	204.001	1.026
0.25	x-x	0.112	1.4	0.067	173.792	984.945	164.086	1.010	165	1.005
0.25	x-x	0.083	1.875	0.089	126.942	873.915	119.804	1.024	120.29	1.020
0.25	x-x	0.051	3.011	0.143	93.284	672.857	86.721	0.870	86.976	0.868
0.25	x-x	0.022	6.963	0.346	136.758	356.537	105.91	0.303	106.29	0.302
0.5	x-x	0.855	0.048	0.006	1257.32	1415.148	1209.125	1.048	1260.562	1.005
0.5	x-x	0.847	0.051	0.006	1245.698	1411.36	1195.656	1.049	1245.929	1.007
0.5	x-x	0.837	0.055	0.007	1233.424	1407.336	1181.509	1.050	1230.575	1.008
0.5	x-x	0.828	0.058	0.007	1220.367	1403.043	1166.557	1.051	1214.364	1.010
0.5	x-x	0.818	0.062	0.007	1206.556	1398.457	1150.827	1.052	1197.327	1.012

0.5	x-x	0.807	0.066	0.008	1191.666	1393.546	1134.022	1.054	1179.148	1.014
0.5	x-x	0.795	0.071	0.008	1175.382	1388.271	1115.861	1.056	1159.525	1.016
0.5	x-x	0.783	0.075	0.009	1158.054	1382.598	1096.665	1.058	1138.811	1.018
0.5	x-x	0.77	0.081	0.01	1139.578	1376.479	1076.344	1.060	1116.914	1.021
0.5	x-x	0.756	0.087	0.01	1119.993	1370.091	1055.072	1.061	1094.025	1.024
0.5	x-x	0.741	0.093	0.011	1099.389	1363.716	1033.113	1.063	1070.433	1.026
0.5	x-x	0.725	0.1	0.012	1077.802	1357.197	1010.419	1.064	1046.089	1.027
0.5	x-x	0.709	0.107	0.012	1055.057	1350.548	986.857	1.064	1020.855	1.029
0.5	x-x	0.692	0.115	0.013	1030.887	1343.776	962.212	1.065	994.505	1.030
0.5	x-x	0.673	0.124	0.014	1005.569	1336.538	936.571	1.065	967.139	1.032
0.5	x-x	0.654	0.133	0.015	979.098	1329.032	910.053	1.065	938.888	1.033
0.5	x-x	0.634	0.144	0.016	951.374	1321.146	882.541	1.065	909.633	1.033
0.5	x-x	0.614	0.155	0.017	922.667	1312.9	854.3	1.065	879.661	1.034
0.5	x-x	0.593	0.167	0.018	892.95	1304.103	825.249	1.064	848.89	1.035
0.5	x-x	0.571	0.18	0.019	862.457	1294.463	795.507	1.063	817.452	1.035
0.5	x-x	0.548	0.194	0.02	830.695	1283.848	764.654	1.063	784.908	1.035
0.5	x-x	0.525	0.209	0.022	797.481	1271.97	732.498	1.062	751.064	1.036
0.5	x-x	0.501	0.227	0.024	762.727	1258.577	698.961	1.062	715.846	1.037
0.5	x-x	0.476	0.247	0.026	726.525	1244.046	664.317	1.061	679.551	1.037
0.5	x-x	0.45	0.269	0.028	688.868	1227.677	628.431	1.060	642.047	1.038
0.5	x-x	0.422	0.295	0.03	649.541	1208.477	590.982	1.059	603.009	1.038
0.5	x-x	0.394	0.326	0.034	608.401	1185.102	551.717	1.057	562.184	1.037
0.5	x-x	0.363	0.363	0.038	565.141	1157.485	510.602	1.055	519.554	1.037
0.5	x-x	0.332	0.409	0.043	519.311	1124.701	467.33	1.053	474.819	1.036
0.5	x-x	0.299	0.466	0.049	470.737	1085.076	421.765	1.050	427.855	1.035
0.5	x-x	0.265	0.54	0.057	421.009	1039.505	375.614	1.046	380.437	1.033
0.5	x-x	0.231	0.632	0.066	368.81	988.01	328.017	1.044	331.689	1.033
0.5	x-x	0.197	0.753	0.078	313.13	924.594	277.764	1.051	280.393	1.041
0.5	x-x	0.165	0.905	0.092	262.595	858.572	232.67	1.052	234.512	1.044
0.5	x-x	0.134	1.12	0.114	213.018	771.083	188.098	1.054	189.3	1.047
0.5	x-x	0.104	1.437	0.149	157.028	658.039	138.638	1.108	139.29	1.103
0.5	x-x	0.073	2.013	0.21	120.96	522.319	105.188	1.033	105.563	1.029
0.5	x-x	0.042	3.47	0.37	110.78	337.91	88.407	0.702	88.671	0.700
0.5	x-x	0.011	12.783	1.392	12060.711	787.113	1473.969	0.011	1551.125	0.011
0.75	x-x	0.841	0.053	0.009	1240.732	1378.472	1167.572	1.067	1215.464	1.025
0.75	x-x	0.832	0.056	0.01	1229.037	1373.476	1153.687	1.068	1200.423	1.026
0.75	x-x	0.822	0.059	0.011	1216.64	1368.173	1139.083	1.069	1184.62	1.028
0.75	x-x	0.812	0.063	0.011	1203.623	1362.446	1123.772	1.071	1168.07	1.030
0.75	x-x	0.801	0.067	0.012	1189.687	1356.061	1107.36	1.072	1150.348	1.032
0.75	x-x	0.79	0.071	0.013	1174.549	1349.265	1089.804	1.074	1131.414	1.035
0.75	x-x	0.778	0.075	0.013	1158.503	1342.014	1071.36	1.076	1111.548	1.037
0.75	x-x	0.765	0.08	0.014	1141.536	1334.361	1052.082	1.078	1090.81	1.040
0.75	x-x	0.752	0.085	0.015	1123.728	1326.367	1032.103	1.080	1069.349	1.042
0.75	x-x	0.738	0.091	0.016	1105.134	1318.081	1011.523	1.081	1047.273	1.044
0.75	x-x	0.723	0.097	0.017	1085.712	1309.697	990.441	1.082	1024.69	1.046
0.75	x-x	0.708	0.104	0.018	1065.335	1301.107	968.702	1.082	1001.44	1.047
0.75	x-x	0.691	0.111	0.019	1043.862	1292.276	946.189	1.082	977.398	1.048
0.75	x-x	0.674	0.119	0.02	1021.175	1283.167	922.809	1.083	952.471	1.049
0.75	x-x	0.656	0.127	0.022	997.144	1273.548	898.364	1.083	926.452	1.050
0.75	x-x	0.638	0.136	0.023	972.123	1263.389	873.164	1.082	899.675	1.050
0.75	x-x	0.618	0.146	0.024	946.133	1252.299	847.08	1.082	872.007	1.051
0.75	x-x	0.598	0.156	0.026	918.98	1240.607	820.155	1.081	843.501	1.051
0.75	x-x	0.577	0.168	0.028	890.706	1228.083	792.365	1.079	814.135	1.051
0.75	x-x	0.555	0.18	0.03	861.127	1214.521	763.534	1.078	783.728	1.050
0.75	x-x	0.533	0.194	0.032	830.455	1199.7	733.804	1.077	752.437	1.050
0.75	x-x	0.51	0.209	0.034	798.473	1183.354	702.984	1.075	720.066	1.050
0.75	x-x	0.486	0.226	0.037	764.746	1165.376	670.791	1.074	686.328	1.050

0.75	x-x	0.462	0.245	0.04	729.661	1145.048	637.395	1.073	651.406	1.050
0.75	x-x	0.436	0.266	0.043	693.293	1122.124	602.911	1.071	615.433	1.049
0.75	x-x	0.409	0.291	0.047	655.218	1096.301	567.077	1.068	578.141	1.047
0.75	x-x	0.381	0.321	0.052	615.207	1066.879	529.705	1.065	539.346	1.046
0.75	x-x	0.351	0.356	0.058	573.076	1032.485	490.541	1.061	498.798	1.044
0.75	x-x	0.321	0.399	0.066	528.534	991.341	449.272	1.059	456.188	1.043
0.75	x-x	0.289	0.453	0.075	481.117	940.625	405.403	1.057	411.026	1.042
0.75	x-x	0.257	0.521	0.087	432.982	883.987	361.551	1.053	366.017	1.040
0.75	x-x	0.224	0.608	0.102	381.776	818.967	315.911	1.051	319.315	1.040
0.75	x-x	0.192	0.72	0.12	326.459	748.012	268.448	1.058	270.902	1.048
0.75	x-x	0.16	0.871	0.144	273.015	670.219	223.219	1.059	224.913	1.051
0.75	x-x	0.127	1.093	0.181	216.458	578.611	176.268	1.071	177.323	1.065
0.75	x-x	0.096	1.448	0.24	151.203	474.093	124.255	1.144	124.778	1.139
0.75	x-x	0.065	2.122	0.351	96.544	352.887	79.893	1.206	80.109	1.203
0.75	x-x	0.034	3.989	0.672	91.588	207.626	66.401	0.760	66.551	0.759
1	x-x	0.823	0.057	0.014	1226.556	1340.774	1128.426	1.081	1173.099	1.040
1	x-x	0.814	0.06	0.014	1214.944	1334.355	1114.119	1.082	1157.644	1.042
1	x-x	0.804	0.063	0.015	1202.721	1327.562	1099.179	1.084	1141.522	1.044
1	x-x	0.793	0.067	0.016	1189.51	1320.359	1083.291	1.085	1124.396	1.046
1	x-x	0.782	0.071	0.017	1175.25	1312.743	1066.43	1.087	1106.242	1.048
1	x-x	0.771	0.075	0.018	1160.464	1304.469	1048.898	1.089	1087.389	1.050
1	x-x	0.758	0.079	0.019	1145.021	1295.745	1030.752	1.090	1067.899	1.052
1	x-x	0.745	0.084	0.02	1128.881	1286.656	1012.041	1.091	1047.827	1.054
1	x-x	0.732	0.089	0.021	1112.075	1277.18	992.796	1.092	1027.211	1.056
1	x-x	0.718	0.094	0.023	1094.488	1267.2	972.883	1.093	1005.909	1.057
1	x-x	0.703	0.1	0.024	1076.231	1256.757	952.446	1.094	984.076	1.058
1	x-x	0.687	0.106	0.025	1057.167	1246.139	931.563	1.093	961.8	1.059
1	x-x	0.671	0.113	0.027	1036.905	1235.013	909.77	1.093	938.587	1.059
1	x-x	0.654	0.121	0.028	1015.454	1223.325	887.086	1.093	914.461	1.060
1	x-x	0.637	0.128	0.03	992.977	1211.081	863.675	1.092	889.604	1.060
1	x-x	0.618	0.137	0.032	969.499	1198.258	839.583	1.091	864.065	1.060
1	x-x	0.599	0.146	0.034	945.011	1184.559	814.7	1.090	837.732	1.060
1	x-x	0.579	0.156	0.036	919.297	1169.843	788.852	1.088	810.427	1.059
1	x-x	0.559	0.167	0.038	892.415	1154.202	762.186	1.086	782.308	1.058
1	x-x	0.537	0.179	0.041	864.333	1137.45	734.655	1.084	753.332	1.057
1	x-x	0.515	0.192	0.044	834.81	1119.493	706.115	1.082	723.352	1.056
1	x-x	0.493	0.206	0.047	803.682	1099.87	676.346	1.079	692.144	1.055
1	x-x	0.469	0.223	0.05	770.794	1078.428	645.286	1.077	659.65	1.054
1	x-x	0.445	0.241	0.054	736.492	1054.713	613.13	1.075	626.085	1.053
1	x-x	0.42	0.262	0.059	700.639	1028.175	579.735	1.073	591.303	1.052
1	x-x	0.394	0.286	0.064	663.259	998.324	545.123	1.070	555.339	1.050
1	x-x	0.367	0.314	0.071	624.082	963.852	508.927	1.068	517.82	1.049
1	x-x	0.339	0.347	0.079	582.52	922.98	470.547	1.066	478.139	1.049
1	x-x	0.309	0.388	0.088	538.523	876.018	430.381	1.064	436.724	1.048
1	x-x	0.278	0.44	0.101	491.753	821.671	388.254	1.062	393.409	1.048
1	x-x	0.248	0.502	0.116	444.968	764.098	347.084	1.058	351.197	1.045
1	x-x	0.216	0.584	0.135	395.229	698.491	304.238	1.053	307.394	1.042
1	x-x	0.185	0.69	0.16	339.61	628.183	258.966	1.058	261.249	1.049
1	x-x	0.154	0.831	0.193	285.629	554.544	216.011	1.059	217.598	1.052
1	x-x	0.123	1.047	0.243	224.808	469.154	169.354	1.076	170.327	1.070
1	x-x	0.093	1.38	0.321	181.083	378.854	133.566	1.032	134.171	1.027
1	x-x	0.062	2.057	0.477	112.373	266.468	83.495	1.103	83.731	1.100
1	x-x	0.032	3.957	0.928	93.615	129.691	56.44	0.839	56.548	0.837
0.25	y-y	0.824	0.026	0.029	1349.118	1217.238	1126.357	1.083	1170.862	1.042
0.25	y-y	0.814	0.028	0.031	1342.561	1205.743	1112.012	1.085	1155.369	1.044
0.25	y-y	0.804	0.029	0.032	1335.755	1193.577	1097.069	1.086	1139.247	1.046
0.25	y-y	0.794	0.031	0.034	1328.519	1180.74	1081.424	1.088	1122.385	1.048

0.25	y-y	0.783	0.033	0.036	1320.846	1167.202	1065.075	1.089	1104.784	1.050
0.25	y-y	0.771	0.035	0.038	1312.774	1152.95	1048.056	1.090	1086.483	1.052
0.25	y-y	0.759	0.037	0.041	1304.237	1138.059	1030.415	1.091	1067.537	1.053
0.25	y-y	0.746	0.039	0.043	1295.201	1122.585	1012.203	1.092	1048.002	1.055
0.25	y-y	0.733	0.041	0.046	1285.804	1106.465	993.479	1.092	1027.943	1.056
0.25	y-y	0.718	0.044	0.048	1276.028	1089.684	974.24	1.093	1007.36	1.057
0.25	y-y	0.704	0.046	0.051	1265.657	1072.108	954.284	1.093	986.038	1.057
0.25	y-y	0.688	0.049	0.054	1254.792	1053.704	933.673	1.092	964.048	1.058
0.25	y-y	0.672	0.052	0.058	1243.438	1034.238	912.26	1.092	941.237	1.058
0.25	y-y	0.655	0.055	0.062	1231.485	1013.868	890.146	1.091	917.713	1.058
0.25	y-y	0.638	0.059	0.065	1218.79	992.46	867.194	1.090	893.337	1.058
0.25	y-y	0.62	0.062	0.07	1205.562	969.862	843.437	1.089	868.147	1.058
0.25	y-y	0.601	0.066	0.074	1191.373	945.447	818.244	1.088	841.48	1.058
0.25	y-y	0.581	0.07	0.079	1175.925	919.832	792.01	1.087	813.76	1.058
0.25	y-y	0.561	0.075	0.085	1159.365	893.151	764.974	1.087	785.245	1.059
0.25	y-y	0.54	0.08	0.091	1141.658	865.189	737.03	1.085	755.829	1.058
0.25	y-y	0.518	0.086	0.097	1122.572	836.141	708.294	1.084	725.639	1.058
0.25	y-y	0.495	0.092	0.105	1102.009	805.783	678.645	1.081	694.552	1.057
0.25	y-y	0.472	0.099	0.113	1079.616	774.188	648.092	1.079	662.583	1.055
0.25	y-y	0.448	0.107	0.122	1054.897	741.039	616.341	1.076	629.433	1.054
0.25	y-y	0.422	0.116	0.132	1027.447	706.295	583.367	1.073	595.082	1.052
0.25	y-y	0.396	0.127	0.145	996.236	669.879	548.954	1.069	559.315	1.050
0.25	y-y	0.369	0.14	0.159	960.64	631.448	512.9	1.066	521.934	1.048
0.25	y-y	0.341	0.156	0.176	919.961	590.533	474.958	1.062	482.695	1.045
0.25	y-y	0.311	0.175	0.196	873.137	547.037	435.088	1.059	441.572	1.044
0.25	y-y	0.28	0.199	0.222	818.819	500.67	393.134	1.056	398.42	1.042
0.25	y-y	0.248	0.231	0.256	754.676	451.014	348.753	1.055	352.906	1.042
0.25	y-y	0.217	0.269	0.298	688.668	401.458	305.992	1.050	309.185	1.039
0.25	y-y	0.185	0.318	0.353	617.959	351.179	263.794	1.041	266.163	1.032
0.25	y-y	0.153	0.387	0.43	539.92	296.229	219.637	1.036	221.278	1.028
0.25	y-y	0.121	0.491	0.547	452.675	233.114	171.706	1.047	172.707	1.041
0.25	y-y	0.09	0.654	0.734	357.318	237.318	157.792	0.849	158.637	0.844
0.5	y-y	0.74	0.065	0.034	1194.015	1186.073	994.341	1.103	1028.866	1.066
0.5	y-y	0.73	0.068	0.035	1183.09	1175.787	979.624	1.104	1013.117	1.067
0.5	y-y	0.719	0.072	0.037	1171.689	1165.118	964.494	1.104	996.943	1.068
0.5	y-y	0.707	0.075	0.038	1159.937	1154.076	949.063	1.104	980.465	1.069
0.5	y-y	0.696	0.078	0.04	1147.749	1142.601	933.246	1.105	963.594	1.070
0.5	y-y	0.684	0.082	0.042	1135.089	1130.653	917.015	1.105	946.3	1.070
0.5	y-y	0.671	0.086	0.044	1122.052	1118.325	900.511	1.104	928.735	1.071
0.5	y-y	0.658	0.09	0.046	1108.611	1105.595	883.719	1.104	910.884	1.071
0.5	y-y	0.645	0.094	0.048	1094.972	1092.426	866.761	1.102	892.878	1.070
0.5	y-y	0.631	0.099	0.05	1080.723	1078.619	849.272	1.101	874.33	1.069
0.5	y-y	0.617	0.104	0.053	1065.899	1064.255	831.351	1.099	855.348	1.068
0.5	y-y	0.602	0.109	0.055	1050.372	1049.23	812.886	1.097	835.814	1.067
0.5	y-y	0.587	0.114	0.058	1034.064	1033.449	793.806	1.095	815.656	1.066
0.5	y-y	0.571	0.12	0.061	1016.917	1016.811	774.058	1.094	794.82	1.065
0.5	y-y	0.555	0.126	0.064	998.848	999.41	753.69	1.091	773.361	1.063
0.5	y-y	0.538	0.133	0.068	979.87	981.106	732.674	1.089	751.249	1.062
0.5	y-y	0.521	0.14	0.071	959.901	961.45	710.767	1.086	728.234	1.060
0.5	y-y	0.503	0.148	0.075	938.696	940.279	687.813	1.084	704.158	1.059
0.5	y-y	0.485	0.157	0.08	916.41	918.084	664.231	1.082	679.461	1.058
0.5	y-y	0.467	0.167	0.085	892.807	894.601	639.819	1.080	653.939	1.057
0.5	y-y	0.447	0.177	0.09	867.819	869.755	614.581	1.078	627.598	1.056
0.5	y-y	0.427	0.189	0.096	841.308	843.367	588.439	1.076	600.361	1.055
0.5	y-y	0.407	0.202	0.102	812.998	815.403	561.336	1.074	572.175	1.054
0.5	y-y	0.386	0.217	0.11	782.391	785.647	533.04	1.073	542.804	1.054
0.5	y-y	0.364	0.234	0.118	749.486	753.794	503.542	1.072	512.247	1.054

0.5	y-y	0.342	0.253	0.128	714.566	719.783	473.077	1.072	480.752	1.055
0.5	y-y	0.319	0.276	0.14	677.486	683.593	441.703	1.071	448.386	1.055
0.5	y-y	0.296	0.303	0.153	637.995	644.985	409.35	1.070	415.084	1.056
0.5	y-y	0.271	0.336	0.17	595.845	603.504	375.892	1.070	380.721	1.056
0.5	y-y	0.247	0.375	0.19	552.225	560.308	342.389	1.068	346.392	1.055
0.5	y-y	0.222	0.421	0.213	508.308	516.418	309.714	1.063	312.985	1.052
0.5	y-y	0.197	0.48	0.243	460.787	468.896	275.639	1.058	278.227	1.048
0.5	y-y	0.172	0.552	0.28	413.38	421.213	242.822	1.049	244.829	1.040
0.5	y-y	0.146	0.652	0.331	358.22	369.626	207.38	1.046	208.841	1.039
0.5	y-y	0.122	0.783	0.399	301.978	317.137	172.719	1.046	173.731	1.040
0.5	y-y	0.098	0.971	0.495	243.354	256.954	136.499	1.064	137.131	1.059
0.5	y-y	0.073	1.294	0.662	199.962	201.101	107.543	1.010	107.934	1.007
0.5	y-y	0.049	1.936	0.991	129.205	71.904	47.682	1.516	47.759	1.514
0.75	y-y	0.661	0.107	0.035	1054.241	1176.408	889.952	1.100	917.508	1.067
0.75	y-y	0.65	0.112	0.036	1041.903	1167.633	876.211	1.099	902.91	1.067
0.75	y-y	0.639	0.116	0.038	1029.141	1158.675	862.217	1.098	888.057	1.067
0.75	y-y	0.628	0.12	0.039	1015.962	1149.449	847.937	1.098	872.916	1.066
0.75	y-y	0.617	0.125	0.04	1002.316	1139.855	833.295	1.097	857.406	1.066
0.75	y-y	0.605	0.13	0.042	988.225	1129.93	818.339	1.096	841.58	1.065
0.75	y-y	0.593	0.135	0.044	973.703	1119.705	803.109	1.094	825.482	1.065
0.75	y-y	0.581	0.141	0.045	958.724	1109.153	787.586	1.093	809.09	1.064
0.75	y-y	0.569	0.147	0.047	943.182	1098.234	771.691	1.092	792.325	1.063
0.75	y-y	0.556	0.153	0.049	927.102	1086.912	755.441	1.090	775.204	1.062
0.75	y-y	0.543	0.159	0.051	910.515	1075.176	738.868	1.089	757.763	1.061
0.75	y-y	0.53	0.166	0.053	893.331	1062.829	721.838	1.087	739.861	1.060
0.75	y-y	0.516	0.174	0.055	875.583	1049.858	704.39	1.085	721.542	1.059
0.75	y-y	0.502	0.182	0.058	857.253	1036.187	686.504	1.084	702.786	1.058
0.75	y-y	0.488	0.19	0.06	838.278	1021.744	668.136	1.082	683.548	1.057
0.75	y-y	0.473	0.199	0.063	818.569	1006.399	649.204	1.080	663.746	1.056
0.75	y-y	0.458	0.209	0.066	798.019	990.182	629.691	1.078	643.363	1.055
0.75	y-y	0.443	0.22	0.069	776.577	972.834	609.5	1.076	622.3	1.054
0.75	y-y	0.427	0.231	0.073	754.371	953.972	588.61	1.075	600.539	1.054
0.75	y-y	0.411	0.244	0.077	731.416	933.571	567.077	1.074	578.141	1.054
0.75	y-y	0.395	0.258	0.081	707.721	911.876	545.052	1.073	555.266	1.054
0.75	y-y	0.378	0.273	0.086	683.261	888.861	522.558	1.072	531.938	1.053
0.75	y-y	0.361	0.289	0.091	657.885	864.323	499.486	1.071	508.05	1.053
0.75	y-y	0.344	0.308	0.097	631.481	837.99	475.744	1.070	483.506	1.052
0.75	y-y	0.326	0.329	0.104	604.103	809.721	451.385	1.068	458.368	1.052
0.75	y-y	0.307	0.353	0.111	575.701	779.42	426.425	1.067	432.651	1.052
0.75	y-y	0.288	0.381	0.12	546.148	746.542	400.709	1.067	406.202	1.052
0.75	y-y	0.269	0.413	0.131	515.318	711.117	374.273	1.066	379.06	1.052
0.75	y-y	0.25	0.448	0.143	484.882	675.645	348.738	1.063	352.891	1.051
0.75	y-y	0.231	0.489	0.156	453.857	638.561	323.162	1.060	326.725	1.049
0.75	y-y	0.212	0.539	0.172	421.444	598.549	296.863	1.057	299.867	1.046
0.75	y-y	0.192	0.599	0.192	386.661	555.867	269.52	1.055	271.994	1.045
0.75	y-y	0.173	0.669	0.214	349.939	514.097	242.256	1.057	244.253	1.048
0.75	y-y	0.154	0.751	0.241	313.969	471.318	215.899	1.058	217.483	1.050
0.75	y-y	0.135	0.859	0.277	276.51	424.726	188.821	1.058	190.032	1.052
0.75	y-y	0.115	1.007	0.326	233.917	374.417	159.467	1.070	160.33	1.065
0.75	y-y	0.096	1.206	0.39	206.985	323.481	137.975	1.033	138.62	1.028
0.75	y-y	0.077	1.491	0.483	126.997	263.289	90.931	1.263	91.211	1.259
0.75	y-y	0.059	1.964	0.639	127.476	193.016	80.968	1.071	81.19	1.068
0.75	y-y	0.039	2.93	0.957	85.674	124.571	52.563	1.099	52.656	1.097
1	y-y	0.594	0.149	0.034	937.972	1180.548	807.587	1.089	830.213	1.060
1	y-y	0.584	0.154	0.035	925.08	1173.168	794.633	1.089	816.53	1.059
1	y-y	0.574	0.159	0.037	911.904	1165.575	781.486	1.088	802.654	1.059
1	y-y	0.563	0.164	0.038	898.465	1157.752	768.159	1.087	788.602	1.059

1	y-y	0.553	0.17	0.039	884.732	1149.668	754.624	1.086	774.344	1.058
1	y-y	0.542	0.176	0.04	870.705	1141.288	740.872	1.085	759.871	1.057
1	y-y	0.531	0.182	0.041	856.301	1132.613	726.856	1.083	745.133	1.057
1	y-y	0.52	0.189	0.043	841.528	1123.619	712.577	1.082	730.135	1.056
1	y-y	0.509	0.196	0.044	826.365	1114.226	698	1.081	714.838	1.055
1	y-y	0.498	0.203	0.046	810.76	1104.381	683.08	1.080	699.198	1.055
1	y-y	0.486	0.211	0.048	794.695	1094.101	667.825	1.079	683.223	1.054
1	y-y	0.474	0.219	0.049	778.195	1083.353	652.253	1.078	666.934	1.054
1	y-y	0.463	0.228	0.051	761.33	1072.066	636.404	1.077	650.371	1.054
1	y-y	0.45	0.237	0.053	744.215	1060.193	620.354	1.076	633.618	1.053
1	y-y	0.438	0.246	0.056	726.677	1047.629	603.965	1.075	616.531	1.053
1	y-y	0.425	0.257	0.058	708.769	1034.323	587.277	1.074	599.151	1.052
1	y-y	0.413	0.268	0.06	690.46	1020.272	570.288	1.072	581.478	1.051
1	y-y	0.4	0.28	0.063	671.753	1005.304	552.967	1.071	563.482	1.051
1	y-y	0.386	0.293	0.066	652.616	989.35	535.298	1.069	545.146	1.050
1	y-y	0.373	0.307	0.069	632.985	972.087	517.172	1.068	526.359	1.049
1	y-y	0.359	0.322	0.073	612.767	953.089	498.449	1.067	506.977	1.049
1	y-y	0.345	0.339	0.077	591.917	932.549	479.199	1.066	487.076	1.049
1	y-y	0.33	0.358	0.081	570.481	910.527	459.509	1.065	466.747	1.049
1	y-y	0.316	0.379	0.086	548.487	886.999	439.434	1.064	446.048	1.048
1	y-y	0.301	0.402	0.092	525.823	861.719	418.881	1.063	424.887	1.048
1	y-y	0.285	0.427	0.098	502.441	834.465	397.817	1.062	403.23	1.048
1	y-y	0.27	0.457	0.105	478.355	805.364	376.332	1.062	381.173	1.048
1	y-y	0.255	0.487	0.112	455.435	777.323	356.223	1.059	360.558	1.046
1	y-y	0.239	0.522	0.12	431.743	746.915	335.56	1.056	339.404	1.044
1	y-y	0.223	0.563	0.13	406.91	713.943	314.142	1.054	317.508	1.043
1	y-y	0.207	0.612	0.142	379.715	678.422	291.322	1.054	294.215	1.044
1	y-y	0.192	0.666	0.154	351.382	642.937	268.361	1.058	270.814	1.048
1	y-y	0.177	0.724	0.168	324.744	608.774	247.093	1.059	249.171	1.050
1	y-y	0.161	0.795	0.184	297.934	571.884	225.728	1.059	227.46	1.051
1	y-y	0.146	0.882	0.204	269.493	531.848	203.418	1.061	204.825	1.054
1	y-y	0.13	0.992	0.23	237.791	488.544	179.297	1.073	180.388	1.066
1	y-y	0.115	1.125	0.261	212.512	444.053	159.168	1.066	160.028	1.060
1	y-y	0.1	1.289	0.3	200.584	399.711	146.793	1.006	147.524	1.001
1	y-y	0.085	1.516	0.352	113.483	351.744	91.075	1.377	91.356	1.373
1	y-y	0.069	1.851	0.43	123.382	296.212	92.542	1.107	92.831	1.103
1	y-y	0.054	2.365	0.55	46.155	231.288	39.503	2.022	39.555	2.019
1	y-y	0.039	3.271	0.765	108.002	208.174	74.695	0.769	74.884	0.767

Tabla B.17 Valores de r_1 de la sección 19 (40 cm x 80 cm con ρ = 0.03 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.888	0.042	0.003	1220.291	1360.462	1181.492	1.061	1233.075	1.017
0.25	x-x	0.875	0.047	0.003	1202.528	1356.416	1161.865	1.064	1211.713	1.020
0.25	x-x	0.861	0.052	0.003	1183.213	1352.283	1140.885	1.066	1188.911	1.022
0.25	x-x	0.845	0.058	0.004	1162.381	1348.076	1118.609	1.067	1164.74	1.025
0.25	x-x	0.829	0.065	0.004	1139.778	1343.86	1094.864	1.069	1139.019	1.027
0.25	x-x	0.81	0.073	0.004	1115.361	1340.133	1069.941	1.070	1112.069	1.029
0.25	x-x	0.791	0.081	0.005	1089.319	1337.137	1044.128	1.070	1084.21	1.031
0.25	x-x	0.771	0.09	0.005	1061.968	1334.767	1017.595	1.070	1055.629	1.032
0.25	x-x	0.751	0.099	0.005	1033.646	1332.775	990.462	1.070	1026.459	1.033
0.25	x-x	0.73	0.108	0.006	1004.452	1330.74	962.56	1.071	996.523	1.034
0.25	x-x	0.709	0.118	0.006	974.783	1328.627	934.237	1.071	966.197	1.036
0.25	x-x	0.687	0.128	0.006	944.729	1326.757	905.725	1.071	935.733	1.036
0.25	x-x	0.664	0.139	0.007	913.929	1324.641	876.452	1.071	904.521	1.037
0.25	x-x	0.642	0.15	0.007	882.814	1322.337	846.852	1.070	873.029	1.038
0.25	x-x	0.619	0.162	0.007	851.635	1319.602	817.072	1.069	841.414	1.038

0.25	x-x	0.595	0.174	0.008	819.758	1316.378	786.535	1.068	809.066	1.038
0.25	x-x	0.571	0.188	0.008	786.958	1312.87	755.132	1.067	775.876	1.039
0.25	x-x	0.546	0.202	0.009	753.744	1308.711	723.23	1.066	742.236	1.039
0.25	x-x	0.52	0.218	0.01	719.785	1303.792	690.529	1.064	707.835	1.038
0.25	x-x	0.494	0.235	0.01	684.826	1298.108	656.839	1.063	672.478	1.038
0.25	x-x	0.467	0.255	0.011	648.989	1291.545	622.281	1.061	636.3	1.037
0.25	x-x	0.44	0.277	0.012	612.047	1284.099	586.688	1.058	599.134	1.036
0.25	x-x	0.411	0.303	0.014	573.599	1274.927	549.57	1.055	560.476	1.035
0.25	x-x	0.381	0.332	0.015	533.957	1265.664	511.568	1.053	521.005	1.034
0.25	x-x	0.353	0.363	0.016	491.998	1258.438	471.914	1.056	479.933	1.038
0.25	x-x	0.325	0.396	0.018	453.113	1248.993	434.884	1.056	441.685	1.040
0.25	x-x	0.298	0.431	0.019	416.898	1236.566	400.123	1.053	405.874	1.039
0.25	x-x	0.272	0.47	0.021	379.126	1225.645	364.244	1.053	369.003	1.040
0.25	x-x	0.244	0.52	0.023	339.843	1211.15	326.79	1.053	330.616	1.041
0.25	x-x	0.217	0.575	0.026	303.83	1188.416	292.002	1.050	295.053	1.039
0.25	x-x	0.19	0.644	0.03	266.341	1164.447	256.067	1.050	258.41	1.040
0.25	x-x	0.162	0.739	0.035	226.664	1132.266	218.014	1.049	219.71	1.041
0.25	x-x	0.135	0.861	0.044	189.804	1079.205	182.247	1.045	183.43	1.038
0.25	x-x	0.108	1.039	0.054	151.84	1014.596	145.701	1.045	146.457	1.040
0.25	x-x	0.079	1.361	0.075	111.03	901.446	106.295	1.047	106.696	1.043
0.25	x-x	0.051	1.985	0.12	72.321	700.368	68.743	1.055	68.91	1.052
0.25	x-x	0.024	4.031	0.258	35.987	376.35	33.628	1.001	33.668	1.000
0.5	x-x	0.895	0.045	0.006	1209.31	1331.562	1149.714	1.099	1198.502	1.054
0.5	x-x	0.882	0.049	0.006	1192.872	1327.785	1132.101	1.101	1179.375	1.056
0.5	x-x	0.869	0.054	0.007	1175.231	1323.832	1113.405	1.102	1159.099	1.058
0.5	x-x	0.854	0.06	0.007	1156.407	1319.59	1093.584	1.103	1137.634	1.060
0.5	x-x	0.838	0.066	0.008	1136.372	1315.09	1072.657	1.104	1115.004	1.062
0.5	x-x	0.822	0.073	0.009	1115.114	1310.261	1050.594	1.104	1091.184	1.063
0.5	x-x	0.804	0.08	0.009	1092.475	1305.372	1027.449	1.105	1066.238	1.065
0.5	x-x	0.785	0.087	0.01	1068.503	1300.502	1003.322	1.105	1040.278	1.066
0.5	x-x	0.766	0.096	0.011	1043.392	1295.844	978.496	1.105	1013.613	1.067
0.5	x-x	0.746	0.104	0.011	1016.787	1291.34	952.611	1.105	985.863	1.068
0.5	x-x	0.725	0.113	0.012	989.002	1286.969	925.921	1.106	957.305	1.069
0.5	x-x	0.704	0.123	0.013	960.471	1282.472	898.661	1.106	928.195	1.070
0.5	x-x	0.682	0.133	0.013	931.314	1277.734	870.888	1.105	898.596	1.071
0.5	x-x	0.659	0.143	0.014	901.832	1272.746	842.869	1.105	868.797	1.072
0.5	x-x	0.637	0.154	0.015	872.079	1267.366	814.605	1.104	838.798	1.072
0.5	x-x	0.614	0.165	0.016	842.184	1261.427	786.159	1.102	808.668	1.071
0.5	x-x	0.59	0.177	0.017	811.563	1254.726	756.977	1.101	777.825	1.071
0.5	x-x	0.566	0.19	0.018	780.369	1247.108	727.185	1.099	746.403	1.071
0.5	x-x	0.541	0.204	0.019	748.883	1238.715	697.118	1.097	714.76	1.070
0.5	x-x	0.516	0.219	0.02	716.663	1229.415	666.392	1.094	682.496	1.068
0.5	x-x	0.49	0.236	0.022	683.653	1218.509	634.812	1.091	649.408	1.066
0.5	x-x	0.464	0.254	0.024	649.809	1205.279	602.241	1.087	615.363	1.064
0.5	x-x	0.436	0.275	0.026	615.087	1189.692	568.761	1.083	580.45	1.061
0.5	x-x	0.408	0.299	0.029	579.261	1171.544	534.251	1.078	544.552	1.058
0.5	x-x	0.379	0.325	0.032	543.116	1153.181	499.935	1.072	508.944	1.053
0.5	x-x	0.351	0.355	0.035	502.68	1133.397	462.212	1.071	469.903	1.054
0.5	x-x	0.322	0.388	0.038	461.847	1111.52	424.312	1.072	430.784	1.056
0.5	x-x	0.294	0.425	0.042	422.876	1087.38	388.158	1.069	393.567	1.055
0.5	x-x	0.266	0.466	0.047	382.769	1061.187	351.278	1.068	355.702	1.055
0.5	x-x	0.238	0.513	0.053	344.535	1024.061	315.374	1.066	318.936	1.054
0.5	x-x	0.21	0.572	0.06	306.063	981.453	279.481	1.061	282.274	1.050
0.5	x-x	0.181	0.647	0.069	264.802	930.908	241.4	1.062	243.481	1.053
0.5	x-x	0.154	0.743	0.083	225.241	858.923	204.256	1.062	205.744	1.054
0.5	x-x	0.126	0.878	0.102	185.537	770.957	167.26	1.061	168.256	1.054
0.5	x-x	0.097	1.091	0.131	143.261	662.346	128.503	1.068	129.09	1.063

0.5	x-x	0.069	1.459	0.186	102.542	515.761	91.051	1.074	91.346	1.071
0.5	x-x	0.041	2.333	0.315	63.1	300.142	54.138	1.068	54.242	1.066
0.75	x-x	0.895	0.047	0.009	1200.922	1310.537	1126.627	1.122	1173.435	1.078
0.75	x-x	0.883	0.051	0.009	1185.804	1305.167	1109.433	1.124	1154.795	1.080
0.75	x-x	0.87	0.056	0.01	1169.813	1299.382	1091.345	1.126	1135.211	1.082
0.75	x-x	0.856	0.061	0.011	1152.989	1293.318	1072.521	1.127	1114.857	1.084
0.75	x-x	0.841	0.067	0.012	1135.247	1287.049	1052.961	1.128	1093.738	1.086
0.75	x-x	0.825	0.072	0.013	1116.457	1280.586	1032.578	1.128	1071.762	1.087
0.75	x-x	0.809	0.079	0.014	1096.518	1273.889	1011.285	1.129	1048.84	1.089
0.75	x-x	0.791	0.085	0.015	1075.541	1267.043	989.247	1.129	1025.154	1.090
0.75	x-x	0.773	0.092	0.016	1053.562	1260.102	966.544	1.129	1000.793	1.091
0.75	x-x	0.754	0.1	0.017	1030.391	1253.098	943.046	1.129	975.622	1.092
0.75	x-x	0.734	0.108	0.018	1005.711	1245.909	918.43	1.129	949.3	1.093
0.75	x-x	0.714	0.116	0.019	980.165	1238.432	893.196	1.129	922.366	1.093
0.75	x-x	0.693	0.125	0.02	953.828	1230.833	867.506	1.128	894.996	1.093
0.75	x-x	0.671	0.134	0.021	926.469	1223.003	841.119	1.127	866.938	1.093
0.75	x-x	0.649	0.144	0.023	898.339	1214.803	814.193	1.125	838.361	1.093
0.75	x-x	0.626	0.155	0.024	869.936	1206.101	787.095	1.123	809.659	1.092
0.75	x-x	0.603	0.166	0.025	841.315	1196.319	759.66	1.120	780.657	1.090
0.75	x-x	0.579	0.177	0.027	811.805	1185.654	731.473	1.118	750.921	1.089
0.75	x-x	0.555	0.19	0.029	781.87	1173.964	702.906	1.114	720.846	1.087
0.75	x-x	0.53	0.203	0.031	751.727	1161.111	674.136	1.110	690.62	1.084
0.75	x-x	0.505	0.217	0.033	720.955	1146.631	644.731	1.106	659.792	1.081
0.75	x-x	0.479	0.233	0.035	689.186	1130.468	614.461	1.101	628.126	1.077
0.75	x-x	0.453	0.251	0.038	656.586	1112.052	583.385	1.096	595.69	1.073
0.75	x-x	0.425	0.27	0.042	623.187	1090.778	551.482	1.089	562.464	1.068
0.75	x-x	0.398	0.292	0.046	588.681	1066.177	518.535	1.083	528.233	1.063
0.75	x-x	0.37	0.317	0.05	554.839	1040.288	486.508	1.073	495.035	1.055
0.75	x-x	0.341	0.344	0.055	517.437	1010.123	451.58	1.068	458.918	1.051
0.75	x-x	0.313	0.377	0.061	475.698	975.72	413.407	1.068	419.548	1.052
0.75	x-x	0.285	0.412	0.068	436.467	940.345	377.868	1.064	382.992	1.050
0.75	x-x	0.257	0.453	0.075	395.129	899.866	340.836	1.063	345	1.051
0.75	x-x	0.229	0.502	0.085	353.199	851.441	303.25	1.064	306.541	1.053
0.75	x-x	0.2	0.562	0.096	311.659	797.93	266.401	1.062	268.937	1.052
0.75	x-x	0.173	0.635	0.111	270.717	733.943	229.977	1.063	231.865	1.054
0.75	x-x	0.145	0.736	0.133	227.584	655.71	191.905	1.067	193.218	1.060
0.75	x-x	0.117	0.882	0.163	184.409	568.614	154.482	1.069	155.332	1.063
0.75	x-x	0.09	1.101	0.212	141.689	465.854	117.7	1.077	118.192	1.073
0.75	x-x	0.062	1.52	0.306	97.772	310.269	78.476	1.115	78.694	1.112
0.75	x-x	0.034	2.605	0.543	59.606	151.873	44.144	1.096	44.213	1.094
1	x-x	0.891	0.049	0.012	1195.217	1287.616	1104.773	1.140	1149.747	1.095
1	x-x	0.879	0.053	0.013	1181.475	1280.911	1088.186	1.141	1131.793	1.097
1	x-x	0.866	0.057	0.014	1167.159	1273.865	1071.054	1.142	1113.272	1.099
1	x-x	0.853	0.061	0.015	1152.198	1266.418	1053.295	1.143	1094.098	1.101
1	x-x	0.838	0.066	0.016	1136.511	1258.604	1034.893	1.144	1074.256	1.102
1	x-x	0.823	0.071	0.017	1119.923	1250.42	1015.727	1.144	1053.619	1.103
1	x-x	0.807	0.077	0.019	1102.491	1242.024	995.976	1.145	1032.382	1.104
1	x-x	0.791	0.082	0.02	1084.25	1233.451	975.709	1.144	1010.622	1.105
1	x-x	0.773	0.089	0.021	1065.151	1224.664	954.881	1.144	988.295	1.105
1	x-x	0.755	0.095	0.023	1045.07	1215.522	933.33	1.143	965.227	1.105
1	x-x	0.737	0.102	0.024	1023.745	1205.966	910.844	1.142	941.197	1.105
1	x-x	0.717	0.109	0.025	1001.24	1196.059	887.542	1.141	916.338	1.106
1	x-x	0.697	0.117	0.027	977.911	1185.886	863.778	1.140	891.029	1.105
1	x-x	0.677	0.125	0.028	953.721	1175.481	839.555	1.139	865.276	1.105
1	x-x	0.656	0.134	0.03	928.515	1164.776	814.738	1.136	838.939	1.104
1	x-x	0.634	0.143	0.032	902.076	1153.558	789.077	1.134	811.757	1.103
1	x-x	0.611	0.153	0.034	875.108	1141.843	763.149	1.131	784.342	1.101

1	x-x	0.588	0.163	0.036	847.803	1129.456	737.046	1.127	756.796	1.097
1	x-x	0.565	0.174	0.038	819.616	1116.071	710.252	1.122	728.574	1.094
1	x-x	0.54	0.186	0.04	790.599	1101.252	682.693	1.118	699.604	1.091
1	x-x	0.516	0.199	0.043	761.08	1084.865	654.638	1.112	670.171	1.087
1	x-x	0.491	0.213	0.046	731.135	1066.655	626.13	1.107	640.326	1.082
1	x-x	0.465	0.227	0.049	700.42	1046.24	596.878	1.100	609.765	1.077
1	x-x	0.439	0.244	0.053	668.802	1023.02	566.709	1.094	578.313	1.072
1	x-x	0.413	0.262	0.058	636.098	996.649	535.529	1.088	545.88	1.067
1	x-x	0.385	0.284	0.063	602.141	966.431	503.185	1.081	512.312	1.062
1	x-x	0.358	0.306	0.068	569.54	935.597	472.477	1.071	480.515	1.053
1	x-x	0.331	0.332	0.075	534.63	900.185	439.908	1.063	446.868	1.046
1	x-x	0.303	0.362	0.083	493.29	859.413	402.794	1.062	408.622	1.047
1	x-x	0.276	0.395	0.092	454.841	818.744	368.756	1.058	373.635	1.044
1	x-x	0.249	0.433	0.102	414.352	772.391	333.338	1.055	337.319	1.043
1	x-x	0.221	0.482	0.115	368.835	719.224	294.681	1.059	297.789	1.048
1	x-x	0.194	0.537	0.13	327.892	664.579	259.986	1.055	262.401	1.046
1	x-x	0.167	0.609	0.15	284.418	602.962	223.899	1.055	225.688	1.047
1	x-x	0.14	0.711	0.179	236.673	531.206	185.198	1.063	186.421	1.056
1	x-x	0.113	0.847	0.218	193.417	451.965	149.822	1.066	150.621	1.061
1	x-x	0.087	1.061	0.281	148.136	341.994	111.527	1.099	111.969	1.095
1	x-x	0.06	1.472	0.401	101.492	223.067	73.379	1.153	73.571	1.150
1	x-x	0.035	2.392	0.67	62.134	117.899	41.897	1.183	41.959	1.181
0.25	y-y	0.89	0.022	0.026	1291.838	1190.654	1103.959	1.139	1148.865	1.094
0.25	y-y	0.878	0.024	0.028	1284.953	1176.785	1087.101	1.141	1130.619	1.097
0.25	y-y	0.865	0.026	0.03	1277.653	1162.338	1069.649	1.143	1111.754	1.099
0.25	y-y	0.852	0.028	0.033	1269.968	1147.247	1051.592	1.144	1092.261	1.102
0.25	y-y	0.838	0.03	0.035	1261.971	1131.462	1032.962	1.145	1072.175	1.104
0.25	y-y	0.823	0.032	0.038	1253.719	1114.894	1013.747	1.146	1051.489	1.105
0.25	y-y	0.807	0.035	0.041	1245.069	1097.503	993.845	1.147	1030.092	1.107
0.25	y-y	0.791	0.037	0.044	1236.252	1079.333	973.463	1.147	1008.213	1.108
0.25	y-y	0.774	0.04	0.047	1227.151	1060.239	952.43	1.147	985.669	1.108
0.25	y-y	0.756	0.042	0.05	1217.817	1040.165	930.757	1.147	962.476	1.109
0.25	y-y	0.737	0.045	0.054	1208.238	1019.052	908.412	1.146	938.601	1.109
0.25	y-y	0.718	0.048	0.057	1198.37	996.908	885.399	1.145	914.054	1.109
0.25	y-y	0.698	0.051	0.061	1188.386	974.046	862.077	1.144	889.219	1.109
0.25	y-y	0.678	0.054	0.066	1178.27	950.389	838.385	1.141	864.034	1.107
0.25	y-y	0.656	0.057	0.07	1167.845	925.922	814.234	1.138	838.404	1.105
0.25	y-y	0.634	0.06	0.075	1157.055	900.487	789.491	1.135	812.194	1.103
0.25	y-y	0.612	0.063	0.08	1145.578	874.16	764.092	1.130	785.338	1.100
0.25	y-y	0.589	0.067	0.086	1133.395	847.397	738.413	1.126	758.237	1.096
0.25	y-y	0.565	0.071	0.091	1120.258	819.714	712.02	1.120	730.434	1.092
0.25	y-y	0.541	0.076	0.098	1105.845	791.172	684.885	1.115	701.905	1.088
0.25	y-y	0.516	0.081	0.104	1089.847	762.295	657.352	1.109	673.016	1.083
0.25	y-y	0.491	0.086	0.112	1072.105	732.868	629.282	1.102	643.623	1.078
0.25	y-y	0.466	0.093	0.12	1052.243	702.654	600.459	1.095	613.502	1.072
0.25	y-y	0.439	0.1	0.128	1029.851	671.197	570.53	1.088	582.293	1.066
0.25	y-y	0.413	0.108	0.138	1004.035	638.665	539.487	1.080	549.993	1.060
0.25	y-y	0.385	0.118	0.15	974.424	604.965	507.33	1.072	516.61	1.053
0.25	y-y	0.357	0.129	0.163	941.029	570.388	474.445	1.064	482.552	1.046
0.25	y-y	0.33	0.142	0.177	905.706	535.758	441.99	1.054	449.017	1.038
0.25	y-y	0.302	0.156	0.193	867.941	502.231	410.655	1.040	416.714	1.025
0.25	y-y	0.275	0.172	0.212	826.187	465.171	377.075	1.029	382.177	1.015
0.25	y-y	0.247	0.191	0.234	780.084	419.661	338.22	1.032	342.319	1.020
0.25	y-y	0.22	0.213	0.26	729.241	373.505	299.357	1.038	302.564	1.027
0.25	y-y	0.193	0.242	0.292	672.107	327.416	260.828	1.045	263.259	1.035
0.25	y-y	0.168	0.274	0.329	616.527	284.969	226.09	1.047	227.915	1.039
0.25	y-y	0.143	0.317	0.377	553.952	241.138	190.691	1.057	191.987	1.049

0.25	y-y	0.118	0.378	0.442	473.972	196.794	154.246	1.080	155.093	1.074
0.25	y-y	0.094	0.471	0.536	378.795	154.3	118.868	1.112	119.37	1.107
0.25	y-y	0.07	0.626	0.685	275.21	114.732	85.9	1.151	86.162	1.147
0.25	y-y	0.047	0.937	0.977	171.63	75.266	54.335	1.211	54.439	1.209
0.25	y-y	0.025	1.741	1.751	83.457	49.926	31.945	1.087	31.981	1.086
0.5	y-y	0.851	0.048	0.026	1196.093	1192.94	1034.997	1.162	1074.368	1.119
0.5	y-y	0.84	0.051	0.027	1186.547	1183.297	1020.675	1.162	1058.943	1.120
0.5	y-y	0.829	0.054	0.029	1176.73	1173.397	1006.132	1.163	1043.298	1.121
0.5	y-y	0.817	0.057	0.03	1166.672	1163.259	991.415	1.163	1027.483	1.122
0.5	y-y	0.804	0.06	0.032	1156.345	1152.846	976.488	1.163	1011.458	1.123
0.5	y-y	0.791	0.063	0.034	1145.707	1142.12	961.303	1.162	995.175	1.123
0.5	y-y	0.778	0.067	0.035	1134.69	1131.007	945.777	1.161	978.546	1.122
0.5	y-y	0.764	0.07	0.037	1123.291	1119.509	929.924	1.160	961.585	1.122
0.5	y-y	0.75	0.074	0.039	1111.551	1107.666	913.819	1.159	944.374	1.121
0.5	y-y	0.735	0.078	0.041	1099.42	1095.509	897.461	1.157	926.915	1.120
0.5	y-y	0.72	0.082	0.043	1086.854	1082.948	880.779	1.155	909.13	1.119
0.5	y-y	0.705	0.086	0.045	1073.702	1069.837	863.599	1.152	890.839	1.117
0.5	y-y	0.689	0.09	0.047	1060.012	1056.188	845.986	1.150	872.108	1.115
0.5	y-y	0.672	0.095	0.05	1045.794	1041.951	827.941	1.147	852.945	1.113
0.5	y-y	0.655	0.1	0.052	1030.919	1027.056	809.368	1.143	833.247	1.111
0.5	y-y	0.638	0.105	0.055	1015.256	1011.48	790.208	1.140	812.953	1.108
0.5	y-y	0.62	0.11	0.058	998.82	995.171	770.475	1.137	792.083	1.106
0.5	y-y	0.602	0.116	0.061	981.7	978.214	750.312	1.133	770.789	1.103
0.5	y-y	0.584	0.122	0.064	963.979	960.709	729.857	1.129	749.218	1.100
0.5	y-y	0.565	0.128	0.067	945.46	942.501	708.939	1.125	727.192	1.096
0.5	y-y	0.545	0.135	0.071	925.973	923.394	687.392	1.120	704.54	1.093
0.5	y-y	0.525	0.142	0.074	905.3	903.13	665.011	1.116	681.047	1.089
0.5	y-y	0.505	0.15	0.079	883.601	881.831	642.012	1.111	656.945	1.086
0.5	y-y	0.484	0.158	0.083	860.969	859.557	618.53	1.106	632.379	1.081
0.5	y-y	0.463	0.167	0.088	837.225	836.196	594.467	1.100	607.248	1.077
0.5	y-y	0.441	0.177	0.093	811.823	811.249	569.369	1.094	581.083	1.072
0.5	y-y	0.419	0.188	0.099	784.935	784.586	543.356	1.089	554.014	1.068
0.5	y-y	0.396	0.201	0.106	756.671	756.558	516.737	1.083	526.368	1.063
0.5	y-y	0.373	0.214	0.113	727.011	727.192	489.593	1.077	498.23	1.059
0.5	y-y	0.351	0.229	0.121	697.26	697.521	463.027	1.070	470.745	1.053
0.5	y-y	0.328	0.245	0.13	666.706	666.875	436.432	1.063	443.282	1.046
0.5	y-y	0.305	0.263	0.14	634.288	634.362	409.027	1.055	415.038	1.039
0.5	y-y	0.283	0.284	0.151	601.472	601.542	382.139	1.045	387.381	1.031
0.5	y-y	0.26	0.307	0.164	567.89	568.007	355.453	1.034	359.984	1.021
0.5	y-y	0.238	0.334	0.179	531.124	532.251	327.495	1.026	331.337	1.014
0.5	y-y	0.216	0.364	0.195	490.775	498.257	299.719	1.018	302.934	1.008
0.5	y-y	0.195	0.398	0.214	450.854	460.374	271.59	1.014	274.227	1.005
0.5	y-y	0.174	0.44	0.238	407.727	411.702	239.611	1.025	241.661	1.016
0.5	y-y	0.153	0.491	0.266	361.939	363.373	208.041	1.041	209.585	1.034
0.5	y-y	0.133	0.556	0.302	315.926	314.757	177.487	1.058	178.609	1.051
0.5	y-y	0.112	0.645	0.351	265.752	263.143	145.879	1.088	146.637	1.082
0.5	y-y	0.093	0.764	0.417	217.933	211.84	116.266	1.125	116.747	1.120
0.5	y-y	0.074	0.934	0.512	172.474	163.406	89.209	1.167	89.492	1.164
0.5	y-y	0.055	1.224	0.674	125.295	116.924	63.189	1.220	63.331	1.218
0.5	y-y	0.036	1.802	0.993	80.208	73.669	39.473	1.287	39.528	1.286
0.5	y-y	0.018	3.576	1.963	50.943	57.195	27.468	0.905	27.495	0.904
0.75	y-y	0.765	0.085	0.028	1077.697	1178.476	936.045	1.155	968.131	1.117
0.75	y-y	0.754	0.088	0.029	1066.493	1171.2	923.068	1.154	954.256	1.116
0.75	y-y	0.743	0.092	0.03	1054.952	1163.805	909.896	1.153	940.185	1.116
0.75	y-y	0.731	0.096	0.031	1042.995	1156.268	896.463	1.152	925.85	1.115
0.75	y-y	0.719	0.1	0.033	1030.627	1148.588	882.781	1.150	911.264	1.114
0.75	y-y	0.707	0.104	0.034	1017.808	1140.767	868.831	1.149	896.406	1.113

0.75	y-y	0.694	0.108	0.035	1004.567	1132.775	854.622	1.147	881.289	1.112
0.75	y-y	0.681	0.113	0.036	990.949	1124.558	840.168	1.145	865.927	1.111
0.75	y-y	0.668	0.117	0.038	976.949	1116.055	825.44	1.143	850.291	1.110
0.75	y-y	0.655	0.122	0.039	962.582	1107.293	810.476	1.141	834.421	1.109
0.75	y-y	0.641	0.127	0.041	947.831	1098.279	795.278	1.139	818.321	1.107
0.75	y-y	0.628	0.132	0.042	932.652	1088.986	779.811	1.137	801.953	1.105
0.75	y-y	0.614	0.138	0.044	916.979	1079.385	764.025	1.134	785.268	1.104
0.75	y-y	0.599	0.143	0.045	900.804	1069.459	747.921	1.132	768.266	1.102
0.75	y-y	0.585	0.149	0.047	884.255	1059.049	731.526	1.129	750.977	1.100
0.75	y-y	0.57	0.156	0.049	867.389	1048.142	714.888	1.126	733.453	1.097
0.75	y-y	0.555	0.162	0.051	850.189	1036.817	698.048	1.122	715.738	1.095
0.75	y-y	0.539	0.169	0.053	832.484	1024.903	680.832	1.119	697.649	1.092
0.75	y-y	0.524	0.176	0.055	814.173	1012.365	663.177	1.115	679.123	1.089
0.75	y-y	0.508	0.184	0.057	795.412	999.131	645.184	1.112	660.267	1.087
0.75	y-y	0.492	0.192	0.06	776.388	985.206	626.999	1.108	641.235	1.084
0.75	y-y	0.476	0.201	0.062	757.09	970.509	608.605	1.104	622.009	1.080
0.75	y-y	0.46	0.21	0.065	737.376	954.895	589.879	1.100	602.462	1.077
0.75	y-y	0.443	0.219	0.068	717.048	938.173	570.654	1.096	582.422	1.074
0.75	y-y	0.426	0.23	0.071	696.252	920.172	551.001	1.092	561.964	1.071
0.75	y-y	0.409	0.241	0.075	675.026	900.842	530.965	1.088	541.138	1.067
0.75	y-y	0.392	0.252	0.079	653.386	880.166	510.594	1.084	519.994	1.064
0.75	y-y	0.375	0.265	0.083	631.407	858.236	490.002	1.080	498.653	1.061
0.75	y-y	0.358	0.278	0.088	610.58	836.737	470.639	1.073	478.614	1.056
0.75	y-y	0.341	0.292	0.093	589.04	813.299	450.633	1.067	457.939	1.050
0.75	y-y	0.323	0.308	0.098	566.706	787.96	430.006	1.061	436.654	1.045
0.75	y-y	0.305	0.325	0.105	543.213	760.871	408.656	1.056	414.656	1.040
0.75	y-y	0.288	0.344	0.112	517.761	733.001	386.471	1.052	391.833	1.037
0.75	y-y	0.27	0.365	0.119	490.441	704.544	363.61	1.050	368.352	1.037
0.75	y-y	0.254	0.386	0.127	464.515	675.485	341.873	1.047	346.062	1.034
0.75	y-y	0.236	0.41	0.136	437.996	644.763	319.903	1.044	323.568	1.032
0.75	y-y	0.219	0.438	0.147	409.607	612.102	297.005	1.042	300.162	1.031
0.75	y-y	0.203	0.469	0.159	380.542	580.192	274.479	1.042	277.173	1.032
0.75	y-y	0.185	0.506	0.173	350.453	545.733	251.401	1.042	253.658	1.032
0.75	y-y	0.168	0.55	0.189	319.514	509.467	228.079	1.041	229.935	1.032
0.75	y-y	0.151	0.6	0.209	289.253	470.773	205.203	1.042	206.705	1.034
0.75	y-y	0.135	0.661	0.233	258.123	421.593	180.572	1.056	181.734	1.049
0.75	y-y	0.119	0.735	0.261	227.909	371.045	156.871	1.071	157.747	1.065
0.75	y-y	0.103	0.833	0.299	197.113	318.965	133.329	1.089	133.961	1.084
0.75	y-y	0.086	0.97	0.35	164.709	264.056	109.287	1.116	109.711	1.112
0.75	y-y	0.07	1.176	0.427	131.236	205.55	84.913	1.160	85.169	1.156
0.75	y-y	0.055	1.464	0.536	102.145	154.242	64.246	1.200	64.392	1.197
0.75	y-y	0.04	1.961	0.725	73.237	107.248	44.903	1.246	44.974	1.244
0.75	y-y	0.025	3.078	1.149	56.7	61.199	30.059	1.152	30.091	1.150
1	y-y	0.692	0.119	0.027	971.264	1183.01	857.078	1.140	883.902	1.105
1	y-y	0.681	0.123	0.028	959.126	1177.787	844.928	1.139	870.985	1.105
1	y-y	0.671	0.127	0.029	946.77	1172.516	832.671	1.138	857.965	1.104
1	y-y	0.66	0.132	0.03	934.207	1167.183	820.307	1.137	844.845	1.104
1	y-y	0.65	0.136	0.031	921.246	1161.705	807.653	1.136	831.429	1.103
1	y-y	0.639	0.141	0.031	908.046	1156.106	794.847	1.135	817.864	1.103
1	y-y	0.628	0.146	0.032	894.678	1150.385	781.946	1.133	804.211	1.102
1	y-y	0.616	0.151	0.033	881.181	1144.518	768.972	1.132	790.494	1.101
1	y-y	0.605	0.156	0.034	867.623	1138.504	755.98	1.130	776.772	1.100
1	y-y	0.593	0.161	0.035	853.939	1132.293	742.901	1.128	762.97	1.098
1	y-y	0.582	0.166	0.036	840.051	1125.837	729.662	1.126	749.013	1.096
1	y-y	0.57	0.172	0.037	825.898	1119.127	716.218	1.123	734.853	1.095
1	y-y	0.558	0.178	0.038	811.516	1112.106	702.582	1.121	720.505	1.093
1	y-y	0.546	0.183	0.04	797.046	1104.664	688.823	1.119	706.043	1.091

1	y-y	0.533	0.19	0.041	782.422	1096.856	674.925	1.116	691.448	1.090
1	y-y	0.521	0.196	0.042	767.711	1088.665	660.94	1.114	676.778	1.088
1	y-y	0.509	0.202	0.044	752.898	1080.015	646.839	1.111	662	1.085
1	y-y	0.496	0.209	0.045	737.926	1070.894	632.585	1.108	647.078	1.083
1	y-y	0.484	0.217	0.047	722.75	1061.248	618.139	1.105	631.971	1.081
1	y-y	0.471	0.224	0.048	707.339	1050.997	603.467	1.102	616.642	1.078
1	y-y	0.458	0.232	0.05	691.689	1040.08	588.559	1.099	601.084	1.076
1	y-y	0.445	0.24	0.052	675.832	1028.398	573.424	1.096	585.308	1.074
1	y-y	0.432	0.249	0.054	659.751	1015.975	558.078	1.093	569.327	1.071
1	y-y	0.418	0.258	0.056	643.419	1002.803	542.515	1.089	553.14	1.068
1	y-y	0.405	0.268	0.059	626.777	988.642	526.643	1.086	536.65	1.066
1	y-y	0.391	0.279	0.062	609.84	973.514	510.504	1.083	519.902	1.063
1	y-y	0.378	0.289	0.064	593.222	958.241	494.767	1.078	503.589	1.060
1	y-y	0.364	0.301	0.067	576.963	942.853	479.458	1.073	487.738	1.055
1	y-y	0.351	0.313	0.07	560.276	926.333	463.773	1.068	471.516	1.051
1	y-y	0.337	0.326	0.073	542.808	908.532	447.465	1.064	454.668	1.047
1	y-y	0.323	0.34	0.077	523.833	889.375	430.06	1.062	436.709	1.045
1	y-y	0.309	0.355	0.081	502.883	868.897	411.305	1.062	417.384	1.046
1	y-y	0.295	0.371	0.085	481.981	848.008	392.793	1.062	398.333	1.047
1	y-y	0.282	0.387	0.09	463.278	828.087	376.223	1.059	381.302	1.045
1	y-y	0.269	0.405	0.094	443.991	806.477	359.179	1.057	363.806	1.043
1	y-y	0.255	0.424	0.099	423.812	783.288	341.522	1.055	345.702	1.042
1	y-y	0.241	0.446	0.105	402.267	758.481	322.976	1.056	326.712	1.043
1	y-y	0.227	0.47	0.112	379.345	731.866	303.549	1.058	306.847	1.047
1	y-y	0.213	0.497	0.119	356.999	704.176	284.649	1.059	287.547	1.048
1	y-y	0.2	0.524	0.127	336.976	677.165	267.653	1.056	270.214	1.046
1	y-y	0.187	0.555	0.135	316.269	648.238	250.227	1.055	252.464	1.045
1	y-y	0.173	0.591	0.145	294.468	617.22	232.127	1.055	234.05	1.046
1	y-y	0.16	0.634	0.157	271.192	583.988	213.145	1.057	214.765	1.049
1	y-y	0.146	0.685	0.172	247.279	548.063	193.78	1.062	195.119	1.054
1	y-y	0.132	0.746	0.189	223.916	510.861	174.969	1.064	176.059	1.057
1	y-y	0.119	0.812	0.208	203.04	473.239	157.975	1.063	158.864	1.058
1	y-y	0.106	0.895	0.232	181.361	422.783	139.45	1.073	140.142	1.068
1	y-y	0.093	1.002	0.264	158.61	367.504	120.226	1.090	120.74	1.085
1	y-y	0.08	1.145	0.306	135.257	310.604	100.962	1.112	101.324	1.108
1	y-y	0.066	1.351	0.365	112.04	250.658	81.922	1.137	82.16	1.134
1	y-y	0.052	1.658	0.454	88.3	190.263	63.001	1.177	63.142	1.175
1	y-y	0.04	2.102	0.584	68.479	138.867	47.402	1.204	47.482	1.202

Tabla B.18 Valores de r_1 de la sección 20 (40 cm x 80 cm con ρ = 0.06 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.898	0.035	0.002	1570.763	1740.572	1536.881	1.042	1606.054	0.997
0.25	x-x	0.889	0.038	0.002	1555.59	1736.985	1519.608	1.043	1587.2	0.999
0.25	x-x	0.879	0.042	0.003	1539.185	1733.168	1501.087	1.045	1567.006	1.001
0.25	x-x	0.869	0.046	0.003	1521.599	1729.107	1481.376	1.047	1545.539	1.003
0.25	x-x	0.858	0.05	0.003	1502.349	1724.772	1460.019	1.049	1522.306	1.006
0.25	x-x	0.846	0.055	0.003	1481.343	1720.146	1436.945	1.051	1497.239	1.008
0.25	x-x	0.833	0.06	0.004	1458.732	1715.244	1412.338	1.053	1470.542	1.011
0.25	x-x	0.819	0.066	0.004	1434.358	1710.519	1386.376	1.055	1442.417	1.014
0.25	x-x	0.804	0.072	0.004	1408.232	1705.385	1358.696	1.056	1412.479	1.016
0.25	x-x	0.788	0.08	0.005	1380.249	1699.373	1328.955	1.058	1380.365	1.018
0.25	x-x	0.77	0.087	0.005	1350.297	1693.53	1297.737	1.059	1346.715	1.020
0.25	x-x	0.752	0.096	0.005	1318.432	1688.406	1265.402	1.060	1311.926	1.022
0.25	x-x	0.732	0.105	0.006	1284.898	1683.867	1232.051	1.061	1276.112	1.024
0.25	x-x	0.712	0.114	0.006	1249.995	1679.545	1197.728	1.061	1239.327	1.025
0.25	x-x	0.692	0.124	0.006	1214.258	1674.974	1162.678	1.061	1201.837	1.027

0.25	x-x	0.67	0.135	0.007	1177.65	1670.142	1126.873	1.061	1163.62	1.028
0.25	x-x	0.648	0.147	0.007	1139.847	1664.977	1090	1.061	1124.345	1.029
0.25	x-x	0.626	0.159	0.008	1101.12	1659.524	1052.344	1.061	1084.322	1.030
0.25	x-x	0.603	0.172	0.008	1061.428	1653.666	1013.833	1.061	1043.48	1.031
0.25	x-x	0.579	0.186	0.009	1020.361	1647.512	974.153	1.060	1001.494	1.031
0.25	x-x	0.554	0.202	0.009	977.294	1641.134	932.766	1.060	957.803	1.032
0.25	x-x	0.528	0.22	0.01	932.742	1634.312	890.078	1.059	912.848	1.033
0.25	x-x	0.502	0.239	0.011	887.064	1626.407	846.254	1.058	866.811	1.033
0.25	x-x	0.474	0.262	0.012	839.968	1616.841	800.946	1.056	819.337	1.033
0.25	x-x	0.445	0.288	0.013	790.434	1606.173	753.445	1.055	769.697	1.032
0.25	x-x	0.415	0.318	0.015	738.566	1592.891	703.593	1.053	717.745	1.032
0.25	x-x	0.384	0.355	0.017	684.416	1576.433	651.485	1.050	663.601	1.031
0.25	x-x	0.35	0.399	0.019	627.451	1556.214	596.713	1.048	606.861	1.030
0.25	x-x	0.316	0.455	0.021	568.582	1533.693	540.454	1.044	548.766	1.028
0.25	x-x	0.283	0.518	0.023	507.845	1516.849	483.587	1.046	490.231	1.032
0.25	x-x	0.252	0.589	0.026	451.31	1494.546	430.222	1.047	435.472	1.034
0.25	x-x	0.225	0.663	0.029	402.265	1467.317	383.59	1.044	387.759	1.033
0.25	x-x	0.195	0.761	0.033	349.324	1432.518	333.305	1.046	336.448	1.036
0.25	x-x	0.167	0.888	0.04	302.151	1381.392	287.934	1.033	290.276	1.025
0.25	x-x	0.138	1.06	0.047	232.666	1325.667	222.625	1.108	224.023	1.101
0.25	x-x	0.107	1.345	0.061	268.43	1231.268	251.443	0.762	253.227	0.757
0.25	x-x	0.079	1.797	0.085	70.074	1075.219	68.305	2.057	68.436	2.053
0.25	x-x	0.049	2.799	0.136	67.555	832.716	64.754	1.359	64.871	1.357
0.5	x-x	0.891	0.042	0.005	1541.792	1696.085	1475.579	1.078	1539.229	1.033
0.5	x-x	0.882	0.045	0.005	1526.419	1690.418	1457.281	1.080	1519.33	1.036
0.5	x-x	0.872	0.049	0.006	1509.846	1684.518	1437.872	1.082	1498.244	1.038
0.5	x-x	0.861	0.053	0.006	1491.732	1678.364	1417.05	1.084	1475.651	1.041
0.5	x-x	0.85	0.057	0.007	1472.326	1671.933	1395.053	1.087	1451.812	1.044
0.5	x-x	0.837	0.062	0.007	1451.489	1665.218	1371.778	1.089	1426.622	1.047
0.5	x-x	0.824	0.067	0.008	1429.175	1658.196	1347.199	1.091	1400.058	1.050
0.5	x-x	0.81	0.073	0.008	1405.501	1651.073	1321.583	1.093	1372.413	1.053
0.5	x-x	0.794	0.079	0.009	1380.514	1644.178	1295.193	1.094	1343.975	1.054
0.5	x-x	0.778	0.086	0.01	1354.068	1637.4	1267.828	1.095	1314.533	1.056
0.5	x-x	0.761	0.094	0.011	1325.964	1630.742	1239.315	1.096	1283.906	1.058
0.5	x-x	0.743	0.102	0.011	1296.168	1624.19	1209.617	1.096	1252.061	1.059
0.5	x-x	0.724	0.11	0.012	1264.98	1617.496	1178.86	1.096	1219.136	1.060
0.5	x-x	0.704	0.119	0.013	1232.336	1610.763	1147.049	1.095	1185.146	1.060
0.5	x-x	0.684	0.129	0.013	1198.214	1603.748	1114.049	1.095	1149.952	1.061
0.5	x-x	0.662	0.139	0.014	1163.113	1596.436	1080.3	1.094	1114.027	1.061
0.5	x-x	0.641	0.151	0.015	1126.971	1588.551	1045.642	1.093	1077.208	1.061
0.5	x-x	0.618	0.162	0.016	1090.113	1579.779	1010.257	1.092	1039.693	1.061
0.5	x-x	0.595	0.175	0.017	1051.934	1570.129	973.68	1.091	1000.994	1.061
0.5	x-x	0.572	0.189	0.018	1012.435	1559.324	935.863	1.090	961.069	1.061
0.5	x-x	0.547	0.204	0.02	971.616	1547.189	896.814	1.089	919.934	1.061
0.5	x-x	0.522	0.221	0.021	929.377	1534.08	856.635	1.087	877.706	1.061
0.5	x-x	0.496	0.24	0.023	885.947	1519.277	815.359	1.085	834.425	1.060
0.5	x-x	0.469	0.261	0.025	840.978	1501.935	772.552	1.083	789.649	1.059
0.5	x-x	0.441	0.285	0.028	794.266	1481.104	727.957	1.080	743.117	1.058
0.5	x-x	0.411	0.314	0.03	745.586	1456.583	681.535	1.077	694.805	1.056
0.5	x-x	0.381	0.347	0.034	694.444	1427.83	632.961	1.073	644.392	1.054
0.5	x-x	0.349	0.388	0.038	640.709	1393.595	582.123	1.069	591.777	1.052
0.5	x-x	0.316	0.438	0.043	585.998	1354.859	530.761	1.063	538.775	1.047
0.5	x-x	0.284	0.497	0.049	528.286	1312.381	477.464	1.060	483.94	1.045
0.5	x-x	0.251	0.568	0.056	466.294	1263.042	420.908	1.063	425.932	1.050
0.5	x-x	0.22	0.651	0.064	409.486	1212.392	369.493	1.061	373.359	1.050
0.5	x-x	0.189	0.756	0.074	351.772	1144.42	316.85	1.065	319.689	1.056
0.5	x-x	0.16	0.889	0.089	301.962	1054.138	270.283	1.053	272.346	1.045

0.5	x-x	0.13	1.079	0.109	239.062	947.92	213.791	1.083	215.079	1.077
0.5	x-x	0.099	1.388	0.144	102.799	802.4	96.029	1.844	96.288	1.839
0.5	x-x	0.069	1.945	0.207	151.405	624.727	130.805	0.943	131.286	0.939
0.5	x-x	0.038	3.452	0.376	130.858	375.634	102.632	0.659	102.928	0.657
0.75	x-x	0.898	0.041	0.007	1544.466	1666.675	1455.644	1.101	1517.55	1.056
0.75	x-x	0.89	0.044	0.008	1530.763	1660.753	1439.021	1.103	1499.492	1.059
0.75	x-x	0.88	0.047	0.008	1516.182	1654.636	1421.615	1.105	1480.602	1.061
0.75	x-x	0.871	0.051	0.009	1500.376	1648.227	1403.069	1.107	1460.496	1.064
0.75	x-x	0.86	0.055	0.009	1483.535	1641.34	1383.441	1.109	1439.24	1.066
0.75	x-x	0.848	0.059	0.01	1465.573	1634.197	1362.844	1.111	1416.962	1.068
0.75	x-x	0.836	0.063	0.011	1446.355	1626.723	1341.135	1.112	1393.509	1.071
0.75	x-x	0.823	0.068	0.012	1426.034	1618.956	1318.498	1.114	1369.086	1.073
0.75	x-x	0.809	0.073	0.013	1404.74	1610.911	1295.079	1.115	1343.852	1.075
0.75	x-x	0.795	0.079	0.014	1382.46	1602.554	1270.868	1.116	1317.802	1.076
0.75	x-x	0.78	0.085	0.015	1359.002	1593.937	1245.76	1.117	1290.825	1.078
0.75	x-x	0.763	0.091	0.016	1334.12	1584.904	1219.479	1.117	1262.63	1.079
0.75	x-x	0.747	0.098	0.017	1307.909	1575.607	1192.227	1.117	1233.438	1.080
0.75	x-x	0.729	0.106	0.018	1280.335	1566.12	1164.039	1.117	1203.292	1.081
0.75	x-x	0.71	0.114	0.019	1251.07	1556.154	1134.511	1.117	1171.766	1.081
0.75	x-x	0.691	0.122	0.02	1220.613	1545.797	1104.134	1.116	1139.39	1.082
0.75	x-x	0.67	0.132	0.021	1189.066	1534.688	1072.84	1.115	1106.095	1.082
0.75	x-x	0.65	0.141	0.023	1156.26	1523.063	1040.647	1.114	1071.908	1.081
0.75	x-x	0.628	0.152	0.024	1122.236	1510.677	1007.512	1.112	1036.785	1.081
0.75	x-x	0.606	0.164	0.026	1086.681	1497.433	973.184	1.110	1000.47	1.080
0.75	x-x	0.582	0.176	0.027	1050.079	1483.112	938.017	1.108	963.341	1.079
0.75	x-x	0.559	0.189	0.029	1012.351	1467.311	901.852	1.106	925.236	1.078
0.75	x-x	0.535	0.204	0.031	972.982	1449.916	864.323	1.104	885.778	1.077
0.75	x-x	0.51	0.22	0.034	932.279	1430.149	825.505	1.102	845.055	1.076
0.75	x-x	0.483	0.238	0.036	890.658	1408.14	785.896	1.098	803.595	1.073
0.75	x-x	0.457	0.258	0.04	847.487	1383.547	745.018	1.093	760.904	1.070
0.75	x-x	0.429	0.281	0.043	802.398	1355.543	702.5	1.089	716.608	1.067
0.75	x-x	0.4	0.308	0.048	755.31	1323.024	658.191	1.084	670.56	1.064
0.75	x-x	0.37	0.339	0.053	706.004	1284.458	611.818	1.079	622.491	1.061
0.75	x-x	0.339	0.378	0.06	653.924	1238.111	562.929	1.075	571.952	1.058
0.75	x-x	0.308	0.423	0.067	601.21	1185.557	513.793	1.069	521.299	1.053
0.75	x-x	0.276	0.479	0.077	545.467	1125.814	462.738	1.063	468.818	1.050
0.75	x-x	0.244	0.545	0.088	484.479	1060.421	408.729	1.067	413.465	1.054
0.75	x-x	0.213	0.627	0.101	425.193	989.148	356.842	1.066	360.447	1.055
0.75	x-x	0.182	0.734	0.118	362.052	904.761	302.406	1.073	304.991	1.063
0.75	x-x	0.151	0.878	0.142	306.338	809.272	253.836	1.062	255.654	1.054
0.75	x-x	0.121	1.087	0.177	242.961	699.885	200.634	1.074	201.768	1.068
0.75	x-x	0.06	2.082	0.352	80.914	402.525	70.015	1.542	70.153	1.539
0.75	x-x	0.031	4.01	0.694	50.121	251.445	42.793	1.274	42.844	1.273
1	x-x	0.884	0.046	0.011	1523.147	1629.621	1409.073	1.120	1467.003	1.075
1	x-x	0.875	0.049	0.011	1509.403	1622.933	1392.383	1.121	1448.921	1.077
1	x-x	0.865	0.052	0.012	1494.528	1615.908	1374.635	1.123	1429.712	1.079
1	x-x	0.854	0.056	0.013	1478.709	1608.445	1355.941	1.124	1409.501	1.081
1	x-x	0.843	0.06	0.014	1461.92	1600.458	1336.248	1.126	1388.234	1.084
1	x-x	0.831	0.064	0.015	1444.339	1591.651	1315.534	1.127	1365.89	1.086
1	x-x	0.818	0.068	0.016	1426.018	1582.174	1293.985	1.128	1342.674	1.087
1	x-x	0.805	0.073	0.017	1406.93	1572.265	1271.773	1.129	1318.775	1.089
1	x-x	0.791	0.078	0.018	1387.043	1561.958	1248.92	1.130	1294.218	1.090
1	x-x	0.776	0.083	0.019	1366.09	1551.102	1225.144	1.130	1268.704	1.092
1	x-x	0.761	0.089	0.021	1344.13	1539.797	1200.591	1.131	1242.392	1.093
1	x-x	0.745	0.095	0.022	1321.105	1528.275	1175.384	1.130	1215.419	1.093
1	x-x	0.728	0.101	0.023	1296.709	1516.167	1149.092	1.130	1187.327	1.094
1	x-x	0.71	0.108	0.025	1270.939	1503.518	1121.783	1.129	1158.193	1.094

1	x-x	0.692	0.116	0.026	1243.951	1490.454	1093.688	1.128	1128.269	1.094
1	x-x	0.673	0.124	0.028	1215.825	1476.929	1064.874	1.127	1097.63	1.093
1	x-x	0.653	0.132	0.03	1186.567	1462.594	1035.202	1.125	1066.131	1.092
1	x-x	0.632	0.142	0.032	1155.905	1447.203	1004.397	1.123	1033.487	1.091
1	x-x	0.611	0.152	0.034	1123.969	1430.978	972.727	1.120	999.986	1.090
1	x-x	0.589	0.162	0.036	1090.683	1413.872	940.162	1.117	965.604	1.088
1	x-x	0.566	0.174	0.038	1055.798	1395.789	906.534	1.114	930.165	1.086
1	x-x	0.542	0.187	0.041	1019.311	1376.039	871.619	1.110	893.443	1.083
1	x-x	0.518	0.201	0.044	981.184	1354.396	835.405	1.107	855.432	1.081
1	x-x	0.494	0.216	0.047	941.662	1330.391	798.007	1.104	816.261	1.079
1	x-x	0.468	0.233	0.05	900.738	1303.773	759.465	1.100	775.981	1.077
1	x-x	0.442	0.253	0.055	858.592	1274.033	719.881	1.095	734.704	1.073
1	x-x	0.415	0.274	0.06	814.746	1239.882	678.695	1.091	691.854	1.070
1	x-x	0.387	0.3	0.065	768.433	1199.516	635.11	1.087	646.618	1.068
1	x-x	0.358	0.33	0.072	719.868	1153.06	589.653	1.083	599.561	1.065
1	x-x	0.328	0.366	0.081	668.729	1099.577	542.204	1.078	550.57	1.062
1	x-x	0.298	0.408	0.091	617.762	1042.45	495.654	1.072	502.636	1.057
1	x-x	0.267	0.46	0.103	564.122	977.497	447.388	1.065	453.068	1.052
1	x-x	0.236	0.523	0.118	503.899	907.049	395.802	1.066	400.242	1.054
1	x-x	0.206	0.599	0.136	444.116	833.812	345.963	1.065	349.35	1.055
1	x-x	0.176	0.703	0.16	378.568	748.995	292.726	1.072	295.147	1.063
1	x-x	0.146	0.838	0.192	321.148	660.232	245.823	1.063	247.529	1.056
1	x-x	0.116	1.047	0.24	231.461	558.609	180.178	1.151	181.093	1.145
1	x-x	0.087	1.383	0.322	123.765	440.084	102.128	1.515	102.421	1.510
1	x-x	0.057	2.049	0.479	102.554	286.27	78.841	1.299	79.016	1.296
0.25	y-y	0.884	0.021	0.024	1636.91	1514.675	1407.21	1.121	1464.983	1.077
0.25	y-y	0.875	0.022	0.025	1630.084	1501.196	1390.604	1.123	1446.994	1.079
0.25	y-y	0.865	0.024	0.027	1623.026	1486.921	1373.296	1.124	1428.264	1.081
0.25	y-y	0.855	0.025	0.029	1615.507	1471.769	1355.075	1.125	1408.566	1.082
0.25	y-y	0.843	0.027	0.031	1607.443	1455.639	1335.825	1.126	1387.778	1.084
0.25	y-y	0.832	0.029	0.033	1598.766	1438.533	1315.536	1.128	1365.893	1.086
0.25	y-y	0.819	0.031	0.035	1589.436	1420.696	1294.422	1.129	1343.145	1.088
0.25	y-y	0.805	0.033	0.037	1579.573	1402.202	1272.657	1.129	1319.725	1.089
0.25	y-y	0.792	0.035	0.04	1569.35	1382.945	1250.293	1.130	1295.693	1.090
0.25	y-y	0.777	0.038	0.042	1558.74	1362.798	1227.236	1.129	1270.947	1.091
0.25	y-y	0.762	0.04	0.045	1547.473	1341.492	1203.131	1.129	1245.112	1.091
0.25	y-y	0.746	0.043	0.048	1535.698	1319.089	1178.162	1.129	1218.39	1.092
0.25	y-y	0.729	0.046	0.052	1523.434	1295.465	1152.277	1.128	1190.728	1.092
0.25	y-y	0.711	0.049	0.055	1510.472	1270.823	1125.559	1.127	1162.219	1.092
0.25	y-y	0.693	0.052	0.059	1496.583	1244.795	1097.64	1.126	1132.476	1.092
0.25	y-y	0.674	0.055	0.063	1482.137	1217.033	1068.509	1.125	1101.493	1.092
0.25	y-y	0.654	0.059	0.067	1467.029	1187.604	1038.214	1.124	1069.326	1.091
0.25	y-y	0.634	0.062	0.072	1451.085	1157.142	1007.203	1.123	1036.458	1.091
0.25	y-y	0.613	0.066	0.077	1434.089	1125.462	975.284	1.121	1002.69	1.090
0.25	y-y	0.591	0.071	0.082	1416.155	1092.197	942.299	1.119	967.858	1.089
0.25	y-y	0.568	0.075	0.088	1397.044	1057.903	908.616	1.115	932.357	1.087
0.25	y-y	0.545	0.08	0.094	1376.539	1022.369	874.056	1.112	896.003	1.085
0.25	y-y	0.521	0.086	0.101	1354.099	985.634	838.515	1.108	858.693	1.082
0.25	y-y	0.496	0.093	0.109	1329.247	947.167	801.541	1.104	819.96	1.079
0.25	y-y	0.47	0.1	0.118	1301.854	907.362	763.509	1.099	780.203	1.076
0.25	y-y	0.444	0.108	0.127	1270.808	866.09	724.099	1.094	739.097	1.072
0.25	y-y	0.417	0.118	0.138	1235.375	822.836	682.925	1.089	696.25	1.068
0.25	y-y	0.389	0.13	0.151	1195.142	777.054	639.736	1.084	651.415	1.064
0.25	y-y	0.359	0.144	0.167	1149.019	728.833	594.574	1.078	604.649	1.060
0.25	y-y	0.329	0.161	0.185	1095.543	677.958	547.25	1.073	555.774	1.056
0.25	y-y	0.298	0.182	0.207	1033.12	623.972	497.49	1.068	504.524	1.053
0.25	y-y	0.267	0.206	0.234	967.514	570.18	449.05	1.061	454.773	1.048

0.25	y-y	0.236	0.235	0.267	896.344	516.097	401.159	1.051	405.72	1.039
0.25	y-y	0.205	0.273	0.308	818.201	458.093	351.535	1.042	355.032	1.032
0.25	y-y	0.174	0.323	0.364	731.124	388.024	295.471	1.051	297.938	1.042
0.25	y-y	0.144	0.388	0.439	641.271	320.604	242.835	1.056	244.499	1.049
0.25	y-y	0.115	0.48	0.546	544.362	277.959	205.163	0.996	206.349	0.991
0.25	y-y	0.086	0.634	0.722	420.473	323.259	203.613	0.749	204.781	0.745
0.5	y-y	0.802	0.057	0.029	1473.475	1467.805	1250.831	1.144	1296.27	1.104
0.5	y-y	0.791	0.06	0.031	1460.914	1455.869	1233.214	1.145	1277.36	1.105
0.5	y-y	0.78	0.063	0.032	1447.866	1443.44	1215.108	1.145	1257.944	1.106
0.5	y-y	0.768	0.066	0.034	1434.434	1430.609	1196.668	1.145	1238.192	1.107
0.5	y-y	0.756	0.069	0.035	1420.576	1417.353	1177.867	1.145	1218.075	1.107
0.5	y-y	0.743	0.073	0.037	1406.241	1403.619	1158.653	1.144	1197.538	1.107
0.5	y-y	0.73	0.077	0.039	1391.521	1389.508	1139.175	1.144	1176.742	1.107
0.5	y-y	0.717	0.081	0.041	1376.32	1374.93	1119.324	1.142	1155.572	1.107
0.5	y-y	0.703	0.084	0.043	1360.813	1359.829	1099.2	1.141	1134.136	1.106
0.5	y-y	0.688	0.089	0.045	1344.457	1343.902	1078.274	1.139	1111.873	1.104
0.5	y-y	0.673	0.093	0.047	1327.357	1327.267	1056.73	1.137	1088.979	1.103
0.5	y-y	0.658	0.098	0.05	1309.514	1309.911	1034.592	1.135	1065.485	1.102
0.5	y-y	0.642	0.103	0.052	1290.921	1291.82	1011.886	1.132	1041.418	1.100
0.5	y-y	0.626	0.108	0.055	1271.458	1272.845	988.482	1.130	1016.645	1.098
0.5	y-y	0.609	0.114	0.058	1250.997	1252.971	964.342	1.127	991.127	1.096
0.5	y-y	0.592	0.12	0.061	1229.575	1231.883	939.35	1.124	964.747	1.094
0.5	y-y	0.574	0.126	0.064	1207.143	1209.35	913.405	1.121	937.4	1.092
0.5	y-y	0.555	0.133	0.067	1183.372	1185.572	886.502	1.118	909.087	1.090
0.5	y-y	0.536	0.141	0.071	1158.529	1160.879	859.039	1.114	880.23	1.088
0.5	y-y	0.517	0.149	0.075	1132.303	1134.788	830.641	1.111	850.438	1.085
0.5	y-y	0.497	0.158	0.08	1104.571	1107.183	801.26	1.107	819.666	1.083
0.5	y-y	0.477	0.167	0.085	1075.202	1077.917	770.841	1.104	787.861	1.080
0.5	y-y	0.456	0.178	0.09	1044.053	1047.072	739.447	1.101	755.095	1.078
0.5	y-y	0.435	0.19	0.096	1010.587	1014.398	706.793	1.097	721.076	1.076
0.5	y-y	0.413	0.203	0.103	974.519	979.437	672.652	1.095	685.575	1.074
0.5	y-y	0.39	0.218	0.11	936.147	942.004	637.233	1.092	648.819	1.073
0.5	y-y	0.367	0.236	0.119	895.594	902.345	600.848	1.090	611.139	1.072
0.5	y-y	0.343	0.255	0.129	852.612	860.306	563.458	1.087	572.498	1.070
0.5	y-y	0.319	0.279	0.14	806.898	815.235	524.806	1.084	532.64	1.068
0.5	y-y	0.294	0.305	0.154	759.528	768.274	485.971	1.081	492.681	1.066
0.5	y-y	0.27	0.335	0.169	711.962	720.696	448.103	1.075	453.802	1.062
0.5	y-y	0.245	0.372	0.188	660.893	669.739	408.875	1.069	413.614	1.057
0.5	y-y	0.22	0.415	0.21	609.908	618.791	371.036	1.060	374.934	1.049
0.5	y-y	0.195	0.469	0.238	554.694	563.807	331.569	1.051	334.679	1.042
0.5	y-y	0.171	0.534	0.271	493.769	509.5	291.761	1.048	294.167	1.039
0.5	y-y	0.148	0.616	0.313	432.564	451.731	252.206	1.045	254.001	1.038
0.5	y-y	0.124	0.732	0.373	363.326	378.518	206.879	1.066	208.085	1.060
0.5	y-y	0.1	0.9	0.459	296.743	302.622	163.562	1.088	164.315	1.083
0.5	y-y	0.077	1.159	0.593	313.627	193.126	128.107	1.067	128.569	1.063
0.5	y-y	0.031	2.74	1.409	52.396	80.466	32.308	1.736	32.337	1.734
0.5	y-y	0.009	9.848	5.065	4035.455	1486.751	2778.376	0.006	3012.974	0.005
0.75	y-y	0.718	0.096	0.031	1315.17	1453.122	1126.072	1.138	1162.766	1.102
0.75	y-y	0.707	0.1	0.032	1300.537	1443.347	1109.56	1.137	1145.168	1.102
0.75	y-y	0.696	0.104	0.033	1285.462	1433.402	1092.797	1.136	1127.322	1.102
0.75	y-y	0.684	0.109	0.035	1269.919	1423.239	1075.748	1.135	1109.187	1.101
0.75	y-y	0.673	0.113	0.036	1253.827	1412.733	1058.293	1.134	1090.64	1.100
0.75	y-y	0.66	0.118	0.037	1237.224	1401.934	1040.504	1.132	1071.756	1.099
0.75	y-y	0.648	0.123	0.039	1220.154	1390.861	1022.433	1.131	1052.593	1.098
0.75	y-y	0.635	0.128	0.04	1202.599	1379.467	1004.055	1.129	1033.125	1.097
0.75	y-y	0.622	0.133	0.042	1184.41	1367.678	985.242	1.127	1013.217	1.096
0.75	y-y	0.609	0.139	0.043	1165.639	1355.441	966.019	1.125	992.898	1.095

0.75	y-y	0.596	0.145	0.045	1146.325	1342.747	946.426	1.123	972.212	1.093
0.75	y-y	0.582	0.151	0.047	1126.335	1329.349	926.274	1.121	950.959	1.091
0.75	y-y	0.568	0.157	0.049	1105.707	1315.338	905.657	1.118	929.242	1.090
0.75	y-y	0.553	0.164	0.051	1084.426	1300.686	884.578	1.116	907.063	1.088
0.75	y-y	0.538	0.172	0.053	1062.467	1285.312	863.008	1.113	884.397	1.086
0.75	y-y	0.523	0.18	0.055	1039.71	1269.097	840.845	1.111	861.137	1.084
0.75	y-y	0.508	0.188	0.058	1016.123	1251.963	818.07	1.108	837.265	1.082
0.75	y-y	0.492	0.197	0.06	991.663	1233.624	794.573	1.105	812.669	1.081
0.75	y-y	0.476	0.206	0.063	966.38	1213.861	770.346	1.103	787.343	1.079
0.75	y-y	0.46	0.217	0.066	940.291	1192.586	745.42	1.101	761.324	1.078
0.75	y-y	0.443	0.228	0.07	913.531	1169.994	720.01	1.099	734.837	1.077
0.75	y-y	0.426	0.24	0.073	886.109	1146.091	694.169	1.096	707.941	1.075
0.75	y-y	0.409	0.253	0.078	857.824	1120.689	667.753	1.093	680.488	1.073
0.75	y-y	0.392	0.267	0.082	828.458	1093.396	640.552	1.091	652.26	1.071
0.75	y-y	0.374	0.283	0.087	798.126	1064.007	612.636	1.088	623.338	1.069
0.75	y-y	0.355	0.301	0.093	766.823	1032.586	584.1	1.086	593.82	1.068
0.75	y-y	0.337	0.321	0.099	734.435	998.53	554.762	1.083	563.523	1.066
0.75	y-y	0.318	0.343	0.106	700.84	961.579	524.569	1.081	532.396	1.065
0.75	y-y	0.299	0.367	0.114	667.663	924.254	495.239	1.078	502.209	1.063
0.75	y-y	0.28	0.394	0.123	633.928	885.364	465.884	1.073	472.047	1.059
0.75	y-y	0.261	0.425	0.133	598.913	843.608	435.808	1.069	441.197	1.056
0.75	y-y	0.242	0.462	0.145	562.173	798.968	404.869	1.065	409.515	1.053
0.75	y-y	0.223	0.502	0.158	523.503	755.106	373.966	1.063	377.927	1.052
0.75	y-y	0.204	0.546	0.173	483.479	710.188	342.944	1.063	346.272	1.053
0.75	y-y	0.185	0.601	0.191	442.55	661.801	311.51	1.062	314.253	1.053
0.75	y-y	0.166	0.67	0.214	397.838	609.861	278.333	1.065	280.521	1.057
0.75	y-y	0.148	0.752	0.241	353.485	558.124	246.293	1.069	248.005	1.062
0.75	y-y	0.129	0.854	0.274	315.796	504.532	217.953	1.057	219.292	1.051
0.75	y-y	0.111	0.989	0.32	247.361	443.202	174.262	1.133	175.117	1.127
0.75	y-y	0.092	1.183	0.385	340.811	366.437	195.976	0.834	197.058	0.830
0.75	y-y	0.055	1.936	0.633	152.899	118.416	69.326	1.411	69.461	1.408
1	y-y	0.647	0.135	0.03	1178.156	1458.392	1026.713	1.124	1057.13	1.092
1	y-y	0.637	0.139	0.031	1162.778	1450.667	1011.267	1.123	1040.762	1.092
1	y-y	0.626	0.144	0.032	1147.1	1442.748	995.623	1.122	1024.2	1.091
1	y-y	0.616	0.149	0.033	1131.141	1434.635	979.8	1.121	1007.464	1.090
1	y-y	0.605	0.154	0.034	1114.853	1426.32	963.766	1.119	990.519	1.089
1	y-y	0.594	0.16	0.035	1098.236	1417.769	947.512	1.118	973.358	1.088
1	y-y	0.582	0.165	0.036	1081.18	1408.992	930.965	1.116	955.905	1.087
1	y-y	0.571	0.171	0.038	1063.727	1399.939	914.144	1.115	938.179	1.086
1	y-y	0.559	0.177	0.039	1045.877	1390.494	897.009	1.113	920.14	1.085
1	y-y	0.548	0.184	0.04	1027.577	1380.584	879.503	1.111	901.729	1.084
1	y-y	0.536	0.191	0.041	1008.846	1370.224	861.66	1.110	882.982	1.083
1	y-y	0.524	0.198	0.043	989.718	1359.372	843.502	1.108	863.924	1.082
1	y-y	0.511	0.205	0.044	970.233	1347.945	825.04	1.106	844.568	1.081
1	y-y	0.499	0.213	0.046	950.529	1335.922	806.384	1.105	825.029	1.080
1	y-y	0.487	0.221	0.048	930.399	1323.256	787.383	1.103	805.149	1.079
1	y-y	0.474	0.229	0.05	909.977	1309.92	768.14	1.101	785.04	1.077
1	y-y	0.461	0.238	0.052	889.24	1295.893	748.651	1.099	764.695	1.076
1	y-y	0.448	0.248	0.054	868.157	1280.988	728.85	1.096	744.048	1.074
1	y-y	0.435	0.258	0.056	846.676	1265.107	708.693	1.094	723.054	1.072
1	y-y	0.421	0.269	0.058	824.698	1247.993	688.059	1.092	701.588	1.071
1	y-y	0.407	0.281	0.061	802.101	1229.298	666.796	1.090	679.493	1.069
1	y-y	0.393	0.294	0.064	778.848	1208.999	644.916	1.088	656.786	1.068
1	y-y	0.379	0.308	0.067	755.063	1187.151	622.566	1.086	633.62	1.067
1	y-y	0.364	0.323	0.071	730.806	1163.869	599.856	1.084	610.112	1.065
1	y-y	0.349	0.339	0.075	705.936	1139.017	576.694	1.081	586.168	1.064
1	y-y	0.335	0.357	0.079	680.391	1112.233	552.991	1.079	561.696	1.063

1	y-y	0.319	0.377	0.084	654.165	1083.44	528.775	1.077	536.729	1.061
1	y-y	0.304	0.398	0.088	629.163	1055.56	505.999	1.074	513.277	1.058
1	y-y	0.289	0.421	0.094	603.437	1025.48	482.663	1.070	489.282	1.055
1	y-y	0.274	0.447	0.1	576.655	992.878	458.542	1.066	464.512	1.052
1	y-y	0.258	0.477	0.107	547.57	957.409	432.854	1.065	438.169	1.052
1	y-y	0.243	0.508	0.115	516.931	921.803	406.696	1.066	411.385	1.054
1	y-y	0.228	0.542	0.122	487.262	887.644	381.917	1.066	386.048	1.054
1	y-y	0.213	0.58	0.131	457.592	851.016	357.152	1.065	360.763	1.054
1	y-y	0.198	0.625	0.142	426.47	811.246	331.453	1.066	334.561	1.056
1	y-y	0.182	0.678	0.154	393.003	768.314	304.361	1.070	306.979	1.061
1	y-y	0.168	0.737	0.168	360.734	724.18	278.357	1.074	280.545	1.066
1	y-y	0.153	0.804	0.184	332.949	680.684	255.618	1.068	257.462	1.060
1	y-y	0.138	0.886	0.203	303.056	633.864	231.65	1.065	233.164	1.058
1	y-y	0.123	0.991	0.227	246.243	582.679	191.691	1.145	192.726	1.139
1	y-y	0.108	1.121	0.258	271.041	528.656	199.18	0.969	200.298	0.963
1	y-y	0.093	1.289	0.299	373.165	470.048	235.475	0.707	237.039	0.702
1	y-y	0.064	1.846	0.432	122.895	326.708	94.008	1.215	94.256	1.212
1	y-y	0.035	3.322	0.787	133.975	385.979	105.325	0.588	105.637	0.586
1	y-y	0.005	22.701	5.501	259902.69	939.634	1970.043	0.004	2085.163	0.004

Tabla B.19 Valores de r_1 de la sección 21 (60 cm x120 cm con ρ = 0.03 y f_c' = 250 kg/cm^2)

s	Eje	Pn/P	ey	ex	Px_CR	Py_CR	Pxy	Pn/Px	Pxym	Pn/Pxym
0.25	x-x	0.896	0.053	0.004	2194.584	2425.194	2155.755	1.028	2253.937	0.984
0.25	x-x	0.888	0.057	0.004	2175.753	2421.883	2135.009	1.030	2231.269	0.985
0.25	x-x	0.88	0.062	0.004	2155.667	2418.349	2112.968	1.031	2207.206	0.987
0.25	x-x	0.871	0.067	0.004	2134.321	2414.541	2089.603	1.032	2181.723	0.988
0.25	x-x	0.862	0.072	0.005	2111.407	2410.439	2064.625	1.033	2154.509	0.990
0.25	x-x	0.851	0.078	0.005	2086.733	2406.013	2037.853	1.034	2125.372	0.991
0.25	x-x	0.84	0.085	0.006	2060.265	2401.225	2009.251	1.035	2094.279	0.993
0.25	x-x	0.828	0.092	0.006	2031.871	2396.033	1978.697	1.036	2061.106	0.994
0.25	x-x	0.816	0.099	0.006	2001.26	2390.384	1945.914	1.037	2025.559	0.996
0.25	x-x	0.802	0.108	0.007	1968.144	2384.22	1910.634	1.038	1987.361	0.998
0.25	x-x	0.787	0.118	0.008	1932.472	2377.474	1872.815	1.040	1946.475	1.000
0.25	x-x	0.771	0.128	0.008	1894.072	2370.148	1832.352	1.041	1902.804	1.002
0.25	x-x	0.753	0.14	0.009	1853.079	2362.976	1789.848	1.042	1857.01	1.004
0.25	x-x	0.735	0.153	0.009	1808.825	2356.326	1744.885	1.043	1808.654	1.006
0.25	x-x	0.716	0.166	0.01	1762.086	2350.037	1698.071	1.044	1758.405	1.008
0.25	x-x	0.696	0.181	0.011	1713.868	2344.44	1650.476	1.044	1707.419	1.009
0.25	x-x	0.676	0.196	0.011	1664.486	2338.684	1601.932	1.044	1655.52	1.010
0.25	x-x	0.655	0.212	0.012	1614.099	2332.599	1552.514	1.044	1602.796	1.011
0.25	x-x	0.634	0.229	0.012	1562.752	2325.878	1502.153	1.044	1549.175	1.012
0.25	x-x	0.612	0.247	0.013	1510.395	2318.563	1450.853	1.044	1494.672	1.013
0.25	x-x	0.59	0.267	0.014	1456.95	2310.571	1398.547	1.043	1439.219	1.014
0.25	x-x	0.567	0.288	0.015	1402.269	2301.561	1345.014	1.043	1382.59	1.015
0.25	x-x	0.543	0.311	0.016	1346.146	2291.808	1290.21	1.042	1324.747	1.015
0.25	x-x	0.519	0.336	0.017	1288.309	2280.982	1233.824	1.042	1265.371	1.016
0.25	x-x	0.495	0.363	0.018	1229.018	2268.887	1176.095	1.041	1204.725	1.016
0.25	x-x	0.469	0.394	0.02	1167.363	2255.409	1116.222	1.040	1141.979	1.017
0.25	x-x	0.443	0.43	0.022	1102.823	2239.363	1053.531	1.039	1076.447	1.017
0.25	x-x	0.415	0.471	0.024	1035.761	2221.124	988.567	1.038	1008.716	1.017
0.25	x-x	0.386	0.52	0.026	965.934	2199.682	921.025	1.036	938.491	1.017
0.25	x-x	0.355	0.579	0.029	893.454	2173.905	850.975	1.034	865.864	1.016
0.25	x-x	0.326	0.645	0.032	818.028	2152.855	779.532	1.034	792.007	1.017
0.25	x-x	0.297	0.716	0.034	743.407	2133.781	709.382	1.037	719.698	1.022
0.25	x-x	0.271	0.787	0.038	679.011	2107.649	648.062	1.035	656.661	1.022
0.25	x-x	0.245	0.869	0.042	614.62	2074.653	586.545	1.035	593.58	1.023

0.25	x-x	0.219	0.972	0.047	547.942	2035.194	522.949	1.035	528.534	1.024
0.25	x-x	0.194	1.088	0.053	485.808	1988.432	463.563	1.034	467.946	1.025
0.25	x-x	0.168	1.245	0.061	420.003	1926.742	400.671	1.035	403.941	1.026
0.25	x-x	0.142	1.443	0.072	357.11	1853.512	340.641	1.034	343.002	1.027
0.25	x-x	0.117	1.726	0.088	292.285	1746.374	278.567	1.037	280.144	1.031
0.25	x-x	0.09	2.187	0.115	225.388	1584.873	214.425	1.037	215.358	1.033
0.25	x-x	0.065	2.951	0.16	161.664	1353.304	153.363	1.043	153.84	1.039
0.25	x-x	0.037	4.952	0.282	97.615	946.929	91.775	1.001	91.945	1.000
0.5	x-x	0.887	0.06	0.008	2161.444	2373.274	2083.846	1.053	2175.449	1.009
0.5	x-x	0.879	0.065	0.008	2142.405	2367.283	2061.602	1.055	2151.217	1.011
0.5	x-x	0.87	0.07	0.009	2122.15	2360.898	2038.083	1.057	2125.621	1.013
0.5	x-x	0.861	0.075	0.01	2100.53	2353.904	2013.022	1.058	2098.376	1.015
0.5	x-x	0.851	0.08	0.01	2077.465	2346.629	1986.617	1.060	2069.701	1.017
0.5	x-x	0.84	0.086	0.011	2052.848	2338.86	1958.649	1.062	2039.361	1.019
0.5	x-x	0.829	0.093	0.012	2026.531	2330.533	1928.976	1.063	2007.213	1.022
0.5	x-x	0.816	0.1	0.013	1998.263	2321.598	1897.383	1.065	1973.028	1.024
0.5	x-x	0.803	0.108	0.014	1967.824	2311.988	1863.679	1.066	1936.609	1.026
0.5	x-x	0.789	0.117	0.015	1935.344	2301.793	1828.096	1.068	1898.215	1.028
0.5	x-x	0.774	0.126	0.016	1901.025	2291.316	1791.05	1.069	1858.304	1.030
0.5	x-x	0.758	0.136	0.017	1864.746	2280.668	1752.531	1.070	1816.871	1.032
0.5	x-x	0.741	0.148	0.018	1826.035	2270.068	1712.272	1.071	1773.638	1.034
0.5	x-x	0.723	0.16	0.019	1784.596	2259.614	1670.08	1.072	1728.408	1.035
0.5	x-x	0.705	0.173	0.02	1741.298	2249.417	1626.775	1.072	1682.067	1.037
0.5	x-x	0.686	0.186	0.022	1696.04	2239.07	1582.048	1.072	1634.293	1.038
0.5	x-x	0.665	0.201	0.023	1648.889	2228.662	1536.009	1.072	1585.21	1.039
0.5	x-x	0.645	0.217	0.024	1600.432	2218.284	1489.204	1.071	1535.407	1.039
0.5	x-x	0.624	0.233	0.025	1550.857	2207.312	1441.517	1.071	1484.765	1.039
0.5	x-x	0.602	0.251	0.027	1500.142	2195.212	1392.739	1.070	1433.069	1.040
0.5	x-x	0.58	0.27	0.029	1448.432	2181.901	1343.027	1.068	1380.49	1.039
0.5	x-x	0.557	0.29	0.03	1395.84	2167.035	1292.417	1.067	1327.074	1.039
0.5	x-x	0.534	0.312	0.032	1342.13	2150.332	1240.698	1.066	1272.602	1.039
0.5	x-x	0.51	0.336	0.035	1286.71	2131.337	1187.318	1.064	1216.504	1.038
0.5	x-x	0.486	0.363	0.037	1229.805	2109.643	1132.477	1.062	1158.999	1.038
0.5	x-x	0.461	0.393	0.04	1171.009	2084.924	1075.885	1.060	1099.795	1.037
0.5	x-x	0.435	0.426	0.044	1109.632	2056.638	1016.984	1.059	1038.322	1.037
0.5	x-x	0.408	0.465	0.048	1045.899	2023.714	955.908	1.057	974.736	1.037
0.5	x-x	0.38	0.51	0.053	979.389	1984.919	892.29	1.055	908.673	1.036
0.5	x-x	0.351	0.563	0.059	911.572	1941.071	827.777	1.051	841.858	1.033
0.5	x-x	0.323	0.624	0.065	841.744	1896.713	762.714	1.047	774.653	1.031
0.5	x-x	0.294	0.693	0.072	765.635	1848.814	693.067	1.049	702.911	1.034
0.5	x-x	0.266	0.771	0.08	693.18	1801.127	627.469	1.049	635.527	1.035
0.5	x-x	0.238	0.861	0.089	620.697	1743.265	561.609	1.050	568.056	1.038
0.5	x-x	0.211	0.965	0.1	552.535	1672.566	499.103	1.049	504.188	1.038
0.5	x-x	0.186	1.088	0.115	485.951	1586.736	437.845	1.049	441.753	1.040
0.5	x-x	0.158	1.259	0.135	414.889	1476.194	372.638	1.051	375.465	1.044
0.5	x-x	0.133	1.475	0.162	348.373	1347.82	311.692	1.052	313.668	1.046
0.5	x-x	0.106	1.809	0.204	277.423	1176.642	246.892	1.059	248.13	1.054
0.5	x-x	0.079	2.354	0.274	207.94	966.133	183.823	1.063	184.509	1.059
0.5	x-x	0.052	3.424	0.414	135.755	696.722	119.085	1.090	119.372	1.088
0.5	x-x	0.024	7.123	0.897	116.715	298.642	86.864	0.691	87.017	0.690
0.75	x-x	0.875	0.067	0.013	2131.427	2319.536	2015.482	1.074	2101.049	1.030
0.75	x-x	0.866	0.072	0.014	2112.234	2311.36	1992.241	1.076	2075.805	1.032
0.75	x-x	0.857	0.077	0.015	2091.76	2302.719	1967.71	1.077	2049.187	1.035
0.75	x-x	0.847	0.082	0.016	2069.981	2293.563	1941.867	1.079	2021.175	1.037
0.75	x-x	0.837	0.088	0.017	2046.962	2283.625	1914.615	1.081	1991.668	1.039
0.75	x-x	0.825	0.094	0.018	2022.481	2273.147	1885.973	1.083	1960.693	1.041
0.75	x-x	0.813	0.101	0.019	1996.273	2262.088	1855.728	1.084	1928.025	1.044

0.75	x-x	0.8	0.108	0.02	1968.372	2250.46	1823.963	1.086	1893.759	1.046
0.75	x-x	0.787	0.116	0.022	1938.998	2238.386	1790.992	1.087	1858.241	1.048
0.75	x-x	0.772	0.124	0.023	1908.132	2225.844	1756.821	1.088	1821.483	1.049
0.75	x-x	0.757	0.133	0.025	1875.843	2212.966	1721.629	1.088	1783.68	1.050
0.75	x-x	0.741	0.143	0.026	1841.756	2199.741	1685.123	1.089	1744.525	1.052
0.75	x-x	0.725	0.154	0.028	1805.316	2186.195	1646.892	1.089	1703.583	1.053
0.75	x-x	0.708	0.165	0.03	1766.951	2172.208	1607.26	1.089	1661.211	1.054
0.75	x-x	0.69	0.177	0.031	1726.712	2157.646	1566.237	1.089	1617.426	1.055
0.75	x-x	0.671	0.19	0.033	1684.556	2142.669	1523.913	1.089	1572.33	1.056
0.75	x-x	0.651	0.204	0.035	1640.717	2126.731	1480.244	1.089	1525.884	1.056
0.75	x-x	0.631	0.219	0.037	1595.207	2109.721	1435.248	1.088	1478.116	1.057
0.75	x-x	0.61	0.234	0.039	1548.139	2092.225	1389.34	1.087	1429.471	1.056
0.75	x-x	0.589	0.251	0.042	1499.451	2073.715	1342.271	1.086	1379.692	1.056
0.75	x-x	0.567	0.27	0.044	1449.575	2053.769	1294.27	1.084	1329.028	1.055
0.75	x-x	0.544	0.289	0.047	1398.627	2031.937	1245.334	1.082	1277.48	1.054
0.75	x-x	0.521	0.31	0.05	1346.464	2007.816	1195.301	1.079	1224.886	1.053
0.75	x-x	0.498	0.334	0.054	1292.846	1980.963	1143.953	1.077	1171.022	1.052
0.75	x-x	0.474	0.359	0.058	1238.085	1950.555	1091.414	1.074	1116.026	1.050
0.75	x-x	0.449	0.387	0.063	1181.499	1916.666	1037.354	1.070	1059.563	1.048
0.75	x-x	0.423	0.419	0.068	1122.11	1878.515	980.985	1.067	1000.824	1.046
0.75	x-x	0.397	0.456	0.075	1060.327	1835.278	922.636	1.064	940.164	1.044
0.75	x-x	0.369	0.498	0.082	996.094	1785.149	862.093	1.061	877.376	1.042
0.75	x-x	0.342	0.547	0.091	931.207	1729.566	801.33	1.056	814.519	1.039
0.75	x-x	0.314	0.604	0.101	864.056	1667.76	739.203	1.050	750.412	1.034
0.75	x-x	0.285	0.669	0.112	791.133	1600.68	673.576	1.049	682.87	1.034
0.75	x-x	0.258	0.743	0.125	717.468	1530.926	608.695	1.048	616.275	1.035
0.75	x-x	0.23	0.835	0.14	640.572	1449.069	541.398	1.050	547.386	1.039
0.75	x-x	0.203	0.941	0.159	566.793	1360.904	477.33	1.051	481.979	1.041
0.75	x-x	0.176	1.076	0.183	491.825	1258.092	412.547	1.054	416.015	1.045
0.75	x-x	0.149	1.254	0.215	416.52	1137.386	347.714	1.058	350.175	1.051
0.75	x-x	0.123	1.485	0.26	345.674	1002.121	286.808	1.062	288.48	1.056
0.75	x-x	0.096	1.858	0.333	269.252	839.049	222.139	1.071	223.14	1.066
0.75	x-x	0.07	2.479	0.455	196.45	632.694	159.572	1.086	160.088	1.083
0.75	x-x	0.044	3.834	0.725	119.275	379.883	94.231	1.149	94.41	1.147
0.75	x-x	0.017	9.629	1.884	145.478	130.644	70.801	0.586	70.902	0.585
1	x-x	0.859	0.074	0.019	2105.185	2264.809	1951.504	1.089	2031.617	1.046
1	x-x	0.85	0.078	0.02	2085.927	2254.739	1927.589	1.091	2005.712	1.048
1	x-x	0.84	0.083	0.021	2065.497	2244.094	1902.485	1.092	1978.546	1.050
1	x-x	0.83	0.089	0.022	2043.841	2232.802	1876.131	1.094	1950.058	1.053
1	x-x	0.819	0.094	0.024	2020.878	2220.829	1848.477	1.096	1920.199	1.055
1	x-x	0.807	0.101	0.025	1996.778	2207.977	1819.574	1.097	1889.028	1.057
1	x-x	0.794	0.107	0.027	1971.453	2194.53	1789.588	1.098	1856.73	1.059
1	x-x	0.781	0.114	0.029	1944.835	2180.535	1758.536	1.099	1823.326	1.060
1	x-x	0.767	0.122	0.03	1917.105	2165.789	1726.476	1.100	1788.883	1.062
1	x-x	0.753	0.13	0.032	1888.255	2150.347	1693.48	1.100	1753.483	1.063
1	x-x	0.738	0.138	0.034	1858.04	2134.17	1659.374	1.100	1716.943	1.064
1	x-x	0.722	0.148	0.036	1826.089	2117.177	1623.865	1.101	1678.956	1.064
1	x-x	0.706	0.157	0.039	1792.108	2099.421	1586.815	1.101	1639.38	1.065
1	x-x	0.689	0.168	0.041	1756.567	2081.032	1548.725	1.101	1598.757	1.066
1	x-x	0.671	0.179	0.043	1719.336	2061.991	1509.531	1.100	1557.024	1.067
1	x-x	0.653	0.191	0.046	1680.425	2041.931	1469.099	1.099	1514.044	1.067
1	x-x	0.634	0.204	0.048	1639.869	2021.105	1427.648	1.098	1470.056	1.067
1	x-x	0.614	0.218	0.051	1597.54	1999.366	1385.06	1.097	1424.941	1.066
1	x-x	0.594	0.233	0.054	1553.535	1976.516	1341.376	1.095	1378.746	1.066
1	x-x	0.573	0.248	0.058	1507.672	1952.568	1296.53	1.093	1331.411	1.064
1	x-x	0.551	0.266	0.061	1459.935	1927.285	1250.475	1.090	1282.891	1.063
1	x-x	0.529	0.284	0.065	1410.816	1900.321	1203.506	1.087	1233.503	1.061

1	x-x	0.506	0.305	0.069	1360.236	1871.206	1155.468	1.084	1183.091	1.059
1	x-x	0.483	0.327	0.074	1307.78	1839.426	1105.985	1.080	1131.266	1.056
1	x-x	0.459	0.351	0.079	1253.753	1803.855	1055.028	1.077	1078.009	1.054
1	x-x	0.434	0.379	0.086	1198.302	1763.638	1002.613	1.072	1023.346	1.051
1	x-x	0.409	0.409	0.093	1140.555	1718.216	948.195	1.068	966.718	1.048
1	x-x	0.384	0.444	0.101	1079.96	1666.177	891.261	1.065	907.607	1.046
1	x-x	0.357	0.484	0.111	1016.676	1607.092	832.148	1.062	846.38	1.044
1	x-x	0.331	0.529	0.122	953.822	1544.402	774.124	1.056	786.426	1.040
1	x-x	0.303	0.582	0.136	889.313	1473.889	714.893	1.050	725.372	1.035
1	x-x	0.277	0.642	0.15	820.558	1400.089	654.111	1.046	662.872	1.032
1	x-x	0.25	0.713	0.168	745.764	1321.149	590.426	1.046	597.555	1.034
1	x-x	0.223	0.798	0.189	669.793	1233.075	526.358	1.047	532.016	1.036
1	x-x	0.196	0.901	0.214	592.188	1140.939	462.75	1.049	467.118	1.040
1	x-x	0.17	1.031	0.247	514.706	1037.202	399.543	1.051	402.795	1.043
1	x-x	0.143	1.207	0.292	434.424	924.102	335.582	1.056	337.873	1.049
1	x-x	0.117	1.446	0.354	356.252	801.097	273.885	1.060	275.41	1.055
1	x-x	0.091	1.826	0.453	274.528	634.959	207.754	1.084	208.63	1.079
1	x-x	0.066	2.449	0.619	199.081	453.53	146.544	1.114	146.979	1.111
1	x-x	0.04	3.878	1.001	117.793	263.451	84.167	1.187	84.311	1.185
1	x-x	0.015	9.916	2.619	143.748	92.681	57.663	0.654	57.73	0.654
0.25	y-y	0.857	0.034	0.04	2277.586	2091.7	1949.277	1.088	2029.204	1.045
0.25	y-y	0.848	0.036	0.042	2267.608	2072.251	1925.189	1.090	2003.113	1.048
0.25	y-y	0.838	0.039	0.045	2257.028	2051.611	1899.871	1.092	1975.719	1.050
0.25	y-y	0.828	0.041	0.047	2245.68	2029.815	1873.275	1.094	1946.973	1.052
0.25	y-y	0.817	0.044	0.05	2233.41	2006.863	1845.341	1.096	1916.815	1.055
0.25	y-y	0.805	0.047	0.054	2220.456	1982.581	1816.134	1.097	1885.321	1.057
0.25	y-y	0.793	0.05	0.057	2206.836	1957.027	1785.759	1.099	1852.609	1.059
0.25	y-y	0.78	0.053	0.061	2192.525	1930.306	1754.334	1.100	1818.809	1.061
0.25	y-y	0.767	0.057	0.065	2177.382	1902.408	1721.805	1.102	1783.869	1.063
0.25	y-y	0.752	0.06	0.069	2161.533	1873.44	1688.387	1.103	1748.024	1.065
0.25	y-y	0.738	0.064	0.073	2144.996	1843.412	1654.142	1.103	1711.343	1.066
0.25	y-y	0.722	0.068	0.078	2127.91	1811.969	1618.91	1.103	1673.659	1.067
0.25	y-y	0.706	0.072	0.083	2110.254	1778.778	1582.455	1.103	1634.727	1.068
0.25	y-y	0.689	0.077	0.089	2092.228	1743.959	1545.03	1.103	1594.82	1.068
0.25	y-y	0.671	0.081	0.094	2073.442	1707.23	1506.243	1.102	1553.526	1.069
0.25	y-y	0.653	0.086	0.101	2054.001	1668.777	1466.351	1.101	1511.125	1.069
0.25	y-y	0.633	0.091	0.107	2033.743	1628.924	1425.566	1.100	1467.848	1.068
0.25	y-y	0.614	0.096	0.115	2012.612	1587.491	1383.775	1.098	1423.58	1.067
0.25	y-y	0.594	0.102	0.122	1990.433	1544.336	1340.843	1.095	1378.183	1.066
0.25	y-y	0.573	0.108	0.131	1967.051	1499.389	1296.71	1.093	1331.6	1.064
0.25	y-y	0.551	0.115	0.14	1942.248	1452.705	1251.396	1.090	1283.86	1.062
0.25	y-y	0.529	0.122	0.149	1915.702	1404.519	1205.025	1.086	1235.099	1.060
0.25	y-y	0.506	0.13	0.16	1886.846	1354.977	1157.576	1.082	1185.301	1.057
0.25	y-y	0.483	0.139	0.172	1855.215	1303.643	1108.682	1.078	1134.089	1.054
0.25	y-y	0.459	0.149	0.185	1819.631	1250.518	1058.09	1.074	1081.206	1.051
0.25	y-y	0.435	0.161	0.199	1779.42	1195.412	1005.65	1.070	1026.509	1.048
0.25	y-y	0.41	0.175	0.215	1734.418	1138.019	951.338	1.066	969.984	1.045
0.25	y-y	0.384	0.19	0.234	1682.88	1078.11	894.744	1.062	911.219	1.043
0.25	y-y	0.357	0.209	0.255	1623.717	1015.569	835.834	1.058	850.194	1.040
0.25	y-y	0.33	0.231	0.28	1557.516	951.139	775.622	1.054	787.972	1.037
0.25	y-y	0.303	0.256	0.309	1487.076	886.48	716.134	1.047	726.649	1.032
0.25	y-y	0.276	0.284	0.341	1412.414	822.739	658.185	1.039	667.057	1.025
0.25	y-y	0.249	0.317	0.38	1332.027	755.075	598.453	1.031	605.778	1.018
0.25	y-y	0.223	0.355	0.426	1246.412	675.978	532.62	1.034	538.415	1.023
0.25	y-y	0.197	0.399	0.481	1158.044	596.728	468.341	1.038	472.815	1.028
0.25	y-y	0.17	0.457	0.551	1057.994	516.232	403.524	1.044	406.841	1.036
0.25	y-y	0.144	0.535	0.643	946.802	434.426	338.531	1.055	340.862	1.048

0.25	y-y	0.119	0.642	0.767	821.163	356.717	276.473	1.066	278.026	1.060
0.25	y-y	0.095	0.793	0.942	674.2	282.482	216.49	1.086	217.441	1.081
0.25	y-y	0.071	1.046	1.225	506.982	209.916	157.925	1.116	158.43	1.112
0.25	y-y	0.048	1.549	1.767	329.819	140.295	102.504	1.154	102.717	1.152
0.25	y-y	0.025	2.95	3.247	161.761	81.927	55.606	1.114	55.668	1.113
0.5	y-y	0.777	0.09	0.048	2039.78	2027.93	1726.424	1.114	1788.827	1.075
0.5	y-y	0.767	0.094	0.05	2022.564	2010.605	1701.682	1.115	1762.278	1.077
0.5	y-y	0.756	0.098	0.052	2004.772	1992.695	1676.412	1.115	1735.19	1.078
0.5	y-y	0.744	0.103	0.055	1986.338	1974.126	1650.542	1.116	1707.49	1.078
0.5	y-y	0.732	0.108	0.057	1967.225	1954.864	1624.051	1.116	1679.155	1.079
0.5	y-y	0.72	0.113	0.06	1947.489	1934.988	1597.061	1.116	1650.319	1.080
0.5	y-y	0.707	0.119	0.063	1927.215	1914.553	1569.692	1.115	1621.11	1.080
0.5	y-y	0.694	0.125	0.066	1906.291	1893.424	1541.802	1.114	1591.381	1.080
0.5	y-y	0.681	0.131	0.069	1884.839	1871.762	1513.605	1.113	1561.358	1.079
0.5	y-y	0.667	0.137	0.072	1862.696	1849.44	1484.936	1.112	1530.871	1.078
0.5	y-y	0.653	0.144	0.076	1839.599	1826.306	1455.563	1.110	1499.672	1.077
0.5	y-y	0.638	0.151	0.08	1815.139	1802.055	1425.084	1.108	1467.337	1.076
0.5	y-y	0.623	0.158	0.083	1789.43	1776.828	1393.714	1.106	1434.102	1.075
0.5	y-y	0.607	0.166	0.088	1762.736	1750.569	1361.633	1.104	1400.157	1.073
0.5	y-y	0.591	0.174	0.092	1734.894	1723.09	1328.681	1.101	1365.337	1.072
0.5	y-y	0.575	0.183	0.097	1705.671	1694.202	1294.671	1.099	1329.45	1.070
0.5	y-y	0.558	0.193	0.102	1674.989	1663.826	1259.584	1.096	1292.48	1.068
0.5	y-y	0.541	0.203	0.107	1642.817	1632.059	1223.537	1.094	1254.553	1.067
0.5	y-y	0.523	0.214	0.113	1609.076	1598.998	1186.612	1.091	1215.763	1.065
0.5	y-y	0.505	0.226	0.119	1573.605	1564.193	1148.554	1.088	1175.843	1.062
0.5	y-y	0.486	0.238	0.125	1536.29	1527.484	1109.313	1.085	1134.748	1.060
0.5	y-y	0.467	0.252	0.133	1497.059	1488.618	1068.822	1.081	1092.415	1.058
0.5	y-y	0.448	0.267	0.141	1455.648	1447.582	1027.057	1.078	1048.824	1.056
0.5	y-y	0.427	0.284	0.15	1411.968	1404.226	984.023	1.075	1003.986	1.053
0.5	y-y	0.407	0.302	0.159	1365.68	1358.347	939.59	1.071	957.774	1.051
0.5	y-y	0.386	0.323	0.17	1316.153	1309.687	893.495	1.068	909.923	1.049
0.5	y-y	0.364	0.347	0.183	1263.613	1257.923	845.872	1.065	860.581	1.047
0.5	y-y	0.342	0.374	0.197	1207.927	1202.745	796.708	1.062	809.744	1.045
0.5	y-y	0.32	0.402	0.212	1152.373	1147.176	748.868	1.058	760.374	1.042
0.5	y-y	0.298	0.436	0.23	1093.4	1088.681	699.795	1.054	709.832	1.039
0.5	y-y	0.276	0.473	0.25	1032.809	1028.548	650.895	1.049	659.57	1.035
0.5	y-y	0.254	0.517	0.274	970.405	966.82	602.161	1.042	609.578	1.030
0.5	y-y	0.232	0.565	0.3	909.222	904.509	555.16	1.033	561.458	1.022
0.5	y-y	0.211	0.62	0.33	845.448	843.328	509.048	1.024	514.338	1.013
0.5	y-y	0.189	0.688	0.367	770.926	777.321	458.825	1.021	463.118	1.011
0.5	y-y	0.168	0.771	0.412	692.715	700.22	405.254	1.026	408.6	1.018
0.5	y-y	0.148	0.87	0.466	613.708	616.281	351.13	1.040	353.64	1.033
0.5	y-y	0.127	1	0.538	531.817	530.185	297.411	1.056	299.209	1.050
0.5	y-y	0.107	1.173	0.632	447.812	443.204	244.783	1.081	246	1.076
0.5	y-y	0.087	1.431	0.771	360.242	354.704	192.64	1.112	193.393	1.108
0.5	y-y	0.067	1.811	0.979	276.951	270.291	144.795	1.149	145.22	1.145
0.5	y-y	0.048	2.494	1.352	195.106	188.116	99.63	1.189	99.831	1.186
0.5	y-y	0.028	4.154	2.258	109.839	106.848	55.374	1.257	55.436	1.256
0.75	y-y	0.696	0.149	0.05	1819.827	2007.425	1553.947	1.109	1604.323	1.074
0.75	y-y	0.686	0.155	0.052	1799.553	1993.532	1530.96	1.108	1579.833	1.074
0.75	y-y	0.675	0.161	0.054	1778.586	1979.194	1507.455	1.108	1554.815	1.074
0.75	y-y	0.664	0.168	0.056	1757.066	1964.496	1483.6	1.107	1529.45	1.074
0.75	y-y	0.652	0.174	0.058	1734.896	1949.433	1459.338	1.106	1503.679	1.074
0.75	y-y	0.641	0.181	0.06	1712.026	1934.051	1434.674	1.105	1477.507	1.073
0.75	y-y	0.629	0.189	0.062	1688.452	1918.313	1409.604	1.104	1450.931	1.073
0.75	y-y	0.617	0.196	0.065	1664.167	1902.18	1384.115	1.103	1423.94	1.072
0.75	y-y	0.605	0.204	0.067	1639.14	1885.522	1358.138	1.102	1396.461	1.072

0.75	y-y	0.592	0.213	0.07	1613.394	1868.227	1331.651	1.100	1368.474	1.070
0.75	y-y	0.579	0.221	0.072	1586.929	1850.414	1304.739	1.098	1340.069	1.069
0.75	y-y	0.566	0.23	0.075	1559.706	1831.963	1277.338	1.096	1311.18	1.068
0.75	y-y	0.552	0.24	0.078	1531.664	1812.712	1249.354	1.094	1281.711	1.067
0.75	y-y	0.539	0.25	0.081	1502.766	1792.579	1220.757	1.092	1251.631	1.065
0.75	y-y	0.525	0.261	0.084	1473.012	1771.517	1191.557	1.090	1220.954	1.064
0.75	y-y	0.511	0.272	0.088	1442.324	1749.515	1161.735	1.088	1189.662	1.062
0.75	y-y	0.496	0.284	0.091	1410.776	1726.37	1131.287	1.085	1157.752	1.060
0.75	y-y	0.481	0.297	0.095	1378.369	1701.872	1100.167	1.083	1125.181	1.058
0.75	y-y	0.466	0.311	0.1	1344.971	1675.951	1068.313	1.080	1091.883	1.057
0.75	y-y	0.451	0.326	0.104	1310.516	1648.499	1035.69	1.077	1057.828	1.055
0.75	y-y	0.435	0.342	0.109	1275.153	1619.314	1002.371	1.075	1023.093	1.053
0.75	y-y	0.42	0.358	0.114	1238.963	1588.364	968.453	1.072	987.783	1.051
0.75	y-y	0.404	0.377	0.12	1201.618	1555.412	933.71	1.070	951.665	1.050
0.75	y-y	0.387	0.397	0.127	1163.05	1520.155	898.065	1.067	914.663	1.048
0.75	y-y	0.371	0.418	0.134	1123.143	1482.268	861.423	1.065	876.683	1.047
0.75	y-y	0.354	0.442	0.142	1082.068	1441.744	823.974	1.064	837.925	1.046
0.75	y-y	0.338	0.468	0.15	1041.249	1399.966	787.056	1.061	799.775	1.044
0.75	y-y	0.321	0.495	0.16	1000.532	1356.886	750.571	1.058	762.13	1.042
0.75	y-y	0.304	0.525	0.17	958.554	1310.589	713.204	1.054	723.633	1.039
0.75	y-y	0.286	0.56	0.182	915.406	1260.633	674.976	1.050	684.31	1.036
0.75	y-y	0.27	0.596	0.195	873.573	1212.057	638.718	1.045	647.069	1.031
0.75	y-y	0.253	0.635	0.208	828.997	1161.854	601.381	1.042	608.779	1.029
0.75	y-y	0.236	0.68	0.224	779.725	1108.075	561.533	1.041	567.978	1.029
0.75	y-y	0.219	0.732	0.242	727.851	1051.65	520.653	1.041	526.189	1.030
0.75	y-y	0.202	0.789	0.262	677.624	995.767	481.727	1.040	486.462	1.030
0.75	y-y	0.186	0.854	0.286	625.319	937.573	442.158	1.040	446.144	1.031
0.75	y-y	0.169	0.933	0.314	571.335	875.21	401.81	1.041	405.099	1.033
0.75	y-y	0.152	1.028	0.347	516.808	812.465	362.103	1.042	364.772	1.034
0.75	y-y	0.136	1.14	0.387	461.861	742.987	321.86	1.047	323.967	1.040
0.75	y-y	0.12	1.279	0.438	407.683	657.829	280.198	1.059	281.793	1.053
0.75	y-y	0.103	1.466	0.505	350.837	567.478	237.621	1.077	238.768	1.072
0.75	y-y	0.087	1.712	0.592	294.868	476.659	196.651	1.100	197.436	1.096
0.75	y-y	0.072	2.06	0.716	240.551	385.258	157.514	1.125	158.016	1.122
0.75	y-y	0.056	2.591	0.908	187.102	294.81	120.011	1.155	120.303	1.152
0.75	y-y	0.04	3.549	1.252	130.171	204.781	82.228	1.209	82.365	1.207
0.75	y-y	0.025	5.627	1.99	97.401	122.777	55.532	1.110	55.595	1.108
1	y-y	0.628	0.208	0.049	1628.251	2015.152	1415.898	1.098	1457.6	1.067
1	y-y	0.618	0.215	0.051	1607.021	2004.245	1394.546	1.097	1434.982	1.066
1	y-y	0.608	0.222	0.052	1585.39	1993.09	1372.943	1.096	1412.118	1.066
1	y-y	0.598	0.229	0.054	1563.404	1981.667	1351.123	1.096	1389.046	1.066
1	y-y	0.588	0.237	0.055	1540.99	1969.977	1329.04	1.095	1365.717	1.065
1	y-y	0.577	0.245	0.057	1518.08	1958.028	1306.653	1.094	1342.088	1.065
1	y-y	0.567	0.253	0.059	1494.648	1945.738	1283.917	1.092	1318.113	1.064
1	y-y	0.556	0.262	0.06	1470.761	1933.081	1260.877	1.091	1293.842	1.063
1	y-y	0.545	0.271	0.062	1446.493	1920.012	1237.583	1.090	1269.325	1.062
1	y-y	0.534	0.28	0.064	1421.866	1906.492	1214.043	1.088	1244.575	1.061
1	y-y	0.523	0.29	0.066	1396.881	1892.45	1190.242	1.086	1219.574	1.060
1	y-y	0.511	0.3	0.068	1371.523	1877.857	1166.17	1.085	1194.314	1.059
1	y-y	0.5	0.311	0.07	1345.73	1862.608	1141.759	1.083	1168.722	1.058
1	y-y	0.488	0.322	0.073	1319.513	1846.768	1117.055	1.081	1142.851	1.057
1	y-y	0.476	0.334	0.075	1292.895	1829.929	1091.946	1.079	1116.583	1.055
1	y-y	0.464	0.346	0.078	1265.938	1812.138	1066.517	1.077	1090.007	1.054
1	y-y	0.452	0.359	0.081	1238.621	1793.226	1040.72	1.075	1063.076	1.053
1	y-y	0.44	0.372	0.084	1210.9	1773.035	1014.501	1.073	1035.733	1.051
1	y-y	0.428	0.387	0.087	1182.613	1751.618	987.796	1.071	1007.914	1.050
1	y-y	0.415	0.402	0.091	1153.651	1728.818	960.511	1.069	979.523	1.049

1	y-y	0.402	0.418	0.095	1123.952	1704.447	932.586	1.068	950.497	1.047
1	y-y	0.389	0.435	0.099	1093.572	1678.243	904.024	1.066	920.845	1.046
1	y-y	0.376	0.454	0.104	1062.496	1650.43	874.927	1.064	890.674	1.045
1	y-y	0.363	0.474	0.109	1030.909	1620.814	845.408	1.062	860.101	1.044
1	y-y	0.35	0.496	0.114	998.746	1589.564	815.509	1.061	829.173	1.043
1	y-y	0.336	0.519	0.12	967.82	1558.828	787.013	1.058	799.731	1.041
1	y-y	0.323	0.543	0.126	936.401	1525.914	758.074	1.055	769.866	1.038
1	y-y	0.31	0.569	0.132	904.223	1490.546	728.498	1.051	739.382	1.036
1	y-y	0.296	0.599	0.14	870.343	1452.9	697.778	1.049	707.758	1.034
1	y-y	0.282	0.629	0.147	836.022	1416.182	667.497	1.047	676.623	1.033
1	y-y	0.269	0.661	0.155	800.508	1379.249	636.899	1.046	645.202	1.032
1	y-y	0.256	0.696	0.164	762.838	1339.62	604.871	1.046	612.356	1.033
1	y-y	0.242	0.736	0.173	724.115	1297.011	572.125	1.046	578.817	1.034
1	y-y	0.229	0.778	0.184	686.917	1253.438	540.7	1.046	546.672	1.035
1	y-y	0.215	0.824	0.195	648.675	1208.663	508.949	1.047	514.237	1.036
1	y-y	0.202	0.876	0.208	609.733	1162.655	477.092	1.049	481.736	1.039
1	y-y	0.189	0.935	0.223	570.697	1113.252	445.16	1.050	449.201	1.041
1	y-y	0.176	0.999	0.239	532.634	1061.565	414.021	1.050	417.514	1.042
1	y-y	0.162	1.075	0.259	492.043	1005.923	381.341	1.053	384.302	1.045
1	y-y	0.149	1.163	0.281	452.059	949.728	349.54	1.056	352.026	1.048
1	y-y	0.136	1.266	0.307	412.287	890.897	318.084	1.057	320.142	1.051
1	y-y	0.123	1.385	0.338	373.706	829.641	287.595	1.059	289.276	1.053
1	y-y	0.11	1.533	0.377	333.567	761.219	255.921	1.064	257.251	1.058
1	y-y	0.097	1.724	0.427	292.536	675.433	222.48	1.077	223.485	1.072
1	y-y	0.084	1.967	0.489	252.992	586.599	190.356	1.091	191.091	1.087
1	y-y	0.072	2.272	0.571	216.15	496.047	160.302	1.105	160.823	1.102
1	y-y	0.059	2.715	0.69	177.608	401.407	129.576	1.127	129.916	1.124
1	y-y	0.046	3.414	0.877	136.237	306.555	98.058	1.166	98.252	1.164
1	y-y	0.033	4.68	1.216	100.145	211.689	69.904	1.174	70.003	1.172
1	y-y	0.021	7.433	1.952	122.207	125.528	63.512	0.799	63.594	0.798

Tabla B.20 Valores de r_1 de la sección 22 (60 cm x120 cm con ρ = 0.6 y f'_c = 250 kg/cm^2)

s	Eje	Pn/P	ey	ex	Px_CR	Py_CR	Pxy	Pn/Px	Pxym	Pn/Pxy
0.25	x-x	0.862	0.072	0.005	2856.148	3259.684	2801.69	1.025	2924.58	0.982
0.25	x-x	0.853	0.076	0.005	2829.849	3255.503	2773.34	1.026	2893.71	0.983
0.25	x-x	0.845	0.082	0.005	2801.911	3251.023	2743.31	1.027	2861.03	0.984
0.25	x-x	0.836	0.087	0.005	2772.274	3246.21	2711.54	1.027	2826.49	0.986
0.25	x-x	0.826	0.093	0.006	2740.233	3241.025	2677.34	1.028	2789.35	0.987
0.25	x-x	0.816	0.099	0.006	2705.541	3235.187	2640.33	1.030	2749.20	0.989
0.25	x-x	0.804	0.106	0.007	2668.851	3228.369	2600.95	1.031	2706.53	0.991
0.25	x-x	0.792	0.114	0.007	2629.802	3221.727	2559.66	1.032	2661.85	0.992
0.25	x-x	0.779	0.122	0.008	2588.11	3214.471	2515.70	1.032	2614.35	0.993
0.25	x-x	0.765	0.131	0.008	2543.429	3206.535	2468.76	1.033	2563.69	0.995
0.25	x-x	0.75	0.141	0.009	2495.658	3197.824	2418.75	1.034	2509.80	0.997
0.25	x-x	0.735	0.152	0.009	2444.608	3188.305	2365.53	1.035	2452.55	0.999
0.25	x-x	0.718	0.165	0.01	2390.577	3178.692	2309.83	1.036	2392.73	1.000
0.25	x-x	0.7	0.178	0.011	2333.078	3169.2	2251.32	1.037	2330.00	1.002
0.25	x-x	0.681	0.193	0.011	2272.473	3159.897	2190.37	1.037	2264.78	1.003
0.25	x-x	0.662	0.208	0.012	2209.332	3150.715	2127.47	1.037	2197.59	1.004
0.25	x-x	0.642	0.225	0.013	2143.16	3140.473	2061.63	1.038	2127.42	1.006
0.25	x-x	0.621	0.244	0.013	2074.193	3128.62	1992.93	1.039	2054.34	1.008
0.25	x-x	0.599	0.263	0.014	2003.543	3116.782	1923.12	1.039	1980.24	1.009
0.25	x-x	0.577	0.285	0.015	1930.79	3103.679	1851.34	1.039	1904.21	1.010
0.25	x-x	0.554	0.309	0.016	1855.532	3089.308	1777.29	1.039	1825.96	1.011
0.25	x-x	0.53	0.335	0.018	1777.385	3072.918	1700.46	1.039	1744.96	1.012
0.25	x-x	0.505	0.365	0.019	1696.491	3054.433	1621.08	1.038	1661.47	1.013

0.25	x-x	0.479	0.398	0.021	1612.269	3033.426	1538.62	1.038	1574.97	1.014
0.25	x-x	0.452	0.437	0.023	1524.535	3008.842	1452.81	1.038	1485.17	1.015
0.25	x-x	0.424	0.482	0.025	1432.601	2980.735	1363.24	1.037	1391.69	1.016
0.25	x-x	0.395	0.536	0.028	1336.219	2947.719	1269.59	1.037	1294.23	1.017
0.25	x-x	0.364	0.602	0.031	1234.405	2907.129	1170.80	1.036	1191.72	1.018
0.25	x-x	0.331	0.684	0.036	1125.501	2855.572	1065.28	1.036	1082.58	1.019
0.25	x-x	0.296	0.791	0.041	1009.949	2793.048	954.009	1.034	967.858	1.020
0.25	x-x	0.261	0.923	0.047	891.556	2733.805	842.139	1.034	852.912	1.021
0.25	x-x	0.229	1.075	0.052	776.577	2679.866	734.817	1.037	743.006	1.026
0.25	x-x	0.2	1.239	0.059	678.671	2614.402	642.677	1.037	648.932	1.027
0.25	x-x	0.172	1.447	0.069	582.547	2520.229	551.446	1.038	556.045	1.030
0.25	x-x	0.143	1.733	0.082	488.238	2402.779	462.023	1.035	465.247	1.028
0.25	x-x	0.116	2.138	0.102	395.054	2238.666	373.41	1.033	375.513	1.028
0.25	x-x	0.087	2.829	0.135	240.035	2000.099	229.04	1.266	229.829	1.262
0.25	x-x	0.06	4.054	0.197	244.044	1651.311	227.106	0.881	227.882	0.878
0.25	x-x	0.031	7.779	0.386	190.273	1057.756	169.462	0.606	169.894	0.605
0.5	x-x	0.85	0.079	0.01	2815.931	3181.022	2706.25	1.047	2820.75	1.005
0.5	x-x	0.842	0.084	0.01	2789.537	3173.073	2676.21	1.049	2788.13	1.006
0.5	x-x	0.833	0.089	0.011	2761.467	3164.586	2644.44	1.050	2753.66	1.008
0.5	x-x	0.823	0.095	0.012	2731.085	3155.514	2610.36	1.051	2716.73	1.010
0.5	x-x	0.813	0.101	0.012	2698.518	3145.812	2574.10	1.053	2677.48	1.012
0.5	x-x	0.802	0.107	0.013	2664.208	3135.192	2535.92	1.055	2636.19	1.014
0.5	x-x	0.791	0.114	0.014	2627.978	3123.233	2495.45	1.056	2592.48	1.017
0.5	x-x	0.778	0.122	0.015	2589.437	3110.353	2452.67	1.058	2546.34	1.019
0.5	x-x	0.765	0.13	0.016	2548.275	3097.011	2407.65	1.059	2497.85	1.021
0.5	x-x	0.751	0.139	0.017	2504.567	3082.84	2360.30	1.061	2446.92	1.023
0.5	x-x	0.736	0.149	0.018	2458.531	3068.019	2310.97	1.062	2393.95	1.025
0.5	x-x	0.72	0.16	0.019	2410.029	3052.537	2259.59	1.063	2338.86	1.027
0.5	x-x	0.704	0.172	0.02	2358.886	3036.641	2206.20	1.063	2281.70	1.028
0.5	x-x	0.686	0.185	0.022	2304.664	3020.416	2150.49	1.064	2222.16	1.030
0.5	x-x	0.668	0.199	0.023	2247.785	3003.759	2092.81	1.064	2160.63	1.031
0.5	x-x	0.649	0.214	0.024	2187.659	2986.584	2032.65	1.065	2096.57	1.032
0.5	x-x	0.629	0.23	0.026	2124.1	2968.604	1969.77	1.065	2029.73	1.034
0.5	x-x	0.609	0.248	0.028	2058.213	2949.024	1904.83	1.066	1960.85	1.035
0.5	x-x	0.588	0.267	0.029	1990.325	2928.105	1838.31	1.066	1890.44	1.037
0.5	x-x	0.566	0.288	0.031	1920.008	2905.725	1769.89	1.066	1818.15	1.037
0.5	x-x	0.543	0.311	0.033	1847.435	2881.272	1699.56	1.065	1744.01	1.038
0.5	x-x	0.519	0.337	0.036	1772.686	2854.091	1627.29	1.064	1668.00	1.038
0.5	x-x	0.495	0.365	0.039	1695.142	2823.33	1552.45	1.063	1589.46	1.038
0.5	x-x	0.47	0.398	0.042	1614.143	2788.26	1474.49	1.062	1507.84	1.039
0.5	x-x	0.444	0.434	0.046	1530.089	2748.36	1393.85	1.061	1423.61	1.039
0.5	x-x	0.416	0.477	0.05	1442.446	2702.088	1309.96	1.060	1336.22	1.039
0.5	x-x	0.388	0.528	0.056	1350.5	2647.65	1222.21	1.059	1245.03	1.039
0.5	x-x	0.358	0.589	0.062	1253.303	2582.405	1129.74	1.057	1149.21	1.039
0.5	x-x	0.327	0.664	0.071	1149.924	2503.126	1031.83	1.056	1048.05	1.040
0.5	x-x	0.294	0.76	0.082	1040.838	2405.902	928.991	1.056	942.118	1.041
0.5	x-x	0.261	0.877	0.094	930.884	2305.8	827.84	1.052	838.248	1.039
0.5	x-x	0.228	1.024	0.108	812.574	2189.925	720.814	1.055	728.692	1.044
0.5	x-x	0.197	1.201	0.125	699.532	2071.621	620.245	1.058	626.069	1.049
0.5	x-x	0.166	1.435	0.147	587.166	1923.042	519.985	1.064	524.073	1.056
0.5	x-x	0.137	1.738	0.177	486.263	1748.191	429.452	1.063	432.236	1.056
0.5	x-x	0.108	2.187	0.227	417.409	1519.37	363.118	0.993	365.106	0.987
0.5	x-x	0.05	4.622	0.495	67.845	875.312	64.177	2.598	64.239	2.595
0.5	x-x	0.02	11.259	1.228	192.092	338.521	127.228	0.529	127.472	0.528
0.75	x-x	0.836	0.086	0.016	2779.719	3098.442	2614.25	1.066	2720.94	1.024
0.75	x-x	0.827	0.091	0.016	2753.093	3087.083	2582.74	1.068	2686.82	1.026
0.75	x-x	0.818	0.096	0.017	2724.331	3075.015	2549.12	1.069	2650.46	1.028

0.75	x-x	0.808	0.101	0.018	2693.778	3062.167	2513.70	1.071	2612.19	1.031
0.75	x-x	0.797	0.108	0.019	2661.596	3048.466	2476.62	1.073	2572.16	1.033
0.75	x-x	0.786	0.114	0.021	2627.631	3033.636	2437.62	1.075	2530.12	1.035
0.75	x-x	0.774	0.121	0.022	2591.864	3017.279	2396.50	1.076	2485.85	1.038
0.75	x-x	0.761	0.129	0.023	2553.992	2999.991	2353.46	1.078	2439.57	1.040
0.75	x-x	0.748	0.137	0.025	2514.19	2981.879	2308.78	1.080	2391.59	1.042
0.75	x-x	0.734	0.146	0.026	2472.353	2963.154	2262.55	1.081	2342.03	1.044
0.75	x-x	0.719	0.156	0.028	2428.639	2943.965	2215.04	1.082	2291.16	1.046
0.75	x-x	0.703	0.166	0.03	2382.826	2924.02	2165.94	1.082	2238.67	1.047
0.75	x-x	0.687	0.178	0.031	2334.353	2903.259	2114.82	1.083	2184.10	1.048
0.75	x-x	0.67	0.19	0.033	2283.212	2881.596	2061.7	1.083	2127.48	1.049
0.75	x-x	0.652	0.203	0.035	2229.763	2859.131	2006.97	1.083	2069.26	1.050
0.75	x-x	0.633	0.218	0.038	2173.061	2835.714	1949.87	1.083	2008.62	1.051
0.75	x-x	0.614	0.233	0.04	2113.383	2810.226	1890.19	1.083	1945.34	1.052
0.75	x-x	0.594	0.25	0.042	2050.788	2782.696	1828.12	1.083	1879.66	1.053
0.75	x-x	0.573	0.269	0.045	1985.941	2753.408	1764.43	1.082	1812.4	1.054
0.75	x-x	0.551	0.289	0.048	1918.388	2721.955	1698.71	1.082	1743.12	1.054
0.75	x-x	0.529	0.311	0.052	1848.253	2687.678	1630.93	1.081	1671.82	1.055
0.75	x-x	0.506	0.336	0.055	1775.63	2650.244	1561.20	1.080	1598.63	1.054
0.75	x-x	0.481	0.363	0.06	1700.665	2607.94	1489.25	1.078	1523.28	1.054
0.75	x-x	0.457	0.394	0.065	1622.601	2560.19	1414.59	1.076	1445.25	1.053
0.75	x-x	0.431	0.429	0.071	1541.114	2505.445	1336.82	1.074	1364.18	1.052
0.75	x-x	0.404	0.47	0.078	1455.905	2442.978	1255.93	1.072	1280.04	1.052
0.75	x-x	0.376	0.518	0.086	1366.552	2372.046	1171.82	1.070	1192.78	1.051
0.75	x-x	0.347	0.576	0.096	1272.086	2288.66	1083.33	1.068	1101.22	1.051
0.75	x-x	0.317	0.647	0.109	1171.624	2189.409	989.817	1.067	1004.73	1.051
0.75	x-x	0.285	0.736	0.124	1066.506	2074.83	893.147	1.065	905.274	1.051
0.75	x-x	0.254	0.844	0.143	959.669	1949.251	796.768	1.062	806.405	1.049
0.75	x-x	0.222	0.981	0.166	845.084	1811.589	696.698	1.063	704.055	1.052
0.75	x-x	0.191	1.151	0.194	727.817	1666.728	597.38	1.067	602.781	1.057
0.75	x-x	0.16	1.386	0.232	607.151	1497.126	496.275	1.075	499.997	1.067
0.75	x-x	0.13	1.708	0.284	497.236	1314.85	404.582	1.071	407.052	1.064
0.75	x-x	0.099	2.229	0.371	442.763	1089.897	347.694	0.952	349.517	0.947
1	x-x	0.819	0.091	0.022	2748.293	3012.564	2526.32	1.081	2625.81	1.040
1	x-x	0.81	0.096	0.023	2721.198	2998.081	2493.39	1.083	2590.26	1.042
1	x-x	0.8	0.102	0.025	2692.537	2982.736	2458.89	1.085	2553.05	1.045
1	x-x	0.789	0.107	0.026	2662.396	2966.446	2422.87	1.086	2514.24	1.047
1	x-x	0.778	0.114	0.028	2630.623	2949.18	2385.25	1.088	2473.75	1.049
1	x-x	0.767	0.12	0.029	2597.551	2930.527	2346.09	1.089	2431.65	1.051
1	x-x	0.754	0.127	0.031	2562.924	2910.88	2305.5	1.091	2388.07	1.053
1	x-x	0.741	0.135	0.033	2526.483	2890.19	2263.30	1.092	2342.83	1.055
1	x-x	0.728	0.143	0.035	2488.509	2868.597	2219.87	1.093	2296.32	1.057
1	x-x	0.714	0.151	0.037	2449.007	2846.12	2175.27	1.094	2248.64	1.058
1	x-x	0.699	0.161	0.039	2407.606	2822.537	2129.15	1.094	2199.39	1.059
1	x-x	0.683	0.171	0.041	2364.232	2798.028	2081.63	1.094	2148.71	1.060
1	x-x	0.667	0.181	0.043	2318.452	2772.454	2032.35	1.094	2096.25	1.061
1	x-x	0.65	0.193	0.046	2270.771	2745.249	1981.48	1.094	2042.17	1.061
1	x-x	0.632	0.205	0.049	2220.897	2716.578	1928.99	1.093	1986.46	1.061
1	x-x	0.614	0.219	0.052	2167.652	2686.072	1873.89	1.092	1928.08	1.062
1	x-x	0.595	0.234	0.055	2111.27	2653.959	1816.62	1.092	1867.50	1.062
1	x-x	0.575	0.25	0.058	2052.272	2620.026	1757.56	1.091	1805.15	1.062
1	x-x	0.555	0.267	0.062	1990.433	2583.718	1696.44	1.090	1740.73	1.062
1	x-x	0.534	0.287	0.066	1925.772	2544.516	1633.18	1.089	1674.19	1.062
1	x-x	0.512	0.308	0.071	1858.22	2501.803	1567.67	1.088	1605.42	1.063
1	x-x	0.489	0.331	0.076	1787.885	2455.043	1499.98	1.087	1534.51	1.062
1	x-x	0.465	0.358	0.082	1714.684	2403.925	1430.18	1.084	1461.53	1.061
1	x-x	0.441	0.388	0.089	1637.955	2347.526	1357.72	1.082	1385.95	1.060

1	x-x	0.415	0.422	0.096	1557.851	2283.979	1282.43	1.080	1307.58	1.059
1	x-x	0.389	0.461	0.106	1474.164	2211.529	1204.01	1.077	1226.15	1.058
1	x-x	0.362	0.507	0.117	1386.275	2129.071	1122.24	1.075	1141.45	1.057
1	x-x	0.334	0.563	0.13	1293.221	2035.76	1036.79	1.074	1053.17	1.057
1	x-x	0.305	0.63	0.146	1194.253	1929.094	947.195	1.073	960.845	1.058
1	x-x	0.275	0.712	0.166	1092.273	1811.819	856.545	1.071	867.692	1.057
1	x-x	0.245	0.815	0.191	986.671	1681.094	764.3	1.067	773.163	1.055
1	x-x	0.215	0.94	0.22	877.564	1545.954	672.768	1.065	679.626	1.054
1	x-x	0.185	1.103	0.259	758.093	1399.107	576.745	1.069	581.778	1.060
1	x-x	0.155	1.325	0.311	635.282	1237.441	480.25	1.075	483.734	1.067
1	x-x	0.125	1.637	0.384	520.884	1062.904	390.525	1.070	392.826	1.064
1	x-x	0.095	2.152	0.505	400.131	861.56	297.628	1.067	298.963	1.062
0.25	y-y	0.819	0.042	0.048	3031.258	2727.184	2521.42	1.082	2620.52	1.041
0.25	y-y	0.809	0.044	0.05	3016.773	2700.837	2489.03	1.084	2585.55	1.043
0.25	y-y	0.799	0.047	0.053	3001.271	2673.244	2455.21	1.085	2549.08	1.045
0.25	y-y	0.789	0.05	0.056	2984.955	2644.134	2419.92	1.087	2511.06	1.047
0.25	y-y	0.778	0.052	0.059	2967.641	2613.45	2383.04	1.088	2471.37	1.049
0.25	y-y	0.766	0.056	0.063	2949.402	2581.177	2344.67	1.089	2430.13	1.051
0.25	y-y	0.754	0.059	0.066	2930.301	2547.146	2304.75	1.091	2387.27	1.053
0.25	y-y	0.741	0.062	0.07	2910.225	2511.202	2263.16	1.092	2342.68	1.055
0.25	y-y	0.728	0.066	0.074	2888.805	2473.336	2219.73	1.093	2296.18	1.056
0.25	y-y	0.714	0.07	0.079	2866.443	2433.886	2175.06	1.094	2248.41	1.058
0.25	y-y	0.699	0.074	0.083	2842.912	2392.744	2128.97	1.094	2199.19	1.059
0.25	y-y	0.683	0.079	0.088	2818.249	2349.819	2081.50	1.095	2148.58	1.060
0.25	y-y	0.667	0.083	0.094	2792.437	2304.487	2032.21	1.095	2096.10	1.062
0.25	y-y	0.651	0.088	0.1	2764.932	2257.078	1981.17	1.095	2041.85	1.062
0.25	y-y	0.633	0.094	0.106	2735.045	2206.973	1927.66	1.095	1985.06	1.063
0.25	y-y	0.615	0.1	0.113	2703.211	2154.262	1872.12	1.095	1926.20	1.064
0.25	y-y	0.596	0.106	0.121	2669.85	2099.27	1815.09	1.095	1865.88	1.065
0.25	y-y	0.577	0.113	0.129	2634.59	2041.868	1756.41	1.094	1803.94	1.065
0.25	y-y	0.556	0.12	0.138	2597.422	1982.018	1696.17	1.093	1740.45	1.065
0.25	y-y	0.535	0.128	0.148	2557.435	1919.248	1633.76	1.091	1674.80	1.065
0.25	y-y	0.513	0.137	0.159	2514.287	1853.545	1569.21	1.089	1607.03	1.064
0.25	y-y	0.49	0.147	0.171	2467.746	1784.896	1502.60	1.087	1537.24	1.062
0.25	y-y	0.466	0.158	0.184	2417.026	1713.322	1433.85	1.084	1465.37	1.061
0.25	y-y	0.442	0.171	0.199	2360.889	1638.29	1362.41	1.082	1390.83	1.059
0.25	y-y	0.417	0.187	0.217	2296.766	1559.868	1287.82	1.079	1313.19	1.058
0.25	y-y	0.39	0.204	0.237	2224.798	1477.625	1210.26	1.075	1232.63	1.056
0.25	y-y	0.363	0.226	0.261	2142.004	1391.102	1129.00	1.073	1148.45	1.055
0.25	y-y	0.335	0.251	0.289	2046.676	1299.338	1043.57	1.071	1060.16	1.054
0.25	y-y	0.306	0.283	0.324	1937.729	1201.571	953.89	1.069	967.735	1.054
0.25	y-y	0.276	0.323	0.368	1811.884	1096.706	859.283	1.069	870.502	1.055
0.25	y-y	0.245	0.371	0.421	1679.184	990.834	766.398	1.066	775.31	1.053
0.25	y-y	0.214	0.431	0.489	1537.627	883.827	674.844	1.060	681.744	1.049
0.25	y-y	0.184	0.508	0.577	1384.375	771.736	582.02	1.053	587.145	1.044
0.25	y-y	0.154	0.606	0.692	1228.19	648.433	486.284	1.059	489.857	1.051
0.25	y-y	0.125	0.745	0.857	1056.227	526.639	392.831	1.063	395.159	1.057
0.25	y-y	0.096	0.971	1.121	852.683	465.949	331.24	0.963	332.894	0.958
0.25	y-y	0.067	1.379	1.6	610.148	262.581	194.276	1.145	194.844	1.142
0.25	y-y	0.039	2.337	2.723	522.182	85.853	75.398	1.717	75.484	1.715
0.25	y-y	0.011	8.12	9.439	227.953	3142.099	227.007	0.162	227.782	0.162
0.5	y-y	0.736	0.105	0.055	2675.078	2658.758	2222.40	1.105	2299.03	1.068
0.5	y-y	0.726	0.11	0.057	2650.647	2635.003	2189.14	1.105	2263.46	1.069
0.5	y-y	0.715	0.115	0.059	2625.307	2610.353	2155.05	1.106	2227.04	1.070
0.5	y-y	0.704	0.12	0.062	2599.041	2584.774	2120.14	1.106	2189.77	1.071
0.5	y-y	0.692	0.125	0.065	2571.746	2558.233	2084.36	1.107	2151.62	1.072
0.5	y-y	0.68	0.131	0.068	2543.269	2530.677	2047.61	1.107	2112.49	1.073

0.5	y-y	0.667	0.137	0.071	2513.867	2501.837	2009.94	1.107	2072.41	1.073
0.5	y-y	0.654	0.144	0.074	2483.377	2471.601	1971.21	1.106	2031.27	1.074
0.5	y-y	0.641	0.151	0.078	2451.979	2440.49	1931.93	1.106	1989.59	1.074
0.5	y-y	0.627	0.158	0.081	2419.526	2408.395	1891.98	1.105	1947.24	1.074
0.5	y-y	0.613	0.166	0.085	2385.827	2374.71	1850.91	1.104	1903.76	1.073
0.5	y-y	0.598	0.174	0.09	2350.539	2339.382	1808.56	1.103	1858.99	1.073
0.5	y-y	0.583	0.183	0.094	2313.499	2302.302	1764.84	1.101	1812.83	1.072
0.5	y-y	0.567	0.192	0.099	2274.818	2263.309	1719.82	1.100	1765.36	1.071
0.5	y-y	0.551	0.202	0.104	2234.139	2222.161	1673.25	1.098	1716.32	1.071
0.5	y-y	0.535	0.213	0.11	2190.864	2178.77	1624.84	1.097	1665.43	1.070
0.5	y-y	0.517	0.225	0.116	2144.684	2133.315	1574.67	1.095	1612.76	1.069
0.5	y-y	0.5	0.238	0.123	2095.55	2085.355	1522.61	1.094	1558.20	1.069
0.5	y-y	0.481	0.252	0.13	2044.083	2035.157	1469.27	1.092	1502.38	1.068
0.5	y-y	0.463	0.267	0.138	1989.833	1982.198	1414.28	1.091	1444.93	1.068
0.5	y-y	0.443	0.285	0.147	1932.129	1926.065	1357.24	1.089	1385.45	1.067
0.5	y-y	0.424	0.304	0.156	1870.84	1866.305	1298.08	1.088	1323.86	1.067
0.5	y-y	0.403	0.325	0.167	1805.944	1802.882	1236.97	1.087	1260.36	1.066
0.5	y-y	0.382	0.35	0.18	1737.217	1735.662	1173.97	1.085	1195.01	1.066
0.5	y-y	0.361	0.377	0.194	1664.119	1664.024	1108.77	1.084	1127.52	1.066
0.5	y-y	0.338	0.409	0.211	1586.174	1587.382	1041.18	1.084	1057.70	1.067
0.5	y-y	0.315	0.447	0.23	1503.096	1505.602	971.339	1.082	985.699	1.066
0.5	y-y	0.291	0.492	0.253	1414.359	1418.252	899.156	1.080	911.447	1.066
0.5	y-y	0.267	0.544	0.28	1323.487	1328.115	827.435	1.077	837.833	1.064
0.5	y-y	0.243	0.606	0.312	1228.648	1233.753	755.022	1.074	763.67	1.062
0.5	y-y	0.219	0.681	0.351	1129.233	1134.853	681.777	1.070	688.821	1.059
0.5	y-y	0.195	0.772	0.398	1028.674	1033.87	609.982	1.063	615.614	1.054
0.5	y-y	0.171	0.885	0.457	923.934	930.702	538.557	1.056	542.943	1.048
0.5	y-y	0.147	1.031	0.534	807.184	823.662	464.47	1.054	467.728	1.047
0.5	y-y	0.122	1.239	0.642	678.47	699.252	384.02	1.064	386.245	1.058
0.5	y-y	0.1	1.519	0.789	557.435	570.524	308.002	1.079	309.431	1.074
0.5	y-y	0.076	1.981	1.032	391.335	439.302	220.667	1.151	221.4	1.147
0.5	y-y	0.053	2.834	1.476	224.576	232.442	118.273	1.495	118.483	1.492
0.75	y-y	0.657	0.172	0.057	2358.214	2637.544	1987.21	1.102	2048.26	1.069
0.75	y-y	0.646	0.179	0.059	2330.228	2617.392	1956.06	1.102	2015.19	1.070
0.75	y-y	0.636	0.185	0.061	2301.511	2596.565	1924.37	1.101	1981.57	1.069
0.75	y-y	0.625	0.193	0.063	2272.031	2575.066	1892.14	1.100	1947.40	1.069
0.75	y-y	0.613	0.2	0.066	2241.628	2552.775	1859.21	1.099	1912.54	1.069
0.75	y-y	0.602	0.208	0.068	2210.042	2529.598	1825.39	1.098	1876.77	1.068
0.75	y-y	0.59	0.217	0.071	2177.066	2505.338	1790.48	1.098	1839.89	1.068
0.75	y-y	0.577	0.225	0.073	2142.619	2479.948	1754.44	1.097	1801.86	1.068
0.75	y-y	0.565	0.235	0.076	2106.866	2453.686	1717.57	1.096	1762.99	1.068
0.75	y-y	0.552	0.245	0.079	2070.022	2426.537	1680.04	1.095	1723.46	1.068
0.75	y-y	0.539	0.255	0.083	2032.131	2398.41	1641.86	1.094	1683.31	1.067
0.75	y-y	0.526	0.267	0.086	1992.801	2369.004	1602.68	1.093	1642.16	1.067
0.75	y-y	0.512	0.279	0.09	1952.079	2337.998	1562.45	1.092	1599.95	1.067
0.75	y-y	0.498	0.291	0.094	1909.985	2305.338	1521.21	1.091	1556.73	1.066
0.75	y-y	0.484	0.305	0.098	1866.504	2270.901	1478.97	1.090	1512.53	1.066
0.75	y-y	0.469	0.32	0.103	1821.701	2234.593	1435.80	1.089	1467.40	1.066
0.75	y-y	0.454	0.336	0.108	1775.405	2196.013	1391.49	1.089	1421.15	1.066
0.75	y-y	0.439	0.353	0.113	1727.396	2154.917	1345.91	1.088	1373.64	1.066
0.75	y-y	0.423	0.372	0.119	1677.783	2111.399	1299.25	1.086	1325.07	1.065
0.75	y-y	0.407	0.392	0.125	1626.346	2065.334	1251.43	1.085	1275.36	1.065
0.75	y-y	0.391	0.415	0.133	1573.234	2016.432	1202.52	1.083	1224.60	1.064
0.75	y-y	0.374	0.44	0.141	1518.417	1964.228	1152.45	1.082	1172.72	1.063
0.75	y-y	0.357	0.467	0.149	1461.475	1908.375	1100.98	1.081	1119.47	1.063
0.75	y-y	0.339	0.498	0.159	1402.382	1848.293	1048.06	1.079	1064.80	1.062
0.75	y-y	0.321	0.533	0.171	1341.038	1783.833	993.73	1.078	1008.76	1.062

0.75	y-y	0.303	0.573	0.184	1277.238	1714.869	937.997	1.077	951.381	1.062
0.75	y-y	0.285	0.618	0.199	1211.26	1641.532	881.212	1.077	893.015	1.062
0.75	y-y	0.266	0.668	0.215	1145.738	1567.862	826.01	1.074	836.372	1.061
0.75	y-y	0.247	0.726	0.234	1077.259	1488.61	769.185	1.072	778.163	1.060
0.75	y-y	0.228	0.795	0.257	1005.848	1403.274	710.817	1.070	718.477	1.058
0.75	y-y	0.21	0.868	0.282	938.058	1323.097	657.09	1.066	663.63	1.055
0.75	y-y	0.192	0.957	0.311	863.428	1236.832	599.981	1.064	605.429	1.055
0.75	y-y	0.173	1.068	0.348	781.331	1143.093	539.167	1.068	543.562	1.059
0.75	y-y	0.154	1.198	0.391	701.082	1049.013	480.846	1.070	484.339	1.062
0.75	y-y	0.136	1.36	0.445	618.677	951.144	422.343	1.073	425.035	1.066
0.75	y-y	0.117	1.581	0.518	538.24	844.183	364.629	1.069	366.634	1.063
0.75	y-y	0.098	1.88	0.617	425.588	726.897	291.934	1.121	293.218	1.116
0.75	y-y	0.08	2.293	0.754	489.16	595.413	292.068	0.915	293.354	0.911
0.75	y-y	0.043	4.257	1.406	219.999	148.964	91.253	1.562	91.378	1.560
0.75	y-y	0.025	7.176	2.377	100.986	139.125	59.559	1.408	59.612	1.406
1	y-y	0.59	0.238	0.056	2095.105	2644.71	1800.36	1.092	1850.32	1.062
1	y-y	0.58	0.246	0.058	2065.567	2627.69	1770.79	1.091	1819.10	1.062
1	y-y	0.57	0.254	0.059	2035.304	2610.192	1740.74	1.091	1787.40	1.062
1	y-y	0.559	0.263	0.061	2004.362	2591.986	1710.15	1.090	1755.17	1.062
1	y-y	0.549	0.272	0.063	1972.745	2573.145	1679.07	1.090	1722.45	1.062
1	y-y	0.538	0.282	0.065	1940.427	2553.535	1647.46	1.089	1689.20	1.062
1	y-y	0.528	0.292	0.068	1907.405	2533.077	1615.30	1.089	1655.41	1.062
1	y-y	0.517	0.303	0.07	1873.586	2511.677	1582.52	1.088	1620.99	1.063
1	y-y	0.505	0.314	0.072	1839.017	2489.276	1549.14	1.088	1585.99	1.063
1	y-y	0.494	0.326	0.075	1803.766	2465.825	1515.22	1.087	1550.46	1.062
1	y-y	0.482	0.339	0.078	1767.812	2441.277	1480.78	1.086	1514.41	1.062
1	y-y	0.47	0.352	0.081	1731.128	2415.66	1445.81	1.085	1477.86	1.061
1	y-y	0.458	0.366	0.084	1693.637	2388.764	1410.24	1.084	1440.71	1.061
1	y-y	0.446	0.381	0.087	1655.233	2360.582	1374.01	1.082	1402.92	1.060
1	y-y	0.434	0.397	0.091	1616.021	2330.637	1337.08	1.081	1364.44	1.060
1	y-y	0.421	0.414	0.095	1575.999	2298.824	1299.46	1.080	1325.29	1.059
1	y-y	0.408	0.432	0.099	1535.075	2264.811	1261.03	1.079	1285.34	1.059
1	y-y	0.395	0.452	0.103	1493.193	2228.505	1221.8	1.078	1244.60	1.058
1	y-y	0.382	0.473	0.108	1450.308	2189.686	1181.72	1.077	1203.04	1.058
1	y-y	0.368	0.496	0.114	1406.272	2148.266	1140.74	1.076	1160.60	1.057
1	y-y	0.354	0.522	0.12	1360.912	2104.29	1098.84	1.075	1117.25	1.057
1	y-y	0.34	0.549	0.127	1314.278	2057.449	1056.03	1.074	1073.02	1.057
1	y-y	0.326	0.58	0.134	1266.217	2007.505	1012.23	1.073	1027.84	1.057
1	y-y	0.311	0.614	0.142	1216.742	1954.033	967.44	1.073	981.684	1.057
1	y-y	0.296	0.652	0.151	1165.533	1896.695	921.458	1.073	934.371	1.058
1	y-y	0.282	0.693	0.161	1114.908	1838.533	876.521	1.072	888.198	1.058
1	y-y	0.267	0.738	0.172	1063.801	1777.472	831.498	1.070	841.998	1.057
1	y-y	0.252	0.79	0.184	1011.036	1711.942	785.395	1.068	794.757	1.055
1	y-y	0.236	0.847	0.198	957.108	1643.825	739.001	1.066	747.284	1.055
1	y-y	0.222	0.91	0.213	902.436	1576.2	693.204	1.065	700.487	1.054
1	y-y	0.207	0.98	0.23	845.234	1506.713	646.484	1.066	652.814	1.055
1	y-y	0.192	1.063	0.249	784.39	1432.289	597.698	1.068	603.104	1.059
1	y-y	0.176	1.157	0.271	724.43	1355.5	550.007	1.070	554.582	1.061
1	y-y	0.161	1.27	0.298	662.539	1273.278	501.317	1.073	505.115	1.065
1	y-y	0.146	1.401	0.328	600.742	1190.364	453.573	1.077	456.68	1.069
1	y-y	0.132	1.556	0.365	545.876	1103.791	410.187	1.072	412.726	1.066
1	y-y	0.117	1.752	0.411	480.446	1010.086	360.823	1.082	362.787	1.076
1	y-y	0.102	2.012	0.472	385.233	908.225	294.385	1.154	295.691	1.149
1	y-y	0.087	2.338	0.549	522.85	805.222	350.322	0.833	352.172	0.828
1	y-y	0.073	2.785	0.654	357.078	686.494	252.703	0.965	253.664	0.962
1	y-y	0.044	4.622	1.09	67.717	459.039	60.075	2.425	60.129	2.423
1	y-y	0.029	6.87	1.627	46.24	235.767	39.111	2.488	39.134	2.487

Tabla B.21 Valores de r_1 de la sección 23 (60 cm x120 cm con ρ = 0.03 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.897	0.06	0.004	2773.354	3075.858	2696.039	1.057	2815.506	1.012
0.25	x-x	0.885	0.067	0.004	2736.85	3067.708	2655.425	1.059	2771.243	1.014
0.25	x-x	0.872	0.075	0.005	2696.961	3059.206	2611.663	1.061	2723.615	1.017
0.25	x-x	0.858	0.084	0.005	2653.548	3050.358	2564.68	1.062	2672.556	1.020
0.25	x-x	0.842	0.093	0.006	2606.72	3041.164	2514.628	1.064	2618.25	1.022
0.25	x-x	0.826	0.104	0.006	2555.94	3031.742	2461.134	1.066	2560.307	1.024
0.25	x-x	0.808	0.116	0.007	2500.898	3023.239	2404.683	1.067	2499.271	1.027
0.25	x-x	0.788	0.128	0.008	2441.449	3016.044	2345.322	1.068	2435.211	1.029
0.25	x-x	0.768	0.142	0.008	2379.253	3009.923	2284.346	1.069	2369.536	1.030
0.25	x-x	0.748	0.156	0.008	2314.783	3004.996	2222.158	1.069	2302.692	1.031
0.25	x-x	0.726	0.171	0.009	2249.046	3000.192	2159.022	1.069	2234.966	1.033
0.25	x-x	0.705	0.186	0.009	2182.51	2995.324	2095.252	1.069	2166.702	1.033
0.25	x-x	0.683	0.203	0.01	2115.139	2990.044	2030.65	1.068	2097.691	1.034
0.25	x-x	0.66	0.219	0.01	2046.649	2984.435	1965.01	1.068	2027.721	1.035
0.25	x-x	0.638	0.237	0.011	1977.307	2978.419	1898.561	1.067	1957.039	1.035
0.25	x-x	0.615	0.256	0.012	1907.199	2971.592	1831.244	1.066	1885.589	1.036
0.25	x-x	0.591	0.276	0.012	1835.464	2964.228	1762.409	1.065	1812.69	1.036
0.25	x-x	0.567	0.297	0.013	1761.951	2955.884	1691.794	1.064	1738.072	1.036
0.25	x-x	0.542	0.321	0.014	1687.626	2946.33	1620.269	1.063	1662.669	1.036
0.25	x-x	0.517	0.346	0.015	1610.938	2935.499	1546.452	1.062	1585.03	1.036
0.25	x-x	0.491	0.375	0.017	1531.326	2922.262	1469.6	1.061	1504.395	1.036
0.25	x-x	0.464	0.406	0.018	1449.627	2907.102	1390.733	1.059	1421.854	1.036
0.25	x-x	0.436	0.443	0.02	1365.705	2889.218	1309.647	1.057	1337.209	1.035
0.25	x-x	0.407	0.485	0.022	1279.227	2867.973	1226.049	1.054	1250.172	1.033
0.25	x-x	0.378	0.531	0.024	1187.778	2851.195	1139.126	1.054	1159.922	1.035
0.25	x-x	0.35	0.579	0.025	1097.417	2836.418	1053.724	1.056	1071.493	1.039
0.25	x-x	0.325	0.626	0.027	1018.503	2816.06	978.314	1.054	993.613	1.038
0.25	x-x	0.299	0.678	0.029	938.739	2790.419	901.83	1.054	914.815	1.039
0.25	x-x	0.273	0.74	0.032	856.884	2761.182	823.445	1.053	834.256	1.039
0.25	x-x	0.248	0.806	0.036	779.93	2726.762	749.552	1.050	758.5	1.038
0.25	x-x	0.222	0.889	0.04	698.755	2682.964	671.562	1.050	678.736	1.039
0.25	x-x	0.197	0.985	0.045	620.673	2632.528	596.571	1.048	602.226	1.038
0.25	x-x	0.171	1.108	0.053	540.013	2563.223	518.896	1.048	523.169	1.039
0.25	x-x	0.145	1.276	0.063	457.479	2470.745	439.395	1.046	442.455	1.039
0.25	x-x	0.119	1.496	0.076	378.159	2348.106	362.911	1.045	364.996	1.039
0.25	x-x	0.092	1.859	0.1	292.918	2149.38	280.552	1.046	281.796	1.041
0.25	x-x	0.066	2.481	0.143	210.729	1834.755	200.977	1.044	201.615	1.041
0.25	x-x	0.039	3.96	0.246	125.535	1307.234	118.819	1.048	119.042	1.046
0.5	x-x	0.892	0.072	0.009	2714.069	3001.381	2584.926	1.096	2694.548	1.052
0.5	x-x	0.879	0.079	0.01	2677.275	2992.181	2544.877	1.098	2651.06	1.054
0.5	x-x	0.866	0.087	0.011	2637.729	2982.671	2502.429	1.099	2605.027	1.056
0.5	x-x	0.851	0.096	0.012	2595.532	2972.778	2457.661	1.100	2556.549	1.058
0.5	x-x	0.836	0.105	0.013	2550.62	2962.571	2410.603	1.101	2505.667	1.059
0.5	x-x	0.819	0.115	0.014	2502.369	2951.965	2360.681	1.102	2451.774	1.061
0.5	x-x	0.801	0.126	0.015	2450.564	2941.182	2307.889	1.103	2394.878	1.063
0.5	x-x	0.783	0.138	0.016	2396.026	2930.402	2253.087	1.104	2335.919	1.064
0.5	x-x	0.763	0.151	0.017	2338.759	2919.935	2196.458	1.104	2275.107	1.066
0.5	x-x	0.743	0.164	0.018	2278.724	2909.508	2137.8	1.104	2212.232	1.067
0.5	x-x	0.722	0.178	0.019	2216.475	2899.155	2077.608	1.104	2147.84	1.068
0.5	x-x	0.701	0.193	0.02	2152.94	2888.96	2016.722	1.104	2082.832	1.069
0.5	x-x	0.679	0.209	0.021	2088.165	2878.207	1954.822	1.103	2016.873	1.069
0.5	x-x	0.656	0.226	0.022	2022.104	2866.2	1891.588	1.102	1949.631	1.069
0.5	x-x	0.633	0.243	0.023	1955.523	2852.963	1827.776	1.101	1881.913	1.069

0.5	x-x	0.61	0.261	0.025	1888.616	2838.283	1763.539	1.100	1813.884	1.069
0.5	x-x	0.587	0.28	0.026	1820.359	2821.901	1697.963	1.098	1744.585	1.069
0.5	x-x	0.563	0.301	0.028	1750.614	2803.45	1630.898	1.096	1673.863	1.068
0.5	x-x	0.538	0.323	0.03	1679.92	2782.907	1562.913	1.094	1602.327	1.067
0.5	x-x	0.513	0.347	0.032	1607.46	2759.809	1493.27	1.091	1529.21	1.066
0.5	x-x	0.487	0.374	0.035	1532.544	2733.558	1421.341	1.089	1453.864	1.065
0.5	x-x	0.461	0.404	0.038	1455.677	2703.212	1347.484	1.086	1376.68	1.063
0.5	x-x	0.433	0.438	0.042	1376.456	2667.439	1271.257	1.083	1297.212	1.061
0.5	x-x	0.405	0.476	0.046	1296.529	2627.512	1194.591	1.077	1217.481	1.057
0.5	x-x	0.377	0.518	0.05	1212.622	2587.424	1115.608	1.073	1135.546	1.054
0.5	x-x	0.349	0.565	0.055	1121.909	2544.377	1031.364	1.074	1048.382	1.056
0.5	x-x	0.321	0.615	0.059	1035.764	2501.928	952.027	1.071	966.509	1.055
0.5	x-x	0.294	0.671	0.065	948.619	2451.443	871.6	1.071	883.723	1.056
0.5	x-x	0.267	0.732	0.072	866.266	2391.02	795.014	1.068	805.088	1.054
0.5	x-x	0.241	0.801	0.08	785.767	2317.696	719.77	1.064	728.017	1.052
0.5	x-x	0.214	0.888	0.091	699.384	2225.224	639.202	1.064	645.698	1.053
0.5	x-x	0.188	0.988	0.104	618.154	2119.017	563.424	1.060	568.464	1.051
0.5	x-x	0.161	1.123	0.122	531.248	1978.569	482.391	1.061	486.082	1.053
0.5	x-x	0.135	1.304	0.147	445.643	1805.511	402.733	1.061	405.302	1.054
0.5	x-x	0.108	1.565	0.185	357.977	1583.538	321.522	1.066	323.158	1.061
0.5	x-x	0.08	2.021	0.251	266.025	1289.362	236.975	1.072	237.862	1.068
0.5	x-x	0.054	2.855	0.375	178.653	900.353	156.413	1.092	156.799	1.090
0.5	x-x	0.026	5.536	0.773	127.477	380.991	98.479	0.842	98.632	0.841
0.75	x-x	0.893	0.075	0.014	2696.486	2952.679	2533.208	1.120	2638.399	1.075
0.75	x-x	0.881	0.082	0.015	2662.571	2940.769	2494.688	1.122	2596.639	1.078
0.75	x-x	0.868	0.089	0.016	2626.669	2927.797	2454.037	1.123	2552.628	1.080
0.75	x-x	0.854	0.097	0.017	2588.909	2914.039	2411.631	1.124	2506.777	1.082
0.75	x-x	0.839	0.105	0.019	2548.929	2899.576	2367.27	1.125	2458.882	1.083
0.75	x-x	0.823	0.114	0.02	2506.484	2884.561	2320.906	1.126	2408.898	1.085
0.75	x-x	0.806	0.124	0.022	2461.135	2869.002	2272.222	1.127	2356.495	1.087
0.75	x-x	0.789	0.134	0.023	2413.43	2853.046	2221.835	1.128	2302.344	1.089
0.75	x-x	0.771	0.145	0.025	2363.553	2836.721	2169.954	1.128	2246.683	1.090
0.75	x-x	0.752	0.157	0.027	2310.748	2820.01	2115.969	1.129	2188.863	1.091
0.75	x-x	0.732	0.169	0.028	2255.632	2803.153	2060.565	1.129	2129.63	1.092
0.75	x-x	0.712	0.183	0.03	2198.602	2785.797	2003.904	1.128	2069.162	1.093
0.75	x-x	0.69	0.197	0.032	2139.62	2767.825	1945.922	1.127	2007.401	1.093
0.75	x-x	0.669	0.211	0.033	2078.712	2749.634	1886.865	1.126	1944.614	1.092
0.75	x-x	0.646	0.227	0.035	2015.848	2730.653	1826.452	1.124	1880.509	1.092
0.75	x-x	0.623	0.244	0.037	1952.195	2710.307	1765.432	1.122	1815.887	1.090
0.75	x-x	0.6	0.261	0.04	1887.886	2687.931	1703.71	1.119	1750.652	1.089
0.75	x-x	0.576	0.28	0.042	1822.032	2663.159	1640.529	1.116	1684.009	1.087
0.75	x-x	0.552	0.299	0.045	1755.047	2635.858	1576.302	1.113	1616.403	1.085
0.75	x-x	0.527	0.321	0.048	1687.606	2605.379	1511.477	1.109	1548.309	1.082
0.75	x-x	0.502	0.344	0.052	1618.515	2571.614	1445.214	1.104	1478.851	1.079
0.75	x-x	0.476	0.369	0.056	1546.531	2533.544	1376.386	1.100	1406.862	1.076
0.75	x-x	0.45	0.397	0.06	1472.665	2490.281	1305.773	1.095	1333.171	1.072
0.75	x-x	0.423	0.429	0.066	1396.718	2440.631	1233.164	1.090	1257.571	1.069
0.75	x-x	0.396	0.464	0.072	1320.728	2386.19	1160.814	1.082	1182.416	1.063
0.75	x-x	0.368	0.504	0.079	1241.207	2326.18	1086.03	1.075	1104.916	1.057
0.75	x-x	0.34	0.548	0.087	1154.958	2260.734	1006.65	1.072	1022.855	1.055
0.75	x-x	0.312	0.596	0.095	1068.547	2192.931	928.429	1.069	942.196	1.053
0.75	x-x	0.284	0.652	0.104	978.336	2114.786	847.291	1.067	858.742	1.053
0.75	x-x	0.258	0.714	0.116	890.11	2029.398	768.379	1.065	777.785	1.052
0.75	x-x	0.231	0.787	0.129	801.342	1930.32	689.093	1.063	696.648	1.051
0.75	x-x	0.203	0.876	0.146	710.498	1814.886	608.387	1.063	614.269	1.053
0.75	x-x	0.178	0.979	0.167	624.813	1681.798	531.827	1.061	536.316	1.053
0.75	x-x	0.151	1.123	0.197	531.226	1519.27	449.261	1.066	452.46	1.059

0.75	x-x	0.125	1.315	0.238	441.386	1337.288	370.562	1.068	372.736	1.062
0.75	x-x	0.098	1.603	0.301	347.952	1122.008	289.817	1.078	291.145	1.073
0.75	x-x	0.071	2.109	0.412	253.41	810.229	205.524	1.105	206.191	1.102
0.75	x-x	0.046	3.129	0.639	159.981	480.707	124.747	1.165	124.992	1.163
0.75	x-x	0.019	7.047	1.507	169.629	173.706	88.204	0.691	88.327	0.690
1	x-x	0.889	0.077	0.019	2685.205	2900.241	2484.855	1.137	2585.989	1.092
1	x-x	0.877	0.084	0.02	2654.299	2884.844	2447.296	1.139	2545.335	1.095
1	x-x	0.864	0.09	0.022	2622.053	2868.509	2408.353	1.140	2503.236	1.097
1	x-x	0.851	0.097	0.024	2588.198	2851.305	2367.908	1.141	2459.57	1.099
1	x-x	0.836	0.105	0.025	2552.729	2833.241	2326.024	1.142	2414.412	1.100
1	x-x	0.821	0.113	0.027	2515.355	2814.469	2282.622	1.143	2367.681	1.102
1	x-x	0.805	0.121	0.029	2475.599	2795.032	2237.397	1.143	2319.059	1.103
1	x-x	0.789	0.13	0.031	2433.795	2775.084	2190.781	1.144	2269.017	1.104
1	x-x	0.771	0.139	0.033	2390.189	2754.552	2142.979	1.144	2217.779	1.105
1	x-x	0.753	0.15	0.035	2344.368	2733.456	2093.718	1.143	2165.061	1.106
1	x-x	0.735	0.16	0.037	2296.138	2711.751	2042.871	1.143	2110.735	1.106
1	x-x	0.716	0.172	0.039	2245.928	2688.972	1990.575	1.142	2054.954	1.106
1	x-x	0.695	0.184	0.042	2193.942	2665.484	1937.253	1.140	1998.177	1.106
1	x-x	0.675	0.197	0.044	2139.867	2641.296	1882.712	1.138	1940.203	1.105
1	x-x	0.653	0.21	0.047	2083.712	2616.319	1826.962	1.136	1881.049	1.103
1	x-x	0.631	0.225	0.05	2025.259	2590.501	1769.857	1.133	1820.569	1.102
1	x-x	0.609	0.24	0.052	1964.917	2563.504	1711.607	1.130	1758.992	1.099
1	x-x	0.586	0.257	0.056	1903.522	2534.817	1652.686	1.126	1696.822	1.096
1	x-x	0.562	0.274	0.059	1840.348	2503.779	1592.358	1.121	1633.29	1.093
1	x-x	0.538	0.293	0.063	1775.105	2469.847	1530.32	1.117	1568.088	1.090
1	x-x	0.513	0.314	0.067	1708.878	2432.002	1467.156	1.112	1501.834	1.086
1	x-x	0.488	0.336	0.072	1641.622	2389.765	1402.853	1.106	1434.526	1.082
1	x-x	0.463	0.36	0.077	1572.141	2342.342	1336.494	1.100	1365.211	1.077
1	x-x	0.437	0.386	0.083	1500.097	2288.085	1267.591	1.095	1293.394	1.073
1	x-x	0.41	0.416	0.091	1425.543	2226.797	1196.472	1.089	1219.435	1.069
1	x-x	0.384	0.449	0.099	1352.056	2161.862	1126.879	1.081	1147.226	1.062
1	x-x	0.357	0.486	0.108	1276.958	2089.273	1055.995	1.073	1073.842	1.055
1	x-x	0.33	0.527	0.118	1196.346	2012.348	982.281	1.066	997.705	1.050
1	x-x	0.303	0.572	0.129	1109.264	1929.778	905.042	1.063	918.12	1.048
1	x-x	0.276	0.625	0.143	1021.165	1838.02	827.427	1.059	838.345	1.045
1	x-x	0.249	0.684	0.158	929.672	1741.127	748.942	1.058	757.876	1.046
1	x-x	0.223	0.755	0.176	838.955	1631.826	671.142	1.055	678.307	1.044
1	x-x	0.197	0.841	0.199	743.178	1511.284	590.846	1.056	596.392	1.047
1	x-x	0.171	0.947	0.228	649.542	1379.139	512.856	1.057	517.03	1.048
1	x-x	0.144	1.091	0.268	550.063	1229.702	431.703	1.062	434.656	1.055
1	x-x	0.119	1.278	0.321	456.443	1056.973	354.336	1.069	356.323	1.063
1	x-x	0.094	1.568	0.405	357.367	827.808	270.894	1.099	272.054	1.094
1	x-x	0.069	2.051	0.544	261.616	584.797	191.658	1.140	192.238	1.136
1	x-x	0.045	3.007	0.823	167.806	353.648	118.034	1.206	118.253	1.203
1	x-x	0.02	6.387	1.798	149.527	148.319	76.247	0.835	76.339	0.834
0.25	y-y	0.899	0.032	0.038	2921.895	2703.093	2516.242	1.136	2620	1.091
0.25	y-y	0.888	0.035	0.041	2907.442	2673.706	2480.248	1.138	2580.999	1.093
0.25	y-y	0.876	0.038	0.044	2892.136	2642.62	2442.567	1.139	2540.22	1.096
0.25	y-y	0.863	0.041	0.048	2875.991	2610.151	2403.536	1.141	2498.032	1.098
0.25	y-y	0.85	0.044	0.051	2858.964	2576.246	2363.136	1.143	2454.422	1.100
0.25	y-y	0.836	0.047	0.055	2841.004	2540.668	2321.191	1.144	2409.205	1.102
0.25	y-y	0.821	0.051	0.059	2822.279	2503.326	2277.801	1.145	2362.495	1.104
0.25	y-y	0.805	0.055	0.063	2802.832	2464.188	2233.025	1.145	2314.362	1.105
0.25	y-y	0.789	0.058	0.068	2782.87	2423.203	2187.006	1.146	2264.967	1.106
0.25	y-y	0.771	0.062	0.073	2762.435	2380.21	2139.686	1.145	2214.253	1.107
0.25	y-y	0.753	0.066	0.078	2741.691	2334.989	2091.027	1.145	2162.184	1.107
0.25	y-y	0.735	0.071	0.084	2720.12	2287.167	2040.48	1.144	2108.183	1.107

0.25	y-y	0.716	0.075	0.089	2697.857	2237.455	1988.749	1.143	2053.008	1.107
0.25	y-y	0.695	0.079	0.096	2674.884	2186.286	1936.211	1.141	1997.068	1.106
0.25	y-y	0.675	0.084	0.102	2651.268	2133.211	1882.592	1.139	1940.075	1.105
0.25	y-y	0.653	0.089	0.109	2626.936	2077.91	1827.645	1.136	1881.774	1.103
0.25	y-y	0.631	0.094	0.117	2601.71	2020.358	1771.316	1.132	1822.113	1.101
0.25	y-y	0.609	0.1	0.125	2575.166	1961.09	1713.876	1.129	1761.388	1.098
0.25	y-y	0.586	0.106	0.133	2546.793	1900.549	1655.513	1.124	1699.802	1.095
0.25	y-y	0.562	0.112	0.142	2515.864	1838.491	1595.838	1.119	1636.952	1.091
0.25	y-y	0.538	0.12	0.152	2481.77	1774.341	1534.318	1.114	1572.285	1.087
0.25	y-y	0.513	0.128	0.163	2443.876	1708.853	1471.45	1.109	1506.335	1.083
0.25	y-y	0.488	0.137	0.174	2401.993	1641.767	1407.165	1.103	1439.035	1.079
0.25	y-y	0.463	0.147	0.187	2355.363	1572.655	1341.097	1.097	1370.014	1.074
0.25	y-y	0.437	0.159	0.201	2302.109	1500.92	1272.475	1.091	1298.479	1.069
0.25	y-y	0.41	0.173	0.217	2241.368	1426.886	1201.619	1.085	1224.782	1.064
0.25	y-y	0.383	0.188	0.235	2173.826	1351.331	1129.615	1.078	1150.061	1.059
0.25	y-y	0.356	0.206	0.254	2101.902	1275.809	1058.421	1.069	1076.351	1.051
0.25	y-y	0.329	0.225	0.276	2024.761	1201.69	988.851	1.058	1004.484	1.041
0.25	y-y	0.302	0.246	0.301	1941.708	1122.679	916.619	1.048	930.036	1.033
0.25	y-y	0.276	0.271	0.329	1853.286	1031.052	837.035	1.046	848.209	1.032
0.25	y-y	0.249	0.298	0.361	1759.932	936.246	756.7	1.047	765.821	1.034
0.25	y-y	0.223	0.331	0.399	1656.035	841.352	676.754	1.047	684.039	1.036
0.25	y-y	0.197	0.372	0.444	1538.121	742.661	594.572	1.053	600.189	1.043
0.25	y-y	0.172	0.424	0.5	1408.256	646.235	514.734	1.059	518.938	1.050
0.25	y-y	0.147	0.488	0.569	1273.057	555.046	440.065	1.062	443.134	1.055
0.25	y-y	0.123	0.577	0.66	1100.03	462.154	362.572	1.077	364.653	1.071
0.25	y-y	0.099	0.71	0.788	894.327	372.304	286.585	1.100	287.884	1.095
0.25	y-y	0.076	0.92	0.984	671.51	286.332	214.277	1.129	215.002	1.125
0.25	y-y	0.054	1.287	1.333	452.978	199.521	144.826	1.177	145.157	1.174
0.25	y-y	0.031	2.2	2.207	241.541	132.282	87.836	1.113	87.957	1.112
0.5	y-y	0.85	0.077	0.04	2689.748	2680.736	2325.356	1.161	2413.692	1.118
0.5	y-y	0.838	0.081	0.042	2668.243	2659.131	2293.215	1.161	2379.081	1.120
0.5	y-y	0.827	0.085	0.045	2646.174	2636.935	2260.602	1.162	2343.998	1.121
0.5	y-y	0.815	0.09	0.047	2623.492	2614.104	2227.473	1.162	2308.399	1.121
0.5	y-y	0.802	0.095	0.05	2600.075	2590.541	2193.695	1.162	2272.143	1.122
0.5	y-y	0.789	0.1	0.052	2575.883	2566.252	2159.279	1.161	2235.241	1.122
0.5	y-y	0.776	0.105	0.055	2550.951	2541.232	2124.277	1.160	2197.755	1.122
0.5	y-y	0.762	0.11	0.058	2524.985	2515.182	2088.313	1.159	2159.283	1.121
0.5	y-y	0.748	0.116	0.061	2498.103	2488.332	2051.672	1.158	2120.132	1.121
0.5	y-y	0.733	0.122	0.064	2470.155	2460.565	2014.215	1.157	2080.158	1.120
0.5	y-y	0.718	0.128	0.067	2441.158	2431.802	1975.944	1.155	2039.366	1.119
0.5	y-y	0.703	0.135	0.07	2411.035	2401.85	1936.734	1.153	1997.624	1.118
0.5	y-y	0.687	0.142	0.074	2379.782	2370.853	1896.729	1.150	1955.092	1.116
0.5	y-y	0.67	0.149	0.078	2347.216	2338.551	1855.702	1.147	1911.53	1.114
0.5	y-y	0.653	0.156	0.081	2313.166	2304.744	1813.488	1.145	1866.769	1.112
0.5	y-y	0.636	0.164	0.086	2277.652	2269.482	1770.207	1.141	1820.94	1.110
0.5	y-y	0.618	0.173	0.09	2240.674	2232.725	1725.907	1.138	1774.098	1.107
0.5	y-y	0.6	0.182	0.095	2202.175	2194.56	1680.682	1.134	1726.346	1.104
0.5	y-y	0.581	0.191	0.099	2162.023	2155.078	1634.58	1.130	1677.742	1.101
0.5	y-y	0.562	0.201	0.105	2119.996	2113.614	1587.175	1.126	1627.839	1.098
0.5	y-y	0.543	0.212	0.11	2075.851	2069.96	1538.321	1.121	1576.49	1.094
0.5	y-y	0.523	0.224	0.116	2029.531	2023.872	1487.973	1.116	1523.655	1.090
0.5	y-y	0.502	0.236	0.123	1980.991	1975.54	1436.335	1.112	1469.556	1.086
0.5	y-y	0.482	0.25	0.13	1930.204	1924.826	1383.441	1.106	1414.234	1.082
0.5	y-y	0.461	0.264	0.138	1876.624	1871.401	1328.977	1.101	1357.368	1.078
0.5	y-y	0.439	0.28	0.146	1819.127	1814.69	1272.264	1.095	1298.26	1.074
0.5	y-y	0.416	0.298	0.155	1758.235	1754.492	1213.673	1.090	1237.307	1.069
0.5	y-y	0.394	0.318	0.166	1694.217	1690.922	1153.583	1.085	1174.914	1.065

0.5	y-y	0.372	0.34	0.177	1630.446	1626.773	1094.965	1.079	1114.166	1.060
0.5	y-y	0.349	0.363	0.19	1562.755	1559.166	1034.67	1.072	1051.797	1.055
0.5	y-y	0.327	0.389	0.203	1492.922	1489.55	974.28	1.065	989.452	1.049
0.5	y-y	0.304	0.418	0.219	1421.127	1418.161	914.049	1.058	927.39	1.042
0.5	y-y	0.282	0.45	0.236	1350.325	1346.352	855.77	1.048	867.453	1.033
0.5	y-y	0.261	0.484	0.255	1280.05	1275.234	799.605	1.036	809.796	1.023
0.5	y-y	0.239	0.525	0.276	1199.565	1201.225	740.002	1.026	748.723	1.014
0.5	y-y	0.218	0.572	0.301	1110.528	1121.772	676.981	1.022	684.271	1.012
0.5	y-y	0.197	0.624	0.33	1022.303	1028.918	611.506	1.025	617.449	1.015
0.5	y-y	0.177	0.687	0.364	925.682	926.924	542.197	1.035	546.863	1.026
0.5	y-y	0.157	0.763	0.405	829.471	826.9	476.156	1.046	479.752	1.038
0.5	y-y	0.137	0.861	0.458	724.067	717.073	406.36	1.068	408.976	1.061
0.5	y-y	0.117	0.982	0.523	623.143	612.676	342.21	1.090	344.063	1.084
0.5	y-y	0.098	1.146	0.612	518.985	506.848	278.937	1.120	280.167	1.115
0.5	y-y	0.079	1.39	0.745	413.174	398.516	216.693	1.160	217.435	1.156
0.5	y-y	0.06	1.776	0.95	308.508	298.368	159.281	1.205	159.682	1.202
0.5	y-y	0.042	2.466	1.323	212.186	201.158	106.731	1.257	106.911	1.255
0.5	y-y	0.025	4.109	2.205	122.424	132.345	64.895	1.204	64.961	1.202
0.75	y-y	0.763	0.133	0.044	2420.386	2648.614	2101.101	1.154	2172.957	1.116
0.75	y-y	0.752	0.138	0.045	2394.814	2632.107	2071.592	1.154	2141.41	1.116
0.75	y-y	0.741	0.144	0.047	2368.332	2615.204	2041.461	1.153	2109.23	1.116
0.75	y-y	0.729	0.15	0.049	2340.951	2598.017	2010.804	1.152	2076.52	1.115
0.75	y-y	0.717	0.157	0.051	2312.694	2580.505	1979.629	1.151	2043.291	1.115
0.75	y-y	0.705	0.163	0.053	2283.652	2562.671	1948.023	1.149	2009.637	1.114
0.75	y-y	0.692	0.17	0.055	2253.857	2544.434	1915.979	1.148	1975.551	1.113
0.75	y-y	0.679	0.177	0.057	2223.295	2525.732	1883.467	1.146	1941.005	1.112
0.75	y-y	0.666	0.184	0.059	2191.91	2506.386	1850.372	1.144	1905.875	1.111
0.75	y-y	0.653	0.192	0.061	2159.66	2486.299	1816.636	1.142	1870.105	1.109
0.75	y-y	0.639	0.2	0.063	2126.567	2465.615	1782.38	1.140	1833.823	1.108
0.75	y-y	0.626	0.208	0.066	2092.548	2444.267	1747.534	1.137	1796.958	1.106
0.75	y-y	0.612	0.217	0.068	2057.508	2422.172	1712.02	1.135	1759.427	1.104
0.75	y-y	0.597	0.226	0.071	2021.507	2399.304	1675.895	1.132	1721.297	1.102
0.75	y-y	0.583	0.235	0.073	1984.668	2375.534	1639.214	1.129	1682.624	1.100
0.75	y-y	0.568	0.245	0.076	1946.911	2350.711	1601.884	1.126	1643.314	1.098
0.75	y-y	0.553	0.255	0.079	1908.312	2324.662	1563.914	1.123	1603.379	1.095
0.75	y-y	0.537	0.266	0.082	1868.682	2297.268	1525.172	1.119	1562.682	1.092
0.75	y-y	0.522	0.278	0.086	1827.719	2268.503	1485.493	1.116	1521.055	1.090
0.75	y-y	0.506	0.29	0.089	1785.648	2238.214	1445.017	1.112	1478.645	1.087
0.75	y-y	0.49	0.303	0.093	1742.853	2206.141	1403.942	1.108	1435.665	1.084
0.75	y-y	0.474	0.317	0.097	1699.374	2172.287	1362.353	1.104	1392.204	1.081
0.75	y-y	0.457	0.331	0.102	1654.729	2136.401	1319.9	1.100	1347.901	1.077
0.75	y-y	0.441	0.347	0.107	1608.81	2098.074	1276.433	1.096	1302.602	1.074
0.75	y-y	0.424	0.364	0.112	1561.572	2056.829	1231.84	1.093	1256.194	1.072
0.75	y-y	0.407	0.381	0.118	1513.302	2012.627	1186.384	1.089	1208.958	1.069
0.75	y-y	0.39	0.4	0.124	1465.439	1966.842	1141.492	1.085	1162.375	1.066
0.75	y-y	0.373	0.42	0.131	1417.829	1919.514	1097.096	1.080	1116.373	1.061
0.75	y-y	0.356	0.441	0.138	1369.134	1868.949	1051.882	1.075	1069.589	1.057
0.75	y-y	0.339	0.465	0.146	1319.443	1814.132	1005.681	1.069	1021.855	1.052
0.75	y-y	0.322	0.489	0.155	1271.247	1760.15	961.547	1.062	976.322	1.046
0.75	y-y	0.305	0.515	0.164	1220.199	1704.567	916.233	1.057	929.638	1.041
0.75	y-y	0.288	0.543	0.174	1163.934	1644.933	867.822	1.054	879.839	1.039
0.75	y-y	0.271	0.575	0.185	1104.363	1581.995	817.768	1.051	828.431	1.038
0.75	y-y	0.254	0.609	0.197	1046.557	1518.913	769.759	1.048	779.199	1.035
0.75	y-y	0.237	0.646	0.211	986.895	1453.167	721.158	1.045	729.437	1.033
0.75	y-y	0.22	0.689	0.227	922.963	1383.43	670.45	1.044	677.6	1.033
0.75	y-y	0.204	0.737	0.245	860.024	1312.603	621.183	1.042	627.316	1.032
0.75	y-y	0.187	0.792	0.265	795.683	1239.862	571.902	1.041	577.097	1.032

0.75	y-y	0.171	0.854	0.288	730.531	1162.892	522.46	1.041	526.792	1.032
0.75	y-y	0.155	0.931	0.317	663.002	1070.292	469.959	1.047	473.461	1.039
0.75	y-y	0.139	1.021	0.35	594.954	966.572	416.56	1.059	419.309	1.052
0.75	y-y	0.123	1.131	0.391	526.856	859.859	364.131	1.074	366.23	1.068
0.75	y-y	0.108	1.268	0.443	460.55	745.794	312.754	1.094	314.301	1.088
0.75	y-y	0.092	1.453	0.512	391.631	628.878	261.179	1.120	262.257	1.115
0.75	y-y	0.077	1.701	0.602	324.489	517.253	212.753	1.150	213.468	1.146
0.75	y-y	0.062	2.056	0.734	260.86	405.677	167.12	1.183	167.561	1.180
0.75	y-y	0.048	2.618	0.945	198.001	300.347	123.99	1.221	124.232	1.218
0.75	y-y	0.033	3.672	1.337	134.027	198.798	82.124	1.280	82.231	1.278
0.75	y-y	0.019	6.291	2.301	146.699	129.205	70.217	0.850	70.295	0.849
1	y-y	0.69	0.187	0.043	2179.08	2658.816	1922.173	1.140	1982.138	1.105
1	y-y	0.679	0.194	0.044	2151.948	2646.677	1894.818	1.139	1953.061	1.105
1	y-y	0.669	0.2	0.045	2124.346	2634.375	1867.213	1.138	1923.746	1.104
1	y-y	0.658	0.207	0.046	2096.299	2621.9	1839.379	1.137	1894.215	1.104
1	y-y	0.647	0.214	0.048	2067.689	2609.248	1811.228	1.135	1864.374	1.103
1	y-y	0.636	0.221	0.049	2038.503	2596.369	1782.731	1.134	1834.194	1.102
1	y-y	0.625	0.229	0.05	2008.752	2583.204	1753.876	1.132	1803.664	1.101
1	y-y	0.614	0.237	0.052	1978.569	2569.693	1724.747	1.131	1772.872	1.100
1	y-y	0.602	0.245	0.053	1948.074	2555.774	1695.414	1.129	1741.894	1.099
1	y-y	0.591	0.253	0.055	1917.302	2541.389	1665.89	1.127	1710.744	1.097
1	y-y	0.579	0.262	0.057	1886.135	2526.429	1636.05	1.124	1679.291	1.095
1	y-y	0.567	0.27	0.058	1854.436	2510.867	1605.796	1.122	1647.431	1.094
1	y-y	0.555	0.28	0.06	1822.185	2494.583	1575.08	1.120	1615.118	1.092
1	y-y	0.543	0.289	0.062	1789.585	2477.695	1544.121	1.118	1582.582	1.091
1	y-y	0.531	0.299	0.064	1756.774	2459.688	1512.84	1.115	1549.739	1.089
1	y-y	0.519	0.309	0.066	1723.766	2440.773	1481.351	1.113	1516.713	1.087
1	y-y	0.507	0.32	0.068	1690.5	2420.793	1449.577	1.110	1483.42	1.085
1	y-y	0.494	0.331	0.071	1656.893	2399.609	1417.431	1.107	1449.773	1.083
1	y-y	0.481	0.342	0.073	1622.714	2377.207	1384.771	1.104	1415.623	1.080
1	y-y	0.469	0.354	0.076	1587.84	2353.395	1351.475	1.102	1380.846	1.078
1	y-y	0.456	0.367	0.079	1552.297	2327.973	1317.536	1.099	1345.435	1.076
1	y-y	0.443	0.38	0.082	1516.187	2300.614	1282.967	1.096	1309.406	1.074
1	y-y	0.429	0.394	0.085	1479.388	2271.708	1247.847	1.093	1272.845	1.072
1	y-y	0.416	0.409	0.089	1442.207	2240.985	1212.353	1.091	1235.936	1.070
1	y-y	0.403	0.425	0.093	1404.557	2208.673	1176.531	1.088	1198.728	1.067
1	y-y	0.39	0.441	0.097	1368.371	2176.783	1142.313	1.083	1163.226	1.064
1	y-y	0.376	0.459	0.101	1331.844	2142.831	1107.74	1.079	1127.395	1.060
1	y-y	0.363	0.477	0.106	1294.392	2106.446	1072.357	1.074	1090.767	1.056
1	y-y	0.349	0.497	0.111	1254.794	2067.66	1035.4	1.071	1052.552	1.053
1	y-y	0.336	0.517	0.116	1214.492	2029.321	998.609	1.068	1014.555	1.051
1	y-y	0.322	0.538	0.121	1172.888	1990.404	961.321	1.065	976.089	1.049
1	y-y	0.309	0.561	0.126	1129.028	1948.936	922.47	1.063	936.06	1.048
1	y-y	0.295	0.586	0.133	1084.065	1904.715	882.85	1.062	895.29	1.047
1	y-y	0.282	0.612	0.139	1040.899	1859.315	844.76	1.060	856.142	1.046
1	y-y	0.269	0.64	0.146	996.578	1812.229	806.147	1.058	816.507	1.045
1	y-y	0.255	0.67	0.154	950.648	1763.886	766.829	1.058	776.197	1.045
1	y-y	0.242	0.703	0.162	904.238	1712.157	727.172	1.058	735.591	1.046
1	y-y	0.229	0.738	0.172	859.784	1657.619	688.902	1.056	696.453	1.044
1	y-y	0.216	0.777	0.182	812.462	1598.647	648.683	1.056	655.374	1.045
1	y-y	0.202	0.821	0.194	764.459	1538.578	608.534	1.056	614.419	1.046
1	y-y	0.189	0.869	0.206	716.592	1475.89	568.738	1.057	573.875	1.047
1	y-y	0.176	0.922	0.221	670.427	1409.513	530.144	1.056	534.605	1.048
1	y-y	0.163	0.983	0.238	622.152	1338.728	490.309	1.057	494.122	1.049
1	y-y	0.15	1.055	0.258	572.229	1263.267	449.564	1.061	452.768	1.053
1	y-y	0.137	1.138	0.281	523.2	1188.066	410.131	1.063	412.796	1.056
1	y-y	0.125	1.23	0.307	477.424	1102.484	372.184	1.066	374.377	1.059

1	y-y	0.112	1.344	0.34	429.975	996.106	331.691	1.075	333.431	1.069
1	y-y	0.1	1.489	0.382	380.154	881.837	289.877	1.091	291.205	1.086
1	y-y	0.087	1.678	0.437	329.553	758.521	247.647	1.111	248.616	1.107
1	y-y	0.074	1.923	0.507	281.618	635.905	207.956	1.131	208.639	1.128
1	y-y	0.062	2.243	0.6	236.291	519.32	171.148	1.153	171.61	1.150
1	y-y	0.05	2.718	0.739	189.486	402.539	134.284	1.185	134.569	1.182

Tabla B.22 Valores de r_1 de la sección 24 (60 cm x120 cm con ρ = 0.06 y f'_c = 400 kg/cm^2)

s	Eje	Pn/P0	ey	ex	Px_CR	Py_CR	Pxy	Pn/Pxy	Pxym	Pn/Pxym
0.25	x-x	0.894	0.058	0.004	3521.877	3919.24	3448.456	1.041	3603.22	0.996
0.25	x-x	0.885	0.063	0.004	3487.364	3912.138	3409.965	1.042	3561.217	0.998
0.25	x-x	0.876	0.069	0.004	3449.446	3904.546	3368.054	1.044	3515.531	1.000
0.25	x-x	0.866	0.075	0.005	3408.592	3896.176	3323.008	1.046	3466.483	1.002
0.25	x-x	0.855	0.082	0.005	3365.131	3886.65	3274.929	1.047	3414.195	1.005
0.25	x-x	0.843	0.089	0.005	3318.567	3877.287	3224.339	1.049	3359.247	1.007
0.25	x-x	0.83	0.097	0.006	3268.277	3867.152	3170.036	1.050	3300.346	1.009
0.25	x-x	0.815	0.106	0.006	3213.872	3856.213	3111.709	1.052	3237.173	1.011
0.25	x-x	0.8	0.116	0.007	3155.512	3844.383	3049.53	1.054	3169.933	1.013
0.25	x-x	0.784	0.127	0.008	3092.797	3831.692	2983.229	1.055	3098.355	1.016
0.25	x-x	0.766	0.139	0.008	3025.657	3819.428	2913.584	1.056	3023.298	1.018
0.25	x-x	0.748	0.152	0.009	2953.814	3807.957	2840.528	1.057	2944.71	1.020
0.25	x-x	0.729	0.166	0.009	2878.461	3797.392	2765.177	1.058	2863.81	1.021
0.25	x-x	0.709	0.182	0.01	2799.787	3787.662	2687.601	1.058	2780.684	1.023
0.25	x-x	0.688	0.198	0.01	2717.64	3777.169	2606.822	1.059	2694.303	1.025
0.25	x-x	0.666	0.215	0.011	2632.981	3765.421	2523.556	1.060	2605.45	1.026
0.25	x-x	0.644	0.233	0.012	2546.987	3753.962	2439.62	1.059	2516.074	1.027
0.25	x-x	0.621	0.253	0.013	2458.926	3741.591	2353.819	1.059	2424.911	1.028
0.25	x-x	0.598	0.274	0.013	2368.431	3728.501	2265.936	1.059	2331.745	1.029
0.25	x-x	0.574	0.297	0.014	2275.348	3713.837	2175.566	1.058	2236.16	1.030
0.25	x-x	0.549	0.323	0.015	2179.745	3697.797	2082.923	1.058	2138.401	1.030
0.25	x-x	0.523	0.351	0.017	2080.629	3680.126	1987.093	1.057	2037.521	1.031
0.25	x-x	0.497	0.383	0.018	1978.519	3659.839	1888.365	1.056	1933.849	1.031
0.25	x-x	0.469	0.419	0.02	1872.385	3637.524	1786.083	1.054	1826.72	1.031
0.25	x-x	0.44	0.461	0.022	1761.839	3611.887	1679.695	1.053	1715.587	1.031
0.25	x-x	0.411	0.51	0.024	1646.045	3580.408	1568.115	1.051	1599.353	1.031
0.25	x-x	0.379	0.57	0.027	1523.318	3539.564	1449.535	1.050	1476.186	1.031
0.25	x-x	0.346	0.644	0.031	1394.475	3491.602	1325.537	1.047	1347.789	1.030
0.25	x-x	0.313	0.731	0.035	1261.702	3448.708	1199.85	1.046	1218.053	1.030
0.25	x-x	0.281	0.826	0.038	1131.054	3411.411	1077.401	1.048	1092.056	1.034
0.25	x-x	0.253	0.924	0.041	1018.112	3366.164	970.706	1.047	982.586	1.035
0.25	x-x	0.226	1.039	0.047	907.151	3301.784	864.968	1.047	874.388	1.036
0.25	x-x	0.198	1.183	0.053	796.23	3226.738	759.461	1.046	766.714	1.036
0.25	x-x	0.171	1.365	0.062	687.387	3125.347	655.462	1.044	660.857	1.036
0.25	x-x	0.142	1.623	0.074	570.692	2994.441	544.334	1.049	548.05	1.042
0.25	x-x	0.116	1.972	0.091	480.445	2810.581	457.018	1.015	459.635	1.009
0.25	x-x	0.087	2.576	0.122	252.137	2515.423	243.04	1.436	243.778	1.432
0.25	x-x	0.06	3.653	0.18	307.777	2080.11	287.295	0.838	288.327	0.835
0.25	x-x	0.03	7.007	0.36	90.83	1313.777	86.793	1.406	86.887	1.405
0.5	x-x	0.897	0.063	0.008	3491.496	3832.63	3353.211	1.074	3499.363	1.029
0.5	x-x	0.888	0.068	0.008	3458.196	3821.447	3314.079	1.076	3456.767	1.031
0.5	x-x	0.879	0.073	0.009	3422.286	3809.689	3272.413	1.078	3411.461	1.034
0.5	x-x	0.869	0.079	0.009	3384.187	3797.367	3228.657	1.080	3363.934	1.037
0.5	x-x	0.858	0.085	0.01	3343.728	3784.206	3182.509	1.082	3313.868	1.040
0.5	x-x	0.847	0.092	0.011	3300.652	3769.811	3133.523	1.085	3260.788	1.042
0.5	x-x	0.834	0.1	0.012	3254.286	3754.655	3081.503	1.087	3204.494	1.045

0.5	x-x	0.821	0.108	0.013	3204.525	3739.191	3026.724	1.088	3145.298	1.047
0.5	x-x	0.806	0.117	0.014	3151.662	3723.135	2969.318	1.090	3083.352	1.050
0.5	x-x	0.791	0.127	0.015	3095.83	3706.896	2909.712	1.091	3019.13	1.052
0.5	x-x	0.775	0.137	0.016	3036.406	3690.493	2847.404	1.092	2952.101	1.053
0.5	x-x	0.757	0.149	0.017	2973.16	3674.256	2782.412	1.093	2882.301	1.055
0.5	x-x	0.739	0.161	0.018	2906.547	3658.286	2715.201	1.093	2810.24	1.056
0.5	x-x	0.72	0.175	0.019	2836.56	3642.44	2645.679	1.093	2735.832	1.057
0.5	x-x	0.701	0.189	0.021	2762.164	3626.577	2572.87	1.093	2658.049	1.058
0.5	x-x	0.68	0.205	0.022	2684.014	3610.455	2497.231	1.093	2577.398	1.059
0.5	x-x	0.659	0.221	0.023	2603.93	3593.271	2419.979	1.093	2495.187	1.060
0.5	x-x	0.637	0.239	0.025	2521.747	3574.942	2340.992	1.092	2411.301	1.060
0.5	x-x	0.614	0.258	0.026	2436.96	3554.757	2259.609	1.091	2325.045	1.061
0.5	x-x	0.591	0.279	0.028	2350.237	3532.478	2176.419	1.090	2237.061	1.061
0.5	x-x	0.567	0.301	0.03	2261.981	3507.801	2091.774	1.089	2147.73	1.060
0.5	x-x	0.543	0.325	0.032	2170.954	3479.929	2004.478	1.087	2055.804	1.060
0.5	x-x	0.517	0.352	0.035	2076.23	3448.384	1913.776	1.085	1960.508	1.059
0.5	x-x	0.491	0.382	0.038	1979.155	3412.255	1820.759	1.083	1863.009	1.059
0.5	x-x	0.464	0.417	0.041	1878.909	3370.482	1724.7	1.081	1762.562	1.058
0.5	x-x	0.436	0.456	0.045	1774.373	3321.666	1624.624	1.078	1658.177	1.057
0.5	x-x	0.407	0.502	0.05	1664.69	3263.733	1519.748	1.076	1549.07	1.055
0.5	x-x	0.377	0.557	0.056	1549.13	3193.882	1409.411	1.073	1434.595	1.054
0.5	x-x	0.345	0.623	0.063	1428.397	3109.025	1294.292	1.071	1315.499	1.053
0.5	x-x	0.313	0.701	0.071	1306.264	3024.055	1180.474	1.066	1198.089	1.050
0.5	x-x	0.281	0.793	0.08	1174.215	2928.652	1059.344	1.066	1073.508	1.052
0.5	x-x	0.251	0.898	0.089	1046.614	2834.183	944.117	1.067	955.351	1.055
0.5	x-x	0.221	1.025	0.101	919.824	2714.792	828.905	1.069	837.552	1.058
0.5	x-x	0.192	1.174	0.116	802.441	2575.876	721.861	1.068	728.41	1.059
0.5	x-x	0.164	1.367	0.137	686.293	2391.712	614.965	1.068	619.712	1.060
0.5	x-x	0.135	1.642	0.167	565.112	2167.45	504.585	1.071	507.776	1.065
0.5	x-x	0.106	2.047	0.214	425.298	1878.886	379.591	1.123	381.394	1.118
0.5	x-x	0.077	2.775	0.297	520.508	1512.232	428.565	0.719	430.865	0.715
0.5	x-x	0.019	10.836	1.253	191.625	210.3	102.833	0.725	102.965	0.724
0.75	x-x	0.895	0.066	0.012	3466.581	3754.49	3271.07	1.099	3410.001	1.054
0.75	x-x	0.887	0.071	0.013	3434.82	3741.148	3232.818	1.101	3368.451	1.057
0.75	x-x	0.877	0.076	0.013	3401.201	3727.264	3192.838	1.103	3325.068	1.059
0.75	x-x	0.867	0.082	0.014	3365.643	3712.782	3151.058	1.105	3279.781	1.062
0.75	x-x	0.857	0.088	0.015	3327.894	3697.649	3107.265	1.107	3232.364	1.064
0.75	x-x	0.845	0.094	0.017	3287.703	3681.624	3061.128	1.109	3182.467	1.066
0.75	x-x	0.833	0.101	0.018	3244.864	3664.374	3012.31	1.110	3129.735	1.069
0.75	x-x	0.82	0.109	0.019	3199.437	3646.486	2961.336	1.112	3074.745	1.071
0.75	x-x	0.807	0.117	0.021	3151.803	3628.027	2908.629	1.113	3017.964	1.073
0.75	x-x	0.792	0.126	0.022	3101.635	3609.021	2853.979	1.114	2959.169	1.074
0.75	x-x	0.776	0.135	0.024	3048.874	3589.525	2797.42	1.114	2898.408	1.076
0.75	x-x	0.76	0.145	0.025	2992.946	3569.052	2738.231	1.115	2834.917	1.077
0.75	x-x	0.743	0.156	0.027	2933.85	3547.383	2676.366	1.115	2768.659	1.078
0.75	x-x	0.725	0.168	0.029	2871.941	3524.769	2612.35	1.115	2700.209	1.079
0.75	x-x	0.707	0.18	0.03	2806.803	3501.616	2546.126	1.114	2629.515	1.079
0.75	x-x	0.688	0.194	0.032	2737.524	3477.778	2476.918	1.114	2555.766	1.080
0.75	x-x	0.667	0.208	0.034	2665.34	3452.291	2405.33	1.114	2479.617	1.080
0.75	x-x	0.646	0.224	0.036	2590.139	3424.935	2331.274	1.113	2400.991	1.081
0.75	x-x	0.625	0.241	0.039	2512.433	3395.971	2255.396	1.112	2320.585	1.081
0.75	x-x	0.602	0.259	0.041	2431.623	3365.251	2177.243	1.111	2237.931	1.080
0.75	x-x	0.579	0.279	0.044	2348.387	3332.008	2097.151	1.109	2153.399	1.080
0.75	x-x	0.555	0.3	0.047	2263.113	3295.855	2015.419	1.106	2067.315	1.079
0.75	x-x	0.531	0.324	0.05	2175.675	3254.873	1931.423	1.103	1979.031	1.077
0.75	x-x	0.506	0.35	0.054	2085.062	3208.204	1844.349	1.101	1887.713	1.075
0.75	x-x	0.48	0.378	0.059	1991.525	3155.113	1754.485	1.097	1793.682	1.073

0.75	x-x	0.453	0.411	0.064	1894.637	3095.83	1661.917	1.094	1697.045	1.071
0.75	x-x	0.425	0.448	0.07	1793.751	3028.381	1565.94	1.090	1597.09	1.069
0.75	x-x	0.397	0.492	0.078	1687.815	2949.165	1465.298	1.086	1492.538	1.067
0.75	x-x	0.367	0.543	0.087	1576.238	2855.936	1359.686	1.083	1383.109	1.065
0.75	x-x	0.336	0.604	0.097	1460.413	2748.322	1250.797	1.079	1270.592	1.062
0.75	x-x	0.305	0.677	0.11	1343.043	2630.572	1142.051	1.073	1158.531	1.058
0.75	x-x	0.274	0.762	0.124	1216.759	2502.683	1028.467	1.071	1041.813	1.058
0.75	x-x	0.244	0.863	0.14	1085.837	2367.532	913.89	1.072	924.413	1.060
0.75	x-x	0.214	0.99	0.161	951.76	2210.656	797.491	1.075	805.492	1.065
0.75	x-x	0.184	1.146	0.186	821.85	2041.546	686.113	1.077	692.027	1.068
0.75	x-x	0.154	1.362	0.222	689.114	1836.129	572.523	1.080	576.635	1.072
0.75	x-x	0.125	1.658	0.273	561.055	1606.288	463.864	1.082	466.56	1.075
0.75	x-x	0.096	2.112	0.355	362.732	1330.203	306.794	1.262	307.971	1.257
0.75	x-x	0.067	2.958	0.506	625.989	985.286	423.137	0.640	425.379	0.636
1	x-x	0.881	0.074	0.017	3418.561	3668.82	3164.739	1.118	3294.605	1.074
1	x-x	0.872	0.078	0.019	3387.181	3653.47	3126.592	1.120	3253.284	1.076
1	x-x	0.862	0.084	0.02	3354.002	3637.371	3086.714	1.121	3210.131	1.078
1	x-x	0.851	0.089	0.021	3318.838	3620.365	3044.886	1.123	3164.916	1.080
1	x-x	0.84	0.095	0.023	3281.479	3602.321	3000.899	1.124	3117.42	1.082
1	x-x	0.828	0.102	0.024	3242.176	3582.774	2954.715	1.125	3067.609	1.084
1	x-x	0.816	0.108	0.026	3201.056	3561.801	2906.574	1.126	3015.751	1.086
1	x-x	0.802	0.116	0.027	3157.891	3539.25	2856.272	1.127	2961.634	1.087
1	x-x	0.788	0.124	0.029	3112.929	3515.704	2804.476	1.128	2905.984	1.089
1	x-x	0.773	0.132	0.031	3065.968	3491.308	2751.177	1.129	2848.796	1.090
1	x-x	0.758	0.141	0.033	3016.203	3465.743	2695.599	1.129	2789.247	1.091
1	x-x	0.742	0.15	0.035	2963.773	3439.173	2638.04	1.129	2727.664	1.092
1	x-x	0.725	0.161	0.038	2908.971	3411.429	2578.713	1.128	2664.286	1.092
1	x-x	0.707	0.172	0.04	2851.941	3382.123	2517.594	1.128	2599.095	1.092
1	x-x	0.689	0.183	0.042	2791.857	3351.644	2454.352	1.126	2531.746	1.092
1	x-x	0.669	0.196	0.045	2727.613	3319.564	2388.007	1.125	2461.211	1.092
1	x-x	0.65	0.209	0.048	2660.434	3286.09	2319.726	1.124	2388.743	1.092
1	x-x	0.629	0.224	0.051	2590.668	3250.738	2249.632	1.123	2314.483	1.091
1	x-x	0.608	0.24	0.054	2517.531	3212.724	2176.891	1.121	2237.559	1.090
1	x-x	0.586	0.257	0.058	2441.143	3171.891	2101.691	1.119	2158.186	1.090
1	x-x	0.563	0.276	0.061	2361.735	3128.444	2024.459	1.117	2076.827	1.088
1	x-x	0.54	0.296	0.066	2279.767	3081.786	1945.44	1.114	1993.751	1.087
1	x-x	0.515	0.319	0.07	2195.023	3030.454	1864.094	1.110	1908.403	1.084
1	x-x	0.49	0.343	0.075	2106.345	2973.732	1779.588	1.106	1819.927	1.082
1	x-x	0.465	0.371	0.081	2014.73	2910.221	1692.463	1.102	1728.909	1.079
1	x-x	0.438	0.402	0.088	1920.051	2837.911	1602.346	1.098	1634.976	1.076
1	x-x	0.411	0.438	0.097	1821.355	2755.515	1508.65	1.094	1537.542	1.074
1	x-x	0.383	0.479	0.106	1717.428	2662.279	1410.879	1.091	1436.116	1.071
1	x-x	0.354	0.528	0.118	1607.865	2556.464	1308.897	1.087	1330.589	1.070
1	x-x	0.325	0.585	0.131	1495.665	2439.429	1205.655	1.083	1224.036	1.067
1	x-x	0.295	0.653	0.148	1380.49	2308.273	1100.717	1.077	1116.017	1.062
1	x-x	0.266	0.731	0.166	1261.431	2172.985	996.174	1.072	1008.689	1.059
1	x-x	0.236	0.827	0.189	1129.974	2024.612	885.119	1.073	894.985	1.061
1	x-x	0.207	0.947	0.217	994.248	1862.839	773.1	1.074	780.616	1.064
1	x-x	0.178	1.098	0.253	857.898	1690.286	663.064	1.077	668.586	1.068
1	x-x	0.148	1.31	0.303	717.696	1492.053	551.128	1.081	554.938	1.073
1	x-x	0.12	1.6	0.372	577.956	1282.089	442.261	1.090	444.711	1.084
1	x-x	0.091	2.078	0.489	396.319	1019.909	307.258	1.191	308.439	1.187
1	x-x	0.063	2.952	0.701	624.563	704.065	360.707	0.700	362.335	0.697
0.25	y-y	0.881	0.033	0.038	3685.092	3401.117	3161.77	1.118	3291.387	1.074
0.25	y-y	0.871	0.035	0.041	3669.688	3370.336	3123.994	1.120	3250.471	1.076
0.25	y-y	0.862	0.038	0.044	3653.427	3338.039	3084.644	1.121	3207.891	1.078
0.25	y-y	0.851	0.04	0.046	3636.383	3303.856	3043.5	1.122	3163.418	1.080

0.25	y-y	0.84	0.043	0.049	3618.282	3267.497	3000.184	1.123	3116.648	1.081
0.25	y-y	0.828	0.046	0.053	3599.04	3228.728	2954.512	1.125	3067.39	1.083
0.25	y-y	0.815	0.049	0.056	3578.442	3187.626	2906.485	1.126	3015.655	1.085
0.25	y-y	0.802	0.053	0.06	3556.498	3144.496	2856.446	1.127	2961.822	1.087
0.25	y-y	0.788	0.056	0.064	3533.178	3099.689	2804.748	1.128	2906.276	1.088
0.25	y-y	0.773	0.06	0.068	3508.82	3052.855	2751.393	1.128	2849.027	1.090
0.25	y-y	0.758	0.064	0.073	3482.979	3003.438	2695.736	1.129	2789.393	1.091
0.25	y-y	0.742	0.068	0.078	3455.651	2951.681	2638.07	1.129	2727.697	1.092
0.25	y-y	0.725	0.072	0.083	3426.897	2897.185	2578.212	1.129	2663.752	1.093
0.25	y-y	0.708	0.077	0.088	3396.798	2840.222	2516.521	1.129	2597.952	1.093
0.25	y-y	0.689	0.082	0.094	3365.003	2779.686	2452.042	1.128	2529.289	1.094
0.25	y-y	0.67	0.087	0.101	3331.946	2716.316	2385.698	1.128	2458.759	1.094
0.25	y-y	0.651	0.093	0.107	3297.395	2650.612	2317.847	1.127	2386.751	1.094
0.25	y-y	0.63	0.099	0.115	3260.919	2582.242	2248.119	1.125	2312.882	1.094
0.25	y-y	0.609	0.105	0.123	3222.648	2511.091	2176.605	1.123	2237.258	1.093
0.25	y-y	0.587	0.112	0.132	3181.972	2436.547	2102.69	1.120	2159.239	1.091
0.25	y-y	0.564	0.119	0.141	3138.526	2358.936	2026.61	1.117	2079.09	1.089
0.25	y-y	0.54	0.127	0.152	3091.934	2278.536	1948.58	1.114	1997.048	1.087
0.25	y-y	0.516	0.136	0.163	3041.028	2195.293	1868.285	1.110	1912.796	1.084
0.25	y-y	0.491	0.147	0.176	2984.447	2108.179	1784.734	1.106	1825.31	1.081
0.25	y-y	0.466	0.159	0.19	2920.167	2018.087	1698.2	1.101	1734.895	1.078
0.25	y-y	0.439	0.172	0.206	2848.545	1924.585	1608.9	1.096	1641.8	1.074
0.25	y-y	0.412	0.188	0.224	2766.778	1827.018	1515.921	1.092	1545.094	1.071
0.25	y-y	0.384	0.207	0.245	2672.594	1724.107	1418.293	1.087	1443.798	1.068
0.25	y-y	0.355	0.229	0.27	2565.113	1615.449	1316.199	1.083	1338.136	1.066
0.25	y-y	0.325	0.257	0.301	2440.327	1499.999	1208.69	1.080	1227.164	1.064
0.25	y-y	0.295	0.289	0.336	2307.57	1383.914	1102.732	1.075	1118.089	1.060
0.25	y-y	0.265	0.327	0.378	2165.93	1267.089	998.203	1.067	1010.77	1.054
0.25	y-y	0.235	0.372	0.43	2011.186	1145.618	892.057	1.058	902.08	1.047
0.25	y-y	0.206	0.425	0.493	1854.966	1011.635	782.175	1.058	789.87	1.048
0.25	y-y	0.177	0.493	0.573	1684.249	869.914	669.268	1.064	674.894	1.055
0.25	y-y	0.148	0.588	0.682	1489.773	724.246	554.667	1.073	558.526	1.065
0.25	y-y	0.12	0.722	0.837	1274.319	569.094	436.147	1.101	438.529	1.095
0.25	y-y	0.092	0.927	1.074	1014.666	478.895	354.035	1.043	355.603	1.039
0.25	y-y	0.065	1.307	1.504	719.432	188.558	155.176	1.669	155.477	1.666
0.25	y-y	0.038	2.215	2.515	254.731	297.339	142.05	1.066	142.302	1.064
0.5	y-y	0.799	0.091	0.047	3310.839	3298.665	2808.317	1.143	2910.108	1.103
0.5	y-y	0.788	0.095	0.049	3282.888	3271.345	2768.638	1.143	2867.522	1.104
0.5	y-y	0.777	0.1	0.052	3253.769	3242.747	2727.692	1.144	2823.622	1.105
0.5	y-y	0.765	0.105	0.054	3223.578	3212.835	2685.575	1.144	2778.515	1.106
0.5	y-y	0.753	0.11	0.057	3192.374	3181.725	2642.46	1.144	2732.39	1.106
0.5	y-y	0.74	0.115	0.059	3160.016	3149.637	2598.449	1.144	2685.359	1.107
0.5	y-y	0.727	0.121	0.062	3126.747	3116.665	2553.816	1.143	2637.718	1.107
0.5	y-y	0.714	0.127	0.065	3092.197	3082.428	2508.101	1.142	2588.978	1.107
0.5	y-y	0.7	0.134	0.069	3056.538	3047.093	2461.58	1.141	2539.439	1.106
0.5	y-y	0.685	0.14	0.072	3019.495	3010.436	2413.985	1.140	2488.816	1.106
0.5	y-y	0.67	0.147	0.076	2980.677	2971.774	2364.695	1.138	2436.456	1.105
0.5	y-y	0.655	0.155	0.079	2940.213	2931.296	2314.004	1.136	2382.676	1.104
0.5	y-y	0.639	0.163	0.083	2898.312	2889.143	2262.209	1.134	2327.798	1.102
0.5	y-y	0.623	0.171	0.088	2854.61	2844.912	2208.924	1.132	2271.417	1.101
0.5	y-y	0.606	0.18	0.092	2808.38	2798.081	2153.507	1.130	2212.862	1.100
0.5	y-y	0.589	0.19	0.097	2759.188	2748.885	2095.983	1.128	2152.167	1.098
0.5	y-y	0.571	0.2	0.103	2707.121	2697.692	2036.754	1.125	2089.768	1.097
0.5	y-y	0.552	0.211	0.108	2652.312	2643.852	1975.662	1.122	2025.504	1.095
0.5	y-y	0.534	0.223	0.114	2595.225	2587.79	1913.337	1.120	1960.048	1.093
0.5	y-y	0.514	0.236	0.121	2535.212	2528.808	1849.176	1.116	1892.77	1.091
0.5	y-y	0.494	0.25	0.128	2471.309	2466.364	1782.554	1.113	1823.029	1.089

0.5	y-y	0.474	0.266	0.136	2403.431	2399.866	1713.339	1.111	1750.699	1.087
0.5	y-y	0.453	0.283	0.145	2331.833	2329.535	1642.006	1.108	1676.289	1.085
0.5	y-y	0.432	0.302	0.155	2256.363	2255.379	1568.702	1.105	1599.963	1.083
0.5	y-y	0.41	0.324	0.166	2176.184	2176.477	1492.823	1.102	1521.105	1.081
0.5	y-y	0.387	0.348	0.178	2090.356	2091.718	1413.712	1.099	1439.051	1.080
0.5	y-y	0.364	0.376	0.192	1999.132	2001.732	1332.128	1.096	1354.604	1.078
0.5	y-y	0.34	0.408	0.209	1902.287	1906.284	1248.194	1.093	1267.905	1.076
0.5	y-y	0.316	0.445	0.228	1803.237	1807.783	1164.665	1.089	1181.809	1.073
0.5	y-y	0.292	0.486	0.249	1700.128	1704.956	1080.368	1.083	1095.104	1.069
0.5	y-y	0.267	0.535	0.275	1592.624	1597.841	995.388	1.078	1007.884	1.064
0.5	y-y	0.243	0.592	0.304	1483.314	1488.603	911.718	1.071	922.19	1.059
0.5	y-y	0.219	0.658	0.338	1372.851	1377.017	829.523	1.061	838.183	1.050
0.5	y-y	0.196	0.737	0.38	1252.293	1262.606	745.466	1.054	752.453	1.044
0.5	y-y	0.172	0.841	0.434	1112.973	1138.02	654.404	1.053	659.782	1.045
0.5	y-y	0.149	0.964	0.498	977.516	1000.581	563.916	1.061	567.905	1.054
0.5	y-y	0.126	1.134	0.588	830.754	847.315	468.424	1.079	471.173	1.072
0.5	y-y	0.103	1.374	0.713	682.148	692.436	375.795	1.102	377.562	1.096
0.5	y-y	0.081	1.733	0.901	546.932	526.545	287.485	1.130	288.518	1.126
0.5	y-y	0.059	2.346	1.222	149.774	165.213	80.126	2.955	80.206	2.952
0.5	y-y	0.037	3.698	1.927	273.908	313.973	151.82	0.976	152.107	0.974
0.75	y-y	0.716	0.153	0.05	2951.519	3266.563	2526.307	1.137	2608.382	1.102
0.75	y-y	0.705	0.159	0.051	2918.565	3244.126	2488.939	1.137	2568.566	1.102
0.75	y-y	0.693	0.165	0.053	2884.89	3220.818	2450.934	1.136	2528.11	1.101
0.75	y-y	0.682	0.172	0.055	2850.2	3196.747	2412.17	1.135	2486.886	1.101
0.75	y-y	0.67	0.179	0.058	2814.245	3171.929	2372.51	1.134	2444.753	1.100
0.75	y-y	0.658	0.186	0.06	2776.835	3146.438	2331.895	1.132	2401.65	1.099
0.75	y-y	0.645	0.194	0.062	2737.81	3120.194	2290.204	1.131	2357.451	1.099
0.75	y-y	0.633	0.202	0.064	2697.323	3093.055	2247.51	1.130	2312.237	1.098
0.75	y-y	0.62	0.21	0.067	2655.691	3065.04	2204.082	1.128	2266.297	1.097
0.75	y-y	0.606	0.219	0.07	2612.976	3035.955	2159.897	1.127	2219.609	1.096
0.75	y-y	0.593	0.229	0.072	2569.095	3005.755	2114.92	1.125	2172.138	1.095
0.75	y-y	0.579	0.239	0.075	2523.512	2974.158	2068.694	1.123	2123.407	1.094
0.75	y-y	0.565	0.249	0.079	2476.315	2940.926	2021.228	1.121	2073.426	1.093
0.75	y-y	0.55	0.26	0.082	2427.575	2906.189	1972.695	1.120	2022.386	1.092
0.75	y-y	0.535	0.272	0.085	2377.411	2869.749	1923.143	1.118	1970.339	1.091
0.75	y-y	0.52	0.285	0.089	2325.98	2831.375	1872.639	1.116	1917.36	1.090
0.75	y-y	0.505	0.298	0.093	2273.05	2790.602	1820.906	1.114	1863.163	1.088
0.75	y-y	0.489	0.312	0.097	2218.224	2747.246	1767.703	1.112	1807.499	1.087
0.75	y-y	0.473	0.328	0.102	2161.594	2701.535	1713.281	1.109	1750.639	1.085
0.75	y-y	0.457	0.344	0.107	2102.989	2653.303	1657.56	1.107	1692.502	1.084
0.75	y-y	0.44	0.362	0.113	2042.848	2602.302	1600.815	1.104	1633.383	1.082
0.75	y-y	0.423	0.382	0.119	1981.208	2547.99	1542.965	1.101	1573.199	1.080
0.75	y-y	0.406	0.403	0.125	1917.441	2489.923	1483.589	1.098	1511.52	1.078
0.75	y-y	0.388	0.427	0.133	1851.525	2427.145	1422.484	1.096	1448.141	1.076
0.75	y-y	0.37	0.452	0.141	1783.362	2359.573	1359.734	1.093	1383.159	1.075
0.75	y-y	0.352	0.481	0.15	1712.854	2287.426	1295.526	1.091	1316.774	1.074
0.75	y-y	0.334	0.513	0.161	1640.373	2210.936	1230.302	1.089	1249.448	1.072
0.75	y-y	0.315	0.547	0.172	1568.394	2133.362	1166.545	1.085	1183.744	1.070
0.75	y-y	0.297	0.586	0.185	1493.434	2049.426	1100.796	1.082	1116.099	1.067
0.75	y-y	0.278	0.631	0.2	1415.889	1959.399	1033.565	1.079	1047.044	1.065
0.75	y-y	0.26	0.677	0.215	1342.688	1874.517	971.685	1.073	983.589	1.060
0.75	y-y	0.241	0.73	0.233	1262.49	1783.618	906.094	1.069	916.437	1.057
0.75	y-y	0.223	0.794	0.254	1173.663	1685.557	835.978	1.069	844.774	1.058
0.75	y-y	0.204	0.864	0.277	1084.428	1586.911	767.345	1.070	774.75	1.060
0.75	y-y	0.186	0.947	0.305	994.44	1484.134	699.164	1.070	705.307	1.060
0.75	y-y	0.168	1.049	0.34	898.078	1373.301	627.921	1.072	632.871	1.063
0.75	y-y	0.149	1.174	0.382	802.192	1258.644	558.041	1.073	561.947	1.066

0.75	y-y	0.131	1.325	0.432	709.46	1140.962	490.949	1.074	493.97	1.068
0.75	y-y	0.113	1.527	0.5	606.573	996.118	416.078	1.092	418.245	1.086
0.75	y-y	0.095	1.809	0.595	534.78	836.314	355.045	1.071	356.622	1.066
0.75	y-y	0.077	2.191	0.724	279.006	681.083	208.19	1.492	208.731	1.488
0.75	y-y	0.06	2.807	0.932	548.286	529.187	288.646	0.830	289.688	0.827
0.75	y-y	0.042	3.976	1.326	97.45	334.399	76.905	2.173	76.979	2.171
0.75	y-y	0.025	6.623	2.22	5.11	377.322	5.048	19.586	5.048	19.585
1	y-y	0.644	0.213	0.049	2641.305	3276.456	2300.424	1.124	2368.281	1.092
1	y-y	0.634	0.221	0.05	2606.371	3258.713	2265.319	1.123	2331.092	1.091
1	y-y	0.623	0.228	0.052	2570.569	3240.458	2229.598	1.122	2293.284	1.091
1	y-y	0.613	0.236	0.053	2533.981	3221.376	2193.193	1.121	2254.786	1.091
1	y-y	0.602	0.245	0.055	2496.615	3201.659	2156.221	1.120	2215.728	1.090
1	y-y	0.591	0.253	0.057	2458.451	3181.239	2118.657	1.119	2176.08	1.090
1	y-y	0.58	0.262	0.059	2419.534	3160.136	2080.565	1.118	2135.915	1.089
1	y-y	0.568	0.271	0.06	2379.784	3138.381	2041.918	1.117	2095.205	1.089
1	y-y	0.557	0.281	0.062	2339.304	3115.939	2002.796	1.116	2054.035	1.088
1	y-y	0.545	0.291	0.065	2298.214	3092.562	1963.206	1.114	2012.414	1.087
1	y-y	0.533	0.302	0.067	2256.485	3067.994	1923.051	1.113	1970.242	1.086
1	y-y	0.521	0.313	0.069	2214.009	3042.252	1882.292	1.111	1927.481	1.085
1	y-y	0.508	0.325	0.072	2170.621	3015.158	1840.776	1.109	1883.97	1.083
1	y-y	0.496	0.338	0.074	2126.229	2986.838	1798.521	1.107	1839.733	1.082
1	y-y	0.483	0.351	0.077	2081.135	2956.794	1755.602	1.105	1794.85	1.081
1	y-y	0.47	0.365	0.08	2035.413	2925.032	1712.12	1.103	1749.426	1.080
1	y-y	0.458	0.379	0.083	1988.911	2891.082	1667.854	1.101	1703.236	1.078
1	y-y	0.444	0.395	0.087	1941.545	2854.855	1622.775	1.099	1656.252	1.077
1	y-y	0.431	0.412	0.091	1893.253	2816.123	1576.831	1.097	1608.42	1.076
1	y-y	0.417	0.429	0.095	1843.794	2774.709	1529.866	1.095	1559.584	1.074
1	y-y	0.404	0.449	0.099	1792.927	2730.721	1481.822	1.093	1509.686	1.073
1	y-y	0.39	0.469	0.104	1740.827	2683.878	1432.811	1.091	1458.846	1.072
1	y-y	0.375	0.492	0.109	1687.365	2634.145	1382.813	1.090	1407.047	1.071
1	y-y	0.361	0.516	0.115	1632.638	2581.135	1331.866	1.088	1354.333	1.070
1	y-y	0.346	0.543	0.121	1576.247	2524.363	1279.67	1.086	1300.396	1.069
1	y-y	0.332	0.571	0.128	1520.542	2466.268	1228.463	1.084	1247.552	1.068
1	y-y	0.317	0.602	0.135	1464.543	2404.955	1177.151	1.081	1194.667	1.065
1	y-y	0.302	0.636	0.144	1407.017	2339.169	1124.708	1.078	1140.687	1.063
1	y-y	0.287	0.673	0.153	1348.32	2271.081	1071.953	1.075	1086.459	1.061
1	y-y	0.273	0.713	0.162	1288.633	2203.444	1019.633	1.073	1032.749	1.059
1	y-y	0.258	0.756	0.172	1226.051	2133.313	965.927	1.072	977.689	1.059
1	y-y	0.243	0.805	0.183	1159.154	2058.114	909.526	1.073	919.948	1.060
1	y-y	0.228	0.858	0.196	1092.3	1980.613	853.762	1.073	862.938	1.062
1	y-y	0.213	0.918	0.21	1023.942	1898.429	797.281	1.074	805.278	1.064
1	y-y	0.199	0.986	0.226	955.871	1816.225	742.031	1.075	748.953	1.065
1	y-y	0.184	1.061	0.244	888.482	1730.652	687.651	1.076	693.592	1.067
1	y-y	0.17	1.149	0.265	819.698	1638.282	632.411	1.078	637.432	1.069
1	y-y	0.155	1.257	0.29	749.097	1537.936	576.018	1.080	580.18	1.072
1	y-y	0.141	1.378	0.319	680.402	1437.247	521.815	1.082	525.228	1.075
1	y-y	0.127	1.523	0.354	607.94	1331.671	465.825	1.090	468.544	1.084
1	y-y	0.112	1.709	0.399	550.735	1217.091	418.711	1.074	420.907	1.069
1	y-y	0.098	1.95	0.457	491.697	1087.536	369.798	1.059	371.51	1.054
1	y-y	0.083	2.265	0.534	207.056	932.206	176.89	1.888	177.281	1.884
1	y-y	0.069	2.697	0.639	434.056	776.583	299.183	0.929	300.302	0.925
1	y-y	0.055	3.357	0.799	524.19	608.703	302.898	0.729	304.045	0.726

Apéndice C

Tablas de parámetros calculados r_2

Excepto los casos 1, 5, 9 y 17 que se presentan en el capítulo 4, los demás casos se incluyen en este apéndice.

Tabla C.1 Valores de r_2 de la sección 2 (40 cm x 40 cm con ρ = 0.06 y f'_c = 250 kg/cm^2) para distintos criterios de cálculo del exponente a.

s	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	0.857	1.323	1.277	1.247	1.227	1.217	1.213	1.214	1.218	1.213	1.213
0.25	0.849	1.311	1.264	1.231	1.210	1.198	1.192	1.194	1.200	1.192	1.192
0.25	0.839	1.299	1.251	1.217	1.194	1.179	1.172	1.176	1.183	1.172	1.172
0.25	0.830	1.289	1.238	1.203	1.178	1.162	1.153	1.158	1.168	1.153	1.153
0.25	0.820	1.279	1.227	1.190	1.164	1.147	1.136	1.143	1.155	1.136	1.136
0.25	0.809	1.269	1.216	1.178	1.151	1.132	1.120	1.129	1.142	1.120	1.120
0.25	0.797	1.260	1.206	1.167	1.138	1.118	1.105	1.116	1.131	1.104	1.105
0.25	0.785	1.252	1.196	1.156	1.126	1.105	1.090	1.103	1.121	1.091	1.092
0.25	0.772	1.244	1.188	1.146	1.116	1.093	1.077	1.092	1.113	1.080	1.080
0.25	0.758	1.237	1.179	1.136	1.105	1.082	1.065	1.082	1.105	1.069	1.070
0.25	0.744	1.228	1.170	1.126	1.094	1.070	1.052	1.072	1.098	1.058	1.059
0.25	0.728	1.219	1.160	1.116	1.082	1.057	1.038	1.061	1.090	1.048	1.048
0.25	0.712	1.211	1.150	1.105	1.071	1.045	1.026	1.051	1.084	1.039	1.039
0.25	0.695	1.202	1.142	1.096	1.062	1.036	1.015	1.043	1.078	1.032	1.032
0.25	0.678	1.195	1.134	1.088	1.053	1.027	1.007	1.037	1.073	1.026	1.027
0.25	0.659	1.188	1.127	1.081	1.047	1.020	1.000	1.032	1.069	1.023	1.023
0.25	0.640	1.182	1.121	1.075	1.041	1.014	0.994	1.029	1.066	1.021	1.021
0.25	0.620	1.177	1.116	1.071	1.037	1.011	0.990	1.027	1.065	1.021	1.021
0.25	0.600	1.174	1.114	1.069	1.036	1.010	0.990	1.028	1.066	1.025	1.024
0.25	0.579	1.171	1.111	1.066	1.032	1.006	0.986	1.027	1.066	1.026	1.025
0.25	0.556	1.166	1.106	1.060	1.026	0.999	0.979	1.024	1.064	1.025	1.024
0.25	0.533	1.160	1.099	1.053	1.019	0.992	0.970	1.019	1.061	1.024	1.023
0.25	0.509	1.155	1.093	1.047	1.012	0.984	0.963	1.016	1.060	1.024	1.022
0.25	0.484	1.150	1.088	1.041	1.005	0.977	0.955	1.012	1.058	1.025	1.023
0.25	0.457	1.144	1.081	1.033	0.997	0.968	0.945	1.007	1.056	1.025	1.023
0.25	0.430	1.137	1.073	1.025	0.987	0.957	0.933	1.002	1.054	1.026	1.023
0.25	0.401	1.131	1.066	1.016	0.977	0.946	0.921	0.997	1.052	1.028	1.025
0.25	0.371	1.125	1.058	1.007	0.967	0.935	0.909	0.992	1.051	1.032	1.028
0.25	0.340	1.118	1.051	0.998	0.957	0.924	0.896	0.987	1.051	1.038	1.033
0.25	0.306	1.112	1.042	0.989	0.946	0.912	0.883	0.983	1.051	1.046	1.039
0.25	0.271	1.104	1.034	0.978	0.935	0.899	0.869	0.978	1.052	1.056	1.034
0.25	0.234	1.093	1.020	0.963	0.918	0.880	0.849	0.969	1.050	1.066	1.020
0.25	0.198	1.094	1.022	0.966	0.921	0.884	0.853	0.977	1.062	1.094	1.022
0.25	0.163	1.103	1.033	0.979	0.936	0.901	0.872	0.989	1.082	1.103	1.033
0.25	0.129	1.105	1.037	0.984	0.942	0.908	0.880	0.994	1.096	1.105	1.037
0.25	0.096	1.109	1.042	0.989	0.948	0.914	0.887	0.999	1.109	1.109	1.042
0.25	0.068	1.113	1.045	0.993	0.951	0.918	0.890	1.003	1.113	1.113	1.045
0.25	0.040	1.113	1.043	0.990	0.947	0.913	0.884	1.000	1.113	1.113	1.043
0.25	0.009	1.113	1.043	0.988	0.944	0.908	0.879	0.998	1.113	1.113	1.043
0.5	0.827	1.462	1.396	1.340	1.291	1.250	1.214	1.238	1.267	1.214	1.214
0.5	0.817	1.446	1.377	1.318	1.268	1.224	1.187	1.213	1.246	1.187	1.187
0.5	0.807	1.430	1.360	1.299	1.246	1.200	1.161	1.191	1.227	1.161	1.161
0.5	0.797	1.415	1.343	1.280	1.225	1.178	1.137	1.170	1.210	1.136	1.138

0.5	0.786	1.401	1.326	1.262	1.205	1.157	1.114	1.151	1.195	1.117	1.119
0.5	0.774	1.388	1.311	1.245	1.187	1.137	1.093	1.134	1.181	1.099	1.101
0.5	0.762	1.374	1.296	1.228	1.169	1.117	1.072	1.117	1.168	1.083	1.085
0.5	0.749	1.361	1.281	1.211	1.150	1.097	1.051	1.101	1.156	1.067	1.069
0.5	0.736	1.346	1.264	1.193	1.131	1.077	1.029	1.084	1.143	1.051	1.053
0.5	0.721	1.330	1.246	1.173	1.110	1.054	1.005	1.064	1.129	1.034	1.035
0.5	0.706	1.316	1.230	1.156	1.090	1.033	0.983	1.048	1.118	1.019	1.020
0.5	0.691	1.303	1.215	1.140	1.073	1.015	0.963	1.034	1.108	1.007	1.008
0.5	0.675	1.291	1.202	1.125	1.058	0.999	0.946	1.022	1.097	0.998	0.999
0.5	0.658	1.280	1.190	1.112	1.044	0.984	0.931	1.012	1.089	0.991	0.992
0.5	0.640	1.270	1.179	1.100	1.031	0.971	0.917	1.004	1.082	0.987	0.987
0.5	0.622	1.261	1.170	1.090	1.021	0.960	0.906	0.998	1.077	0.985	0.984
0.5	0.604	1.255	1.163	1.083	1.013	0.952	0.898	0.996	1.075	0.987	0.986
0.5	0.584	1.249	1.156	1.076	1.006	0.944	0.890	0.994	1.074	0.989	0.988
0.5	0.564	1.243	1.150	1.069	0.999	0.937	0.883	0.992	1.074	0.993	0.991
0.5	0.543	1.237	1.143	1.062	0.991	0.930	0.875	0.990	1.074	0.997	0.995
0.5	0.521	1.230	1.136	1.054	0.983	0.921	0.866	0.988	1.073	1.002	0.999
0.5	0.498	1.222	1.127	1.045	0.974	0.911	0.856	0.985	1.072	1.005	1.002
0.5	0.474	1.212	1.116	1.033	0.961	0.898	0.843	0.979	1.068	1.008	1.004
0.5	0.450	1.202	1.105	1.021	0.949	0.885	0.829	0.973	1.065	1.011	1.006
0.5	0.424	1.192	1.094	1.009	0.936	0.871	0.815	0.967	1.063	1.015	1.010
0.5	0.398	1.182	1.083	0.997	0.923	0.858	0.801	0.962	1.061	1.021	1.014
0.5	0.371	1.171	1.071	0.985	0.910	0.844	0.786	0.957	1.059	1.028	1.021
0.5	0.343	1.161	1.060	0.972	0.896	0.830	0.772	0.952	1.058	1.037	1.028
0.5	0.313	1.150	1.048	0.959	0.883	0.816	0.757	0.947	1.058	1.048	1.038
0.5	0.282	1.140	1.037	0.948	0.870	0.802	0.742	0.943	1.060	1.062	1.037
0.5	0.251	1.128	1.022	0.932	0.853	0.784	0.724	0.936	1.060	1.076	1.022
0.5	0.219	1.119	1.013	0.922	0.842	0.773	0.712	0.935	1.064	1.096	1.013
0.5	0.187	1.125	1.020	0.929	0.850	0.781	0.720	0.947	1.085	1.125	1.020
0.5	0.154	1.136	1.031	0.941	0.862	0.794	0.733	0.959	1.111	1.136	1.031
0.5	0.121	1.139	1.035	0.945	0.867	0.798	0.738	0.963	1.129	1.139	1.035
0.5	0.087	1.151	1.048	0.959	0.881	0.813	0.753	0.977	1.151	1.151	1.048
0.5	0.057	1.160	1.058	0.969	0.893	0.825	0.766	0.987	1.160	1.160	1.058
0.5	0.026	1.167	1.066	0.979	0.903	0.836	0.777	0.996	1.167	1.167	1.066
0.75	0.786	1.459	1.374	1.295	1.221	1.153	1.090	1.146	1.206	1.094	1.097
0.75	0.776	1.443	1.355	1.275	1.200	1.131	1.066	1.126	1.190	1.075	1.078
0.75	0.765	1.427	1.338	1.255	1.179	1.109	1.043	1.108	1.176	1.058	1.061
0.75	0.754	1.412	1.321	1.236	1.159	1.087	1.021	1.090	1.163	1.042	1.045
0.75	0.742	1.396	1.303	1.218	1.139	1.066	0.999	1.073	1.150	1.027	1.029
0.75	0.730	1.381	1.286	1.199	1.119	1.045	0.977	1.056	1.138	1.012	1.014
0.75	0.718	1.366	1.269	1.181	1.100	1.025	0.956	1.041	1.128	0.999	1.001
0.75	0.704	1.353	1.255	1.165	1.082	1.007	0.938	1.027	1.120	0.989	0.990
0.75	0.691	1.340	1.241	1.150	1.067	0.991	0.921	1.016	1.111	0.980	0.981
0.75	0.677	1.329	1.228	1.136	1.052	0.976	0.905	1.006	1.102	0.974	0.975
0.75	0.662	1.318	1.217	1.124	1.039	0.962	0.891	0.998	1.094	0.969	0.970
0.75	0.647	1.307	1.204	1.110	1.024	0.947	0.875	0.988	1.085	0.963	0.963
0.75	0.631	1.296	1.192	1.097	1.011	0.933	0.861	0.980	1.078	0.960	0.959
0.75	0.615	1.287	1.182	1.087	1.000	0.922	0.850	0.974	1.074	0.959	0.959
0.75	0.598	1.280	1.174	1.079	0.992	0.913	0.841	0.972	1.072	0.962	0.960
0.75	0.580	1.273	1.167	1.070	0.983	0.904	0.831	0.969	1.070	0.965	0.963
0.75	0.562	1.266	1.159	1.062	0.974	0.895	0.822	0.966	1.069	0.968	0.966
0.75	0.543	1.258	1.151	1.053	0.965	0.885	0.813	0.964	1.068	0.973	0.970
0.75	0.524	1.251	1.143	1.045	0.956	0.876	0.804	0.961	1.067	0.977	0.974
0.75	0.504	1.244	1.135	1.037	0.948	0.868	0.795	0.960	1.067	0.983	0.979
0.75	0.484	1.237	1.127	1.028	0.939	0.859	0.786	0.958	1.067	0.990	0.985
0.75	0.462	1.229	1.119	1.020	0.930	0.849	0.776	0.956	1.067	0.997	0.992
0.75	0.441	1.221	1.110	1.010	0.921	0.840	0.766	0.954	1.067	1.005	0.999

0.75	0.418	1.213	1.101	1.000	0.910	0.829	0.756	0.951	1.067	1.013	1.006
0.75	0.394	1.203	1.090	0.989	0.898	0.817	0.743	0.948	1.066	1.021	1.013
0.75	0.369	1.192	1.079	0.977	0.886	0.804	0.731	0.944	1.066	1.030	1.021
0.75	0.344	1.182	1.067	0.965	0.873	0.791	0.718	0.940	1.065	1.040	1.030
0.75	0.318	1.171	1.055	0.952	0.860	0.778	0.705	0.936	1.065	1.051	1.040
0.75	0.291	1.161	1.044	0.941	0.848	0.766	0.692	0.933	1.067	1.065	1.044
0.75	0.263	1.147	1.030	0.925	0.832	0.749	0.676	0.926	1.065	1.077	1.030
0.75	0.234	1.133	1.014	0.909	0.816	0.733	0.659	0.920	1.065	1.091	1.014
0.75	0.206	1.128	1.010	0.904	0.811	0.728	0.654	0.924	1.074	1.116	1.010
0.75	0.177	1.136	1.018	0.913	0.819	0.736	0.662	0.934	1.096	1.136	1.018
0.75	0.147	1.146	1.028	0.923	0.830	0.747	0.673	0.945	1.121	1.146	1.028
0.75	0.117	1.151	1.034	0.930	0.837	0.754	0.680	0.951	1.142	1.151	1.034
0.75	0.089	1.157	1.041	0.936	0.843	0.760	0.686	0.958	1.157	1.157	1.041
0.75	0.061	1.170	1.054	0.950	0.858	0.775	0.701	0.972	1.170	1.170	1.054
0.75	0.032	1.183	1.068	0.965	0.873	0.791	0.717	0.986	1.183	1.183	1.068
0.75	0.005	1.192	1.078	0.975	0.884	0.801	0.727	0.997	1.192	1.192	1.078
1	0.744	1.417	1.322	1.234	1.152	1.075	1.004	1.082	1.163	1.033	1.035
1	0.733	1.402	1.306	1.216	1.133	1.055	0.982	1.066	1.151	1.018	1.020
1	0.722	1.386	1.288	1.196	1.112	1.033	0.960	1.048	1.138	1.003	1.005
1	0.711	1.371	1.271	1.179	1.093	1.013	0.940	1.033	1.127	0.990	0.992
1	0.699	1.357	1.256	1.162	1.076	0.995	0.921	1.019	1.119	0.979	0.981
1	0.686	1.345	1.242	1.147	1.060	0.979	0.904	1.007	1.108	0.971	0.972
1	0.674	1.333	1.229	1.133	1.045	0.963	0.888	0.997	1.098	0.963	0.964
1	0.661	1.322	1.217	1.120	1.031	0.949	0.874	0.988	1.089	0.958	0.958
1	0.647	1.312	1.205	1.108	1.018	0.936	0.860	0.979	1.082	0.953	0.954
1	0.634	1.302	1.195	1.096	1.006	0.923	0.847	0.972	1.076	0.950	0.950
1	0.619	1.294	1.186	1.087	0.996	0.913	0.837	0.967	1.072	0.950	0.949
1	0.604	1.287	1.179	1.079	0.988	0.905	0.829	0.965	1.070	0.952	0.951
1	0.589	1.281	1.172	1.072	0.981	0.897	0.821	0.963	1.068	0.955	0.954
1	0.574	1.275	1.165	1.065	0.973	0.889	0.813	0.961	1.067	0.959	0.957
1	0.557	1.269	1.158	1.057	0.965	0.881	0.805	0.959	1.066	0.963	0.960
1	0.541	1.262	1.151	1.050	0.958	0.873	0.797	0.957	1.066	0.967	0.964
1	0.524	1.256	1.144	1.042	0.950	0.865	0.788	0.955	1.065	0.972	0.968
1	0.506	1.249	1.137	1.035	0.942	0.858	0.781	0.954	1.065	0.978	0.974
1	0.488	1.243	1.130	1.028	0.934	0.850	0.773	0.952	1.066	0.984	0.979
1	0.470	1.236	1.123	1.020	0.926	0.841	0.764	0.951	1.066	0.991	0.985
1	0.451	1.229	1.115	1.012	0.918	0.833	0.756	0.950	1.066	0.998	0.992
1	0.431	1.222	1.108	1.004	0.910	0.825	0.747	0.948	1.067	1.006	0.999
1	0.411	1.215	1.100	0.996	0.901	0.816	0.738	0.947	1.068	1.015	1.007
1	0.390	1.208	1.092	0.987	0.892	0.807	0.729	0.945	1.069	1.024	1.015
1	0.369	1.200	1.084	0.978	0.883	0.798	0.720	0.944	1.070	1.034	1.024
1	0.346	1.190	1.072	0.967	0.871	0.785	0.708	0.940	1.069	1.042	1.032
1	0.323	1.178	1.060	0.953	0.858	0.772	0.694	0.934	1.068	1.051	1.039
1	0.299	1.167	1.048	0.941	0.845	0.758	0.681	0.930	1.067	1.062	1.048
1	0.274	1.156	1.035	0.928	0.831	0.745	0.668	0.925	1.067	1.074	1.035
1	0.249	1.141	1.020	0.912	0.815	0.729	0.651	0.918	1.064	1.084	1.020
1	0.223	1.132	1.011	0.902	0.805	0.718	0.641	0.917	1.068	1.102	1.011
1	0.198	1.132	1.010	0.901	0.804	0.718	0.640	0.924	1.080	1.132	1.010
1	0.172	1.139	1.018	0.909	0.813	0.726	0.649	0.932	1.101	1.139	1.018
1	0.146	1.147	1.026	0.918	0.822	0.735	0.658	0.940	1.122	1.147	1.026
1	0.119	1.155	1.035	0.927	0.831	0.745	0.667	0.950	1.145	1.155	1.035
1	0.095	1.158	1.038	0.930	0.834	0.748	0.670	0.952	1.158	1.158	1.038
1	0.070	1.167	1.047	0.940	0.844	0.758	0.680	0.962	1.167	1.167	1.047
1	0.046	1.178	1.059	0.953	0.857	0.771	0.693	0.975	1.178	1.178	1.059
1	0.020	1.189	1.072	0.966	0.870	0.784	0.707	0.988	1.189	1.189	1.072

Tabla C.2 Valores de r_2 de la sección 3 (40 cm x 40 cm con ρ = 0.03 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*.

s	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	0.894	1.856	1.919	2.005	2.113	2.242	2.392	2.343	2.259	2.392	2.392
0.25	0.882	1.759	1.799	1.860	1.939	2.036	2.149	2.104	2.038	2.149	2.149
0.25	0.869	1.680	1.703	1.744	1.802	1.874	1.960	1.919	1.867	1.960	1.960
0.25	0.854	1.621	1.631	1.658	1.701	1.757	1.824	1.787	1.744	1.824	1.824
0.25	0.839	1.573	1.574	1.591	1.623	1.667	1.721	1.686	1.650	1.721	1.721
0.25	0.822	1.526	1.518	1.526	1.549	1.582	1.624	1.594	1.564	1.624	1.624
0.25	0.805	1.480	1.465	1.466	1.480	1.504	1.537	1.510	1.488	1.537	1.537
0.25	0.786	1.440	1.419	1.414	1.421	1.439	1.464	1.441	1.424	1.463	1.461
0.25	0.767	1.405	1.379	1.370	1.373	1.385	1.405	1.385	1.373	1.400	1.399
0.25	0.747	1.374	1.346	1.333	1.332	1.340	1.356	1.339	1.332	1.349	1.348
0.25	0.726	1.348	1.318	1.303	1.299	1.305	1.317	1.303	1.299	1.310	1.309
0.25	0.705	1.326	1.294	1.277	1.272	1.276	1.286	1.274	1.273	1.278	1.277
0.25	0.683	1.306	1.272	1.254	1.247	1.249	1.257	1.247	1.250	1.249	1.249
0.25	0.661	1.288	1.253	1.233	1.224	1.224	1.229	1.223	1.229	1.223	1.223
0.25	0.639	1.272	1.235	1.213	1.203	1.201	1.204	1.201	1.210	1.201	1.201
0.25	0.616	1.258	1.219	1.195	1.183	1.179	1.180	1.181	1.193	1.180	1.180
0.25	0.592	1.244	1.203	1.178	1.164	1.158	1.157	1.162	1.177	1.161	1.161
0.25	0.568	1.232	1.190	1.164	1.148	1.140	1.138	1.147	1.165	1.147	1.146
0.25	0.544	1.221	1.178	1.150	1.132	1.123	1.119	1.132	1.153	1.134	1.133
0.25	0.518	1.211	1.166	1.136	1.117	1.105	1.099	1.118	1.142	1.122	1.121
0.25	0.492	1.202	1.155	1.123	1.103	1.090	1.082	1.106	1.133	1.112	1.111
0.25	0.466	1.192	1.144	1.110	1.088	1.073	1.063	1.093	1.125	1.104	1.102
0.25	0.438	1.183	1.132	1.096	1.072	1.054	1.043	1.080	1.116	1.095	1.093
0.25	0.410	1.173	1.120	1.082	1.055	1.036	1.021	1.067	1.107	1.089	1.086
0.25	0.380	1.165	1.110	1.070	1.040	1.019	1.003	1.057	1.102	1.086	1.082
0.25	0.351	1.150	1.092	1.049	1.017	0.993	0.974	1.039	1.090	1.077	1.073
0.25	0.322	1.148	1.090	1.047	1.015	0.991	0.972	1.040	1.094	1.087	1.082
0.25	0.293	1.154	1.097	1.056	1.025	1.002	0.984	1.052	1.107	1.106	1.097
0.25	0.265	1.157	1.102	1.061	1.031	1.008	0.991	1.061	1.117	1.122	1.102
0.25	0.236	1.157	1.100	1.059	1.028	1.005	0.988	1.062	1.123	1.135	1.100
0.25	0.209	1.156	1.097	1.053	1.020	0.994	0.975	1.060	1.127	1.147	1.097
0.25	0.182	1.158	1.095	1.048	1.013	0.985	0.962	1.058	1.134	1.158	1.095
0.25	0.156	1.158	1.094	1.045	1.008	0.978	0.955	1.055	1.141	1.158	1.094
0.25	0.130	1.162	1.097	1.047	1.008	0.977	0.952	1.056	1.153	1.162	1.097
0.25	0.103	1.172	1.106	1.055	1.016	0.984	0.959	1.065	1.171	1.172	1.106
0.25	0.074	1.186	1.119	1.068	1.027	0.995	0.969	1.078	1.186	1.186	1.119
0.25	0.045	1.199	1.131	1.077	1.034	1.000	0.973	1.088	1.199	1.199	1.131
0.25	0.017	1.219	1.147	1.090	1.044	1.007	0.976	1.102	1.219	1.219	1.147
0.5	0.892	2.319	2.429	2.557	2.705	2.873	3.064	2.999	2.891	3.064	3.064
0.5	0.880	2.171	2.244	2.331	2.433	2.550	2.683	2.628	2.549	2.683	2.683
0.5	0.867	2.049	2.094	2.150	2.218	2.298	2.390	2.346	2.289	2.390	2.390
0.5	0.854	1.956	1.980	2.014	2.058	2.112	2.175	2.140	2.099	2.175	2.175
0.5	0.839	1.878	1.886	1.903	1.929	1.964	2.007	1.980	1.951	2.007	2.007
0.5	0.825	1.807	1.801	1.803	1.814	1.833	1.859	1.840	1.823	1.859	1.859
0.5	0.809	1.743	1.725	1.715	1.714	1.719	1.732	1.722	1.715	1.732	1.732
0.5	0.793	1.687	1.658	1.638	1.627	1.622	1.623	1.621	1.625	1.623	1.623
0.5	0.776	1.638	1.601	1.573	1.553	1.540	1.533	1.540	1.551	1.534	1.534
0.5	0.758	1.593	1.549	1.515	1.488	1.468	1.454	1.468	1.488	1.457	1.458
0.5	0.739	1.551	1.501	1.460	1.428	1.402	1.382	1.404	1.433	1.390	1.391
0.5	0.720	1.516	1.460	1.415	1.377	1.347	1.323	1.353	1.389	1.337	1.338
0.5	0.699	1.484	1.424	1.374	1.333	1.299	1.271	1.309	1.353	1.293	1.293
0.5	0.679	1.454	1.391	1.338	1.293	1.256	1.225	1.270	1.319	1.255	1.255
0.5	0.657	1.427	1.361	1.305	1.258	1.218	1.185	1.237	1.289	1.223	1.223

0.5	0.635	1.404	1.335	1.276	1.227	1.185	1.150	1.209	1.264	1.198	1.197
0.5	0.613	1.381	1.310	1.249	1.198	1.154	1.117	1.183	1.242	1.175	1.175
0.5	0.590	1.361	1.287	1.224	1.171	1.125	1.086	1.160	1.221	1.156	1.155
0.5	0.566	1.343	1.267	1.202	1.148	1.101	1.060	1.142	1.206	1.142	1.141
0.5	0.542	1.326	1.248	1.181	1.125	1.077	1.035	1.124	1.191	1.130	1.129
0.5	0.517	1.309	1.229	1.161	1.103	1.053	1.010	1.108	1.178	1.120	1.117
0.5	0.492	1.294	1.212	1.142	1.082	1.031	0.986	1.093	1.166	1.112	1.109
0.5	0.467	1.279	1.195	1.124	1.062	1.009	0.963	1.079	1.156	1.106	1.102
0.5	0.441	1.265	1.179	1.105	1.042	0.988	0.940	1.066	1.147	1.102	1.097
0.5	0.414	1.250	1.162	1.087	1.022	0.966	0.917	1.052	1.137	1.098	1.093
0.5	0.387	1.235	1.145	1.068	1.002	0.944	0.893	1.039	1.129	1.097	1.091
0.5	0.359	1.217	1.124	1.045	0.976	0.916	0.864	1.022	1.118	1.093	1.086
0.5	0.331	1.205	1.110	1.029	0.959	0.898	0.844	1.013	1.114	1.098	1.089
0.5	0.303	1.210	1.116	1.035	0.965	0.904	0.850	1.026	1.129	1.124	1.114
0.5	0.275	1.218	1.124	1.043	0.973	0.912	0.858	1.041	1.148	1.153	1.124
0.5	0.247	1.223	1.129	1.048	0.978	0.916	0.862	1.053	1.164	1.180	1.129
0.5	0.219	1.226	1.132	1.050	0.979	0.917	0.863	1.062	1.177	1.205	1.132
0.5	0.191	1.229	1.135	1.053	0.982	0.920	0.864	1.070	1.192	1.229	1.135
0.5	0.163	1.239	1.145	1.064	0.992	0.930	0.875	1.080	1.213	1.239	1.145
0.5	0.138	1.247	1.153	1.072	1.000	0.938	0.882	1.088	1.231	1.247	1.153
0.5	0.112	1.260	1.167	1.085	1.014	0.952	0.896	1.102	1.255	1.260	1.167
0.5	0.087	1.276	1.183	1.103	1.032	0.969	0.913	1.119	1.276	1.276	1.183
0.5	0.062	1.289	1.196	1.114	1.042	0.978	0.920	1.131	1.289	1.289	1.196
0.5	0.037	1.304	1.211	1.128	1.055	0.990	0.931	1.145	1.304	1.304	1.211
0.5	0.013	1.323	1.231	1.148	1.075	1.009	0.949	1.165	1.323	1.323	1.231
0.75	0.896	2.589	2.735	2.892	3.061	3.244	3.442	3.380	3.270	3.442	3.442
0.75	0.886	2.414	2.514	2.622	2.737	2.860	2.991	2.943	2.866	2.991	2.991
0.75	0.875	2.269	2.334	2.404	2.479	2.558	2.642	2.606	2.554	2.642	2.642
0.75	0.863	2.151	2.190	2.231	2.276	2.323	2.375	2.349	2.316	2.375	2.375
0.75	0.851	2.057	2.076	2.096	2.119	2.144	2.172	2.156	2.138	2.172	2.172
0.75	0.838	1.977	1.978	1.982	1.988	1.995	2.005	1.999	1.992	2.005	2.005
0.75	0.825	1.903	1.890	1.879	1.870	1.863	1.858	1.861	1.866	1.858	1.858
0.75	0.811	1.836	1.811	1.787	1.766	1.747	1.730	1.743	1.758	1.730	1.730
0.75	0.796	1.777	1.741	1.707	1.676	1.647	1.620	1.642	1.667	1.619	1.621
0.75	0.781	1.724	1.679	1.637	1.598	1.561	1.526	1.558	1.591	1.530	1.531
0.75	0.766	1.678	1.626	1.576	1.530	1.487	1.446	1.486	1.528	1.455	1.457
0.75	0.750	1.637	1.578	1.522	1.471	1.422	1.376	1.425	1.475	1.393	1.394
0.75	0.733	1.601	1.537	1.476	1.420	1.367	1.317	1.374	1.432	1.342	1.343
0.75	0.716	1.570	1.501	1.436	1.376	1.319	1.266	1.332	1.397	1.300	1.302
0.75	0.698	1.541	1.468	1.400	1.336	1.277	1.221	1.295	1.368	1.265	1.266
0.75	0.680	1.513	1.436	1.364	1.298	1.236	1.178	1.259	1.336	1.232	1.233
0.75	0.661	1.487	1.406	1.331	1.262	1.198	1.138	1.228	1.307	1.204	1.205
0.75	0.641	1.463	1.380	1.302	1.231	1.165	1.103	1.202	1.284	1.182	1.182
0.75	0.621	1.441	1.355	1.275	1.202	1.134	1.071	1.178	1.262	1.163	1.163
0.75	0.600	1.420	1.331	1.250	1.174	1.105	1.041	1.156	1.243	1.147	1.146
0.75	0.579	1.401	1.310	1.227	1.150	1.079	1.014	1.138	1.227	1.134	1.133
0.75	0.558	1.384	1.291	1.206	1.128	1.056	0.990	1.122	1.213	1.125	1.123
0.75	0.535	1.367	1.272	1.185	1.106	1.033	0.966	1.107	1.200	1.117	1.114
0.75	0.512	1.349	1.252	1.163	1.082	1.009	0.941	1.091	1.187	1.109	1.106
0.75	0.489	1.331	1.233	1.143	1.061	0.986	0.918	1.077	1.176	1.104	1.100
0.75	0.465	1.315	1.214	1.123	1.040	0.964	0.895	1.063	1.165	1.100	1.095
0.75	0.441	1.298	1.196	1.103	1.019	0.942	0.873	1.050	1.155	1.098	1.092
0.75	0.416	1.281	1.177	1.083	0.997	0.920	0.850	1.037	1.146	1.096	1.089
0.75	0.391	1.265	1.160	1.064	0.978	0.899	0.829	1.026	1.138	1.097	1.089
0.75	0.365	1.247	1.139	1.042	0.955	0.876	0.804	1.012	1.129	1.097	1.088
0.75	0.339	1.232	1.123	1.024	0.936	0.856	0.784	1.002	1.123	1.101	1.091
0.75	0.314	1.232	1.123	1.024	0.935	0.855	0.783	1.009	1.134	1.122	1.111

0.75	0.289	1.237	1.127	1.029	0.940	0.860	0.788	1.022	1.150	1.149	1.127
0.75	0.263	1.242	1.133	1.035	0.946	0.866	0.794	1.036	1.167	1.178	1.133
0.75	0.237	1.248	1.140	1.042	0.954	0.874	0.801	1.051	1.185	1.208	1.140
0.75	0.211	1.253	1.145	1.047	0.959	0.879	0.807	1.064	1.202	1.237	1.145
0.75	0.186	1.256	1.148	1.051	0.962	0.882	0.809	1.071	1.216	1.256	1.148
0.75	0.163	1.264	1.157	1.059	0.971	0.891	0.818	1.079	1.235	1.264	1.157
0.75	0.139	1.276	1.169	1.073	0.985	0.905	0.833	1.093	1.258	1.276	1.169
0.75	0.115	1.292	1.187	1.092	1.005	0.926	0.854	1.112	1.285	1.292	1.187
0.75	0.093	1.308	1.204	1.110	1.024	0.945	0.873	1.129	1.308	1.308	1.204
0.75	0.071	1.322	1.220	1.126	1.041	0.963	0.891	1.146	1.322	1.322	1.220
0.75	0.048	1.338	1.237	1.145	1.060	0.982	0.911	1.164	1.338	1.338	1.237
0.75	0.027	1.350	1.251	1.160	1.076	0.999	0.928	1.179	1.350	1.350	1.251
0.75	0.006	1.368	1.271	1.182	1.099	1.023	0.954	1.200	1.368	1.368	1.271
1	0.852	2.092	2.111	2.130	2.149	2.168	2.188	2.177	2.164	2.188	2.188
1	0.841	2.018	2.022	2.026	2.029	2.033	2.037	2.034	2.032	2.037	2.037
1	0.830	1.950	1.940	1.930	1.920	1.910	1.901	1.907	1.914	1.901	1.901
1	0.818	1.886	1.864	1.843	1.821	1.800	1.779	1.794	1.811	1.779	1.779
1	0.805	1.829	1.797	1.765	1.734	1.704	1.674	1.697	1.723	1.674	1.674
1	0.792	1.779	1.737	1.697	1.658	1.619	1.582	1.614	1.647	1.582	1.584
1	0.779	1.733	1.683	1.636	1.589	1.545	1.501	1.541	1.582	1.506	1.508
1	0.765	1.691	1.636	1.582	1.530	1.479	1.430	1.479	1.527	1.442	1.444
1	0.751	1.655	1.593	1.534	1.477	1.422	1.369	1.425	1.481	1.388	1.389
1	0.737	1.622	1.555	1.491	1.430	1.371	1.315	1.378	1.442	1.341	1.343
1	0.722	1.592	1.521	1.454	1.389	1.327	1.268	1.339	1.409	1.303	1.304
1	0.706	1.566	1.491	1.420	1.352	1.287	1.226	1.305	1.382	1.270	1.272
1	0.691	1.541	1.463	1.388	1.318	1.251	1.187	1.273	1.355	1.242	1.243
1	0.674	1.517	1.436	1.359	1.286	1.216	1.151	1.245	1.329	1.216	1.217
1	0.657	1.496	1.412	1.332	1.257	1.186	1.119	1.220	1.307	1.195	1.196
1	0.640	1.477	1.390	1.308	1.231	1.159	1.091	1.200	1.288	1.179	1.179
1	0.623	1.459	1.369	1.286	1.207	1.133	1.064	1.180	1.271	1.164	1.164
1	0.604	1.438	1.346	1.261	1.180	1.105	1.034	1.159	1.252	1.148	1.147
1	0.586	1.419	1.325	1.238	1.156	1.079	1.007	1.140	1.236	1.135	1.133
1	0.566	1.402	1.306	1.217	1.133	1.055	0.983	1.124	1.221	1.125	1.123
1	0.547	1.385	1.287	1.196	1.111	1.033	0.960	1.109	1.208	1.116	1.114
1	0.527	1.369	1.269	1.176	1.090	1.011	0.937	1.094	1.196	1.109	1.106
1	0.506	1.353	1.251	1.157	1.070	0.989	0.915	1.081	1.185	1.103	1.099
1	0.485	1.337	1.234	1.138	1.050	0.969	0.894	1.069	1.175	1.100	1.095
1	0.464	1.322	1.217	1.121	1.032	0.950	0.874	1.057	1.166	1.098	1.092
1	0.442	1.307	1.201	1.103	1.013	0.930	0.854	1.046	1.158	1.096	1.090
1	0.420	1.291	1.183	1.084	0.993	0.910	0.834	1.034	1.149	1.095	1.088
1	0.397	1.277	1.167	1.067	0.975	0.892	0.815	1.024	1.142	1.097	1.089
1	0.374	1.262	1.151	1.049	0.957	0.873	0.796	1.014	1.136	1.099	1.090
1	0.351	1.243	1.130	1.028	0.934	0.850	0.773	1.000	1.125	1.098	1.087
1	0.328	1.237	1.124	1.021	0.927	0.842	0.765	1.001	1.129	1.111	1.100
1	0.306	1.240	1.127	1.024	0.931	0.846	0.769	1.011	1.142	1.134	1.122
1	0.283	1.244	1.131	1.028	0.935	0.850	0.773	1.023	1.156	1.159	1.131
1	0.260	1.248	1.135	1.033	0.940	0.855	0.778	1.035	1.171	1.184	1.135
1	0.237	1.253	1.141	1.039	0.946	0.862	0.785	1.048	1.187	1.211	1.141
1	0.214	1.259	1.147	1.046	0.953	0.869	0.792	1.062	1.204	1.239	1.147
1	0.191	1.264	1.153	1.052	0.960	0.876	0.799	1.073	1.221	1.264	1.153
1	0.171	1.266	1.156	1.055	0.962	0.878	0.802	1.076	1.232	1.266	1.156
1	0.151	1.274	1.165	1.064	0.972	0.889	0.812	1.085	1.250	1.274	1.165
1	0.130	1.285	1.176	1.076	0.985	0.901	0.825	1.097	1.270	1.285	1.176
1	0.110	1.300	1.193	1.094	1.004	0.921	0.845	1.115	1.295	1.300	1.193
1	0.089	1.320	1.214	1.118	1.028	0.946	0.871	1.138	1.320	1.320	1.214
1	0.069	1.338	1.235	1.140	1.052	0.970	0.896	1.160	1.338	1.338	1.235
1	0.051	1.342	1.240	1.145	1.057	0.976	0.901	1.164	1.342	1.342	1.240

1	0.033	1.349	1.247	1.153	1.065	0.985	0.910	1.172	1.349	1.349	1.247
1	0.015	1.362	1.262	1.168	1.082	1.002	0.928	1.188	1.362	1.362	1.262

Tabla C.3 Valores de r_2 de la sección 4 (40 cm x 40 cm con ρ = 0.06 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*.

s	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	0.893	1.723	1.757	1.812	1.884	1.974	2.078	2.043	1.984	2.078	2.078
0.25	0.883	1.660	1.681	1.720	1.776	1.846	1.930	1.897	1.849	1.930	1.930
0.25	0.873	1.605	1.614	1.641	1.683	1.738	1.804	1.774	1.734	1.804	1.804
0.25	0.863	1.559	1.558	1.575	1.606	1.649	1.702	1.675	1.642	1.702	1.702
0.25	0.851	1.519	1.511	1.519	1.541	1.574	1.617	1.592	1.565	1.617	1.617
0.25	0.839	1.483	1.468	1.470	1.484	1.508	1.542	1.520	1.499	1.542	1.542
0.25	0.826	1.452	1.431	1.426	1.433	1.451	1.477	1.458	1.442	1.477	1.477
0.25	0.811	1.424	1.398	1.388	1.390	1.402	1.422	1.406	1.394	1.422	1.422
0.25	0.796	1.398	1.368	1.353	1.351	1.357	1.371	1.359	1.352	1.372	1.371
0.25	0.780	1.372	1.338	1.319	1.312	1.315	1.324	1.315	1.312	1.322	1.322
0.25	0.763	1.347	1.310	1.288	1.277	1.276	1.281	1.276	1.277	1.279	1.278
0.25	0.746	1.325	1.285	1.260	1.247	1.242	1.244	1.242	1.248	1.242	1.242
0.25	0.727	1.304	1.262	1.235	1.220	1.213	1.212	1.213	1.223	1.212	1.212
0.25	0.708	1.287	1.243	1.215	1.197	1.189	1.186	1.190	1.204	1.187	1.187
0.25	0.688	1.272	1.227	1.197	1.179	1.169	1.165	1.172	1.188	1.168	1.168
0.25	0.667	1.258	1.213	1.182	1.163	1.152	1.147	1.156	1.174	1.152	1.152
0.25	0.646	1.248	1.201	1.170	1.151	1.139	1.133	1.144	1.164	1.141	1.141
0.25	0.624	1.238	1.191	1.160	1.139	1.126	1.119	1.134	1.155	1.131	1.131
0.25	0.602	1.228	1.180	1.147	1.125	1.112	1.103	1.121	1.145	1.119	1.119
0.25	0.578	1.218	1.169	1.135	1.112	1.096	1.087	1.109	1.135	1.108	1.108
0.25	0.553	1.208	1.158	1.123	1.099	1.082	1.072	1.097	1.126	1.099	1.098
0.25	0.528	1.200	1.149	1.113	1.087	1.070	1.058	1.088	1.119	1.092	1.091
0.25	0.502	1.191	1.139	1.101	1.075	1.056	1.043	1.078	1.112	1.085	1.084
0.25	0.474	1.182	1.128	1.089	1.061	1.040	1.025	1.067	1.104	1.078	1.076
0.25	0.446	1.173	1.118	1.077	1.047	1.025	1.009	1.057	1.098	1.073	1.071
0.25	0.417	1.165	1.108	1.065	1.034	1.010	0.992	1.048	1.093	1.070	1.068
0.25	0.387	1.157	1.097	1.053	1.020	0.995	0.975	1.038	1.088	1.069	1.065
0.25	0.355	1.147	1.086	1.041	1.006	0.979	0.957	1.029	1.083	1.069	1.065
0.25	0.321	1.139	1.076	1.028	0.992	0.963	0.940	1.021	1.080	1.073	1.067
0.25	0.285	1.125	1.060	1.010	0.971	0.940	0.914	1.007	1.073	1.074	1.060
0.25	0.251	1.121	1.056	1.005	0.966	0.935	0.909	1.008	1.078	1.088	1.056
0.25	0.217	1.128	1.064	1.015	0.978	0.948	0.924	1.022	1.094	1.114	1.064
0.25	0.185	1.130	1.067	1.020	0.983	0.954	0.930	1.029	1.106	1.130	1.067
0.25	0.153	1.132	1.069	1.021	0.984	0.955	0.932	1.031	1.117	1.132	1.069
0.25	0.125	1.133	1.069	1.021	0.984	0.954	0.930	1.030	1.126	1.133	1.069
0.25	0.097	1.134	1.069	1.019	0.981	0.950	0.925	1.029	1.134	1.134	1.069
0.25	0.067	1.134	1.067	1.016	0.976	0.944	0.918	1.026	1.134	1.134	1.067
0.25	0.036	1.140	1.073	1.021	0.980	0.947	0.920	1.031	1.140	1.140	1.073
0.25	0.003	1.161	1.093	1.041	1.000	0.967	0.940	1.051	1.161	1.161	1.093
0.5	0.887	2.096	2.152	2.222	2.305	2.402	2.513	2.471	2.408	2.513	2.513
0.5	0.877	2.001	2.037	2.083	2.141	2.210	2.290	2.256	2.208	2.290	2.290
0.5	0.867	1.921	1.939	1.967	2.005	2.053	2.110	2.082	2.047	2.110	2.110
0.5	0.857	1.853	1.857	1.870	1.892	1.923	1.962	1.941	1.916	1.962	1.962
0.5	0.845	1.793	1.785	1.786	1.795	1.811	1.836	1.821	1.806	1.836	1.836
0.5	0.833	1.739	1.721	1.711	1.709	1.714	1.726	1.718	1.711	1.726	1.726
0.5	0.821	1.691	1.663	1.644	1.633	1.629	1.631	1.629	1.630	1.631	1.631
0.5	0.807	1.648	1.612	1.586	1.567	1.555	1.549	1.553	1.561	1.549	1.549
0.5	0.793	1.606	1.564	1.530	1.504	1.485	1.472	1.483	1.498	1.472	1.472
0.5	0.779	1.565	1.516	1.475	1.443	1.417	1.397	1.415	1.438	1.399	1.400

0.5	0.763	1.527	1.472	1.426	1.387	1.356	1.330	1.356	1.386	1.336	1.337
0.5	0.747	1.493	1.433	1.382	1.339	1.303	1.273	1.305	1.343	1.284	1.285
0.5	0.730	1.463	1.398	1.343	1.296	1.256	1.223	1.262	1.307	1.240	1.241
0.5	0.713	1.436	1.367	1.309	1.259	1.216	1.179	1.226	1.278	1.203	1.204
0.5	0.695	1.412	1.341	1.280	1.227	1.182	1.142	1.196	1.253	1.174	1.175
0.5	0.676	1.391	1.317	1.254	1.199	1.152	1.111	1.170	1.231	1.151	1.151
0.5	0.656	1.373	1.296	1.231	1.174	1.125	1.083	1.149	1.212	1.132	1.132
0.5	0.636	1.357	1.279	1.212	1.154	1.104	1.060	1.133	1.198	1.119	1.119
0.5	0.615	1.343	1.264	1.195	1.136	1.085	1.040	1.119	1.186	1.109	1.109
0.5	0.593	1.330	1.249	1.179	1.119	1.067	1.022	1.107	1.176	1.101	1.101
0.5	0.570	1.316	1.234	1.163	1.102	1.049	1.002	1.094	1.166	1.094	1.093
0.5	0.547	1.302	1.218	1.146	1.084	1.030	0.982	1.082	1.156	1.087	1.085
0.5	0.523	1.288	1.202	1.129	1.065	1.010	0.961	1.069	1.145	1.081	1.078
0.5	0.497	1.273	1.186	1.111	1.046	0.990	0.940	1.056	1.135	1.075	1.072
0.5	0.472	1.259	1.170	1.094	1.027	0.970	0.920	1.044	1.126	1.072	1.068
0.5	0.446	1.245	1.155	1.077	1.010	0.951	0.899	1.033	1.119	1.070	1.065
0.5	0.418	1.231	1.139	1.060	0.992	0.932	0.879	1.022	1.112	1.070	1.064
0.5	0.390	1.218	1.124	1.043	0.973	0.912	0.859	1.012	1.106	1.071	1.065
0.5	0.361	1.204	1.108	1.026	0.955	0.892	0.838	1.002	1.101	1.075	1.067
0.5	0.331	1.191	1.094	1.010	0.938	0.874	0.818	0.994	1.097	1.081	1.072
0.5	0.300	1.176	1.077	0.991	0.917	0.852	0.795	0.983	1.092	1.088	1.077
0.5	0.269	1.163	1.062	0.975	0.899	0.834	0.776	0.974	1.090	1.098	1.062
0.5	0.238	1.165	1.064	0.977	0.902	0.836	0.778	0.985	1.105	1.126	1.064
0.5	0.206	1.174	1.074	0.987	0.912	0.846	0.789	1.003	1.128	1.163	1.074
0.5	0.174	1.176	1.076	0.990	0.915	0.849	0.791	1.007	1.144	1.176	1.076
0.5	0.141	1.184	1.085	0.999	0.924	0.859	0.801	1.017	1.166	1.184	1.085
0.5	0.112	1.192	1.093	1.008	0.934	0.869	0.811	1.025	1.186	1.192	1.093
0.5	0.082	1.199	1.101	1.017	0.943	0.878	0.822	1.034	1.199	1.199	1.101
0.5	0.051	1.208	1.110	1.026	0.952	0.888	0.831	1.043	1.208	1.208	1.110
0.5	0.022	1.223	1.127	1.043	0.970	0.905	0.849	1.060	1.223	1.223	1.127
0.75	0.848	1.920	1.911	1.903	1.897	1.894	1.892	1.892	1.894	1.892	1.892
0.75	0.837	1.859	1.838	1.819	1.802	1.787	1.774	1.782	1.792	1.774	1.774
0.75	0.826	1.805	1.774	1.745	1.718	1.693	1.671	1.686	1.704	1.671	1.671
0.75	0.815	1.756	1.716	1.679	1.644	1.612	1.581	1.603	1.629	1.581	1.581
0.75	0.803	1.711	1.663	1.619	1.577	1.538	1.501	1.531	1.563	1.501	1.501
0.75	0.790	1.668	1.614	1.563	1.515	1.470	1.428	1.464	1.503	1.429	1.431
0.75	0.777	1.628	1.567	1.510	1.457	1.407	1.360	1.404	1.450	1.366	1.368
0.75	0.763	1.591	1.525	1.463	1.405	1.350	1.299	1.350	1.403	1.312	1.314
0.75	0.749	1.558	1.487	1.420	1.358	1.300	1.246	1.304	1.364	1.265	1.267
0.75	0.735	1.528	1.453	1.382	1.317	1.256	1.199	1.264	1.330	1.226	1.228
0.75	0.720	1.501	1.421	1.348	1.279	1.216	1.156	1.229	1.302	1.193	1.194
0.75	0.704	1.474	1.392	1.315	1.244	1.178	1.116	1.196	1.277	1.162	1.163
0.75	0.687	1.451	1.365	1.286	1.212	1.144	1.081	1.168	1.252	1.137	1.138
0.75	0.670	1.430	1.341	1.260	1.184	1.115	1.050	1.144	1.231	1.117	1.117
0.75	0.652	1.411	1.320	1.237	1.160	1.089	1.023	1.125	1.213	1.101	1.101
0.75	0.634	1.395	1.303	1.218	1.139	1.067	1.001	1.110	1.199	1.090	1.090
0.75	0.615	1.380	1.286	1.200	1.120	1.047	0.980	1.096	1.188	1.082	1.081
0.75	0.596	1.366	1.270	1.182	1.102	1.028	0.960	1.084	1.177	1.075	1.074
0.75	0.576	1.352	1.254	1.165	1.084	1.009	0.940	1.072	1.167	1.070	1.068
0.75	0.555	1.338	1.239	1.149	1.067	0.991	0.922	1.061	1.158	1.066	1.064
0.75	0.533	1.326	1.226	1.134	1.051	0.975	0.905	1.053	1.151	1.065	1.062
0.75	0.512	1.313	1.212	1.120	1.035	0.959	0.889	1.044	1.145	1.064	1.060
0.75	0.489	1.301	1.198	1.104	1.019	0.942	0.872	1.036	1.139	1.064	1.060
0.75	0.466	1.288	1.183	1.089	1.003	0.925	0.854	1.027	1.133	1.065	1.060
0.75	0.442	1.274	1.168	1.073	0.986	0.908	0.836	1.018	1.126	1.067	1.061
0.75	0.417	1.260	1.153	1.056	0.969	0.890	0.818	1.009	1.121	1.069	1.062
0.75	0.391	1.246	1.137	1.040	0.952	0.872	0.800	1.001	1.116	1.073	1.065

0.75	0.365	1.231	1.121	1.023	0.934	0.854	0.781	0.992	1.110	1.078	1.069
0.75	0.339	1.218	1.107	1.007	0.917	0.837	0.764	0.984	1.107	1.085	1.075
0.75	0.311	1.202	1.089	0.988	0.898	0.817	0.743	0.974	1.102	1.092	1.080
0.75	0.282	1.184	1.070	0.968	0.876	0.795	0.721	0.963	1.096	1.099	1.070
0.75	0.254	1.176	1.061	0.959	0.867	0.785	0.711	0.963	1.101	1.117	1.061
0.75	0.226	1.181	1.067	0.964	0.873	0.791	0.717	0.977	1.120	1.150	1.067
0.75	0.197	1.189	1.075	0.973	0.882	0.800	0.726	0.994	1.141	1.189	1.075
0.75	0.168	1.193	1.079	0.978	0.886	0.804	0.730	0.999	1.160	1.193	1.079
0.75	0.140	1.197	1.084	0.982	0.890	0.808	0.735	1.003	1.177	1.197	1.084
0.75	0.113	1.208	1.095	0.994	0.903	0.821	0.748	1.015	1.201	1.208	1.095
0.75	0.085	1.220	1.108	1.008	0.918	0.836	0.763	1.029	1.220	1.220	1.108
0.75	0.058	1.227	1.116	1.016	0.926	0.845	0.771	1.037	1.227	1.227	1.116
0.75	0.031	1.242	1.132	1.033	0.944	0.863	0.789	1.054	1.242	1.242	1.132
0.75	0.005	1.262	1.154	1.057	0.968	0.888	0.815	1.077	1.262	1.262	1.154
1	0.805	1.745	1.699	1.653	1.609	1.565	1.523	1.556	1.592	1.523	1.523
1	0.794	1.705	1.651	1.599	1.549	1.500	1.453	1.493	1.535	1.453	1.455
1	0.782	1.665	1.604	1.547	1.491	1.437	1.385	1.432	1.481	1.390	1.393
1	0.770	1.627	1.561	1.498	1.438	1.379	1.324	1.377	1.433	1.334	1.337
1	0.758	1.593	1.522	1.455	1.390	1.328	1.269	1.330	1.391	1.286	1.289
1	0.745	1.562	1.487	1.416	1.347	1.282	1.221	1.288	1.356	1.245	1.247
1	0.732	1.534	1.455	1.379	1.308	1.240	1.176	1.250	1.324	1.209	1.211
1	0.718	1.508	1.425	1.347	1.273	1.203	1.137	1.218	1.298	1.178	1.180
1	0.705	1.485	1.399	1.318	1.242	1.170	1.102	1.190	1.276	1.152	1.154
1	0.690	1.463	1.375	1.291	1.213	1.140	1.071	1.165	1.255	1.130	1.131
1	0.675	1.444	1.353	1.268	1.188	1.113	1.042	1.143	1.235	1.112	1.113
1	0.660	1.427	1.333	1.246	1.165	1.089	1.018	1.125	1.219	1.097	1.098
1	0.644	1.412	1.316	1.228	1.145	1.068	0.996	1.110	1.205	1.087	1.087
1	0.627	1.398	1.301	1.211	1.127	1.049	0.977	1.098	1.194	1.079	1.079
1	0.611	1.385	1.287	1.195	1.111	1.032	0.959	1.086	1.184	1.073	1.072
1	0.593	1.372	1.273	1.180	1.095	1.015	0.941	1.076	1.175	1.068	1.066
1	0.576	1.359	1.258	1.165	1.078	0.998	0.924	1.066	1.166	1.063	1.061
1	0.558	1.347	1.245	1.150	1.063	0.982	0.908	1.057	1.159	1.060	1.058
1	0.539	1.336	1.233	1.137	1.049	0.968	0.893	1.049	1.153	1.059	1.056
1	0.520	1.325	1.220	1.124	1.035	0.953	0.878	1.042	1.147	1.059	1.056
1	0.500	1.314	1.208	1.110	1.021	0.939	0.863	1.034	1.142	1.060	1.056
1	0.480	1.302	1.195	1.097	1.007	0.924	0.848	1.027	1.137	1.061	1.057
1	0.459	1.291	1.183	1.084	0.993	0.910	0.834	1.021	1.133	1.064	1.058
1	0.438	1.280	1.171	1.071	0.980	0.896	0.819	1.015	1.129	1.068	1.061
1	0.416	1.269	1.159	1.058	0.966	0.882	0.805	1.009	1.126	1.072	1.065
1	0.394	1.256	1.144	1.042	0.949	0.865	0.788	1.000	1.120	1.075	1.067
1	0.370	1.241	1.128	1.025	0.932	0.847	0.770	0.991	1.114	1.078	1.069
1	0.346	1.226	1.112	1.008	0.915	0.829	0.752	0.982	1.109	1.083	1.073
1	0.321	1.213	1.097	0.993	0.898	0.813	0.735	0.974	1.106	1.090	1.079
1	0.296	1.196	1.079	0.973	0.878	0.792	0.715	0.963	1.099	1.095	1.079
1	0.271	1.183	1.065	0.959	0.864	0.778	0.700	0.958	1.098	1.106	1.065
1	0.246	1.180	1.062	0.956	0.860	0.774	0.696	0.962	1.107	1.127	1.062
1	0.221	1.186	1.068	0.962	0.866	0.780	0.703	0.977	1.125	1.158	1.068
1	0.195	1.192	1.075	0.969	0.874	0.788	0.710	0.991	1.144	1.192	1.075
1	0.169	1.198	1.081	0.976	0.881	0.795	0.718	0.998	1.163	1.198	1.081
1	0.145	1.199	1.083	0.977	0.882	0.796	0.719	0.999	1.176	1.199	1.083
1	0.121	1.206	1.090	0.986	0.891	0.805	0.728	1.007	1.195	1.206	1.090
1	0.097	1.217	1.101	0.997	0.903	0.817	0.740	1.019	1.217	1.217	1.101
1	0.073	1.227	1.113	1.009	0.915	0.830	0.753	1.031	1.227	1.227	1.113
1	0.048	1.242	1.129	1.026	0.933	0.848	0.771	1.048	1.242	1.242	1.129
1	0.026	1.249	1.137	1.035	0.942	0.858	0.781	1.056	1.249	1.249	1.137
1	0.004	1.265	1.154	1.053	0.961	0.876	0.800	1.074	1.265	1.265	1.154

Tabla C.4 Valores de r_2 de la sección 6 (80 cm x 80 cm con ρ = 0.06 y f'_c = 250 kg/cm^2) para distintos criterios de cálculo del exponente *a*.

s	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	0.849	1.305	1.255	1.220	1.196	1.181	1.172	1.176	1.184	1.172	1.172
0.25	0.840	1.295	1.244	1.208	1.183	1.167	1.157	1.162	1.172	1.157	1.157
0.25	0.831	1.286	1.234	1.197	1.171	1.154	1.143	1.149	1.160	1.143	1.143
0.25	0.822	1.277	1.224	1.186	1.159	1.141	1.129	1.137	1.149	1.129	1.129
0.25	0.812	1.269	1.215	1.176	1.149	1.129	1.116	1.125	1.139	1.116	1.116
0.25	0.801	1.261	1.206	1.167	1.138	1.118	1.104	1.115	1.130	1.104	1.104
0.25	0.789	1.253	1.197	1.156	1.126	1.104	1.089	1.102	1.120	1.089	1.090
0.25	0.777	1.245	1.188	1.146	1.114	1.092	1.075	1.090	1.111	1.077	1.078
0.25	0.764	1.237	1.179	1.136	1.103	1.079	1.062	1.079	1.103	1.066	1.066
0.25	0.750	1.232	1.173	1.129	1.096	1.071	1.052	1.072	1.098	1.059	1.059
0.25	0.735	1.228	1.168	1.123	1.089	1.064	1.045	1.067	1.096	1.054	1.054
0.25	0.720	1.222	1.162	1.116	1.082	1.056	1.037	1.061	1.093	1.048	1.049
0.25	0.703	1.216	1.156	1.110	1.075	1.049	1.029	1.056	1.091	1.043	1.044
0.25	0.686	1.211	1.151	1.105	1.070	1.043	1.023	1.052	1.088	1.041	1.041
0.25	0.668	1.205	1.144	1.098	1.063	1.036	1.016	1.047	1.084	1.038	1.038
0.25	0.649	1.198	1.137	1.091	1.056	1.029	1.008	1.043	1.080	1.034	1.034
0.25	0.629	1.191	1.130	1.084	1.049	1.022	1.001	1.038	1.076	1.031	1.031
0.25	0.609	1.185	1.123	1.077	1.042	1.015	0.995	1.034	1.073	1.029	1.029
0.25	0.588	1.178	1.117	1.071	1.036	1.009	0.988	1.030	1.070	1.028	1.027
0.25	0.566	1.172	1.111	1.065	1.030	1.003	0.982	1.027	1.067	1.027	1.026
0.25	0.543	1.167	1.105	1.059	1.024	0.997	0.975	1.023	1.065	1.027	1.026
0.25	0.520	1.161	1.100	1.053	1.018	0.990	0.969	1.020	1.063	1.027	1.025
0.25	0.496	1.156	1.094	1.047	1.012	0.984	0.962	1.017	1.062	1.028	1.026
0.25	0.471	1.150	1.088	1.041	1.005	0.977	0.954	1.014	1.061	1.029	1.027
0.25	0.445	1.145	1.082	1.034	0.997	0.968	0.945	1.009	1.059	1.030	1.027
0.25	0.418	1.139	1.075	1.027	0.989	0.959	0.935	1.006	1.058	1.032	1.029
0.25	0.390	1.134	1.069	1.020	0.981	0.950	0.926	1.002	1.058	1.036	1.032
0.25	0.360	1.129	1.063	1.012	0.973	0.942	0.916	0.999	1.058	1.042	1.037
0.25	0.329	1.124	1.057	1.006	0.965	0.933	0.906	0.996	1.060	1.050	1.044
0.25	0.296	1.121	1.053	1.001	0.959	0.926	0.899	0.996	1.064	1.062	1.053
0.25	0.263	1.110	1.041	0.987	0.944	0.910	0.881	0.987	1.061	1.068	1.041
0.25	0.230	1.116	1.048	0.996	0.954	0.921	0.893	1.001	1.077	1.094	1.048
0.25	0.197	1.124	1.059	1.008	0.969	0.937	0.912	1.018	1.096	1.124	1.059
0.25	0.165	1.128	1.064	1.015	0.976	0.946	0.921	1.024	1.109	1.128	1.064
0.25	0.137	1.128	1.064	1.016	0.979	0.949	0.925	1.025	1.117	1.128	1.064
0.25	0.110	1.131	1.067	1.019	0.981	0.951	0.927	1.028	1.128	1.131	1.067
0.25	0.082	1.131	1.066	1.016	0.976	0.945	0.920	1.025	1.131	1.131	1.066
0.25	0.054	1.133	1.066	1.015	0.976	0.944	0.918	1.025	1.133	1.133	1.066
0.25	0.026	1.136	1.070	1.019	0.979	0.947	0.921	1.029	1.136	1.136	1.070
0.5	0.819	1.448	1.379	1.319	1.268	1.224	1.186	1.213	1.246	1.186	1.186
0.5	0.810	1.433	1.362	1.301	1.248	1.202	1.162	1.192	1.228	1.162	1.162
0.5	0.800	1.419	1.346	1.283	1.229	1.181	1.140	1.173	1.212	1.138	1.140
0.5	0.789	1.406	1.331	1.267	1.210	1.161	1.119	1.155	1.198	1.120	1.122
0.5	0.778	1.393	1.317	1.251	1.193	1.143	1.099	1.139	1.185	1.104	1.106
0.5	0.766	1.381	1.303	1.235	1.176	1.124	1.079	1.124	1.173	1.089	1.091
0.5	0.754	1.370	1.290	1.221	1.161	1.108	1.062	1.111	1.164	1.077	1.078
0.5	0.742	1.361	1.280	1.210	1.149	1.095	1.048	1.101	1.158	1.068	1.070
0.5	0.728	1.351	1.270	1.198	1.136	1.082	1.034	1.091	1.152	1.060	1.061
0.5	0.714	1.341	1.258	1.186	1.123	1.068	1.019	1.080	1.146	1.051	1.052
0.5	0.699	1.331	1.247	1.173	1.109	1.053	1.004	1.070	1.141	1.042	1.043
0.5	0.684	1.321	1.236	1.162	1.097	1.040	0.990	1.061	1.133	1.036	1.037

0.5	0.667	1.312	1.226	1.151	1.086	1.028	0.977	1.053	1.126	1.031	1.031
0.5	0.651	1.304	1.217	1.141	1.075	1.016	0.965	1.046	1.120	1.027	1.027
0.5	0.633	1.295	1.207	1.131	1.064	1.005	0.953	1.040	1.115	1.024	1.024
0.5	0.615	1.287	1.198	1.121	1.054	0.994	0.942	1.034	1.111	1.022	1.022
0.5	0.596	1.279	1.189	1.112	1.044	0.984	0.931	1.029	1.107	1.022	1.021
0.5	0.577	1.270	1.180	1.101	1.033	0.973	0.920	1.023	1.102	1.021	1.020
0.5	0.556	1.260	1.169	1.090	1.021	0.961	0.907	1.017	1.097	1.020	1.018
0.5	0.535	1.250	1.158	1.078	1.009	0.948	0.894	1.010	1.092	1.019	1.017
0.5	0.512	1.240	1.147	1.066	0.996	0.935	0.881	1.003	1.088	1.019	1.016
0.5	0.490	1.230	1.136	1.055	0.984	0.922	0.868	0.997	1.084	1.021	1.017
0.5	0.466	1.221	1.126	1.044	0.972	0.910	0.855	0.992	1.081	1.024	1.019
0.5	0.442	1.211	1.115	1.032	0.960	0.897	0.842	0.986	1.078	1.027	1.022
0.5	0.416	1.201	1.104	1.021	0.948	0.884	0.828	0.981	1.076	1.032	1.026
0.5	0.390	1.191	1.094	1.009	0.936	0.872	0.815	0.976	1.075	1.038	1.031
0.5	0.363	1.182	1.083	0.997	0.923	0.858	0.801	0.971	1.074	1.046	1.038
0.5	0.335	1.172	1.072	0.985	0.910	0.845	0.787	0.967	1.074	1.056	1.046
0.5	0.306	1.165	1.064	0.976	0.900	0.834	0.776	0.966	1.077	1.070	1.059
0.5	0.276	1.152	1.049	0.961	0.884	0.817	0.758	0.958	1.075	1.080	1.049
0.5	0.246	1.144	1.041	0.952	0.874	0.806	0.747	0.957	1.079	1.098	1.041
0.5	0.215	1.156	1.054	0.966	0.889	0.822	0.763	0.980	1.105	1.137	1.054
0.5	0.184	1.166	1.065	0.977	0.901	0.834	0.776	0.995	1.129	1.166	1.065
0.5	0.155	1.172	1.072	0.985	0.909	0.842	0.784	1.002	1.148	1.172	1.072
0.5	0.125	1.182	1.083	0.997	0.922	0.856	0.798	1.014	1.171	1.182	1.083
0.5	0.096	1.188	1.090	1.004	0.930	0.864	0.807	1.022	1.188	1.188	1.090
0.5	0.066	1.193	1.095	1.009	0.935	0.870	0.813	1.027	1.193	1.193	1.095
0.5	0.038	1.201	1.104	1.019	0.946	0.881	0.824	1.037	1.201	1.201	1.104
0.5	0.010	1.207	1.110	1.026	0.952	0.888	0.831	1.043	1.207	1.207	1.110
0.75	0.779	1.454	1.368	1.289	1.215	1.146	1.083	1.141	1.203	1.090	1.093
0.75	0.769	1.441	1.354	1.273	1.198	1.129	1.065	1.127	1.193	1.077	1.080
0.75	0.759	1.430	1.341	1.259	1.183	1.113	1.047	1.114	1.184	1.066	1.068
0.75	0.748	1.420	1.330	1.247	1.170	1.099	1.034	1.104	1.178	1.058	1.060
0.75	0.736	1.409	1.318	1.233	1.156	1.084	1.017	1.093	1.171	1.048	1.051
0.75	0.724	1.397	1.304	1.218	1.139	1.066	0.999	1.080	1.162	1.038	1.039
0.75	0.711	1.384	1.290	1.203	1.123	1.050	0.982	1.067	1.155	1.028	1.029
0.75	0.698	1.373	1.277	1.189	1.108	1.034	0.966	1.056	1.149	1.020	1.021
0.75	0.684	1.362	1.265	1.177	1.095	1.020	0.951	1.047	1.140	1.014	1.015
0.75	0.670	1.353	1.255	1.165	1.082	1.007	0.938	1.039	1.133	1.009	1.010
0.75	0.655	1.343	1.244	1.153	1.070	0.994	0.925	1.032	1.126	1.005	1.006
0.75	0.640	1.334	1.234	1.142	1.059	0.982	0.912	1.025	1.120	1.003	1.003
0.75	0.625	1.325	1.224	1.131	1.047	0.970	0.900	1.019	1.115	1.001	1.000
0.75	0.608	1.316	1.214	1.121	1.036	0.959	0.888	1.013	1.111	1.000	0.999
0.75	0.592	1.307	1.204	1.111	1.026	0.948	0.877	1.008	1.107	1.000	0.999
0.75	0.574	1.299	1.195	1.101	1.015	0.937	0.866	1.003	1.103	1.001	1.000
0.75	0.556	1.291	1.186	1.092	1.005	0.927	0.855	1.000	1.101	1.004	1.001
0.75	0.537	1.282	1.176	1.081	0.994	0.915	0.843	0.995	1.097	1.005	1.002
0.75	0.518	1.272	1.166	1.070	0.983	0.903	0.831	0.990	1.094	1.008	1.004
0.75	0.498	1.263	1.156	1.059	0.971	0.892	0.819	0.985	1.091	1.011	1.007
0.75	0.477	1.254	1.146	1.048	0.960	0.880	0.807	0.981	1.089	1.015	1.010
0.75	0.456	1.243	1.134	1.036	0.947	0.867	0.794	0.975	1.086	1.019	1.013
0.75	0.433	1.233	1.123	1.024	0.934	0.854	0.781	0.970	1.083	1.024	1.017
0.75	0.410	1.222	1.111	1.011	0.922	0.841	0.768	0.965	1.081	1.030	1.023
0.75	0.387	1.211	1.099	0.999	0.909	0.828	0.754	0.960	1.079	1.037	1.029
0.75	0.362	1.201	1.088	0.987	0.896	0.814	0.741	0.956	1.078	1.046	1.036
0.75	0.337	1.191	1.077	0.975	0.884	0.802	0.729	0.952	1.078	1.056	1.046
0.75	0.311	1.182	1.068	0.966	0.874	0.792	0.719	0.951	1.081	1.071	1.059
0.75	0.284	1.172	1.056	0.953	0.861	0.779	0.705	0.948	1.082	1.084	1.056
0.75	0.257	1.157	1.040	0.937	0.844	0.761	0.688	0.940	1.079	1.093	1.040

0.75	0.230	1.162	1.046	0.942	0.850	0.767	0.693	0.954	1.097	1.126	1.046
0.75	0.202	1.173	1.057	0.954	0.862	0.780	0.706	0.975	1.122	1.164	1.057
0.75	0.175	1.178	1.064	0.961	0.869	0.787	0.713	0.982	1.141	1.178	1.064
0.75	0.148	1.185	1.070	0.968	0.876	0.794	0.720	0.989	1.161	1.185	1.070
0.75	0.121	1.195	1.082	0.980	0.889	0.807	0.733	1.001	1.185	1.195	1.082
0.75	0.094	1.205	1.092	0.991	0.900	0.818	0.744	1.012	1.205	1.205	1.092
0.75	0.067	1.211	1.099	0.998	0.907	0.825	0.752	1.019	1.211	1.211	1.099
0.75	0.042	1.222	1.110	1.010	0.920	0.839	0.765	1.031	1.222	1.222	1.110
0.75	0.015	1.233	1.123	1.023	0.934	0.853	0.779	1.044	1.233	1.233	1.123
1	0.737	1.417	1.322	1.234	1.152	1.075	1.003	1.084	1.167	1.037	1.039
1	0.726	1.407	1.311	1.222	1.139	1.062	0.990	1.075	1.162	1.030	1.032
1	0.715	1.397	1.301	1.211	1.127	1.049	0.976	1.066	1.157	1.023	1.025
1	0.704	1.388	1.290	1.199	1.115	1.036	0.963	1.058	1.153	1.017	1.019
1	0.693	1.379	1.281	1.189	1.104	1.025	0.951	1.050	1.148	1.013	1.014
1	0.680	1.372	1.272	1.180	1.094	1.014	0.941	1.045	1.143	1.010	1.011
1	0.668	1.364	1.264	1.170	1.084	1.004	0.930	1.039	1.138	1.008	1.009
1	0.655	1.355	1.253	1.159	1.072	0.992	0.918	1.032	1.131	1.004	1.004
1	0.641	1.345	1.243	1.148	1.060	0.979	0.905	1.024	1.125	1.000	1.000
1	0.628	1.336	1.232	1.136	1.048	0.967	0.892	1.017	1.118	0.997	0.997
1	0.613	1.326	1.222	1.126	1.037	0.955	0.880	1.011	1.113	0.995	0.995
1	0.599	1.318	1.212	1.115	1.026	0.944	0.868	1.005	1.108	0.994	0.993
1	0.583	1.309	1.203	1.105	1.015	0.933	0.857	1.000	1.104	0.994	0.993
1	0.568	1.301	1.194	1.095	1.005	0.922	0.846	0.995	1.100	0.995	0.993
1	0.551	1.293	1.185	1.086	0.995	0.912	0.836	0.991	1.097	0.997	0.994
1	0.535	1.285	1.176	1.076	0.985	0.902	0.825	0.987	1.094	0.999	0.996
1	0.518	1.277	1.167	1.067	0.975	0.891	0.815	0.983	1.092	1.002	0.998
1	0.500	1.269	1.158	1.057	0.965	0.881	0.805	0.979	1.090	1.005	1.001
1	0.482	1.261	1.149	1.048	0.956	0.871	0.795	0.976	1.088	1.010	1.005
1	0.464	1.252	1.140	1.039	0.946	0.861	0.784	0.972	1.087	1.015	1.009
1	0.444	1.244	1.131	1.029	0.936	0.851	0.774	0.969	1.085	1.020	1.014
1	0.425	1.236	1.122	1.019	0.925	0.840	0.763	0.966	1.085	1.026	1.019
1	0.404	1.227	1.113	1.009	0.915	0.830	0.753	0.963	1.084	1.034	1.026
1	0.383	1.218	1.103	0.999	0.904	0.819	0.742	0.960	1.083	1.041	1.032
1	0.361	1.207	1.091	0.986	0.892	0.806	0.729	0.955	1.081	1.048	1.038
1	0.339	1.197	1.080	0.975	0.880	0.794	0.716	0.951	1.081	1.057	1.046
1	0.316	1.188	1.071	0.965	0.870	0.784	0.706	0.949	1.082	1.069	1.057
1	0.292	1.179	1.060	0.954	0.858	0.772	0.695	0.946	1.083	1.081	1.060
1	0.268	1.164	1.045	0.937	0.841	0.755	0.677	0.937	1.079	1.089	1.045
1	0.244	1.159	1.039	0.931	0.835	0.749	0.671	0.939	1.085	1.107	1.039
1	0.219	1.168	1.049	0.942	0.846	0.760	0.682	0.958	1.107	1.142	1.049
1	0.194	1.178	1.060	0.953	0.857	0.771	0.694	0.975	1.130	1.178	1.060
1	0.171	1.181	1.063	0.956	0.861	0.774	0.697	0.978	1.144	1.181	1.063
1	0.147	1.186	1.069	0.963	0.867	0.781	0.704	0.984	1.162	1.186	1.069
1	0.122	1.198	1.081	0.976	0.881	0.795	0.718	0.998	1.187	1.198	1.081
1	0.099	1.206	1.090	0.986	0.891	0.805	0.728	1.007	1.206	1.206	1.090
1	0.076	1.209	1.094	0.989	0.894	0.809	0.731	1.011	1.209	1.209	1.094
1	0.052	1.220	1.106	1.002	0.907	0.822	0.745	1.023	1.220	1.220	1.106
1	0.029	1.234	1.121	1.017	0.924	0.839	0.762	1.039	1.234	1.234	1.121
1	0.008	1.240	1.127	1.024	0.930	0.846	0.768	1.045	1.240	1.240	1.127

Tabla C.5 Valores de r_2 de la sección 7 (80 cm x 80 cm con ρ = 0.03 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*.

s	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	0.891	1.797	1.847	1.918	2.010	2.120	2.249	2.204	2.131	2.249	2.249
0.25	0.878	1.721	1.752	1.804	1.874	1.960	2.060	2.018	1.958	2.060	2.060

0.25	0.865	1.654	1.671	1.707	1.759	1.824	1.903	1.864	1.815	1.903	1.903
0.25	0.850	1.596	1.602	1.625	1.663	1.713	1.775	1.739	1.699	1.775	1.775
0.25	0.834	1.547	1.544	1.557	1.583	1.622	1.670	1.638	1.606	1.670	1.670
0.25	0.818	1.502	1.490	1.495	1.512	1.541	1.578	1.550	1.525	1.578	1.578
0.25	0.800	1.460	1.441	1.439	1.449	1.469	1.497	1.473	1.454	1.499	1.497
0.25	0.781	1.423	1.399	1.391	1.395	1.408	1.430	1.410	1.396	1.427	1.426
0.25	0.762	1.391	1.362	1.350	1.349	1.358	1.374	1.358	1.349	1.369	1.368
0.25	0.742	1.362	1.330	1.315	1.310	1.315	1.327	1.314	1.310	1.321	1.321
0.25	0.721	1.337	1.303	1.285	1.278	1.280	1.289	1.279	1.279	1.283	1.283
0.25	0.700	1.315	1.279	1.259	1.250	1.250	1.256	1.249	1.253	1.250	1.250
0.25	0.678	1.295	1.257	1.235	1.224	1.222	1.226	1.222	1.230	1.222	1.222
0.25	0.656	1.277	1.238	1.215	1.202	1.198	1.200	1.199	1.210	1.198	1.198
0.25	0.633	1.263	1.222	1.197	1.183	1.178	1.178	1.180	1.193	1.179	1.179
0.25	0.610	1.249	1.207	1.181	1.166	1.158	1.157	1.163	1.178	1.161	1.161
0.25	0.587	1.236	1.193	1.165	1.148	1.140	1.136	1.146	1.165	1.145	1.145
0.25	0.563	1.225	1.181	1.152	1.134	1.124	1.119	1.133	1.154	1.133	1.133
0.25	0.538	1.215	1.169	1.139	1.119	1.107	1.101	1.119	1.143	1.121	1.120
0.25	0.513	1.205	1.157	1.125	1.103	1.090	1.081	1.105	1.133	1.110	1.109
0.25	0.487	1.197	1.148	1.114	1.091	1.075	1.065	1.095	1.125	1.102	1.101
0.25	0.461	1.189	1.139	1.104	1.079	1.062	1.051	1.086	1.120	1.097	1.096
0.25	0.433	1.182	1.130	1.093	1.067	1.048	1.035	1.076	1.114	1.093	1.091
0.25	0.405	1.174	1.120	1.081	1.053	1.033	1.018	1.067	1.108	1.090	1.087
0.25	0.377	1.160	1.104	1.063	1.033	1.010	0.993	1.050	1.096	1.081	1.077
0.25	0.348	1.159	1.103	1.063	1.033	1.011	0.994	1.054	1.102	1.090	1.086
0.25	0.321	1.163	1.108	1.068	1.039	1.018	1.002	1.062	1.112	1.105	1.101
0.25	0.293	1.165	1.111	1.071	1.042	1.021	1.006	1.068	1.120	1.119	1.111
0.25	0.267	1.161	1.106	1.066	1.037	1.015	0.999	1.066	1.121	1.125	1.106
0.25	0.242	1.162	1.106	1.065	1.035	1.013	0.996	1.068	1.127	1.137	1.106
0.25	0.217	1.164	1.106	1.064	1.032	1.008	0.990	1.070	1.133	1.151	1.106
0.25	0.191	1.166	1.106	1.062	1.029	1.004	0.984	1.071	1.141	1.166	1.106
0.25	0.165	1.166	1.105	1.060	1.025	0.999	0.978	1.069	1.148	1.166	1.105
0.25	0.140	1.170	1.108	1.061	1.026	0.998	0.976	1.070	1.158	1.170	1.108
0.25	0.115	1.176	1.112	1.063	1.025	0.995	0.971	1.072	1.171	1.176	1.112
0.25	0.088	1.181	1.115	1.063	1.022	0.990	0.964	1.073	1.181	1.181	1.115
0.25	0.061	1.190	1.122	1.068	1.025	0.991	0.963	1.079	1.190	1.190	1.122
0.25	0.035	1.202	1.132	1.077	1.033	0.998	0.969	1.088	1.202	1.202	1.132
0.25	0.009	1.215	1.143	1.085	1.039	1.001	0.969	1.097	1.215	1.215	1.143
0.5	0.900	2.376	2.501	2.646	2.813	3.004	3.219	3.155	3.037	3.219	3.219
0.5	0.888	2.232	2.320	2.424	2.544	2.682	2.838	2.782	2.692	2.838	2.838
0.5	0.876	2.113	2.173	2.245	2.330	2.429	2.542	2.494	2.426	2.542	2.542
0.5	0.864	2.011	2.047	2.095	2.153	2.222	2.302	2.262	2.212	2.302	2.302
0.5	0.850	1.926	1.943	1.971	2.008	2.055	2.110	2.078	2.042	2.110	2.110
0.5	0.836	1.852	1.855	1.867	1.887	1.916	1.953	1.929	1.904	1.953	1.953
0.5	0.821	1.786	1.775	1.774	1.780	1.794	1.816	1.800	1.786	1.816	1.816
0.5	0.805	1.725	1.703	1.691	1.685	1.688	1.696	1.689	1.685	1.696	1.696
0.5	0.789	1.670	1.639	1.617	1.602	1.594	1.592	1.593	1.599	1.592	1.592
0.5	0.772	1.620	1.581	1.550	1.527	1.511	1.501	1.510	1.525	1.502	1.503
0.5	0.754	1.576	1.530	1.492	1.463	1.440	1.423	1.441	1.464	1.428	1.429
0.5	0.735	1.537	1.485	1.442	1.407	1.379	1.357	1.382	1.414	1.367	1.368
0.5	0.715	1.503	1.446	1.399	1.359	1.327	1.301	1.334	1.373	1.317	1.318
0.5	0.695	1.472	1.411	1.360	1.317	1.281	1.251	1.292	1.338	1.275	1.276
0.5	0.674	1.444	1.379	1.324	1.278	1.240	1.207	1.255	1.305	1.239	1.240
0.5	0.653	1.419	1.350	1.293	1.244	1.203	1.168	1.223	1.277	1.210	1.210
0.5	0.631	1.396	1.325	1.265	1.215	1.172	1.135	1.197	1.254	1.186	1.186
0.5	0.609	1.375	1.301	1.240	1.187	1.142	1.104	1.173	1.233	1.165	1.165
0.5	0.586	1.354	1.279	1.215	1.161	1.114	1.074	1.151	1.214	1.148	1.147
0.5	0.562	1.336	1.259	1.193	1.137	1.089	1.048	1.132	1.198	1.134	1.132

0.5	0.538	1.319	1.239	1.172	1.114	1.065	1.022	1.114	1.183	1.121	1.119
0.5	0.513	1.302	1.220	1.151	1.091	1.040	0.996	1.097	1.169	1.110	1.108
0.5	0.488	1.287	1.204	1.133	1.072	1.019	0.973	1.083	1.159	1.104	1.101
0.5	0.463	1.274	1.188	1.116	1.053	0.999	0.952	1.071	1.150	1.100	1.096
0.5	0.437	1.260	1.173	1.099	1.034	0.979	0.930	1.059	1.141	1.097	1.092
0.5	0.410	1.247	1.158	1.082	1.016	0.959	0.909	1.048	1.135	1.096	1.090
0.5	0.383	1.230	1.139	1.061	0.993	0.935	0.883	1.032	1.124	1.092	1.086
0.5	0.357	1.223	1.131	1.051	0.983	0.923	0.871	1.029	1.125	1.101	1.093
0.5	0.330	1.230	1.138	1.059	0.990	0.931	0.878	1.043	1.141	1.127	1.118
0.5	0.303	1.234	1.142	1.063	0.994	0.934	0.882	1.054	1.155	1.150	1.140
0.5	0.276	1.234	1.142	1.063	0.994	0.934	0.881	1.061	1.165	1.170	1.142
0.5	0.249	1.237	1.145	1.065	0.996	0.936	0.883	1.070	1.178	1.192	1.145
0.5	0.223	1.244	1.152	1.073	1.004	0.944	0.891	1.083	1.195	1.220	1.152
0.5	0.197	1.249	1.157	1.077	1.008	0.947	0.894	1.093	1.210	1.249	1.157
0.5	0.170	1.254	1.162	1.082	1.013	0.952	0.898	1.099	1.226	1.254	1.162
0.5	0.146	1.260	1.167	1.087	1.017	0.956	0.902	1.104	1.241	1.260	1.167
0.5	0.121	1.269	1.178	1.098	1.028	0.966	0.911	1.114	1.261	1.269	1.178
0.5	0.097	1.277	1.184	1.103	1.032	0.969	0.913	1.120	1.277	1.277	1.184
0.5	0.072	1.286	1.193	1.111	1.039	0.975	0.918	1.128	1.286	1.286	1.193
0.5	0.049	1.297	1.205	1.123	1.050	0.986	0.928	1.140	1.297	1.297	1.205
0.5	0.025	1.313	1.222	1.140	1.068	1.004	0.946	1.157	1.313	1.313	1.222
0.5	0.003	1.328	1.236	1.155	1.082	1.017	0.958	1.172	1.328	1.328	1.236
0.75	0.893	2.470	2.585	2.708	2.839	2.980	3.131	3.082	2.996	3.131	3.131
0.75	0.882	2.333	2.413	2.499	2.590	2.688	2.792	2.752	2.690	2.792	2.792
0.75	0.871	2.215	2.268	2.325	2.385	2.449	2.518	2.487	2.445	2.518	2.518
0.75	0.860	2.115	2.145	2.178	2.214	2.253	2.294	2.273	2.246	2.294	2.294
0.75	0.847	2.029	2.041	2.055	2.072	2.091	2.112	2.099	2.085	2.112	2.112
0.75	0.835	1.953	1.950	1.949	1.950	1.953	1.958	1.954	1.952	1.958	1.958
0.75	0.821	1.885	1.868	1.854	1.842	1.831	1.823	1.829	1.836	1.823	1.823
0.75	0.807	1.822	1.794	1.768	1.745	1.723	1.704	1.719	1.736	1.704	1.704
0.75	0.793	1.766	1.728	1.693	1.660	1.629	1.601	1.625	1.651	1.601	1.602
0.75	0.778	1.716	1.670	1.626	1.586	1.548	1.512	1.545	1.580	1.516	1.518
0.75	0.763	1.670	1.617	1.566	1.519	1.475	1.433	1.475	1.518	1.444	1.445
0.75	0.746	1.630	1.570	1.513	1.460	1.411	1.364	1.415	1.466	1.382	1.384
0.75	0.730	1.594	1.528	1.466	1.409	1.355	1.305	1.364	1.423	1.331	1.333
0.75	0.712	1.561	1.491	1.425	1.364	1.306	1.253	1.320	1.387	1.289	1.290
0.75	0.695	1.531	1.457	1.387	1.322	1.262	1.206	1.281	1.356	1.252	1.253
0.75	0.676	1.503	1.424	1.351	1.284	1.221	1.162	1.246	1.324	1.219	1.220
0.75	0.657	1.477	1.395	1.319	1.248	1.183	1.123	1.215	1.296	1.192	1.192
0.75	0.637	1.453	1.368	1.290	1.217	1.150	1.088	1.189	1.272	1.170	1.170
0.75	0.617	1.431	1.344	1.263	1.189	1.120	1.056	1.165	1.251	1.151	1.151
0.75	0.597	1.410	1.320	1.237	1.161	1.091	1.026	1.144	1.232	1.135	1.134
0.75	0.575	1.391	1.299	1.214	1.136	1.064	0.999	1.125	1.215	1.123	1.121
0.75	0.553	1.373	1.279	1.192	1.113	1.041	0.974	1.109	1.202	1.113	1.111
0.75	0.531	1.355	1.259	1.171	1.091	1.017	0.949	1.093	1.188	1.105	1.102
0.75	0.509	1.338	1.240	1.150	1.069	0.994	0.926	1.078	1.176	1.098	1.095
0.75	0.485	1.323	1.223	1.132	1.050	0.974	0.906	1.067	1.167	1.096	1.092
0.75	0.462	1.308	1.207	1.115	1.031	0.955	0.886	1.056	1.159	1.095	1.090
0.75	0.437	1.293	1.190	1.096	1.012	0.935	0.865	1.044	1.151	1.094	1.088
0.75	0.412	1.278	1.173	1.079	0.993	0.915	0.845	1.034	1.144	1.095	1.088
0.75	0.387	1.261	1.154	1.058	0.972	0.893	0.822	1.021	1.135	1.094	1.086
0.75	0.363	1.247	1.139	1.042	0.954	0.875	0.803	1.012	1.129	1.098	1.089
0.75	0.338	1.252	1.144	1.047	0.960	0.881	0.809	1.025	1.145	1.124	1.114
0.75	0.312	1.256	1.149	1.052	0.965	0.886	0.814	1.038	1.161	1.150	1.139
0.75	0.288	1.259	1.152	1.055	0.967	0.888	0.816	1.048	1.174	1.174	1.152
0.75	0.264	1.259	1.152	1.055	0.967	0.888	0.816	1.056	1.185	1.195	1.152
0.75	0.239	1.268	1.161	1.065	0.978	0.899	0.827	1.073	1.205	1.226	1.161

0.75	0.216	1.275	1.169	1.073	0.986	0.907	0.835	1.088	1.222	1.255	1.169
0.75	0.192	1.281	1.176	1.080	0.993	0.914	0.842	1.100	1.240	1.281	1.176
0.75	0.168	1.286	1.181	1.085	0.998	0.919	0.847	1.105	1.255	1.286	1.181
0.75	0.146	1.294	1.190	1.095	1.008	0.929	0.857	1.114	1.273	1.294	1.190
0.75	0.124	1.305	1.201	1.107	1.021	0.942	0.871	1.127	1.294	1.305	1.201
0.75	0.101	1.317	1.214	1.121	1.035	0.957	0.885	1.140	1.316	1.317	1.214
0.75	0.080	1.323	1.221	1.128	1.043	0.965	0.894	1.148	1.323	1.323	1.221
0.75	0.059	1.331	1.230	1.137	1.052	0.974	0.903	1.156	1.331	1.331	1.230
0.75	0.039	1.346	1.246	1.155	1.071	0.994	0.923	1.174	1.346	1.346	1.246
0.75	0.018	1.363	1.265	1.174	1.092	1.015	0.945	1.193	1.363	1.363	1.265
1	0.850	2.072	2.086	2.101	2.116	2.131	2.146	2.138	2.127	2.146	2.146
1	0.838	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000
1	0.827	1.934	1.922	1.909	1.896	1.884	1.871	1.879	1.889	1.871	1.871
1	0.815	1.873	1.849	1.825	1.801	1.778	1.755	1.772	1.791	1.755	1.755
1	0.802	1.818	1.784	1.750	1.717	1.685	1.653	1.678	1.706	1.653	1.653
1	0.789	1.768	1.725	1.683	1.643	1.603	1.564	1.597	1.633	1.565	1.567
1	0.776	1.723	1.673	1.624	1.576	1.530	1.485	1.527	1.570	1.491	1.493
1	0.762	1.683	1.626	1.571	1.517	1.466	1.416	1.466	1.517	1.429	1.431
1	0.748	1.647	1.584	1.523	1.465	1.409	1.356	1.413	1.471	1.376	1.378
1	0.733	1.613	1.545	1.480	1.418	1.359	1.301	1.367	1.432	1.330	1.332
1	0.718	1.583	1.511	1.442	1.376	1.313	1.253	1.327	1.399	1.291	1.292
1	0.703	1.556	1.480	1.407	1.338	1.273	1.210	1.291	1.371	1.257	1.259
1	0.687	1.530	1.450	1.375	1.303	1.235	1.171	1.259	1.342	1.228	1.229
1	0.670	1.506	1.423	1.345	1.270	1.200	1.134	1.230	1.316	1.202	1.203
1	0.653	1.484	1.398	1.317	1.241	1.169	1.102	1.206	1.294	1.181	1.181
1	0.636	1.465	1.376	1.293	1.215	1.142	1.073	1.184	1.274	1.164	1.164
1	0.618	1.446	1.355	1.270	1.190	1.115	1.045	1.164	1.256	1.149	1.148
1	0.600	1.427	1.334	1.247	1.166	1.090	1.019	1.146	1.240	1.136	1.135
1	0.582	1.409	1.314	1.225	1.142	1.065	0.993	1.128	1.225	1.124	1.122
1	0.563	1.392	1.295	1.204	1.120	1.042	0.969	1.112	1.211	1.114	1.112
1	0.543	1.375	1.276	1.184	1.099	1.019	0.946	1.097	1.198	1.106	1.103
1	0.523	1.359	1.258	1.164	1.078	0.997	0.923	1.083	1.186	1.099	1.096
1	0.502	1.343	1.240	1.145	1.058	0.977	0.902	1.070	1.175	1.094	1.090
1	0.481	1.329	1.225	1.129	1.040	0.958	0.883	1.060	1.167	1.092	1.088
1	0.460	1.315	1.210	1.112	1.023	0.941	0.865	1.050	1.160	1.092	1.086
1	0.439	1.301	1.194	1.096	1.005	0.923	0.847	1.040	1.153	1.092	1.086
1	0.416	1.287	1.179	1.079	0.988	0.905	0.828	1.030	1.146	1.093	1.086
1	0.394	1.272	1.162	1.062	0.970	0.886	0.810	1.020	1.139	1.094	1.086
1	0.372	1.256	1.144	1.043	0.950	0.866	0.789	1.008	1.130	1.094	1.085
1	0.349	1.255	1.143	1.041	0.949	0.864	0.787	1.014	1.139	1.112	1.102
1	0.327	1.259	1.148	1.046	0.954	0.870	0.793	1.027	1.154	1.136	1.125
1	0.304	1.264	1.153	1.052	0.960	0.875	0.799	1.040	1.169	1.162	1.150
1	0.282	1.264	1.153	1.052	0.960	0.876	0.799	1.047	1.179	1.182	1.153
1	0.261	1.265	1.154	1.053	0.961	0.877	0.800	1.055	1.190	1.202	1.154
1	0.239	1.273	1.163	1.062	0.970	0.887	0.810	1.071	1.208	1.230	1.163
1	0.218	1.282	1.172	1.073	0.981	0.898	0.821	1.088	1.227	1.259	1.172
1	0.197	1.288	1.179	1.080	0.989	0.905	0.829	1.100	1.243	1.288	1.179
1	0.177	1.289	1.181	1.082	0.991	0.907	0.831	1.102	1.253	1.289	1.181
1	0.157	1.296	1.189	1.090	0.999	0.916	0.840	1.110	1.270	1.296	1.189
1	0.137	1.308	1.201	1.103	1.013	0.931	0.855	1.124	1.290	1.308	1.201
1	0.117	1.319	1.213	1.116	1.027	0.945	0.870	1.137	1.311	1.319	1.213
1	0.099	1.323	1.218	1.122	1.033	0.951	0.875	1.142	1.323	1.323	1.218
1	0.080	1.328	1.224	1.128	1.039	0.958	0.882	1.148	1.328	1.328	1.224
1	0.061	1.339	1.236	1.140	1.052	0.971	0.896	1.160	1.339	1.339	1.236
1	0.042	1.357	1.255	1.162	1.075	0.995	0.920	1.181	1.357	1.357	1.255
1	0.025	1.367	1.267	1.174	1.088	1.008	0.934	1.193	1.367	1.367	1.267
1	0.008	1.378	1.279	1.187	1.102	1.023	0.949	1.206	1.378	1.378	1.279

Tabla C.6 Valores de r_2 de la sección 8 (80 cm x 80 cm con ρ = 0.06 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*.

s	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	0.896	1.690	1.715	1.759	1.820	1.896	1.986	1.957	1.907	1.986	1.986
0.25	0.887	1.636	1.649	1.681	1.729	1.790	1.863	1.836	1.794	1.863	1.863
0.25	0.878	1.589	1.594	1.616	1.652	1.701	1.762	1.736	1.700	1.762	1.762
0.25	0.868	1.547	1.544	1.557	1.584	1.623	1.672	1.648	1.619	1.672	1.672
0.25	0.857	1.511	1.500	1.506	1.526	1.556	1.595	1.574	1.549	1.595	1.595
0.25	0.845	1.478	1.461	1.460	1.472	1.495	1.526	1.507	1.487	1.526	1.526
0.25	0.833	1.448	1.425	1.419	1.425	1.440	1.464	1.448	1.433	1.464	1.464
0.25	0.820	1.421	1.394	1.382	1.382	1.392	1.409	1.396	1.386	1.409	1.409
0.25	0.805	1.397	1.365	1.349	1.344	1.349	1.362	1.351	1.345	1.362	1.362
0.25	0.790	1.376	1.342	1.322	1.314	1.315	1.323	1.316	1.313	1.323	1.322
0.25	0.774	1.357	1.319	1.297	1.285	1.283	1.288	1.283	1.285	1.287	1.286
0.25	0.757	1.338	1.298	1.273	1.259	1.254	1.255	1.254	1.259	1.254	1.254
0.25	0.739	1.322	1.279	1.252	1.236	1.228	1.227	1.229	1.238	1.227	1.227
0.25	0.720	1.305	1.260	1.231	1.214	1.204	1.202	1.206	1.218	1.203	1.203
0.25	0.700	1.289	1.243	1.213	1.193	1.183	1.178	1.185	1.202	1.181	1.181
0.25	0.680	1.273	1.227	1.195	1.175	1.163	1.158	1.167	1.186	1.163	1.163
0.25	0.659	1.259	1.212	1.179	1.158	1.145	1.138	1.151	1.171	1.147	1.147
0.25	0.637	1.246	1.198	1.165	1.143	1.129	1.121	1.136	1.159	1.132	1.132
0.25	0.615	1.235	1.186	1.152	1.129	1.114	1.105	1.123	1.148	1.120	1.120
0.25	0.592	1.225	1.175	1.140	1.116	1.100	1.090	1.112	1.138	1.110	1.110
0.25	0.568	1.214	1.164	1.128	1.104	1.087	1.076	1.101	1.130	1.101	1.101
0.25	0.543	1.205	1.153	1.117	1.091	1.074	1.062	1.091	1.121	1.093	1.092
0.25	0.518	1.196	1.144	1.106	1.080	1.061	1.048	1.082	1.115	1.087	1.086
0.25	0.492	1.188	1.134	1.095	1.068	1.048	1.033	1.072	1.108	1.081	1.079
0.25	0.466	1.179	1.124	1.084	1.055	1.034	1.018	1.063	1.102	1.076	1.074
0.25	0.438	1.171	1.115	1.074	1.043	1.021	1.003	1.054	1.097	1.073	1.070
0.25	0.408	1.164	1.106	1.063	1.031	1.007	0.989	1.046	1.092	1.071	1.068
0.25	0.378	1.156	1.097	1.052	1.019	0.994	0.974	1.038	1.089	1.071	1.068
0.25	0.346	1.151	1.090	1.044	1.010	0.983	0.962	1.034	1.089	1.076	1.072
0.25	0.314	1.138	1.075	1.028	0.991	0.962	0.939	1.021	1.081	1.075	1.069
0.25	0.282	1.138	1.075	1.028	0.992	0.964	0.941	1.026	1.089	1.090	1.075
0.25	0.251	1.145	1.084	1.039	1.004	0.977	0.956	1.041	1.105	1.114	1.084
0.25	0.220	1.147	1.087	1.043	1.009	0.983	0.962	1.049	1.115	1.133	1.087
0.25	0.192	1.145	1.085	1.041	1.008	0.982	0.961	1.050	1.120	1.145	1.085
0.25	0.165	1.147	1.087	1.042	1.008	0.982	0.961	1.051	1.129	1.147	1.087
0.25	0.137	1.148	1.086	1.039	1.004	0.976	0.954	1.048	1.137	1.148	1.086
0.25	0.109	1.147	1.084	1.036	0.999	0.970	0.947	1.045	1.145	1.147	1.084
0.25	0.081	1.151	1.087	1.039	1.002	0.972	0.949	1.048	1.151	1.151	1.087
0.25	0.053	1.154	1.088	1.038	0.999	0.967	0.942	1.048	1.154	1.154	1.088
0.25	0.025	1.158	1.091	1.038	0.997	0.964	0.938	1.049	1.158	1.158	1.091
0.5	0.881	1.980	2.010	2.051	2.102	2.163	2.235	2.206	2.164	2.235	2.235
0.5	0.872	1.906	1.920	1.944	1.977	2.019	2.070	2.047	2.016	2.070	2.070
0.5	0.862	1.842	1.843	1.853	1.871	1.898	1.932	1.914	1.893	1.932	1.932
0.5	0.851	1.787	1.776	1.775	1.782	1.796	1.817	1.805	1.792	1.817	1.817
0.5	0.840	1.737	1.717	1.706	1.703	1.707	1.717	1.710	1.705	1.717	1.717
0.5	0.828	1.692	1.664	1.644	1.632	1.627	1.629	1.627	1.629	1.629	1.629
0.5	0.816	1.650	1.615	1.588	1.569	1.556	1.550	1.554	1.562	1.550	1.550
0.5	0.802	1.613	1.571	1.538	1.512	1.493	1.480	1.490	1.505	1.480	1.480
0.5	0.788	1.581	1.534	1.495	1.465	1.441	1.423	1.438	1.459	1.423	1.424
0.5	0.774	1.550	1.498	1.455	1.420	1.391	1.369	1.390	1.416	1.372	1.373
0.5	0.758	1.520	1.464	1.416	1.377	1.344	1.317	1.344	1.377	1.324	1.325

0.5	0.742	1.493	1.432	1.381	1.338	1.301	1.270	1.304	1.344	1.283	1.284
0.5	0.725	1.468	1.404	1.349	1.303	1.263	1.230	1.270	1.316	1.248	1.249
0.5	0.708	1.446	1.379	1.321	1.272	1.230	1.194	1.240	1.292	1.219	1.220
0.5	0.689	1.425	1.355	1.295	1.244	1.200	1.161	1.214	1.271	1.194	1.195
0.5	0.670	1.406	1.334	1.271	1.218	1.172	1.132	1.191	1.250	1.173	1.173
0.5	0.651	1.388	1.313	1.249	1.194	1.146	1.104	1.170	1.232	1.154	1.155
0.5	0.630	1.370	1.293	1.227	1.170	1.121	1.078	1.150	1.215	1.138	1.138
0.5	0.609	1.352	1.273	1.206	1.147	1.097	1.052	1.132	1.198	1.123	1.123
0.5	0.587	1.335	1.254	1.185	1.125	1.073	1.028	1.115	1.183	1.110	1.109
0.5	0.564	1.319	1.236	1.165	1.104	1.051	1.005	1.099	1.170	1.099	1.098
0.5	0.540	1.303	1.219	1.146	1.084	1.030	0.982	1.084	1.158	1.091	1.089
0.5	0.516	1.288	1.203	1.129	1.066	1.010	0.962	1.071	1.148	1.085	1.082
0.5	0.491	1.274	1.187	1.112	1.047	0.991	0.941	1.059	1.138	1.080	1.076
0.5	0.466	1.260	1.171	1.095	1.029	0.971	0.921	1.047	1.130	1.076	1.072
0.5	0.439	1.246	1.156	1.078	1.011	0.952	0.901	1.036	1.122	1.075	1.070
0.5	0.412	1.233	1.141	1.062	0.993	0.933	0.881	1.026	1.116	1.075	1.069
0.5	0.384	1.220	1.126	1.045	0.975	0.914	0.860	1.016	1.110	1.077	1.070
0.5	0.355	1.208	1.113	1.031	0.960	0.898	0.843	1.009	1.108	1.084	1.076
0.5	0.326	1.193	1.096	1.013	0.940	0.877	0.821	0.997	1.102	1.088	1.078
0.5	0.296	1.181	1.082	0.997	0.923	0.859	0.802	0.989	1.099	1.096	1.082
0.5	0.266	1.190	1.092	1.007	0.934	0.870	0.813	1.007	1.120	1.129	1.092
0.5	0.236	1.197	1.100	1.016	0.942	0.878	0.822	1.024	1.140	1.161	1.100
0.5	0.206	1.201	1.104	1.020	0.947	0.883	0.827	1.035	1.156	1.190	1.104
0.5	0.177	1.208	1.112	1.029	0.956	0.893	0.837	1.046	1.176	1.208	1.112
0.5	0.148	1.214	1.118	1.035	0.963	0.900	0.844	1.052	1.193	1.214	1.118
0.5	0.119	1.217	1.121	1.039	0.966	0.903	0.847	1.055	1.209	1.217	1.121
0.5	0.091	1.224	1.129	1.047	0.975	0.912	0.856	1.063	1.224	1.224	1.129
0.5	0.064	1.230	1.135	1.053	0.981	0.918	0.862	1.070	1.230	1.230	1.135
0.5	0.035	1.238	1.143	1.061	0.988	0.925	0.869	1.077	1.238	1.238	1.143
0.5	0.010	1.244	1.149	1.065	0.993	0.928	0.871	1.082	1.244	1.244	1.149
0.75	0.843	1.860	1.839	1.820	1.803	1.788	1.775	1.783	1.793	1.775	1.775
0.75	0.833	1.812	1.782	1.754	1.729	1.706	1.684	1.698	1.715	1.684	1.684
0.75	0.822	1.768	1.730	1.695	1.662	1.631	1.603	1.623	1.646	1.603	1.603
0.75	0.811	1.727	1.683	1.641	1.602	1.565	1.530	1.556	1.586	1.530	1.530
0.75	0.799	1.688	1.637	1.589	1.544	1.502	1.462	1.495	1.530	1.461	1.463
0.75	0.786	1.653	1.596	1.543	1.492	1.445	1.401	1.440	1.482	1.404	1.406
0.75	0.773	1.619	1.557	1.499	1.444	1.393	1.345	1.391	1.439	1.353	1.355
0.75	0.759	1.588	1.521	1.458	1.400	1.345	1.293	1.346	1.400	1.308	1.310
0.75	0.745	1.559	1.488	1.422	1.359	1.301	1.247	1.306	1.367	1.269	1.271
0.75	0.730	1.533	1.458	1.388	1.323	1.263	1.206	1.272	1.339	1.235	1.237
0.75	0.715	1.509	1.431	1.358	1.291	1.228	1.169	1.242	1.316	1.207	1.209
0.75	0.699	1.487	1.406	1.331	1.261	1.196	1.135	1.215	1.295	1.183	1.184
0.75	0.682	1.466	1.383	1.305	1.233	1.166	1.104	1.191	1.274	1.162	1.162
0.75	0.665	1.447	1.361	1.281	1.207	1.139	1.075	1.169	1.254	1.143	1.144
0.75	0.648	1.429	1.340	1.258	1.183	1.113	1.048	1.150	1.236	1.128	1.128
0.75	0.629	1.411	1.320	1.237	1.160	1.089	1.023	1.132	1.221	1.114	1.114
0.75	0.611	1.395	1.302	1.217	1.139	1.067	1.000	1.117	1.207	1.104	1.103
0.75	0.591	1.379	1.284	1.198	1.118	1.045	0.978	1.102	1.194	1.095	1.093
0.75	0.571	1.363	1.267	1.179	1.098	1.024	0.956	1.088	1.182	1.087	1.085
0.75	0.550	1.348	1.250	1.160	1.078	1.003	0.934	1.075	1.171	1.080	1.078
0.75	0.529	1.333	1.233	1.142	1.060	0.984	0.914	1.063	1.161	1.076	1.073
0.75	0.506	1.318	1.217	1.125	1.041	0.964	0.894	1.051	1.152	1.073	1.069
0.75	0.484	1.303	1.200	1.107	1.022	0.944	0.874	1.040	1.143	1.070	1.066
0.75	0.460	1.288	1.183	1.089	1.003	0.925	0.854	1.029	1.135	1.069	1.064
0.75	0.436	1.273	1.167	1.072	0.985	0.907	0.835	1.019	1.128	1.070	1.064
0.75	0.411	1.259	1.151	1.055	0.967	0.888	0.816	1.009	1.122	1.072	1.065
0.75	0.386	1.244	1.136	1.038	0.950	0.870	0.798	1.001	1.117	1.076	1.068

0.75	0.359	1.232	1.123	1.024	0.935	0.855	0.782	0.995	1.114	1.084	1.074
0.75	0.333	1.219	1.108	1.008	0.918	0.838	0.765	0.987	1.111	1.091	1.081
0.75	0.306	1.200	1.088	0.987	0.896	0.815	0.742	0.974	1.103	1.095	1.083
0.75	0.279	1.202	1.089	0.988	0.898	0.816	0.743	0.984	1.117	1.121	1.089
0.75	0.251	1.210	1.098	0.997	0.907	0.826	0.753	1.002	1.138	1.155	1.098
0.75	0.224	1.213	1.102	1.001	0.911	0.830	0.757	1.015	1.154	1.184	1.102
0.75	0.197	1.218	1.106	1.006	0.916	0.835	0.762	1.027	1.171	1.218	1.106
0.75	0.171	1.227	1.116	1.016	0.926	0.846	0.772	1.037	1.193	1.227	1.116
0.75	0.144	1.235	1.125	1.026	0.936	0.855	0.782	1.046	1.214	1.235	1.125
0.75	0.118	1.239	1.130	1.031	0.942	0.861	0.788	1.051	1.231	1.239	1.130
0.75	0.093	1.249	1.140	1.042	0.953	0.872	0.799	1.062	1.249	1.249	1.140
0.75	0.067	1.259	1.152	1.054	0.966	0.885	0.813	1.074	1.259	1.259	1.152
0.75	0.042	1.266	1.159	1.061	0.973	0.893	0.821	1.082	1.266	1.266	1.159
0.75	0.018	1.274	1.168	1.071	0.983	0.903	0.831	1.091	1.274	1.274	1.168
1	0.800	1.705	1.652	1.600	1.550	1.501	1.454	1.493	1.534	1.452	1.454
1	0.789	1.675	1.617	1.561	1.506	1.454	1.403	1.447	1.494	1.405	1.408
1	0.777	1.646	1.583	1.523	1.465	1.409	1.355	1.405	1.457	1.362	1.365
1	0.766	1.618	1.551	1.487	1.425	1.366	1.309	1.365	1.422	1.322	1.325
1	0.754	1.593	1.522	1.454	1.389	1.327	1.268	1.330	1.392	1.287	1.290
1	0.741	1.569	1.495	1.424	1.356	1.292	1.231	1.299	1.367	1.257	1.259
1	0.728	1.547	1.469	1.396	1.326	1.259	1.196	1.270	1.344	1.230	1.232
1	0.714	1.524	1.444	1.368	1.295	1.227	1.162	1.242	1.322	1.204	1.206
1	0.700	1.503	1.420	1.341	1.267	1.196	1.130	1.217	1.303	1.181	1.183
1	0.686	1.483	1.397	1.316	1.239	1.168	1.100	1.193	1.282	1.160	1.162
1	0.671	1.464	1.376	1.292	1.214	1.141	1.072	1.172	1.262	1.142	1.143
1	0.655	1.446	1.356	1.270	1.191	1.116	1.046	1.153	1.245	1.127	1.127
1	0.639	1.429	1.336	1.250	1.168	1.093	1.022	1.135	1.229	1.114	1.114
1	0.623	1.413	1.318	1.230	1.147	1.070	0.999	1.120	1.215	1.102	1.102
1	0.606	1.398	1.302	1.212	1.128	1.050	0.978	1.106	1.202	1.093	1.092
1	0.589	1.384	1.286	1.195	1.110	1.031	0.958	1.093	1.191	1.086	1.085
1	0.571	1.370	1.270	1.178	1.092	1.012	0.939	1.081	1.181	1.080	1.078
1	0.553	1.356	1.255	1.161	1.074	0.994	0.920	1.069	1.171	1.075	1.072
1	0.534	1.343	1.241	1.146	1.058	0.977	0.902	1.060	1.163	1.072	1.069
1	0.515	1.331	1.227	1.131	1.042	0.961	0.885	1.050	1.156	1.070	1.066
1	0.495	1.318	1.213	1.116	1.026	0.944	0.869	1.041	1.149	1.069	1.065
1	0.475	1.305	1.199	1.101	1.011	0.928	0.852	1.033	1.142	1.069	1.064
1	0.454	1.293	1.185	1.086	0.995	0.912	0.836	1.025	1.137	1.070	1.064
1	0.432	1.280	1.171	1.071	0.980	0.896	0.819	1.017	1.131	1.072	1.065
1	0.410	1.266	1.156	1.055	0.963	0.878	0.802	1.007	1.125	1.074	1.066
1	0.387	1.253	1.141	1.039	0.946	0.862	0.785	0.999	1.120	1.077	1.068
1	0.364	1.240	1.127	1.025	0.931	0.846	0.769	0.992	1.116	1.083	1.073
1	0.340	1.228	1.114	1.010	0.916	0.831	0.754	0.986	1.114	1.090	1.079
1	0.316	1.210	1.095	0.990	0.895	0.810	0.732	0.974	1.106	1.093	1.081
1	0.292	1.202	1.085	0.980	0.885	0.799	0.722	0.972	1.107	1.105	1.085
1	0.268	1.209	1.093	0.988	0.893	0.808	0.730	0.988	1.126	1.136	1.093
1	0.242	1.216	1.100	0.996	0.902	0.816	0.739	1.004	1.146	1.167	1.100
1	0.219	1.217	1.102	0.998	0.903	0.818	0.740	1.013	1.158	1.191	1.102
1	0.196	1.221	1.106	1.002	0.908	0.822	0.745	1.024	1.174	1.221	1.106
1	0.171	1.231	1.117	1.013	0.919	0.834	0.757	1.035	1.195	1.231	1.117
1	0.148	1.238	1.124	1.021	0.928	0.843	0.766	1.043	1.214	1.238	1.124
1	0.126	1.240	1.127	1.024	0.930	0.846	0.768	1.045	1.227	1.240	1.127
1	0.103	1.249	1.137	1.035	0.942	0.857	0.780	1.056	1.248	1.249	1.137
1	0.080	1.262	1.151	1.049	0.957	0.873	0.796	1.070	1.262	1.262	1.151
1	0.059	1.267	1.156	1.055	0.963	0.879	0.802	1.076	1.267	1.267	1.156
1	0.037	1.274	1.164	1.064	0.972	0.888	0.812	1.085	1.274	1.274	1.164
1	0.014	1.286	1.177	1.078	0.987	0.903	0.827	1.099	1.286	1.286	1.177

Tabla C.7 Valores de r_2 de la sección 10 (40 cm x 60 cm con ρ = 0.06 y f'_c = 250 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x - x	0.864	1.229	1.188	1.163	1.149	1.142	1.141	1.141	1.143	1.141	1.141
0.25	x - x	0.855	1.220	1.179	1.152	1.137	1.129	1.127	1.127	1.130	1.127	1.127
0.25	x - x	0.846	1.212	1.170	1.143	1.126	1.117	1.114	1.115	1.119	1.114	1.114
0.25	x - x	0.837	1.205	1.161	1.133	1.116	1.106	1.101	1.103	1.108	1.101	1.101
0.25	x - x	0.827	1.198	1.153	1.124	1.106	1.095	1.089	1.092	1.099	1.089	1.089
0.25	x - x	0.817	1.191	1.146	1.116	1.097	1.085	1.078	1.083	1.090	1.078	1.078
0.25	x - x	0.805	1.185	1.139	1.109	1.088	1.076	1.068	1.074	1.083	1.068	1.068
0.25	x - x	0.793	1.179	1.133	1.101	1.080	1.066	1.058	1.065	1.076	1.058	1.058
0.25	x - x	0.781	1.174	1.127	1.094	1.073	1.058	1.049	1.057	1.070	1.050	1.050
0.25	x - x	0.767	1.170	1.123	1.090	1.068	1.053	1.043	1.053	1.067	1.045	1.046
0.25	x - x	0.752	1.169	1.121	1.089	1.066	1.052	1.042	1.052	1.068	1.045	1.045
0.25	x - x	0.737	1.165	1.118	1.085	1.063	1.048	1.038	1.050	1.067	1.042	1.043
0.25	x - x	0.720	1.159	1.111	1.079	1.056	1.041	1.031	1.044	1.063	1.037	1.037
0.25	x - x	0.703	1.153	1.105	1.073	1.051	1.036	1.026	1.040	1.060	1.033	1.033
0.25	x - x	0.684	1.147	1.100	1.068	1.046	1.031	1.021	1.036	1.057	1.030	1.030
0.25	x - x	0.665	1.141	1.094	1.062	1.040	1.025	1.015	1.031	1.053	1.026	1.026
0.25	x - x	0.645	1.135	1.088	1.056	1.035	1.019	1.009	1.027	1.050	1.022	1.023
0.25	x - x	0.624	1.130	1.083	1.051	1.029	1.014	1.003	1.023	1.046	1.019	1.019
0.25	x - x	0.603	1.125	1.078	1.046	1.024	1.008	0.997	1.019	1.043	1.017	1.016
0.25	x - x	0.581	1.120	1.073	1.041	1.019	1.003	0.991	1.016	1.041	1.015	1.014
0.25	x - x	0.558	1.116	1.069	1.037	1.014	0.998	0.986	1.013	1.039	1.014	1.013
0.25	x - x	0.534	1.112	1.065	1.032	1.009	0.993	0.981	1.010	1.038	1.012	1.012
0.25	x - x	0.510	1.108	1.061	1.028	1.004	0.987	0.975	1.007	1.036	1.012	1.011
0.25	x - x	0.484	1.105	1.057	1.023	1.000	0.982	0.969	1.004	1.035	1.012	1.011
0.25	x - x	0.458	1.101	1.053	1.019	0.994	0.977	0.963	1.001	1.034	1.013	1.011
0.25	x - x	0.430	1.097	1.048	1.014	0.989	0.971	0.957	0.998	1.034	1.014	1.012
0.25	x - x	0.402	1.094	1.044	1.009	0.984	0.965	0.950	0.996	1.034	1.017	1.015
0.25	x - x	0.371	1.090	1.040	1.004	0.978	0.959	0.944	0.994	1.034	1.021	1.018
0.25	x - x	0.340	1.088	1.037	1.001	0.974	0.954	0.938	0.993	1.037	1.028	1.024
0.25	x - x	0.307	1.086	1.035	0.999	0.972	0.952	0.936	0.995	1.041	1.038	1.033
0.25	x - x	0.271	1.082	1.030	0.993	0.966	0.945	0.928	0.993	1.043	1.047	1.030
0.25	x - x	0.235	1.081	1.031	0.995	0.969	0.949	0.934	0.998	1.050	1.061	1.031
0.25	x - x	0.201	1.085	1.038	1.005	0.982	0.964	0.951	1.011	1.063	1.082	1.038
0.25	x - x	0.169	1.088	1.042	1.010	0.988	0.971	0.958	1.016	1.073	1.088	1.042
0.25	x - x	0.141	1.087	1.040	1.008	0.985	0.968	0.954	1.014	1.078	1.087	1.040
0.25	x - x	0.112	1.088	1.041	1.008	0.985	0.968	0.955	1.014	1.085	1.088	1.041
0.25	x - x	0.080	1.089	1.042	1.009	0.985	0.968	0.954	1.015	1.089	1.089	1.042
0.25	x - x	0.049	1.093	1.044	1.009	0.983	0.965	0.950	1.015	1.093	1.093	1.044
0.25	x - x	0.020	1.094	1.044	1.008	0.981	0.962	0.946	1.014	1.094	1.094	1.044
0.5	x - x	0.847	1.377	1.321	1.277	1.244	1.220	1.202	1.211	1.226	1.202	1.202
0.5	x - x	0.838	1.363	1.304	1.259	1.224	1.198	1.178	1.189	1.206	1.178	1.178
0.5	x - x	0.828	1.350	1.289	1.242	1.205	1.177	1.156	1.169	1.188	1.156	1.156
0.5	x - x	0.818	1.338	1.275	1.227	1.188	1.158	1.135	1.151	1.173	1.135	1.135
0.5	x - x	0.808	1.326	1.262	1.212	1.172	1.141	1.116	1.135	1.159	1.116	1.116
0.5	x - x	0.797	1.315	1.250	1.198	1.157	1.124	1.098	1.119	1.146	1.098	1.099
0.5	x - x	0.785	1.305	1.238	1.185	1.142	1.108	1.081	1.105	1.135	1.083	1.084
0.5	x - x	0.772	1.296	1.228	1.174	1.130	1.095	1.067	1.094	1.126	1.071	1.073
0.5	x - x	0.759	1.289	1.220	1.165	1.121	1.085	1.056	1.086	1.121	1.064	1.065
0.5	x - x	0.745	1.282	1.212	1.157	1.112	1.076	1.047	1.079	1.117	1.058	1.059
0.5	x - x	0.731	1.273	1.204	1.148	1.102	1.066	1.036	1.071	1.113	1.051	1.051
0.5	x - x	0.715	1.265	1.195	1.138	1.093	1.055	1.025	1.063	1.109	1.044	1.045

0.5	x - x	0.699	1.257	1.187	1.130	1.084	1.046	1.015	1.057	1.106	1.039	1.040
0.5	x - x	0.682	1.248	1.177	1.120	1.074	1.036	1.005	1.049	1.099	1.033	1.034
0.5	x - x	0.664	1.240	1.168	1.111	1.064	1.027	0.995	1.043	1.093	1.029	1.030
0.5	x - x	0.646	1.232	1.160	1.102	1.056	1.018	0.987	1.038	1.089	1.026	1.026
0.5	x - x	0.626	1.224	1.152	1.094	1.047	1.009	0.978	1.032	1.084	1.023	1.023
0.5	x - x	0.606	1.216	1.143	1.085	1.038	0.999	0.967	1.026	1.079	1.020	1.020
0.5	x - x	0.585	1.208	1.135	1.076	1.029	0.990	0.958	1.021	1.075	1.018	1.017
0.5	x - x	0.563	1.200	1.127	1.068	1.020	0.981	0.948	1.016	1.072	1.017	1.016
0.5	x - x	0.540	1.193	1.119	1.059	1.011	0.972	0.939	1.011	1.068	1.016	1.015
0.5	x - x	0.517	1.185	1.111	1.051	1.002	0.962	0.929	1.006	1.065	1.016	1.014
0.5	x - x	0.493	1.178	1.103	1.043	0.994	0.953	0.919	1.002	1.063	1.017	1.015
0.5	x - x	0.469	1.172	1.096	1.035	0.985	0.944	0.909	0.998	1.061	1.019	1.016
0.5	x - x	0.443	1.164	1.087	1.025	0.974	0.932	0.897	0.992	1.059	1.021	1.017
0.5	x - x	0.416	1.156	1.078	1.015	0.963	0.920	0.883	0.986	1.057	1.023	1.019
0.5	x - x	0.388	1.149	1.069	1.005	0.952	0.908	0.870	0.981	1.055	1.028	1.023
0.5	x - x	0.358	1.141	1.060	0.995	0.941	0.895	0.857	0.976	1.055	1.034	1.028
0.5	x - x	0.328	1.135	1.053	0.986	0.931	0.885	0.846	0.974	1.057	1.045	1.037
0.5	x - x	0.296	1.129	1.046	0.978	0.922	0.875	0.835	0.973	1.060	1.058	1.046
0.5	x - x	0.262	1.123	1.039	0.970	0.913	0.865	0.825	0.971	1.064	1.073	1.039
0.5	x - x	0.229	1.120	1.037	0.969	0.913	0.866	0.826	0.977	1.073	1.094	1.037
0.5	x - x	0.195	1.125	1.044	0.977	0.922	0.876	0.837	0.990	1.091	1.125	1.044
0.5	x - x	0.160	1.133	1.052	0.986	0.932	0.887	0.848	1.000	1.111	1.133	1.052
0.5	x - x	0.129	1.136	1.056	0.991	0.938	0.893	0.856	1.004	1.125	1.136	1.056
0.5	x - x	0.097	1.140	1.061	0.996	0.944	0.900	0.863	1.009	1.140	1.140	1.061
0.5	x - x	0.065	1.144	1.064	0.999	0.946	0.902	0.865	1.012	1.144	1.144	1.064
0.5	x - x	0.035	1.150	1.070	1.004	0.950	0.905	0.866	1.017	1.150	1.150	1.070
0.5	x - x	0.005	1.156	1.075	1.009	0.954	0.909	0.870	1.022	1.156	1.156	1.075
0.75	x - x	0.825	1.447	1.377	1.316	1.264	1.218	1.178	1.205	1.238	1.178	1.178
0.75	x - x	0.815	1.433	1.361	1.299	1.244	1.197	1.156	1.186	1.222	1.156	1.156
0.75	x - x	0.805	1.419	1.345	1.281	1.225	1.177	1.134	1.167	1.206	1.134	1.134
0.75	x - x	0.795	1.404	1.328	1.262	1.205	1.155	1.110	1.147	1.190	1.110	1.112
0.75	x - x	0.784	1.390	1.312	1.244	1.185	1.134	1.088	1.129	1.175	1.092	1.094
0.75	x - x	0.772	1.377	1.298	1.229	1.168	1.115	1.068	1.113	1.163	1.077	1.079
0.75	x - x	0.760	1.366	1.285	1.215	1.154	1.100	1.052	1.100	1.154	1.065	1.067
0.75	x - x	0.747	1.355	1.273	1.202	1.140	1.085	1.036	1.089	1.146	1.055	1.056
0.75	x - x	0.733	1.344	1.261	1.188	1.125	1.069	1.020	1.077	1.138	1.044	1.046
0.75	x - x	0.719	1.333	1.248	1.175	1.111	1.054	1.004	1.065	1.132	1.034	1.036
0.75	x - x	0.704	1.322	1.237	1.163	1.098	1.040	0.990	1.056	1.127	1.027	1.028
0.75	x - x	0.689	1.313	1.226	1.151	1.086	1.028	0.977	1.047	1.120	1.021	1.022
0.75	x - x	0.673	1.304	1.217	1.141	1.075	1.017	0.966	1.040	1.114	1.017	1.018
0.75	x - x	0.656	1.295	1.207	1.131	1.064	1.006	0.954	1.034	1.109	1.014	1.014
0.75	x - x	0.639	1.284	1.196	1.118	1.051	0.992	0.940	1.025	1.101	1.008	1.008
0.75	x - x	0.620	1.274	1.185	1.107	1.038	0.979	0.926	1.017	1.094	1.004	1.004
0.75	x - x	0.601	1.264	1.174	1.095	1.026	0.966	0.913	1.010	1.088	1.002	1.001
0.75	x - x	0.581	1.255	1.163	1.084	1.015	0.954	0.901	1.004	1.084	1.000	0.999
0.75	x - x	0.560	1.246	1.153	1.073	1.004	0.943	0.889	0.998	1.079	1.000	0.998
0.75	x - x	0.539	1.237	1.143	1.063	0.993	0.931	0.877	0.992	1.076	1.001	0.998
0.75	x - x	0.517	1.227	1.133	1.052	0.981	0.920	0.865	0.987	1.072	1.002	0.999
0.75	x - x	0.494	1.218	1.124	1.042	0.971	0.908	0.854	0.983	1.070	1.005	1.001
0.75	x - x	0.471	1.209	1.114	1.031	0.960	0.897	0.842	0.978	1.067	1.008	1.004
0.75	x - x	0.447	1.200	1.104	1.021	0.949	0.885	0.830	0.974	1.065	1.012	1.008
0.75	x - x	0.421	1.191	1.094	1.010	0.937	0.874	0.818	0.969	1.064	1.018	1.012
0.75	x - x	0.395	1.181	1.083	0.998	0.924	0.860	0.804	0.964	1.062	1.024	1.017
0.75	x - x	0.368	1.171	1.071	0.986	0.911	0.846	0.789	0.958	1.061	1.031	1.023
0.75	x - x	0.340	1.161	1.061	0.974	0.899	0.833	0.775	0.954	1.061	1.041	1.032
0.75	x - x	0.311	1.153	1.051	0.964	0.888	0.821	0.763	0.952	1.063	1.054	1.043
0.75	x - x	0.280	1.143	1.041	0.952	0.875	0.808	0.749	0.948	1.065	1.068	1.041

0.75	x - x	0.249	1.136	1.033	0.944	0.867	0.799	0.740	0.949	1.070	1.087	1.033
0.75	x - x	0.218	1.136	1.033	0.945	0.868	0.801	0.743	0.958	1.083	1.113	1.033
0.75	x - x	0.185	1.144	1.043	0.955	0.879	0.812	0.754	0.973	1.106	1.144	1.043
0.75	x - x	0.154	1.152	1.050	0.963	0.887	0.821	0.763	0.981	1.128	1.152	1.050
0.75	x - x	0.123	1.159	1.058	0.972	0.897	0.831	0.773	0.989	1.149	1.159	1.058
0.75	x - x	0.092	1.166	1.066	0.980	0.905	0.840	0.782	0.997	1.166	1.166	1.066
0.75	x - x	0.061	1.174	1.074	0.988	0.913	0.848	0.790	1.005	1.174	1.174	1.074
0.75	x - x	0.030	1.183	1.084	0.999	0.924	0.859	0.802	1.016	1.183	1.183	1.084
1	x - x	0.798	1.460	1.378	1.303	1.234	1.171	1.113	1.160	1.213	1.111	1.113
1	x - x	0.788	1.445	1.361	1.284	1.214	1.150	1.090	1.142	1.198	1.093	1.096
1	x - x	0.778	1.431	1.345	1.267	1.196	1.130	1.070	1.125	1.185	1.077	1.080
1	x - x	0.767	1.418	1.331	1.251	1.179	1.112	1.051	1.111	1.174	1.064	1.066
1	x - x	0.755	1.404	1.316	1.235	1.161	1.093	1.031	1.096	1.164	1.051	1.053
1	x - x	0.743	1.391	1.300	1.218	1.143	1.075	1.012	1.081	1.153	1.038	1.040
1	x - x	0.731	1.377	1.285	1.202	1.126	1.056	0.993	1.067	1.144	1.026	1.028
1	x - x	0.718	1.364	1.271	1.186	1.109	1.039	0.975	1.054	1.136	1.015	1.016
1	x - x	0.704	1.352	1.257	1.172	1.094	1.023	0.958	1.042	1.129	1.006	1.007
1	x - x	0.690	1.341	1.245	1.158	1.080	1.008	0.943	1.032	1.121	0.999	1.000
1	x - x	0.675	1.330	1.233	1.146	1.066	0.994	0.929	1.023	1.113	0.994	0.994
1	x - x	0.660	1.320	1.222	1.134	1.054	0.982	0.916	1.016	1.107	0.990	0.990
1	x - x	0.644	1.312	1.213	1.124	1.044	0.971	0.904	1.010	1.102	0.988	0.988
1	x - x	0.627	1.304	1.205	1.115	1.034	0.961	0.894	1.006	1.098	0.988	0.988
1	x - x	0.611	1.296	1.196	1.106	1.024	0.950	0.883	1.001	1.095	0.988	0.987
1	x - x	0.593	1.287	1.186	1.095	1.013	0.938	0.871	0.995	1.090	0.988	0.986
1	x - x	0.574	1.278	1.176	1.084	1.002	0.927	0.860	0.990	1.086	0.988	0.987
1	x - x	0.555	1.269	1.166	1.074	0.991	0.916	0.849	0.986	1.083	0.990	0.988
1	x - x	0.535	1.260	1.156	1.063	0.980	0.905	0.837	0.981	1.080	0.992	0.989
1	x - x	0.515	1.250	1.145	1.051	0.967	0.892	0.824	0.975	1.076	0.994	0.990
1	x - x	0.493	1.239	1.134	1.040	0.955	0.879	0.811	0.970	1.072	0.996	0.992
1	x - x	0.471	1.229	1.123	1.028	0.943	0.867	0.798	0.965	1.069	1.000	0.995
1	x - x	0.449	1.219	1.112	1.016	0.930	0.854	0.785	0.960	1.067	1.005	0.999
1	x - x	0.425	1.209	1.100	1.004	0.918	0.841	0.772	0.955	1.065	1.011	1.004
1	x - x	0.401	1.198	1.089	0.992	0.905	0.828	0.759	0.950	1.063	1.018	1.010
1	x - x	0.376	1.188	1.077	0.980	0.893	0.815	0.745	0.946	1.062	1.026	1.017
1	x - x	0.350	1.177	1.066	0.968	0.880	0.802	0.732	0.942	1.062	1.035	1.026
1	x - x	0.323	1.168	1.056	0.957	0.869	0.791	0.721	0.939	1.063	1.048	1.037
1	x - x	0.295	1.158	1.045	0.946	0.857	0.779	0.709	0.937	1.065	1.062	1.045
1	x - x	0.267	1.149	1.035	0.935	0.846	0.767	0.697	0.935	1.068	1.078	1.035
1	x - x	0.238	1.143	1.029	0.928	0.840	0.761	0.691	0.937	1.075	1.099	1.029
1	x - x	0.209	1.144	1.031	0.931	0.842	0.764	0.694	0.948	1.091	1.129	1.031
1	x - x	0.179	1.154	1.041	0.942	0.853	0.775	0.705	0.962	1.115	1.154	1.041
1	x - x	0.149	1.162	1.050	0.951	0.863	0.785	0.715	0.971	1.138	1.162	1.050
1	x - x	0.121	1.167	1.055	0.956	0.868	0.790	0.721	0.977	1.156	1.167	1.055
1	x - x	0.091	1.176	1.064	0.966	0.879	0.801	0.731	0.986	1.176	1.176	1.064
1	x - x	0.061	1.185	1.075	0.976	0.889	0.811	0.741	0.997	1.185	1.185	1.075
1	x - x	0.033	1.194	1.084	0.986	0.899	0.821	0.751	1.007	1.194	1.194	1.084
1	x - x	0.004	1.207	1.098	1.001	0.914	0.836	0.767	1.021	1.207	1.207	1.098
0.25	y - y	0.841	1.412	1.356	1.313	1.280	1.255	1.237	1.247	1.263	1.237	1.237
0.25	y - y	0.832	1.399	1.341	1.296	1.261	1.235	1.215	1.227	1.245	1.215	1.215
0.25	y - y	0.823	1.386	1.327	1.280	1.244	1.216	1.195	1.209	1.229	1.195	1.195
0.25	y - y	0.813	1.374	1.314	1.266	1.228	1.199	1.176	1.193	1.215	1.176	1.176
0.25	y - y	0.802	1.363	1.301	1.252	1.213	1.183	1.159	1.177	1.201	1.159	1.159
0.25	y - y	0.791	1.352	1.289	1.239	1.198	1.167	1.142	1.163	1.189	1.142	1.143
0.25	y - y	0.780	1.341	1.276	1.225	1.183	1.150	1.123	1.147	1.177	1.126	1.127
0.25	y - y	0.767	1.331	1.264	1.211	1.167	1.133	1.105	1.132	1.165	1.110	1.111
0.25	y - y	0.754	1.320	1.252	1.197	1.152	1.116	1.087	1.118	1.155	1.096	1.097
0.25	y - y	0.740	1.309	1.240	1.183	1.137	1.099	1.068	1.103	1.144	1.081	1.082

0.25	y - y	0.725	1.298	1.227	1.169	1.121	1.082	1.050	1.089	1.134	1.067	1.068
0.25	y - y	0.710	1.287	1.214	1.155	1.106	1.066	1.032	1.075	1.125	1.055	1.056
0.25	y - y	0.694	1.277	1.203	1.142	1.092	1.051	1.016	1.063	1.117	1.044	1.045
0.25	y - y	0.677	1.266	1.191	1.129	1.078	1.035	1.000	1.052	1.107	1.034	1.035
0.25	y - y	0.659	1.257	1.180	1.117	1.065	1.022	0.985	1.042	1.099	1.027	1.027
0.25	y - y	0.641	1.250	1.173	1.110	1.057	1.013	0.976	1.037	1.095	1.024	1.024
0.25	y - y	0.622	1.243	1.166	1.102	1.050	1.006	0.968	1.033	1.092	1.024	1.023
0.25	y - y	0.602	1.237	1.159	1.095	1.042	0.998	0.960	1.029	1.090	1.023	1.022
0.25	y - y	0.582	1.230	1.152	1.088	1.034	0.990	0.952	1.026	1.087	1.023	1.022
0.25	y - y	0.560	1.223	1.144	1.079	1.025	0.980	0.942	1.021	1.084	1.023	1.021
0.25	y - y	0.538	1.215	1.136	1.070	1.016	0.970	0.931	1.016	1.081	1.022	1.021
0.25	y - y	0.515	1.207	1.126	1.060	1.005	0.959	0.919	1.010	1.077	1.022	1.019
0.25	y - y	0.491	1.198	1.117	1.050	0.994	0.947	0.907	1.004	1.073	1.022	1.019
0.25	y - y	0.466	1.190	1.107	1.039	0.982	0.935	0.894	0.998	1.070	1.023	1.019
0.25	y - y	0.440	1.181	1.097	1.028	0.971	0.922	0.880	0.992	1.067	1.025	1.021
0.25	y - y	0.413	1.171	1.086	1.016	0.958	0.908	0.865	0.985	1.064	1.027	1.022
0.25	y - y	0.385	1.161	1.075	1.004	0.944	0.893	0.850	0.978	1.061	1.031	1.025
0.25	y - y	0.356	1.151	1.064	0.991	0.930	0.879	0.834	0.972	1.059	1.037	1.030
0.25	y - y	0.325	1.142	1.053	0.979	0.917	0.864	0.818	0.966	1.058	1.045	1.037
0.25	y - y	0.293	1.133	1.043	0.967	0.904	0.850	0.803	0.961	1.059	1.057	1.043
0.25	y - y	0.260	1.124	1.032	0.955	0.890	0.834	0.786	0.957	1.061	1.071	1.032
0.25	y - y	0.226	1.115	1.021	0.942	0.875	0.818	0.768	0.952	1.063	1.088	1.021
0.25	y - y	0.192	1.117	1.023	0.944	0.878	0.820	0.771	0.960	1.079	1.117	1.023
0.25	y - y	0.158	1.128	1.036	0.959	0.894	0.838	0.790	0.975	1.104	1.128	1.036
0.25	y - y	0.124	1.136	1.045	0.969	0.904	0.849	0.802	0.984	1.126	1.136	1.045
0.25	y - y	0.091	1.146	1.056	0.981	0.917	0.863	0.816	0.996	1.146	1.146	1.056
0.25	y - y	0.061	1.151	1.063	0.990	0.928	0.875	0.830	1.005	1.151	1.151	1.063
0.25	y - y	0.032	1.158	1.071	0.999	0.938	0.887	0.842	1.013	1.158	1.158	1.071
0.25	y - y	0.002	1.168	1.082	1.010	0.950	0.899	0.855	1.024	1.168	1.168	1.082
0.5	y - y	0.785	1.459	1.375	1.296	1.224	1.156	1.094	1.149	1.209	1.098	1.101
0.5	y - y	0.774	1.446	1.359	1.279	1.205	1.137	1.073	1.133	1.197	1.083	1.086
0.5	y - y	0.764	1.433	1.345	1.263	1.188	1.118	1.054	1.118	1.186	1.069	1.072
0.5	y - y	0.753	1.419	1.329	1.246	1.169	1.098	1.033	1.102	1.174	1.054	1.057
0.5	y - y	0.741	1.404	1.313	1.228	1.150	1.078	1.011	1.085	1.162	1.040	1.042
0.5	y - y	0.729	1.390	1.296	1.210	1.131	1.058	0.990	1.069	1.151	1.026	1.028
0.5	y - y	0.716	1.376	1.281	1.193	1.113	1.039	0.970	1.055	1.141	1.014	1.016
0.5	y - y	0.703	1.364	1.267	1.178	1.096	1.021	0.952	1.042	1.134	1.004	1.005
0.5	y - y	0.690	1.352	1.254	1.164	1.081	1.006	0.936	1.031	1.125	0.996	0.997
0.5	y - y	0.676	1.341	1.241	1.150	1.067	0.991	0.921	1.021	1.116	0.989	0.990
0.5	y - y	0.661	1.330	1.229	1.137	1.053	0.976	0.906	1.012	1.108	0.984	0.985
0.5	y - y	0.646	1.320	1.218	1.125	1.041	0.963	0.892	1.005	1.101	0.981	0.981
0.5	y - y	0.630	1.311	1.208	1.115	1.029	0.951	0.880	0.999	1.096	0.979	0.979
0.5	y - y	0.614	1.302	1.198	1.104	1.018	0.940	0.868	0.993	1.091	0.978	0.977
0.5	y - y	0.597	1.293	1.189	1.094	1.007	0.928	0.857	0.988	1.087	0.978	0.977
0.5	y - y	0.579	1.285	1.179	1.084	0.997	0.918	0.846	0.983	1.084	0.979	0.978
0.5	y - y	0.561	1.276	1.170	1.074	0.987	0.907	0.835	0.979	1.081	0.982	0.979
0.5	y - y	0.542	1.268	1.161	1.064	0.976	0.897	0.824	0.975	1.079	0.984	0.982
0.5	y - y	0.523	1.259	1.152	1.054	0.966	0.886	0.814	0.972	1.077	0.988	0.984
0.5	y - y	0.503	1.251	1.143	1.045	0.956	0.876	0.803	0.968	1.075	0.992	0.988
0.5	y - y	0.482	1.243	1.134	1.035	0.946	0.866	0.793	0.965	1.074	0.998	0.993
0.5	y - y	0.461	1.234	1.124	1.025	0.936	0.855	0.782	0.962	1.073	1.004	0.998
0.5	y - y	0.439	1.225	1.114	1.015	0.925	0.844	0.770	0.959	1.072	1.010	1.004
0.5	y - y	0.416	1.215	1.103	1.003	0.912	0.831	0.758	0.954	1.070	1.017	1.009
0.5	y - y	0.393	1.205	1.092	0.991	0.900	0.818	0.745	0.950	1.069	1.024	1.016
0.5	y - y	0.368	1.193	1.080	0.978	0.887	0.805	0.731	0.945	1.067	1.032	1.023
0.5	y - y	0.343	1.182	1.067	0.965	0.873	0.791	0.717	0.940	1.066	1.041	1.031
0.5	y - y	0.316	1.170	1.055	0.952	0.859	0.777	0.703	0.935	1.065	1.052	1.041

0.5	y - y	0.289	1.159	1.042	0.938	0.846	0.763	0.689	0.931	1.066	1.065	1.042
0.5	y - y	0.261	1.148	1.030	0.925	0.832	0.749	0.675	0.927	1.067	1.080	1.030
0.5	y - y	0.233	1.140	1.021	0.916	0.822	0.738	0.663	0.927	1.072	1.099	1.021
0.5	y - y	0.205	1.138	1.019	0.914	0.819	0.736	0.661	0.934	1.085	1.127	1.019
0.5	y - y	0.175	1.148	1.030	0.925	0.831	0.747	0.673	0.947	1.109	1.148	1.030
0.5	y - y	0.147	1.156	1.038	0.933	0.840	0.756	0.682	0.955	1.131	1.156	1.038
0.5	y - y	0.118	1.167	1.050	0.946	0.853	0.769	0.694	0.967	1.157	1.167	1.050
0.5	y - y	0.090	1.176	1.060	0.956	0.863	0.780	0.705	0.978	1.176	1.176	1.060
0.5	y - y	0.063	1.184	1.069	0.965	0.873	0.790	0.716	0.987	1.184	1.184	1.069
0.5	y - y	0.035	1.197	1.083	0.981	0.889	0.806	0.732	1.002	1.197	1.197	1.083
0.5	y - y	0.007	1.212	1.099	0.998	0.906	0.824	0.750	1.019	1.212	1.212	1.099
0.75	y - y	0.721	1.386	1.288	1.198	1.114	1.036	0.964	1.051	1.141	1.007	1.009
0.75	y - y	0.710	1.375	1.276	1.185	1.101	1.022	0.949	1.041	1.135	0.999	1.001
0.75	y - y	0.699	1.365	1.266	1.173	1.088	1.009	0.936	1.032	1.130	0.993	0.995
0.75	y - y	0.688	1.356	1.255	1.162	1.076	0.997	0.924	1.025	1.123	0.988	0.989
0.75	y - y	0.676	1.347	1.246	1.152	1.065	0.985	0.912	1.017	1.116	0.984	0.985
0.75	y - y	0.664	1.339	1.236	1.142	1.055	0.975	0.901	1.011	1.110	0.981	0.981
0.75	y - y	0.652	1.331	1.228	1.133	1.045	0.965	0.891	1.006	1.106	0.979	0.979
0.75	y - y	0.639	1.324	1.220	1.124	1.036	0.955	0.881	1.001	1.102	0.978	0.978
0.75	y - y	0.626	1.316	1.211	1.115	1.027	0.945	0.871	0.996	1.098	0.977	0.976
0.75	y - y	0.612	1.309	1.203	1.106	1.017	0.936	0.861	0.991	1.094	0.976	0.976
0.75	y - y	0.598	1.301	1.195	1.097	1.008	0.926	0.851	0.987	1.090	0.977	0.975
0.75	y - y	0.584	1.294	1.187	1.089	0.999	0.917	0.842	0.983	1.087	0.978	0.976
0.75	y - y	0.569	1.287	1.179	1.081	0.990	0.908	0.832	0.980	1.085	0.979	0.977
0.75	y - y	0.554	1.280	1.172	1.072	0.982	0.899	0.824	0.977	1.083	0.982	0.979
0.75	y - y	0.538	1.272	1.163	1.063	0.972	0.889	0.813	0.972	1.079	0.983	0.980
0.75	y - y	0.522	1.264	1.153	1.053	0.962	0.878	0.802	0.968	1.076	0.985	0.981
0.75	y - y	0.505	1.256	1.145	1.044	0.952	0.868	0.792	0.964	1.074	0.988	0.984
0.75	y - y	0.488	1.248	1.136	1.034	0.942	0.858	0.782	0.960	1.072	0.991	0.987
0.75	y - y	0.470	1.239	1.127	1.025	0.932	0.848	0.772	0.957	1.070	0.996	0.990
0.75	y - y	0.452	1.231	1.118	1.015	0.922	0.838	0.762	0.953	1.068	1.000	0.994
0.75	y - y	0.434	1.223	1.109	1.006	0.912	0.828	0.751	0.949	1.067	1.005	0.999
0.75	y - y	0.415	1.214	1.099	0.996	0.902	0.817	0.741	0.946	1.066	1.011	1.004
0.75	y - y	0.395	1.205	1.090	0.986	0.892	0.807	0.730	0.943	1.065	1.018	1.010
0.75	y - y	0.375	1.197	1.081	0.976	0.882	0.797	0.720	0.939	1.064	1.026	1.016
0.75	y - y	0.354	1.188	1.071	0.966	0.871	0.786	0.709	0.936	1.064	1.034	1.024
0.75	y - y	0.333	1.180	1.062	0.956	0.862	0.776	0.700	0.934	1.065	1.044	1.033
0.75	y - y	0.311	1.171	1.053	0.947	0.852	0.767	0.690	0.932	1.067	1.056	1.043
0.75	y - y	0.289	1.163	1.044	0.938	0.842	0.757	0.680	0.930	1.068	1.068	1.044
0.75	y - y	0.266	1.155	1.035	0.928	0.833	0.747	0.670	0.929	1.071	1.081	1.035
0.75	y - y	0.242	1.149	1.029	0.922	0.826	0.741	0.664	0.930	1.076	1.098	1.029
0.75	y - y	0.220	1.145	1.025	0.918	0.822	0.737	0.660	0.933	1.083	1.118	1.025
0.75	y - y	0.196	1.148	1.028	0.921	0.826	0.741	0.664	0.943	1.098	1.148	1.028
0.75	y - y	0.172	1.157	1.038	0.931	0.836	0.750	0.674	0.953	1.120	1.157	1.038
0.75	y - y	0.148	1.165	1.046	0.940	0.845	0.760	0.683	0.962	1.140	1.165	1.046
0.75	y - y	0.125	1.169	1.051	0.945	0.850	0.765	0.689	0.967	1.157	1.169	1.051
0.75	y - y	0.101	1.174	1.056	0.951	0.856	0.771	0.694	0.973	1.173	1.174	1.056
0.75	y - y	0.077	1.183	1.066	0.961	0.866	0.781	0.705	0.983	1.183	1.183	1.066
0.75	y - y	0.054	1.192	1.075	0.970	0.876	0.791	0.714	0.992	1.192	1.192	1.075
0.75	y - y	0.031	1.202	1.087	0.982	0.888	0.804	0.727	1.004	1.202	1.202	1.087
0.75	y - y	0.008	1.212	1.098	0.994	0.900	0.815	0.739	1.015	1.212	1.212	1.098
1	y - y	0.662	1.322	1.224	1.136	1.056	0.983	0.917	1.017	1.107	0.990	0.990
1	y - y	0.652	1.316	1.218	1.129	1.049	0.976	0.910	1.013	1.104	0.989	0.989
1	y - y	0.641	1.311	1.212	1.123	1.042	0.969	0.902	1.009	1.101	0.988	0.988
1	y - y	0.630	1.305	1.206	1.116	1.035	0.962	0.896	1.006	1.099	0.988	0.988
1	y - y	0.619	1.300	1.200	1.110	1.029	0.955	0.889	1.004	1.097	0.988	0.988
1	y - y	0.607	1.295	1.194	1.104	1.022	0.948	0.881	1.000	1.094	0.988	0.987

1	y - y	0.595	1.288	1.187	1.096	1.014	0.940	0.873	0.996	1.091	0.988	0.986
1	y - y	0.583	1.282	1.181	1.089	1.007	0.932	0.865	0.993	1.088	0.988	0.986
1	y - y	0.571	1.276	1.174	1.082	1.000	0.925	0.858	0.989	1.086	0.989	0.987
1	y - y	0.558	1.270	1.168	1.075	0.993	0.918	0.850	0.986	1.083	0.990	0.987
1	y - y	0.545	1.264	1.161	1.069	0.985	0.910	0.843	0.983	1.081	0.991	0.988
1	y - y	0.532	1.258	1.154	1.061	0.977	0.902	0.834	0.980	1.079	0.992	0.989
1	y - y	0.518	1.251	1.147	1.053	0.969	0.894	0.826	0.976	1.076	0.993	0.990
1	y - y	0.504	1.244	1.139	1.045	0.961	0.885	0.817	0.972	1.074	0.995	0.991
1	y - y	0.489	1.238	1.132	1.037	0.953	0.877	0.809	0.969	1.072	0.997	0.993
1	y - y	0.475	1.231	1.125	1.030	0.945	0.868	0.800	0.965	1.070	1.000	0.995
1	y - y	0.460	1.224	1.117	1.022	0.936	0.860	0.791	0.962	1.068	1.002	0.997
1	y - y	0.444	1.217	1.109	1.014	0.928	0.851	0.783	0.959	1.066	1.006	1.000
1	y - y	0.428	1.210	1.102	1.006	0.920	0.843	0.774	0.955	1.065	1.010	1.003
1	y - y	0.412	1.203	1.094	0.998	0.911	0.834	0.765	0.952	1.064	1.014	1.007
1	y - y	0.396	1.196	1.087	0.990	0.903	0.826	0.756	0.949	1.063	1.019	1.011
1	y - y	0.379	1.189	1.079	0.981	0.894	0.817	0.747	0.946	1.062	1.024	1.016
1	y - y	0.362	1.182	1.071	0.973	0.886	0.808	0.739	0.944	1.062	1.030	1.021
1	y - y	0.345	1.175	1.064	0.965	0.878	0.800	0.730	0.941	1.062	1.038	1.027
1	y - y	0.327	1.169	1.057	0.958	0.870	0.792	0.722	0.940	1.063	1.046	1.035
1	y - y	0.309	1.163	1.051	0.951	0.863	0.785	0.715	0.938	1.064	1.055	1.043
1	y - y	0.290	1.156	1.043	0.943	0.855	0.776	0.706	0.936	1.066	1.065	1.043
1	y - y	0.271	1.150	1.036	0.936	0.847	0.768	0.698	0.935	1.068	1.075	1.036
1	y - y	0.251	1.146	1.032	0.932	0.843	0.764	0.694	0.936	1.072	1.089	1.032
1	y - y	0.233	1.142	1.028	0.928	0.839	0.760	0.690	0.938	1.077	1.104	1.028
1	y - y	0.214	1.143	1.030	0.930	0.841	0.763	0.693	0.946	1.088	1.124	1.030
1	y - y	0.194	1.149	1.035	0.936	0.847	0.769	0.699	0.956	1.102	1.149	1.035
1	y - y	0.174	1.156	1.044	0.944	0.856	0.778	0.708	0.965	1.120	1.156	1.044
1	y - y	0.154	1.162	1.050	0.951	0.863	0.784	0.715	0.971	1.136	1.162	1.050
1	y - y	0.135	1.164	1.052	0.953	0.865	0.787	0.717	0.973	1.147	1.164	1.052
1	y - y	0.115	1.168	1.056	0.958	0.870	0.792	0.722	0.978	1.160	1.168	1.056
1	y - y	0.096	1.174	1.063	0.964	0.877	0.799	0.729	0.984	1.174	1.174	1.063
1	y - y	0.075	1.182	1.071	0.973	0.885	0.807	0.738	0.993	1.182	1.182	1.071
1	y - y	0.055	1.187	1.077	0.978	0.891	0.813	0.743	0.999	1.187	1.187	1.077
1	y - y	0.037	1.193	1.083	0.985	0.897	0.819	0.749	1.005	1.193	1.193	1.083
1	y - y	0.018	1.201	1.091	0.993	0.906	0.828	0.759	1.014	1.201	1.201	1.091

Tabla C.8 Valores de r_2 de la sección 11 (40 cm x 60 cm con ρ = 0.03 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente a. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x - x	0.899	1.643	1.686	1.751	1.835	1.936	2.052	2.017	1.953	2.052	2.052
0.25	x - x	0.887	1.572	1.600	1.648	1.714	1.793	1.885	1.851	1.798	1.885	1.885
0.25	x - x	0.874	1.513	1.529	1.564	1.615	1.678	1.751	1.719	1.674	1.751	1.751
0.25	x - x	0.860	1.464	1.471	1.496	1.535	1.585	1.645	1.614	1.576	1.645	1.645
0.25	x - x	0.844	1.424	1.423	1.440	1.469	1.509	1.558	1.529	1.497	1.558	1.558
0.25	x - x	0.827	1.387	1.380	1.388	1.410	1.441	1.480	1.453	1.426	1.480	1.480
0.25	x - x	0.809	1.352	1.339	1.342	1.356	1.380	1.411	1.387	1.365	1.411	1.411
0.25	x - x	0.790	1.321	1.303	1.301	1.311	1.329	1.353	1.332	1.315	1.352	1.351
0.25	x - x	0.770	1.294	1.273	1.267	1.273	1.287	1.307	1.288	1.274	1.303	1.302
0.25	x - x	0.750	1.270	1.247	1.239	1.242	1.253	1.269	1.252	1.242	1.263	1.262
0.25	x - x	0.729	1.250	1.225	1.216	1.217	1.225	1.239	1.224	1.216	1.231	1.231
0.25	x - x	0.707	1.233	1.207	1.196	1.195	1.202	1.213	1.200	1.195	1.205	1.204
0.25	x - x	0.686	1.218	1.190	1.178	1.176	1.181	1.190	1.178	1.176	1.181	1.181
0.25	x - x	0.663	1.204	1.176	1.162	1.159	1.162	1.170	1.160	1.160	1.161	1.161
0.25	x - x	0.641	1.193	1.164	1.149	1.145	1.147	1.153	1.145	1.147	1.145	1.145
0.25	x - x	0.618	1.183	1.153	1.137	1.132	1.132	1.137	1.131	1.136	1.131	1.131

0.25	x - x	0.594	1.174	1.143	1.126	1.119	1.118	1.121	1.118	1.125	1.118	1.118
0.25	x - x	0.570	1.166	1.134	1.116	1.108	1.106	1.108	1.108	1.117	1.108	1.107
0.25	x - x	0.546	1.160	1.127	1.108	1.099	1.095	1.096	1.098	1.110	1.099	1.099
0.25	x - x	0.521	1.154	1.120	1.101	1.091	1.086	1.086	1.091	1.105	1.093	1.092
0.25	x - x	0.495	1.148	1.113	1.093	1.082	1.077	1.076	1.083	1.099	1.086	1.086
0.25	x - x	0.468	1.142	1.107	1.086	1.074	1.068	1.066	1.076	1.094	1.081	1.081
0.25	x - x	0.441	1.136	1.100	1.078	1.065	1.058	1.055	1.069	1.089	1.077	1.076
0.25	x - x	0.412	1.131	1.094	1.070	1.056	1.048	1.044	1.062	1.085	1.074	1.072
0.25	x - x	0.383	1.124	1.085	1.060	1.045	1.036	1.030	1.053	1.080	1.070	1.068
0.25	x - x	0.354	1.120	1.082	1.058	1.043	1.033	1.028	1.052	1.080	1.072	1.070
0.25	x - x	0.325	1.120	1.084	1.061	1.047	1.039	1.035	1.058	1.085	1.081	1.078
0.25	x - x	0.298	1.121	1.084	1.062	1.048	1.041	1.037	1.060	1.090	1.088	1.084
0.25	x - x	0.271	1.121	1.082	1.057	1.042	1.032	1.027	1.057	1.091	1.094	1.082
0.25	x - x	0.245	1.118	1.078	1.052	1.035	1.025	1.018	1.053	1.091	1.098	1.078
0.25	x - x	0.218	1.118	1.078	1.052	1.035	1.024	1.017	1.055	1.096	1.109	1.078
0.25	x - x	0.190	1.120	1.079	1.052	1.035	1.023	1.016	1.057	1.103	1.120	1.079
0.25	x - x	0.162	1.123	1.079	1.049	1.029	1.015	1.006	1.054	1.110	1.123	1.079
0.25	x - x	0.136	1.123	1.076	1.045	1.023	1.007	0.997	1.051	1.115	1.123	1.076
0.25	x - x	0.109	1.128	1.080	1.047	1.024	1.008	0.996	1.053	1.126	1.128	1.080
0.25	x - x	0.079	1.133	1.083	1.049	1.024	1.007	0.994	1.055	1.133	1.133	1.083
0.25	x - x	0.051	1.143	1.088	1.050	1.021	1.000	0.984	1.057	1.143	1.143	1.088
0.25	x - x	0.024	1.150	1.093	1.052	1.021	0.997	0.979	1.060	1.150	1.150	1.093
0.5	x - x	0.900	2.124	2.223	2.346	2.495	2.670	2.872	2.812	2.701	2.872	2.872
0.5	x - x	0.888	1.999	2.068	2.157	2.267	2.397	2.548	2.493	2.406	2.548	2.548
0.5	x - x	0.875	1.892	1.936	1.998	2.077	2.174	2.287	2.237	2.170	2.287	2.287
0.5	x - x	0.861	1.803	1.828	1.869	1.926	1.997	2.082	2.038	1.985	2.082	2.082
0.5	x - x	0.846	1.731	1.741	1.766	1.806	1.858	1.921	1.883	1.842	1.921	1.921
0.5	x - x	0.831	1.667	1.665	1.677	1.703	1.739	1.786	1.754	1.723	1.786	1.786
0.5	x - x	0.814	1.609	1.596	1.598	1.611	1.636	1.669	1.643	1.621	1.669	1.669
0.5	x - x	0.796	1.558	1.536	1.529	1.533	1.547	1.570	1.551	1.536	1.571	1.569
0.5	x - x	0.778	1.513	1.485	1.470	1.467	1.474	1.489	1.475	1.468	1.486	1.486
0.5	x - x	0.759	1.474	1.440	1.420	1.412	1.412	1.421	1.412	1.412	1.418	1.417
0.5	x - x	0.740	1.440	1.402	1.378	1.365	1.361	1.365	1.361	1.366	1.362	1.362
0.5	x - x	0.719	1.411	1.369	1.342	1.325	1.318	1.318	1.319	1.330	1.317	1.317
0.5	x - x	0.698	1.383	1.338	1.308	1.289	1.278	1.275	1.281	1.297	1.277	1.277
0.5	x - x	0.676	1.359	1.311	1.278	1.256	1.243	1.237	1.247	1.268	1.243	1.243
0.5	x - x	0.653	1.337	1.288	1.252	1.228	1.213	1.204	1.220	1.244	1.215	1.215
0.5	x - x	0.631	1.319	1.267	1.230	1.204	1.187	1.176	1.196	1.224	1.192	1.192
0.5	x - x	0.608	1.301	1.248	1.209	1.181	1.161	1.149	1.174	1.205	1.171	1.171
0.5	x - x	0.584	1.285	1.230	1.189	1.160	1.138	1.124	1.155	1.189	1.154	1.153
0.5	x - x	0.560	1.272	1.215	1.172	1.141	1.118	1.102	1.139	1.175	1.140	1.139
0.5	x - x	0.535	1.260	1.201	1.157	1.124	1.099	1.081	1.124	1.164	1.128	1.127
0.5	x - x	0.510	1.249	1.189	1.143	1.109	1.082	1.063	1.112	1.155	1.120	1.118
0.5	x - x	0.485	1.239	1.178	1.130	1.094	1.066	1.045	1.101	1.147	1.114	1.112
0.5	x - x	0.458	1.228	1.164	1.115	1.077	1.048	1.024	1.088	1.138	1.107	1.104
0.5	x - x	0.431	1.216	1.150	1.099	1.059	1.027	1.002	1.075	1.129	1.100	1.097
0.5	x - x	0.402	1.204	1.136	1.083	1.041	1.007	0.980	1.062	1.121	1.096	1.092
0.5	x - x	0.374	1.191	1.121	1.065	1.021	0.985	0.956	1.048	1.112	1.091	1.086
0.5	x - x	0.345	1.185	1.115	1.059	1.015	0.979	0.950	1.046	1.113	1.099	1.093
0.5	x - x	0.316	1.188	1.118	1.062	1.018	0.982	0.953	1.054	1.124	1.116	1.110
0.5	x - x	0.287	1.191	1.120	1.064	1.019	0.983	0.953	1.060	1.134	1.134	1.120
0.5	x - x	0.258	1.193	1.122	1.065	1.019	0.983	0.952	1.066	1.144	1.153	1.122
0.5	x - x	0.231	1.193	1.121	1.064	1.018	0.980	0.949	1.070	1.151	1.169	1.121
0.5	x - x	0.204	1.196	1.124	1.066	1.020	0.982	0.951	1.077	1.163	1.189	1.124
0.5	x - x	0.176	1.197	1.123	1.064	1.015	0.976	0.943	1.075	1.172	1.197	1.123
0.5	x - x	0.148	1.203	1.127	1.065	1.015	0.973	0.938	1.077	1.186	1.203	1.127
0.5	x - x	0.121	1.210	1.132	1.070	1.018	0.975	0.938	1.082	1.202	1.210	1.132

0.5	x - x	0.093	1.221	1.143	1.079	1.026	0.982	0.945	1.092	1.221	1.221	1.143
0.5	x - x	0.066	1.229	1.149	1.082	1.026	0.979	0.939	1.095	1.229	1.229	1.149
0.5	x - x	0.038	1.245	1.163	1.094	1.036	0.987	0.944	1.108	1.245	1.245	1.163
0.5	x - x	0.011	1.262	1.179	1.110	1.050	0.999	0.955	1.124	1.262	1.262	1.179
0.75	x - x	0.892	2.312	2.418	2.541	2.683	2.843	3.025	2.963	2.860	3.025	3.025
0.75	x - x	0.880	2.172	2.244	2.330	2.429	2.543	2.673	2.620	2.543	2.673	2.673
0.75	x - x	0.867	2.056	2.101	2.157	2.225	2.304	2.395	2.351	2.295	2.395	2.395
0.75	x - x	0.853	1.961	1.985	2.019	2.063	2.116	2.179	2.144	2.103	2.179	2.179
0.75	x - x	0.839	1.878	1.885	1.900	1.925	1.958	1.999	1.973	1.946	1.999	1.999
0.75	x - x	0.824	1.803	1.795	1.795	1.804	1.820	1.843	1.826	1.811	1.843	1.843
0.75	x - x	0.808	1.735	1.715	1.703	1.698	1.701	1.710	1.702	1.698	1.710	1.710
0.75	x - x	0.791	1.676	1.645	1.622	1.607	1.599	1.598	1.599	1.605	1.598	1.598
0.75	x - x	0.774	1.625	1.585	1.554	1.531	1.515	1.504	1.514	1.529	1.506	1.506
0.75	x - x	0.756	1.579	1.533	1.495	1.465	1.442	1.425	1.443	1.466	1.430	1.431
0.75	x - x	0.738	1.540	1.488	1.445	1.409	1.381	1.359	1.384	1.415	1.369	1.369
0.75	x - x	0.718	1.506	1.449	1.401	1.362	1.330	1.303	1.336	1.375	1.319	1.320
0.75	x - x	0.698	1.475	1.414	1.363	1.320	1.284	1.254	1.294	1.340	1.277	1.278
0.75	x - x	0.678	1.447	1.382	1.328	1.282	1.243	1.211	1.258	1.308	1.242	1.242
0.75	x - x	0.656	1.421	1.353	1.296	1.247	1.206	1.172	1.226	1.280	1.212	1.212
0.75	x - x	0.634	1.398	1.327	1.268	1.217	1.174	1.137	1.199	1.255	1.187	1.187
0.75	x - x	0.612	1.376	1.303	1.241	1.188	1.143	1.105	1.174	1.234	1.166	1.165
0.75	x - x	0.589	1.355	1.280	1.216	1.162	1.115	1.075	1.152	1.214	1.147	1.147
0.75	x - x	0.565	1.338	1.260	1.195	1.139	1.091	1.049	1.133	1.198	1.134	1.132
0.75	x - x	0.541	1.321	1.242	1.175	1.117	1.068	1.025	1.117	1.185	1.123	1.121
0.75	x - x	0.516	1.306	1.225	1.156	1.097	1.047	1.003	1.102	1.174	1.115	1.112
0.75	x - x	0.491	1.292	1.210	1.140	1.079	1.027	0.982	1.090	1.164	1.109	1.106
0.75	x - x	0.466	1.279	1.195	1.123	1.061	1.008	0.962	1.078	1.156	1.105	1.102
0.75	x - x	0.440	1.266	1.180	1.106	1.043	0.988	0.941	1.066	1.148	1.103	1.098
0.75	x - x	0.414	1.252	1.164	1.089	1.024	0.968	0.919	1.054	1.140	1.101	1.095
0.75	x - x	0.386	1.237	1.147	1.069	1.003	0.945	0.894	1.041	1.131	1.099	1.092
0.75	x - x	0.359	1.225	1.133	1.055	0.987	0.928	0.877	1.032	1.126	1.102	1.095
0.75	x - x	0.332	1.220	1.128	1.050	0.982	0.923	0.872	1.034	1.131	1.116	1.107
0.75	x - x	0.304	1.225	1.133	1.054	0.986	0.927	0.875	1.045	1.146	1.140	1.130
0.75	x - x	0.276	1.228	1.136	1.057	0.988	0.928	0.876	1.055	1.159	1.164	1.136
0.75	x - x	0.248	1.230	1.137	1.057	0.988	0.927	0.874	1.062	1.171	1.187	1.137
0.75	x - x	0.221	1.234	1.141	1.061	0.992	0.931	0.878	1.073	1.186	1.212	1.141
0.75	x - x	0.193	1.239	1.146	1.066	0.996	0.934	0.881	1.082	1.201	1.239	1.146
0.75	x - x	0.166	1.244	1.150	1.069	0.998	0.935	0.880	1.085	1.216	1.244	1.150
0.75	x - x	0.139	1.254	1.160	1.078	1.006	0.943	0.887	1.095	1.237	1.254	1.160
0.75	x - x	0.113	1.266	1.172	1.090	1.018	0.954	0.898	1.107	1.260	1.266	1.172
0.75	x - x	0.087	1.276	1.182	1.100	1.026	0.962	0.904	1.116	1.276	1.276	1.182
0.75	x - x	0.061	1.288	1.193	1.109	1.035	0.969	0.910	1.127	1.288	1.288	1.193
0.75	x - x	0.036	1.305	1.211	1.128	1.053	0.986	0.926	1.145	1.305	1.305	1.211
0.75	x - x	0.011	1.326	1.233	1.150	1.076	1.009	0.949	1.167	1.326	1.326	1.233
1	x - x	0.899	2.571	2.718	2.879	3.055	3.247	3.457	3.395	3.279	3.457	3.457
1	x - x	0.888	2.403	2.506	2.620	2.743	2.877	3.022	2.970	2.886	3.022	3.022
1	x - x	0.877	2.263	2.333	2.410	2.493	2.585	2.683	2.642	2.582	2.683	2.683
1	x - x	0.865	2.146	2.190	2.238	2.291	2.350	2.415	2.383	2.342	2.415	2.415
1	x - x	0.852	2.050	2.072	2.098	2.129	2.163	2.203	2.181	2.155	2.203	2.203
1	x - x	0.839	1.967	1.972	1.981	1.993	2.009	2.029	2.016	2.003	2.029	2.029
1	x - x	0.825	1.893	1.883	1.877	1.874	1.875	1.879	1.876	1.874	1.879	1.879
1	x - x	0.811	1.825	1.803	1.784	1.769	1.757	1.748	1.754	1.763	1.748	1.748
1	x - x	0.796	1.763	1.729	1.700	1.673	1.651	1.631	1.647	1.666	1.631	1.632
1	x - x	0.780	1.707	1.663	1.624	1.589	1.558	1.529	1.555	1.584	1.532	1.534
1	x - x	0.764	1.657	1.606	1.559	1.517	1.478	1.443	1.478	1.515	1.451	1.453
1	x - x	0.747	1.613	1.555	1.502	1.454	1.409	1.369	1.413	1.459	1.384	1.386
1	x - x	0.729	1.575	1.511	1.453	1.400	1.351	1.306	1.359	1.413	1.330	1.331

1	x - x	0.711	1.541	1.473	1.410	1.353	1.300	1.252	1.313	1.376	1.285	1.286
1	x - x	0.692	1.511	1.438	1.371	1.310	1.255	1.204	1.273	1.342	1.247	1.248
1	x - x	0.673	1.482	1.406	1.336	1.272	1.214	1.160	1.238	1.310	1.214	1.215
1	x - x	0.653	1.457	1.377	1.304	1.238	1.178	1.122	1.208	1.284	1.188	1.188
1	x - x	0.632	1.434	1.351	1.276	1.208	1.146	1.089	1.183	1.261	1.166	1.166
1	x - x	0.611	1.412	1.327	1.249	1.179	1.115	1.057	1.159	1.240	1.148	1.147
1	x - x	0.589	1.392	1.304	1.225	1.153	1.088	1.028	1.139	1.222	1.133	1.132
1	x - x	0.567	1.373	1.284	1.203	1.129	1.063	1.003	1.121	1.207	1.122	1.120
1	x - x	0.544	1.356	1.265	1.182	1.108	1.040	0.979	1.106	1.194	1.113	1.111
1	x - x	0.521	1.340	1.247	1.163	1.087	1.019	0.957	1.093	1.183	1.107	1.104
1	x - x	0.497	1.325	1.230	1.145	1.068	0.999	0.937	1.081	1.173	1.103	1.100
1	x - x	0.473	1.311	1.214	1.128	1.050	0.980	0.917	1.070	1.165	1.101	1.097
1	x - x	0.449	1.296	1.198	1.110	1.032	0.961	0.897	1.059	1.157	1.100	1.095
1	x - x	0.423	1.282	1.182	1.093	1.013	0.942	0.877	1.048	1.150	1.100	1.094
1	x - x	0.398	1.267	1.166	1.075	0.994	0.922	0.856	1.037	1.143	1.101	1.094
1	x - x	0.372	1.252	1.149	1.058	0.976	0.902	0.836	1.027	1.137	1.104	1.095
1	x - x	0.346	1.241	1.137	1.045	0.962	0.888	0.822	1.021	1.134	1.111	1.102
1	x - x	0.320	1.238	1.134	1.042	0.959	0.885	0.819	1.026	1.142	1.129	1.119
1	x - x	0.293	1.242	1.138	1.045	0.962	0.888	0.821	1.038	1.157	1.155	1.138
1	x - x	0.266	1.247	1.143	1.050	0.967	0.892	0.825	1.050	1.174	1.183	1.143
1	x - x	0.240	1.251	1.147	1.054	0.970	0.895	0.827	1.061	1.189	1.209	1.147
1	x - x	0.215	1.254	1.150	1.057	0.973	0.897	0.830	1.072	1.203	1.235	1.150
1	x - x	0.189	1.259	1.155	1.062	0.978	0.903	0.835	1.081	1.219	1.259	1.155
1	x - x	0.163	1.269	1.166	1.072	0.988	0.912	0.844	1.092	1.241	1.269	1.166
1	x - x	0.138	1.279	1.176	1.083	0.999	0.922	0.853	1.102	1.262	1.279	1.176
1	x - x	0.115	1.290	1.188	1.095	1.011	0.935	0.865	1.114	1.284	1.290	1.188
1	x - x	0.091	1.304	1.202	1.110	1.026	0.950	0.880	1.129	1.304	1.304	1.202
1	x - x	0.066	1.318	1.217	1.125	1.042	0.966	0.896	1.144	1.318	1.318	1.217
1	x - x	0.043	1.331	1.231	1.140	1.057	0.981	0.912	1.159	1.331	1.331	1.231
1	x - x	0.022	1.347	1.248	1.158	1.075	0.999	0.930	1.176	1.347	1.347	1.248
1	x - x	0.001	1.370	1.273	1.184	1.103	1.027	0.958	1.203	1.370	1.370	1.273
0.25	y - y	0.894	2.150	2.251	2.376	2.526	2.702	2.906	2.839	2.725	2.906	2.906
0.25	y - y	0.882	2.026	2.095	2.185	2.295	2.425	2.576	2.516	2.428	2.576	2.576
0.25	y - y	0.869	1.920	1.964	2.026	2.104	2.198	2.309	2.257	2.189	2.309	2.309
0.25	y - y	0.856	1.835	1.859	1.900	1.954	2.023	2.105	2.060	2.008	2.105	2.105
0.25	y - y	0.841	1.765	1.776	1.800	1.838	1.888	1.950	1.912	1.871	1.950	1.950
0.25	y - y	0.825	1.703	1.700	1.712	1.736	1.771	1.816	1.784	1.754	1.816	1.816
0.25	y - y	0.809	1.645	1.632	1.633	1.645	1.668	1.699	1.674	1.653	1.699	1.699
0.25	y - y	0.792	1.594	1.573	1.564	1.567	1.579	1.600	1.582	1.569	1.600	1.599
0.25	y - y	0.774	1.550	1.521	1.506	1.501	1.506	1.518	1.506	1.501	1.515	1.515
0.25	y - y	0.755	1.509	1.474	1.452	1.441	1.439	1.445	1.439	1.442	1.443	1.442
0.25	y - y	0.735	1.472	1.432	1.405	1.389	1.382	1.382	1.382	1.392	1.381	1.381
0.25	y - y	0.715	1.441	1.397	1.366	1.346	1.334	1.330	1.336	1.352	1.332	1.332
0.25	y - y	0.694	1.412	1.365	1.331	1.307	1.293	1.285	1.297	1.318	1.291	1.291
0.25	y - y	0.672	1.386	1.336	1.299	1.272	1.255	1.244	1.261	1.287	1.255	1.255
0.25	y - y	0.650	1.363	1.310	1.271	1.242	1.222	1.209	1.231	1.261	1.225	1.225
0.25	y - y	0.627	1.343	1.287	1.246	1.215	1.193	1.177	1.206	1.239	1.201	1.200
0.25	y - y	0.604	1.323	1.266	1.222	1.189	1.165	1.148	1.182	1.218	1.178	1.178
0.25	y - y	0.580	1.306	1.246	1.200	1.165	1.139	1.119	1.160	1.200	1.159	1.158
0.25	y - y	0.556	1.290	1.228	1.180	1.143	1.115	1.093	1.141	1.184	1.143	1.142
0.25	y - y	0.531	1.275	1.211	1.161	1.122	1.091	1.067	1.123	1.170	1.128	1.127
0.25	y - y	0.506	1.261	1.194	1.142	1.101	1.068	1.042	1.106	1.157	1.116	1.114
0.25	y - y	0.480	1.248	1.179	1.125	1.082	1.047	1.019	1.091	1.146	1.107	1.105
0.25	y - y	0.453	1.235	1.164	1.108	1.062	1.026	0.995	1.077	1.136	1.100	1.097
0.25	y - y	0.426	1.222	1.149	1.090	1.043	1.004	0.972	1.063	1.127	1.094	1.090
0.25	y - y	0.398	1.210	1.134	1.074	1.024	0.983	0.949	1.050	1.118	1.090	1.086
0.25	y - y	0.369	1.197	1.119	1.056	1.004	0.960	0.924	1.036	1.111	1.088	1.082

0.25	y - y	0.341	1.182	1.101	1.035	0.980	0.934	0.895	1.020	1.101	1.085	1.078
0.25	y - y	0.312	1.186	1.105	1.039	0.983	0.937	0.898	1.029	1.113	1.106	1.098
0.25	y - y	0.283	1.192	1.112	1.047	0.993	0.947	0.909	1.044	1.130	1.131	1.112
0.25	y - y	0.255	1.197	1.117	1.052	0.998	0.953	0.915	1.054	1.143	1.154	1.117
0.25	y - y	0.227	1.202	1.123	1.058	1.005	0.960	0.921	1.066	1.158	1.179	1.123
0.25	y - y	0.200	1.207	1.127	1.062	1.008	0.962	0.924	1.075	1.172	1.207	1.127
0.25	y - y	0.173	1.212	1.132	1.067	1.012	0.967	0.928	1.080	1.185	1.212	1.132
0.25	y - y	0.148	1.216	1.137	1.071	1.017	0.971	0.932	1.084	1.199	1.216	1.137
0.25	y - y	0.124	1.224	1.143	1.077	1.021	0.974	0.934	1.090	1.215	1.224	1.143
0.25	y - y	0.099	1.235	1.154	1.086	1.029	0.981	0.940	1.100	1.235	1.235	1.154
0.25	y - y	0.074	1.245	1.163	1.094	1.036	0.987	0.944	1.108	1.245	1.245	1.163
0.25	y - y	0.047	1.261	1.178	1.108	1.049	0.998	0.954	1.122	1.261	1.261	1.178
0.25	y - y	0.021	1.280	1.198	1.128	1.069	1.017	0.973	1.142	1.280	1.280	1.198
0.5	y - y	0.895	2.555	2.694	2.843	3.003	3.177	3.364	3.305	3.200	3.364	3.364
0.5	y - y	0.885	2.397	2.494	2.598	2.709	2.829	2.957	2.909	2.834	2.957	2.957
0.5	y - y	0.874	2.264	2.329	2.398	2.472	2.551	2.636	2.599	2.547	2.636	2.636
0.5	y - y	0.862	2.153	2.192	2.234	2.280	2.329	2.381	2.355	2.321	2.381	2.381
0.5	y - y	0.850	2.058	2.076	2.097	2.121	2.147	2.176	2.159	2.140	2.176	2.176
0.5	y - y	0.837	1.976	1.978	1.982	1.988	1.996	2.006	1.999	1.993	2.006	2.006
0.5	y - y	0.824	1.902	1.889	1.878	1.869	1.863	1.858	1.861	1.866	1.858	1.858
0.5	y - y	0.810	1.834	1.809	1.786	1.765	1.746	1.729	1.742	1.757	1.729	1.729
0.5	y - y	0.795	1.774	1.738	1.705	1.673	1.645	1.618	1.640	1.665	1.618	1.619
0.5	y - y	0.780	1.722	1.676	1.634	1.595	1.558	1.523	1.555	1.588	1.527	1.529
0.5	y - y	0.765	1.675	1.622	1.572	1.526	1.483	1.442	1.482	1.524	1.452	1.453
0.5	y - y	0.749	1.633	1.574	1.518	1.466	1.417	1.372	1.421	1.471	1.388	1.390
0.5	y - y	0.732	1.597	1.532	1.471	1.414	1.361	1.312	1.369	1.427	1.337	1.338
0.5	y - y	0.715	1.564	1.495	1.430	1.369	1.312	1.260	1.325	1.391	1.294	1.295
0.5	y - y	0.697	1.535	1.461	1.392	1.328	1.269	1.213	1.287	1.360	1.257	1.259
0.5	y - y	0.679	1.507	1.430	1.358	1.291	1.229	1.171	1.253	1.329	1.226	1.227
0.5	y - y	0.660	1.482	1.401	1.327	1.257	1.193	1.133	1.223	1.303	1.200	1.200
0.5	y - y	0.641	1.460	1.376	1.299	1.227	1.161	1.100	1.198	1.280	1.179	1.179
0.5	y - y	0.621	1.439	1.352	1.273	1.199	1.131	1.068	1.175	1.260	1.160	1.160
0.5	y - y	0.600	1.416	1.327	1.245	1.170	1.100	1.036	1.151	1.239	1.142	1.141
0.5	y - y	0.579	1.396	1.304	1.220	1.143	1.072	1.007	1.131	1.221	1.128	1.126
0.5	y - y	0.557	1.377	1.284	1.198	1.119	1.047	0.981	1.114	1.206	1.117	1.115
0.5	y - y	0.534	1.359	1.263	1.176	1.096	1.023	0.956	1.097	1.192	1.108	1.106
0.5	y - y	0.511	1.342	1.244	1.155	1.074	1.000	0.932	1.083	1.180	1.102	1.098
0.5	y - y	0.488	1.326	1.226	1.136	1.053	0.978	0.910	1.070	1.169	1.097	1.093
0.5	y - y	0.464	1.310	1.209	1.117	1.033	0.957	0.888	1.057	1.160	1.095	1.090
0.5	y - y	0.440	1.294	1.191	1.098	1.013	0.936	0.866	1.045	1.151	1.093	1.087
0.5	y - y	0.415	1.278	1.173	1.078	0.993	0.915	0.844	1.033	1.142	1.093	1.086
0.5	y - y	0.390	1.262	1.156	1.060	0.973	0.894	0.823	1.021	1.135	1.093	1.086
0.5	y - y	0.364	1.247	1.139	1.042	0.954	0.875	0.803	1.011	1.129	1.097	1.088
0.5	y - y	0.339	1.236	1.126	1.028	0.939	0.858	0.785	1.005	1.127	1.104	1.094
0.5	y - y	0.314	1.237	1.127	1.028	0.939	0.859	0.786	1.013	1.138	1.127	1.116
0.5	y - y	0.289	1.243	1.134	1.036	0.947	0.867	0.794	1.029	1.156	1.156	1.134
0.5	y - y	0.263	1.248	1.139	1.041	0.952	0.872	0.800	1.042	1.172	1.183	1.139
0.5	y - y	0.238	1.253	1.145	1.047	0.958	0.878	0.806	1.055	1.189	1.211	1.145
0.5	y - y	0.213	1.261	1.153	1.056	0.967	0.887	0.815	1.072	1.209	1.243	1.153
0.5	y - y	0.188	1.268	1.160	1.063	0.975	0.895	0.823	1.083	1.227	1.268	1.160
0.5	y - y	0.165	1.273	1.166	1.070	0.982	0.903	0.830	1.090	1.243	1.273	1.166
0.5	y - y	0.141	1.284	1.179	1.083	0.996	0.917	0.845	1.103	1.265	1.284	1.179
0.5	y - y	0.118	1.298	1.195	1.100	1.014	0.936	0.864	1.120	1.290	1.298	1.195
0.5	y - y	0.096	1.313	1.210	1.117	1.032	0.954	0.883	1.136	1.313	1.313	1.210
0.5	y - y	0.073	1.327	1.227	1.135	1.051	0.974	0.903	1.154	1.327	1.327	1.227
0.5	y - y	0.051	1.339	1.240	1.149	1.066	0.990	0.920	1.168	1.339	1.339	1.240
0.5	y - y	0.032	1.351	1.253	1.163	1.081	1.005	0.936	1.182	1.351	1.351	1.253

0.5	y - y	0.011	1.369	1.273	1.185	1.105	1.031	0.962	1.204	1.369	1.369	1.273
0.75	y - y	0.830	1.952	1.943	1.935	1.927	1.919	1.912	1.916	1.922	1.912	1.912
0.75	y - y	0.818	1.891	1.871	1.852	1.833	1.814	1.796	1.809	1.823	1.796	1.796
0.75	y - y	0.807	1.836	1.806	1.777	1.748	1.720	1.693	1.714	1.737	1.693	1.693
0.75	y - y	0.795	1.787	1.748	1.710	1.673	1.637	1.603	1.632	1.663	1.602	1.604
0.75	y - y	0.782	1.742	1.695	1.650	1.607	1.564	1.523	1.560	1.599	1.527	1.529
0.75	y - y	0.770	1.702	1.649	1.597	1.548	1.500	1.454	1.498	1.544	1.463	1.465
0.75	y - y	0.756	1.665	1.606	1.549	1.495	1.442	1.392	1.444	1.496	1.407	1.409
0.75	y - y	0.743	1.632	1.568	1.507	1.448	1.391	1.338	1.397	1.456	1.360	1.362
0.75	y - y	0.729	1.602	1.533	1.467	1.404	1.345	1.288	1.354	1.420	1.318	1.320
0.75	y - y	0.715	1.573	1.501	1.431	1.365	1.303	1.243	1.317	1.390	1.282	1.283
0.75	y - y	0.700	1.547	1.471	1.398	1.329	1.264	1.202	1.284	1.363	1.251	1.252
0.75	y - y	0.684	1.523	1.443	1.368	1.296	1.229	1.165	1.253	1.336	1.223	1.224
0.75	y - y	0.669	1.500	1.417	1.339	1.265	1.196	1.131	1.226	1.311	1.199	1.199
0.75	y - y	0.653	1.480	1.394	1.313	1.238	1.167	1.100	1.202	1.290	1.178	1.179
0.75	y - y	0.637	1.461	1.372	1.290	1.212	1.140	1.072	1.182	1.271	1.162	1.162
0.75	y - y	0.620	1.442	1.352	1.267	1.188	1.114	1.045	1.163	1.254	1.147	1.146
0.75	y - y	0.603	1.425	1.332	1.246	1.165	1.090	1.020	1.145	1.238	1.134	1.133
0.75	y - y	0.585	1.408	1.314	1.226	1.144	1.068	0.997	1.129	1.224	1.123	1.122
0.75	y - y	0.568	1.393	1.297	1.208	1.124	1.047	0.976	1.115	1.212	1.115	1.113
0.75	y - y	0.549	1.379	1.281	1.190	1.106	1.028	0.956	1.103	1.201	1.109	1.106
0.75	y - y	0.531	1.365	1.265	1.173	1.088	1.010	0.937	1.091	1.192	1.104	1.101
0.75	y - y	0.512	1.352	1.251	1.158	1.072	0.992	0.919	1.081	1.183	1.101	1.097
0.75	y - y	0.492	1.339	1.237	1.143	1.056	0.976	0.902	1.071	1.176	1.099	1.095
0.75	y - y	0.473	1.326	1.222	1.127	1.039	0.959	0.884	1.061	1.168	1.098	1.093
0.75	y - y	0.452	1.312	1.207	1.111	1.022	0.941	0.867	1.052	1.161	1.097	1.091
0.75	y - y	0.432	1.299	1.193	1.095	1.006	0.924	0.849	1.042	1.154	1.096	1.090
0.75	y - y	0.411	1.286	1.178	1.079	0.989	0.907	0.832	1.033	1.148	1.097	1.090
0.75	y - y	0.390	1.272	1.163	1.063	0.972	0.889	0.814	1.023	1.141	1.098	1.090
0.75	y - y	0.369	1.260	1.149	1.049	0.957	0.874	0.799	1.016	1.137	1.102	1.093
0.75	y - y	0.347	1.250	1.139	1.038	0.946	0.863	0.787	1.012	1.136	1.110	1.100
0.75	y - y	0.326	1.246	1.135	1.034	0.942	0.858	0.783	1.014	1.141	1.124	1.113
0.75	y - y	0.305	1.249	1.137	1.036	0.944	0.861	0.785	1.024	1.153	1.145	1.133
0.75	y - y	0.283	1.252	1.141	1.040	0.948	0.865	0.789	1.035	1.166	1.168	1.141
0.75	y - y	0.261	1.256	1.146	1.045	0.953	0.870	0.794	1.046	1.181	1.193	1.146
0.75	y - y	0.240	1.261	1.150	1.050	0.958	0.875	0.799	1.058	1.195	1.216	1.150
0.75	y - y	0.220	1.265	1.155	1.055	0.964	0.880	0.804	1.070	1.209	1.240	1.155
0.75	y - y	0.200	1.268	1.158	1.058	0.966	0.883	0.807	1.079	1.221	1.268	1.158
0.75	y - y	0.180	1.273	1.164	1.064	0.973	0.890	0.814	1.084	1.235	1.273	1.164
0.75	y - y	0.160	1.280	1.171	1.072	0.981	0.898	0.822	1.092	1.252	1.280	1.171
0.75	y - y	0.140	1.288	1.180	1.081	0.990	0.908	0.832	1.102	1.269	1.288	1.180
0.75	y - y	0.121	1.301	1.194	1.096	1.006	0.924	0.849	1.117	1.291	1.301	1.194
0.75	y - y	0.102	1.315	1.209	1.113	1.024	0.942	0.867	1.133	1.314	1.315	1.209
0.75	y - y	0.083	1.326	1.221	1.125	1.036	0.955	0.880	1.145	1.326	1.326	1.221
0.75	y - y	0.066	1.331	1.227	1.132	1.043	0.962	0.887	1.152	1.331	1.331	1.227
0.75	y - y	0.048	1.340	1.237	1.142	1.054	0.974	0.899	1.162	1.340	1.340	1.237
0.75	y - y	0.030	1.355	1.254	1.160	1.073	0.993	0.919	1.180	1.355	1.355	1.254
0.75	y - y	0.012	1.377	1.278	1.186	1.101	1.022	0.948	1.205	1.377	1.377	1.278
1	y - y	0.766	1.664	1.614	1.568	1.527	1.489	1.455	1.488	1.525	1.462	1.464
1	y - y	0.755	1.634	1.579	1.528	1.483	1.441	1.403	1.443	1.485	1.415	1.416
1	y - y	0.744	1.606	1.546	1.492	1.443	1.398	1.356	1.402	1.449	1.373	1.375
1	y - y	0.732	1.581	1.518	1.460	1.407	1.359	1.315	1.366	1.419	1.337	1.339
1	y - y	0.720	1.557	1.491	1.430	1.375	1.324	1.277	1.334	1.393	1.305	1.307
1	y - y	0.707	1.536	1.466	1.403	1.345	1.291	1.243	1.305	1.369	1.277	1.278
1	y - y	0.695	1.515	1.443	1.377	1.316	1.261	1.211	1.278	1.347	1.252	1.253
1	y - y	0.682	1.496	1.421	1.352	1.290	1.233	1.181	1.254	1.325	1.229	1.230
1	y - y	0.669	1.477	1.400	1.330	1.265	1.207	1.153	1.232	1.305	1.209	1.209

1	y - y	0.656	1.461	1.381	1.309	1.243	1.183	1.128	1.212	1.287	1.191	1.192
1	y - y	0.642	1.445	1.363	1.289	1.222	1.161	1.105	1.195	1.271	1.176	1.176
1	y - y	0.628	1.430	1.347	1.271	1.202	1.140	1.083	1.178	1.257	1.163	1.163
1	y - y	0.614	1.415	1.330	1.253	1.183	1.120	1.062	1.163	1.243	1.151	1.150
1	y - y	0.600	1.401	1.315	1.236	1.165	1.101	1.042	1.148	1.230	1.140	1.139
1	y - y	0.585	1.388	1.300	1.220	1.148	1.083	1.023	1.135	1.219	1.130	1.129
1	y - y	0.570	1.376	1.287	1.206	1.133	1.067	1.006	1.124	1.209	1.123	1.122
1	y - y	0.555	1.364	1.274	1.192	1.118	1.051	0.990	1.113	1.200	1.117	1.115
1	y - y	0.540	1.353	1.261	1.178	1.104	1.036	0.975	1.103	1.192	1.112	1.109
1	y - y	0.524	1.342	1.249	1.166	1.090	1.022	0.960	1.094	1.184	1.108	1.105
1	y - y	0.509	1.332	1.238	1.154	1.077	1.009	0.946	1.086	1.178	1.105	1.102
1	y - y	0.493	1.322	1.227	1.142	1.065	0.996	0.933	1.079	1.172	1.103	1.099
1	y - y	0.477	1.313	1.217	1.130	1.053	0.983	0.920	1.071	1.166	1.102	1.097
1	y - y	0.461	1.303	1.206	1.119	1.041	0.970	0.907	1.064	1.161	1.101	1.096
1	y - y	0.444	1.293	1.195	1.107	1.028	0.957	0.893	1.057	1.156	1.100	1.095
1	y - y	0.427	1.284	1.184	1.096	1.016	0.944	0.880	1.050	1.151	1.100	1.094
1	y - y	0.410	1.274	1.174	1.084	1.004	0.932	0.867	1.043	1.146	1.101	1.094
1	y - y	0.393	1.264	1.163	1.072	0.991	0.918	0.852	1.035	1.142	1.101	1.094
1	y - y	0.376	1.254	1.151	1.060	0.978	0.904	0.838	1.028	1.137	1.103	1.095
1	y - y	0.358	1.246	1.142	1.050	0.968	0.894	0.828	1.023	1.135	1.107	1.098
1	y - y	0.341	1.239	1.135	1.043	0.961	0.887	0.821	1.021	1.135	1.114	1.104
1	y - y	0.324	1.238	1.134	1.041	0.959	0.885	0.818	1.025	1.141	1.126	1.116
1	y - y	0.306	1.240	1.136	1.044	0.961	0.886	0.820	1.032	1.150	1.142	1.131
1	y - y	0.288	1.243	1.139	1.046	0.963	0.889	0.822	1.040	1.160	1.160	1.139
1	y - y	0.270	1.246	1.142	1.049	0.966	0.891	0.824	1.048	1.171	1.179	1.142
1	y - y	0.252	1.251	1.146	1.053	0.970	0.895	0.828	1.058	1.183	1.198	1.146
1	y - y	0.235	1.251	1.147	1.054	0.970	0.895	0.827	1.063	1.191	1.214	1.147
1	y - y	0.219	1.253	1.149	1.056	0.972	0.897	0.829	1.070	1.200	1.231	1.149
1	y - y	0.202	1.256	1.152	1.059	0.975	0.900	0.832	1.078	1.211	1.249	1.152
1	y - y	0.184	1.261	1.157	1.063	0.980	0.904	0.836	1.083	1.223	1.261	1.157
1	y - y	0.167	1.267	1.164	1.070	0.986	0.910	0.842	1.090	1.237	1.267	1.164
1	y - y	0.150	1.276	1.172	1.079	0.995	0.919	0.851	1.099	1.253	1.276	1.172
1	y - y	0.134	1.281	1.178	1.084	1.000	0.924	0.855	1.104	1.265	1.281	1.178
1	y - y	0.118	1.288	1.186	1.093	1.009	0.932	0.863	1.112	1.280	1.288	1.186
1	y - y	0.102	1.297	1.195	1.102	1.019	0.942	0.873	1.122	1.296	1.297	1.195
1	y - y	0.086	1.306	1.205	1.112	1.029	0.952	0.883	1.131	1.306	1.306	1.205
1	y - y	0.070	1.315	1.214	1.123	1.039	0.963	0.893	1.142	1.315	1.315	1.214
1	y - y	0.054	1.326	1.226	1.135	1.052	0.976	0.907	1.154	1.326	1.326	1.226
1	y - y	0.04	1.333	1.234	1.143	1.06	0.984	0.914	1.162	1.333	1.333	1.234
1	y - y	0.025	1.344	1.245	1.155	1.072	0.996	0.926	1.173	1.344	1.344	1.245
1	y - y	0.011	1.358	1.26	1.17	1.088	1.013	0.943	1.189	1.358	1.358	1.26

Tabla C.9 Valores de r_2 de la sección 12 (40 cm x 60 cm con ρ = 0.06 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente a. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x - x	0.897	1.508	1.521	1.552	1.599	1.658	1.727	1.705	1.667	1.727	1.727
0.25	x - x	0.888	1.466	1.471	1.493	1.530	1.578	1.635	1.614	1.581	1.635	1.635
0.25	x - x	0.878	1.428	1.426	1.441	1.469	1.508	1.554	1.535	1.507	1.554	1.554
0.25	x - x	0.868	1.396	1.387	1.396	1.417	1.448	1.486	1.468	1.444	1.486	1.486
0.25	x - x	0.857	1.368	1.355	1.358	1.374	1.399	1.430	1.413	1.393	1.430	1.430
0.25	x - x	0.845	1.344	1.326	1.325	1.336	1.355	1.381	1.365	1.348	1.381	1.381
0.25	x - x	0.832	1.322	1.300	1.295	1.301	1.316	1.337	1.322	1.309	1.337	1.337
0.25	x - x	0.818	1.303	1.278	1.269	1.272	1.282	1.299	1.286	1.276	1.299	1.299

0.25	x - x	0.803	1.288	1.261	1.250	1.250	1.258	1.272	1.260	1.252	1.272	1.272
0.25	x - x	0.786	1.274	1.245	1.232	1.230	1.236	1.247	1.237	1.231	1.246	1.246
0.25	x - x	0.769	1.257	1.226	1.211	1.207	1.210	1.219	1.211	1.207	1.217	1.217
0.25	x - x	0.751	1.240	1.209	1.192	1.186	1.188	1.195	1.188	1.187	1.192	1.192
0.25	x - x	0.732	1.225	1.193	1.175	1.168	1.169	1.174	1.168	1.169	1.171	1.171
0.25	x - x	0.712	1.212	1.178	1.160	1.152	1.151	1.155	1.150	1.154	1.152	1.151
0.25	x - x	0.691	1.199	1.165	1.146	1.137	1.135	1.138	1.135	1.141	1.135	1.135
0.25	x - x	0.670	1.188	1.153	1.134	1.124	1.121	1.122	1.121	1.129	1.121	1.121
0.25	x - x	0.648	1.178	1.143	1.122	1.111	1.107	1.107	1.109	1.118	1.107	1.107
0.25	x - x	0.625	1.169	1.133	1.112	1.100	1.095	1.094	1.098	1.109	1.096	1.096
0.25	x - x	0.602	1.162	1.125	1.103	1.091	1.085	1.083	1.089	1.102	1.088	1.088
0.25	x - x	0.578	1.154	1.117	1.094	1.081	1.075	1.072	1.080	1.095	1.079	1.079
0.25	x - x	0.553	1.147	1.109	1.086	1.072	1.064	1.060	1.071	1.088	1.072	1.071
0.25	x - x	0.528	1.142	1.103	1.079	1.064	1.055	1.051	1.064	1.083	1.066	1.066
0.25	x - x	0.502	1.136	1.096	1.071	1.055	1.046	1.041	1.057	1.078	1.061	1.060
0.25	x - x	0.475	1.129	1.089	1.063	1.047	1.036	1.030	1.050	1.073	1.057	1.056
0.25	x - x	0.447	1.124	1.083	1.056	1.038	1.027	1.020	1.044	1.069	1.054	1.052
0.25	x - x	0.417	1.119	1.077	1.049	1.030	1.018	1.010	1.038	1.067	1.052	1.050
0.25	x - x	0.387	1.115	1.071	1.042	1.023	1.010	1.001	1.033	1.065	1.052	1.050
0.25	x - x	0.355	1.111	1.067	1.038	1.018	1.004	0.994	1.031	1.065	1.056	1.053
0.25	x - x	0.321	1.106	1.060	1.030	1.008	0.993	0.982	1.025	1.063	1.058	1.054
0.25	x - x	0.287	1.101	1.057	1.027	1.006	0.991	0.980	1.025	1.065	1.065	1.057
0.25	x - x	0.255	1.103	1.061	1.033	1.014	1.001	0.992	1.034	1.074	1.080	1.061
0.25	x - x	0.224	1.105	1.064	1.036	1.018	1.006	0.998	1.040	1.082	1.093	1.064
0.25	x - x	0.196	1.103	1.060	1.032	1.013	1.000	0.990	1.037	1.084	1.103	1.060
0.25	x - x	0.167	1.102	1.060	1.031	1.011	0.998	0.988	1.036	1.089	1.102	1.060
0.25	x - x	0.136	1.104	1.060	1.031	1.011	0.997	0.987	1.036	1.096	1.104	1.060
0.25	x - x	0.106	1.106	1.060	1.029	1.007	0.991	0.980	1.035	1.105	1.106	1.060
0.25	x - x	0.077	1.107	1.059	1.026	1.003	0.986	0.974	1.032	1.107	1.107	1.059
0.25	x - x	0.047	1.109	1.060	1.026	1.001	0.983	0.970	1.032	1.109	1.109	1.060
0.25	x - x	0.014	1.115	1.064	1.028	1.002	0.983	0.968	1.035	1.115	1.115	1.064
0.5	x - x	0.895	1.880	1.921	1.979	2.054	2.146	2.253	2.218	2.158	2.253	2.253
0.5	x - x	0.885	1.805	1.829	1.869	1.925	1.995	2.078	2.046	1.998	2.078	2.078
0.5	x - x	0.876	1.738	1.749	1.774	1.814	1.866	1.930	1.902	1.864	1.930	1.930
0.5	x - x	0.865	1.682	1.681	1.694	1.721	1.759	1.807	1.783	1.753	1.807	1.807
0.5	x - x	0.854	1.633	1.623	1.627	1.643	1.669	1.706	1.685	1.663	1.706	1.706
0.5	x - x	0.842	1.590	1.572	1.567	1.574	1.591	1.617	1.601	1.585	1.617	1.617
0.5	x - x	0.829	1.552	1.526	1.514	1.513	1.523	1.540	1.528	1.518	1.540	1.540
0.5	x - x	0.816	1.518	1.486	1.468	1.461	1.464	1.474	1.466	1.462	1.474	1.474
0.5	x - x	0.801	1.489	1.453	1.430	1.418	1.416	1.421	1.416	1.417	1.421	1.421
0.5	x - x	0.786	1.462	1.422	1.395	1.379	1.373	1.373	1.372	1.377	1.373	1.373
0.5	x - x	0.770	1.435	1.391	1.361	1.342	1.331	1.328	1.331	1.341	1.328	1.328
0.5	x - x	0.753	1.410	1.363	1.330	1.307	1.294	1.287	1.294	1.308	1.288	1.289
0.5	x - x	0.736	1.386	1.336	1.300	1.275	1.259	1.249	1.260	1.280	1.253	1.253
0.5	x - x	0.717	1.364	1.312	1.274	1.247	1.228	1.217	1.232	1.256	1.223	1.224
0.5	x - x	0.698	1.345	1.291	1.251	1.222	1.202	1.188	1.207	1.235	1.198	1.199
0.5	x - x	0.677	1.327	1.271	1.230	1.199	1.177	1.162	1.185	1.216	1.177	1.177
0.5	x - x	0.656	1.309	1.252	1.209	1.177	1.153	1.136	1.164	1.198	1.156	1.156
0.5	x - x	0.634	1.293	1.235	1.190	1.156	1.131	1.113	1.145	1.181	1.139	1.139
0.5	x - x	0.612	1.279	1.219	1.173	1.138	1.112	1.092	1.130	1.168	1.125	1.124
0.5	x - x	0.589	1.266	1.205	1.158	1.122	1.094	1.073	1.115	1.156	1.113	1.112
0.5	x - x	0.565	1.253	1.190	1.142	1.105	1.076	1.054	1.101	1.145	1.102	1.101
0.5	x - x	0.541	1.241	1.177	1.128	1.089	1.059	1.036	1.089	1.135	1.093	1.092
0.5	x - x	0.516	1.231	1.165	1.114	1.075	1.044	1.019	1.078	1.127	1.086	1.085
0.5	x - x	0.490	1.219	1.152	1.100	1.059	1.026	1.000	1.066	1.118	1.079	1.077
0.5	x - x	0.463	1.208	1.139	1.085	1.042	1.008	0.980	1.054	1.110	1.074	1.071
0.5	x - x	0.435	1.197	1.127	1.071	1.026	0.990	0.961	1.043	1.103	1.070	1.067

0.5	x - x	0.406	1.187	1.114	1.057	1.011	0.973	0.942	1.033	1.097	1.069	1.065
0.5	x - x	0.376	1.177	1.103	1.044	0.996	0.957	0.924	1.025	1.093	1.071	1.066
0.5	x - x	0.345	1.169	1.093	1.033	0.983	0.943	0.909	1.019	1.092	1.076	1.070
0.5	x - x	0.313	1.159	1.082	1.020	0.969	0.926	0.891	1.011	1.090	1.083	1.075
0.5	x - x	0.281	1.153	1.075	1.013	0.962	0.920	0.884	1.010	1.093	1.095	1.075
0.5	x - x	0.248	1.155	1.078	1.017	0.967	0.925	0.890	1.020	1.106	1.118	1.078
0.5	x - x	0.215	1.161	1.085	1.023	0.973	0.932	0.897	1.033	1.122	1.146	1.085
0.5	x - x	0.184	1.162	1.086	1.025	0.975	0.934	0.900	1.037	1.133	1.162	1.086
0.5	x - x	0.153	1.164	1.089	1.028	0.979	0.939	0.905	1.040	1.146	1.164	1.089
0.5	x - x	0.122	1.167	1.091	1.030	0.980	0.939	0.904	1.042	1.160	1.167	1.091
0.5	x - x	0.092	1.172	1.094	1.031	0.980	0.937	0.901	1.044	1.172	1.172	1.094
0.5	x - x	0.063	1.177	1.098	1.035	0.983	0.939	0.903	1.048	1.177	1.177	1.098
0.5	x - x	0.032	1.183	1.104	1.039	0.986	0.941	0.904	1.052	1.183	1.183	1.104
0.5	x - x	0.001	1.194	1.113	1.047	0.991	0.944	0.905	1.060	1.194	1.194	1.113
0.75	x - x	0.885	2.039	2.079	2.130	2.192	2.265	2.349	2.317	2.269	2.349	2.349
0.75	x - x	0.876	1.955	1.978	2.010	2.052	2.103	2.164	2.138	2.101	2.164	2.164
0.75	x - x	0.866	1.883	1.891	1.908	1.933	1.967	2.009	1.988	1.963	2.009	2.009
0.75	x - x	0.855	1.820	1.814	1.818	1.829	1.848	1.874	1.860	1.844	1.874	1.874
0.75	x - x	0.844	1.763	1.747	1.739	1.739	1.745	1.759	1.750	1.743	1.759	1.759
0.75	x - x	0.832	1.712	1.686	1.669	1.659	1.655	1.658	1.656	1.656	1.658	1.658
0.75	x - x	0.819	1.666	1.632	1.607	1.588	1.577	1.571	1.574	1.582	1.571	1.571
0.75	x - x	0.806	1.627	1.586	1.554	1.529	1.511	1.498	1.507	1.521	1.498	1.498
0.75	x - x	0.792	1.591	1.545	1.507	1.477	1.453	1.435	1.450	1.470	1.435	1.436
0.75	x - x	0.777	1.557	1.505	1.462	1.427	1.398	1.376	1.397	1.422	1.378	1.379
0.75	x - x	0.762	1.525	1.468	1.421	1.382	1.349	1.322	1.349	1.381	1.328	1.329
0.75	x - x	0.746	1.496	1.435	1.384	1.341	1.305	1.274	1.307	1.346	1.286	1.287
0.75	x - x	0.730	1.470	1.406	1.352	1.305	1.266	1.233	1.272	1.316	1.250	1.251
0.75	x - x	0.712	1.446	1.379	1.322	1.273	1.231	1.196	1.241	1.292	1.219	1.220
0.75	x - x	0.694	1.422	1.351	1.291	1.240	1.196	1.158	1.210	1.266	1.189	1.190
0.75	x - x	0.674	1.400	1.327	1.265	1.211	1.165	1.125	1.183	1.243	1.165	1.165
0.75	x - x	0.654	1.380	1.305	1.240	1.184	1.136	1.094	1.160	1.222	1.143	1.144
0.75	x - x	0.634	1.361	1.284	1.217	1.160	1.110	1.067	1.139	1.204	1.126	1.126
0.75	x - x	0.612	1.344	1.265	1.196	1.138	1.087	1.042	1.121	1.188	1.112	1.111
0.75	x - x	0.590	1.328	1.247	1.177	1.117	1.065	1.019	1.105	1.174	1.100	1.099
0.75	x - x	0.568	1.312	1.229	1.158	1.097	1.044	0.997	1.090	1.161	1.090	1.089
0.75	x - x	0.544	1.297	1.212	1.140	1.078	1.024	0.976	1.077	1.150	1.082	1.080
0.75	x - x	0.520	1.283	1.197	1.124	1.060	1.005	0.957	1.065	1.141	1.077	1.075
0.75	x - x	0.495	1.269	1.182	1.107	1.043	0.986	0.937	1.053	1.132	1.073	1.070
0.75	x - x	0.470	1.255	1.167	1.091	1.025	0.968	0.918	1.042	1.124	1.070	1.066
0.75	x - x	0.443	1.242	1.152	1.074	1.007	0.949	0.897	1.031	1.117	1.068	1.064
0.75	x - x	0.416	1.228	1.136	1.057	0.989	0.929	0.876	1.020	1.110	1.068	1.062
0.75	x - x	0.388	1.215	1.121	1.040	0.971	0.910	0.856	1.010	1.104	1.070	1.063
0.75	x - x	0.359	1.203	1.108	1.026	0.955	0.893	0.838	1.002	1.101	1.075	1.067
0.75	x - x	0.329	1.190	1.094	1.010	0.938	0.875	0.819	0.994	1.098	1.082	1.073
0.75	x - x	0.299	1.179	1.081	0.997	0.924	0.860	0.804	0.988	1.097	1.093	1.081
0.75	x - x	0.269	1.175	1.077	0.993	0.920	0.856	0.800	0.992	1.104	1.112	1.077
0.75	x - x	0.237	1.181	1.083	0.999	0.926	0.863	0.807	1.007	1.123	1.144	1.083
0.75	x - x	0.206	1.186	1.089	1.004	0.932	0.868	0.812	1.020	1.141	1.176	1.089
0.75	x - x	0.176	1.191	1.094	1.010	0.938	0.875	0.819	1.027	1.159	1.191	1.094
0.75	x - x	0.146	1.196	1.099	1.016	0.944	0.880	0.825	1.033	1.176	1.196	1.099
0.75	x - x	0.115	1.203	1.106	1.022	0.950	0.886	0.830	1.039	1.196	1.203	1.106
0.75	x - x	0.085	1.210	1.114	1.031	0.958	0.894	0.838	1.048	1.210	1.210	1.114
0.75	x - x	0.056	1.218	1.122	1.038	0.966	0.902	0.845	1.055	1.218	1.218	1.122
0.75	x - x	0.026	1.229	1.132	1.048	0.975	0.910	0.853	1.066	1.229	1.229	1.132
1	x - x	0.861	1.953	1.954	1.959	1.968	1.980	1.995	1.987	1.977	1.995	1.995
1	x - x	0.851	1.889	1.878	1.871	1.867	1.866	1.868	1.866	1.866	1.868	1.868
1	x - x	0.840	1.832	1.810	1.792	1.777	1.766	1.757	1.762	1.769	1.757	1.757

1	x - x	0.829	1.780	1.748	1.721	1.697	1.676	1.658	1.670	1.684	1.658	1.658
1	x - x	0.817	1.731	1.691	1.655	1.623	1.594	1.568	1.587	1.609	1.568	1.568
1	x - x	0.804	1.688	1.641	1.598	1.559	1.524	1.492	1.517	1.546	1.492	1.492
1	x - x	0.791	1.649	1.596	1.547	1.502	1.462	1.425	1.456	1.492	1.426	1.427
1	x - x	0.777	1.612	1.553	1.499	1.449	1.404	1.362	1.401	1.442	1.367	1.369
1	x - x	0.763	1.577	1.513	1.454	1.400	1.351	1.305	1.350	1.399	1.316	1.318
1	x - x	0.749	1.546	1.477	1.414	1.356	1.303	1.255	1.307	1.362	1.272	1.274
1	x - x	0.733	1.517	1.444	1.378	1.317	1.261	1.210	1.269	1.330	1.235	1.237
1	x - x	0.717	1.491	1.415	1.346	1.282	1.224	1.170	1.236	1.304	1.204	1.205
1	x - x	0.701	1.468	1.389	1.317	1.251	1.191	1.135	1.208	1.283	1.178	1.179
1	x - x	0.683	1.448	1.366	1.292	1.224	1.161	1.104	1.184	1.262	1.157	1.157
1	x - x	0.666	1.429	1.345	1.268	1.199	1.135	1.076	1.163	1.243	1.139	1.139
1	x - x	0.647	1.410	1.323	1.245	1.173	1.108	1.048	1.142	1.224	1.122	1.122
1	x - x	0.628	1.392	1.303	1.223	1.150	1.083	1.022	1.124	1.207	1.108	1.107
1	x - x	0.608	1.375	1.284	1.202	1.128	1.061	0.999	1.108	1.193	1.097	1.096
1	x - x	0.588	1.359	1.266	1.183	1.108	1.039	0.977	1.093	1.181	1.088	1.086
1	x - x	0.566	1.342	1.247	1.163	1.086	1.016	0.953	1.078	1.167	1.078	1.076
1	x - x	0.544	1.326	1.230	1.143	1.065	0.995	0.931	1.064	1.156	1.071	1.069
1	x - x	0.521	1.311	1.213	1.126	1.047	0.975	0.911	1.052	1.146	1.067	1.064
1	x - x	0.498	1.296	1.197	1.108	1.028	0.956	0.890	1.040	1.137	1.064	1.060
1	x - x	0.474	1.281	1.180	1.090	1.009	0.936	0.870	1.029	1.128	1.062	1.057
1	x - x	0.449	1.266	1.164	1.073	0.991	0.917	0.851	1.019	1.121	1.062	1.056
1	x - x	0.424	1.252	1.149	1.056	0.973	0.899	0.832	1.009	1.115	1.063	1.057
1	x - x	0.398	1.238	1.133	1.039	0.956	0.881	0.813	1.000	1.109	1.066	1.059
1	x - x	0.371	1.224	1.118	1.024	0.939	0.864	0.796	0.992	1.105	1.072	1.063
1	x - x	0.343	1.212	1.104	1.008	0.923	0.847	0.779	0.985	1.103	1.080	1.070
1	x - x	0.315	1.198	1.090	0.993	0.907	0.830	0.761	0.978	1.100	1.089	1.078
1	x - x	0.287	1.189	1.079	0.982	0.896	0.819	0.750	0.976	1.102	1.103	1.079
1	x - x	0.258	1.187	1.077	0.980	0.894	0.817	0.748	0.983	1.113	1.126	1.077
1	x - x	0.229	1.194	1.085	0.988	0.902	0.825	0.756	0.999	1.133	1.160	1.085
1	x - x	0.200	1.200	1.091	0.995	0.908	0.832	0.763	1.014	1.153	1.200	1.091
1	x - x	0.172	1.203	1.094	0.998	0.912	0.835	0.766	1.018	1.169	1.203	1.094
1	x - x	0.142	1.209	1.101	1.005	0.919	0.843	0.774	1.025	1.189	1.209	1.101
1	x - x	0.113	1.218	1.110	1.014	0.928	0.851	0.782	1.034	1.212	1.218	1.110
1	x - x	0.086	1.226	1.119	1.023	0.937	0.860	0.790	1.042	1.226	1.226	1.119
1	x - x	0.058	1.237	1.131	1.035	0.950	0.873	0.804	1.055	1.237	1.237	1.131
1	x - x	0.030	1.250	1.144	1.049	0.964	0.887	0.817	1.069	1.250	1.250	1.144
1	x - x	0.003	1.264	1.159	1.064	0.979	0.902	0.832	1.084	1.264	1.264	1.159
0.25	y - y	0.899	2.030	2.102	2.194	2.307	2.441	2.595	2.548	2.463	2.595	2.595
0.25	y - y	0.890	1.941	1.991	2.060	2.146	2.250	2.371	2.328	2.259	2.371	2.371
0.25	y - y	0.881	1.864	1.897	1.947	2.013	2.093	2.189	2.150	2.094	2.189	2.189
0.25	y - y	0.871	1.797	1.815	1.850	1.898	1.960	2.034	1.999	1.954	2.034	2.034
0.25	y - y	0.861	1.740	1.746	1.768	1.802	1.849	1.907	1.876	1.841	1.907	1.907
0.25	y - y	0.849	1.690	1.687	1.698	1.721	1.755	1.800	1.774	1.746	1.800	1.800
0.25	y - y	0.837	1.644	1.632	1.633	1.646	1.670	1.702	1.681	1.660	1.702	1.702
0.25	y - y	0.824	1.602	1.581	1.574	1.578	1.592	1.614	1.598	1.584	1.614	1.614
0.25	y - y	0.811	1.565	1.537	1.523	1.519	1.525	1.539	1.528	1.521	1.539	1.539
0.25	y - y	0.796	1.531	1.497	1.476	1.466	1.465	1.472	1.466	1.465	1.472	1.472
0.25	y - y	0.781	1.498	1.459	1.432	1.416	1.409	1.409	1.409	1.414	1.409	1.409
0.25	y - y	0.765	1.467	1.423	1.391	1.370	1.357	1.352	1.357	1.369	1.353	1.353
0.25	y - y	0.749	1.438	1.389	1.353	1.328	1.311	1.301	1.312	1.330	1.304	1.304
0.25	y - y	0.731	1.412	1.359	1.319	1.289	1.268	1.254	1.271	1.296	1.261	1.261
0.25	y - y	0.713	1.388	1.332	1.289	1.256	1.231	1.214	1.237	1.268	1.225	1.226
0.25	y - y	0.693	1.367	1.308	1.263	1.227	1.200	1.180	1.208	1.245	1.197	1.197
0.25	y - y	0.674	1.350	1.290	1.242	1.205	1.177	1.155	1.188	1.227	1.177	1.177
0.25	y - y	0.653	1.335	1.272	1.223	1.185	1.155	1.132	1.170	1.211	1.160	1.160
0.25	y - y	0.632	1.319	1.256	1.205	1.166	1.135	1.110	1.153	1.196	1.145	1.145

0.25	y - y	0.610	1.305	1.239	1.188	1.147	1.114	1.088	1.136	1.182	1.131	1.130
0.25	y - y	0.587	1.291	1.224	1.171	1.129	1.095	1.067	1.121	1.170	1.118	1.118
0.25	y - y	0.563	1.277	1.208	1.153	1.109	1.074	1.045	1.106	1.157	1.106	1.105
0.25	y - y	0.538	1.263	1.193	1.137	1.091	1.054	1.024	1.091	1.146	1.097	1.095
0.25	y - y	0.513	1.251	1.179	1.121	1.074	1.036	1.004	1.079	1.136	1.089	1.087
0.25	y - y	0.487	1.238	1.165	1.105	1.057	1.017	0.984	1.066	1.127	1.082	1.080
0.25	y - y	0.460	1.225	1.150	1.088	1.038	0.997	0.962	1.053	1.117	1.077	1.073
0.25	y - y	0.432	1.212	1.135	1.072	1.020	0.977	0.941	1.041	1.109	1.073	1.069
0.25	y - y	0.403	1.199	1.120	1.056	1.002	0.958	0.920	1.029	1.102	1.071	1.066
0.25	y - y	0.373	1.187	1.106	1.040	0.984	0.938	0.898	1.018	1.096	1.071	1.066
0.25	y - y	0.342	1.176	1.092	1.024	0.967	0.919	0.877	1.008	1.092	1.075	1.068
0.25	y - y	0.310	1.164	1.079	1.009	0.950	0.900	0.857	0.999	1.089	1.082	1.073
0.25	y - y	0.277	1.151	1.063	0.990	0.929	0.877	0.832	0.988	1.085	1.089	1.063
0.25	y - y	0.244	1.149	1.061	0.987	0.925	0.872	0.826	0.992	1.094	1.110	1.061
0.25	y - y	0.211	1.159	1.072	0.999	0.938	0.887	0.842	1.011	1.116	1.145	1.072
0.25	y - y	0.179	1.165	1.079	1.007	0.947	0.896	0.852	1.022	1.135	1.165	1.079
0.25	y - y	0.147	1.172	1.086	1.015	0.955	0.904	0.860	1.029	1.154	1.172	1.086
0.25	y - y	0.117	1.177	1.092	1.022	0.964	0.914	0.872	1.036	1.170	1.177	1.092
0.25	y - y	0.088	1.182	1.098	1.029	0.971	0.922	0.880	1.043	1.182	1.182	1.098
0.25	y - y	0.059	1.190	1.106	1.037	0.979	0.930	0.888	1.051	1.190	1.190	1.106
0.25	y - y	0.032	1.201	1.117	1.047	0.988	0.939	0.896	1.061	1.201	1.201	1.117
0.25	y - y	0.004	1.214	1.131	1.061	1.002	0.952	0.909	1.075	1.214	1.214	1.131
0.5	y - y	0.847	1.904	1.892	1.883	1.876	1.870	1.867	1.869	1.872	1.867	1.867
0.5	y - y	0.837	1.848	1.826	1.806	1.788	1.772	1.759	1.767	1.778	1.759	1.759
0.5	y - y	0.826	1.798	1.766	1.737	1.710	1.685	1.663	1.678	1.696	1.663	1.663
0.5	y - y	0.814	1.750	1.710	1.672	1.637	1.605	1.575	1.597	1.623	1.575	1.575
0.5	y - y	0.802	1.707	1.659	1.615	1.573	1.534	1.498	1.527	1.559	1.498	1.498
0.5	y - y	0.789	1.667	1.613	1.562	1.514	1.469	1.428	1.464	1.503	1.429	1.431
0.5	y - y	0.776	1.629	1.569	1.512	1.459	1.410	1.363	1.406	1.452	1.370	1.372
0.5	y - y	0.763	1.594	1.528	1.467	1.409	1.355	1.305	1.355	1.408	1.317	1.319
0.5	y - y	0.749	1.562	1.492	1.426	1.364	1.307	1.253	1.310	1.370	1.272	1.274
0.5	y - y	0.734	1.534	1.459	1.389	1.324	1.264	1.207	1.272	1.338	1.235	1.236
0.5	y - y	0.719	1.507	1.428	1.355	1.287	1.224	1.165	1.237	1.310	1.201	1.203
0.5	y - y	0.703	1.481	1.400	1.323	1.253	1.187	1.126	1.205	1.286	1.172	1.173
0.5	y - y	0.686	1.459	1.374	1.296	1.223	1.155	1.093	1.179	1.263	1.149	1.150
0.5	y - y	0.669	1.440	1.353	1.272	1.197	1.128	1.064	1.158	1.243	1.131	1.131
0.5	y - y	0.651	1.421	1.332	1.249	1.173	1.102	1.037	1.138	1.226	1.115	1.115
0.5	y - y	0.633	1.404	1.312	1.227	1.150	1.078	1.012	1.120	1.210	1.101	1.101
0.5	y - y	0.614	1.387	1.294	1.208	1.129	1.056	0.989	1.105	1.196	1.091	1.090
0.5	y - y	0.595	1.372	1.276	1.189	1.109	1.035	0.967	1.091	1.184	1.083	1.082
0.5	y - y	0.575	1.357	1.260	1.171	1.089	1.015	0.946	1.078	1.173	1.076	1.074
0.5	y - y	0.554	1.342	1.243	1.153	1.071	0.995	0.926	1.066	1.162	1.070	1.068
0.5	y - y	0.533	1.328	1.228	1.137	1.054	0.978	0.908	1.056	1.154	1.068	1.065
0.5	y - y	0.511	1.315	1.213	1.121	1.037	0.960	0.890	1.046	1.147	1.066	1.062
0.5	y - y	0.488	1.301	1.198	1.104	1.019	0.942	0.871	1.036	1.139	1.065	1.060
0.5	y - y	0.465	1.286	1.182	1.087	1.001	0.923	0.852	1.026	1.131	1.064	1.059
0.5	y - y	0.441	1.272	1.166	1.071	0.984	0.905	0.834	1.016	1.125	1.065	1.059
0.5	y - y	0.416	1.258	1.150	1.053	0.966	0.886	0.815	1.007	1.119	1.067	1.060
0.5	y - y	0.390	1.242	1.133	1.035	0.947	0.867	0.795	0.996	1.112	1.070	1.062
0.5	y - y	0.364	1.227	1.117	1.018	0.929	0.848	0.776	0.987	1.107	1.074	1.065
0.5	y - y	0.337	1.213	1.101	1.001	0.911	0.830	0.757	0.978	1.102	1.081	1.071
0.5	y - y	0.309	1.198	1.085	0.984	0.893	0.812	0.738	0.971	1.099	1.090	1.078
0.5	y - y	0.281	1.187	1.072	0.970	0.878	0.796	0.722	0.965	1.099	1.102	1.072
0.5	y - y	0.253	1.182	1.067	0.964	0.872	0.789	0.715	0.969	1.107	1.124	1.067
0.5	y - y	0.225	1.190	1.075	0.973	0.881	0.798	0.724	0.986	1.129	1.159	1.075
0.5	y - y	0.197	1.196	1.082	0.979	0.888	0.805	0.731	1.000	1.148	1.196	1.082
0.5	y - y	0.169	1.205	1.091	0.990	0.898	0.816	0.741	1.011	1.171	1.205	1.091

0.5	y - y	0.141	1.212	1.099	0.997	0.906	0.824	0.750	1.018	1.191	1.212	1.099
0.5	y - y	0.114	1.218	1.106	1.006	0.915	0.833	0.759	1.026	1.211	1.218	1.106
0.5	y - y	0.087	1.230	1.119	1.019	0.929	0.847	0.773	1.040	1.230	1.230	1.119
0.5	y - y	0.060	1.243	1.133	1.034	0.944	0.863	0.789	1.054	1.243	1.243	1.133
0.5	y - y	0.034	1.257	1.149	1.051	0.962	0.882	0.809	1.071	1.257	1.257	1.149
0.5	y - y	0.009	1.271	1.164	1.067	0.980	0.900	0.828	1.087	1.271	1.271	1.164
0.75	y - y	0.781	1.653	1.592	1.533	1.477	1.423	1.372	1.418	1.467	1.377	1.379
0.75	y - y	0.770	1.623	1.557	1.495	1.435	1.377	1.322	1.375	1.429	1.333	1.335
0.75	y - y	0.759	1.595	1.525	1.459	1.395	1.335	1.277	1.336	1.396	1.294	1.296
0.75	y - y	0.747	1.569	1.496	1.426	1.360	1.296	1.237	1.301	1.366	1.259	1.262
0.75	y - y	0.735	1.545	1.469	1.396	1.327	1.261	1.200	1.270	1.341	1.229	1.231
0.75	y - y	0.723	1.523	1.444	1.368	1.297	1.230	1.166	1.242	1.319	1.203	1.205
0.75	y - y	0.710	1.503	1.420	1.343	1.269	1.200	1.135	1.217	1.299	1.180	1.182
0.75	y - y	0.696	1.483	1.398	1.318	1.243	1.172	1.106	1.194	1.281	1.159	1.161
0.75	y - y	0.682	1.466	1.378	1.296	1.219	1.147	1.080	1.174	1.263	1.142	1.143
0.75	y - y	0.668	1.449	1.360	1.276	1.197	1.124	1.055	1.156	1.246	1.127	1.128
0.75	y - y	0.654	1.433	1.342	1.256	1.176	1.102	1.032	1.139	1.231	1.114	1.114
0.75	y - y	0.639	1.418	1.325	1.238	1.157	1.081	1.011	1.124	1.217	1.102	1.102
0.75	y - y	0.623	1.404	1.309	1.220	1.138	1.062	0.990	1.110	1.205	1.093	1.092
0.75	y - y	0.608	1.391	1.294	1.204	1.121	1.044	0.972	1.098	1.194	1.086	1.085
0.75	y - y	0.591	1.377	1.278	1.187	1.103	1.025	0.953	1.086	1.183	1.078	1.077
0.75	y - y	0.574	1.363	1.263	1.171	1.085	1.007	0.934	1.074	1.173	1.071	1.070
0.75	y - y	0.557	1.349	1.248	1.155	1.068	0.989	0.915	1.062	1.163	1.066	1.064
0.75	y - y	0.539	1.337	1.234	1.140	1.053	0.972	0.898	1.052	1.155	1.063	1.060
0.75	y - y	0.521	1.325	1.221	1.125	1.037	0.957	0.882	1.043	1.148	1.061	1.057
0.75	y - y	0.502	1.312	1.207	1.111	1.022	0.941	0.866	1.035	1.141	1.059	1.055
0.75	y - y	0.483	1.300	1.194	1.096	1.007	0.925	0.850	1.026	1.134	1.058	1.053
0.75	y - y	0.464	1.288	1.180	1.082	0.992	0.909	0.834	1.018	1.128	1.058	1.053
0.75	y - y	0.444	1.276	1.167	1.068	0.977	0.894	0.819	1.010	1.123	1.060	1.054
0.75	y - y	0.423	1.264	1.154	1.054	0.963	0.879	0.804	1.003	1.118	1.062	1.055
0.75	y - y	0.402	1.252	1.141	1.040	0.948	0.864	0.788	0.995	1.114	1.066	1.058
0.75	y - y	0.381	1.240	1.128	1.026	0.934	0.850	0.774	0.989	1.110	1.070	1.061
0.75	y - y	0.359	1.229	1.116	1.013	0.921	0.836	0.760	0.983	1.108	1.076	1.067
0.75	y - y	0.336	1.218	1.103	1.000	0.907	0.822	0.746	0.977	1.105	1.083	1.072
0.75	y - y	0.313	1.206	1.091	0.987	0.893	0.809	0.732	0.972	1.103	1.092	1.080
0.75	y - y	0.290	1.197	1.082	0.977	0.883	0.798	0.722	0.969	1.104	1.103	1.082
0.75	y - y	0.267	1.191	1.075	0.970	0.876	0.791	0.714	0.970	1.108	1.118	1.075
0.75	y - y	0.244	1.192	1.076	0.971	0.877	0.792	0.716	0.978	1.120	1.142	1.076
0.75	y - y	0.220	1.199	1.083	0.979	0.885	0.800	0.723	0.994	1.139	1.172	1.083
0.75	y - y	0.197	1.205	1.089	0.986	0.892	0.807	0.731	1.007	1.157	1.205	1.089
0.75	y - y	0.174	1.208	1.093	0.989	0.896	0.811	0.735	1.011	1.171	1.208	1.093
0.75	y - y	0.151	1.211	1.097	0.993	0.900	0.815	0.739	1.015	1.186	1.211	1.097
0.75	y - y	0.128	1.219	1.105	1.002	0.908	0.824	0.748	1.023	1.205	1.219	1.105
0.75	y - y	0.105	1.227	1.113	1.010	0.917	0.833	0.756	1.031	1.224	1.227	1.113
0.75	y - y	0.083	1.236	1.123	1.021	0.928	0.844	0.768	1.042	1.236	1.236	1.123
0.75	y - y	0.061	1.244	1.132	1.031	0.938	0.854	0.778	1.052	1.244	1.244	1.132
0.75	y - y	0.039	1.256	1.145	1.044	0.952	0.868	0.792	1.065	1.256	1.256	1.145
0.75	y - y	0.018	1.266	1.156	1.056	0.964	0.880	0.804	1.076	1.266	1.266	1.156
1	y - y	0.720	1.495	1.419	1.350	1.287	1.229	1.176	1.241	1.308	1.208	1.209
1	y - y	0.709	1.479	1.401	1.330	1.265	1.206	1.152	1.221	1.293	1.190	1.191
1	y - y	0.698	1.464	1.385	1.312	1.246	1.185	1.129	1.203	1.279	1.173	1.174
1	y - y	0.686	1.451	1.369	1.295	1.227	1.165	1.109	1.187	1.264	1.159	1.160
1	y - y	0.674	1.438	1.355	1.280	1.211	1.148	1.090	1.173	1.252	1.147	1.148
1	y - y	0.662	1.426	1.341	1.264	1.194	1.130	1.071	1.159	1.239	1.136	1.136
1	y - y	0.650	1.413	1.326	1.248	1.177	1.112	1.052	1.145	1.227	1.124	1.124
1	y - y	0.637	1.400	1.312	1.233	1.161	1.095	1.034	1.132	1.215	1.114	1.114
1	y - y	0.624	1.388	1.299	1.219	1.145	1.079	1.018	1.121	1.205	1.105	1.105

1	y - y	0.611	1.377	1.287	1.205	1.131	1.064	1.002	1.110	1.195	1.098	1.098
1	y - y	0.598	1.367	1.275	1.192	1.118	1.049	0.987	1.100	1.187	1.092	1.091
1	y - y	0.584	1.356	1.263	1.179	1.103	1.035	0.972	1.090	1.178	1.086	1.084
1	y - y	0.569	1.344	1.250	1.166	1.089	1.019	0.956	1.080	1.169	1.079	1.078
1	y - y	0.555	1.333	1.238	1.152	1.075	1.005	0.941	1.070	1.161	1.074	1.072
1	y - y	0.540	1.323	1.227	1.140	1.062	0.991	0.927	1.062	1.154	1.070	1.068
1	y - y	0.525	1.313	1.216	1.128	1.049	0.978	0.914	1.054	1.147	1.068	1.065
1	y - y	0.509	1.303	1.205	1.116	1.037	0.965	0.900	1.046	1.141	1.065	1.062
1	y - y	0.493	1.293	1.193	1.104	1.024	0.952	0.887	1.038	1.135	1.063	1.059
1	y - y	0.477	1.283	1.182	1.092	1.012	0.939	0.873	1.031	1.130	1.062	1.058
1	y - y	0.461	1.273	1.172	1.081	1.000	0.926	0.860	1.024	1.125	1.062	1.057
1	y - y	0.444	1.264	1.161	1.070	0.988	0.914	0.848	1.017	1.120	1.062	1.056
1	y - y	0.427	1.254	1.151	1.059	0.976	0.902	0.835	1.011	1.116	1.063	1.057
1	y - y	0.410	1.245	1.140	1.047	0.964	0.889	0.822	1.004	1.112	1.065	1.058
1	y - y	0.393	1.235	1.130	1.036	0.952	0.877	0.810	0.998	1.108	1.067	1.060
1	y - y	0.375	1.226	1.120	1.026	0.941	0.866	0.798	0.993	1.106	1.071	1.062
1	y - y	0.357	1.218	1.111	1.016	0.931	0.855	0.787	0.989	1.104	1.076	1.067
1	y - y	0.338	1.209	1.101	1.005	0.920	0.844	0.775	0.984	1.102	1.081	1.071
1	y - y	0.319	1.200	1.092	0.995	0.909	0.832	0.763	0.979	1.100	1.087	1.076
1	y - y	0.300	1.194	1.084	0.987	0.901	0.824	0.755	0.977	1.102	1.096	1.084
1	y - y	0.281	1.187	1.078	0.981	0.894	0.817	0.748	0.976	1.103	1.106	1.078
1	y - y	0.263	1.186	1.077	0.980	0.893	0.817	0.748	0.981	1.111	1.122	1.077
1	y - y	0.243	1.189	1.080	0.983	0.897	0.820	0.752	0.990	1.122	1.143	1.080
1	y - y	0.223	1.195	1.087	0.990	0.904	0.827	0.758	1.003	1.138	1.167	1.087
1	y - y	0.204	1.200	1.091	0.995	0.909	0.832	0.763	1.013	1.151	1.190	1.091
1	y - y	0.185	1.201	1.092	0.996	0.909	0.833	0.764	1.015	1.161	1.201	1.092
1	y - y	0.166	1.204	1.095	0.999	0.913	0.836	0.767	1.019	1.172	1.204	1.095
1	y - y	0.147	1.208	1.100	1.004	0.918	0.841	0.772	1.024	1.186	1.208	1.100
1	y - y	0.127	1.215	1.107	1.011	0.925	0.849	0.780	1.031	1.202	1.215	1.107
1	y - y	0.108	1.220	1.112	1.016	0.930	0.853	0.784	1.036	1.216	1.220	1.112
1	y - y	0.090	1.225	1.117	1.021	0.935	0.858	0.789	1.041	1.225	1.225	1.117
1	y - y	0.071	1.231	1.124	1.029	0.943	0.866	0.797	1.048	1.231	1.231	1.124
1	y - y	0.052	1.240	1.133	1.038	0.953	0.876	0.807	1.058	1.240	1.240	1.133
1	y - y	0.034	1.248	1.142	1.047	0.962	0.885	0.815	1.067	1.248	1.248	1.142
1	y - y	0.015	1.258	1.153	1.058	0.972	0.895	0.825	1.077	1.258	1.258	1.153

Tabla C.10 Valores de r_2 de la sección 13 (60 cm x 90 cm con ρ = 0.03 y f_c' = 250 kg/cm^2) para distintos criterios de cálculo del exponente a. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x - x	0.893	1.330	1.304	1.294	1.296	1.306	1.323	1.317	1.308	1.323	1.323
0.25	x - x	0.885	1.311	1.283	1.270	1.268	1.276	1.289	1.283	1.276	1.289	1.289
0.25	x - x	0.877	1.295	1.265	1.249	1.245	1.250	1.260	1.255	1.249	1.260	1.260
0.25	x - x	0.868	1.281	1.248	1.230	1.224	1.226	1.233	1.229	1.225	1.233	1.233
0.25	x - x	0.858	1.267	1.232	1.212	1.204	1.203	1.209	1.205	1.203	1.209	1.209
0.25	x - x	0.848	1.255	1.218	1.197	1.186	1.184	1.187	1.185	1.184	1.187	1.187
0.25	x - x	0.837	1.244	1.205	1.182	1.170	1.166	1.167	1.166	1.167	1.167	1.167
0.25	x - x	0.825	1.233	1.194	1.169	1.155	1.149	1.149	1.149	1.151	1.149	1.149
0.25	x - x	0.812	1.224	1.182	1.157	1.141	1.134	1.132	1.133	1.137	1.132	1.132
0.25	x - x	0.798	1.215	1.173	1.146	1.129	1.120	1.117	1.119	1.126	1.117	1.117
0.25	x - x	0.783	1.207	1.163	1.135	1.117	1.107	1.103	1.107	1.115	1.103	1.103
0.25	x - x	0.767	1.198	1.154	1.125	1.106	1.095	1.089	1.095	1.105	1.090	1.090
0.25	x - x	0.750	1.190	1.146	1.116	1.097	1.085	1.079	1.086	1.098	1.080	1.081
0.25	x - x	0.732	1.183	1.138	1.108	1.089	1.077	1.070	1.079	1.093	1.073	1.074
0.25	x - x	0.713	1.175	1.130	1.101	1.082	1.070	1.063	1.072	1.088	1.067	1.067
0.25	x - x	0.694	1.166	1.122	1.093	1.074	1.062	1.054	1.065	1.083	1.060	1.060

0.25	x - x	0.673	1.158	1.114	1.085	1.066	1.054	1.046	1.058	1.076	1.054	1.054
0.25	x - x	0.652	1.150	1.106	1.077	1.058	1.046	1.038	1.052	1.071	1.048	1.048
0.25	x - x	0.631	1.143	1.099	1.070	1.051	1.039	1.031	1.046	1.066	1.042	1.042
0.25	x - x	0.610	1.137	1.093	1.064	1.045	1.032	1.024	1.041	1.061	1.038	1.038
0.25	x - x	0.587	1.132	1.088	1.059	1.039	1.026	1.017	1.036	1.058	1.035	1.035
0.25	x - x	0.565	1.127	1.083	1.053	1.033	1.020	1.011	1.032	1.055	1.032	1.031
0.25	x - x	0.541	1.122	1.078	1.048	1.027	1.013	1.004	1.027	1.052	1.029	1.029
0.25	x - x	0.517	1.118	1.073	1.043	1.022	1.008	0.998	1.024	1.050	1.028	1.027
0.25	x - x	0.493	1.114	1.068	1.037	1.016	1.001	0.991	1.020	1.047	1.026	1.025
0.25	x - x	0.467	1.110	1.064	1.032	1.010	0.995	0.983	1.016	1.045	1.025	1.024
0.25	x - x	0.441	1.106	1.059	1.027	1.004	0.988	0.976	1.012	1.044	1.025	1.024
0.25	x - x	0.414	1.102	1.054	1.022	0.998	0.981	0.969	1.009	1.043	1.026	1.024
0.25	x - x	0.385	1.098	1.049	1.016	0.992	0.974	0.961	1.005	1.042	1.028	1.025
0.25	x - x	0.356	1.094	1.045	1.010	0.985	0.967	0.952	1.001	1.042	1.031	1.028
0.25	x - x	0.327	1.091	1.042	1.008	0.983	0.965	0.951	1.002	1.044	1.038	1.034
0.25	x - x	0.298	1.097	1.051	1.020	0.998	0.982	0.970	1.017	1.058	1.057	1.051
0.25	x - x	0.270	1.100	1.056	1.025	1.005	0.990	0.979	1.025	1.067	1.070	1.056
0.25	x - x	0.243	1.101	1.056	1.026	1.005	0.990	0.979	1.028	1.072	1.080	1.056
0.25	x - x	0.219	1.100	1.055	1.024	1.003	0.987	0.976	1.028	1.075	1.089	1.055
0.25	x - x	0.193	1.101	1.056	1.025	1.004	0.988	0.977	1.031	1.081	1.101	1.056
0.25	x - x	0.166	1.103	1.058	1.027	1.005	0.990	0.979	1.033	1.089	1.103	1.058
0.25	x - x	0.140	1.104	1.057	1.025	1.002	0.985	0.973	1.031	1.095	1.104	1.057
0.25	x - x	0.114	1.107	1.059	1.026	1.003	0.986	0.973	1.032	1.103	1.107	1.059
0.25	x - x	0.087	1.110	1.061	1.027	1.003	0.985	0.972	1.033	1.110	1.110	1.061
0.25	x - x	0.059	1.117	1.066	1.031	1.005	0.986	0.972	1.037	1.117	1.117	1.066
0.25	x - x	0.034	1.120	1.067	1.029	1.002	0.982	0.966	1.037	1.120	1.120	1.067
0.25	x - x	0.007	1.127	1.072	1.033	1.004	0.982	0.965	1.040	1.127	1.127	1.072
0.5	x - x	0.879	1.529	1.494	1.473	1.461	1.459	1.465	1.462	1.459	1.465	1.465
0.5	x - x	0.871	1.502	1.463	1.437	1.421	1.414	1.415	1.414	1.414	1.415	1.415
0.5	x - x	0.862	1.477	1.434	1.404	1.384	1.373	1.369	1.370	1.374	1.369	1.369
0.5	x - x	0.852	1.454	1.407	1.374	1.350	1.336	1.328	1.331	1.338	1.328	1.328
0.5	x - x	0.842	1.433	1.384	1.347	1.320	1.302	1.291	1.297	1.307	1.291	1.291
0.5	x - x	0.831	1.414	1.362	1.322	1.293	1.272	1.258	1.266	1.280	1.258	1.258
0.5	x - x	0.819	1.396	1.341	1.299	1.267	1.244	1.227	1.238	1.255	1.227	1.227
0.5	x - x	0.806	1.380	1.322	1.278	1.244	1.218	1.199	1.213	1.233	1.199	1.199
0.5	x - x	0.792	1.364	1.305	1.258	1.222	1.194	1.173	1.191	1.214	1.173	1.174
0.5	x - x	0.778	1.348	1.287	1.238	1.200	1.171	1.148	1.169	1.195	1.150	1.151
0.5	x - x	0.763	1.333	1.269	1.219	1.180	1.148	1.124	1.148	1.179	1.129	1.130
0.5	x - x	0.747	1.319	1.254	1.202	1.161	1.129	1.103	1.131	1.165	1.112	1.113
0.5	x - x	0.731	1.305	1.240	1.187	1.145	1.112	1.085	1.117	1.155	1.099	1.099
0.5	x - x	0.714	1.293	1.227	1.173	1.131	1.097	1.070	1.105	1.146	1.088	1.088
0.5	x - x	0.696	1.282	1.215	1.161	1.119	1.084	1.057	1.094	1.140	1.079	1.079
0.5	x - x	0.677	1.272	1.204	1.150	1.107	1.073	1.045	1.086	1.132	1.072	1.072
0.5	x - x	0.657	1.261	1.193	1.138	1.095	1.061	1.033	1.077	1.124	1.065	1.065
0.5	x - x	0.637	1.250	1.181	1.127	1.084	1.049	1.021	1.069	1.116	1.059	1.059
0.5	x - x	0.616	1.239	1.170	1.116	1.072	1.038	1.009	1.060	1.109	1.053	1.053
0.5	x - x	0.595	1.229	1.160	1.105	1.062	1.027	0.998	1.053	1.102	1.049	1.048
0.5	x - x	0.573	1.220	1.150	1.095	1.051	1.016	0.987	1.046	1.097	1.045	1.044
0.5	x - x	0.550	1.211	1.141	1.085	1.040	1.004	0.975	1.039	1.091	1.042	1.040
0.5	x - x	0.527	1.203	1.132	1.076	1.030	0.994	0.964	1.032	1.087	1.040	1.038
0.5	x - x	0.503	1.195	1.124	1.066	1.020	0.983	0.952	1.026	1.083	1.039	1.037
0.5	x - x	0.479	1.188	1.115	1.057	1.010	0.972	0.940	1.020	1.080	1.038	1.035
0.5	x - x	0.454	1.180	1.106	1.047	1.000	0.961	0.928	1.014	1.076	1.038	1.035
0.5	x - x	0.428	1.172	1.097	1.037	0.989	0.949	0.915	1.008	1.074	1.040	1.036
0.5	x - x	0.402	1.164	1.088	1.026	0.976	0.935	0.900	1.002	1.070	1.041	1.037
0.5	x - x	0.374	1.155	1.077	1.015	0.963	0.921	0.885	0.994	1.068	1.044	1.039
0.5	x - x	0.346	1.147	1.068	1.004	0.951	0.907	0.870	0.988	1.066	1.049	1.043

0.5	x - x	0.318	1.143	1.063	0.999	0.946	0.902	0.865	0.989	1.070	1.061	1.053
0.5	x - x	0.289	1.150	1.072	1.009	0.958	0.915	0.879	1.005	1.087	1.087	1.072
0.5	x - x	0.261	1.157	1.079	1.017	0.965	0.923	0.887	1.018	1.103	1.111	1.079
0.5	x - x	0.233	1.162	1.084	1.022	0.971	0.929	0.893	1.028	1.116	1.134	1.084
0.5	x - x	0.206	1.165	1.089	1.027	0.977	0.936	0.901	1.039	1.129	1.157	1.089
0.5	x - x	0.179	1.168	1.092	1.030	0.980	0.938	0.903	1.042	1.141	1.168	1.092
0.5	x - x	0.151	1.173	1.096	1.033	0.982	0.939	0.903	1.045	1.155	1.173	1.096
0.5	x - x	0.126	1.176	1.098	1.034	0.982	0.938	0.902	1.047	1.166	1.176	1.098
0.5	x - x	0.099	1.181	1.102	1.038	0.985	0.941	0.904	1.051	1.181	1.181	1.102
0.5	x - x	0.071	1.187	1.108	1.043	0.990	0.945	0.907	1.056	1.187	1.187	1.108
0.5	x - x	0.045	1.198	1.117	1.050	0.995	0.949	0.910	1.064	1.198	1.198	1.117
0.5	x - x	0.019	1.207	1.126	1.058	1.002	0.954	0.914	1.072	1.207	1.207	1.126
0.75	x - x	0.860	1.608	1.562	1.523	1.490	1.464	1.444	1.454	1.469	1.444	1.444
0.75	x - x	0.850	1.581	1.530	1.487	1.451	1.421	1.396	1.409	1.428	1.396	1.396
0.75	x - x	0.840	1.556	1.501	1.455	1.415	1.382	1.354	1.370	1.392	1.354	1.354
0.75	x - x	0.830	1.532	1.474	1.423	1.381	1.344	1.313	1.333	1.359	1.313	1.313
0.75	x - x	0.819	1.509	1.447	1.393	1.347	1.308	1.274	1.297	1.327	1.274	1.274
0.75	x - x	0.807	1.487	1.422	1.365	1.316	1.274	1.237	1.265	1.299	1.237	1.237
0.75	x - x	0.794	1.466	1.398	1.338	1.287	1.242	1.203	1.236	1.273	1.203	1.205
0.75	x - x	0.781	1.445	1.374	1.313	1.259	1.212	1.170	1.207	1.250	1.174	1.176
0.75	x - x	0.768	1.426	1.352	1.288	1.232	1.182	1.139	1.181	1.228	1.148	1.150
0.75	x - x	0.753	1.407	1.331	1.265	1.207	1.156	1.111	1.158	1.210	1.125	1.127
0.75	x - x	0.738	1.390	1.312	1.244	1.184	1.132	1.086	1.138	1.194	1.106	1.108
0.75	x - x	0.723	1.374	1.294	1.224	1.164	1.110	1.063	1.120	1.182	1.090	1.091
0.75	x - x	0.706	1.359	1.278	1.207	1.145	1.091	1.043	1.105	1.172	1.077	1.078
0.75	x - x	0.690	1.346	1.263	1.191	1.129	1.073	1.025	1.092	1.162	1.067	1.068
0.75	x - x	0.672	1.333	1.250	1.177	1.113	1.058	1.009	1.081	1.152	1.059	1.059
0.75	x - x	0.654	1.321	1.237	1.163	1.099	1.043	0.994	1.071	1.143	1.052	1.052
0.75	x - x	0.635	1.309	1.223	1.149	1.084	1.027	0.978	1.060	1.133	1.045	1.045
0.75	x - x	0.615	1.298	1.211	1.136	1.071	1.013	0.963	1.052	1.126	1.040	1.040
0.75	x - x	0.595	1.286	1.199	1.123	1.057	0.999	0.949	1.043	1.119	1.037	1.036
0.75	x - x	0.574	1.275	1.187	1.110	1.044	0.986	0.934	1.035	1.112	1.034	1.032
0.75	x - x	0.552	1.264	1.175	1.097	1.030	0.972	0.920	1.027	1.106	1.031	1.029
0.75	x - x	0.530	1.253	1.163	1.085	1.018	0.959	0.907	1.020	1.101	1.031	1.028
0.75	x - x	0.507	1.243	1.152	1.074	1.006	0.946	0.894	1.014	1.096	1.031	1.028
0.75	x - x	0.483	1.233	1.141	1.062	0.993	0.933	0.880	1.007	1.092	1.032	1.028
0.75	x - x	0.460	1.223	1.130	1.049	0.980	0.919	0.866	1.001	1.088	1.034	1.029
0.75	x - x	0.435	1.213	1.119	1.037	0.967	0.906	0.852	0.995	1.085	1.037	1.031
0.75	x - x	0.410	1.203	1.107	1.025	0.954	0.892	0.838	0.988	1.082	1.041	1.034
0.75	x - x	0.385	1.192	1.096	1.013	0.941	0.878	0.822	0.982	1.079	1.045	1.038
0.75	x - x	0.358	1.182	1.084	0.999	0.926	0.862	0.806	0.975	1.077	1.051	1.043
0.75	x - x	0.331	1.171	1.072	0.987	0.913	0.848	0.791	0.970	1.075	1.059	1.050
0.75	x - x	0.304	1.171	1.072	0.987	0.914	0.849	0.793	0.977	1.086	1.079	1.069
0.75	x - x	0.277	1.179	1.081	0.996	0.923	0.859	0.803	0.994	1.105	1.110	1.081
0.75	x - x	0.249	1.185	1.087	1.002	0.928	0.864	0.808	1.007	1.122	1.138	1.087
0.75	x - x	0.223	1.191	1.093	1.009	0.935	0.871	0.815	1.020	1.139	1.166	1.093
0.75	x - x	0.196	1.198	1.100	1.016	0.943	0.880	0.823	1.033	1.157	1.198	1.100
0.75	x - x	0.170	1.205	1.108	1.024	0.951	0.886	0.830	1.041	1.175	1.205	1.108
0.75	x - x	0.142	1.213	1.116	1.032	0.959	0.895	0.838	1.049	1.195	1.213	1.116
0.75	x - x	0.117	1.220	1.123	1.040	0.967	0.902	0.846	1.057	1.212	1.220	1.123
0.75	x - x	0.091	1.227	1.131	1.048	0.974	0.910	0.853	1.065	1.227	1.227	1.131
0.75	x - x	0.065	1.238	1.142	1.058	0.984	0.920	0.862	1.075	1.238	1.238	1.142
0.75	x - x	0.041	1.249	1.152	1.068	0.994	0.928	0.870	1.085	1.249	1.249	1.152
0.75	x - x	0.016	1.262	1.166	1.081	1.007	0.941	0.882	1.099	1.262	1.262	1.166
1	x - x	0.834	1.607	1.545	1.488	1.436	1.388	1.343	1.371	1.406	1.343	1.343
1	x - x	0.825	1.584	1.519	1.459	1.404	1.352	1.305	1.337	1.375	1.305	1.305
1	x - x	0.814	1.560	1.491	1.428	1.370	1.316	1.266	1.303	1.345	1.266	1.266

1	x - x	0.803	1.537	1.466	1.400	1.339	1.282	1.230	1.272	1.318	1.230	1.230
1	x - x	0.791	1.516	1.441	1.372	1.309	1.251	1.196	1.243	1.293	1.197	1.200
1	x - x	0.779	1.493	1.416	1.344	1.279	1.218	1.162	1.213	1.269	1.169	1.171
1	x - x	0.766	1.472	1.391	1.317	1.249	1.186	1.129	1.185	1.246	1.141	1.144
1	x - x	0.753	1.451	1.368	1.292	1.222	1.157	1.098	1.160	1.226	1.117	1.120
1	x - x	0.739	1.432	1.346	1.268	1.196	1.130	1.070	1.138	1.208	1.097	1.099
1	x - x	0.725	1.414	1.327	1.247	1.173	1.106	1.045	1.118	1.194	1.079	1.081
1	x - x	0.710	1.398	1.309	1.227	1.152	1.084	1.022	1.101	1.183	1.065	1.066
1	x - x	0.695	1.383	1.292	1.209	1.133	1.064	1.001	1.086	1.172	1.053	1.054
1	x - x	0.678	1.370	1.277	1.193	1.116	1.046	0.982	1.073	1.160	1.044	1.044
1	x - x	0.662	1.357	1.263	1.177	1.100	1.029	0.965	1.062	1.150	1.036	1.036
1	x - x	0.645	1.344	1.249	1.163	1.084	1.013	0.948	1.051	1.141	1.030	1.030
1	x - x	0.627	1.332	1.236	1.149	1.070	0.998	0.933	1.042	1.132	1.025	1.025
1	x - x	0.609	1.322	1.224	1.136	1.057	0.984	0.919	1.035	1.126	1.023	1.022
1	x - x	0.590	1.312	1.213	1.125	1.045	0.972	0.906	1.029	1.121	1.022	1.021
1	x - x	0.571	1.302	1.203	1.113	1.033	0.960	0.894	1.023	1.117	1.022	1.020
1	x - x	0.550	1.292	1.192	1.102	1.021	0.947	0.881	1.017	1.112	1.023	1.020
1	x - x	0.530	1.282	1.181	1.090	1.008	0.935	0.868	1.011	1.108	1.024	1.021
1	x - x	0.509	1.272	1.170	1.078	0.996	0.922	0.855	1.005	1.104	1.026	1.022
1	x - x	0.486	1.260	1.157	1.065	0.982	0.907	0.840	0.999	1.099	1.027	1.023
1	x - x	0.464	1.249	1.144	1.051	0.968	0.893	0.826	0.992	1.095	1.030	1.024
1	x - x	0.441	1.237	1.132	1.038	0.954	0.879	0.811	0.985	1.091	1.033	1.027
1	x - x	0.417	1.226	1.119	1.025	0.940	0.864	0.796	0.979	1.088	1.037	1.031
1	x - x	0.393	1.214	1.106	1.011	0.925	0.849	0.781	0.972	1.084	1.042	1.035
1	x - x	0.368	1.202	1.093	0.996	0.910	0.833	0.765	0.965	1.081	1.048	1.039
1	x - x	0.342	1.190	1.080	0.983	0.896	0.819	0.750	0.960	1.079	1.056	1.046
1	x - x	0.317	1.182	1.072	0.974	0.888	0.810	0.741	0.959	1.082	1.069	1.058
1	x - x	0.292	1.186	1.076	0.978	0.892	0.815	0.746	0.971	1.097	1.095	1.076
1	x - x	0.266	1.194	1.084	0.987	0.900	0.823	0.754	0.987	1.116	1.126	1.084
1	x - x	0.240	1.201	1.092	0.995	0.908	0.831	0.762	1.003	1.136	1.157	1.092
1	x - x	0.216	1.206	1.097	1.000	0.913	0.836	0.767	1.015	1.151	1.185	1.097
1	x - x	0.190	1.213	1.105	1.009	0.922	0.845	0.776	1.029	1.171	1.213	1.105
1	x - x	0.165	1.225	1.117	1.021	0.935	0.858	0.789	1.041	1.195	1.225	1.117
1	x - x	0.141	1.232	1.124	1.028	0.942	0.865	0.795	1.048	1.212	1.232	1.124
1	x - x	0.117	1.241	1.135	1.039	0.954	0.876	0.807	1.059	1.233	1.241	1.135
1	x - x	0.092	1.252	1.146	1.051	0.966	0.889	0.819	1.071	1.252	1.252	1.146
1	x - x	0.067	1.262	1.157	1.062	0.976	0.899	0.829	1.081	1.262	1.262	1.157
1	x - x	0.044	1.272	1.167	1.073	0.987	0.910	0.840	1.092	1.272	1.272	1.167
1	x - x	0.021	1.287	1.183	1.090	1.005	0.928	0.859	1.109	1.287	1.287	1.183
0.25	y - y	0.873	1.548	1.514	1.492	1.480	1.478	1.483	1.480	1.478	1.483	1.483
0.25	y - y	0.864	1.522	1.484	1.458	1.443	1.436	1.436	1.435	1.437	1.436	1.436
0.25	y - y	0.855	1.499	1.457	1.428	1.408	1.397	1.394	1.395	1.399	1.394	1.394
0.25	y - y	0.845	1.478	1.433	1.400	1.377	1.363	1.356	1.359	1.366	1.356	1.356
0.25	y - y	0.835	1.458	1.410	1.374	1.349	1.332	1.321	1.327	1.337	1.321	1.321
0.25	y - y	0.823	1.440	1.389	1.351	1.322	1.302	1.289	1.298	1.311	1.289	1.289
0.25	y - y	0.811	1.423	1.369	1.328	1.297	1.275	1.259	1.271	1.287	1.259	1.259
0.25	y - y	0.799	1.407	1.351	1.308	1.274	1.250	1.232	1.246	1.266	1.231	1.232
0.25	y - y	0.785	1.391	1.333	1.287	1.252	1.225	1.205	1.223	1.246	1.207	1.207
0.25	y - y	0.771	1.375	1.315	1.267	1.230	1.201	1.179	1.200	1.227	1.183	1.184
0.25	y - y	0.756	1.357	1.295	1.245	1.206	1.175	1.151	1.176	1.207	1.158	1.158
0.25	y - y	0.741	1.341	1.276	1.224	1.183	1.150	1.124	1.153	1.189	1.135	1.135
0.25	y - y	0.724	1.325	1.259	1.205	1.162	1.128	1.100	1.134	1.174	1.115	1.116
0.25	y - y	0.707	1.311	1.243	1.189	1.144	1.108	1.079	1.117	1.163	1.099	1.100
0.25	y - y	0.689	1.299	1.229	1.173	1.128	1.091	1.061	1.103	1.151	1.087	1.087
0.25	y - y	0.671	1.287	1.216	1.160	1.113	1.076	1.045	1.091	1.141	1.077	1.077
0.25	y - y	0.651	1.275	1.204	1.146	1.099	1.061	1.029	1.080	1.131	1.067	1.067
0.25	y - y	0.631	1.263	1.191	1.132	1.084	1.045	1.013	1.068	1.121	1.058	1.058

0.25	y - y	0.611	1.252	1.179	1.120	1.072	1.032	0.999	1.059	1.113	1.052	1.052
0.25	y - y	0.590	1.244	1.170	1.111	1.062	1.022	0.989	1.053	1.108	1.049	1.048
0.25	y - y	0.568	1.235	1.161	1.101	1.052	1.011	0.978	1.047	1.104	1.047	1.046
0.25	y - y	0.546	1.227	1.152	1.091	1.042	1.001	0.967	1.040	1.099	1.045	1.043
0.25	y - y	0.523	1.219	1.144	1.082	1.032	0.991	0.956	1.035	1.096	1.044	1.042
0.25	y - y	0.499	1.211	1.135	1.073	1.022	0.979	0.944	1.029	1.092	1.044	1.041
0.25	y - y	0.475	1.203	1.125	1.062	1.010	0.967	0.931	1.023	1.088	1.043	1.040
0.25	y - y	0.450	1.194	1.115	1.051	0.998	0.954	0.916	1.015	1.084	1.043	1.039
0.25	y - y	0.424	1.184	1.104	1.039	0.985	0.940	0.901	1.008	1.080	1.044	1.039
0.25	y - y	0.398	1.175	1.094	1.027	0.972	0.925	0.886	1.001	1.077	1.046	1.041
0.25	y - y	0.370	1.166	1.083	1.015	0.959	0.911	0.870	0.994	1.074	1.049	1.043
0.25	y - y	0.342	1.157	1.072	1.003	0.944	0.895	0.853	0.987	1.071	1.054	1.047
0.25	y - y	0.314	1.147	1.061	0.989	0.929	0.879	0.835	0.979	1.069	1.061	1.052
0.25	y - y	0.285	1.150	1.064	0.992	0.932	0.881	0.838	0.988	1.082	1.082	1.064
0.25	y - y	0.257	1.159	1.074	1.004	0.945	0.896	0.853	1.006	1.101	1.112	1.074
0.25	y - y	0.229	1.166	1.082	1.013	0.955	0.906	0.864	1.020	1.118	1.139	1.082
0.25	y - y	0.202	1.171	1.088	1.019	0.962	0.913	0.872	1.032	1.134	1.165	1.088
0.25	y - y	0.176	1.177	1.094	1.027	0.970	0.923	0.883	1.040	1.149	1.177	1.094
0.25	y - y	0.150	1.182	1.100	1.034	0.978	0.932	0.892	1.047	1.163	1.182	1.100
0.25	y - y	0.125	1.186	1.104	1.037	0.981	0.935	0.895	1.051	1.176	1.186	1.104
0.25	y - y	0.101	1.190	1.107	1.038	0.981	0.932	0.891	1.052	1.189	1.190	1.107
0.25	y - y	0.076	1.197	1.113	1.043	0.984	0.934	0.891	1.057	1.197	1.197	1.113
0.25	y - y	0.053	1.205	1.120	1.050	0.991	0.940	0.897	1.064	1.205	1.205	1.120
0.25	y - y	0.028	1.214	1.129	1.058	0.998	0.947	0.904	1.073	1.214	1.214	1.129
0.25	y - y	0.003	1.228	1.144	1.073	1.013	0.962	0.918	1.087	1.228	1.228	1.144
0.5	y - y	0.820	1.591	1.526	1.464	1.407	1.354	1.304	1.339	1.380	1.304	1.304
0.5	y - y	0.810	1.570	1.501	1.437	1.377	1.321	1.269	1.308	1.353	1.269	1.269
0.5	y - y	0.799	1.548	1.476	1.409	1.346	1.288	1.233	1.278	1.327	1.231	1.234
0.5	y - y	0.788	1.527	1.452	1.382	1.317	1.256	1.200	1.249	1.302	1.202	1.205
0.5	y - y	0.777	1.507	1.428	1.356	1.289	1.226	1.167	1.222	1.280	1.175	1.178
0.5	y - y	0.764	1.486	1.405	1.330	1.260	1.195	1.135	1.195	1.257	1.149	1.152
0.5	y - y	0.752	1.465	1.381	1.304	1.232	1.165	1.103	1.169	1.237	1.124	1.127
0.5	y - y	0.738	1.445	1.359	1.279	1.205	1.137	1.074	1.145	1.218	1.102	1.104
0.5	y - y	0.725	1.427	1.339	1.257	1.182	1.112	1.047	1.124	1.203	1.084	1.086
0.5	y - y	0.710	1.411	1.320	1.237	1.160	1.089	1.023	1.106	1.191	1.068	1.070
0.5	y - y	0.696	1.396	1.303	1.218	1.140	1.068	1.001	1.090	1.179	1.055	1.056
0.5	y - y	0.680	1.382	1.287	1.201	1.121	1.048	0.981	1.076	1.167	1.044	1.045
0.5	y - y	0.664	1.368	1.272	1.185	1.104	1.030	0.962	1.064	1.156	1.036	1.036
0.5	y - y	0.648	1.355	1.258	1.169	1.088	1.013	0.945	1.052	1.145	1.029	1.029
0.5	y - y	0.631	1.343	1.245	1.155	1.072	0.997	0.928	1.042	1.137	1.023	1.023
0.5	y - y	0.614	1.332	1.232	1.141	1.058	0.982	0.912	1.033	1.129	1.019	1.018
0.5	y - y	0.596	1.321	1.220	1.128	1.044	0.968	0.898	1.025	1.122	1.017	1.015
0.5	y - y	0.577	1.310	1.208	1.116	1.031	0.954	0.884	1.018	1.116	1.015	1.014
0.5	y - y	0.558	1.300	1.197	1.103	1.018	0.940	0.870	1.012	1.111	1.015	1.013
0.5	y - y	0.538	1.289	1.185	1.091	1.005	0.927	0.856	1.005	1.107	1.016	1.013
0.5	y - y	0.518	1.280	1.175	1.079	0.993	0.915	0.844	1.000	1.103	1.018	1.015
0.5	y - y	0.497	1.270	1.164	1.068	0.981	0.902	0.831	0.995	1.100	1.021	1.016
0.5	y - y	0.476	1.259	1.152	1.056	0.968	0.889	0.818	0.989	1.096	1.024	1.019
0.5	y - y	0.454	1.249	1.141	1.044	0.956	0.876	0.805	0.984	1.093	1.028	1.023
0.5	y - y	0.432	1.239	1.130	1.032	0.943	0.864	0.791	0.979	1.091	1.033	1.027
0.5	y - y	0.409	1.228	1.118	1.019	0.930	0.850	0.778	0.974	1.089	1.039	1.032
0.5	y - y	0.385	1.217	1.106	1.006	0.917	0.837	0.764	0.969	1.086	1.045	1.037
0.5	y - y	0.361	1.206	1.094	0.994	0.904	0.823	0.750	0.963	1.085	1.053	1.044
0.5	y - y	0.337	1.195	1.082	0.981	0.890	0.809	0.736	0.958	1.083	1.062	1.051
0.5	y - y	0.312	1.187	1.073	0.971	0.880	0.798	0.724	0.956	1.085	1.074	1.063
0.5	y - y	0.287	1.189	1.075	0.973	0.882	0.800	0.726	0.967	1.099	1.099	1.075
0.5	y - y	0.262	1.197	1.084	0.982	0.891	0.810	0.736	0.984	1.119	1.131	1.084

0.5	y - y	0.237	1.203	1.090	0.989	0.898	0.816	0.743	0.998	1.137	1.160	1.090
0.5	y - y	0.212	1.211	1.099	0.998	0.908	0.826	0.753	1.015	1.157	1.193	1.099
0.5	y - y	0.188	1.217	1.105	1.005	0.915	0.833	0.760	1.026	1.174	1.217	1.105
0.5	y - y	0.165	1.224	1.113	1.013	0.923	0.842	0.769	1.034	1.193	1.224	1.113
0.5	y - y	0.141	1.234	1.124	1.025	0.936	0.855	0.782	1.045	1.214	1.234	1.124
0.5	y - y	0.117	1.244	1.135	1.037	0.948	0.867	0.795	1.057	1.236	1.244	1.135
0.5	y - y	0.094	1.255	1.146	1.049	0.960	0.880	0.807	1.069	1.255	1.255	1.146
0.5	y - y	0.071	1.264	1.157	1.061	0.973	0.893	0.821	1.081	1.264	1.264	1.157
0.5	y - y	0.050	1.275	1.169	1.073	0.986	0.907	0.835	1.093	1.275	1.275	1.169
0.5	y - y	0.028	1.289	1.185	1.090	1.004	0.926	0.855	1.110	1.289	1.289	1.185
0.5	y - y	0.007	1.305	1.203	1.109	1.024	0.947	0.876	1.129	1.305	1.305	1.203
0.75	y - y	0.757	1.480	1.394	1.313	1.237	1.166	1.099	1.168	1.239	1.119	1.121
0.75	y - y	0.746	1.464	1.376	1.293	1.215	1.143	1.074	1.148	1.224	1.101	1.103
0.75	y - y	0.735	1.448	1.358	1.274	1.195	1.121	1.052	1.131	1.211	1.085	1.087
0.75	y - y	0.724	1.434	1.342	1.256	1.176	1.101	1.031	1.115	1.200	1.071	1.073
0.75	y - y	0.712	1.420	1.327	1.239	1.158	1.082	1.012	1.100	1.190	1.059	1.061
0.75	y - y	0.700	1.407	1.312	1.224	1.142	1.065	0.994	1.088	1.182	1.049	1.051
0.75	y - y	0.687	1.396	1.299	1.210	1.127	1.049	0.977	1.076	1.172	1.041	1.042
0.75	y - y	0.674	1.385	1.287	1.196	1.112	1.034	0.962	1.066	1.163	1.034	1.035
0.75	y - y	0.661	1.374	1.275	1.183	1.099	1.020	0.947	1.057	1.154	1.028	1.029
0.75	y - y	0.647	1.363	1.263	1.171	1.085	1.006	0.933	1.048	1.146	1.023	1.023
0.75	y - y	0.634	1.353	1.252	1.159	1.073	0.993	0.919	1.040	1.139	1.019	1.019
0.75	y - y	0.619	1.343	1.241	1.147	1.060	0.980	0.906	1.032	1.132	1.015	1.015
0.75	y - y	0.604	1.334	1.231	1.136	1.048	0.968	0.893	1.025	1.126	1.013	1.012
0.75	y - y	0.589	1.325	1.221	1.125	1.037	0.956	0.882	1.020	1.122	1.012	1.011
0.75	y - y	0.574	1.316	1.211	1.115	1.026	0.945	0.870	1.014	1.117	1.012	1.010
0.75	y - y	0.558	1.307	1.202	1.104	1.015	0.934	0.859	1.009	1.113	1.012	1.010
0.75	y - y	0.541	1.299	1.192	1.094	1.005	0.923	0.847	1.004	1.109	1.014	1.011
0.75	y - y	0.525	1.291	1.183	1.085	0.995	0.912	0.837	1.000	1.106	1.016	1.012
0.75	y - y	0.508	1.282	1.174	1.075	0.985	0.902	0.826	0.995	1.104	1.018	1.014
0.75	y - y	0.490	1.274	1.165	1.065	0.974	0.891	0.815	0.991	1.101	1.021	1.016
0.75	y - y	0.472	1.265	1.155	1.055	0.964	0.880	0.804	0.987	1.099	1.024	1.019
0.75	y - y	0.454	1.256	1.145	1.044	0.952	0.869	0.792	0.982	1.096	1.028	1.022
0.75	y - y	0.435	1.246	1.134	1.033	0.941	0.857	0.781	0.977	1.093	1.032	1.025
0.75	y - y	0.416	1.237	1.124	1.022	0.929	0.845	0.768	0.972	1.090	1.036	1.029
0.75	y - y	0.397	1.227	1.113	1.010	0.917	0.833	0.756	0.967	1.088	1.041	1.033
0.75	y - y	0.377	1.216	1.102	0.998	0.905	0.820	0.743	0.962	1.085	1.046	1.037
0.75	y - y	0.356	1.206	1.090	0.986	0.892	0.807	0.731	0.956	1.083	1.052	1.042
0.75	y - y	0.335	1.196	1.080	0.976	0.881	0.796	0.719	0.953	1.082	1.061	1.049
0.75	y - y	0.315	1.190	1.074	0.969	0.874	0.789	0.712	0.952	1.085	1.072	1.060
0.75	y - y	0.295	1.191	1.075	0.970	0.876	0.791	0.714	0.961	1.096	1.093	1.075
0.75	y - y	0.274	1.197	1.081	0.977	0.882	0.798	0.721	0.974	1.112	1.119	1.081
0.75	y - y	0.252	1.204	1.089	0.985	0.891	0.806	0.729	0.989	1.129	1.146	1.089
0.75	y - y	0.232	1.211	1.096	0.992	0.898	0.813	0.737	1.003	1.146	1.173	1.096
0.75	y - y	0.212	1.215	1.100	0.996	0.903	0.818	0.741	1.014	1.159	1.196	1.100
0.75	y - y	0.192	1.220	1.106	1.003	0.909	0.825	0.748	1.024	1.175	1.220	1.106
0.75	y - y	0.172	1.229	1.116	1.013	0.920	0.835	0.759	1.034	1.194	1.229	1.116
0.75	y - y	0.152	1.235	1.122	1.020	0.927	0.843	0.766	1.041	1.210	1.235	1.122
0.75	y - y	0.132	1.245	1.132	1.031	0.938	0.854	0.777	1.052	1.229	1.245	1.132
0.75	y - y	0.113	1.252	1.141	1.040	0.947	0.863	0.787	1.061	1.246	1.252	1.141
0.75	y - y	0.094	1.260	1.149	1.048	0.957	0.873	0.796	1.069	1.260	1.260	1.149
0.75	y - y	0.075	1.266	1.156	1.056	0.964	0.880	0.804	1.076	1.266	1.266	1.156
0.75	y - y	0.057	1.276	1.167	1.067	0.976	0.892	0.816	1.088	1.276	1.276	1.167
0.75	y - y	0.037	1.290	1.182	1.083	0.993	0.910	0.834	1.104	1.290	1.290	1.182
0.75	y - y	0.019	1.304	1.197	1.099	1.009	0.927	0.851	1.119	1.304	1.304	1.197
0.75	y - y	0.002	1.314	1.209	1.111	1.022	0.940	0.865	1.132	1.314	1.314	1.209
1	y - y	0.697	1.385	1.294	1.211	1.135	1.066	1.003	1.087	1.173	1.054	1.055

1	y - y	0.686	1.376	1.284	1.200	1.124	1.054	0.990	1.079	1.165	1.047	1.048
1	y - y	0.675	1.367	1.274	1.189	1.112	1.042	0.978	1.070	1.158	1.041	1.042
1	y - y	0.664	1.358	1.264	1.179	1.102	1.031	0.967	1.063	1.151	1.036	1.037
1	y - y	0.653	1.350	1.255	1.169	1.091	1.020	0.955	1.056	1.144	1.032	1.032
1	y - y	0.641	1.341	1.246	1.159	1.081	1.009	0.945	1.049	1.138	1.028	1.028
1	y - y	0.630	1.334	1.237	1.150	1.071	0.999	0.934	1.043	1.133	1.025	1.025
1	y - y	0.618	1.326	1.229	1.141	1.062	0.990	0.925	1.037	1.128	1.023	1.022
1	y - y	0.605	1.319	1.222	1.134	1.054	0.981	0.916	1.033	1.125	1.022	1.021
1	y - y	0.593	1.313	1.215	1.126	1.046	0.973	0.907	1.029	1.121	1.021	1.020
1	y - y	0.580	1.306	1.208	1.118	1.038	0.965	0.899	1.025	1.118	1.021	1.020
1	y - y	0.567	1.300	1.200	1.111	1.030	0.957	0.891	1.021	1.115	1.022	1.020
1	y - y	0.553	1.293	1.193	1.103	1.022	0.949	0.882	1.018	1.113	1.022	1.020
1	y - y	0.540	1.287	1.186	1.095	1.014	0.940	0.874	1.014	1.110	1.023	1.020
1	y - y	0.526	1.280	1.179	1.088	1.006	0.932	0.865	1.010	1.107	1.024	1.021
1	y - y	0.512	1.273	1.171	1.080	0.997	0.923	0.857	1.006	1.105	1.025	1.022
1	y - y	0.497	1.266	1.163	1.071	0.988	0.914	0.847	1.002	1.101	1.026	1.022
1	y - y	0.482	1.258	1.154	1.062	0.979	0.904	0.837	0.997	1.098	1.027	1.023
1	y - y	0.467	1.250	1.146	1.053	0.970	0.895	0.827	0.992	1.095	1.029	1.024
1	y - y	0.452	1.242	1.138	1.044	0.960	0.885	0.818	0.988	1.093	1.031	1.025
1	y - y	0.436	1.235	1.129	1.035	0.951	0.876	0.808	0.984	1.090	1.033	1.027
1	y - y	0.420	1.227	1.121	1.026	0.942	0.866	0.798	0.980	1.088	1.036	1.030
1	y - y	0.404	1.219	1.112	1.017	0.932	0.856	0.788	0.975	1.086	1.040	1.032
1	y - y	0.388	1.211	1.104	1.008	0.922	0.846	0.777	0.971	1.083	1.043	1.035
1	y - y	0.371	1.203	1.095	0.998	0.912	0.835	0.767	0.966	1.081	1.047	1.038
1	y - y	0.355	1.195	1.086	0.989	0.902	0.825	0.756	0.962	1.080	1.052	1.042
1	y - y	0.338	1.188	1.078	0.981	0.894	0.817	0.747	0.959	1.079	1.058	1.048
1	y - y	0.321	1.183	1.072	0.975	0.888	0.810	0.741	0.958	1.080	1.066	1.055
1	y - y	0.304	1.183	1.073	0.975	0.889	0.811	0.742	0.964	1.088	1.081	1.069
1	y - y	0.287	1.187	1.077	0.979	0.893	0.816	0.747	0.973	1.100	1.100	1.077
1	y - y	0.270	1.192	1.083	0.985	0.899	0.822	0.752	0.984	1.113	1.121	1.083
1	y - y	0.252	1.198	1.089	0.992	0.905	0.828	0.759	0.996	1.127	1.144	1.089
1	y - y	0.236	1.201	1.092	0.995	0.909	0.831	0.762	1.005	1.138	1.162	1.092
1	y - y	0.219	1.204	1.096	0.999	0.912	0.835	0.766	1.013	1.149	1.180	1.096
1	y - y	0.203	1.209	1.100	1.004	0.917	0.840	0.771	1.023	1.161	1.200	1.100
1	y - y	0.186	1.215	1.107	1.011	0.924	0.847	0.778	1.030	1.175	1.215	1.107
1	y - y	0.168	1.223	1.116	1.020	0.934	0.856	0.787	1.039	1.191	1.223	1.116
1	y - y	0.152	1.228	1.121	1.025	0.939	0.861	0.792	1.044	1.204	1.228	1.121
1	y - y	0.136	1.233	1.126	1.03	0.944	0.866	0.797	1.05	1.216	1.233	1.126
1	y - y	0.12	1.24	1.133	1.037	0.952	0.874	0.805	1.057	1.23	1.24	1.133
1	y - y	0.104	1.247	1.14	1.045	0.96	0.883	0.813	1.065	1.245	1.247	1.14
1	y - y	0.087	1.254	1.148	1.053	0.968	0.891	0.822	1.073	1.254	1.254	1.148
1	y - y	0.071	1.261	1.155	1.061	0.975	0.898	0.828	1.08	1.261	1.261	1.155
1	y - y	0.055	1.266	1.161	1.066	0.981	0.904	0.834	1.086	1.266	1.266	1.161
1	y - y	0.04	1.274	1.169	1.075	0.99	0.913	0.843	1.095	1.274	1.274	1.169
1	y - y	0.024	1.284	1.18	1.087	1.002	0.925	0.855	1.106	1.284	1.284	1.18
1	y - y	0.008	1.297	1.194	1.101	1.017	0.941	0.871	1.121	1.297	1.297	1.194

Tabla C.11 Valores de r_2 de la sección 14 (60 cm x 90 cm con ρ = 0.06 y f'_c = 250 kg/cm^2) para distintos criterios de cálculo del exponente a. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.859	1.221	1.179	1.153	1.137	1.129	1.126	1.127	1.130	1.126	1.126
0.25	x -x	0.851	1.216	1.174	1.147	1.131	1.122	1.119	1.120	1.123	1.119	1.119
0.25	x -x	0.842	1.212	1.170	1.143	1.126	1.117	1.114	1.116	1.120	1.114	1.114
0.25	x -x	0.833	1.208	1.165	1.137	1.120	1.110	1.106	1.108	1.113	1.106	1.106
0.25	x -x	0.823	1.202	1.158	1.129	1.111	1.101	1.095	1.099	1.105	1.095	1.095

0.25	x -x	0.812	1.195	1.151	1.121	1.103	1.091	1.085	1.089	1.097	1.085	1.085
0.25	x -x	0.800	1.189	1.144	1.114	1.094	1.082	1.075	1.081	1.090	1.075	1.075
0.25	x -x	0.788	1.184	1.138	1.107	1.087	1.074	1.066	1.072	1.083	1.066	1.066
0.25	x -x	0.775	1.178	1.131	1.100	1.079	1.065	1.057	1.065	1.077	1.058	1.058
0.25	x -x	0.761	1.173	1.126	1.094	1.072	1.058	1.049	1.058	1.072	1.051	1.051
0.25	x -x	0.747	1.168	1.120	1.088	1.066	1.051	1.041	1.052	1.068	1.044	1.045
0.25	x -x	0.731	1.163	1.114	1.081	1.058	1.043	1.032	1.045	1.063	1.037	1.038
0.25	x -x	0.714	1.156	1.108	1.074	1.051	1.035	1.024	1.038	1.059	1.031	1.031
0.25	x -x	0.697	1.150	1.101	1.068	1.044	1.028	1.016	1.032	1.055	1.025	1.026
0.25	x -x	0.678	1.145	1.096	1.063	1.039	1.023	1.011	1.029	1.052	1.022	1.022
0.25	x -x	0.659	1.139	1.091	1.057	1.034	1.017	1.006	1.025	1.049	1.019	1.019
0.25	x -x	0.639	1.135	1.087	1.054	1.031	1.014	1.003	1.023	1.047	1.018	1.018
0.25	x -x	0.619	1.132	1.084	1.051	1.028	1.012	1.000	1.022	1.046	1.018	1.018
0.25	x -x	0.598	1.129	1.081	1.048	1.025	1.009	0.997	1.020	1.046	1.018	1.018
0.25	x -x	0.575	1.124	1.076	1.043	1.020	1.004	0.992	1.017	1.044	1.017	1.016
0.25	x -x	0.552	1.120	1.072	1.039	1.016	0.999	0.987	1.015	1.042	1.016	1.015
0.25	x -x	0.528	1.115	1.067	1.034	1.011	0.994	0.981	1.011	1.040	1.015	1.014
0.25	x -x	0.504	1.111	1.063	1.029	1.006	0.988	0.975	1.009	1.039	1.015	1.014
0.25	x -x	0.478	1.107	1.059	1.025	1.001	0.983	0.970	1.006	1.038	1.015	1.014
0.25	x -x	0.451	1.104	1.055	1.021	0.996	0.978	0.964	1.004	1.037	1.016	1.015
0.25	x -x	0.423	1.100	1.051	1.016	0.991	0.973	0.958	1.001	1.037	1.019	1.016
0.25	x -x	0.394	1.097	1.047	1.012	0.986	0.967	0.952	0.999	1.038	1.022	1.019
0.25	x -x	0.364	1.093	1.043	1.007	0.981	0.962	0.946	0.998	1.039	1.027	1.023
0.25	x -x	0.332	1.090	1.039	1.003	0.976	0.956	0.940	0.996	1.040	1.033	1.029
0.25	x -x	0.298	1.087	1.035	0.998	0.971	0.950	0.933	0.995	1.043	1.041	1.035
0.25	x -x	0.264	1.081	1.029	0.991	0.963	0.942	0.925	0.991	1.043	1.048	1.029
0.25	x -x	0.231	1.085	1.036	1.002	0.977	0.958	0.943	1.005	1.056	1.068	1.036
0.25	x -x	0.200	1.091	1.044	1.012	0.989	0.972	0.959	1.018	1.069	1.091	1.044
0.25	x -x	0.171	1.091	1.044	1.012	0.990	0.973	0.960	1.018	1.075	1.091	1.044
0.25	x -x	0.144	1.092	1.046	1.014	0.991	0.974	0.962	1.020	1.082	1.092	1.046
0.25	x -x	0.115	1.094	1.047	1.015	0.992	0.975	0.962	1.021	1.090	1.094	1.047
0.25	x -x	0.086	1.094	1.047	1.014	0.991	0.974	0.961	1.020	1.094	1.094	1.047
0.25	x -x	0.058	1.096	1.049	1.015	0.991	0.974	0.961	1.021	1.096	1.096	1.049
0.25	x -x	0.029	1.100	1.051	1.016	0.992	0.974	0.960	1.023	1.100	1.100	1.051
0.5	x -x	0.842	1.364	1.306	1.260	1.225	1.198	1.178	1.189	1.206	1.178	1.178
0.5	x -x	0.833	1.355	1.296	1.249	1.213	1.185	1.164	1.177	1.195	1.164	1.164
0.5	x -x	0.824	1.347	1.286	1.239	1.202	1.173	1.151	1.166	1.185	1.151	1.151
0.5	x -x	0.814	1.339	1.276	1.228	1.189	1.159	1.136	1.153	1.175	1.136	1.136
0.5	x -x	0.803	1.331	1.267	1.217	1.178	1.147	1.122	1.141	1.166	1.122	1.122
0.5	x -x	0.792	1.323	1.258	1.207	1.166	1.134	1.109	1.130	1.157	1.109	1.110
0.5	x -x	0.780	1.313	1.247	1.194	1.153	1.119	1.093	1.117	1.146	1.095	1.096
0.5	x -x	0.768	1.303	1.236	1.183	1.140	1.105	1.078	1.105	1.137	1.083	1.084
0.5	x -x	0.754	1.294	1.226	1.171	1.127	1.092	1.063	1.093	1.129	1.072	1.073
0.5	x -x	0.740	1.284	1.215	1.159	1.114	1.078	1.048	1.082	1.121	1.061	1.062
0.5	x -x	0.725	1.274	1.204	1.147	1.101	1.064	1.033	1.070	1.113	1.050	1.051
0.5	x -x	0.710	1.264	1.192	1.135	1.088	1.050	1.019	1.059	1.107	1.040	1.041
0.5	x -x	0.694	1.254	1.182	1.124	1.077	1.038	1.006	1.050	1.101	1.032	1.033
0.5	x -x	0.676	1.246	1.173	1.114	1.067	1.028	0.995	1.043	1.094	1.027	1.027
0.5	x -x	0.659	1.237	1.164	1.105	1.057	1.018	0.985	1.036	1.088	1.022	1.022
0.5	x -x	0.640	1.230	1.157	1.098	1.049	1.010	0.977	1.031	1.084	1.020	1.020
0.5	x -x	0.621	1.224	1.151	1.092	1.043	1.004	0.971	1.029	1.083	1.020	1.020
0.5	x -x	0.601	1.218	1.145	1.086	1.038	0.999	0.966	1.027	1.081	1.022	1.021
0.5	x -x	0.580	1.212	1.138	1.079	1.031	0.992	0.959	1.024	1.079	1.022	1.021
0.5	x -x	0.558	1.206	1.132	1.073	1.024	0.985	0.952	1.021	1.077	1.023	1.022
0.5	x -x	0.536	1.199	1.125	1.065	1.017	0.977	0.944	1.017	1.075	1.023	1.022
0.5	x -x	0.512	1.192	1.117	1.057	1.008	0.968	0.934	1.013	1.072	1.024	1.021
0.5	x -x	0.488	1.184	1.109	1.049	0.999	0.959	0.925	1.008	1.070	1.025	1.022

0.5	x -x	0.463	1.177	1.102	1.040	0.991	0.950	0.915	1.005	1.068	1.027	1.024
0.5	x -x	0.437	1.170	1.093	1.031	0.981	0.939	0.904	1.000	1.067	1.030	1.026
0.5	x -x	0.410	1.163	1.085	1.022	0.971	0.928	0.892	0.995	1.065	1.033	1.029
0.5	x -x	0.382	1.156	1.077	1.013	0.960	0.917	0.880	0.991	1.065	1.039	1.033
0.5	x -x	0.353	1.149	1.068	1.003	0.950	0.905	0.867	0.987	1.065	1.046	1.039
0.5	x -x	0.322	1.141	1.060	0.994	0.939	0.894	0.855	0.983	1.066	1.055	1.048
0.5	x -x	0.290	1.134	1.051	0.984	0.928	0.882	0.842	0.979	1.067	1.066	1.051
0.5	x -x	0.258	1.125	1.041	0.973	0.917	0.869	0.829	0.975	1.068	1.078	1.041
0.5	x -x	0.226	1.129	1.047	0.980	0.925	0.879	0.840	0.989	1.084	1.106	1.047
0.5	x -x	0.193	1.138	1.056	0.990	0.936	0.890	0.852	1.004	1.104	1.138	1.056
0.5	x -x	0.162	1.142	1.062	0.997	0.943	0.899	0.861	1.010	1.119	1.142	1.062
0.5	x -x	0.132	1.148	1.069	1.005	0.952	0.909	0.872	1.018	1.136	1.148	1.069
0.5	x -x	0.101	1.153	1.074	1.010	0.958	0.914	0.877	1.023	1.152	1.153	1.074
0.5	x -x	0.072	1.155	1.077	1.013	0.961	0.917	0.880	1.026	1.155	1.155	1.077
0.5	x -x	0.044	1.159	1.080	1.016	0.963	0.918	0.881	1.028	1.159	1.159	1.080
0.5	x -x	0.013	1.165	1.085	1.020	0.966	0.921	0.883	1.033	1.165	1.165	1.085
0.75	x -x	0.820	1.438	1.366	1.305	1.251	1.204	1.163	1.192	1.227	1.163	1.163
0.75	x -x	0.811	1.427	1.355	1.291	1.237	1.189	1.147	1.178	1.216	1.147	1.147
0.75	x -x	0.801	1.417	1.343	1.279	1.223	1.174	1.131	1.166	1.206	1.131	1.131
0.75	x -x	0.790	1.407	1.331	1.266	1.209	1.158	1.115	1.152	1.195	1.116	1.118
0.75	x -x	0.779	1.396	1.319	1.252	1.194	1.142	1.097	1.138	1.185	1.102	1.104
0.75	x -x	0.768	1.386	1.307	1.239	1.179	1.127	1.081	1.126	1.176	1.090	1.092
0.75	x -x	0.755	1.375	1.295	1.226	1.165	1.111	1.064	1.113	1.167	1.079	1.080
0.75	x -x	0.743	1.364	1.283	1.212	1.150	1.095	1.047	1.100	1.158	1.067	1.068
0.75	x -x	0.729	1.351	1.268	1.196	1.133	1.077	1.028	1.086	1.148	1.053	1.055
0.75	x -x	0.715	1.338	1.254	1.180	1.116	1.059	1.009	1.071	1.139	1.041	1.042
0.75	x -x	0.700	1.326	1.240	1.166	1.100	1.043	0.992	1.059	1.132	1.031	1.032
0.75	x -x	0.684	1.315	1.228	1.152	1.086	1.028	0.976	1.049	1.123	1.023	1.024
0.75	x -x	0.668	1.304	1.216	1.140	1.073	1.014	0.962	1.039	1.114	1.017	1.017
0.75	x -x	0.651	1.293	1.204	1.127	1.059	1.000	0.947	1.030	1.106	1.010	1.010
0.75	x -x	0.633	1.284	1.194	1.116	1.048	0.988	0.934	1.023	1.100	1.007	1.007
0.75	x -x	0.615	1.275	1.185	1.106	1.037	0.977	0.924	1.017	1.096	1.006	1.005
0.75	x -x	0.596	1.267	1.176	1.097	1.027	0.967	0.913	1.012	1.092	1.005	1.004
0.75	x -x	0.577	1.259	1.167	1.087	1.018	0.957	0.903	1.008	1.088	1.006	1.004
0.75	x -x	0.556	1.251	1.159	1.079	1.009	0.948	0.893	1.004	1.086	1.007	1.006
0.75	x -x	0.535	1.243	1.150	1.070	0.999	0.938	0.884	1.000	1.084	1.010	1.007
0.75	x -x	0.513	1.235	1.141	1.060	0.990	0.928	0.874	0.997	1.082	1.013	1.010
0.75	x -x	0.490	1.227	1.133	1.052	0.981	0.919	0.864	0.994	1.081	1.017	1.013
0.75	x -x	0.467	1.218	1.124	1.042	0.970	0.908	0.853	0.990	1.079	1.021	1.017
0.75	x -x	0.442	1.209	1.113	1.030	0.958	0.895	0.840	0.984	1.076	1.025	1.020
0.75	x -x	0.417	1.199	1.102	1.019	0.946	0.883	0.827	0.979	1.074	1.030	1.024
0.75	x -x	0.391	1.190	1.092	1.007	0.934	0.870	0.813	0.975	1.073	1.036	1.029
0.75	x -x	0.363	1.180	1.081	0.996	0.922	0.857	0.800	0.970	1.072	1.044	1.036
0.75	x -x	0.335	1.171	1.071	0.984	0.909	0.844	0.786	0.966	1.072	1.054	1.045
0.75	x -x	0.306	1.161	1.060	0.973	0.897	0.831	0.772	0.962	1.074	1.066	1.056
0.75	x -x	0.276	1.150	1.047	0.959	0.882	0.815	0.756	0.957	1.073	1.078	1.047
0.75	x -x	0.246	1.144	1.041	0.953	0.876	0.809	0.750	0.958	1.079	1.097	1.041
0.75	x -x	0.215	1.151	1.049	0.961	0.885	0.819	0.761	0.975	1.100	1.131	1.049
0.75	x -x	0.185	1.159	1.057	0.970	0.894	0.828	0.770	0.988	1.121	1.159	1.057
0.75	x -x	0.155	1.165	1.064	0.977	0.902	0.836	0.778	0.995	1.140	1.165	1.064
0.75	x -x	0.125	1.173	1.073	0.987	0.912	0.846	0.789	1.004	1.161	1.173	1.073
0.75	x -x	0.095	1.181	1.082	0.996	0.921	0.856	0.798	1.013	1.181	1.181	1.082
0.75	x -x	0.066	1.188	1.089	1.004	0.930	0.865	0.808	1.021	1.188	1.188	1.089
0.75	x -x	0.036	1.196	1.098	1.013	0.939	0.875	0.818	1.030	1.196	1.196	1.098
0.75	x -x	0.007	1.204	1.106	1.022	0.948	0.883	0.825	1.039	1.204	1.204	1.106
1	x -x	0.794	1.458	1.376	1.301	1.233	1.170	1.111	1.160	1.214	1.111	1.114
1	x -x	0.784	1.446	1.362	1.286	1.216	1.152	1.093	1.145	1.203	1.097	1.100

1	x -x	0.773	1.433	1.348	1.270	1.199	1.133	1.073	1.130	1.191	1.083	1.086
1	x -x	0.762	1.421	1.334	1.255	1.182	1.116	1.055	1.116	1.181	1.070	1.073
1	x -x	0.751	1.409	1.320	1.240	1.166	1.099	1.037	1.102	1.172	1.058	1.060
1	x -x	0.739	1.396	1.306	1.225	1.150	1.081	1.018	1.089	1.162	1.046	1.048
1	x -x	0.726	1.384	1.293	1.209	1.133	1.064	1.000	1.076	1.154	1.035	1.037
1	x -x	0.713	1.372	1.279	1.194	1.117	1.047	0.983	1.063	1.146	1.025	1.027
1	x -x	0.700	1.360	1.266	1.180	1.102	1.031	0.966	1.052	1.140	1.017	1.018
1	x -x	0.686	1.348	1.253	1.166	1.088	1.016	0.950	1.041	1.131	1.009	1.010
1	x -x	0.671	1.337	1.240	1.153	1.073	1.001	0.935	1.031	1.122	1.002	1.003
1	x -x	0.655	1.326	1.228	1.140	1.060	0.987	0.920	1.022	1.114	0.997	0.998
1	x -x	0.639	1.317	1.218	1.129	1.048	0.974	0.907	1.016	1.108	0.994	0.994
1	x -x	0.623	1.308	1.208	1.118	1.037	0.963	0.896	1.010	1.103	0.993	0.993
1	x -x	0.606	1.299	1.199	1.108	1.026	0.952	0.885	1.005	1.099	0.993	0.992
1	x -x	0.588	1.290	1.188	1.097	1.015	0.940	0.873	0.999	1.094	0.993	0.991
1	x -x	0.569	1.281	1.179	1.087	1.004	0.929	0.862	0.994	1.091	0.994	0.992
1	x -x	0.550	1.272	1.169	1.076	0.993	0.918	0.850	0.990	1.087	0.995	0.993
1	x -x	0.530	1.263	1.159	1.066	0.982	0.907	0.839	0.985	1.084	0.998	0.995
1	x -x	0.510	1.254	1.149	1.056	0.972	0.896	0.828	0.981	1.082	1.001	0.998
1	x -x	0.489	1.245	1.140	1.046	0.961	0.885	0.817	0.977	1.080	1.006	1.001
1	x -x	0.467	1.236	1.130	1.036	0.951	0.875	0.806	0.974	1.079	1.011	1.006
1	x -x	0.444	1.228	1.121	1.026	0.941	0.864	0.796	0.971	1.078	1.018	1.012
1	x -x	0.421	1.219	1.112	1.016	0.931	0.854	0.785	0.969	1.078	1.026	1.019
1	x -x	0.397	1.210	1.101	1.005	0.919	0.842	0.773	0.965	1.078	1.034	1.026
1	x -x	0.372	1.200	1.091	0.994	0.907	0.830	0.760	0.961	1.077	1.042	1.034
1	x -x	0.346	1.190	1.080	0.982	0.895	0.817	0.748	0.958	1.077	1.053	1.043
1	x -x	0.319	1.180	1.069	0.971	0.883	0.805	0.735	0.954	1.078	1.064	1.053
1	x -x	0.291	1.169	1.057	0.957	0.869	0.791	0.721	0.950	1.078	1.077	1.057
1	x -x	0.263	1.156	1.043	0.943	0.854	0.775	0.705	0.944	1.077	1.089	1.043
1	x -x	0.235	1.154	1.040	0.941	0.852	0.773	0.703	0.950	1.088	1.113	1.040
1	x -x	0.206	1.162	1.049	0.950	0.862	0.783	0.713	0.969	1.111	1.150	1.049
1	x -x	0.178	1.167	1.054	0.955	0.867	0.788	0.718	0.975	1.129	1.167	1.054
1	x -x	0.150	1.174	1.062	0.963	0.876	0.797	0.727	0.984	1.150	1.174	1.062
1	x -x	0.121	1.184	1.073	0.975	0.887	0.809	0.739	0.995	1.174	1.184	1.073
1	x -x	0.094	1.191	1.081	0.982	0.895	0.817	0.747	1.003	1.191	1.191	1.081
1	x -x	0.066	1.201	1.092	0.994	0.907	0.829	0.759	1.014	1.201	1.201	1.092
1	x -x	0.038	1.212	1.103	1.006	0.919	0.841	0.772	1.026	1.212	1.212	1.103
1	x -x	0.012	1.221	1.113	1.016	0.930	0.852	0.782	1.036	1.221	1.221	1.113
0.25	y -y	0.835	1.382	1.322	1.275	1.238	1.209	1.187	1.201	1.219	1.187	1.187
0.25	y -y	0.826	1.373	1.312	1.264	1.226	1.196	1.173	1.188	1.208	1.173	1.173
0.25	y -y	0.817	1.366	1.304	1.254	1.215	1.184	1.160	1.177	1.200	1.160	1.160
0.25	y -y	0.807	1.358	1.295	1.245	1.205	1.173	1.148	1.167	1.192	1.148	1.148
0.25	y -y	0.796	1.351	1.287	1.236	1.195	1.162	1.137	1.158	1.184	1.136	1.137
0.25	y -y	0.785	1.344	1.279	1.227	1.185	1.152	1.125	1.149	1.178	1.127	1.128
0.25	y -y	0.774	1.337	1.271	1.218	1.176	1.142	1.114	1.140	1.172	1.118	1.119
0.25	y -y	0.761	1.330	1.264	1.210	1.167	1.132	1.103	1.132	1.166	1.110	1.112
0.25	y -y	0.748	1.323	1.256	1.201	1.157	1.121	1.092	1.124	1.161	1.103	1.104
0.25	y -y	0.735	1.315	1.246	1.190	1.145	1.108	1.078	1.113	1.154	1.092	1.093
0.25	y -y	0.720	1.303	1.233	1.176	1.130	1.092	1.060	1.099	1.144	1.079	1.080
0.25	y -y	0.704	1.292	1.220	1.162	1.115	1.076	1.044	1.086	1.136	1.067	1.068
0.25	y -y	0.688	1.281	1.209	1.150	1.102	1.062	1.029	1.075	1.127	1.058	1.058
0.25	y -y	0.671	1.272	1.199	1.139	1.090	1.049	1.016	1.066	1.119	1.050	1.050
0.25	y -y	0.654	1.263	1.189	1.129	1.079	1.038	1.004	1.058	1.112	1.044	1.045
0.25	y -y	0.635	1.254	1.179	1.118	1.068	1.026	0.991	1.050	1.106	1.039	1.038
0.25	y -y	0.616	1.245	1.169	1.107	1.056	1.014	0.978	1.042	1.099	1.033	1.033
0.25	y -y	0.596	1.236	1.160	1.097	1.045	1.002	0.966	1.034	1.093	1.029	1.029
0.25	y -y	0.575	1.228	1.151	1.087	1.035	0.991	0.954	1.028	1.089	1.027	1.026
0.25	y -y	0.554	1.220	1.142	1.078	1.025	0.981	0.943	1.022	1.084	1.025	1.024

0.25	y -y	0.531	1.212	1.133	1.068	1.014	0.969	0.931	1.016	1.080	1.023	1.022
0.25	y -y	0.508	1.203	1.123	1.057	1.003	0.957	0.918	1.009	1.075	1.022	1.020
0.25	y -y	0.484	1.195	1.114	1.047	0.991	0.945	0.905	1.003	1.072	1.022	1.019
0.25	y -y	0.460	1.187	1.105	1.037	0.981	0.933	0.893	0.998	1.070	1.024	1.021
0.25	y -y	0.434	1.181	1.098	1.029	0.972	0.924	0.882	0.994	1.069	1.029	1.025
0.25	y -y	0.407	1.174	1.090	1.021	0.963	0.914	0.872	0.991	1.070	1.035	1.030
0.25	y -y	0.379	1.167	1.082	1.012	0.953	0.903	0.860	0.988	1.070	1.042	1.036
0.25	y -y	0.350	1.160	1.074	1.002	0.942	0.891	0.848	0.984	1.070	1.051	1.043
0.25	y -y	0.320	1.153	1.065	0.993	0.932	0.880	0.835	0.981	1.072	1.061	1.053
0.25	y -y	0.289	1.145	1.056	0.983	0.920	0.867	0.822	0.978	1.074	1.074	1.056
0.25	y -y	0.256	1.135	1.044	0.969	0.906	0.852	0.805	0.972	1.074	1.086	1.044
0.25	y -y	0.224	1.131	1.040	0.964	0.900	0.845	0.797	0.974	1.082	1.107	1.040
0.25	y -y	0.191	1.141	1.051	0.976	0.913	0.860	0.813	0.991	1.105	1.141	1.051
0.25	y -y	0.159	1.148	1.059	0.986	0.924	0.871	0.825	1.001	1.125	1.148	1.059
0.25	y -y	0.128	1.153	1.066	0.994	0.933	0.881	0.837	1.008	1.142	1.153	1.066
0.25	y -y	0.099	1.159	1.073	1.002	0.943	0.893	0.850	1.017	1.159	1.159	1.073
0.25	y -y	0.070	1.163	1.078	1.008	0.949	0.900	0.857	1.022	1.163	1.163	1.078
0.25	y -y	0.042	1.169	1.085	1.014	0.956	0.906	0.863	1.028	1.169	1.169	1.085
0.25	y -y	0.015	1.174	1.089	1.019	0.960	0.910	0.867	1.033	1.174	1.174	1.089
0.5	y -y	0.780	1.456	1.371	1.292	1.220	1.152	1.090	1.147	1.208	1.097	1.100
0.5	y -y	0.769	1.443	1.357	1.277	1.203	1.135	1.071	1.132	1.197	1.084	1.086
0.5	y -y	0.759	1.431	1.343	1.262	1.187	1.117	1.053	1.118	1.187	1.071	1.074
0.5	y -y	0.748	1.419	1.329	1.246	1.170	1.100	1.035	1.105	1.178	1.059	1.061
0.5	y -y	0.736	1.406	1.315	1.231	1.154	1.083	1.017	1.092	1.169	1.048	1.050
0.5	y -y	0.724	1.394	1.301	1.216	1.138	1.066	0.999	1.079	1.161	1.037	1.039
0.5	y -y	0.712	1.382	1.288	1.201	1.122	1.049	0.982	1.066	1.153	1.027	1.029
0.5	y -y	0.699	1.370	1.275	1.187	1.107	1.033	0.965	1.055	1.147	1.019	1.020
0.5	y -y	0.685	1.359	1.263	1.174	1.093	1.018	0.950	1.045	1.137	1.011	1.012
0.5	y -y	0.671	1.348	1.250	1.160	1.078	1.003	0.934	1.035	1.128	1.005	1.005
0.5	y -y	0.656	1.338	1.239	1.148	1.065	0.989	0.920	1.026	1.121	1.000	1.000
0.5	y -y	0.641	1.328	1.228	1.136	1.053	0.976	0.907	1.019	1.114	0.997	0.996
0.5	y -y	0.625	1.319	1.218	1.126	1.042	0.965	0.894	1.013	1.109	0.995	0.994
0.5	y -y	0.609	1.311	1.209	1.115	1.031	0.953	0.882	1.007	1.105	0.994	0.993
0.5	y -y	0.592	1.302	1.199	1.105	1.020	0.942	0.871	1.002	1.101	0.994	0.993
0.5	y -y	0.575	1.293	1.189	1.094	1.008	0.930	0.858	0.996	1.096	0.994	0.992
0.5	y -y	0.557	1.284	1.178	1.083	0.996	0.918	0.846	0.990	1.092	0.994	0.992
0.5	y -y	0.538	1.274	1.168	1.072	0.985	0.906	0.834	0.985	1.088	0.996	0.993
0.5	y -y	0.518	1.265	1.158	1.061	0.974	0.894	0.822	0.980	1.085	0.998	0.995
0.5	y -y	0.498	1.256	1.148	1.051	0.962	0.882	0.810	0.976	1.083	1.002	0.998
0.5	y -y	0.478	1.246	1.138	1.039	0.951	0.870	0.798	0.971	1.080	1.006	1.001
0.5	y -y	0.456	1.237	1.127	1.028	0.939	0.858	0.785	0.967	1.078	1.011	1.005
0.5	y -y	0.434	1.227	1.117	1.017	0.927	0.847	0.773	0.963	1.076	1.017	1.010
0.5	y -y	0.411	1.218	1.106	1.006	0.916	0.835	0.762	0.960	1.076	1.025	1.017
0.5	y -y	0.387	1.208	1.096	0.995	0.905	0.823	0.750	0.956	1.075	1.033	1.025
0.5	y -y	0.363	1.199	1.086	0.984	0.893	0.812	0.738	0.953	1.076	1.043	1.033
0.5	y -y	0.338	1.189	1.075	0.973	0.882	0.800	0.726	0.950	1.076	1.054	1.043
0.5	y -y	0.311	1.179	1.064	0.962	0.870	0.788	0.714	0.947	1.077	1.066	1.055
0.5	y -y	0.285	1.169	1.053	0.950	0.858	0.775	0.701	0.944	1.078	1.080	1.053
0.5	y -y	0.258	1.158	1.042	0.938	0.845	0.762	0.688	0.941	1.080	1.094	1.042
0.5	y -y	0.231	1.156	1.039	0.934	0.841	0.758	0.684	0.946	1.090	1.118	1.039
0.5	y -y	0.203	1.164	1.047	0.943	0.850	0.767	0.693	0.964	1.112	1.154	1.047
0.5	y -y	0.175	1.171	1.056	0.952	0.859	0.776	0.702	0.973	1.134	1.171	1.056
0.5	y -y	0.148	1.179	1.064	0.961	0.869	0.786	0.711	0.982	1.155	1.179	1.064
0.5	y -y	0.122	1.186	1.072	0.969	0.877	0.794	0.720	0.990	1.175	1.186	1.072
0.5	y -y	0.095	1.196	1.082	0.980	0.888	0.806	0.732	1.001	1.196	1.196	1.082
0.5	y -y	0.068	1.205	1.092	0.991	0.899	0.817	0.743	1.011	1.205	1.205	1.092
0.5	y -y	0.041	1.213	1.101	1.000	0.909	0.828	0.754	1.021	1.213	1.213	1.101

0.5	y -y	0.015	1.223	1.112	1.012	0.922	0.841	0.768	1.033	1.223	1.223	1.112
0.75	y -y	0.717	1.393	1.297	1.207	1.124	1.046	0.974	1.063	1.153	1.020	1.022
0.75	y -y	0.706	1.382	1.284	1.194	1.109	1.031	0.959	1.052	1.147	1.011	1.013
0.75	y -y	0.695	1.372	1.273	1.181	1.096	1.017	0.944	1.042	1.140	1.004	1.005
0.75	y -y	0.683	1.362	1.262	1.170	1.084	1.005	0.931	1.034	1.132	0.998	0.999
0.75	y -y	0.672	1.353	1.252	1.159	1.072	0.993	0.919	1.026	1.125	0.994	0.995
0.75	y -y	0.660	1.345	1.242	1.148	1.061	0.981	0.907	1.019	1.119	0.990	0.991
0.75	y -y	0.647	1.337	1.233	1.139	1.051	0.970	0.896	1.013	1.113	0.988	0.988
0.75	y -y	0.634	1.329	1.225	1.130	1.042	0.961	0.886	1.008	1.109	0.986	0.986
0.75	y -y	0.621	1.322	1.217	1.121	1.033	0.951	0.877	1.004	1.105	0.986	0.985
0.75	y -y	0.608	1.314	1.208	1.112	1.023	0.941	0.866	0.998	1.101	0.985	0.984
0.75	y -y	0.594	1.306	1.200	1.102	1.013	0.931	0.856	0.994	1.097	0.985	0.984
0.75	y -y	0.579	1.298	1.192	1.094	1.004	0.922	0.846	0.990	1.094	0.986	0.984
0.75	y -y	0.564	1.291	1.183	1.085	0.995	0.912	0.837	0.986	1.091	0.987	0.985
0.75	y -y	0.549	1.284	1.175	1.076	0.986	0.903	0.827	0.982	1.088	0.989	0.986
0.75	y -y	0.533	1.276	1.167	1.068	0.977	0.894	0.818	0.979	1.086	0.992	0.988
0.75	y -y	0.517	1.269	1.159	1.059	0.968	0.885	0.809	0.975	1.084	0.995	0.991
0.75	y -y	0.501	1.262	1.151	1.051	0.959	0.876	0.800	0.972	1.083	0.998	0.994
0.75	y -y	0.484	1.254	1.143	1.042	0.950	0.867	0.791	0.970	1.082	1.003	0.998
0.75	y -y	0.466	1.247	1.135	1.034	0.942	0.858	0.782	0.967	1.081	1.008	1.002
0.75	y -y	0.449	1.240	1.128	1.026	0.933	0.849	0.773	0.965	1.080	1.014	1.008
0.75	y -y	0.430	1.232	1.119	1.017	0.924	0.840	0.763	0.962	1.080	1.020	1.013
0.75	y -y	0.411	1.225	1.111	1.008	0.915	0.830	0.754	0.960	1.079	1.027	1.019
0.75	y -y	0.391	1.217	1.102	0.999	0.905	0.821	0.744	0.957	1.079	1.034	1.026
0.75	y -y	0.371	1.209	1.093	0.989	0.896	0.811	0.734	0.955	1.079	1.042	1.033
0.75	y -y	0.350	1.200	1.084	0.980	0.886	0.801	0.724	0.952	1.079	1.051	1.041
0.75	y -y	0.329	1.191	1.075	0.970	0.875	0.790	0.713	0.949	1.080	1.061	1.049
0.75	y -y	0.307	1.182	1.065	0.959	0.864	0.779	0.702	0.946	1.080	1.071	1.058
0.75	y -y	0.284	1.172	1.054	0.948	0.852	0.767	0.690	0.942	1.080	1.081	1.054
0.75	y -y	0.262	1.161	1.043	0.936	0.840	0.755	0.678	0.937	1.080	1.092	1.043
0.75	y -y	0.239	1.157	1.038	0.932	0.836	0.750	0.674	0.941	1.086	1.110	1.038
0.75	y -y	0.216	1.161	1.042	0.936	0.840	0.755	0.678	0.952	1.102	1.138	1.042
0.75	y -y	0.193	1.170	1.051	0.945	0.850	0.765	0.688	0.967	1.122	1.170	1.051
0.75	y -y	0.171	1.173	1.055	0.949	0.854	0.768	0.692	0.971	1.136	1.173	1.055
0.75	y -y	0.148	1.179	1.061	0.955	0.860	0.775	0.699	0.977	1.154	1.179	1.061
0.75	y -y	0.125	1.188	1.071	0.966	0.871	0.786	0.709	0.987	1.174	1.188	1.071
0.75	y -y	0.103	1.195	1.079	0.974	0.880	0.795	0.718	0.996	1.194	1.195	1.079
0.75	y -y	0.081	1.202	1.086	0.982	0.887	0.802	0.726	1.003	1.202	1.202	1.086
0.75	y -y	0.059	1.210	1.095	0.991	0.897	0.813	0.736	1.013	1.210	1.210	1.095
0.75	y -y	0.038	1.219	1.105	1.001	0.908	0.823	0.746	1.023	1.219	1.219	1.105
0.75	y -y	0.016	1.229	1.115	1.013	0.919	0.835	0.758	1.034	1.229	1.229	1.115
1	y -y	0.658	1.328	1.231	1.142	1.062	0.989	0.923	1.024	1.115	0.998	0.999
1	y -y	0.647	1.322	1.223	1.134	1.054	0.980	0.914	1.019	1.111	0.996	0.996
1	y -y	0.636	1.315	1.216	1.127	1.046	0.973	0.906	1.015	1.107	0.995	0.994
1	y -y	0.625	1.309	1.210	1.120	1.039	0.965	0.898	1.011	1.104	0.994	0.994
1	y -y	0.614	1.304	1.204	1.114	1.032	0.958	0.891	1.008	1.101	0.994	0.993
1	y -y	0.603	1.298	1.197	1.106	1.025	0.950	0.883	1.004	1.098	0.993	0.992
1	y -y	0.591	1.291	1.190	1.099	1.017	0.943	0.875	1.000	1.095	0.993	0.992
1	y -y	0.578	1.285	1.184	1.092	1.010	0.935	0.867	0.997	1.093	0.994	0.992
1	y -y	0.566	1.279	1.177	1.085	1.002	0.928	0.860	0.994	1.090	0.994	0.992
1	y -y	0.553	1.273	1.171	1.078	0.995	0.920	0.852	0.991	1.088	0.996	0.993
1	y -y	0.540	1.267	1.164	1.071	0.988	0.913	0.845	0.988	1.086	0.997	0.994
1	y -y	0.527	1.261	1.158	1.064	0.981	0.905	0.837	0.985	1.084	0.999	0.996
1	y -y	0.513	1.255	1.151	1.058	0.974	0.898	0.830	0.982	1.083	1.001	0.998
1	y -y	0.499	1.250	1.145	1.051	0.967	0.891	0.823	0.979	1.081	1.004	1.000
1	y -y	0.485	1.244	1.138	1.044	0.960	0.884	0.815	0.977	1.080	1.007	1.003
1	y -y	0.470	1.238	1.132	1.038	0.953	0.877	0.808	0.975	1.079	1.011	1.006

1	y -y	0.455	1.232	1.126	1.031	0.946	0.870	0.801	0.973	1.079	1.015	1.009
1	y -y	0.440	1.227	1.120	1.024	0.939	0.863	0.794	0.971	1.079	1.020	1.014
1	y -y	0.425	1.221	1.114	1.018	0.932	0.856	0.787	0.969	1.079	1.025	1.018
1	y -y	0.409	1.215	1.107	1.011	0.925	0.848	0.779	0.967	1.078	1.030	1.023
1	y -y	0.392	1.208	1.100	1.003	0.917	0.840	0.771	0.965	1.078	1.036	1.028
1	y -y	0.376	1.202	1.093	0.996	0.909	0.832	0.763	0.962	1.078	1.041	1.033
1	y -y	0.358	1.195	1.086	0.988	0.901	0.824	0.754	0.960	1.078	1.048	1.039
1	y -y	0.341	1.189	1.078	0.980	0.893	0.815	0.746	0.957	1.078	1.055	1.045
1	y -y	0.323	1.182	1.071	0.973	0.885	0.807	0.737	0.955	1.078	1.063	1.052
1	y -y	0.305	1.175	1.063	0.964	0.877	0.798	0.728	0.953	1.079	1.071	1.059
1	y -y	0.286	1.167	1.055	0.955	0.867	0.788	0.718	0.949	1.079	1.079	1.055
1	y -y	0.267	1.158	1.045	0.945	0.856	0.777	0.707	0.945	1.078	1.087	1.045
1	y -y	0.249	1.153	1.040	0.940	0.851	0.772	0.702	0.945	1.081	1.100	1.040
1	y -y	0.230	1.155	1.042	0.942	0.854	0.775	0.705	0.953	1.092	1.120	1.042
1	y -y	0.210	1.161	1.048	0.949	0.860	0.782	0.712	0.966	1.107	1.144	1.048
1	y -y	0.191	1.166	1.054	0.954	0.866	0.787	0.717	0.975	1.122	1.166	1.054
1	y -y	0.172	1.168	1.056	0.956	0.868	0.789	0.719	0.977	1.132	1.168	1.056
1	y -y	0.154	1.173	1.061	0.962	0.874	0.796	0.726	0.982	1.146	1.173	1.061
1	y -y	0.135	1.180	1.069	0.970	0.883	0.805	0.735	0.991	1.163	1.180	1.069
1	y -y	0.116	1.186	1.075	0.977	0.889	0.811	0.741	0.997	1.178	1.186	1.075
1	y -y	0.098	1.191	1.080	0.982	0.894	0.816	0.746	1.002	1.191	1.191	1.080
1	y -y	0.080	1.196	1.086	0.988	0.901	0.823	0.753	1.008	1.196	1.196	1.086
1	y -y	0.061	1.204	1.094	0.997	0.910	0.832	0.763	1.017	1.204	1.204	1.094
1	y -y	0.043	1.211	1.102	1.005	0.918	0.840	0.770	1.025	1.211	1.211	1.102
1	y -y	0.024	1.218	1.109	1.012	0.926	0.848	0.778	1.032	1.218	1.218	1.109
1		0.007	1.223	1.115	1.019	0.932	0.855	0.785	1.039	1.223	1.223	1.115

Tabla C.12 Valores de r_2 de la sección 15 (60 cm x 90 cm con ρ = 0.03 y f_c' = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.896	1.607	1.642	1.699	1.773	1.863	1.966	1.933	1.875	1.966	1.966
0.25	x -x	0.884	1.543	1.564	1.605	1.662	1.732	1.814	1.782	1.734	1.814	1.814
0.25	x -x	0.871	1.489	1.499	1.527	1.571	1.626	1.690	1.660	1.621	1.690	1.690
0.25	x -x	0.856	1.443	1.445	1.464	1.496	1.539	1.591	1.563	1.530	1.591	1.591
0.25	x -x	0.841	1.407	1.401	1.412	1.436	1.470	1.512	1.486	1.458	1.512	1.512
0.25	x -x	0.824	1.373	1.361	1.366	1.383	1.410	1.443	1.419	1.396	1.443	1.443
0.25	x -x	0.806	1.342	1.326	1.325	1.337	1.357	1.384	1.363	1.344	1.384	1.384
0.25	x -x	0.787	1.315	1.296	1.292	1.300	1.316	1.338	1.318	1.303	1.337	1.335
0.25	x -x	0.768	1.291	1.269	1.262	1.267	1.280	1.299	1.281	1.268	1.294	1.294
0.25	x -x	0.747	1.268	1.244	1.235	1.238	1.248	1.264	1.247	1.237	1.257	1.256
0.25	x -x	0.726	1.248	1.223	1.213	1.214	1.222	1.235	1.220	1.213	1.227	1.226
0.25	x -x	0.705	1.232	1.205	1.194	1.193	1.199	1.210	1.197	1.192	1.201	1.201
0.25	x -x	0.683	1.217	1.189	1.176	1.174	1.178	1.187	1.176	1.174	1.179	1.179
0.25	x -x	0.660	1.203	1.175	1.161	1.157	1.160	1.168	1.158	1.159	1.160	1.160
0.25	x -x	0.637	1.193	1.163	1.149	1.144	1.145	1.151	1.144	1.147	1.144	1.144
0.25	x -x	0.614	1.183	1.153	1.137	1.131	1.131	1.136	1.130	1.136	1.130	1.130
0.25	x -x	0.591	1.174	1.142	1.125	1.118	1.117	1.120	1.117	1.125	1.117	1.117
0.25	x -x	0.567	1.166	1.134	1.116	1.108	1.106	1.108	1.107	1.117	1.107	1.107
0.25	x -x	0.542	1.159	1.126	1.107	1.098	1.094	1.095	1.097	1.109	1.098	1.098
0.25	x -x	0.516	1.152	1.118	1.098	1.087	1.082	1.082	1.088	1.102	1.089	1.089
0.25	x -x	0.490	1.146	1.110	1.089	1.077	1.072	1.070	1.079	1.096	1.083	1.082
0.25	x -x	0.464	1.140	1.103	1.081	1.068	1.061	1.058	1.071	1.091	1.077	1.076
0.25	x -x	0.436	1.134	1.096	1.073	1.059	1.050	1.046	1.063	1.086	1.072	1.071
0.25	x -x	0.408	1.128	1.089	1.064	1.048	1.039	1.033	1.055	1.081	1.068	1.067
0.25	x -x	0.379	1.121	1.081	1.056	1.039	1.029	1.023	1.048	1.076	1.066	1.064

0.25	x -x	0.351	1.122	1.084	1.060	1.045	1.036	1.031	1.055	1.083	1.075	1.073
0.25	x -x	0.324	1.124	1.087	1.064	1.050	1.042	1.037	1.060	1.089	1.084	1.081
0.25	x -x	0.298	1.123	1.085	1.061	1.047	1.038	1.033	1.059	1.091	1.089	1.085
0.25	x -x	0.273	1.120	1.082	1.057	1.041	1.032	1.026	1.056	1.091	1.093	1.082
0.25	x -x	0.247	1.120	1.081	1.056	1.040	1.030	1.024	1.057	1.094	1.101	1.081
0.25	x -x	0.221	1.122	1.082	1.056	1.040	1.030	1.023	1.059	1.099	1.111	1.082
0.25	x -x	0.195	1.121	1.079	1.051	1.033	1.022	1.014	1.056	1.102	1.121	1.079
0.25	x -x	0.169	1.122	1.079	1.051	1.032	1.019	1.010	1.056	1.108	1.122	1.079
0.25	x -x	0.142	1.126	1.081	1.051	1.031	1.018	1.008	1.057	1.116	1.126	1.081
0.25	x -x	0.115	1.131	1.084	1.053	1.031	1.016	1.005	1.058	1.127	1.131	1.084
0.25	x -x	0.089	1.133	1.084	1.050	1.026	1.009	0.996	1.056	1.133	1.133	1.084
0.25	x -x	0.063	1.139	1.088	1.051	1.025	1.007	0.993	1.058	1.139	1.139	1.088
0.25	x -x	0.034	1.148	1.094	1.056	1.027	1.007	0.991	1.063	1.148	1.148	1.094
0.25	x -x	0.006	1.160	1.102	1.060	1.028	1.004	0.985	1.068	1.160	1.160	1.102
0.5	x -x	0.897	2.071	2.158	2.267	2.400	2.557	2.738	2.681	2.581	2.738	2.738
0.5	x -x	0.885	1.953	2.010	2.088	2.184	2.300	2.434	2.383	2.305	2.434	2.434
0.5	x -x	0.872	1.855	1.890	1.943	2.012	2.097	2.197	2.151	2.091	2.197	2.197
0.5	x -x	0.858	1.773	1.791	1.824	1.873	1.934	2.008	1.969	1.922	2.008	2.008
0.5	x -x	0.843	1.705	1.709	1.728	1.760	1.804	1.860	1.826	1.790	1.860	1.860
0.5	x -x	0.828	1.645	1.637	1.644	1.663	1.694	1.734	1.706	1.679	1.734	1.734
0.5	x -x	0.811	1.591	1.573	1.570	1.579	1.598	1.626	1.604	1.586	1.626	1.626
0.5	x -x	0.794	1.544	1.519	1.508	1.509	1.519	1.538	1.521	1.511	1.538	1.537
0.5	x -x	0.775	1.503	1.472	1.455	1.450	1.454	1.465	1.454	1.450	1.463	1.463
0.5	x -x	0.756	1.467	1.432	1.410	1.399	1.398	1.404	1.398	1.399	1.402	1.401
0.5	x -x	0.737	1.436	1.396	1.371	1.356	1.351	1.353	1.351	1.358	1.351	1.351
0.5	x -x	0.716	1.408	1.365	1.336	1.319	1.310	1.309	1.312	1.324	1.309	1.309
0.5	x -x	0.695	1.382	1.336	1.305	1.285	1.274	1.270	1.277	1.294	1.273	1.273
0.5	x -x	0.673	1.358	1.310	1.277	1.254	1.241	1.234	1.246	1.267	1.241	1.241
0.5	x -x	0.651	1.337	1.287	1.251	1.227	1.211	1.203	1.219	1.243	1.214	1.214
0.5	x -x	0.628	1.318	1.267	1.230	1.204	1.186	1.175	1.196	1.224	1.192	1.192
0.5	x -x	0.605	1.301	1.248	1.209	1.181	1.162	1.149	1.175	1.205	1.172	1.171
0.5	x -x	0.581	1.286	1.230	1.190	1.160	1.139	1.124	1.156	1.189	1.154	1.154
0.5	x -x	0.557	1.273	1.216	1.173	1.142	1.119	1.103	1.140	1.177	1.141	1.140
0.5	x -x	0.532	1.260	1.201	1.157	1.124	1.099	1.081	1.124	1.165	1.129	1.128
0.5	x -x	0.507	1.247	1.187	1.141	1.106	1.079	1.059	1.110	1.153	1.118	1.117
0.5	x -x	0.481	1.236	1.173	1.125	1.089	1.060	1.038	1.096	1.144	1.110	1.108
0.5	x -x	0.455	1.224	1.160	1.110	1.071	1.040	1.016	1.083	1.134	1.102	1.100
0.5	x -x	0.427	1.213	1.146	1.094	1.053	1.020	0.994	1.069	1.125	1.096	1.093
0.5	x -x	0.399	1.201	1.132	1.077	1.034	0.999	0.971	1.056	1.117	1.092	1.088
0.5	x -x	0.371	1.190	1.119	1.063	1.019	0.983	0.953	1.046	1.111	1.091	1.086
0.5	x -x	0.344	1.192	1.122	1.067	1.022	0.987	0.958	1.054	1.121	1.107	1.101
0.5	x -x	0.316	1.196	1.125	1.070	1.025	0.990	0.960	1.062	1.132	1.124	1.118
0.5	x -x	0.288	1.197	1.126	1.070	1.025	0.989	0.959	1.066	1.140	1.140	1.126
0.5	x -x	0.261	1.198	1.127	1.072	1.027	0.991	0.961	1.073	1.149	1.156	1.127
0.5	x -x	0.234	1.199	1.128	1.071	1.026	0.989	0.959	1.077	1.157	1.173	1.128
0.5	x -x	0.206	1.202	1.130	1.072	1.025	0.987	0.956	1.082	1.168	1.194	1.130
0.5	x -x	0.181	1.203	1.129	1.069	1.021	0.982	0.949	1.081	1.176	1.203	1.129
0.5	x -x	0.154	1.207	1.133	1.072	1.023	0.982	0.949	1.084	1.189	1.207	1.133
0.5	x -x	0.127	1.213	1.137	1.076	1.025	0.984	0.949	1.088	1.204	1.213	1.137
0.5	x -x	0.100	1.221	1.144	1.080	1.028	0.984	0.947	1.093	1.221	1.221	1.144
0.5	x -x	0.074	1.230	1.151	1.086	1.032	0.987	0.948	1.099	1.230	1.230	1.151
0.5	x -x	0.047	1.244	1.164	1.098	1.042	0.995	0.955	1.111	1.244	1.244	1.164
0.5	x -x	0.020	1.260	1.178	1.110	1.052	1.002	0.960	1.123	1.260	1.260	1.178
0.75	x -x	0.889	2.264	2.358	2.468	2.594	2.738	2.901	2.843	2.750	2.901	2.901
0.75	x -x	0.877	2.132	2.194	2.269	2.356	2.457	2.572	2.523	2.454	2.572	2.572
0.75	x -x	0.864	2.021	2.057	2.104	2.162	2.230	2.309	2.270	2.221	2.309	2.309
0.75	x -x	0.851	1.928	1.945	1.971	2.006	2.050	2.103	2.073	2.039	2.103	2.103

0.75	x -x	0.836	1.849	1.850	1.859	1.877	1.902	1.935	1.914	1.892	1.935	1.935
0.75	x -x	0.821	1.778	1.765	1.761	1.764	1.774	1.791	1.778	1.768	1.791	1.791
0.75	x -x	0.805	1.716	1.691	1.675	1.667	1.665	1.670	1.665	1.665	1.670	1.670
0.75	x -x	0.789	1.661	1.627	1.602	1.584	1.573	1.568	1.572	1.581	1.569	1.569
0.75	x -x	0.772	1.614	1.573	1.540	1.515	1.496	1.484	1.496	1.513	1.486	1.486
0.75	x -x	0.754	1.572	1.524	1.485	1.454	1.430	1.412	1.431	1.456	1.417	1.418
0.75	x -x	0.735	1.535	1.482	1.438	1.402	1.374	1.351	1.377	1.409	1.361	1.362
0.75	x -x	0.716	1.503	1.446	1.398	1.358	1.326	1.299	1.332	1.372	1.315	1.316
0.75	x -x	0.696	1.473	1.412	1.360	1.317	1.281	1.251	1.291	1.338	1.275	1.275
0.75	x -x	0.675	1.446	1.381	1.326	1.280	1.241	1.208	1.256	1.307	1.240	1.241
0.75	x -x	0.654	1.420	1.352	1.295	1.246	1.205	1.170	1.225	1.279	1.211	1.211
0.75	x -x	0.632	1.398	1.327	1.267	1.217	1.173	1.137	1.199	1.256	1.188	1.187
0.75	x -x	0.609	1.377	1.304	1.242	1.189	1.144	1.106	1.175	1.235	1.167	1.167
0.75	x -x	0.586	1.357	1.281	1.217	1.163	1.116	1.076	1.153	1.216	1.150	1.149
0.75	x -x	0.562	1.339	1.262	1.197	1.141	1.093	1.051	1.136	1.201	1.137	1.136
0.75	x -x	0.538	1.323	1.244	1.176	1.119	1.070	1.027	1.119	1.187	1.126	1.124
0.75	x -x	0.514	1.306	1.225	1.156	1.097	1.046	1.002	1.103	1.174	1.116	1.113
0.75	x -x	0.489	1.291	1.208	1.138	1.077	1.025	0.980	1.089	1.163	1.109	1.106
0.75	x -x	0.463	1.277	1.192	1.120	1.058	1.004	0.957	1.075	1.154	1.104	1.100
0.75	x -x	0.438	1.263	1.176	1.102	1.038	0.983	0.935	1.062	1.145	1.100	1.095
0.75	x -x	0.411	1.248	1.159	1.083	1.018	0.961	0.911	1.049	1.135	1.097	1.091
0.75	x -x	0.384	1.233	1.142	1.064	0.997	0.938	0.887	1.036	1.127	1.095	1.088
0.75	x -x	0.357	1.225	1.134	1.056	0.988	0.929	0.877	1.034	1.128	1.104	1.097
0.75	x -x	0.330	1.229	1.138	1.059	0.992	0.933	0.881	1.044	1.141	1.127	1.118
0.75	x -x	0.303	1.232	1.140	1.061	0.992	0.933	0.880	1.052	1.153	1.148	1.138
0.75	x -x	0.276	1.234	1.142	1.063	0.994	0.934	0.882	1.061	1.165	1.170	1.142
0.75	x -x	0.249	1.238	1.146	1.067	0.998	0.938	0.885	1.071	1.179	1.194	1.146
0.75	x -x	0.223	1.243	1.151	1.071	1.002	0.941	0.888	1.082	1.194	1.219	1.151
0.75	x -x	0.196	1.248	1.156	1.076	1.006	0.945	0.891	1.092	1.210	1.248	1.156
0.75	x -x	0.170	1.254	1.161	1.081	1.011	0.949	0.895	1.097	1.225	1.254	1.161
0.75	x -x	0.144	1.261	1.168	1.088	1.017	0.955	0.900	1.104	1.243	1.261	1.168
0.75	x -x	0.118	1.270	1.177	1.096	1.024	0.961	0.906	1.112	1.262	1.270	1.177
0.75	x -x	0.094	1.279	1.186	1.104	1.032	0.967	0.911	1.121	1.279	1.279	1.186
0.75	x -x	0.069	1.291	1.197	1.115	1.042	0.978	0.920	1.132	1.291	1.291	1.197
0.75	x -x	0.044	1.307	1.214	1.132	1.059	0.994	0.936	1.149	1.307	1.307	1.214
0.75	x -x	0.019	1.322	1.229	1.146	1.072	1.005	0.946	1.163	1.322	1.322	1.229
1	x -x	0.897	2.529	2.665	2.813	2.976	3.152	3.345	3.286	3.179	3.345	3.345
1	x -x	0.886	2.368	2.463	2.567	2.679	2.802	2.934	2.885	2.808	2.934	2.934
1	x -x	0.875	2.235	2.298	2.367	2.442	2.524	2.613	2.575	2.521	2.613	2.613
1	x -x	0.863	2.122	2.160	2.202	2.248	2.300	2.357	2.329	2.292	2.357	2.357
1	x -x	0.850	2.026	2.042	2.063	2.087	2.115	2.148	2.129	2.108	2.148	2.148
1	x -x	0.837	1.942	1.941	1.944	1.951	1.961	1.974	1.965	1.957	1.974	1.974
1	x -x	0.823	1.867	1.852	1.840	1.832	1.827	1.824	1.826	1.829	1.824	1.824
1	x -x	0.808	1.800	1.772	1.748	1.728	1.711	1.696	1.707	1.720	1.696	1.696
1	x -x	0.793	1.741	1.703	1.669	1.639	1.612	1.589	1.609	1.632	1.589	1.590
1	x -x	0.777	1.690	1.643	1.601	1.563	1.529	1.498	1.527	1.558	1.502	1.503
1	x -x	0.761	1.644	1.590	1.542	1.497	1.457	1.420	1.457	1.497	1.429	1.431
1	x -x	0.744	1.604	1.544	1.489	1.440	1.394	1.352	1.398	1.446	1.369	1.370
1	x -x	0.727	1.568	1.503	1.444	1.390	1.340	1.295	1.349	1.404	1.320	1.321
1	x -x	0.709	1.536	1.467	1.404	1.346	1.293	1.244	1.306	1.370	1.278	1.279
1	x -x	0.690	1.507	1.434	1.367	1.306	1.250	1.199	1.269	1.338	1.243	1.244
1	x -x	0.670	1.480	1.403	1.333	1.270	1.211	1.158	1.236	1.309	1.213	1.213
1	x -x	0.651	1.456	1.377	1.304	1.238	1.178	1.123	1.209	1.284	1.189	1.189
1	x -x	0.630	1.435	1.353	1.278	1.210	1.148	1.092	1.186	1.263	1.170	1.170
1	x -x	0.609	1.415	1.331	1.254	1.184	1.120	1.063	1.165	1.245	1.154	1.153
1	x -x	0.587	1.395	1.308	1.229	1.158	1.093	1.034	1.144	1.227	1.139	1.138
1	x -x	0.565	1.377	1.288	1.208	1.135	1.069	1.009	1.127	1.212	1.128	1.127

1	x -x	0.542	1.359	1.268	1.186	1.112	1.045	0.984	1.111	1.198	1.119	1.116
1	x -x	0.519	1.341	1.248	1.165	1.089	1.021	0.959	1.095	1.185	1.110	1.107
1	x -x	0.495	1.325	1.230	1.144	1.067	0.998	0.935	1.080	1.173	1.104	1.100
1	x -x	0.470	1.308	1.212	1.125	1.047	0.977	0.913	1.067	1.163	1.100	1.096
1	x -x	0.446	1.292	1.194	1.106	1.026	0.955	0.891	1.054	1.154	1.097	1.092
1	x -x	0.420	1.276	1.176	1.086	1.005	0.933	0.868	1.041	1.144	1.095	1.089
1	x -x	0.395	1.260	1.158	1.067	0.985	0.912	0.846	1.029	1.136	1.095	1.088
1	x -x	0.369	1.246	1.143	1.051	0.968	0.894	0.828	1.020	1.131	1.099	1.090
1	x -x	0.344	1.244	1.141	1.048	0.966	0.892	0.825	1.026	1.139	1.117	1.107
1	x -x	0.318	1.248	1.145	1.052	0.969	0.895	0.828	1.037	1.154	1.141	1.131
1	x -x	0.292	1.252	1.148	1.056	0.973	0.898	0.831	1.048	1.168	1.166	1.148
1	x -x	0.267	1.254	1.150	1.058	0.974	0.900	0.832	1.057	1.180	1.189	1.150
1	x -x	0.242	1.259	1.155	1.062	0.979	0.905	0.837	1.070	1.196	1.216	1.155
1	x -x	0.216	1.267	1.164	1.072	0.989	0.914	0.846	1.086	1.216	1.247	1.164
1	x -x	0.192	1.272	1.169	1.076	0.993	0.917	0.849	1.096	1.231	1.272	1.169
1	x -x	0.168	1.280	1.178	1.085	1.002	0.927	0.858	1.104	1.250	1.280	1.178
1	x -x	0.143	1.289	1.188	1.096	1.012	0.937	0.869	1.115	1.270	1.289	1.188
1	x -x	0.119	1.297	1.196	1.104	1.021	0.945	0.876	1.123	1.289	1.297	1.196
1	x -x	0.096	1.306	1.205	1.113	1.030	0.954	0.885	1.132	1.306	1.306	1.205
1	x -x	0.073	1.319	1.219	1.128	1.045	0.970	0.901	1.147	1.319	1.319	1.219
1	x -x	0.050	1.335	1.236	1.146	1.064	0.989	0.920	1.165	1.335	1.335	1.236
1	x -x	0.029	1.347	1.248	1.159	1.077	1.001	0.932	1.177	1.347	1.347	1.248
1	x -x	0.008	1.360	1.263	1.174	1.092	1.017	0.948	1.192	1.360	1.360	1.263
0.25	y -y	0.892	2.097	2.185	2.294	2.427	2.582	2.762	2.700	2.599	2.762	2.762
0.25	y -y	0.879	1.984	2.044	2.123	2.220	2.336	2.472	2.416	2.336	2.472	2.472
0.25	y -y	0.867	1.889	1.927	1.981	2.052	2.138	2.240	2.191	2.128	2.240	2.240
0.25	y -y	0.853	1.809	1.829	1.865	1.915	1.978	2.055	2.012	1.963	2.055	2.055
0.25	y -y	0.838	1.741	1.748	1.769	1.803	1.849	1.906	1.870	1.832	1.906	1.906
0.25	y -y	0.822	1.679	1.673	1.681	1.702	1.733	1.774	1.744	1.717	1.774	1.774
0.25	y -y	0.806	1.622	1.606	1.603	1.612	1.631	1.659	1.637	1.618	1.659	1.659
0.25	y -y	0.788	1.573	1.548	1.536	1.536	1.545	1.563	1.547	1.537	1.562	1.561
0.25	y -y	0.770	1.529	1.498	1.479	1.471	1.473	1.482	1.473	1.471	1.479	1.479
0.25	y -y	0.752	1.491	1.453	1.429	1.415	1.410	1.413	1.410	1.416	1.411	1.411
0.25	y -y	0.732	1.458	1.416	1.387	1.368	1.359	1.356	1.360	1.372	1.357	1.357
0.25	y -y	0.712	1.429	1.383	1.350	1.328	1.315	1.309	1.317	1.336	1.312	1.312
0.25	y -y	0.691	1.401	1.352	1.316	1.290	1.274	1.264	1.278	1.303	1.272	1.272
0.25	y -y	0.669	1.376	1.324	1.285	1.256	1.237	1.224	1.245	1.273	1.237	1.238
0.25	y -y	0.647	1.355	1.300	1.259	1.229	1.207	1.192	1.218	1.249	1.211	1.211
0.25	y -y	0.624	1.337	1.280	1.237	1.205	1.181	1.164	1.196	1.230	1.190	1.190
0.25	y -y	0.601	1.320	1.261	1.216	1.182	1.156	1.138	1.175	1.213	1.171	1.171
0.25	y -y	0.578	1.304	1.244	1.197	1.161	1.134	1.113	1.156	1.197	1.155	1.155
0.25	y -y	0.553	1.291	1.228	1.180	1.142	1.113	1.091	1.140	1.184	1.142	1.141
0.25	y -y	0.529	1.277	1.212	1.162	1.122	1.092	1.067	1.124	1.172	1.130	1.128
0.25	y -y	0.503	1.262	1.196	1.143	1.102	1.069	1.043	1.107	1.159	1.118	1.116
0.25	y -y	0.477	1.249	1.181	1.126	1.083	1.048	1.020	1.093	1.148	1.109	1.107
0.25	y -y	0.451	1.236	1.166	1.110	1.064	1.028	0.997	1.079	1.138	1.103	1.099
0.25	y -y	0.423	1.224	1.151	1.092	1.045	1.006	0.974	1.065	1.129	1.097	1.093
0.25	y -y	0.396	1.211	1.136	1.076	1.026	0.985	0.951	1.052	1.121	1.094	1.089
0.25	y -y	0.367	1.197	1.119	1.056	1.004	0.960	0.924	1.037	1.111	1.089	1.083
0.25	y -y	0.340	1.193	1.114	1.050	0.997	0.952	0.915	1.036	1.114	1.099	1.093
0.25	y -y	0.311	1.198	1.120	1.057	1.004	0.960	0.923	1.048	1.129	1.122	1.114
0.25	y -y	0.284	1.203	1.125	1.062	1.010	0.966	0.930	1.058	1.142	1.143	1.125
0.25	y -y	0.256	1.206	1.128	1.065	1.013	0.969	0.933	1.067	1.153	1.163	1.128
0.25	y -y	0.230	1.208	1.130	1.067	1.015	0.971	0.935	1.074	1.164	1.183	1.130
0.25	y -y	0.204	1.212	1.134	1.072	1.020	0.977	0.941	1.083	1.176	1.204	1.134
0.25	y -y	0.179	1.215	1.137	1.074	1.021	0.977	0.941	1.086	1.187	1.215	1.137
0.25	y -y	0.154	1.219	1.140	1.075	1.020	0.975	0.936	1.088	1.200	1.219	1.140

0.25	y -y	0.129	1.225	1.143	1.076	1.020	0.972	0.932	1.090	1.214	1.225	1.143
0.25	y -y	0.105	1.231	1.149	1.080	1.023	0.974	0.932	1.094	1.229	1.231	1.149
0.25	y -y	0.080	1.239	1.157	1.088	1.030	0.980	0.937	1.102	1.239	1.239	1.157
0.25	y -y	0.055	1.253	1.170	1.101	1.042	0.992	0.949	1.115	1.253	1.253	1.170
0.25	y -y	0.030	1.267	1.184	1.113	1.053	1.002	0.957	1.128	1.267	1.267	1.184
0.25	y -y	0.005	1.288	1.204	1.132	1.071	1.017	0.971	1.147	1.288	1.288	1.204
0.5	y -y	0.893	2.509	2.635	2.771	2.917	3.074	3.244	3.188	3.093	3.244	3.244
0.5	y -y	0.883	2.363	2.453	2.548	2.651	2.761	2.878	2.833	2.763	2.878	2.878
0.5	y -y	0.872	2.238	2.297	2.361	2.429	2.502	2.580	2.545	2.497	2.580	2.580
0.5	y -y	0.860	2.131	2.166	2.204	2.246	2.290	2.338	2.314	2.283	2.338	2.338
0.5	y -y	0.848	2.041	2.056	2.074	2.094	2.117	2.143	2.128	2.111	2.143	2.143
0.5	y -y	0.835	1.960	1.959	1.961	1.964	1.970	1.977	1.972	1.967	1.977	1.977
0.5	y -y	0.822	1.887	1.872	1.859	1.848	1.839	1.832	1.837	1.843	1.832	1.832
0.5	y -y	0.808	1.821	1.793	1.768	1.745	1.724	1.706	1.720	1.737	1.706	1.706
0.5	y -y	0.793	1.762	1.724	1.689	1.656	1.626	1.598	1.622	1.648	1.598	1.599
0.5	y -y	0.778	1.711	1.664	1.621	1.580	1.542	1.506	1.539	1.574	1.511	1.512
0.5	y -y	0.763	1.665	1.611	1.560	1.513	1.468	1.427	1.468	1.512	1.437	1.439
0.5	y -y	0.747	1.624	1.563	1.507	1.454	1.404	1.357	1.408	1.459	1.375	1.377
0.5	y -y	0.730	1.588	1.522	1.460	1.402	1.349	1.298	1.357	1.417	1.324	1.326
0.5	y -y	0.713	1.556	1.485	1.419	1.358	1.300	1.247	1.314	1.382	1.282	1.284
0.5	y -y	0.695	1.527	1.451	1.382	1.317	1.256	1.200	1.275	1.350	1.246	1.247
0.5	y -y	0.676	1.498	1.420	1.346	1.278	1.215	1.157	1.241	1.318	1.214	1.215
0.5	y -y	0.657	1.473	1.391	1.314	1.244	1.179	1.118	1.210	1.291	1.187	1.188
0.5	y -y	0.638	1.451	1.366	1.287	1.214	1.147	1.085	1.186	1.269	1.167	1.167
0.5	y -y	0.618	1.430	1.342	1.261	1.187	1.118	1.055	1.164	1.249	1.150	1.149
0.5	y -y	0.597	1.410	1.319	1.237	1.160	1.090	1.026	1.143	1.231	1.135	1.133
0.5	y -y	0.576	1.391	1.299	1.214	1.137	1.065	0.999	1.125	1.216	1.123	1.121
0.5	y -y	0.554	1.374	1.280	1.194	1.115	1.042	0.976	1.110	1.203	1.115	1.113
0.5	y -y	0.532	1.357	1.261	1.174	1.093	1.020	0.953	1.096	1.191	1.108	1.105
0.5	y -y	0.509	1.341	1.243	1.154	1.072	0.998	0.930	1.082	1.179	1.102	1.098
0.5	y -y	0.486	1.325	1.226	1.135	1.053	0.977	0.909	1.069	1.170	1.098	1.094
0.5	y -y	0.462	1.310	1.209	1.117	1.033	0.957	0.888	1.058	1.161	1.097	1.091
0.5	y -y	0.438	1.295	1.192	1.098	1.014	0.937	0.867	1.046	1.152	1.095	1.089
0.5	y -y	0.413	1.279	1.175	1.080	0.995	0.917	0.846	1.035	1.145	1.096	1.088
0.5	y -y	0.388	1.264	1.158	1.062	0.975	0.897	0.826	1.024	1.138	1.097	1.089
0.5	y -y	0.364	1.250	1.143	1.045	0.958	0.878	0.806	1.015	1.132	1.101	1.092
0.5	y -y	0.339	1.248	1.139	1.042	0.954	0.874	0.802	1.019	1.140	1.118	1.108
0.5	y -y	0.313	1.252	1.144	1.046	0.958	0.879	0.807	1.032	1.155	1.144	1.133
0.5	y -y	0.288	1.255	1.147	1.050	0.962	0.882	0.810	1.043	1.169	1.169	1.147
0.5	y -y	0.263	1.260	1.153	1.056	0.968	0.889	0.817	1.057	1.186	1.197	1.153
0.5	y -y	0.239	1.263	1.156	1.059	0.972	0.892	0.820	1.068	1.200	1.222	1.156
0.5	y -y	0.215	1.268	1.162	1.065	0.978	0.898	0.826	1.081	1.216	1.249	1.162
0.5	y -y	0.191	1.276	1.171	1.075	0.988	0.909	0.837	1.095	1.235	1.276	1.171
0.5	y -y	0.168	1.285	1.180	1.085	0.998	0.919	0.847	1.104	1.254	1.285	1.180
0.5	y -y	0.144	1.294	1.190	1.095	1.009	0.930	0.858	1.115	1.274	1.294	1.190
0.5	y -y	0.122	1.302	1.198	1.104	1.018	0.940	0.869	1.124	1.292	1.302	1.198
0.5	y -y	0.101	1.310	1.208	1.114	1.029	0.951	0.880	1.134	1.310	1.310	1.208
0.5	y -y	0.080	1.323	1.222	1.129	1.045	0.968	0.897	1.149	1.323	1.323	1.222
0.5	y -y	0.058	1.337	1.237	1.146	1.063	0.986	0.916	1.165	1.337	1.337	1.237
0.5	y -y	0.038	1.352	1.253	1.163	1.081	1.005	0.935	1.182	1.352	1.352	1.253
0.5	y -y	0.018	1.363	1.266	1.177	1.095	1.020	0.951	1.196	1.363	1.363	1.266
0.75	y -y	0.828	1.934	1.922	1.910	1.898	1.887	1.876	1.883	1.892	1.876	1.876
0.75	y -y	0.816	1.875	1.851	1.829	1.806	1.784	1.763	1.779	1.796	1.763	1.763
0.75	y -y	0.805	1.821	1.788	1.756	1.725	1.694	1.664	1.688	1.713	1.664	1.664
0.75	y -y	0.793	1.774	1.732	1.692	1.653	1.615	1.578	1.609	1.642	1.578	1.580
0.75	y -y	0.780	1.730	1.682	1.635	1.589	1.545	1.503	1.541	1.582	1.507	1.509
0.75	y -y	0.767	1.691	1.636	1.583	1.532	1.483	1.436	1.482	1.529	1.446	1.448

0.75	y -y	0.754	1.656	1.595	1.537	1.481	1.427	1.376	1.429	1.484	1.393	1.394
0.75	y -y	0.741	1.623	1.558	1.495	1.435	1.378	1.323	1.384	1.445	1.347	1.349
0.75	y -y	0.727	1.594	1.525	1.458	1.395	1.334	1.277	1.344	1.412	1.308	1.310
0.75	y -y	0.712	1.568	1.494	1.424	1.358	1.295	1.235	1.310	1.384	1.275	1.276
0.75	y -y	0.698	1.543	1.466	1.393	1.323	1.258	1.196	1.278	1.358	1.245	1.246
0.75	y -y	0.682	1.519	1.438	1.362	1.290	1.223	1.159	1.248	1.331	1.218	1.219
0.75	y -y	0.667	1.496	1.413	1.334	1.260	1.191	1.125	1.221	1.307	1.194	1.195
0.75	y -y	0.651	1.476	1.390	1.309	1.233	1.162	1.095	1.199	1.286	1.175	1.175
0.75	y -y	0.634	1.458	1.370	1.287	1.209	1.136	1.068	1.179	1.269	1.160	1.160
0.75	y -y	0.618	1.441	1.350	1.265	1.186	1.112	1.043	1.161	1.253	1.146	1.146
0.75	y -y	0.601	1.424	1.331	1.244	1.164	1.089	1.019	1.144	1.237	1.134	1.133
0.75	y -y	0.583	1.408	1.313	1.225	1.143	1.067	0.996	1.129	1.224	1.124	1.122
0.75	y -y	0.565	1.393	1.297	1.207	1.124	1.047	0.976	1.116	1.213	1.117	1.115
0.75	y -y	0.547	1.379	1.281	1.190	1.106	1.028	0.956	1.104	1.202	1.111	1.108
0.75	y -y	0.528	1.365	1.265	1.173	1.088	1.010	0.937	1.092	1.192	1.106	1.103
0.75	y -y	0.509	1.350	1.249	1.156	1.070	0.990	0.917	1.080	1.183	1.101	1.097
0.75	y -y	0.490	1.336	1.234	1.139	1.052	0.972	0.898	1.069	1.174	1.098	1.093
0.75	y -y	0.470	1.323	1.219	1.123	1.035	0.954	0.880	1.058	1.166	1.096	1.091
0.75	y -y	0.450	1.309	1.204	1.107	1.018	0.937	0.862	1.048	1.158	1.095	1.089
0.75	y -y	0.429	1.295	1.188	1.090	1.001	0.919	0.844	1.038	1.151	1.094	1.087
0.75	y -y	0.408	1.281	1.173	1.074	0.984	0.901	0.826	1.028	1.144	1.094	1.087
0.75	y -y	0.387	1.268	1.158	1.059	0.967	0.884	0.809	1.019	1.138	1.096	1.088
0.75	y -y	0.366	1.257	1.146	1.045	0.954	0.870	0.795	1.013	1.134	1.101	1.091
0.75	y -y	0.346	1.254	1.143	1.042	0.951	0.867	0.792	1.017	1.140	1.115	1.105
0.75	y -y	0.324	1.256	1.145	1.045	0.953	0.870	0.794	1.026	1.152	1.136	1.125
0.75	y -y	0.303	1.260	1.150	1.049	0.958	0.875	0.799	1.038	1.166	1.159	1.147
0.75	y -y	0.282	1.264	1.154	1.054	0.962	0.879	0.803	1.049	1.179	1.182	1.154
0.75	y -y	0.262	1.266	1.156	1.056	0.964	0.881	0.805	1.057	1.190	1.202	1.156
0.75	y -y	0.242	1.269	1.159	1.059	0.968	0.885	0.809	1.067	1.203	1.224	1.159
0.75	y -y	0.222	1.275	1.166	1.067	0.976	0.893	0.817	1.081	1.219	1.249	1.166
0.75	y -y	0.202	1.280	1.171	1.072	0.981	0.898	0.823	1.092	1.232	1.272	1.171
0.75	y -y	0.182	1.287	1.179	1.080	0.990	0.907	0.832	1.101	1.249	1.287	1.179
0.75	y -y	0.163	1.294	1.187	1.088	0.998	0.916	0.840	1.109	1.265	1.294	1.187
0.75	y -y	0.144	1.301	1.194	1.096	1.006	0.924	0.849	1.116	1.280	1.301	1.194
0.75	y -y	0.126	1.305	1.199	1.101	1.012	0.930	0.854	1.122	1.293	1.305	1.199
0.75	y -y	0.107	1.313	1.208	1.111	1.022	0.940	0.864	1.131	1.310	1.313	1.208
0.75	y -y	0.089	1.325	1.221	1.125	1.037	0.955	0.880	1.145	1.325	1.325	1.221
0.75	y -y	0.071	1.337	1.234	1.138	1.051	0.970	0.895	1.158	1.337	1.337	1.234
0.75	y -y	0.054	1.347	1.244	1.150	1.063	0.982	0.908	1.170	1.347	1.347	1.244
0.75	y -y	0.037	1.357	1.255	1.162	1.075	0.995	0.921	1.182	1.357	1.357	1.255
0.75	y -y	0.019	1.369	1.269	1.176	1.091	1.011	0.938	1.196	1.369	1.369	1.269
0.75	y -y	0.002	1.388	1.290	1.200	1.115	1.037	0.964	1.219	1.388	1.388	1.290
1	y -y	0.763	1.650	1.597	1.549	1.505	1.465	1.429	1.465	1.504	1.438	1.439
1	y -y	0.752	1.622	1.565	1.513	1.465	1.422	1.382	1.424	1.468	1.395	1.397
1	y -y	0.741	1.596	1.535	1.479	1.428	1.382	1.339	1.387	1.436	1.358	1.359
1	y -y	0.729	1.572	1.508	1.449	1.396	1.346	1.301	1.354	1.409	1.325	1.326
1	y -y	0.717	1.551	1.483	1.422	1.365	1.314	1.266	1.325	1.385	1.296	1.297
1	y -y	0.705	1.530	1.460	1.396	1.337	1.283	1.234	1.298	1.363	1.270	1.271
1	y -y	0.693	1.511	1.438	1.371	1.311	1.255	1.204	1.273	1.342	1.247	1.248
1	y -y	0.680	1.492	1.417	1.348	1.286	1.228	1.176	1.250	1.321	1.225	1.226
1	y -y	0.667	1.475	1.397	1.327	1.262	1.204	1.150	1.230	1.303	1.207	1.207
1	y -y	0.653	1.459	1.380	1.307	1.242	1.181	1.126	1.211	1.287	1.191	1.191
1	y -y	0.640	1.445	1.364	1.290	1.223	1.161	1.105	1.196	1.272	1.178	1.178
1	y -y	0.626	1.431	1.348	1.273	1.205	1.142	1.085	1.181	1.259	1.166	1.166
1	y -y	0.612	1.418	1.333	1.257	1.187	1.124	1.066	1.167	1.247	1.156	1.155
1	y -y	0.598	1.404	1.318	1.240	1.169	1.105	1.047	1.153	1.235	1.145	1.144
1	y -y	0.583	1.391	1.304	1.225	1.153	1.088	1.028	1.140	1.223	1.136	1.135

1	y -y	0.568	1.380	1.291	1.210	1.138	1.072	1.012	1.129	1.214	1.129	1.128
1	y -y	0.553	1.368	1.277	1.196	1.122	1.056	0.995	1.118	1.205	1.123	1.121
1	y -y	0.538	1.356	1.264	1.182	1.107	1.040	0.979	1.107	1.195	1.116	1.114
1	y -y	0.522	1.344	1.251	1.167	1.092	1.024	0.962	1.097	1.187	1.111	1.108
1	y -y	0.506	1.332	1.238	1.153	1.077	1.008	0.946	1.087	1.178	1.106	1.103
1	y -y	0.490	1.321	1.226	1.140	1.063	0.994	0.931	1.077	1.171	1.103	1.099
1	y -y	0.474	1.310	1.214	1.127	1.049	0.979	0.916	1.069	1.164	1.100	1.096
1	y -y	0.458	1.300	1.202	1.115	1.036	0.965	0.901	1.060	1.158	1.098	1.093
1	y -y	0.441	1.289	1.190	1.102	1.022	0.951	0.886	1.052	1.152	1.097	1.091
1	y -y	0.424	1.278	1.178	1.088	1.008	0.936	0.871	1.043	1.145	1.095	1.089
1	y -y	0.407	1.267	1.166	1.075	0.994	0.921	0.856	1.035	1.140	1.095	1.088
1	y -y	0.390	1.257	1.155	1.063	0.981	0.908	0.842	1.027	1.135	1.096	1.088
1	y -y	0.373	1.247	1.144	1.052	0.969	0.895	0.829	1.020	1.131	1.097	1.089
1	y -y	0.356	1.244	1.140	1.048	0.965	0.891	0.825	1.021	1.133	1.106	1.097
1	y -y	0.339	1.244	1.141	1.048	0.966	0.892	0.825	1.027	1.141	1.121	1.111
1	y -y	0.322	1.247	1.143	1.051	0.968	0.894	0.827	1.035	1.151	1.137	1.127
1	y -y	0.304	1.251	1.147	1.055	0.972	0.898	0.831	1.044	1.162	1.155	1.144
1	y -y	0.287	1.252	1.148	1.055	0.972	0.898	0.831	1.049	1.170	1.170	1.148
1	y -y	0.271	1.253	1.150	1.057	0.974	0.899	0.832	1.056	1.178	1.185	1.150
1	y -y	0.254	1.256	1.152	1.059	0.976	0.901	0.834	1.063	1.188	1.202	1.152
1	y -y	0.237	1.260	1.156	1.064	0.980	0.906	0.838	1.072	1.199	1.221	1.156
1	y -y	0.220	1.266	1.163	1.070	0.987	0.912	0.845	1.084	1.213	1.243	1.163
1	y -y	0.203	1.270	1.167	1.074	0.991	0.915	0.847	1.092	1.224	1.261	1.167
1	y -y	0.188	1.273	1.170	1.077	0.994	0.918	0.850	1.097	1.234	1.273	1.170
1	y -y	0.171	1.279	1.176	1.084	1.000	0.925	0.856	1.103	1.247	1.279	1.176
1	y -y	0.155	1.285	1.183	1.090	1.007	0.932	0.864	1.109	1.260	1.285	1.183
1	y -y	0.138	1.291	1.189	1.097	1.014	0.939	0.871	1.116	1.274	1.291	1.189
1	y -y	0.122	1.296	1.195	1.103	1.020	0.944	0.876	1.122	1.286	1.296	1.195
1	y -y	0.107	1.301	1.199	1.107	1.024	0.949	0.88	1.127	1.298	1.301	1.199
1	y -y	0.092	1.308	1.207	1.115	1.032	0.956	0.888	1.134	1.308	1.308	1.207
1	y -y	0.076	1.317	1.216	1.125	1.042	0.967	0.898	1.144	1.317	1.317	1.216
1	y -y	0.061	1.328	1.229	1.138	1.056	0.981	0.912	1.157	1.328	1.328	1.229
1	y -y	0.046	1.338	1.239	1.149	1.067	0.992	0.923	1.168	1.338	1.338	1.239
1	y -y	0.032	1.345	1.247	1.157	1.075	1	0.931	1.176	1.345	1.345	1.247
1	y -y	0.018	1.352	1.254	1.165	1.083	1.008	0.939	1.183	1.352	1.352	1.254
1	y -y	0.004	1.364	1.267	1.178	1.097	1.022	0.953	1.197	1.364	1.364	1.267

Tabla C.13 Valores de r_2 de la sección 16 (60 cm x 90 cm con ρ = 0.06 y f_c' = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.893	1.479	1.485	1.510	1.550	1.601	1.661	1.640	1.607	1.661	1.661
0.25	x -x	0.884	1.446	1.447	1.465	1.497	1.539	1.591	1.571	1.541	1.591	1.591
0.25	x -x	0.874	1.414	1.408	1.420	1.445	1.480	1.522	1.503	1.478	1.522	1.522
0.25	x -x	0.864	1.384	1.374	1.380	1.398	1.427	1.462	1.444	1.422	1.462	1.462
0.25	x -x	0.853	1.359	1.344	1.346	1.360	1.382	1.412	1.395	1.376	1.412	1.412
0.25	x -x	0.840	1.337	1.318	1.316	1.325	1.343	1.367	1.352	1.336	1.367	1.367
0.25	x -x	0.827	1.317	1.294	1.288	1.293	1.307	1.327	1.313	1.300	1.327	1.327
0.25	x -x	0.813	1.298	1.273	1.264	1.266	1.276	1.292	1.279	1.269	1.292	1.292
0.25	x -x	0.798	1.283	1.255	1.243	1.242	1.249	1.261	1.251	1.243	1.262	1.261
0.25	x -x	0.782	1.266	1.236	1.222	1.218	1.222	1.232	1.223	1.218	1.231	1.230
0.25	x -x	0.764	1.250	1.218	1.201	1.195	1.196	1.204	1.197	1.195	1.201	1.201
0.25	x -x	0.746	1.234	1.201	1.182	1.174	1.174	1.179	1.174	1.175	1.176	1.176
0.25	x -x	0.727	1.221	1.186	1.166	1.157	1.155	1.159	1.155	1.159	1.156	1.156
0.25	x -x	0.707	1.208	1.172	1.152	1.142	1.139	1.141	1.139	1.145	1.139	1.139
0.25	x -x	0.687	1.196	1.160	1.139	1.129	1.125	1.126	1.126	1.134	1.125	1.125

0.25	x -x	0.665	1.187	1.151	1.129	1.118	1.113	1.113	1.115	1.124	1.113	1.113
0.25	x -x	0.643	1.180	1.143	1.120	1.108	1.103	1.102	1.105	1.116	1.104	1.104
0.25	x -x	0.621	1.171	1.133	1.111	1.098	1.092	1.090	1.095	1.108	1.094	1.094
0.25	x -x	0.597	1.163	1.125	1.102	1.089	1.082	1.079	1.086	1.101	1.085	1.085
0.25	x -x	0.573	1.156	1.117	1.093	1.079	1.072	1.068	1.078	1.094	1.078	1.077
0.25	x -x	0.548	1.148	1.109	1.085	1.070	1.061	1.057	1.069	1.087	1.070	1.070
0.25	x -x	0.523	1.142	1.103	1.078	1.062	1.053	1.048	1.063	1.083	1.065	1.065
0.25	x -x	0.496	1.137	1.096	1.070	1.054	1.044	1.038	1.056	1.078	1.061	1.060
0.25	x -x	0.469	1.131	1.090	1.063	1.046	1.035	1.028	1.050	1.074	1.057	1.056
0.25	x -x	0.441	1.126	1.084	1.056	1.038	1.026	1.018	1.044	1.071	1.055	1.053
0.25	x -x	0.411	1.121	1.078	1.049	1.030	1.018	1.009	1.039	1.068	1.054	1.052
0.25	x -x	0.380	1.116	1.072	1.042	1.022	1.009	0.999	1.034	1.066	1.054	1.052
0.25	x -x	0.348	1.111	1.066	1.035	1.014	1.000	0.989	1.029	1.065	1.056	1.053
0.25	x -x	0.315	1.103	1.057	1.026	1.003	0.988	0.976	1.021	1.061	1.057	1.053
0.25	x -x	0.283	1.104	1.060	1.030	1.010	0.996	0.985	1.029	1.069	1.069	1.060
0.25	x -x	0.253	1.108	1.066	1.038	1.020	1.007	0.999	1.039	1.079	1.085	1.066
0.25	x -x	0.225	1.107	1.064	1.037	1.018	1.005	0.996	1.040	1.082	1.094	1.064
0.25	x -x	0.198	1.106	1.064	1.036	1.017	1.004	0.995	1.041	1.087	1.106	1.064
0.25	x -x	0.169	1.108	1.065	1.036	1.017	1.004	0.994	1.041	1.093	1.108	1.065
0.25	x -x	0.141	1.106	1.063	1.034	1.014	1.000	0.990	1.039	1.098	1.106	1.063
0.25	x -x	0.114	1.108	1.064	1.034	1.013	0.998	0.988	1.039	1.105	1.108	1.064
0.25	x -x	0.085	1.111	1.065	1.034	1.012	0.997	0.986	1.040	1.111	1.111	1.065
0.25	x -x	0.055	1.112	1.065	1.032	1.009	0.993	0.981	1.038	1.112	1.112	1.065
0.25	x -x	0.027	1.116	1.068	1.034	1.010	0.992	0.979	1.040	1.116	1.116	1.068
0.5	x -x	0.899	1.889	1.931	1.991	2.067	2.160	2.270	2.237	2.177	2.270	2.270
0.5	x -x	0.891	1.817	1.844	1.887	1.945	2.019	2.106	2.075	2.026	2.106	2.106
0.5	x -x	0.882	1.758	1.773	1.803	1.848	1.906	1.977	1.948	1.907	1.977	1.977
0.5	x -x	0.872	1.704	1.708	1.726	1.758	1.802	1.857	1.832	1.799	1.857	1.857
0.5	x -x	0.862	1.658	1.652	1.661	1.683	1.715	1.758	1.736	1.709	1.758	1.758
0.5	x -x	0.851	1.618	1.605	1.605	1.618	1.641	1.673	1.654	1.634	1.673	1.673
0.5	x -x	0.838	1.579	1.558	1.552	1.556	1.571	1.594	1.579	1.565	1.594	1.594
0.5	x -x	0.826	1.543	1.516	1.503	1.501	1.508	1.524	1.512	1.504	1.524	1.524
0.5	x -x	0.812	1.512	1.479	1.460	1.452	1.454	1.463	1.455	1.452	1.463	1.463
0.5	x -x	0.797	1.482	1.445	1.421	1.408	1.404	1.408	1.404	1.406	1.408	1.408
0.5	x -x	0.782	1.454	1.412	1.384	1.366	1.358	1.356	1.357	1.364	1.356	1.356
0.5	x -x	0.766	1.426	1.380	1.348	1.327	1.314	1.308	1.314	1.326	1.309	1.309
0.5	x -x	0.749	1.401	1.352	1.316	1.291	1.275	1.266	1.276	1.293	1.269	1.269
0.5	x -x	0.731	1.378	1.326	1.288	1.260	1.241	1.229	1.244	1.266	1.235	1.235
0.5	x -x	0.713	1.357	1.303	1.263	1.233	1.212	1.197	1.216	1.243	1.206	1.207
0.5	x -x	0.693	1.339	1.282	1.240	1.208	1.185	1.169	1.192	1.224	1.182	1.183
0.5	x -x	0.673	1.322	1.265	1.221	1.188	1.164	1.146	1.173	1.207	1.164	1.164
0.5	x -x	0.652	1.308	1.249	1.204	1.171	1.146	1.127	1.158	1.193	1.150	1.150
0.5	x -x	0.630	1.294	1.234	1.188	1.153	1.127	1.107	1.142	1.180	1.135	1.135
0.5	x -x	0.608	1.281	1.220	1.173	1.137	1.110	1.090	1.129	1.168	1.124	1.124
0.5	x -x	0.585	1.269	1.207	1.159	1.122	1.094	1.072	1.116	1.158	1.114	1.113
0.5	x -x	0.561	1.256	1.192	1.143	1.106	1.076	1.053	1.103	1.147	1.103	1.103
0.5	x -x	0.537	1.244	1.179	1.129	1.090	1.060	1.036	1.091	1.137	1.095	1.094
0.5	x -x	0.512	1.233	1.168	1.116	1.076	1.045	1.020	1.080	1.130	1.089	1.088
0.5	x -x	0.486	1.222	1.155	1.102	1.061	1.028	1.002	1.069	1.122	1.083	1.081
0.5	x -x	0.459	1.212	1.143	1.089	1.046	1.011	0.983	1.058	1.114	1.079	1.076
0.5	x -x	0.431	1.202	1.131	1.075	1.031	0.995	0.965	1.048	1.108	1.077	1.073
0.5	x -x	0.402	1.192	1.119	1.062	1.016	0.978	0.947	1.039	1.103	1.076	1.072
0.5	x -x	0.371	1.182	1.108	1.049	1.001	0.962	0.929	1.030	1.099	1.078	1.072
0.5	x -x	0.340	1.172	1.096	1.035	0.986	0.945	0.911	1.022	1.096	1.081	1.075
0.5	x -x	0.309	1.159	1.081	1.019	0.968	0.926	0.890	1.011	1.090	1.084	1.076
0.5	x -x	0.278	1.159	1.082	1.021	0.971	0.929	0.894	1.019	1.101	1.104	1.082
0.5	x -x	0.246	1.165	1.089	1.028	0.978	0.937	0.902	1.031	1.117	1.130	1.089

0.5	x -x	0.216	1.167	1.091	1.030	0.981	0.940	0.906	1.039	1.128	1.152	1.091
0.5	x -x	0.186	1.171	1.096	1.036	0.987	0.947	0.914	1.048	1.142	1.171	1.096
0.5	x -x	0.156	1.175	1.099	1.039	0.990	0.949	0.915	1.051	1.155	1.175	1.099
0.5	x -x	0.127	1.176	1.100	1.039	0.990	0.949	0.914	1.051	1.166	1.176	1.100
0.5	x -x	0.099	1.179	1.103	1.041	0.991	0.949	0.914	1.053	1.179	1.179	1.103
0.5	x -x	0.069	1.184	1.106	1.043	0.992	0.949	0.913	1.056	1.184	1.184	1.106
0.5	x -x	0.040	1.189	1.111	1.048	0.995	0.952	0.915	1.060	1.189	1.189	1.111
0.5	x -x	0.012	1.196	1.117	1.052	0.999	0.954	0.916	1.065	1.196	1.196	1.117
0.75	x -x	0.882	1.967	1.992	2.028	2.073	2.128	2.192	2.166	2.128	2.192	2.192
0.75	x -x	0.872	1.899	1.911	1.931	1.961	1.999	2.046	2.024	1.996	2.046	2.046
0.75	x -x	0.862	1.842	1.841	1.850	1.867	1.892	1.924	1.907	1.888	1.924	1.924
0.75	x -x	0.852	1.790	1.780	1.778	1.784	1.797	1.817	1.805	1.793	1.817	1.817
0.75	x -x	0.841	1.743	1.723	1.712	1.708	1.712	1.721	1.715	1.710	1.721	1.721
0.75	x -x	0.829	1.700	1.672	1.652	1.640	1.635	1.636	1.635	1.637	1.636	1.636
0.75	x -x	0.816	1.660	1.625	1.598	1.579	1.567	1.560	1.564	1.572	1.560	1.560
0.75	x -x	0.803	1.623	1.582	1.549	1.524	1.505	1.492	1.502	1.516	1.492	1.492
0.75	x -x	0.789	1.587	1.540	1.501	1.470	1.446	1.427	1.443	1.464	1.427	1.428
0.75	x -x	0.774	1.552	1.500	1.456	1.419	1.390	1.366	1.388	1.416	1.369	1.370
0.75	x -x	0.759	1.520	1.462	1.414	1.373	1.339	1.311	1.340	1.373	1.318	1.319
0.75	x -x	0.742	1.490	1.429	1.376	1.332	1.294	1.262	1.297	1.338	1.275	1.276
0.75	x -x	0.726	1.464	1.398	1.343	1.295	1.254	1.219	1.261	1.308	1.238	1.239
0.75	x -x	0.708	1.439	1.370	1.311	1.260	1.217	1.179	1.227	1.281	1.205	1.206
0.75	x -x	0.689	1.416	1.344	1.282	1.229	1.183	1.144	1.199	1.257	1.178	1.179
0.75	x -x	0.670	1.396	1.322	1.258	1.203	1.155	1.114	1.175	1.236	1.157	1.157
0.75	x -x	0.650	1.378	1.301	1.236	1.179	1.130	1.087	1.155	1.218	1.139	1.139
0.75	x -x	0.630	1.360	1.282	1.215	1.157	1.106	1.062	1.137	1.202	1.124	1.124
0.75	x -x	0.609	1.345	1.265	1.196	1.137	1.086	1.041	1.121	1.189	1.113	1.112
0.75	x -x	0.587	1.330	1.249	1.179	1.118	1.066	1.020	1.107	1.177	1.103	1.102
0.75	x -x	0.564	1.315	1.233	1.161	1.100	1.047	1.000	1.094	1.166	1.095	1.094
0.75	x -x	0.541	1.301	1.217	1.145	1.083	1.028	0.981	1.082	1.156	1.089	1.087
0.75	x -x	0.517	1.288	1.203	1.129	1.066	1.011	0.963	1.071	1.147	1.084	1.082
0.75	x -x	0.492	1.273	1.186	1.112	1.047	0.991	0.942	1.059	1.138	1.079	1.076
0.75	x -x	0.466	1.259	1.171	1.095	1.029	0.972	0.921	1.047	1.130	1.076	1.072
0.75	x -x	0.439	1.246	1.156	1.079	1.012	0.953	0.902	1.037	1.123	1.075	1.071
0.75	x -x	0.412	1.233	1.142	1.063	0.995	0.935	0.883	1.027	1.117	1.076	1.070
0.75	x -x	0.384	1.220	1.127	1.047	0.977	0.916	0.863	1.017	1.111	1.078	1.072
0.75	x -x	0.355	1.208	1.113	1.031	0.960	0.898	0.843	1.008	1.107	1.083	1.075
0.75	x -x	0.326	1.193	1.097	1.013	0.941	0.877	0.822	0.998	1.102	1.088	1.078
0.75	x -x	0.296	1.183	1.085	1.001	0.928	0.864	0.808	0.993	1.102	1.098	1.085
0.75	x -x	0.266	1.186	1.089	1.006	0.933	0.870	0.814	1.006	1.117	1.126	1.089
0.75	x -x	0.236	1.192	1.095	1.011	0.938	0.875	0.819	1.019	1.135	1.156	1.095
0.75	x -x	0.207	1.195	1.099	1.015	0.943	0.879	0.824	1.030	1.150	1.184	1.099
0.75	x -x	0.177	1.201	1.105	1.022	0.950	0.887	0.831	1.039	1.169	1.201	1.105
0.75	x -x	0.148	1.208	1.112	1.029	0.957	0.893	0.838	1.046	1.188	1.208	1.112
0.75	x -x	0.119	1.214	1.118	1.035	0.963	0.900	0.844	1.052	1.205	1.214	1.118
0.75	x -x	0.090	1.220	1.125	1.043	0.971	0.908	0.852	1.059	1.220	1.220	1.125
0.75	x -x	0.062	1.228	1.132	1.049	0.977	0.913	0.857	1.066	1.228	1.228	1.132
0.75	x -x	0.034	1.236	1.141	1.058	0.986	0.922	0.866	1.075	1.236	1.236	1.141
0.75	x -x	0.007	1.245	1.150	1.067	0.994	0.929	0.872	1.084	1.245	1.245	1.150
1	x -x	0.857	1.910	1.903	1.900	1.901	1.905	1.913	1.908	1.904	1.913	1.913
1	x -x	0.847	1.856	1.839	1.826	1.816	1.809	1.806	1.807	1.811	1.806	1.806
1	x -x	0.836	1.806	1.779	1.757	1.738	1.722	1.709	1.716	1.727	1.709	1.709
1	x -x	0.825	1.759	1.725	1.694	1.667	1.643	1.622	1.636	1.653	1.622	1.622
1	x -x	0.813	1.718	1.676	1.638	1.604	1.573	1.546	1.566	1.590	1.546	1.546
1	x -x	0.801	1.679	1.631	1.587	1.547	1.510	1.477	1.504	1.534	1.477	1.477
1	x -x	0.788	1.643	1.589	1.539	1.494	1.452	1.414	1.447	1.484	1.416	1.418
1	x -x	0.774	1.608	1.548	1.494	1.443	1.397	1.355	1.395	1.438	1.361	1.363

1	x -x	0.760	1.576	1.511	1.451	1.397	1.347	1.301	1.347	1.397	1.313	1.315
1	x -x	0.745	1.545	1.476	1.412	1.354	1.300	1.251	1.305	1.361	1.270	1.272
1	x -x	0.730	1.517	1.443	1.376	1.315	1.258	1.206	1.267	1.330	1.233	1.235
1	x -x	0.714	1.491	1.414	1.344	1.279	1.220	1.166	1.234	1.303	1.202	1.203
1	x -x	0.697	1.467	1.387	1.314	1.247	1.186	1.130	1.205	1.281	1.175	1.176
1	x -x	0.680	1.446	1.364	1.288	1.219	1.156	1.099	1.180	1.259	1.153	1.154
1	x -x	0.662	1.427	1.342	1.264	1.194	1.129	1.070	1.159	1.240	1.135	1.136
1	x -x	0.643	1.407	1.320	1.241	1.169	1.103	1.043	1.139	1.221	1.119	1.119
1	x -x	0.624	1.390	1.301	1.220	1.146	1.079	1.018	1.121	1.206	1.106	1.106
1	x -x	0.604	1.373	1.282	1.200	1.125	1.057	0.995	1.106	1.192	1.096	1.095
1	x -x	0.584	1.358	1.265	1.181	1.105	1.036	0.973	1.092	1.180	1.087	1.086
1	x -x	0.562	1.342	1.248	1.162	1.085	1.015	0.952	1.078	1.168	1.080	1.078
1	x -x	0.540	1.327	1.231	1.145	1.067	0.996	0.932	1.066	1.158	1.075	1.073
1	x -x	0.518	1.313	1.216	1.129	1.050	0.978	0.914	1.056	1.150	1.072	1.069
1	x -x	0.494	1.300	1.201	1.112	1.033	0.961	0.895	1.046	1.143	1.071	1.067
1	x -x	0.471	1.287	1.187	1.097	1.016	0.943	0.878	1.037	1.136	1.071	1.066
1	x -x	0.446	1.273	1.171	1.081	0.999	0.926	0.859	1.028	1.130	1.072	1.066
1	x -x	0.421	1.259	1.156	1.065	0.982	0.908	0.841	1.019	1.124	1.074	1.068
1	x -x	0.395	1.246	1.142	1.048	0.965	0.890	0.823	1.010	1.119	1.078	1.070
1	x -x	0.368	1.232	1.126	1.032	0.948	0.873	0.805	1.002	1.115	1.083	1.074
1	x -x	0.340	1.217	1.110	1.015	0.930	0.854	0.785	0.993	1.110	1.088	1.079
1	x -x	0.312	1.201	1.093	0.996	0.910	0.833	0.764	0.982	1.104	1.094	1.083
1	x -x	0.284	1.195	1.086	0.989	0.903	0.827	0.758	0.984	1.110	1.112	1.086
1	x -x	0.255	1.200	1.092	0.995	0.909	0.833	0.764	0.999	1.129	1.143	1.092
1	x -x	0.228	1.203	1.095	0.998	0.912	0.835	0.766	1.010	1.144	1.171	1.095
1	x -x	0.200	1.208	1.100	1.004	0.918	0.841	0.772	1.024	1.162	1.208	1.100
1	x -x	0.172	1.216	1.109	1.013	0.927	0.850	0.781	1.032	1.183	1.216	1.109
1	x -x	0.145	1.222	1.114	1.018	0.933	0.856	0.787	1.038	1.201	1.222	1.114
1	x -x	0.118	1.231	1.124	1.028	0.943	0.866	0.797	1.048	1.222	1.231	1.124
1	x -x	0.090	1.240	1.133	1.038	0.953	0.876	0.807	1.058	1.240	1.240	1.133
1	x -x	0.064	1.248	1.142	1.047	0.962	0.885	0.816	1.067	1.248	1.248	1.142
1	x -x	0.038	1.260	1.156	1.062	0.977	0.901	0.832	1.081	1.260	1.260	1.156
1	x -x	0.012	1.271	1.167	1.073	0.989	0.913	0.844	1.093	1.271	1.271	1.167
0.25	y -y	0.894	1.912	1.956	2.017	2.095	2.190	2.300	2.264	2.202	2.300	2.300
0.25	y -y	0.885	1.841	1.868	1.911	1.969	2.042	2.128	2.095	2.045	2.128	2.128
0.25	y -y	0.876	1.780	1.794	1.823	1.865	1.921	1.988	1.959	1.919	1.988	1.988
0.25	y -y	0.866	1.729	1.733	1.751	1.781	1.823	1.876	1.850	1.818	1.876	1.876
0.25	y -y	0.856	1.686	1.681	1.689	1.710	1.742	1.783	1.760	1.735	1.783	1.783
0.25	y -y	0.845	1.648	1.635	1.636	1.648	1.671	1.702	1.683	1.663	1.702	1.702
0.25	y -y	0.833	1.612	1.593	1.587	1.592	1.607	1.630	1.614	1.600	1.630	1.630
0.25	y -y	0.820	1.580	1.555	1.542	1.541	1.549	1.565	1.553	1.544	1.565	1.565
0.25	y -y	0.807	1.551	1.520	1.502	1.496	1.498	1.508	1.499	1.495	1.508	1.508
0.25	y -y	0.793	1.522	1.486	1.463	1.451	1.448	1.452	1.448	1.450	1.452	1.452
0.25	y -y	0.777	1.490	1.450	1.422	1.405	1.396	1.395	1.396	1.403	1.395	1.395
0.25	y -y	0.761	1.461	1.416	1.384	1.362	1.349	1.342	1.349	1.362	1.343	1.344
0.25	y -y	0.744	1.434	1.385	1.349	1.323	1.306	1.296	1.307	1.326	1.299	1.300
0.25	y -y	0.727	1.410	1.357	1.318	1.289	1.269	1.255	1.272	1.296	1.262	1.263
0.25	y -y	0.708	1.388	1.333	1.291	1.259	1.236	1.220	1.241	1.272	1.231	1.231
0.25	y -y	0.689	1.367	1.310	1.265	1.232	1.206	1.188	1.214	1.249	1.204	1.204
0.25	y -y	0.669	1.349	1.289	1.242	1.207	1.179	1.159	1.190	1.228	1.180	1.180
0.25	y -y	0.648	1.331	1.269	1.221	1.183	1.153	1.131	1.168	1.209	1.159	1.159
0.25	y -y	0.626	1.314	1.251	1.200	1.161	1.130	1.105	1.149	1.192	1.141	1.141
0.25	y -y	0.604	1.299	1.234	1.182	1.141	1.109	1.083	1.132	1.178	1.127	1.126
0.25	y -y	0.581	1.285	1.218	1.165	1.122	1.088	1.061	1.116	1.164	1.114	1.113
0.25	y -y	0.558	1.271	1.202	1.147	1.102	1.067	1.038	1.099	1.151	1.101	1.100
0.25	y -y	0.533	1.257	1.187	1.130	1.084	1.047	1.017	1.085	1.140	1.091	1.090
0.25	y -y	0.508	1.245	1.173	1.115	1.067	1.029	0.997	1.073	1.131	1.084	1.082

0.25	y -y	0.482	1.234	1.160	1.101	1.052	1.012	0.978	1.062	1.123	1.080	1.077
0.25	y -y	0.456	1.224	1.149	1.088	1.037	0.996	0.961	1.053	1.118	1.078	1.074
0.25	y -y	0.428	1.214	1.137	1.074	1.022	0.979	0.943	1.044	1.112	1.077	1.073
0.25	y -y	0.399	1.204	1.125	1.060	1.007	0.963	0.925	1.035	1.108	1.078	1.073
0.25	y -y	0.369	1.193	1.113	1.047	0.992	0.946	0.906	1.026	1.104	1.080	1.074
0.25	y -y	0.339	1.183	1.100	1.033	0.976	0.928	0.888	1.018	1.101	1.085	1.078
0.25	y -y	0.307	1.169	1.085	1.015	0.957	0.908	0.866	1.007	1.096	1.089	1.081
0.25	y -y	0.275	1.162	1.076	1.005	0.945	0.895	0.851	1.003	1.098	1.102	1.076
0.25	y -y	0.243	1.168	1.084	1.013	0.954	0.904	0.861	1.018	1.116	1.131	1.084
0.25	y -y	0.212	1.174	1.090	1.021	0.962	0.913	0.871	1.032	1.133	1.160	1.090
0.25	y -y	0.182	1.177	1.094	1.025	0.968	0.919	0.878	1.039	1.147	1.177	1.094
0.25	y -y	0.153	1.182	1.099	1.032	0.975	0.928	0.888	1.045	1.162	1.182	1.099
0.25	y -y	0.125	1.186	1.104	1.037	0.981	0.934	0.894	1.051	1.177	1.186	1.104
0.25	y -y	0.096	1.190	1.108	1.041	0.984	0.937	0.896	1.054	1.190	1.190	1.108
0.25	y -y	0.070	1.194	1.112	1.043	0.986	0.938	0.897	1.057	1.194	1.194	1.112
0.25	y -y	0.044	1.199	1.116	1.046	0.988	0.939	0.897	1.060	1.199	1.199	1.116
0.25	y -y	0.017	1.205	1.120	1.050	0.990	0.940	0.897	1.064	1.205	1.205	1.120
0.5	y -y	0.843	1.863	1.843	1.825	1.810	1.797	1.786	1.792	1.801	1.786	1.786
0.5	y -y	0.833	1.814	1.785	1.759	1.735	1.714	1.694	1.706	1.722	1.694	1.694
0.5	y -y	0.822	1.770	1.733	1.699	1.667	1.638	1.611	1.630	1.652	1.611	1.611
0.5	y -y	0.810	1.729	1.685	1.645	1.607	1.571	1.538	1.563	1.591	1.538	1.538
0.5	y -y	0.798	1.692	1.642	1.595	1.551	1.510	1.472	1.503	1.538	1.471	1.473
0.5	y -y	0.786	1.656	1.600	1.548	1.499	1.454	1.411	1.448	1.489	1.413	1.415
0.5	y -y	0.773	1.622	1.561	1.504	1.450	1.400	1.353	1.398	1.445	1.361	1.363
0.5	y -y	0.759	1.590	1.524	1.462	1.405	1.351	1.300	1.352	1.405	1.314	1.316
0.5	y -y	0.745	1.560	1.490	1.424	1.363	1.305	1.252	1.310	1.370	1.273	1.275
0.5	y -y	0.731	1.532	1.458	1.388	1.324	1.264	1.207	1.273	1.339	1.236	1.238
0.5	y -y	0.715	1.507	1.429	1.356	1.289	1.226	1.167	1.240	1.313	1.205	1.207
0.5	y -y	0.699	1.484	1.402	1.327	1.257	1.192	1.132	1.211	1.291	1.179	1.180
0.5	y -y	0.683	1.463	1.379	1.301	1.229	1.162	1.100	1.187	1.269	1.157	1.158
0.5	y -y	0.666	1.444	1.357	1.277	1.203	1.135	1.072	1.166	1.250	1.139	1.140
0.5	y -y	0.648	1.425	1.337	1.255	1.179	1.109	1.045	1.146	1.232	1.124	1.124
0.5	y -y	0.630	1.407	1.316	1.232	1.155	1.084	1.018	1.127	1.215	1.109	1.109
0.5	y -y	0.611	1.390	1.297	1.211	1.133	1.060	0.993	1.110	1.201	1.097	1.096
0.5	y -y	0.591	1.374	1.279	1.192	1.112	1.038	0.971	1.095	1.188	1.088	1.087
0.5	y -y	0.571	1.358	1.261	1.173	1.091	1.017	0.949	1.081	1.176	1.080	1.078
0.5	y -y	0.550	1.343	1.244	1.154	1.072	0.996	0.927	1.068	1.165	1.074	1.071
0.5	y -y	0.529	1.328	1.228	1.136	1.053	0.977	0.907	1.056	1.155	1.070	1.066
0.5	y -y	0.507	1.313	1.211	1.119	1.034	0.957	0.887	1.045	1.146	1.066	1.063
0.5	y -y	0.484	1.299	1.195	1.102	1.016	0.939	0.868	1.034	1.138	1.065	1.060
0.5	y -y	0.461	1.285	1.180	1.085	0.999	0.921	0.850	1.025	1.131	1.065	1.060
0.5	y -y	0.436	1.272	1.166	1.070	0.983	0.904	0.832	1.017	1.126	1.068	1.061
0.5	y -y	0.412	1.258	1.151	1.054	0.966	0.887	0.815	1.009	1.121	1.071	1.064
0.5	y -y	0.386	1.245	1.136	1.038	0.950	0.870	0.798	1.000	1.116	1.076	1.067
0.5	y -y	0.360	1.231	1.121	1.022	0.933	0.853	0.780	0.993	1.112	1.082	1.072
0.5	y -y	0.333	1.217	1.106	1.006	0.916	0.835	0.762	0.985	1.109	1.089	1.078
0.5	y -y	0.306	1.203	1.091	0.990	0.899	0.818	0.744	0.977	1.106	1.097	1.085
0.5	y -y	0.279	1.197	1.084	0.982	0.891	0.809	0.735	0.978	1.111	1.115	1.084
0.5	y -y	0.252	1.202	1.089	0.988	0.897	0.815	0.741	0.992	1.129	1.146	1.089
0.5	y -y	0.225	1.208	1.096	0.994	0.904	0.822	0.748	1.008	1.148	1.178	1.096
0.5	y -y	0.198	1.214	1.102	1.001	0.910	0.829	0.755	1.022	1.167	1.214	1.102
0.5	y -y	0.172	1.219	1.108	1.007	0.917	0.835	0.761	1.028	1.185	1.219	1.108
0.5	y -y	0.145	1.227	1.117	1.017	0.927	0.845	0.772	1.037	1.206	1.227	1.117
0.5	y -y	0.118	1.236	1.126	1.026	0.937	0.855	0.782	1.047	1.227	1.236	1.126
0.5	y -y	0.092	1.243	1.133	1.034	0.945	0.864	0.791	1.055	1.243	1.243	1.133
0.5	y -y	0.067	1.251	1.143	1.045	0.956	0.876	0.803	1.065	1.251	1.251	1.143
0.5	y -y	0.042	1.263	1.156	1.058	0.970	0.891	0.818	1.079	1.263	1.263	1.156

0.5	y -y	0.017	1.276	1.170	1.074	0.986	0.907	0.835	1.094	1.276	1.276	1.170
0.75	y -y	0.778	1.648	1.586	1.527	1.470	1.416	1.363	1.412	1.462	1.370	1.372
0.75	y -y	0.767	1.619	1.553	1.489	1.429	1.371	1.315	1.369	1.425	1.327	1.330
0.75	y -y	0.756	1.592	1.521	1.454	1.390	1.329	1.271	1.331	1.392	1.289	1.291
0.75	y -y	0.744	1.566	1.492	1.422	1.355	1.292	1.231	1.297	1.364	1.256	1.258
0.75	y -y	0.732	1.543	1.466	1.392	1.323	1.257	1.195	1.267	1.339	1.227	1.229
0.75	y -y	0.719	1.521	1.441	1.365	1.294	1.226	1.162	1.240	1.318	1.201	1.203
0.75	y -y	0.706	1.501	1.418	1.340	1.266	1.197	1.131	1.215	1.299	1.179	1.180
0.75	y -y	0.693	1.483	1.397	1.317	1.241	1.170	1.103	1.193	1.281	1.159	1.161
0.75	y -y	0.679	1.466	1.378	1.296	1.219	1.146	1.078	1.174	1.263	1.143	1.144
0.75	y -y	0.665	1.449	1.359	1.275	1.196	1.123	1.054	1.156	1.246	1.128	1.128
0.75	y -y	0.650	1.433	1.341	1.255	1.175	1.100	1.031	1.139	1.231	1.115	1.115
0.75	y -y	0.635	1.418	1.324	1.237	1.155	1.080	1.009	1.124	1.218	1.103	1.103
0.75	y -y	0.620	1.403	1.308	1.219	1.137	1.060	0.989	1.110	1.205	1.094	1.094
0.75	y -y	0.604	1.390	1.293	1.203	1.120	1.042	0.970	1.098	1.194	1.087	1.086
0.75	y -y	0.587	1.377	1.278	1.187	1.103	1.025	0.952	1.087	1.185	1.080	1.079
0.75	y -y	0.571	1.364	1.264	1.172	1.086	1.008	0.935	1.076	1.175	1.075	1.073
0.75	y -y	0.553	1.351	1.250	1.157	1.070	0.991	0.917	1.066	1.166	1.071	1.068
0.75	y -y	0.536	1.339	1.237	1.142	1.056	0.975	0.902	1.057	1.159	1.068	1.065
0.75	y -y	0.518	1.328	1.224	1.129	1.041	0.961	0.886	1.049	1.153	1.067	1.063
0.75	y -y	0.499	1.317	1.212	1.116	1.027	0.946	0.872	1.041	1.147	1.066	1.062
0.75	y -y	0.480	1.305	1.199	1.102	1.013	0.931	0.856	1.033	1.141	1.066	1.061
0.75	y -y	0.461	1.293	1.186	1.088	0.998	0.916	0.841	1.025	1.136	1.067	1.062
0.75	y -y	0.441	1.282	1.174	1.075	0.984	0.902	0.826	1.018	1.131	1.069	1.063
0.75	y -y	0.420	1.271	1.161	1.061	0.971	0.888	0.812	1.011	1.127	1.072	1.065
0.75	y -y	0.399	1.259	1.149	1.048	0.957	0.873	0.797	1.005	1.123	1.076	1.068
0.75	y -y	0.378	1.247	1.135	1.034	0.942	0.858	0.782	0.998	1.119	1.080	1.071
0.75	y -y	0.355	1.235	1.122	1.020	0.927	0.843	0.766	0.990	1.115	1.085	1.075
0.75	y -y	0.333	1.222	1.108	1.005	0.911	0.827	0.751	0.983	1.111	1.091	1.080
0.75	y -y	0.310	1.208	1.093	0.989	0.896	0.811	0.734	0.975	1.107	1.097	1.084
0.75	y -y	0.288	1.202	1.086	0.982	0.888	0.803	0.727	0.975	1.110	1.110	1.086
0.75	y -y	0.265	1.203	1.087	0.983	0.890	0.805	0.728	0.984	1.122	1.133	1.087
0.75	y -y	0.241	1.209	1.094	0.990	0.897	0.812	0.736	0.999	1.140	1.162	1.094
0.75	y -y	0.219	1.211	1.096	0.992	0.898	0.814	0.737	1.007	1.152	1.185	1.096
0.75	y -y	0.197	1.215	1.100	0.997	0.903	0.819	0.742	1.018	1.167	1.215	1.100
0.75	y -y	0.175	1.222	1.108	1.005	0.912	0.827	0.751	1.026	1.185	1.222	1.108
0.75	y -y	0.152	1.228	1.115	1.012	0.919	0.835	0.758	1.033	1.202	1.228	1.115
0.75	y -y	0.131	1.234	1.121	1.019	0.926	0.842	0.765	1.040	1.219	1.234	1.121
0.75	y -y	0.110	1.241	1.129	1.027	0.935	0.850	0.774	1.048	1.236	1.241	1.129
0.75	y -y	0.088	1.249	1.137	1.035	0.943	0.859	0.783	1.057	1.249	1.249	1.137
0.75	y -y	0.068	1.257	1.146	1.045	0.954	0.870	0.794	1.066	1.257	1.257	1.146
0.75	y -y	0.047	1.267	1.157	1.056	0.965	0.882	0.805	1.077	1.267	1.267	1.157
0.75	y -y	0.026	1.278	1.169	1.069	0.978	0.895	0.819	1.090	1.278	1.278	1.169
0.75	y -y	0.006	1.285	1.177	1.078	0.987	0.904	0.828	1.098	1.285	1.285	1.177
1	y -y	0.716	1.495	1.419	1.349	1.285	1.226	1.172	1.239	1.308	1.206	1.208
1	y -y	0.705	1.478	1.400	1.328	1.263	1.202	1.147	1.219	1.292	1.187	1.189
1	y -y	0.694	1.463	1.383	1.310	1.242	1.181	1.124	1.200	1.277	1.171	1.172
1	y -y	0.682	1.449	1.367	1.292	1.224	1.161	1.103	1.184	1.262	1.157	1.157
1	y -y	0.671	1.436	1.353	1.276	1.207	1.143	1.084	1.170	1.249	1.144	1.145
1	y -y	0.658	1.423	1.338	1.260	1.189	1.125	1.065	1.156	1.236	1.133	1.133
1	y -y	0.646	1.411	1.324	1.245	1.173	1.107	1.047	1.142	1.224	1.122	1.122
1	y -y	0.633	1.398	1.310	1.230	1.157	1.091	1.030	1.130	1.213	1.112	1.112
1	y -y	0.620	1.387	1.297	1.216	1.142	1.075	1.014	1.119	1.203	1.104	1.104
1	y -y	0.607	1.376	1.285	1.203	1.128	1.060	0.999	1.108	1.194	1.097	1.097
1	y -y	0.593	1.365	1.274	1.190	1.115	1.046	0.984	1.099	1.186	1.092	1.090
1	y -y	0.580	1.355	1.262	1.178	1.102	1.033	0.970	1.090	1.178	1.086	1.085
1	y -y	0.565	1.344	1.250	1.165	1.089	1.019	0.955	1.081	1.170	1.081	1.080

1	y -y	0.551	1.334	1.239	1.153	1.076	1.006	0.942	1.072	1.163	1.078	1.075
1	y -y	0.536	1.325	1.229	1.142	1.064	0.993	0.929	1.065	1.157	1.075	1.072
1	y -y	0.521	1.316	1.219	1.131	1.053	0.981	0.917	1.058	1.152	1.073	1.070
1	y -y	0.506	1.307	1.209	1.121	1.041	0.969	0.904	1.051	1.147	1.072	1.068
1	y -y	0.490	1.298	1.199	1.110	1.030	0.958	0.892	1.045	1.142	1.071	1.067
1	y -y	0.474	1.289	1.189	1.099	1.019	0.946	0.881	1.039	1.138	1.071	1.067
1	y -y	0.458	1.280	1.179	1.089	1.008	0.935	0.869	1.033	1.133	1.072	1.066
1	y -y	0.441	1.271	1.169	1.078	0.996	0.923	0.856	1.026	1.129	1.072	1.067
1	y -y	0.424	1.262	1.159	1.067	0.985	0.911	0.844	1.021	1.126	1.074	1.068
1	y -y	0.407	1.253	1.149	1.057	0.974	0.899	0.832	1.015	1.122	1.076	1.069
1	y -y	0.390	1.244	1.139	1.046	0.962	0.887	0.820	1.009	1.119	1.079	1.071
1	y -y	0.372	1.234	1.129	1.035	0.951	0.876	0.808	1.003	1.116	1.082	1.074
1	y -y	0.353	1.225	1.119	1.024	0.939	0.863	0.795	0.998	1.113	1.086	1.077
1	y -y	0.335	1.215	1.108	1.012	0.927	0.850	0.782	0.991	1.110	1.090	1.080
1	y -y	0.316	1.204	1.095	0.999	0.913	0.836	0.767	0.984	1.105	1.093	1.082
1	y -y	0.298	1.197	1.088	0.991	0.904	0.827	0.758	0.981	1.106	1.101	1.088
1	y -y	0.279	1.196	1.087	0.990	0.904	0.827	0.759	0.987	1.113	1.117	1.087
1	y -y	0.260	1.200	1.091	0.994	0.908	0.832	0.763	0.996	1.126	1.138	1.091
1	y -y	0.241	1.203	1.095	0.998	0.912	0.835	0.766	1.006	1.138	1.159	1.095
1	y -y	0.223	1.204	1.095	0.999	0.913	0.836	0.767	1.012	1.147	1.177	1.095
1	y -y	0.204	1.207	1.099	1.003	0.917	0.840	0.771	1.021	1.159	1.198	1.099
1	y -y	0.185	1.213	1.105	1.009	0.924	0.847	0.778	1.029	1.173	1.213	1.105
1	y -y	0.167	1.218	1.110	1.014	0.928	0.852	0.783	1.034	1.187	1.218	1.110
1	y -y	0.149	1.221	1.114	1.018	0.932	0.855	0.786	1.038	1.198	1.221	1.114
1	y -y	0.131	1.226	1.119	1.023	0.937	0.861	0.791	1.043	1.212	1.226	1.119
1	y -y	0.113	1.233	1.126	1.031	0.946	0.869	0.800	1.051	1.227	1.233	1.126
1	y -y	0.095	1.239	1.132	1.037	0.952	0.875	0.806	1.057	1.239	1.239	1.132
1	y -y	0.077	1.245	1.139	1.044	0.958	0.882	0.813	1.063	1.245	1.245	1.139
1	y -y	0.059	1.250	1.144	1.050	0.964	0.888	0.818	1.069	1.250	1.250	1.144
1	y -y	0.042	1.258	1.154	1.059	0.975	0.898	0.829	1.079	1.258	1.258	1.154
1	y -y	0.024	1.266	1.162	1.068	0.984	0.907	0.838	1.087	1.266	1.266	1.162
1	y -y	0.007	1.273	1.170	1.076	0.992	0.916	0.847	1.096	1.273	1.273	1.170

Tabla C.14 Valores de r_2 de la sección 18 (40 cm x 80 cm con ρ = 0.06 y f'_c = 250 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.866	1.179	1.144	1.125	1.115	1.111	1.113	1.112	1.111	1.113	1.113
0.25	x -x	0.858	1.172	1.136	1.116	1.105	1.100	1.100	1.100	1.101	1.100	1.100
0.25	x -x	0.850	1.166	1.129	1.108	1.096	1.091	1.090	1.090	1.092	1.090	1.090
0.25	x -x	0.840	1.160	1.123	1.101	1.088	1.082	1.080	1.081	1.083	1.080	1.080
0.25	x -x	0.831	1.154	1.117	1.093	1.080	1.073	1.070	1.072	1.075	1.070	1.070
0.25	x -x	0.820	1.149	1.111	1.087	1.073	1.065	1.062	1.064	1.068	1.062	1.062
0.25	x -x	0.809	1.144	1.105	1.081	1.066	1.058	1.053	1.056	1.062	1.053	1.053
0.25	x -x	0.797	1.142	1.103	1.079	1.064	1.055	1.051	1.054	1.060	1.050	1.051
0.25	x -x	0.785	1.140	1.101	1.077	1.062	1.053	1.049	1.053	1.060	1.049	1.049
0.25	x -x	0.771	1.136	1.097	1.073	1.058	1.049	1.044	1.049	1.057	1.045	1.045
0.25	x -x	0.756	1.132	1.094	1.069	1.054	1.045	1.040	1.045	1.054	1.041	1.041
0.25	x -x	0.740	1.128	1.089	1.064	1.048	1.038	1.033	1.039	1.050	1.035	1.035
0.25	x -x	0.723	1.123	1.083	1.057	1.041	1.031	1.024	1.032	1.045	1.028	1.028
0.25	x -x	0.705	1.117	1.077	1.051	1.035	1.024	1.018	1.027	1.042	1.022	1.022
0.25	x -x	0.687	1.112	1.072	1.047	1.030	1.020	1.013	1.023	1.038	1.019	1.019
0.25	x -x	0.667	1.107	1.068	1.042	1.026	1.015	1.008	1.020	1.036	1.016	1.016
0.25	x -x	0.647	1.103	1.064	1.038	1.022	1.011	1.004	1.016	1.033	1.013	1.013
0.25	x -x	0.627	1.099	1.060	1.035	1.018	1.007	0.999	1.013	1.031	1.011	1.011
0.25	x -x	0.605	1.096	1.056	1.031	1.014	1.003	0.995	1.011	1.029	1.009	1.009

0.25	x -x	0.583	1.092	1.053	1.027	1.010	0.999	0.991	1.008	1.027	1.007	1.007
0.25	x -x	0.560	1.089	1.050	1.024	1.007	0.996	0.987	1.006	1.026	1.006	1.006
0.25	x -x	0.537	1.087	1.048	1.022	1.005	0.994	0.985	1.005	1.026	1.007	1.007
0.25	x -x	0.512	1.085	1.046	1.021	1.004	0.992	0.984	1.005	1.027	1.009	1.008
0.25	x -x	0.486	1.083	1.044	1.019	1.002	0.990	0.982	1.005	1.027	1.010	1.010
0.25	x -x	0.459	1.080	1.041	1.016	0.999	0.987	0.978	1.003	1.027	1.012	1.010
0.25	x -x	0.431	1.077	1.038	1.012	0.994	0.982	0.973	1.001	1.027	1.012	1.011
0.25	x -x	0.401	1.074	1.034	1.008	0.990	0.977	0.967	0.998	1.026	1.014	1.012
0.25	x -x	0.370	1.071	1.031	1.004	0.985	0.972	0.962	0.996	1.027	1.017	1.014
0.25	x -x	0.337	1.068	1.027	1.000	0.980	0.966	0.956	0.994	1.028	1.021	1.018
0.25	x -x	0.302	1.066	1.024	0.996	0.976	0.961	0.950	0.993	1.029	1.027	1.023
0.25	x -x	0.266	1.061	1.019	0.991	0.970	0.955	0.944	0.991	1.030	1.034	1.019
0.25	x -x	0.232	1.065	1.026	1.000	0.982	0.970	0.960	1.003	1.041	1.051	1.026
0.25	x -x	0.200	1.065	1.027	1.003	0.986	0.974	0.966	1.007	1.047	1.065	1.027
0.25	x -x	0.171	1.065	1.027	1.003	0.986	0.974	0.965	1.007	1.052	1.065	1.027
0.25	x -x	0.141	1.066	1.029	1.005	0.988	0.977	0.968	1.009	1.058	1.066	1.029
0.25	x -x	0.112	1.068	1.030	1.005	0.989	0.977	0.968	1.010	1.066	1.068	1.030
0.25	x -x	0.083	1.070	1.033	1.008	0.992	0.981	0.972	1.013	1.070	1.070	1.033
0.25	x -x	0.051	1.073	1.035	1.011	0.995	0.983	0.975	1.015	1.073	1.073	1.035
0.25	x -x	0.022	1.075	1.036	1.010	0.993	0.981	0.972	1.015	1.075	1.075	1.036
0.5	x -x	0.855	1.311	1.261	1.226	1.201	1.186	1.177	1.181	1.188	1.177	1.177
0.5	x -x	0.847	1.300	1.248	1.211	1.185	1.167	1.157	1.162	1.172	1.157	1.157
0.5	x -x	0.837	1.288	1.235	1.196	1.169	1.150	1.137	1.145	1.156	1.137	1.137
0.5	x -x	0.828	1.278	1.223	1.183	1.154	1.134	1.120	1.129	1.142	1.120	1.120
0.5	x -x	0.818	1.268	1.212	1.171	1.141	1.119	1.103	1.114	1.129	1.103	1.103
0.5	x -x	0.807	1.259	1.202	1.160	1.128	1.106	1.089	1.101	1.119	1.089	1.089
0.5	x -x	0.795	1.253	1.196	1.153	1.121	1.097	1.080	1.094	1.113	1.080	1.081
0.5	x -x	0.783	1.248	1.190	1.146	1.114	1.090	1.072	1.088	1.109	1.073	1.074
0.5	x -x	0.770	1.243	1.184	1.140	1.107	1.083	1.064	1.082	1.105	1.068	1.068
0.5	x -x	0.756	1.237	1.178	1.133	1.100	1.075	1.056	1.075	1.101	1.061	1.062
0.5	x -x	0.741	1.229	1.169	1.124	1.090	1.064	1.044	1.066	1.094	1.052	1.053
0.5	x -x	0.725	1.220	1.159	1.113	1.079	1.053	1.033	1.057	1.088	1.043	1.044
0.5	x -x	0.709	1.211	1.150	1.104	1.069	1.042	1.022	1.048	1.083	1.036	1.036
0.5	x -x	0.692	1.203	1.142	1.096	1.061	1.034	1.013	1.042	1.078	1.030	1.031
0.5	x -x	0.673	1.195	1.133	1.087	1.052	1.025	1.004	1.035	1.072	1.025	1.025
0.5	x -x	0.654	1.187	1.125	1.079	1.043	1.016	0.994	1.029	1.067	1.020	1.020
0.5	x -x	0.634	1.180	1.118	1.071	1.036	1.008	0.986	1.024	1.062	1.016	1.016
0.5	x -x	0.614	1.174	1.111	1.064	1.028	1.000	0.979	1.019	1.059	1.014	1.013
0.5	x -x	0.593	1.167	1.105	1.057	1.021	0.993	0.971	1.014	1.055	1.011	1.011
0.5	x -x	0.571	1.161	1.098	1.051	1.014	0.986	0.963	1.010	1.052	1.010	1.009
0.5	x -x	0.548	1.156	1.093	1.045	1.008	0.980	0.957	1.007	1.051	1.010	1.009
0.5	x -x	0.525	1.152	1.089	1.041	1.004	0.975	0.952	1.006	1.051	1.012	1.011
0.5	x -x	0.501	1.149	1.085	1.038	1.001	0.972	0.949	1.006	1.052	1.016	1.014
0.5	x -x	0.476	1.144	1.080	1.032	0.995	0.966	0.942	1.003	1.051	1.018	1.016
0.5	x -x	0.450	1.138	1.075	1.026	0.989	0.959	0.935	1.001	1.051	1.021	1.018
0.5	x -x	0.422	1.133	1.069	1.020	0.982	0.952	0.928	0.998	1.051	1.024	1.021
0.5	x -x	0.394	1.128	1.063	1.013	0.974	0.944	0.918	0.995	1.051	1.028	1.024
0.5	x -x	0.363	1.122	1.056	1.006	0.966	0.934	0.908	0.991	1.051	1.034	1.029
0.5	x -x	0.332	1.116	1.050	0.998	0.957	0.925	0.898	0.988	1.051	1.041	1.035
0.5	x -x	0.299	1.111	1.043	0.990	0.949	0.915	0.887	0.985	1.053	1.050	1.043
0.5	x -x	0.265	1.103	1.034	0.981	0.939	0.904	0.876	0.981	1.054	1.060	1.034
0.5	x -x	0.231	1.106	1.039	0.988	0.947	0.914	0.887	0.993	1.067	1.084	1.039
0.5	x -x	0.197	1.108	1.042	0.991	0.952	0.920	0.894	1.001	1.079	1.108	1.042
0.5	x -x	0.165	1.111	1.046	0.996	0.958	0.927	0.902	1.006	1.091	1.111	1.046
0.5	x -x	0.134	1.112	1.048	0.999	0.960	0.930	0.905	1.008	1.102	1.112	1.048
0.5	x -x	0.104	1.116	1.050	1.001	0.962	0.931	0.905	1.010	1.114	1.116	1.050
0.5	x -x	0.073	1.122	1.057	1.007	0.968	0.938	0.913	1.017	1.122	1.122	1.057

0.5	x -x	0.042	1.126	1.060	1.010	0.970	0.938	0.912	1.019	1.126	1.126	1.060
0.5	x -x	0.011	1.131	1.064	1.012	0.972	0.939	0.912	1.022	1.131	1.131	1.064
0.75	x -x	0.841	1.395	1.333	1.283	1.243	1.211	1.186	1.200	1.221	1.186	1.186
0.75	x -x	0.832	1.381	1.318	1.266	1.225	1.191	1.164	1.181	1.204	1.164	1.164
0.75	x -x	0.822	1.369	1.304	1.251	1.208	1.173	1.145	1.164	1.189	1.145	1.145
0.75	x -x	0.812	1.356	1.290	1.235	1.191	1.155	1.125	1.147	1.174	1.125	1.125
0.75	x -x	0.801	1.345	1.277	1.221	1.175	1.138	1.107	1.132	1.162	1.107	1.107
0.75	x -x	0.790	1.336	1.267	1.210	1.163	1.125	1.093	1.120	1.153	1.094	1.096
0.75	x -x	0.778	1.327	1.257	1.199	1.152	1.112	1.080	1.110	1.145	1.084	1.085
0.75	x -x	0.765	1.319	1.247	1.189	1.140	1.100	1.067	1.100	1.138	1.074	1.076
0.75	x -x	0.752	1.310	1.237	1.178	1.129	1.088	1.054	1.090	1.132	1.065	1.066
0.75	x -x	0.738	1.300	1.227	1.166	1.116	1.075	1.040	1.079	1.125	1.055	1.056
0.75	x -x	0.723	1.289	1.214	1.153	1.102	1.060	1.024	1.067	1.117	1.044	1.045
0.75	x -x	0.708	1.277	1.202	1.140	1.088	1.045	1.008	1.055	1.109	1.034	1.035
0.75	x -x	0.691	1.267	1.191	1.128	1.076	1.032	0.995	1.046	1.102	1.026	1.027
0.75	x -x	0.674	1.257	1.180	1.117	1.064	1.020	0.983	1.038	1.095	1.020	1.021
0.75	x -x	0.656	1.248	1.171	1.107	1.054	1.010	0.972	1.031	1.089	1.016	1.016
0.75	x -x	0.638	1.240	1.162	1.098	1.045	1.000	0.962	1.025	1.084	1.012	1.012
0.75	x -x	0.618	1.231	1.153	1.088	1.034	0.989	0.951	1.018	1.079	1.009	1.008
0.75	x -x	0.598	1.223	1.144	1.078	1.024	0.979	0.940	1.012	1.074	1.006	1.006
0.75	x -x	0.577	1.215	1.135	1.069	1.014	0.968	0.929	1.007	1.070	1.005	1.004
0.75	x -x	0.555	1.207	1.127	1.060	1.005	0.959	0.920	1.002	1.067	1.005	1.003
0.75	x -x	0.533	1.200	1.120	1.053	0.998	0.952	0.912	0.999	1.065	1.007	1.005
0.75	x -x	0.510	1.195	1.114	1.047	0.991	0.945	0.905	0.997	1.065	1.010	1.008
0.75	x -x	0.486	1.189	1.108	1.041	0.985	0.938	0.898	0.996	1.065	1.015	1.012
0.75	x -x	0.462	1.183	1.101	1.034	0.978	0.930	0.890	0.994	1.065	1.020	1.016
0.75	x -x	0.436	1.175	1.092	1.024	0.967	0.919	0.878	0.989	1.063	1.023	1.018
0.75	x -x	0.409	1.167	1.083	1.014	0.956	0.907	0.865	0.984	1.062	1.027	1.022
0.75	x -x	0.381	1.159	1.074	1.004	0.945	0.895	0.853	0.979	1.061	1.033	1.027
0.75	x -x	0.351	1.150	1.064	0.993	0.934	0.883	0.840	0.975	1.061	1.041	1.033
0.75	x -x	0.321	1.142	1.055	0.983	0.923	0.871	0.827	0.971	1.061	1.050	1.042
0.75	x -x	0.289	1.133	1.045	0.972	0.910	0.858	0.813	0.967	1.062	1.062	1.045
0.75	x -x	0.257	1.126	1.037	0.963	0.901	0.848	0.802	0.965	1.065	1.077	1.037
0.75	x -x	0.224	1.128	1.040	0.968	0.907	0.855	0.811	0.977	1.081	1.104	1.040
0.75	x -x	0.192	1.130	1.042	0.970	0.910	0.859	0.815	0.985	1.094	1.130	1.042
0.75	x -x	0.160	1.136	1.049	0.978	0.918	0.867	0.824	0.992	1.112	1.136	1.049
0.75	x -x	0.127	1.139	1.053	0.981	0.922	0.871	0.828	0.996	1.128	1.139	1.053
0.75	x -x	0.096	1.146	1.060	0.990	0.931	0.881	0.838	1.004	1.146	1.146	1.060
0.75	x -x	0.065	1.154	1.069	0.999	0.940	0.891	0.848	1.013	1.154	1.154	1.069
0.75	x -x	0.034	1.162	1.077	1.006	0.946	0.896	0.853	1.020	1.162	1.162	1.077
0.75	x -x	0.004	1.172	1.086	1.015	0.955	0.904	0.861	1.029	1.172	1.172	1.086
1	x -x	0.823	1.439	1.367	1.305	1.250	1.202	1.161	1.189	1.224	1.161	1.161
1	x -x	0.814	1.424	1.350	1.286	1.230	1.180	1.137	1.169	1.207	1.137	1.137
1	x -x	0.804	1.411	1.335	1.269	1.212	1.161	1.117	1.152	1.193	1.117	1.117
1	x -x	0.793	1.400	1.323	1.256	1.198	1.146	1.101	1.139	1.183	1.101	1.103
1	x -x	0.782	1.389	1.311	1.243	1.184	1.132	1.086	1.127	1.174	1.090	1.092
1	x -x	0.771	1.378	1.299	1.230	1.169	1.116	1.069	1.114	1.164	1.078	1.080
1	x -x	0.758	1.366	1.286	1.215	1.154	1.100	1.052	1.101	1.155	1.065	1.067
1	x -x	0.745	1.355	1.272	1.201	1.138	1.083	1.034	1.087	1.145	1.053	1.055
1	x -x	0.732	1.342	1.259	1.186	1.122	1.066	1.016	1.074	1.136	1.041	1.043
1	x -x	0.718	1.330	1.245	1.171	1.107	1.049	0.999	1.061	1.128	1.030	1.031
1	x -x	0.703	1.319	1.233	1.158	1.092	1.035	0.983	1.050	1.123	1.021	1.023
1	x -x	0.687	1.307	1.220	1.144	1.078	1.019	0.967	1.039	1.113	1.013	1.014
1	x -x	0.671	1.296	1.208	1.131	1.064	1.005	0.953	1.029	1.104	1.006	1.007
1	x -x	0.654	1.286	1.197	1.119	1.051	0.992	0.939	1.021	1.097	1.001	1.001
1	x -x	0.637	1.277	1.187	1.108	1.040	0.980	0.927	1.014	1.091	0.998	0.998
1	x -x	0.618	1.268	1.177	1.098	1.029	0.969	0.916	1.008	1.087	0.996	0.995

1	x -x	0.599	1.258	1.167	1.087	1.018	0.957	0.903	1.002	1.081	0.994	0.993
1	x -x	0.579	1.249	1.156	1.076	1.006	0.945	0.891	0.996	1.076	0.993	0.991
1	x -x	0.559	1.240	1.147	1.066	0.995	0.934	0.879	0.990	1.072	0.993	0.991
1	x -x	0.537	1.232	1.138	1.056	0.986	0.924	0.869	0.986	1.070	0.995	0.992
1	x -x	0.515	1.224	1.130	1.048	0.977	0.915	0.860	0.983	1.069	0.999	0.996
1	x -x	0.493	1.217	1.122	1.040	0.969	0.906	0.851	0.981	1.068	1.004	1.000
1	x -x	0.469	1.209	1.114	1.031	0.960	0.897	0.842	0.979	1.068	1.009	1.005
1	x -x	0.445	1.202	1.106	1.022	0.950	0.887	0.832	0.976	1.068	1.015	1.010
1	x -x	0.420	1.193	1.097	1.013	0.940	0.877	0.821	0.973	1.067	1.022	1.016
1	x -x	0.394	1.184	1.087	1.002	0.929	0.865	0.809	0.969	1.067	1.029	1.022
1	x -x	0.367	1.175	1.077	0.991	0.918	0.853	0.797	0.965	1.066	1.037	1.030
1	x -x	0.339	1.166	1.066	0.980	0.905	0.840	0.783	0.961	1.066	1.047	1.038
1	x -x	0.309	1.155	1.054	0.968	0.892	0.827	0.769	0.956	1.067	1.058	1.048
1	x -x	0.278	1.144	1.042	0.954	0.878	0.811	0.753	0.951	1.067	1.071	1.042
1	x -x	0.248	1.137	1.035	0.947	0.871	0.804	0.746	0.952	1.072	1.089	1.035
1	x -x	0.216	1.137	1.035	0.948	0.872	0.806	0.749	0.961	1.086	1.117	1.035
1	x -x	0.185	1.141	1.040	0.953	0.877	0.811	0.754	0.970	1.103	1.141	1.040
1	x -x	0.154	1.148	1.047	0.960	0.885	0.819	0.761	0.977	1.123	1.148	1.047
1	x -x	0.123	1.154	1.053	0.967	0.892	0.826	0.769	0.984	1.143	1.154	1.053
1	x -x	0.093	1.163	1.063	0.976	0.902	0.837	0.779	0.994	1.163	1.163	1.063
1	x -x	0.062	1.174	1.075	0.990	0.916	0.851	0.794	1.007	1.174	1.174	1.075
1	x -x	0.032	1.186	1.087	1.002	0.927	0.862	0.805	1.019	1.186	1.186	1.087
1	x -x	0.002	1.198	1.100	1.015	0.941	0.876	0.819	1.032	1.198	1.198	1.100
0.25	y -y	0.824	1.462	1.398	1.345	1.300	1.262	1.230	1.251	1.279	1.230	1.230
0.25	y -y	0.814	1.447	1.381	1.325	1.277	1.237	1.203	1.228	1.258	1.203	1.203
0.25	y -y	0.804	1.432	1.364	1.305	1.256	1.213	1.177	1.206	1.239	1.177	1.177
0.25	y -y	0.794	1.418	1.348	1.288	1.236	1.192	1.154	1.186	1.223	1.154	1.155
0.25	y -y	0.783	1.405	1.333	1.271	1.217	1.171	1.131	1.167	1.208	1.135	1.137
0.25	y -y	0.771	1.393	1.319	1.255	1.200	1.152	1.110	1.150	1.195	1.118	1.119
0.25	y -y	0.759	1.380	1.304	1.238	1.181	1.132	1.089	1.133	1.182	1.101	1.102
0.25	y -y	0.746	1.366	1.288	1.220	1.162	1.110	1.066	1.114	1.168	1.083	1.084
0.25	y -y	0.733	1.352	1.272	1.202	1.142	1.089	1.043	1.096	1.155	1.065	1.067
0.25	y -y	0.718	1.338	1.256	1.185	1.122	1.068	1.020	1.079	1.143	1.050	1.051
0.25	y -y	0.704	1.325	1.241	1.168	1.105	1.049	1.000	1.064	1.134	1.036	1.037
0.25	y -y	0.688	1.314	1.228	1.154	1.089	1.032	0.982	1.051	1.123	1.026	1.026
0.25	y -y	0.672	1.303	1.216	1.140	1.074	1.017	0.966	1.040	1.114	1.017	1.018
0.25	y -y	0.655	1.292	1.203	1.127	1.060	1.001	0.949	1.030	1.105	1.010	1.010
0.25	y -y	0.638	1.282	1.193	1.116	1.048	0.989	0.937	1.023	1.099	1.006	1.006
0.25	y -y	0.620	1.274	1.184	1.106	1.038	0.978	0.925	1.016	1.094	1.004	1.003
0.25	y -y	0.601	1.265	1.174	1.095	1.027	0.966	0.913	1.010	1.089	1.002	1.001
0.25	y -y	0.581	1.256	1.165	1.085	1.016	0.955	0.902	1.005	1.085	1.001	1.000
0.25	y -y	0.561	1.248	1.156	1.076	1.006	0.945	0.891	1.000	1.082	1.002	1.000
0.25	y -y	0.540	1.240	1.147	1.067	0.996	0.934	0.880	0.996	1.079	1.004	1.001
0.25	y -y	0.518	1.232	1.138	1.056	0.985	0.923	0.868	0.991	1.076	1.005	1.002
0.25	y -y	0.495	1.223	1.128	1.046	0.974	0.911	0.856	0.986	1.074	1.008	1.005
0.25	y -y	0.472	1.215	1.119	1.036	0.963	0.900	0.844	0.982	1.072	1.012	1.008
0.25	y -y	0.448	1.206	1.109	1.025	0.952	0.888	0.831	0.977	1.070	1.016	1.011
0.25	y -y	0.422	1.196	1.098	1.013	0.939	0.874	0.817	0.971	1.068	1.021	1.015
0.25	y -y	0.396	1.186	1.087	1.001	0.926	0.861	0.803	0.966	1.066	1.027	1.020
0.25	y -y	0.369	1.176	1.076	0.989	0.913	0.847	0.788	0.961	1.064	1.034	1.026
0.25	y -y	0.341	1.165	1.063	0.975	0.898	0.831	0.772	0.955	1.063	1.042	1.033
0.25	y -y	0.311	1.154	1.050	0.961	0.883	0.815	0.755	0.949	1.062	1.053	1.042
0.25	y -y	0.280	1.142	1.038	0.947	0.869	0.800	0.739	0.944	1.062	1.065	1.038
0.25	y -y	0.248	1.134	1.028	0.936	0.856	0.786	0.724	0.941	1.066	1.084	1.028
0.25	y -y	0.217	1.126	1.018	0.925	0.844	0.773	0.710	0.939	1.071	1.104	1.018
0.25	y -y	0.185	1.129	1.022	0.929	0.848	0.777	0.714	0.948	1.089	1.129	1.022
0.25	y -y	0.153	1.141	1.035	0.943	0.863	0.792	0.730	0.962	1.116	1.141	1.035

0.25	y -y	0.121	1.149	1.044	0.953	0.873	0.803	0.742	0.971	1.139	1.149	1.044
0.25	y -y	0.090	1.160	1.057	0.967	0.888	0.819	0.759	0.985	1.160	1.160	1.057
0.25	y -y	0.061	1.170	1.068	0.980	0.903	0.835	0.776	0.998	1.170	1.170	1.068
0.25	y -y	0.031	1.184	1.084	0.997	0.922	0.856	0.798	1.015	1.184	1.184	1.084
0.25	y -y	0.001	1.202	1.105	1.020	0.947	0.883	0.826	1.038	1.202	1.202	1.105
0.5	y -y	0.740	1.410	1.315	1.227	1.144	1.067	0.995	1.075	1.157	1.026	1.028
0.5	y -y	0.730	1.398	1.301	1.211	1.128	1.050	0.977	1.062	1.148	1.015	1.017
0.5	y -y	0.719	1.385	1.287	1.196	1.111	1.033	0.960	1.049	1.140	1.005	1.007
0.5	y -y	0.707	1.374	1.274	1.182	1.096	1.017	0.943	1.038	1.133	0.996	0.997
0.5	y -y	0.696	1.363	1.262	1.169	1.083	1.003	0.929	1.028	1.127	0.989	0.990
0.5	y -y	0.684	1.353	1.251	1.157	1.070	0.990	0.915	1.019	1.119	0.983	0.984
0.5	y -y	0.671	1.343	1.241	1.146	1.058	0.977	0.902	1.011	1.111	0.979	0.979
0.5	y -y	0.658	1.334	1.230	1.135	1.047	0.965	0.890	1.004	1.105	0.975	0.976
0.5	y -y	0.645	1.325	1.221	1.124	1.035	0.954	0.878	0.998	1.099	0.973	0.973
0.5	y -y	0.631	1.317	1.211	1.114	1.025	0.943	0.867	0.992	1.095	0.971	0.971
0.5	y -y	0.617	1.309	1.202	1.105	1.015	0.932	0.857	0.987	1.090	0.971	0.970
0.5	y -y	0.602	1.301	1.194	1.095	1.005	0.922	0.846	0.982	1.087	0.971	0.970
0.5	y -y	0.587	1.293	1.185	1.086	0.995	0.912	0.836	0.978	1.083	0.971	0.970
0.5	y -y	0.571	1.285	1.176	1.077	0.986	0.902	0.826	0.974	1.080	0.973	0.971
0.5	y -y	0.555	1.277	1.167	1.067	0.975	0.892	0.815	0.970	1.077	0.974	0.972
0.5	y -y	0.538	1.269	1.158	1.058	0.966	0.882	0.805	0.966	1.074	0.977	0.974
0.5	y -y	0.521	1.261	1.150	1.049	0.956	0.872	0.795	0.963	1.072	0.980	0.977
0.5	y -y	0.503	1.254	1.142	1.040	0.947	0.863	0.786	0.960	1.071	0.985	0.981
0.5	y -y	0.485	1.246	1.133	1.031	0.938	0.853	0.776	0.957	1.070	0.990	0.985
0.5	y -y	0.467	1.238	1.125	1.022	0.929	0.844	0.766	0.954	1.069	0.996	0.990
0.5	y -y	0.447	1.230	1.116	1.013	0.919	0.834	0.756	0.952	1.069	1.002	0.995
0.5	y -y	0.427	1.222	1.107	1.003	0.909	0.824	0.747	0.949	1.068	1.009	1.001
0.5	y -y	0.407	1.214	1.098	0.994	0.899	0.814	0.737	0.946	1.068	1.016	1.008
0.5	y -y	0.386	1.205	1.089	0.984	0.889	0.804	0.726	0.944	1.068	1.025	1.016
0.5	y -y	0.364	1.197	1.080	0.974	0.879	0.793	0.716	0.941	1.068	1.034	1.024
0.5	y -y	0.342	1.188	1.070	0.964	0.869	0.783	0.705	0.939	1.069	1.044	1.033
0.5	y -y	0.319	1.179	1.061	0.954	0.859	0.772	0.695	0.936	1.070	1.055	1.043
0.5	y -y	0.296	1.169	1.050	0.943	0.847	0.761	0.684	0.933	1.071	1.067	1.050
0.5	y -y	0.271	1.159	1.039	0.932	0.836	0.749	0.672	0.930	1.072	1.080	1.039
0.5	y -y	0.247	1.153	1.032	0.925	0.828	0.742	0.665	0.931	1.077	1.098	1.032
0.5	y -y	0.222	1.147	1.027	0.919	0.822	0.736	0.659	0.934	1.084	1.118	1.027
0.5	y -y	0.197	1.147	1.026	0.918	0.822	0.735	0.658	0.941	1.096	1.147	1.026
0.5	y -y	0.172	1.154	1.034	0.926	0.830	0.743	0.666	0.948	1.116	1.154	1.034
0.5	y -y	0.146	1.162	1.042	0.935	0.839	0.753	0.675	0.957	1.137	1.162	1.042
0.5	y -y	0.122	1.166	1.046	0.939	0.843	0.757	0.680	0.961	1.154	1.166	1.046
0.5	y -y	0.098	1.172	1.054	0.947	0.851	0.765	0.687	0.969	1.172	1.172	1.054
0.5	y -y	0.073	1.184	1.067	0.961	0.865	0.779	0.702	0.983	1.184	1.184	1.067
0.5	y -y	0.049	1.197	1.080	0.974	0.879	0.794	0.716	0.996	1.197	1.197	1.080
0.5	y -y	0.025	1.209	1.093	0.989	0.894	0.808	0.731	1.010	1.209	1.209	1.093
0.5	y -y	0.001	1.224	1.110	1.006	0.912	0.827	0.750	1.028	1.224	1.224	1.110
0.75	y -y	0.661	1.319	1.220	1.132	1.051	0.978	0.912	1.012	1.104	0.986	0.986
0.75	y -y	0.650	1.312	1.213	1.124	1.043	0.969	0.903	1.007	1.099	0.983	0.984
0.75	y -y	0.639	1.305	1.206	1.116	1.034	0.961	0.894	1.002	1.095	0.981	0.981
0.75	y -y	0.628	1.299	1.198	1.108	1.026	0.953	0.885	0.998	1.091	0.980	0.979
0.75	y -y	0.617	1.292	1.192	1.101	1.019	0.944	0.877	0.994	1.087	0.979	0.978
0.75	y -y	0.605	1.286	1.185	1.093	1.011	0.936	0.869	0.990	1.084	0.978	0.977
0.75	y -y	0.593	1.280	1.178	1.086	1.003	0.929	0.861	0.986	1.081	0.978	0.977
0.75	y -y	0.581	1.274	1.171	1.079	0.996	0.921	0.853	0.982	1.079	0.978	0.977
0.75	y -y	0.569	1.268	1.165	1.072	0.989	0.914	0.846	0.979	1.076	0.979	0.977
0.75	y -y	0.556	1.262	1.159	1.066	0.982	0.907	0.839	0.977	1.074	0.981	0.978
0.75	y -y	0.543	1.257	1.153	1.059	0.976	0.900	0.832	0.974	1.073	0.983	0.980
0.75	y -y	0.530	1.252	1.147	1.054	0.970	0.894	0.826	0.973	1.072	0.986	0.983

0.75	y -y	0.516	1.247	1.142	1.048	0.964	0.888	0.820	0.971	1.072	0.989	0.986
0.75	y -y	0.502	1.242	1.137	1.043	0.958	0.882	0.814	0.970	1.072	0.993	0.990
0.75	y -y	0.488	1.237	1.131	1.037	0.952	0.876	0.808	0.969	1.072	0.998	0.993
0.75	y -y	0.473	1.231	1.125	1.030	0.945	0.869	0.801	0.967	1.071	1.001	0.997
0.75	y -y	0.458	1.225	1.119	1.023	0.938	0.862	0.794	0.964	1.070	1.005	1.000
0.75	y -y	0.443	1.219	1.112	1.017	0.931	0.855	0.786	0.962	1.070	1.010	1.004
0.75	y -y	0.427	1.213	1.105	1.010	0.924	0.847	0.779	0.960	1.069	1.014	1.008
0.75	y -y	0.411	1.207	1.099	1.003	0.917	0.840	0.771	0.958	1.069	1.020	1.013
0.75	y -y	0.395	1.201	1.092	0.996	0.909	0.832	0.764	0.956	1.069	1.026	1.018
0.75	y -y	0.378	1.194	1.085	0.988	0.902	0.824	0.755	0.954	1.069	1.032	1.023
0.75	y -y	0.361	1.187	1.077	0.980	0.893	0.816	0.746	0.951	1.068	1.037	1.028
0.75	y -y	0.344	1.180	1.069	0.971	0.884	0.807	0.737	0.948	1.068	1.044	1.034
0.75	y -y	0.326	1.173	1.062	0.963	0.876	0.798	0.729	0.945	1.068	1.051	1.041
0.75	y -y	0.307	1.166	1.054	0.955	0.867	0.789	0.720	0.942	1.068	1.059	1.048
0.75	y -y	0.288	1.158	1.045	0.946	0.858	0.779	0.710	0.939	1.068	1.068	1.045
0.75	y -y	0.269	1.151	1.038	0.938	0.850	0.771	0.701	0.937	1.070	1.078	1.038
0.75	y -y	0.250	1.147	1.033	0.933	0.845	0.767	0.697	0.938	1.074	1.091	1.033
0.75	y -y	0.231	1.144	1.031	0.932	0.844	0.766	0.696	0.943	1.081	1.108	1.031
0.75	y -y	0.212	1.143	1.030	0.931	0.843	0.765	0.695	0.947	1.089	1.125	1.030
0.75	y -y	0.192	1.147	1.034	0.935	0.847	0.769	0.700	0.955	1.102	1.147	1.034
0.75	y -y	0.173	1.153	1.040	0.941	0.853	0.775	0.706	0.961	1.117	1.153	1.040
0.75	y -y	0.154	1.156	1.044	0.945	0.857	0.779	0.710	0.965	1.129	1.156	1.044
0.75	y -y	0.135	1.160	1.048	0.949	0.861	0.783	0.714	0.969	1.143	1.160	1.048
0.75	y -y	0.115	1.165	1.053	0.955	0.867	0.789	0.720	0.975	1.157	1.165	1.053
0.75	y -y	0.096	1.173	1.062	0.963	0.876	0.798	0.729	0.984	1.173	1.173	1.062
0.75	y -y	0.077	1.180	1.070	0.972	0.884	0.807	0.737	0.992	1.180	1.180	1.070
0.75	y -y	0.059	1.187	1.077	0.979	0.892	0.814	0.744	0.999	1.187	1.187	1.077
0.75	y -y	0.039	1.197	1.087	0.989	0.902	0.824	0.754	1.009	1.197	1.197	1.087
0.75	y -y	0.020	1.205	1.095	0.998	0.911	0.833	0.763	1.018	1.205	1.205	1.095
0.75	y -y	0.001	1.216	1.107	1.011	0.924	0.846	0.776	1.031	1.216	1.216	1.107
1	y -y	0.594	1.256	1.164	1.084	1.015	0.954	0.900	1.000	1.080	0.993	0.992
1	y -y	0.584	1.251	1.159	1.079	1.009	0.948	0.894	0.997	1.077	0.993	0.992
1	y -y	0.574	1.246	1.154	1.073	1.003	0.942	0.888	0.994	1.075	0.992	0.991
1	y -y	0.563	1.242	1.149	1.068	0.998	0.936	0.882	0.991	1.073	0.993	0.991
1	y -y	0.553	1.237	1.144	1.063	0.993	0.931	0.876	0.989	1.072	0.993	0.991
1	y -y	0.542	1.233	1.140	1.058	0.988	0.926	0.871	0.987	1.070	0.994	0.992
1	y -y	0.531	1.229	1.135	1.054	0.983	0.921	0.866	0.985	1.069	0.996	0.993
1	y -y	0.520	1.226	1.131	1.050	0.979	0.917	0.862	0.984	1.069	0.998	0.995
1	y -y	0.509	1.222	1.127	1.046	0.975	0.913	0.858	0.983	1.069	1.000	0.997
1	y -y	0.498	1.218	1.124	1.042	0.970	0.908	0.853	0.982	1.068	1.002	0.999
1	y -y	0.486	1.215	1.120	1.038	0.966	0.904	0.849	0.980	1.068	1.005	1.001
1	y -y	0.474	1.211	1.116	1.033	0.962	0.899	0.844	0.979	1.068	1.008	1.004
1	y -y	0.463	1.207	1.112	1.029	0.957	0.894	0.839	0.978	1.068	1.011	1.006
1	y -y	0.450	1.203	1.107	1.024	0.952	0.890	0.834	0.976	1.068	1.014	1.009
1	y -y	0.438	1.200	1.103	1.020	0.948	0.885	0.829	0.975	1.068	1.017	1.012
1	y -y	0.425	1.196	1.099	1.015	0.943	0.880	0.824	0.974	1.068	1.021	1.015
1	y -y	0.413	1.191	1.094	1.010	0.937	0.874	0.818	0.972	1.067	1.024	1.018
1	y -y	0.400	1.186	1.089	1.005	0.932	0.868	0.812	0.970	1.067	1.027	1.021
1	y -y	0.386	1.182	1.084	0.999	0.926	0.862	0.806	0.968	1.066	1.031	1.024
1	y -y	0.373	1.177	1.079	0.994	0.920	0.856	0.799	0.966	1.066	1.035	1.028
1	y -y	0.359	1.173	1.074	0.988	0.914	0.850	0.793	0.964	1.066	1.040	1.032
1	y -y	0.345	1.168	1.068	0.983	0.908	0.843	0.786	0.962	1.066	1.045	1.036
1	y -y	0.330	1.163	1.063	0.976	0.902	0.836	0.779	0.959	1.066	1.050	1.041
1	y -y	0.316	1.158	1.057	0.970	0.895	0.830	0.772	0.957	1.066	1.056	1.046
1	y -y	0.301	1.152	1.051	0.964	0.888	0.822	0.764	0.955	1.067	1.061	1.051
1	y -y	0.285	1.147	1.045	0.957	0.881	0.814	0.756	0.952	1.066	1.067	1.045
1	y -y	0.270	1.142	1.039	0.951	0.875	0.808	0.750	0.950	1.068	1.075	1.039

1	y -y	0.255	1.138	1.035	0.947	0.871	0.804	0.746	0.951	1.070	1.084	1.035
1	y -y	0.239	1.137	1.035	0.947	0.871	0.805	0.747	0.955	1.076	1.097	1.035
1	y -y	0.223	1.137	1.035	0.948	0.872	0.806	0.748	0.959	1.083	1.110	1.035
1	y -y	0.207	1.138	1.036	0.949	0.873	0.807	0.750	0.965	1.090	1.126	1.036
1	y -y	0.192	1.140	1.039	0.951	0.876	0.810	0.753	0.969	1.099	1.140	1.039
1	y -y	0.177	1.143	1.042	0.954	0.879	0.813	0.756	0.972	1.109	1.143	1.042
1	y -y	0.161	1.146	1.045	0.958	0.883	0.817	0.760	0.976	1.119	1.146	1.045
1	y -y	0.146	1.150	1.049	0.962	0.887	0.821	0.764	0.980	1.129	1.150	1.049
1	y -y	0.130	1.153	1.052	0.966	0.891	0.825	0.768	0.983	1.139	1.153	1.052
1	y -y	0.115	1.156	1.055	0.969	0.894	0.828	0.771	0.986	1.149	1.156	1.055
1	y -y	0.100	1.160	1.060	0.973	0.899	0.833	0.776	0.991	1.160	1.160	1.060
1	y -y	0.085	1.166	1.066	0.980	0.906	0.841	0.784	0.998	1.166	1.166	1.066
1	y -y	0.069	1.171	1.072	0.987	0.912	0.848	0.791	1.004	1.171	1.171	1.072
1	y -y	0.054	1.177	1.078	0.992	0.918	0.853	0.796	1.010	1.177	1.177	1.078
1	y -y	0.039	1.183	1.084	0.998	0.924	0.859	0.802	1.016	1.183	1.183	1.084
1	y -y	0.024	1.189	1.090	1.005	0.930	0.865	0.808	1.022	1.189	1.189	1.090
1	y -y	0.009	1.195	1.097	1.011	0.937	0.872	0.815	1.029	1.195	1.195	1.097

Tabla C.15 Valores de r_2 de la sección 19 (40 cm x 80 cm con ρ = 0.03 y f_c' = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.888	1.450	1.470	1.508	1.560	1.624	1.697	1.670	1.629	1.697	1.697
0.25	x -x	0.875	1.402	1.412	1.439	1.479	1.529	1.587	1.562	1.527	1.587	1.587
0.25	x -x	0.861	1.362	1.364	1.382	1.413	1.453	1.500	1.476	1.446	1.500	1.500
0.25	x -x	0.845	1.330	1.326	1.338	1.362	1.393	1.432	1.409	1.384	1.432	1.432
0.25	x -x	0.829	1.303	1.293	1.299	1.317	1.342	1.373	1.352	1.330	1.373	1.373
0.25	x -x	0.810	1.276	1.262	1.263	1.276	1.295	1.320	1.301	1.283	1.320	1.320
0.25	x -x	0.791	1.251	1.234	1.232	1.241	1.256	1.276	1.259	1.244	1.276	1.275
0.25	x -x	0.771	1.229	1.210	1.206	1.212	1.224	1.241	1.225	1.213	1.238	1.237
0.25	x -x	0.751	1.210	1.190	1.184	1.188	1.198	1.213	1.197	1.187	1.207	1.207
0.25	x -x	0.730	1.195	1.173	1.166	1.169	1.177	1.189	1.175	1.167	1.182	1.182
0.25	x -x	0.709	1.183	1.161	1.154	1.155	1.162	1.173	1.160	1.154	1.165	1.165
0.25	x -x	0.687	1.171	1.149	1.141	1.141	1.148	1.157	1.145	1.140	1.148	1.148
0.25	x -x	0.664	1.162	1.139	1.130	1.130	1.135	1.143	1.132	1.129	1.134	1.134
0.25	x -x	0.642	1.154	1.131	1.121	1.120	1.125	1.132	1.122	1.120	1.123	1.123
0.25	x -x	0.619	1.146	1.122	1.112	1.110	1.114	1.120	1.111	1.111	1.112	1.112
0.25	x -x	0.595	1.138	1.114	1.102	1.099	1.102	1.107	1.100	1.102	1.100	1.100
0.25	x -x	0.571	1.132	1.107	1.095	1.091	1.093	1.097	1.091	1.095	1.091	1.091
0.25	x -x	0.546	1.126	1.101	1.088	1.083	1.084	1.087	1.083	1.089	1.083	1.083
0.25	x -x	0.520	1.121	1.094	1.080	1.075	1.074	1.076	1.075	1.083	1.076	1.076
0.25	x -x	0.494	1.116	1.088	1.074	1.067	1.066	1.067	1.068	1.078	1.070	1.069
0.25	x -x	0.467	1.112	1.083	1.068	1.060	1.057	1.058	1.062	1.074	1.065	1.064
0.25	x -x	0.440	1.107	1.077	1.061	1.052	1.049	1.048	1.055	1.069	1.060	1.059
0.25	x -x	0.411	1.102	1.071	1.054	1.044	1.039	1.038	1.048	1.065	1.056	1.055
0.25	x -x	0.381	1.097	1.065	1.047	1.037	1.031	1.028	1.042	1.061	1.054	1.052
0.25	x -x	0.353	1.096	1.067	1.049	1.040	1.035	1.034	1.046	1.065	1.060	1.058
0.25	x -x	0.325	1.096	1.067	1.050	1.041	1.037	1.036	1.048	1.068	1.065	1.063
0.25	x -x	0.298	1.094	1.064	1.046	1.036	1.031	1.029	1.045	1.068	1.067	1.064
0.25	x -x	0.272	1.094	1.063	1.046	1.036	1.031	1.029	1.046	1.071	1.072	1.063
0.25	x -x	0.244	1.095	1.065	1.047	1.038	1.033	1.031	1.048	1.075	1.080	1.065
0.25	x -x	0.217	1.094	1.062	1.044	1.033	1.027	1.024	1.046	1.076	1.086	1.062
0.25	x -x	0.190	1.095	1.063	1.044	1.032	1.026	1.023	1.047	1.081	1.095	1.063
0.25	x -x	0.162	1.097	1.065	1.045	1.034	1.027	1.024	1.049	1.087	1.097	1.065
0.25	x -x	0.135	1.099	1.064	1.042	1.028	1.020	1.015	1.045	1.093	1.099	1.064
0.25	x -x	0.108	1.103	1.066	1.043	1.029	1.020	1.015	1.047	1.101	1.103	1.066

0.25	x -x	0.079	1.108	1.070	1.046	1.031	1.021	1.015	1.051	1.108	1.108	1.070
0.25	x -x	0.051	1.113	1.071	1.043	1.025	1.012	1.004	1.048	1.113	1.113	1.071
0.25	x -x	0.024	1.120	1.076	1.047	1.027	1.013	1.004	1.052	1.120	1.120	1.076
0.5	x -x	0.895	1.869	1.933	2.019	2.129	2.259	2.410	2.361	2.276	2.410	2.410
0.5	x -x	0.882	1.771	1.813	1.875	1.956	2.054	2.170	2.124	2.056	2.170	2.170
0.5	x -x	0.869	1.691	1.715	1.758	1.817	1.892	1.980	1.938	1.884	1.980	1.980
0.5	x -x	0.854	1.625	1.636	1.664	1.707	1.764	1.833	1.795	1.751	1.833	1.833
0.5	x -x	0.838	1.570	1.570	1.587	1.618	1.661	1.714	1.680	1.645	1.714	1.714
0.5	x -x	0.822	1.519	1.509	1.515	1.535	1.566	1.606	1.577	1.550	1.606	1.606
0.5	x -x	0.804	1.472	1.454	1.452	1.463	1.485	1.514	1.490	1.470	1.514	1.514
0.5	x -x	0.785	1.431	1.407	1.399	1.403	1.417	1.439	1.419	1.406	1.437	1.436
0.5	x -x	0.766	1.396	1.367	1.354	1.353	1.362	1.377	1.362	1.354	1.373	1.373
0.5	x -x	0.746	1.365	1.333	1.316	1.311	1.316	1.327	1.315	1.311	1.322	1.321
0.5	x -x	0.725	1.339	1.304	1.285	1.277	1.278	1.286	1.278	1.279	1.281	1.281
0.5	x -x	0.704	1.318	1.282	1.260	1.251	1.250	1.255	1.249	1.254	1.251	1.251
0.5	x -x	0.682	1.299	1.261	1.239	1.227	1.225	1.228	1.225	1.233	1.225	1.225
0.5	x -x	0.659	1.282	1.242	1.218	1.206	1.201	1.203	1.202	1.213	1.201	1.201
0.5	x -x	0.637	1.267	1.226	1.201	1.187	1.181	1.181	1.184	1.197	1.182	1.182
0.5	x -x	0.614	1.253	1.211	1.185	1.169	1.162	1.160	1.166	1.182	1.165	1.165
0.5	x -x	0.590	1.240	1.197	1.169	1.152	1.143	1.140	1.150	1.168	1.149	1.148
0.5	x -x	0.566	1.230	1.185	1.156	1.138	1.128	1.123	1.137	1.158	1.137	1.136
0.5	x -x	0.541	1.219	1.174	1.143	1.124	1.112	1.106	1.124	1.147	1.126	1.125
0.5	x -x	0.516	1.209	1.162	1.131	1.110	1.097	1.089	1.111	1.138	1.115	1.115
0.5	x -x	0.490	1.200	1.152	1.119	1.096	1.081	1.072	1.100	1.129	1.107	1.106
0.5	x -x	0.464	1.191	1.141	1.106	1.082	1.066	1.055	1.088	1.122	1.099	1.098
0.5	x -x	0.436	1.182	1.130	1.093	1.067	1.049	1.036	1.077	1.114	1.093	1.091
0.5	x -x	0.408	1.173	1.119	1.081	1.053	1.032	1.018	1.066	1.107	1.088	1.085
0.5	x -x	0.379	1.163	1.108	1.067	1.038	1.016	0.999	1.055	1.100	1.084	1.081
0.5	x -x	0.351	1.162	1.107	1.067	1.038	1.016	1.000	1.057	1.104	1.093	1.089
0.5	x -x	0.322	1.161	1.106	1.066	1.037	1.016	1.000	1.060	1.110	1.103	1.098
0.5	x -x	0.294	1.161	1.106	1.065	1.036	1.013	0.997	1.062	1.115	1.114	1.106
0.5	x -x	0.266	1.163	1.107	1.066	1.036	1.014	0.997	1.066	1.122	1.127	1.107
0.5	x -x	0.238	1.163	1.105	1.063	1.031	1.008	0.990	1.066	1.127	1.139	1.105
0.5	x -x	0.210	1.162	1.103	1.059	1.026	1.001	0.982	1.066	1.132	1.153	1.103
0.5	x -x	0.181	1.166	1.107	1.062	1.029	1.004	0.984	1.071	1.144	1.166	1.107
0.5	x -x	0.154	1.171	1.109	1.062	1.027	0.999	0.978	1.071	1.155	1.171	1.109
0.5	x -x	0.126	1.176	1.112	1.063	1.025	0.996	0.972	1.073	1.168	1.176	1.112
0.5	x -x	0.097	1.186	1.121	1.071	1.033	1.002	0.978	1.081	1.186	1.186	1.121
0.5	x -x	0.069	1.195	1.127	1.075	1.033	1.000	0.973	1.085	1.195	1.195	1.127
0.5	x -x	0.041	1.205	1.135	1.079	1.035	0.999	0.970	1.090	1.205	1.205	1.135
0.5	x -x	0.012	1.223	1.151	1.094	1.048	1.011	0.980	1.105	1.223	1.223	1.151
0.75	x -x	0.895	2.171	2.269	2.390	2.534	2.702	2.896	2.834	2.726	2.896	2.896
0.75	x -x	0.883	2.037	2.102	2.187	2.290	2.412	2.553	2.498	2.415	2.553	2.553
0.75	x -x	0.870	1.926	1.967	2.024	2.096	2.184	2.287	2.239	2.176	2.287	2.287
0.75	x -x	0.856	1.836	1.857	1.893	1.943	2.005	2.080	2.039	1.991	2.080	2.080
0.75	x -x	0.841	1.761	1.767	1.787	1.819	1.862	1.916	1.882	1.847	1.916	1.916
0.75	x -x	0.825	1.694	1.687	1.693	1.711	1.739	1.776	1.750	1.725	1.776	1.776
0.75	x -x	0.809	1.634	1.616	1.611	1.617	1.632	1.656	1.637	1.622	1.656	1.656
0.75	x -x	0.791	1.581	1.554	1.540	1.537	1.542	1.556	1.544	1.537	1.556	1.555
0.75	x -x	0.773	1.535	1.501	1.480	1.469	1.468	1.473	1.468	1.469	1.472	1.472
0.75	x -x	0.754	1.495	1.455	1.428	1.412	1.404	1.404	1.405	1.413	1.403	1.403
0.75	x -x	0.734	1.460	1.416	1.384	1.364	1.351	1.346	1.353	1.367	1.348	1.348
0.75	x -x	0.714	1.431	1.383	1.348	1.323	1.307	1.298	1.310	1.331	1.304	1.304
0.75	x -x	0.693	1.405	1.354	1.316	1.289	1.270	1.258	1.275	1.302	1.268	1.268
0.75	x -x	0.671	1.381	1.328	1.287	1.258	1.237	1.223	1.245	1.275	1.237	1.238
0.75	x -x	0.649	1.360	1.305	1.263	1.231	1.209	1.193	1.220	1.253	1.213	1.213
0.75	x -x	0.626	1.340	1.283	1.239	1.206	1.182	1.164	1.197	1.232	1.191	1.191

0.75	x -x	0.603	1.322	1.263	1.217	1.182	1.156	1.136	1.174	1.213	1.171	1.170
0.75	x -x	0.579	1.306	1.245	1.197	1.161	1.133	1.112	1.156	1.197	1.154	1.154
0.75	x -x	0.555	1.291	1.229	1.180	1.142	1.112	1.090	1.140	1.184	1.142	1.141
0.75	x -x	0.530	1.277	1.213	1.162	1.122	1.091	1.067	1.124	1.171	1.129	1.128
0.75	x -x	0.505	1.264	1.197	1.145	1.104	1.071	1.045	1.109	1.160	1.119	1.118
0.75	x -x	0.479	1.252	1.184	1.129	1.086	1.052	1.024	1.096	1.151	1.112	1.110
0.75	x -x	0.453	1.239	1.169	1.113	1.068	1.032	1.002	1.082	1.141	1.105	1.102
0.75	x -x	0.425	1.226	1.154	1.096	1.049	1.010	0.979	1.068	1.132	1.099	1.096
0.75	x -x	0.398	1.214	1.139	1.079	1.030	0.989	0.956	1.055	1.123	1.096	1.091
0.75	x -x	0.370	1.202	1.126	1.064	1.014	0.972	0.937	1.045	1.118	1.096	1.090
0.75	x -x	0.341	1.199	1.123	1.061	1.011	0.969	0.934	1.047	1.122	1.107	1.101
0.75	x -x	0.313	1.200	1.123	1.061	1.010	0.967	0.932	1.052	1.131	1.124	1.116
0.75	x -x	0.285	1.201	1.124	1.061	1.009	0.966	0.930	1.058	1.140	1.141	1.124
0.75	x -x	0.257	1.206	1.128	1.065	1.013	0.970	0.934	1.067	1.153	1.163	1.128
0.75	x -x	0.229	1.207	1.129	1.064	1.011	0.967	0.929	1.072	1.163	1.183	1.129
0.75	x -x	0.200	1.210	1.131	1.066	1.013	0.968	0.930	1.079	1.175	1.205	1.131
0.75	x -x	0.173	1.216	1.136	1.070	1.015	0.969	0.930	1.083	1.190	1.216	1.136
0.75	x -x	0.145	1.223	1.142	1.074	1.018	0.970	0.929	1.088	1.206	1.223	1.142
0.75	x -x	0.117	1.233	1.151	1.082	1.024	0.975	0.933	1.096	1.226	1.233	1.151
0.75	x -x	0.090	1.244	1.161	1.091	1.032	0.982	0.938	1.105	1.244	1.244	1.161
0.75	x -x	0.062	1.256	1.172	1.100	1.038	0.986	0.940	1.114	1.256	1.256	1.172
0.75	x -x	0.034	1.273	1.188	1.115	1.052	0.998	0.951	1.130	1.273	1.273	1.188
0.75	x -x	0.008	1.295	1.209	1.135	1.070	1.014	0.965	1.150	1.295	1.295	1.209
1	x -x	0.891	2.320	2.428	2.553	2.695	2.858	3.041	2.978	2.874	3.041	3.041
1	x -x	0.879	2.177	2.249	2.334	2.434	2.548	2.677	2.624	2.547	2.677	2.677
1	x -x	0.866	2.054	2.098	2.153	2.219	2.296	2.385	2.342	2.287	2.385	2.385
1	x -x	0.853	1.954	1.976	2.008	2.049	2.100	2.160	2.126	2.087	2.160	2.160
1	x -x	0.838	1.870	1.875	1.888	1.910	1.940	1.978	1.954	1.929	1.978	1.978
1	x -x	0.823	1.795	1.785	1.783	1.789	1.802	1.823	1.808	1.795	1.823	1.823
1	x -x	0.807	1.728	1.705	1.691	1.684	1.684	1.691	1.685	1.683	1.691	1.691
1	x -x	0.791	1.668	1.635	1.611	1.594	1.584	1.579	1.583	1.591	1.579	1.579
1	x -x	0.773	1.617	1.576	1.543	1.518	1.500	1.487	1.499	1.516	1.489	1.489
1	x -x	0.755	1.572	1.524	1.485	1.453	1.428	1.409	1.429	1.454	1.414	1.415
1	x -x	0.737	1.533	1.479	1.434	1.397	1.367	1.343	1.371	1.404	1.354	1.355
1	x -x	0.717	1.500	1.442	1.393	1.352	1.318	1.290	1.325	1.365	1.307	1.308
1	x -x	0.697	1.471	1.409	1.357	1.312	1.275	1.244	1.286	1.334	1.269	1.269
1	x -x	0.677	1.445	1.380	1.324	1.277	1.238	1.205	1.253	1.304	1.237	1.237
1	x -x	0.656	1.421	1.353	1.295	1.247	1.205	1.170	1.225	1.279	1.211	1.211
1	x -x	0.634	1.400	1.330	1.270	1.220	1.177	1.140	1.202	1.258	1.190	1.190
1	x -x	0.611	1.380	1.308	1.246	1.194	1.149	1.111	1.179	1.239	1.171	1.171
1	x -x	0.588	1.359	1.285	1.221	1.167	1.121	1.082	1.157	1.219	1.153	1.152
1	x -x	0.565	1.342	1.265	1.200	1.145	1.097	1.056	1.139	1.204	1.140	1.139
1	x -x	0.540	1.325	1.246	1.180	1.123	1.074	1.032	1.122	1.190	1.129	1.127
1	x -x	0.516	1.308	1.228	1.159	1.101	1.051	1.007	1.106	1.177	1.119	1.116
1	x -x	0.491	1.293	1.211	1.141	1.081	1.029	0.984	1.092	1.166	1.111	1.108
1	x -x	0.465	1.278	1.194	1.123	1.061	1.008	0.962	1.078	1.155	1.106	1.102
1	x -x	0.439	1.264	1.178	1.104	1.041	0.986	0.939	1.065	1.146	1.101	1.097
1	x -x	0.413	1.249	1.161	1.085	1.021	0.964	0.915	1.051	1.137	1.098	1.092
1	x -x	0.385	1.236	1.146	1.069	1.002	0.944	0.894	1.040	1.130	1.098	1.092
1	x -x	0.358	1.225	1.134	1.056	0.989	0.931	0.880	1.034	1.128	1.104	1.096
1	x -x	0.331	1.221	1.130	1.052	0.984	0.926	0.875	1.036	1.133	1.118	1.109
1	x -x	0.303	1.225	1.133	1.054	0.987	0.927	0.876	1.046	1.146	1.141	1.131
1	x -x	0.276	1.228	1.136	1.056	0.988	0.928	0.876	1.054	1.159	1.163	1.136
1	x -x	0.249	1.232	1.140	1.060	0.991	0.931	0.878	1.065	1.173	1.188	1.140
1	x -x	0.221	1.237	1.144	1.064	0.995	0.934	0.881	1.076	1.189	1.215	1.144
1	x -x	0.194	1.240	1.147	1.066	0.996	0.935	0.880	1.083	1.202	1.240	1.147
1	x -x	0.167	1.248	1.154	1.073	1.002	0.940	0.885	1.090	1.220	1.248	1.154

1	x -x	0.140	1.258	1.164	1.083	1.011	0.948	0.892	1.099	1.242	1.258	1.164
1	x -x	0.113	1.269	1.175	1.093	1.021	0.956	0.899	1.110	1.264	1.269	1.175
1	x -x	0.087	1.283	1.189	1.106	1.033	0.968	0.910	1.123	1.283	1.283	1.189
1	x -x	0.060	1.298	1.205	1.121	1.047	0.981	0.922	1.138	1.298	1.298	1.205
1	x -x	0.035	1.315	1.221	1.138	1.063	0.996	0.936	1.155	1.315	1.315	1.221
1	x -x	0.010	1.338	1.245	1.162	1.087	1.019	0.958	1.179	1.338	1.338	1.245
0.25	y -y	0.890	2.292	2.399	2.525	2.671	2.838	3.027	2.961	2.853	3.027	3.027
0.25	y -y	0.878	2.155	2.227	2.315	2.417	2.535	2.670	2.614	2.533	2.670	2.670
0.25	y -y	0.865	2.040	2.085	2.142	2.212	2.294	2.389	2.342	2.283	2.389	2.389
0.25	y -y	0.852	1.946	1.971	2.006	2.051	2.107	2.173	2.136	2.093	2.173	2.173
0.25	y -y	0.838	1.868	1.876	1.894	1.921	1.958	2.003	1.974	1.944	2.003	2.003
0.25	y -y	0.823	1.798	1.791	1.795	1.807	1.827	1.855	1.835	1.816	1.855	1.855
0.25	y -y	0.807	1.732	1.714	1.705	1.704	1.710	1.724	1.713	1.705	1.724	1.724
0.25	y -y	0.791	1.675	1.646	1.626	1.614	1.610	1.612	1.610	1.613	1.612	1.612
0.25	y -y	0.774	1.625	1.587	1.559	1.539	1.526	1.519	1.525	1.537	1.520	1.520
0.25	y -y	0.756	1.580	1.536	1.501	1.474	1.454	1.440	1.454	1.474	1.443	1.444
0.25	y -y	0.737	1.542	1.491	1.450	1.418	1.392	1.373	1.395	1.423	1.381	1.382
0.25	y -y	0.718	1.509	1.453	1.408	1.371	1.341	1.318	1.347	1.383	1.332	1.332
0.25	y -y	0.698	1.479	1.420	1.371	1.330	1.296	1.269	1.306	1.350	1.290	1.291
0.25	y -y	0.678	1.450	1.387	1.334	1.290	1.254	1.224	1.268	1.316	1.253	1.253
0.25	y -y	0.656	1.424	1.357	1.301	1.254	1.215	1.182	1.234	1.286	1.220	1.221
0.25	y -y	0.634	1.400	1.331	1.272	1.223	1.181	1.146	1.205	1.260	1.194	1.194
0.25	y -y	0.612	1.378	1.306	1.245	1.194	1.150	1.112	1.179	1.238	1.172	1.171
0.25	y -y	0.589	1.357	1.282	1.219	1.166	1.120	1.081	1.156	1.217	1.152	1.151
0.25	y -y	0.565	1.339	1.262	1.197	1.142	1.095	1.054	1.137	1.201	1.137	1.136
0.25	y -y	0.541	1.322	1.243	1.176	1.119	1.070	1.028	1.119	1.186	1.125	1.123
0.25	y -y	0.516	1.305	1.224	1.155	1.096	1.046	1.002	1.101	1.172	1.114	1.111
0.25	y -y	0.491	1.288	1.205	1.135	1.074	1.022	0.976	1.085	1.160	1.105	1.101
0.25	y -y	0.466	1.273	1.188	1.115	1.053	0.999	0.951	1.070	1.148	1.098	1.094
0.25	y -y	0.439	1.257	1.170	1.095	1.031	0.975	0.927	1.055	1.138	1.092	1.087
0.25	y -y	0.413	1.242	1.152	1.075	1.009	0.952	0.902	1.040	1.128	1.088	1.083
0.25	y -y	0.385	1.228	1.136	1.057	0.990	0.930	0.879	1.028	1.120	1.088	1.081
0.25	y -y	0.357	1.214	1.120	1.039	0.968	0.907	0.853	1.016	1.113	1.089	1.081
0.25	y -y	0.330	1.204	1.108	1.025	0.953	0.890	0.835	1.009	1.112	1.096	1.087
0.25	y -y	0.302	1.209	1.113	1.030	0.959	0.896	0.841	1.021	1.127	1.121	1.111
0.25	y -y	0.275	1.217	1.122	1.040	0.968	0.906	0.851	1.038	1.146	1.151	1.122
0.25	y -y	0.247	1.223	1.129	1.047	0.976	0.914	0.860	1.052	1.164	1.179	1.129
0.25	y -y	0.220	1.229	1.135	1.053	0.983	0.921	0.866	1.065	1.180	1.207	1.135
0.25	y -y	0.193	1.238	1.145	1.064	0.994	0.932	0.877	1.080	1.200	1.238	1.145
0.25	y -y	0.168	1.246	1.154	1.074	1.004	0.943	0.889	1.090	1.219	1.246	1.154
0.25	y -y	0.143	1.256	1.165	1.086	1.017	0.957	0.904	1.102	1.239	1.256	1.165
0.25	y -y	0.118	1.270	1.180	1.102	1.035	0.975	0.923	1.118	1.263	1.270	1.180
0.25	y -y	0.094	1.283	1.194	1.117	1.049	0.990	0.938	1.133	1.283	1.283	1.194
0.25	y -y	0.070	1.295	1.206	1.129	1.061	1.001	0.948	1.145	1.295	1.295	1.206
0.25	y -y	0.047	1.311	1.222	1.144	1.076	1.015	0.961	1.160	1.311	1.311	1.222
0.25	y -y	0.025	1.326	1.237	1.160	1.091	1.030	0.976	1.176	1.326	1.326	1.237
0.25	y -y	0.002	1.343	1.256	1.179	1.111	1.051	0.997	1.195	1.343	1.343	1.256
0.5	y -y	0.851	2.092	2.111	2.130	2.150	2.169	2.189	2.178	2.165	2.189	2.189
0.5	y -y	0.840	2.016	2.020	2.023	2.026	2.030	2.033	2.031	2.029	2.033	2.033
0.5	y -y	0.829	1.947	1.936	1.926	1.916	1.906	1.895	1.902	1.910	1.895	1.895
0.5	y -y	0.817	1.883	1.860	1.838	1.816	1.794	1.772	1.788	1.805	1.772	1.772
0.5	y -y	0.804	1.825	1.792	1.759	1.727	1.696	1.665	1.690	1.716	1.665	1.665
0.5	y -y	0.791	1.773	1.731	1.690	1.650	1.611	1.572	1.605	1.640	1.573	1.575
0.5	y -y	0.778	1.726	1.676	1.628	1.581	1.535	1.491	1.532	1.574	1.496	1.498
0.5	y -y	0.764	1.685	1.628	1.573	1.520	1.469	1.419	1.469	1.518	1.432	1.434
0.5	y -y	0.750	1.647	1.585	1.524	1.467	1.411	1.357	1.414	1.471	1.376	1.378
0.5	y -y	0.735	1.612	1.545	1.479	1.417	1.357	1.300	1.365	1.430	1.328	1.329

0.5	y -y	0.720	1.582	1.509	1.440	1.374	1.311	1.251	1.324	1.396	1.287	1.289
0.5	y -y	0.705	1.555	1.478	1.406	1.336	1.271	1.208	1.289	1.368	1.254	1.256
0.5	y -y	0.689	1.529	1.449	1.373	1.302	1.234	1.169	1.257	1.340	1.225	1.226
0.5	y -y	0.672	1.505	1.422	1.344	1.269	1.199	1.133	1.229	1.314	1.200	1.201
0.5	y -y	0.655	1.484	1.398	1.317	1.240	1.168	1.101	1.204	1.292	1.179	1.179
0.5	y -y	0.638	1.464	1.376	1.292	1.214	1.141	1.072	1.183	1.273	1.162	1.162
0.5	y -y	0.620	1.445	1.354	1.269	1.189	1.114	1.044	1.163	1.255	1.147	1.146
0.5	y -y	0.602	1.427	1.334	1.247	1.165	1.089	1.018	1.145	1.239	1.134	1.133
0.5	y -y	0.584	1.410	1.315	1.226	1.143	1.066	0.994	1.129	1.225	1.124	1.122
0.5	y -y	0.565	1.395	1.298	1.207	1.123	1.045	0.972	1.115	1.213	1.116	1.114
0.5	y -y	0.545	1.379	1.281	1.189	1.104	1.025	0.951	1.102	1.202	1.110	1.107
0.5	y -y	0.525	1.364	1.264	1.171	1.085	1.005	0.931	1.089	1.191	1.105	1.101
0.5	y -y	0.505	1.350	1.248	1.154	1.066	0.986	0.911	1.078	1.182	1.101	1.097
0.5	y -y	0.484	1.336	1.232	1.137	1.049	0.968	0.893	1.067	1.174	1.099	1.094
0.5	y -y	0.463	1.321	1.216	1.119	1.030	0.948	0.873	1.056	1.165	1.097	1.091
0.5	y -y	0.441	1.306	1.199	1.101	1.011	0.929	0.853	1.045	1.157	1.095	1.089
0.5	y -y	0.419	1.290	1.182	1.083	0.992	0.908	0.832	1.033	1.148	1.094	1.087
0.5	y -y	0.396	1.275	1.165	1.065	0.973	0.889	0.813	1.023	1.141	1.095	1.087
0.5	y -y	0.373	1.262	1.152	1.050	0.958	0.874	0.797	1.015	1.137	1.100	1.091
0.5	y -y	0.351	1.251	1.138	1.036	0.944	0.859	0.782	1.009	1.133	1.106	1.096
0.5	y -y	0.328	1.244	1.131	1.028	0.935	0.851	0.774	1.008	1.136	1.118	1.107
0.5	y -y	0.305	1.246	1.133	1.031	0.938	0.853	0.776	1.018	1.148	1.140	1.128
0.5	y -y	0.283	1.250	1.138	1.036	0.943	0.859	0.782	1.031	1.164	1.166	1.138
0.5	y -y	0.260	1.256	1.144	1.042	0.950	0.865	0.788	1.044	1.180	1.192	1.144
0.5	y -y	0.238	1.262	1.151	1.049	0.957	0.873	0.796	1.059	1.197	1.220	1.151
0.5	y -y	0.216	1.265	1.154	1.053	0.961	0.877	0.800	1.069	1.210	1.244	1.154
0.5	y -y	0.195	1.270	1.159	1.059	0.967	0.883	0.806	1.080	1.225	1.270	1.159
0.5	y -y	0.174	1.279	1.170	1.069	0.978	0.894	0.818	1.090	1.244	1.279	1.170
0.5	y -y	0.153	1.288	1.180	1.080	0.989	0.906	0.830	1.101	1.263	1.288	1.180
0.5	y -y	0.133	1.298	1.191	1.092	1.002	0.919	0.843	1.113	1.283	1.298	1.191
0.5	y -y	0.112	1.314	1.208	1.111	1.021	0.939	0.864	1.131	1.308	1.314	1.208
0.5	y -y	0.093	1.327	1.223	1.127	1.038	0.956	0.881	1.147	1.327	1.327	1.223
0.5	y -y	0.074	1.336	1.233	1.137	1.049	0.968	0.893	1.157	1.336	1.336	1.233
0.5	y -y	0.055	1.348	1.245	1.151	1.064	0.984	0.909	1.171	1.348	1.348	1.245
0.5	y -y	0.036	1.364	1.263	1.170	1.084	1.005	0.931	1.190	1.364	1.364	1.263
0.5	y -y	0.018	1.383	1.285	1.194	1.110	1.031	0.958	1.213	1.383	1.383	1.285
0.75	y -y	0.765	1.657	1.606	1.558	1.516	1.476	1.441	1.476	1.514	1.449	1.450
0.75	y -y	0.754	1.627	1.571	1.519	1.472	1.429	1.390	1.431	1.474	1.402	1.404
0.75	y -y	0.743	1.600	1.539	1.484	1.433	1.386	1.344	1.391	1.440	1.361	1.363
0.75	y -y	0.731	1.575	1.510	1.451	1.398	1.348	1.303	1.356	1.410	1.326	1.327
0.75	y -y	0.719	1.552	1.485	1.423	1.366	1.314	1.267	1.325	1.385	1.296	1.297
0.75	y -y	0.707	1.531	1.461	1.397	1.338	1.284	1.235	1.298	1.363	1.270	1.271
0.75	y -y	0.694	1.512	1.439	1.372	1.312	1.256	1.205	1.273	1.343	1.247	1.248
0.75	y -y	0.681	1.494	1.418	1.349	1.287	1.229	1.177	1.251	1.322	1.226	1.226
0.75	y -y	0.668	1.476	1.399	1.328	1.264	1.205	1.151	1.230	1.304	1.207	1.208
0.75	y -y	0.655	1.460	1.381	1.308	1.242	1.182	1.127	1.212	1.287	1.191	1.191
0.75	y -y	0.641	1.446	1.364	1.290	1.223	1.162	1.106	1.196	1.272	1.178	1.178
0.75	y -y	0.628	1.431	1.348	1.273	1.204	1.142	1.085	1.180	1.259	1.165	1.165
0.75	y -y	0.614	1.417	1.333	1.256	1.186	1.123	1.065	1.166	1.246	1.154	1.153
0.75	y -y	0.599	1.404	1.318	1.240	1.169	1.105	1.046	1.152	1.234	1.144	1.143
0.75	y -y	0.585	1.391	1.304	1.225	1.153	1.088	1.029	1.140	1.223	1.135	1.134
0.75	y -y	0.570	1.380	1.291	1.211	1.139	1.073	1.013	1.130	1.214	1.129	1.128
0.75	y -y	0.555	1.368	1.278	1.197	1.124	1.057	0.997	1.119	1.205	1.123	1.121
0.75	y -y	0.539	1.357	1.265	1.183	1.109	1.042	0.981	1.109	1.196	1.117	1.115
0.75	y -y	0.524	1.345	1.252	1.169	1.094	1.026	0.965	1.098	1.188	1.112	1.109
0.75	y -y	0.508	1.334	1.240	1.156	1.080	1.011	0.950	1.089	1.180	1.108	1.105
0.75	y -y	0.492	1.323	1.228	1.143	1.066	0.997	0.935	1.080	1.173	1.105	1.101

0.75	y -y	0.476	1.313	1.217	1.131	1.053	0.984	0.921	1.072	1.167	1.102	1.098
0.75	y -y	0.460	1.302	1.205	1.118	1.040	0.970	0.906	1.064	1.160	1.101	1.096
0.75	y -y	0.443	1.292	1.193	1.105	1.027	0.956	0.892	1.055	1.154	1.099	1.094
0.75	y -y	0.426	1.281	1.181	1.093	1.013	0.941	0.877	1.047	1.148	1.098	1.092
0.75	y -y	0.409	1.270	1.170	1.080	0.999	0.927	0.862	1.039	1.143	1.098	1.091
0.75	y -y	0.392	1.261	1.159	1.068	0.987	0.914	0.848	1.032	1.138	1.099	1.091
0.75	y -y	0.375	1.253	1.150	1.059	0.977	0.904	0.838	1.027	1.136	1.102	1.094
0.75	y -y	0.358	1.245	1.142	1.050	0.968	0.895	0.829	1.024	1.135	1.107	1.098
0.75	y -y	0.341	1.240	1.136	1.044	0.962	0.889	0.823	1.023	1.136	1.115	1.105
0.75	y -y	0.323	1.238	1.135	1.042	0.960	0.886	0.820	1.026	1.141	1.127	1.117
0.75	y -y	0.305	1.240	1.136	1.044	0.961	0.887	0.821	1.032	1.150	1.143	1.132
0.75	y -y	0.288	1.244	1.140	1.047	0.964	0.890	0.823	1.041	1.161	1.161	1.140
0.75	y -y	0.270	1.248	1.144	1.052	0.969	0.895	0.828	1.051	1.173	1.180	1.144
0.75	y -y	0.254	1.250	1.146	1.053	0.970	0.896	0.829	1.057	1.182	1.197	1.146
0.75	y -y	0.236	1.252	1.148	1.055	0.971	0.896	0.829	1.064	1.191	1.214	1.148
0.75	y -y	0.219	1.255	1.151	1.057	0.974	0.898	0.830	1.071	1.201	1.232	1.151
0.75	y -y	0.203	1.258	1.153	1.060	0.976	0.901	0.833	1.079	1.212	1.250	1.153
0.75	y -y	0.185	1.264	1.160	1.067	0.983	0.908	0.839	1.086	1.225	1.264	1.160
0.75	y -y	0.168	1.271	1.168	1.075	0.991	0.916	0.847	1.094	1.241	1.271	1.168
0.75	y -y	0.151	1.278	1.174	1.081	0.997	0.921	0.852	1.100	1.254	1.278	1.174
0.75	y -y	0.135	1.284	1.181	1.087	1.003	0.927	0.857	1.107	1.268	1.284	1.181
0.75	y -y	0.119	1.292	1.189	1.096	1.012	0.935	0.865	1.115	1.283	1.292	1.189
0.75	y -y	0.103	1.302	1.200	1.107	1.023	0.947	0.877	1.126	1.301	1.302	1.200
0.75	y -y	0.086	1.312	1.211	1.119	1.035	0.959	0.889	1.138	1.312	1.312	1.211
0.75	y -y	0.070	1.324	1.223	1.132	1.048	0.972	0.902	1.151	1.324	1.324	1.223
0.75	y -y	0.055	1.331	1.231	1.140	1.056	0.980	0.910	1.159	1.331	1.331	1.231
0.75	y -y	0.040	1.342	1.243	1.152	1.068	0.992	0.922	1.171	1.342	1.342	1.243
0.75	y -y	0.025	1.357	1.259	1.169	1.087	1.011	0.941	1.188	1.357	1.357	1.259
0.75	y -y	0.009	1.375	1.278	1.190	1.108	1.033	0.963	1.208	1.375	1.375	1.278
1	y -y	0.692	1.464	1.401	1.347	1.302	1.265	1.233	1.277	1.325	1.259	1.260
1	y -y	0.681	1.451	1.386	1.331	1.285	1.246	1.213	1.260	1.311	1.244	1.244
1	y -y	0.671	1.438	1.372	1.316	1.268	1.228	1.194	1.245	1.297	1.229	1.229
1	y -y	0.660	1.426	1.359	1.301	1.253	1.212	1.177	1.231	1.284	1.216	1.216
1	y -y	0.650	1.415	1.347	1.288	1.239	1.197	1.161	1.218	1.273	1.205	1.205
1	y -y	0.639	1.405	1.335	1.276	1.226	1.183	1.146	1.207	1.263	1.195	1.195
1	y -y	0.628	1.395	1.324	1.264	1.213	1.169	1.132	1.196	1.253	1.185	1.185
1	y -y	0.616	1.385	1.313	1.252	1.200	1.156	1.118	1.185	1.243	1.176	1.175
1	y -y	0.605	1.374	1.301	1.239	1.186	1.141	1.102	1.173	1.233	1.166	1.165
1	y -y	0.593	1.364	1.289	1.226	1.173	1.127	1.088	1.162	1.223	1.157	1.156
1	y -y	0.582	1.354	1.279	1.215	1.161	1.114	1.074	1.152	1.215	1.149	1.148
1	y -y	0.570	1.346	1.270	1.205	1.150	1.103	1.062	1.143	1.207	1.143	1.142
1	y -y	0.558	1.337	1.260	1.194	1.139	1.091	1.050	1.135	1.200	1.137	1.135
1	y -y	0.546	1.329	1.251	1.184	1.128	1.079	1.037	1.126	1.193	1.131	1.129
1	y -y	0.533	1.320	1.241	1.174	1.117	1.067	1.025	1.118	1.186	1.126	1.124
1	y -y	0.521	1.312	1.232	1.164	1.106	1.056	1.013	1.110	1.179	1.121	1.118
1	y -y	0.509	1.304	1.223	1.154	1.095	1.045	1.001	1.102	1.173	1.116	1.114
1	y -y	0.496	1.296	1.215	1.145	1.085	1.034	0.989	1.095	1.168	1.113	1.110
1	y -y	0.484	1.289	1.206	1.136	1.075	1.023	0.978	1.088	1.163	1.110	1.106
1	y -y	0.471	1.282	1.198	1.127	1.065	1.013	0.967	1.081	1.158	1.107	1.103
1	y -y	0.458	1.274	1.190	1.118	1.056	1.002	0.955	1.074	1.153	1.104	1.100
1	y -y	0.445	1.267	1.181	1.108	1.046	0.991	0.944	1.068	1.148	1.102	1.098
1	y -y	0.432	1.260	1.173	1.099	1.035	0.980	0.932	1.061	1.143	1.100	1.095
1	y -y	0.418	1.252	1.164	1.090	1.025	0.969	0.920	1.054	1.139	1.098	1.093
1	y -y	0.405	1.245	1.156	1.080	1.015	0.958	0.909	1.048	1.134	1.098	1.092
1	y -y	0.391	1.238	1.149	1.072	1.006	0.948	0.898	1.042	1.131	1.098	1.091
1	y -y	0.378	1.232	1.141	1.064	0.997	0.939	0.888	1.037	1.128	1.099	1.092
1	y -y	0.364	1.227	1.136	1.058	0.991	0.933	0.882	1.034	1.127	1.102	1.094

1	y -y	0.351	1.223	1.132	1.054	0.987	0.929	0.878	1.034	1.128	1.107	1.099
1	y -y	0.337	1.221	1.130	1.052	0.985	0.927	0.876	1.035	1.131	1.114	1.106
1	y -y	0.323	1.221	1.130	1.052	0.984	0.926	0.874	1.038	1.136	1.123	1.114
1	y -y	0.309	1.223	1.132	1.053	0.985	0.926	0.875	1.043	1.143	1.135	1.126
1	y -y	0.295	1.226	1.134	1.055	0.987	0.928	0.876	1.048	1.150	1.147	1.134
1	y -y	0.282	1.227	1.135	1.056	0.987	0.928	0.875	1.052	1.156	1.158	1.135
1	y -y	0.269	1.229	1.137	1.058	0.989	0.929	0.877	1.057	1.163	1.170	1.137
1	y -y	0.255	1.231	1.139	1.060	0.991	0.931	0.878	1.062	1.170	1.182	1.139
1	y -y	0.241	1.233	1.141	1.061	0.992	0.932	0.879	1.067	1.177	1.195	1.141
1	y -y	0.227	1.236	1.143	1.063	0.994	0.933	0.880	1.073	1.185	1.209	1.143
1	y -y	0.213	1.238	1.145	1.065	0.995	0.934	0.880	1.078	1.192	1.222	1.145
1	y -y	0.200	1.239	1.146	1.065	0.995	0.934	0.880	1.082	1.198	1.234	1.146
1	y -y	0.187	1.242	1.149	1.068	0.998	0.936	0.882	1.085	1.207	1.242	1.149
1	y -y	0.173	1.246	1.153	1.072	1.001	0.939	0.884	1.088	1.216	1.246	1.153
1	y -y	0.160	1.250	1.157	1.075	1.004	0.942	0.886	1.092	1.226	1.250	1.157
1	y -y	0.146	1.255	1.161	1.080	1.008	0.945	0.889	1.097	1.236	1.255	1.161
1	y -y	0.132	1.261	1.168	1.086	1.014	0.951	0.894	1.103	1.248	1.261	1.168
1	y -y	0.119	1.267	1.173	1.090	1.018	0.954	0.897	1.107	1.258	1.267	1.173
1	y -y	0.106	1.273	1.179	1.097	1.024	0.960	0.902	1.114	1.271	1.273	1.179
1	y -y	0.093	1.28	1.186	1.103	1.03	0.966	0.908	1.12	1.28	1.28	1.186
1	y -y	0.08	1.287	1.193	1.11	1.037	0.971	0.913	1.127	1.287	1.287	1.193
1	y -y	0.066	1.294	1.2	1.117	1.043	0.978	0.919	1.134	1.294	1.294	1.2
1	y -y	0.052	1.303	1.209	1.126	1.052	0.986	0.926	1.143	1.303	1.303	1.209
1	y -y	0.04	1.311	1.217	1.133	1.059	0.992	0.932	1.151	1.311	1.311	1.217

Tabla C.16 Valores de r_2 de la sección 20 (40 cm x 80 cm con ρ = 0.06 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.898	1.393	1.399	1.422	1.458	1.504	1.558	1.541	1.512	1.558	1.558
0.25	x -x	0.889	1.361	1.361	1.378	1.407	1.445	1.490	1.473	1.448	1.490	1.490
0.25	x -x	0.879	1.332	1.327	1.338	1.361	1.392	1.429	1.414	1.392	1.429	1.429
0.25	x -x	0.869	1.307	1.297	1.303	1.321	1.346	1.377	1.362	1.343	1.377	1.377
0.25	x -x	0.858	1.286	1.272	1.274	1.287	1.308	1.334	1.320	1.304	1.334	1.334
0.25	x -x	0.846	1.268	1.251	1.250	1.260	1.276	1.299	1.285	1.271	1.299	1.299
0.25	x -x	0.833	1.254	1.235	1.232	1.239	1.253	1.273	1.260	1.247	1.273	1.273
0.25	x -x	0.819	1.239	1.218	1.213	1.218	1.230	1.246	1.234	1.223	1.246	1.246
0.25	x -x	0.804	1.226	1.204	1.197	1.199	1.209	1.223	1.212	1.202	1.223	1.223
0.25	x -x	0.788	1.213	1.189	1.179	1.180	1.187	1.198	1.188	1.181	1.198	1.197
0.25	x -x	0.770	1.199	1.173	1.162	1.160	1.165	1.174	1.165	1.160	1.172	1.171
0.25	x -x	0.752	1.186	1.158	1.145	1.142	1.145	1.152	1.145	1.142	1.149	1.149
0.25	x -x	0.732	1.173	1.145	1.132	1.127	1.129	1.135	1.129	1.128	1.132	1.131
0.25	x -x	0.712	1.162	1.134	1.120	1.115	1.115	1.120	1.115	1.116	1.117	1.117
0.25	x -x	0.692	1.153	1.124	1.110	1.104	1.104	1.107	1.103	1.106	1.104	1.104
0.25	x -x	0.670	1.145	1.116	1.100	1.094	1.093	1.096	1.093	1.097	1.093	1.093
0.25	x -x	0.648	1.137	1.108	1.092	1.085	1.083	1.085	1.083	1.089	1.083	1.083
0.25	x -x	0.626	1.131	1.101	1.084	1.076	1.074	1.075	1.075	1.082	1.075	1.075
0.25	x -x	0.603	1.125	1.095	1.078	1.069	1.066	1.066	1.068	1.077	1.067	1.067
0.25	x -x	0.579	1.120	1.089	1.072	1.063	1.059	1.059	1.062	1.072	1.062	1.062
0.25	x -x	0.554	1.116	1.085	1.067	1.058	1.054	1.053	1.057	1.068	1.058	1.058
0.25	x -x	0.528	1.112	1.080	1.063	1.053	1.049	1.048	1.053	1.066	1.055	1.054
0.25	x -x	0.502	1.107	1.076	1.058	1.048	1.043	1.041	1.049	1.062	1.051	1.051
0.25	x -x	0.474	1.103	1.070	1.051	1.040	1.035	1.032	1.043	1.058	1.047	1.046
0.25	x -x	0.445	1.098	1.065	1.046	1.034	1.027	1.024	1.038	1.055	1.044	1.043
0.25	x -x	0.415	1.094	1.061	1.040	1.028	1.020	1.016	1.033	1.053	1.043	1.041
0.25	x -x	0.384	1.090	1.056	1.034	1.021	1.013	1.008	1.028	1.051	1.042	1.040

0.25	x -x	0.350	1.087	1.051	1.029	1.015	1.006	1.000	1.024	1.050	1.043	1.041
0.25	x -x	0.316	1.081	1.044	1.021	1.006	0.996	0.989	1.018	1.047	1.044	1.041
0.25	x -x	0.283	1.081	1.047	1.026	1.013	1.005	0.999	1.025	1.054	1.054	1.047
0.25	x -x	0.252	1.080	1.047	1.027	1.015	1.007	1.002	1.028	1.057	1.062	1.047
0.25	x -x	0.225	1.079	1.046	1.025	1.012	1.004	0.999	1.027	1.060	1.069	1.046
0.25	x -x	0.195	1.080	1.047	1.026	1.014	1.006	1.001	1.030	1.065	1.080	1.047
0.25	x -x	0.167	1.080	1.046	1.025	1.012	1.003	0.998	1.029	1.069	1.080	1.046
0.25	x -x	0.138	1.081	1.047	1.026	1.013	1.004	0.999	1.030	1.074	1.081	1.047
0.25	x -x	0.107	1.083	1.049	1.028	1.015	1.007	1.001	1.032	1.082	1.083	1.049
0.25	x -x	0.079	1.084	1.049	1.026	1.011	1.002	0.995	1.030	1.084	1.084	1.049
0.25	x -x	0.049	1.087	1.051	1.027	1.012	1.002	0.996	1.031	1.087	1.087	1.051
0.25	x -x	0.018	1.092	1.054	1.029	1.012	1.002	0.994	1.033	1.092	1.092	1.054
0.5	x -x	0.891	1.678	1.697	1.735	1.789	1.857	1.939	1.911	1.865	1.939	1.939
0.5	x -x	0.882	1.621	1.629	1.654	1.695	1.748	1.813	1.787	1.749	1.813	1.813
0.5	x -x	0.872	1.571	1.569	1.584	1.613	1.654	1.705	1.681	1.651	1.705	1.705
0.5	x -x	0.861	1.529	1.519	1.526	1.546	1.576	1.617	1.596	1.571	1.617	1.617
0.5	x -x	0.850	1.493	1.476	1.476	1.488	1.510	1.541	1.523	1.504	1.541	1.541
0.5	x -x	0.837	1.464	1.442	1.436	1.442	1.459	1.483	1.467	1.452	1.483	1.483
0.5	x -x	0.824	1.438	1.412	1.402	1.403	1.415	1.434	1.420	1.408	1.434	1.434
0.5	x -x	0.810	1.414	1.384	1.370	1.368	1.375	1.389	1.377	1.369	1.389	1.389
0.5	x -x	0.794	1.389	1.356	1.338	1.332	1.334	1.345	1.336	1.332	1.345	1.344
0.5	x -x	0.778	1.365	1.328	1.307	1.297	1.296	1.302	1.296	1.296	1.301	1.301
0.5	x -x	0.761	1.341	1.302	1.278	1.265	1.261	1.263	1.261	1.265	1.262	1.262
0.5	x -x	0.743	1.320	1.279	1.252	1.237	1.230	1.230	1.231	1.238	1.230	1.230
0.5	x -x	0.724	1.301	1.257	1.228	1.211	1.202	1.200	1.203	1.215	1.201	1.201
0.5	x -x	0.704	1.283	1.237	1.207	1.188	1.178	1.174	1.180	1.196	1.176	1.176
0.5	x -x	0.684	1.267	1.220	1.189	1.169	1.157	1.151	1.161	1.179	1.156	1.156
0.5	x -x	0.662	1.253	1.205	1.173	1.151	1.138	1.131	1.143	1.164	1.139	1.139
0.5	x -x	0.641	1.240	1.191	1.157	1.135	1.120	1.112	1.128	1.151	1.124	1.124
0.5	x -x	0.618	1.228	1.178	1.143	1.120	1.104	1.095	1.114	1.139	1.111	1.111
0.5	x -x	0.595	1.217	1.167	1.131	1.107	1.090	1.079	1.102	1.129	1.100	1.100
0.5	x -x	0.572	1.208	1.157	1.121	1.095	1.078	1.066	1.092	1.122	1.092	1.092
0.5	x -x	0.547	1.201	1.149	1.112	1.086	1.068	1.055	1.085	1.116	1.087	1.086
0.5	x -x	0.522	1.193	1.140	1.102	1.076	1.056	1.043	1.077	1.110	1.082	1.081
0.5	x -x	0.496	1.185	1.131	1.092	1.065	1.045	1.030	1.069	1.104	1.077	1.076
0.5	x -x	0.469	1.177	1.122	1.082	1.054	1.033	1.017	1.061	1.099	1.073	1.071
0.5	x -x	0.441	1.169	1.113	1.072	1.042	1.020	1.003	1.053	1.094	1.070	1.068
0.5	x -x	0.411	1.162	1.104	1.062	1.030	1.007	0.988	1.045	1.090	1.069	1.066
0.5	x -x	0.381	1.153	1.094	1.051	1.018	0.993	0.973	1.037	1.086	1.068	1.065
0.5	x -x	0.349	1.146	1.085	1.040	1.006	0.979	0.958	1.029	1.083	1.071	1.066
0.5	x -x	0.316	1.135	1.073	1.027	0.991	0.963	0.940	1.020	1.079	1.072	1.066
0.5	x -x	0.284	1.135	1.074	1.028	0.993	0.965	0.944	1.025	1.086	1.087	1.074
0.5	x -x	0.251	1.134	1.073	1.028	0.994	0.967	0.946	1.030	1.094	1.103	1.073
0.5	x -x	0.220	1.134	1.075	1.030	0.996	0.970	0.949	1.036	1.102	1.120	1.075
0.5	x -x	0.189	1.135	1.075	1.031	0.997	0.971	0.950	1.039	1.111	1.135	1.075
0.5	x -x	0.160	1.136	1.075	1.029	0.994	0.967	0.945	1.038	1.119	1.136	1.075
0.5	x -x	0.130	1.141	1.079	1.033	0.998	0.971	0.949	1.042	1.132	1.141	1.079
0.5	x -x	0.099	1.144	1.082	1.034	0.998	0.970	0.947	1.044	1.144	1.144	1.082
0.5	x -x	0.069	1.147	1.083	1.034	0.996	0.967	0.943	1.044	1.147	1.147	1.083
0.5	x -x	0.038	1.154	1.089	1.039	1.001	0.970	0.946	1.049	1.154	1.154	1.089
0.5	x -x	0.007	1.164	1.097	1.045	1.004	0.971	0.944	1.055	1.164	1.164	1.097
0.75	x -x	0.898	1.988	2.040	2.110	2.196	2.300	2.420	2.383	2.317	2.420	2.420
0.75	x -x	0.890	1.902	1.936	1.985	2.049	2.128	2.221	2.188	2.135	2.221	2.221
0.75	x -x	0.880	1.828	1.847	1.880	1.926	1.985	2.056	2.027	1.985	2.056	2.056
0.75	x -x	0.871	1.763	1.768	1.787	1.819	1.861	1.915	1.890	1.858	1.915	1.915
0.75	x -x	0.860	1.706	1.700	1.707	1.726	1.755	1.794	1.773	1.749	1.794	1.794
0.75	x -x	0.848	1.657	1.642	1.639	1.647	1.665	1.692	1.676	1.660	1.692	1.692

0.75	x -x	0.836	1.616	1.594	1.584	1.584	1.594	1.612	1.600	1.589	1.612	1.612
0.75	x -x	0.823	1.580	1.551	1.535	1.528	1.531	1.542	1.534	1.529	1.542	1.542
0.75	x -x	0.809	1.547	1.513	1.491	1.479	1.476	1.480	1.476	1.477	1.480	1.480
0.75	x -x	0.795	1.516	1.477	1.450	1.433	1.425	1.424	1.424	1.430	1.424	1.424
0.75	x -x	0.780	1.484	1.440	1.408	1.387	1.373	1.367	1.373	1.384	1.368	1.368
0.75	x -x	0.763	1.453	1.405	1.369	1.343	1.326	1.315	1.325	1.342	1.317	1.317
0.75	x -x	0.747	1.426	1.373	1.334	1.304	1.284	1.270	1.285	1.307	1.274	1.275
0.75	x -x	0.729	1.401	1.345	1.303	1.271	1.247	1.230	1.250	1.278	1.239	1.239
0.75	x -x	0.710	1.378	1.321	1.276	1.241	1.215	1.196	1.221	1.255	1.209	1.209
0.75	x -x	0.691	1.358	1.298	1.251	1.215	1.187	1.166	1.196	1.234	1.184	1.184
0.75	x -x	0.670	1.340	1.278	1.229	1.190	1.161	1.138	1.173	1.213	1.161	1.162
0.75	x -x	0.650	1.322	1.258	1.208	1.168	1.136	1.111	1.152	1.195	1.142	1.142
0.75	x -x	0.628	1.306	1.240	1.188	1.147	1.114	1.088	1.134	1.179	1.126	1.125
0.75	x -x	0.606	1.291	1.224	1.171	1.128	1.094	1.067	1.118	1.166	1.112	1.112
0.75	x -x	0.582	1.277	1.209	1.155	1.111	1.076	1.047	1.104	1.154	1.102	1.101
0.75	x -x	0.559	1.266	1.196	1.141	1.096	1.060	1.030	1.093	1.145	1.094	1.093
0.75	x -x	0.535	1.255	1.185	1.128	1.083	1.046	1.015	1.083	1.138	1.089	1.088
0.75	x -x	0.510	1.245	1.174	1.116	1.070	1.032	1.000	1.075	1.132	1.086	1.084
0.75	x -x	0.483	1.233	1.160	1.101	1.053	1.014	0.981	1.063	1.123	1.080	1.077
0.75	x -x	0.457	1.221	1.147	1.086	1.037	0.996	0.962	1.052	1.116	1.076	1.073
0.75	x -x	0.429	1.210	1.134	1.072	1.021	0.979	0.944	1.042	1.110	1.074	1.070
0.75	x -x	0.400	1.199	1.121	1.058	1.005	0.962	0.925	1.032	1.104	1.074	1.069
0.75	x -x	0.370	1.188	1.108	1.043	0.989	0.944	0.906	1.023	1.099	1.076	1.070
0.75	x -x	0.339	1.177	1.095	1.029	0.973	0.927	0.887	1.014	1.096	1.080	1.073
0.75	x -x	0.308	1.165	1.082	1.014	0.957	0.909	0.868	1.005	1.092	1.086	1.077
0.75	x -x	0.276	1.164	1.082	1.014	0.958	0.911	0.871	1.012	1.102	1.106	1.082
0.75	x -x	0.244	1.162	1.080	1.012	0.956	0.909	0.869	1.017	1.110	1.125	1.080
0.75	x -x	0.213	1.166	1.084	1.017	0.961	0.914	0.874	1.028	1.125	1.152	1.084
0.75	x -x	0.182	1.168	1.086	1.019	0.963	0.916	0.876	1.032	1.138	1.168	1.086
0.75	x -x	0.151	1.171	1.089	1.022	0.966	0.919	0.879	1.036	1.152	1.171	1.089
0.75	x -x	0.121	1.179	1.097	1.030	0.974	0.927	0.887	1.043	1.171	1.179	1.097
0.75	x -x	0.090	1.185	1.102	1.034	0.977	0.929	0.888	1.048	1.185	1.185	1.102
0.75	x -x	0.060	1.192	1.109	1.040	0.983	0.934	0.893	1.054	1.192	1.192	1.109
0.75	x -x	0.031	1.203	1.119	1.049	0.990	0.940	0.898	1.063	1.203	1.203	1.119
0.75	x -x	0.000	1.217	1.132	1.060	1.000	0.949	0.905	1.075	1.217	1.217	1.132
1	x -x	0.884	2.015	2.049	2.094	2.148	2.213	2.288	2.259	2.215	2.288	2.288
1	x -x	0.875	1.933	1.950	1.976	2.011	2.055	2.108	2.085	2.053	2.108	2.108
1	x -x	0.865	1.864	1.867	1.878	1.898	1.925	1.960	1.943	1.921	1.960	1.960
1	x -x	0.854	1.803	1.794	1.794	1.801	1.815	1.836	1.824	1.811	1.836	1.836
1	x -x	0.843	1.752	1.733	1.723	1.720	1.724	1.734	1.727	1.722	1.734	1.734
1	x -x	0.831	1.706	1.679	1.660	1.649	1.644	1.646	1.644	1.645	1.646	1.646
1	x -x	0.818	1.663	1.629	1.603	1.584	1.572	1.566	1.569	1.577	1.566	1.566
1	x -x	0.805	1.625	1.584	1.551	1.526	1.508	1.495	1.505	1.519	1.495	1.495
1	x -x	0.791	1.588	1.541	1.503	1.472	1.448	1.430	1.445	1.465	1.430	1.431
1	x -x	0.776	1.553	1.501	1.457	1.421	1.392	1.369	1.390	1.417	1.372	1.373
1	x -x	0.761	1.521	1.463	1.415	1.375	1.341	1.314	1.342	1.375	1.321	1.322
1	x -x	0.745	1.489	1.428	1.375	1.331	1.294	1.262	1.297	1.336	1.274	1.275
1	x -x	0.728	1.461	1.396	1.340	1.293	1.252	1.218	1.258	1.305	1.236	1.237
1	x -x	0.710	1.436	1.367	1.309	1.259	1.215	1.179	1.226	1.279	1.204	1.205
1	x -x	0.692	1.413	1.342	1.281	1.228	1.183	1.144	1.198	1.256	1.177	1.178
1	x -x	0.673	1.393	1.320	1.256	1.202	1.155	1.114	1.174	1.234	1.155	1.156
1	x -x	0.653	1.374	1.298	1.232	1.176	1.127	1.085	1.152	1.214	1.135	1.136
1	x -x	0.632	1.355	1.277	1.210	1.152	1.102	1.058	1.131	1.197	1.118	1.118
1	x -x	0.611	1.338	1.258	1.189	1.130	1.078	1.033	1.114	1.181	1.105	1.104
1	x -x	0.589	1.322	1.241	1.170	1.110	1.057	1.011	1.098	1.168	1.094	1.093
1	x -x	0.566	1.308	1.225	1.153	1.092	1.038	0.991	1.085	1.157	1.086	1.084
1	x -x	0.542	1.295	1.210	1.138	1.075	1.021	0.973	1.075	1.149	1.081	1.079

1	x -x	0.518	1.283	1.197	1.124	1.060	1.005	0.957	1.065	1.141	1.078	1.075
1	x -x	0.494	1.270	1.183	1.109	1.044	0.988	0.939	1.055	1.134	1.075	1.072
1	x -x	0.468	1.258	1.169	1.093	1.028	0.971	0.921	1.045	1.127	1.074	1.070
1	x -x	0.442	1.245	1.155	1.078	1.011	0.953	0.903	1.036	1.121	1.073	1.068
1	x -x	0.415	1.232	1.141	1.063	0.995	0.936	0.884	1.026	1.115	1.074	1.069
1	x -x	0.387	1.219	1.126	1.047	0.978	0.918	0.865	1.017	1.110	1.076	1.070
1	x -x	0.358	1.206	1.111	1.030	0.960	0.899	0.845	1.007	1.105	1.080	1.072
1	x -x	0.328	1.192	1.095	1.013	0.941	0.878	0.823	0.997	1.100	1.085	1.076
1	x -x	0.298	1.181	1.083	1.000	0.927	0.864	0.809	0.992	1.099	1.095	1.083
1	x -x	0.267	1.178	1.081	0.997	0.925	0.863	0.808	0.997	1.108	1.117	1.081
1	x -x	0.236	1.178	1.081	0.997	0.925	0.862	0.807	1.005	1.121	1.141	1.081
1	x -x	0.206	1.183	1.086	1.002	0.930	0.867	0.812	1.018	1.138	1.172	1.086
1	x -x	0.176	1.187	1.090	1.007	0.934	0.871	0.816	1.024	1.155	1.187	1.090
1	x -x	0.146	1.192	1.096	1.012	0.940	0.877	0.822	1.029	1.172	1.192	1.096
1	x -x	0.116	1.203	1.107	1.024	0.952	0.889	0.834	1.041	1.196	1.203	1.107
1	x -x	0.087	1.212	1.116	1.033	0.961	0.897	0.841	1.050	1.212	1.212	1.116
1	x -x	0.057	1.222	1.127	1.044	0.971	0.908	0.852	1.061	1.222	1.222	1.127
1	x -x	0.028	1.234	1.138	1.055	0.982	0.918	0.861	1.072	1.234	1.234	1.138
0.25	y -y	0.884	2.056	2.108	2.174	2.253	2.347	2.455	2.413	2.351	2.455	2.455
0.25	y -y	0.875	1.971	2.004	2.048	2.104	2.172	2.252	2.217	2.169	2.252	2.252
0.25	y -y	0.865	1.896	1.912	1.939	1.976	2.024	2.081	2.053	2.017	2.081	2.081
0.25	y -y	0.855	1.832	1.835	1.847	1.869	1.900	1.940	1.918	1.893	1.940	1.940
0.25	y -y	0.843	1.777	1.768	1.768	1.778	1.795	1.821	1.805	1.789	1.821	1.821
0.25	y -y	0.832	1.727	1.709	1.699	1.698	1.704	1.718	1.708	1.701	1.718	1.718
0.25	y -y	0.819	1.682	1.654	1.636	1.625	1.622	1.625	1.622	1.623	1.625	1.625
0.25	y -y	0.805	1.640	1.605	1.578	1.559	1.548	1.543	1.546	1.554	1.543	1.543
0.25	y -y	0.792	1.600	1.558	1.524	1.499	1.480	1.467	1.478	1.493	1.468	1.468
0.25	y -y	0.777	1.563	1.514	1.474	1.442	1.417	1.398	1.415	1.438	1.400	1.401
0.25	y -y	0.762	1.528	1.473	1.428	1.391	1.360	1.336	1.361	1.390	1.342	1.343
0.25	y -y	0.746	1.496	1.437	1.387	1.345	1.310	1.281	1.313	1.350	1.292	1.293
0.25	y -y	0.729	1.468	1.405	1.351	1.305	1.266	1.234	1.272	1.316	1.251	1.252
0.25	y -y	0.711	1.442	1.374	1.317	1.268	1.226	1.190	1.236	1.287	1.214	1.215
0.25	y -y	0.693	1.418	1.347	1.287	1.235	1.190	1.152	1.204	1.261	1.184	1.184
0.25	y -y	0.674	1.398	1.325	1.262	1.208	1.162	1.122	1.181	1.240	1.162	1.162
0.25	y -y	0.654	1.380	1.304	1.240	1.184	1.135	1.094	1.159	1.221	1.143	1.143
0.25	y -y	0.634	1.362	1.284	1.218	1.160	1.111	1.067	1.139	1.204	1.126	1.126
0.25	y -y	0.613	1.346	1.266	1.198	1.139	1.088	1.043	1.122	1.189	1.113	1.113
0.25	y -y	0.591	1.330	1.249	1.180	1.119	1.067	1.021	1.107	1.177	1.102	1.101
0.25	y -y	0.568	1.315	1.232	1.161	1.099	1.045	0.998	1.092	1.164	1.092	1.091
0.25	y -y	0.545	1.300	1.216	1.143	1.080	1.025	0.977	1.079	1.153	1.084	1.082
0.25	y -y	0.521	1.287	1.201	1.127	1.063	1.007	0.957	1.067	1.144	1.079	1.077
0.25	y -y	0.496	1.274	1.186	1.110	1.045	0.988	0.937	1.055	1.136	1.075	1.072
0.25	y -y	0.470	1.259	1.170	1.093	1.026	0.967	0.916	1.043	1.126	1.071	1.067
0.25	y -y	0.444	1.246	1.155	1.076	1.008	0.948	0.896	1.032	1.119	1.070	1.065
0.25	y -y	0.417	1.232	1.139	1.059	0.989	0.929	0.875	1.021	1.112	1.070	1.064
0.25	y -y	0.389	1.218	1.123	1.041	0.970	0.908	0.853	1.010	1.105	1.070	1.064
0.25	y -y	0.359	1.203	1.107	1.023	0.950	0.887	0.831	0.999	1.099	1.073	1.065
0.25	y -y	0.329	1.189	1.091	1.005	0.931	0.867	0.810	0.989	1.095	1.079	1.070
0.25	y -y	0.298	1.177	1.077	0.990	0.914	0.848	0.789	0.981	1.093	1.089	1.077
0.25	y -y	0.267	1.166	1.063	0.975	0.897	0.829	0.769	0.974	1.093	1.101	1.063
0.25	y -y	0.236	1.165	1.062	0.973	0.896	0.827	0.767	0.982	1.105	1.127	1.062
0.25	y -y	0.205	1.175	1.074	0.985	0.908	0.841	0.781	1.002	1.129	1.165	1.074
0.25	y -y	0.174	1.182	1.081	0.994	0.917	0.850	0.791	1.011	1.149	1.182	1.081
0.25	y -y	0.144	1.190	1.090	1.003	0.927	0.860	0.802	1.020	1.170	1.190	1.090
0.25	y -y	0.115	1.199	1.100	1.014	0.940	0.874	0.816	1.032	1.192	1.199	1.100
0.25	y -y	0.086	1.210	1.113	1.029	0.955	0.891	0.834	1.046	1.210	1.210	1.113
0.25	y -y	0.057	1.225	1.130	1.048	0.976	0.913	0.857	1.065	1.225	1.225	1.130

0.25	y -y	0.028	1.244	1.151	1.071	1.000	0.939	0.884	1.087	1.244	1.244	1.151
0.25	y -y	0.002	1.259	1.167	1.088	1.019	0.959	0.906	1.104	1.259	1.259	1.167
0.5	y -y	0.802	1.721	1.670	1.620	1.572	1.526	1.481	1.517	1.556	1.481	1.481
0.5	y -y	0.791	1.685	1.628	1.574	1.521	1.469	1.420	1.462	1.507	1.421	1.423
0.5	y -y	0.780	1.651	1.589	1.529	1.471	1.416	1.363	1.411	1.462	1.369	1.371
0.5	y -y	0.768	1.619	1.551	1.487	1.426	1.366	1.310	1.365	1.421	1.322	1.324
0.5	y -y	0.756	1.589	1.517	1.449	1.384	1.322	1.262	1.324	1.386	1.281	1.283
0.5	y -y	0.743	1.562	1.487	1.415	1.347	1.282	1.220	1.288	1.356	1.245	1.247
0.5	y -y	0.730	1.537	1.458	1.383	1.312	1.245	1.181	1.255	1.329	1.214	1.216
0.5	y -y	0.717	1.514	1.432	1.354	1.281	1.211	1.146	1.226	1.307	1.187	1.189
0.5	y -y	0.703	1.492	1.407	1.326	1.251	1.180	1.112	1.200	1.286	1.163	1.164
0.5	y -y	0.688	1.471	1.384	1.301	1.224	1.151	1.082	1.176	1.266	1.142	1.143
0.5	y -y	0.673	1.453	1.363	1.279	1.200	1.126	1.056	1.157	1.248	1.126	1.127
0.5	y -y	0.658	1.436	1.344	1.258	1.178	1.102	1.032	1.139	1.232	1.112	1.112
0.5	y -y	0.642	1.420	1.326	1.238	1.156	1.080	1.008	1.122	1.217	1.099	1.099
0.5	y -y	0.626	1.405	1.309	1.219	1.136	1.059	0.986	1.107	1.203	1.089	1.088
0.5	y -y	0.609	1.389	1.292	1.201	1.116	1.038	0.965	1.093	1.190	1.080	1.079
0.5	y -y	0.592	1.375	1.275	1.183	1.098	1.018	0.945	1.080	1.179	1.072	1.071
0.5	y -y	0.574	1.360	1.260	1.166	1.080	1.000	0.925	1.068	1.168	1.066	1.064
0.5	y -y	0.555	1.347	1.245	1.150	1.063	0.982	0.908	1.057	1.160	1.062	1.059
0.5	y -y	0.536	1.335	1.232	1.136	1.048	0.966	0.891	1.049	1.153	1.060	1.057
0.5	y -y	0.517	1.323	1.218	1.121	1.032	0.951	0.875	1.040	1.146	1.059	1.055
0.5	y -y	0.497	1.311	1.204	1.107	1.017	0.935	0.859	1.032	1.139	1.058	1.054
0.5	y -y	0.477	1.298	1.191	1.092	1.002	0.919	0.843	1.023	1.134	1.059	1.054
0.5	y -y	0.456	1.286	1.178	1.078	0.987	0.904	0.827	1.016	1.128	1.060	1.055
0.5	y -y	0.435	1.274	1.165	1.064	0.972	0.889	0.812	1.009	1.124	1.063	1.057
0.5	y -y	0.413	1.262	1.151	1.050	0.958	0.874	0.797	1.002	1.120	1.067	1.060
0.5	y -y	0.390	1.250	1.138	1.036	0.943	0.858	0.781	0.995	1.116	1.072	1.063
0.5	y -y	0.367	1.238	1.124	1.021	0.928	0.843	0.766	0.988	1.112	1.077	1.068
0.5	y -y	0.343	1.225	1.110	1.007	0.913	0.827	0.750	0.981	1.109	1.084	1.073
0.5	y -y	0.319	1.212	1.096	0.991	0.897	0.811	0.734	0.974	1.106	1.091	1.079
0.5	y -y	0.294	1.202	1.085	0.980	0.885	0.800	0.722	0.971	1.106	1.103	1.085
0.5	y -y	0.270	1.194	1.077	0.971	0.876	0.790	0.713	0.970	1.110	1.118	1.077
0.5	y -y	0.245	1.191	1.074	0.968	0.873	0.787	0.710	0.975	1.119	1.139	1.074
0.5	y -y	0.220	1.196	1.079	0.974	0.879	0.793	0.716	0.989	1.136	1.169	1.079
0.5	y -y	0.195	1.202	1.086	0.981	0.886	0.801	0.723	1.003	1.155	1.202	1.086
0.5	y -y	0.171	1.205	1.089	0.984	0.889	0.803	0.726	1.006	1.169	1.205	1.089
0.5	y -y	0.148	1.210	1.094	0.989	0.895	0.809	0.732	1.011	1.185	1.210	1.094
0.5	y -y	0.124	1.220	1.106	1.002	0.907	0.822	0.745	1.023	1.208	1.220	1.106
0.5	y -y	0.100	1.230	1.116	1.013	0.919	0.834	0.757	1.034	1.230	1.230	1.116
0.5	y -y	0.077	1.241	1.128	1.026	0.932	0.847	0.770	1.047	1.241	1.241	1.128
0.5	y -y	0.054	1.254	1.142	1.041	0.948	0.863	0.787	1.062	1.254	1.254	1.142
0.5	y -y	0.031	1.267	1.156	1.056	0.963	0.879	0.803	1.077	1.267	1.267	1.156
0.5	y -y	0.009	1.283	1.174	1.074	0.983	0.900	0.823	1.095	1.283	1.283	1.174
0.75	y -y	0.718	1.491	1.415	1.345	1.281	1.223	1.169	1.235	1.303	1.202	1.204
0.75	y -y	0.707	1.474	1.396	1.324	1.259	1.199	1.144	1.214	1.287	1.183	1.184
0.75	y -y	0.696	1.458	1.378	1.304	1.237	1.176	1.120	1.195	1.271	1.165	1.166
0.75	y -y	0.684	1.444	1.361	1.286	1.218	1.155	1.098	1.178	1.256	1.150	1.151
0.75	y -y	0.673	1.430	1.346	1.270	1.200	1.136	1.078	1.162	1.242	1.137	1.137
0.75	y -y	0.660	1.417	1.331	1.254	1.182	1.118	1.058	1.148	1.229	1.125	1.125
0.75	y -y	0.648	1.405	1.317	1.238	1.166	1.100	1.040	1.135	1.217	1.114	1.114
0.75	y -y	0.635	1.392	1.304	1.223	1.150	1.083	1.023	1.122	1.206	1.104	1.104
0.75	y -y	0.622	1.381	1.291	1.209	1.135	1.068	1.006	1.111	1.196	1.096	1.095
0.75	y -y	0.609	1.370	1.279	1.196	1.121	1.053	0.991	1.100	1.186	1.089	1.088
0.75	y -y	0.596	1.359	1.267	1.183	1.108	1.039	0.976	1.091	1.178	1.083	1.082
0.75	y -y	0.582	1.349	1.256	1.171	1.095	1.026	0.963	1.082	1.171	1.078	1.077
0.75	y -y	0.568	1.340	1.245	1.160	1.083	1.013	0.950	1.074	1.164	1.075	1.073

0.75	y -y	0.553	1.331	1.235	1.149	1.072	1.002	0.938	1.067	1.158	1.072	1.070
0.75	y -y	0.538	1.322	1.226	1.139	1.061	0.991	0.927	1.061	1.154	1.071	1.068
0.75	y -y	0.523	1.313	1.216	1.129	1.050	0.979	0.915	1.055	1.148	1.069	1.066
0.75	y -y	0.508	1.304	1.206	1.118	1.039	0.967	0.902	1.048	1.143	1.068	1.064
0.75	y -y	0.492	1.295	1.196	1.107	1.027	0.955	0.890	1.041	1.138	1.067	1.063
0.75	y -y	0.476	1.285	1.186	1.096	1.016	0.943	0.878	1.035	1.133	1.067	1.062
0.75	y -y	0.460	1.276	1.176	1.086	1.005	0.932	0.866	1.029	1.129	1.067	1.062
0.75	y -y	0.443	1.268	1.166	1.075	0.994	0.921	0.855	1.023	1.126	1.068	1.063
0.75	y -y	0.426	1.259	1.156	1.065	0.983	0.909	0.843	1.017	1.122	1.070	1.064
0.75	y -y	0.409	1.249	1.146	1.053	0.971	0.897	0.830	1.011	1.118	1.071	1.064
0.75	y -y	0.392	1.239	1.135	1.042	0.959	0.884	0.817	1.005	1.114	1.073	1.066
0.75	y -y	0.374	1.230	1.124	1.031	0.947	0.872	0.805	0.999	1.111	1.076	1.068
0.75	y -y	0.355	1.220	1.114	1.020	0.935	0.860	0.792	0.993	1.108	1.080	1.071
0.75	y -y	0.337	1.211	1.103	1.008	0.923	0.847	0.779	0.987	1.105	1.084	1.074
0.75	y -y	0.318	1.201	1.093	0.997	0.911	0.835	0.767	0.981	1.102	1.090	1.079
0.75	y -y	0.299	1.194	1.085	0.989	0.903	0.827	0.758	0.979	1.103	1.098	1.085
0.75	y -y	0.280	1.190	1.081	0.985	0.899	0.823	0.755	0.981	1.107	1.110	1.081
0.75	y -y	0.261	1.187	1.078	0.981	0.896	0.819	0.751	0.983	1.112	1.124	1.078
0.75	y -y	0.242	1.188	1.079	0.983	0.897	0.821	0.753	0.990	1.122	1.143	1.079
0.75	y -y	0.223	1.192	1.084	0.987	0.902	0.825	0.757	1.000	1.135	1.165	1.084
0.75	y -y	0.204	1.195	1.086	0.990	0.904	0.828	0.759	1.008	1.146	1.185	1.086
0.75	y -y	0.185	1.198	1.089	0.992	0.907	0.830	0.761	1.012	1.157	1.198	1.089
0.75	y -y	0.166	1.201	1.093	0.996	0.910	0.834	0.765	1.016	1.170	1.201	1.093
0.75	y -y	0.148	1.207	1.099	1.003	0.917	0.841	0.772	1.023	1.184	1.207	1.099
0.75	y -y	0.129	1.214	1.106	1.010	0.925	0.848	0.779	1.030	1.200	1.214	1.106
0.75	y -y	0.111	1.219	1.112	1.016	0.930	0.854	0.785	1.036	1.214	1.219	1.112
0.75	y -y	0.092	1.227	1.120	1.024	0.939	0.862	0.793	1.044	1.227	1.227	1.120
0.75	y -y	0.073	1.234	1.127	1.032	0.946	0.869	0.800	1.051	1.234	1.234	1.127
0.75	y -y	0.055	1.244	1.138	1.043	0.957	0.881	0.811	1.062	1.244	1.244	1.138
0.75	y -y	0.037	1.252	1.147	1.052	0.967	0.890	0.820	1.072	1.252	1.252	1.147
0.75	y -y	0.018	1.264	1.159	1.064	0.979	0.902	0.832	1.084	1.264	1.264	1.159
0.75	y -y	0.000	1.274	1.169	1.075	0.990	0.913	0.844	1.095	1.274	1.274	1.169
1	y -y	0.647	1.369	1.292	1.226	1.169	1.120	1.077	1.146	1.209	1.130	1.130
1	y -y	0.637	1.359	1.282	1.215	1.157	1.107	1.064	1.136	1.201	1.122	1.122
1	y -y	0.626	1.351	1.272	1.204	1.146	1.095	1.051	1.126	1.192	1.114	1.114
1	y -y	0.616	1.342	1.262	1.194	1.135	1.083	1.039	1.117	1.185	1.107	1.107
1	y -y	0.605	1.334	1.253	1.184	1.124	1.072	1.027	1.109	1.177	1.101	1.101
1	y -y	0.594	1.326	1.245	1.175	1.114	1.062	1.016	1.102	1.171	1.096	1.095
1	y -y	0.582	1.318	1.236	1.165	1.104	1.051	1.005	1.094	1.165	1.091	1.090
1	y -y	0.571	1.311	1.228	1.157	1.095	1.042	0.995	1.088	1.159	1.087	1.086
1	y -y	0.559	1.304	1.221	1.149	1.087	1.033	0.986	1.082	1.154	1.084	1.082
1	y -y	0.548	1.298	1.213	1.141	1.079	1.025	0.977	1.077	1.150	1.082	1.080
1	y -y	0.536	1.291	1.207	1.134	1.071	1.017	0.969	1.072	1.147	1.080	1.078
1	y -y	0.524	1.285	1.200	1.127	1.064	1.009	0.961	1.067	1.143	1.079	1.076
1	y -y	0.511	1.279	1.193	1.119	1.056	1.000	0.952	1.062	1.139	1.077	1.074
1	y -y	0.499	1.273	1.186	1.112	1.048	0.992	0.943	1.057	1.136	1.076	1.073
1	y -y	0.487	1.267	1.180	1.105	1.040	0.984	0.934	1.053	1.132	1.075	1.072
1	y -y	0.474	1.261	1.173	1.097	1.032	0.975	0.925	1.048	1.129	1.074	1.070
1	y -y	0.461	1.254	1.165	1.089	1.023	0.966	0.916	1.043	1.125	1.073	1.069
1	y -y	0.448	1.248	1.158	1.081	1.015	0.957	0.907	1.038	1.122	1.073	1.069
1	y -y	0.435	1.241	1.151	1.074	1.007	0.949	0.898	1.033	1.119	1.073	1.068
1	y -y	0.421	1.235	1.144	1.066	0.999	0.940	0.888	1.028	1.116	1.074	1.068
1	y -y	0.407	1.229	1.137	1.058	0.990	0.931	0.879	1.024	1.114	1.075	1.069
1	y -y	0.393	1.222	1.130	1.050	0.982	0.922	0.869	1.019	1.111	1.076	1.069
1	y -y	0.379	1.215	1.122	1.042	0.973	0.912	0.859	1.014	1.108	1.077	1.070
1	y -y	0.364	1.209	1.115	1.034	0.964	0.903	0.849	1.009	1.106	1.079	1.071
1	y -y	0.349	1.202	1.107	1.025	0.955	0.893	0.839	1.004	1.103	1.081	1.073

1	y -y	0.335	1.195	1.099	1.017	0.945	0.883	0.828	0.999	1.101	1.084	1.075
1	y -y	0.319	1.188	1.091	1.008	0.936	0.873	0.818	0.995	1.099	1.087	1.078
1	y -y	0.304	1.182	1.085	1.001	0.929	0.866	0.810	0.991	1.098	1.092	1.082
1	y -y	0.289	1.180	1.082	0.999	0.927	0.864	0.809	0.993	1.102	1.101	1.082
1	y -y	0.274	1.178	1.081	0.998	0.926	0.863	0.808	0.996	1.106	1.112	1.081
1	y -y	0.258	1.177	1.080	0.997	0.925	0.862	0.807	0.999	1.111	1.123	1.080
1	y -y	0.243	1.177	1.080	0.997	0.925	0.862	0.807	1.003	1.118	1.136	1.080
1	y -y	0.228	1.179	1.082	0.998	0.926	0.863	0.808	1.008	1.125	1.149	1.082
1	y -y	0.213	1.181	1.084	1.001	0.929	0.866	0.811	1.015	1.134	1.165	1.084
1	y -y	0.198	1.184	1.087	1.004	0.932	0.869	0.813	1.021	1.143	1.184	1.087
1	y -y	0.182	1.187	1.090	1.006	0.934	0.871	0.816	1.023	1.151	1.187	1.090
1	y -y	0.168	1.188	1.091	1.008	0.935	0.872	0.817	1.025	1.159	1.188	1.091
1	y -y	0.153	1.190	1.094	1.010	0.938	0.875	0.819	1.027	1.168	1.190	1.094
1	y -y	0.138	1.195	1.099	1.016	0.944	0.881	0.825	1.033	1.179	1.195	1.099
1	y -y	0.123	1.200	1.104	1.021	0.949	0.886	0.831	1.038	1.190	1.200	1.104
1	y -y	0.108	1.205	1.109	1.026	0.954	0.891	0.835	1.043	1.201	1.205	1.109
1	y -y	0.093	1.210	1.114	1.030	0.958	0.895	0.839	1.047	1.210	1.210	1.114
1	y -y	0.079	1.215	1.119	1.035	0.963	0.899	0.843	1.052	1.215	1.215	1.119
1	y -y	0.064	1.220	1.124	1.041	0.968	0.905	0.849	1.058	1.220	1.220	1.124
1	y -y	0.049	1.226	1.130	1.048	0.975	0.912	0.856	1.064	1.226	1.226	1.130
1	y -y	0.035	1.231	1.136	1.052	0.980	0.916	0.859	1.069	1.231	1.231	1.136
1	y -y	0.020	1.238	1.142	1.059	0.985	0.921	0.864	1.076	1.238	1.238	1.142
1	y -y	0.005	1.247	1.152	1.068	0.994	0.929	0.871	1.085	1.247	1.247	1.152

Tabla C.17 Valores de r_2 de la sección 21 (60 cm x 120 cm con ρ = 0.03 y f'_c = 250 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.896	1.257	1.232	1.223	1.225	1.234	1.248	1.243	1.236	1.248	1.248
0.25	x -x	0.888	1.246	1.220	1.209	1.209	1.217	1.229	1.224	1.217	1.229	1.229
0.25	x -x	0.880	1.234	1.207	1.195	1.194	1.199	1.210	1.205	1.199	1.210	1.210
0.25	x -x	0.871	1.223	1.194	1.180	1.177	1.181	1.190	1.185	1.181	1.190	1.190
0.25	x -x	0.862	1.211	1.181	1.166	1.161	1.163	1.170	1.166	1.163	1.170	1.170
0.25	x -x	0.851	1.202	1.170	1.154	1.147	1.148	1.153	1.150	1.147	1.153	1.153
0.25	x -x	0.840	1.193	1.160	1.143	1.135	1.134	1.138	1.135	1.134	1.138	1.138
0.25	x -x	0.828	1.185	1.151	1.132	1.123	1.121	1.123	1.121	1.121	1.123	1.123
0.25	x -x	0.816	1.177	1.142	1.122	1.112	1.109	1.109	1.108	1.110	1.109	1.109
0.25	x -x	0.802	1.170	1.134	1.113	1.102	1.098	1.097	1.097	1.100	1.097	1.097
0.25	x -x	0.787	1.163	1.127	1.105	1.093	1.088	1.086	1.087	1.092	1.086	1.086
0.25	x -x	0.771	1.157	1.120	1.097	1.084	1.078	1.075	1.077	1.083	1.076	1.076
0.25	x -x	0.753	1.150	1.112	1.088	1.075	1.067	1.064	1.068	1.075	1.065	1.065
0.25	x -x	0.735	1.143	1.105	1.082	1.068	1.060	1.056	1.061	1.070	1.058	1.058
0.25	x -x	0.716	1.137	1.100	1.077	1.063	1.055	1.051	1.056	1.067	1.053	1.054
0.25	x -x	0.696	1.130	1.093	1.070	1.056	1.048	1.044	1.050	1.062	1.047	1.047
0.25	x -x	0.676	1.123	1.087	1.064	1.050	1.042	1.038	1.045	1.057	1.042	1.042
0.25	x -x	0.655	1.117	1.081	1.058	1.045	1.037	1.032	1.040	1.053	1.038	1.038
0.25	x -x	0.634	1.112	1.076	1.053	1.040	1.031	1.027	1.036	1.050	1.034	1.034
0.25	x -x	0.612	1.107	1.071	1.049	1.035	1.026	1.022	1.032	1.046	1.030	1.030
0.25	x -x	0.590	1.103	1.067	1.044	1.030	1.022	1.017	1.028	1.044	1.027	1.027
0.25	x -x	0.567	1.099	1.063	1.040	1.026	1.017	1.011	1.025	1.041	1.025	1.024
0.25	x -x	0.543	1.095	1.059	1.036	1.021	1.012	1.006	1.021	1.039	1.022	1.022
0.25	x -x	0.519	1.092	1.055	1.032	1.017	1.008	1.002	1.018	1.037	1.021	1.020
0.25	x -x	0.495	1.089	1.052	1.028	1.013	1.003	0.996	1.015	1.035	1.020	1.019
0.25	x -x	0.469	1.086	1.049	1.025	1.009	0.999	0.992	1.013	1.035	1.020	1.019
0.25	x -x	0.443	1.084	1.047	1.022	1.007	0.996	0.988	1.012	1.035	1.021	1.020
0.25	x -x	0.415	1.081	1.043	1.018	1.002	0.991	0.983	1.009	1.034	1.022	1.020

0.25	x -x	0.386	1.078	1.039	1.014	0.997	0.985	0.976	1.006	1.034	1.023	1.021
0.25	x -x	0.355	1.074	1.035	1.009	0.991	0.978	0.969	1.002	1.033	1.024	1.022
0.25	x -x	0.326	1.074	1.036	1.011	0.995	0.983	0.975	1.008	1.038	1.033	1.030
0.25	x -x	0.297	1.076	1.040	1.017	1.002	0.992	0.985	1.015	1.045	1.044	1.040
0.25	x -x	0.271	1.075	1.039	1.016	1.001	0.990	0.983	1.016	1.048	1.050	1.039
0.25	x -x	0.245	1.076	1.040	1.017	1.002	0.992	0.984	1.018	1.052	1.059	1.040
0.25	x -x	0.219	1.077	1.040	1.017	1.002	0.992	0.985	1.020	1.057	1.068	1.040
0.25	x -x	0.194	1.078	1.041	1.017	1.002	0.991	0.984	1.021	1.061	1.078	1.041
0.25	x -x	0.168	1.080	1.042	1.019	1.003	0.992	0.985	1.023	1.067	1.080	1.042
0.25	x -x	0.142	1.081	1.043	1.019	1.003	0.992	0.985	1.023	1.073	1.081	1.043
0.25	x -x	0.117	1.084	1.047	1.022	1.006	0.995	0.987	1.026	1.081	1.084	1.047
0.25	x -x	0.090	1.087	1.048	1.023	1.006	0.994	0.986	1.027	1.087	1.087	1.048
0.25	x -x	0.065	1.091	1.051	1.025	1.008	0.996	0.987	1.030	1.091	1.091	1.051
0.25	x -x	0.037	1.095	1.054	1.027	1.009	0.996	0.987	1.032	1.095	1.095	1.054
0.25	x -x	0.011	1.100	1.057	1.028	1.008	0.993	0.983	1.033	1.100	1.100	1.057
0.5	x -x	0.887	1.439	1.407	1.389	1.383	1.387	1.398	1.393	1.387	1.398	1.398
0.5	x -x	0.879	1.419	1.384	1.364	1.355	1.356	1.363	1.360	1.356	1.363	1.363
0.5	x -x	0.870	1.401	1.363	1.341	1.329	1.327	1.332	1.329	1.327	1.332	1.332
0.5	x -x	0.861	1.383	1.343	1.318	1.304	1.299	1.301	1.299	1.299	1.301	1.301
0.5	x -x	0.851	1.365	1.323	1.294	1.277	1.270	1.268	1.268	1.271	1.268	1.268
0.5	x -x	0.840	1.349	1.304	1.273	1.254	1.244	1.240	1.241	1.246	1.240	1.240
0.5	x -x	0.829	1.334	1.287	1.254	1.232	1.220	1.213	1.217	1.224	1.213	1.213
0.5	x -x	0.816	1.320	1.270	1.236	1.212	1.197	1.189	1.194	1.204	1.189	1.189
0.5	x -x	0.803	1.307	1.256	1.219	1.194	1.177	1.167	1.174	1.187	1.167	1.167
0.5	x -x	0.789	1.295	1.242	1.204	1.177	1.158	1.146	1.156	1.172	1.147	1.147
0.5	x -x	0.774	1.282	1.228	1.188	1.159	1.139	1.126	1.138	1.157	1.128	1.128
0.5	x -x	0.758	1.269	1.213	1.172	1.142	1.120	1.105	1.121	1.142	1.109	1.110
0.5	x -x	0.741	1.256	1.199	1.157	1.126	1.103	1.087	1.106	1.130	1.094	1.094
0.5	x -x	0.723	1.245	1.188	1.145	1.114	1.091	1.074	1.095	1.123	1.083	1.084
0.5	x -x	0.705	1.235	1.177	1.135	1.103	1.079	1.062	1.085	1.116	1.075	1.075
0.5	x -x	0.686	1.225	1.167	1.124	1.093	1.069	1.052	1.077	1.109	1.067	1.067
0.5	x -x	0.665	1.215	1.157	1.114	1.083	1.059	1.041	1.069	1.102	1.060	1.060
0.5	x -x	0.645	1.206	1.147	1.104	1.072	1.049	1.031	1.061	1.095	1.054	1.054
0.5	x -x	0.624	1.196	1.138	1.095	1.063	1.039	1.021	1.054	1.088	1.048	1.048
0.5	x -x	0.602	1.188	1.130	1.087	1.054	1.030	1.012	1.047	1.083	1.044	1.044
0.5	x -x	0.580	1.181	1.122	1.079	1.046	1.022	1.003	1.042	1.079	1.040	1.040
0.5	x -x	0.557	1.173	1.114	1.071	1.038	1.013	0.994	1.036	1.074	1.037	1.036
0.5	x -x	0.534	1.167	1.107	1.063	1.030	1.004	0.985	1.030	1.070	1.035	1.033
0.5	x -x	0.510	1.160	1.100	1.056	1.022	0.996	0.976	1.025	1.067	1.033	1.032
0.5	x -x	0.486	1.154	1.094	1.048	1.014	0.987	0.967	1.021	1.065	1.032	1.030
0.5	x -x	0.461	1.149	1.088	1.042	1.007	0.980	0.958	1.017	1.063	1.033	1.031
0.5	x -x	0.435	1.145	1.083	1.036	1.001	0.973	0.951	1.014	1.063	1.036	1.033
0.5	x -x	0.408	1.140	1.077	1.030	0.993	0.965	0.942	1.011	1.062	1.039	1.035
0.5	x -x	0.380	1.134	1.070	1.021	0.984	0.954	0.931	1.006	1.061	1.041	1.037
0.5	x -x	0.351	1.127	1.062	1.013	0.974	0.943	0.918	1.000	1.059	1.045	1.040
0.5	x -x	0.323	1.126	1.061	1.012	0.974	0.944	0.920	1.004	1.065	1.057	1.051
0.5	x -x	0.294	1.129	1.066	1.018	0.981	0.952	0.928	1.014	1.076	1.075	1.066
0.5	x -x	0.266	1.130	1.068	1.021	0.984	0.956	0.932	1.021	1.085	1.091	1.068
0.5	x -x	0.238	1.133	1.071	1.024	0.988	0.960	0.937	1.028	1.095	1.108	1.071
0.5	x -x	0.211	1.134	1.071	1.024	0.988	0.959	0.936	1.032	1.103	1.124	1.071
0.5	x -x	0.186	1.136	1.073	1.025	0.988	0.959	0.936	1.035	1.112	1.136	1.073
0.5	x -x	0.158	1.141	1.077	1.028	0.991	0.961	0.937	1.038	1.123	1.141	1.077
0.5	x -x	0.133	1.143	1.079	1.030	0.991	0.961	0.937	1.039	1.133	1.143	1.079
0.5	x -x	0.106	1.149	1.083	1.033	0.994	0.962	0.937	1.043	1.147	1.149	1.083
0.5	x -x	0.079	1.156	1.090	1.038	0.998	0.966	0.940	1.048	1.156	1.156	1.090
0.5	x -x	0.052	1.164	1.096	1.043	1.002	0.969	0.942	1.054	1.164	1.164	1.096
0.5	x -x	0.024	1.174	1.105	1.051	1.008	0.974	0.945	1.062	1.174	1.174	1.105

0.75	x -x	0.875	1.548	1.509	1.481	1.462	1.452	1.448	1.449	1.452	1.448	1.448
0.75	x -x	0.866	1.524	1.480	1.449	1.426	1.412	1.405	1.408	1.414	1.405	1.405
0.75	x -x	0.857	1.501	1.455	1.420	1.394	1.377	1.366	1.371	1.379	1.366	1.366
0.75	x -x	0.847	1.481	1.432	1.394	1.365	1.345	1.331	1.338	1.350	1.331	1.331
0.75	x -x	0.837	1.462	1.410	1.369	1.338	1.314	1.298	1.307	1.322	1.298	1.298
0.75	x -x	0.825	1.443	1.387	1.344	1.309	1.283	1.264	1.276	1.294	1.264	1.264
0.75	x -x	0.813	1.424	1.366	1.319	1.283	1.254	1.232	1.248	1.269	1.232	1.232
0.75	x -x	0.800	1.407	1.346	1.297	1.258	1.227	1.202	1.222	1.247	1.202	1.202
0.75	x -x	0.787	1.389	1.326	1.275	1.234	1.201	1.175	1.198	1.226	1.176	1.177
0.75	x -x	0.772	1.372	1.307	1.254	1.211	1.175	1.147	1.174	1.207	1.152	1.153
0.75	x -x	0.757	1.355	1.287	1.232	1.187	1.150	1.120	1.151	1.188	1.129	1.130
0.75	x -x	0.741	1.338	1.269	1.212	1.166	1.127	1.096	1.131	1.172	1.109	1.110
0.75	x -x	0.725	1.324	1.253	1.196	1.148	1.109	1.076	1.116	1.161	1.094	1.095
0.75	x -x	0.708	1.311	1.239	1.180	1.132	1.092	1.059	1.102	1.152	1.082	1.083
0.75	x -x	0.690	1.298	1.226	1.166	1.117	1.077	1.043	1.090	1.143	1.072	1.073
0.75	x -x	0.671	1.287	1.214	1.154	1.105	1.064	1.030	1.081	1.134	1.065	1.065
0.75	x -x	0.651	1.276	1.202	1.142	1.092	1.051	1.016	1.071	1.126	1.058	1.058
0.75	x -x	0.631	1.265	1.190	1.130	1.080	1.038	1.003	1.063	1.118	1.052	1.052
0.75	x -x	0.610	1.254	1.179	1.118	1.067	1.025	0.990	1.054	1.111	1.047	1.046
0.75	x -x	0.589	1.243	1.168	1.106	1.056	1.014	0.978	1.046	1.104	1.042	1.042
0.75	x -x	0.567	1.233	1.157	1.095	1.044	1.002	0.966	1.039	1.098	1.039	1.038
0.75	x -x	0.544	1.223	1.147	1.084	1.033	0.990	0.954	1.032	1.093	1.036	1.035
0.75	x -x	0.521	1.214	1.137	1.074	1.022	0.979	0.943	1.026	1.088	1.035	1.033
0.75	x -x	0.498	1.206	1.128	1.064	1.011	0.967	0.930	1.019	1.084	1.034	1.032
0.75	x -x	0.474	1.197	1.118	1.053	1.000	0.955	0.917	1.013	1.080	1.034	1.031
0.75	x -x	0.449	1.190	1.109	1.044	0.990	0.944	0.905	1.008	1.078	1.036	1.033
0.75	x -x	0.423	1.182	1.101	1.034	0.979	0.933	0.893	1.003	1.076	1.040	1.035
0.75	x -x	0.397	1.175	1.092	1.025	0.968	0.921	0.881	0.998	1.075	1.044	1.039
0.75	x -x	0.369	1.166	1.082	1.013	0.956	0.907	0.866	0.992	1.073	1.049	1.042
0.75	x -x	0.342	1.159	1.074	1.004	0.946	0.897	0.855	0.988	1.073	1.057	1.049
0.75	x -x	0.314	1.158	1.074	1.005	0.947	0.898	0.856	0.995	1.082	1.074	1.066
0.75	x -x	0.285	1.160	1.076	1.007	0.950	0.901	0.860	1.003	1.094	1.095	1.076
0.75	x -x	0.258	1.164	1.080	1.011	0.954	0.906	0.864	1.013	1.107	1.117	1.080
0.75	x -x	0.230	1.168	1.085	1.016	0.959	0.910	0.869	1.024	1.121	1.141	1.085
0.75	x -x	0.203	1.172	1.088	1.020	0.962	0.914	0.873	1.033	1.134	1.165	1.088
0.75	x -x	0.176	1.177	1.093	1.024	0.967	0.918	0.877	1.038	1.148	1.177	1.093
0.75	x -x	0.149	1.182	1.098	1.029	0.972	0.923	0.881	1.043	1.163	1.182	1.098
0.75	x -x	0.123	1.188	1.104	1.035	0.976	0.927	0.885	1.048	1.179	1.188	1.104
0.75	x -x	0.096	1.196	1.112	1.042	0.983	0.932	0.889	1.056	1.196	1.196	1.112
0.75	x -x	0.070	1.206	1.121	1.050	0.991	0.940	0.896	1.064	1.206	1.206	1.121
0.75	x -x	0.044	1.216	1.131	1.059	0.999	0.947	0.902	1.074	1.216	1.216	1.131
0.75	x -x	0.017	1.231	1.145	1.073	1.011	0.958	0.912	1.087	1.231	1.231	1.145
1	x -x	0.859	1.597	1.548	1.507	1.473	1.444	1.422	1.433	1.449	1.422	1.422
1	x -x	0.850	1.572	1.519	1.475	1.437	1.405	1.379	1.393	1.413	1.379	1.379
1	x -x	0.840	1.550	1.493	1.445	1.404	1.370	1.340	1.357	1.381	1.340	1.340
1	x -x	0.830	1.528	1.469	1.418	1.374	1.336	1.304	1.325	1.351	1.304	1.304
1	x -x	0.819	1.508	1.446	1.392	1.345	1.305	1.271	1.295	1.325	1.271	1.271
1	x -x	0.807	1.489	1.423	1.367	1.317	1.275	1.238	1.266	1.300	1.238	1.238
1	x -x	0.794	1.469	1.401	1.341	1.290	1.245	1.206	1.238	1.276	1.205	1.207
1	x -x	0.781	1.449	1.378	1.316	1.262	1.215	1.173	1.211	1.253	1.177	1.179
1	x -x	0.767	1.428	1.355	1.290	1.234	1.185	1.141	1.184	1.231	1.150	1.152
1	x -x	0.753	1.408	1.332	1.266	1.207	1.156	1.111	1.158	1.210	1.125	1.127
1	x -x	0.738	1.390	1.312	1.243	1.183	1.130	1.084	1.136	1.194	1.105	1.106
1	x -x	0.722	1.374	1.294	1.224	1.162	1.108	1.061	1.118	1.181	1.088	1.090
1	x -x	0.706	1.359	1.277	1.206	1.143	1.088	1.040	1.103	1.170	1.075	1.076
1	x -x	0.689	1.345	1.262	1.189	1.126	1.070	1.021	1.089	1.159	1.064	1.064
1	x -x	0.671	1.332	1.248	1.174	1.110	1.054	1.004	1.077	1.149	1.055	1.056

1	x -x	0.653	1.319	1.234	1.160	1.095	1.038	0.988	1.067	1.139	1.048	1.048
1	x -x	0.634	1.307	1.221	1.146	1.080	1.023	0.972	1.056	1.130	1.041	1.041
1	x -x	0.614	1.296	1.208	1.133	1.067	1.009	0.958	1.048	1.123	1.037	1.036
1	x -x	0.594	1.285	1.197	1.120	1.054	0.996	0.944	1.040	1.116	1.034	1.033
1	x -x	0.573	1.273	1.184	1.107	1.040	0.982	0.930	1.032	1.110	1.031	1.029
1	x -x	0.551	1.262	1.172	1.095	1.027	0.968	0.916	1.024	1.103	1.029	1.027
1	x -x	0.529	1.251	1.161	1.083	1.015	0.955	0.903	1.017	1.098	1.028	1.025
1	x -x	0.506	1.241	1.149	1.071	1.002	0.942	0.890	1.011	1.094	1.028	1.025
1	x -x	0.483	1.231	1.138	1.059	0.990	0.930	0.877	1.004	1.090	1.029	1.026
1	x -x	0.459	1.222	1.128	1.048	0.978	0.918	0.864	0.999	1.087	1.033	1.028
1	x -x	0.434	1.212	1.118	1.037	0.967	0.905	0.852	0.994	1.085	1.037	1.031
1	x -x	0.409	1.203	1.108	1.025	0.954	0.892	0.838	0.989	1.082	1.041	1.035
1	x -x	0.384	1.193	1.096	1.013	0.941	0.878	0.823	0.983	1.080	1.047	1.040
1	x -x	0.357	1.183	1.085	1.001	0.928	0.864	0.808	0.977	1.078	1.053	1.045
1	x -x	0.331	1.176	1.077	0.993	0.919	0.855	0.799	0.976	1.081	1.065	1.056
1	x -x	0.303	1.176	1.078	0.994	0.921	0.857	0.801	0.984	1.092	1.086	1.076
1	x -x	0.277	1.179	1.081	0.997	0.924	0.860	0.804	0.994	1.106	1.110	1.081
1	x -x	0.250	1.185	1.088	1.003	0.930	0.867	0.810	1.008	1.123	1.138	1.088
1	x -x	0.223	1.190	1.092	1.008	0.934	0.870	0.814	1.019	1.138	1.165	1.092
1	x -x	0.196	1.196	1.099	1.015	0.941	0.877	0.821	1.032	1.155	1.196	1.099
1	x -x	0.170	1.202	1.105	1.021	0.947	0.883	0.826	1.038	1.172	1.202	1.105
1	x -x	0.143	1.209	1.112	1.028	0.954	0.890	0.833	1.045	1.190	1.209	1.112
1	x -x	0.117	1.217	1.121	1.036	0.963	0.898	0.841	1.054	1.210	1.217	1.121
1	x -x	0.091	1.228	1.131	1.047	0.973	0.908	0.851	1.064	1.228	1.228	1.131
1	x -x	0.066	1.238	1.142	1.058	0.984	0.919	0.861	1.075	1.238	1.238	1.142
1	x -x	0.040	1.251	1.155	1.071	0.997	0.931	0.873	1.088	1.251	1.251	1.155
1	x -x	0.015	1.268	1.172	1.087	1.013	0.946	0.887	1.105	1.268	1.268	1.172
0.25	y -y	0.857	1.591	1.547	1.512	1.486	1.466	1.452	1.458	1.469	1.452	1.452
0.25	y -y	0.848	1.568	1.520	1.482	1.451	1.428	1.410	1.419	1.433	1.410	1.410
0.25	y -y	0.838	1.547	1.496	1.454	1.420	1.393	1.372	1.384	1.402	1.372	1.372
0.25	y -y	0.828	1.527	1.473	1.427	1.390	1.360	1.336	1.351	1.372	1.336	1.336
0.25	y -y	0.817	1.507	1.449	1.401	1.361	1.327	1.300	1.319	1.344	1.300	1.300
0.25	y -y	0.805	1.488	1.428	1.376	1.333	1.297	1.267	1.290	1.319	1.267	1.267
0.25	y -y	0.793	1.470	1.407	1.353	1.307	1.268	1.235	1.263	1.296	1.236	1.237
0.25	y -y	0.780	1.452	1.386	1.329	1.281	1.240	1.205	1.237	1.274	1.209	1.210
0.25	y -y	0.767	1.434	1.365	1.306	1.256	1.212	1.175	1.212	1.253	1.183	1.185
0.25	y -y	0.752	1.415	1.344	1.283	1.230	1.185	1.145	1.187	1.233	1.158	1.160
0.25	y -y	0.738	1.397	1.323	1.260	1.205	1.157	1.116	1.163	1.215	1.135	1.136
0.25	y -y	0.722	1.381	1.305	1.239	1.182	1.133	1.090	1.142	1.200	1.115	1.116
0.25	y -y	0.706	1.365	1.287	1.220	1.162	1.111	1.067	1.124	1.187	1.099	1.099
0.25	y -y	0.689	1.350	1.270	1.202	1.142	1.090	1.044	1.107	1.173	1.084	1.085
0.25	y -y	0.671	1.336	1.255	1.185	1.124	1.071	1.025	1.093	1.161	1.072	1.073
0.25	y -y	0.653	1.323	1.240	1.169	1.107	1.053	1.006	1.080	1.149	1.062	1.062
0.25	y -y	0.633	1.310	1.225	1.153	1.090	1.035	0.987	1.067	1.138	1.053	1.053
0.25	y -y	0.614	1.297	1.212	1.138	1.074	1.019	0.970	1.056	1.128	1.045	1.045
0.25	y -y	0.594	1.285	1.198	1.124	1.059	1.003	0.954	1.046	1.120	1.040	1.039
0.25	y -y	0.573	1.273	1.186	1.110	1.045	0.988	0.938	1.037	1.112	1.035	1.034
0.25	y -y	0.551	1.262	1.173	1.097	1.031	0.973	0.923	1.028	1.105	1.032	1.030
0.25	y -y	0.529	1.251	1.161	1.084	1.017	0.959	0.908	1.020	1.099	1.030	1.028
0.25	y -y	0.506	1.240	1.149	1.071	1.003	0.945	0.893	1.012	1.094	1.029	1.026
0.25	y -y	0.483	1.229	1.137	1.058	0.990	0.931	0.879	1.005	1.089	1.029	1.026
0.25	y -y	0.459	1.219	1.127	1.047	0.978	0.917	0.865	0.998	1.085	1.031	1.027
0.25	y -y	0.435	1.210	1.116	1.035	0.965	0.904	0.851	0.993	1.083	1.035	1.029
0.25	y -y	0.410	1.200	1.105	1.023	0.953	0.891	0.837	0.987	1.080	1.039	1.033
0.25	y -y	0.384	1.191	1.094	1.011	0.939	0.877	0.822	0.981	1.078	1.044	1.037
0.25	y -y	0.357	1.181	1.083	0.999	0.926	0.862	0.806	0.975	1.076	1.051	1.043
0.25	y -y	0.330	1.171	1.072	0.986	0.911	0.846	0.789	0.969	1.075	1.059	1.050

0.25	y -y	0.303	1.167	1.066	0.979	0.904	0.838	0.780	0.969	1.081	1.074	1.064
0.25	y -y	0.276	1.172	1.072	0.986	0.911	0.845	0.787	0.983	1.097	1.102	1.072
0.25	y -y	0.249	1.182	1.083	0.997	0.922	0.857	0.800	1.001	1.118	1.134	1.083
0.25	y -y	0.223	1.187	1.089	1.004	0.930	0.865	0.808	1.015	1.135	1.162	1.089
0.25	y -y	0.197	1.195	1.097	1.013	0.940	0.876	0.819	1.030	1.154	1.195	1.097
0.25	y -y	0.170	1.203	1.106	1.023	0.951	0.887	0.832	1.040	1.173	1.203	1.106
0.25	y -y	0.144	1.210	1.114	1.031	0.959	0.897	0.841	1.048	1.191	1.210	1.114
0.25	y -y	0.119	1.220	1.125	1.043	0.972	0.909	0.854	1.060	1.211	1.220	1.125
0.25	y -y	0.095	1.228	1.134	1.053	0.982	0.920	0.866	1.069	1.228	1.228	1.134
0.25	y -y	0.071	1.236	1.143	1.062	0.991	0.929	0.875	1.078	1.236	1.236	1.143
0.25	y -y	0.048	1.246	1.153	1.071	1.000	0.938	0.883	1.088	1.246	1.246	1.153
0.25	y -y	0.025	1.259	1.166	1.085	1.014	0.951	0.895	1.101	1.259	1.259	1.166
0.25	y -y	0.003	1.274	1.181	1.101	1.030	0.967	0.912	1.117	1.274	1.274	1.181
0.5	y -y	0.777	1.520	1.439	1.362	1.290	1.221	1.156	1.216	1.279	1.164	1.167
0.5	y -y	0.767	1.501	1.417	1.338	1.264	1.193	1.127	1.192	1.260	1.141	1.144
0.5	y -y	0.756	1.482	1.396	1.315	1.238	1.166	1.099	1.169	1.241	1.120	1.122
0.5	y -y	0.744	1.464	1.376	1.292	1.214	1.141	1.072	1.147	1.224	1.100	1.102
0.5	y -y	0.732	1.448	1.357	1.272	1.193	1.118	1.048	1.129	1.211	1.083	1.086
0.5	y -y	0.720	1.433	1.340	1.254	1.173	1.098	1.027	1.113	1.200	1.070	1.071
0.5	y -y	0.707	1.418	1.324	1.236	1.154	1.078	1.006	1.098	1.190	1.057	1.059
0.5	y -y	0.694	1.405	1.310	1.220	1.137	1.060	0.988	1.084	1.180	1.047	1.048
0.5	y -y	0.681	1.393	1.296	1.205	1.121	1.043	0.970	1.073	1.169	1.039	1.040
0.5	y -y	0.667	1.381	1.283	1.191	1.106	1.027	0.954	1.062	1.160	1.032	1.032
0.5	y -y	0.653	1.370	1.270	1.178	1.092	1.012	0.939	1.053	1.151	1.026	1.026
0.5	y -y	0.638	1.359	1.258	1.165	1.078	0.998	0.924	1.044	1.143	1.021	1.021
0.5	y -y	0.623	1.348	1.246	1.152	1.064	0.984	0.909	1.035	1.136	1.017	1.017
0.5	y -y	0.607	1.338	1.235	1.139	1.051	0.970	0.895	1.027	1.129	1.014	1.013
0.5	y -y	0.591	1.328	1.223	1.127	1.039	0.957	0.882	1.020	1.123	1.012	1.011
0.5	y -y	0.575	1.318	1.213	1.116	1.026	0.944	0.869	1.014	1.117	1.011	1.009
0.5	y -y	0.558	1.308	1.202	1.104	1.014	0.931	0.856	1.007	1.112	1.011	1.008
0.5	y -y	0.541	1.298	1.191	1.092	1.002	0.919	0.843	1.001	1.108	1.011	1.008
0.5	y -y	0.523	1.289	1.181	1.082	0.991	0.907	0.831	0.996	1.104	1.013	1.010
0.5	y -y	0.505	1.280	1.171	1.071	0.979	0.896	0.819	0.991	1.101	1.015	1.011
0.5	y -y	0.486	1.271	1.160	1.060	0.968	0.884	0.807	0.986	1.098	1.018	1.014
0.5	y -y	0.467	1.261	1.150	1.049	0.957	0.872	0.795	0.982	1.095	1.022	1.017
0.5	y -y	0.448	1.252	1.140	1.038	0.946	0.861	0.784	0.978	1.093	1.027	1.021
0.5	y -y	0.427	1.243	1.130	1.028	0.934	0.849	0.772	0.974	1.092	1.033	1.026
0.5	y -y	0.407	1.233	1.120	1.016	0.923	0.838	0.760	0.969	1.090	1.039	1.031
0.5	y -y	0.386	1.223	1.108	1.004	0.910	0.825	0.747	0.964	1.087	1.045	1.036
0.5	y -y	0.364	1.211	1.096	0.991	0.897	0.811	0.734	0.959	1.085	1.051	1.041
0.5	y -y	0.342	1.202	1.086	0.981	0.886	0.800	0.722	0.955	1.085	1.060	1.049
0.5	y -y	0.320	1.195	1.078	0.972	0.877	0.791	0.713	0.954	1.087	1.072	1.060
0.5	y -y	0.298	1.193	1.076	0.970	0.875	0.789	0.712	0.960	1.095	1.091	1.076
0.5	y -y	0.276	1.197	1.080	0.975	0.880	0.794	0.717	0.972	1.110	1.116	1.080
0.5	y -y	0.254	1.204	1.088	0.983	0.888	0.803	0.725	0.987	1.129	1.145	1.088
0.5	y -y	0.232	1.209	1.093	0.988	0.893	0.808	0.730	0.999	1.143	1.171	1.093
0.5	y -y	0.211	1.213	1.098	0.993	0.899	0.813	0.736	1.012	1.158	1.196	1.098
0.5	y -y	0.189	1.222	1.108	1.004	0.910	0.824	0.747	1.025	1.178	1.222	1.108
0.5	y -y	0.168	1.230	1.117	1.013	0.919	0.834	0.757	1.035	1.197	1.230	1.117
0.5	y -y	0.148	1.236	1.123	1.020	0.926	0.841	0.764	1.041	1.213	1.236	1.123
0.5	y -y	0.127	1.245	1.133	1.030	0.937	0.852	0.775	1.052	1.232	1.245	1.133
0.5	y -y	0.107	1.254	1.143	1.041	0.948	0.864	0.787	1.062	1.251	1.254	1.143
0.5	y -y	0.087	1.266	1.156	1.055	0.963	0.879	0.802	1.076	1.266	1.266	1.156
0.5	y -y	0.067	1.276	1.167	1.066	0.975	0.891	0.815	1.087	1.276	1.276	1.167
0.5	y -y	0.048	1.286	1.177	1.078	0.987	0.903	0.827	1.099	1.286	1.286	1.177
0.5	y -y	0.028	1.300	1.193	1.095	1.005	0.922	0.846	1.115	1.300	1.300	1.193
0.5	y -y	0.009	1.317	1.212	1.115	1.026	0.944	0.868	1.135	1.317	1.317	1.212

0.75	y -y	0.696	1.387	1.295	1.212	1.137	1.067	1.004	1.089	1.175	1.055	1.056
0.75	y -y	0.686	1.377	1.285	1.201	1.125	1.055	0.991	1.080	1.167	1.048	1.049
0.75	y -y	0.675	1.368	1.275	1.190	1.113	1.043	0.979	1.071	1.159	1.042	1.043
0.75	y -y	0.664	1.360	1.266	1.180	1.103	1.032	0.967	1.064	1.152	1.037	1.038
0.75	y -y	0.652	1.351	1.256	1.170	1.092	1.021	0.956	1.057	1.146	1.033	1.033
0.75	y -y	0.641	1.343	1.247	1.161	1.082	1.011	0.945	1.050	1.140	1.029	1.029
0.75	y -y	0.629	1.335	1.239	1.151	1.072	1.000	0.935	1.044	1.135	1.026	1.026
0.75	y -y	0.617	1.327	1.230	1.143	1.063	0.991	0.925	1.039	1.130	1.024	1.023
0.75	y -y	0.605	1.320	1.222	1.134	1.054	0.981	0.916	1.033	1.125	1.022	1.021
0.75	y -y	0.592	1.313	1.214	1.125	1.045	0.972	0.906	1.028	1.121	1.021	1.019
0.75	y -y	0.579	1.305	1.206	1.116	1.036	0.963	0.896	1.023	1.117	1.020	1.018
0.75	y -y	0.566	1.298	1.198	1.108	1.027	0.953	0.887	1.018	1.113	1.019	1.017
0.75	y -y	0.552	1.290	1.190	1.099	1.018	0.944	0.877	1.013	1.109	1.018	1.016
0.75	y -y	0.539	1.283	1.182	1.091	1.009	0.935	0.868	1.009	1.106	1.019	1.016
0.75	y -y	0.525	1.276	1.174	1.083	1.001	0.926	0.859	1.005	1.103	1.020	1.016
0.75	y -y	0.511	1.269	1.166	1.074	0.992	0.917	0.850	1.001	1.100	1.020	1.017
0.75	y -y	0.496	1.261	1.158	1.066	0.983	0.908	0.841	0.996	1.097	1.021	1.017
0.75	y -y	0.481	1.254	1.150	1.057	0.974	0.899	0.832	0.992	1.094	1.023	1.019
0.75	y -y	0.466	1.247	1.143	1.049	0.966	0.891	0.823	0.989	1.092	1.026	1.021
0.75	y -y	0.451	1.240	1.135	1.041	0.958	0.882	0.815	0.986	1.090	1.029	1.023
0.75	y -y	0.435	1.233	1.128	1.034	0.949	0.874	0.806	0.982	1.089	1.032	1.026
0.75	y -y	0.420	1.227	1.120	1.026	0.941	0.865	0.797	0.979	1.088	1.036	1.030
0.75	y -y	0.404	1.220	1.113	1.018	0.933	0.857	0.789	0.976	1.087	1.041	1.033
0.75	y -y	0.387	1.213	1.105	1.009	0.924	0.848	0.779	0.973	1.085	1.045	1.037
0.75	y -y	0.371	1.205	1.097	1.000	0.914	0.838	0.769	0.968	1.083	1.049	1.041
0.75	y -y	0.354	1.198	1.089	0.992	0.906	0.829	0.760	0.965	1.083	1.055	1.046
0.75	y -y	0.338	1.192	1.083	0.986	0.900	0.823	0.754	0.964	1.084	1.063	1.053
0.75	y -y	0.321	1.189	1.079	0.982	0.896	0.819	0.750	0.966	1.088	1.073	1.062
0.75	y -y	0.304	1.189	1.079	0.982	0.896	0.819	0.751	0.971	1.095	1.088	1.076
0.75	y -y	0.286	1.192	1.082	0.985	0.899	0.822	0.754	0.979	1.105	1.106	1.082
0.75	y -y	0.270	1.195	1.085	0.988	0.902	0.825	0.756	0.988	1.116	1.124	1.085
0.75	y -y	0.253	1.198	1.089	0.992	0.906	0.829	0.760	0.996	1.127	1.143	1.089
0.75	y -y	0.236	1.201	1.093	0.996	0.909	0.832	0.763	1.005	1.138	1.161	1.093
0.75	y -y	0.219	1.205	1.096	1.000	0.913	0.836	0.767	1.014	1.149	1.181	1.096
0.75	y -y	0.202	1.210	1.101	1.004	0.918	0.841	0.771	1.023	1.162	1.201	1.101
0.75	y -y	0.186	1.214	1.106	1.009	0.923	0.845	0.776	1.029	1.174	1.214	1.106
0.75	y -y	0.169	1.219	1.111	1.015	0.928	0.851	0.781	1.035	1.187	1.219	1.111
0.75	y -y	0.152	1.224	1.116	1.020	0.934	0.856	0.786	1.040	1.199	1.224	1.116
0.75	y -y	0.136	1.230	1.122	1.026	0.940	0.862	0.793	1.046	1.212	1.230	1.122
0.75	y -y	0.120	1.236	1.129	1.033	0.947	0.870	0.800	1.053	1.227	1.236	1.129
0.75	y -y	0.103	1.244	1.137	1.042	0.956	0.878	0.808	1.061	1.242	1.244	1.137
0.75	y -y	0.087	1.251	1.145	1.050	0.964	0.886	0.816	1.069	1.251	1.251	1.145
0.75	y -y	0.072	1.260	1.154	1.059	0.973	0.896	0.826	1.079	1.260	1.260	1.154
0.75	y -y	0.056	1.268	1.163	1.068	0.983	0.906	0.836	1.088	1.268	1.268	1.163
0.75	y -y	0.040	1.278	1.174	1.079	0.994	0.917	0.847	1.099	1.278	1.278	1.174
0.75	y -y	0.025	1.288	1.184	1.090	1.006	0.929	0.859	1.110	1.288	1.288	1.184
0.75	y -y	0.010	1.300	1.197	1.104	1.020	0.943	0.873	1.124	1.300	1.300	1.197
1	y -y	0.628	1.304	1.217	1.142	1.076	1.019	0.968	1.054	1.128	1.040	1.039
1	y -y	0.618	1.298	1.211	1.136	1.070	1.012	0.961	1.049	1.124	1.037	1.037
1	y -y	0.608	1.293	1.205	1.129	1.063	1.005	0.954	1.045	1.121	1.036	1.035
1	y -y	0.598	1.287	1.199	1.123	1.057	0.998	0.947	1.042	1.118	1.034	1.033
1	y -y	0.588	1.282	1.193	1.117	1.050	0.992	0.941	1.038	1.114	1.033	1.032
1	y -y	0.577	1.276	1.187	1.110	1.043	0.985	0.933	1.034	1.111	1.031	1.030
1	y -y	0.567	1.270	1.181	1.104	1.037	0.978	0.926	1.030	1.108	1.030	1.028
1	y -y	0.556	1.265	1.175	1.097	1.030	0.971	0.919	1.026	1.105	1.029	1.027
1	y -y	0.545	1.259	1.169	1.091	1.024	0.965	0.913	1.022	1.102	1.028	1.026
1	y -y	0.534	1.254	1.163	1.085	1.017	0.958	0.906	1.019	1.099	1.028	1.026

1	y -y	0.523	1.248	1.158	1.079	1.011	0.952	0.900	1.015	1.097	1.028	1.025
1	y -y	0.511	1.243	1.152	1.073	1.005	0.945	0.893	1.012	1.095	1.028	1.025
1	y -y	0.500	1.238	1.146	1.067	0.999	0.939	0.886	1.009	1.092	1.028	1.025
1	y -y	0.488	1.233	1.141	1.061	0.993	0.932	0.880	1.006	1.090	1.029	1.025
1	y -y	0.476	1.228	1.135	1.056	0.987	0.926	0.873	1.003	1.089	1.030	1.026
1	y -y	0.464	1.223	1.130	1.050	0.981	0.920	0.867	1.000	1.087	1.032	1.027
1	y -y	0.452	1.219	1.126	1.045	0.975	0.915	0.861	0.998	1.086	1.034	1.029
1	y -y	0.440	1.214	1.120	1.040	0.969	0.908	0.855	0.995	1.085	1.036	1.031
1	y -y	0.428	1.210	1.115	1.034	0.963	0.902	0.848	0.993	1.084	1.038	1.032
1	y -y	0.415	1.205	1.110	1.028	0.957	0.895	0.841	0.990	1.083	1.040	1.034
1	y -y	0.402	1.200	1.105	1.022	0.951	0.889	0.834	0.987	1.082	1.043	1.036
1	y -y	0.389	1.195	1.099	1.016	0.944	0.882	0.827	0.984	1.081	1.045	1.039
1	y -y	0.376	1.190	1.093	1.009	0.937	0.874	0.819	0.981	1.079	1.048	1.041
1	y -y	0.363	1.185	1.087	1.003	0.930	0.867	0.811	0.978	1.078	1.051	1.043
1	y -y	0.350	1.180	1.083	0.998	0.925	0.861	0.805	0.976	1.079	1.056	1.048
1	y -y	0.336	1.177	1.078	0.994	0.920	0.856	0.800	0.975	1.080	1.061	1.052
1	y -y	0.323	1.175	1.077	0.992	0.919	0.855	0.799	0.977	1.083	1.070	1.060
1	y -y	0.310	1.175	1.077	0.993	0.920	0.856	0.800	0.982	1.089	1.081	1.071
1	y -y	0.296	1.178	1.080	0.995	0.922	0.859	0.803	0.988	1.096	1.093	1.080
1	y -y	0.282	1.179	1.081	0.996	0.923	0.859	0.803	0.992	1.103	1.105	1.081
1	y -y	0.269	1.181	1.083	0.998	0.925	0.861	0.805	0.997	1.110	1.117	1.083
1	y -y	0.256	1.184	1.086	1.002	0.929	0.865	0.809	1.005	1.119	1.132	1.086
1	y -y	0.242	1.187	1.089	1.005	0.932	0.868	0.812	1.012	1.127	1.146	1.089
1	y -y	0.229	1.189	1.091	1.007	0.933	0.869	0.813	1.016	1.134	1.159	1.091
1	y -y	0.215	1.191	1.093	1.009	0.936	0.872	0.815	1.022	1.142	1.172	1.093
1	y -y	0.202	1.194	1.097	1.013	0.939	0.875	0.819	1.029	1.151	1.187	1.097
1	y -y	0.189	1.198	1.101	1.017	0.944	0.88	0.823	1.034	1.16	1.198	1.101
1	y -y	0.176	1.201	1.104	1.019	0.946	0.882	0.825	1.037	1.169	1.201	1.104
1	y -y	0.162	1.204	1.107	1.023	0.949	0.885	0.828	1.04	1.178	1.204	1.107
1	y -y	0.149	1.207	1.11	1.026	0.952	0.888	0.831	1.043	1.186	1.207	1.11
1	y -y	0.136	1.211	1.114	1.03	0.957	0.893	0.836	1.047	1.196	1.211	1.114
1	y -y	0.123	1.215	1.119	1.035	0.961	0.897	0.84	1.052	1.205	1.215	1.119
1	y -y	0.11	1.22	1.123	1.039	0.965	0.901	0.843	1.056	1.215	1.22	1.123
1	y -y	0.097	1.225	1.129	1.044	0.971	0.906	0.848	1.061	1.225	1.225	1.129
1	y -y	0.084	1.231	1.134	1.05	0.976	0.912	0.854	1.067	1.231	1.231	1.134
1	y -y	0.072	1.236	1.139	1.055	0.981	0.916	0.859	1.072	1.236	1.236	1.139
1	y -y	0.059	1.241	1.145	1.061	0.987	0.922	0.864	1.078	1.241	1.241	1.145
1	y -y	0.046	1.248	1.152	1.067	0.993	0.928	0.869	1.085	1.248	1.248	1.152
1	y -y	0.033	1.256	1.16	1.076	1.001	0.935	0.877	1.093	1.256	1.256	1.16
1	y -y	0.021	1.264	1.168	1.084	1.01	0.943	0.885	1.101	1.264	1.264	1.168
1	y -y	0.009	1.272	1.177	1.092	1.017	0.951	0.891	1.11	1.272	1.272	1.177

Tabla C.18 Valores de r_2 de la sección 22 (60 cm x 120 cm con ρ = 0.06 y f'_c = 250 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.862	1.175	1.139	1.118	1.107	1.103	1.103	1.102	1.103	1.103	1.103
0.25	x -x	0.853	1.169	1.132	1.111	1.099	1.094	1.093	1.093	1.094	1.093	1.093
0.25	x -x	0.845	1.163	1.126	1.104	1.092	1.086	1.084	1.085	1.087	1.084	1.084
0.25	x -x	0.836	1.158	1.121	1.098	1.085	1.078	1.076	1.077	1.080	1.076	1.076
0.25	x -x	0.826	1.154	1.116	1.093	1.079	1.072	1.069	1.071	1.075	1.069	1.069
0.25	x -x	0.816	1.151	1.113	1.090	1.076	1.069	1.066	1.068	1.072	1.066	1.066
0.25	x -x	0.804	1.148	1.110	1.086	1.072	1.064	1.061	1.063	1.069	1.061	1.061
0.25	x -x	0.792	1.143	1.105	1.081	1.066	1.058	1.053	1.057	1.063	1.053	1.053

0.25	x -x	0.779	1.139	1.100	1.075	1.060	1.051	1.046	1.050	1.058	1.047	1.047
0.25	x -x	0.765	1.135	1.095	1.070	1.055	1.045	1.040	1.045	1.054	1.041	1.041
0.25	x -x	0.750	1.131	1.091	1.066	1.050	1.040	1.034	1.040	1.051	1.036	1.036
0.25	x -x	0.735	1.127	1.087	1.061	1.044	1.034	1.028	1.035	1.047	1.030	1.031
0.25	x -x	0.718	1.123	1.082	1.056	1.039	1.028	1.021	1.030	1.044	1.025	1.025
0.25	x -x	0.700	1.118	1.077	1.051	1.034	1.023	1.016	1.026	1.042	1.021	1.021
0.25	x -x	0.681	1.114	1.073	1.047	1.030	1.019	1.011	1.022	1.039	1.018	1.018
0.25	x -x	0.662	1.109	1.069	1.043	1.026	1.015	1.007	1.019	1.036	1.016	1.016
0.25	x -x	0.642	1.106	1.066	1.041	1.024	1.013	1.005	1.018	1.035	1.015	1.015
0.25	x -x	0.621	1.104	1.064	1.038	1.022	1.011	1.003	1.017	1.035	1.015	1.015
0.25	x -x	0.599	1.100	1.060	1.035	1.018	1.007	0.999	1.015	1.033	1.013	1.013
0.25	x -x	0.577	1.096	1.057	1.031	1.014	1.003	0.995	1.012	1.031	1.012	1.011
0.25	x -x	0.554	1.093	1.053	1.028	1.011	0.999	0.991	1.010	1.030	1.011	1.010
0.25	x -x	0.530	1.089	1.050	1.024	1.007	0.995	0.987	1.008	1.029	1.010	1.009
0.25	x -x	0.505	1.086	1.047	1.021	1.003	0.991	0.983	1.005	1.028	1.010	1.009
0.25	x -x	0.479	1.083	1.044	1.018	1.000	0.988	0.979	1.004	1.027	1.010	1.009
0.25	x -x	0.452	1.081	1.041	1.014	0.996	0.984	0.975	1.002	1.027	1.011	1.010
0.25	x -x	0.424	1.078	1.037	1.011	0.992	0.979	0.970	1.000	1.027	1.012	1.011
0.25	x -x	0.395	1.075	1.034	1.007	0.989	0.975	0.965	0.998	1.027	1.015	1.013
0.25	x -x	0.364	1.073	1.032	1.004	0.985	0.971	0.961	0.997	1.029	1.019	1.016
0.25	x -x	0.331	1.071	1.030	1.002	0.982	0.968	0.957	0.997	1.031	1.025	1.022
0.25	x -x	0.296	1.068	1.026	0.997	0.977	0.962	0.951	0.995	1.032	1.031	1.026
0.25	x -x	0.261	1.068	1.027	0.999	0.980	0.966	0.956	1.000	1.038	1.043	1.027
0.25	x -x	0.229	1.070	1.032	1.007	0.990	0.978	0.969	1.009	1.047	1.057	1.032
0.25	x -x	0.200	1.069	1.032	1.007	0.991	0.979	0.971	1.012	1.051	1.069	1.032
0.25	x -x	0.172	1.070	1.033	1.009	0.992	0.981	0.973	1.013	1.057	1.070	1.033
0.25	x -x	0.143	1.070	1.033	1.008	0.992	0.981	0.973	1.013	1.062	1.070	1.033
0.25	x -x	0.116	1.071	1.034	1.010	0.993	0.982	0.974	1.014	1.068	1.071	1.034
0.25	x -x	0.087	1.072	1.034	1.010	0.993	0.982	0.974	1.014	1.072	1.072	1.034
0.25	x -x	0.060	1.074	1.036	1.011	0.995	0.983	0.975	1.016	1.074	1.074	1.036
0.25	x -x	0.031	1.077	1.038	1.013	0.996	0.984	0.976	1.018	1.077	1.077	1.038
0.25	x -x	0.004	1.080	1.041	1.015	0.998	0.986	0.977	1.020	1.080	1.080	1.041
0.5	x -x	0.850	1.304	1.252	1.215	1.188	1.170	1.159	1.164	1.174	1.159	1.159
0.5	x -x	0.842	1.294	1.241	1.202	1.175	1.155	1.143	1.150	1.161	1.143	1.143
0.5	x -x	0.833	1.284	1.230	1.190	1.162	1.141	1.128	1.136	1.148	1.128	1.128
0.5	x -x	0.823	1.276	1.221	1.180	1.151	1.130	1.115	1.125	1.139	1.115	1.115
0.5	x -x	0.813	1.270	1.214	1.173	1.143	1.122	1.107	1.117	1.133	1.107	1.107
0.5	x -x	0.802	1.264	1.207	1.166	1.135	1.113	1.097	1.110	1.127	1.097	1.097
0.5	x -x	0.791	1.257	1.200	1.157	1.126	1.103	1.086	1.100	1.119	1.087	1.088
0.5	x -x	0.778	1.251	1.193	1.149	1.117	1.093	1.076	1.092	1.113	1.078	1.079
0.5	x -x	0.765	1.243	1.184	1.140	1.107	1.083	1.065	1.083	1.106	1.068	1.069
0.5	x -x	0.751	1.236	1.176	1.131	1.098	1.072	1.053	1.074	1.100	1.059	1.060
0.5	x -x	0.736	1.228	1.168	1.122	1.088	1.062	1.042	1.065	1.094	1.050	1.051
0.5	x -x	0.720	1.220	1.159	1.113	1.077	1.050	1.030	1.055	1.088	1.042	1.042
0.5	x -x	0.704	1.212	1.150	1.103	1.068	1.040	1.019	1.047	1.083	1.034	1.035
0.5	x -x	0.686	1.205	1.142	1.095	1.059	1.031	1.009	1.040	1.078	1.029	1.029
0.5	x -x	0.668	1.197	1.135	1.087	1.051	1.023	1.001	1.034	1.073	1.024	1.024
0.5	x -x	0.649	1.191	1.129	1.081	1.045	1.016	0.994	1.030	1.069	1.022	1.022
0.5	x -x	0.629	1.186	1.123	1.076	1.040	1.012	0.990	1.028	1.068	1.021	1.021
0.5	x -x	0.609	1.180	1.118	1.070	1.034	1.006	0.984	1.025	1.066	1.020	1.020
0.5	x -x	0.588	1.175	1.112	1.065	1.029	1.001	0.978	1.022	1.063	1.020	1.019
0.5	x -x	0.566	1.168	1.106	1.059	1.022	0.994	0.972	1.019	1.061	1.019	1.018
0.5	x -x	0.543	1.162	1.100	1.052	1.016	0.987	0.964	1.015	1.059	1.018	1.017
0.5	x -x	0.519	1.156	1.093	1.045	1.009	0.980	0.957	1.011	1.056	1.018	1.017
0.5	x -x	0.495	1.151	1.087	1.039	1.002	0.973	0.949	1.008	1.055	1.019	1.017
0.5	x -x	0.470	1.145	1.082	1.033	0.995	0.966	0.942	1.005	1.054	1.021	1.018
0.5	x -x	0.444	1.140	1.076	1.027	0.988	0.958	0.934	1.002	1.053	1.023	1.020

0.5	x -x	0.416	1.135	1.070	1.020	0.981	0.951	0.926	0.999	1.052	1.026	1.023
0.5	x -x	0.388	1.130	1.064	1.014	0.974	0.943	0.917	0.996	1.053	1.031	1.027
0.5	x -x	0.358	1.125	1.058	1.007	0.967	0.935	0.909	0.994	1.054	1.038	1.033
0.5	x -x	0.327	1.121	1.054	1.002	0.961	0.928	0.901	0.993	1.057	1.047	1.041
0.5	x -x	0.294	1.116	1.048	0.995	0.954	0.920	0.892	0.991	1.060	1.058	1.048
0.5	x -x	0.261	1.113	1.046	0.993	0.952	0.919	0.891	0.994	1.066	1.073	1.046
0.5	x -x	0.228	1.117	1.051	1.000	0.960	0.928	0.902	1.006	1.079	1.096	1.051
0.5	x -x	0.197	1.118	1.054	1.004	0.966	0.935	0.910	1.014	1.090	1.118	1.054
0.5	x -x	0.166	1.122	1.058	1.010	0.972	0.942	0.918	1.019	1.102	1.122	1.058
0.5	x -x	0.137	1.122	1.059	1.010	0.973	0.943	0.919	1.020	1.111	1.122	1.059
0.5	x -x	0.108	1.125	1.060	1.011	0.973	0.943	0.918	1.021	1.122	1.125	1.060
0.5	x -x	0.079	1.126	1.061	1.012	0.974	0.943	0.918	1.022	1.126	1.126	1.061
0.5	x -x	0.050	1.130	1.064	1.014	0.974	0.943	0.917	1.024	1.130	1.130	1.064
0.5	x -x	0.020	1.135	1.069	1.018	0.978	0.946	0.920	1.028	1.135	1.135	1.069
0.75	x -x	0.836	1.390	1.326	1.275	1.233	1.200	1.173	1.189	1.211	1.173	1.173
0.75	x -x	0.827	1.377	1.312	1.259	1.217	1.182	1.154	1.172	1.196	1.154	1.154
0.75	x -x	0.818	1.367	1.301	1.247	1.203	1.167	1.138	1.159	1.185	1.138	1.138
0.75	x -x	0.808	1.357	1.290	1.236	1.191	1.155	1.125	1.147	1.176	1.125	1.125
0.75	x -x	0.797	1.348	1.280	1.225	1.179	1.142	1.111	1.136	1.167	1.110	1.112
0.75	x -x	0.786	1.339	1.270	1.213	1.167	1.129	1.098	1.125	1.158	1.099	1.101
0.75	x -x	0.774	1.330	1.260	1.202	1.155	1.115	1.083	1.114	1.150	1.088	1.089
0.75	x -x	0.761	1.321	1.250	1.191	1.143	1.103	1.069	1.103	1.142	1.078	1.079
0.75	x -x	0.748	1.312	1.240	1.180	1.131	1.090	1.056	1.093	1.136	1.068	1.069
0.75	x -x	0.734	1.302	1.229	1.168	1.118	1.076	1.041	1.081	1.128	1.058	1.059
0.75	x -x	0.719	1.291	1.217	1.155	1.104	1.061	1.025	1.069	1.120	1.046	1.047
0.75	x -x	0.703	1.281	1.205	1.143	1.090	1.047	1.010	1.059	1.114	1.037	1.038
0.75	x -x	0.687	1.271	1.195	1.131	1.079	1.034	0.997	1.049	1.107	1.030	1.031
0.75	x -x	0.670	1.262	1.185	1.121	1.067	1.022	0.985	1.041	1.100	1.024	1.024
0.75	x -x	0.652	1.254	1.176	1.111	1.058	1.013	0.974	1.035	1.094	1.020	1.020
0.75	x -x	0.633	1.247	1.169	1.104	1.050	1.005	0.967	1.031	1.091	1.019	1.019
0.75	x -x	0.614	1.239	1.161	1.096	1.042	0.996	0.958	1.027	1.087	1.018	1.018
0.75	x -x	0.594	1.232	1.153	1.088	1.033	0.988	0.949	1.022	1.084	1.017	1.017
0.75	x -x	0.573	1.225	1.145	1.080	1.025	0.980	0.941	1.018	1.081	1.017	1.016
0.75	x -x	0.551	1.218	1.138	1.072	1.017	0.972	0.933	1.015	1.079	1.018	1.017
0.75	x -x	0.529	1.210	1.130	1.064	1.009	0.963	0.923	1.011	1.077	1.019	1.017
0.75	x -x	0.506	1.202	1.121	1.055	0.999	0.953	0.913	1.006	1.074	1.020	1.018
0.75	x -x	0.481	1.194	1.112	1.045	0.989	0.942	0.902	1.001	1.071	1.022	1.019
0.75	x -x	0.457	1.186	1.103	1.036	0.979	0.931	0.891	0.996	1.069	1.024	1.020
0.75	x -x	0.431	1.178	1.094	1.026	0.968	0.920	0.879	0.991	1.067	1.027	1.023
0.75	x -x	0.404	1.170	1.085	1.016	0.958	0.909	0.867	0.987	1.066	1.032	1.027
0.75	x -x	0.376	1.162	1.077	1.006	0.947	0.898	0.855	0.983	1.065	1.039	1.032
0.75	x -x	0.347	1.156	1.069	0.998	0.938	0.888	0.844	0.981	1.067	1.048	1.041
0.75	x -x	0.317	1.149	1.061	0.989	0.929	0.877	0.833	0.978	1.069	1.059	1.051
0.75	x -x	0.285	1.141	1.053	0.980	0.918	0.866	0.821	0.976	1.072	1.072	1.053
0.75	x -x	0.254	1.139	1.051	0.978	0.917	0.865	0.820	0.981	1.080	1.093	1.051
0.75	x -x	0.222	1.141	1.055	0.983	0.922	0.871	0.827	0.992	1.095	1.119	1.055
0.75	x -x	0.191	1.146	1.060	0.988	0.929	0.878	0.835	1.003	1.111	1.146	1.060
0.75	x -x	0.160	1.151	1.066	0.995	0.936	0.886	0.843	1.009	1.128	1.151	1.066
0.75	x -x	0.130	1.155	1.070	1.000	0.941	0.892	0.849	1.014	1.143	1.155	1.070
0.75	x -x	0.099	1.159	1.075	1.004	0.946	0.896	0.854	1.019	1.159	1.159	1.075
0.75	x -x	0.070	1.163	1.079	1.009	0.950	0.901	0.859	1.023	1.163	1.163	1.079
0.75	x -x	0.041	1.168	1.083	1.012	0.953	0.903	0.860	1.027	1.168	1.168	1.083
0.75	x -x	0.012	1.176	1.091	1.020	0.961	0.911	0.867	1.034	1.176	1.176	1.091
1	x -x	0.819	1.438	1.366	1.303	1.248	1.200	1.157	1.187	1.223	1.157	1.157
1	x -x	0.810	1.426	1.352	1.288	1.232	1.183	1.139	1.172	1.211	1.139	1.139
1	x -x	0.800	1.414	1.339	1.274	1.216	1.166	1.122	1.158	1.199	1.120	1.122
1	x -x	0.789	1.403	1.326	1.260	1.201	1.150	1.105	1.144	1.188	1.107	1.109

1	x -x	0.778	1.392	1.314	1.246	1.187	1.135	1.089	1.131	1.179	1.095	1.097
1	x -x	0.767	1.381	1.302	1.233	1.172	1.119	1.072	1.118	1.169	1.082	1.084
1	x -x	0.754	1.370	1.289	1.219	1.157	1.103	1.055	1.105	1.160	1.070	1.072
1	x -x	0.741	1.359	1.277	1.206	1.143	1.088	1.039	1.093	1.152	1.060	1.061
1	x -x	0.728	1.348	1.265	1.192	1.128	1.072	1.022	1.081	1.144	1.049	1.050
1	x -x	0.714	1.337	1.252	1.178	1.113	1.056	1.006	1.069	1.137	1.039	1.040
1	x -x	0.699	1.326	1.240	1.165	1.099	1.042	0.990	1.058	1.132	1.030	1.031
1	x -x	0.683	1.315	1.228	1.152	1.085	1.027	0.975	1.048	1.122	1.022	1.023
1	x -x	0.667	1.304	1.216	1.139	1.072	1.013	0.960	1.039	1.114	1.016	1.016
1	x -x	0.650	1.294	1.205	1.127	1.060	1.000	0.947	1.030	1.107	1.011	1.011
1	x -x	0.632	1.285	1.195	1.117	1.049	0.988	0.935	1.024	1.101	1.008	1.008
1	x -x	0.614	1.276	1.186	1.107	1.038	0.978	0.924	1.018	1.097	1.007	1.006
1	x -x	0.595	1.268	1.176	1.097	1.028	0.967	0.913	1.013	1.092	1.006	1.005
1	x -x	0.575	1.259	1.167	1.088	1.018	0.957	0.903	1.008	1.089	1.006	1.005
1	x -x	0.555	1.251	1.159	1.078	1.008	0.947	0.893	1.004	1.086	1.008	1.006
1	x -x	0.534	1.243	1.150	1.069	0.999	0.937	0.883	1.000	1.084	1.010	1.008
1	x -x	0.512	1.235	1.141	1.060	0.989	0.927	0.873	0.996	1.082	1.013	1.010
1	x -x	0.489	1.226	1.132	1.050	0.979	0.917	0.862	0.993	1.080	1.016	1.013
1	x -x	0.465	1.217	1.121	1.039	0.967	0.905	0.849	0.987	1.077	1.019	1.015
1	x -x	0.441	1.207	1.111	1.027	0.955	0.892	0.836	0.982	1.074	1.023	1.018
1	x -x	0.415	1.197	1.100	1.016	0.943	0.879	0.823	0.977	1.072	1.028	1.022
1	x -x	0.389	1.187	1.089	1.005	0.931	0.867	0.810	0.972	1.071	1.035	1.028
1	x -x	0.362	1.179	1.080	0.994	0.920	0.855	0.798	0.969	1.071	1.044	1.036
1	x -x	0.334	1.171	1.071	0.984	0.910	0.844	0.787	0.966	1.073	1.055	1.046
1	x -x	0.305	1.162	1.061	0.974	0.898	0.832	0.774	0.964	1.075	1.068	1.057
1	x -x	0.275	1.154	1.053	0.965	0.889	0.822	0.764	0.963	1.078	1.084	1.053
1	x -x	0.245	1.153	1.051	0.964	0.888	0.822	0.764	0.970	1.090	1.108	1.051
1	x -x	0.215	1.154	1.054	0.967	0.891	0.826	0.768	0.980	1.104	1.135	1.054
1	x -x	0.185	1.162	1.061	0.975	0.900	0.834	0.777	0.992	1.124	1.162	1.061
1	x -x	0.155	1.167	1.067	0.981	0.906	0.841	0.783	0.998	1.143	1.167	1.067
1	x -x	0.125	1.173	1.074	0.988	0.913	0.848	0.791	1.005	1.162	1.173	1.074
1	x -x	0.095	1.180	1.081	0.995	0.921	0.856	0.799	1.013	1.180	1.180	1.081
1	x -x	0.067	1.186	1.088	1.002	0.928	0.863	0.806	1.020	1.186	1.186	1.088
1	x -x	0.037	1.195	1.096	1.011	0.937	0.872	0.815	1.029	1.195	1.195	1.096
1	x -x	0.009	1.203	1.105	1.021	0.947	0.882	0.825	1.038	1.203	1.203	1.105
0.25	y -y	0.819	1.447	1.381	1.325	1.277	1.237	1.202	1.226	1.256	1.202	1.202
0.25	y -y	0.809	1.436	1.368	1.310	1.261	1.219	1.183	1.210	1.243	1.183	1.183
0.25	y -y	0.799	1.424	1.354	1.294	1.243	1.200	1.162	1.192	1.228	1.160	1.162
0.25	y -y	0.789	1.411	1.339	1.278	1.225	1.180	1.140	1.174	1.214	1.142	1.144
0.25	y -y	0.778	1.399	1.325	1.262	1.207	1.160	1.119	1.157	1.200	1.125	1.126
0.25	y -y	0.766	1.387	1.312	1.247	1.191	1.142	1.100	1.142	1.188	1.109	1.111
0.25	y -y	0.754	1.376	1.299	1.233	1.176	1.126	1.082	1.128	1.178	1.096	1.098
0.25	y -y	0.741	1.366	1.287	1.220	1.161	1.110	1.066	1.115	1.170	1.085	1.086
0.25	y -y	0.728	1.354	1.274	1.205	1.146	1.093	1.048	1.102	1.161	1.072	1.073
0.25	y -y	0.714	1.342	1.261	1.191	1.130	1.076	1.029	1.088	1.152	1.060	1.061
0.25	y -y	0.699	1.332	1.249	1.177	1.115	1.061	1.013	1.076	1.145	1.050	1.051
0.25	y -y	0.683	1.321	1.237	1.165	1.101	1.046	0.997	1.066	1.136	1.042	1.043
0.25	y -y	0.667	1.311	1.226	1.153	1.089	1.033	0.983	1.057	1.128	1.035	1.036
0.25	y -y	0.651	1.302	1.216	1.141	1.076	1.020	0.970	1.049	1.121	1.030	1.030
0.25	y -y	0.633	1.293	1.206	1.131	1.065	1.007	0.957	1.041	1.115	1.026	1.026
0.25	y -y	0.615	1.285	1.196	1.120	1.054	0.995	0.944	1.034	1.110	1.023	1.022
0.25	y -y	0.596	1.276	1.187	1.109	1.042	0.983	0.932	1.028	1.105	1.021	1.020
0.25	y -y	0.577	1.267	1.177	1.099	1.032	0.972	0.920	1.022	1.100	1.020	1.018
0.25	y -y	0.556	1.258	1.167	1.089	1.020	0.960	0.907	1.016	1.096	1.019	1.017
0.25	y -y	0.535	1.248	1.156	1.077	1.007	0.947	0.893	1.008	1.091	1.018	1.015
0.25	y -y	0.513	1.238	1.145	1.065	0.995	0.934	0.880	1.002	1.086	1.018	1.015
0.25	y -y	0.490	1.228	1.134	1.053	0.982	0.921	0.866	0.996	1.082	1.019	1.015

0.25	y -y	0.466	1.219	1.124	1.042	0.970	0.908	0.853	0.990	1.079	1.021	1.017
0.25	y -y	0.442	1.209	1.113	1.030	0.958	0.895	0.839	0.984	1.076	1.025	1.020
0.25	y -y	0.417	1.199	1.102	1.018	0.945	0.881	0.825	0.978	1.073	1.029	1.023
0.25	y -y	0.390	1.188	1.090	1.005	0.931	0.867	0.810	0.972	1.071	1.035	1.028
0.25	y -y	0.363	1.179	1.079	0.993	0.919	0.853	0.796	0.967	1.070	1.042	1.034
0.25	y -y	0.335	1.170	1.070	0.983	0.907	0.841	0.783	0.964	1.071	1.053	1.044
0.25	y -y	0.306	1.161	1.060	0.972	0.896	0.829	0.770	0.961	1.073	1.066	1.055
0.25	y -y	0.276	1.154	1.051	0.962	0.884	0.817	0.757	0.959	1.077	1.082	1.051
0.25	y -y	0.245	1.146	1.042	0.951	0.873	0.804	0.743	0.957	1.081	1.100	1.042
0.25	y -y	0.214	1.146	1.041	0.950	0.871	0.802	0.741	0.965	1.094	1.127	1.041
0.25	y -y	0.184	1.157	1.054	0.964	0.886	0.817	0.757	0.982	1.119	1.157	1.054
0.25	y -y	0.154	1.163	1.060	0.971	0.894	0.826	0.766	0.990	1.138	1.163	1.060
0.25	y -y	0.125	1.173	1.072	0.984	0.908	0.841	0.782	1.002	1.161	1.173	1.072
0.25	y -y	0.096	1.180	1.080	0.993	0.917	0.851	0.793	1.011	1.180	1.180	1.080
0.25	y -y	0.067	1.189	1.090	1.004	0.929	0.864	0.806	1.022	1.189	1.189	1.090
0.25	y -y	0.039	1.196	1.098	1.013	0.940	0.875	0.819	1.031	1.196	1.196	1.098
0.25	y -y	0.011	1.204	1.107	1.024	0.951	0.887	0.830	1.041	1.204	1.204	1.107
0.5	y -y	0.736	1.415	1.320	1.232	1.150	1.073	1.001	1.083	1.166	1.035	1.037
0.5	y -y	0.726	1.404	1.308	1.219	1.136	1.058	0.986	1.072	1.159	1.026	1.028
0.5	y -y	0.715	1.393	1.296	1.206	1.122	1.044	0.971	1.061	1.153	1.018	1.020
0.5	y -y	0.704	1.383	1.285	1.193	1.109	1.030	0.957	1.052	1.148	1.011	1.013
0.5	y -y	0.692	1.373	1.274	1.182	1.096	1.017	0.943	1.043	1.141	1.005	1.007
0.5	y -y	0.680	1.363	1.263	1.170	1.083	1.003	0.929	1.034	1.133	1.000	1.001
0.5	y -y	0.667	1.354	1.252	1.158	1.071	0.991	0.916	1.026	1.126	0.995	0.995
0.5	y -y	0.654	1.345	1.242	1.148	1.060	0.979	0.905	1.020	1.120	0.992	0.992
0.5	y -y	0.641	1.337	1.234	1.138	1.050	0.969	0.894	1.014	1.115	0.990	0.990
0.5	y -y	0.627	1.329	1.225	1.129	1.040	0.959	0.883	1.009	1.111	0.990	0.989
0.5	y -y	0.613	1.321	1.216	1.119	1.030	0.948	0.872	1.004	1.106	0.989	0.988
0.5	y -y	0.598	1.313	1.207	1.109	1.020	0.937	0.861	0.999	1.102	0.988	0.987
0.5	y -y	0.583	1.304	1.198	1.100	1.009	0.927	0.851	0.994	1.098	0.989	0.987
0.5	y -y	0.567	1.297	1.189	1.090	1.000	0.917	0.841	0.990	1.095	0.990	0.988
0.5	y -y	0.551	1.289	1.180	1.081	0.990	0.907	0.831	0.986	1.093	0.992	0.989
0.5	y -y	0.535	1.281	1.172	1.072	0.981	0.897	0.820	0.982	1.090	0.995	0.991
0.5	y -y	0.517	1.272	1.162	1.062	0.970	0.886	0.809	0.978	1.087	0.997	0.993
0.5	y -y	0.500	1.264	1.153	1.052	0.960	0.876	0.799	0.974	1.085	1.000	0.996
0.5	y -y	0.481	1.256	1.144	1.042	0.950	0.865	0.788	0.970	1.083	1.004	0.999
0.5	y -y	0.463	1.247	1.135	1.032	0.939	0.855	0.778	0.966	1.081	1.009	1.003
0.5	y -y	0.443	1.238	1.125	1.022	0.929	0.844	0.767	0.963	1.080	1.014	1.008
0.5	y -y	0.424	1.230	1.116	1.012	0.918	0.833	0.756	0.959	1.078	1.021	1.013
0.5	y -y	0.403	1.221	1.106	1.002	0.908	0.822	0.745	0.956	1.077	1.028	1.019
0.5	y -y	0.382	1.212	1.096	0.992	0.897	0.812	0.734	0.953	1.077	1.035	1.026
0.5	y -y	0.361	1.204	1.087	0.982	0.887	0.802	0.724	0.951	1.078	1.045	1.035
0.5	y -y	0.338	1.196	1.079	0.973	0.878	0.792	0.715	0.949	1.079	1.056	1.045
0.5	y -y	0.315	1.186	1.069	0.963	0.867	0.781	0.704	0.946	1.080	1.067	1.055
0.5	y -y	0.291	1.177	1.058	0.952	0.856	0.770	0.693	0.944	1.081	1.080	1.058
0.5	y -y	0.267	1.169	1.050	0.943	0.847	0.760	0.683	0.942	1.084	1.094	1.050
0.5	y -y	0.243	1.164	1.044	0.937	0.841	0.754	0.677	0.945	1.091	1.113	1.044
0.5	y -y	0.219	1.164	1.044	0.937	0.841	0.755	0.677	0.953	1.103	1.138	1.044
0.5	y -y	0.195	1.170	1.051	0.944	0.848	0.762	0.685	0.966	1.122	1.170	1.051
0.5	y -y	0.171	1.175	1.057	0.950	0.855	0.768	0.691	0.972	1.139	1.175	1.057
0.5	y -y	0.147	1.181	1.063	0.956	0.861	0.775	0.697	0.978	1.157	1.181	1.063
0.5	y -y	0.122	1.192	1.074	0.969	0.873	0.787	0.710	0.990	1.180	1.192	1.074
0.5	y -y	0.100	1.196	1.079	0.974	0.878	0.793	0.715	0.995	1.196	1.196	1.079
0.5	y -y	0.076	1.204	1.088	0.983	0.888	0.803	0.725	1.005	1.204	1.204	1.088
0.5	y -y	0.053	1.215	1.099	0.995	0.901	0.815	0.738	1.017	1.215	1.215	1.099
0.5	y -y	0.030	1.223	1.108	1.004	0.910	0.825	0.747	1.026	1.223	1.223	1.108
0.5	y -y	0.008	1.232	1.119	1.015	0.922	0.837	0.759	1.037	1.232	1.232	1.119

0.75	y -y	0.657	1.329	1.232	1.143	1.063	0.990	0.924	1.026	1.117	1.000	1.000
0.75	y -y	0.646	1.324	1.225	1.137	1.056	0.983	0.916	1.022	1.113	0.999	0.999
0.75	y -y	0.636	1.317	1.218	1.129	1.048	0.975	0.908	1.017	1.109	0.997	0.997
0.75	y -y	0.625	1.311	1.211	1.121	1.040	0.966	0.899	1.013	1.106	0.996	0.995
0.75	y -y	0.613	1.304	1.204	1.114	1.032	0.958	0.891	1.008	1.102	0.995	0.994
0.75	y -y	0.602	1.298	1.197	1.107	1.025	0.950	0.883	1.004	1.099	0.994	0.993
0.75	y -y	0.590	1.292	1.191	1.099	1.017	0.943	0.875	1.001	1.096	0.994	0.993
0.75	y -y	0.577	1.286	1.184	1.092	1.010	0.935	0.867	0.997	1.093	0.994	0.993
0.75	y -y	0.565	1.280	1.178	1.086	1.003	0.928	0.860	0.994	1.091	0.995	0.993
0.75	y -y	0.552	1.274	1.171	1.079	0.996	0.921	0.853	0.991	1.089	0.997	0.994
0.75	y -y	0.539	1.268	1.165	1.072	0.989	0.913	0.845	0.989	1.087	0.998	0.996
0.75	y -y	0.526	1.262	1.158	1.065	0.982	0.906	0.838	0.986	1.085	1.000	0.997
0.75	y -y	0.512	1.256	1.152	1.059	0.975	0.899	0.831	0.983	1.084	1.003	0.999
0.75	y -y	0.498	1.251	1.146	1.052	0.968	0.892	0.823	0.981	1.083	1.006	1.002
0.75	y -y	0.484	1.245	1.140	1.045	0.961	0.885	0.816	0.979	1.082	1.009	1.005
0.75	y -y	0.469	1.239	1.133	1.039	0.954	0.878	0.809	0.976	1.081	1.013	1.008
0.75	y -y	0.454	1.233	1.127	1.032	0.947	0.870	0.802	0.974	1.080	1.017	1.011
0.75	y -y	0.439	1.227	1.120	1.025	0.940	0.863	0.794	0.972	1.080	1.021	1.015
0.75	y -y	0.423	1.220	1.113	1.017	0.931	0.855	0.786	0.969	1.078	1.025	1.018
0.75	y -y	0.407	1.213	1.105	1.009	0.923	0.846	0.777	0.965	1.077	1.029	1.022
0.75	y -y	0.391	1.206	1.097	1.000	0.914	0.837	0.768	0.962	1.076	1.034	1.026
0.75	y -y	0.374	1.199	1.089	0.992	0.906	0.828	0.759	0.959	1.075	1.039	1.031
0.75	y -y	0.357	1.192	1.082	0.985	0.898	0.820	0.751	0.957	1.075	1.046	1.036
0.75	y -y	0.339	1.186	1.076	0.978	0.890	0.812	0.743	0.955	1.076	1.054	1.043
0.75	y -y	0.321	1.179	1.068	0.970	0.882	0.804	0.735	0.953	1.076	1.062	1.051
0.75	y -y	0.303	1.173	1.061	0.962	0.874	0.796	0.726	0.951	1.077	1.070	1.058
0.75	y -y	0.285	1.167	1.055	0.956	0.868	0.789	0.719	0.950	1.080	1.081	1.055
0.75	y -y	0.266	1.162	1.050	0.950	0.862	0.783	0.714	0.950	1.083	1.092	1.050
0.75	y -y	0.247	1.160	1.048	0.948	0.860	0.782	0.712	0.954	1.089	1.108	1.048
0.75	y -y	0.228	1.162	1.050	0.951	0.863	0.785	0.716	0.963	1.100	1.128	1.050
0.75	y -y	0.210	1.163	1.051	0.952	0.865	0.787	0.717	0.970	1.110	1.147	1.051
0.75	y -y	0.192	1.168	1.056	0.958	0.870	0.792	0.723	0.978	1.124	1.168	1.056
0.75	y -y	0.173	1.174	1.063	0.964	0.877	0.799	0.729	0.984	1.139	1.174	1.063
0.75	y -y	0.154	1.178	1.067	0.968	0.881	0.803	0.733	0.988	1.151	1.178	1.067
0.75	y -y	0.136	1.182	1.071	0.973	0.886	0.808	0.738	0.993	1.164	1.182	1.071
0.75	y -y	0.117	1.188	1.078	0.980	0.892	0.815	0.745	1.000	1.180	1.188	1.078
0.75	y -y	0.098	1.192	1.082	0.984	0.897	0.819	0.749	1.004	1.192	1.192	1.082
0.75	y -y	0.080	1.195	1.086	0.988	0.901	0.823	0.753	1.008	1.195	1.195	1.086
0.75	y -y	0.062	1.203	1.093	0.996	0.909	0.831	0.761	1.016	1.203	1.203	1.093
0.75	y -y	0.043	1.210	1.101	1.003	0.917	0.839	0.769	1.023	1.210	1.210	1.101
0.75	y -y	0.025	1.214	1.105	1.008	0.921	0.844	0.774	1.028	1.214	1.214	1.105
0.75	y -y	0.007	1.222	1.114	1.017	0.930	0.853	0.783	1.037	1.222	1.222	1.114
1	y -y	0.590	1.265	1.174	1.094	1.025	0.964	0.910	1.011	1.091	1.006	1.005
1	y -y	0.580	1.261	1.169	1.090	1.020	0.959	0.905	1.009	1.090	1.006	1.005
1	y -y	0.570	1.257	1.165	1.085	1.015	0.954	0.900	1.007	1.088	1.007	1.005
1	y -y	0.559	1.253	1.161	1.080	1.011	0.949	0.895	1.005	1.087	1.007	1.006
1	y -y	0.549	1.249	1.156	1.076	1.006	0.944	0.890	1.003	1.086	1.008	1.006
1	y -y	0.538	1.245	1.152	1.071	1.001	0.939	0.885	1.001	1.084	1.009	1.007
1	y -y	0.528	1.241	1.147	1.067	0.996	0.934	0.880	0.999	1.083	1.011	1.008
1	y -y	0.517	1.237	1.143	1.062	0.991	0.929	0.875	0.997	1.082	1.012	1.009
1	y -y	0.505	1.233	1.139	1.057	0.987	0.925	0.870	0.996	1.081	1.014	1.011
1	y -y	0.494	1.228	1.134	1.053	0.982	0.920	0.865	0.994	1.081	1.016	1.012
1	y -y	0.482	1.224	1.129	1.047	0.976	0.914	0.859	0.991	1.079	1.017	1.013
1	y -y	0.470	1.219	1.124	1.042	0.970	0.907	0.852	0.988	1.078	1.019	1.014
1	y -y	0.458	1.214	1.118	1.036	0.964	0.901	0.846	0.986	1.076	1.020	1.016
1	y -y	0.446	1.209	1.113	1.030	0.958	0.895	0.839	0.983	1.075	1.022	1.017
1	y -y	0.434	1.204	1.108	1.024	0.952	0.889	0.833	0.980	1.074	1.024	1.019

1	y -y	0.421	1.199	1.102	1.019	0.946	0.882	0.826	0.978	1.073	1.027	1.021
1	y -y	0.408	1.194	1.097	1.013	0.940	0.876	0.820	0.975	1.072	1.030	1.023
1	y -y	0.395	1.189	1.092	1.007	0.934	0.870	0.813	0.973	1.071	1.033	1.026
1	y -y	0.382	1.185	1.087	1.002	0.928	0.863	0.807	0.971	1.071	1.037	1.030
1	y -y	0.368	1.180	1.082	0.996	0.922	0.857	0.800	0.969	1.071	1.041	1.034
1	y -y	0.354	1.176	1.077	0.991	0.917	0.852	0.795	0.968	1.071	1.047	1.038
1	y -y	0.340	1.172	1.073	0.987	0.912	0.847	0.789	0.967	1.072	1.053	1.044
1	y -y	0.326	1.168	1.068	0.982	0.906	0.841	0.783	0.966	1.073	1.059	1.049
1	y -y	0.311	1.164	1.063	0.976	0.901	0.835	0.777	0.964	1.074	1.065	1.055
1	y -y	0.296	1.160	1.059	0.971	0.896	0.829	0.771	0.963	1.076	1.072	1.059
1	y -y	0.282	1.156	1.054	0.967	0.891	0.824	0.766	0.963	1.077	1.080	1.054
1	y -y	0.267	1.153	1.051	0.963	0.887	0.821	0.763	0.963	1.080	1.089	1.051
1	y -y	0.252	1.152	1.051	0.963	0.887	0.821	0.763	0.967	1.086	1.101	1.051
1	y -y	0.236	1.153	1.052	0.965	0.889	0.823	0.765	0.973	1.093	1.115	1.052
1	y -y	0.222	1.154	1.053	0.966	0.891	0.825	0.767	0.978	1.101	1.129	1.053
1	y -y	0.207	1.156	1.055	0.969	0.893	0.828	0.770	0.985	1.109	1.145	1.055
1	y -y	0.192	1.160	1.060	0.973	0.898	0.833	0.775	0.991	1.120	1.160	1.060
1	y -y	0.176	1.163	1.063	0.977	0.902	0.836	0.779	0.994	1.129	1.163	1.063
1	y -y	0.161	1.166	1.066	0.980	0.905	0.840	0.782	0.997	1.139	1.166	1.066
1	y -y	0.146	1.168	1.069	0.983	0.908	0.843	0.785	1.000	1.148	1.168	1.069
1	y -y	0.132	1.172	1.072	0.986	0.912	0.846	0.789	1.004	1.157	1.172	1.072
1	y -y	0.117	1.175	1.076	0.990	0.916	0.851	0.794	1.008	1.168	1.175	1.076
1	y -y	0.102	1.178	1.079	0.994	0.920	0.855	0.797	1.011	1.177	1.178	1.079
1	y -y	0.087	1.180	1.081	0.996	0.922	0.857	0.800	1.013	1.180	1.180	1.081
1	y -y	0.073	1.184	1.085	1.000	0.926	0.861	0.804	1.017	1.184	1.184	1.085
1	y -y	0.059	1.189	1.090	1.005	0.931	0.866	0.809	1.023	1.189	1.189	1.090
1	y -y	0.044	1.193	1.095	1.010	0.936	0.871	0.814	1.027	1.193	1.193	1.095
1	y -y	0.029	1.197	1.098	1.013	0.939	0.874	0.817	1.031	1.197	1.197	1.098
1	y -y	0.015	1.201	1.103	1.018	0.944	0.879	0.822	1.035	1.201	1.201	1.103
1	y -y	0.001	1.206	1.108	1.024	0.950	0.885	0.828	1.041	1.206	1.206	1.108

Tabla C.19 Valores de r_2 de la sección 23 (60 cm x 120 cm con ρ = 0.03 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.897	1.473	1.496	1.539	1.596	1.665	1.745	1.720	1.676	1.745	1.745
0.25	x -x	0.885	1.424	1.437	1.469	1.514	1.569	1.633	1.608	1.571	1.633	1.633
0.25	x -x	0.872	1.382	1.387	1.409	1.444	1.488	1.540	1.517	1.485	1.540	1.540
0.25	x -x	0.858	1.347	1.345	1.360	1.387	1.422	1.465	1.442	1.415	1.465	1.465
0.25	x -x	0.842	1.319	1.312	1.321	1.341	1.370	1.405	1.384	1.360	1.405	1.405
0.25	x -x	0.826	1.293	1.282	1.286	1.301	1.324	1.353	1.333	1.313	1.353	1.353
0.25	x -x	0.808	1.269	1.253	1.253	1.264	1.282	1.305	1.287	1.270	1.305	1.305
0.25	x -x	0.788	1.246	1.228	1.225	1.233	1.247	1.266	1.249	1.236	1.266	1.265
0.25	x -x	0.768	1.228	1.208	1.204	1.209	1.221	1.237	1.221	1.209	1.234	1.233
0.25	x -x	0.748	1.209	1.188	1.182	1.185	1.195	1.209	1.194	1.185	1.204	1.203
0.25	x -x	0.726	1.193	1.172	1.165	1.167	1.175	1.187	1.173	1.165	1.180	1.179
0.25	x -x	0.705	1.180	1.158	1.150	1.151	1.158	1.169	1.156	1.150	1.160	1.160
0.25	x -x	0.683	1.169	1.146	1.137	1.137	1.142	1.152	1.140	1.136	1.143	1.143
0.25	x -x	0.660	1.159	1.135	1.126	1.124	1.129	1.136	1.126	1.124	1.128	1.128
0.25	x -x	0.638	1.151	1.127	1.116	1.114	1.117	1.124	1.115	1.115	1.116	1.116
0.25	x -x	0.615	1.143	1.118	1.107	1.104	1.106	1.112	1.104	1.106	1.105	1.105
0.25	x -x	0.591	1.136	1.110	1.098	1.094	1.095	1.100	1.094	1.098	1.094	1.094
0.25	x -x	0.567	1.130	1.104	1.091	1.086	1.087	1.090	1.086	1.092	1.086	1.086
0.25	x -x	0.542	1.125	1.098	1.084	1.079	1.078	1.081	1.079	1.086	1.079	1.079
0.25	x -x	0.517	1.119	1.092	1.077	1.071	1.070	1.072	1.071	1.080	1.072	1.072
0.25	x -x	0.491	1.115	1.087	1.072	1.065	1.063	1.064	1.066	1.077	1.068	1.068

0.25	x -x	0.464	1.111	1.082	1.066	1.058	1.055	1.055	1.060	1.073	1.063	1.063
0.25	x -x	0.436	1.107	1.077	1.060	1.051	1.047	1.046	1.054	1.069	1.060	1.059
0.25	x -x	0.407	1.101	1.070	1.052	1.042	1.037	1.034	1.046	1.064	1.055	1.054
0.25	x -x	0.378	1.097	1.067	1.049	1.039	1.034	1.032	1.045	1.063	1.056	1.055
0.25	x -x	0.350	1.097	1.068	1.052	1.043	1.039	1.037	1.048	1.067	1.062	1.060
0.25	x -x	0.325	1.094	1.065	1.048	1.038	1.034	1.032	1.045	1.066	1.063	1.061
0.25	x -x	0.299	1.094	1.064	1.047	1.037	1.033	1.030	1.046	1.068	1.067	1.064
0.25	x -x	0.273	1.094	1.063	1.046	1.036	1.031	1.029	1.046	1.070	1.072	1.063
0.25	x -x	0.248	1.093	1.062	1.043	1.033	1.027	1.024	1.044	1.072	1.077	1.062
0.25	x -x	0.222	1.094	1.062	1.043	1.033	1.026	1.023	1.046	1.076	1.085	1.062
0.25	x -x	0.197	1.094	1.061	1.042	1.030	1.024	1.020	1.045	1.079	1.094	1.061
0.25	x -x	0.171	1.097	1.063	1.043	1.031	1.024	1.020	1.047	1.085	1.097	1.063
0.25	x -x	0.145	1.098	1.063	1.042	1.029	1.021	1.016	1.046	1.090	1.098	1.063
0.25	x -x	0.119	1.101	1.065	1.042	1.029	1.020	1.015	1.046	1.097	1.101	1.065
0.25	x -x	0.092	1.105	1.068	1.044	1.029	1.019	1.014	1.048	1.105	1.105	1.068
0.25	x -x	0.066	1.109	1.068	1.042	1.025	1.014	1.006	1.047	1.109	1.109	1.068
0.25	x -x	0.039	1.117	1.074	1.046	1.027	1.014	1.005	1.051	1.117	1.117	1.074
0.25	x -x	0.011	1.126	1.080	1.049	1.028	1.013	1.002	1.055	1.126	1.126	1.080
0.5	x -x	0.892	1.819	1.870	1.944	2.038	2.152	2.284	2.239	2.164	2.284	2.284
0.5	x -x	0.879	1.733	1.765	1.817	1.887	1.974	2.075	2.033	1.973	2.075	2.075
0.5	x -x	0.866	1.661	1.678	1.713	1.764	1.829	1.907	1.869	1.821	1.907	1.907
0.5	x -x	0.851	1.601	1.606	1.628	1.665	1.714	1.774	1.740	1.701	1.774	1.774
0.5	x -x	0.836	1.550	1.546	1.557	1.583	1.620	1.667	1.636	1.605	1.667	1.667
0.5	x -x	0.819	1.504	1.491	1.494	1.510	1.536	1.572	1.546	1.521	1.572	1.572
0.5	x -x	0.801	1.461	1.441	1.437	1.445	1.463	1.490	1.468	1.450	1.490	1.490
0.5	x -x	0.783	1.424	1.399	1.389	1.391	1.403	1.423	1.405	1.393	1.421	1.420
0.5	x -x	0.763	1.393	1.363	1.350	1.348	1.356	1.371	1.356	1.348	1.366	1.365
0.5	x -x	0.743	1.364	1.332	1.315	1.309	1.313	1.324	1.313	1.310	1.319	1.318
0.5	x -x	0.722	1.339	1.304	1.285	1.277	1.278	1.285	1.277	1.278	1.280	1.280
0.5	x -x	0.701	1.316	1.279	1.258	1.248	1.247	1.252	1.246	1.252	1.247	1.247
0.5	x -x	0.679	1.296	1.257	1.234	1.222	1.219	1.222	1.220	1.228	1.219	1.219
0.5	x -x	0.656	1.278	1.238	1.214	1.200	1.195	1.196	1.197	1.208	1.195	1.195
0.5	x -x	0.633	1.263	1.222	1.196	1.181	1.174	1.173	1.178	1.192	1.176	1.176
0.5	x -x	0.610	1.250	1.207	1.179	1.163	1.155	1.152	1.160	1.177	1.158	1.158
0.5	x -x	0.587	1.237	1.192	1.164	1.146	1.136	1.131	1.143	1.163	1.142	1.142
0.5	x -x	0.563	1.226	1.181	1.150	1.131	1.120	1.114	1.130	1.152	1.130	1.130
0.5	x -x	0.538	1.216	1.169	1.137	1.117	1.104	1.096	1.117	1.142	1.119	1.118
0.5	x -x	0.513	1.206	1.158	1.125	1.103	1.088	1.079	1.105	1.133	1.109	1.108
0.5	x -x	0.487	1.198	1.149	1.114	1.091	1.075	1.065	1.095	1.126	1.103	1.101
0.5	x -x	0.461	1.190	1.139	1.104	1.079	1.061	1.049	1.085	1.120	1.097	1.095
0.5	x -x	0.433	1.182	1.129	1.092	1.065	1.046	1.033	1.075	1.113	1.092	1.090
0.5	x -x	0.405	1.171	1.117	1.077	1.049	1.028	1.012	1.062	1.105	1.086	1.083
0.5	x -x	0.377	1.165	1.110	1.070	1.041	1.019	1.003	1.058	1.103	1.087	1.084
0.5	x -x	0.349	1.165	1.110	1.070	1.041	1.020	1.004	1.061	1.108	1.097	1.093
0.5	x -x	0.321	1.162	1.107	1.067	1.038	1.017	1.001	1.061	1.111	1.104	1.100
0.5	x -x	0.294	1.163	1.108	1.068	1.039	1.018	1.001	1.065	1.118	1.116	1.108
0.5	x -x	0.267	1.162	1.106	1.065	1.034	1.012	0.995	1.065	1.121	1.125	1.106
0.5	x -x	0.241	1.162	1.105	1.063	1.031	1.008	0.990	1.066	1.126	1.138	1.105
0.5	x -x	0.214	1.165	1.106	1.063	1.031	1.006	0.987	1.070	1.135	1.154	1.106
0.5	x -x	0.188	1.166	1.106	1.061	1.027	1.002	0.981	1.070	1.142	1.166	1.106
0.5	x -x	0.161	1.170	1.109	1.063	1.028	1.001	0.979	1.072	1.153	1.170	1.109
0.5	x -x	0.135	1.175	1.112	1.064	1.028	0.999	0.976	1.074	1.165	1.175	1.112
0.5	x -x	0.108	1.183	1.118	1.069	1.031	1.001	0.977	1.078	1.180	1.183	1.118
0.5	x -x	0.080	1.191	1.125	1.074	1.034	1.002	0.976	1.084	1.191	1.191	1.125
0.5	x -x	0.054	1.201	1.132	1.078	1.035	1.001	0.973	1.089	1.201	1.201	1.132
0.5	x -x	0.026	1.216	1.145	1.088	1.043	1.007	0.977	1.100	1.216	1.216	1.145
0.75	x -x	0.893	2.109	2.193	2.297	2.423	2.570	2.740	2.683	2.587	2.740	2.740

0.75	x -x	0.881	1.991	2.046	2.119	2.209	2.317	2.442	2.391	2.318	2.442	2.442
0.75	x -x	0.868	1.892	1.925	1.974	2.037	2.114	2.206	2.162	2.106	2.206	2.206
0.75	x -x	0.854	1.810	1.825	1.855	1.897	1.952	2.019	1.982	1.939	2.019	2.019
0.75	x -x	0.839	1.740	1.742	1.756	1.783	1.821	1.869	1.839	1.807	1.869	1.869
0.75	x -x	0.823	1.678	1.667	1.670	1.683	1.707	1.740	1.716	1.695	1.740	1.740
0.75	x -x	0.806	1.621	1.600	1.592	1.595	1.608	1.629	1.612	1.599	1.629	1.629
0.75	x -x	0.789	1.571	1.542	1.526	1.521	1.524	1.535	1.525	1.521	1.535	1.534
0.75	x -x	0.771	1.529	1.494	1.471	1.459	1.456	1.460	1.456	1.459	1.459	1.459
0.75	x -x	0.752	1.491	1.451	1.423	1.406	1.397	1.396	1.398	1.407	1.396	1.396
0.75	x -x	0.732	1.459	1.414	1.382	1.360	1.348	1.342	1.349	1.365	1.344	1.344
0.75	x -x	0.712	1.430	1.381	1.346	1.321	1.305	1.296	1.308	1.330	1.302	1.302
0.75	x -x	0.690	1.403	1.352	1.314	1.286	1.267	1.255	1.273	1.300	1.265	1.265
0.75	x -x	0.669	1.378	1.324	1.284	1.254	1.232	1.218	1.241	1.271	1.233	1.233
0.75	x -x	0.646	1.356	1.300	1.258	1.226	1.202	1.185	1.214	1.248	1.207	1.207
0.75	x -x	0.623	1.337	1.279	1.234	1.200	1.175	1.157	1.191	1.227	1.185	1.185
0.75	x -x	0.600	1.318	1.258	1.212	1.176	1.149	1.129	1.169	1.209	1.165	1.165
0.75	x -x	0.576	1.302	1.240	1.192	1.155	1.126	1.104	1.150	1.193	1.149	1.148
0.75	x -x	0.552	1.288	1.224	1.174	1.135	1.105	1.081	1.134	1.179	1.136	1.135
0.75	x -x	0.527	1.273	1.208	1.156	1.115	1.083	1.058	1.117	1.166	1.123	1.122
0.75	x -x	0.502	1.260	1.193	1.139	1.097	1.063	1.036	1.102	1.155	1.114	1.112
0.75	x -x	0.476	1.249	1.179	1.124	1.080	1.045	1.016	1.090	1.146	1.107	1.105
0.75	x -x	0.450	1.237	1.166	1.109	1.063	1.026	0.995	1.078	1.138	1.102	1.099
0.75	x -x	0.423	1.225	1.152	1.093	1.045	1.006	0.974	1.066	1.130	1.098	1.094
0.75	x -x	0.396	1.213	1.137	1.077	1.027	0.986	0.951	1.053	1.122	1.095	1.090
0.75	x -x	0.368	1.207	1.131	1.069	1.019	0.978	0.943	1.051	1.123	1.102	1.096
0.75	x -x	0.340	1.205	1.129	1.067	1.017	0.975	0.940	1.054	1.129	1.114	1.108
0.75	x -x	0.312	1.204	1.127	1.065	1.014	0.972	0.936	1.057	1.135	1.128	1.121
0.75	x -x	0.284	1.207	1.130	1.067	1.016	0.973	0.937	1.064	1.146	1.147	1.130
0.75	x -x	0.258	1.206	1.129	1.066	1.013	0.970	0.934	1.067	1.154	1.163	1.129
0.75	x -x	0.231	1.210	1.132	1.068	1.015	0.971	0.934	1.075	1.165	1.184	1.132
0.75	x -x	0.203	1.213	1.134	1.070	1.016	0.971	0.933	1.082	1.177	1.206	1.134
0.75	x -x	0.178	1.217	1.137	1.071	1.017	0.971	0.932	1.084	1.189	1.217	1.137
0.75	x -x	0.151	1.224	1.143	1.076	1.020	0.973	0.933	1.089	1.205	1.224	1.143
0.75	x -x	0.125	1.231	1.150	1.082	1.025	0.977	0.935	1.096	1.222	1.231	1.150
0.75	x -x	0.098	1.241	1.159	1.090	1.032	0.982	0.939	1.104	1.241	1.241	1.159
0.75	x -x	0.071	1.253	1.170	1.099	1.040	0.988	0.944	1.114	1.253	1.253	1.170
0.75	x -x	0.046	1.268	1.184	1.112	1.051	0.998	0.952	1.127	1.268	1.268	1.184
0.75	x -x	0.019	1.287	1.202	1.129	1.066	1.012	0.964	1.144	1.287	1.287	1.202
1	x -x	0.889	2.253	2.344	2.450	2.572	2.712	2.869	2.813	2.723	2.869	2.869
1	x -x	0.877	2.127	2.188	2.260	2.345	2.444	2.556	2.508	2.441	2.556	2.556
1	x -x	0.864	2.019	2.055	2.101	2.157	2.224	2.302	2.263	2.215	2.302	2.302
1	x -x	0.851	1.928	1.944	1.969	2.003	2.047	2.099	2.069	2.035	2.099	2.099
1	x -x	0.836	1.849	1.850	1.858	1.875	1.900	1.933	1.911	1.890	1.933	1.933
1	x -x	0.821	1.779	1.766	1.760	1.763	1.773	1.790	1.777	1.767	1.790	1.790
1	x -x	0.805	1.716	1.691	1.674	1.665	1.663	1.667	1.663	1.663	1.667	1.667
1	x -x	0.789	1.660	1.625	1.599	1.581	1.569	1.563	1.568	1.577	1.563	1.563
1	x -x	0.771	1.613	1.570	1.537	1.511	1.492	1.478	1.491	1.509	1.480	1.481
1	x -x	0.753	1.570	1.522	1.482	1.450	1.425	1.405	1.426	1.452	1.411	1.412
1	x -x	0.735	1.533	1.479	1.434	1.397	1.367	1.343	1.371	1.405	1.354	1.355
1	x -x	0.716	1.500	1.442	1.393	1.352	1.318	1.290	1.325	1.366	1.308	1.309
1	x -x	0.695	1.470	1.408	1.355	1.311	1.274	1.243	1.285	1.333	1.268	1.269
1	x -x	0.675	1.443	1.377	1.322	1.275	1.235	1.201	1.251	1.302	1.234	1.235
1	x -x	0.653	1.419	1.350	1.292	1.242	1.200	1.164	1.221	1.276	1.207	1.207
1	x -x	0.631	1.396	1.325	1.264	1.213	1.169	1.132	1.195	1.253	1.184	1.184
1	x -x	0.609	1.375	1.301	1.239	1.186	1.140	1.101	1.171	1.232	1.164	1.163
1	x -x	0.586	1.355	1.279	1.215	1.160	1.112	1.072	1.150	1.213	1.146	1.145
1	x -x	0.562	1.337	1.260	1.194	1.137	1.089	1.047	1.132	1.198	1.134	1.132

1	x -x	0.538	1.320	1.241	1.173	1.115	1.066	1.023	1.116	1.184	1.122	1.121
1	x -x	0.513	1.304	1.223	1.154	1.095	1.043	0.999	1.100	1.172	1.114	1.111
1	x -x	0.488	1.290	1.207	1.136	1.076	1.023	0.977	1.087	1.162	1.107	1.104
1	x -x	0.463	1.276	1.191	1.119	1.057	1.003	0.956	1.074	1.153	1.103	1.099
1	x -x	0.437	1.262	1.176	1.102	1.038	0.982	0.934	1.062	1.144	1.100	1.095
1	x -x	0.410	1.248	1.159	1.083	1.017	0.960	0.910	1.049	1.135	1.097	1.091
1	x -x	0.384	1.235	1.145	1.067	1.001	0.942	0.892	1.039	1.130	1.098	1.092
1	x -x	0.357	1.231	1.140	1.062	0.995	0.937	0.886	1.040	1.134	1.111	1.103
1	x -x	0.330	1.229	1.138	1.059	0.992	0.933	0.881	1.044	1.141	1.126	1.118
1	x -x	0.303	1.231	1.140	1.061	0.993	0.934	0.882	1.052	1.153	1.147	1.138
1	x -x	0.276	1.233	1.141	1.062	0.993	0.934	0.881	1.060	1.164	1.169	1.141
1	x -x	0.249	1.236	1.144	1.064	0.995	0.935	0.882	1.068	1.177	1.191	1.144
1	x -x	0.223	1.240	1.148	1.068	0.998	0.937	0.884	1.079	1.191	1.217	1.148
1	x -x	0.197	1.245	1.152	1.072	1.002	0.940	0.886	1.088	1.206	1.245	1.152
1	x -x	0.171	1.251	1.158	1.077	1.007	0.945	0.890	1.094	1.222	1.251	1.158
1	x -x	0.144	1.260	1.167	1.085	1.014	0.952	0.896	1.102	1.241	1.260	1.167
1	x -x	0.119	1.269	1.176	1.095	1.023	0.960	0.903	1.111	1.261	1.269	1.176
1	x -x	0.094	1.281	1.187	1.106	1.033	0.969	0.912	1.122	1.281	1.281	1.187
1	x -x	0.069	1.294	1.201	1.118	1.045	0.980	0.923	1.135	1.294	1.294	1.201
1	x -x	0.045	1.312	1.219	1.136	1.063	0.997	0.939	1.153	1.312	1.312	1.219
1	x -x	0.020	1.332	1.240	1.158	1.085	1.018	0.959	1.175	1.332	1.332	1.240
0.25	y -y	0.899	2.384	2.516	2.669	2.845	3.047	3.277	3.208	3.082	3.277	3.277
0.25	y -y	0.888	2.236	2.329	2.439	2.566	2.712	2.878	2.818	2.723	2.878	2.878
0.25	y -y	0.876	2.115	2.178	2.255	2.346	2.452	2.572	2.520	2.448	2.572	2.572
0.25	y -y	0.863	2.012	2.051	2.101	2.164	2.238	2.325	2.281	2.227	2.325	2.325
0.25	y -y	0.850	1.925	1.945	1.975	2.016	2.066	2.127	2.092	2.053	2.127	2.127
0.25	y -y	0.836	1.850	1.855	1.869	1.892	1.925	1.965	1.939	1.912	1.965	1.965
0.25	y -y	0.821	1.782	1.774	1.774	1.783	1.800	1.825	1.807	1.791	1.825	1.825
0.25	y -y	0.805	1.720	1.700	1.688	1.685	1.690	1.701	1.691	1.686	1.701	1.701
0.25	y -y	0.789	1.665	1.635	1.613	1.600	1.594	1.595	1.594	1.598	1.594	1.594
0.25	y -y	0.771	1.617	1.579	1.549	1.528	1.514	1.506	1.513	1.526	1.507	1.507
0.25	y -y	0.753	1.574	1.528	1.492	1.464	1.443	1.428	1.444	1.465	1.432	1.433
0.25	y -y	0.735	1.536	1.484	1.442	1.409	1.382	1.362	1.385	1.415	1.371	1.372
0.25	y -y	0.716	1.503	1.446	1.400	1.362	1.331	1.307	1.338	1.375	1.322	1.323
0.25	y -y	0.695	1.472	1.411	1.361	1.319	1.285	1.256	1.295	1.340	1.279	1.280
0.25	y -y	0.675	1.443	1.379	1.325	1.280	1.242	1.211	1.257	1.306	1.242	1.242
0.25	y -y	0.653	1.417	1.350	1.293	1.245	1.205	1.171	1.225	1.278	1.211	1.212
0.25	y -y	0.631	1.395	1.324	1.265	1.215	1.173	1.137	1.198	1.254	1.187	1.187
0.25	y -y	0.609	1.373	1.300	1.239	1.187	1.142	1.105	1.173	1.232	1.165	1.165
0.25	y -y	0.586	1.353	1.278	1.214	1.160	1.114	1.074	1.150	1.213	1.147	1.146
0.25	y -y	0.562	1.334	1.257	1.192	1.136	1.088	1.047	1.131	1.196	1.132	1.131
0.25	y -y	0.538	1.317	1.238	1.170	1.113	1.063	1.021	1.113	1.181	1.120	1.118
0.25	y -y	0.513	1.301	1.220	1.150	1.091	1.040	0.996	1.097	1.168	1.110	1.107
0.25	y -y	0.488	1.286	1.203	1.132	1.071	1.019	0.973	1.083	1.158	1.103	1.100
0.25	y -y	0.463	1.272	1.187	1.115	1.052	0.998	0.951	1.070	1.148	1.098	1.095
0.25	y -y	0.437	1.258	1.171	1.097	1.033	0.977	0.929	1.057	1.140	1.095	1.090
0.25	y -y	0.410	1.244	1.155	1.079	1.013	0.956	0.906	1.045	1.131	1.093	1.087
0.25	y -y	0.383	1.230	1.139	1.060	0.992	0.933	0.881	1.032	1.124	1.092	1.085
0.25	y -y	0.356	1.220	1.127	1.047	0.977	0.916	0.863	1.024	1.121	1.097	1.089
0.25	y -y	0.329	1.220	1.126	1.046	0.976	0.914	0.861	1.030	1.130	1.115	1.107
0.25	y -y	0.302	1.226	1.133	1.052	0.983	0.922	0.868	1.044	1.146	1.141	1.131
0.25	y -y	0.276	1.229	1.136	1.056	0.986	0.926	0.872	1.054	1.160	1.164	1.136
0.25	y -y	0.249	1.233	1.140	1.060	0.991	0.930	0.877	1.065	1.174	1.188	1.140
0.25	y -y	0.223	1.239	1.147	1.068	0.999	0.939	0.886	1.079	1.190	1.216	1.147
0.25	y -y	0.197	1.245	1.153	1.074	1.006	0.945	0.892	1.090	1.206	1.245	1.153
0.25	y -y	0.172	1.252	1.161	1.082	1.013	0.953	0.900	1.098	1.223	1.252	1.161
0.25	y -y	0.147	1.259	1.168	1.089	1.021	0.961	0.908	1.105	1.240	1.259	1.168

0.25	y -y	0.123	1.268	1.177	1.098	1.030	0.970	0.916	1.115	1.258	1.268	1.177
0.25	y -y	0.099	1.276	1.185	1.106	1.037	0.975	0.921	1.122	1.276	1.276	1.185
0.25	y -y	0.076	1.286	1.195	1.115	1.045	0.983	0.927	1.131	1.286	1.286	1.195
0.25	y -y	0.054	1.299	1.208	1.128	1.058	0.995	0.940	1.144	1.299	1.299	1.208
0.25	y -y	0.031	1.316	1.226	1.147	1.077	1.015	0.960	1.163	1.316	1.316	1.226
0.25	y -y	0.008	1.335	1.246	1.168	1.098	1.036	0.981	1.184	1.335	1.335	1.246
0.5	y -y	0.850	2.072	2.087	2.102	2.117	2.132	2.147	2.139	2.128	2.147	2.147
0.5	y -y	0.838	1.999	1.999	1.999	1.999	1.999	1.998	1.999	1.999	1.998	1.998
0.5	y -y	0.827	1.932	1.919	1.906	1.893	1.880	1.867	1.876	1.885	1.867	1.867
0.5	y -y	0.815	1.870	1.845	1.821	1.797	1.773	1.749	1.767	1.786	1.749	1.749
0.5	y -y	0.802	1.814	1.779	1.745	1.711	1.678	1.646	1.672	1.700	1.646	1.646
0.5	y -y	0.789	1.764	1.721	1.678	1.637	1.596	1.557	1.591	1.627	1.558	1.560
0.5	y -y	0.776	1.720	1.668	1.619	1.571	1.524	1.479	1.521	1.564	1.485	1.487
0.5	y -y	0.762	1.679	1.622	1.566	1.512	1.461	1.410	1.461	1.512	1.423	1.425
0.5	y -y	0.748	1.643	1.580	1.519	1.460	1.404	1.350	1.408	1.466	1.370	1.372
0.5	y -y	0.733	1.610	1.542	1.476	1.414	1.354	1.296	1.362	1.427	1.325	1.327
0.5	y -y	0.718	1.581	1.508	1.439	1.373	1.309	1.249	1.323	1.395	1.287	1.288
0.5	y -y	0.703	1.554	1.477	1.405	1.336	1.270	1.207	1.288	1.368	1.254	1.256
0.5	y -y	0.687	1.528	1.448	1.372	1.300	1.232	1.167	1.256	1.340	1.225	1.226
0.5	y -y	0.670	1.504	1.420	1.341	1.267	1.197	1.130	1.227	1.313	1.199	1.199
0.5	y -y	0.653	1.482	1.395	1.314	1.237	1.165	1.098	1.202	1.290	1.177	1.178
0.5	y -y	0.636	1.462	1.373	1.289	1.211	1.137	1.068	1.180	1.270	1.160	1.160
0.5	y -y	0.618	1.442	1.351	1.265	1.185	1.110	1.040	1.160	1.252	1.144	1.144
0.5	y -y	0.600	1.424	1.330	1.242	1.161	1.084	1.013	1.141	1.235	1.131	1.130
0.5	y -y	0.581	1.406	1.311	1.221	1.138	1.061	0.989	1.124	1.221	1.120	1.118
0.5	y -y	0.562	1.390	1.293	1.202	1.118	1.039	0.966	1.110	1.208	1.112	1.110
0.5	y -y	0.543	1.375	1.275	1.183	1.098	1.018	0.945	1.096	1.197	1.105	1.102
0.5	y -y	0.523	1.359	1.258	1.165	1.078	0.998	0.924	1.083	1.186	1.100	1.096
0.5	y -y	0.502	1.345	1.242	1.147	1.060	0.979	0.904	1.072	1.177	1.096	1.092
0.5	y -y	0.482	1.331	1.227	1.131	1.042	0.961	0.885	1.062	1.169	1.094	1.089
0.5	y -y	0.461	1.317	1.211	1.114	1.025	0.943	0.867	1.052	1.161	1.094	1.088
0.5	y -y	0.439	1.303	1.196	1.097	1.007	0.924	0.848	1.042	1.154	1.093	1.087
0.5	y -y	0.416	1.287	1.179	1.079	0.988	0.905	0.829	1.031	1.146	1.093	1.086
0.5	y -y	0.394	1.274	1.164	1.063	0.971	0.888	0.811	1.022	1.140	1.095	1.087
0.5	y -y	0.372	1.262	1.151	1.049	0.957	0.873	0.796	1.015	1.137	1.100	1.091
0.5	y -y	0.349	1.256	1.144	1.043	0.950	0.866	0.789	1.016	1.140	1.113	1.103
0.5	y -y	0.327	1.256	1.144	1.042	0.950	0.865	0.788	1.023	1.150	1.133	1.122
0.5	y -y	0.304	1.260	1.149	1.047	0.955	0.870	0.794	1.035	1.164	1.157	1.145
0.5	y -y	0.282	1.262	1.151	1.050	0.957	0.873	0.796	1.045	1.177	1.179	1.151
0.5	y -y	0.261	1.264	1.153	1.052	0.959	0.875	0.798	1.054	1.188	1.201	1.153
0.5	y -y	0.239	1.270	1.160	1.059	0.967	0.883	0.807	1.068	1.205	1.227	1.160
0.5	y -y	0.218	1.277	1.167	1.067	0.975	0.891	0.815	1.082	1.221	1.254	1.167
0.5	y -y	0.197	1.281	1.172	1.072	0.980	0.897	0.820	1.093	1.235	1.281	1.172
0.5	y -y	0.177	1.287	1.179	1.079	0.988	0.905	0.829	1.100	1.252	1.287	1.179
0.5	y -y	0.157	1.295	1.187	1.088	0.997	0.914	0.838	1.108	1.268	1.295	1.187
0.5	y -y	0.137	1.305	1.198	1.100	1.010	0.927	0.851	1.120	1.288	1.305	1.198
0.5	y -y	0.117	1.314	1.208	1.111	1.021	0.939	0.863	1.131	1.306	1.314	1.208
0.5	y -y	0.098	1.322	1.217	1.120	1.031	0.949	0.874	1.140	1.322	1.322	1.217
0.5	y -y	0.079	1.333	1.229	1.133	1.045	0.964	0.889	1.153	1.333	1.333	1.229
0.5	y -y	0.060	1.346	1.244	1.149	1.062	0.981	0.907	1.169	1.346	1.346	1.244
0.5	y -y	0.042	1.362	1.262	1.169	1.082	1.003	0.929	1.188	1.362	1.362	1.262
0.5	y -y	0.025	1.377	1.278	1.187	1.101	1.022	0.949	1.206	1.377	1.377	1.278
0.5	y -y	0.007	1.393	1.296	1.206	1.122	1.044	0.972	1.225	1.393	1.393	1.296
0.75	y -y	0.763	1.650	1.598	1.549	1.505	1.465	1.429	1.465	1.504	1.437	1.439
0.75	y -y	0.752	1.622	1.565	1.513	1.465	1.421	1.381	1.423	1.468	1.395	1.396
0.75	y -y	0.741	1.596	1.535	1.479	1.428	1.381	1.338	1.386	1.436	1.357	1.358
0.75	y -y	0.729	1.573	1.508	1.449	1.395	1.346	1.300	1.353	1.409	1.324	1.325

0.75	y -y	0.717	1.551	1.483	1.422	1.365	1.313	1.265	1.324	1.385	1.295	1.297
0.75	y -y	0.705	1.531	1.460	1.396	1.337	1.283	1.233	1.297	1.363	1.270	1.271
0.75	y -y	0.692	1.511	1.438	1.371	1.310	1.255	1.203	1.273	1.342	1.246	1.247
0.75	y -y	0.679	1.493	1.417	1.348	1.286	1.228	1.175	1.250	1.322	1.225	1.226
0.75	y -y	0.666	1.476	1.398	1.327	1.262	1.203	1.149	1.229	1.303	1.207	1.207
0.75	y -y	0.653	1.459	1.379	1.307	1.240	1.180	1.125	1.210	1.286	1.190	1.190
0.75	y -y	0.639	1.444	1.362	1.288	1.220	1.159	1.102	1.193	1.270	1.176	1.176
0.75	y -y	0.626	1.429	1.346	1.270	1.201	1.138	1.081	1.178	1.256	1.163	1.163
0.75	y -y	0.612	1.415	1.330	1.253	1.183	1.119	1.061	1.163	1.243	1.151	1.151
0.75	y -y	0.597	1.401	1.314	1.236	1.165	1.100	1.041	1.148	1.231	1.141	1.140
0.75	y -y	0.583	1.388	1.300	1.220	1.148	1.082	1.023	1.136	1.219	1.131	1.130
0.75	y -y	0.568	1.376	1.286	1.205	1.132	1.066	1.005	1.124	1.209	1.124	1.122
0.75	y -y	0.553	1.364	1.273	1.191	1.117	1.050	0.989	1.113	1.200	1.117	1.115
0.75	y -y	0.537	1.352	1.260	1.177	1.102	1.034	0.972	1.102	1.191	1.111	1.109
0.75	y -y	0.522	1.340	1.247	1.163	1.087	1.019	0.956	1.092	1.182	1.106	1.104
0.75	y -y	0.506	1.329	1.235	1.150	1.073	1.004	0.942	1.083	1.175	1.103	1.099
0.75	y -y	0.490	1.319	1.223	1.138	1.060	0.991	0.928	1.075	1.169	1.100	1.097
0.75	y -y	0.474	1.309	1.212	1.126	1.048	0.977	0.914	1.067	1.163	1.099	1.094
0.75	y -y	0.457	1.299	1.201	1.114	1.035	0.964	0.900	1.060	1.157	1.098	1.093
0.75	y -y	0.441	1.289	1.190	1.102	1.022	0.951	0.887	1.052	1.152	1.097	1.091
0.75	y -y	0.424	1.279	1.179	1.089	1.009	0.937	0.872	1.044	1.146	1.096	1.090
0.75	y -y	0.407	1.268	1.167	1.077	0.996	0.923	0.857	1.036	1.141	1.096	1.089
0.75	y -y	0.390	1.259	1.157	1.066	0.984	0.911	0.845	1.030	1.137	1.098	1.090
0.75	y -y	0.373	1.252	1.149	1.058	0.976	0.903	0.837	1.027	1.136	1.103	1.095
0.75	y -y	0.356	1.249	1.146	1.054	0.972	0.899	0.833	1.028	1.139	1.112	1.104
0.75	y -y	0.339	1.248	1.145	1.053	0.971	0.898	0.831	1.032	1.146	1.126	1.116
0.75	y -y	0.322	1.248	1.145	1.053	0.970	0.896	0.830	1.037	1.152	1.139	1.128
0.75	y -y	0.305	1.250	1.146	1.054	0.971	0.897	0.830	1.043	1.161	1.154	1.143
0.75	y -y	0.288	1.252	1.148	1.056	0.973	0.899	0.832	1.050	1.170	1.170	1.148
0.75	y -y	0.271	1.253	1.150	1.057	0.974	0.899	0.832	1.056	1.178	1.185	1.150
0.75	y -y	0.254	1.255	1.152	1.059	0.976	0.901	0.833	1.062	1.187	1.202	1.152
0.75	y -y	0.237	1.258	1.155	1.062	0.978	0.903	0.836	1.070	1.198	1.220	1.155
0.75	y -y	0.220	1.262	1.159	1.066	0.982	0.907	0.839	1.079	1.209	1.238	1.159
0.75	y -y	0.204	1.266	1.163	1.070	0.986	0.911	0.842	1.088	1.220	1.257	1.163
0.75	y -y	0.187	1.270	1.167	1.074	0.990	0.914	0.846	1.093	1.231	1.270	1.167
0.75	y -y	0.171	1.275	1.172	1.079	0.995	0.920	0.851	1.098	1.243	1.275	1.172
0.75	y -y	0.155	1.281	1.179	1.086	1.002	0.926	0.858	1.105	1.257	1.281	1.179
0.75	y -y	0.139	1.287	1.185	1.092	1.009	0.933	0.864	1.112	1.270	1.287	1.185
0.75	y -y	0.123	1.295	1.193	1.101	1.017	0.942	0.873	1.120	1.285	1.295	1.193
0.75	y -y	0.108	1.303	1.201	1.109	1.026	0.950	0.881	1.128	1.299	1.303	1.201
0.75	y -y	0.092	1.311	1.210	1.118	1.035	0.959	0.890	1.137	1.311	1.311	1.210
0.75	y -y	0.077	1.318	1.218	1.127	1.044	0.968	0.899	1.146	1.318	1.318	1.218
0.75	y -y	0.062	1.328	1.229	1.138	1.055	0.980	0.911	1.157	1.328	1.328	1.229
0.75	y -y	0.048	1.341	1.242	1.152	1.070	0.995	0.926	1.171	1.341	1.341	1.242
0.75	y -y	0.033	1.354	1.257	1.168	1.086	1.011	0.942	1.186	1.354	1.354	1.257
0.75	y -y	0.019	1.366	1.269	1.181	1.099	1.025	0.956	1.199	1.366	1.366	1.269
0.75	y -y	0.005	1.377	1.281	1.194	1.113	1.038	0.969	1.212	1.377	1.377	1.281
1	y -y	0.690	1.463	1.399	1.346	1.301	1.263	1.231	1.275	1.324	1.258	1.259
1	y -y	0.679	1.449	1.384	1.329	1.282	1.243	1.210	1.258	1.309	1.242	1.242
1	y -y	0.669	1.436	1.369	1.313	1.265	1.225	1.190	1.242	1.294	1.226	1.226
1	y -y	0.658	1.424	1.356	1.298	1.249	1.207	1.172	1.227	1.281	1.212	1.213
1	y -y	0.647	1.412	1.343	1.284	1.234	1.192	1.155	1.214	1.269	1.200	1.200
1	y -y	0.636	1.401	1.330	1.270	1.219	1.176	1.139	1.201	1.258	1.189	1.189
1	y -y	0.625	1.390	1.318	1.257	1.205	1.161	1.123	1.188	1.247	1.178	1.178
1	y -y	0.614	1.379	1.306	1.244	1.191	1.146	1.108	1.177	1.236	1.168	1.168
1	y -y	0.602	1.369	1.295	1.232	1.178	1.132	1.092	1.165	1.226	1.158	1.158
1	y -y	0.591	1.359	1.284	1.220	1.165	1.118	1.078	1.154	1.217	1.150	1.149

1	y -y	0.579	1.350	1.273	1.208	1.153	1.106	1.065	1.145	1.209	1.143	1.141
1	y -y	0.567	1.341	1.264	1.198	1.142	1.094	1.053	1.136	1.201	1.136	1.135
1	y -y	0.555	1.332	1.254	1.188	1.131	1.082	1.040	1.128	1.194	1.130	1.129
1	y -y	0.543	1.324	1.245	1.178	1.120	1.071	1.028	1.119	1.187	1.125	1.123
1	y -y	0.531	1.316	1.236	1.168	1.109	1.059	1.016	1.111	1.181	1.120	1.118
1	y -y	0.519	1.308	1.227	1.158	1.099	1.048	1.004	1.103	1.174	1.115	1.113
1	y -y	0.507	1.300	1.219	1.149	1.089	1.038	0.993	1.096	1.169	1.112	1.109
1	y -y	0.494	1.293	1.211	1.140	1.080	1.027	0.982	1.090	1.164	1.109	1.106
1	y -y	0.481	1.286	1.203	1.131	1.070	1.017	0.971	1.083	1.159	1.106	1.103
1	y -y	0.469	1.279	1.195	1.123	1.061	1.007	0.961	1.077	1.155	1.104	1.100
1	y -y	0.456	1.272	1.187	1.114	1.051	0.997	0.950	1.071	1.150	1.102	1.098
1	y -y	0.443	1.266	1.179	1.106	1.042	0.987	0.939	1.065	1.146	1.100	1.096
1	y -y	0.429	1.258	1.171	1.096	1.032	0.976	0.928	1.058	1.142	1.099	1.094
1	y -y	0.416	1.251	1.163	1.087	1.022	0.965	0.915	1.052	1.137	1.097	1.092
1	y -y	0.403	1.244	1.155	1.078	1.012	0.955	0.904	1.046	1.133	1.097	1.091
1	y -y	0.390	1.237	1.147	1.070	1.003	0.945	0.895	1.040	1.130	1.097	1.091
1	y -y	0.376	1.233	1.142	1.065	0.998	0.940	0.889	1.038	1.130	1.101	1.094
1	y -y	0.363	1.231	1.140	1.062	0.995	0.937	0.886	1.039	1.132	1.107	1.100
1	y -y	0.349	1.230	1.140	1.062	0.995	0.936	0.885	1.042	1.137	1.116	1.108
1	y -y	0.336	1.229	1.138	1.060	0.993	0.934	0.882	1.043	1.140	1.123	1.115
1	y -y	0.322	1.229	1.137	1.059	0.991	0.932	0.880	1.045	1.143	1.131	1.122
1	y -y	0.309	1.230	1.139	1.060	0.992	0.933	0.881	1.050	1.150	1.142	1.133
1	y -y	0.295	1.232	1.141	1.062	0.994	0.935	0.882	1.055	1.157	1.154	1.141
1	y -y	0.282	1.233	1.141	1.062	0.994	0.934	0.881	1.058	1.162	1.164	1.141
1	y -y	0.269	1.233	1.141	1.062	0.993	0.933	0.880	1.061	1.167	1.174	1.141
1	y -y	0.255	1.235	1.142	1.063	0.994	0.934	0.881	1.066	1.173	1.186	1.142
1	y -y	0.242	1.237	1.145	1.066	0.997	0.936	0.883	1.072	1.181	1.199	1.145
1	y -y	0.229	1.239	1.147	1.067	0.998	0.937	0.883	1.076	1.188	1.211	1.147
1	y -y	0.216	1.242	1.149	1.069	0.999	0.938	0.884	1.082	1.195	1.224	1.149
1	y -y	0.202	1.244	1.151	1.071	1.001	0.939	0.885	1.086	1.202	1.237	1.151
1	y -y	0.189	1.246	1.154	1.073	1.003	0.942	0.887	1.090	1.210	1.246	1.154
1	y -y	0.176	1.249	1.157	1.076	1.006	0.944	0.889	1.092	1.218	1.249	1.157
1	y -y	0.163	1.253	1.16	1.079	1.009	0.947	0.892	1.096	1.227	1.253	1.16
1	y -y	0.15	1.258	1.164	1.083	1.012	0.95	0.894	1.1	1.237	1.258	1.164
1	y -y	0.137	1.262	1.169	1.088	1.016	0.954	0.898	1.104	1.247	1.262	1.169
1	y -y	0.125	1.267	1.174	1.092	1.021	0.957	0.901	1.109	1.256	1.267	1.174
1	y -y	0.112	1.272	1.179	1.097	1.026	0.962	0.906	1.114	1.267	1.272	1.179
1	y -y	0.1	1.278	1.185	1.103	1.031	0.967	0.91	1.12	1.278	1.278	1.185
1	y -y	0.087	1.284	1.191	1.109	1.037	0.973	0.916	1.126	1.284	1.284	1.191
1	y -y	0.074	1.291	1.198	1.116	1.043	0.978	0.921	1.133	1.291	1.291	1.198
1	y -y	0.062	1.298	1.205	1.122	1.049	0.984	0.926	1.139	1.298	1.298	1.205
1	y -y	0.05	1.307	1.214	1.132	1.058	0.993	0.934	1.149	1.307	1.307	1.214

Tabla C.20 Valores de r_2 de la sección 24 (60 cm x 120 cm con ρ = 0.06 y f'_c = 400 kg/cm^2) para distintos criterios de cálculo del exponente *a*. Se indica el eje de referencia para la pendiente.

s	Eje	Pn/P0	α=1.0	α=1.2	α=1.4	α=1.6	α=1.8	α=2.0	PCA	Euro	India	J
0.25	x -x	0.894	1.369	1.369	1.387	1.417	1.456	1.502	1.486	1.461	1.502	1.502
0.25	x -x	0.885	1.341	1.337	1.349	1.374	1.406	1.446	1.431	1.408	1.446	1.446
0.25	x -x	0.876	1.317	1.308	1.316	1.335	1.362	1.396	1.381	1.361	1.396	1.396
0.25	x -x	0.866	1.295	1.284	1.287	1.302	1.325	1.353	1.339	1.322	1.353	1.353
0.25	x -x	0.855	1.279	1.264	1.265	1.276	1.295	1.320	1.306	1.291	1.320	1.320
0.25	x -x	0.843	1.262	1.244	1.242	1.250	1.266	1.287	1.274	1.260	1.287	1.287
0.25	x -x	0.830	1.246	1.225	1.221	1.226	1.238	1.256	1.244	1.233	1.256	1.256

0.25	x -x	0.815	1.231	1.209	1.202	1.205	1.215	1.229	1.218	1.209	1.229	1.229
0.25	x -x	0.800	1.219	1.195	1.186	1.187	1.194	1.206	1.196	1.189	1.206	1.206
0.25	x -x	0.784	1.208	1.182	1.170	1.169	1.174	1.184	1.175	1.170	1.183	1.183
0.25	x -x	0.766	1.195	1.168	1.155	1.152	1.155	1.163	1.155	1.152	1.160	1.160
0.25	x -x	0.748	1.183	1.155	1.141	1.136	1.138	1.144	1.138	1.136	1.141	1.141
0.25	x -x	0.729	1.173	1.144	1.129	1.123	1.124	1.129	1.124	1.124	1.126	1.126
0.25	x -x	0.709	1.162	1.132	1.117	1.111	1.111	1.114	1.110	1.113	1.111	1.111
0.25	x -x	0.688	1.154	1.124	1.108	1.101	1.100	1.103	1.100	1.104	1.100	1.100
0.25	x -x	0.666	1.147	1.117	1.101	1.094	1.092	1.094	1.092	1.097	1.092	1.092
0.25	x -x	0.644	1.139	1.109	1.092	1.085	1.082	1.084	1.083	1.090	1.083	1.083
0.25	x -x	0.621	1.132	1.102	1.085	1.076	1.074	1.074	1.075	1.083	1.074	1.074
0.25	x -x	0.598	1.126	1.095	1.078	1.069	1.066	1.066	1.068	1.077	1.068	1.067
0.25	x -x	0.574	1.121	1.089	1.072	1.062	1.058	1.058	1.061	1.072	1.061	1.061
0.25	x -x	0.549	1.115	1.083	1.065	1.055	1.050	1.049	1.055	1.067	1.055	1.055
0.25	x -x	0.523	1.111	1.079	1.060	1.049	1.044	1.042	1.050	1.063	1.051	1.051
0.25	x -x	0.497	1.107	1.074	1.054	1.043	1.038	1.035	1.045	1.060	1.048	1.047
0.25	x -x	0.469	1.102	1.069	1.049	1.037	1.030	1.027	1.039	1.057	1.044	1.044
0.25	x -x	0.440	1.098	1.064	1.043	1.031	1.024	1.019	1.035	1.054	1.042	1.041
0.25	x -x	0.411	1.094	1.060	1.038	1.025	1.017	1.012	1.031	1.052	1.042	1.040
0.25	x -x	0.379	1.092	1.056	1.034	1.020	1.011	1.006	1.028	1.052	1.043	1.041
0.25	x -x	0.346	1.087	1.050	1.027	1.012	1.003	0.996	1.023	1.050	1.043	1.041
0.25	x -x	0.313	1.084	1.048	1.026	1.011	1.002	0.996	1.023	1.052	1.049	1.046
0.25	x -x	0.281	1.084	1.051	1.030	1.017	1.010	1.005	1.029	1.058	1.058	1.051
0.25	x -x	0.253	1.082	1.049	1.029	1.016	1.009	1.004	1.030	1.059	1.064	1.049
0.25	x -x	0.226	1.083	1.050	1.029	1.016	1.009	1.004	1.031	1.063	1.072	1.050
0.25	x -x	0.198	1.082	1.048	1.028	1.015	1.007	1.002	1.031	1.066	1.082	1.048
0.25	x -x	0.171	1.082	1.048	1.027	1.014	1.006	1.001	1.031	1.070	1.082	1.048
0.25	x -x	0.142	1.082	1.048	1.026	1.013	1.004	0.999	1.030	1.075	1.082	1.048
0.25	x -x	0.116	1.083	1.049	1.027	1.013	1.004	0.998	1.031	1.081	1.083	1.049
0.25	x -x	0.087	1.085	1.050	1.027	1.013	1.003	0.997	1.031	1.085	1.085	1.050
0.25	x -x	0.060	1.088	1.051	1.028	1.013	1.003	0.996	1.032	1.088	1.088	1.051
0.25	x -x	0.030	1.092	1.054	1.029	1.013	1.003	0.996	1.034	1.092	1.092	1.054
0.25	x -x	0.003	1.094	1.055	1.029	1.012	1.000	0.992	1.034	1.094	1.094	1.055
0.5	x -x	0.897	1.694	1.715	1.755	1.812	1.882	1.967	1.940	1.894	1.967	1.967
0.5	x -x	0.888	1.638	1.648	1.676	1.719	1.775	1.843	1.818	1.779	1.843	1.843
0.5	x -x	0.879	1.590	1.590	1.608	1.640	1.685	1.740	1.717	1.684	1.740	1.740
0.5	x -x	0.869	1.547	1.541	1.550	1.573	1.608	1.652	1.631	1.604	1.652	1.652
0.5	x -x	0.858	1.513	1.500	1.504	1.520	1.547	1.583	1.564	1.541	1.583	1.583
0.5	x -x	0.847	1.483	1.464	1.462	1.472	1.492	1.521	1.504	1.486	1.521	1.521
0.5	x -x	0.834	1.455	1.431	1.423	1.428	1.443	1.465	1.450	1.436	1.465	1.465
0.5	x -x	0.821	1.427	1.399	1.387	1.387	1.396	1.413	1.400	1.390	1.413	1.413
0.5	x -x	0.806	1.403	1.371	1.355	1.350	1.355	1.367	1.357	1.351	1.367	1.367
0.5	x -x	0.791	1.380	1.345	1.325	1.317	1.317	1.325	1.318	1.316	1.325	1.324
0.5	x -x	0.775	1.358	1.319	1.296	1.284	1.281	1.285	1.281	1.283	1.284	1.284
0.5	x -x	0.757	1.336	1.295	1.269	1.254	1.248	1.248	1.248	1.254	1.248	1.248
0.5	x -x	0.739	1.317	1.273	1.245	1.228	1.219	1.217	1.220	1.230	1.217	1.217
0.5	x -x	0.720	1.299	1.253	1.223	1.204	1.193	1.189	1.195	1.209	1.191	1.191
0.5	x -x	0.701	1.282	1.235	1.203	1.183	1.171	1.165	1.174	1.192	1.169	1.169
0.5	x -x	0.680	1.268	1.220	1.188	1.166	1.153	1.146	1.157	1.177	1.152	1.152
0.5	x -x	0.659	1.255	1.207	1.173	1.151	1.136	1.128	1.142	1.165	1.138	1.138
0.5	x -x	0.637	1.243	1.193	1.159	1.136	1.121	1.111	1.129	1.153	1.125	1.125
0.5	x -x	0.614	1.231	1.181	1.146	1.122	1.106	1.095	1.116	1.142	1.113	1.112
0.5	x -x	0.591	1.221	1.169	1.134	1.109	1.092	1.080	1.104	1.132	1.103	1.102
0.5	x -x	0.567	1.210	1.158	1.121	1.096	1.078	1.065	1.093	1.123	1.093	1.093
0.5	x -x	0.543	1.201	1.148	1.110	1.083	1.064	1.051	1.083	1.115	1.085	1.084
0.5	x -x	0.517	1.192	1.139	1.100	1.072	1.052	1.038	1.074	1.109	1.080	1.079
0.5	x -x	0.491	1.184	1.129	1.090	1.061	1.040	1.024	1.066	1.103	1.075	1.073

0.5	x -x	0.464	1.176	1.120	1.079	1.049	1.027	1.010	1.057	1.097	1.071	1.069
0.5	x -x	0.436	1.168	1.111	1.069	1.038	1.015	0.997	1.050	1.093	1.068	1.066
0.5	x -x	0.407	1.161	1.102	1.059	1.027	1.002	0.983	1.042	1.089	1.068	1.065
0.5	x -x	0.377	1.155	1.095	1.050	1.017	0.991	0.971	1.036	1.087	1.070	1.066
0.5	x -x	0.345	1.147	1.086	1.040	1.005	0.978	0.956	1.030	1.085	1.073	1.068
0.5	x -x	0.313	1.141	1.079	1.033	0.997	0.970	0.947	1.027	1.085	1.079	1.074
0.5	x -x	0.281	1.141	1.081	1.035	1.001	0.974	0.953	1.033	1.094	1.095	1.081
0.5	x -x	0.251	1.140	1.081	1.036	1.002	0.976	0.955	1.038	1.101	1.110	1.081
0.5	x -x	0.221	1.143	1.084	1.039	1.006	0.981	0.960	1.045	1.111	1.128	1.084
0.5	x -x	0.192	1.141	1.082	1.037	1.004	0.978	0.957	1.046	1.116	1.141	1.082
0.5	x -x	0.164	1.143	1.082	1.037	1.002	0.976	0.954	1.046	1.125	1.143	1.082
0.5	x -x	0.135	1.143	1.081	1.035	1.000	0.972	0.950	1.044	1.133	1.143	1.081
0.5	x -x	0.106	1.146	1.084	1.036	1.000	0.971	0.948	1.045	1.144	1.146	1.084
0.5	x -x	0.077	1.150	1.086	1.038	1.000	0.971	0.947	1.047	1.150	1.150	1.086
0.5	x -x	0.048	1.155	1.090	1.040	1.002	0.971	0.946	1.050	1.155	1.155	1.090
0.5	x -x	0.019	1.164	1.097	1.046	1.005	0.973	0.948	1.056	1.164	1.164	1.097
0.75	x -x	0.895	1.925	1.963	2.016	2.084	2.167	2.264	2.233	2.179	2.264	2.264
0.75	x -x	0.887	1.850	1.872	1.908	1.958	2.021	2.096	2.068	2.024	2.096	2.096
0.75	x -x	0.877	1.785	1.794	1.816	1.851	1.897	1.955	1.930	1.896	1.955	1.955
0.75	x -x	0.867	1.729	1.727	1.738	1.760	1.793	1.836	1.815	1.789	1.836	1.836
0.75	x -x	0.857	1.683	1.672	1.674	1.687	1.711	1.743	1.725	1.705	1.743	1.743
0.75	x -x	0.845	1.642	1.623	1.618	1.623	1.638	1.661	1.647	1.633	1.661	1.661
0.75	x -x	0.833	1.603	1.578	1.565	1.563	1.570	1.585	1.574	1.566	1.585	1.585
0.75	x -x	0.820	1.568	1.537	1.518	1.509	1.510	1.518	1.511	1.508	1.518	1.518
0.75	x -x	0.807	1.537	1.500	1.476	1.462	1.457	1.459	1.457	1.459	1.459	1.459
0.75	x -x	0.792	1.507	1.465	1.436	1.417	1.407	1.403	1.406	1.414	1.404	1.404
0.75	x -x	0.776	1.477	1.431	1.397	1.374	1.359	1.350	1.358	1.371	1.351	1.351
0.75	x -x	0.760	1.448	1.398	1.361	1.333	1.314	1.302	1.314	1.333	1.305	1.305
0.75	x -x	0.743	1.423	1.369	1.328	1.298	1.275	1.259	1.277	1.301	1.265	1.266
0.75	x -x	0.725	1.400	1.343	1.299	1.266	1.240	1.222	1.244	1.274	1.232	1.232
0.75	x -x	0.707	1.378	1.319	1.272	1.236	1.209	1.188	1.215	1.251	1.202	1.203
0.75	x -x	0.688	1.359	1.298	1.250	1.212	1.182	1.160	1.192	1.231	1.179	1.180
0.75	x -x	0.667	1.342	1.279	1.229	1.190	1.159	1.135	1.172	1.214	1.161	1.161
0.75	x -x	0.646	1.325	1.261	1.210	1.169	1.137	1.112	1.154	1.198	1.144	1.144
0.75	x -x	0.625	1.310	1.244	1.192	1.150	1.117	1.090	1.137	1.183	1.129	1.129
0.75	x -x	0.602	1.296	1.229	1.176	1.133	1.099	1.071	1.123	1.171	1.118	1.118
0.75	x -x	0.579	1.283	1.214	1.160	1.116	1.081	1.052	1.110	1.160	1.108	1.107
0.75	x -x	0.555	1.269	1.199	1.144	1.099	1.062	1.033	1.096	1.149	1.098	1.097
0.75	x -x	0.531	1.256	1.185	1.128	1.082	1.044	1.014	1.083	1.139	1.090	1.088
0.75	x -x	0.506	1.244	1.172	1.113	1.066	1.027	0.995	1.072	1.130	1.084	1.082
0.75	x -x	0.480	1.232	1.158	1.098	1.050	1.009	0.976	1.060	1.122	1.079	1.076
0.75	x -x	0.453	1.221	1.145	1.084	1.034	0.992	0.957	1.049	1.115	1.075	1.072
0.75	x -x	0.425	1.210	1.133	1.070	1.018	0.975	0.939	1.040	1.109	1.074	1.070
0.75	x -x	0.397	1.200	1.121	1.057	1.004	0.960	0.922	1.032	1.105	1.075	1.070
0.75	x -x	0.367	1.190	1.110	1.044	0.989	0.944	0.905	1.024	1.102	1.079	1.073
0.75	x -x	0.336	1.179	1.097	1.029	0.973	0.926	0.886	1.015	1.098	1.083	1.076
0.75	x -x	0.305	1.173	1.090	1.023	0.966	0.919	0.878	1.015	1.101	1.096	1.087
0.75	x -x	0.274	1.172	1.090	1.023	0.967	0.920	0.880	1.022	1.111	1.115	1.090
0.75	x -x	0.244	1.174	1.092	1.025	0.969	0.922	0.883	1.029	1.123	1.137	1.092
0.75	x -x	0.214	1.178	1.096	1.030	0.974	0.928	0.888	1.040	1.137	1.163	1.096
0.75	x -x	0.184	1.179	1.098	1.031	0.975	0.929	0.889	1.044	1.148	1.179	1.098
0.75	x -x	0.154	1.183	1.101	1.034	0.978	0.932	0.892	1.047	1.163	1.183	1.101
0.75	x -x	0.125	1.185	1.103	1.036	0.980	0.933	0.893	1.049	1.175	1.185	1.103
0.75	x -x	0.096	1.189	1.107	1.038	0.981	0.933	0.892	1.052	1.189	1.189	1.107
0.75	x -x	0.067	1.195	1.112	1.044	0.986	0.937	0.896	1.057	1.195	1.195	1.112
0.75	x -x	0.039	1.203	1.120	1.050	0.991	0.942	0.899	1.064	1.203	1.203	1.120
0.75	x -x	0.010	1.214	1.129	1.059	1.000	0.949	0.905	1.073	1.214	1.214	1.129

1	x -x	0.881	1.964	1.987	2.019	2.061	2.111	2.171	2.147	2.112	2.171	2.171
1	x -x	0.872	1.893	1.901	1.917	1.942	1.976	2.017	1.998	1.973	2.017	2.017
1	x -x	0.862	1.832	1.828	1.833	1.845	1.865	1.893	1.878	1.862	1.893	1.893
1	x -x	0.851	1.781	1.767	1.762	1.764	1.774	1.790	1.780	1.771	1.790	1.790
1	x -x	0.840	1.734	1.712	1.698	1.692	1.692	1.699	1.694	1.691	1.699	1.699
1	x -x	0.828	1.690	1.660	1.639	1.624	1.617	1.615	1.616	1.619	1.615	1.615
1	x -x	0.816	1.650	1.613	1.584	1.563	1.549	1.540	1.546	1.556	1.540	1.540
1	x -x	0.802	1.614	1.571	1.537	1.510	1.489	1.474	1.486	1.502	1.474	1.474
1	x -x	0.788	1.580	1.532	1.492	1.460	1.434	1.414	1.431	1.453	1.414	1.415
1	x -x	0.773	1.548	1.494	1.450	1.412	1.382	1.357	1.380	1.409	1.361	1.362
1	x -x	0.758	1.517	1.459	1.410	1.368	1.334	1.305	1.334	1.369	1.313	1.314
1	x -x	0.742	1.489	1.426	1.373	1.328	1.290	1.257	1.293	1.334	1.271	1.272
1	x -x	0.725	1.462	1.396	1.340	1.292	1.250	1.215	1.257	1.305	1.235	1.236
1	x -x	0.707	1.437	1.368	1.308	1.257	1.213	1.175	1.224	1.279	1.202	1.203
1	x -x	0.689	1.415	1.343	1.281	1.227	1.181	1.141	1.197	1.256	1.176	1.176
1	x -x	0.669	1.396	1.321	1.257	1.202	1.154	1.112	1.174	1.236	1.156	1.156
1	x -x	0.650	1.377	1.301	1.235	1.178	1.128	1.085	1.154	1.217	1.138	1.138
1	x -x	0.629	1.360	1.281	1.214	1.155	1.105	1.060	1.135	1.201	1.123	1.123
1	x -x	0.608	1.344	1.264	1.195	1.135	1.083	1.038	1.120	1.187	1.111	1.110
1	x -x	0.586	1.329	1.247	1.177	1.116	1.064	1.017	1.106	1.175	1.101	1.100
1	x -x	0.563	1.314	1.231	1.160	1.098	1.044	0.997	1.092	1.164	1.093	1.092
1	x -x	0.540	1.299	1.215	1.142	1.080	1.025	0.977	1.079	1.154	1.086	1.084
1	x -x	0.515	1.285	1.199	1.125	1.062	1.006	0.957	1.067	1.144	1.081	1.078
1	x -x	0.490	1.271	1.183	1.108	1.043	0.987	0.937	1.055	1.135	1.076	1.073
1	x -x	0.465	1.257	1.168	1.091	1.025	0.967	0.917	1.043	1.127	1.073	1.069
1	x -x	0.438	1.243	1.153	1.075	1.008	0.949	0.897	1.033	1.120	1.072	1.067
1	x -x	0.411	1.231	1.139	1.059	0.991	0.931	0.879	1.024	1.114	1.073	1.068
1	x -x	0.383	1.219	1.126	1.045	0.975	0.915	0.861	1.016	1.110	1.078	1.071
1	x -x	0.354	1.207	1.112	1.030	0.959	0.897	0.843	1.008	1.106	1.083	1.075
1	x -x	0.325	1.195	1.099	1.016	0.944	0.881	0.826	1.001	1.104	1.090	1.081
1	x -x	0.295	1.190	1.094	1.010	0.938	0.876	0.820	1.003	1.110	1.107	1.094
1	x -x	0.266	1.189	1.092	1.009	0.937	0.875	0.820	1.009	1.120	1.129	1.092
1	x -x	0.236	1.193	1.097	1.014	0.942	0.879	0.824	1.022	1.137	1.157	1.097
1	x -x	0.207	1.197	1.101	1.018	0.946	0.883	0.828	1.033	1.152	1.186	1.101
1	x -x	0.178	1.201	1.105	1.022	0.950	0.887	0.832	1.039	1.168	1.201	1.105
1	x -x	0.148	1.206	1.110	1.027	0.955	0.892	0.837	1.044	1.186	1.206	1.110
1	x -x	0.120	1.211	1.115	1.032	0.960	0.897	0.841	1.049	1.202	1.211	1.115
1	x -x	0.091	1.219	1.123	1.040	0.967	0.904	0.848	1.057	1.219	1.219	1.123
1	x -x	0.063	1.226	1.130	1.047	0.975	0.911	0.855	1.064	1.226	1.226	1.130
1	x -x	0.035	1.236	1.140	1.057	0.984	0.919	0.863	1.074	1.236	1.236	1.140
1	x -x	0.007	1.247	1.152	1.068	0.995	0.930	0.873	1.085	1.247	1.247	1.152
0.25	y -y	0.881	1.975	2.009	2.054	2.112	2.181	2.262	2.229	2.181	2.262	2.262
0.25	y -y	0.871	1.908	1.926	1.956	1.996	2.046	2.107	2.079	2.042	2.107	2.107
0.25	y -y	0.862	1.846	1.851	1.866	1.891	1.925	1.968	1.946	1.920	1.968	1.968
0.25	y -y	0.851	1.791	1.785	1.788	1.801	1.821	1.850	1.833	1.816	1.850	1.850
0.25	y -y	0.840	1.742	1.726	1.719	1.721	1.730	1.747	1.736	1.726	1.747	1.747
0.25	y -y	0.828	1.698	1.673	1.657	1.650	1.650	1.656	1.651	1.649	1.656	1.656
0.25	y -y	0.815	1.656	1.624	1.601	1.585	1.577	1.575	1.576	1.581	1.575	1.575
0.25	y -y	0.802	1.620	1.581	1.551	1.529	1.514	1.505	1.511	1.523	1.505	1.505
0.25	y -y	0.788	1.585	1.541	1.505	1.477	1.456	1.441	1.454	1.471	1.442	1.442
0.25	y -y	0.773	1.553	1.502	1.461	1.428	1.402	1.382	1.401	1.425	1.385	1.386
0.25	y -y	0.758	1.522	1.467	1.421	1.384	1.353	1.328	1.353	1.384	1.335	1.336
0.25	y -y	0.742	1.494	1.434	1.385	1.343	1.308	1.280	1.312	1.349	1.291	1.292
0.25	y -y	0.725	1.468	1.405	1.352	1.307	1.269	1.237	1.275	1.319	1.255	1.256
0.25	y -y	0.708	1.444	1.377	1.321	1.273	1.232	1.198	1.242	1.293	1.222	1.223
0.25	y -y	0.689	1.423	1.353	1.294	1.244	1.201	1.164	1.215	1.270	1.195	1.196
0.25	y -y	0.670	1.403	1.332	1.270	1.217	1.172	1.133	1.191	1.249	1.174	1.174

0.25	y -y	0.651	1.385	1.310	1.247	1.192	1.145	1.104	1.169	1.230	1.154	1.154
0.25	y -y	0.630	1.367	1.290	1.225	1.168	1.120	1.078	1.149	1.212	1.137	1.136
0.25	y -y	0.609	1.350	1.271	1.204	1.146	1.096	1.052	1.131	1.197	1.122	1.122
0.25	y -y	0.587	1.333	1.253	1.183	1.124	1.072	1.027	1.113	1.182	1.109	1.108
0.25	y -y	0.564	1.316	1.234	1.164	1.102	1.049	1.003	1.097	1.168	1.098	1.096
0.25	y -y	0.540	1.301	1.217	1.144	1.082	1.028	0.980	1.082	1.155	1.088	1.086
0.25	y -y	0.516	1.286	1.201	1.127	1.063	1.008	0.960	1.069	1.145	1.082	1.080
0.25	y -y	0.491	1.272	1.185	1.110	1.045	0.988	0.939	1.056	1.136	1.077	1.074
0.25	y -y	0.466	1.258	1.168	1.092	1.025	0.968	0.917	1.044	1.127	1.073	1.069
0.25	y -y	0.439	1.244	1.153	1.074	1.007	0.948	0.896	1.032	1.119	1.071	1.066
0.25	y -y	0.412	1.230	1.138	1.058	0.989	0.928	0.875	1.021	1.112	1.071	1.065
0.25	y -y	0.384	1.218	1.124	1.042	0.972	0.910	0.856	1.013	1.108	1.075	1.068
0.25	y -y	0.355	1.205	1.110	1.027	0.955	0.893	0.837	1.004	1.104	1.080	1.072
0.25	y -y	0.325	1.194	1.097	1.012	0.939	0.875	0.819	0.997	1.102	1.088	1.079
0.25	y -y	0.295	1.183	1.084	0.998	0.923	0.858	0.800	0.990	1.101	1.098	1.084
0.25	y -y	0.265	1.180	1.079	0.992	0.917	0.850	0.792	0.993	1.109	1.118	1.079
0.25	y -y	0.235	1.188	1.089	1.003	0.928	0.862	0.804	1.011	1.130	1.152	1.089
0.25	y -y	0.206	1.192	1.093	1.008	0.933	0.868	0.810	1.024	1.147	1.181	1.093
0.25	y -y	0.177	1.200	1.102	1.017	0.944	0.879	0.822	1.035	1.167	1.200	1.102
0.25	y -y	0.148	1.206	1.110	1.026	0.952	0.888	0.832	1.043	1.186	1.206	1.110
0.25	y -y	0.120	1.213	1.117	1.034	0.961	0.897	0.841	1.051	1.204	1.213	1.117
0.25	y -y	0.092	1.220	1.125	1.042	0.971	0.908	0.852	1.059	1.220	1.220	1.125
0.25	y -y	0.065	1.228	1.133	1.051	0.980	0.917	0.862	1.068	1.228	1.228	1.133
0.25	y -y	0.038	1.238	1.144	1.062	0.991	0.929	0.874	1.079	1.238	1.238	1.144
0.25	y -y	0.013	1.246	1.152	1.071	1.000	0.938	0.883	1.088	1.246	1.246	1.152
0.5	y -y	0.799	1.706	1.652	1.601	1.550	1.502	1.455	1.493	1.534	1.453	1.455
0.5	y -y	0.788	1.674	1.616	1.559	1.505	1.452	1.402	1.446	1.492	1.404	1.406
0.5	y -y	0.777	1.644	1.581	1.520	1.461	1.405	1.351	1.401	1.453	1.359	1.361
0.5	y -y	0.765	1.615	1.547	1.482	1.420	1.361	1.304	1.360	1.418	1.317	1.319
0.5	y -y	0.753	1.588	1.516	1.448	1.382	1.320	1.260	1.323	1.386	1.280	1.282
0.5	y -y	0.740	1.562	1.487	1.415	1.347	1.282	1.220	1.289	1.358	1.247	1.249
0.5	y -y	0.727	1.538	1.459	1.384	1.313	1.246	1.182	1.258	1.332	1.217	1.219
0.5	y -y	0.714	1.515	1.433	1.356	1.283	1.214	1.148	1.230	1.311	1.191	1.193
0.5	y -y	0.700	1.495	1.410	1.331	1.255	1.184	1.117	1.205	1.292	1.169	1.171
0.5	y -y	0.685	1.476	1.389	1.307	1.230	1.158	1.090	1.184	1.273	1.151	1.152
0.5	y -y	0.670	1.459	1.369	1.286	1.207	1.133	1.064	1.165	1.255	1.135	1.136
0.5	y -y	0.655	1.442	1.350	1.265	1.184	1.109	1.039	1.147	1.239	1.121	1.121
0.5	y -y	0.639	1.425	1.332	1.244	1.163	1.086	1.015	1.130	1.224	1.108	1.108
0.5	y -y	0.623	1.409	1.314	1.225	1.142	1.065	0.993	1.114	1.210	1.097	1.097
0.5	y -y	0.606	1.395	1.298	1.208	1.124	1.045	0.973	1.101	1.198	1.089	1.088
0.5	y -y	0.589	1.381	1.282	1.191	1.106	1.027	0.953	1.089	1.187	1.082	1.081
0.5	y -y	0.571	1.366	1.266	1.173	1.087	1.007	0.934	1.076	1.177	1.075	1.073
0.5	y -y	0.552	1.352	1.250	1.156	1.069	0.989	0.914	1.065	1.167	1.070	1.068
0.5	y -y	0.534	1.339	1.236	1.141	1.053	0.972	0.897	1.055	1.159	1.067	1.064
0.5	y -y	0.514	1.326	1.222	1.125	1.037	0.955	0.880	1.045	1.151	1.065	1.061
0.5	y -y	0.494	1.313	1.208	1.110	1.021	0.938	0.863	1.036	1.144	1.064	1.059
0.5	y -y	0.474	1.301	1.193	1.095	1.005	0.922	0.846	1.027	1.137	1.064	1.059
0.5	y -y	0.453	1.288	1.179	1.080	0.989	0.906	0.829	1.019	1.131	1.065	1.059
0.5	y -y	0.432	1.275	1.165	1.065	0.973	0.890	0.813	1.011	1.126	1.067	1.060
0.5	y -y	0.410	1.263	1.152	1.051	0.959	0.874	0.798	1.004	1.122	1.070	1.063
0.5	y -y	0.387	1.252	1.140	1.038	0.945	0.860	0.783	0.998	1.119	1.076	1.067
0.5	y -y	0.364	1.239	1.126	1.023	0.930	0.845	0.768	0.991	1.115	1.082	1.072
0.5	y -y	0.340	1.226	1.112	1.008	0.914	0.829	0.751	0.984	1.112	1.088	1.078
0.5	y -y	0.316	1.215	1.099	0.995	0.900	0.815	0.738	0.979	1.110	1.097	1.085
0.5	y -y	0.292	1.207	1.091	0.986	0.891	0.806	0.728	0.978	1.113	1.111	1.091
0.5	y -y	0.267	1.204	1.088	0.983	0.888	0.803	0.725	0.983	1.122	1.132	1.088
0.5	y -y	0.243	1.209	1.093	0.988	0.893	0.808	0.730	0.996	1.138	1.159	1.093

0.5	y -y	0.219	1.212	1.097	0.992	0.898	0.812	0.735	1.008	1.153	1.187	1.097
0.5	y -y	0.196	1.216	1.101	0.996	0.902	0.817	0.739	1.018	1.168	1.216	1.101
0.5	y -y	0.172	1.225	1.110	1.007	0.913	0.827	0.750	1.028	1.189	1.225	1.110
0.5	y -y	0.149	1.228	1.114	1.011	0.917	0.832	0.754	1.032	1.204	1.228	1.114
0.5	y -y	0.126	1.235	1.122	1.019	0.925	0.840	0.763	1.040	1.222	1.235	1.122
0.5	y -y	0.103	1.244	1.132	1.029	0.936	0.851	0.774	1.050	1.243	1.244	1.132
0.5	y -y	0.081	1.252	1.140	1.038	0.945	0.860	0.783	1.059	1.252	1.252	1.140
0.5	y -y	0.059	1.260	1.149	1.048	0.955	0.871	0.794	1.069	1.260	1.260	1.149
0.5	y -y	0.037	1.271	1.161	1.060	0.969	0.885	0.808	1.081	1.271	1.271	1.161
0.5	y -y	0.015	1.283	1.174	1.074	0.983	0.899	0.823	1.095	1.283	1.283	1.174
0.75	y -y	0.716	1.494	1.417	1.347	1.283	1.224	1.170	1.237	1.306	1.205	1.206
0.75	y -y	0.705	1.478	1.400	1.328	1.262	1.202	1.146	1.218	1.292	1.187	1.188
0.75	y -y	0.693	1.463	1.382	1.309	1.241	1.179	1.123	1.199	1.276	1.170	1.171
0.75	y -y	0.682	1.449	1.366	1.291	1.222	1.159	1.102	1.183	1.261	1.155	1.156
0.75	y -y	0.670	1.435	1.351	1.275	1.205	1.141	1.082	1.168	1.248	1.143	1.143
0.75	y -y	0.658	1.422	1.337	1.259	1.188	1.123	1.063	1.154	1.235	1.131	1.131
0.75	y -y	0.645	1.410	1.323	1.243	1.171	1.105	1.045	1.141	1.223	1.120	1.120
0.75	y -y	0.633	1.398	1.309	1.229	1.156	1.089	1.028	1.128	1.212	1.111	1.111
0.75	y -y	0.620	1.386	1.296	1.215	1.141	1.073	1.012	1.117	1.202	1.103	1.103
0.75	y -y	0.606	1.375	1.284	1.202	1.127	1.059	0.997	1.107	1.193	1.096	1.096
0.75	y -y	0.593	1.365	1.273	1.189	1.114	1.045	0.982	1.098	1.185	1.091	1.089
0.75	y -y	0.579	1.354	1.261	1.177	1.101	1.031	0.968	1.089	1.177	1.085	1.084
0.75	y -y	0.565	1.344	1.250	1.165	1.088	1.018	0.954	1.080	1.170	1.081	1.079
0.75	y -y	0.550	1.334	1.239	1.153	1.075	1.005	0.941	1.072	1.163	1.077	1.075
0.75	y -y	0.535	1.325	1.228	1.142	1.063	0.992	0.928	1.064	1.157	1.075	1.072
0.75	y -y	0.520	1.316	1.218	1.131	1.052	0.981	0.916	1.058	1.152	1.073	1.070
0.75	y -y	0.505	1.306	1.208	1.120	1.041	0.969	0.904	1.051	1.147	1.072	1.068
0.75	y -y	0.489	1.297	1.198	1.109	1.029	0.957	0.892	1.044	1.142	1.071	1.067
0.75	y -y	0.473	1.287	1.187	1.097	1.017	0.944	0.878	1.037	1.136	1.070	1.065
0.75	y -y	0.457	1.277	1.176	1.086	1.004	0.931	0.865	1.030	1.131	1.069	1.064
0.75	y -y	0.440	1.267	1.165	1.074	0.992	0.918	0.852	1.023	1.126	1.069	1.064
0.75	y -y	0.423	1.258	1.155	1.063	0.980	0.906	0.839	1.016	1.122	1.070	1.064
0.75	y -y	0.406	1.248	1.145	1.052	0.969	0.894	0.827	1.010	1.118	1.072	1.065
0.75	y -y	0.388	1.240	1.135	1.041	0.958	0.883	0.815	1.005	1.115	1.076	1.068
0.75	y -y	0.370	1.231	1.125	1.031	0.947	0.871	0.803	1.000	1.112	1.079	1.071
0.75	y -y	0.352	1.222	1.115	1.020	0.935	0.859	0.791	0.994	1.110	1.083	1.074
0.75	y -y	0.334	1.213	1.106	1.010	0.925	0.849	0.780	0.990	1.108	1.089	1.079
0.75	y -y	0.315	1.206	1.098	1.002	0.916	0.840	0.771	0.987	1.108	1.096	1.085
0.75	y -y	0.297	1.202	1.093	0.997	0.912	0.835	0.767	0.988	1.112	1.108	1.093
0.75	y -y	0.278	1.201	1.093	0.997	0.912	0.835	0.767	0.994	1.120	1.124	1.093
0.75	y -y	0.260	1.201	1.092	0.996	0.911	0.834	0.766	0.998	1.127	1.140	1.092
0.75	y -y	0.241	1.204	1.096	1.000	0.914	0.838	0.769	1.007	1.138	1.159	1.096
0.75	y -y	0.223	1.208	1.101	1.005	0.919	0.843	0.774	1.018	1.151	1.181	1.101
0.75	y -y	0.204	1.211	1.103	1.007	0.921	0.845	0.776	1.025	1.162	1.200	1.103
0.75	y -y	0.186	1.214	1.106	1.010	0.925	0.848	0.779	1.030	1.173	1.214	1.106
0.75	y -y	0.168	1.219	1.111	1.016	0.930	0.853	0.785	1.035	1.187	1.219	1.111
0.75	y -y	0.149	1.222	1.115	1.019	0.933	0.856	0.788	1.039	1.199	1.222	1.115
0.75	y -y	0.131	1.225	1.117	1.022	0.936	0.859	0.790	1.041	1.210	1.225	1.117
0.75	y -y	0.113	1.231	1.124	1.028	0.943	0.866	0.797	1.048	1.224	1.231	1.124
0.75	y -y	0.095	1.237	1.130	1.035	0.950	0.873	0.804	1.055	1.237	1.237	1.130
0.75	y -y	0.077	1.241	1.135	1.039	0.954	0.877	0.808	1.059	1.241	1.241	1.135
0.75	y -y	0.060	1.248	1.142	1.047	0.962	0.885	0.815	1.067	1.248	1.248	1.142
0.75	y -y	0.042	1.256	1.151	1.057	0.972	0.895	0.826	1.076	1.256	1.256	1.151
0.75	y -y	0.025	1.263	1.159	1.064	0.979	0.903	0.833	1.084	1.263	1.263	1.159
0.75	y -y	0.008	1.272	1.167	1.074	0.989	0.912	0.843	1.093	1.272	1.272	1.167
1	y -y	0.644	1.372	1.295	1.229	1.171	1.122	1.078	1.148	1.213	1.133	1.133
1	y -y	0.634	1.364	1.286	1.218	1.160	1.110	1.066	1.139	1.205	1.126	1.126

1	y -y	0.623	1.355	1.276	1.208	1.150	1.099	1.054	1.131	1.197	1.119	1.119
1	y -y	0.613	1.347	1.267	1.199	1.140	1.088	1.043	1.123	1.190	1.113	1.113
1	y -y	0.602	1.340	1.259	1.190	1.130	1.078	1.032	1.116	1.184	1.108	1.108
1	y -y	0.591	1.332	1.251	1.181	1.120	1.068	1.022	1.109	1.178	1.103	1.103
1	y -y	0.580	1.325	1.243	1.172	1.111	1.058	1.012	1.102	1.172	1.099	1.098
1	y -y	0.568	1.317	1.235	1.163	1.102	1.048	1.002	1.095	1.167	1.095	1.094
1	y -y	0.557	1.310	1.227	1.155	1.093	1.039	0.992	1.089	1.161	1.091	1.090
1	y -y	0.545	1.303	1.219	1.146	1.084	1.029	0.982	1.082	1.156	1.088	1.086
1	y -y	0.533	1.295	1.211	1.138	1.075	1.020	0.972	1.076	1.151	1.085	1.083
1	y -y	0.521	1.288	1.203	1.129	1.066	1.010	0.962	1.070	1.146	1.082	1.080
1	y -y	0.508	1.281	1.195	1.121	1.056	1.001	0.952	1.064	1.142	1.080	1.077
1	y -y	0.496	1.274	1.187	1.112	1.047	0.991	0.942	1.058	1.137	1.077	1.074
1	y -y	0.483	1.267	1.179	1.104	1.038	0.981	0.931	1.052	1.133	1.075	1.072
1	y -y	0.470	1.260	1.171	1.095	1.029	0.972	0.921	1.046	1.128	1.074	1.070
1	y -y	0.458	1.253	1.164	1.087	1.020	0.962	0.911	1.040	1.124	1.073	1.068
1	y -y	0.444	1.246	1.156	1.079	1.011	0.953	0.902	1.035	1.121	1.072	1.068
1	y -y	0.431	1.240	1.149	1.071	1.003	0.944	0.892	1.030	1.118	1.072	1.067
1	y -y	0.417	1.233	1.142	1.063	0.995	0.935	0.883	1.026	1.115	1.073	1.067
1	y -y	0.404	1.227	1.135	1.055	0.986	0.926	0.874	1.021	1.113	1.074	1.068
1	y -y	0.390	1.222	1.128	1.048	0.979	0.918	0.865	1.018	1.111	1.076	1.070
1	y -y	0.375	1.216	1.122	1.041	0.971	0.910	0.856	1.014	1.109	1.079	1.072
1	y -y	0.361	1.210	1.115	1.033	0.963	0.901	0.847	1.009	1.107	1.081	1.074
1	y -y	0.346	1.204	1.108	1.026	0.955	0.892	0.838	1.006	1.106	1.085	1.076
1	y -y	0.332	1.198	1.102	1.019	0.947	0.884	0.829	1.002	1.105	1.088	1.079
1	y -y	0.317	1.193	1.096	1.013	0.941	0.878	0.823	1.000	1.105	1.094	1.084
1	y -y	0.302	1.190	1.094	1.011	0.938	0.876	0.820	1.001	1.108	1.102	1.092
1	y -y	0.287	1.190	1.093	1.010	0.938	0.875	0.820	1.005	1.113	1.113	1.093
1	y -y	0.273	1.189	1.092	1.009	0.937	0.875	0.820	1.008	1.118	1.124	1.092
1	y -y	0.258	1.190	1.093	1.010	0.938	0.875	0.820	1.012	1.124	1.136	1.093
1	y -y	0.243	1.192	1.096	1.013	0.941	0.879	0.823	1.019	1.133	1.151	1.096
1	y -y	0.228	1.194	1.098	1.015	0.943	0.881	0.825	1.025	1.141	1.165	1.098
1	y -y	0.213	1.197	1.100	1.017	0.945	0.883	0.827	1.031	1.149	1.180	1.100
1	y -y	0.199	1.198	1.102	1.019	0.947	0.884	0.829	1.035	1.156	1.198	1.102
1	y -y	0.184	1.200	1.103	1.020	0.948	0.886	0.830	1.037	1.164	1.200	1.103
1	y -y	0.170	1.203	1.107	1.024	0.952	0.889	0.833	1.041	1.173	1.203	1.107
1	y -y	0.155	1.205	1.109	1.027	0.954	0.891	0.836	1.043	1.182	1.205	1.109
1	y -y	0.141	1.207	1.111	1.027	0.955	0.892	0.837	1.044	1.189	1.207	1.111
1	y -y	0.127	1.209	1.113	1.030	0.958	0.895	0.839	1.047	1.198	1.209	1.113
1	y -y	0.112	1.213	1.118	1.035	0.963	0.899	0.844	1.052	1.208	1.213	1.118
1	y -y	0.098	1.217	1.121	1.039	0.966	0.903	0.847	1.055	1.217	1.217	1.121
1	y -y	0.083	1.220	1.124	1.041	0.969	0.905	0.849	1.058	1.220	1.220	1.124
1	y -y	0.069	1.224	1.128	1.045	0.972	0.909	0.853	1.062	1.224	1.224	1.128
1	y -y	0.055	1.229	1.133	1.050	0.978	0.914	0.858	1.067	1.229	1.229	1.133
1	y -y	0.041	1.233	1.137	1.054	0.981	0.917	0.861	1.071	1.233	1.233	1.137
1	y -y	0.027	1.239	1.143	1.060	0.987	0.923	0.866	1.077	1.239	1.239	1.143
1	y -y	0.013	1.244	1.149	1.065	0.992	0.927	0.870	1.082	1.244	1.244	1.149

Apéndice D

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