

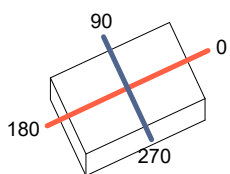
Luminaria

Código A646-091
Nombre LAB 2 2020 GRAPHITE GREY
Ensayo
Código CL041A21F024G
Nombre LAB 2 2020 GRAPHITE GREY

| | | | | | | | |
|---|-----------|---|----------------|---|----------------|---|---------|
| Flujo Luminaria | 322.83 lm | Potencia Luminaria | 8.96 W | Eficacia | 36.01 lm/W | Eficiencia | 100.00% |
| Flujo Fuentes de luz | 322.83 lm | Valor Máximo | 836.71 cd | Posición | C=0.00 G=0.00 | CG Bisimétrico | |
| Luminaria Rectangular Área Luminosa Redonda | | Longit. Diam. | 80 mm 25 mm | Anchura Altura | 125 mm 0 mm | Altura | 125 mm |
| Área Luminosa Horizontal Área Emisión sobre Pl. 0° Área Emisión sobre Pl. 90° | | 0.000491 m2 0.000000 m2 0.000000 m2 | | Área Emisión sobre Pl. 180° Área Emisión sobre Pl. 270° Área de deslumbramiento a 76° | | 0.000000 m2 0.000000 m2 0.000119 m2 | |
| Sist. de Coorden. Fecha Distancia de Ensayo | | CG 29-03-2021 6.44 | | Tipo de Simetría Máximo Ángulo Gamma Flujo de Ensayo | | Bisimétrico 90 322.83 lm | |
| Operador Temperatura Humedad Notas | | Asselum T2 25.00 °C RM21032206.2 | | Tensión Nominal Corriente Nominal Fotocélula | | 230.26 V 0.09 A Prc | |

| Fuentes de luz de la Luminaria | | | | | |
|--------------------------------|-----------------------------|---------------------|-------------|----------|-------|
| Familia | Código LED | Nombre LED | Flujo [lm] | Pot. [W] | Cant. |
| C.I.E. F UTE | 89 98 100 100 100 1.00 A | | 322.83 | 8.96 | 1 |
| | | D DIN 5040 B NBN | A60 BZ 1 | | |

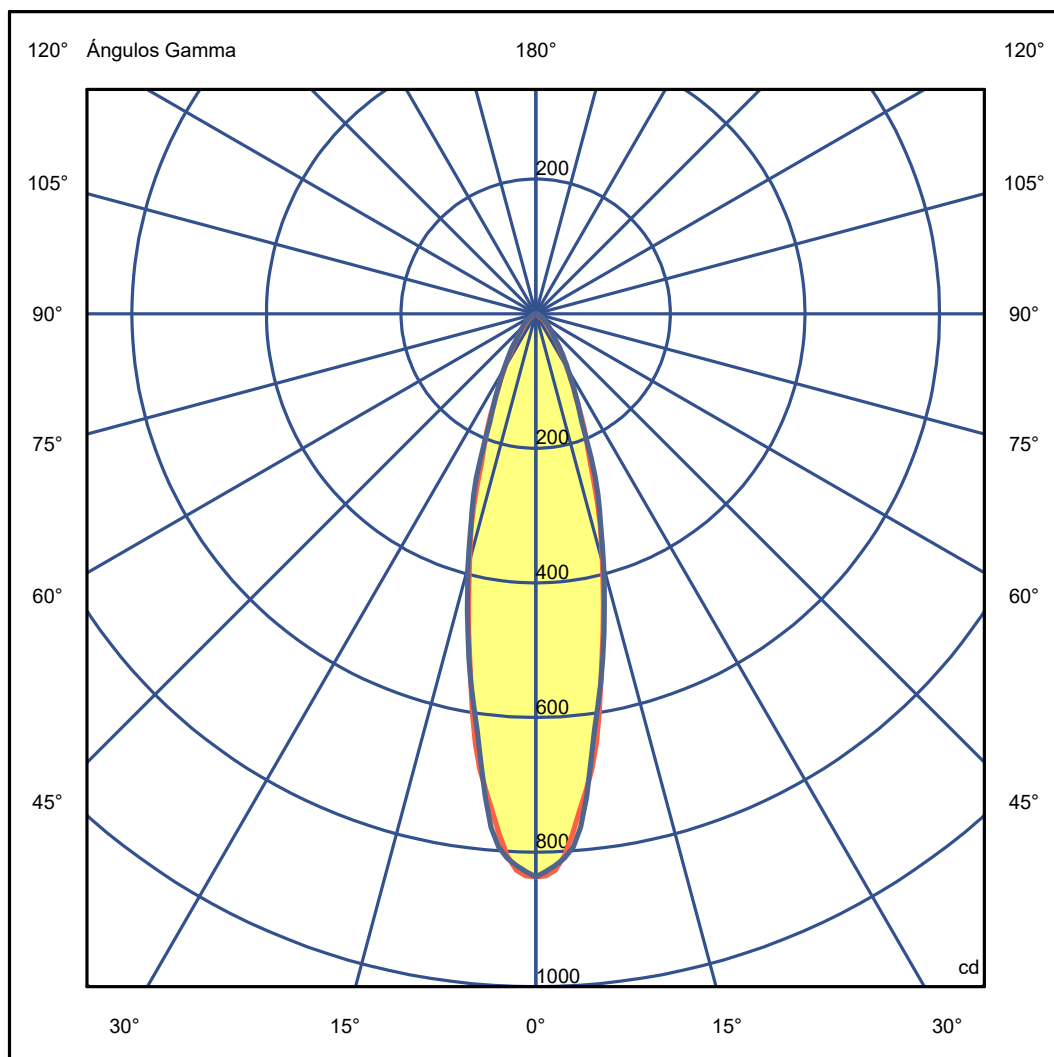
80mm x 125mm



Semiplanos C

180.0 — 0.0
270.0 — 90.0

ULOR 0.00 %
DLOR100.00 %
RN 0.00 %



Luminaria

Código A646-091
Nombre LAB 2 2020 GRAPHITE GREY

Ensayo

Código CL041A21F024G
Nombre LAB 2 2020 GRAPHITE GREY

| | | | | | | | |
|----------------------|-----------|--------------------|-----------|----------|---------------|------------|-------------|
| Flujo Luminaria | 322.83 lm | Potencia Luminaria | 8.96 W | Eficacia | 36.01 lm/W | Eficiencia | 100.00% |
| Flujo Fuentes de luz | 322.83 lm | Valor Máximo | 836.71 cd | Posición | C=0.00 G=0.00 | CG | Bisimétrico |

Tabla de Intensidad Luminosa cd

Tabla 1/1

| | C 0.00 | C 15.00 | C 30.00 | C 45.00 | C 60.00 | C 75.00 | C 90.00 |
|--------|--------|---------|---------|---------|---------|---------|---------|
| G 0.0 | 836.71 | 836.71 | 836.71 | 836.71 | 836.71 | 836.71 | 836.71 |
| G 2.5 | 818.83 | 816.43 | 812.09 | 815.57 | 816.89 | 817.91 | 815.71 |
| G 5.0 | 741.86 | 754.94 | 756.33 | 762.38 | 757.84 | 755.44 | 765.61 |
| G 7.5 | 664.77 | 669.54 | 655.51 | 673.64 | 665.35 | 676.74 | 646.34 |
| G 10.0 | 556.33 | 570.47 | 565.89 | 574.79 | 562.88 | 581.91 | 556.42 |
| G 12.5 | 462.24 | 469.21 | 477.32 | 473.20 | 469.00 | 478.01 | 468.85 |
| G 15.0 | 381.32 | 388.92 | 383.21 | 393.90 | 388.38 | 396.22 | 388.96 |
| G 17.5 | 312.27 | 314.79 | 307.47 | 314.76 | 317.65 | 324.26 | 318.04 |
| G 20.0 | 237.18 | 250.11 | 249.92 | 252.86 | 249.89 | 247.42 | 258.93 |
| G 22.5 | 191.14 | 199.77 | 190.34 | 192.75 | 192.16 | 198.92 | 186.17 |
| G 25.0 | 147.85 | 154.44 | 152.10 | 155.42 | 147.31 | 153.98 | 148.04 |
| G 27.5 | 116.75 | 119.93 | 121.56 | 121.10 | 118.31 | 121.12 | 118.54 |
| G 30.0 | 93.60 | 96.63 | 92.07 | 96.91 | 94.91 | 96.83 | 95.12 |
| G 32.5 | 73.13 | 74.72 | 73.98 | 75.17 | 76.79 | 75.91 | 76.94 |
| G 35.0 | 57.26 | 58.69 | 59.55 | 61.05 | 60.56 | 59.96 | 62.03 |
| G 37.5 | 46.51 | 46.33 | 46.54 | 46.98 | 48.13 | 49.47 | 47.59 |
| G 40.0 | 35.17 | 36.86 | 38.35 | 38.58 | 38.63 | 38.92 | 40.03 |
| G 42.5 | 28.78 | 29.94 | 30.88 | 31.69 | 32.47 | 32.93 | 33.74 |
| G 45.0 | 23.50 | 24.50 | 24.97 | 26.52 | 27.42 | 27.75 | 28.37 |
| G 47.5 | 18.13 | 19.57 | 20.72 | 21.98 | 22.91 | 22.84 | 24.15 |
| G 50.0 | 14.87 | 15.68 | 17.12 | 18.23 | 19.11 | 19.63 | 20.57 |
| G 52.5 | 12.03 | 12.52 | 13.53 | 15.32 | 16.06 | 16.93 | 16.77 |
| G 55.0 | 9.15 | 9.73 | 11.05 | 12.88 | 13.60 | 14.18 | 14.28 |
| G 57.5 | 7.02 | 7.61 | 8.61 | 10.53 | 11.51 | 12.09 | 11.99 |
| G 60.0 | 5.29 | 5.70 | 6.70 | 8.42 | 9.51 | 10.25 | 9.84 |
| G 62.5 | 3.36 | 4.03 | 5.20 | 6.64 | 7.56 | 7.79 | 8.11 |
| G 65.0 | 2.36 | 2.90 | 3.64 | 4.94 | 5.87 | 6.23 | 5.80 |
| G 67.5 | 1.55 | 1.94 | 2.75 | 3.67 | 4.49 | 4.81 | 4.73 |
| G 70.0 | 1.12 | 1.40 | 2.02 | 2.70 | 3.53 | 3.67 | 3.74 |
| G 72.5 | 0.83 | 1.05 | 1.38 | 2.06 | 2.78 | 2.89 | 2.96 |
| G 75.0 | 0.60 | 0.76 | 1.00 | 1.48 | 2.18 | 2.26 | 2.32 |
| G 77.5 | 0.37 | 0.56 | 0.73 | 1.11 | 1.63 | 1.64 | 1.73 |
| G 80.0 | 0.29 | 0.44 | 0.54 | 0.84 | 1.23 | 1.22 | 1.11 |
| G 82.5 | 0.29 | 0.38 | 0.46 | 0.67 | 0.84 | 0.76 | 0.76 |
| G 85.0 | 0.27 | 0.40 | 0.52 | 0.67 | 0.55 | 0.51 | 0.44 |
| G 87.5 | 0.18 | 0.36 | 0.43 | 0.48 | 0.38 | 0.34 | 0.27 |
| G 90.0 | 0.18 | 0.31 | 0.36 | 0.38 | 0.33 | 0.27 | 0.23 |

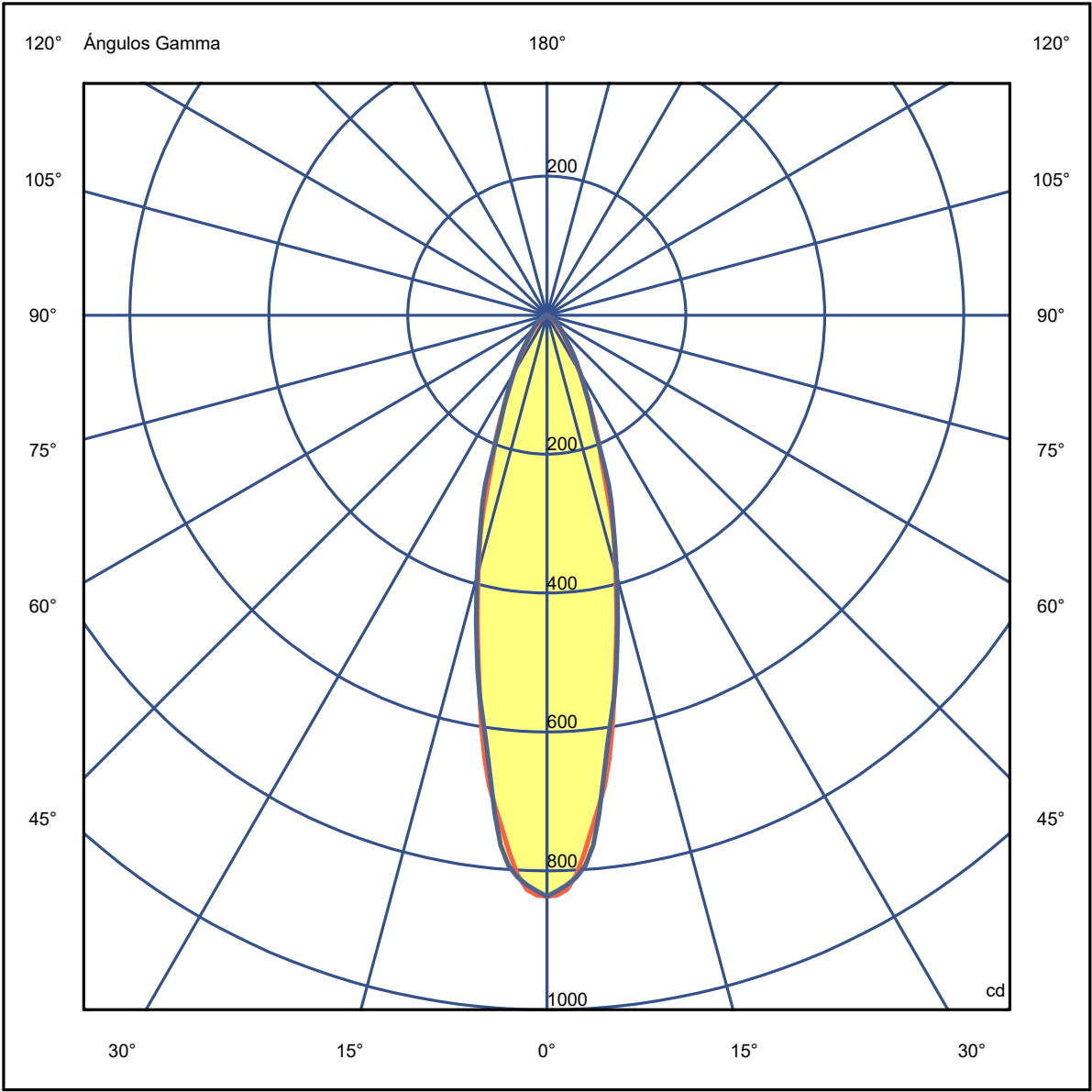
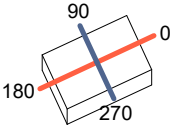
Luminaria
Código A646-091
Nombre LAB 2 2020 GRAPHITE GREY
Ensayo
Código CL041A21F024G
Nombre LAB 2 2020 GRAPHITE GREY

| | | | | | | | |
|----------------------|-----------|--------------------|-----------|----------|---------------|------------|-------------|
| Flujo Luminaria | 322.83 lm | Potencia Luminaria | 8.96 W | Eficacia | 36.01 lm/W | Eficiencia | 100.00% |
| Flujo Fuentes de luz | 322.83 lm | Valor Máximo | 836.71 cd | Posición | C=0.00 G=0.00 | CG | Bisimétrico |

80mm x 125mm

Semiplanos C

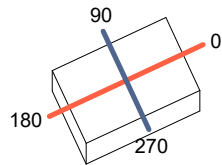
180.0 0.0
270.0 90.0



Luminaria
Código A646-091
Nombre LAB 2 2020 GRAPHITE GREY
Ensayo
Código CL041A21F024G
Nombre LAB 2 2020 GRAPHITE GREY

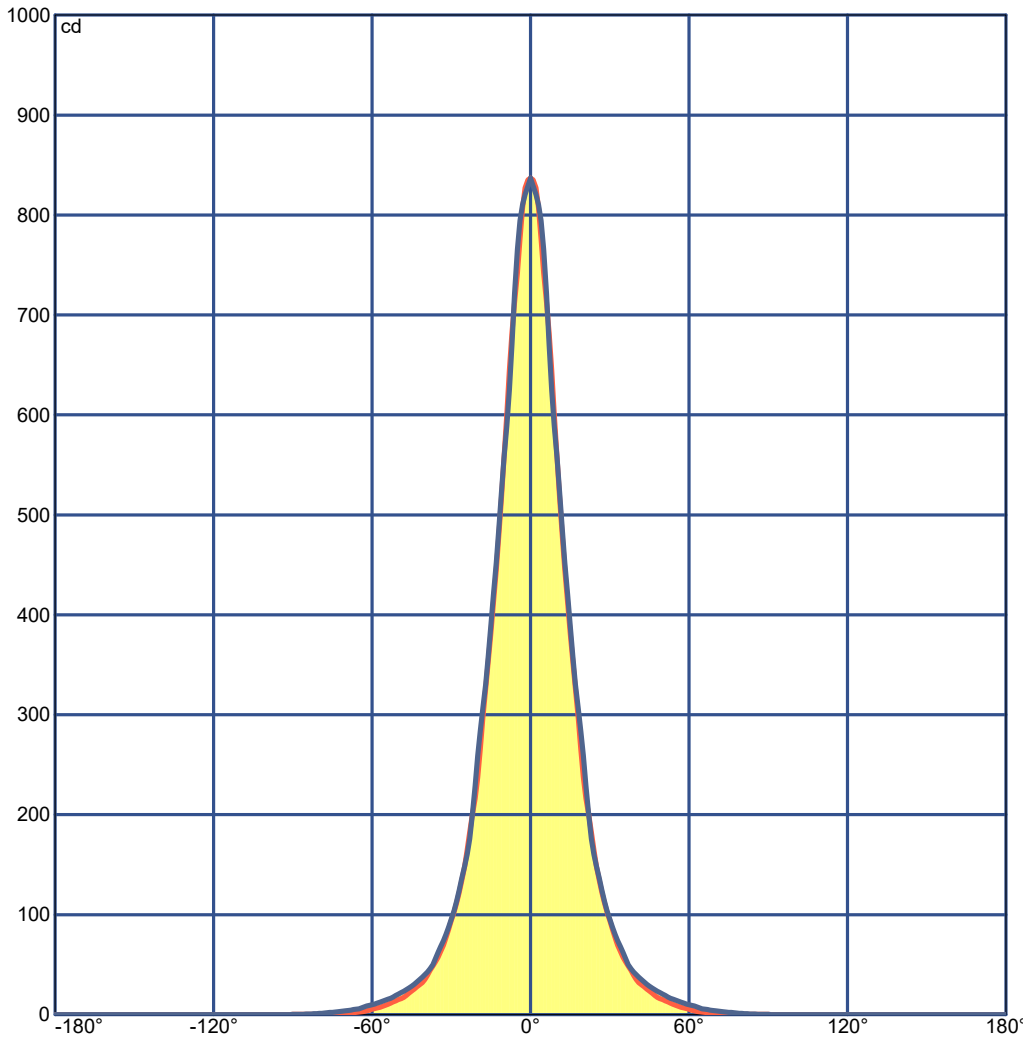
| | | | | | | | |
|----------------------|-----------|--------------------|-----------|----------|---------------|------------|-------------|
| Flujo Luminaria | 322.83 lm | Potencia Luminaria | 8.96 W | Eficacia | 36.01 lm/W | Eficiencia | 100.00% |
| Flujo Fuentes de luz | 322.83 lm | Valor Máximo | 836.71 cd | Posición | C=0.00 G=0.00 | CG | Bisimétrico |

80mm x 125mm



Semiplanos C

| | |
|-------|------|
| 180.0 | 0.0 |
| 270.0 | 90.0 |



Luminaria

Código A646-091
 Nombre LAB 2 2020 GRAPHITE GREY
 Ensayo
 Código CL041A21F024G
 Nombre LAB 2 2020 GRAPHITE GREY

| | | | | | | | |
|----------------------|-----------|--------------------|-----------|----------|---------------|----------------|---------|
| Flujo Luminaria | 322.83 lm | Potencia Luminaria | 8.96 W | Eficacia | 36.01 lm/W | Eficiencia | 100.00% |
| Flujo Fuentes de luz | 322.83 lm | Valor Máximo | 836.71 cd | Posición | C=0.00 G=0.00 | CG Bisimétrico | |

UGR
 S = 0.250

| Reflectancias | | | | | | | | | | |
|-----------------------|------|------|------|------|------|--------------------|------|------|------|------|
| Techo/Cavidad | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Paredes | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| PDT | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Dimensiones del Local | | | | | | | | | | |
| Mista Lateral | | | | | | Vista Longitudinal | | | | |
| x=2H y=2H | 21.4 | 22.2 | 21.7 | 22.4 | 22.6 | 22.7 | 23.4 | 22.9 | 23.6 | 23.8 |
| x=2H y=3H | 21.4 | 22.1 | 21.7 | 22.3 | 22.6 | 23.0 | 23.7 | 23.3 | 23.9 | 24.1 |
| x=2H y=4H | 21.4 | 22.0 | 21.7 | 22.3 | 22.5 | 23.1 | 23.7 | 23.4 | 24.0 | 24.2 |
| x=2H y=6H | 21.3 | 21.9 | 21.6 | 22.2 | 22.4 | 23.1 | 23.7 | 23.4 | 24.0 | 24.2 |
| x=2H y=8H | 21.3 | 21.8 | 21.6 | 22.1 | 22.4 | 23.1 | 23.7 | 23.4 | 24.0 | 24.3 |
| x=2H y=12H | 21.2 | 21.8 | 21.6 | 22.1 | 22.4 | 23.1 | 23.6 | 23.4 | 23.9 | 24.2 |
| x=4H y=2H | 21.6 | 22.2 | 21.9 | 22.5 | 22.8 | 22.7 | 23.4 | 23.0 | 23.6 | 23.9 |
| x=4H y=3H | 21.6 | 22.2 | 22.0 | 22.5 | 22.8 | 23.1 | 23.7 | 23.5 | 24.0 | 24.3 |
| x=4H y=4H | 21.6 | 22.1 | 22.0 | 22.4 | 22.7 | 23.3 | 23.7 | 23.6 | 24.1 | 24.4 |
| x=4H y=6H | 21.5 | 21.9 | 21.9 | 22.3 | 22.7 | 23.4 | 23.8 | 23.8 | 24.1 | 24.5 |
| x=4H y=8H | 21.5 | 21.9 | 21.9 | 22.2 | 22.6 | 23.4 | 23.7 | 23.8 | 24.1 | 24.5 |
| x=4H y=12H | 21.5 | 21.8 | 21.9 | 22.2 | 22.6 | 23.4 | 23.7 | 23.8 | 24.1 | 24.5 |
| x=8H y=4H | 21.6 | 21.9 | 22.0 | 22.3 | 22.7 | 23.2 | 23.6 | 23.6 | 24.0 | 24.4 |
| x=8H y=6H | 21.5 | 21.8 | 22.0 | 22.2 | 22.7 | 23.4 | 23.6 | 23.8 | 24.0 | 24.5 |
| x=8H y=8H | 21.5 | 21.7 | 22.0 | 22.2 | 22.7 | 23.4 | 23.6 | 23.9 | 24.1 | 24.5 |
| x=8H y=12H | 21.5 | 21.7 | 22.0 | 22.2 | 22.7 | 23.4 | 23.6 | 23.9 | 24.1 | 24.6 |
| x=12H y=4H | 21.7 | 22.0 | 22.2 | 22.4 | 22.9 | 23.2 | 23.5 | 23.6 | 23.9 | 24.3 |
| x=12H y=6H | 21.7 | 21.9 | 22.2 | 22.4 | 22.8 | 23.3 | 23.6 | 23.8 | 24.0 | 24.5 |
| x=12H y=8H | 21.7 | 21.9 | 22.2 | 22.4 | 22.8 | 23.4 | 23.6 | 23.9 | 24.0 | 24.5 |

Luminaria
Código A646-091
Nombre LAB 2 2020 GRAPHITE GREY
Ensayo
Código CL041A21F024G
Nombre LAB 2 2020 GRAPHITE GREY

| | | | | | | | |
|----------------------|-----------|--------------------|-----------|----------|---------------|----------------|---------|
| Flujo Luminaria | 322.83 lm | Potencia Luminaria | 8.96 W | Eficacia | 36.01 lm/W | Eficiencia | 100.00% |
| Flujo Fuentes de luz | 322.83 lm | Valor Máximo | 836.71 cd | Posición | C=0.00 G=0.00 | CG Bisimétrico | |

Flujo Total=322.83 Flujo Luminaria=322.83

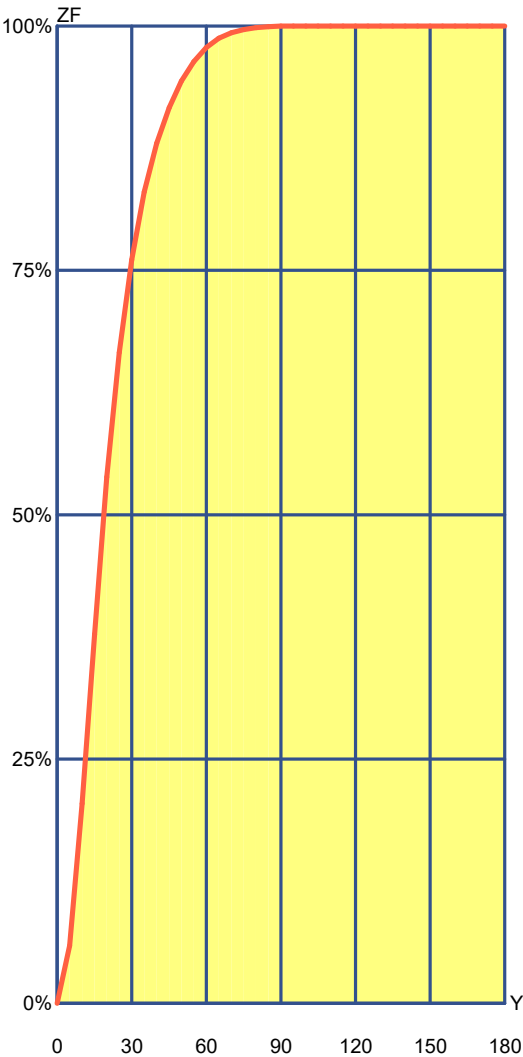
| | | | | | | | | | | | | |
|-----|------|------|------|------|------|------|------|------|------|------|-------|-------|
| RI | 0.60 | 0.80 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 | 10.00 | 20.00 |
| DRR | 0.65 | 0.70 | 0.76 | 0.80 | 0.83 | 0.89 | 0.92 | 0.94 | 0.96 | 0.98 | 1.00 | 1.01 |
| RC | - | - | - | - | - | - | - | - | - | - | - | - |

Flujo Zonal por 1000 Lúmenes

| | | | | | | | | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
| Y° | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| ZF(Y) | 205 | 539 | 761 | 880 | 944 | 978 | 993 | 998 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |

Códigos de Flujo C.I.E.
89 98 100 100 100

| | | | |
|------------|---------------------------------|------|-------------|
| C.I.E. | -/-/-/-/-/-/-/-/-/-/-/-/-/-/-/- | LOR | 100.00000 % |
| D DIN 5040 | A60 | ULOR | 0.00000 % |
| F UTE | 1.00 A | DLOR | 100.00000 % |
| B NBN | BZ 1 | UFF | 0.00000 % |
| RN | 0.00000 % | DFF | 100.00000 % |
| BLF | 1.0 | FFR | 0.00000 % |



| Flujo Zonal | | | | |
|-------------|--------|---------|-----------|----------|
| Gamma ° | Flujo | Suma lm | Flujo [%] | Suma [%] |
| 0° | 0.00 | 0.00 | 0.00% | 0.00 % |
| 5° | 58.98 | 58.98 | 5.90 % | 5.90 % |
| 10° | 145.52 | 204.50 | 14.55 % | 20.45 % |
| 15° | 173.13 | 377.63 | 17.31 % | 37.76 % |
| 20° | 160.92 | 538.55 | 16.09 % | 53.86 % |
| 25° | 127.35 | 665.90 | 12.73 % | 66.59 % |
| 30° | 95.00 | 760.90 | 9.50 % | 76.09 % |
| 35° | 69.45 | 830.35 | 6.95 % | 83.03 % |
| 40° | 49.69 | 880.03 | 4.97 % | 88.00 % |
| 45° | 36.45 | 916.49 | 3.65 % | 91.65 % |
| 50° | 27.22 | 943.71 | 2.72 % | 94.37 % |
| 55° | 20.07 | 963.78 | 2.01 % | 96.38 % |
| 60° | 14.36 | 978.14 | 1.44 % | 97.81 % |
| 65° | 9.38 | 987.52 | 0.94 % | 98.75 % |
| 70° | 5.55 | 993.07 | 0.55 % | 99.31 % |
| 75° | 3.30 | 996.37 | 0.33 % | 99.64 % |
| 80° | 1.90 | 998.27 | 0.19 % | 99.83 % |
| 85° | 1.07 | 999.34 | 0.11 % | 99.93 % |
| 90° | 0.66 | 1000.00 | 0.07 % | 100.00 % |
| 95° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 100° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 105° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 110° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 115° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 120° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 125° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 130° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 135° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 140° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 145° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 150° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 155° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 160° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 165° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 170° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 175° | 0.00 | 1000.00 | 0.00 % | 100.00 % |
| 180° | 0.00 | 1000.00 | 0.00 % | 100.00 % |

Luminaria
Código A646-091
Nombre LAB 2 2020 GRAPHITE GREY
Ensayo
Código CL041A21F024G
Nombre LAB 2 2020 GRAPHITE GREY

| | | | | | | | |
|----------------------|-----------|--------------------|-----------|----------|---------------|----------------|---------|
| Flujo Luminaria | 322.83 lm | Potencia Luminaria | 8.96 W | Eficacia | 36.01 lm/W | Eficiencia | 100.00% |
| Flujo Fuentes de luz | 322.83 lm | Valor Máximo | 836.71 cd | Posición | C=0.00 G=0.00 | CG Bisimétrico | |

Isolux (Suelo)

Posición Luminaria X=0.00m Y=0.00m Z=2.50m

