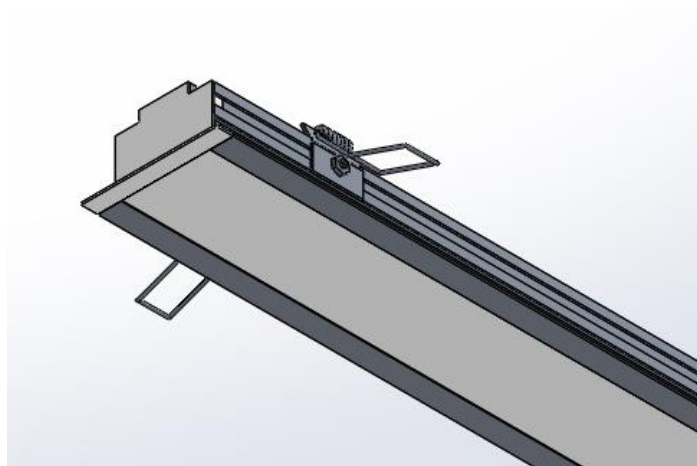


SLED9103 E46 BARRA M80B 44W 4000K 80 1224mm



Fluxo luminoso – 4420 lm

Potência – 43,8 W

Intensidade pico – 1768cd

CCT – 4056K

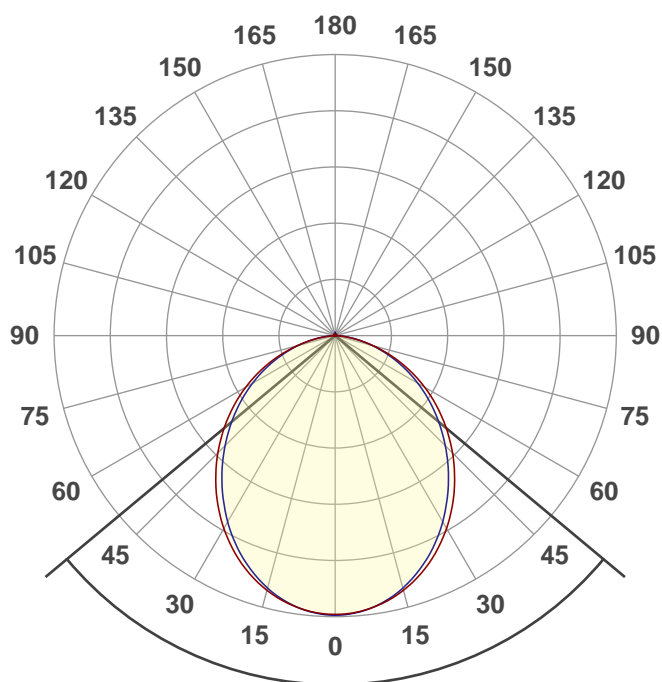


IRC – 82,6

Coordenada CIE 1931 – x- 0,380 y- 0,383

Data do ensaio

17/11/2022 12:00:03



Facho de abertura

100,4°

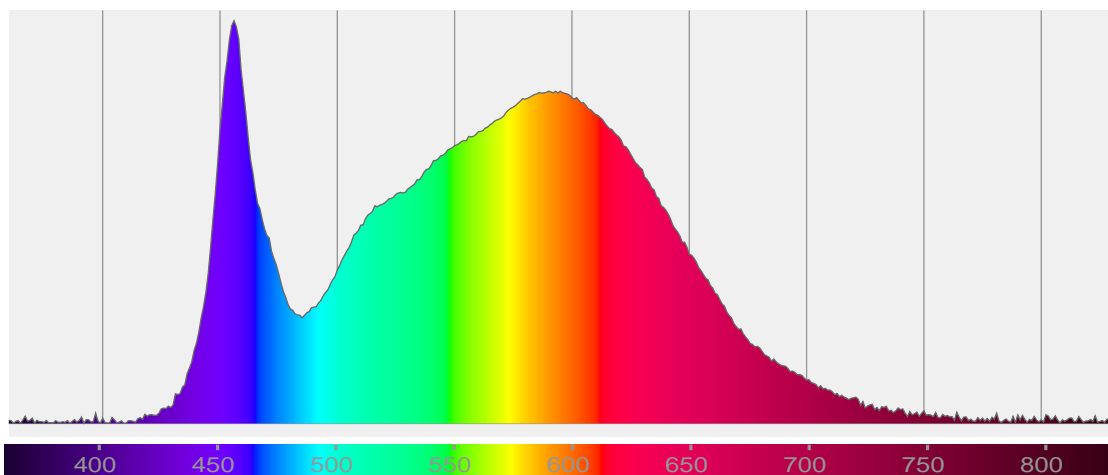
Rf 82,4

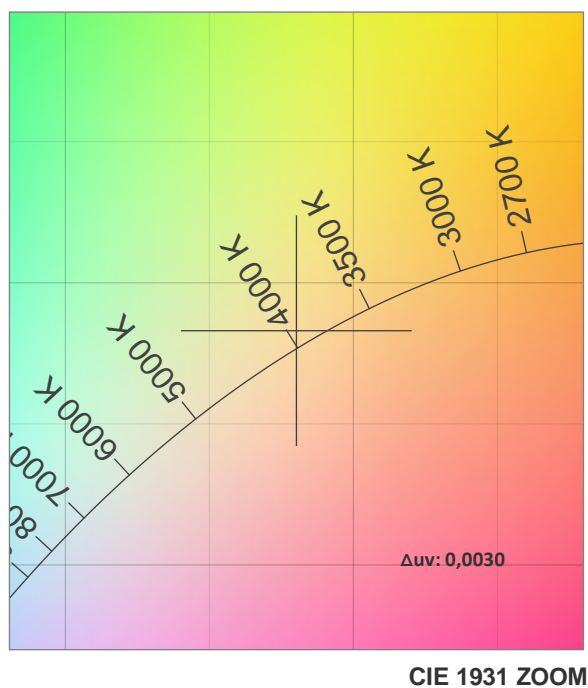
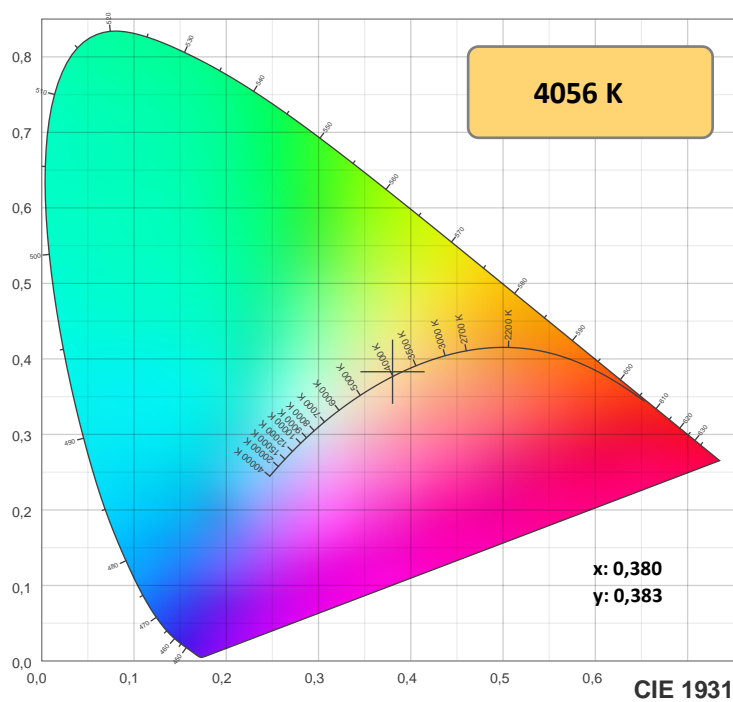
Fidelity index Rf

Rg 92,2

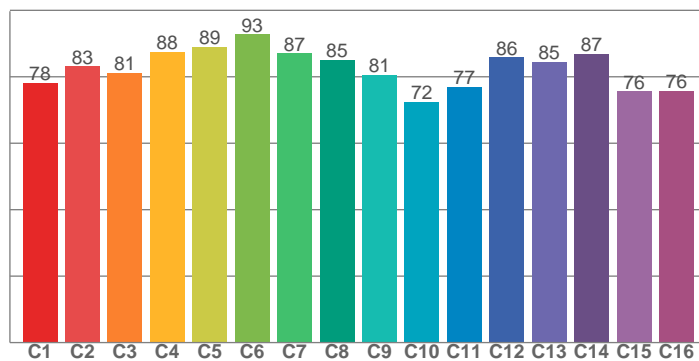
Gamut index Rg

| Hue Bin | R _f | Shifts (%) | |
|---------|----------------|------------|------|
| | | Chroma | Hue |
| 1 | 78 | -12% | 1% |
| 2 | 83 | -7% | 5% |
| 3 | 81 | -5% | 9% |
| 4 | 88 | -3% | 4% |
| 5 | 89 | -5% | 2% |
| 6 | 93 | -3% | -2% |
| 7 | 87 | -8% | 0% |
| 8 | 85 | -8% | 4% |
| 9 | 81 | -7% | 12% |
| 10 | 72 | -5% | 17% |
| 11 | 77 | 5% | 15% |
| 12 | 86 | 5% | 4% |
| 13 | 85 | 6% | -9% |
| 14 | 87 | 3% | -9% |
| 15 | 76 | -3% | -17% |
| 16 | 76 | -7% | -12% |

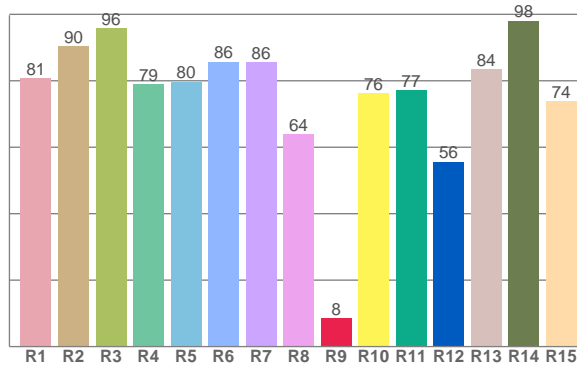




TM-30: 82,4



CRI: 82,6 (R1-R8)



CRIRA R1-R8 / CRIre R1-R15

| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|
| 80,7 | 90,4 | 95,9 | 79,0 | 79,7 | 85,7 | 85,6 | 64,0 | 8,5 | 76,2 | 77,2 | 55,6 | 83,5 | 98,1 | 73,9 |

TM30 valores C. 16 valores extraídos dos 99.

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 78,1 | 83,2 | 81,2 | 87,5 | 89,0 | 92,8 | 87,0 | 85,1 | 80,6 | 72,4 | 77,0 | 85,8 | 84,6 | 86,8 | 75,7 | 75,8 |

Parametros de cor

| Temperatura de cor | Índice de reprodução de cor | Reprodução de cor vermelho R9 | Color fidelity | Color gamut | Color quality scale | Coordenada de cor cie 1931 | Coordenada de cor cie 1931 | Coordenada de cor | Coordenada de cor | Color deviation from black body |
|--------------------|-----------------------------|-------------------------------|----------------|-------------|---------------------|----------------------------|----------------------------|-------------------|-------------------|---------------------------------|
| CCT | IRC | CRI R9 | TM30 Rf | TM30 Rg | CQS | x | y | u | v | Δuv |
| 4056 K | 82,6 | 8,5 | 82,4 | 92,2 | 81,7 | 0,380 | 0,383 | 0,222 | 0,336 | 0,0030 |

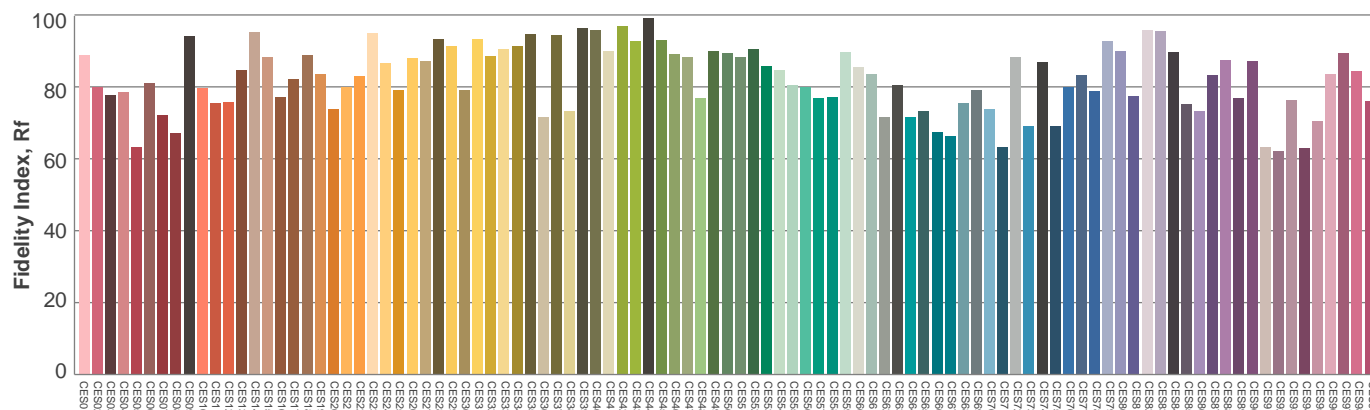
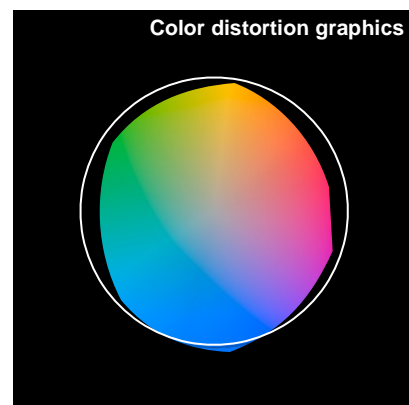
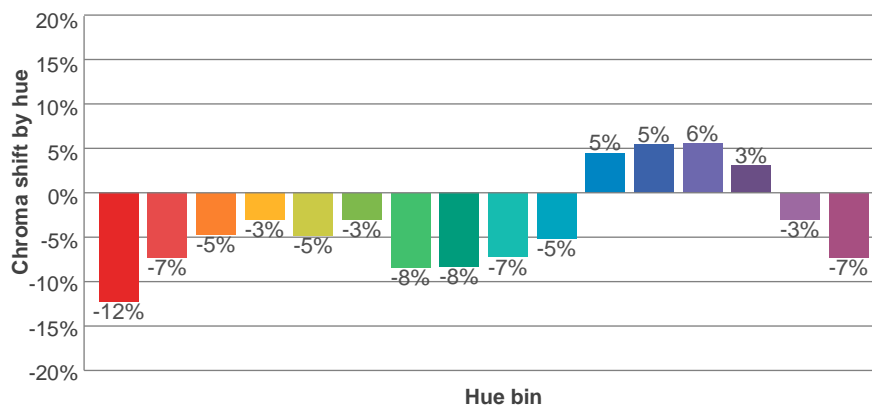
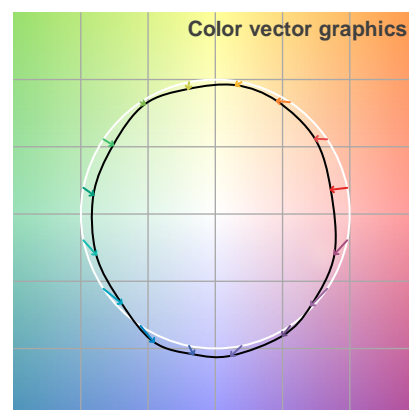
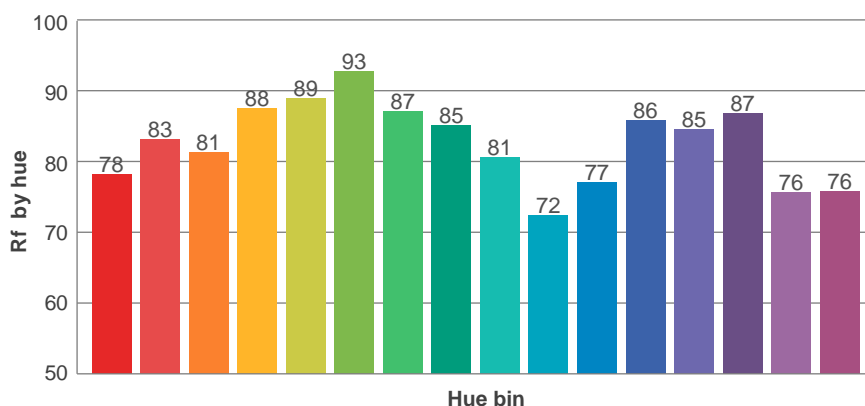
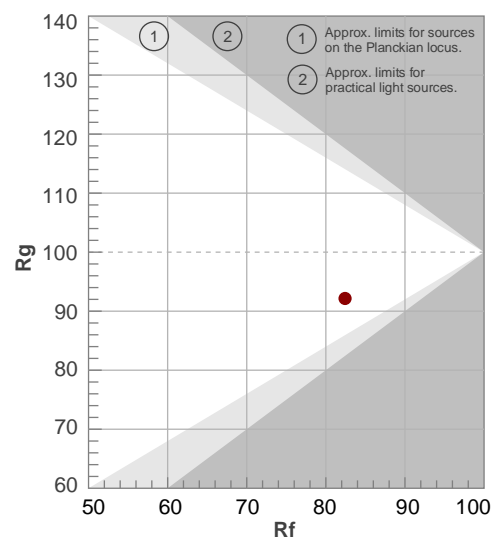
Rf 82,4

Fidelity index Rf

Rg 92,2

Gamut index Rg

| Hue Bin | Ri | Shifts (%) | |
|---------|----|------------|------|
| | | Chroma | Hue |
| 1 | 78 | -12% | 1% |
| 2 | 83 | -7% | 5% |
| 3 | 81 | -5% | 9% |
| 4 | 88 | -3% | 4% |
| 5 | 89 | -5% | 2% |
| 6 | 93 | -3% | -2% |
| 7 | 87 | -8% | 0% |
| 8 | 85 | -8% | 4% |
| 9 | 81 | -7% | 12% |
| 10 | 72 | -5% | 17% |
| 11 | 77 | 5% | 15% |
| 12 | 86 | 5% | 4% |
| 13 | 85 | 6% | -9% |
| 14 | 87 | 3% | -9% |
| 15 | 76 | -3% | -17% |
| 16 | 76 | -7% | -12% |



Avaliação todas as amostras de cores

Glare Evaluation According to UGR

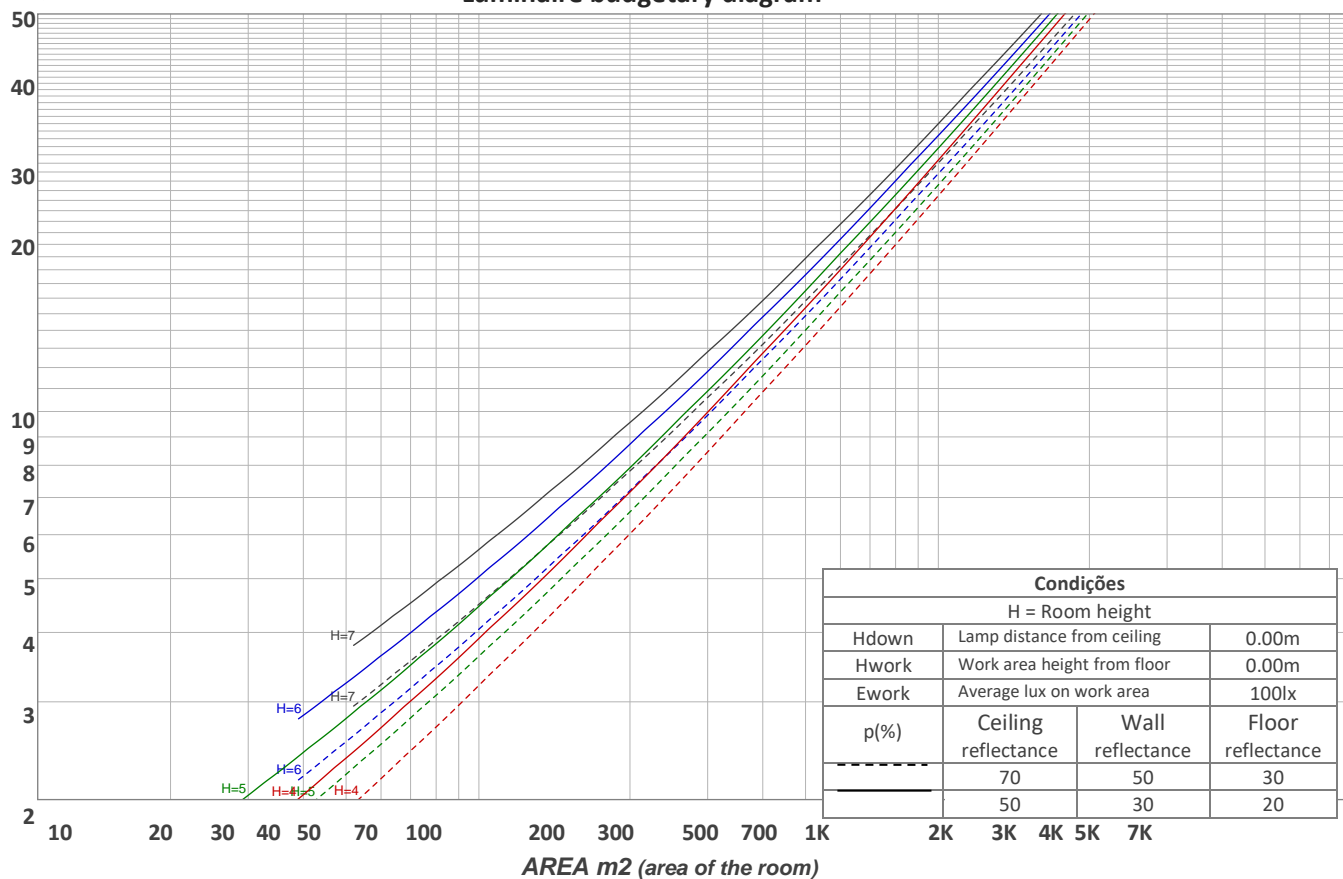
| | | | | | | | | | | | |
|--|-----|--|------|------|------|------|---|------|------|------|------|
| p Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| p Walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| p Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room size X Y | | Viewing direction at right angles to lamp axis | | | | | Viewing direction parallel to lamp axis | | | | |
| 2H | 2H | 23,6 | 24,8 | 23,9 | 25,1 | 25,3 | 23,3 | 24,4 | 23,5 | 24,7 | 25,0 |
| | 3H | 24,9 | 26,2 | 25,3 | 26,4 | 26,6 | 24,5 | 25,8 | 25,0 | 26,0 | 26,3 |
| | 4H | 25,5 | 26,6 | 25,9 | 26,9 | 27,2 | 25,1 | 26,2 | 25,5 | 26,5 | 26,8 |
| | 6H | 25,8 | 26,8 | 26,2 | 27,1 | 27,5 | 25,5 | 26,5 | 25,8 | 26,8 | 27,2 |
| | 8H | 25,9 | 26,9 | 26,2 | 27,2 | 27,6 | 25,6 | 26,6 | 26,0 | 26,9 | 27,3 |
| | 12H | 25,9 | 26,9 | 26,3 | 27,2 | 27,7 | 25,6 | 26,6 | 26,0 | 26,9 | 27,4 |
| 4H | 2H | 24,1 | 25,3 | 24,5 | 25,6 | 25,8 | 23,8 | 25,0 | 24,3 | 25,3 | 25,6 |
| | 3H | 25,8 | 26,7 | 26,1 | 27,1 | 27,5 | 25,4 | 26,4 | 25,8 | 26,7 | 27,2 |
| | 4H | 26,3 | 27,2 | 26,8 | 27,6 | 28,2 | 26,0 | 26,9 | 26,5 | 27,3 | 27,9 |
| | 6H | 26,7 | 27,6 | 27,2 | 27,9 | 28,3 | 26,5 | 27,3 | 27,0 | 27,7 | 28,1 |
| | 8H | 26,8 | 27,6 | 27,4 | 28,0 | 28,4 | 26,6 | 27,4 | 27,1 | 27,8 | 28,2 |
| | 12H | 26,9 | 27,5 | 27,4 | 27,9 | 28,4 | 26,7 | 27,3 | 27,2 | 27,8 | 28,2 |
| 8H | 4H | 26,5 | 27,3 | 27,1 | 27,7 | 28,1 | 26,3 | 27,0 | 26,8 | 27,4 | 27,8 |
| | 6H | 27,1 | 27,7 | 27,6 | 28,1 | 28,7 | 26,9 | 27,5 | 27,4 | 27,9 | 28,5 |
| | 8H | 27,3 | 27,8 | 27,8 | 28,3 | 28,9 | 27,1 | 27,6 | 27,6 | 28,1 | 28,8 |
| | 12H | 27,4 | 27,8 | 27,9 | 28,3 | 28,9 | 27,2 | 27,6 | 27,8 | 28,2 | 28,8 |
| 12H | 4H | 26,5 | 27,2 | 27,0 | 27,6 | 28,1 | 26,3 | 26,9 | 26,8 | 27,3 | 27,8 |
| | 6H | 27,1 | 27,6 | 27,7 | 28,2 | 28,8 | 26,9 | 27,4 | 27,5 | 28,0 | 28,6 |
| | 8H | 27,3 | 27,7 | 27,9 | 28,3 | 28,9 | 27,2 | 27,6 | 27,7 | 28,1 | 28,7 |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | | |
| S = 1.0H | | 0,1 / -0,1 | | | | | 0,1 / -0,1 | | | | |
| S = 1.5H | | 0,2 / -0,3 | | | | | 0,2 / -0,3 | | | | |
| S = 2.0H | | 0,5 / -0,6 | | | | | 0,5 / -0,7 | | | | |
| Standard table | | n/a | | | | | n/a | | | | |
| Correction summand | | n/a | | | | | n/a | | | | |
| Corrected glare indices referring to 4420 lm total luminous flux | | | | | | | | | | | |

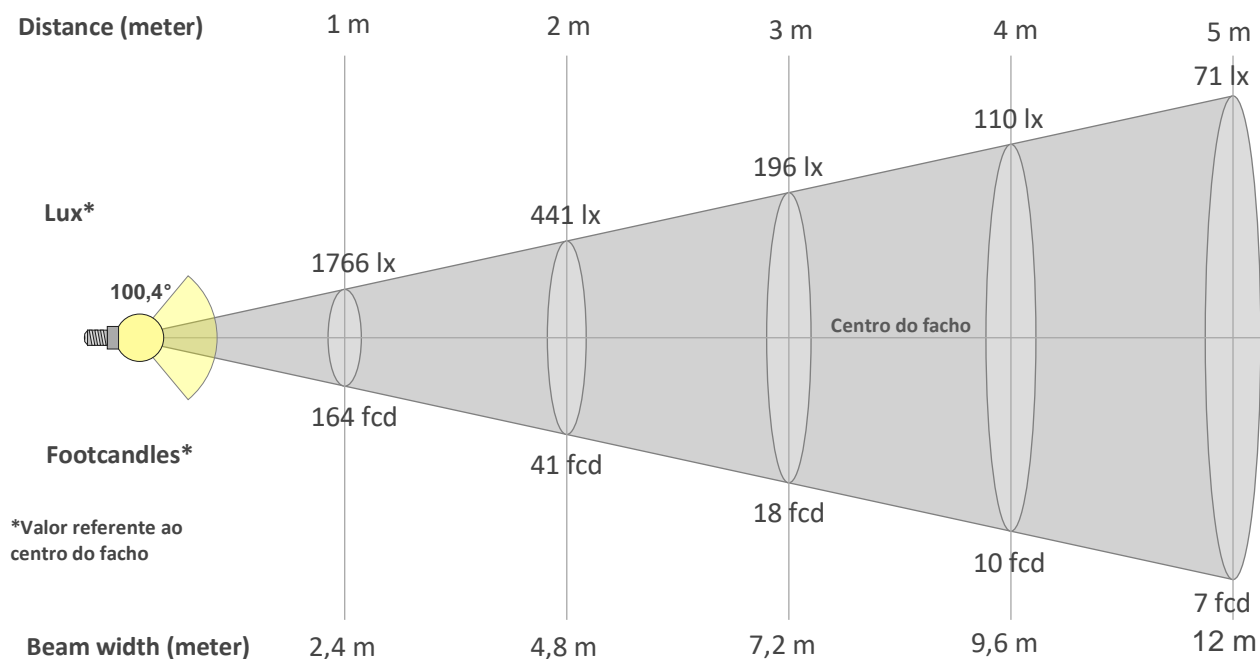
Coeficiente de utilização

| Ceiling reflectance | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Wall reflectance | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| Floor reflectance | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 0 |
| RCR | (RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 75 | 72 | 70 |
| 3 | 90 | 80 | 72 | 66 | 88 | 78 | 71 | 65 | 75 | 69 | 64 | 73 | 67 | 63 | 70 | 65 | 61 | 59 |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 61 | 55 | 67 | 60 | 54 | 65 | 59 | 54 | 62 | 57 | 53 | 51 |
| 5 | 76 | 63 | 55 | 48 | 74 | 62 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 46 | 56 | 50 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 39 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 25 |

Quantidade de luminárias

Luminaire budgetary diagram





Beam intensities from 1-20m

| 1m | 2m | 3m | 4m | 5m | 6m | 7m | 8m | 9m | 10m | 11m | 12m | 13m | 14m | 15m | 16m | 17m | 18m | 19m | 20m |
|--------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 19,7ft | 23ft | 26,2ft | 29,5ft | 32,8ft | 36,1ft | 39,4ft | 42,7ft | 45,9ft | 49,2ft | 52,5ft | 55,8ft | 59,1ft | 62,3ft | 65,6ft |
| 1766lx | 441lx | 196lx | 110lx | 71lx | 49lx | 36lx | 28lx | 22lx | 18lx | 15lx | 12lx | 10lx | 9lx | 8lx | 7lx | 6lx | 5lx | 5lx | 4lx |
| 164fcd | 41fcd | 18,2fcd | 10,3fcd | 6,6fcd | 4,6fcd | 3,3fcd | 2,6fcd | 2fcd | 1,6fcd | 1,4fcd | 1,1fcd | 1fcd | 0,8fcd | 0,7fcd | 0,6fcd | 0,6fcd | 0,5fcd | 0,5fcd | 0,4fcd |

Intensities in 0° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1766 | 1753 | 1721 | 1668 | 1598 | 1510 | 1409 | 1297 | 1176 | 1050 | 920 | 788 | 654 | 519 | 383 | 252 | 132 | 41 | 3 | 2 |
| 100% | 99% | 97% | 94% | 90% | 86% | 80% | 73% | 67% | 59% | 52% | 45% | 37% | 29% | 22% | 14% | 7% | 2% | 0% | 0% |

Intensities in 90° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1766 | 1755 | 1716 | 1654 | 1571 | 1473 | 1361 | 1239 | 1114 | 985 | 858 | 731 | 605 | 480 | 358 | 244 | 139 | 49 | 3 | 2 |
| 100% | 99% | 97% | 94% | 89% | 83% | 77% | 70% | 63% | 56% | 49% | 41% | 34% | 27% | 20% | 14% | 8% | 3% | 0% | 0% |

Intensities in 180° c-plane

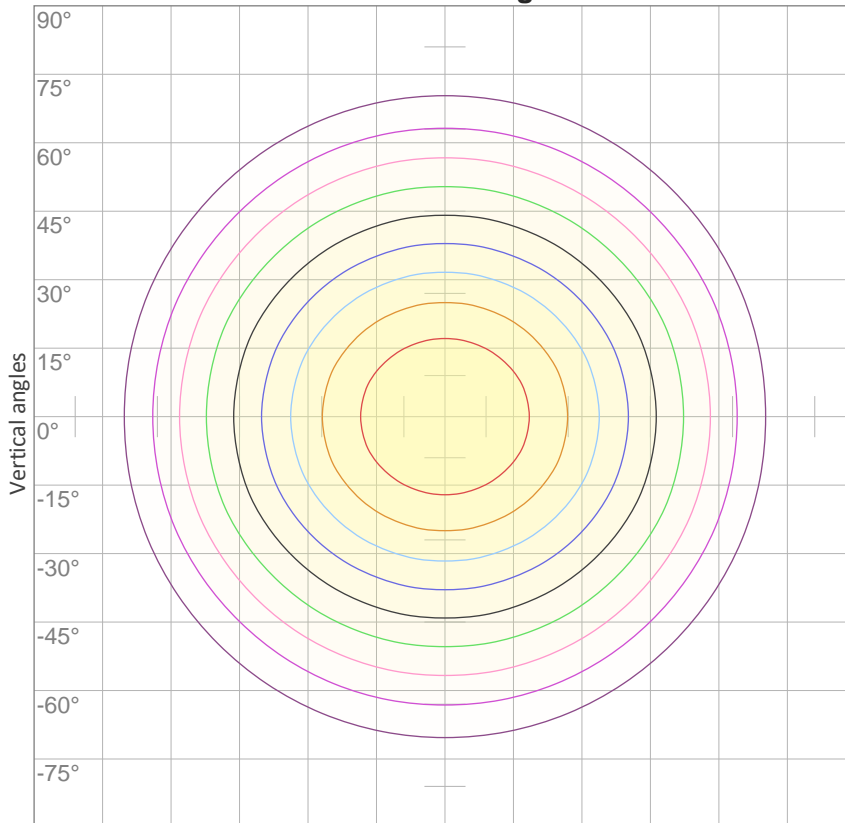
| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1766 | 1753 | 1721 | 1668 | 1598 | 1510 | 1409 | 1297 | 1176 | 1050 | 920 | 788 | 654 | 519 | 383 | 252 | 132 | 41 | 3 | 2 |
| 100% | 99% | 97% | 94% | 90% | 86% | 80% | 73% | 67% | 59% | 52% | 45% | 37% | 29% | 22% | 14% | 7% | 2% | 0% | 0% |

Intensities in 270° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1766 | 1755 | 1716 | 1654 | 1571 | 1473 | 1361 | 1239 | 1114 | 985 | 858 | 731 | 605 | 480 | 358 | 244 | 139 | 49 | 3 | 2 |
| 100% | 99% | 97% | 94% | 89% | 83% | 77% | 70% | 63% | 56% | 49% | 41% | 34% | 27% | 20% | 14% | 8% | 3% | 0% | 0% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 100,4° | 156,2° | 170,3° | 79,3% | 55,0% |

iso-candela diagram



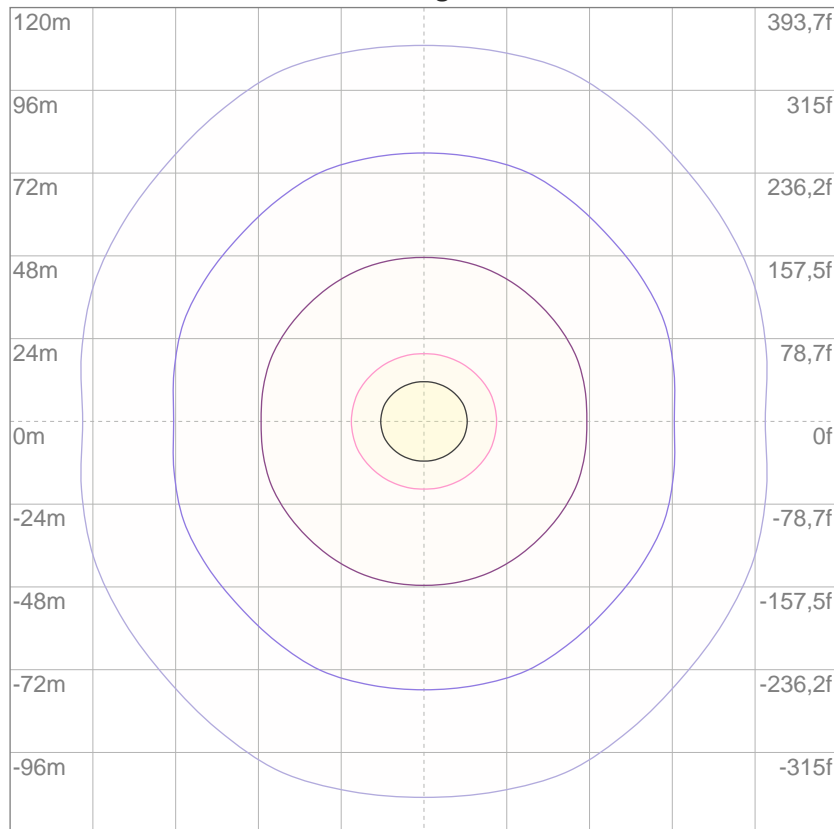
| | |
|-----|---------|
| 10% | 177 cd |
| 20% | 353 cd |
| 30% | 530 cd |
| 40% | 706 cd |
| 50% | 883 cd |
| 60% | 1059 cd |
| 70% | 1236 cd |
| 80% | 1413 cd |
| 90% | 1589 cd |

Conditions:

Number of c-planes: 16

Candela at center: 1766 cd

iso-lux diagram



Mounting height: 10 meters

| | |
|-----|----------|
| 3% | 0,530 lx |
| 5% | 0,883 lx |
| 10% | 1,77 lx |
| 30% | 5,30 lx |
| 50% | 8,83 lx |

Conditions:

Number of c-planes: 16

Lux at center: 17,7 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

Potência

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Voltagem: 238 V
Corrente: 0,184 A
Frequência: 0 Hz
FP: 0,56

THD



THD corrente: n/a
THD tensão: n/a