

SLED 9165H EX12 5W IP67 2700K 24V 90 1m



Perfil flexível

Fluxo luminoso – 282 lm/m

Potência – 4,6 W/m

Intensidade pico – 91,3cd

CCT – 2706K



IRC – 94,0

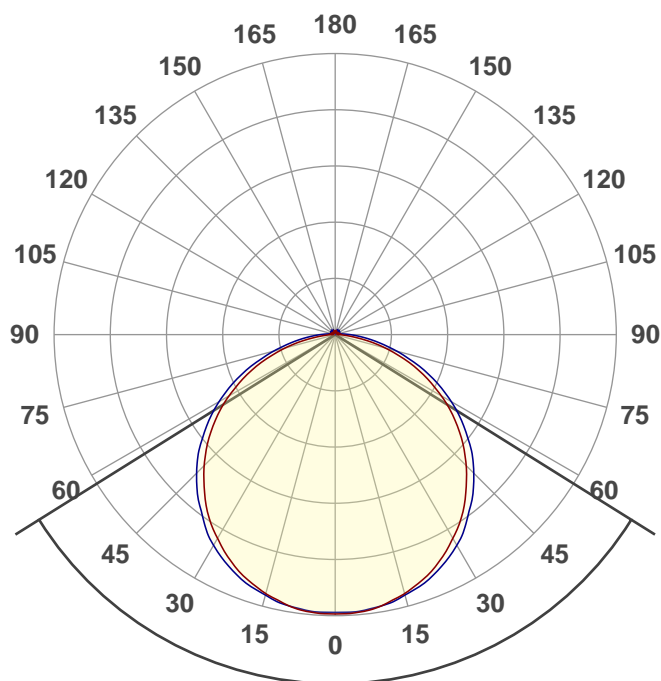
Coordenada CIE 1931 – x- 0,456 y- 0,403

24V

IP67

Data do ensaio

14/12/2022 11:49:34



Facho de abertura

116°

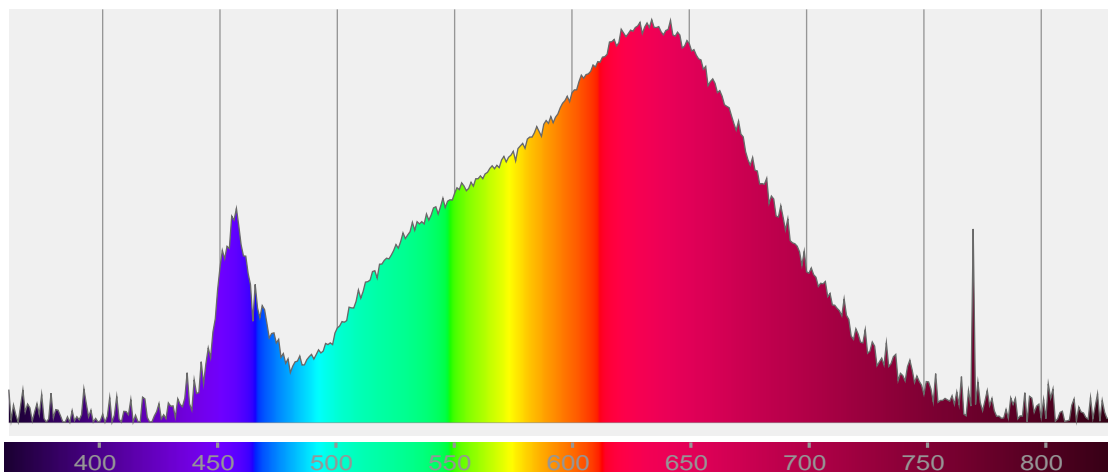
Rf 90,8

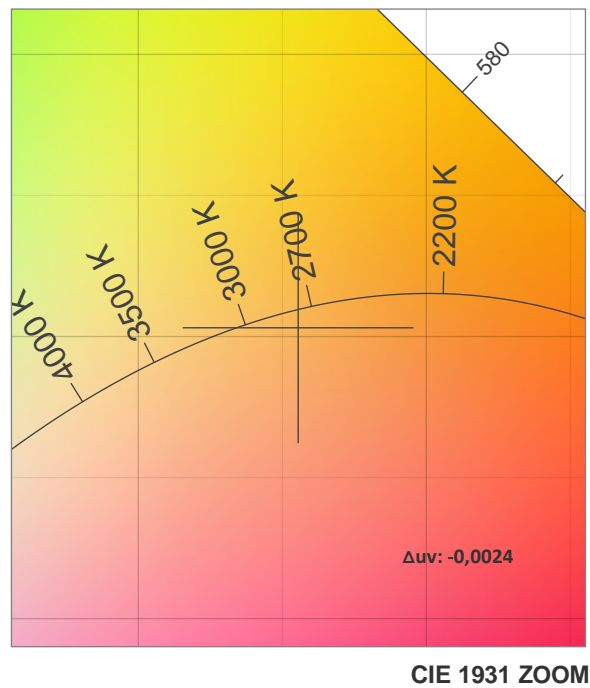
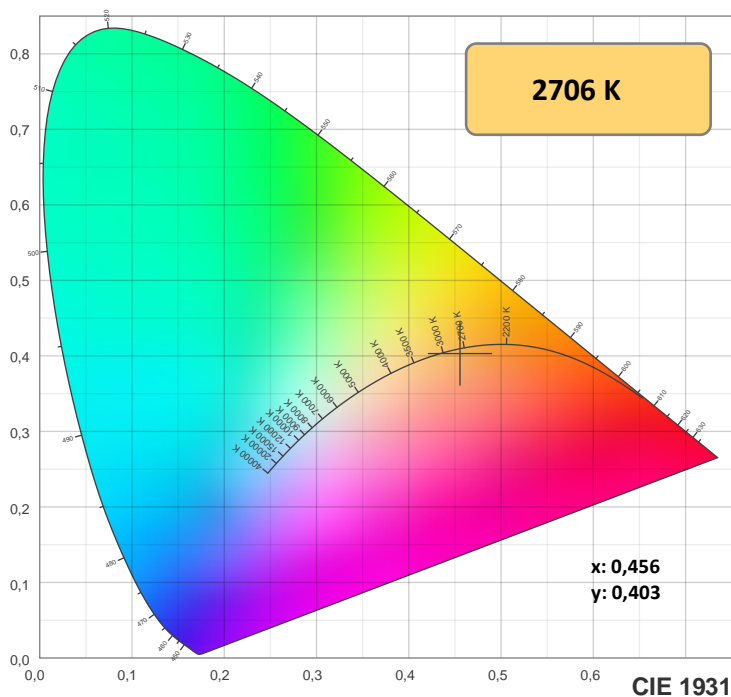
Fidelity index Rf

Rg 101,6

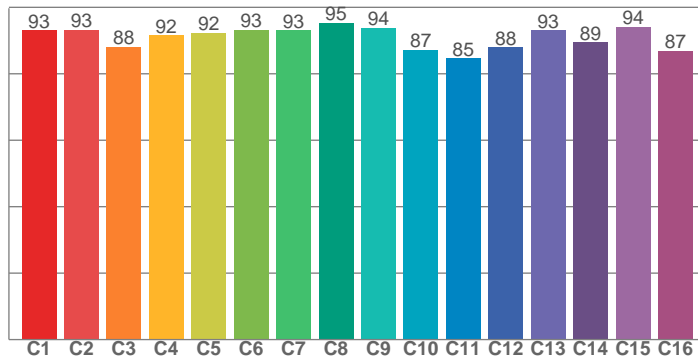
Gamut index Rg

| Hue Bin | R _f | Shifts (%) | |
|---------|----------------|------------|------|
| | | Chroma | Hue |
| 1 | 93 | -3% | 0% |
| 2 | 93 | -2% | 3% |
| 3 | 88 | 0% | 6% |
| 4 | 92 | -1% | 3% |
| 5 | 92 | 2% | 4% |
| 6 | 93 | 4% | 0% |
| 7 | 93 | 0% | -3% |
| 8 | 95 | -1% | -3% |
| 9 | 94 | -2% | 2% |
| 10 | 87 | -2% | 8% |
| 11 | 85 | 2% | 11% |
| 12 | 88 | 6% | 4% |
| 13 | 93 | 4% | -2% |
| 14 | 89 | 6% | -5% |
| 15 | 94 | 0% | -3% |
| 16 | 87 | 0% | -10% |

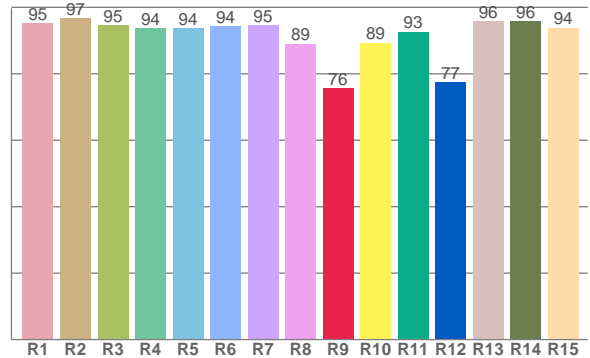




TM-30: 90,8



CRI: 94,0 (R1-R8)



CRIRA R1-R8 / CRIR R1-R15

| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,3 | 96,6 | 94,6 | 93,6 | 93,7 | 94,4 | 94,6 | 89,0 | 75,7 | 89,4 | 92,7 | 77,4 | 95,7 | 95,8 | 93,9 |

TM30 valores C. 16 valores extraídos dos 99.

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,1 | 93,2 | 88,2 | 91,5 | 92,4 | 93,2 | 93,1 | 95,3 | 93,8 | 87,2 | 84,7 | 88,0 | 93,1 | 89,4 | 94,1 | 86,9 |

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 |
| 2706 K | 94,0 | 75,7 | 90,8 | 101,6 | 89,3 | 0,456 | 0,403 | 0,263 | 0,349 | -0,0024 |

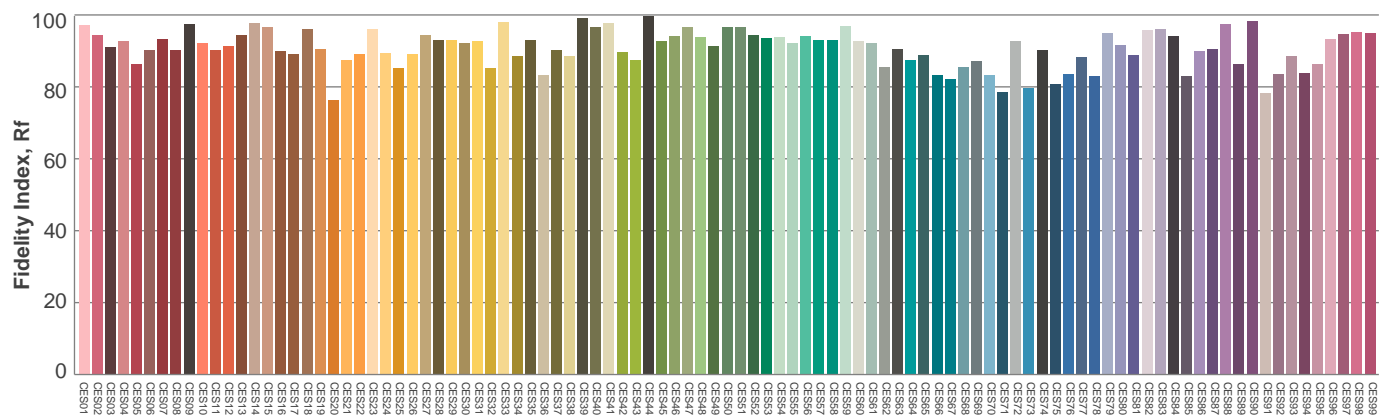
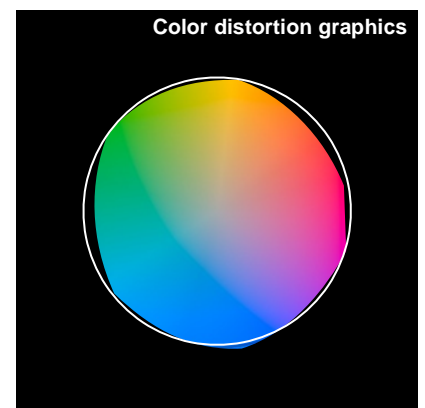
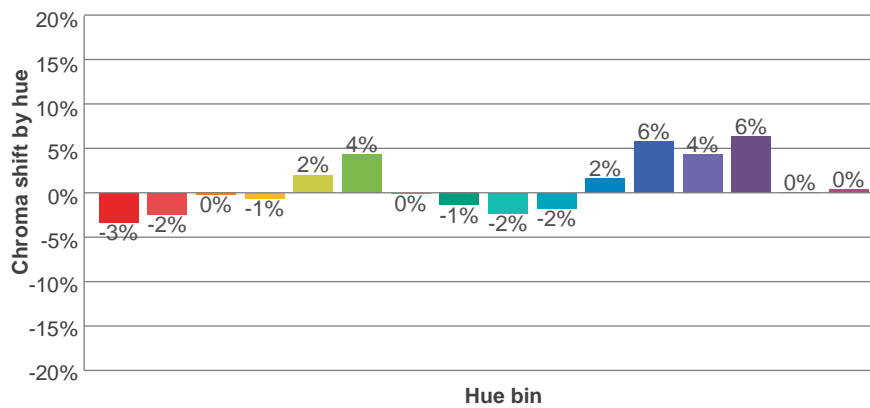
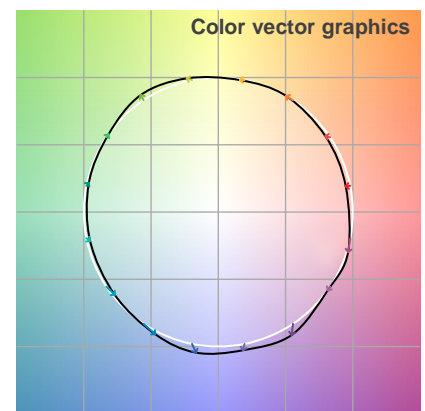
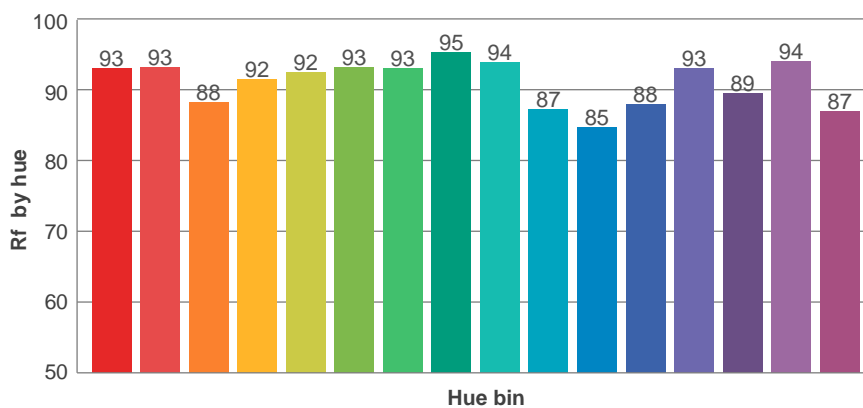
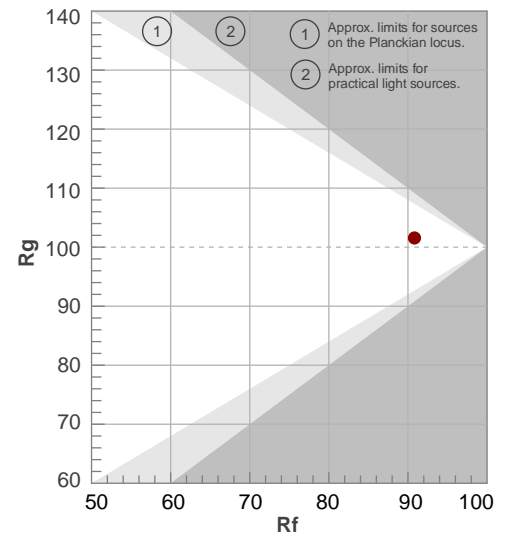
Rf 90,8

Fidelity index Rf

Rg 101,6

Gamut index Rg

| Hue Bin | R _f | Shifts (%) | |
|---------|----------------|------------|------|
| | | Chroma | Hue |
| 1 | 93 | -3% | 0% |
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| 6 | 93 | 4% | 0% |
| 7 | 93 | 0% | -3% |
| 8 | 95 | -1% | -3% |
| 9 | 94 | -2% | 2% |
| 10 | 87 | -2% | 8% |
| 11 | 85 | 2% | 11% |
| 12 | 88 | 6% | 4% |
| 13 | 93 | 4% | -2% |
| 14 | 89 | 6% | -5% |
| 15 | 94 | 0% | -3% |
| 16 | 87 | 0% | -10% |



Glare Evaluation According to UGR

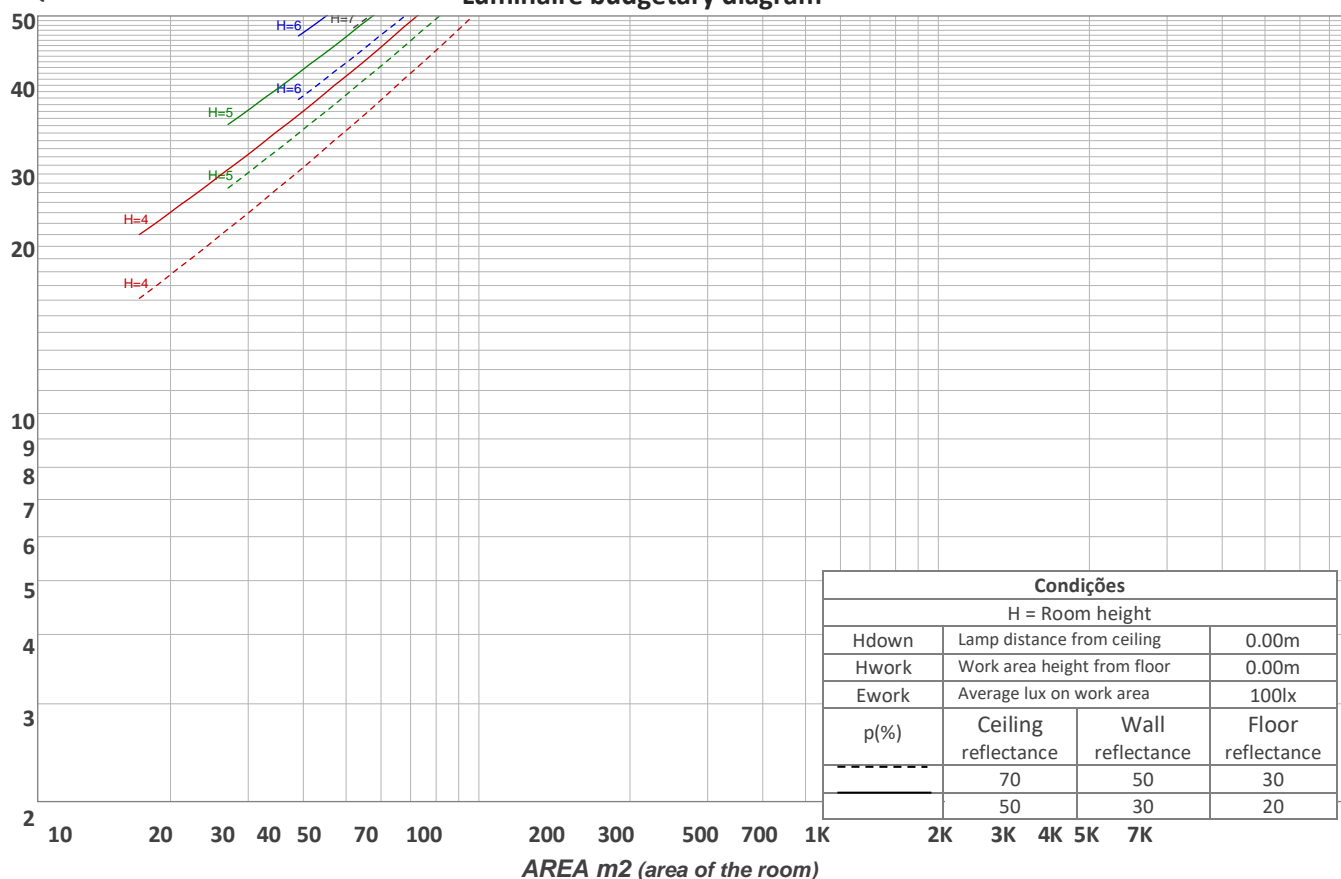
| | | | | | | | | | | | |
|---|-----|--|------|------|------|------|---|------|------|------|------|
| p Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| p Walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| p Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room size X Y | | Viewing direction at right angles to lamp axis | | | | | Viewing direction parallel to lamp axis | | | | |
| 2H | 2H | 19,2 | 20,4 | 19,5 | 20,8 | 21,0 | 19,5 | 20,7 | 19,8 | 21,1 | 21,4 |
| | 3H | 20,6 | 21,9 | 21,1 | 22,2 | 22,5 | 21,1 | 22,4 | 21,6 | 22,7 | 23,0 |
| | 4H | 21,3 | 22,4 | 21,7 | 22,8 | 23,1 | 21,8 | 23,0 | 22,3 | 23,4 | 23,7 |
| | 6H | 21,7 | 22,8 | 22,1 | 23,1 | 23,5 | 22,5 | 23,5 | 22,9 | 23,9 | 24,3 |
| | 8H | 21,8 | 22,9 | 22,2 | 23,2 | 23,7 | 22,7 | 23,8 | 23,1 | 24,1 | 24,6 |
| | 12H | 21,9 | 22,9 | 22,3 | 23,3 | 23,8 | 23,0 | 24,0 | 23,4 | 24,4 | 24,9 |
| 4H | 2H | 19,9 | 21,1 | 20,3 | 21,4 | 21,7 | 20,1 | 21,3 | 20,6 | 21,6 | 22,0 |
| | 3H | 21,7 | 22,7 | 22,1 | 23,0 | 23,5 | 22,0 | 23,0 | 22,5 | 23,4 | 23,9 |
| | 4H | 22,3 | 23,3 | 22,8 | 23,7 | 24,3 | 22,8 | 23,8 | 23,3 | 24,2 | 24,8 |
| | 6H | 22,8 | 23,7 | 23,4 | 24,1 | 24,5 | 23,5 | 24,4 | 24,1 | 24,8 | 25,3 |
| | 8H | 23,0 | 23,8 | 23,6 | 24,2 | 24,7 | 23,9 | 24,7 | 24,4 | 25,1 | 25,5 |
| | 12H | 23,1 | 23,8 | 23,6 | 24,2 | 24,8 | 24,2 | 24,8 | 24,7 | 25,3 | 25,8 |
| 8H | 4H | 22,7 | 23,4 | 23,2 | 23,9 | 24,3 | 23,1 | 23,9 | 23,7 | 24,3 | 24,8 |
| | 6H | 23,4 | 24,0 | 23,9 | 24,5 | 25,1 | 24,0 | 24,6 | 24,6 | 25,1 | 25,7 |
| | 8H | 23,7 | 24,2 | 24,2 | 24,7 | 25,4 | 24,5 | 25,0 | 25,0 | 25,6 | 26,2 |
| | 12H | 23,8 | 24,3 | 24,5 | 24,8 | 25,5 | 24,9 | 25,3 | 25,5 | 25,9 | 26,6 |
| 12H | 4H | 22,7 | 23,4 | 23,2 | 23,8 | 24,4 | 23,1 | 23,8 | 23,7 | 24,3 | 24,8 |
| | 6H | 23,5 | 24,0 | 24,0 | 24,6 | 25,3 | 24,1 | 24,6 | 24,7 | 25,2 | 25,9 |
| | 8H | 23,8 | 24,2 | 24,4 | 24,8 | 25,4 | 24,6 | 25,0 | 25,2 | 25,6 | 26,2 |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | | |
| S = 1.0H | | 0,1 / -0,1 | | | | | 0,1 / -0,1 | | | | |
| S = 1.5H | | 0,1 / -0,3 | | | | | 0,1 / -0,2 | | | | |
| S = 2.0H | | 0,4 / -0,5 | | | | | 0,3 / -0,4 | | | | |
| Standard table | | n/a | | | | | n/a | | | | |
| Correction summand | | n/a | | | | | n/a | | | | |
| Corrected glare indices referring to 282 lm total luminous flux | | | | | | | | | | | |

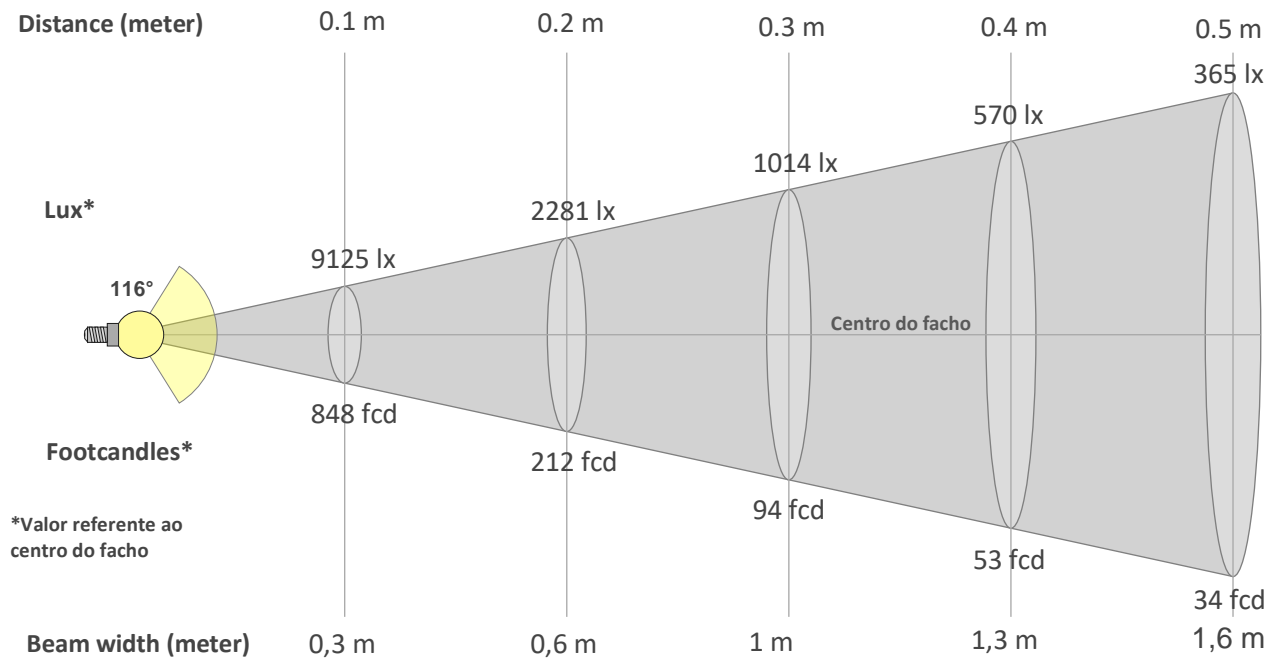
Coeficiente de utilização

| 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 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 97 |
| 1 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 95 | 92 | 89 | 91 | 88 | 86 | 87 | 85 | 83 | 80 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 77 | 73 | 79 | 75 | 71 | 76 | 72 | 69 | 66 |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 64 | 59 | 67 | 62 | 58 | 56 |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 53 | 64 | 57 | 52 | 62 | 56 | 51 | 59 | 54 | 50 | 47 |
| 5 | 75 | 61 | 52 | 46 | 72 | 60 | 52 | 45 | 58 | 50 | 44 | 55 | 49 | 44 | 53 | 48 | 43 | 41 |
| 6 | 69 | 55 | 46 | 40 | 67 | 54 | 46 | 39 | 52 | 44 | 39 | 50 | 43 | 38 | 48 | 42 | 38 | 35 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 47 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 31 |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 30 | 40 | 34 | 30 | 28 |
| 9 | 55 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |
| 10 | 52 | 39 | 31 | 25 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 29 | 25 | 34 | 29 | 24 | 23 |

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 |
| 91lx | 23lx | 10lx | 6lx | 4lx | 3lx | 2lx | 1lx | 1lx | 1lx | 1lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| 8,5fcd | 2,1fcd | 0,9fcd | 0,5fcd | 0,3fcd | 0,2fcd | 0,2fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |

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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 91,3 | 91,0 | 89,8 | 87,6 | 84,8 | 81,2 | 76,9 | 72,2 | 66,5 | 60,5 | 54,2 | 47,4 | 40,1 | 32,5 | 24,8 | 17,0 | 9,7 | 4,0 | 1,4 | 1,1 |
| 100% | 100% | 98% | 96% | 93% | 89% | 84% | 79% | 73% | 66% | 59% | 52% | 44% | 36% | 27% | 19% | 11% | 4% | 2% | 1% |

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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 91,3 | 90,7 | 89,9 | 88,1 | 86,1 | 83,1 | 79,5 | 74,8 | 69,7 | 64,0 | 57,9 | 51,0 | 43,8 | 36,3 | 28,4 | 20,8 | 14,1 | 8,7 | 4,9 | 2,6 |
| 100% | 99% | 98% | 97% | 94% | 91% | 87% | 82% | 76% | 70% | 63% | 56% | 48% | 40% | 31% | 23% | 15% | 10% | 5% | 3% |

Intensities in 180° c-plane

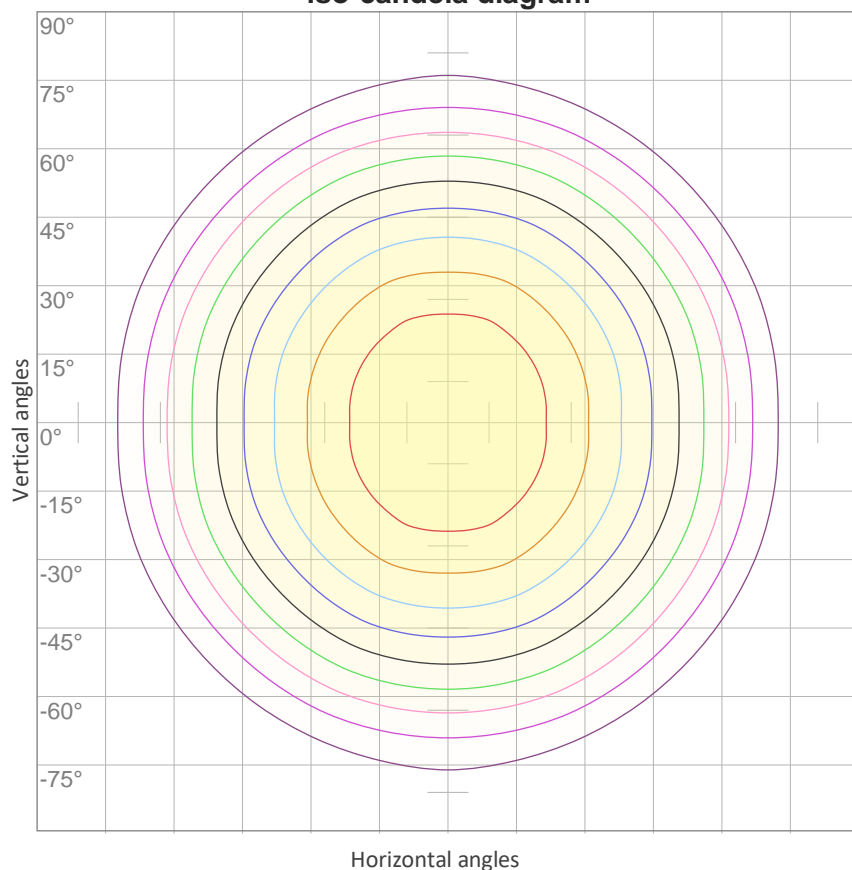
| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 91,3 | 91,0 | 89,8 | 87,6 | 84,8 | 81,2 | 76,9 | 72,2 | 66,5 | 60,5 | 54,2 | 47,4 | 40,1 | 32,5 | 24,8 | 17,0 | 9,7 | 4,0 | 1,4 | 1,1 |
| 100% | 100% | 98% | 96% | 93% | 89% | 84% | 79% | 73% | 66% | 59% | 52% | 44% | 36% | 27% | 19% | 11% | 4% | 2% | 1% |

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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 91,3 | 90,7 | 89,9 | 88,1 | 86,1 | 83,1 | 79,5 | 74,8 | 69,7 | 64,0 | 57,9 | 51,0 | 43,8 | 36,3 | 28,4 | 20,8 | 14,1 | 8,7 | 4,9 | 2,6 |
| 100% | 99% | 98% | 97% | 94% | 91% | 87% | 82% | 76% | 70% | 63% | 56% | 48% | 40% | 31% | 23% | 15% | 10% | 5% | 3% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 116° | 165,1° | 183,3° | 74,8% | 50,4% |

iso-candela diagram



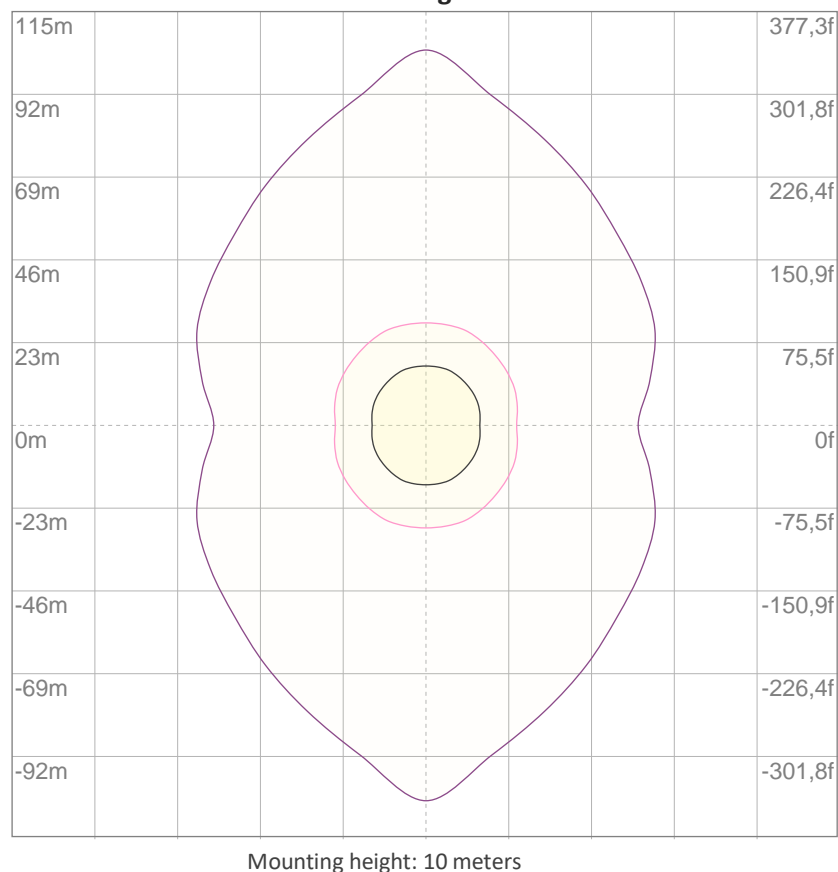
| | |
|-----|-------|
| 10% | 9 cd |
| 20% | 18 cd |
| 30% | 27 cd |
| 40% | 37 cd |
| 50% | 46 cd |
| 60% | 55 cd |
| 70% | 64 cd |
| 80% | 73 cd |
| 90% | 82 cd |

Conditions:

Number of c-planes: 16

Candela at center: 91 cd

iso-lux diagram



| | |
|-----|----------|
| 3% | 27,4m lx |
| 5% | 45,6m lx |
| 10% | 91,3m lx |
| 30% | 0,274 lx |
| 50% | 0,456 lx |

Conditions:

Number of c-planes: 16

Lux at center: 0,913 lx

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

Potência

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

Vttagem: 24,0 V

Corrente: 0,192 A

Frequência: 0 Hz

FP: 1,0

THD



THD corrente: n/a

THD tensão: n/a