

## FITA SLED8040 11WM 4000K 95 - 1m



Fluxo luminoso – 836 lm/m

Potência – 11,0 W/m

Intensidade pico – 260cd

CCT – 4021K

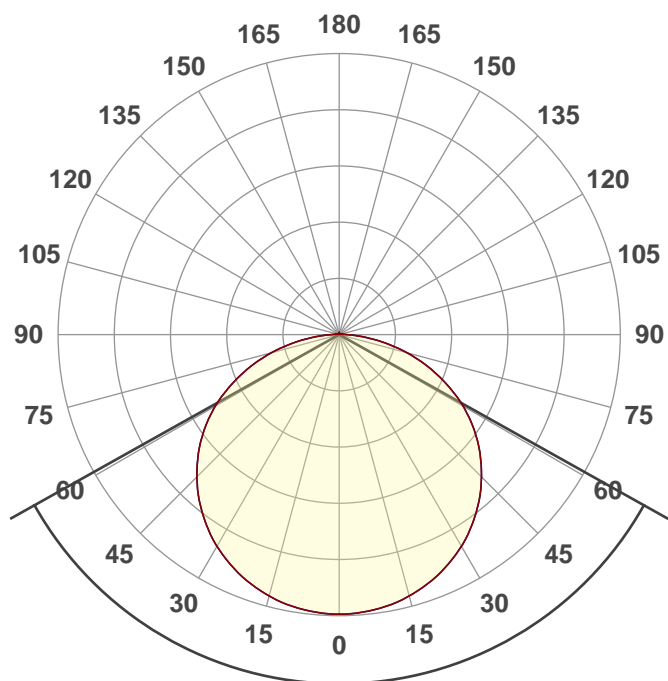


IRC – 97,1

Coordenada CIE 1931 – x- 0,380 y- 0,376

Data do ensaio

16/01/2020 11:37:50



Facho de abertura

**121,5°**

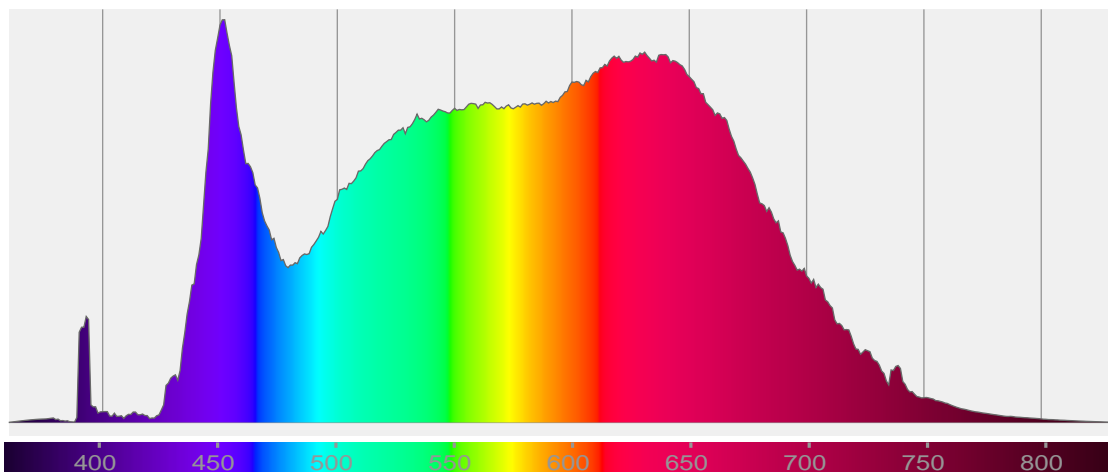
**Rf 92,9**

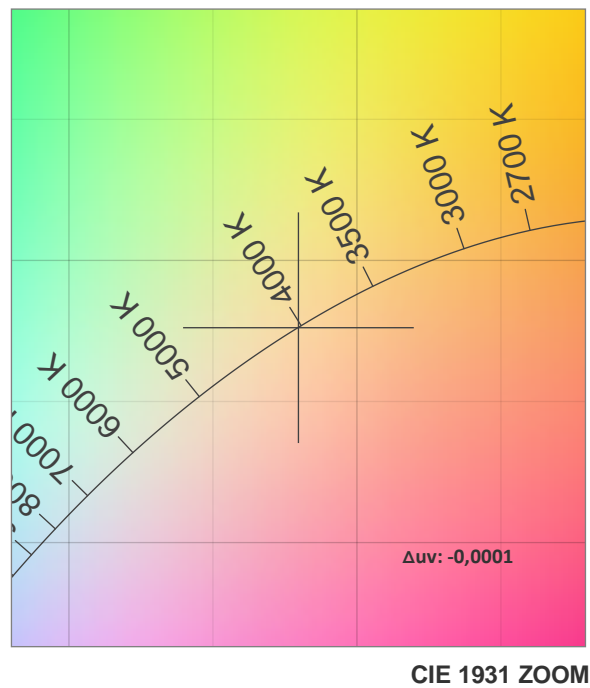
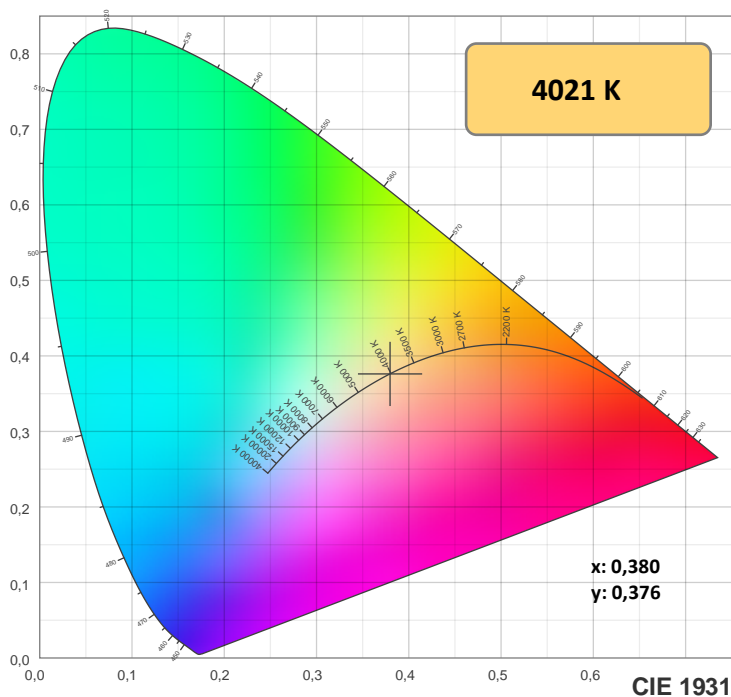
Fidelity index Rf

**Rg 100,2**

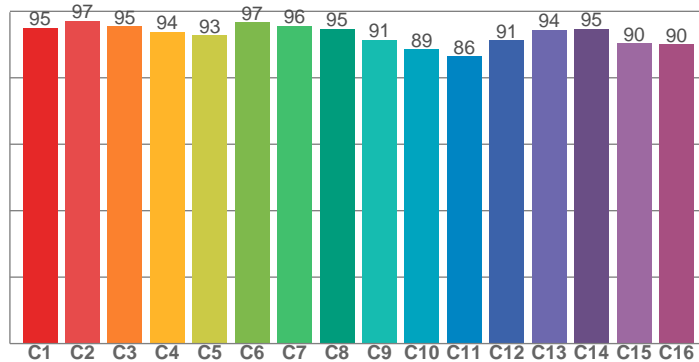
Gamut index Rg

| Hue Bin | R <sub>f</sub> | Shifts (%) |     |
|---------|----------------|------------|-----|
|         |                | Chroma     | Hue |
| 1       | 95             | -1%        | 0%  |
| 2       | 97             | -1%        | 0%  |
| 3       | 95             | -1%        | 1%  |
| 4       | 94             | -2%        | 0%  |
| 5       | 93             | -4%        | 1%  |
| 6       | 97             | 0%         | 1%  |
| 7       | 96             | -2%        | 1%  |
| 8       | 95             | -2%        | 3%  |
| 9       | 91             | -1%        | 6%  |
| 10      | 89             | -1%        | 7%  |
| 11      | 86             | 3%         | 9%  |
| 12      | 91             | 4%         | 3%  |
| 13      | 94             | 4%         | -1% |
| 14      | 95             | 3%         | 0%  |
| 15      | 90             | 3%         | -4% |
| 16      | 90             | 2%         | -6% |

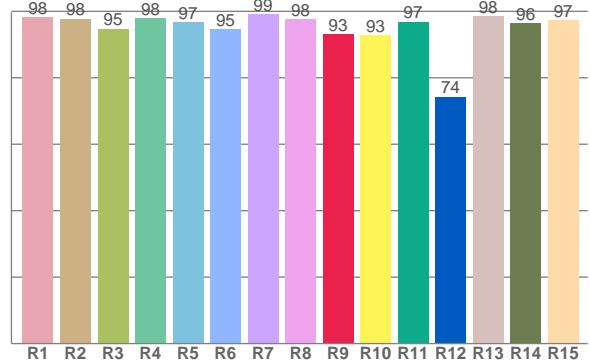




TM-30: 92,9



CRI: 97,1 (R1-R8)



CRIRA R1-R8 / CRIR R1-R15

| R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9   | R10  | R11  | R12  | R13  | R14  | R15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 98,3 | 97,8 | 94,7 | 98,0 | 96,6 | 94,7 | 99,1 | 97,7 | 93,2 | 92,9 | 96,9 | 74,3 | 98,5 | 96,5 | 97,3 |

TM30 valores C. 16 valores extraídos dos 99.

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,1 | 97,2 | 95,4 | 93,8 | 92,8 | 96,6 | 95,6 | 94,6 | 91,4 | 88,6 | 86,4 | 91,2 | 94,5 | 94,8 | 90,4 | 90,1 |

## 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                             |
| 4021 K             | 97,1                        | 93,2                          | 92,9           | 100,2       | 94,8                | 0,380                      | 0,376                      | 0,225             | 0,334             | -0,0001                         |

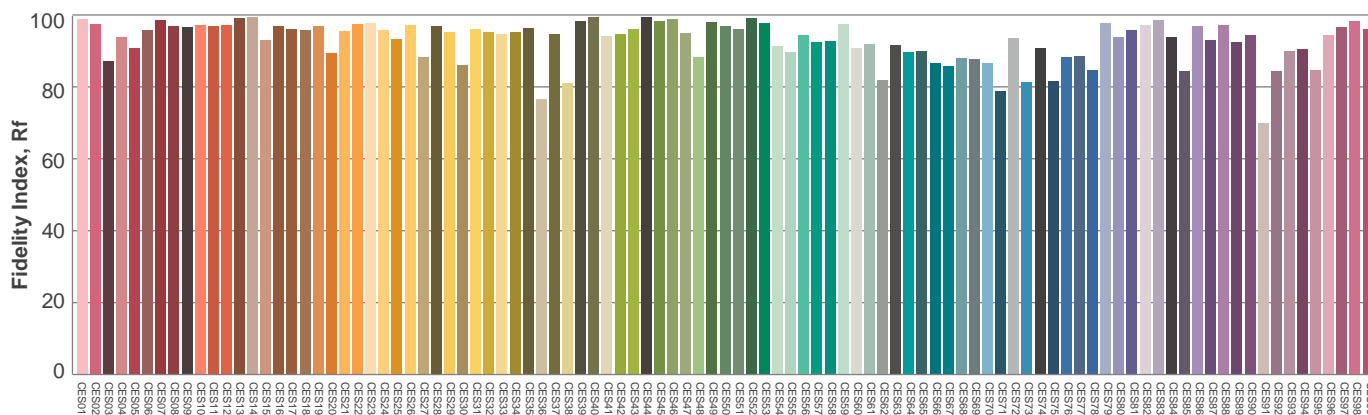
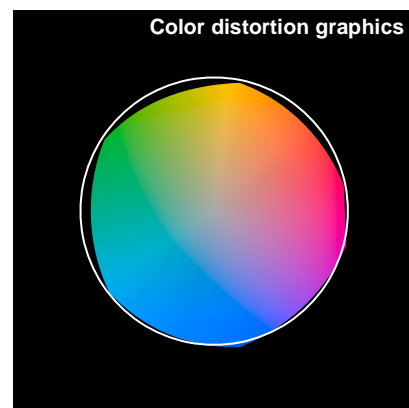
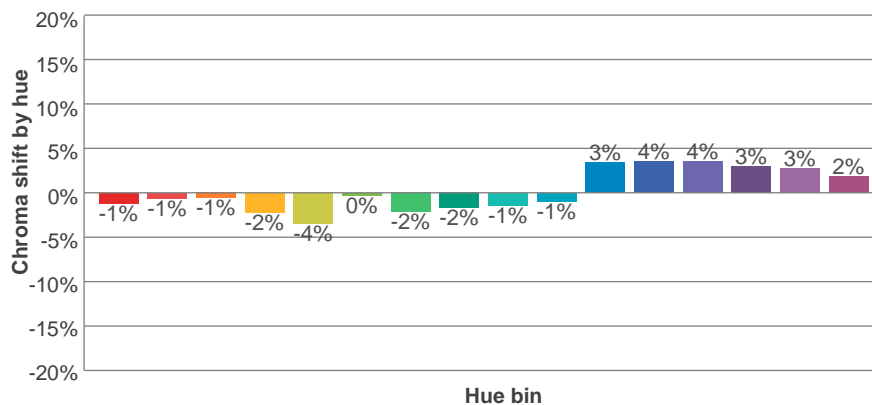
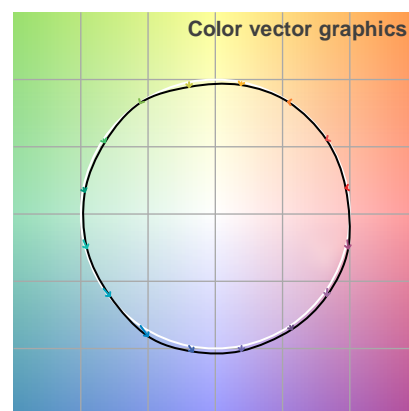
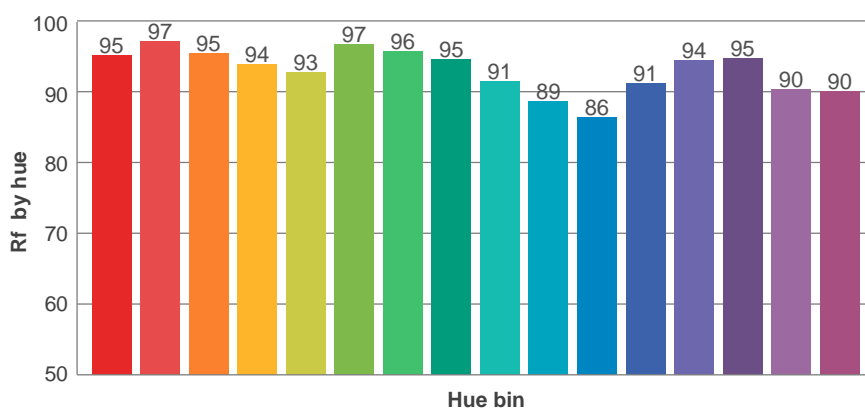
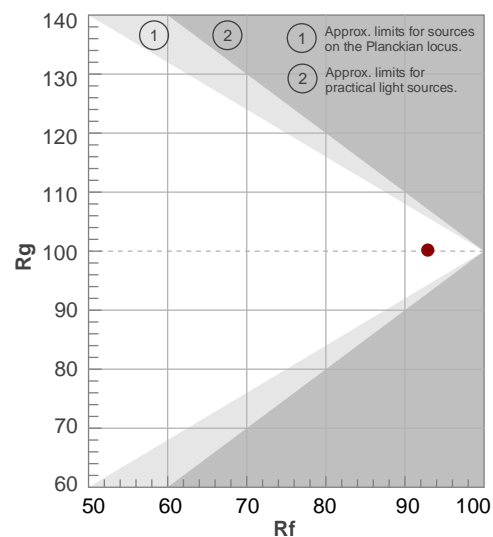
**Rf 92,9**

Fidelity index Rf

**Rg 100,2**

Gamut index Rg

| Hue Bin | R <sub>f</sub> | Shifts (%) |     |
|---------|----------------|------------|-----|
|         |                | Chroma     | Hue |
| 1       | 95             | -1%        | 0%  |
| 2       | 97             | -1%        | 0%  |
| 3       | 95             | -1%        | 1%  |
| 4       | 94             | -2%        | 0%  |
| 5       | 93             | -4%        | 1%  |
| 6       | 97             | 0%         | 1%  |
| 7       | 96             | -2%        | 1%  |
| 8       | 95             | -2%        | 3%  |
| 9       | 91             | -1%        | 6%  |
| 10      | 89             | -1%        | 7%  |
| 11      | 86             | 3%         | 9%  |
| 12      | 91             | 4%         | 3%  |
| 13      | 94             | 4%         | -1% |
| 14      | 95             | 3%         | 0%  |
| 15      | 90             | 3%         | -4% |
| 16      | 90             | 2%         | -6% |



Avaliação todas as amostras de cores

Glare Evaluation According to UGR

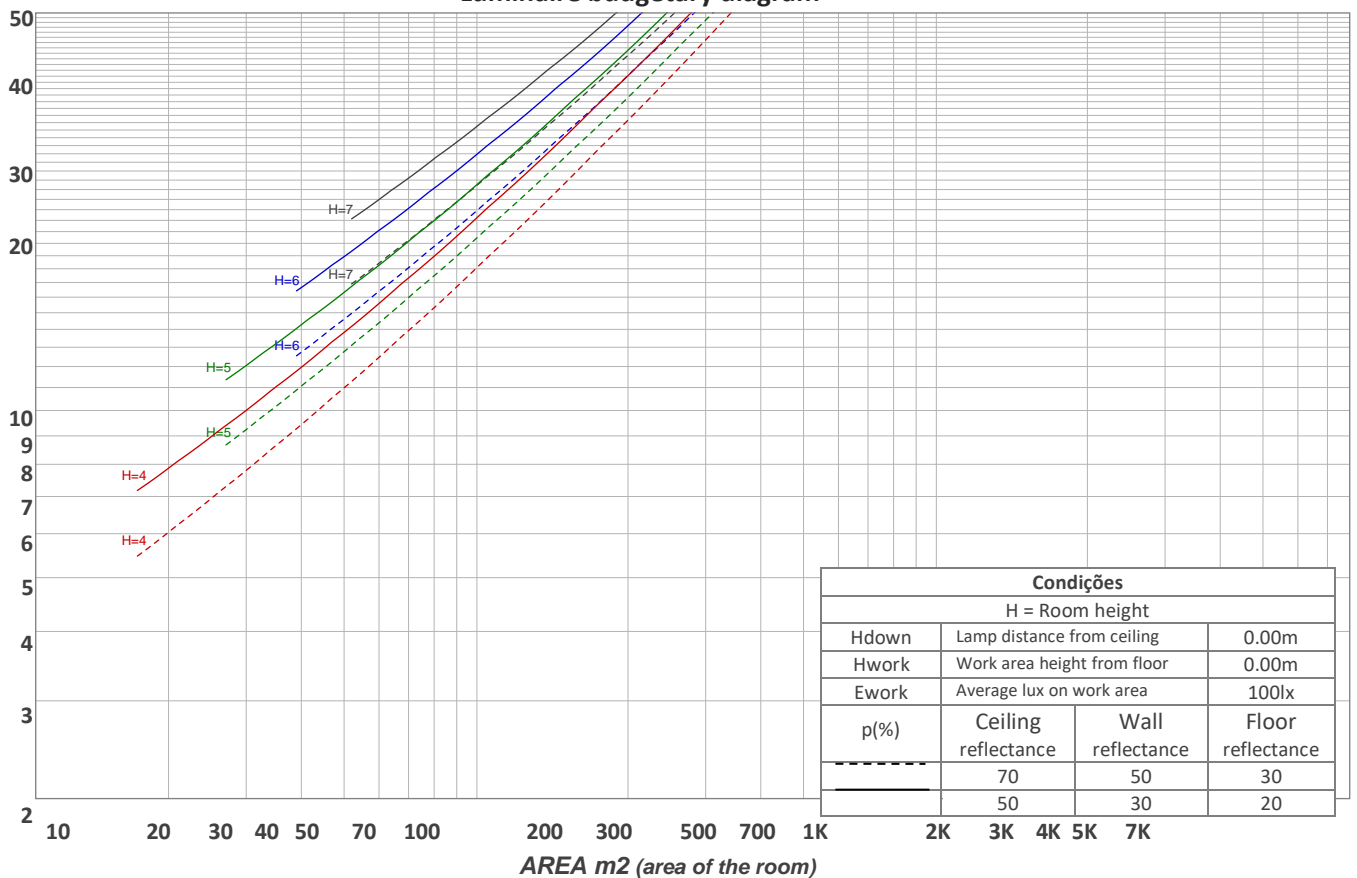
|   |     |  |      |      |      |      |   |      |      |      |      |
|---|-----|--|------|------|------|------|---|------|------|------|------|
| p Ceiling   |     | 70   | 70   | 50   | 50   | 30   | 70                                      | 70   | 50   | 50   | 30   |
| p Walls   |     | 50   | 30   | 50   | 30   | 30   | 50                                      | 30   | 50   | 30   | 30   |
| p Floor   |     | 20   | 20   | 20   | 20   | 20   | 20                                      | 20   | 20   | 20   | 20   |
| Room size<br>X    Y   |     | Viewing direction at right angles to lamp axis |      |      |      |      | Viewing direction parallel to lamp axis |      |      |      |      |
| 2H  | 2H  | 24,8   | 26,0 | 25,0 | 26,4 | 26,6 | 24,8                                    | 26,1 | 25,1 | 26,4 | 26,6 |
|   | 3H  | 26,4   | 27,7 | 26,9 | 28,0 | 28,3 | 26,5                                    | 27,8 | 26,9 | 28,1 | 28,3 |
|   | 4H  | 27,2   | 28,4 | 27,6 | 28,7 | 29,0 | 27,3                                    | 28,5 | 27,7 | 28,8 | 29,1 |
|   | 6H  | 27,8   | 28,9 | 28,2 | 29,2 | 29,6 | 27,9                                    | 29,0 | 28,3 | 29,3 | 29,7 |
|   | 8H  | 28,1   | 29,1 | 28,4 | 29,4 | 29,9 | 28,2                                    | 29,2 | 28,5 | 29,5 | 30,0 |
|   | 12H | 28,2   | 29,2 | 28,6 | 29,6 | 30,1 | 28,3                                    | 29,4 | 28,7 | 29,7 | 30,2 |
| 4H  | 2H  | 25,4   | 26,7 | 25,9 | 27,0 | 27,3 | 25,5                                    | 26,7 | 25,9 | 27,0 | 27,3 |
|   | 3H  | 27,4   | 28,5 | 27,8 | 28,8 | 29,3 | 27,5                                    | 28,5 | 27,9 | 28,9 | 29,3 |
|   | 4H  | 28,2   | 29,2 | 28,7 | 29,6 | 30,2 | 28,3                                    | 29,3 | 28,8 | 29,7 | 30,3 |
|   | 6H  | 29,0   | 29,9 | 29,5 | 30,2 | 30,6 | 29,0                                    | 29,9 | 29,6 | 30,3 | 30,7 |
|   | 8H  | 29,2   | 30,1 | 29,8 | 30,5 | 30,9 | 29,3                                    | 30,2 | 29,9 | 30,6 | 31,0 |
|   | 12H | 29,4   | 30,1 | 30,0 | 30,6 | 31,1 | 29,6                                    | 30,3 | 30,1 | 30,7 | 31,2 |
| 8H  | 4H  | 28,6   | 29,4 | 29,1 | 29,8 | 30,2 | 28,6                                    | 29,5 | 29,2 | 29,9 | 30,3 |
|   | 6H  | 29,5   | 30,1 | 30,0 | 30,6 | 31,2 | 29,6                                    | 30,2 | 30,1 | 30,7 | 31,3 |
|   | 8H  | 29,9   | 30,5 | 30,4 | 31,0 | 31,7 | 30,0                                    | 30,5 | 30,5 | 31,1 | 31,7 |
|   | 12H | 30,2   | 30,7 | 30,8 | 31,2 | 31,8 | 30,3                                    | 30,8 | 30,9 | 31,3 | 32,0 |
| 12H   | 4H  | 28,6   | 29,3 | 29,1 | 29,8 | 30,3 | 28,7                                    | 29,4 | 29,2 | 29,8 | 30,3 |
|   | 6H  | 29,6   | 30,2 | 30,1 | 30,7 | 31,4 | 29,7                                    | 30,2 | 30,2 | 30,8 | 31,4 |
|   | 8H  | 30,0   | 30,5 | 30,6 | 31,0 | 31,7 | 30,1                                    | 30,6 | 30,7 | 31,1 | 31,8 |
| 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 / -0,2                                     |      |      |      |      | 0,1 / -0,1                              |      |      |      |      |
| S = 2.0H  |     | 0,3 / -0,4                                     |      |      |      |      | 0,3 / -0,3                              |      |      |      |      |
| Standard table  |     | n/a  |      |      |      |      | n/a                                     |      |      |      |      |
| Correction<br>summand   |     | n/a  |      |      |      |      | n/a                                     |      |      |      |      |
| Corrected glare indices referring to 836 lm total luminous flux |     |  |      |      |      |      |   |      |      |      |      |

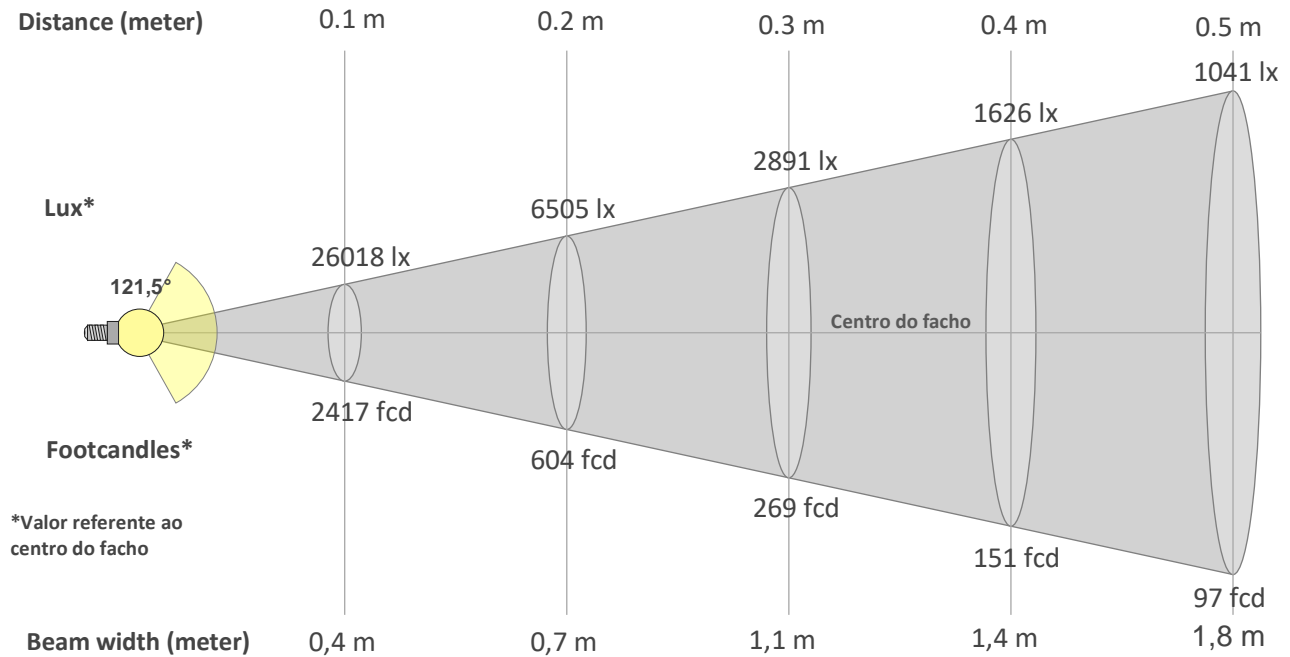
**Coeficiente de utilização**

| 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 | 110 | 110 | 110 | 105 | 105 | 105 | 101 | 101 | 101 | 99 |
| 1                   | 108  | 102 | 98  | 94  | 105 | 100 | 96  | 92  | 95  | 92  | 89  | 91  | 88  | 86  | 87  | 85  | 83  | 81 |
| 2                   | 97   | 89  | 81  | 75  | 95  | 87  | 80  | 74  | 83  | 77  | 72  | 79  | 75  | 70  | 76  | 72  | 69  | 66 |
| 3                   | 88   | 77  | 69  | 62  | 86  | 76  | 68  | 61  | 72  | 66  | 60  | 69  | 64  | 59  | 67  | 62  | 58  | 55 |
| 4                   | 81   | 68  | 59  | 52  | 78  | 67  | 58  | 52  | 64  | 57  | 51  | 61  | 55  | 50  | 59  | 54  | 49  | 47 |
| 5                   | 74   | 61  | 51  | 45  | 72  | 59  | 51  | 44  | 57  | 49  | 44  | 55  | 48  | 43  | 53  | 47  | 42  | 40 |
| 6                   | 68   | 54  | 45  | 39  | 66  | 53  | 45  | 38  | 51  | 44  | 38  | 50  | 43  | 37  | 48  | 42  | 37  | 35 |
| 7                   | 63   | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 31 |
| 8                   | 59   | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  | 41  | 34  | 29  | 40  | 34  | 29  | 27 |
| 9                   | 55   | 41  | 33  | 27  | 53  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 26  | 37  | 31  | 26  | 24 |
| 10                  | 51   | 38  | 30  | 24  | 50  | 37  | 30  | 24  | 36  | 29  | 24  | 35  | 29  | 24  | 34  | 28  | 24  | 22 |

**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 |
| 260lx   | 65lx  | 29lx   | 16lx   | 10lx   | 7lx    | 5lx    | 4lx    | 3lx    | 3lx    | 2lx    | 2lx    | 2lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    |
| 24,2fcd | 6fcd  | 2,7fcd | 1,5fcd | 1fcd   | 0,7fcd | 0,5fcd | 0,4fcd | 0,3fcd | 0,2fcd | 0,2fcd | 0,2fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd |

### 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 260  | 259  | 256 | 252 | 245 | 237 | 227 | 216 | 202 | 187 | 171 | 153 | 133 | 111 | 89  | 65  | 42  | 22  | 7   | 3   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 83% | 78% | 72% | 66% | 59% | 51% | 43% | 34% | 25% | 16% | 8%  | 3%  | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 260  | 259  | 256 | 252 | 245 | 237 | 227 | 216 | 202 | 187 | 171 | 153 | 133 | 111 | 89  | 65  | 42  | 22  | 7   | 3   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 83% | 78% | 72% | 66% | 59% | 51% | 43% | 34% | 25% | 16% | 8%  | 3%  | 1%  |

### Intensities in 180° c-plane

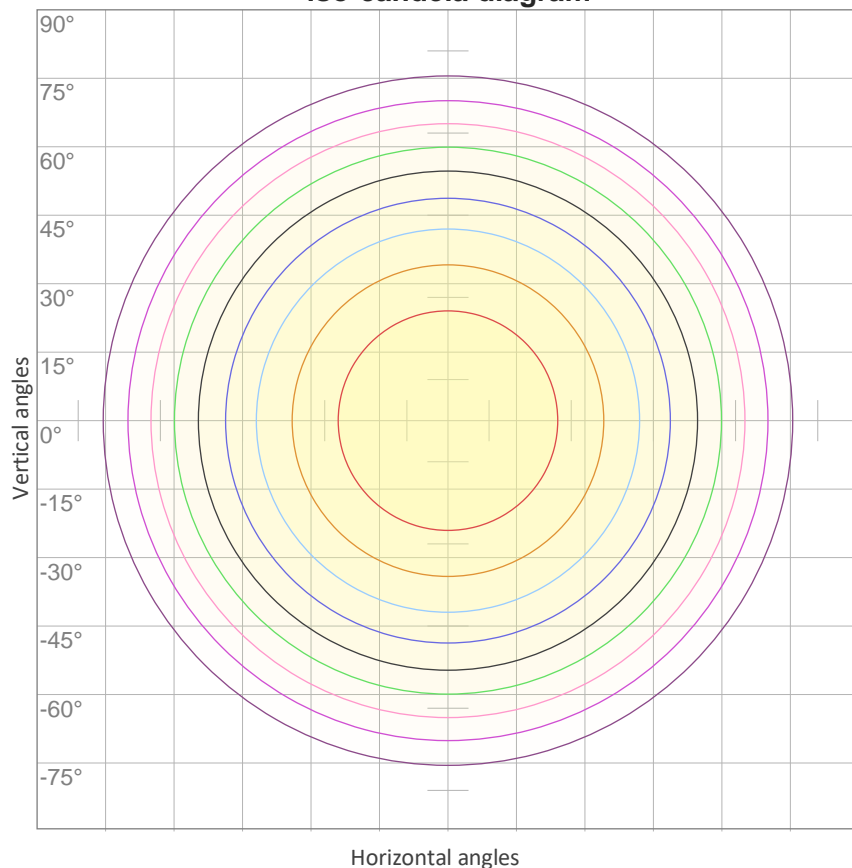
| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 260  | 259  | 256 | 252 | 245 | 237 | 227 | 216 | 202 | 187 | 171 | 153 | 133 | 111 | 89  | 65  | 42  | 22  | 7   | 3   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 83% | 78% | 72% | 66% | 59% | 51% | 43% | 34% | 25% | 16% | 8%  | 3%  | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 260  | 259  | 256 | 252 | 245 | 237 | 227 | 216 | 202 | 187 | 171 | 153 | 133 | 111 | 89  | 65  | 42  | 22  | 7   | 3   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 83% | 78% | 72% | 66% | 59% | 51% | 43% | 34% | 25% | 16% | 8%  | 3%  | 1%  |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 121,5°         | 167,8°          | 180,7°            | 74,3%                        | 49,3%                       |

**iso-candela diagram**



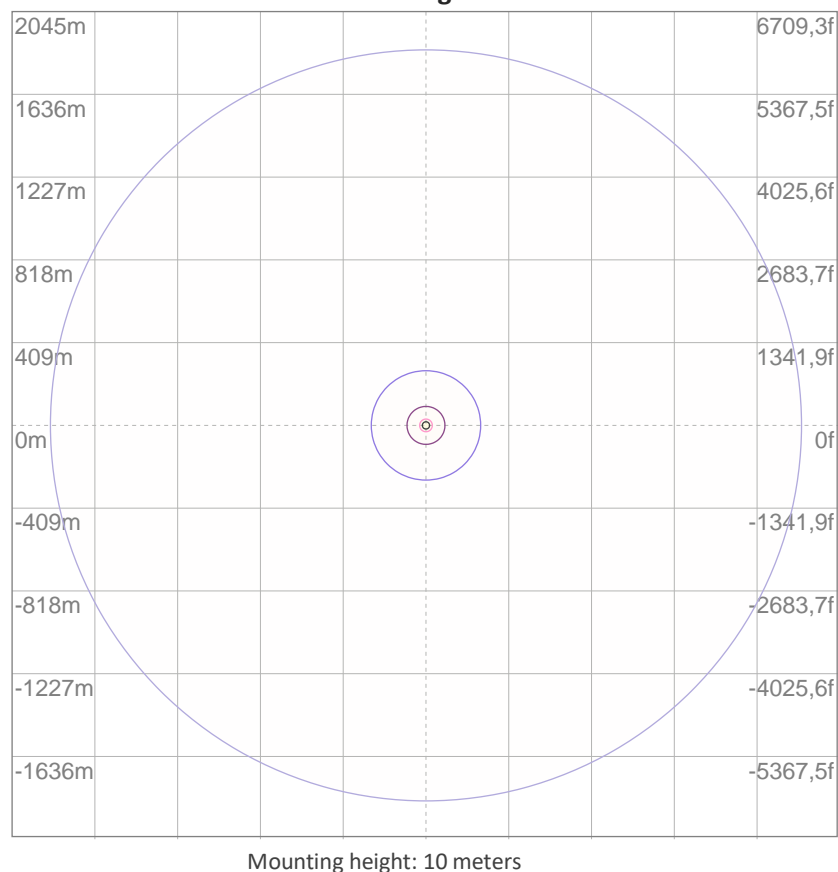
|     |        |
|-----|--------|
| 10% | 26 cd  |
| 20% | 52 cd  |
| 30% | 78 cd  |
| 40% | 104 cd |
| 50% | 130 cd |
| 60% | 156 cd |
| 70% | 182 cd |
| 80% | 208 cd |
| 90% | 234 cd |

Conditions:

Number of c-planes: 12

Candela at center: 260 cd

**iso-lux diagram**



|     |          |
|-----|----------|
| 3%  | 78,1m lx |
| 5%  | 0,130 lx |
| 10% | 0,260 lx |
| 30% | 0,781 lx |
| 50% | 1,30 lx  |

Conditions:

Number of c-planes: 12

Lux at center: 2,60 lx

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

**Potência**

|  |  |  |  |  |  |
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|  |  |  |  |  |  |

**Vttagem: 12,0 V**

**Corrente: 0,920 A**

**Frequência: 0 Hz**

**FP: 1,0**

**THD**



**THD corrente: n/a**

**THD tensão: n/a**