

Light efficiency:



Light quality:



Color temperature:

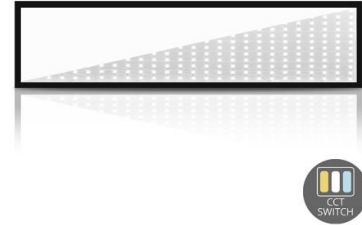


Output: 3627 lm

Peak: 1215 cd

Power: 36,0 W

PF: 0,97



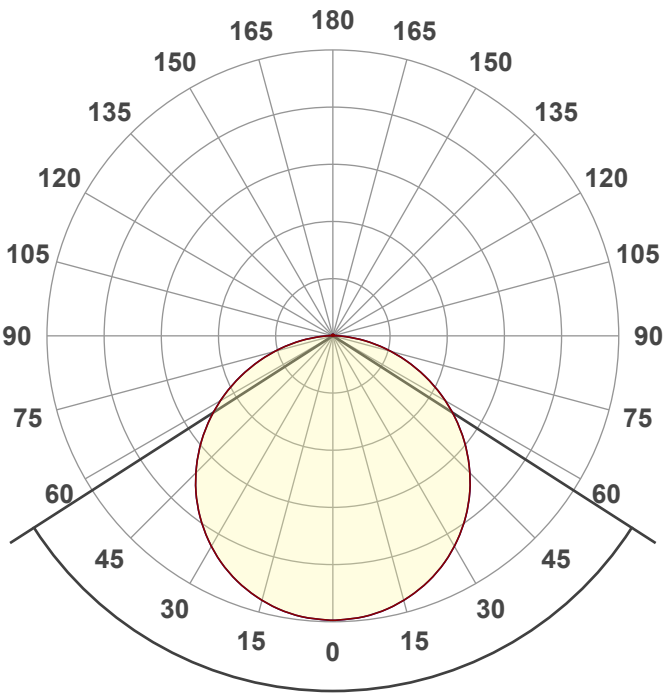
Tracking number: [VT241004-005850](#)

Product name:  
**849800-6000K**

Item number:  
**849800-6000K**

Date and time:  
**4-10-2024 12:19:01**

Description:  
**SIDE-LIT LED PANEEL | DESDE |  
120X30CM | 36W | ZWART | CCT-  
SWITCH**

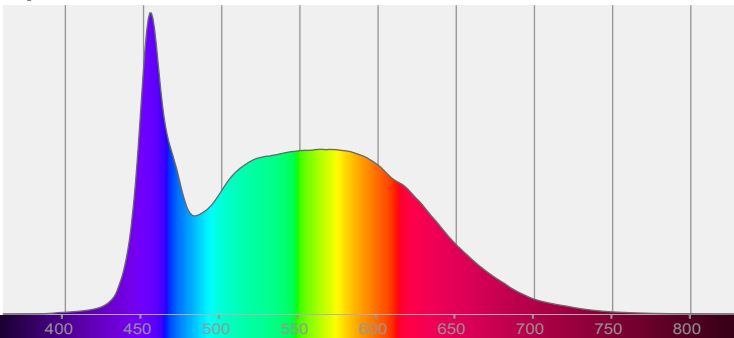


Beam angle **114,6°**

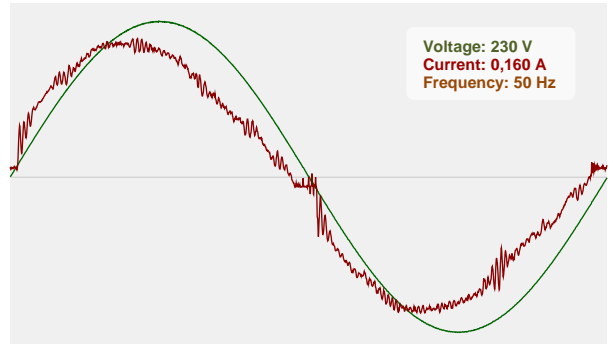


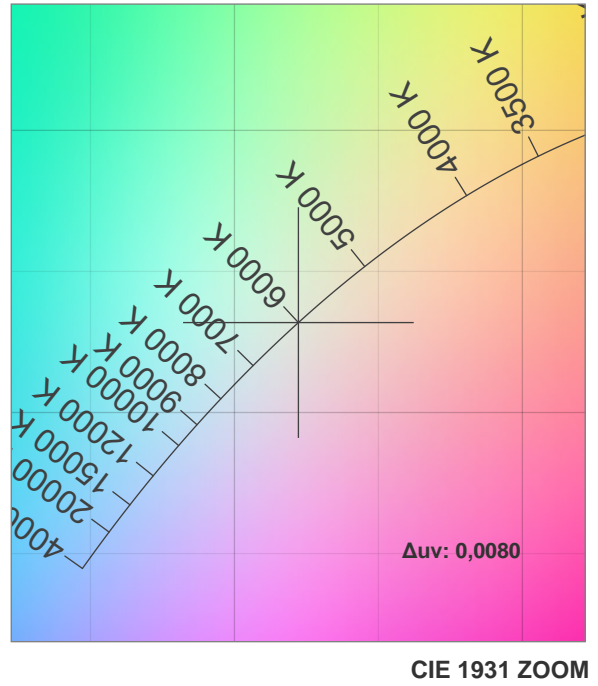
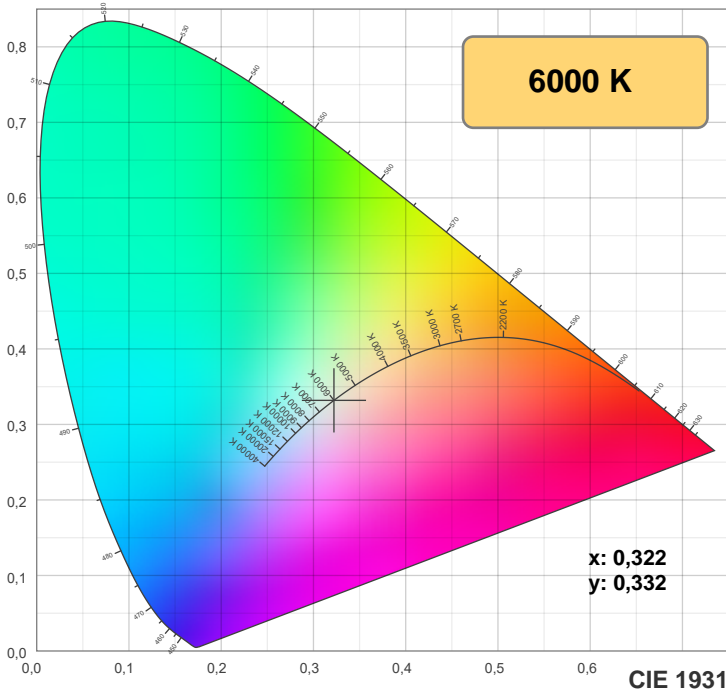
CIE 1931  
x: 0,322  
y: 0,332

Spectra

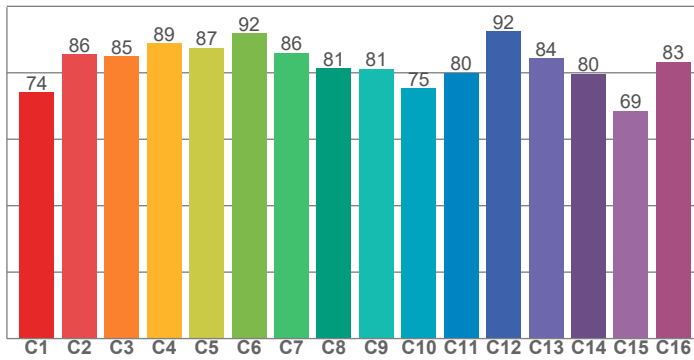


Power

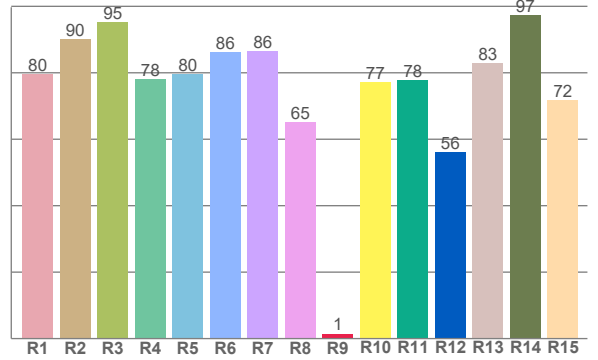




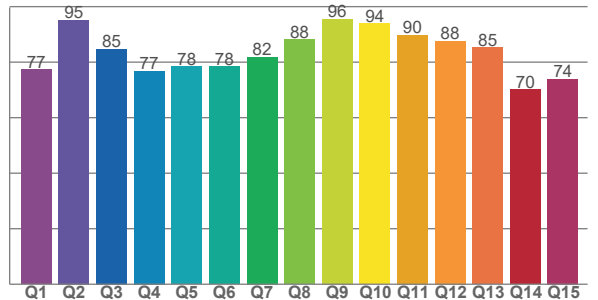
**TM30: 82,9**



**CRI: 82,6 (R1-R8)**



**CQS: 82,1**



CRI R values, only R1-R8 are used to calculate final CRI value

| R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9  | R10  | R11  | R12  | R13  | R14  | R15  |
|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|
| 79,6 | 90,1 | 95,3 | 78,0 | 79,5 | 86,3 | 86,5 | 65,2 | 1,5 | 77,1 | 77,7 | 56,0 | 82,9 | 97,4 | 71,7 |

TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 74,1 | 85,5 | 85,0 | 88,9 | 87,5 | 91,8 | 86,0 | 81,4 | 81,2 | 75,4 | 80,0 | 92,5 | 84,3 | 79,7 | 68,6 | 83,3 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 77,4 | 95,2 | 84,7 | 76,7 | 78,5 | 78,5 | 81,8 | 88,1 | 95,6 | 93,8 | 89,9 | 87,5 | 85,2 | 70,2 | 73,9 |

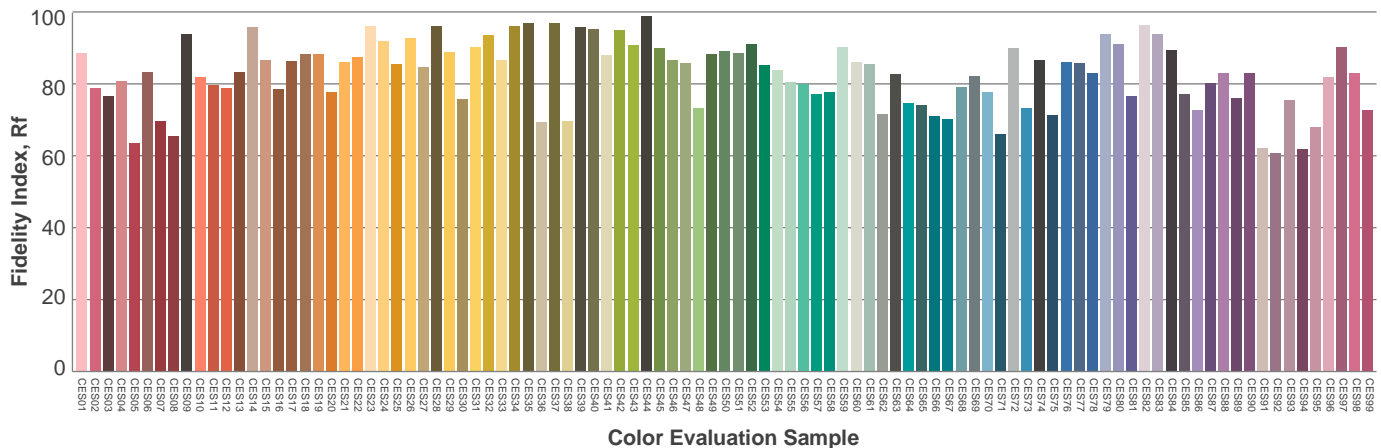
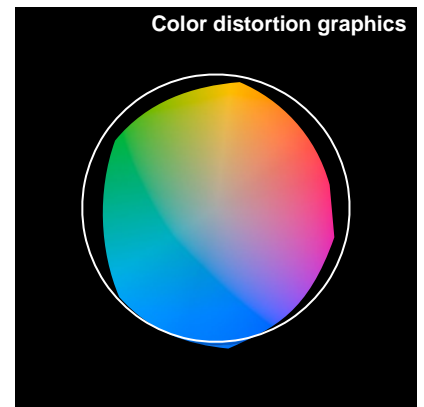
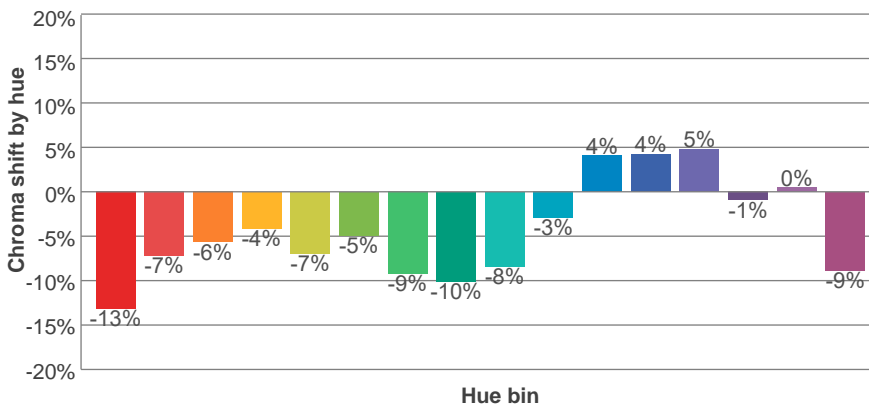
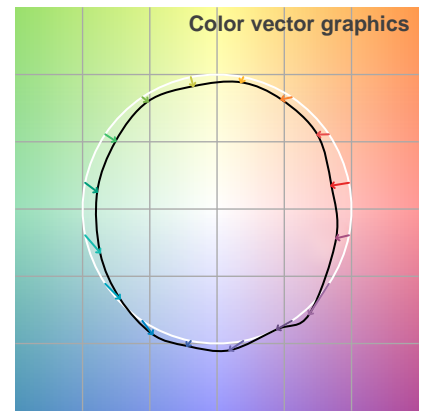
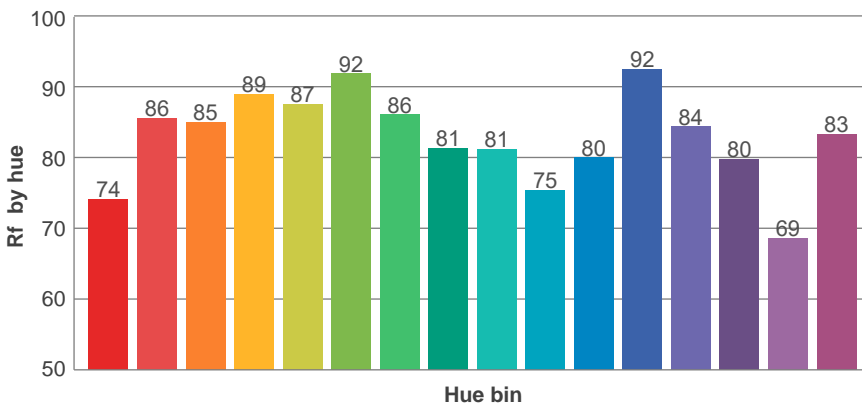
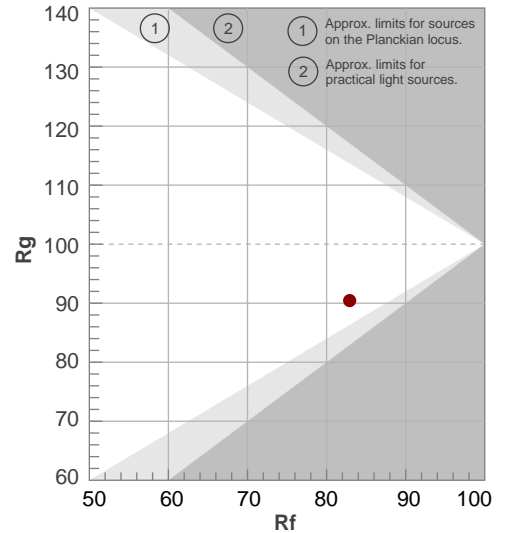
**Color parameters**

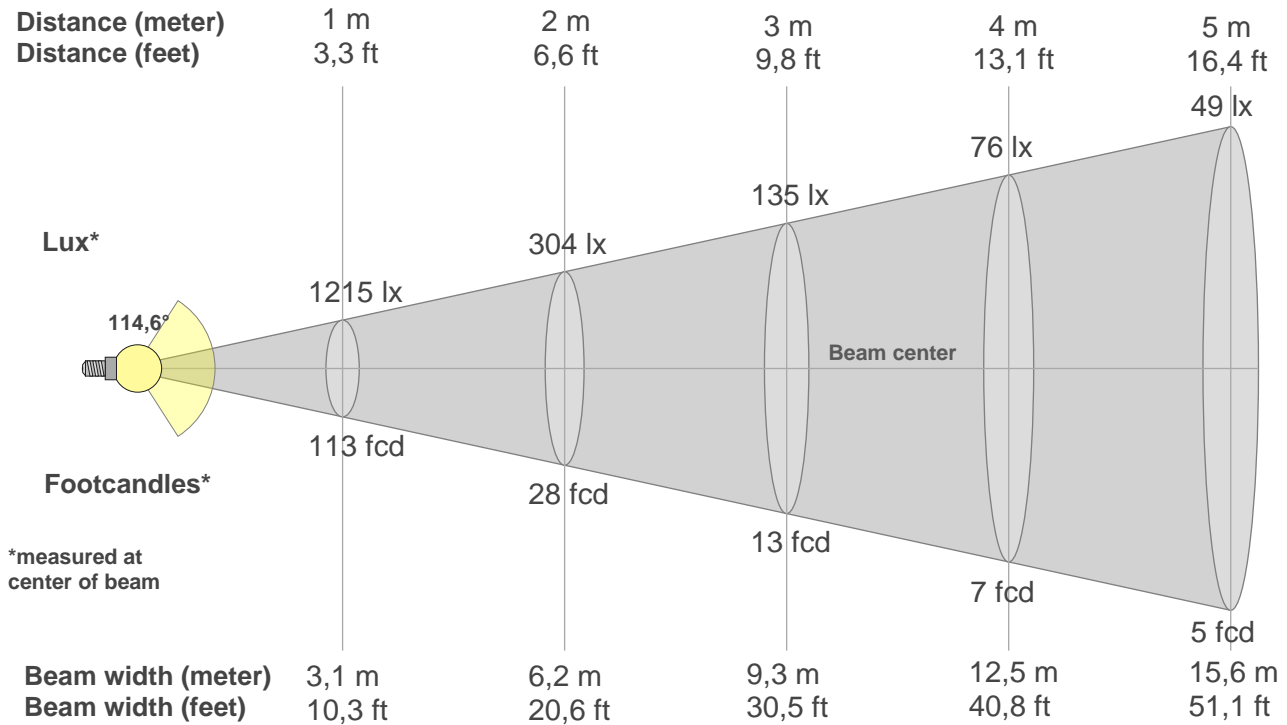
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                             |
| 6000 K            | 82,6                  | 1,5           | 82,9           | 90,4        | 82,1                | 0,322                     | 0,332                     | 0,203            | 0,314            | 0,0080                          |

**Rf 82,9**  
Fidelity index Rf

**Rg 90,4**  
Gamut index Rg

| Hue Bin | R <sub>f</sub> | Shifts (%) |      |
|---------|----------------|------------|------|
|         |                | Chroma     | Hue  |
| 1       | 74             | -13%       | 0%   |
| 2       | 86             | -7%        | 5%   |
| 3       | 85             | -6%        | 5%   |
| 4       | 89             | -4%        | 1%   |
| 5       | 87             | -7%        | -1%  |
| 6       | 92             | -5%        | -2%  |
| 7       | 86             | -9%        | 0%   |
| 8       | 81             | -10%       | 5%   |
| 9       | 81             | -8%        | 15%  |
| 10      | 75             | -3%        | 15%  |
| 11      | 80             | 4%         | 12%  |
| 12      | 92             | 4%         | -2%  |
| 13      | 84             | 5%         | -11% |
| 14      | 80             | -1%        | -13% |
| 15      | 69             | 0%         | -27% |
| 16      | 83             | -9%        | -4%  |





**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 |
| 1215lx   | 304lx   | 135lx   | 76lx   | 49lx   | 34lx   | 25lx   | 19lx   | 15lx   | 12lx   | 10lx   | 8lx    | 7lx    | 6lx    | 5lx    | 5lx    | 4lx    | 4lx    | 3lx    | 3lx    |
| 112,9fcd | 28,2fcd | 12,5fcd | 7,1fcd | 4,5fcd | 3,1fcd | 2,3fcd | 1,8fcd | 1,4fcd | 1,1fcd | 0,9fcd | 0,8fcd | 0,7fcd | 0,6fcd | 0,5fcd | 0,4fcd | 0,4fcd | 0,3fcd | 0,3fcd | 0,3fcd |

**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° |
|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1215 | 1210 | 1195 | 1170 | 1135 | 1092 | 1038 | 976 | 906 | 828 | 742 | 651 | 555 | 456 | 356 | 257 | 163 | 78  | 22  | 5   |
| 100% | 100% | 98%  | 96%  | 93%  | 90%  | 85%  | 80% | 75% | 68% | 61% | 54% | 46% | 38% | 29% | 21% | 13% | 6%  | 2%  | 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° |
|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1215 | 1210 | 1195 | 1170 | 1135 | 1092 | 1038 | 976 | 906 | 828 | 742 | 651 | 555 | 456 | 356 | 257 | 163 | 78  | 22  | 5   |
| 100% | 100% | 98%  | 96%  | 93%  | 90%  | 85%  | 80% | 75% | 68% | 61% | 54% | 46% | 38% | 29% | 21% | 13% | 6%  | 2%  | 0%  |

**Intensities in 180° c-plane**

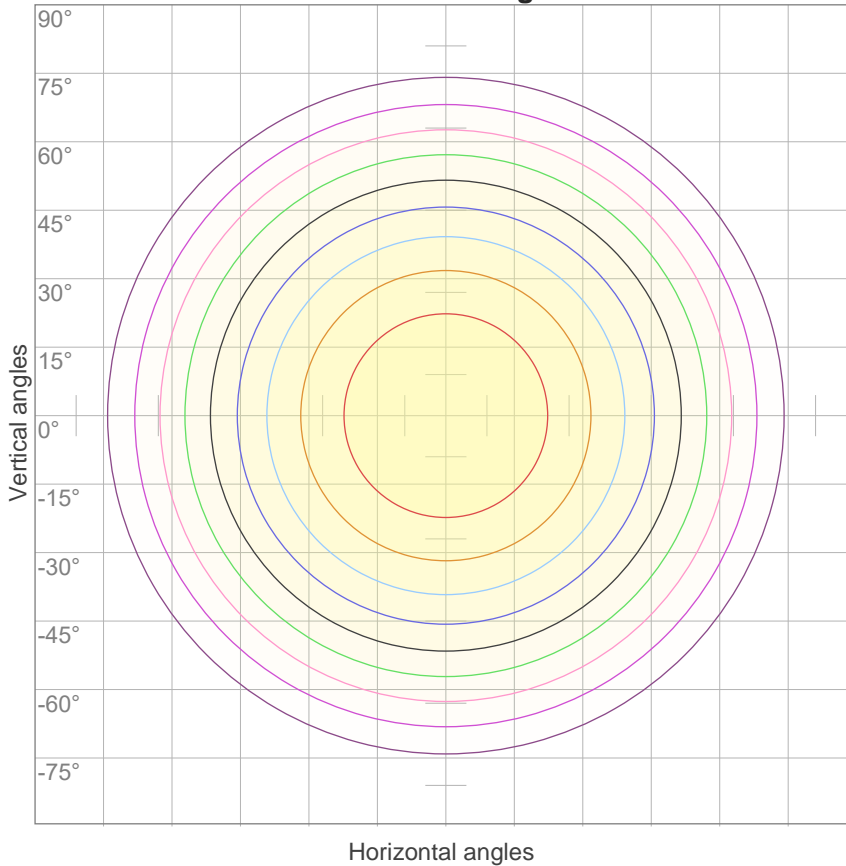
| 0°   | 5°   | 10°  | 15°  | 20°  | 25°  | 30°  | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1215 | 1210 | 1195 | 1170 | 1135 | 1092 | 1038 | 976 | 906 | 828 | 742 | 651 | 555 | 456 | 356 | 257 | 163 | 78  | 22  | 5   |
| 100% | 100% | 98%  | 96%  | 93%  | 90%  | 85%  | 80% | 75% | 68% | 61% | 54% | 46% | 38% | 29% | 21% | 13% | 6%  | 2%  | 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° |
|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1215 | 1210 | 1195 | 1170 | 1135 | 1092 | 1038 | 976 | 906 | 828 | 742 | 651 | 555 | 456 | 356 | 257 | 163 | 78  | 22  | 5   |
| 100% | 100% | 98%  | 96%  | 93%  | 90%  | 85%  | 80% | 75% | 68% | 61% | 54% | 46% | 38% | 29% | 21% | 13% | 6%  | 2%  | 0%  |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| <b>114,6°</b>  | <b>164,7°</b>   | <b>178,2°</b>     | <b>76,6%</b>                 | <b>51,9%</b>                |

**iso-candela diagram**



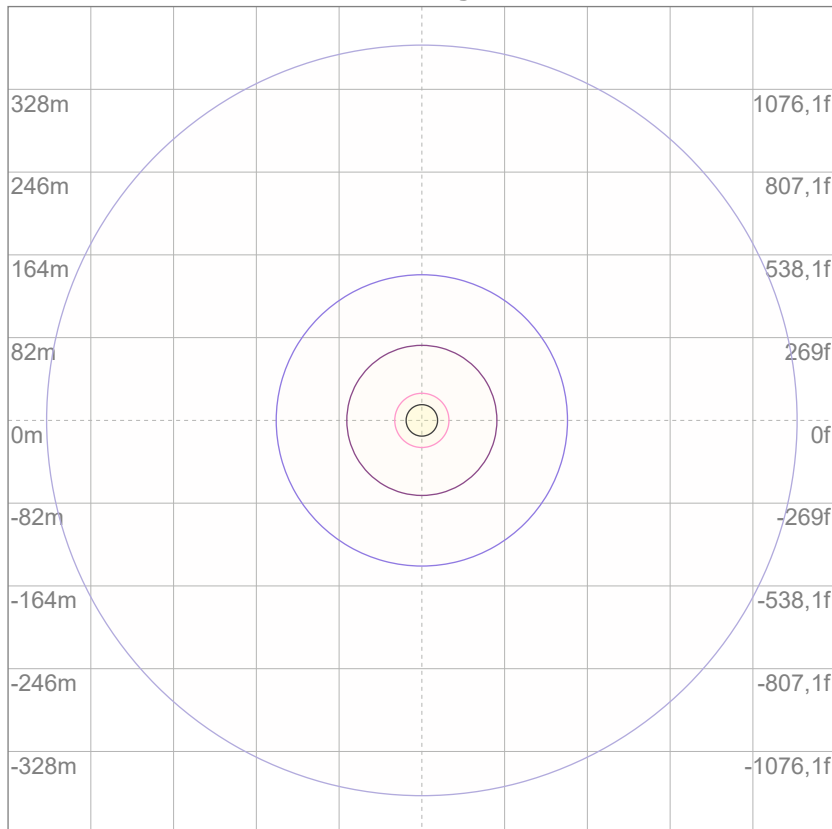
|     |         |
|-----|---------|
| 10% | 122 cd  |
| 20% | 243 cd  |
| 30% | 365 cd  |
| 40% | 486 cd  |
| 50% | 608 cd  |
| 60% | 729 cd  |
| 70% | 851 cd  |
| 80% | 972 cd  |
| 90% | 1094 cd |

Conditions:

Number of c-planes: 12

Candela at center: 1215 cd

**iso-lux diagram**



|     |          |
|-----|----------|
| 3%  | 0,365 lx |
| 5%  | 0,608 lx |
| 10% | 1,22 lx  |
| 30% | 3,65 lx  |
| 50% | 6,08 lx  |

Conditions:

Number of c-planes: 12

Lux at center: 12,2 lx

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

**Glare evaluation according to UGR**

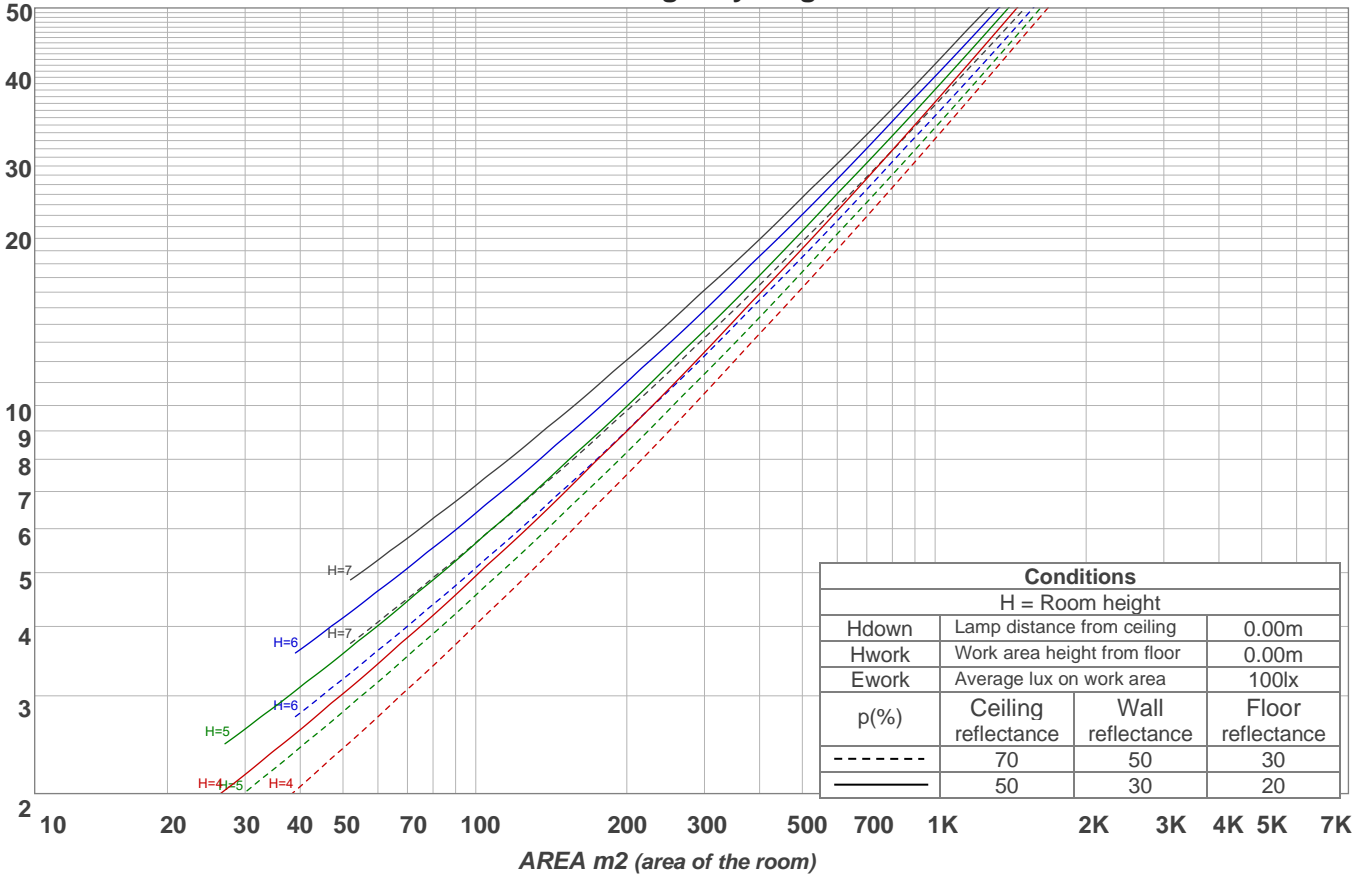
|  |     |   |      |      |      |      |   |      |      |      |      |
|--|-----|---|------|------|------|------|---|------|------|------|------|
| p Ceiling  |     | 70  | 70   | 50   | 50   | 30   | 70                                      | 70   | 50   | 50   | 30   |
| p Walls  |     | 50  | 30   | 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<br>lamp axis |      |      |      |      | Viewing direction parallel to lamp axis |      |      |      |      |
| 2H   | 2H  | 17,4  | 18,6 | 17,6 | 18,9 | 19,2 | 17,3                                    | 18,5 | 17,5 | 18,8 | 19,1 |
|  | 3H  | 18,9  | 20,2 | 19,3 | 20,5 | 20,7 | 18,8                                    | 20,0 | 19,2 | 20,3 | 20,6 |
|  | 4H  | 19,6  | 20,8 | 20,0 | 21,1 | 21,4 | 19,4                                    | 20,6 | 19,8 | 20,9 | 21,2 |
|  | 6H  | 20,2  | 21,3 | 20,5 | 21,6 | 22,0 | 20,0                                    | 21,1 | 20,3 | 21,3 | 21,7 |
|  | 8H  | 20,4  | 21,4 | 20,7 | 21,7 | 22,2 | 20,1                                    | 21,2 | 20,5 | 21,5 | 21,9 |
|  | 12H | 20,5  | 21,5 | 20,9 | 21,9 | 22,3 | 20,2                                    | 21,2 | 20,6 | 21,6 | 22,1 |
| 4H   | 2H  | 18,0  | 19,2 | 18,4 | 19,5 | 19,8 | 17,9                                    | 19,1 | 18,3 | 19,4 | 19,7 |
|  | 3H  | 19,8  | 20,8 | 20,2 | 21,2 | 21,7 | 19,7                                    | 20,7 | 20,1 | 21,1 | 21,5 |
|  | 4H  | 20,6  | 21,5 | 21,0 | 21,9 | 22,5 | 20,4                                    | 21,4 | 20,9 | 21,8 | 22,3 |
|  | 6H  | 21,2  | 22,1 | 21,7 | 22,5 | 22,9 | 21,0                                    | 21,9 | 21,5 | 22,3 | 22,7 |
|  | 8H  | 21,5  | 22,3 | 22,0 | 22,7 | 23,1 | 21,2                                    | 22,0 | 21,8 | 22,4 | 22,8 |
|  | 12H | 21,6  | 22,3 | 22,1 | 22,8 | 23,2 | 21,4                                    | 22,1 | 21,9 | 22,5 | 23,0 |
| 8H   | 4H  | 20,9  | 21,7 | 21,4 | 22,1 | 22,5 | 20,7                                    | 21,5 | 21,2 | 21,9 | 22,3 |
|  | 6H  | 21,7  | 22,3 | 22,2 | 22,8 | 23,3 | 21,5                                    | 22,1 | 22,0 | 22,6 | 23,2 |
|  | 8H  | 22,0  | 22,6 | 22,6 | 23,1 | 23,8 | 21,8                                    | 22,4 | 22,4 | 22,9 | 23,6 |
|  | 12H | 22,3  | 22,8 | 22,9 | 23,3 | 23,9 | 22,0                                    | 22,5 | 22,6 | 23,0 | 23,7 |
| 12H  | 4H  | 20,9  | 21,6 | 21,4 | 22,0 | 22,5 | 20,7                                    | 21,4 | 21,3 | 21,9 | 22,4 |
|  | 6H  | 21,8  | 22,3 | 22,3 | 22,8 | 23,5 | 21,6                                    | 22,1 | 22,1 | 22,7 | 23,3 |
|  | 8H  | 22,1  | 22,6 | 22,7 | 23,1 | 23,7 | 21,9                                    | 22,4 | 22,5 | 22,9 | 23,5 |
| 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 / -0,2                              |      |      |      |      |
| S = 2.0H   |     | 0,4 / -0,4  |      |      |      |      | 0,4 / -0,4                              |      |      |      |      |
| CIE 117-1995. Corrected glare indices referring to 3627 lm total luminous flux |     |   |      |      |      |      |   |      |      |      |      |

**Coefficients of Utilization**

| Ceiling reflectance | 80   |     |     |     | 70  |     |     |     | 50  |     |     | 30  |     |     | 10  |     |     | 0  |
|---------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
|                     | 70   | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 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                   | 108  | 103 | 99  | 95  | 105 | 101 | 97  | 93  | 96  | 93  | 90  | 92  | 90  | 87  | 88  | 86  | 84  | 82 |
| 2                   | 98   | 90  | 83  | 77  | 95  | 88  | 81  | 76  | 84  | 78  | 74  | 80  | 76  | 72  | 77  | 74  | 70  | 68 |
| 3                   | 89   | 78  | 70  | 63  | 87  | 77  | 69  | 63  | 74  | 67  | 62  | 71  | 65  | 60  | 68  | 63  | 59  | 57 |
| 4                   | 82   | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 65  | 58  | 52  | 63  | 57  | 51  | 61  | 55  | 51  | 48 |
| 5                   | 75   | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 58  | 51  | 45  | 56  | 50  | 45  | 54  | 49  | 44  | 42 |
| 6                   | 69   | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 39  | 36 |
| 7                   | 64   | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  | 46  | 40  | 34  | 45  | 39  | 34  | 32 |
| 8                   | 60   | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 29 |
| 9                   | 56   | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26 |
| 10                  | 52   | 39  | 31  | 26  | 51  | 38  | 31  | 25  | 37  | 30  | 25  | 36  | 30  | 25  | 35  | 29  | 25  | 23 |

LAMPS (number of lamps)

**Luminaire budgetary diagram**



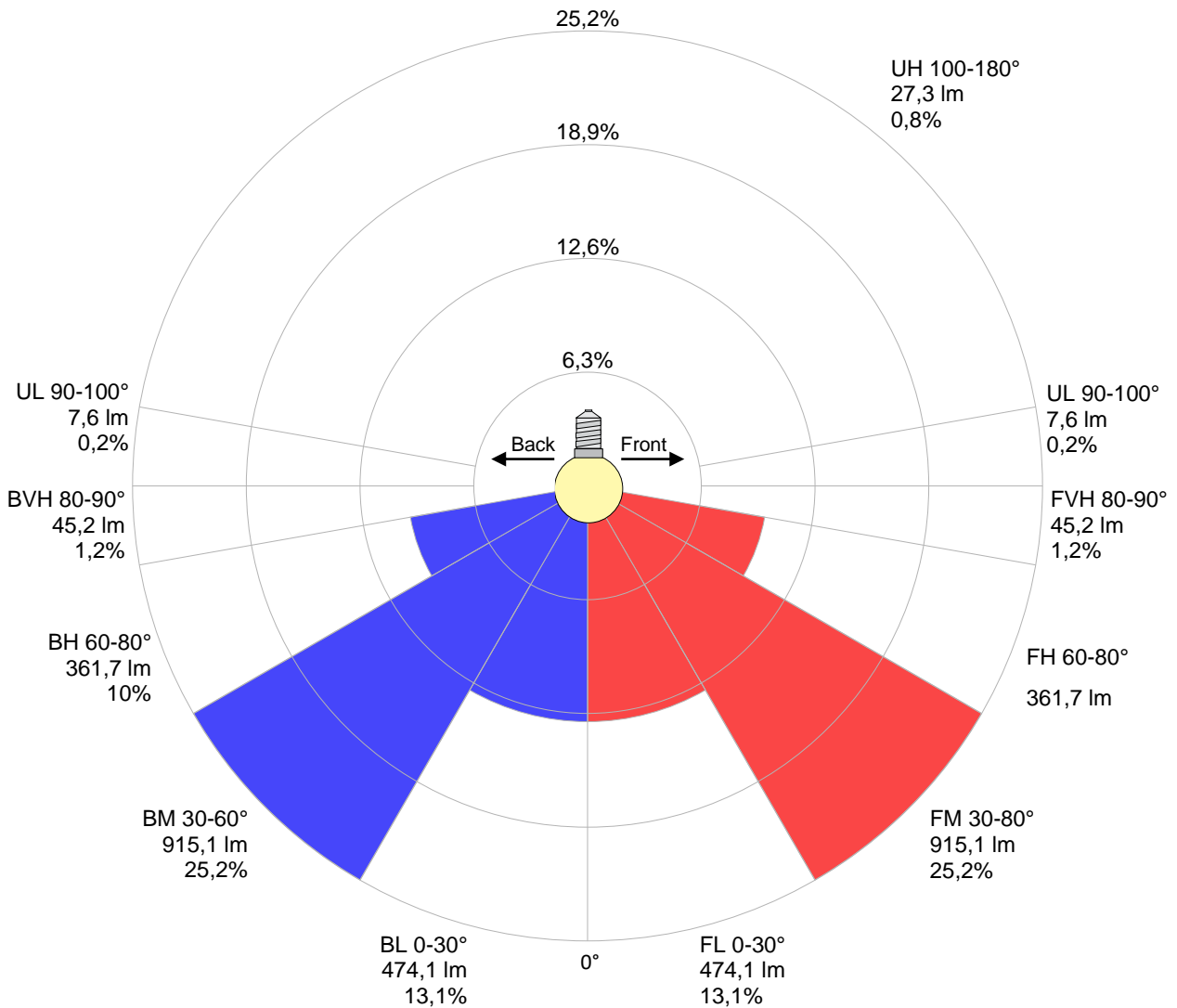
**Zonal Lumen Summary**

| 0°-10°    | 10°-20°   | 20°-30°   | 30°-40°   | 40°-50°   | 50°-60°   | 60°-70°   | 70°-80°   | 80°-90°   |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| {LUM0-10} | 330 lm    | 503 lm    | 611 lm    | 638 lm    | 582 lm    | 452 lm    | 272 lm    | 89,5 lm   |
| 90°-100°  | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 6,67 lm   | 4,49 lm   | 4,71 lm   | 4,68 lm   | 4,33 lm   | 3,65 lm   | 2,91 lm   | 1,89 lm   | 0,641 lm  |

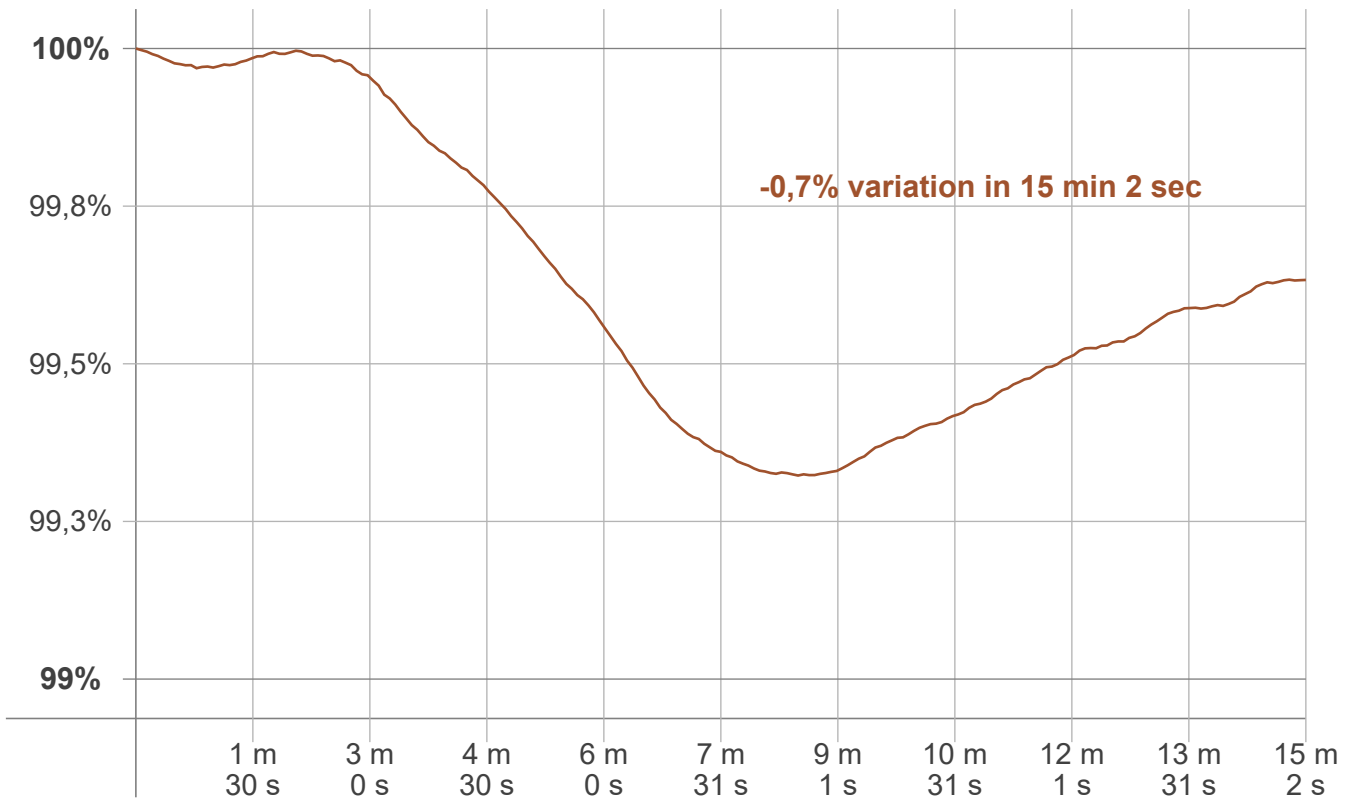
LCS table

| BUG rating:          | B1 U2 G1 |          |
|----------------------|----------|----------|
| <b>Forward light</b> | Lumens   | Lumens % |
| Low(0-30):           | 474,1    | 13,1%    |
| Medium(30-60):       | 915,1    | 25,2%    |
| High(60-80):         | 361,7    | 10%      |
| Very high(80-90):    | 45,2     | 1,2%     |
| <b>Back light</b>    |          |          |
| Low(0-30):           | 474,1    | 13,1%    |
| Medium(30-60):       | 915,1    | 25,2%    |
| High(60-80):         | 361,7    | 10%      |
| Very high(80-90):    | 45,2     | 1,2%     |
| <b>Uplight</b>       |          |          |
| Low(90-100):         | 7,6      | 0,2%     |
| High(100-180):       | 27,3     | 0,8%     |

LCS graph



**Warmup curve**



**Warmup result**

|                         |  |
|-------------------------|--|
| <b>Warmup time:</b>     | <b>Lamp stabilized in 15 min 2 sec</b> |
| <b>Warmup variation</b> | <b>-0,7%</b>                           |

**Warmup conditions**

|                           |               |
|---------------------------|---------------|
| <b>Stable period:</b>     | <b>15 min</b> |
| <b>Stable change max:</b> | <b>2,0%</b>   |
| <b>Minimum time:</b>      | <b>15 min</b> |

**Color temperature change**

| <b>CCT start</b> | <b>CCT change</b> | <b>CCT end</b> |
|------------------|-------------------|----------------|
| 5972 K           | +28 K             | 6000 K         |

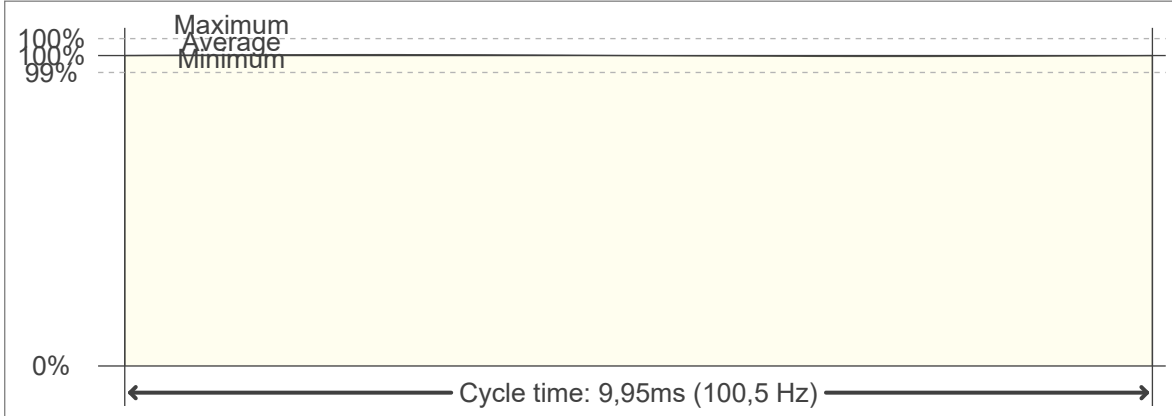
**Output change**

| <b>Output start</b> | <b>Output change</b> | <b>Output end</b> |
|---------------------|----------------------|-------------------|
| 3641 lm             | -13 lm               | 3627 lm           |

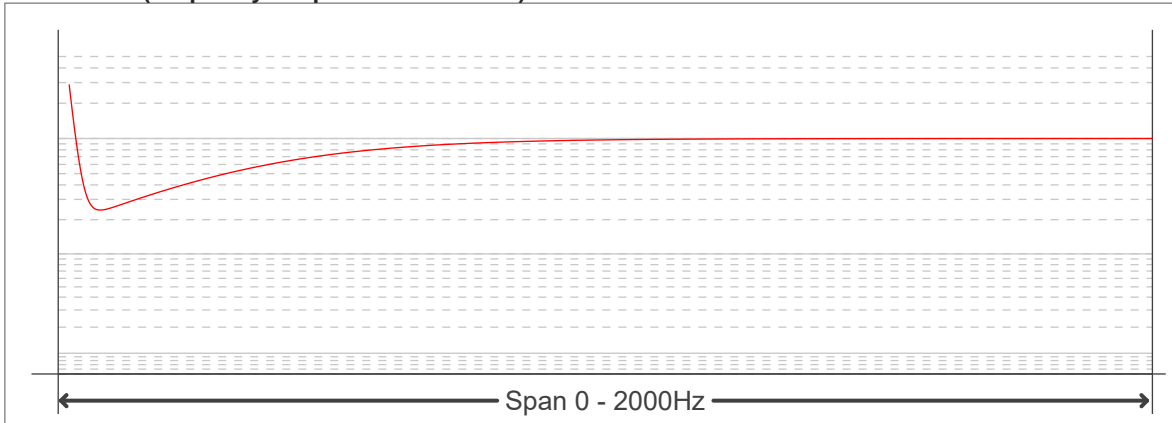
**Flicker curve (complete sampled flicker signal)**



**Flicker frame (frame of one flicker period)**



**Flicker FFT (frequency scope of flicker curve)**



**Flicker results:**

| Flicker frequency:    |        | 100,5 Hz      |        |
|-----------------------|--------|---------------|--------|
| Flicker index:        | 0      | JA8/10 40Hz   | 0,02 % |
| Flicker percentage:   | 0,33 % | JA8/10 90Hz   | 0,03 % |
| SVM: (Visual flicker) | 0,01   | JA8/10 200Hz  | 0,32 % |
| PstLM                 | 0,03   | JA8/10 400Hz  | 0,32 % |
| Mp                    | 0,01   | JA8/10 1000Hz | 0,32 % |

**Flicker conditions:**

|              |                      |
|--------------|----------------------|
| Sample rate: | 20000 samples/second |
|--------------|----------------------|