

Light efficiency:



Light quality:



Color temperature:

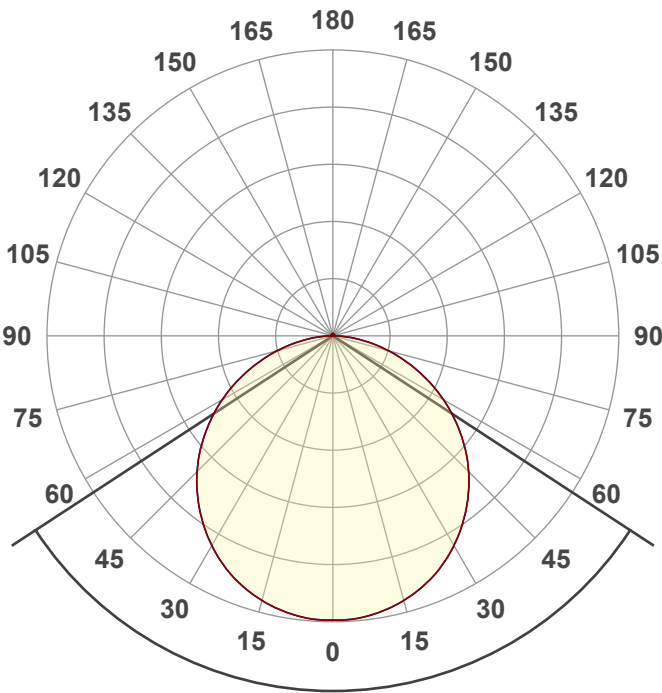
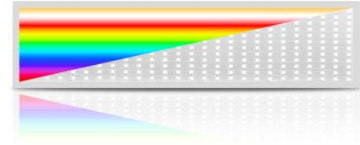


Output: 489 lm

Peak: 165 cd

Power: 8,0 W

PF: 0,7



Tracking number: [VT240930-001356](#)

Product name:
804398-GROEN

Item number:
804398-GROEN

Date and time:
30-9-2024 15:45:57

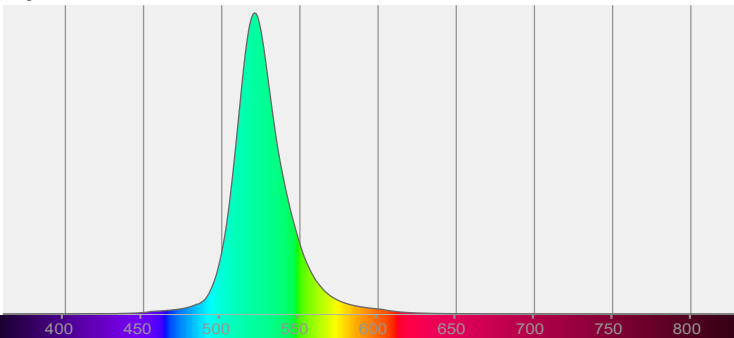
Description:
**BACK-LIT LED PANEEL | DOVER |
120x30CM | RGB+CCT | 40W**

Beam angle **113,7°**

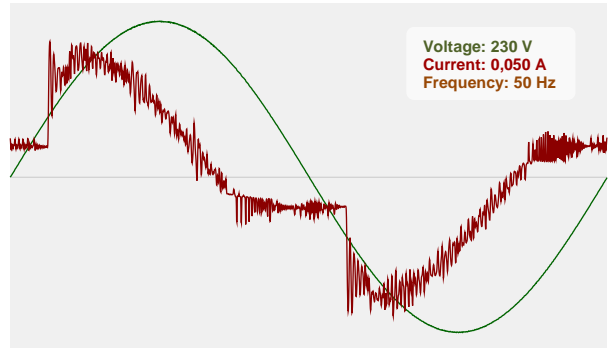


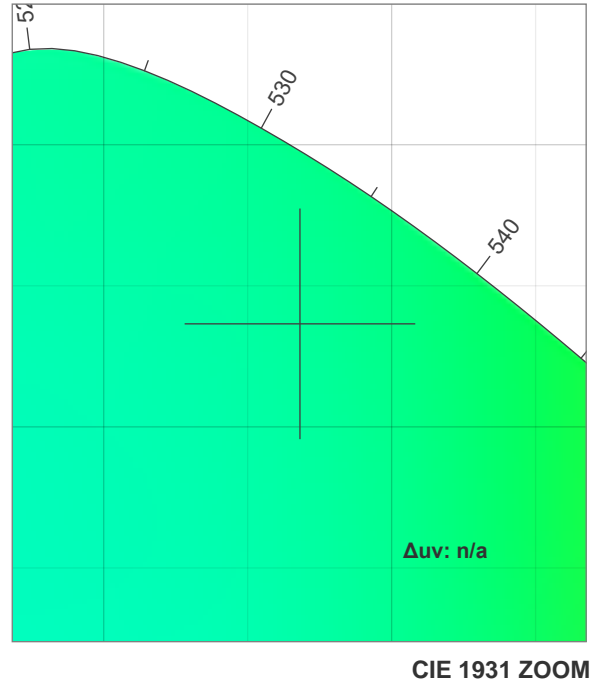
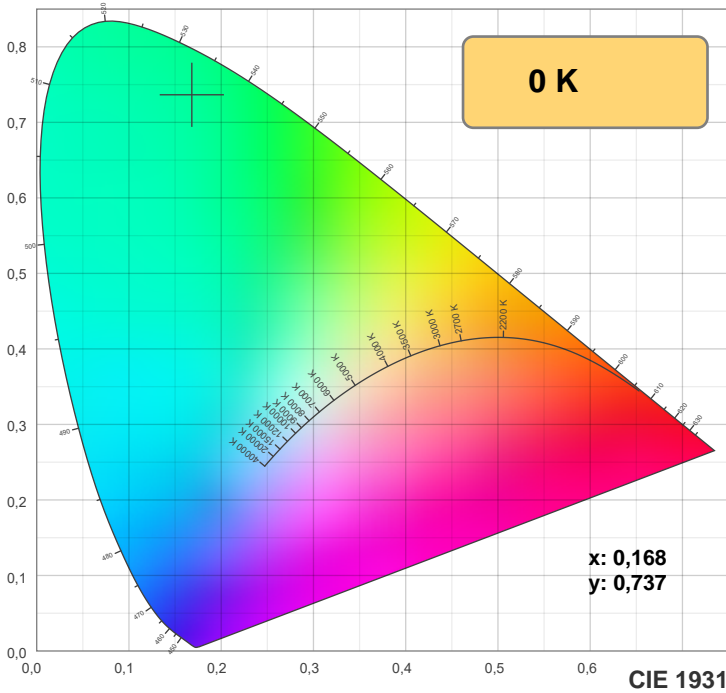
CIE 1931
x: 0,168
y: 0,737

Spectra



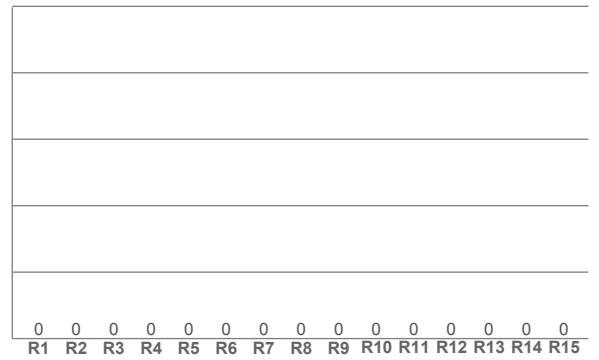
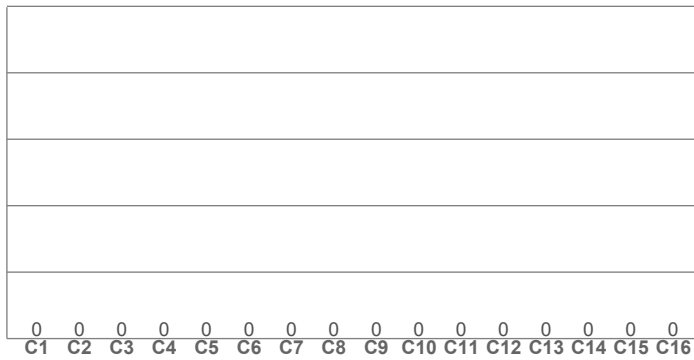
Power





TM-30: 0,0

CRI: 0,0 (R1-R8)



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 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

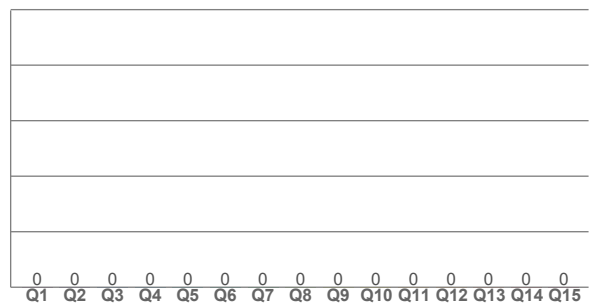
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

CQS: 0,0



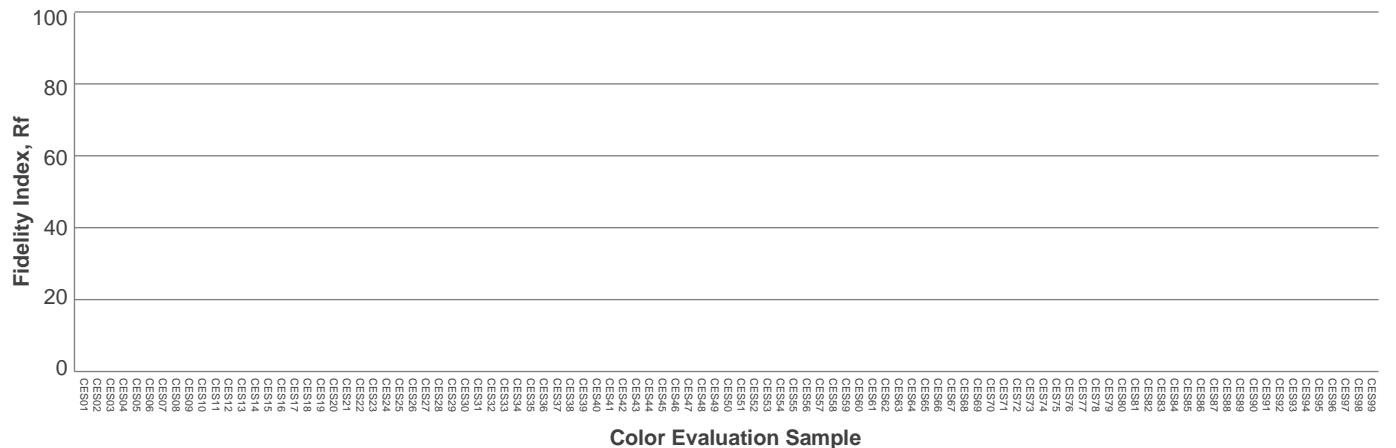
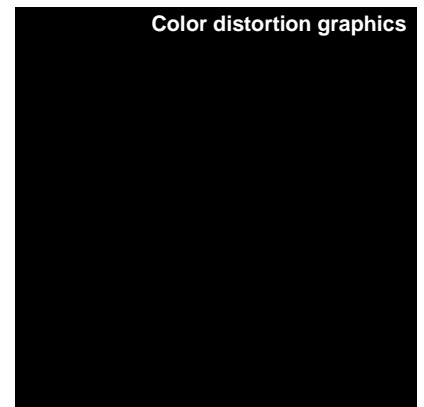
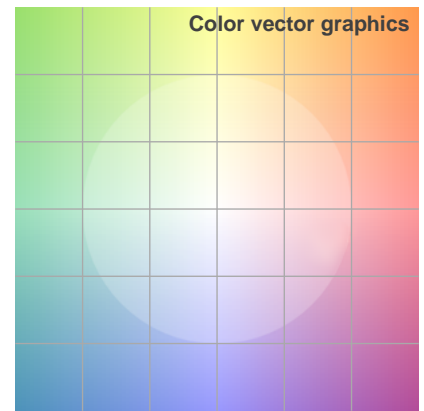
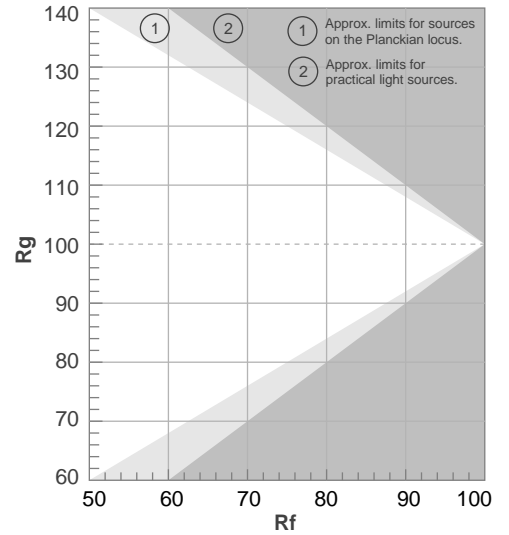
Color parameters

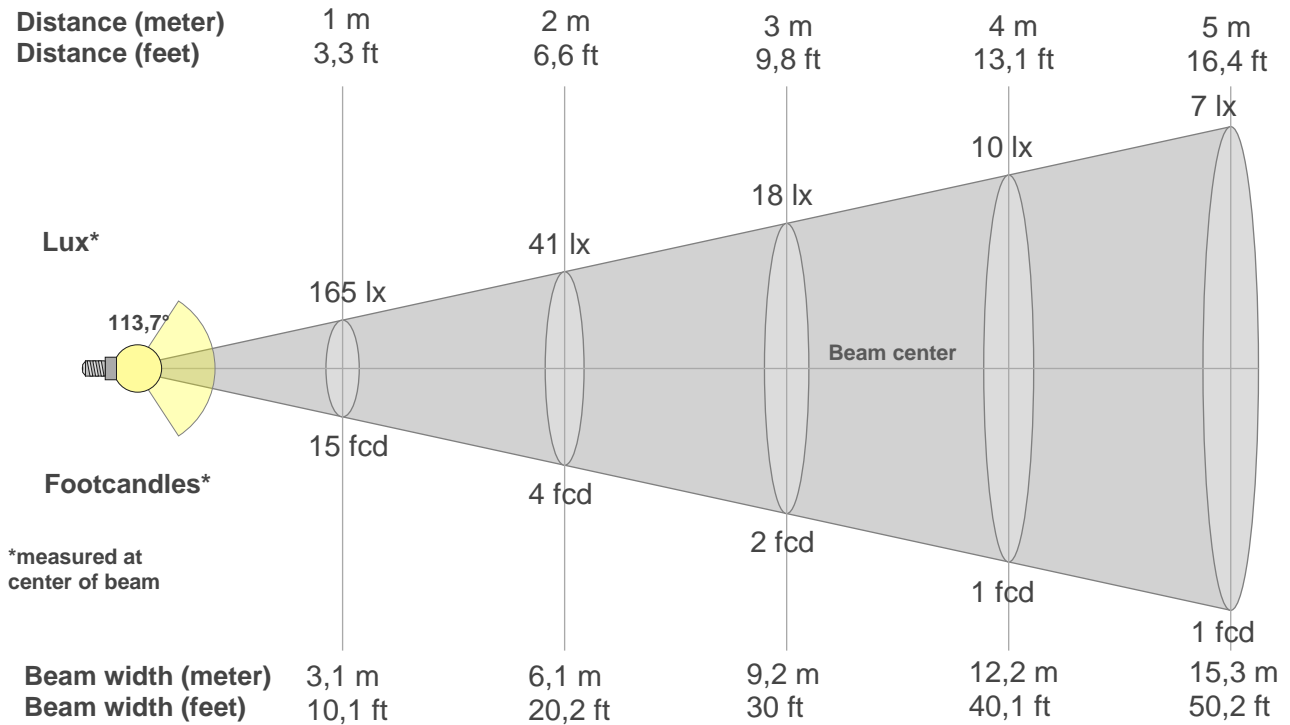
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | x | y | u | v | Δuv |
| 0 K | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,168 | 0,737 | 0,058 | 0,384 | n/a |

Rf 0,0
Fidelity index Rf

Rg 0,0
Gamut index Rg

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





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 |
| 165lx | 41lx | 18lx | 10lx | 7lx | 5lx | 3lx | 3lx | 2lx | 2lx | 1lx | 1lx | 1lx | 1lx | 1lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| 15,4fcd | 3,8fcd | 1,7fcd | 1fcd | 0,6fcd | 0,4fcd | 0,3fcd | 0,2fcd | 0,2fcd | 0,2fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 165 | 165 | 163 | 159 | 154 | 148 | 141 | 132 | 122 | 112 | 100 | 87 | 74 | 61 | 47 | 34 | 21 | 10 | 3 | 1 |
| 100% | 100% | 98% | 96% | 93% | 90% | 85% | 80% | 74% | 68% | 60% | 53% | 45% | 37% | 28% | 20% | 13% | 6% | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 165 | 165 | 163 | 159 | 154 | 148 | 141 | 132 | 122 | 112 | 100 | 87 | 74 | 61 | 47 | 34 | 21 | 10 | 3 | 1 |
| 100% | 100% | 98% | 96% | 93% | 90% | 85% | 80% | 74% | 68% | 60% | 53% | 45% | 37% | 28% | 20% | 13% | 6% | 2% | 1% |

Intensities in 180° c-plane

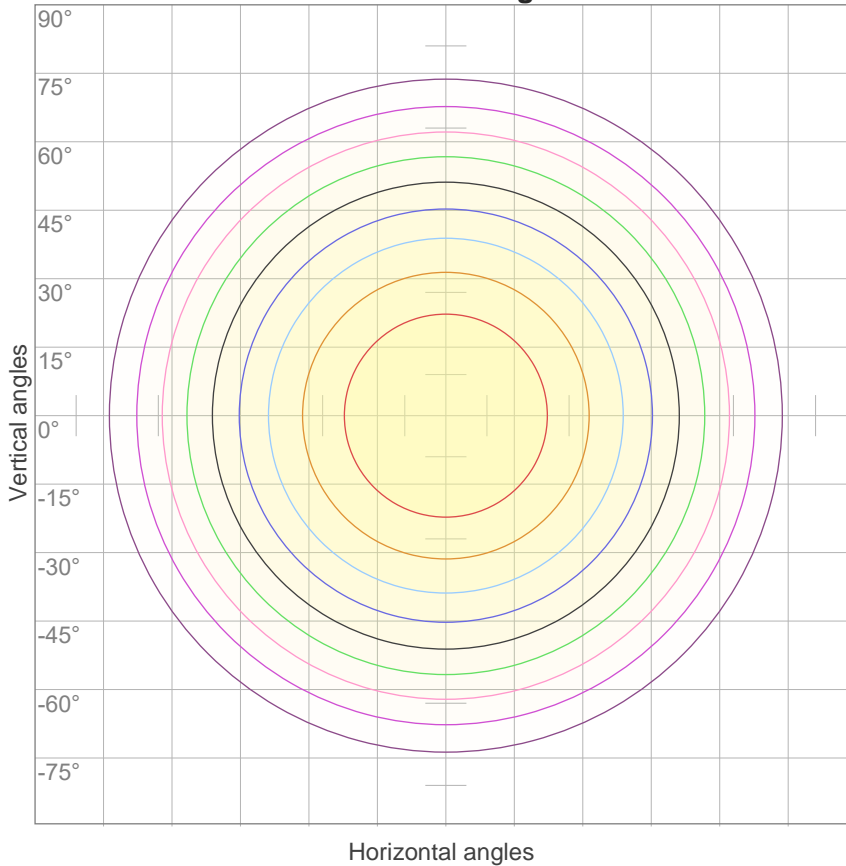
| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 165 | 165 | 163 | 159 | 154 | 148 | 141 | 132 | 122 | 112 | 100 | 87 | 74 | 61 | 47 | 34 | 21 | 10 | 3 | 1 |
| 100% | 100% | 98% | 96% | 93% | 90% | 85% | 80% | 74% | 68% | 60% | 53% | 45% | 37% | 28% | 20% | 13% | 6% | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 165 | 165 | 163 | 159 | 154 | 148 | 141 | 132 | 122 | 112 | 100 | 87 | 74 | 61 | 47 | 34 | 21 | 10 | 3 | 1 |
| 100% | 100% | 98% | 96% | 93% | 90% | 85% | 80% | 74% | 68% | 60% | 53% | 45% | 37% | 28% | 20% | 13% | 6% | 2% | 1% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 113,7° | 163,8° | 176,3° | 76,8% | 52,1% |

iso-candela diagram



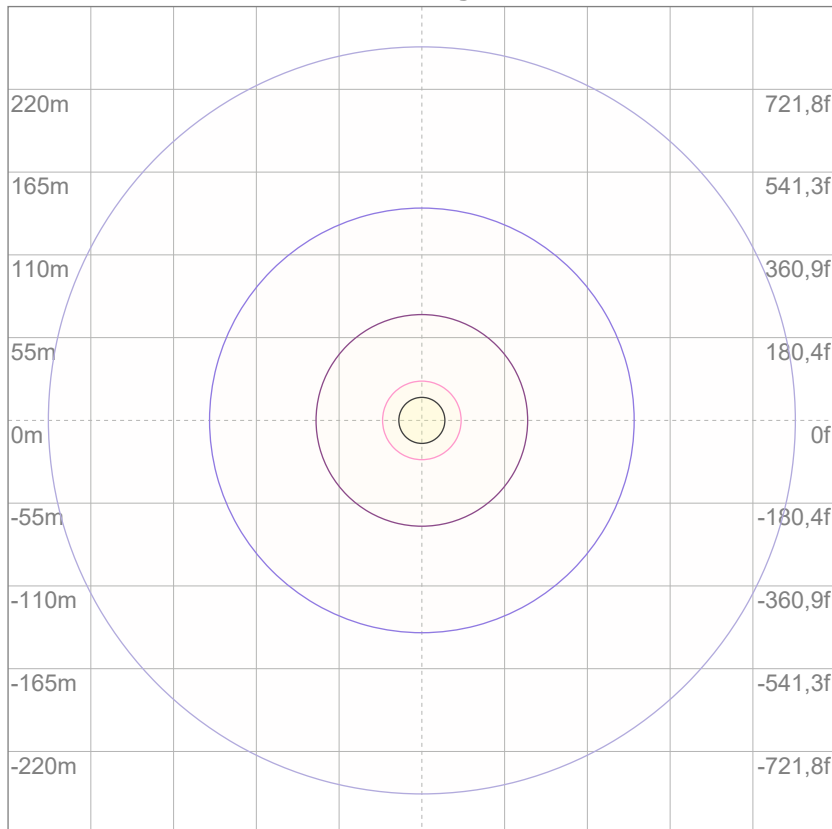
| | |
|-----|--------|
| 10% | 17 cd |
| 20% | 33 cd |
| 30% | 50 cd |
| 40% | 66 cd |
| 50% | 83 cd |
| 60% | 99 cd |
| 70% | 116 cd |
| 80% | 132 cd |
| 90% | 149 cd |

Conditions:

Number of c-planes: 12

Candela at center: 165 cd

iso-lux diagram



| | |
|-----|----------|
| 3% | 49,6m lx |
| 5% | 82,7m lx |
| 10% | 0,165 lx |
| 30% | 0,496 lx |
| 50% | 0,827 lx |

Conditions:

Number of c-planes: 12

Lux at center: 1,65 lx

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

Mounting height: 10 meters (33 feet)

Glare evaluation according to UGR

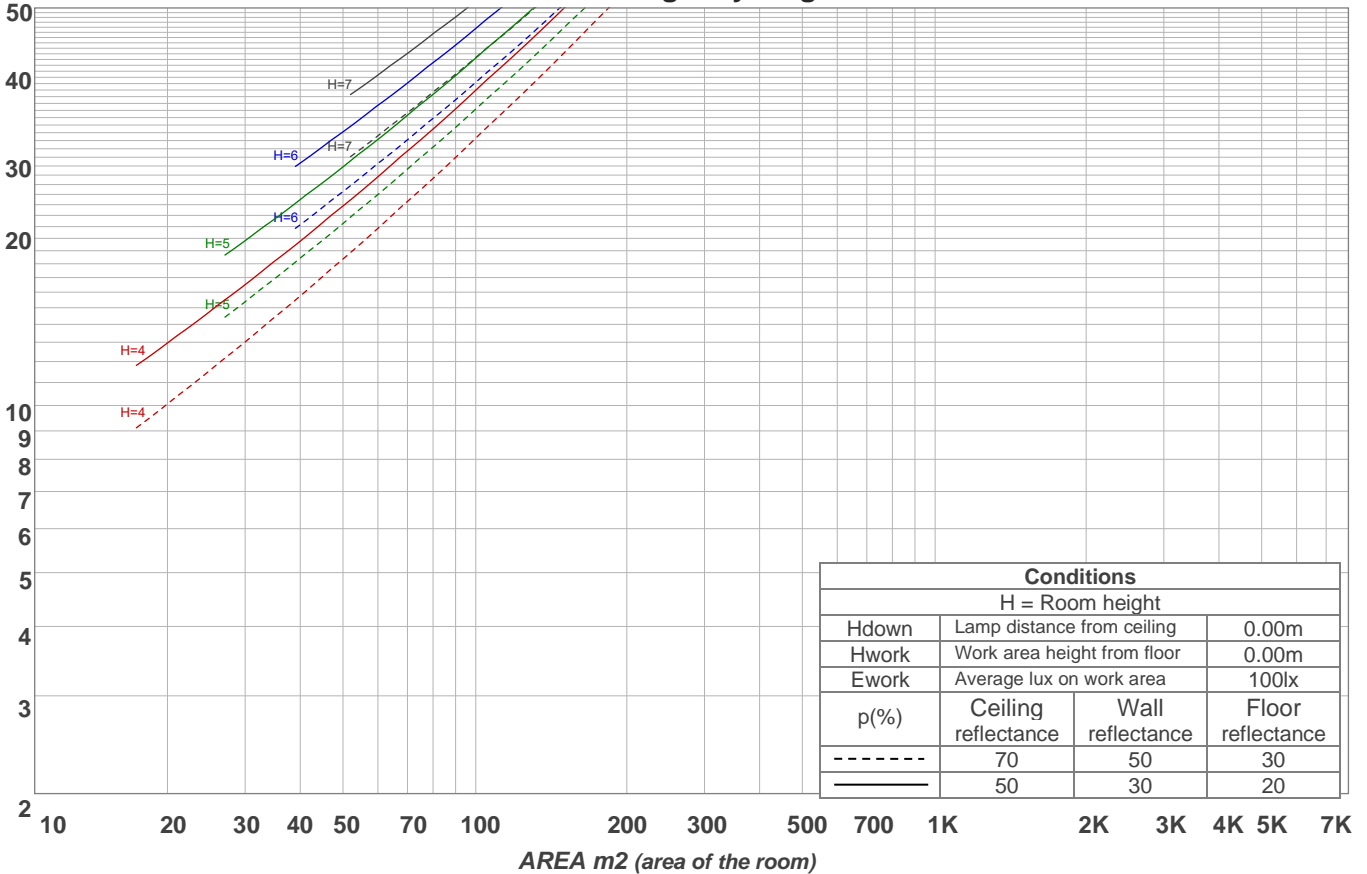
| | | | | | | | | | | | |
|---|-----|--|------|------|------|------|---|------|------|------|------|
| p Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| p Walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| p Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room size X Y | | Viewing direction at right angles to lamp axis | | | | | Viewing direction parallel to lamp axis | | | | |
| 2H | 2H | 10,4 | 11,6 | 10,7 | 12,0 | 12,2 | 10,3 | 11,5 | 10,6 | 11,9 | 12,1 |
| | 3H | 11,9 | 13,2 | 12,3 | 13,5 | 13,7 | 11,8 | 13,0 | 12,2 | 13,3 | 13,6 |
| | 4H | 12,6 | 13,8 | 13,0 | 14,1 | 14,4 | 12,4 | 13,6 | 12,8 | 13,9 | 14,2 |
| | 6H | 13,1 | 14,2 | 13,5 | 14,5 | 14,9 | 12,9 | 14,0 | 13,3 | 14,3 | 14,7 |
| | 8H | 13,3 | 14,3 | 13,7 | 14,7 | 15,1 | 13,1 | 14,1 | 13,4 | 14,4 | 14,9 |
| | 12H | 13,4 | 14,4 | 13,8 | 14,8 | 15,3 | 13,2 | 14,2 | 13,5 | 14,5 | 15,0 |
| 4H | 2H | 11,0 | 12,2 | 11,4 | 12,5 | 12,8 | 10,9 | 12,1 | 11,3 | 12,4 | 12,7 |
| | 3H | 12,8 | 13,8 | 13,2 | 14,2 | 14,6 | 12,7 | 13,7 | 13,1 | 14,1 | 14,5 |
| | 4H | 13,5 | 14,5 | 14,0 | 14,9 | 15,4 | 13,4 | 14,3 | 13,8 | 14,7 | 15,3 |
| | 6H | 14,1 | 15,0 | 14,7 | 15,4 | 15,8 | 13,9 | 14,8 | 14,5 | 15,2 | 15,6 |
| | 8H | 14,4 | 15,2 | 14,9 | 15,6 | 16,0 | 14,2 | 15,0 | 14,7 | 15,3 | 15,8 |
| | 12H | 14,5 | 15,2 | 15,1 | 15,7 | 16,2 | 14,3 | 15,0 | 14,8 | 15,4 | 15,9 |
| 8H | 4H | 13,8 | 14,6 | 14,3 | 15,0 | 15,4 | 13,7 | 14,5 | 14,2 | 14,9 | 15,3 |
| | 6H | 14,6 | 15,2 | 15,1 | 15,7 | 16,3 | 14,4 | 15,0 | 14,9 | 15,5 | 16,1 |
| | 8H | 14,9 | 15,5 | 15,5 | 16,0 | 16,7 | 14,7 | 15,3 | 15,3 | 15,8 | 16,5 |
| | 12H | 15,2 | 15,6 | 15,8 | 16,2 | 16,8 | 14,9 | 15,4 | 15,5 | 15,9 | 16,5 |
| 12H | 4H | 13,8 | 14,5 | 14,3 | 14,9 | 15,4 | 13,7 | 14,4 | 14,2 | 14,8 | 15,3 |
| | 6H | 14,7 | 15,2 | 15,2 | 15,7 | 16,4 | 14,5 | 15,0 | 15,0 | 15,6 | 16,2 |
| | 8H | 15,0 | 15,5 | 15,6 | 16,0 | 16,6 | 14,8 | 15,3 | 15,4 | 15,8 | 16,4 |
| 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 / -0,5 | | | | |
| CIE 117-1995. Corrected glare indices referring to 489 lm total luminous flux | | | | | | | | | | | |

Coefficients of Utilization

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

LAMPS (number of lamps)

Luminaire budgetary diagram



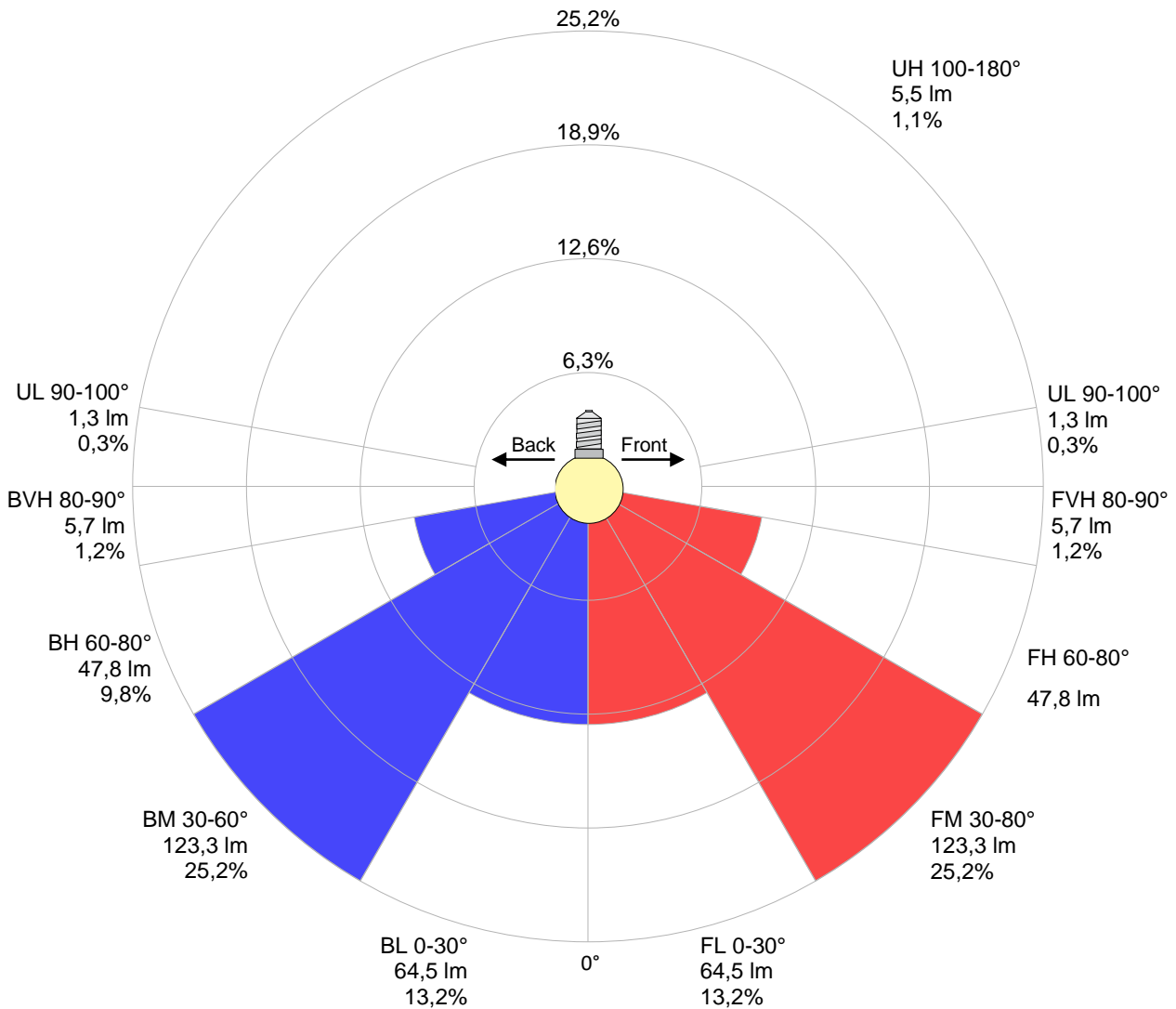
Zonal Lumen Summary

| | | | | | | | | |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
| {LUM0-10} | 45,0 lm | 68,4 lm | 82,6 lm | 86,1 lm | 78,1 lm | 60,0 lm | 35,6 lm | 11,1 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 1,14 lm | 1,03 lm | 0,976 lm | 0,925 lm | 0,833 lm | 0,726 lm | 0,549 lm | 0,332 lm | 0,117 lm |

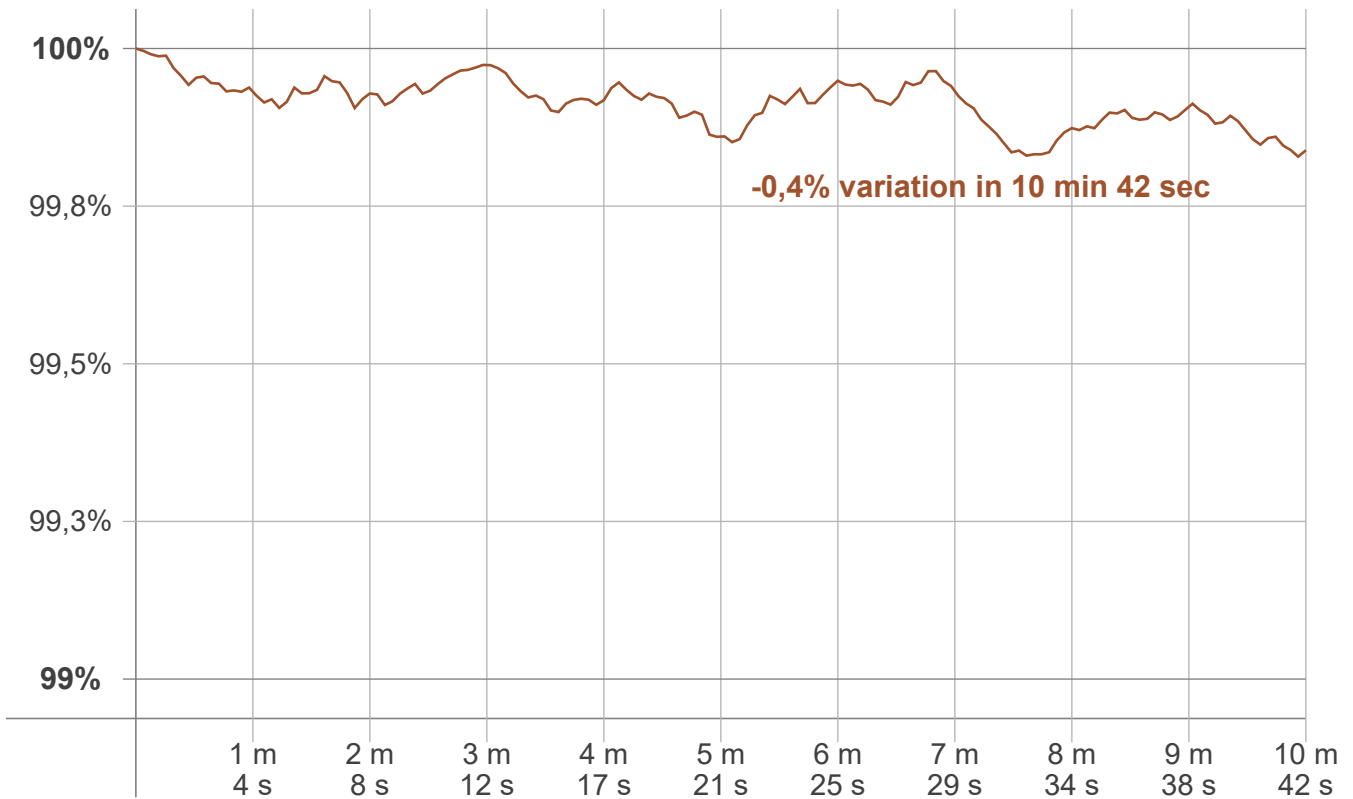
LCS table

| BUG rating: | B0 U1 G0 | |
|----------------------|----------|----------|
| Forward light | Lumens | Lumens % |
| Low(0-30): | 64,5 | 13,2% |
| Medium(30-60): | 123,3 | 25,2% |
| High(60-80): | 47,8 | 9,8% |
| Very high(80-90): | 5,7 | 1,2% |
| Back light | | |
| Low(0-30): | 64,5 | 13,2% |
| Medium(30-60): | 123,3 | 25,2% |
| High(60-80): | 47,8 | 9,8% |
| Very high(80-90): | 5,7 | 1,2% |
| Uplight | | |
| Low(90-100): | 1,3 | 0,3% |
| High(100-180): | 5,5 | 1,1% |

LCS graph



Warmup curve



Warmup result

| | |
|-------------------------|----------------------|
| Warmup time: | Not completed |
| Warmup variation | -0,4% |

Warmup conditions

| | |
|---------------------------|---------------|
| Stable period: | 15 min |
| Stable change max: | 2,0% |
| Minimum time: | 15 min |

Color temperature change

| CCT start | CCT change | CCT end |
|------------------|-------------------|----------------|
| 0 K | 0 K | 0 K |

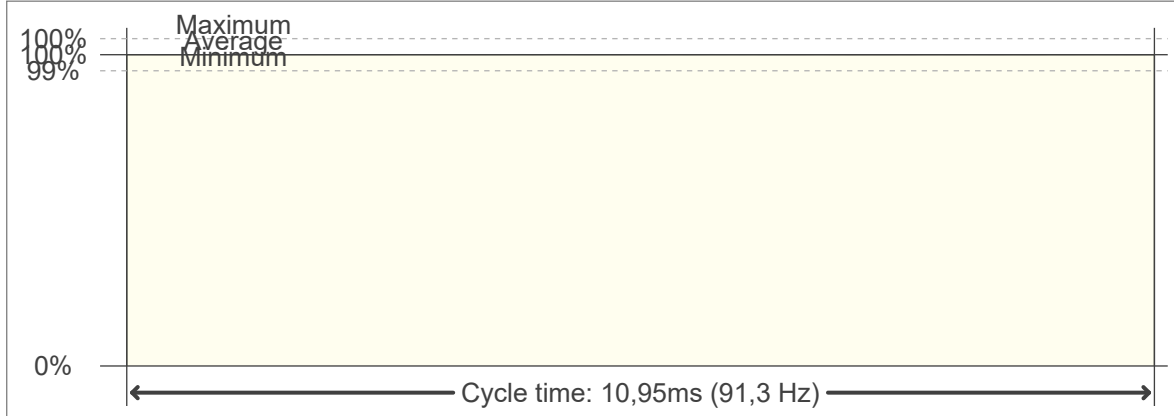
Output change

| Output start | Output change | Output end |
|---------------------|----------------------|-------------------|
| 490 lm | -1 lm | 489 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: | | 91,32 Hz | |
|-----------------------|--------|---------------|--------|
| Flicker index: | 0 | JA8/10 40Hz | 0,01 % |
| Flicker percentage: | 0,04 % | JA8/10 90Hz | 0,02 % |
| SVM: (Visual flicker) | 0 | JA8/10 200Hz | 0,03 % |
| PstLM | 0,01 | JA8/10 400Hz | 0,03 % |
| Mp | 0,01 | JA8/10 1000Hz | 0,04 % |

Flicker conditions:

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