

Light efficiency:

61 Lumen/Watt

Light quality:

CRI: 92.7

Color temperature:

2926 K

Output: 448 lm

Peak: 830 cd

Power: 7.3 W

PF: 1.0



Tracking number: [n/a](#)

Product name:

**NANOFLEX677.6RGB30ADD25WHB
,white**

Item number:

Date and time:

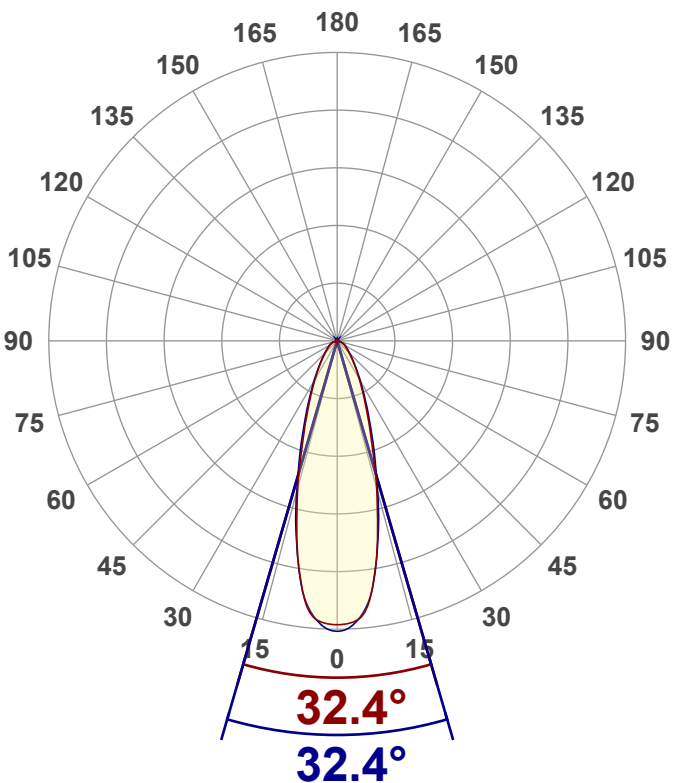
2025/8/21 13:40:48

Operator:

MW

Description:

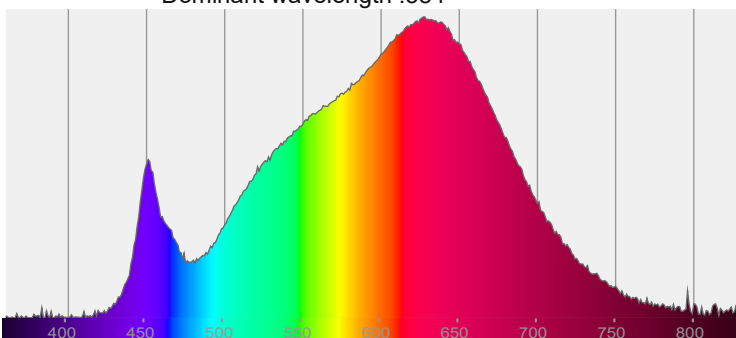
**24Vdc,25w/m, RGBW30K,Beam
angle:25degree, length:1m**



CIE 1931
x: 0.443
y: 0.407

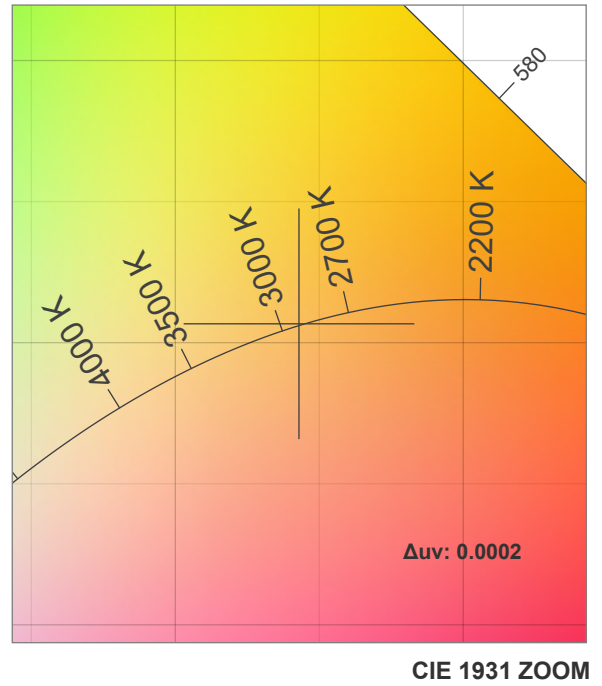
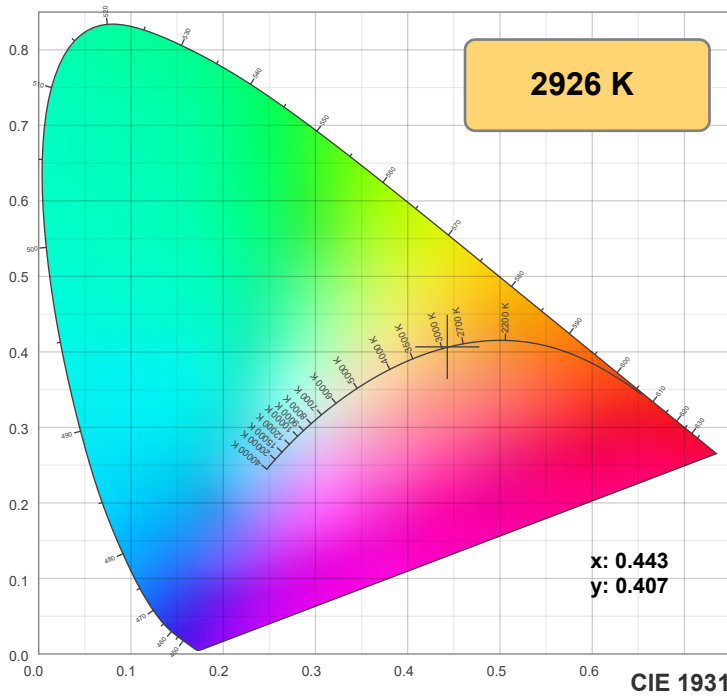
Spectra: Peak wavelength :628

Dominant wavelength :584

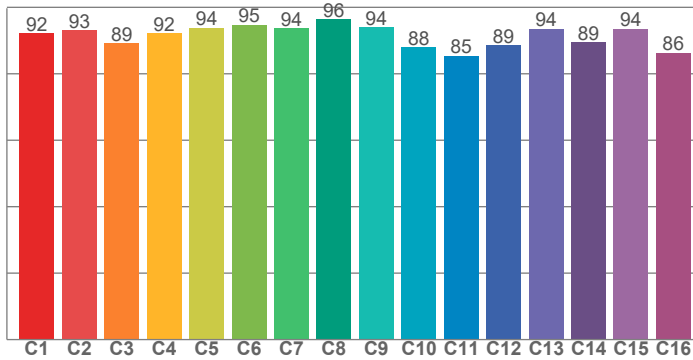


Power

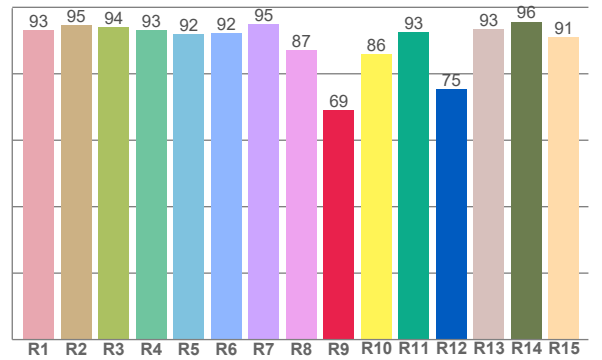
Voltage: 24.0 V
Current: 0.304 A
Frequency: 0 Hz



TM-30: 91.3



CRI: 92.7 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93.2 | 94.7 | 94.0 | 93.2 | 91.8 | 92.2 | 94.9 | 87.2 | 69.1 | 85.8 | 92.6 | 75.3 | 93.4 | 95.7 | 91.0 |

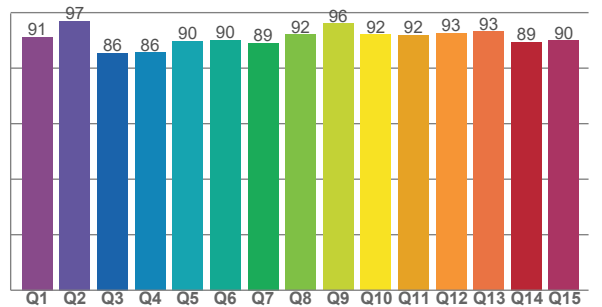
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92.3 | 93.1 | 89.1 | 92.2 | 93.8 | 94.8 | 93.7 | 96.4 | 93.9 | 87.9 | 85.4 | 88.5 | 93.6 | 89.4 | 93.6 | 86.3 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91.2 | 96.9 | 85.5 | 85.7 | 89.7 | 90.1 | 89.1 | 92.1 | 96.1 | 92.1 | 91.9 | 92.6 | 93.2 | 89.5 | 89.9 |

CQS: 90.4



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 |
| 2926 K | 92.7 | 69.1 | 91.3 | 100.4 | 90.4 | 0.443 | 0.407 | 0.253 | 0.349 | 0.0002 |

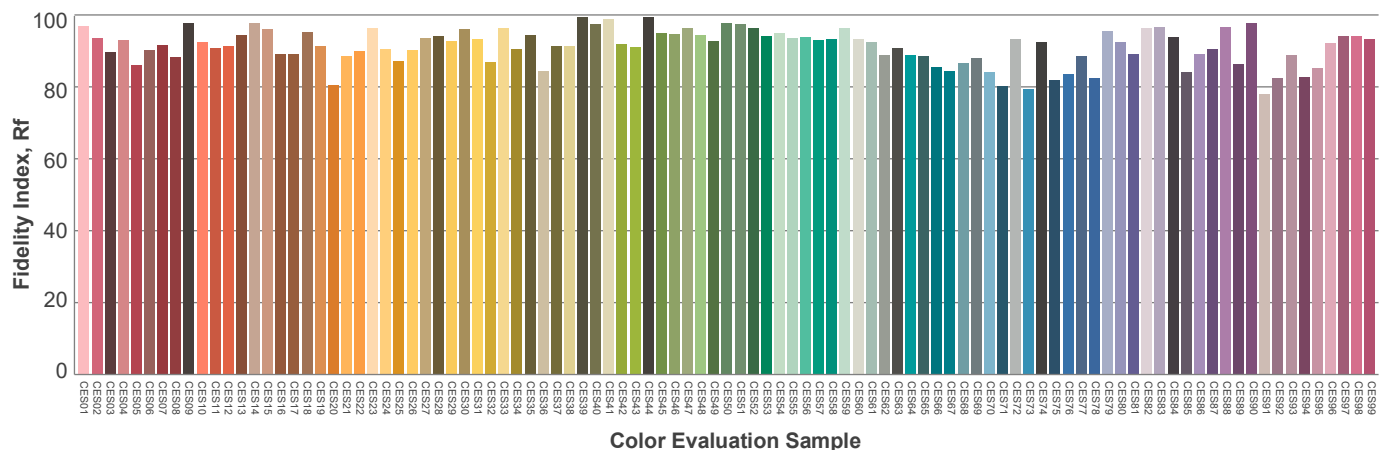
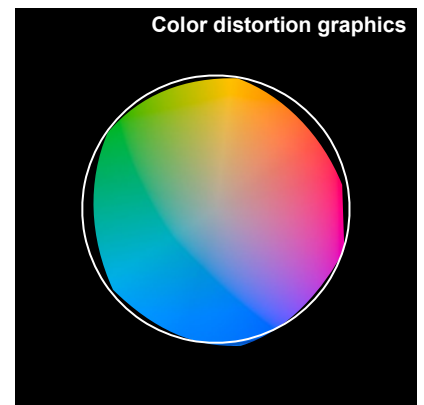
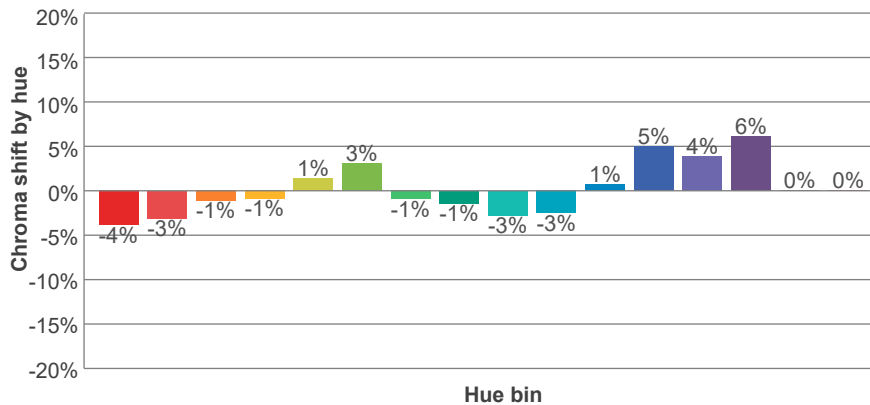
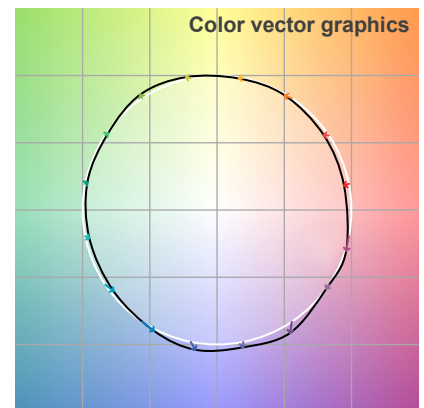
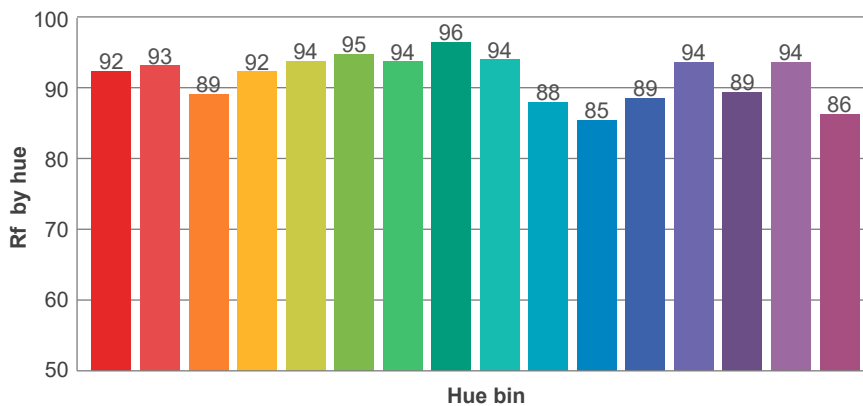
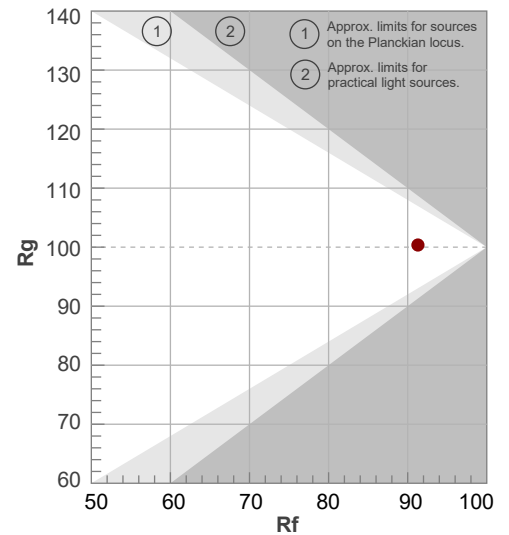
Rf 91.3

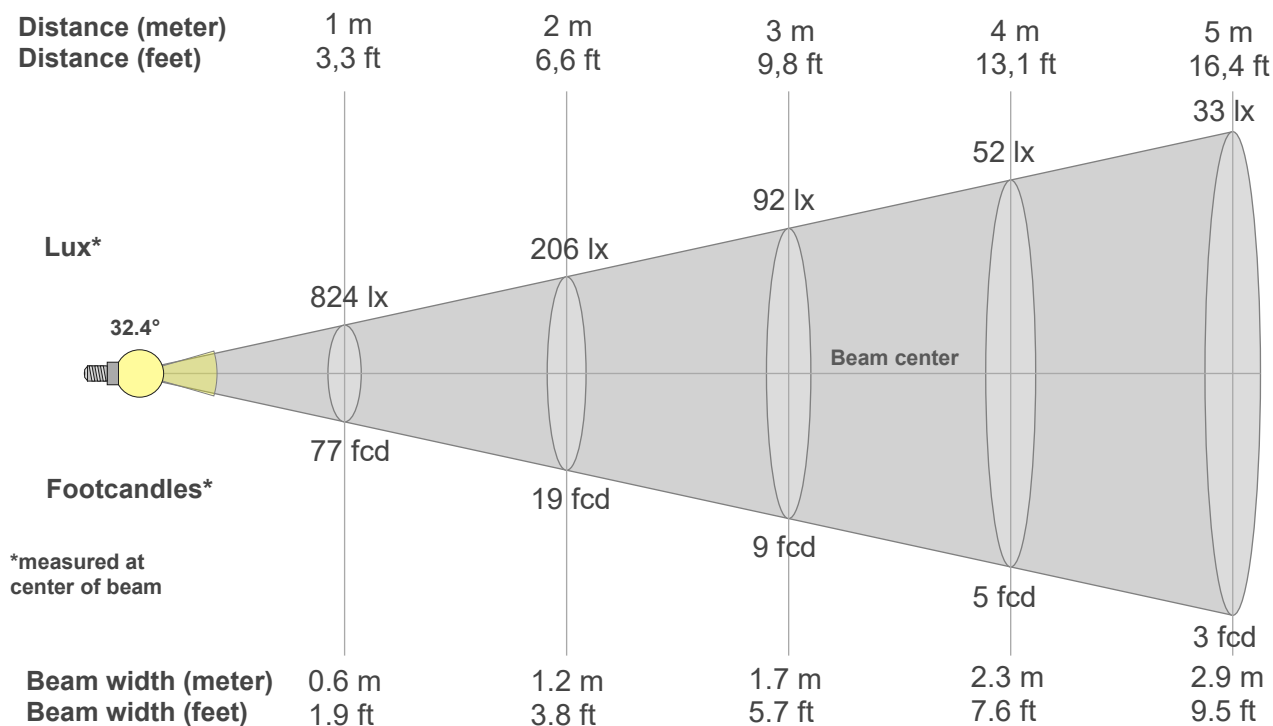
Fidelity index Rf

Rg 100.4

Gamut index Rg

| Hue Bin | R _f | Shifts (%) | |
|---------|----------------|------------|------|
| | | Chroma | Hue |
| 1 | 92 | -4% | -1% |
| 2 | 93 | -3% | 2% |
| 3 | 89 | -1% | 5% |
| 4 | 92 | -1% | 3% |
| 5 | 94 | 1% | 3% |
| 6 | 95 | 3% | 0% |
| 7 | 94 | -1% | -2% |
| 8 | 96 | -1% | -2% |
| 9 | 94 | -3% | 2% |
| 10 | 88 | -3% | 7% |
| 11 | 85 | 1% | 11% |
| 12 | 89 | 5% | 4% |
| 13 | 94 | 4% | -2% |
| 14 | 89 | 6% | -6% |
| 15 | 94 | 0% | -4% |
| 16 | 86 | 0% | -11% |





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 |
| 824lx | 206lx | 92lx | 52lx | 33lx | 23lx | 17lx | 13lx | 10lx | 8lx | 7lx | 6lx | 5lx | 4lx | 4lx | 3lx | 3lx | 3lx | 2lx | 2lx |
| 76.6fcd | 19.1fcd | 8.5fcd | 4.8fcd | 3.1fcd | 2.1fcd | 1.6fcd | 1.2fcd | 0.9fcd | 0.8fcd | 0.6fcd | 0.5fcd | 0.5fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd |

Intensities in 0° c-plane

| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 824 | 805 | 805 | 767 | 710 | 648 | 564 | 481 | 409 | 342 | 281 | 242 | 203 | 174 | 151 | 128 | 113 | 97 | 85 | 75 |
| 100% | 98% | 98% | 93% | 86% | 79% | 68% | 58% | 50% | 42% | 34% | 29% | 25% | 21% | 18% | 16% | 14% | 12% | 10% | 9% |

Intensities in 90° c-plane

| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 824 | 829 | 803 | 768 | 724 | 647 | 571 | 496 | 422 | 353 | 303 | 253 | 216 | 185 | 157 | 137 | 117 | 102 | 89 | 77 |
| 100% | 101% | 97% | 93% | 88% | 79% | 69% | 60% | 51% | 43% | 37% | 31% | 26% | 22% | 19% | 17% | 14% | 12% | 11% | 9% |

Intensities in 180° c-plane

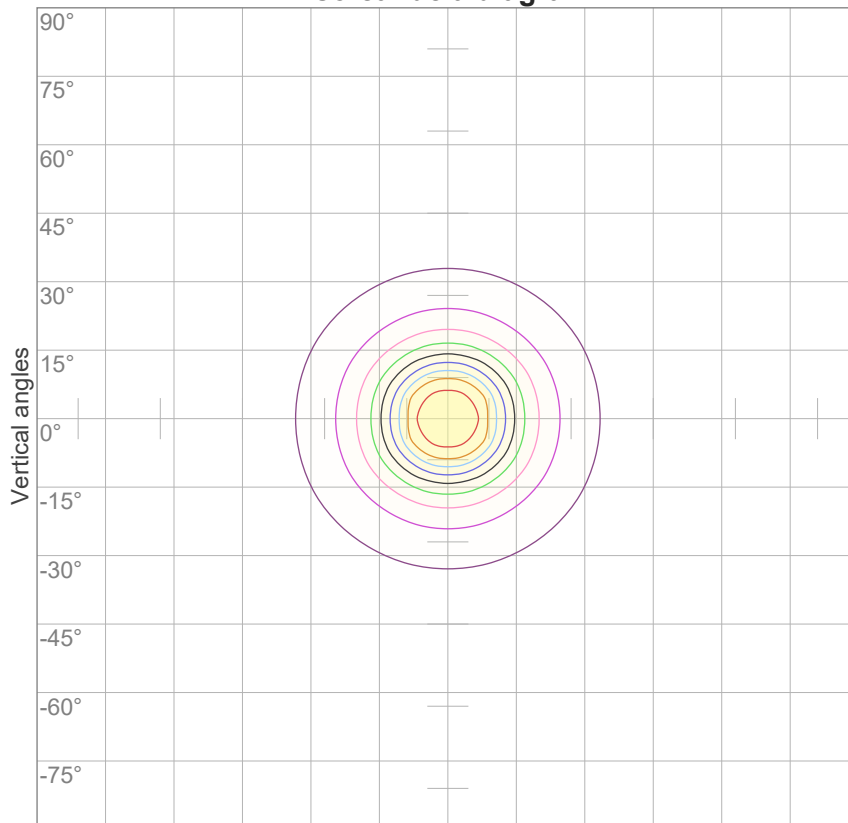
| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 824 | 805 | 805 | 767 | 710 | 648 | 564 | 481 | 409 | 342 | 281 | 242 | 203 | 174 | 151 | 128 | 113 | 97 | 85 | 75 |
| 100% | 98% | 98% | 93% | 86% | 79% | 68% | 58% | 50% | 42% | 34% | 29% | 25% | 21% | 18% | 16% | 14% | 12% | 10% | 9% |

Intensities in 270° c-plane

| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 824 | 829 | 803 | 768 | 724 | 647 | 571 | 496 | 422 | 353 | 303 | 253 | 216 | 185 | 157 | 137 | 117 | 102 | 89 | 77 |
| 100% | 101% | 97% | 93% | 88% | 79% | 69% | 60% | 51% | 43% | 37% | 31% | 26% | 22% | 19% | 17% | 14% | 12% | 11% | 9% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 32.4° | 73.8° | 128.6° | 91.8% | 81.6% |

iso-candela diagram



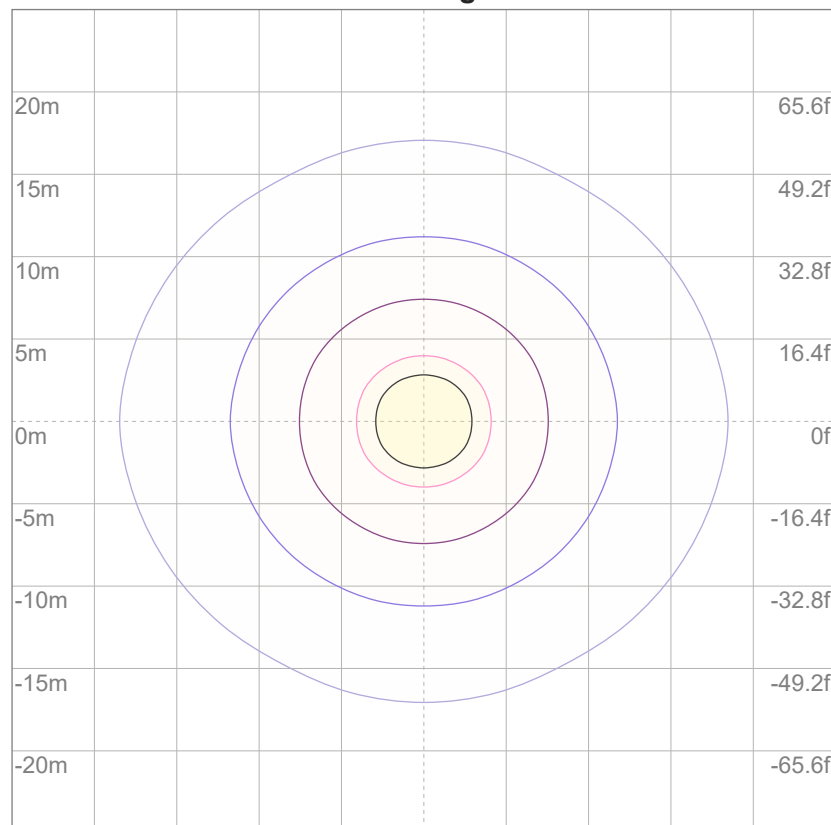
| | |
|-----|--------|
| 10% | 82 cd |
| 20% | 165 cd |
| 30% | 247 cd |
| 40% | 330 cd |
| 50% | 412 cd |
| 60% | 495 cd |
| 70% | 577 cd |
| 80% | 659 cd |
| 90% | 742 cd |

Conditions:

Number of c-planes: 12

Candela at center: 824 cd

iso-lux diagram



| | |
|-----|----------|
| 3% | 0.247 lx |
| 5% | 0.412 lx |
| 10% | 0.824 lx |
| 30% | 2.47 lx |
| 50% | 4.12 lx |

Conditions:

Number of c-planes: 12

Lux at center: 8.24 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

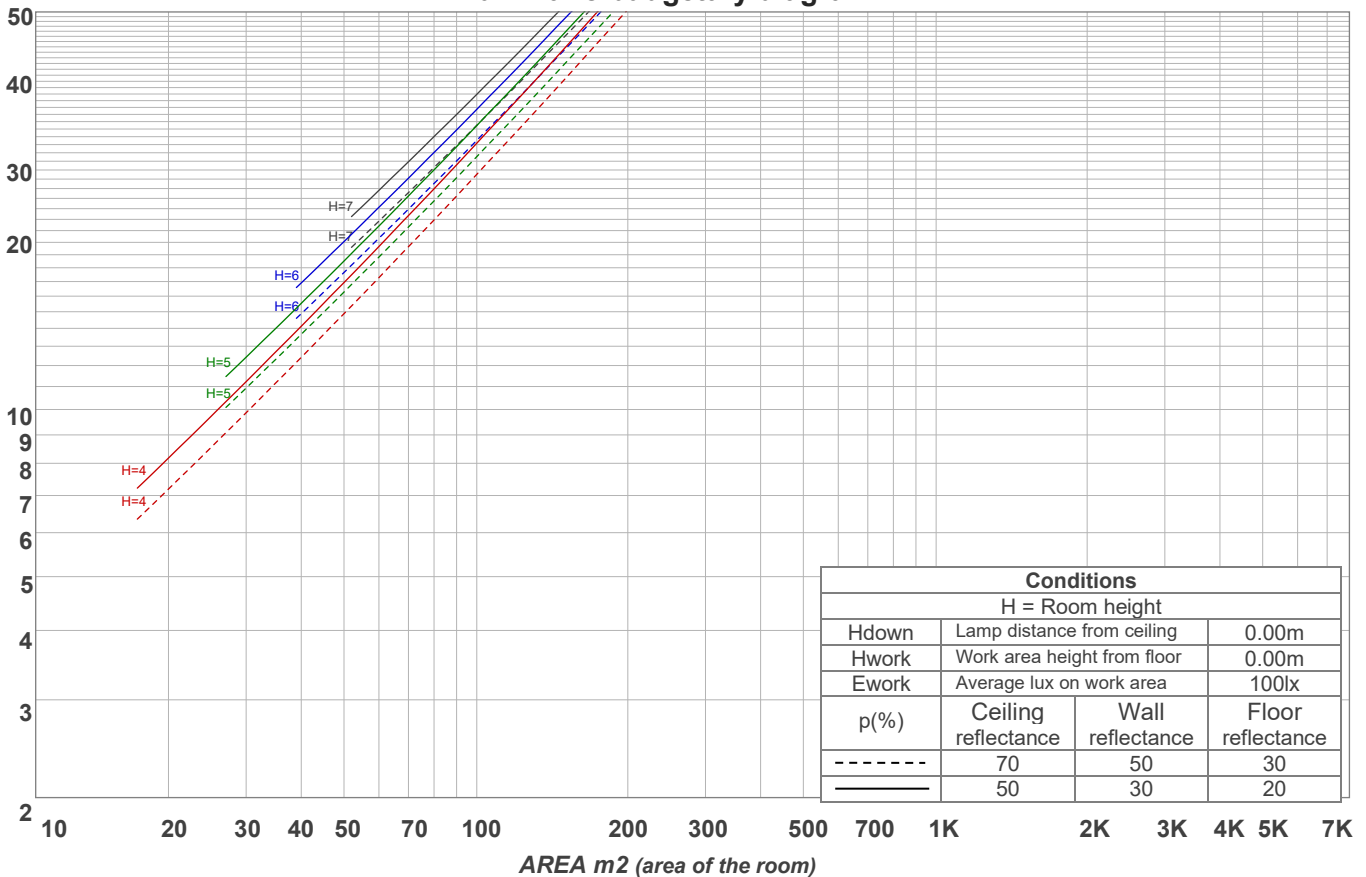
| | | | | | | | | | | | |
|---|-----|---|------|------|------|------|---|------|------|------|------|
| p Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| p Walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| p Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room size X Y | | Viewing direction at right angles to lamp axis | | | | | Viewing direction parallel to lamp axis | | | | |
| 2H | 2H | 9.7 | 10.5 | 9.9 | 10.7 | 11.0 | 11.4 | 12.1 | 11.5 | 12.4 | 12.6 |
| | 3H | 10.3 | 11.2 | 10.7 | 11.4 | 11.6 | 12.3 | 13.2 | 12.7 | 13.4 | 13.6 |
| | 4H | 10.5 | 11.3 | 10.9 | 11.6 | 11.8 | 12.8 | 13.6 | 13.2 | 13.9 | 14.1 |
| | 6H | 10.7 | 11.4 | 11.0 | 11.7 | 12.0 | 13.1 | 13.8 | 13.4 | 14.1 | 14.5 |
| | 8H | 10.6 | 11.3 | 11.0 | 11.7 | 12.1 | 13.2 | 13.9 | 13.5 | 14.2 | 14.6 |
| | 12H | 10.6 | 11.3 | 11.0 | 11.6 | 12.1 | 13.2 | 13.9 | 13.6 | 14.2 | 14.7 |
| 4H | 2H | 10.1 | 10.9 | 10.5 | 11.1 | 11.4 | 11.4 | 12.3 | 11.9 | 12.5 | 12.8 |
| | 3H | 10.9 | 11.6 | 11.3 | 12.0 | 12.4 | 12.7 | 13.4 | 13.1 | 13.8 | 14.2 |
| | 4H | 11.1 | 11.8 | 11.6 | 12.2 | 12.7 | 13.2 | 13.8 | 13.6 | 14.2 | 14.8 |
| | 6H | 11.3 | 11.9 | 11.8 | 12.3 | 12.6 | 13.6 | 14.2 | 14.1 | 14.5 | 14.9 |
| | 8H | 11.3 | 11.9 | 11.8 | 12.2 | 12.6 | 13.6 | 14.2 | 14.2 | 14.6 | 15.0 |
| | 12H | 11.3 | 11.7 | 11.8 | 12.2 | 12.6 | 13.7 | 14.1 | 14.2 | 14.6 | 15.0 |
| 8H | 4H | 11.3 | 11.9 | 11.8 | 12.2 | 12.6 | 13.2 | 13.8 | 13.7 | 14.1 | 14.5 |
| | 6H | 11.5 | 11.9 | 12.0 | 12.4 | 12.9 | 13.6 | 14.0 | 14.2 | 14.5 | 15.1 |
| | 8H | 11.6 | 11.9 | 12.1 | 12.4 | 13.1 | 13.8 | 14.1 | 14.3 | 14.7 | 15.3 |
| | 12H | 11.6 | 11.9 | 12.2 | 12.4 | 13.0 | 13.9 | 14.1 | 14.5 | 14.7 | 15.3 |
| 12H | 4H | 11.3 | 11.7 | 11.8 | 12.1 | 12.6 | 13.2 | 13.6 | 13.7 | 14.0 | 14.5 |
| | 6H | 11.5 | 11.9 | 12.1 | 12.4 | 13.0 | 13.7 | 14.0 | 14.2 | 14.5 | 15.2 |
| | 8H | 11.6 | 11.9 | 12.2 | 12.4 | 13.0 | 13.8 | 14.1 | 14.4 | 14.6 | 15.2 |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | | |
| S = 1.0H | | 0.7 / -0.6 | | | | | 0.6 / -0.4 | | | | |
| S = 1.5H | | 1.6 / -1.1 | | | | | 1.4 / -0.9 | | | | |
| S = 2.0H | | 2.6 / -1.8 | | | | | 2.3 / -1.5 | | | | |
| CIE 117-1995. Corrected glare indices referring to 448 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 | 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 | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 102 | 100 | 98 | 98 | 97 | 95 | 95 | 94 | 92 | 90 |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 86 | 84 | 82 |
| 3 | 100 | 92 | 87 | 82 | 98 | 91 | 86 | 82 | 88 | 84 | 80 | 85 | 82 | 79 | 83 | 80 | 77 | 76 |
| 4 | 94 | 86 | 80 | 75 | 92 | 85 | 79 | 75 | 82 | 77 | 74 | 80 | 76 | 73 | 78 | 75 | 72 | 70 |
| 5 | 89 | 80 | 74 | 69 | 88 | 79 | 73 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | 74 | 70 | 67 | 65 |
| 6 | 85 | 75 | 69 | 64 | 83 | 74 | 68 | 64 | 73 | 67 | 63 | 71 | 67 | 63 | 70 | 66 | 62 | 61 |
| 7 | 81 | 71 | 65 | 60 | 79 | 70 | 64 | 60 | 69 | 63 | 60 | 68 | 63 | 59 | 66 | 62 | 59 | 57 |
| 8 | 77 | 67 | 61 | 57 | 76 | 66 | 61 | 56 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 56 | 54 |
| 9 | 74 | 64 | 58 | 53 | 72 | 63 | 57 | 53 | 62 | 57 | 53 | 61 | 56 | 53 | 60 | 56 | 53 | 51 |
| 10 | 71 | 61 | 55 | 51 | 69 | 60 | 54 | 51 | 59 | 54 | 50 | 58 | 54 | 50 | 58 | 53 | 50 | 49 |

LAMPS (number of lamps)

Luminaire budgetary diagram



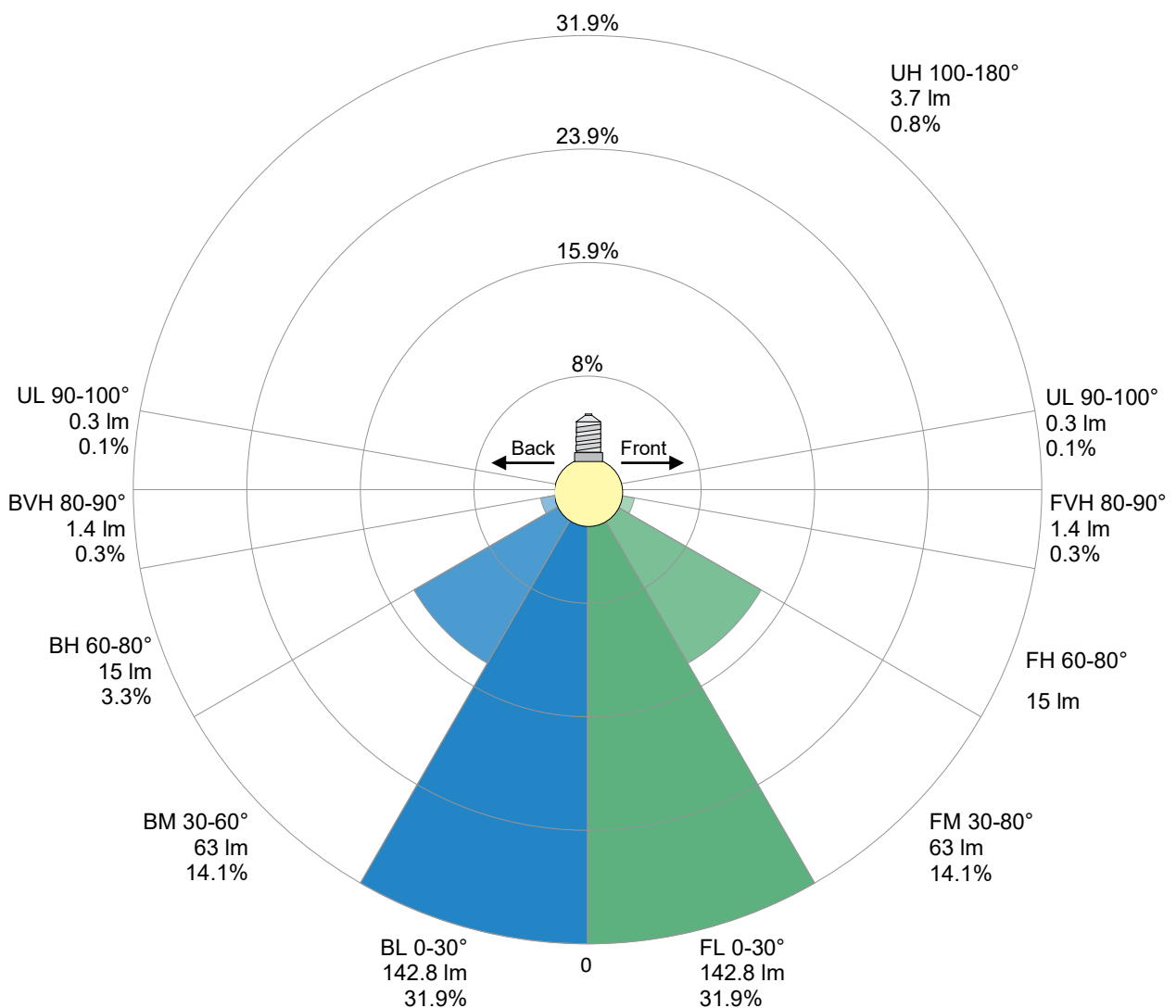
Zonal Lumen Summary

| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 71.0 lm | 125 lm | 89.8 lm | 58.9 lm | 39.2 lm | 27.9 lm | 19.6 lm | 10.4 lm | 2.66 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 0.253 lm | 0.333 lm | 0.217 lm | 0.473 lm | 0.667 lm | 0.761 lm | 0.672 lm | 0.443 lm | 0.175 lm |

LCS table

| BUG rating: | B1 U1 G0 | |
|-------------------|----------|----------|
| Forward light | Lumens | Lumens % |
| Low(0-30): | 142.8 | 31.9% |
| Medium(30-60): | 63 | 14.1% |
| High(60-80): | 15 | 3.3% |
| Very high(80-90): | 1.4 | 0.3% |
| Back light | | |
| Low(0-30): | 142.8 | 31.9% |
| Medium(30-60): | 63 | 14.1% |
| High(60-80): | 15 | 3.3% |
| Very high(80-90): | 1.4 | 0.3% |
| Uplight | | |
| Low(90-100): | 0.3 | 0.1% |
| High(100-180): | 3.7 | 0.8% |

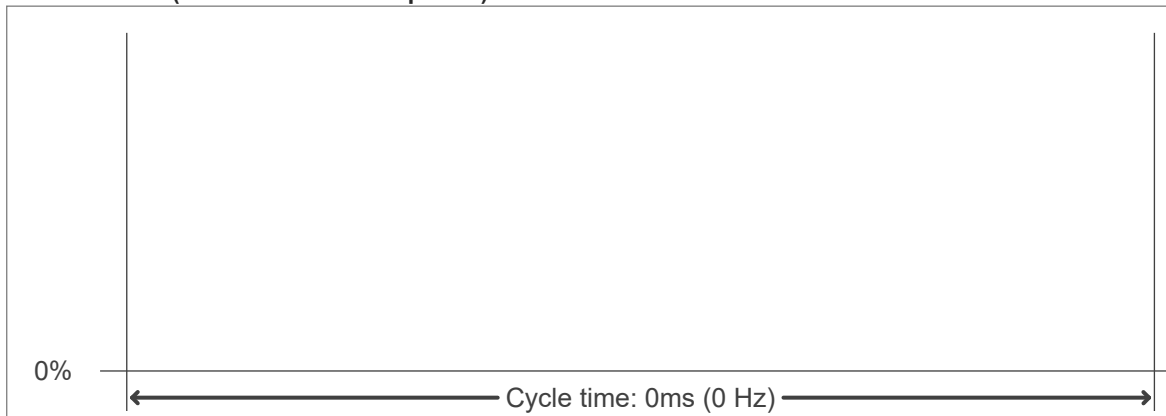
LCS graph



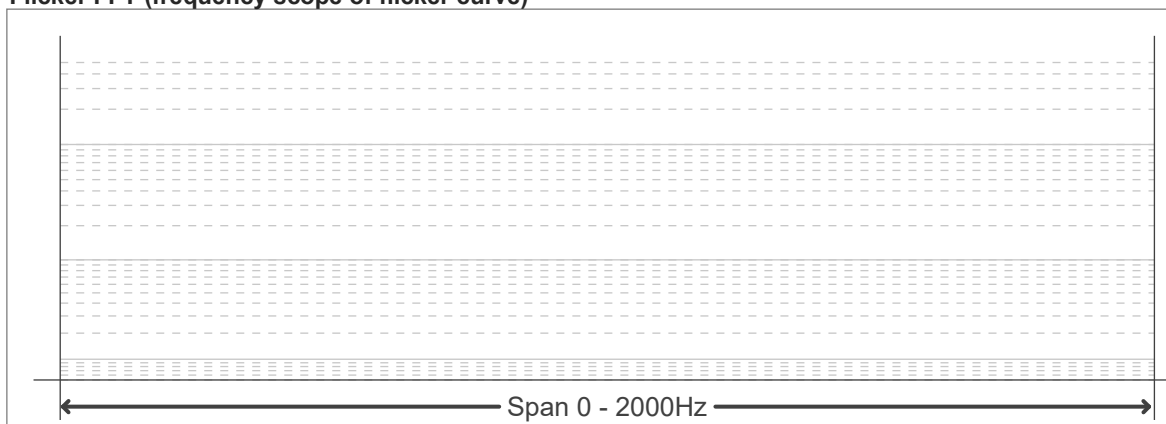
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

| Flicker frequency: | | n/a Hz | |
|-----------------------|-------|---------------|-------|
| Flicker index: | n/a | JA8/10 40Hz | n/a % |
| Flicker percentage: | n/a % | JA8/10 90Hz | n/a % |
| SVM: (Visual flicker) | n/a | JA8/10 200Hz | n/a % |
| PstLM | n/a | JA8/10 400Hz | n/a % |
| Mp | n/a | JA8/10 1000Hz | n/a % |

Flicker conditions:

| | |
|--------------|--------------------|
| Sample rate: | n/a samples/second |
|--------------|--------------------|