

Light efficiency:

74 Lumen/Watt

Light quality:

CRI: 91.8

Color temperature:

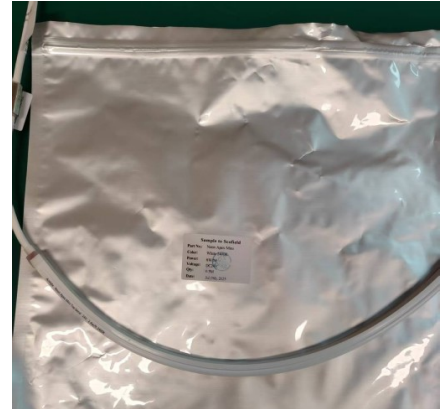
2376 K

Output: 313 lm

Peak: 105 cd

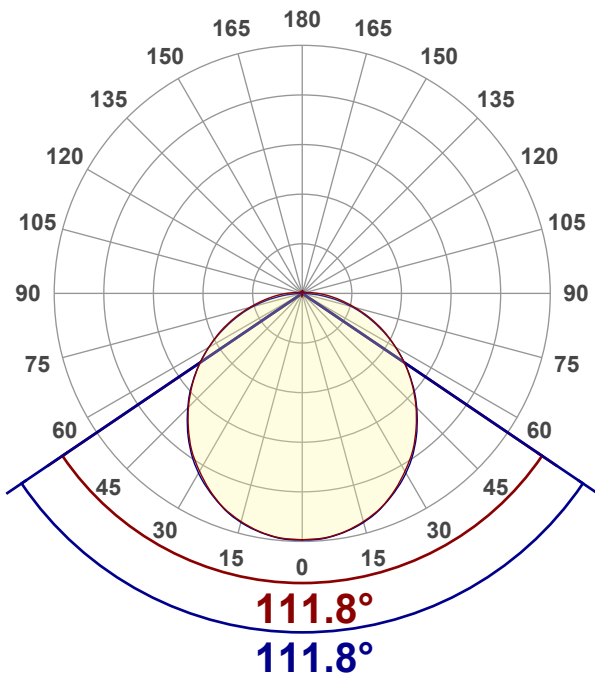
Power: 4.2 W

PF: 1.0



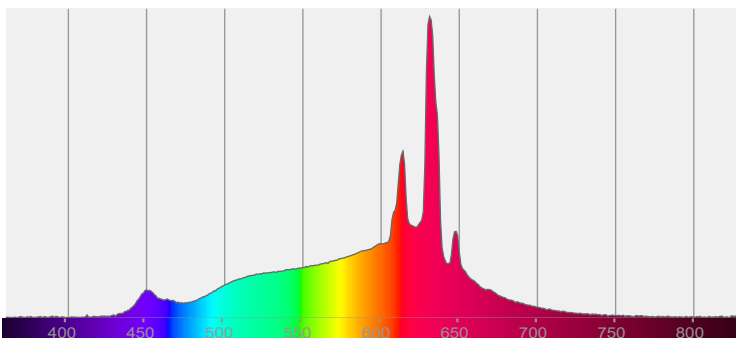
Output
625.7 lm/m
190.7 lm/ft

Power
8.4 W/m
2.6 W/ft



CIE 1931
x: 0.486
y: 0.410

Spectra: Peak wavelength :631
Dominant wavelength :587



Tracking number: [n/a](#)

Product name:
Neon Apex Mini 2400K

Item number:

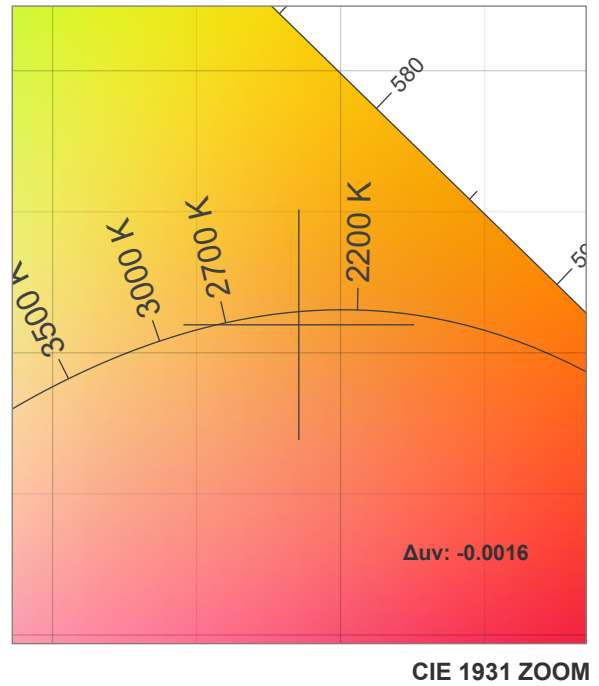
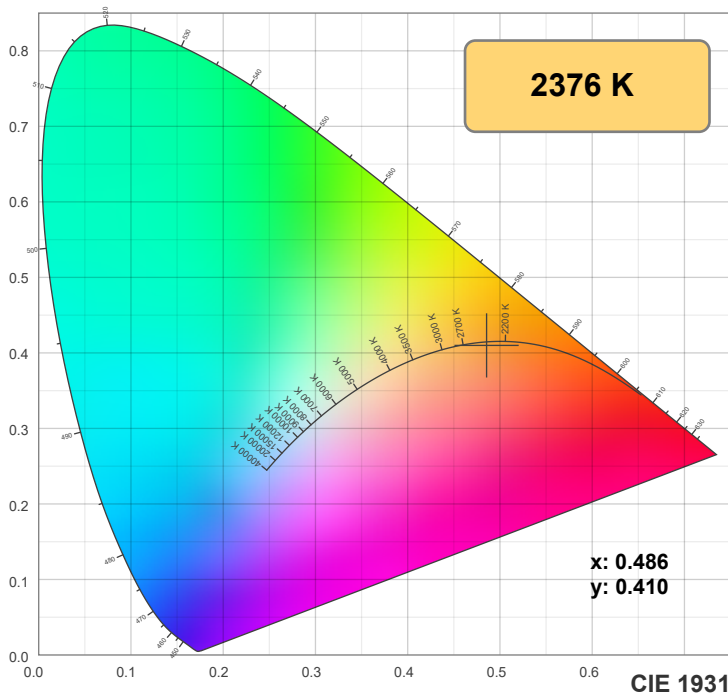
Date and time:
2025/8/5 14:53:33

Operator:
Michael

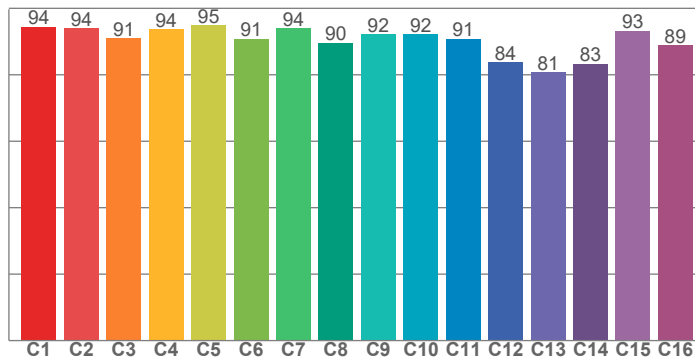
Description:
**color:white 2400K,
Power:8w/m,voltage:24V,length:0.5
m**

Power

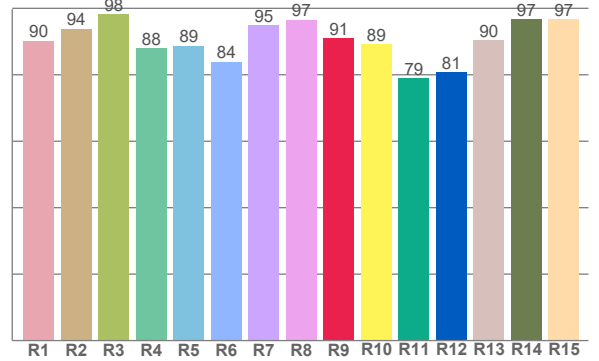
Voltage: 24.0 V
Current: 0.175 A
Frequency: 0 Hz



TM-30: 91.3



CRI: 91.8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90.3 | 93.9 | 98.3 | 87.9 | 88.7 | 84.0 | 95.0 | 96.6 | 91.0 | 89.3 | 79.0 | 80.8 | 90.3 | 96.8 | 96.7 |

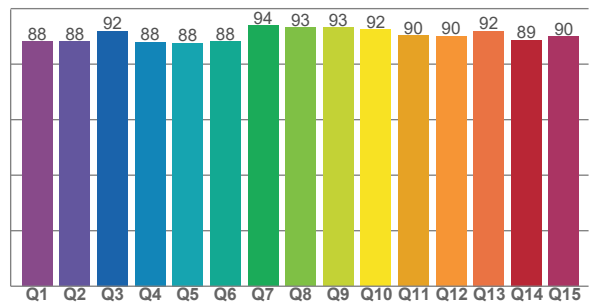
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94.4 | 94.0 | 90.9 | 93.8 | 94.9 | 90.9 | 94.0 | 89.6 | 92.1 | 92.2 | 90.8 | 83.8 | 80.7 | 83.4 | 93.2 | 88.9 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 88.2 | 88.2 | 92.0 | 88.0 | 87.6 | 88.2 | 93.8 | 93.2 | 93.3 | 92.4 | 90.2 | 90.1 | 91.9 | 88.7 | 90.0 |

CQS: 89.9



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 |
| 2376 K | 91.8 | 91.0 | 91.3 | 102.5 | 89.9 | 0.486 | 0.410 | 0.280 | 0.354 | -0.0016 |

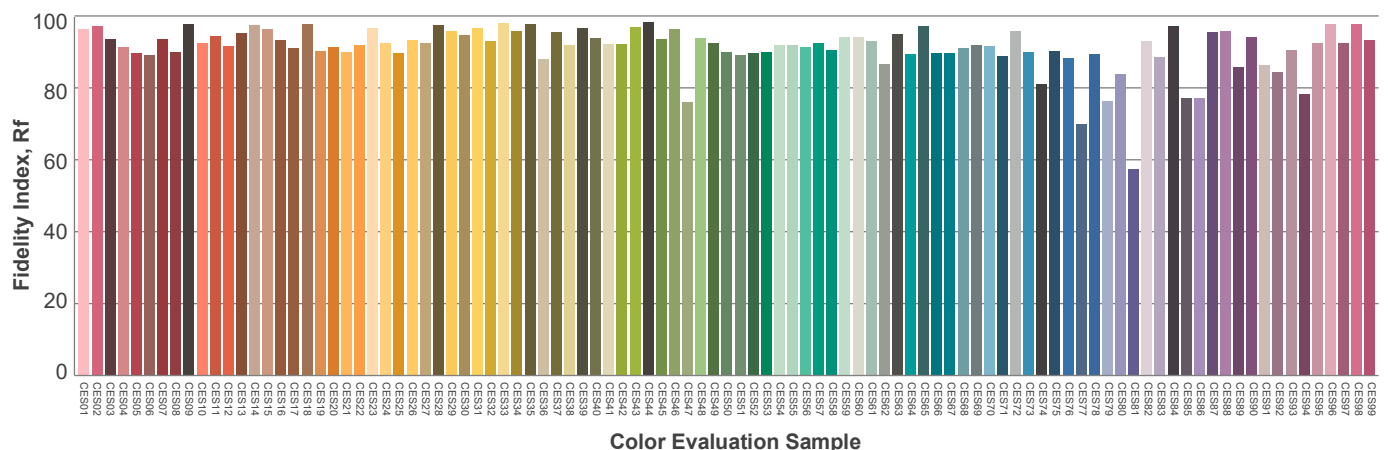
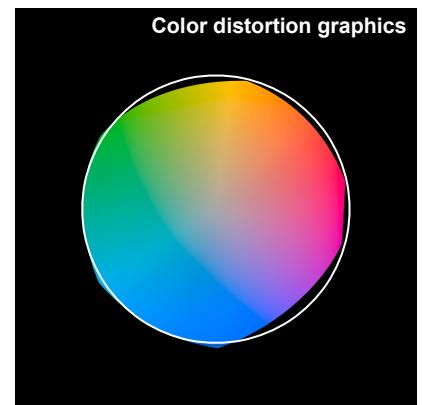
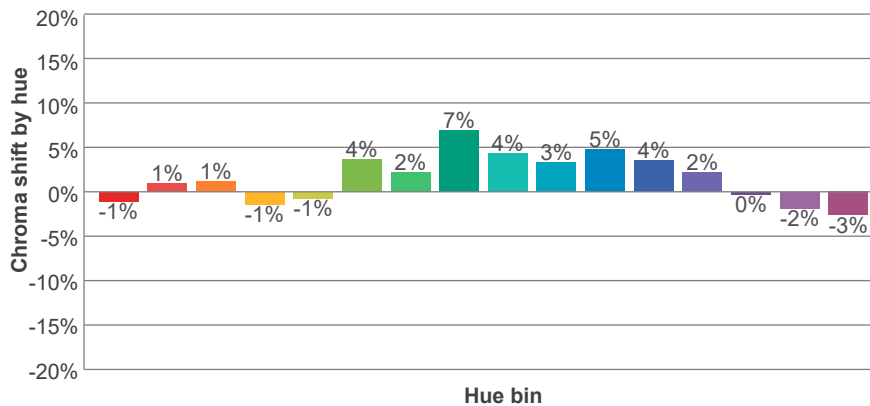
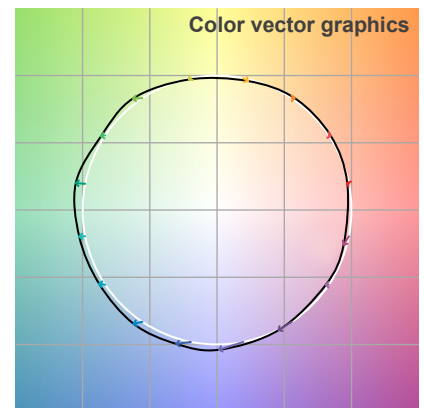
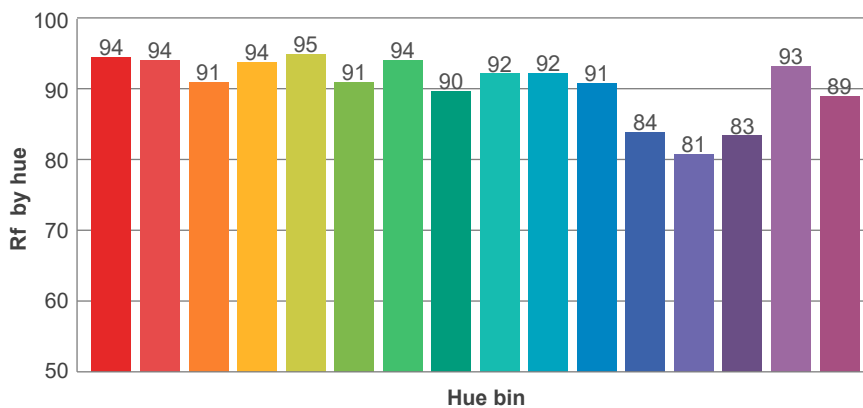
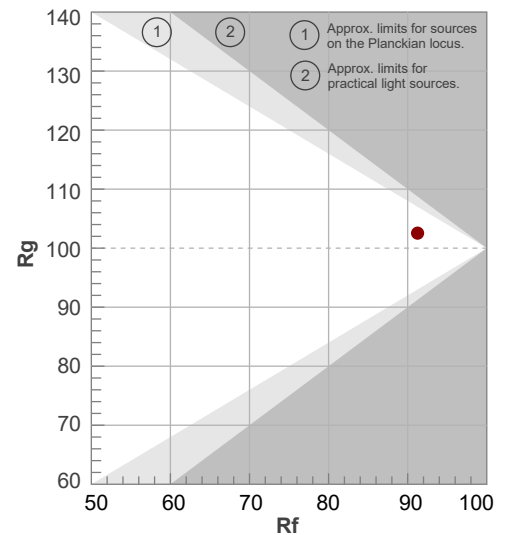
Rf 91.3

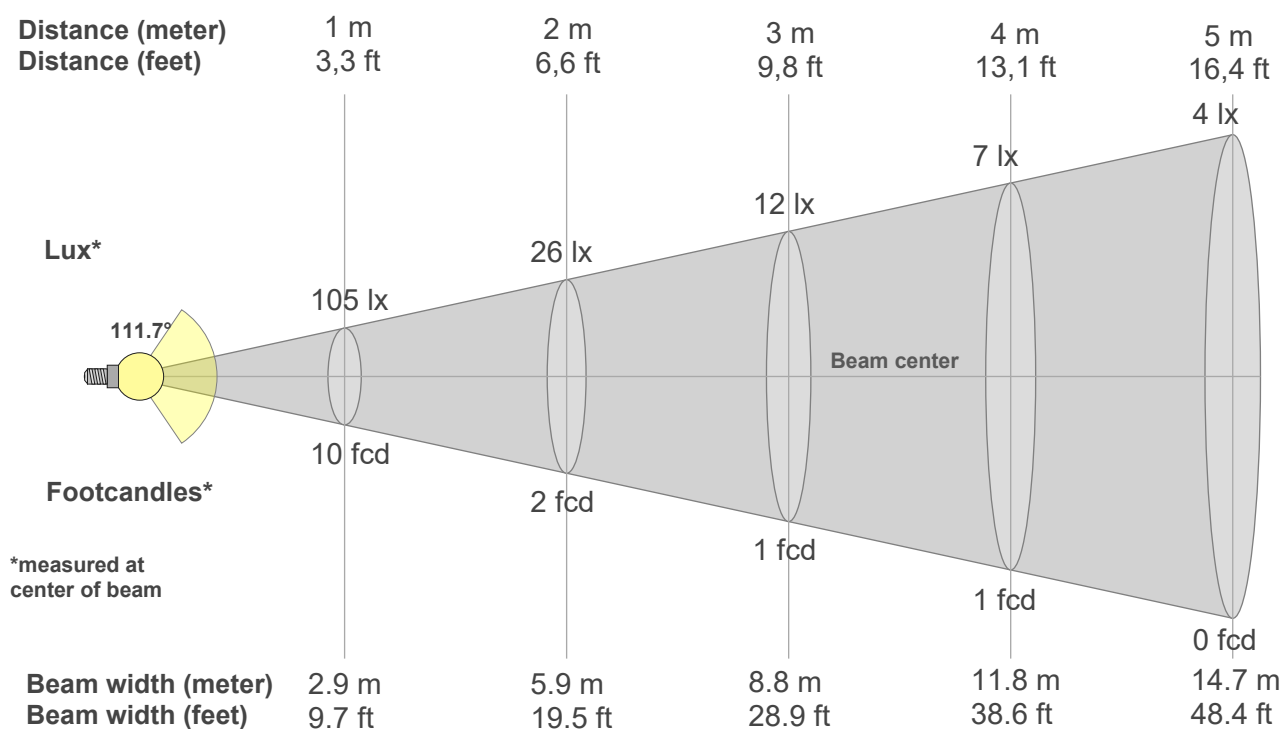
Fidelity index Rf

Rg 102.5

Gamut index Rg

| Hue Bin | R _f | Shifts (%) | |
|---------|----------------|------------|------|
| | | Chroma | Hue |
| 1 | 94 | -1% | 1% |
| 2 | 94 | 1% | -1% |
| 3 | 91 | 1% | -2% |
| 4 | 94 | -1% | -4% |
| 5 | 95 | -1% | 2% |
| 6 | 91 | 4% | 6% |
| 7 | 94 | 2% | 2% |
| 8 | 90 | 7% | 1% |
| 9 | 92 | 4% | -1% |
| 10 | 92 | 3% | -3% |
| 11 | 91 | 5% | -5% |
| 12 | 84 | 4% | -10% |
| 13 | 81 | 2% | -19% |
| 14 | 83 | 0% | -12% |
| 15 | 93 | -2% | -1% |
| 16 | 89 | -3% | -7% |





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 |
| 105lx | 26lx | 12lx | 7lx | 4lx | 3lx | 2lx | 2lx | 1lx | 1lx | 1lx | 1lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| 9.8fcd | 2.4fcd | 1.1fcd | 0.6fcd | 0.4fcd | 0.3fcd | 0.2fcd | 0.2fcd | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 105 | 105 | 103 | 101 | 98 | 93 | 88 | 82 | 76 | 69 | 61 | 54 | 46 | 39 | 31 | 23 | 17 | 11 | 7 | 4 |
| 100% | 100% | 98% | 96% | 93% | 88% | 83% | 78% | 72% | 65% | 58% | 51% | 44% | 37% | 29% | 22% | 16% | 11% | 6% | 3% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 105 | 105 | 103 | 101 | 98 | 93 | 88 | 83 | 76 | 69 | 62 | 54 | 46 | 38 | 30 | 22 | 14 | 6 | 1 | 0 |
| 100% | 100% | 98% | 96% | 93% | 89% | 84% | 79% | 72% | 66% | 59% | 51% | 44% | 36% | 28% | 21% | 13% | 6% | 1% | 0% |

Intensities in 180° c-plane

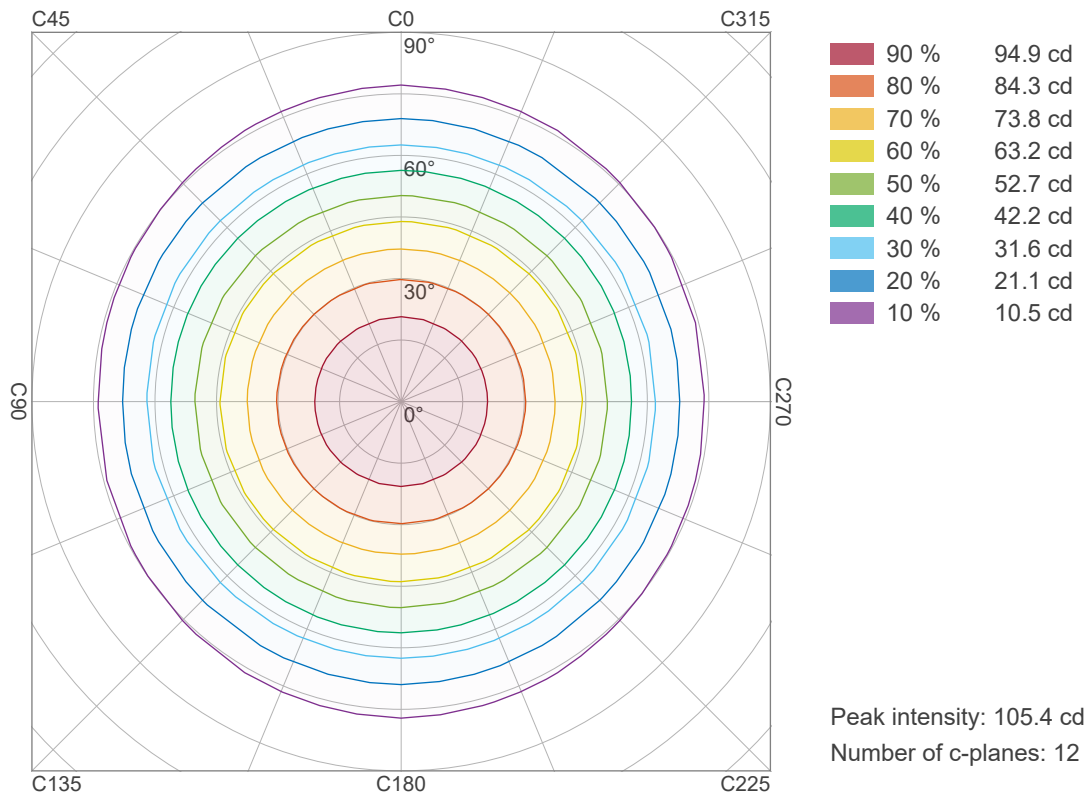
| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 105 | 105 | 103 | 101 | 98 | 93 | 88 | 82 | 76 | 69 | 61 | 54 | 46 | 39 | 31 | 23 | 17 | 11 | 7 | 4 |
| 100% | 100% | 98% | 96% | 93% | 88% | 83% | 78% | 72% | 65% | 58% | 51% | 44% | 37% | 29% | 22% | 16% | 11% | 6% | 3% |

Intensities in 270° c-plane

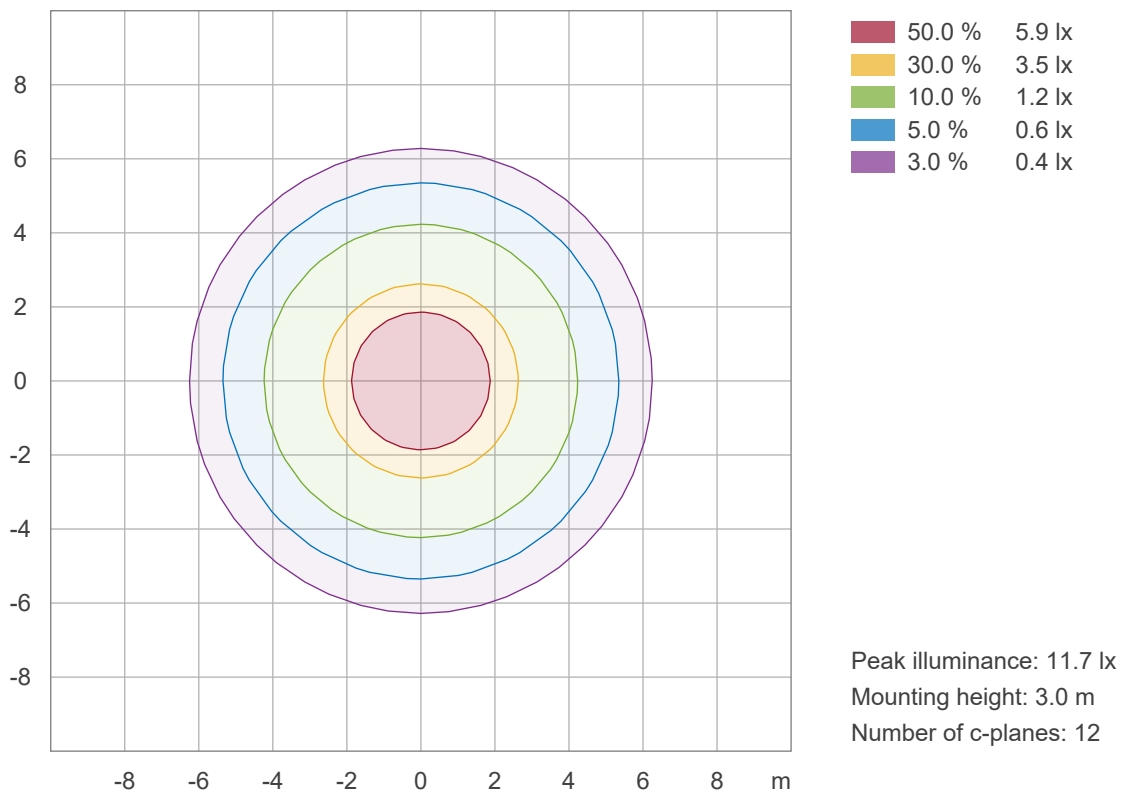
| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 105 | 105 | 103 | 101 | 98 | 93 | 88 | 83 | 76 | 69 | 62 | 54 | 46 | 38 | 30 | 22 | 14 | 6 | 1 | 0 |
| 100% | 100% | 98% | 96% | 93% | 89% | 84% | 79% | 72% | 66% | 59% | 51% | 44% | 36% | 28% | 21% | 13% | 6% | 1% | 0% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 111.7° | 167.8° | 187.5° | 75.0% | 51.1% |

Iso-candela diagram



Iso-lux diagram



Glare evaluation according to UGR

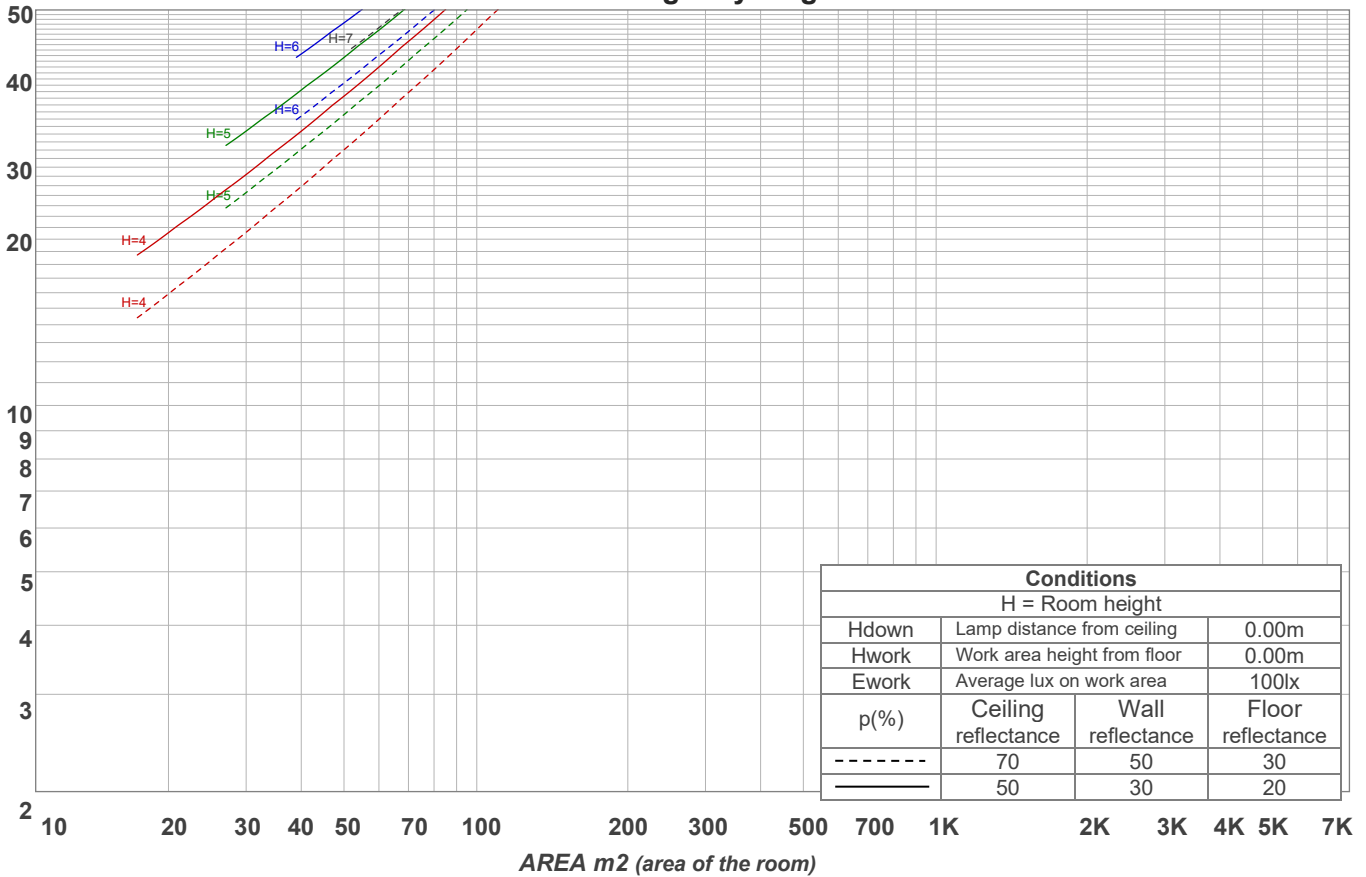
| | | | | | | | | | | | |
|---|-----|---|------|------|------|------|---|------|------|------|------|
| p Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| p Walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| p Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room size X Y | | Viewing direction at right angles to lamp axis | | | | | Viewing direction parallel to lamp axis | | | | |
| 2H | 2H | 17.9 | 19.2 | 18.2 | 19.5 | 19.8 | 19.6 | 20.8 | 19.9 | 21.2 | 21.4 |
| | 3H | 19.1 | 20.3 | 19.5 | 20.6 | 20.9 | 21.1 | 22.4 | 21.6 | 22.7 | 23.0 |
| | 4H | 19.5 | 20.7 | 20.0 | 21.0 | 21.3 | 21.8 | 23.0 | 22.2 | 23.3 | 23.6 |
| | 6H | 19.9 | 21.0 | 20.3 | 21.3 | 21.7 | 22.4 | 23.5 | 22.7 | 23.8 | 24.2 |
| | 8H | 20.0 | 21.1 | 20.4 | 21.4 | 21.9 | 22.6 | 23.6 | 22.9 | 23.9 | 24.4 |
| | 12H | 20.1 | 21.1 | 20.5 | 21.5 | 22.0 | 22.7 | 23.7 | 23.1 | 24.0 | 24.5 |
| 4H | 2H | 18.5 | 19.8 | 19.0 | 20.1 | 20.4 | 19.9 | 21.1 | 20.3 | 21.4 | 21.7 |
| | 3H | 20.0 | 21.0 | 20.4 | 21.3 | 21.8 | 21.7 | 22.7 | 22.1 | 23.0 | 23.5 |
| | 4H | 20.5 | 21.4 | 20.9 | 21.8 | 22.4 | 22.4 | 23.3 | 22.8 | 23.7 | 24.3 |
| | 6H | 20.9 | 21.8 | 21.4 | 22.2 | 22.6 | 23.0 | 23.9 | 23.5 | 24.3 | 24.7 |
| | 8H | 21.1 | 21.9 | 21.6 | 22.3 | 22.7 | 23.2 | 24.0 | 23.7 | 24.4 | 24.8 |
| | 12H | 21.2 | 21.9 | 21.7 | 22.3 | 22.8 | 23.4 | 24.0 | 23.9 | 24.5 | 25.0 |
| 8H | 4H | 20.7 | 21.5 | 21.3 | 22.0 | 22.4 | 22.5 | 23.3 | 23.0 | 23.7 | 24.1 |
| | 6H | 21.3 | 21.9 | 21.8 | 22.4 | 23.0 | 23.2 | 23.8 | 23.7 | 24.3 | 24.9 |
| | 8H | 21.6 | 22.1 | 22.1 | 22.7 | 23.3 | 23.5 | 24.0 | 24.0 | 24.6 | 25.3 |
| | 12H | 21.8 | 22.2 | 22.4 | 22.8 | 23.4 | 23.7 | 24.2 | 24.3 | 24.7 | 25.3 |
| 12H | 4H | 20.8 | 21.4 | 21.3 | 21.9 | 22.4 | 22.5 | 23.1 | 23.0 | 23.6 | 24.1 |
| | 6H | 21.4 | 21.9 | 21.9 | 22.5 | 23.2 | 23.2 | 23.8 | 23.8 | 24.3 | 25.0 |
| | 8H | 21.7 | 22.1 | 22.3 | 22.7 | 23.3 | 23.5 | 24.0 | 24.1 | 24.5 | 25.2 |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | | |
| S = 1.0H | | 0.1 / -0.2 | | | | | 0.1 / -0.1 | | | | |
| S = 1.5H | | 0.2 / -0.4 | | | | | 0.4 / -0.4 | | | | |
| S = 2.0H | | 0.5 / -0.7 | | | | | 0.9 / -0.9 | | | | |
| CIE 117-1995. Corrected glare indices referring to 313 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 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 95 | 92 | 89 | 91 | 88 | 86 | 87 | 85 | 83 | 81 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 78 | 73 | 79 | 75 | 71 | 76 | 72 | 69 | 67 |
| 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 | 65 | 57 | 52 | 62 | 56 | 51 | 60 | 54 | 50 | 48 |
| 5 | 75 | 62 | 52 | 46 | 72 | 60 | 52 | 45 | 58 | 50 | 45 | 56 | 49 | 44 | 54 | 48 | 43 | 41 |
| 6 | 69 | 55 | 46 | 40 | 67 | 54 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 44 | 38 | 34 | 32 |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 42 | 35 | 30 | 41 | 35 | 30 | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 25 |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 31 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

LAMPS (number of lamps)

Luminaire budgetary diagram



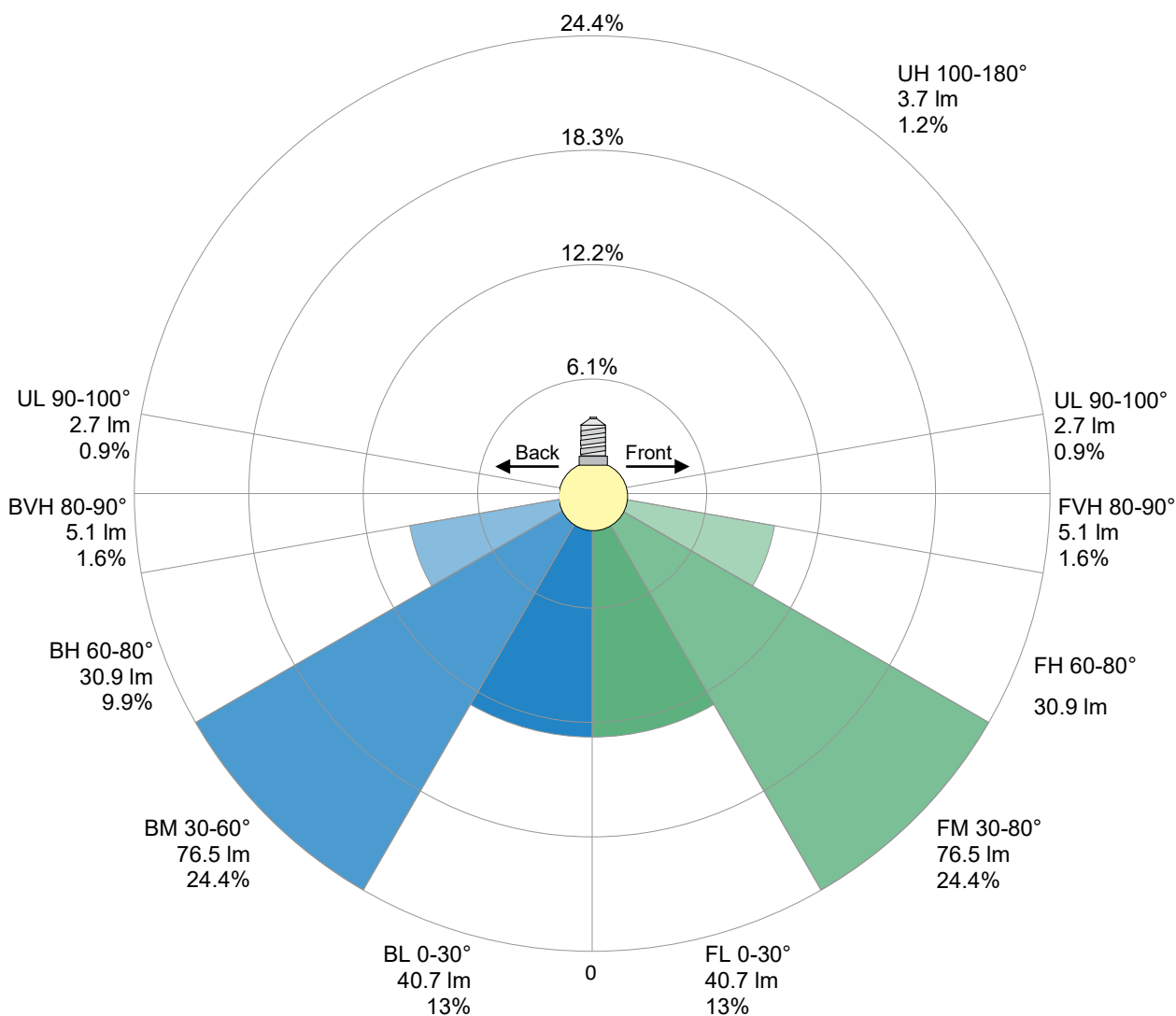
Zonal Lumen Summary

| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 9.97 lm | 28.5 lm | 43.0 lm | 51.5 lm | 53.2 lm | 48.3 lm | 37.9 lm | 24.0 lm | 10.1 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 2.62 lm | 1.14 lm | 0.827 lm | 0.626 lm | 0.442 lm | 0.310 lm | 0.212 lm | 0.129 lm | 0.047 lm |

LCS table

| BUG rating: | B0 U1 G0 | |
|-------------------|----------|----------|
| Forward light | Lumens | Lumens % |
| Low(0-30): | 40.7 | 13% |
| Medium(30-60): | 76.5 | 24.4% |
| High(60-80): | 30.9 | 9.9% |
| Very high(80-90): | 5.1 | 1.6% |
| Back light | | |
| Low(0-30): | 40.7 | 13% |
| Medium(30-60): | 76.5 | 24.4% |
| High(60-80): | 30.9 | 9.9% |
| Very high(80-90): | 5.1 | 1.6% |
| Uplight | | |
| Low(90-100): | 2.7 | 0.9% |
| High(100-180): | 3.7 | 1.2% |

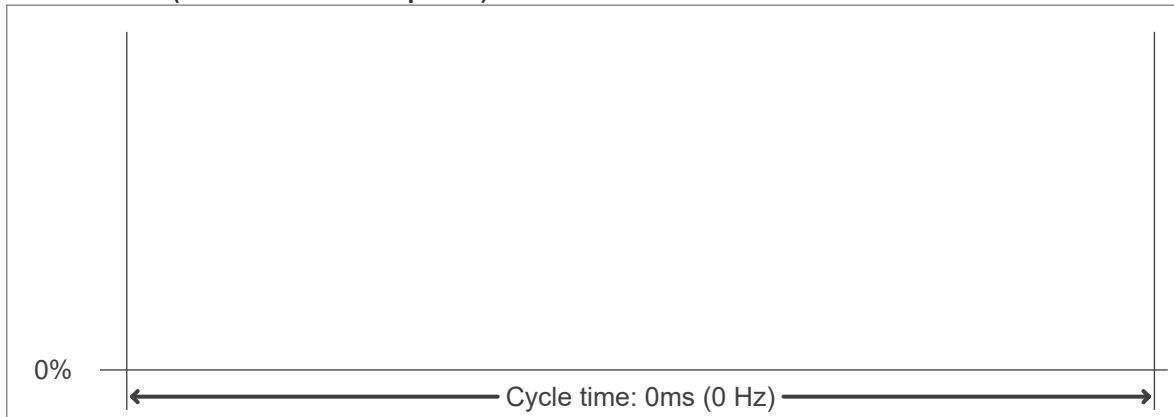
LCS graph



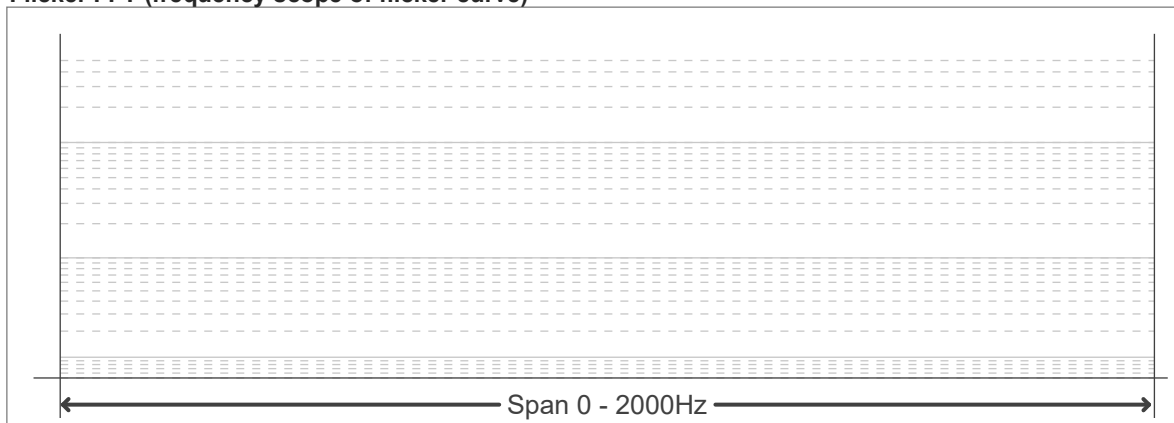
Flicker curve (complete sampled flicker signal)



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