

Light efficiency:



Light quality:



Color temperature:



Output: 1251 lm

Peak: 3043 cd

Power: 18.3 W

PF: 0.90



Product name:

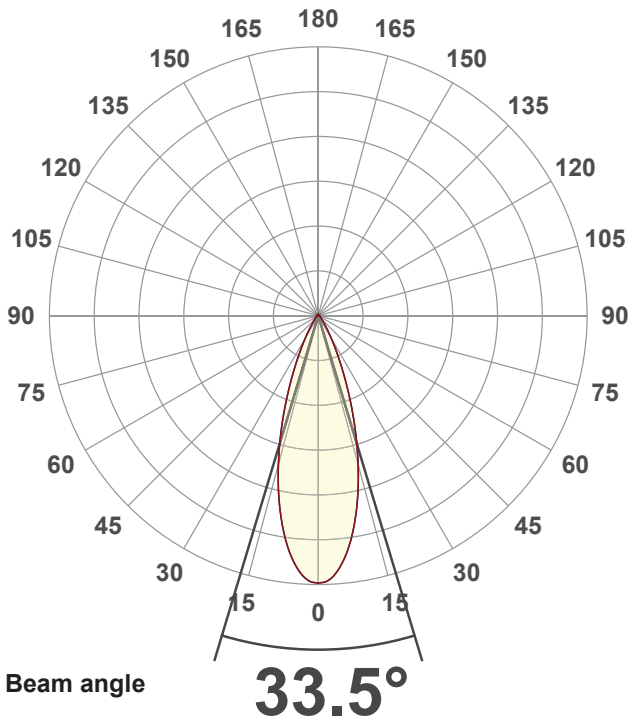
SORAA VIVID PAR30S

Item number:

SP30SW-18-36D-940-03-S3

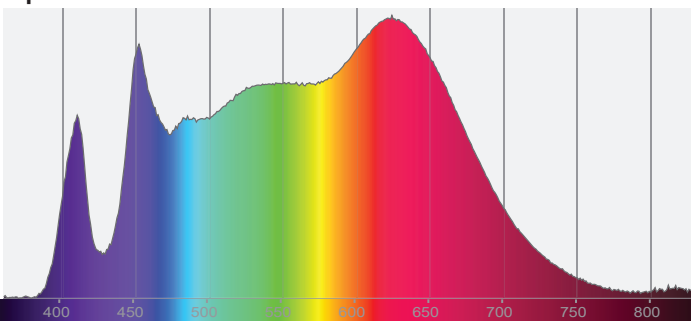
Date and time:

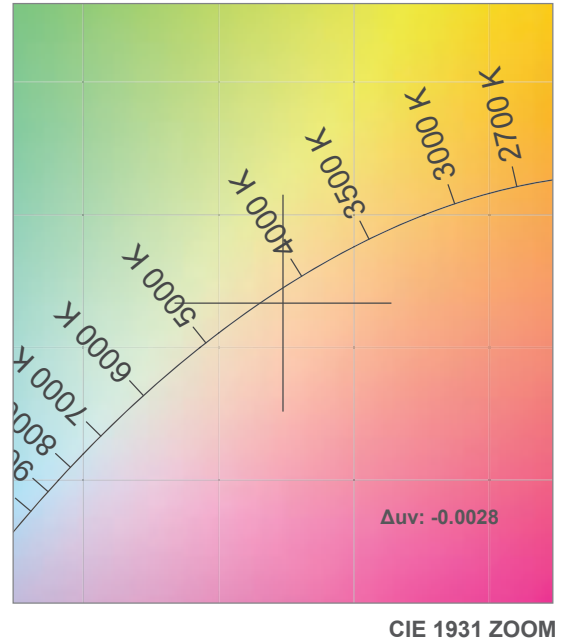
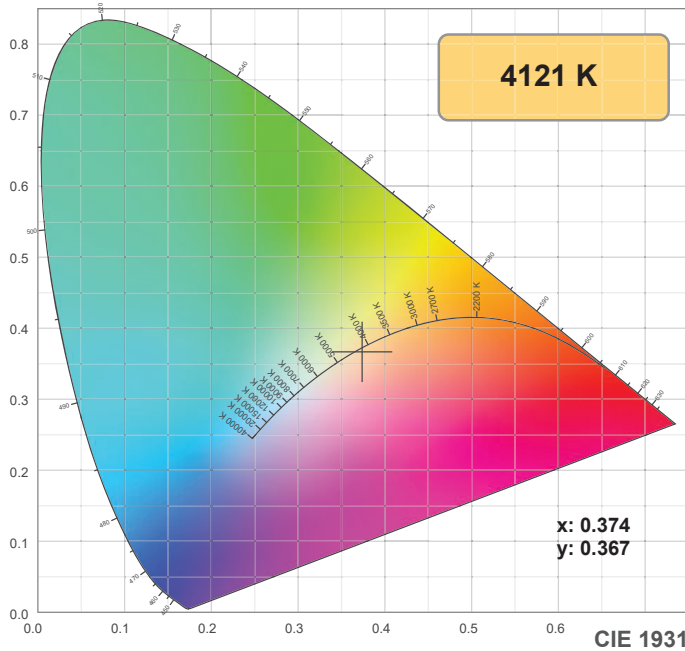
5/4/2021 2:01:12 PM



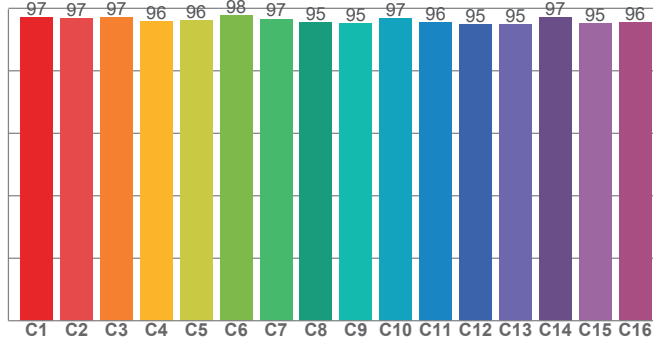
CIE 1931
x: 0.374
y: 0.367

Spectra

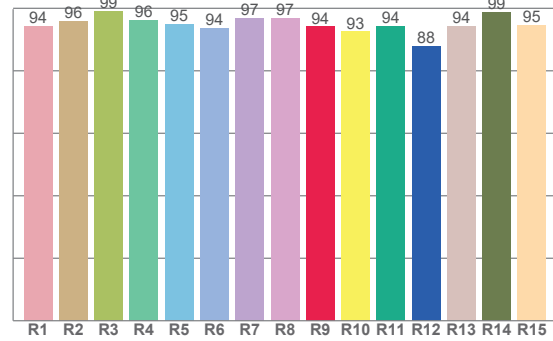




TM30: 96.2



CRI: 95.9 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94.3 | 95.7 | 99.1 | 96.0 | 94.9 | 93.6 | 97.0 | 96.9 | 94.1 | 92.5 | 94.2 | 87.9 | 94.2 | 98.9 | 94.6 |

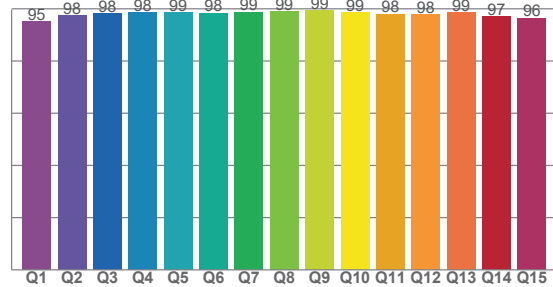
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 97.2 | 96.9 | 97.0 | 95.9 | 96.2 | 97.7 | 96.6 | 95.5 | 95.2 | 96.9 | 95.5 | 95.0 | 95.0 | 97.0 | 95.2 | 95.6 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95.1 | 97.5 | 98.2 | 98.5 | 98.6 | 98.4 | 98.7 | 98.8 | 99.3 | 98.6 | 98.0 | 97.7 | 98.6 | 97.1 | 96.5 |

CQS: 97.7



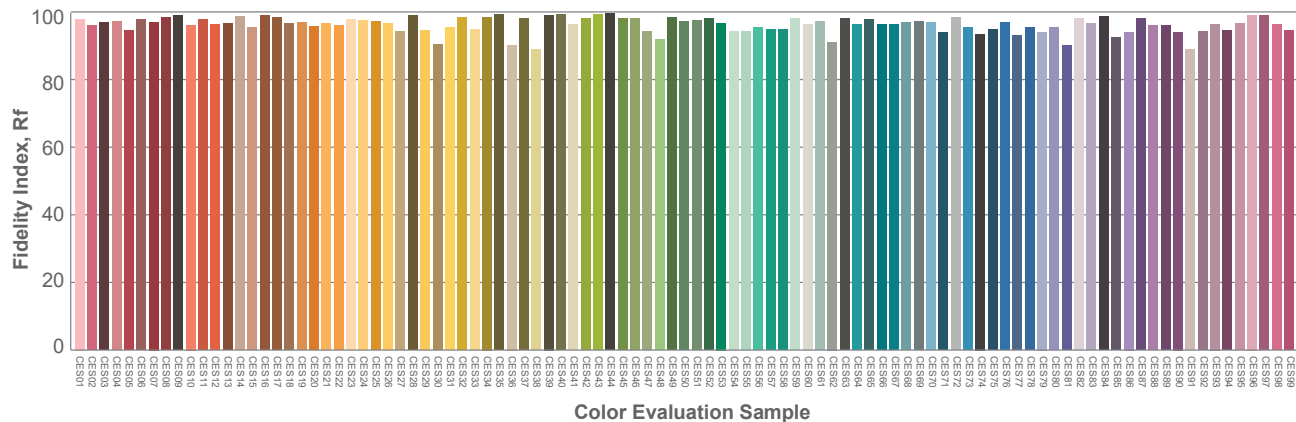
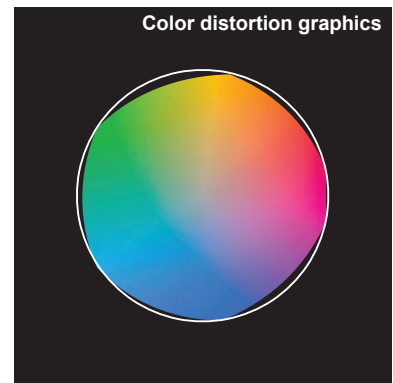
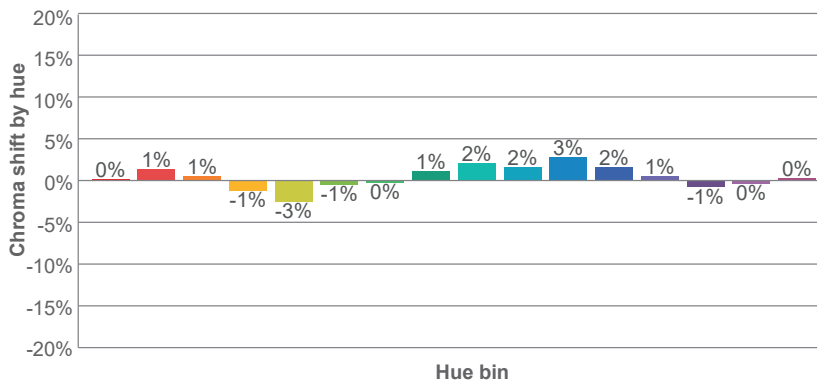
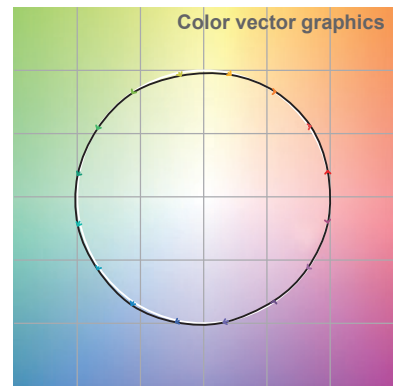
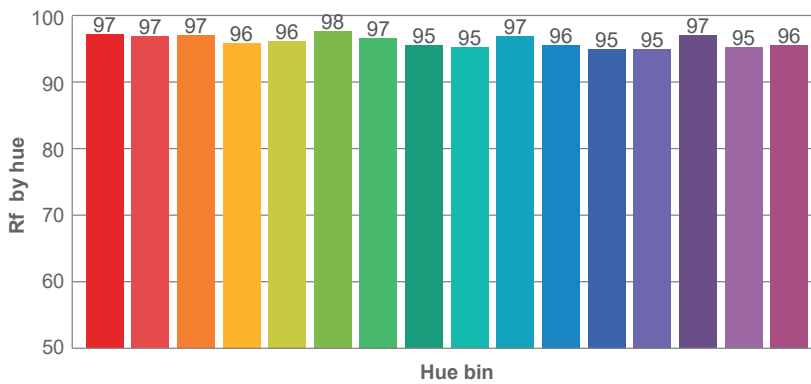
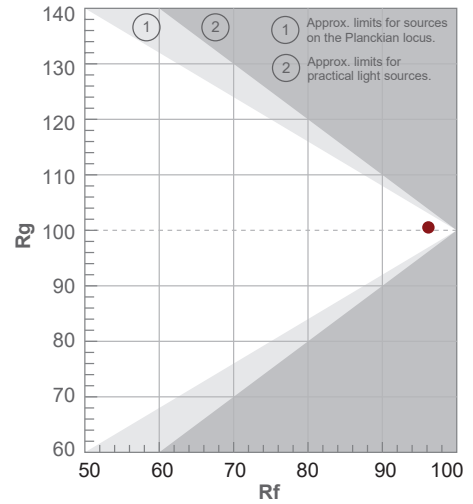
Color parameters

| 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 |
| 4121 K | 95.9 | 94.1 | 96.2 | 100.5 | 97.7 | 0.374 | 0.367 | 0.225 | 0.331 | -0.0028 |

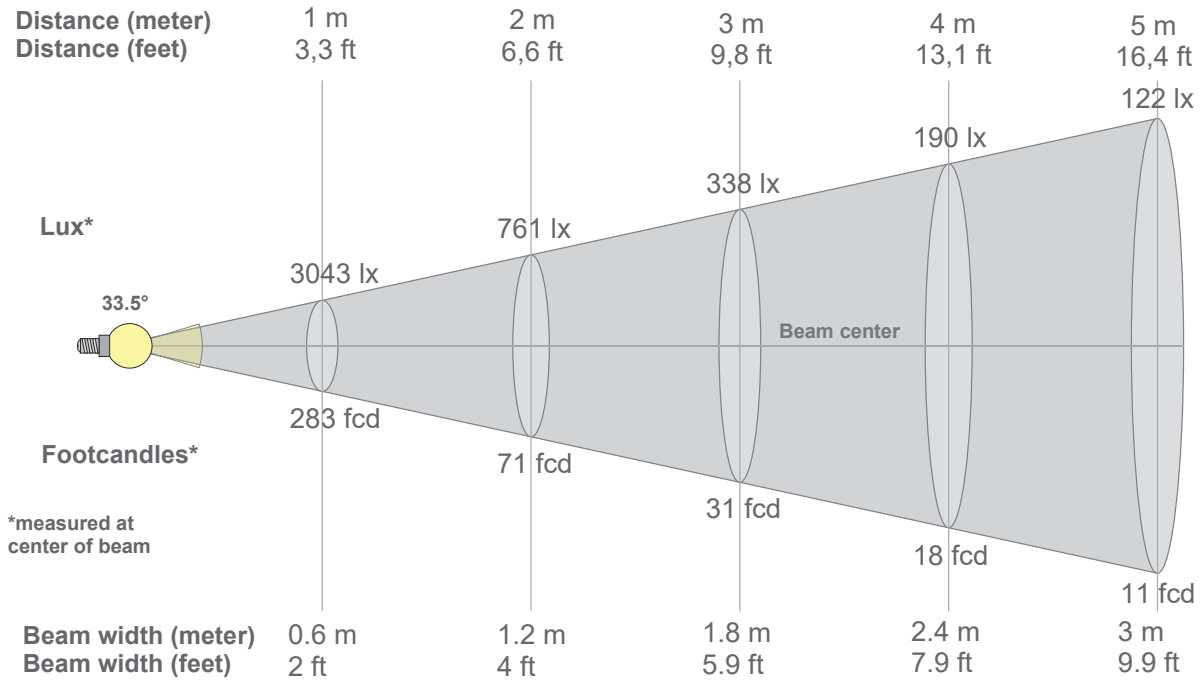
Rf 96.2
Fidelity index Rf

Rg 100.5
Gammut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 1% |
| 2 | 97 | 1% | -1% |
| 3 | 97 | 1% | -1% |
| 4 | 96 | -1% | -2% |
| 5 | 96 | -3% | -1% |
| 6 | 98 | -1% | 1% |
| 7 | 97 | 0% | 2% |
| 8 | 95 | 1% | 3% |
| 9 | 95 | 2% | 3% |
| 10 | 97 | 2% | 1% |
| 11 | 96 | 3% | 0% |
| 12 | 95 | 2% | -2% |
| 13 | 95 | 1% | -4% |
| 14 | 97 | -1% | 1% |
| 15 | 95 | 0% | -1% |
| 16 | 96 | 0% | -1% |



Beam details



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 |
| 3043lx | 761lx | 338lx | 190lx | 122lx | 85lx | 62lx | 48lx | 38lx | 30lx | 25lx | 21lx | 18lx | 16lx | 14lx | 12lx | 11lx | 9lx | 8lx | 8lx |
| 282.7fcd | 70.7fcd | 31.4fcd | 17.7fcd | 11.3fcd | 7.9fcd | 5.8fcd | 4.4fcd | 3.5fcd | 2.8fcd | 2.3fcd | 2fcd | 1.7fcd | 1.4fcd | 1.3fcd | 1.1fcd | 1fcd | 0.9fcd | 0.8fcd | 0.7fcd |

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° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3043 | 3019 | 2931 | 2792 | 2607 | 2387 | 2147 | 1886 | 1621 | 1361 | 1112 | 881 | 684 | 523 | 393 | 294 | 220 | 165 | 127 | 101 |
| 100% | 99% | 96% | 92% | 86% | 78% | 71% | 62% | 53% | 45% | 37% | 29% | 22% | 17% | 13% | 10% | 7% | 5% | 4% | 3% |

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° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3043 | 3019 | 2931 | 2792 | 2607 | 2387 | 2147 | 1886 | 1621 | 1361 | 1112 | 881 | 684 | 523 | 393 | 294 | 220 | 165 | 127 | 101 |
| 100% | 99% | 96% | 92% | 86% | 78% | 71% | 62% | 53% | 45% | 37% | 29% | 22% | 17% | 13% | 10% | 7% | 5% | 4% | 3% |

Intensities in 180° c-plane

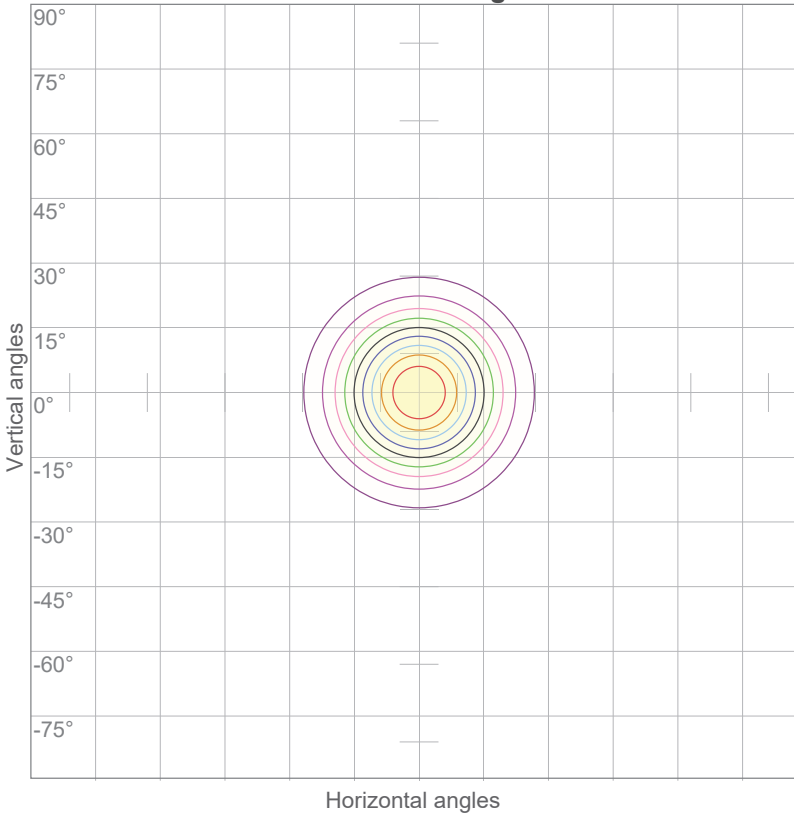
| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3043 | 3019 | 2931 | 2792 | 2607 | 2387 | 2147 | 1886 | 1621 | 1361 | 1112 | 881 | 684 | 523 | 393 | 294 | 220 | 165 | 127 | 101 |
| 100% | 99% | 96% | 92% | 86% | 78% | 71% | 62% | 53% | 45% | 37% | 29% | 22% | 17% | 13% | 10% | 7% | 5% | 4% | 3% |

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° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3043 | 3019 | 2931 | 2792 | 2607 | 2387 | 2147 | 1886 | 1621 | 1361 | 1112 | 881 | 684 | 523 | 393 | 294 | 220 | 165 | 127 | 101 |
| 100% | 99% | 96% | 92% | 86% | 78% | 71% | 62% | 53% | 45% | 37% | 29% | 22% | 17% | 13% | 10% | 7% | 5% | 4% | 3% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 33.5° | 59.5° | 81.7° | 95.6% | 91.0% |

ISO candela diagram

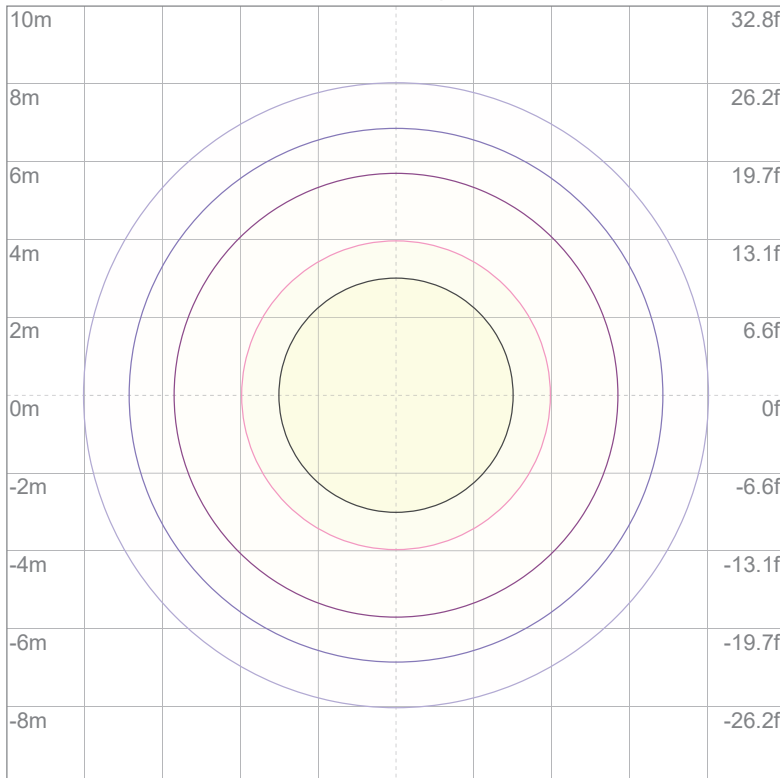


| | |
|-----|---------|
| 10% | 304 cd |
| 20% | 609 cd |
| 30% | 913 cd |
| 40% | 1217 cd |
| 50% | 1522 cd |
| 60% | 1826 cd |
| 70% | 2130 cd |
| 80% | 2434 cd |
| 90% | 2739 cd |

Conditions:

Number of c-planes: 16
Candela at center: 3043 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0.913 lx |
| 5% | 1.52 lx |
| 10% | 3.04 lx |
| 30% | 9.13 lx |
| 50% | 15.2 lx |

Conditions:

Number of c-planes: 16
Lux at center: 30.4 lx

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