

General Specificitaions:

Total Fixture Output: 9.2 klm

Light Engine Output: 31.5 klm

Efficacy: 16 Lumen/Watt

Lens Option: N/A

Zoomrange: 12-48°

CRI: 90+

CQS: 90+

TM-30 Rf: 90+

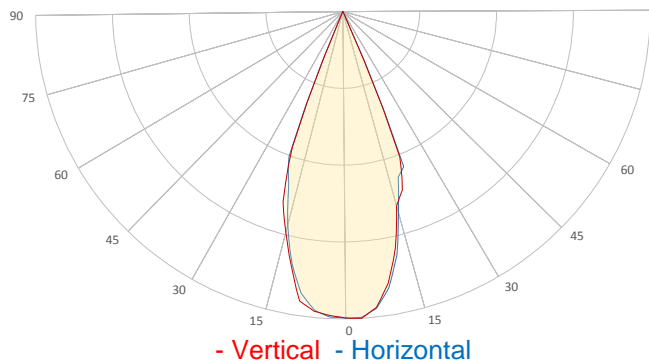
TM-30 Rg: 98+

TLCI: 90+

Color Temperature: 3000 K



Measurement



Catalog Number: 90234015

Measured Output: 9141 lm

Measured Peak: 27170 cd

Consumed Power: 582 W

Efficacy: 15.7 Lumen/Watt

Beam Angle (50%): 41.9°

Field Angle (10%): 46.8°

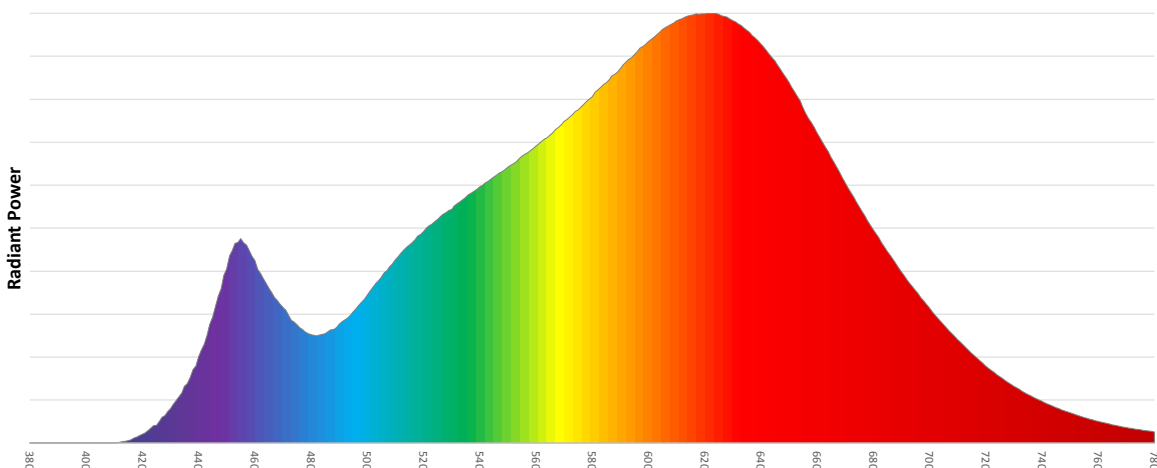
Cutoff Angle (3%): 47.7°

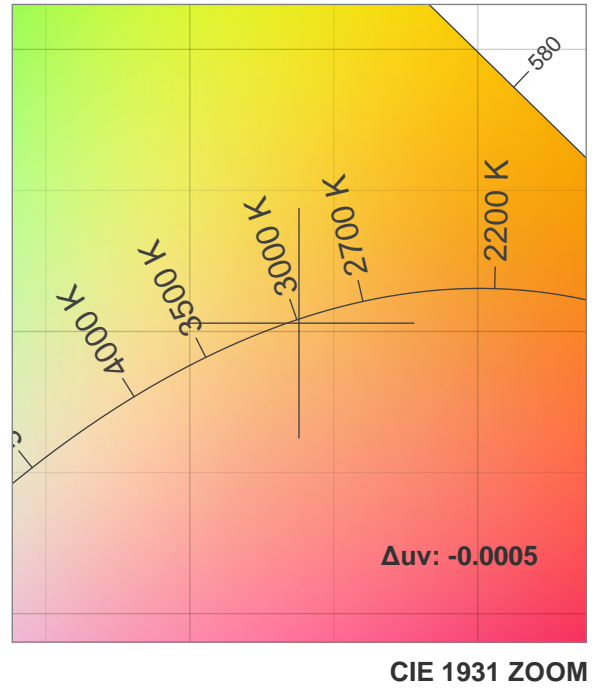
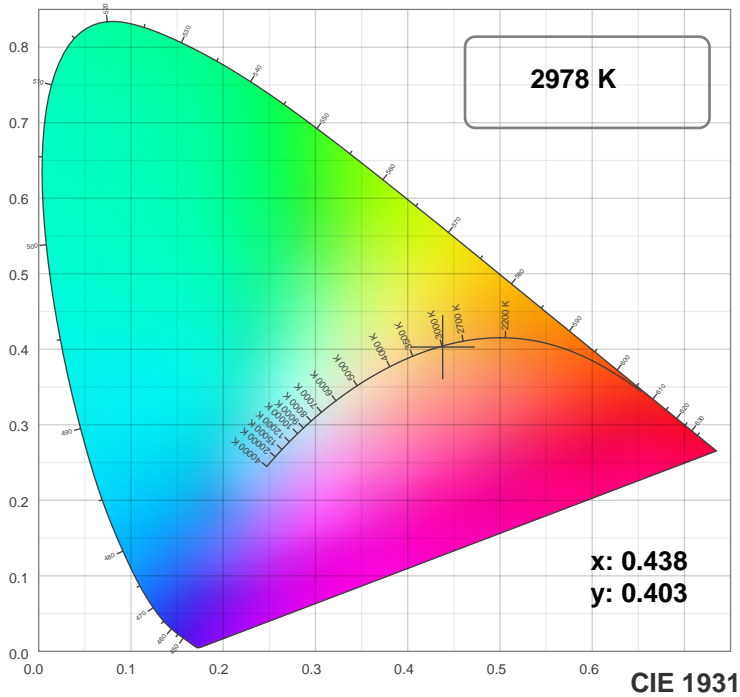
Measurement Condition:

Ambient Temperature: 25 +/- 5C

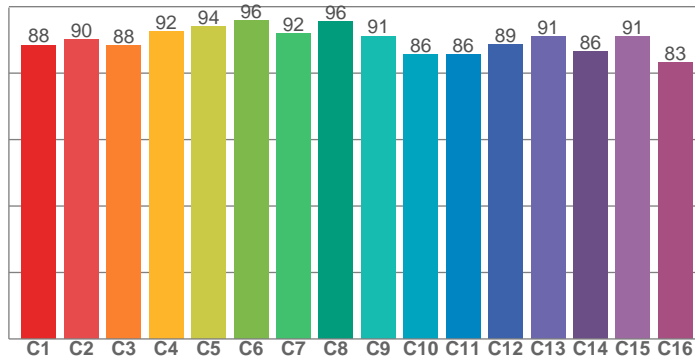
AC Supply: 230V/50Hz

Spectral distribution

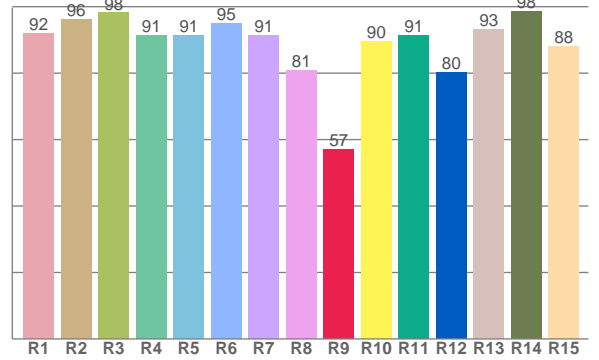




TM30: 89.8



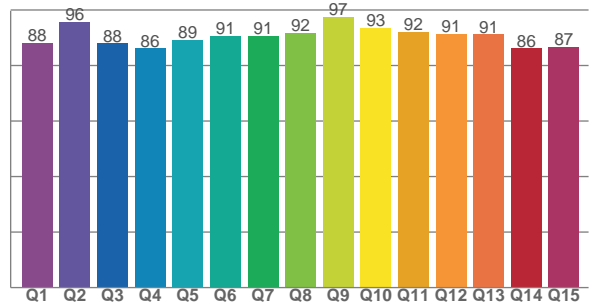
CRI: 92.0 (R1-R8)



Color Parameters

| Color Temperature | Color Rendering Index | Red Component | Color Fidelity | Color Gamut |
|-------------------|-----------------------|---------------|----------------|-------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg |
| 2978 K | 92.0 | 56.9 | 89.8 | 98.3 |

CQS: 89.9



| Television Lighting Consistency Index | Color Quality Scale | Color Coordinate CIE 1931 | Color Coordinate CIE 1931 | Color Coordinate CIE 1964 | Color Coordinate CIE 1964 | Color Diviation from Black Body |
|---------------------------------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| TLCI | CQS | x | y | u | v | Δuv |
| 90+ | 89.9 | 0.438 | 0.403 | 0.252 | 0.347 | -0.0005 |

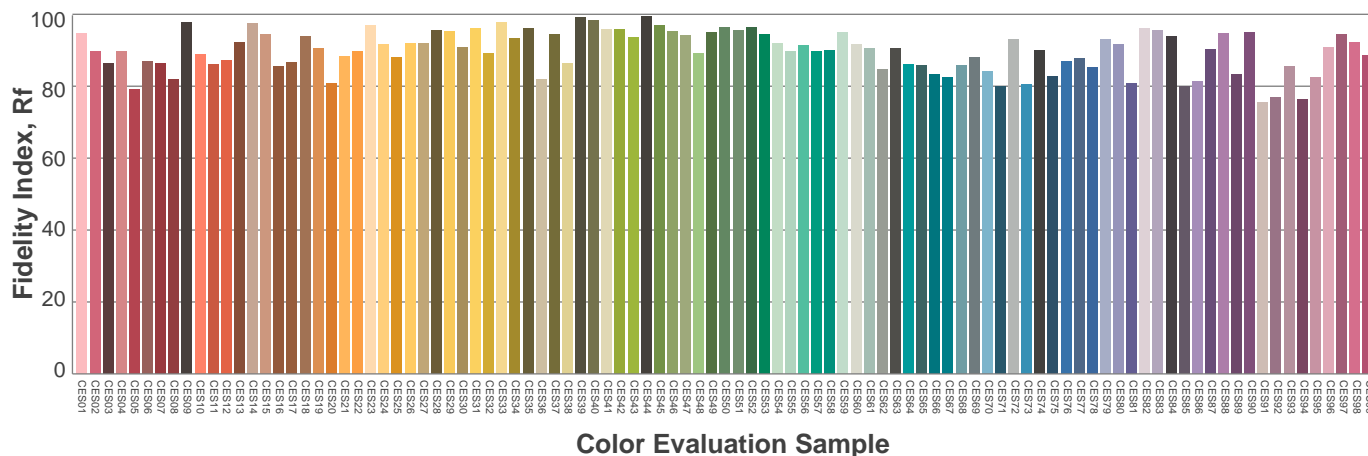
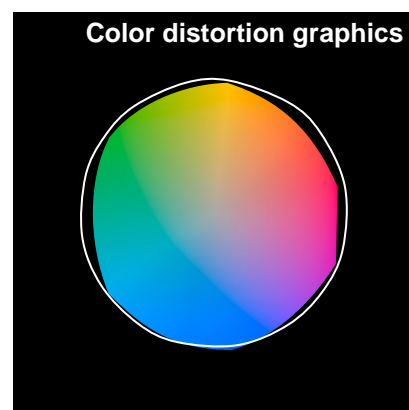
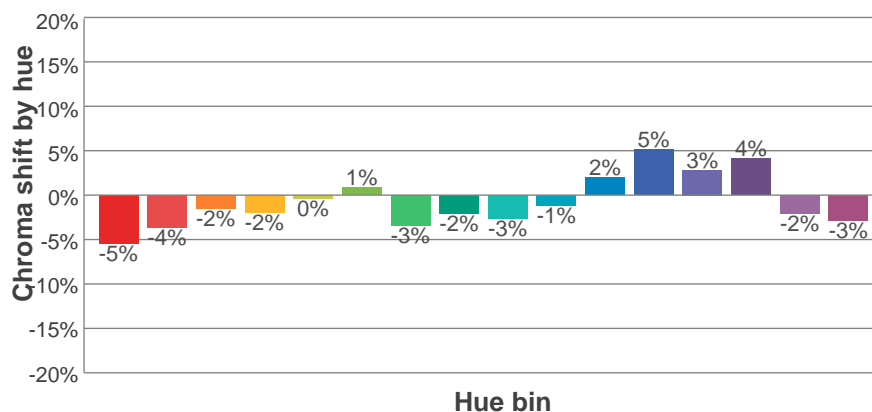
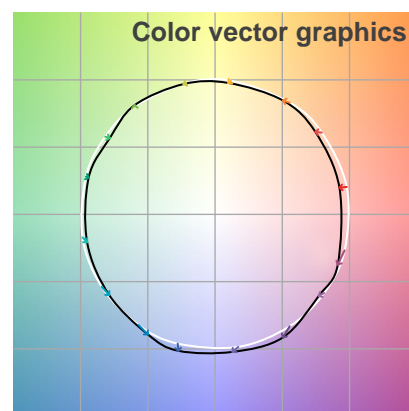
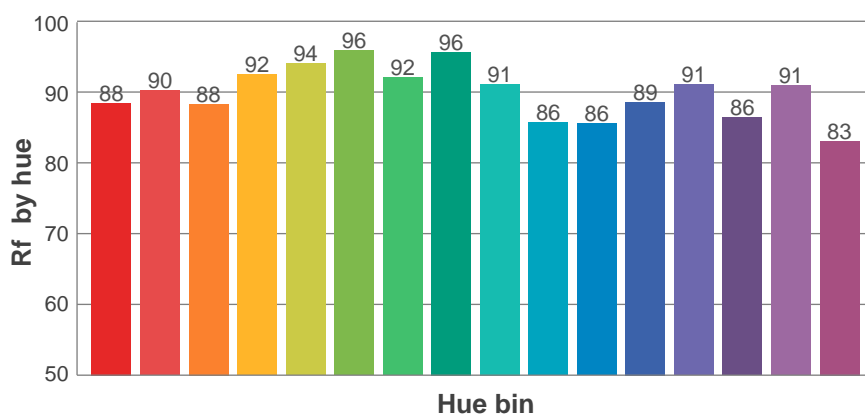
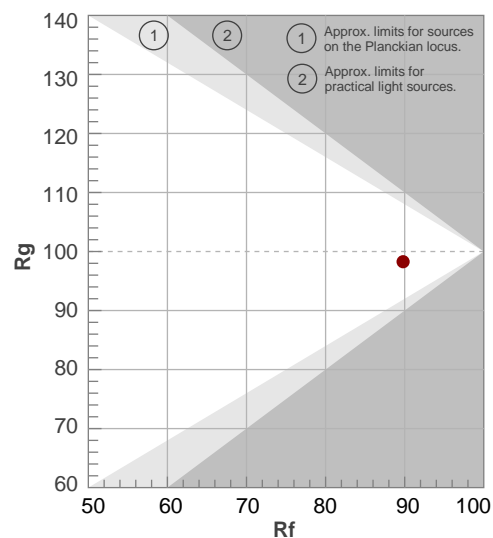
Rf 89.8

Fidelity index Rf

Rg 98.3

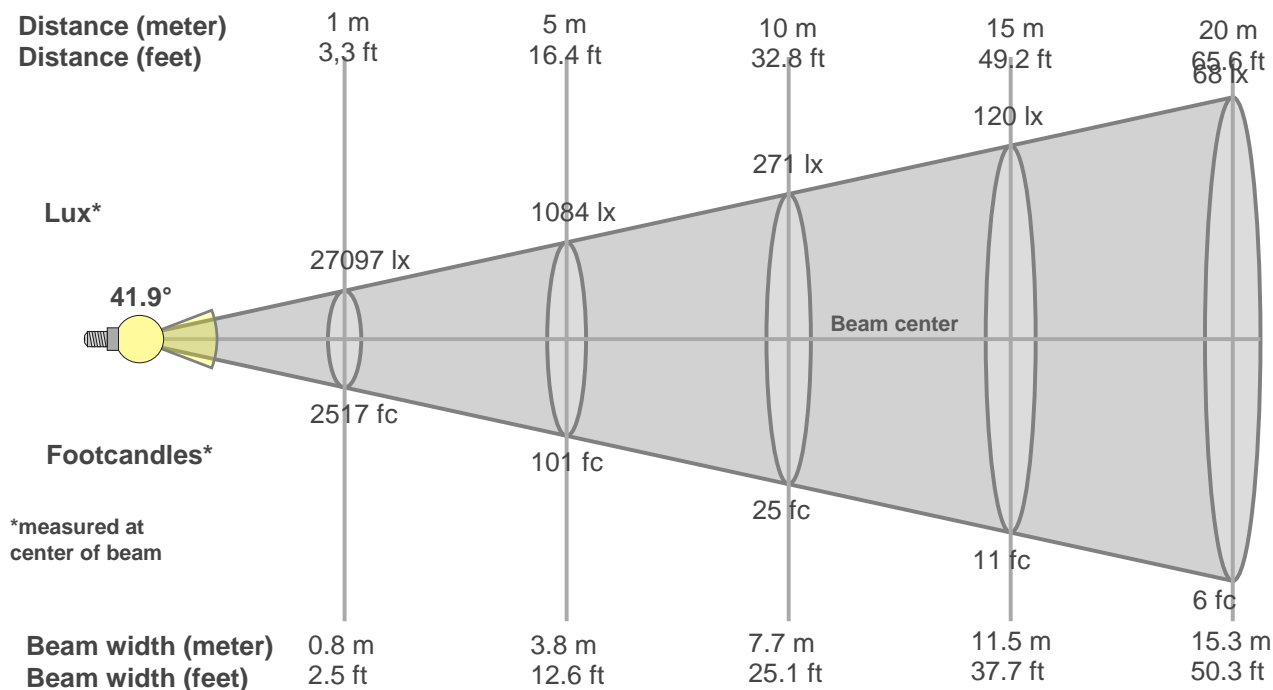
Gamut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 88 | -5% | 0% |
| 2 | 90 | -4% | 3% |
| 3 | 88 | -2% | 5% |
| 4 | 92 | -2% | 2% |
| 5 | 94 | 0% | 2% |
| 6 | 96 | 1% | 0% |
| 7 | 92 | -3% | -1% |
| 8 | 96 | -2% | 0% |
| 9 | 91 | -3% | 4% |
| 10 | 86 | -1% | 8% |
| 11 | 86 | 2% | 10% |
| 12 | 89 | 5% | 2% |
| 13 | 91 | 3% | -5% |
| 14 | 86 | 4% | -9% |
| 15 | 91 | -2% | -4% |
| 16 | 83 | -3% | -11% |



Beam Details

MAC Encore Performance WRM – Wide



Beam width:

Beam luminous intensity formula:

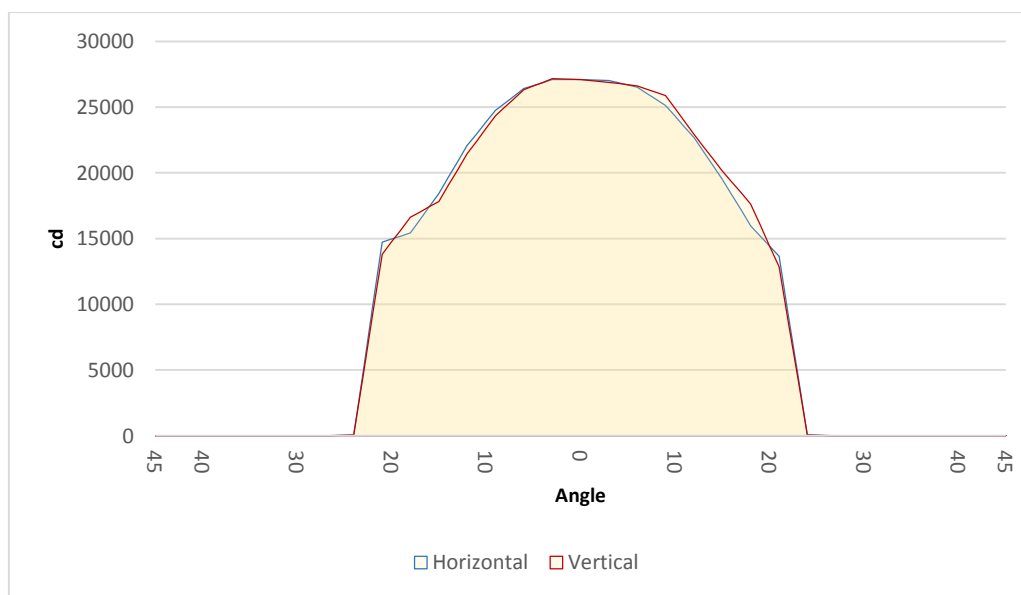
$$w = 0.8 * \text{distance}$$

$$\text{lux} = 27097 / (\text{distance}^2) \text{ (where distance is in meters)}$$

$$\text{fc} = 27097 / (\text{distance}^2) \text{ (where distance is in feet)}$$

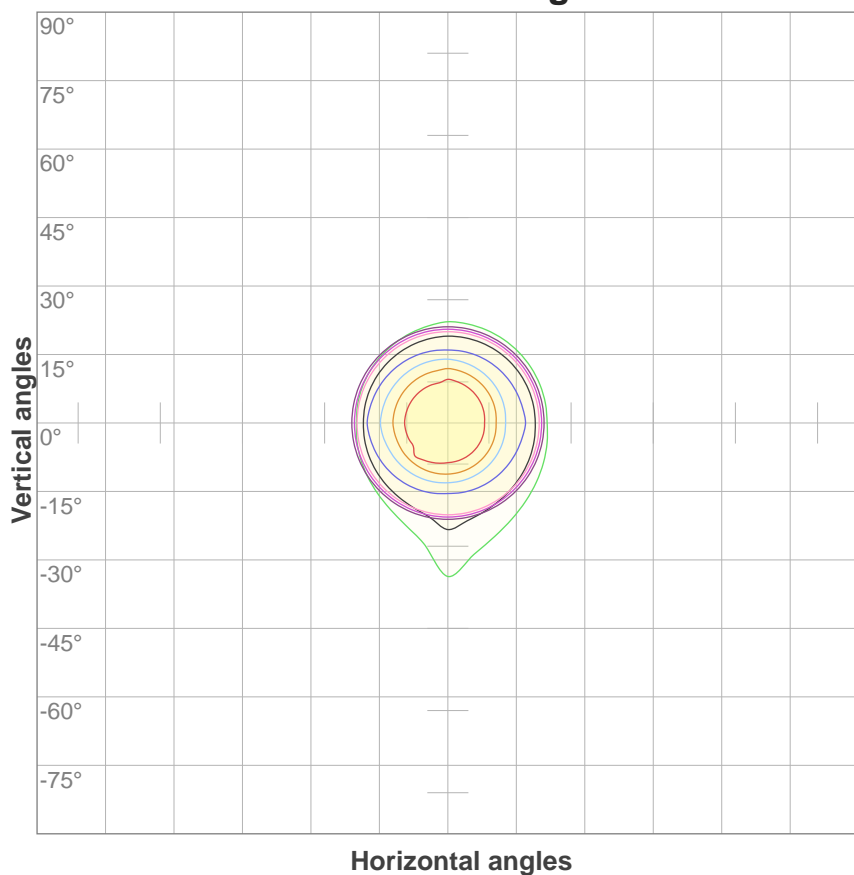
Beam illuminance from 1-20m

| 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 |
| 27097lx | 6774lx | 3011lx | 1694lx | 1084lx | 753lx | 553lx | 423lx | 335lx | 271lx | 224lx | 188lx | 160lx | 138lx | 120lx | 106lx | 94lx | 84lx | 75lx | 68lx |
| 2517.4fc | 629.3fc | 279.7fc | 157.3fc | 100.7fc | 69.9fc | 51.4fc | 39.3fc | 31.1fc | 25.2fc | 20.8fc | 17.5fc | 14.9fc | 12.8fc | 11.2fc | 9.8fc | 8.7fc | 7.8fc | 7fc | 6.3fc |



| Beam angle 50% | Field angle 10% | Cutoff angle 3% |
|----------------|-----------------|-----------------|
| 41.9° | 46.8° | 47.7° |

ISO candela diagram



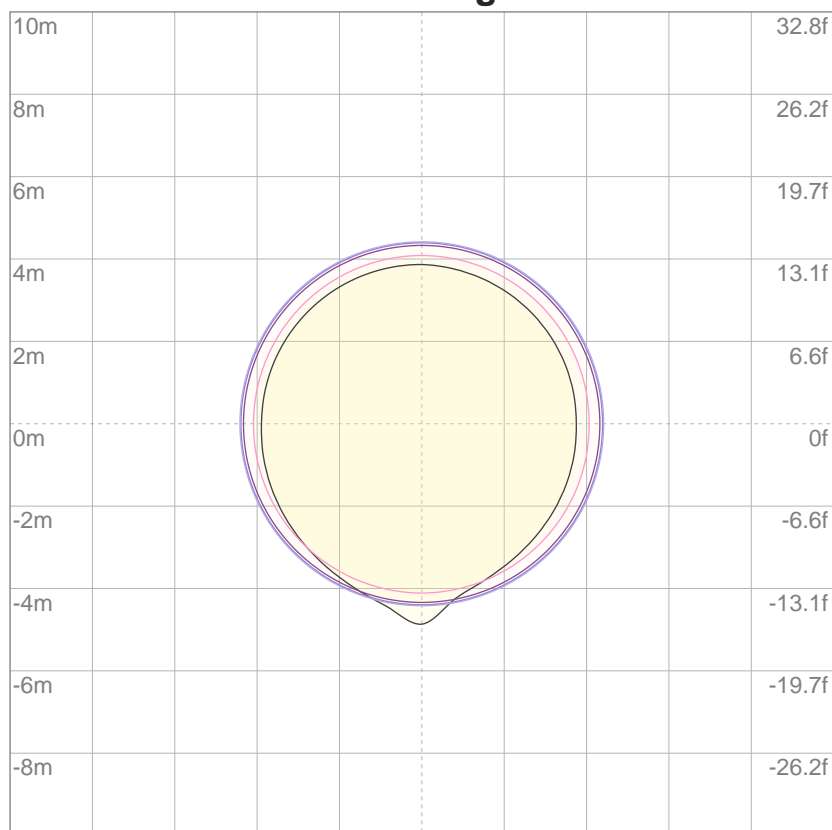
| | |
|-----|----------|
| 10% | 2710 cd |
| 20% | 5419 cd |
| 30% | 8129 cd |
| 40% | 10839 cd |
| 50% | 13548 cd |
| 60% | 16258 cd |
| 70% | 18968 cd |
| 80% | 21678 cd |
| 90% | 24387 cd |

Conditions:

Number of c-planes: 4

Candela at center: 27097 cd

ISO lux diagram



| | |
|-----|---------|
| 3% | 8.13 lx |
| 5% | 13.5 lx |
| 10% | 27.1 lx |
| 30% | 81.3 lx |
| 50% | 135 lx |

Conditions:

Number of c-planes: 4

Lux at center: 271 lx

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

Throw Distance: 10 meters (33 feet)