



Photometric Test Report



ECLNANOPANELTWC

Pocket-sized soft light, with wireless control
(CRMX and W-DMX) and battery-powered

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| | |
|------------|-----|
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| Filter MD | 90 |
| Filter LD | 95 |
| Filter INT | 100 |

Color temperature 4000K

| | |
|------------|-----|
| Filter HD | 105 |
| Filter MD | 110 |
| Filter LD | 115 |
| Filter INT | 120 |

Color temperature 5600K

| | |
|------------|-----|
| Filter HD | 125 |
| Filter MD | 130 |
| Filter LD | 135 |
| Filter INT | 140 |

Color temperature 6000K

| | |
|------------|-----|
| Filter HD | 145 |
| Filter MD | 150 |
| Filter LD | 155 |
| Filter INT | 160 |

TESTING PROCESS

Prolights has its own optical testing laboratory in order to provide accurate photometric reports for its lighting products. The testing laboratory contains certain variety of precise lighting measurement systems that ensure an optimal reading of all the characteristic parameters of the lighting devices. All measurements are made at a controlled room temperature of 20°C without any external light sources. This photometric report is obtained through the data measured by a high precision measurement system and analyzed by a dedicate software.

Prolights measurement instrument

Prolights measurement instrument is a complete measurement system for any light source. It's equipped with two-axis goniometer, that enables to measure the full 3D distribution field of the light source. This instrument measures the light intensity, the beam angle and the most significative colors parameters, like color temperature, spectral distribution, CRI, CQS, TM-30 with a very high accuracy rate.

Please Note: All measurements are made with light source at operating temperature. Before starting the measurement, the instrument analyzes the process of the light source during the heating phase. The measuring process of all the parameters begins only when the light emission is stable, that is with a variation of less than 0.5% in a 15 minutes time frame.

Prolights measurement software

The software provides user friendly interface for the operator who does the measurements, and it also analyzes and processes all the collected data by the instrument. With this software it is possible to see the measured data in real-time and it is possible to examine all the measured data and graphics afterwards as well. All information is collected in a specific Prolights template, and the software creates also IES and LDT files, which are widely used to transfer the photometric data, and to develop lighting system.

Additionally, the fixtures are rechecked using various hand-held instruments like Sekonic C-700 and Gossen Mavospec Base, this is done to ensure, that the data in the photometric report are as accurate as possible.



Total lumen output:

1524 lm

Peak candela output:

515 cd

PRODUCT NAME:
ECLNANOPANELTWC

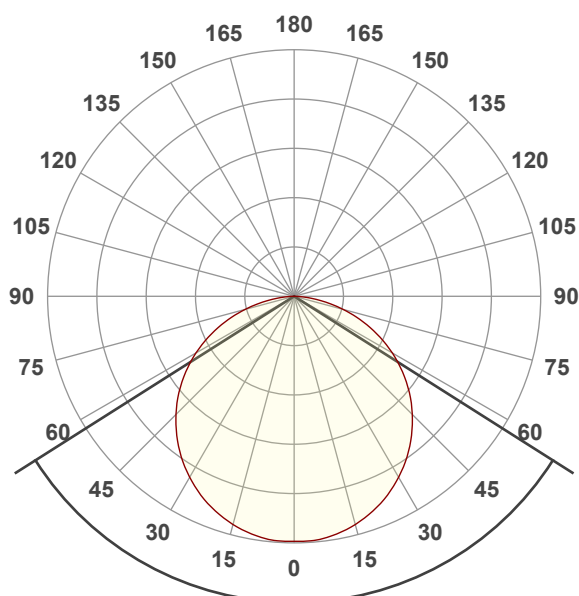
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h Full On Cal.On

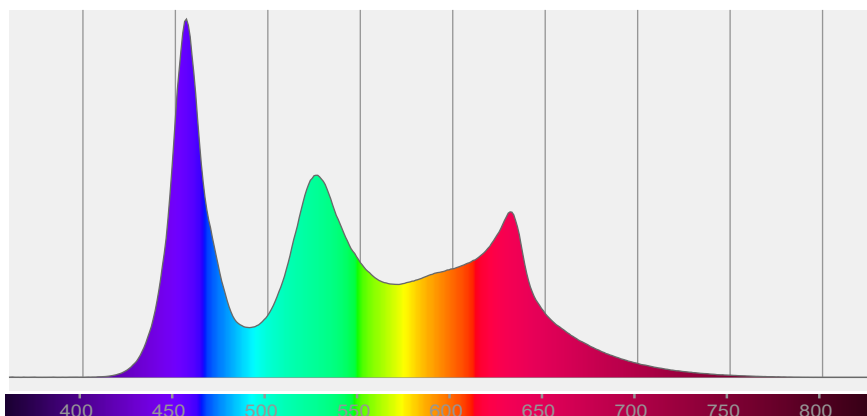
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:42:12



Beam angle 50%: 115,2°
Field angle 10%: 162,9°
Cut off angle 2.5%: 174,1°

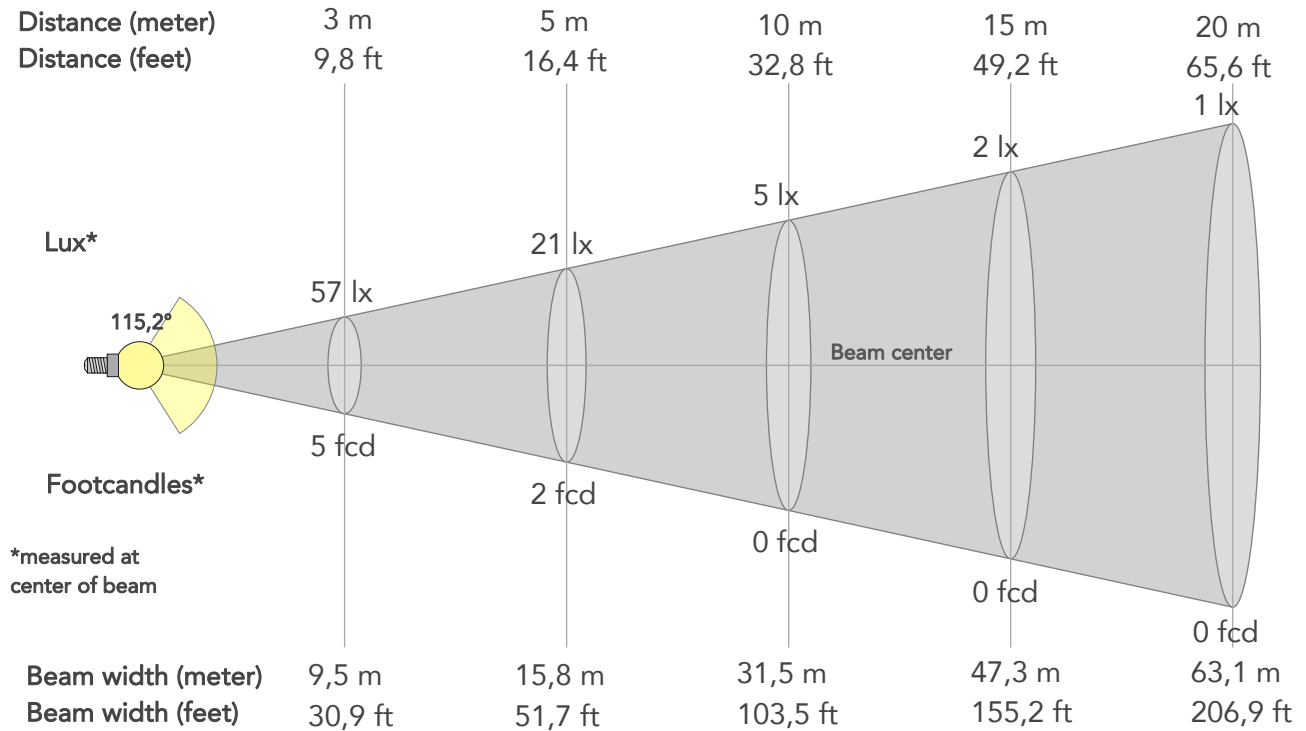
Spectra



BEAM DETAILS



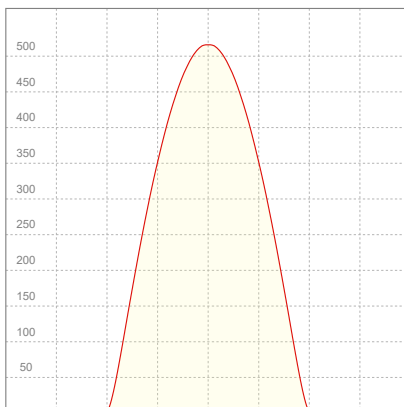
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115,2° | 162,9° | 174,1° | 77,4% | 52,3% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 515lx | 129lx | 57lx | 32lx | 21lx | 9lx | 5lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 48fcd | 12fcd | 5fcd | 3fcd | 2fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,2m | 6,3m | 9,5m | 12,6m | 15,8m | 23,7m | 31,5m | 47,3m | 63,1m | 78,9m | 94,6m | 126,2m | 157,7m |
| Beam wid. | 10,4ft | 20,8ft | 30,9ft | 41,3ft | 51,7ft | 77,6ft | 103,5ft | 155,2ft | 206,9ft | 258,7ft | 310,4ft | 413,9ft | 517,3ft |

LINEAR DISTRIBUTION DIAGRAM

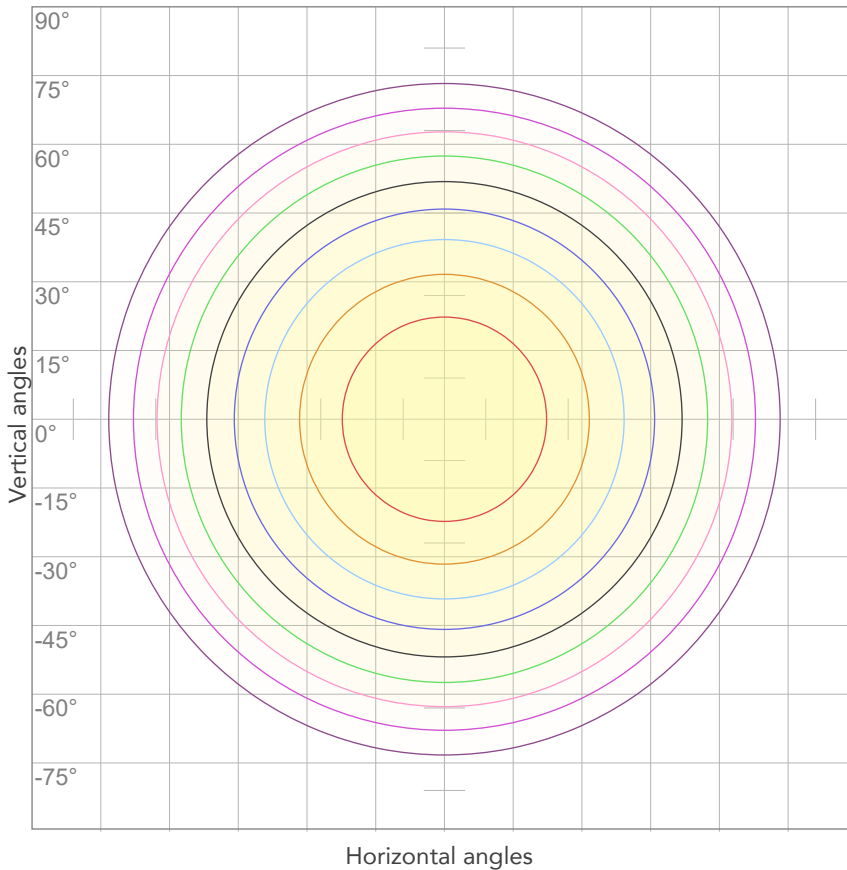


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,222A | 29,9W | 51lm/W |

| Power FC |
|----------|
| 0,59 |

ISO CANDELA DIAGRAM



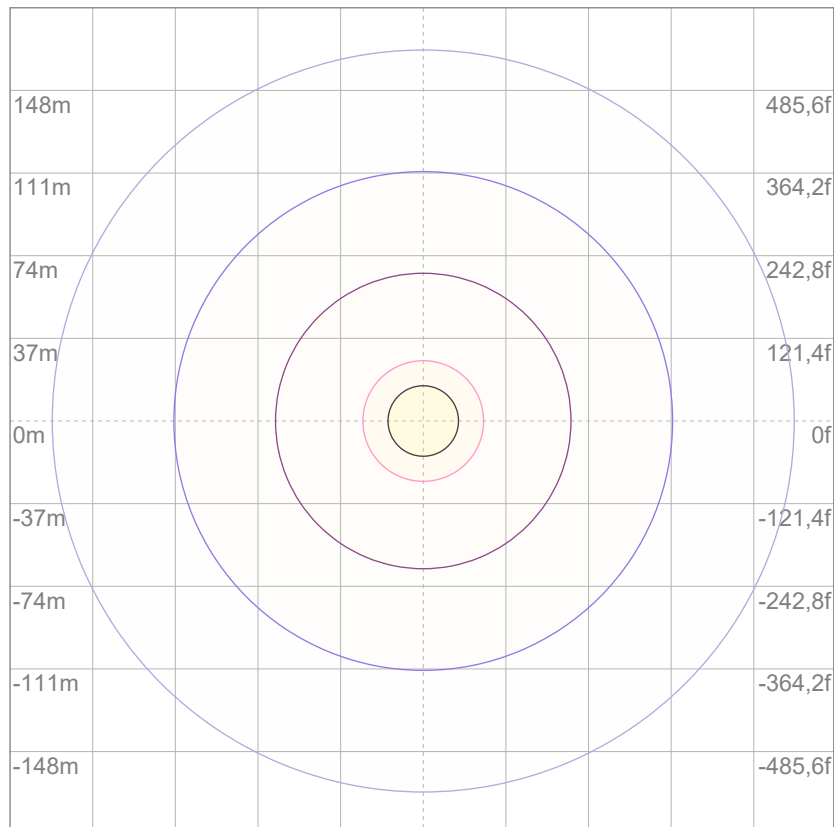
| | |
|-----|--------|
| 10% | 52 cd |
| 20% | 103 cd |
| 30% | 155 cd |
| 40% | 206 cd |
| 50% | 258 cd |
| 60% | 309 cd |
| 70% | 361 cd |
| 80% | 412 cd |

Conditions:

Number of c-planes: 2

Candela at center: 515 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,155 lx |
| 5% | 0,258 lx |
| 10% | 0,515 lx |
| 30% | 1,55 lx |
| 50% | 2,58 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,15 lx

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



Total lumen output:

1590 lm

Peak candela output:

554 cd

PRODUCT NAME:
ECLNANOPANELTWC

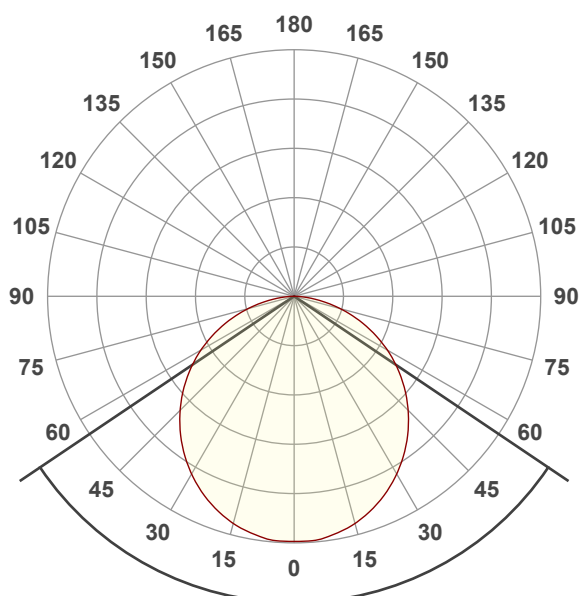
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h Full On Cal.On

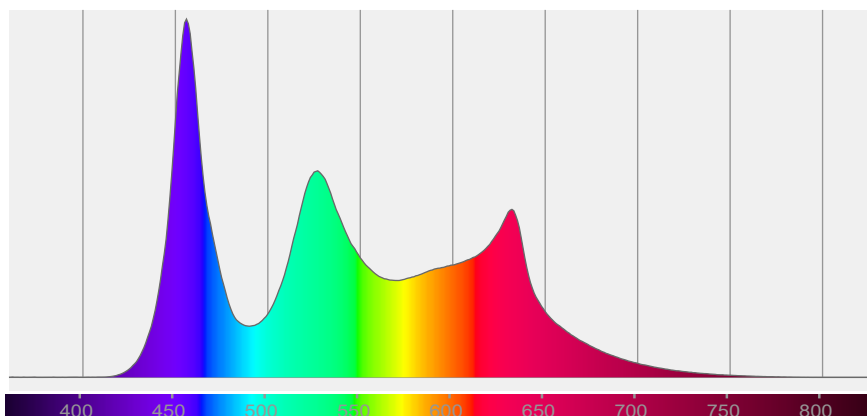
Operator:
Paolo Carvone

Date and time:
23/05/2022 11:02:22



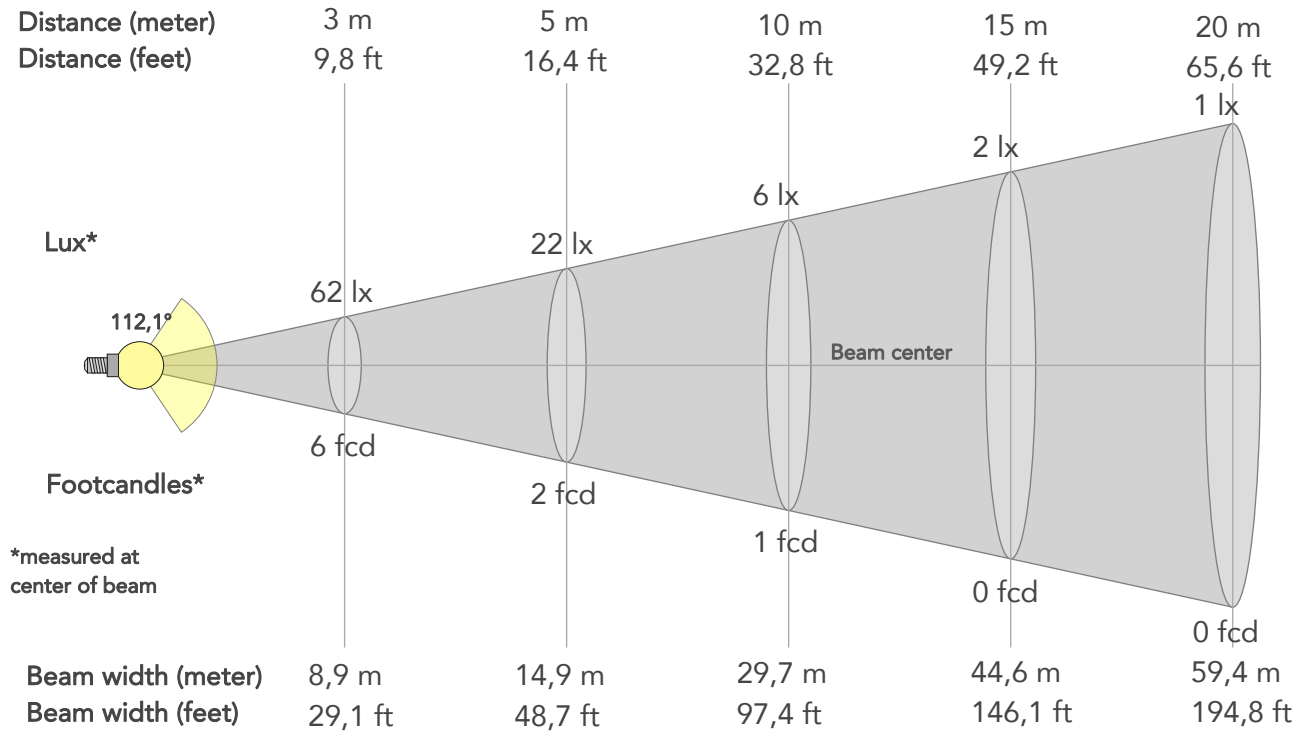
Beam angle 50%: 112,1°
Field angle 10%: 162,2°
Cut off angle 2.5%: 174,4°

Spectra



BEAM DETAILS

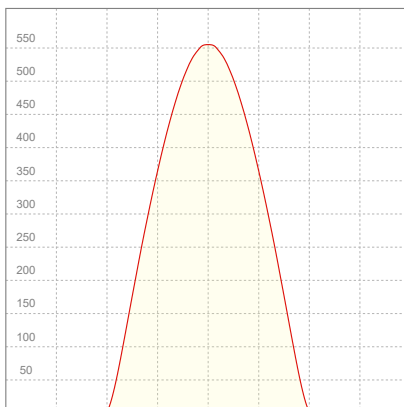
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 112,1° | 162,2° | 174,4° | 77,7% | 52,9% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 554lx | 139lx | 62lx | 35lx | 22lx | 10lx | 6lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 51fcd | 13fcd | 6fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 5,9m | 8,9m | 11,9m | 14,9m | 22,3m | 29,7m | 44,6m | 59,4m | 74,3m | 89,1m | 118,8m | 148,5m |
| Beam wid. | 9,8ft | 19,6ft | 29,1ft | 38,9ft | 48,7ft | 73,1ft | 97,4ft | 146,1ft | 194,8ft | 243,5ft | 292,3ft | 389,7ft | 487,1ft |

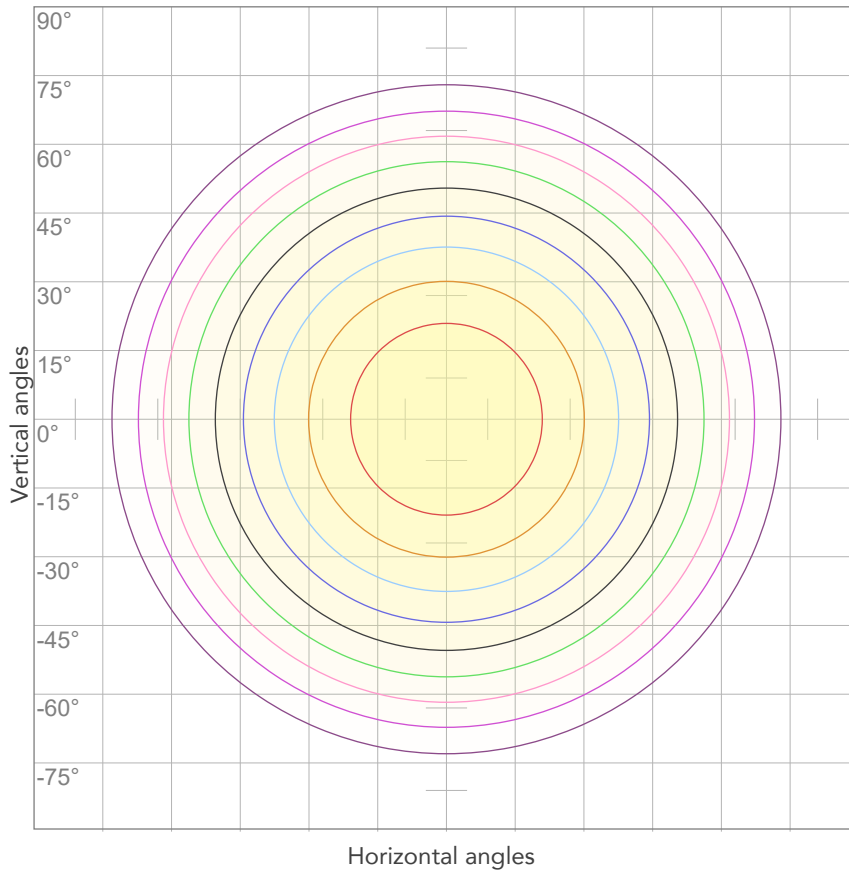
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,221A | 29,8W | 53lm/W |
| Power FC | | | |
| 0,6 | | | |

ISO CANDELA DIAGRAM



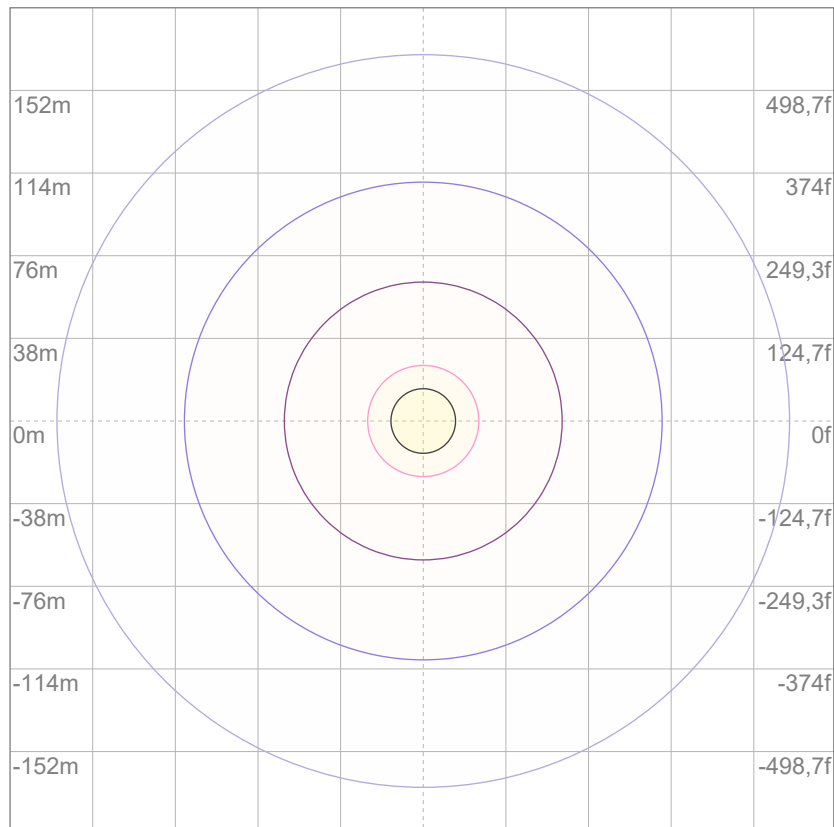
| | |
|-----|--------|
| 10% | 55 cd |
| 20% | 111 cd |
| 30% | 166 cd |
| 40% | 222 cd |
| 50% | 277 cd |
| 60% | 333 cd |
| 70% | 388 cd |
| 80% | 443 cd |

Conditions:

Number of c-planes: 2

Candela at center: 554 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,166 lx |
| 5% | 0,277 lx |
| 10% | 0,554 lx |
| 30% | 1,66 lx |
| 50% | 2,77 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,54 lx

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



Total lumen output:

1693 lm

Peak candela output:

632 cd

PRODUCT NAME:
ECLNANOPANELTWC

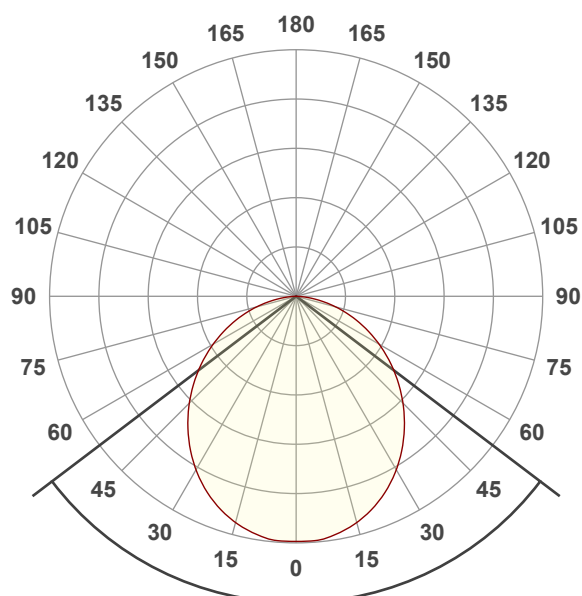
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h Full On Cal.On

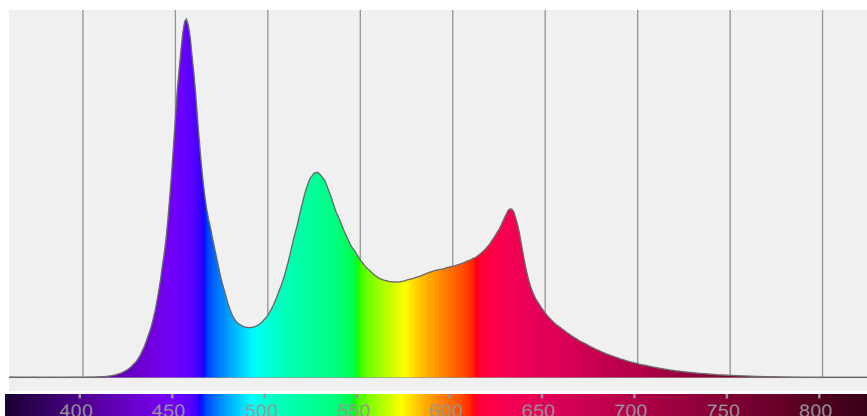
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:46:51



Beam angle 50%: 105,7°
Field angle 10%: 159,6°
Cut off angle 2.5%: 172,5°

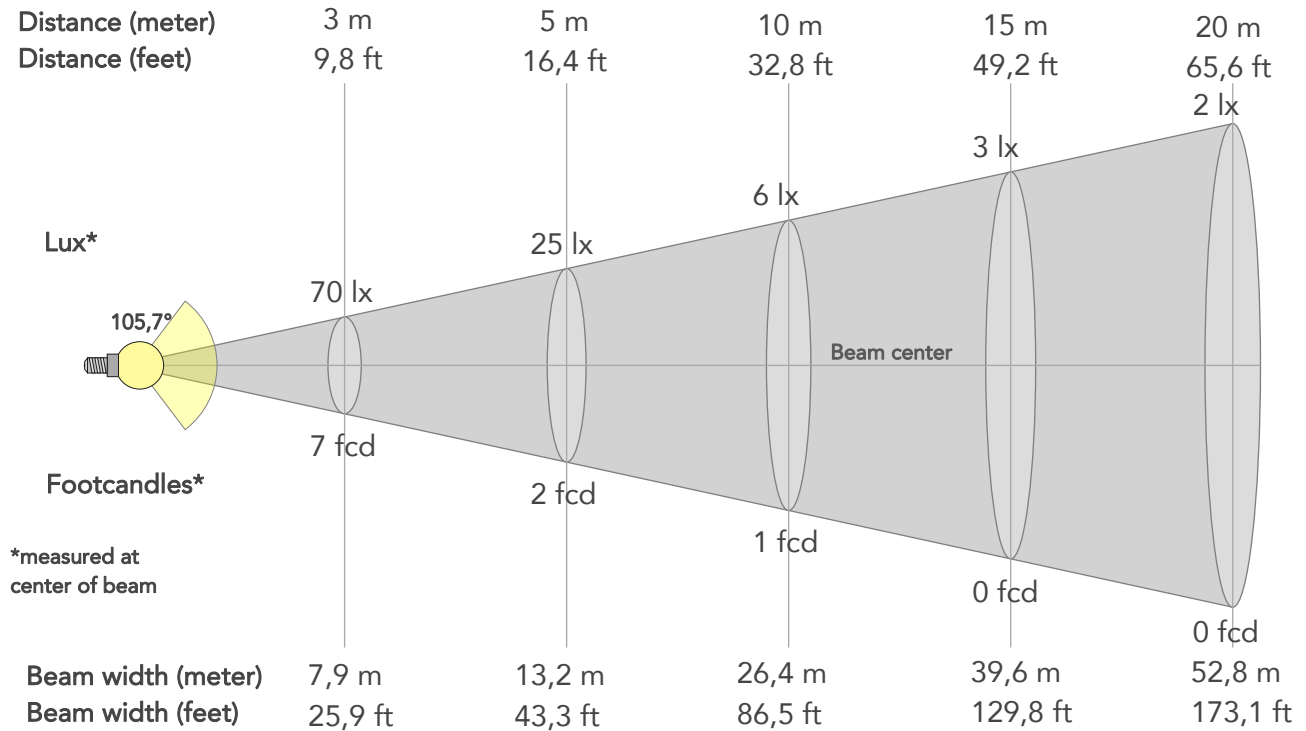
Spectra



BEAM DETAILS



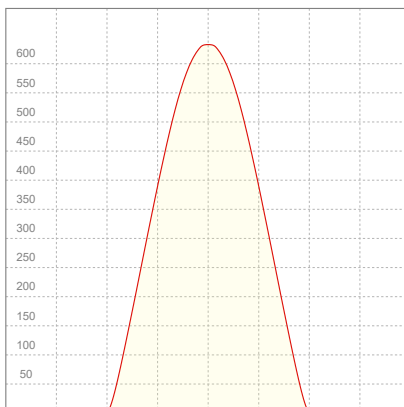
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 105,7° | 159,6° | 172,5° | 79,5% | 55,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 632lx | 158lx | 70lx | 39lx | 25lx | 11lx | 6lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 59fcd | 15fcd | 7fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,6m | 5,3m | 7,9m | 10,6m | 13,2m | 19,8m | 26,4m | 39,6m | 52,8m | 66m | 79,1m | 105,5m | 131,9m |
| Beam wid. | 8,7ft | 17,4ft | 25,9ft | 34,6ft | 43,3ft | 64,9ft | 86,5ft | 129,8ft | 173,1ft | 216,3ft | 259,6ft | 346,1ft | 432,6ft |

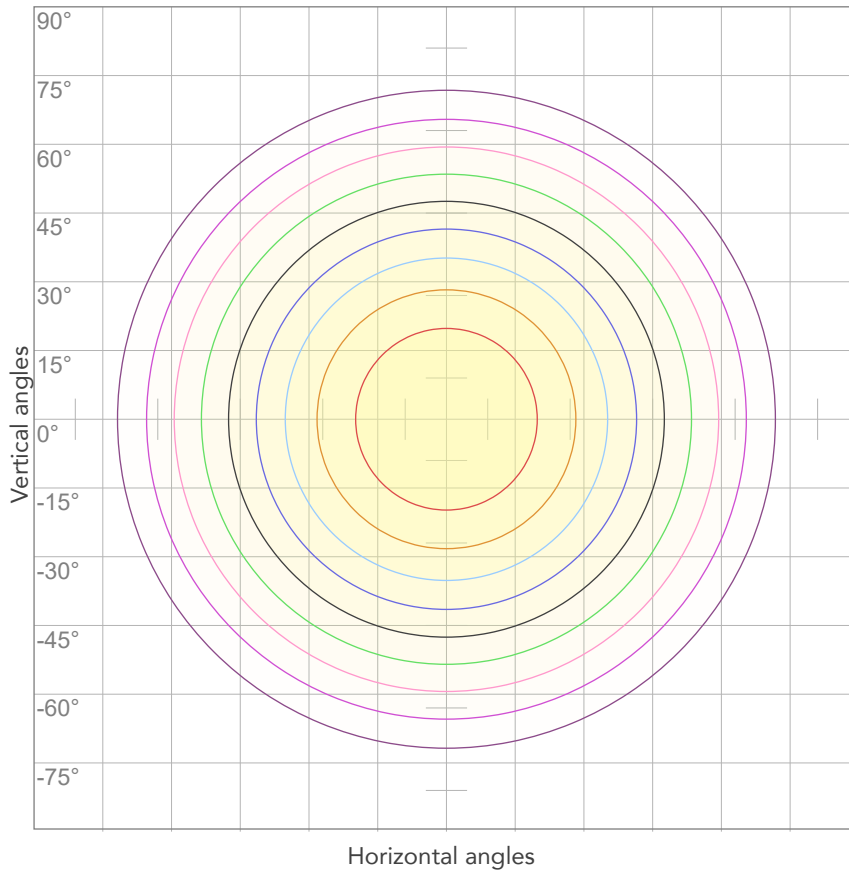
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,221A | 29,9W | 57lm/W |
| Power FC | | | |
| 0,6 | | | |

ISO CANDELA DIAGRAM



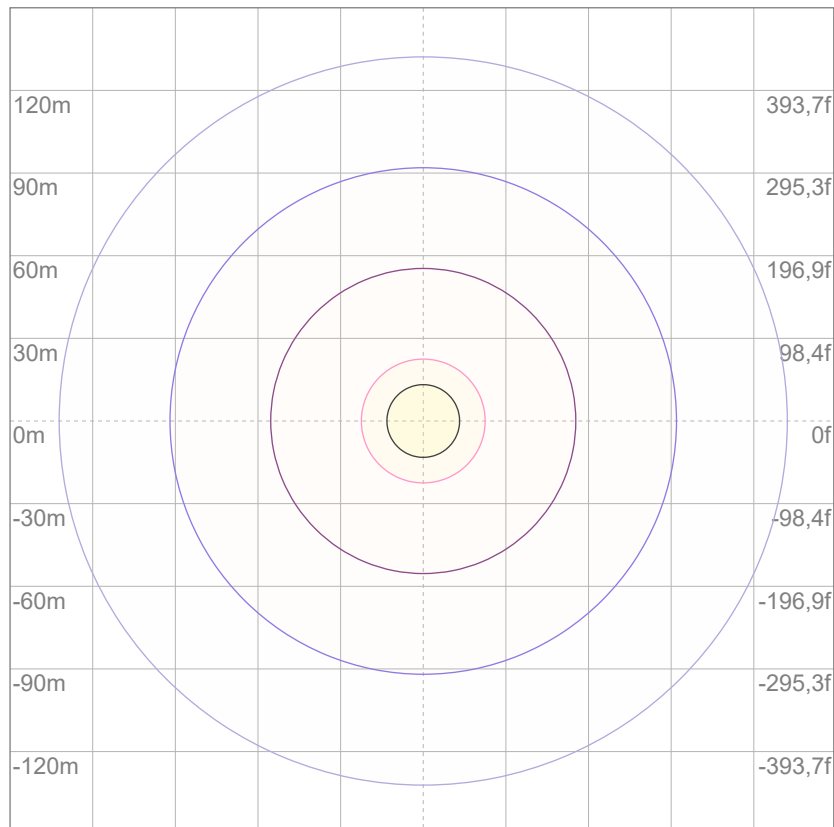
| | |
|-----|--------|
| 10% | 63 cd |
| 20% | 126 cd |
| 30% | 190 cd |
| 40% | 253 cd |
| 50% | 316 cd |
| 60% | 379 cd |
| 70% | 442 cd |
| 80% | 505 cd |

Conditions:

Number of c-planes: 2

Candela at center: 632 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,190 lx |
| 5% | 0,316 lx |
| 10% | 0,632 lx |
| 30% | 1,90 lx |
| 50% | 3,16 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,32 lx

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



Total lumen output:

1594 lm

Peak candela output:

795 cd

PRODUCT NAME:
ECLNANOPANELTWC

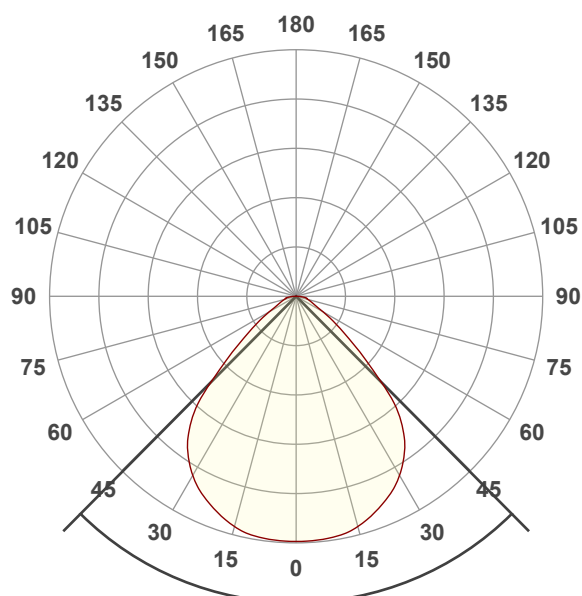
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h Full On Cal.On

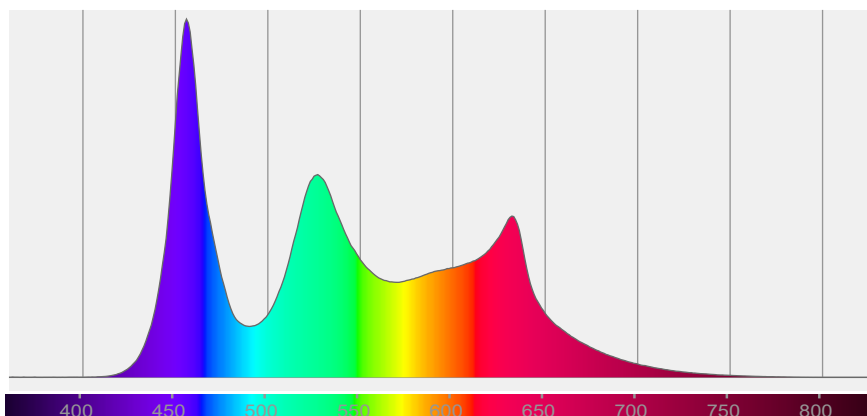
Operator:
Paolo Carvone

Date and time:
23/05/2022 11:25:38



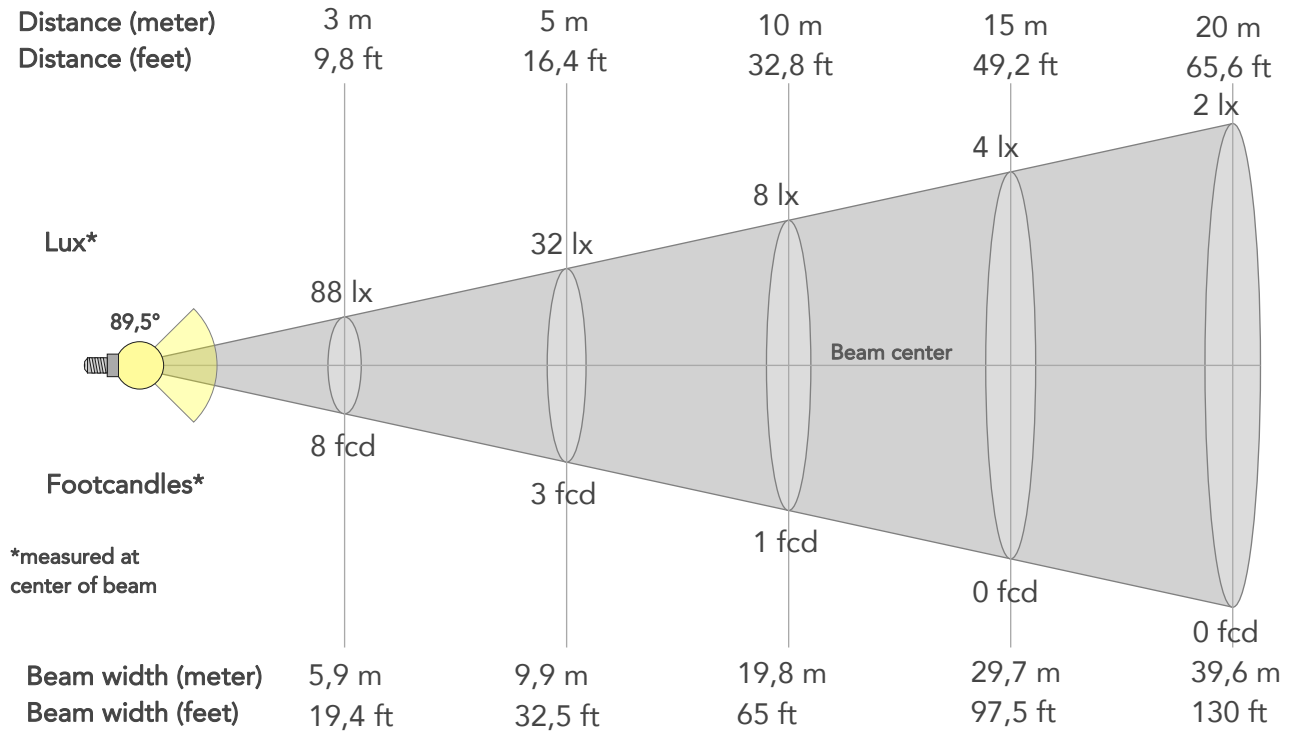
Beam angle 50%: 89,5°
Field angle 10%: 125°
Cut off angle 2.5%: 169,2°

Spectra



BEAM DETAILS

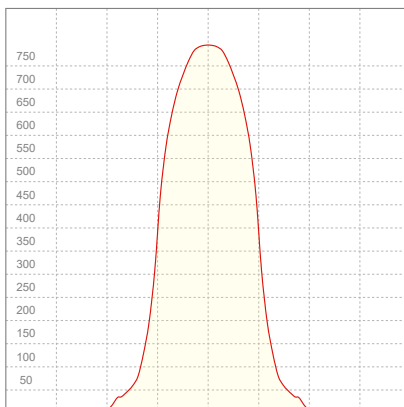
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,5° | 125° | 169,2° | 90,8% | 73,9% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 795lx | 199lx | 88lx | 50lx | 32lx | 14lx | 8lx | 4lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 74fcd | 18fcd | 8fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 4m | 5,9m | 7,9m | 9,9m | 14,9m | 19,8m | 29,7m | 39,6m | 49,6m | 59,5m | 79,3m | 99,1m |
| Beam wid. | 6,5ft | 13,1ft | 19,4ft | 26ft | 32,5ft | 48,8ft | 65ft | 97,5ft | 130ft | 162,6ft | 195,1ft | 260,1ft | 325,1ft |

LINEAR DISTRIBUTION DIAGRAM

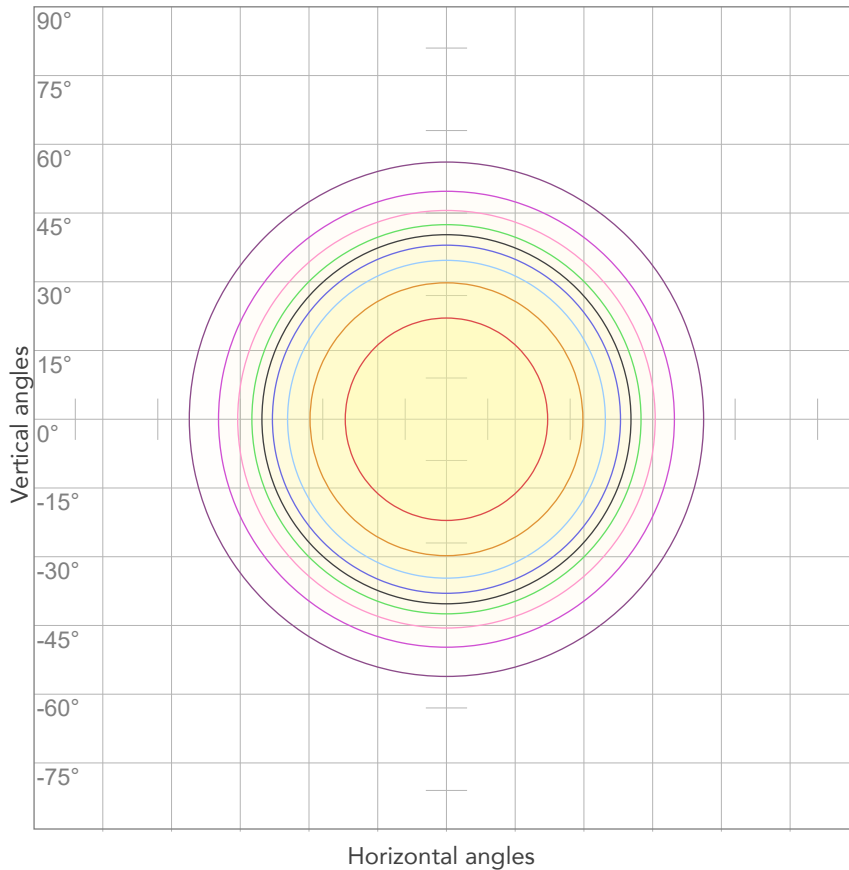


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,218A | 29,7W | 54lm/W |

| Power FC |
|----------|
| 0,6 |

ISO CANDELA DIAGRAM



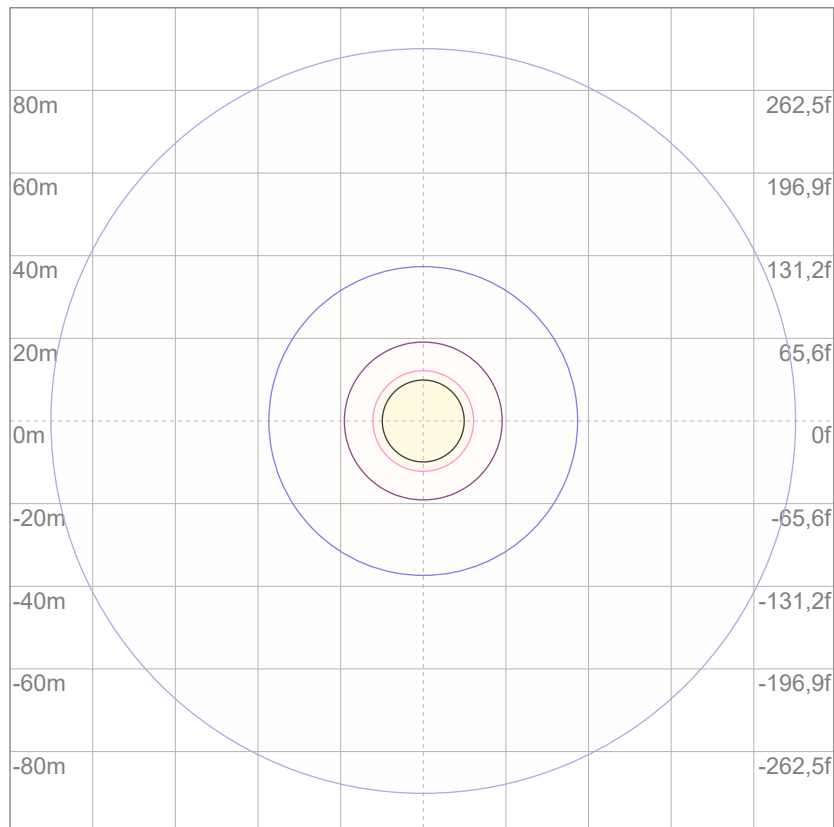
| | |
|-----|--------|
| 10% | 79 cd |
| 20% | 159 cd |
| 30% | 238 cd |
| 40% | 318 cd |
| 50% | 397 cd |
| 60% | 477 cd |
| 70% | 556 cd |
| 80% | 636 cd |

Conditions:

Number of c-planes: 2

Candela at center: 795 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,238 lx |
| 5% | 0,397 lx |
| 10% | 0,795 lx |
| 30% | 2,38 lx |
| 50% | 3,97 lx |

Conditions:

Number of c-planes: 2

Lux at center: 7,95 lx

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



Total lumen output:

332 lm

Peak candela output:

116 cd

PRODUCT NAME:
ECLNANOPANELTWC

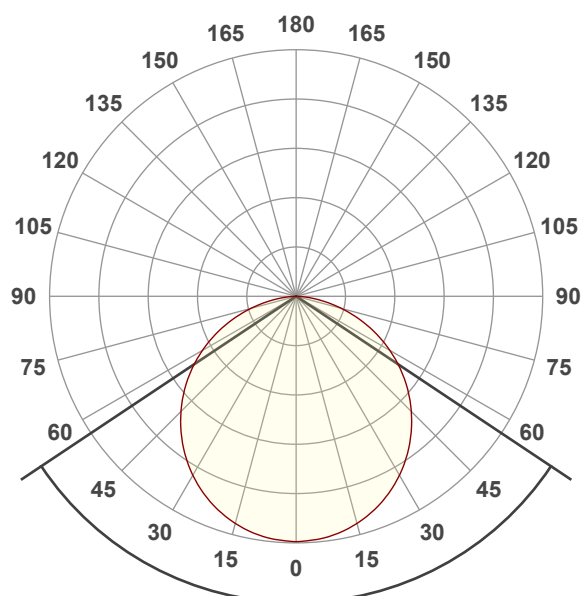
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h Red

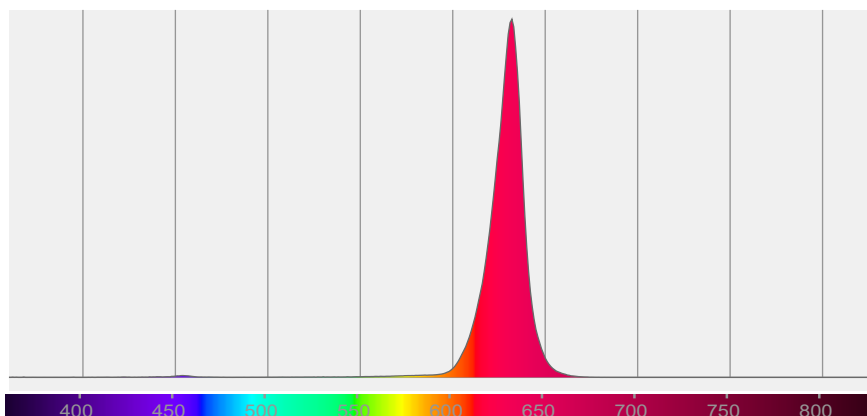
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:29:03



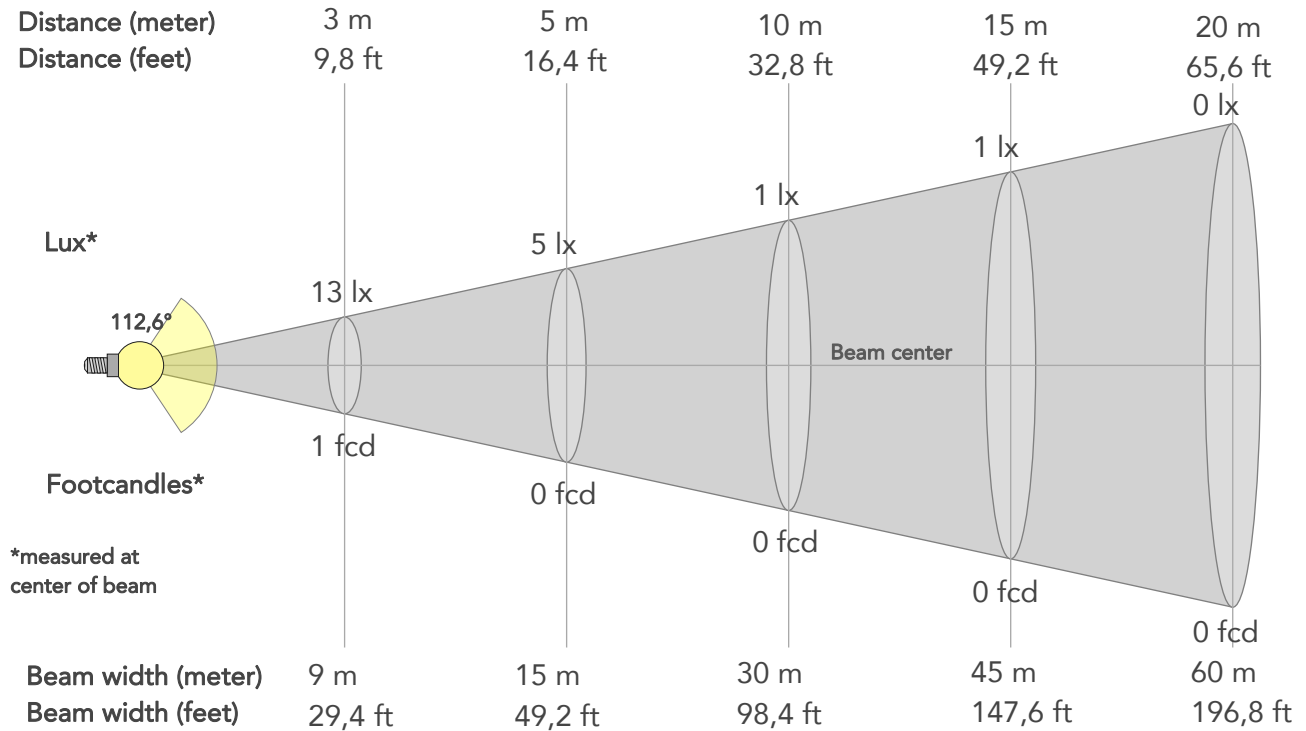
Beam angle 50%: 112,6°
Field angle 10%: 161,6°
Cut off angle 2.5%: 173,3°

Spectra



BEAM DETAILS

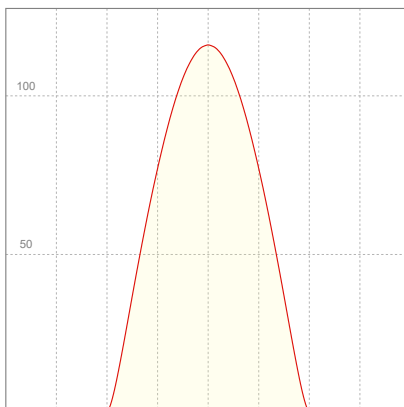
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 112,6° | 161,6° | 173,3° | 78,3% | 53,2% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|-------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 116lx | 29lx | 13lx | 7lx | 5lx | 2lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 11fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 6m | 9m | 12m | 15m | 22,5m | 30m | 45m | 60m | 75m | 90m | 120m | 150m |
| Beam wid. | 9,9ft | 19,8ft | 29,4ft | 39,3ft | 49,2ft | 73,8ft | 98,4ft | 147,6ft | 196,8ft | 246ft | 295,2ft | 393,6ft | 491,9ft |

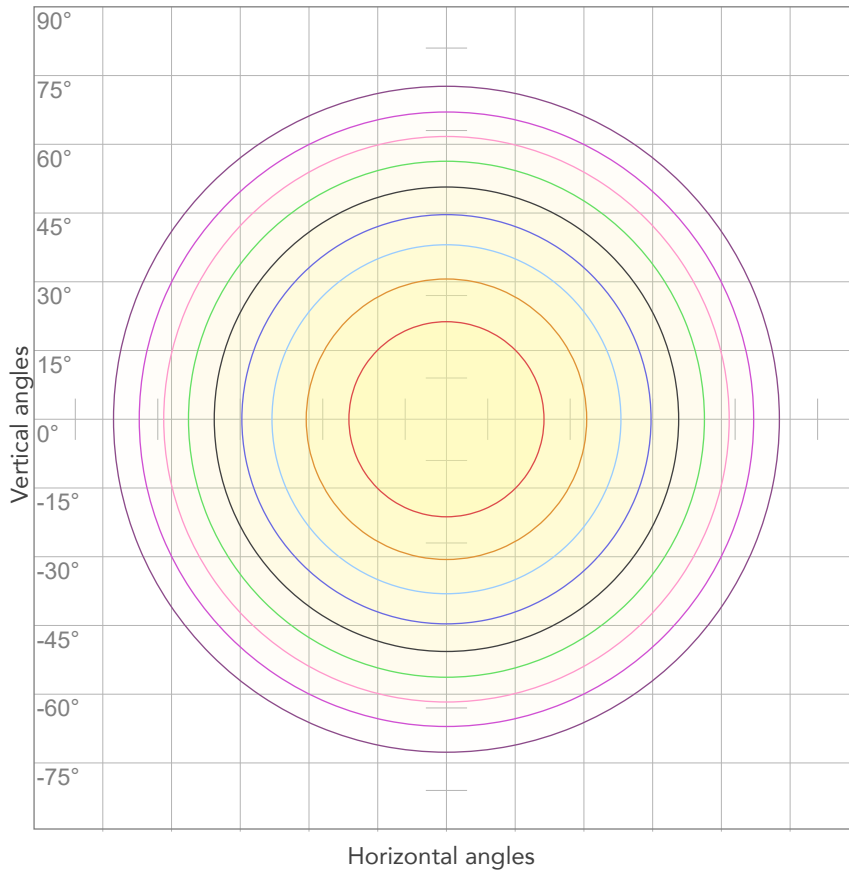
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 228V | 0,144A | 14,7W | 23lm/W |
| Power FC | | | |
| 0,45 | | | |

ISO CANDELA DIAGRAM



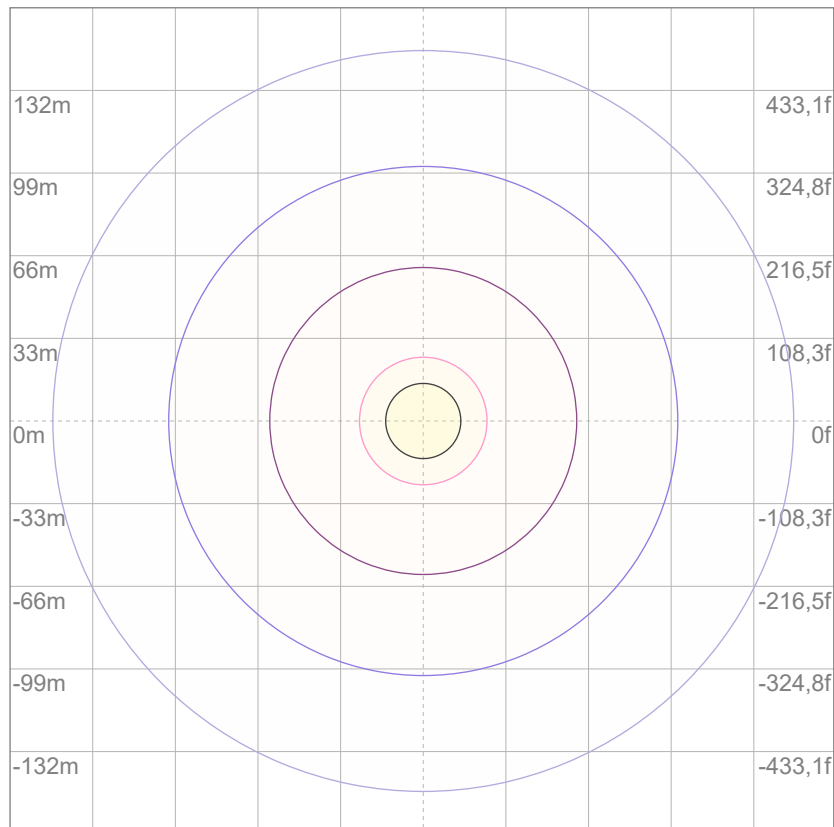
| | |
|-----|-------|
| 10% | 12 cd |
| 20% | 23 cd |
| 30% | 35 cd |
| 40% | 46 cd |
| 50% | 58 cd |
| 60% | 70 cd |
| 70% | 81 cd |
| 80% | 93 cd |

Conditions:

Number of c-planes: 2

Candela at center: 116 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 34,8m lx |
| 5% | 58,0m lx |
| 10% | 0,116 lx |
| 30% | 0,348 lx |
| 50% | 0,580 lx |

Conditions:

Number of c-planes: 2

Lux at center: 1,16 lx

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



Total lumen output:

430 lm

Peak candela output:

153 cd

PRODUCT NAME:
ECLNANOPANELTWC

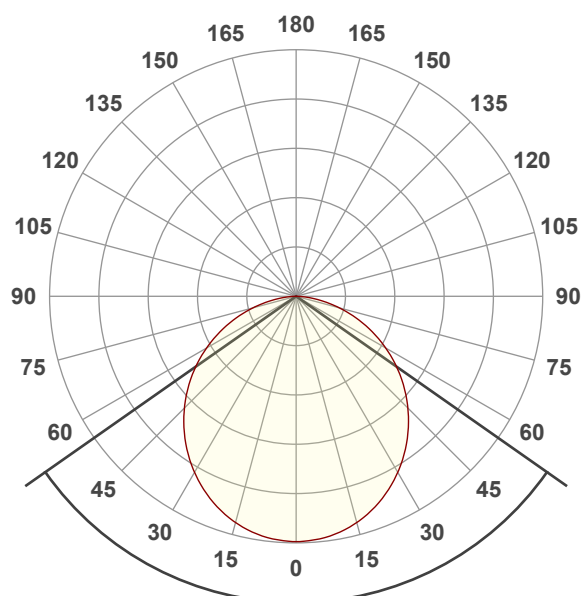
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h Red

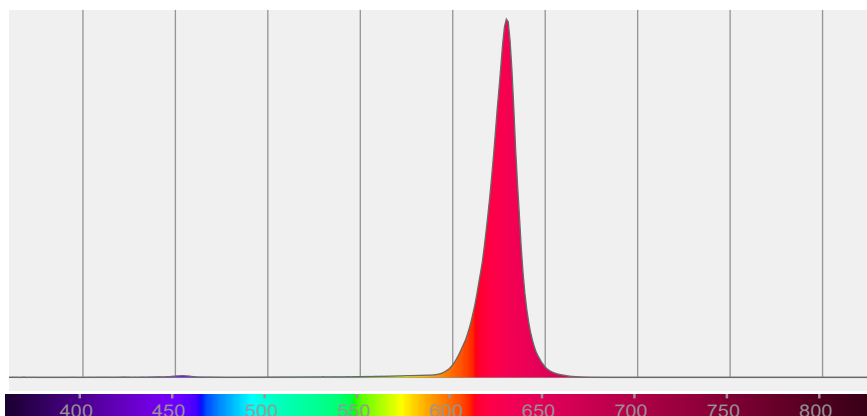
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:07:25



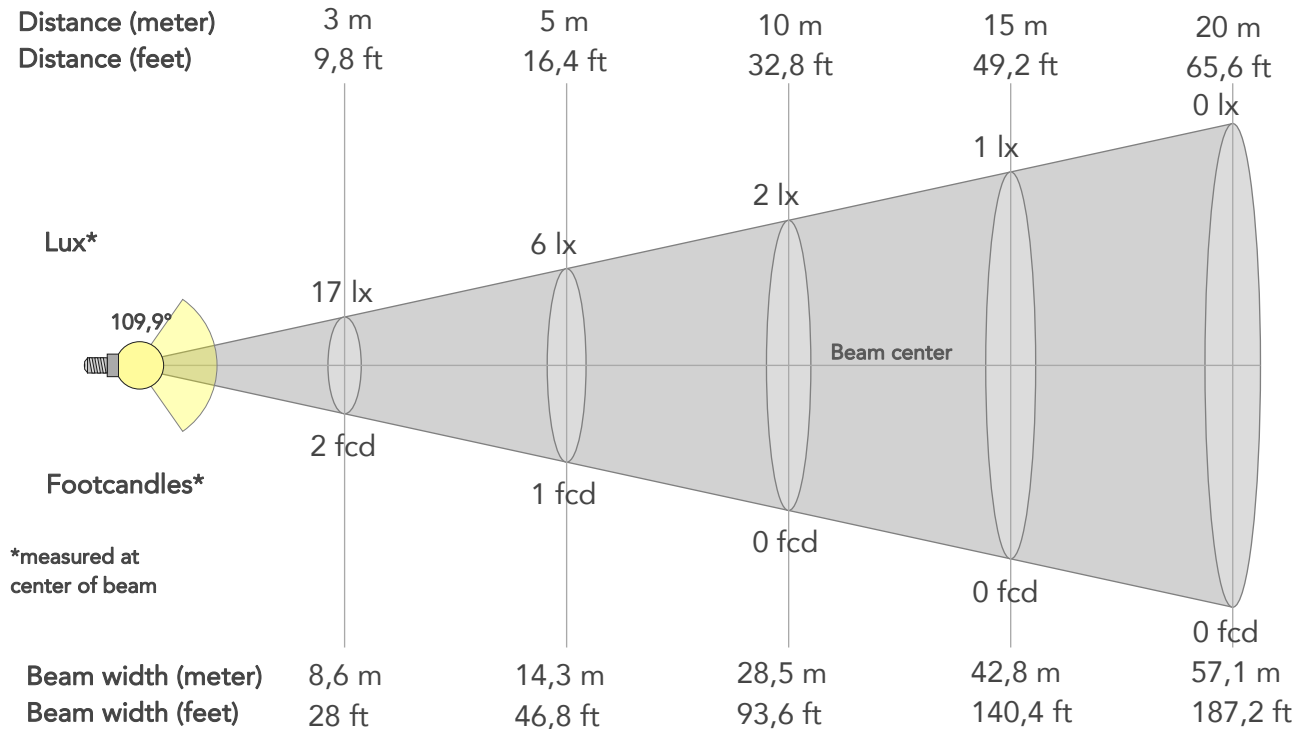
Beam angle 50%: 109,9°
Field angle 10%: 161,1°
Cut off angle 2.5%: 173,8°

Spectra



BEAM DETAILS

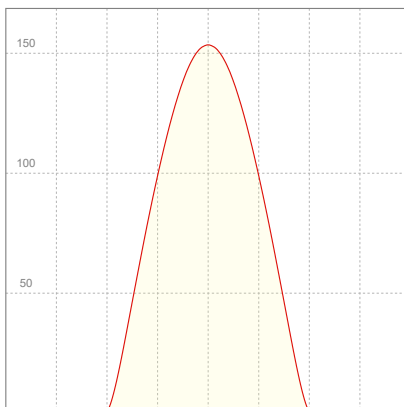
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 109,9° | 161,1° | 173,8° | 78,4% | 53,7% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|-------|--------|--------|--------|--------|---------|---------|-------|---------|---------|--------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 153lx | 38lx | 17lx | 10lx | 6lx | 3lx | 2lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 14fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,9m | 5,7m | 8,6m | 11,4m | 14,3m | 21,4m | 28,5m | 42,8m | 57,1m | 71,3m | 85,6m | 114,1m | 142,7m |
| Beam wid. | 9,4ft | 18,8ft | 28ft | 37,4ft | 46,8ft | 70,2ft | 93,6ft | 140,4ft | 187,2ft | 234ft | 280,8ft | 374,4ft | 468ft |

LINEAR DISTRIBUTION DIAGRAM

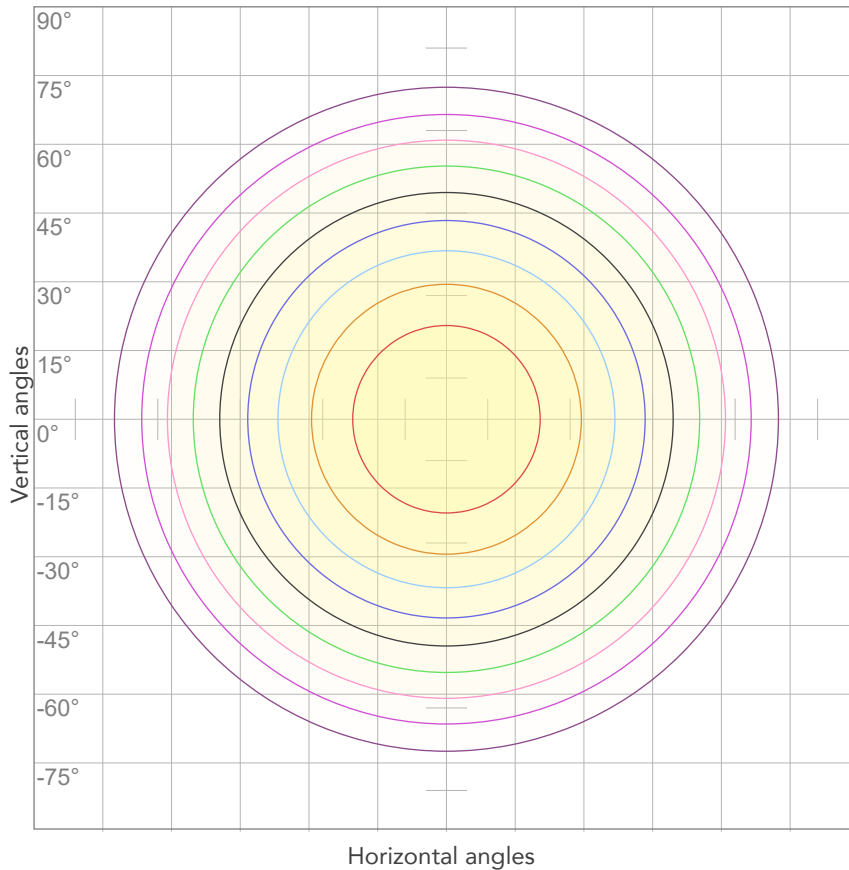


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 228V | 0,145A | 15,2W | 28lm/W |

| Power FC |
|----------|
| 0,46 |

ISO CANDELA DIAGRAM



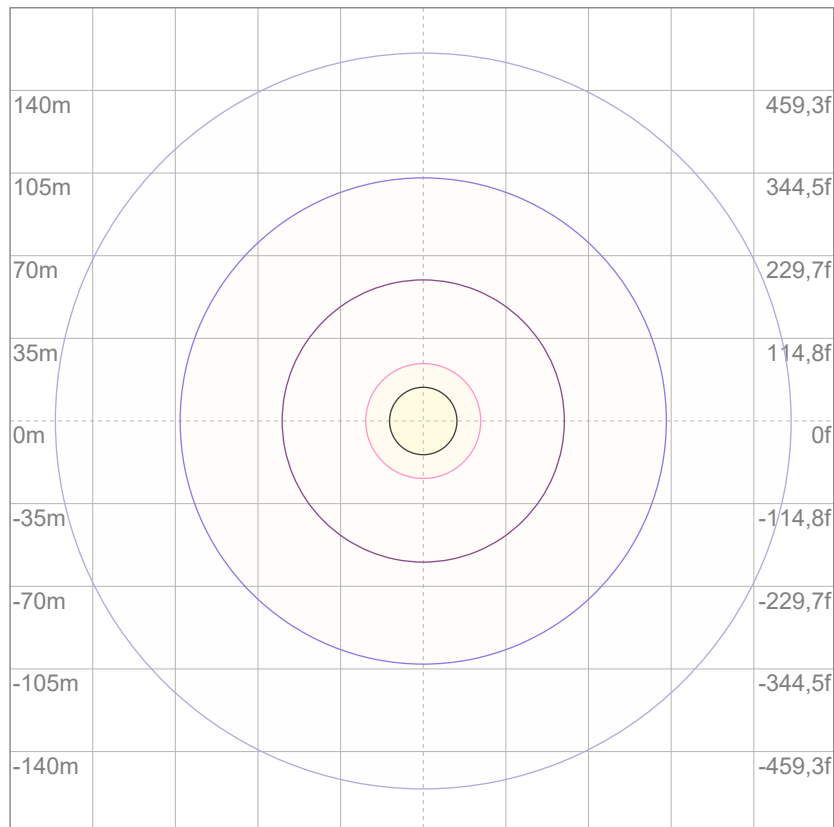
| | |
|-----|--------|
| 10% | 15 cd |
| 20% | 31 cd |
| 30% | 46 cd |
| 40% | 61 cd |
| 50% | 77 cd |
| 60% | 92 cd |
| 70% | 107 cd |
| 80% | 123 cd |

Conditions:

Number of c-planes: 2

Candela at center: 153 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 46,0m lx |
| 5% | 76,7m lx |
| 10% | 0,153 lx |
| 30% | 0,460 lx |
| 50% | 0,767 lx |

Conditions:

Number of c-planes: 2

Lux at center: 1,53 lx

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



Total lumen output:

370 lm

Peak candela output:

141 cd

PRODUCT NAME:
ECLNANOPANELTWC

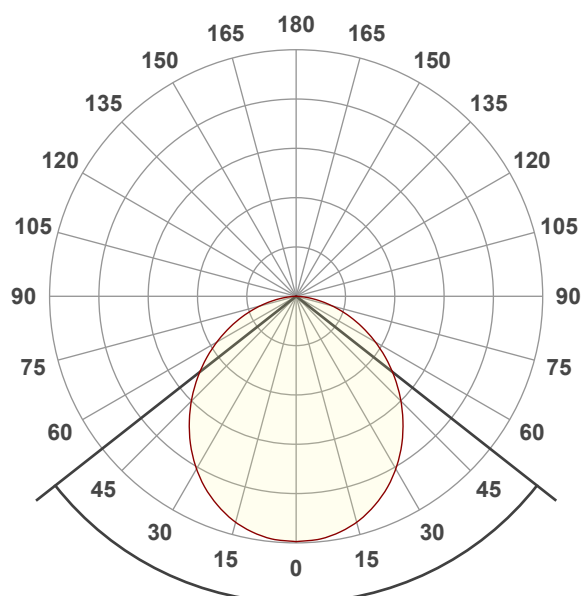
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h Red

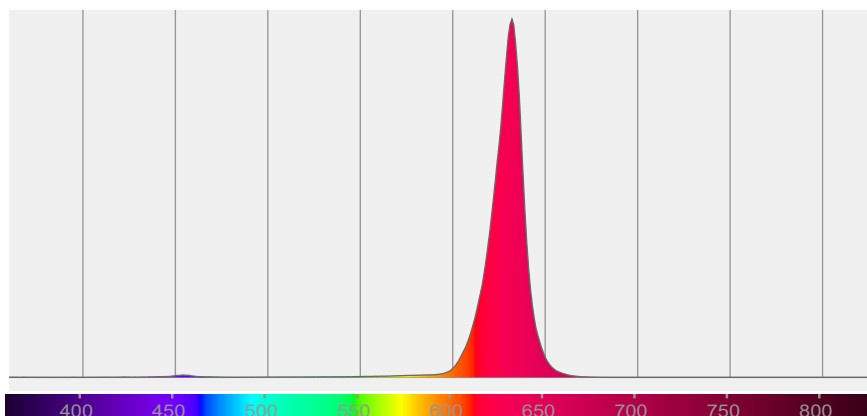
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:49:23



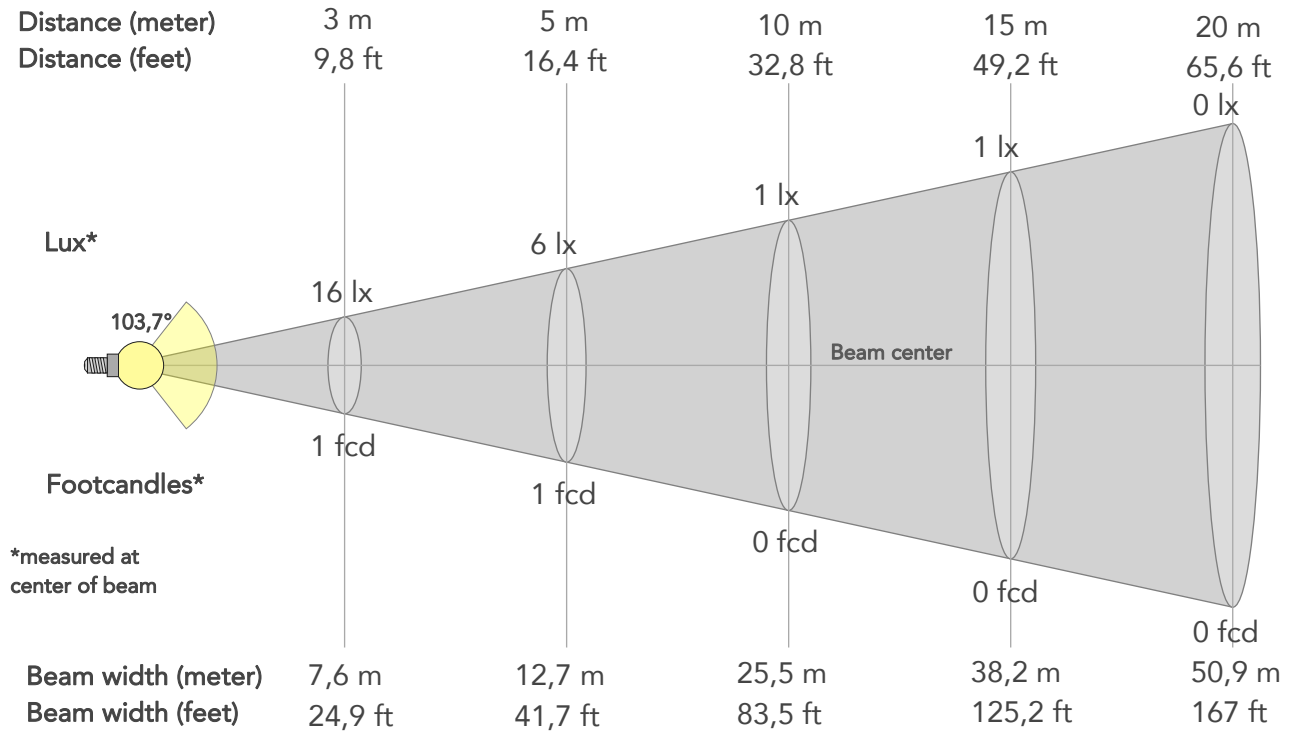
Beam angle 50%: 103,7°
Field angle 10%: 158°
Cut off angle 2.5%: 171,7°

Spectra



BEAM DETAILS

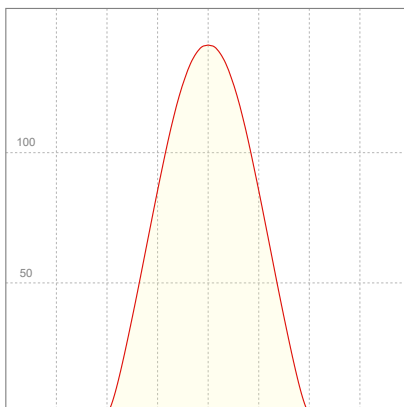
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 103,7° | 158° | 171,7° | 80,2% | 56,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|--------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 141lx | 35lx | 16lx | 9lx | 6lx | 3lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 13fcd | 3fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,5m | 5,1m | 7,6m | 10,2m | 12,7m | 19,1m | 25,5m | 38,2m | 50,9m | 63,6m | 76,4m | 101,8m | 127,3m |
| Beam wid. | 8,4ft | 16,8ft | 24,9ft | 33,3ft | 41,7ft | 62,6ft | 83,5ft | 125,2ft | 167ft | 208,7ft | 250,5ft | 334ft | 417,4ft |

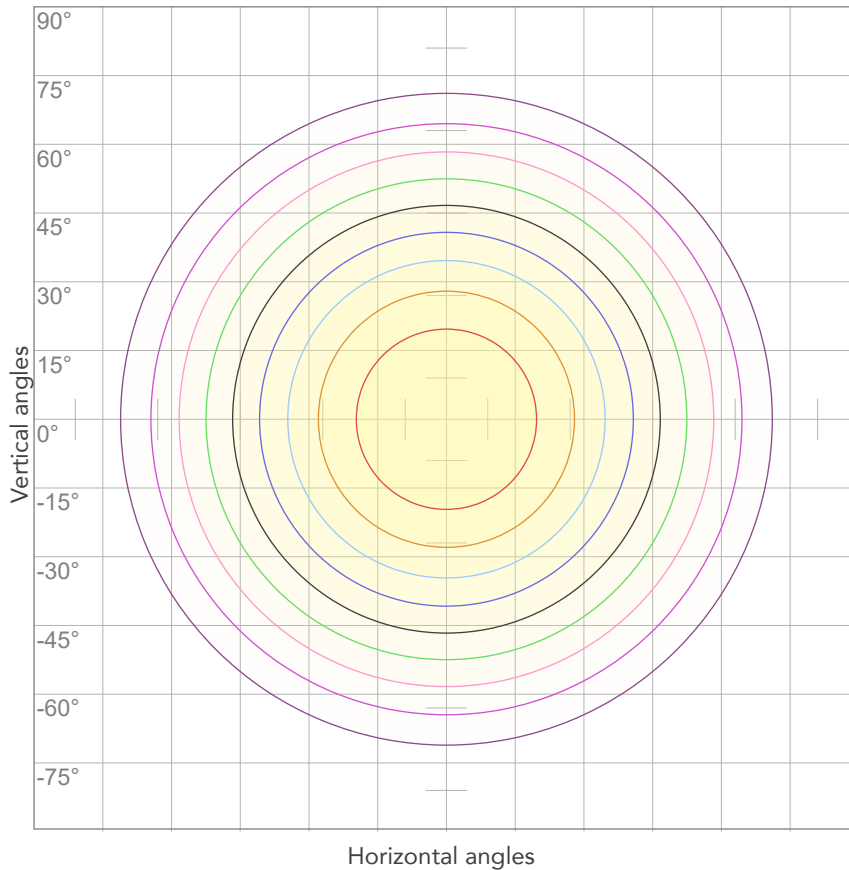
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,144A | 14,7W | 25lm/W |
| Power FC | | | |
| 0,45 | | | |

ISO CANDELA DIAGRAM



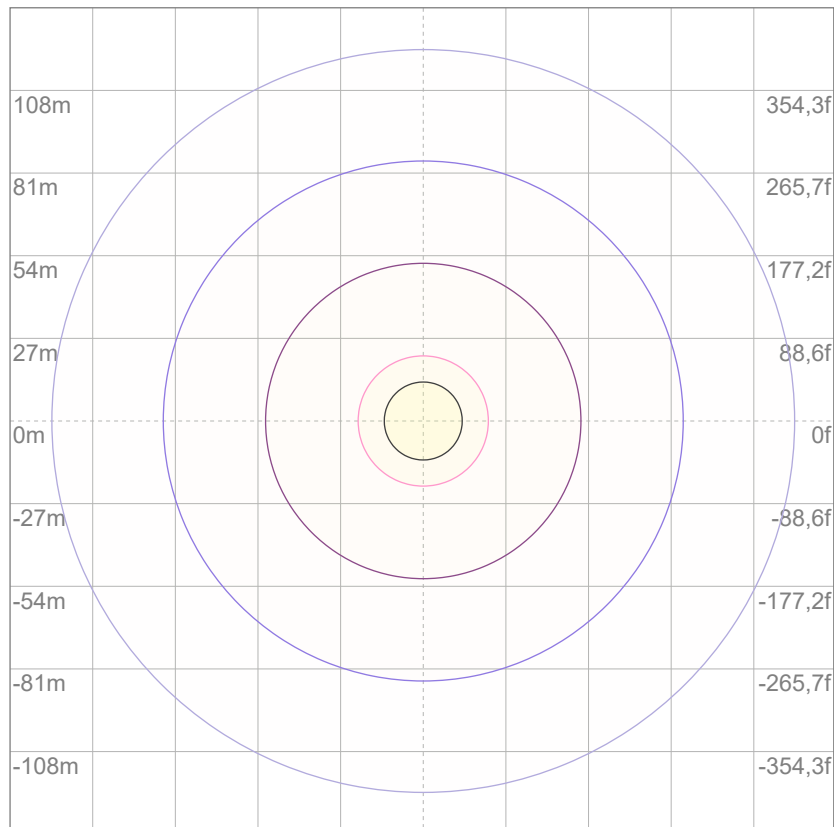
| | |
|-----|--------|
| 10% | 14 cd |
| 20% | 28 cd |
| 30% | 42 cd |
| 40% | 56 cd |
| 50% | 71 cd |
| 60% | 85 cd |
| 70% | 99 cd |
| 80% | 113 cd |

Conditions:

Number of c-planes: 2

Candela at center: 141 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 42,4m lx |
| 5% | 70,6m lx |
| 10% | 0,141 lx |
| 30% | 0,424 lx |
| 50% | 0,706 lx |

Conditions:

Number of c-planes: 2

Lux at center: 1,41 lx

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



Total lumen output:

332 lm

Peak candela output:

167 cd

PRODUCT NAME:
ECLNANOPANELTWC

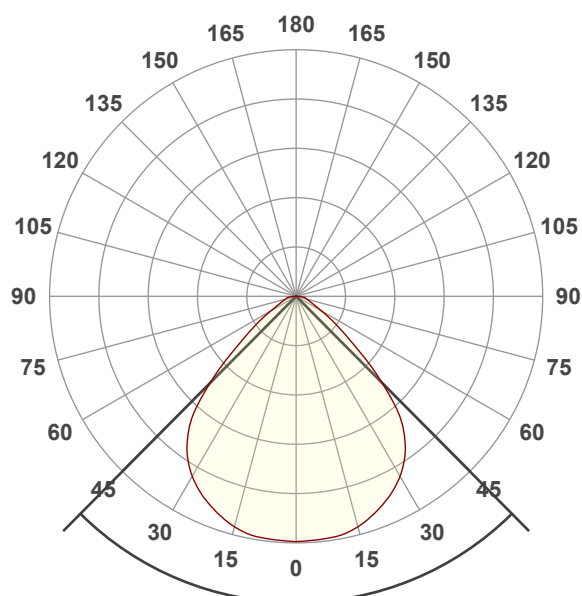
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h Red

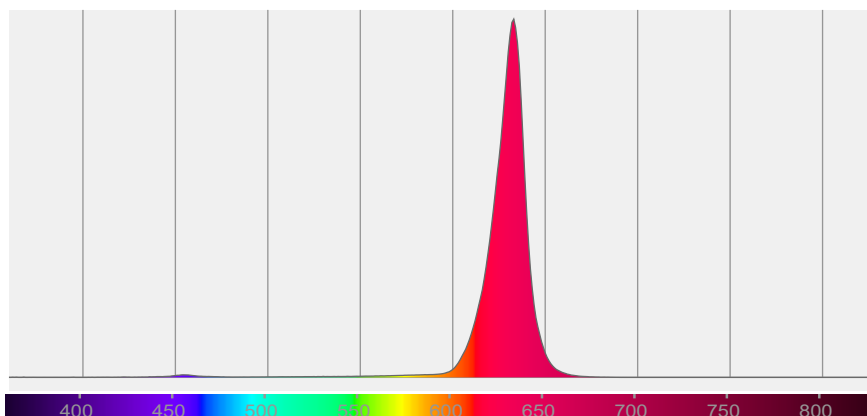
Operator:
Paolo Carvone

Date and time:
23/05/2022 11:28:07



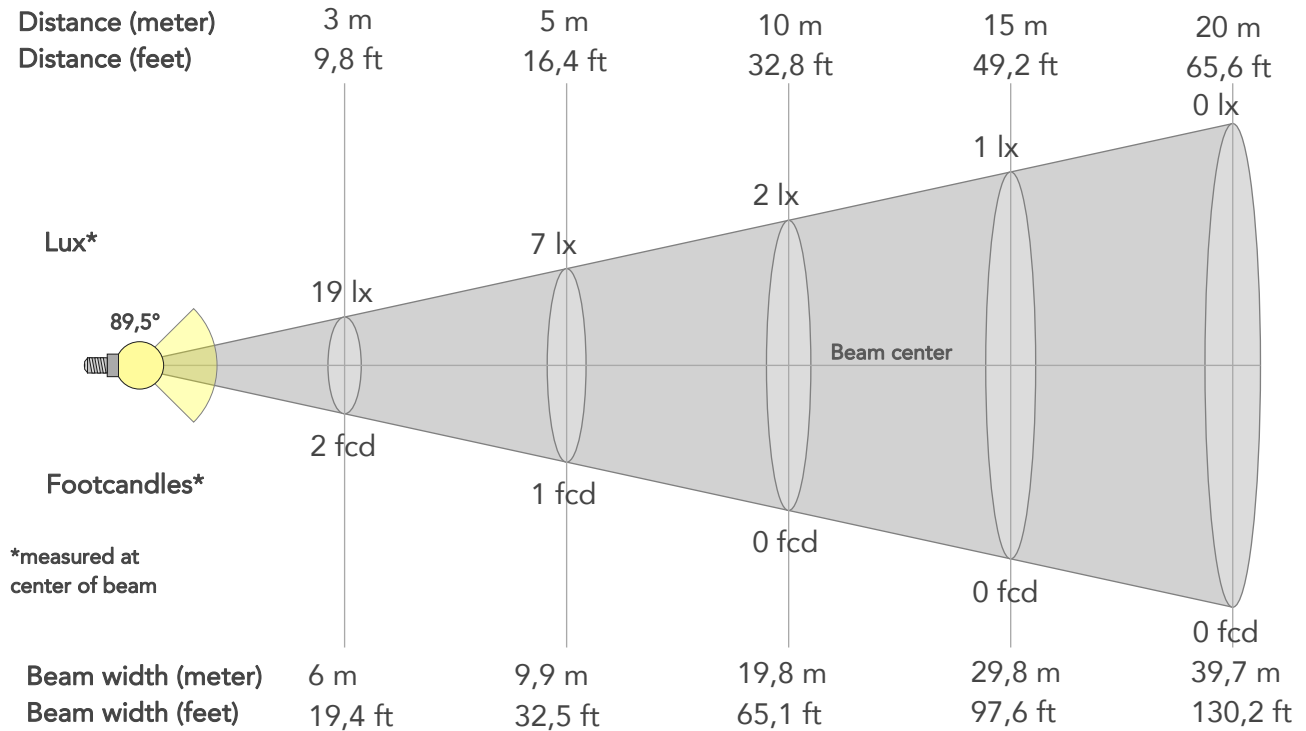
Beam angle 50%: 89,5°
Field angle 10%: 124,1°
Cut off angle 2.5%: 167,9°

Spectra



BEAM DETAILS

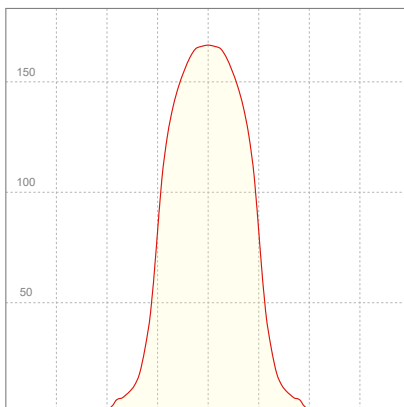
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,5° | 124,1° | 167,9° | 91,3% | 74,2% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 167lx | 42lx | 19lx | 10lx | 7lx | 3lx | 2lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 15fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 4m | 6m | 7,9m | 9,9m | 14,9m | 19,8m | 29,8m | 39,7m | 49,6m | 59,5m | 79,4m | 99,2m |
| Beam wid. | 6,5ft | 13,1ft | 19,4ft | 26ft | 32,5ft | 48,8ft | 65,1ft | 97,6ft | 130,2ft | 162,7ft | 195,3ft | 260,3ft | 325,4ft |

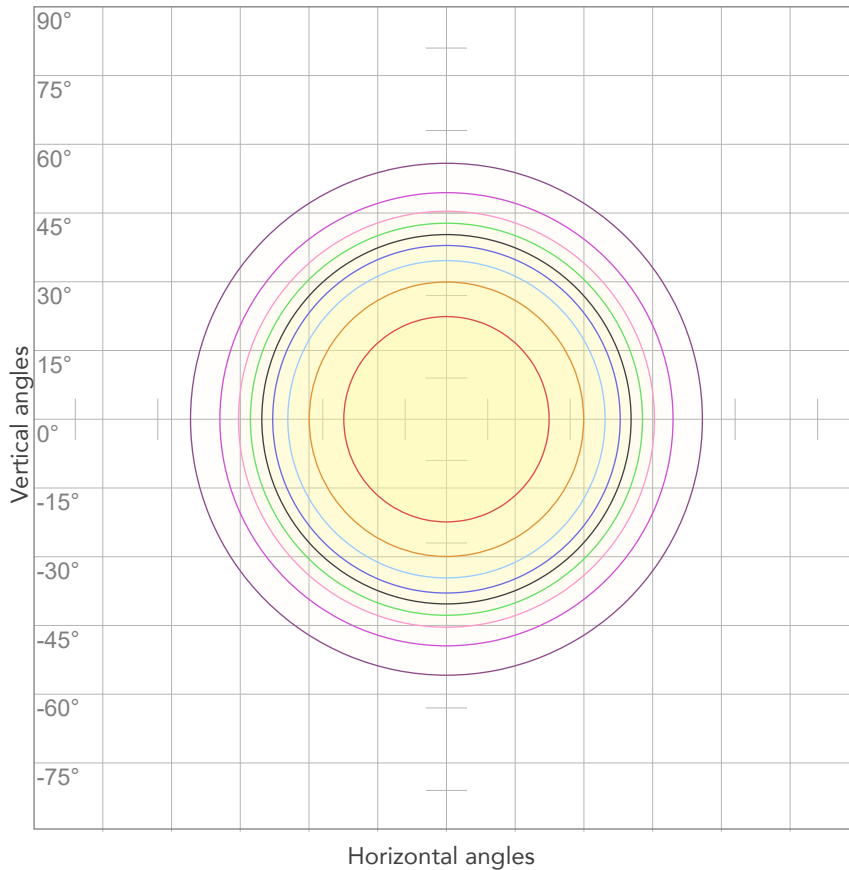
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,140A | 14,7W | 23lm/W |
| Power FC | | | |
| 0,46 | | | |

ISO CANDELA DIAGRAM



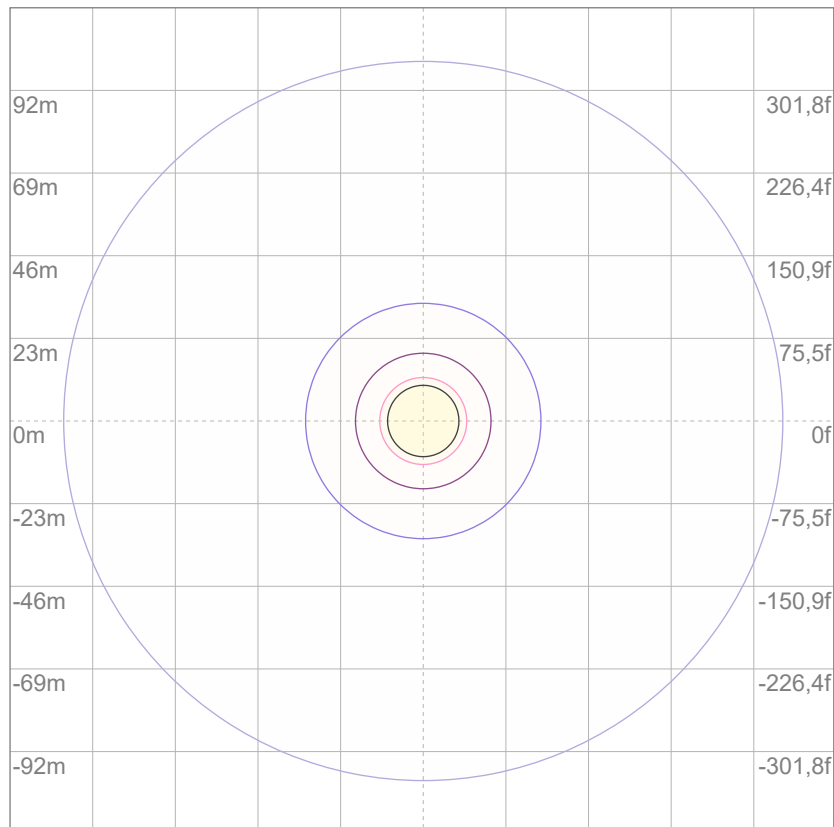
| | |
|-----|--------|
| 10% | 17 cd |
| 20% | 33 cd |
| 30% | 50 cd |
| 40% | 67 cd |
| 50% | 83 cd |
| 60% | 100 cd |
| 70% | 117 cd |
| 80% | 133 cd |

Conditions:

Number of c-planes: 2

Candela at center: 167 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 50,0m lx |
| 5% | 83,3m lx |
| 10% | 0,167 lx |
| 30% | 0,500 lx |
| 50% | 0,833 lx |

Conditions:

Number of c-planes: 2

Lux at center: 1,67 lx

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



Total lumen output:

917 lm

Peak candela output:

309 cd

PRODUCT NAME:
ECLNANOPANELTWC

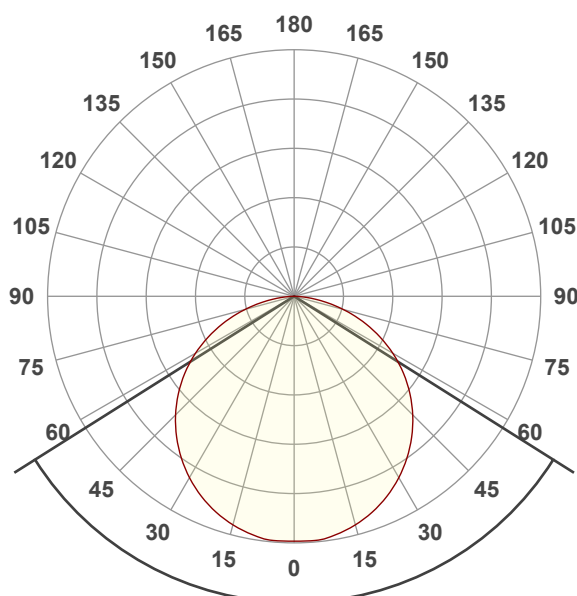
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h Green

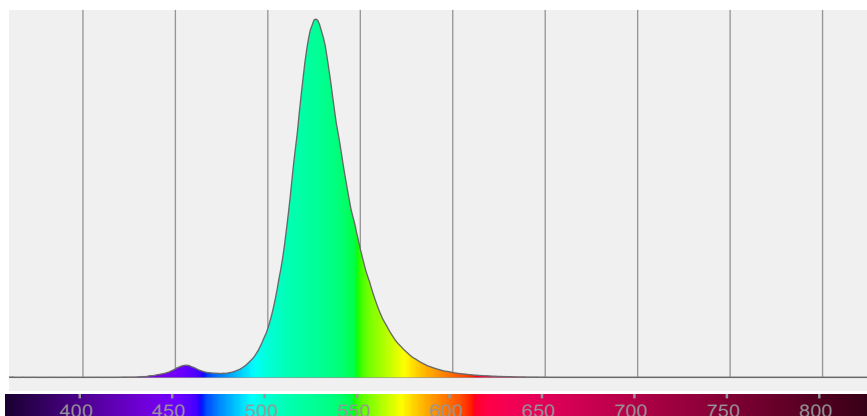
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:30:38



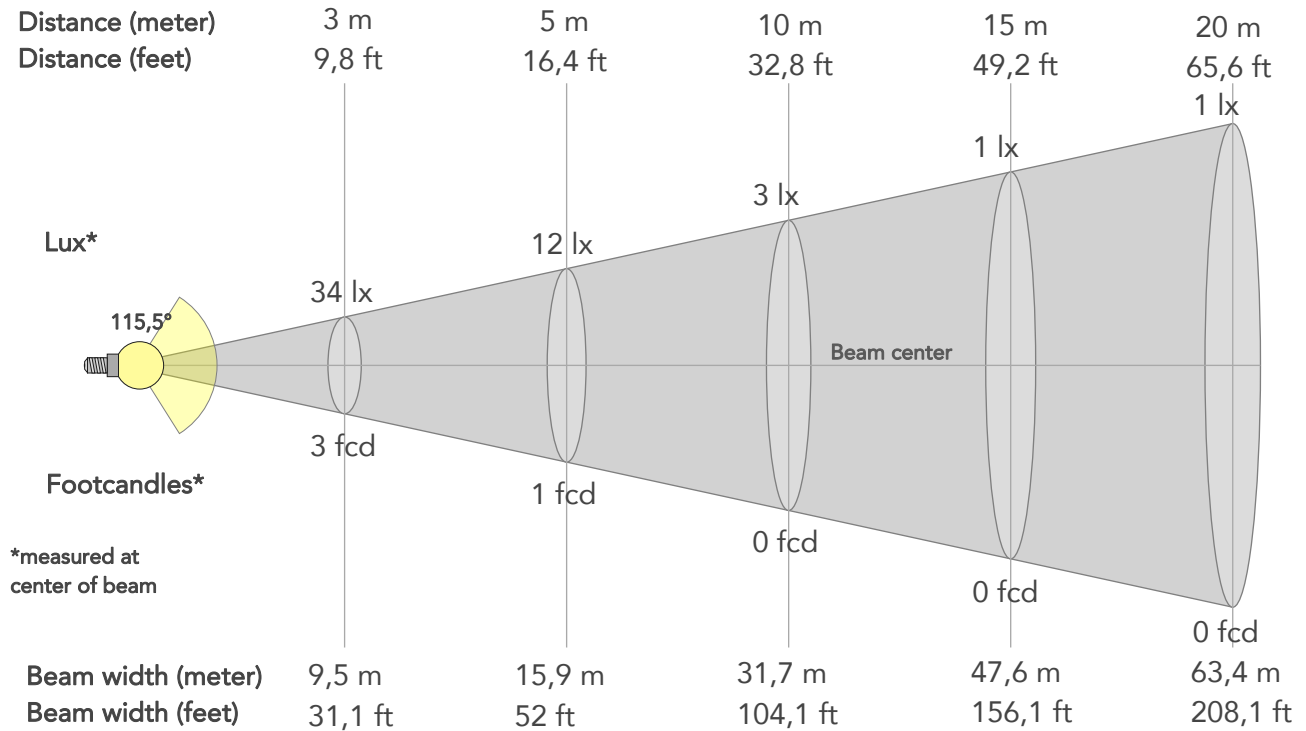
Beam angle 50%: 115,5°
Field angle 10%: 162,8°
Cut off angle 2.5%: 174°

Spectra



BEAM DETAILS

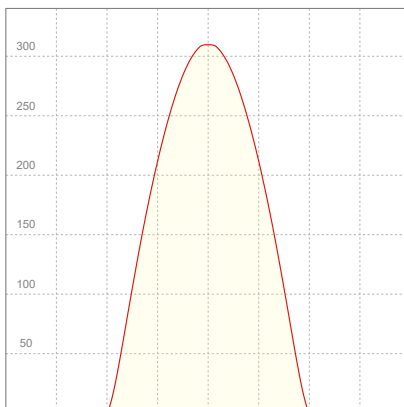
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115,5° | 162,8° | 174° | 77,4% | 52,2% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 309lx | 77lx | 34lx | 19lx | 12lx | 5lx | 3lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 29fcd | 7fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,2m | 6,3m | 9,5m | 12,7m | 15,9m | 23,8m | 31,7m | 47,6m | 63,4m | 79,3m | 95,2m | 126,9m | 158,6m |
| Beam wid. | 10,5ft | 20,9ft | 31,1ft | 41,6ft | 52ft | 78ft | 104,1ft | 156,1ft | 208,1ft | 260,1ft | 312,2ft | 416,2ft | 520,3ft |

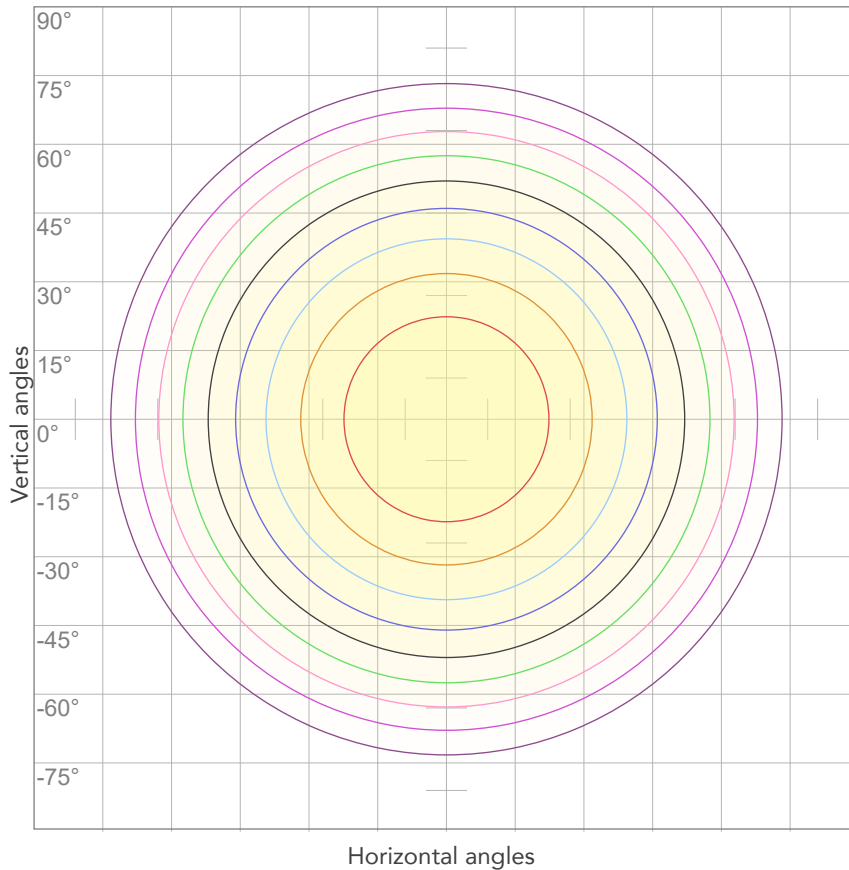
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 228V | 0,152A | 16,7W | 55lm/W |
| Power FC | | | |
| 0,48 | | | |

ISO CANDELA DIAGRAM



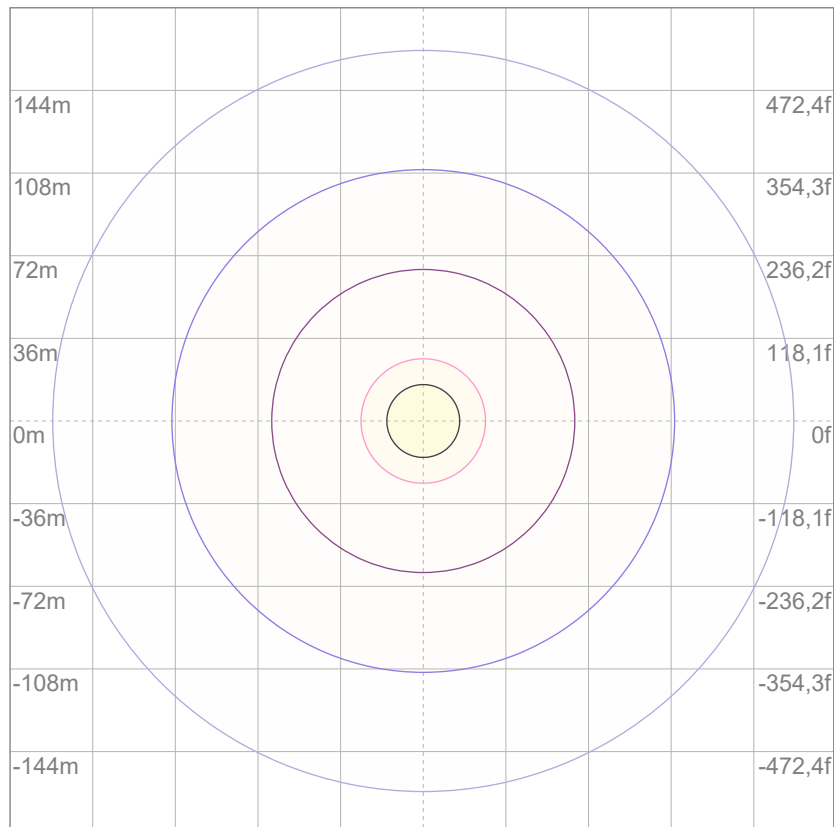
| | |
|-----|--------|
| 10% | 31 cd |
| 20% | 62 cd |
| 30% | 93 cd |
| 40% | 124 cd |
| 50% | 155 cd |
| 60% | 186 cd |
| 70% | 216 cd |
| 80% | 247 cd |

Conditions:

Number of c-planes: 2

Candela at center: 309 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 92,8m lx |
| 5% | 0,155 lx |
| 10% | 0,309 lx |
| 30% | 0,928 lx |
| 50% | 1,55 lx |

Conditions:

Number of c-planes: 2

Lux at center: 3,09 lx

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



Total lumen output:

947 lm

Peak candela output:

331 cd

PRODUCT NAME:
ECLNANOPANELTWC

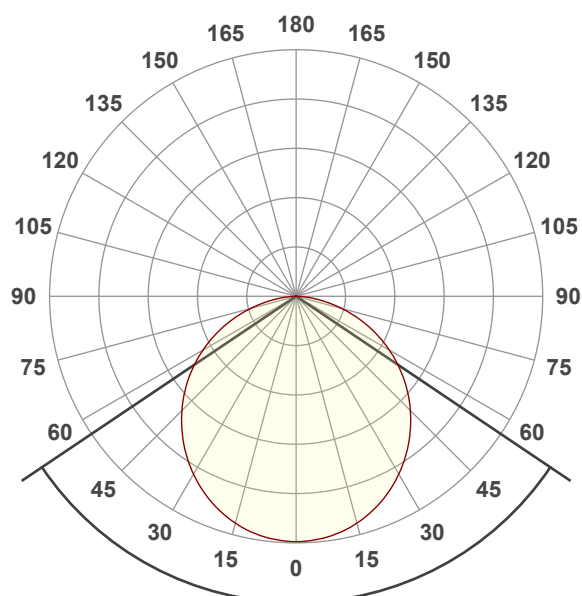
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h Green

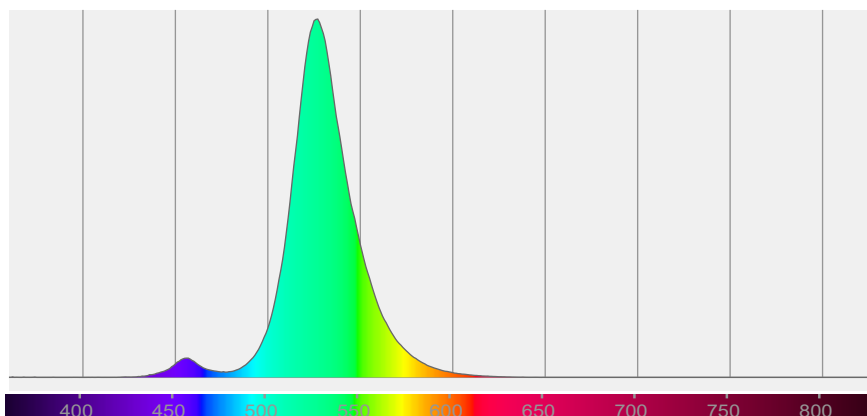
Operator:
Paolo Carvone

Date and time:
23/05/2022 11:04:09



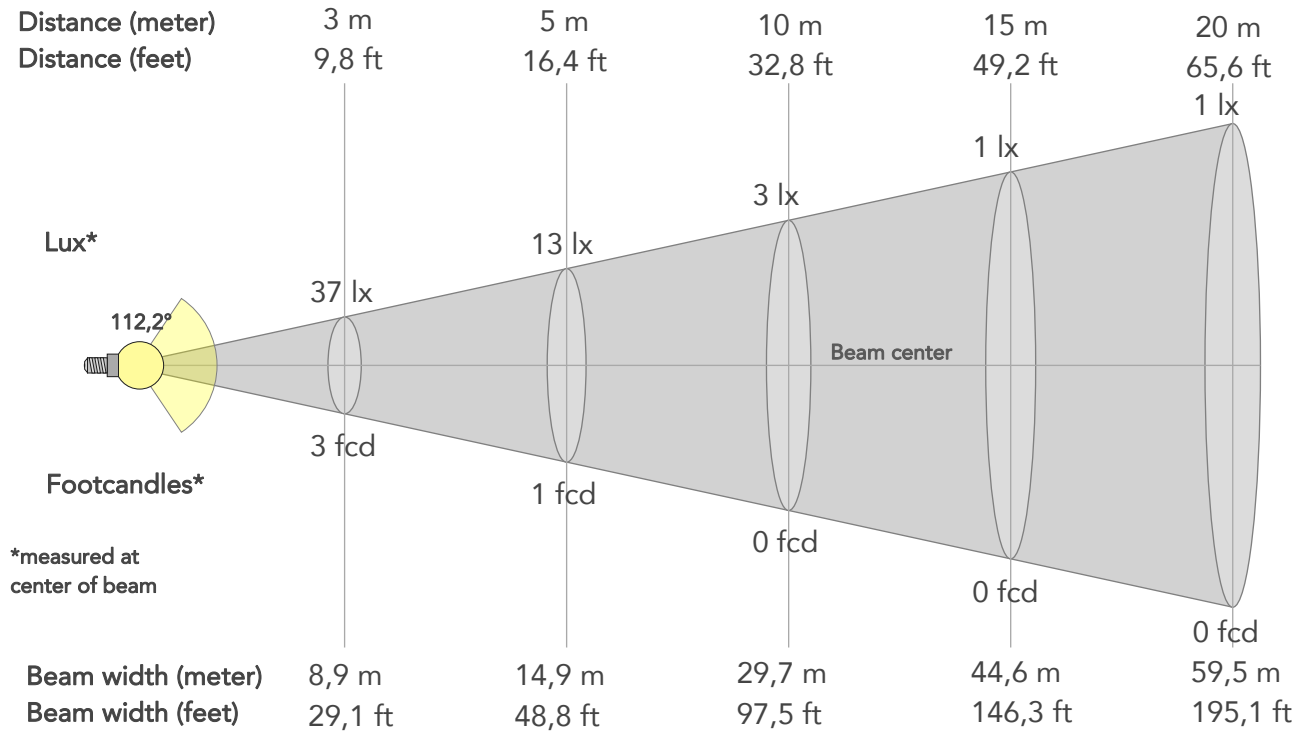
Beam angle 50%: 112,2°
Field angle 10%: 161,9°
Cut off angle 2.5%: 173,9°

Spectra



BEAM DETAILS

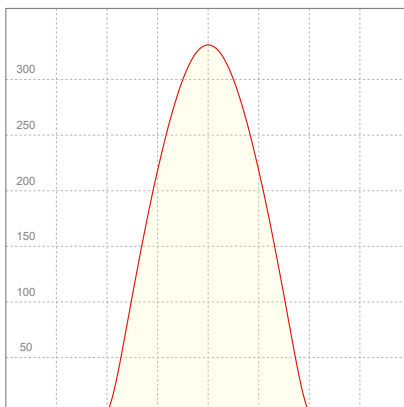
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 112,2° | 161,9° | 173,9° | 78,0% | 53,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 331lx | 83lx | 37lx | 21lx | 13lx | 6lx | 3lx | 1lx | 1lx | 1lx | 0lx | 0lx | 0lx |
| Footcand. | 31fcd | 8fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 5,9m | 8,9m | 11,9m | 14,9m | 22,3m | 29,7m | 44,6m | 59,5m | 74,3m | 89,2m | 118,9m | 148,7m |
| Beam wid. | 9,8ft | 19,6ft | 29,1ft | 39ft | 48,8ft | 73,1ft | 97,5ft | 146,3ft | 195,1ft | 243,8ft | 292,6ft | 390,1ft | 487,7ft |

LINEAR DISTRIBUTION DIAGRAM

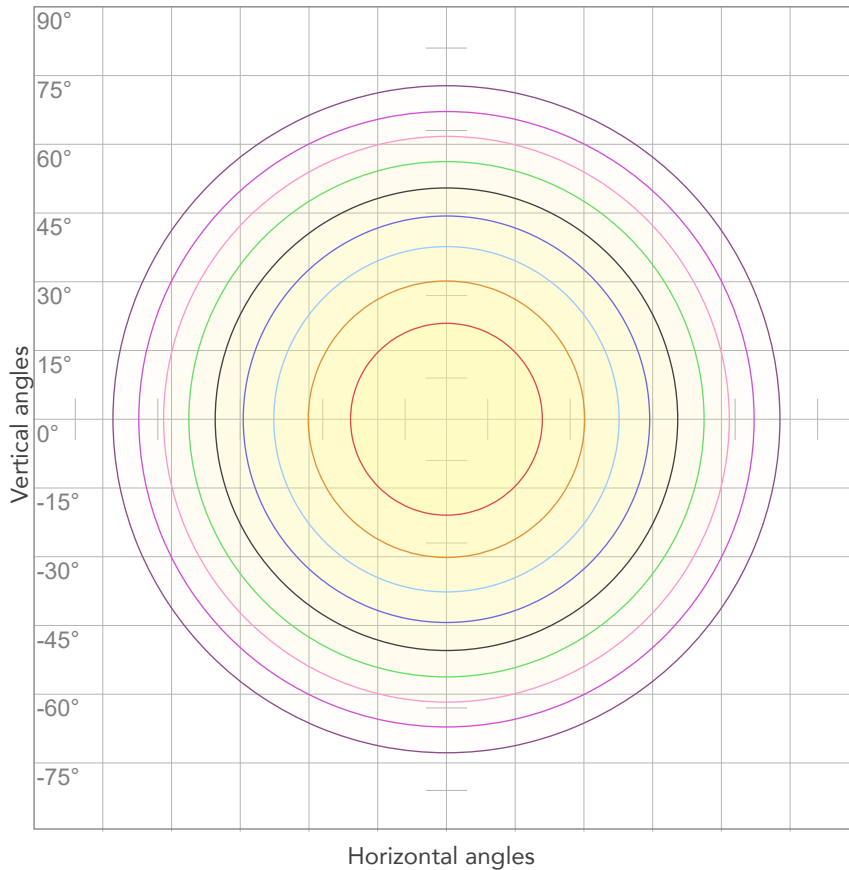


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,149A | 16,6W | 57lm/W |

| Power FC |
|----------|
| 0,49 |

ISO CANDELA DIAGRAM



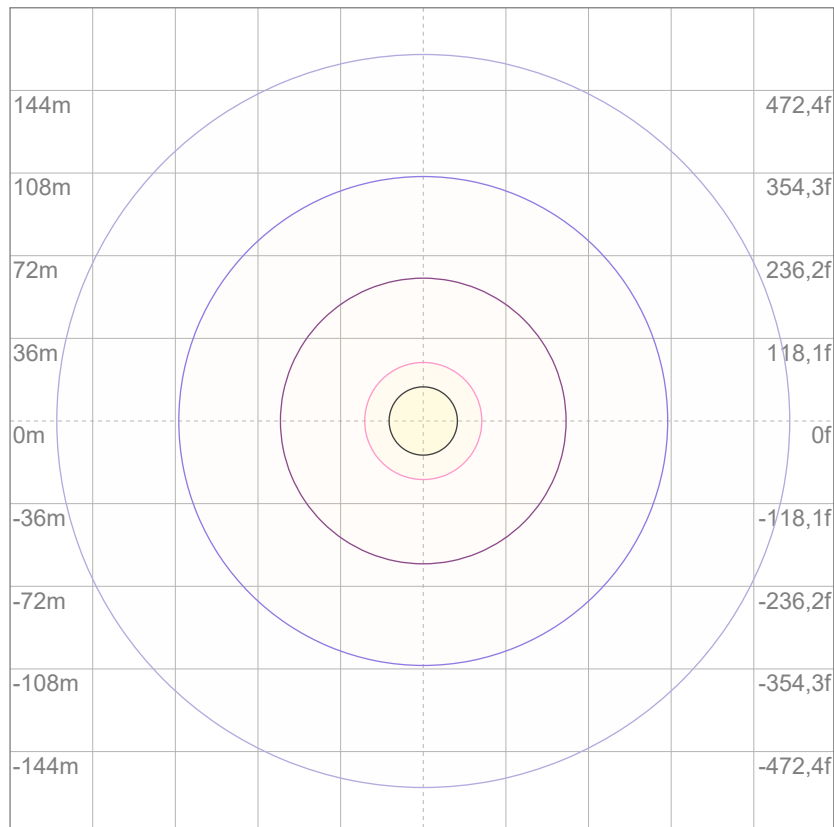
| | |
|-----|--------|
| 10% | 33 cd |
| 20% | 66 cd |
| 30% | 99 cd |
| 40% | 132 cd |
| 50% | 165 cd |
| 60% | 198 cd |
| 70% | 232 cd |
| 80% | 265 cd |

Conditions:

Number of c-planes: 2

Candela at center: 331 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 99,2m lx |
| 5% | 0,165 lx |
| 10% | 0,331 lx |
| 30% | 0,992 lx |
| 50% | 1,65 lx |

Conditions:

Number of c-planes: 2

Lux at center: 3,31 lx

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



Total lumen output:

1014 lm

Peak candela output:

374 cd

PRODUCT NAME:
ECLNANOPANELTWC

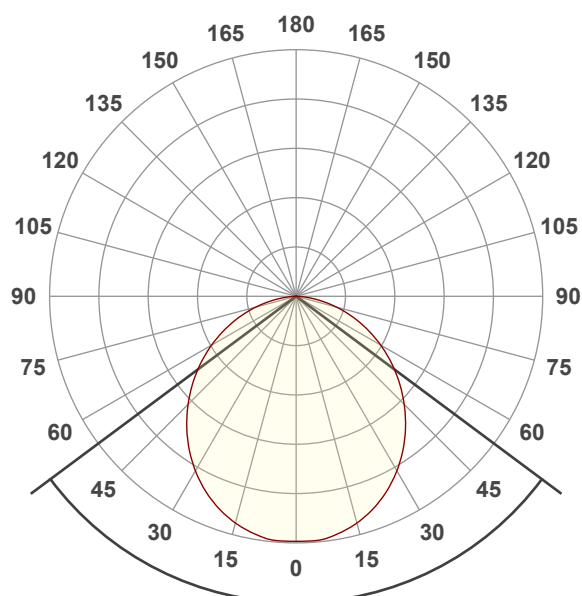
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h Green

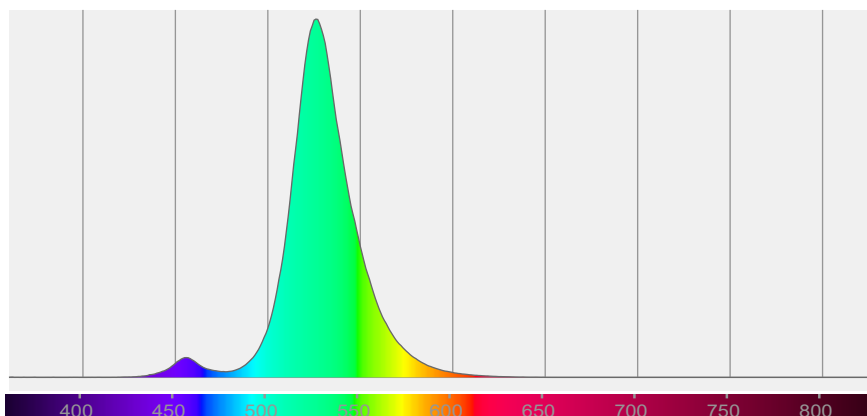
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:48:12



Beam angle 50%: 106,7°
Field angle 10%: 159,9°
Cut off angle 2.5%: 172,5°

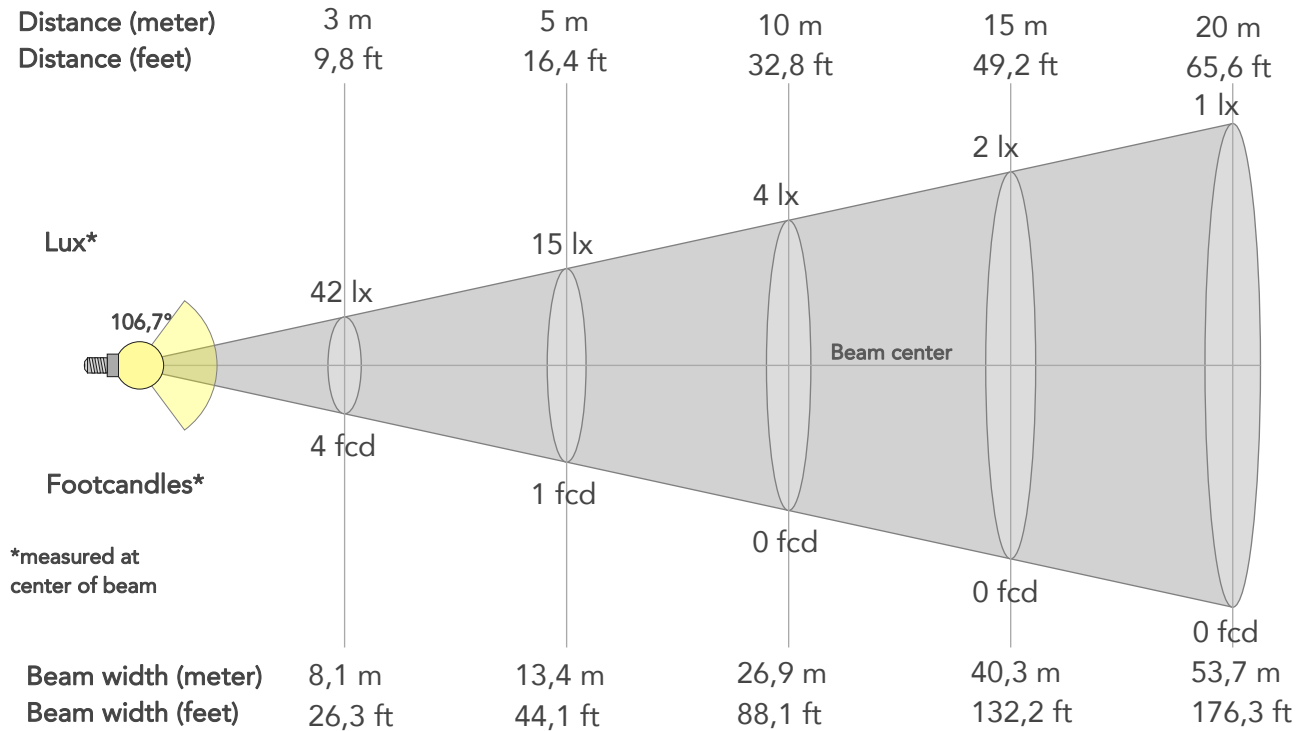
Spectra



BEAM DETAILS



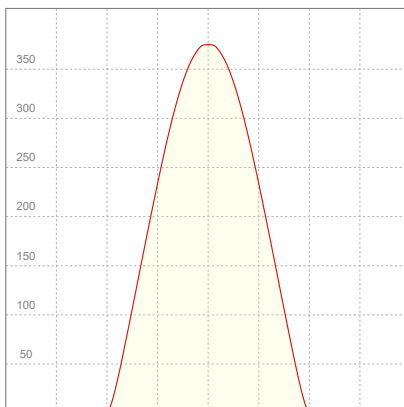
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 106,7° | 159,9° | 172,5° | 79,3% | 54,9% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 374lx | 94lx | 42lx | 23lx | 15lx | 7lx | 4lx | 2lx | 1lx | 1lx | 0lx | 0lx | 0lx |
| Footcand. | 35fcd | 9fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,7m | 5,4m | 8,1m | 10,7m | 13,4m | 20,2m | 26,9m | 40,3m | 53,7m | 67,2m | 80,6m | 107,5m | 134,4m |
| Beam wid. | 8,9ft | 17,7ft | 26,3ft | 35,2ft | 44,1ft | 66,1ft | 88,1ft | 132,2ft | 176,3ft | 220,4ft | 264,4ft | 352,6ft | 440,7ft |

LINEAR DISTRIBUTION DIAGRAM



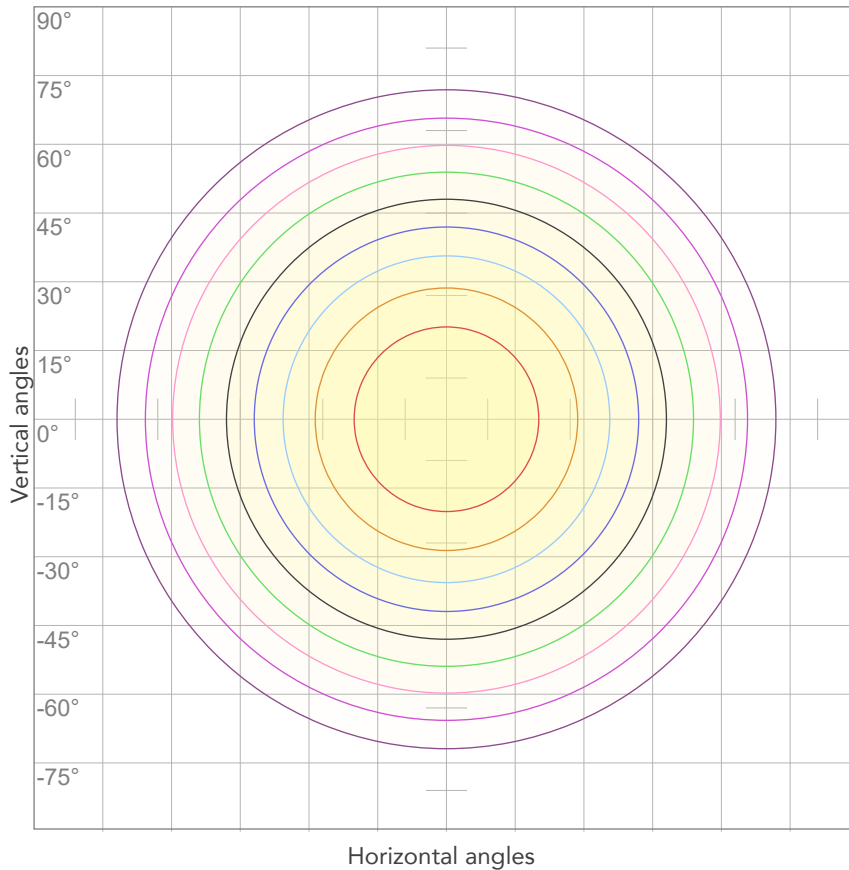
ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,153A | 16,7W | 61lm/W |

| Power FC |
|----------|
| 0,48 |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



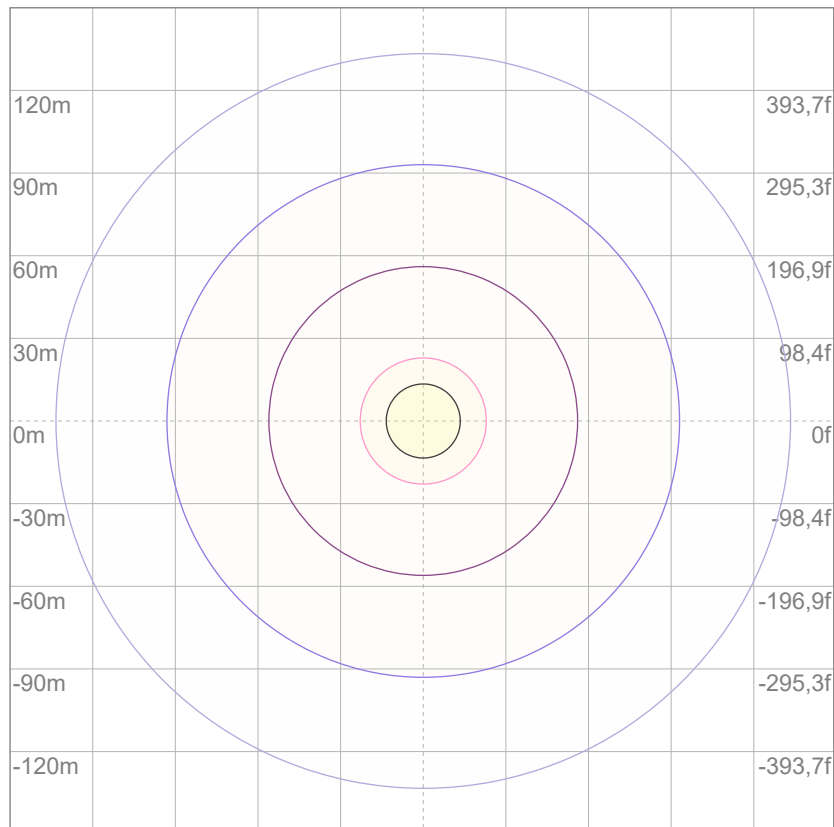
| | |
|-----|--------|
| 10% | 37 cd |
| 20% | 75 cd |
| 30% | 112 cd |
| 40% | 150 cd |
| 50% | 187 cd |
| 60% | 225 cd |
| 70% | 262 cd |
| 80% | 300 cd |

Conditions:

Number of c-planes: 2

Candela at center: 374 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,112 lx |
| 5% | 0,187 lx |
| 10% | 0,374 lx |
| 30% | 1,12 lx |
| 50% | 1,87 lx |

Conditions:

Number of c-planes: 2

Lux at center: 3,74 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

963 lm

Peak candela output:

470 cd

PRODUCT NAME:
ECLNANOPANELTWC

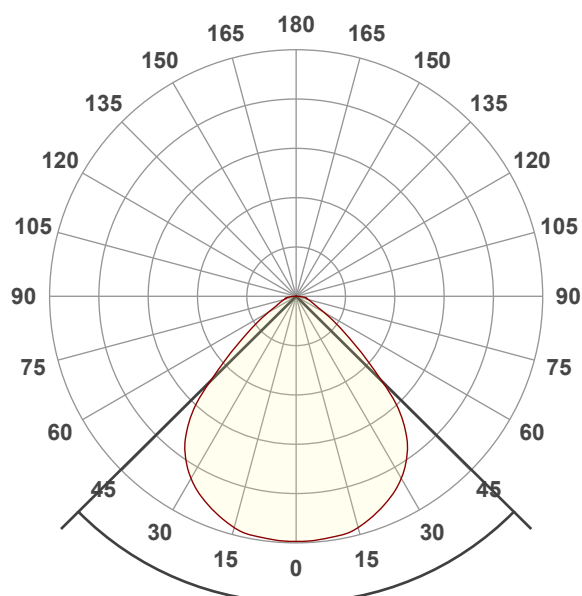
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h Green

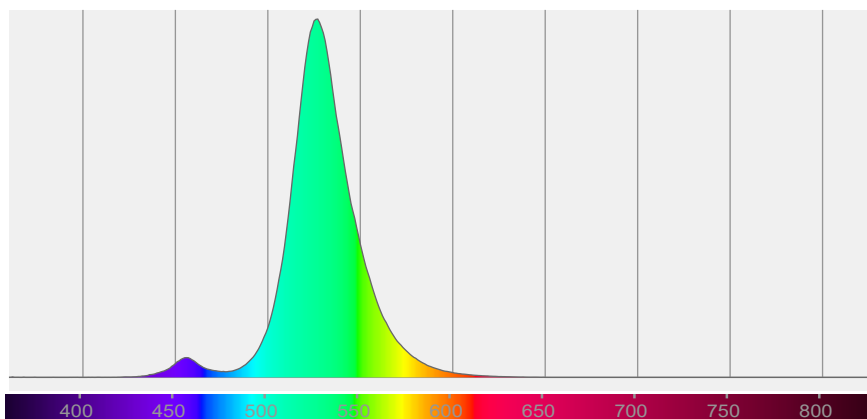
Operator:
Paolo Carvone

Date and time:
23/05/2022 11:29:54



Beam angle 50%: 90,6°
Field angle 10%: 126°
Cut off angle 2.5%: 169,3°

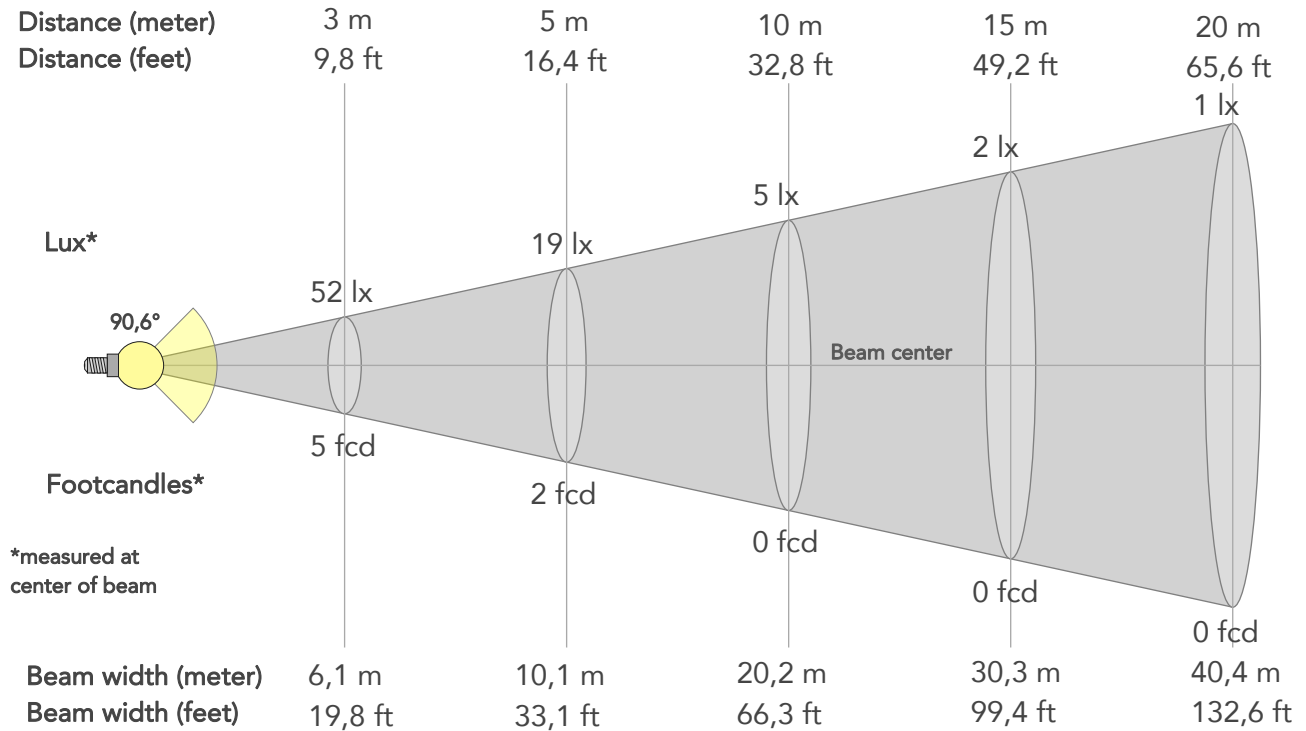
Spectra



BEAM DETAILS



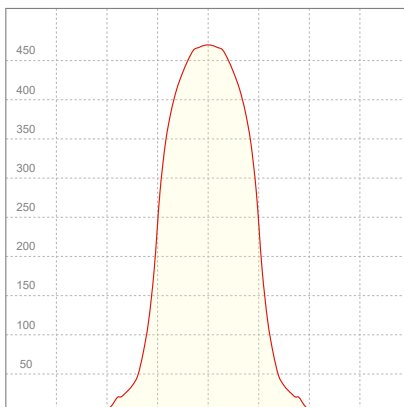
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 90,6° | 126° | 169,3° | 90,8% | 73,4% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 470lx | 117lx | 52lx | 29lx | 19lx | 8lx | 5lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 44fcd | 11fcd | 5fcd | 3fcd | 2fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 4m | 6,1m | 8,1m | 10,1m | 15,2m | 20,2m | 30,3m | 40,4m | 50,5m | 60,6m | 80,8m | 101,1m |
| Beam wid. | 6,7ft | 13,3ft | 19,8ft | 26,5ft | 33,1ft | 49,7ft | 66,3ft | 99,4ft | 132,6ft | 165,7ft | 198,9ft | 265,2ft | 331,5ft |

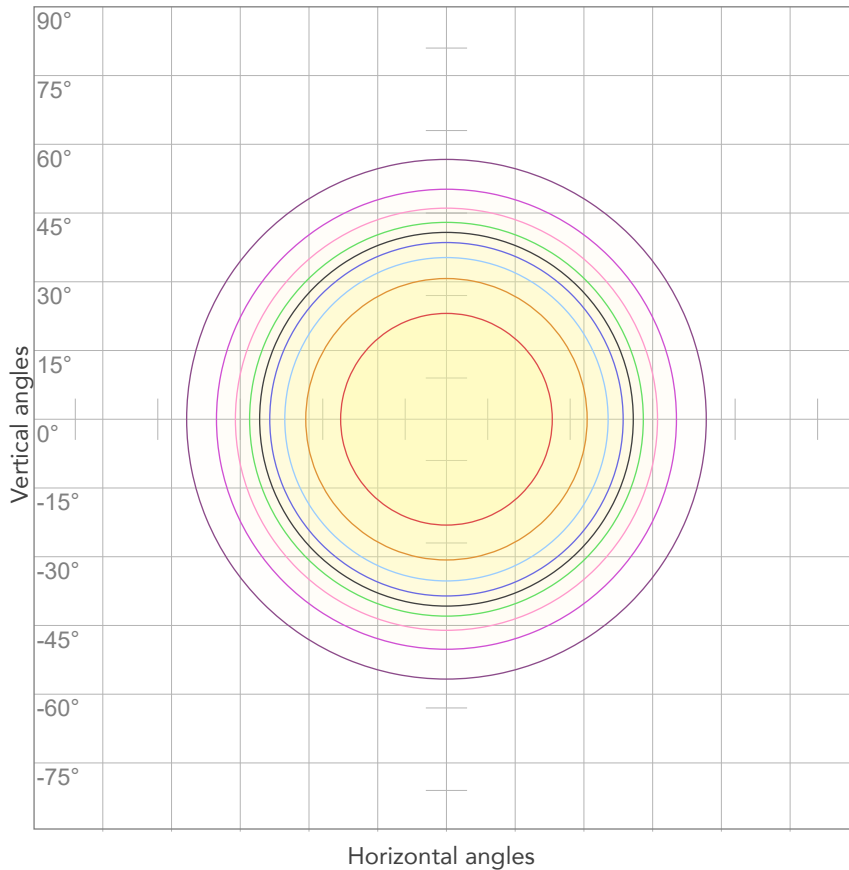
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,149A | 16,6W | 58lm/W |
| Power FC | | | |
| 0,49 | | | |

ISO CANDELA DIAGRAM



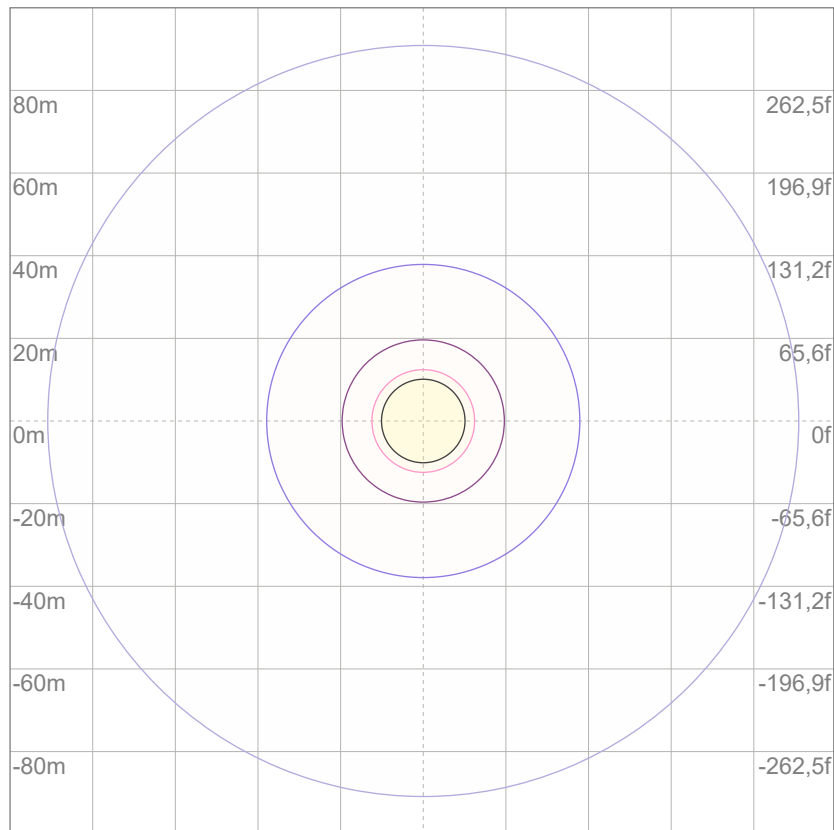
| | |
|-----|--------|
| 10% | 47 cd |
| 20% | 94 cd |
| 30% | 141 cd |
| 40% | 188 cd |
| 50% | 235 cd |
| 60% | 282 cd |
| 70% | 329 cd |
| 80% | 376 cd |

Conditions:

Number of c-planes: 2

Candela at center: 470 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,141 lx |
| 5% | 0,235 lx |
| 10% | 0,470 lx |
| 30% | 1,41 lx |
| 50% | 2,35 lx |

Conditions:

Number of c-planes: 2

Lux at center: 4,70 lx

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



Total lumen output:

274 lm

Peak candela output:

96,8 cd

PRODUCT NAME:
ECLNANOPANELTWC

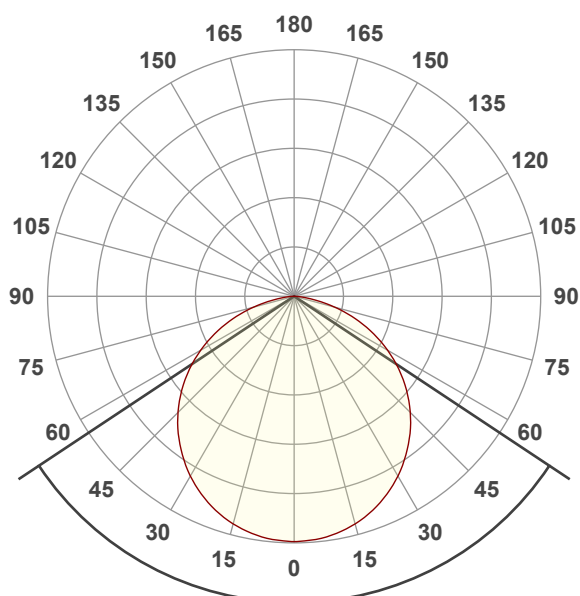
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h Blue

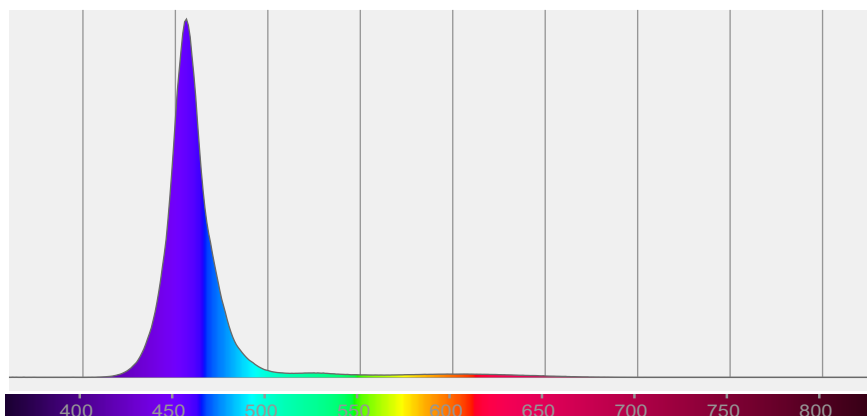
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:40:50



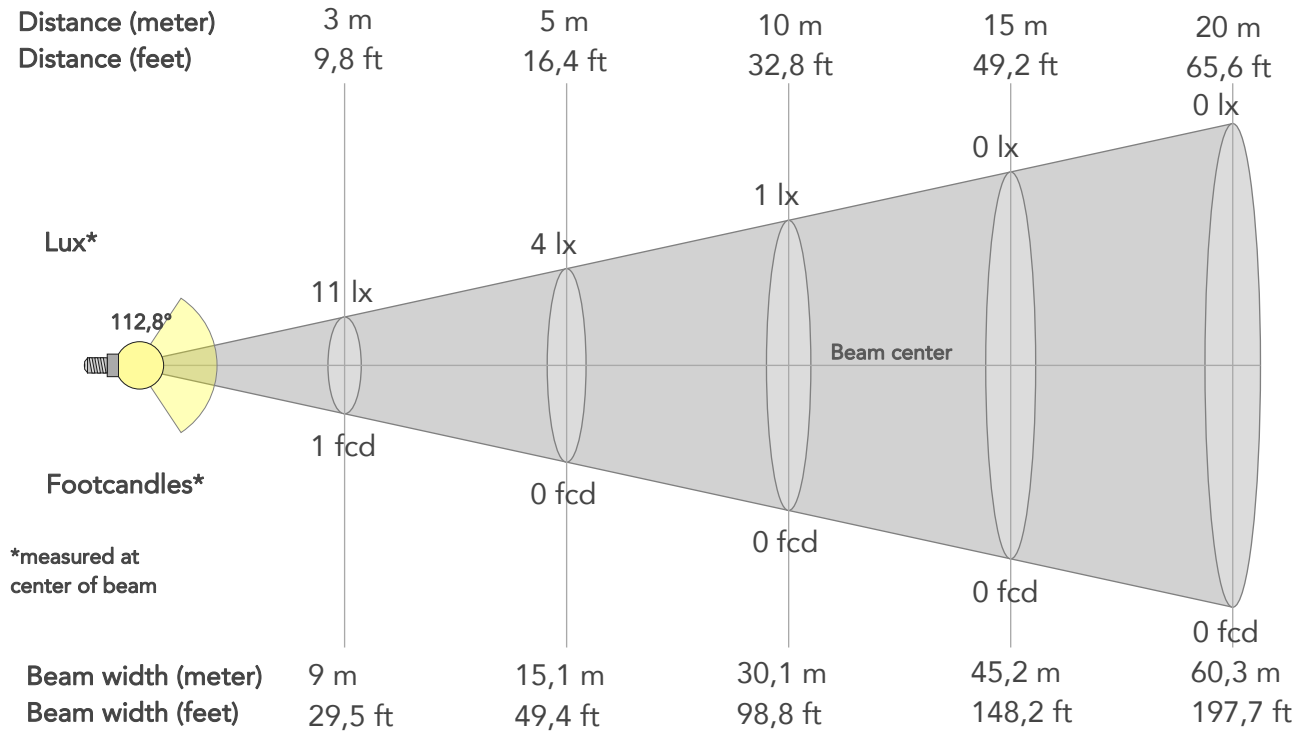
Beam angle 50%: 112,8°
Field angle 10%: 158,3°
Cut off angle 2.5%: 171,2°

Spectra



BEAM DETAILS

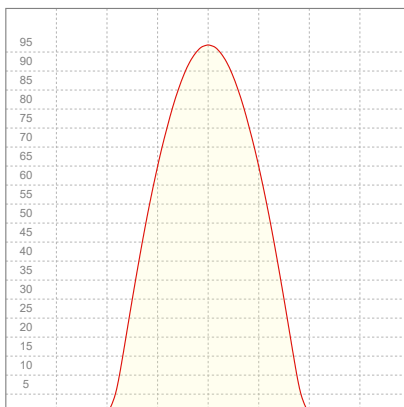
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 112,8° | 158,3° | 171,2° | 79,6% | 54,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 97lx | 24lx | 11lx | 6lx | 4lx | 2lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 9fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 6m | 9m | 12,1m | 15,1m | 22,6m | 30,1m | 45,2m | 60,3m | 75,3m | 90,4m | 120,5m | 150,6m |
| Beam wid. | 9,9ft | 19,9ft | 29,5ft | 39,5ft | 49,4ft | 74,1ft | 98,8ft | 148,2ft | 197,7ft | 247,1ft | 296,5ft | 395,3ft | 494,1ft |

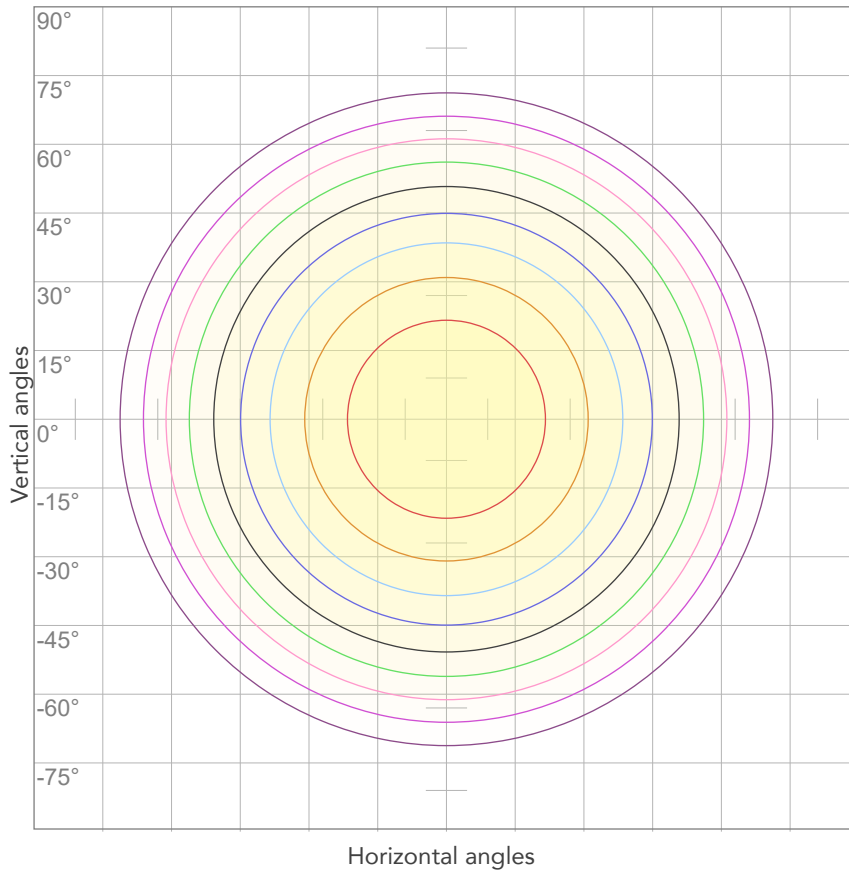
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,167A | 19,4W | 14lm/W |
| Power FC | | | |
| 0,51 | | | |

ISO CANDELA DIAGRAM



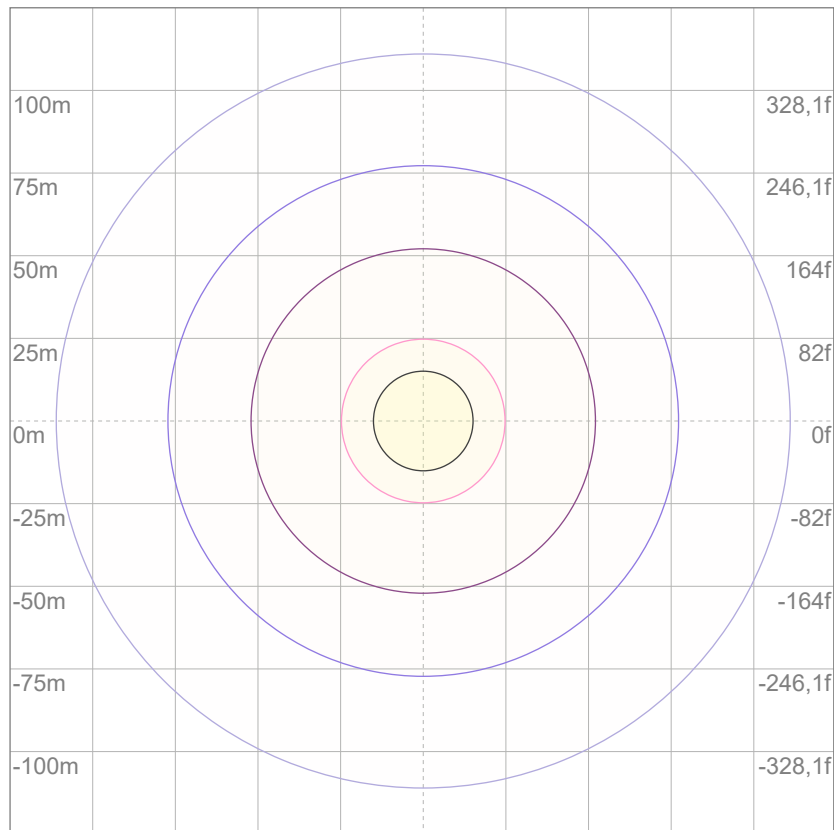
| | |
|-----|-------|
| 10% | 10 cd |
| 20% | 19 cd |
| 30% | 29 cd |
| 40% | 39 cd |
| 50% | 48 cd |
| 60% | 58 cd |
| 70% | 68 cd |
| 80% | 77 cd |

Conditions:

Number of c-planes: 2

Candela at center: 97 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 29,0m lx |
| 5% | 48,4m lx |
| 10% | 96,8m lx |
| 30% | 0,290 lx |
| 50% | 0,484 lx |

Conditions:

Number of c-planes: 2

Lux at center: 0,968 lx

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



Total lumen output:

284 lm

Peak candela output:

103 cd

PRODUCT NAME:
ECLNANOPANELTWC

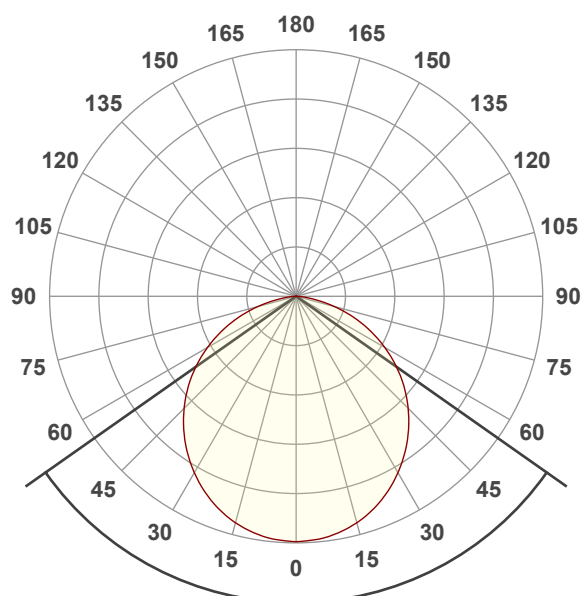
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h Blue

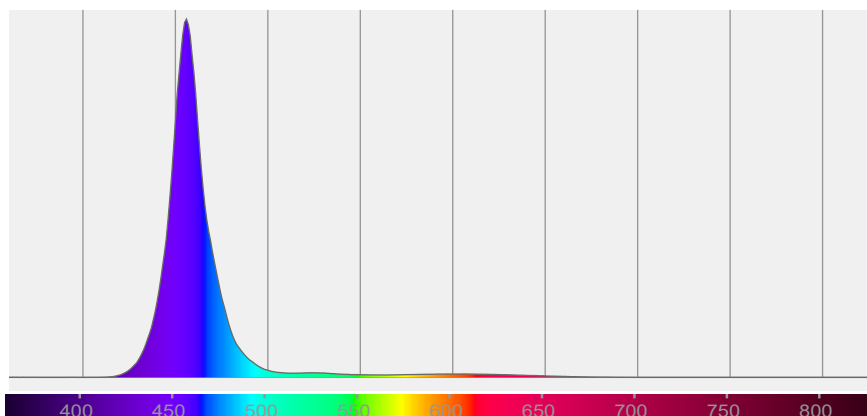
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:55:56



Beam angle 50%: 109,8°
Field angle 10%: 157,5°
Cut off angle 2.5%: 171,1°

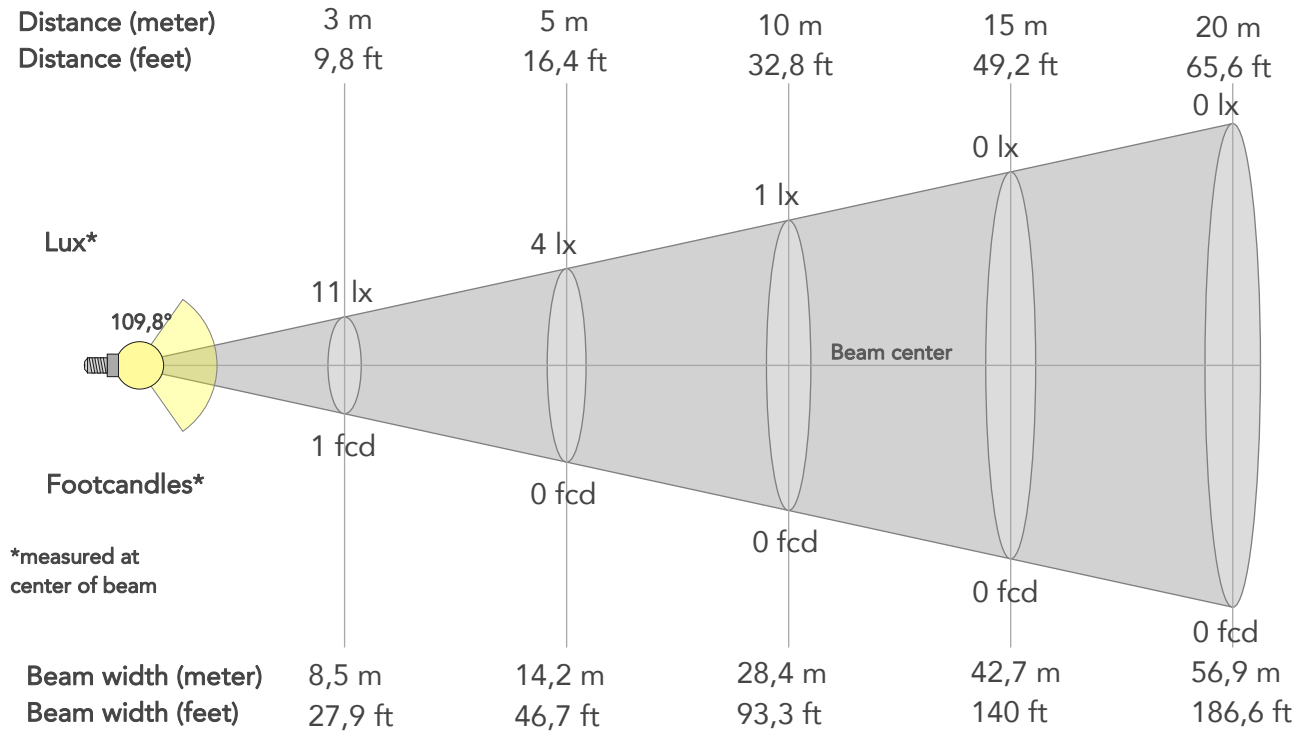
Spectra



BEAM DETAILS



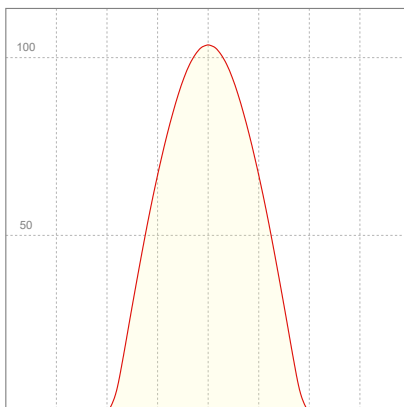
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 109,8° | 157,5° | 171,1° | 80,0% | 54,8% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 103lx | 26lx | 11lx | 6lx | 4lx | 2lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 10fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,8m | 5,7m | 8,5m | 11,4m | 14,2m | 21,3m | 28,4m | 42,7m | 56,9m | 71,1m | 85,3m | 113,8m | 142,2m |
| Beam wid. | 9,4ft | 18,8ft | 27,9ft | 37,3ft | 46,7ft | 70ft | 93,3ft | 140ft | 186,6ft | 233,3ft | 279,9ft | 373,2ft | 466,5ft |

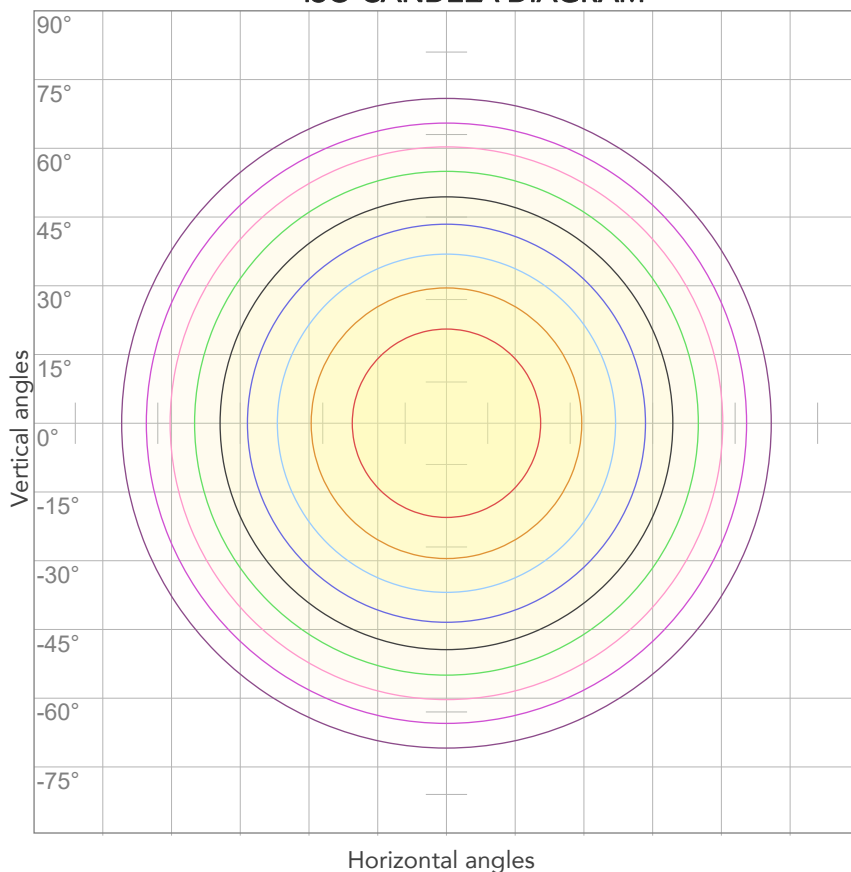
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,167A | 19,4W | 15lm/W |
| Power FC | | | |
| 0,51 | | | |

ISO CANDELA DIAGRAM



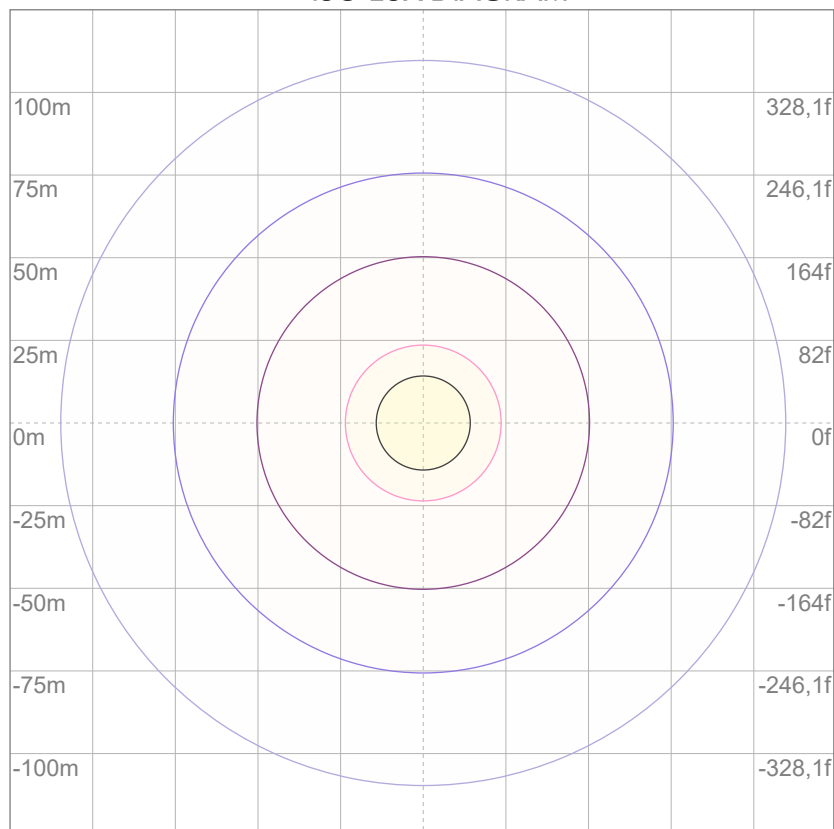
| | |
|-----|-------|
| 10% | 10 cd |
| 20% | 21 cd |
| 30% | 31 cd |
| 40% | 41 cd |
| 50% | 52 cd |
| 60% | 62 cd |
| 70% | 72 cd |
| 80% | 83 cd |

Conditions:

Number of c-planes: 2

Candela at center: 103 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 31,0m lx |
| 5% | 51,7m lx |
| 10% | 0,103 lx |
| 30% | 0,310 lx |
| 50% | 0,517 lx |

Conditions:

Number of c-planes: 2

Lux at center: 1,03 lx

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



Total lumen output:

297 lm

Peak candela output:

116 cd

PRODUCT NAME:
ECLNANOPANELTWC

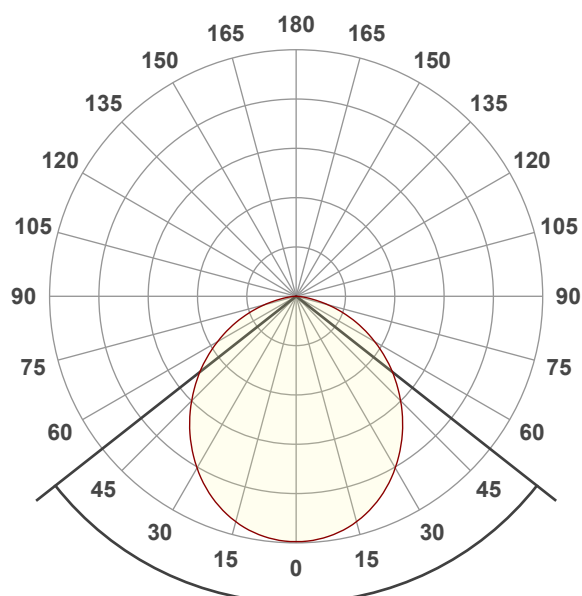
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h Blue

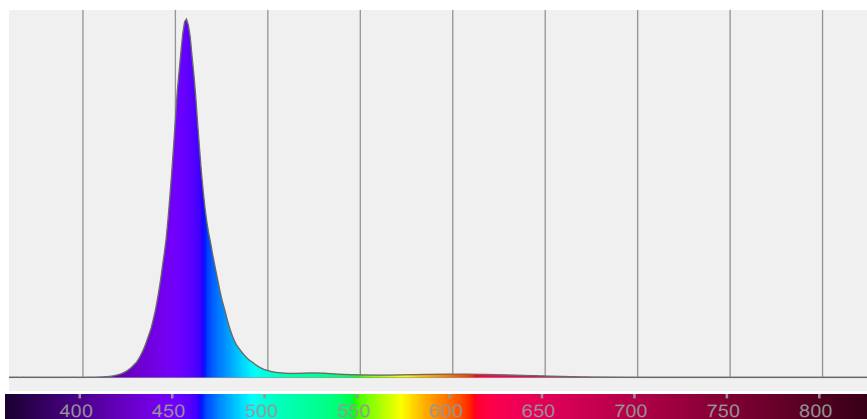
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:45:37



Beam angle 50%: 103,6°
Field angle 10%: 154,7°
Cut off angle 2.5%: 169,4°

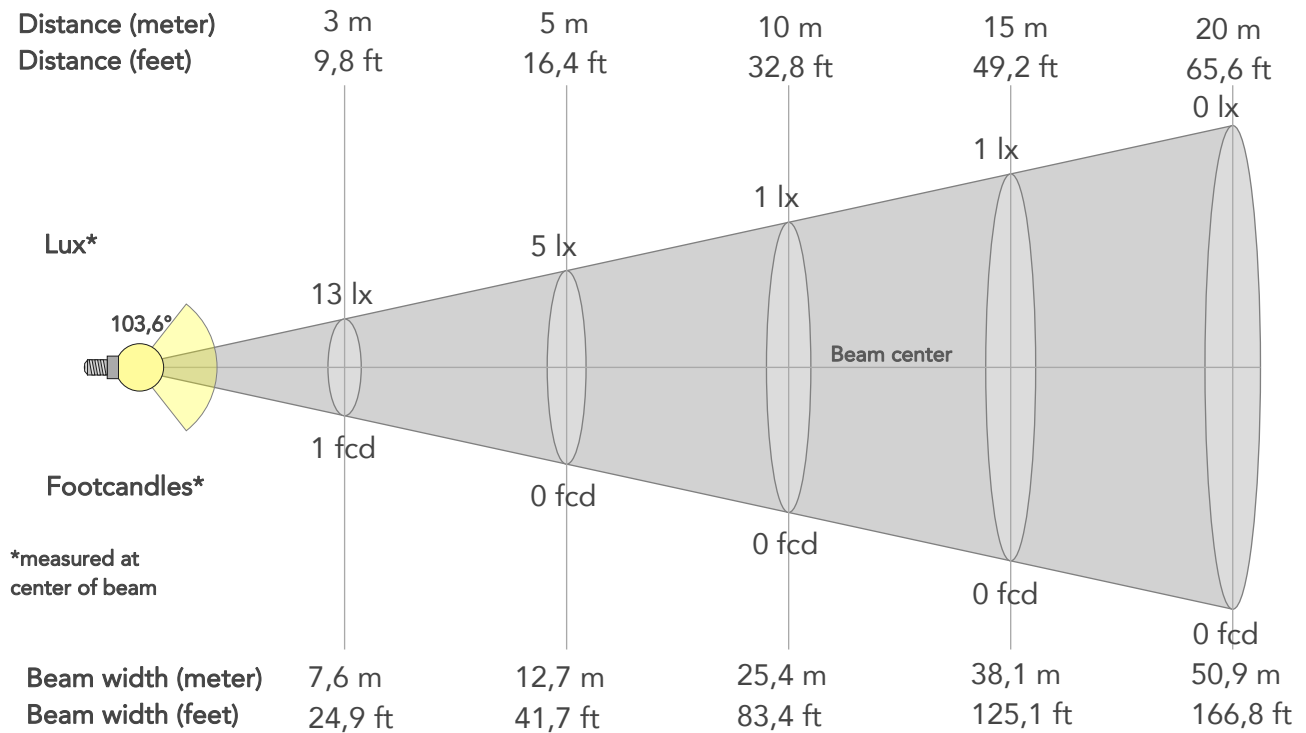
Spectra



BEAM DETAILS



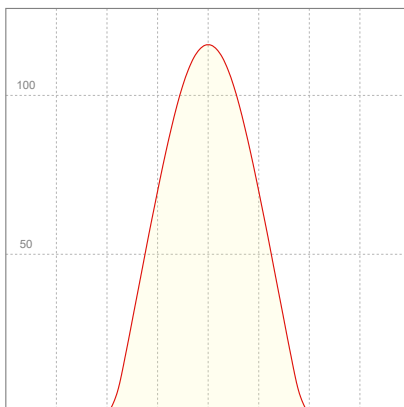
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 103,6° | 154,7° | 169,4° | 81,8% | 57,2% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 116lx | 29lx | 13lx | 7lx | 5lx | 2lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 11fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,5m | 5,1m | 7,6m | 10,2m | 12,7m | 19,1m | 25,4m | 38,1m | 50,9m | 63,6m | 76,3m | 101,7m | 127,2m |
| Beam wid. | 8,4ft | 16,8ft | 24,9ft | 33,3ft | 41,7ft | 62,6ft | 83,4ft | 125,1ft | 166,8ft | 208,5ft | 250,2ft | 333,6ft | 417,1ft |

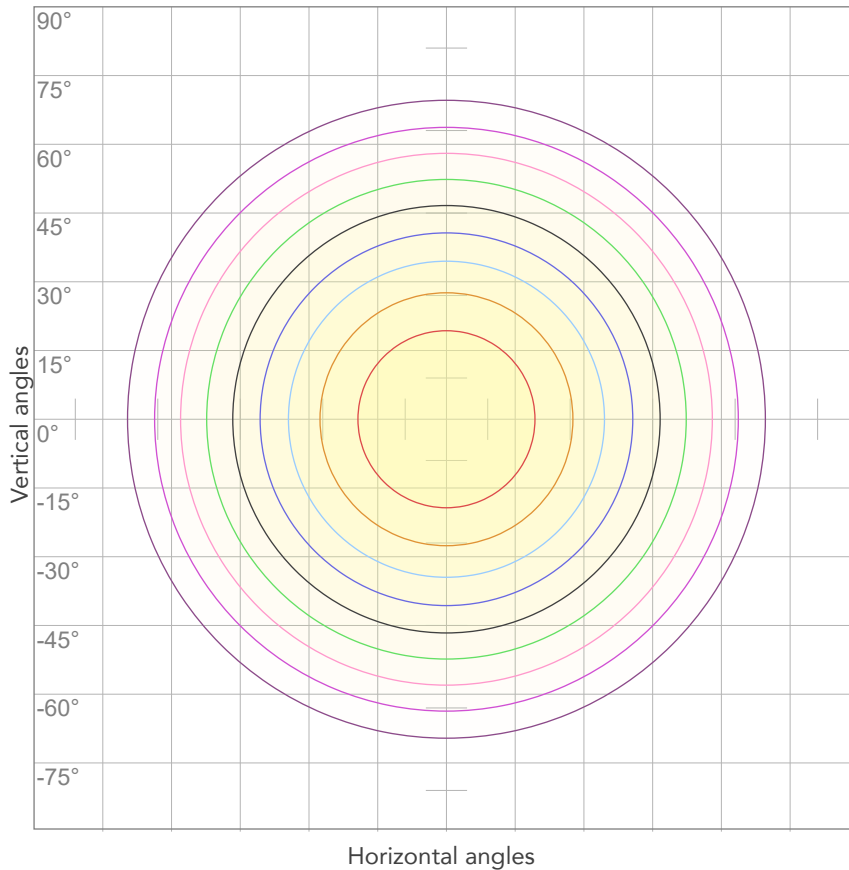
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,166A | 19,4W | 15lm/W |
| Power FC | | | |
| 0,51 | | | |

ISO CANDELA DIAGRAM



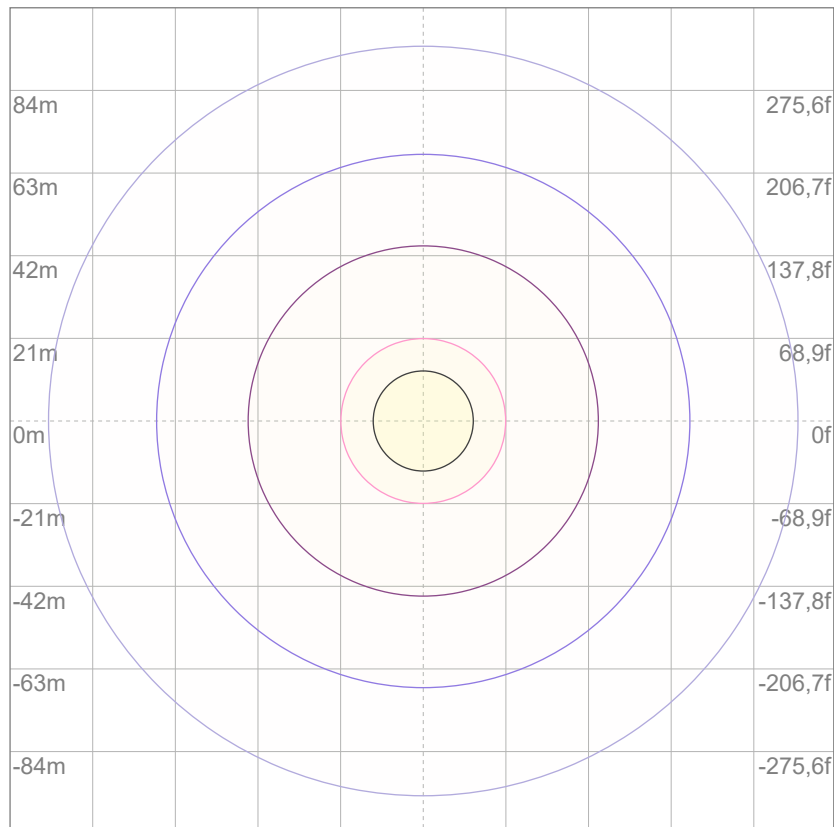
| | |
|-----|-------|
| 10% | 12 cd |
| 20% | 23 cd |
| 30% | 35 cd |
| 40% | 46 cd |
| 50% | 58 cd |
| 60% | 69 cd |
| 70% | 81 cd |
| 80% | 93 cd |

Conditions:

Number of c-planes: 2

Candela at center: 116 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 34,7m lx |
| 5% | 57,9m lx |
| 10% | 0,116 lx |
| 30% | 0,347 lx |
| 50% | 0,579 lx |

Conditions:

Number of c-planes: 2

Lux at center: 1,16 lx

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



Total lumen output:

285 lm

Peak candela output:

149 cd

PRODUCT NAME:
ECLNANOPANELTWC

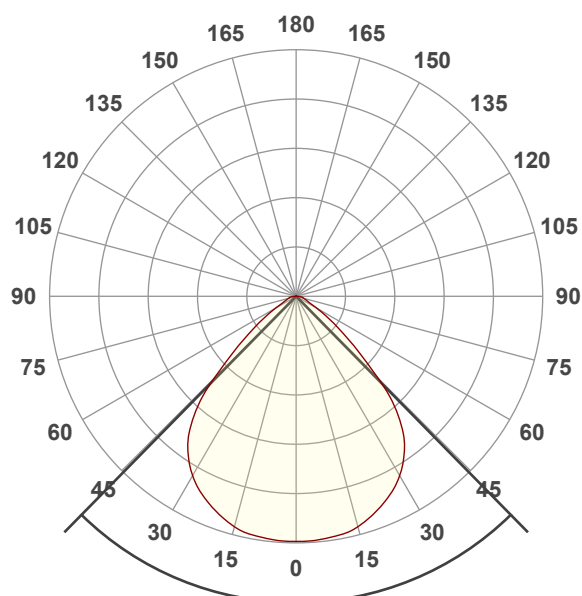
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h Blue

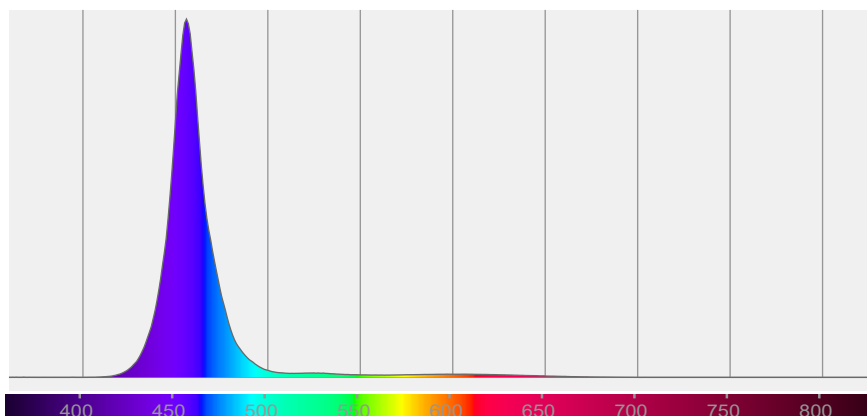
Operator:
Paolo Carvone

Date and time:
23/05/2022 11:31:14



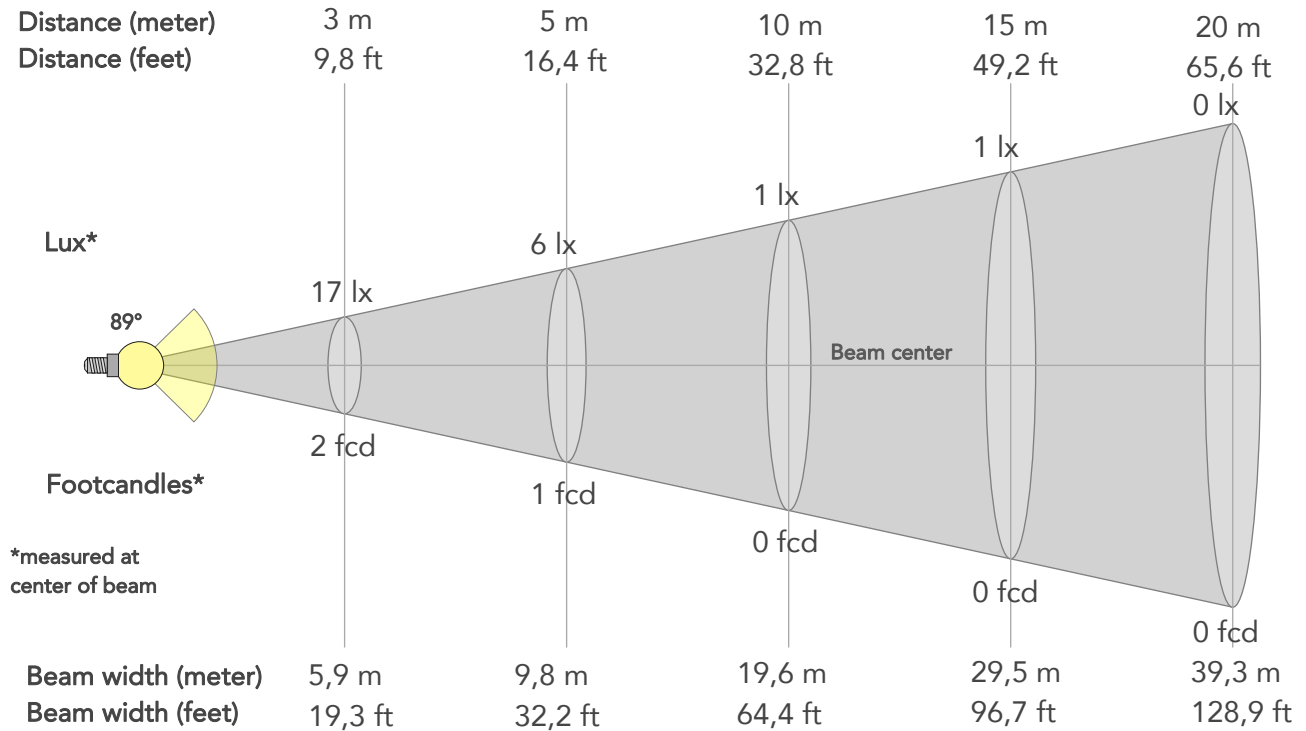
Beam angle 50%: 89°
Field angle 10%: 120,2°
Cut off angle 2.5%: 162,5°

Spectra



BEAM DETAILS

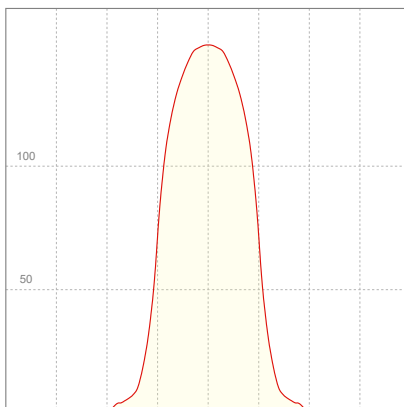
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89° | 120,2° | 162,5° | 93,5% | 77,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 149lx | 37lx | 17lx | 9lx | 6lx | 3lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| Footcand. | 14fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 3,9m | 5,9m | 7,9m | 9,8m | 14,7m | 19,6m | 29,5m | 39,3m | 49,1m | 58,9m | 78,6m | 98,2m |
| Beam wid. | 6,5ft | 13ft | 19,3ft | 25,7ft | 32,2ft | 48,3ft | 64,4ft | 96,7ft | 128,9ft | 161,1ft | 193,3ft | 257,7ft | 322,2ft |

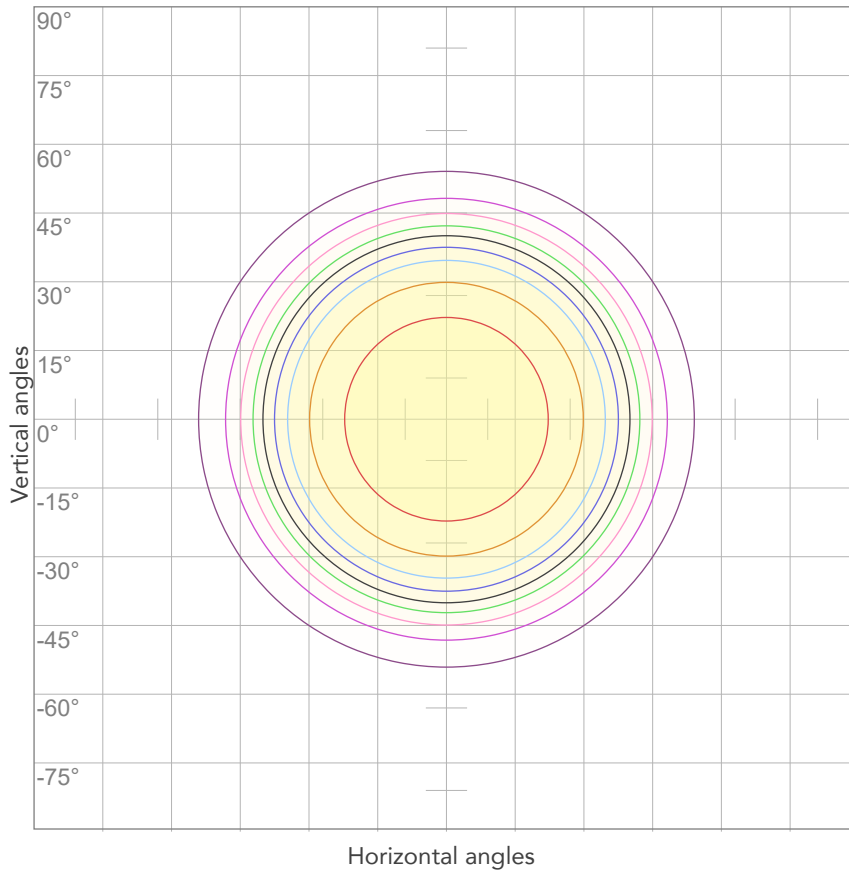
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,164A | 19,5W | 15lm/W |
| Power FC | | | |
| 0,52 | | | |

ISO CANDELA DIAGRAM



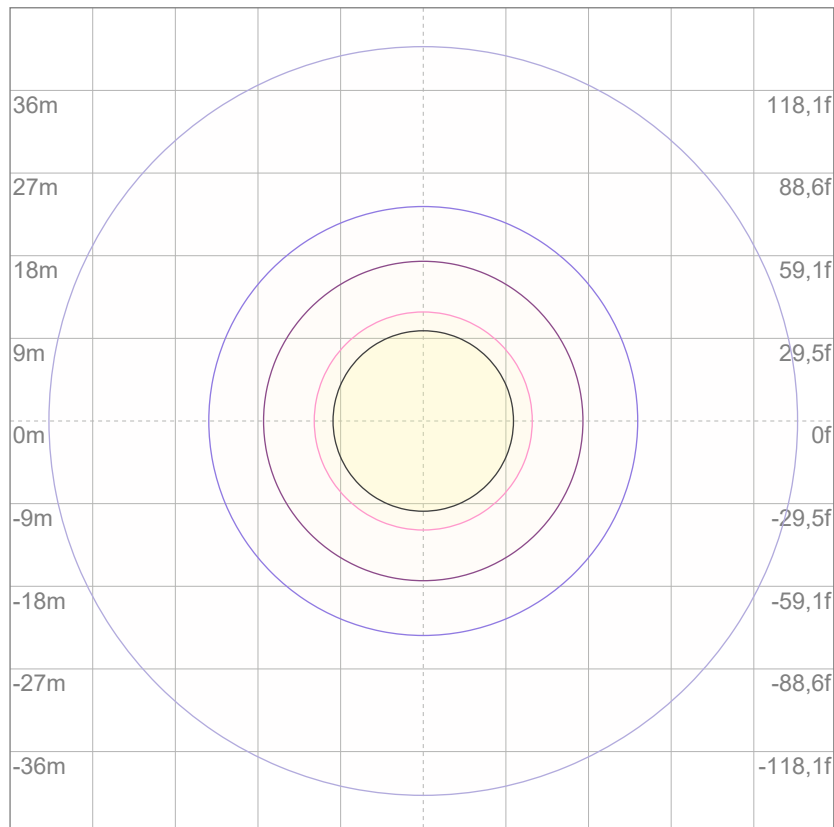
| | |
|-----|--------|
| 10% | 15 cd |
| 20% | 30 cd |
| 30% | 45 cd |
| 40% | 60 cd |
| 50% | 74 cd |
| 60% | 89 cd |
| 70% | 104 cd |
| 80% | 119 cd |

Conditions:

Number of c-planes: 2

Candela at center: 149 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 44,7m lx |
| 5% | 74,5m lx |
| 10% | 0,149 lx |
| 30% | 0,447 lx |
| 50% | 0,745 lx |

Conditions:

Number of c-planes: 2

Lux at center: 1,49 lx

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



Total lumen output:

1525 lm

Peak candela output:

519 cd

PRODUCT NAME:
ECLNANOPANELTWC

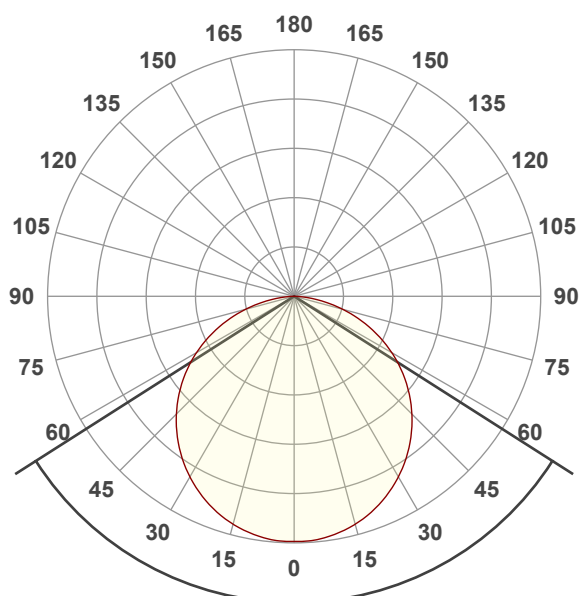
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h White

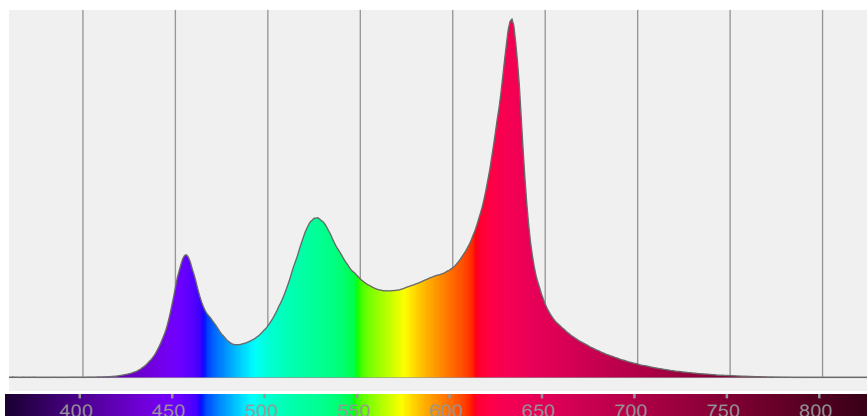
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:37:16



Beam angle 50%: 115°
Field angle 10%: 162,6°
Cut off angle 2.5%: 173,8°

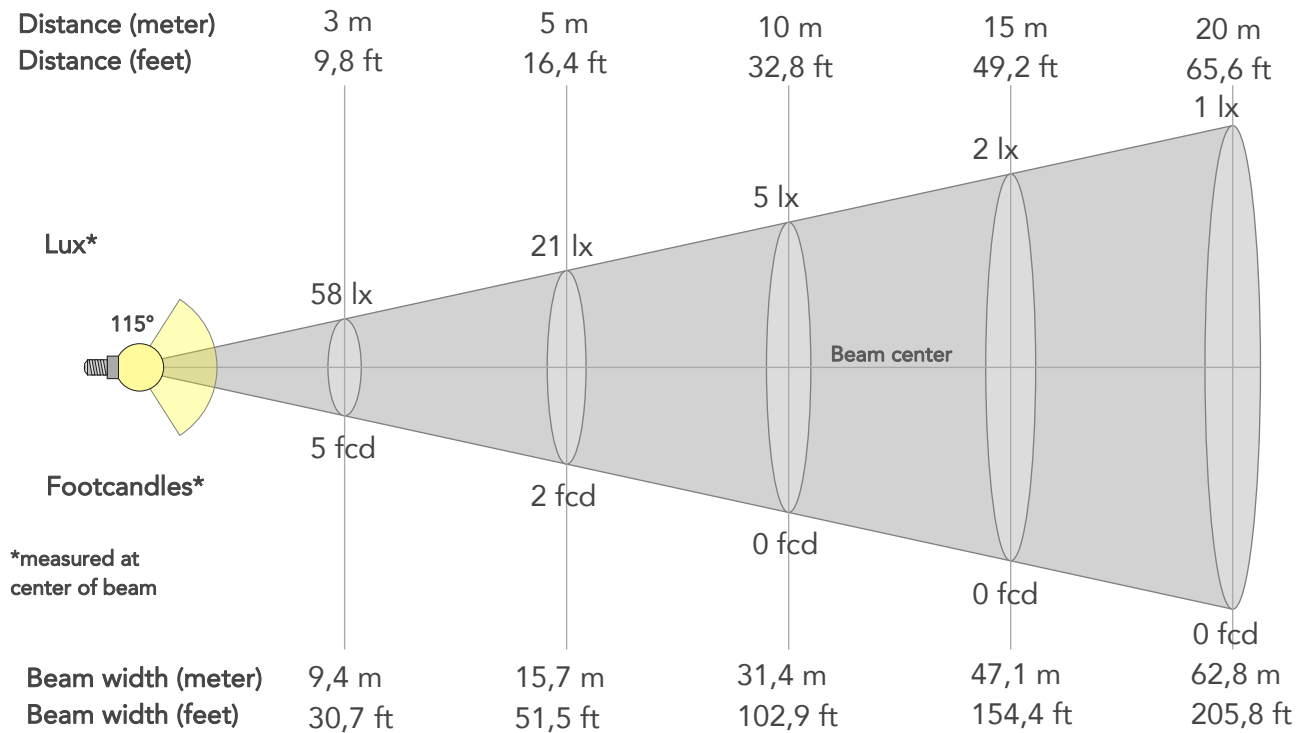
Spectra



BEAM DETAILS



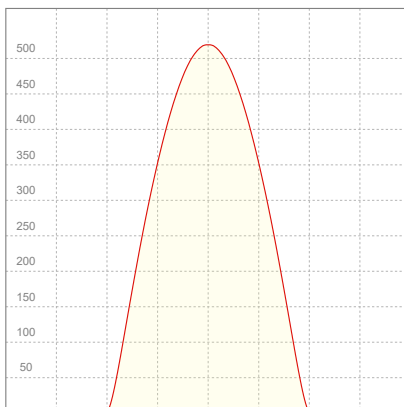
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115° | 162,6° | 173,8° | 77,7% | 52,5% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 519lx | 130lx | 58lx | 32lx | 21lx | 9lx | 5lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 48fcd | 12fcd | 5fcd | 3fcd | 2fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,1m | 6,3m | 9,4m | 12,6m | 15,7m | 23,5m | 31,4m | 47,1m | 62,8m | 78,4m | 94,1m | 125,5m | 156,9m |
| Beam wid. | 10,4ft | 20,7ft | 30,7ft | 41,1ft | 51,5ft | 77,2ft | 102,9ft | 154,4ft | 205,8ft | 257,3ft | 308,7ft | 411,6ft | 514,6ft |

LINEAR DISTRIBUTION DIAGRAM

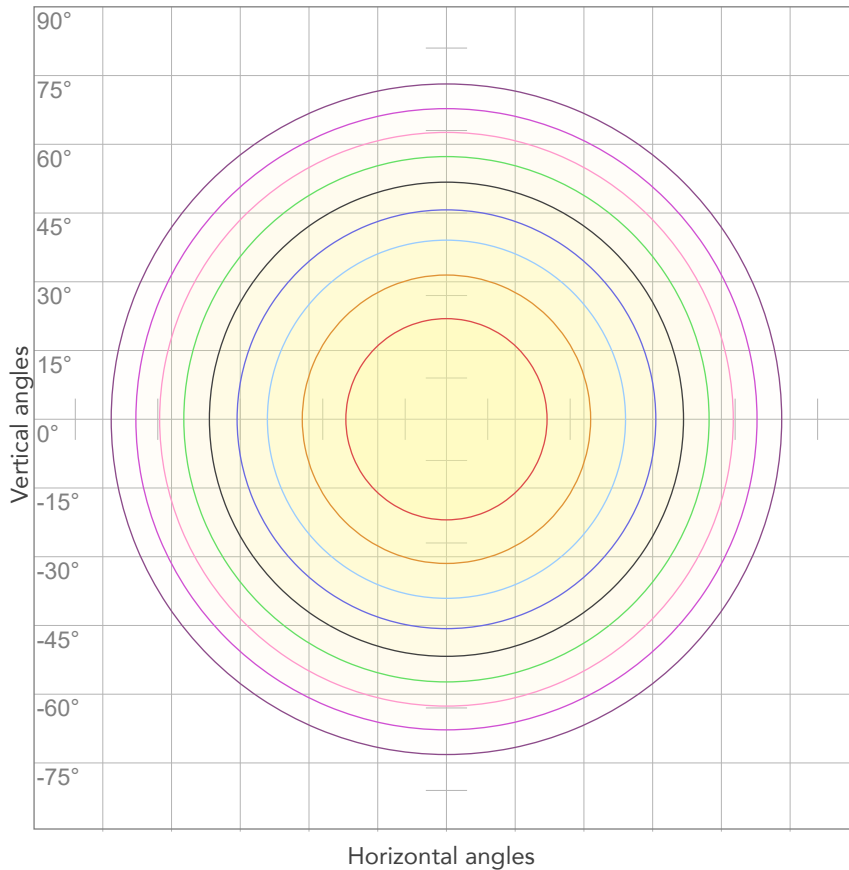


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,221A | 29,9W | 51lm/W |

| Power FC |
|----------|
| 0,6 |

ISO CANDELA DIAGRAM



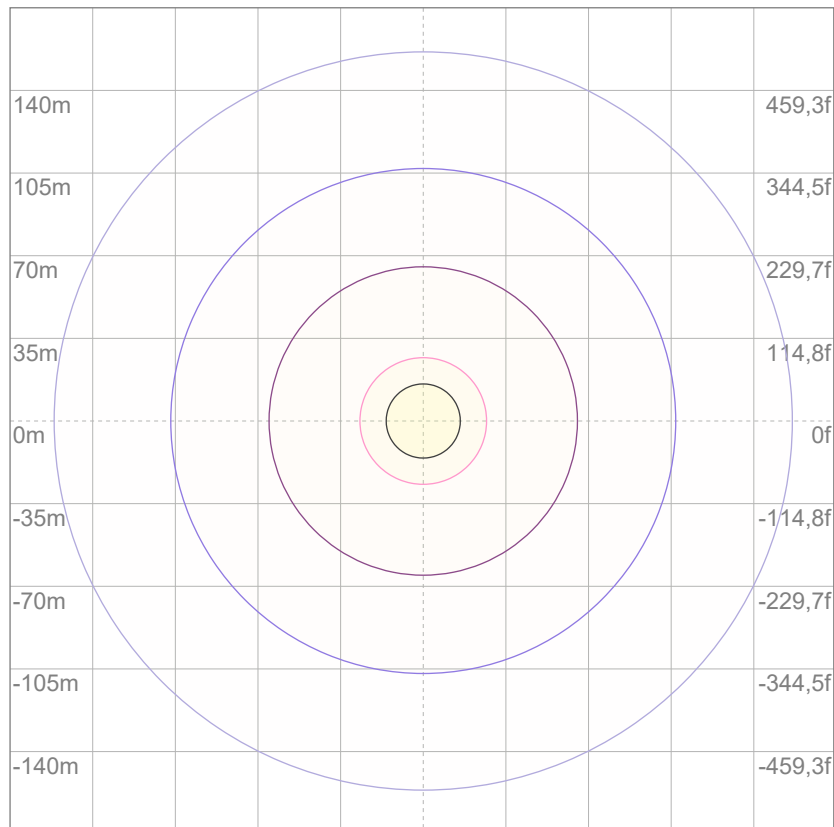
| | |
|-----|--------|
| 10% | 52 cd |
| 20% | 104 cd |
| 30% | 156 cd |
| 40% | 207 cd |
| 50% | 259 cd |
| 60% | 311 cd |
| 70% | 363 cd |
| 80% | 415 cd |

Conditions:

Number of c-planes: 2

Candela at center: 519 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,156 lx |
| 5% | 0,259 lx |
| 10% | 0,519 lx |
| 30% | 1,56 lx |
| 50% | 2,59 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,19 lx

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



Total lumen output:

1689 lm

Peak candela output:

591 cd

PRODUCT NAME:
ECLNANOPANELTWC

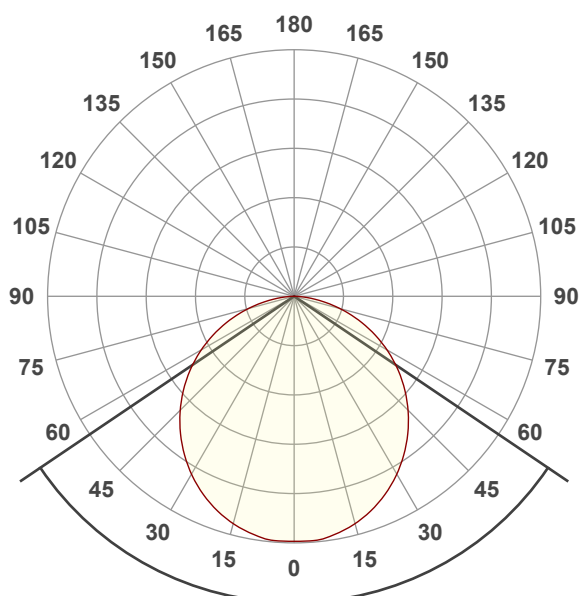
MEASUREMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h White

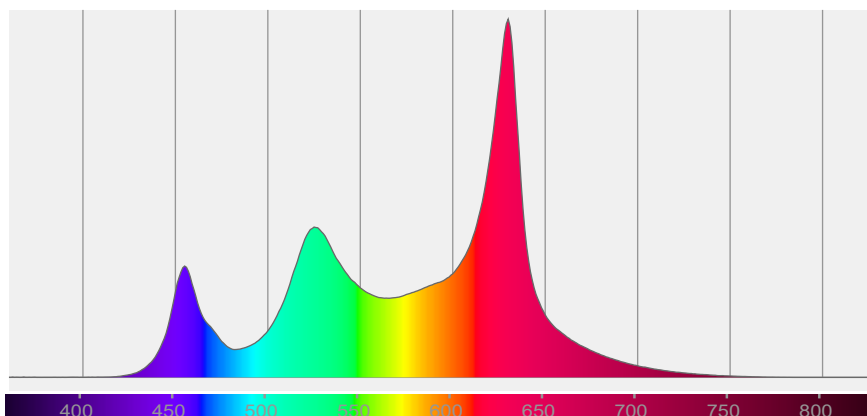
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:12:05



Beam angle 50%: 111,9°
Field angle 10%: 162°
Cut off angle 2.5%: 174°

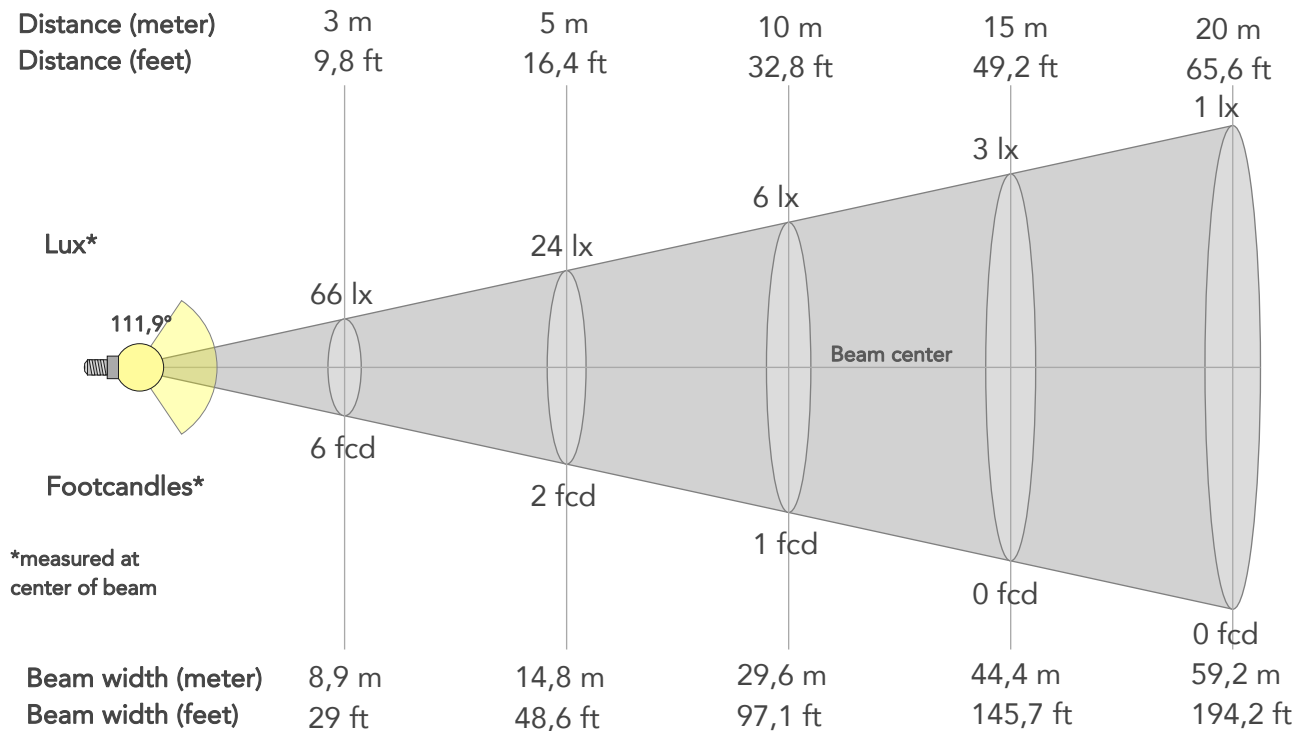
Spectra



BEAM DETAILS



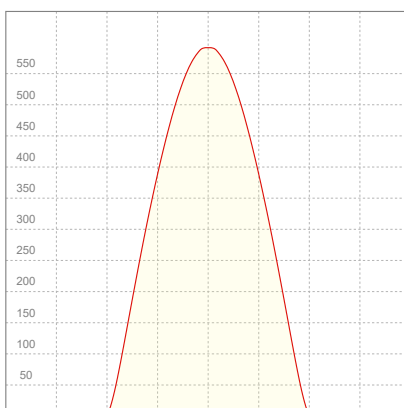
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 111,9° | 162° | 174° | 78,0% | 53,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 591lx | 148lx | 66lx | 37lx | 24lx | 11lx | 6lx | 3lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 55fcd | 14fcd | 6fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 5,9m | 8,9m | 11,8m | 14,8m | 22,2m | 29,6m | 44,4m | 59,2m | 74m | 88,8m | 118,4m | 148m |
| Beam wid. | 9,8ft | 19,5ft | 29ft | 38,8ft | 48,6ft | 72,8ft | 97,1ft | 145,7ft | 194,2ft | 242,8ft | 291,3ft | 388,4ft | 485,5ft |

LINEAR DISTRIBUTION DIAGRAM

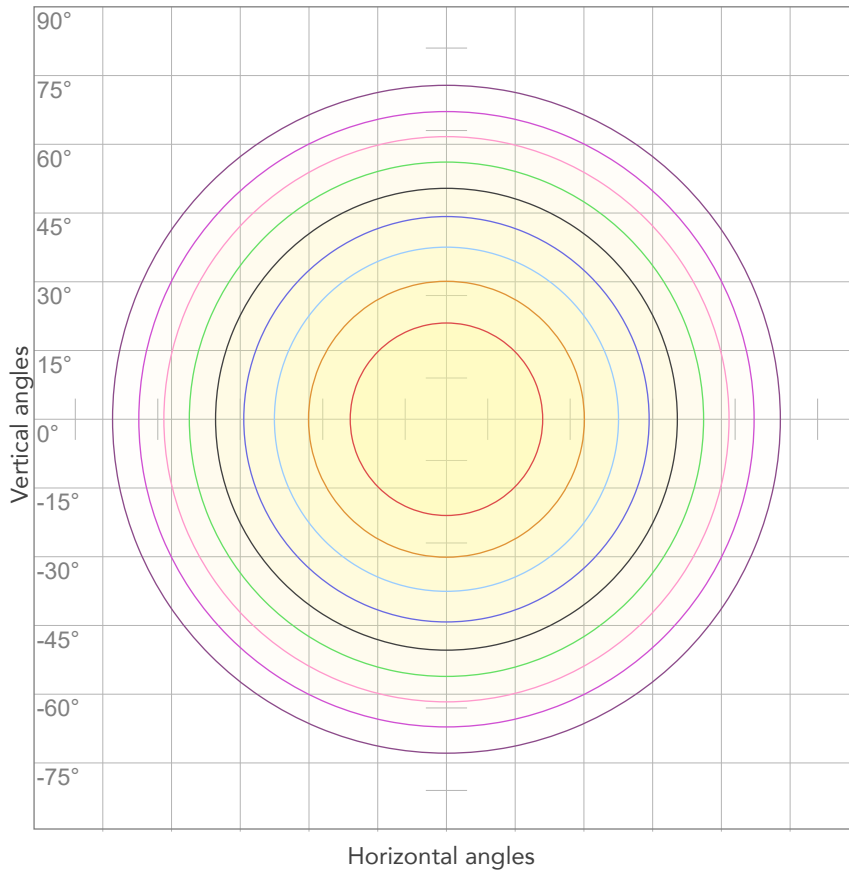


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 228V | 0,222A | 30,4W | 56lm/W |

| Power FC |
|----------|
| 0,6 |

ISO CANDELA DIAGRAM



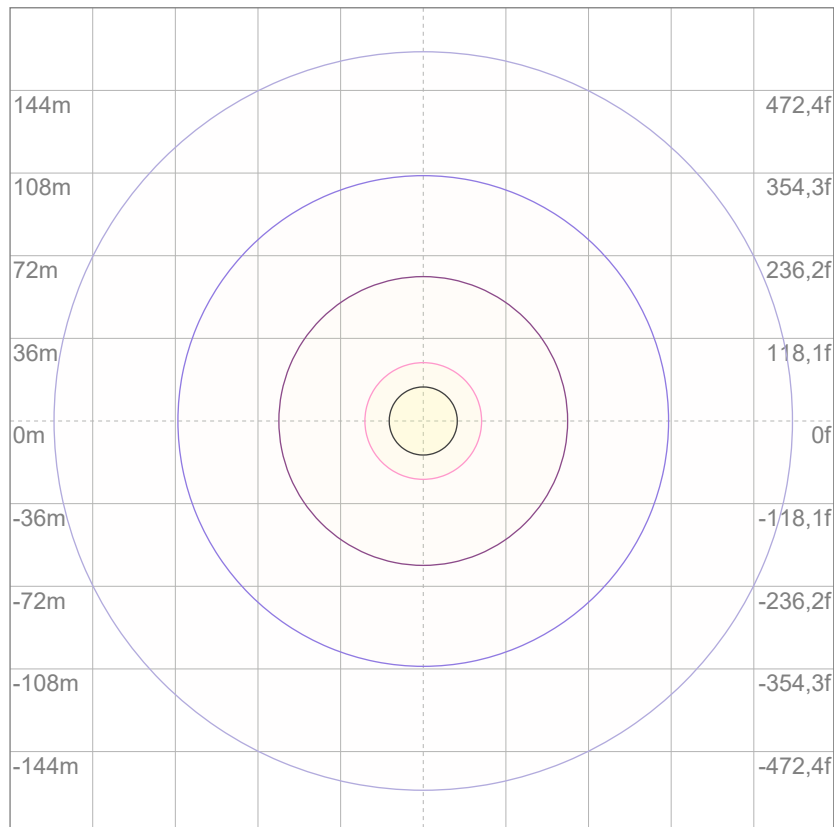
| | |
|-----|--------|
| 10% | 59 cd |
| 20% | 118 cd |
| 30% | 177 cd |
| 40% | 236 cd |
| 50% | 295 cd |
| 60% | 354 cd |
| 70% | 414 cd |
| 80% | 473 cd |

Conditions:

Number of c-planes: 2

Candela at center: 591 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,177 lx |
| 5% | 0,295 lx |
| 10% | 0,591 lx |
| 30% | 1,77 lx |
| 50% | 2,95 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,91 lx

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



Total lumen output:

1692 lm

Peak candela output:

636 cd

PRODUCT NAME:
ECLNANOPANELTWC

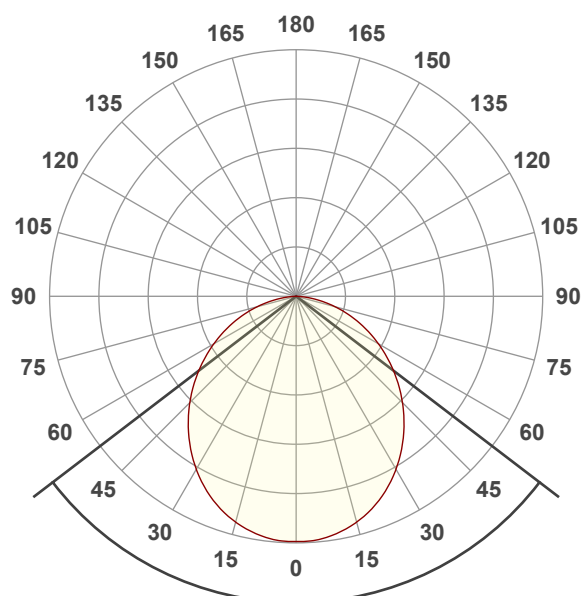
MEASUREMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h White

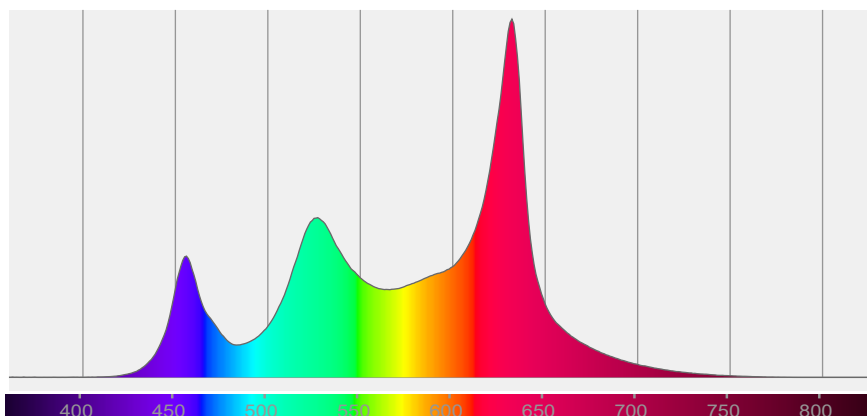
Operator:
Paolo Carvone

Date and time:
23/05/2022 10:50:34



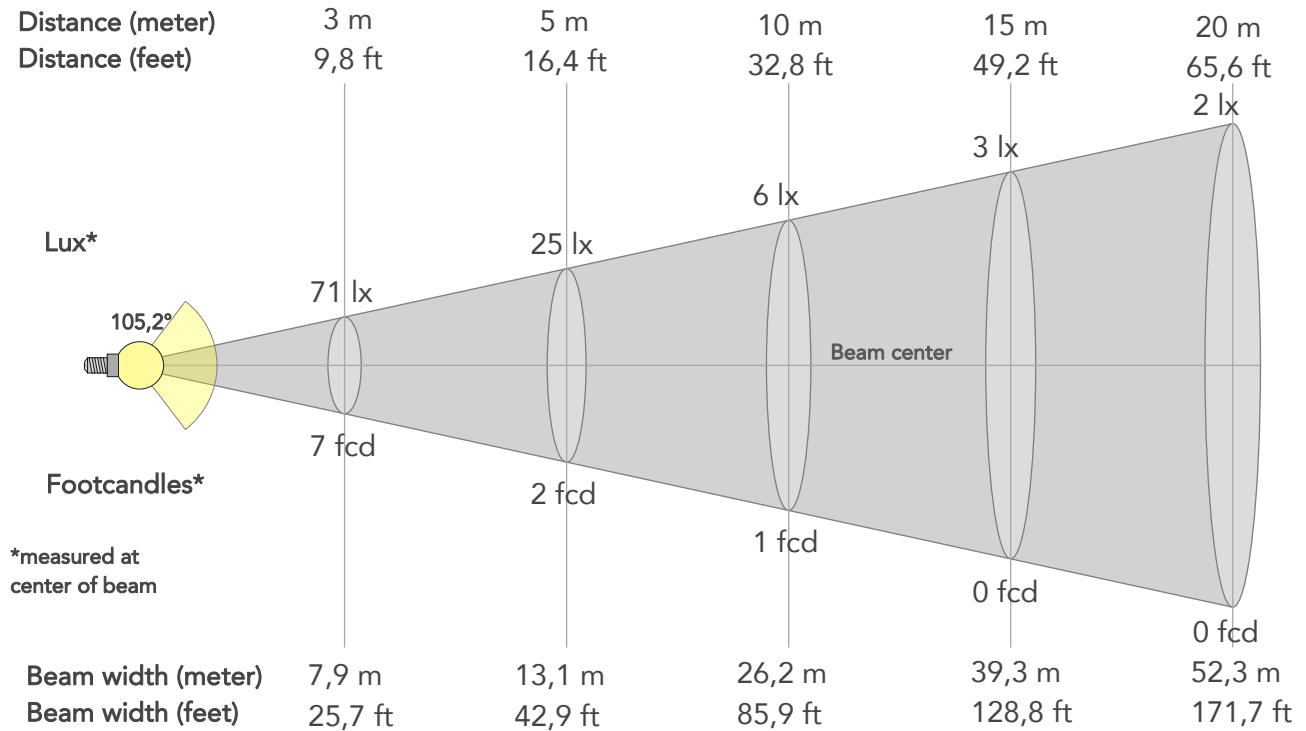
Beam angle 50%: 105,2°
Field angle 10%: 159,3°
Cut off angle 2.5%: 172°

Spectra



BEAM DETAILS

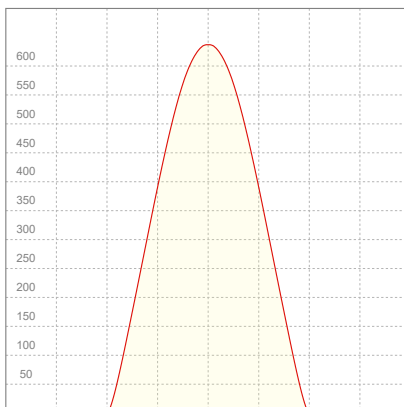
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 105,2° | 159,3° | 172° | 79,8% | 55,4% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 636lx | 159lx | 71lx | 40lx | 25lx | 11lx | 6lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 59fcd | 15fcd | 7fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,6m | 5,2m | 7,9m | 10,5m | 13,1m | 19,6m | 26,2m | 39,3m | 52,3m | 65,4m | 78,5m | 104,7m | 130,9m |
| Beam wid. | 8,6ft | 17,3ft | 25,7ft | 34,3ft | 42,9ft | 64,4ft | 85,9ft | 128,8ft | 171,7ft | 214,6ft | 257,6ft | 343,4ft | 429,3ft |

LINEAR DISTRIBUTION DIAGRAM



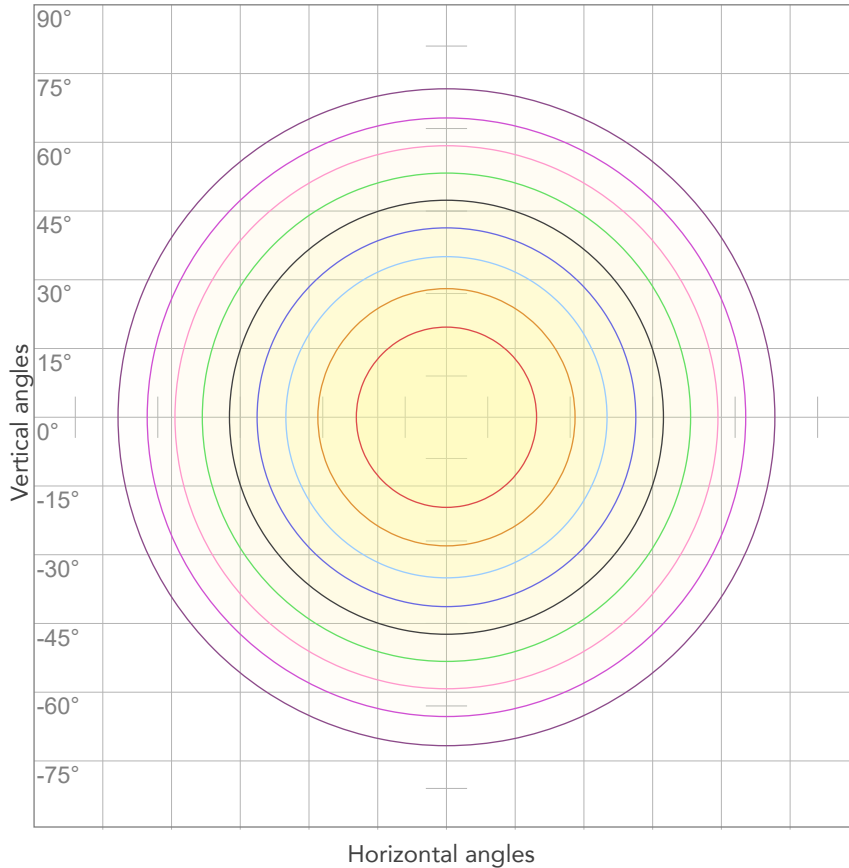
ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,222A | 29,8W | 57lm/W |

| Power FC |
|----------|
| 0,59 |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



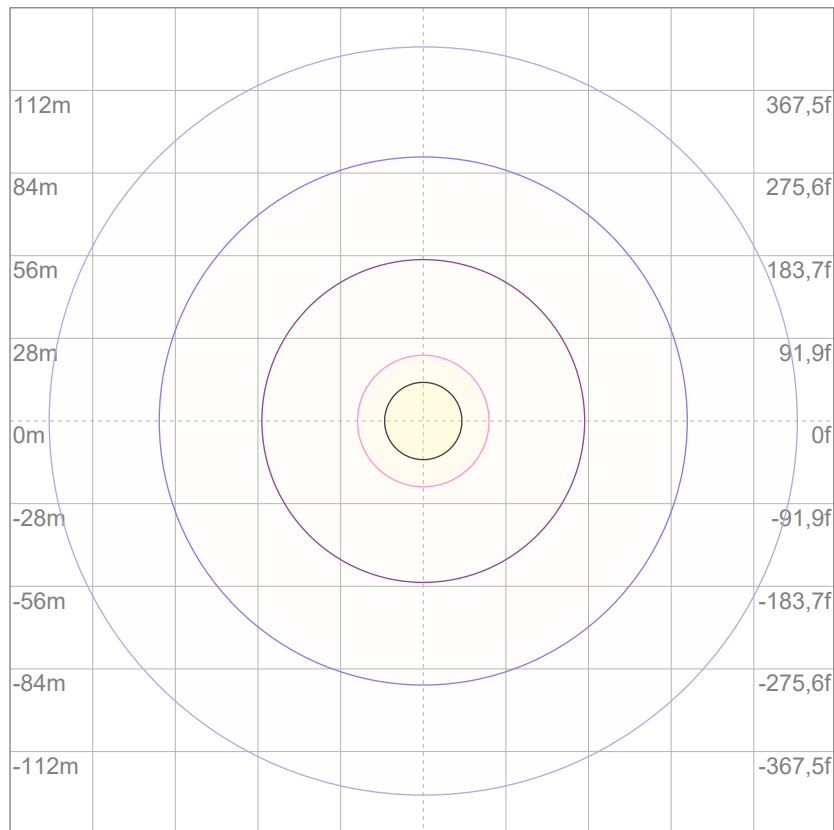
| | |
|-----|--------|
| 10% | 64 cd |
| 20% | 127 cd |
| 30% | 191 cd |
| 40% | 254 cd |
| 50% | 318 cd |
| 60% | 382 cd |
| 70% | 445 cd |
| 80% | 509 cd |

Conditions:

Number of c-planes: 2

Candela at center: 636 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,191 lx |
| 5% | 0,318 lx |
| 10% | 0,636 lx |
| 30% | 1,91 lx |
| 50% | 3,18 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,36 lx

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



Total lumen output:

1595 lm

Peak candela output:

801 cd

PRODUCT NAME:
ECLNANOPANELTWC

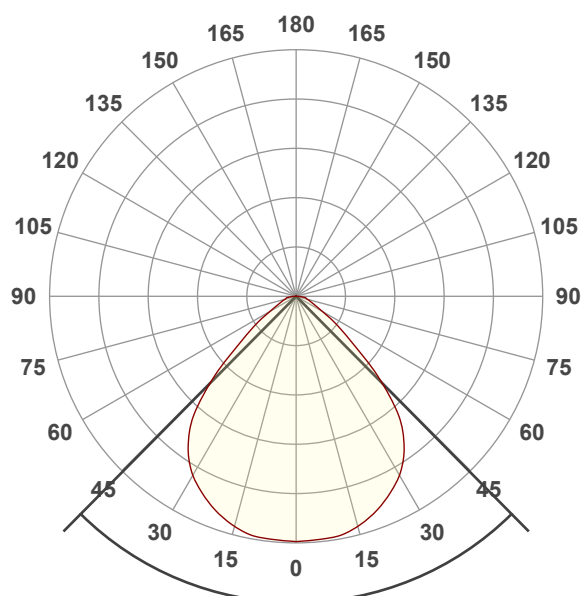
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h White

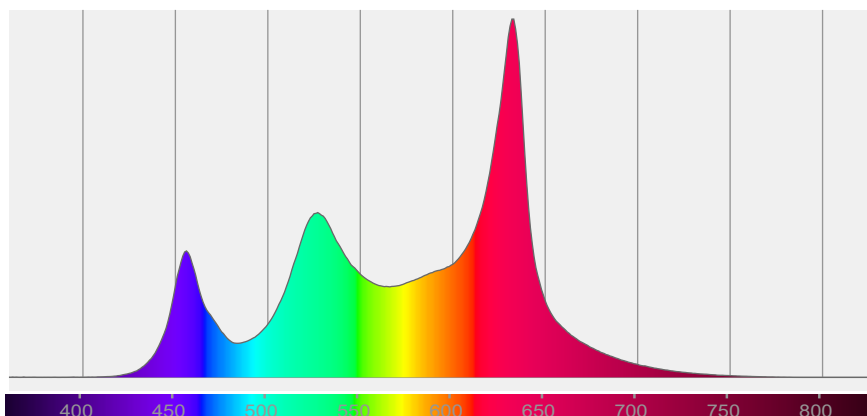
Operator:
Paolo Carvone

Date and time:
23/05/2022 11:33:05



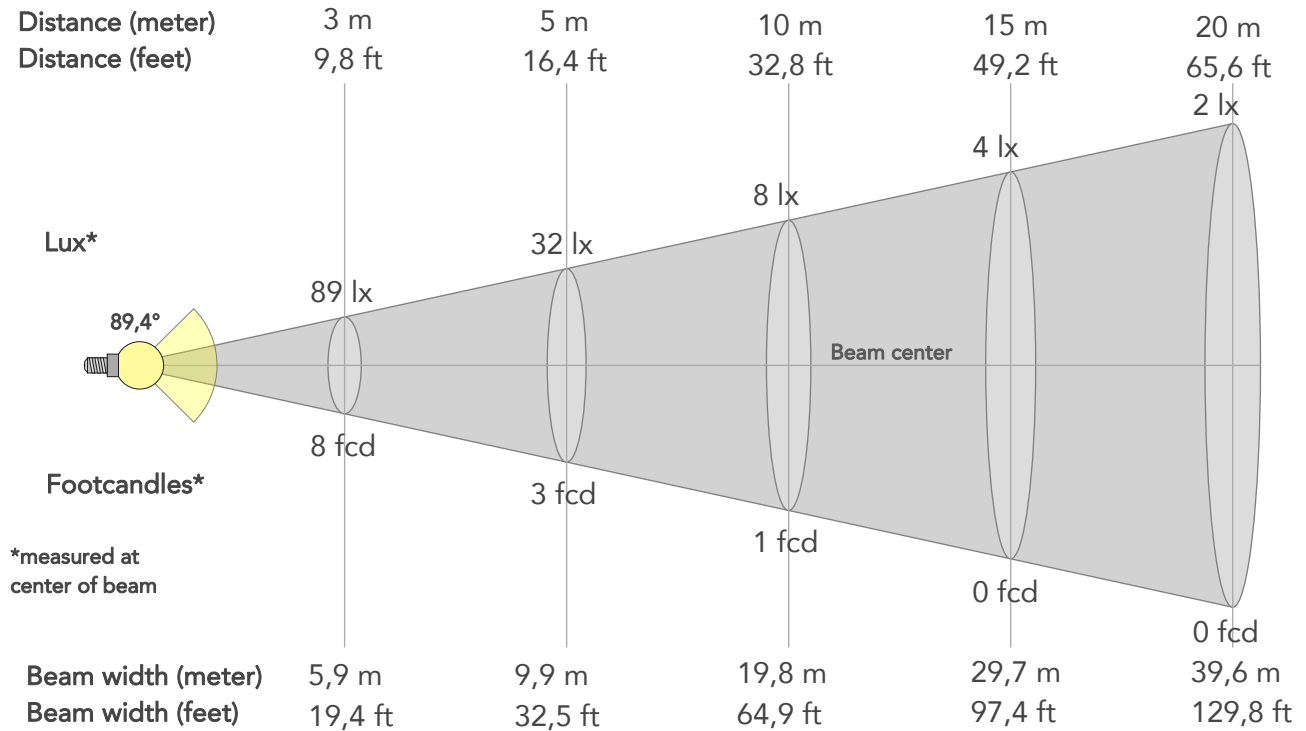
Beam angle 50%: 89,4°
Field angle 10%: 125,6°
Cut off angle 2.5%: 168,4°

Spectra



BEAM DETAILS

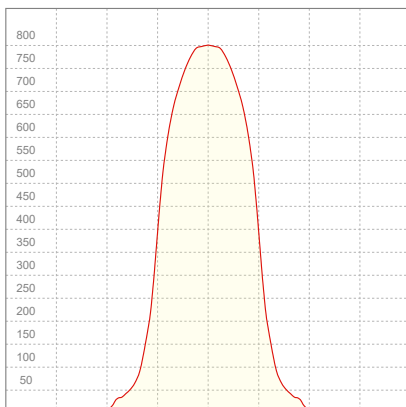
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,4° | 125,6° | 168,4° | 91,1% | 73,7% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 801lx | 200lx | 89lx | 50lx | 32lx | 14lx | 8lx | 4lx | 2lx | 1lx | 1lx | 1lx | 0lx |
| Footcand. | 74fcd | 19fcd | 8fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 4m | 5,9m | 7,9m | 9,9m | 14,8m | 19,8m | 29,7m | 39,6m | 49,5m | 59,4m | 79,2m | 99m |
| Beam wid. | 6,5ft | 13,1ft | 19,4ft | 25,9ft | 32,5ft | 48,7ft | 64,9ft | 97,4ft | 129,8ft | 162,3ft | 194,7ft | 259,7ft | 324,6ft |

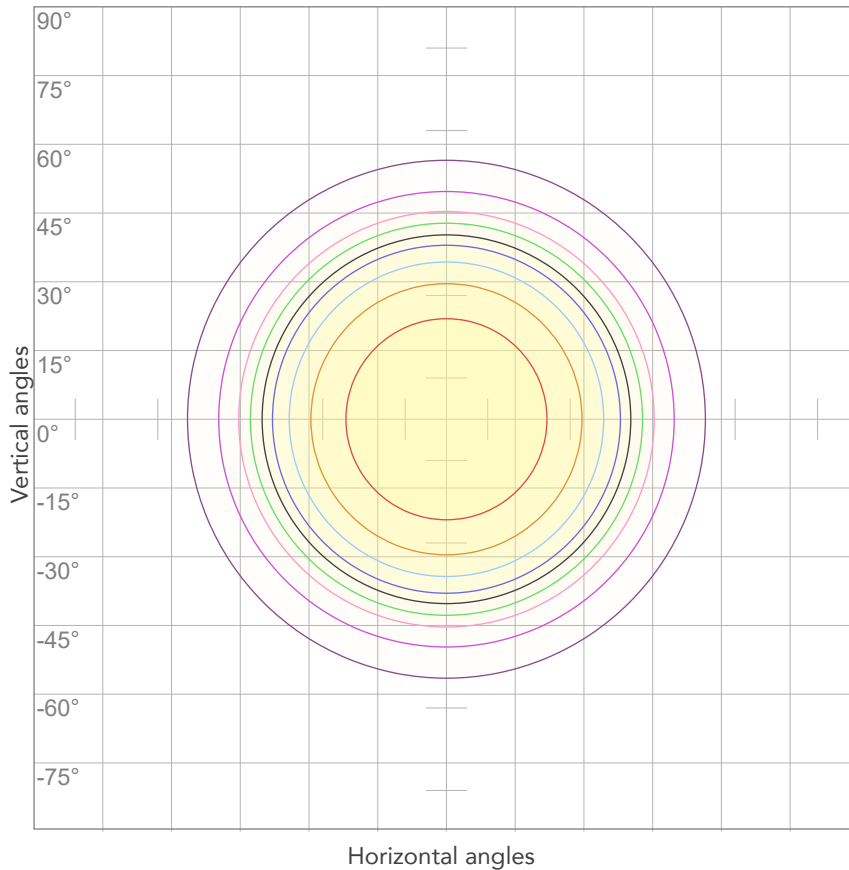
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,220A | 29,7W | 54lm/W |
| Power FC | | | |
| 0,6 | | | |

ISO CANDELA DIAGRAM



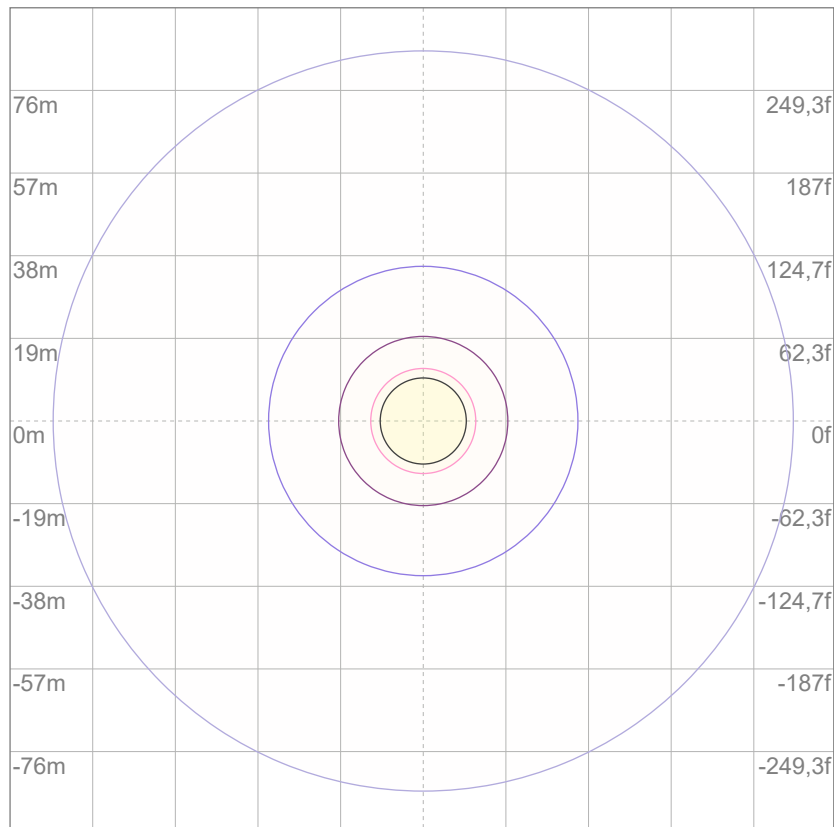
| | |
|-----|--------|
| 10% | 80 cd |
| 20% | 160 cd |
| 30% | 240 cd |
| 40% | 320 cd |
| 50% | 400 cd |
| 60% | 480 cd |
| 70% | 560 cd |
| 80% | 640 cd |

Conditions:

Number of c-planes: 2

Candela at center: 801 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,240 lx |
| 5% | 0,400 lx |
| 10% | 0,801 lx |
| 30% | 2,40 lx |
| 50% | 4,00 lx |

Conditions:

Number of c-planes: 2

Lux at center: 8,01 lx

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



Total lumen output:

1609 lm

Peak candela output:

547 cd

Light quality:

CRI: 92,6

Color temperature:

2803 K

PRODUCT NAME:
ECLNANOPANELTWC

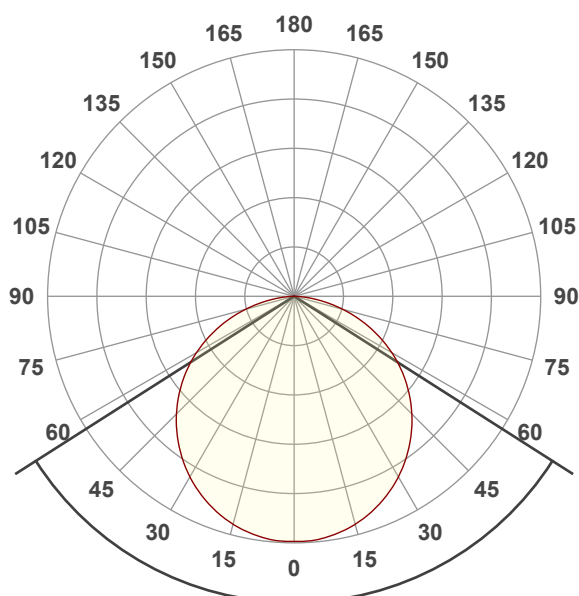
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h 2800K

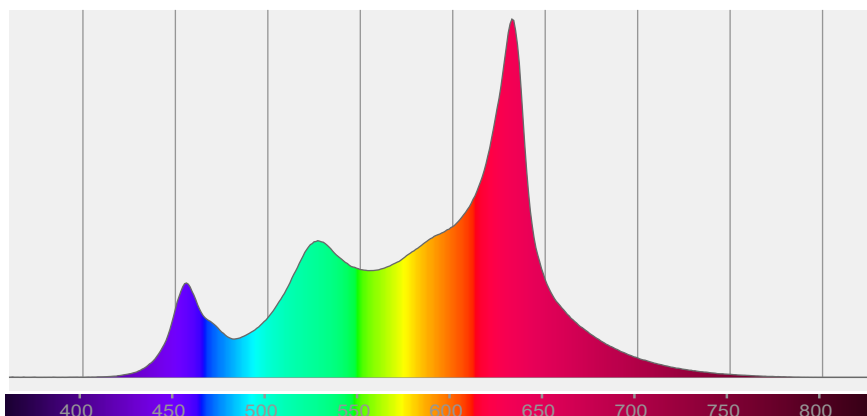
Operator:
Paolo Carvone

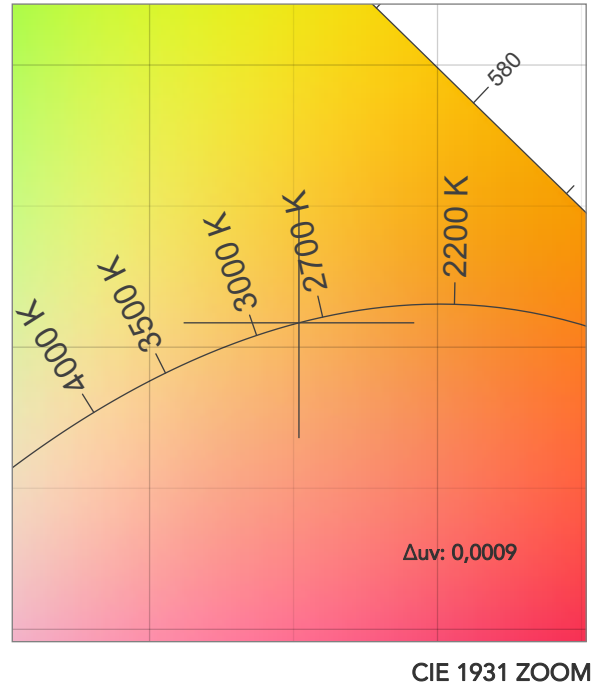
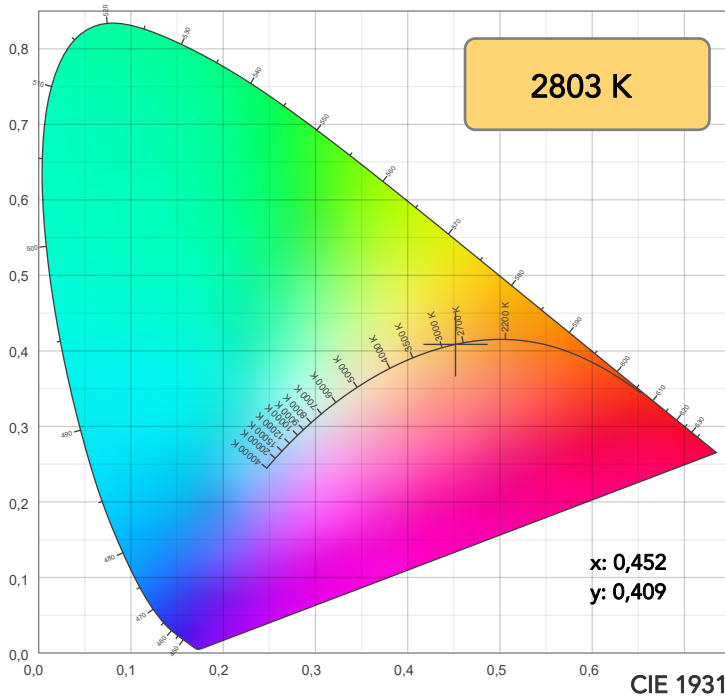
Date and time:
23/05/2022 11:11:22



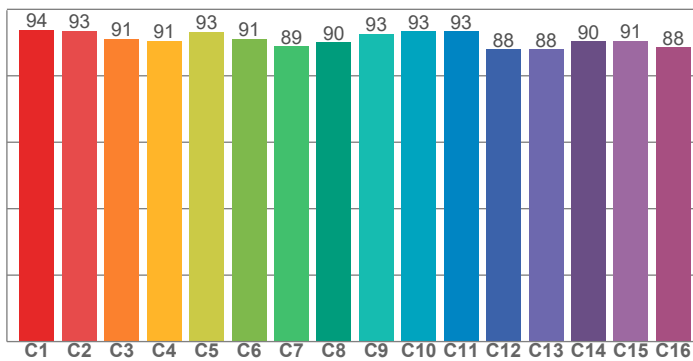
Beam angle 50%: 115°
Field angle 10%: 162,6°
Cut off angle 2.5%: 173,9°

Spectra

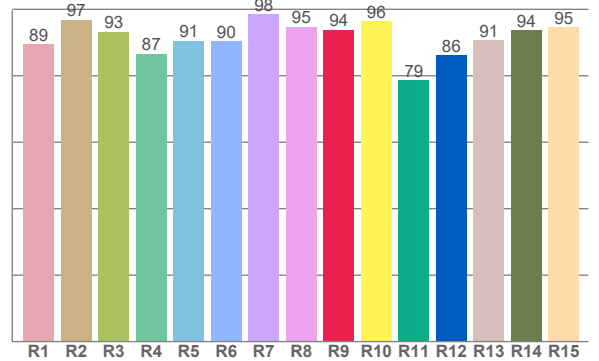




TM30: 91,5



CRI: 92,6 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89,5 | 96,8 | 93,2 | 86,6 | 90,5 | 90,5 | 98,4 | 94,8 | 93,8 | 96,4 | 78,7 | 86,2 | 90,7 | 93,7 | 94,6 |

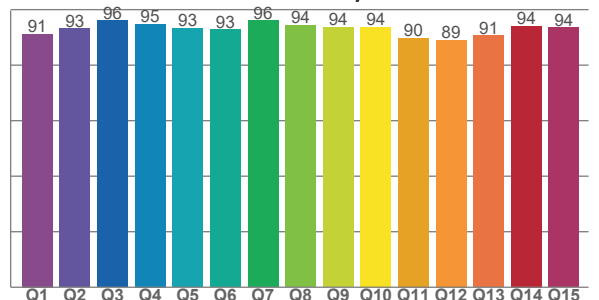
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,9 | 93,5 | 91,2 | 90,5 | 93,2 | 91,2 | 88,9 | 90,0 | 92,6 | 93,4 | 93,3 | 88,0 | 87,9 | 90,4 | 90,6 | 88,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,3 | 93,2 | 96,1 | 94,8 | 93,3 | 92,8 | 96,1 | 94,4 | 93,6 | 93,8 | 89,9 | 89,0 | 90,6 | 94,1 | 93,5 |

CQS: 92,7



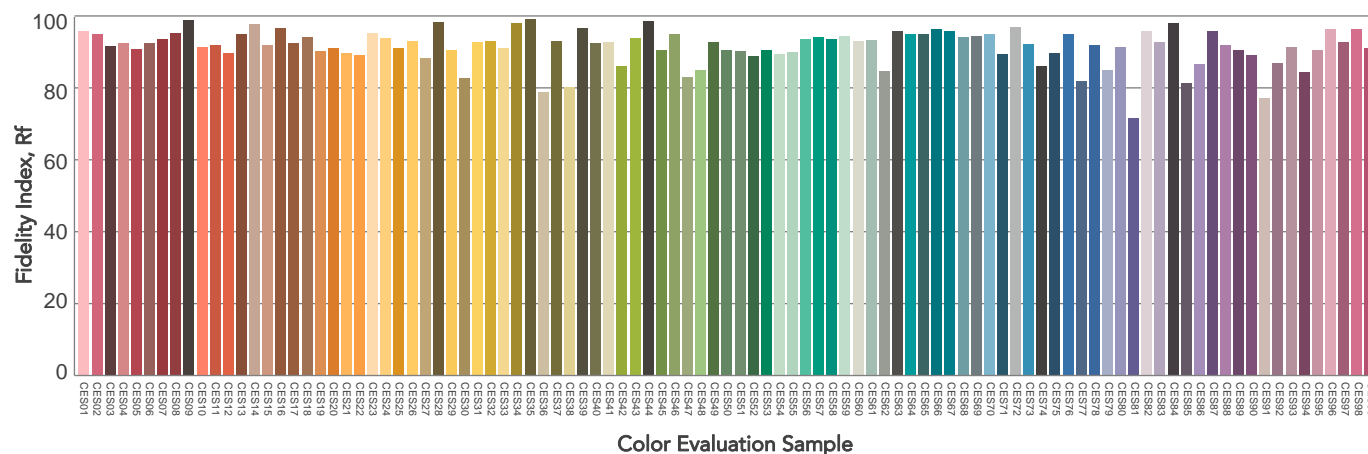
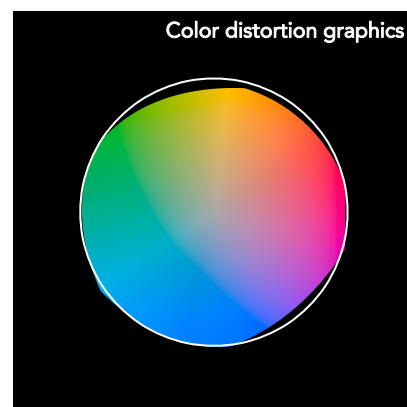
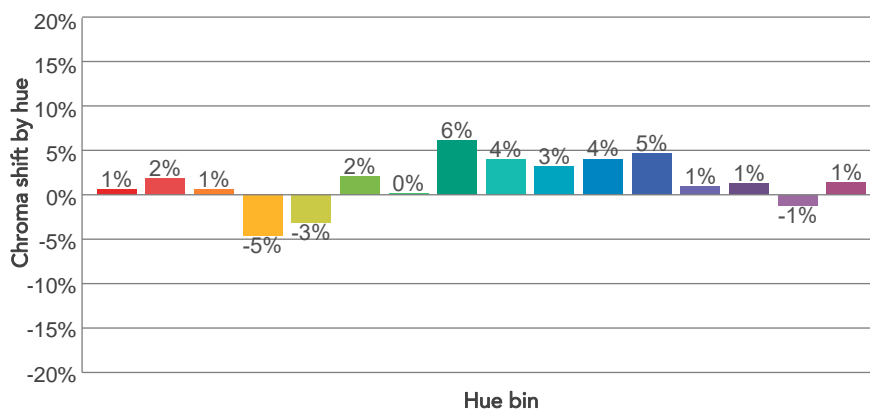
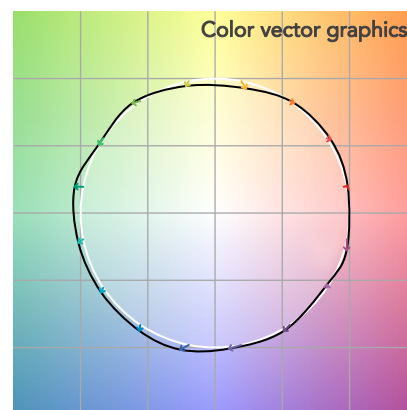
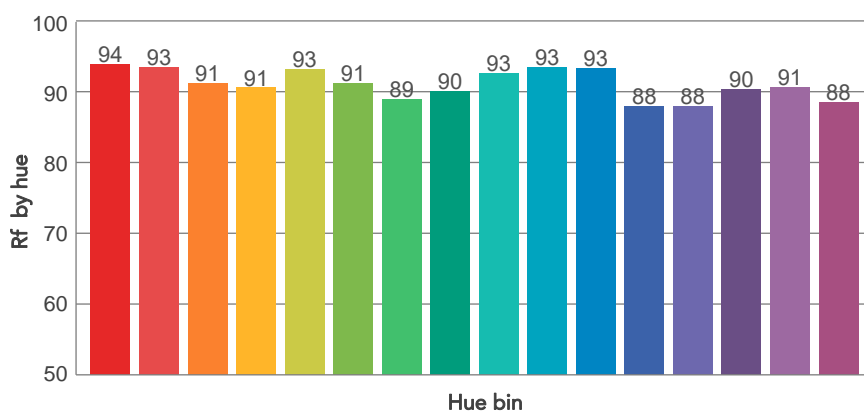
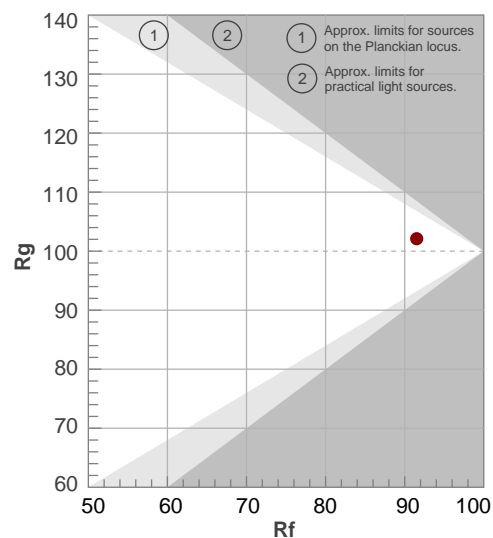
COLOR PARAMETERS

| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2803 K | 92,6 | 93,8 | 91,5 | 102,1 | 92,7 | 86 | 0,452 | 0,409 | 0,0009 |

Fidelity index R_f

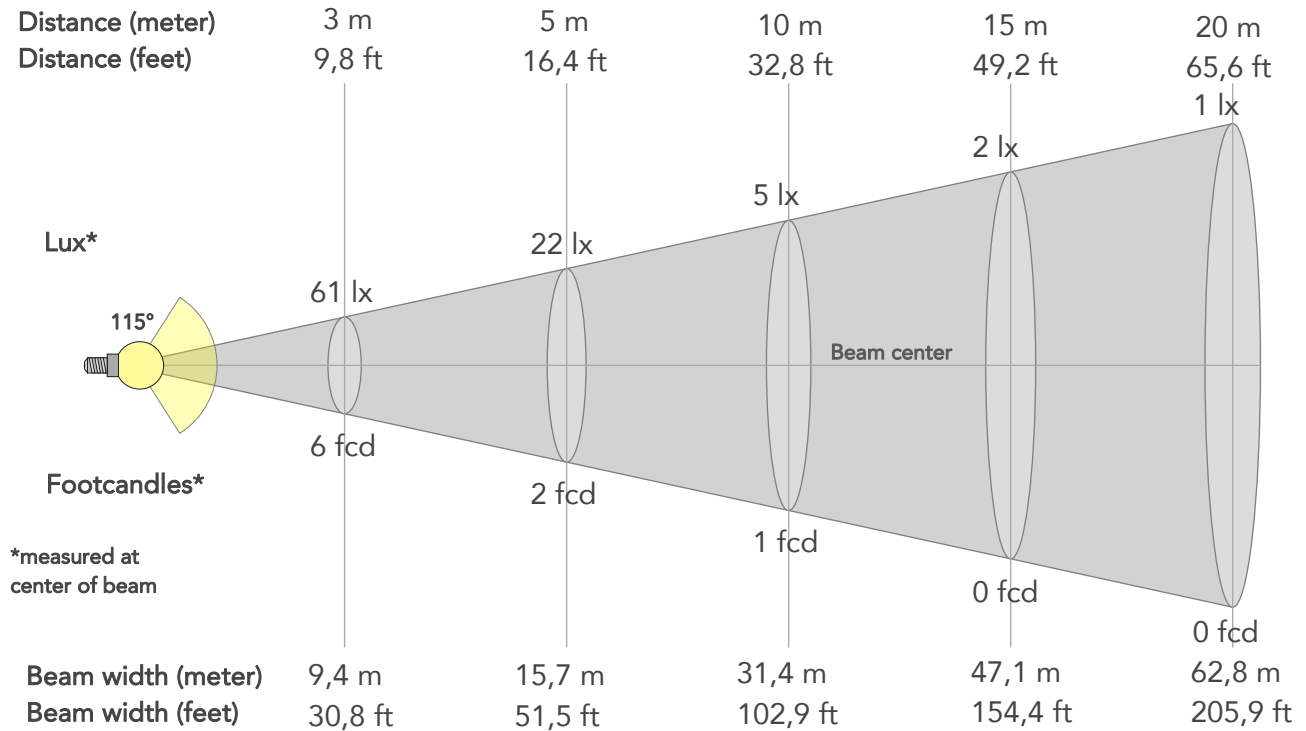
Gammut index

| | | Graphic shifts (%) | |
|---------|-------|--------------------|-----|
| Hue Bin | R_f | Chroma | Hue |
| 1 | 94 | 1% | 1% |
| 2 | 93 | 2% | -2% |
| 3 | 91 | 1% | -3% |
| 4 | 91 | -5% | -4% |
| 5 | 93 | -3% | 3% |
| 6 | 91 | 2% | 6% |
| 7 | 89 | 0% | 6% |
| 8 | 90 | 6% | 1% |
| 9 | 93 | 4% | 2% |
| 10 | 93 | 3% | 2% |
| 11 | 93 | 4% | 2% |
| 12 | 88 | 5% | -6% |
| 13 | 88 | 1% | -9% |
| 14 | 90 | 1% | -6% |
| 15 | 91 | -1% | 2% |
| 16 | 88 | 1% | -8% |



BEAM DETAILS

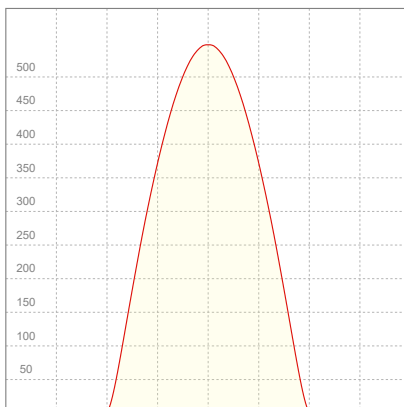
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115° | 162,6° | 173,9° | 77,6% | 52,4% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 547lx | 137lx | 61lx | 34lx | 22lx | 10lx | 5lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 51fcd | 13fcd | 6fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,1m | 6,3m | 9,4m | 12,6m | 15,7m | 23,5m | 31,4m | 47,1m | 62,8m | 78,5m | 94,1m | 125,5m | 156,9m |
| Beam wid. | 10,4ft | 20,7ft | 30,8ft | 41,1ft | 51,5ft | 77,2ft | 102,9ft | 154,4ft | 205,9ft | 257,3ft | 308,8ft | 411,7ft | 514,6ft |

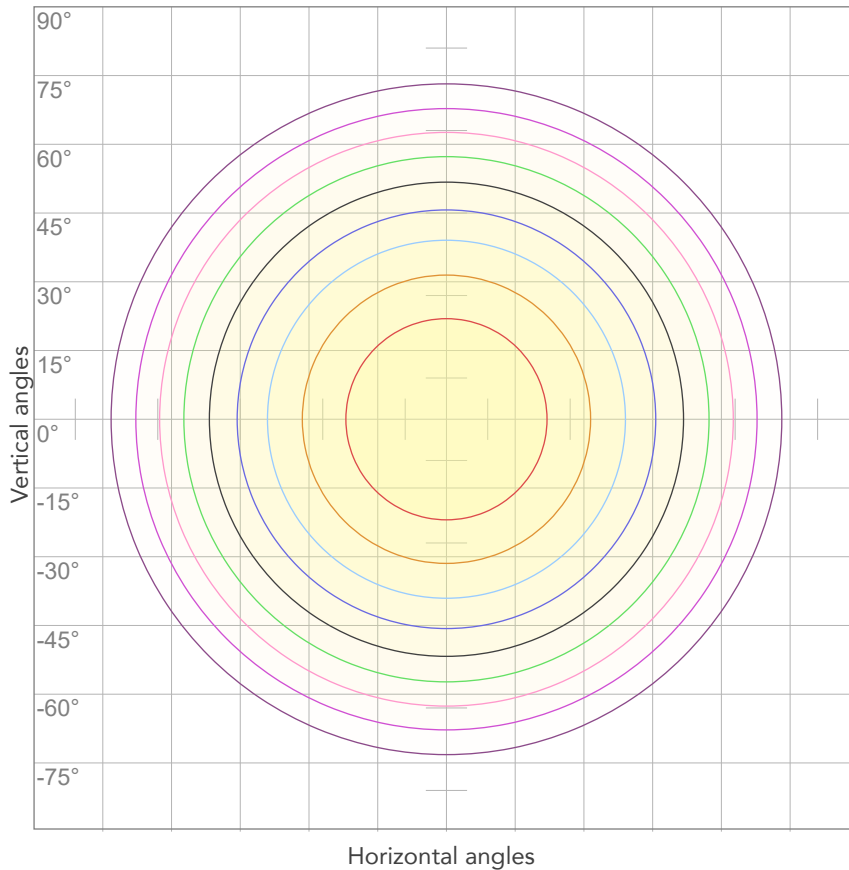
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,216A | 29,3W | 55lm/W |

ISO CANDELA DIAGRAM



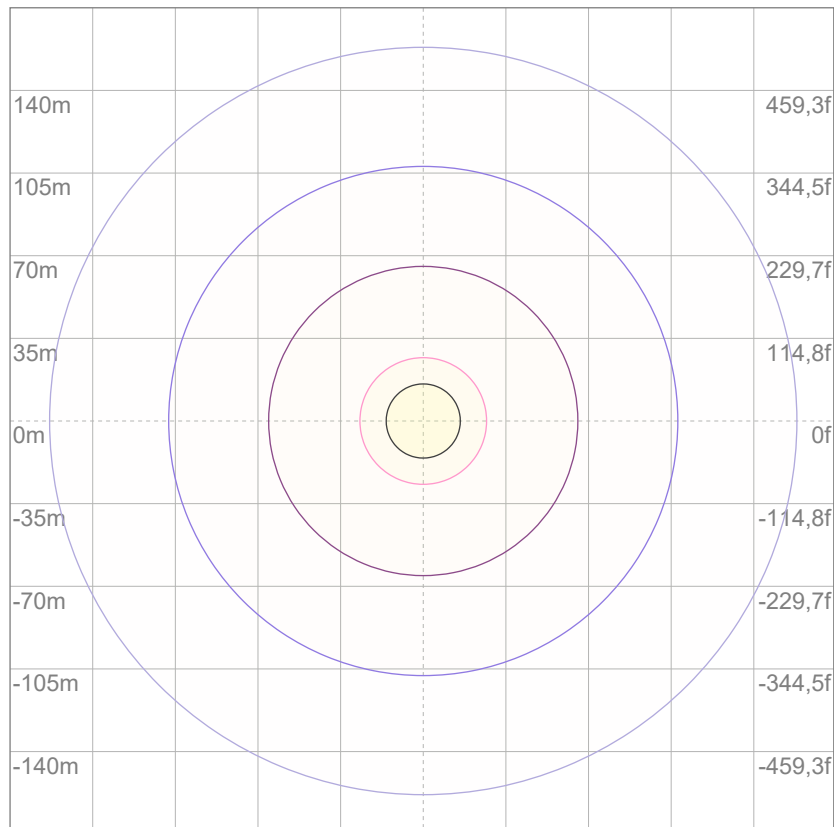
| | |
|-----|--------|
| 10% | 55 cd |
| 20% | 109 cd |
| 30% | 164 cd |
| 40% | 219 cd |
| 50% | 274 cd |
| 60% | 328 cd |
| 70% | 383 cd |
| 80% | 438 cd |

Conditions:

Number of c-planes: 2

Candela at center: 547 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,164 lx |
| 5% | 0,274 lx |
| 10% | 0,547 lx |
| 30% | 1,64 lx |
| 50% | 2,74 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,47 lx

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



Total lumen output:

1773 lm

Peak candela output:

620 cd

Light quality:

CRI: 92,2

Color temperature:

2808 K

PRODUCT NAME:
ECLNANOPANELTWC

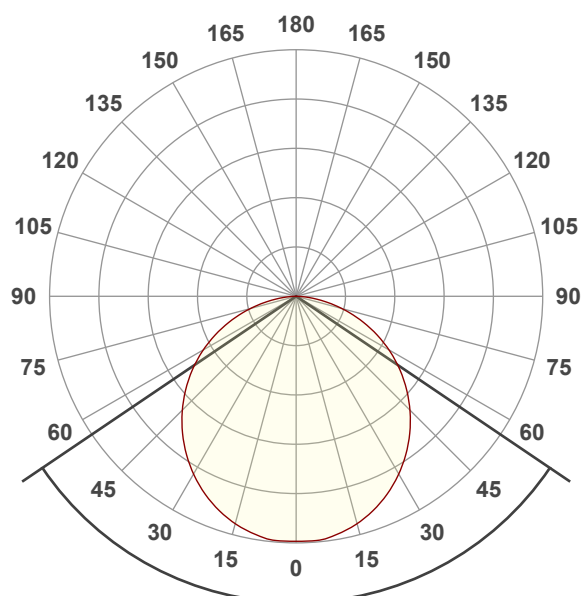
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h 2800K

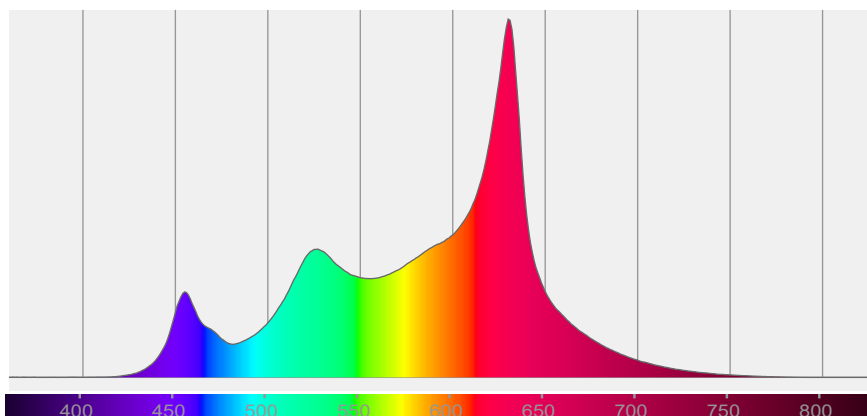
Operator:
Paolo Carvone

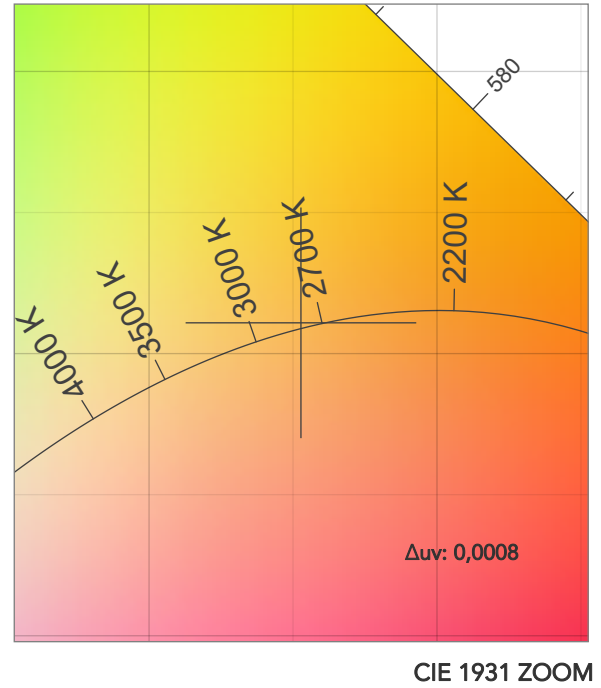
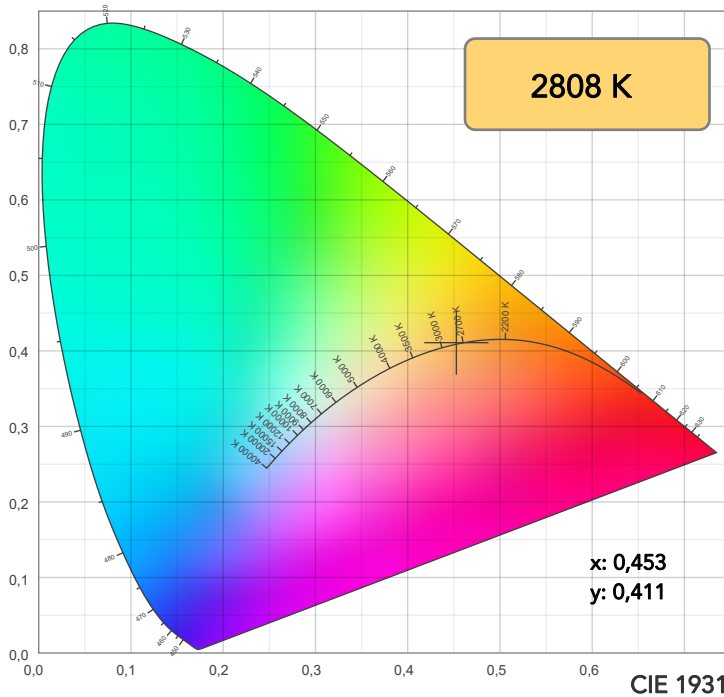
Date and time:
23/05/2022 10:16:21



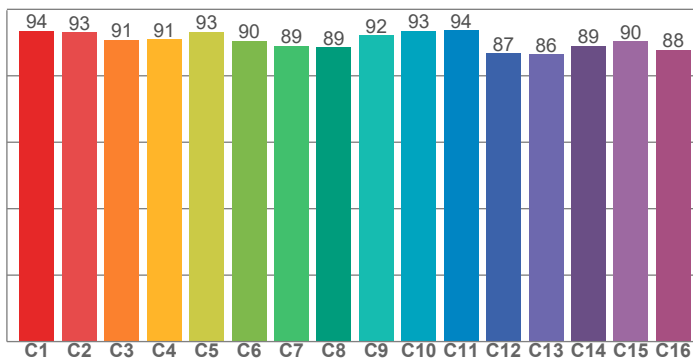
Beam angle 50%: 111,9°
Field angle 10%: 162°
Cut off angle 2.5%: 174,1°

Spectra

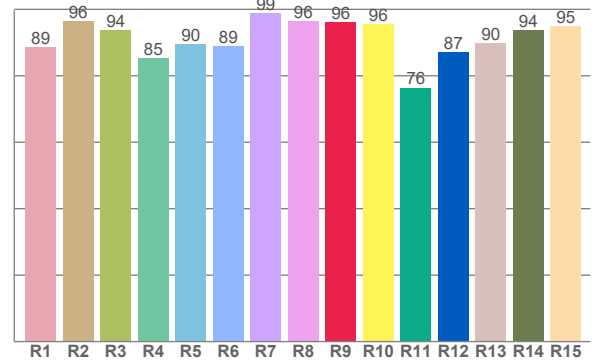




TM30: 91,1



CRI: 92,2 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 88,6 | 96,4 | 93,7 | 85,2 | 89,5 | 88,9 | 98,9 | 96,3 | 96,1 | 95,5 | 76,4 | 87,1 | 89,9 | 93,8 | 94,9 |

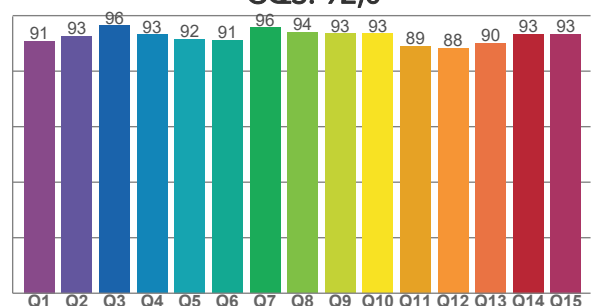
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,6 | 93,1 | 90,7 | 90,9 | 93,2 | 90,4 | 89,0 | 88,6 | 92,2 | 93,5 | 93,6 | 86,7 | 86,4 | 89,0 | 90,4 | 87,9 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90,9 | 92,6 | 96,5 | 93,2 | 91,6 | 91,1 | 95,6 | 94,0 | 93,5 | 93,5 | 89,0 | 88,3 | 90,2 | 93,4 | 93,3 |

CQS: 92,0



COLOR PARAMETERS

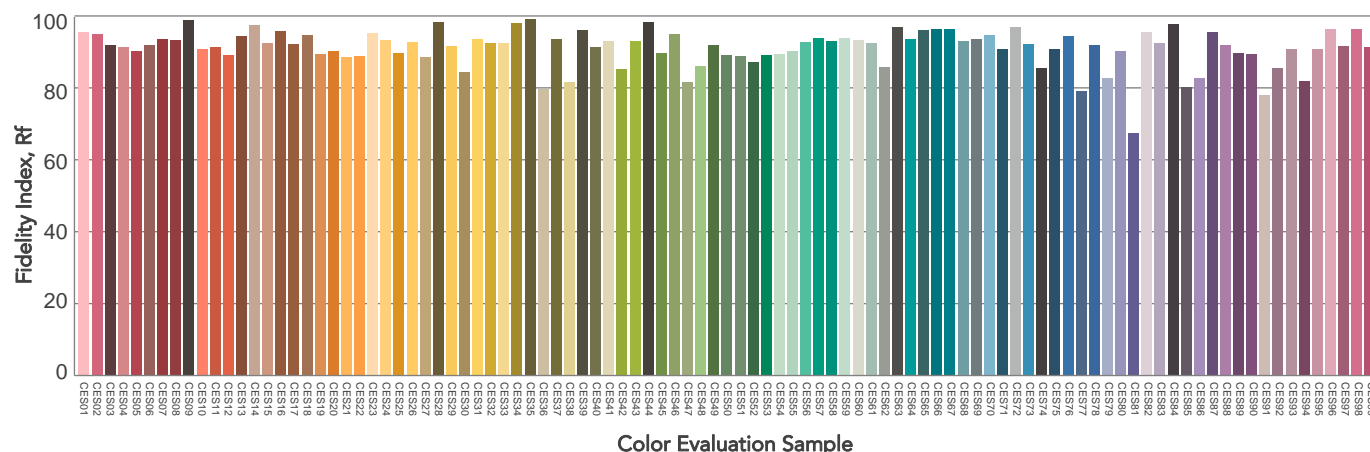
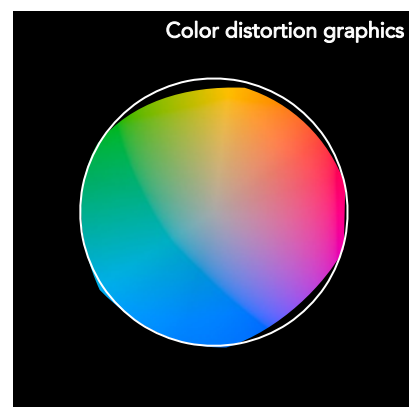
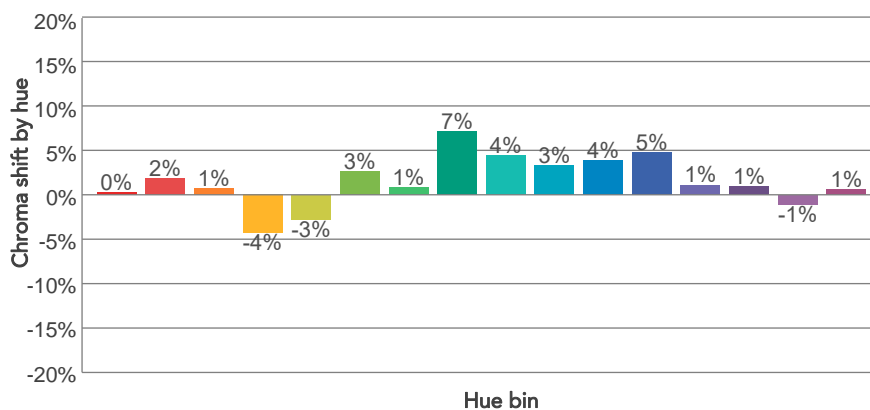
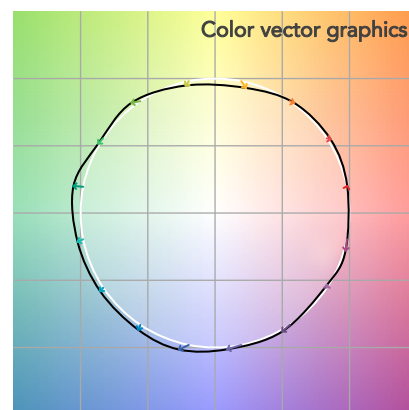
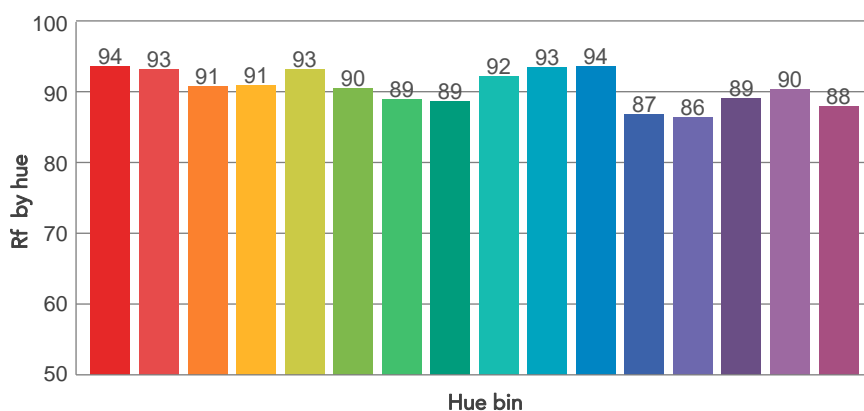
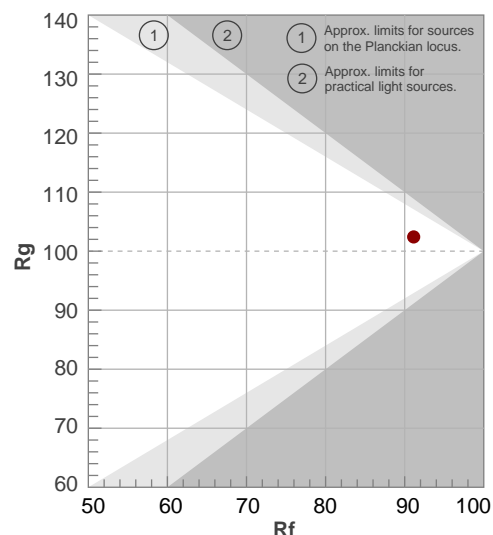
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2808 K | 92,2 | 96,1 | 91,1 | 102,4 | 92,0 | 85 | 0,453 | 0,411 | 0,0008 |

TM30 DETAILS

Rf 91,1
Fidelity index Rf

Rg 102,4
Gammut index

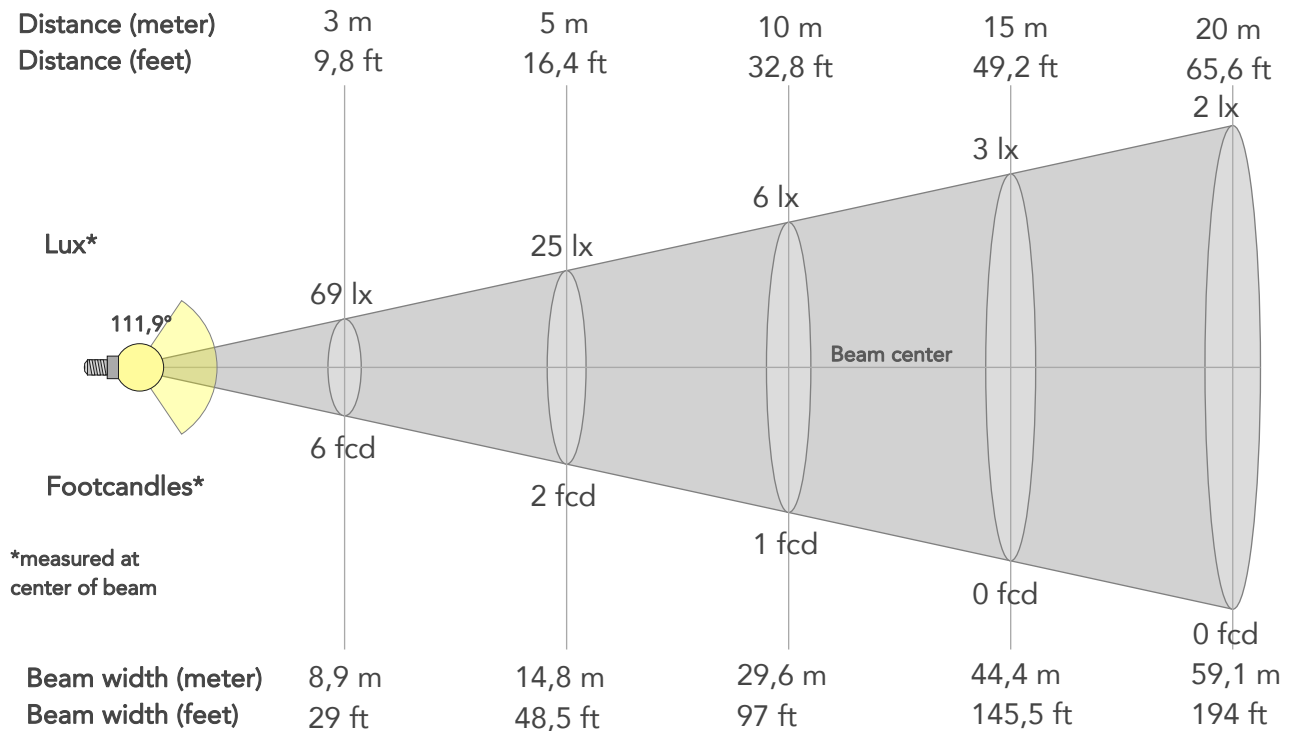
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 94 | 0% | 1% |
| 2 | 93 | 2% | -2% |
| 3 | 91 | 1% | -3% |
| 4 | 91 | -4% | -4% |
| 5 | 93 | -3% | 3% |
| 6 | 90 | 3% | 6% |
| 7 | 89 | 1% | 5% |
| 8 | 89 | 7% | 1% |
| 9 | 92 | 4% | 1% |
| 10 | 93 | 3% | 1% |
| 11 | 94 | 4% | 1% |
| 12 | 87 | 5% | -7% |
| 13 | 86 | 1% | -11% |
| 14 | 89 | 1% | -7% |
| 15 | 90 | -1% | 2% |
| 16 | 88 | 1% | -8% |



BEAM DETAILS



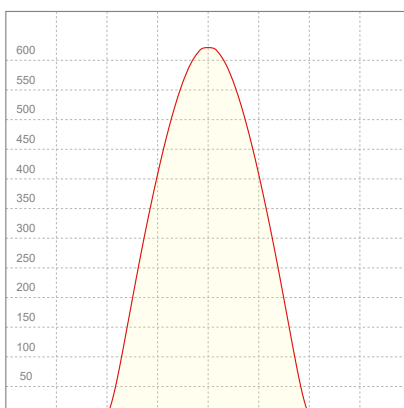
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 111,9° | 162° | 174,1° | 77,9% | 53,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|-------|--------|--------|--------|--------|---------|--------|---------|--------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 620lx | 155lx | 69lx | 39lx | 25lx | 11lx | 6lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 58fcd | 14fcd | 6fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 5,9m | 8,9m | 11,8m | 14,8m | 22,2m | 29,6m | 44,4m | 59,1m | 73,9m | 88,7m | 118,3m | 147,8m |
| Beam wid. | 9,8ft | 19,5ft | 29ft | 38,7ft | 48,5ft | 72,7ft | 97ft | 145,5ft | 194ft | 242,5ft | 291ft | 388ft | 484,9ft |

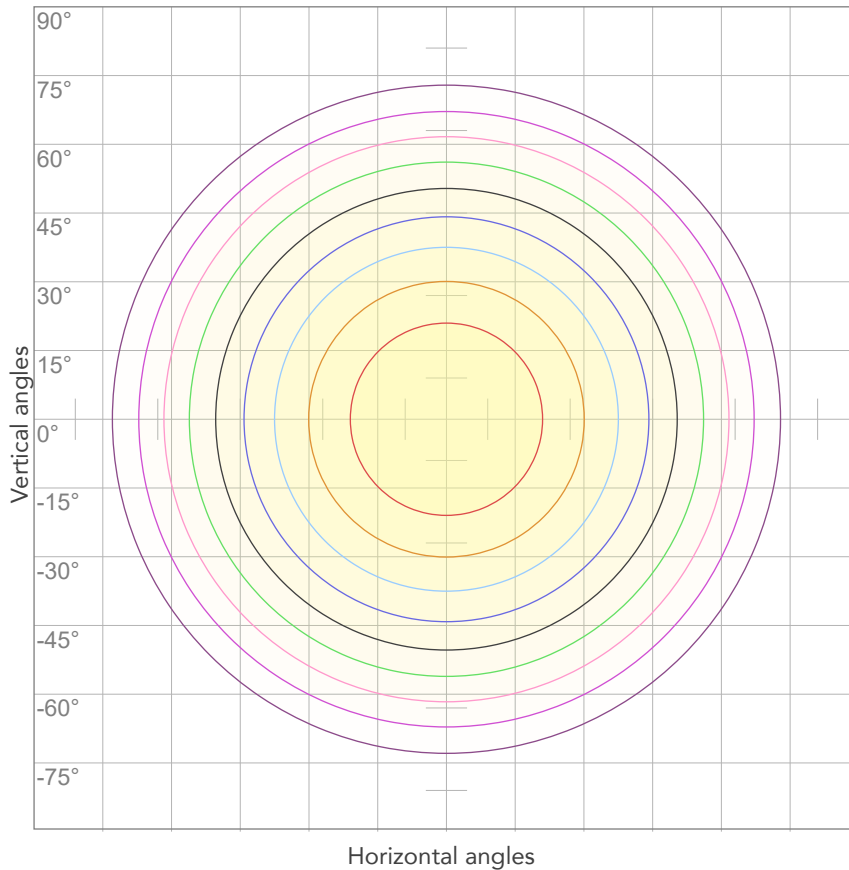
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,220A | 29,9W | 59lm/W |

ISO CANDELA DIAGRAM



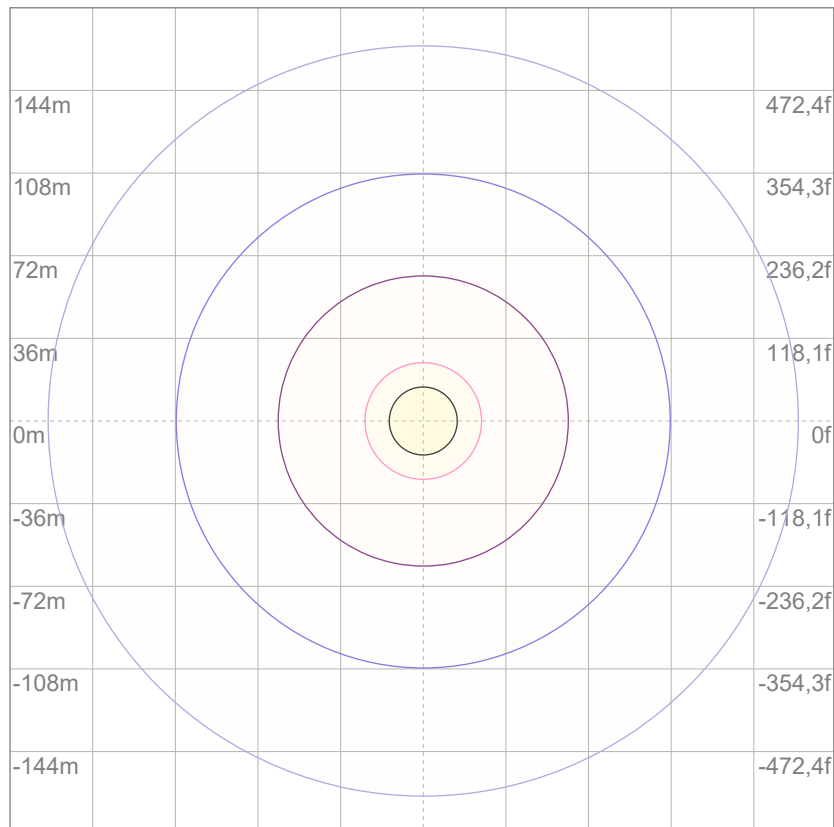
| | |
|-----|--------|
| 10% | 62 cd |
| 20% | 124 cd |
| 30% | 186 cd |
| 40% | 248 cd |
| 50% | 310 cd |
| 60% | 372 cd |
| 70% | 434 cd |
| 80% | 496 cd |

Conditions:

Number of c-planes: 2

Candela at center: 620 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,186 lx |
| 5% | 0,310 lx |
| 10% | 0,620 lx |
| 30% | 1,86 lx |
| 50% | 3,10 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,20 lx

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



Total lumen output:

1821 lm

Peak candela output:

689 cd

Light quality:

CRI: 93,0

Color temperature:

2808 K

PRODUCT NAME:
ECLNANOPANELTWC

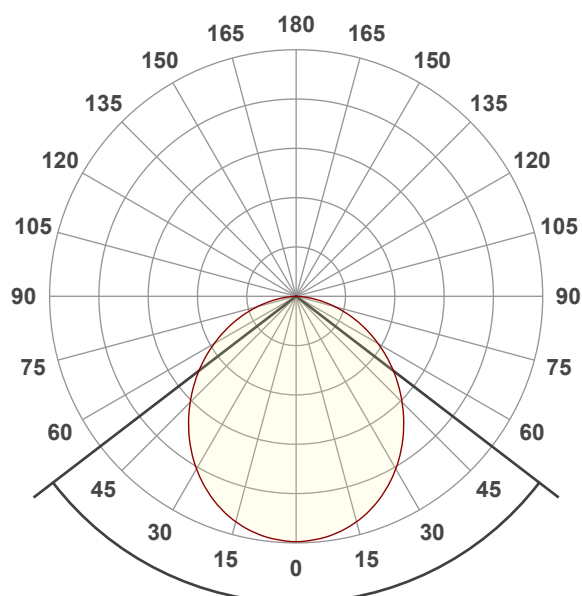
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h 2800K

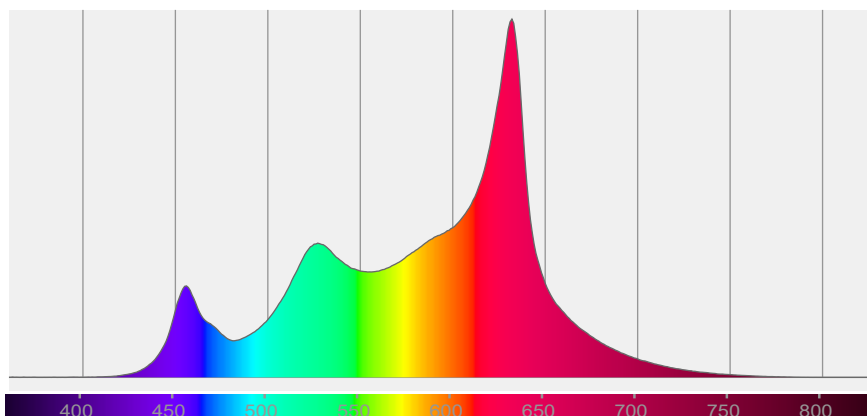
Operator:
Paolo Carvone

Date and time:
20/05/2022 15:04:17

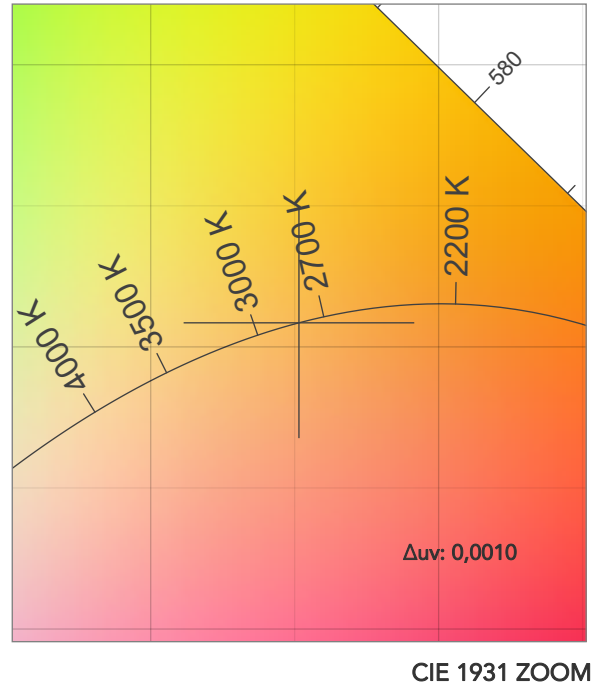
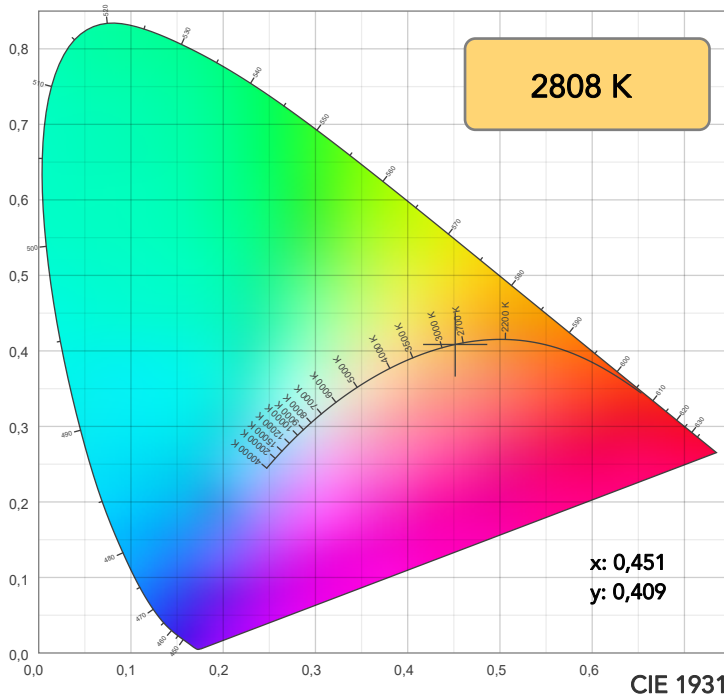


Beam angle 50%: 105,1°
Field angle 10%: 159,2°
Cut off angle 2.5%: 172,1°

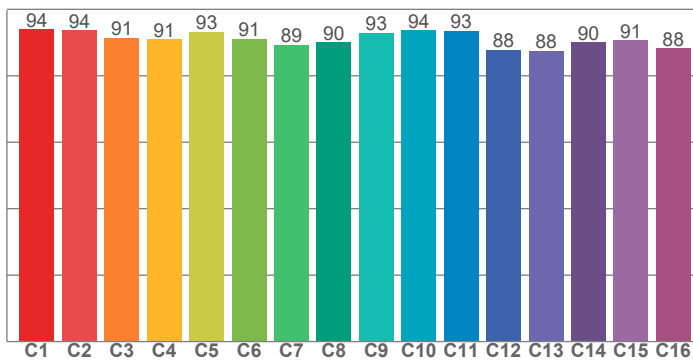
Spectra



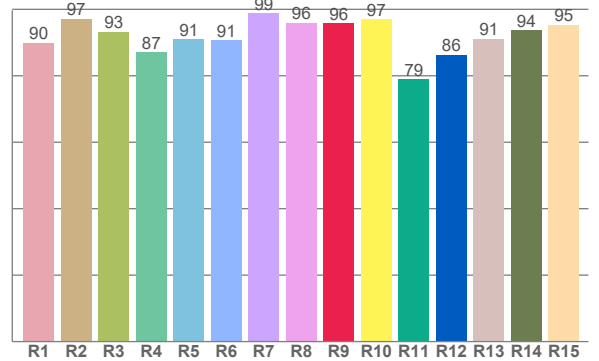
COLOR DETAILS



TM30: 91,6



CRI: 93,0 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90,0 | 97,1 | 93,3 | 87,0 | 91,0 | 90,7 | 98,8 | 96,0 | 95,9 | 97,1 | 79,0 | 86,4 | 91,2 | 93,8 | 95,4 |

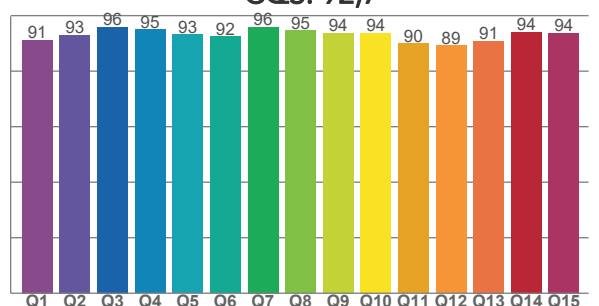
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,0 | 93,7 | 91,5 | 91,0 | 93,2 | 91,2 | 89,2 | 90,0 | 92,9 | 93,7 | 93,4 | 87,9 | 87,6 | 90,0 | 90,6 | 88,3 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,2 | 93,0 | 95,9 | 95,0 | 93,2 | 92,5 | 95,8 | 94,6 | 93,7 | 93,8 | 89,9 | 89,3 | 90,8 | 94,1 | 93,7 |

CQS: 92,7



COLOR PARAMETERS

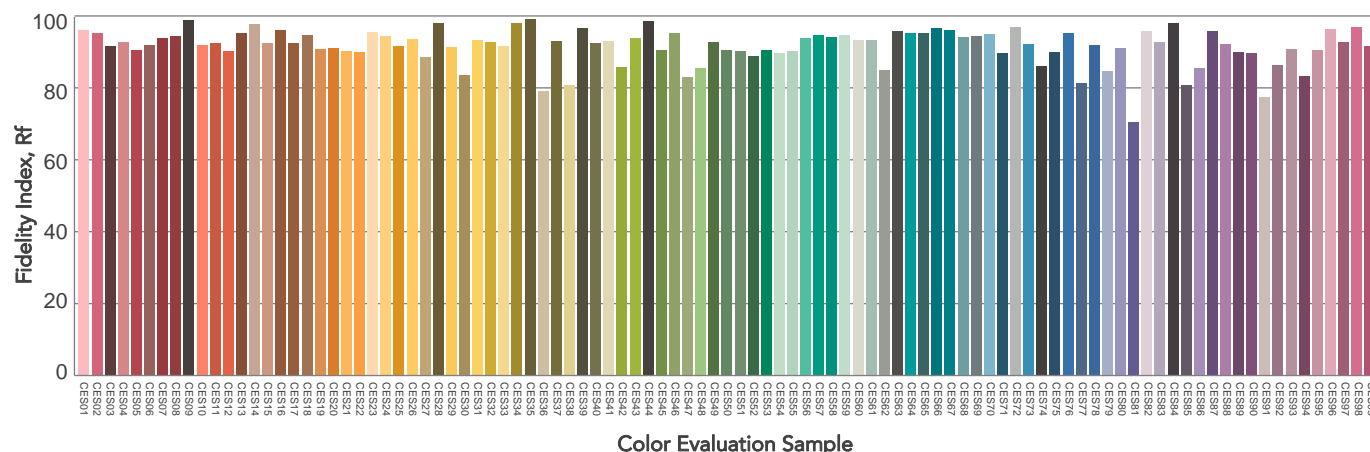
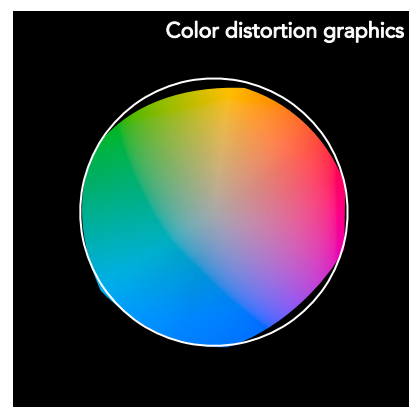
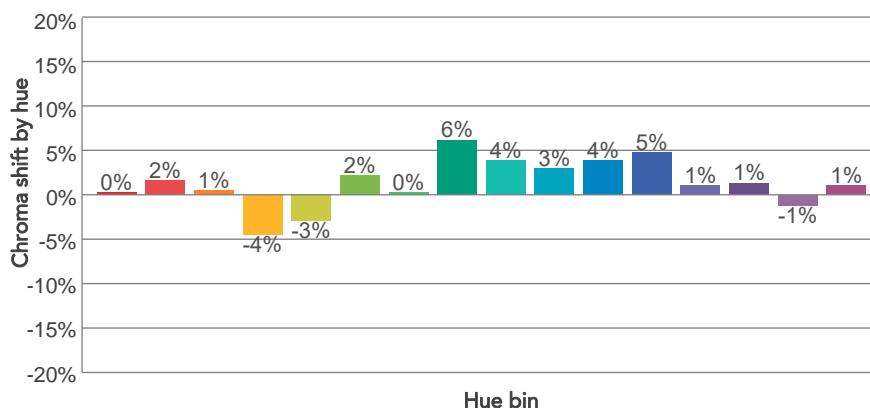
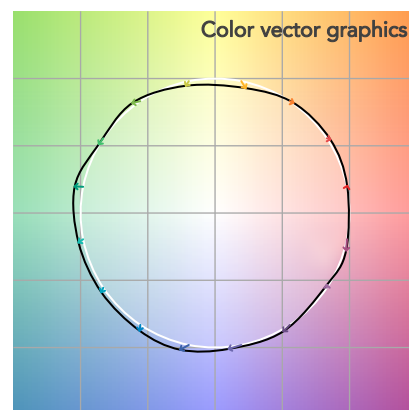
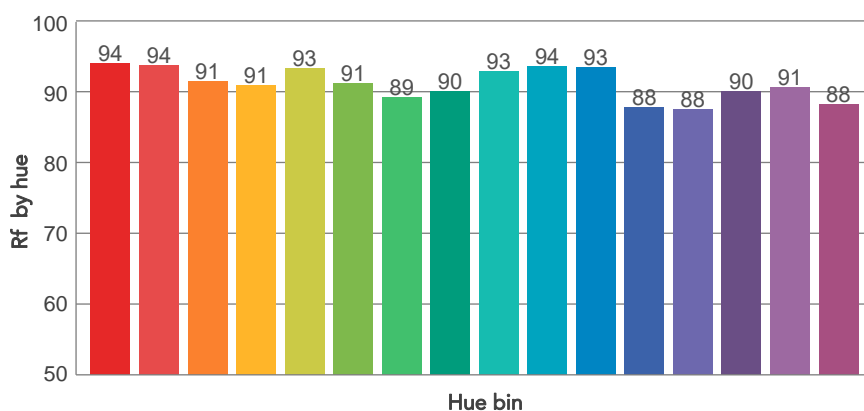
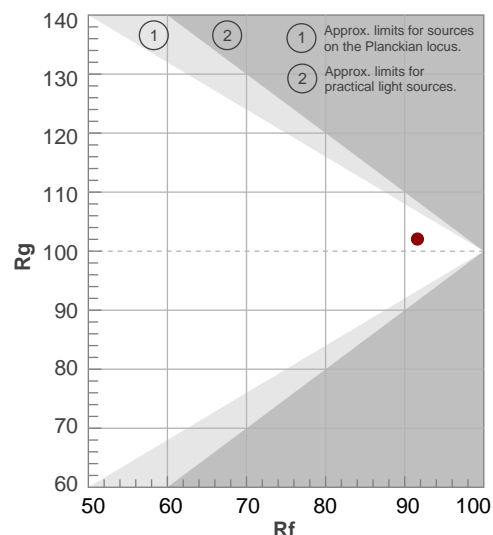
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2808 K | 93,0 | 95,9 | 91,6 | 102,0 | 92,7 | 86 | 0,451 | 0,409 | 0,0010 |

TM30 DETAILS

Rf 91,6
Fidelity index Rf

Rg 102,0
Gammut index

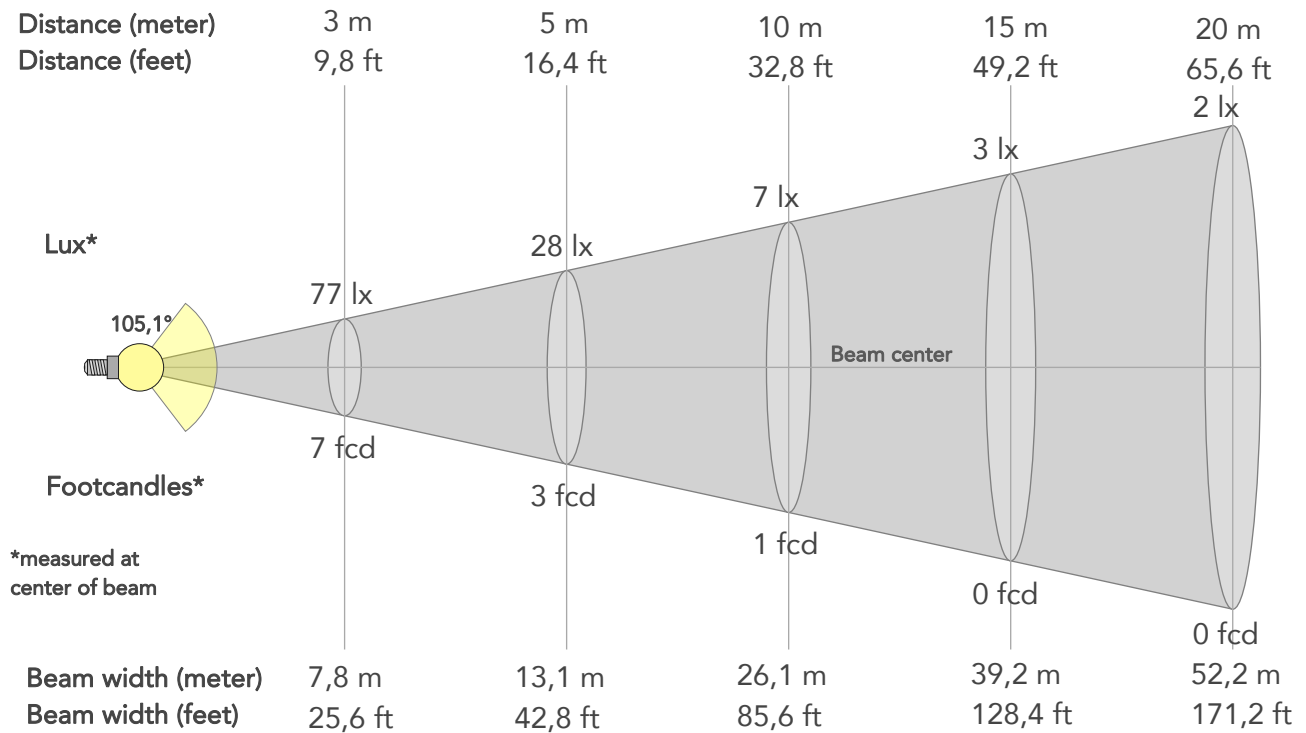
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 94 | 0% | 1% |
| 2 | 94 | 2% | -2% |
| 3 | 91 | 1% | -3% |
| 4 | 91 | -4% | -4% |
| 5 | 93 | -3% | 3% |
| 6 | 91 | 2% | 6% |
| 7 | 89 | 0% | 5% |
| 8 | 90 | 6% | 1% |
| 9 | 93 | 4% | 2% |
| 10 | 94 | 3% | 2% |
| 11 | 93 | 4% | 2% |
| 12 | 88 | 5% | -6% |
| 13 | 88 | 1% | -10% |
| 14 | 90 | 1% | -7% |
| 15 | 91 | -1% | 2% |
| 16 | 88 | 1% | -8% |



BEAM DETAILS



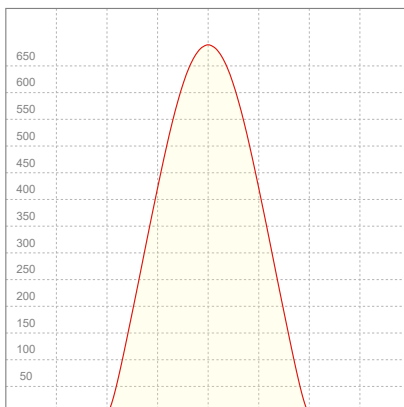
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 105,1° | 159,2° | 172,1° | 80,1% | 55,7% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|-------|---------|---------|--------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 689lx | 172lx | 77lx | 43lx | 28lx | 12lx | 7lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 64fcd | 16fcd | 7fcd | 4fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,6m | 5,2m | 7,8m | 10,4m | 13,1m | 19,6m | 26,1m | 39,2m | 52,2m | 65,3m | 78,3m | 104,4m | 130,5m |
| Beam wid. | 8,6ft | 17,2ft | 25,6ft | 34,2ft | 42,8ft | 64,2ft | 85,6ft | 128,4ft | 171,2ft | 214ft | 256,8ft | 342,4ft | 428ft |

LINEAR DISTRIBUTION DIAGRAM

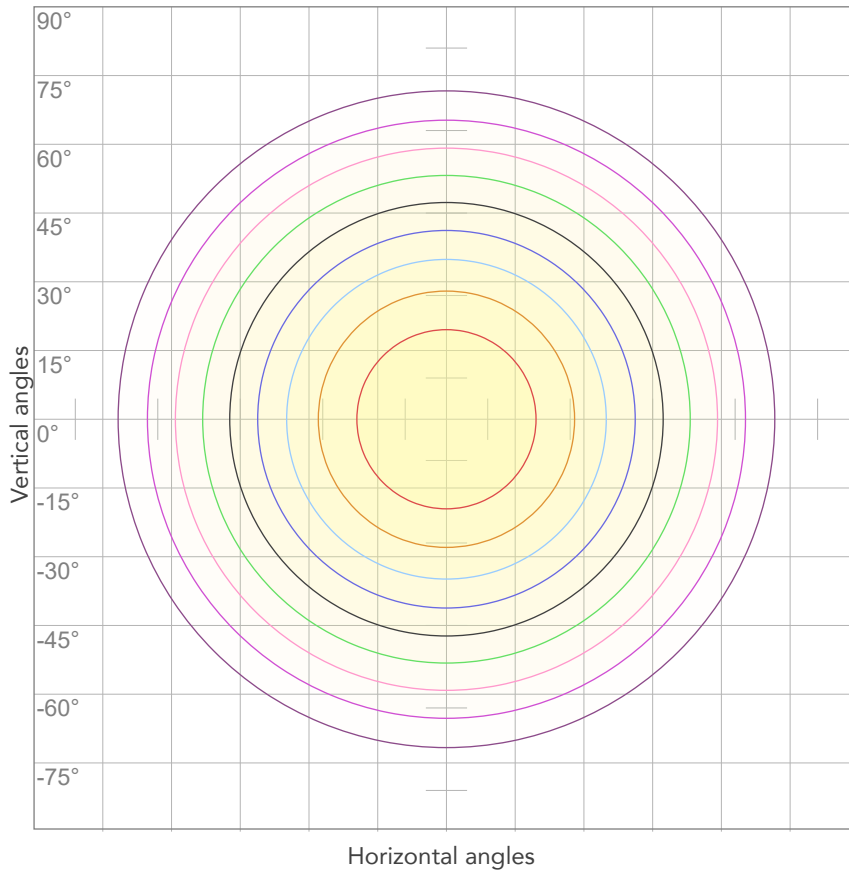


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 225V | 0,220A | 29,4W | 62lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



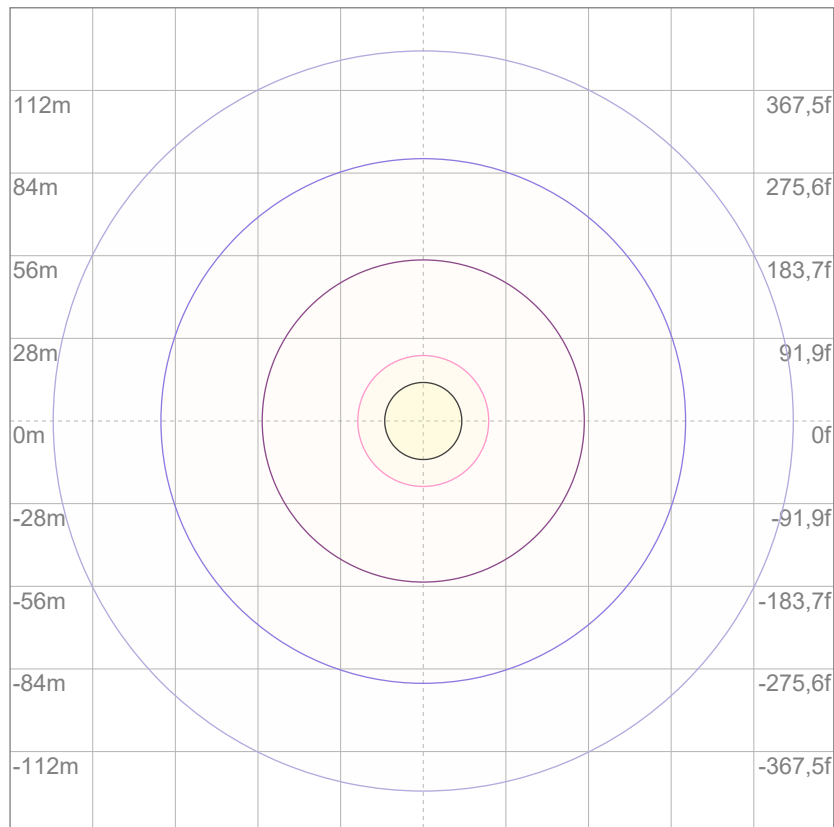
| | |
|-----|--------|
| 10% | 69 cd |
| 20% | 138 cd |
| 30% | 207 cd |
| 40% | 275 cd |
| 50% | 344 cd |
| 60% | 413 cd |
| 70% | 482 cd |
| 80% | 551 cd |

Conditions:

Number of c-planes: 2

Candela at center: 689 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,207 lx |
| 5% | 0,344 lx |
| 10% | 0,689 lx |
| 30% | 2,07 lx |
| 50% | 3,44 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,89 lx

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



Total lumen output:

1713 lm

Peak candela output:

862 cd

Light quality:

CRI: 93,2

Color temperature:

2806 K

PRODUCT NAME:
ECLNANOPANELTWC

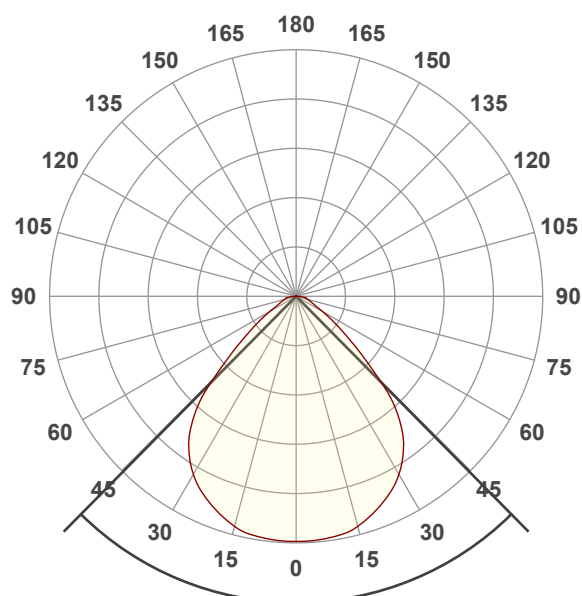
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h 2800K

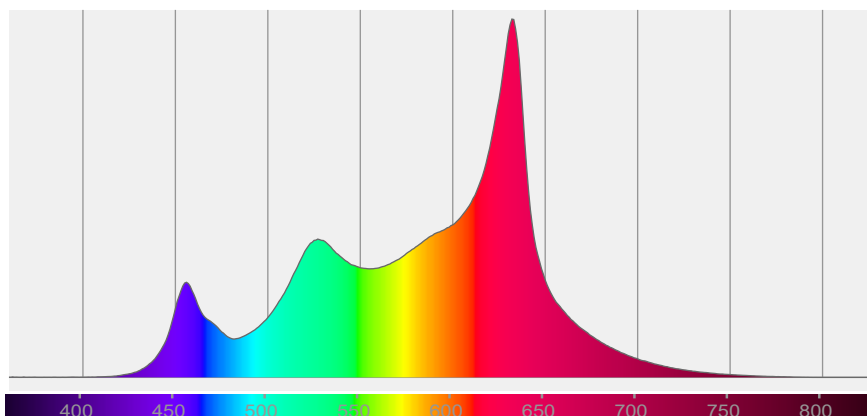
Operator:
Paolo Carvone

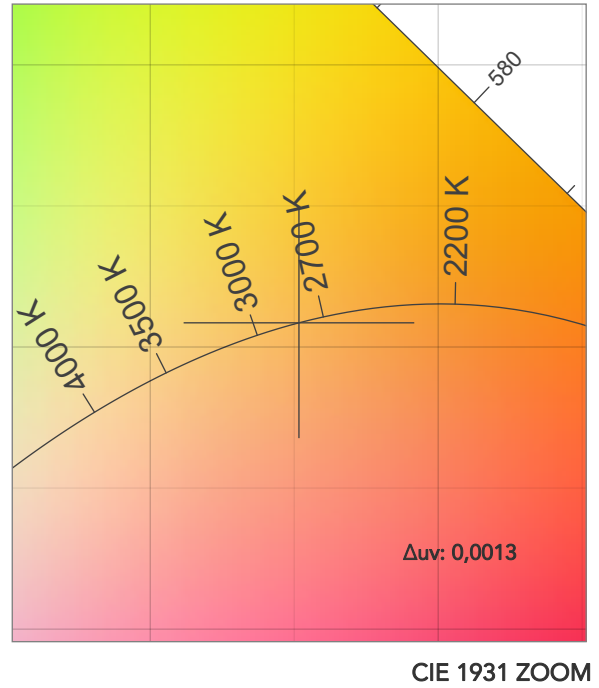
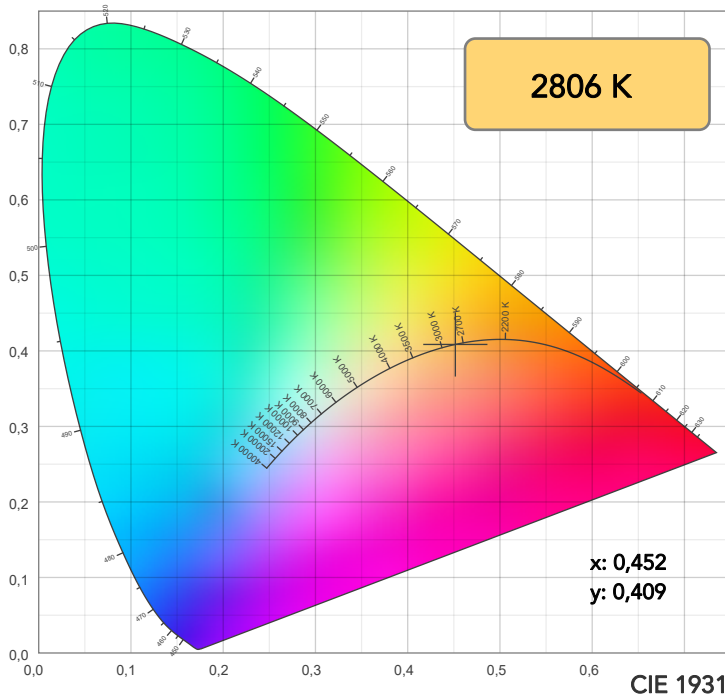
Date and time:
23/05/2022 11:35:07



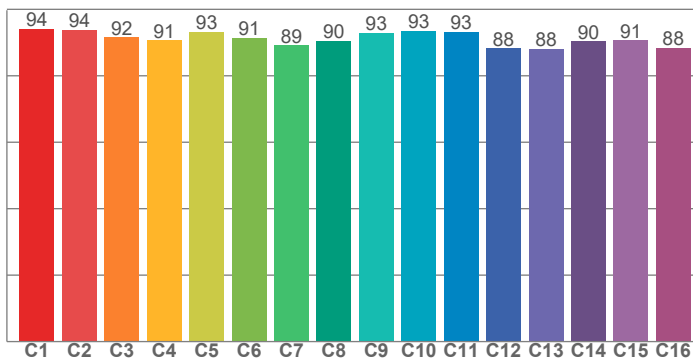
Beam angle 50%: 89,3°
Field angle 10%: 124,6°
Cut off angle 2.5%: 168,7°

Spectra

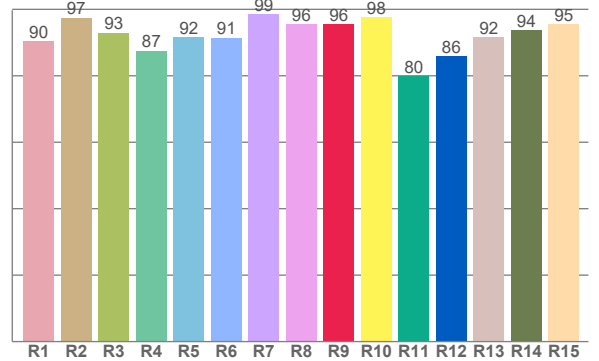




TM30: 91,7



CRI: 93,2 (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 | 97,4 | 93,0 | 87,5 | 91,5 | 91,4 | 98,6 | 95,6 | 95,5 | 97,7 | 79,9 | 85,8 | 91,6 | 93,7 | 95,4 |

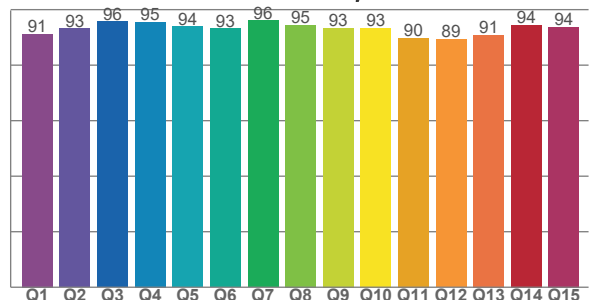
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,1 | 93,8 | 91,6 | 90,7 | 93,1 | 91,4 | 89,1 | 90,5 | 93,0 | 93,5 | 93,3 | 88,3 | 88,1 | 90,4 | 90,6 | 88,4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,2 | 93,2 | 95,7 | 95,5 | 93,8 | 93,2 | 96,1 | 94,5 | 93,4 | 93,3 | 89,9 | 89,3 | 90,8 | 94,4 | 93,7 |

CQS: 92,8



COLOR PARAMETERS

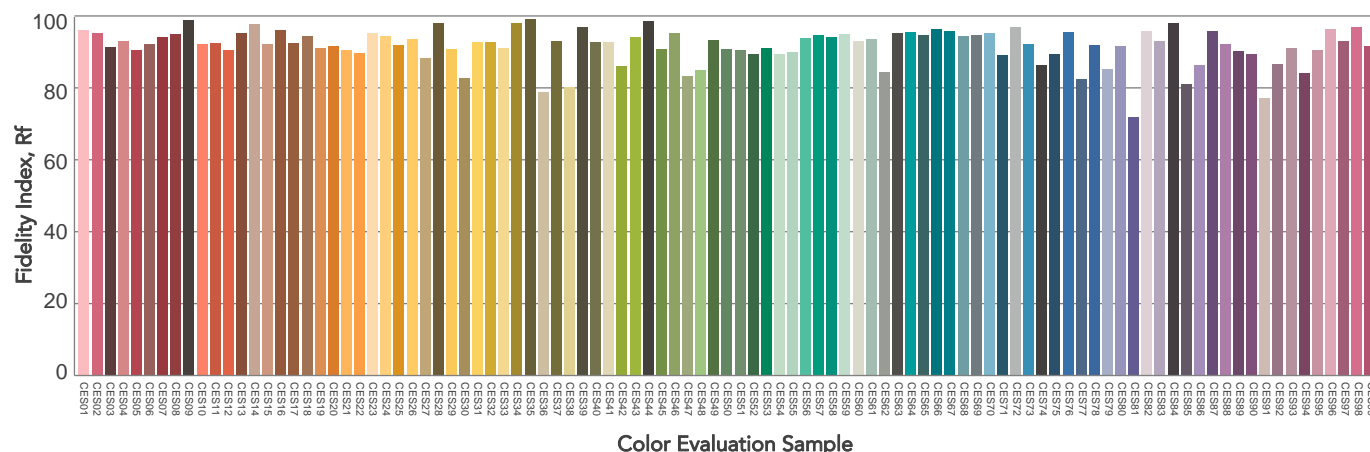
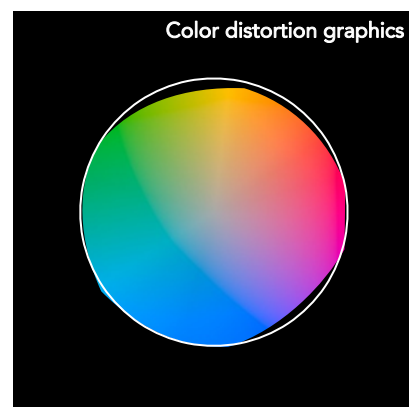
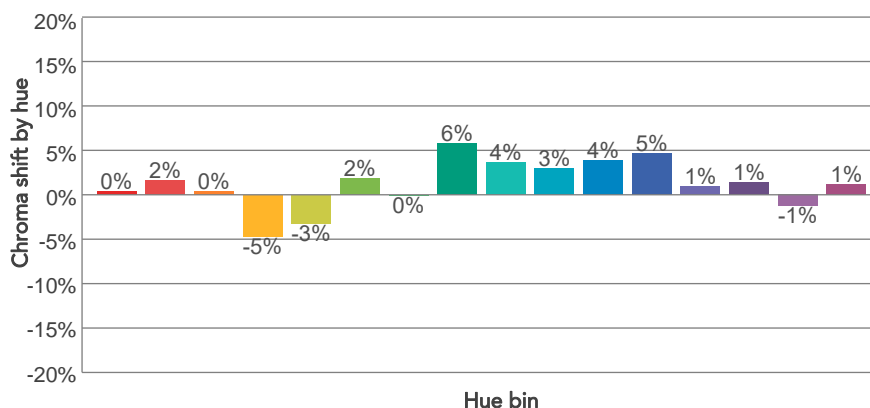
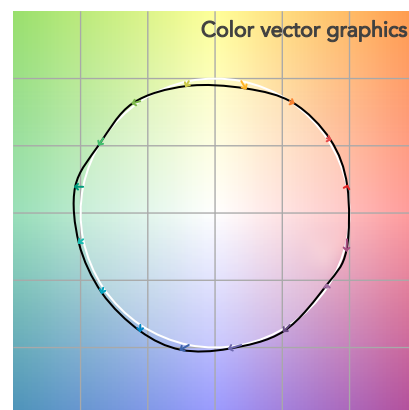
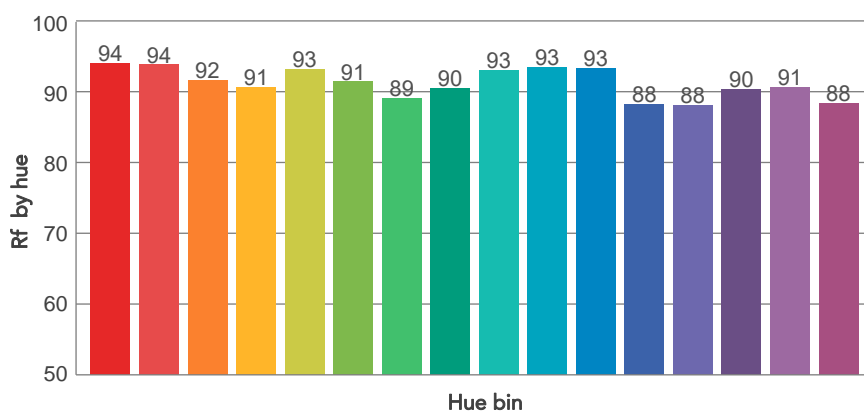
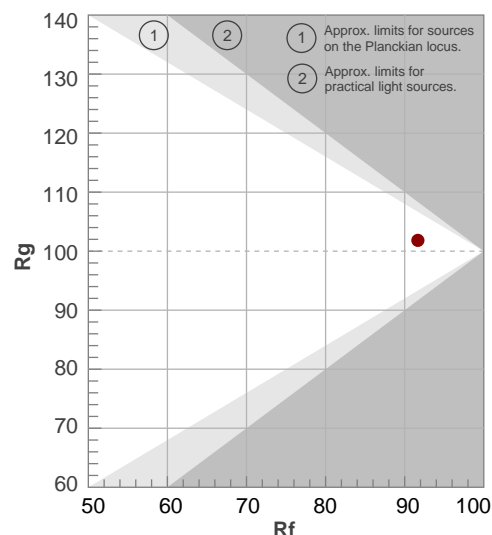
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2806 K | 93,2 | 95,5 | 91,7 | 101,8 | 92,8 | 86 | 0,452 | 0,409 | 0,0013 |

TM30 DETAILS

Rf 91,7
Fidelity index Rf

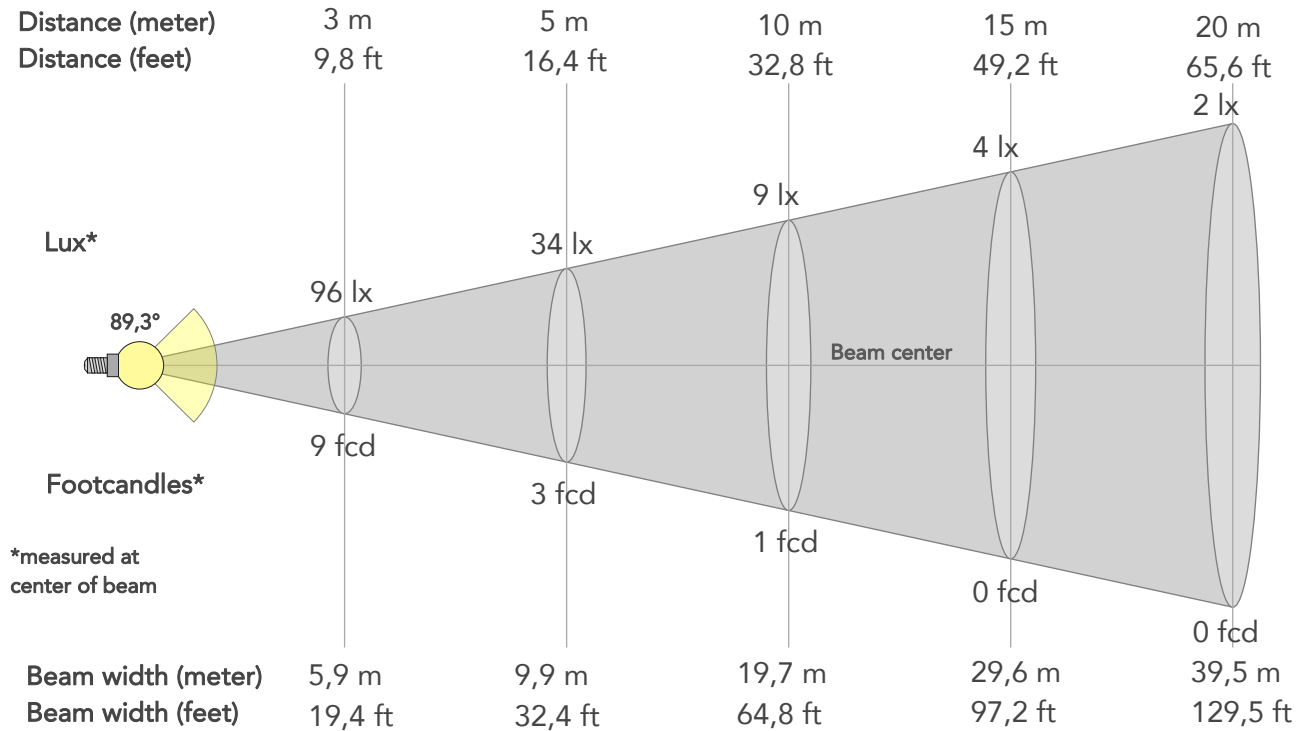
Rg 101,8
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 0% | 1% |
| 2 | 94 | 2% | -2% |
| 3 | 92 | 0% | -3% |
| 4 | 91 | -5% | -4% |
| 5 | 93 | -3% | 3% |
| 6 | 91 | 2% | 6% |
| 7 | 89 | 0% | 6% |
| 8 | 90 | 6% | 1% |
| 9 | 93 | 4% | 2% |
| 10 | 93 | 3% | 2% |
| 11 | 93 | 4% | 2% |
| 12 | 88 | 5% | -5% |
| 13 | 88 | 1% | -9% |
| 14 | 90 | 1% | -6% |
| 15 | 91 | -1% | 2% |
| 16 | 88 | 1% | -8% |



BEAM DETAILS

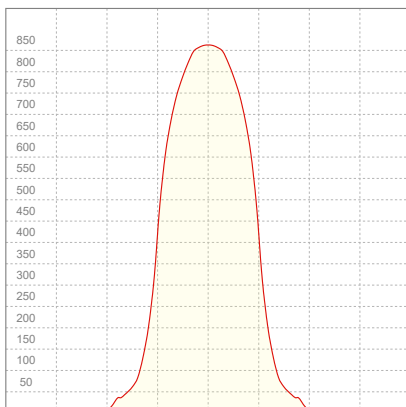
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,3° | 124,6° | 168,7° | 91,0% | 73,9% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 862lx | 216lx | 96lx | 54lx | 34lx | 15lx | 9lx | 4lx | 2lx | 1lx | 1lx | 1lx | 0lx |
| Footcand. | 80fcd | 20fcd | 9fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 3,9m | 5,9m | 7,9m | 9,9m | 14,8m | 19,7m | 29,6m | 39,5m | 49,4m | 59,2m | 79m | 98,7m |
| Beam wid. | 6,5ft | 13ft | 19,4ft | 25,9ft | 32,4ft | 48,6ft | 64,8ft | 97,2ft | 129,5ft | 161,9ft | 194,3ft | 259,1ft | 323,9ft |

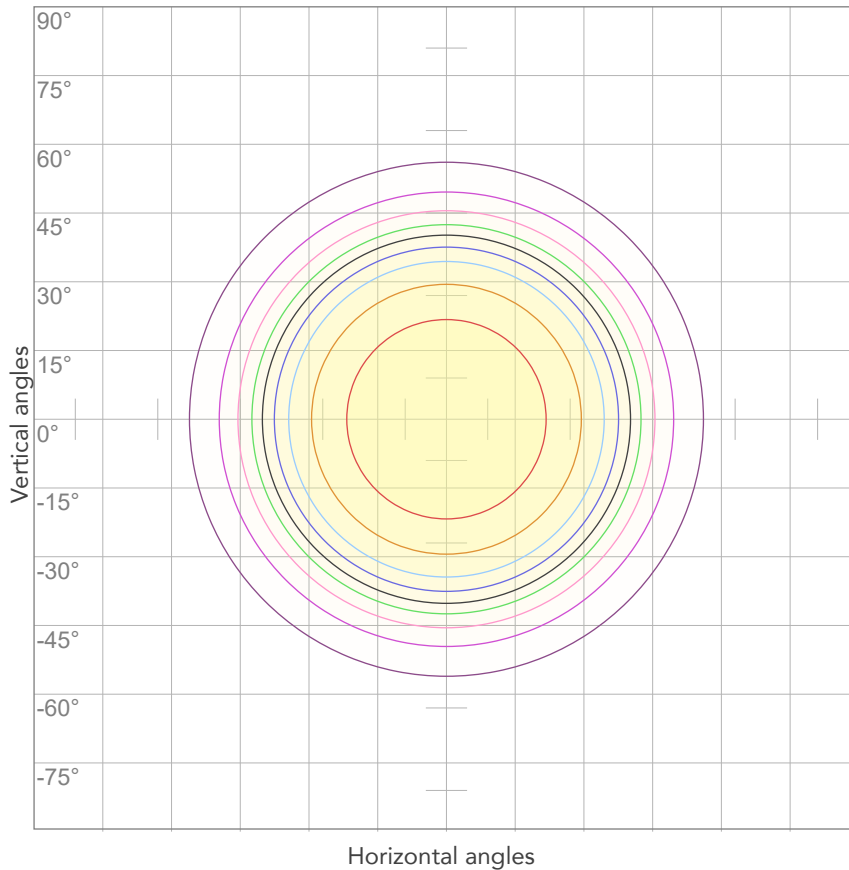
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,216A | 29,1W | 59lm/W |

ISO CANDELA DIAGRAM



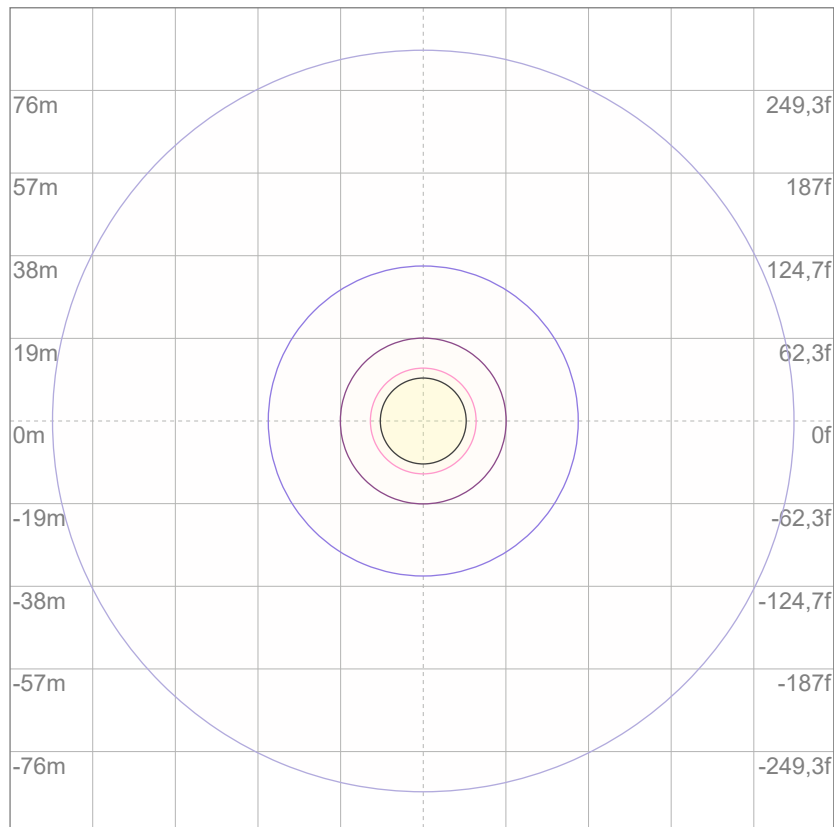
| | |
|-----|--------|
| 10% | 86 cd |
| 20% | 172 cd |
| 30% | 259 cd |
| 40% | 345 cd |
| 50% | 431 cd |
| 60% | 517 cd |
| 70% | 603 cd |
| 80% | 690 cd |

Conditions:

Number of c-planes: 2

Candela at center: 862 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,259 lx |
| 5% | 0,431 lx |
| 10% | 0,862 lx |
| 30% | 2,59 lx |
| 50% | 4,31 lx |

Conditions:

Number of c-planes: 2

Lux at center: 8,62 lx

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



Total lumen output:

1620 lm

Peak candela output:

551 cd

Light quality:

CRI: 94,2

Color temperature:

3224 K

PRODUCT NAME:
ECLNANOPANELTWC

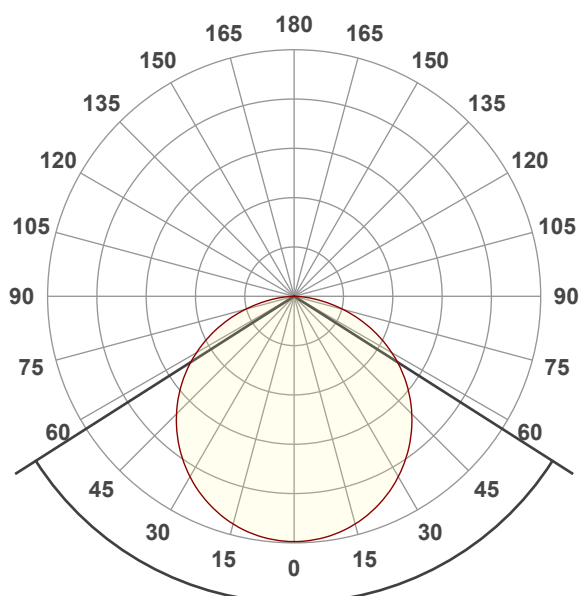
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h 3200K

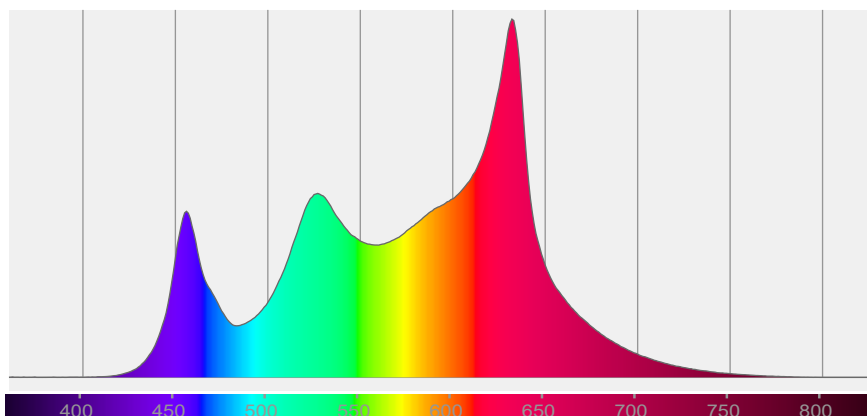
Operator:
Paolo Carvone

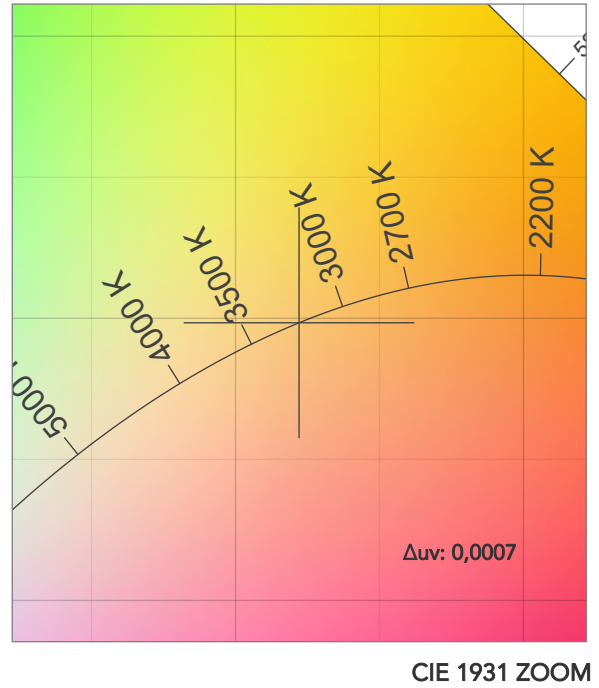
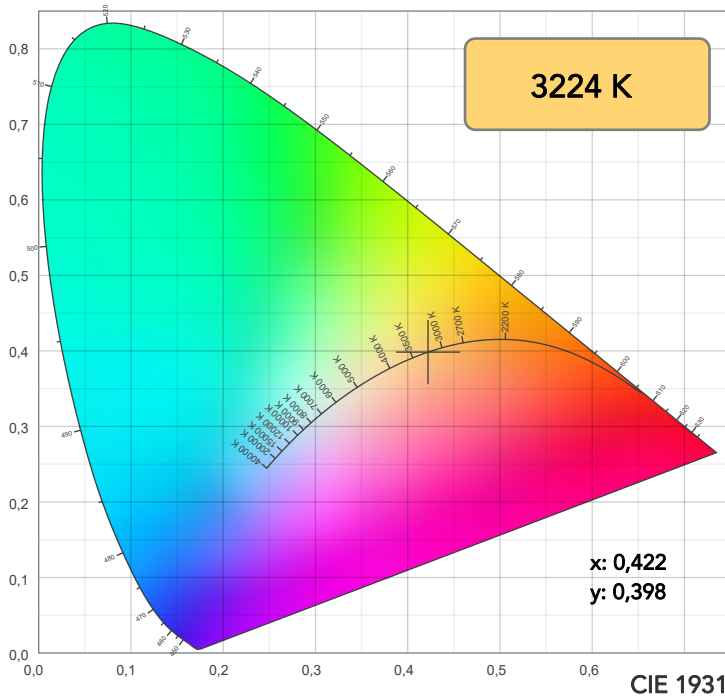
Date and time:
23/05/2022 11:13:43



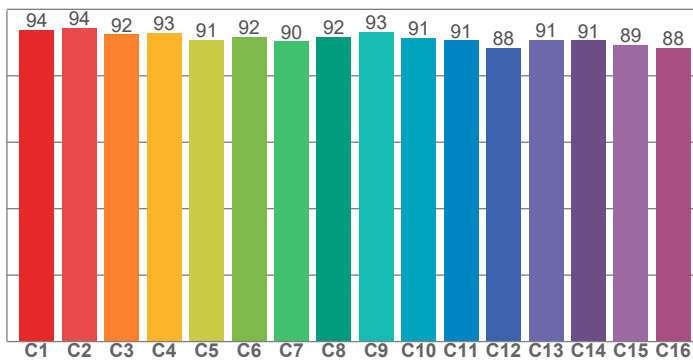
Beam angle 50%: 115°
Field angle 10%: 162,7°
Cut off angle 2.5%: 174°

Spectra

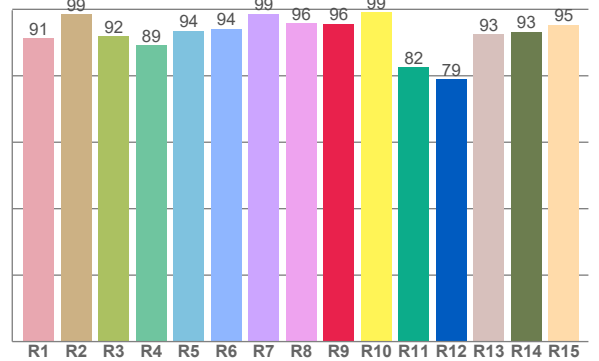




TM30: 91,6



CRI: 94,2 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,3 | 98,5 | 91,9 | 89,3 | 93,6 | 94,1 | 98,6 | 95,9 | 95,7 | 99,1 | 82,5 | 78,9 | 92,6 | 93,3 | 95,3 |

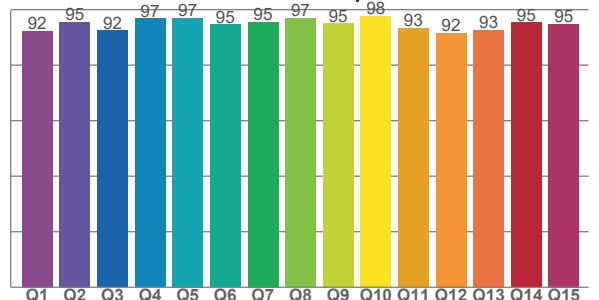
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,9 | 94,4 | 92,5 | 92,9 | 90,8 | 91,8 | 90,4 | 91,7 | 93,2 | 91,5 | 90,6 | 88,4 | 90,9 | 90,6 | 89,4 | 88,4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,3 | 95,5 | 92,5 | 96,8 | 97,0 | 94,6 | 95,5 | 96,9 | 94,9 | 97,6 | 93,3 | 91,7 | 92,6 | 95,3 | 94,9 |

CQS: 94,4



COLOR PARAMETERS

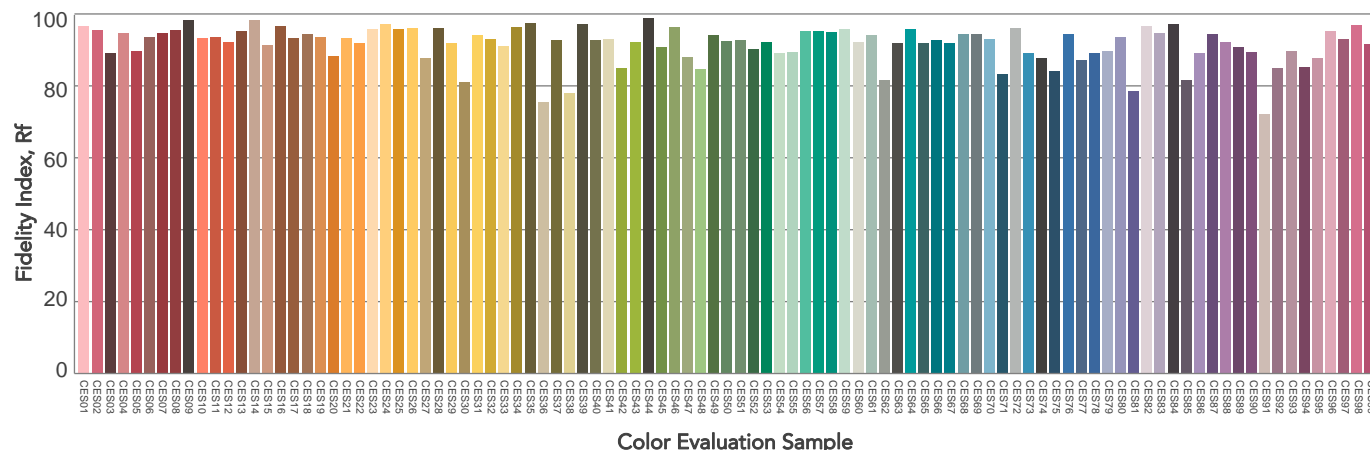
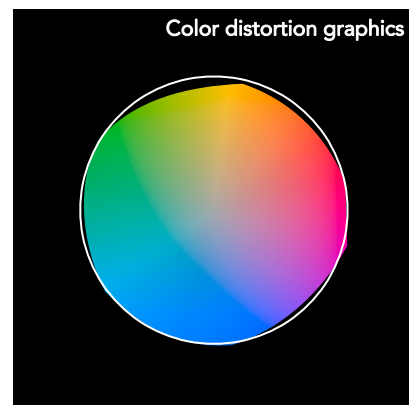
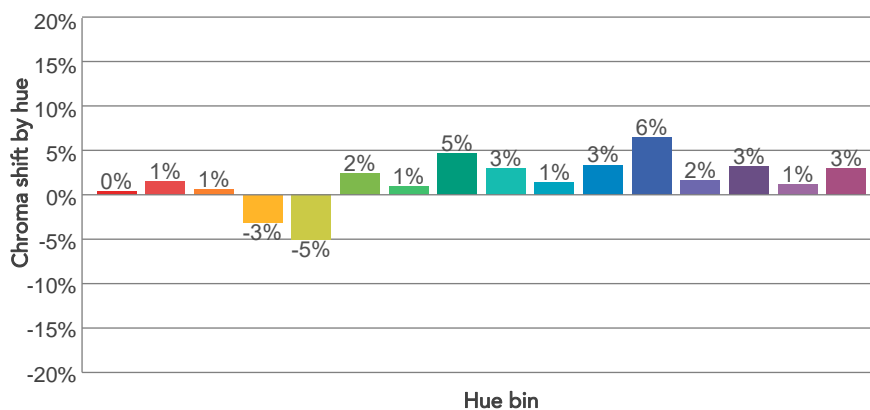
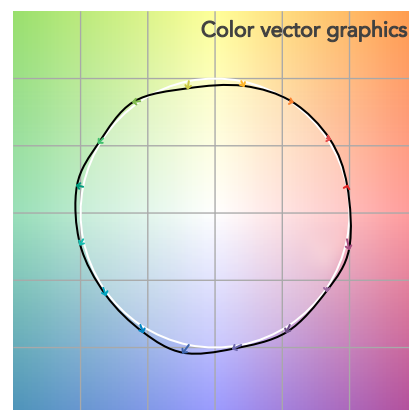
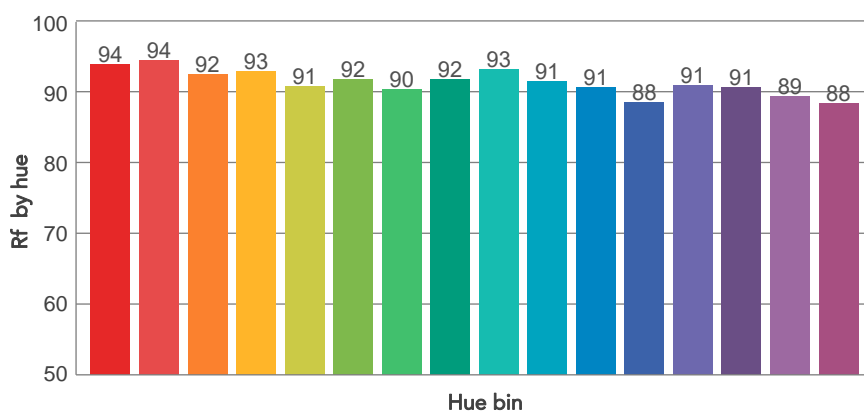
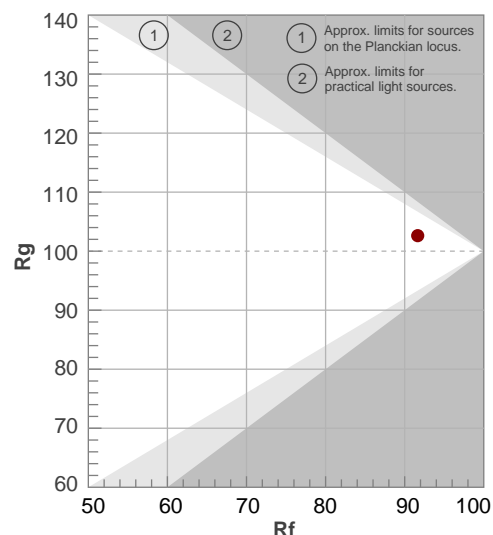
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 3224 K | 94,2 | 95,7 | 91,6 | 102,6 | 94,4 | 89 | 0,422 | 0,398 | 0,0007 |

TM30 DETAILS

Rf 91,6
Fidelity index Rf

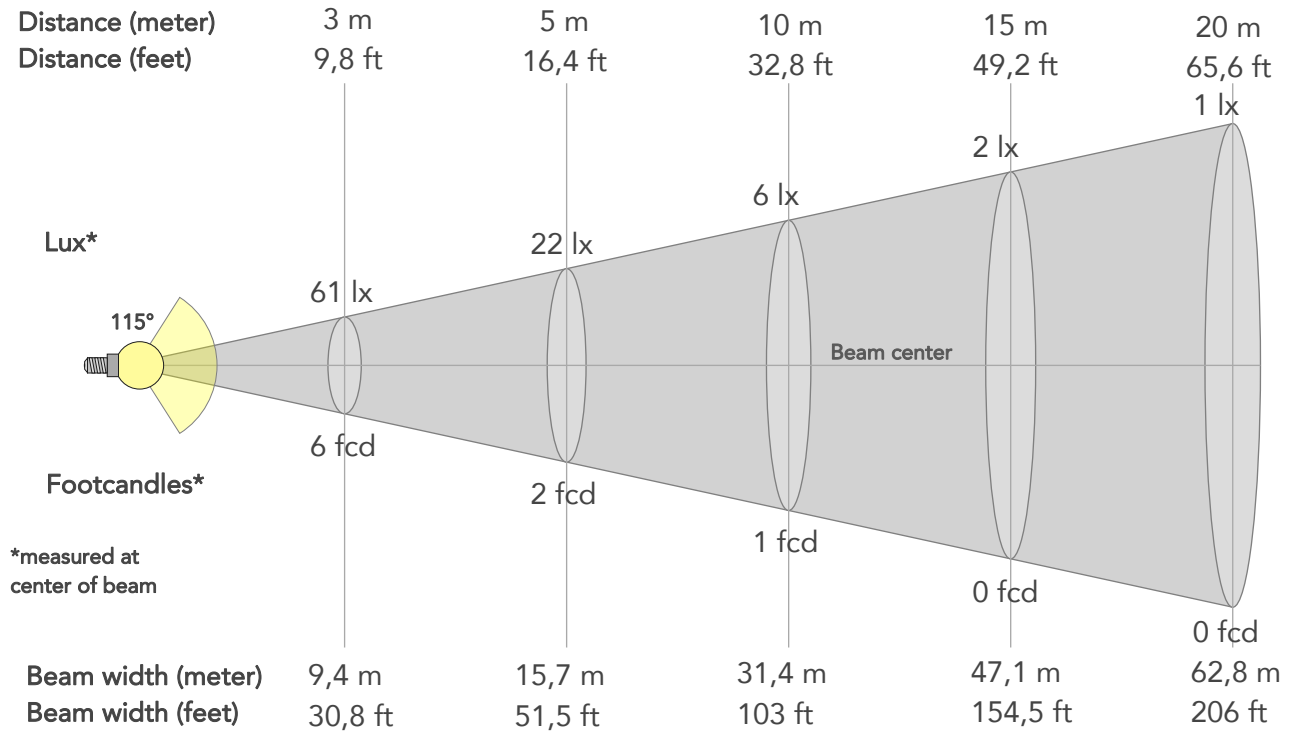
Rg 102,6
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 0% | 1% |
| 2 | 94 | 1% | -2% |
| 3 | 92 | 1% | -2% |
| 4 | 93 | -3% | -2% |
| 5 | 91 | -5% | 2% |
| 6 | 92 | 2% | 5% |
| 7 | 90 | 1% | 5% |
| 8 | 92 | 5% | 0% |
| 9 | 93 | 3% | 3% |
| 10 | 91 | 1% | 5% |
| 11 | 91 | 3% | 5% |
| 12 | 88 | 6% | -3% |
| 13 | 91 | 2% | -6% |
| 14 | 91 | 3% | -5% |
| 15 | 89 | 1% | -2% |
| 16 | 88 | 3% | -7% |



BEAM DETAILS

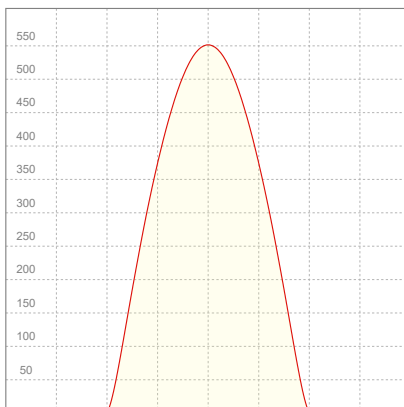
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115° | 162,7° | 174° | 77,7% | 52,5% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|--------|---------|--------|---------|--------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 551lx | 138lx | 61lx | 34lx | 22lx | 10lx | 6lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 51fcd | 13fcd | 6fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,1m | 6,3m | 9,4m | 12,6m | 15,7m | 23,5m | 31,4m | 47,1m | 62,8m | 78,5m | 94,2m | 125,6m | 157m |
| Beam wid. | 10,4ft | 20,7ft | 30,8ft | 41,1ft | 51,5ft | 77,2ft | 103ft | 154,5ft | 206ft | 257,5ft | 309ft | 412ft | 514,9ft |

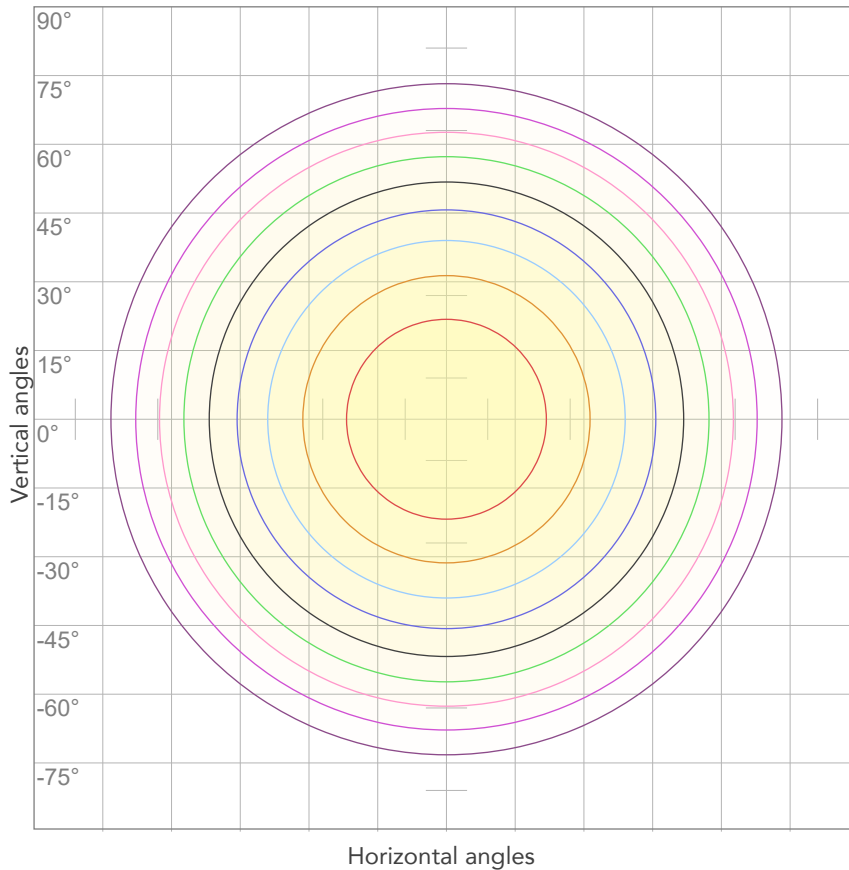
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,217A | 29,2W | 55lm/W |

ISO CANDELA DIAGRAM



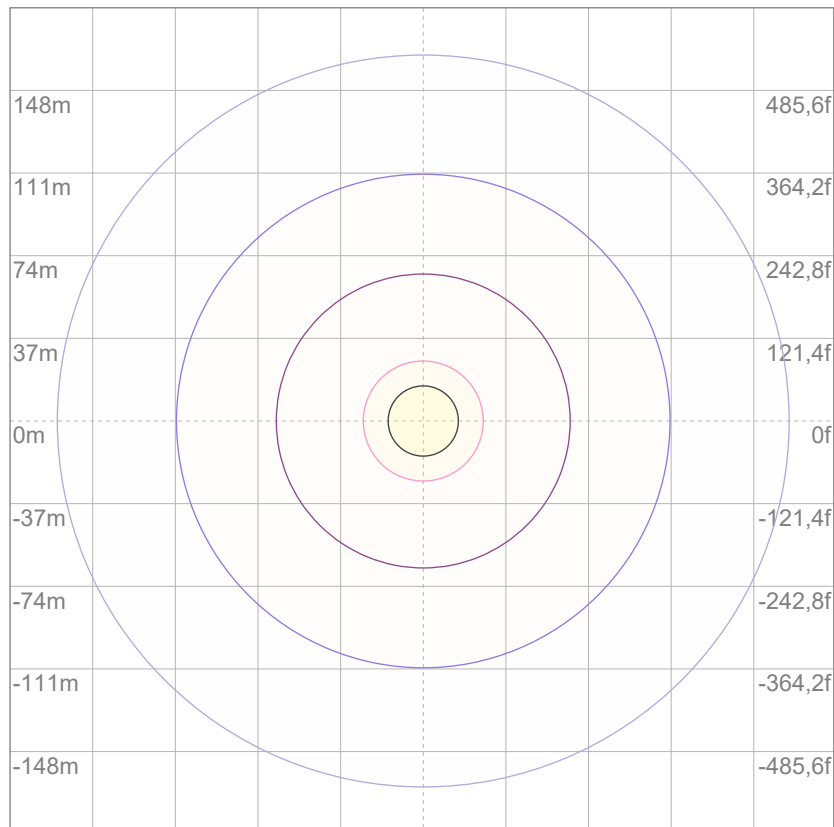
| | |
|-----|--------|
| 10% | 55 cd |
| 20% | 110 cd |
| 30% | 165 cd |
| 40% | 220 cd |
| 50% | 275 cd |
| 60% | 331 cd |
| 70% | 386 cd |
| 80% | 441 cd |

Conditions:

Number of c-planes: 2

Candela at center: 551 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,165 lx |
| 5% | 0,275 lx |
| 10% | 0,551 lx |
| 30% | 1,65 lx |
| 50% | 2,75 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,51 lx

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



Total lumen output:

1771 lm

Peak candela output:

620 cd

Light quality:

CRI: 93,9

Color temperature:

3209 K

PRODUCT NAME:
ECLNANOPANELTWC

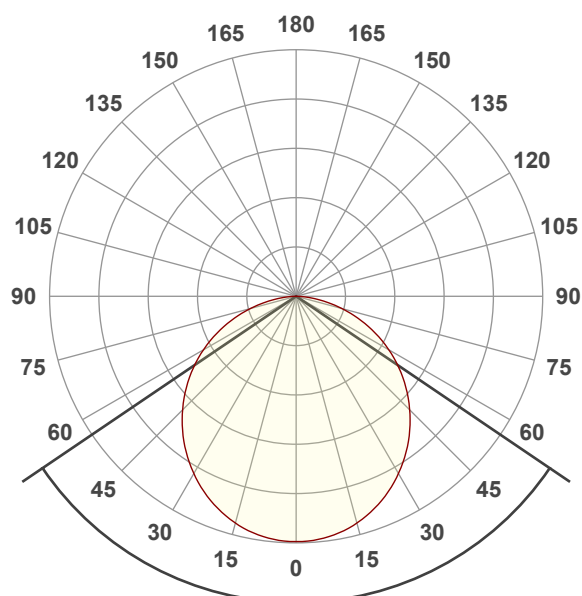
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h 3200K

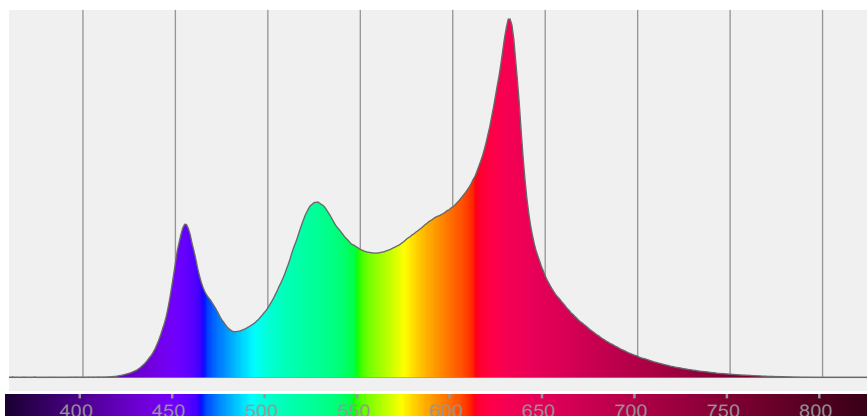
Operator:
Paolo Carvone

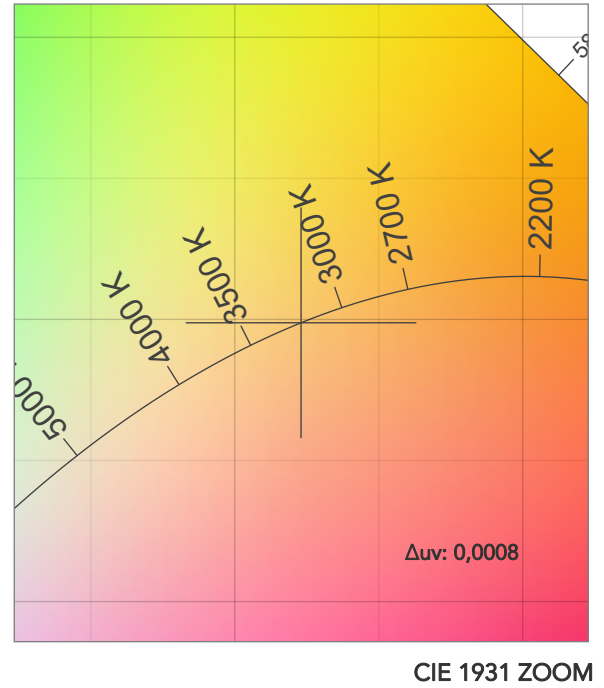
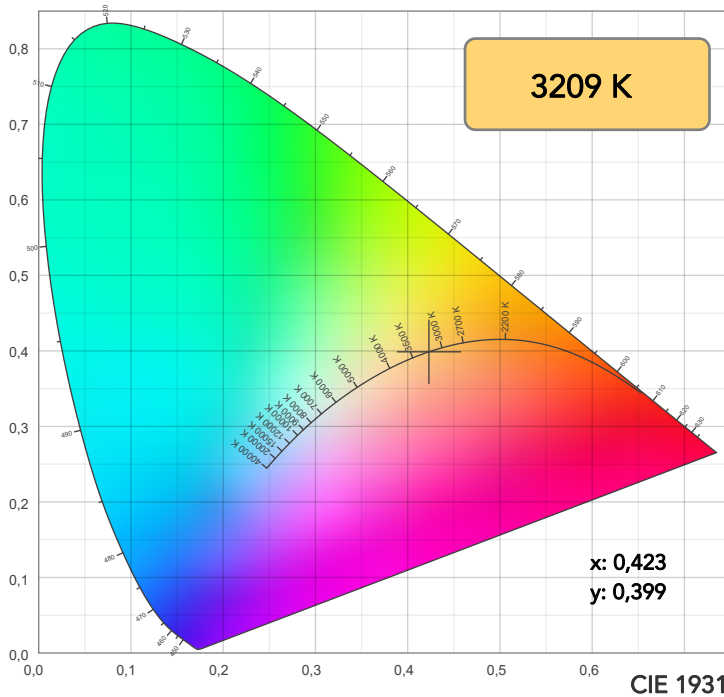
Date and time:
23/05/2022 10:18:40



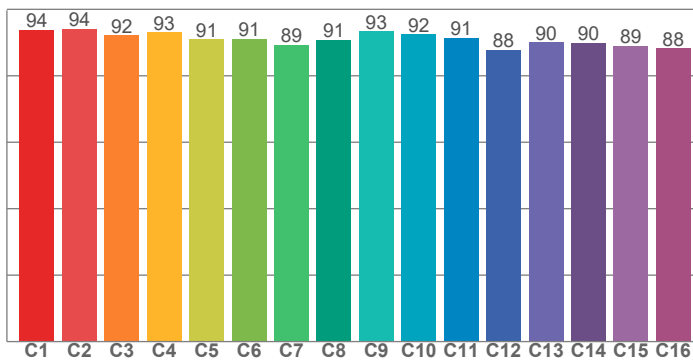
Beam angle 50%: 111,8°
Field angle 10%: 162°
Cut off angle 2.5%: 174,2°

Spectra

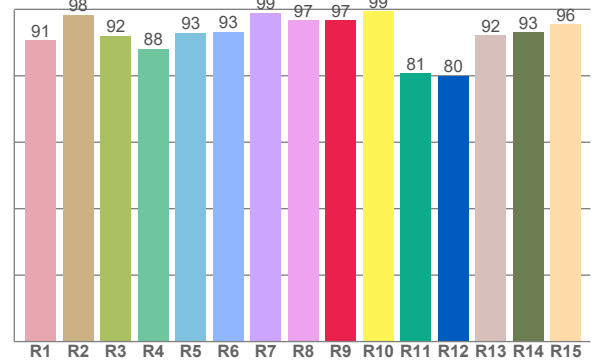




TM30: 91,5



CRI: 93,9 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90,8 | 98,4 | 92,1 | 88,1 | 92,9 | 93,3 | 99,0 | 96,7 | 96,8 | 99,3 | 80,7 | 80,0 | 92,1 | 93,2 | 95,6 |

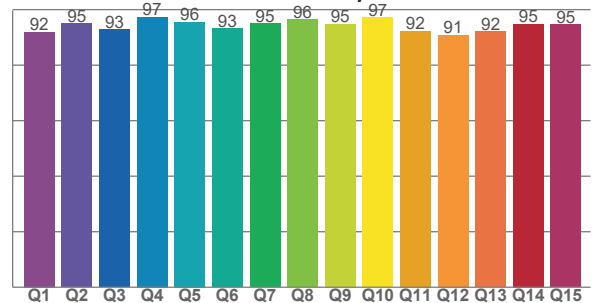
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,8 | 94,1 | 92,1 | 93,1 | 90,9 | 91,1 | 89,3 | 90,8 | 93,3 | 92,4 | 91,4 | 87,7 | 90,0 | 89,8 | 89,0 | 88,2 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,0 | 95,0 | 92,7 | 97,3 | 95,5 | 93,1 | 95,0 | 96,4 | 94,8 | 97,2 | 92,3 | 90,9 | 92,0 | 94,7 | 94,6 |

CQS: 93,9



COLOR PARAMETERS

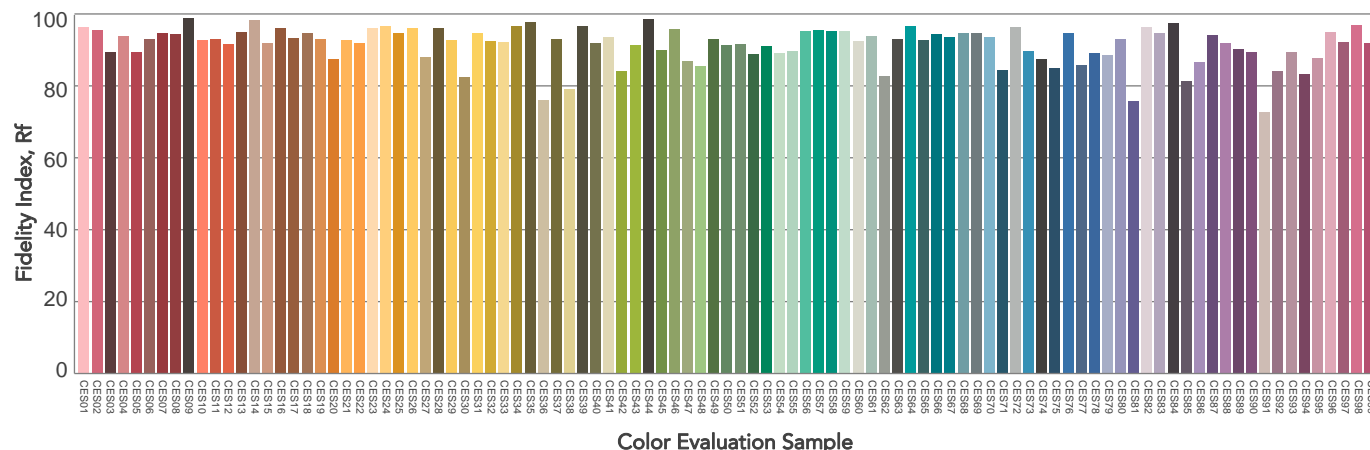
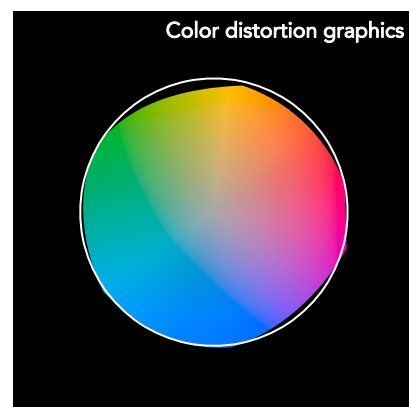
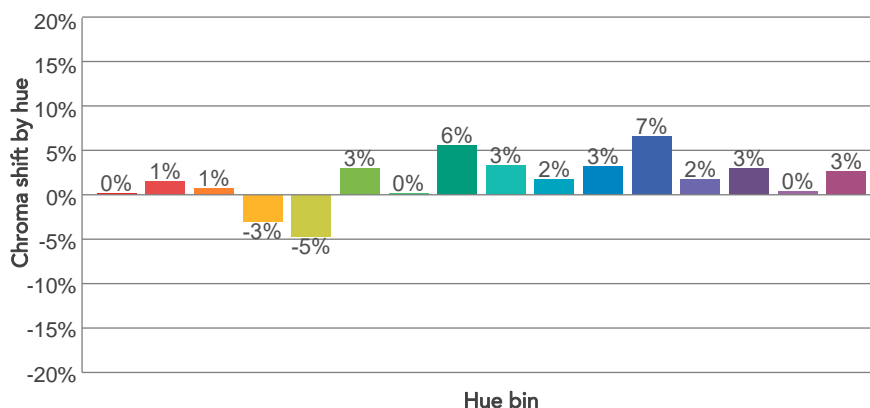
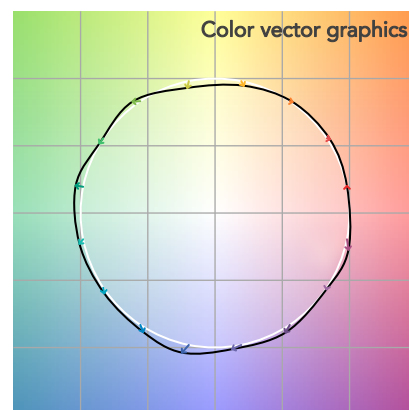
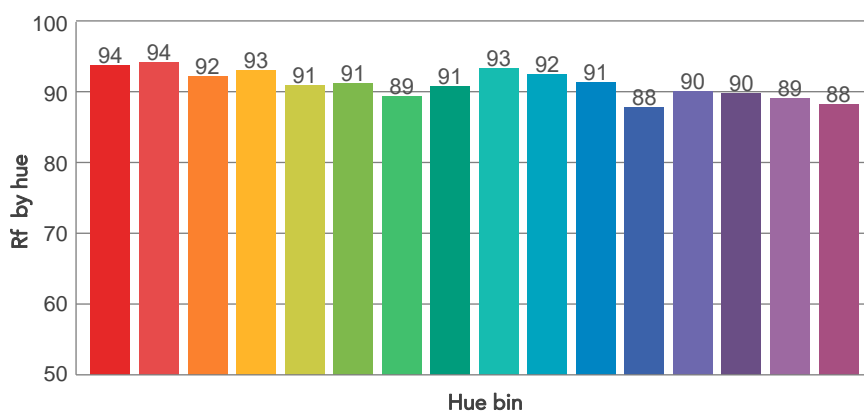
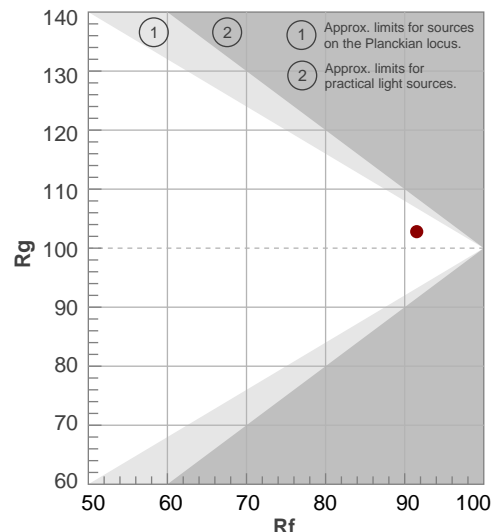
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 3209 K | 93,9 | 96,8 | 91,5 | 102,8 | 93,9 | 88 | 0,423 | 0,399 | 0,0008 |

TM30 DETAILS

Rf 91,5
Fidelity index Rf

Rg 102,8
Gammut index

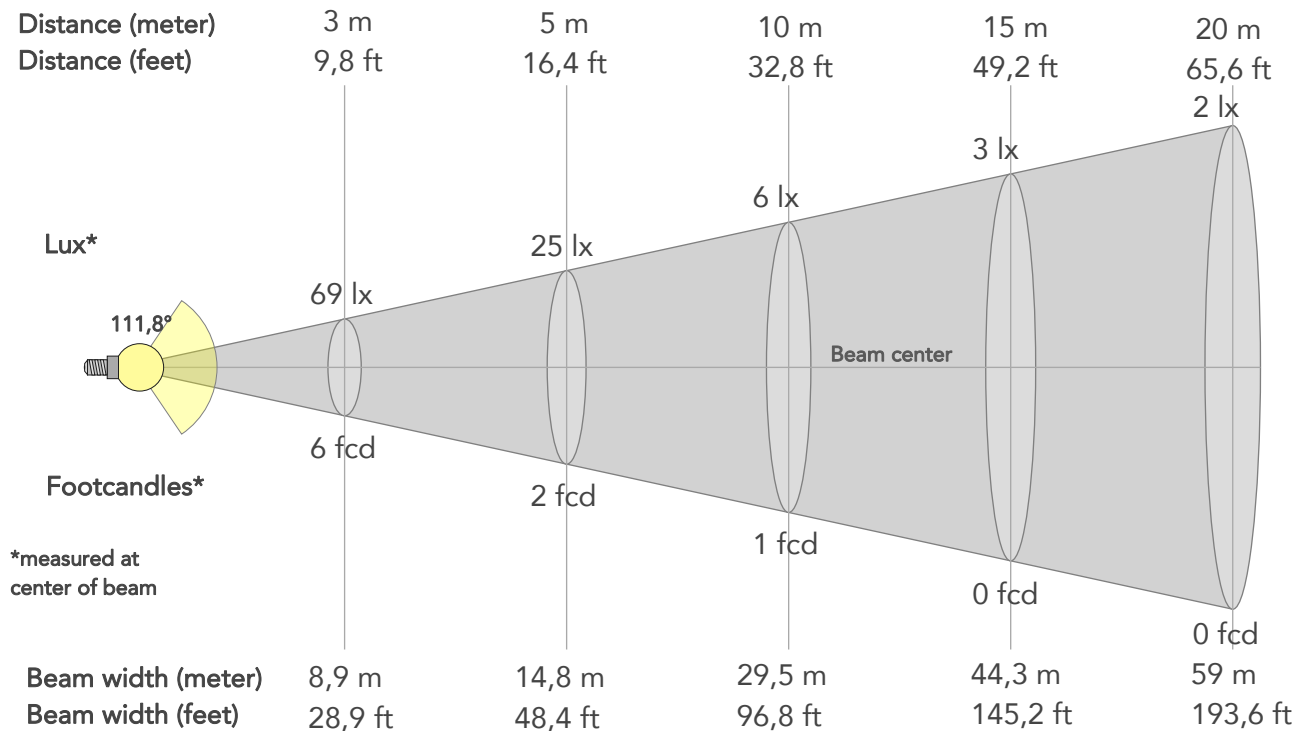
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 0% | 1% |
| 2 | 94 | 1% | -2% |
| 3 | 92 | 1% | -2% |
| 4 | 93 | -3% | -2% |
| 5 | 91 | -5% | 2% |
| 6 | 91 | 3% | 5% |
| 7 | 89 | 0% | 5% |
| 8 | 91 | 6% | 0% |
| 9 | 93 | 3% | 3% |
| 10 | 92 | 2% | 4% |
| 11 | 91 | 3% | 5% |
| 12 | 88 | 7% | -4% |
| 13 | 90 | 2% | -7% |
| 14 | 90 | 3% | -6% |
| 15 | 89 | 0% | -1% |
| 16 | 88 | 3% | -7% |



BEAM DETAILS



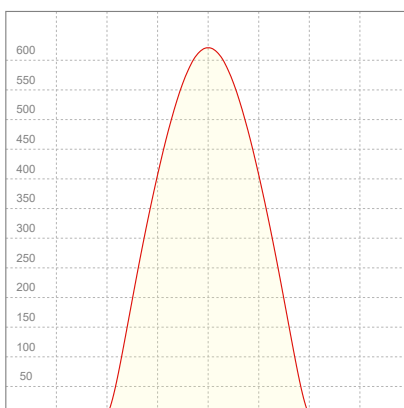
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 111,8° | 162° | 174,2° | 78,0% | 53,1% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|-------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 620lx | 155lx | 69lx | 39lx | 25lx | 11lx | 6lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 58fcd | 14fcd | 6fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 5,9m | 8,9m | 11,8m | 14,8m | 22,1m | 29,5m | 44,3m | 59m | 73,8m | 88,6m | 118,1m | 147,6m |
| Beam wid. | 9,7ft | 19,5ft | 28,9ft | 38,7ft | 48,4ft | 72,6ft | 96,8ft | 145,2ft | 193,6ft | 242ft | 290,4ft | 387,3ft | 484,1ft |

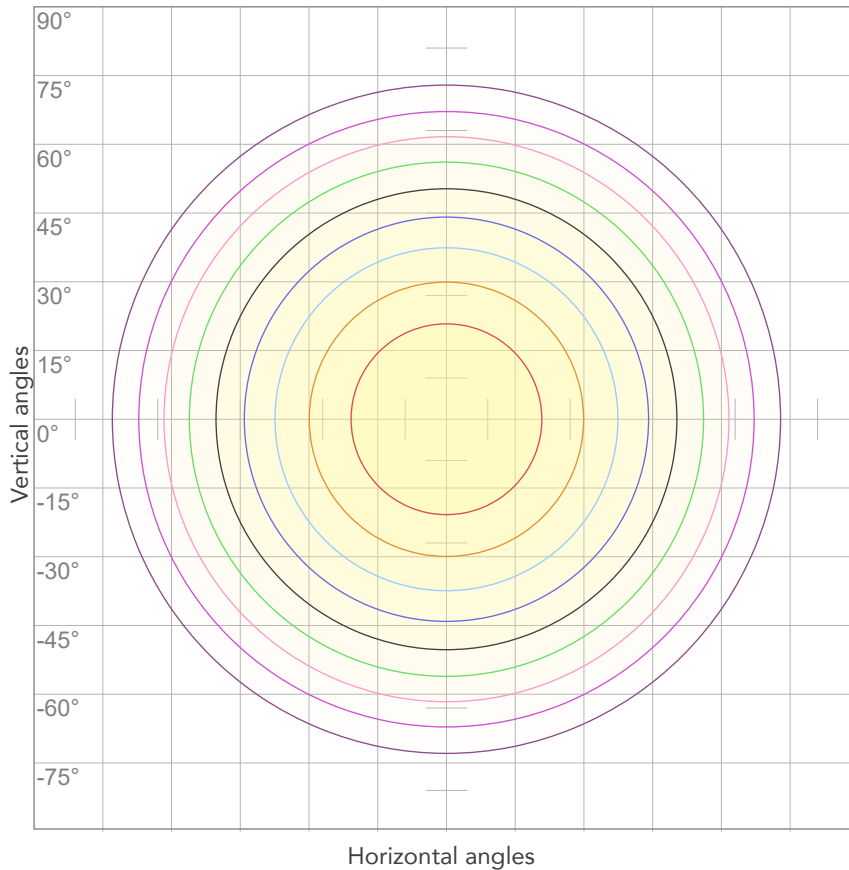
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 228V | 0,218A | 29,6W | 60lm/W |

ISO CANDELA DIAGRAM



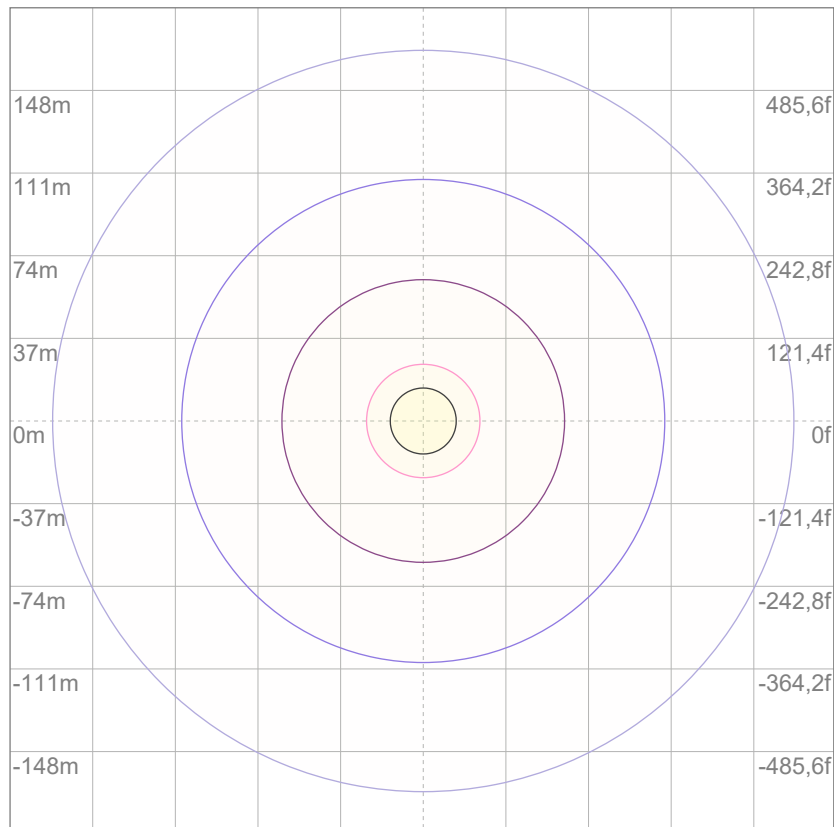
| | |
|-----|--------|
| 10% | 62 cd |
| 20% | 124 cd |
| 30% | 186 cd |
| 40% | 248 cd |
| 50% | 310 cd |
| 60% | 372 cd |
| 70% | 434 cd |
| 80% | 496 cd |

Conditions:

Number of c-planes: 2

Candela at center: 620 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,186 lx |
| 5% | 0,310 lx |
| 10% | 0,620 lx |
| 30% | 1,86 lx |
| 50% | 3,10 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,20 lx

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



Total lumen output:

1829 lm

Peak candela output:

690 cd

Light quality:

CRI: 94,6

Color temperature:

3205 K

PRODUCT NAME:
ECLNANOPANELTWC

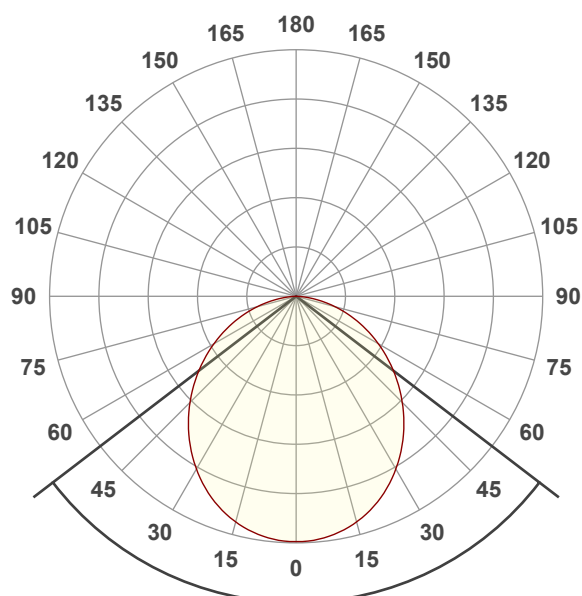
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h 3200K

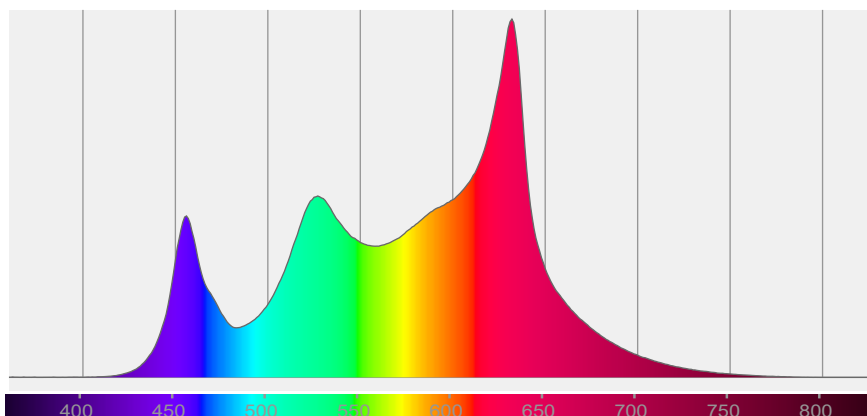
Operator:
Paolo Carvone

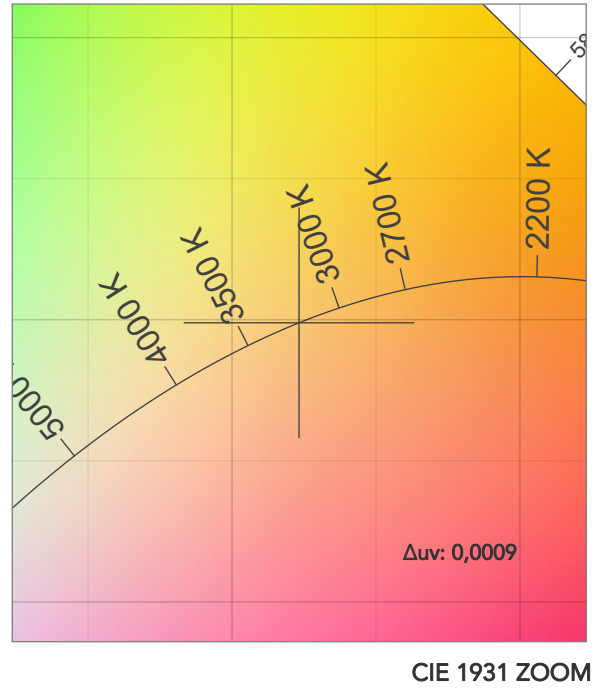
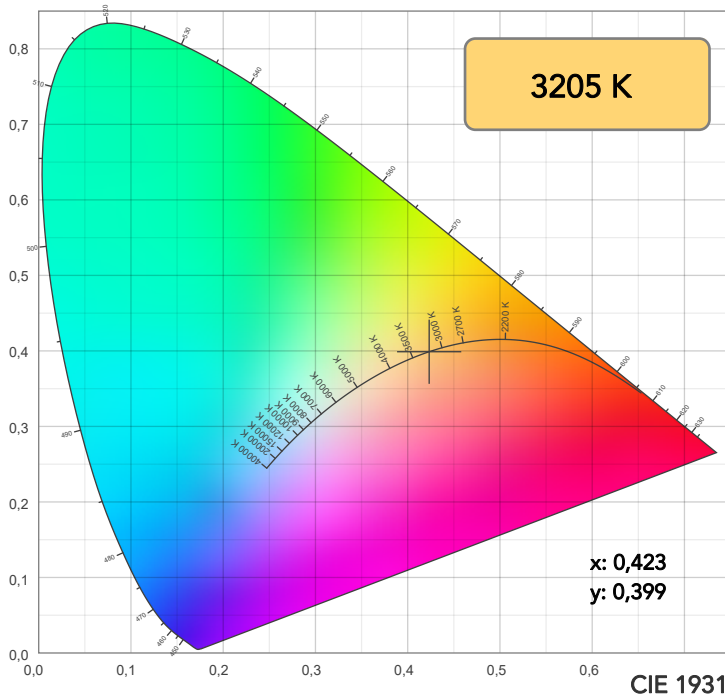
Date and time:
20/05/2022 15:05:49



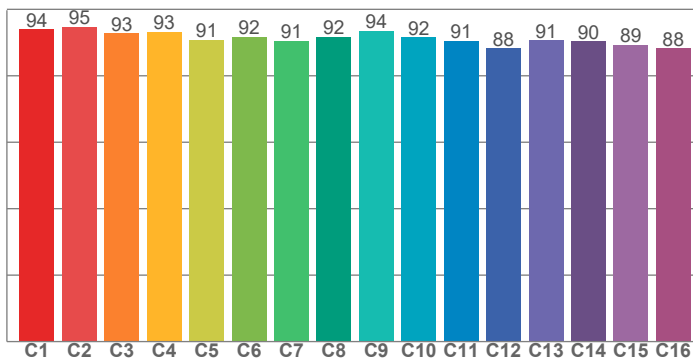
Beam angle 50%: 105,2°
Field angle 10%: 159,3°
Cut off angle 2.5%: 172,2°

Spectra

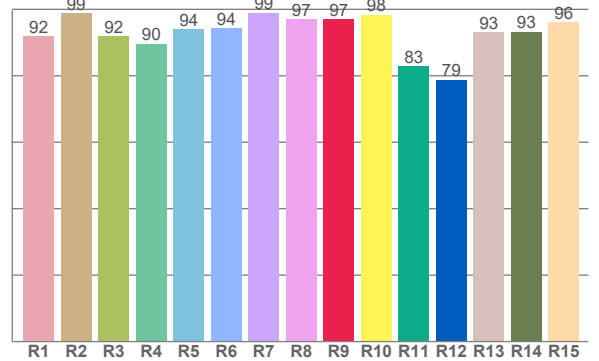




TM30: 91,7



CRI: 94,6 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,9 | 98,9 | 91,9 | 89,7 | 94,1 | 94,4 | 99,0 | 96,9 | 97,1 | 98,4 | 82,9 | 78,9 | 93,1 | 93,2 | 96,1 |

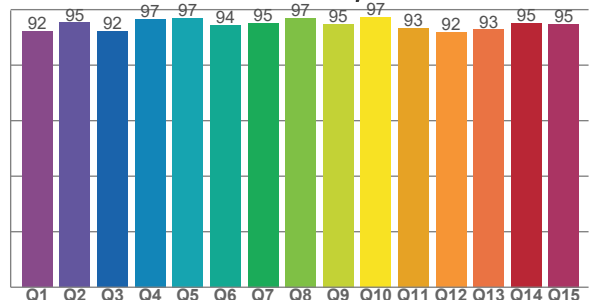
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,0 | 94,7 | 92,8 | 93,2 | 90,8 | 91,8 | 90,6 | 91,8 | 93,5 | 91,6 | 90,6 | 88,3 | 90,6 | 90,3 | 89,3 | 88,3 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 95,3 | 92,2 | 96,6 | 97,0 | 94,3 | 95,1 | 97,0 | 94,9 | 97,3 | 93,3 | 91,9 | 92,8 | 95,3 | 94,9 |

CQS: 94,3



COLOR PARAMETERS

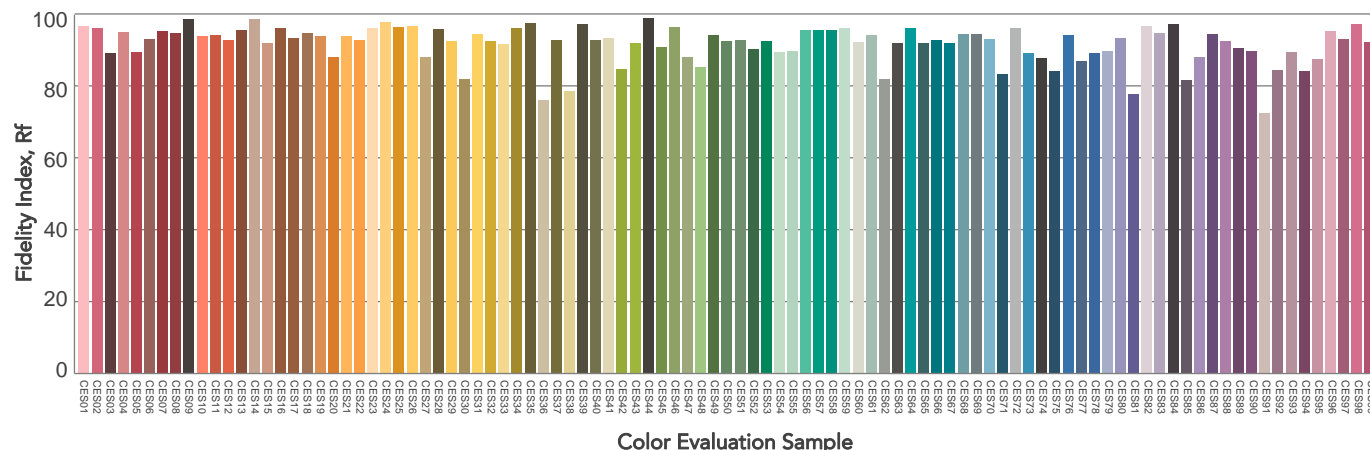
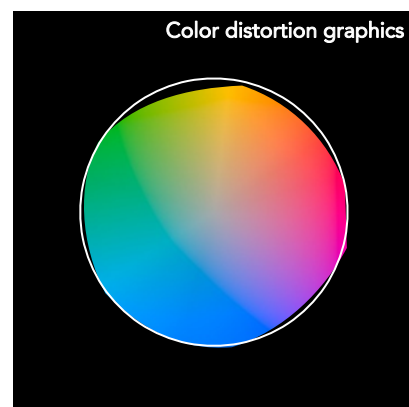
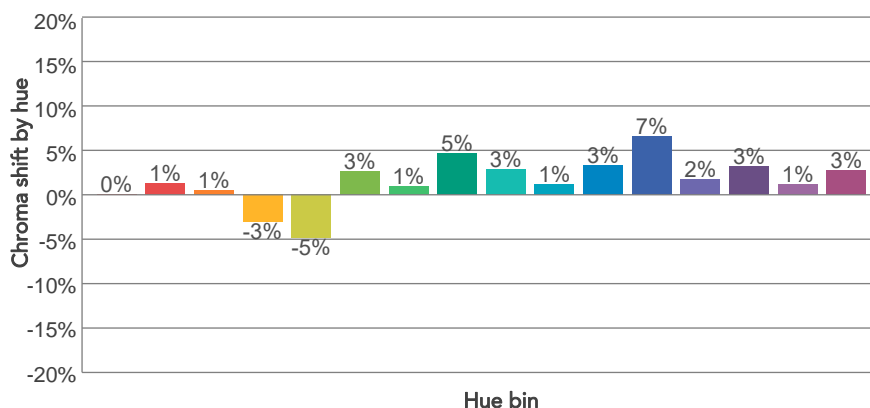
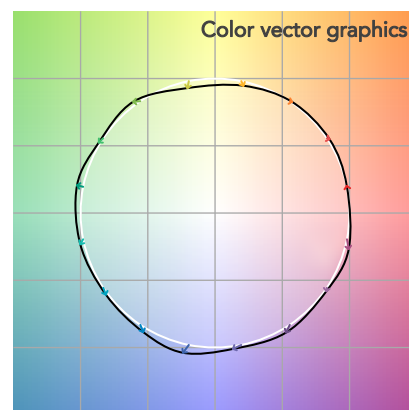
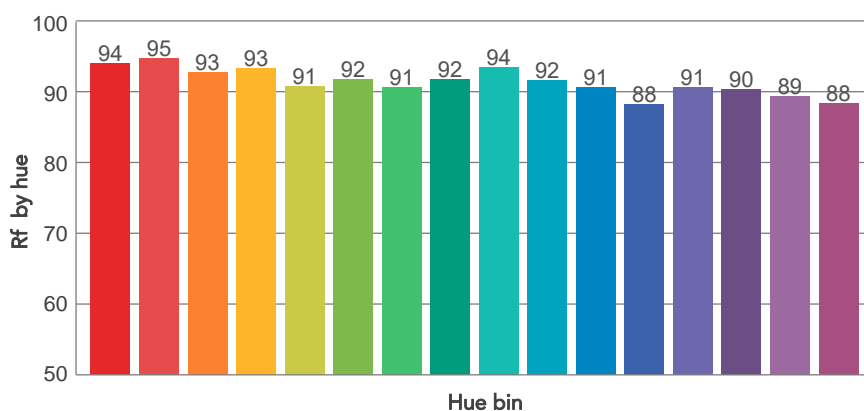
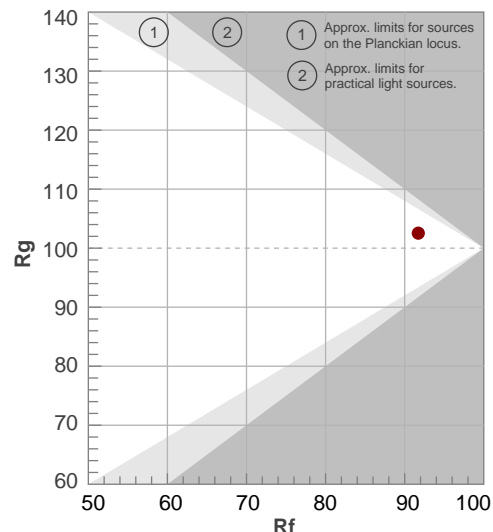
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 3205 K | 94,6 | 97,1 | 91,7 | 102,5 | 94,3 | 89 | 0,423 | 0,399 | 0,0009 |

TM30 DETAILS

Rf 91,7
Fidelity index Rf

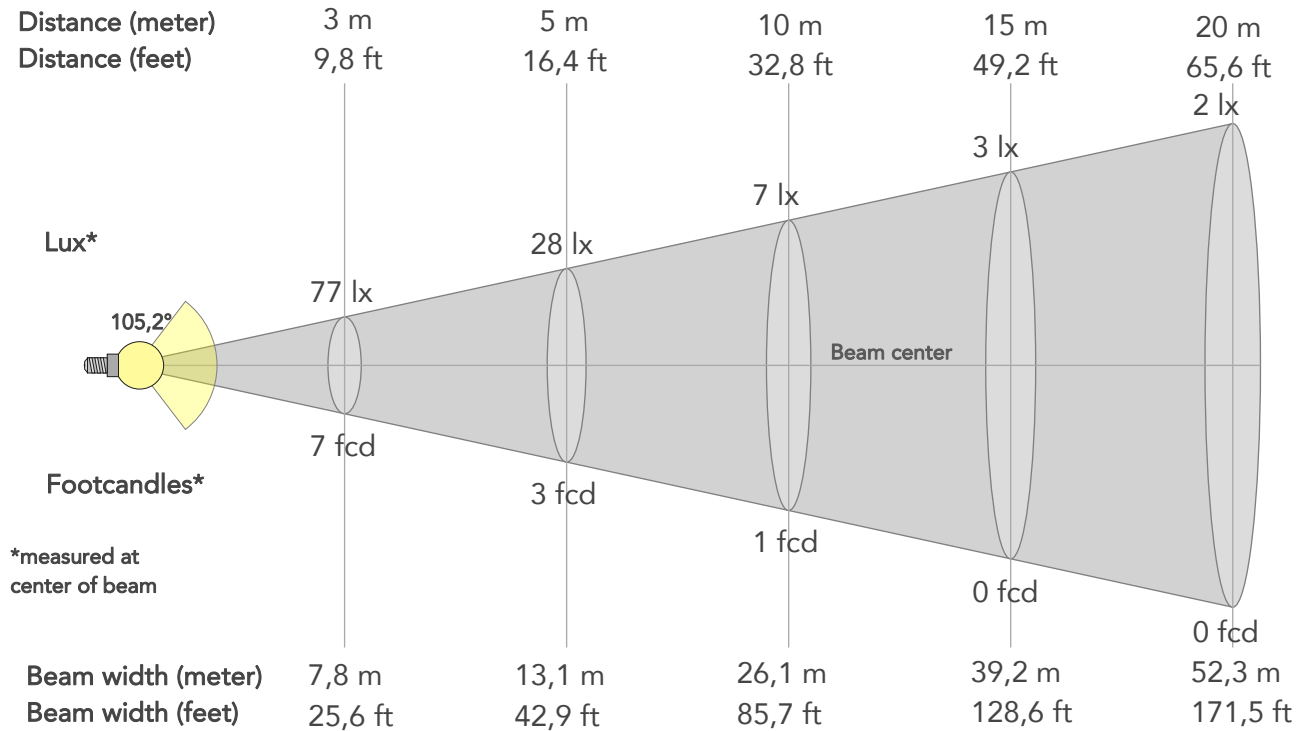
Rg 102,5
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 0% | 1% |
| 2 | 95 | 1% | -2% |
| 3 | 93 | 1% | -2% |
| 4 | 93 | -3% | -2% |
| 5 | 91 | -5% | 2% |
| 6 | 92 | 3% | 5% |
| 7 | 91 | 1% | 4% |
| 8 | 92 | 5% | 0% |
| 9 | 94 | 3% | 3% |
| 10 | 92 | 1% | 5% |
| 11 | 91 | 3% | 5% |
| 12 | 88 | 7% | -3% |
| 13 | 91 | 2% | -7% |
| 14 | 90 | 3% | -5% |
| 15 | 89 | 1% | -2% |
| 16 | 88 | 3% | -7% |



BEAM DETAILS

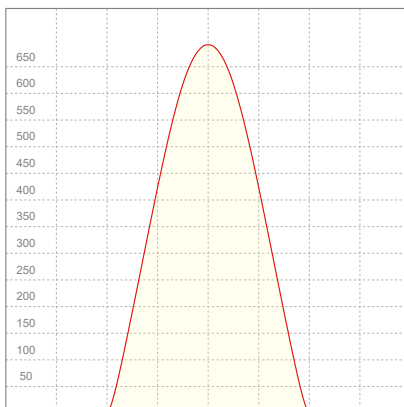
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 105,2° | 159,3° | 172,2° | 80,1% | 55,7% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 690lx | 173lx | 77lx | 43lx | 28lx | 12lx | 7lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 64fcd | 16fcd | 7fcd | 4fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,6m | 5,2m | 7,8m | 10,5m | 13,1m | 19,6m | 26,1m | 39,2m | 52,3m | 65,3m | 78,4m | 104,5m | 130,7m |
| Beam wid. | 8,6ft | 17,3ft | 25,6ft | 34,2ft | 42,9ft | 64,3ft | 85,7ft | 128,6ft | 171,5ft | 214,3ft | 257,2ft | 342,9ft | 428,6ft |

LINEAR DISTRIBUTION DIAGRAM

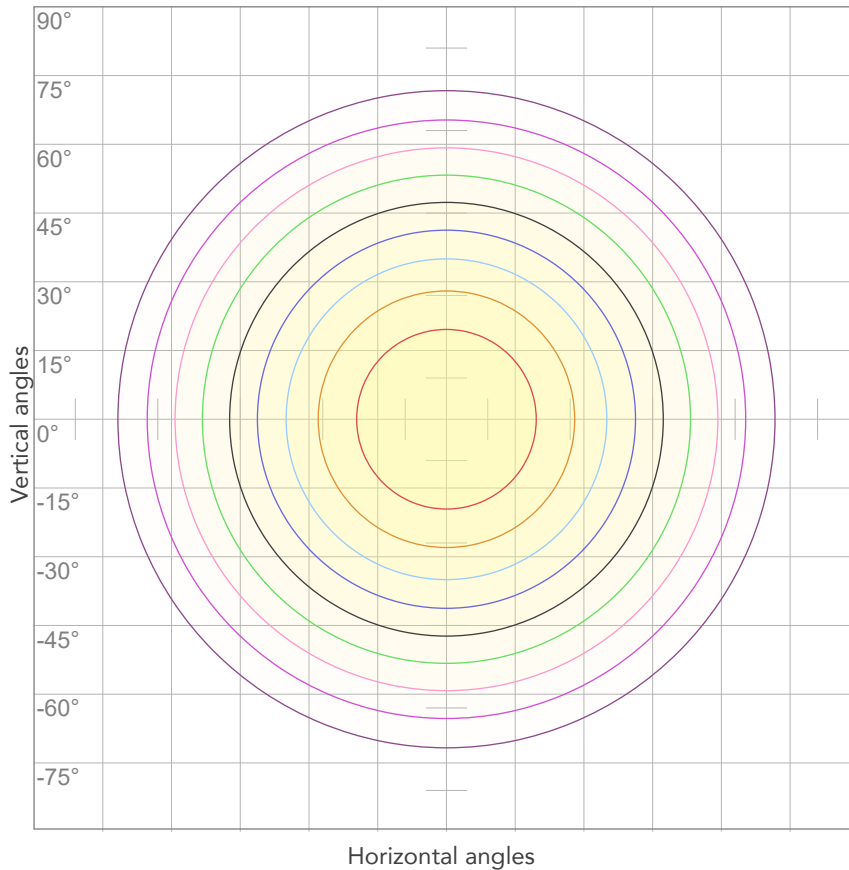


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,218A | 29,3W | 62lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



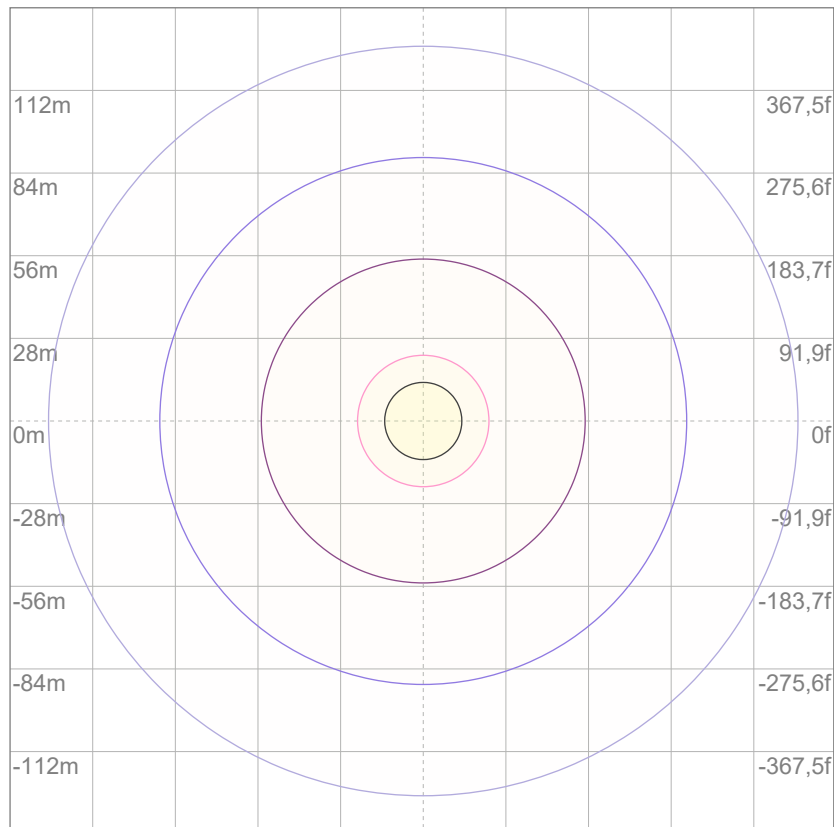
| | |
|-----|--------|
| 10% | 69 cd |
| 20% | 138 cd |
| 30% | 207 cd |
| 40% | 276 cd |
| 50% | 345 cd |
| 60% | 414 cd |
| 70% | 483 cd |
| 80% | 552 cd |

Conditions:

Number of c-planes: 2

Candela at center: 690 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,207 lx |
| 5% | 0,345 lx |
| 10% | 0,690 lx |
| 30% | 2,07 lx |
| 50% | 3,45 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,90 lx

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



Total lumen output:

1724 lm

Peak candela output:

866 cd

Light quality:

CRI: 94,8

Color temperature:

3238 K

PRODUCT NAME:
ECLNANOPANELTWC

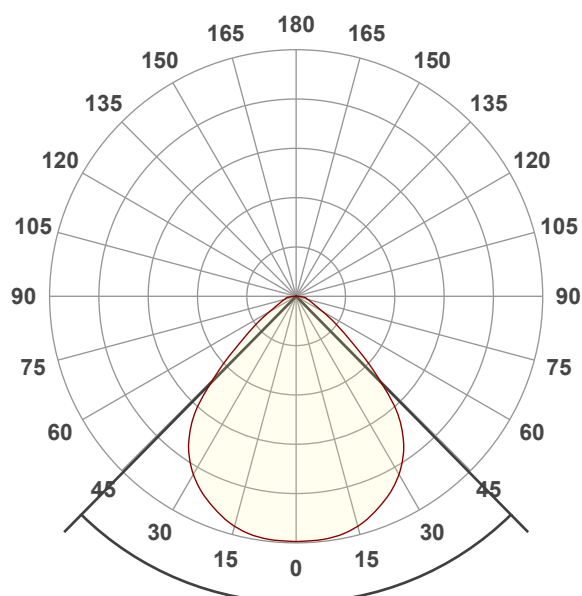
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h 3200K

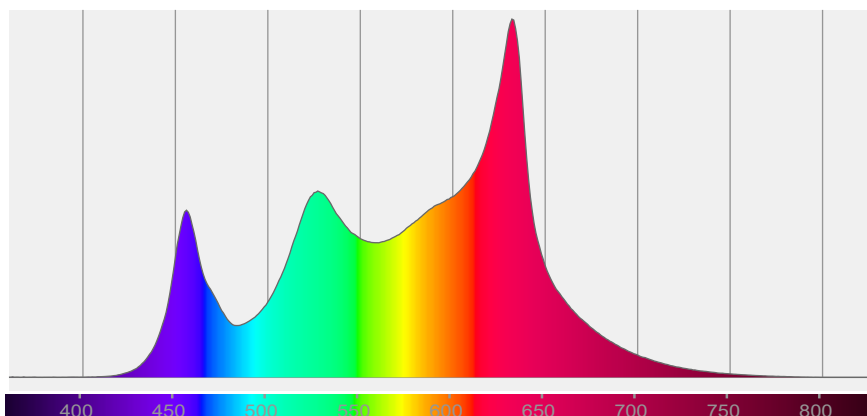
Operator:
Paolo Carvone

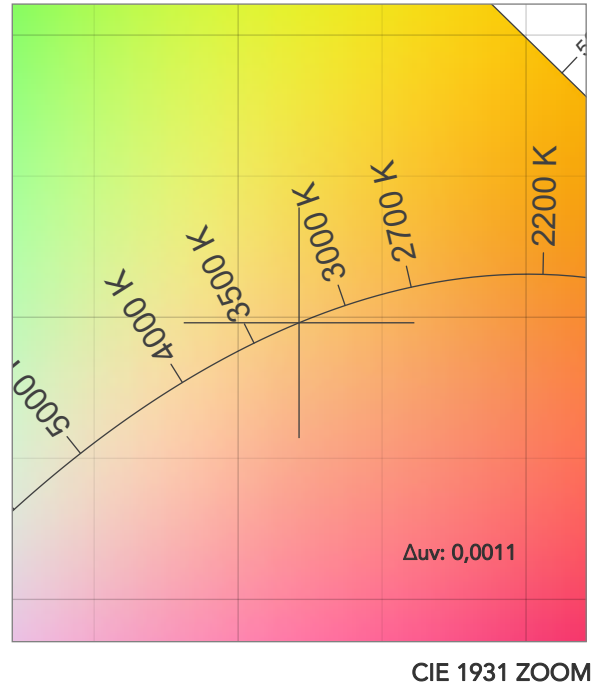
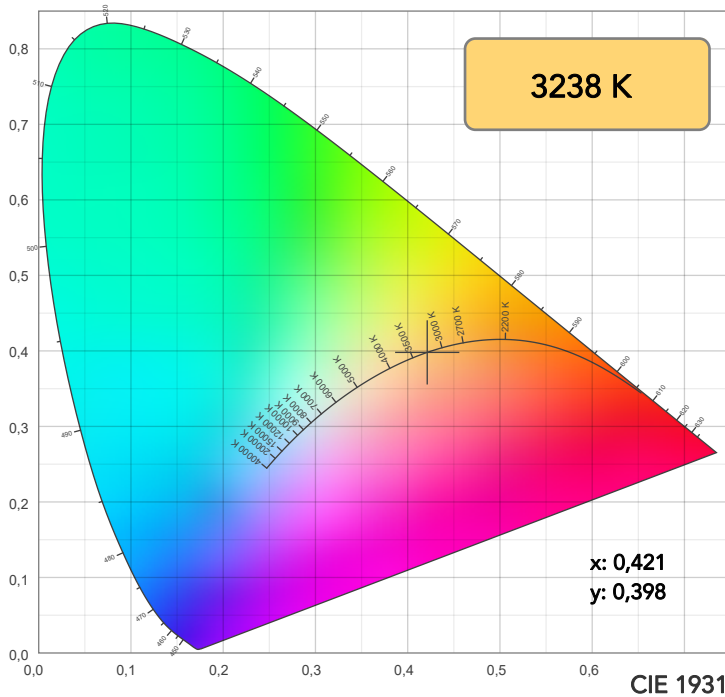
Date and time:
23/05/2022 11:36:31



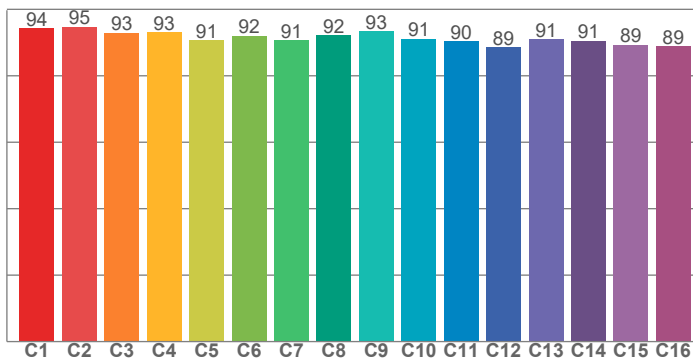
Beam angle 50%: 89,1°
Field angle 10%: 125,6°
Cut off angle 2.5%: 168,8°

Spectra

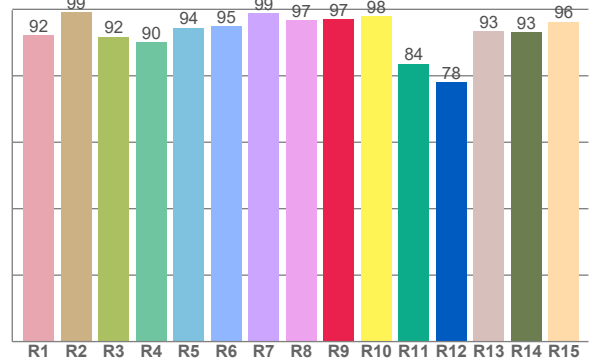




TM30: 91,7



CRI: 94,8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 99,1 | 91,8 | 90,1 | 94,5 | 94,9 | 98,8 | 96,8 | 97,1 | 97,9 | 83,6 | 78,1 | 93,5 | 93,2 | 96,2 |

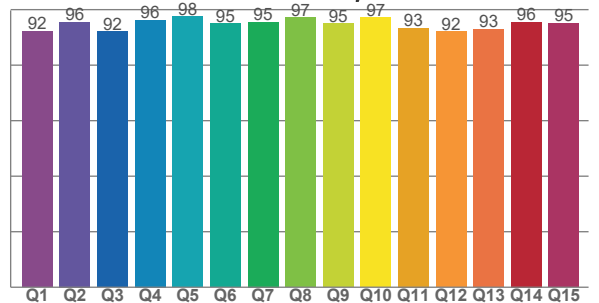
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,2 | 94,7 | 92,9 | 93,0 | 90,7 | 92,0 | 90,7 | 92,2 | 93,4 | 91,1 | 90,3 | 88,5 | 90,9 | 90,5 | 89,3 | 88,9 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 95,5 | 92,2 | 96,3 | 97,6 | 95,0 | 95,5 | 97,1 | 95,0 | 97,2 | 93,4 | 92,1 | 92,9 | 95,6 | 95,1 |

CQS: 94,5



COLOR PARAMETERS

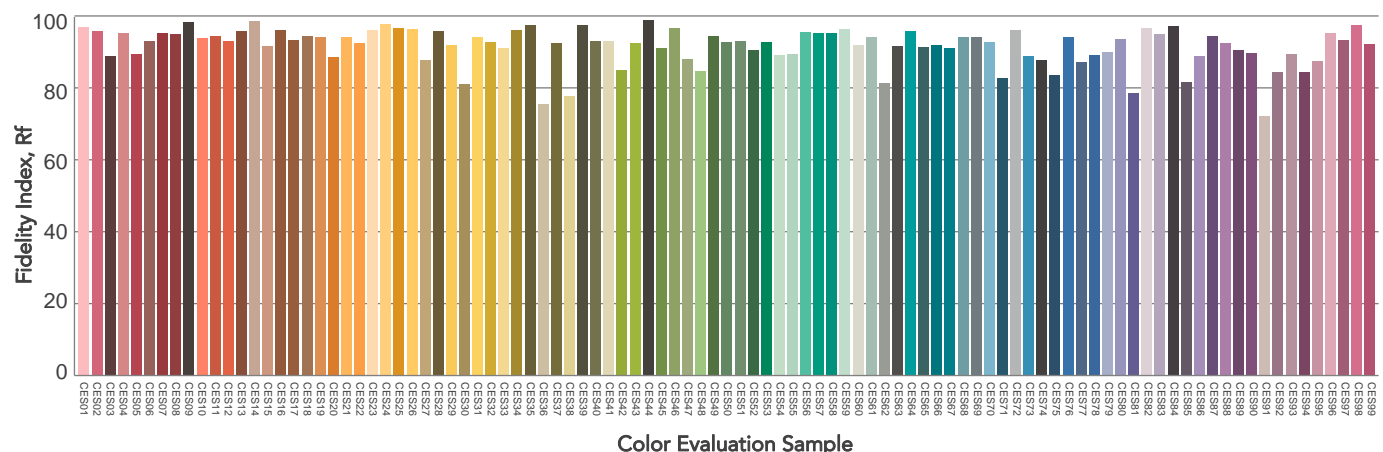
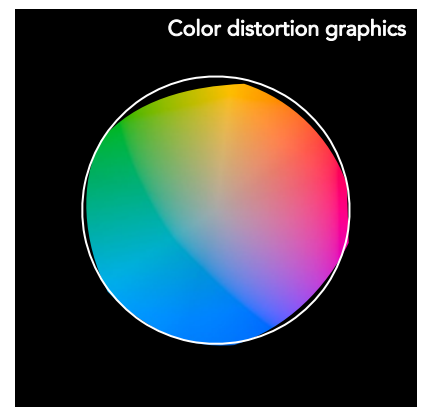
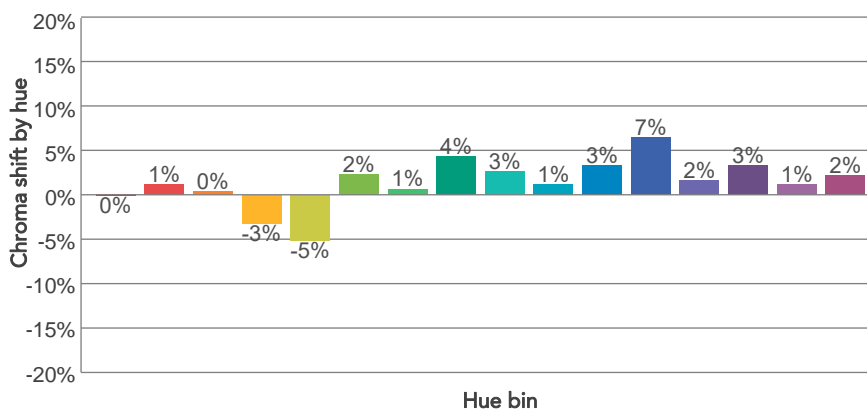
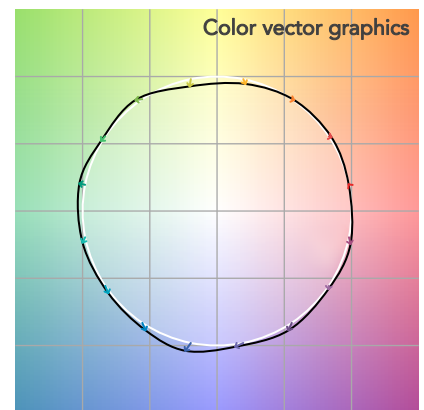
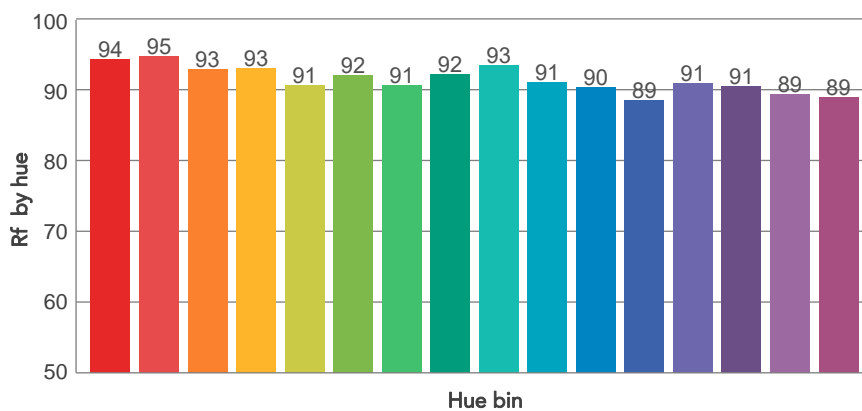
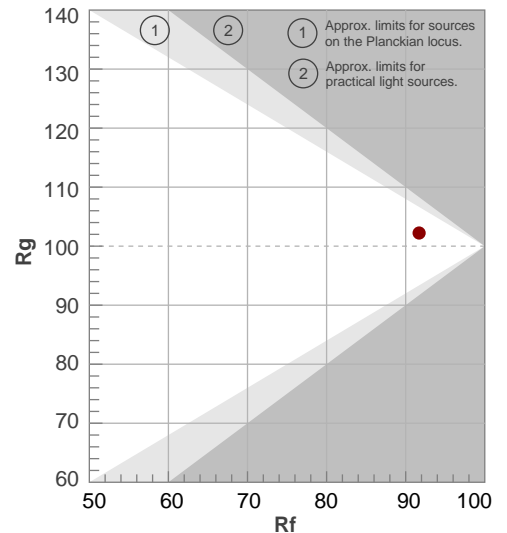
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 3238 K | 94,8 | 97,1 | 91,7 | 102,2 | 94,5 | 89 | 0,421 | 0,398 | 0,0011 |

TM30 DETAILS

Rf 91,7
Fidelity index Rf

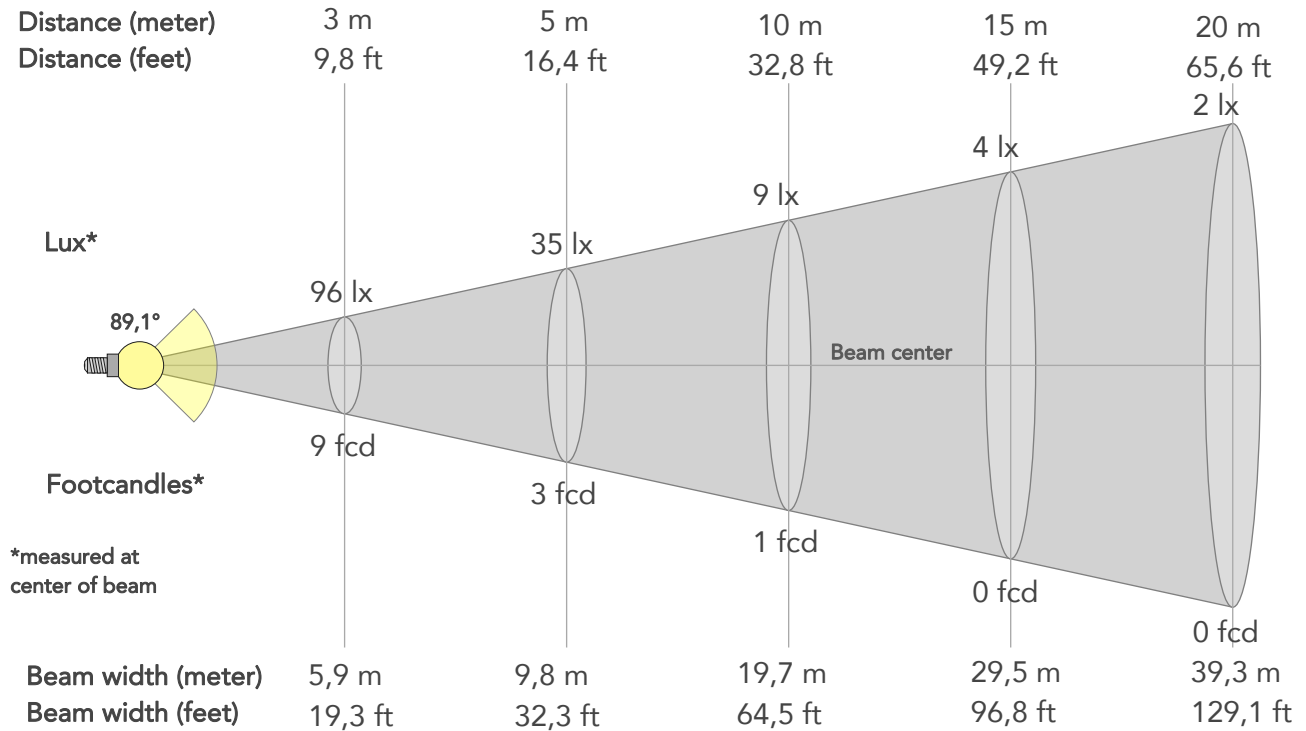
Rg 102,2
Gammut index

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



BEAM DETAILS

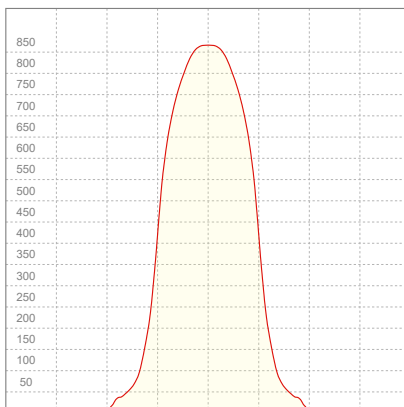
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,1° | 125,6° | 168,8° | 90,9% | 73,6% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 866lx | 217lx | 96lx | 54lx | 35lx | 15lx | 9lx | 4lx | 2lx | 1lx | 1lx | 1lx | 0lx |
| Footcand. | 80fcd | 20fcd | 9fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 3,9m | 5,9m | 7,9m | 9,8m | 14,8m | 19,7m | 29,5m | 39,3m | 49,2m | 59m | 78,7m | 98,4m |
| Beam wid. | 6,5ft | 13ft | 19,3ft | 25,8ft | 32,3ft | 48,4ft | 64,5ft | 96,8ft | 129,1ft | 161,3ft | 193,6ft | 258,1ft | 322,6ft |

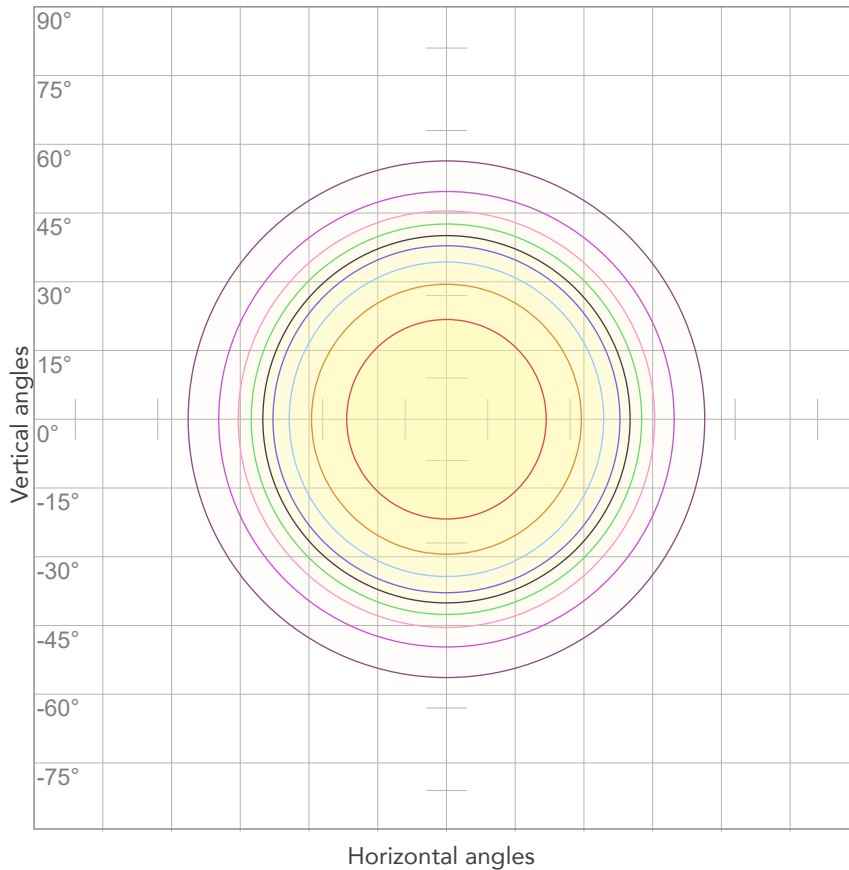
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,216A | 29,2W | 59lm/W |

ISO CANDELA DIAGRAM



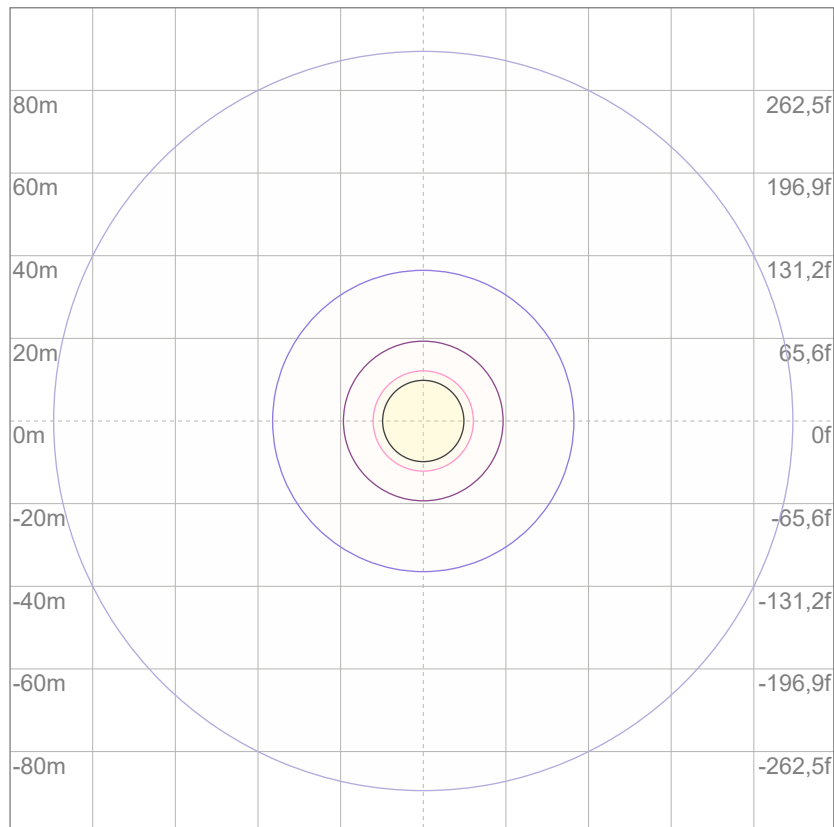
| | |
|-----|--------|
| 10% | 87 cd |
| 20% | 173 cd |
| 30% | 260 cd |
| 40% | 346 cd |
| 50% | 433 cd |
| 60% | 520 cd |
| 70% | 606 cd |
| 80% | 693 cd |

Conditions:

Number of c-planes: 2

Candela at center: 866 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,260 lx |
| 5% | 0,433 lx |
| 10% | 0,866 lx |
| 30% | 2,60 lx |
| 50% | 4,33 lx |

Conditions:

Number of c-planes: 2

Lux at center: 8,66 lx

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



Total lumen output:

1607 lm

Peak candela output:

545 cd

Light quality:

CRI: 94,8

Color temperature:

4026 K

PRODUCT NAME:
ECLNANOPANELTWC

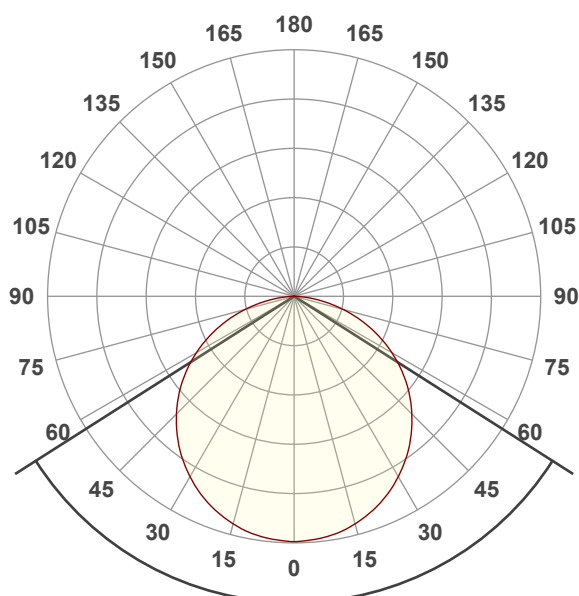
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h 4000K

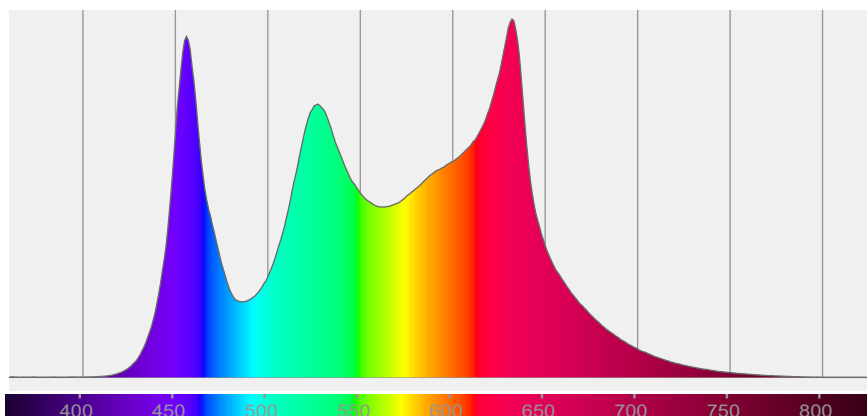
Operator:
Paolo Carvone

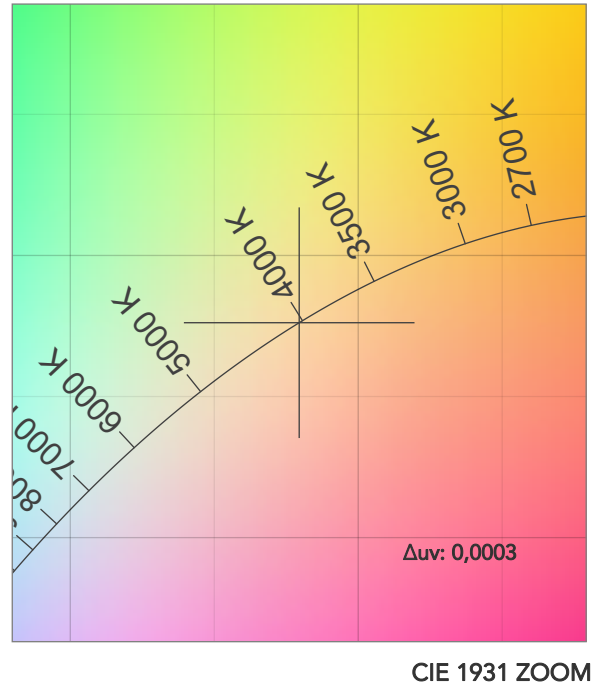
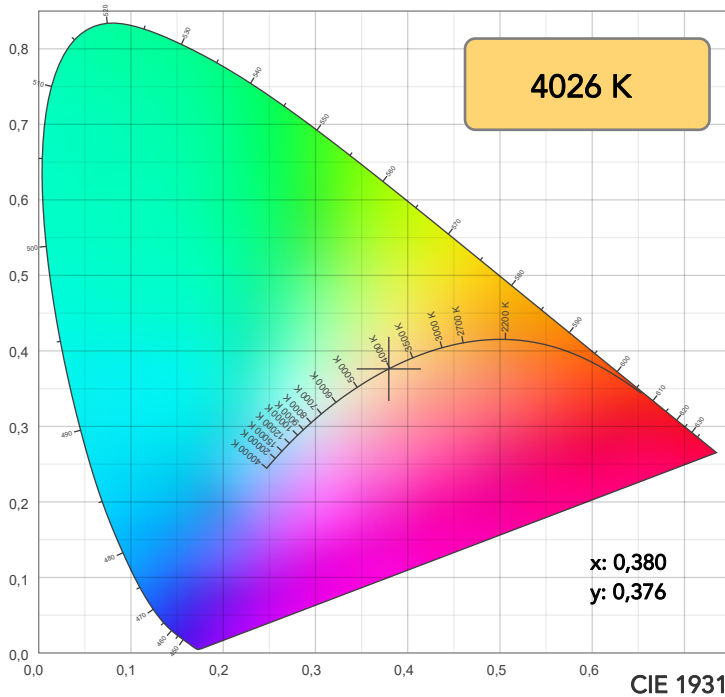
Date and time:
23/05/2022 11:16:20



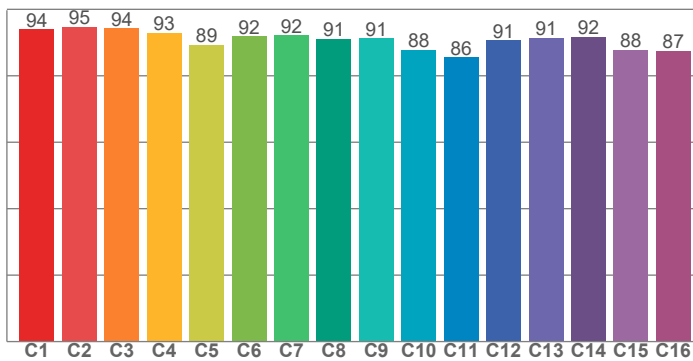
Beam angle 50%: 115°
Field angle 10%: 162,9°
Cut off angle 2.5%: 174,2°

Spectra

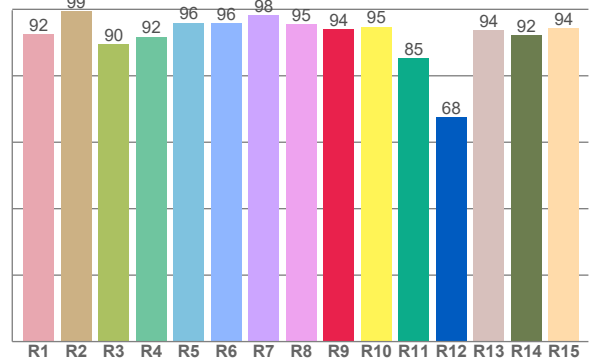




TM30: 90,8



CRI: 94,8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,4 | 99,5 | 89,6 | 91,8 | 96,0 | 95,8 | 98,1 | 95,4 | 94,1 | 94,7 | 85,4 | 67,6 | 93,7 | 92,1 | 94,3 |

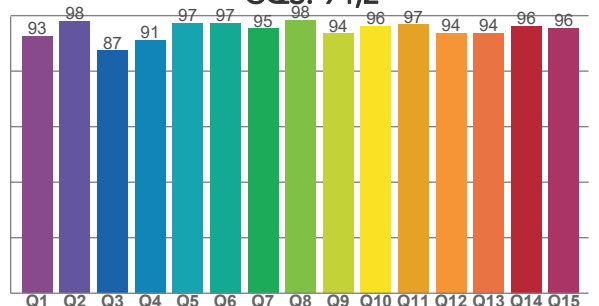
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,0 | 94,8 | 94,3 | 92,8 | 89,3 | 91,8 | 92,1 | 91,2 | 91,2 | 87,7 | 85,5 | 90,7 | 91,4 | 91,7 | 87,9 | 87,4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,6 | 98,0 | 87,4 | 91,2 | 97,4 | 97,3 | 95,4 | 98,3 | 93,6 | 96,3 | 96,7 | 93,8 | 93,8 | 96,3 | 95,5 |

CQS: 94,2



COLOR PARAMETERS

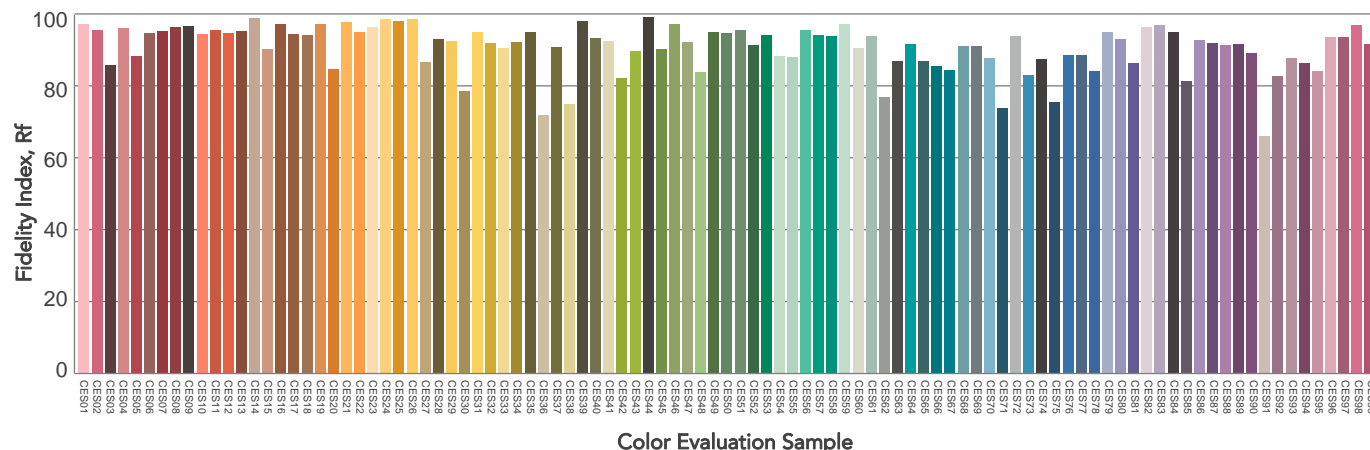
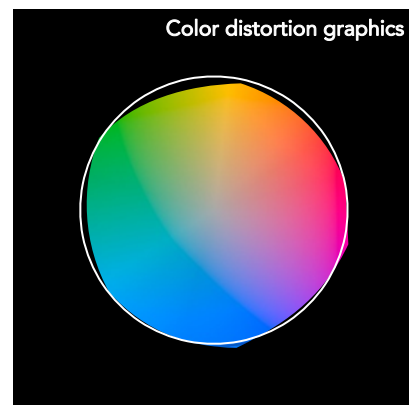
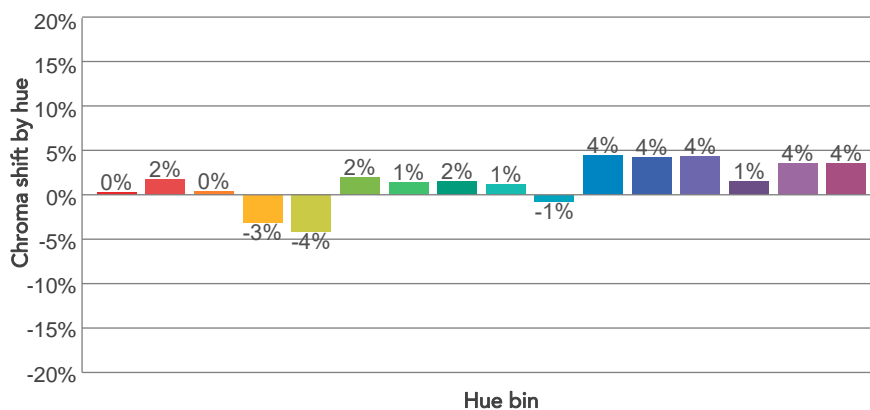
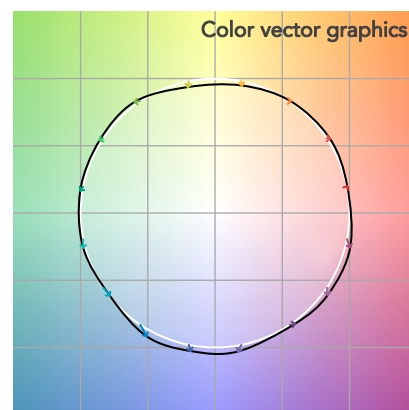
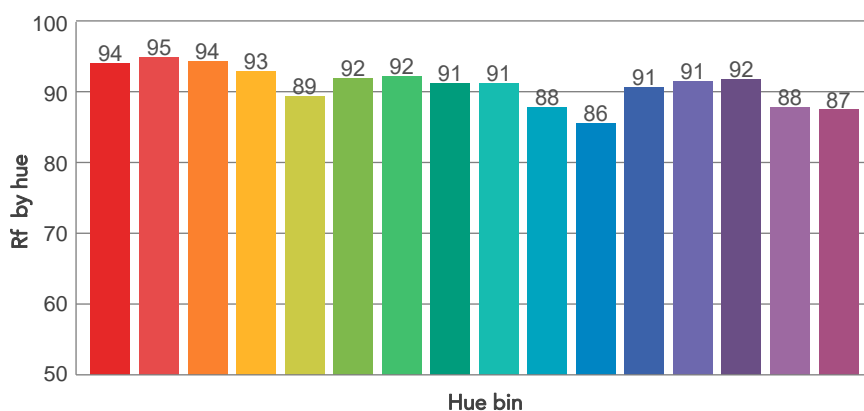
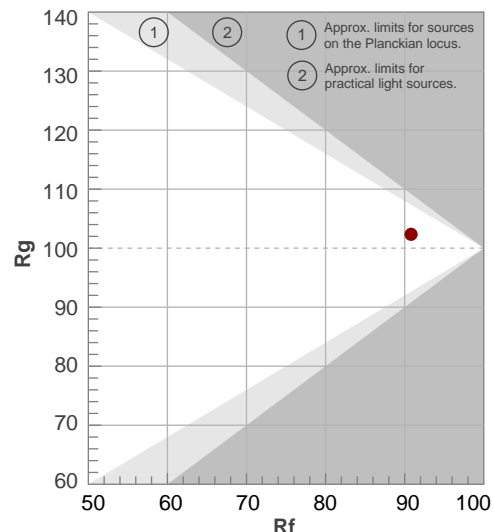
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4026 K | 94,8 | 94,1 | 90,8 | 102,3 | 94,2 | 91 | 0,380 | 0,376 | 0,0003 |

TM30 DETAILS

Rf 90,8
Fidelity index Rf

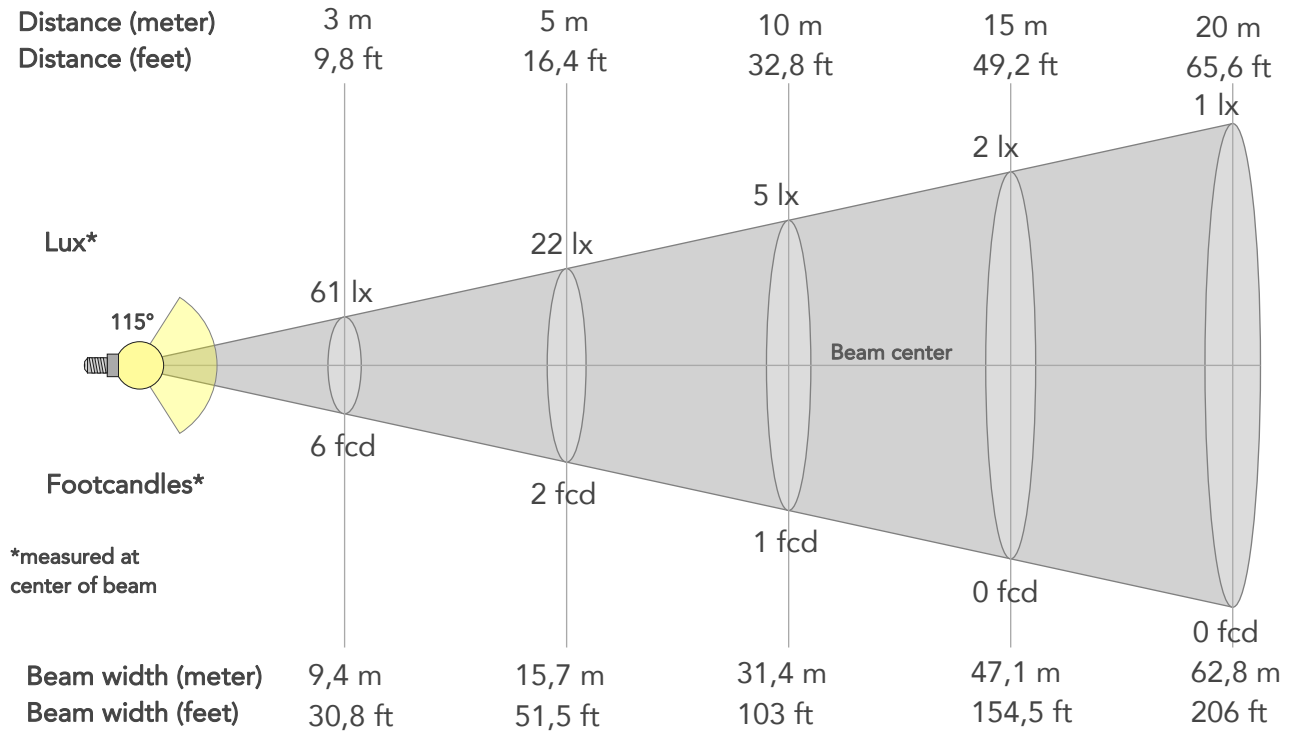
Rg 102,3
Gammut index

| | | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| Hue Bin | R _f | Chroma | Hue |
| 1 | 94 | 0% | 0% |
| 2 | 95 | 2% | -1% |
| 3 | 94 | 0% | -1% |
| 4 | 93 | -3% | -1% |
| 5 | 89 | -4% | 2% |
| 6 | 92 | 2% | 4% |
| 7 | 92 | 1% | 3% |
| 8 | 91 | 2% | 3% |
| 9 | 91 | 1% | 6% |
| 10 | 88 | -1% | 8% |
| 11 | 86 | 4% | 9% |
| 12 | 91 | 4% | 2% |
| 13 | 91 | 4% | -4% |
| 14 | 92 | 1% | 4% |
| 15 | 88 | 4% | -4% |
| 16 | 87 | 4% | -5% |



BEAM DETAILS

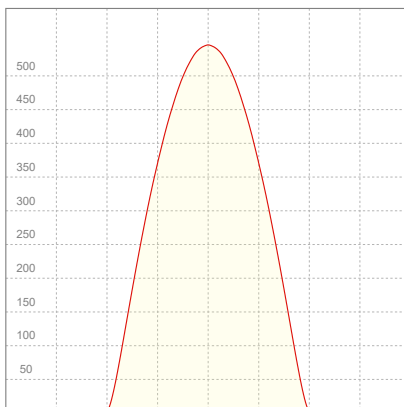
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115° | 162,9° | 174,2° | 77,5% | 52,3% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|--------|---------|--------|---------|--------|---------|-------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 545lx | 136lx | 61lx | 34lx | 22lx | 10lx | 5lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 51fcd | 13fcd | 6fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,1m | 6,3m | 9,4m | 12,6m | 15,7m | 23,6m | 31,4m | 47,1m | 62,8m | 78,5m | 94,2m | 125,6m | 157m |
| Beam wid. | 10,4ft | 20,7ft | 30,8ft | 41,1ft | 51,5ft | 77,3ft | 103ft | 154,5ft | 206ft | 257,5ft | 309ft | 412ft | 515ft |

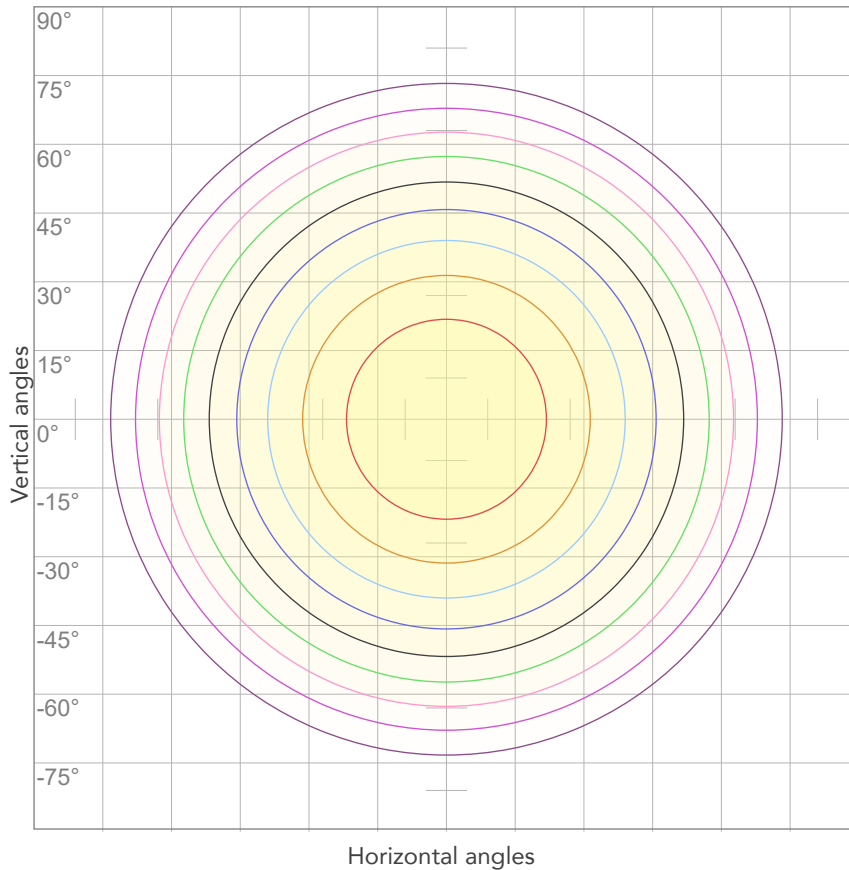
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,219A | 29,4W | 55lm/W |

ISO CANDELA DIAGRAM



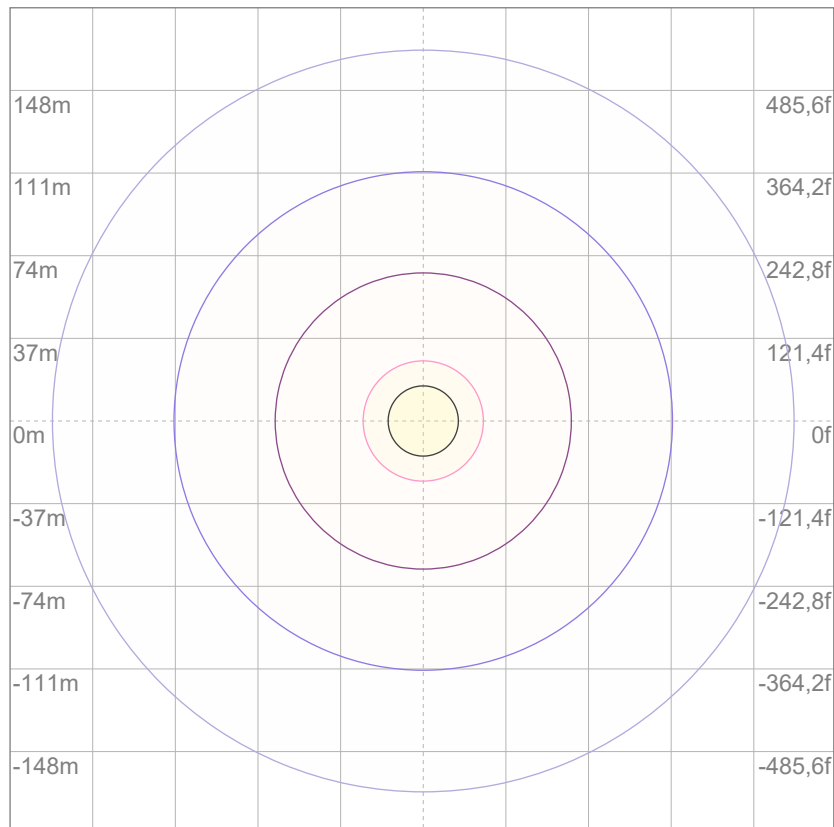
| | |
|-----|--------|
| 10% | 55 cd |
| 20% | 109 cd |
| 30% | 164 cd |
| 40% | 218 cd |
| 50% | 273 cd |
| 60% | 327 cd |
| 70% | 382 cd |
| 80% | 436 cd |

Conditions:

Number of c-planes: 2

Candela at center: 545 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,164 lx |
| 5% | 0,273 lx |
| 10% | 0,545 lx |
| 30% | 1,64 lx |
| 50% | 2,73 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,45 lx

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



Total lumen output:

1744 lm

Peak candela output:

610 cd

Light quality:

CRI: 94,7

Color temperature:

4010 K

PRODUCT NAME:
ECLNANOPANELTWC

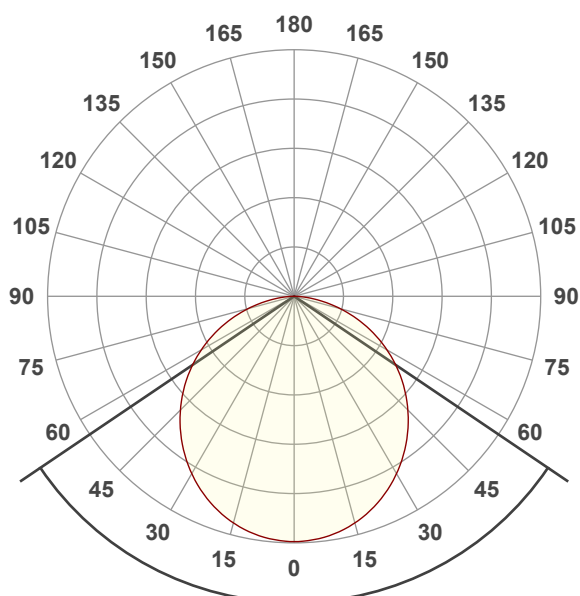
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h 4000K

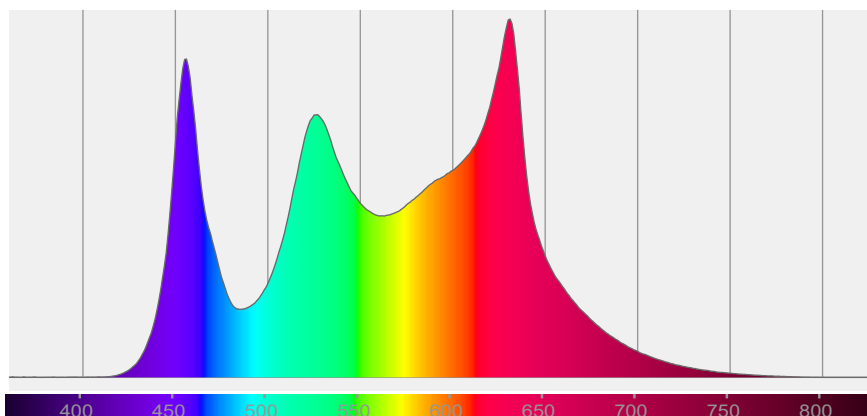
Operator:
Paolo Carvone

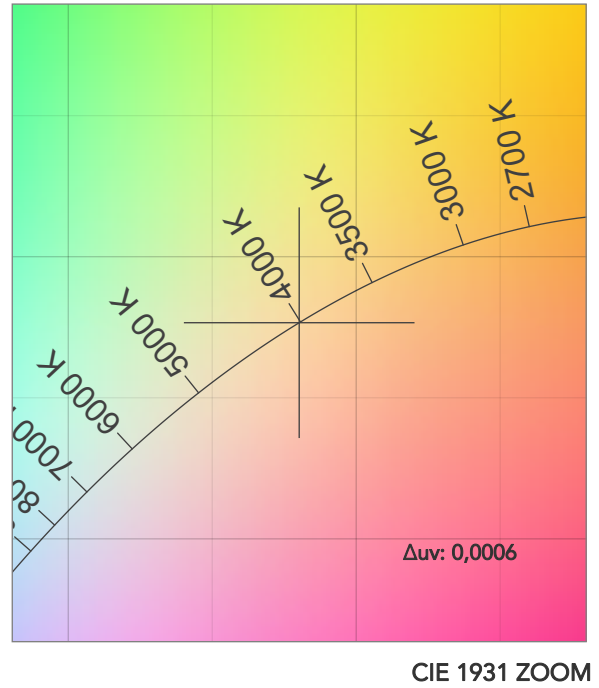
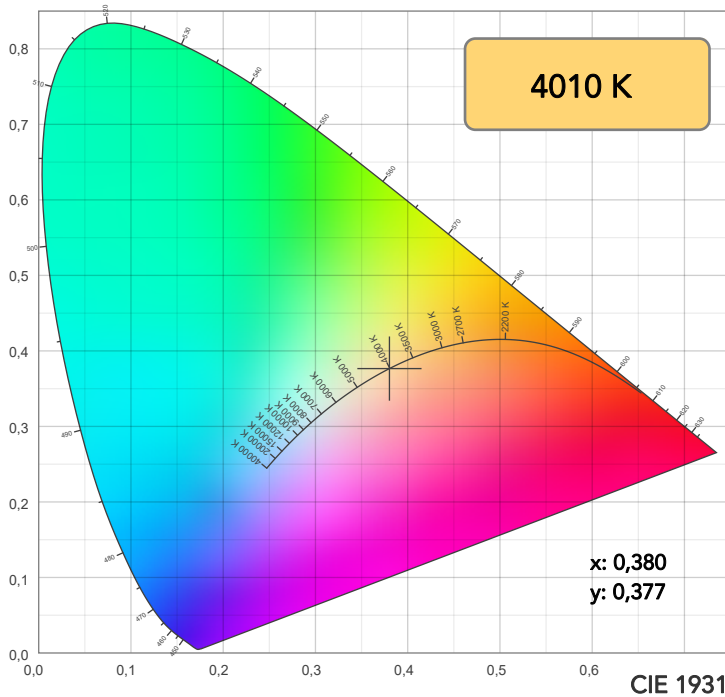
Date and time:
23/05/2022 10:20:59



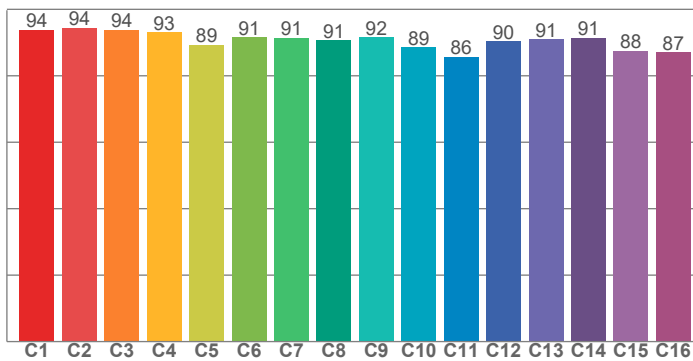
Beam angle 50%: 111,9°
Field angle 10%: 162,2°
Cut off angle 2.5%: 174,4°

Spectra

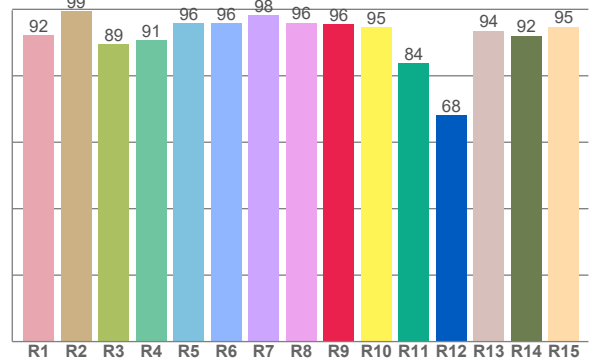




TM30: 90,7



CRI: 94,7 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,1 | 99,4 | 89,4 | 90,7 | 95,8 | 95,8 | 98,2 | 95,9 | 95,6 | 94,6 | 83,9 | 68,1 | 93,6 | 92,0 | 94,7 |

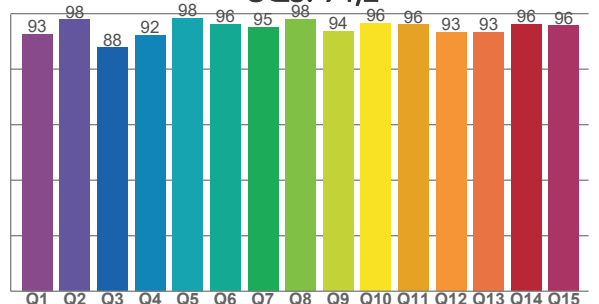
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,9 | 94,4 | 93,8 | 93,0 | 89,3 | 91,5 | 91,5 | 90,6 | 91,5 | 88,5 | 85,8 | 90,4 | 90,9 | 91,5 | 87,6 | 87,1 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,7 | 97,9 | 87,7 | 92,3 | 98,5 | 96,2 | 95,1 | 98,1 | 93,6 | 96,5 | 96,0 | 93,2 | 93,4 | 96,2 | 95,7 |

CQS: 94,2



COLOR PARAMETERS

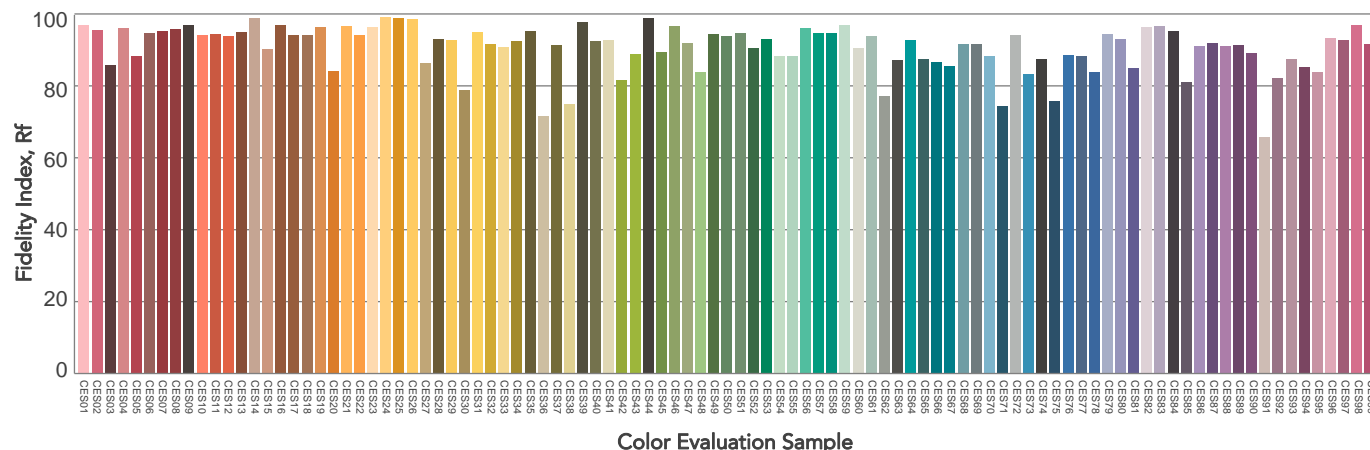
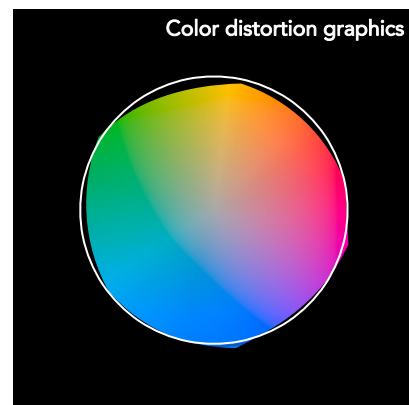
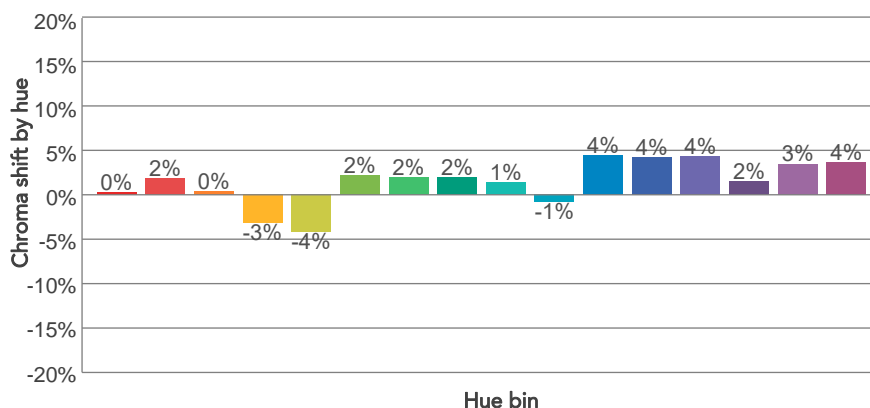
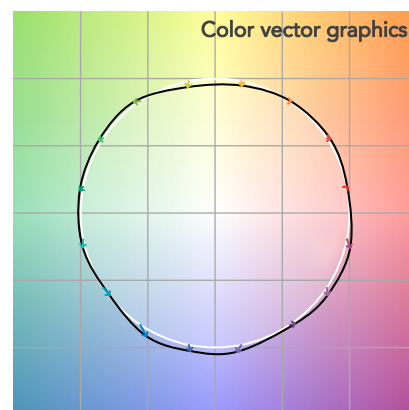
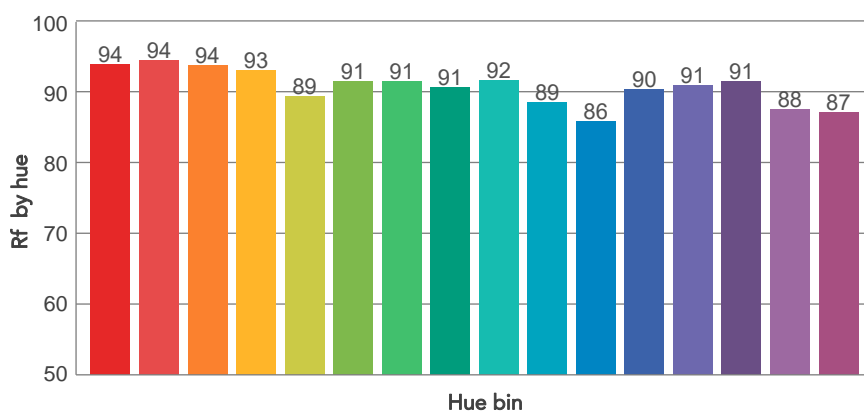
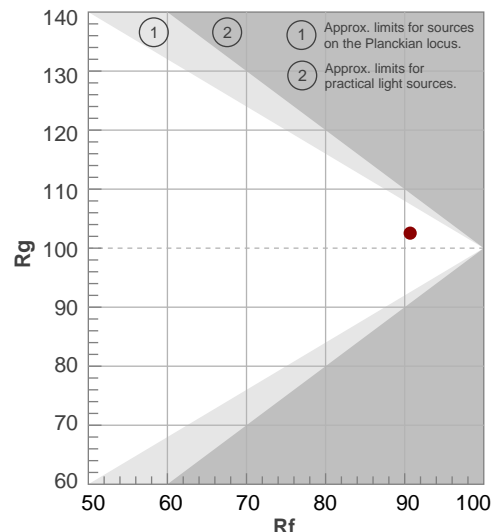
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4010 K | 94,7 | 95,6 | 90,7 | 102,5 | 94,2 | 90 | 0,380 | 0,377 | 0,0006 |

TM30 DETAILS

Rf 90,7
Fidelity index Rf

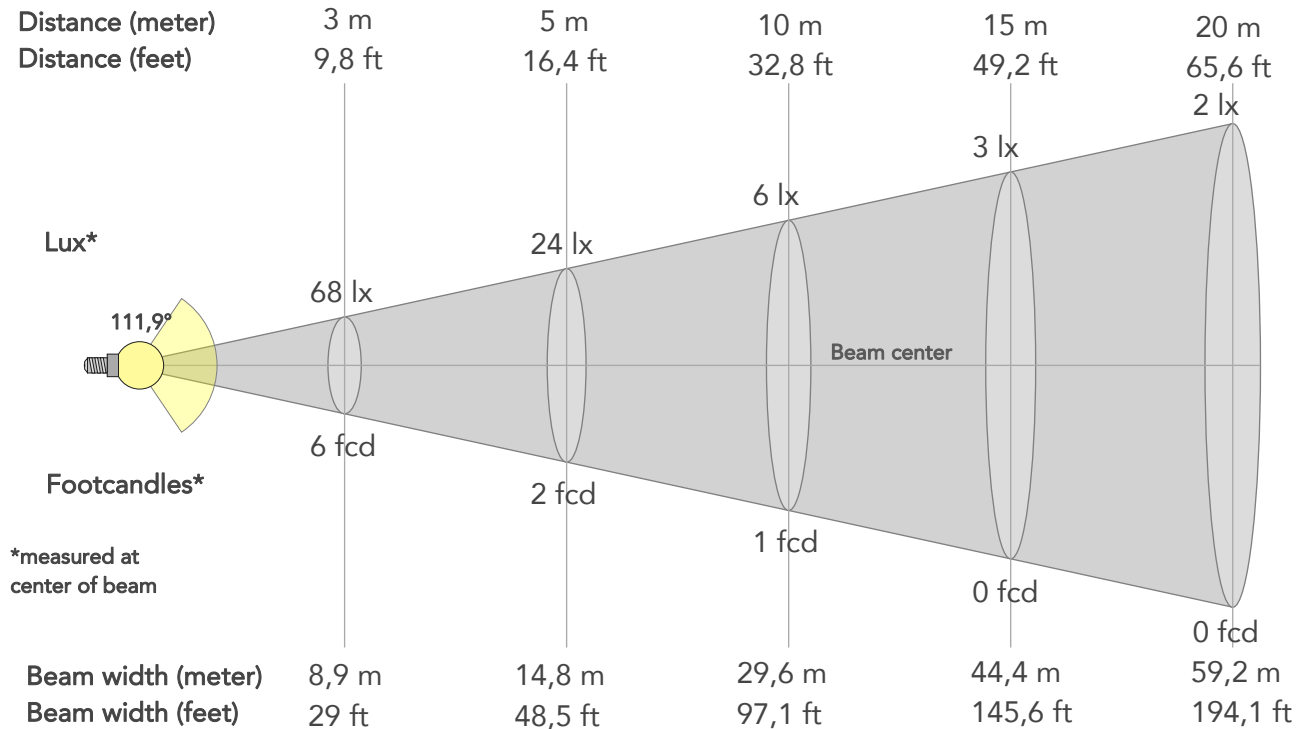
Rg 102,5
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 0% | 0% |
| 2 | 94 | 2% | -2% |
| 3 | 94 | 0% | -1% |
| 4 | 93 | -3% | -1% |
| 5 | 89 | -4% | 2% |
| 6 | 91 | 2% | 4% |
| 7 | 91 | 2% | 3% |
| 8 | 91 | 2% | 3% |
| 9 | 92 | 1% | 6% |
| 10 | 89 | -1% | 7% |
| 11 | 86 | 4% | 8% |
| 12 | 90 | 4% | 2% |
| 13 | 91 | 4% | -4% |
| 14 | 91 | 2% | 4% |
| 15 | 88 | 3% | -4% |
| 16 | 87 | 4% | -6% |



BEAM DETAILS

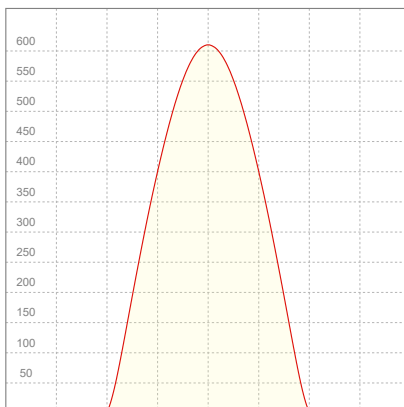
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 111,9° | 162,2° | 174,4° | 77,8% | 53,0% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 610lx | 152lx | 68lx | 38lx | 24lx | 11lx | 6lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 57fcd | 14fcd | 6fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 5,9m | 8,9m | 11,8m | 14,8m | 22,2m | 29,6m | 44,4m | 59,2m | 74m | 88,8m | 118,4m | 148m |
| Beam wid. | 9,8ft | 19,5ft | 29ft | 38,8ft | 48,5ft | 72,8ft | 97,1ft | 145,6ft | 194,1ft | 242,6ft | 291,2ft | 388,2ft | 485,3ft |

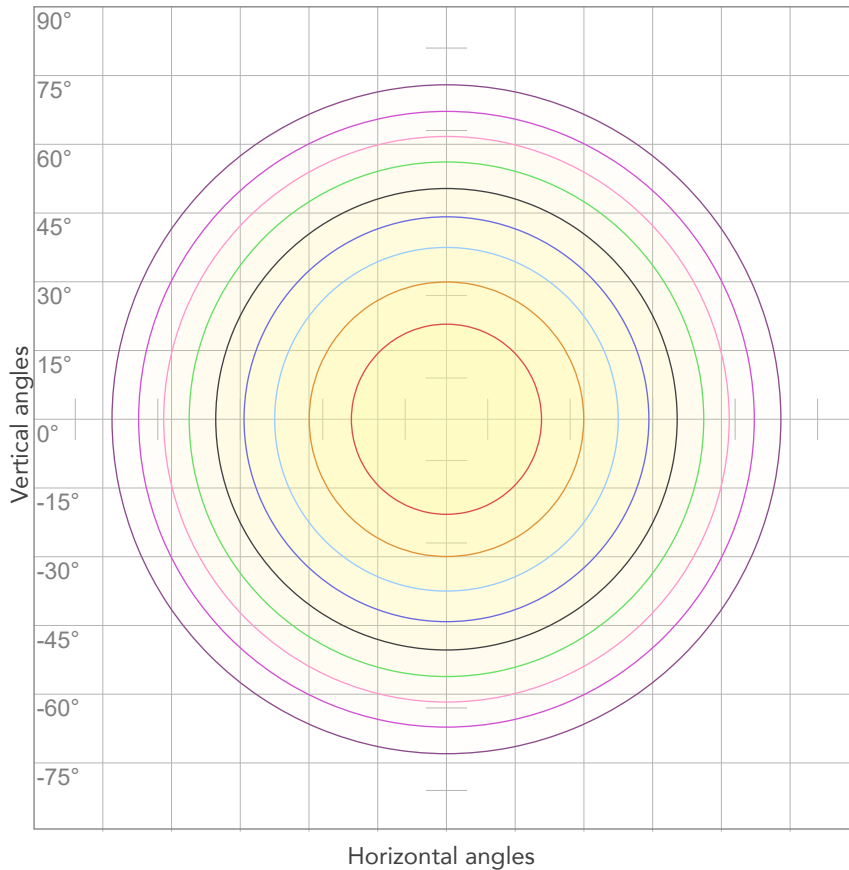
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,219A | 29,8W | 59lm/W |

ISO CANDELA DIAGRAM



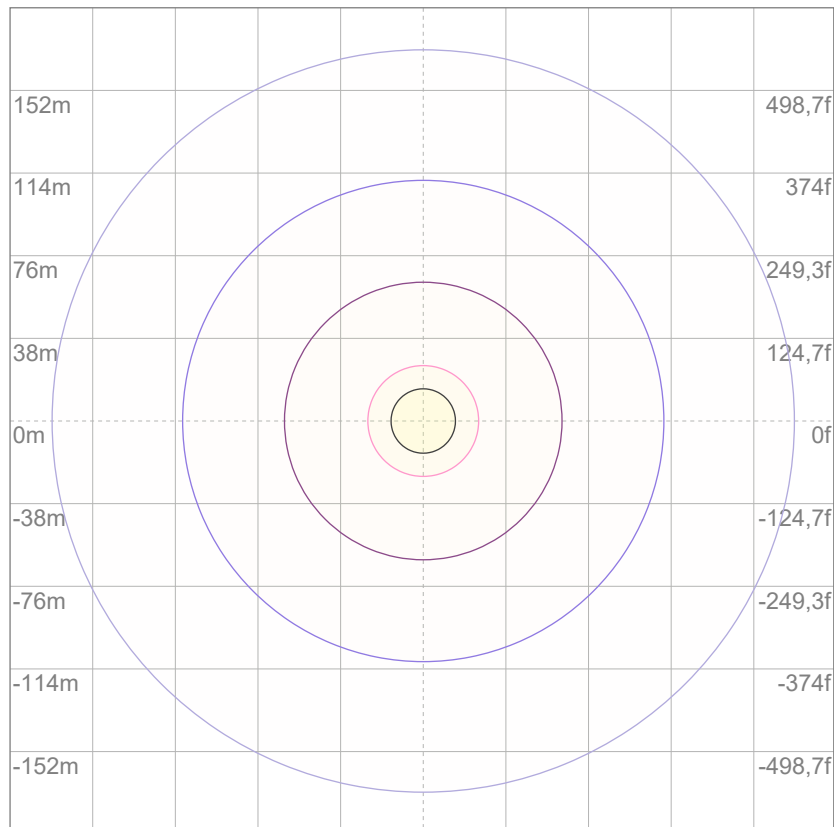
| | |
|-----|--------|
| 10% | 61 cd |
| 20% | 122 cd |
| 30% | 183 cd |
| 40% | 244 cd |
| 50% | 305 cd |
| 60% | 366 cd |
| 70% | 427 cd |
| 80% | 488 cd |

Conditions:

Number of c-planes: 2

Candela at center: 610 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,183 lx |
| 5% | 0,305 lx |
| 10% | 0,610 lx |
| 30% | 1,83 lx |
| 50% | 3,05 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,10 lx

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



Total lumen output:

1809 lm

Peak candela output:

681 cd

Light quality:

CRI: 95,1

Color temperature:

4062 K

PRODUCT NAME:
ECLNANOPANELTWC

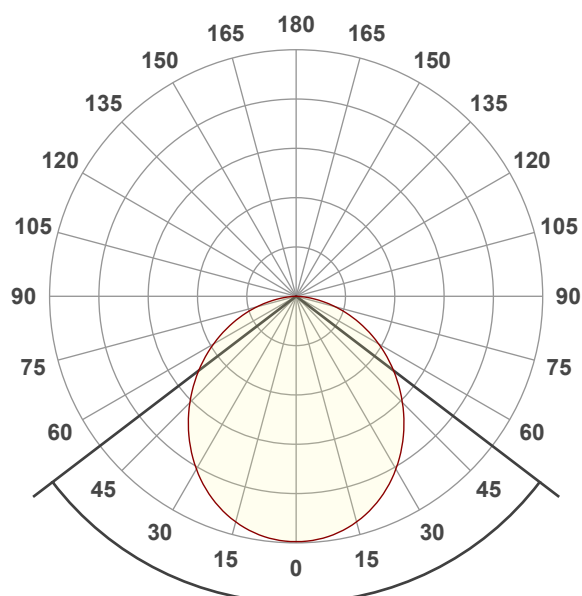
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h 4000K

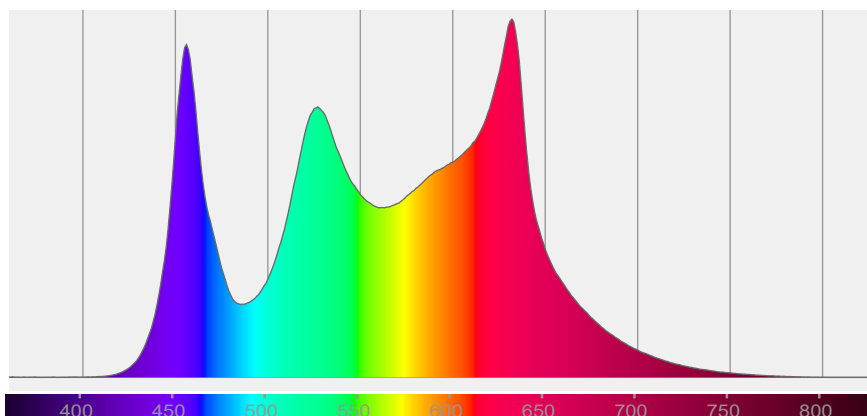
Operator:
Paolo Carvone

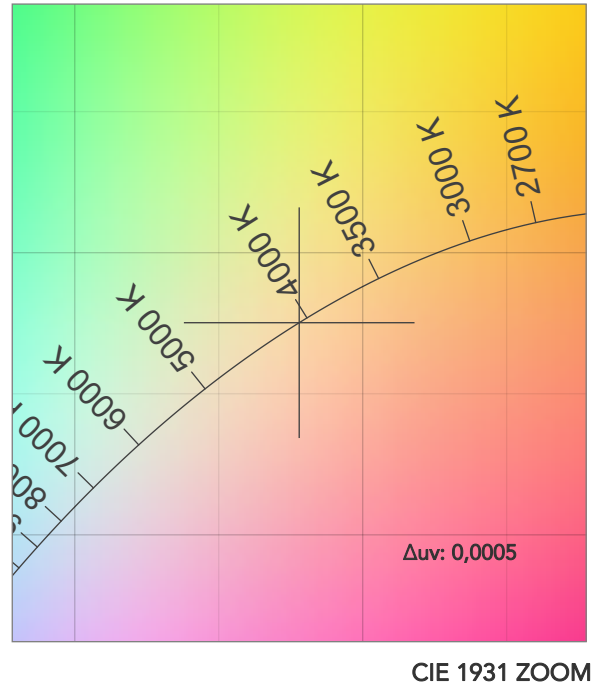
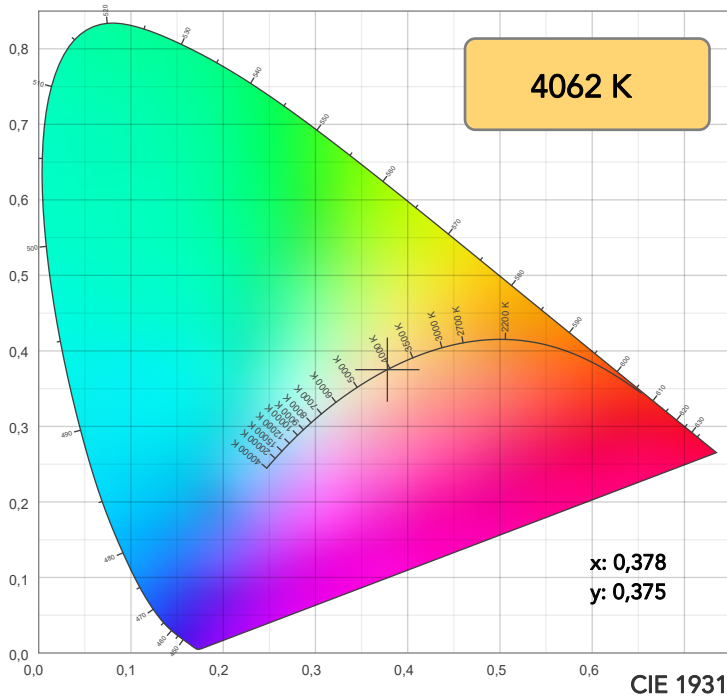
Date and time:
20/05/2022 15:08:11



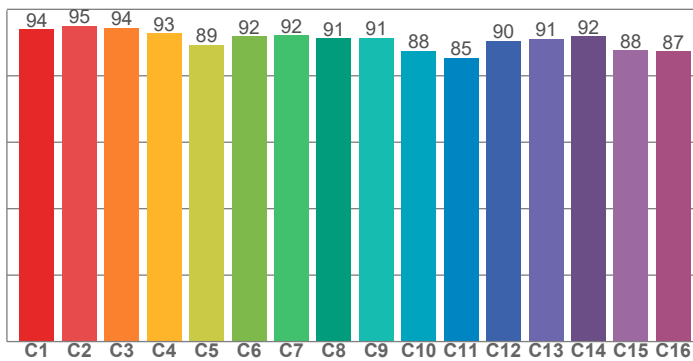
Beam angle 50%: 105,3°
Field angle 10%: 159,5°
Cut off angle 2.5%: 172,4°

Spectra

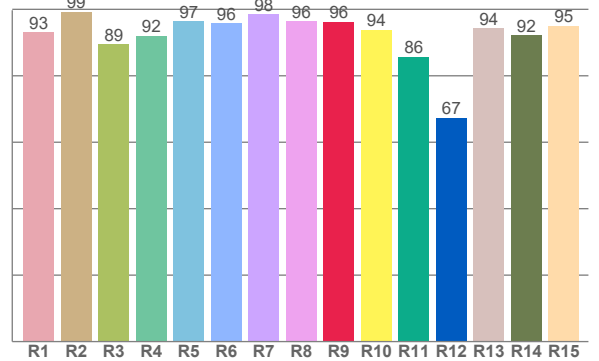




TM30: 90,8



CRI: 95,1 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,0 | 99,3 | 89,5 | 92,1 | 96,5 | 95,9 | 98,5 | 96,4 | 96,3 | 93,8 | 85,7 | 67,4 | 94,3 | 92,1 | 95,1 |

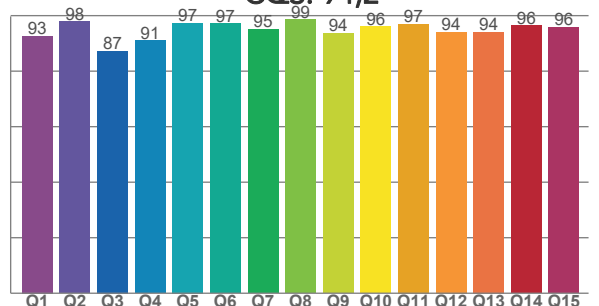
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,0 | 95,1 | 94,4 | 92,8 | 89,3 | 91,9 | 92,2 | 91,3 | 91,3 | 87,6 | 85,3 | 90,5 | 91,2 | 91,9 | 87,7 | 87,4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,6 | 97,9 | 87,2 | 91,0 | 97,4 | 97,1 | 95,1 | 98,6 | 93,6 | 96,1 | 96,9 | 94,2 | 94,1 | 96,4 | 95,8 |

CQS: 94,2



COLOR PARAMETERS

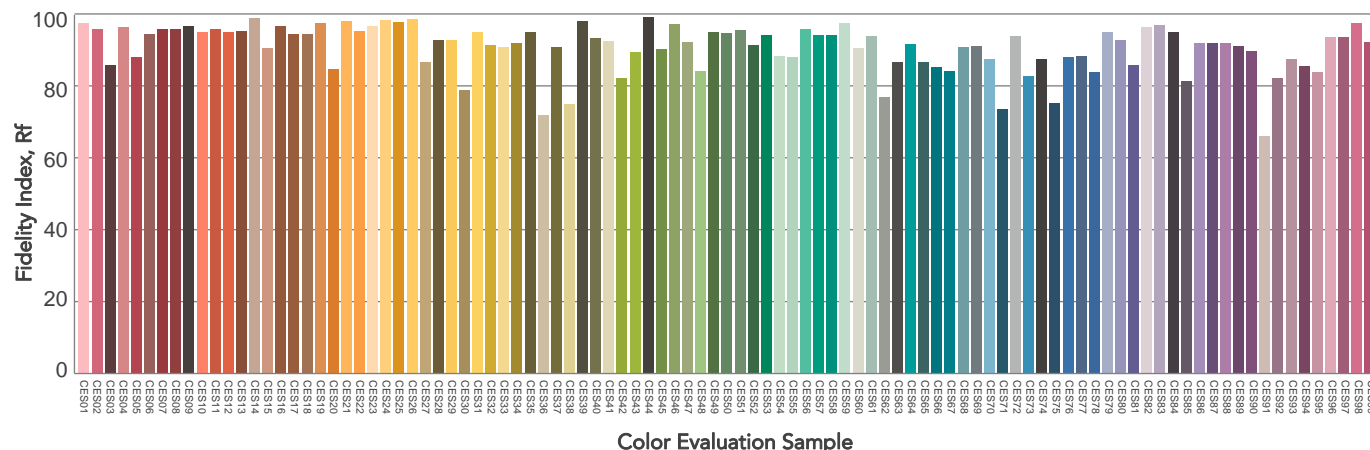
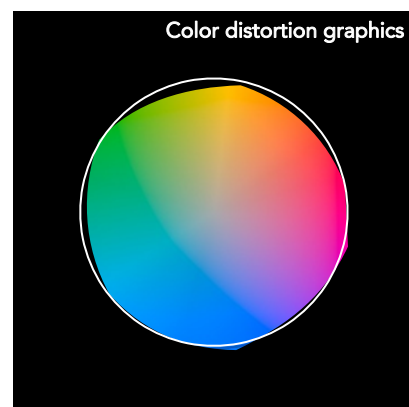
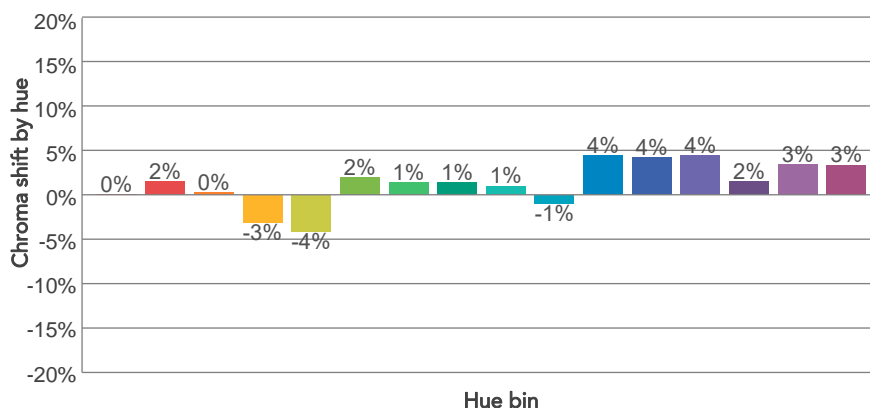
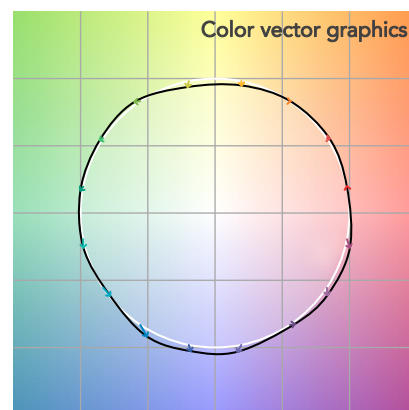
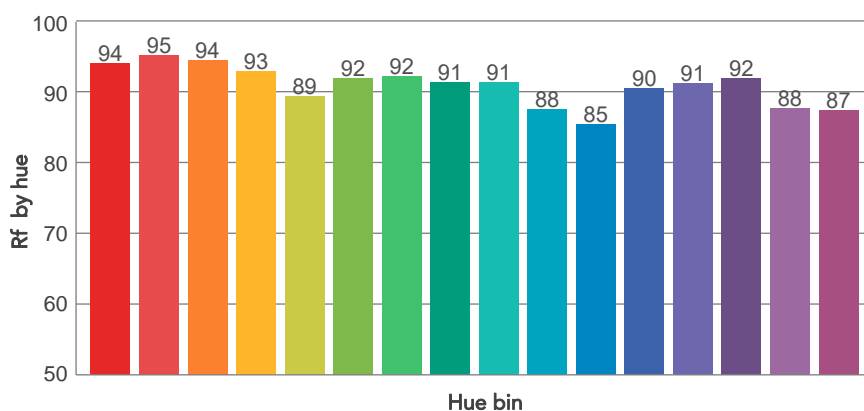
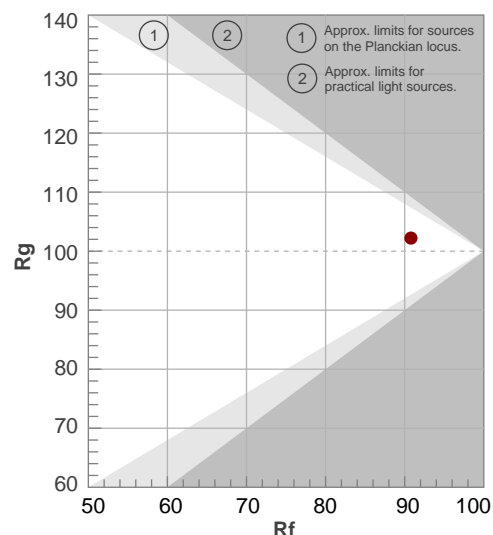
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4062 K | 95,1 | 96,3 | 90,8 | 102,2 | 94,2 | 91 | 0,378 | 0,375 | 0,0005 |

TM30 DETAILS

Rf 90,8
Fidelity index Rf

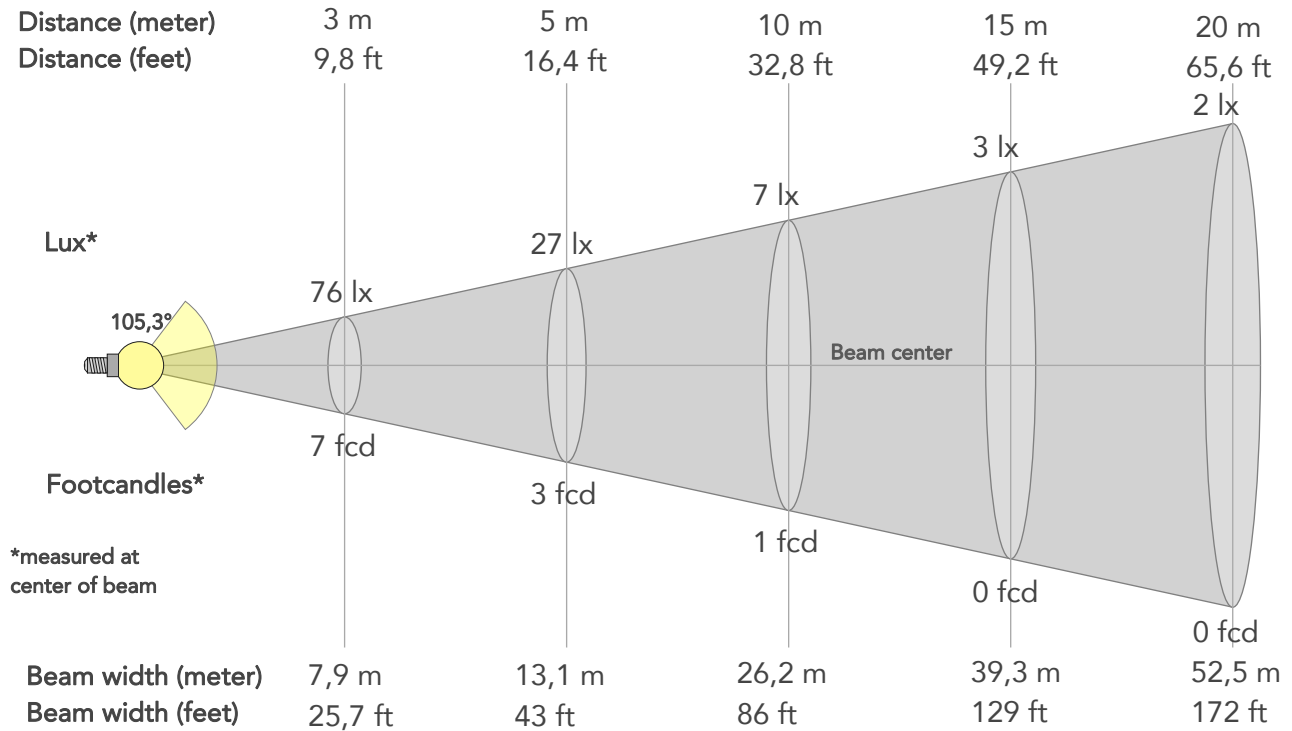
Rg 102,2
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 0% | 0% |
| 2 | 95 | 2% | -1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -3% | -1% |
| 5 | 89 | -4% | 2% |
| 6 | 92 | 2% | 4% |
| 7 | 92 | 1% | 3% |
| 8 | 91 | 1% | 3% |
| 9 | 91 | 1% | 6% |
| 10 | 88 | -1% | 8% |
| 11 | 85 | 4% | 9% |
| 12 | 90 | 4% | 2% |
| 13 | 91 | 4% | -4% |
| 14 | 92 | 2% | 3% |
| 15 | 88 | 3% | -4% |
| 16 | 87 | 3% | -6% |



BEAM DETAILS

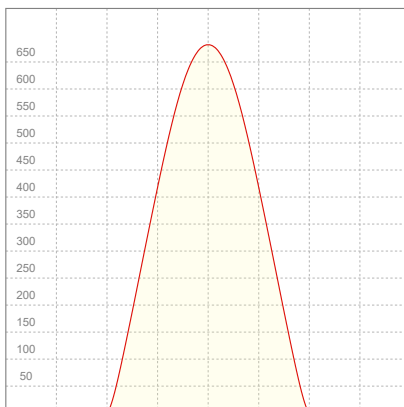
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 105,3° | 159,5° | 172,4° | 80,0% | 55,5% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 681lx | 170lx | 76lx | 43lx | 27lx | 12lx | 7lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 63fcd | 16fcd | 7fcd | 4fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,6m | 5,2m | 7,9m | 10,5m | 13,1m | 19,7m | 26,2m | 39,3m | 52,5m | 65,6m | 78,7m | 104,9m | 131,1m |
| Beam wid. | 8,7ft | 17,3ft | 25,7ft | 34,4ft | 43ft | 64,5ft | 86ft | 129ft | 172ft | 215,1ft | 258,1ft | 344,1ft | 430,1ft |

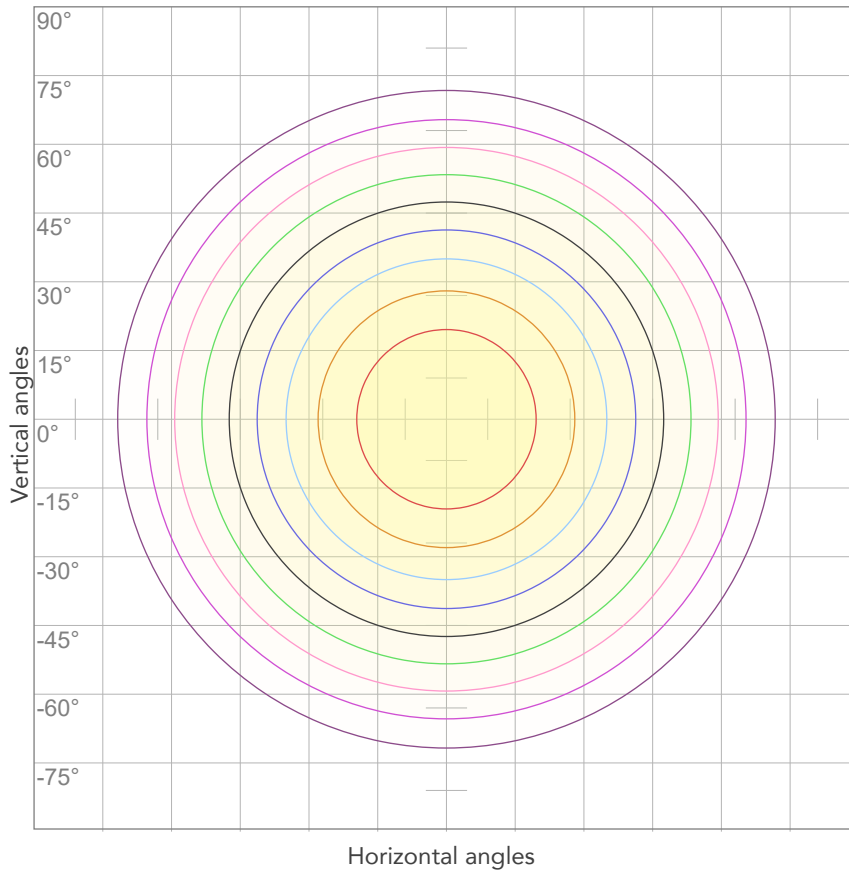
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,220A | 29,4W | 61lm/W |

ISO CANDELA DIAGRAM



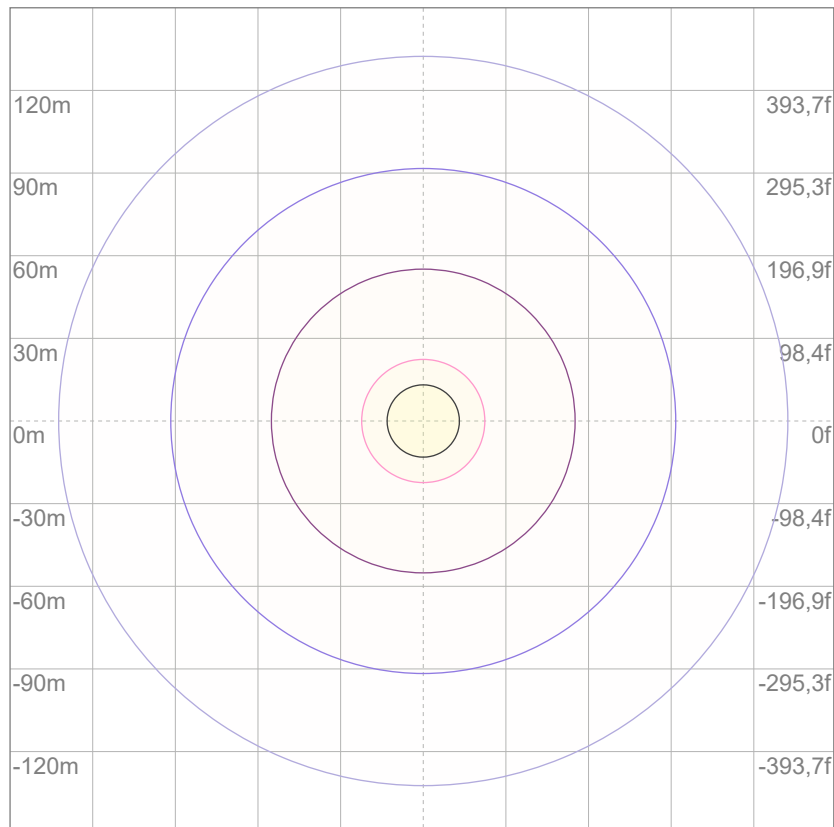
| | |
|-----|--------|
| 10% | 68 cd |
| 20% | 136 cd |
| 30% | 204 cd |
| 40% | 272 cd |
| 50% | 340 cd |
| 60% | 409 cd |
| 70% | 477 cd |
| 80% | 545 cd |

Conditions:

Number of c-planes: 2

Candela at center: 681 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,204 lx |
| 5% | 0,340 lx |
| 10% | 0,681 lx |
| 30% | 2,04 lx |
| 50% | 3,40 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,81 lx

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



Total lumen output:

1673 lm

Peak candela output:

850 cd

Light quality:

CRI: 95,3

Color temperature:

4004 K

PRODUCT NAME:
ECLNANOPANELTWC

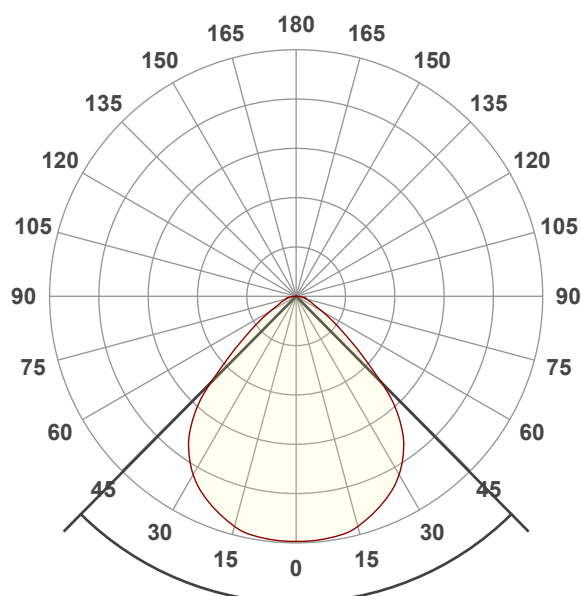
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h 4000K

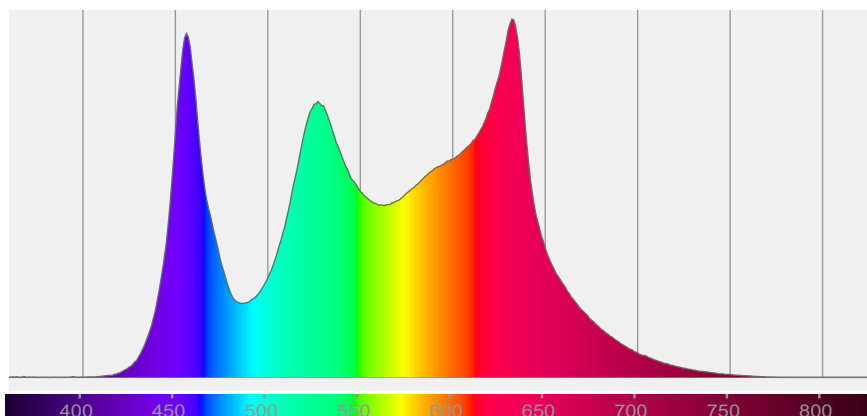
Operator:
Paolo Carvone

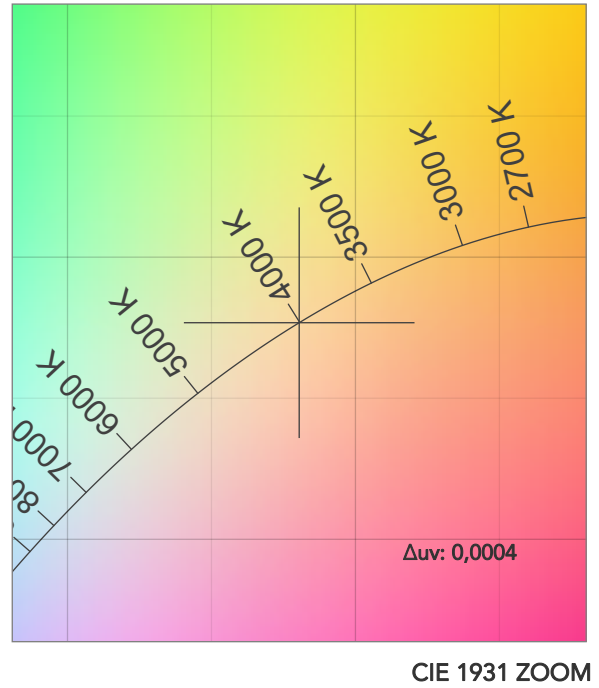
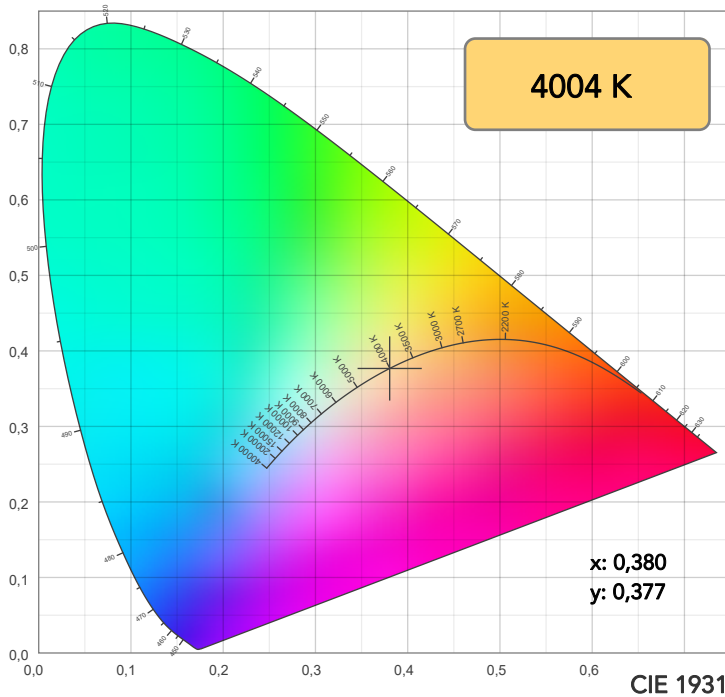
Date and time:
23/05/2022 11:43:47



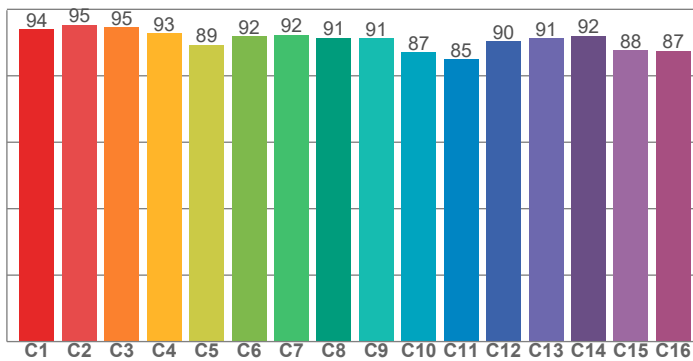
Beam angle 50%: 89,3°
Field angle 10%: 124,1°
Cut off angle 2.5%: 167°

Spectra

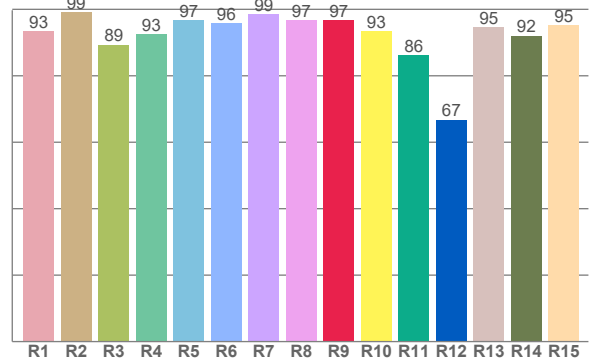




TM30: 90,8



CRI: 95,3 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,3 | 99,1 | 89,3 | 92,5 | 96,8 | 95,8 | 98,6 | 96,7 | 96,6 | 93,4 | 86,2 | 66,7 | 94,6 | 92,0 | 95,2 |

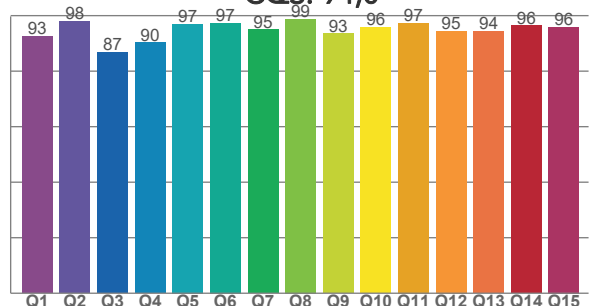
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,0 | 95,4 | 94,6 | 92,7 | 89,2 | 91,9 | 92,4 | 91,4 | 91,3 | 87,1 | 85,0 | 90,4 | 91,2 | 92,0 | 87,6 | 87,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,6 | 98,0 | 86,8 | 90,3 | 96,9 | 97,3 | 94,9 | 98,7 | 93,5 | 95,8 | 97,3 | 94,5 | 94,4 | 96,5 | 95,8 |

CQS: 94,0



COLOR PARAMETERS

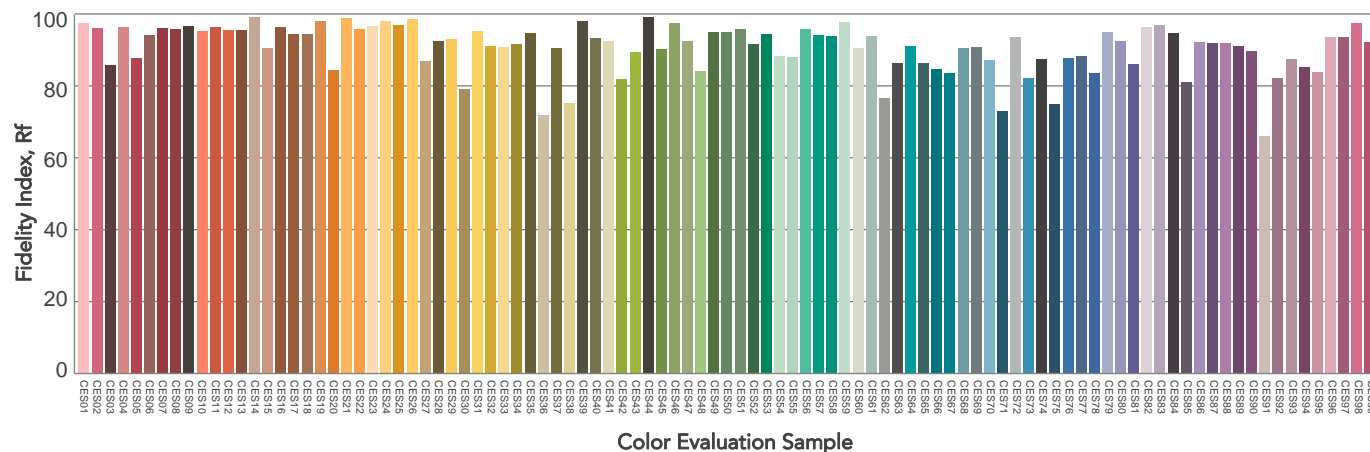
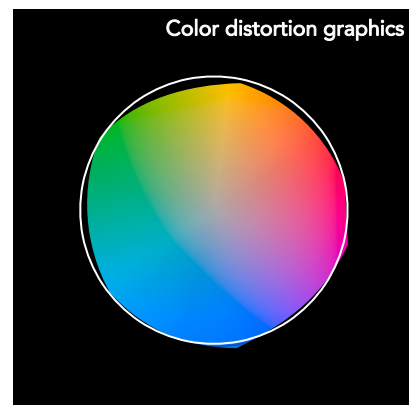
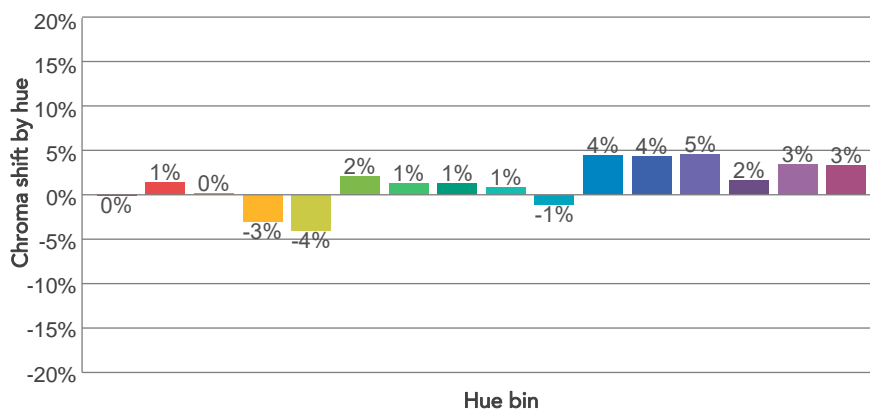
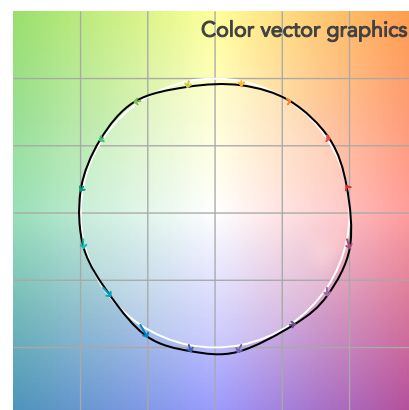
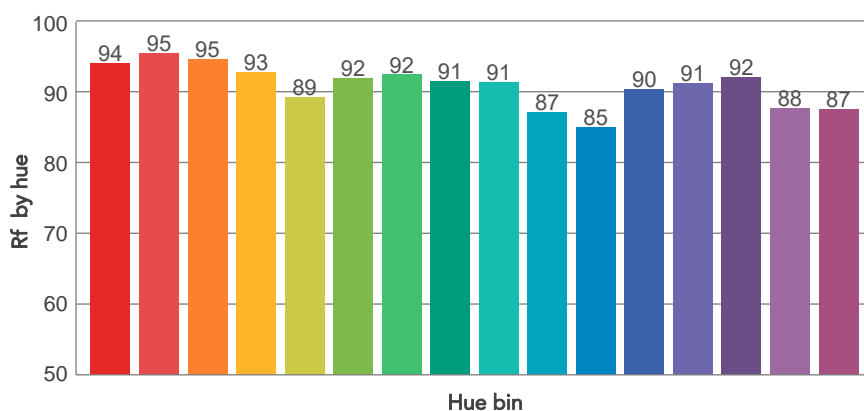
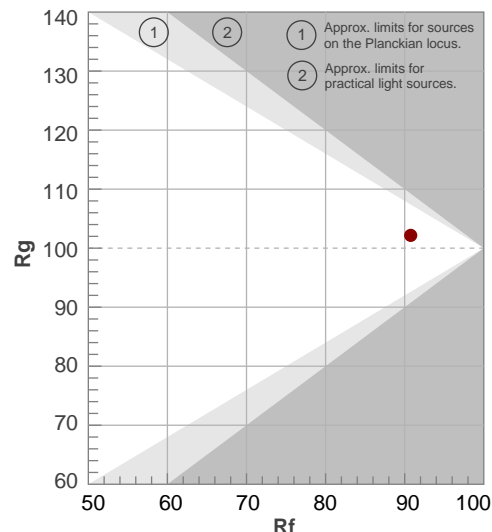
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4004 K | 95,3 | 96,6 | 90,8 | 102,2 | 94,0 | 90 | 0,380 | 0,377 | 0,0004 |

TM30 DETAILS

Rf 90,8
Fidelity index Rf

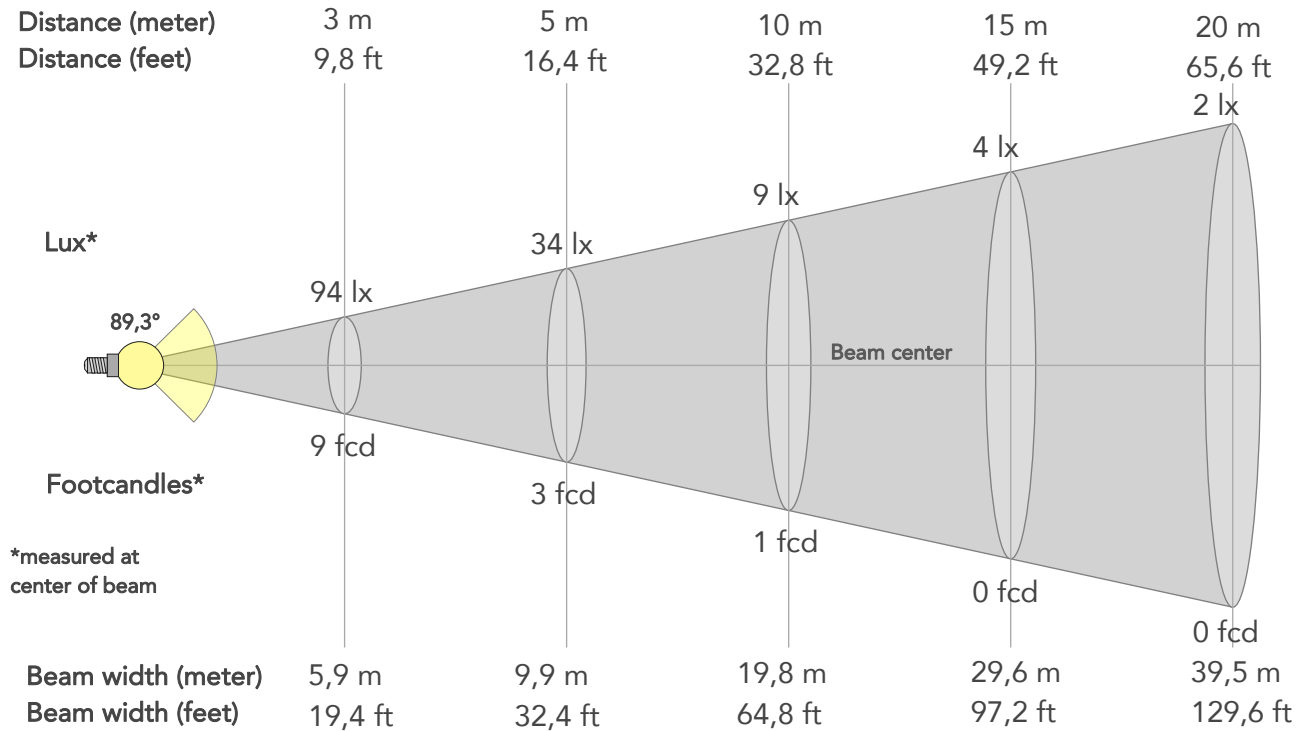
Rg 102,2
Gammut index

| | | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| Hue Bin | R _f | Chroma | Hue |
| 1 | 94 | 0% | 0% |
| 2 | 95 | 1% | -1% |
| 3 | 95 | 0% | 0% |
| 4 | 93 | -3% | -1% |
| 5 | 89 | -4% | 2% |
| 6 | 92 | 2% | 4% |
| 7 | 92 | 1% | 3% |
| 8 | 91 | 1% | 3% |
| 9 | 91 | 1% | 6% |
| 10 | 87 | -1% | 8% |
| 11 | 85 | 4% | 9% |
| 12 | 90 | 4% | 2% |
| 13 | 91 | 5% | -4% |
| 14 | 92 | 2% | 3% |
| 15 | 88 | 3% | -4% |
| 16 | 87 | 3% | -6% |



BEAM DETAILS

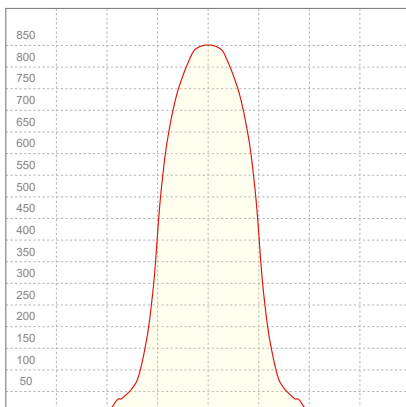
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,3° | 124,1° | 167° | 91,9% | 74,8% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|-------|--------|--------|--------|--------|--------|--------|---------|-------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 850lx | 213lx | 94lx | 53lx | 34lx | 15lx | 9lx | 4lx | 2lx | 1lx | 1lx | 1lx | 0lx |
| Footcand. | 79fcd | 20fcd | 9fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 4m | 5,9m | 7,9m | 9,9m | 14,8m | 19,8m | 29,6m | 39,5m | 49,4m | 59,3m | 79m | 98,8m |
| Beam wid. | 6,5ft | 13ft | 19,4ft | 25,9ft | 32,4ft | 48,6ft | 64,8ft | 97,2ft | 129,6ft | 162ft | 194,4ft | 259,2ft | 324,1ft |

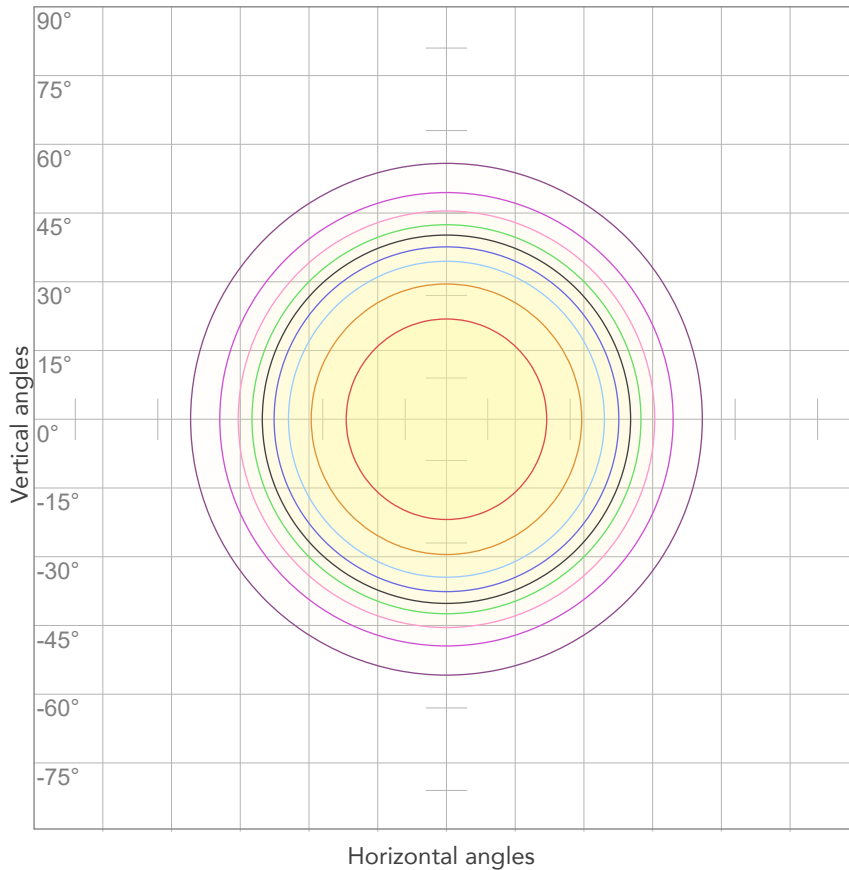
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,217A | 29,3W | 57lm/W |

ISO CANDELA DIAGRAM



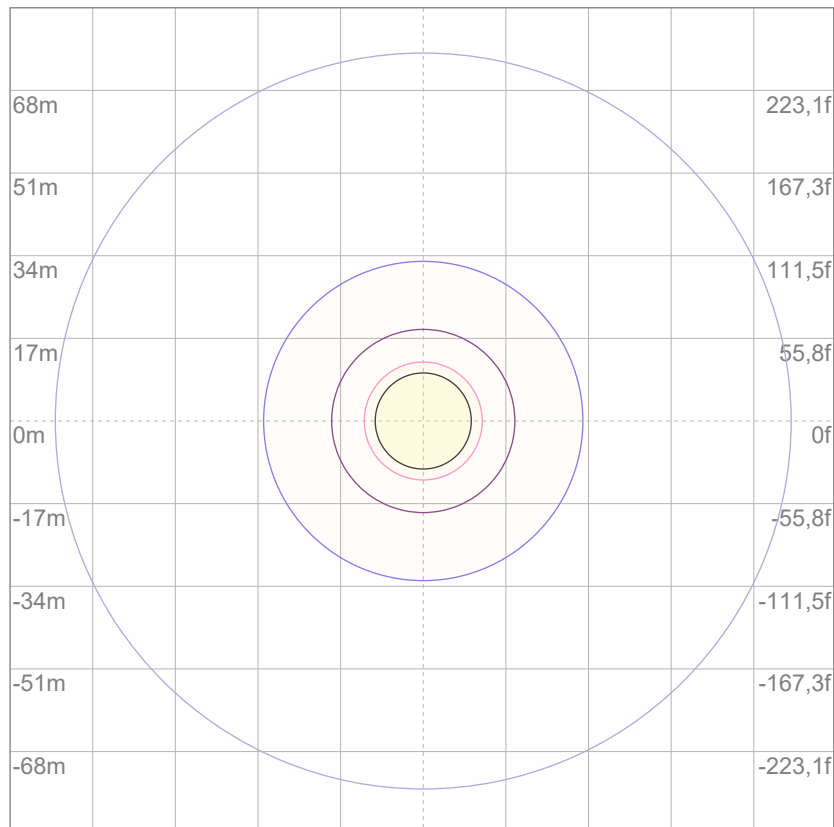
| | |
|-----|--------|
| 10% | 85 cd |
| 20% | 170 cd |
| 30% | 255 cd |
| 40% | 340 cd |
| 50% | 425 cd |
| 60% | 510 cd |
| 70% | 595 cd |
| 80% | 680 cd |

Conditions:

Number of c-planes: 2

Candela at center: 850 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,255 lx |
| 5% | 0,425 lx |
| 10% | 0,850 lx |
| 30% | 2,55 lx |
| 50% | 4,25 lx |

Conditions:

Number of c-planes: 2

Lux at center: 8,50 lx

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



Total lumen output:

1561 lm

Peak candela output:

529 cd

Light quality:

CRI: 94,7

Color temperature:

5658 K

PRODUCT NAME:
ECLNANOPANELTWC

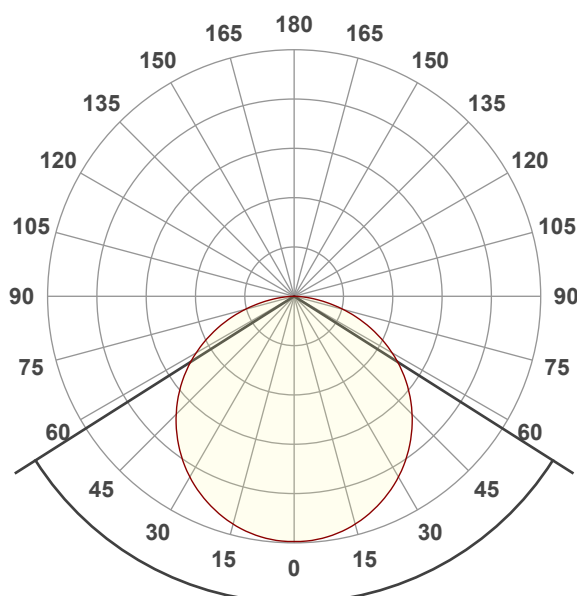
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h 5600K

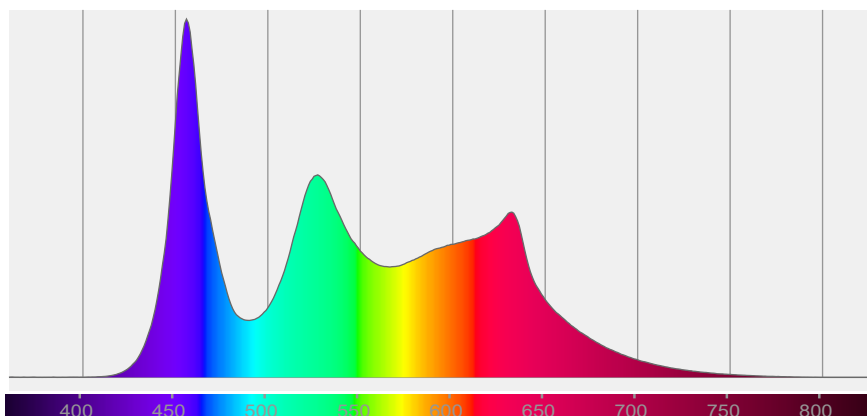
Operator:
Paolo Carvone

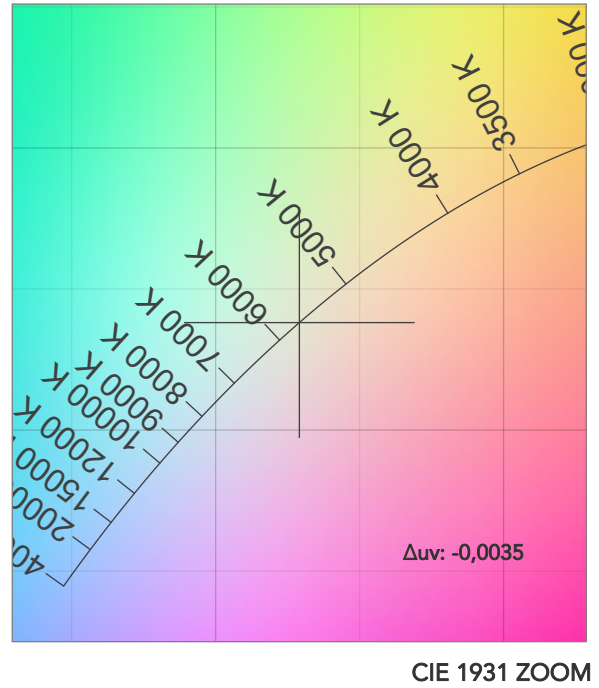
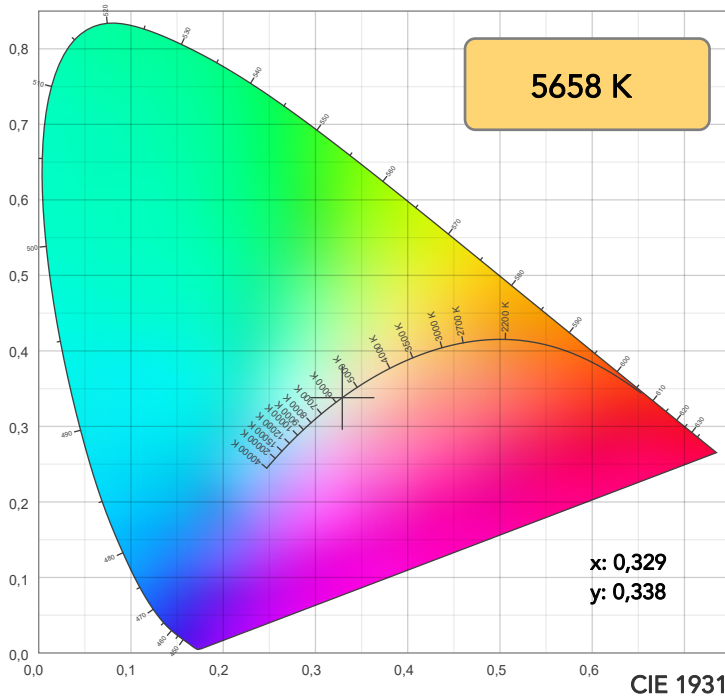
Date and time:
23/05/2022 11:18:29



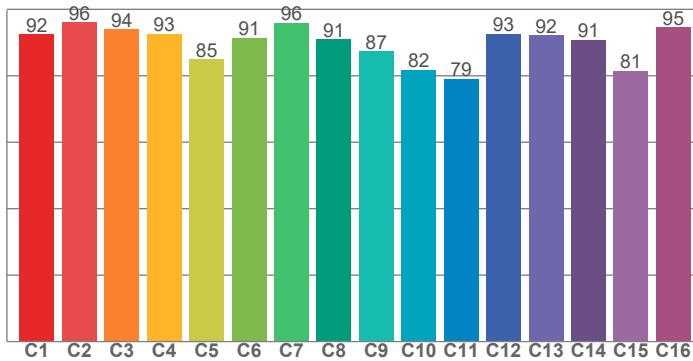
Beam angle 50%: 115,2°
Field angle 10%: 162,8°
Cut off angle 2.5%: 174,2°

Spectra

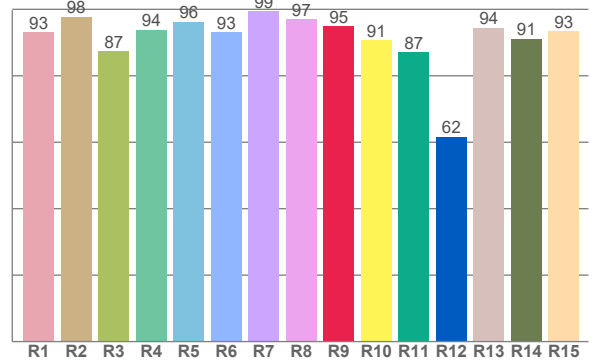




TM30: 89,3



CRI: 94,7 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,1 | 97,8 | 87,4 | 93,8 | 96,3 | 93,1 | 99,4 | 97,1 | 94,8 | 90,6 | 87,0 | 61,7 | 94,5 | 91,2 | 93,4 |

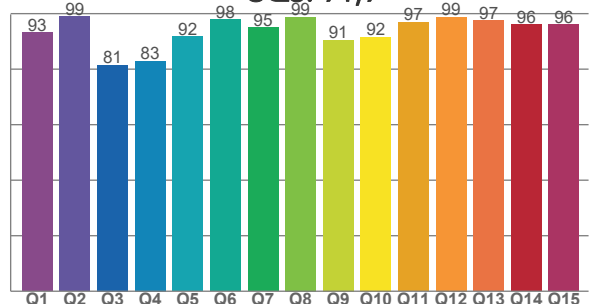
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,4 | 96,1 | 93,9 | 92,6 | 85,0 | 91,5 | 95,9 | 91,0 | 87,3 | 81,8 | 79,1 | 92,6 | 92,1 | 90,8 | 81,4 | 94,6 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,2 | 99,0 | 81,4 | 82,9 | 91,8 | 97,9 | 95,0 | 98,7 | 90,5 | 91,5 | 96,9 | 98,9 | 97,5 | 96,0 | 96,0 |

CQS: 91,9



COLOR PARAMETERS

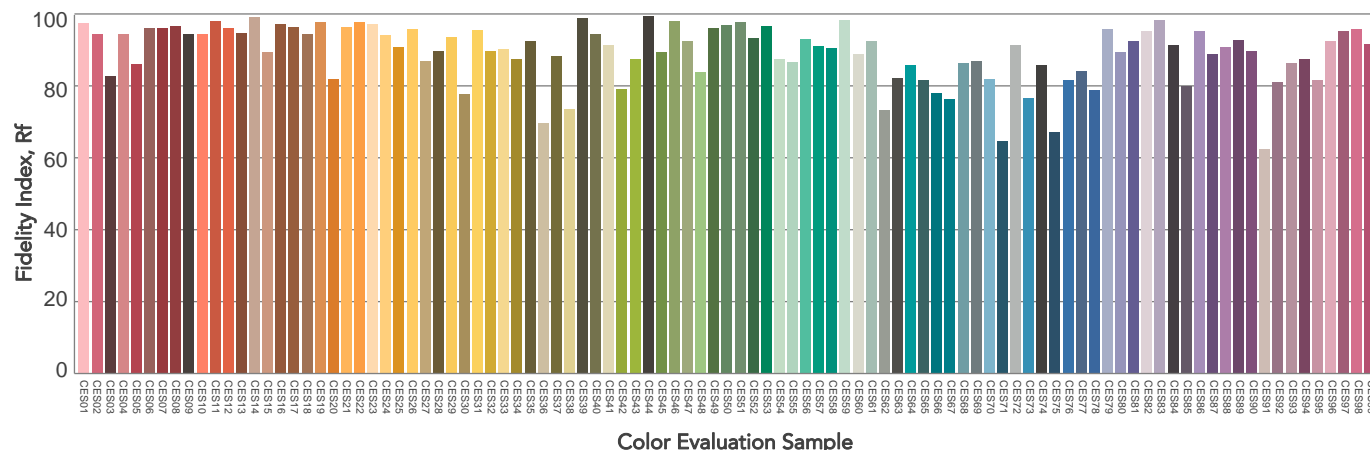
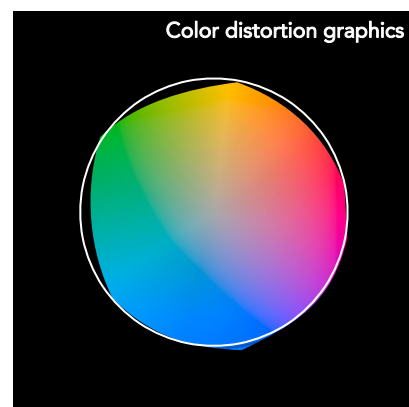
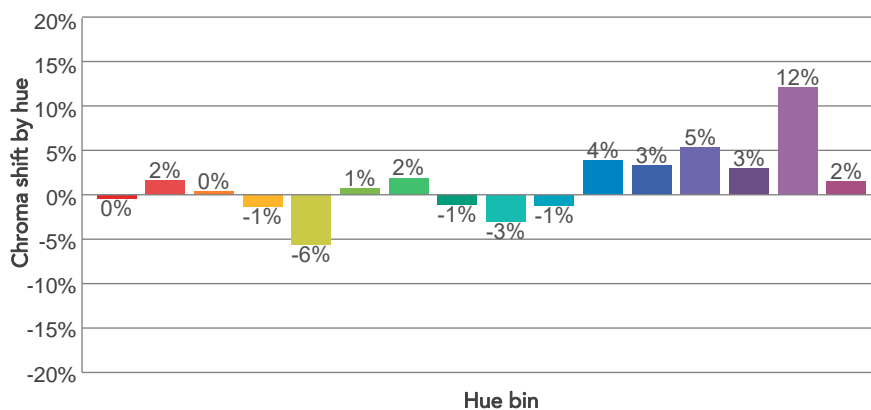
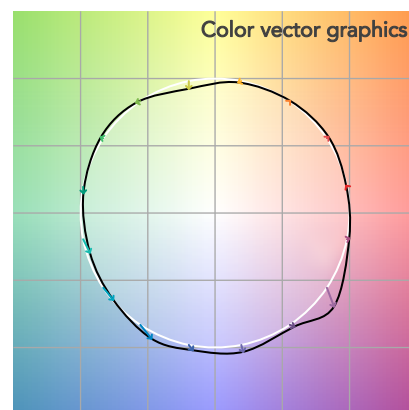
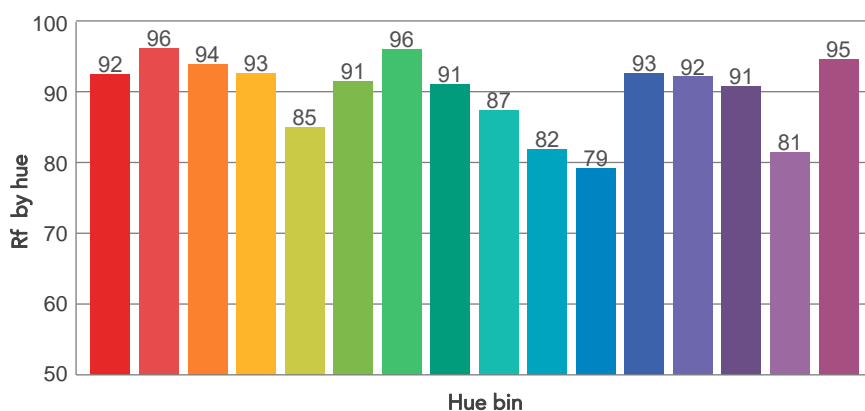
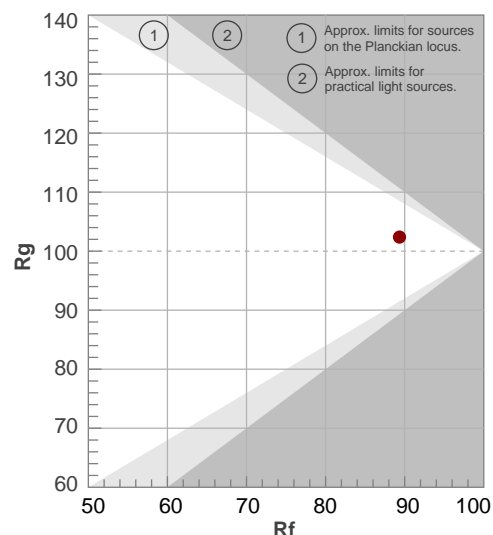
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 5658 K | 94,7 | 94,8 | 89,3 | 102,4 | 91,9 | 93 | 0,329 | 0,338 | -0,0035 |

TM30 DETAILS

Rf 89,3
Fidelity index Rf

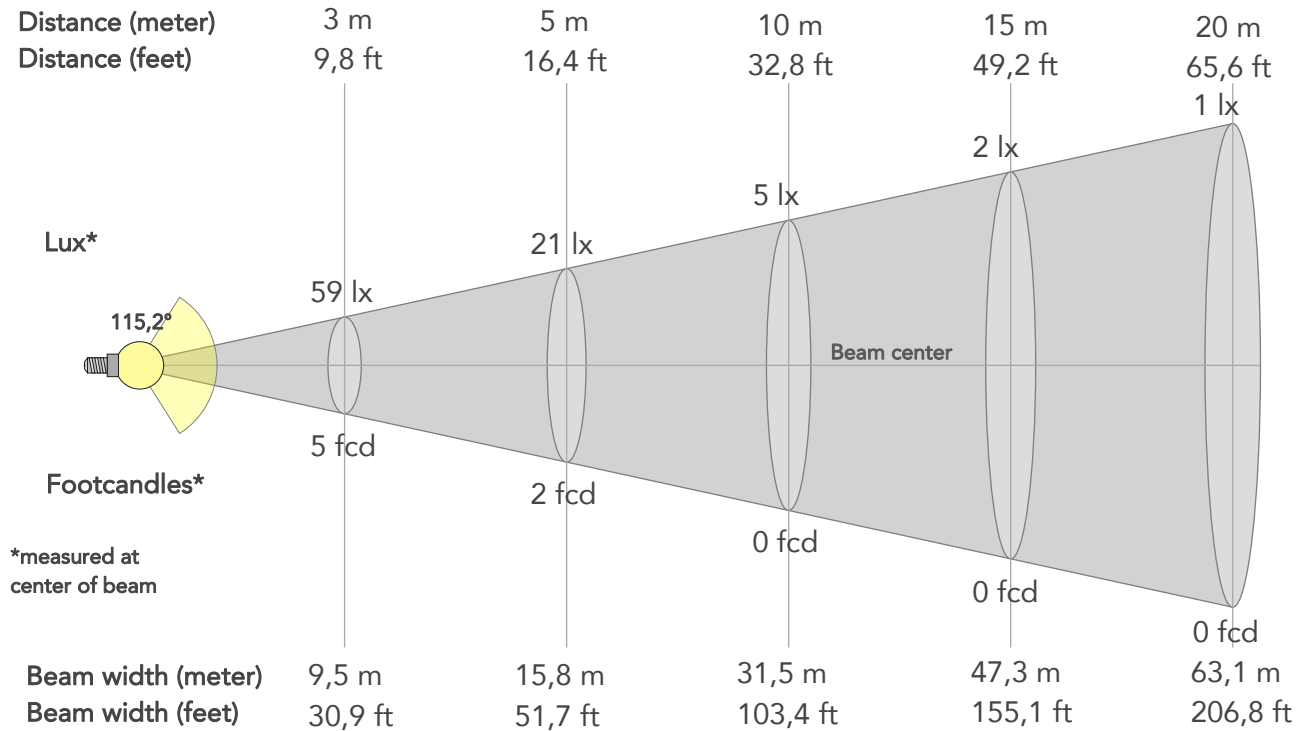
Rg 102,4
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | 0% | 1% |
| 2 | 96 | 2% | 0% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -1% | 2% |
| 5 | 85 | -6% | 1% |
| 6 | 91 | 1% | 3% |
| 7 | 96 | 2% | 0% |
| 8 | 91 | -1% | 5% |
| 9 | 87 | -3% | 11% |
| 10 | 82 | -1% | 12% |
| 11 | 79 | 4% | 13% |
| 12 | 93 | 3% | 4% |
| 13 | 92 | 5% | 0% |
| 14 | 91 | 3% | 2% |
| 15 | 81 | 12% | -9% |
| 16 | 95 | 2% | 1% |



BEAM DETAILS

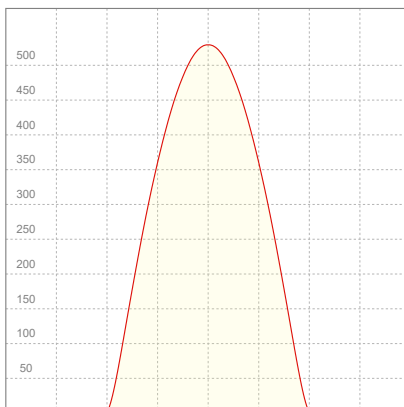
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115,2° | 162,8° | 174,2° | 77,5% | 52,3% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 529lx | 132lx | 59lx | 33lx | 21lx | 9lx | 5lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 49fcd | 12fcd | 5fcd | 3fcd | 2fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,2m | 6,3m | 9,5m | 12,6m | 15,8m | 23,6m | 31,5m | 47,3m | 63,1m | 78,8m | 94,6m | 126,1m | 157,7m |
| Beam wid. | 10,4ft | 20,8ft | 30,9ft | 41,3ft | 51,7ft | 77,6ft | 103,4ft | 155,1ft | 206,8ft | 258,6ft | 310,3ft | 413,7ft | 517,1ft |

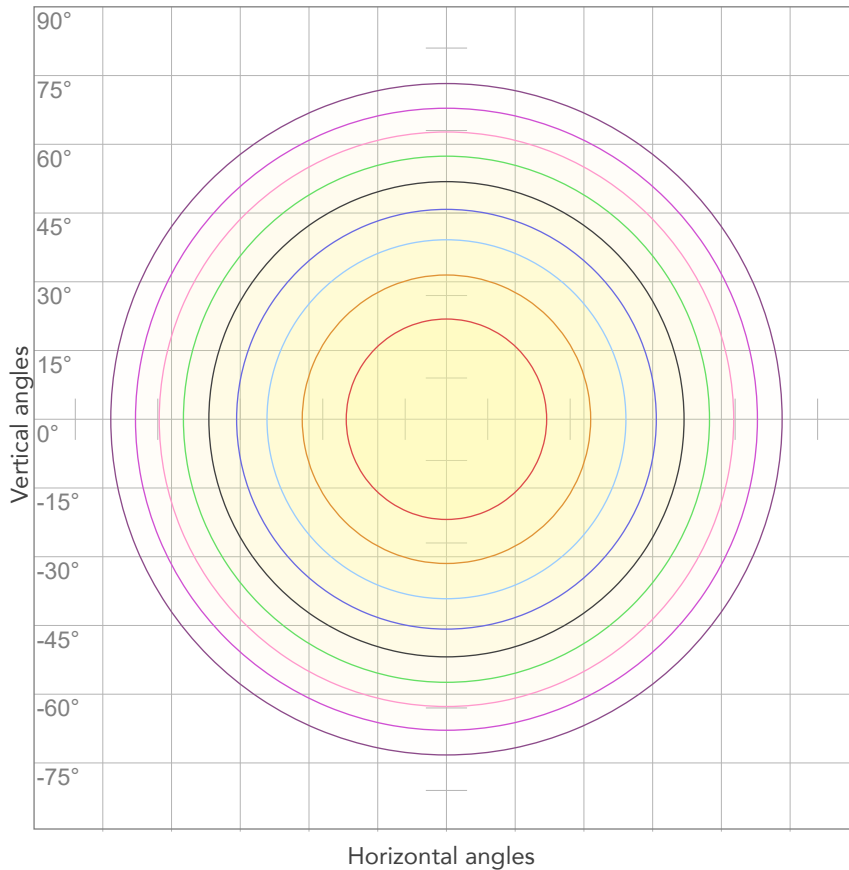
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,219A | 29,5W | 53lm/W |

ISO CANDELA DIAGRAM



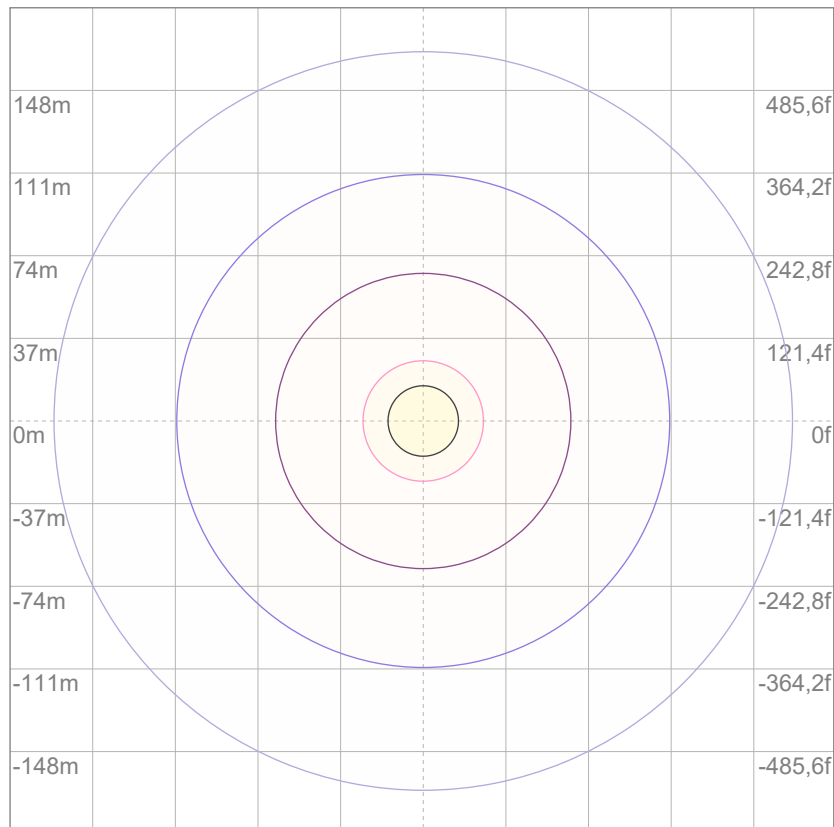
| | |
|-----|--------|
| 10% | 53 cd |
| 20% | 106 cd |
| 30% | 159 cd |
| 40% | 212 cd |
| 50% | 264 cd |
| 60% | 317 cd |
| 70% | 370 cd |
| 80% | 423 cd |

Conditions:

Number of c-planes: 2

Candela at center: 529 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,159 lx |
| 5% | 0,264 lx |
| 10% | 0,529 lx |
| 30% | 1,59 lx |
| 50% | 2,64 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,29 lx

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



Total lumen output:

1677 lm

Peak candela output:

586 cd

Light quality:

CRI: 94,9

Color temperature:

5618 K

PRODUCT NAME:
ECLNANOPANELTWC

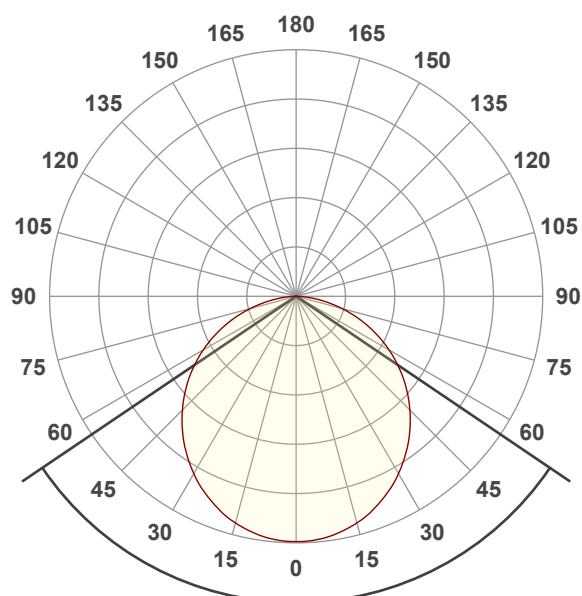
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h 5600K

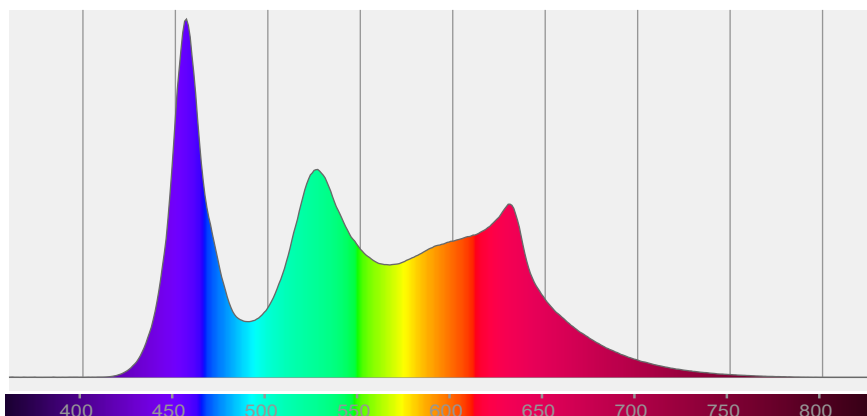
Operator:
Paolo Carvone

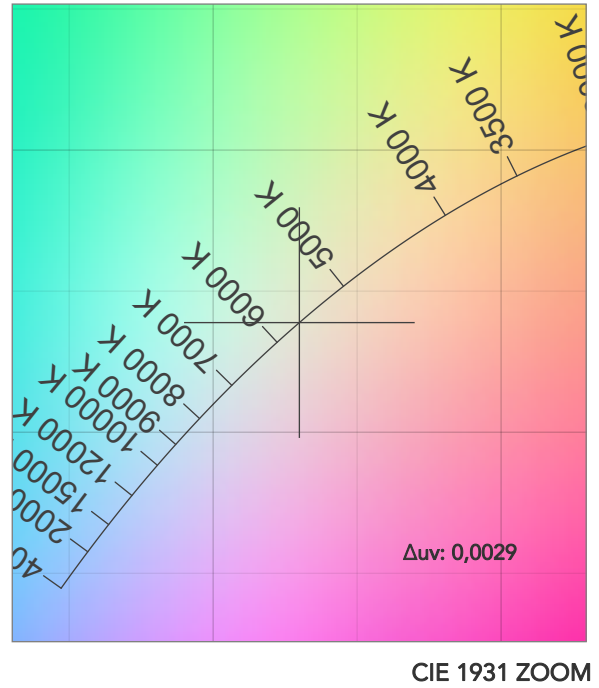
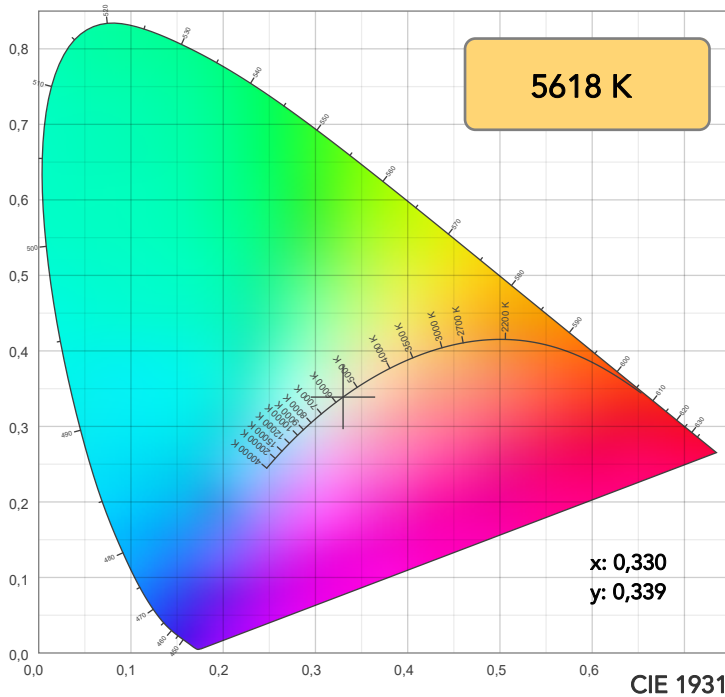
Date and time:
23/05/2022 11:55:33



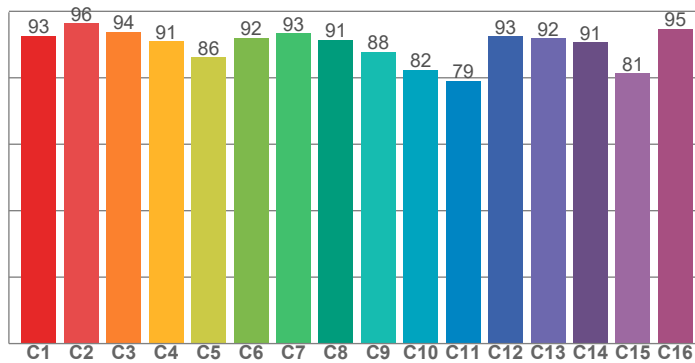
Beam angle 50%: 111,9°
Field angle 10%: 162,2°
Cut off angle 2.5%: 174,4°

Spectra

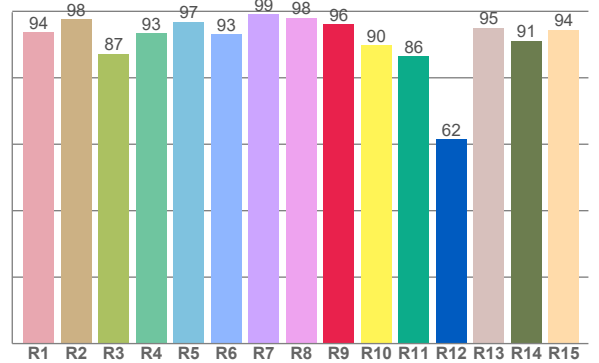




TM30: 89,5



CRI: 94,9 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,7 | 97,5 | 87,2 | 93,4 | 96,9 | 93,2 | 99,1 | 98,1 | 96,2 | 89,7 | 86,4 | 61,5 | 95,1 | 91,2 | 94,4 |

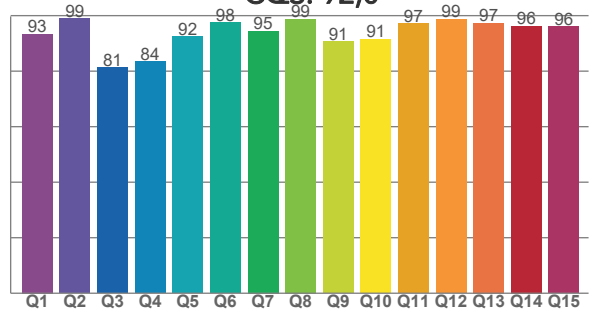
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,6 | 96,4 | 93,9 | 90,9 | 86,1 | 92,1 | 93,3 | 91,5 | 87,9 | 82,3 | 79,1 | 92,5 | 91,9 | 90,6 | 81,3 | 94,8 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,3 | 98,9 | 81,3 | 83,5 | 92,5 | 97,6 | 94,5 | 98,8 | 90,7 | 91,5 | 97,1 | 98,7 | 97,4 | 96,2 | 96,1 |

CQS: 92,0



COLOR PARAMETERS

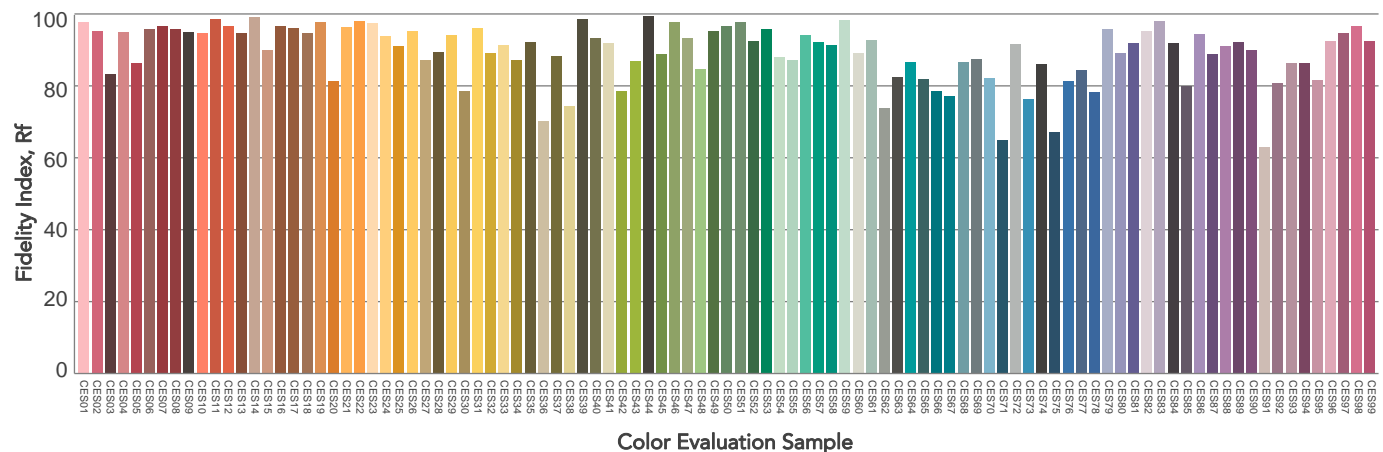
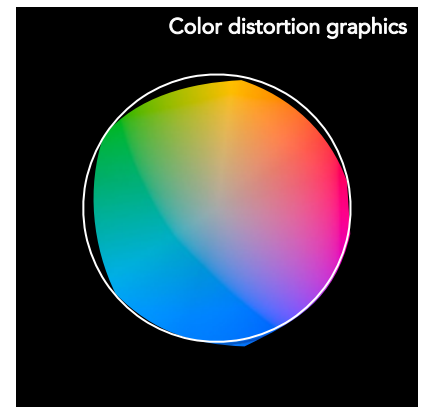
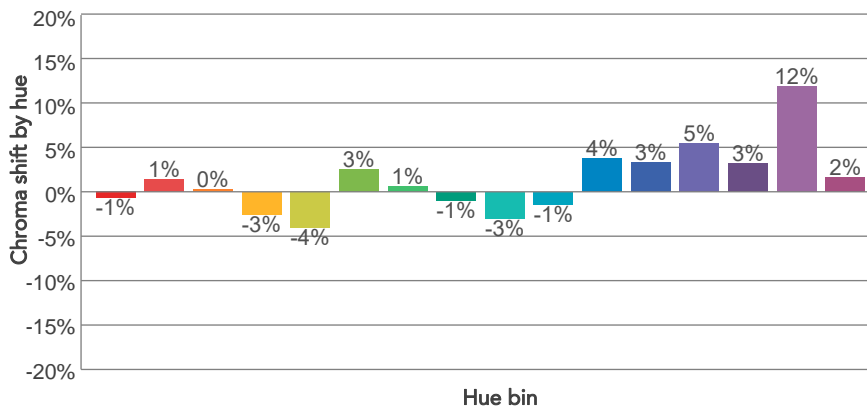
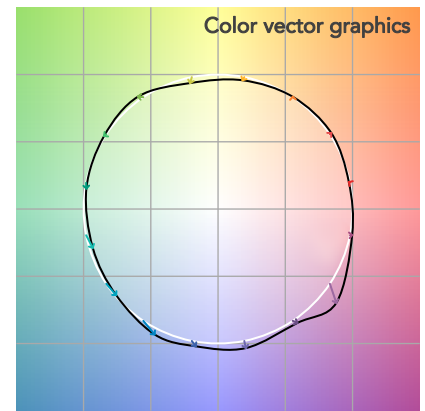
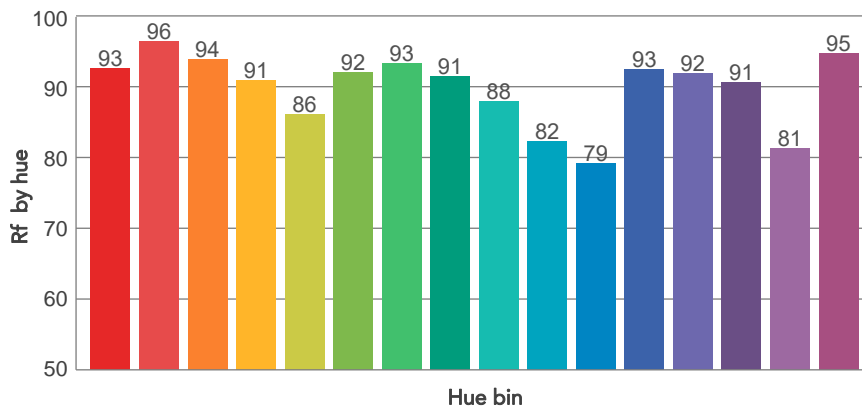
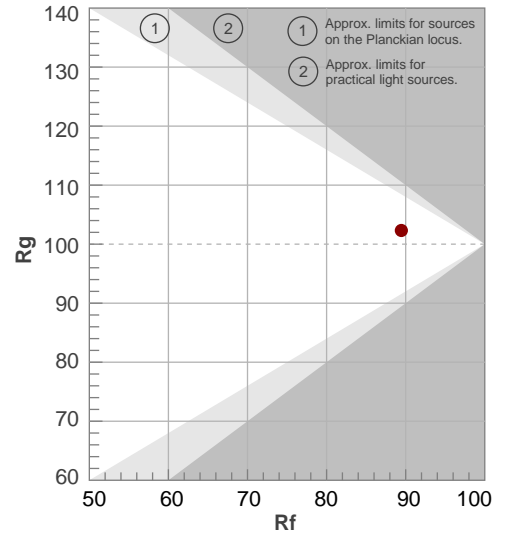
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 5618 K | 94,9 | 96,2 | 89,5 | 102,3 | 92,0 | 92 | 0,330 | 0,339 | 0,0029 |

TM30 DETAILS

Rf 89,5
Fidelity index Rf

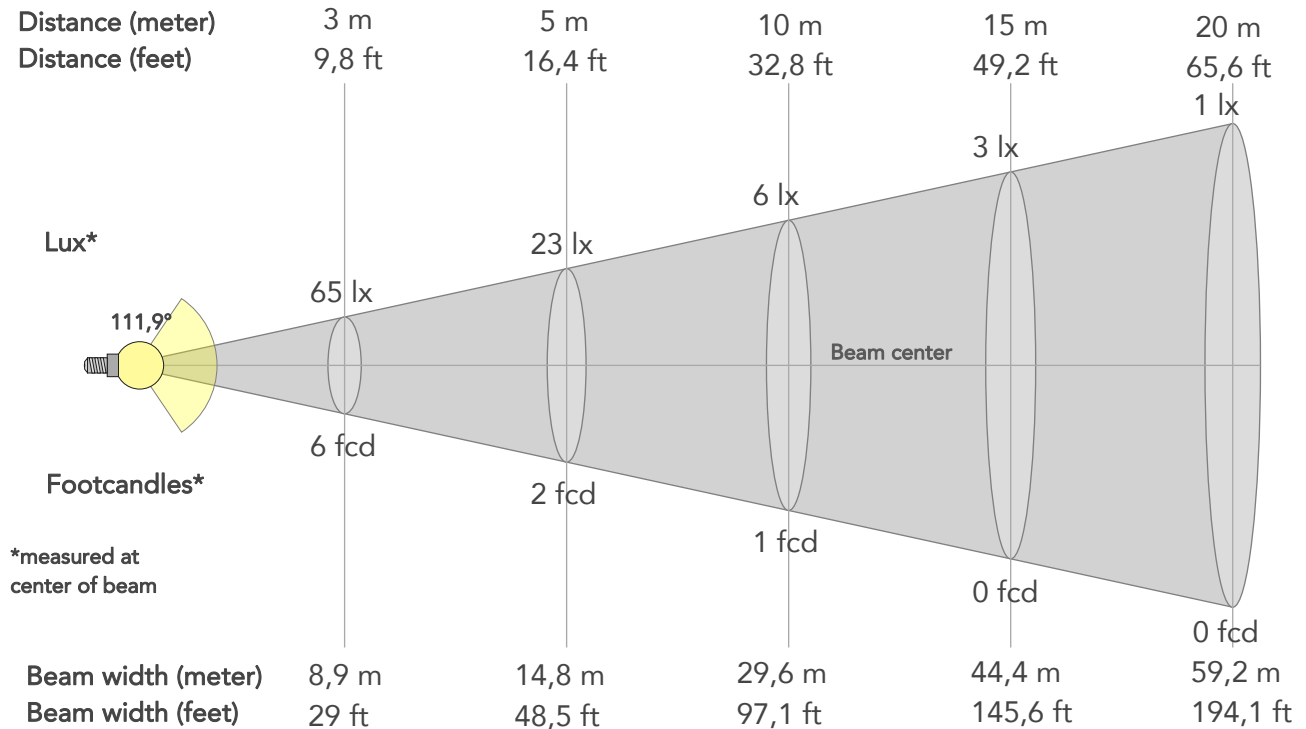
Rg 102,3
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 93 | -1% | 1% |
| 2 | 96 | 1% | 0% |
| 3 | 94 | 0% | 0% |
| 4 | 91 | -3% | 1% |
| 5 | 86 | -4% | 2% |
| 6 | 92 | 3% | 3% |
| 7 | 93 | 1% | 2% |
| 8 | 91 | -1% | 4% |
| 9 | 88 | -3% | 10% |
| 10 | 82 | -1% | 11% |
| 11 | 79 | 4% | 13% |
| 12 | 93 | 3% | 4% |
| 13 | 92 | 5% | 0% |
| 14 | 91 | 3% | 2% |
| 15 | 81 | 12% | -9% |
| 16 | 95 | 2% | 0% |



BEAM DETAILS

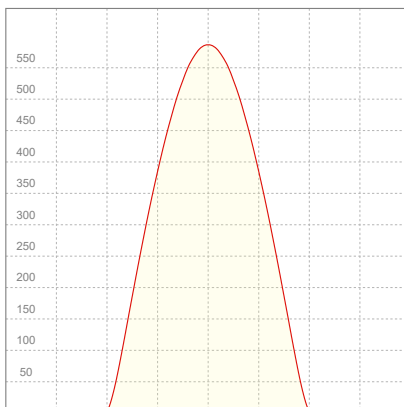
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 111,9° | 162,2° | 174,4° | 77,9% | 53,0% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 586lx | 146lx | 65lx | 37lx | 23lx | 10lx | 6lx | 3lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 54fcd | 14fcd | 6fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3m | 5,9m | 8,9m | 11,8m | 14,8m | 22,2m | 29,6m | 44,4m | 59,2m | 74m | 88,8m | 118,4m | 148m |
| Beam wid. | 9,8ft | 19,5ft | 29ft | 38,8ft | 48,5ft | 72,8ft | 97,1ft | 145,6ft | 194,1ft | 242,6ft | 291,2ft | 388,2ft | 485,3ft |

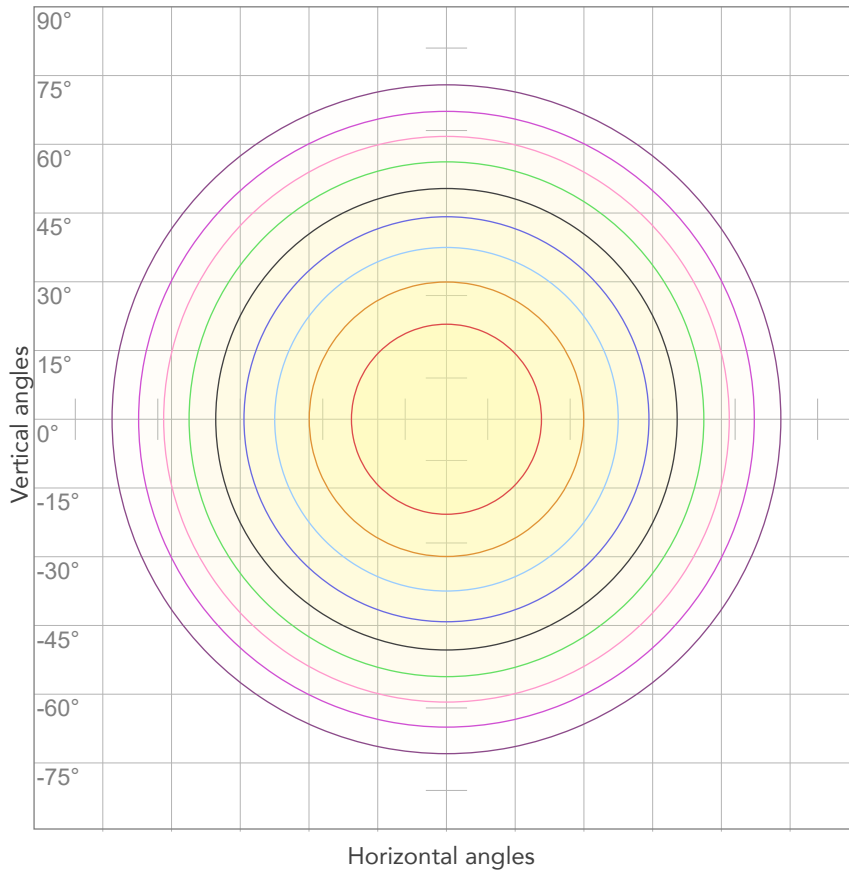
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 227V | 0,222A | 29,9W | 56lm/W |

ISO CANDELA DIAGRAM



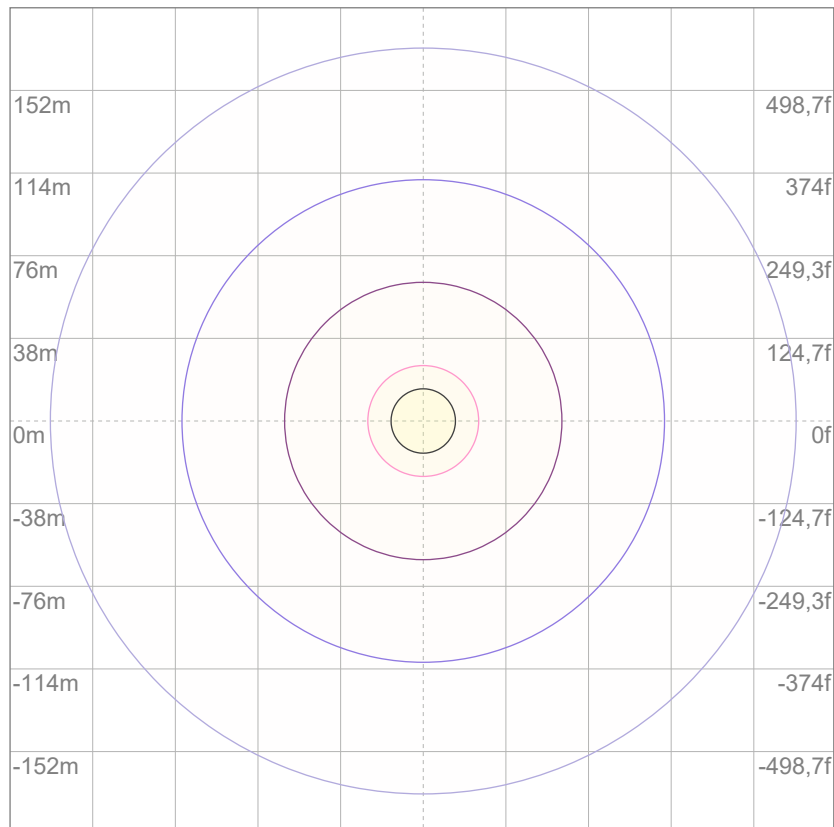
| | |
|-----|--------|
| 10% | 59 cd |
| 20% | 117 cd |
| 30% | 176 cd |
| 40% | 234 cd |
| 50% | 293 cd |
| 60% | 352 cd |
| 70% | 410 cd |
| 80% | 469 cd |

Conditions:

Number of c-planes: 2

Candela at center: 586 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,176 lx |
| 5% | 0,293 lx |
| 10% | 0,586 lx |
| 30% | 1,76 lx |
| 50% | 2,93 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,86 lx

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



Total lumen output:

1728 lm

Peak candela output:

655 cd

Light quality:

CRI: 94,9

Color temperature:

5622 K

PRODUCT NAME:
ECLNANOPANELTWC

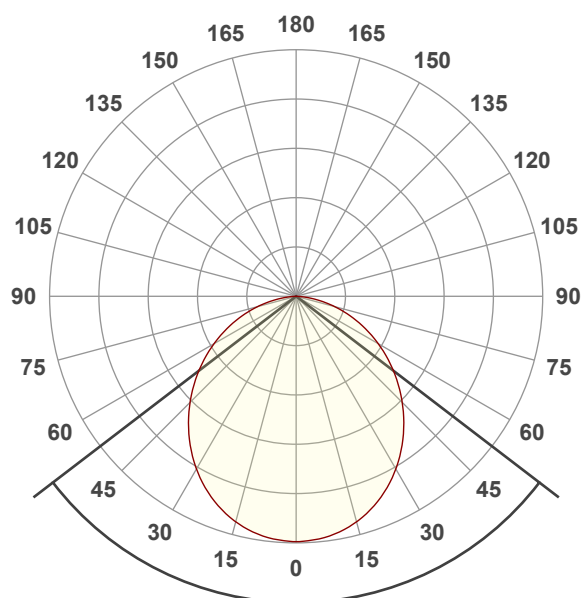
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h 5600K

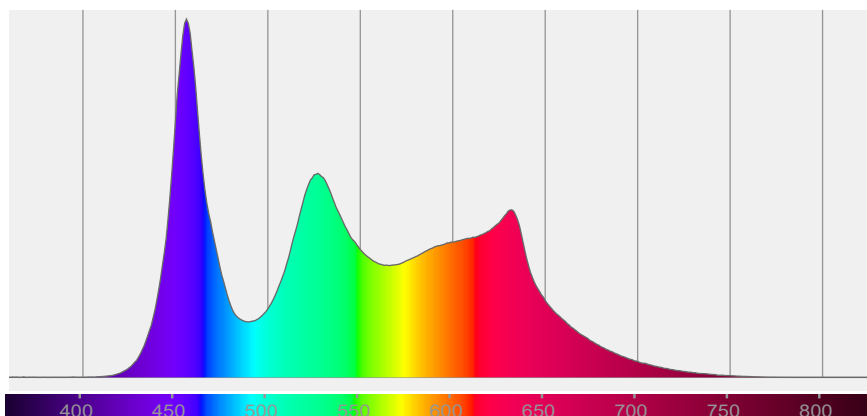
Operator:
Paolo Carvone

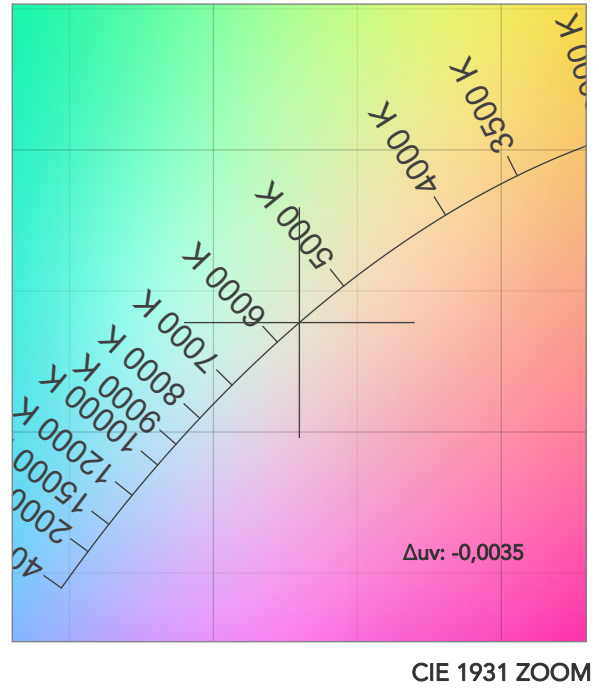
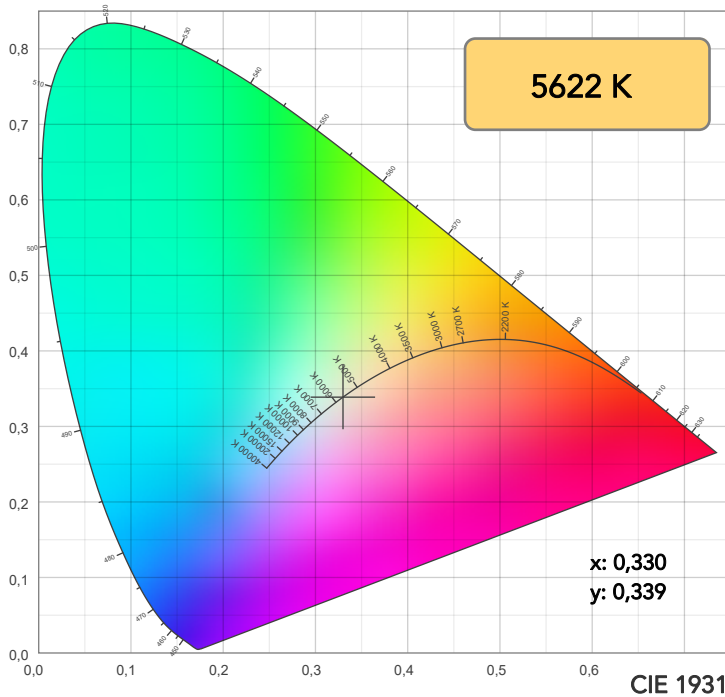
Date and time:
20/05/2022 15:13:28



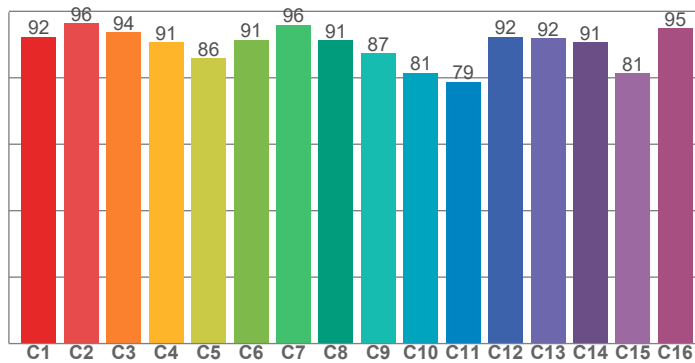
Beam angle 50%: 105,1°
Field angle 10%: 159°
Cut off angle 2.5%: 171,5°

Spectra

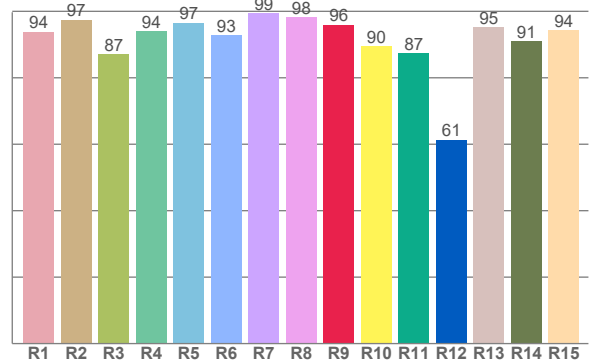




TM30: 89,3



CRI: 94,9 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,8 | 97,5 | 87,2 | 94,1 | 96,6 | 92,8 | 99,3 | 98,2 | 96,0 | 89,5 | 87,3 | 61,4 | 95,1 | 91,1 | 94,3 |

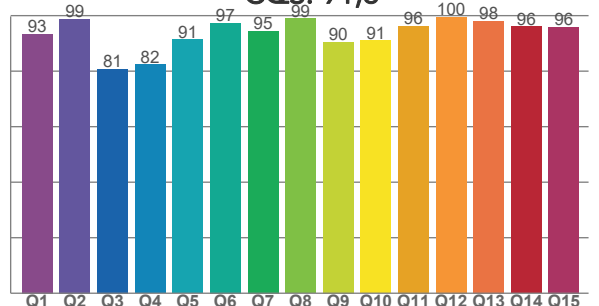
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,4 | 96,3 | 93,7 | 90,6 | 85,9 | 91,4 | 95,9 | 91,2 | 87,4 | 81,5 | 78,7 | 92,3 | 91,8 | 90,7 | 81,3 | 94,9 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,3 | 98,9 | 80,8 | 82,4 | 91,4 | 97,4 | 94,5 | 98,9 | 90,5 | 91,0 | 96,2 | 99,6 | 98,1 | 96,1 | 96,0 |

CQS: 91,6



COLOR PARAMETERS

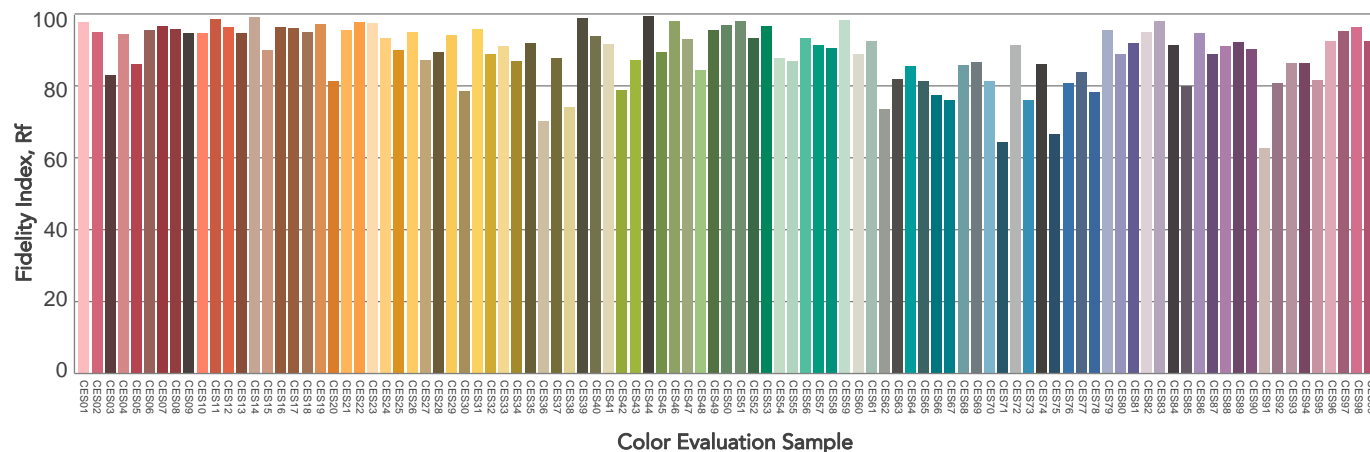
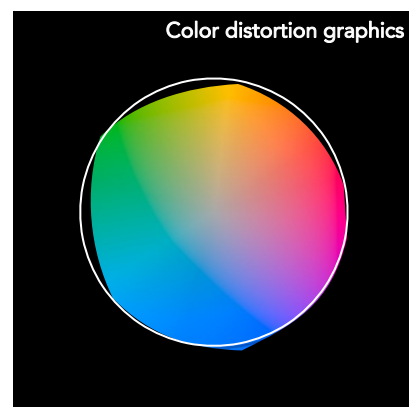
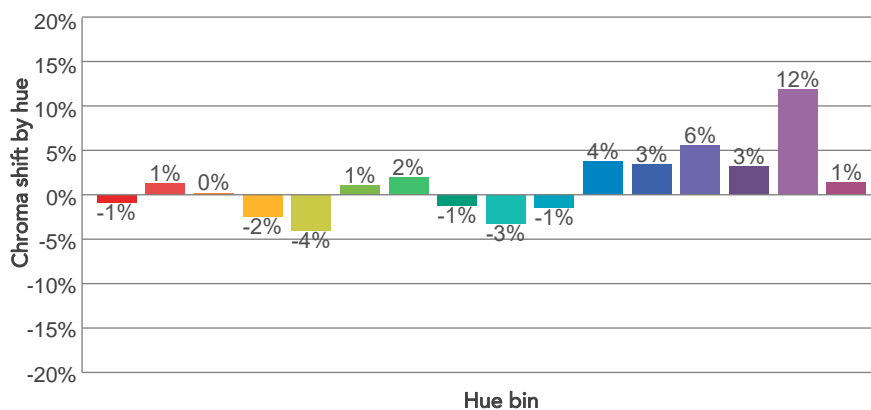
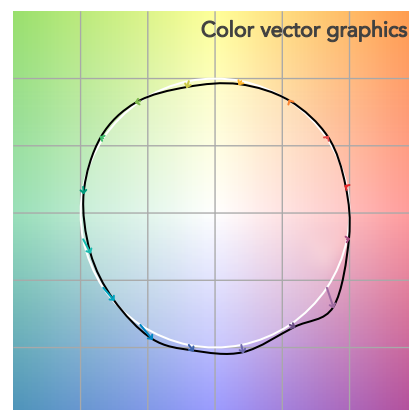
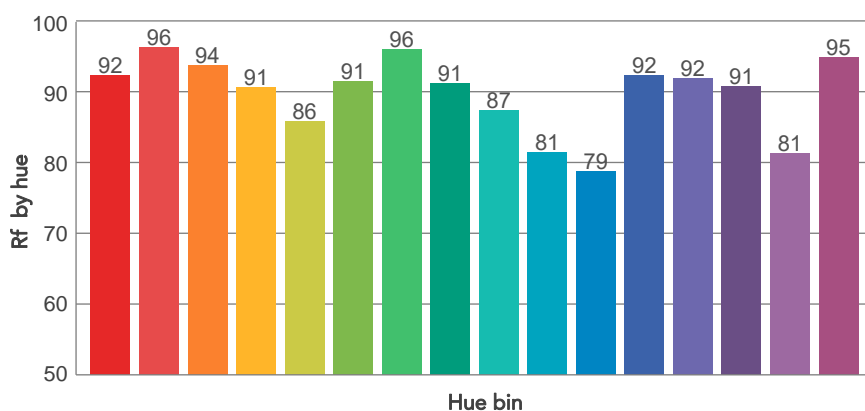
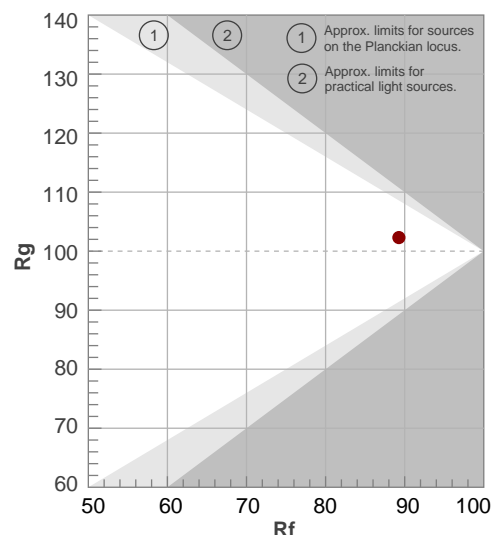
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 5622 K | 94,9 | 96,0 | 89,3 | 102,3 | 91,6 | 92 | 0,330 | 0,339 | -0,0035 |

TM30 DETAILS

Rf 89,3
Fidelity index Rf

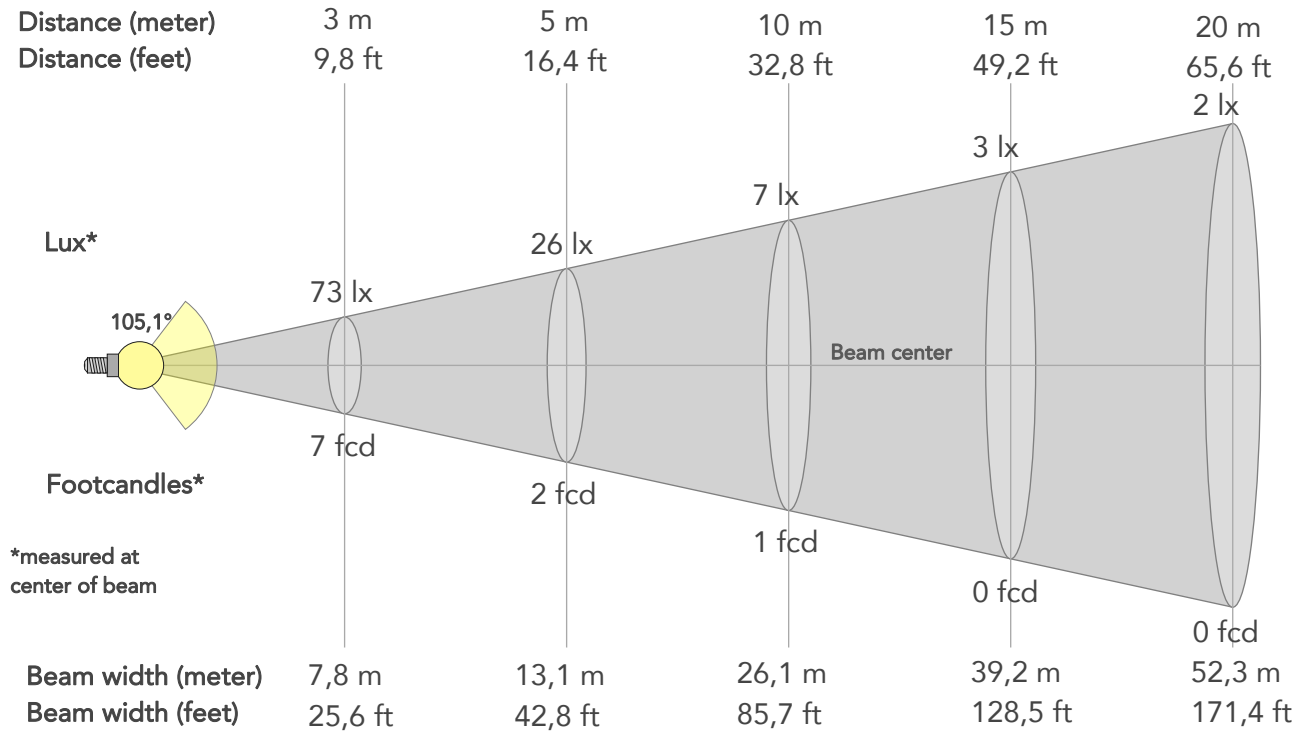
Rg 102,3
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 1% |
| 2 | 96 | 1% | 0% |
| 3 | 94 | 0% | 0% |
| 4 | 91 | -2% | 1% |
| 5 | 86 | -4% | 2% |
| 6 | 91 | 1% | 3% |
| 7 | 96 | 2% | 0% |
| 8 | 91 | -1% | 4% |
| 9 | 87 | -3% | 11% |
| 10 | 81 | -1% | 12% |
| 11 | 79 | 4% | 13% |
| 12 | 92 | 3% | 4% |
| 13 | 92 | 6% | 0% |
| 14 | 91 | 3% | 2% |
| 15 | 81 | 12% | -9% |
| 16 | 95 | 1% | 1% |



BEAM DETAILS

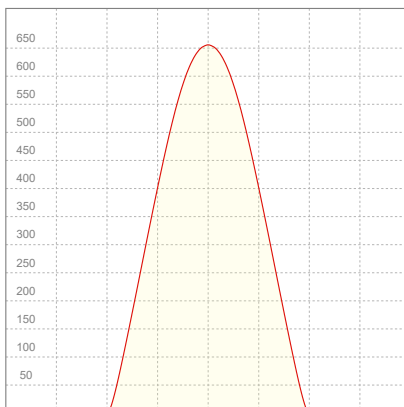
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 105,1° | 159° | 171,5° | 80,3% | 55,8% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 655lx | 164lx | 73lx | 41lx | 26lx | 12lx | 7lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 61fcd | 15fcd | 7fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,6m | 5,2m | 7,8m | 10,5m | 13,1m | 19,6m | 26,1m | 39,2m | 52,3m | 65,3m | 78,4m | 104,5m | 130,6m |
| Beam wid. | 8,6ft | 17,2ft | 25,6ft | 34,2ft | 42,8ft | 64,3ft | 85,7ft | 128,5ft | 171,4ft | 214,2ft | 257,1ft | 342,8ft | 428,5ft |

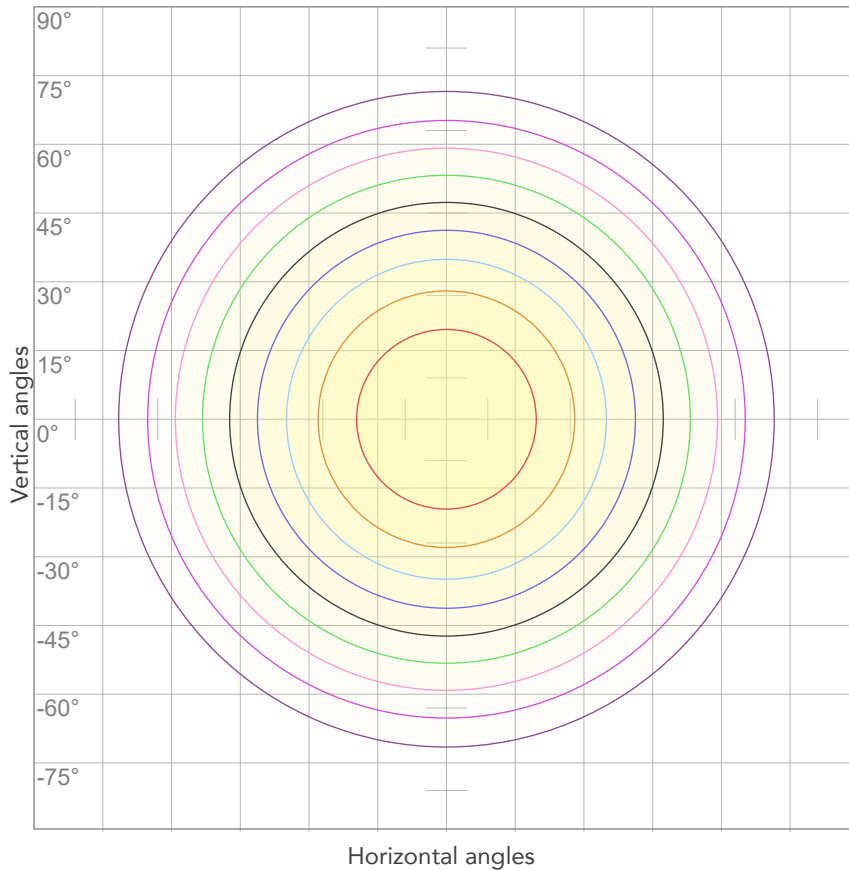
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,220A | 29,5W | 59lm/W |

ISO CANDELA DIAGRAM



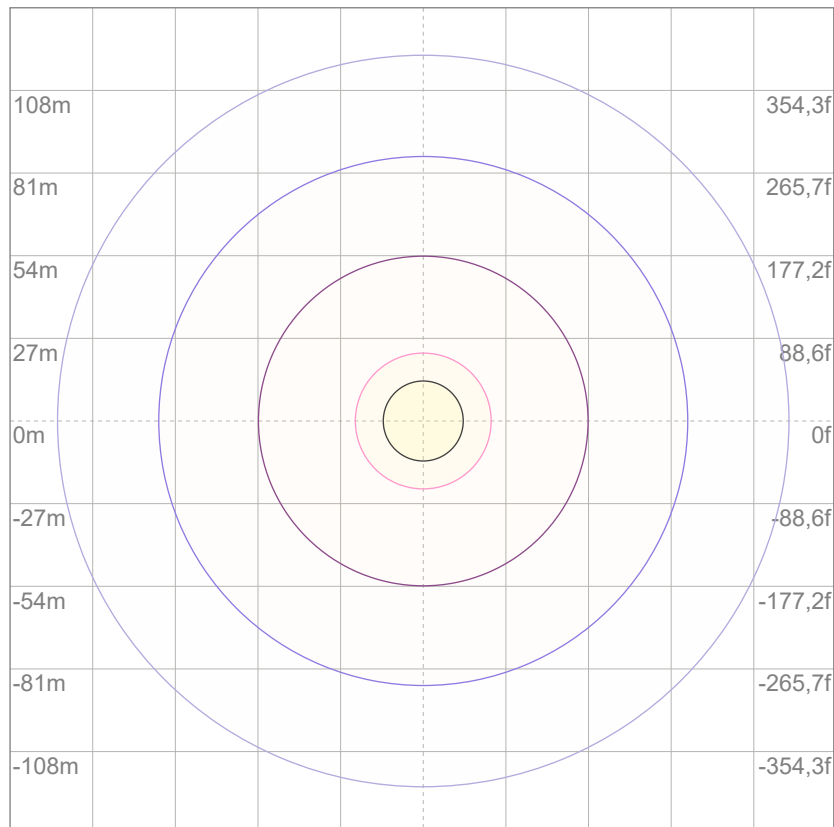
| | |
|-----|--------|
| 10% | 66 cd |
| 20% | 131 cd |
| 30% | 197 cd |
| 40% | 262 cd |
| 50% | 328 cd |
| 60% | 393 cd |
| 70% | 459 cd |
| 80% | 524 cd |

Conditions:

Number of c-planes: 2

Candela at center: 655 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,197 lx |
| 5% | 0,328 lx |
| 10% | 0,655 lx |
| 30% | 1,97 lx |
| 50% | 3,28 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,55 lx

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



Total lumen output:

1639 lm

Peak candela output:

826 cd

Light quality:

CRI: 95,0

Color temperature:

5666 K

PRODUCT NAME:
ECLNANOPANELTWC

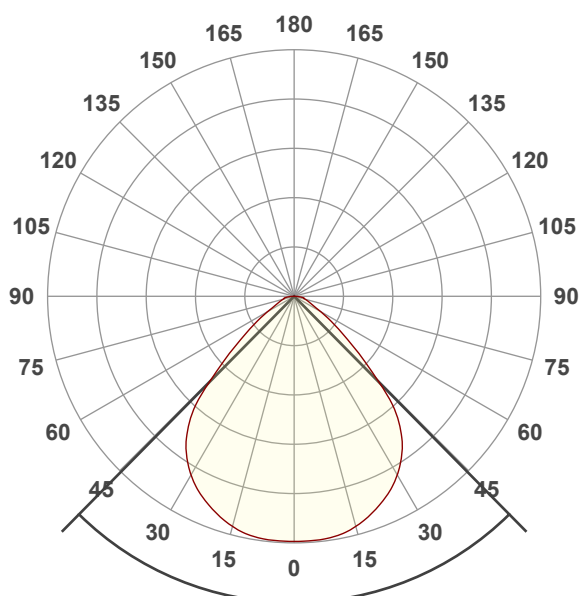
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h 5600K

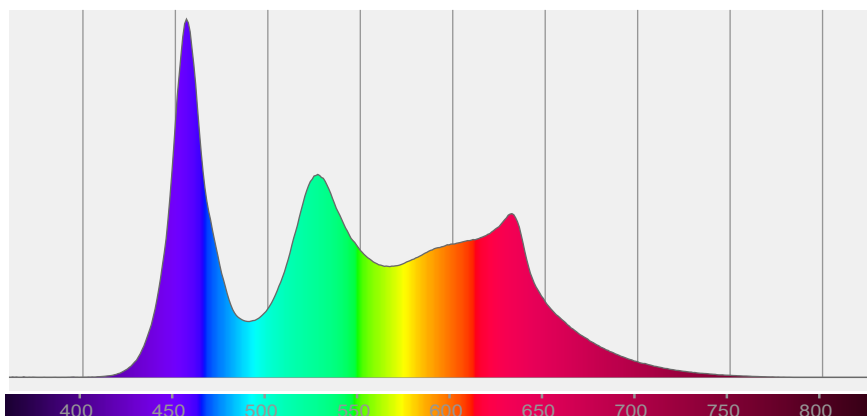
Operator:
Paolo Carvone

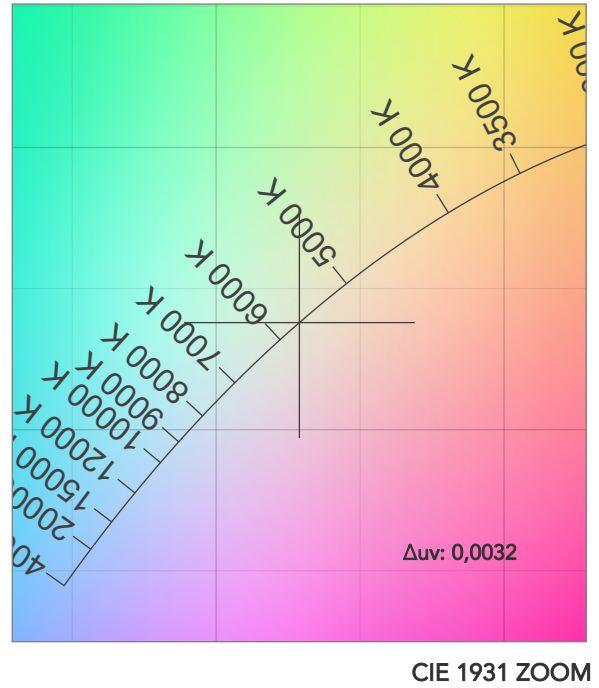
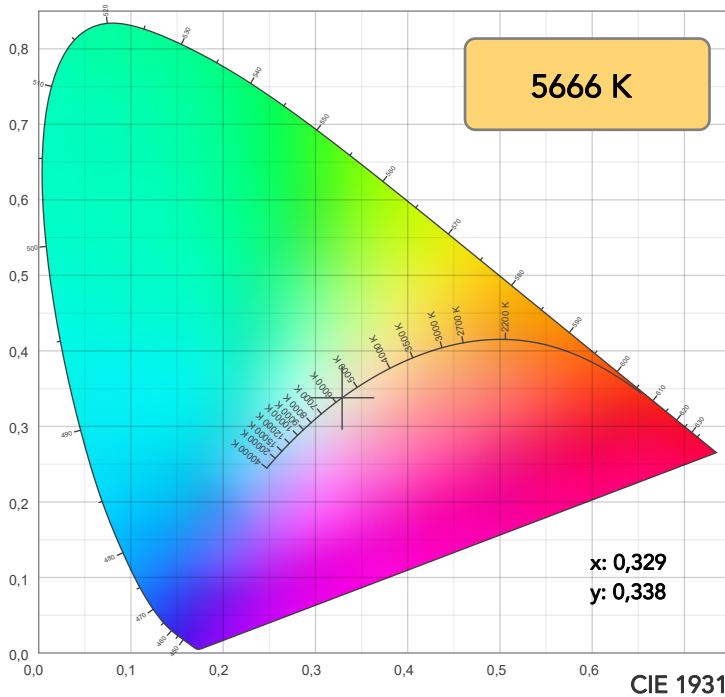
Date and time:
23/05/2022 11:45:21



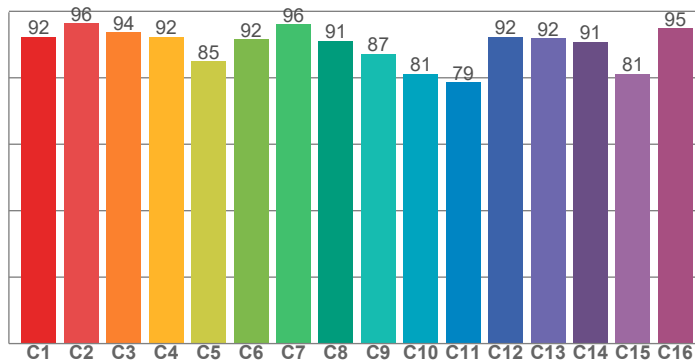
Beam angle 50%: 89,2°
Field angle 10%: 124,5°
Cut off angle 2.5%: 168,1°

Spectra

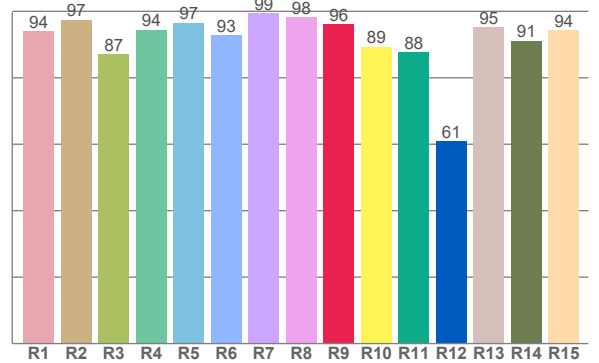




TM30: 89,2



CRI: 95,0 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,0 | 97,5 | 87,2 | 94,5 | 96,6 | 92,8 | 99,5 | 98,2 | 96,0 | 89,4 | 87,7 | 60,9 | 95,3 | 91,1 | 94,3 |

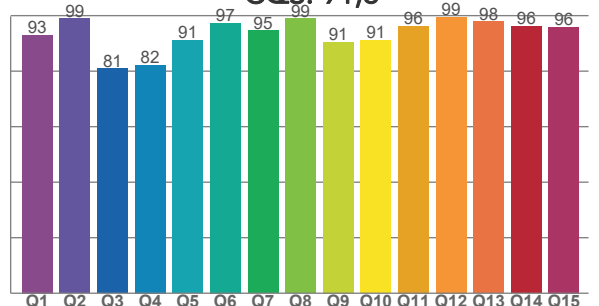
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,3 | 96,4 | 93,7 | 92,3 | 84,9 | 91,5 | 96,1 | 91,0 | 87,1 | 81,2 | 78,7 | 92,4 | 91,9 | 90,8 | 81,2 | 94,9 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,1 | 98,9 | 81,0 | 82,2 | 91,1 | 97,3 | 94,6 | 98,9 | 90,5 | 91,1 | 96,3 | 99,4 | 97,9 | 96,2 | 95,9 |

CQS: 91,6



COLOR PARAMETERS

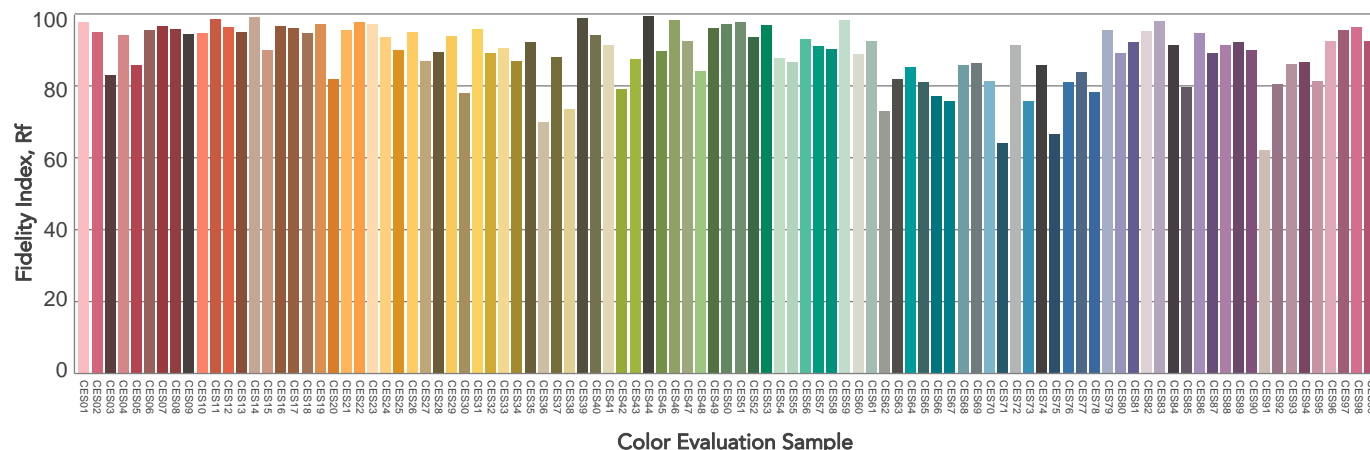
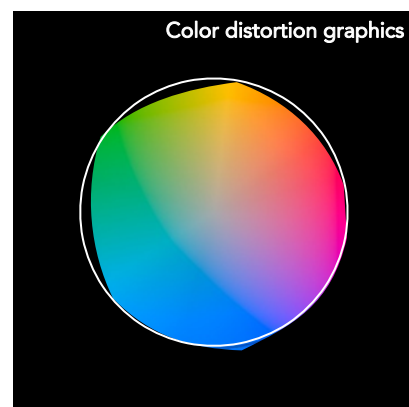
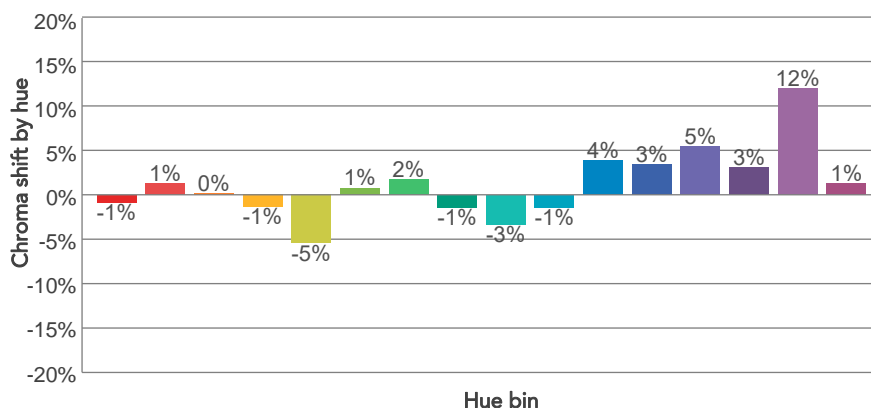
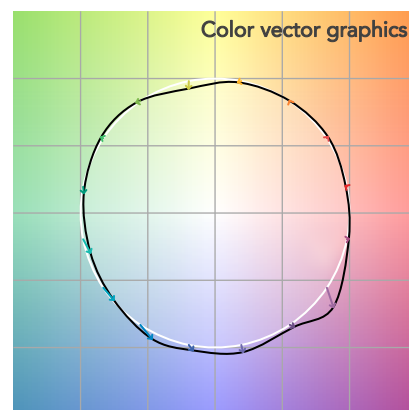
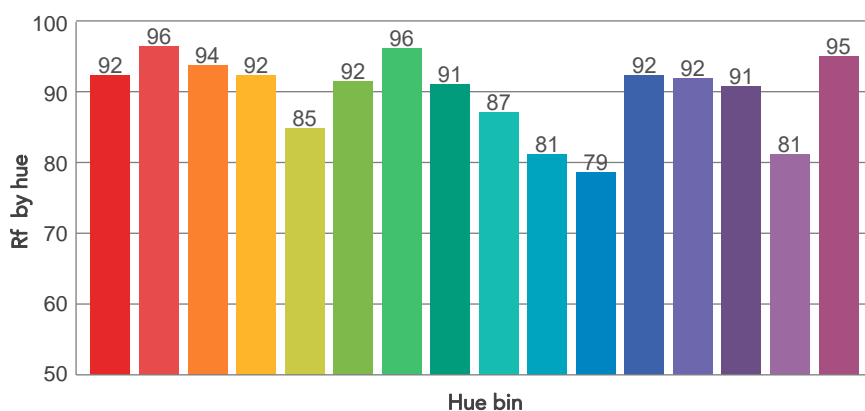
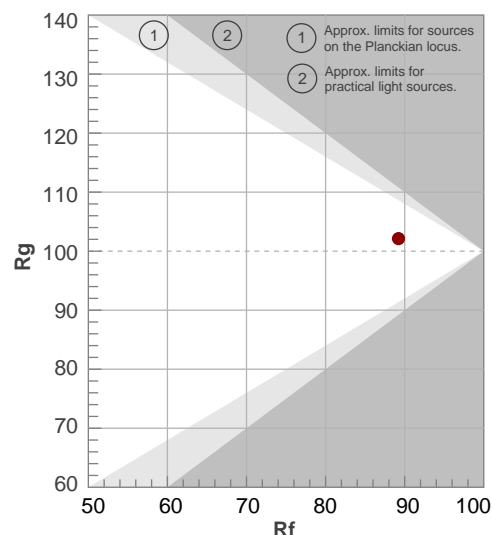
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 5666 K | 95,0 | 96,0 | 89,2 | 102,1 | 91,6 | 92 | 0,329 | 0,338 | 0,0032 |

TM30 DETAILS

Rf 89,2
Fidelity index Rf

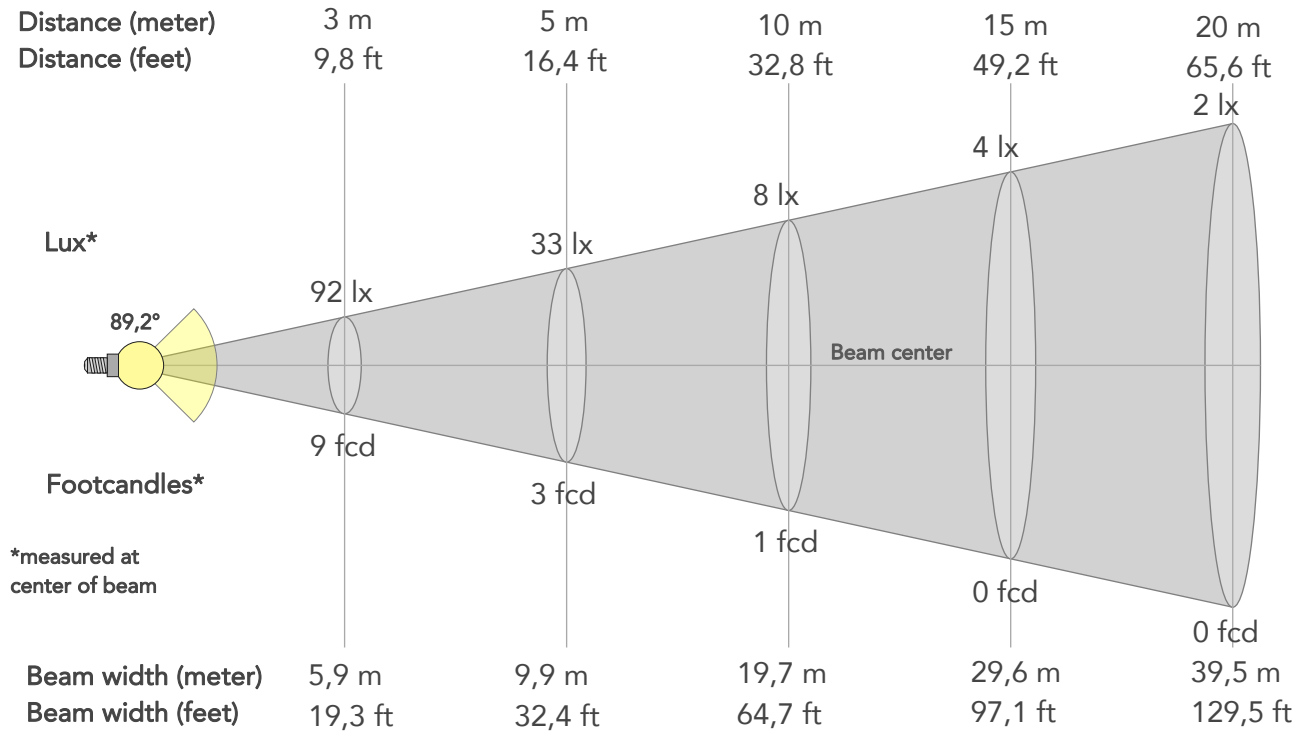
Rg 102,1
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 1% |
| 2 | 96 | 1% | 0% |
| 3 | 94 | 0% | 0% |
| 4 | 92 | -1% | 2% |
| 5 | 85 | -5% | 1% |
| 6 | 92 | 1% | 3% |
| 7 | 96 | 2% | 0% |
| 8 | 91 | -1% | 5% |
| 9 | 87 | -3% | 11% |
| 10 | 81 | -1% | 12% |
| 11 | 79 | 4% | 13% |
| 12 | 92 | 3% | 4% |
| 13 | 92 | 5% | 0% |
| 14 | 91 | 3% | 2% |
| 15 | 81 | 12% | -9% |
| 16 | 95 | 1% | 1% |



BEAM DETAILS

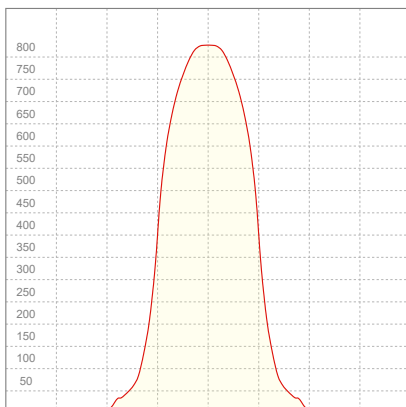
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,2° | 124,5° | 168,1° | 91,4% | 74,4% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 826lx | 207lx | 92lx | 52lx | 33lx | 15lx | 8lx | 4lx | 2lx | 1lx | 1lx | 1lx | 0lx |
| Footcand. | 77fcd | 19fcd | 9fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 3,9m | 5,9m | 7,9m | 9,9m | 14,8m | 19,7m | 29,6m | 39,5m | 49,3m | 59,2m | 78,9m | 98,7m |
| Beam wid. | 6,5ft | 13ft | 19,3ft | 25,9ft | 32,4ft | 48,5ft | 64,7ft | 97,1ft | 129,5ft | 161,8ft | 194,2ft | 258,9ft | 323,6ft |

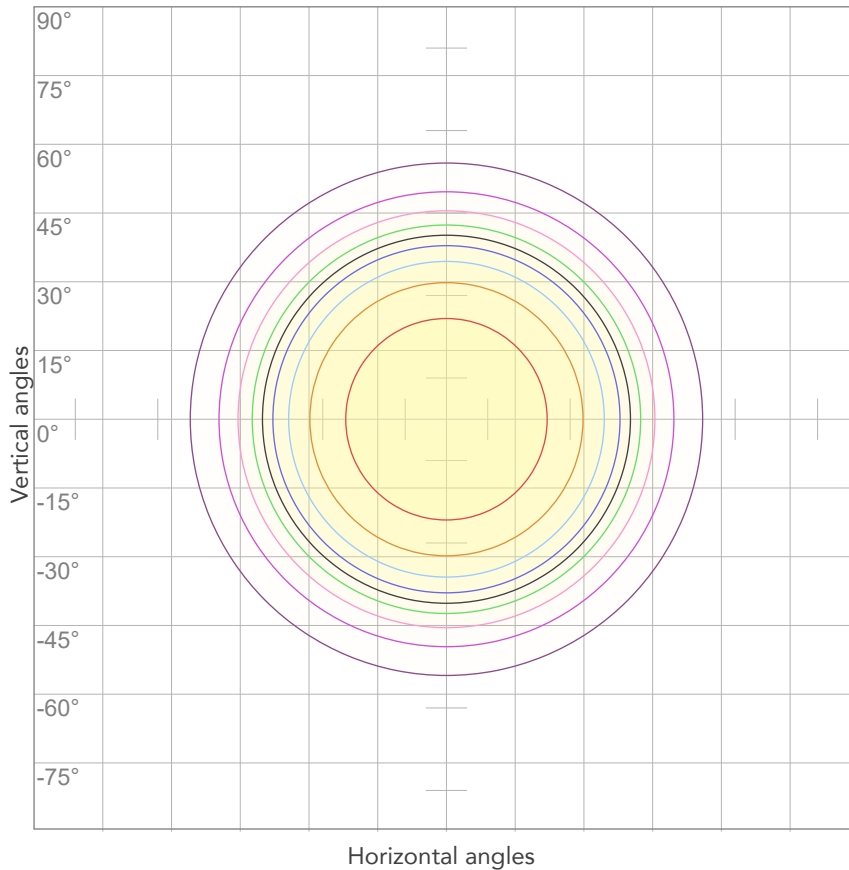
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,220A | 29,5W | 56lm/W |

ISO CANDELA DIAGRAM



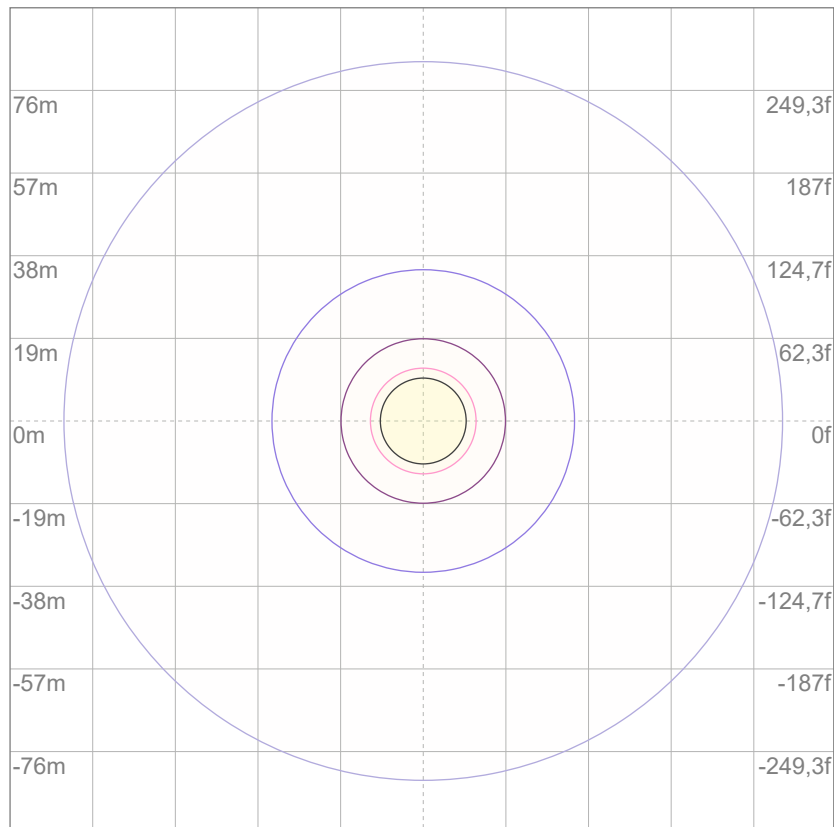
| | |
|-----|--------|
| 10% | 83 cd |
| 20% | 165 cd |
| 30% | 248 cd |
| 40% | 331 cd |
| 50% | 413 cd |
| 60% | 496 cd |
| 70% | 579 cd |
| 80% | 661 cd |

Conditions:

Number of c-planes: 2

Candela at center: 826 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,248 lx |
| 5% | 0,413 lx |
| 10% | 0,826 lx |
| 30% | 2,48 lx |
| 50% | 4,13 lx |

Conditions:

Number of c-planes: 2

Lux at center: 8,26 lx

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



Total lumen output:

1543 lm

Peak candela output:

523 cd

Light quality:

CRI: 94,8

Color temperature:

6077 K

PRODUCT NAME:
ECLNANOPANELTWC

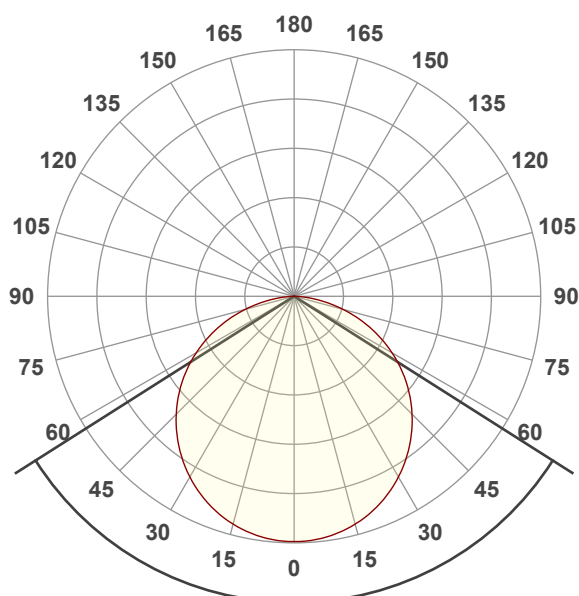
MEASURAMENT CONDITIONS:

Beam angle:
FILTER HD

Target:
2h 6000K

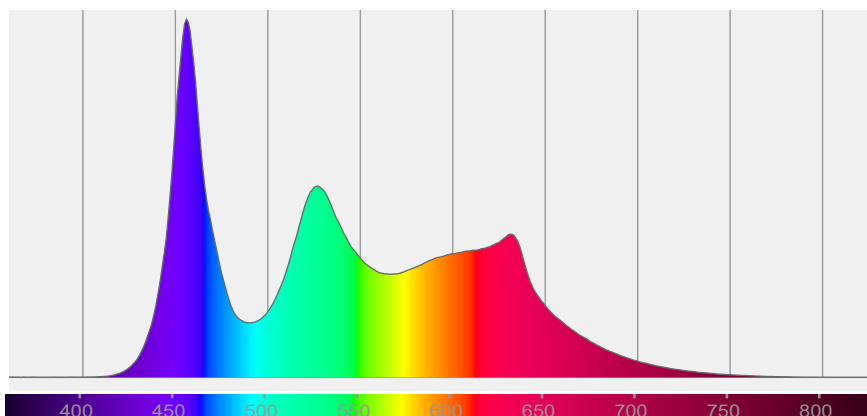
Operator:
Paolo Carvone

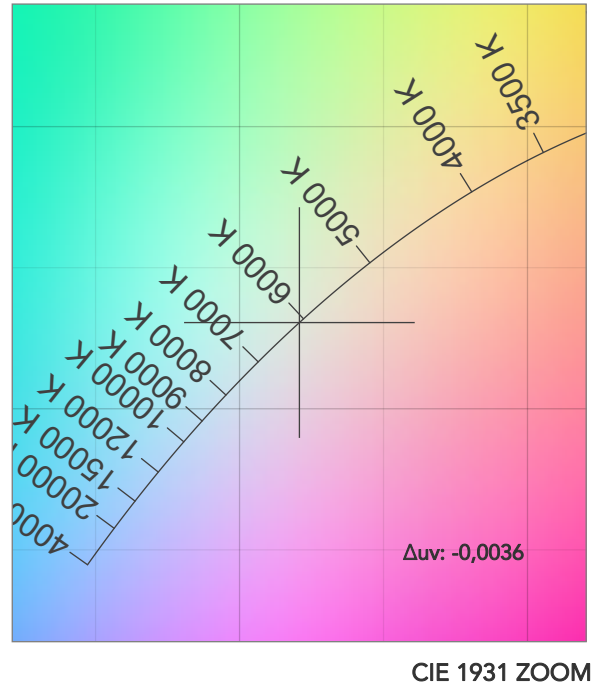
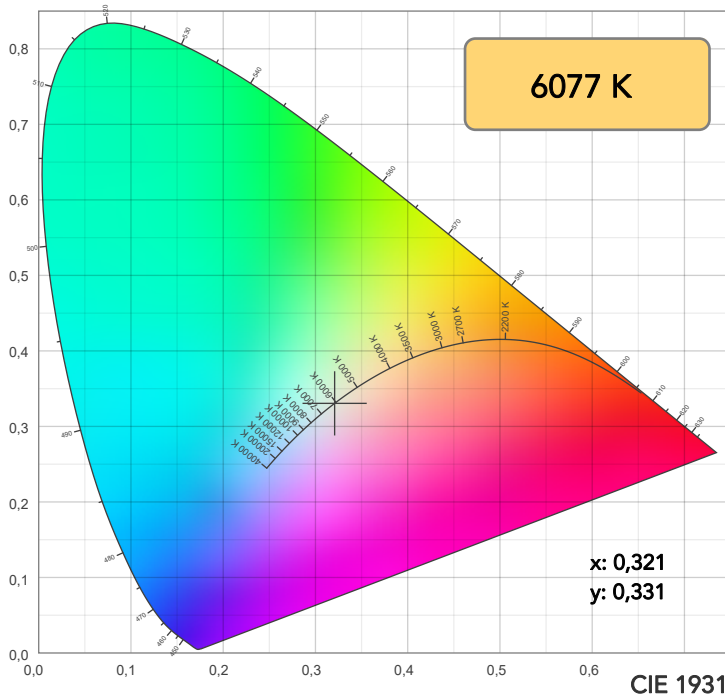
Date and time:
23/05/2022 11:22:35



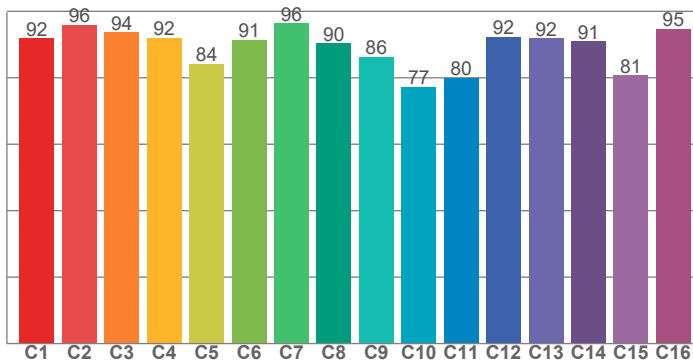
Beam angle 50%: 115,2°
Field angle 10%: 162,8°
Cut off angle 2.5%: 174,2°

Spectra

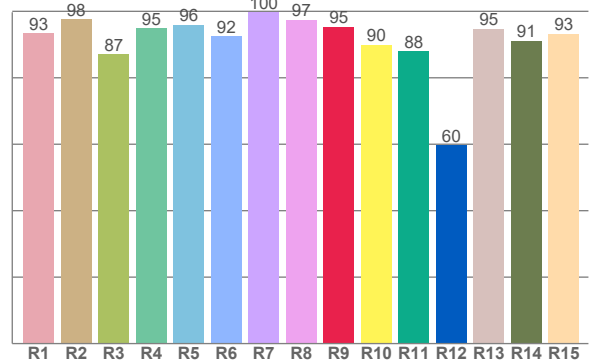




TM30: 88,8



CRI: 94,8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,4 | 97,6 | 87,2 | 95,0 | 95,9 | 92,5 | 99,7 | 97,5 | 95,3 | 89,9 | 88,0 | 59,7 | 94,8 | 91,2 | 93,2 |

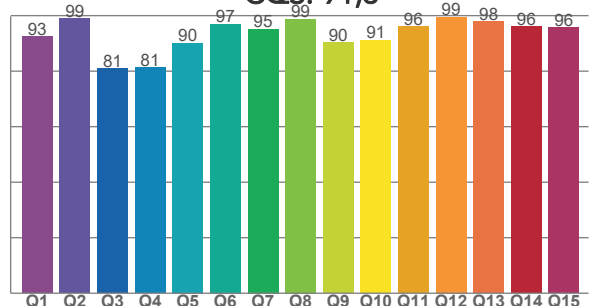
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,9 | 96,0 | 93,6 | 92,1 | 84,3 | 91,4 | 96,4 | 90,4 | 86,3 | 77,3 | 79,9 | 92,3 | 91,9 | 90,9 | 80,7 | 94,7 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,5 | 99,0 | 80,9 | 81,2 | 90,1 | 97,0 | 95,2 | 98,9 | 90,3 | 91,1 | 96,1 | 99,5 | 97,9 | 96,0 | 95,7 |

CQS: 91,3



COLOR PARAMETERS

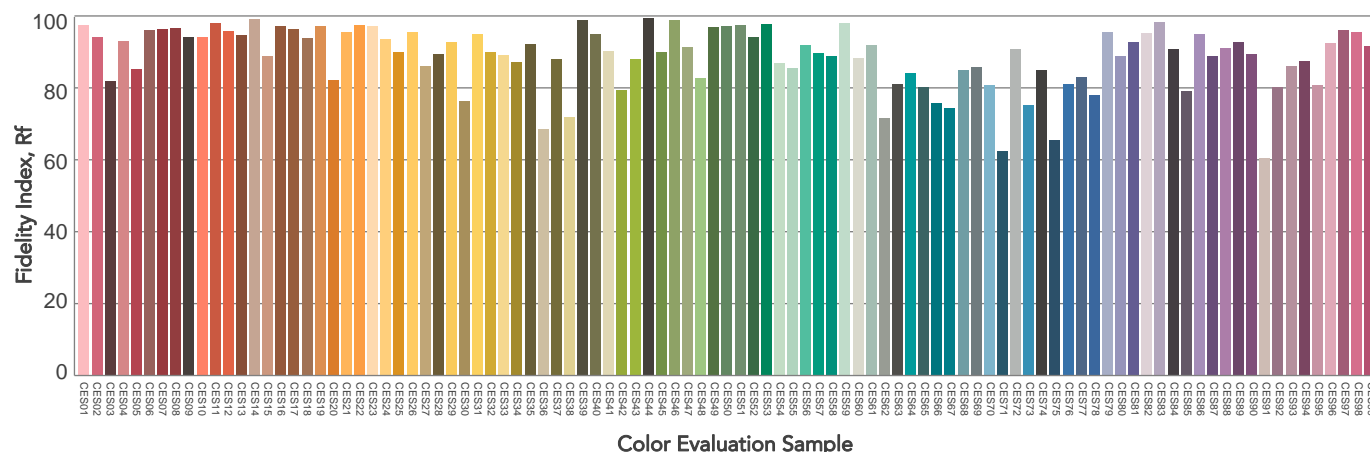
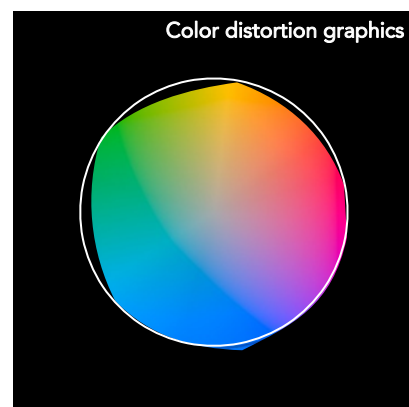
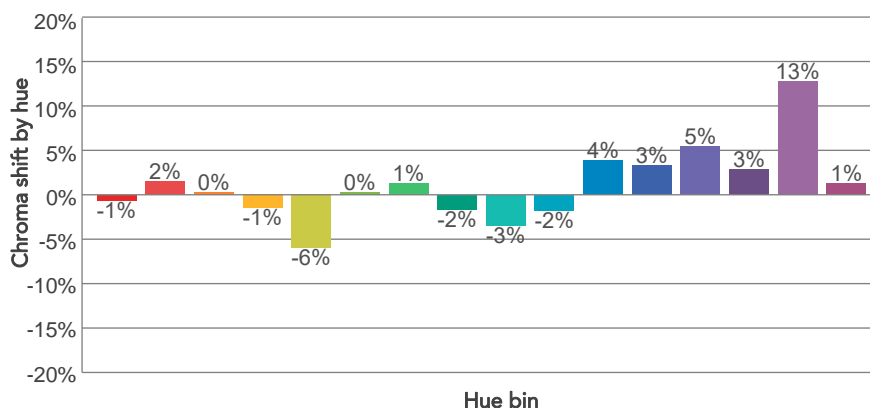
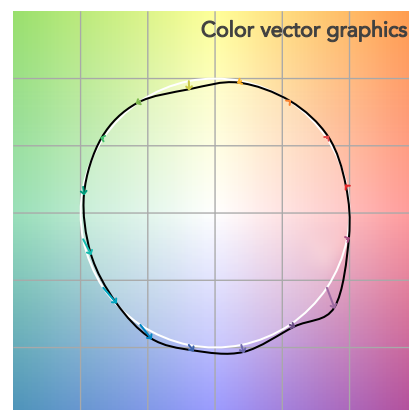
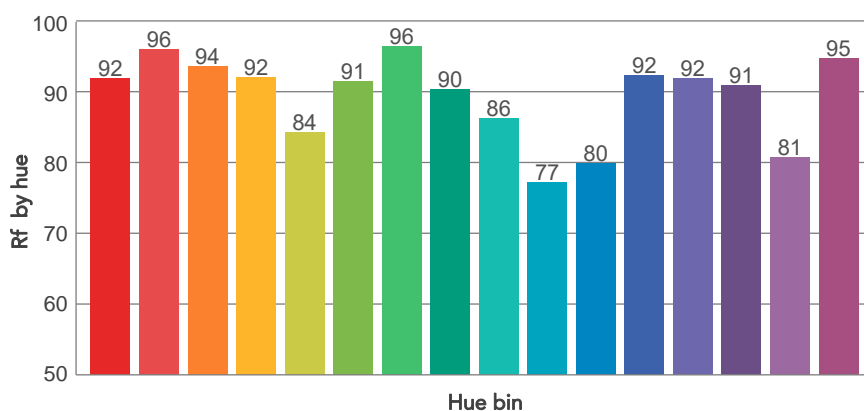
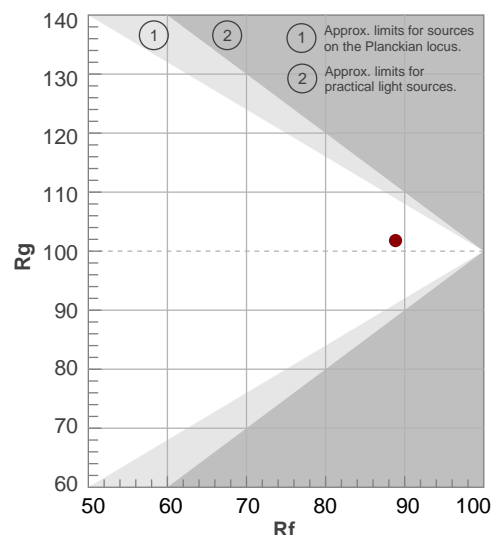
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6077 K | 94,8 | 95,3 | 88,8 | 101,8 | 91,3 | 92 | 0,321 | 0,331 | -0,0036 |

TM30 DETAILS

Rf 88,8
Fidelity index Rf

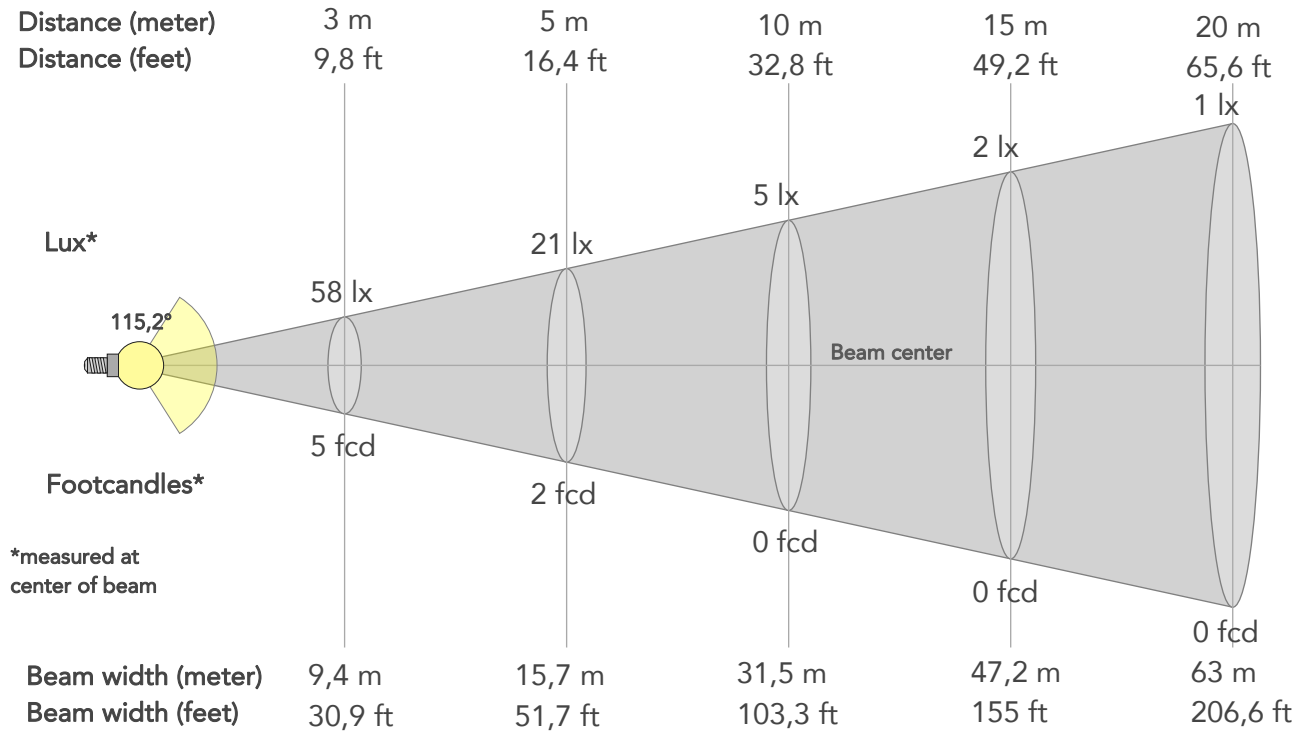
Rg 101,8
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 1% |
| 2 | 96 | 2% | 0% |
| 3 | 94 | 0% | 0% |
| 4 | 92 | -1% | 2% |
| 5 | 84 | -6% | 1% |
| 6 | 91 | 0% | 3% |
| 7 | 96 | 1% | 0% |
| 8 | 90 | -2% | 5% |
| 9 | 86 | -3% | 12% |
| 10 | 77 | -2% | 14% |
| 11 | 80 | 4% | 12% |
| 12 | 92 | 3% | 4% |
| 13 | 92 | 5% | 1% |
| 14 | 91 | 3% | 2% |
| 15 | 81 | 13% | -9% |
| 16 | 95 | 1% | 1% |



BEAM DETAILS

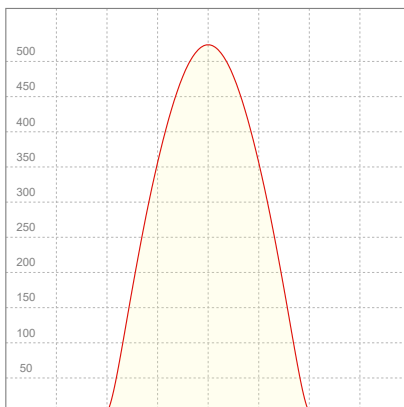
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 115,2° | 162,8° | 174,2° | 77,6% | 52,4% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|--------|--------|--------|--------|--------|---------|--------|---------|---------|--------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 523lx | 131lx | 58lx | 33lx | 21lx | 9lx | 5lx | 2lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 49fcd | 12fcd | 5fcd | 3fcd | 2fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 3,1m | 6,3m | 9,4m | 12,6m | 15,7m | 23,6m | 31,5m | 47,2m | 63m | 78,7m | 94,5m | 126m | 157,5m |
| Beam wid. | 10,4ft | 20,8ft | 30,9ft | 41,3ft | 51,7ft | 77,5ft | 103,3ft | 155ft | 206,6ft | 258,3ft | 310ft | 413,3ft | 516,6ft |

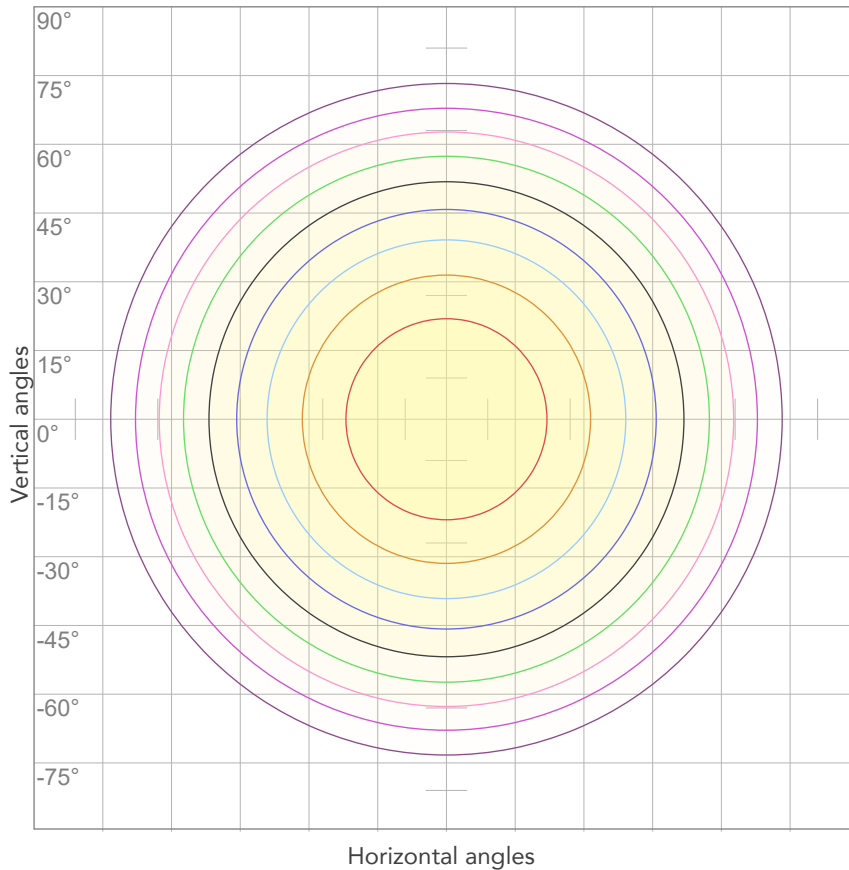
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,220A | 29,5W | 52lm/W |

ISO CANDELA DIAGRAM



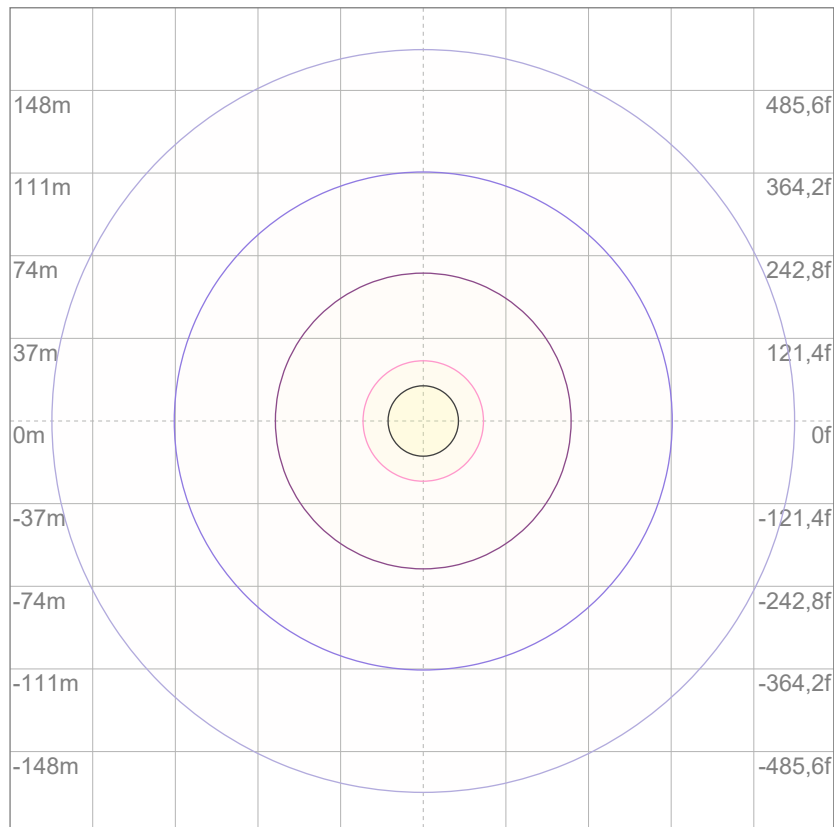
| | |
|-----|--------|
| 10% | 52 cd |
| 20% | 105 cd |
| 30% | 157 cd |
| 40% | 209 cd |
| 50% | 262 cd |
| 60% | 314 cd |
| 70% | 366 cd |
| 80% | 418 cd |

Conditions:

Number of c-planes: 2

Candela at center: 523 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,157 lx |
| 5% | 0,262 lx |
| 10% | 0,523 lx |
| 30% | 1,57 lx |
| 50% | 2,62 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,23 lx

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



Total lumen output:

1641 lm

Peak candela output:

579 cd

Light quality:

CRI: 94,8

Color temperature:

6014 K

PRODUCT NAME:
ECLNANOPANELTWC

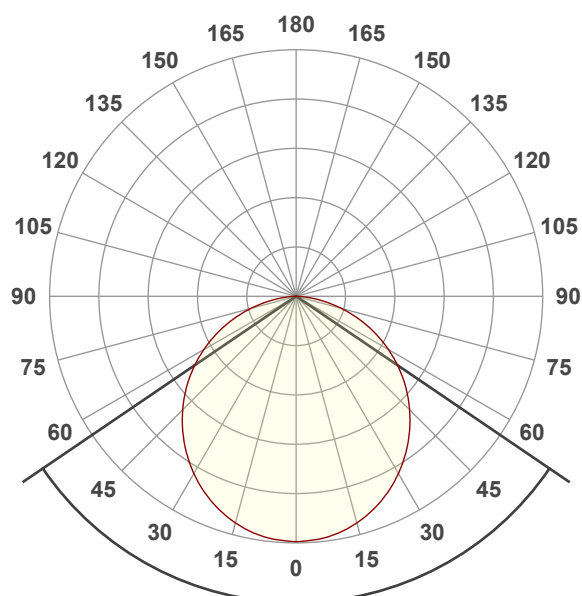
MEASURAMENT CONDITIONS:

Beam angle:
FILTER MD

Target:
2h 6000K

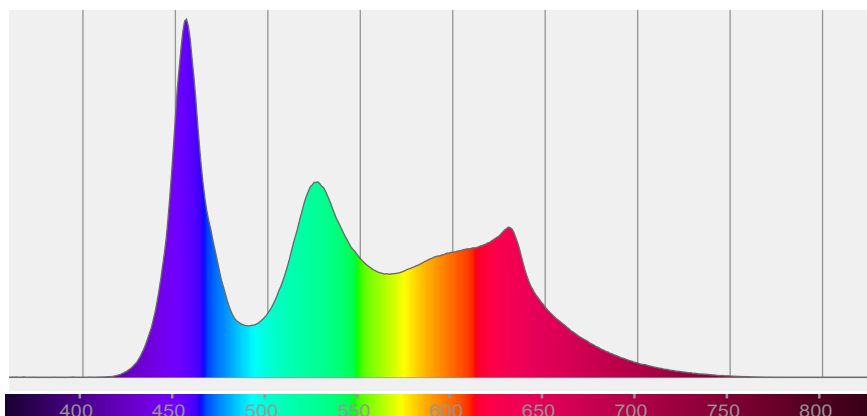
Operator:
Paolo Carvone

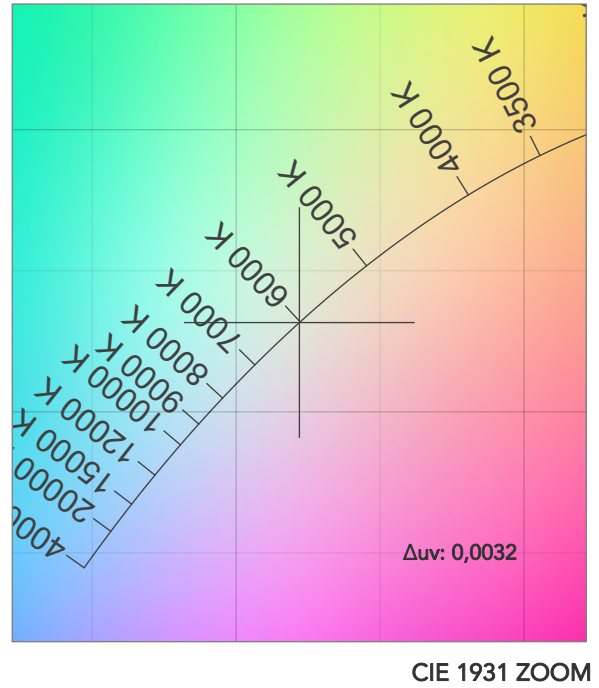
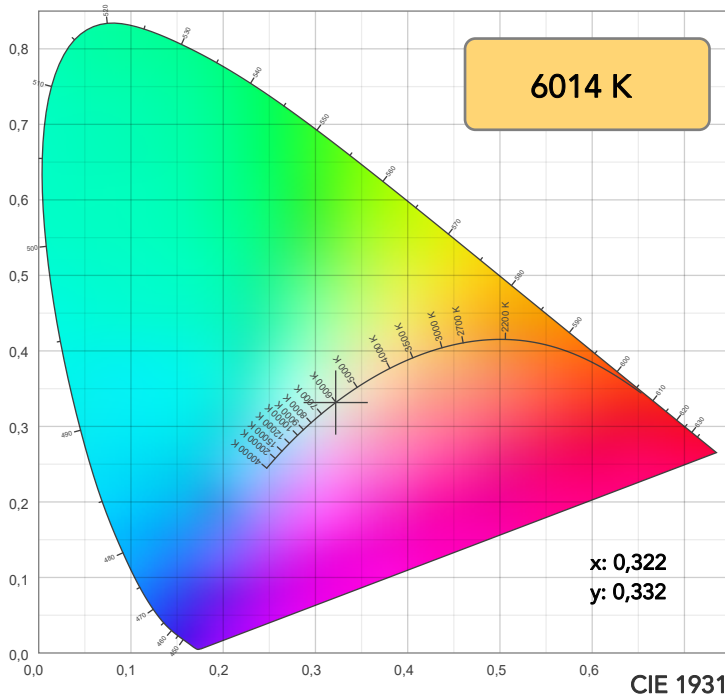
Date and time:
23/05/2022 10:24:43



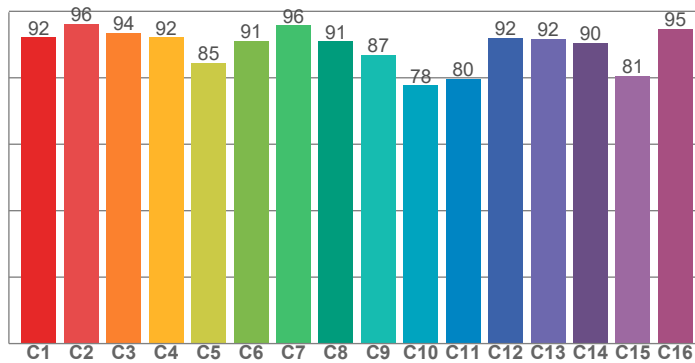
Beam angle 50%: 111,6°
Field angle 10%: 161,6°
Cut off angle 2.5%: 173,4°

Spectra

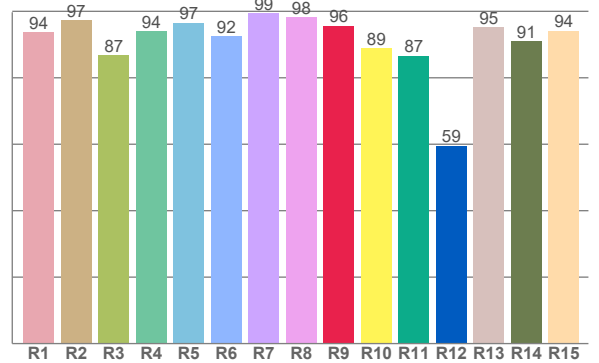




TM30: 88,9



CRI: 94,8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,8 | 97,3 | 86,8 | 94,0 | 96,5 | 92,5 | 99,3 | 98,3 | 95,7 | 88,9 | 86,7 | 59,5 | 95,2 | 90,9 | 94,2 |

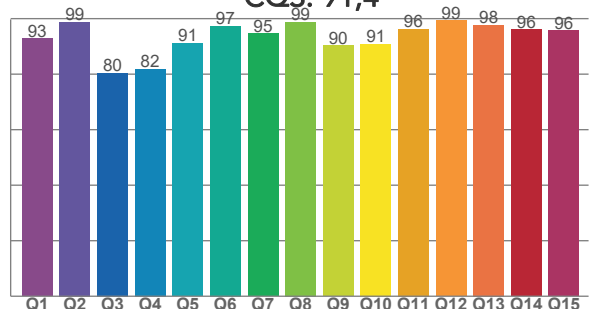
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 96,2 | 93,6 | 92,1 | 84,6 | 91,2 | 95,8 | 90,9 | 86,9 | 77,8 | 79,7 | 92,0 | 91,6 | 90,5 | 80,5 | 94,7 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,8 | 98,8 | 80,5 | 81,8 | 91,1 | 97,3 | 94,7 | 98,8 | 90,3 | 90,8 | 96,3 | 99,3 | 97,8 | 96,1 | 95,8 |

CQS: 91,4



COLOR PARAMETERS

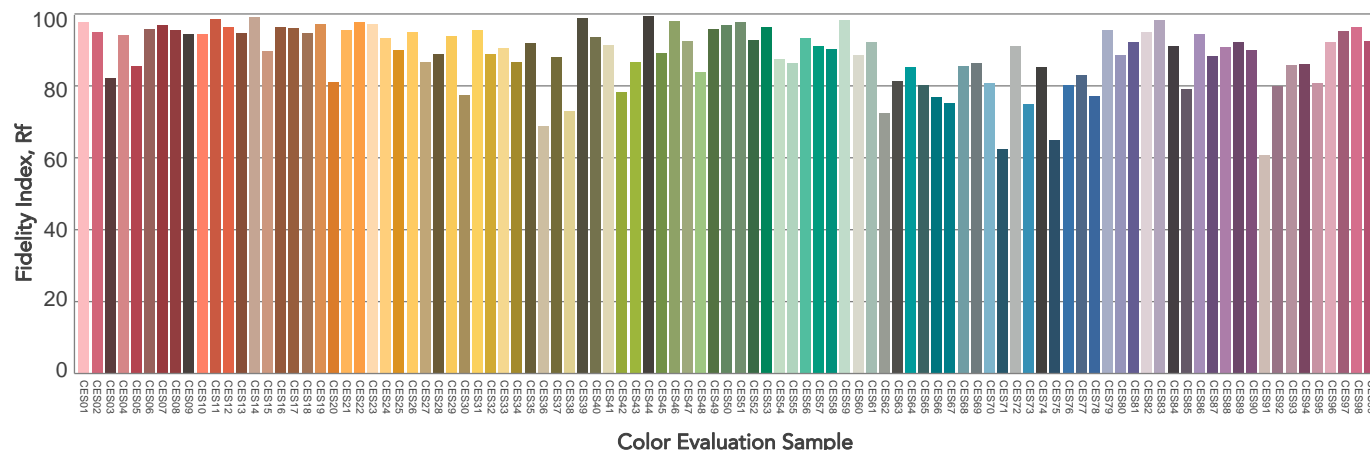
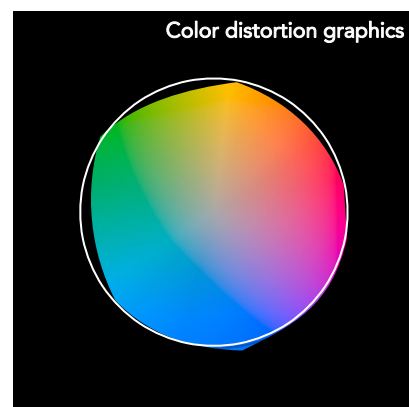
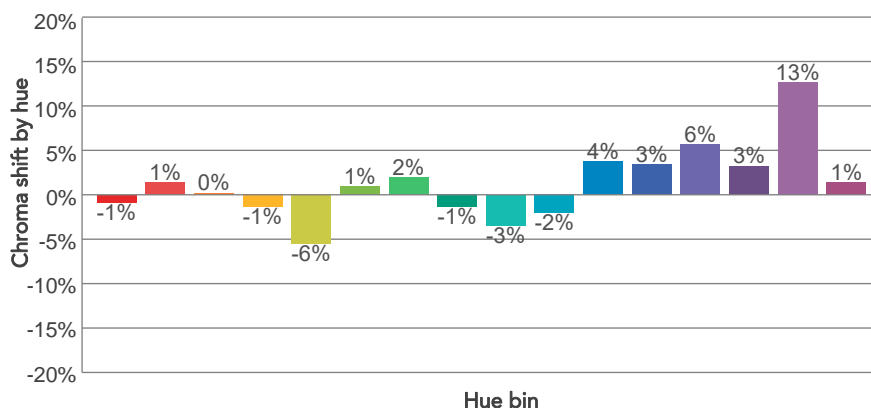
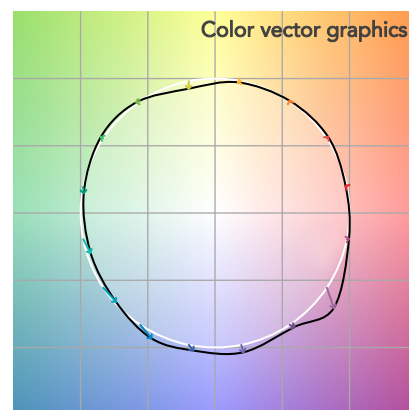
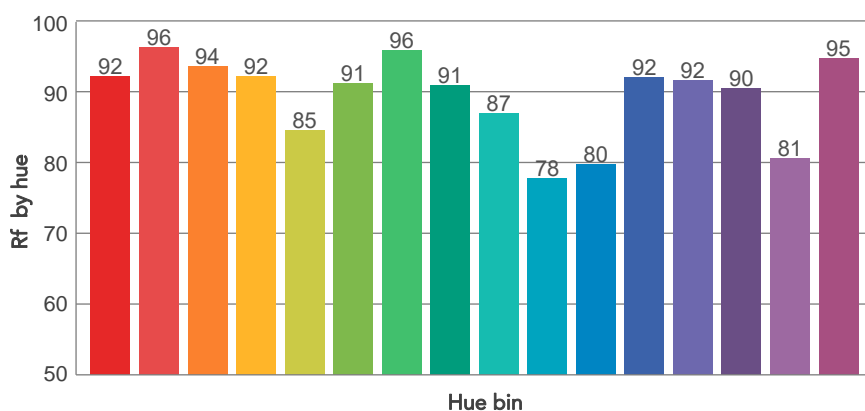
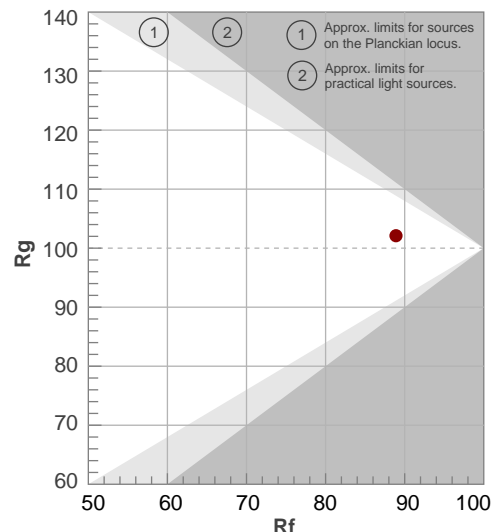
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6014 K | 94,8 | 95,7 | 88,9 | 102,1 | 91,4 | 92 | 0,322 | 0,332 | 0,0032 |

TM30 DETAILS

Rf 88,9
Fidelity index Rf

Rg 102,1
Gammut index

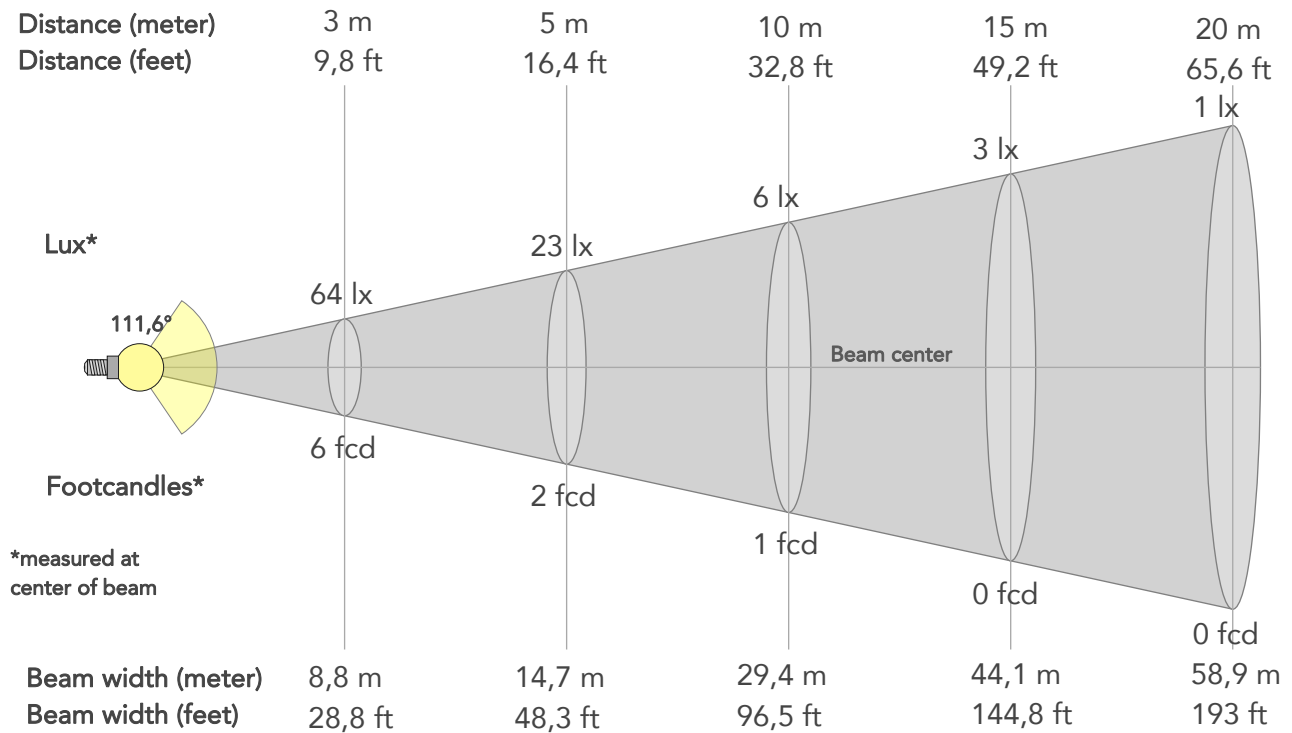
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 92 | -1% | 1% |
| 2 | 96 | 1% | 0% |
| 3 | 94 | 0% | 0% |
| 4 | 92 | -1% | 2% |
| 5 | 85 | -6% | 1% |
| 6 | 91 | 1% | 3% |
| 7 | 96 | 2% | 0% |
| 8 | 91 | -1% | 5% |
| 9 | 87 | -3% | 11% |
| 10 | 78 | -2% | 14% |
| 11 | 80 | 4% | 12% |
| 12 | 92 | 3% | 4% |
| 13 | 92 | 6% | 1% |
| 14 | 90 | 3% | 2% |
| 15 | 81 | 13% | -10% |
| 16 | 95 | 1% | 1% |



BEAM DETAILS



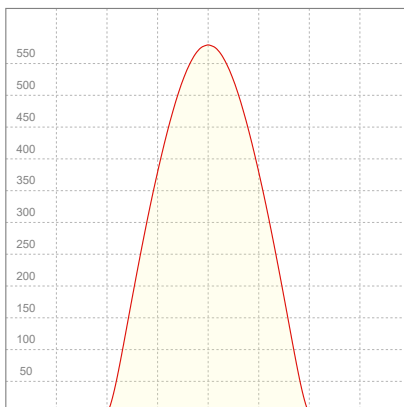
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 111,6° | 161,6° | 173,4° | 78,3% | 53,4% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|--------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 579lx | 145lx | 64lx | 36lx | 23lx | 10lx | 6lx | 3lx | 1lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 54fcd | 13fcd | 6fcd | 3fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,9m | 5,9m | 8,8m | 11,8m | 14,7m | 22,1m | 29,4m | 44,1m | 58,9m | 73,6m | 88,3m | 117,7m | 147,1m |
| Beam wid. | 9,7ft | 19,4ft | 28,8ft | 38,5ft | 48,3ft | 72,4ft | 96,5ft | 144,8ft | 193ft | 241,3ft | 289,6ft | 386,1ft | 482,6ft |

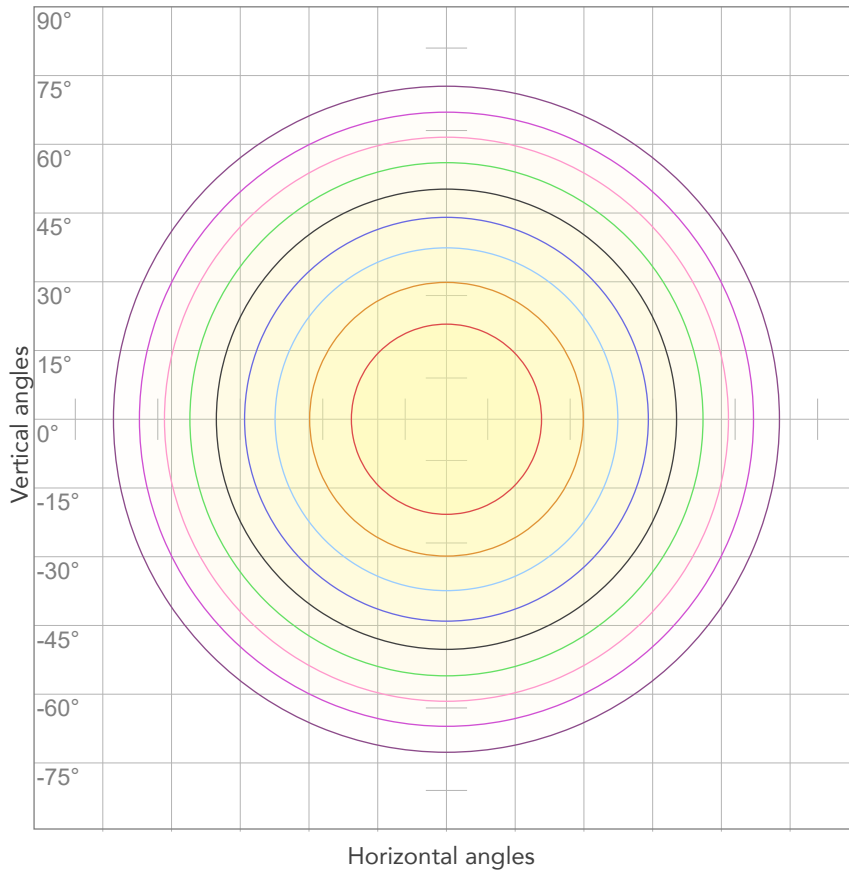
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 228V | 0,221A | 29,8W | 55lm/W |

ISO CANDELA DIAGRAM



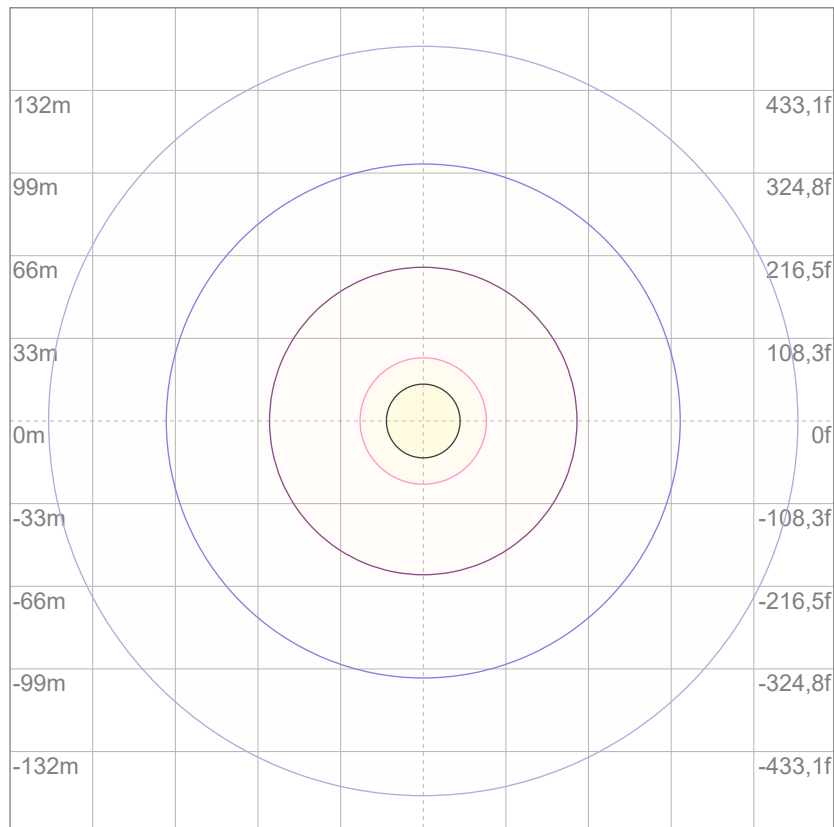
| | |
|-----|--------|
| 10% | 58 cd |
| 20% | 116 cd |
| 30% | 174 cd |
| 40% | 232 cd |
| 50% | 289 cd |
| 60% | 347 cd |
| 70% | 405 cd |
| 80% | 463 cd |

Conditions:

Number of c-planes: 2

Candela at center: 579 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,174 lx |
| 5% | 0,289 lx |
| 10% | 0,579 lx |
| 30% | 1,74 lx |
| 50% | 2,89 lx |

Conditions:

Number of c-planes: 2

Lux at center: 5,79 lx

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



Total lumen output:

1731 lm

Peak candela output:

647 cd

Light quality:

CRI: 95,1

Color temperature:

6073 K

PRODUCT NAME:
ECLNANOPANELTWC

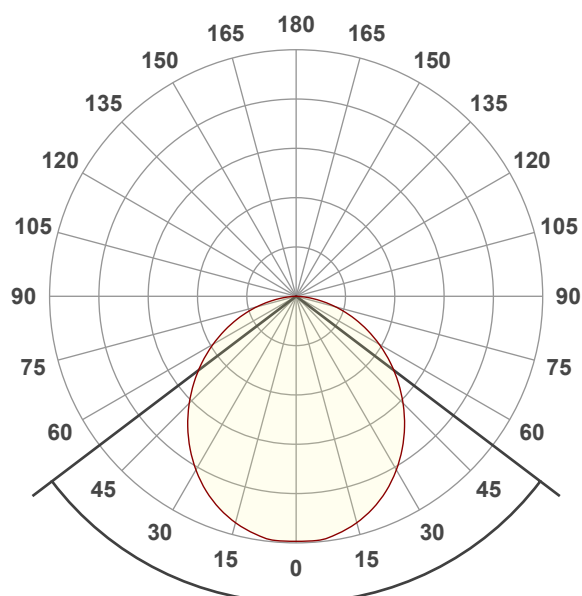
MEASURAMENT CONDITIONS:

Beam angle:
FILTER LD

Target:
2h 6000K

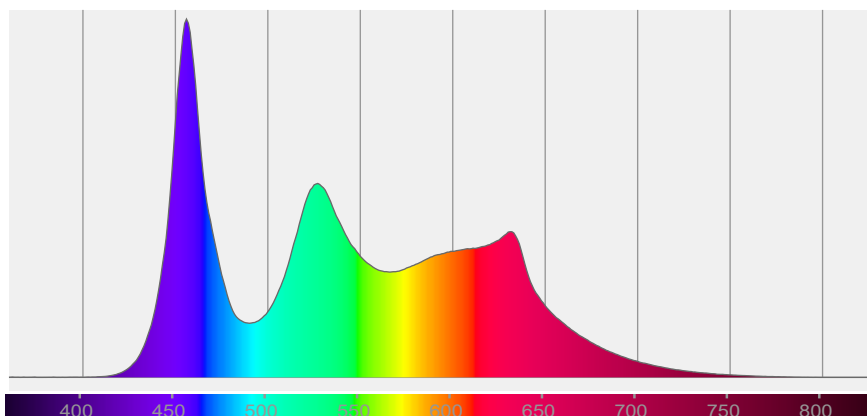
Operator:
Paolo Carvone

Date and time:
20/05/2022 15:15:55

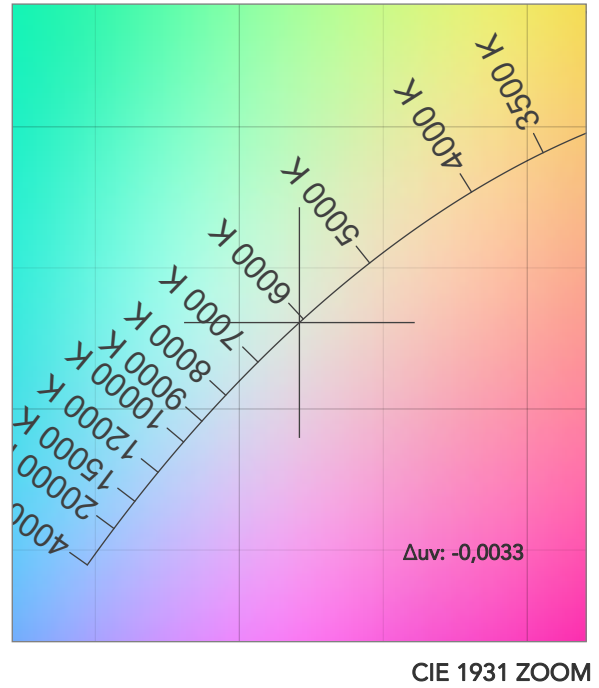
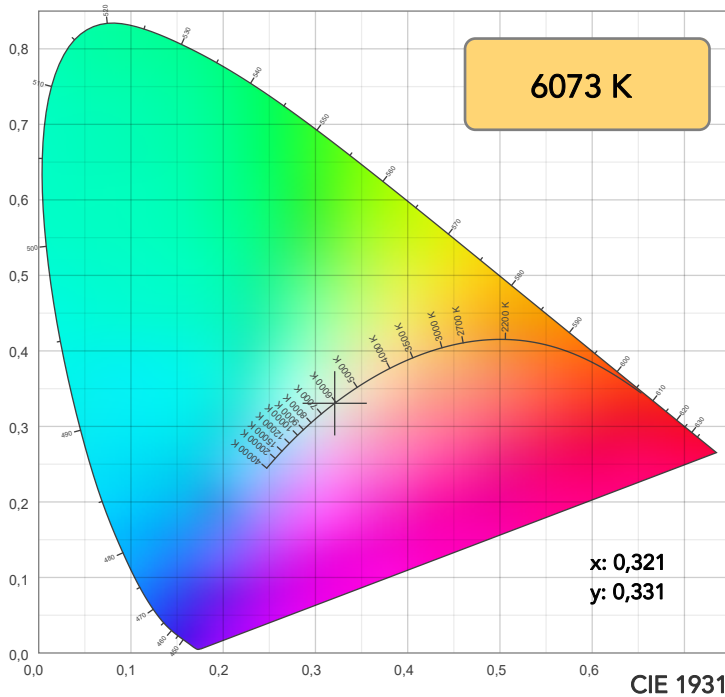


Beam angle 50%: 105,7°
Field angle 10%: 159,6°
Cut off angle 2.5%: 172,4°

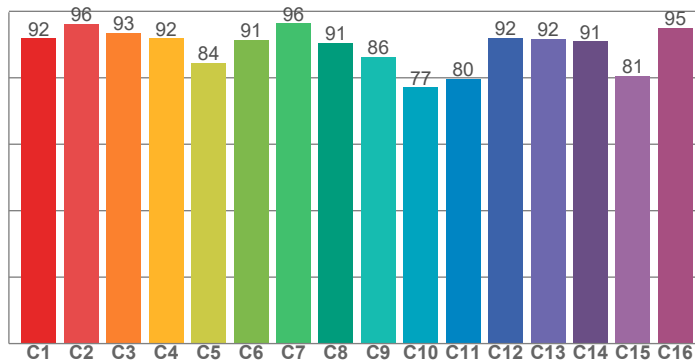
Spectra



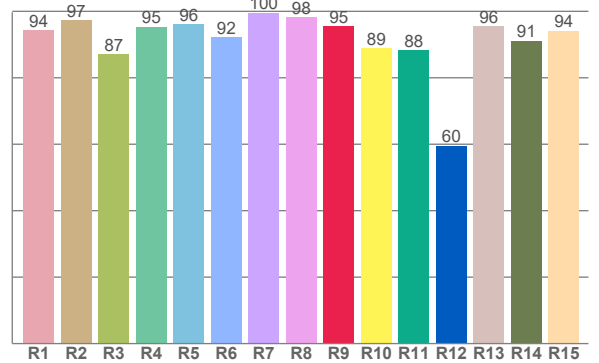
COLOR DETAILS



TM30: 88,8



CRI: 95,1 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,2 | 97,3 | 87,1 | 95,3 | 96,2 | 92,3 | 99,6 | 98,3 | 95,5 | 88,9 | 88,4 | 59,5 | 95,5 | 91,2 | 94,2 |

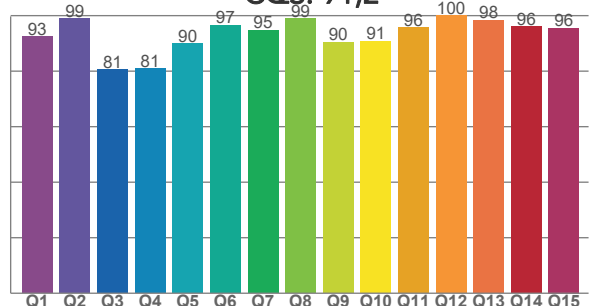
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,9 | 96,2 | 93,5 | 91,9 | 84,4 | 91,5 | 96,4 | 90,6 | 86,4 | 77,1 | 79,7 | 92,1 | 91,7 | 90,9 | 80,7 | 95,0 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 92,5 | 98,9 | 80,6 | 81,0 | 89,9 | 96,5 | 94,7 | 99,0 | 90,4 | 90,8 | 95,6 | 100,0 | 98,3 | 96,1 | 95,6 |

CQS: 91,2



COLOR PARAMETERS

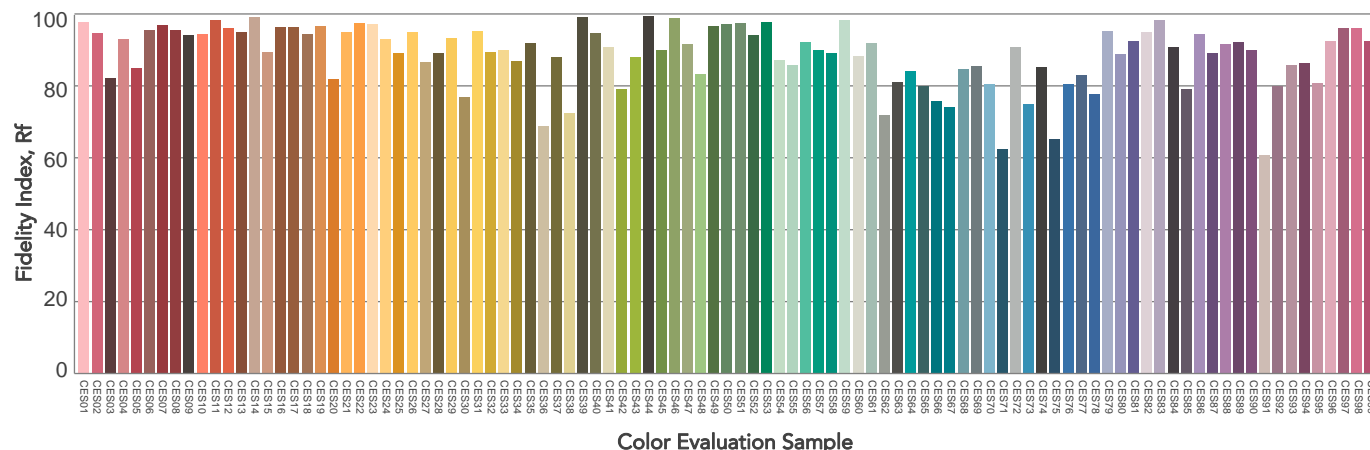
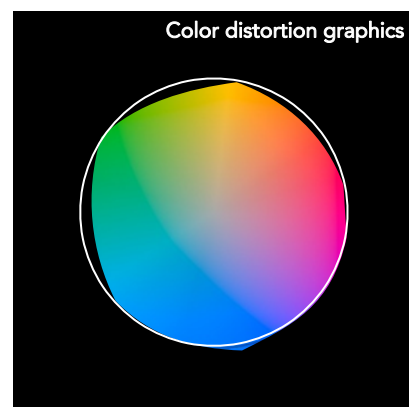
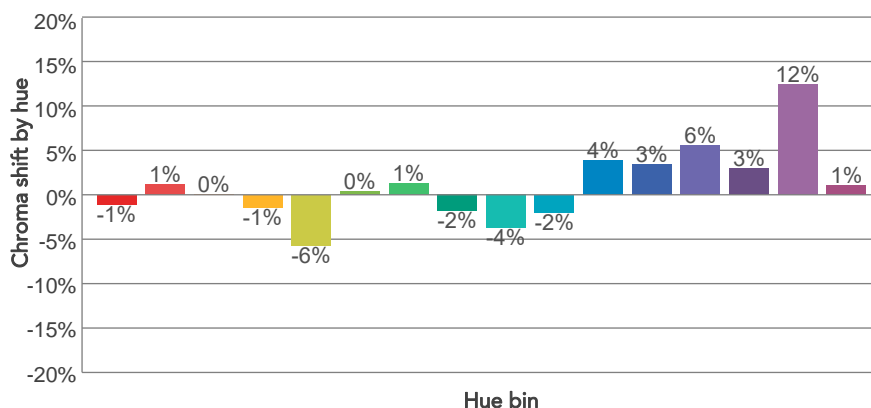
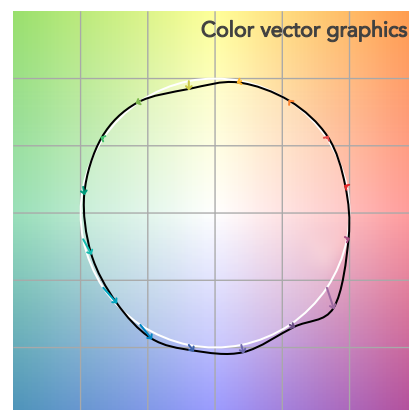
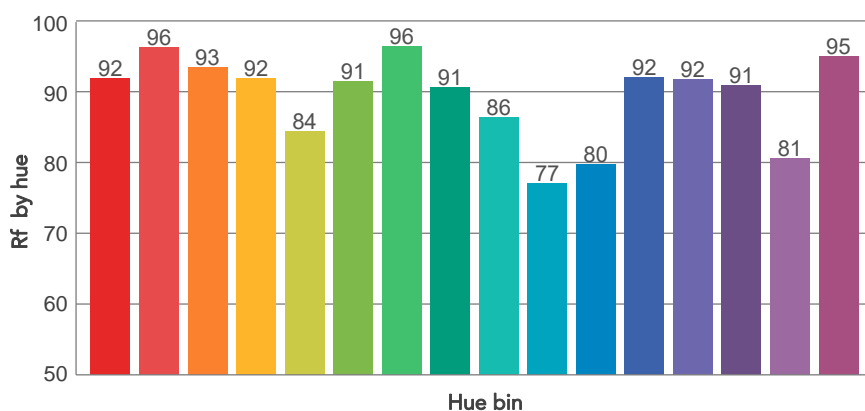
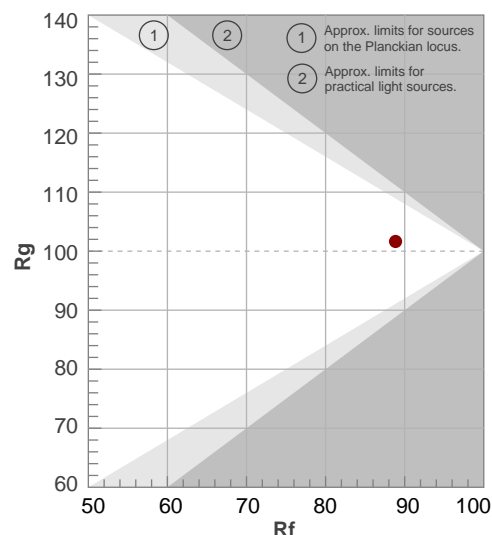
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6073 K | 95,1 | 95,5 | 88,8 | 101,6 | 91,2 | 92 | 0,321 | 0,331 | -0,0033 |

TM30 DETAILS

Rf 88,8
Fidelity index Rf

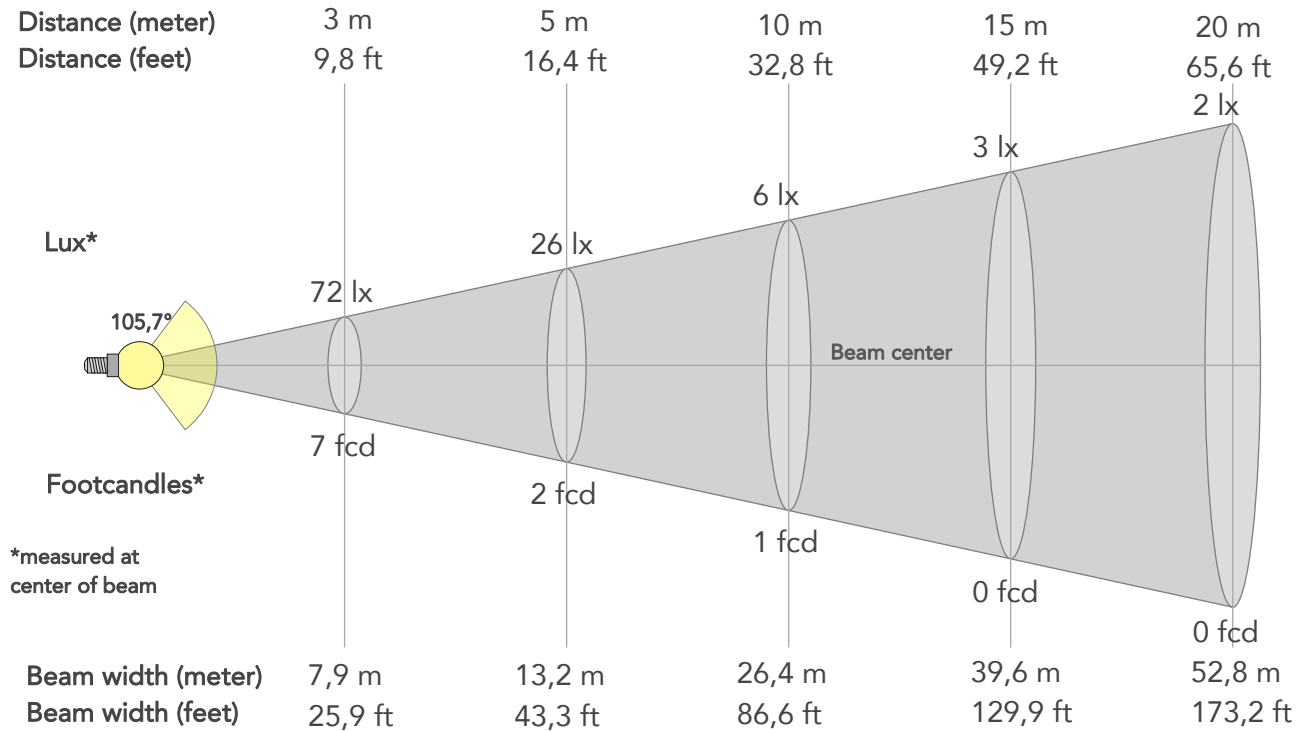
Rg 101,6
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 92 | -1% | 1% |
| 2 | 96 | 1% | 1% |
| 3 | 93 | 0% | 0% |
| 4 | 92 | -1% | 2% |
| 5 | 84 | -6% | 1% |
| 6 | 91 | 0% | 3% |
| 7 | 96 | 1% | 0% |
| 8 | 91 | -2% | 5% |
| 9 | 86 | -4% | 12% |
| 10 | 77 | -2% | 14% |
| 11 | 80 | 4% | 12% |
| 12 | 92 | 3% | 4% |
| 13 | 92 | 6% | 0% |
| 14 | 91 | 3% | 2% |
| 15 | 81 | 12% | -10% |
| 16 | 95 | 1% | 1% |



BEAM DETAILS

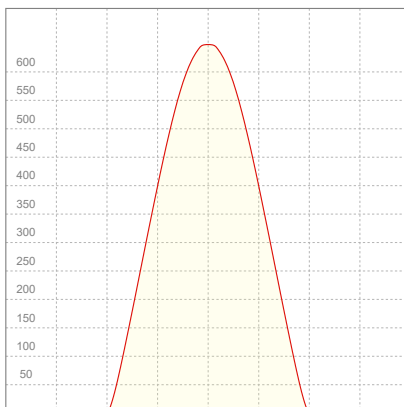
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 105,7° | 159,6° | 172,4° | 79,6% | 55,3% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 647lx | 162lx | 72lx | 40lx | 26lx | 12lx | 6lx | 3lx | 2lx | 1lx | 1lx | 0lx | 0lx |
| Footcand. | 60fcd | 15fcd | 7fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2,6m | 5,3m | 7,9m | 10,6m | 13,2m | 19,8m | 26,4m | 39,6m | 52,8m | 66m | 79,2m | 105,6m | 132m |
| Beam wid. | 8,7ft | 17,4ft | 25,9ft | 34,6ft | 43,3ft | 64,9ft | 86,6ft | 129,9ft | 173,2ft | 216,5ft | 259,8ft | 346,3ft | 432,9ft |

LINEAR DISTRIBUTION DIAGRAM

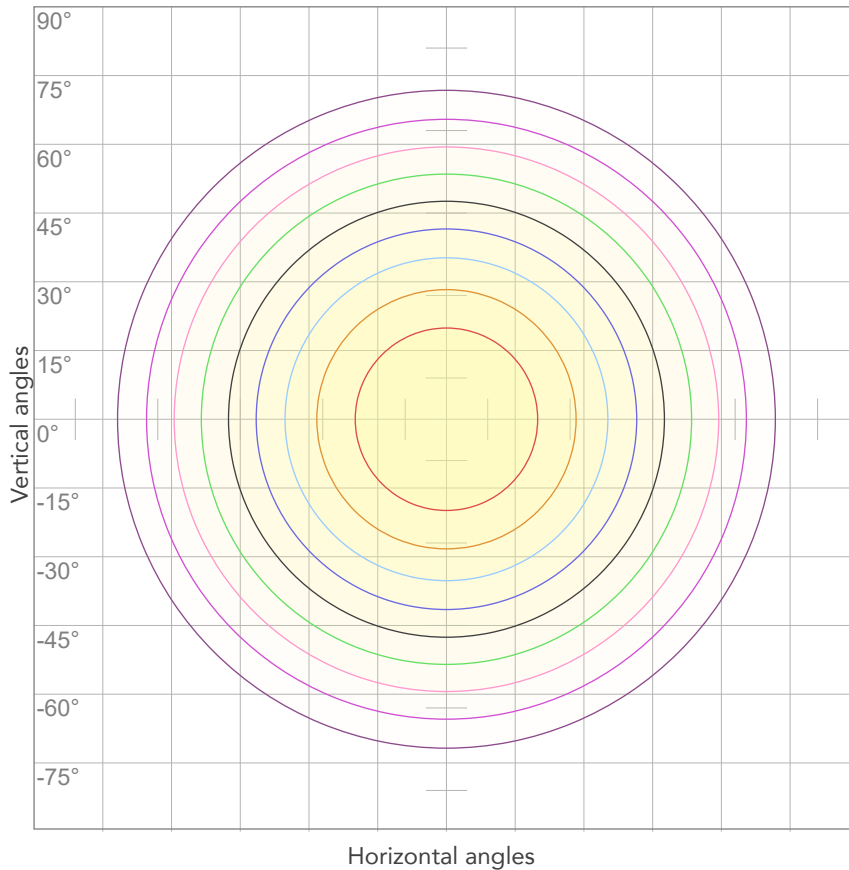


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 225V | 0,220A | 29,4W | 59lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



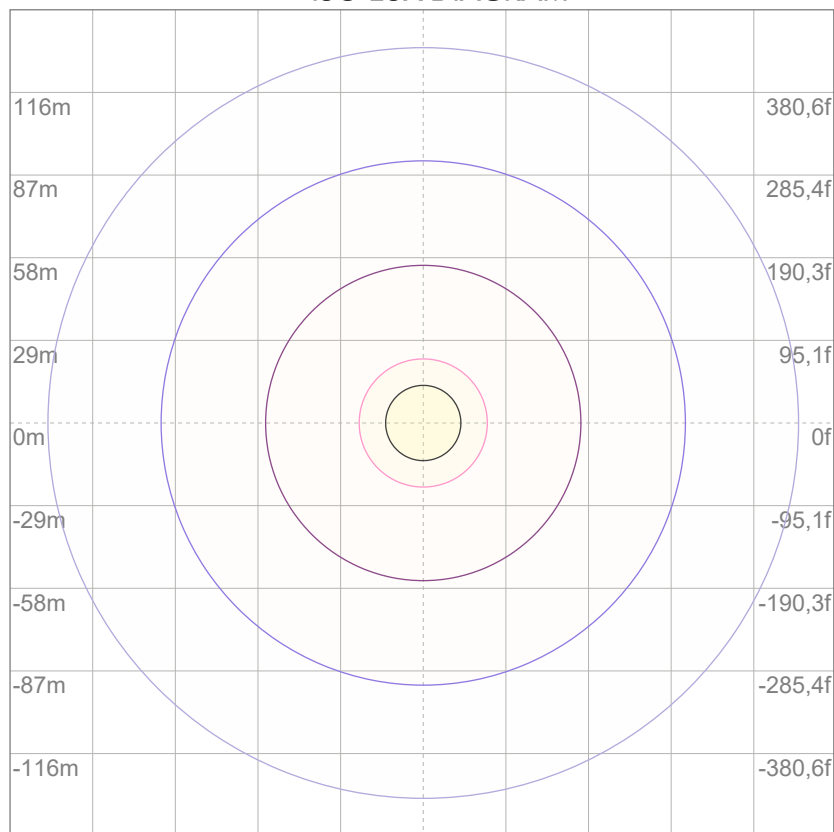
| | |
|-----|--------|
| 10% | 65 cd |
| 20% | 129 cd |
| 30% | 194 cd |
| 40% | 259 cd |
| 50% | 323 cd |
| 60% | 388 cd |
| 70% | 453 cd |
| 80% | 518 cd |

Conditions:

Number of c-planes: 2

Candela at center: 647 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,194 lx |
| 5% | 0,323 lx |
| 10% | 0,647 lx |
| 30% | 1,94 lx |
| 50% | 3,23 lx |

Conditions:

Number of c-planes: 2

Lux at center: 6,47 lx

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



Total lumen output:

1641 lm

Peak candela output:

820 cd

Light quality:

CRI: 95,1

Color temperature:

6075 K

PRODUCT NAME:
ECLNANOPANELTWC

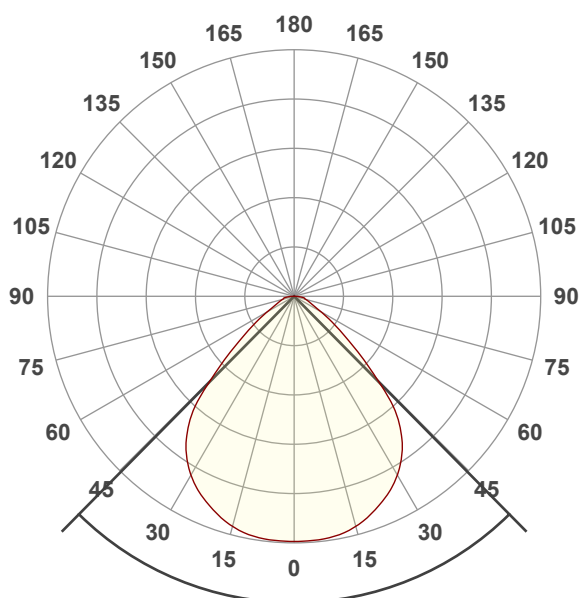
MEASURAMENT CONDITIONS:

Beam angle:
FILTER INT

Target:
2h 6000K

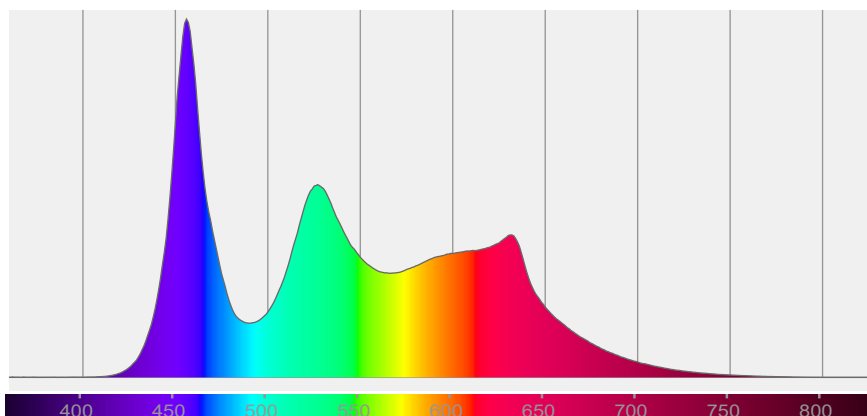
Operator:
Paolo Carvone

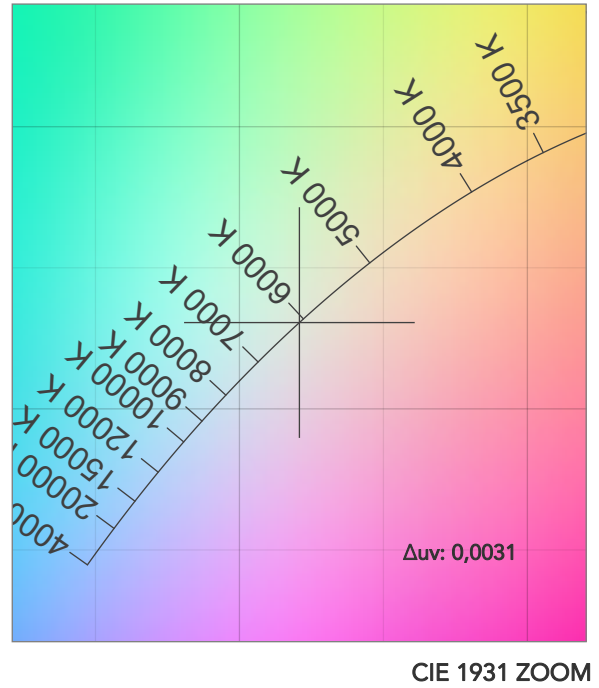
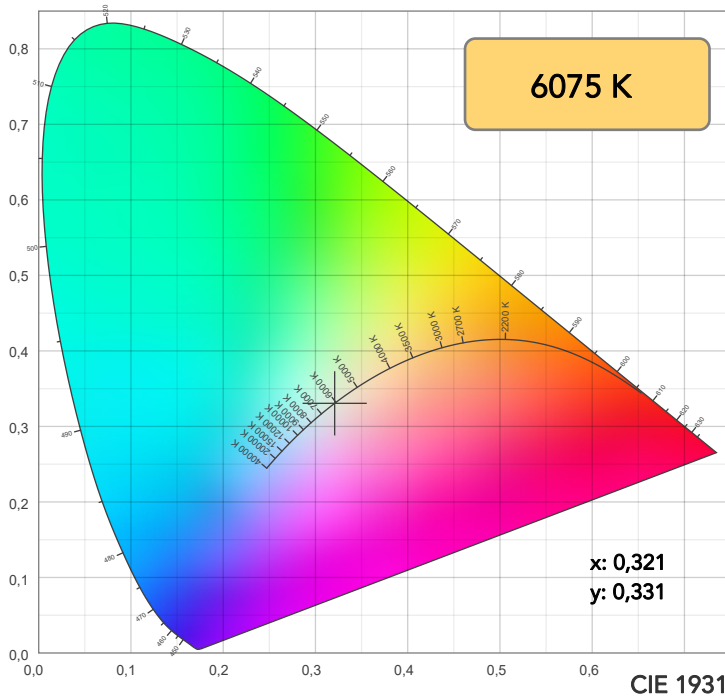
Date and time:
23/05/2022 11:46:51



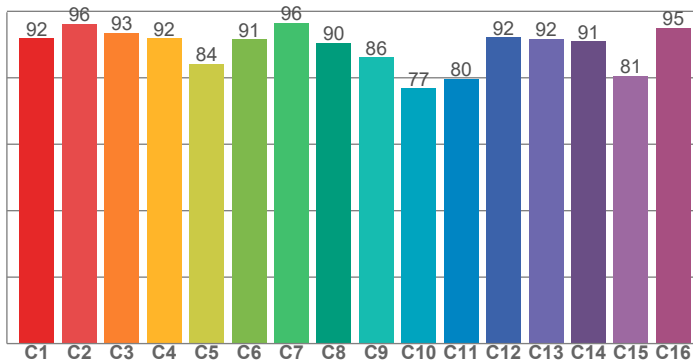
Beam angle 50%: 89,3°
Field angle 10%: 125,5°
Cut off angle 2.5%: 169,1°

Spectra

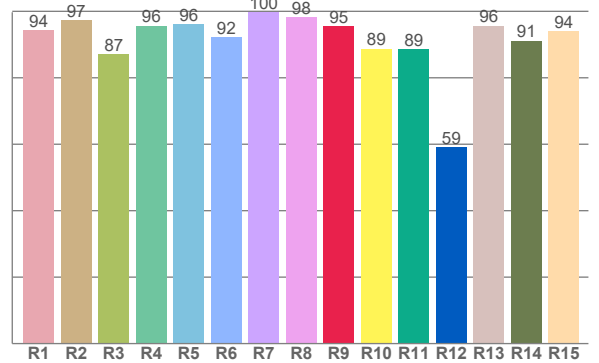




TM30: 88,8



CRI: 95,1 (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 | 97,3 | 87,1 | 95,6 | 96,1 | 92,2 | 99,6 | 98,2 | 95,5 | 88,7 | 88,6 | 59,1 | 95,6 | 91,2 | 94,1 |

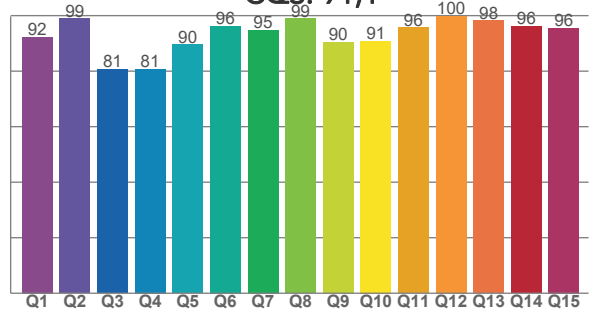
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,8 | 96,2 | 93,5 | 91,9 | 84,2 | 91,5 | 96,5 | 90,4 | 86,2 | 76,9 | 79,6 | 92,1 | 91,7 | 91,0 | 80,5 | 95,0 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,3 | 98,9 | 80,6 | 80,8 | 89,6 | 96,3 | 94,8 | 99,0 | 90,4 | 90,8 | 95,7 | 99,9 | 98,2 | 96,1 | 95,6 |

CQS: 91,1



COLOR PARAMETERS

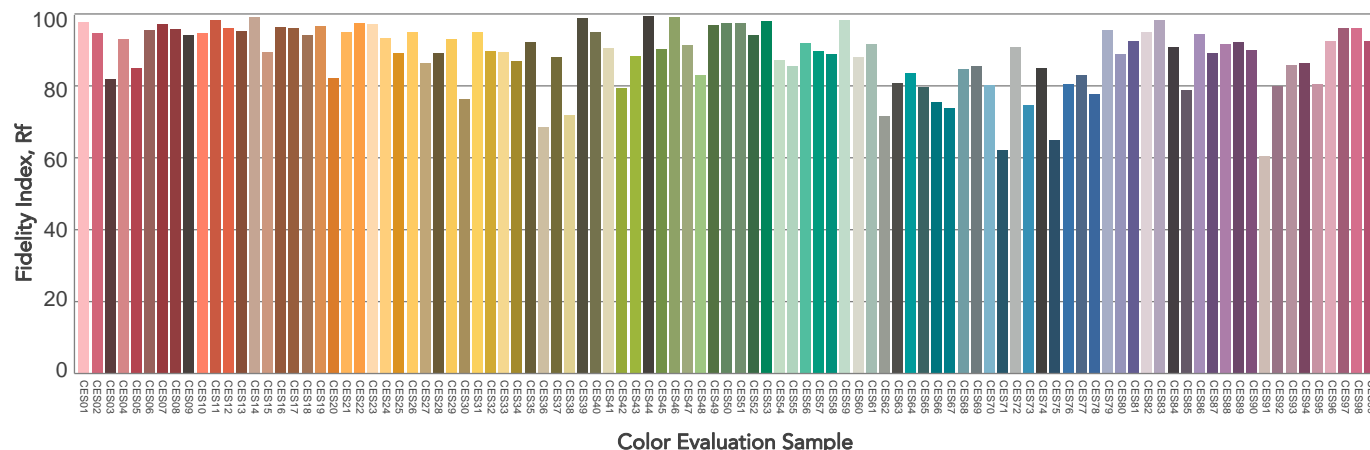
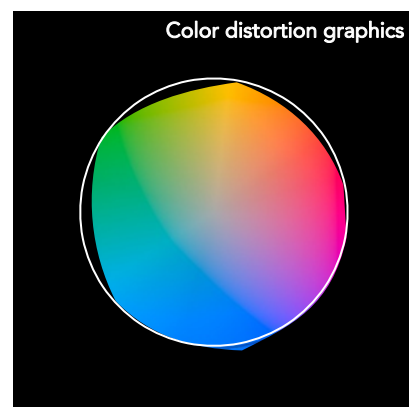
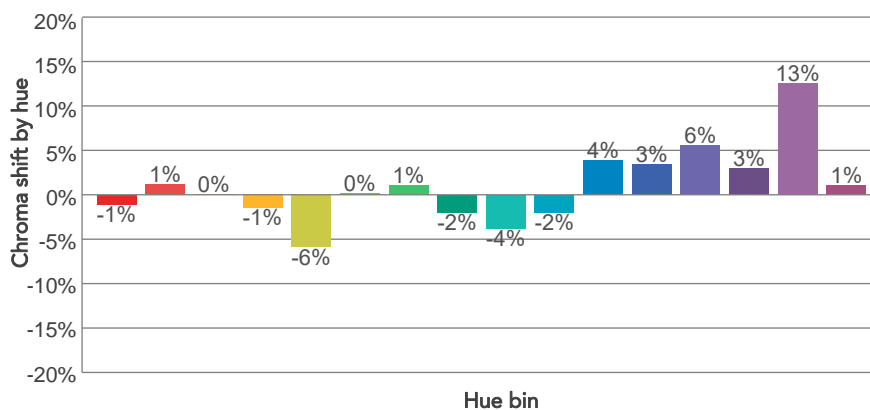
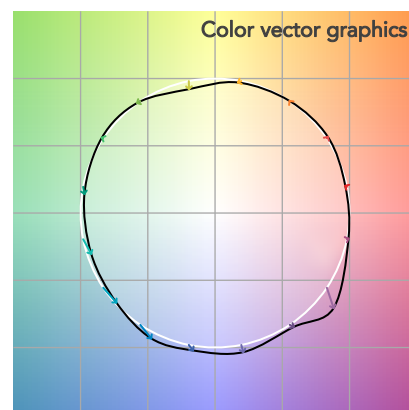
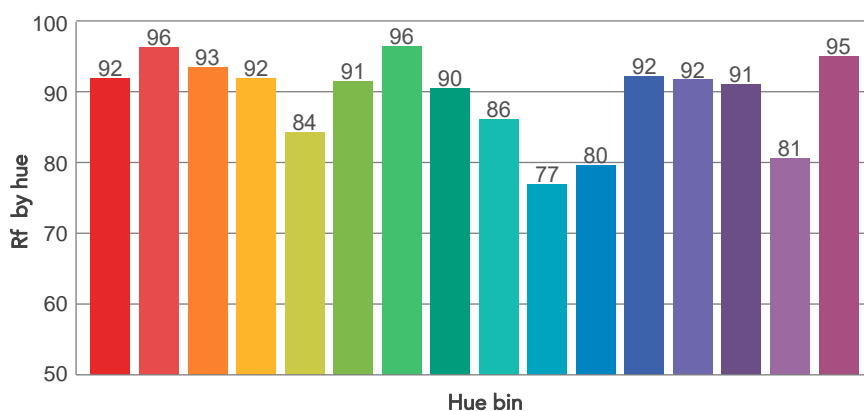
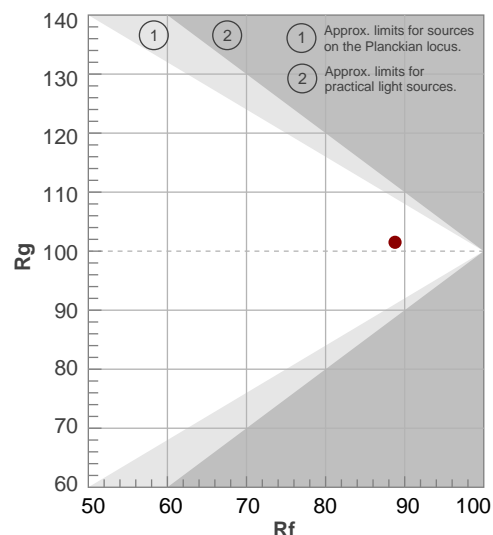
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6075 K | 95,1 | 95,5 | 88,8 | 101,5 | 91,1 | 92 | 0,321 | 0,331 | 0,0031 |

TM30 DETAILS

Rf 88,8
Fidelity index Rf

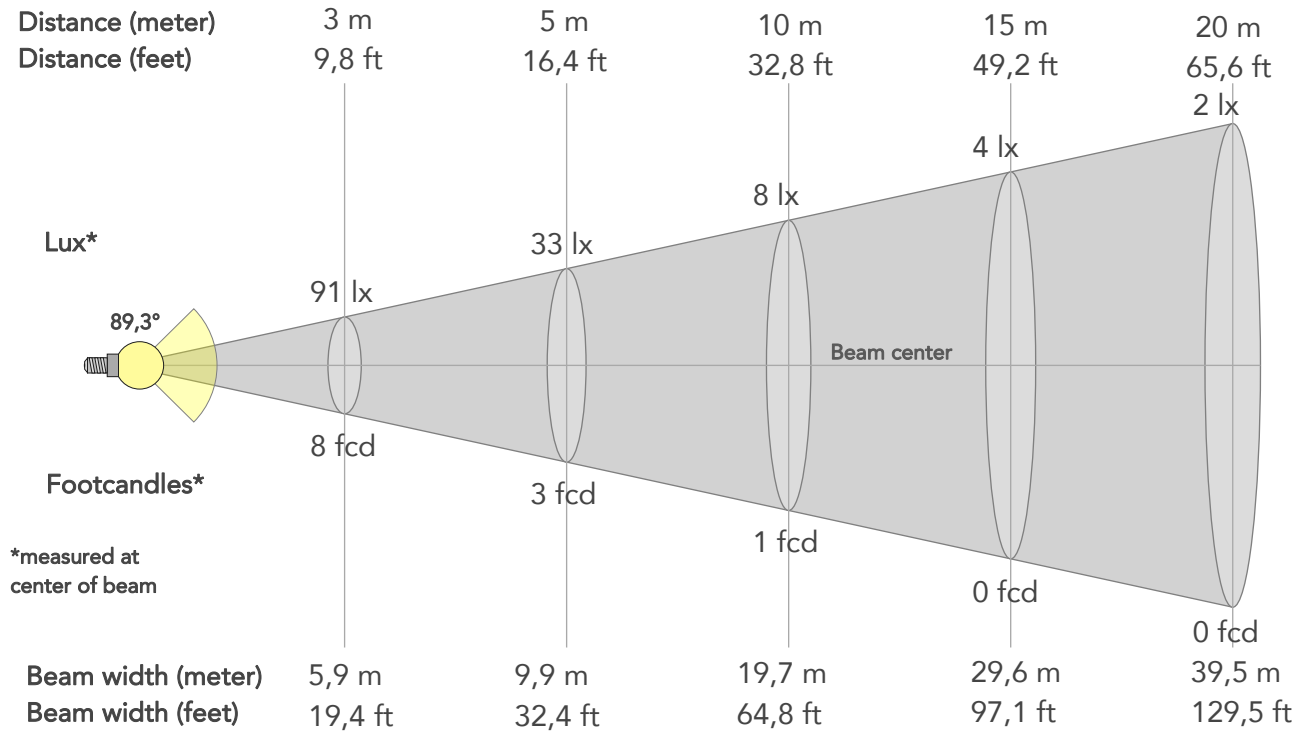
Rg 101,5
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 92 | -1% | 1% |
| 2 | 96 | 1% | 1% |
| 3 | 93 | 0% | 0% |
| 4 | 92 | -1% | 2% |
| 5 | 84 | -6% | 1% |
| 6 | 91 | 0% | 3% |
| 7 | 96 | 1% | 0% |
| 8 | 90 | -2% | 5% |
| 9 | 86 | -4% | 12% |
| 10 | 77 | -2% | 15% |
| 11 | 80 | 4% | 12% |
| 12 | 92 | 3% | 4% |
| 13 | 92 | 6% | 0% |
| 14 | 91 | 3% | 2% |
| 15 | 81 | 13% | -10% |
| 16 | 95 | 1% | 1% |



BEAM DETAILS

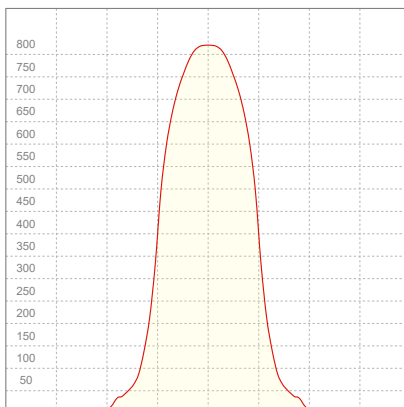
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 89,3° | 125,5° | 169,1° | 90,8% | 73,7% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|-------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 820lx | 205lx | 91lx | 51lx | 33lx | 15lx | 8lx | 4lx | 2lx | 1lx | 1lx | 1lx | 0lx |
| Footcand. | 76fcd | 19fcd | 8fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 2m | 3,9m | 5,9m | 7,9m | 9,9m | 14,8m | 19,7m | 29,6m | 39,5m | 49,4m | 59,2m | 79m | 98,7m |
| Beam wid. | 6,5ft | 13ft | 19,4ft | 25,9ft | 32,4ft | 48,6ft | 64,8ft | 97,1ft | 129,5ft | 161,9ft | 194,3ft | 259,1ft | 323,8ft |

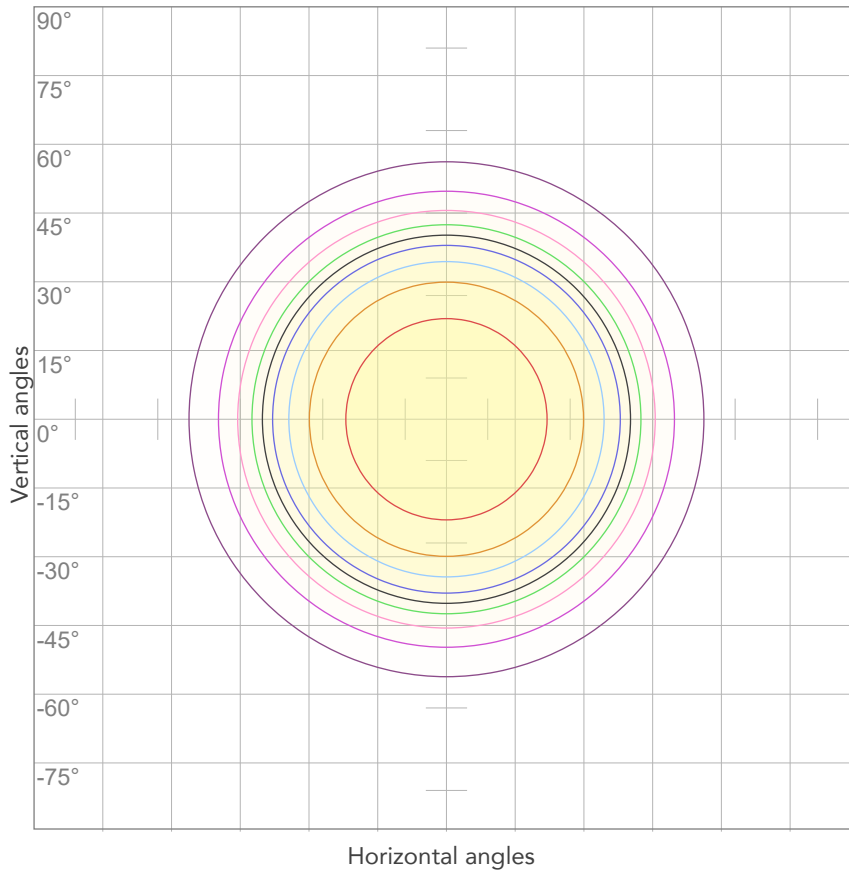
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Effeciency |
|---------------|---------------|-------------|------------|
| 226V | 0,221A | 29,5W | 56lm/W |

ISO CANDELA DIAGRAM



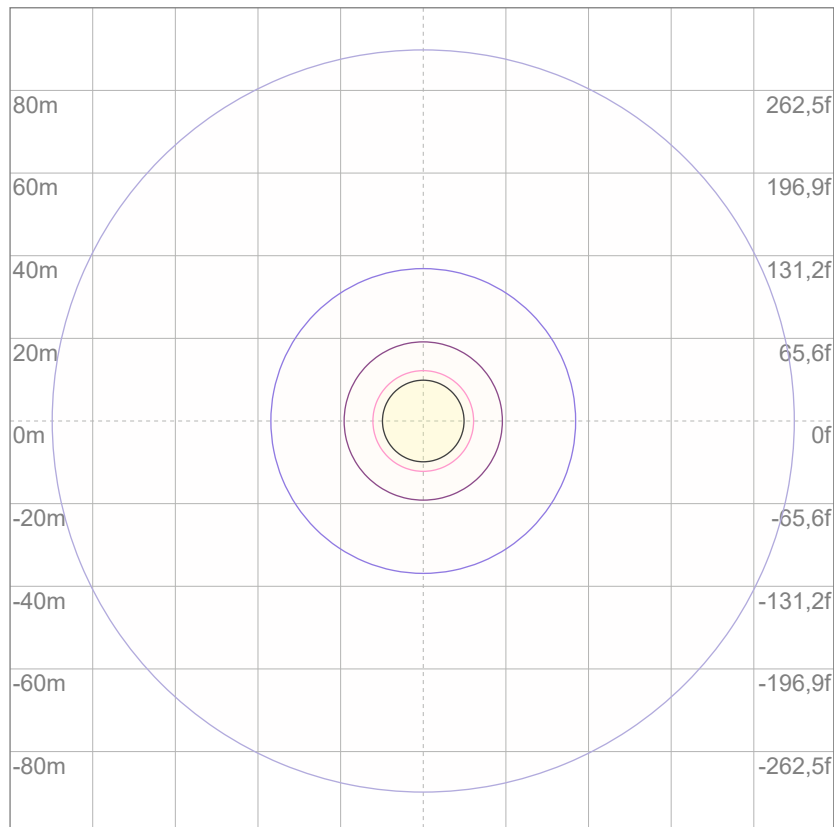
| | |
|-----|--------|
| 10% | 82 cd |
| 20% | 164 cd |
| 30% | 246 cd |
| 40% | 328 cd |
| 50% | 410 cd |
| 60% | 492 cd |
| 70% | 574 cd |
| 80% | 656 cd |

Conditions:

Number of c-planes: 2

Candela at center: 820 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,246 lx |
| 5% | 0,410 lx |
| 10% | 0,820 lx |
| 30% | 2,46 lx |
| 50% | 4,10 lx |

Conditions:

Number of c-planes: 2

Lux at center: 8,20 lx

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