



Photometric Test Report



ECLPENDANT S VW

50W Variable White House Light with
Passive Cooling

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| Beam angle 20° | 95 |
| Beam angle 40° | 100 |
| Beam angle 60° | 105 |

Color preset 5600K

| | |
|----------------|-----|
| Beam angle 20° | 110 |
| Beam angle 40° | 115 |
| Beam angle 60° | 120 |

Color preset 6000K

| | |
|----------------|-----|
| Beam angle 20° | 125 |
| Beam angle 40° | 130 |
| Beam angle 60° | 135 |

Color preset 6500K

| | |
|----------------|-----|
| Beam angle 20° | 140 |
| Beam angle 40° | 145 |
| Beam angle 60° | 150 |

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:

3230 lm

Peak candela output:

19200 cd

Light quality:

CRI: 95,8

Color temperature:

4121 K

PRODUCT NAME:
ECLPENDANTS VW

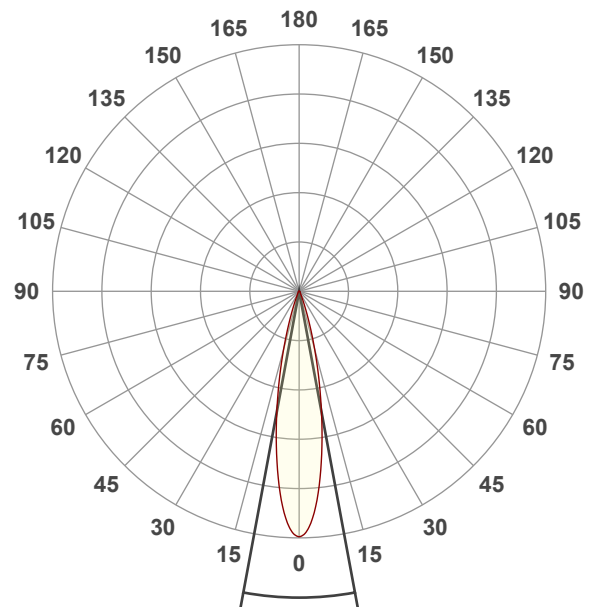
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
Full On

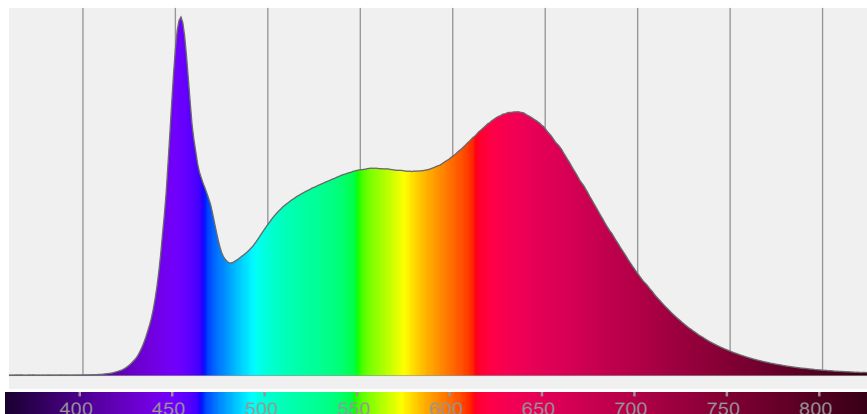
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:00:43

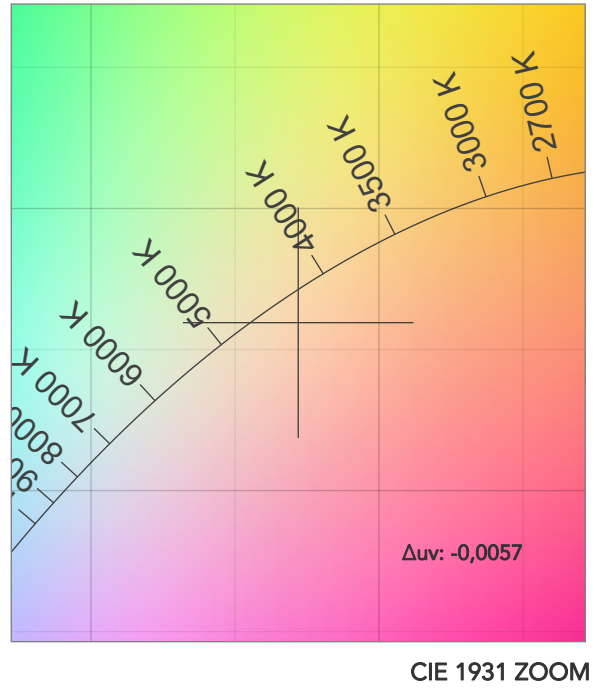
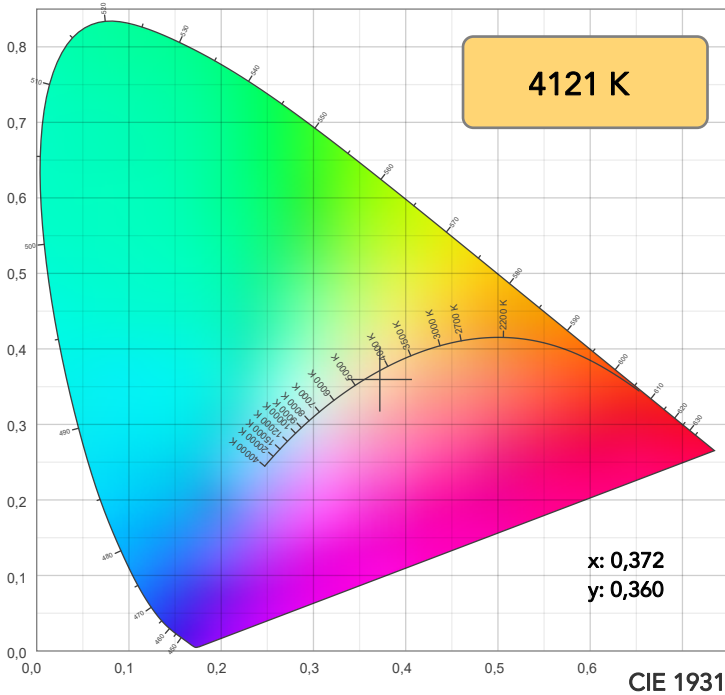


Beam angle 50%: 21°
Field angle 10%: 37,9°
Cut off angle 2.5%: 49,6°

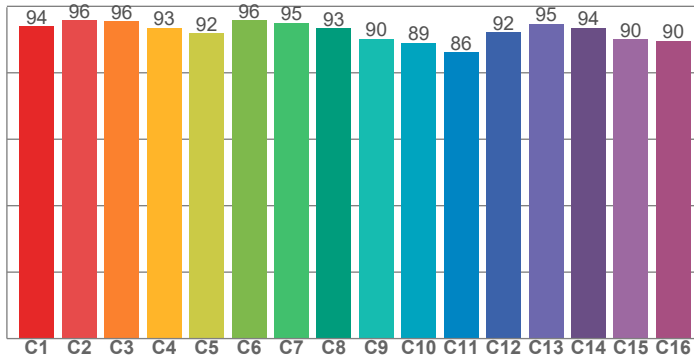
Spectra



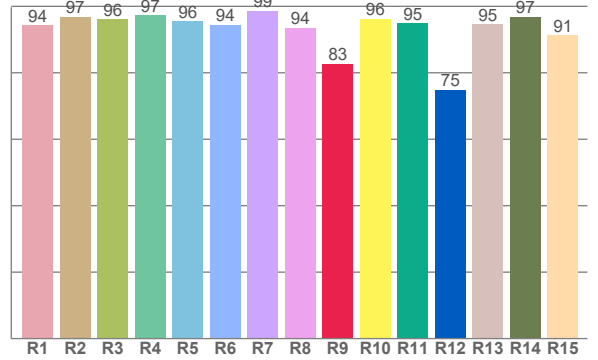
COLOR DETAILS



TM30: 92,3



CRI: 95,8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,3 | 96,9 | 96,0 | 97,3 | 95,5 | 94,5 | 98,7 | 93,5 | 82,7 | 96,3 | 94,9 | 74,9 | 94,7 | 96,9 | 91,2 |

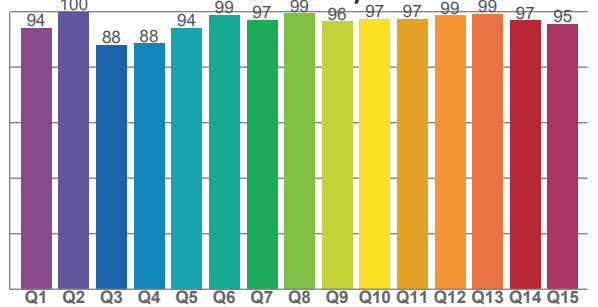
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,0 | 95,8 | 95,5 | 93,5 | 91,8 | 95,8 | 95,0 | 93,4 | 90,1 | 89,1 | 86,2 | 92,2 | 94,7 | 93,6 | 90,1 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,1 | 99,8 | 88,0 | 88,5 | 94,1 | 98,8 | 96,9 | 99,3 | 96,5 | 97,2 | 97,3 | 98,6 | 99,2 | 96,7 | 95,4 |

CQS: 94,7



COLOR PARAMETERS

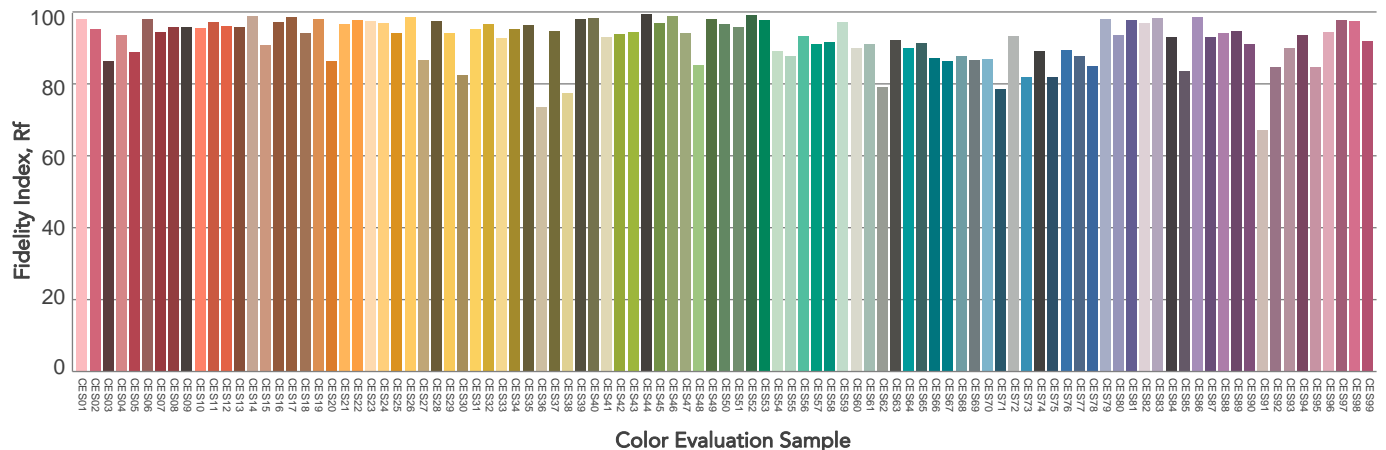
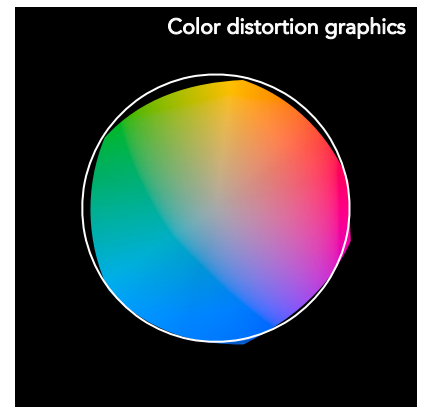
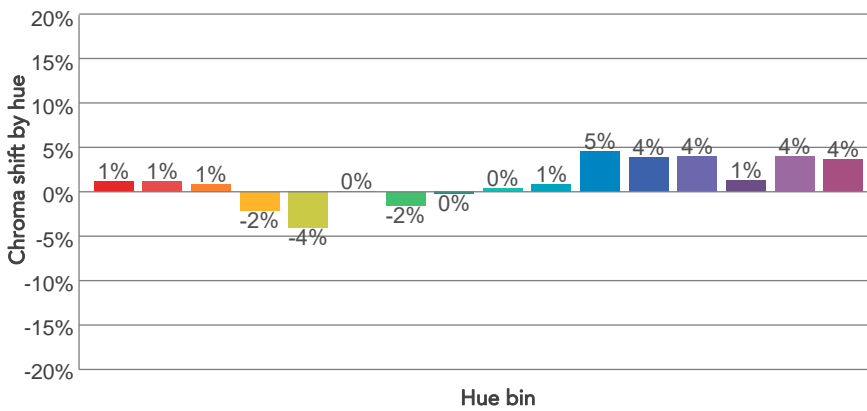
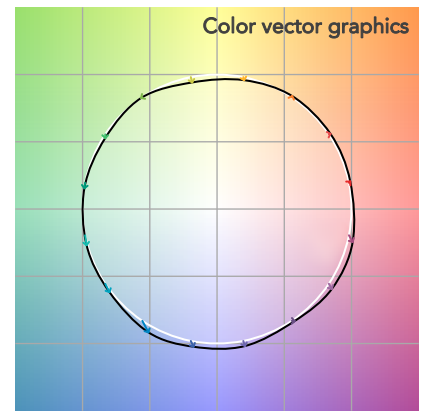
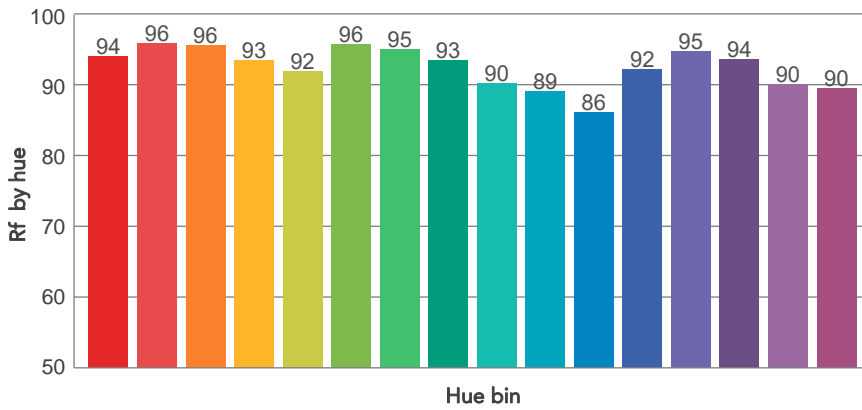
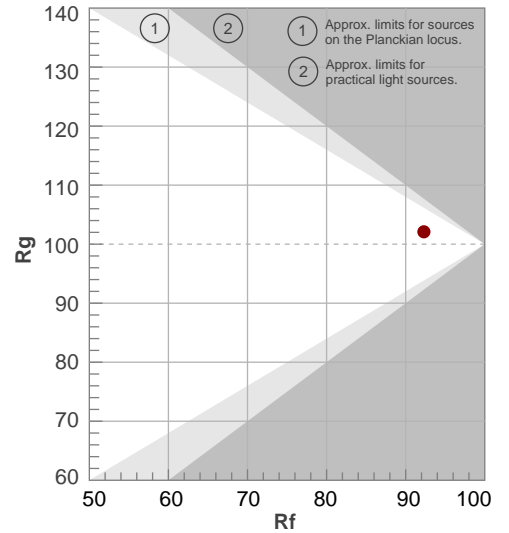
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4121 K | 95,8 | 82,7 | 92,3 | 102,1 | 94,7 | 98 | 0,372 | 0,360 | -0,0057 |

TM30 DETAILS

Rf 92,3
Fidelity index Rf

Rg 102,1
Gammut index

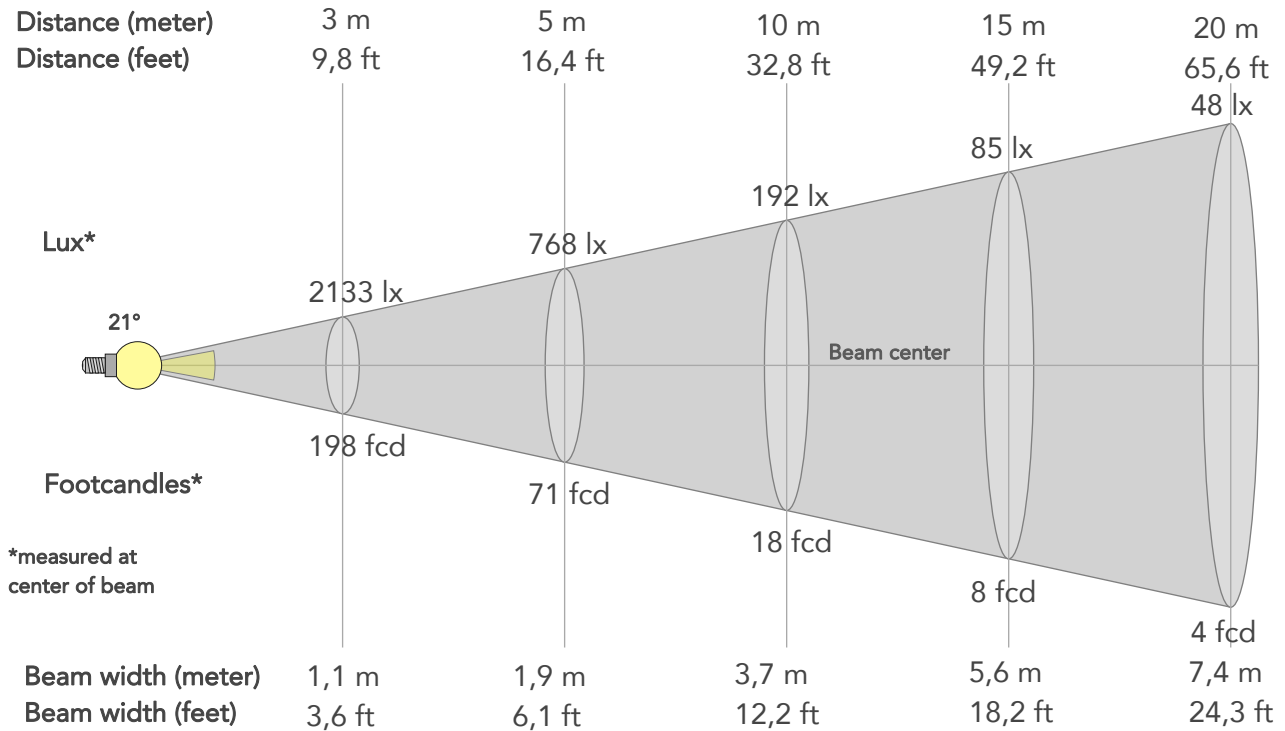
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 1% | 1% |
| 2 | 96 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 93 | -2% | -1% |
| 5 | 92 | -4% | 0% |
| 6 | 96 | 0% | 1% |
| 7 | 95 | -2% | 2% |
| 8 | 93 | 0% | 4% |
| 9 | 90 | 0% | 7% |
| 10 | 89 | 1% | 7% |
| 11 | 86 | 5% | 8% |
| 12 | 92 | 4% | 3% |
| 13 | 95 | 4% | 0% |
| 14 | 94 | 1% | 2% |
| 15 | 90 | 4% | -2% |
| 16 | 90 | 4% | -4% |



BEAM DETAILS



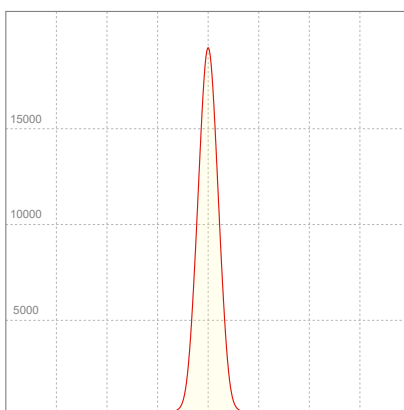
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21° | 37,9° | 49,6° | 97,8% | 95,0% |



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 | 19200lx | 4800lx | 2133lx | 1200lx | 768lx | 341lx | 192lx | 85lx | 48lx | 31lx | 21lx | 12lx | 8lx |
| Footcand. | 1784fcd | 446fcd | 198fcd | 111fcd | 71fcd | 32fcd | 18fcd | 8fcd | 4fcd | 3fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,1m | 14,8m | 18,5m |
| Beam wid. | 1,2ft | 2,4ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,2ft | 24,3ft | 30,4ft | 36,5ft | 48,6ft | 60,8ft |

LINEAR DISTRIBUTION DIAGRAM

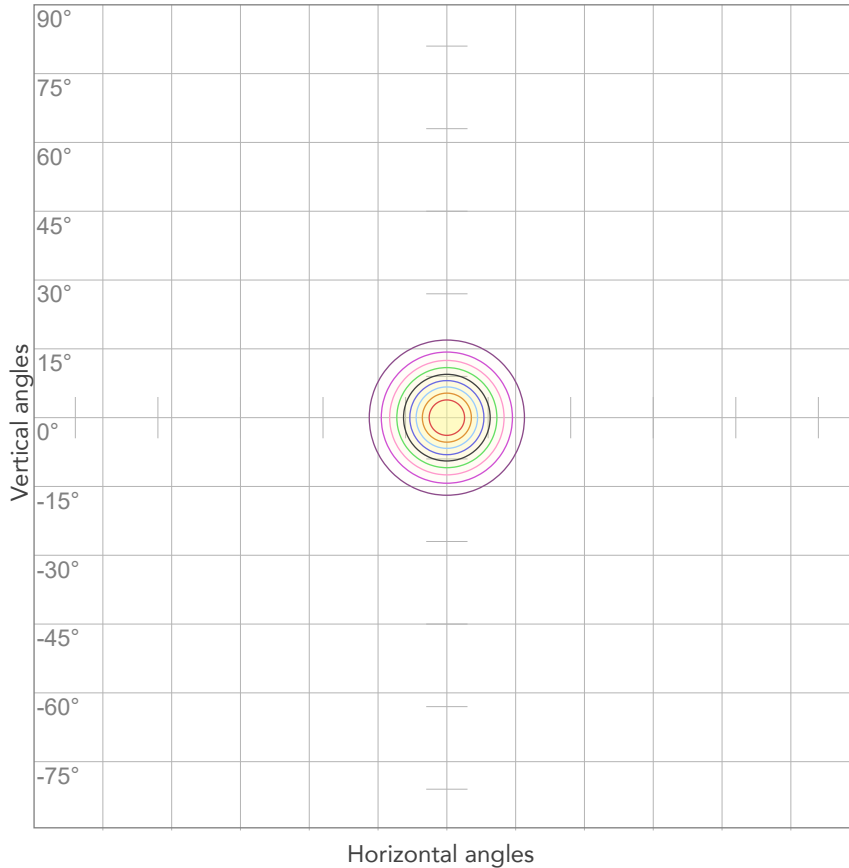


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,301A | 62,8W | 0,94 | 51lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



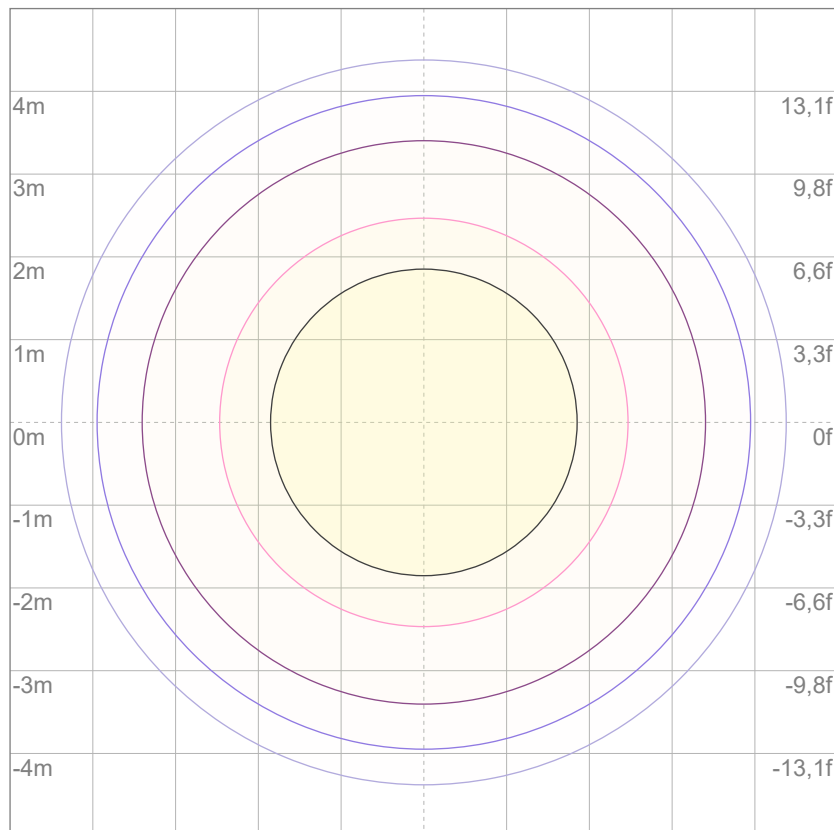
| | |
|-----|----------|
| 10% | 1920 cd |
| 20% | 3840 cd |
| 30% | 5760 cd |
| 40% | 7680 cd |
| 50% | 9600 cd |
| 60% | 11520 cd |
| 70% | 13440 cd |
| 80% | 15360 cd |

Conditions:

Number of c-planes: 2

Candela at center: 19200 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 5,76 lx |
| 5% | 9,60 lx |
| 10% | 19,2 lx |
| 30% | 57,6 lx |
| 50% | 96,0 lx |

Conditions:

Number of c-planes: 2

Lux at center: 192 lx

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



Total lumen output:

3134 lm

Peak candela output:

5548 cd

Light quality:

CRI: 95,5

Color temperature:

4119 K

PRODUCT NAME:
ECLPENDANTS VW

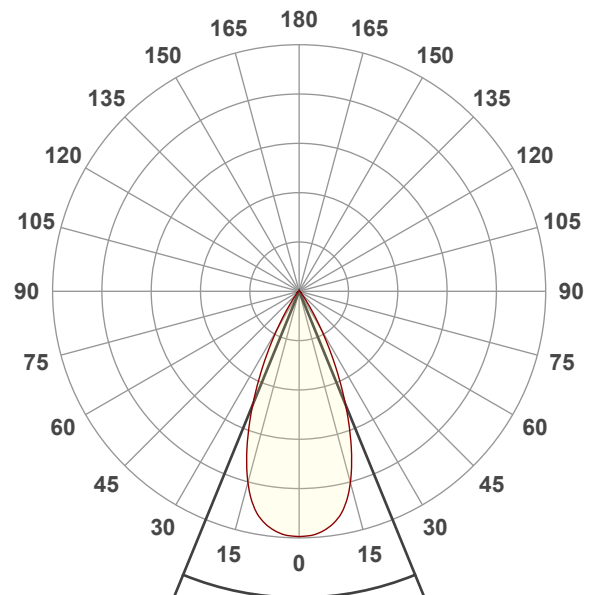
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
Full On

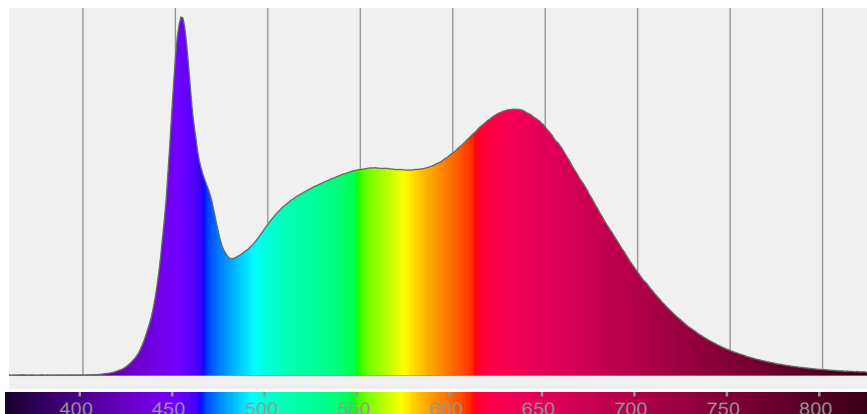
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:33:26

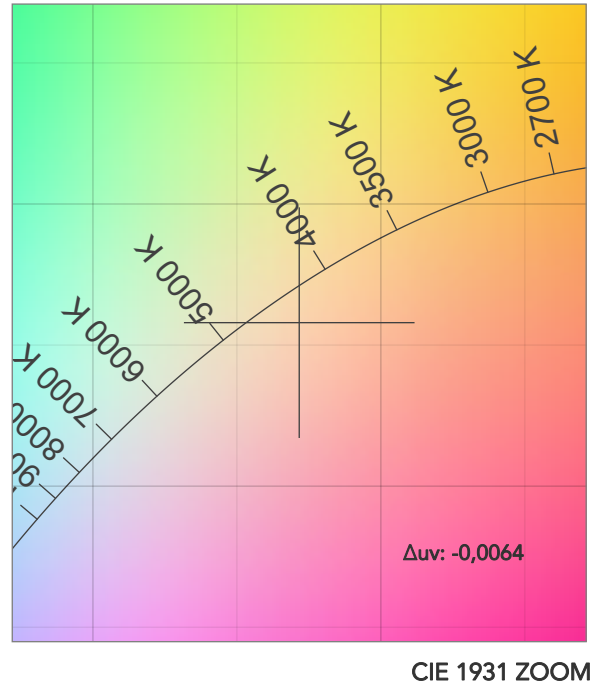
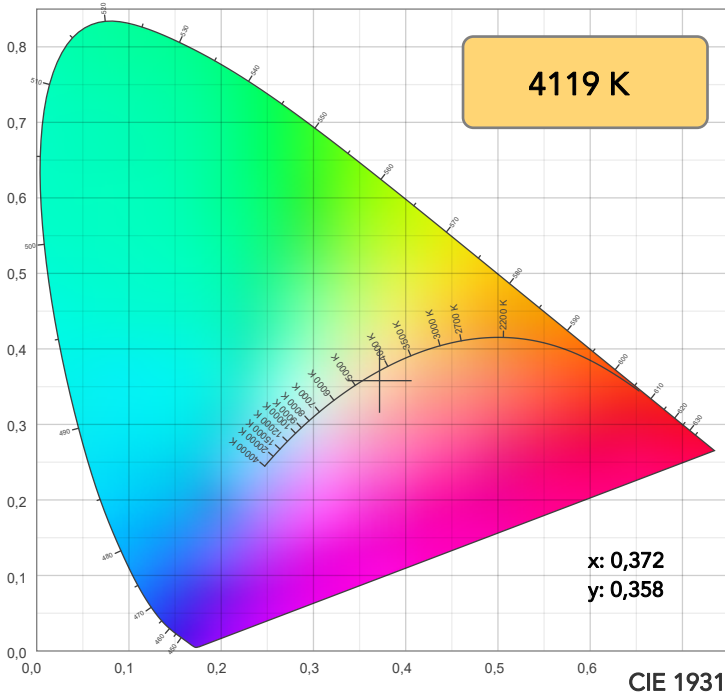


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,3°

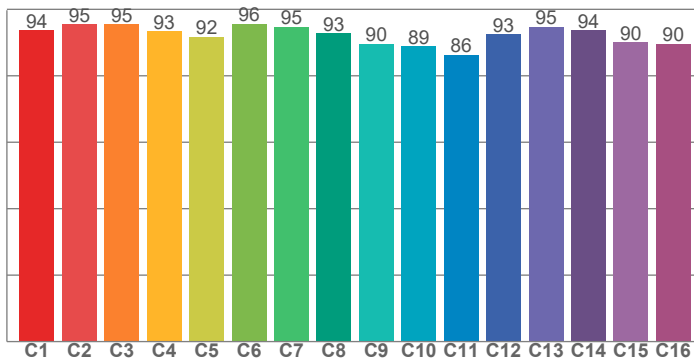
Spectra



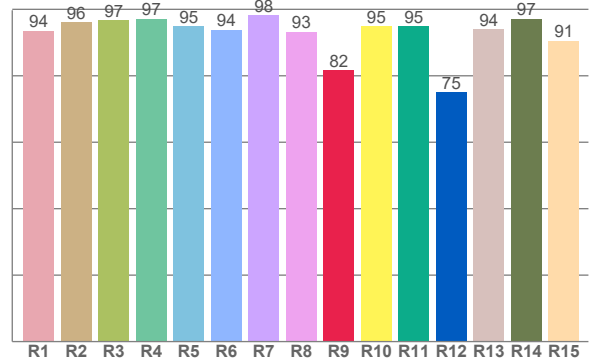
COLOR DETAILS



TM30: 92,1



CRI: 95,5 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,6 | 96,2 | 96,6 | 97,1 | 94,8 | 93,9 | 98,3 | 93,3 | 81,7 | 94,9 | 94,8 | 75,1 | 93,9 | 97,2 | 90,5 |

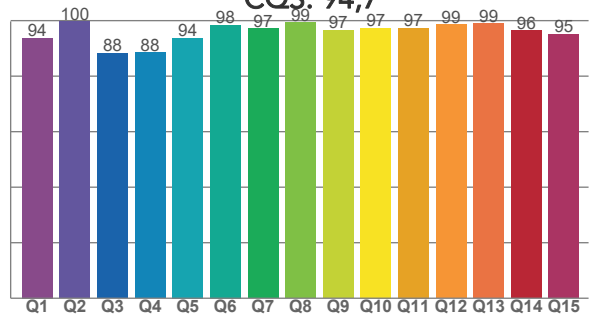
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,7 | 95,4 | 95,4 | 93,3 | 91,7 | 95,7 | 94,7 | 92,8 | 89,6 | 88,8 | 86,4 | 92,5 | 94,6 | 93,6 | 90,1 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,8 | 99,7 | 88,2 | 88,5 | 93,7 | 98,4 | 97,1 | 99,3 | 96,5 | 97,4 | 97,3 | 98,5 | 99,0 | 96,4 | 95,1 |

CQS: 94,7



COLOR PARAMETERS

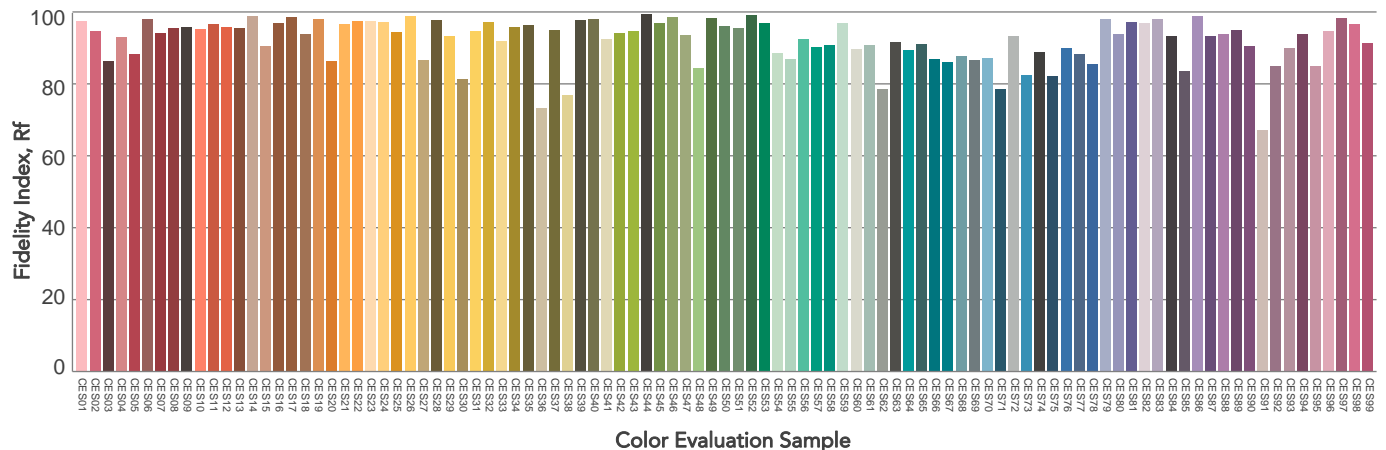
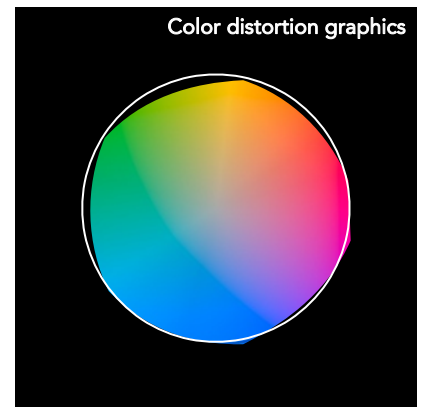
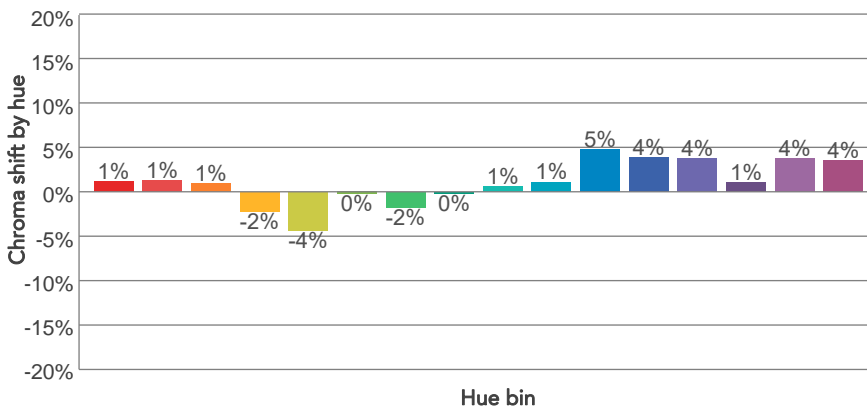
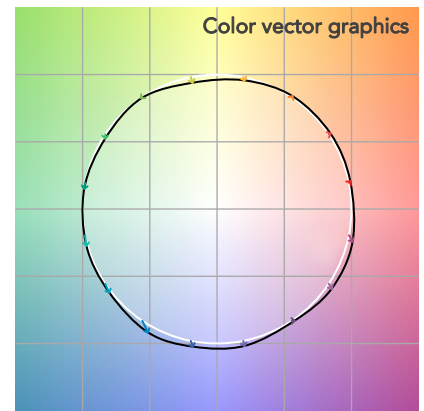
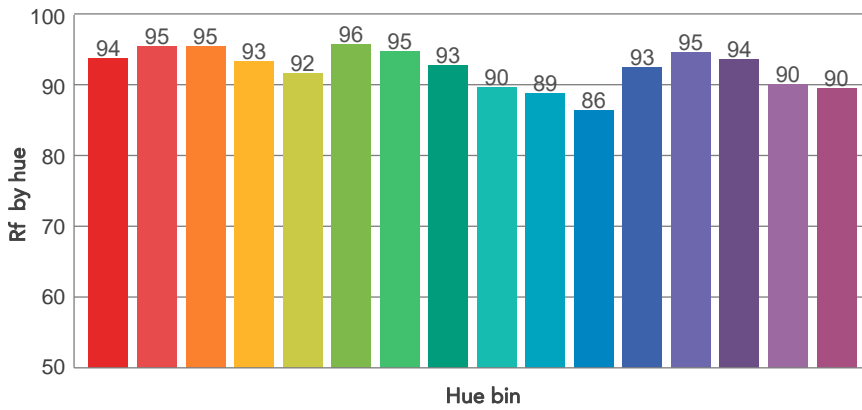
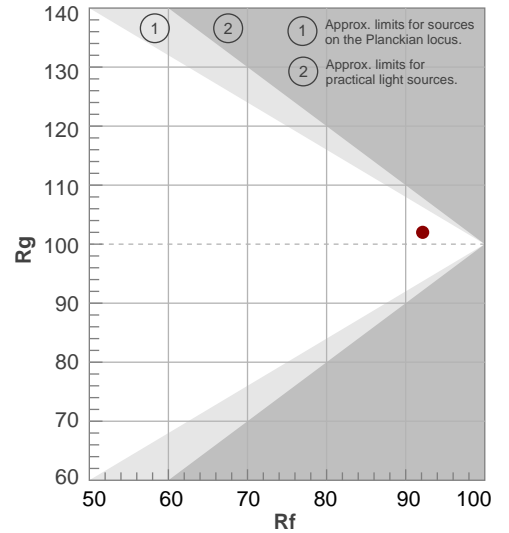
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4119 K | 95,5 | 81,7 | 92,1 | 102,0 | 94,7 | 98 | 0,372 | 0,358 | -0,0064 |

TM30 DETAILS

Rf 92,1
Fidelity index Rf

Rg 102,0
Gammut index

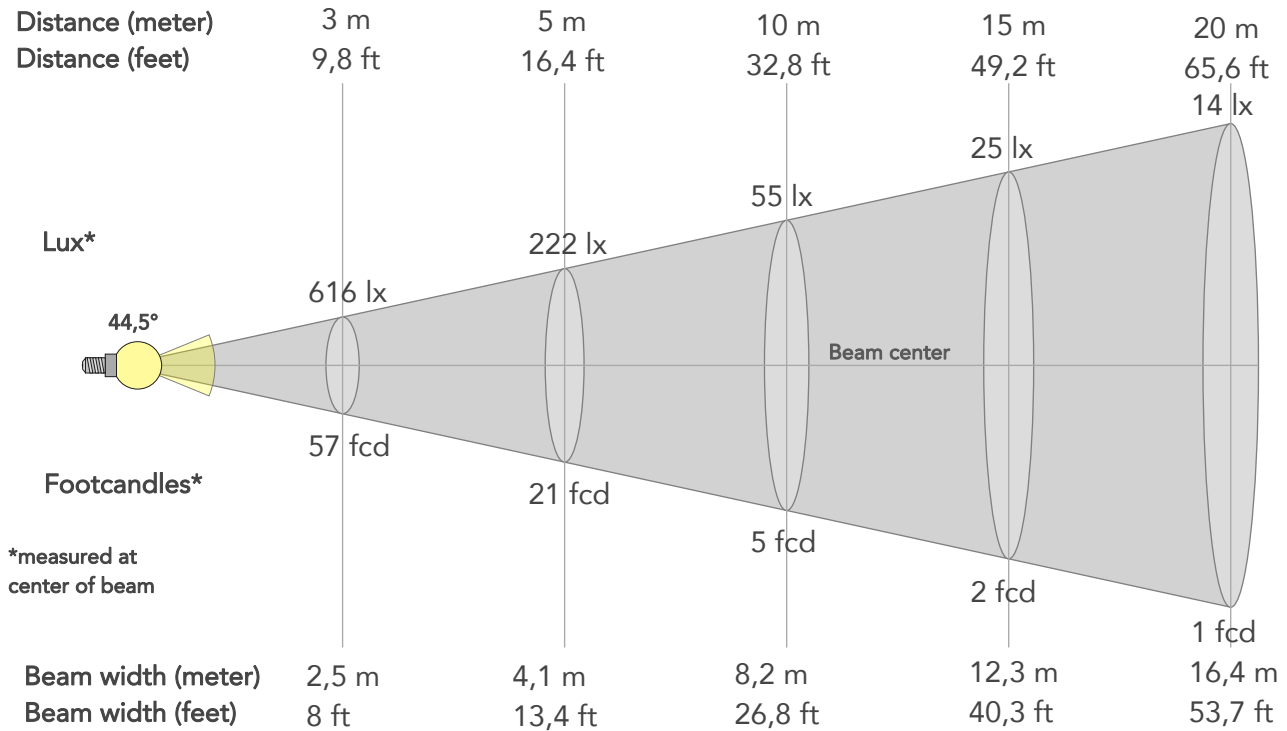
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 1% | 1% |
| 2 | 95 | 1% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 93 | -2% | -1% |
| 5 | 92 | -4% | 0% |
| 6 | 96 | 0% | 1% |
| 7 | 95 | -2% | 3% |
| 8 | 93 | 0% | 4% |
| 9 | 90 | 1% | 8% |
| 10 | 89 | 1% | 7% |
| 11 | 86 | 5% | 8% |
| 12 | 93 | 4% | 2% |
| 13 | 95 | 4% | 0% |
| 14 | 94 | 1% | 2% |
| 15 | 90 | 4% | -2% |
| 16 | 90 | 4% | -4% |



BEAM DETAILS



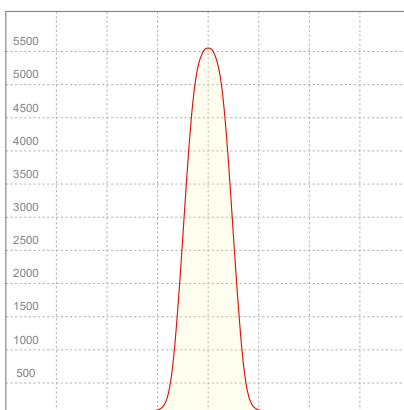
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,3° | 98,2% | 95,5% |



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 | 5548lx | 1387lx | 616lx | 347lx | 222lx | 99lx | 55lx | 25lx | 14lx | 9lx | 6lx | 3lx | 2lx |
| Footcand. | 515fcd | 129fcd | 57fcd | 32fcd | 21fcd | 9fcd | 5fcd | 2fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,6m | 32,7m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,8ft | 40,3ft | 53,7ft | 67,1ft | 80,5ft | 107,4ft | 134,2ft |

LINEAR DISTRIBUTION DIAGRAM

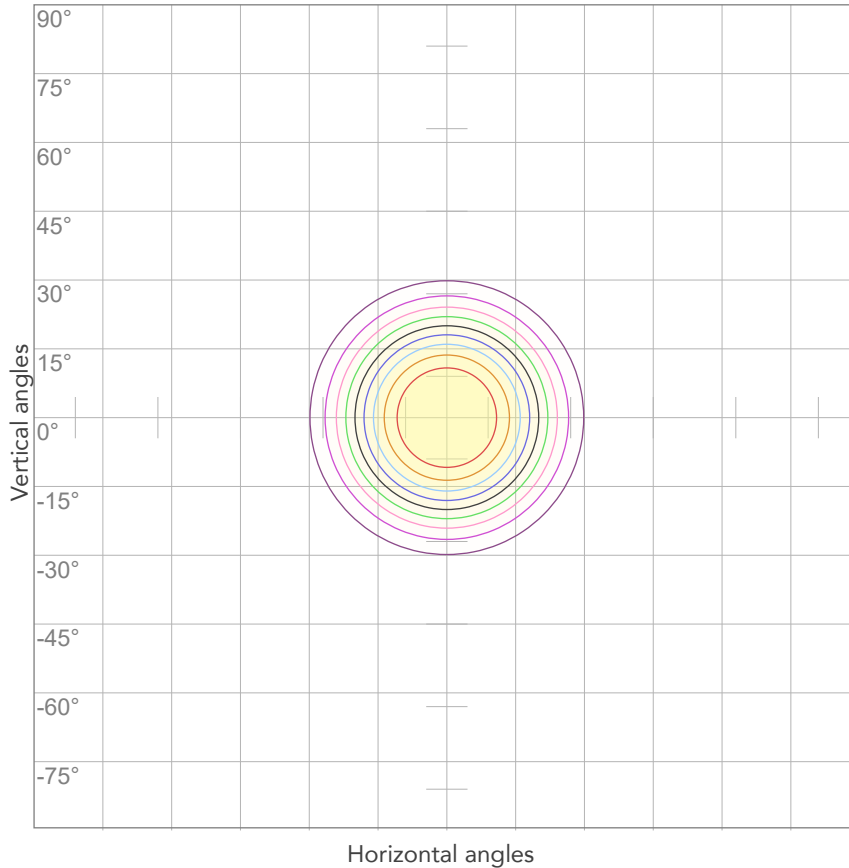


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 224V | 0,291A | 60,9W | 0,93 | 51lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



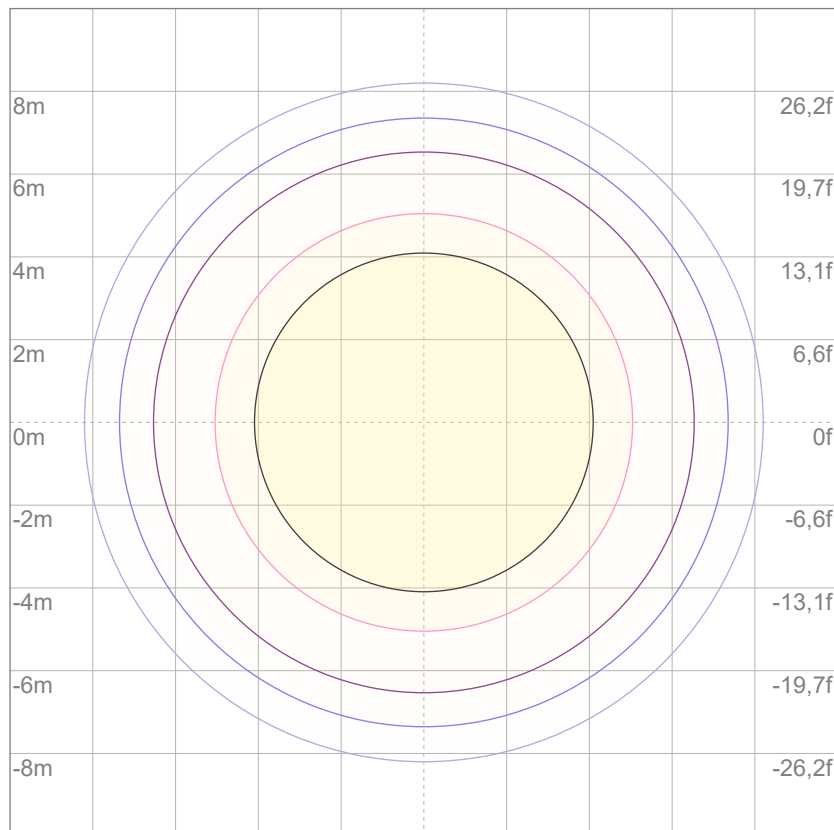
| | |
|-----|---------|
| 10% | 555 cd |
| 20% | 1110 cd |
| 30% | 1665 cd |
| 40% | 2219 cd |
| 50% | 2774 cd |
| 60% | 3329 cd |
| 70% | 3884 cd |
| 80% | 4439 cd |

Conditions:

Number of c-planes: 2

Candela at center: 5548 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,66 lx |
| 5% | 2,77 lx |
| 10% | 5,55 lx |
| 30% | 16,6 lx |
| 50% | 27,7 lx |

Conditions:

Number of c-planes: 2

Lux at center: 55,5 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:

2870 lm

Peak candela output:

2650 cd

Light quality:

CRI: 95,3

Color temperature:

4116 K

PRODUCT NAME:
ECLPENDANTS VW

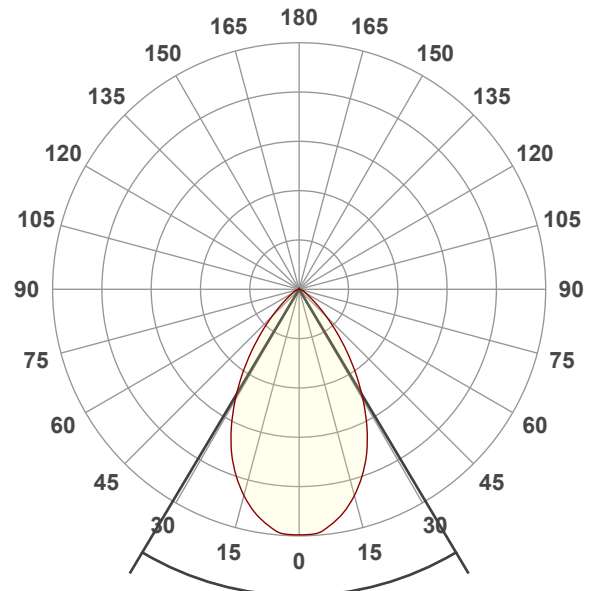
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
Full On

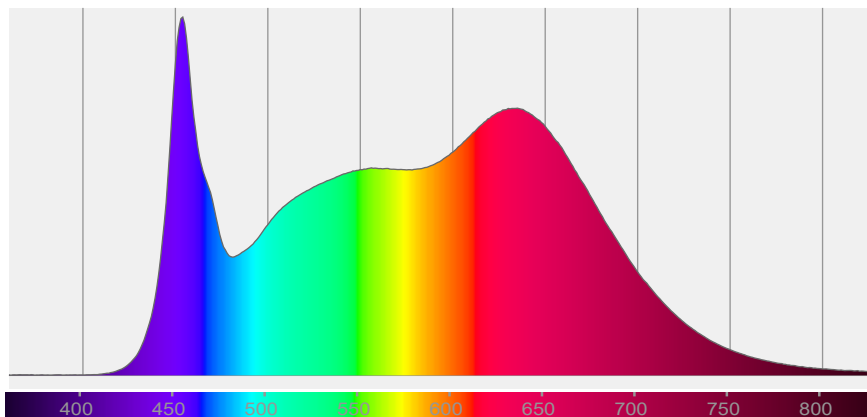
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:14:19

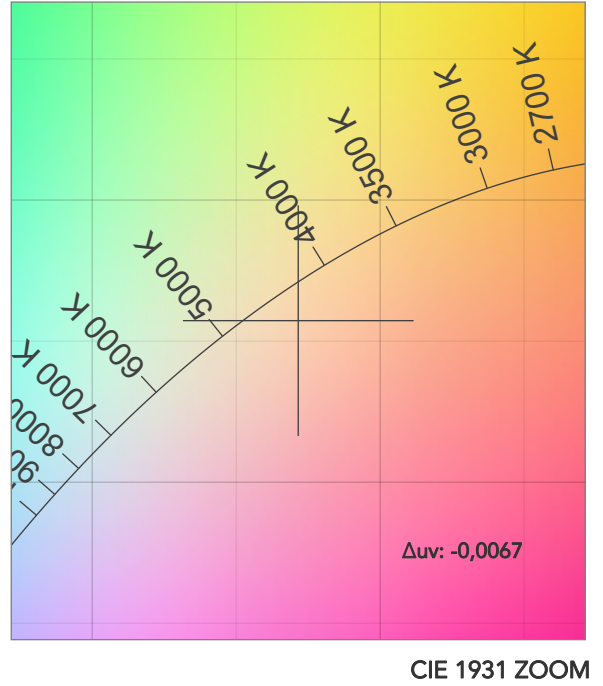
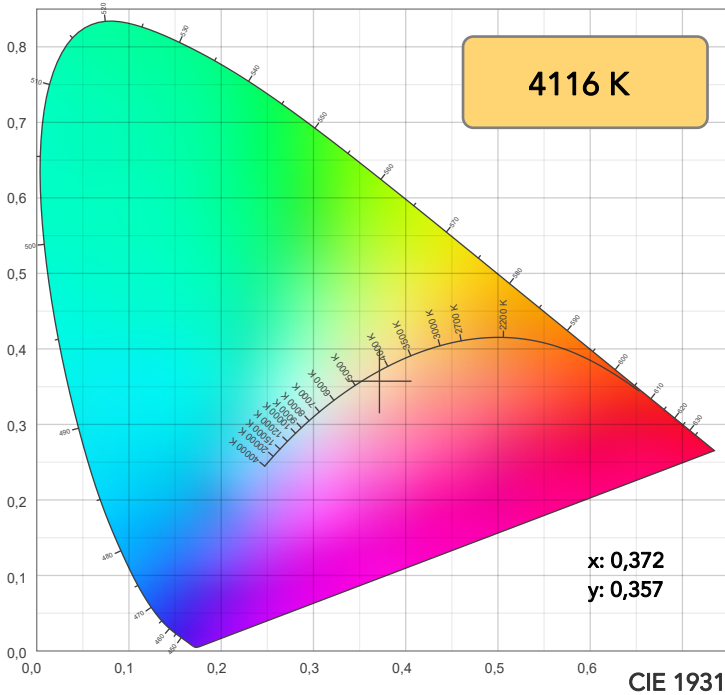


Beam angle 50%: 61,6°
Field angle 10%: 97,9°
Cut off angle 2.5%: 126,3°

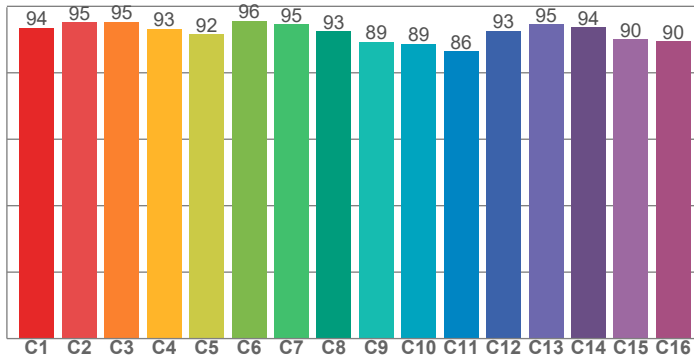
Spectra



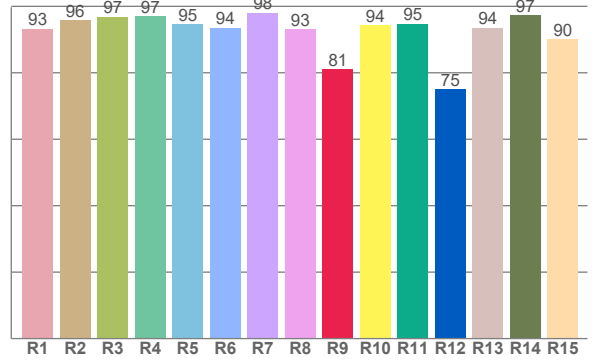
COLOR DETAILS



TM30: 92,1



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 | 95,8 | 96,9 | 97,0 | 94,5 | 93,6 | 98,1 | 93,1 | 81,1 | 94,2 | 94,8 | 75,1 | 93,5 | 97,3 | 90,2 |

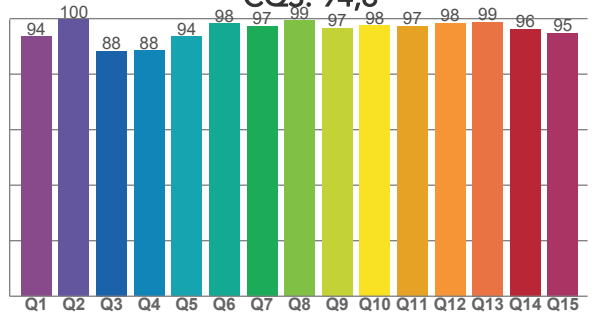
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,5 | 95,2 | 95,4 | 93,2 | 91,6 | 95,7 | 94,6 | 92,5 | 89,3 | 88,7 | 86,5 | 92,7 | 94,6 | 93,6 | 90,1 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,6 | 99,7 | 88,4 | 88,5 | 93,6 | 98,2 | 97,3 | 99,3 | 96,6 | 97,5 | 97,4 | 98,5 | 98,9 | 96,2 | 94,9 |

CQS: 94,6



COLOR PARAMETERS

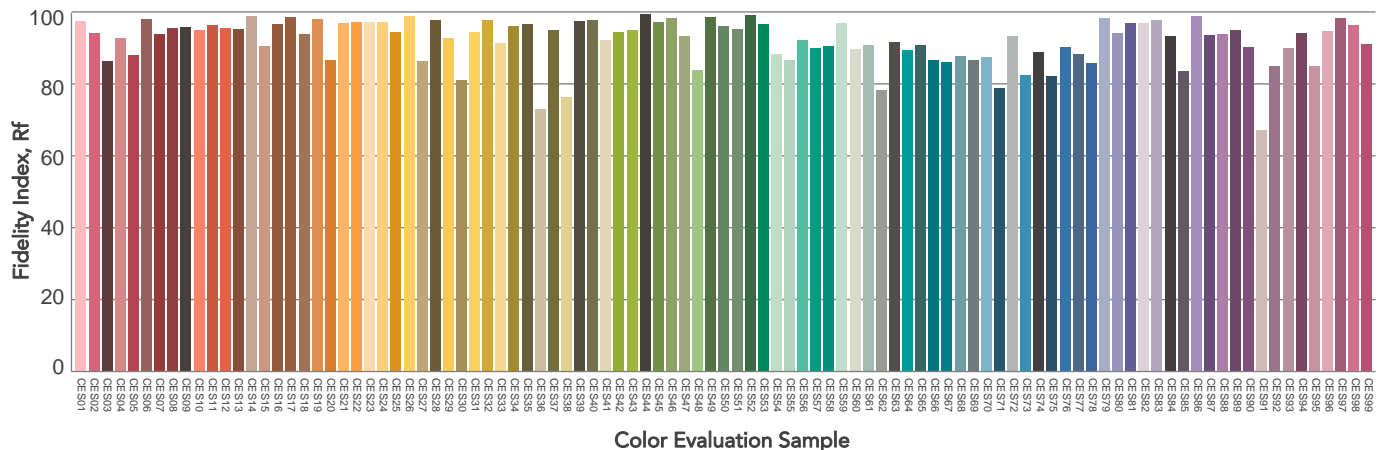
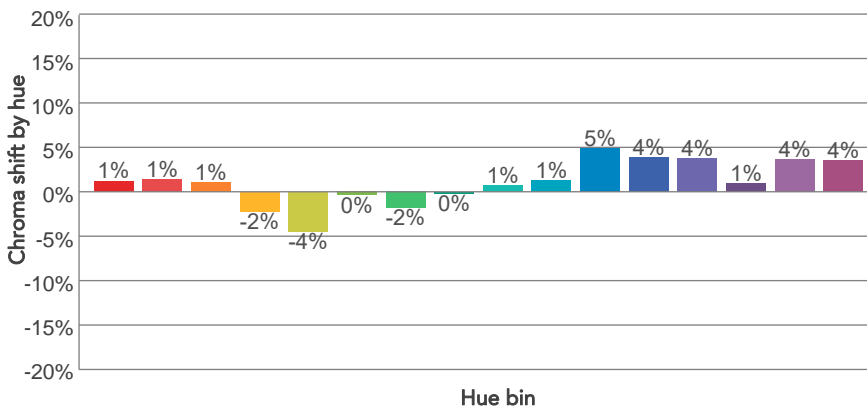
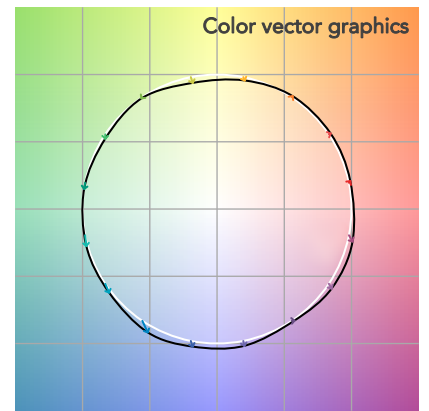
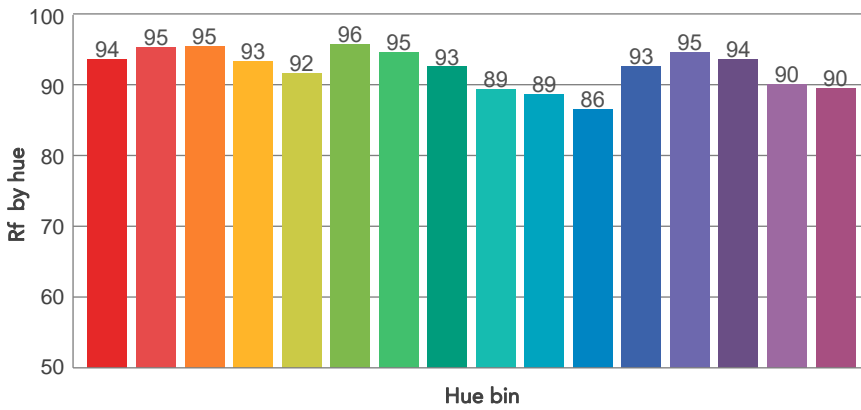
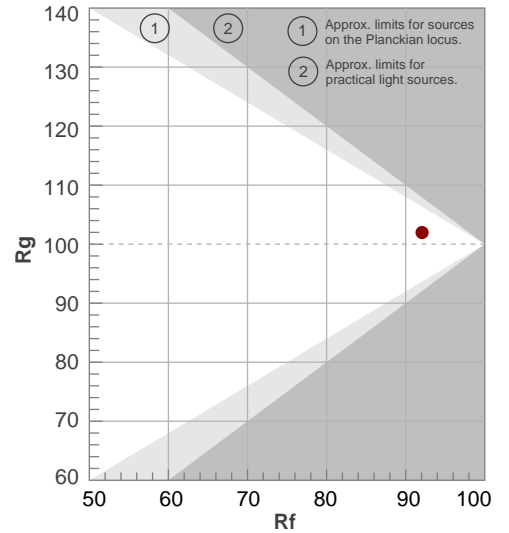
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4116 K | 95,3 | 81,1 | 92,1 | 102,0 | 94,6 | 98 | 0,372 | 0,357 | -0,0067 |

TM30 DETAILS

Rf 92,1
Fidelity index Rf

Rg 102,0
Gammut index

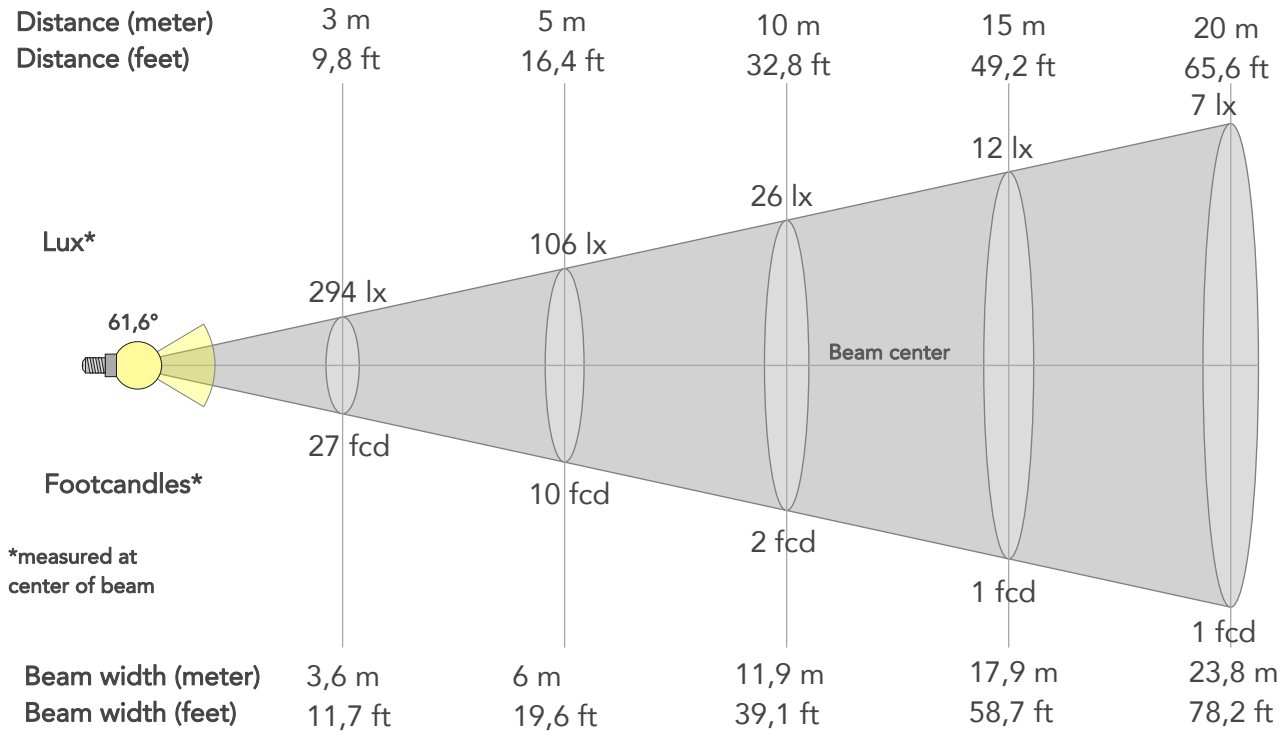
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 1% | 1% |
| 2 | 95 | 1% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 93 | -2% | -2% |
| 5 | 92 | -4% | -1% |
| 6 | 96 | 0% | 1% |
| 7 | 95 | -2% | 3% |
| 8 | 93 | 0% | 5% |
| 9 | 89 | 1% | 8% |
| 10 | 89 | 1% | 7% |
| 11 | 86 | 5% | 8% |
| 12 | 93 | 4% | 2% |
| 13 | 95 | 4% | 0% |
| 14 | 94 | 1% | 2% |
| 15 | 90 | 4% | -2% |
| 16 | 90 | 4% | -4% |



BEAM DETAILS



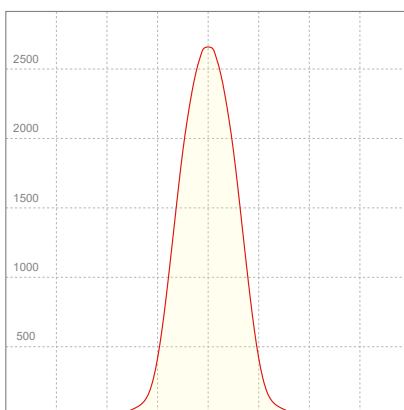
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,6° | 97,9° | 126,3° | 96,6% | 87,7% |



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 | 2650lx | 662lx | 294lx | 166lx | 106lx | 47lx | 26lx | 12lx | 7lx | 4lx | 3lx | 2lx | 1lx |
| Footcand. | 246fcd | 62fcd | 27fcd | 15fcd | 10fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,8m | 6m | 8,9m | 11,9m | 17,9m | 23,8m | 29,8m | 35,8m | 47,7m | 59,6m |
| Beam wid. | 3,9ft | 7,9ft | 11,7ft | 15,6ft | 19,6ft | 29,3ft | 39,1ft | 58,7ft | 78,2ft | 97,8ft | 117,3ft | 156,4ft | 195,6ft |

LINEAR DISTRIBUTION DIAGRAM

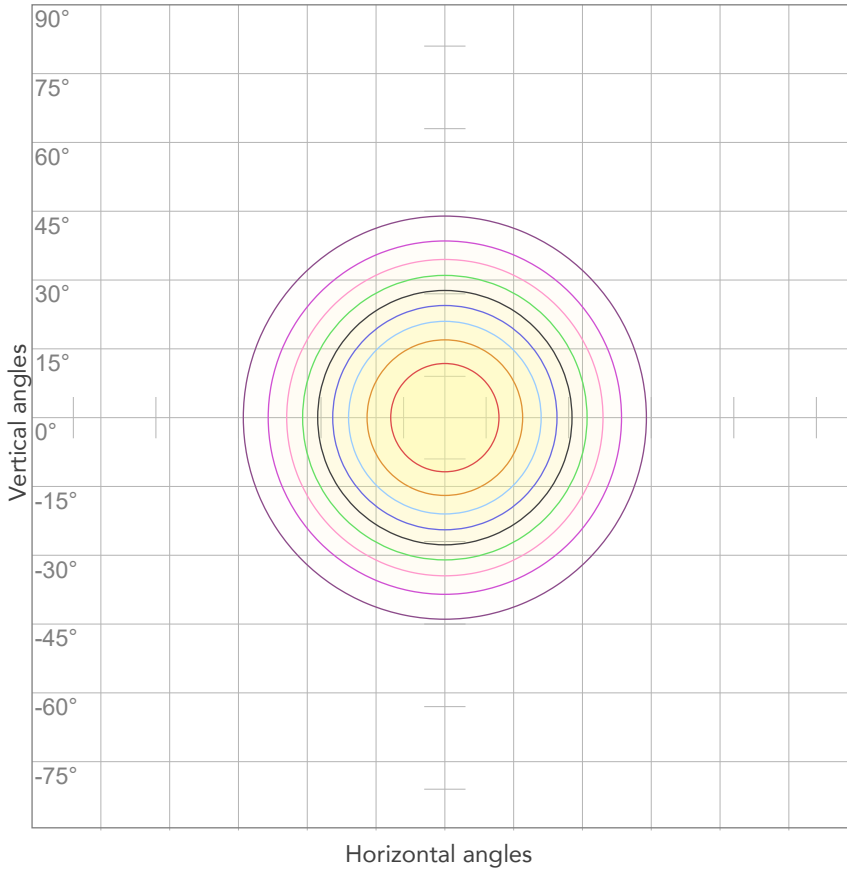


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,290A | 60,3W | 0,94 | 48lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



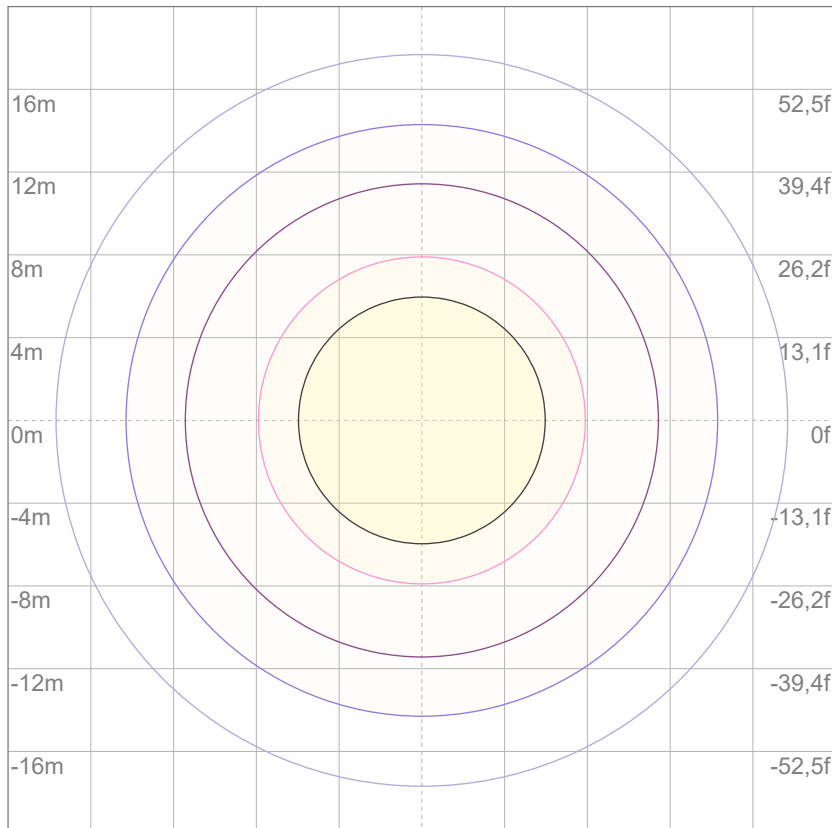
| | |
|-----|---------|
| 10% | 265 cd |
| 20% | 530 cd |
| 30% | 795 cd |
| 40% | 1060 cd |
| 50% | 1325 cd |
| 60% | 1590 cd |
| 70% | 1855 cd |
| 80% | 2120 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2650 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,795 lx |
| 5% | 1,32 lx |
| 10% | 2,65 lx |
| 30% | 7,95 lx |
| 50% | 13,2 lx |

Conditions:

Number of c-planes: 2

Lux at center: 26,5 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:

2705 lm

Peak candela output:

16020 cd

Light quality:

CRI: 97,0

Color temperature:

2651 K

PRODUCT NAME:
ECLPENDANTS VW

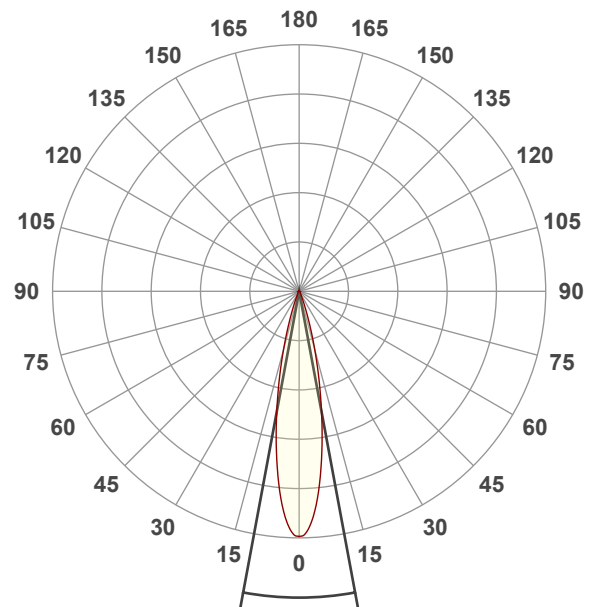
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
Warm White

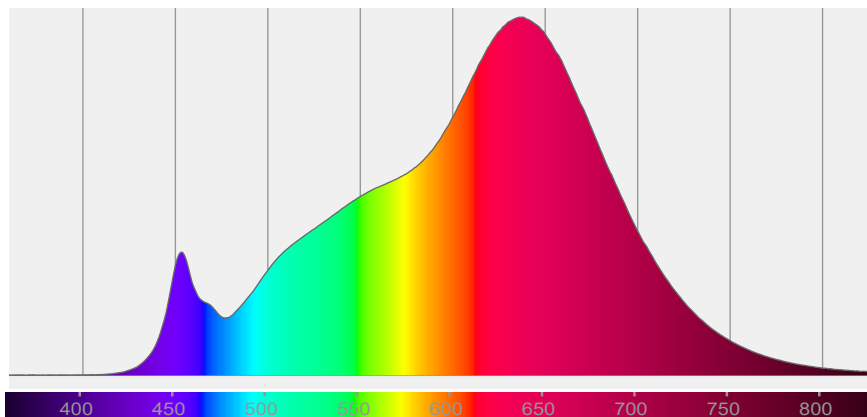
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:02:33

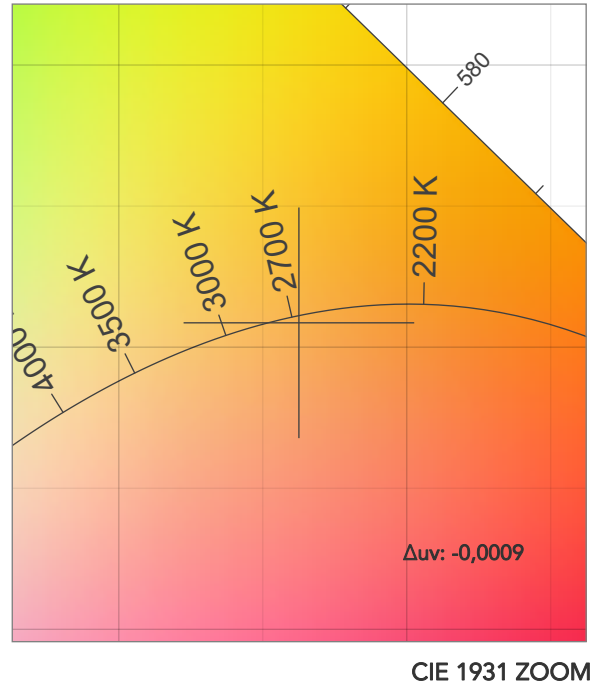
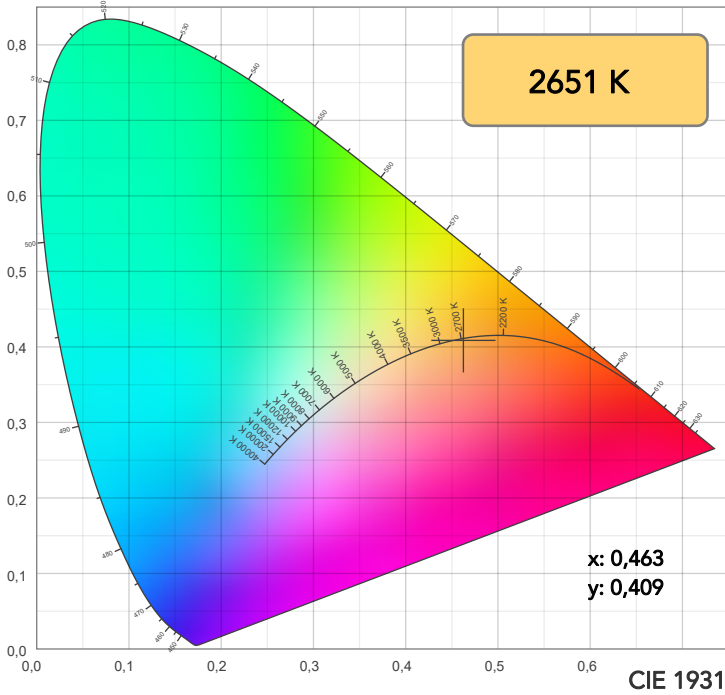


Beam angle 50%: 21,1°
Field angle 10%: 37,9°
Cut off angle 2.5%: 49,6°

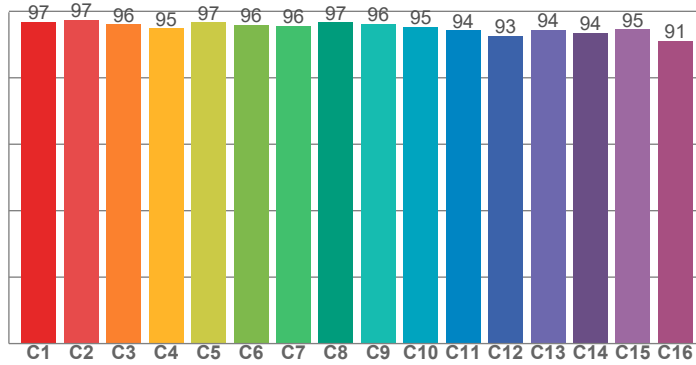
Spectra



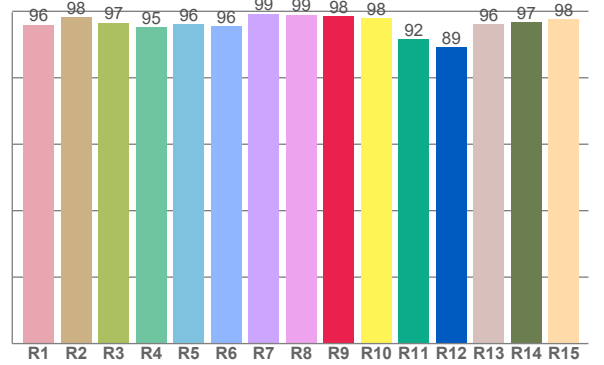
COLOR DETAILS



TM30: 95,3



CRI: 97,0 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,9 | 98,2 | 96,5 | 95,2 | 96,2 | 95,5 | 99,3 | 99,0 | 98,5 | 98,0 | 91,7 | 89,1 | 96,1 | 96,8 | 97,5 |

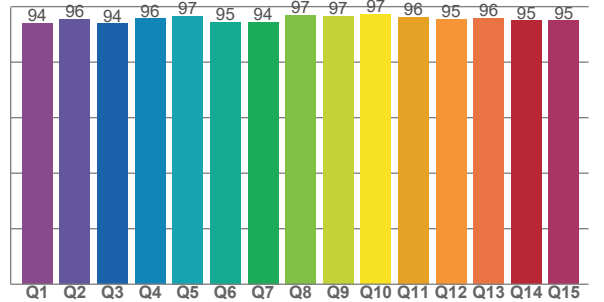
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,9 | 97,4 | 96,1 | 94,8 | 96,6 | 95,9 | 95,6 | 96,6 | 96,2 | 95,3 | 94,2 | 92,6 | 94,5 | 93,6 | 94,6 | 91,2 |

CQS Q values

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

CQS: 95,3



COLOR PARAMETERS

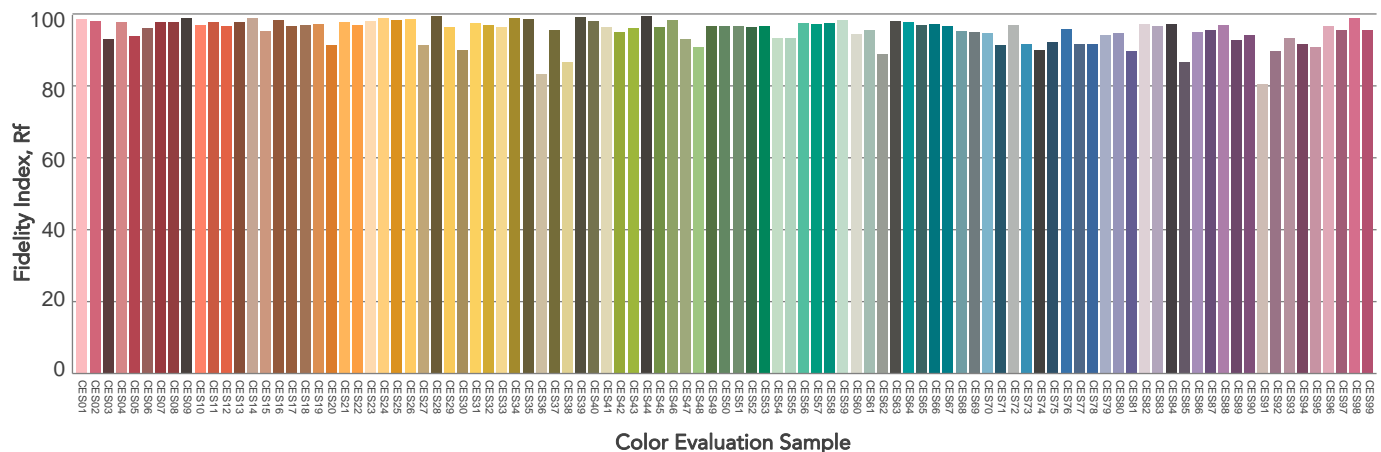
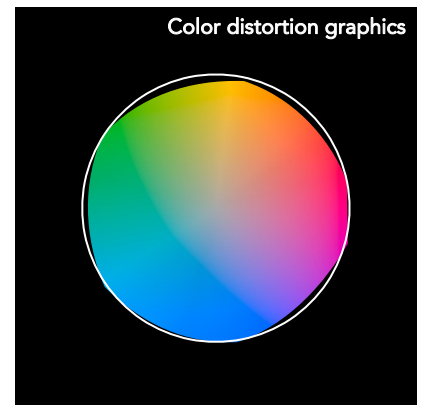
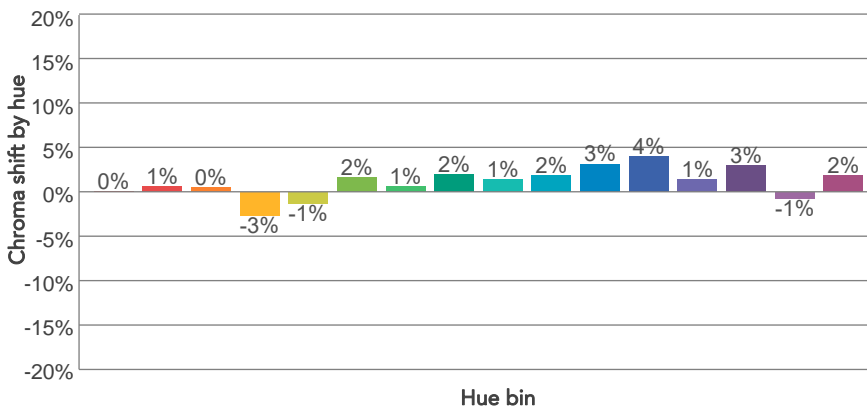
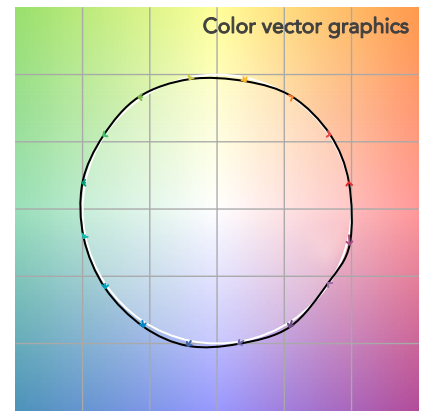
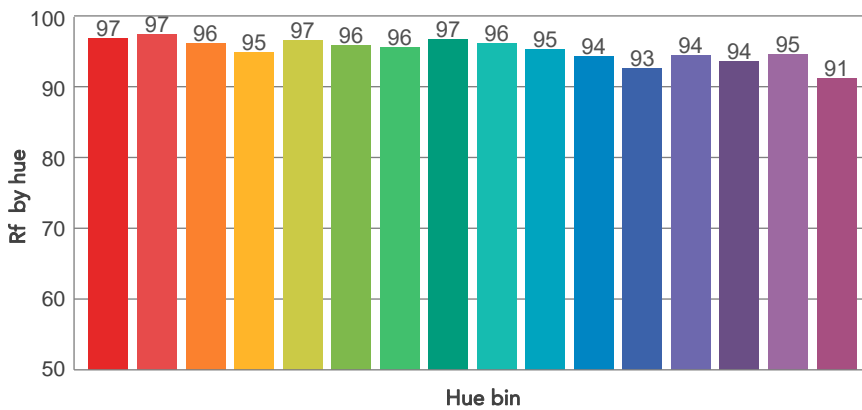
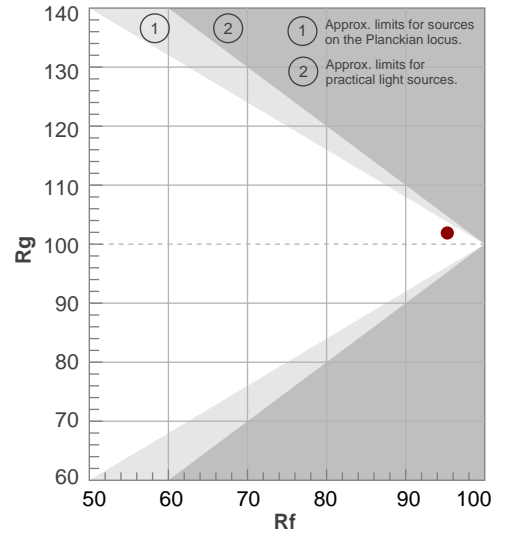
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2651 K | 97,0 | 98,5 | 95,3 | 101,9 | 95,3 | 98 | 0,463 | 0,409 | -0,0009 |

TM30 DETAILS

Rf 95,3
Fidelity index Rf

Rg 101,9
Gammut index

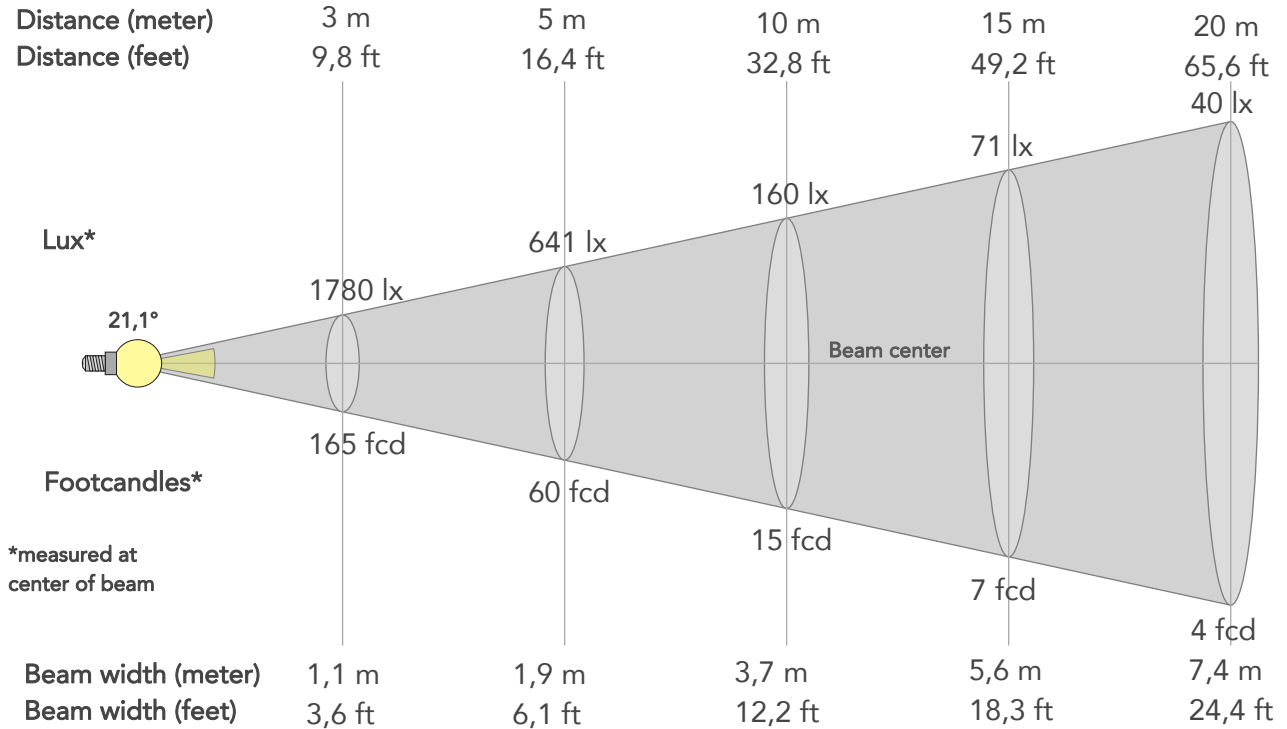
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | -1% |
| 3 | 96 | 0% | 0% |
| 4 | 95 | -3% | -2% |
| 5 | 97 | -1% | 1% |
| 6 | 96 | 2% | 2% |
| 7 | 96 | 1% | 2% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 1% | 2% |
| 10 | 95 | 2% | 3% |
| 11 | 94 | 3% | 3% |
| 12 | 93 | 4% | -2% |
| 13 | 94 | 1% | -4% |
| 14 | 94 | 3% | -4% |
| 15 | 95 | -1% | 0% |
| 16 | 91 | 2% | -7% |



BEAM DETAILS



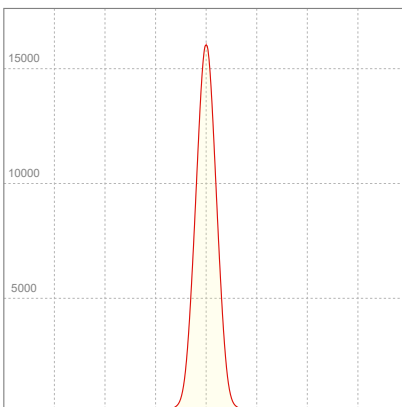
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21,1° | 37,9° | 49,6° | 97,8% | 95,0% |



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 | 16020lx | 4005lx | 1780lx | 1001lx | 641lx | 285lx | 160lx | 71lx | 40lx | 26lx | 18lx | 10lx | 6lx |
| Footcand. | 1488fcd | 372fcd | 165fcd | 93fcd | 60fcd | 26fcd | 15fcd | 7fcd | 4fcd | 2fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,2m | 14,9m | 18,6m |
| Beam wid. | 1,2ft | 2,5ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,3ft | 24,4ft | 30,5ft | 36,6ft | 48,8ft | 61ft |

LINEAR DISTRIBUTION DIAGRAM

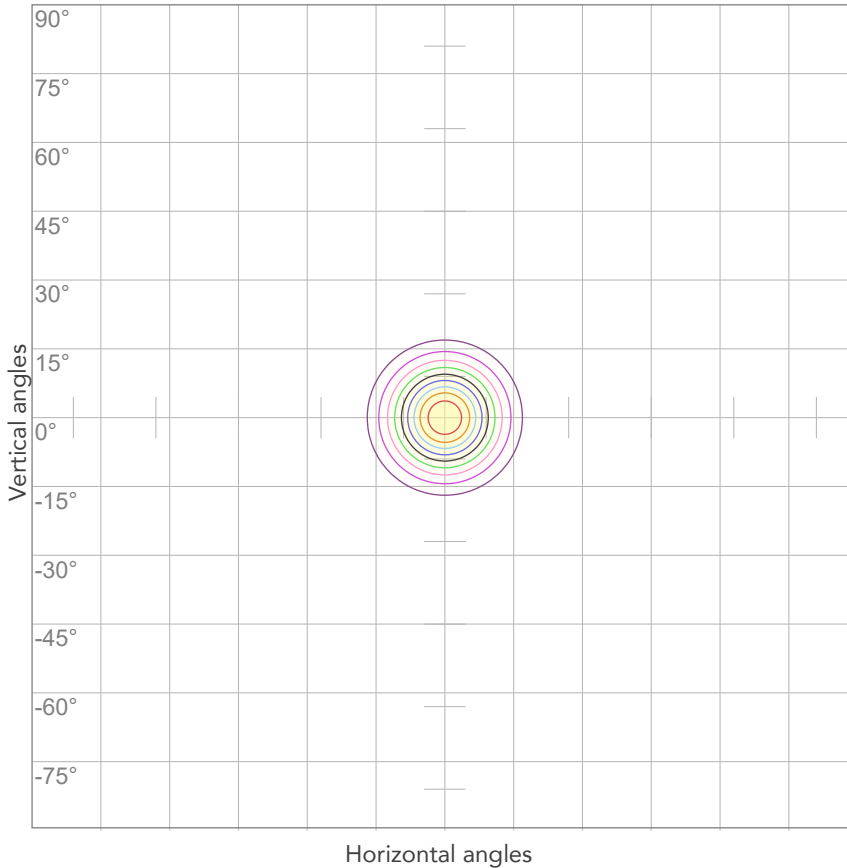


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 222V | 0,297A | 61,8W | 0,94 | 44lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



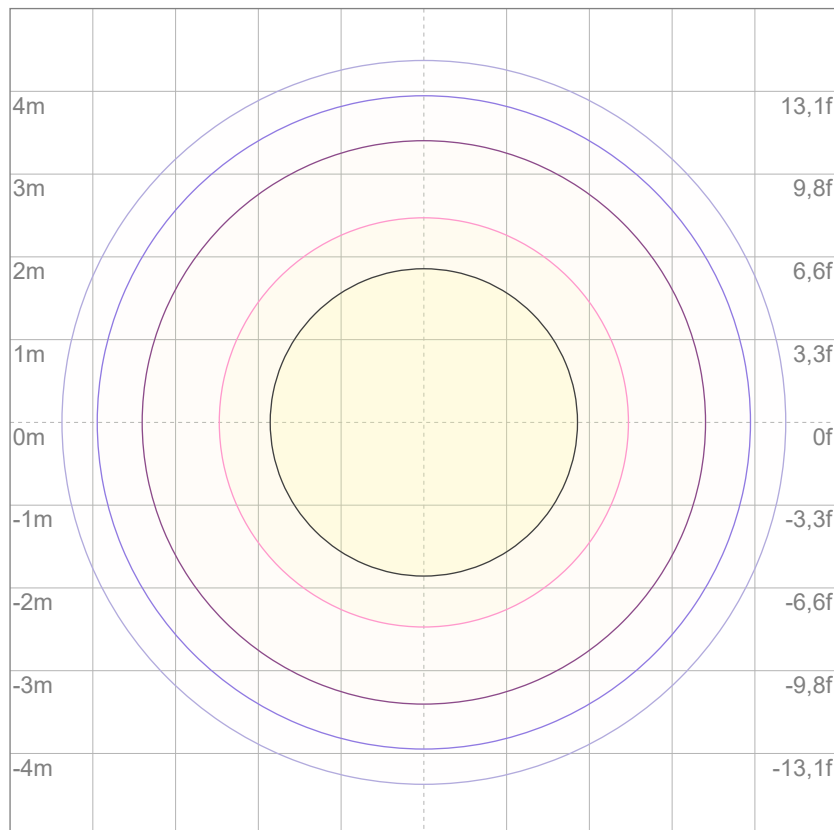
| | |
|-----|----------|
| 10% | 1602 cd |
| 20% | 3204 cd |
| 30% | 4806 cd |
| 40% | 6408 cd |
| 50% | 8010 cd |
| 60% | 9612 cd |
| 70% | 11214 cd |
| 80% | 12816 cd |

Conditions:

Number of c-planes: 2

Candela at center: 16020 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 4,81 lx |
| 5% | 8,01 lx |
| 10% | 16,0 lx |
| 30% | 48,1 lx |
| 50% | 80,1 lx |

Conditions:

Number of c-planes: 2

Lux at center: 160 lx

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



Total lumen output:

2629 lm

Peak candela output:

4666 cd

Light quality:

CRI: 96,9

Color temperature:

2641 K

PRODUCT NAME:
ECLPENDANTS VW

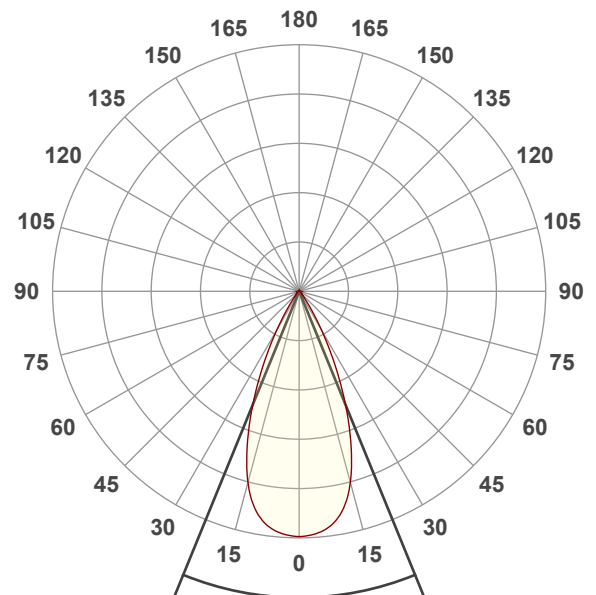
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
Warm White

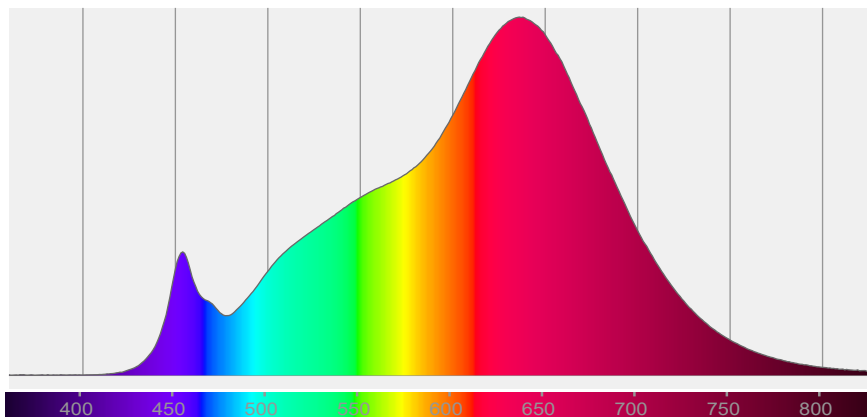
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:34:54

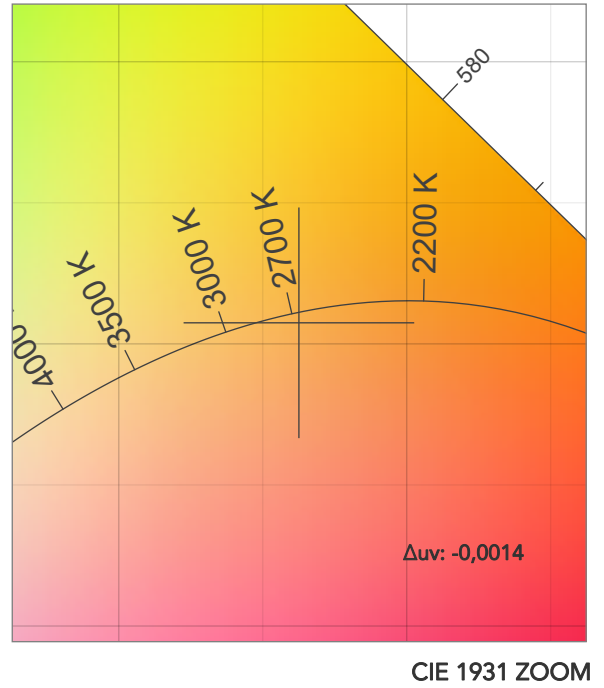
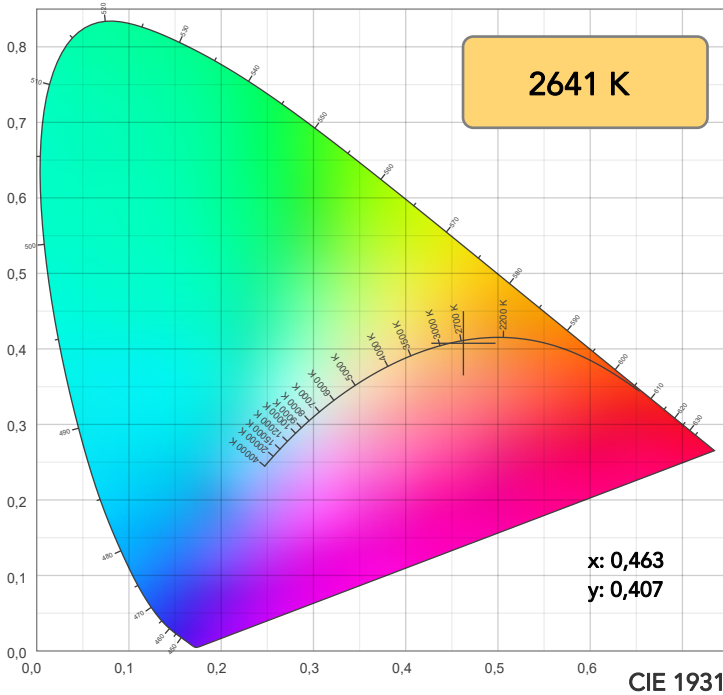


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,2°

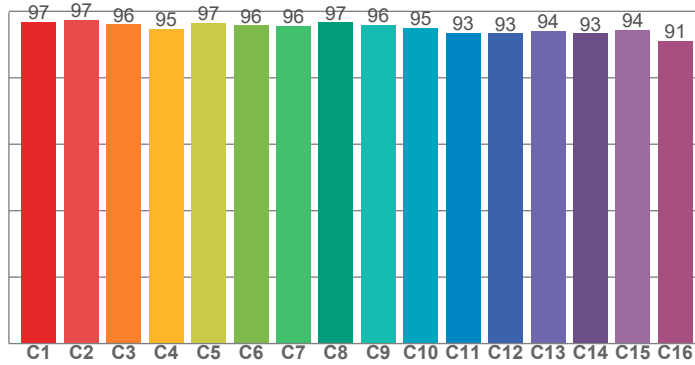
Spectra



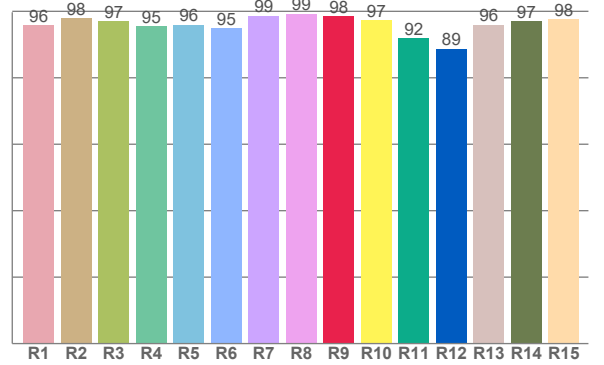
COLOR DETAILS



TM30: 95,2



CRI: 96,9 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,9 | 97,8 | 97,1 | 95,5 | 96,0 | 94,9 | 98,7 | 99,3 | 98,4 | 97,3 | 91,8 | 88,7 | 95,9 | 97,1 | 97,6 |

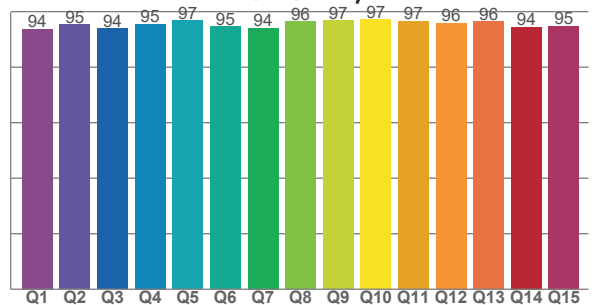
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,8 | 97,5 | 96,1 | 94,7 | 96,5 | 95,8 | 95,6 | 96,7 | 95,9 | 95,1 | 93,5 | 93,3 | 94,1 | 93,3 | 94,5 | 91,1 |

CQS Q values

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

CQS: 95,2



COLOR PARAMETERS

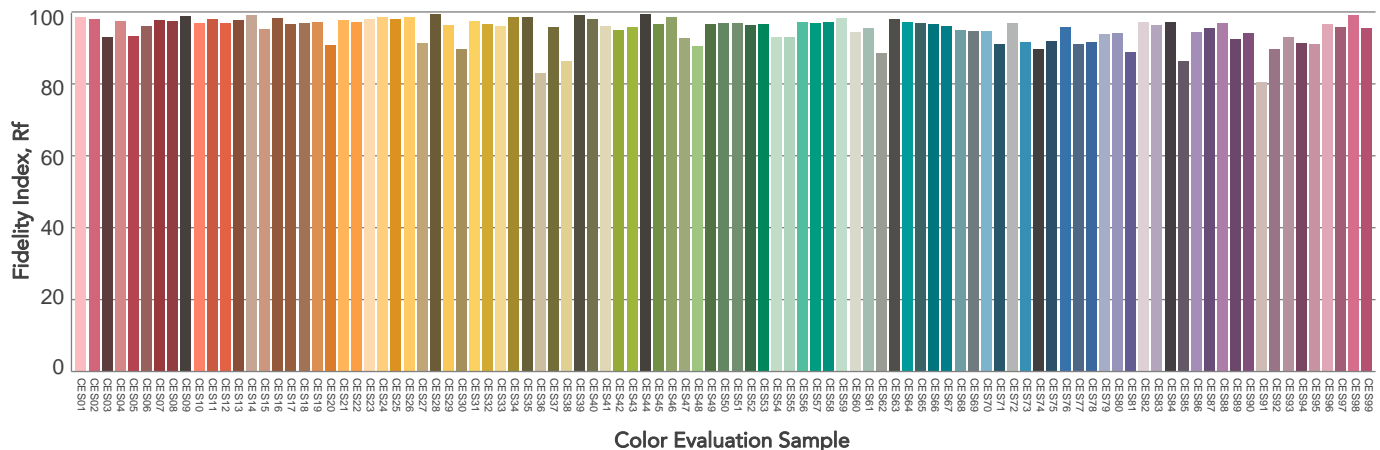
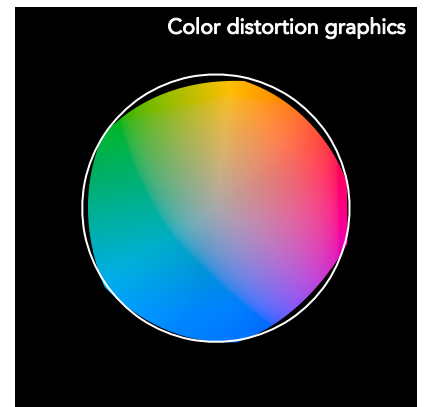
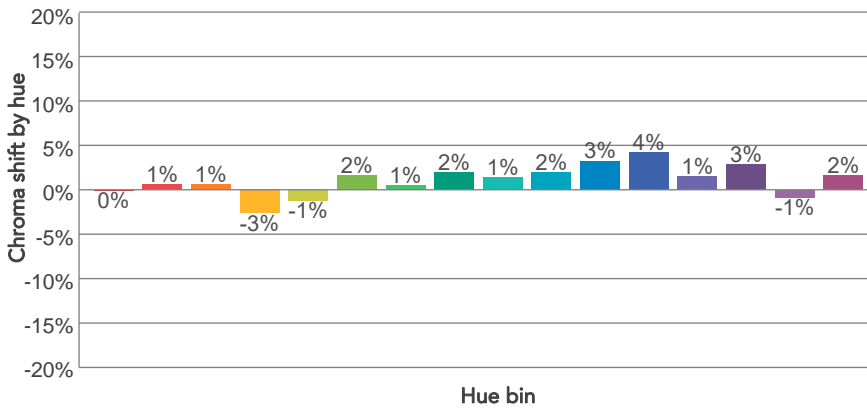
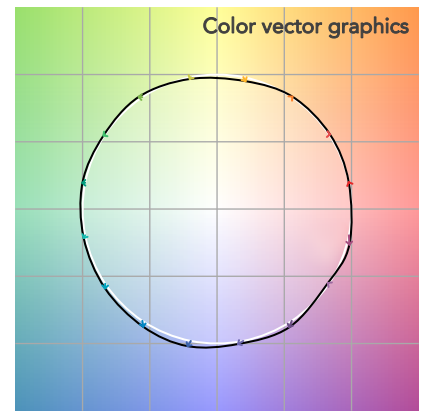
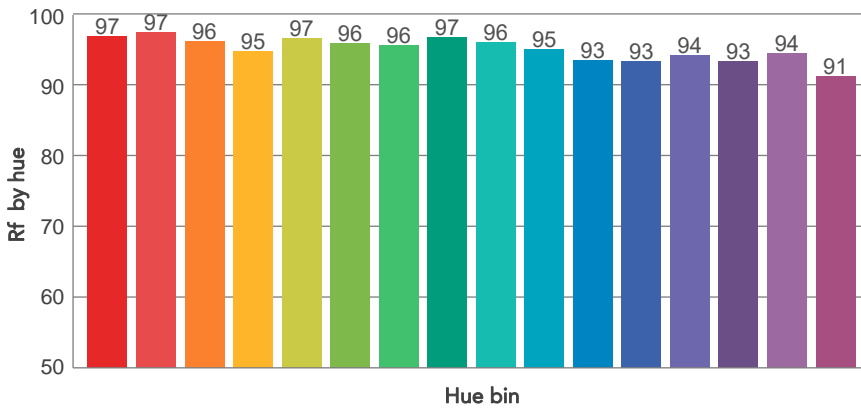
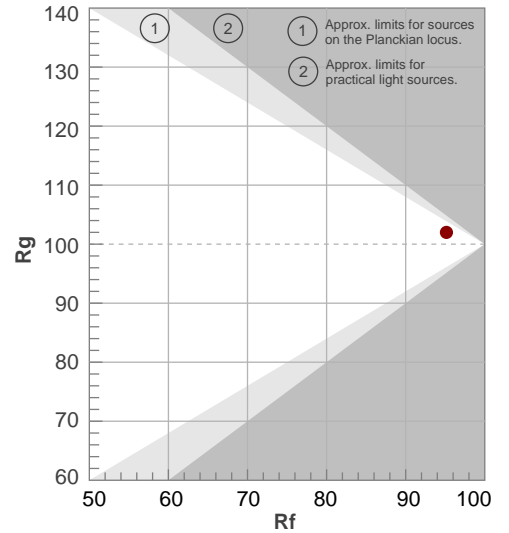
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2641 K | 96,9 | 98,4 | 95,2 | 102,0 | 95,2 | 98 | 0,463 | 0,407 | -0,0014 |

TM30 DETAILS

Rf 95,2
Fidelity index Rf

Rg 102,0
Gammut index

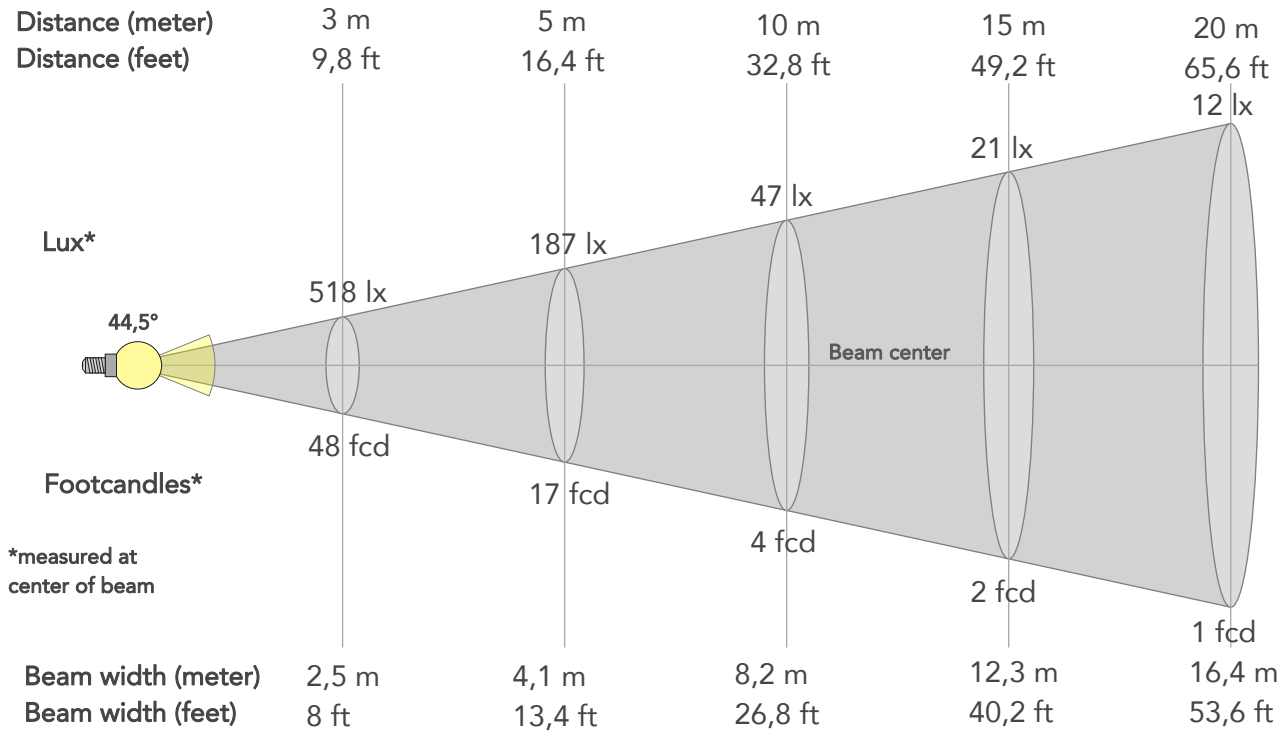
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | -1% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -3% | -2% |
| 5 | 97 | -1% | 1% |
| 6 | 96 | 2% | 2% |
| 7 | 96 | 1% | 2% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 1% | 2% |
| 10 | 95 | 2% | 3% |
| 11 | 93 | 3% | 3% |
| 12 | 93 | 4% | -2% |
| 13 | 94 | 1% | -4% |
| 14 | 93 | 3% | -4% |
| 15 | 94 | -1% | 0% |
| 16 | 91 | 2% | -7% |



BEAM DETAILS



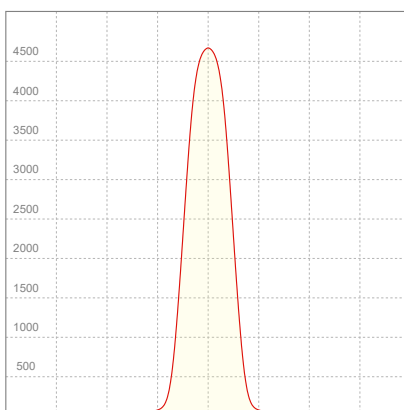
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,2° | 98,3% | 95,5% |



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 | 4666lx | 1166lx | 518lx | 292lx | 187lx | 83lx | 47lx | 21lx | 12lx | 7lx | 5lx | 3lx | 2lx |
| Footcand. | 433fcd | 108fcd | 48fcd | 27fcd | 17fcd | 8fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,4m | 24,5m | 32,7m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,8ft | 40,2ft | 53,6ft | 67ft | 80,5ft | 107,3ft | 134,1ft |

LINEAR DISTRIBUTION DIAGRAM

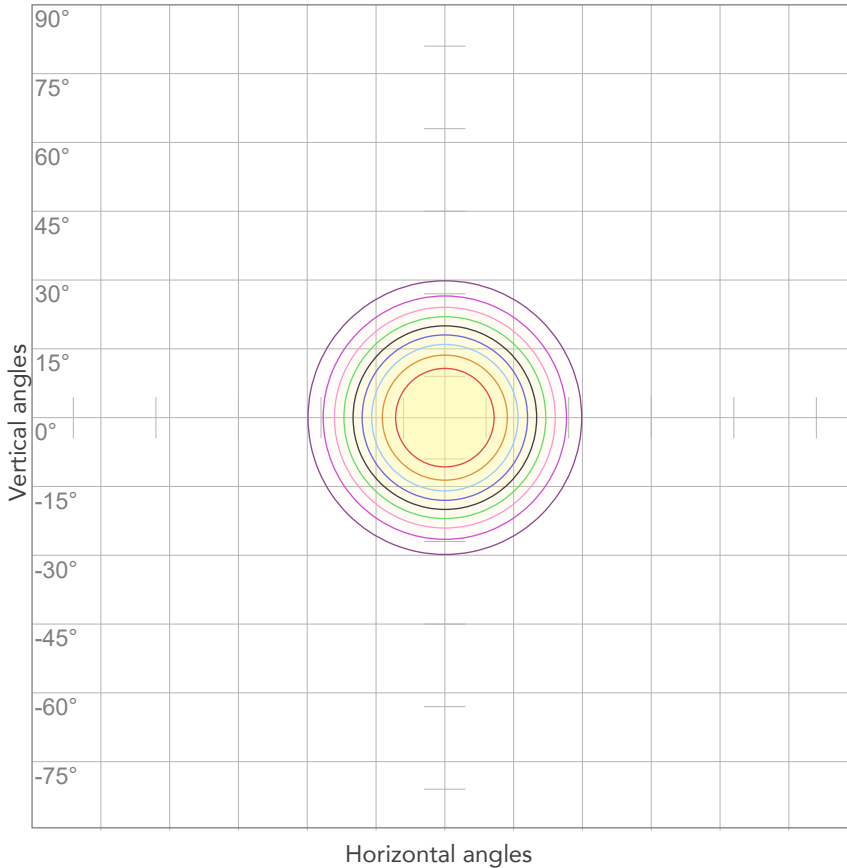


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,289A | 60,2W | 0,93 | 44lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



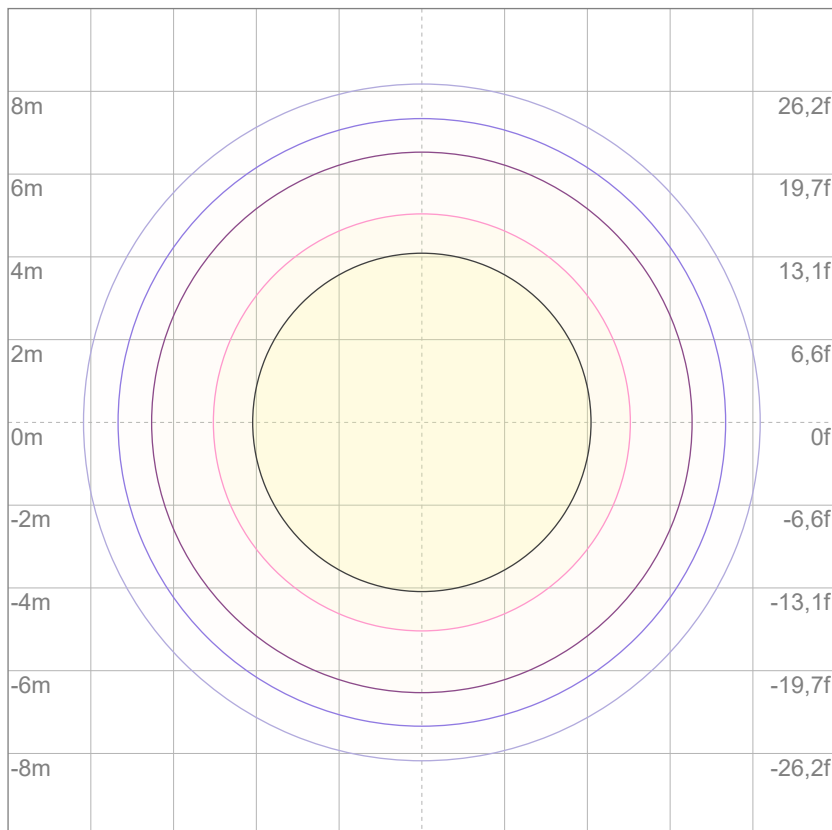
| | |
|-----|---------|
| 10% | 467 cd |
| 20% | 933 cd |
| 30% | 1400 cd |
| 40% | 1866 cd |
| 50% | 2333 cd |
| 60% | 2800 cd |
| 70% | 3266 cd |
| 80% | 3733 cd |

Conditions:

Number of c-planes: 2

Candela at center: 4666 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|---------|
| 3% | 1,40 lx |
| 5% | 2,33 lx |
| 10% | 4,67 lx |
| 30% | 14,0 lx |
| 50% | 23,3 lx |

Conditions:

Number of c-planes: 2

Lux at center: 46,7 lx

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



Total lumen output:

2412 lm

Peak candela output:

2244 cd

Light quality:

CRI: 96,8

Color temperature:

2637 K

PRODUCT NAME:
ECLPENDANTS VW

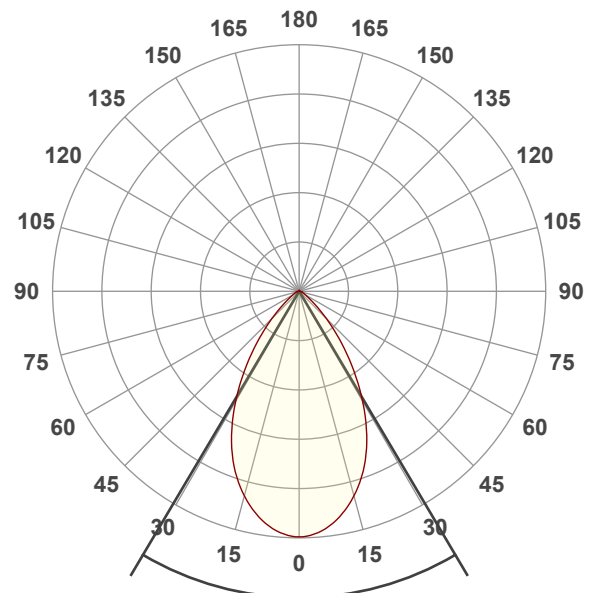
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
Warm White

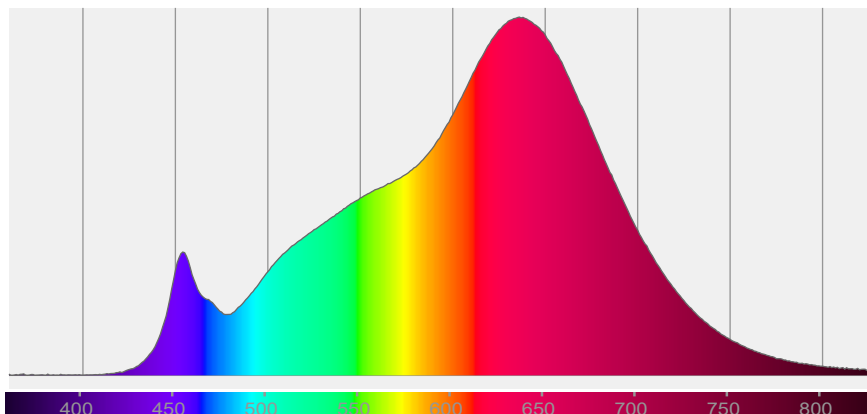
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:16:16

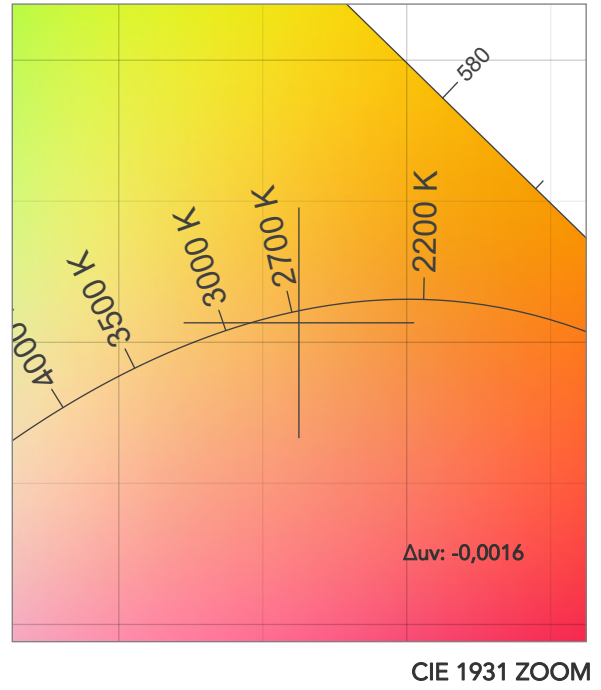
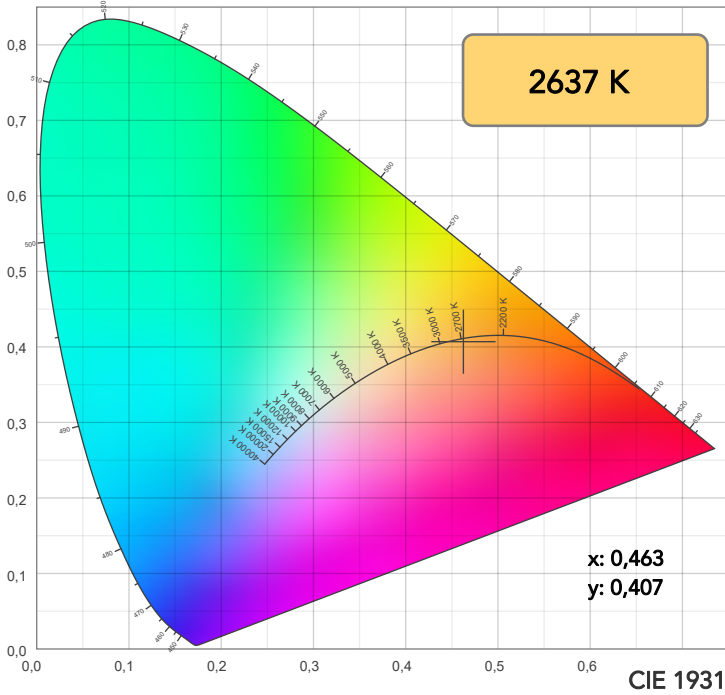


Beam angle 50%: 61,3°
Field angle 10%: 98°
Cut off angle 2.5%: 126°

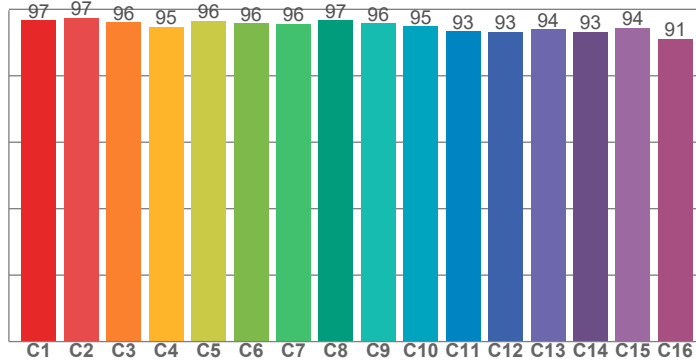
Spectra



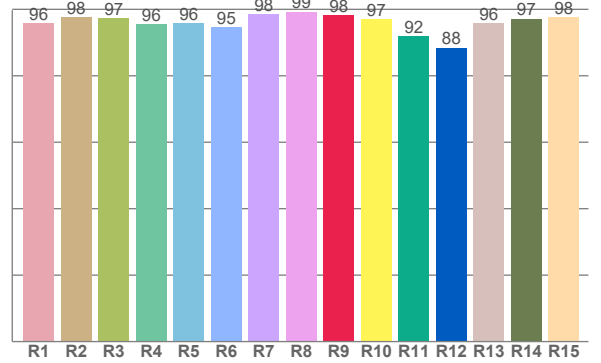
COLOR DETAILS



TM30: 95,1



CRI: 96,8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,8 | 97,7 | 97,4 | 95,5 | 95,9 | 94,6 | 98,5 | 99,2 | 98,3 | 96,9 | 91,8 | 88,4 | 95,8 | 97,2 | 97,6 |

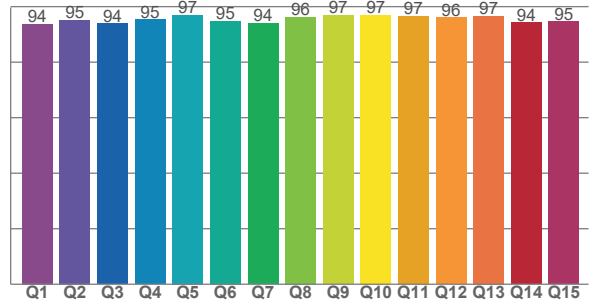
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,7 | 97,5 | 96,1 | 94,6 | 96,5 | 95,8 | 95,6 | 96,7 | 95,8 | 94,9 | 93,4 | 93,2 | 93,9 | 93,2 | 94,4 | 91,1 |

CQS Q values

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

CQS: 95,1



COLOR PARAMETERS

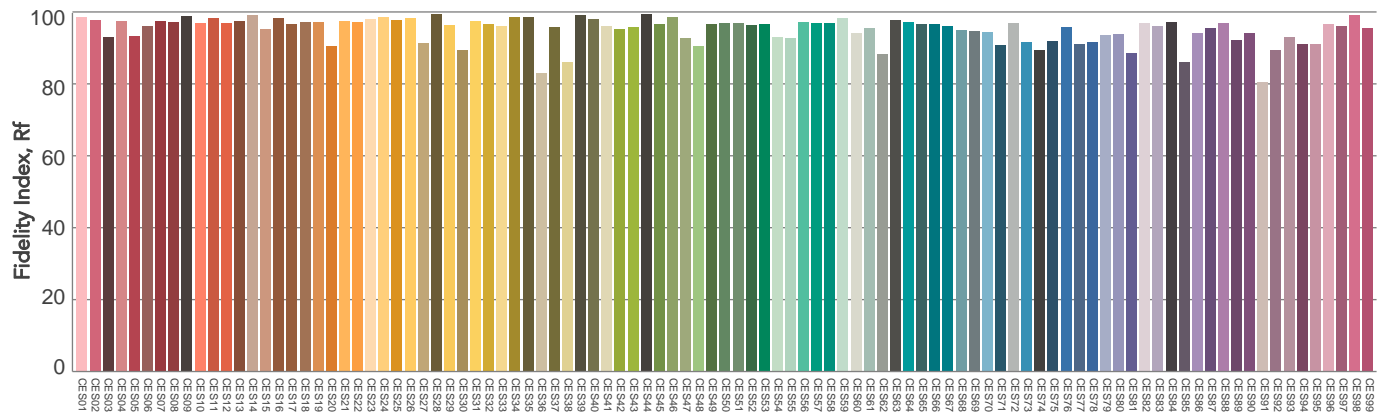
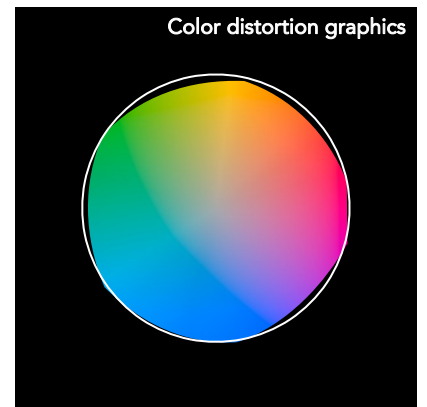
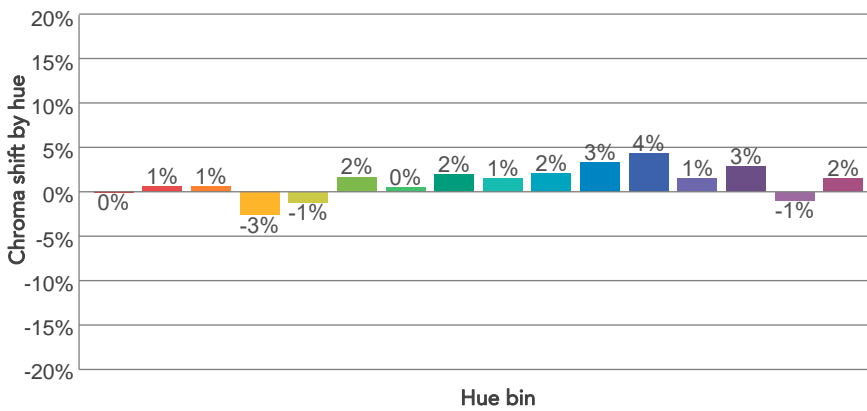
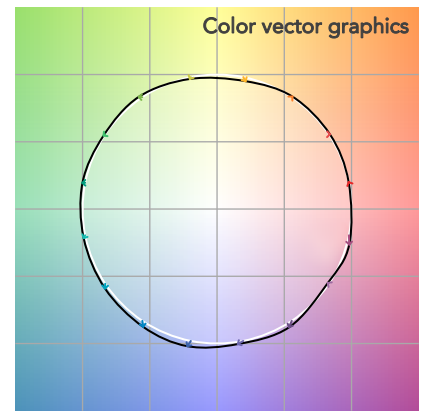
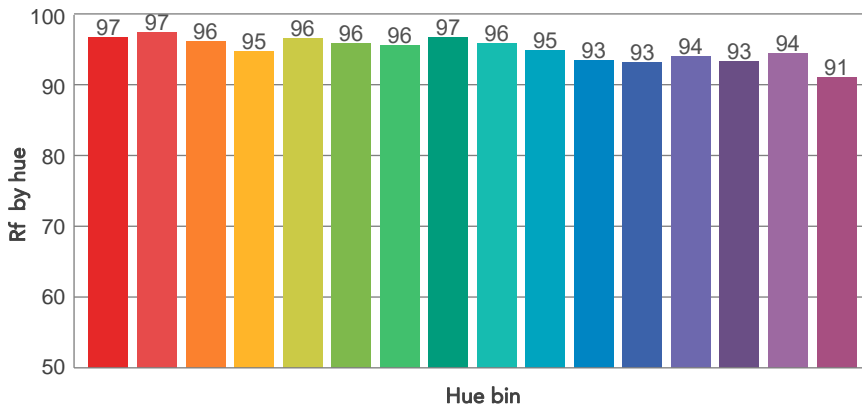
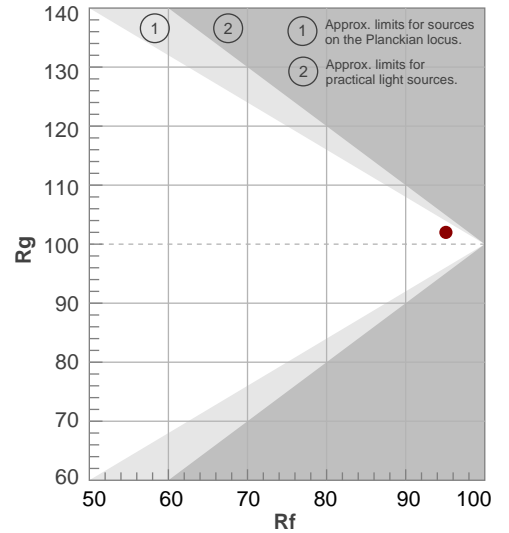
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2637 K | 96,8 | 98,3 | 95,1 | 102,0 | 95,1 | 98 | 0,463 | 0,407 | -0,0016 |

TM30 DETAILS

Rf 95,1
Fidelity index Rf

Rg 102,0
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -3% | -2% |
| 5 | 96 | -1% | 1% |
| 6 | 96 | 2% | 2% |
| 7 | 96 | 0% | 2% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 1% | 2% |
| 10 | 95 | 2% | 3% |
| 11 | 93 | 3% | 3% |
| 12 | 93 | 4% | -2% |
| 13 | 94 | 1% | -4% |
| 14 | 93 | 3% | -4% |
| 15 | 94 | -1% | 0% |
| 16 | 91 | 2% | -7% |

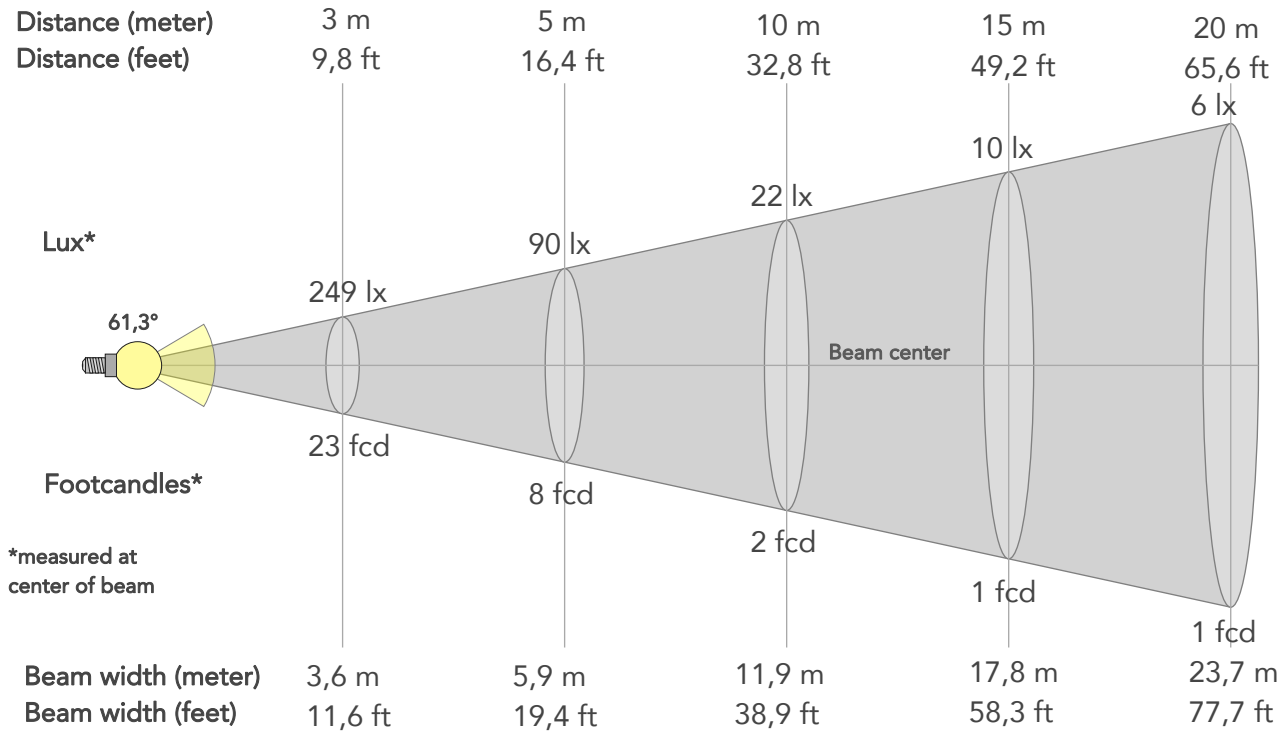


Color Evaluation Sample

BEAM DETAILS



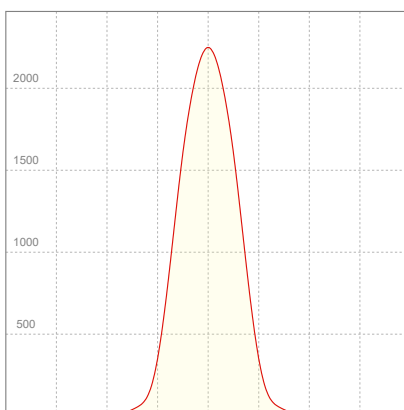
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,3° | 98° | 126° | 96,6% | 87,9% |



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 | 2244lx | 561lx | 249lx | 140lx | 90lx | 40lx | 22lx | 10lx | 6lx | 4lx | 2lx | 1lx | 1lx |
| Footcand. | 209fcd | 52fcd | 23fcd | 13fcd | 8fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,7m | 5,9m | 8,9m | 11,9m | 17,8m | 23,7m | 29,6m | 35,6m | 47,4m | 59,3m |
| Beam wid. | 3,9ft | 7,8ft | 11,6ft | 15,5ft | 19,4ft | 29,2ft | 38,9ft | 58,3ft | 77,7ft | 97,2ft | 116,6ft | 155,5ft | 194,4ft |

LINEAR DISTRIBUTION DIAGRAM

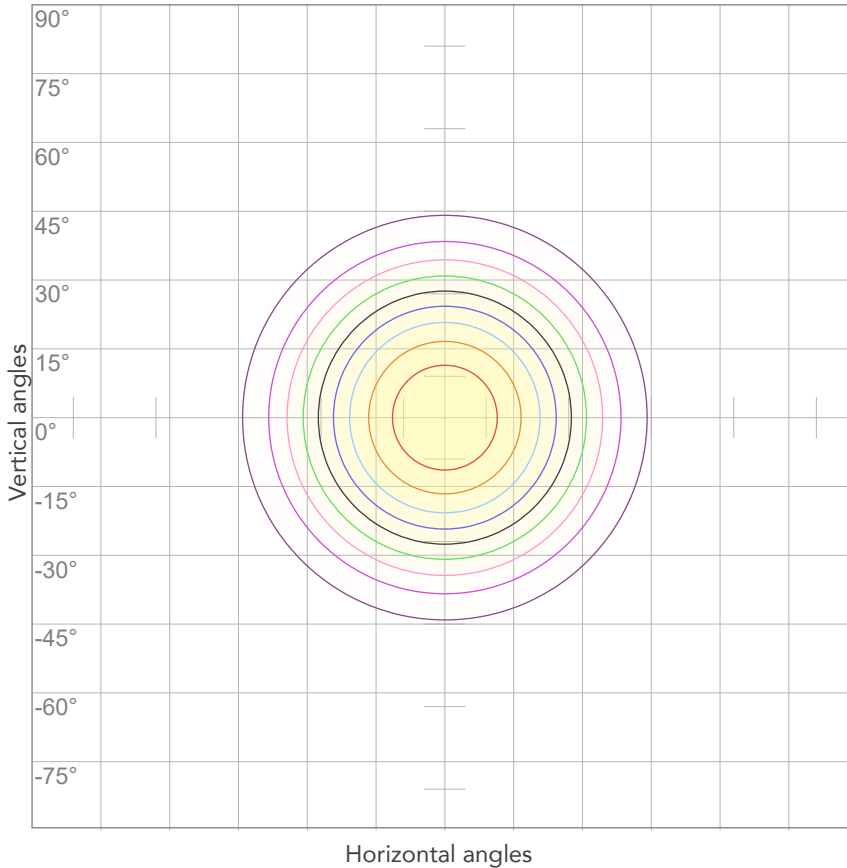


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,288A | 59,6W | 0,93 | 40lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



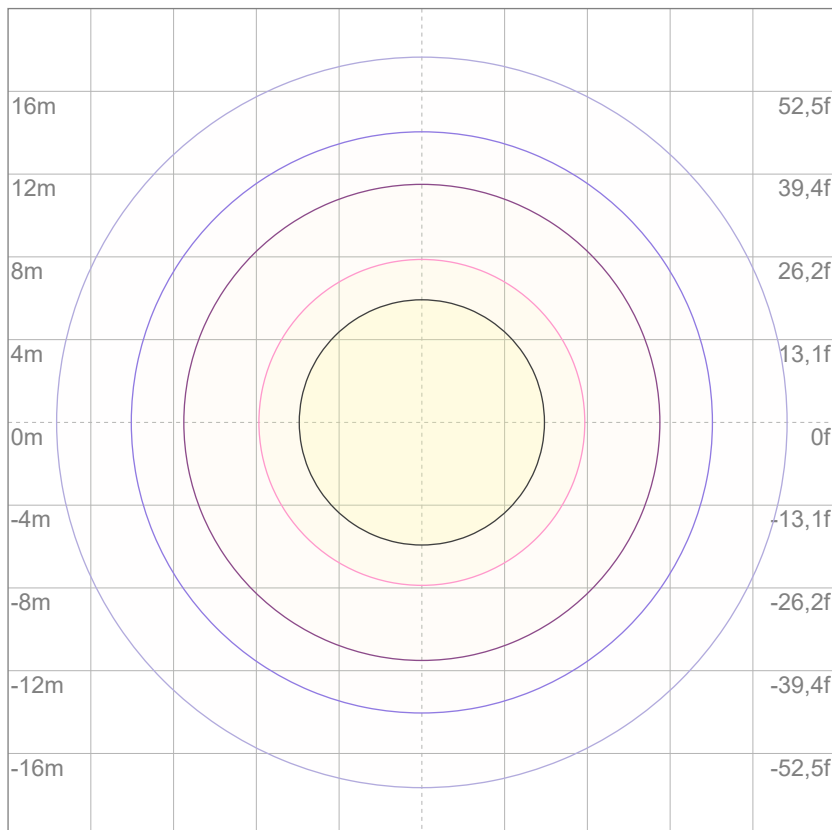
| | |
|-----|---------|
| 10% | 224 cd |
| 20% | 449 cd |
| 30% | 673 cd |
| 40% | 898 cd |
| 50% | 1122 cd |
| 60% | 1347 cd |
| 70% | 1571 cd |
| 80% | 1795 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2244 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,673 lx |
| 5% | 1,12 lx |
| 10% | 2,24 lx |
| 30% | 6,73 lx |
| 50% | 11,2 lx |

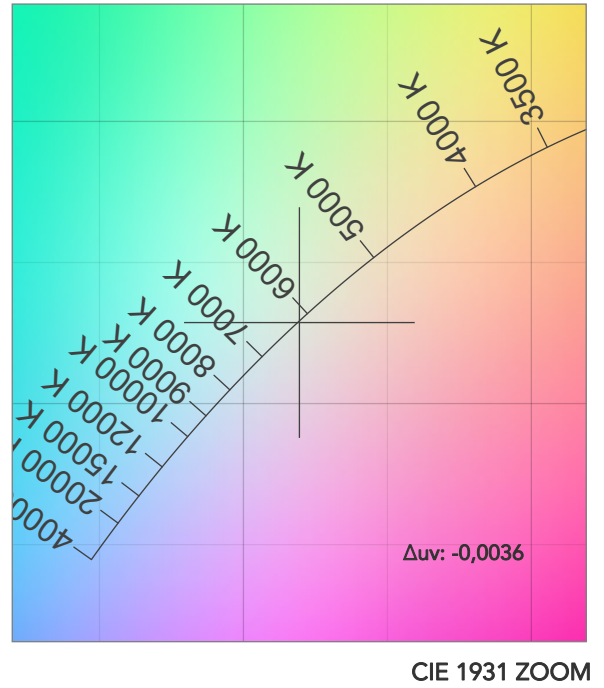
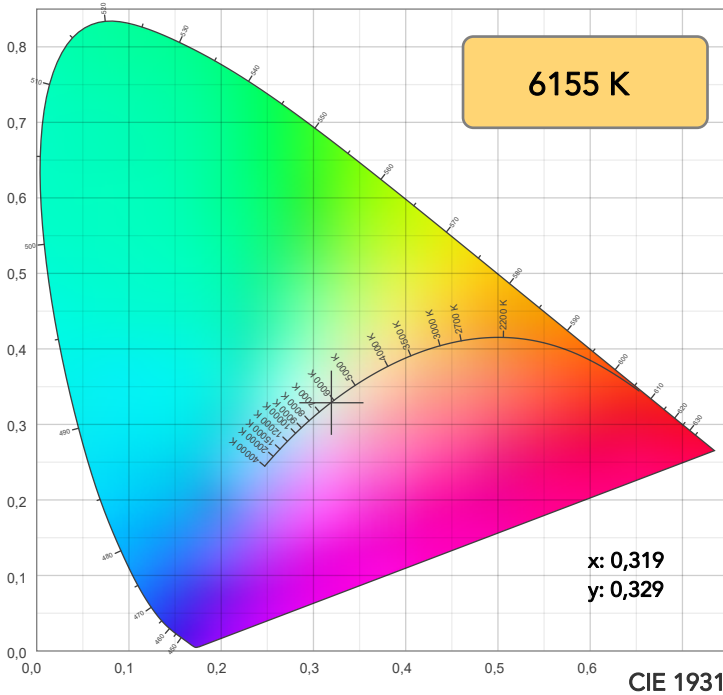
Conditions:

Number of c-planes: 2

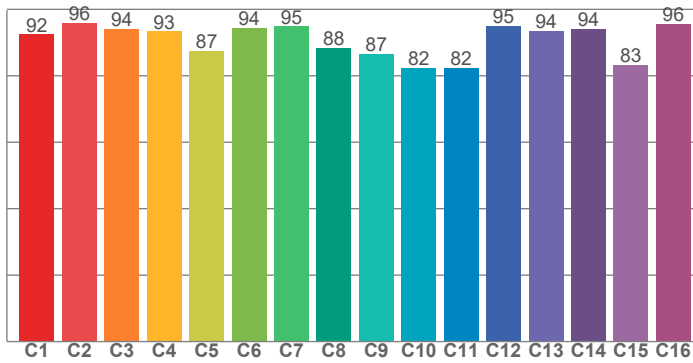
Lux at center: 22,4 lx

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

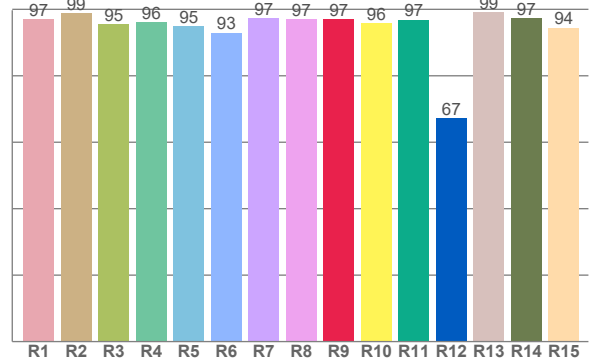
COLOR DETAILS



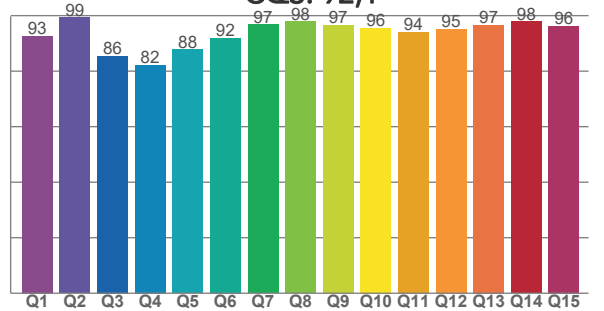
TM30: 90,4



CRI: 96,2 (R1-R8)



CQS: 92,1



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 97,1 | 98,8 | 95,5 | 96,1 | 94,9 | 92,9 | 97,3 | 97,0 | 97,0 | 95,8 | 96,8 | 67,2 | 99,1 | 97,3 | 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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,4 | 95,9 | 94,1 | 93,3 | 87,5 | 94,3 | 94,9 | 88,5 | 86,5 | 82,4 | 82,4 | 95,1 | 93,5 | 94,1 | 83,4 | 95,7 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,7 | 99,3 | 85,5 | 82,3 | 87,8 | 91,9 | 96,8 | 97,9 | 96,6 | 95,6 | 94,1 | 95,2 | 96,6 | 97,9 | 96,3 |

COLOR PARAMETERS

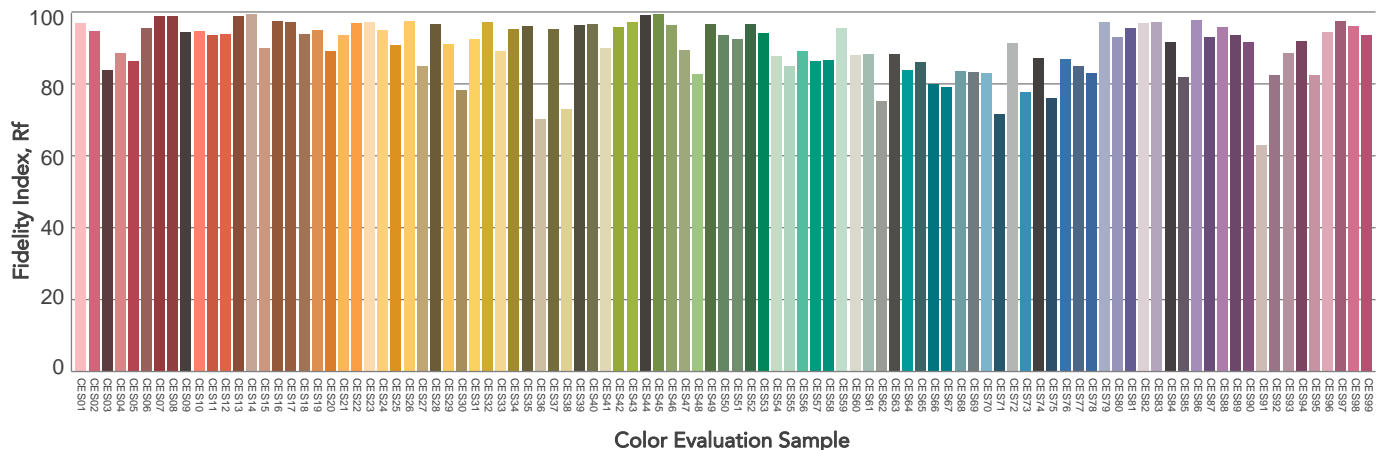
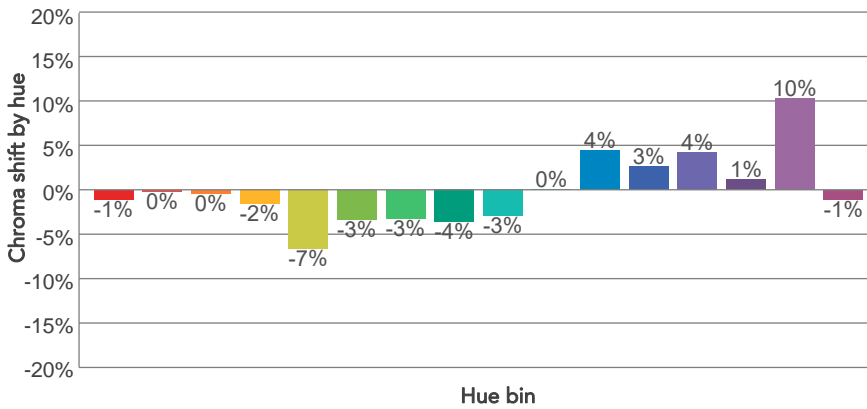
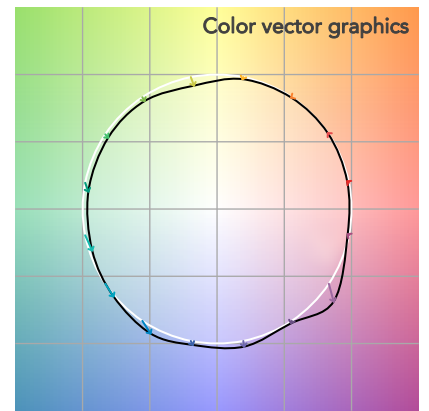
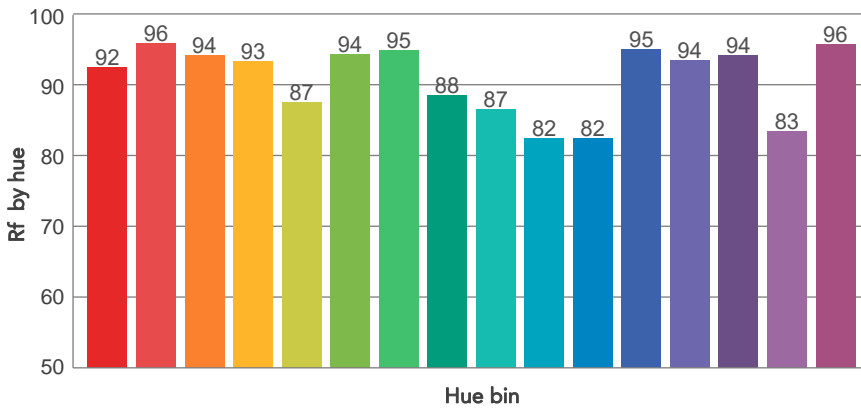
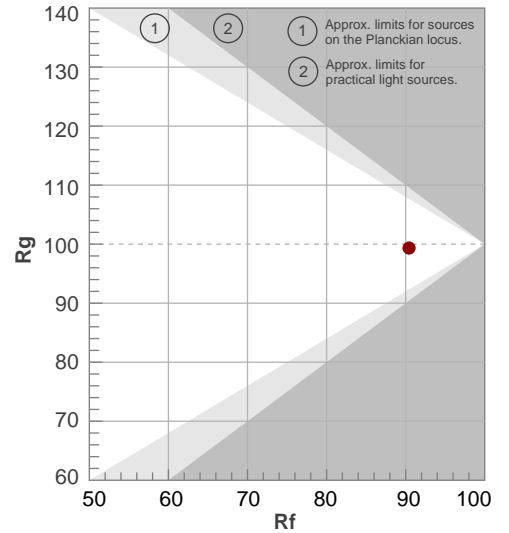
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6155 K | 96,2 | 97,0 | 90,4 | 99,3 | 92,1 | 96 | 0,319 | 0,329 | -0,0036 |

TM30 DETAILS

Rf 90,4
Fidelity index Rf

Rg 99,3
Gammut index

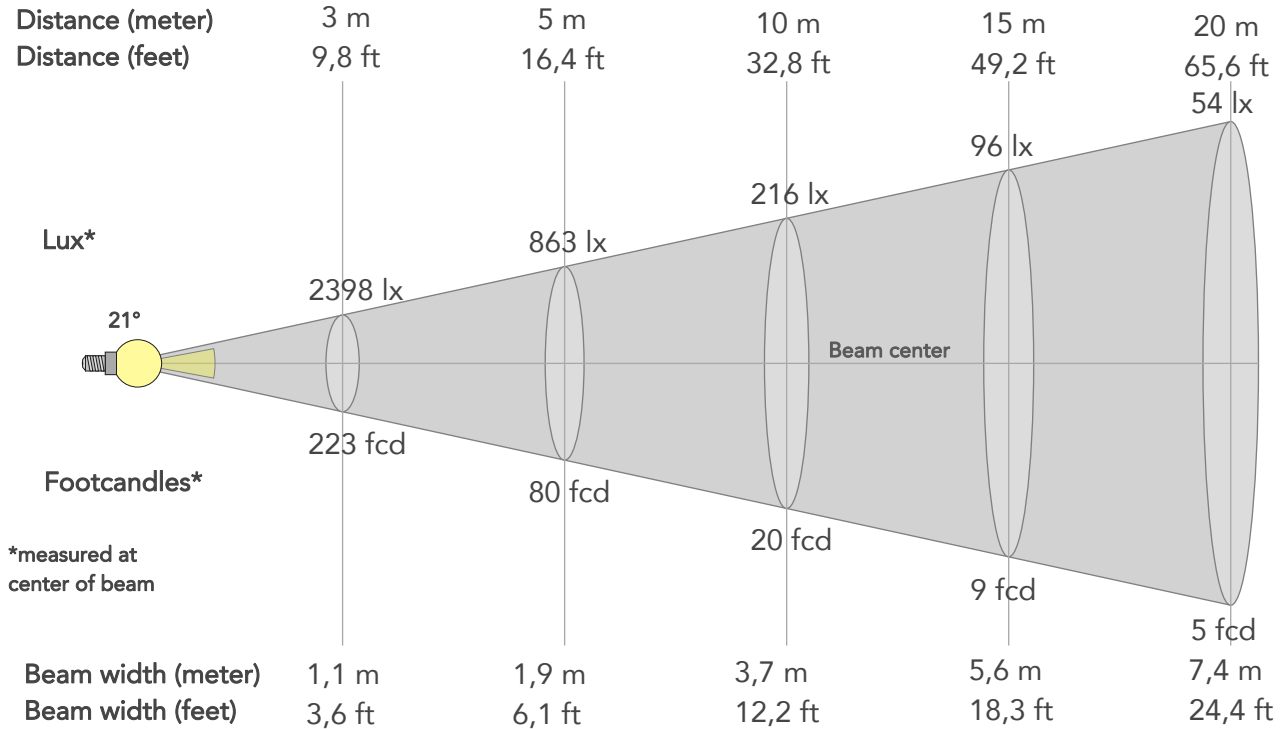
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 1% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -3% | 0% |
| 7 | 95 | -3% | 1% |
| 8 | 88 | -4% | 6% |
| 9 | 87 | -3% | 12% |
| 10 | 82 | 0% | 11% |
| 11 | 82 | 4% | 10% |
| 12 | 95 | 3% | 2% |
| 13 | 94 | 4% | 0% |
| 14 | 94 | 1% | -1% |
| 15 | 83 | 10% | -9% |
| 16 | 96 | -1% | 0% |



BEAM DETAILS



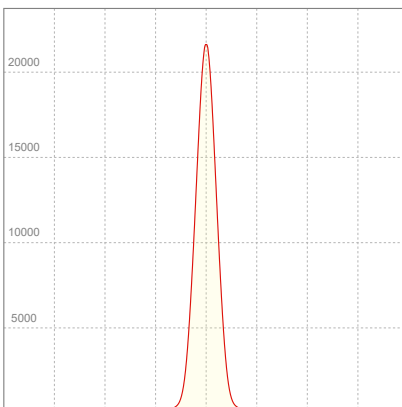
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21° | 37,9° | 49,6° | 97,7% | 94,9% |



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 | 21580lx | 5395lx | 2398lx | 1349lx | 863lx | 384lx | 216lx | 96lx | 54lx | 35lx | 24lx | 13lx | 9lx |
| Footcand. | 2005fcd | 501fcd | 223fcd | 125fcd | 80fcd | 36fcd | 20fcd | 9fcd | 5fcd | 3fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,1m | 14,9m | 18,6m |
| Beam wid. | 1,2ft | 2,5ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,3ft | 24,4ft | 30,5ft | 36,5ft | 48,7ft | 60,9ft |

LINEAR DISTRIBUTION DIAGRAM

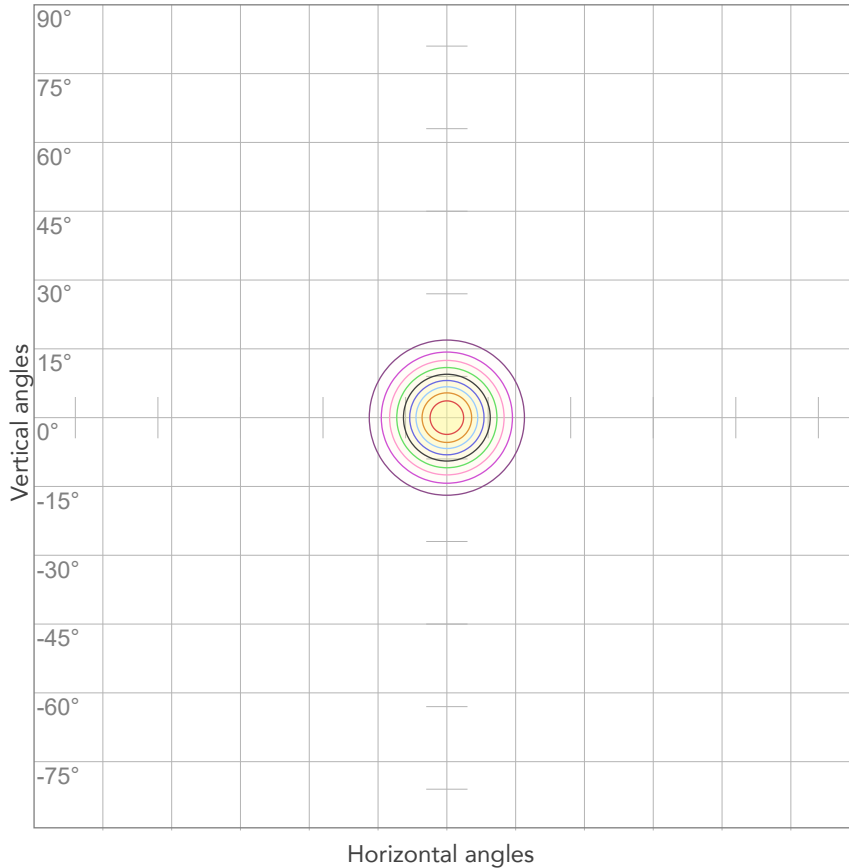


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,295A | 61,5W | 0,94 | 59lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



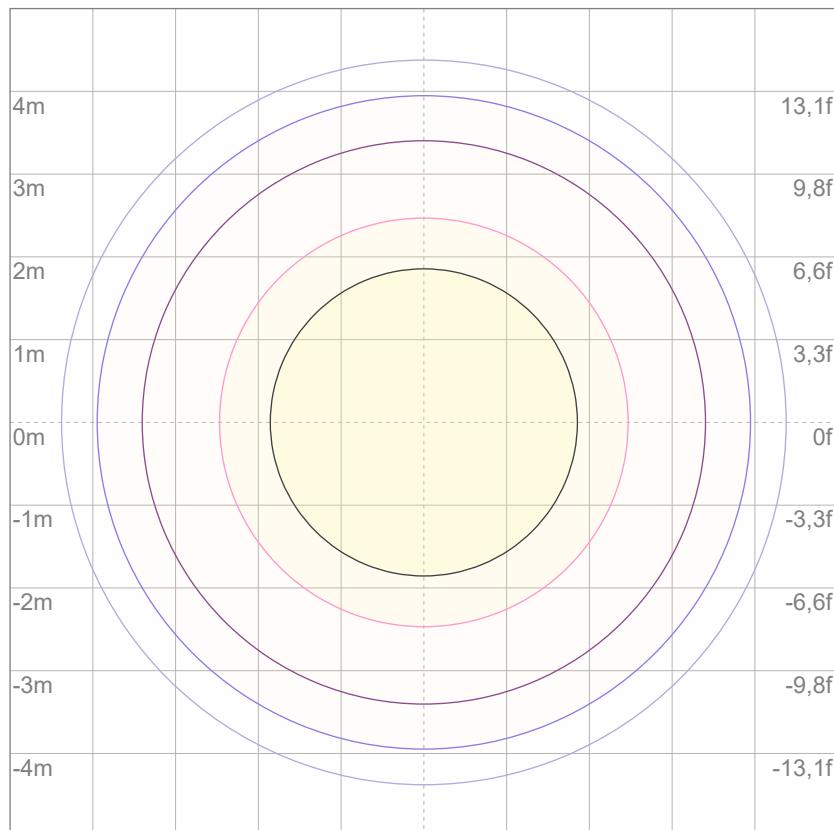
| | |
|-----|----------|
| 10% | 2158 cd |
| 20% | 4316 cd |
| 30% | 6474 cd |
| 40% | 8632 cd |
| 50% | 10790 cd |
| 60% | 12948 cd |
| 70% | 15106 cd |
| 80% | 17264 cd |

Conditions:

Number of c-planes: 2

Candela at center: 21580 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|---------|
| 3% | 6,47 lx |
| 5% | 10,8 lx |
| 10% | 21,6 lx |
| 30% | 64,7 lx |
| 50% | 108 lx |

Conditions:

Number of c-planes: 2

Lux at center: 216 lx

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



Total lumen output:

3533 lm

Peak candela output:

6256 cd

Light quality:

CRI: 96,0

Color temperature:

6197 K

PRODUCT NAME:
ECLPENDANTS VW

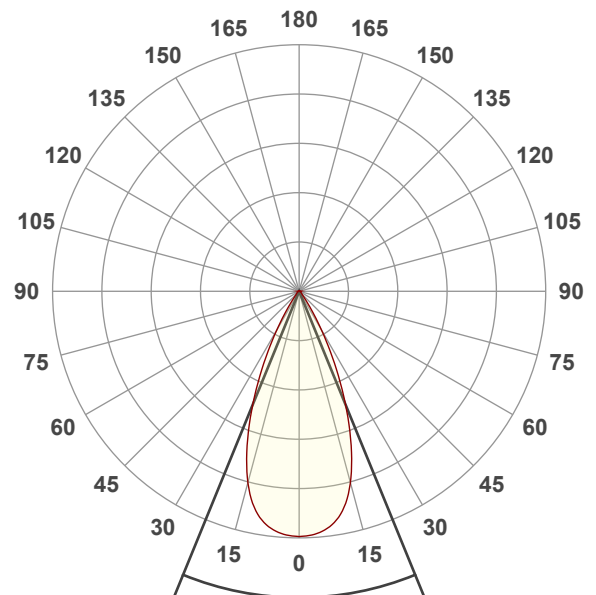
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
Cold White

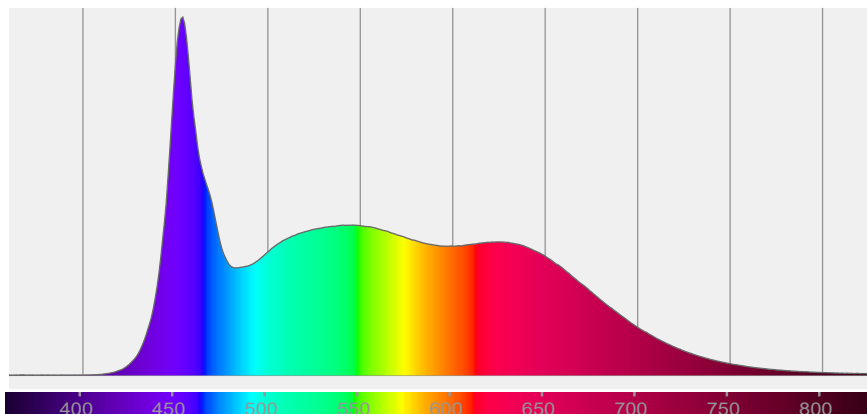
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:36:18

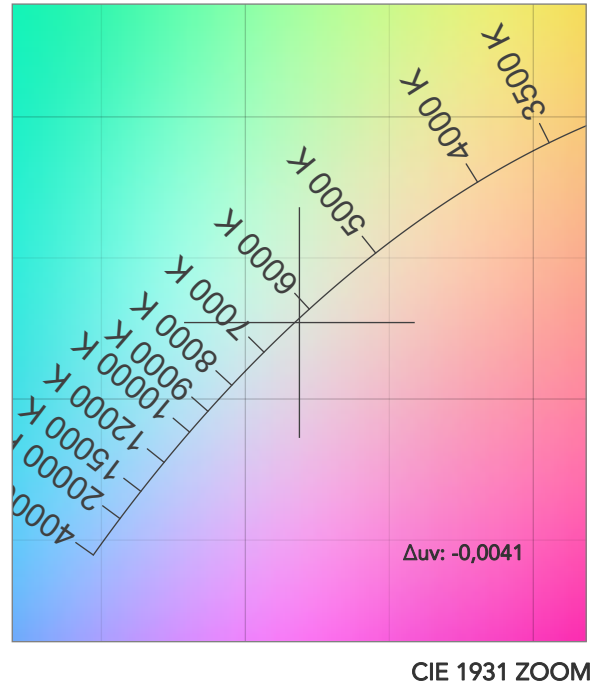
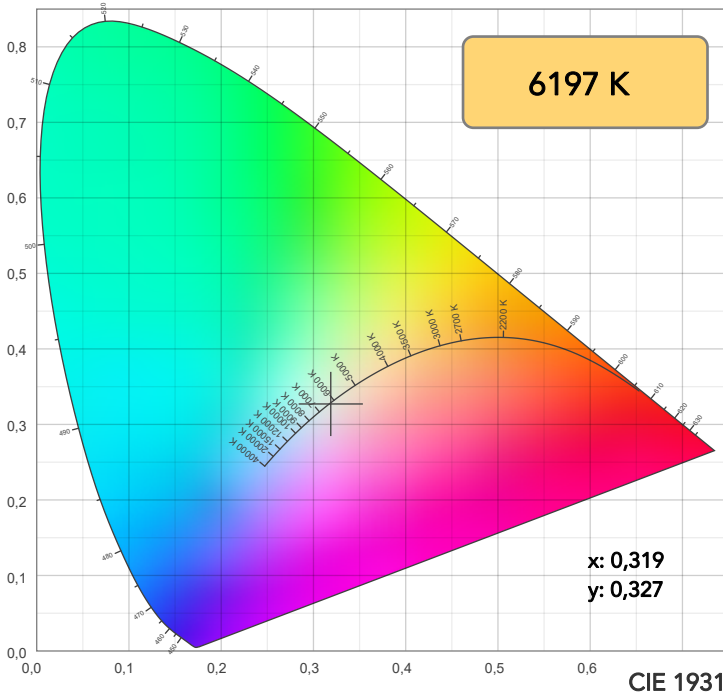


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,2°

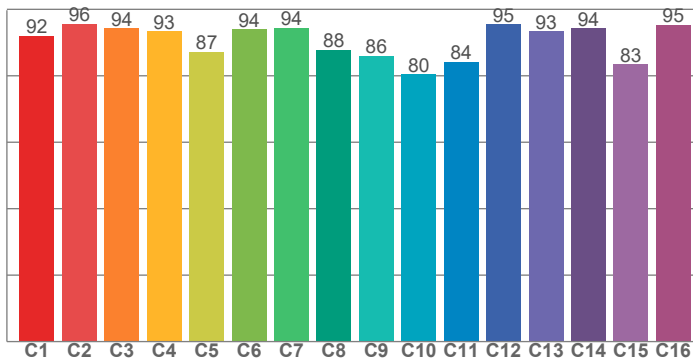
Spectra



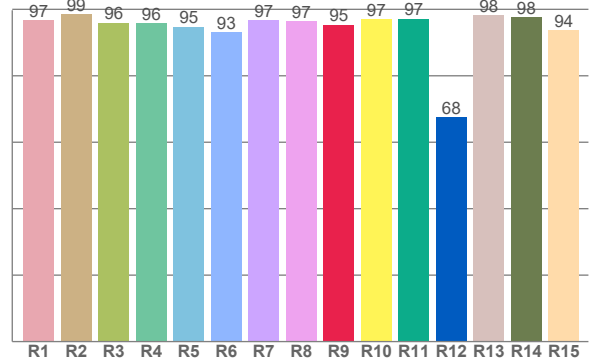
COLOR DETAILS



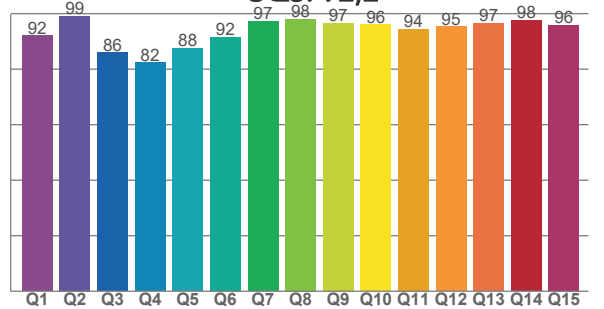
TM30: 90,3



CRI: 96,0 (R1-R8)



CQS: 92,2



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,7 | 98,5 | 96,0 | 95,8 | 94,7 | 93,1 | 96,7 | 96,5 | 95,4 | 97,0 | 97,1 | 67,5 | 98,3 | 97,6 | 93,8 |

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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,1 | 95,6 | 94,2 | 93,3 | 87,1 | 94,0 | 94,4 | 87,8 | 86,1 | 80,5 | 84,2 | 95,4 | 93,3 | 94,2 | 83,4 | 95,4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 99,1 | 86,0 | 82,3 | 87,5 | 91,6 | 97,3 | 98,0 | 96,7 | 96,0 | 94,4 | 95,4 | 96,5 | 97,6 | 95,9 |

COLOR PARAMETERS

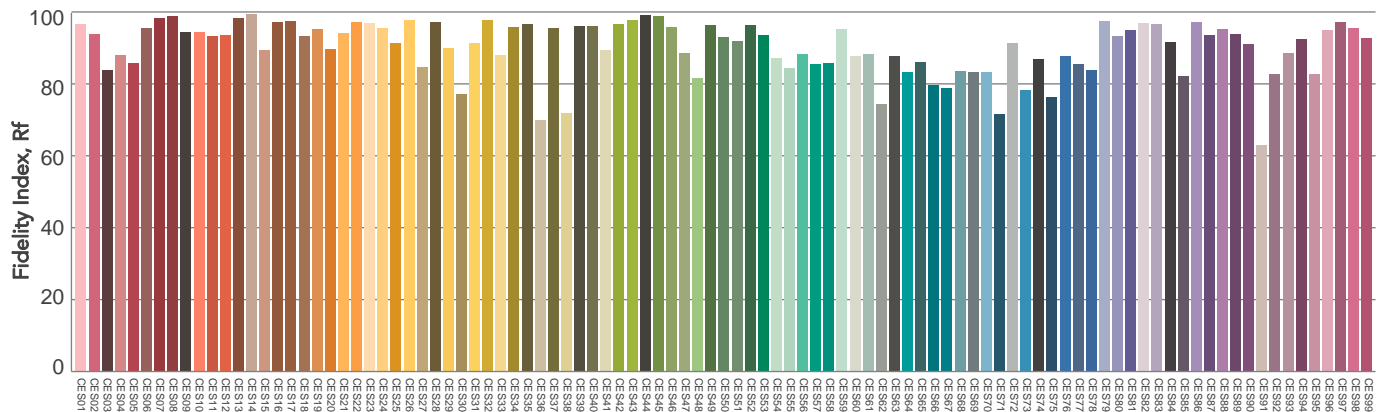
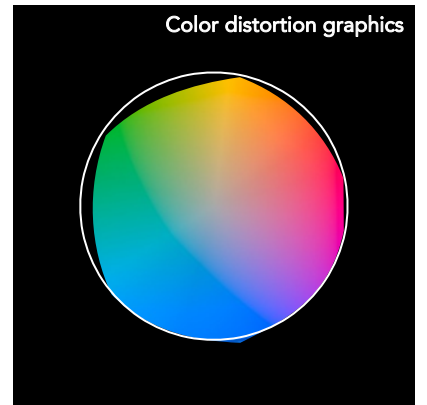
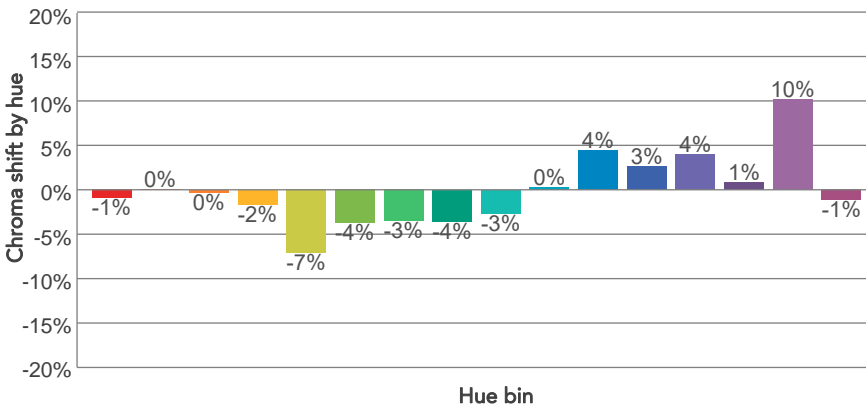
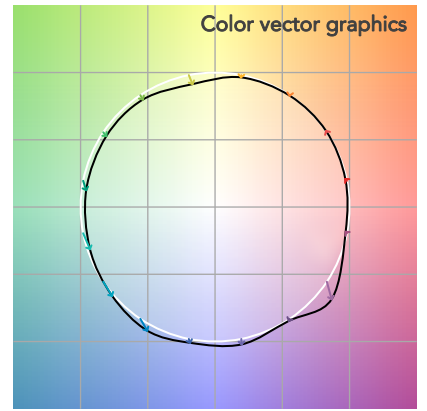
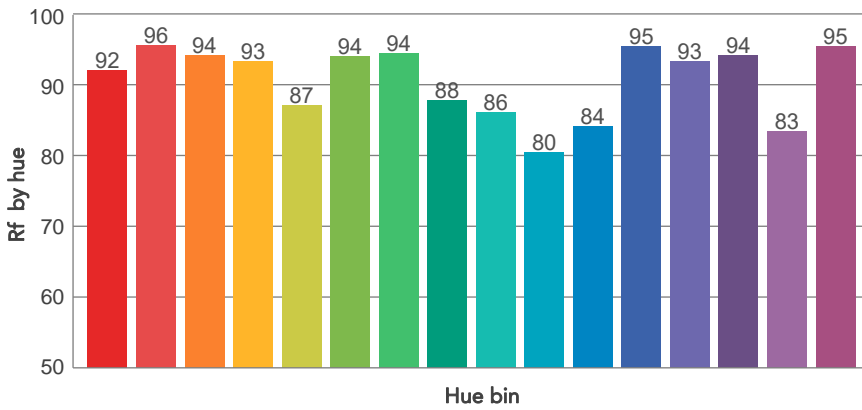
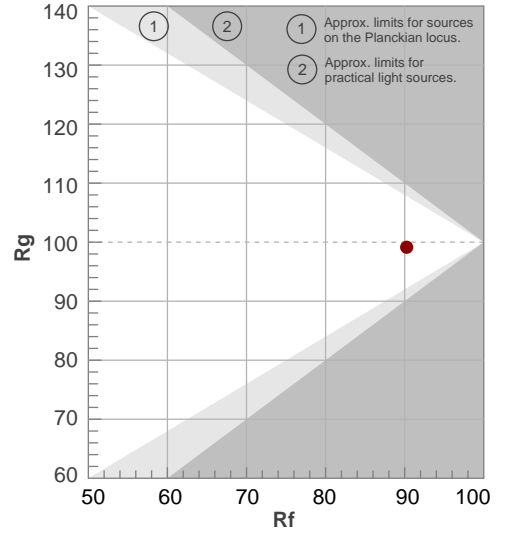
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6197 K | 96,0 | 95,4 | 90,3 | 99,1 | 92,2 | 96 | 0,319 | 0,327 | -0,0041 |

TM30 DETAILS

Rf 90,3
Fidelity index Rf

Rg 99,1
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -4% | 0% |
| 7 | 94 | -3% | 1% |
| 8 | 88 | -4% | 6% |
| 9 | 86 | -3% | 13% |
| 10 | 80 | 0% | 12% |
| 11 | 84 | 4% | 9% |
| 12 | 95 | 3% | 2% |
| 13 | 93 | 4% | -1% |
| 14 | 94 | 1% | -1% |
| 15 | 83 | 10% | -9% |
| 16 | 95 | -1% | 1% |

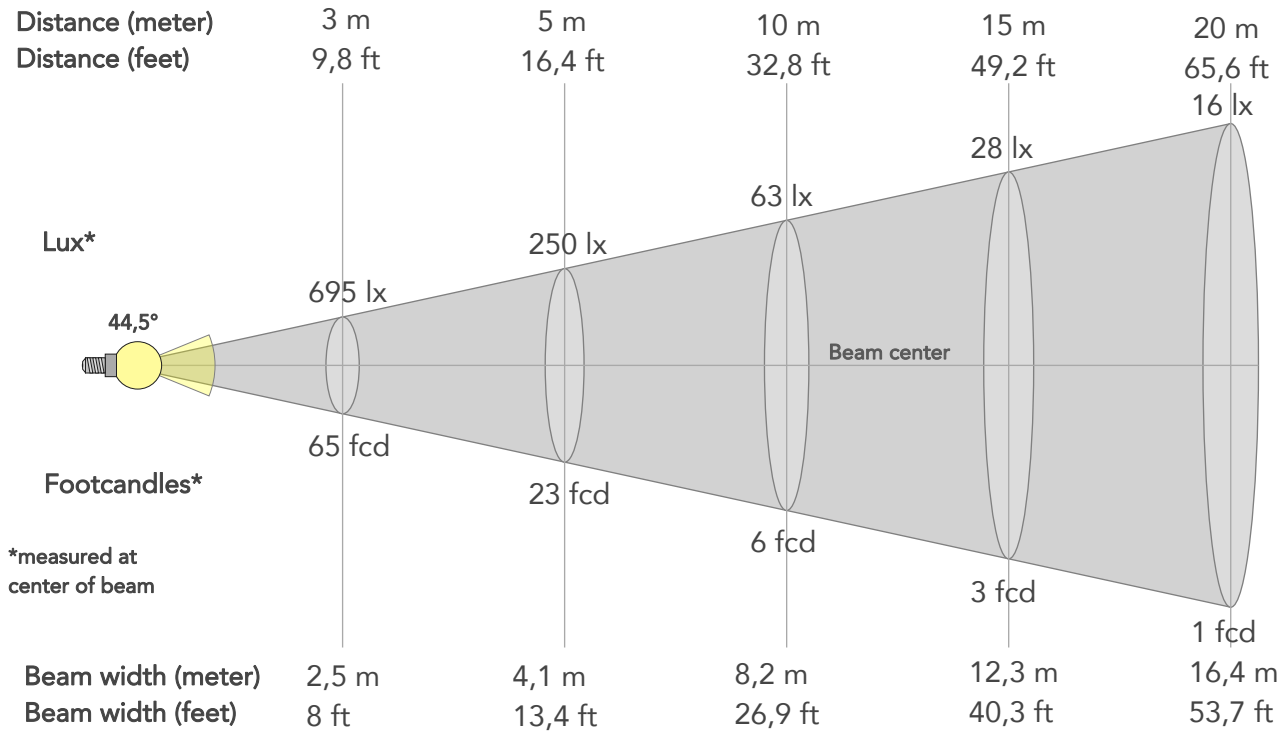


Color Evaluation Sample

BEAM DETAILS



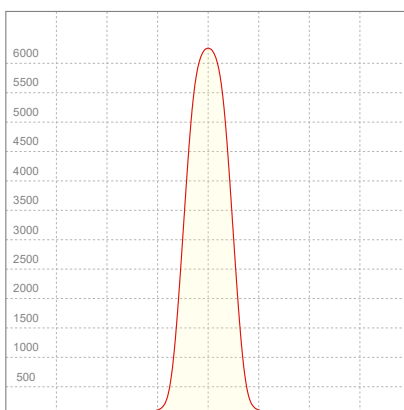
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,2° | 98,3% | 95,6% |



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 | 6256lx | 1564lx | 695lx | 391lx | 250lx | 111lx | 63lx | 28lx | 16lx | 10lx | 7lx | 4lx | 3lx |
| Footcand. | 581fcd | 145fcd | 65fcd | 36fcd | 23fcd | 10fcd | 6fcd | 3fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,6m | 32,7m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,9ft | 40,3ft | 53,7ft | 67,1ft | 80,6ft | 107,4ft | 134,3ft |

LINEAR DISTRIBUTION DIAGRAM

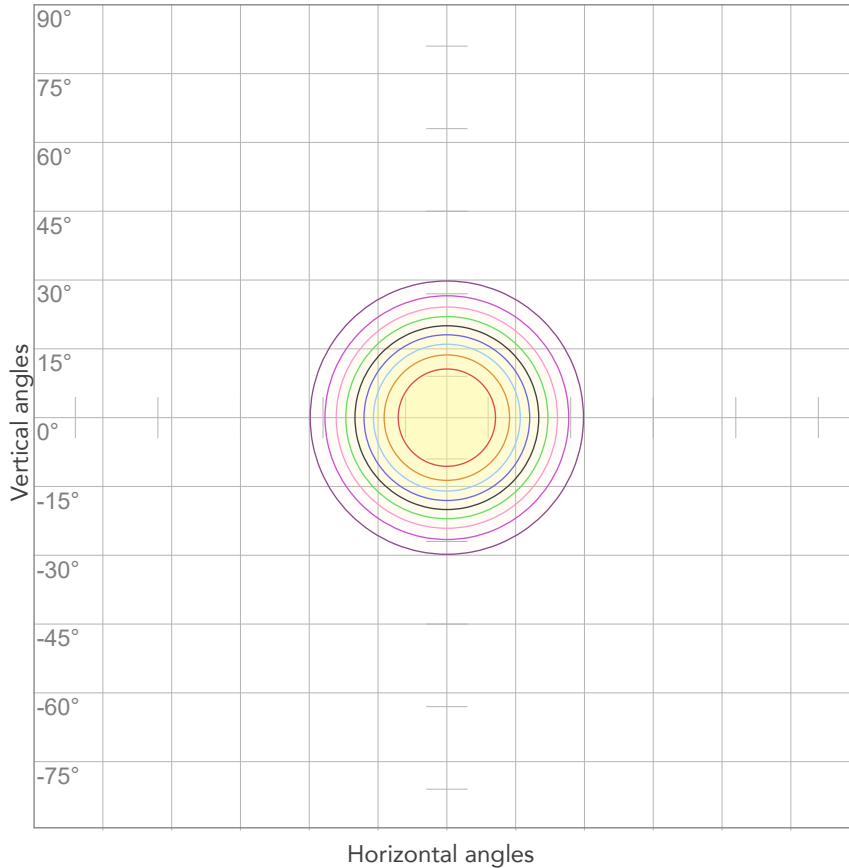


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,287A | 59,9W | 0,93 | 59lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



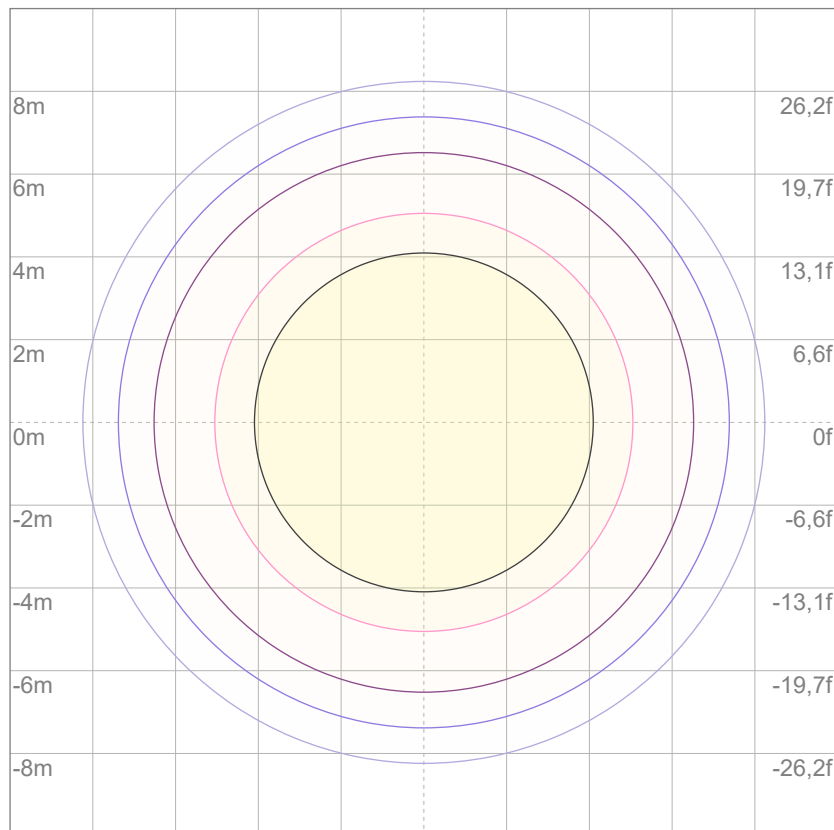
| | |
|-----|---------|
| 10% | 626 cd |
| 20% | 1251 cd |
| 30% | 1877 cd |
| 40% | 2502 cd |
| 50% | 3128 cd |
| 60% | 3754 cd |
| 70% | 4379 cd |
| 80% | 5005 cd |

Conditions:

Number of c-planes: 2

Candela at center: 6256 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,88 lx |
| 5% | 3,13 lx |
| 10% | 6,26 lx |
| 30% | 18,8 lx |
| 50% | 31,3 lx |

Conditions:

Number of c-planes: 2

Lux at center: 62,6 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:

3231 lm

Peak candela output:

3002 cd

Light quality:

CRI: 95,9

Color temperature:

6214 K

PRODUCT NAME:
ECLPENDANTS VW

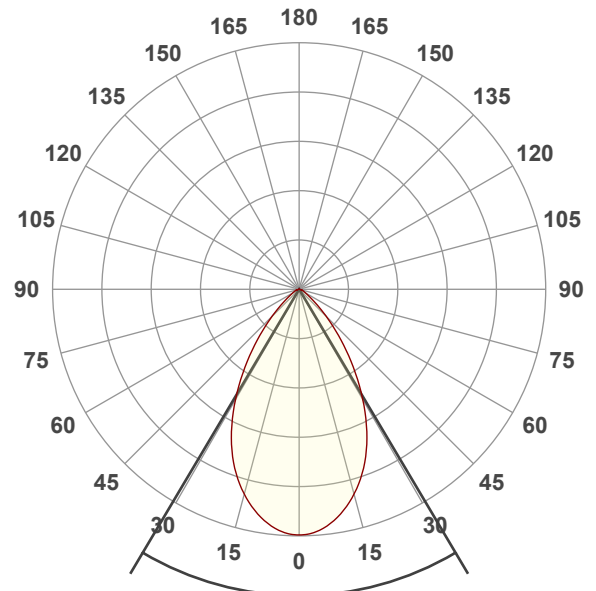
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
Cold White

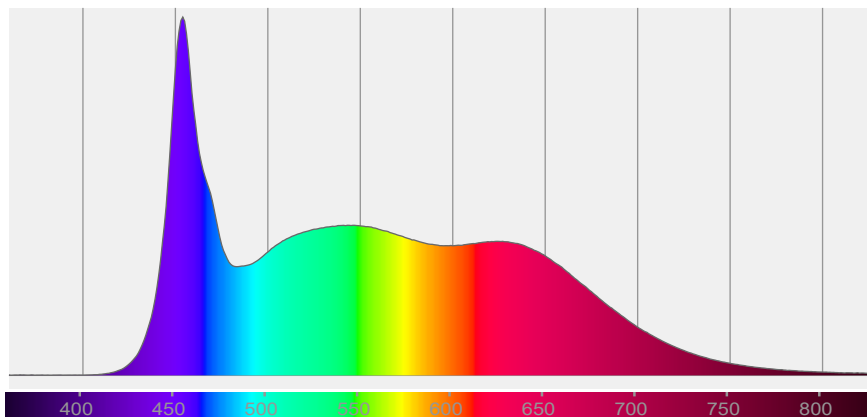
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:18:07

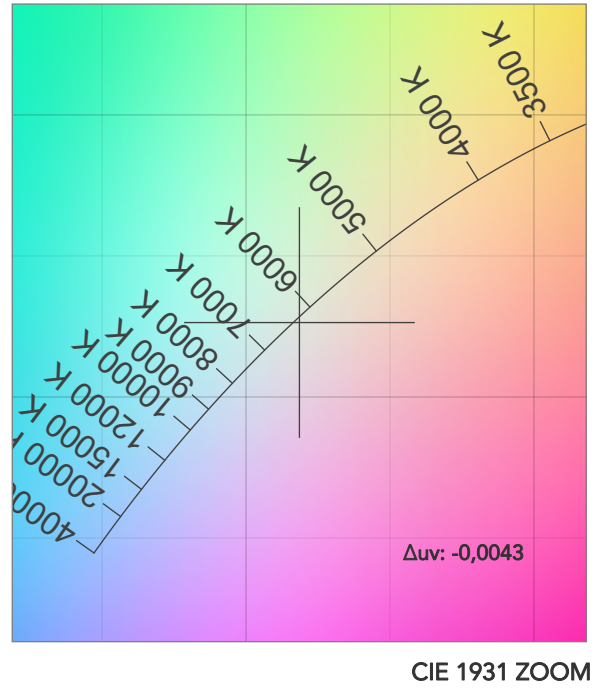
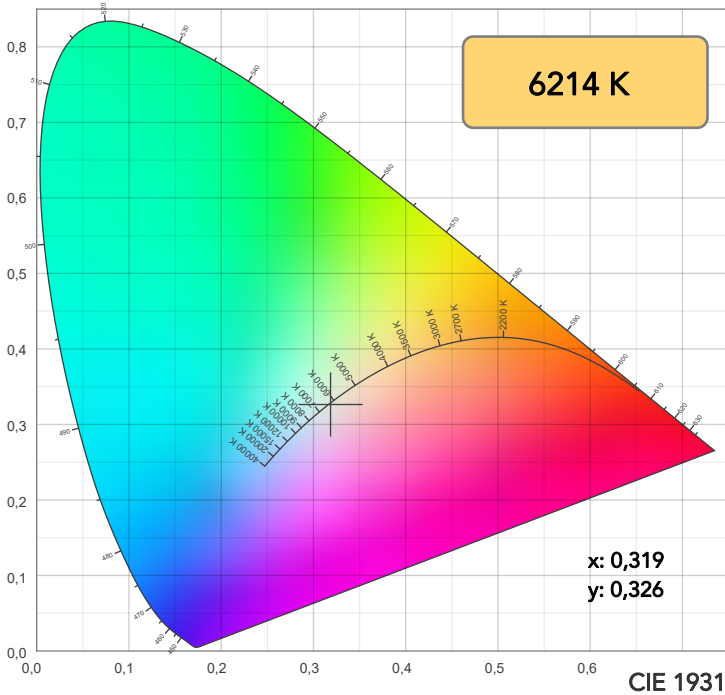


Beam angle 50%: 61,4°
Field angle 10%: 98,1°
Cut off angle 2.5%: 126,1°

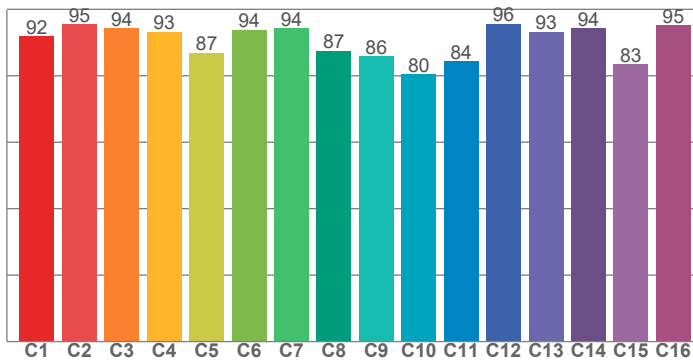
Spectra



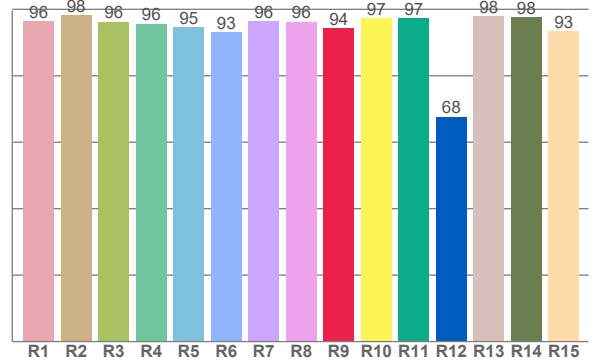
COLOR DETAILS



TM30: 90,2



CRI: 95,9 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,5 | 98,3 | 96,3 | 95,7 | 94,6 | 93,2 | 96,4 | 96,3 | 94,3 | 97,4 | 97,3 | 67,7 | 97,8 | 97,7 | 93,4 |

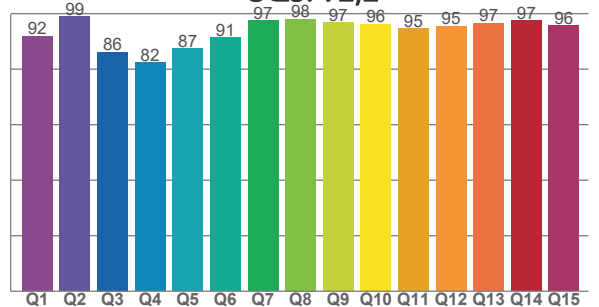
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,9 | 95,5 | 94,2 | 93,3 | 87,0 | 93,8 | 94,2 | 87,4 | 85,9 | 80,5 | 84,4 | 95,6 | 93,2 | 94,3 | 83,4 | 95,2 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,9 | 99,0 | 86,2 | 82,4 | 87,4 | 91,4 | 97,5 | 98,1 | 96,8 | 96,2 | 94,6 | 95,5 | 96,5 | 97,5 | 95,8 |

CQS: 92,2



COLOR PARAMETERS

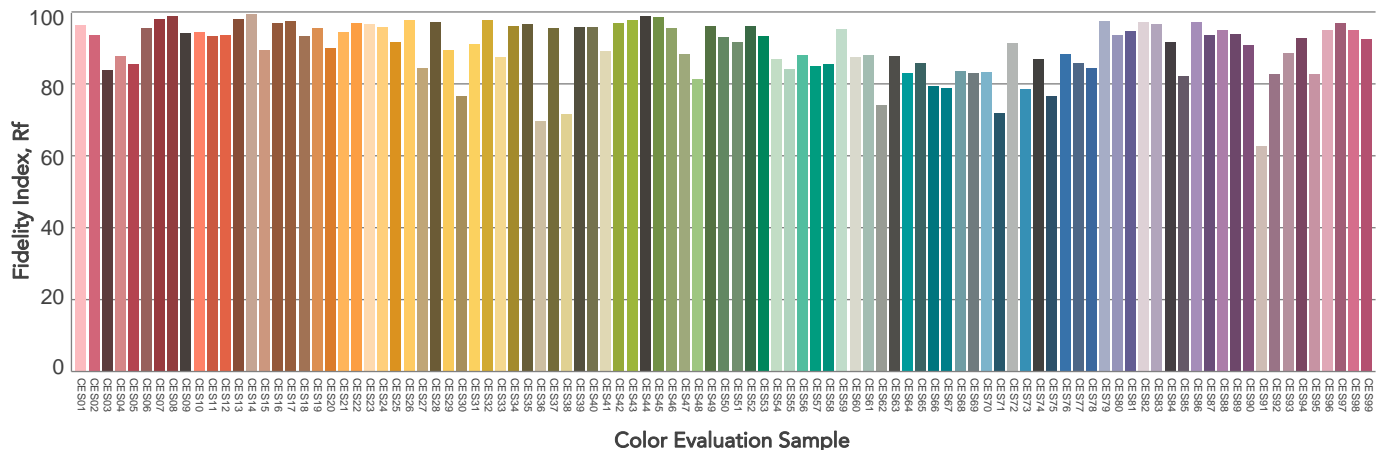
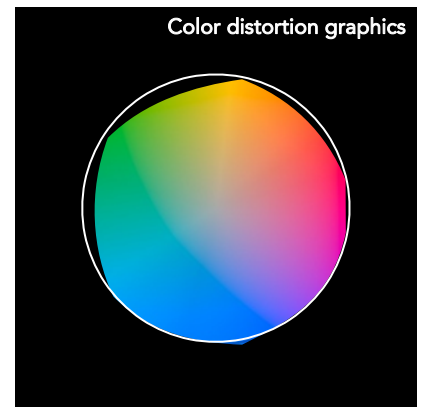
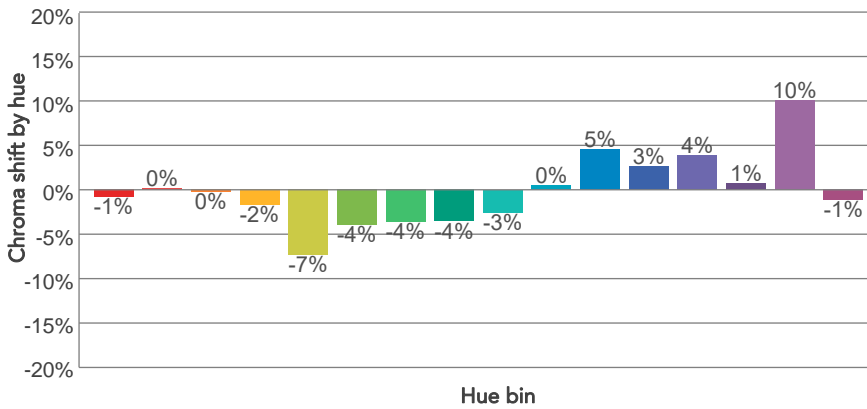
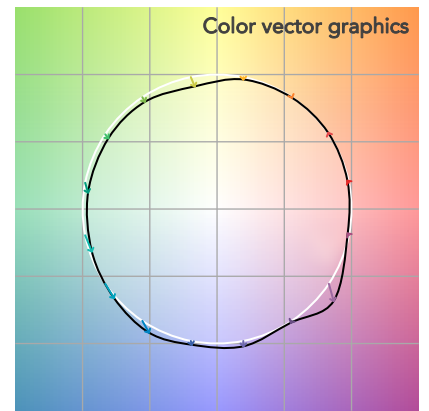
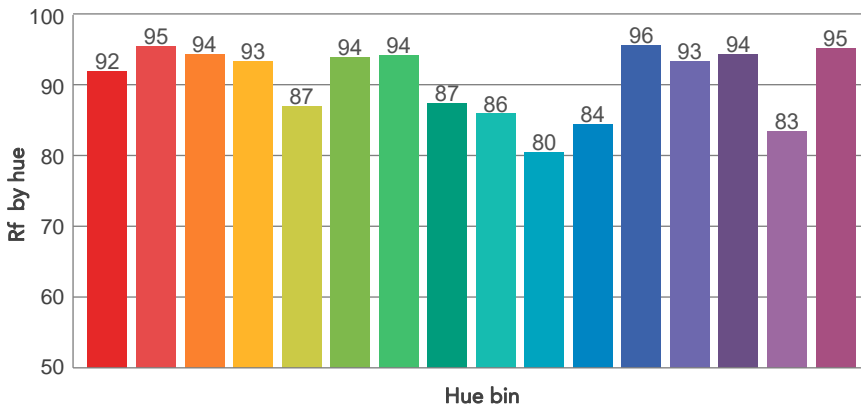
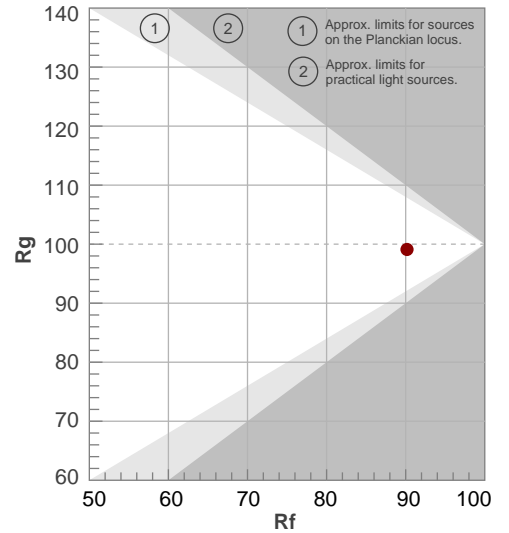
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6214 K | 95,9 | 94,3 | 90,2 | 99,1 | 92,2 | 96 | 0,319 | 0,326 | -0,0043 |

TM30 DETAILS

Rf 90,2
Fidelity index Rf

Rg 99,1
Gammut index

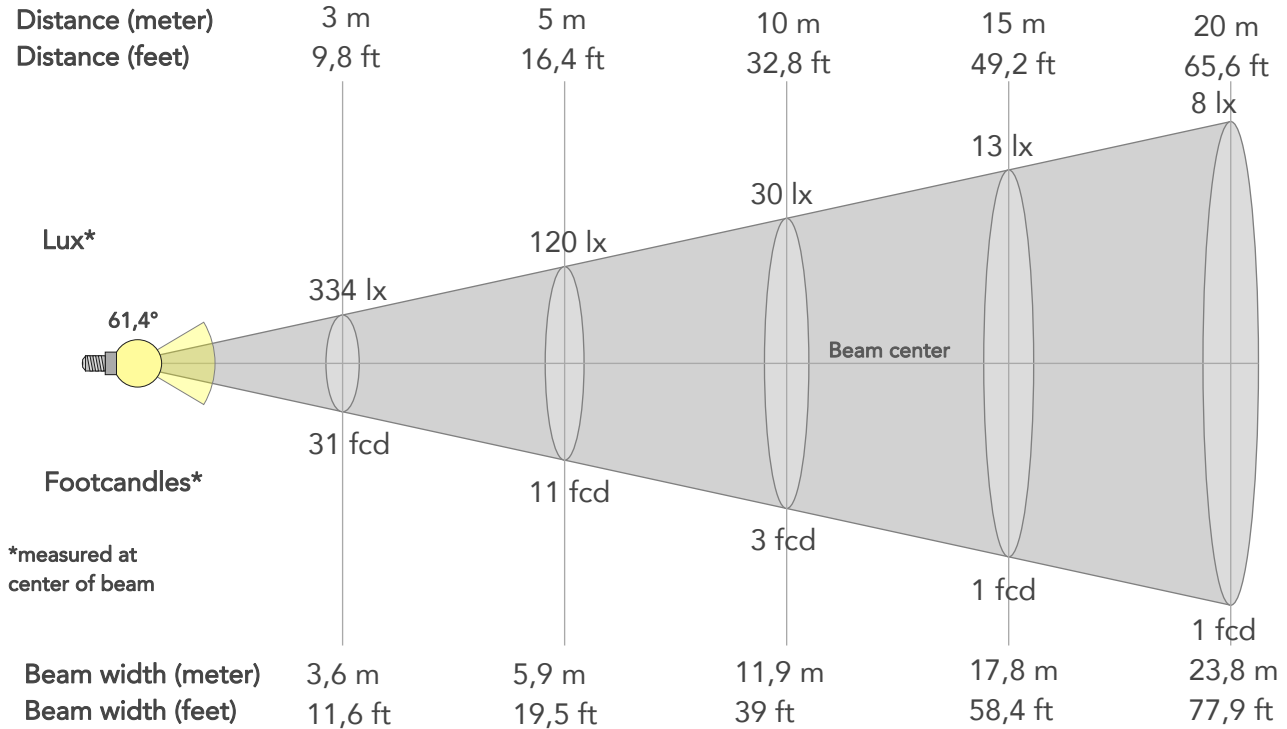
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 95 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -2% |
| 6 | 94 | -4% | 0% |
| 7 | 94 | -4% | 1% |
| 8 | 87 | -4% | 7% |
| 9 | 86 | -3% | 13% |
| 10 | 80 | 0% | 12% |
| 11 | 84 | 5% | 9% |
| 12 | 96 | 3% | 1% |
| 13 | 93 | 4% | -1% |
| 14 | 94 | 1% | -1% |
| 15 | 83 | 10% | -9% |
| 16 | 95 | -1% | 1% |



BEAM DETAILS



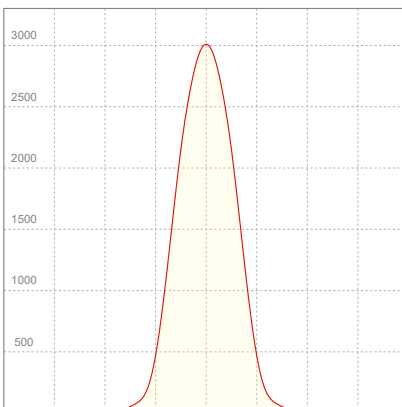
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,4° | 98,1° | 126,1° | 96,7% | 88,0% |



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 | 3002lx | 750lx | 334lx | 188lx | 120lx | 53lx | 30lx | 13lx | 8lx | 5lx | 3lx | 2lx | 1lx |
| Footcand. | 279fcd | 70fcd | 31fcd | 17fcd | 11fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,8m | 5,9m | 8,9m | 11,9m | 17,8m | 23,8m | 29,7m | 35,6m | 47,5m | 59,4m |
| Beam wid. | 3,9ft | 7,8ft | 11,6ft | 15,6ft | 19,5ft | 29,2ft | 39ft | 58,4ft | 77,9ft | 97,4ft | 116,9ft | 155,8ft | 194,8ft |

LINEAR DISTRIBUTION DIAGRAM

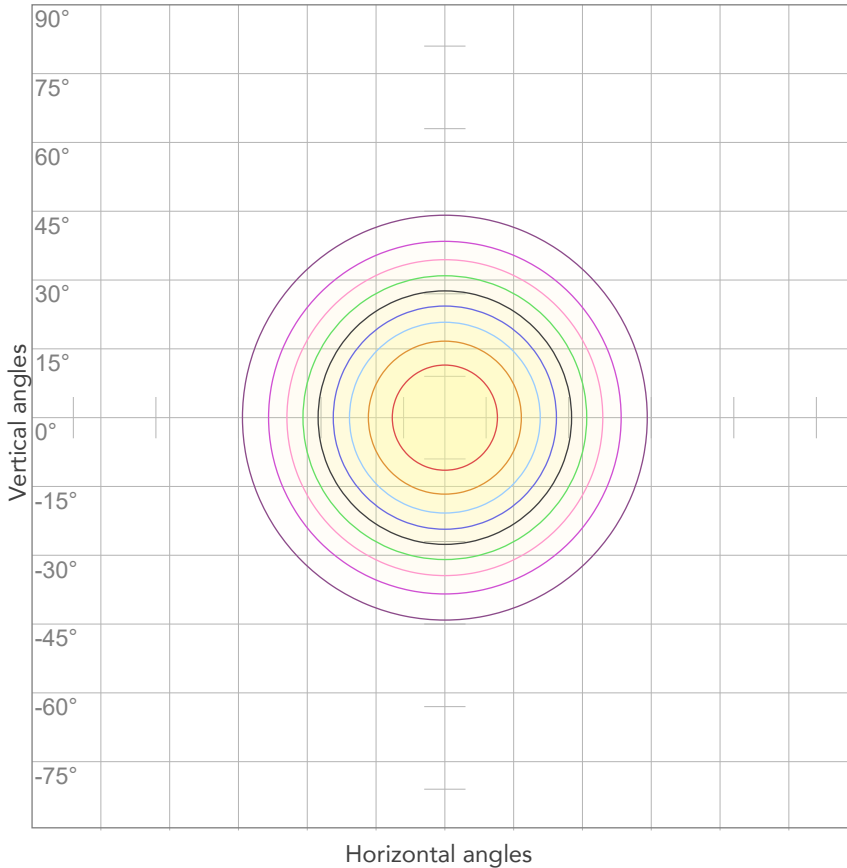


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,286A | 59,3W | 0,93 | 54lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



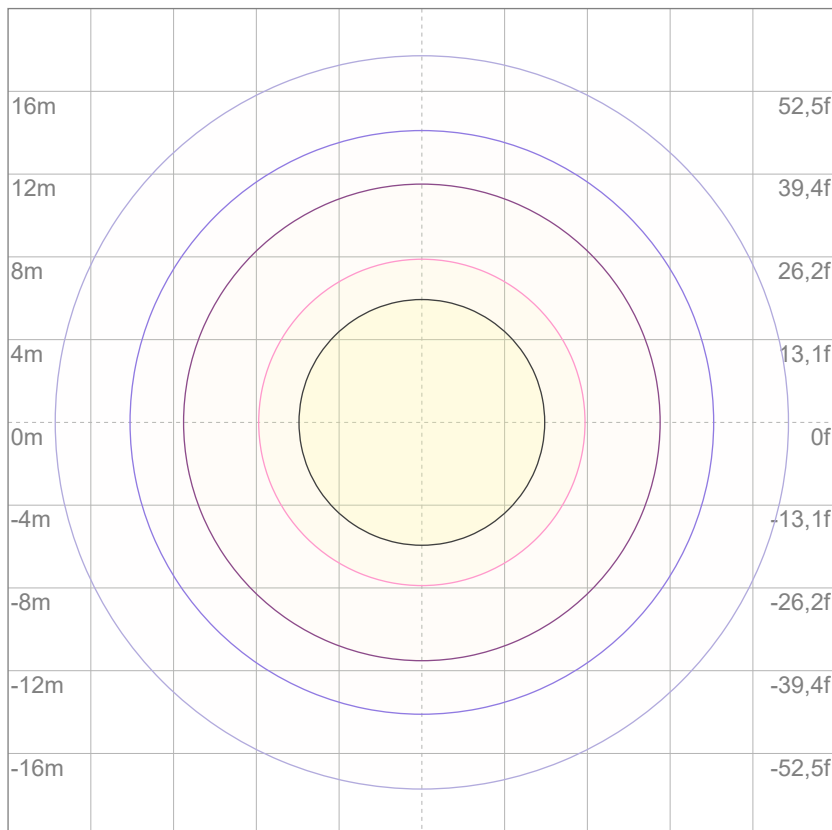
| | |
|-----|---------|
| 10% | 300 cd |
| 20% | 600 cd |
| 30% | 901 cd |
| 40% | 1201 cd |
| 50% | 1501 cd |
| 60% | 1801 cd |
| 70% | 2101 cd |
| 80% | 2401 cd |

Conditions:

Number of c-planes: 2

Candela at center: 3002 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,901 lx |
| 5% | 1,50 lx |
| 10% | 3,00 lx |
| 30% | 9,01 lx |
| 50% | 15,0 lx |

Conditions:

Number of c-planes: 2

Lux at center: 30,0 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:

2751 lm

Peak candela output:

16276 cd

Light quality:

CRI: 96,8

Color temperature:

2687 K

PRODUCT NAME:
ECLPENDANTS VW

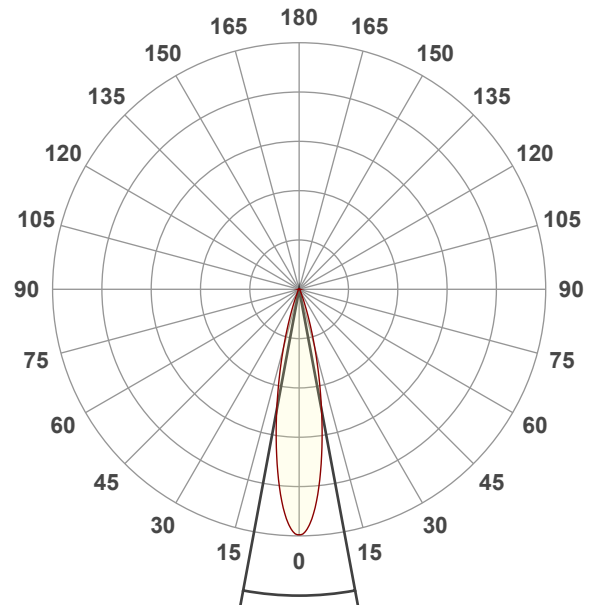
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
2700K

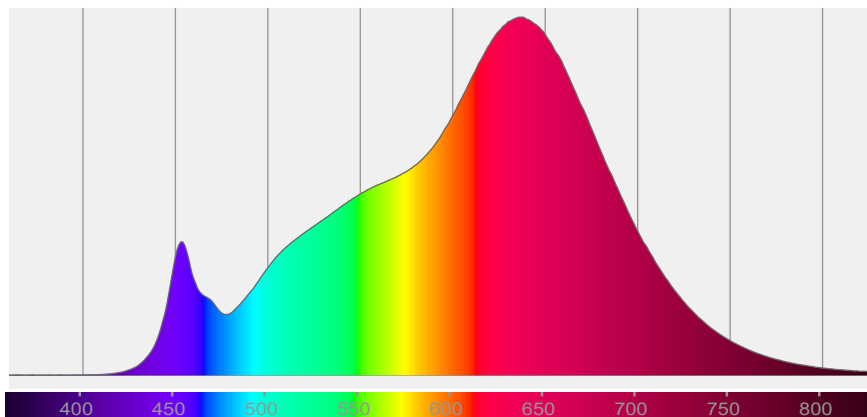
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:06:14

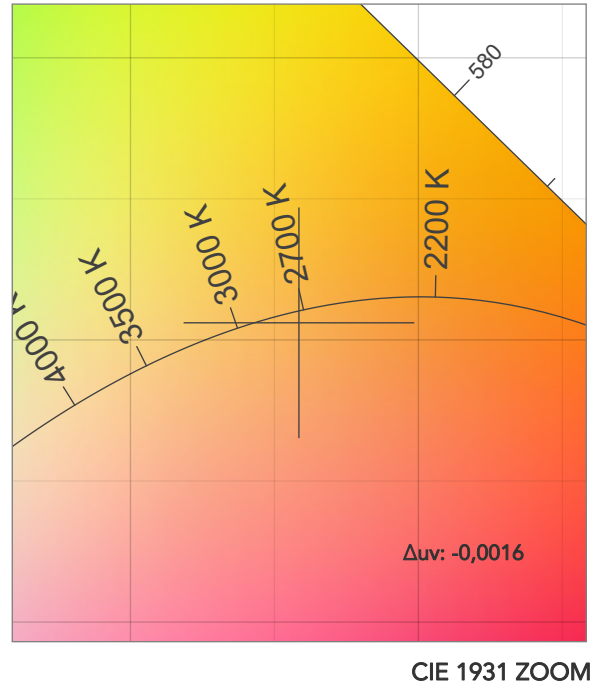
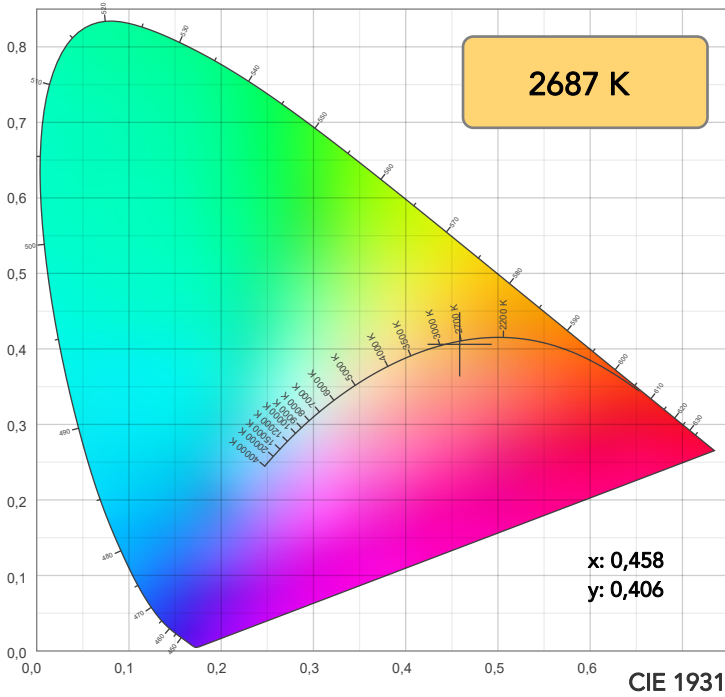


Beam angle 50%: 21,1°
Field angle 10%: 38°
Cut off angle 2.5%: 49,6°

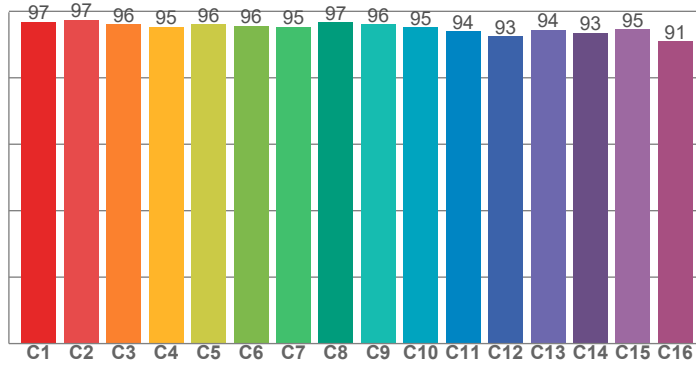
Spectra



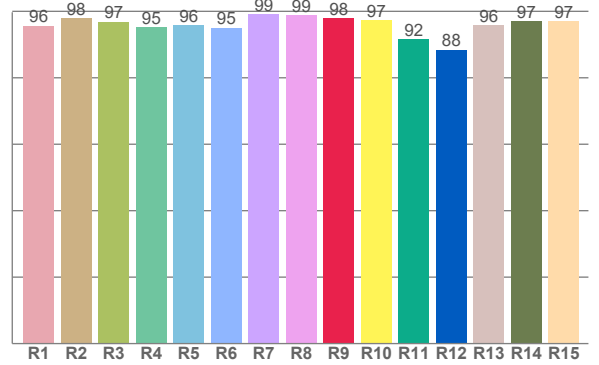
COLOR DETAILS



TM30: 95,2



CRI: 96,8 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,7 | 97,8 | 96,8 | 95,2 | 95,9 | 95,1 | 99,1 | 98,8 | 97,9 | 97,3 | 91,7 | 88,4 | 95,8 | 96,9 | 97,1 |

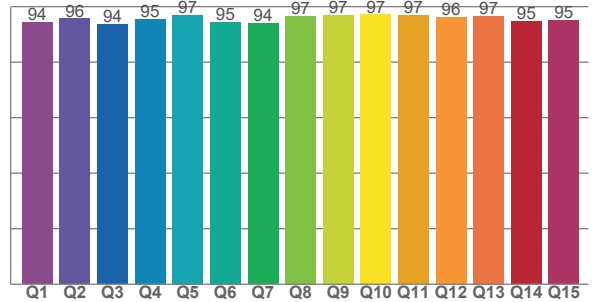
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,8 | 97,4 | 96,1 | 95,4 | 96,1 | 95,7 | 95,4 | 96,7 | 96,1 | 95,1 | 93,9 | 92,5 | 94,5 | 93,4 | 94,6 | 90,9 |

CQS Q values

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

CQS: 95,3



COLOR PARAMETERS

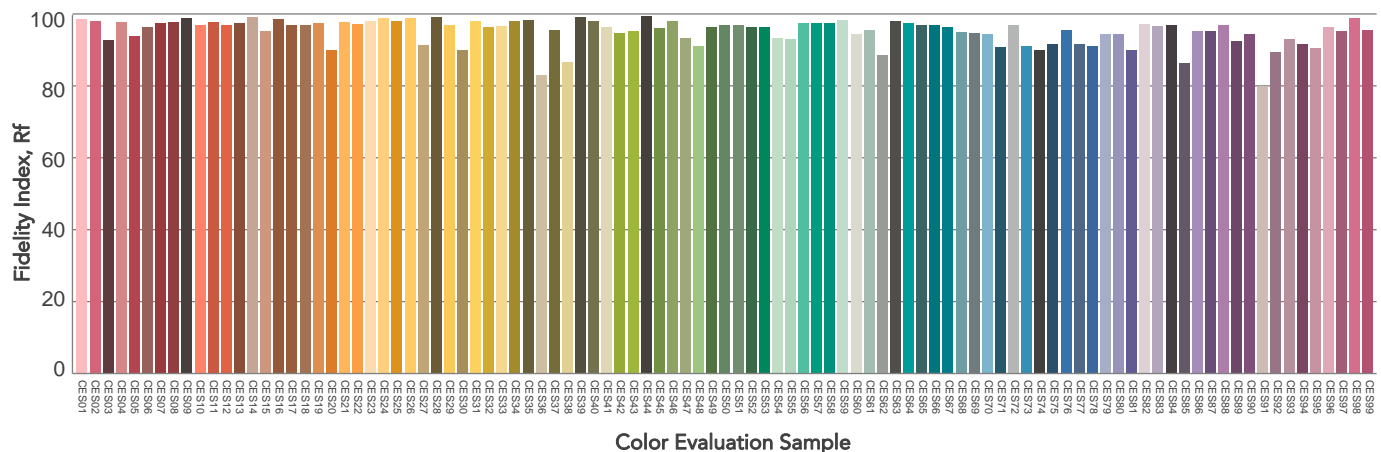
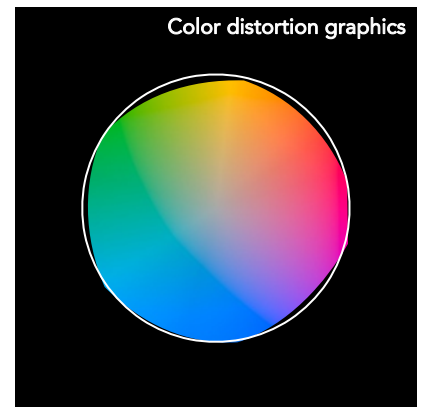
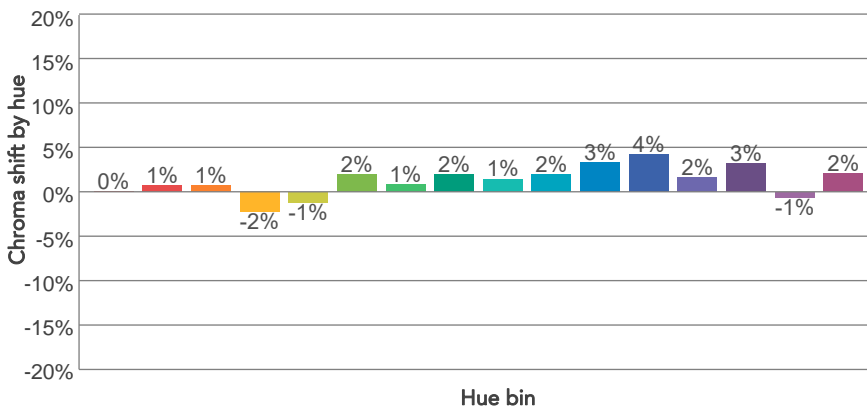
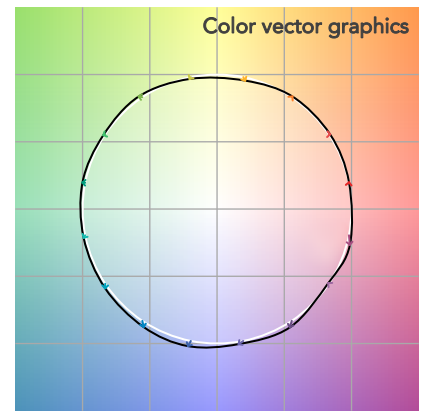
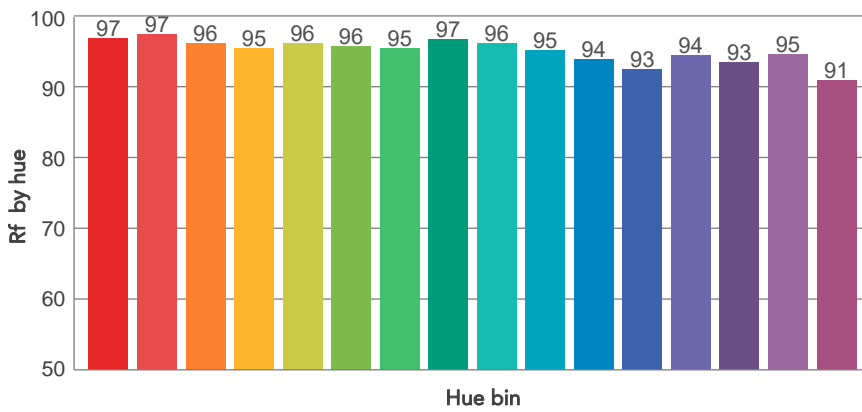
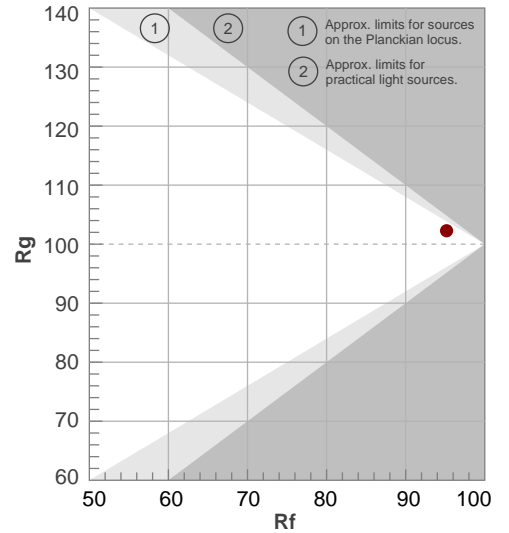
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2687 K | 96,8 | 97,9 | 95,2 | 102,3 | 95,3 | 98 | 0,458 | 0,406 | -0,0016 |

TM30 DETAILS

Rf 95,2
Fidelity index Rf

Rg 102,3
Gammut index

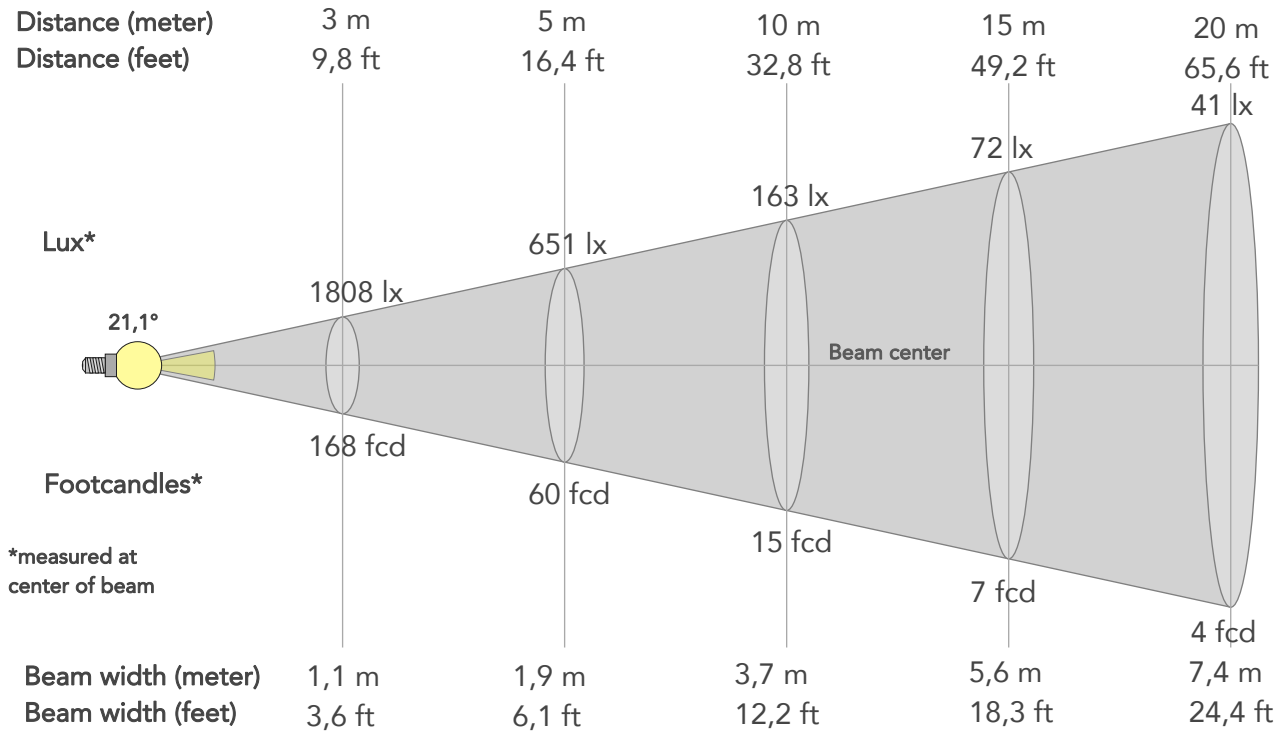
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | -1% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -2% | -2% |
| 5 | 96 | -1% | 1% |
| 6 | 96 | 2% | 2% |
| 7 | 95 | 1% | 1% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 1% | 2% |
| 10 | 95 | 2% | 3% |
| 11 | 94 | 3% | 3% |
| 12 | 93 | 4% | -1% |
| 13 | 94 | 2% | -4% |
| 14 | 93 | 3% | -4% |
| 15 | 95 | -1% | 0% |
| 16 | 91 | 2% | -7% |



BEAM DETAILS



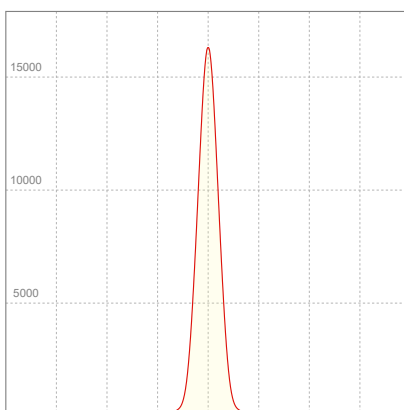
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21,1° | 38° | 49,6° | 97,7% | 94,9% |



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 | 16276lx | 4069lx | 1808lx | 1017lx | 651lx | 289lx | 163lx | 72lx | 41lx | 26lx | 18lx | 10lx | 7lx |
| Footcand. | 1512fcd | 378fcd | 168fcd | 95fcd | 60fcd | 27fcd | 15fcd | 7fcd | 4fcd | 2fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,2m | 14,9m | 18,6m |
| Beam wid. | 1,2ft | 2,5ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,3ft | 24,4ft | 30,5ft | 36,6ft | 48,8ft | 61ft |

LINEAR DISTRIBUTION DIAGRAM

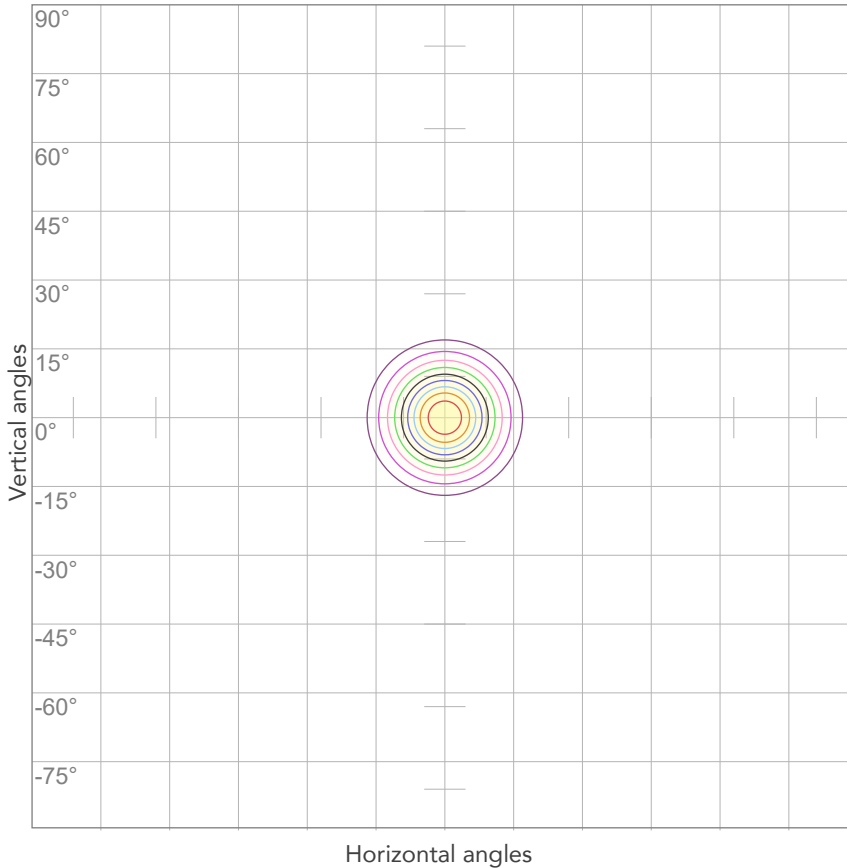


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,299A | 62,4W | 0,94 | 44lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



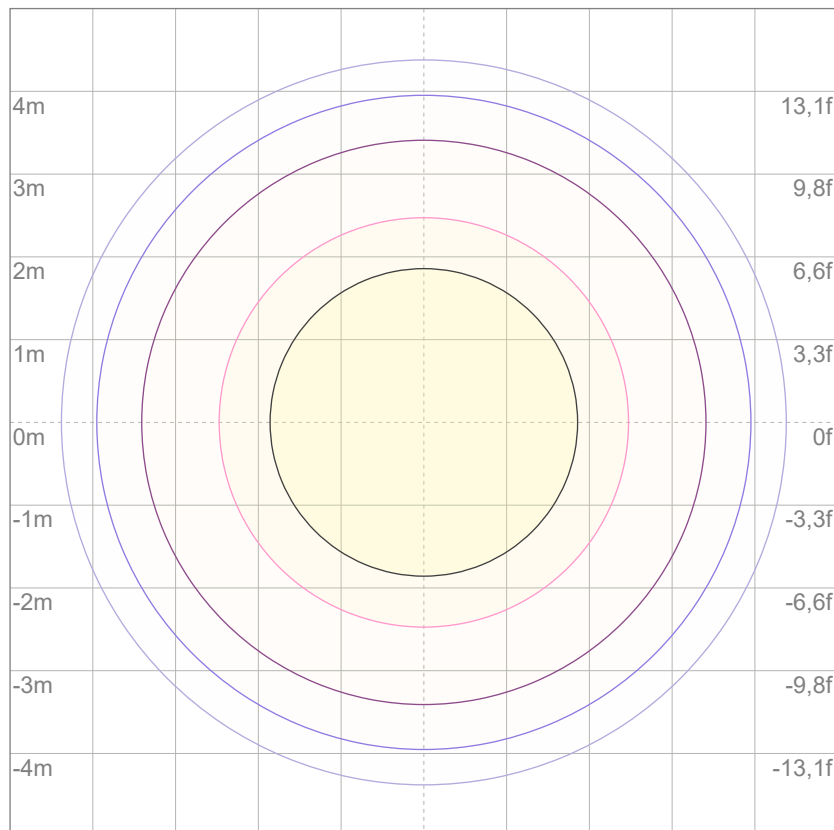
| | |
|-----|----------|
| 10% | 1628 cd |
| 20% | 3255 cd |
| 30% | 4883 cd |
| 40% | 6510 cd |
| 50% | 8138 cd |
| 60% | 9765 cd |
| 70% | 11393 cd |
| 80% | 13021 cd |

Conditions:

Number of c-planes: 2

Candela at center: 16276 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 4,88 lx |
| 5% | 8,14 lx |
| 10% | 16,3 lx |
| 30% | 48,8 lx |
| 50% | 81,4 lx |

Conditions:

Number of c-planes: 2

Lux at center: 163 lx

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



Total lumen output:

2677 lm

Peak candela output:

4753 cd

Light quality:

CRI: 96,7

Color temperature:

2679 K

PRODUCT NAME:
ECLPENDANTS VW

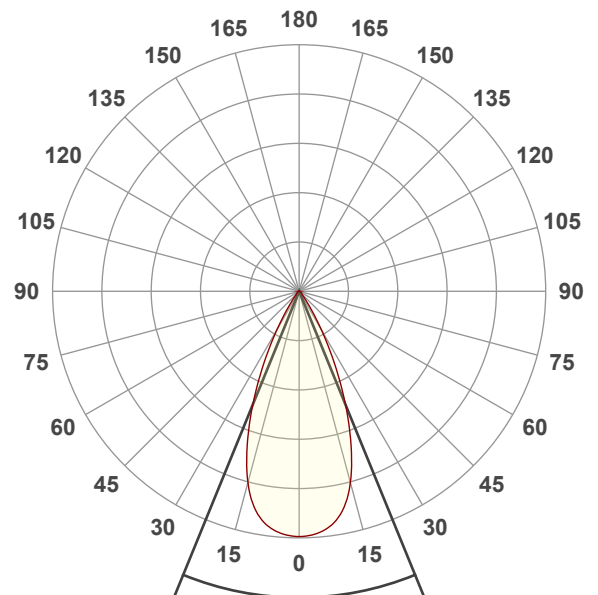
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
2700K

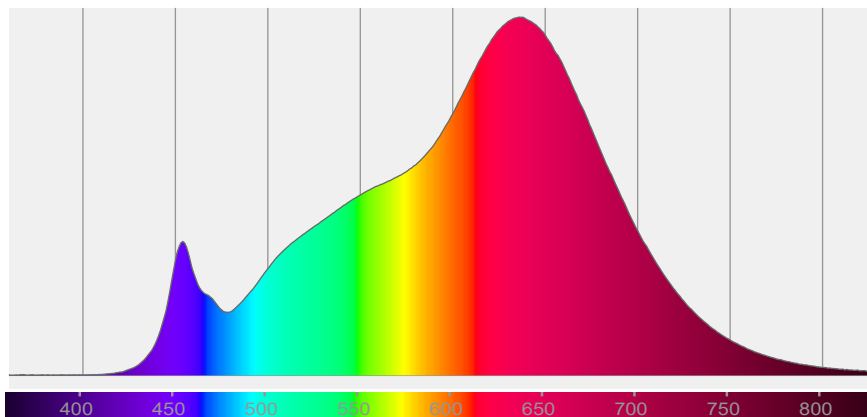
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:40:48

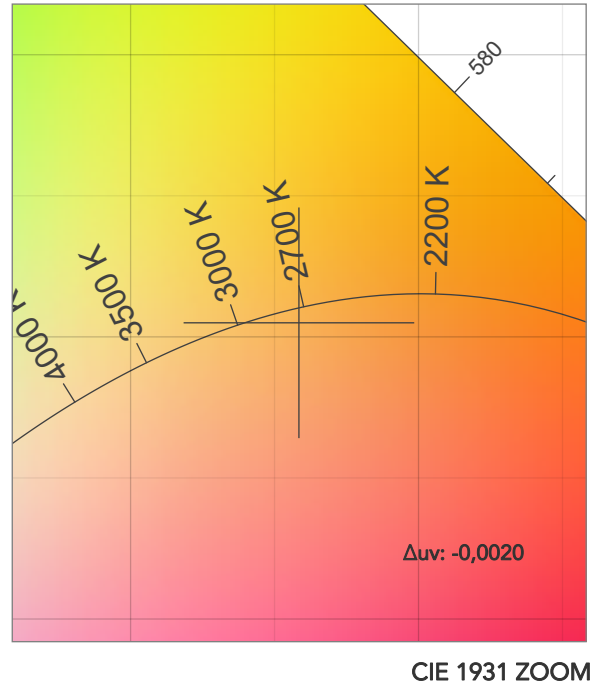
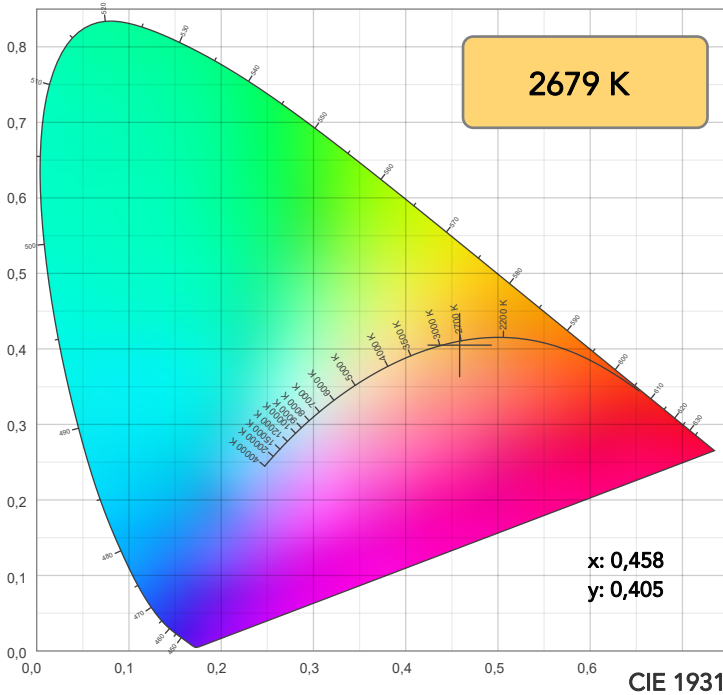


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,2°

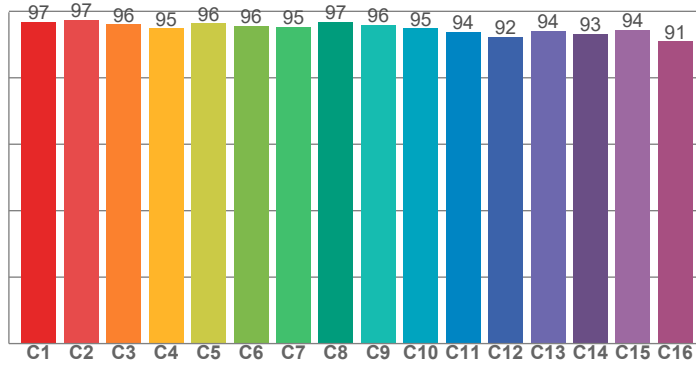
Spectra



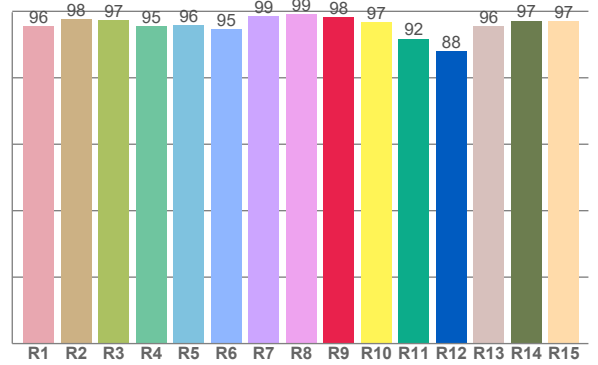
COLOR DETAILS



TM30: 95,1



CRI: 96,7 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,6 | 97,5 | 97,3 | 95,4 | 95,7 | 94,5 | 98,6 | 99,1 | 98,3 | 96,7 | 91,8 | 88,0 | 95,6 | 97,2 | 97,1 |

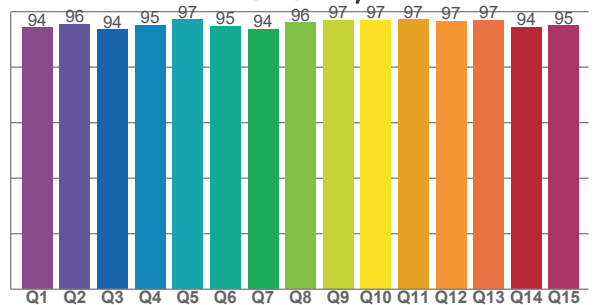
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,7 | 97,4 | 96,0 | 94,8 | 96,4 | 95,6 | 95,4 | 96,7 | 95,9 | 94,9 | 93,8 | 92,3 | 94,2 | 93,2 | 94,5 | 90,9 |

CQS Q values

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

CQS: 95,2



COLOR PARAMETERS

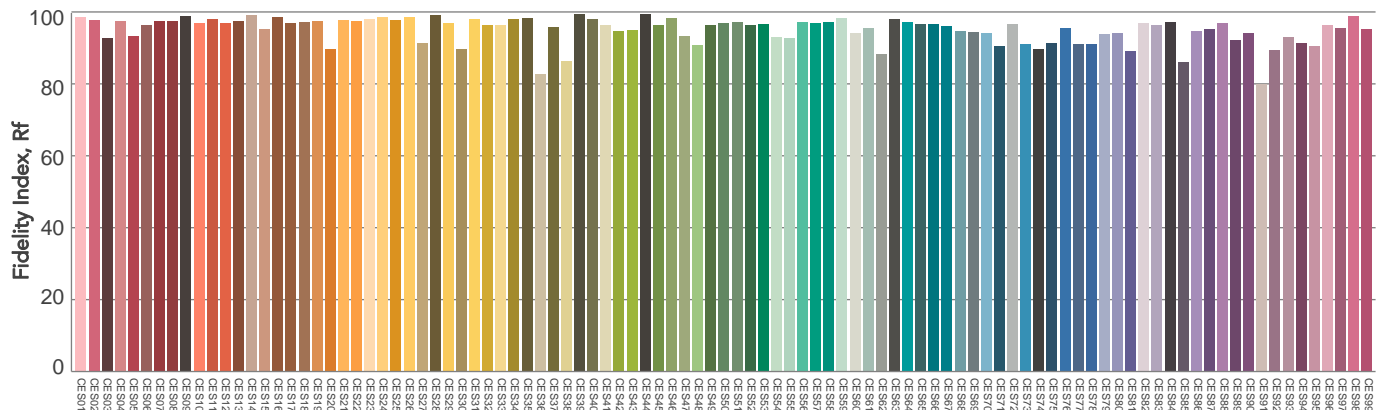
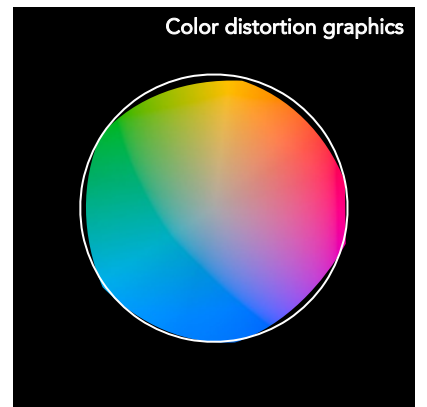
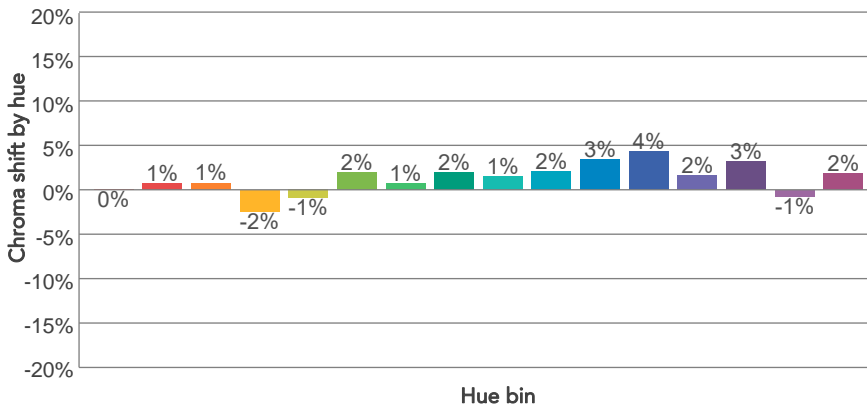
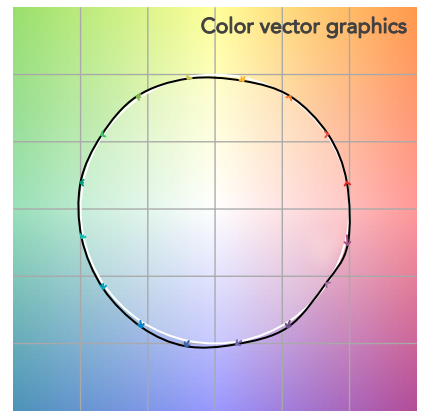
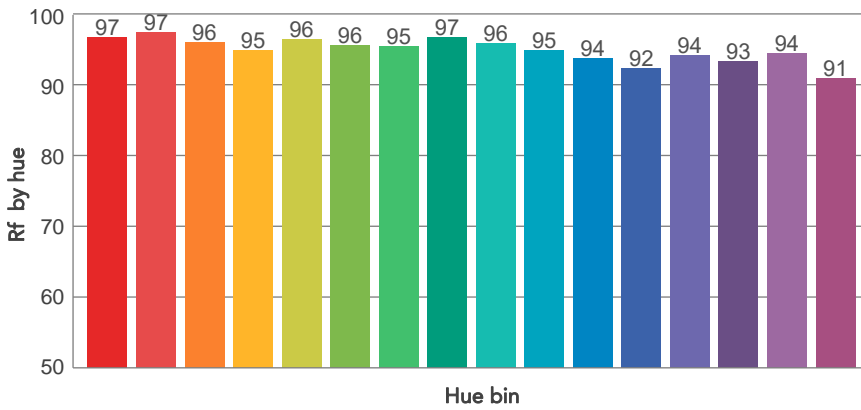
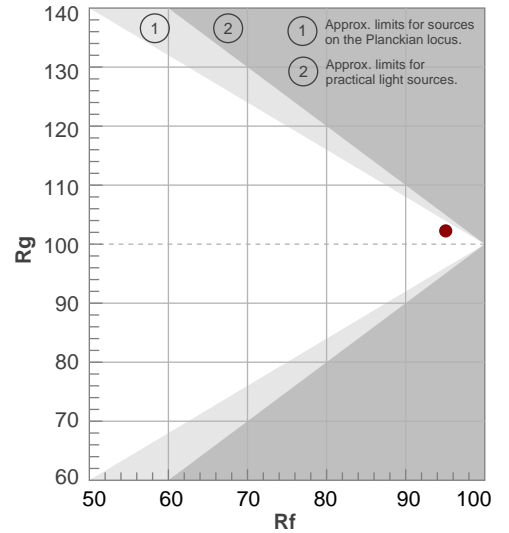
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2679 K | 96,7 | 98,3 | 95,1 | 102,2 | 95,2 | 98 | 0,458 | 0,405 | -0,0020 |

TM30 DETAILS

Rf 95,1
Fidelity index Rf

Rg 102,2
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -2% | -2% |
| 5 | 96 | -1% | 1% |
| 6 | 96 | 2% | 2% |
| 7 | 95 | 1% | 1% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 1% | 2% |
| 10 | 95 | 2% | 3% |
| 11 | 94 | 3% | 3% |
| 12 | 92 | 4% | -2% |
| 13 | 94 | 2% | -4% |
| 14 | 93 | 3% | -4% |
| 15 | 94 | -1% | 0% |
| 16 | 91 | 2% | -7% |

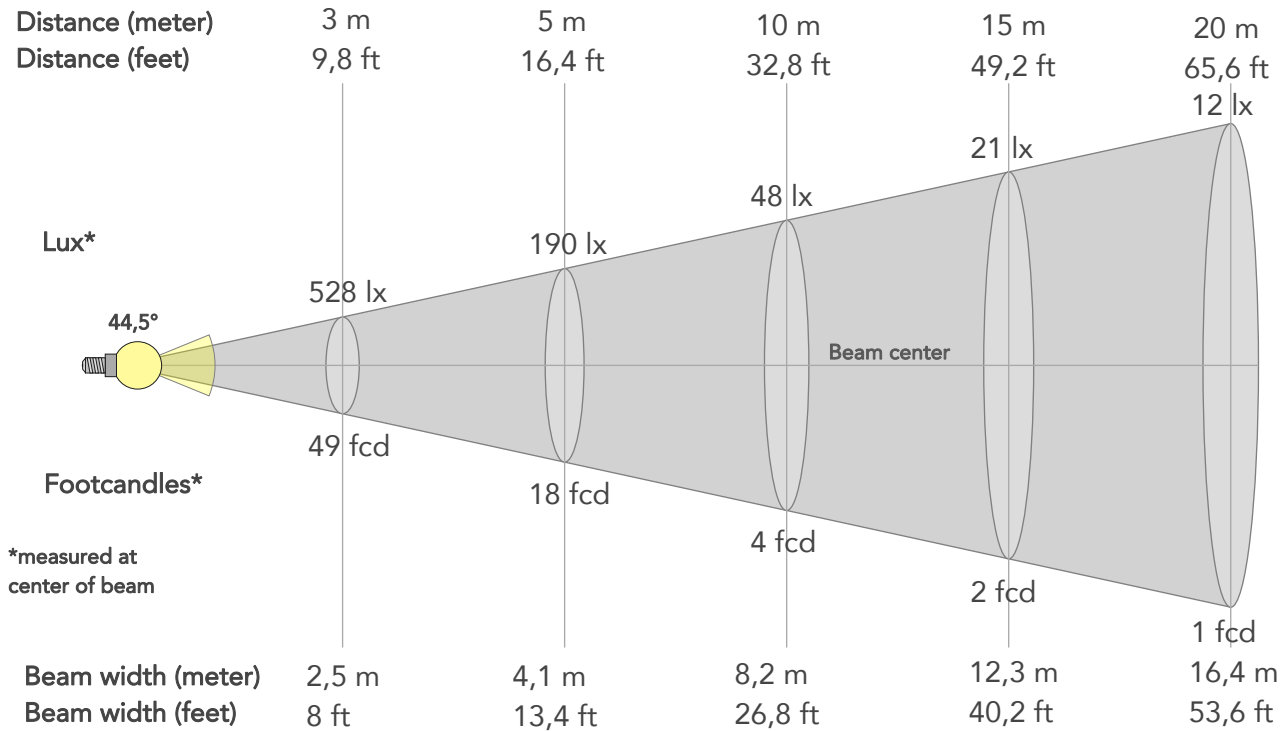


Color Evaluation Sample

BEAM DETAILS



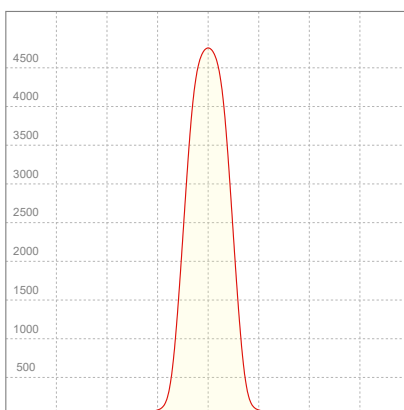
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,2° | 98,3% | 95,6% |



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 | 4753lx | 1188lx | 528lx | 297lx | 190lx | 84lx | 48lx | 21lx | 12lx | 8lx | 5lx | 3lx | 2lx |
| Footcand. | 442fcd | 110fcd | 49fcd | 28fcd | 18fcd | 8fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,4m | 24,5m | 32,7m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,8ft | 40,2ft | 53,6ft | 67,1ft | 80,5ft | 107,3ft | 134,1ft |

LINEAR DISTRIBUTION DIAGRAM

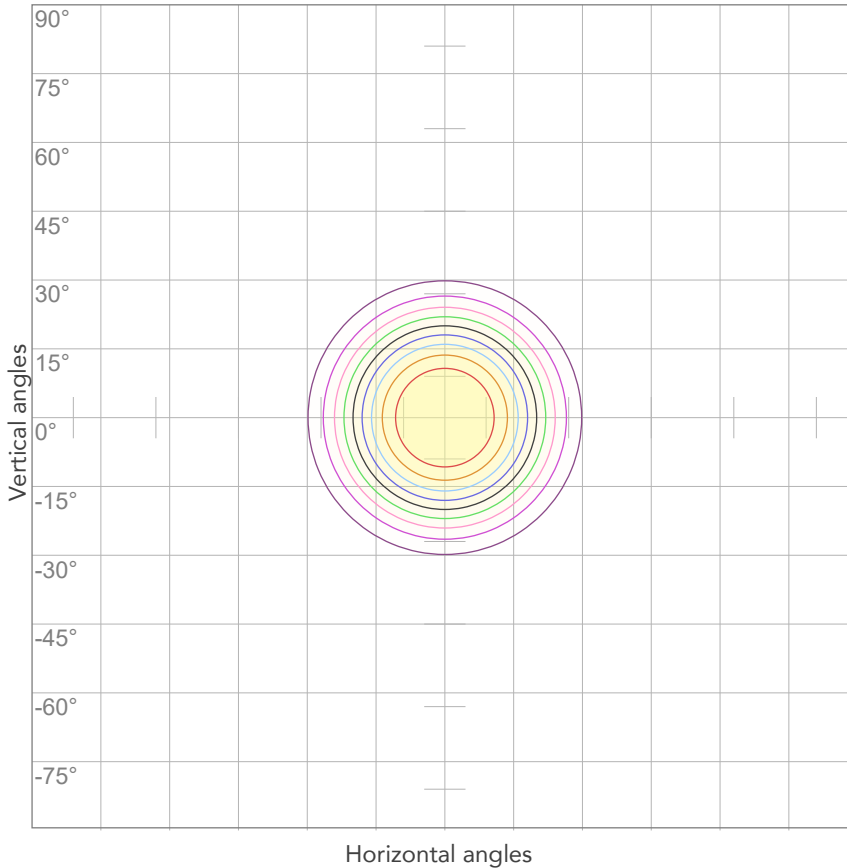


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 221V | 0,294A | 61,1W | 0,94 | 44lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



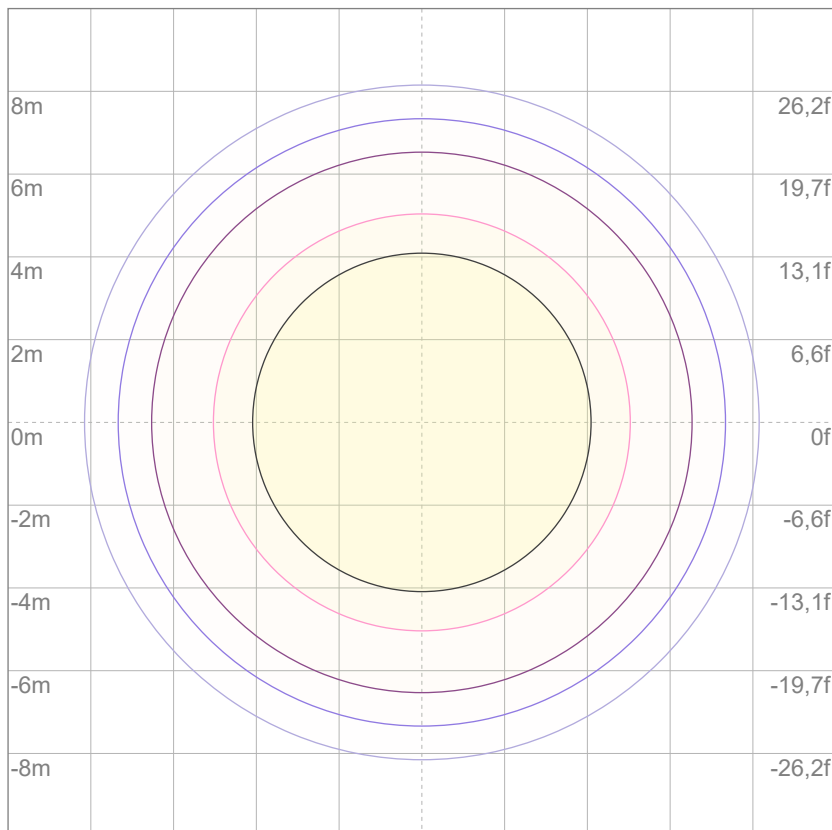
| | |
|-----|---------|
| 10% | 475 cd |
| 20% | 951 cd |
| 30% | 1426 cd |
| 40% | 1901 cd |
| 50% | 2376 cd |
| 60% | 2852 cd |
| 70% | 3327 cd |
| 80% | 3802 cd |

Conditions:

Number of c-planes: 2

Candela at center: 4753 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|---------|
| 3% | 1,43 lx |
| 5% | 2,38 lx |
| 10% | 4,75 lx |
| 30% | 14,3 lx |
| 50% | 23,8 lx |

Conditions:

Number of c-planes: 2

Lux at center: 47,5 lx

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



Total lumen output:

2472 lm

Peak candela output:

2300 cd

Light quality:

CRI: 96,7

Color temperature:

2678 K

PRODUCT NAME:
ECLPENDANTS VW

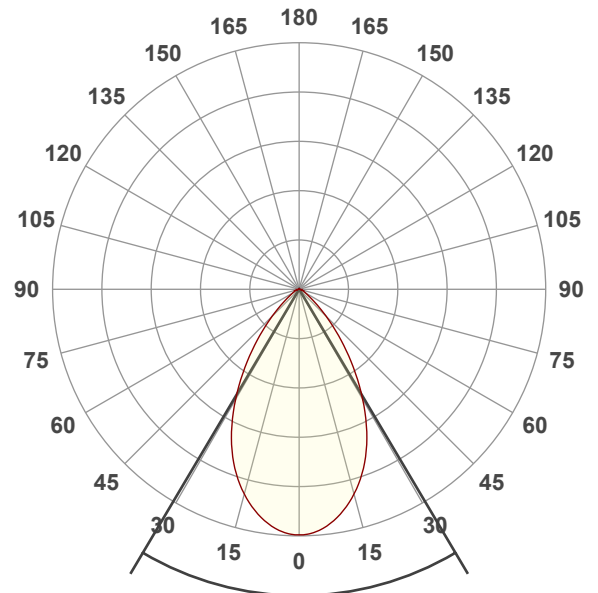
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
2700K

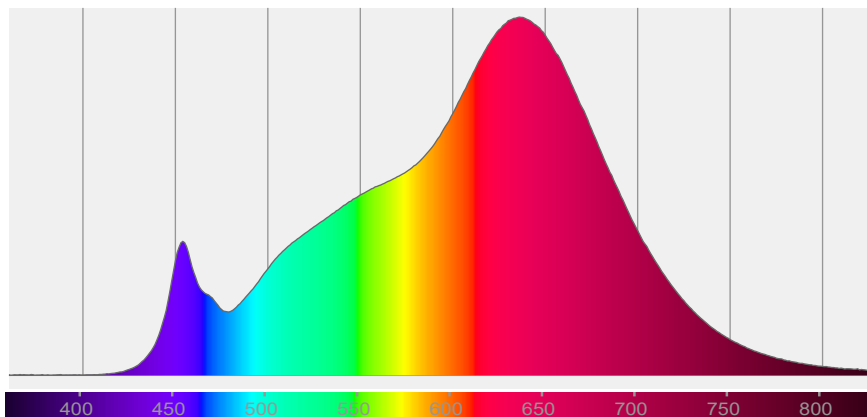
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:10:54

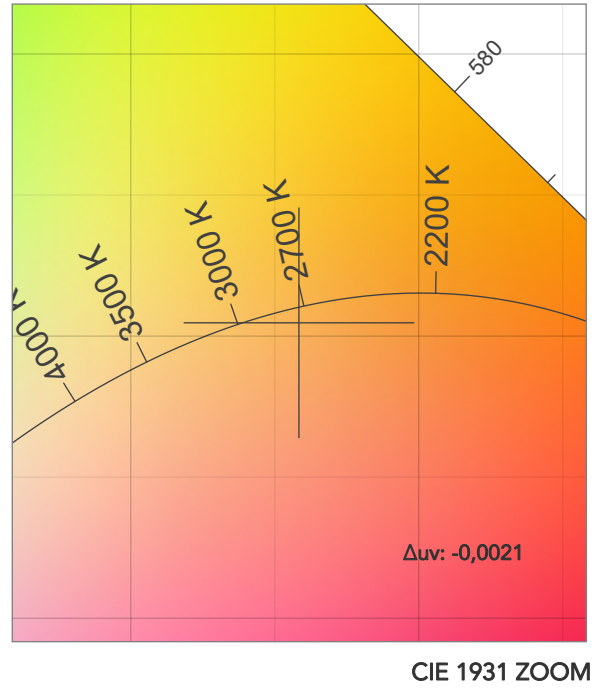
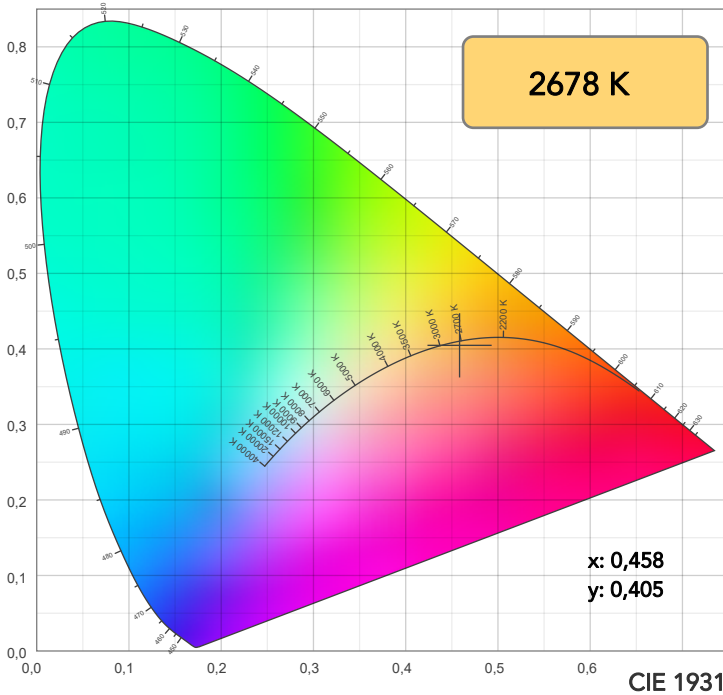


Beam angle 50%: 61,4°
Field angle 10%: 98°
Cut off angle 2.5%: 126°

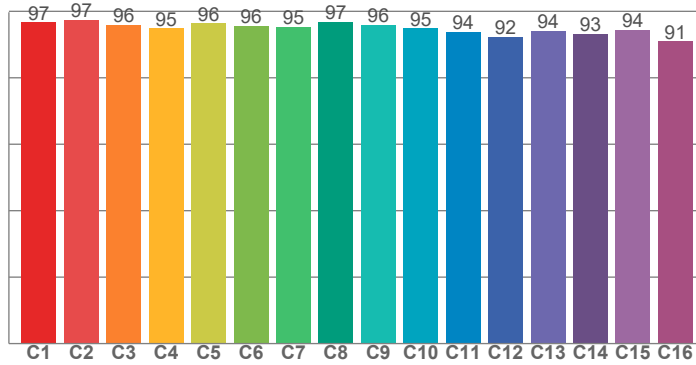
Spectra



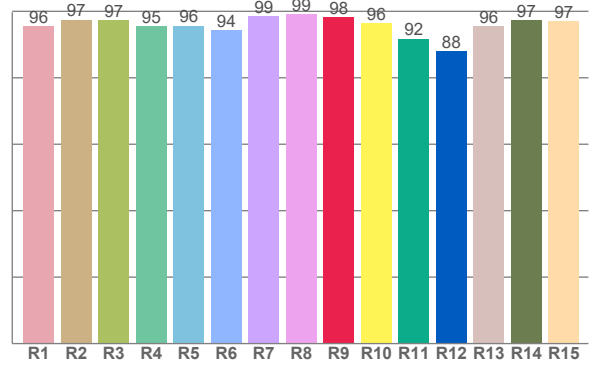
COLOR DETAILS



TM30: 95,0



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

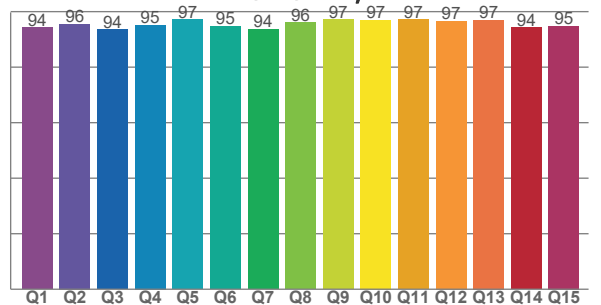
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,7 | 97,4 | 96,0 | 94,8 | 96,4 | 95,6 | 95,4 | 96,7 | 95,8 | 94,8 | 93,8 | 92,3 | 94,1 | 93,2 | 94,5 | 90,9 |

CQS Q values

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

CQS: 95,2



COLOR PARAMETERS

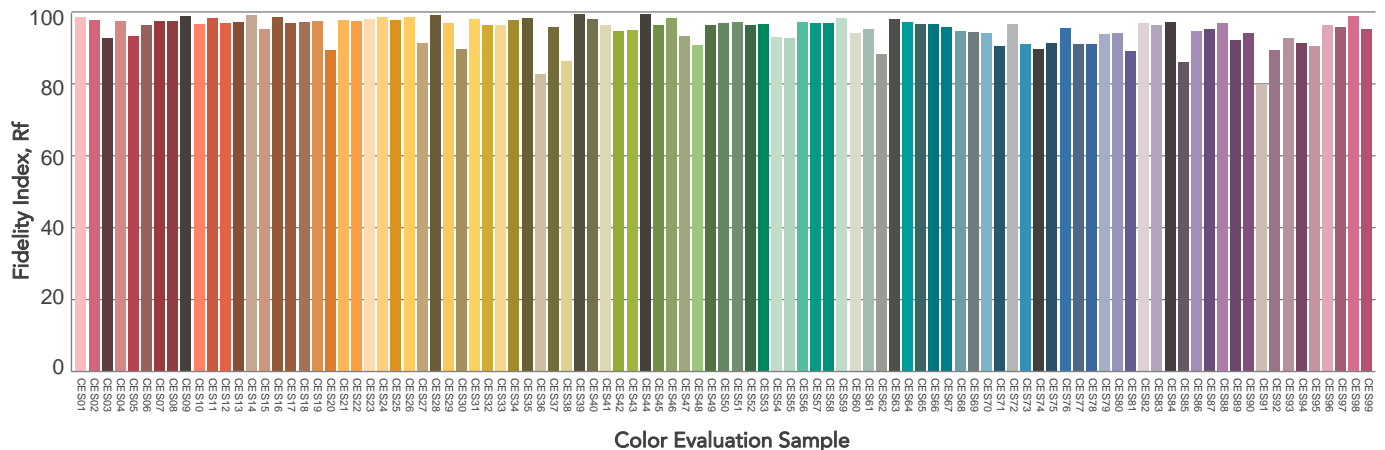
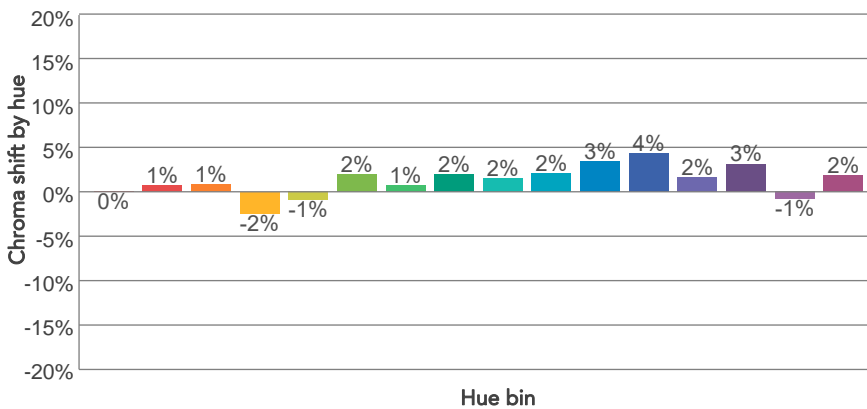
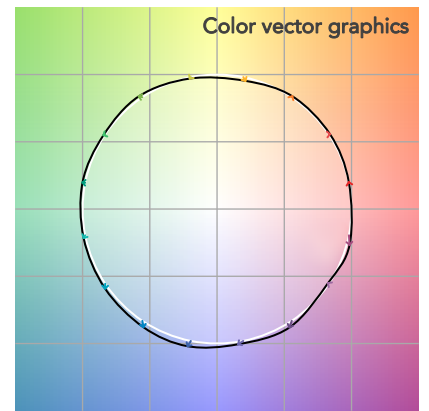
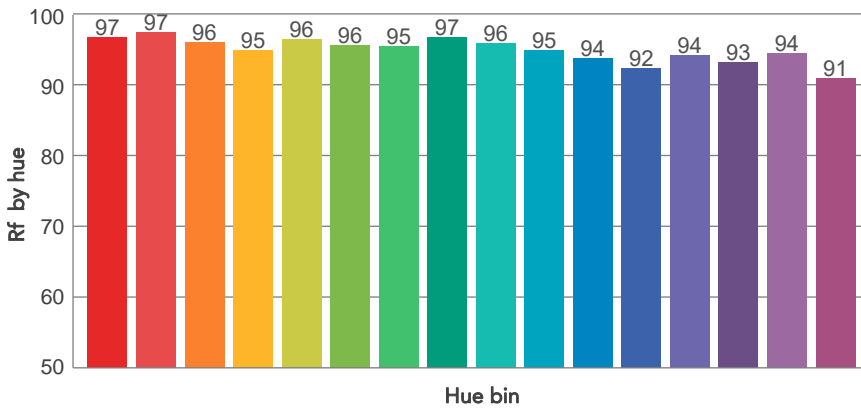
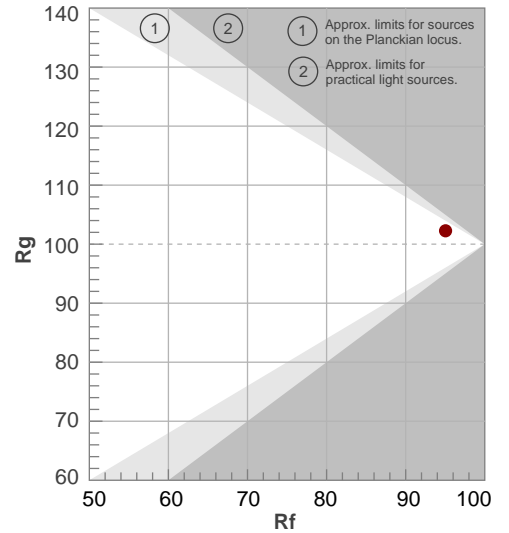
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2678 K | 96,7 | 98,2 | 95,0 | 102,3 | 95,2 | 98 | 0,458 | 0,405 | -0,0021 |

TM30 DETAILS

Rf 95,0
Fidelity index Rf

Rg 102,3
Gammut index

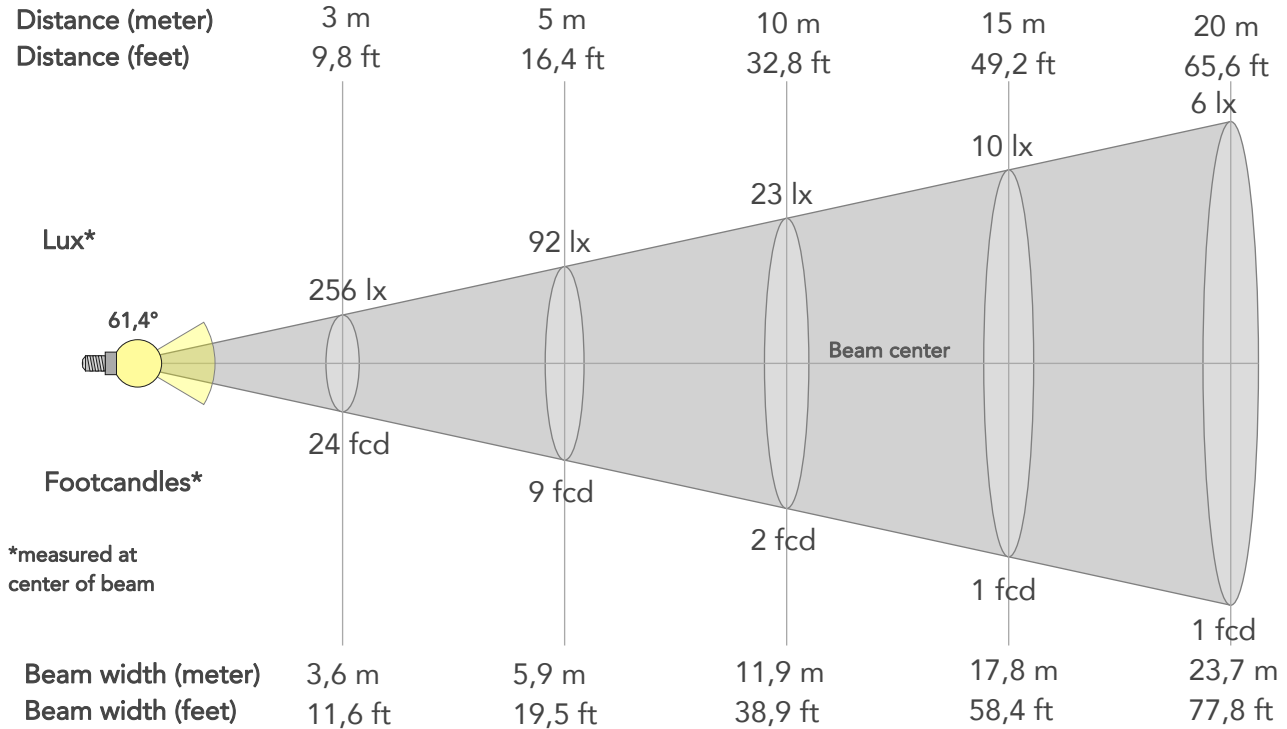
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -2% | -2% |
| 5 | 96 | -1% | 1% |
| 6 | 96 | 2% | 2% |
| 7 | 95 | 1% | 1% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 2% | 2% |
| 10 | 95 | 2% | 3% |
| 11 | 94 | 3% | 3% |
| 12 | 92 | 4% | -2% |
| 13 | 94 | 2% | -4% |
| 14 | 93 | 3% | -4% |
| 15 | 94 | -1% | 0% |
| 16 | 91 | 2% | -7% |



BEAM DETAILS



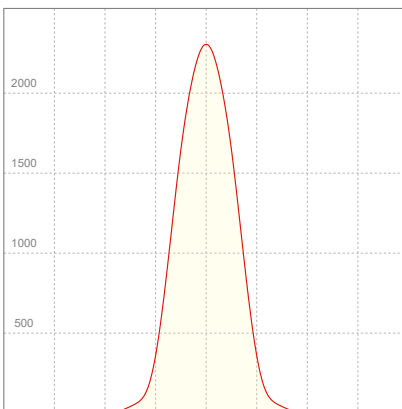
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,4° | 98° | 126° | 96,6% | 88,0% |



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 | 2300lx | 575lx | 256lx | 144lx | 92lx | 41lx | 23lx | 10lx | 6lx | 4lx | 3lx | 1lx | 1lx |
| Footcand. | 214fcd | 53fcd | 24fcd | 13fcd | 9fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,7m | 5,9m | 8,9m | 11,9m | 17,8m | 23,7m | 29,7m | 35,6m | 47,5m | 59,3m |
| Beam wid. | 3,9ft | 7,8ft | 11,6ft | 15,5ft | 19,5ft | 29,2ft | 38,9ft | 58,4ft | 77,8ft | 97,3ft | 116,7ft | 155,6ft | 194,6ft |

LINEAR DISTRIBUTION DIAGRAM

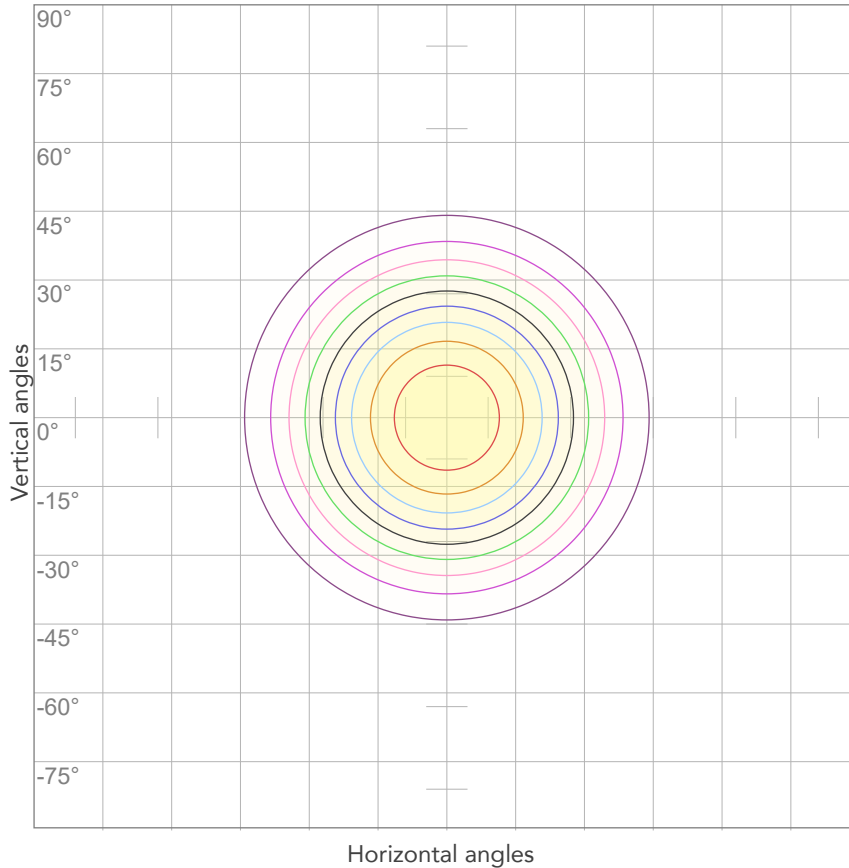


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 222V | 0,293A | 60,8W | 0,94 | 41lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



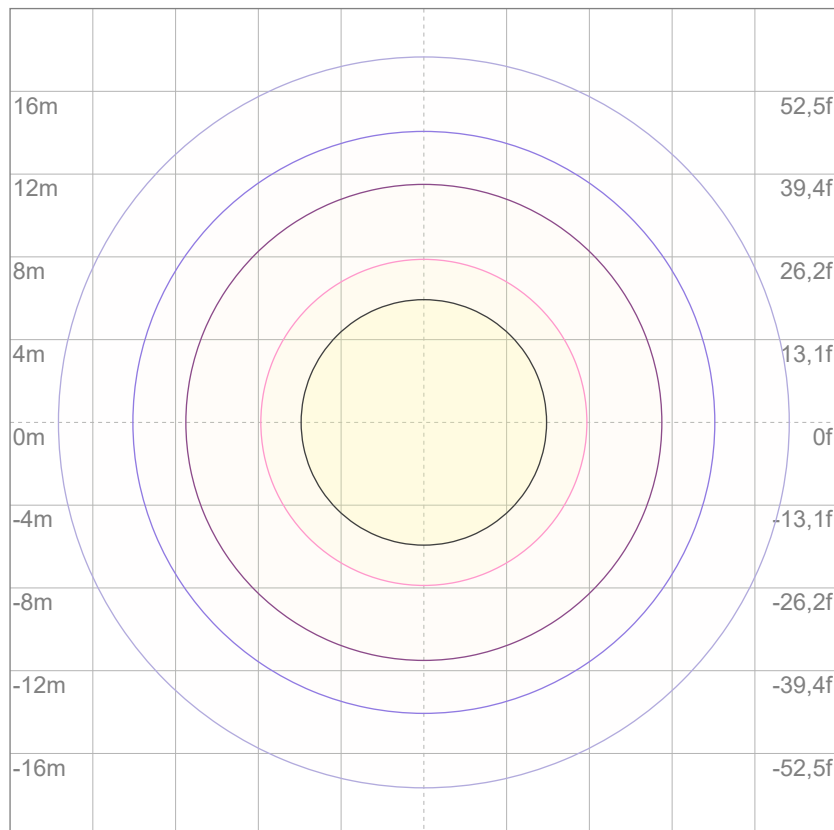
| | |
|-----|---------|
| 10% | 230 cd |
| 20% | 460 cd |
| 30% | 690 cd |
| 40% | 920 cd |
| 50% | 1150 cd |
| 60% | 1380 cd |
| 70% | 1610 cd |
| 80% | 1840 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2300 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,690 lx |
| 5% | 1,15 lx |
| 10% | 2,30 lx |
| 30% | 6,90 lx |
| 50% | 11,5 lx |

Conditions:

Number of c-planes: 2

Lux at center: 23,0 lx

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



Total lumen output:

2782 lm

Peak candela output:

16357 cd

Light quality:

CRI: 96,4

Color temperature:

2790 K

PRODUCT NAME:
ECLPENDANTS VW

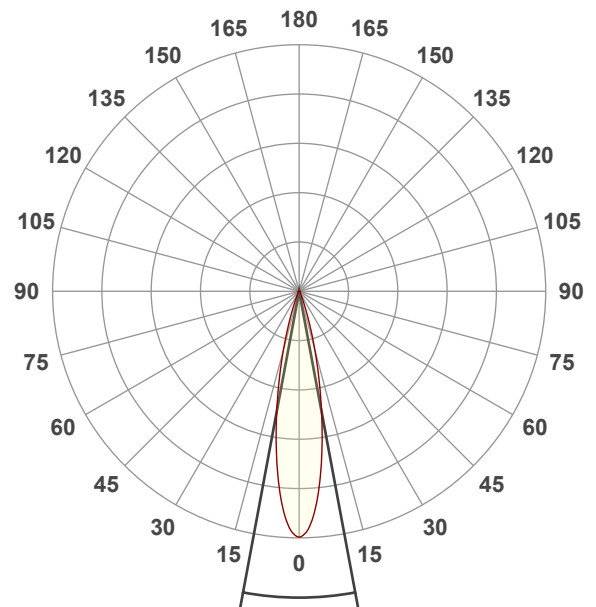
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
2800K

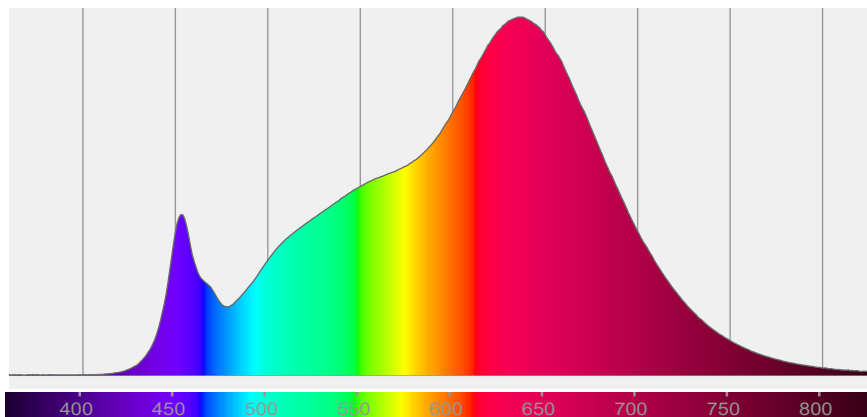
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:08:36

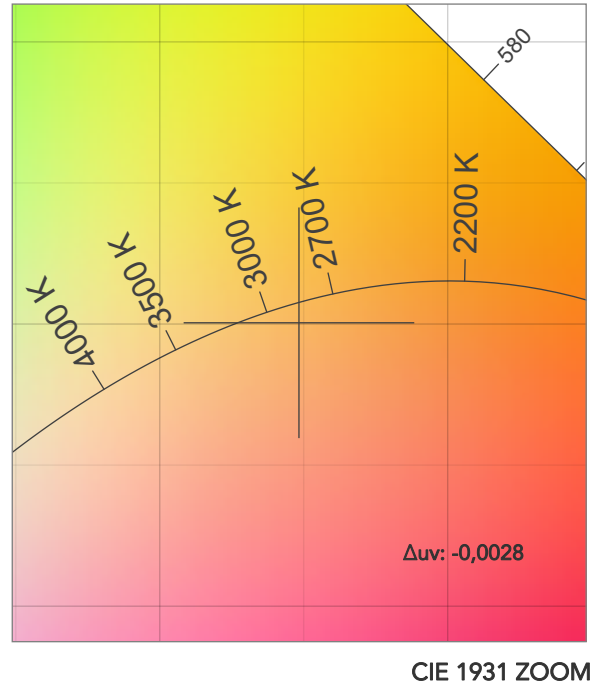
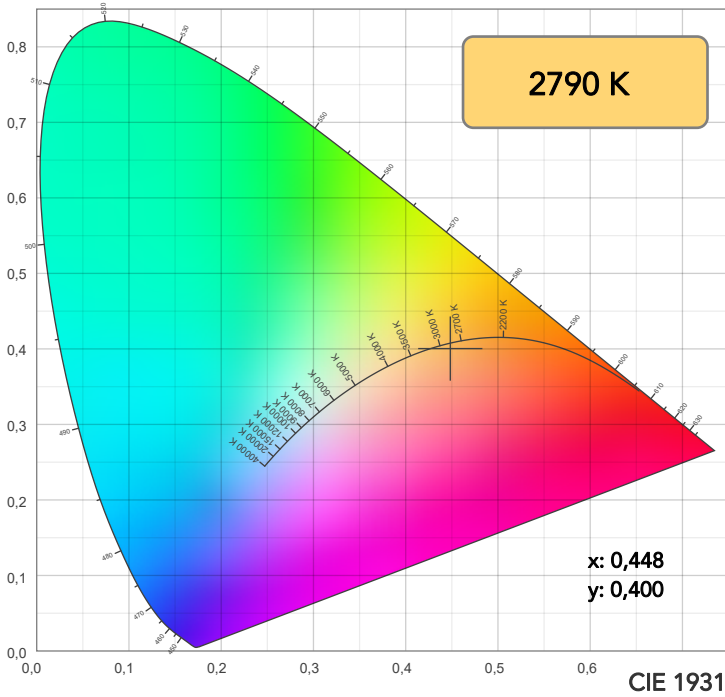


Beam angle 50%: 21,1°
Field angle 10%: 38,1°
Cut off angle 2.5%: 49,8°

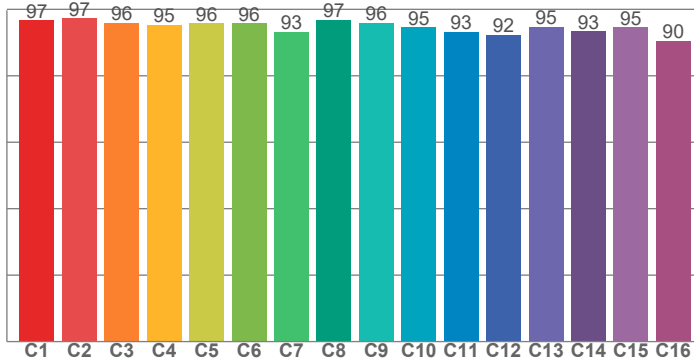
Spectra



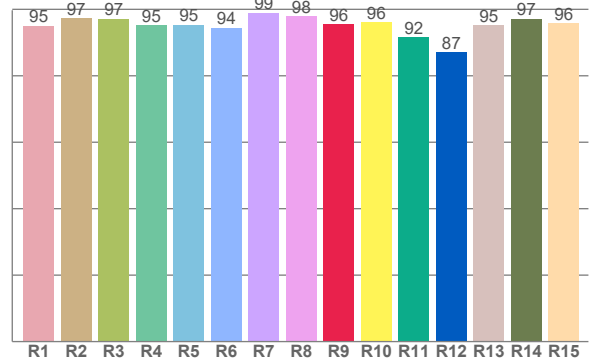
COLOR DETAILS



TM30: 95,0



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

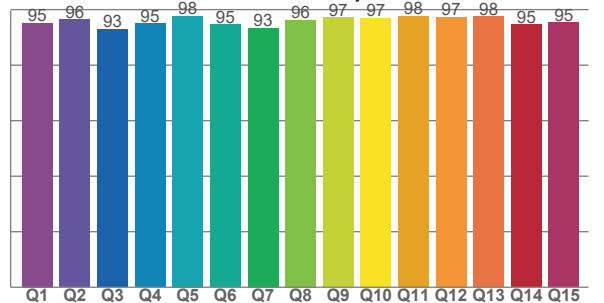
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,6 | 97,3 | 95,9 | 95,3 | 95,8 | 95,8 | 93,3 | 96,8 | 95,9 | 94,6 | 93,2 | 92,4 | 94,8 | 93,3 | 94,6 | 90,5 |

CQS Q values

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

CQS: 95,4



COLOR PARAMETERS

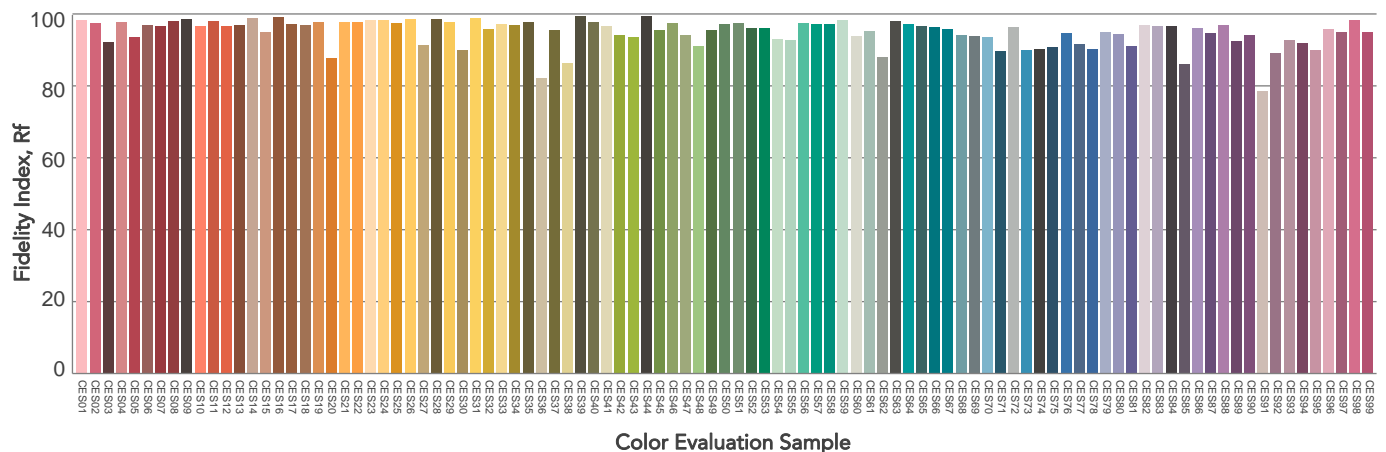
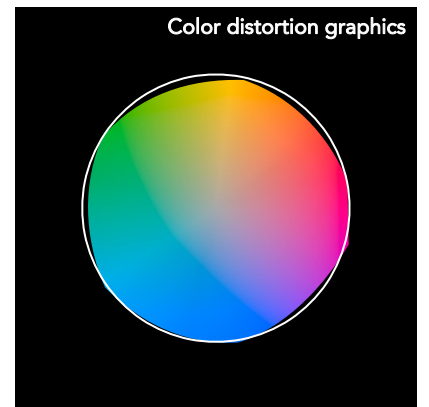
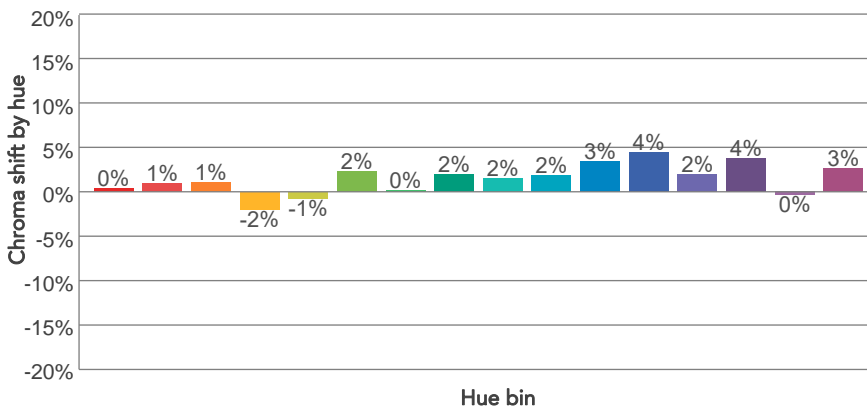
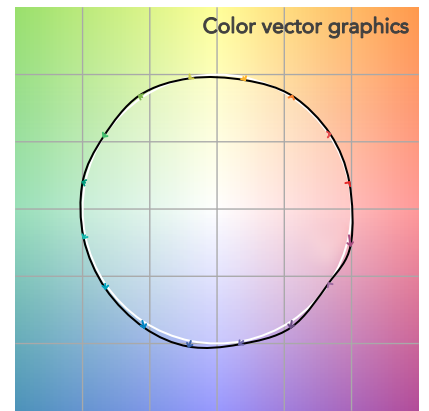
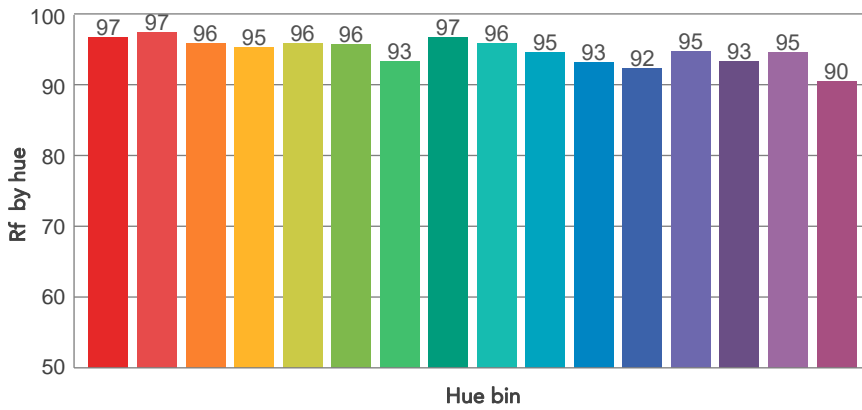
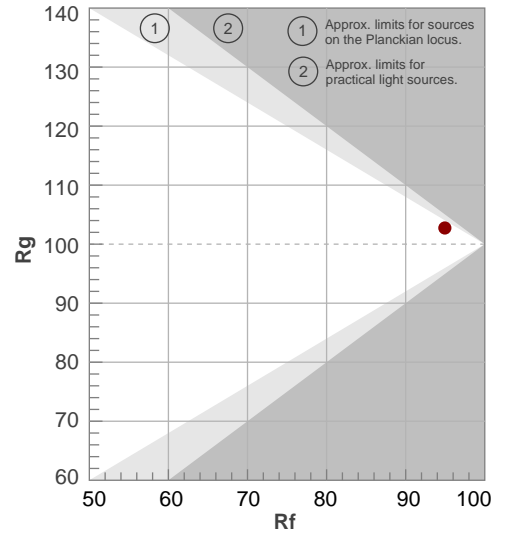
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2790 K | 96,4 | 95,6 | 95,0 | 102,7 | 95,4 | 98 | 0,448 | 0,400 | -0,0028 |

TM30 DETAILS

Rf 95,0
Fidelity index Rf

Rg 102,7
Gammut index

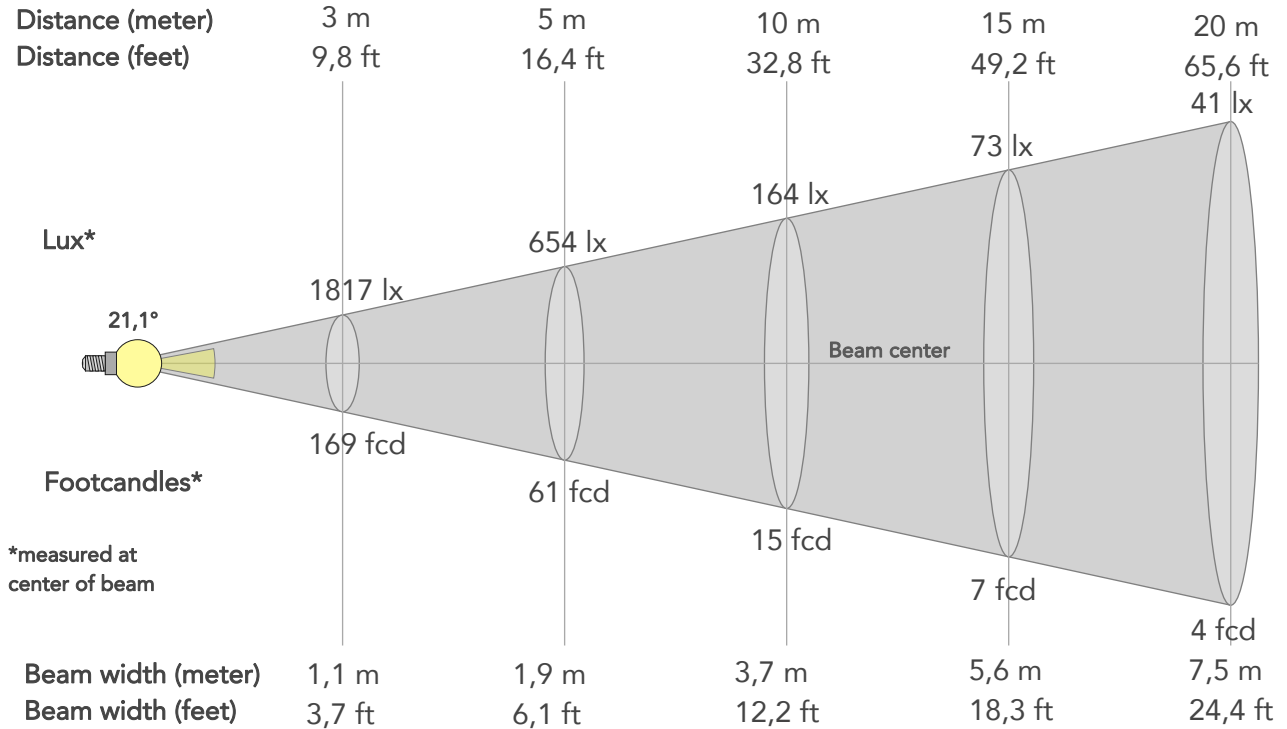
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -2% | -2% |
| 5 | 96 | -1% | 1% |
| 6 | 96 | 2% | 1% |
| 7 | 93 | 0% | 2% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 2% | 2% |
| 10 | 95 | 2% | 3% |
| 11 | 93 | 3% | 4% |
| 12 | 92 | 4% | -1% |
| 13 | 95 | 2% | -3% |
| 14 | 93 | 4% | -4% |
| 15 | 95 | 0% | 0% |
| 16 | 90 | 3% | -7% |



BEAM DETAILS



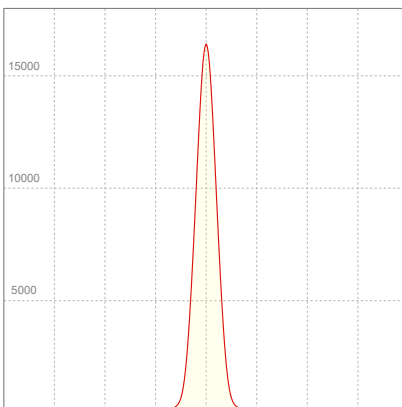
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21,1° | 38,1° | 49,8° | 97,5% | 94,7% |



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 | 16357lx | 4089lx | 1817lx | 1022lx | 654lx | 291lx | 164lx | 73lx | 41lx | 26lx | 18lx | 10lx | 7lx |
| Footcand. | 1520fcd | 380fcd | 169fcd | 95fcd | 61fcd | 27fcd | 15fcd | 7fcd | 4fcd | 2fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,5m | 9,3m | 11,2m | 14,9m | 18,6m |
| Beam wid. | 1,2ft | 2,5ft | 3,7ft | 4,9ft | 6,1ft | 9,2ft | 12,2ft | 18,3ft | 24,4ft | 30,6ft | 36,7ft | 48,9ft | 61,1ft |

LINEAR DISTRIBUTION DIAGRAM

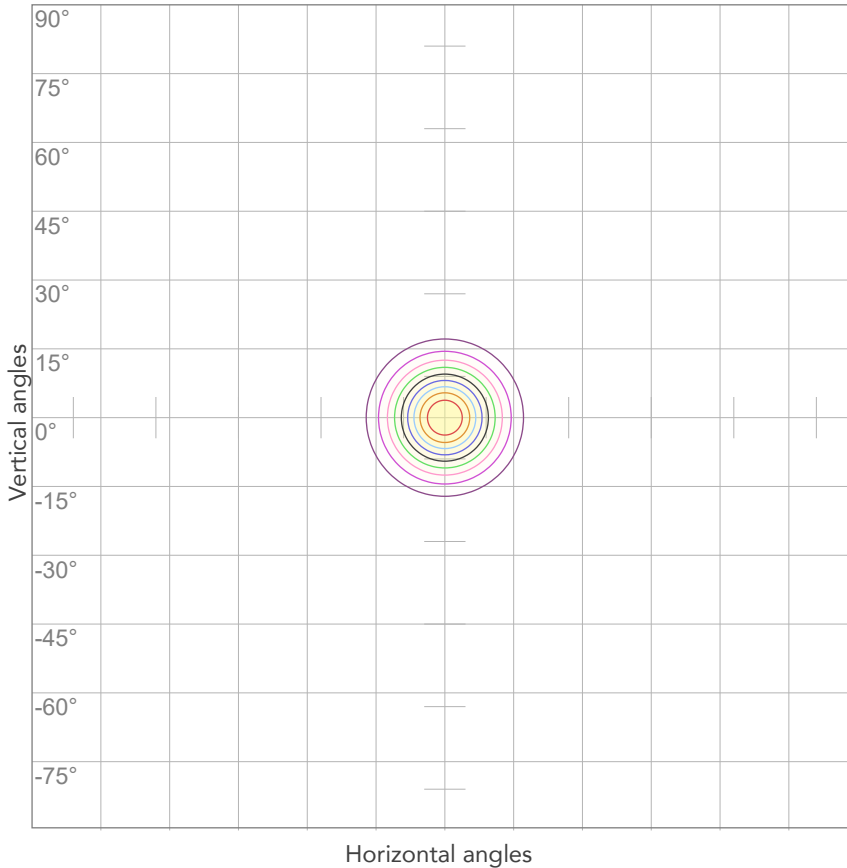


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 222V | 0,297A | 62,0W | 0,94 | 45lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



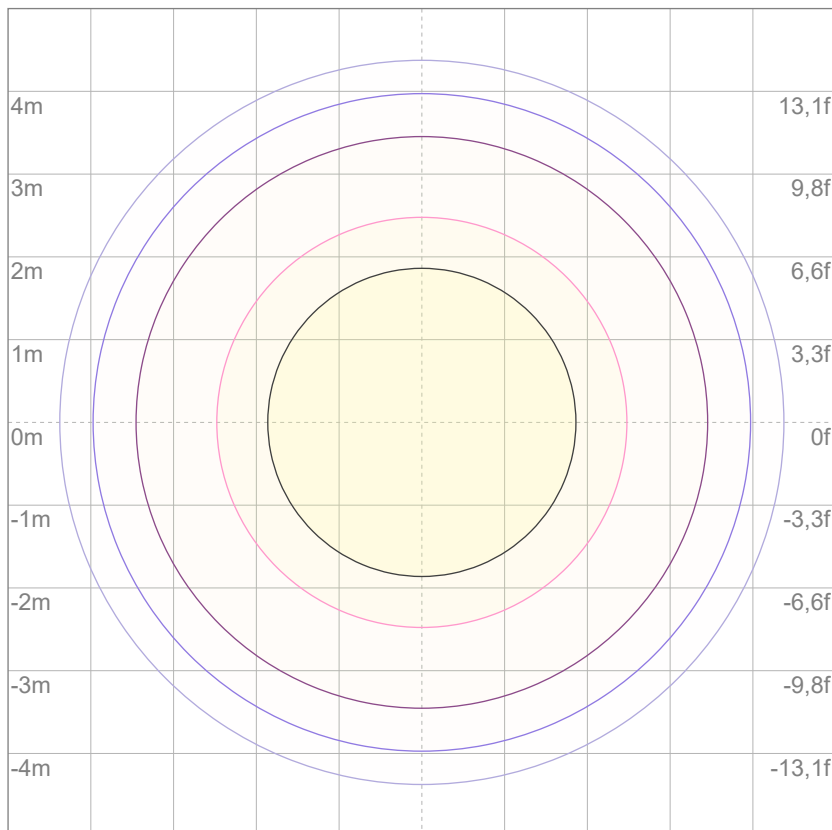
| | |
|-----|----------|
| 10% | 1636 cd |
| 20% | 3271 cd |
| 30% | 4907 cd |
| 40% | 6543 cd |
| 50% | 8178 cd |
| 60% | 9814 cd |
| 70% | 11450 cd |
| 80% | 13085 cd |

Conditions:

Number of c-planes: 2

Candela at center: 16357 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 4,91 lx |
| 5% | 8,18 lx |
| 10% | 16,4 lx |
| 30% | 49,1 lx |
| 50% | 81,8 lx |

Conditions:

Number of c-planes: 2

Lux at center: 164 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:

2734 lm

Peak candela output:

4851 cd

Light quality:

CRI: 96,3

Color temperature:

2807 K

PRODUCT NAME:
ECLPENDANTS VW

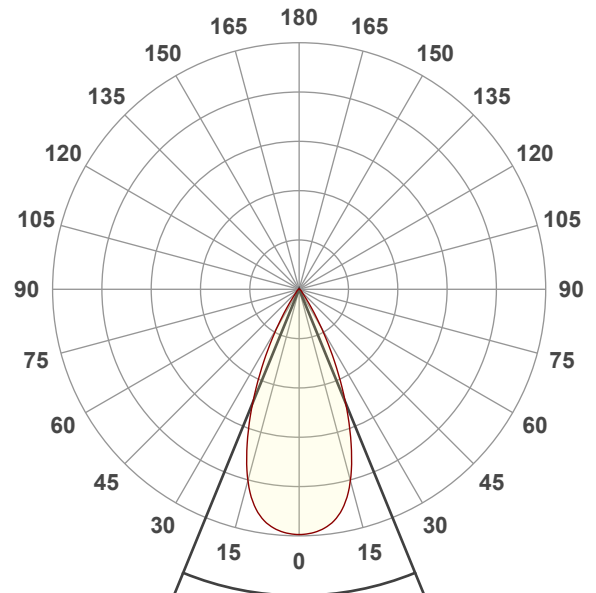
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
2800K

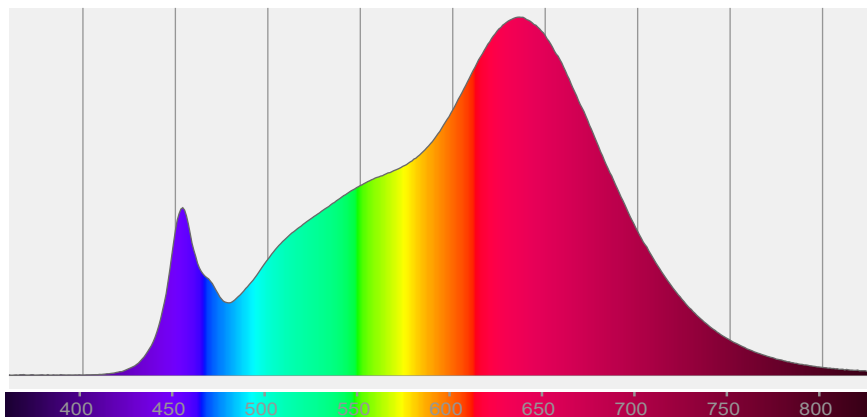
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:44:10

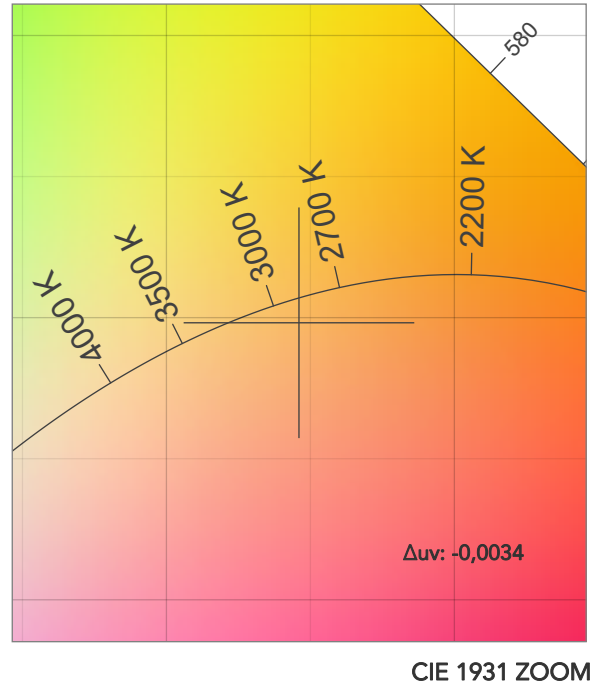
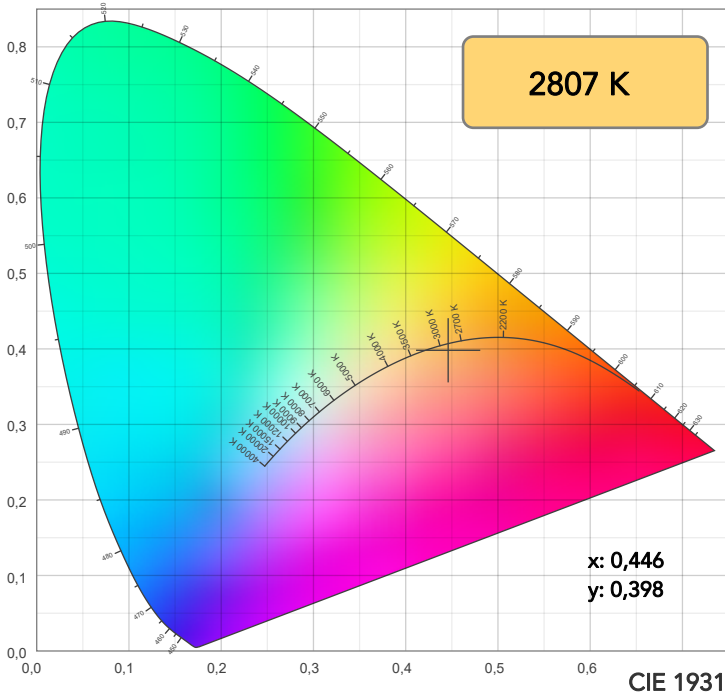


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,2°

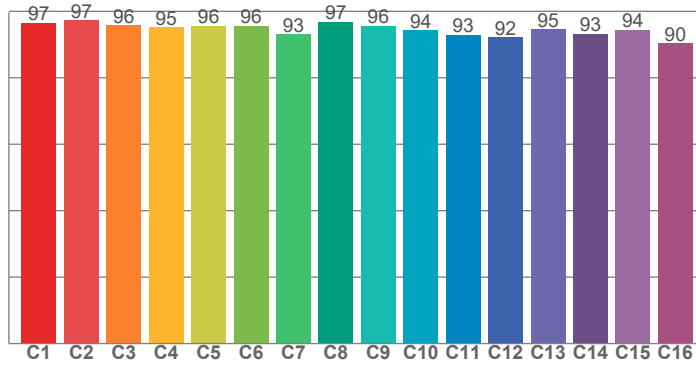
Spectra



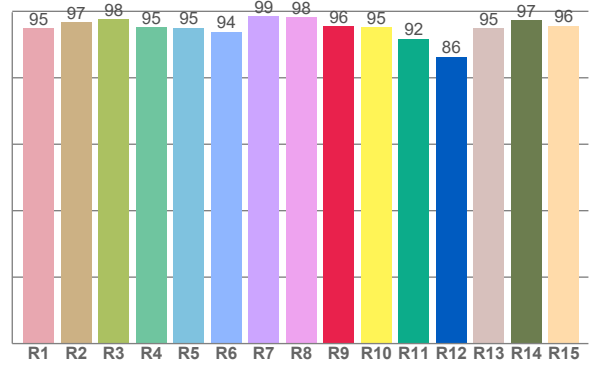
COLOR DETAILS



TM30: 94,8



CRI: 96,3 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,9 | 96,8 | 97,6 | 95,3 | 95,1 | 93,8 | 98,6 | 98,2 | 95,5 | 95,3 | 91,7 | 86,3 | 94,8 | 97,4 | 95,6 |

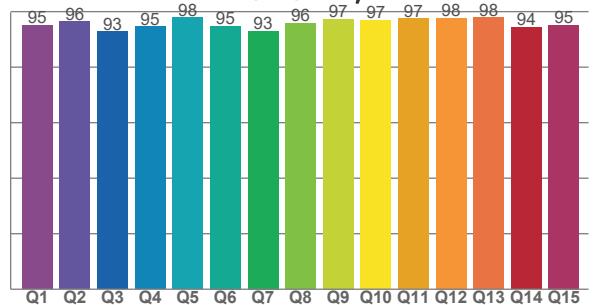
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,5 | 97,3 | 95,8 | 95,1 | 95,7 | 95,7 | 93,1 | 96,8 | 95,6 | 94,3 | 92,9 | 92,2 | 94,6 | 93,2 | 94,5 | 90,4 |

CQS Q values

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

CQS: 95,3



COLOR PARAMETERS

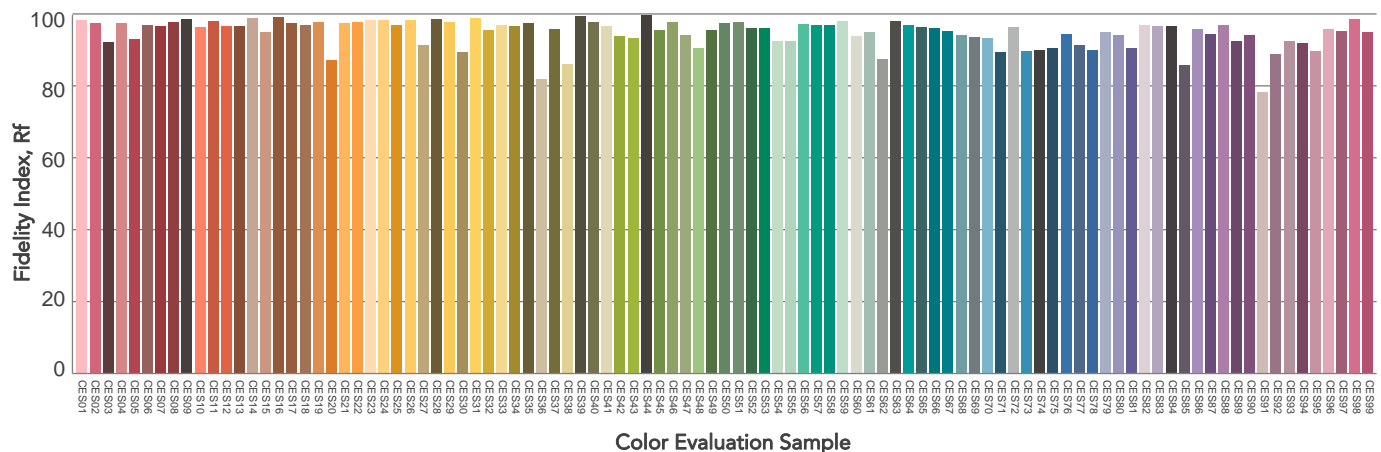
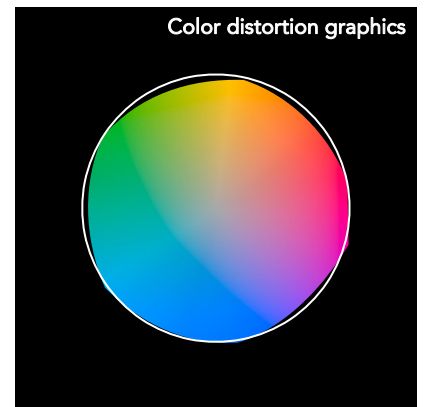
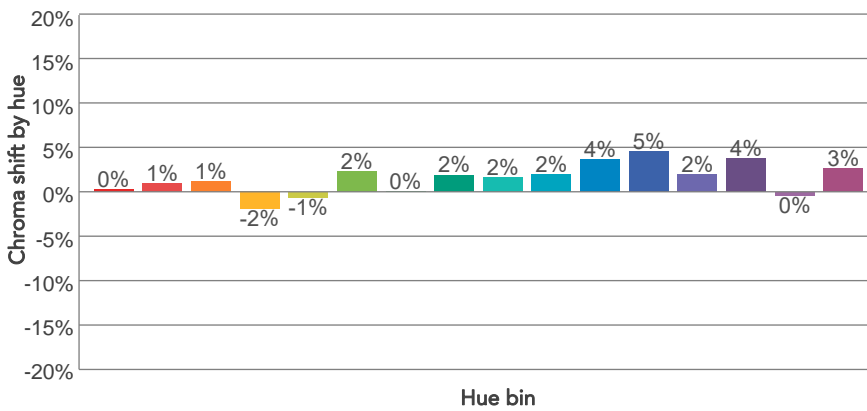
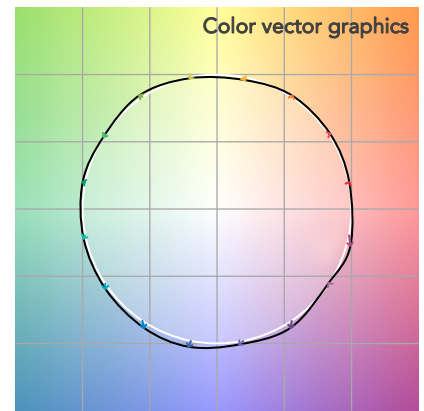
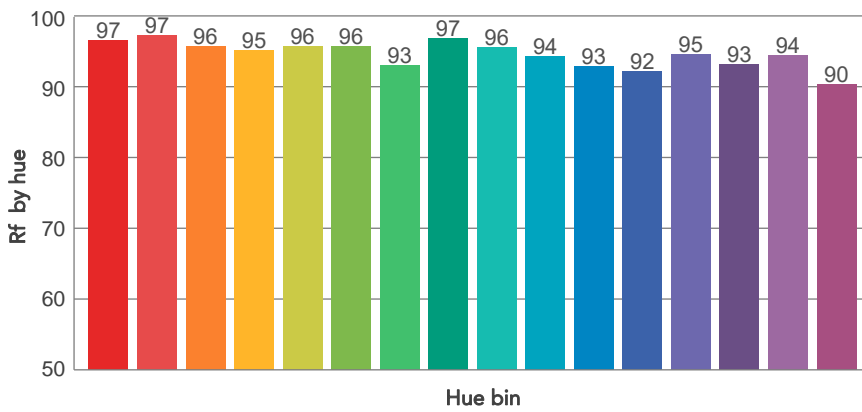
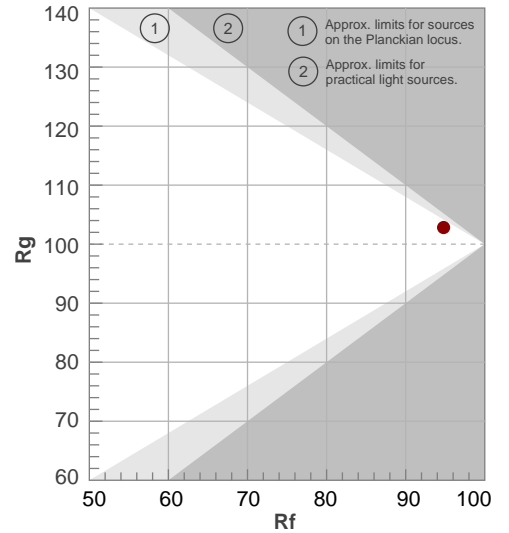
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2807 K | 96,3 | 95,5 | 94,8 | 102,8 | 95,3 | 98 | 0,446 | 0,398 | -0,0034 |

TM30 DETAILS

Rf 94,8
Fidelity index Rf

Rg 102,8
Gammut index

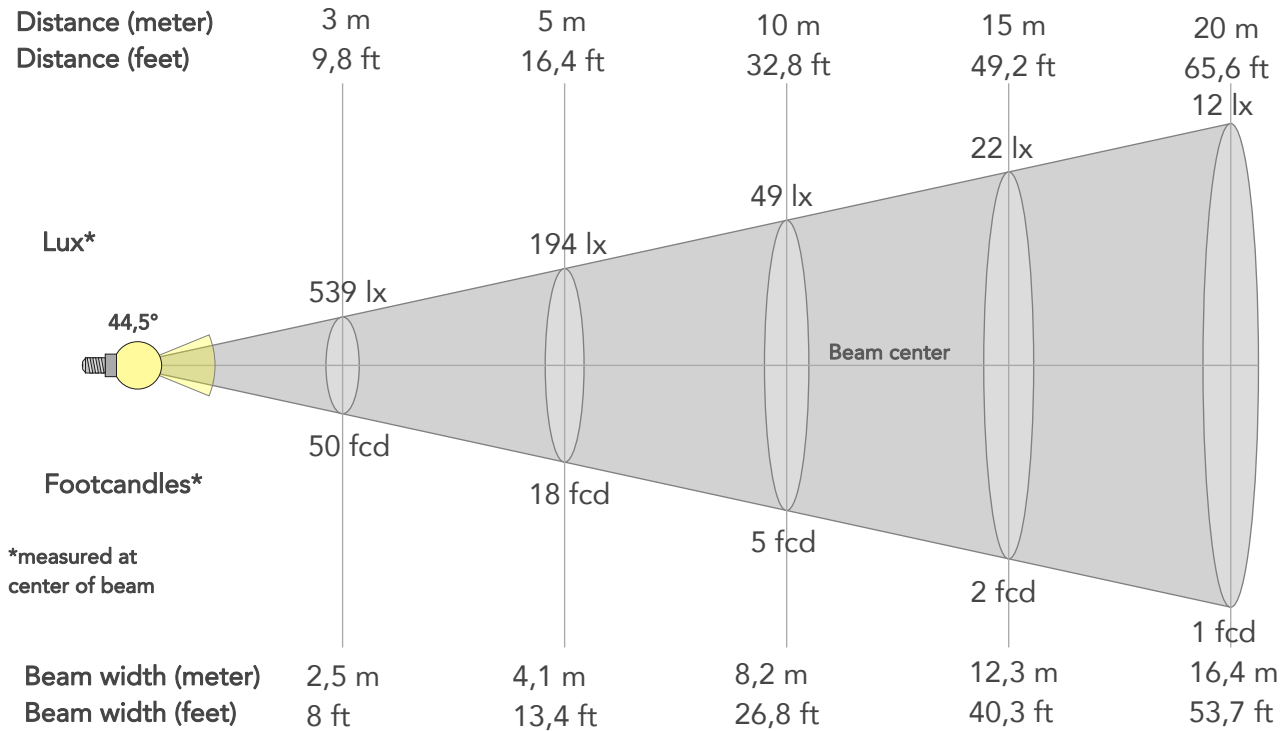
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -2% | -2% |
| 5 | 96 | -1% | 1% |
| 6 | 96 | 2% | 1% |
| 7 | 93 | 0% | 2% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 2% | 2% |
| 10 | 94 | 2% | 3% |
| 11 | 93 | 4% | 4% |
| 12 | 92 | 5% | -1% |
| 13 | 95 | 2% | -4% |
| 14 | 93 | 4% | -4% |
| 15 | 94 | 0% | 0% |
| 16 | 90 | 3% | -7% |



BEAM DETAILS



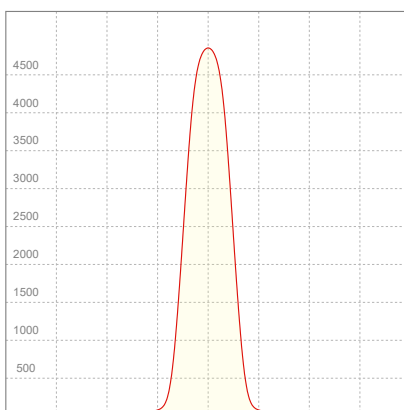
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,2° | 98,3% | 95,5% |



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 | 4851lx | 1213lx | 539lx | 303lx | 194lx | 86lx | 49lx | 22lx | 12lx | 8lx | 5lx | 3lx | 2lx |
| Footcand. | 451fcd | 113fcd | 50fcd | 28fcd | 18fcd | 8fcd | 5fcd | 2fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,5m | 32,7m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,8ft | 40,3ft | 53,7ft | 67,1ft | 80,5ft | 107,3ft | 134,2ft |

LINEAR DISTRIBUTION DIAGRAM

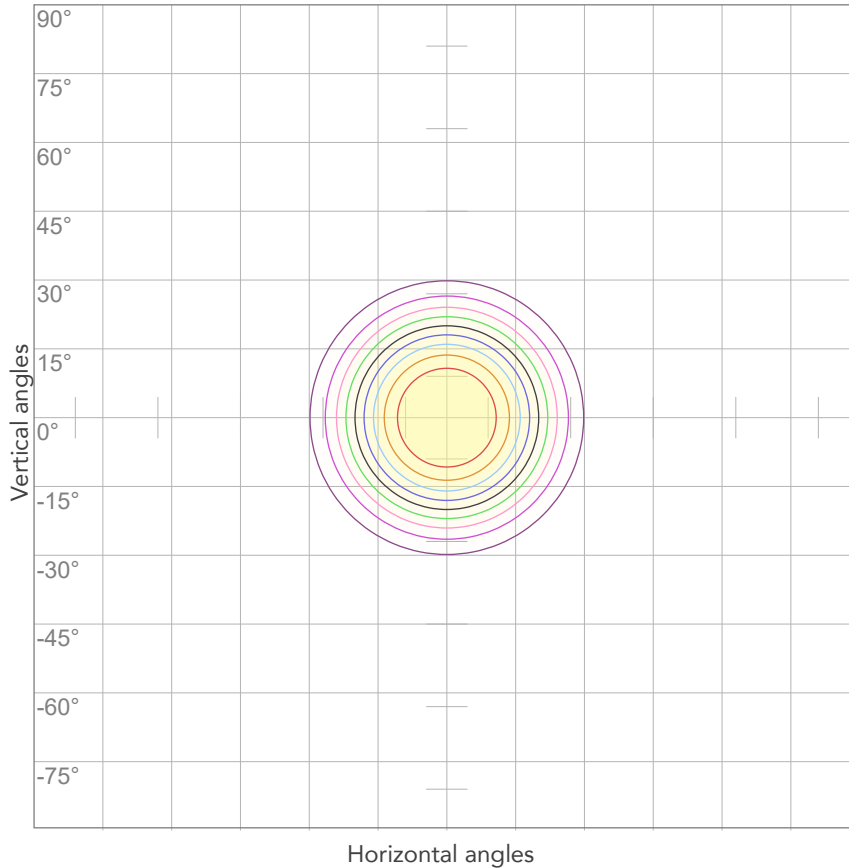


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 222V | 0,294A | 61,2W | 0,94 | 45lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



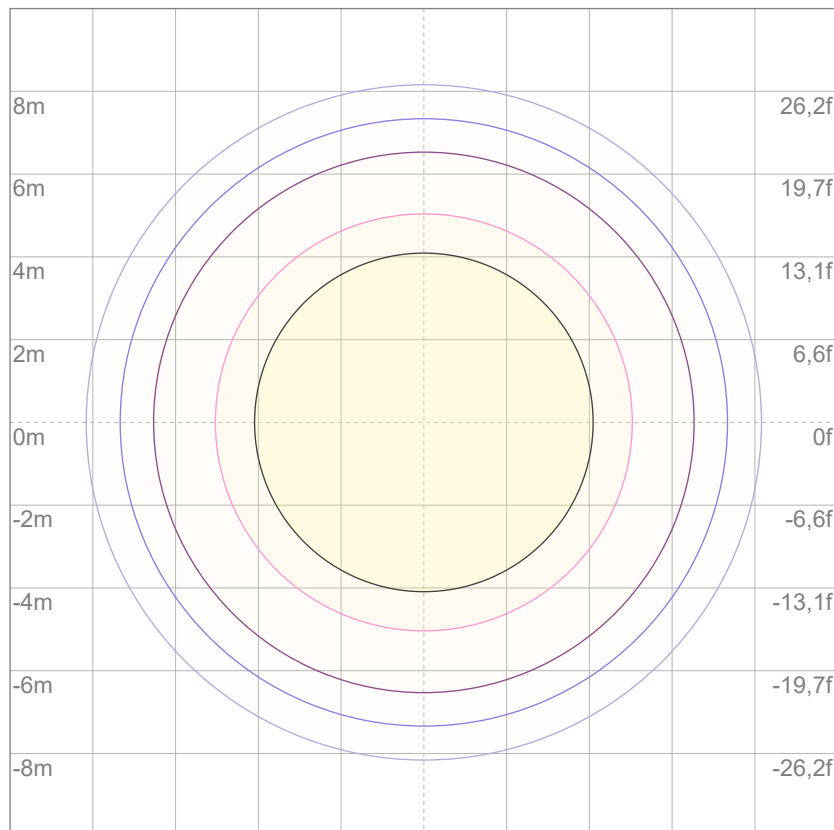
| | |
|-----|---------|
| 10% | 485 cd |
| 20% | 970 cd |
| 30% | 1455 cd |
| 40% | 1940 cd |
| 50% | 2425 cd |
| 60% | 2910 cd |
| 70% | 3395 cd |
| 80% | 3880 cd |

Conditions:

Number of c-planes: 2

Candela at center: 4851 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,46 lx |
| 5% | 2,43 lx |
| 10% | 4,85 lx |
| 30% | 14,6 lx |
| 50% | 24,3 lx |

Conditions:

Number of c-planes: 2

Lux at center: 48,5 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:

2536 lm

Peak candela output:

2357 cd

Light quality:

CRI: 96,2

Color temperature:

2808 K

PRODUCT NAME:
ECLPENDANTS VW

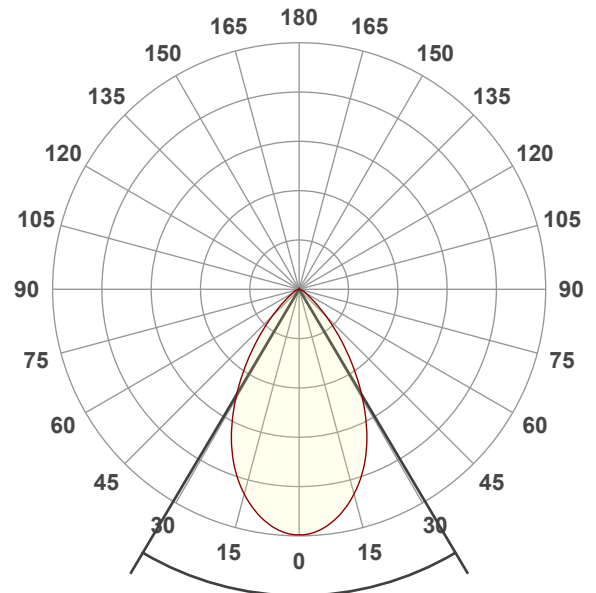
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
2800K

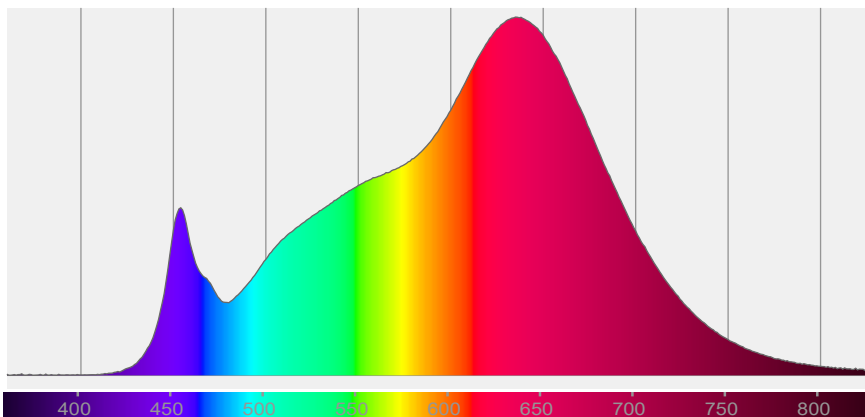
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:09:18

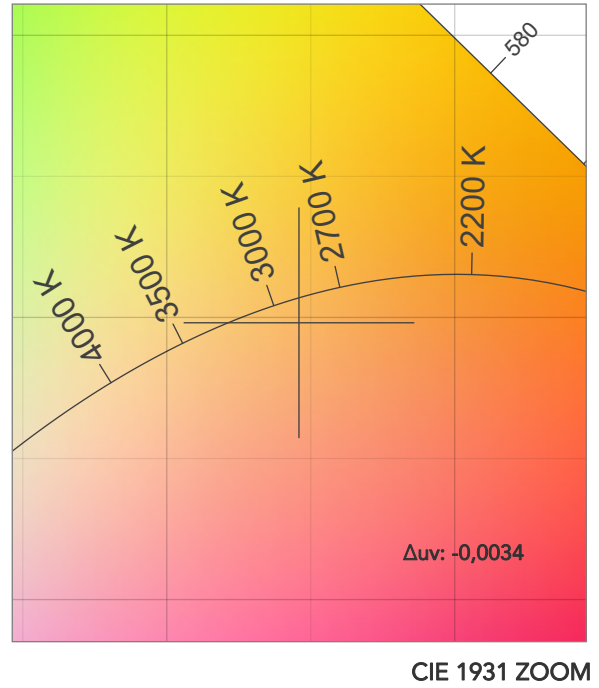
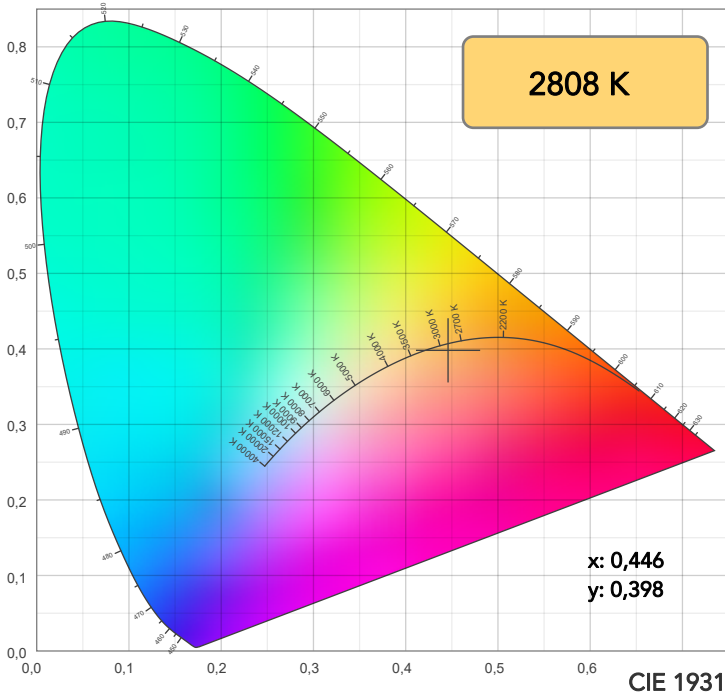


Beam angle 50%: 61,4°
Field angle 10%: 98°
Cut off angle 2.5%: 125,9°

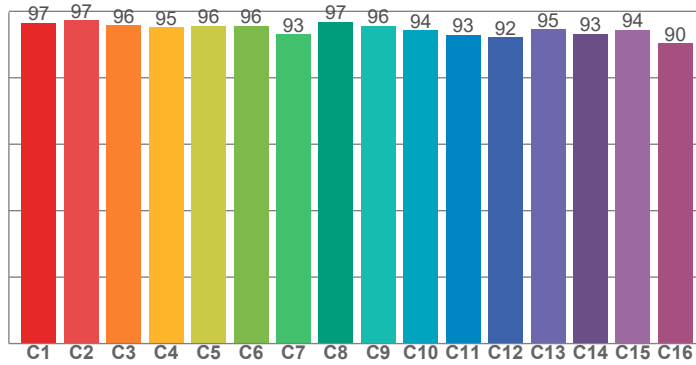
Spectra



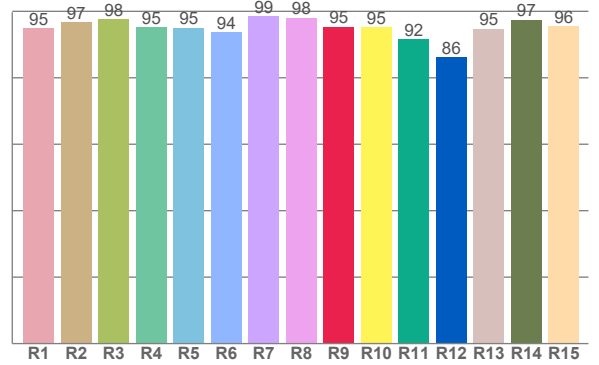
COLOR DETAILS



TM30: 94,8



CRI: 96,2 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,8 | 96,8 | 97,6 | 95,2 | 95,0 | 93,8 | 98,6 | 98,1 | 95,4 | 95,2 | 91,7 | 86,3 | 94,8 | 97,4 | 95,6 |

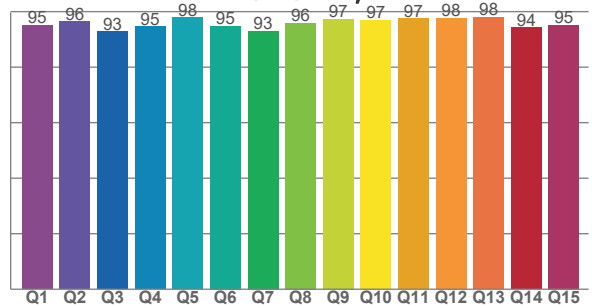
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,5 | 97,3 | 95,7 | 95,1 | 95,7 | 95,7 | 93,1 | 96,8 | 95,6 | 94,3 | 93,0 | 92,2 | 94,6 | 93,2 | 94,5 | 90,4 |

CQS Q values

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

CQS: 95,3



COLOR PARAMETERS

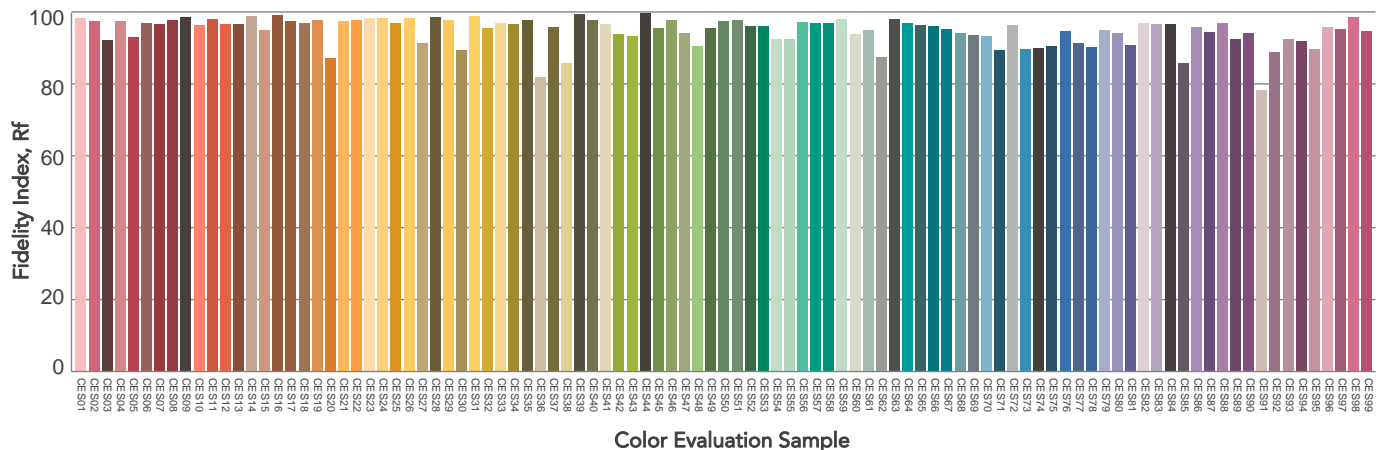
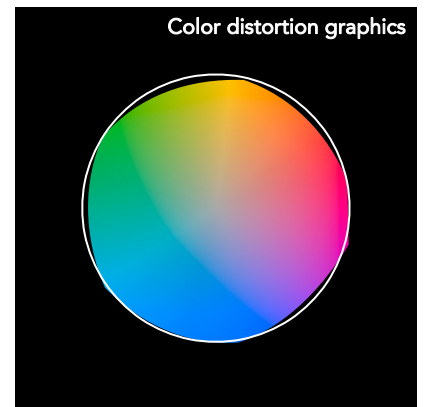
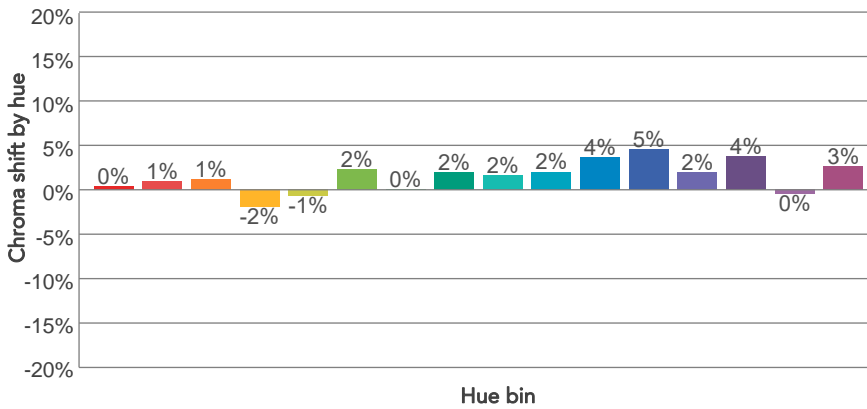
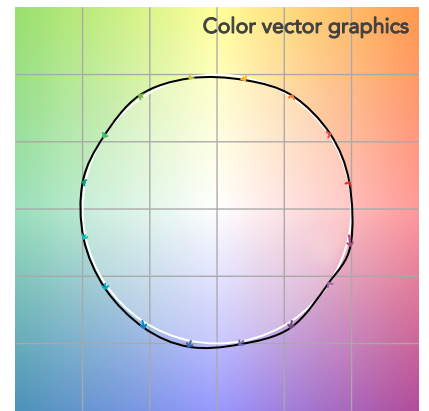
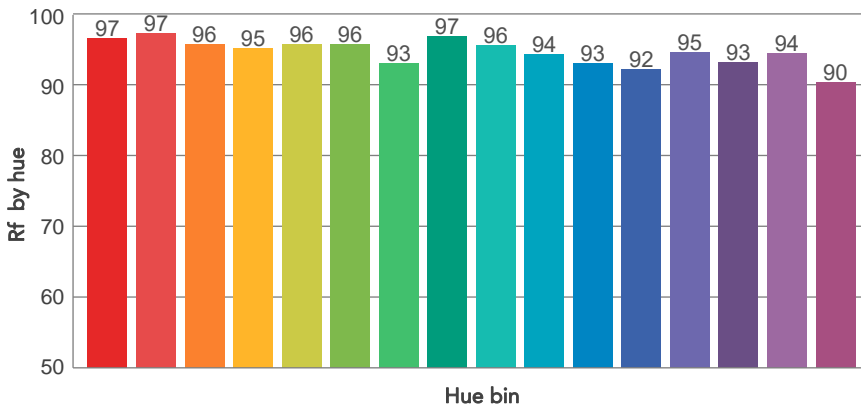
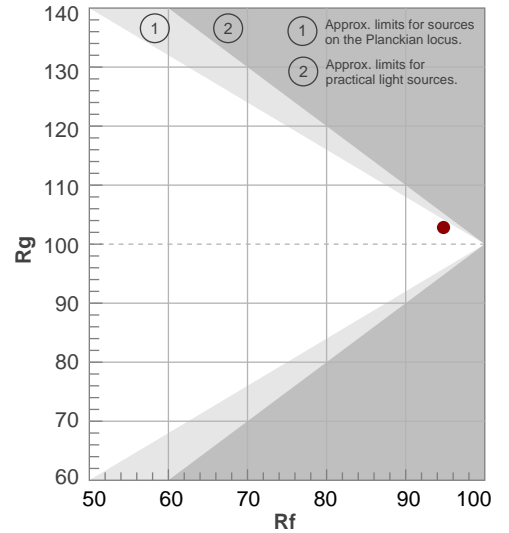
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2808 K | 96,2 | 95,4 | 94,8 | 102,8 | 95,3 | 98 | 0,446 | 0,398 | -0,0034 |

TM30 DETAILS

Rf 94,8
Fidelity index Rf

Rg 102,8
Gammut index

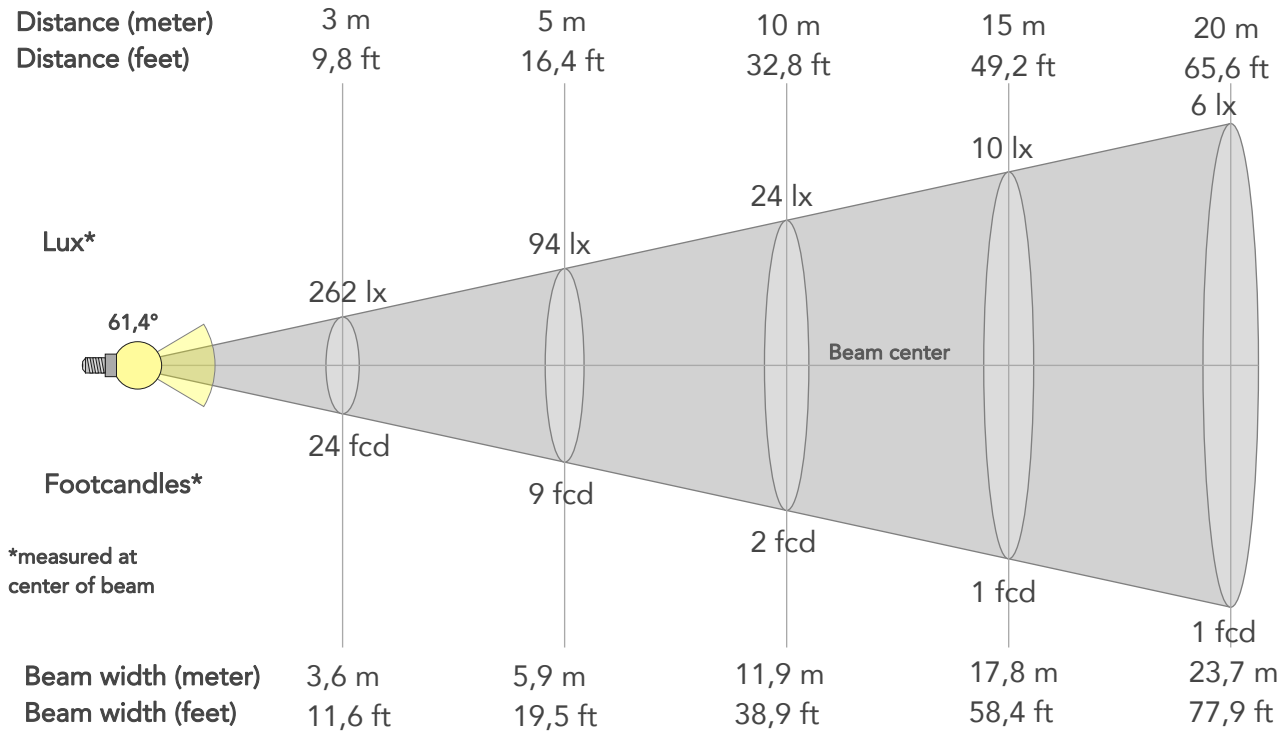
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 97 | 0% | 0% |
| 2 | 97 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 95 | -2% | -2% |
| 5 | 96 | -1% | 1% |
| 6 | 96 | 2% | 1% |
| 7 | 93 | 0% | 2% |
| 8 | 97 | 2% | 0% |
| 9 | 96 | 2% | 2% |
| 10 | 94 | 2% | 3% |
| 11 | 93 | 4% | 4% |
| 12 | 92 | 5% | -1% |
| 13 | 95 | 2% | -4% |
| 14 | 93 | 4% | -4% |
| 15 | 94 | 0% | 0% |
| 16 | 90 | 3% | -7% |



BEAM DETAILS



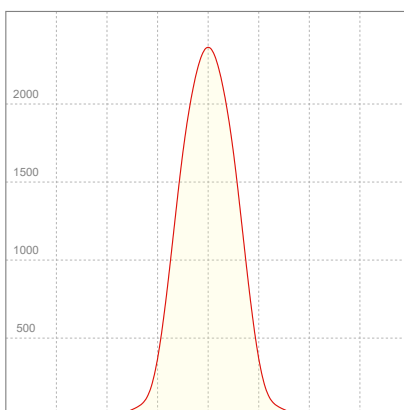
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,4° | 98° | 125,9° | 96,6% | 88,0% |



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 | 2357lx | 589lx | 262lx | 147lx | 94lx | 42lx | 24lx | 10lx | 6lx | 4lx | 3lx | 1lx | 1lx |
| Footcand. | 219fcd | 55fcd | 24fcd | 14fcd | 9fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,7m | 5,9m | 8,9m | 11,9m | 17,8m | 23,7m | 29,7m | 35,6m | 47,5m | 59,3m |
| Beam wid. | 3,9ft | 7,8ft | 11,6ft | 15,5ft | 19,5ft | 29,2ft | 38,9ft | 58,4ft | 77,9ft | 97,3ft | 116,8ft | 155,7ft | 194,7ft |

LINEAR DISTRIBUTION DIAGRAM

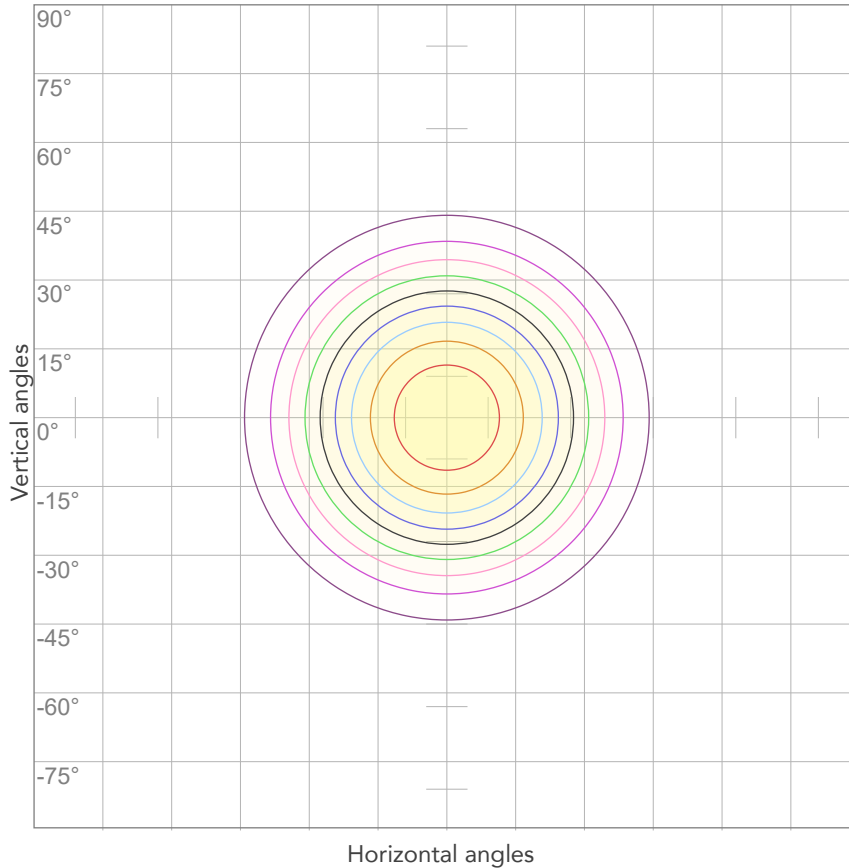


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 222V | 0,294A | 61,2W | 0,94 | 41lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



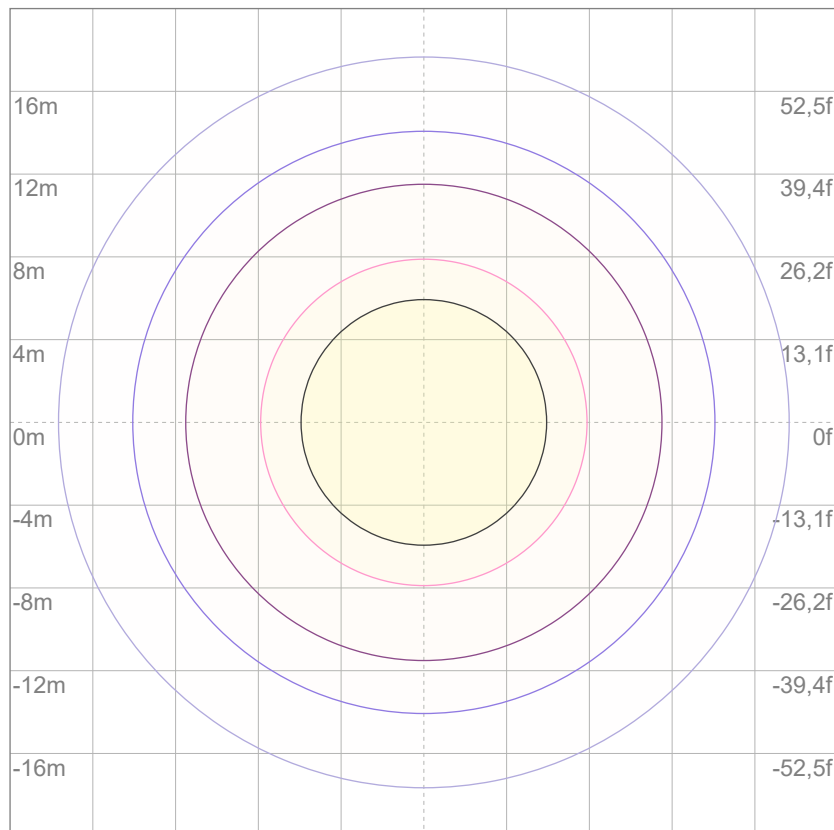
| | |
|-----|---------|
| 10% | 236 cd |
| 20% | 471 cd |
| 30% | 707 cd |
| 40% | 943 cd |
| 50% | 1179 cd |
| 60% | 1414 cd |
| 70% | 1650 cd |
| 80% | 1886 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2357 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,707 lx |
| 5% | 1,18 lx |
| 10% | 2,36 lx |
| 30% | 7,07 lx |
| 50% | 11,8 lx |

Conditions:

Number of c-planes: 2

Lux at center: 23,6 lx

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



Total lumen output:

2929 lm

Peak candela output:

17372 cd

Light quality:

CRI: 95,5

Color temperature:

3199 K

PRODUCT NAME:
ECLPENDANTS VW

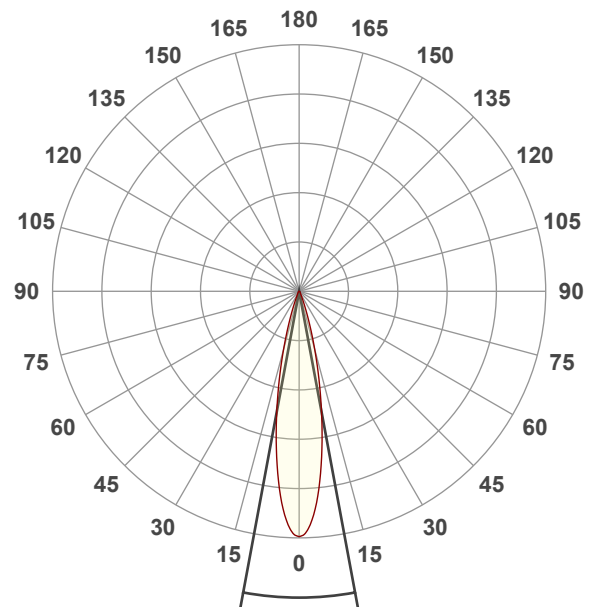
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
3200K

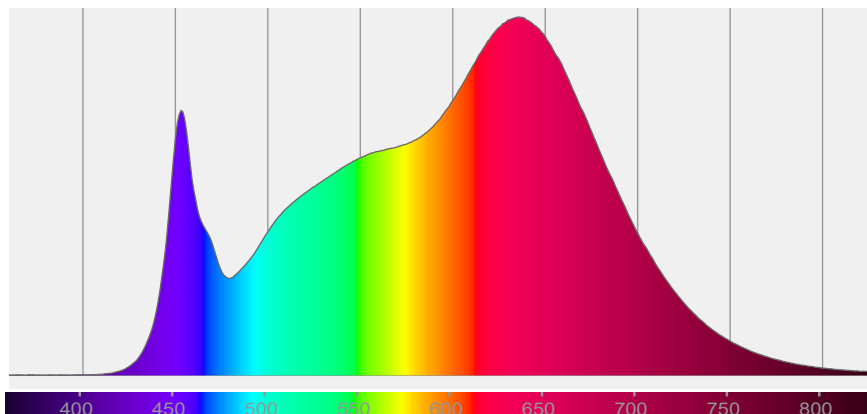
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:11:39

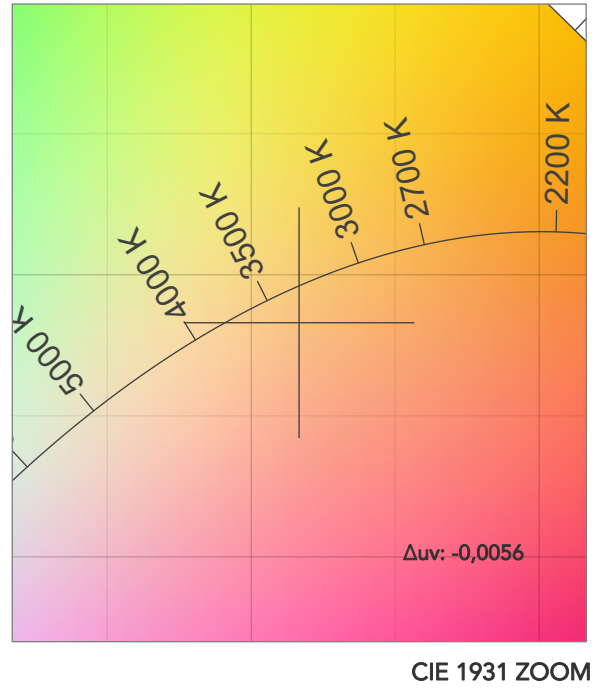
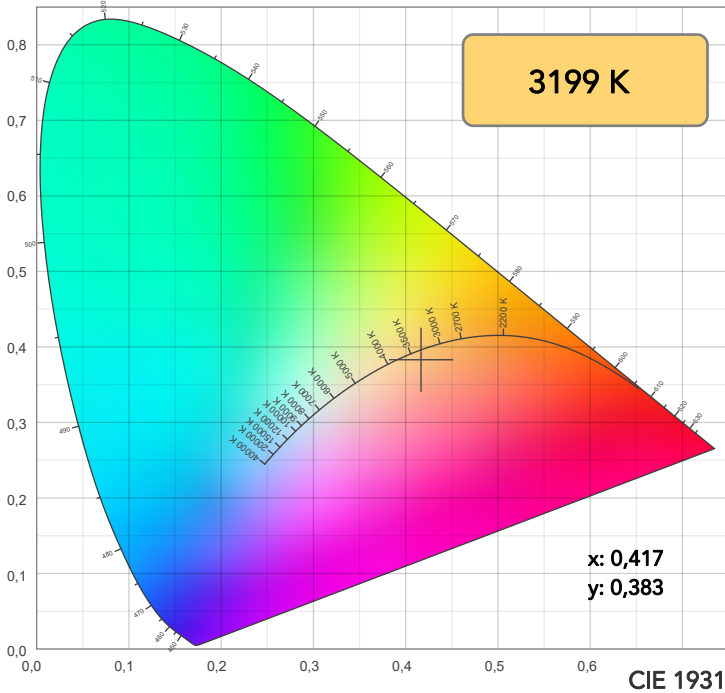


Beam angle 50%: 21°
Field angle 10%: 38°
Cut off angle 2.5%: 49,6°

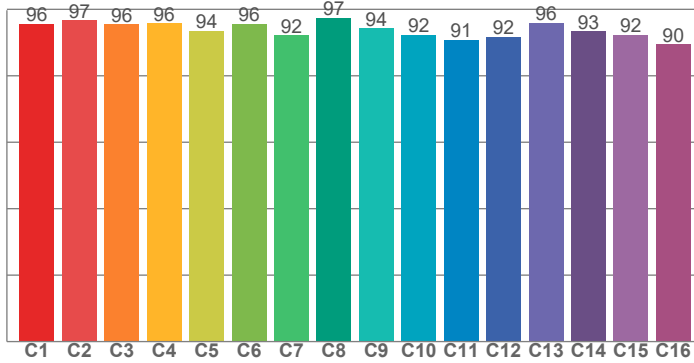
Spectra



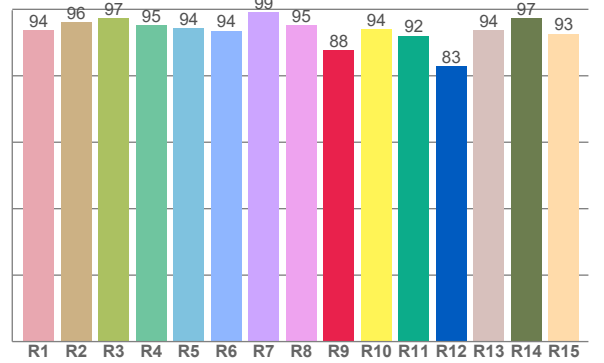
COLOR DETAILS



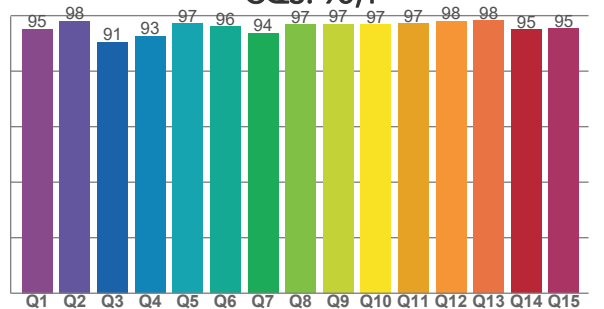
TM30: 94,0



CRI: 95,5 (R1-R8)



CQS: 95,1



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 | 96,1 | 97,2 | 95,2 | 94,4 | 93,5 | 99,1 | 95,2 | 87,8 | 94,0 | 92,0 | 82,9 | 93,8 | 97,4 | 92,7 |

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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,6 | 96,7 | 95,5 | 95,7 | 93,5 | 95,6 | 92,2 | 97,4 | 94,3 | 92,2 | 90,9 | 91,7 | 95,9 | 93,3 | 92,4 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,2 | 98,1 | 90,6 | 92,6 | 97,1 | 96,1 | 93,6 | 96,8 | 96,9 | 96,7 | 97,2 | 98,0 | 98,2 | 94,9 | 95,3 |

COLOR PARAMETERS

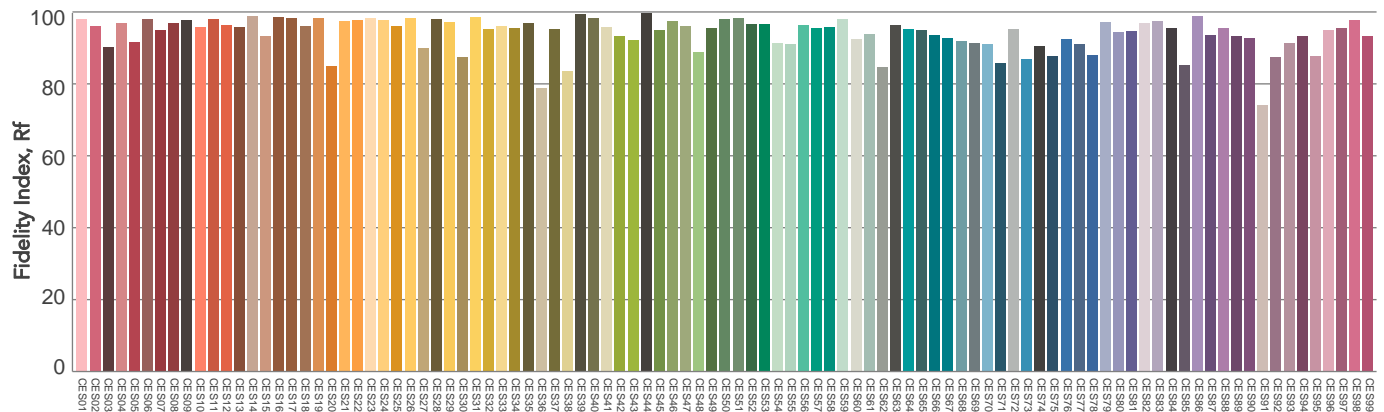
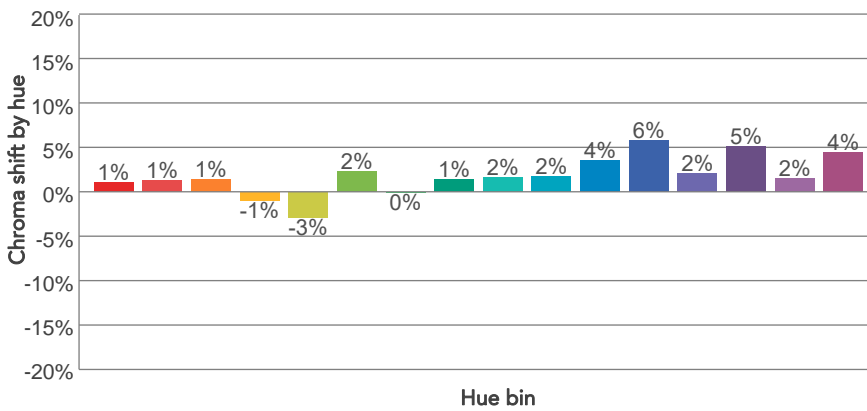
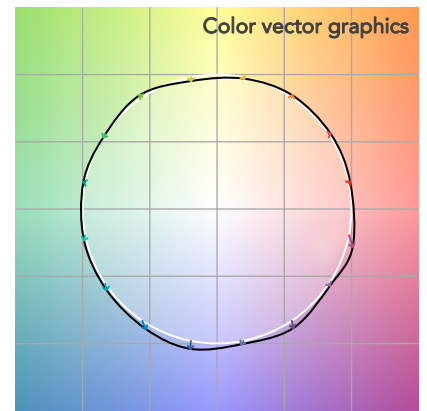
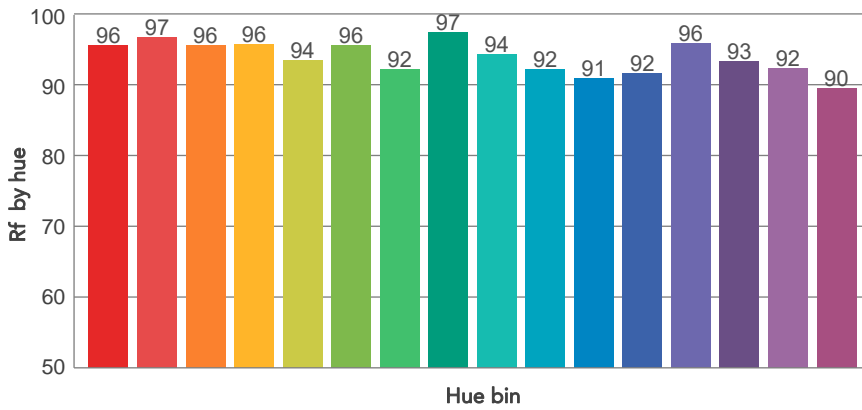
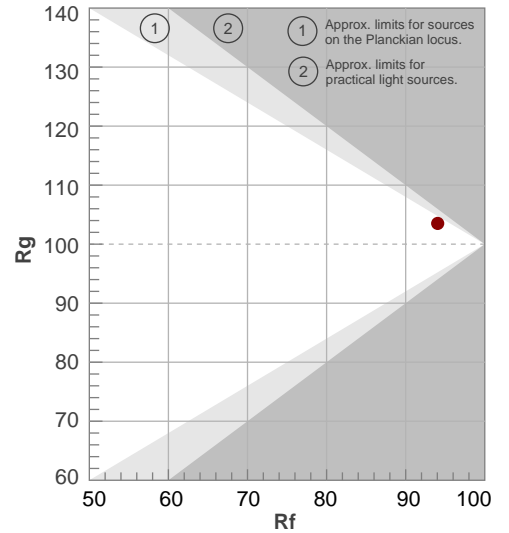
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 3199 K | 95,5 | 87,8 | 94,0 | 103,5 | 95,1 | 98 | 0,417 | 0,383 | -0,0056 |

TM30 DETAILS

Rf 94,0
Fidelity index Rf

Rg 103,5
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 96 | 1% | 1% |
| 2 | 97 | 1% | 0% |
| 3 | 96 | 1% | 0% |
| 4 | 96 | -1% | -1% |
| 5 | 94 | -3% | 0% |
| 6 | 96 | 2% | 1% |
| 7 | 92 | 0% | 3% |
| 8 | 97 | 1% | 0% |
| 9 | 94 | 2% | 4% |
| 10 | 92 | 2% | 4% |
| 11 | 91 | 4% | 5% |
| 12 | 92 | 6% | 1% |
| 13 | 96 | 2% | -2% |
| 14 | 93 | 5% | -2% |
| 15 | 92 | 2% | -1% |
| 16 | 90 | 4% | -8% |

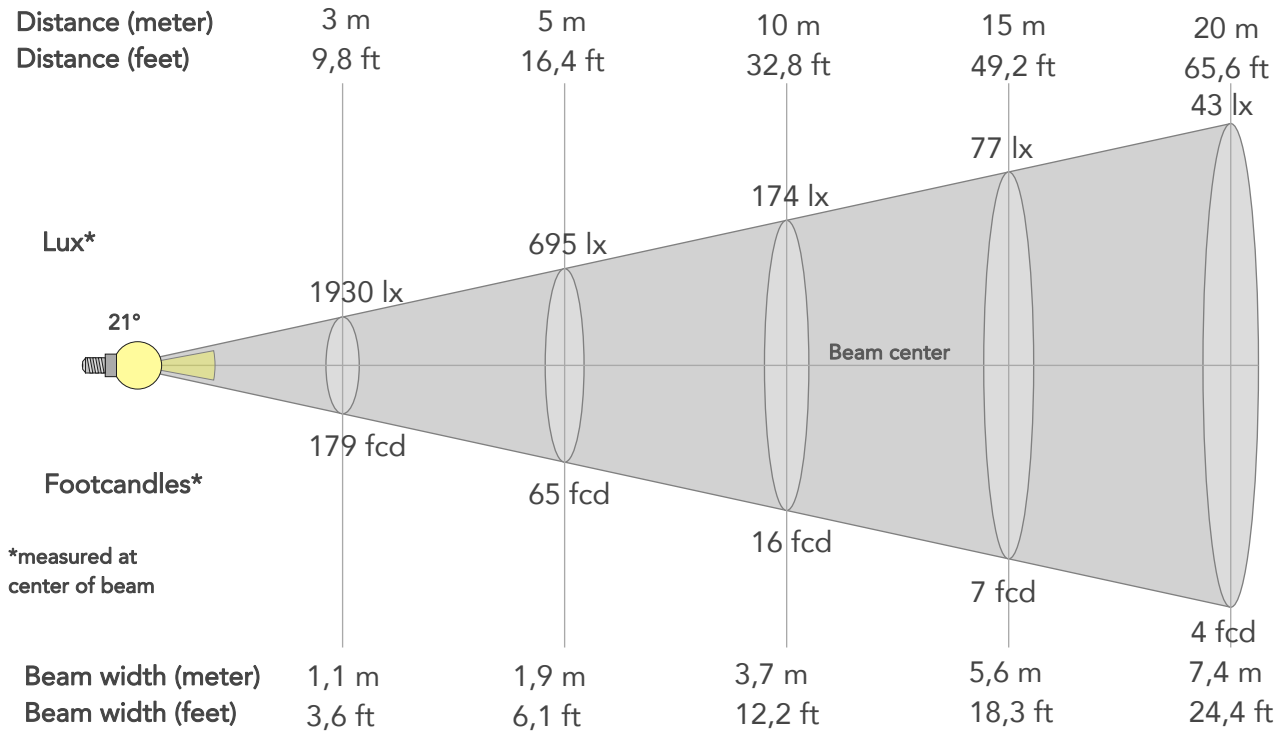


Color Evaluation Sample

BEAM DETAILS



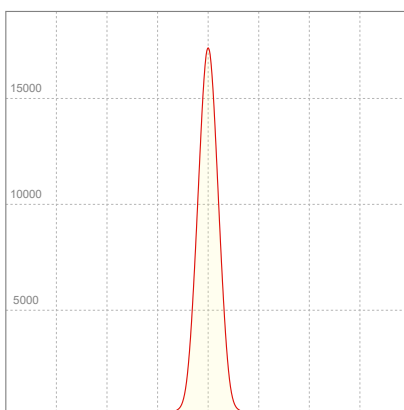
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21° | 38° | 49,6° | 97,8% | 95,0% |



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 | 17372lx | 4343lx | 1930lx | 1086lx | 695lx | 309lx | 174lx | 77lx | 43lx | 28lx | 19lx | 11lx | 7lx |
| Footcand. | 1614fcd | 403fcd | 179fcd | 101fcd | 65fcd | 29fcd | 16fcd | 7fcd | 4fcd | 3fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,1m | 14,9m | 18,6m |
| Beam wid. | 1,2ft | 2,5ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,3ft | 24,4ft | 30,5ft | 36,6ft | 48,7ft | 60,9ft |

LINEAR DISTRIBUTION DIAGRAM

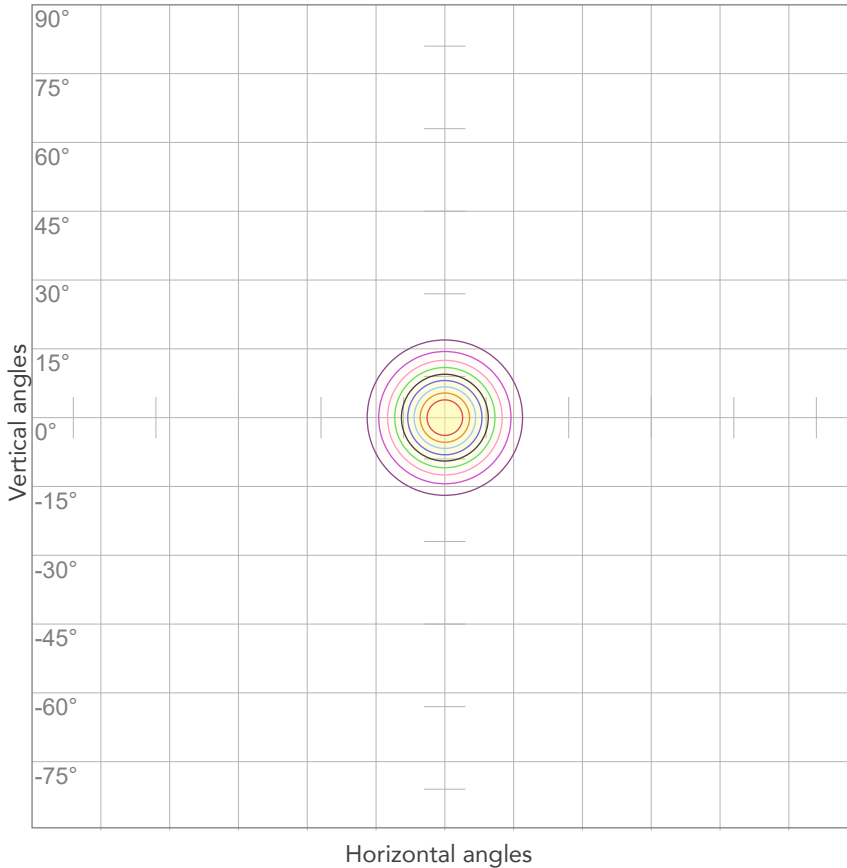


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 222V | 0,297A | 62,0W | 0,94 | 47lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



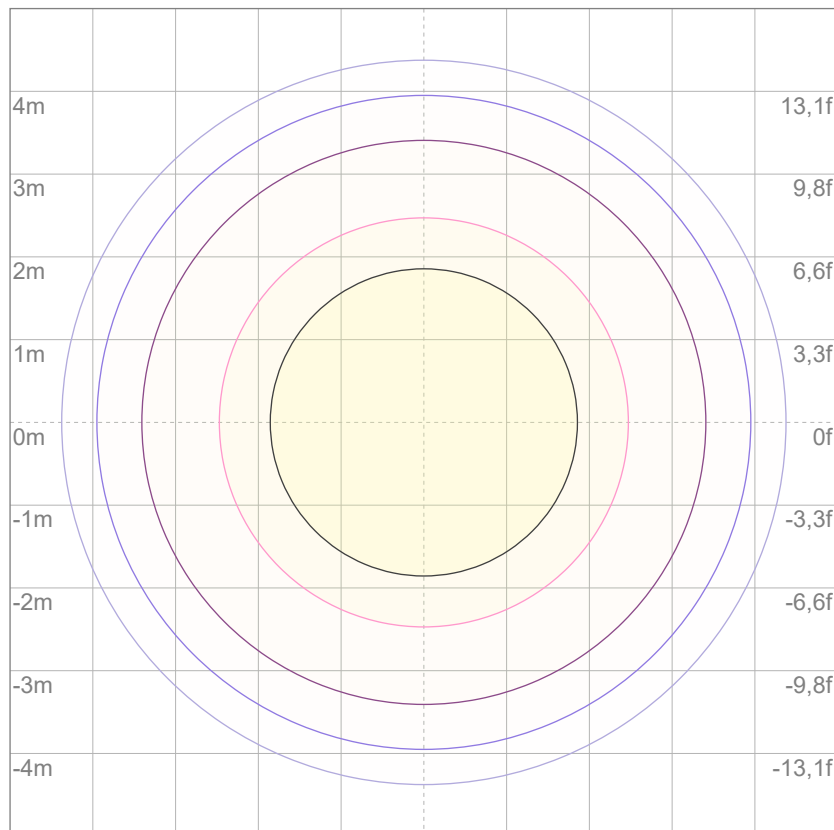
| | |
|-----|----------|
| 10% | 1737 cd |
| 20% | 3474 cd |
| 30% | 5212 cd |
| 40% | 6949 cd |
| 50% | 8686 cd |
| 60% | 10423 cd |
| 70% | 12160 cd |
| 80% | 13897 cd |

Conditions:

Number of c-planes: 2

Candela at center: 17372 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 5,21 lx |
| 5% | 8,69 lx |
| 10% | 17,4 lx |
| 30% | 52,1 lx |
| 50% | 86,9 lx |

Conditions:

Number of c-planes: 2

Lux at center: 174 lx

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



Total lumen output:

2883 lm

Peak candela output:

5102 cd

Light quality:

CRI: 95,4

Color temperature:

3228 K

PRODUCT NAME:
ECLPENDANTS VW

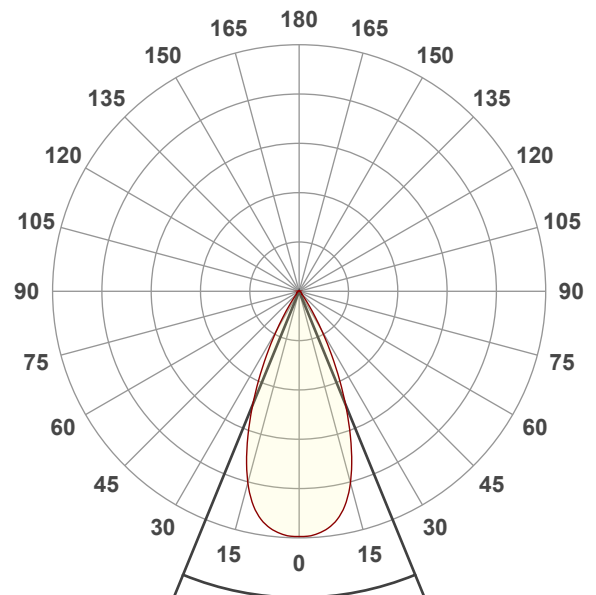
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
3200K

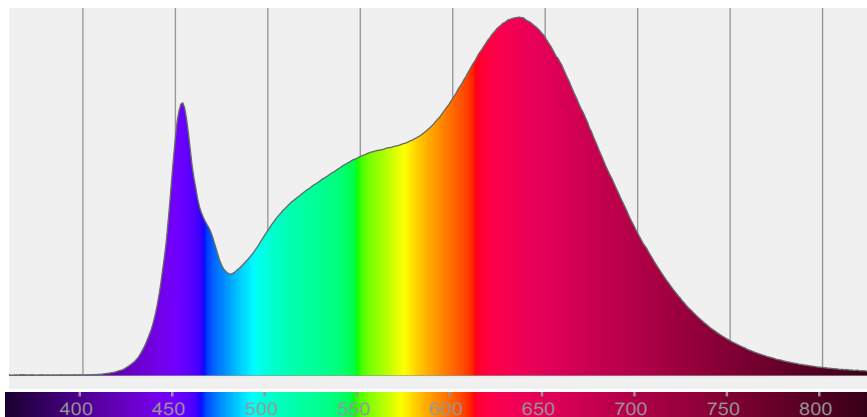
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:47:26

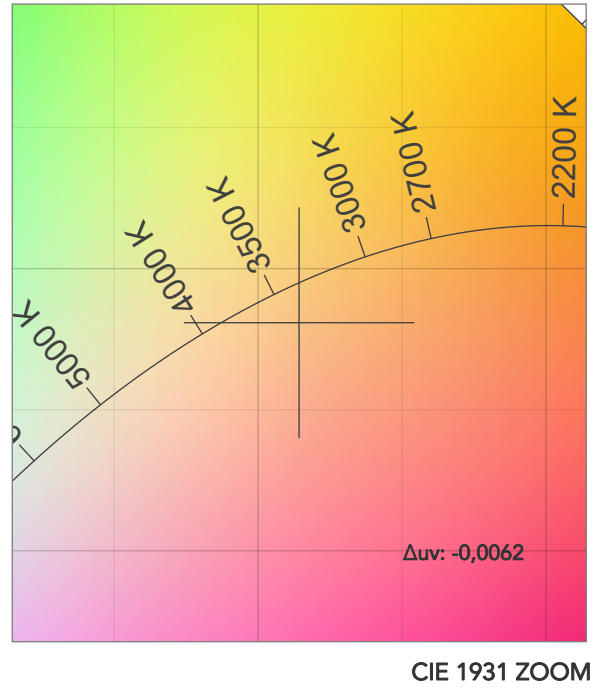
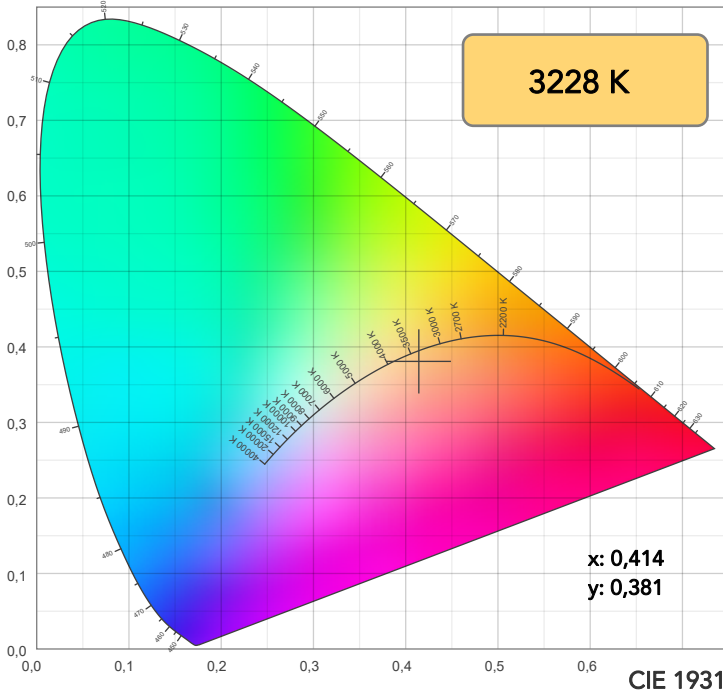


Beam angle 50%: 44,5°
Field angle 10%: 66,5°
Cut off angle 2.5%: 81,5°

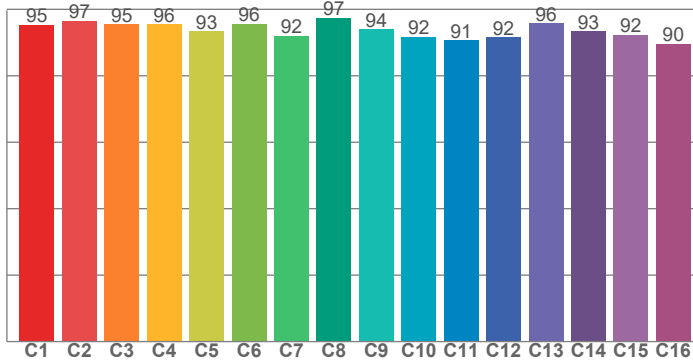
Spectra



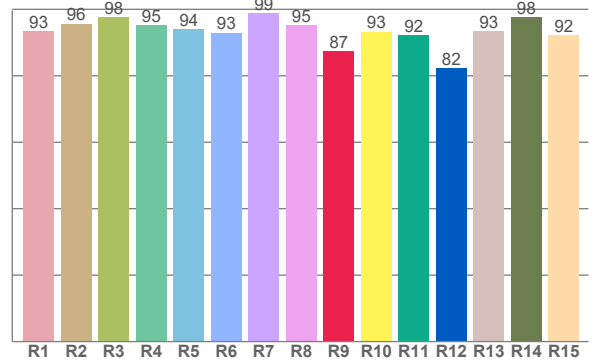
COLOR DETAILS



TM30: 93,9



CRI: 95,4 (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 | 95,6 | 97,5 | 95,3 | 94,1 | 93,0 | 98,8 | 95,2 | 87,3 | 93,2 | 92,1 | 82,3 | 93,4 | 97,6 | 92,3 |

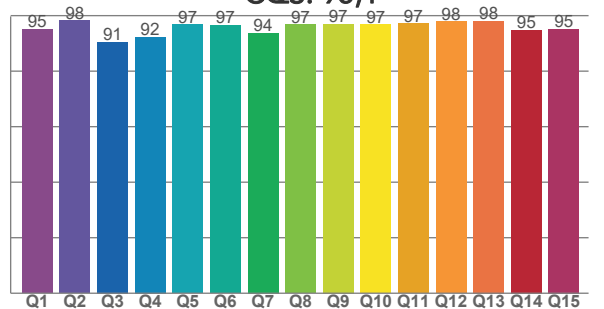
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,4 | 96,5 | 95,4 | 95,5 | 93,3 | 95,7 | 92,0 | 97,5 | 93,9 | 91,8 | 90,7 | 91,6 | 95,8 | 93,3 | 92,2 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,1 | 98,2 | 90,5 | 92,4 | 96,8 | 96,5 | 93,8 | 96,8 | 97,0 | 96,8 | 97,1 | 97,9 | 98,0 | 94,8 | 95,1 |

CQS: 95,1



COLOR PARAMETERS

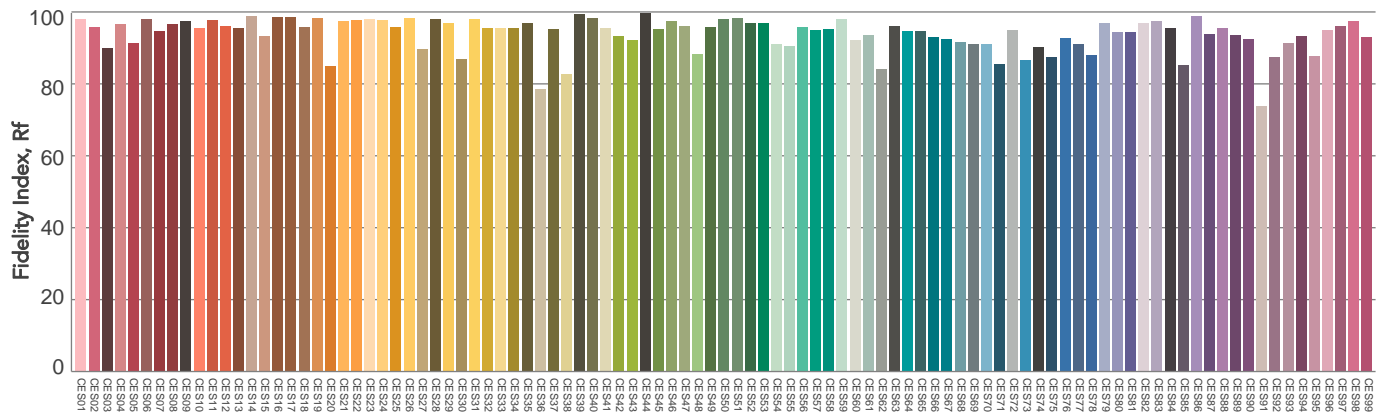
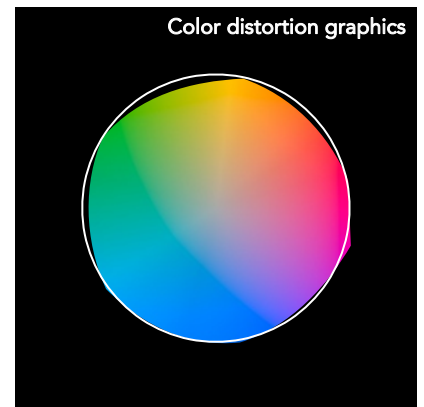
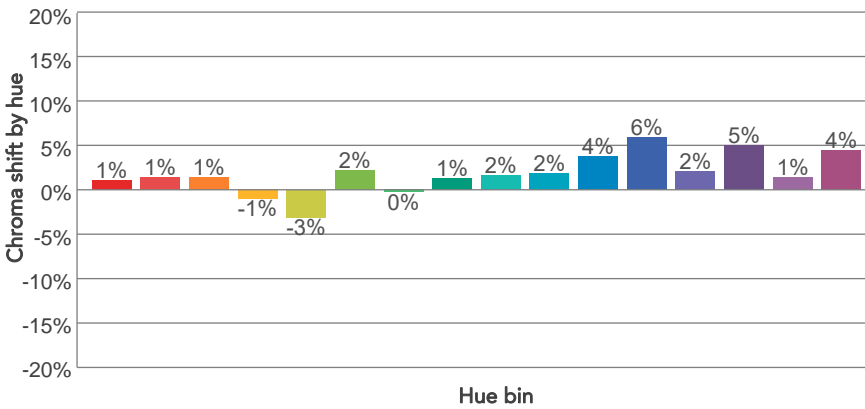
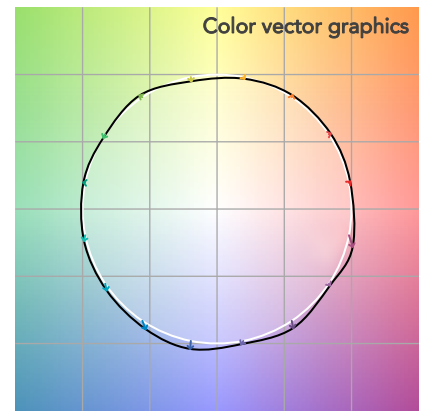
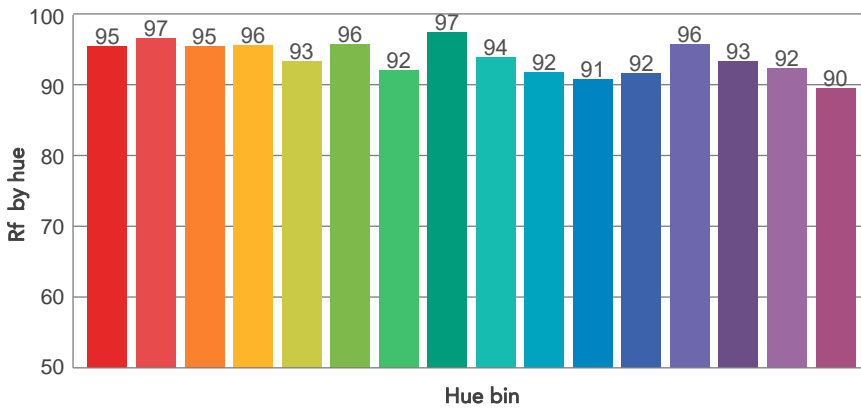
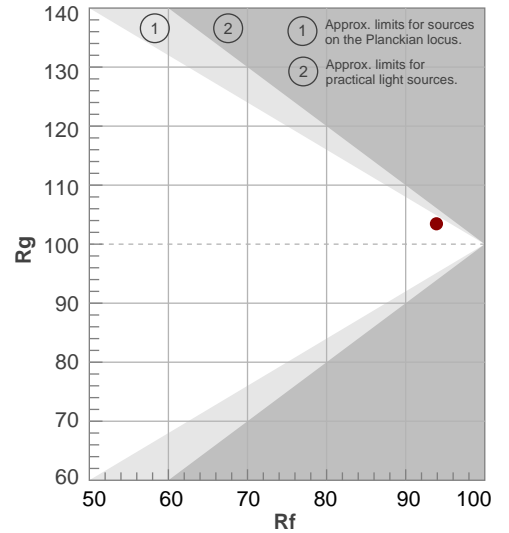
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 3228 K | 95,4 | 87,3 | 93,9 | 103,5 | 95,1 | 98 | 0,414 | 0,381 | -0,0062 |

TM30 DETAILS

Rf 93,9
Fidelity index Rf

Rg 103,5
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 95 | 1% | 1% |
| 2 | 97 | 1% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 96 | -1% | -1% |
| 5 | 93 | -3% | 0% |
| 6 | 96 | 2% | 1% |
| 7 | 92 | 0% | 3% |
| 8 | 97 | 1% | 0% |
| 9 | 94 | 2% | 4% |
| 10 | 92 | 2% | 5% |
| 11 | 91 | 4% | 5% |
| 12 | 92 | 6% | 1% |
| 13 | 96 | 2% | -2% |
| 14 | 93 | 5% | -2% |
| 15 | 92 | 1% | -1% |
| 16 | 90 | 4% | -8% |

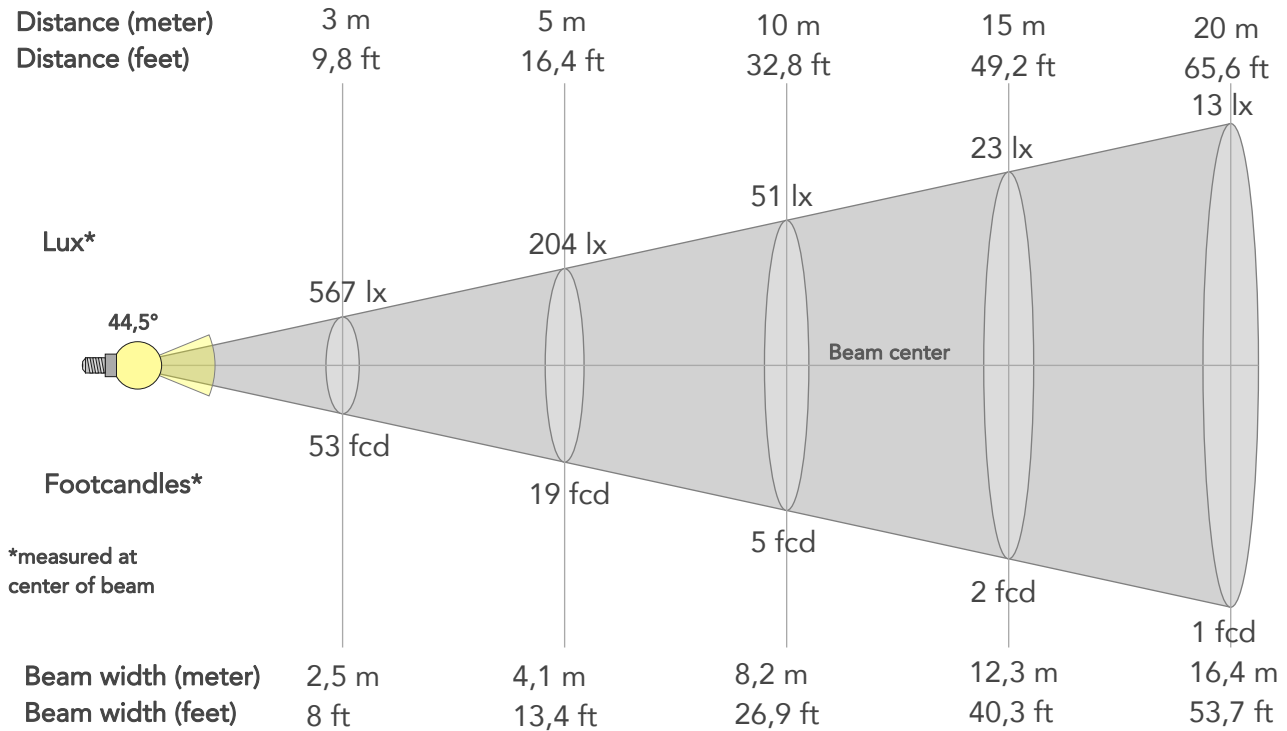


Color Evaluation Sample

BEAM DETAILS



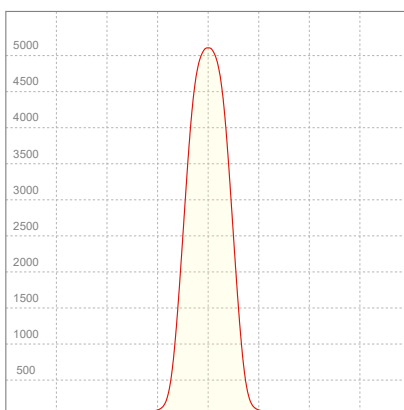
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,5° | 81,5° | 98,3% | 95,6% |



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 | 5102lx | 1275lx | 567lx | 319lx | 204lx | 91lx | 51lx | 23lx | 13lx | 8lx | 6lx | 3lx | 2lx |
| Footcand. | 474fcd | 118fcd | 53fcd | 30fcd | 19fcd | 8fcd | 5fcd | 2fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,6m | 32,8m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,9ft | 40,3ft | 53,7ft | 67,2ft | 80,6ft | 107,4ft | 134,3ft |

LINEAR DISTRIBUTION DIAGRAM

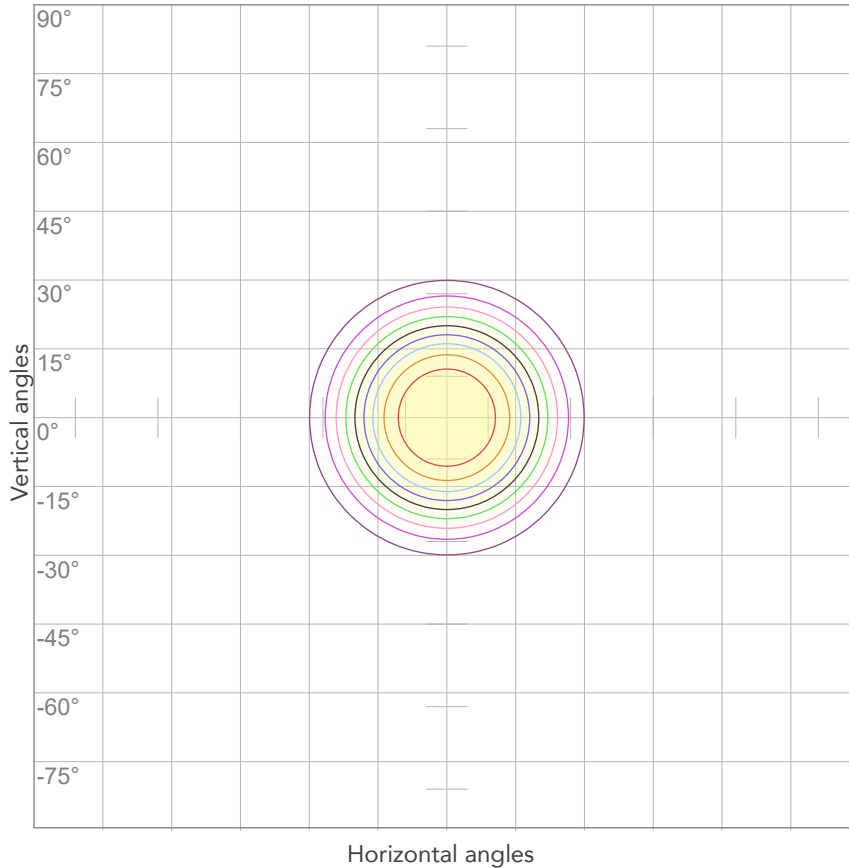


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,294A | 61,1W | 0,94 | 47lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



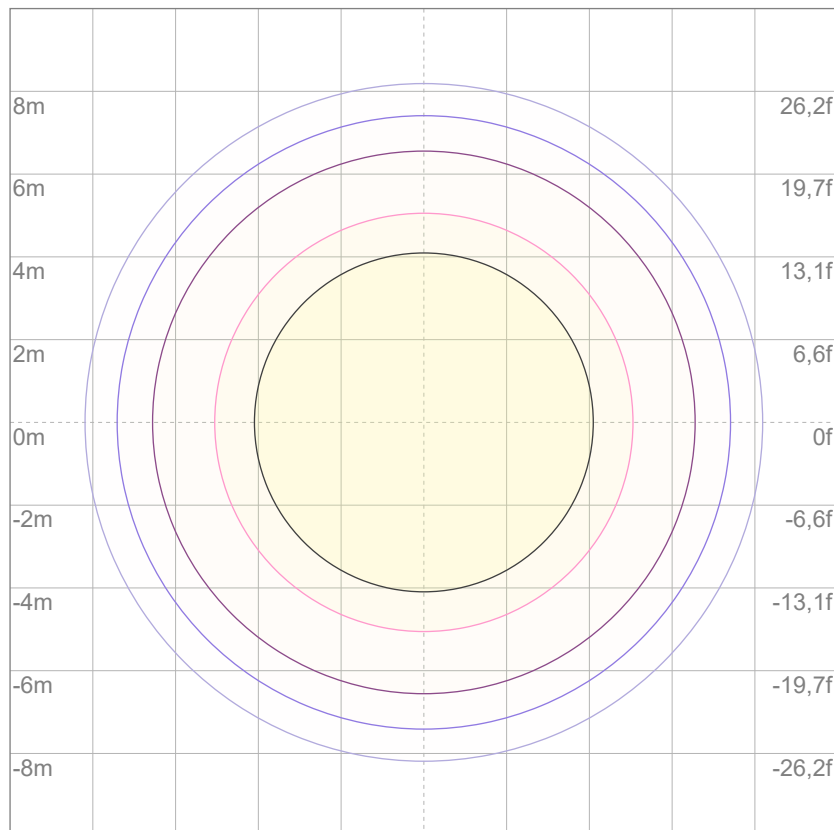
| | |
|-----|---------|
| 10% | 510 cd |
| 20% | 1020 cd |
| 30% | 1531 cd |
| 40% | 2041 cd |
| 50% | 2551 cd |
| 60% | 3061 cd |
| 70% | 3571 cd |
| 80% | 4081 cd |

Conditions:

Number of c-planes: 2

Candela at center: 5102 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,53 lx |
| 5% | 2,55 lx |
| 10% | 5,10 lx |
| 30% | 15,3 lx |
| 50% | 25,5 lx |

Conditions:

Number of c-planes: 2

Lux at center: 51,0 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:

2682 lm

Peak candela output:

2488 cd

Light quality:

CRI: 95,4

Color temperature:

3231 K

PRODUCT NAME:
ECLPENDANTS VW

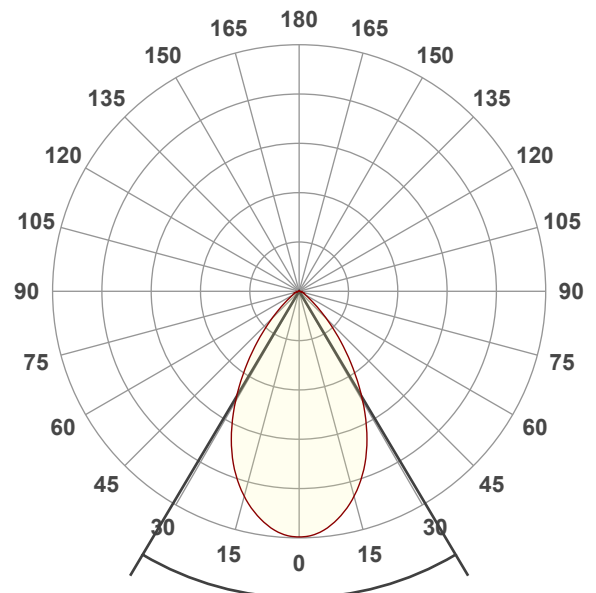
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
3200K

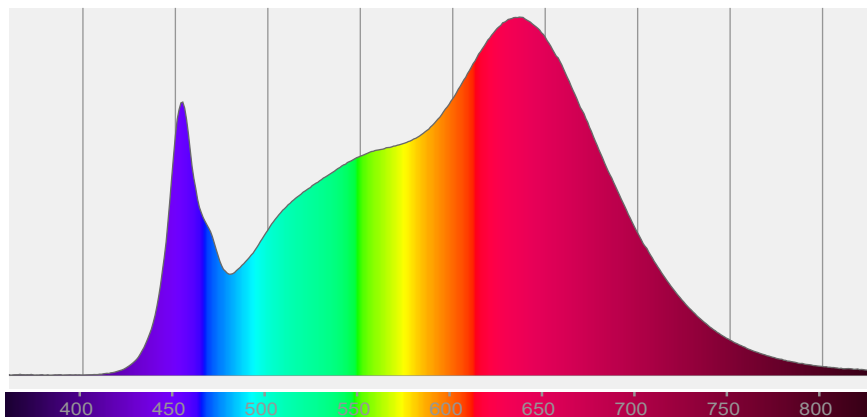
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:07:30

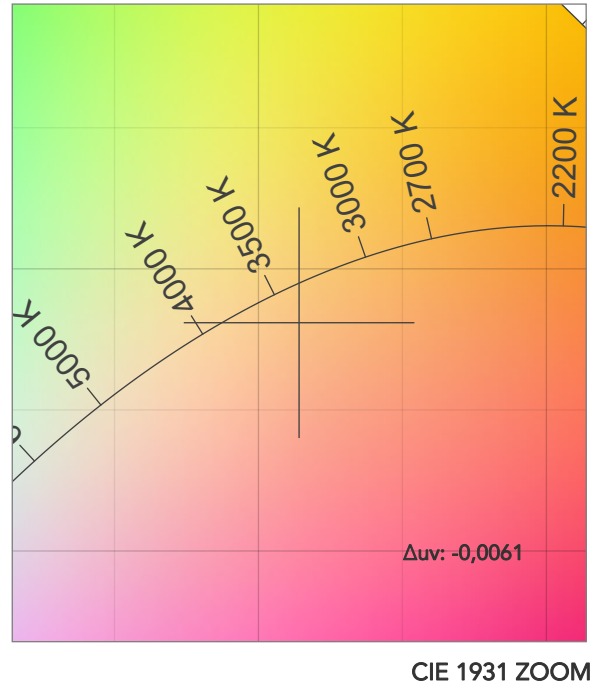
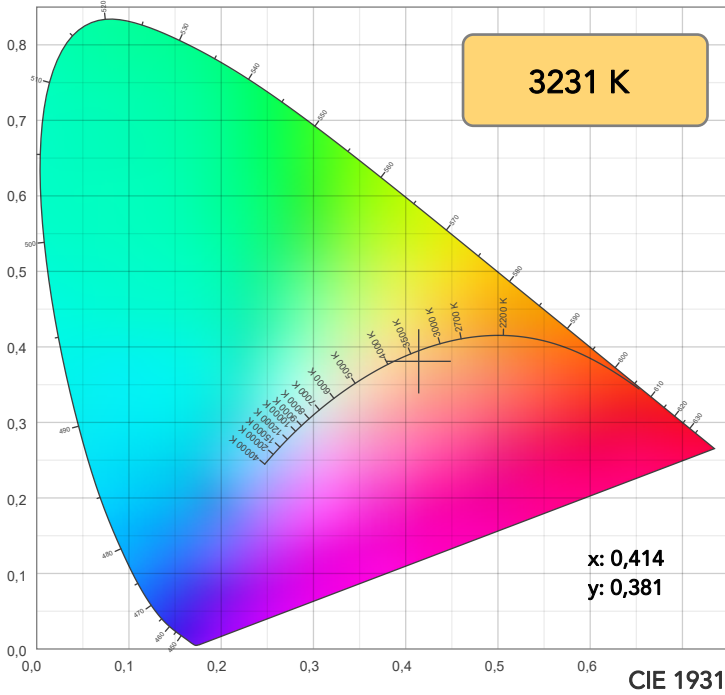


Beam angle 50%: 61,4°
Field angle 10%: 98,1°
Cut off angle 2.5%: 126,2°

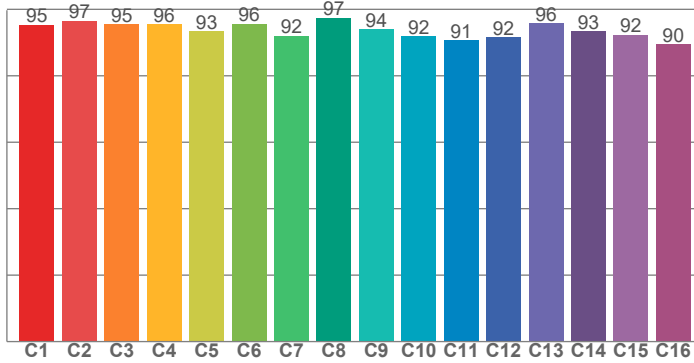
Spectra



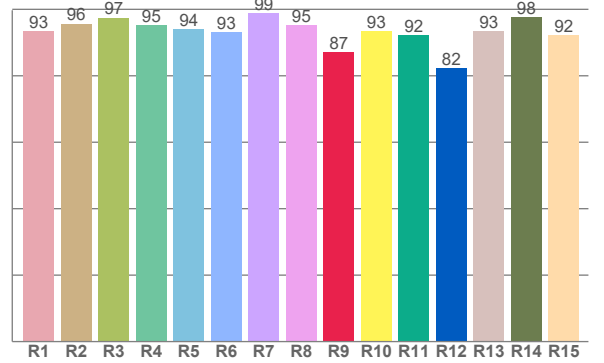
COLOR DETAILS



TM30: 93,9



CRI: 95,4 (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 | 95,7 | 97,5 | 95,3 | 94,1 | 93,1 | 98,9 | 95,1 | 87,2 | 93,3 | 92,1 | 82,4 | 93,4 | 97,5 | 92,3 |

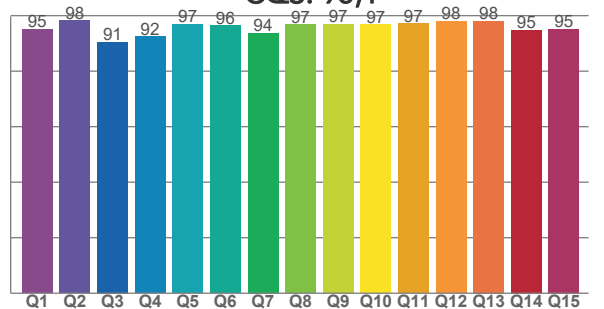
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,4 | 96,5 | 95,4 | 95,5 | 93,4 | 95,7 | 92,0 | 97,4 | 94,0 | 91,8 | 90,7 | 91,6 | 95,8 | 93,3 | 92,3 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,1 | 98,2 | 90,5 | 92,4 | 96,9 | 96,5 | 93,8 | 96,8 | 97,0 | 96,8 | 97,2 | 97,9 | 98,1 | 94,8 | 95,2 |

CQS: 95,1



COLOR PARAMETERS

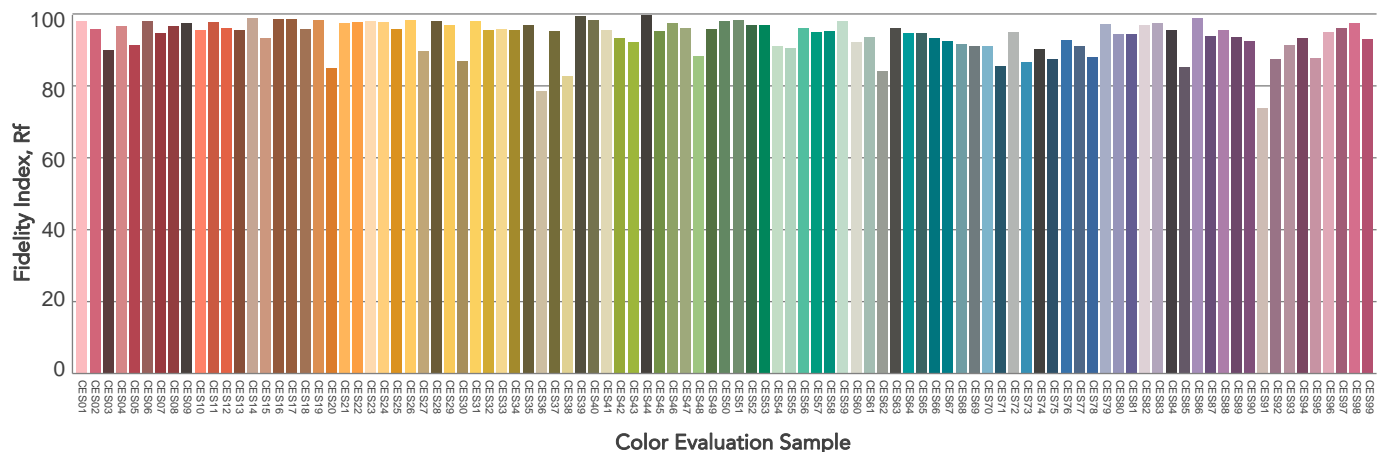
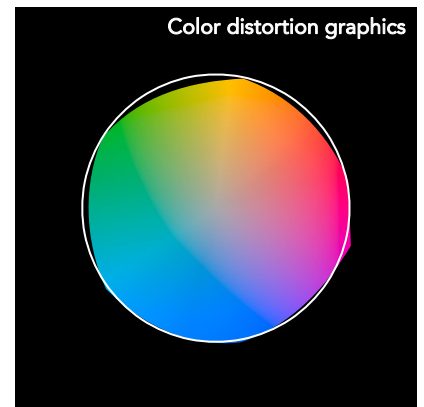
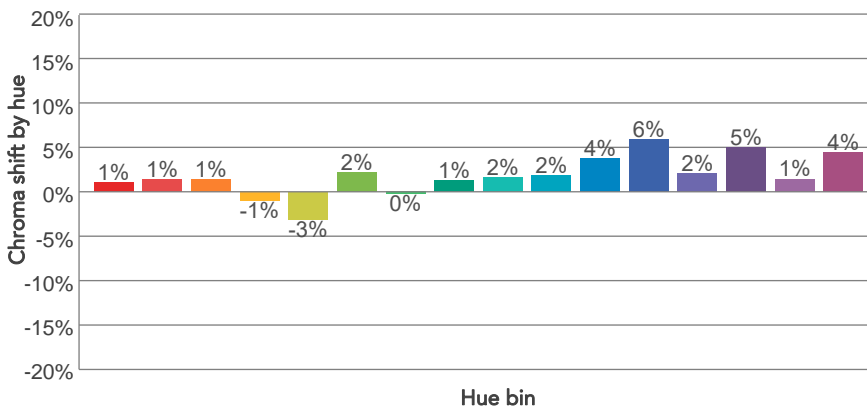
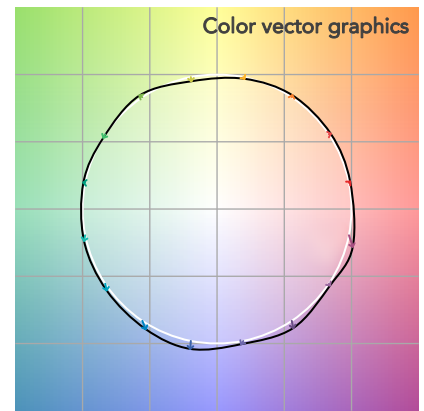
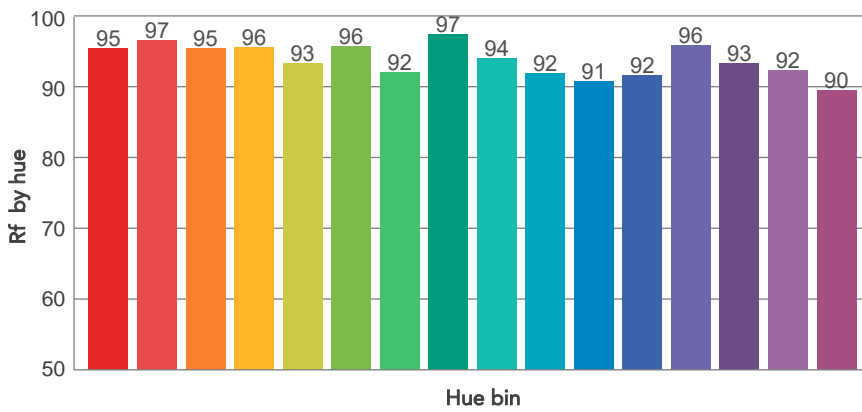
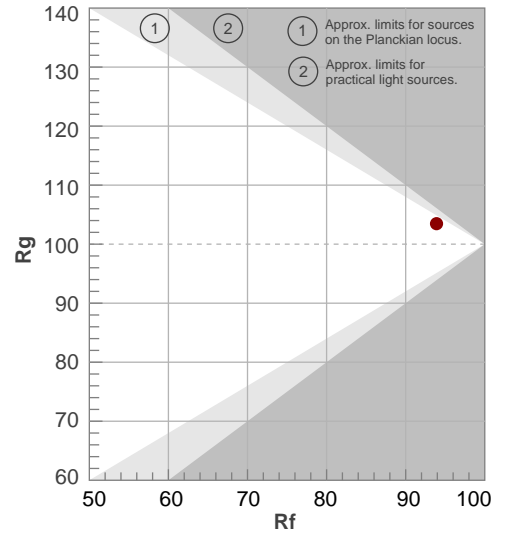
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 3231 K | 95,4 | 87,2 | 93,9 | 103,5 | 95,1 | 98 | 0,414 | 0,381 | -0,0061 |

TM30 DETAILS

Rf 93,9
Fidelity index Rf

Rg 103,5
Gammut index

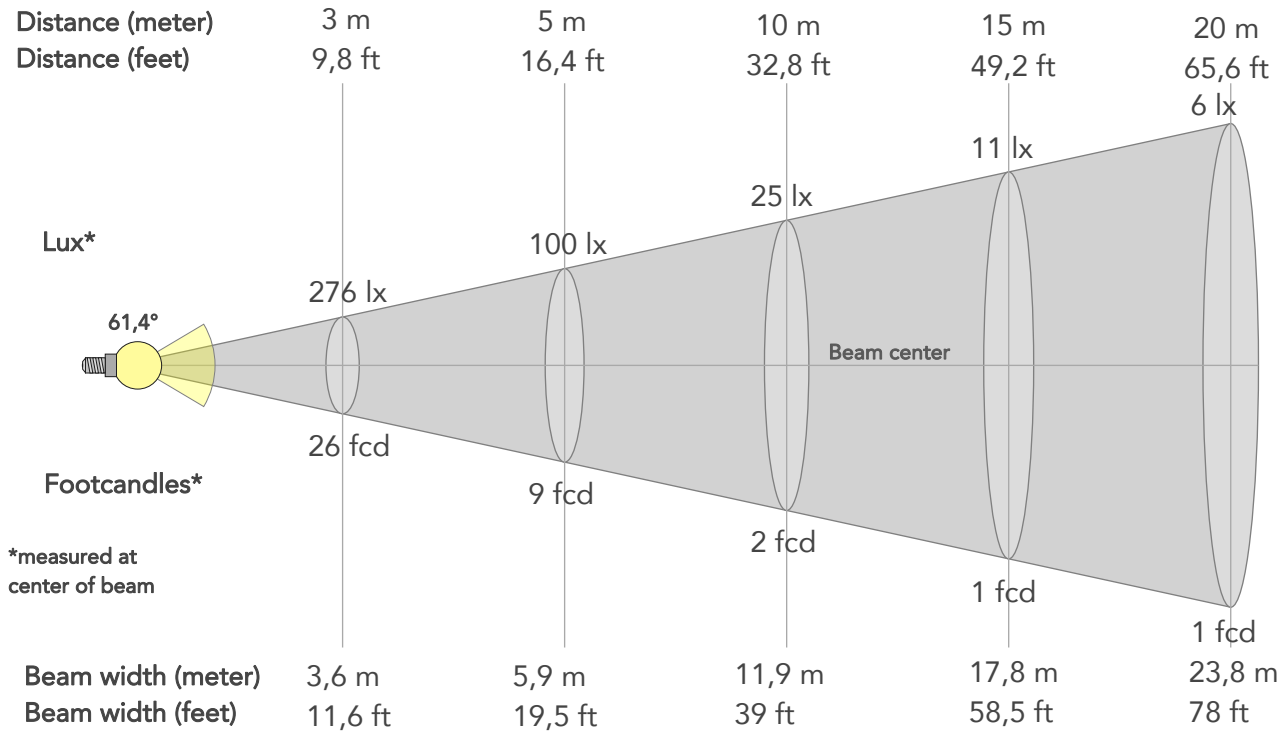
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 95 | 1% | 1% |
| 2 | 97 | 1% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 96 | -1% | -1% |
| 5 | 93 | -3% | 0% |
| 6 | 96 | 2% | 1% |
| 7 | 92 | 0% | 3% |
| 8 | 97 | 1% | 0% |
| 9 | 94 | 2% | 4% |
| 10 | 92 | 2% | 5% |
| 11 | 91 | 4% | 5% |
| 12 | 92 | 6% | 1% |
| 13 | 96 | 2% | -2% |
| 14 | 93 | 5% | -2% |
| 15 | 92 | 1% | -1% |
| 16 | 90 | 4% | -8% |



BEAM DETAILS



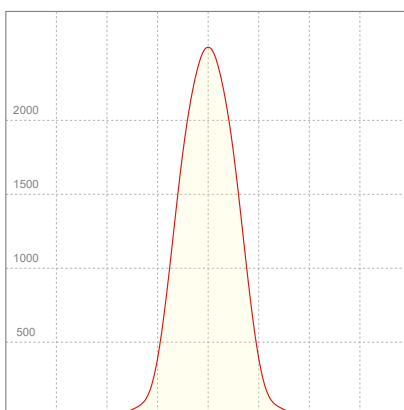
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,4° | 98,1° | 126,2° | 96,6% | 87,9% |



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 | 2488lx | 622lx | 276lx | 155lx | 100lx | 44lx | 25lx | 11lx | 6lx | 4lx | 3lx | 2lx | 1lx |
| Footcand. | 231fcd | 58fcd | 26fcd | 14fcd | 9fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,8m | 5,9m | 8,9m | 11,9m | 17,8m | 23,8m | 29,7m | 35,7m | 47,5m | 59,4m |
| Beam wid. | 3,9ft | 7,8ft | 11,6ft | 15,6ft | 19,5ft | 29,2ft | 39ft | 58,5ft | 78ft | 97,5ft | 116,9ft | 155,9ft | 194,9ft |

LINEAR DISTRIBUTION DIAGRAM

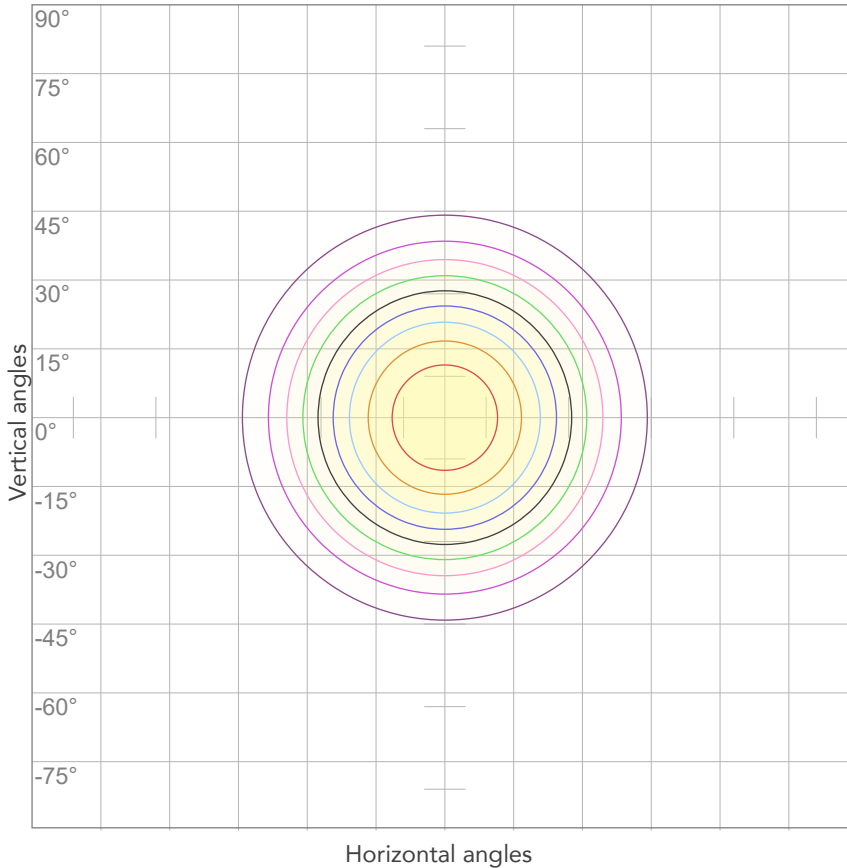


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 223V | 0,294A | 61,2W | 0,94 | 44lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



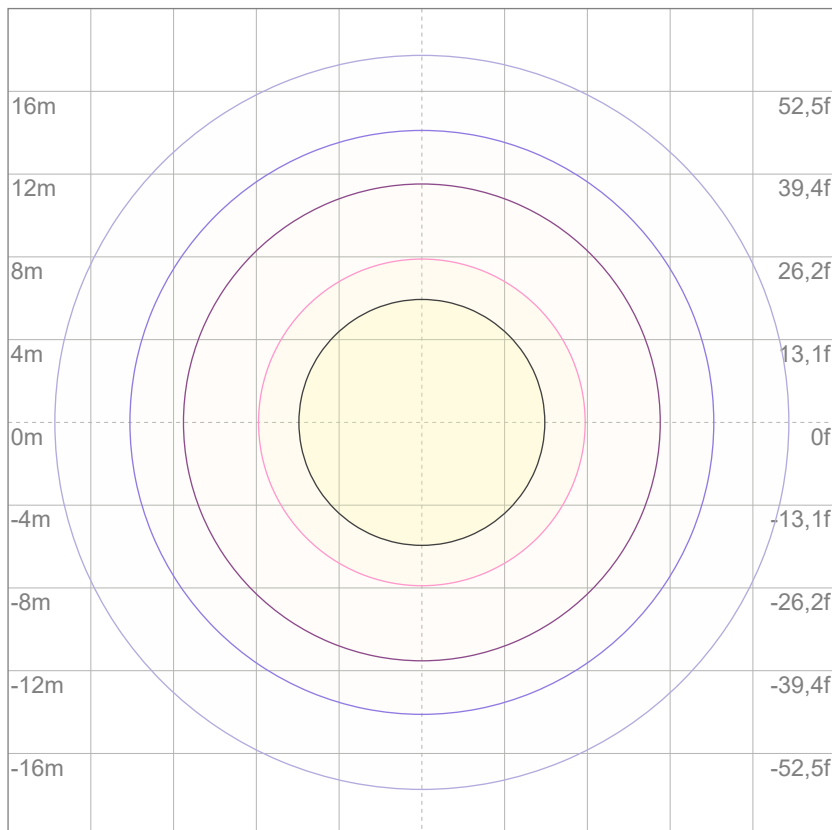
| | |
|-----|---------|
| 10% | 249 cd |
| 20% | 498 cd |
| 30% | 746 cd |
| 40% | 995 cd |
| 50% | 1244 cd |
| 60% | 1493 cd |
| 70% | 1741 cd |
| 80% | 1990 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2488 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,746 lx |
| 5% | 1,24 lx |
| 10% | 2,49 lx |
| 30% | 7,46 lx |
| 50% | 12,4 lx |

Conditions:

Number of c-planes: 2

Lux at center: 24,9 lx

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



Total lumen output:

3123 lm

Peak candela output:

18529 cd

Light quality:

CRI: 95,4

Color temperature:

4001 K

PRODUCT NAME:
ECLPENDANTS VW

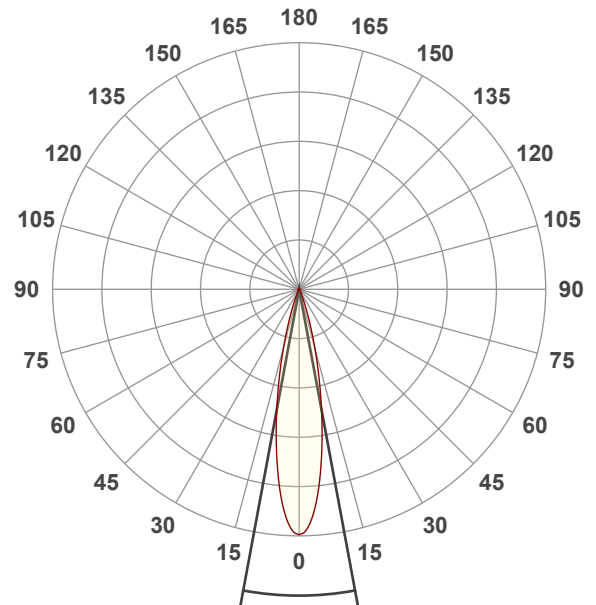
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
4000K

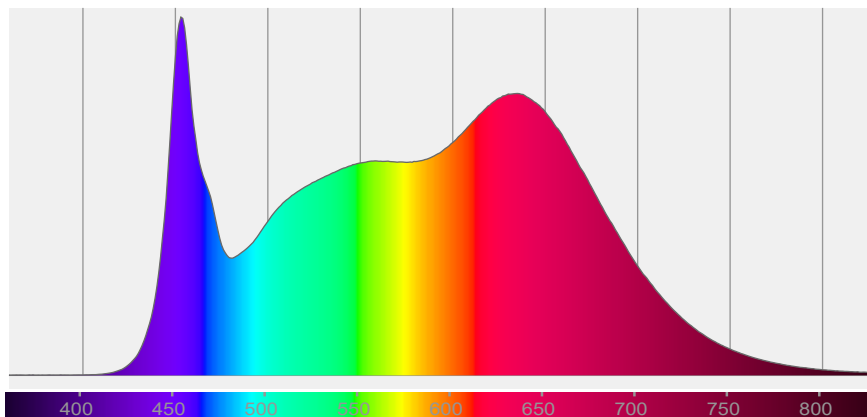
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:15:19

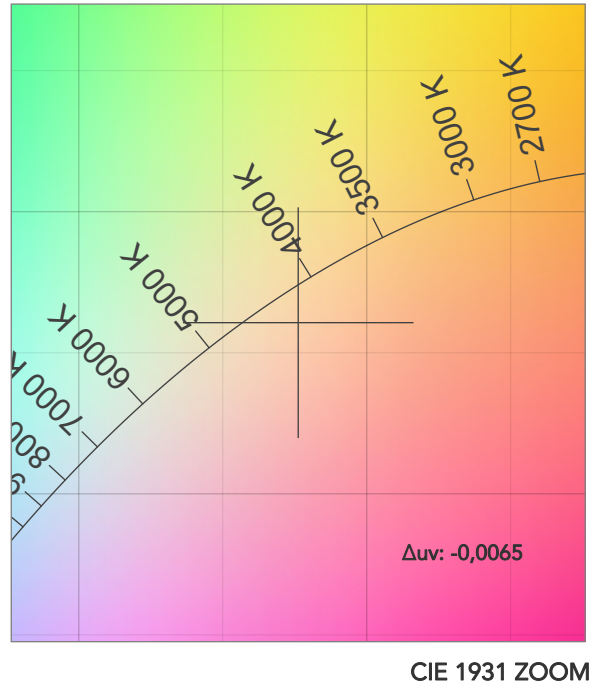
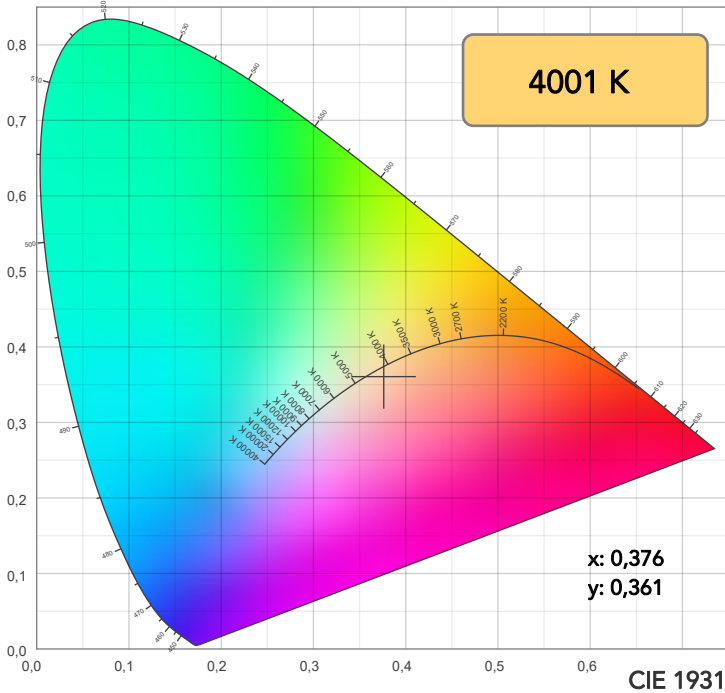


Beam angle 50%: 21°
Field angle 10%: 37,9°
Cut off angle 2.5%: 49,6°

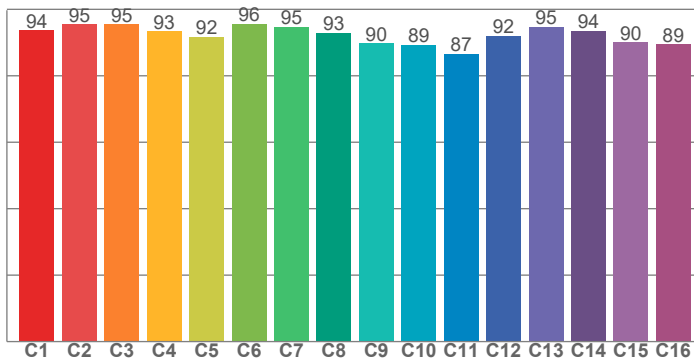
Spectra



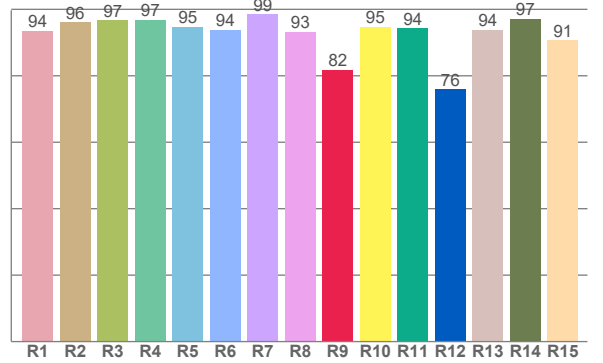
COLOR DETAILS



TM30: 92,2



CRI: 95,4 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,5 | 96,1 | 96,6 | 96,9 | 94,8 | 93,9 | 98,5 | 93,3 | 81,8 | 94,8 | 94,4 | 76,0 | 93,8 | 97,2 | 90,6 |

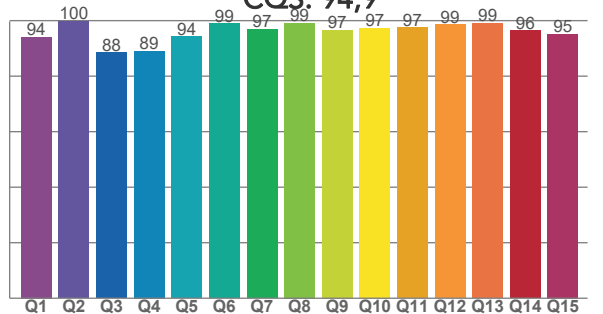
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,7 | 95,4 | 95,5 | 93,4 | 91,7 | 95,7 | 94,7 | 92,9 | 89,8 | 89,2 | 86,7 | 92,0 | 94,8 | 93,5 | 90,1 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94,1 | 99,8 | 88,5 | 89,0 | 94,3 | 98,9 | 96,9 | 99,2 | 96,6 | 97,4 | 97,4 | 98,6 | 99,0 | 96,4 | 95,2 |

CQS: 94,9



COLOR PARAMETERS

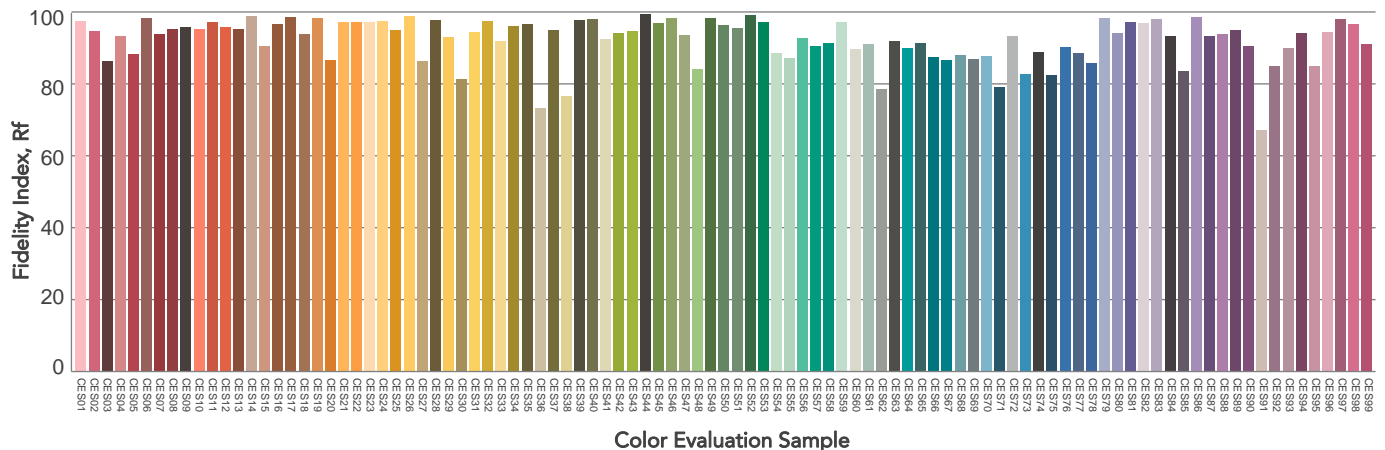
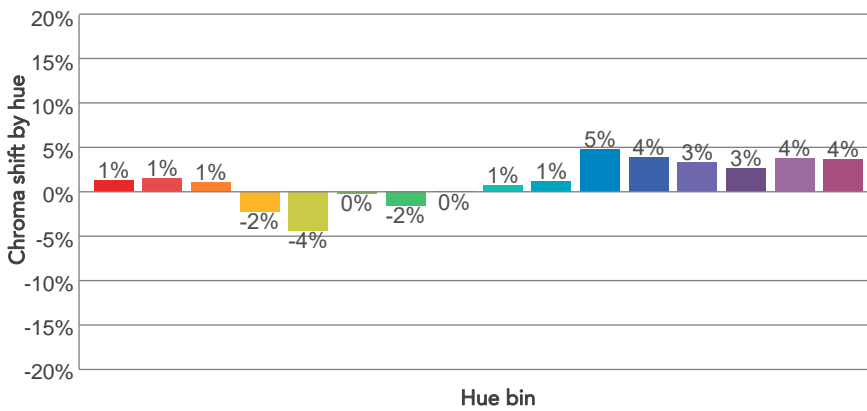
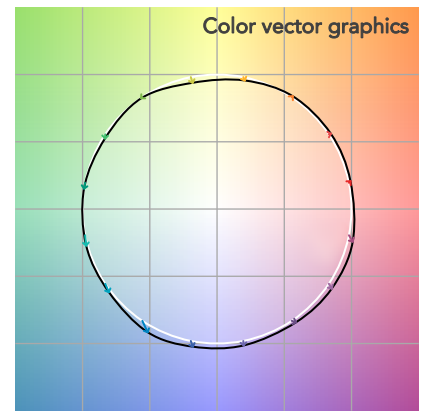
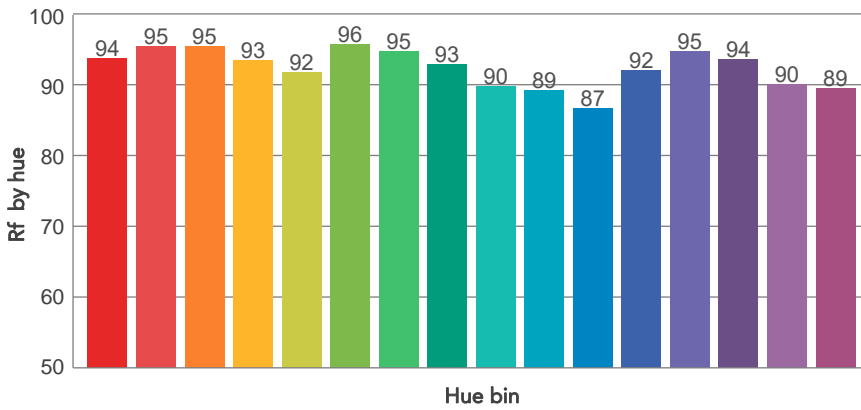
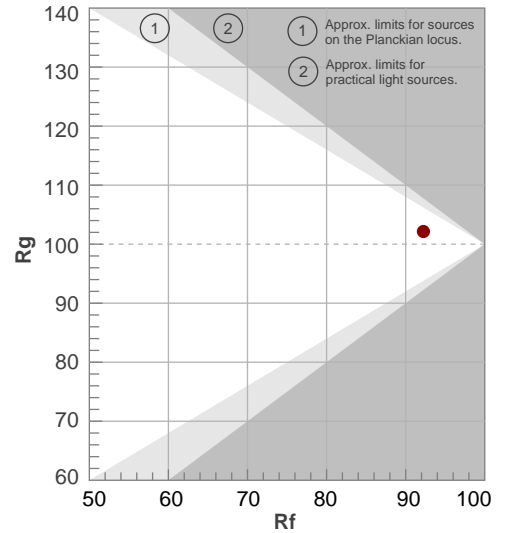
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4001 K | 95,4 | 81,8 | 92,2 | 102,1 | 94,9 | 98 | 0,376 | 0,361 | -0,0065 |

TM30 DETAILS

Rf 92,2
Fidelity index Rf

Rg 102,1
Gammut index

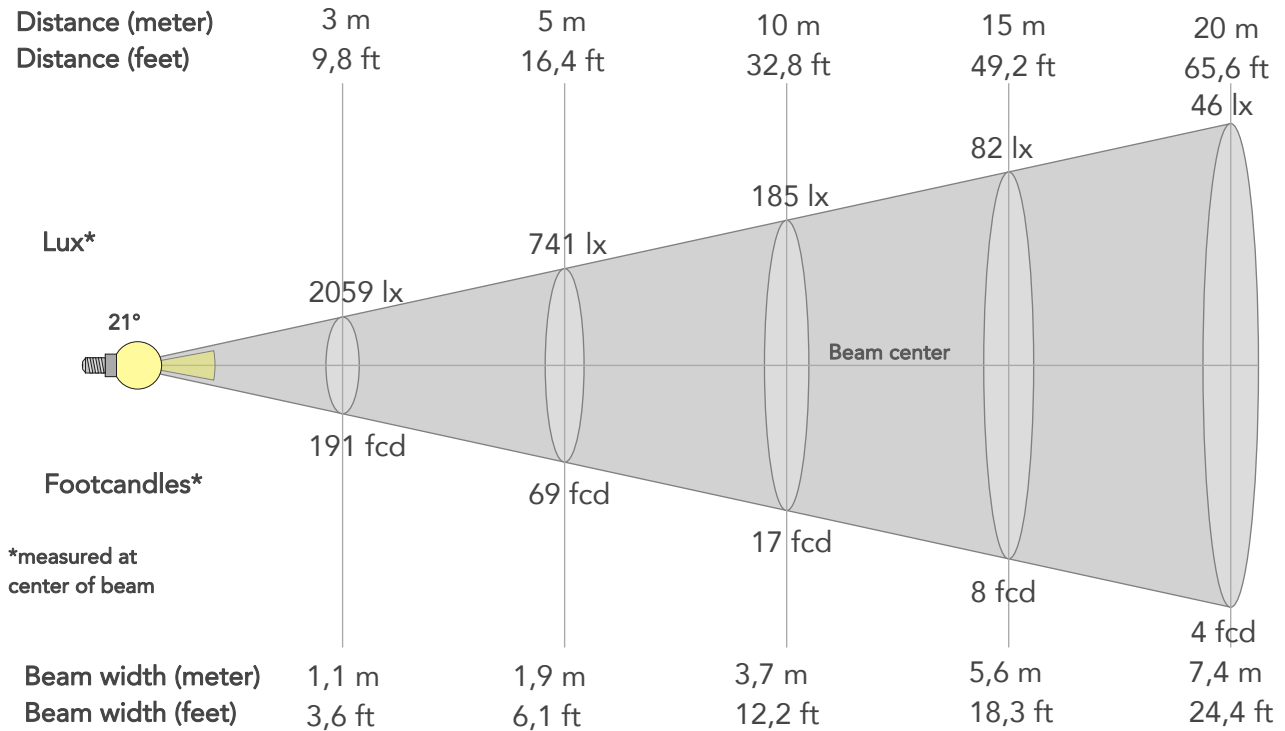
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 1% | 1% |
| 2 | 95 | 1% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 93 | -2% | -2% |
| 5 | 92 | -4% | 0% |
| 6 | 96 | 0% | 1% |
| 7 | 95 | -2% | 3% |
| 8 | 93 | 0% | 4% |
| 9 | 90 | 1% | 8% |
| 10 | 89 | 1% | 7% |
| 11 | 87 | 5% | 8% |
| 12 | 92 | 4% | 2% |
| 13 | 95 | 3% | 0% |
| 14 | 94 | 3% | 2% |
| 15 | 90 | 4% | -2% |
| 16 | 89 | 4% | -4% |



BEAM DETAILS



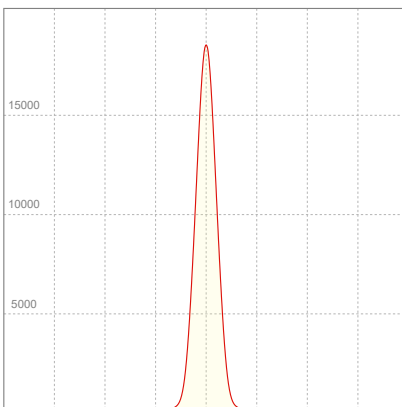
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21° | 37,9° | 49,6° | 97,8% | 95,0% |



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 | 18529lx | 4632lx | 2059lx | 1158lx | 741lx | 329lx | 185lx | 82lx | 46lx | 30lx | 21lx | 12lx | 7lx |
| Footcand. | 1721fcd | 430fcd | 191fcd | 108fcd | 69fcd | 31fcd | 17fcd | 8fcd | 4fcd | 3fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,1m | 14,9m | 18,6m |
| Beam wid. | 1,2ft | 2,5ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,3ft | 24,4ft | 30,4ft | 36,5ft | 48,7ft | 60,9ft |

LINEAR DISTRIBUTION DIAGRAM

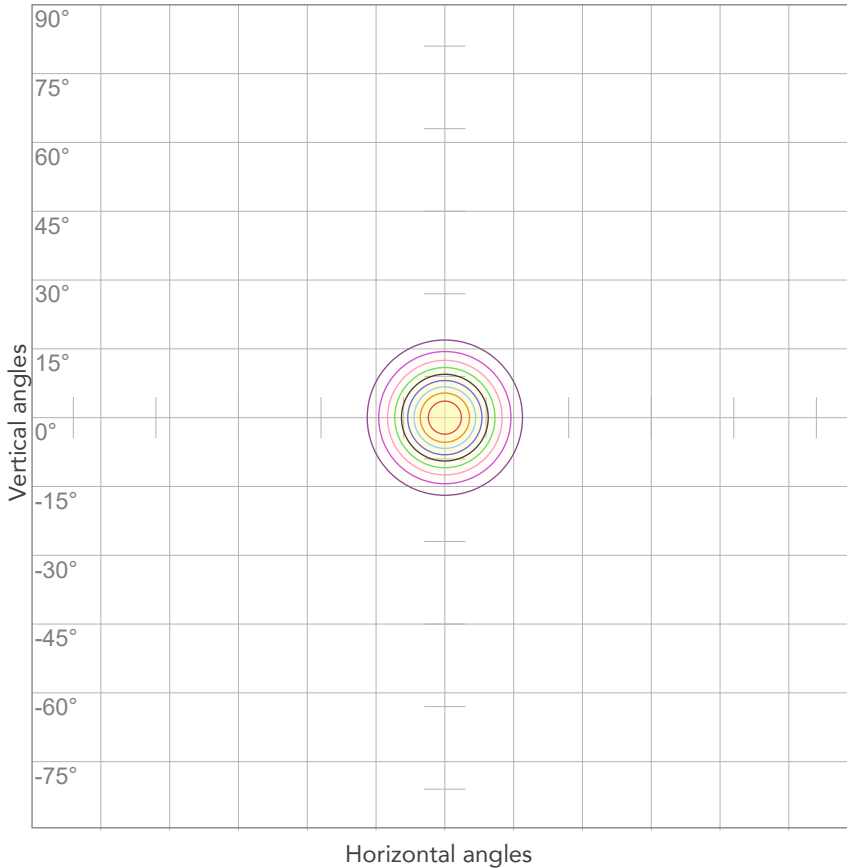


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,293A | 61,2W | 0,94 | 51lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



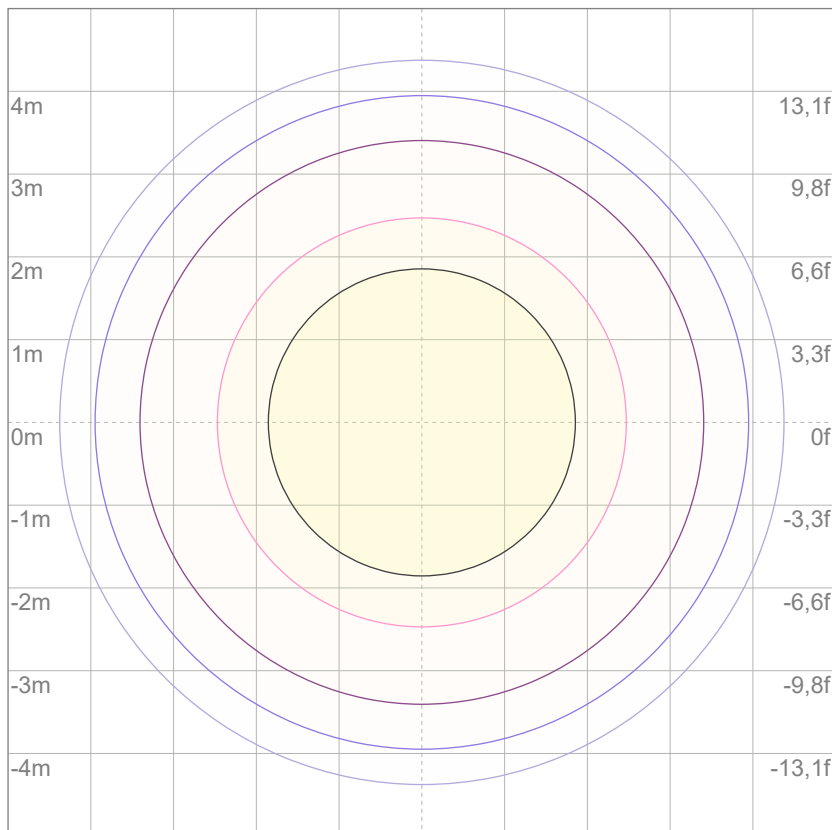
| | |
|-----|----------|
| 10% | 1853 cd |
| 20% | 3706 cd |
| 30% | 5559 cd |
| 40% | 7412 cd |
| 50% | 9265 cd |
| 60% | 11117 cd |
| 70% | 12970 cd |
| 80% | 14823 cd |

Conditions:

Number of c-planes: 2

Candela at center: 18529 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|---------|
| 3% | 5,56 lx |
| 5% | 9,26 lx |
| 10% | 18,5 lx |
| 30% | 55,6 lx |
| 50% | 92,6 lx |

Conditions:

Number of c-planes: 2

Lux at center: 185 lx

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



Total lumen output:

3071 lm

Peak candela output:

5441 cd

Light quality:

CRI: 95,3

Color temperature:

4002 K

PRODUCT NAME:
ECLPENDANTS VW

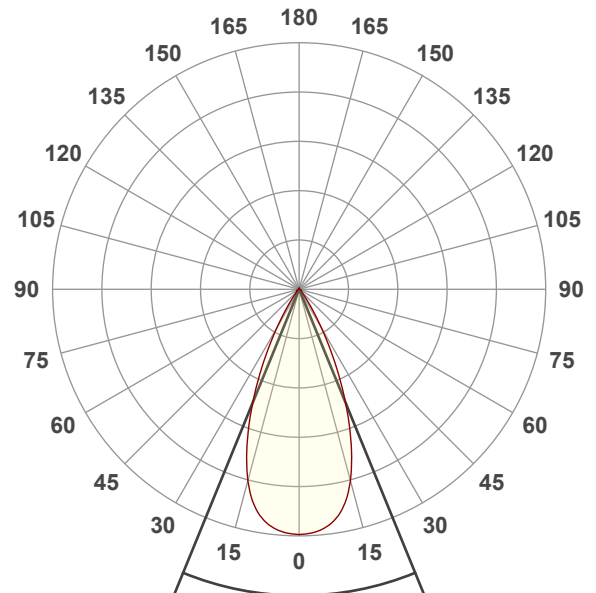
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
4000K

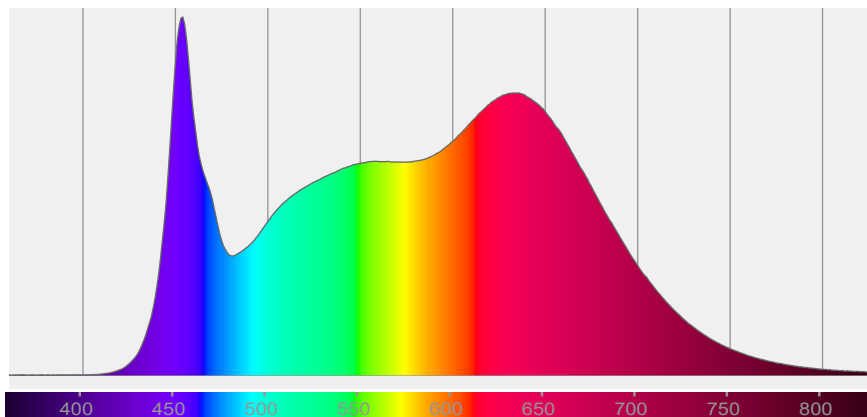
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:49:10

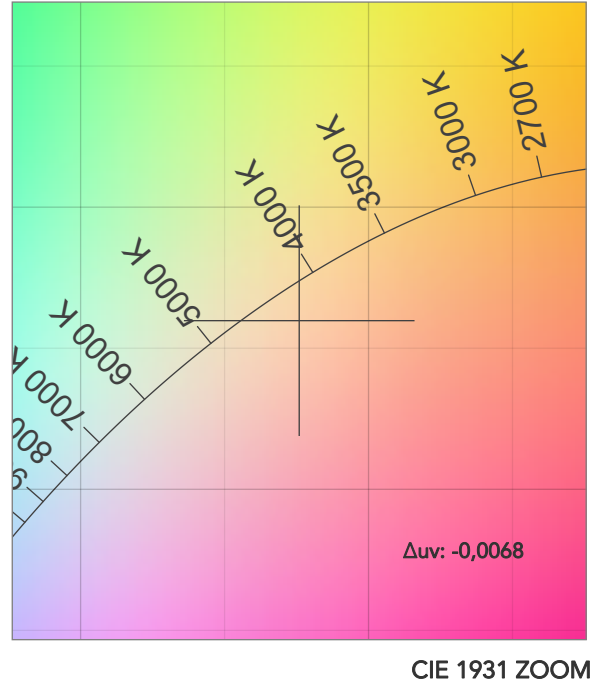
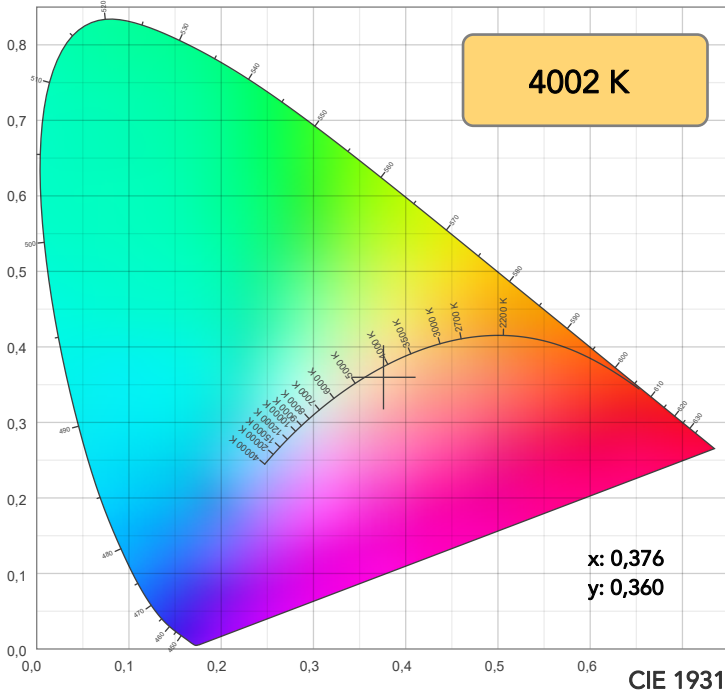


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,1°

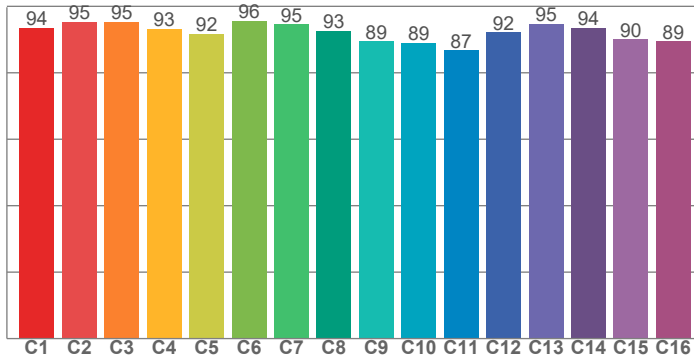
Spectra



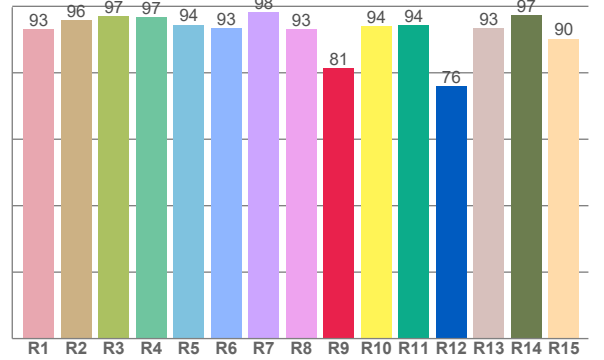
COLOR DETAILS



TM30: 92,2



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,2 | 95,7 | 96,9 | 96,8 | 94,4 | 93,5 | 98,3 | 93,2 | 81,4 | 94,0 | 94,4 | 76,0 | 93,4 | 97,3 | 90,3 |

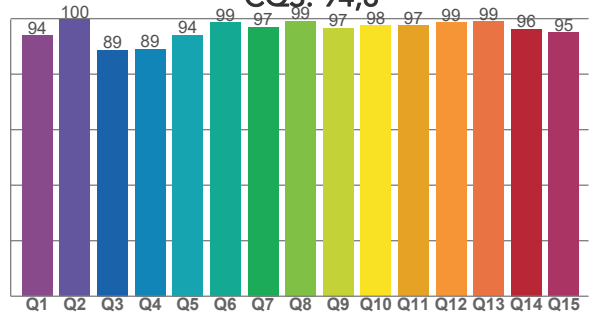
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,6 | 95,2 | 95,4 | 93,3 | 91,6 | 95,7 | 94,6 | 92,6 | 89,5 | 89,1 | 86,8 | 92,1 | 94,7 | 93,5 | 90,1 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,9 | 99,7 | 88,7 | 89,0 | 94,1 | 98,6 | 97,0 | 99,2 | 96,7 | 97,5 | 97,5 | 98,5 | 98,9 | 96,2 | 95,0 |

CQS: 94,8



COLOR PARAMETERS

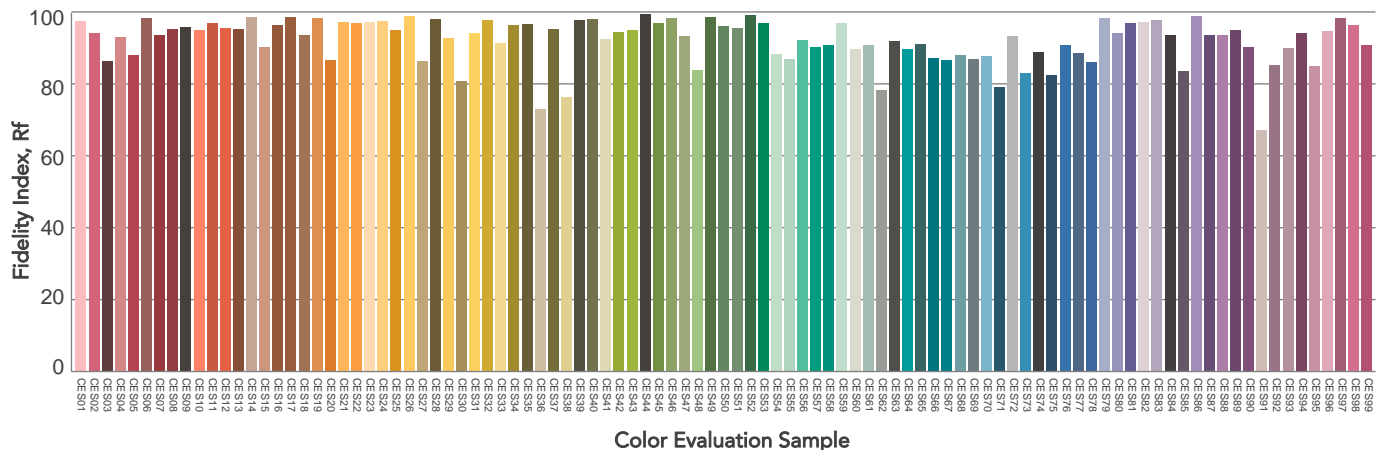
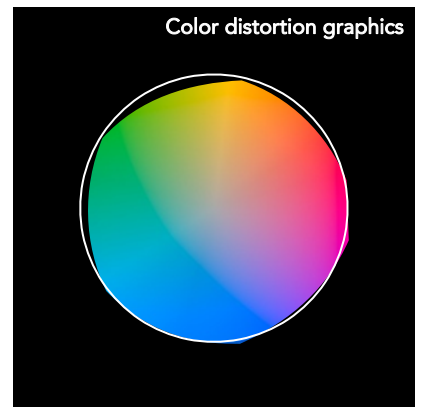
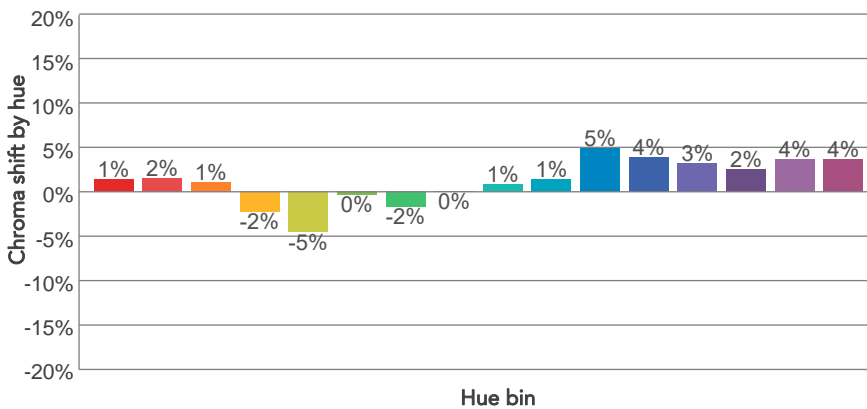
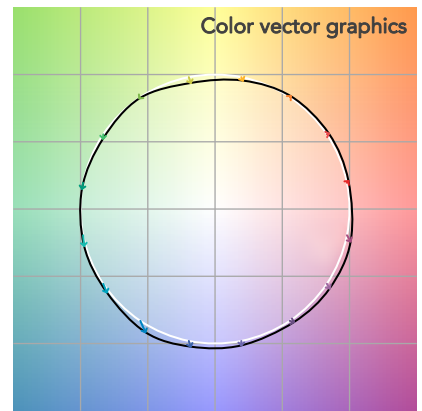
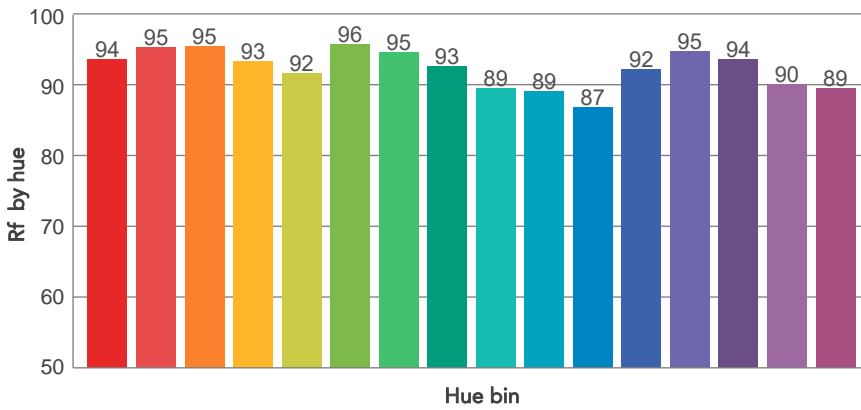
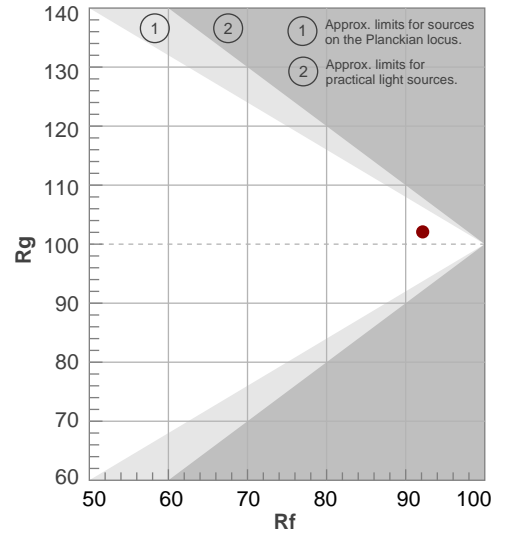
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4002 K | 95,3 | 81,4 | 92,2 | 102,1 | 94,8 | 98 | 0,376 | 0,360 | -0,0068 |

TM30 DETAILS

Rf 92,2
Fidelity index Rf

Rg 102,1
Gammut index

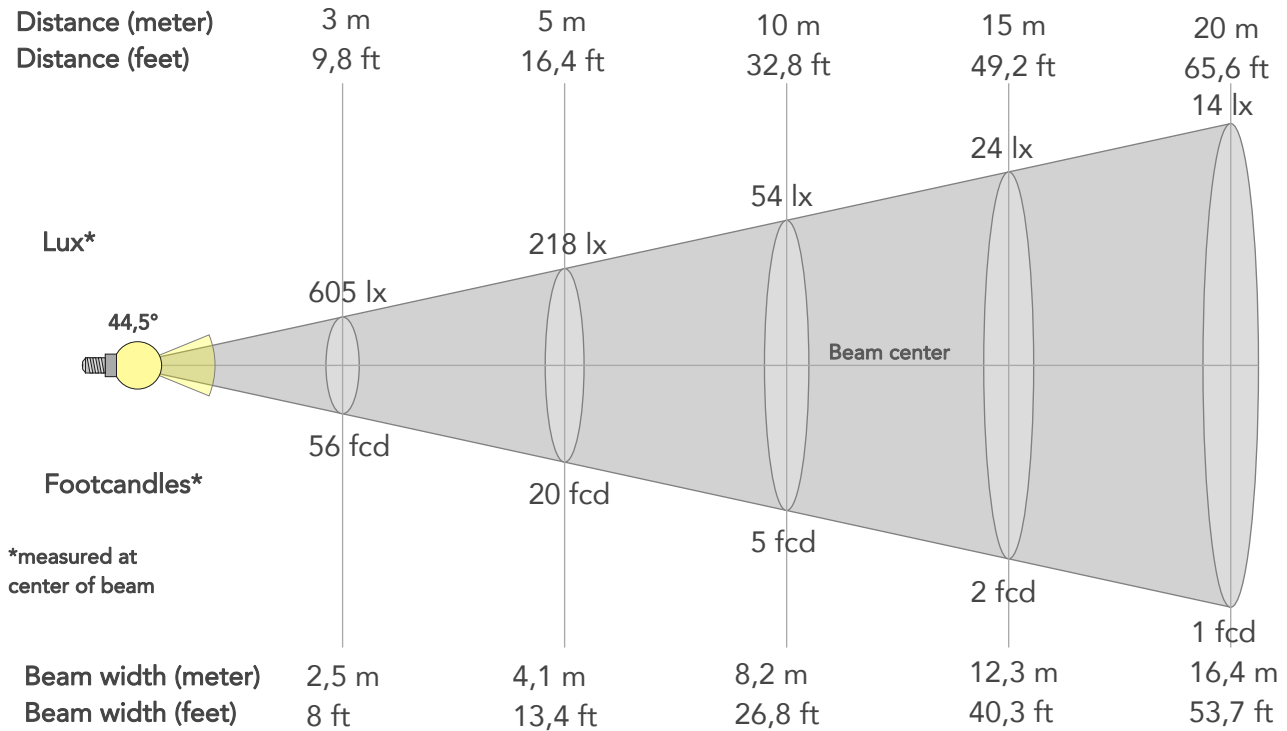
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 1% | 1% |
| 2 | 95 | 2% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 93 | -2% | -2% |
| 5 | 92 | -5% | -1% |
| 6 | 96 | 0% | 1% |
| 7 | 95 | -2% | 3% |
| 8 | 93 | 0% | 5% |
| 9 | 89 | 1% | 8% |
| 10 | 89 | 1% | 7% |
| 11 | 87 | 5% | 8% |
| 12 | 92 | 4% | 2% |
| 13 | 95 | 3% | -1% |
| 14 | 94 | 2% | 2% |
| 15 | 90 | 4% | -2% |
| 16 | 89 | 4% | -4% |



BEAM DETAILS



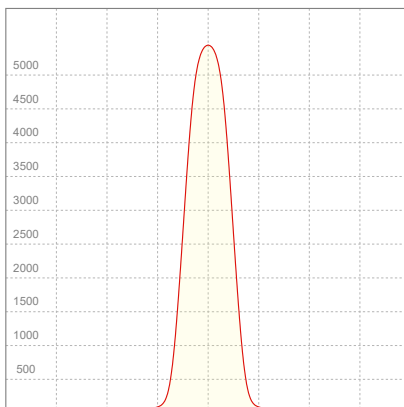
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,1° | 98,3% | 95,5% |



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 | 5441lx | 1360lx | 605lx | 340lx | 218lx | 97lx | 54lx | 24lx | 14lx | 9lx | 6lx | 3lx | 2lx |
| Footcand. | 505fcd | 126fcd | 56fcd | 32fcd | 20fcd | 9fcd | 5fcd | 2fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,6m | 32,7m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,8ft | 40,3ft | 53,7ft | 67,1ft | 80,5ft | 107,4ft | 134,2ft |

LINEAR DISTRIBUTION DIAGRAM

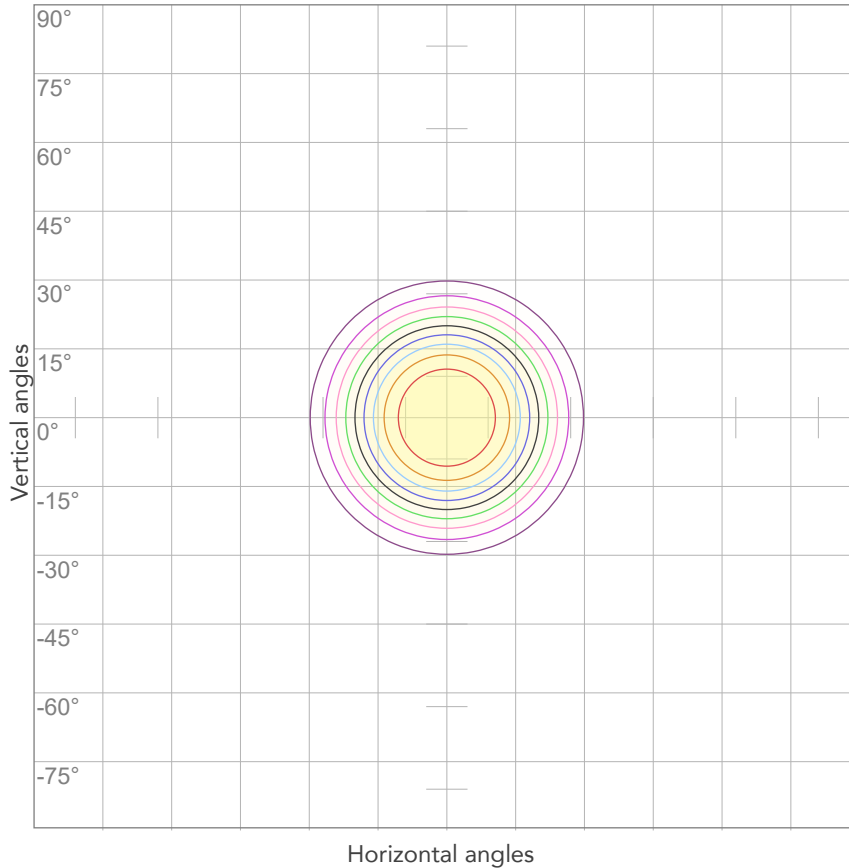


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,290A | 60,3W | 0,94 | 51lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



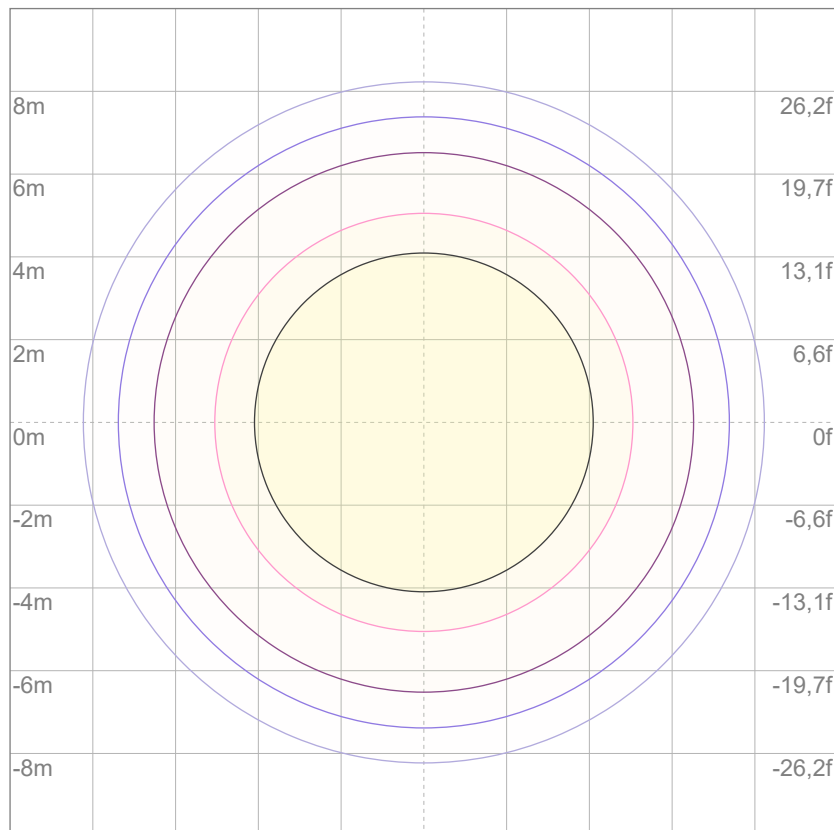
| | |
|-----|---------|
| 10% | 544 cd |
| 20% | 1088 cd |
| 30% | 1632 cd |
| 40% | 2176 cd |
| 50% | 2721 cd |
| 60% | 3265 cd |
| 70% | 3809 cd |
| 80% | 4353 cd |

Conditions:

Number of c-planes: 2

Candela at center: 5441 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,63 lx |
| 5% | 2,72 lx |
| 10% | 5,44 lx |
| 30% | 16,3 lx |
| 50% | 27,2 lx |

Conditions:

Number of c-planes: 2

Lux at center: 54,4 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:

2863 lm

Peak candela output:

2657 cd

Light quality:

CRI: 95,3

Color temperature:

4006 K

PRODUCT NAME:
ECLPENDANTS VW

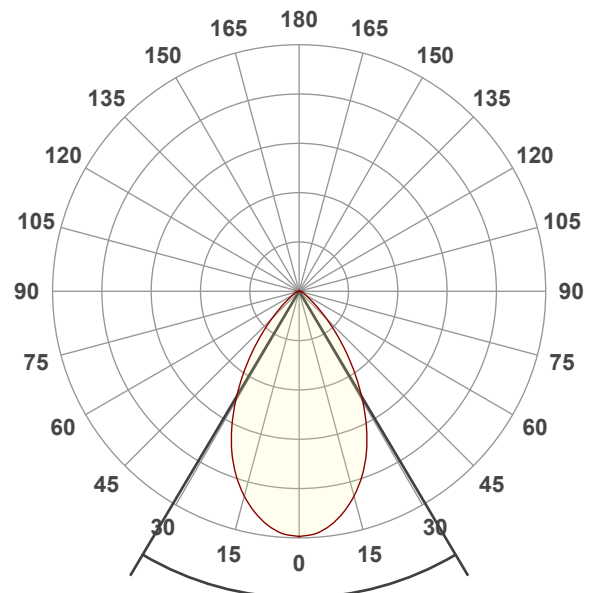
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
4000K

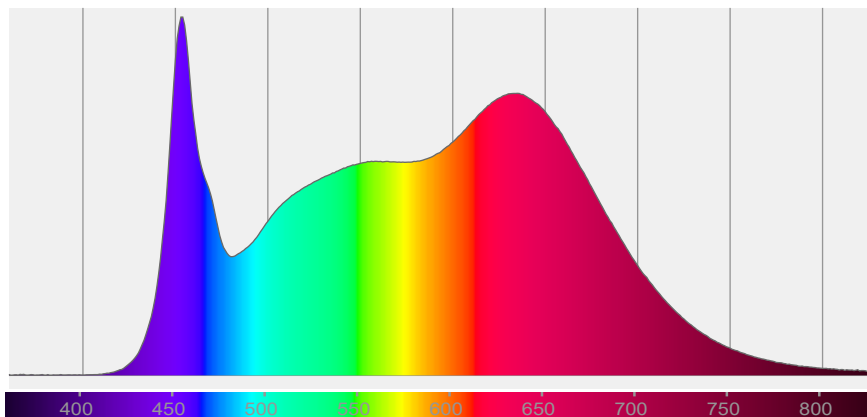
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:05:51

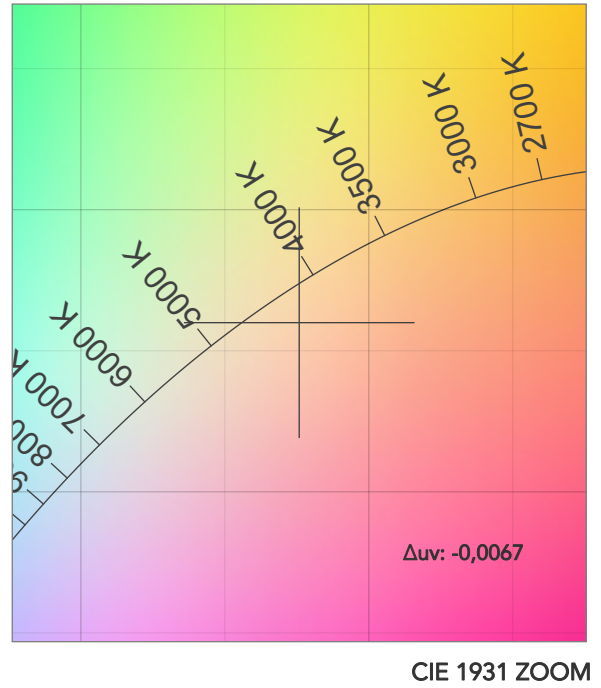
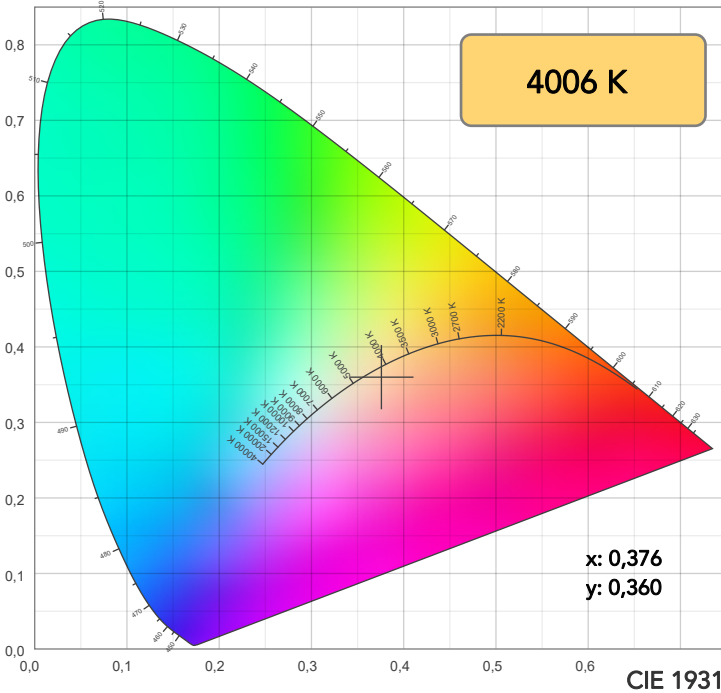


Beam angle 50%: 61,4°
Field angle 10%: 97,7°
Cut off angle 2.5%: 126,1°

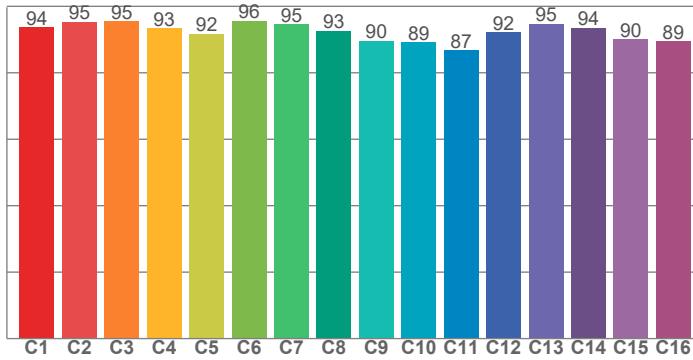
Spectra



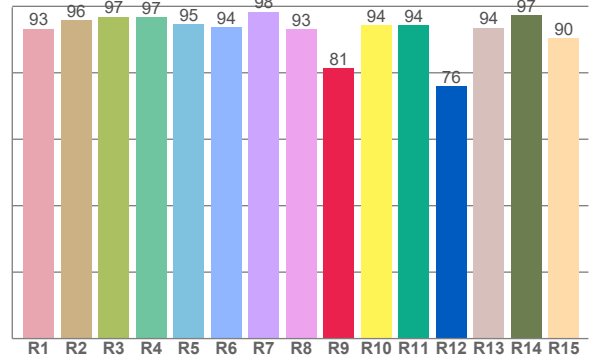
COLOR DETAILS



TM30: 92,2



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 | 95,8 | 96,8 | 96,8 | 94,5 | 93,6 | 98,3 | 93,2 | 81,4 | 94,2 | 94,4 | 76,0 | 93,5 | 97,3 | 90,4 |

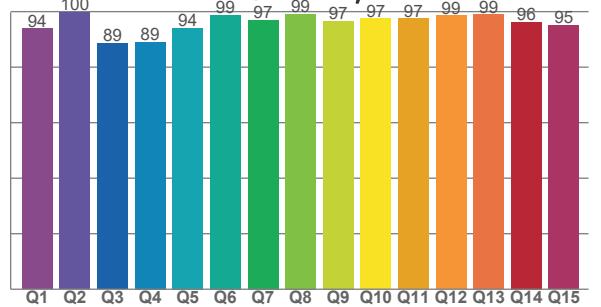
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,6 | 95,3 | 95,4 | 93,3 | 91,7 | 95,7 | 94,6 | 92,7 | 89,6 | 89,1 | 86,7 | 92,1 | 94,7 | 93,5 | 90,1 | 89,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,9 | 99,7 | 88,6 | 89,0 | 94,2 | 98,7 | 97,0 | 99,2 | 96,7 | 97,5 | 97,5 | 98,6 | 99,0 | 96,3 | 95,1 |

CQS: 94,9



COLOR PARAMETERS

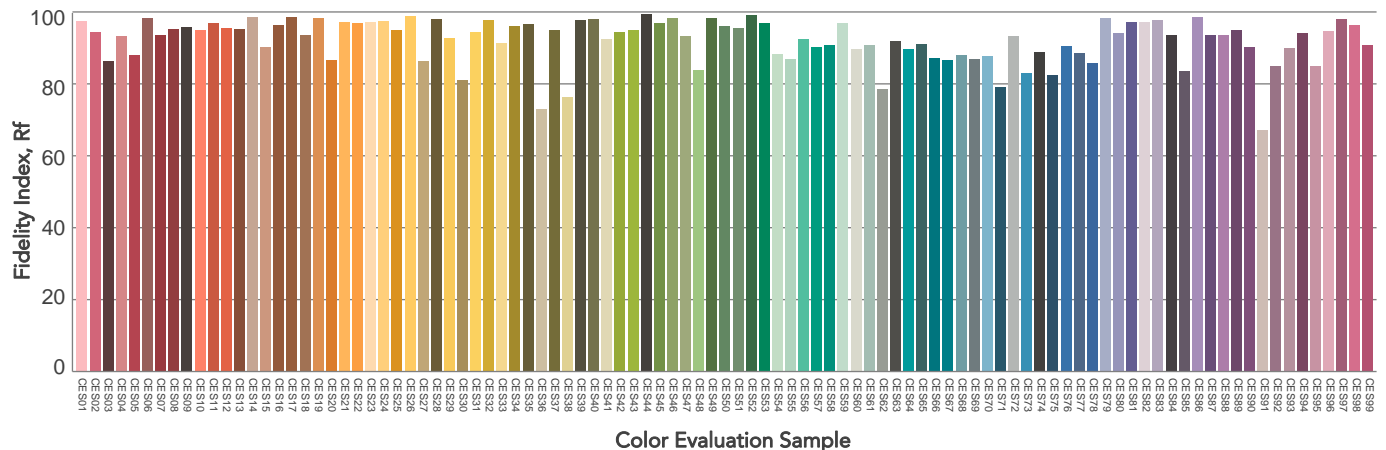
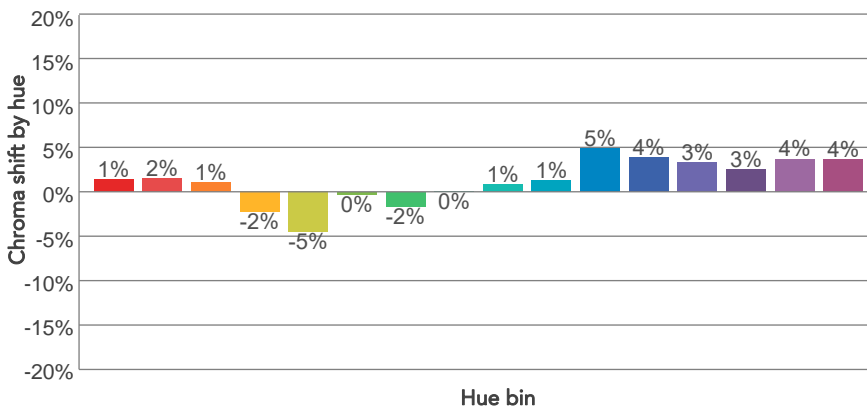
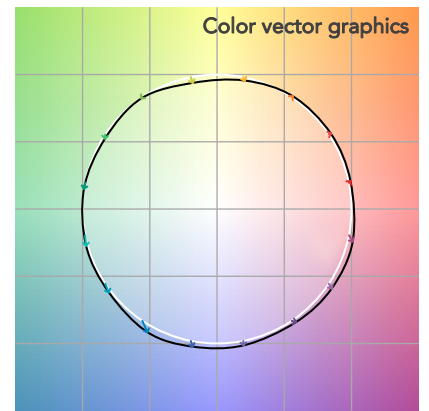
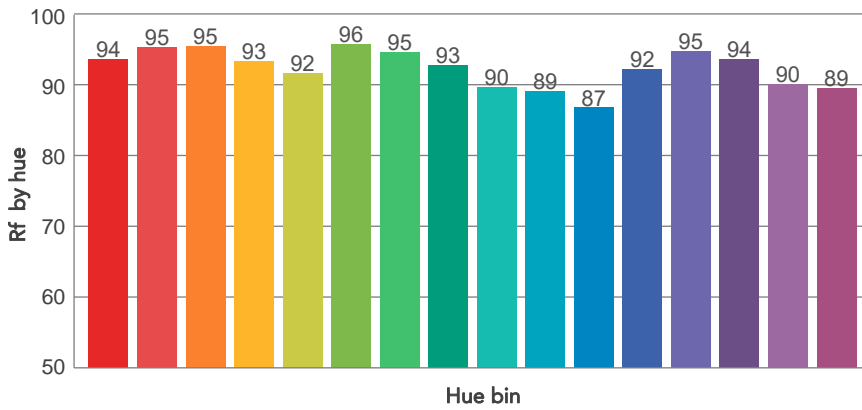
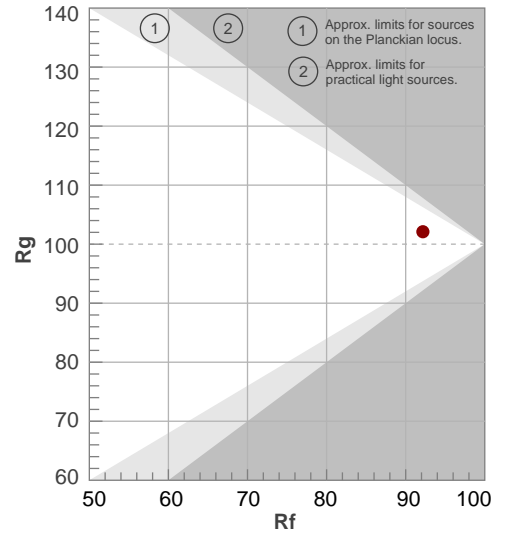
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4006 K | 95,3 | 81,4 | 92,2 | 102,1 | 94,9 | 98 | 0,376 | 0,360 | -0,0067 |

TM30 DETAILS

Rf 92,2
Fidelity index Rf

Rg 102,1
Gammut index

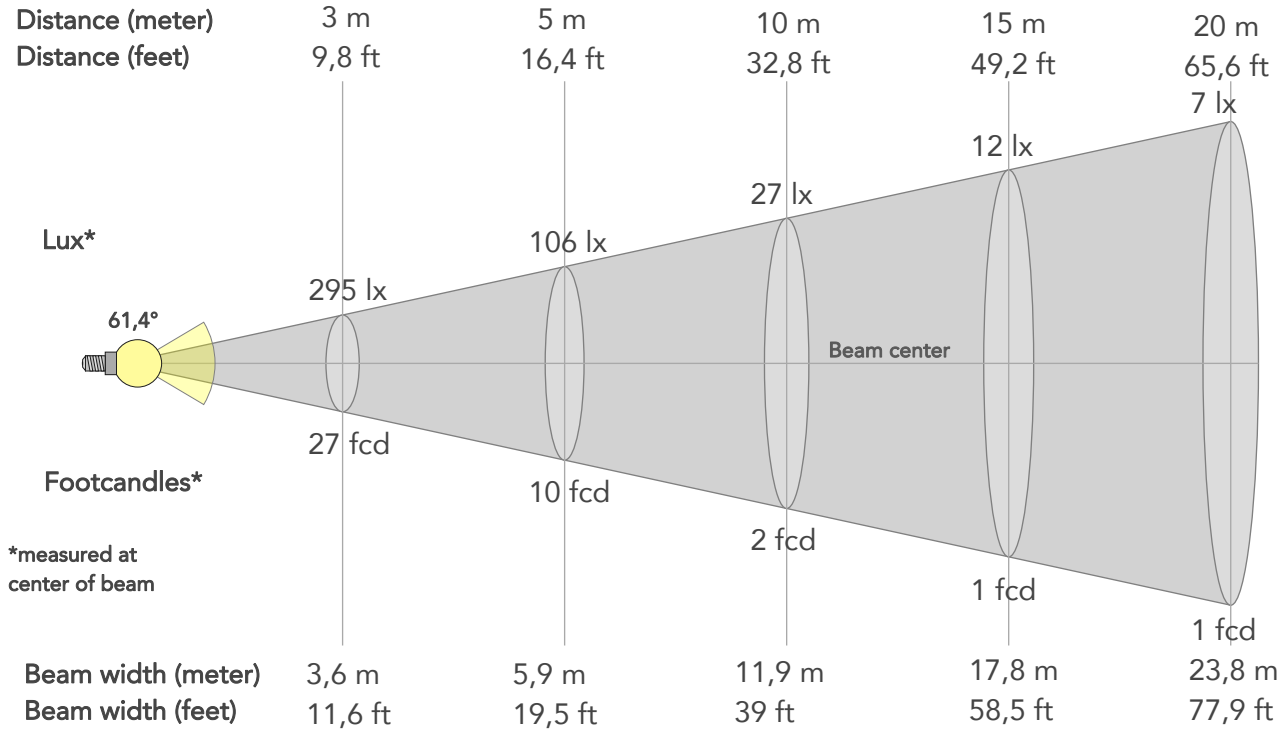
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 94 | 1% | 1% |
| 2 | 95 | 2% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 93 | -2% | -2% |
| 5 | 92 | -5% | -1% |
| 6 | 96 | 0% | 1% |
| 7 | 95 | -2% | 3% |
| 8 | 93 | 0% | 5% |
| 9 | 90 | 1% | 8% |
| 10 | 89 | 1% | 7% |
| 11 | 87 | 5% | 8% |
| 12 | 92 | 4% | 2% |
| 13 | 95 | 3% | 0% |
| 14 | 94 | 3% | 2% |
| 15 | 90 | 4% | -2% |
| 16 | 89 | 4% | -4% |



BEAM DETAILS



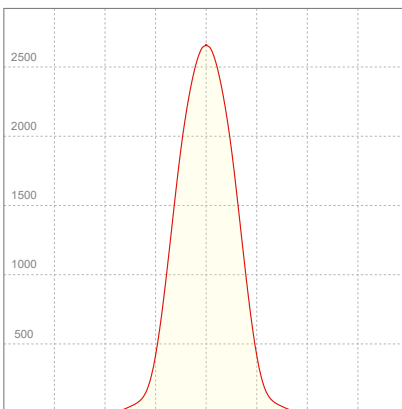
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,4° | 97,7° | 126,1° | 96,6% | 87,7% |



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 | 2657lx | 664lx | 295lx | 166lx | 106lx | 47lx | 27lx | 12lx | 7lx | 4lx | 3lx | 2lx | 1lx |
| Footcand. | 247fcd | 62fcd | 27fcd | 15fcd | 10fcd | 4fcd | 2fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,8m | 5,9m | 8,9m | 11,9m | 17,8m | 23,8m | 29,7m | 35,6m | 47,5m | 59,4m |
| Beam wid. | 3,9ft | 7,8ft | 11,6ft | 15,6ft | 19,5ft | 29,2ft | 39ft | 58,5ft | 77,9ft | 97,4ft | 116,9ft | 155,9ft | 194,9ft |

LINEAR DISTRIBUTION DIAGRAM

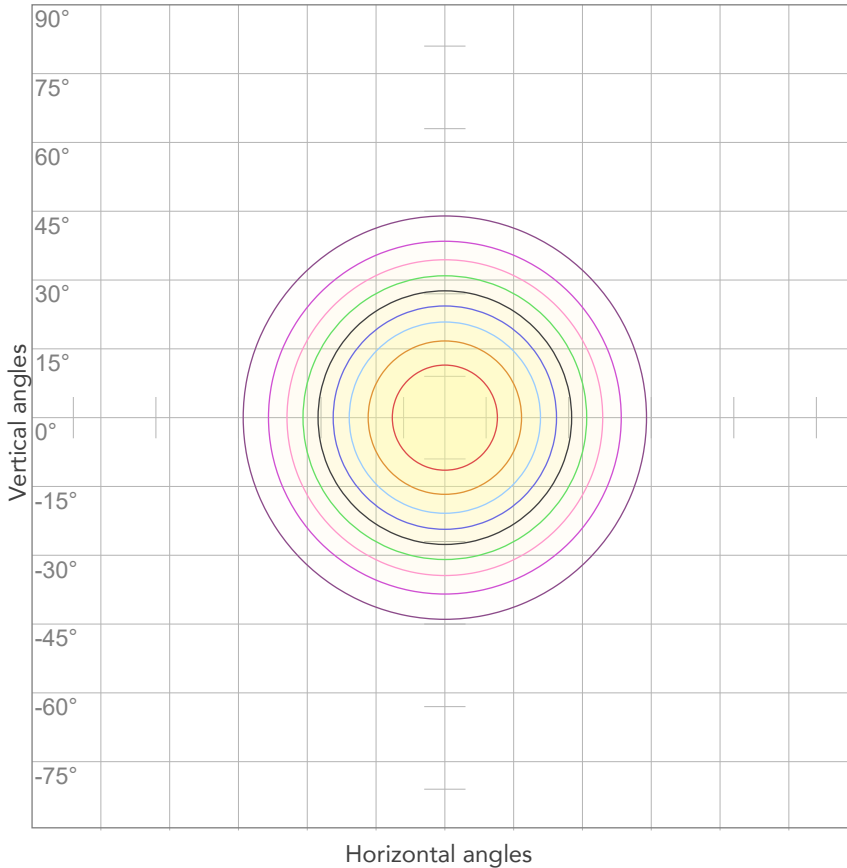


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,291A | 60,5W | 0,93 | 47lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



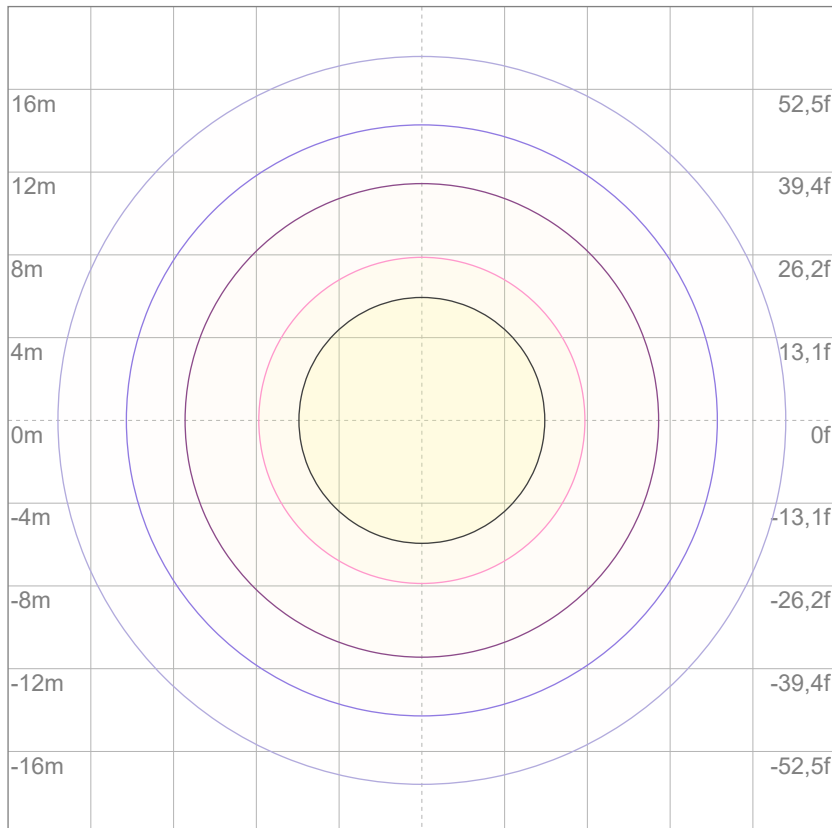
| | |
|-----|---------|
| 10% | 266 cd |
| 20% | 531 cd |
| 30% | 797 cd |
| 40% | 1063 cd |
| 50% | 1329 cd |
| 60% | 1594 cd |
| 70% | 1860 cd |
| 80% | 2126 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2657 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,797 lx |
| 5% | 1,33 lx |
| 10% | 2,66 lx |
| 30% | 7,97 lx |
| 50% | 13,3 lx |

Conditions:

Number of c-planes: 2

Lux at center: 26,6 lx

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



Total lumen output:

3521 lm

Peak candela output:

20934 cd

Light quality:

CRI: 96,3

Color temperature:

5608 K

PRODUCT NAME:
ECLPENDANTS VW

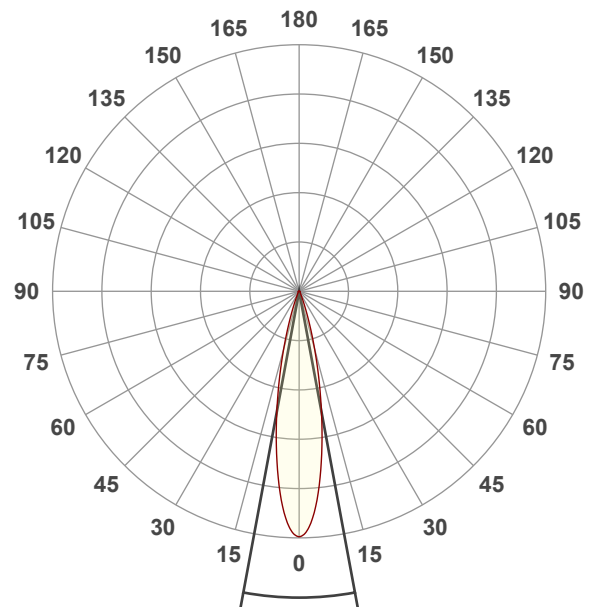
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
5600K

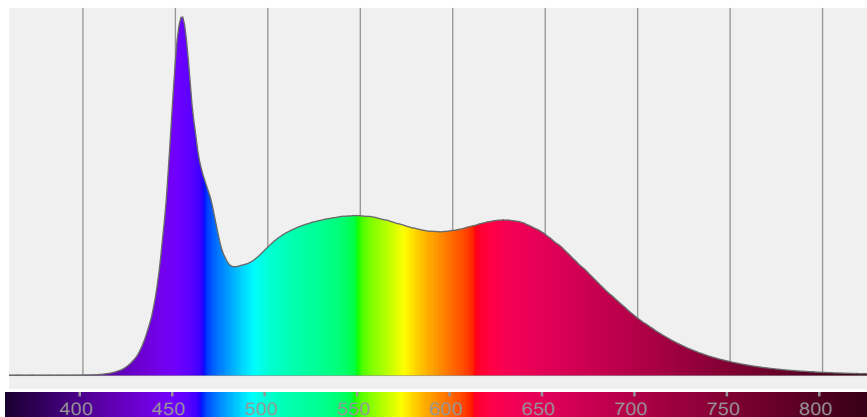
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:24:49

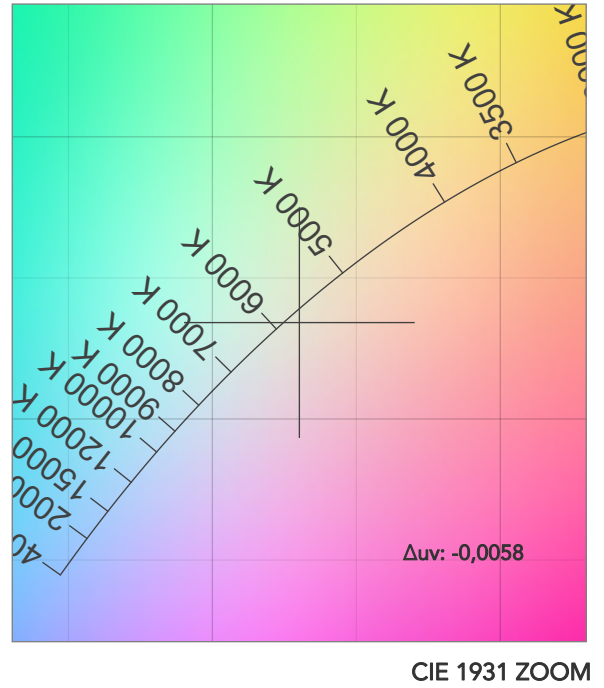
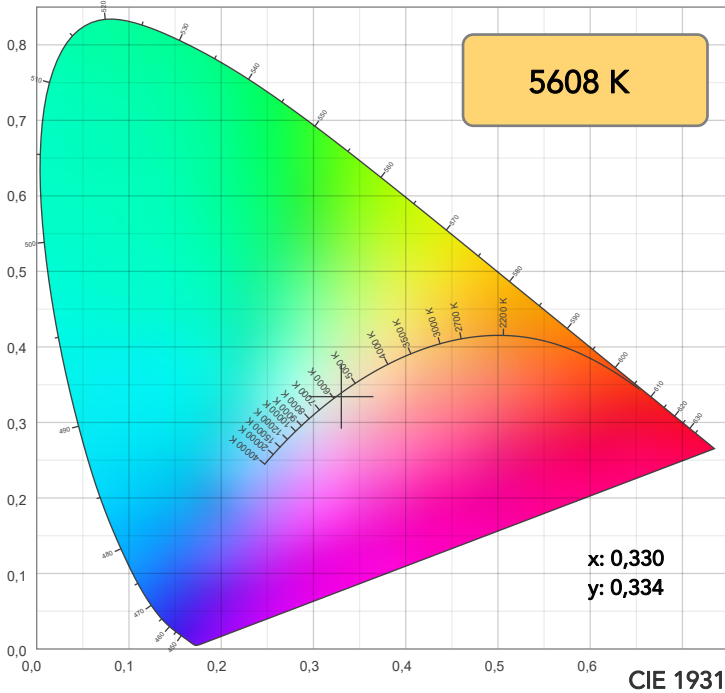


Beam angle 50%: 21°
Field angle 10%: 37,9°
Cut off angle 2.5%: 49,6°

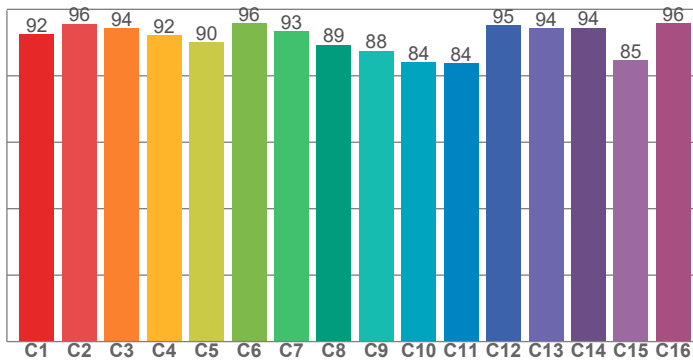
Spectra



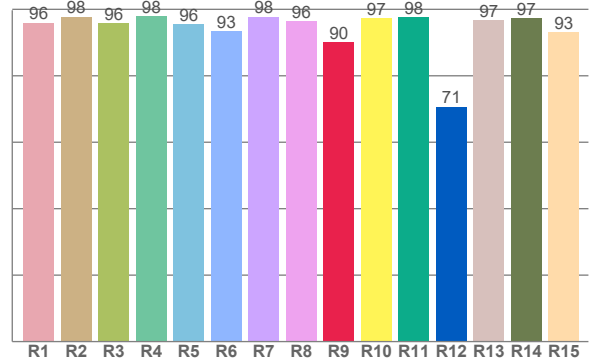
COLOR DETAILS



TM30: 91,0



CRI: 96,3 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,0 | 97,8 | 95,8 | 97,9 | 95,6 | 93,5 | 97,8 | 96,4 | 90,1 | 97,3 | 97,5 | 70,7 | 96,8 | 97,2 | 93,1 |

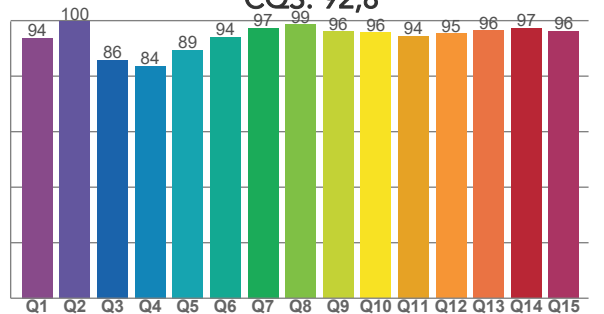
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,5 | 95,6 | 94,3 | 92,1 | 90,1 | 95,8 | 93,4 | 89,3 | 87,5 | 84,0 | 83,7 | 95,1 | 94,2 | 94,4 | 84,6 | 95,8 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,8 | 99,6 | 85,8 | 83,7 | 89,5 | 94,1 | 97,3 | 98,6 | 96,1 | 95,7 | 94,4 | 95,3 | 96,4 | 97,2 | 96,2 |

CQS: 92,8



COLOR PARAMETERS

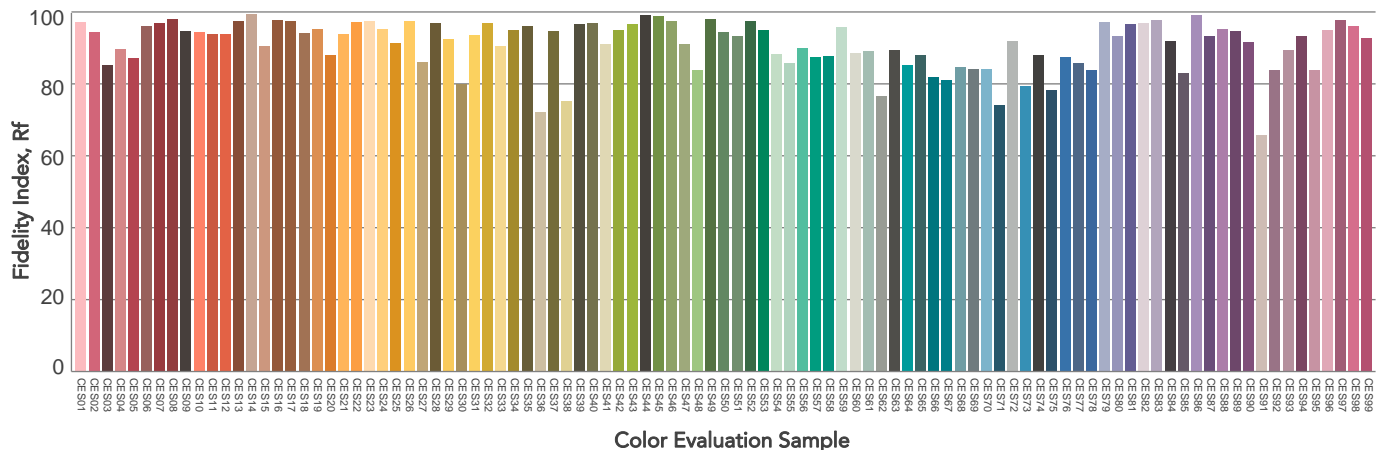
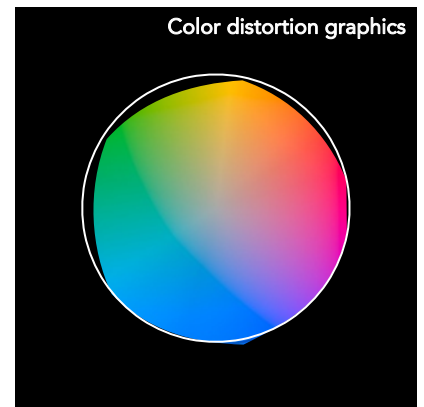
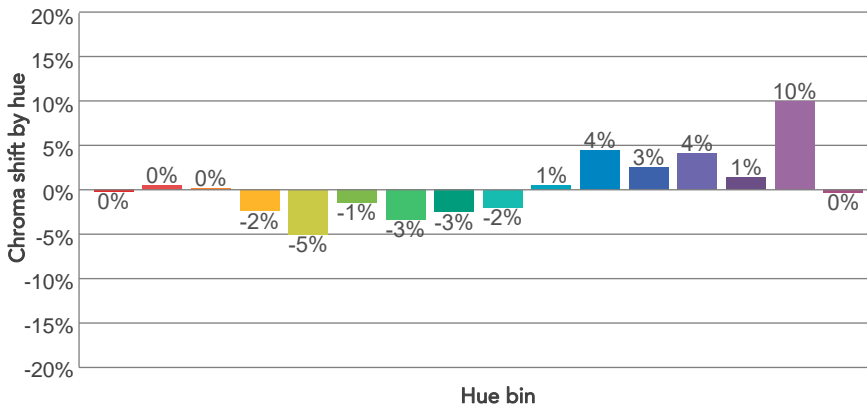
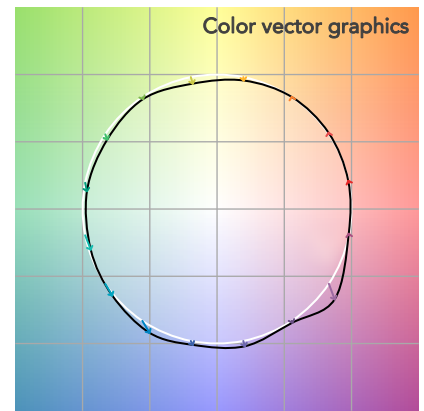
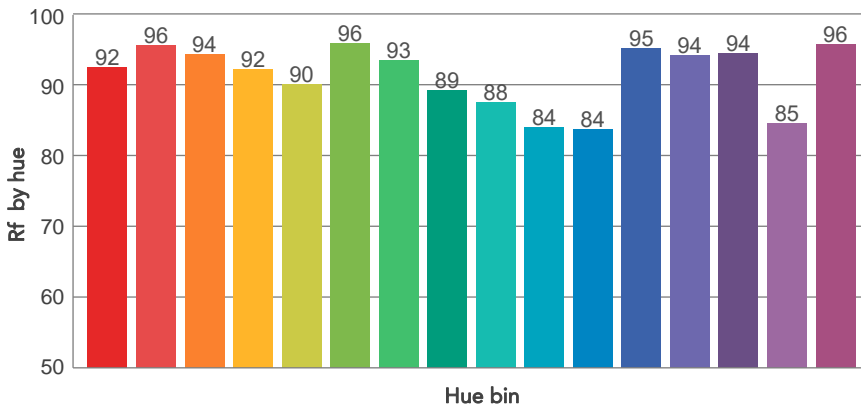
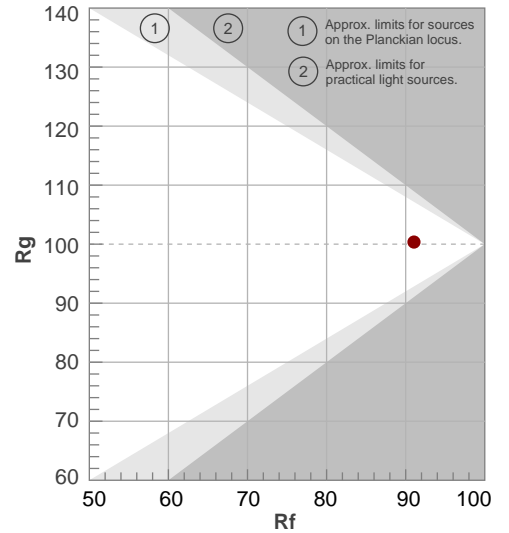
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 5608 K | 96,3 | 90,1 | 91,0 | 100,4 | 92,8 | 97 | 0,330 | 0,334 | -0,0058 |

TM30 DETAILS

Rf 91,0
Fidelity index Rf

Rg 100,4
Gammut index

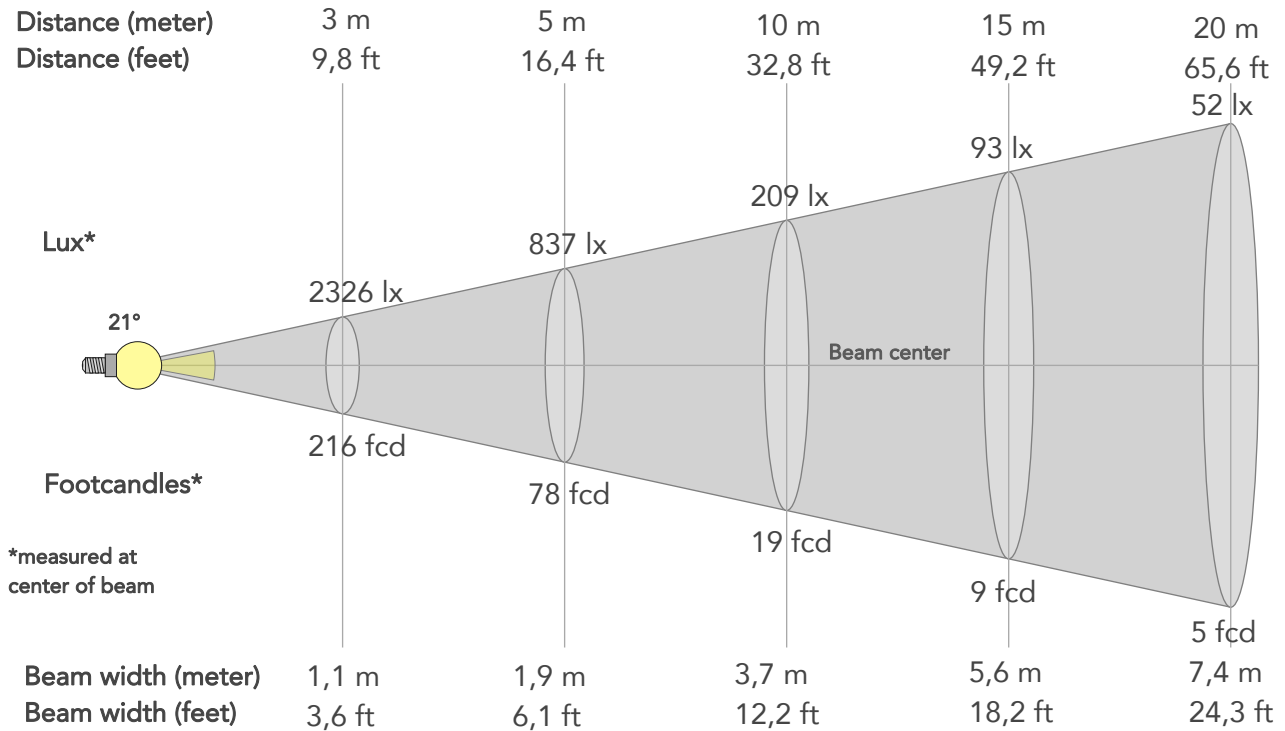
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | 0% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 92 | -2% | -1% |
| 5 | 90 | -5% | 0% |
| 6 | 96 | -1% | 0% |
| 7 | 93 | -3% | 2% |
| 8 | 89 | -3% | 6% |
| 9 | 88 | -2% | 11% |
| 10 | 84 | 1% | 10% |
| 11 | 84 | 4% | 9% |
| 12 | 95 | 3% | 2% |
| 13 | 94 | 4% | 0% |
| 14 | 94 | 1% | 0% |
| 15 | 85 | 10% | -7% |
| 16 | 96 | 0% | 1% |



BEAM DETAILS



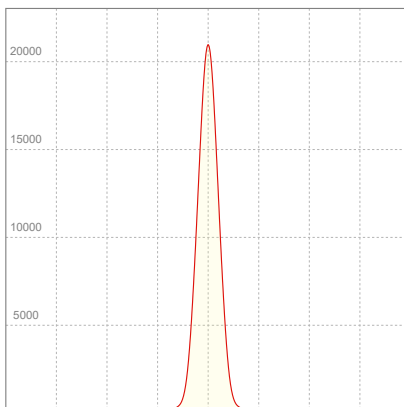
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21° | 37,9° | 49,6° | 97,7% | 95,0% |



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 | 20934lx | 5234lx | 2326lx | 1308lx | 837lx | 372lx | 209lx | 93lx | 52lx | 33lx | 23lx | 13lx | 8lx |
| Footcand. | 1945fcd | 486fcd | 216fcd | 122fcd | 78fcd | 35fcd | 19fcd | 9fcd | 5fcd | 3fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,1m | 14,8m | 18,5m |
| Beam wid. | 1,2ft | 2,4ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,2ft | 24,3ft | 30,4ft | 36,5ft | 48,6ft | 60,8ft |

LINEAR DISTRIBUTION DIAGRAM

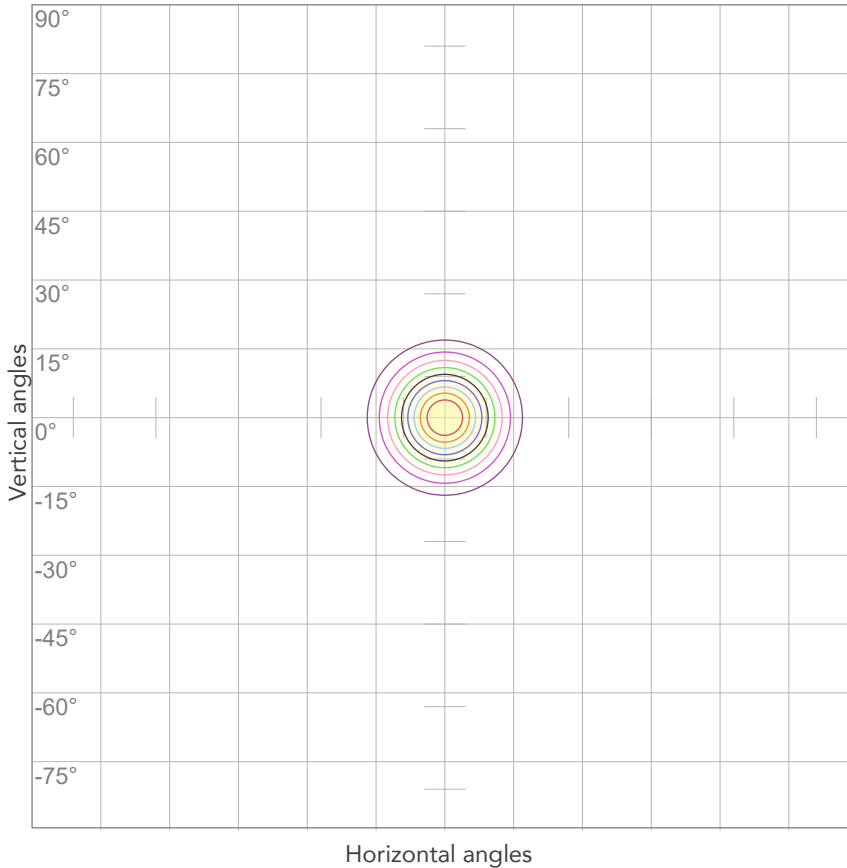


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 223V | 0,296A | 61,7W | 0,94 | 57lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



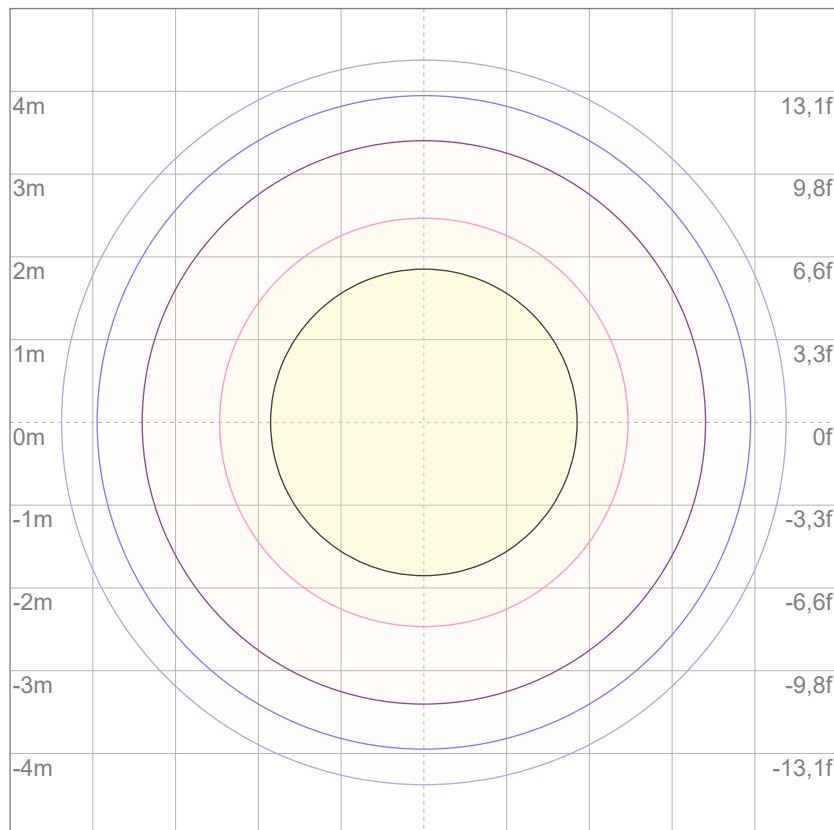
| | |
|-----|----------|
| 10% | 2093 cd |
| 20% | 4187 cd |
| 30% | 6280 cd |
| 40% | 8374 cd |
| 50% | 10467 cd |
| 60% | 12561 cd |
| 70% | 14654 cd |
| 80% | 16747 cd |

Conditions:

Number of c-planes: 2

Candela at center: 20934 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 6,28 lx |
| 5% | 10,5 lx |
| 10% | 20,9 lx |
| 30% | 62,8 lx |
| 50% | 105 lx |

Conditions:

Number of c-planes: 2

Lux at center: 209 lx

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



Total lumen output:

3475 lm

Peak candela output:

6144 cd

Light quality:

CRI: 96,2

Color temperature:

5625 K

PRODUCT NAME:

ECLPENDANTS VW

MEASURAMENT CONDITIONS:

Beam angle:

40°

Target:

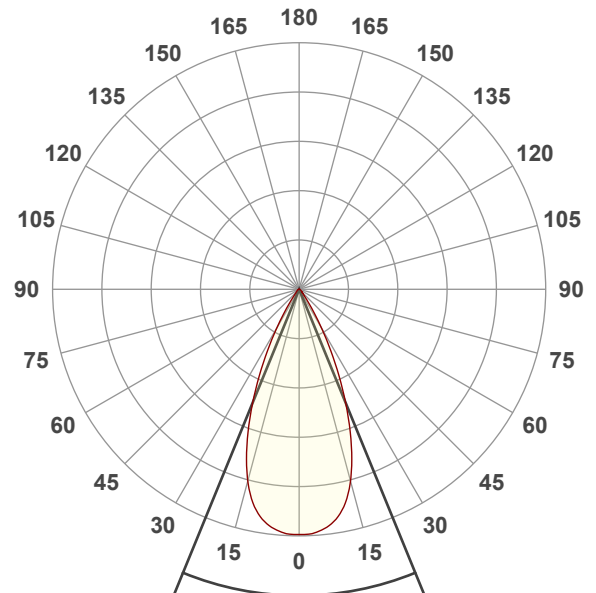
5600K

Operator:

Salvatore Giglio

Date and time:

05/02/2024 16:55:45

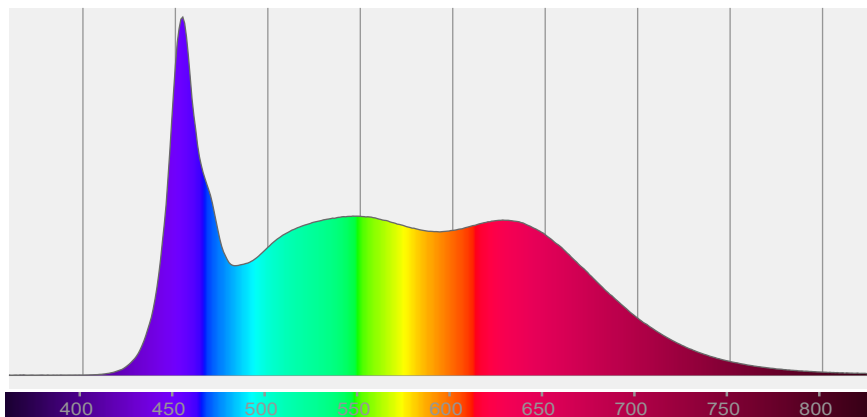


Beam angle 50%: 44,6°

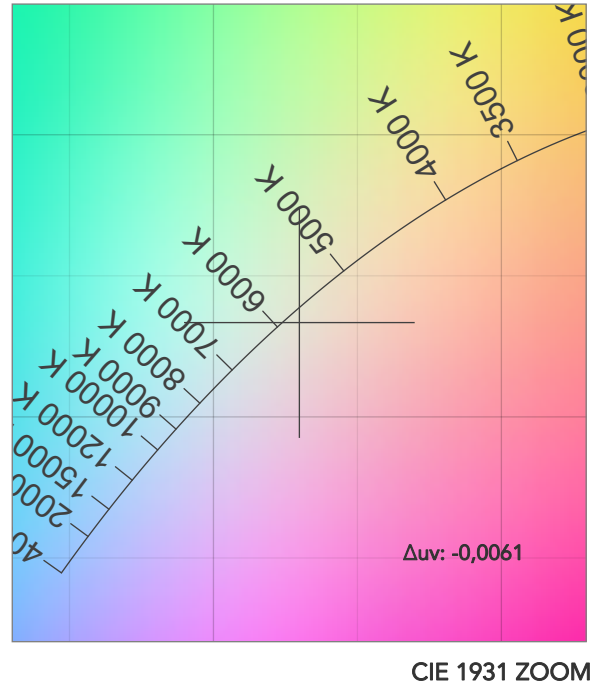
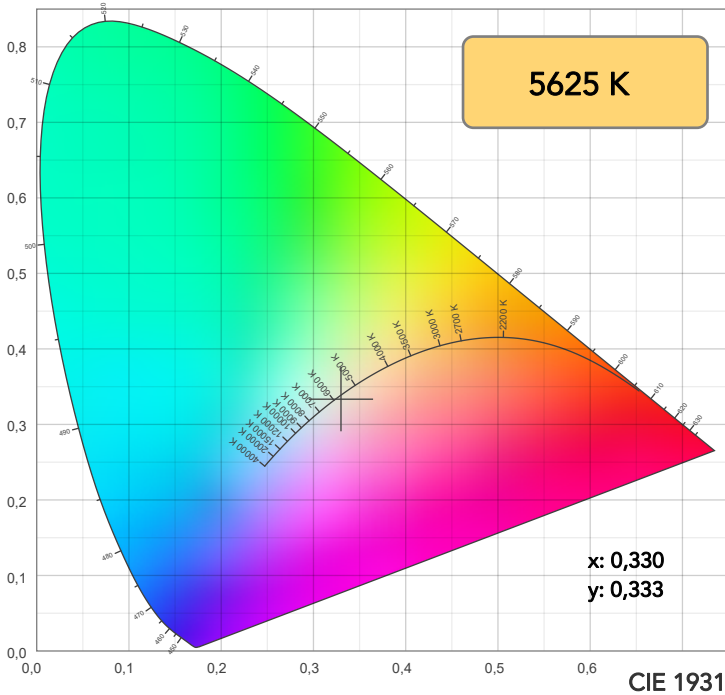
Field angle 10%: 66,5°

Cut off angle 2.5%: 81,5°

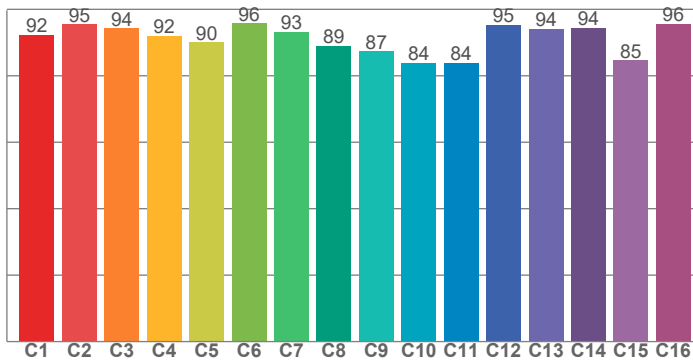
Spectra



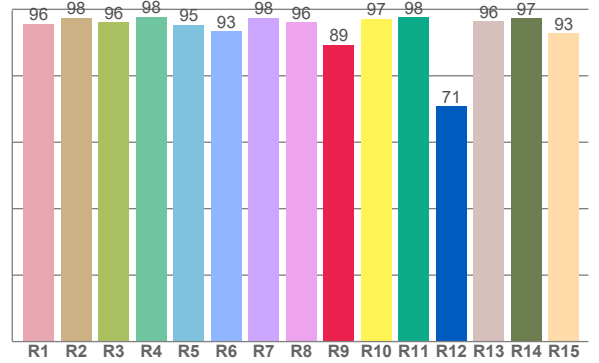
COLOR DETAILS



TM30: 91,0



CRI: 96,2 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,7 | 97,5 | 96,0 | 97,7 | 95,4 | 93,4 | 97,5 | 96,1 | 89,4 | 97,2 | 97,6 | 70,8 | 96,4 | 97,3 | 92,8 |

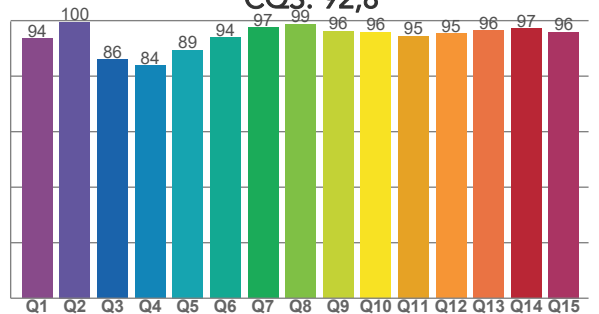
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,3 | 95,5 | 94,3 | 92,0 | 90,0 | 95,7 | 93,2 | 88,9 | 87,3 | 83,9 | 83,8 | 95,3 | 94,2 | 94,5 | 84,6 | 95,6 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,6 | 99,6 | 86,0 | 83,8 | 89,4 | 93,9 | 97,4 | 98,7 | 96,1 | 95,8 | 94,5 | 95,4 | 96,4 | 97,1 | 96,0 |

CQS: 92,8



COLOR PARAMETERS

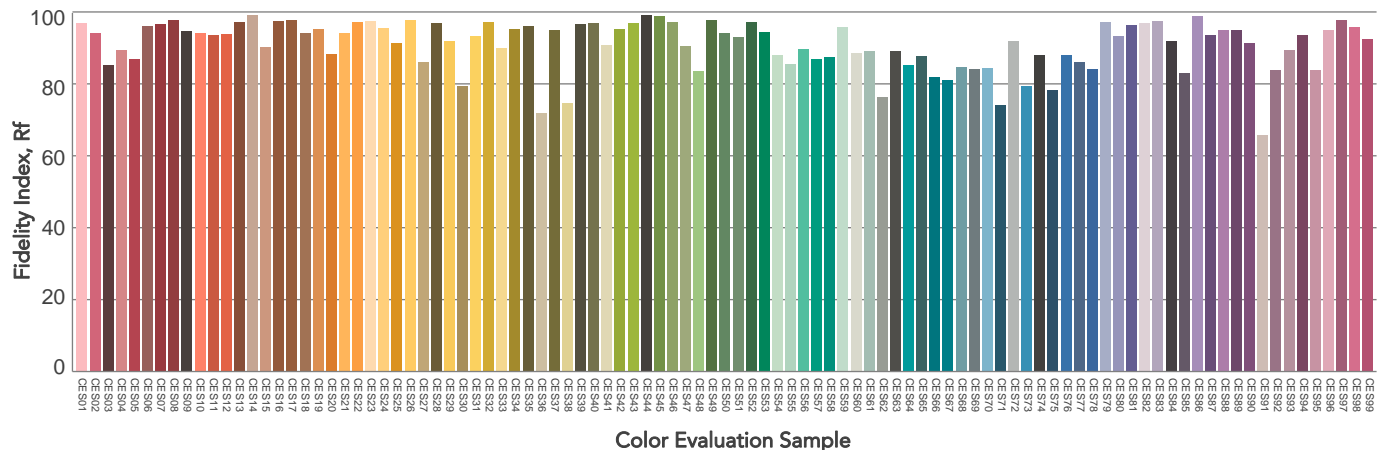
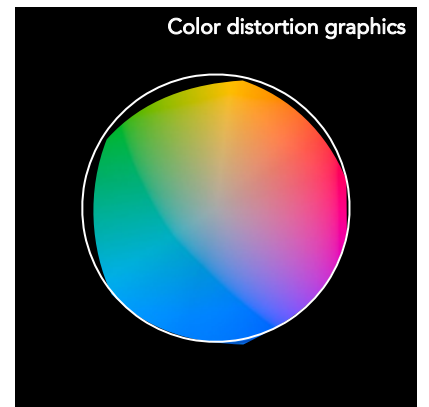
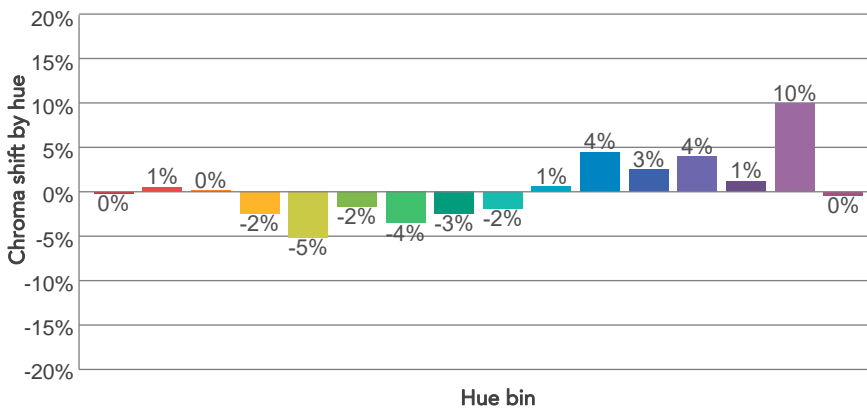
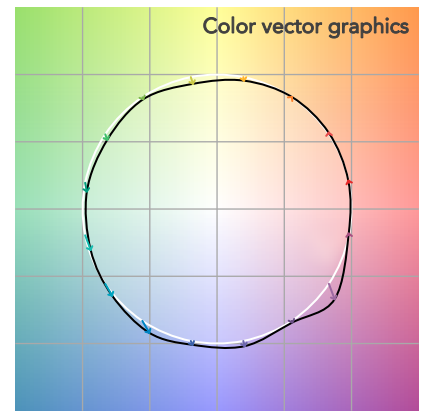
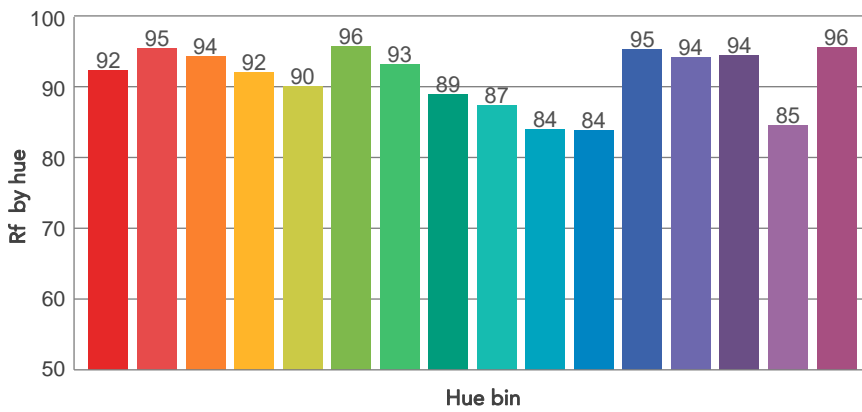
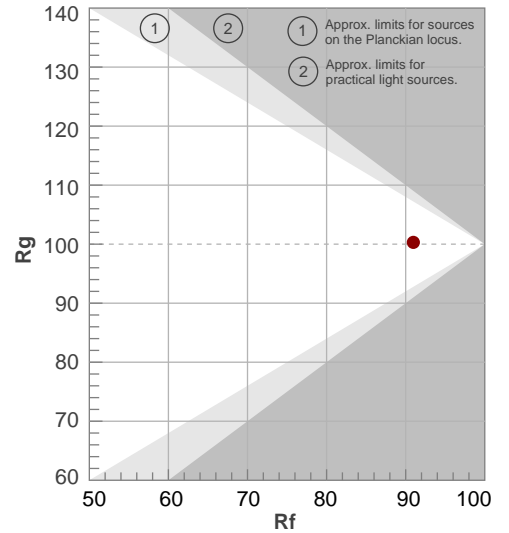
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 5625 K | 96,2 | 89,4 | 91,0 | 100,3 | 92,8 | 97 | 0,330 | 0,333 | -0,0061 |

TM30 DETAILS

Rf 91,0
Fidelity index Rf

Rg 100,3
Gammut index

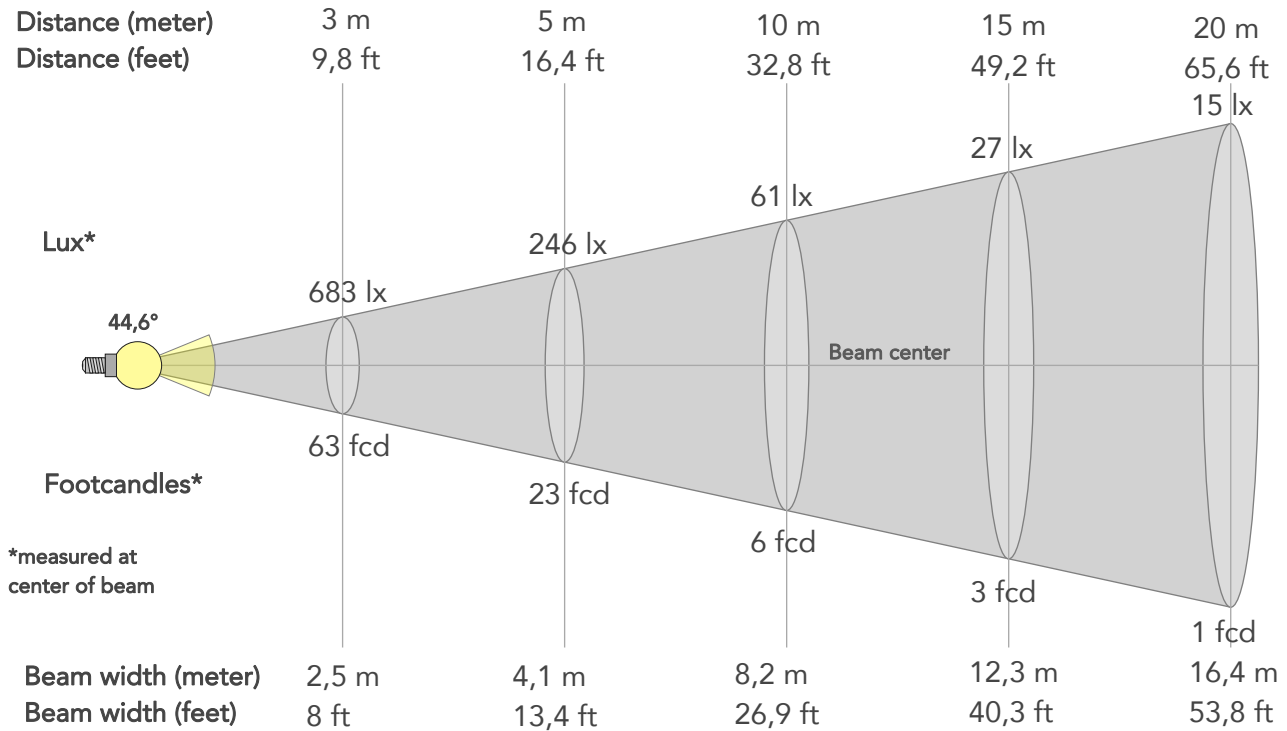
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | 0% | 2% |
| 2 | 95 | 1% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 92 | -2% | -1% |
| 5 | 90 | -5% | -1% |
| 6 | 96 | -2% | 0% |
| 7 | 93 | -4% | 3% |
| 8 | 89 | -3% | 6% |
| 9 | 87 | -2% | 11% |
| 10 | 84 | 1% | 10% |
| 11 | 84 | 4% | 9% |
| 12 | 95 | 3% | 2% |
| 13 | 94 | 4% | 0% |
| 14 | 94 | 1% | 0% |
| 15 | 85 | 10% | -7% |
| 16 | 96 | 0% | 1% |



BEAM DETAILS



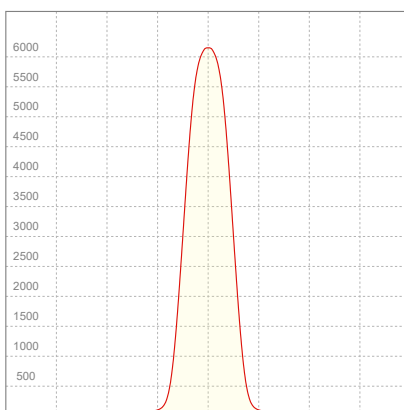
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,6° | 66,5° | 81,5° | 98,3% | 95,6% |



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 | 6144lx | 1536lx | 683lx | 384lx | 246lx | 109lx | 61lx | 27lx | 15lx | 10lx | 7lx | 4lx | 2lx |
| Footcand. | 571fcd | 143fcd | 63fcd | 36fcd | 23fcd | 10fcd | 6fcd | 3fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,6m | 32,8m | 41m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,2ft | 26,9ft | 40,3ft | 53,8ft | 67,2ft | 80,6ft | 107,5ft | 134,4ft |

LINEAR DISTRIBUTION DIAGRAM

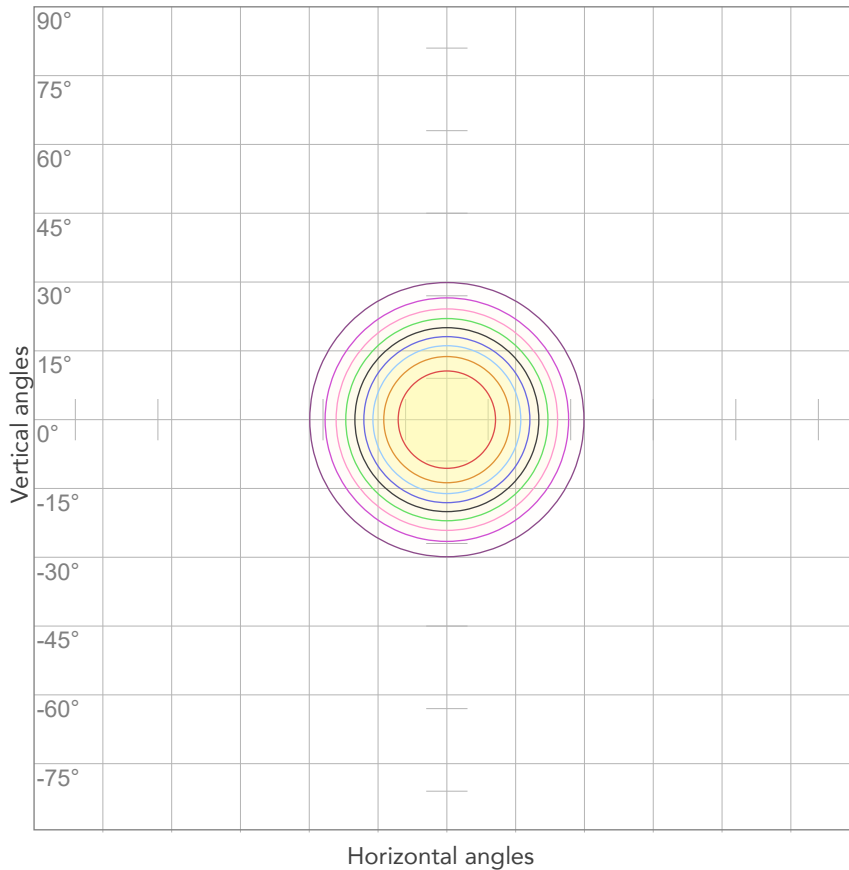


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,293A | 61,0W | 0,94 | 57lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



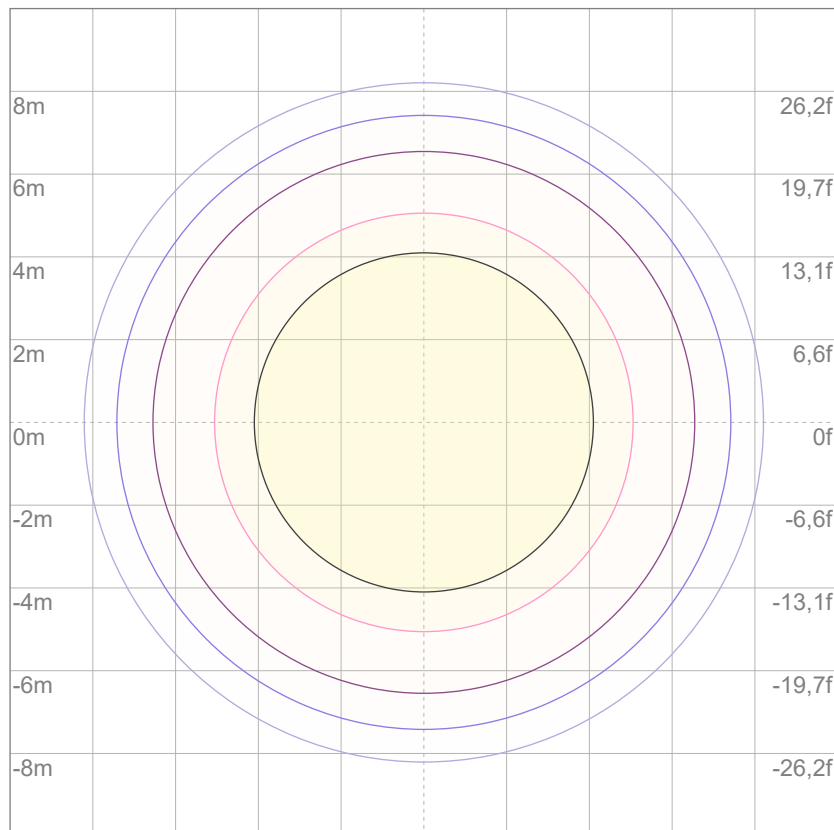
| | |
|-----|---------|
| 10% | 614 cd |
| 20% | 1229 cd |
| 30% | 1843 cd |
| 40% | 2457 cd |
| 50% | 3072 cd |
| 60% | 3686 cd |
| 70% | 4300 cd |
| 80% | 4915 cd |

Conditions:

Number of c-planes: 2

Candela at center: 6144 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,84 lx |
| 5% | 3,07 lx |
| 10% | 6,14 lx |
| 30% | 18,4 lx |
| 50% | 30,7 lx |

Conditions:

Number of c-planes: 2

Lux at center: 61,4 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:

3245 lm

Peak candela output:

2999 cd

Light quality:

CRI: 96,2

Color temperature:

5624 K

PRODUCT NAME:
ECLPENDANTS VW

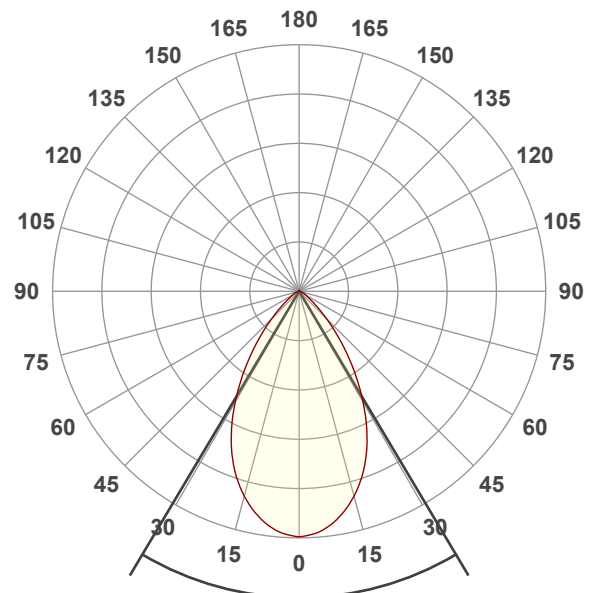
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
5600K

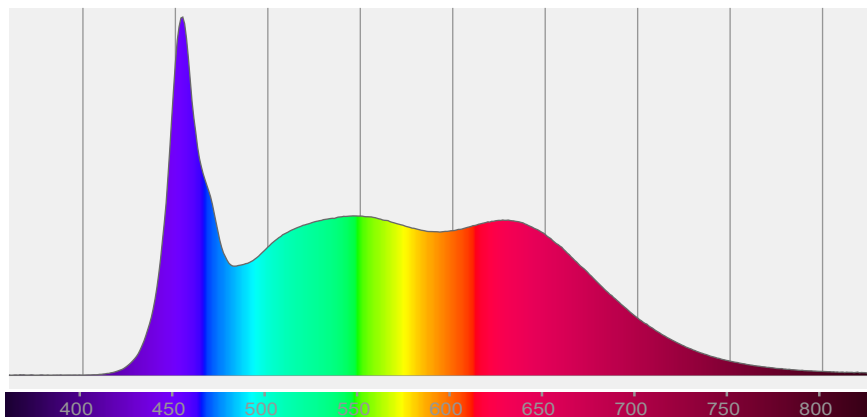
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:02:12

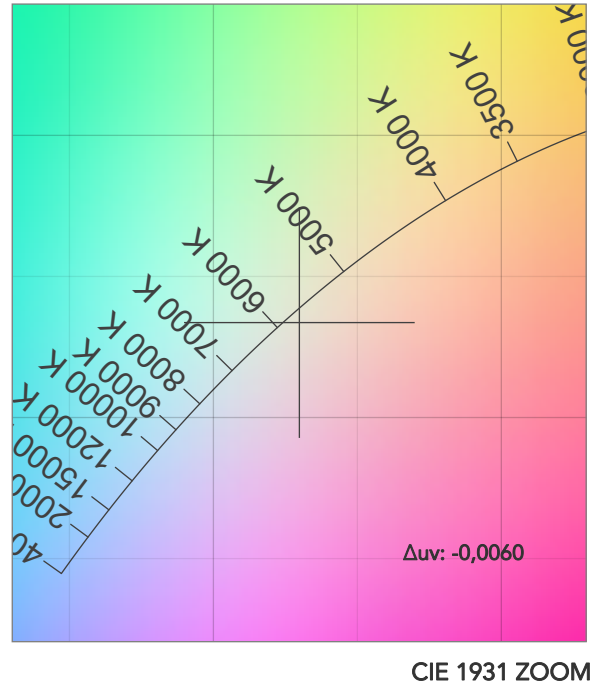
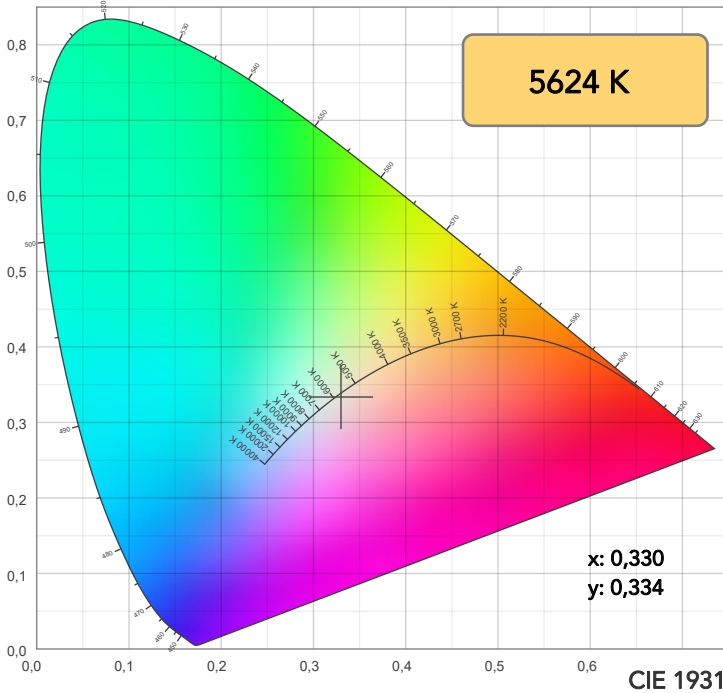


Beam angle 50%: 61,6°
Field angle 10%: 98,2°
Cut off angle 2.5%: 126,7°

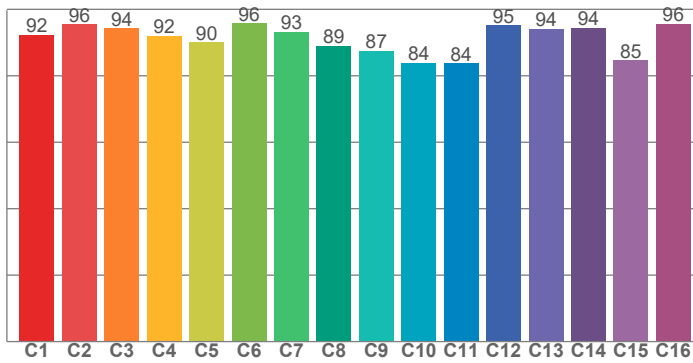
Spectra



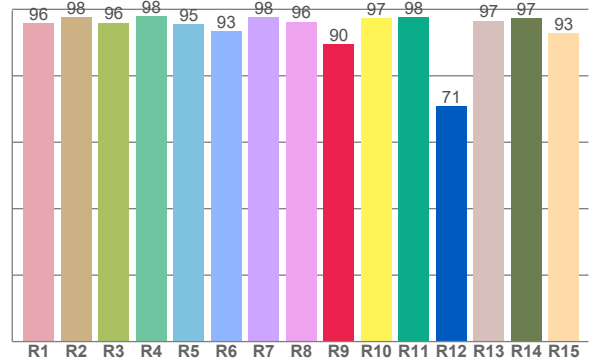
COLOR DETAILS



TM30: 91,0



CRI: 96,2 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,8 | 97,6 | 95,9 | 97,8 | 95,4 | 93,4 | 97,6 | 96,2 | 89,6 | 97,3 | 97,6 | 70,7 | 96,5 | 97,3 | 92,9 |

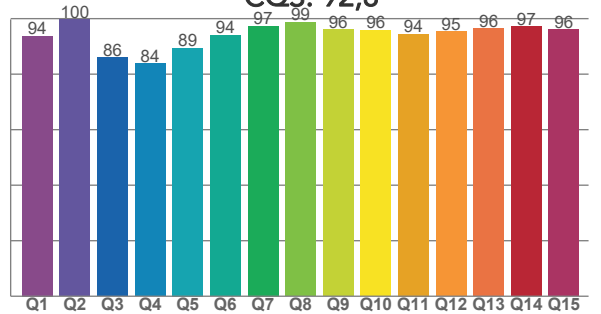
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,4 | 95,5 | 94,3 | 92,1 | 90,1 | 95,8 | 93,3 | 89,1 | 87,4 | 83,9 | 83,8 | 95,2 | 94,2 | 94,5 | 84,6 | 95,7 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,7 | 99,6 | 85,9 | 83,7 | 89,4 | 94,0 | 97,4 | 98,7 | 96,1 | 95,8 | 94,5 | 95,4 | 96,4 | 97,1 | 96,1 |

CQS: 92,8



COLOR PARAMETERS

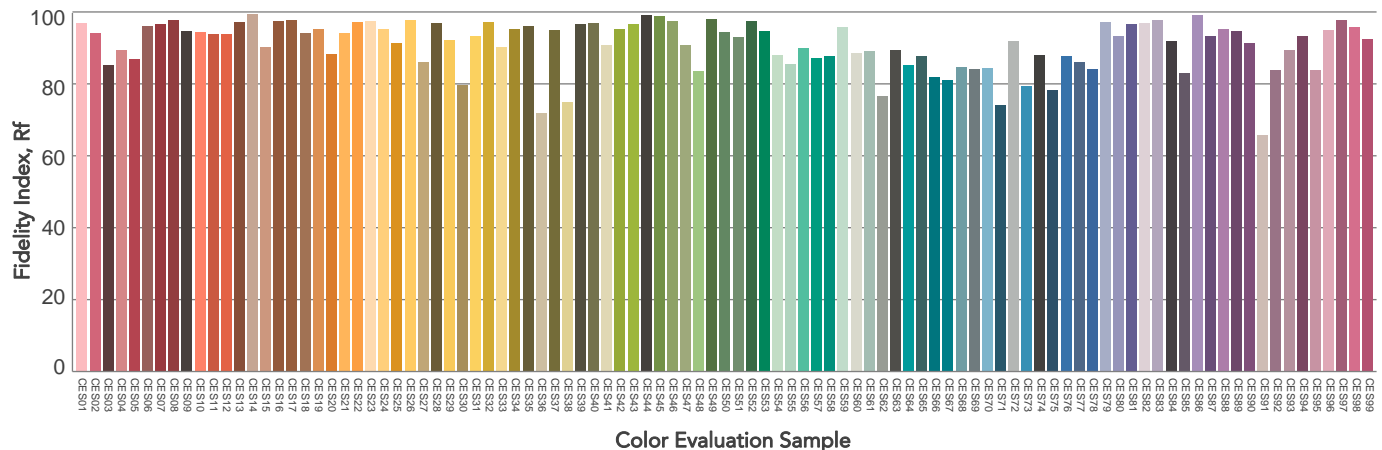
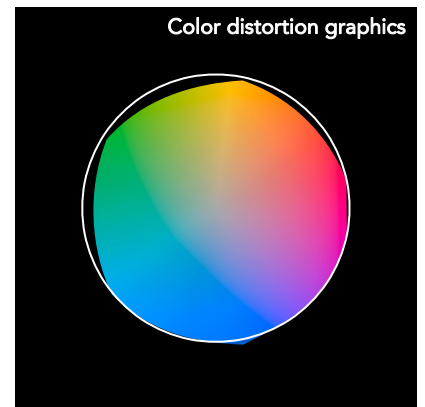
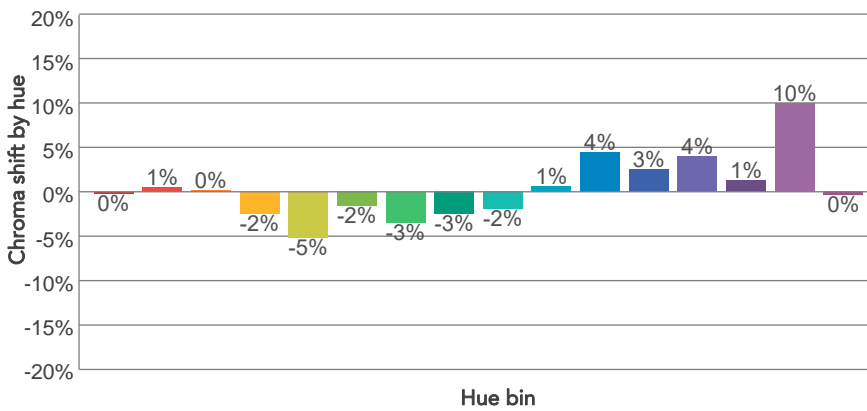
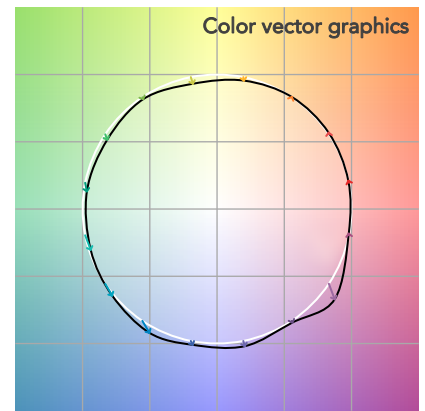
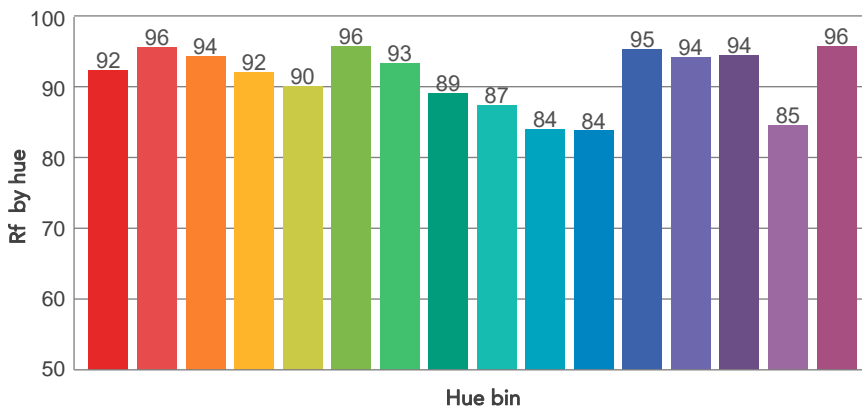
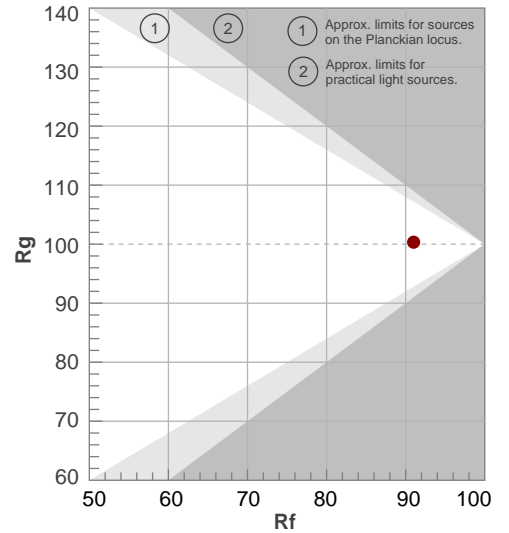
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 5624 K | 96,2 | 89,6 | 91,0 | 100,3 | 92,8 | 97 | 0,330 | 0,334 | -0,0060 |

TM30 DETAILS

Rf 91,0
Fidelity index Rf

Rg 100,3
Gammut index

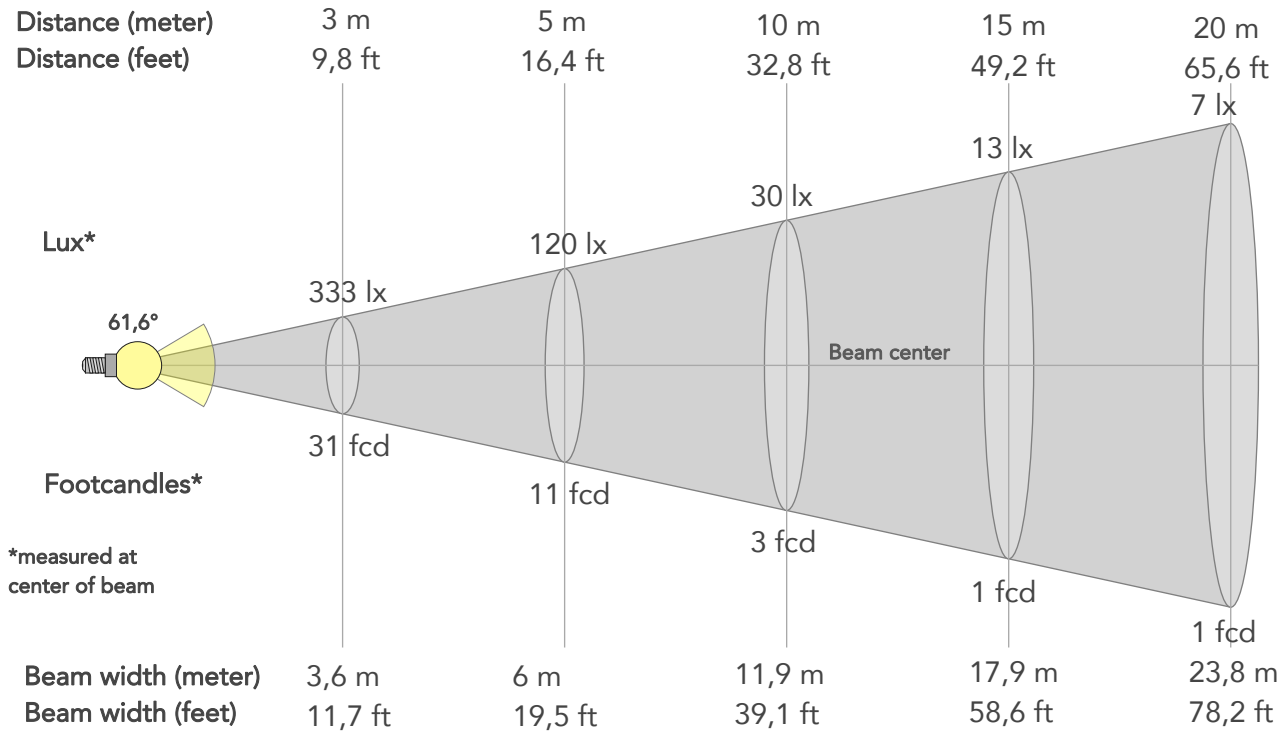
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | 0% | 2% |
| 2 | 96 | 1% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 92 | -2% | -1% |
| 5 | 90 | -5% | -1% |
| 6 | 96 | -2% | 0% |
| 7 | 93 | -3% | 2% |
| 8 | 89 | -3% | 6% |
| 9 | 87 | -2% | 11% |
| 10 | 84 | 1% | 10% |
| 11 | 84 | 4% | 9% |
| 12 | 95 | 3% | 2% |
| 13 | 94 | 4% | 0% |
| 14 | 94 | 1% | 0% |
| 15 | 85 | 10% | -7% |
| 16 | 96 | 0% | 1% |



BEAM DETAILS



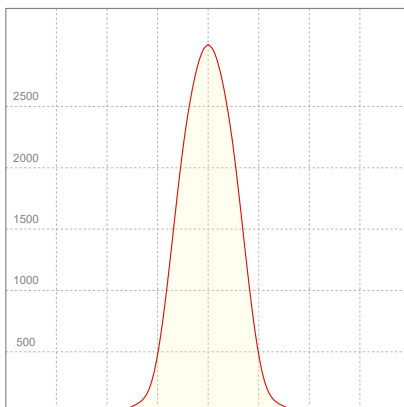
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,6° | 98,2° | 126,7° | 96,6% | 87,6% |



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 | 2999lx | 750lx | 333lx | 187lx | 120lx | 53lx | 30lx | 13lx | 7lx | 5lx | 3lx | 2lx | 1lx |
| Footcand. | 279fcd | 70fcd | 31fcd | 17fcd | 11fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,8m | 6m | 8,9m | 11,9m | 17,9m | 23,8m | 29,8m | 35,7m | 47,7m | 59,6m |
| Beam wid. | 3,9ft | 7,9ft | 11,7ft | 15,6ft | 19,5ft | 29,3ft | 39,1ft | 58,6ft | 78,2ft | 97,7ft | 117,2ft | 156,3ft | 195,4ft |

LINEAR DISTRIBUTION DIAGRAM

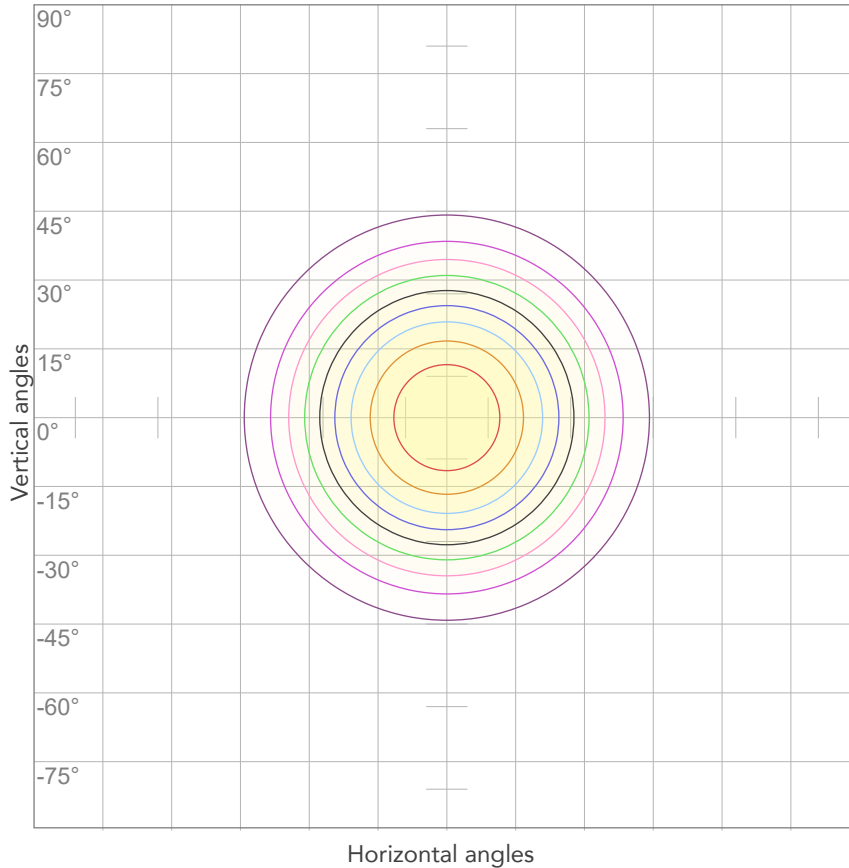


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,294A | 61,2W | 0,94 | 53lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



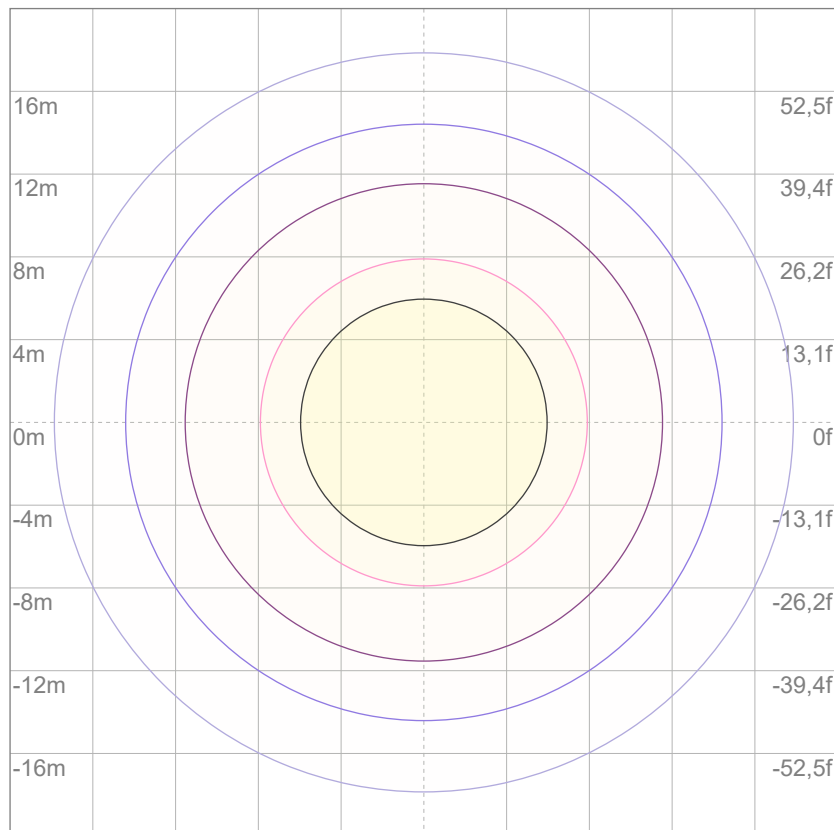
| | |
|-----|---------|
| 10% | 300 cd |
| 20% | 600 cd |
| 30% | 900 cd |
| 40% | 1200 cd |
| 50% | 1499 cd |
| 60% | 1799 cd |
| 70% | 2099 cd |
| 80% | 2399 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2999 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,900 lx |
| 5% | 1,50 lx |
| 10% | 3,00 lx |
| 30% | 9,00 lx |
| 50% | 15,0 lx |

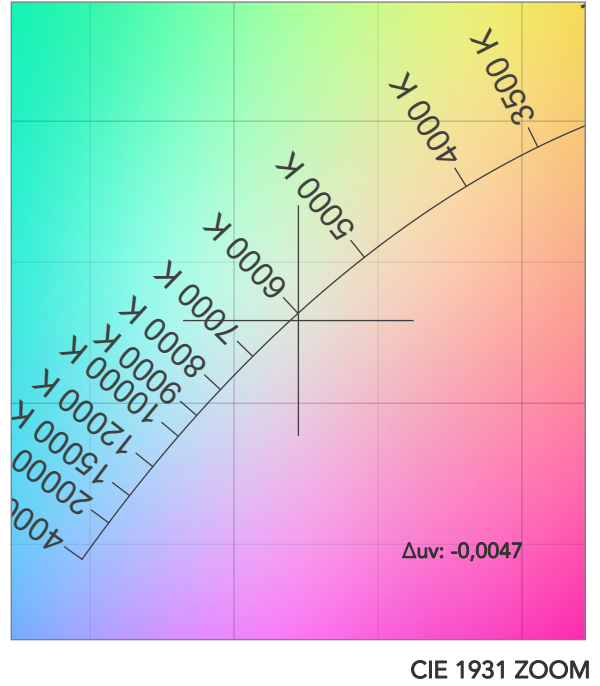
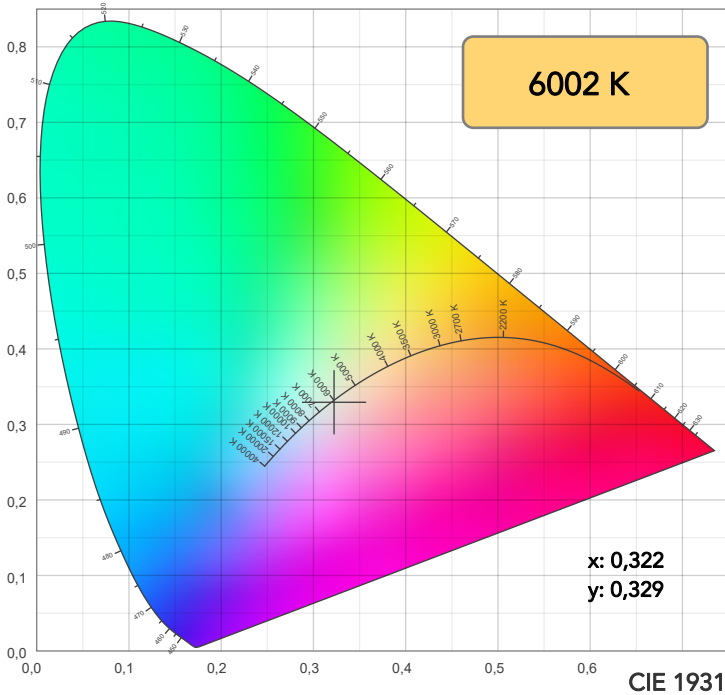
Conditions:

Number of c-planes: 2

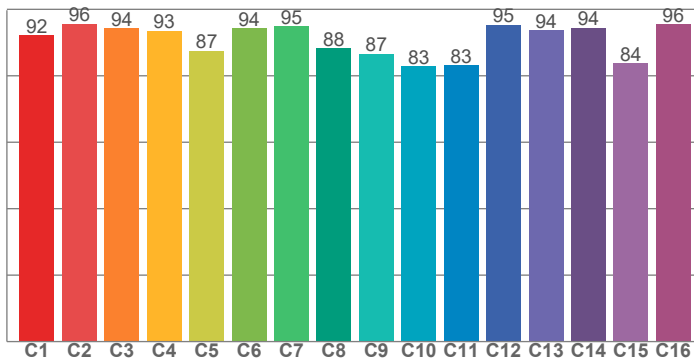
Lux at center: 30,0 lx

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

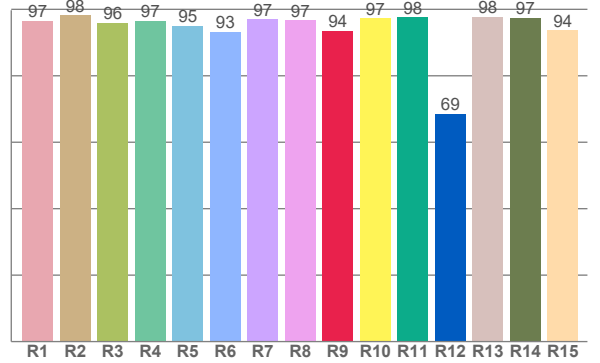
COLOR DETAILS



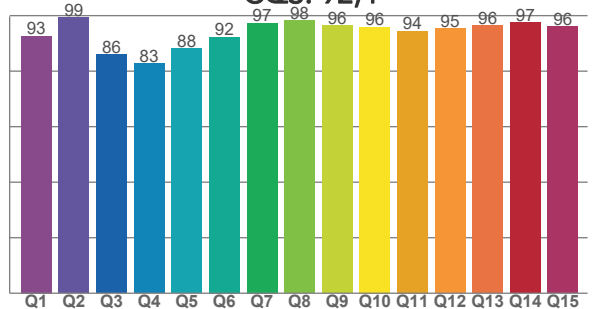
TM30: 90,5



CRI: 96,2 (R1-R8)



CQS: 92,4



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,5 | 98,3 | 95,9 | 96,6 | 95,1 | 93,2 | 97,0 | 96,6 | 93,6 | 97,2 | 97,6 | 68,5 | 97,8 | 97,4 | 93,6 |

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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 95,6 | 94,2 | 93,5 | 87,5 | 94,3 | 94,8 | 88,2 | 86,5 | 82,8 | 83,1 | 95,3 | 93,6 | 94,4 | 83,8 | 95,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,7 | 99,3 | 85,9 | 82,8 | 88,1 | 92,4 | 97,3 | 98,2 | 96,5 | 95,9 | 94,4 | 95,4 | 96,5 | 97,5 | 96,1 |

COLOR PARAMETERS

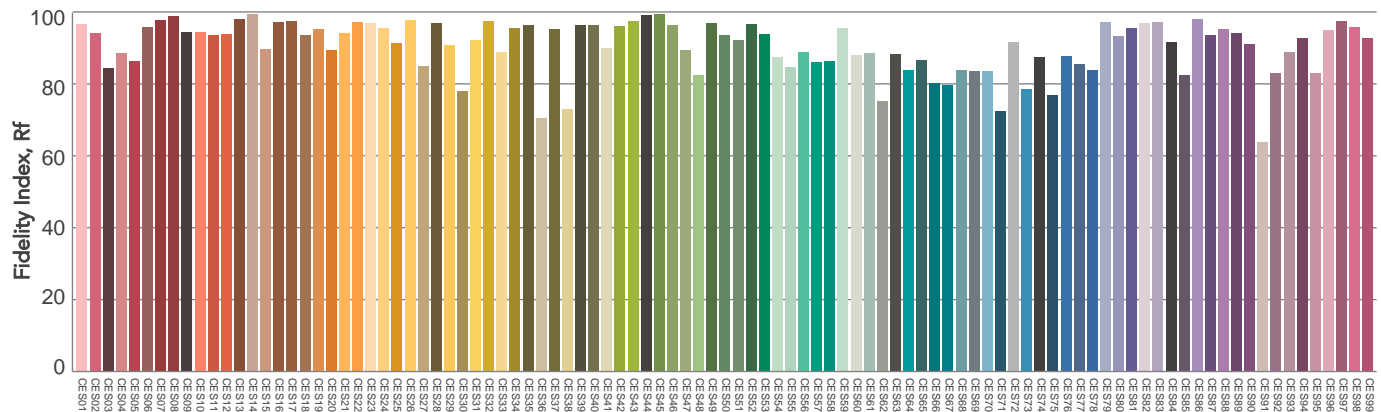
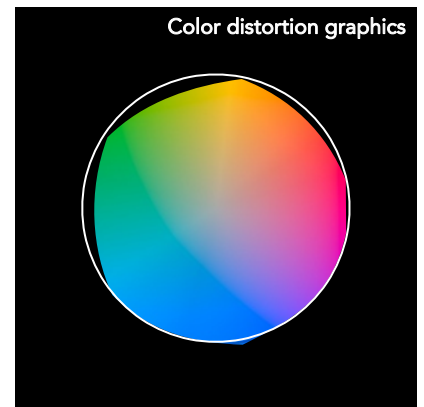
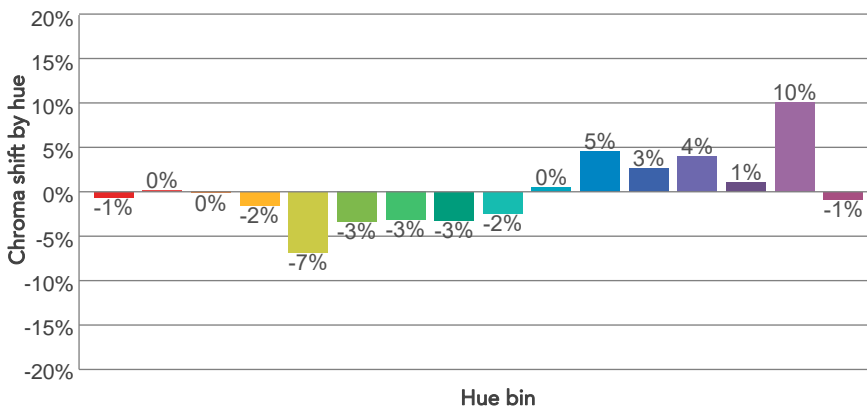
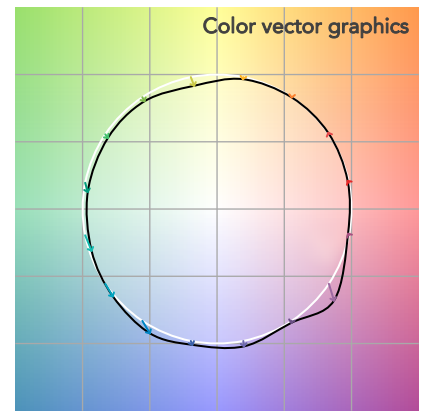
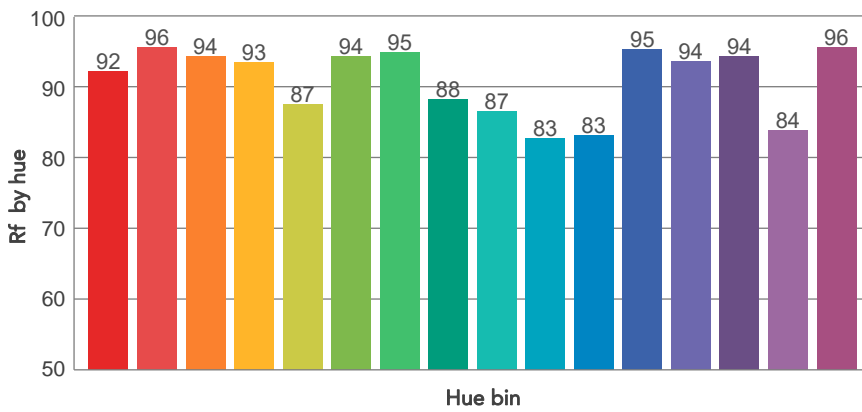
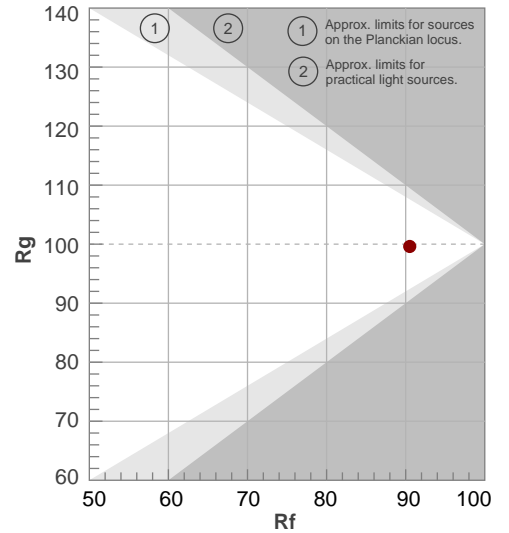
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6002 K | 96,2 | 93,6 | 90,5 | 99,6 | 92,4 | 96 | 0,322 | 0,329 | -0,0047 |

TM30 DETAILS

Rf 90,5
Fidelity index Rf

Rg 99,6
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -3% | 0% |
| 7 | 95 | -3% | 1% |
| 8 | 88 | -3% | 6% |
| 9 | 87 | -2% | 12% |
| 10 | 83 | 0% | 11% |
| 11 | 83 | 5% | 10% |
| 12 | 95 | 3% | 2% |
| 13 | 94 | 4% | 0% |
| 14 | 94 | 1% | -1% |
| 15 | 84 | 10% | -8% |
| 16 | 96 | -1% | 1% |

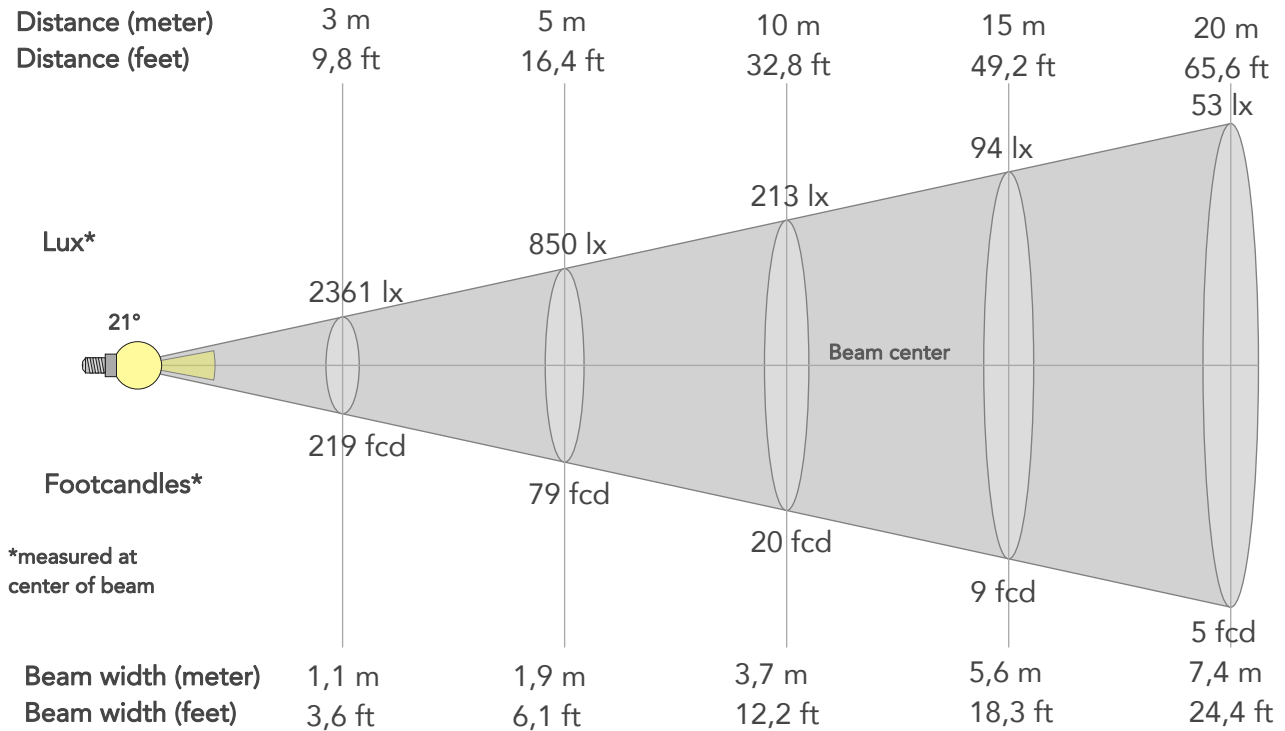


Color Evaluation Sample

BEAM DETAILS



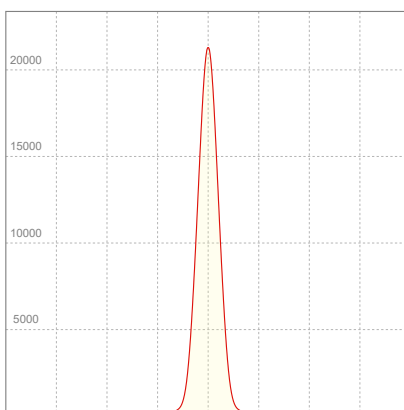
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21° | 37,9° | 49,6° | 97,8% | 95,0% |



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 | 21251lx | 5313lx | 2361lx | 1328lx | 850lx | 378lx | 213lx | 94lx | 53lx | 34lx | 24lx | 13lx | 9lx |
| Footcand. | 1974fcd | 494fcd | 219fcd | 123fcd | 79fcd | 35fcd | 20fcd | 9fcd | 5fcd | 3fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,1m | 14,8m | 18,6m |
| Beam wid. | 1,2ft | 2,4ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,3ft | 24,4ft | 30,4ft | 36,5ft | 48,7ft | 60,9ft |

LINEAR DISTRIBUTION DIAGRAM

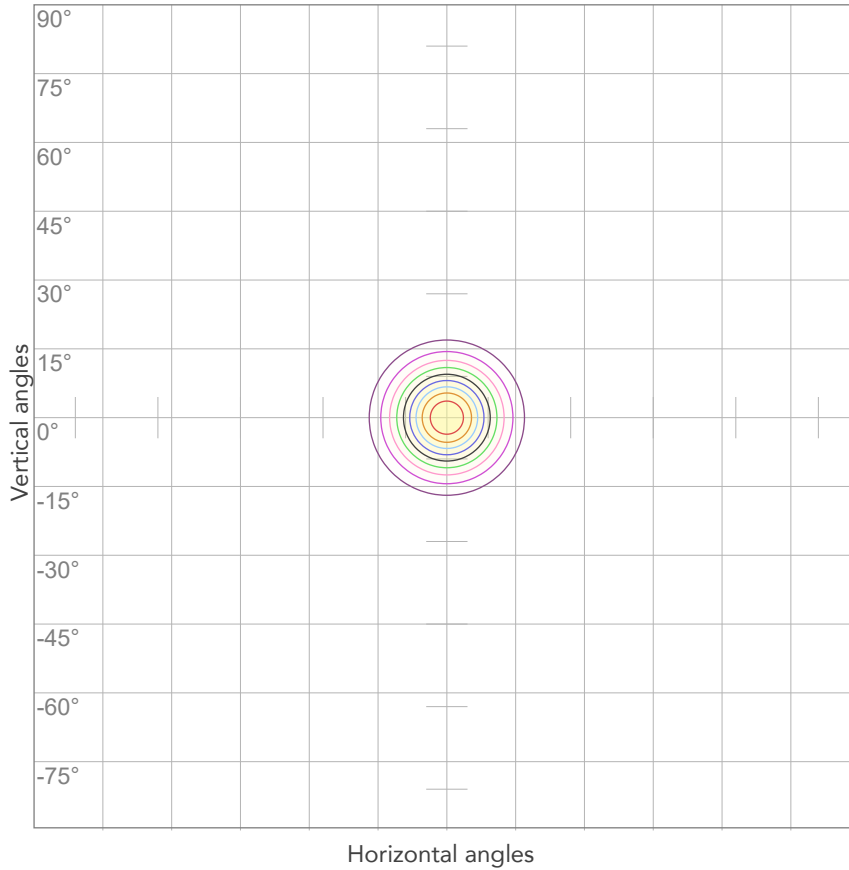


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 224V | 0,293A | 61,4W | 0,94 | 58lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



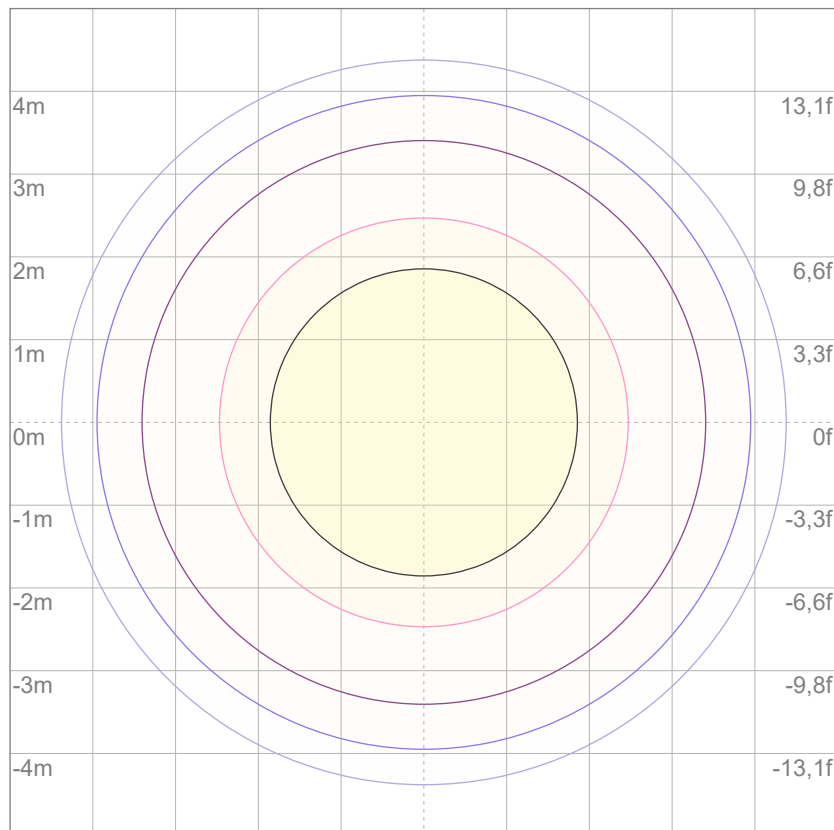
| | |
|-----|----------|
| 10% | 2125 cd |
| 20% | 4250 cd |
| 30% | 6375 cd |
| 40% | 8500 cd |
| 50% | 10625 cd |
| 60% | 12750 cd |
| 70% | 14875 cd |
| 80% | 17001 cd |

Conditions:

Number of c-planes: 2

Candela at center: 21251 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 6,38 lx |
| 5% | 10,6 lx |
| 10% | 21,3 lx |
| 30% | 63,8 lx |
| 50% | 106 lx |

Conditions:

Number of c-planes: 2

Lux at center: 213 lx

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



Total lumen output:

3562 lm

Peak candela output:

6315 cd

Light quality:

CRI: 96,1

Color temperature:

6018 K

PRODUCT NAME:
ECLPENDANTS VW

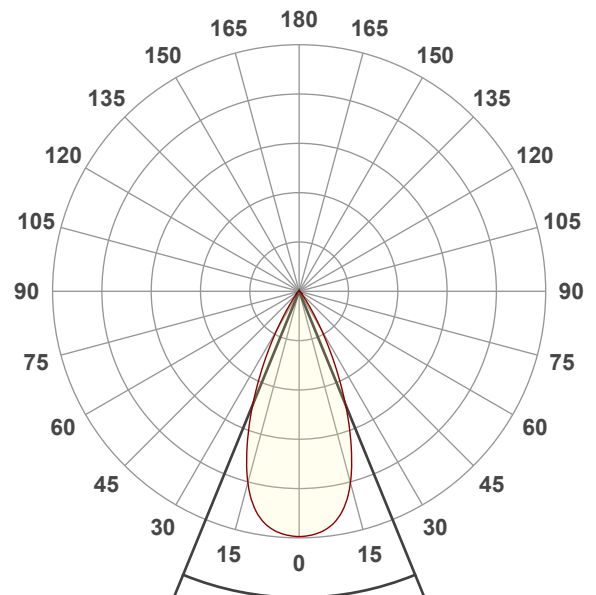
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
6000K

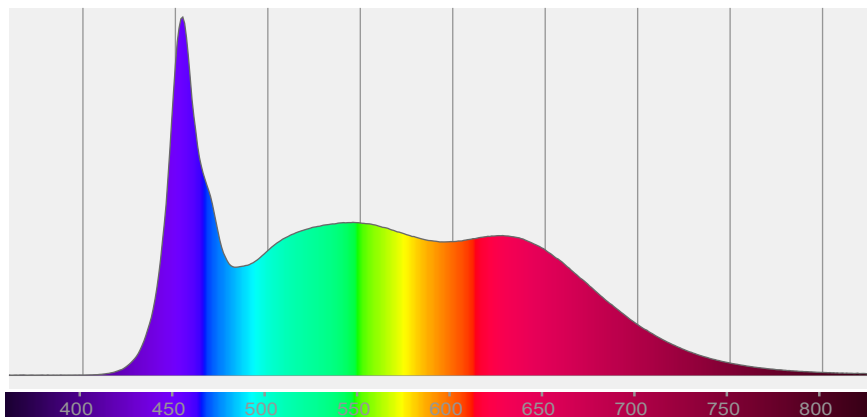
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:37:42

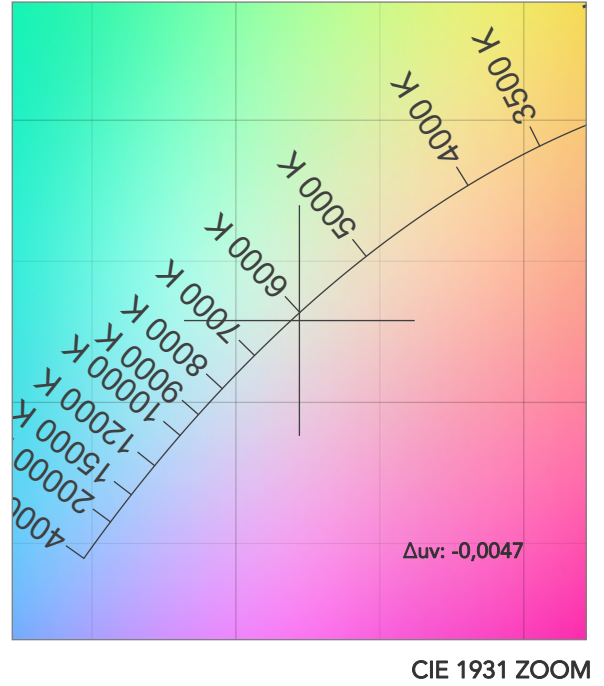
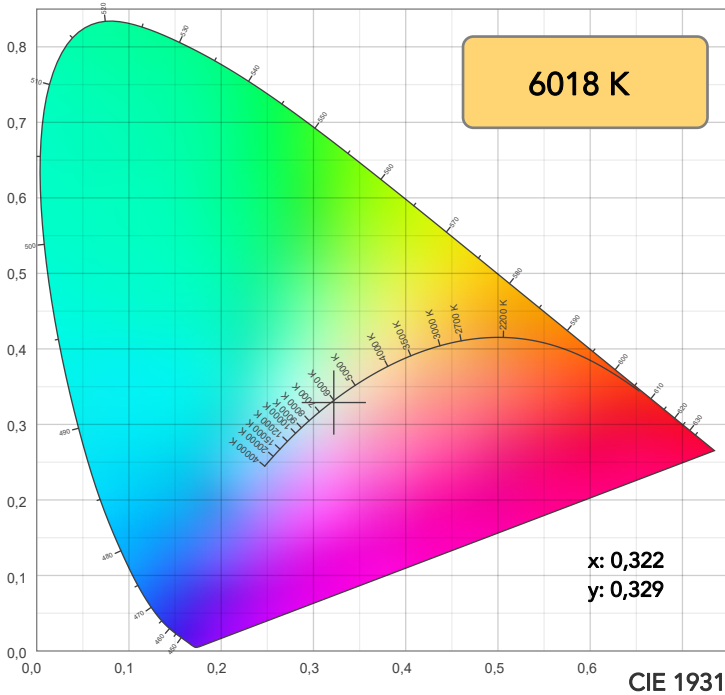


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,3°

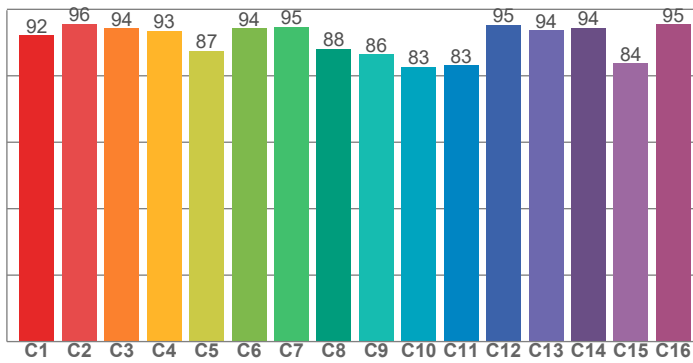
Spectra



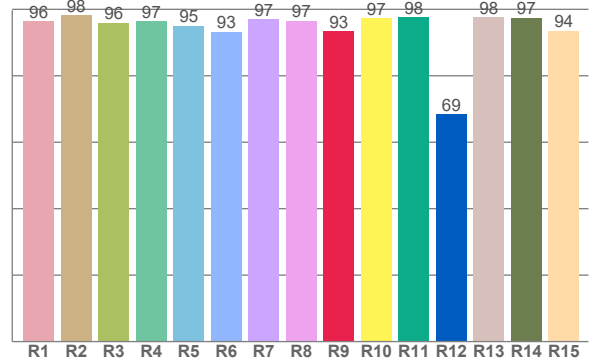
COLOR DETAILS



TM30: 90,5



CRI: 96,1 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,5 | 98,2 | 96,0 | 96,5 | 95,0 | 93,2 | 97,0 | 96,5 | 93,3 | 97,3 | 97,6 | 68,5 | 97,7 | 97,5 | 93,5 |

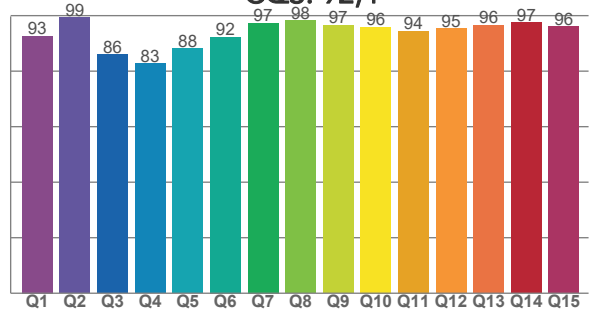
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 95,6 | 94,3 | 93,5 | 87,4 | 94,2 | 94,8 | 88,1 | 86,5 | 82,7 | 83,1 | 95,4 | 93,6 | 94,4 | 83,8 | 95,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,6 | 99,3 | 86,0 | 82,8 | 88,1 | 92,3 | 97,4 | 98,3 | 96,5 | 96,0 | 94,5 | 95,4 | 96,5 | 97,4 | 96,0 |

CQS: 92,4



COLOR PARAMETERS

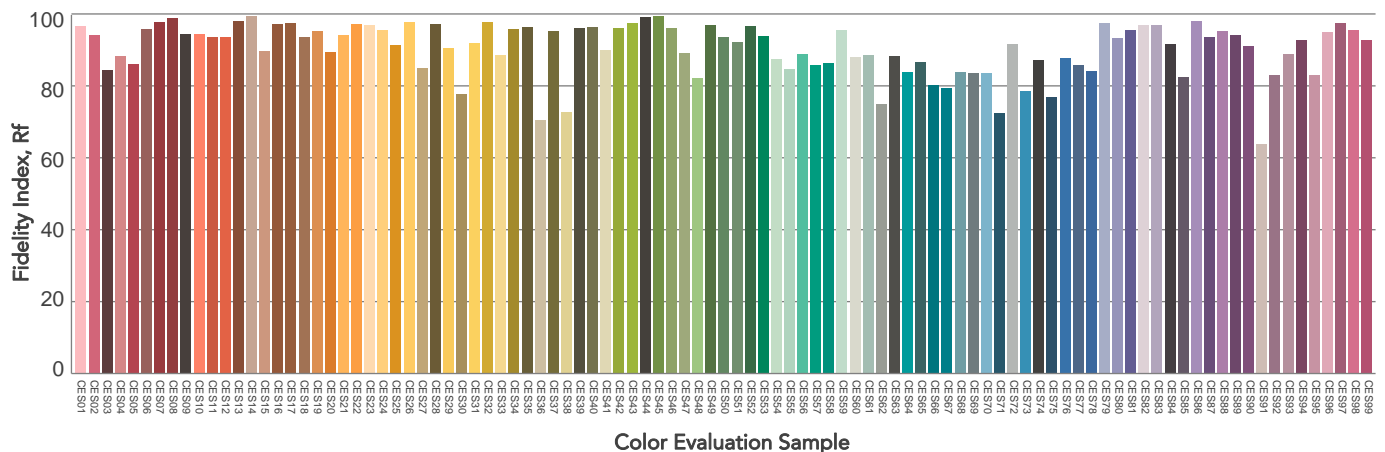
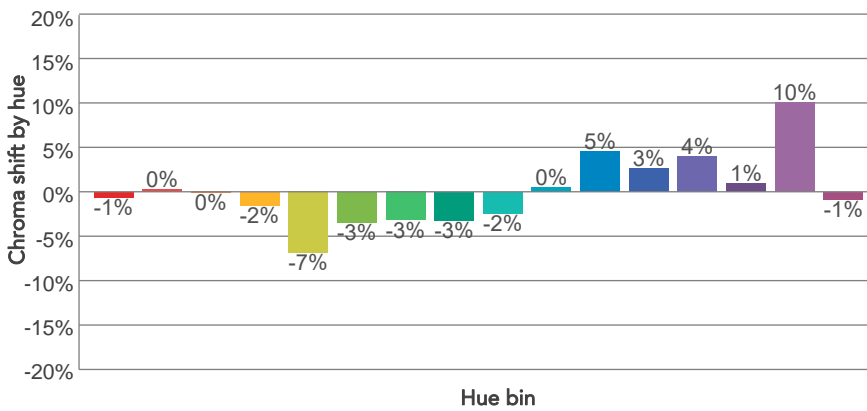
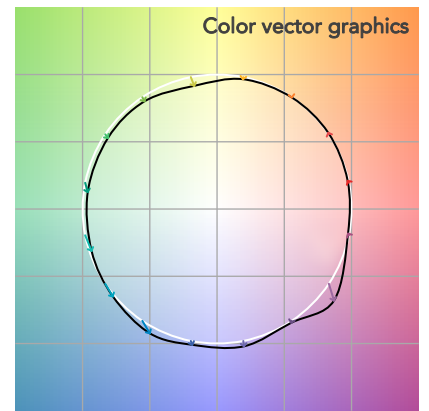
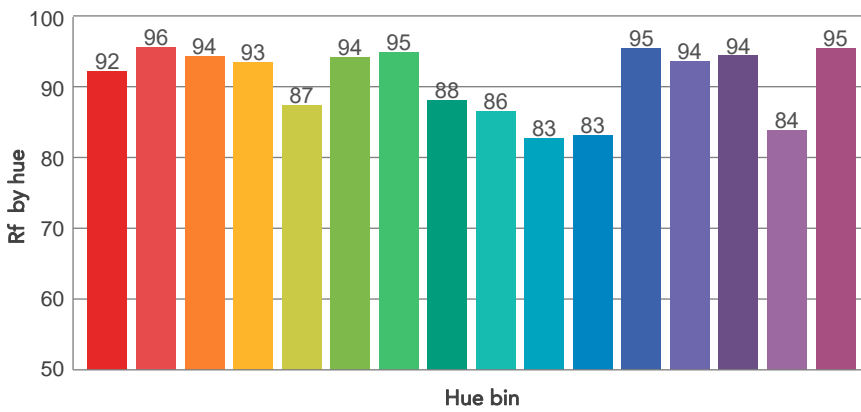
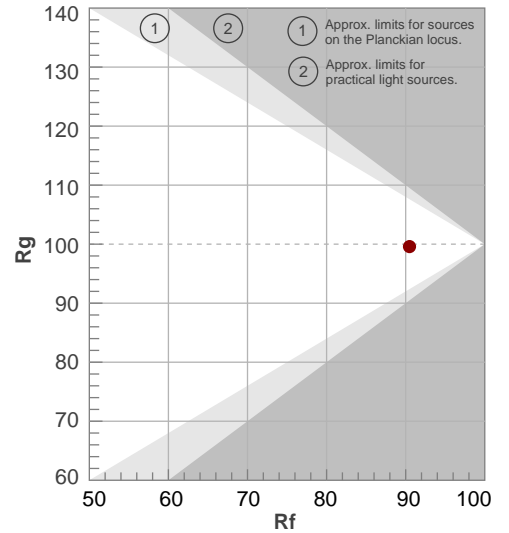
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6018 K | 96,1 | 93,3 | 90,5 | 99,6 | 92,4 | 96 | 0,322 | 0,329 | -0,0047 |

TM30 DETAILS

Rf 90,5
Fidelity index Rf

Rg 99,6
Gammut index

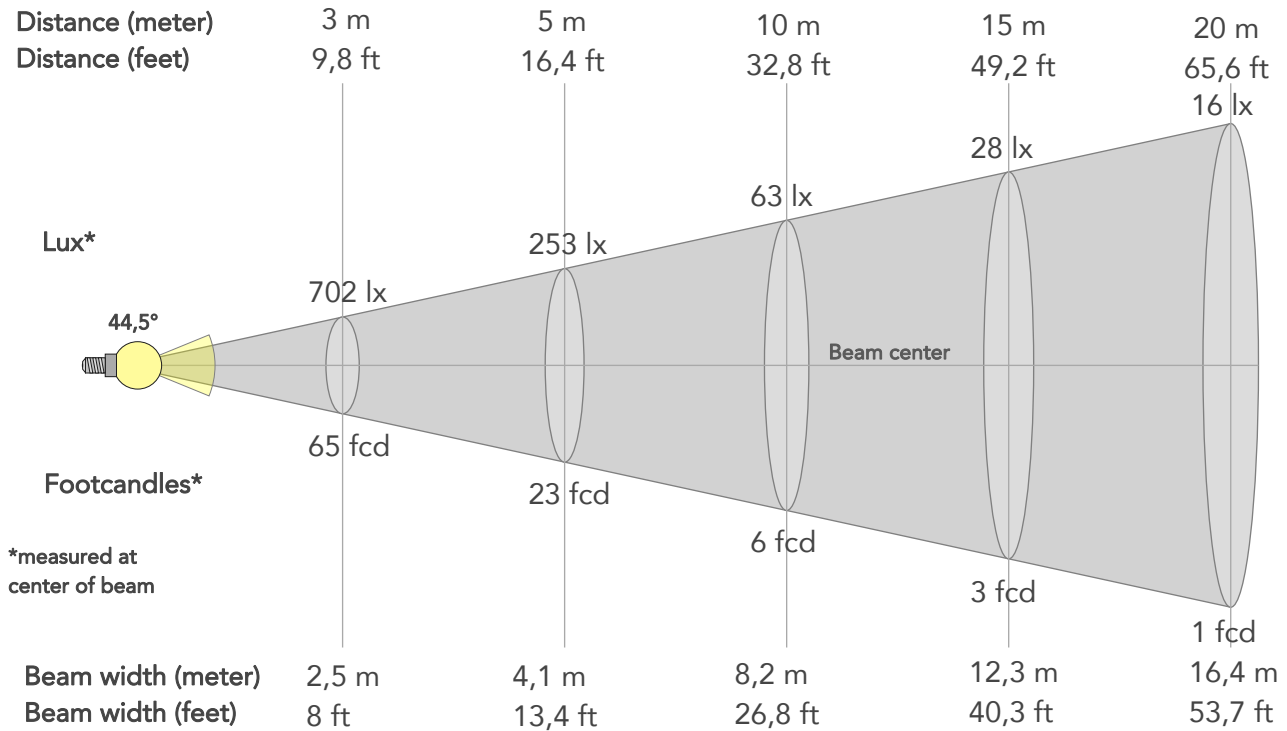
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -3% | 0% |
| 7 | 95 | -3% | 1% |
| 8 | 88 | -3% | 6% |
| 9 | 86 | -2% | 12% |
| 10 | 83 | 0% | 11% |
| 11 | 83 | 5% | 10% |
| 12 | 95 | 3% | 2% |
| 13 | 94 | 4% | 0% |
| 14 | 94 | 1% | -1% |
| 15 | 84 | 10% | -8% |
| 16 | 95 | -1% | 1% |



BEAM DETAILS



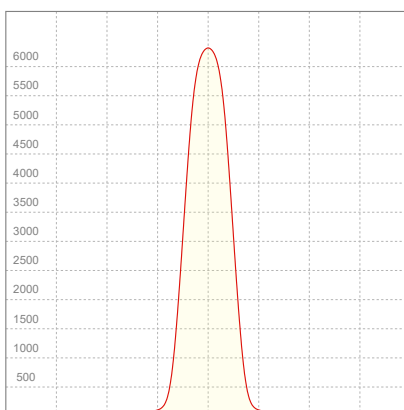
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,3° | 98,3% | 95,6% |



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 | 6315lx | 1579lx | 702lx | 395lx | 253lx | 112lx | 63lx | 28lx | 16lx | 10lx | 7lx | 4lx | 3lx |
| Footcand. | 587fcd | 147fcd | 65fcd | 37fcd | 23fcd | 10fcd | 6fcd | 3fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,6m | 32,7m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,8ft | 40,3ft | 53,7ft | 67,1ft | 80,5ft | 107,4ft | 134,2ft |

LINEAR DISTRIBUTION DIAGRAM

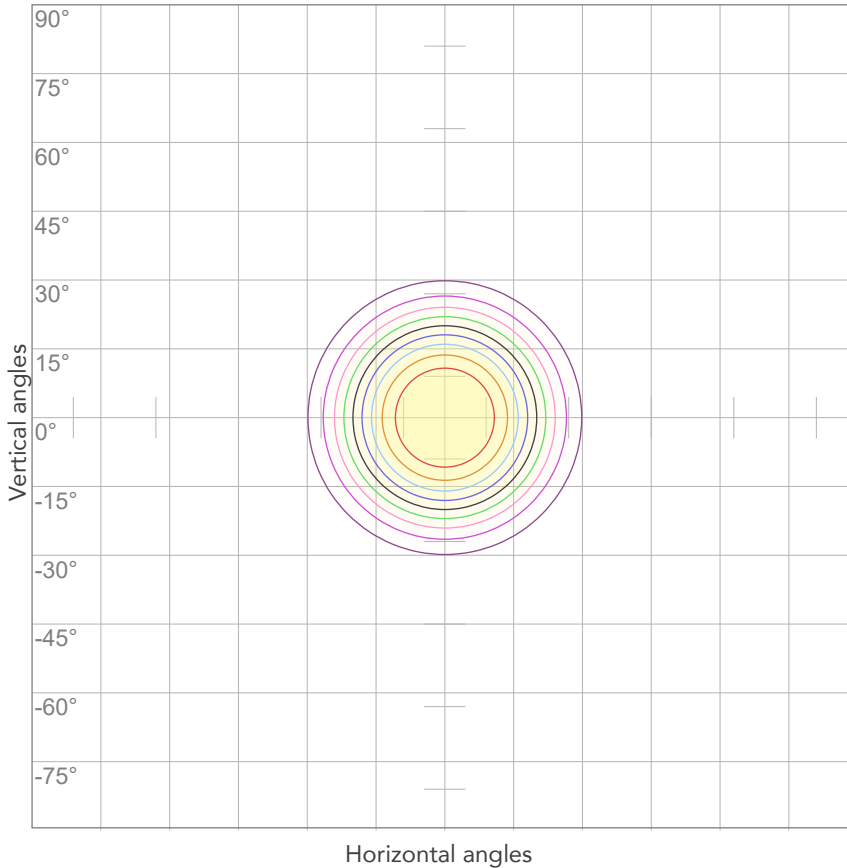


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 223V | 0,293A | 61,2W | 0,94 | 58lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



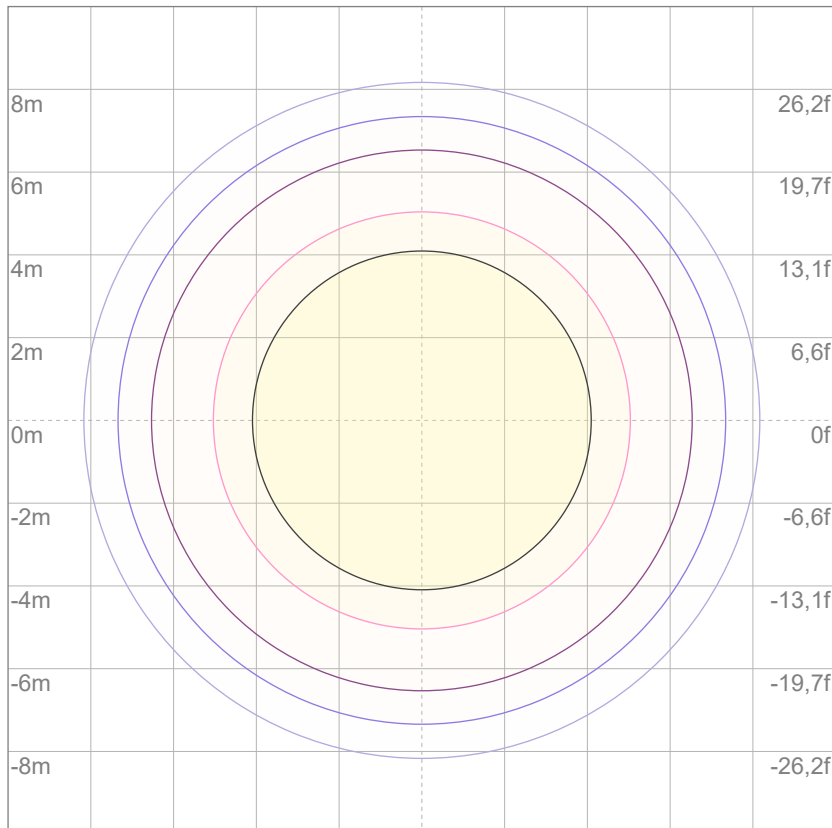
| | |
|-----|---------|
| 10% | 631 cd |
| 20% | 1263 cd |
| 30% | 1894 cd |
| 40% | 2526 cd |
| 50% | 3157 cd |
| 60% | 3789 cd |
| 70% | 4420 cd |
| 80% | 5052 cd |

Conditions:

Number of c-planes: 2

Candela at center: 6315 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,89 lx |
| 5% | 3,16 lx |
| 10% | 6,31 lx |
| 30% | 18,9 lx |
| 50% | 31,6 lx |

Conditions:

Number of c-planes: 2

Lux at center: 63,1 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:

3303 lm

Peak candela output:

3059 cd

Light quality:

CRI: 96,1

Color temperature:

6019 K

PRODUCT NAME:
ECLPENDANTS VW

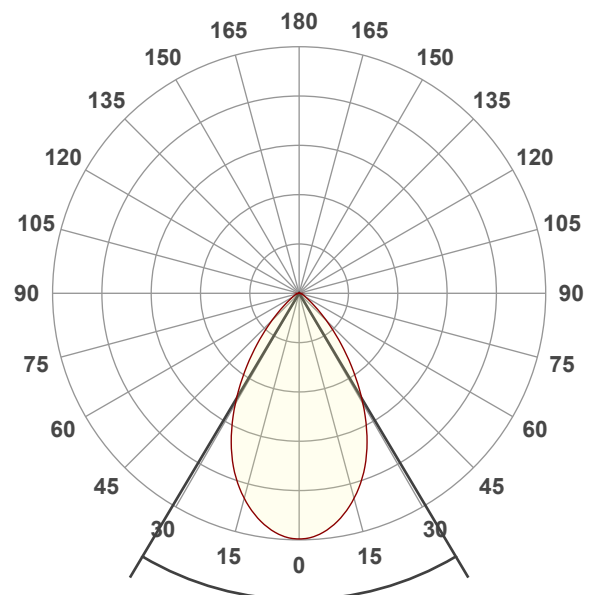
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
6000K

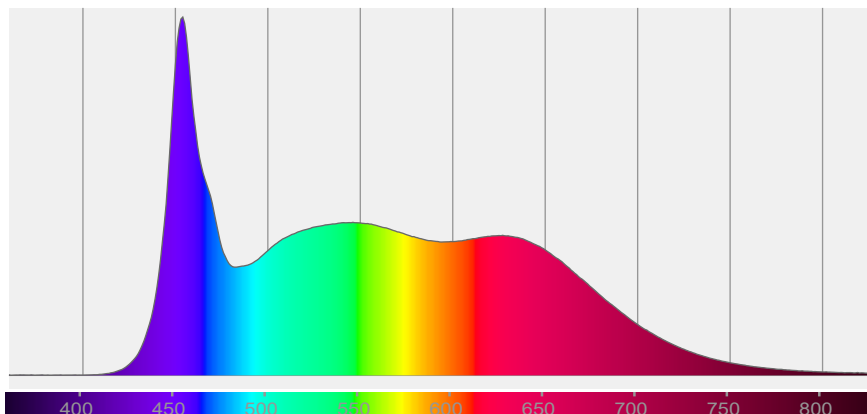
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:03:57

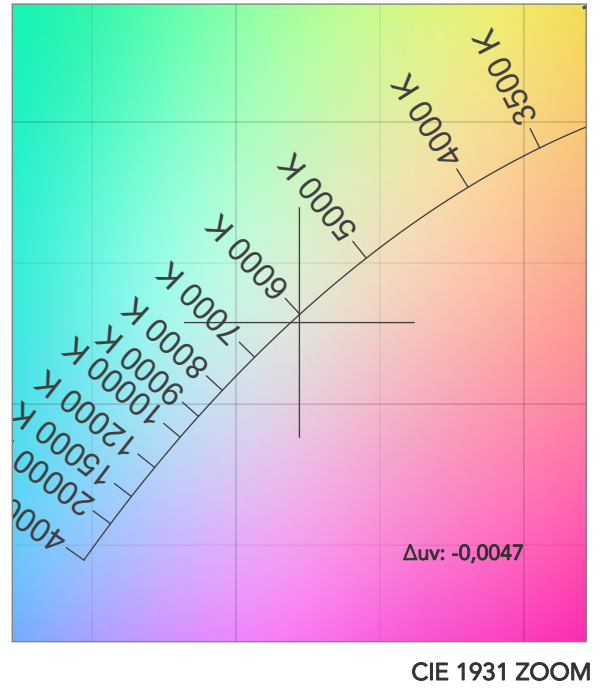
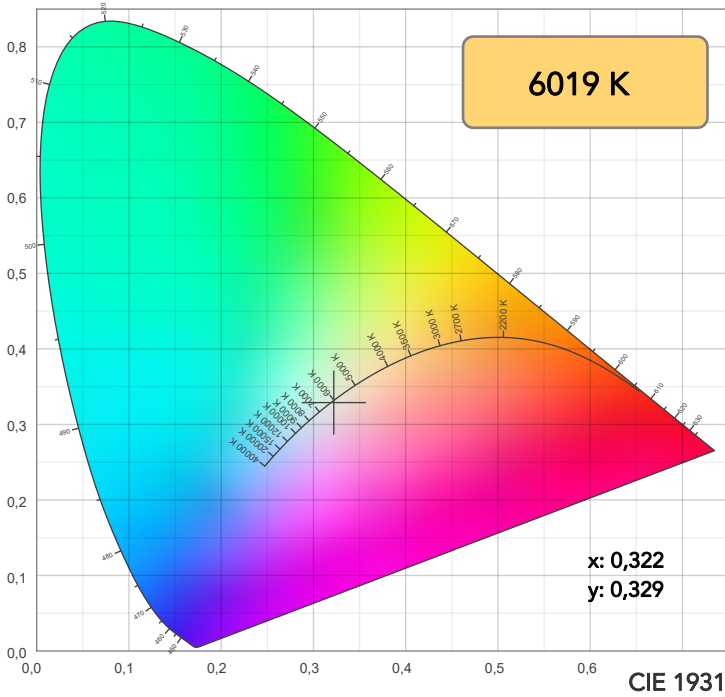


Beam angle 50%: 61,5°
Field angle 10%: 98,2°
Cut off angle 2.5%: 126,5°

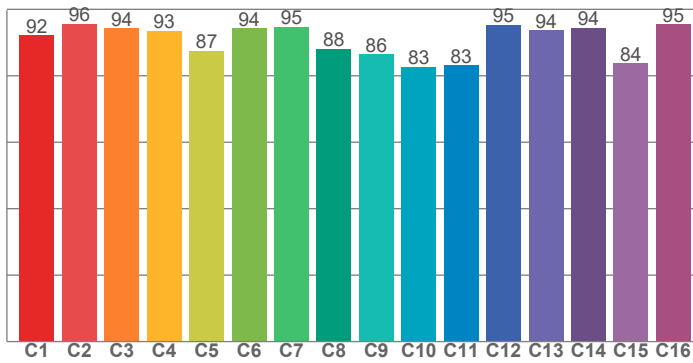
Spectra



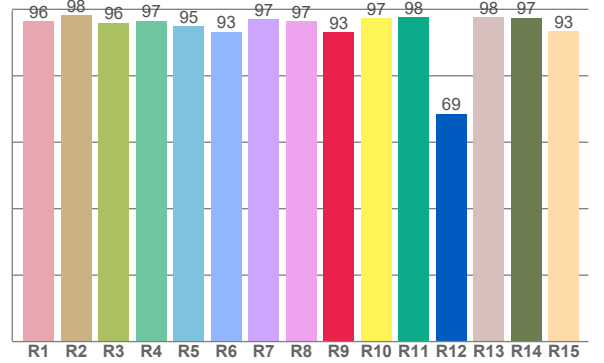
COLOR DETAILS



TM30: 90,5



CRI: 96,1 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,4 | 98,2 | 96,0 | 96,5 | 95,0 | 93,3 | 96,9 | 96,5 | 93,1 | 97,3 | 97,6 | 68,5 | 97,6 | 97,5 | 93,5 |

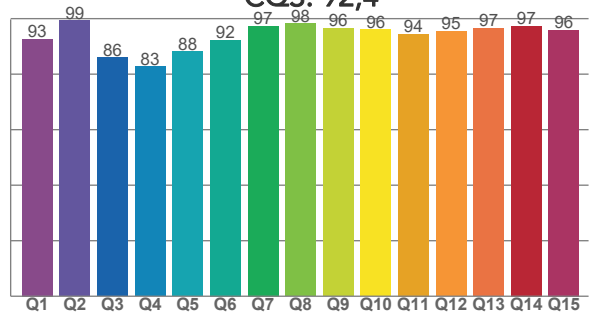
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,1 | 95,6 | 94,3 | 93,5 | 87,4 | 94,2 | 94,8 | 88,1 | 86,5 | 82,8 | 83,1 | 95,4 | 93,6 | 94,4 | 83,8 | 95,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,6 | 99,3 | 86,0 | 82,8 | 88,1 | 92,3 | 97,4 | 98,3 | 96,5 | 96,0 | 94,5 | 95,4 | 96,5 | 97,4 | 96,0 |

CQS: 92,4



COLOR PARAMETERS

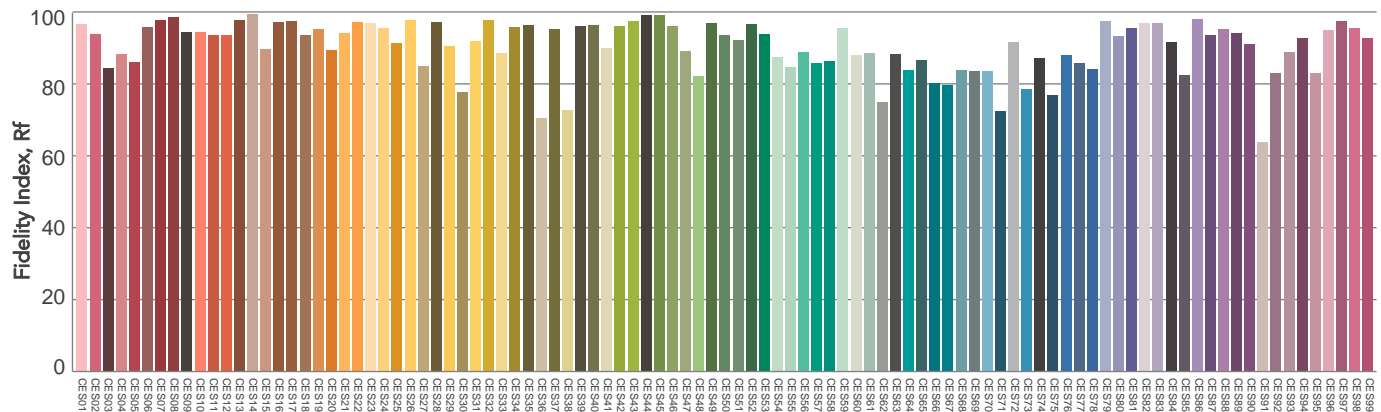
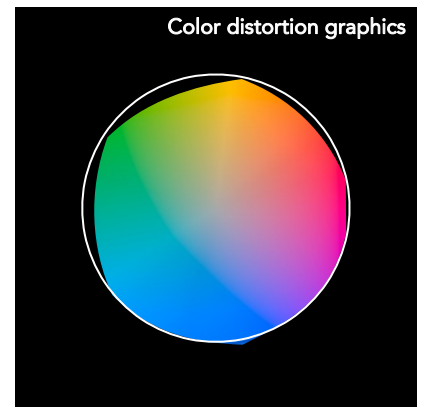
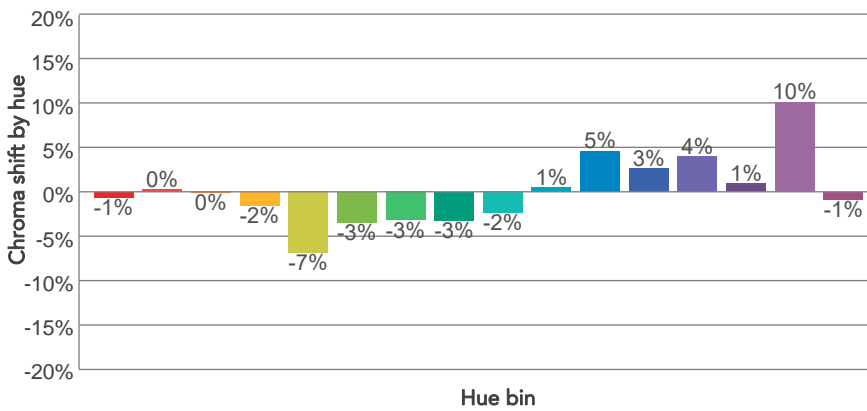
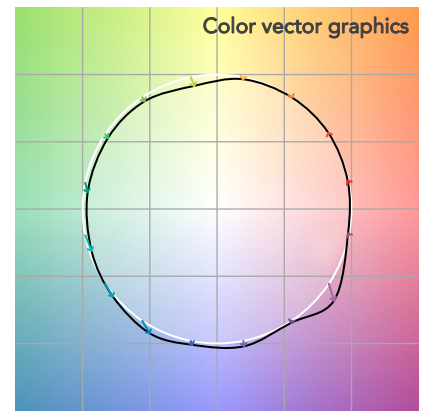
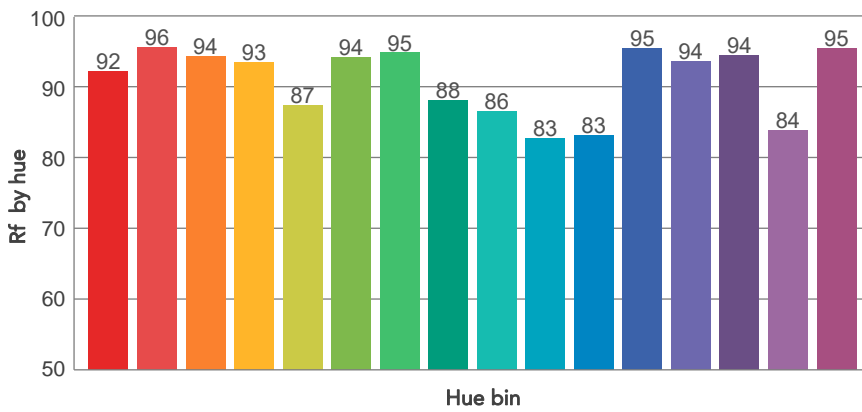
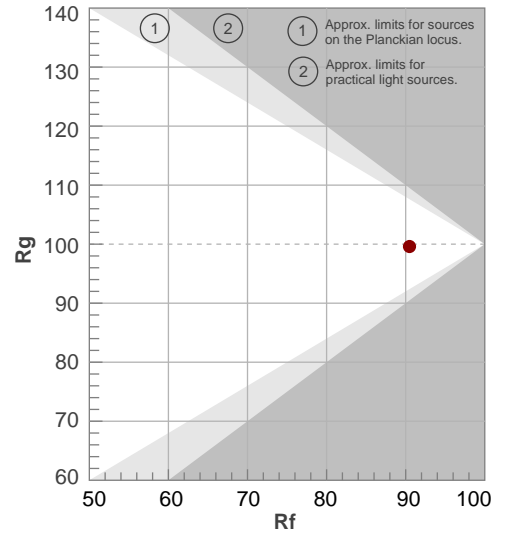
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6019 K | 96,1 | 93,1 | 90,5 | 99,6 | 92,4 | 96 | 0,322 | 0,329 | -0,0047 |

TM30 DETAILS

Rf 90,5
Fidelity index Rf

Rg 99,6
Gammut index

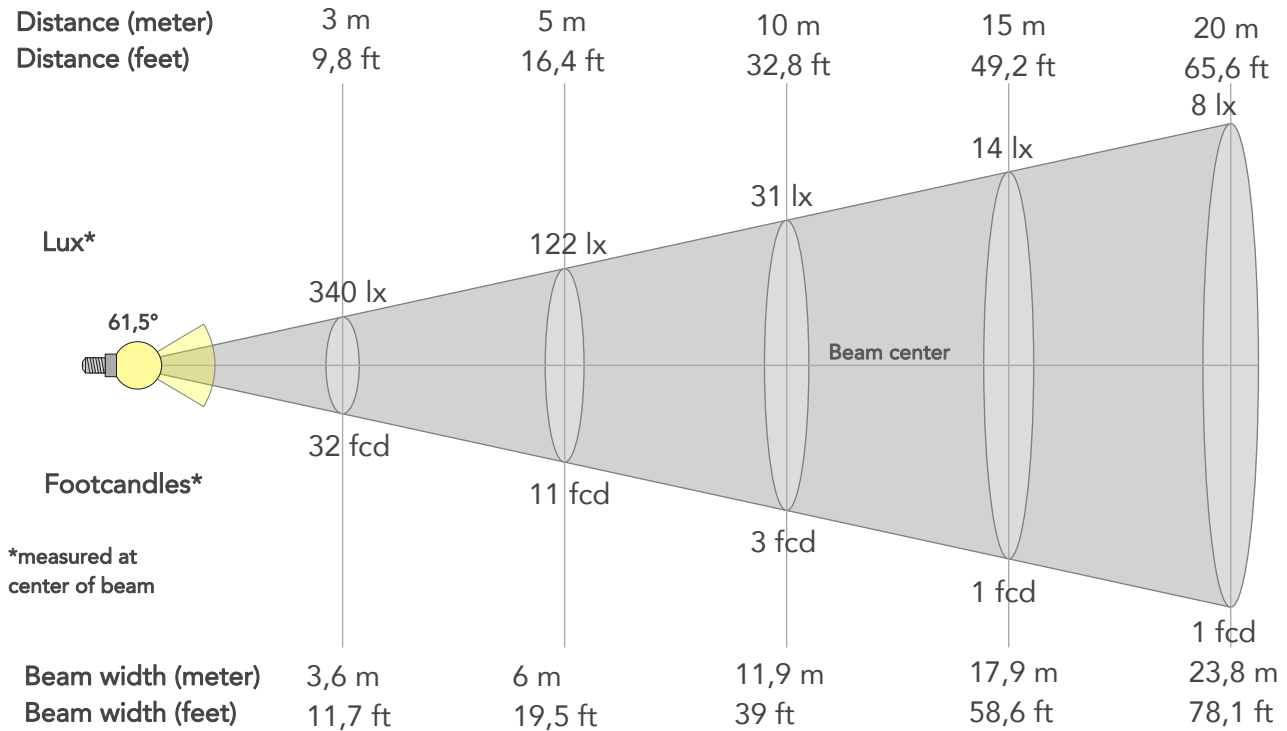
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -3% | 0% |
| 7 | 95 | -3% | 1% |
| 8 | 88 | -3% | 6% |
| 9 | 86 | -2% | 12% |
| 10 | 83 | 1% | 11% |
| 11 | 83 | 5% | 10% |
| 12 | 95 | 3% | 2% |
| 13 | 94 | 4% | 0% |
| 14 | 94 | 1% | -1% |
| 15 | 84 | 10% | -8% |
| 16 | 95 | -1% | 1% |



BEAM DETAILS



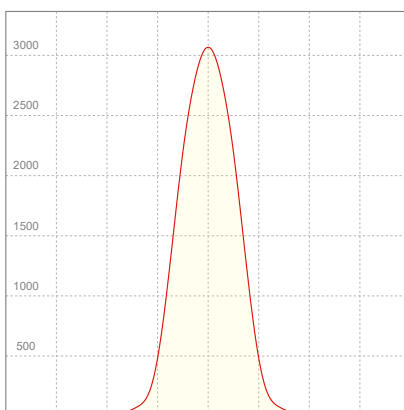
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,5° | 98,2° | 126,5° | 96,6% | 87,9% |



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 | 3059lx | 765lx | 340lx | 191lx | 122lx | 54lx | 31lx | 14lx | 8lx | 5lx | 3lx | 2lx | 1lx |
| Footcand. | 284fcd | 71fcd | 32fcd | 18fcd | 11fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,8m | 6m | 8,9m | 11,9m | 17,9m | 23,8m | 29,8m | 35,7m | 47,6m | 59,5m |
| Beam wid. | 3,9ft | 7,9ft | 11,7ft | 15,6ft | 19,5ft | 29,3ft | 39ft | 58,6ft | 78,1ft | 97,6ft | 117,1ft | 156,2ft | 195,2ft |

LINEAR DISTRIBUTION DIAGRAM

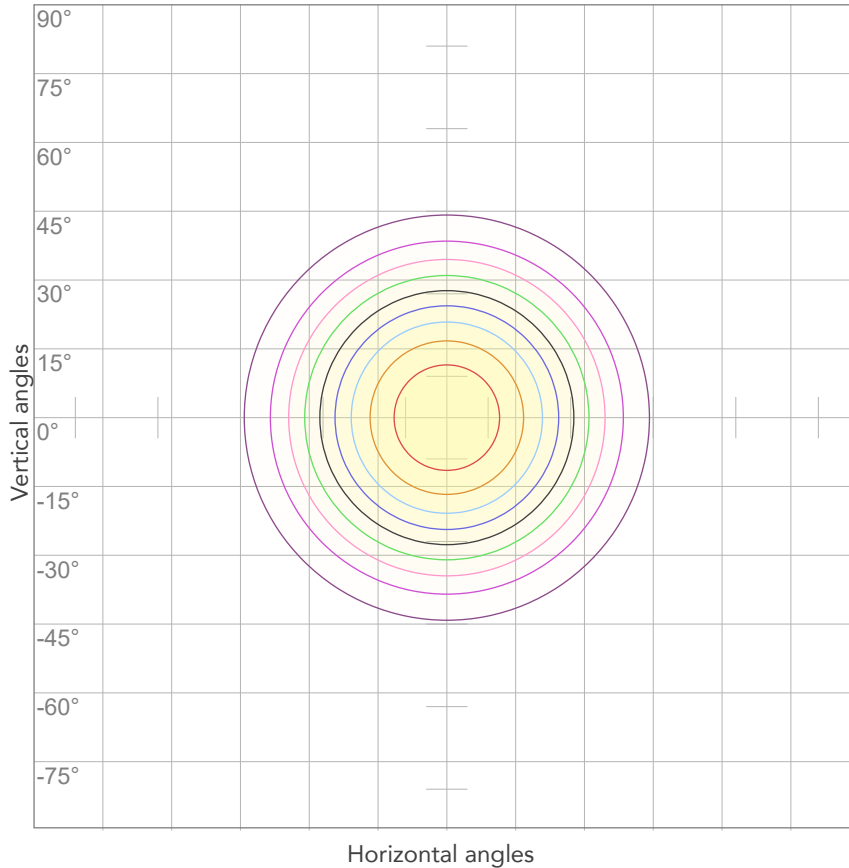


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,294A | 61,1W | 0,94 | 54lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



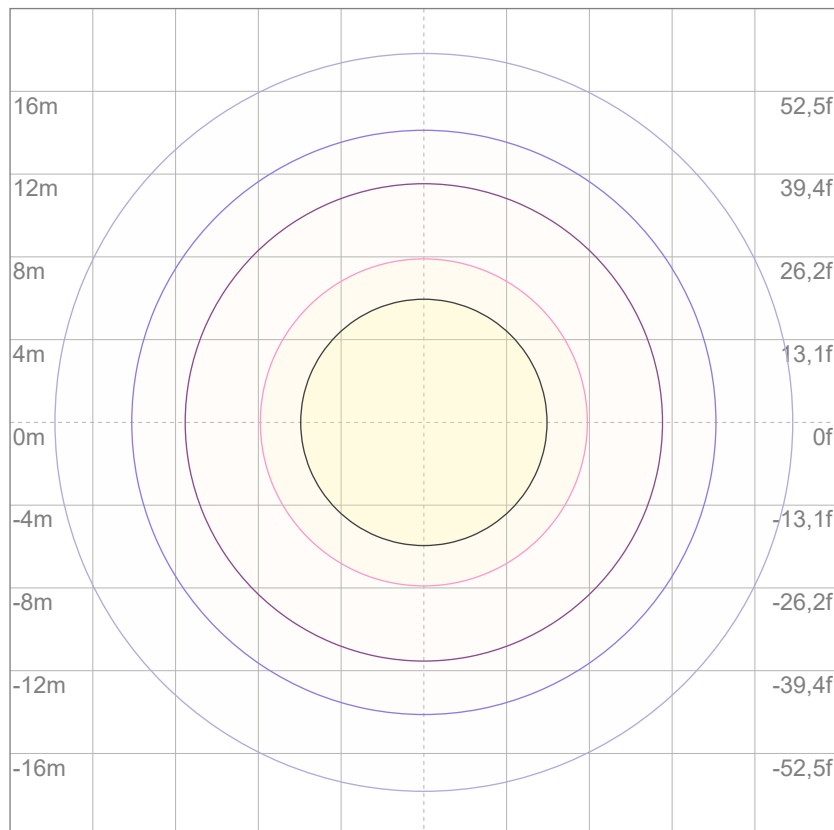
| | |
|-----|---------|
| 10% | 306 cd |
| 20% | 612 cd |
| 30% | 918 cd |
| 40% | 1224 cd |
| 50% | 1530 cd |
| 60% | 1836 cd |
| 70% | 2142 cd |
| 80% | 2448 cd |

Conditions:

Number of c-planes: 2

Candela at center: 3059 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|----------|
| 3% | 0,918 lx |
| 5% | 1,53 lx |
| 10% | 3,06 lx |
| 30% | 9,18 lx |
| 50% | 15,3 lx |

Conditions:

Number of c-planes: 2

Lux at center: 30,6 lx

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



Total lumen output:

3580 lm

Peak candela output:

21256 cd

Light quality:

CRI: 96,1

Color temperature:

6138 K

PRODUCT NAME:
ECLPENDANTS VW

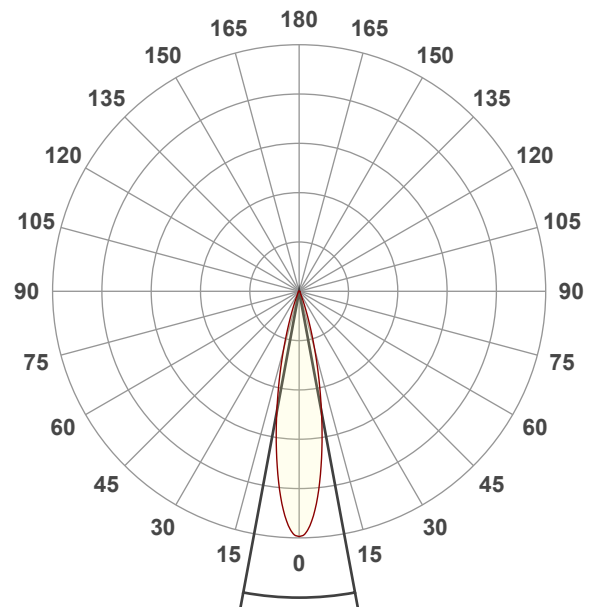
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
6500K

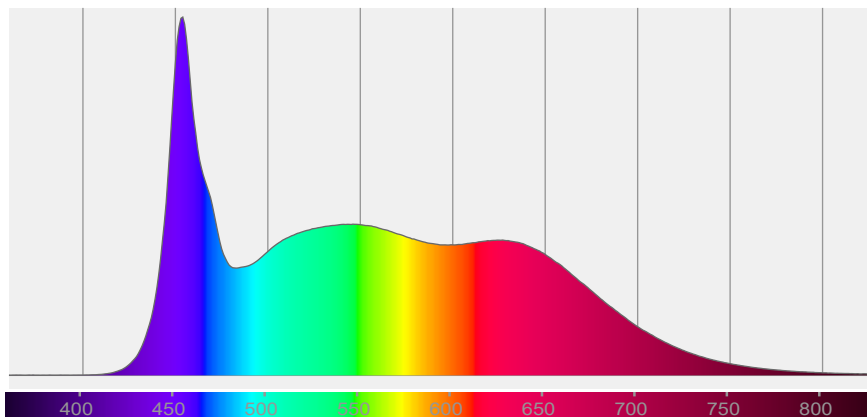
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:26:23

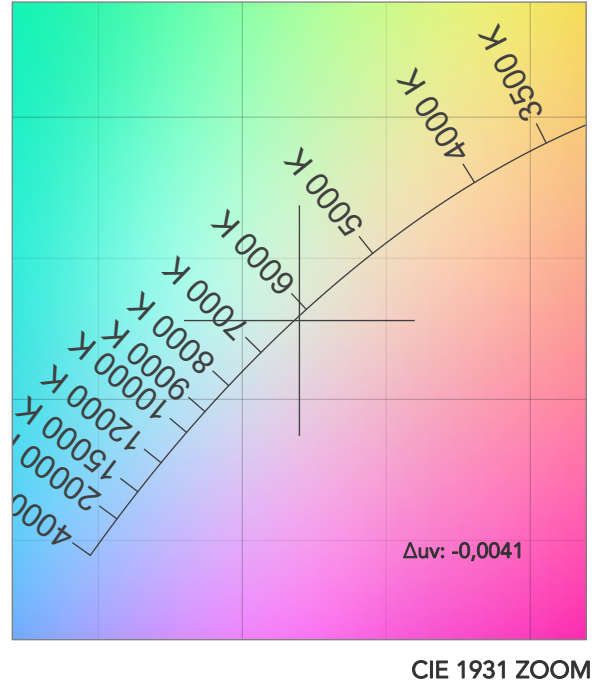
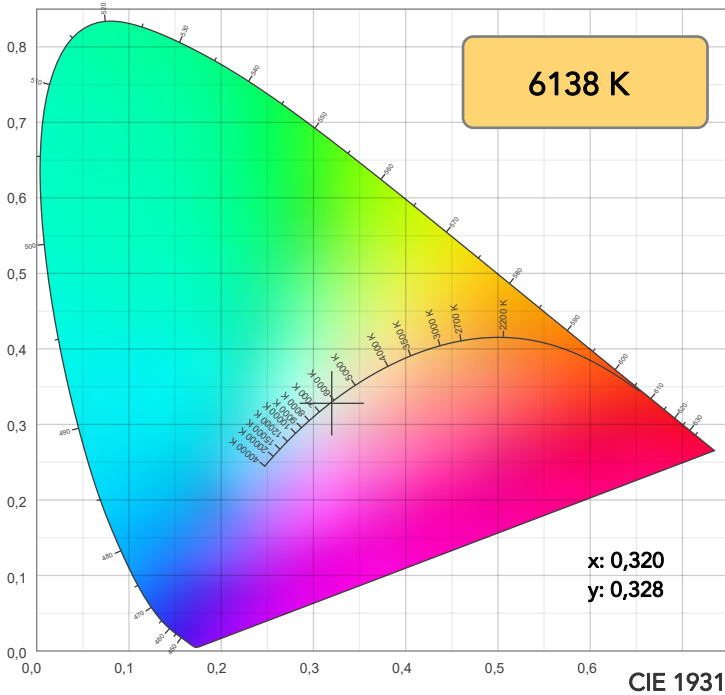


Beam angle 50%: 21°
Field angle 10%: 37,9°
Cut off angle 2.5%: 49,6°

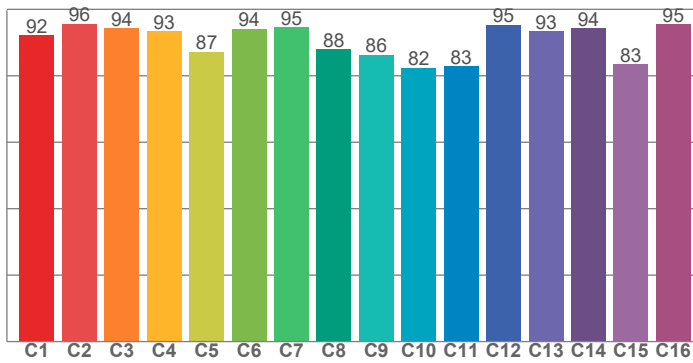
Spectra



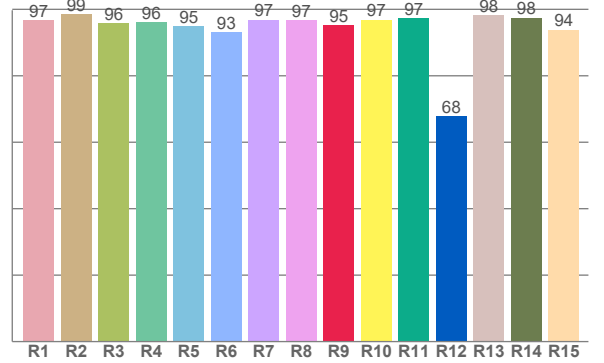
COLOR DETAILS



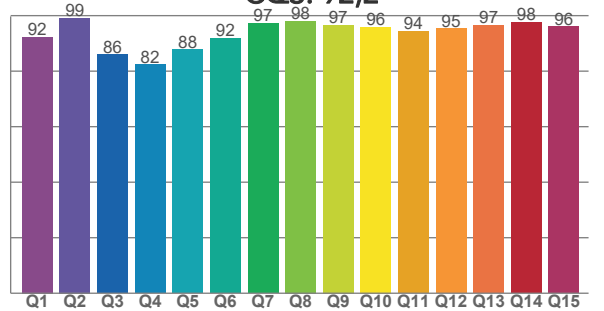
TM30: 90,3



CRI: 96,1 (R1-R8)



CQS: 92,2



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,8 | 98,5 | 95,9 | 96,1 | 94,8 | 93,1 | 96,8 | 96,6 | 95,2 | 96,9 | 97,2 | 67,7 | 98,3 | 97,5 | 93,9 |

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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 95,6 | 94,2 | 93,4 | 87,3 | 94,1 | 94,6 | 88,0 | 86,2 | 82,4 | 82,8 | 95,4 | 93,4 | 94,2 | 83,5 | 95,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,4 | 99,2 | 85,9 | 82,4 | 87,7 | 91,8 | 97,2 | 98,0 | 96,6 | 95,9 | 94,4 | 95,3 | 96,5 | 97,6 | 96,0 |

COLOR PARAMETERS

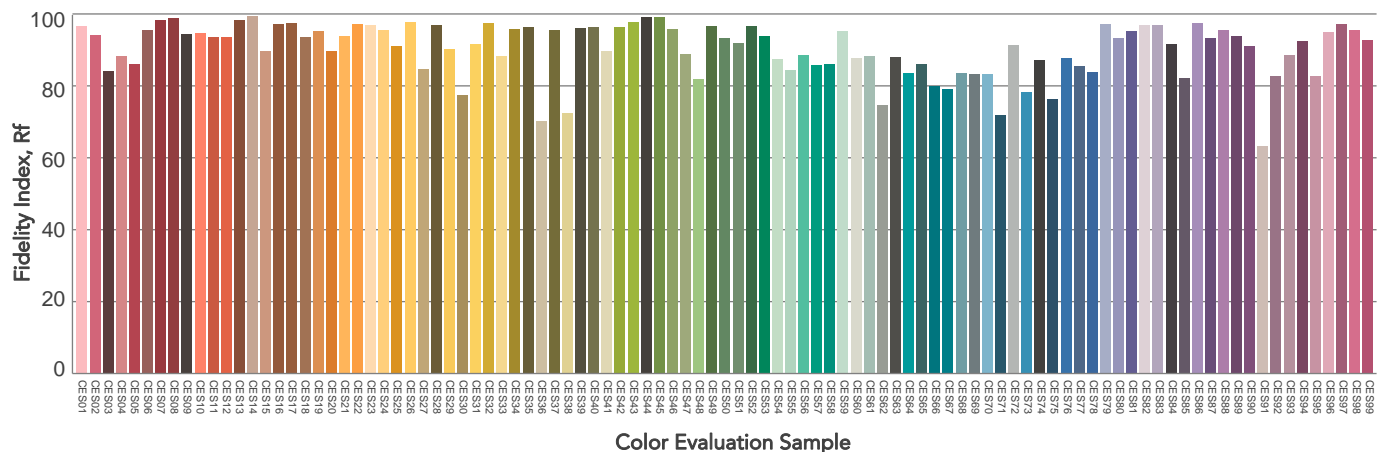
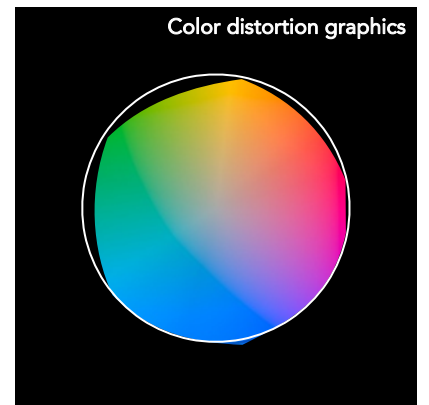
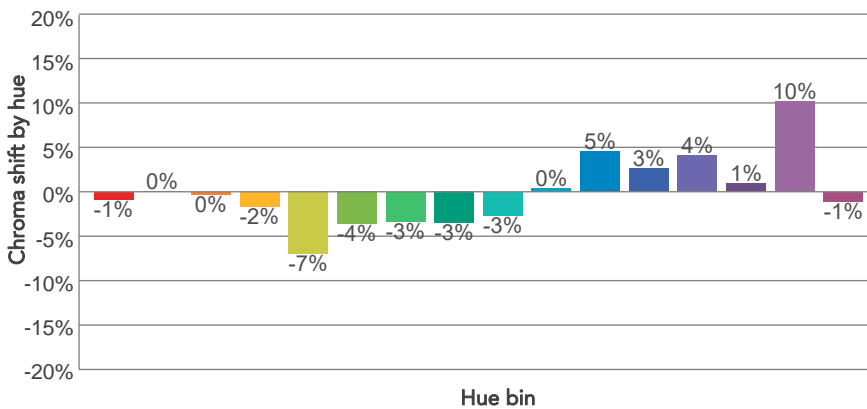
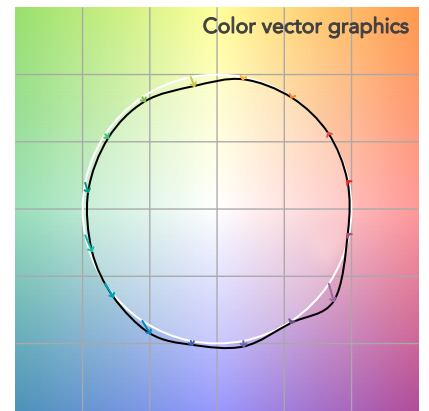
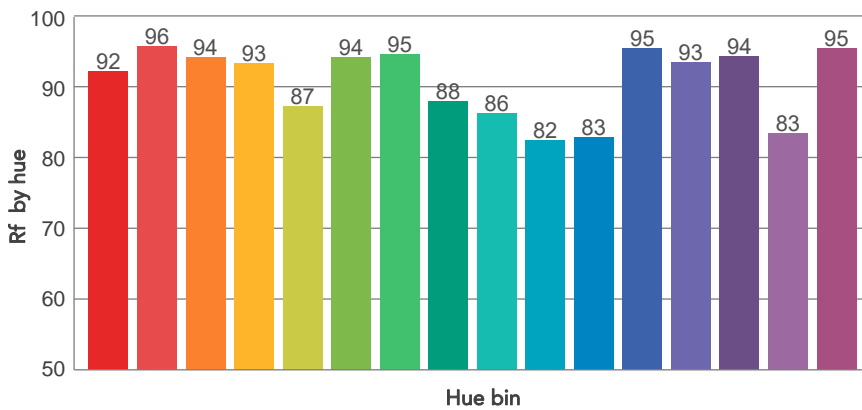
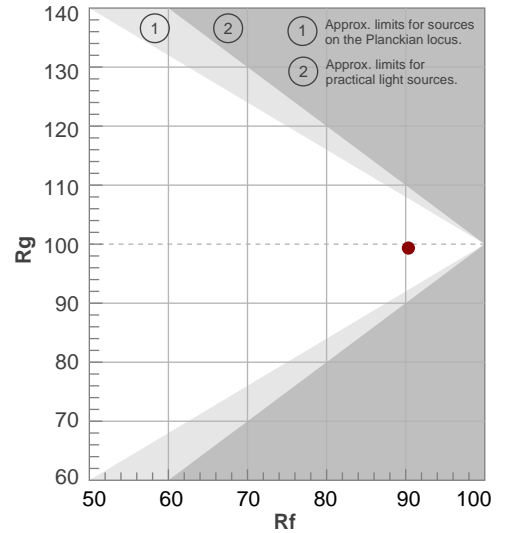
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6138 K | 96,1 | 95,2 | 90,3 | 99,3 | 92,2 | 96 | 0,320 | 0,328 | -0,0041 |

TM30 DETAILS

Rf 90,3
Fidelity index Rf

Rg 99,3
Gammut index

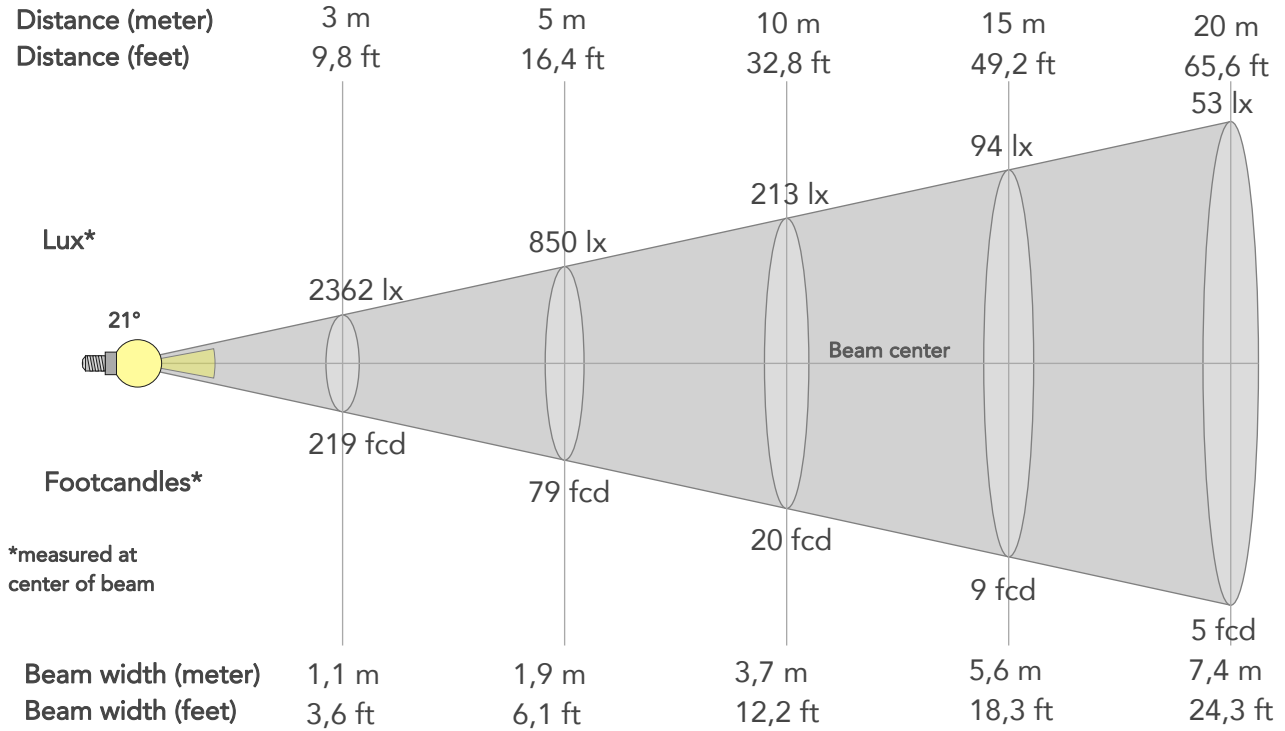
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -4% | 0% |
| 7 | 95 | -3% | 1% |
| 8 | 88 | -3% | 6% |
| 9 | 86 | -3% | 12% |
| 10 | 82 | 0% | 11% |
| 11 | 83 | 5% | 10% |
| 12 | 95 | 3% | 2% |
| 13 | 93 | 4% | 0% |
| 14 | 94 | 1% | -1% |
| 15 | 83 | 10% | -9% |
| 16 | 95 | -1% | 1% |



BEAM DETAILS



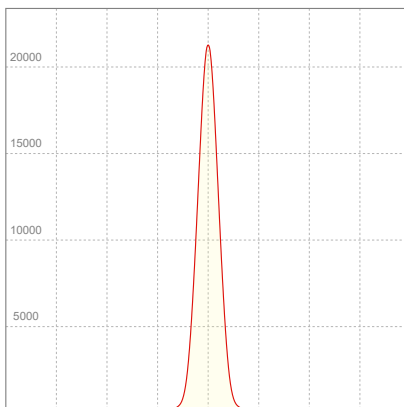
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 21° | 37,9° | 49,6° | 97,8% | 95,0% |



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 | 21256lx | 5314lx | 2362lx | 1329lx | 850lx | 378lx | 213lx | 94lx | 53lx | 34lx | 24lx | 13lx | 9lx |
| Footcand. | 1975fcd | 494fcd | 219fcd | 123fcd | 79fcd | 35fcd | 20fcd | 9fcd | 5fcd | 3fcd | 2fcd | 1fcd | 1fcd |
| Beam wid. | 0,4m | 0,7m | 1,1m | 1,5m | 1,9m | 2,8m | 3,7m | 5,6m | 7,4m | 9,3m | 11,1m | 14,8m | 18,6m |
| Beam wid. | 1,2ft | 2,4ft | 3,6ft | 4,9ft | 6,1ft | 9,1ft | 12,2ft | 18,3ft | 24,3ft | 30,4ft | 36,5ft | 48,7ft | 60,8ft |

LINEAR DISTRIBUTION DIAGRAM

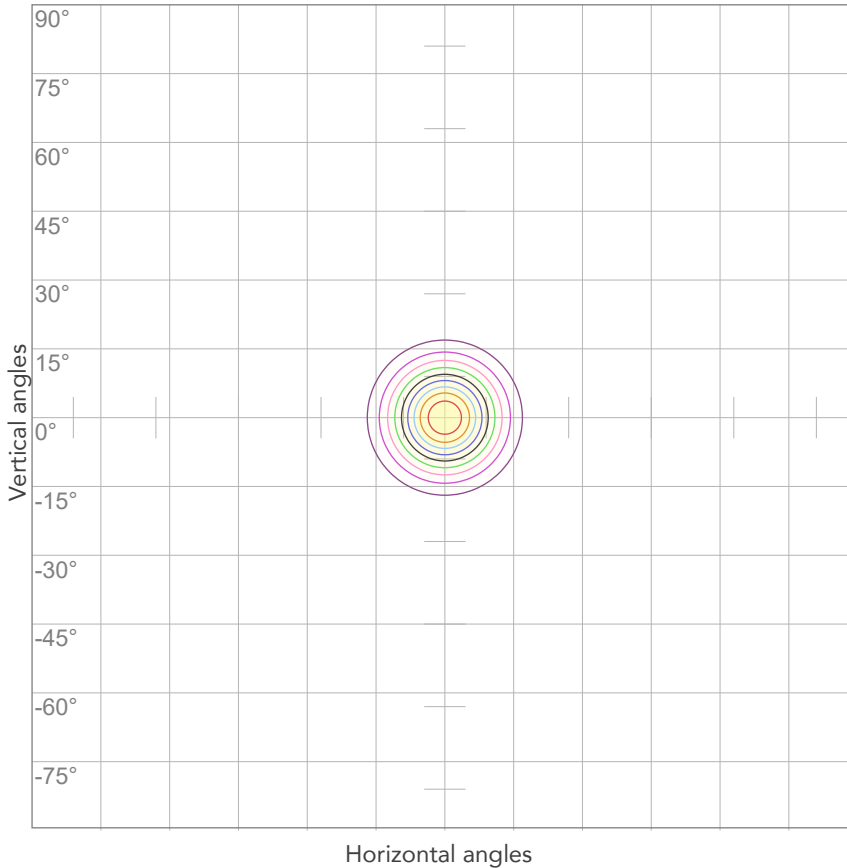


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 224V | 0,291A | 60,8W | 0,93 | 59lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



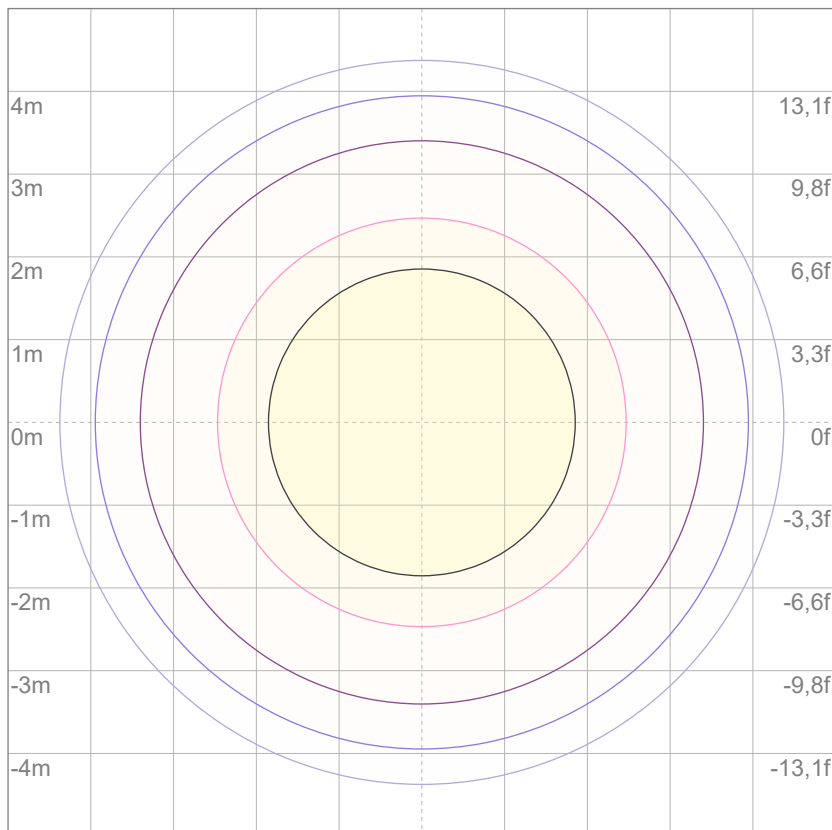
| | |
|-----|----------|
| 10% | 2126 cd |
| 20% | 4251 cd |
| 30% | 6377 cd |
| 40% | 8503 cd |
| 50% | 10628 cd |
| 60% | 12754 cd |
| 70% | 14880 cd |
| 80% | 17005 cd |

Conditions:

Number of c-planes: 2

Candela at center: 21256 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 6,38 lx |
| 5% | 10,6 lx |
| 10% | 21,3 lx |
| 30% | 63,8 lx |
| 50% | 106 lx |

Conditions:

Number of c-planes: 2

Lux at center: 213 lx

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



Total lumen output:

3548 lm

Peak candela output:

6283 cd

Light quality:

CRI: 96,0

Color temperature:

6157 K

PRODUCT NAME:
ECLPENDANTS VW

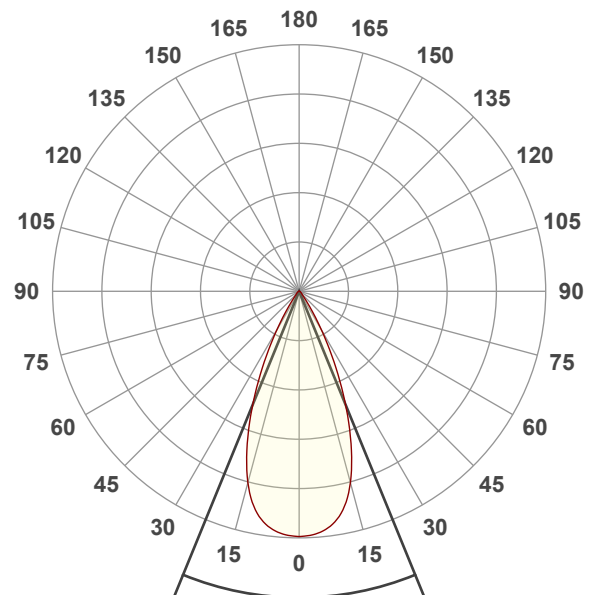
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
6500K

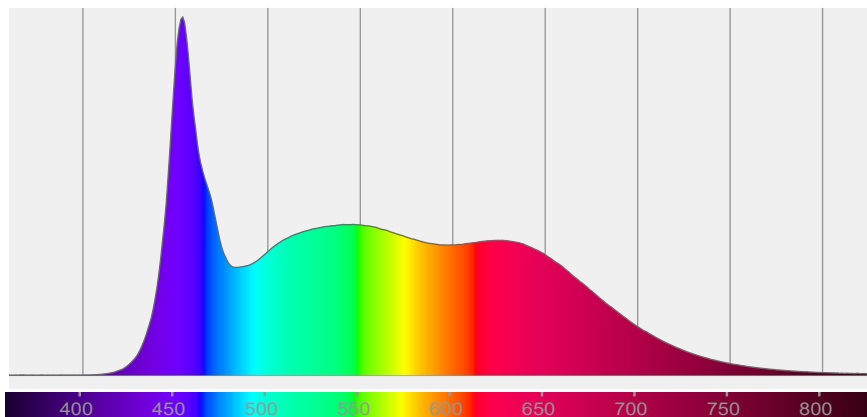
Operator:
Salvatore Giglio

Date and time:
05/02/2024 16:39:19

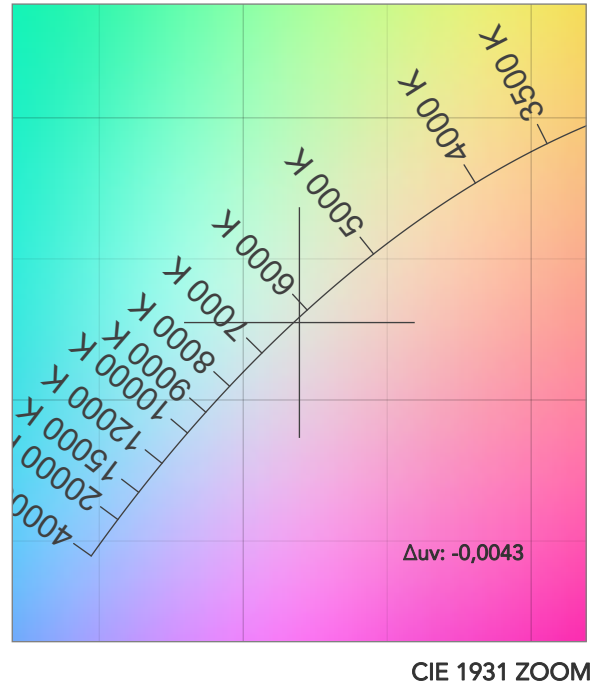
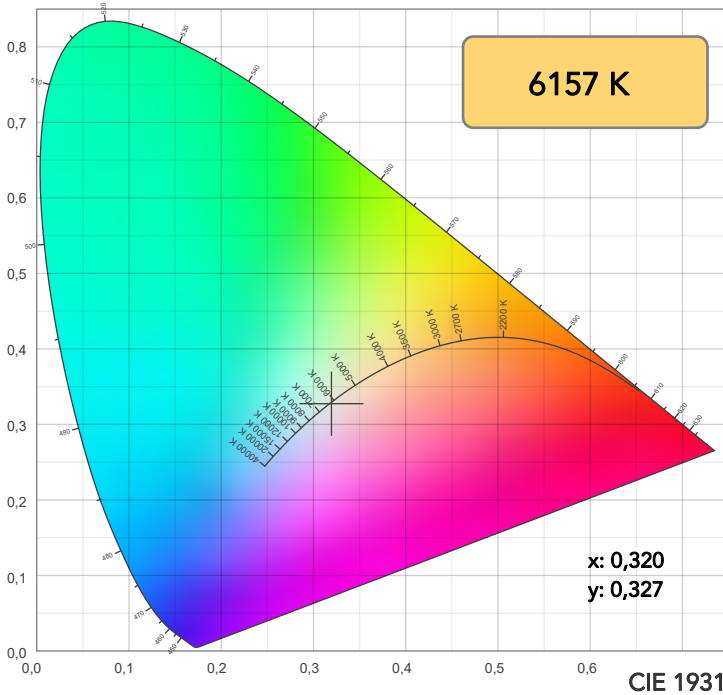


Beam angle 50%: 44,5°
Field angle 10%: 66,3°
Cut off angle 2.5%: 81,2°

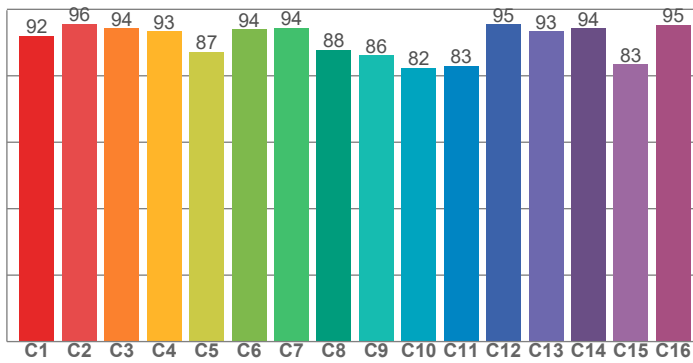
Spectra



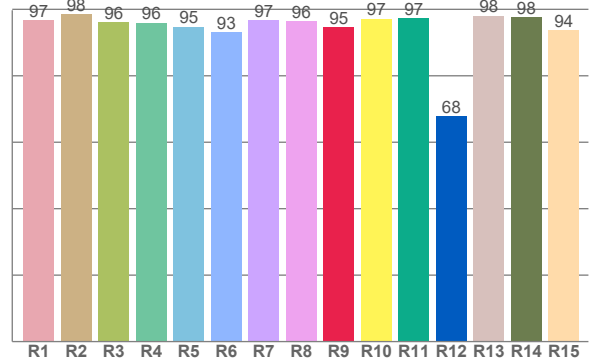
COLOR DETAILS



TM30: 90,3



CRI: 96,0 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,6 | 98,4 | 96,0 | 96,0 | 94,8 | 93,2 | 96,7 | 96,5 | 94,7 | 97,2 | 97,3 | 67,8 | 98,1 | 97,6 | 93,7 |

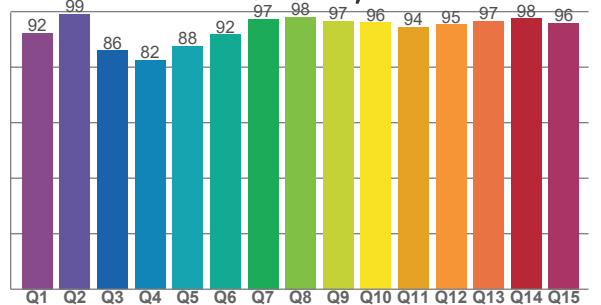
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,1 | 95,6 | 94,2 | 93,4 | 87,2 | 94,0 | 94,5 | 87,8 | 86,1 | 82,3 | 82,9 | 95,4 | 93,4 | 94,3 | 83,5 | 95,4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 99,1 | 86,0 | 82,5 | 87,6 | 91,7 | 97,3 | 98,1 | 96,7 | 96,0 | 94,5 | 95,4 | 96,5 | 97,5 | 95,9 |

CQS: 92,2



COLOR PARAMETERS

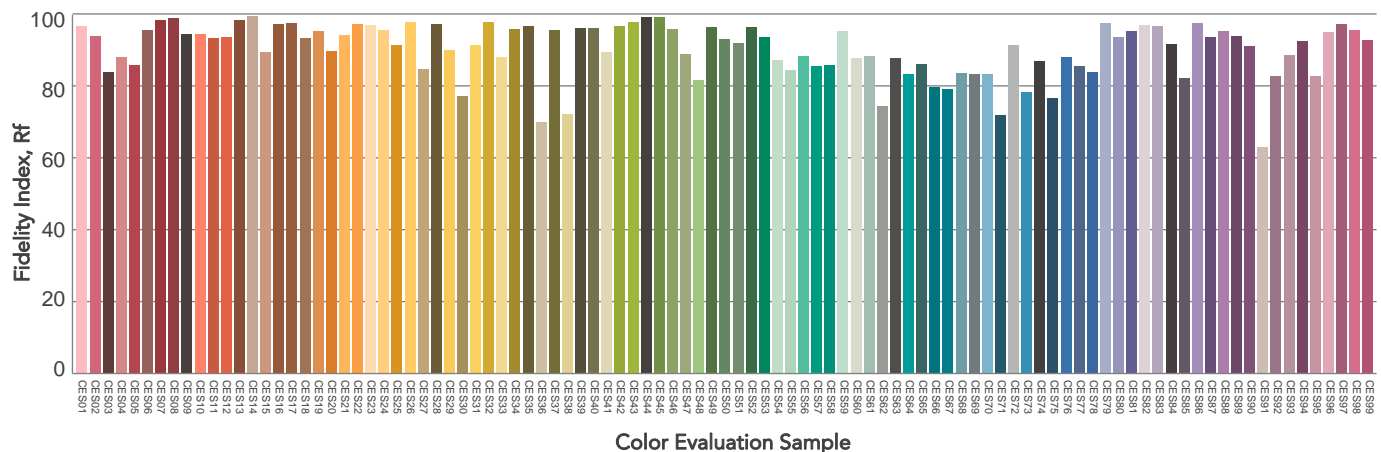
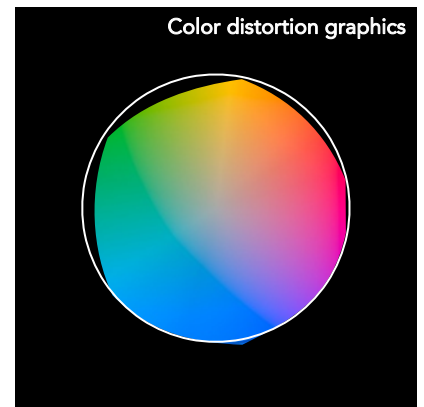
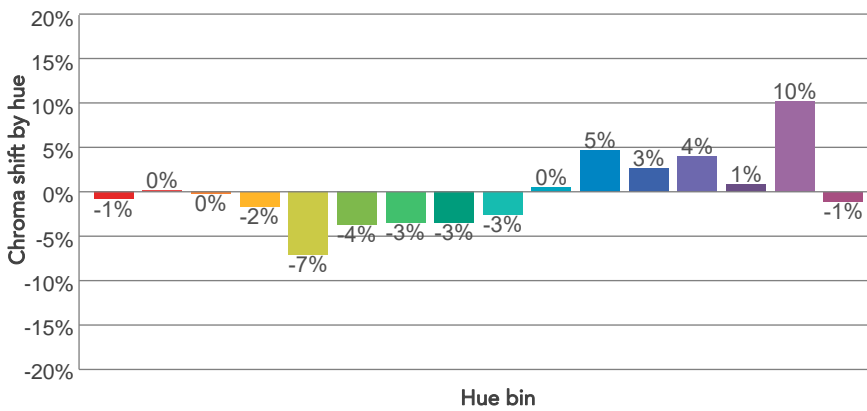
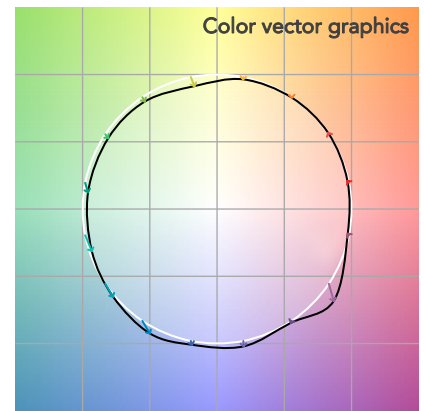
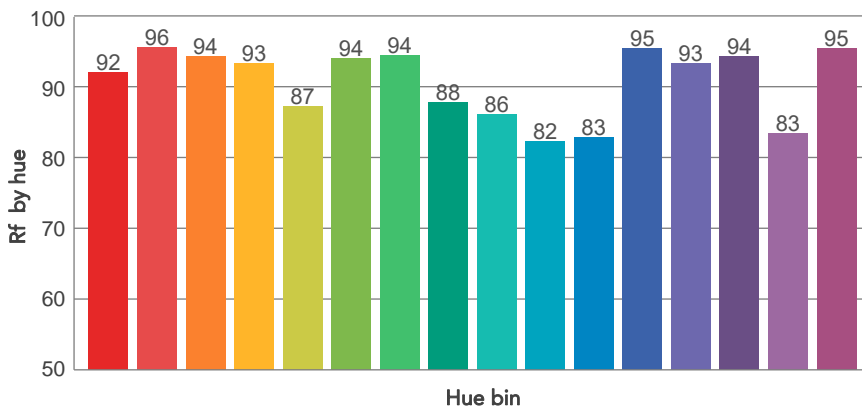
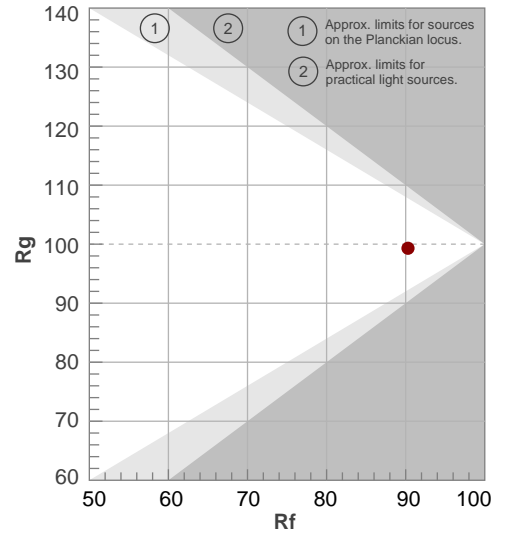
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6157 K | 96,0 | 94,7 | 90,3 | 99,3 | 92,2 | 96 | 0,320 | 0,327 | -0,0043 |

TM30 DETAILS

Rf 90,3
Fidelity index Rf

Rg 99,3
Gammut index

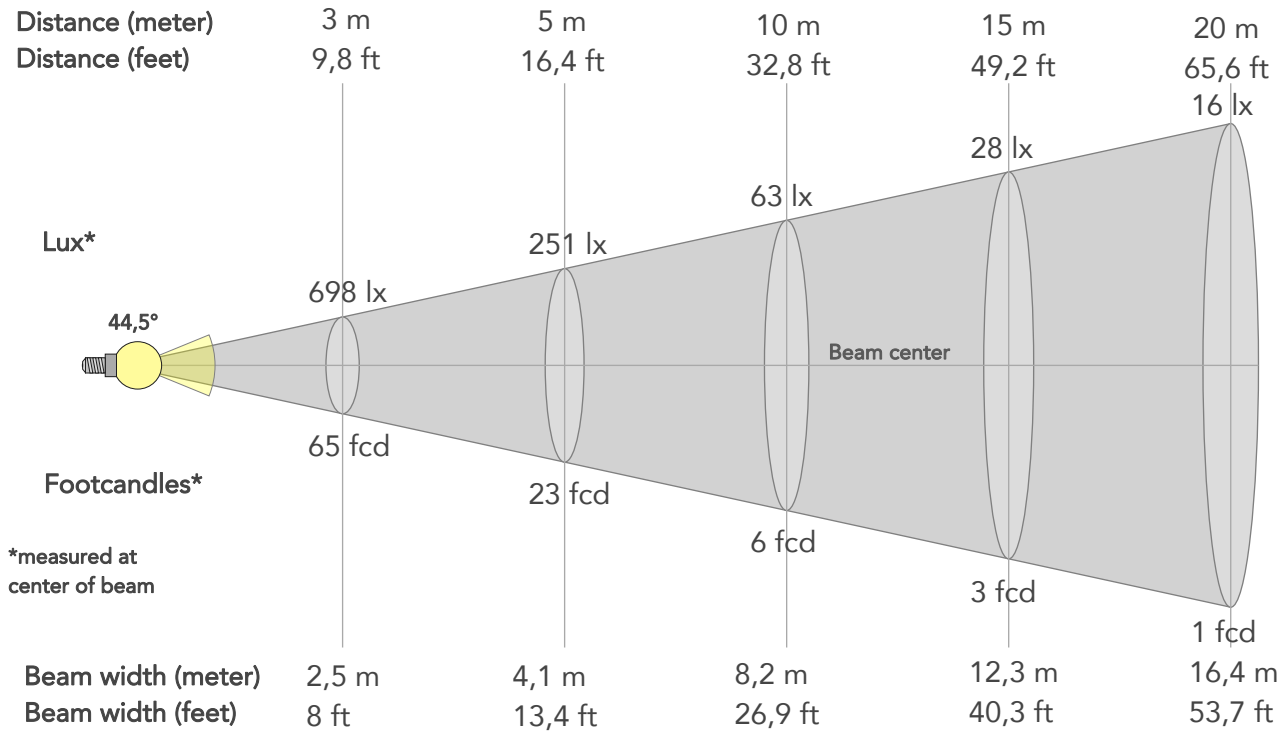
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -4% | 0% |
| 7 | 94 | -3% | 1% |
| 8 | 88 | -3% | 6% |
| 9 | 86 | -3% | 13% |
| 10 | 82 | 0% | 11% |
| 11 | 83 | 5% | 10% |
| 12 | 95 | 3% | 2% |
| 13 | 93 | 4% | 0% |
| 14 | 94 | 1% | -1% |
| 15 | 83 | 10% | -9% |
| 16 | 95 | -1% | 1% |



BEAM DETAILS



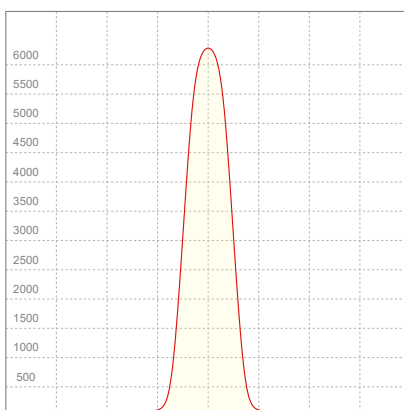
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 44,5° | 66,3° | 81,2° | 98,3% | 95,6% |



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 | 6283lx | 1571lx | 698lx | 393lx | 251lx | 112lx | 63lx | 28lx | 16lx | 10lx | 7lx | 4lx | 3lx |
| Footcand. | 584fcd | 146fcd | 65fcd | 36fcd | 23fcd | 10fcd | 6fcd | 3fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd |
| Beam wid. | 0,8m | 1,6m | 2,5m | 3,3m | 4,1m | 6,1m | 8,2m | 12,3m | 16,4m | 20,5m | 24,6m | 32,8m | 40,9m |
| Beam wid. | 2,7ft | 5,4ft | 8ft | 10,7ft | 13,4ft | 20,1ft | 26,9ft | 40,3ft | 53,7ft | 67,1ft | 80,6ft | 107,4ft | 134,3ft |

LINEAR DISTRIBUTION DIAGRAM

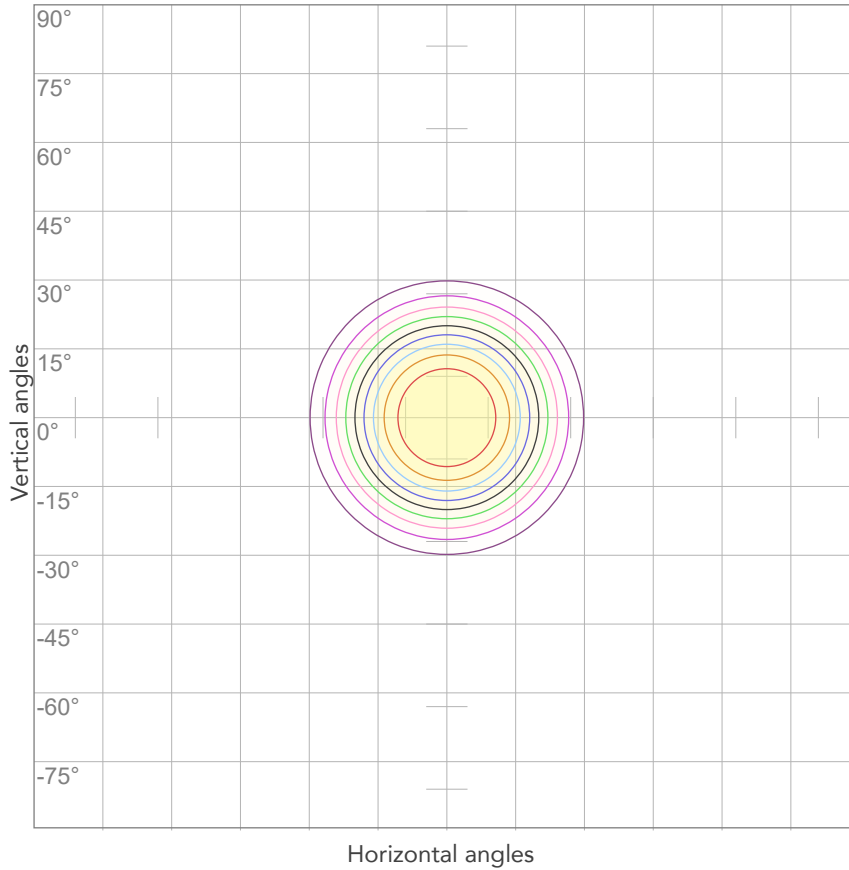


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Efficiency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,291A | 60,5W | 0,94 | 59lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



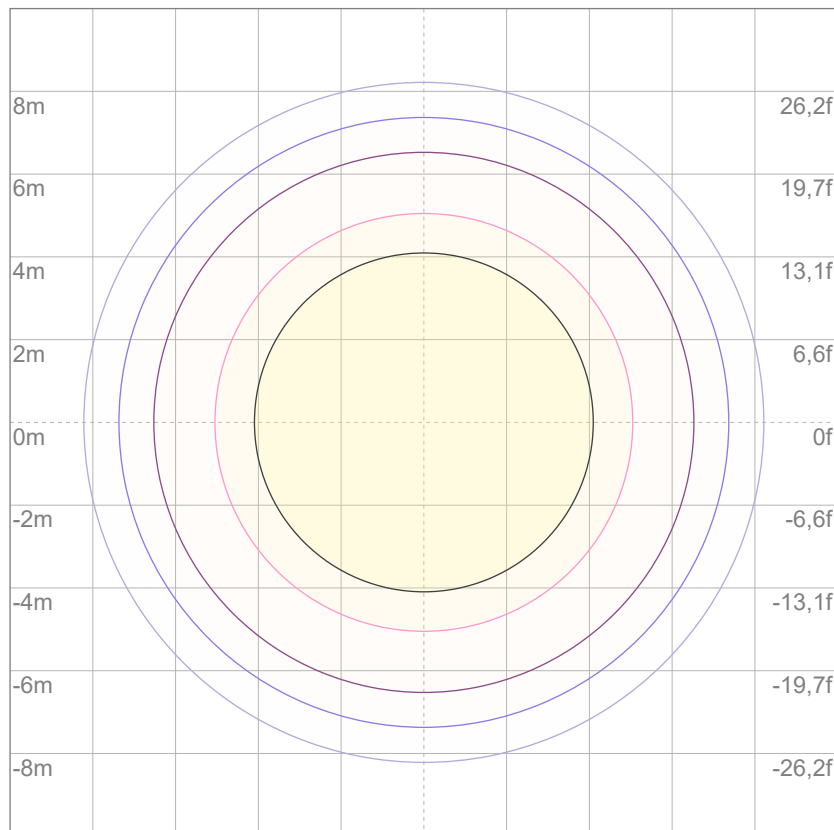
| | |
|-----|---------|
| 10% | 628 cd |
| 20% | 1257 cd |
| 30% | 1885 cd |
| 40% | 2513 cd |
| 50% | 3142 cd |
| 60% | 3770 cd |
| 70% | 4398 cd |
| 80% | 5027 cd |

Conditions:

Number of c-planes: 2

Candela at center: 6283 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

| | |
|-----|---------|
| 3% | 1,88 lx |
| 5% | 3,14 lx |
| 10% | 6,28 lx |
| 30% | 18,8 lx |
| 50% | 31,4 lx |

Conditions:

Number of c-planes: 2

Lux at center: 62,8 lx

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



Total lumen output:

3266 lm

Peak candela output:

3033 cd

Light quality:

CRI: 96,0

Color temperature:

6166 K

PRODUCT NAME:
ECLPENDANTS VW

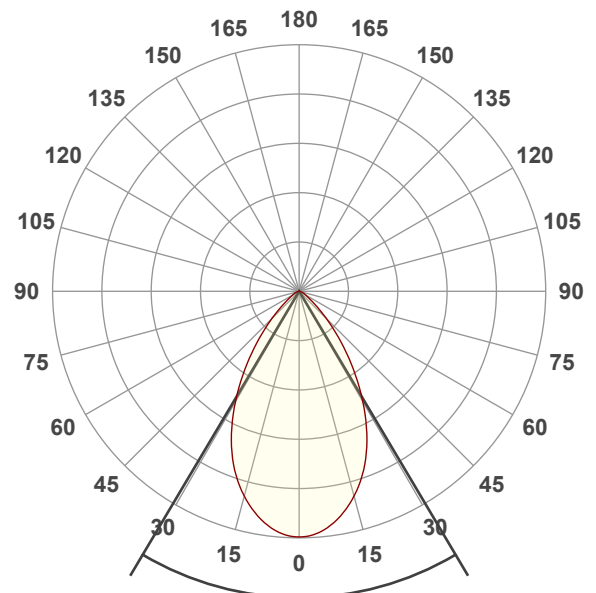
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
6500K

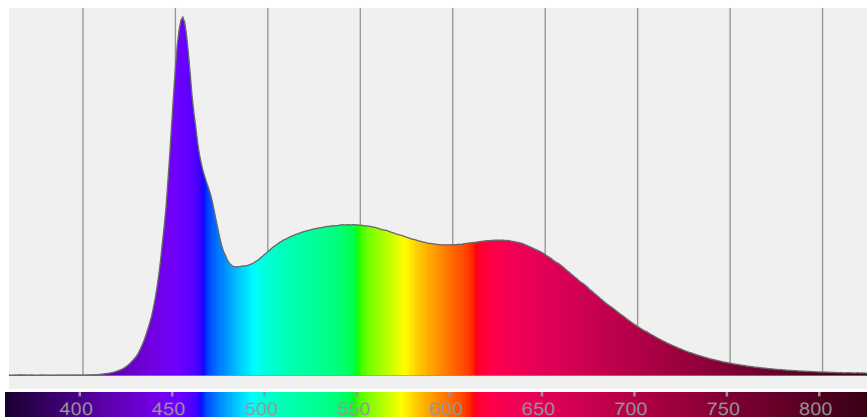
Operator:
Salvatore Giglio

Date and time:
05/02/2024 17:12:31

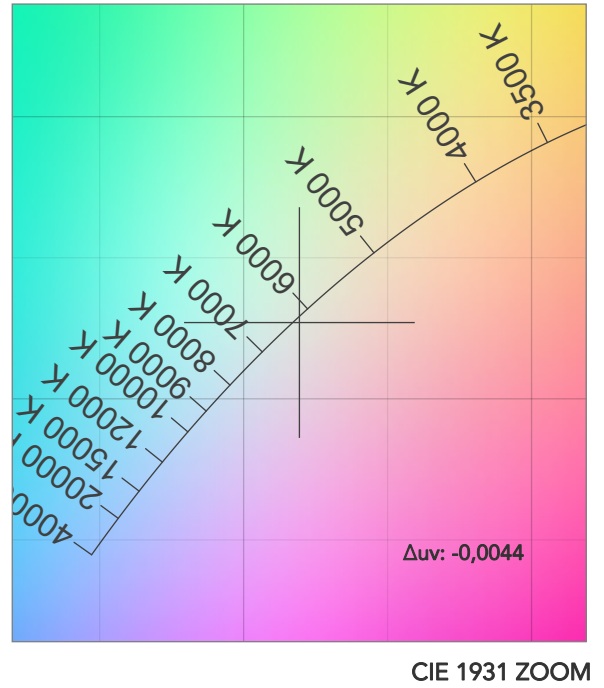
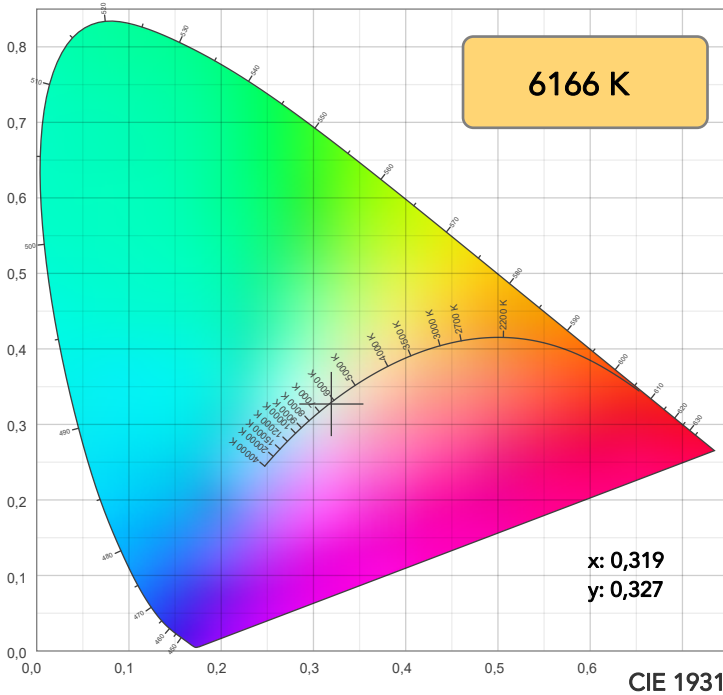


Beam angle 50%: 61,4°
Field angle 10%: 98,1°
Cut off angle 2.5%: 126,2°

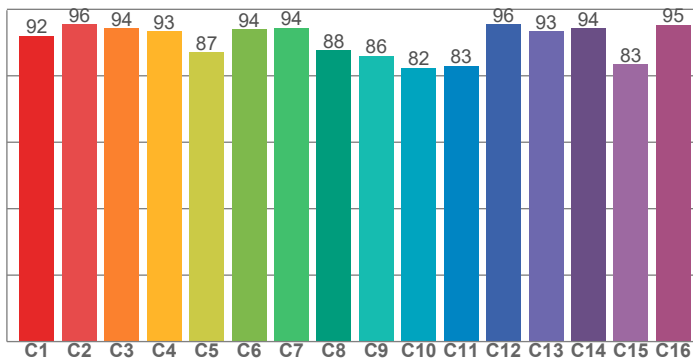
Spectra



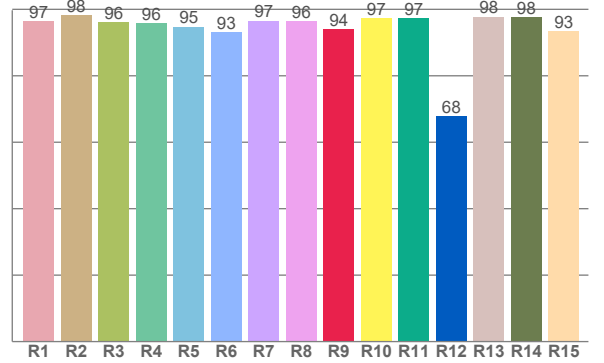
COLOR DETAILS



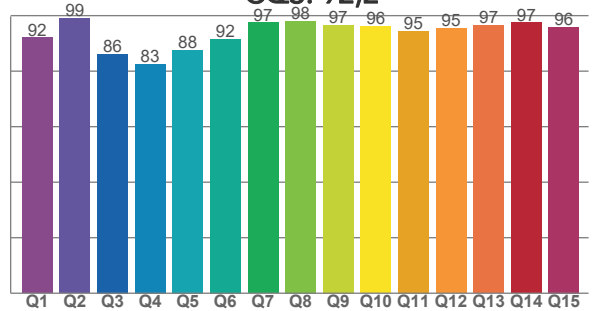
TM30: 90,2



CRI: 96,0 (R1-R8)



CQS: 92,2



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,5 | 98,3 | 96,2 | 95,9 | 94,7 | 93,2 | 96,5 | 96,3 | 94,0 | 97,4 | 97,4 | 67,9 | 97,8 | 97,6 | 93,5 |

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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,0 | 95,5 | 94,2 | 93,3 | 87,1 | 93,9 | 94,4 | 87,6 | 86,0 | 82,3 | 83,0 | 95,5 | 93,3 | 94,3 | 83,5 | 95,3 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,1 | 99,1 | 86,2 | 82,5 | 87,6 | 91,7 | 97,4 | 98,1 | 96,7 | 96,2 | 94,5 | 95,5 | 96,5 | 97,5 | 95,8 |

COLOR PARAMETERS

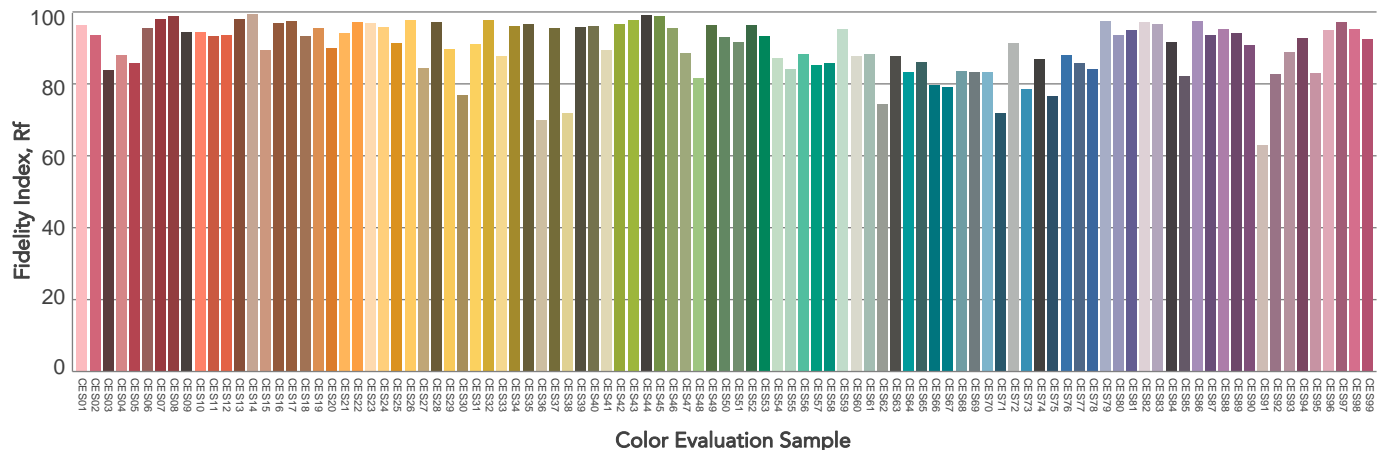
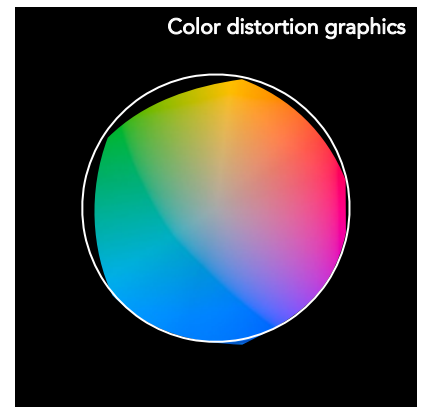
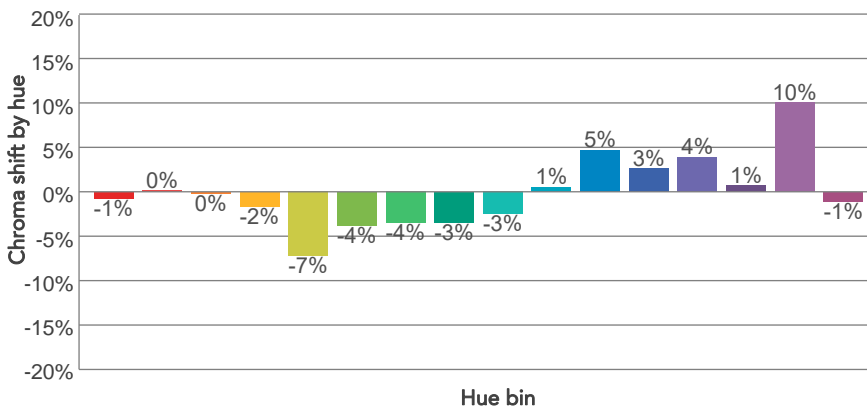
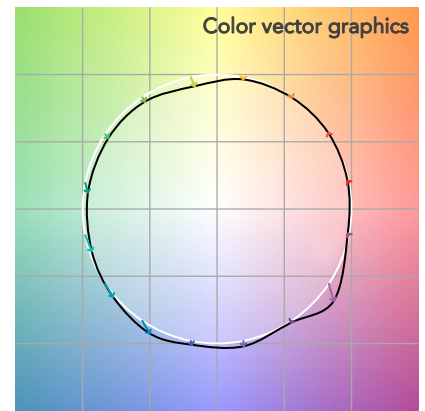
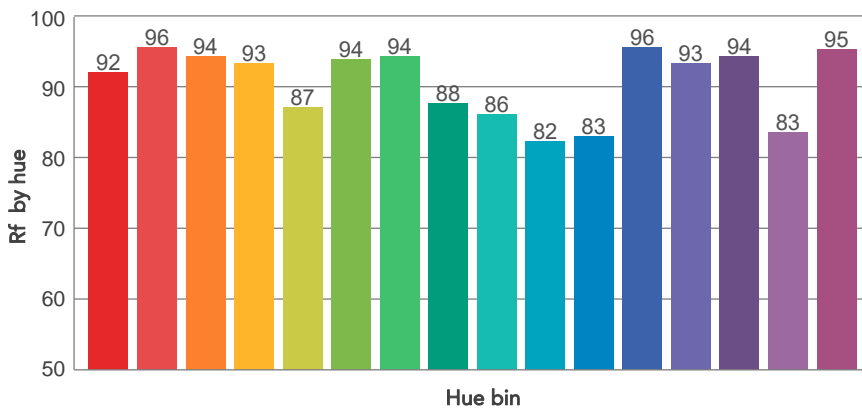
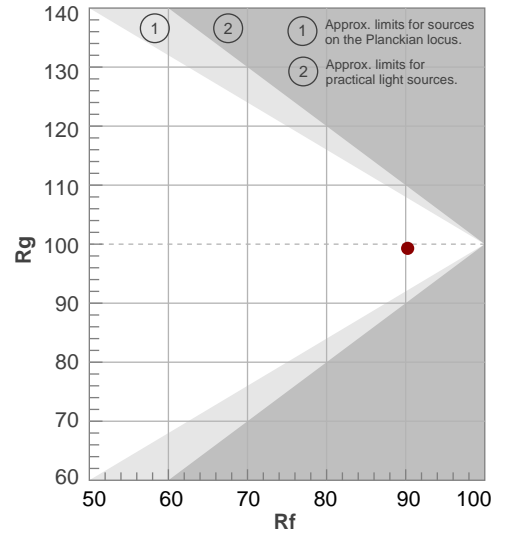
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 6166 K | 96,0 | 94,0 | 90,2 | 99,3 | 92,2 | 96 | 0,319 | 0,327 | -0,0044 |

TM30 DETAILS

Rf 90,2
Fidelity index Rf

Rg 99,3
Gammut index

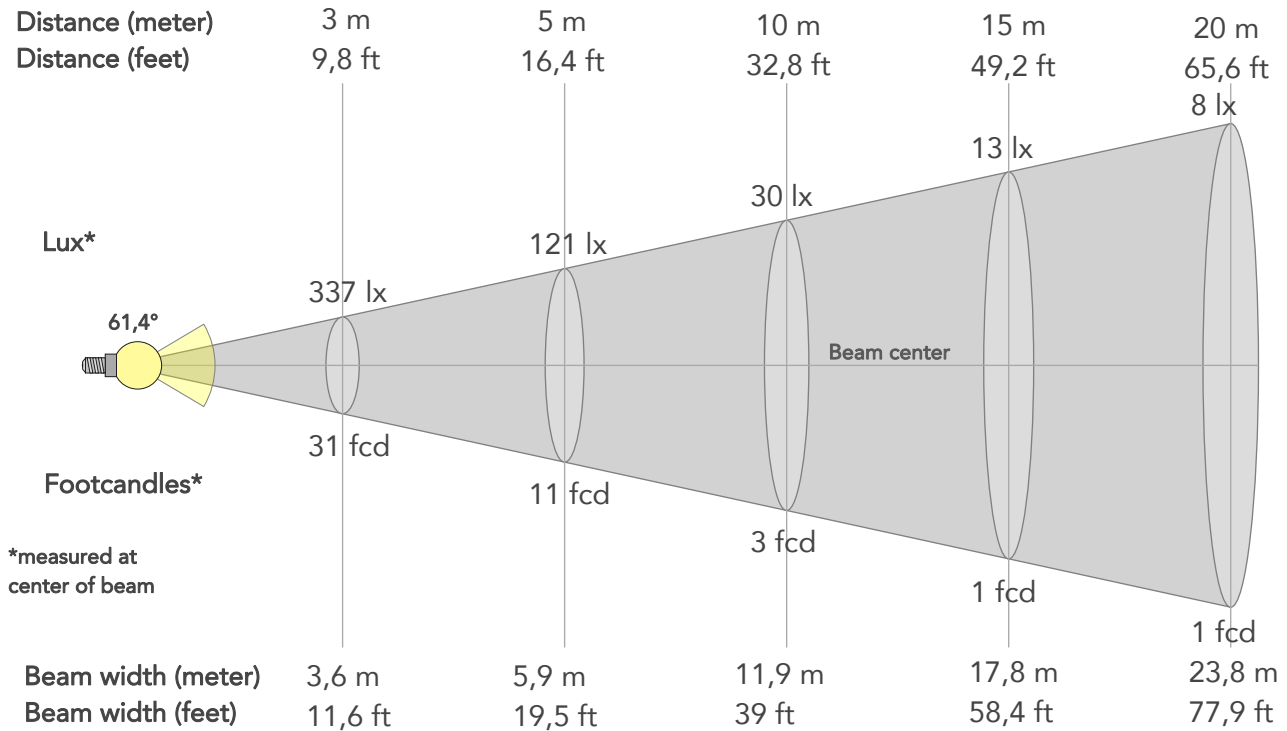
| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -1% | 2% |
| 2 | 96 | 0% | 1% |
| 3 | 94 | 0% | 0% |
| 4 | 93 | -2% | 0% |
| 5 | 87 | -7% | -1% |
| 6 | 94 | -4% | 0% |
| 7 | 94 | -4% | 1% |
| 8 | 88 | -3% | 7% |
| 9 | 86 | -3% | 13% |
| 10 | 82 | 1% | 11% |
| 11 | 83 | 5% | 10% |
| 12 | 96 | 3% | 1% |
| 13 | 93 | 4% | -1% |
| 14 | 94 | 1% | -1% |
| 15 | 83 | 10% | -9% |
| 16 | 95 | -1% | 1% |



BEAM DETAILS



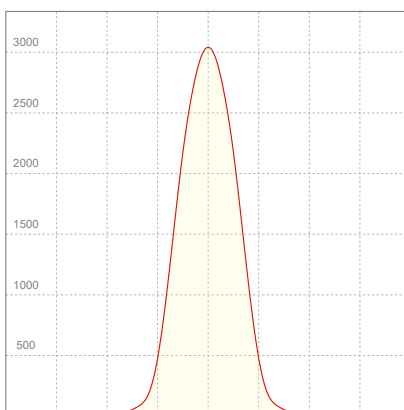
| | | | | |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
| 61,4° | 98,1° | 126,2° | 96,6% | 88,0% |



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 | 3033lx | 758lx | 337lx | 190lx | 121lx | 54lx | 30lx | 13lx | 8lx | 5lx | 3lx | 2lx | 1lx |
| Footcand. | 282fcd | 70fcd | 31fcd | 18fcd | 11fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 1,2m | 2,4m | 3,6m | 4,8m | 5,9m | 8,9m | 11,9m | 17,8m | 23,8m | 29,7m | 35,6m | 47,5m | 59,4m |
| Beam wid. | 3,9ft | 7,8ft | 11,6ft | 15,6ft | 19,5ft | 29,2ft | 39ft | 58,4ft | 77,9ft | 97,4ft | 116,9ft | 155,8ft | 194,8ft |

LINEAR DISTRIBUTION DIAGRAM

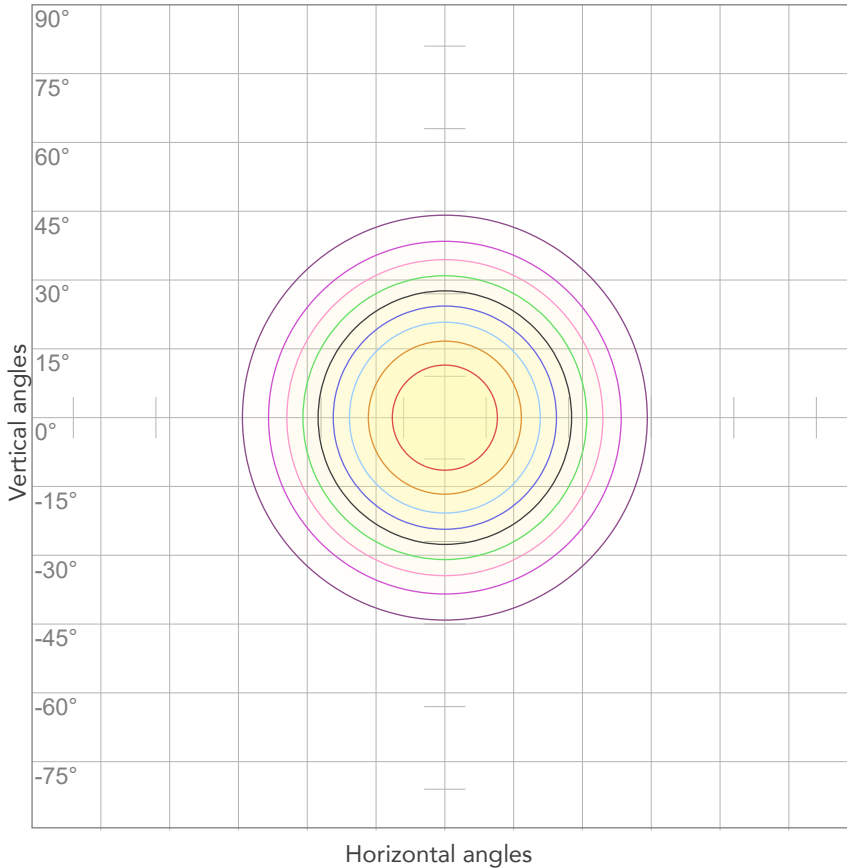


ELECTRICAL SPECIFICATIONS

| | | | | |
|---------------|---------------|-------------|----------|------------|
| Input voltage | Input current | Input power | Power FC | Efficiency |
| 222V | 0,290A | 60,1W | 0,93 | 54lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



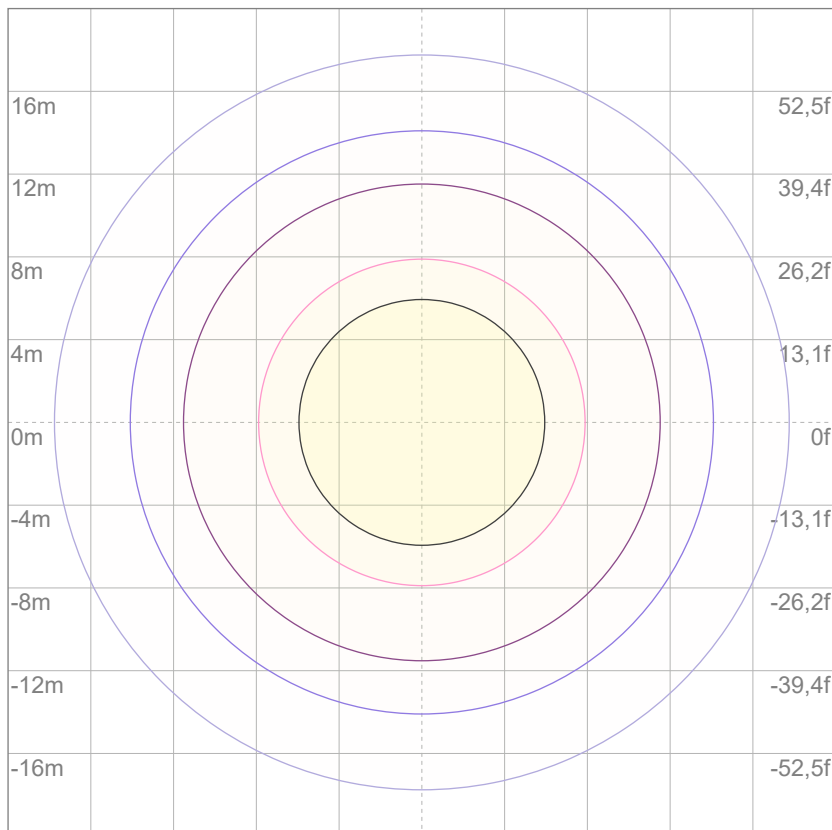
| | |
|-----|---------|
| 10% | 303 cd |
| 20% | 607 cd |
| 30% | 910 cd |
| 40% | 1213 cd |
| 50% | 1517 cd |
| 60% | 1820 cd |
| 70% | 2123 cd |
| 80% | 2426 cd |

Conditions:

Number of c-planes: 2

Candela at center: 3033 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,910 lx |
| 5% | 1,52 lx |
| 10% | 3,03 lx |
| 30% | 9,10 lx |
| 50% | 15,2 lx |

Conditions:

Number of c-planes: 2

Lux at center: 30,3 lx

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