

Photometric Test Report



ECLDISPLAYCAS

PROFILE LENS 50°

25W single color gallery light,
2700K, 3000K, 4000K and 5600K versions
with CASAMBI control on-board

CONTENTS

| | |
|-------------------------|----|
| Table of contents | 2 |
| Testing process | 3 |
| Color temperature 2700K | 4 |
| Color temperature 3000K | 9 |
| Color temperature 4000K | 14 |
| Color temperature 5600K | 19 |

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:

1541 lm

Peak candela output:

2918 cd

Light quality:

CRI: 91,0

Color temperature:

2640 K

PRODUCT NAME:

ECLDISPLAY

MEASURAMENT CONDITIONS:

Beam angle:

Profile 50°

Target:

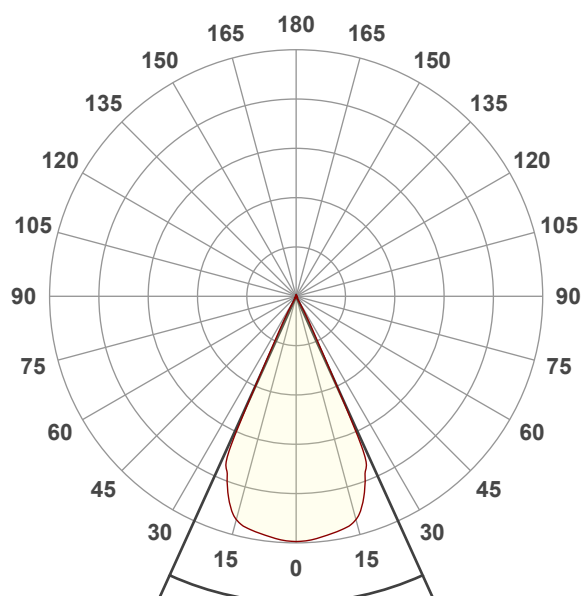
2700K

Operator:

Salvatore Giglio

Date and time:

07/02/2024 16:01:56

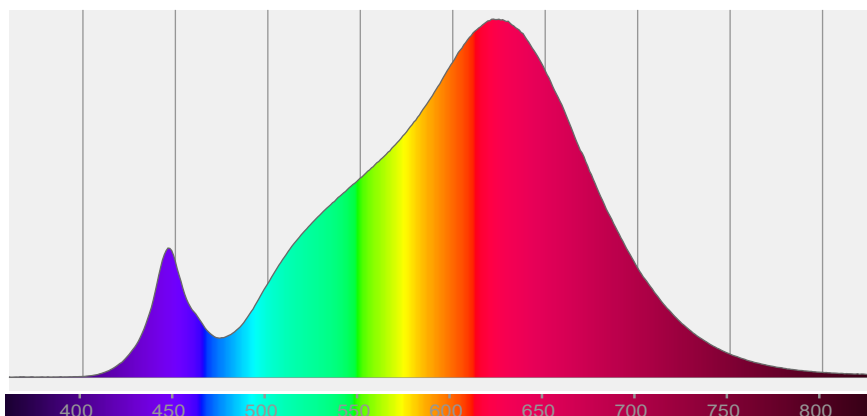


Beam angle 50%: 48,8°

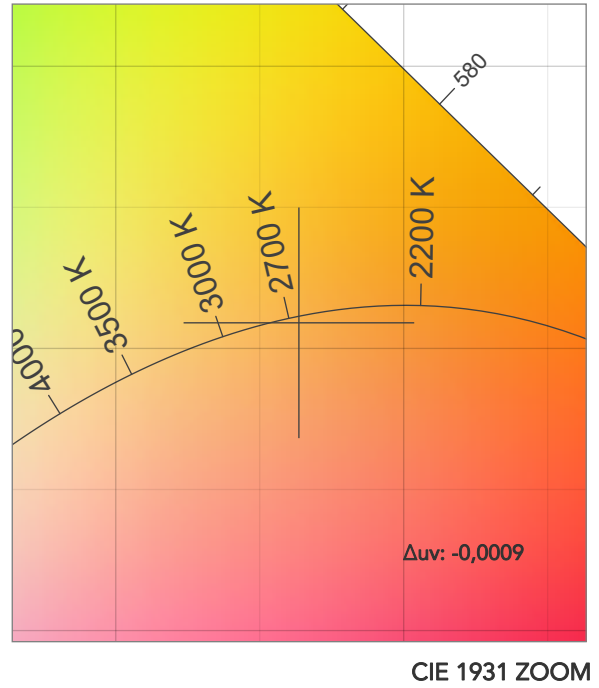
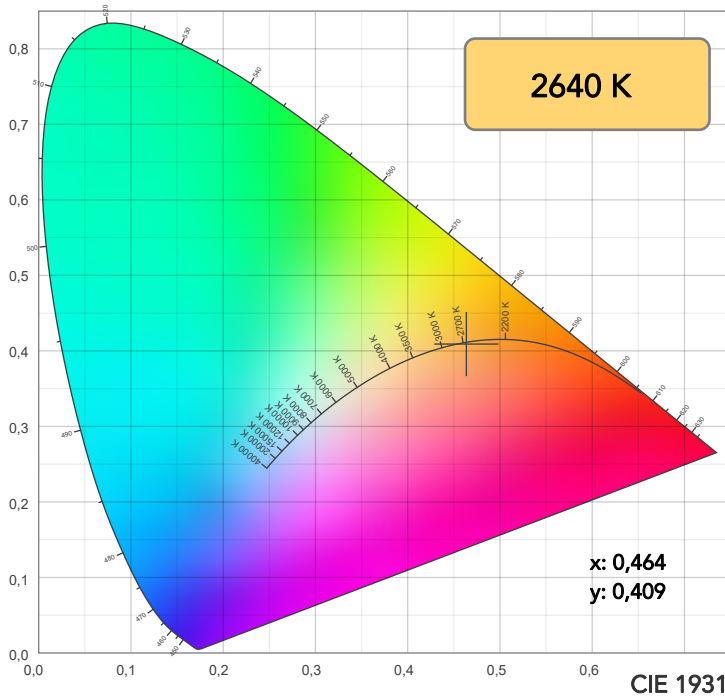
Field angle 10%: 54,1°

Cut off angle 2.5%: 56,6°

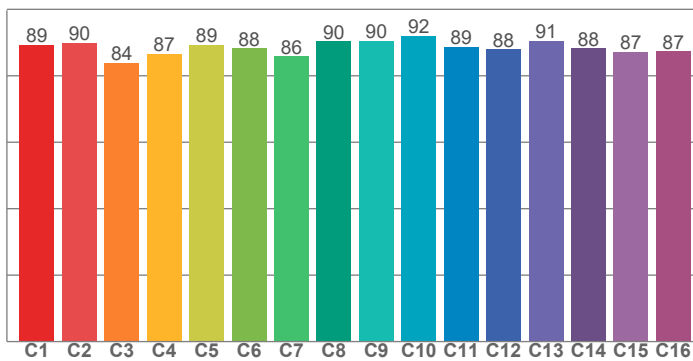
Spectra



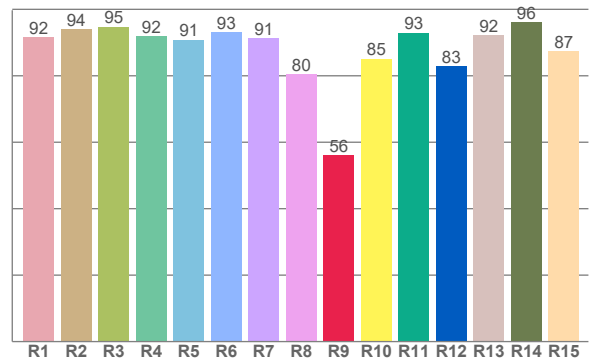
COLOR DETAILS



TM30: 88,6



CRI: 91,0 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,7 | 94,1 | 94,7 | 91,9 | 90,9 | 93,0 | 91,3 | 80,5 | 56,1 | 85,2 | 93,0 | 82,8 | 92,1 | 96,0 | 87,3 |

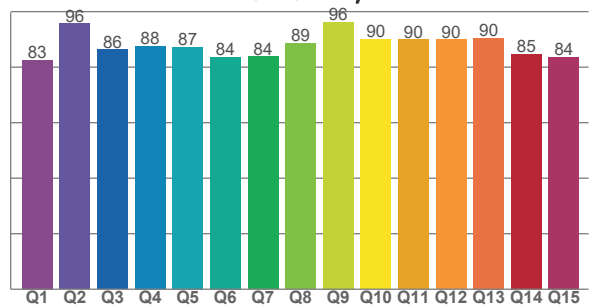
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89,4 | 89,9 | 83,8 | 86,5 | 89,3 | 88,2 | 85,8 | 90,4 | 90,5 | 91,9 | 88,6 | 87,9 | 90,6 | 88,2 | 87,2 | 87,3 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 82,6 | 95,7 | 86,3 | 87,6 | 87,3 | 83,7 | 83,8 | 88,6 | 96,2 | 90,0 | 90,0 | 89,9 | 90,5 | 84,8 | 83,7 |

CQS: 87,2



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 |
| 2640 K | 91,0 | 56,1 | 88,6 | 102,8 | 87,2 | 82 | 0,464 | 0,409 | -0,0009 |

TM30 DETAILS

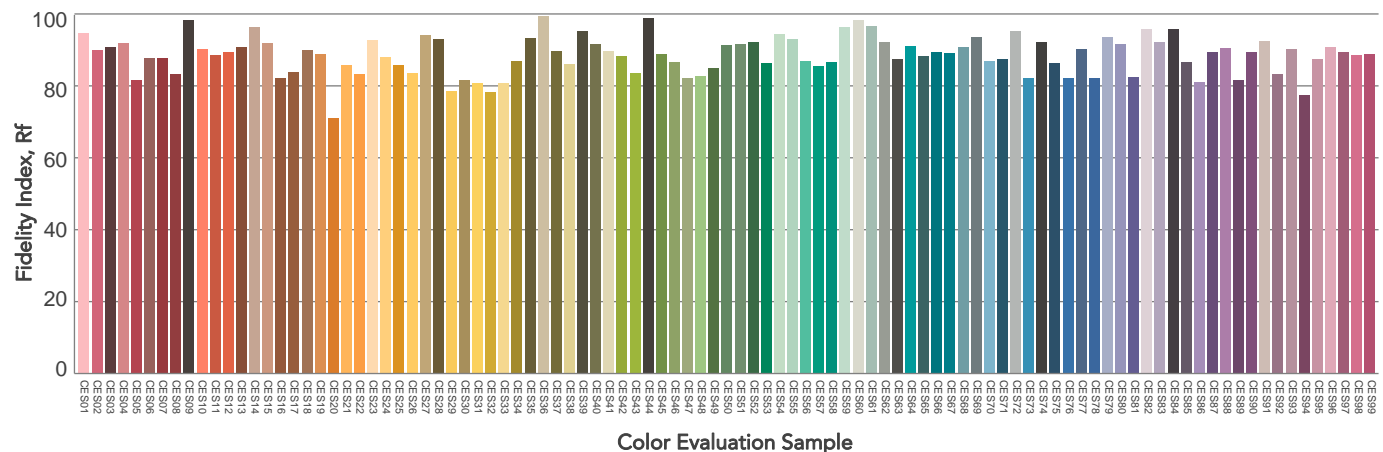
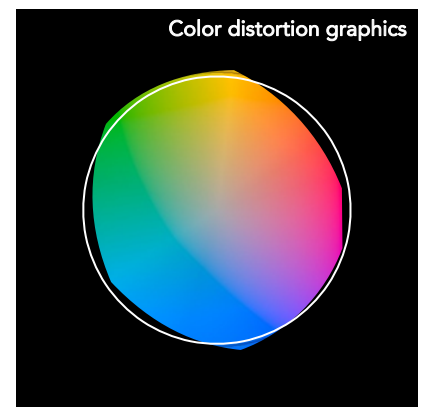
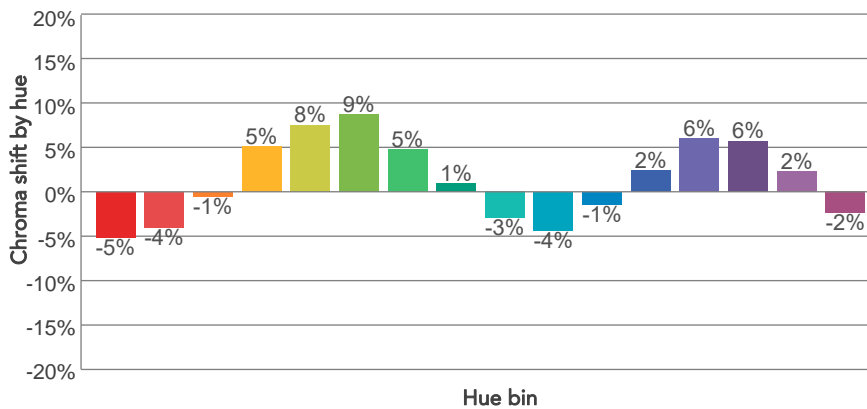
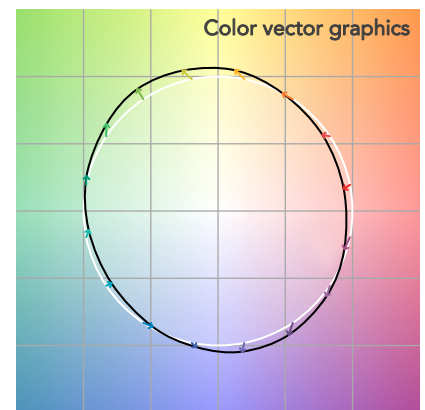
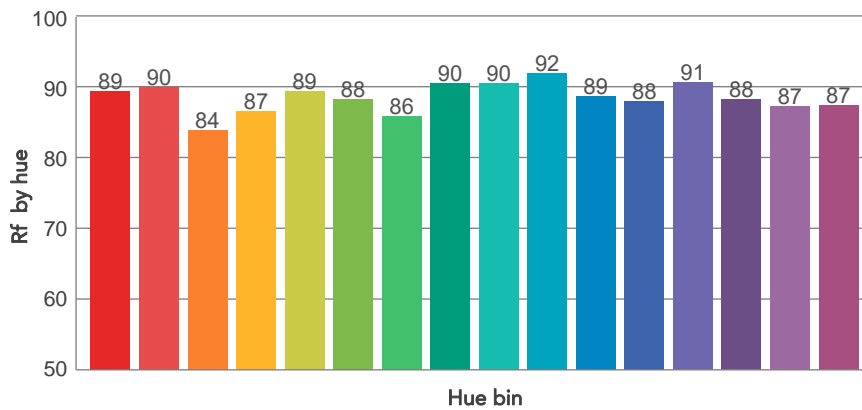
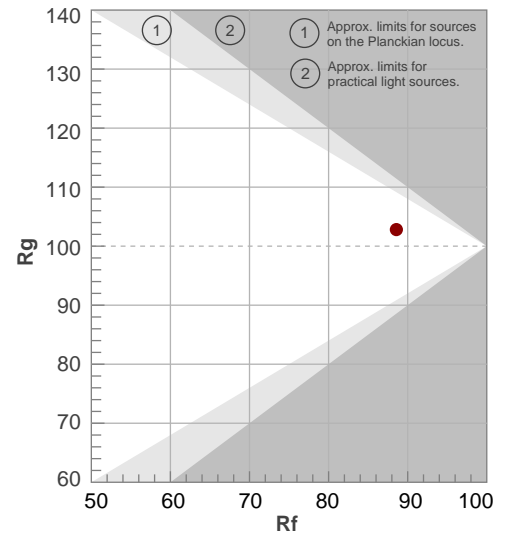
Rf 88,6

Fidelity index Rf

Rg 102,8

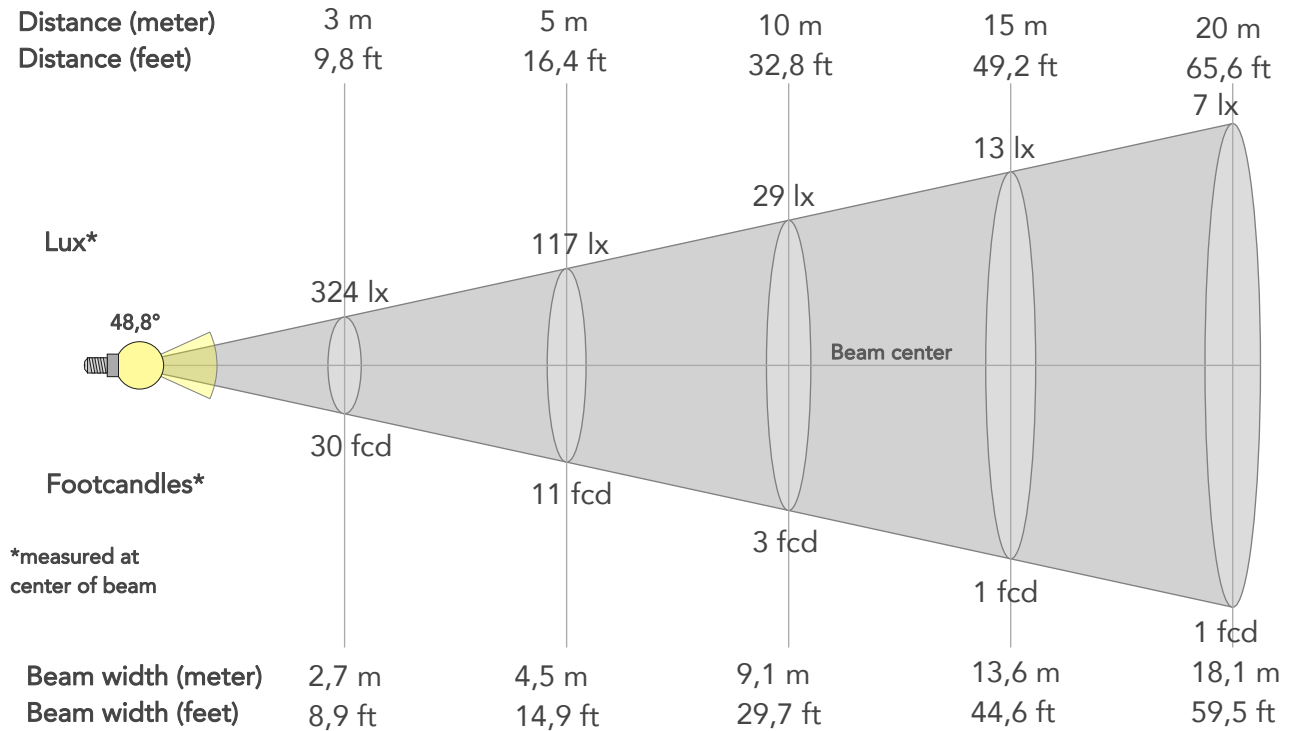
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 89 | -5% | -2% |
| 2 | 90 | -4% | 4% |
| 3 | 84 | -1% | 9% |
| 4 | 87 | 5% | 8% |
| 5 | 89 | 8% | 5% |
| 6 | 88 | 9% | 0% |
| 7 | 86 | 5% | -8% |
| 8 | 90 | 1% | -6% |
| 9 | 90 | -3% | -5% |
| 10 | 92 | -4% | 1% |
| 11 | 89 | -1% | 7% |
| 12 | 88 | 2% | 4% |
| 13 | 91 | 6% | -3% |
| 14 | 88 | 6% | -7% |
| 15 | 87 | 2% | -8% |
| 16 | 87 | -2% | -10% |



BEAM DETAILS

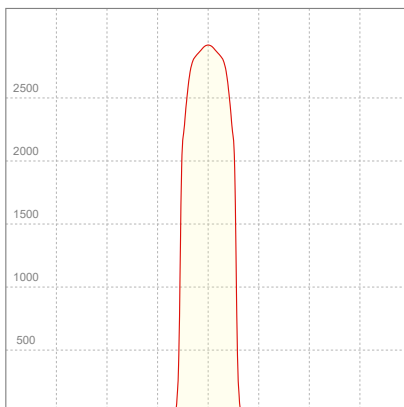
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 48,8° | 54,1° | 56,6° | 99,0% | 98,8% |



BEAM INTENSITIES AND WIDTHS

| Distance | 1m | 2m | 3m | 4m | 5m | 7,5m | 10m | 15m | 20m | 25m | 30m | 40m | 50m |
|-----------|--------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| Distance | 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 24,6ft | 32,8ft | 49,2ft | 65,6ft | 82ft | 98,4ft | 131,2ft | 164ft |
| Lux | 2918lx | 730lx | 324lx | 182lx | 117lx | 52lx | 29lx | 13lx | 7lx | 5lx | 3lx | 2lx | 1lx |
| Footcand. | 271fcd | 68fcd | 30fcd | 17fcd | 11fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 0,9m | 1,8m | 2,7m | 3,6m | 4,5m | 6,8m | 9,1m | 13,6m | 18,1m | 22,7m | 27,2m | 36,3m | 45,3m |
| Beam wid. | 3ft | 6ft | 8,9ft | 11,9ft | 14,9ft | 22,3ft | 29,7ft | 44,6ft | 59,5ft | 74,4ft | 89,2ft | 119ft | 148,7ft |

LINEAR DISTRIBUTION DIAGRAM

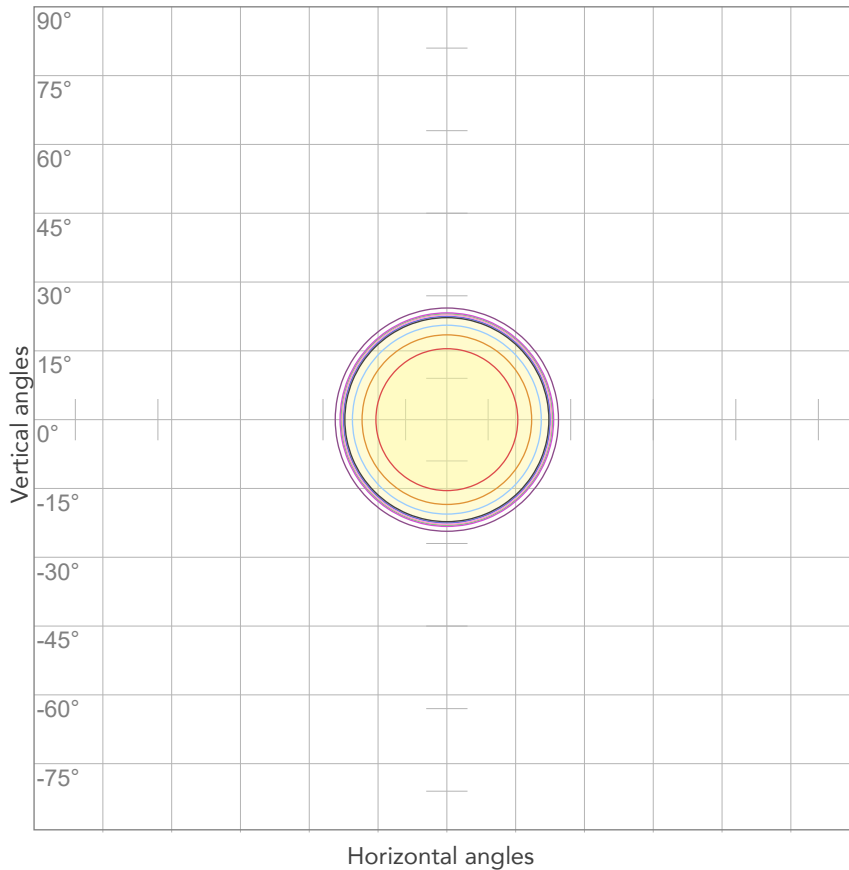


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Effeciency |
|---------------|---------------|-------------|----------|------------|
| 224V | 0,158A | 32,8W | 0,93 | 47lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



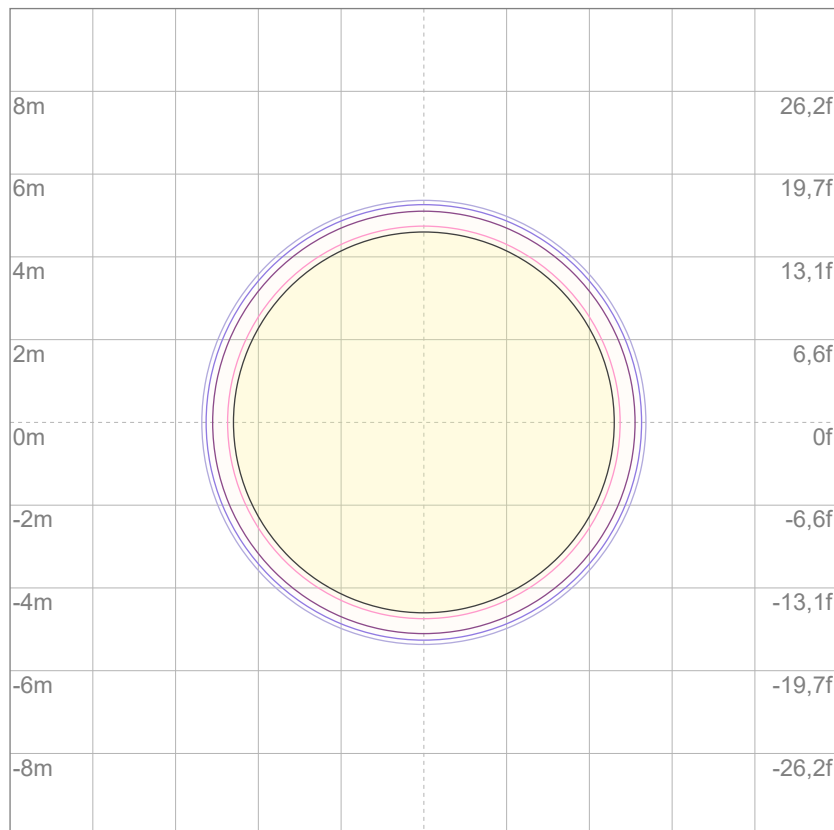
| | |
|-----|---------|
| 10% | 292 cd |
| 20% | 584 cd |
| 30% | 875 cd |
| 40% | 1167 cd |
| 50% | 1459 cd |
| 60% | 1751 cd |
| 70% | 2043 cd |
| 80% | 2334 cd |

Conditions:

Number of c-planes: 2

Candela at center: 2918 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,875 lx |
| 5% | 1,46 lx |
| 10% | 2,92 lx |
| 30% | 8,75 lx |
| 50% | 14,6 lx |

Conditions:

Number of c-planes: 2

Lux at center: 29,2 lx

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



Total lumen output:

1603 lm

Peak candela output:

3113 cd

Light quality:

CRI: 90,2

Color temperature:

2970 K

PRODUCT NAME:

ECLDISPLAY

MEASURAMENT CONDITIONS:

Beam angle:

Profile 50°

Target:

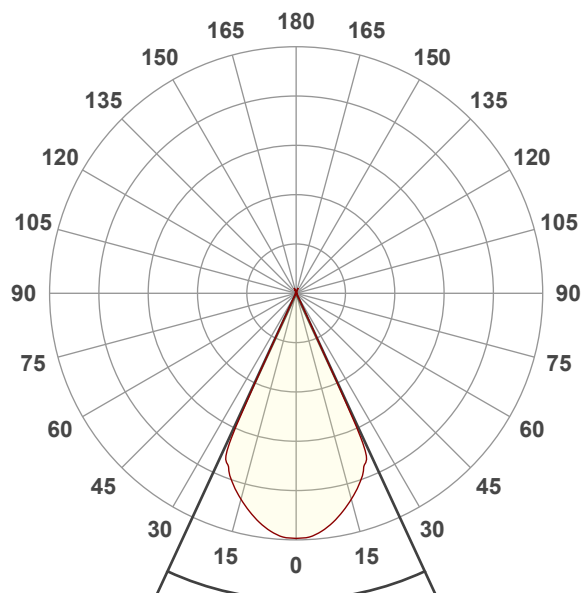
3000K

Operator:

Salvatore Giglio

Date and time:

07/02/2024 13:07:23

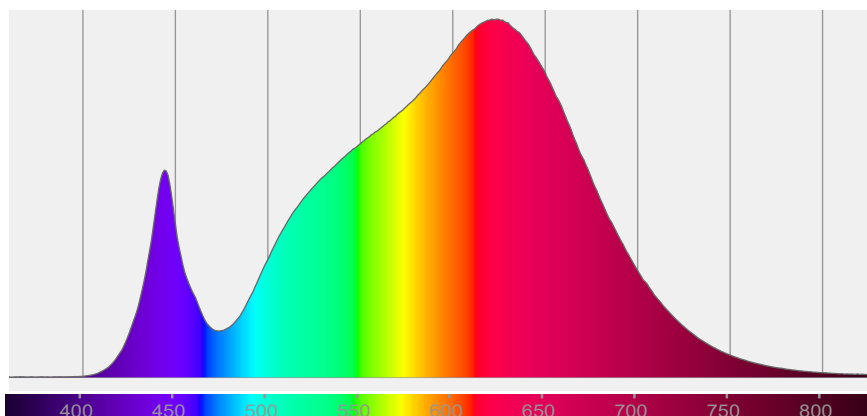


Beam angle 50%: 49,7°

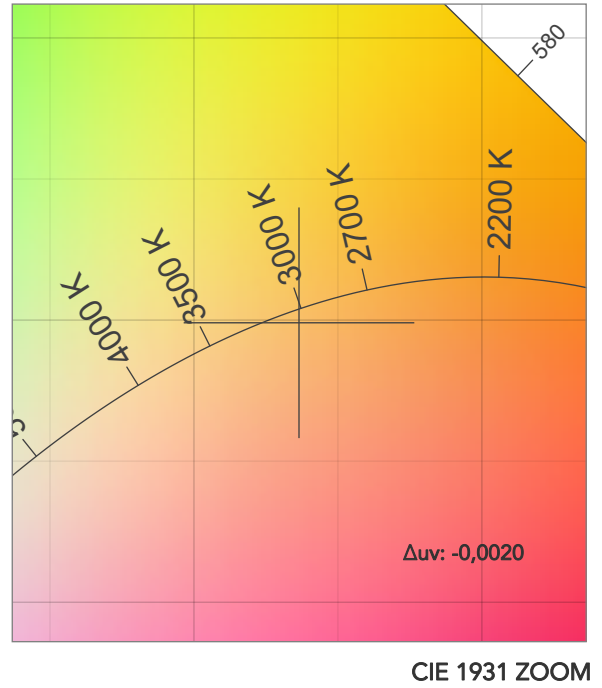
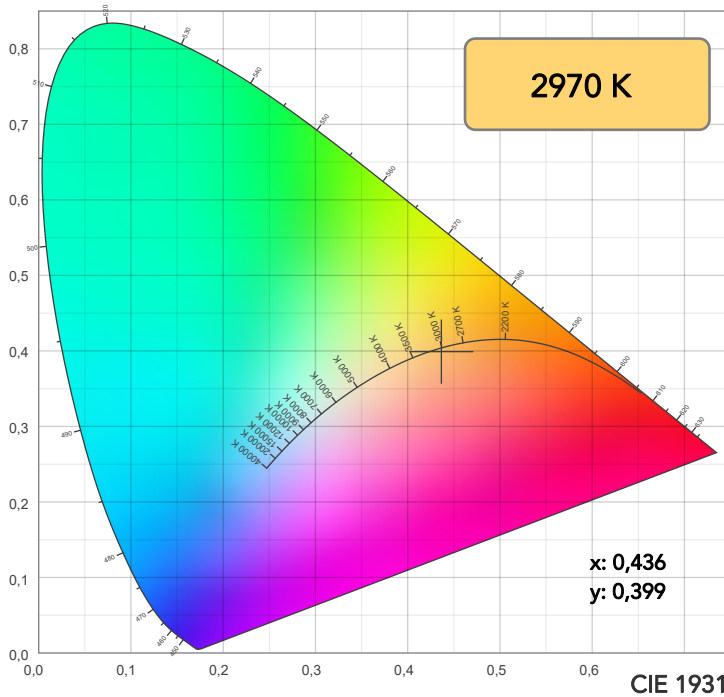
Field angle 10%: 53,6°

Cut off angle 2.5%: 55,9°

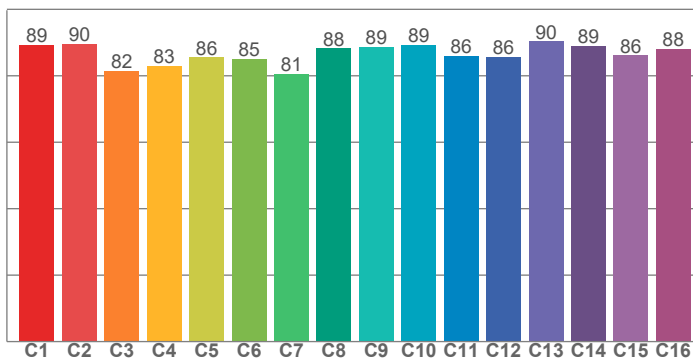
Spectra



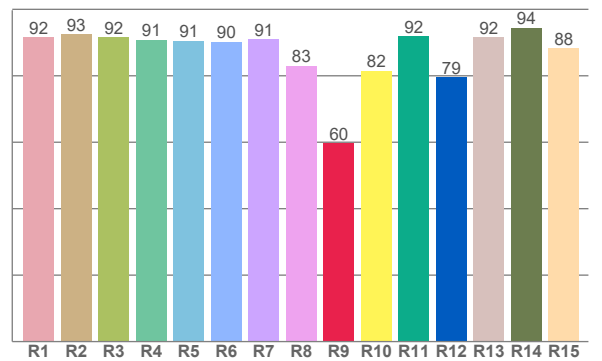
COLOR DETAILS



TM30: 86,8



CRI: 90,2 (R1-R8)



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

| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91,7 | 92,5 | 91,6 | 90,9 | 90,5 | 90,3 | 91,0 | 83,0 | 59,6 | 81,6 | 91,9 | 79,5 | 91,5 | 94,4 | 88,3 |

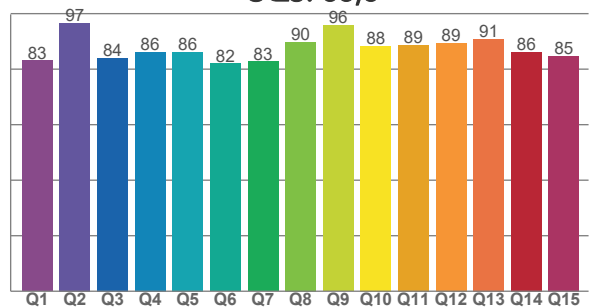
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89,3 | 89,6 | 81,5 | 83,0 | 85,6 | 85,2 | 80,5 | 88,2 | 88,8 | 89,3 | 86,0 | 85,7 | 90,3 | 89,0 | 86,2 | 88,1 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 83,1 | 96,7 | 84,1 | 86,1 | 86,2 | 82,0 | 82,8 | 89,7 | 95,8 | 88,4 | 88,7 | 89,4 | 90,9 | 86,1 | 84,7 |

CQS: 86,8



COLOR PARAMETERS

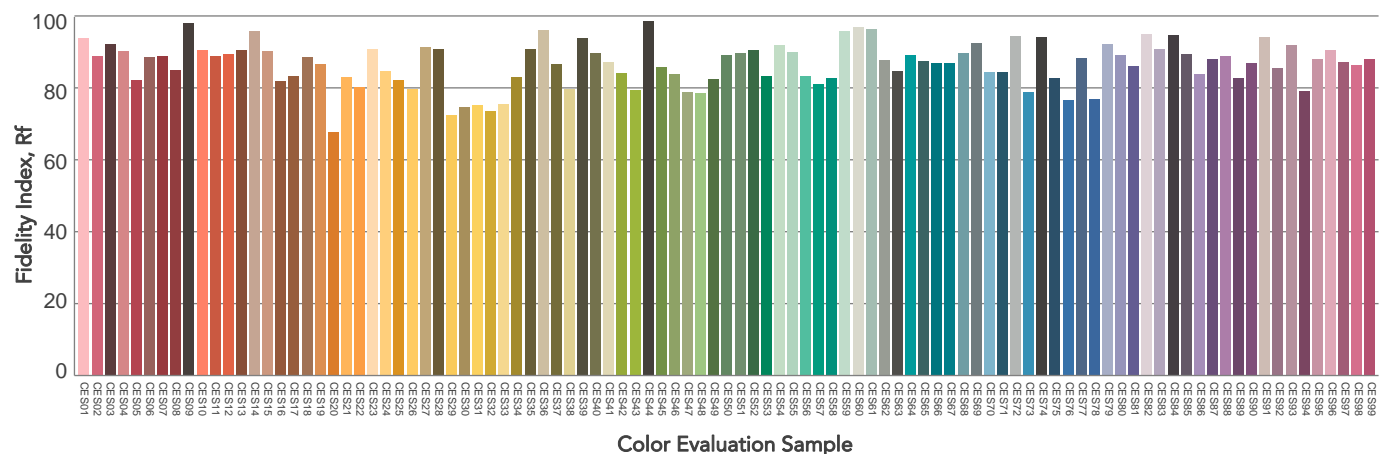
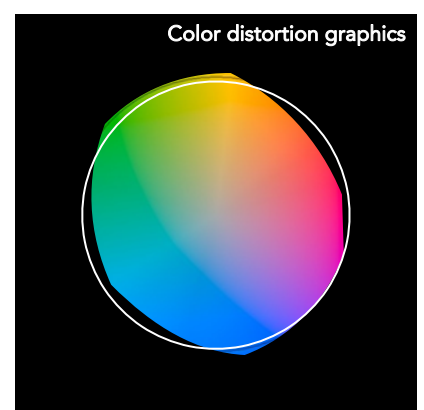
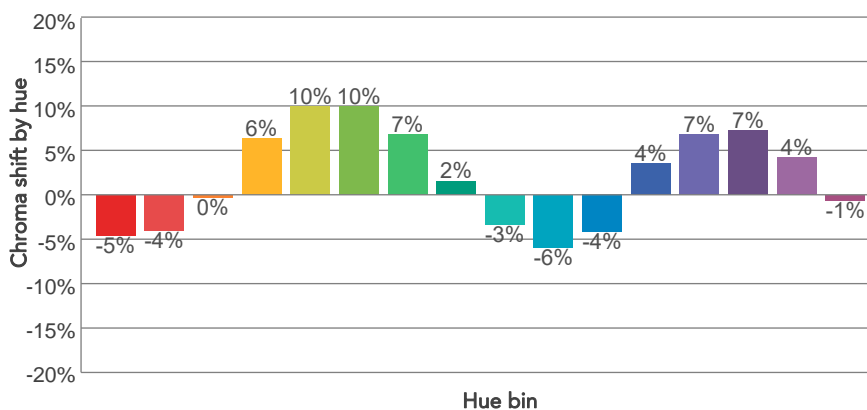
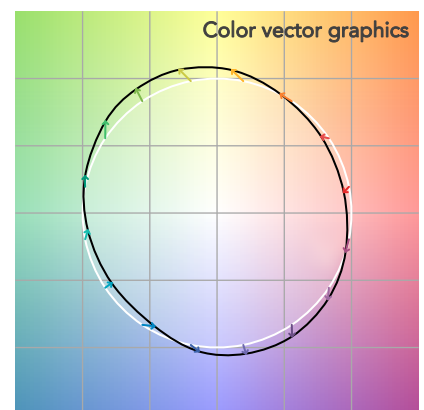
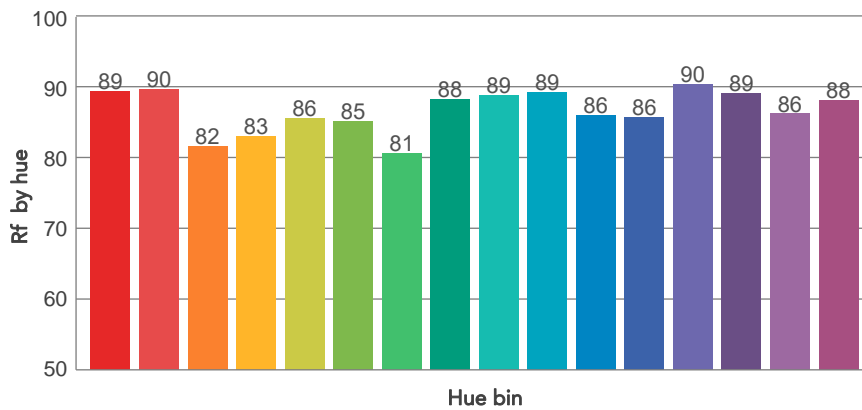
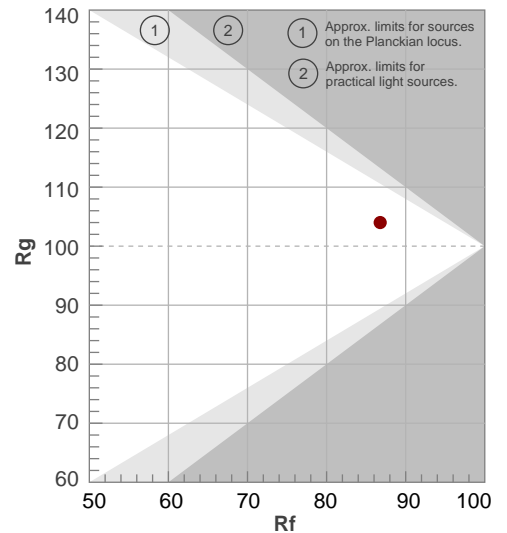
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 2970 K | 90,2 | 59,6 | 86,8 | 104,0 | 86,8 | 79 | 0,436 | 0,399 | -0,0020 |

TM30 DETAILS

Rf 86,8
Fidelity index Rf

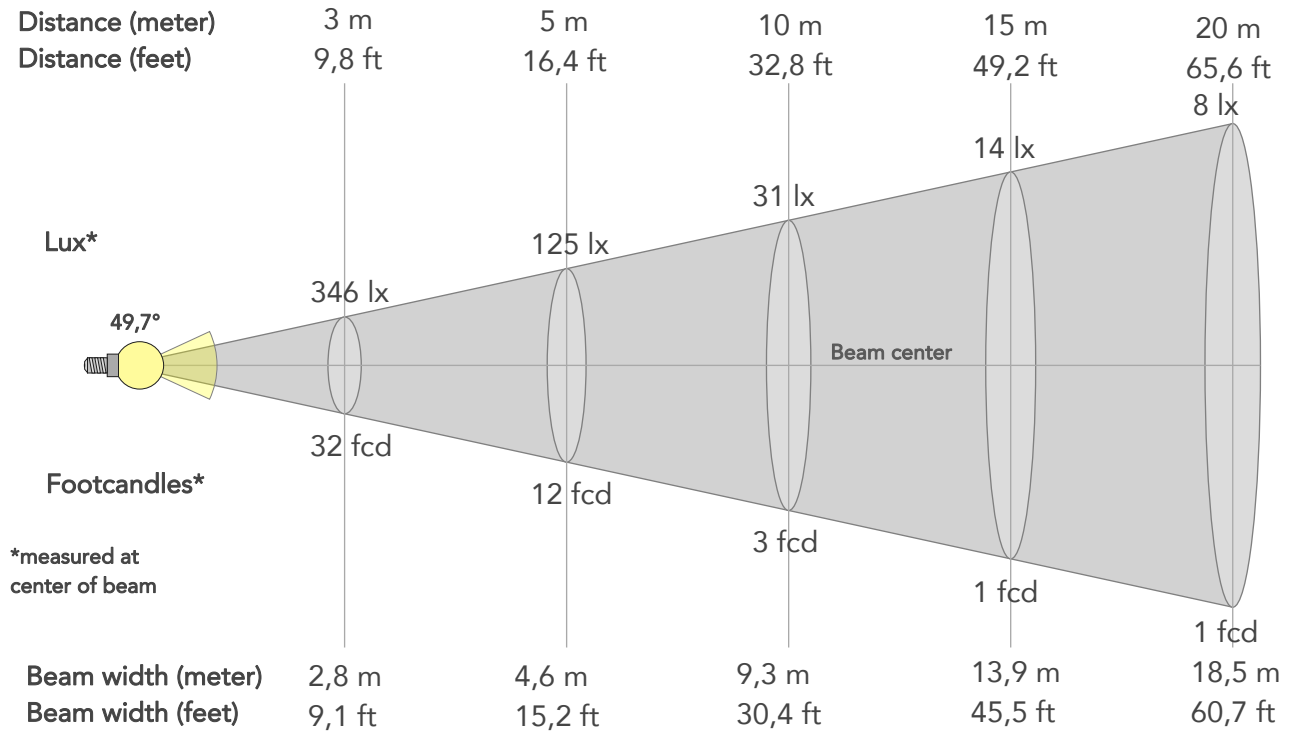
Rg 104,0
Gammut index

| | | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| Hue Bin | R _f | Chroma | Hue |
| 1 | 89 | -5% | -3% |
| 2 | 90 | -4% | 4% |
| 3 | 82 | 0% | 10% |
| 4 | 83 | 6% | 10% |
| 5 | 86 | 10% | 7% |
| 6 | 85 | 10% | -1% |
| 7 | 81 | 7% | -11% |
| 8 | 88 | 2% | -8% |
| 9 | 89 | -3% | -6% |
| 10 | 89 | -6% | 0% |
| 11 | 86 | -4% | 8% |
| 12 | 86 | 4% | 7% |
| 13 | 90 | 7% | 1% |
| 14 | 89 | 7% | -5% |
| 15 | 86 | 4% | -7% |
| 16 | 88 | -1% | -9% |



BEAM DETAILS

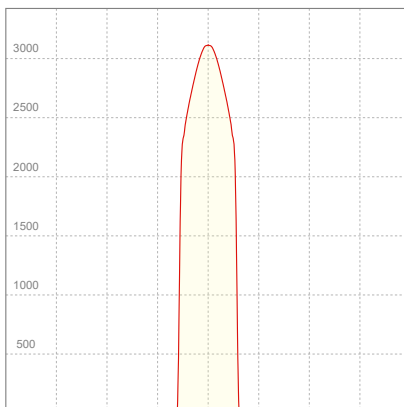
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 49,7° | 53,6° | 55,9° | 99,1% | 98,9% |



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 | 3113lx | 778lx | 346lx | 195lx | 125lx | 55lx | 31lx | 14lx | 8lx | 5lx | 3lx | 2lx | 1lx |
| Footcand. | 289fcd | 72fcd | 32fcd | 18fcd | 12fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 0,9m | 1,9m | 2,8m | 3,7m | 4,6m | 6,9m | 9,3m | 13,9m | 18,5m | 23,1m | 27,8m | 37m | 46,3m |
| Beam wid. | 3,1ft | 6,1ft | 9,1ft | 12,1ft | 15,2ft | 22,8ft | 30,4ft | 45,5ft | 60,7ft | 75,9ft | 91,1ft | 121,4ft | 151,8ft |

LINEAR DISTRIBUTION DIAGRAM

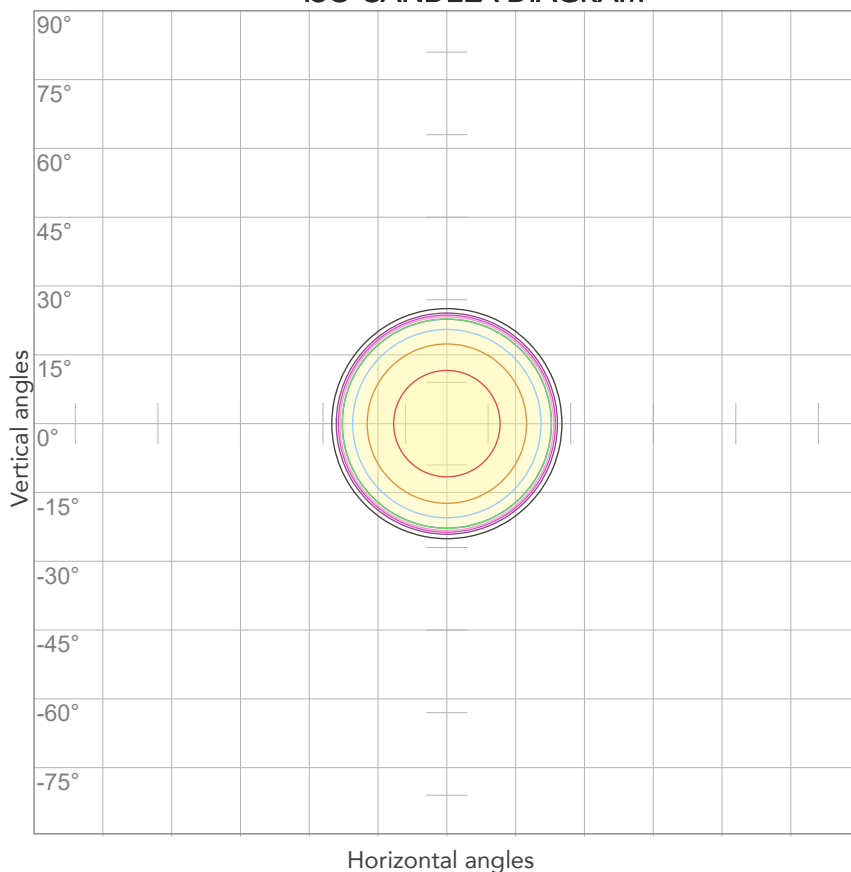


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Effeciency |
|---------------|---------------|-------------|----------|------------|
| 223V | 0,159A | 33,0W | 0,93 | 49lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



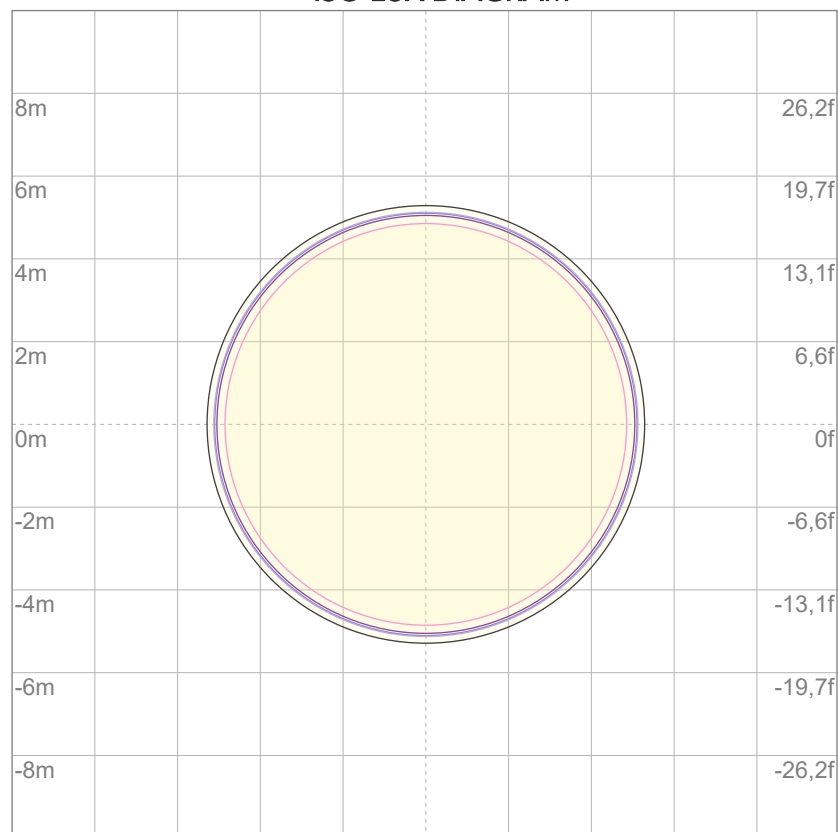
| | |
|-----|---------|
| 10% | 311 cd |
| 20% | 623 cd |
| 30% | 934 cd |
| 40% | 1245 cd |
| 50% | 1556 cd |
| 60% | 1868 cd |
| 70% | 2179 cd |
| 80% | 2490 cd |

Conditions:

Number of c-planes: 2

Candela at center: 3113 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,934 lx |
| 5% | 1,56 lx |
| 10% | 3,11 lx |
| 30% | 9,34 lx |
| 50% | 15,6 lx |

Conditions:

Number of c-planes: 2

Lux at center: 31,1 lx

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



Total lumen output:

1825 lm

Peak candela output:

3345 cd

Light quality:

CRI: 89,0

Color temperature:

4006 K

PRODUCT NAME:

ECLDISPLAY

MEASURAMENT CONDITIONS:

Beam angle:

Profile 50°

Target:

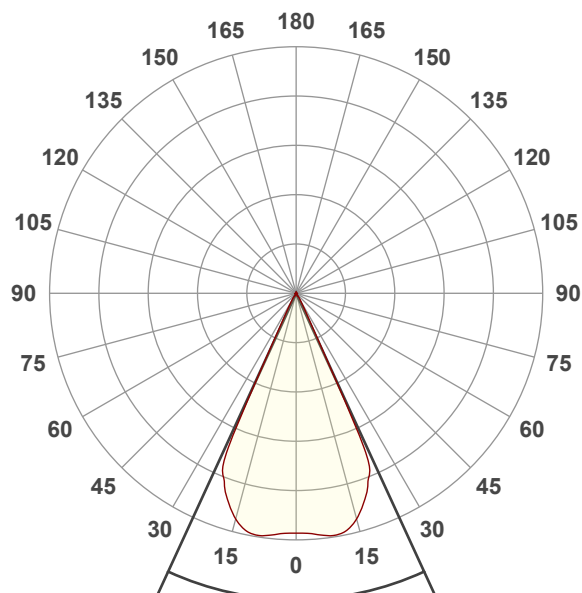
4000K

Operator:

Salvatore Giglio

Date and time:

07/02/2024 12:11:01

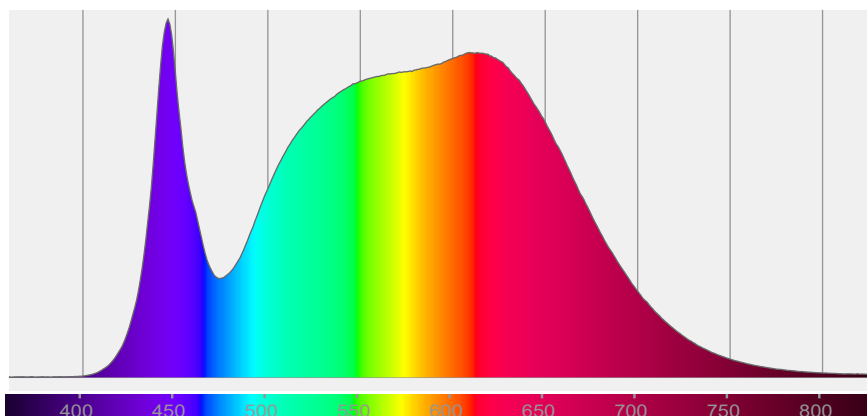


Beam angle 50%: 49,4°

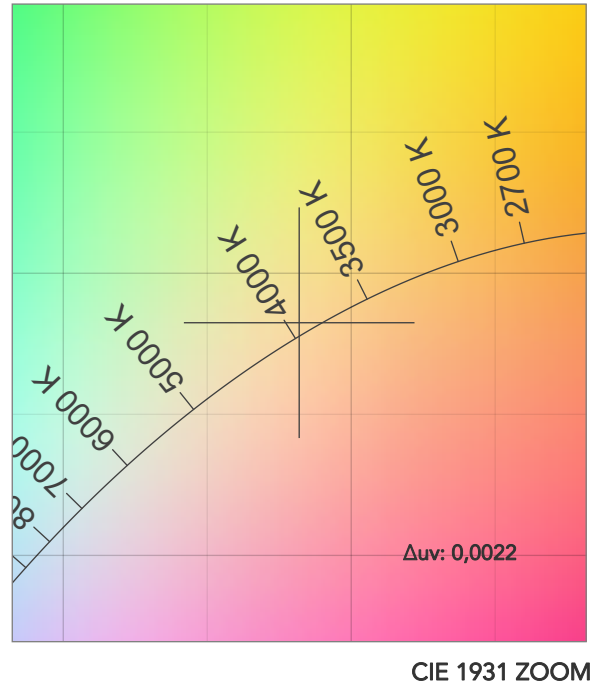
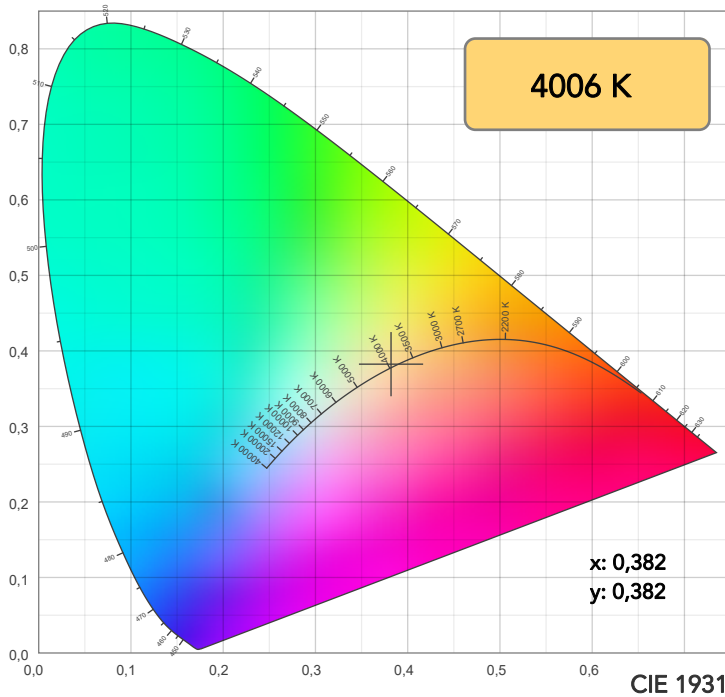
Field angle 10%: 53,6°

Cut off angle 2.5%: 58°

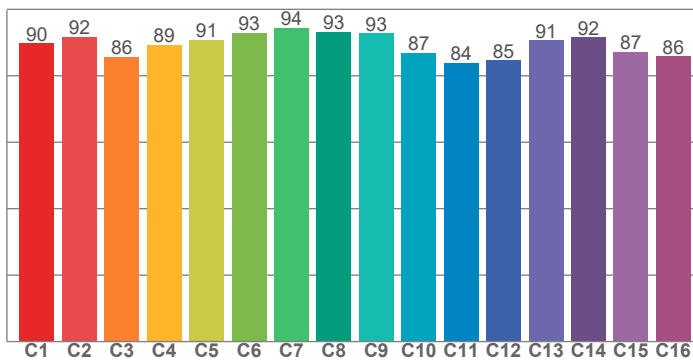
Spectra



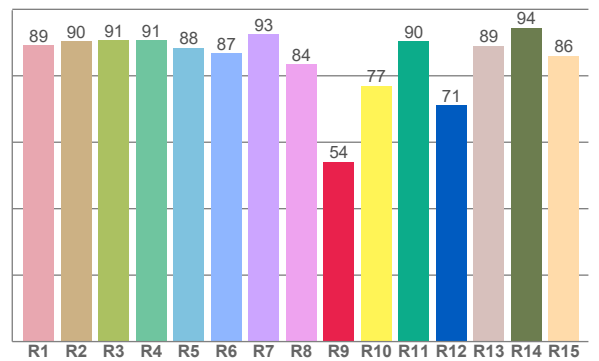
COLOR DETAILS



TM30: 89,3



CRI: 89,0 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89,3 | 90,5 | 90,7 | 90,7 | 88,5 | 86,8 | 92,5 | 83,5 | 54,1 | 77,0 | 90,5 | 71,1 | 89,1 | 94,5 | 86,0 |

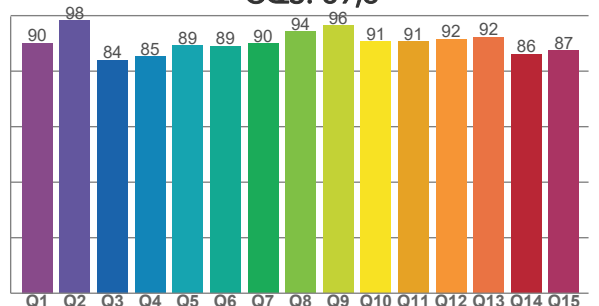
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89,8 | 91,7 | 85,7 | 89,4 | 90,8 | 92,9 | 94,4 | 93,2 | 92,8 | 86,9 | 83,8 | 84,6 | 90,6 | 91,6 | 87,2 | 85,8 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90,1 | 98,2 | 84,1 | 85,2 | 89,2 | 88,9 | 89,9 | 94,3 | 96,5 | 90,7 | 90,7 | 91,5 | 92,2 | 86,1 | 87,4 |

CQS: 89,6



COLOR PARAMETERS

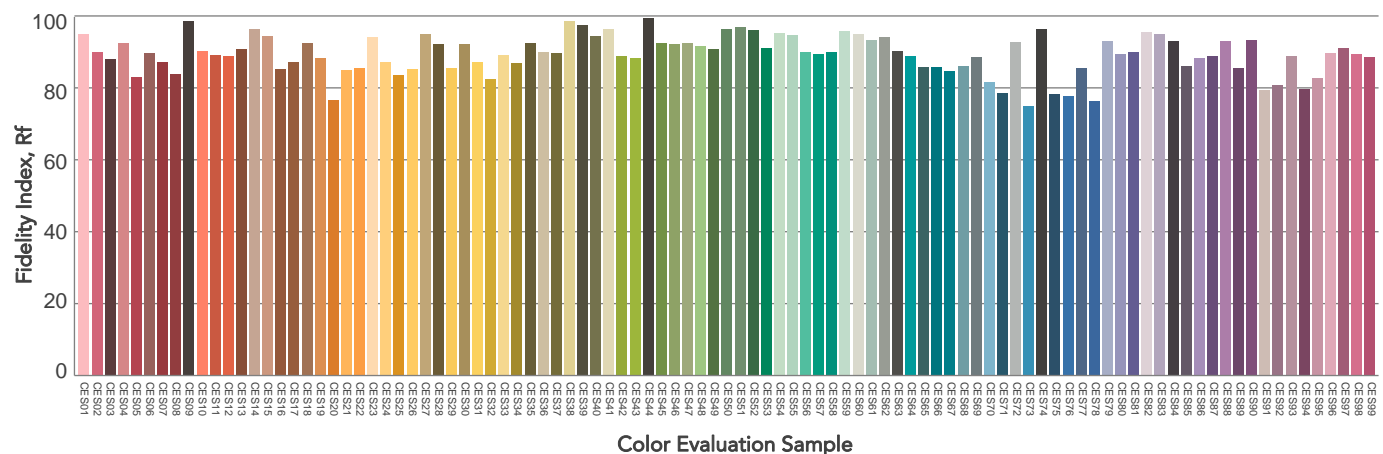
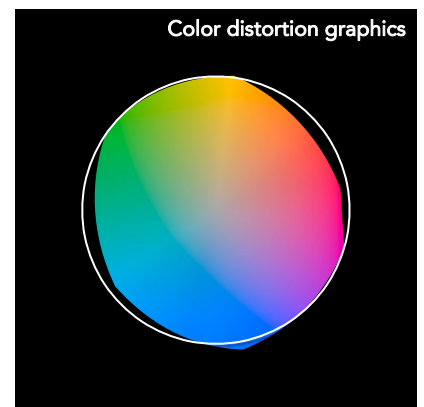
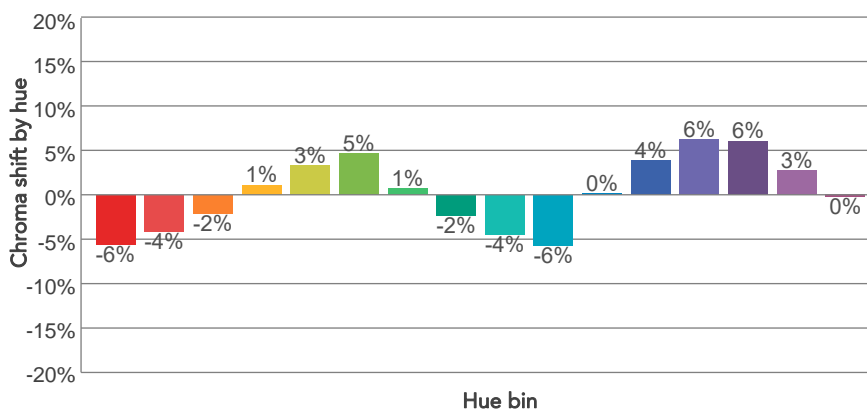
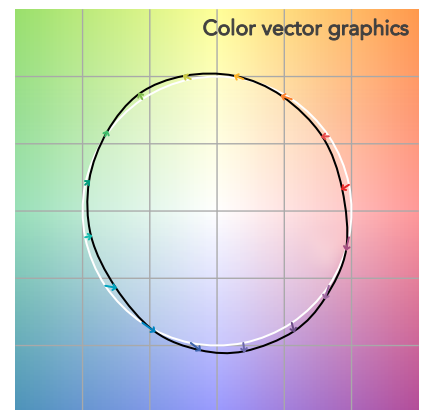
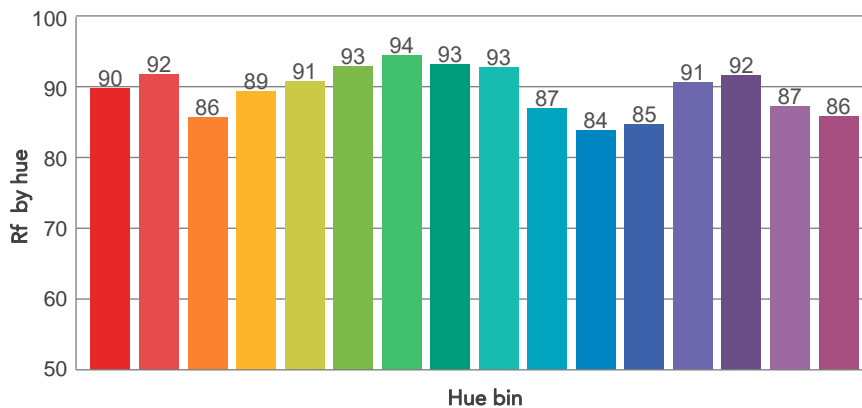
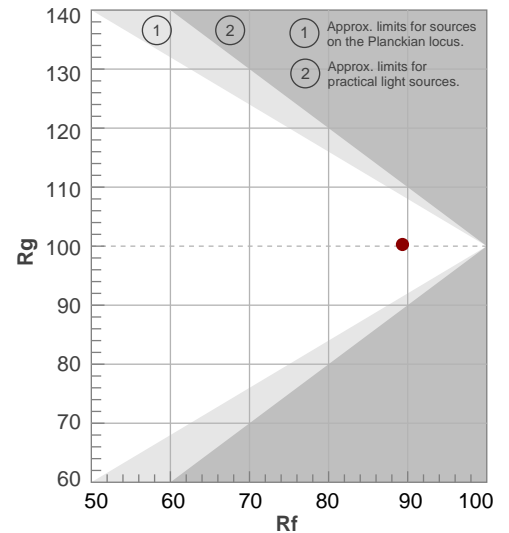
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Television lighting index | Color coordinate cie 1931 | Color coordinate cie 1931 | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | TLCI | x | y | Δuv |
| 4006 K | 89,0 | 54,1 | 89,3 | 100,3 | 89,6 | 88 | 0,382 | 0,382 | 0,0022 |

TM30 DETAILS

Rf 89,3
Fidelity index Rf

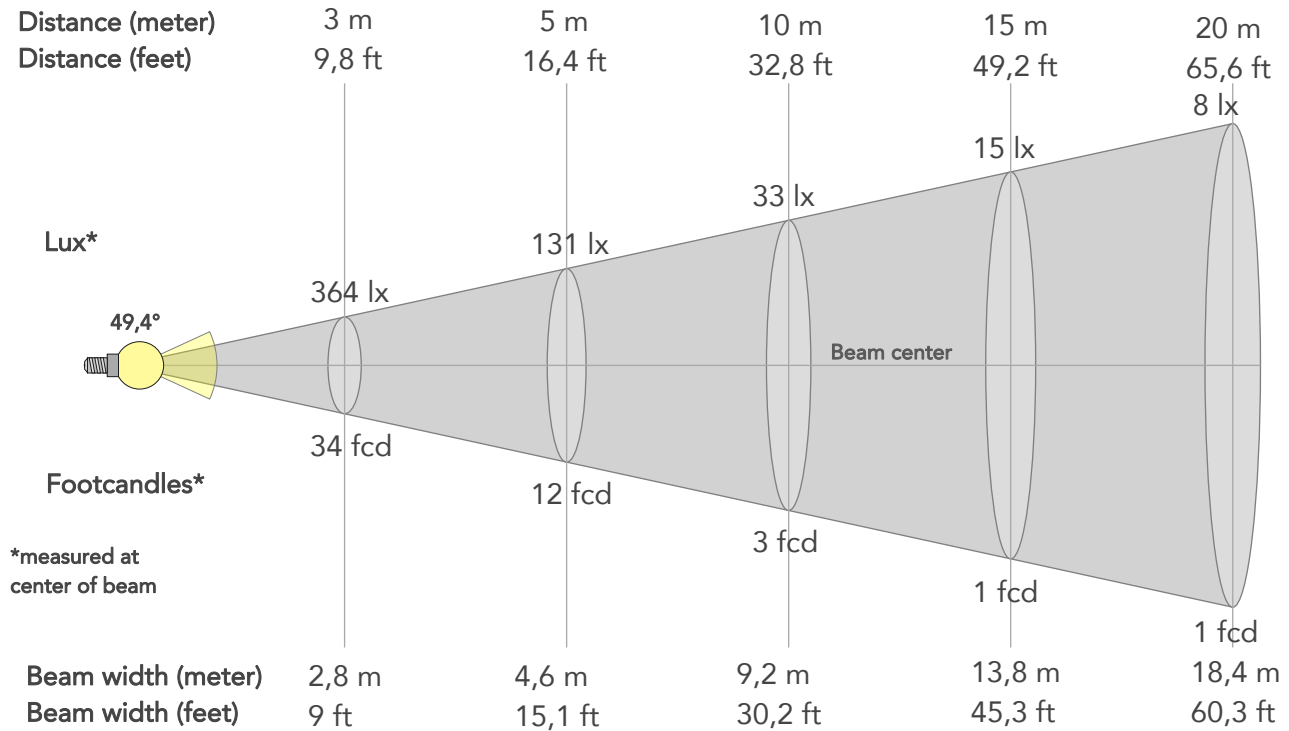
Rg 100,3
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 90 | -6% | -2% |
| 2 | 92 | -4% | 2% |
| 3 | 86 | -2% | 7% |
| 4 | 89 | 1% | 6% |
| 5 | 91 | 3% | 4% |
| 6 | 93 | 5% | 0% |
| 7 | 94 | 1% | -4% |
| 8 | 93 | -2% | -3% |
| 9 | 93 | -4% | 0% |
| 10 | 87 | -6% | 6% |
| 11 | 84 | 0% | 11% |
| 12 | 85 | 4% | 8% |
| 13 | 91 | 6% | 0% |
| 14 | 92 | 6% | -2% |
| 15 | 87 | 3% | -9% |
| 16 | 86 | 0% | -9% |



BEAM DETAILS

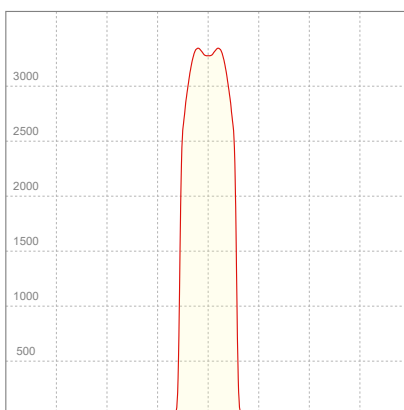
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 49,4° | 53,6° | 58° | 99,2% | 99,0% |



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 | 3280lx | 820lx | 364lx | 205lx | 131lx | 58lx | 33lx | 15lx | 8lx | 5lx | 4lx | 2lx | 1lx |
| Footcand. | 305fcd | 76fcd | 34fcd | 19fcd | 12fcd | 5fcd | 3fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 0,9m | 1,8m | 2,8m | 3,7m | 4,6m | 6,9m | 9,2m | 13,8m | 18,4m | 23m | 27,6m | 36,8m | 46m |
| Beam wid. | 3ft | 6,1ft | 9ft | 12ft | 15,1ft | 22,6ft | 30,2ft | 45,3ft | 60,3ft | 75,4ft | 90,5ft | 120,7ft | 150,8ft |

LINEAR DISTRIBUTION DIAGRAM

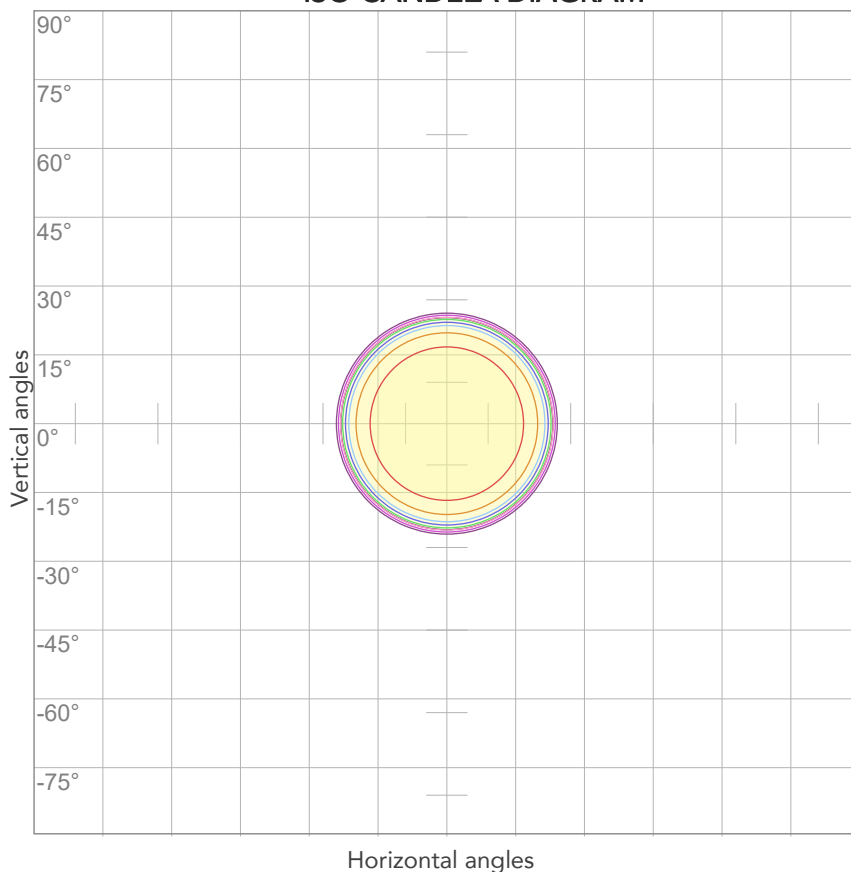


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Effeciency |
|---------------|---------------|-------------|----------|------------|
| 222V | 0,164A | 33,9W | 0,94 | 54lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



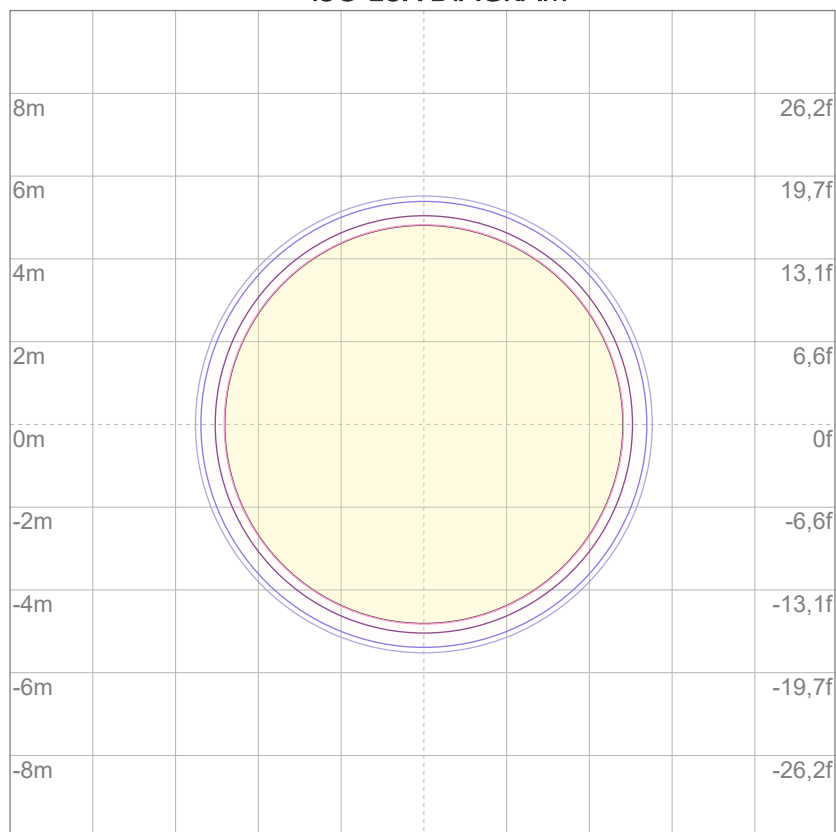
| | |
|-----|---------|
| 10% | 328 cd |
| 20% | 656 cd |
| 30% | 984 cd |
| 40% | 1312 cd |
| 50% | 1640 cd |
| 60% | 1968 cd |
| 70% | 2296 cd |
| 80% | 2624 cd |

Conditions:

Number of c-planes: 2

Candela at center: 3280 cd

ISO LUX DIAGRAM



| | |
|-----|----------|
| 3% | 0,984 lx |
| 5% | 1,64 lx |
| 10% | 3,28 lx |
| 30% | 9,84 lx |
| 50% | 16,4 lx |

Conditions:

Number of c-planes: 2

Lux at center: 32,8 lx

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



Total lumen output:

1852 lm

Peak candela output:

3547 cd

Light quality:

CRI: 90,9

Color temperature:

5350 K

PRODUCT NAME:

ECLDISPLAY

MEASURAMENT CONDITIONS:

Beam angle:

Profile 50°

Target:

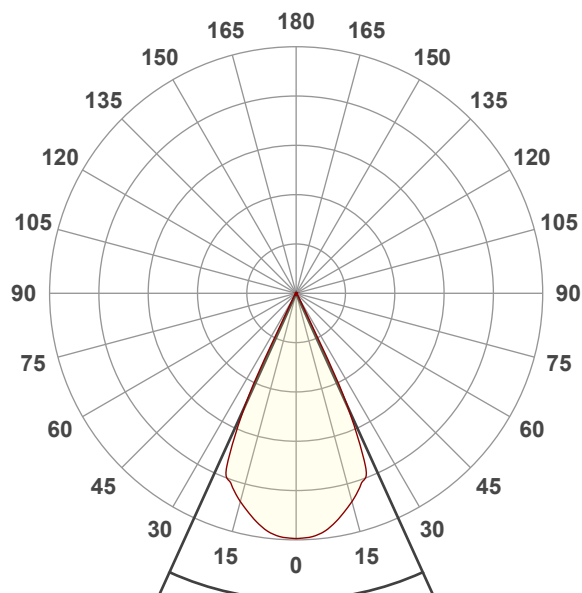
5600K

Operator:

Salvatore Giglio

Date and time:

07/02/2024 12:35:22

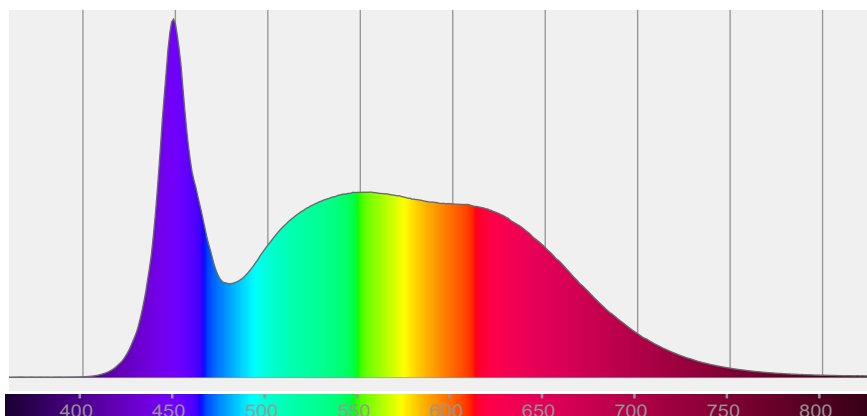


Beam angle 50%: 48,8°

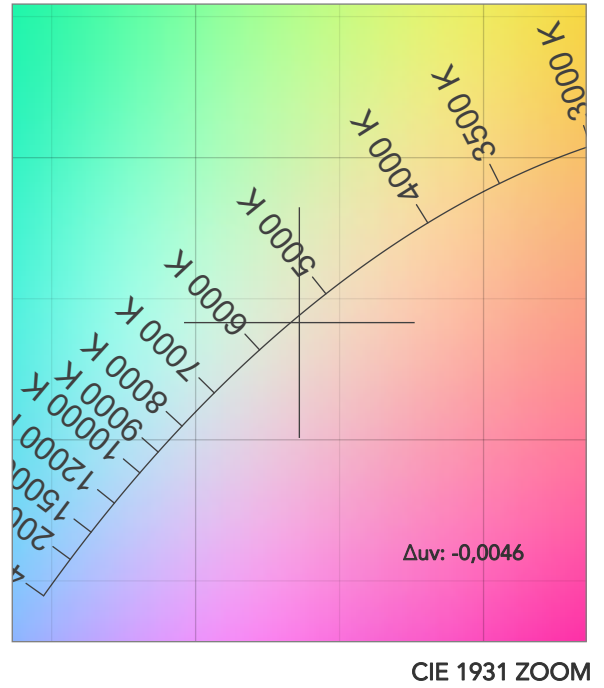
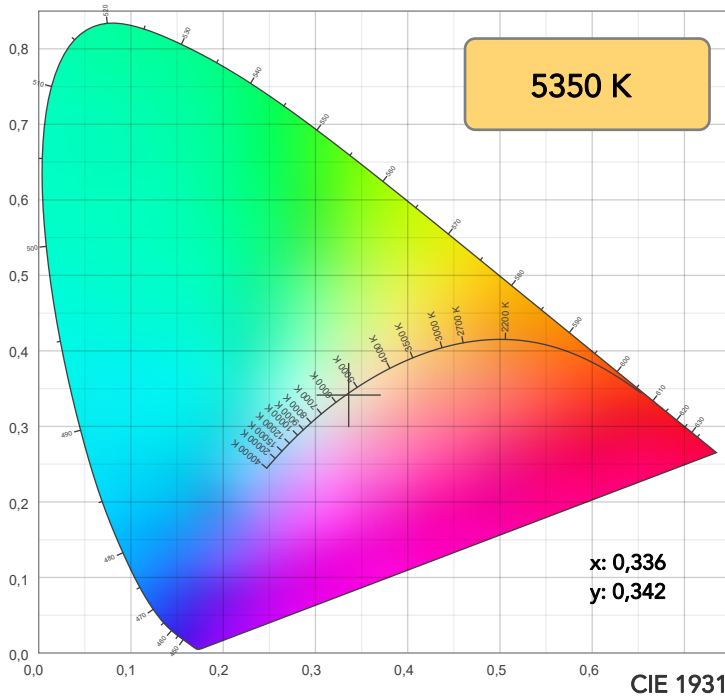
Field angle 10%: 55°

Cut off angle 2.5%: 59°

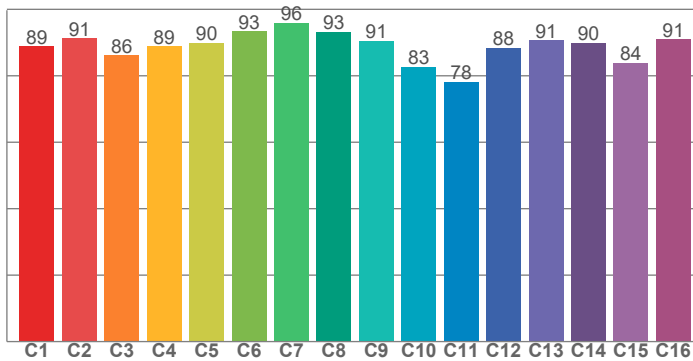
Spectra



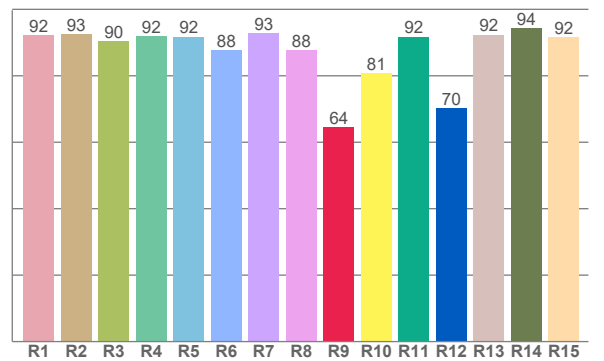
COLOR DETAILS



TM30: 88,6



CRI: 90,9 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,2 | 92,6 | 90,4 | 92,0 | 91,7 | 87,8 | 92,8 | 87,7 | 64,4 | 80,7 | 91,8 | 70,2 | 92,4 | 94,4 | 91,7 |

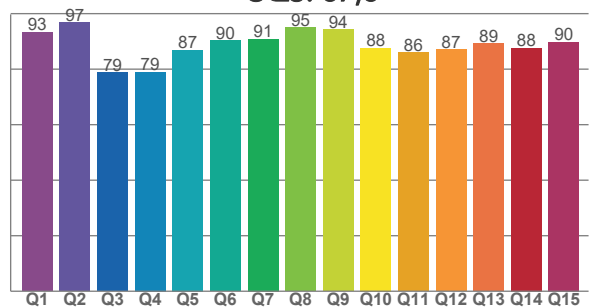
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 88,9 | 91,3 | 86,1 | 88,9 | 89,8 | 93,4 | 96,0 | 93,2 | 90,5 | 82,6 | 78,2 | 88,4 | 90,7 | 90,0 | 84,0 | 91,0 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93,3 | 96,8 | 78,8 | 79,0 | 86,9 | 90,3 | 90,9 | 94,9 | 94,2 | 87,7 | 86,0 | 87,1 | 89,2 | 87,6 | 89,8 |

CQS: 87,8



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 |
| 5350 K | 90,9 | 64,4 | 88,6 | 100,8 | 87,8 | 92 | 0,336 | 0,342 | -0,0046 |

TM30 DETAILS

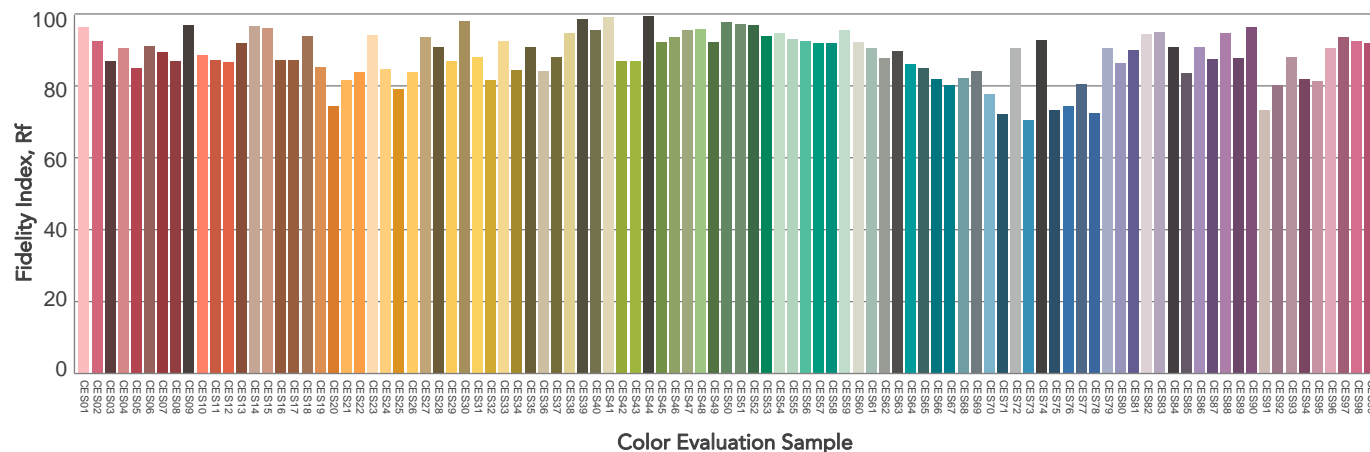
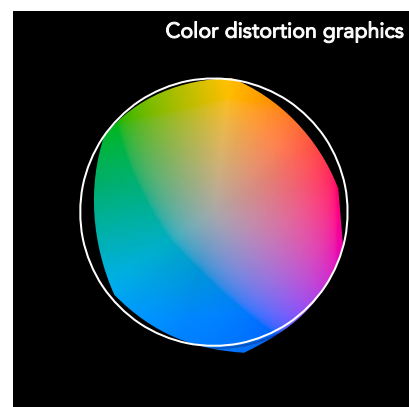
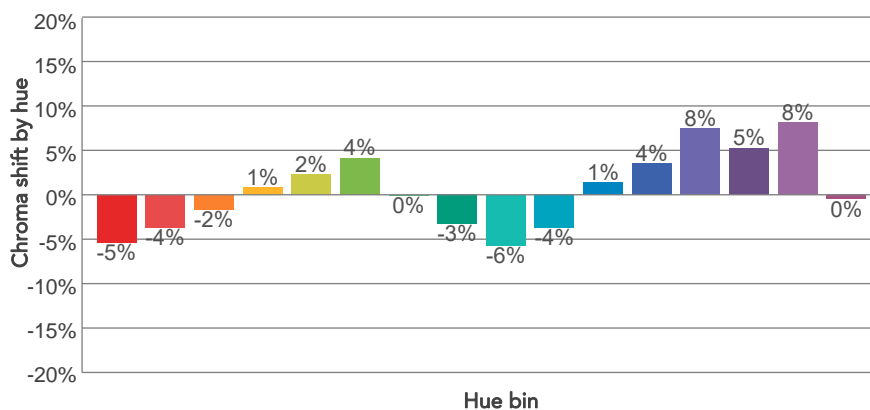
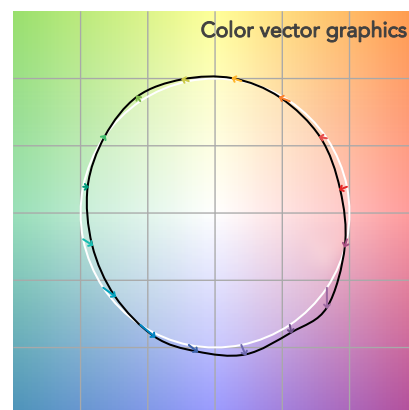
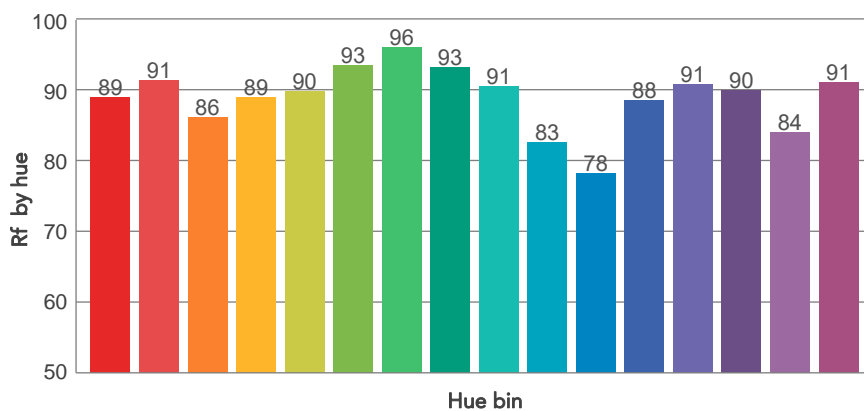
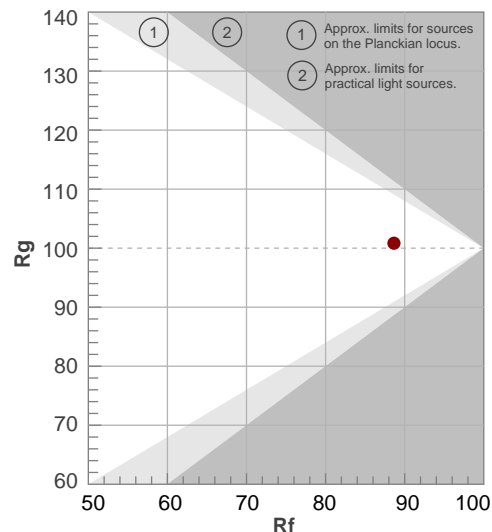
Rf 88,6

Fidelity index Rf

Rg 100,8

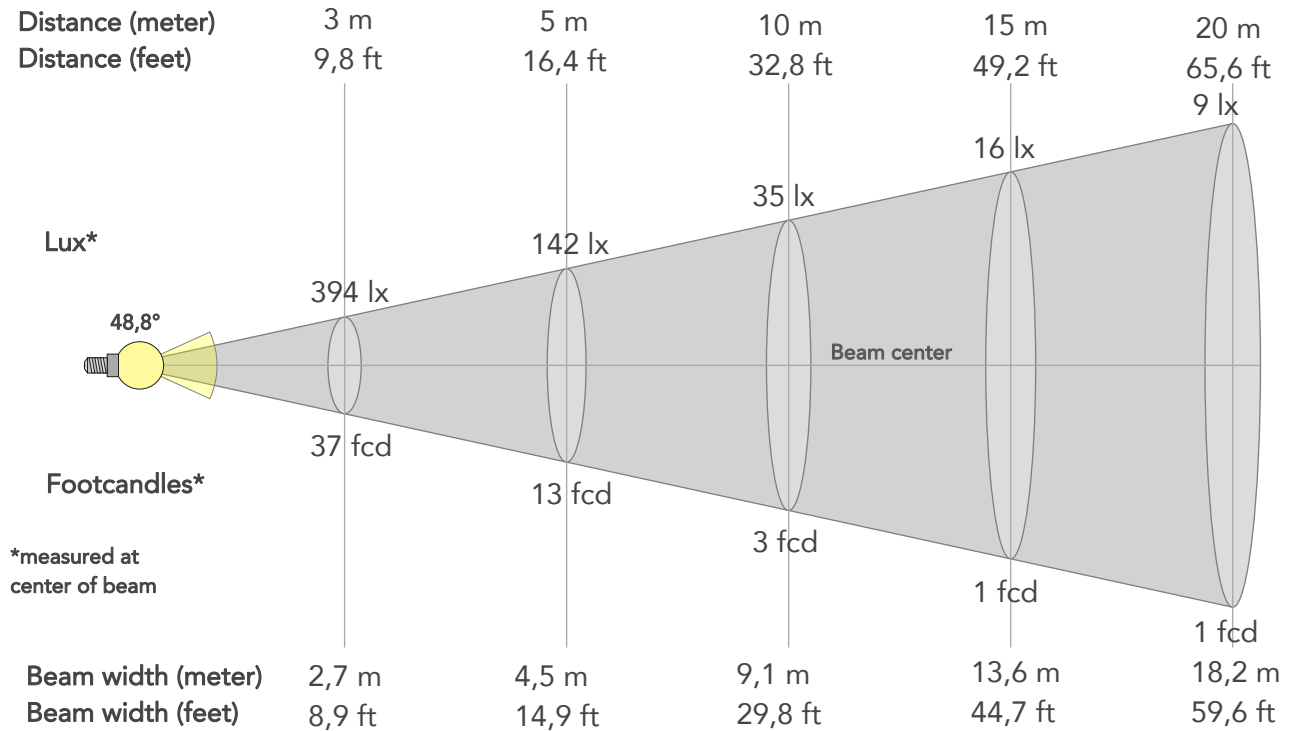
Gammut index

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 89 | -5% | -1% |
| 2 | 91 | -4% | 3% |
| 3 | 86 | -2% | 8% |
| 4 | 89 | 1% | 7% |
| 5 | 90 | 2% | 4% |
| 6 | 93 | 4% | 0% |
| 7 | 96 | 0% | -2% |
| 8 | 93 | -3% | -1% |
| 9 | 91 | -6% | 5% |
| 10 | 83 | -4% | 10% |
| 11 | 78 | 1% | 14% |
| 12 | 88 | 4% | 7% |
| 13 | 91 | 8% | 2% |
| 14 | 90 | 5% | -2% |
| 15 | 84 | 8% | -12% |
| 16 | 91 | 0% | -5% |



BEAM DETAILS

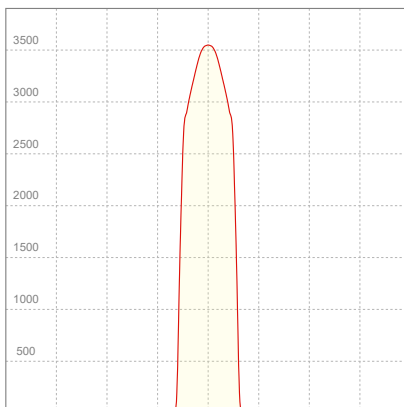
| Beam angle 50% | Field angle 10% | Cut off angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|--------------------|------------------------------|-----------------------------|
| 48,8° | 55° | 59° | 99,1% | 98,9% |



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 | 3547lx | 887lx | 394lx | 222lx | 142lx | 63lx | 35lx | 16lx | 9lx | 6lx | 4lx | 2lx | 1lx |
| Footcand. | 329fcd | 82fcd | 37fcd | 21fcd | 13fcd | 6fcd | 3fcd | 1fcd | 1fcd | 1fcd | 0fcd | 0fcd | 0fcd |
| Beam wid. | 0,9m | 1,8m | 2,7m | 3,6m | 4,5m | 6,8m | 9,1m | 13,6m | 18,2m | 22,7m | 27,2m | 36,3m | 45,4m |
| Beam wid. | 3ft | 6ft | 8,9ft | 11,9ft | 14,9ft | 22,3ft | 29,8ft | 44,7ft | 59,6ft | 74,5ft | 89,4ft | 119,1ft | 148,9ft |

LINEAR DISTRIBUTION DIAGRAM

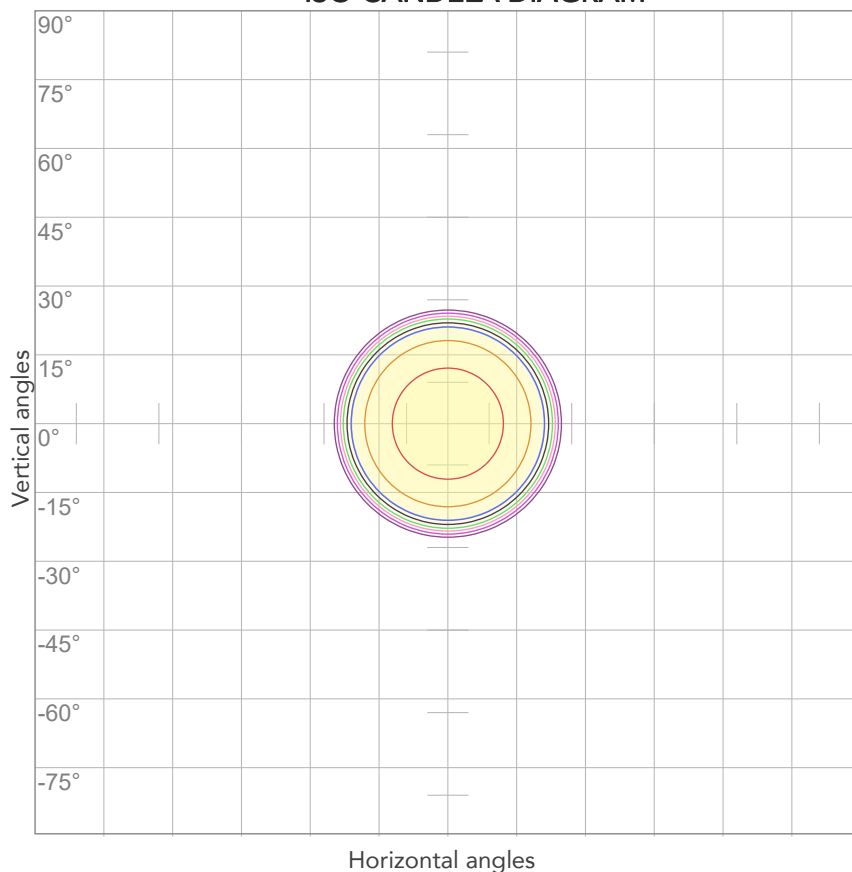


ELECTRICAL SPECIFICATIONS

| Input voltage | Input current | Input power | Power FC | Effeciency |
|---------------|---------------|-------------|----------|------------|
| 223V | 0,160A | 33,3W | 0,93 | 56lm/W |

ISO DIAGRAMS

ISO CANDELA DIAGRAM



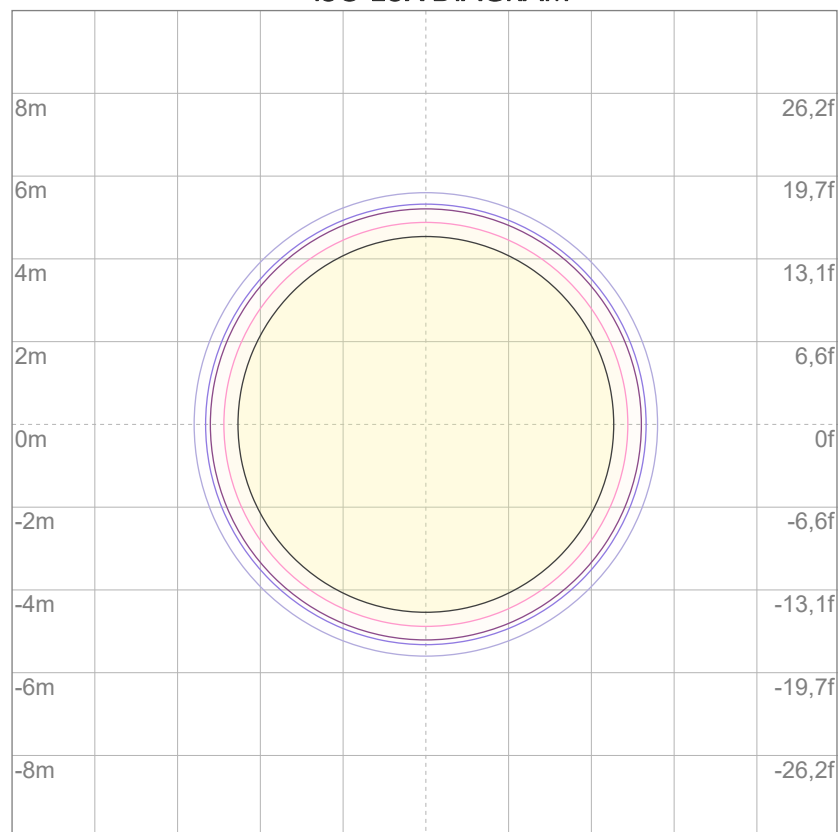
| | |
|-----|---------|
| 10% | 355 cd |
| 20% | 709 cd |
| 30% | 1064 cd |
| 40% | 1419 cd |
| 50% | 1773 cd |
| 60% | 2128 cd |
| 70% | 2483 cd |
| 80% | 2837 cd |

Conditions:

Number of c-planes: 2

Candela at center: 3547 cd

ISO LUX DIAGRAM



| | |
|-----|---------|
| 3% | 1,06 lx |
| 5% | 1,77 lx |
| 10% | 3,55 lx |
| 30% | 10,6 lx |
| 50% | 17,7 lx |

Conditions:

Number of c-planes: 2

Lux at center: 35,5 lx

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