



# Photometric Test Report



## EclDisplay CRMXFC

**Zoomable Wash Lens 15-30°**

40 RGB+WW LED Spotlight with Wireless CRMX and wired control, without lens

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**Color temperature 5600K**

Max Zoom	69
Min Zoom	74

**Color temperature 6000K**

Max Zoom	79
Min Zoom	84

## 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:

402 lm

Peak candela output:

1700 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

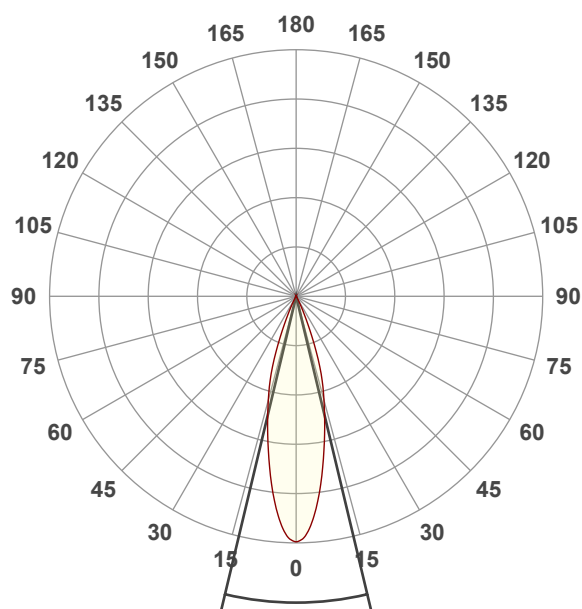
Full On

Operator:

Paolo Carvone

Date and time:

14/01/2021 11:52:44

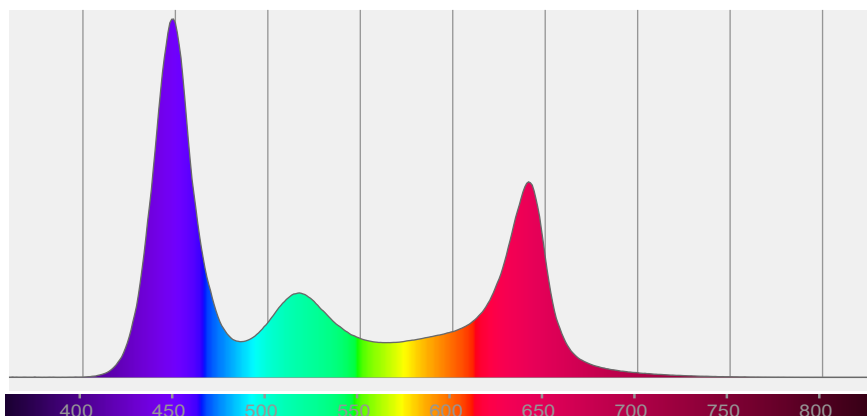


Beam angle 50%: 26,9°

Field angle 10%: 47,1°

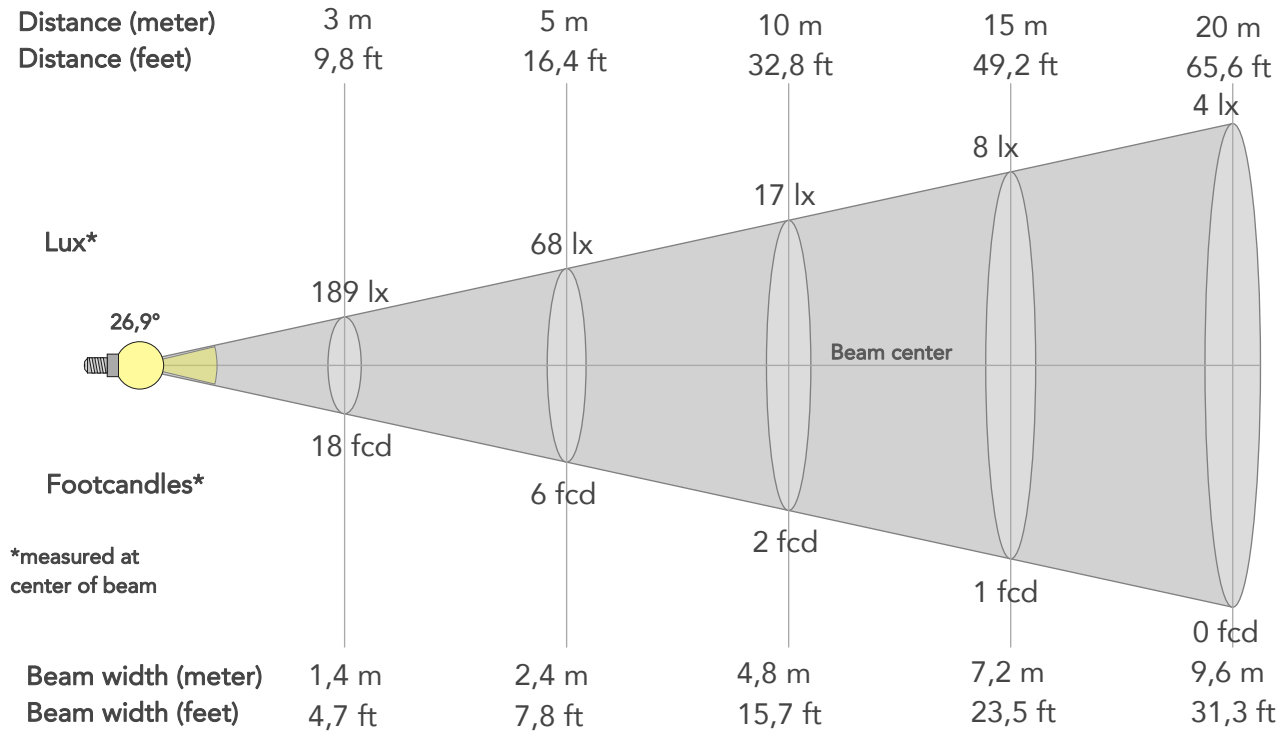
Cut off angle 2.5%: 56,1°

**Spectra**



# BEAM DETAILS

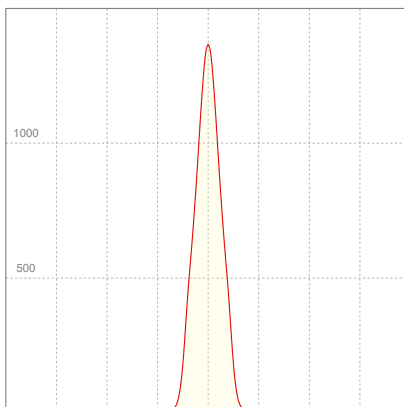
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,9°	47,1°	56,1°	100,0%	99,8%



## 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	1700lx	425lx	189lx	106lx	68lx	30lx	17lx	8lx	4lx	3lx	2lx	1lx	1lx
Footcand.	158fcd	39fcd	18fcd	10fcd	6fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	11,9m	14,3m	19,1m	23,9m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,8ft	11,7ft	15,7ft	23,5ft	31,3ft	39,2ft	47ft	62,6ft	78,3ft

## LINEAR DISTRIBUTION DIAGRAM

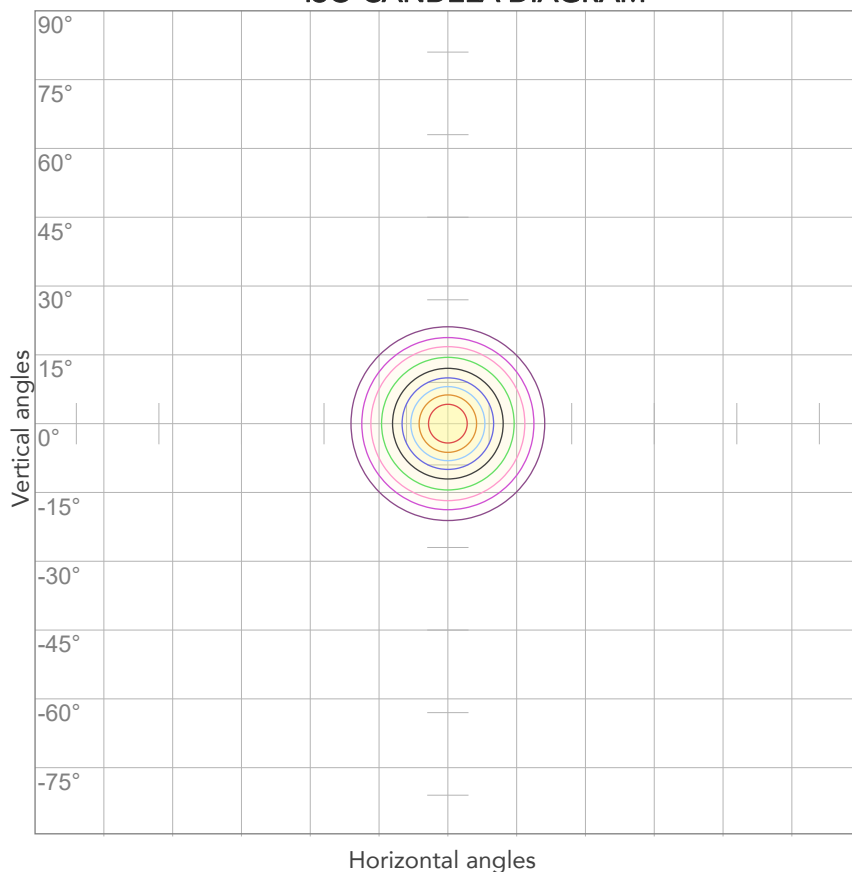


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,155A	32,6W	0,94	12lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



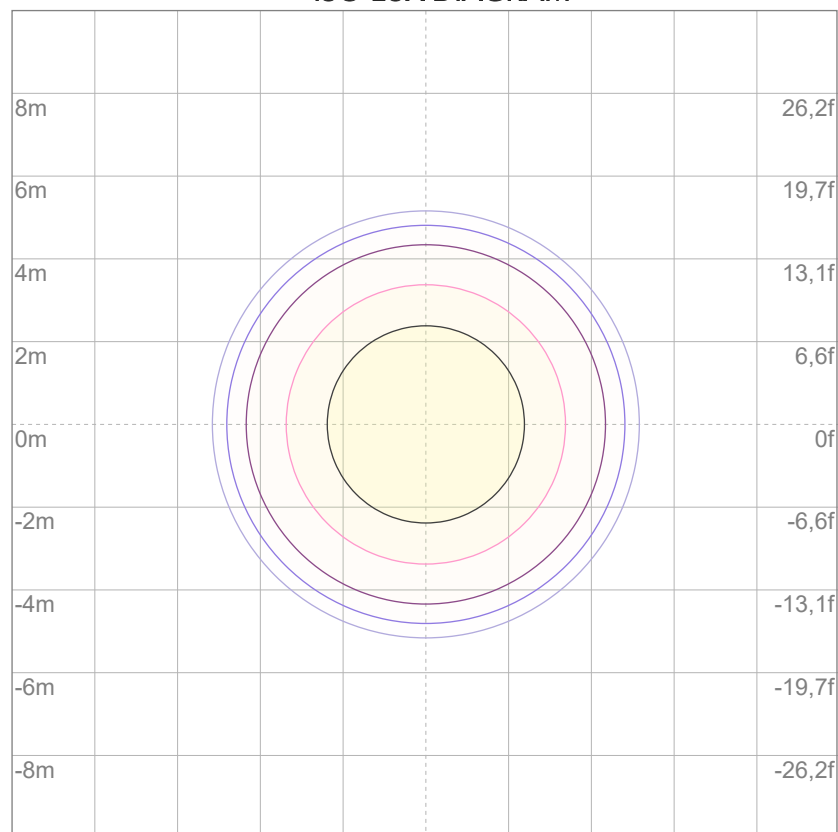
10%	170 cd
20%	340 cd
30%	510 cd
40%	680 cd
50%	850 cd
60%	1020 cd
70%	1190 cd
80%	1360 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1700 cd

## ISO LUX DIAGRAM



3%	0,510 lx
5%	0,850 lx
10%	1,70 lx
30%	5,10 lx
50%	8,50 lx

### Conditions:

Number of c-planes: 2

Lux at center: 17,0 lx

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



Total lumen output:

363 lm

Peak candela output:

3577 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

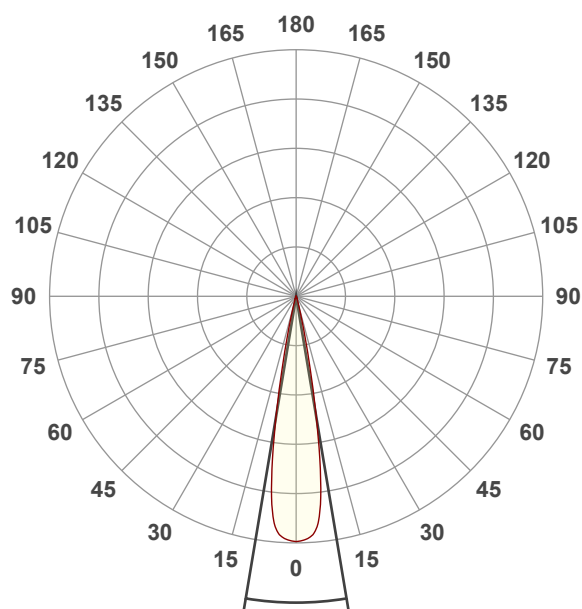
Full On

Operator:

Paolo Carvone

Date and time:

14/01/2021 11:50:04

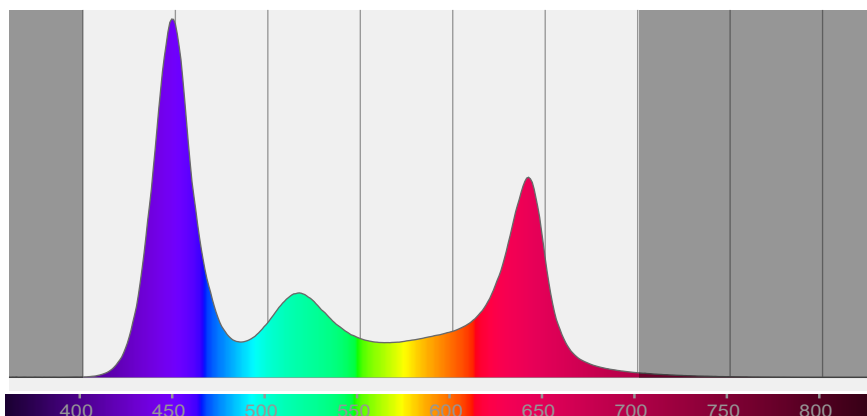


Beam angle 50%: 18,9°

Field angle 10%: 27°

Cut off angle 2.5%: 34,2°

**Spectra**

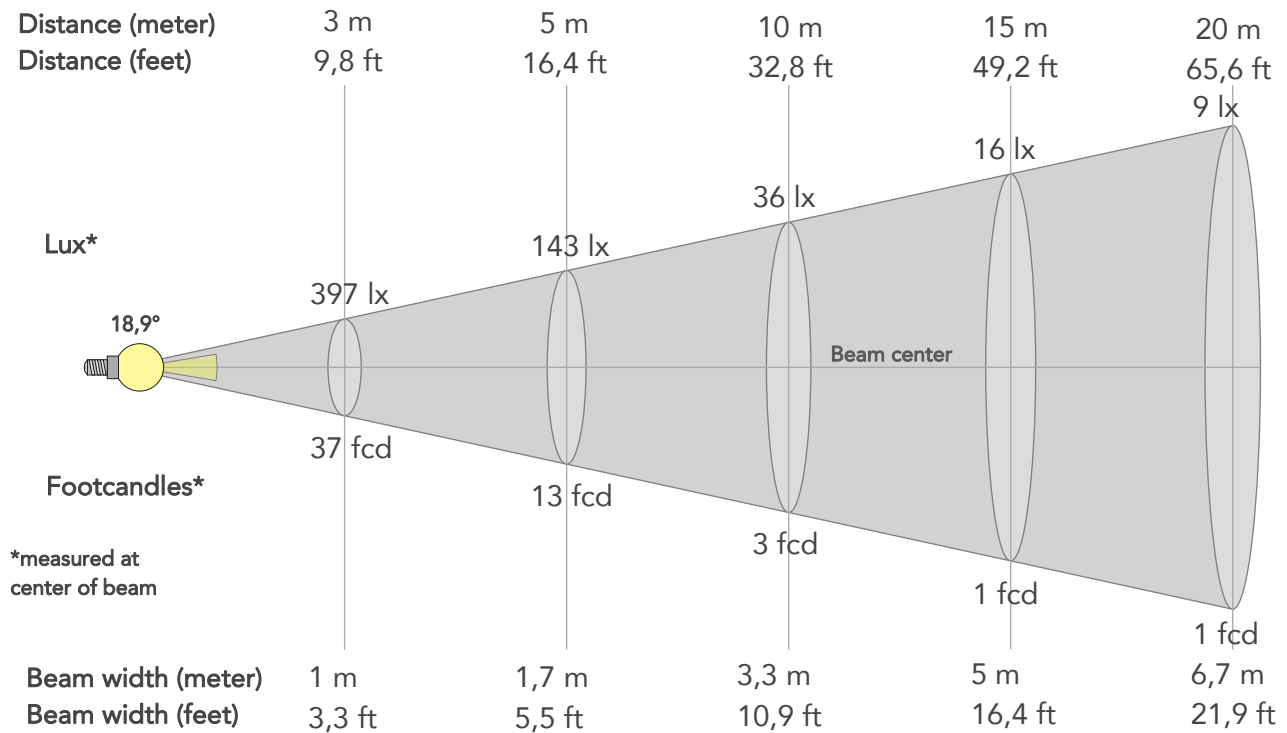




# BEAM DETAILS



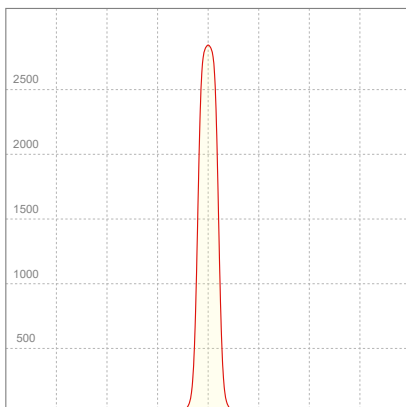
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,9°	27°	34,2°	100,0%	99,9%



## 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	3577lx	894lx	397lx	224lx	143lx	64lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	332fcd	83fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,7m	8,3m	10m	13,3m	16,7m
Beam wid.	1,1ft	2,2ft	3,3ft	4,4ft	5,5ft	8,2ft	10,9ft	16,4ft	21,9ft	27,4ft	32,8ft	43,8ft	54,7ft

## LINEAR DISTRIBUTION DIAGRAM

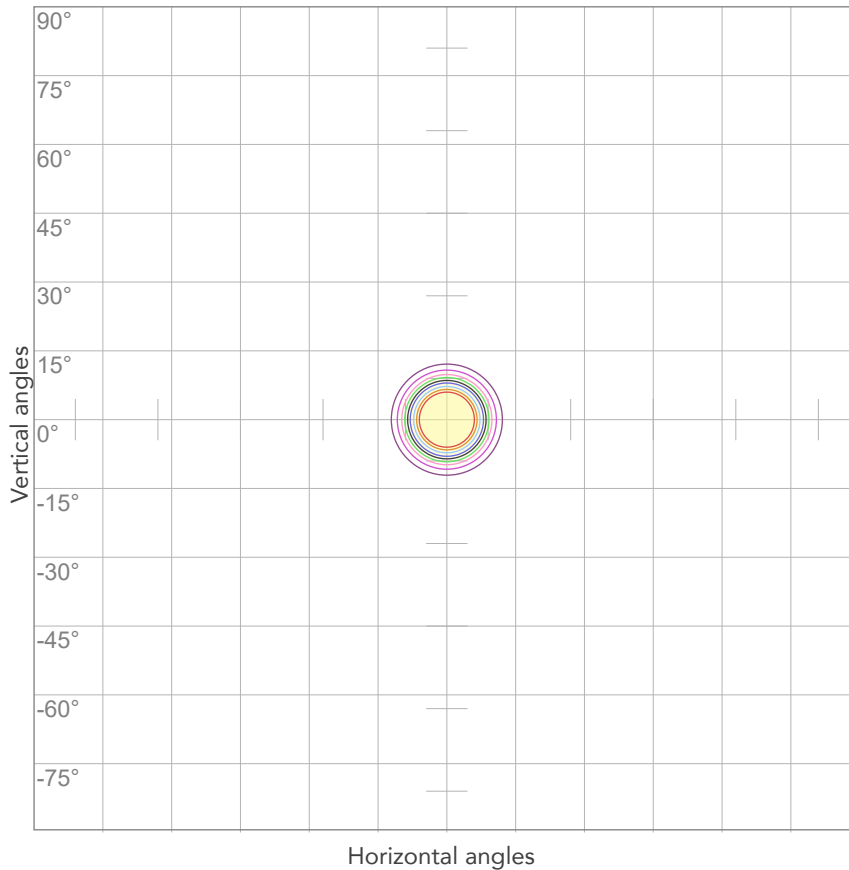


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,156A	32,6W	0,94	11lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



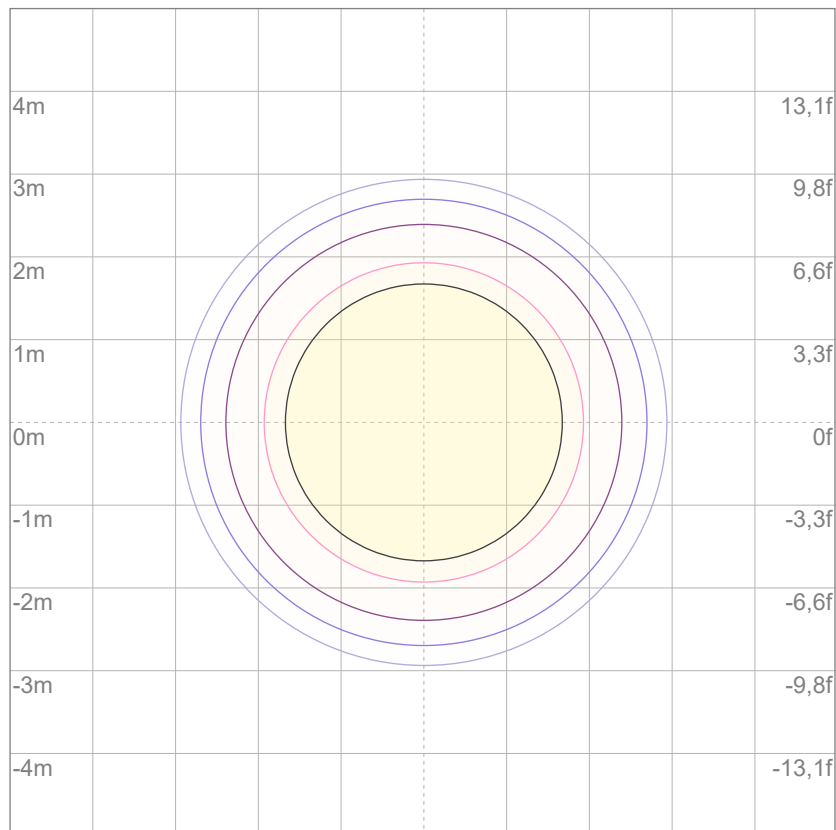
10%	358 cd
20%	715 cd
30%	1073 cd
40%	1431 cd
50%	1789 cd
60%	2146 cd
70%	2504 cd
80%	2862 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3577 cd

## ISO LUX DIAGRAM



3%	1,07 lx
5%	1,79 lx
10%	3,58 lx
30%	10,7 lx
50%	17,9 lx

### Conditions:

Number of c-planes: 2

Lux at center: 35,8 lx

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



Total lumen output:

109 lm

Peak candela output:

473 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

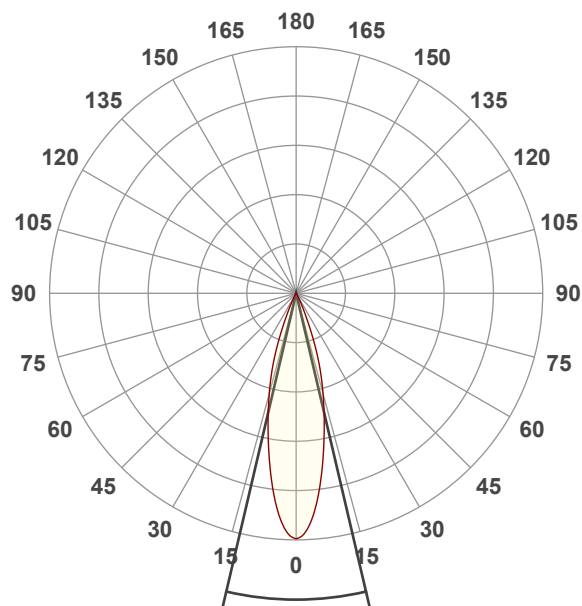
Red

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:33:12

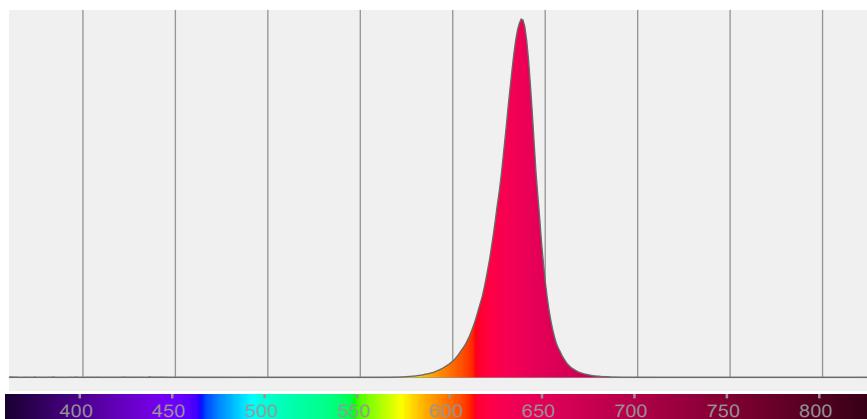


Beam angle 50%: 26,4°

Field angle 10%: 46,3°

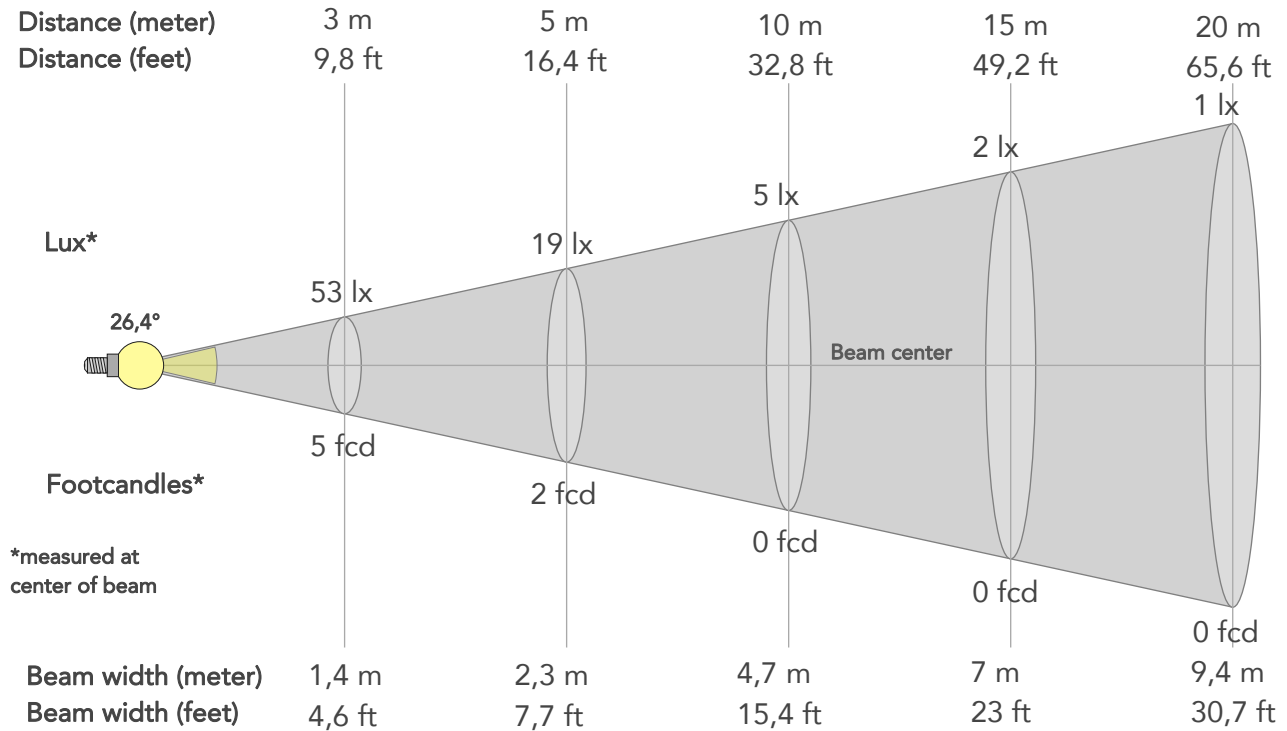
Cut off angle 2.5%: 55,7°

**Spectra**



# BEAM DETAILS

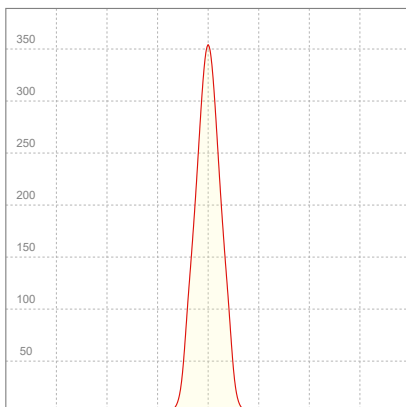
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,4°	46,3°	55,7°	99,8%	99,3%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	473lx	118lx	53lx	30lx	19lx	8lx	5lx	2lx	1lx	1lx	1lx	0lx	0lx
Footcand.	44fcd	11fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,9m	2,3m	3,5m	4,7m	7m	9,4m	11,7m	14,1m	18,7m	23,4m
Beam wid.	1,5ft	3,1ft	4,6ft	6,1ft	7,7ft	11,5ft	15,4ft	23ft	30,7ft	38,4ft	46,1ft	61,5ft	76,8ft

## LINEAR DISTRIBUTION DIAGRAM

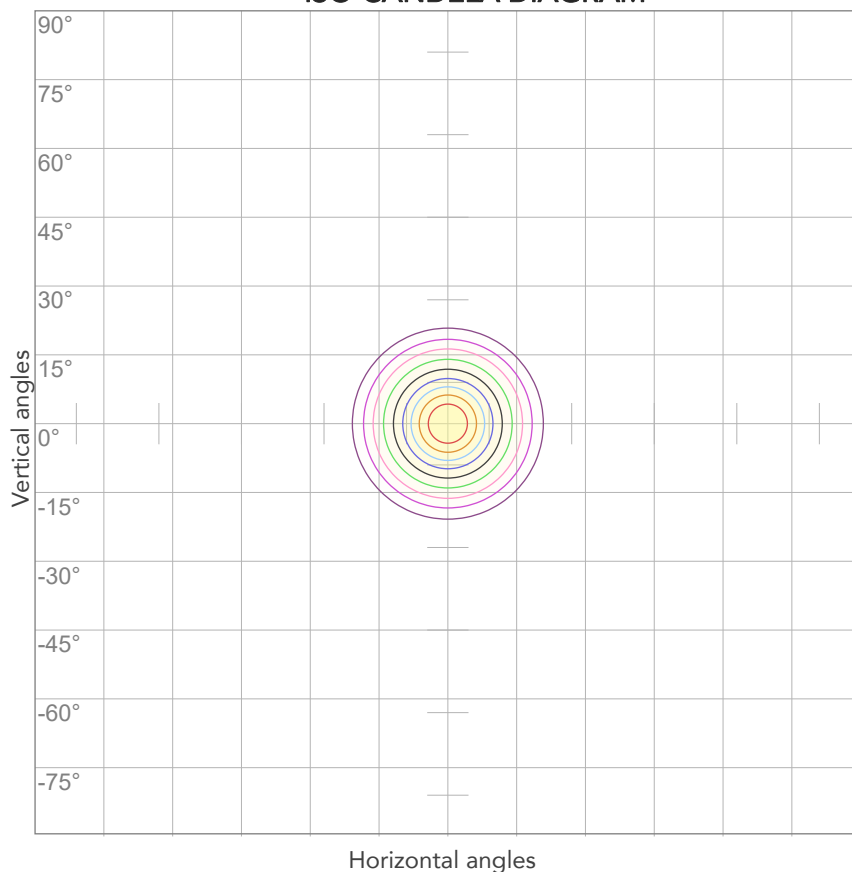


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
224V	0,071A	13,6W	0,85	8lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



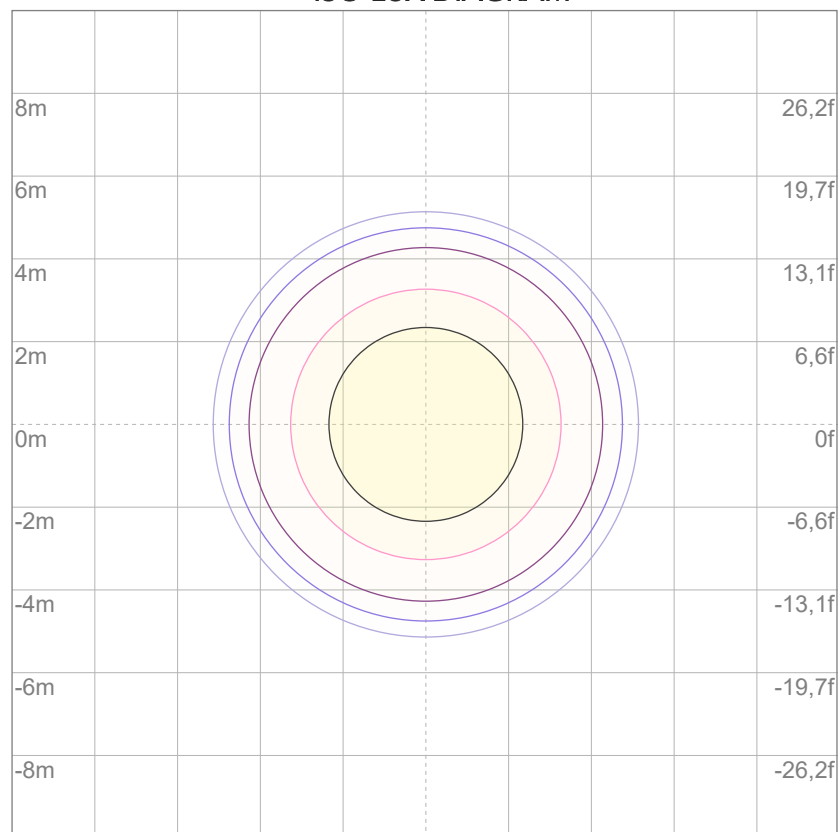
10%	47 cd
20%	95 cd
30%	142 cd
40%	189 cd
50%	237 cd
60%	284 cd
70%	331 cd
80%	378 cd

### Conditions:

Number of c-planes: 2

Candela at center: 473 cd

## ISO LUX DIAGRAM



3%	0,142 lx
5%	0,237 lx
10%	0,473 lx
30%	1,42 lx
50%	2,37 lx

### Conditions:

Number of c-planes: 2

Lux at center: 4,73 lx

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



Total lumen output:

102 lm

Peak candela output:

1001 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

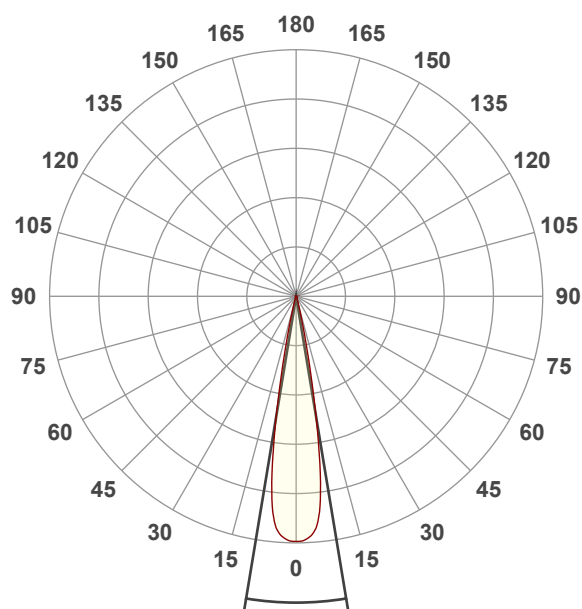
Red

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:46:59

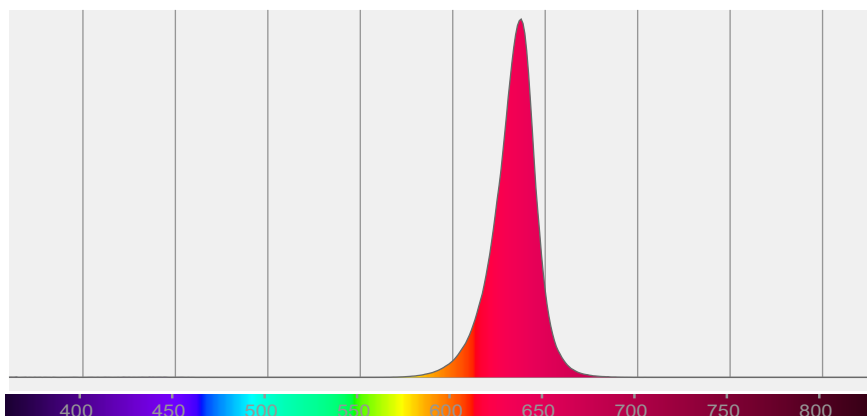


Beam angle 50%: 18,8°

Field angle 10%: 27°

Cut off angle 2.5%: 34,5°

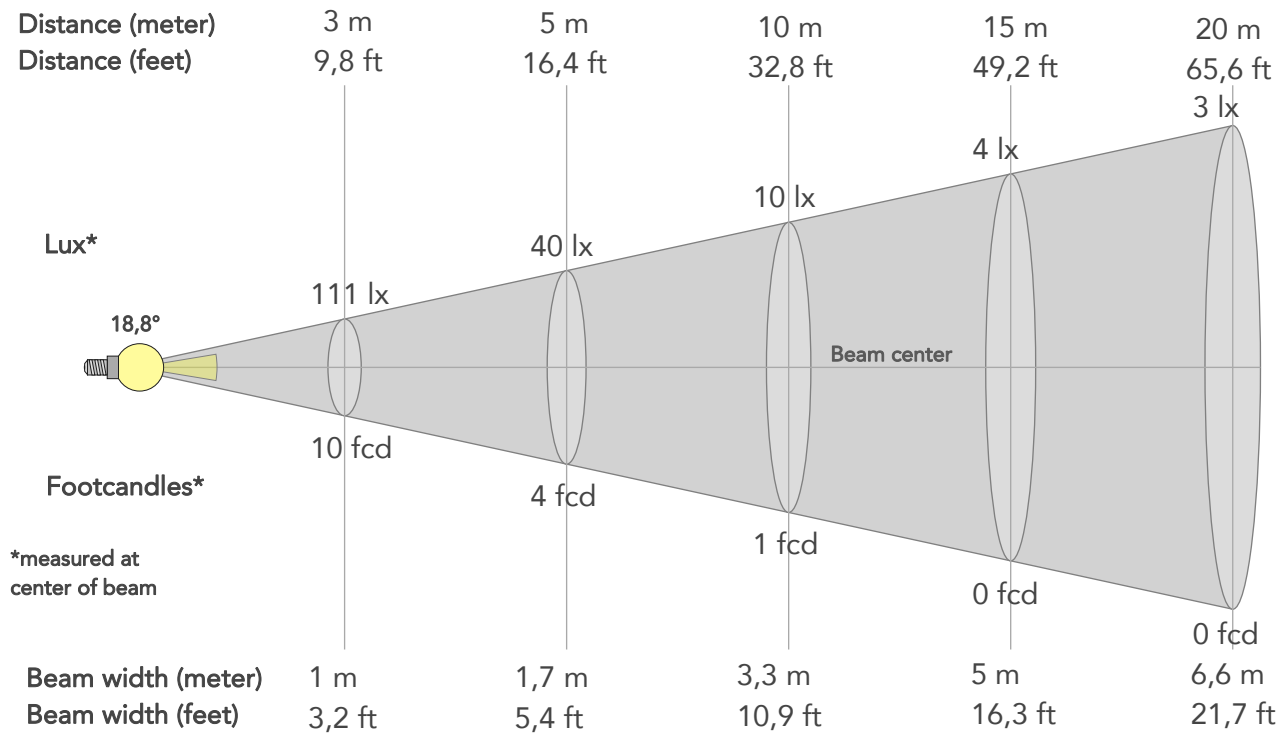
**Spectra**



# BEAM DETAILS



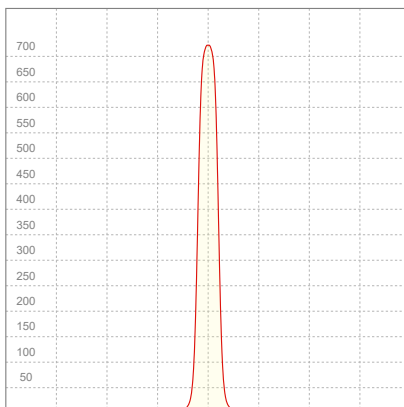
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,8°	27°	34,5°	99,9%	99,6%



## 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	1001lx	250lx	111lx	63lx	40lx	18lx	10lx	4lx	3lx	2lx	1lx	1lx	0lx
Footcand.	93fcd	23fcd	10fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,6m	8,3m	9,9m	13,2m	16,6m
Beam wid.	1,1ft	2,2ft	3,2ft	4,3ft	5,4ft	8,1ft	10,9ft	16,3ft	21,7ft	27,1ft	32,6ft	43,4ft	54,3ft

## LINEAR DISTRIBUTION DIAGRAM

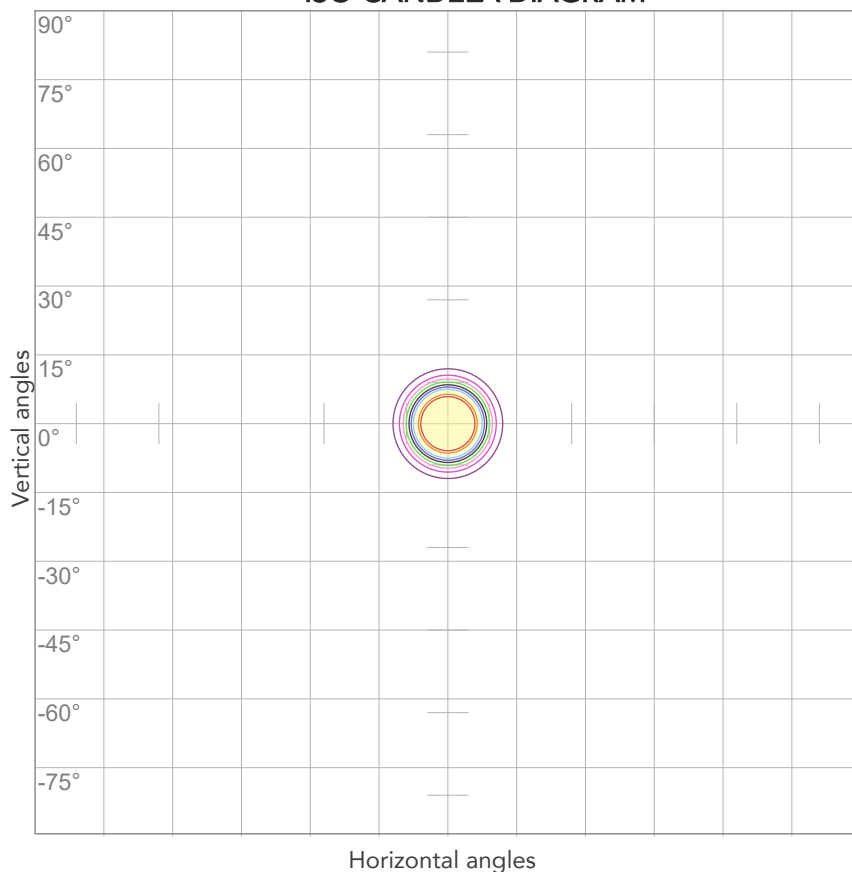


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,070A	13,3W	0,85	8lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



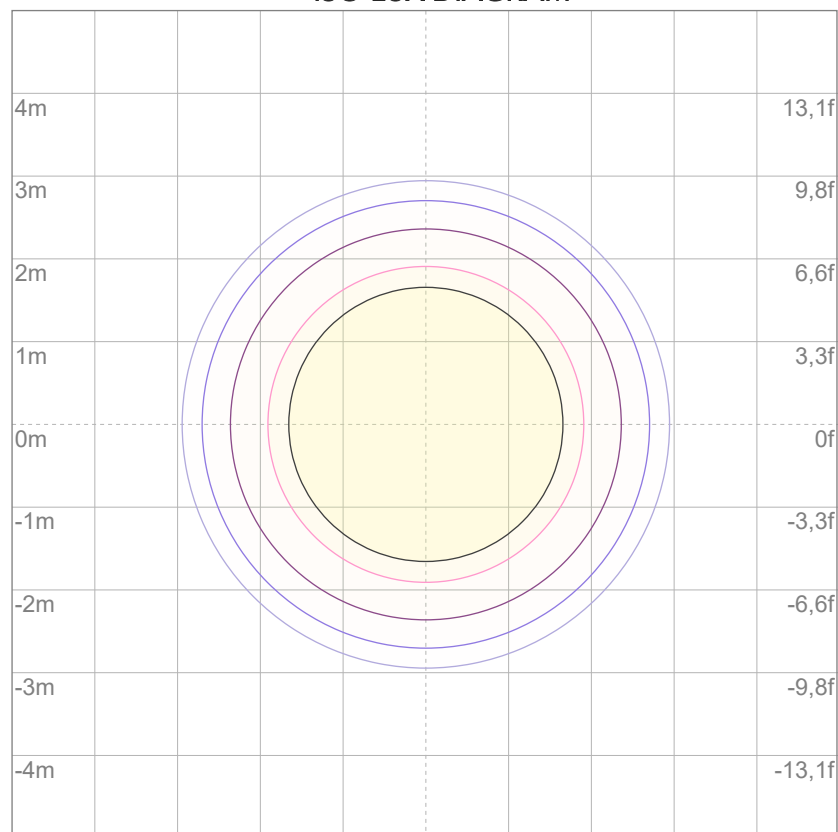
10%	100 cd
20%	200 cd
30%	300 cd
40%	400 cd
50%	500 cd
60%	601 cd
70%	701 cd
80%	801 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1001 cd

## ISO LUX DIAGRAM



3%	0,300 lx
5%	0,500 lx
10%	1,00 lx
30%	3,00 lx
50%	5,00 lx

### Conditions:

Number of c-planes: 2

Lux at center: 10,0 lx

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





Total lumen output:

220 lm

Peak candela output:

924 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

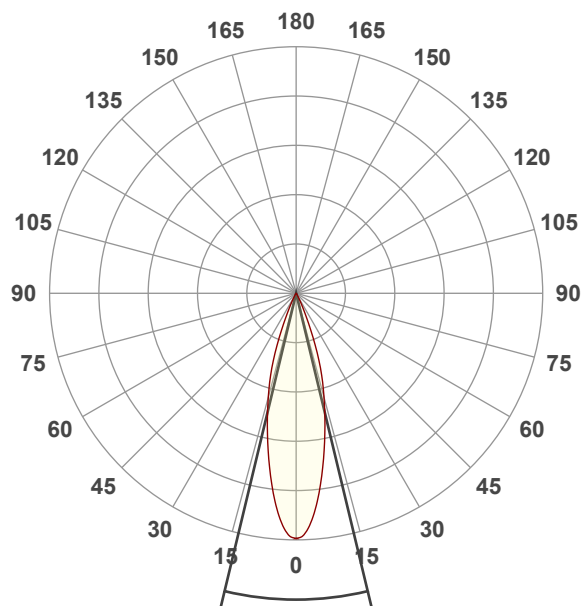
Green

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:35:32

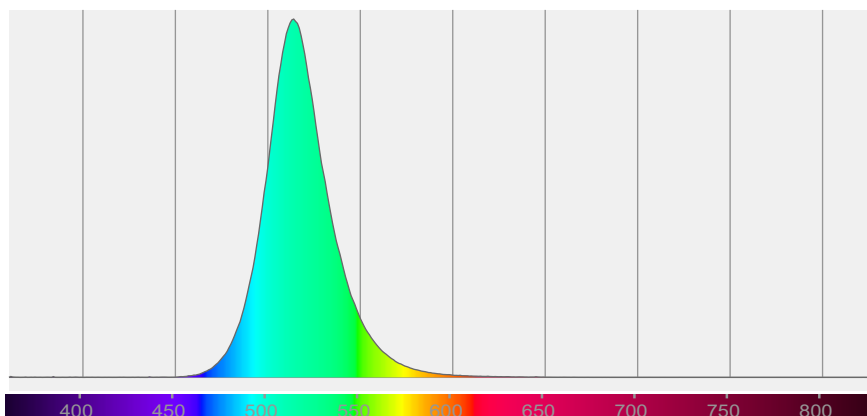


Beam angle 50%: 27°

Field angle 10%: 47°

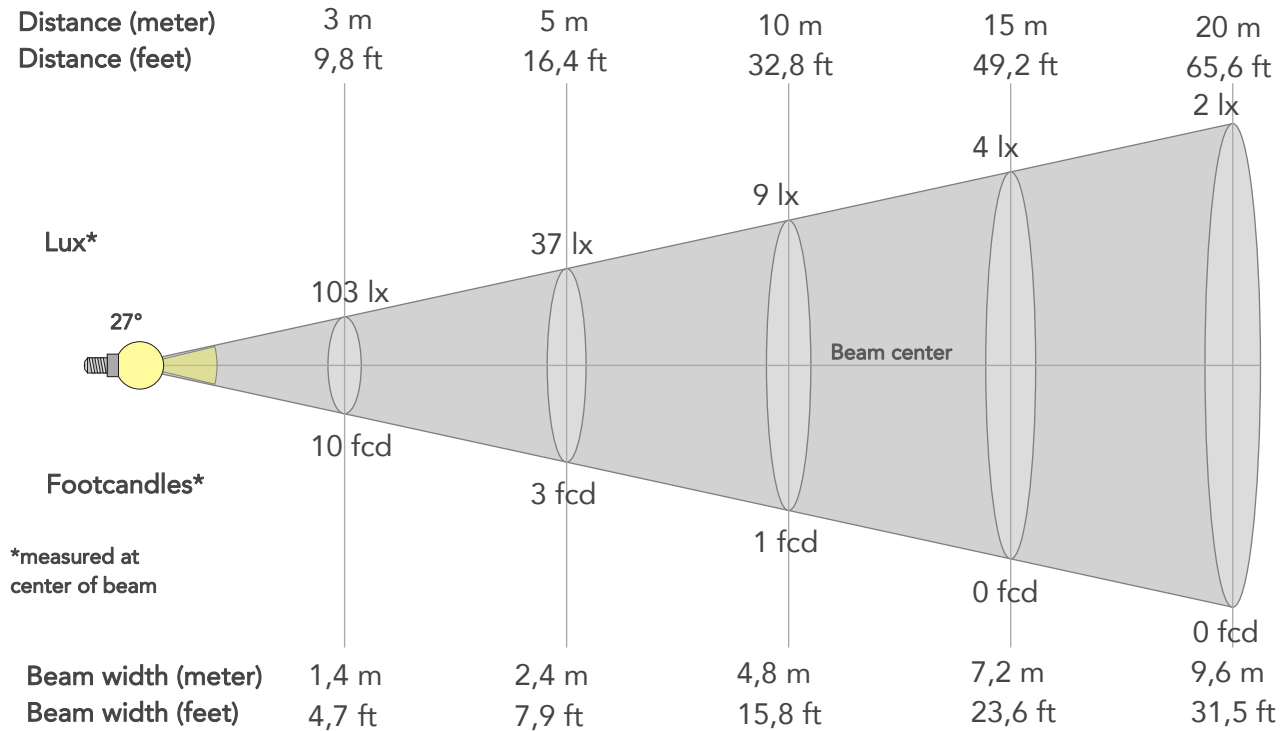
Cut off angle 2.5%: 56,5°

**Spectra**



# BEAM DETAILS

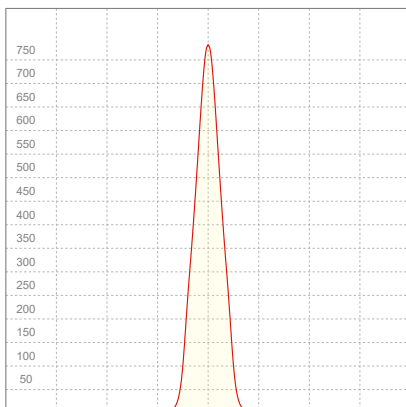
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27°	47°	56,5°	99,9%	99,5%



## 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	924lx	231lx	103lx	58lx	37lx	16lx	9lx	4lx	2lx	1lx	1lx	1lx	0lx
Footcand.	86fcd	21fcd	10fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	12m	14,4m	19,2m	24m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,9ft	11,8ft	15,8ft	23,6ft	31,5ft	39,4ft	47,3ft	63ft	78,8ft

## LINEAR DISTRIBUTION DIAGRAM

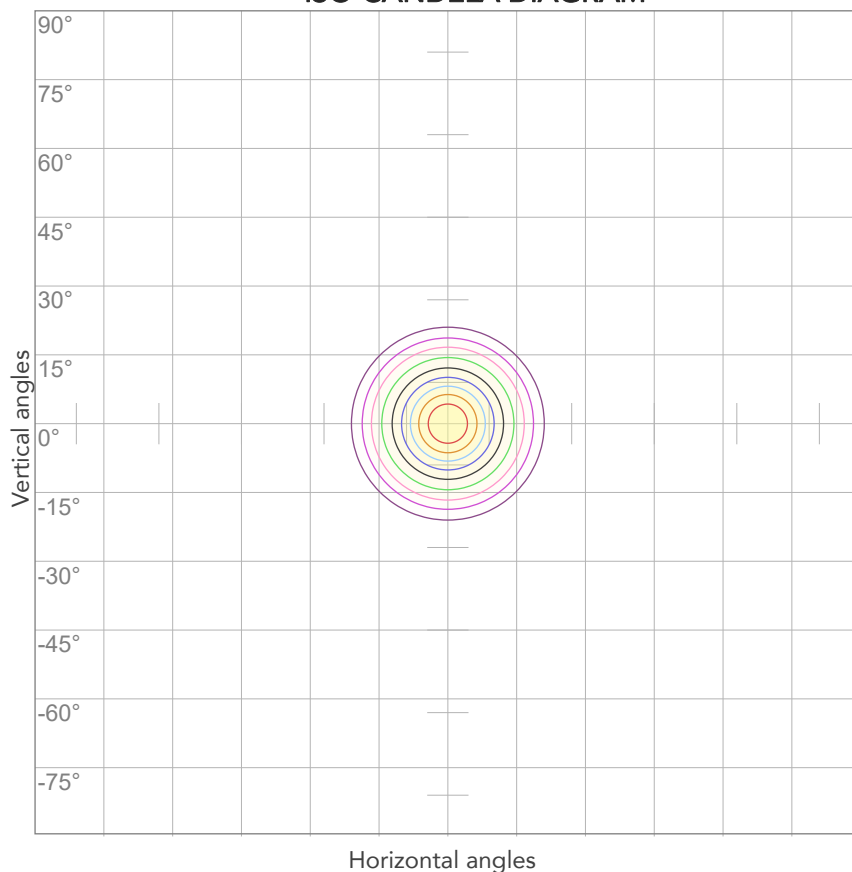


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,089A	17,5W	0,88	13lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



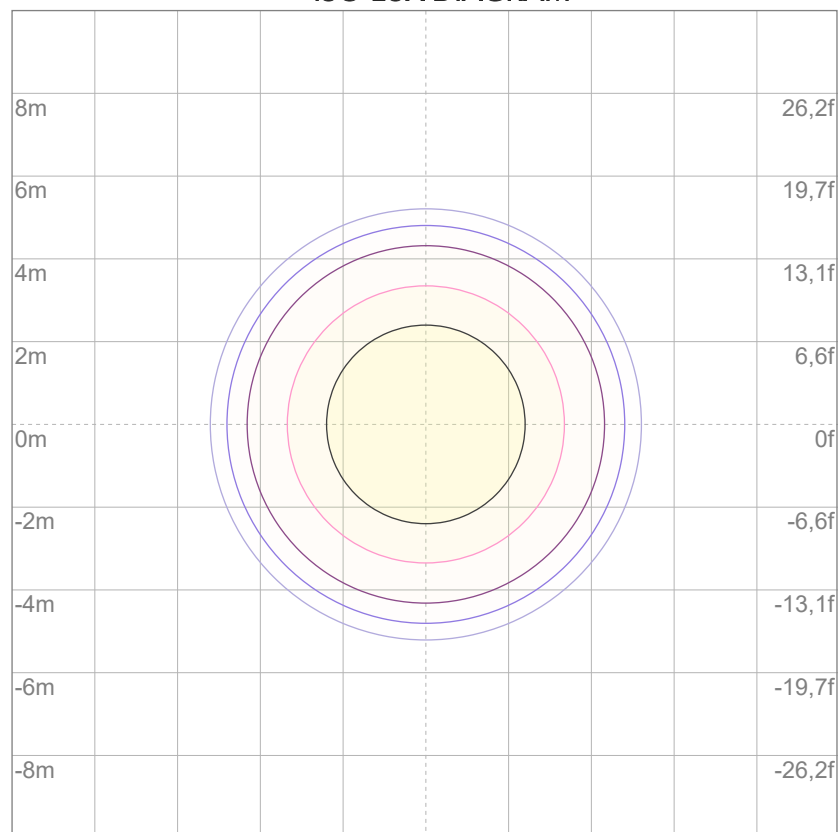
10%	92 cd
20%	185 cd
30%	277 cd
40%	370 cd
50%	462 cd
60%	554 cd
70%	647 cd
80%	739 cd

### Conditions:

Number of c-planes: 2

Candela at center: 924 cd

## ISO LUX DIAGRAM



3%	0,277 lx
5%	0,462 lx
10%	0,924 lx
30%	2,77 lx
50%	4,62 lx

### Conditions:

Number of c-planes: 2

Lux at center: 9,24 lx

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



Total lumen output:

198 lm

Peak candela output:

1930 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

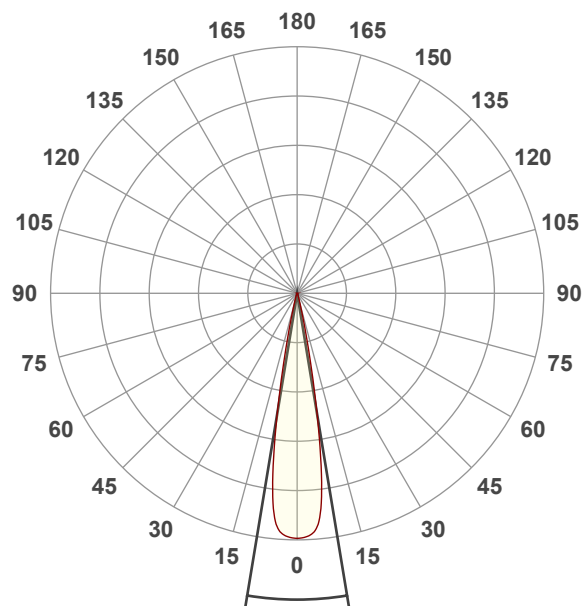
Green

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:48:27

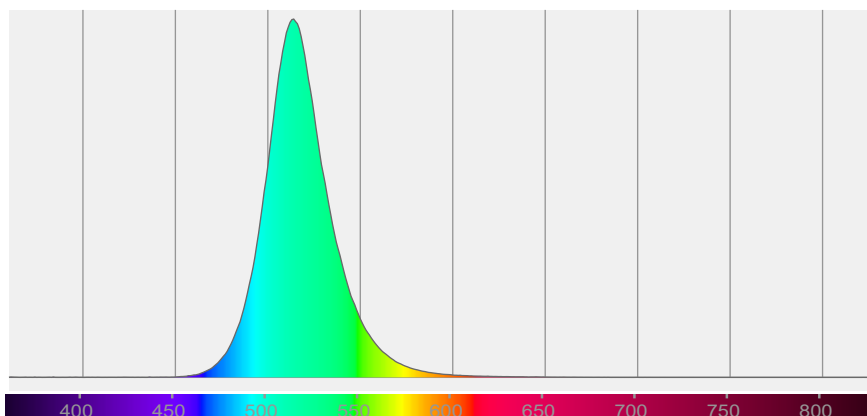


Beam angle 50%: 18,8°

Field angle 10%: 27°

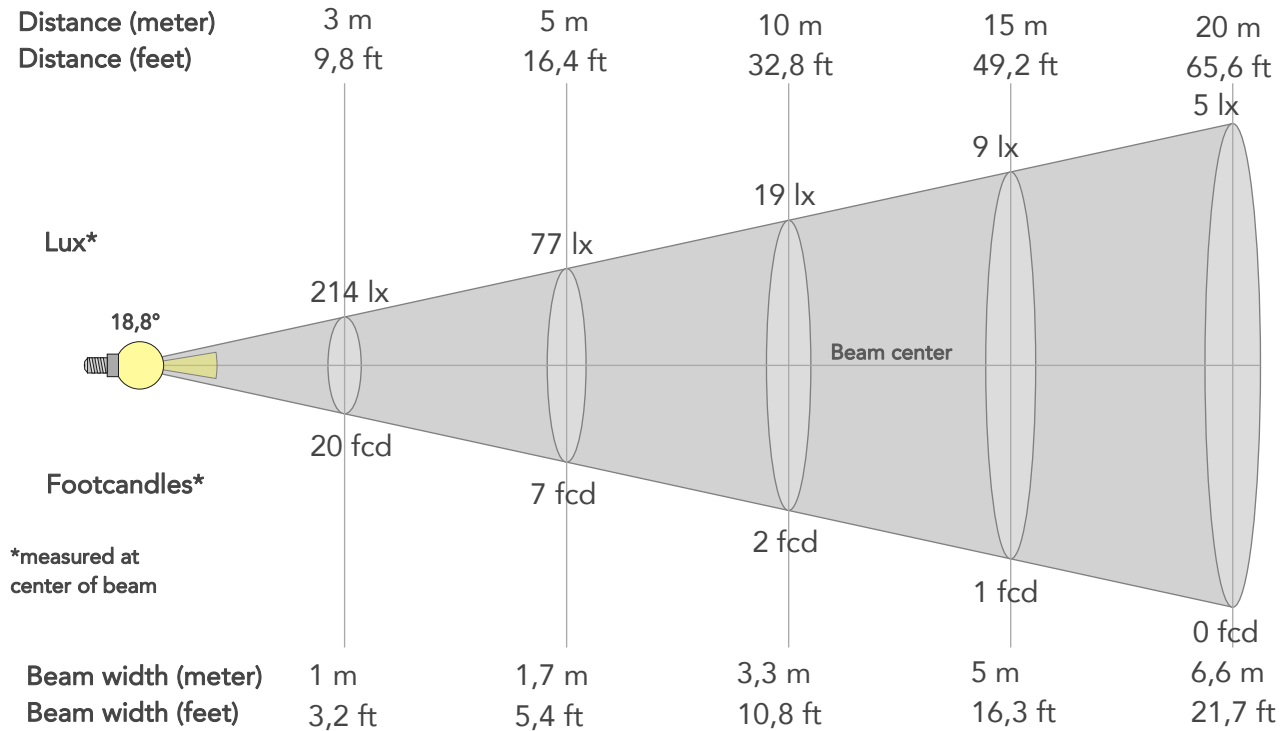
Cut off angle 2.5%: 34,8°

**Spectra**



# BEAM DETAILS

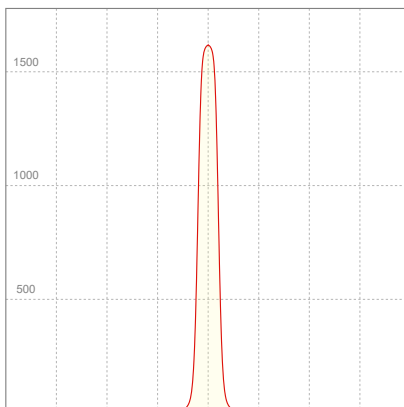
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,8°	27°	34,8°	100,0%	99,7%



## 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	1930lx	483lx	214lx	121lx	77lx	34lx	19lx	9lx	5lx	3lx	2lx	1lx	1lx
Footcand.	179fcd	45fcd	20fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,6m	8,3m	9,9m	13,2m	16,5m
Beam wid.	1,1ft	2,2ft	3,2ft	4,3ft	5,4ft	8,1ft	10,8ft	16,3ft	21,7ft	27,1ft	32,5ft	43,4ft	54,2ft

## LINEAR DISTRIBUTION DIAGRAM

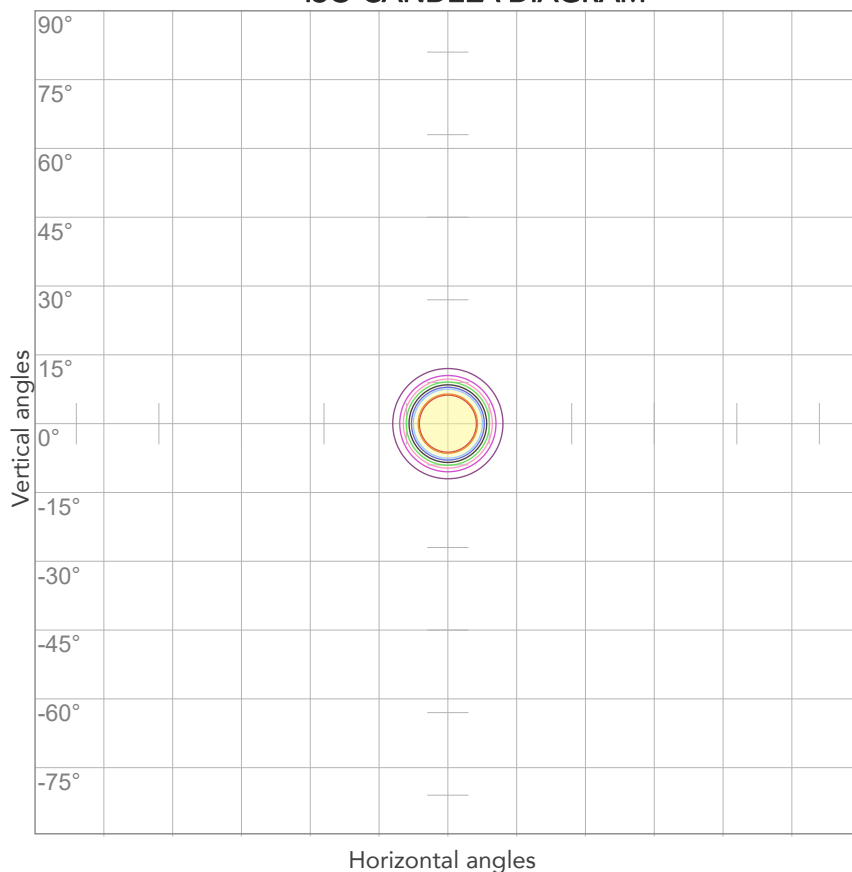


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,091A	18,1W	0,89	11lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



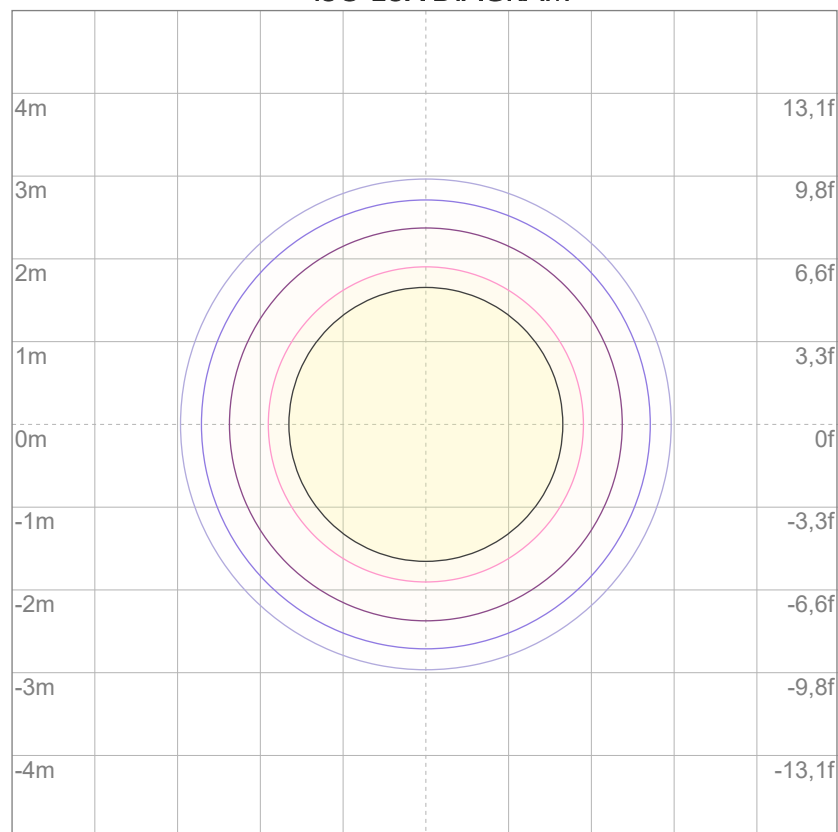
10%	193 cd
20%	386 cd
30%	579 cd
40%	772 cd
50%	965 cd
60%	1158 cd
70%	1351 cd
80%	1544 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1930 cd

## ISO LUX DIAGRAM



3%	0,579 lx
5%	0,965 lx
10%	1,93 lx
30%	5,79 lx
50%	9,65 lx

### Conditions:

Number of c-planes: 2

Lux at center: 19,3 lx

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



Total lumen output:

53,3 lm

Peak candela output:

220 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

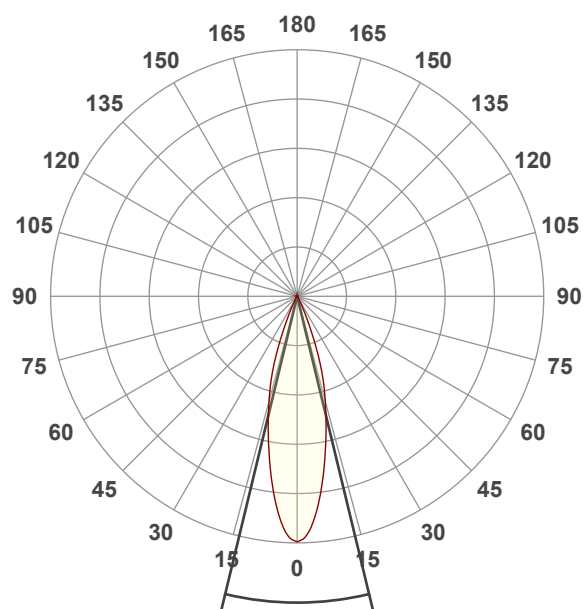
Blue

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:37:07

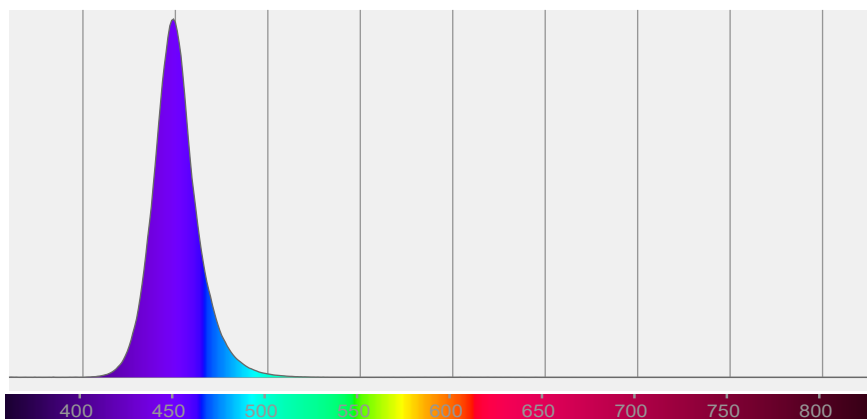


Beam angle 50%: 27,2°

Field angle 10%: 47,2°

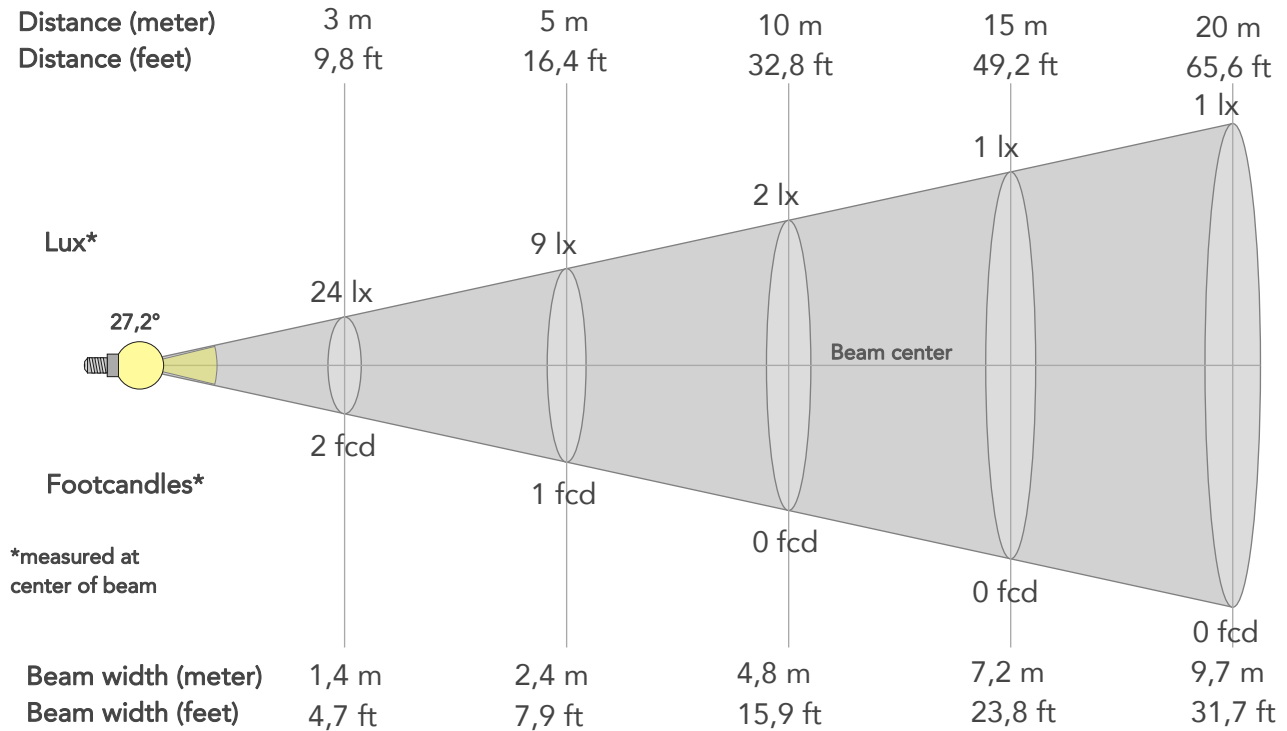
Cut off angle 2.5%: 57°

**Spectra**



# BEAM DETAILS

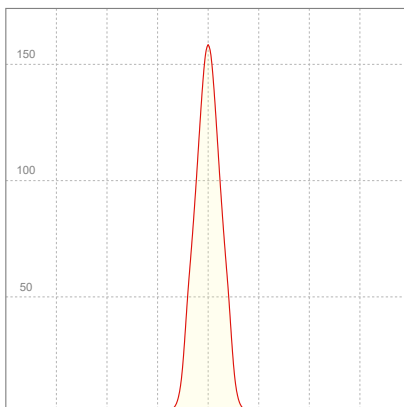
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27,2°	47,2°	57°	99,7%	99,1%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	220lx	55lx	24lx	14lx	9lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx	0lx
Footcand.	20fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,7m	12,1m	14,5m	19,3m	24,2m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,9ft	11,9ft	15,9ft	23,8ft	31,7ft	39,6ft	47,6ft	63,4ft	79,3ft

## LINEAR DISTRIBUTION DIAGRAM



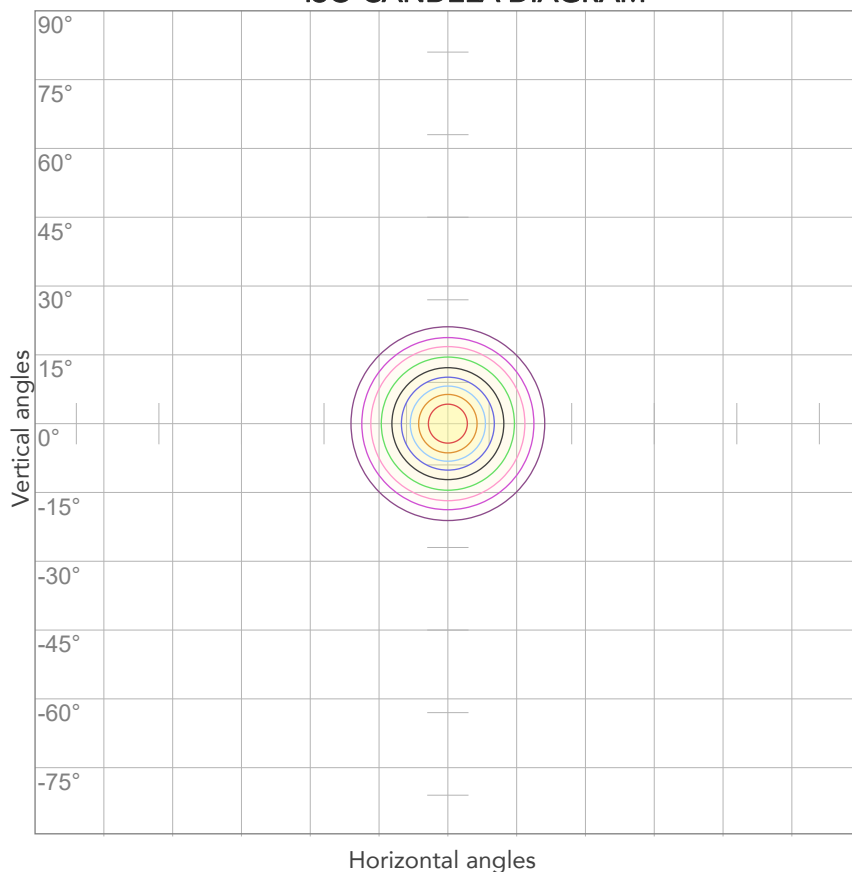
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
223V	0,084A	16,5W	0,88	3lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



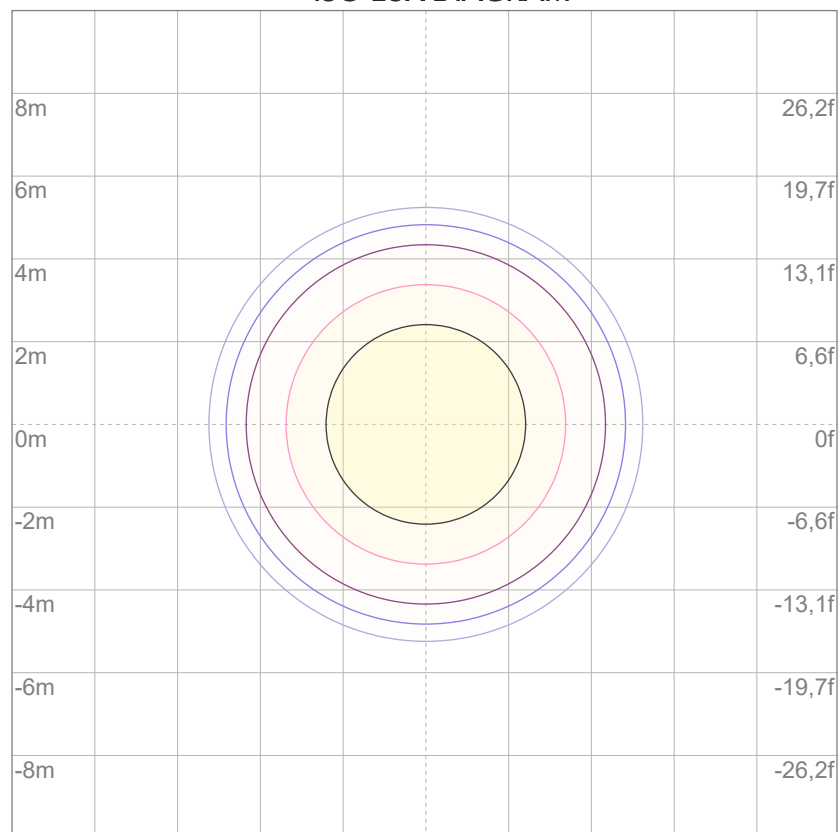
10%	22 cd
20%	44 cd
30%	66 cd
40%	88 cd
50%	110 cd
60%	132 cd
70%	154 cd
80%	176 cd

### Conditions:

Number of c-planes: 2

Candela at center: 220 cd

## ISO LUX DIAGRAM



3%	65,9m lx
5%	0,110 lx
10%	0,220 lx
30%	0,659 lx
50%	1,10 lx

### Conditions:

Number of c-planes: 2

Lux at center: 2,20 lx

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



Total lumen output:

49,1 lm

Peak candela output:

484 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

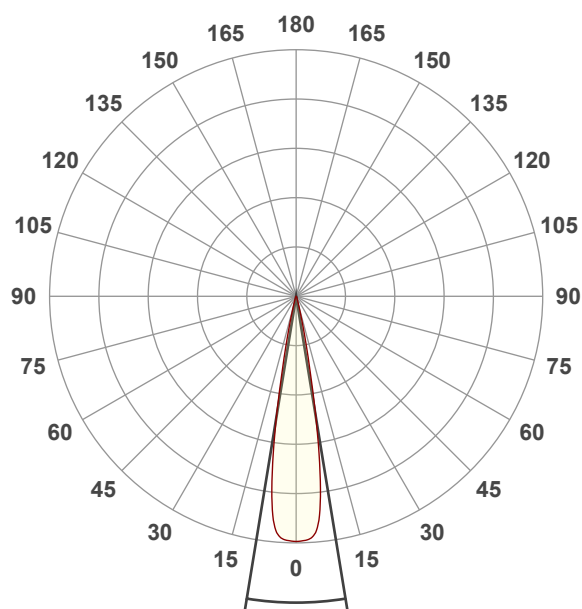
Blue

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:49:53

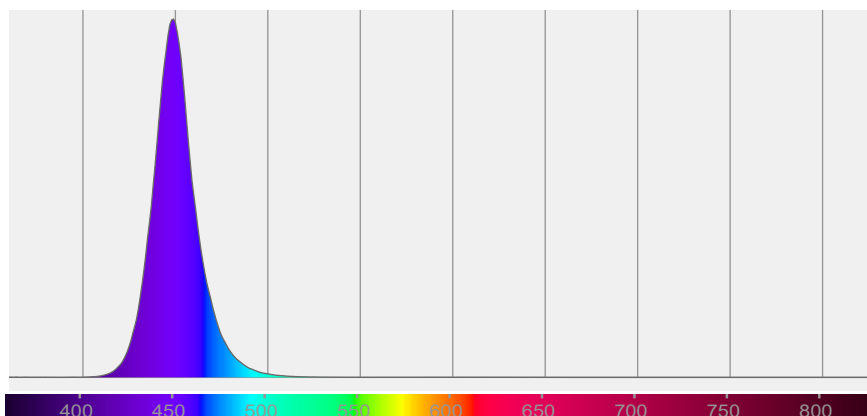


Beam angle 50%: 18,6°

Field angle 10%: 26,8°

Cut off angle 2.5%: 34,7°

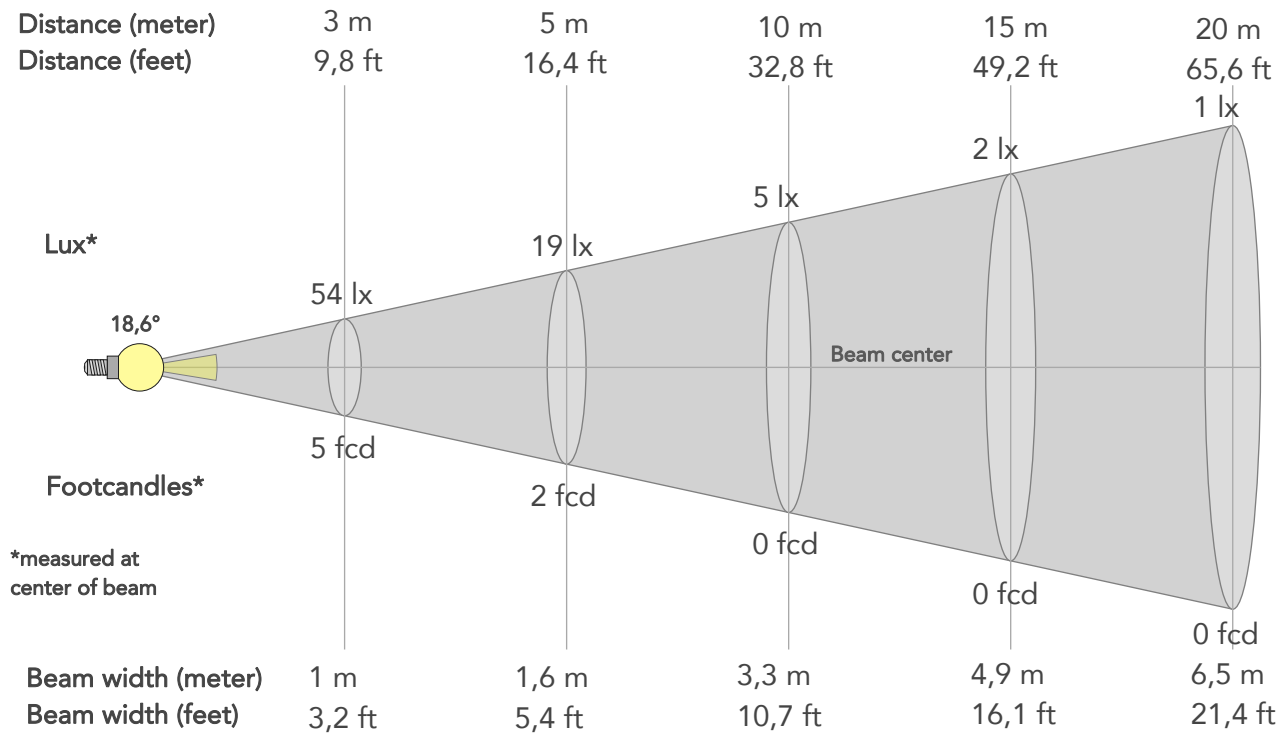
**Spectra**



# BEAM DETAILS



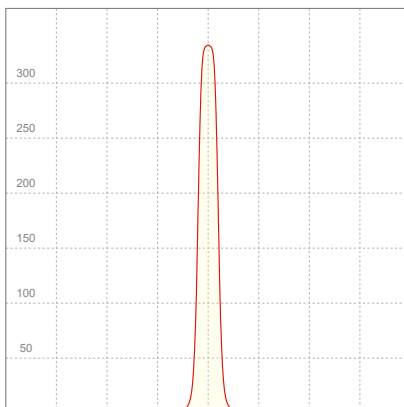
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,6°	26,8°	34,7°	99,8%	99,3%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	484lx	121lx	54lx	30lx	19lx	9lx	5lx	2lx	1lx	1lx	1lx	0lx	0lx
Footcand.	45fcd	11fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,6m	2,4m	3,3m	4,9m	6,5m	8,2m	9,8m	13,1m	16,3m
Beam wid.	1,1ft	2,2ft	3,2ft	4,3ft	5,4ft	8ft	10,7ft	16,1ft	21,4ft	26,8ft	32,1ft	42,9ft	53,6ft

## LINEAR DISTRIBUTION DIAGRAM

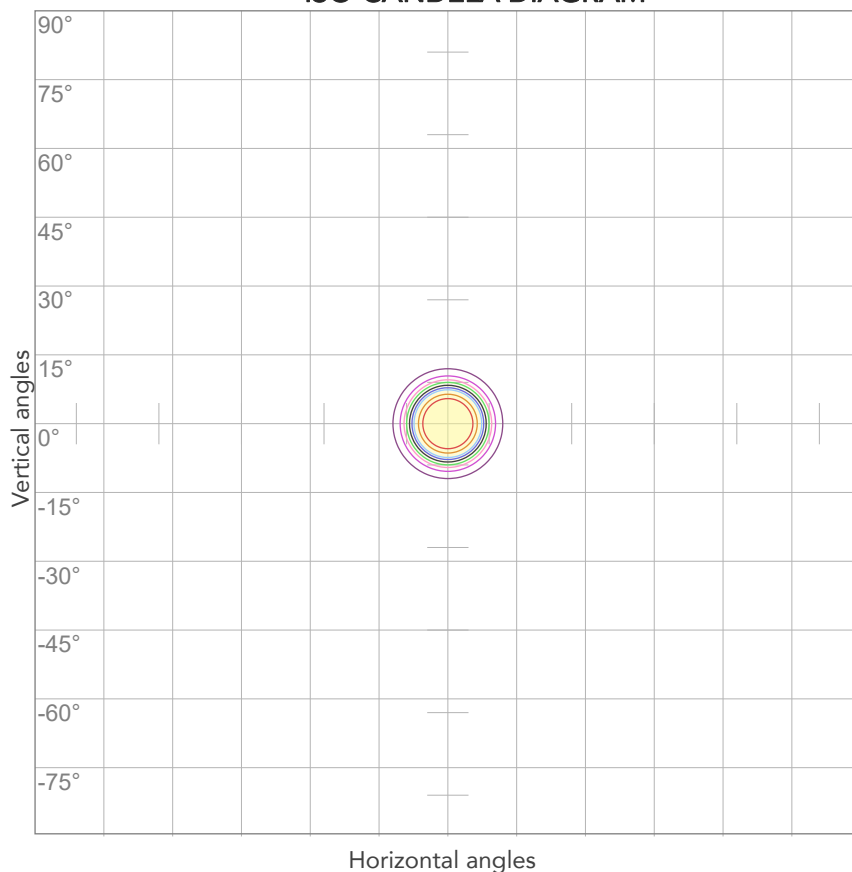


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,084A	16,5W	0,88	3lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



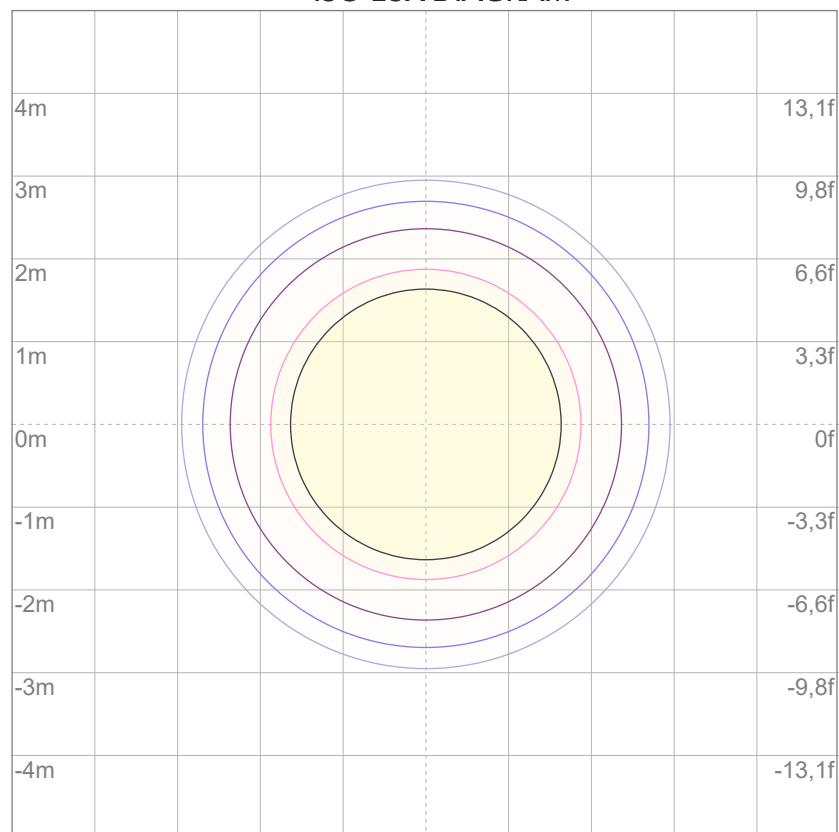
10%	48 cd
20%	97 cd
30%	145 cd
40%	194 cd
50%	242 cd
60%	290 cd
70%	339 cd
80%	387 cd

### Conditions:

Number of c-planes: 2

Candela at center: 484 cd

## ISO LUX DIAGRAM



3%	0,145 lx
5%	0,242 lx
10%	0,484 lx
30%	1,45 lx
50%	2,42 lx

### Conditions:

Number of c-planes: 2

Lux at center: 4,84 lx

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



Total lumen output:

282 lm

Peak candela output:

1190 cd

Light quality:

CRI: 79,1

Color temperature:

3171 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

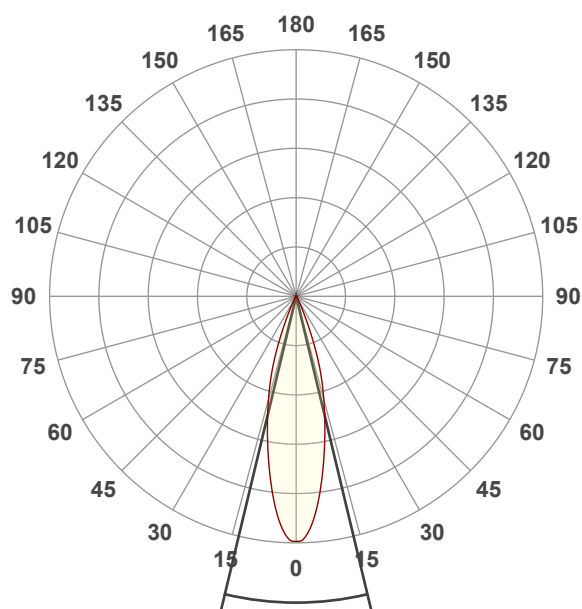
White

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:38:44

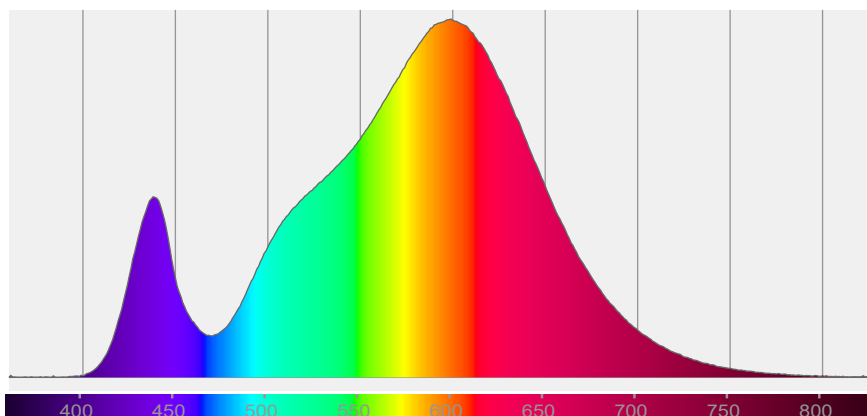


Beam angle 50%: 26,9°

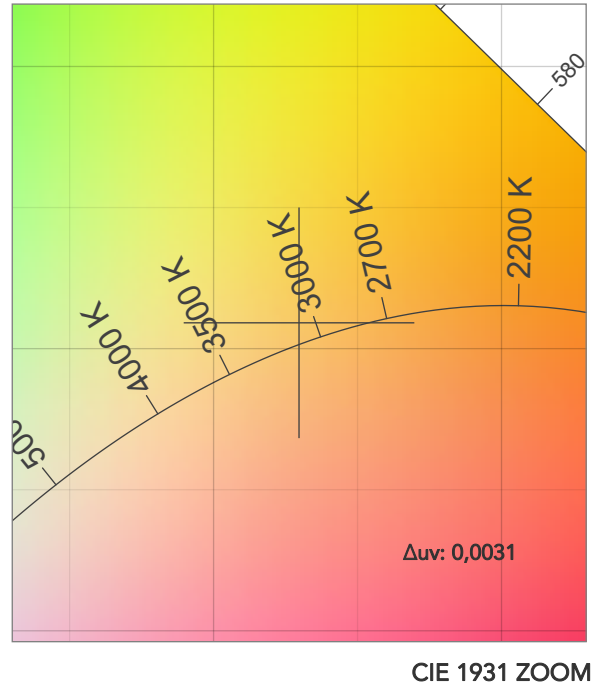
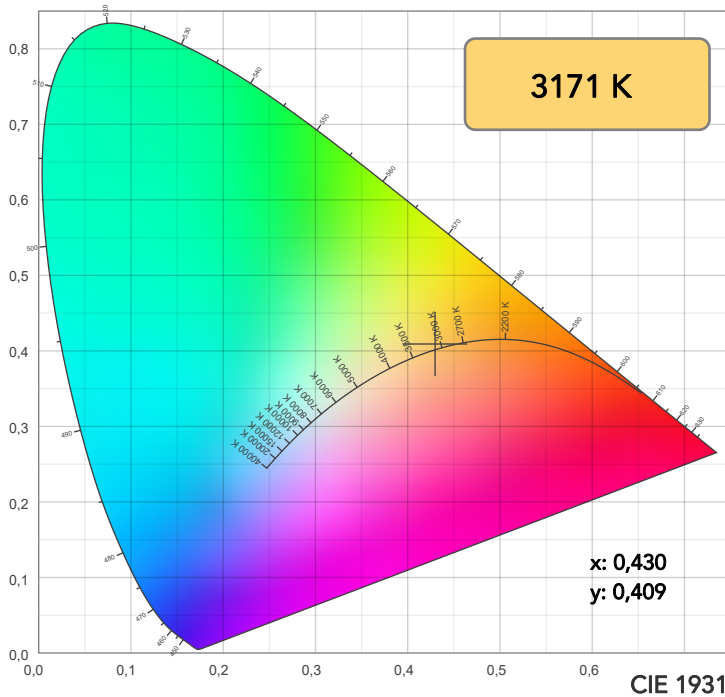
Field angle 10%: 46,7°

Cut off angle 2.5%: 56,4°

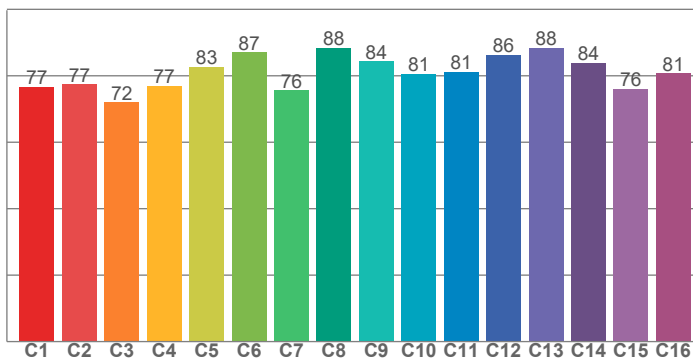
**Spectra**



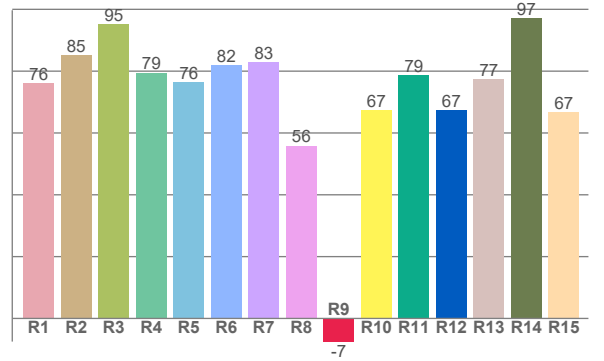
# COLOR DETAILS



**TM30: 80,8**



**CRI: 79,1 (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
76,0	85,1	95,1	79,5	76,5	81,9	82,9	55,9	-7,5	67,3	78,8	67,3	77,5	97,1	66,7

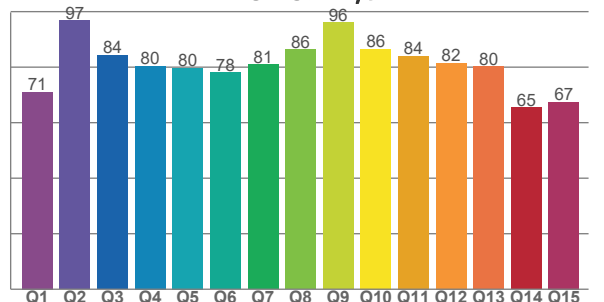
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
76,7	77,4	72,0	76,9	82,7	87,1	75,6	88,3	84,3	80,6	81,2	86,2	88,4	83,8	76,1	80,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
71,0	96,8	84,3	80,5	79,8	78,1	80,9	86,3	96,0	86,5	84,1	81,5	80,2	65,4	67,5

**CQS: 79,3**



## COLOR PARAMETERS

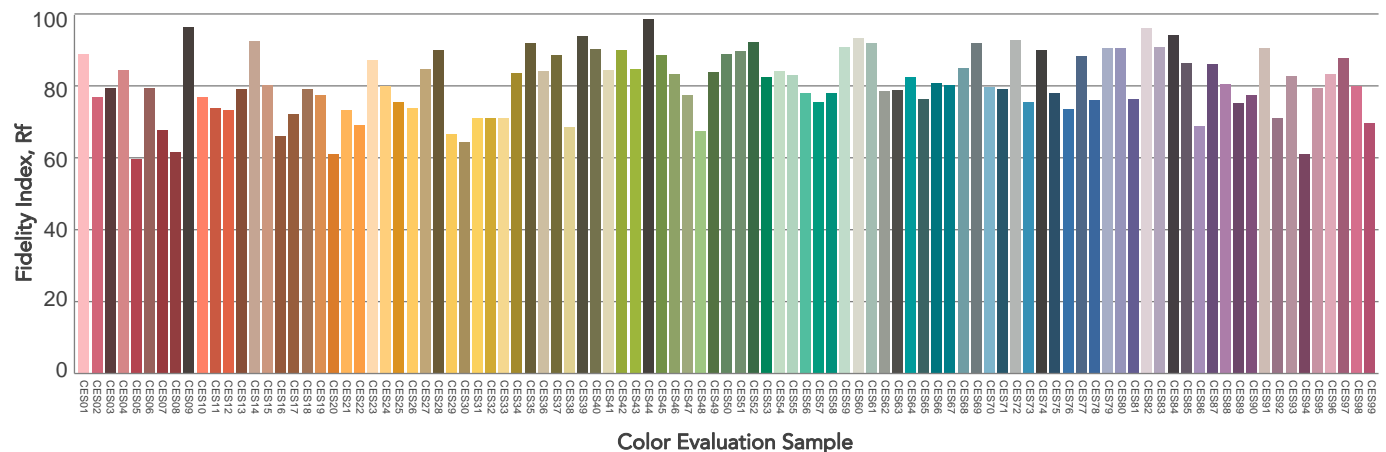
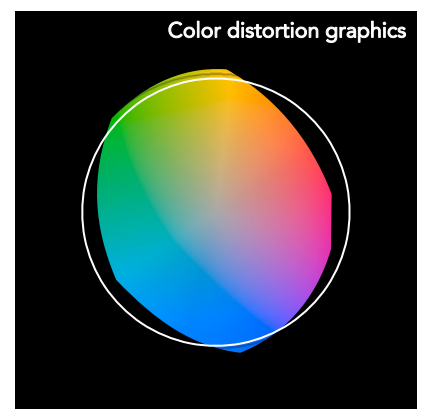
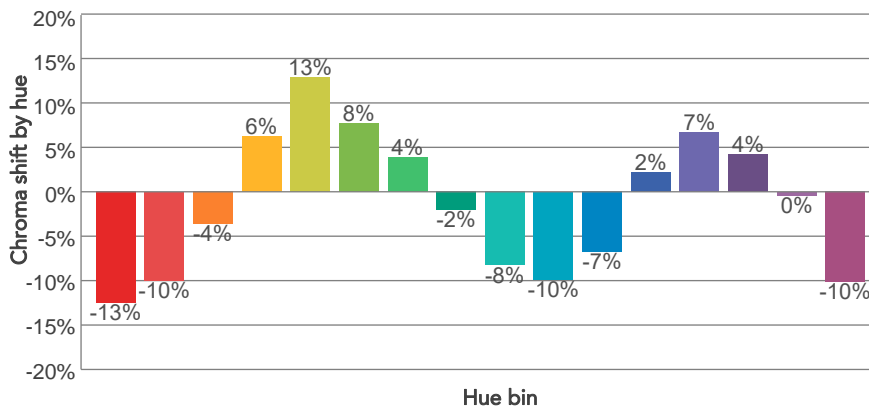
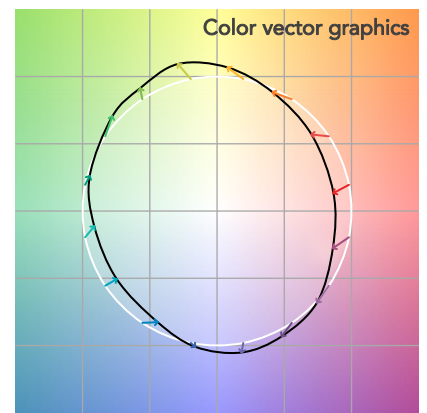
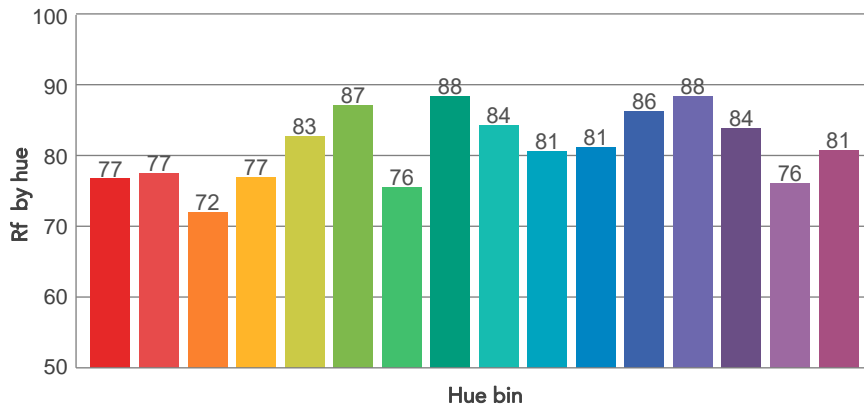
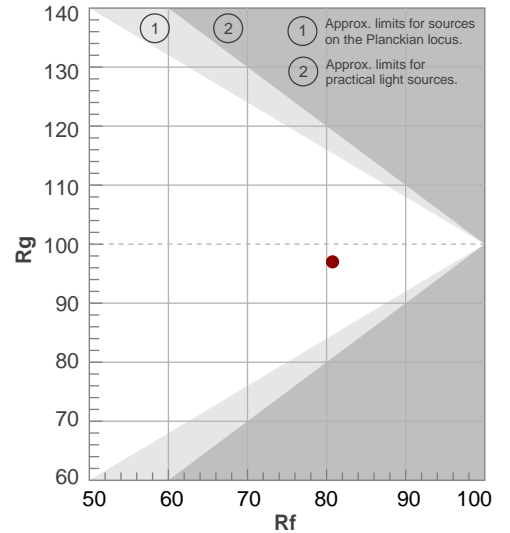
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3171 K	79,1	-7,5	80,8	97,0	79,3	57	0,430	0,409	0,0031

# TM30 DETAILS

**Rf 80,8**  
Fidelity index Rf

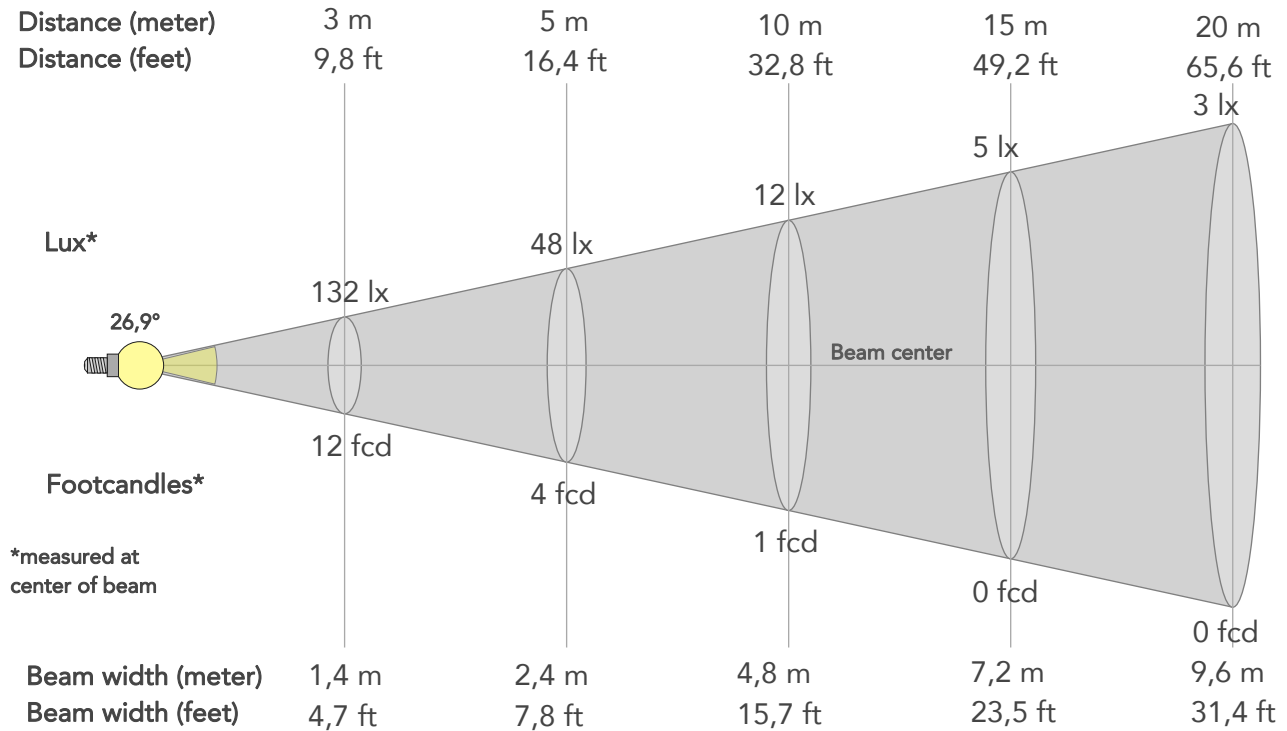
**Rg 97,0**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	77	-13%	-4%
2	77	-10%	8%
3	72	-4%	15%
4	77	6%	13%
5	83	13%	7%
6	87	8%	-3%
7	76	4%	-15%
8	88	-2%	-7%
9	84	-8%	-7%
10	81	-10%	1%
11	81	-7%	9%
12	86	2%	4%
13	88	7%	-3%
14	84	4%	-12%
15	76	0%	-15%
16	81	-10%	-10%



# BEAM DETAILS

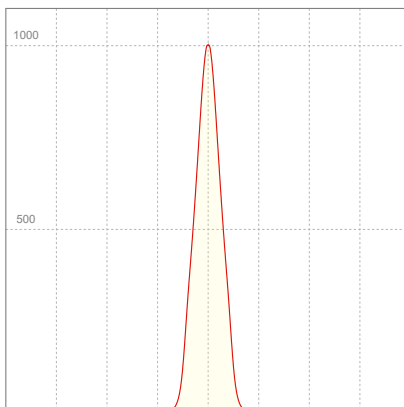
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,9°	46,7°	56,4°	99,9%	99,5%



## 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	1190lx	297lx	132lx	74lx	48lx	21lx	12lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	111fcd	28fcd	12fcd	7fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	12m	14,4m	19,1m	23,9m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,8ft	11,8ft	15,7ft	23,5ft	31,4ft	39,2ft	47,1ft	62,8ft	78,5ft

## LINEAR DISTRIBUTION DIAGRAM



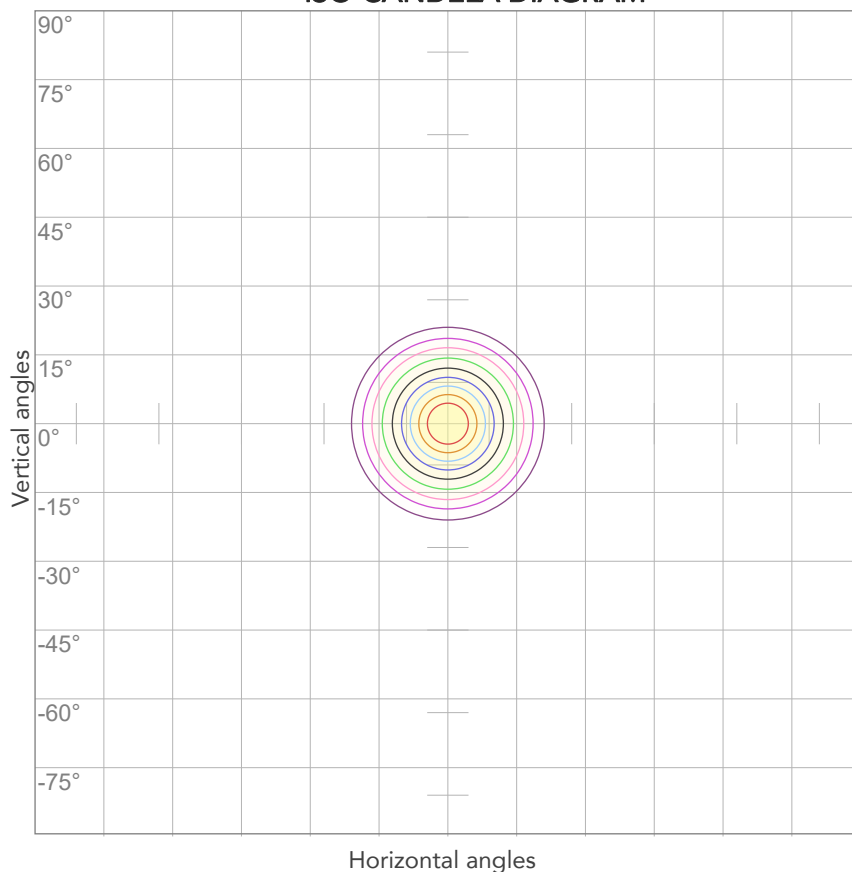
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,092A	18,3W	0,89	15lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



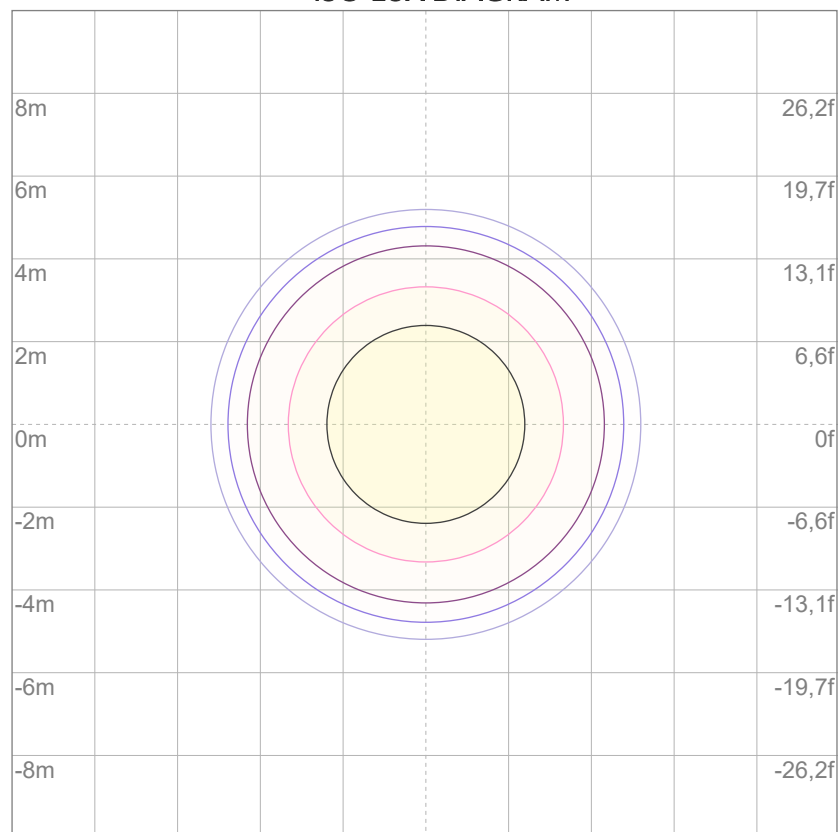
10%	119 cd
20%	238 cd
30%	357 cd
40%	476 cd
50%	595 cd
60%	714 cd
70%	833 cd
80%	952 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1190 cd

## ISO LUX DIAGRAM



3%	0,357 lx
5%	0,595 lx
10%	1,19 lx
30%	3,57 lx
50%	5,95 lx

### Conditions:

Number of c-planes: 2

Lux at center: 11,9 lx

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



Total lumen output:

253 lm

Peak candela output:

2449 cd

Light quality:

CRI: 79,1

Color temperature:

3164 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

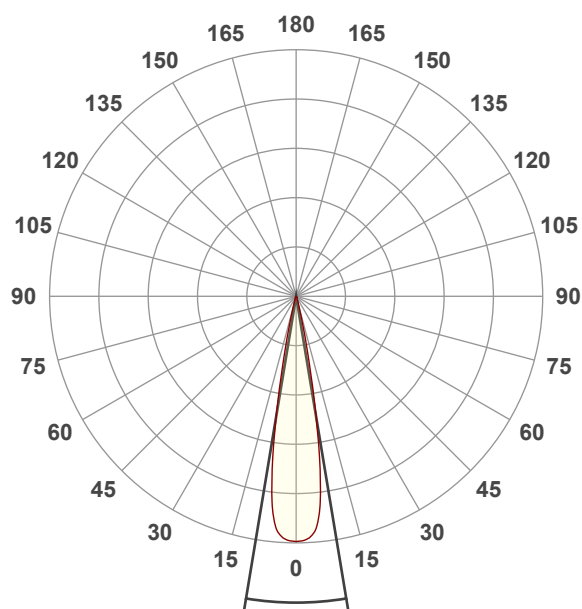
White

Operator:

Paolo Carvone

Date and time:

18/09/2020 14:51:41

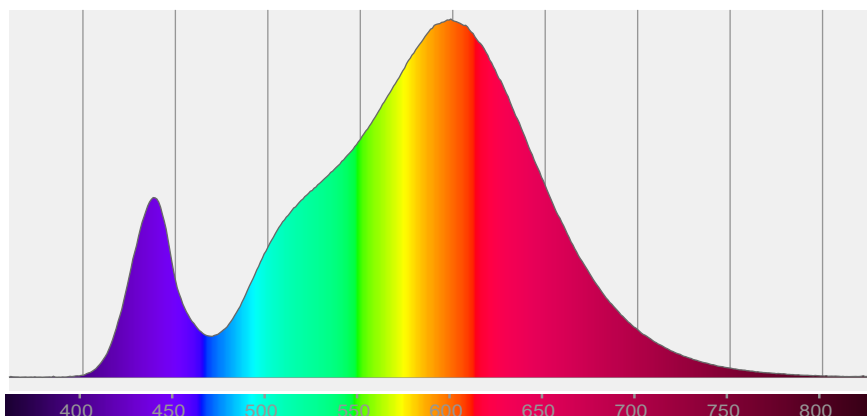


Beam angle 50%: 18,8°

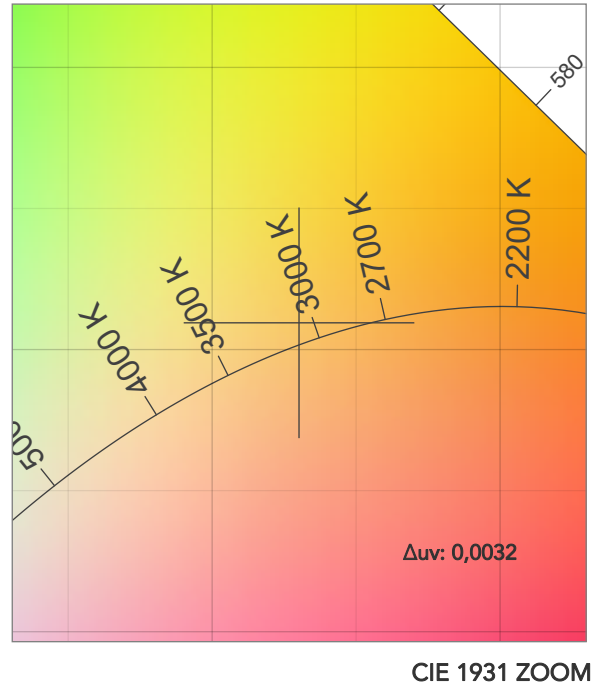
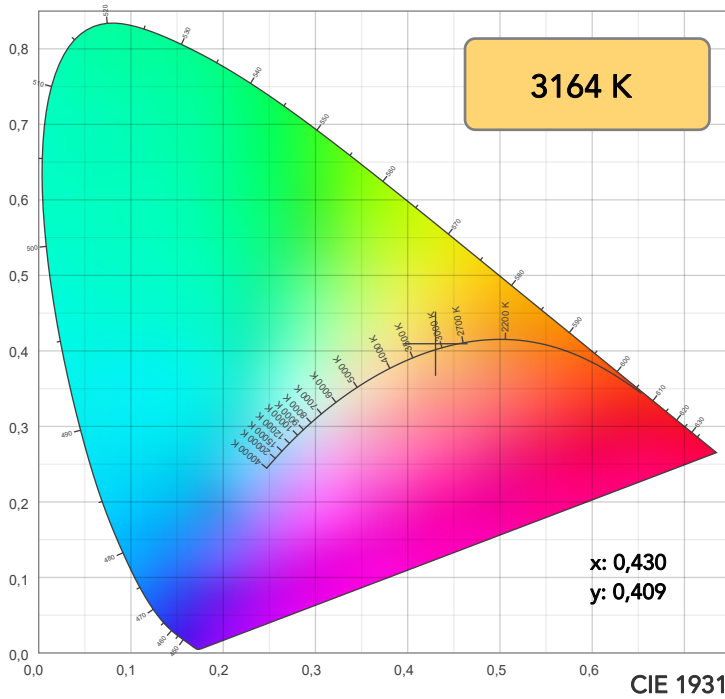
Field angle 10%: 27,3°

Cut off angle 2.5%: 35,1°

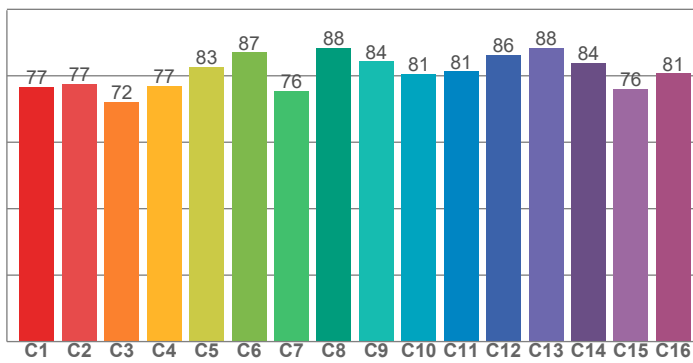
**Spectra**



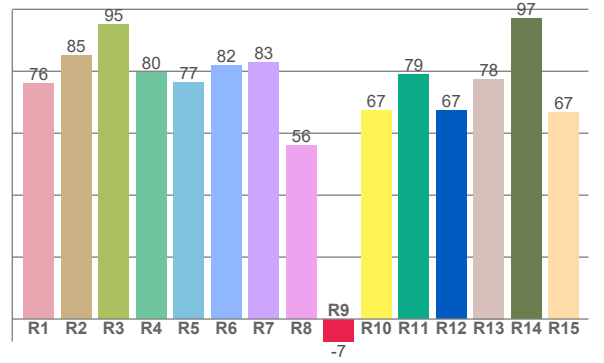
# COLOR DETAILS



TM30: 80,8



CRI: 79,1 (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
76,1	85,2	95,1	79,5	76,5	81,9	82,9	55,9	-7,3	67,4	78,9	67,3	77,5	97,1	66,7

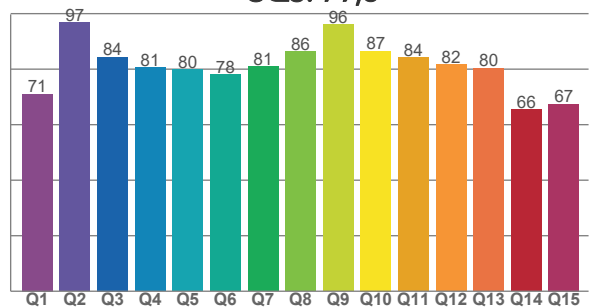
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
76,7	77,5	72,1	76,9	82,7	87,1	75,5	88,3	84,3	80,6	81,3	86,3	88,4	83,9	76,1	80,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
71,0	96,8	84,4	80,6	79,8	78,1	81,0	86,4	96,0	86,6	84,2	81,6	80,3	65,5	67,5

CQS: 79,3



## COLOR PARAMETERS

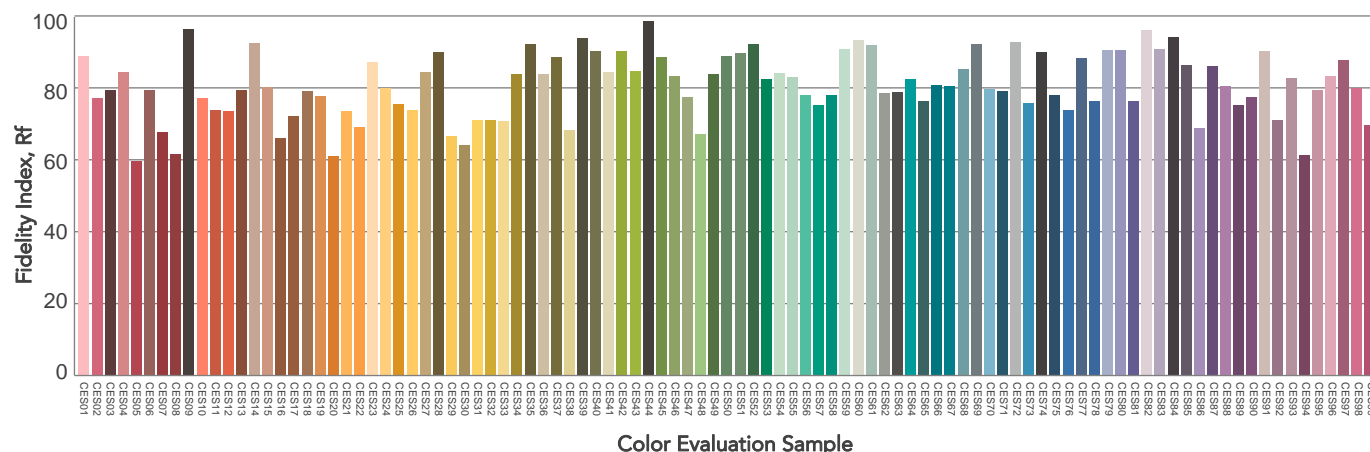
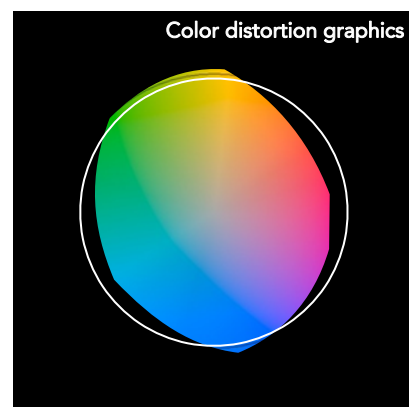
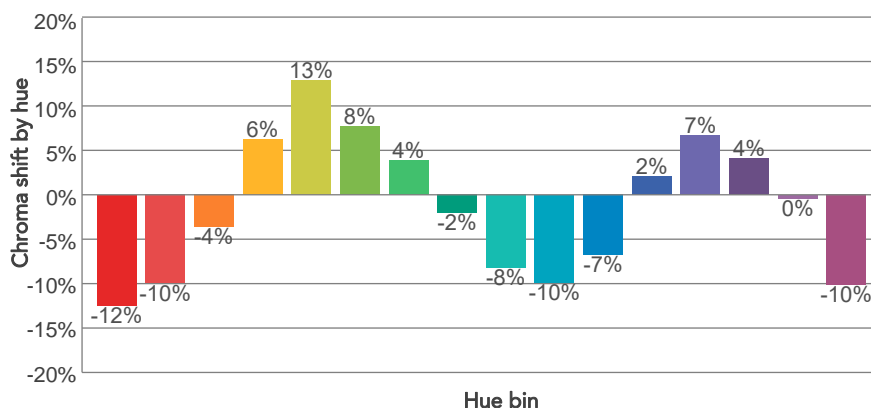
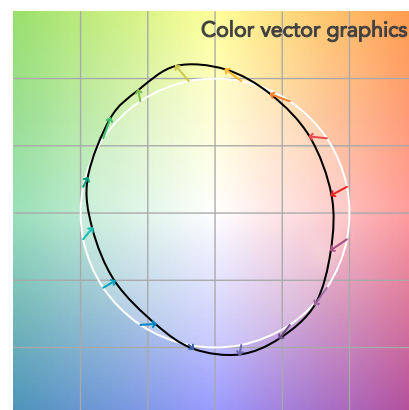
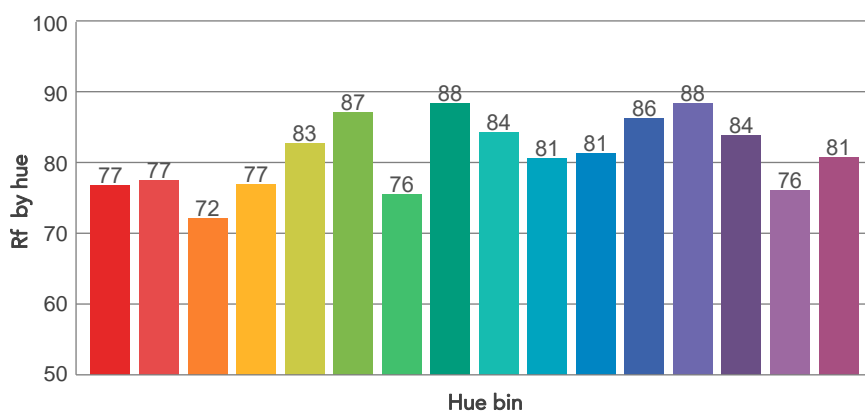
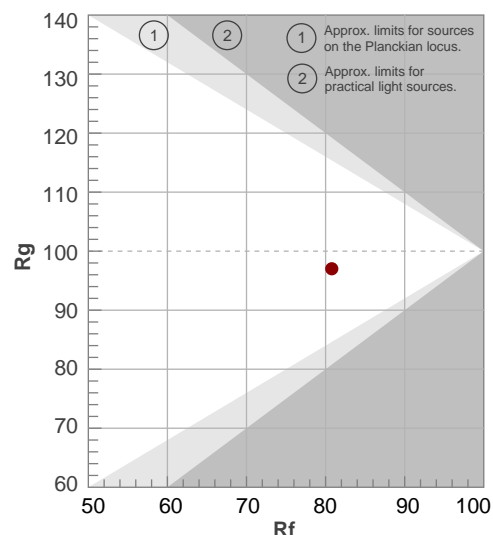
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3164 K	79,1	-7,3	80,8	97,0	79,3	57	0,430	0,409	0,0032

# TM30 DETAILS

**Rf 80,8**  
Fidelity index Rf

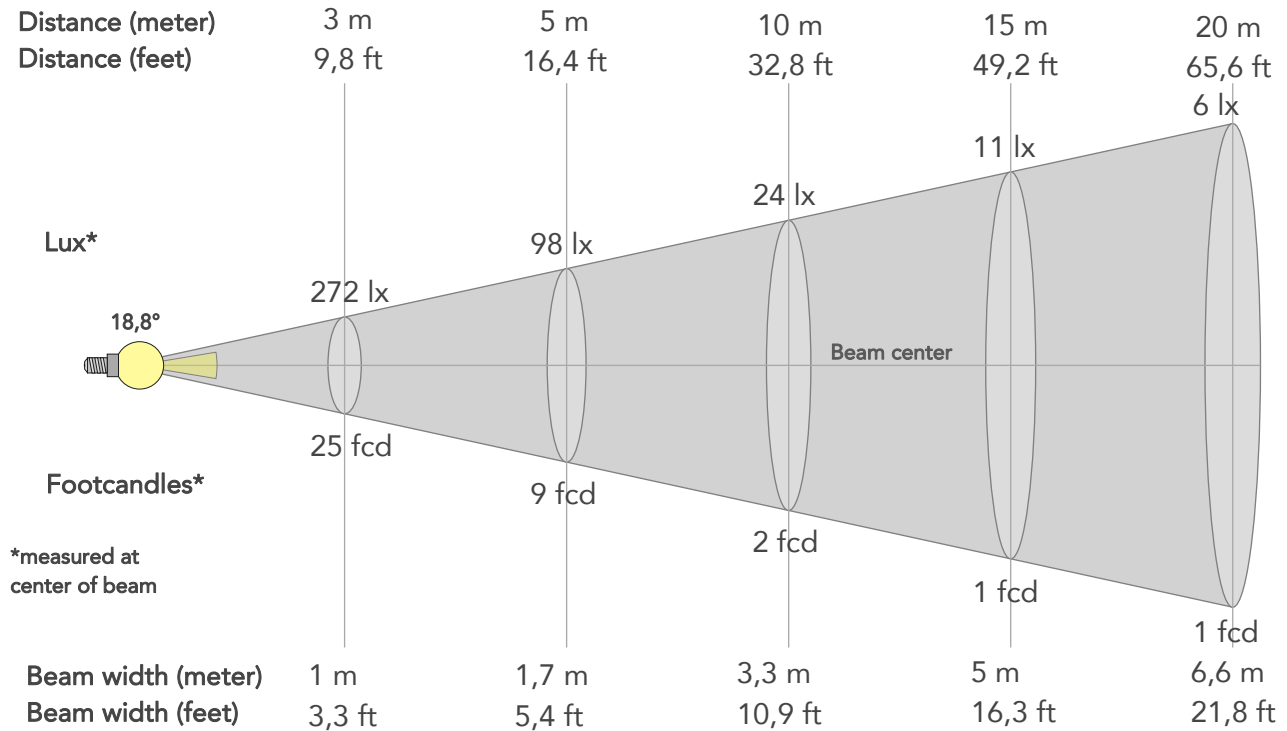
**Rg 97,0**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	77	-12%	-4%
2	77	-10%	8%
3	72	-4%	15%
4	77	6%	13%
5	83	13%	7%
6	87	8%	-3%
7	76	4%	-15%
8	88	-2%	-7%
9	84	-8%	-7%
10	81	-10%	1%
11	81	-7%	9%
12	86	2%	4%
13	88	7%	-3%
14	84	4%	-12%
15	76	0%	-15%
16	81	-10%	-10%



# BEAM DETAILS

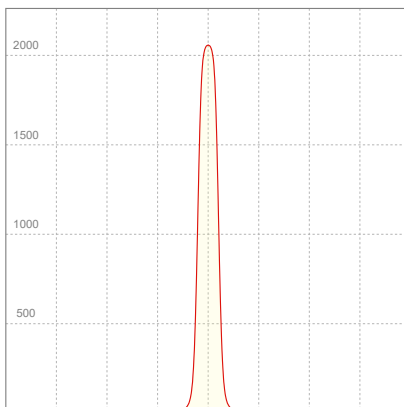
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,8°	27,3°	35,1°	100,0%	99,7%



## 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	2449lx	612lx	272lx	153lx	98lx	44lx	24lx	11lx	6lx	4lx	3lx	2lx	1lx
Footcand.	228fcd	57fcd	25fcd	14fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,6m	8,3m	10m	13,3m	16,6m
Beam wid.	1,1ft	2,2ft	3,3ft	4,3ft	5,4ft	8,2ft	10,9ft	16,3ft	21,8ft	27,2ft	32,6ft	43,5ft	54,4ft

## LINEAR DISTRIBUTION DIAGRAM

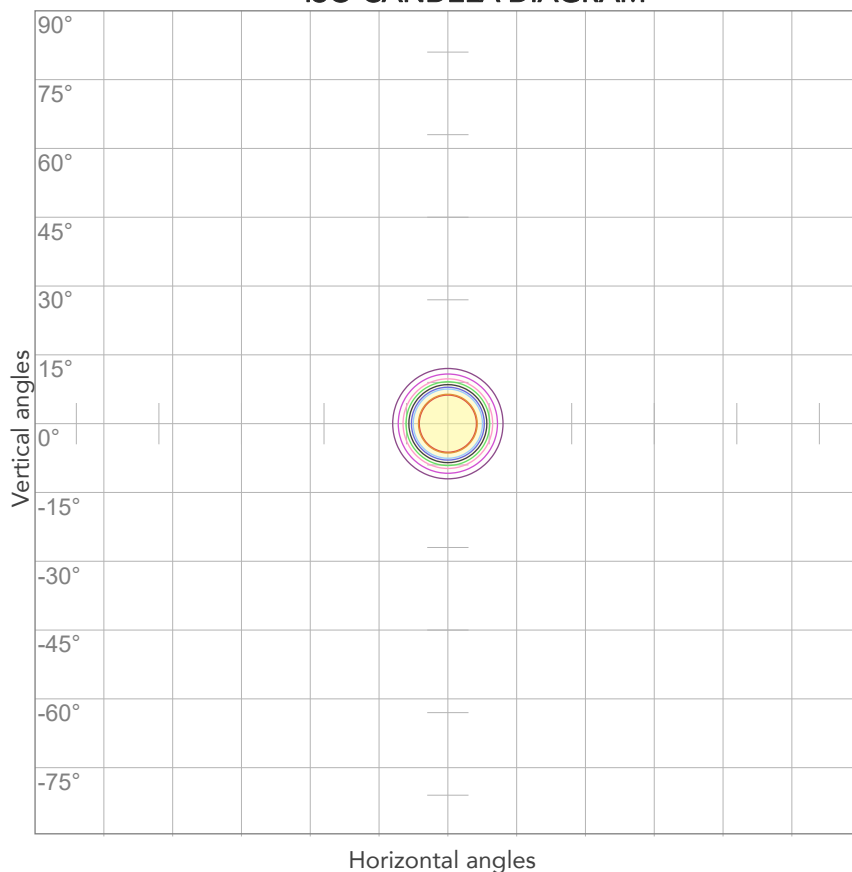


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,092A	18,3W	0,89	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



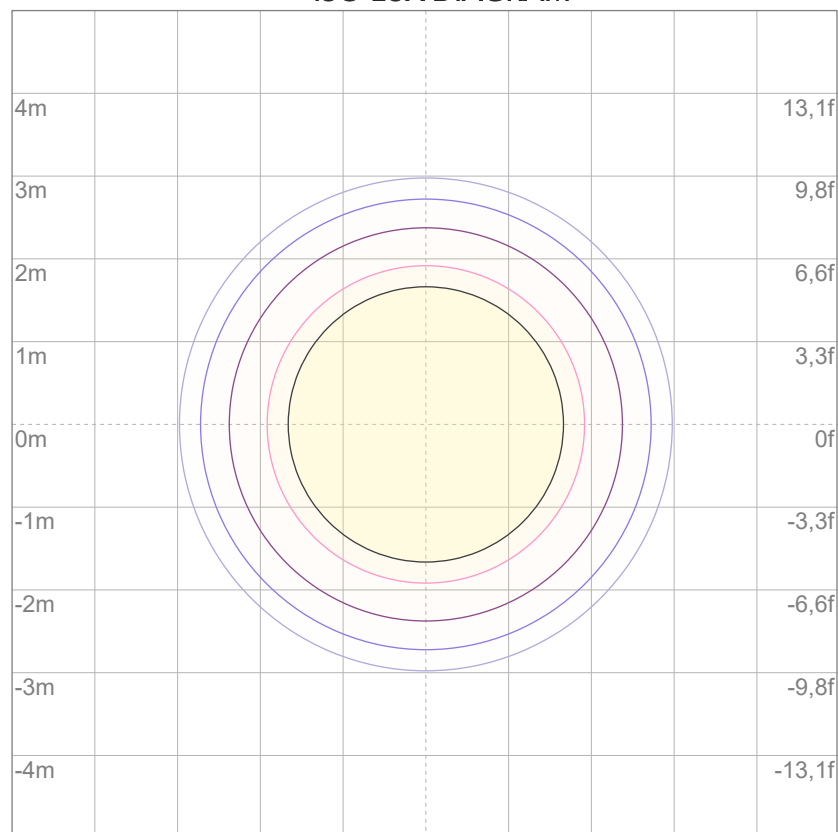
10%	245 cd
20%	490 cd
30%	735 cd
40%	980 cd
50%	1224 cd
60%	1469 cd
70%	1714 cd
80%	1959 cd

### Conditions:

Number of c-planes: 2

Candela at center: 2449 cd

## ISO LUX DIAGRAM



3%	0,735 lx
5%	1,22 lx
10%	2,45 lx
30%	7,35 lx
50%	12,2 lx

### Conditions:

Number of c-planes: 2

Lux at center: 24,5 lx

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



Total lumen output:

342 lm

Peak candela output:

1446 cd

Light quality:

CRI: 92,5

Color temperature:

2830 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash15-30 Max Zoom

Target:

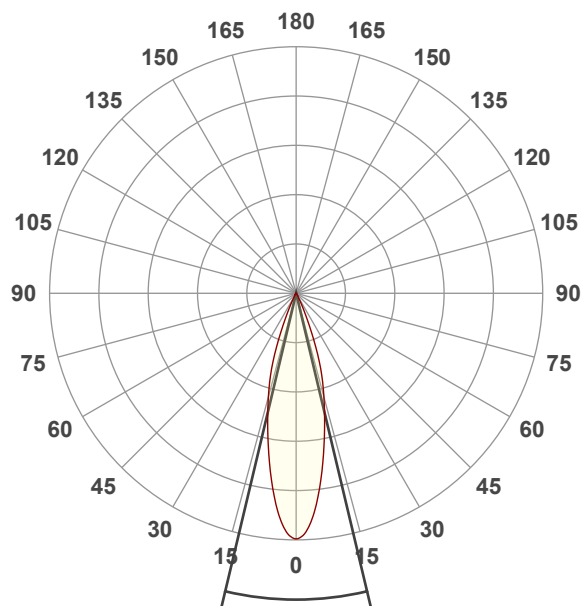
2800K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:08:12

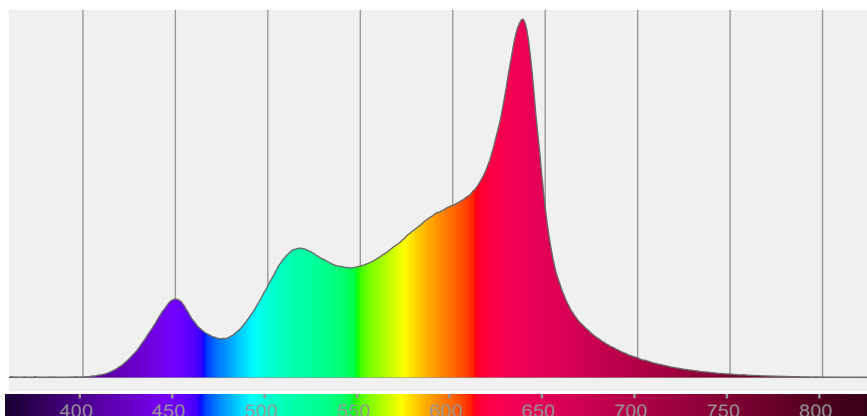


Beam angle 50%: 26,8°

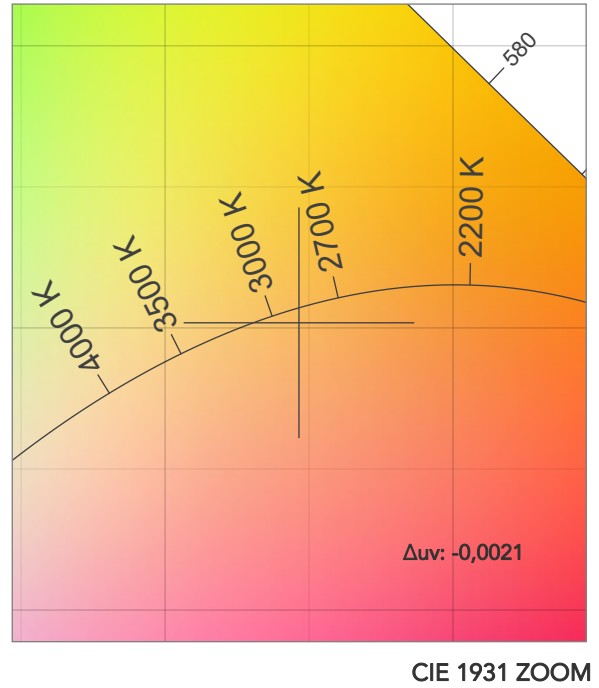
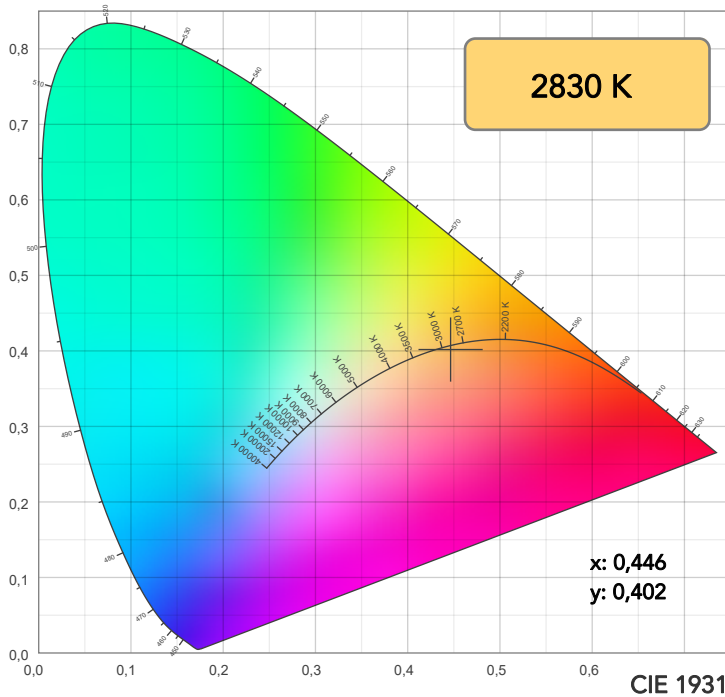
Field angle 10%: 47,1°

Cut off angle 2.5%: 56,1°

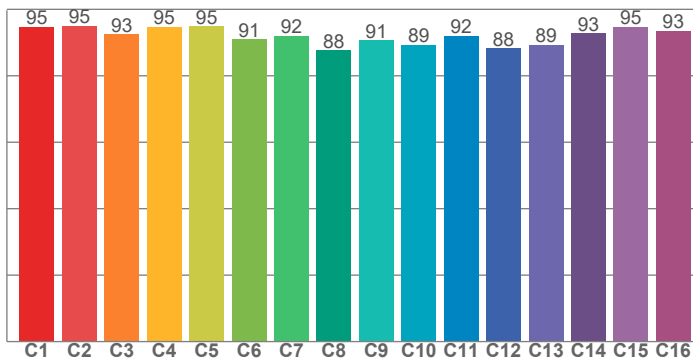
**Spectra**



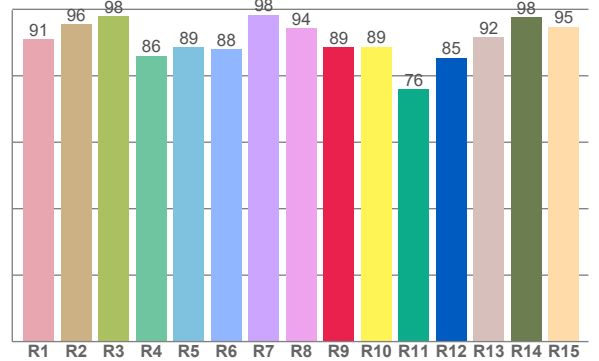
# COLOR DETAILS



TM30: 92,5



CRI: 92,5 (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
90,9	95,5	98,0	86,0	88,6	87,9	98,4	94,4	88,6	88,7	75,9	85,4	91,6	97,7	94,8

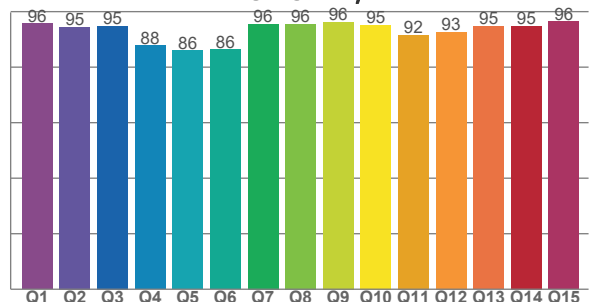
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,7	95,0	92,5	94,8	94,9	90,9	92,0	87,6	90,6	89,3	92,0	88,3	89,3	92,8	94,7	93,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,7	94,5	94,8	87,8	86,0	86,4	95,6	95,6	96,2	95,2	91,6	92,7	94,7	94,8	96,5

CQS: 92,1



## 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	$\Delta uv$
2830 K	92,5	88,6	92,5	104,9	92,1	83	0,446	0,402	-0,0021



## TM30 DETAILS

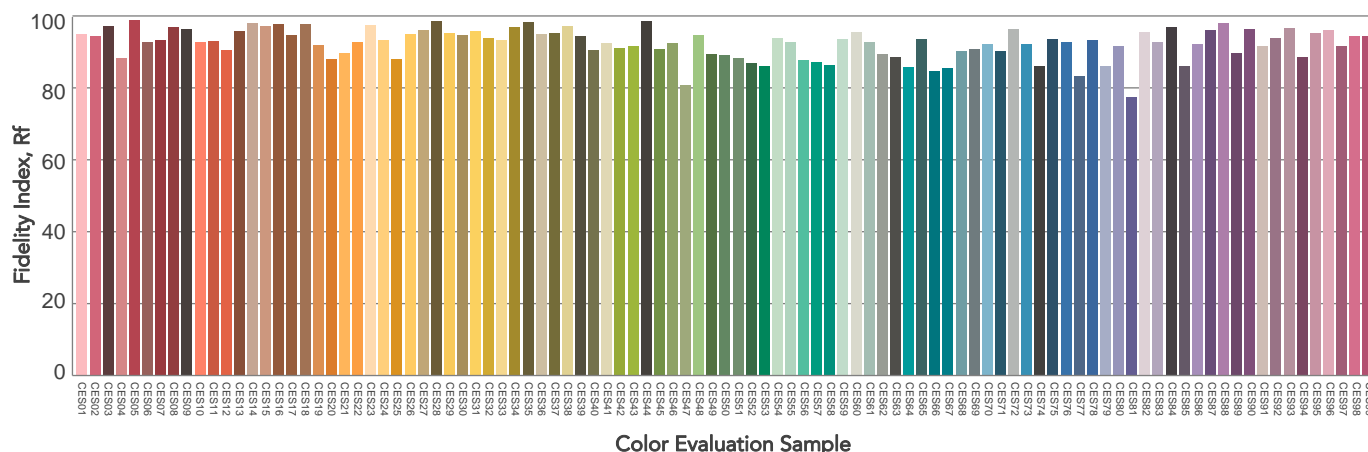
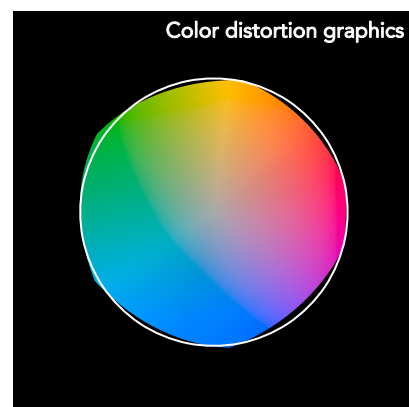
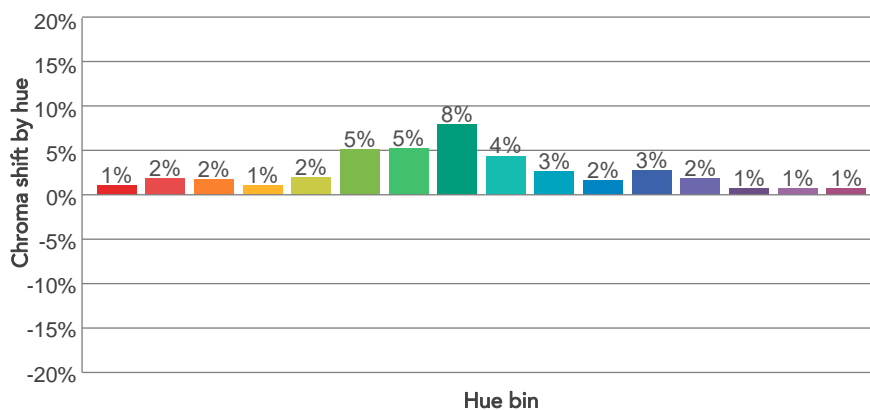
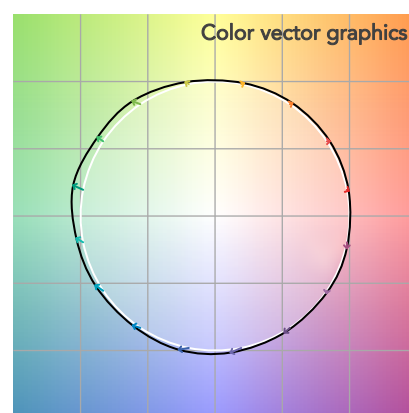
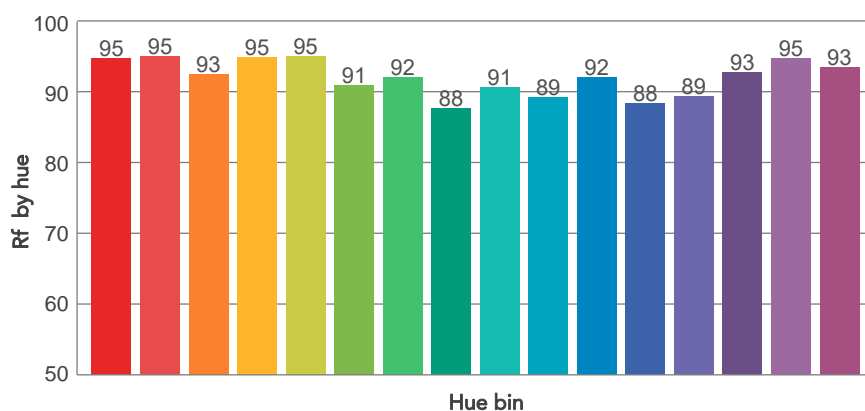
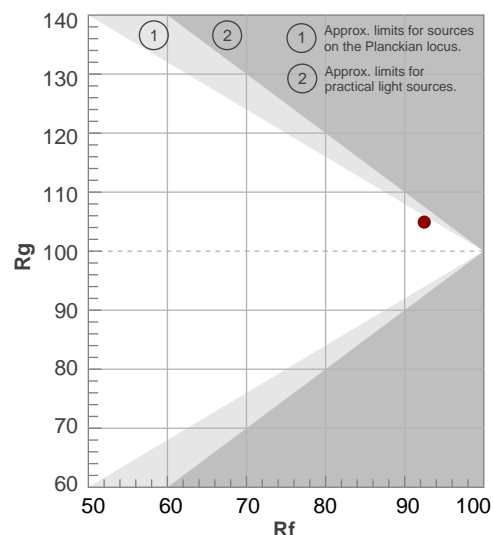
**Rf 92,5**

Fidelity index Rf

**Rg 104,9**

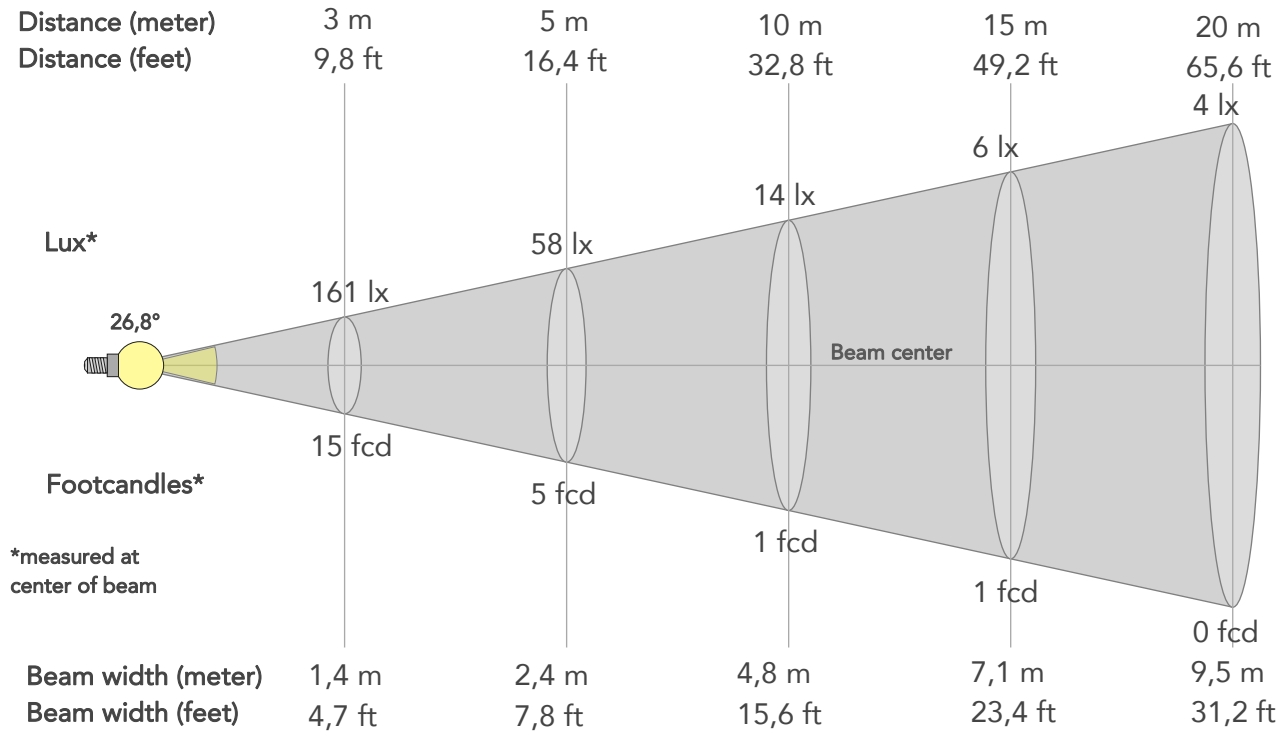
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	-1%
2	95	2%	-1%
3	93	2%	-1%
4	95	1%	-2%
5	95	2%	2%
6	91	5%	4%
7	92	5%	0%
8	88	8%	-2%
9	91	4%	-4%
10	89	3%	-7%
11	92	2%	-6%
12	88	3%	-7%
13	89	2%	-8%
14	93	1%	-5%
15	95	1%	-2%
16	93	1%	-4%



# BEAM DETAILS

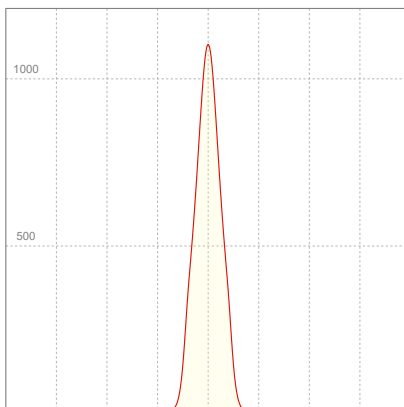
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,8°	47,1°	56,1°	99,9%	99,7%



## 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	1446lx	361lx	161lx	90lx	58lx	26lx	14lx	6lx	4lx	2lx	2lx	1lx	1lx
Footcand.	134fcd	34fcd	15fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,1m	9,5m	11,9m	14,3m	19m	23,8m
Beam wid.	1,6ft	3,1ft	4,7ft	6,2ft	7,8ft	11,7ft	15,6ft	23,4ft	31,2ft	39ft	46,8ft	62,5ft	78,1ft

## LINEAR DISTRIBUTION DIAGRAM

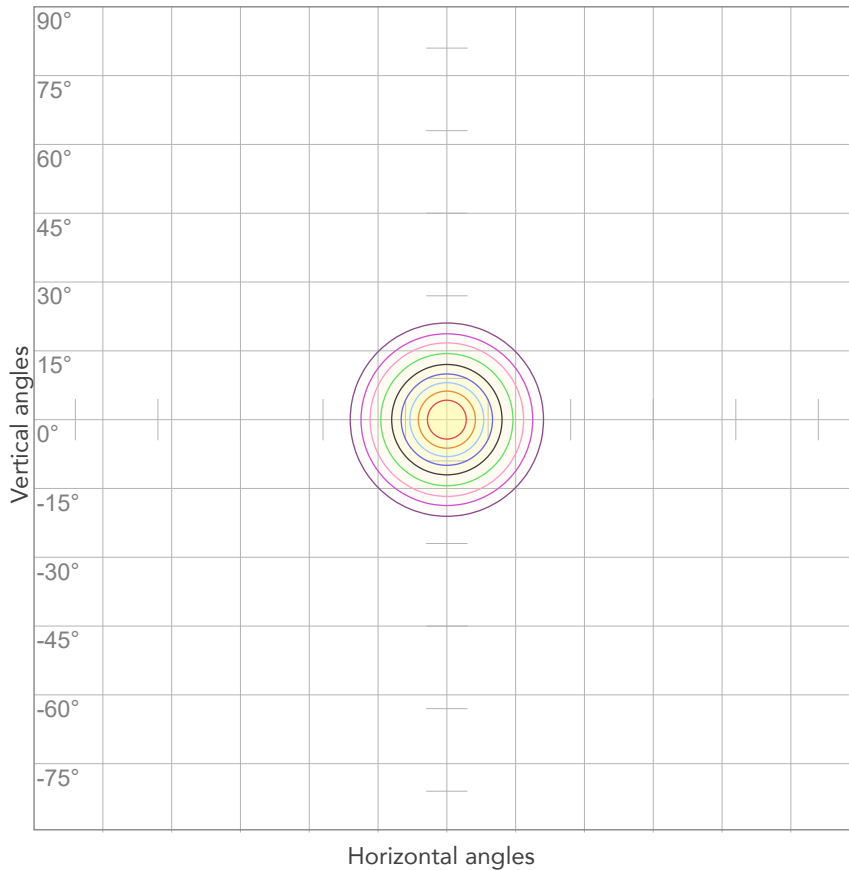


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,110A	22,5W	0,91	15lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



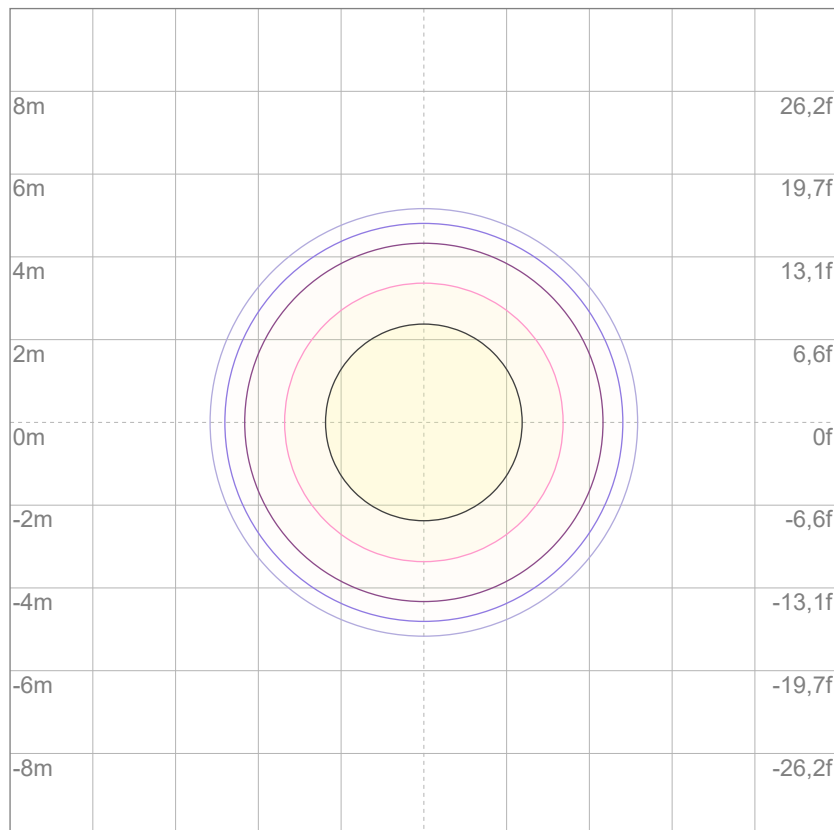
10%	145 cd
20%	289 cd
30%	434 cd
40%	578 cd
50%	723 cd
60%	867 cd
70%	1012 cd
80%	1157 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1446 cd

## ISO LUX DIAGRAM



3%	0,434 lx
5%	0,723 lx
10%	1,45 lx
30%	4,34 lx
50%	7,23 lx

### Conditions:

Number of c-planes: 2

Lux at center: 14,5 lx

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



Total lumen output:

313 lm

Peak candela output:

3040 cd

Light quality:

CRI: 92,4

Color temperature:

2820 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash15-30 Min Zoom

Target:

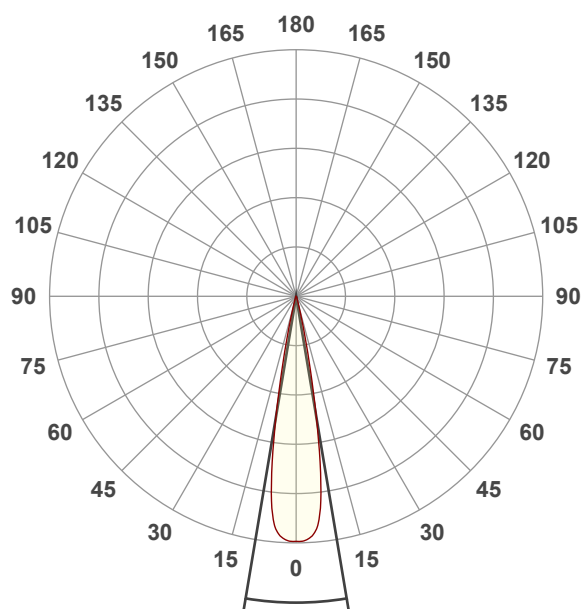
2800K

Operator:

Paolo Carvone

Date and time:

14/01/2021 11:56:20

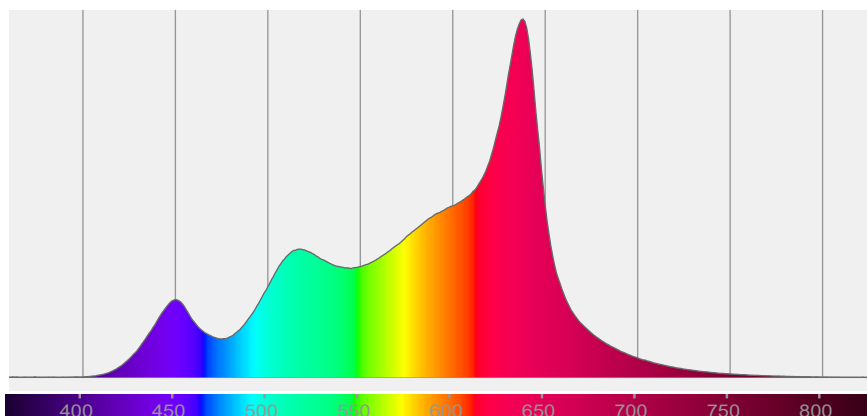


Beam angle 50%: 19°

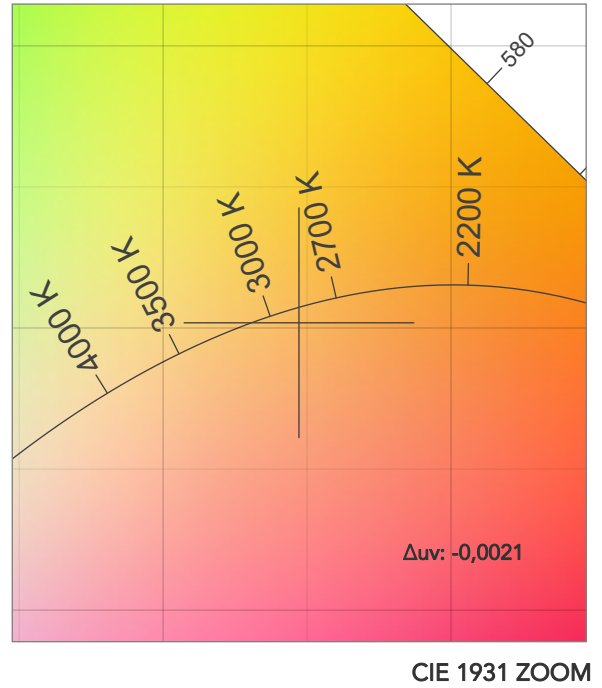
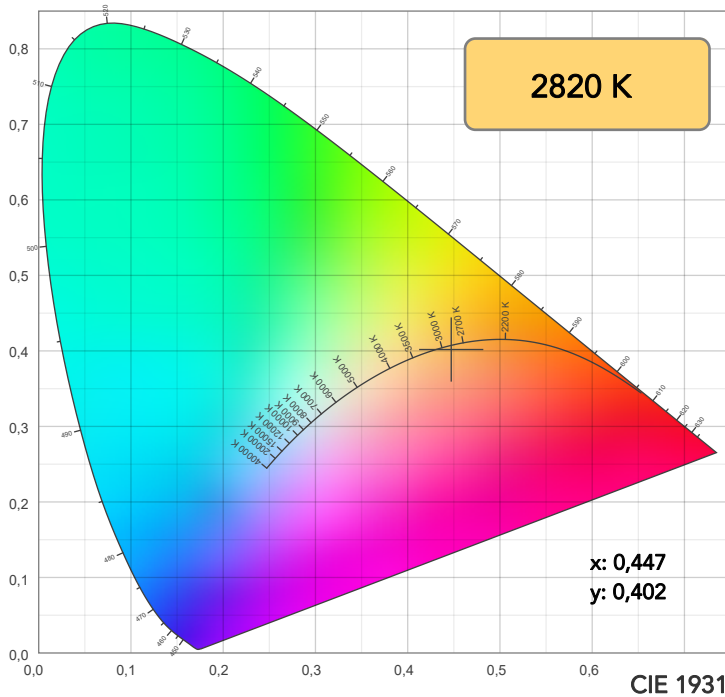
Field angle 10%: 27,1°

Cut off angle 2.5%: 34,5°

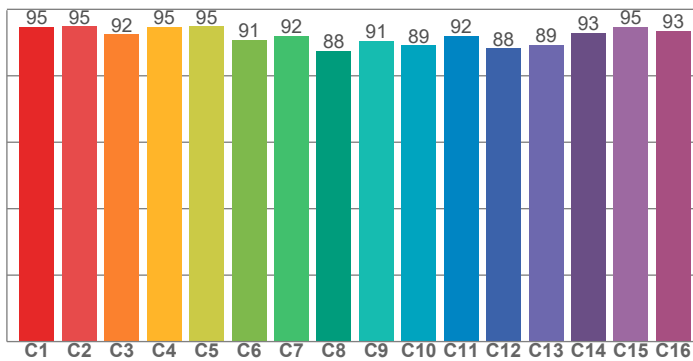
**Spectra**



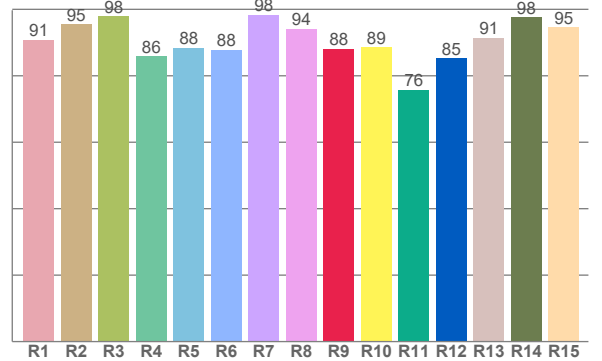
## COLOR DETAILS



TM30: 92,4



CRI: 92,4 (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
90,8	95,5	97,9	85,9	88,5	87,8	98,4	94,1	88,1	88,6	75,8	85,2	91,5	97,7	94,6

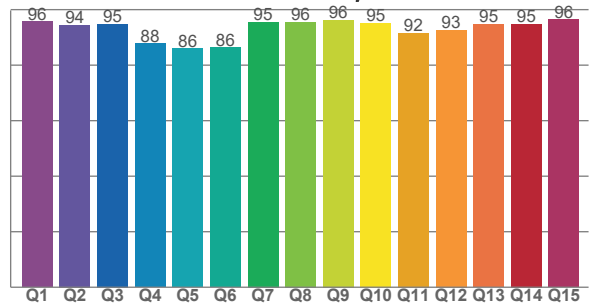
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,6	94,9	92,5	94,8	94,9	90,9	91,9	87,6	90,5	89,2	92,0	88,3	89,3	92,8	94,7	93,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,7	94,5	94,7	87,8	86,0	86,3	95,5	95,6	96,2	95,2	91,6	92,7	94,7	94,8	96,4

CQS: 92,1



## 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	$\Delta uv$
2820 K	92,4	88,1	92,4	105,0	92,1	83	0,447	0,402	-0,0021

## TM30 DETAILS

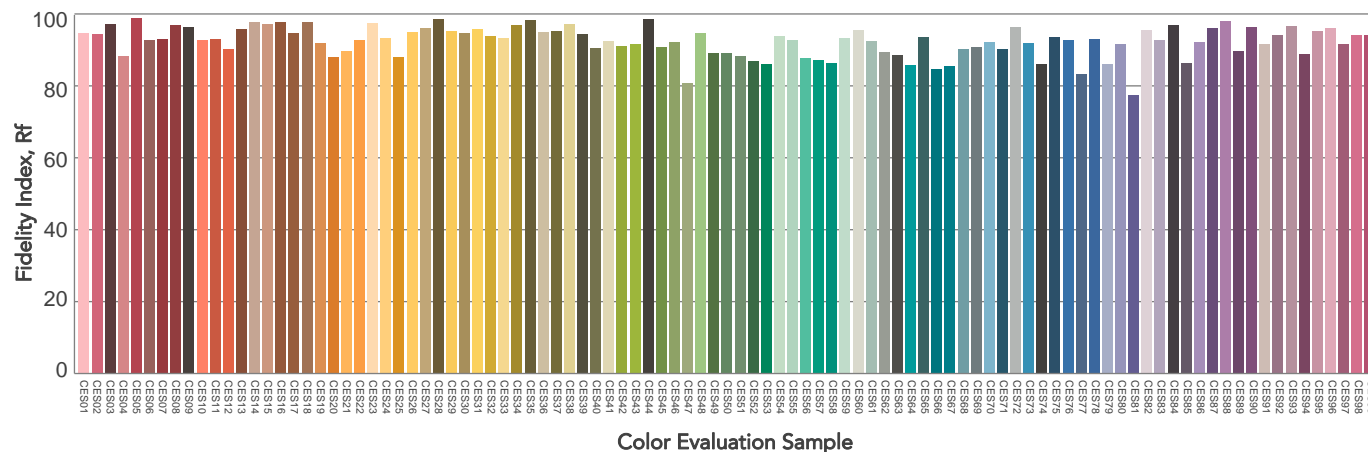
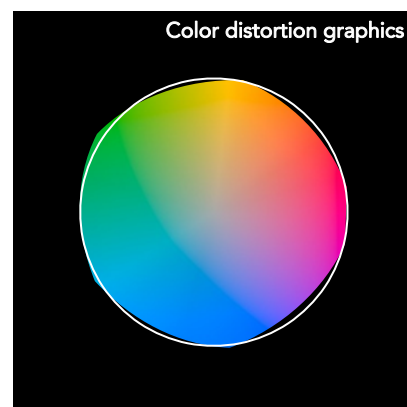
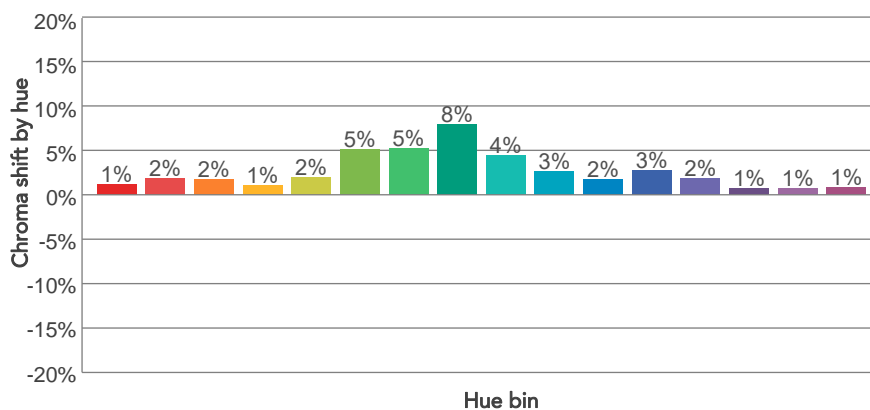
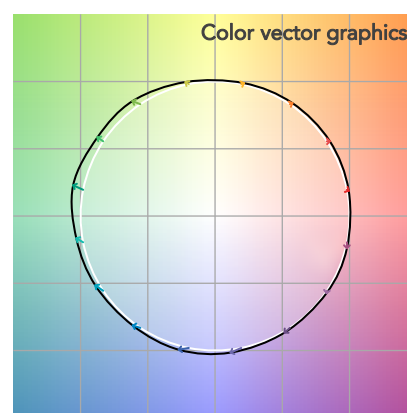
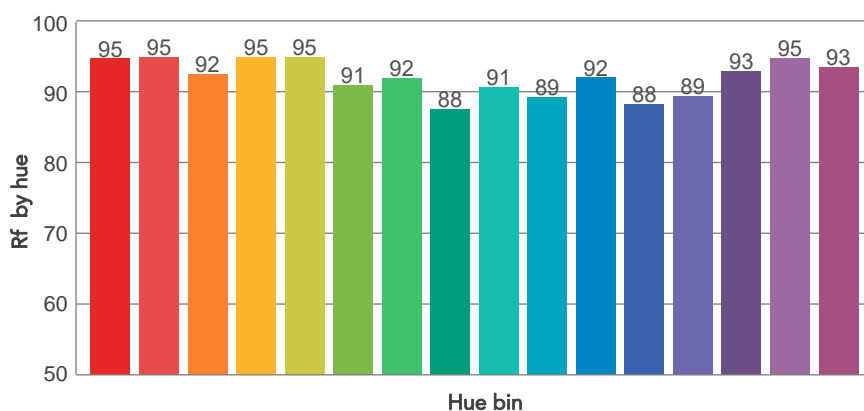
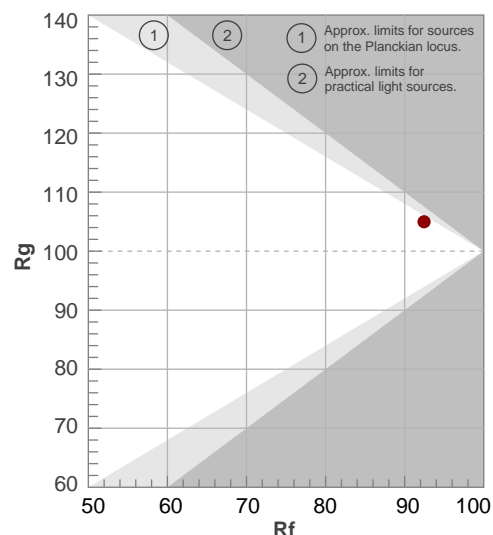
**Rf 92,4**

Fidelity index Rf

**Rg 105,0**

Gammut index

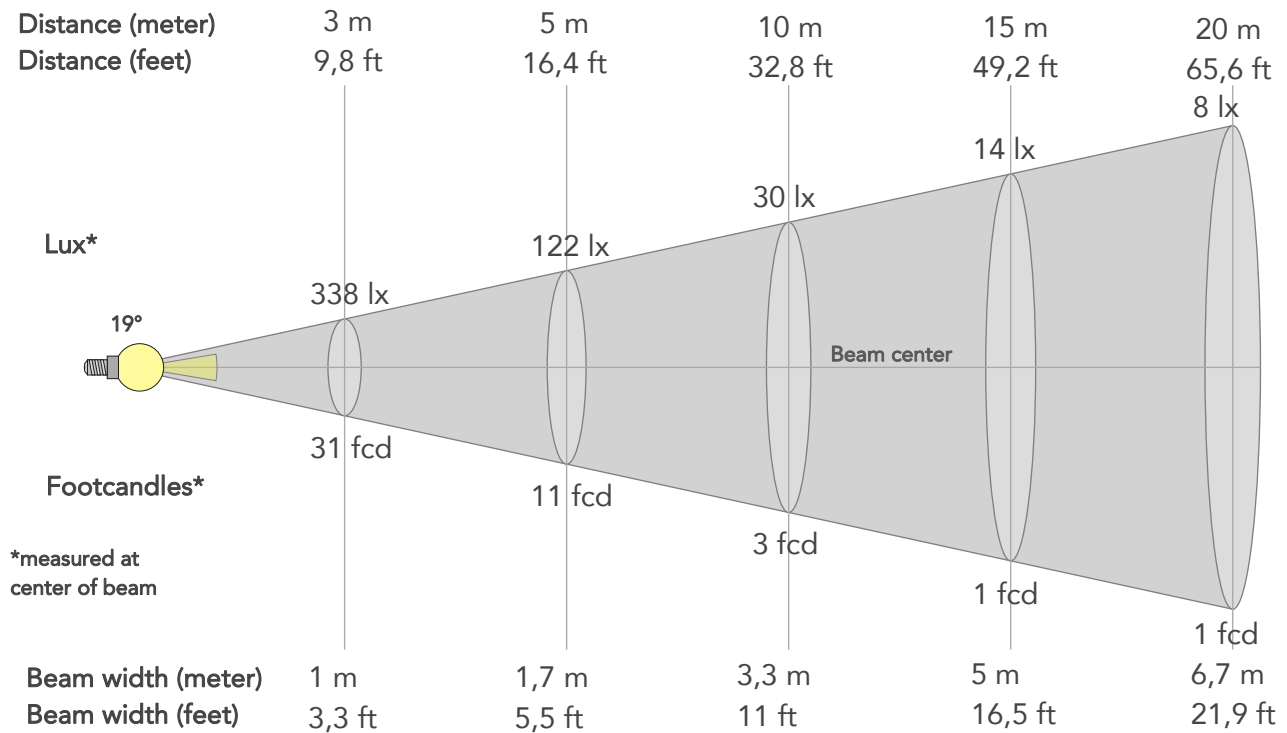
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	-1%
2	95	2%	-1%
3	92	2%	-1%
4	95	1%	-2%
5	95	2%	2%
6	91	5%	4%
7	92	5%	0%
8	88	8%	-2%
9	91	4%	-4%
10	89	3%	-7%
11	92	2%	-6%
12	88	3%	-7%
13	89	2%	-8%
14	93	1%	-5%
15	95	1%	-2%
16	93	1%	-4%



# BEAM DETAILS



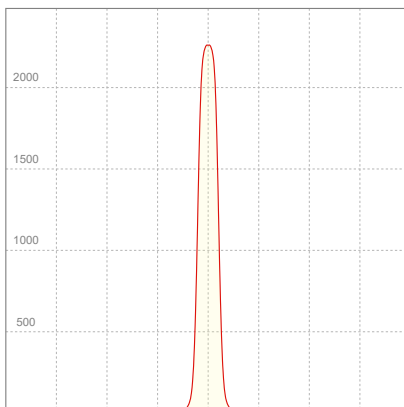
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19°	27,1°	34,5°	100,0%	99,9%



## 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	3040lx	760lx	338lx	190lx	122lx	54lx	30lx	14lx	8lx	5lx	3lx	2lx	1lx
Footcand.	282fcd	71fcd	31fcd	18fcd	11fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,7m	8,4m	10m	13,4m	16,7m
Beam wid.	1,1ft	2,2ft	3,3ft	4,4ft	5,5ft	8,2ft	11ft	16,5ft	21,9ft	27,4ft	32,9ft	43,9ft	54,9ft

## LINEAR DISTRIBUTION DIAGRAM

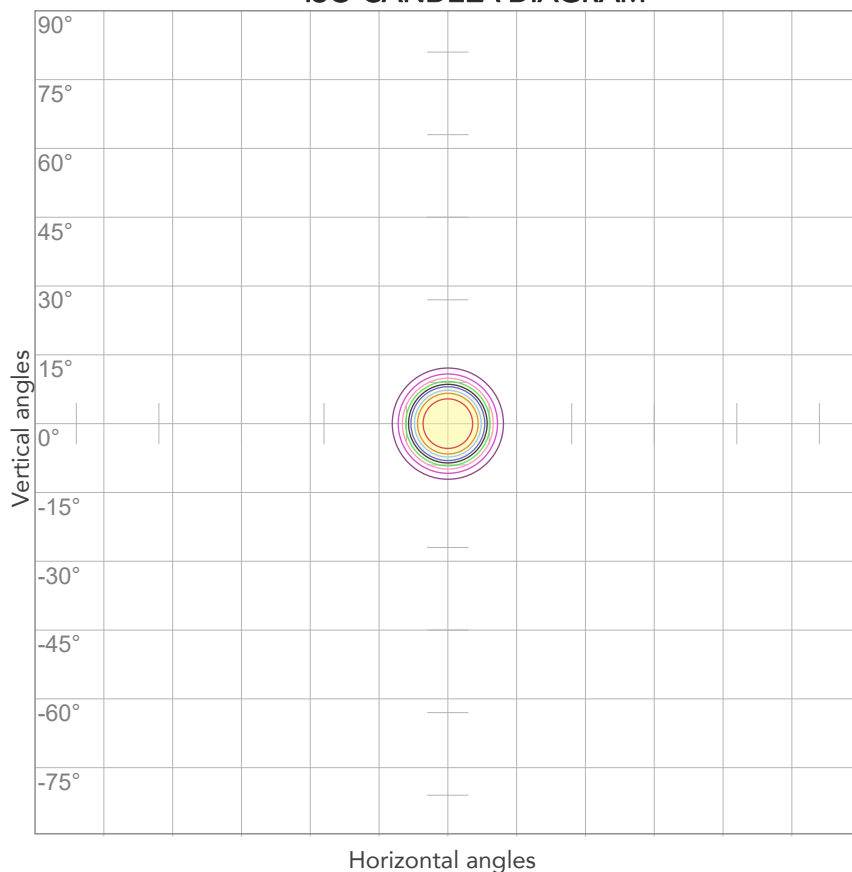


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,110A	22,6W	0,91	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



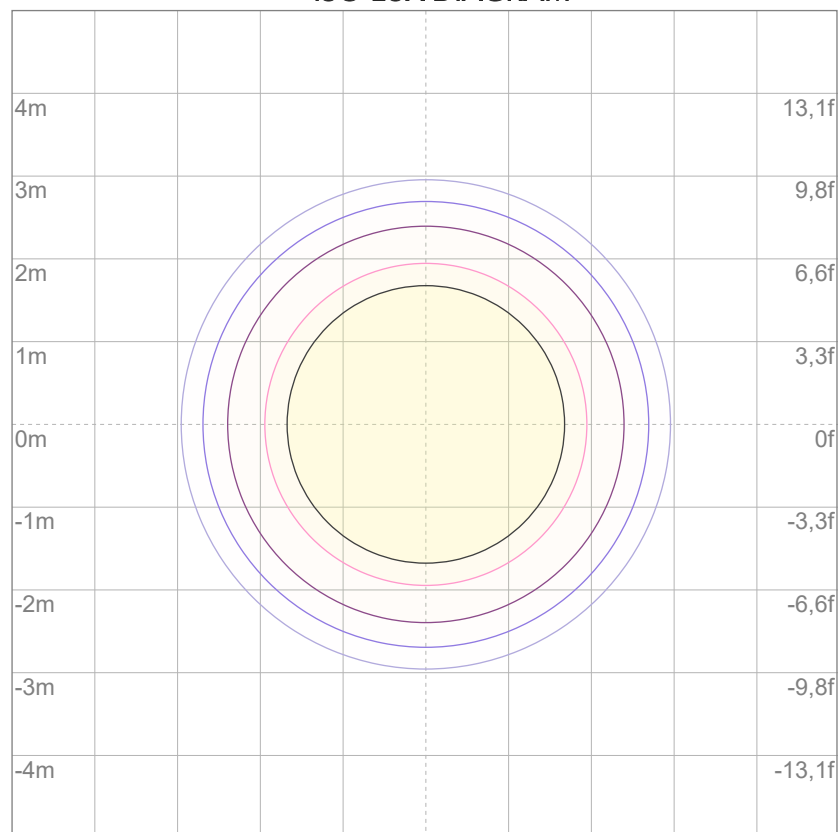
10%	304 cd
20%	608 cd
30%	912 cd
40%	1216 cd
50%	1520 cd
60%	1824 cd
70%	2128 cd
80%	2432 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3040 cd

## ISO LUX DIAGRAM



3%	0,912 lx
5%	1,52 lx
10%	3,04 lx
30%	9,12 lx
50%	15,2 lx

### Conditions:

Number of c-planes: 2

Lux at center: 30,4 lx

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





Total lumen output:

347 lm

Peak candela output:

1463 cd

Light quality:

CRI: 93,3

Color temperature:

3171 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

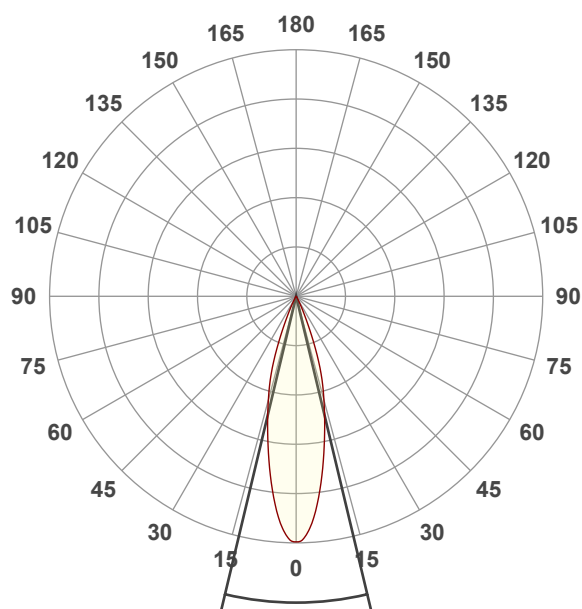
3200K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:12:31

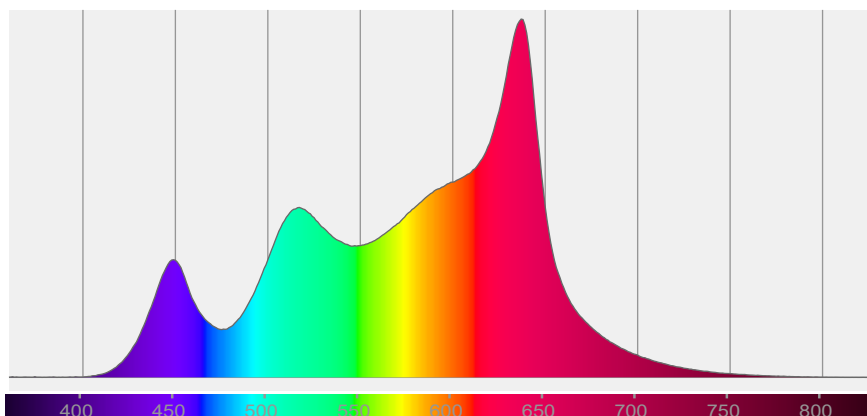


Beam angle 50%: 26,9°

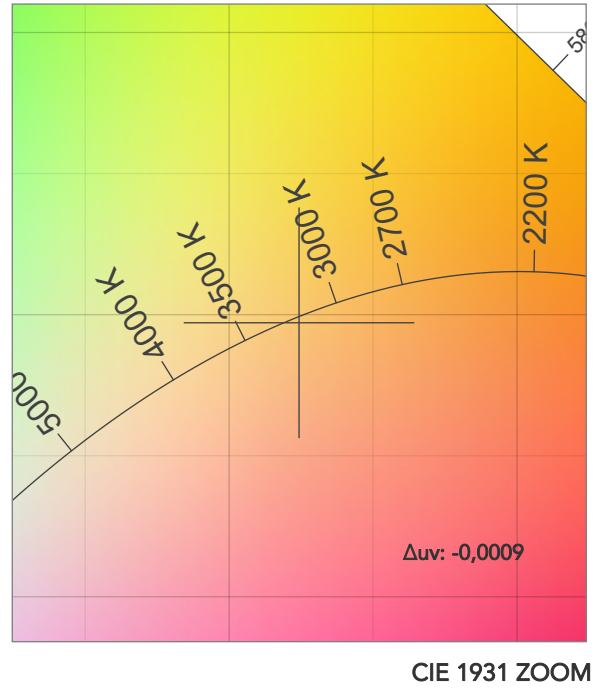
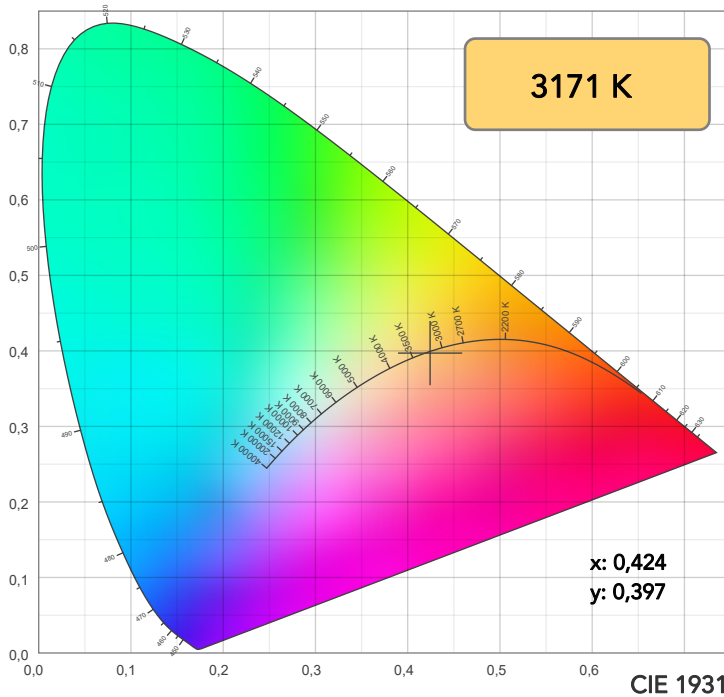
Field angle 10%: 47°

Cut off angle 2.5%: 56,2°

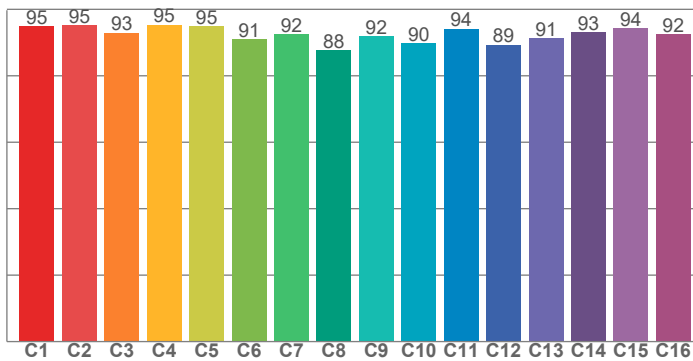
**Spectra**



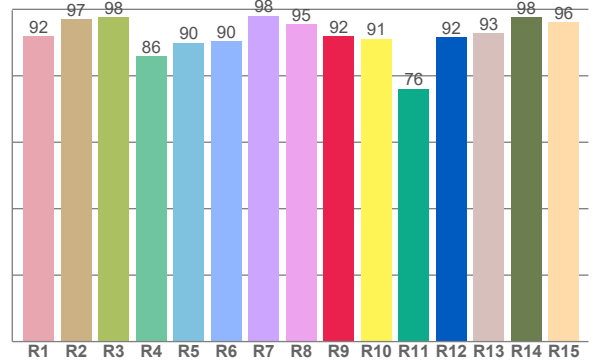
# COLOR DETAILS



**TM30: 93,0**



**CRI: 93,3 (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
91,8	97,0	97,6	86,0	90,0	90,3	98,1	95,4	91,9	91,2	76,1	91,6	92,7	97,6	96,2

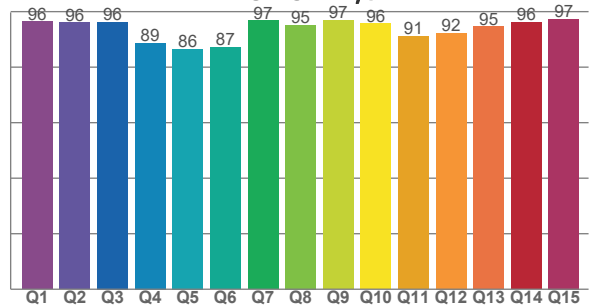
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,9	95,2	92,8	95,3	94,9	91,0	92,5	87,6	91,9	89,8	94,1	89,3	91,3	93,0	94,3	92,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,4	96,0	96,3	88,7	86,5	87,1	96,8	95,2	96,9	95,7	91,1	92,3	94,6	96,1	97,4

**CQS: 92,6**



## 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
3171 K	93,3	91,9	93,0	104,7	92,6	83	0,424	0,397	-0,0009

## TM30 DETAILS

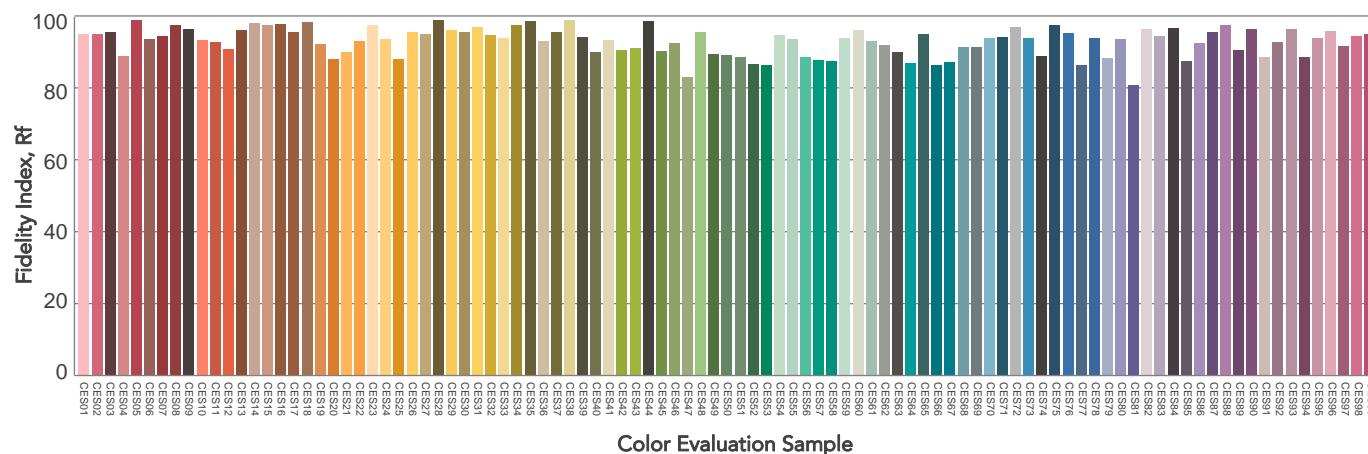
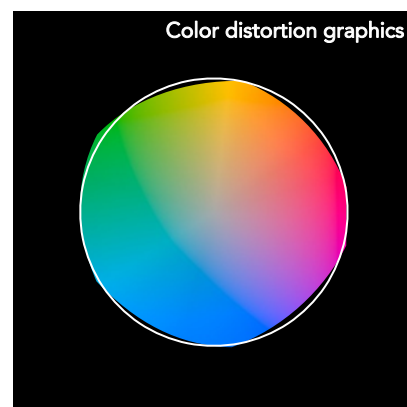
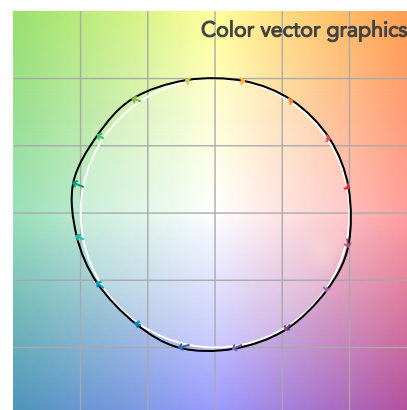
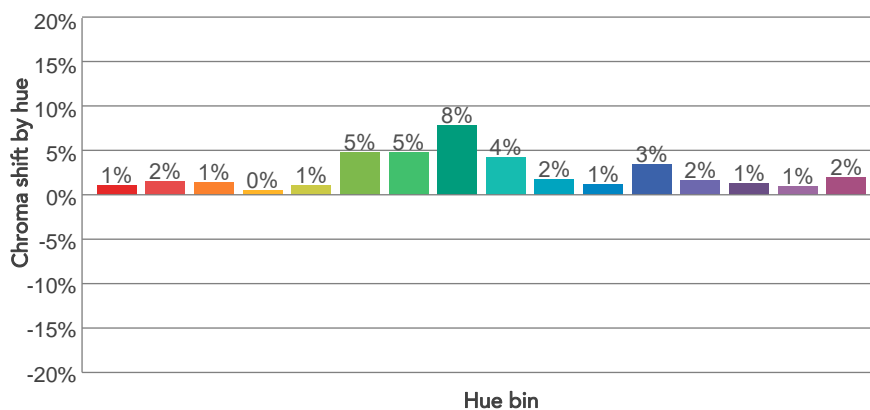
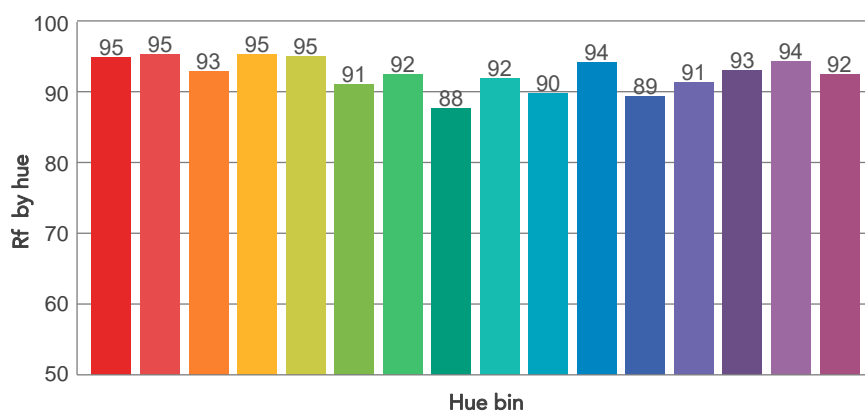
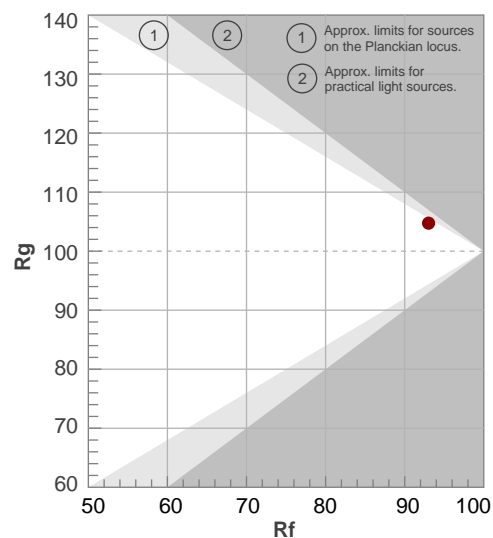
Rf 93,0

Fidelity index  $R_f$

Rg 104,7

## Gammut index

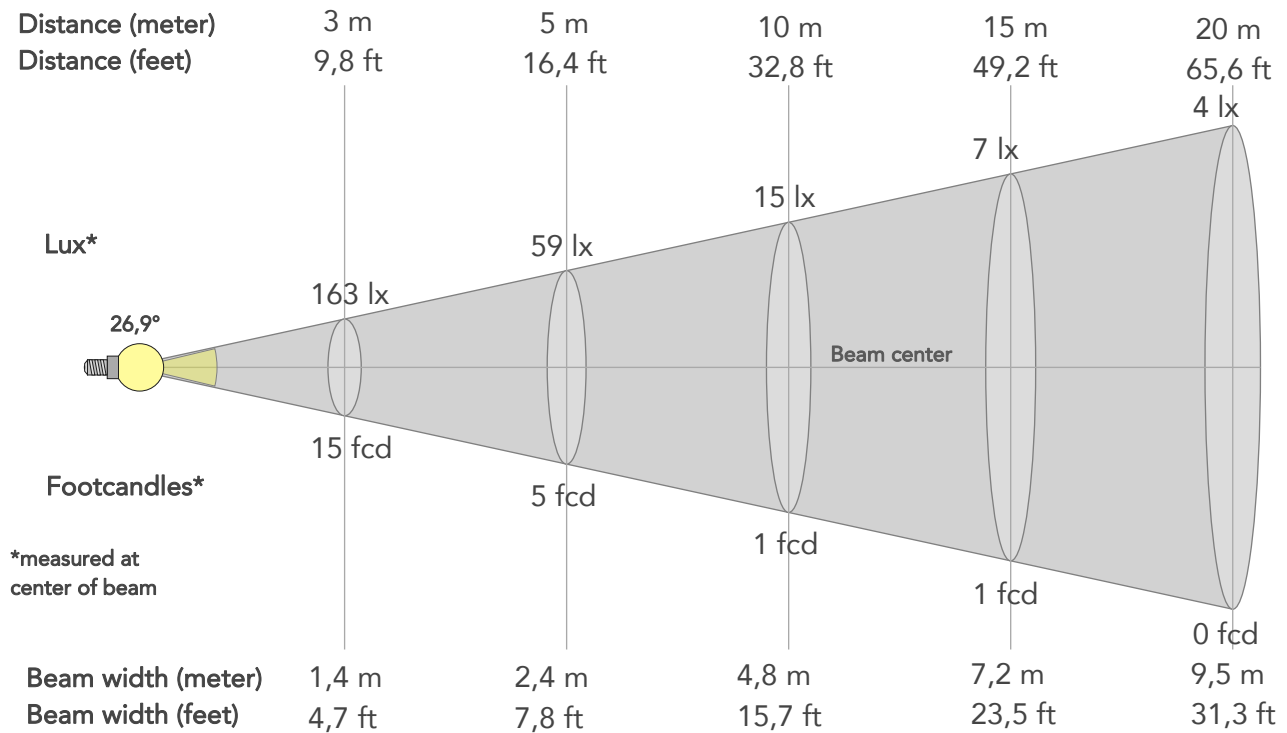
		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	95	1%	-1%
2	95	2%	-1%
3	93	1%	-1%
4	95	0%	-2%
5	95	1%	2%
6	91	5%	4%
7	92	5%	0%
8	88	8%	-1%
9	92	4%	-3%
10	90	2%	-6%
11	94	1%	-3%
12	89	3%	-7%
13	91	2%	-7%
14	93	1%	-5%
15	94	1%	-2%
16	92	2%	-5%



# BEAM DETAILS



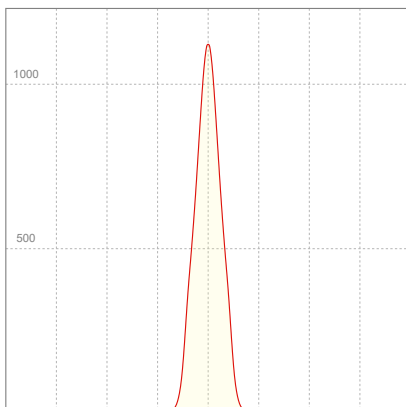
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,9°	47°	56,2°	100,0%	99,7%



## 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	1463lx	366lx	163lx	91lx	59lx	26lx	15lx	7lx	4lx	2lx	2lx	1lx	1lx
Footcand.	136fcd	34fcd	15fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,5m	11,9m	14,3m	19,1m	23,9m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,8ft	11,7ft	15,7ft	23,5ft	31,3ft	39,1ft	47ft	62,6ft	78,3ft

## LINEAR DISTRIBUTION DIAGRAM

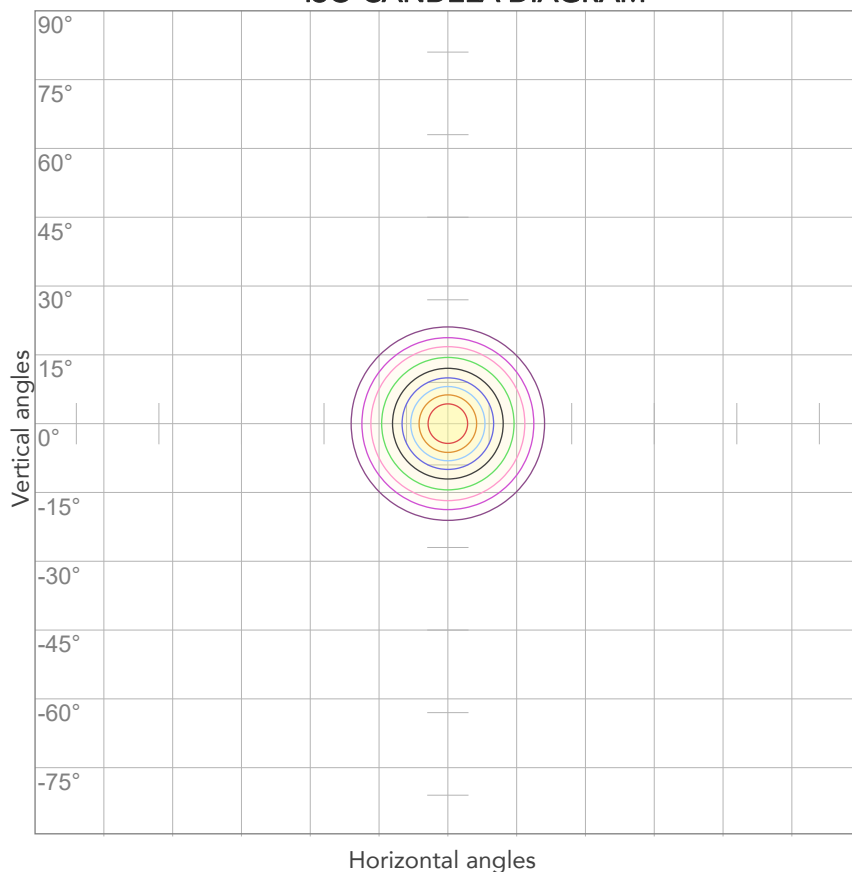


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,111A	22,8W	0,91	15lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



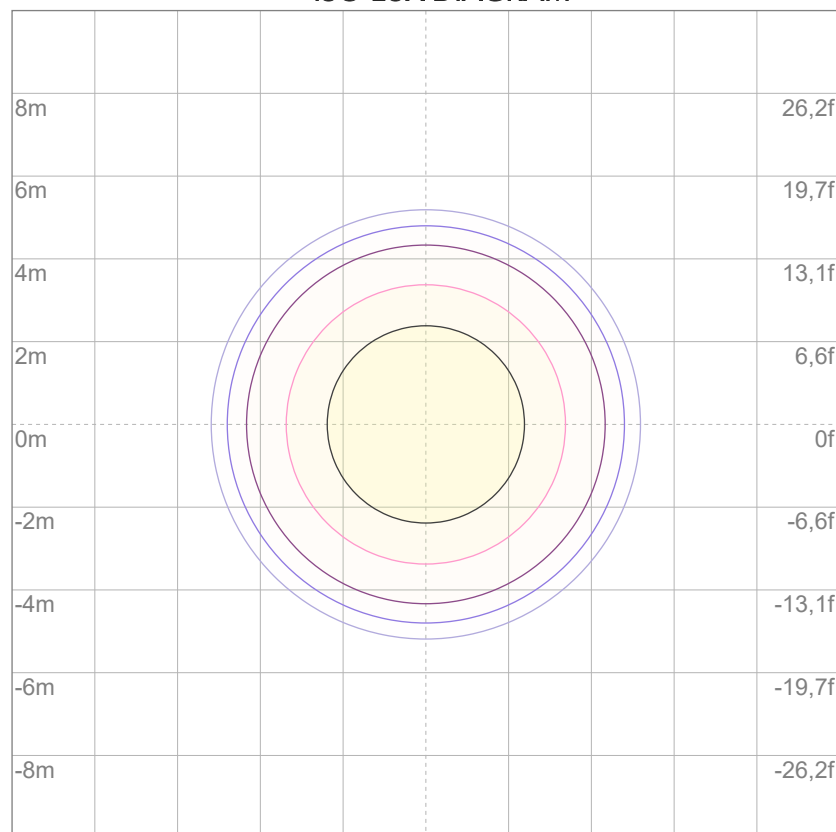
10%	146 cd
20%	293 cd
30%	439 cd
40%	585 cd
50%	732 cd
60%	878 cd
70%	1024 cd
80%	1171 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1463 cd

## ISO LUX DIAGRAM



3%	0,439 lx
5%	0,732 lx
10%	1,46 lx
30%	4,39 lx
50%	7,32 lx

### Conditions:

Number of c-planes: 2

Lux at center: 14,6 lx

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



Total lumen output:

312 lm

Peak candela output:

3035 cd

Light quality:

CRI: 92,9

Color temperature:

2982 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

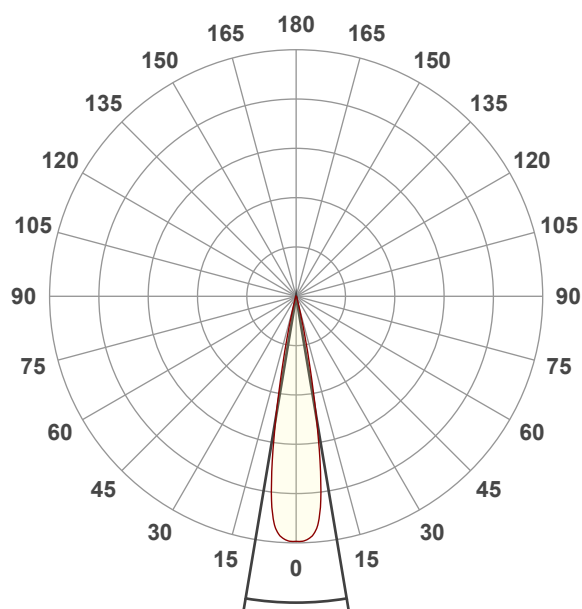
3200K

Operator:

Paolo Carvone

Date and time:

14/01/2021 11:58:07

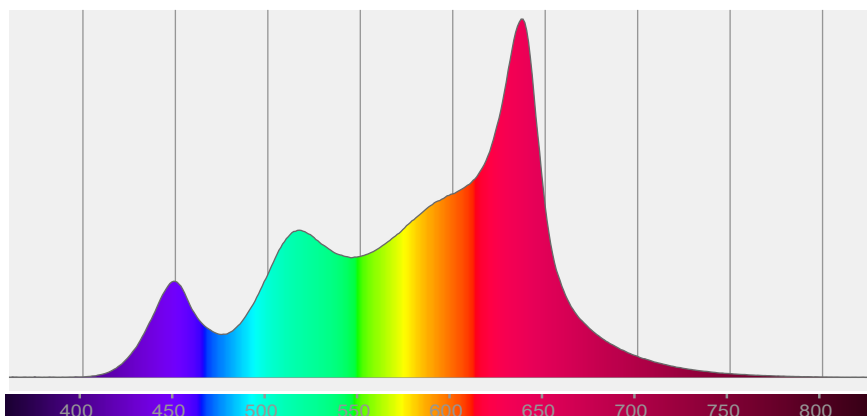


Beam angle 50%: 19°

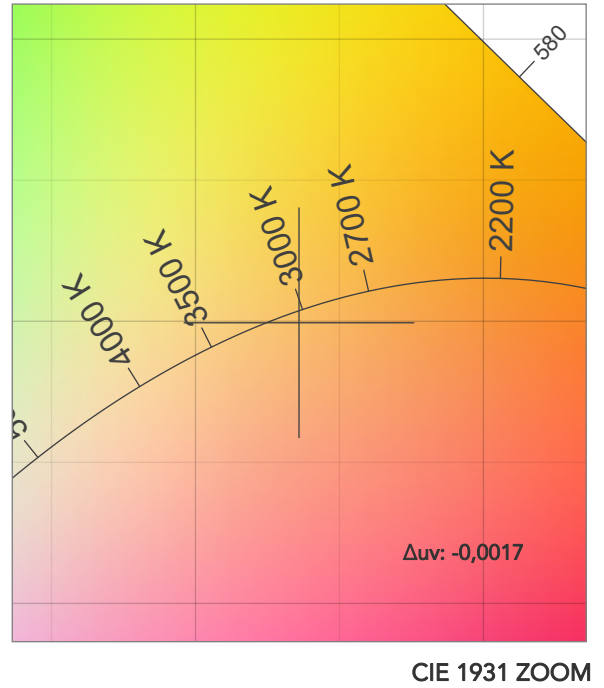
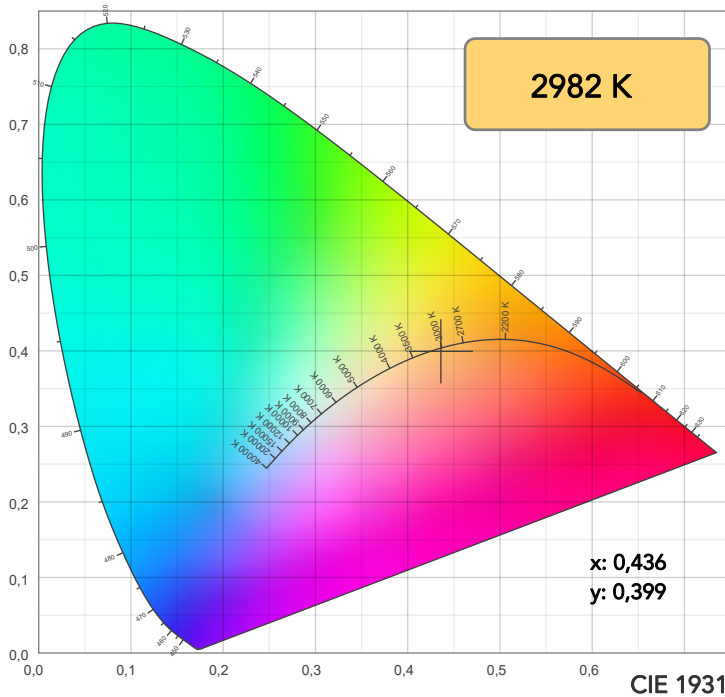
Field angle 10%: 27,1°

Cut off angle 2.5%: 34,5°

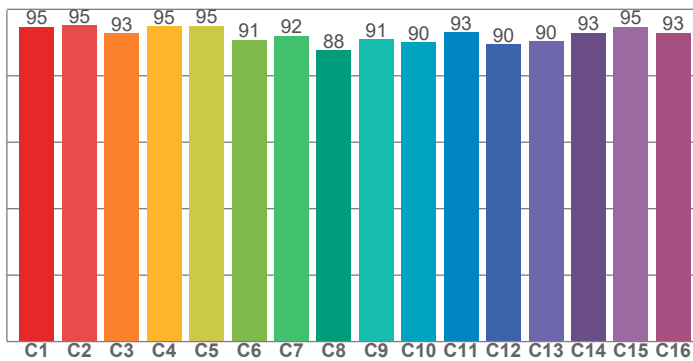
**Spectra**



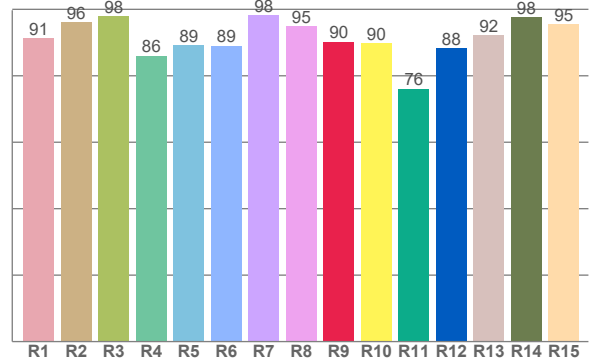
# COLOR DETAILS



**TM30: 92,8**



**CRI: 92,9 (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
91,4	96,2	97,9	86,1	89,3	89,1	98,2	95,0	90,3	89,9	76,1	88,4	92,1	97,7	95,5

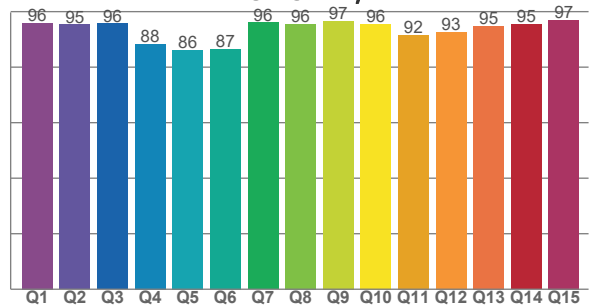
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	95,1	92,7	94,9	95,1	90,9	92,1	87,6	90,9	90,0	93,0	89,5	90,3	92,9	94,8	93,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,9	95,3	95,7	88,4	86,2	86,6	96,0	95,6	96,6	95,6	91,5	92,7	94,8	95,5	97,0

**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	$\Delta uv$
2982 K	92,9	90,3	92,8	104,9	92,4	83	0,436	0,399	-0,0017

## TM30 DETAILS

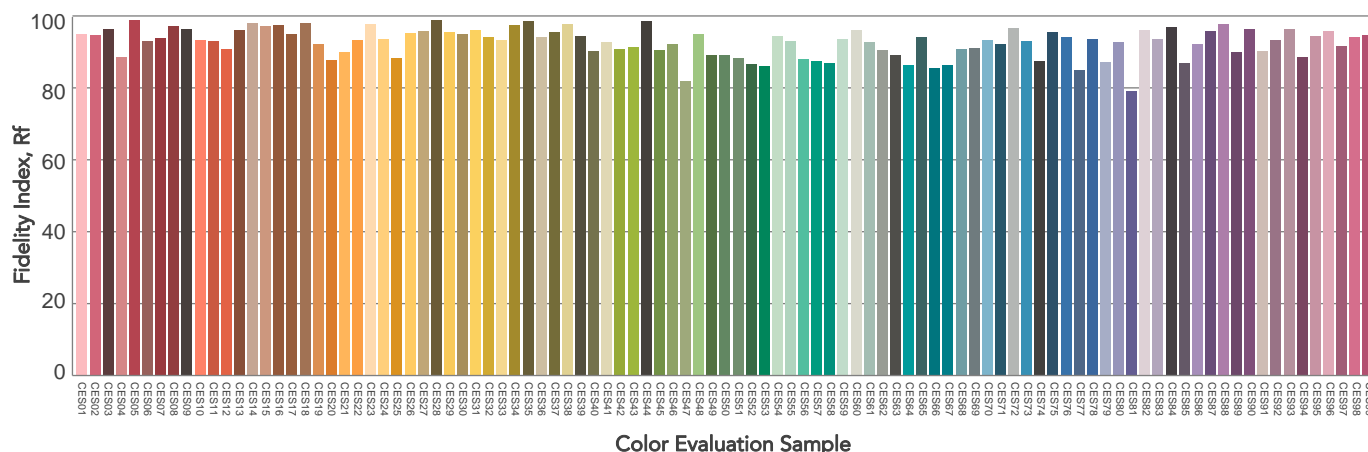
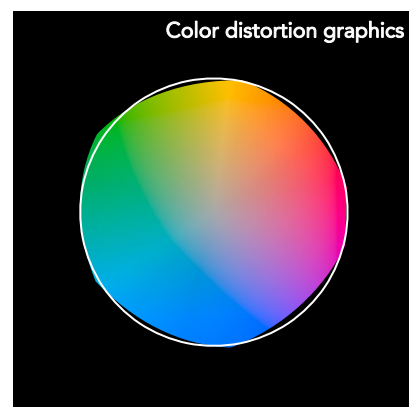
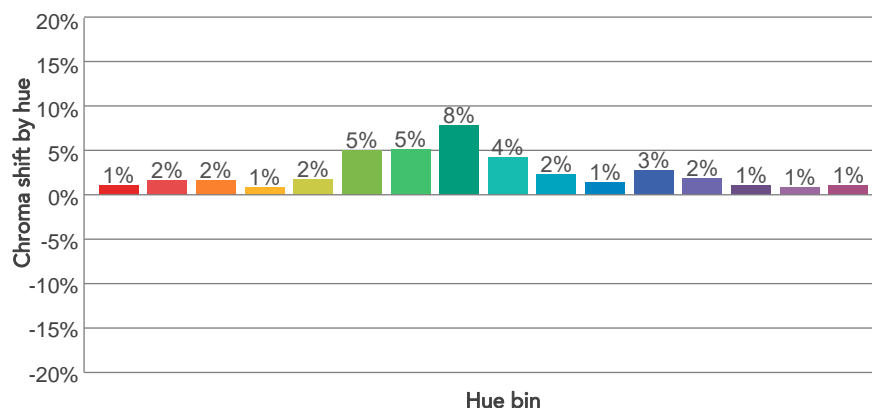
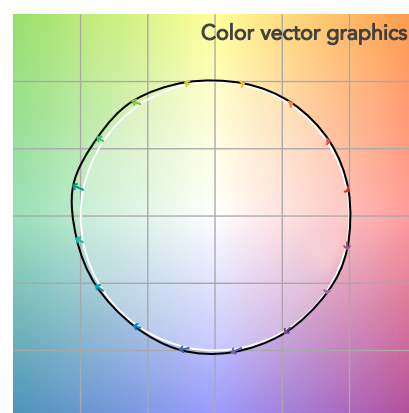
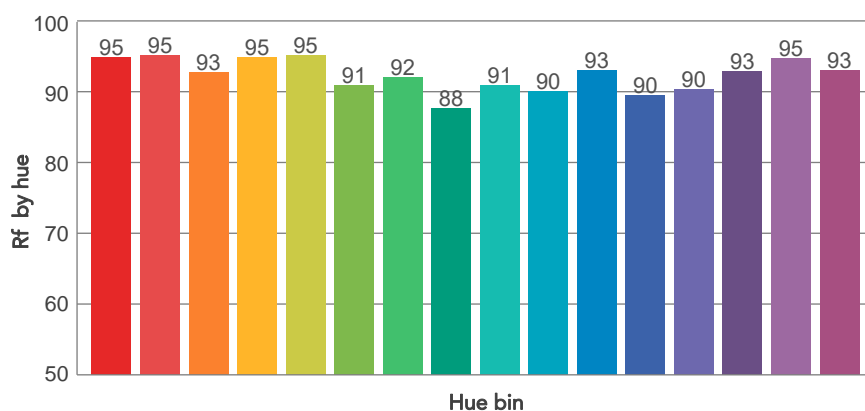
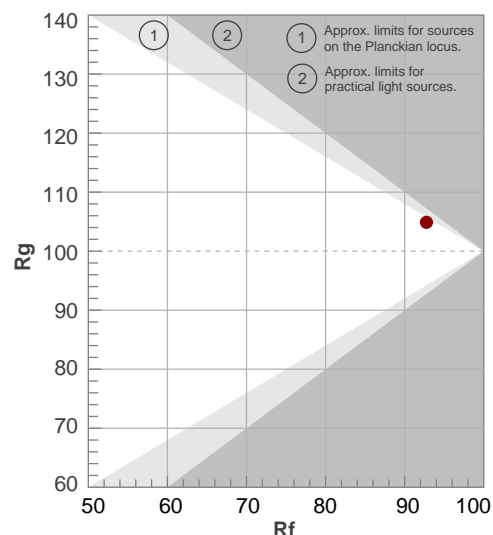
**Rf 92,8**

Fidelity index Rf

**Rg 104,9**

Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	-1%
2	95	2%	-1%
3	93	2%	-1%
4	95	1%	-2%
5	95	2%	2%
6	91	5%	4%
7	92	5%	0%
8	88	8%	-2%
9	91	4%	-4%
10	90	2%	-6%
11	93	1%	-5%
12	90	3%	-6%
13	90	2%	-8%
14	93	1%	-5%
15	95	1%	-1%
16	93	1%	-5%

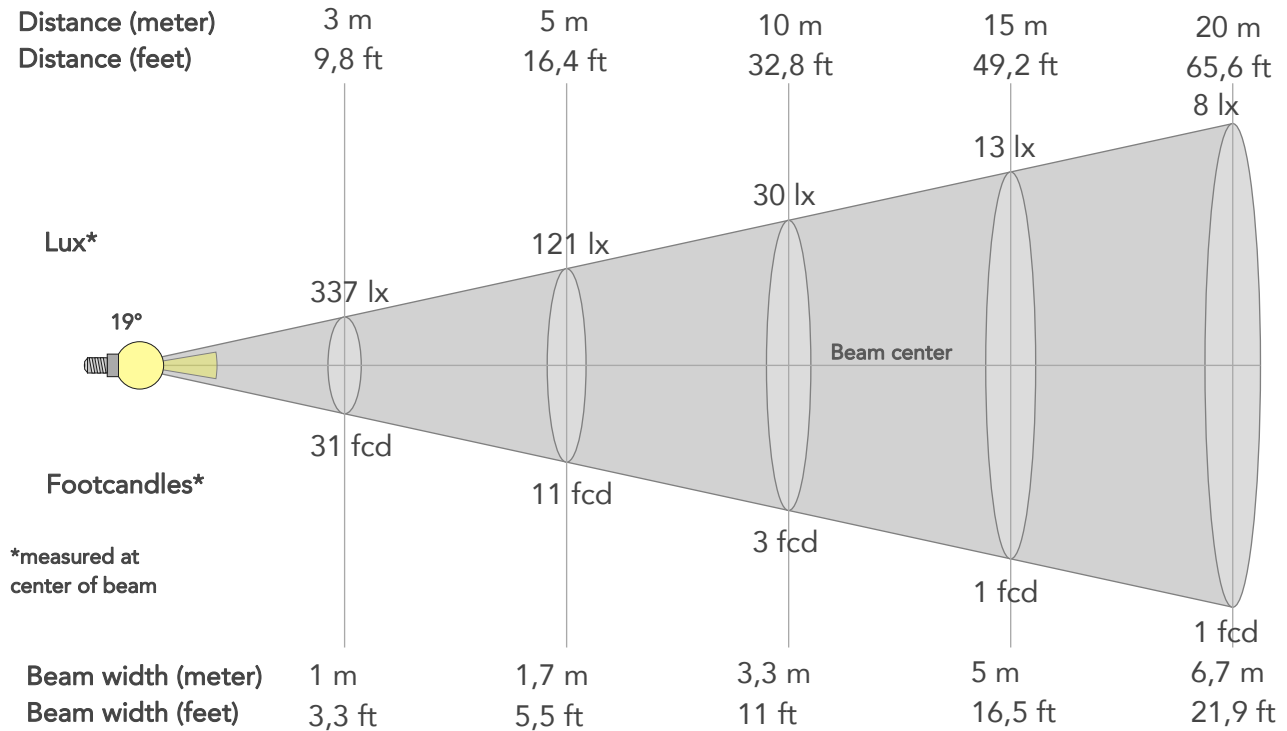




# BEAM DETAILS



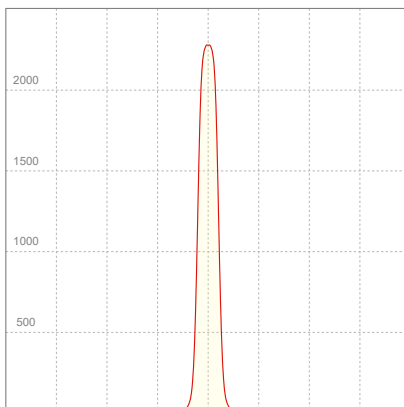
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19°	27,1°	34,5°	100,0%	99,9%



## 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	3035lx	759lx	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.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,7m	8,4m	10m	13,4m	16,7m
Beam wid.	1,1ft	2,2ft	3,3ft	4,4ft	5,5ft	8,2ft	11ft	16,5ft	21,9ft	27,4ft	32,9ft	43,9ft	54,9ft

## LINEAR DISTRIBUTION DIAGRAM

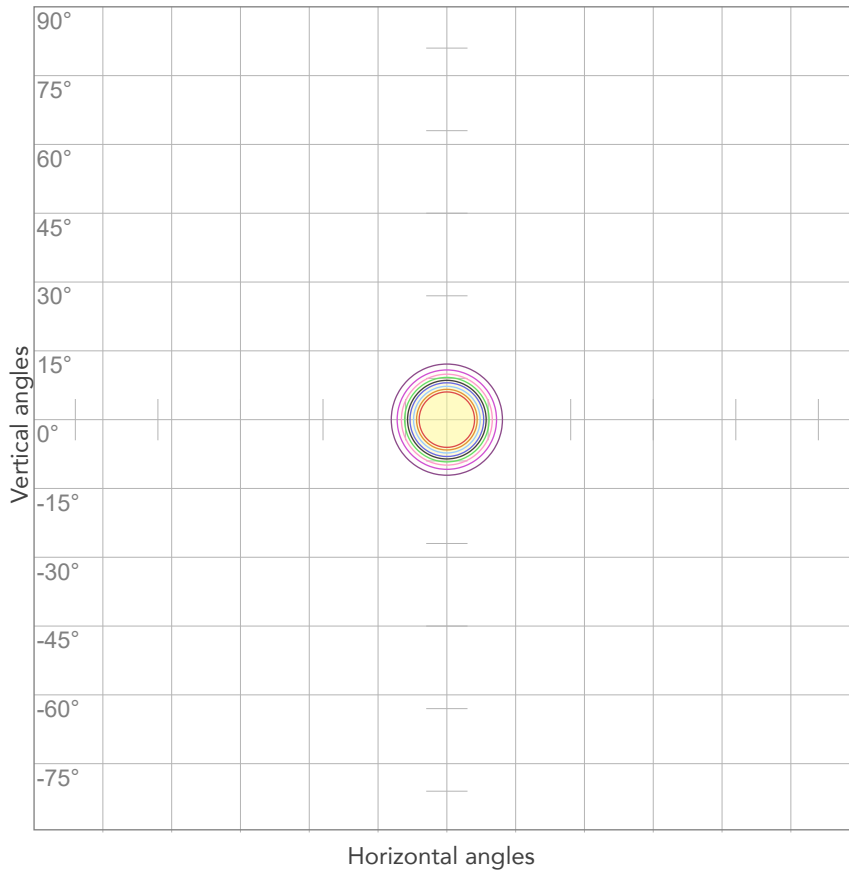


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,111A	22,6W	0,91	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



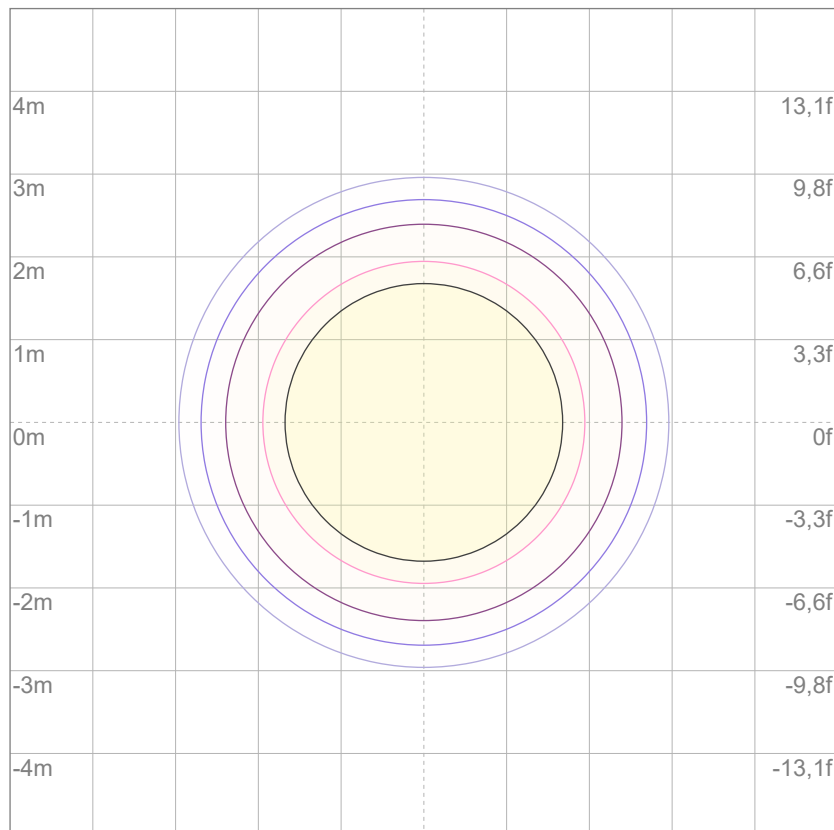
10%	304 cd
20%	607 cd
30%	911 cd
40%	1214 cd
50%	1518 cd
60%	1821 cd
70%	2125 cd
80%	2428 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3035 cd

## ISO LUX DIAGRAM



3%	0,911 lx
5%	1,52 lx
10%	3,04 lx
30%	9,11 lx
50%	15,2 lx

### Conditions:

Number of c-planes: 2

Lux at center: 30,4 lx

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



Total lumen output:

361 lm

Peak candela output:

1505 cd

Light quality:

CRI: 93,5

Color temperature:

3910 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

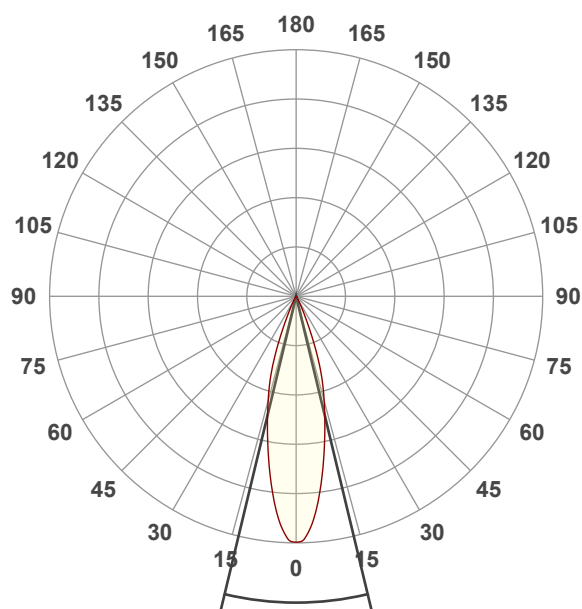
4000K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:14:35

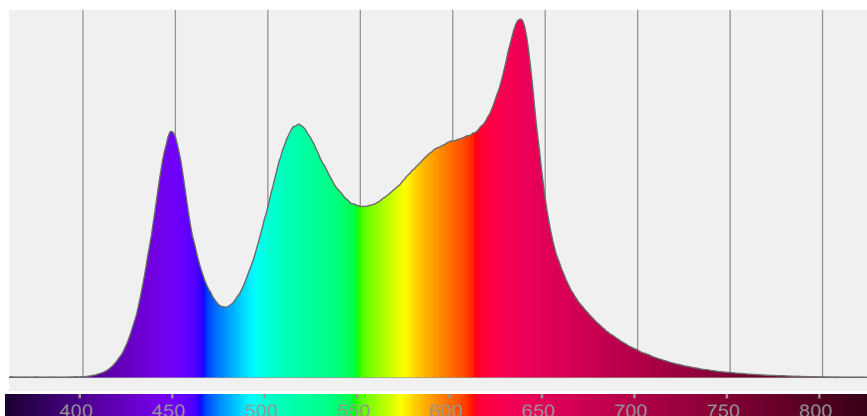


Beam angle 50%: 27°

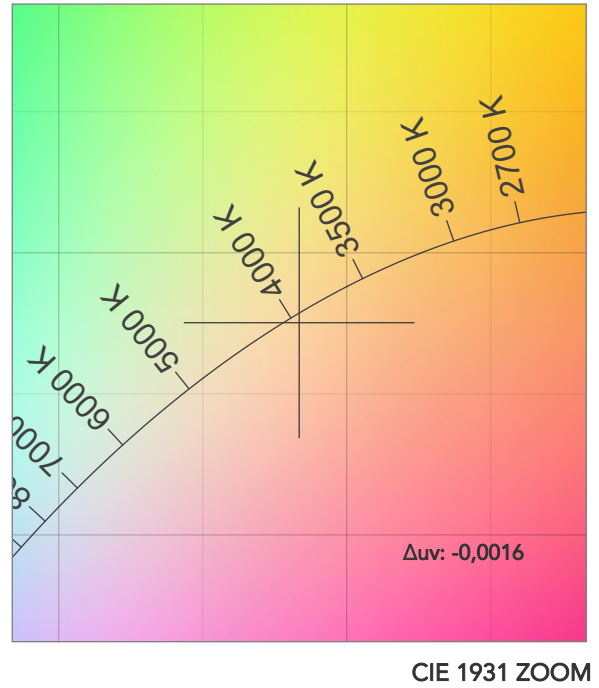
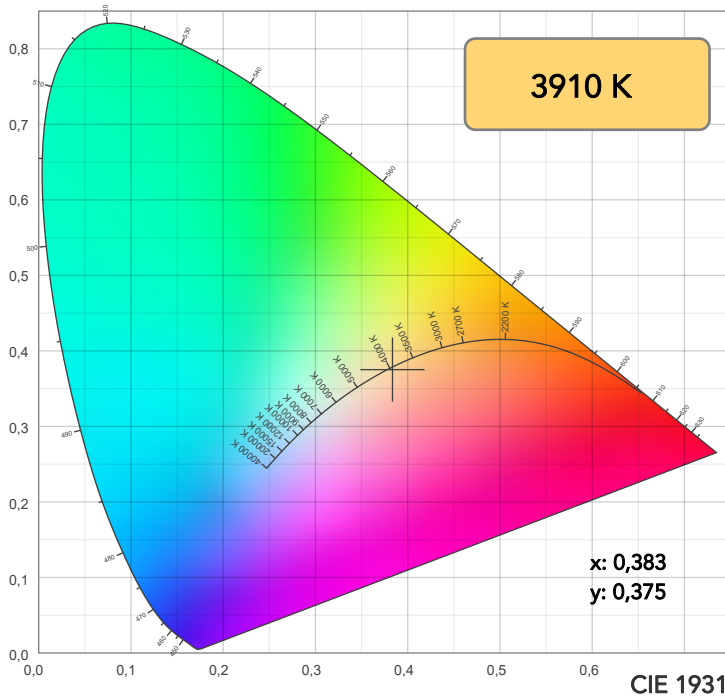
Field angle 10%: 47°

Cut off angle 2.5%: 56,3°

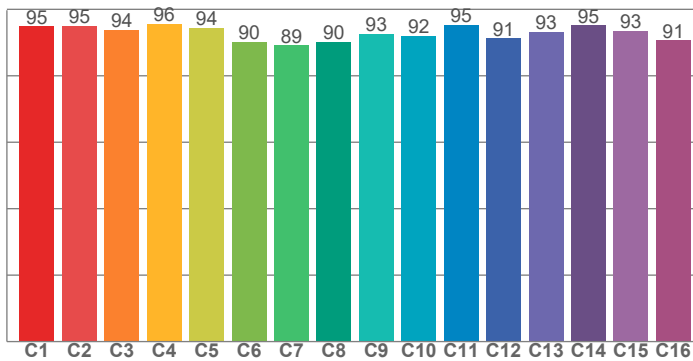
**Spectra**



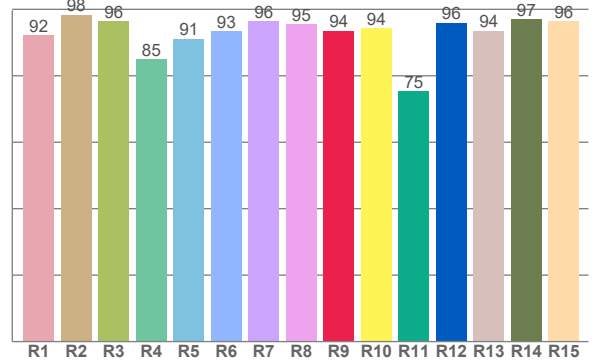
## COLOR DETAILS



TM30: 93,2



CRI: 93,5 (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
92,3	98,4	96,4	84,9	91,2	93,3	96,4	95,5	93,6	94,2	75,3	96,0	93,5	97,0	96,4

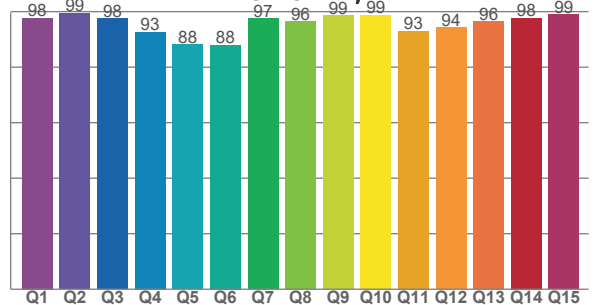
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,9	95,1	93,9	95,7	94,4	90,3	89,2	90,2	92,6	91,9	95,4	91,2	93,1	95,2	93,5	90,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,6	99,4	97,5	92,6	88,2	88,0	97,5	96,5	98,6	98,8	93,1	94,3	96,4	97,7	99,0

CQS: 94,4



## COLOR PARAMETERS

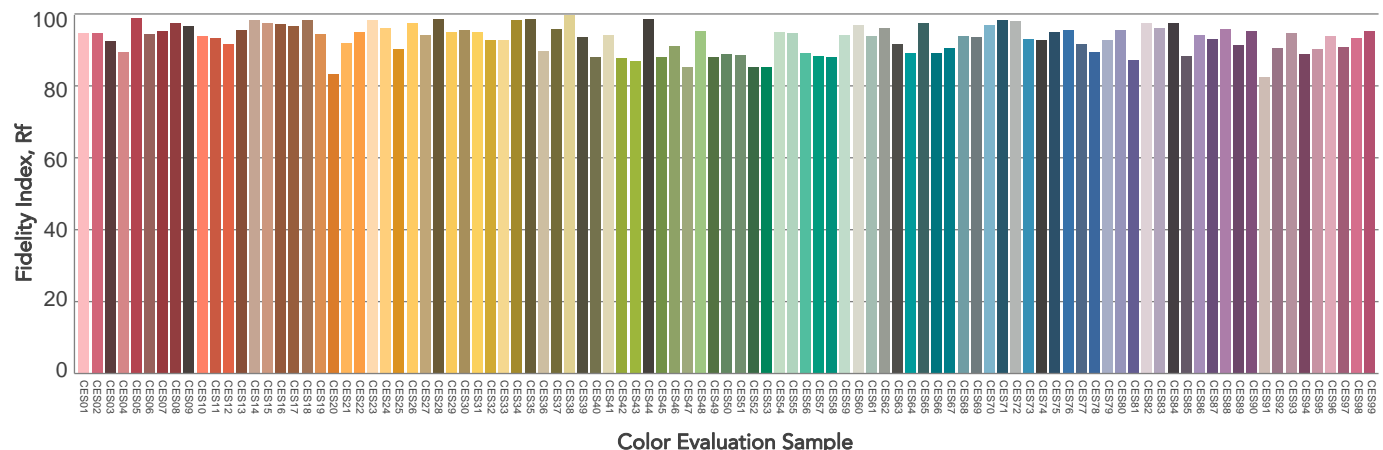
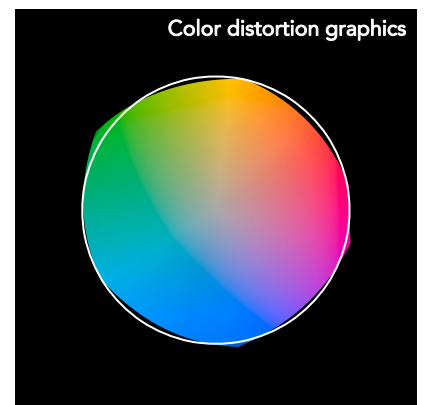
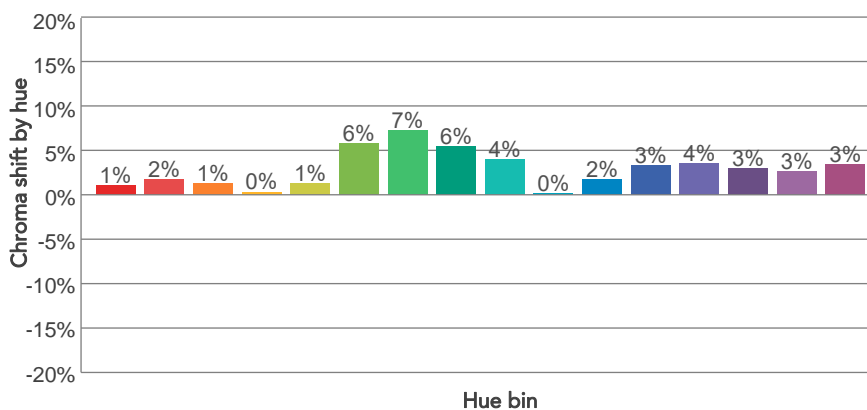
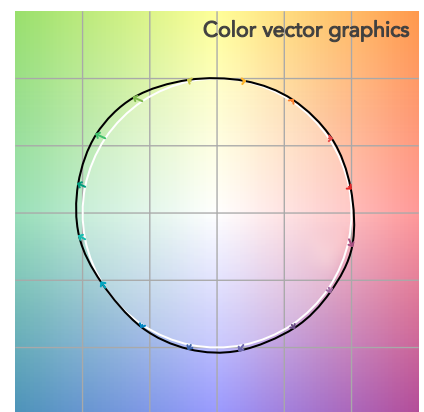
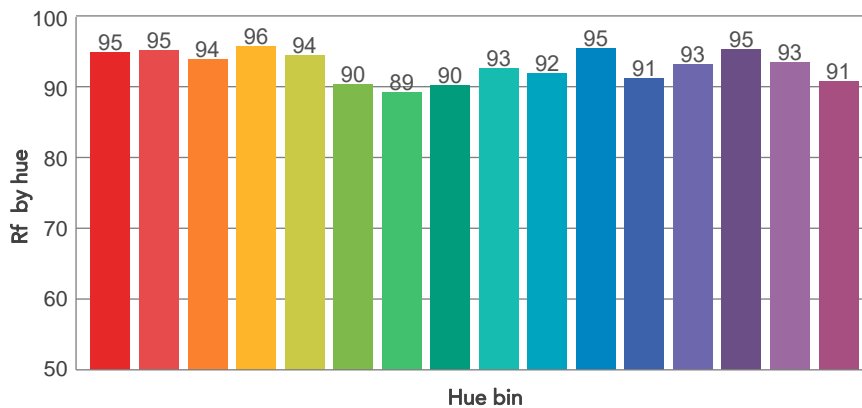
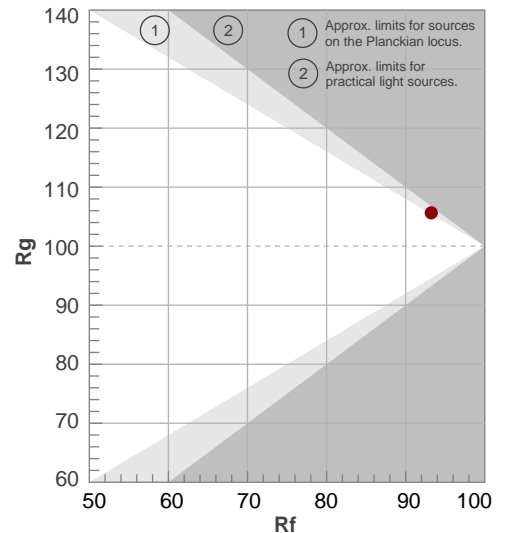
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
3910 K	93,5	93,6	93,2	105,6	94,4	81	0,383	0,375	-0,0016

# TM30 DETAILS

**Rf 93,2**  
Fidelity index Rf

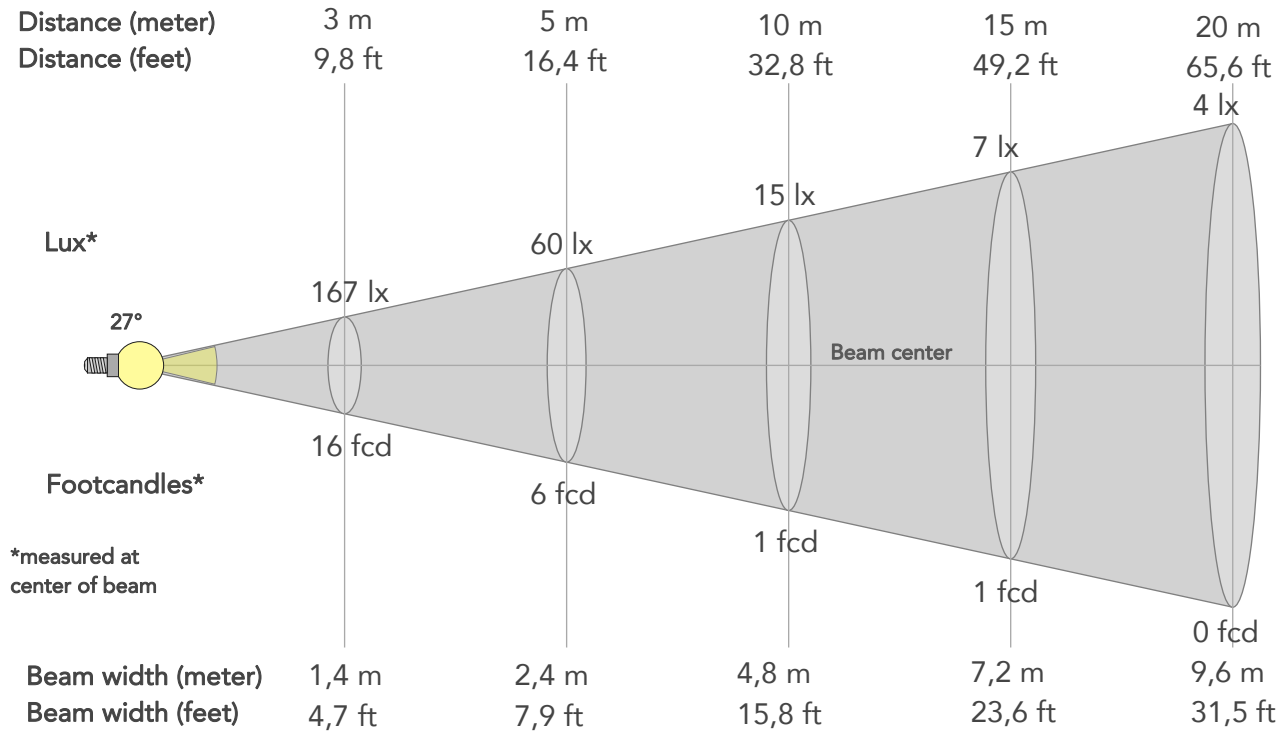
**Rg 105,6**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	-2%
2	95	2%	-1%
3	94	1%	0%
4	96	0%	-1%
5	94	1%	2%
6	90	6%	4%
7	89	7%	1%
8	90	6%	-1%
9	93	4%	-3%
10	92	0%	-5%
11	95	2%	0%
12	91	3%	-1%
13	93	4%	-4%
14	95	3%	0%
15	93	3%	-2%
16	91	3%	-4%



# BEAM DETAILS

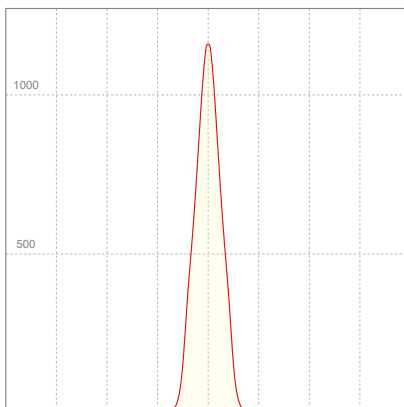
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27°	47°	56,3°	99,9%	99,5%



## 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	1505lx	376lx	167lx	94lx	60lx	27lx	15lx	7lx	4lx	2lx	2lx	1lx	1lx
Footcand.	140fcd	35fcd	16fcd	9fcd	6fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	12m	14,4m	19,2m	24m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,9ft	11,8ft	15,8ft	23,6ft	31,5ft	39,4ft	47,3ft	63ft	78,8ft

## LINEAR DISTRIBUTION DIAGRAM

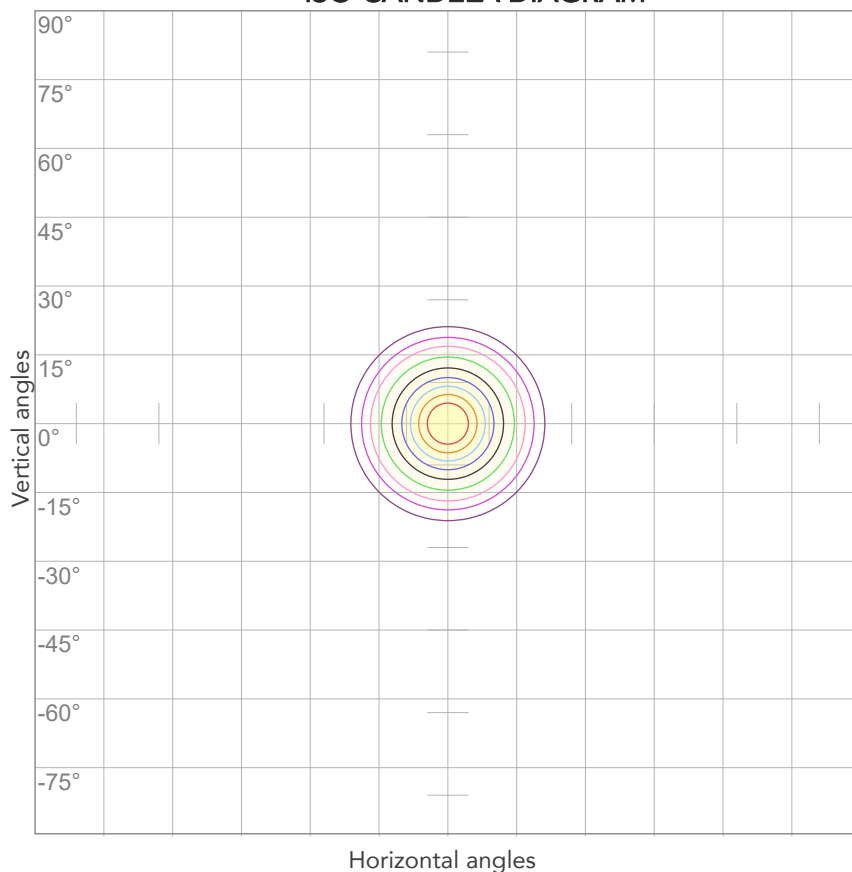


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,116A	23,7W	0,91	15lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



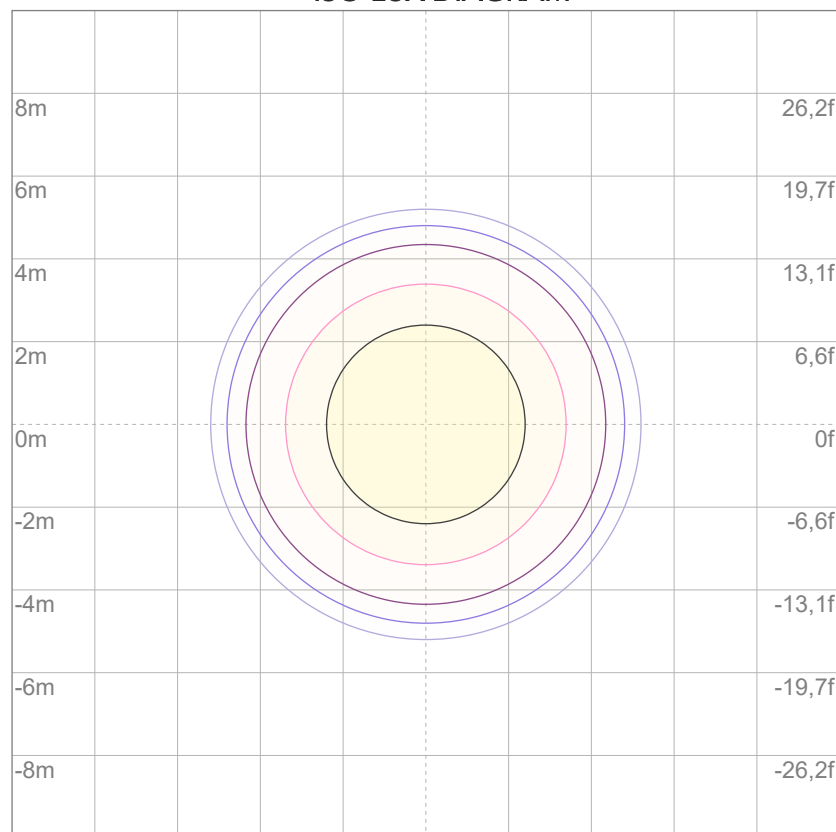
10%	151 cd
20%	301 cd
30%	452 cd
40%	602 cd
50%	753 cd
60%	903 cd
70%	1054 cd
80%	1204 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1505 cd

## ISO LUX DIAGRAM



3%	0,452 lx
5%	0,753 lx
10%	1,51 lx
30%	4,52 lx
50%	7,53 lx

### Conditions:

Number of c-planes: 2

Lux at center: 15,1 lx

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



Total lumen output:

324 lm

Peak candela output:

3139 cd

Light quality:

CRI: 93,5

Color temperature:

3889 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

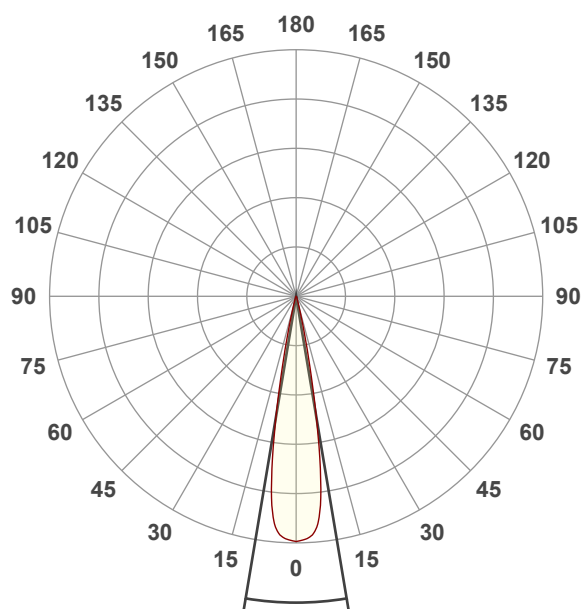
4000K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:00:39

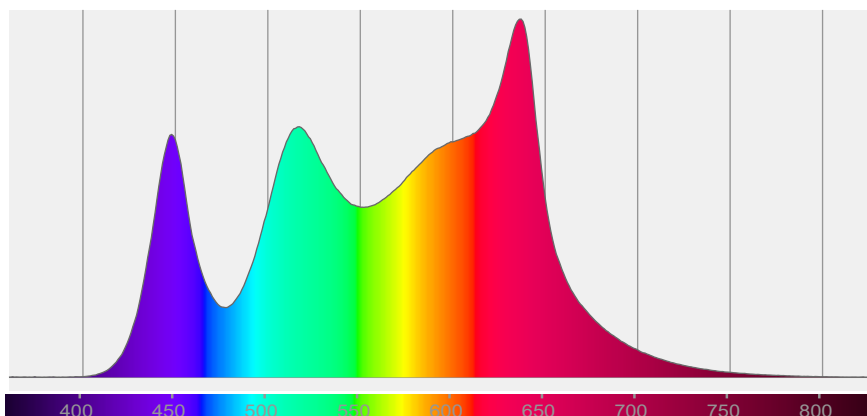


Beam angle 50%: 19°

Field angle 10%: 27,2°

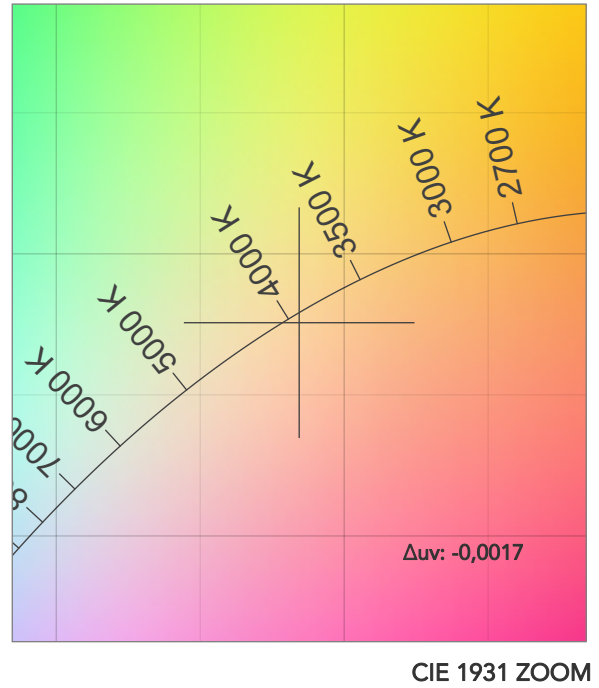
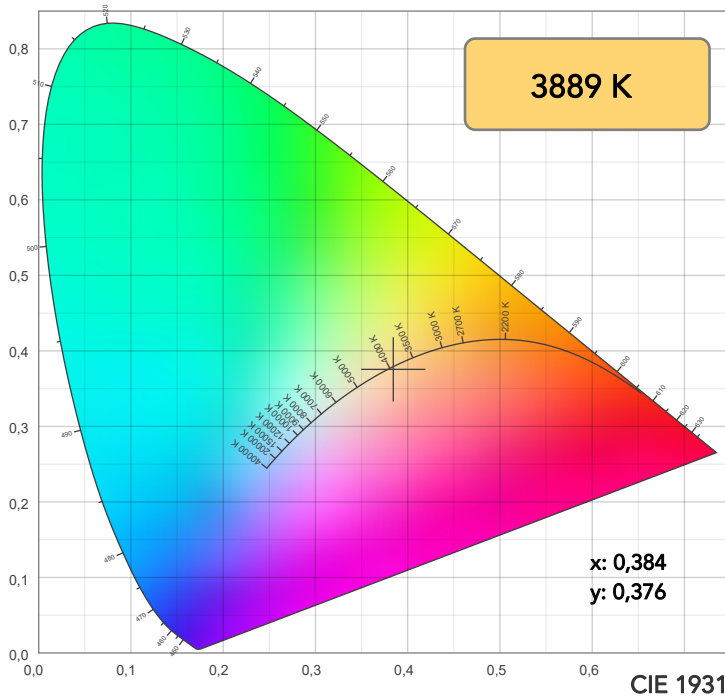
Cut off angle 2.5%: 34,6°

**Spectra**

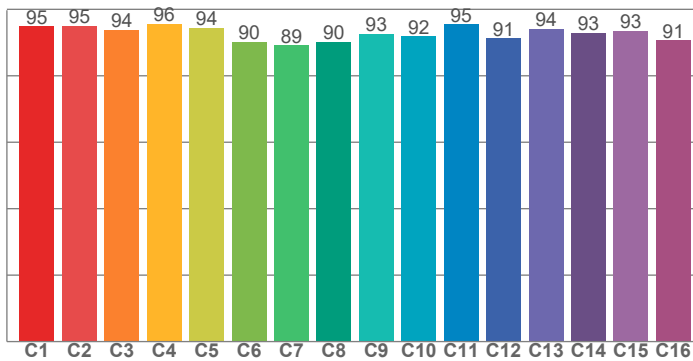




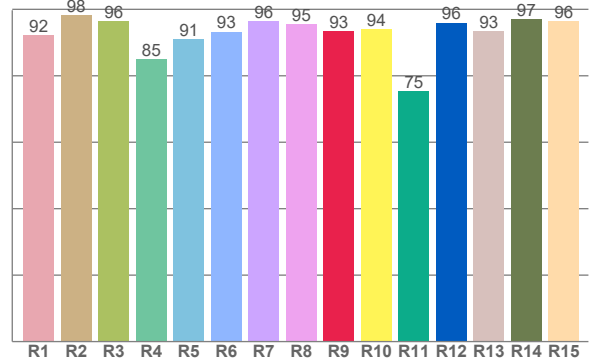
## COLOR DETAILS



TM30: 93,2



CRI: 93,5 (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
92,2	98,3	96,4	84,9	91,1	93,2	96,4	95,4	93,4	94,1	75,3	96,0	93,4	97,0	96,3

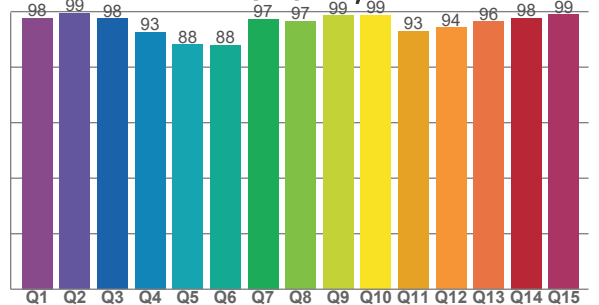
TM30 C values, 16 binned values out of total of 99 C values

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

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,7	99,4	97,5	92,6	88,1	87,9	97,4	96,5	98,6	98,8	93,1	94,3	96,4	97,6	99,0

CQS: 94,4



## COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3889 K	93,5	93,4	93,2	105,7	94,4	81	0,384	0,376	-0,0017

## TM30 DETAILS

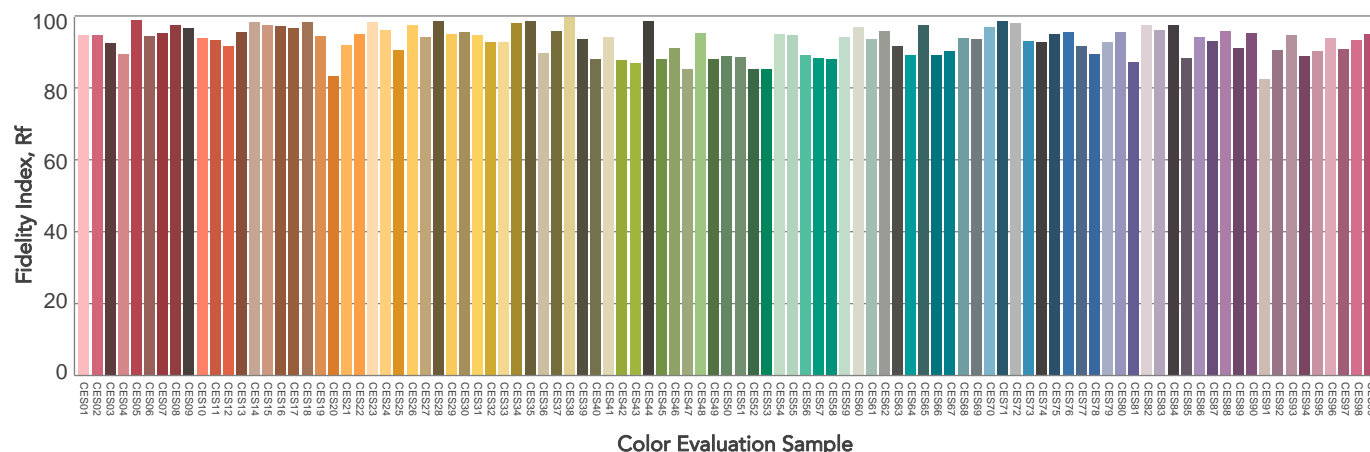
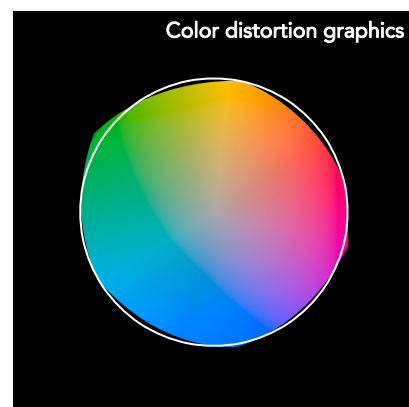
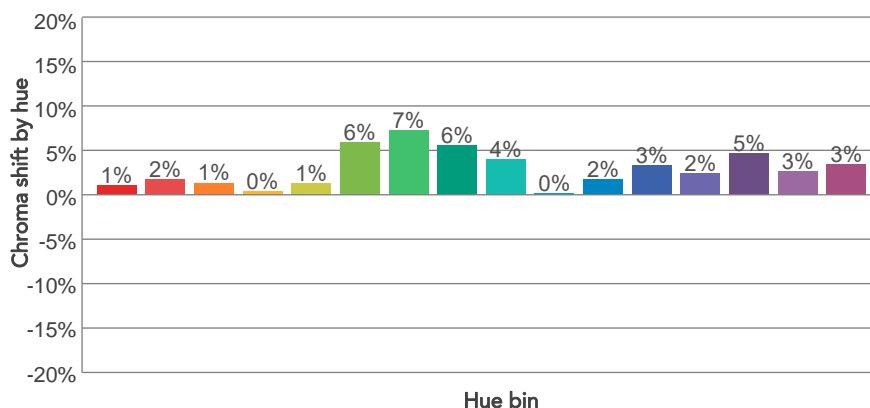
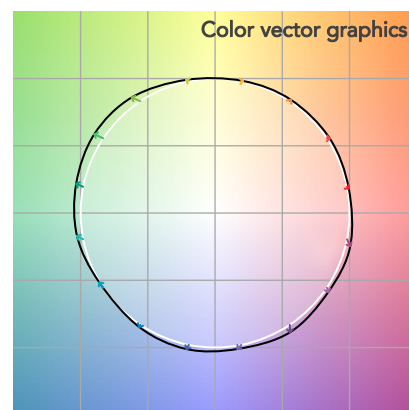
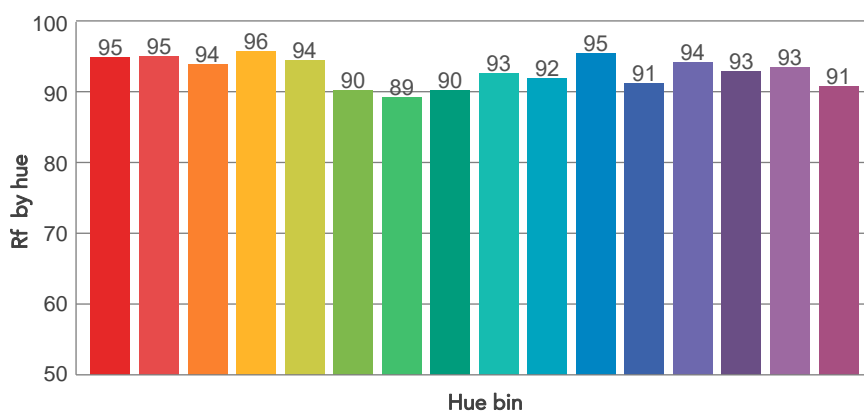
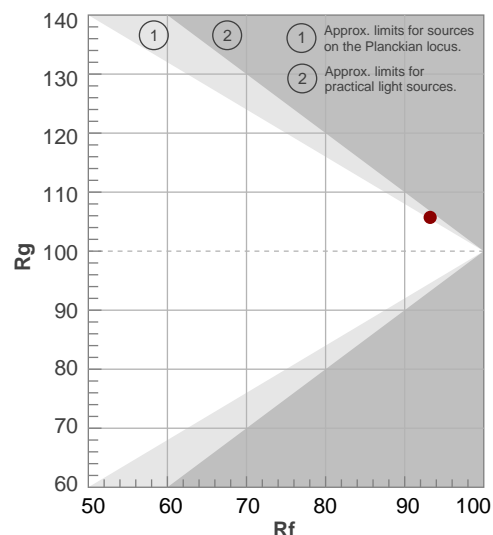
**Rf 93,2**

Fidelity index Rf

**Rg 105,7**

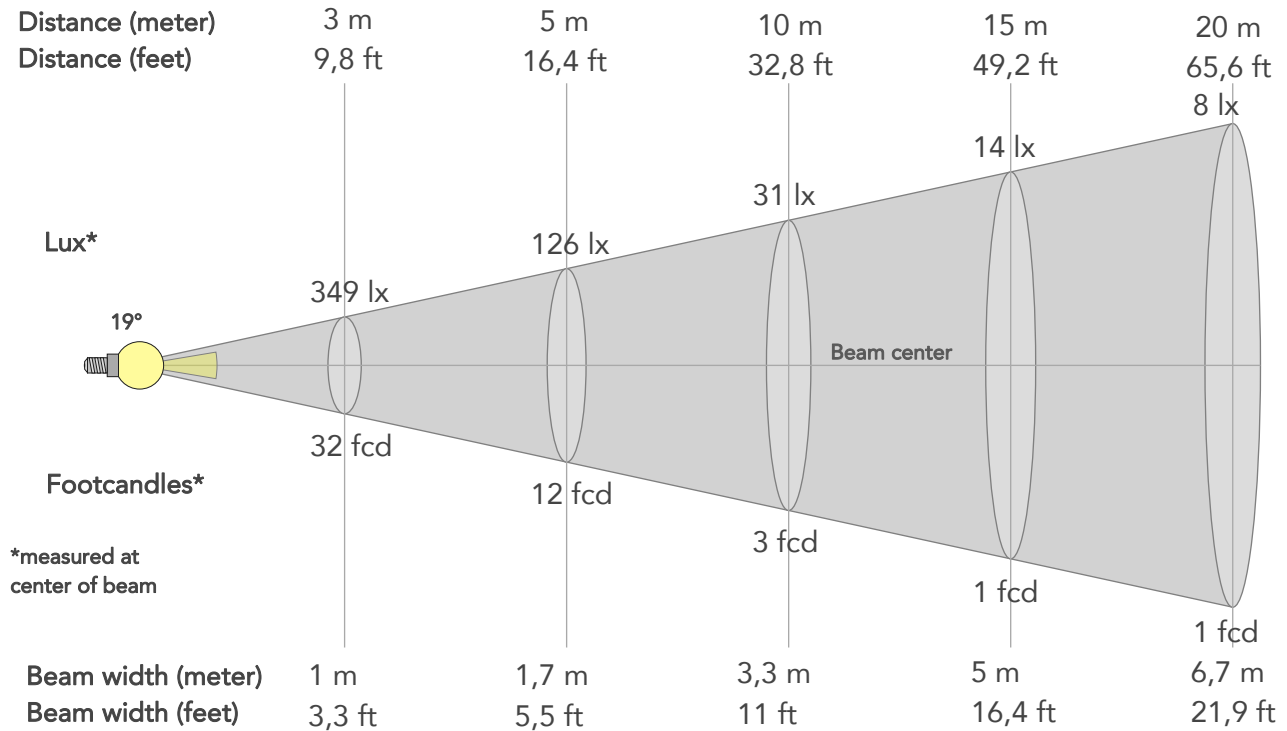
Gammut index

		Graphic shifts (%)	
Hue Bin	R <sub>f</sub>	Chroma	Hue
1	95	1%	-2%
2	95	2%	-1%
3	94	1%	0%
4	96	0%	-1%
5	94	1%	2%
6	90	6%	4%
7	89	7%	1%
8	90	6%	-1%
9	93	4%	-3%
10	92	0%	-5%
11	95	2%	0%
12	91	3%	-1%
13	94	2%	-3%
14	93	5%	-3%
15	93	3%	-2%
16	91	3%	-4%



# BEAM DETAILS

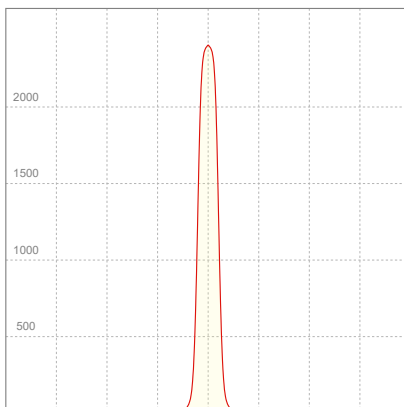
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19°	27,2°	34,6°	100,0%	99,9%



## 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	3139lx	785lx	349lx	196lx	126lx	56lx	31lx	14lx	8lx	5lx	3lx	2lx	1lx
Footcand.	292fcd	73fcd	32fcd	18fcd	12fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,7m	8,4m	10m	13,4m	16,7m
Beam wid.	1,1ft	2,2ft	3,3ft	4,4ft	5,5ft	8,2ft	11ft	16,4ft	21,9ft	27,4ft	32,9ft	43,9ft	54,8ft

## LINEAR DISTRIBUTION DIAGRAM

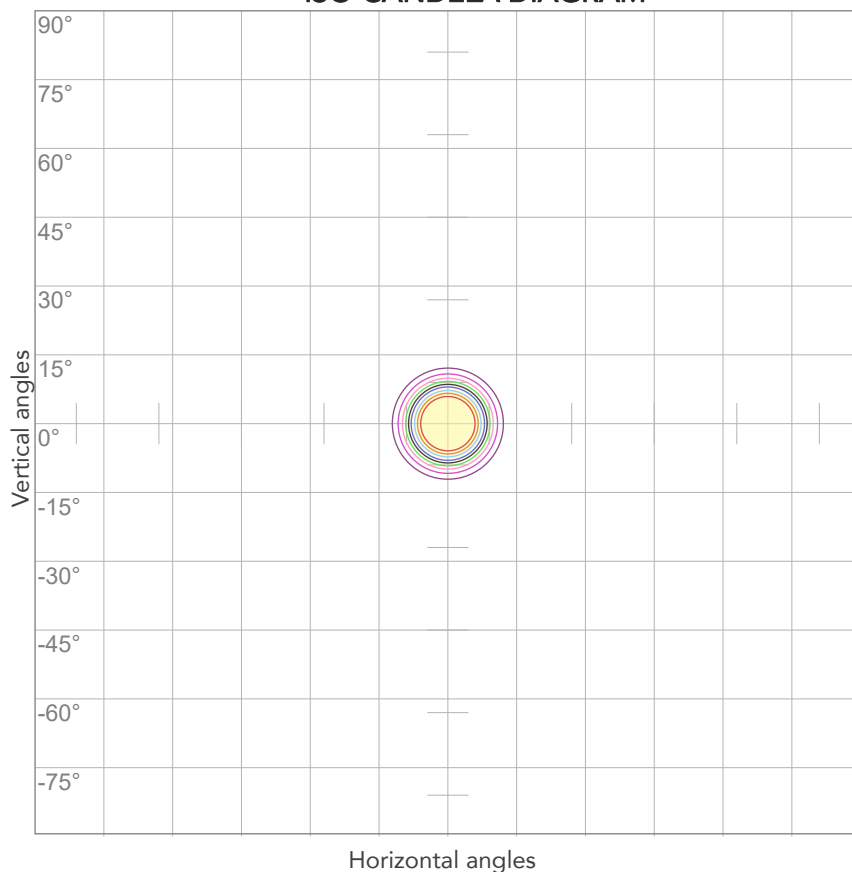


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,116A	23,7W	0,91	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



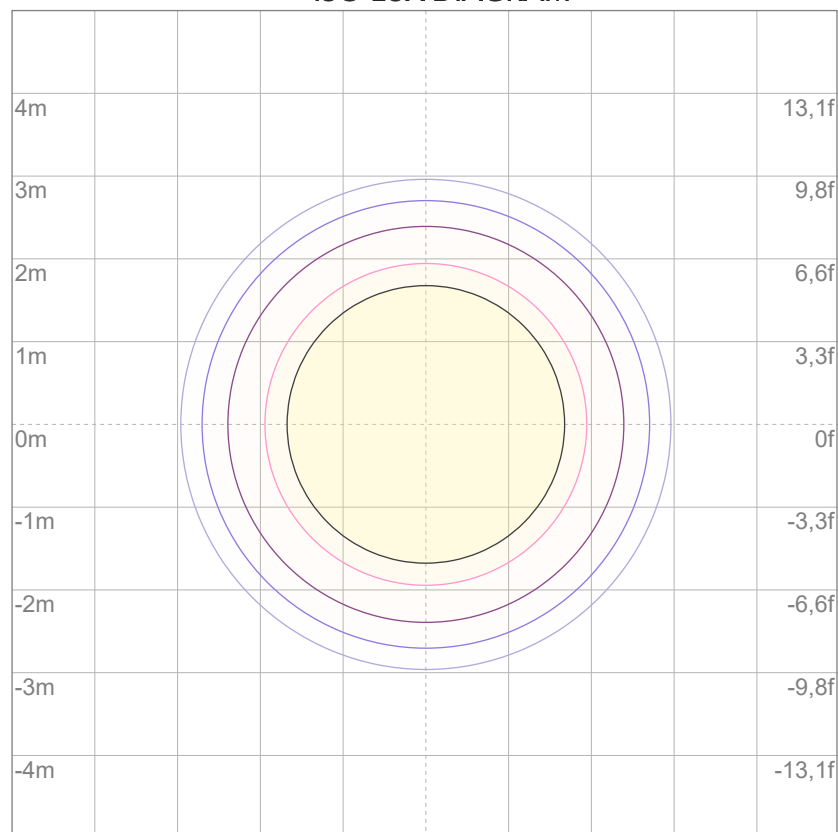
10%	314 cd
20%	628 cd
30%	942 cd
40%	1256 cd
50%	1570 cd
60%	1883 cd
70%	2197 cd
80%	2511 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3139 cd

## ISO LUX DIAGRAM



3%	0,942 lx
5%	1,57 lx
10%	3,14 lx
30%	9,42 lx
50%	15,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 31,4 lx

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



Total lumen output:

392 lm

Peak candela output:

1640 cd

Light quality:

CRI: 91,6

Color temperature:

5561 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

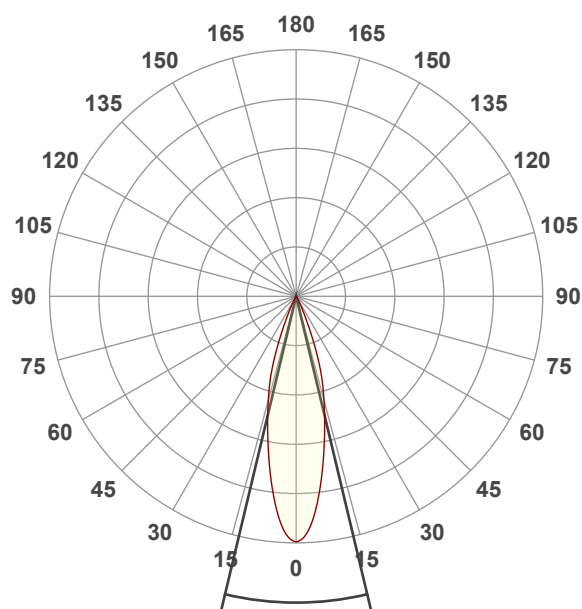
5600K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:16:39

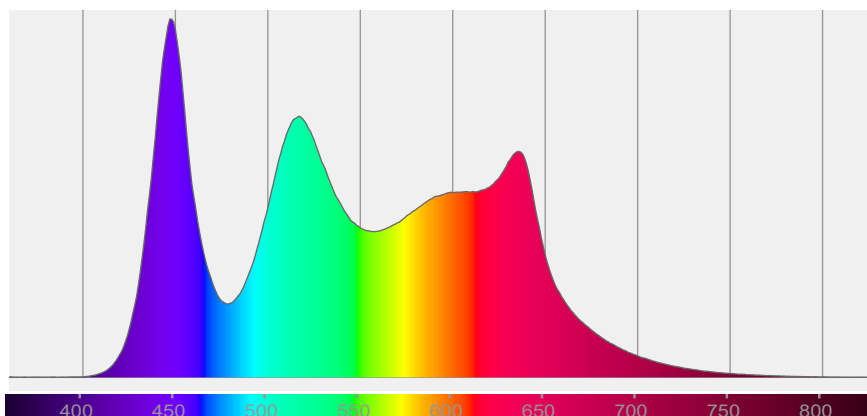


Beam angle 50%: 26,8°

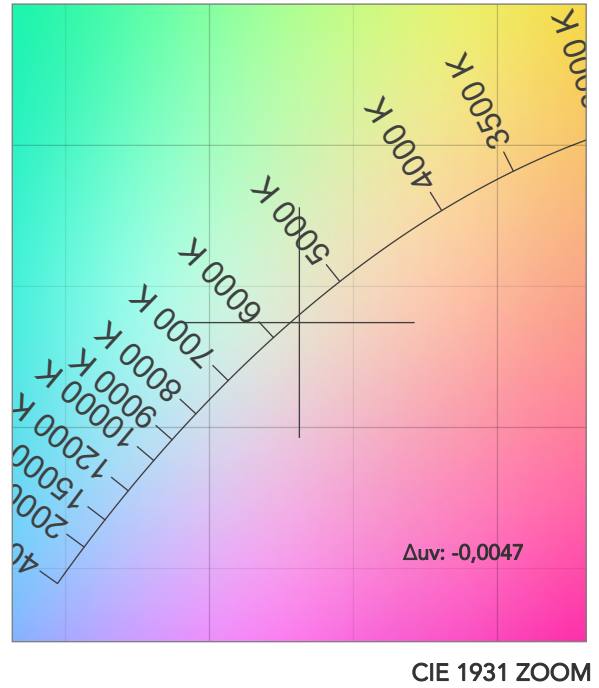
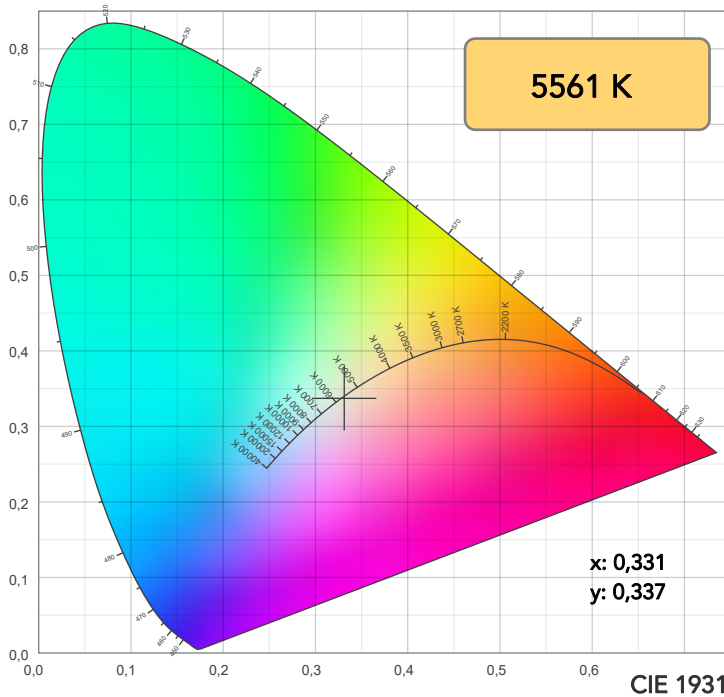
Field angle 10%: 47,1°

Cut off angle 2.5%: 56,4°

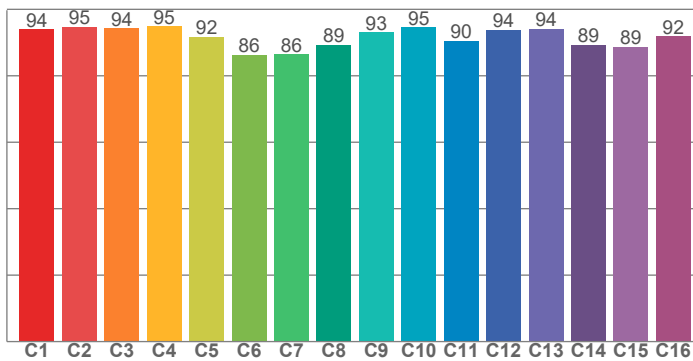
**Spectra**



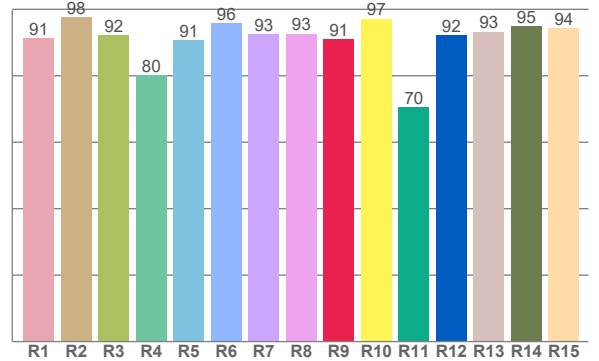
# COLOR DETAILS



TM30: 91,8



CRI: 91,6 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,3	97,7	92,2	80,1	90,8	95,7	92,5	92,7	90,9	97,1	70,4	92,2	93,2	95,0	94,3

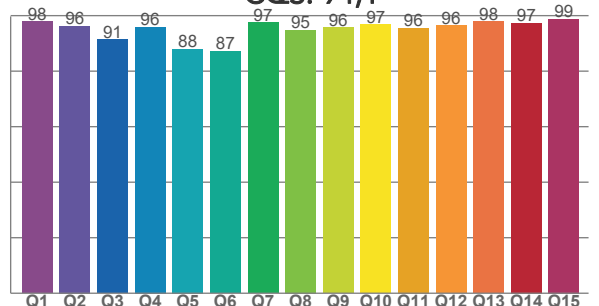
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,0	94,8	94,3	94,9	91,8	86,3	86,4	89,3	93,1	94,5	90,5	93,9	94,1	89,4	88,6	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,8	96,3	91,3	95,9	88,0	87,1	97,5	94,8	95,7	96,8	95,5	96,4	97,8	97,4	98,8

CQS: 94,1



## 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	$\Delta uv$
5561 K	91,6	90,9	91,8	107,8	94,1	83	0,331	0,337	-0,0047

## TM30 DETAILS

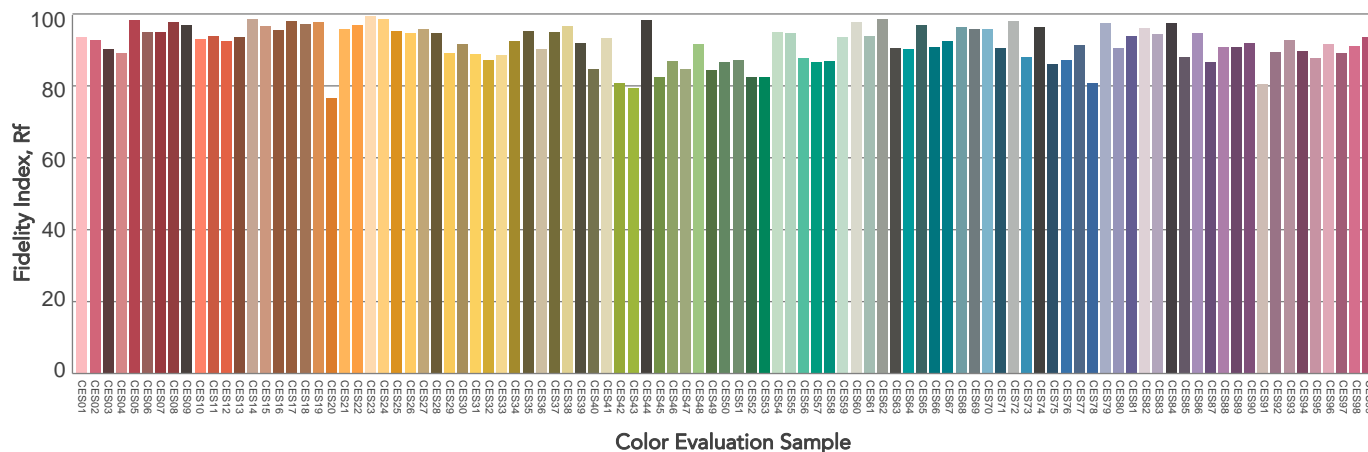
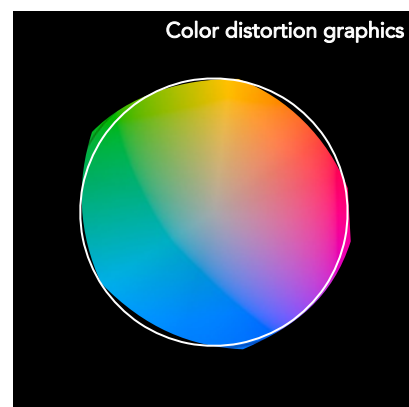
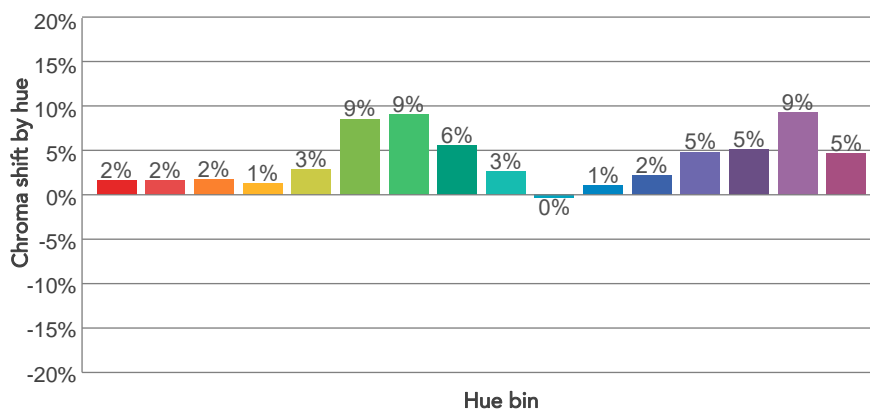
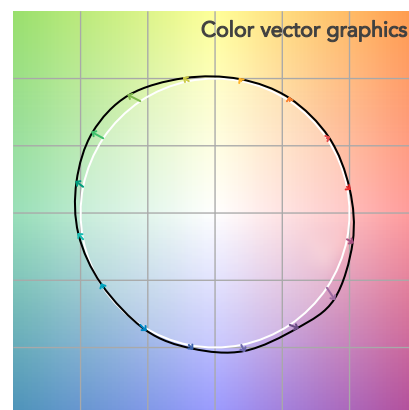
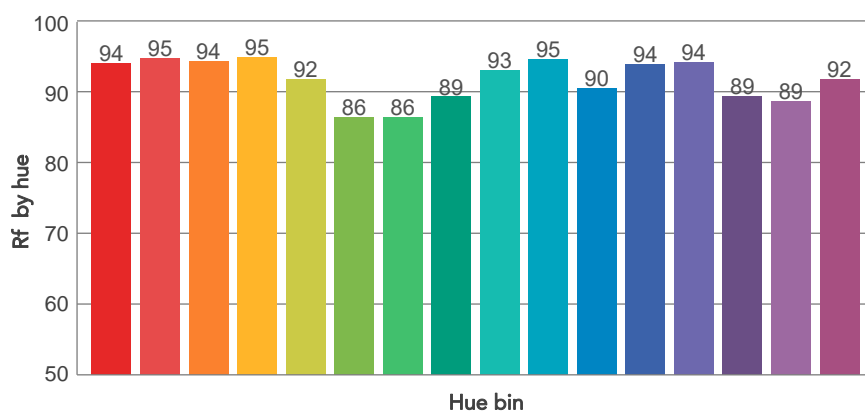
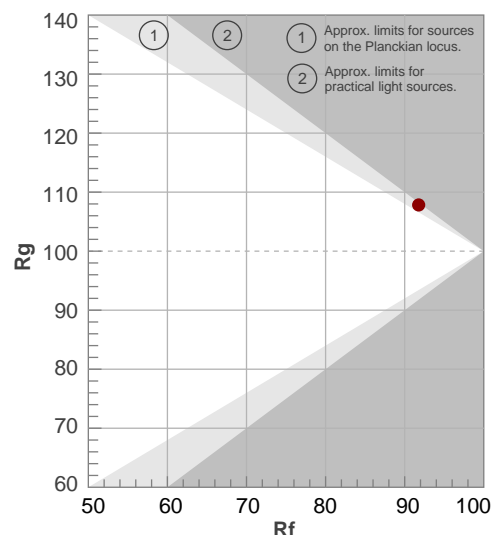
**Rf 91,8**

Fidelity index Rf

**Rg 107,8**

Gammut index

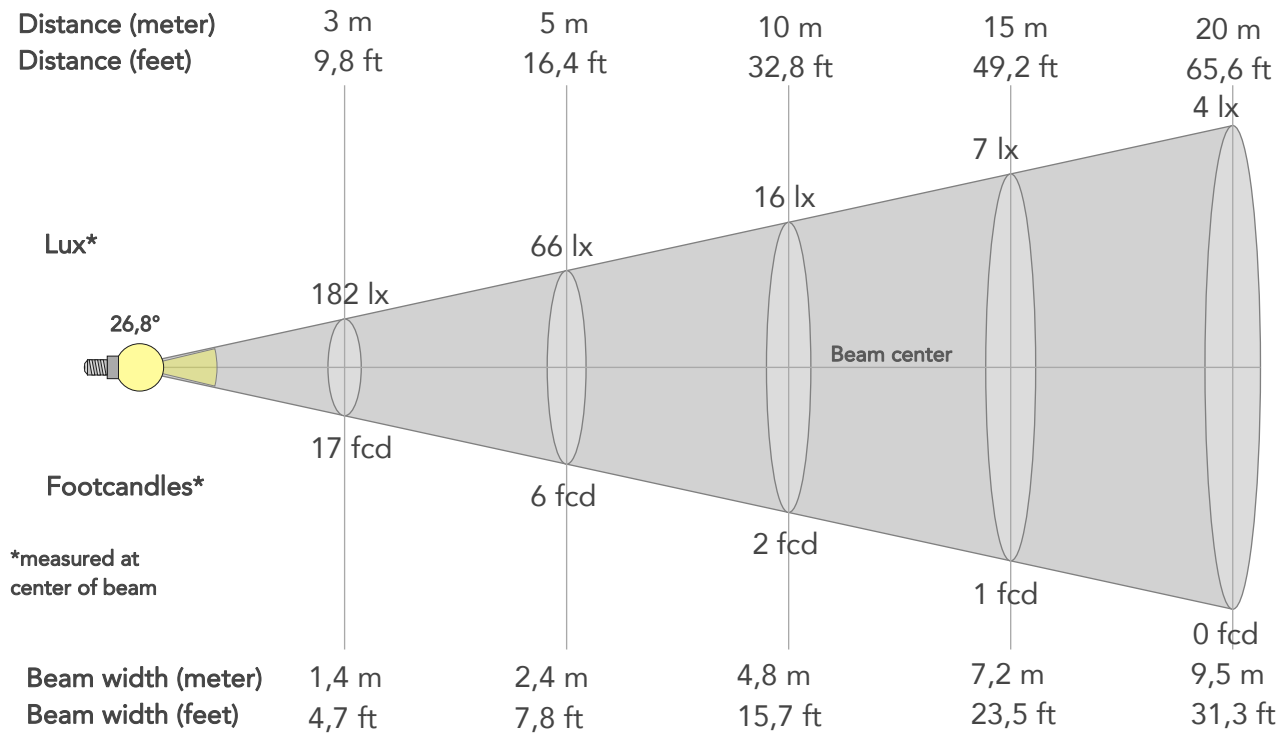
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	2%	-2%
2	95	2%	0%
3	94	2%	2%
4	95	1%	1%
5	92	3%	3%
6	86	9%	5%
7	86	9%	1%
8	89	6%	-3%
9	93	3%	-4%
10	95	0%	-3%
11	90	1%	5%
12	94	2%	3%
13	94	5%	1%
14	89	5%	3%
15	89	9%	-4%
16	92	5%	-1%



# BEAM DETAILS



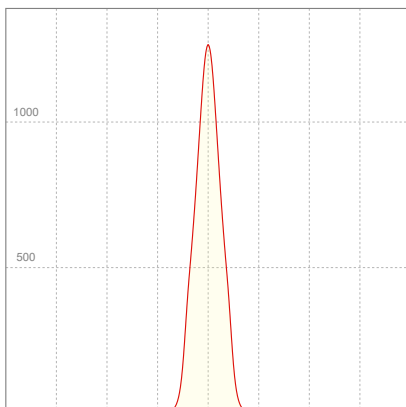
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,8°	47,1°	56,4°	99,9%	99,4%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1640lx	410lx	182lx	103lx	66lx	29lx	16lx	7lx	4lx	3lx	2lx	1lx	1lx
Footcand.	152fcd	38fcd	17fcd	10fcd	6fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,5m	11,9m	14,3m	19,1m	23,9m
Beam wid.	1,6ft	3,1ft	4,7ft	6,3ft	7,8ft	11,7ft	15,7ft	23,5ft	31,3ft	39,1ft	47ft	62,6ft	78,3ft

## LINEAR DISTRIBUTION DIAGRAM



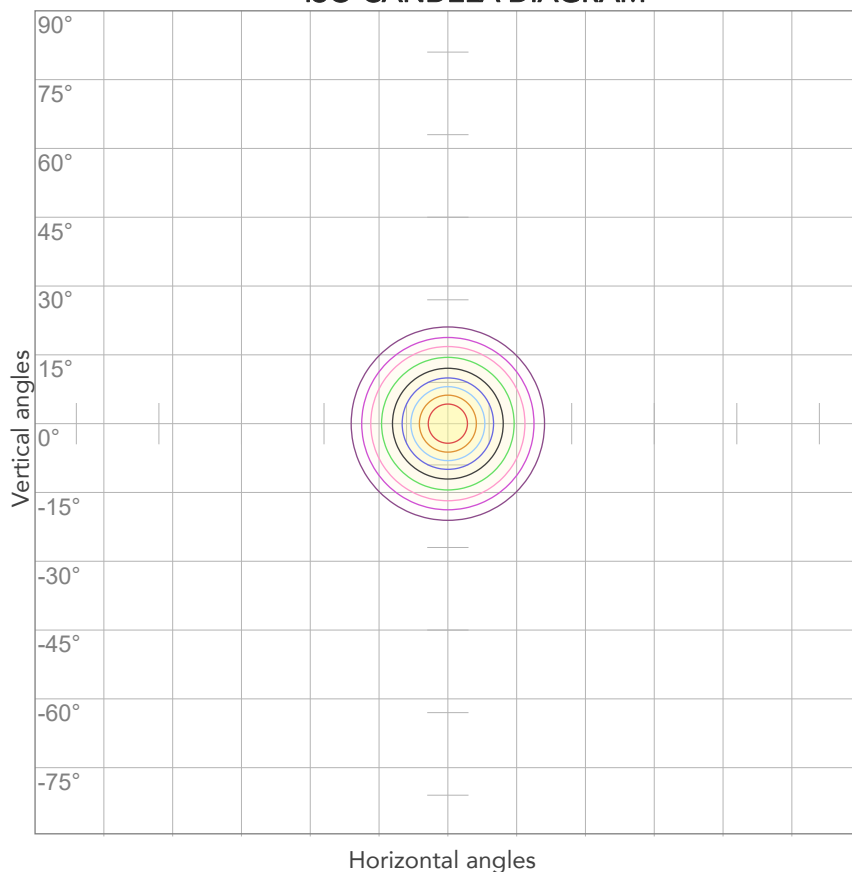
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,126A	26,0W	0,92	15lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



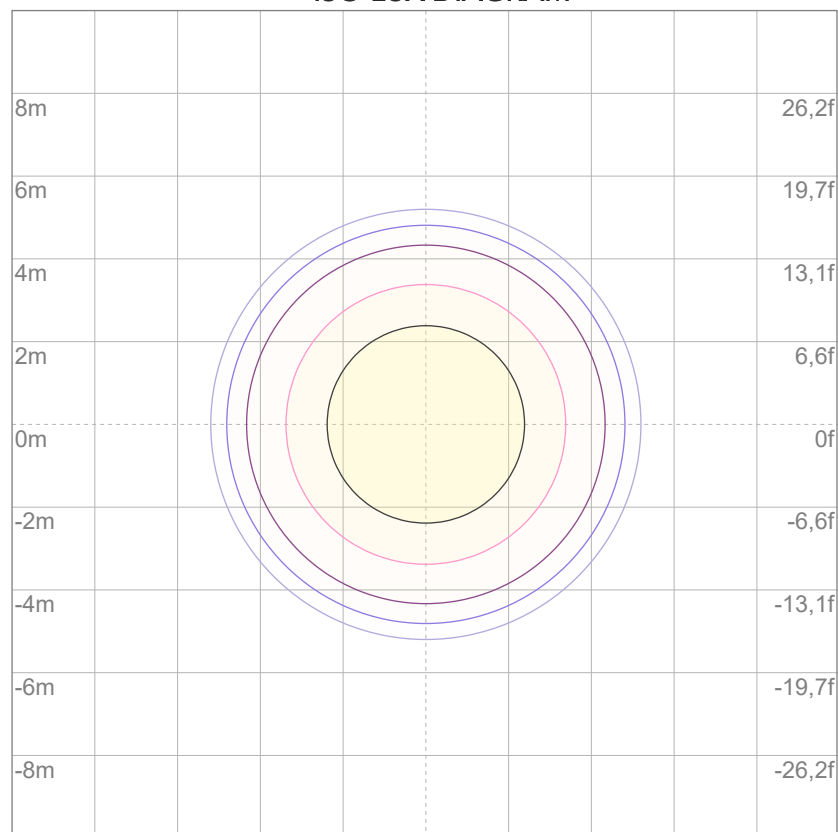
10%	164 cd
20%	328 cd
30%	492 cd
40%	656 cd
50%	820 cd
60%	984 cd
70%	1148 cd
80%	1312 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1640 cd

## ISO LUX DIAGRAM



3%	0,492 lx
5%	0,820 lx
10%	1,64 lx
30%	4,92 lx
50%	8,20 lx

### Conditions:

Number of c-planes: 2

Lux at center: 16,4 lx

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



Total lumen output:

353 lm

Peak candela output:

3394 cd

Light quality:

CRI: 91,6

Color temperature:

5523 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

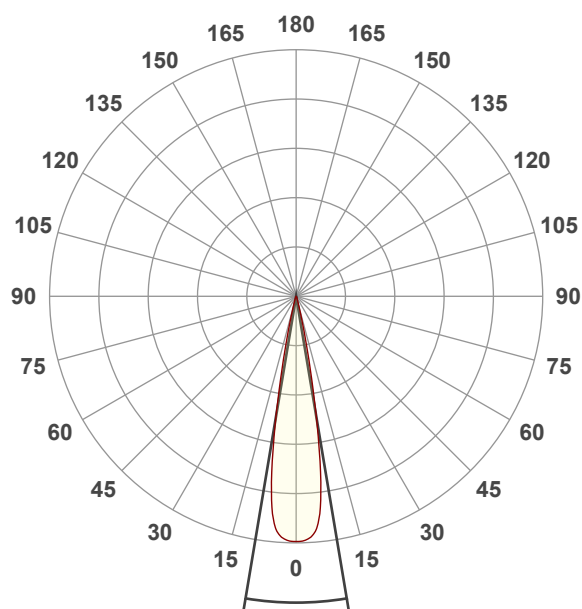
5600K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:02:40

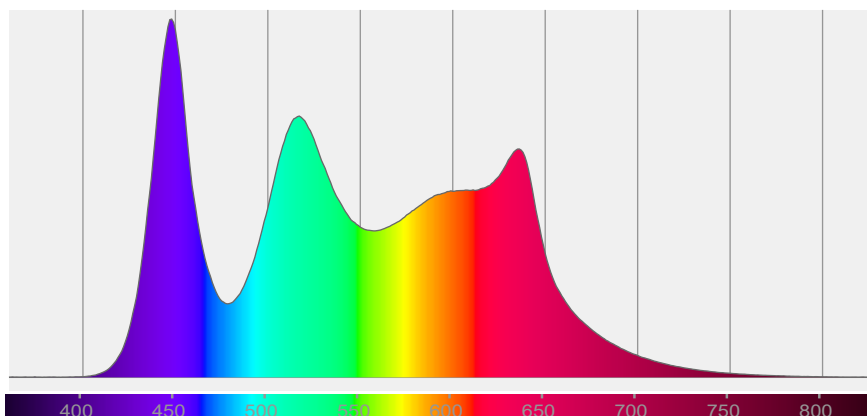


Beam angle 50%: 19°

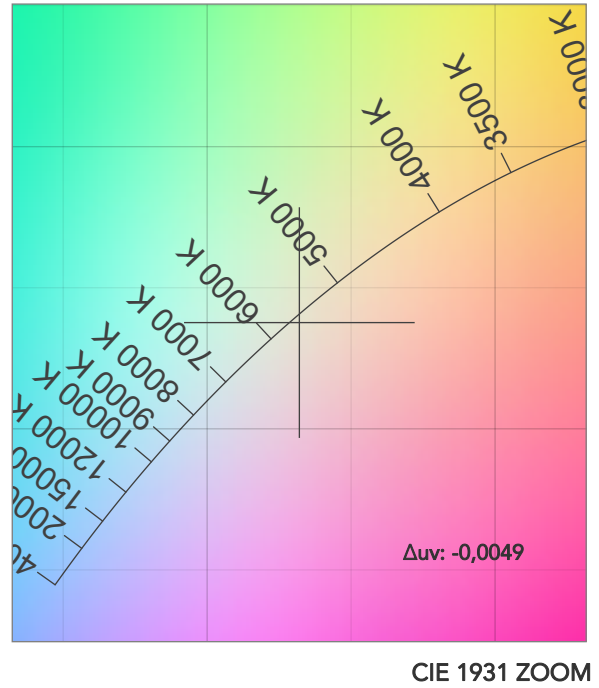
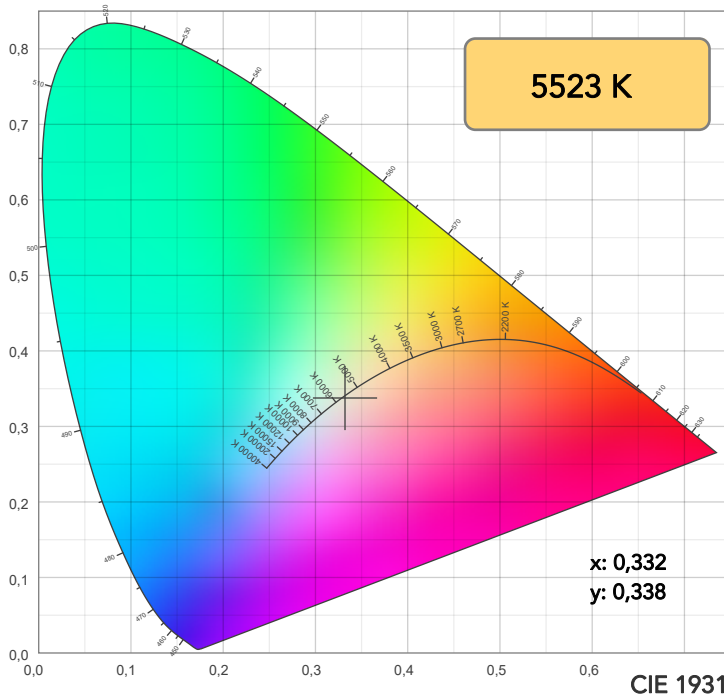
Field angle 10%: 27,3°

Cut off angle 2.5%: 34,6°

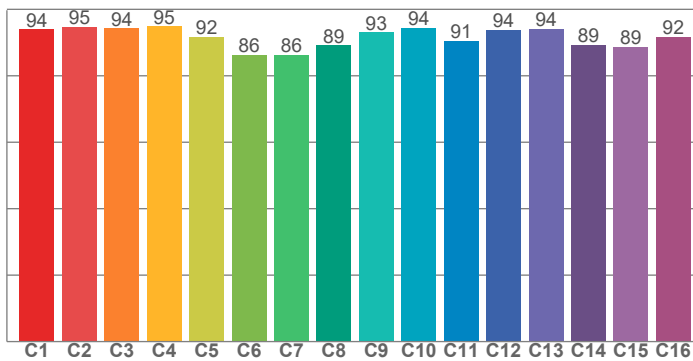
**Spectra**



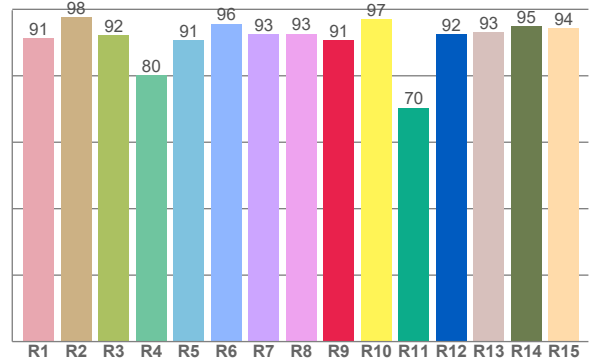
# COLOR DETAILS



TM30: 91,7



CRI: 91,6 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,2	97,7	92,2	80,1	90,7	95,7	92,5	92,6	90,7	97,1	70,4	92,4	93,1	95,0	94,2

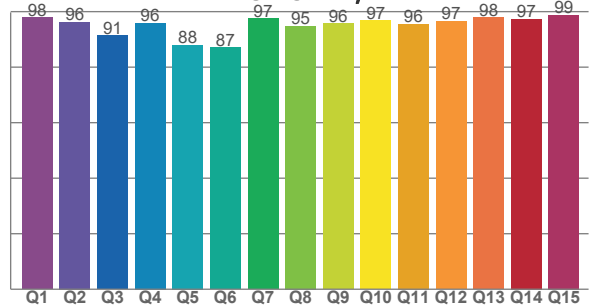
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,0	94,8	94,3	94,8	91,7	86,3	86,4	89,2	93,0	94,5	90,5	93,9	94,1	89,4	88,7	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,8	96,3	91,3	95,9	87,9	87,1	97,5	94,9	95,6	96,7	95,6	96,5	97,9	97,4	98,8

CQS: 94,1



## COLOR PARAMETERS

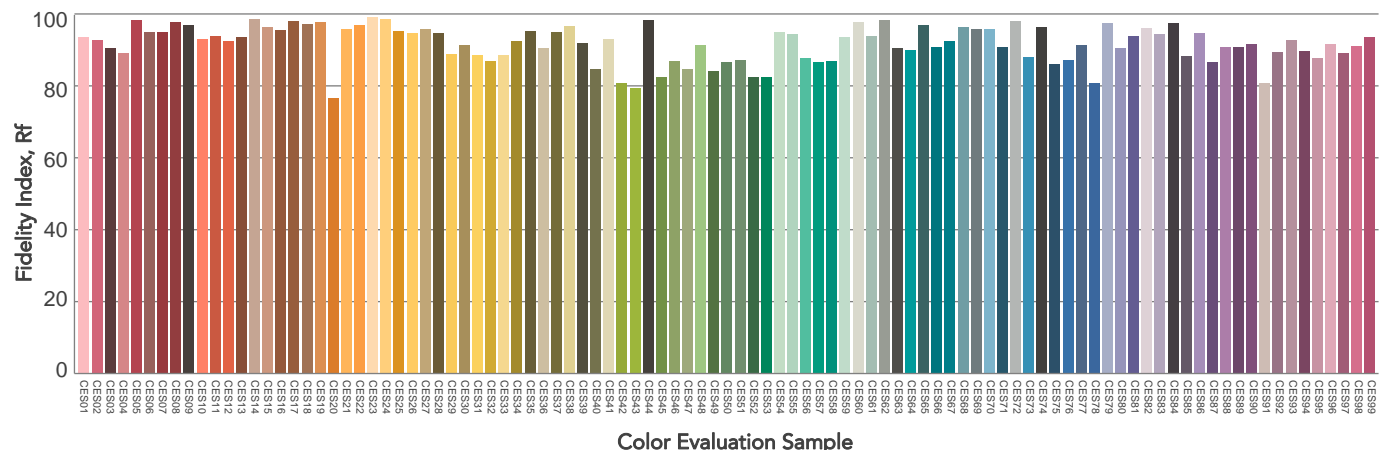
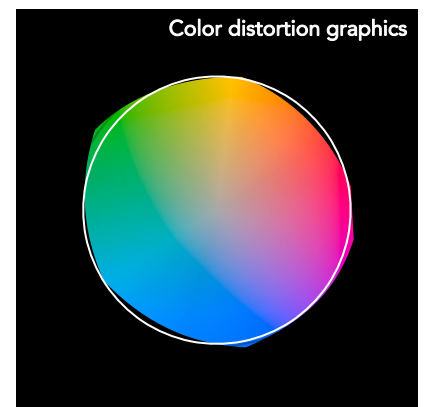
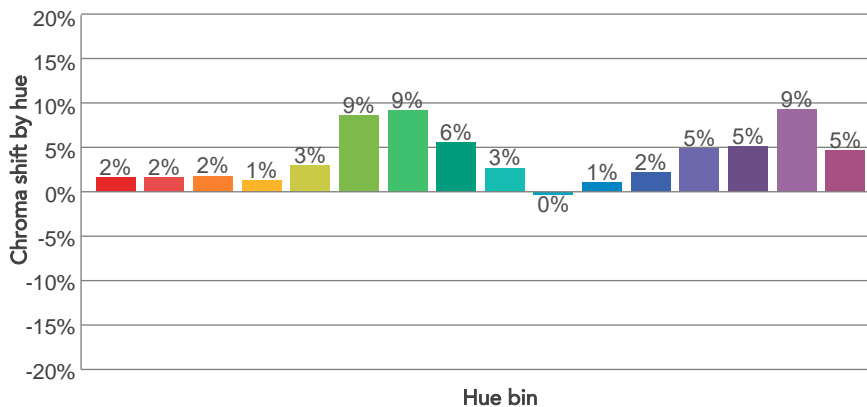
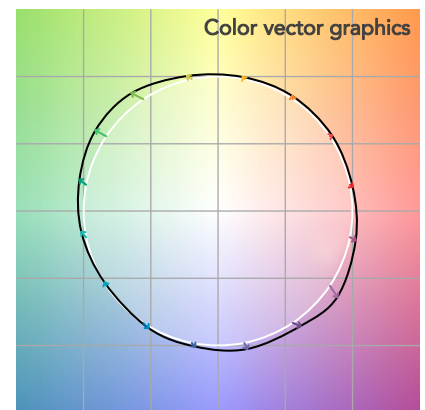
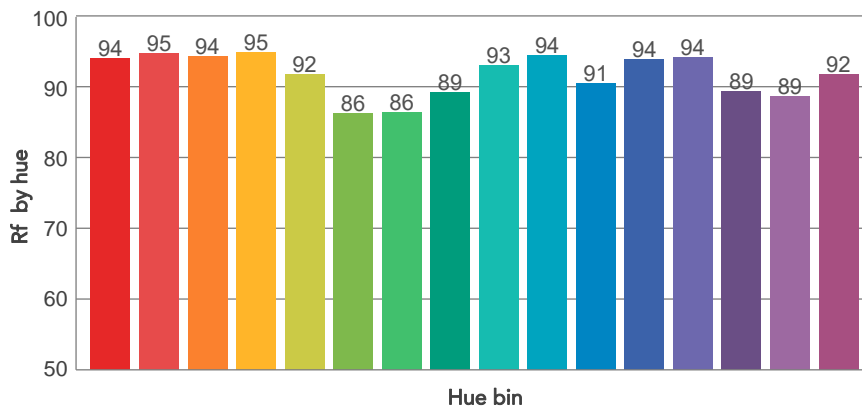
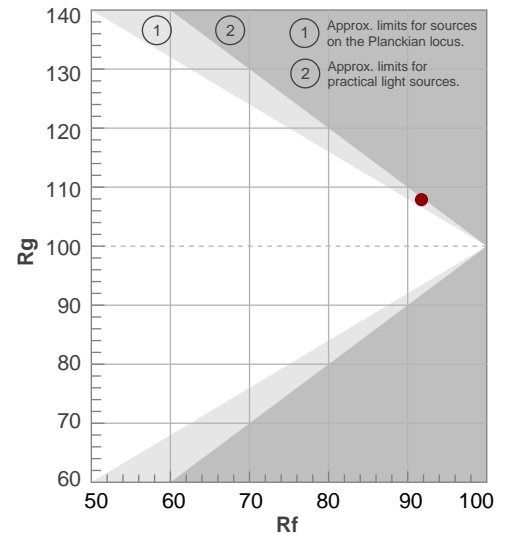
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5523 K	91,6	90,7	91,7	107,9	94,1	83	0,332	0,338	-0,0049

# TM30 DETAILS

**Rf 91,7**  
Fidelity index Rf

**Rg 107,9**  
Gammut index

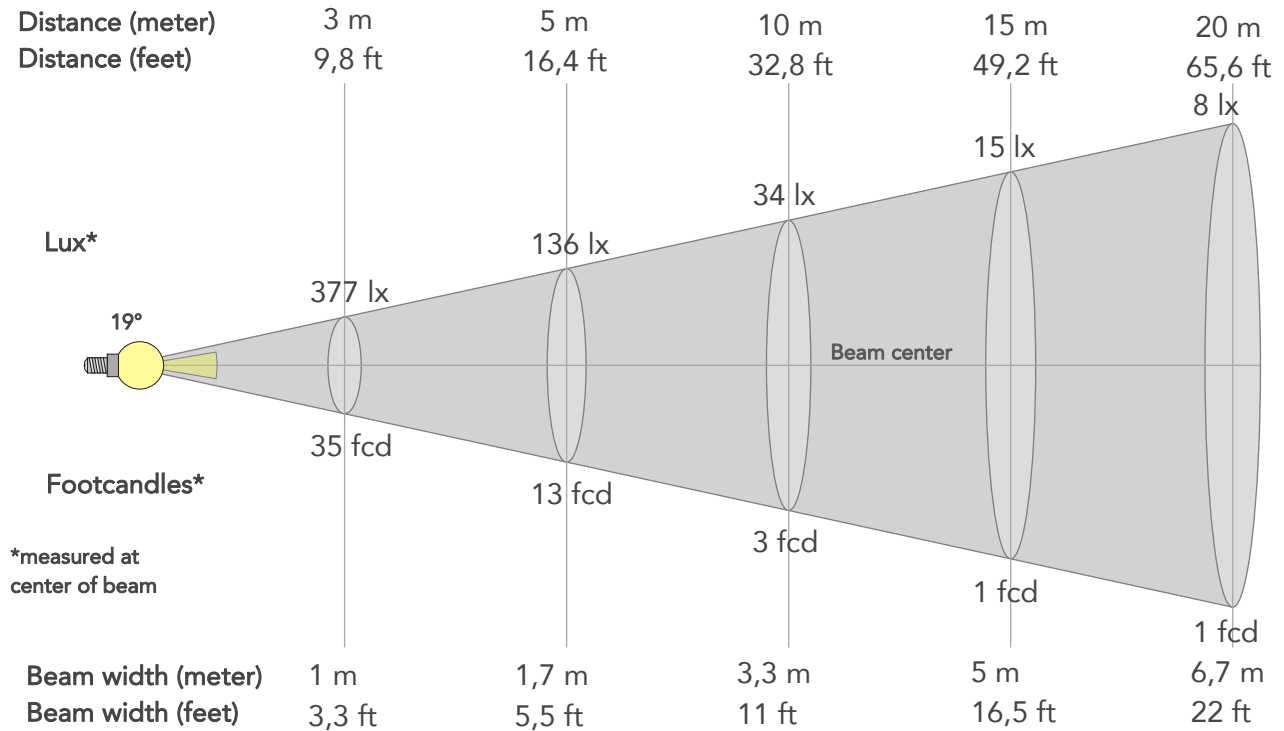
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	2%	-2%
2	95	2%	0%
3	94	2%	2%
4	95	1%	1%
5	92	3%	3%
6	86	9%	5%
7	86	9%	1%
8	89	6%	-3%
9	93	3%	-5%
10	94	0%	-3%
11	91	1%	5%
12	94	2%	3%
13	94	5%	1%
14	89	5%	3%
15	89	9%	-4%
16	92	5%	-1%



# BEAM DETAILS



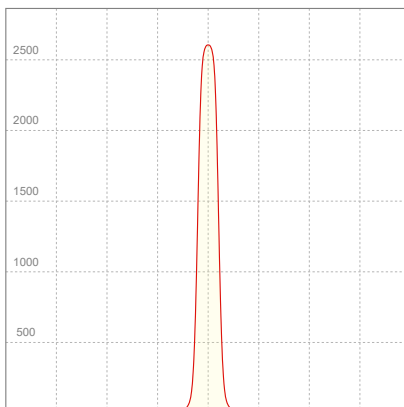
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19°	27,3°	34,6°	100,0%	99,8%



## 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	3394lx	848lx	377lx	212lx	136lx	60lx	34lx	15lx	8lx	5lx	4lx	2lx	1lx
Footcand.	315fcd	79fcd	35fcd	20fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,7m	8,4m	10m	13,4m	16,7m
Beam wid.	1,1ft	2,2ft	3,3ft	4,4ft	5,5ft	8,2ft	11ft	16,5ft	22ft	27,5ft	33ft	44ft	54,9ft

## LINEAR DISTRIBUTION DIAGRAM

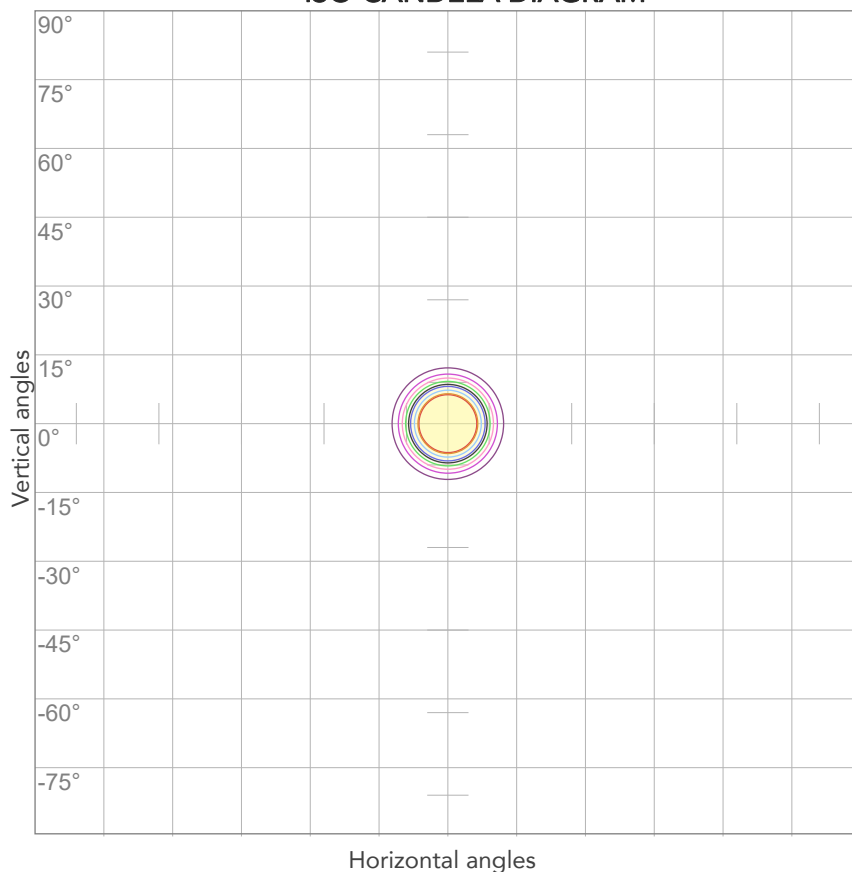


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,126A	26,0W	0,92	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



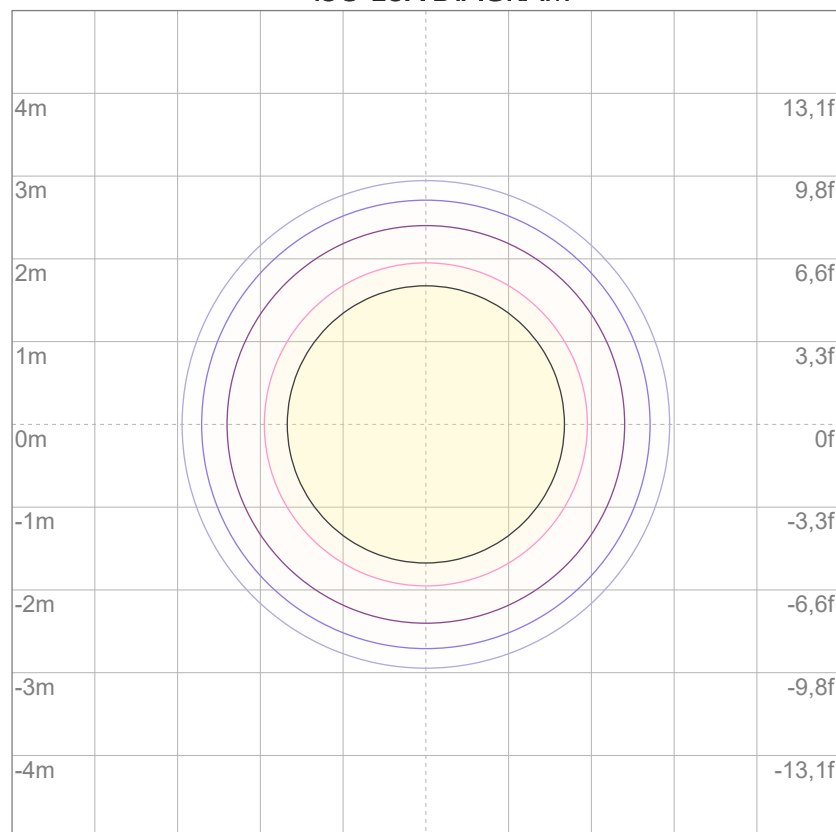
10%	339 cd
20%	679 cd
30%	1018 cd
40%	1358 cd
50%	1697 cd
60%	2036 cd
70%	2376 cd
80%	2715 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3394 cd

## ISO LUX DIAGRAM



3%	1,02 lx
5%	1,70 lx
10%	3,39 lx
30%	10,2 lx
50%	17,0 lx

### Conditions:

Number of c-planes: 2

Lux at center: 33,9 lx

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



Total lumen output:

396 lm

Peak candela output:

1655 cd

Light quality:

CRI: 91,3

Color temperature:

6009 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Max Zoom

Target:

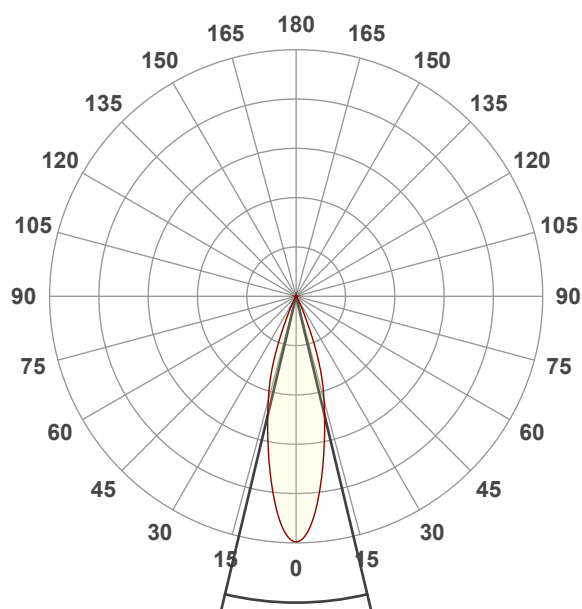
6000K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:19:15

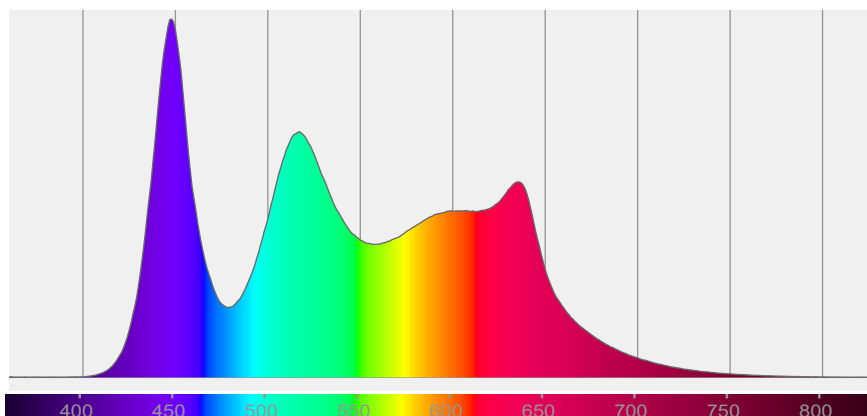


Beam angle 50%: 26,9°

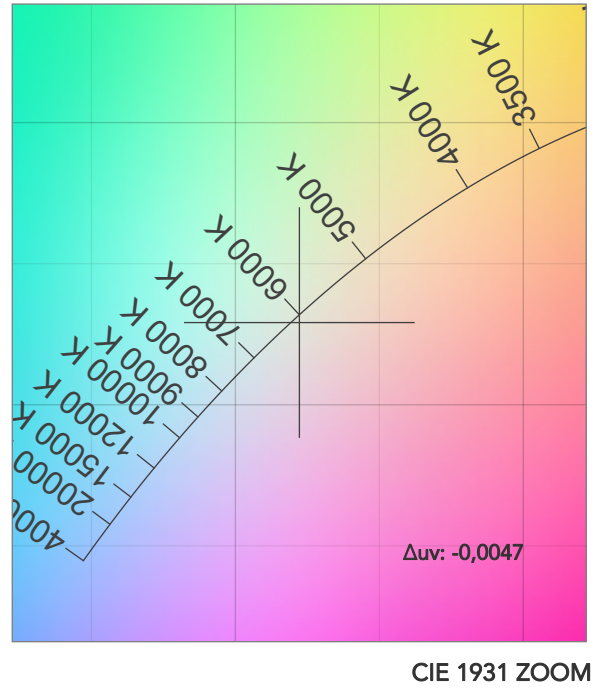
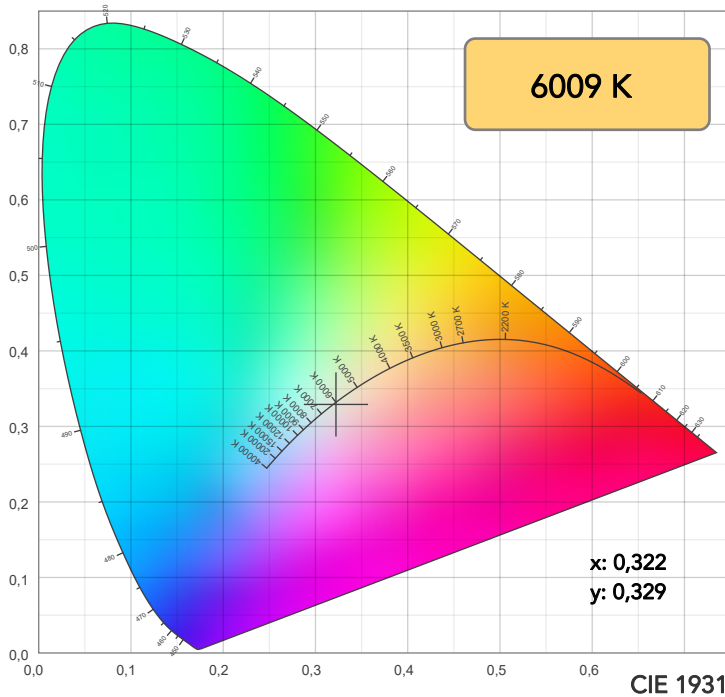
Field angle 10%: 47°

Cut off angle 2.5%: 56,2°

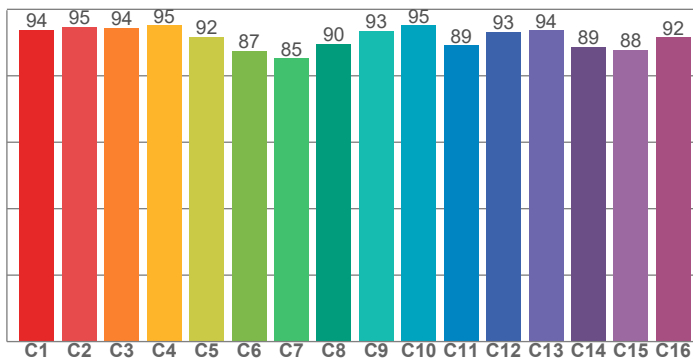
**Spectra**



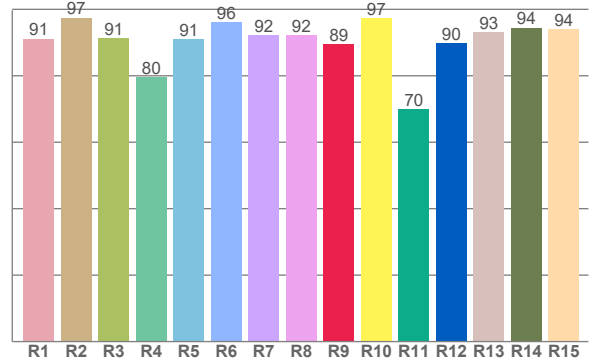
# COLOR DETAILS



TM30: 91,6



CRI: 91,3 (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
91,1	97,4	91,2	79,6	91,0	96,1	92,1	92,1	89,5	97,3	69,9	89,8	93,2	94,4	94,0

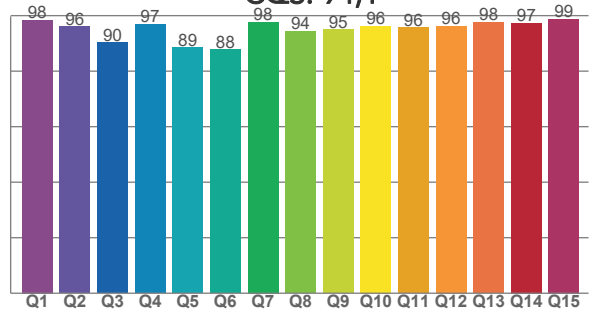
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,9	94,7	94,5	95,2	91,8	87,4	85,2	89,6	93,5	95,2	89,1	93,3	93,7	88,7	87,7	91,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,4	96,0	90,3	96,9	88,6	87,7	97,7	94,4	95,0	96,3	95,7	96,3	97,6	97,4	98,8

CQS: 94,1



## 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	$\Delta uv$
6009 K	91,3	89,5	91,6	108,0	94,1	83	0,322	0,329	-0,0047



## TM30 DETAILS

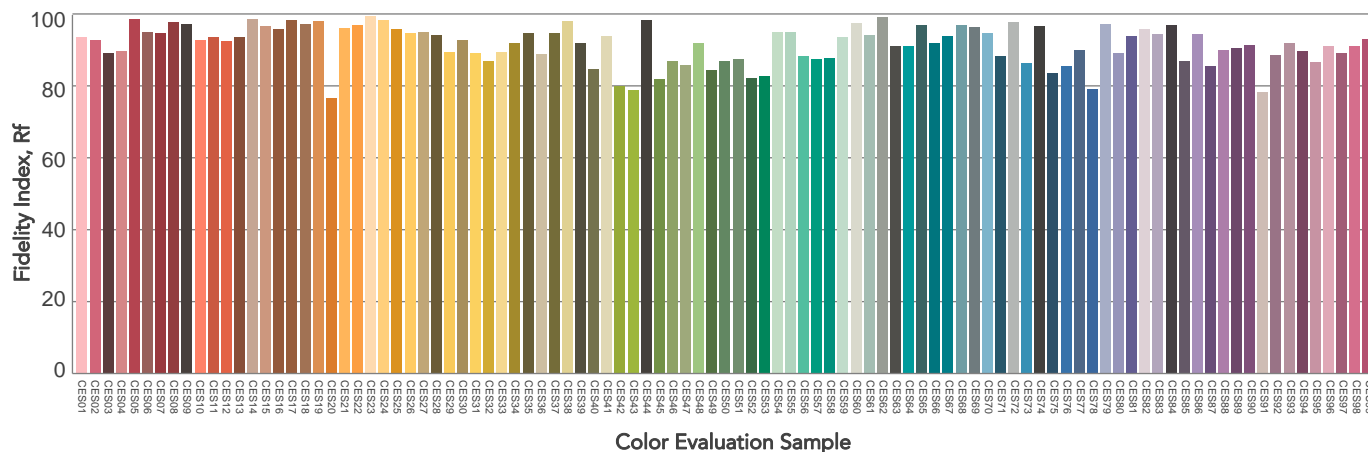
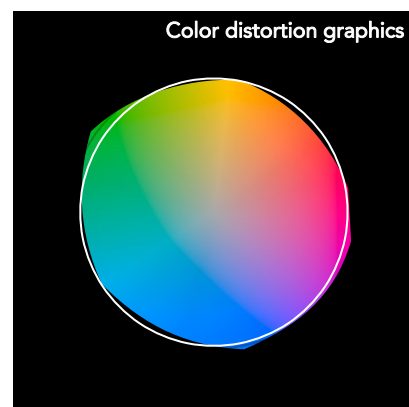
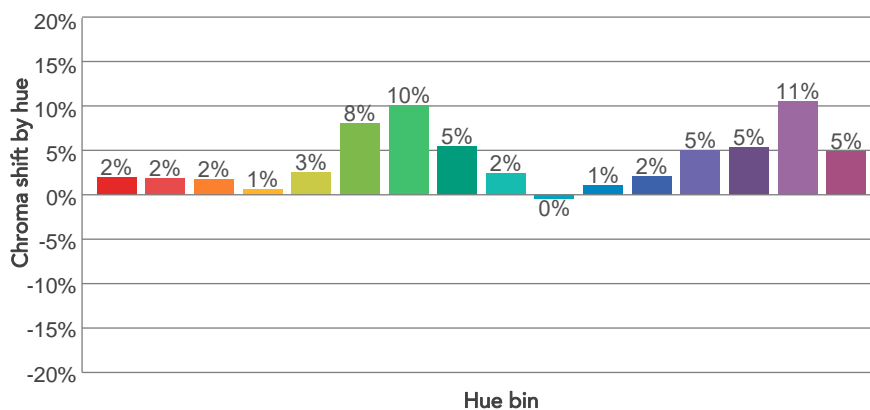
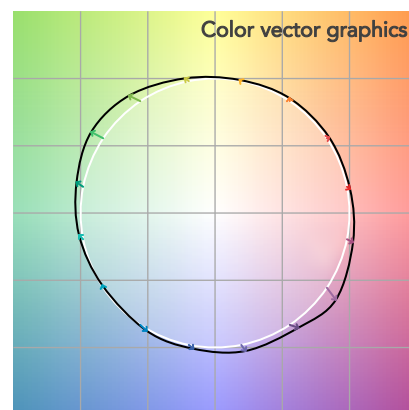
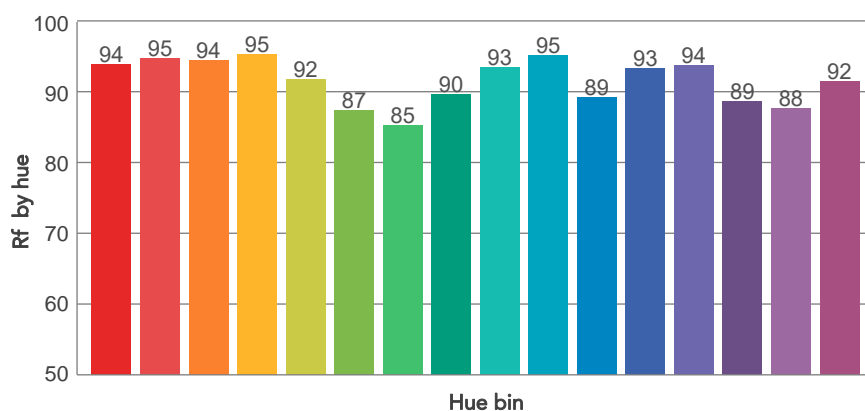
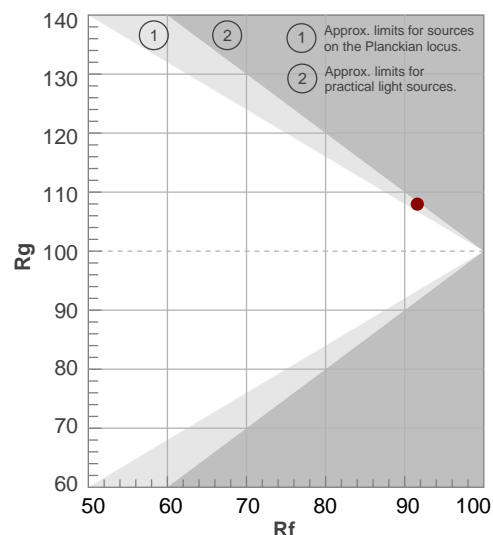
**Rf 91,6**

Fidelity index Rf

**Rg 108,0**

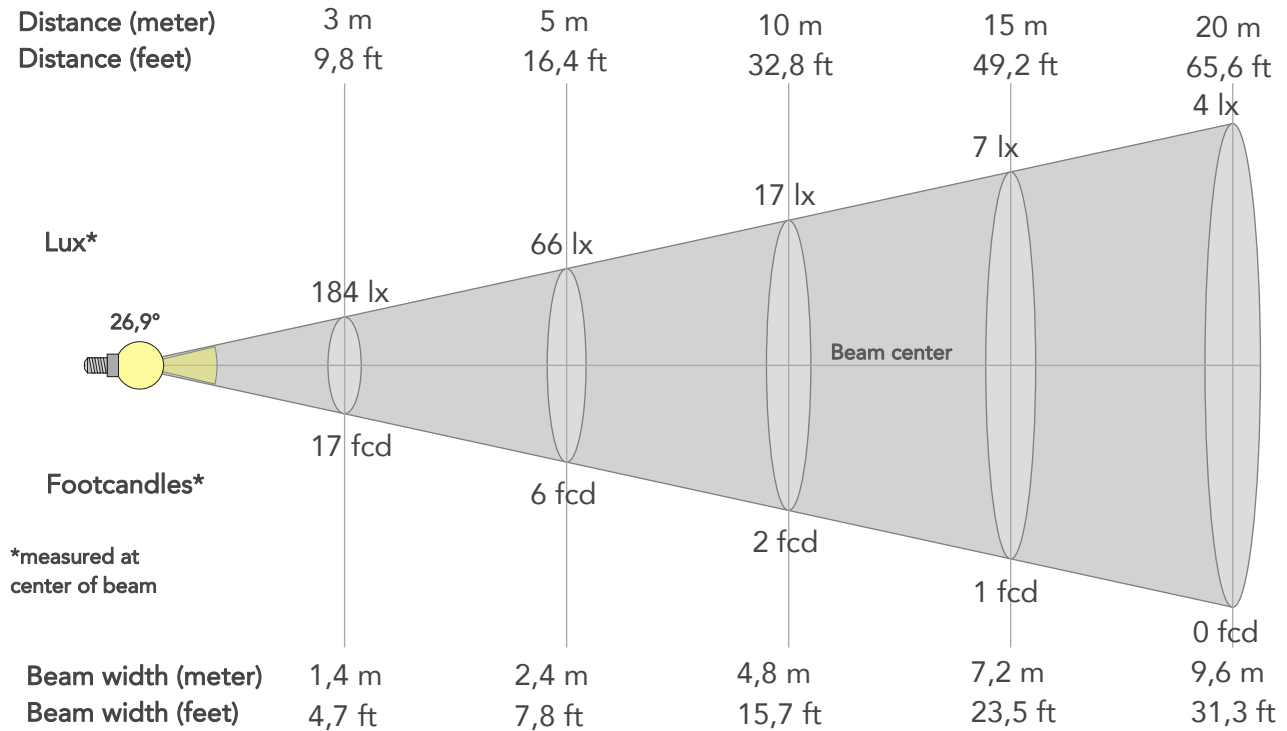
Gammut index

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



# BEAM DETAILS

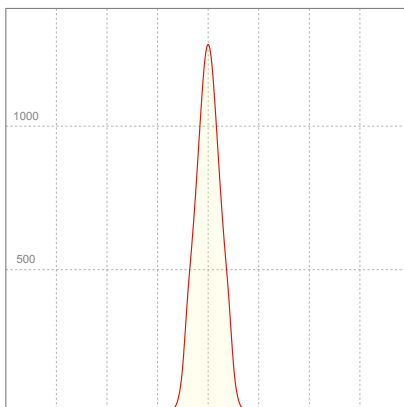
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,9°	47°	56,2°	99,9%	99,4%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1655lx	414lx	184lx	103lx	66lx	29lx	17lx	7lx	4lx	3lx	2lx	1lx	1lx
Footcand.	154fcd	38fcd	17fcd	10fcd	6fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	11,9m	14,3m	19,1m	23,9m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,8ft	11,7ft	15,7ft	23,5ft	31,3ft	39,2ft	47ft	62,7ft	78,3ft

## LINEAR DISTRIBUTION DIAGRAM

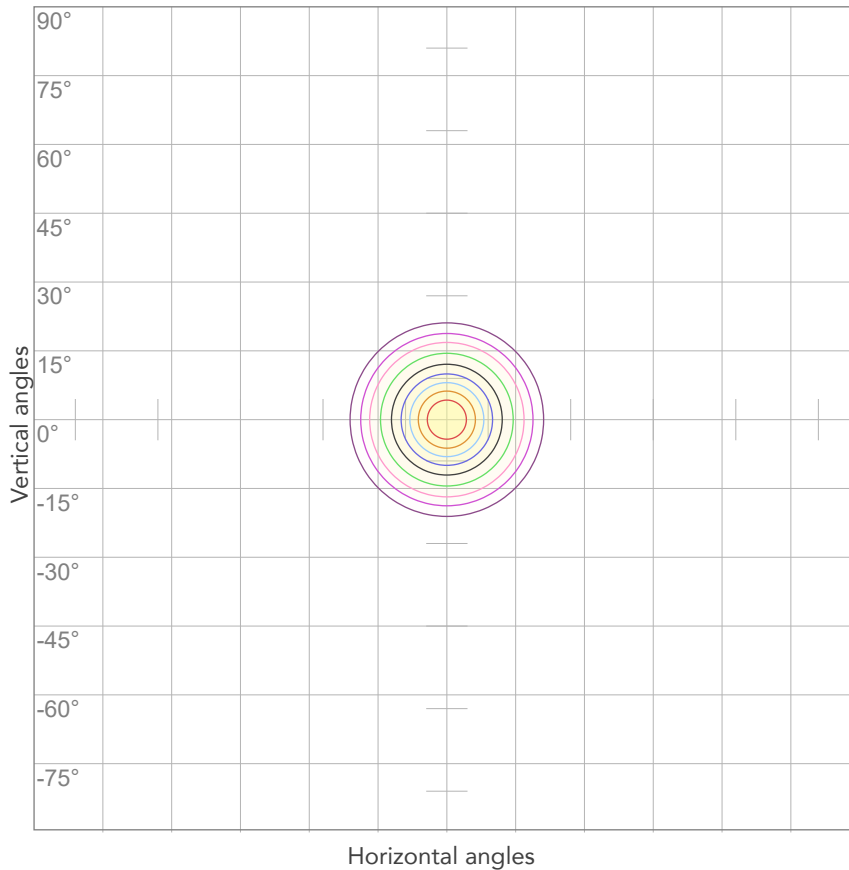


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,128A	26,5W	0,92	15lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



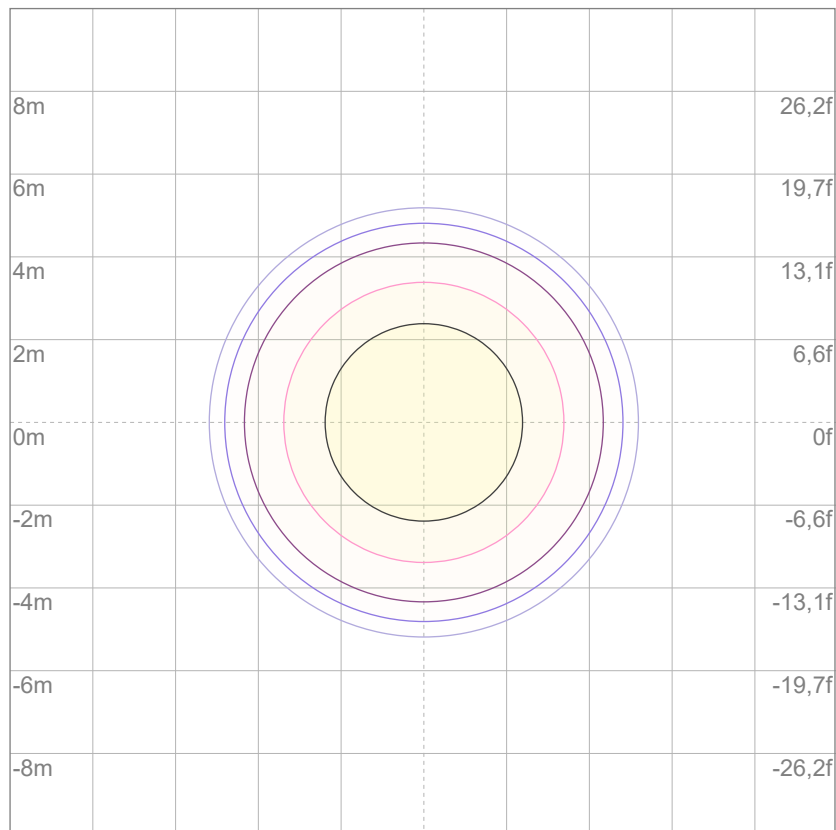
10%	166 cd
20%	331 cd
30%	497 cd
40%	662 cd
50%	828 cd
60%	993 cd
70%	1159 cd
80%	1324 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1655 cd

## ISO LUX DIAGRAM



3%	0,497 lx
5%	0,828 lx
10%	1,66 lx
30%	4,97 lx
50%	8,28 lx

### Conditions:

Number of c-planes: 2

Lux at center: 16,6 lx

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



Total lumen output:

359 lm

Peak candela output:

3467 cd

Light quality:

CRI: 91,3

Color temperature:

5962 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 15-30 Min Zoom

Target:

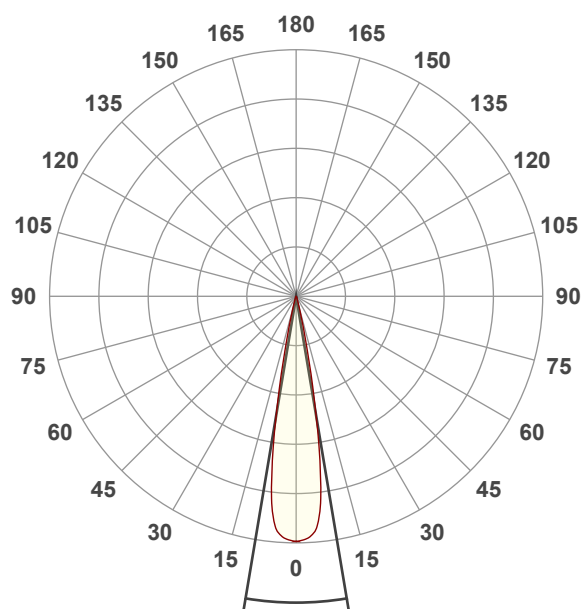
6000K

Operator:

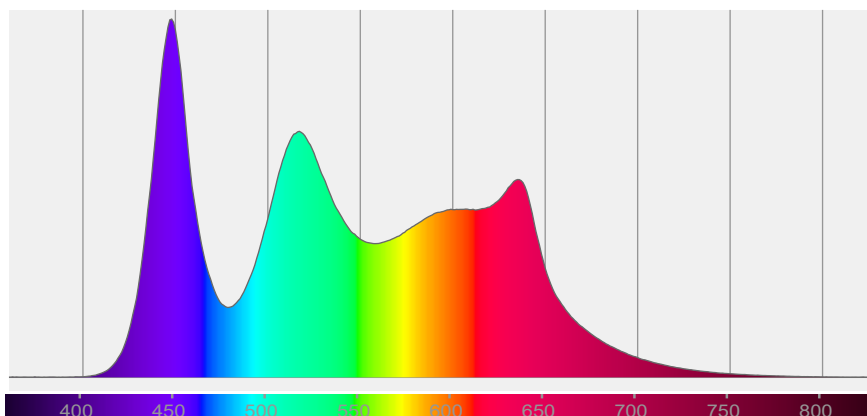
Paolo Carvone

Date and time:

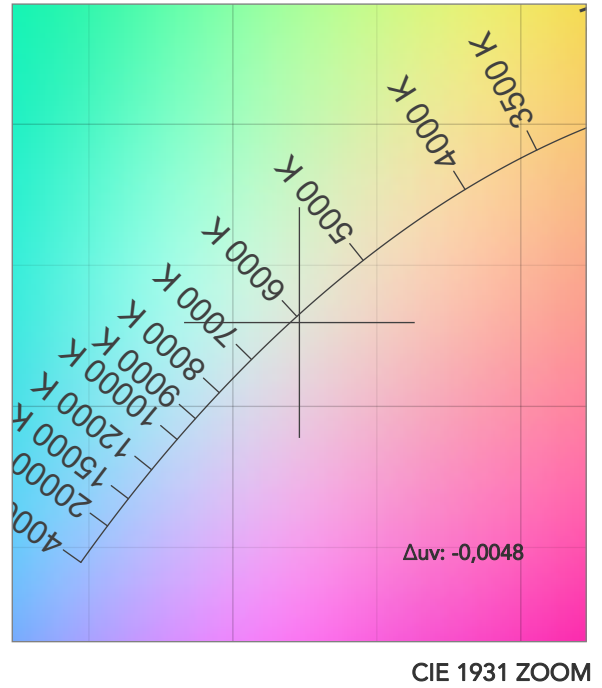
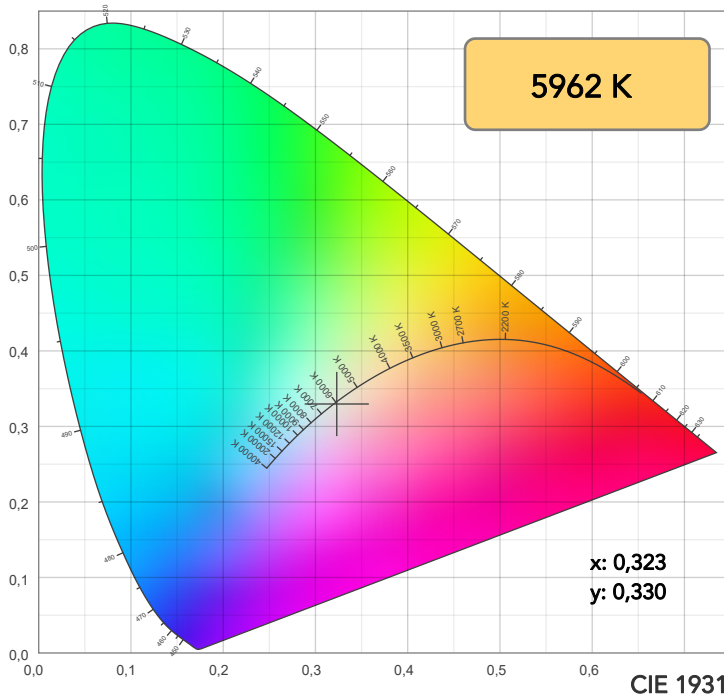
14/01/2021 12:04:14



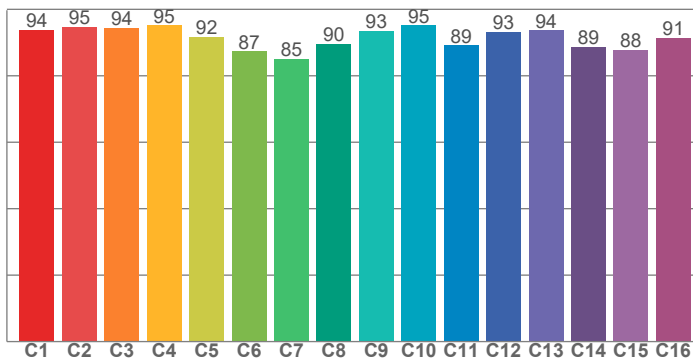
Spectra



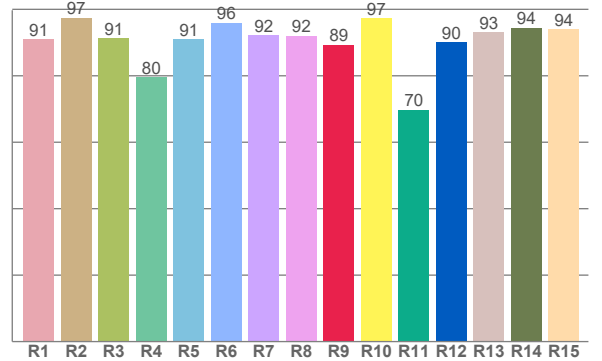
# COLOR DETAILS



TM30: 91,6



CRI: 91,3 (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
91,0	97,4	91,2	79,6	90,9	96,0	92,1	92,1	89,3	97,2	69,8	90,0	93,1	94,4	93,9

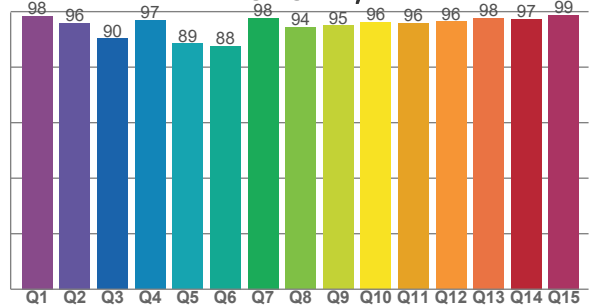
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,9	94,7	94,4	95,2	91,7	87,4	85,1	89,6	93,5	95,2	89,2	93,3	93,7	88,6	87,8	91,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,4	96,0	90,3	96,9	88,5	87,6	97,7	94,4	95,0	96,2	95,8	96,4	97,6	97,3	98,8

CQS: 94,1



## 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	$\Delta uv$
5962 K	91,3	89,3	91,6	108,0	94,1	83	0,323	0,330	-0,0048

## TM30 DETAILS

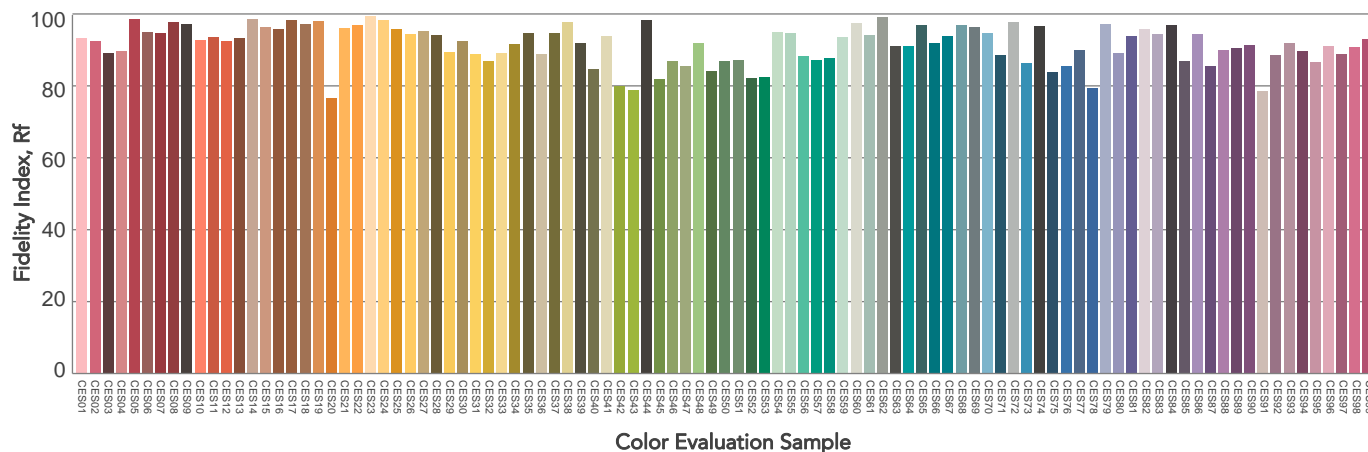
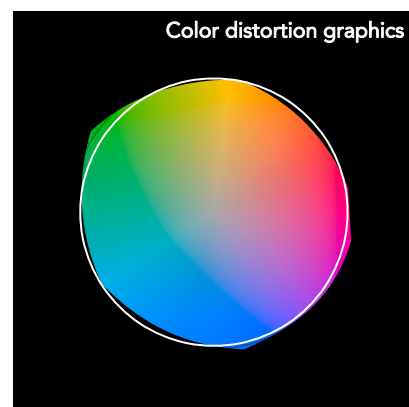
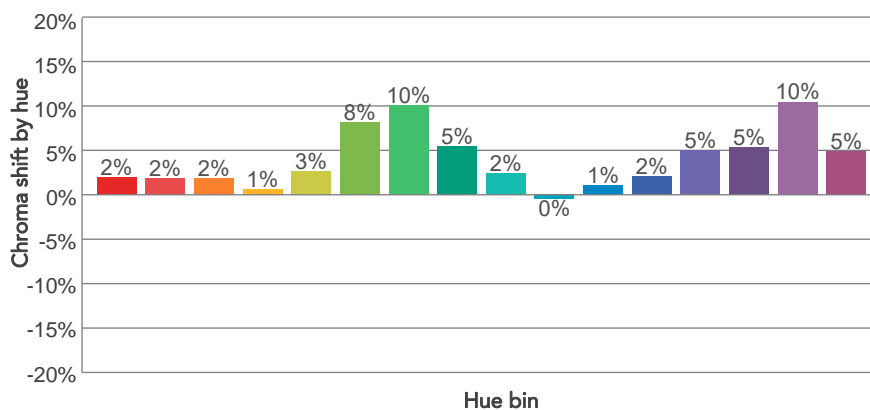
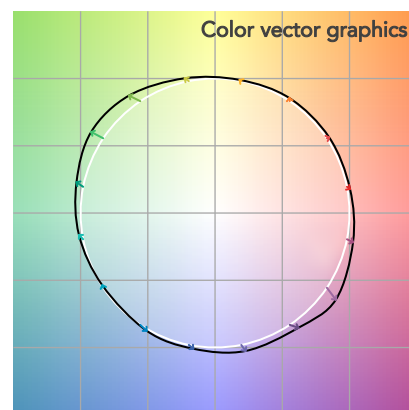
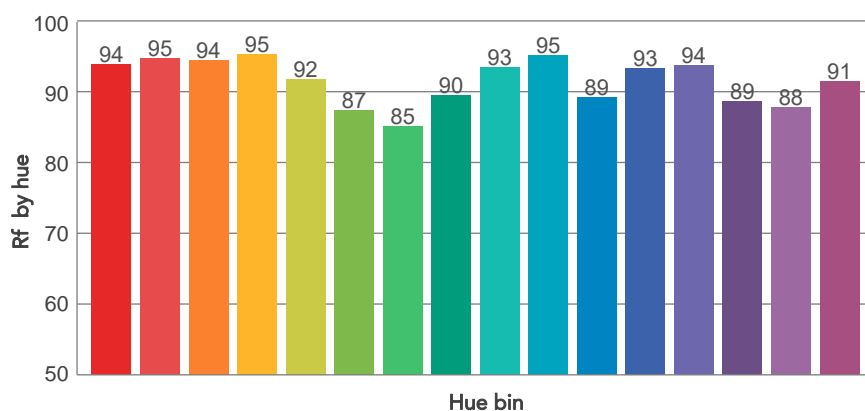
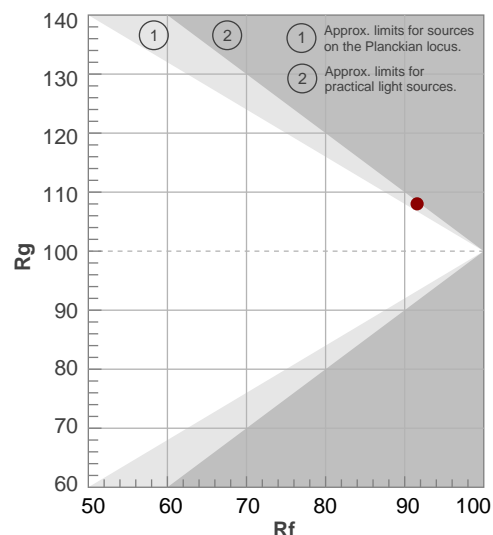
**Rf 91,6**

Fidelity index Rf

**Rg 108,0**

Gammut index

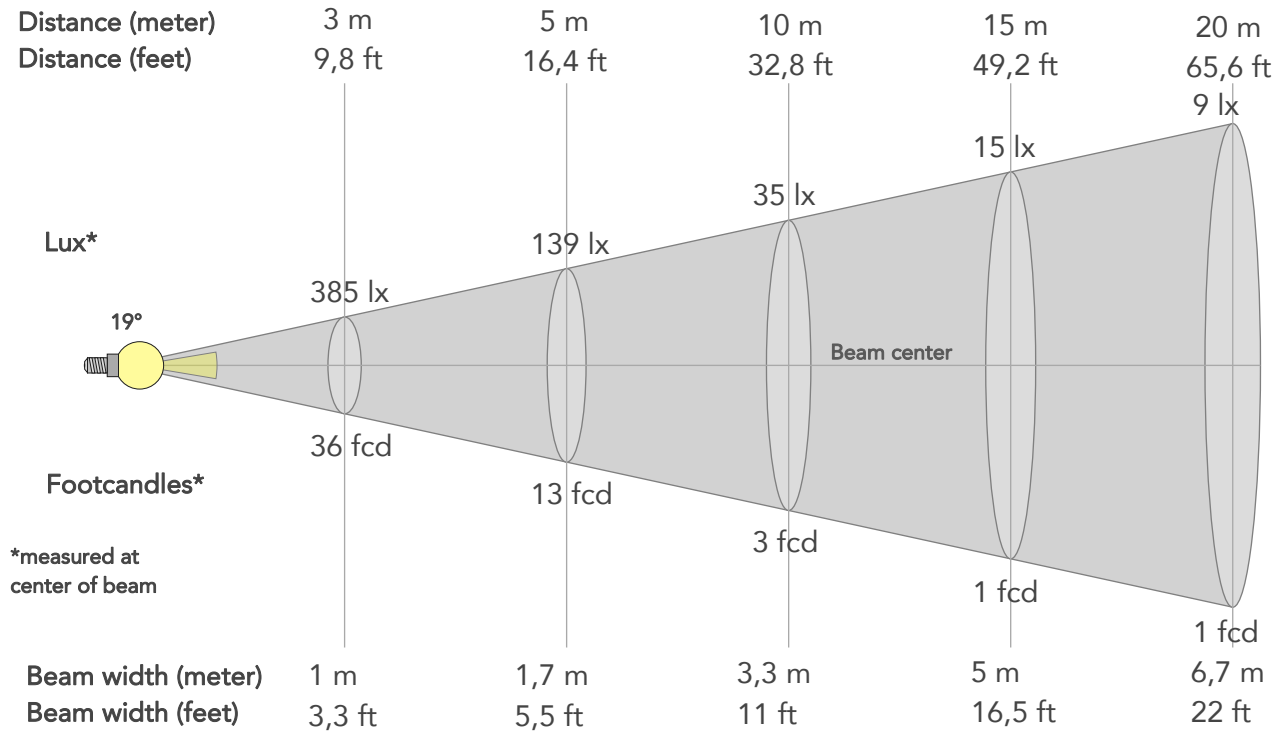
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	2%	-2%
2	95	2%	0%
3	94	2%	2%
4	95	1%	1%
5	92	3%	3%
6	87	8%	5%
7	85	10%	1%
8	90	5%	-2%
9	93	2%	-4%
10	95	0%	-2%
11	89	1%	6%
12	93	2%	4%
13	94	5%	2%
14	89	5%	4%
15	88	10%	-4%
16	91	5%	-1%



# BEAM DETAILS



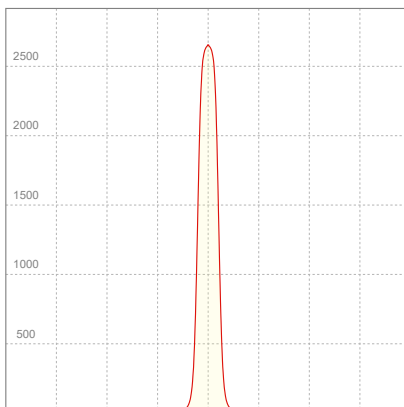
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19°	27,2°	34,4°	100,0%	99,8%



## 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	3467lx	867lx	385lx	217lx	139lx	62lx	35lx	15lx	9lx	6lx	4lx	2lx	1lx
Footcand.	322fcd	81fcd	36fcd	20fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,7m	8,4m	10m	13,4m	16,7m
Beam wid.	1,1ft	2,2ft	3,3ft	4,4ft	5,5ft	8,2ft	11ft	16,5ft	22ft	27,5ft	33ft	43,9ft	54,9ft

## LINEAR DISTRIBUTION DIAGRAM

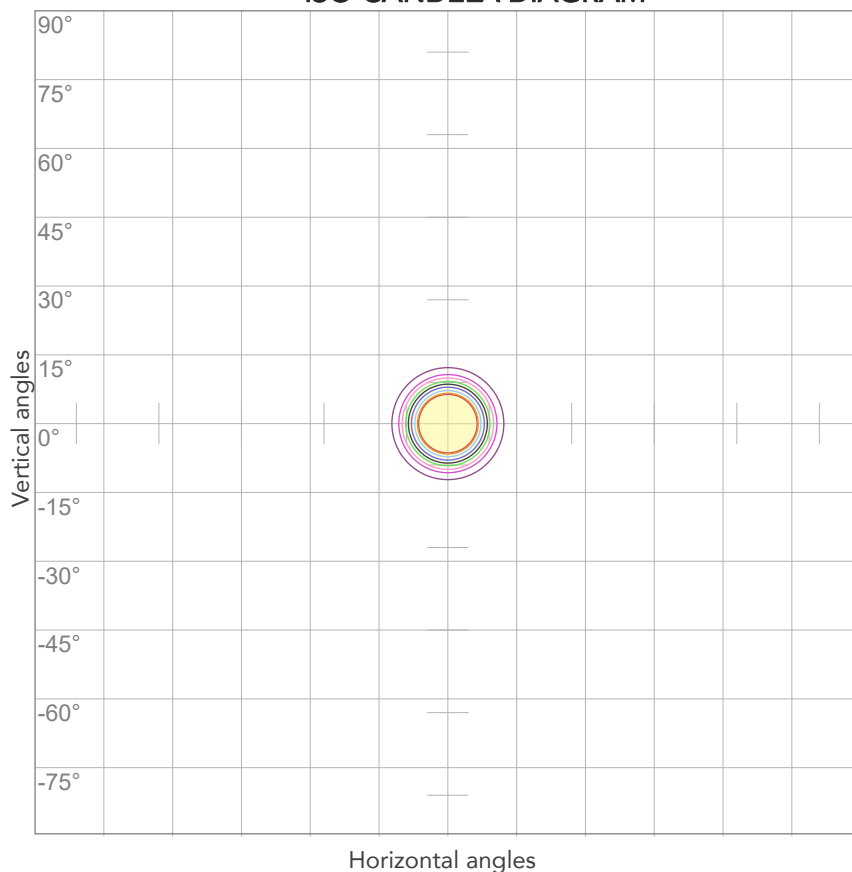


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,128A	26,6W	0,92	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



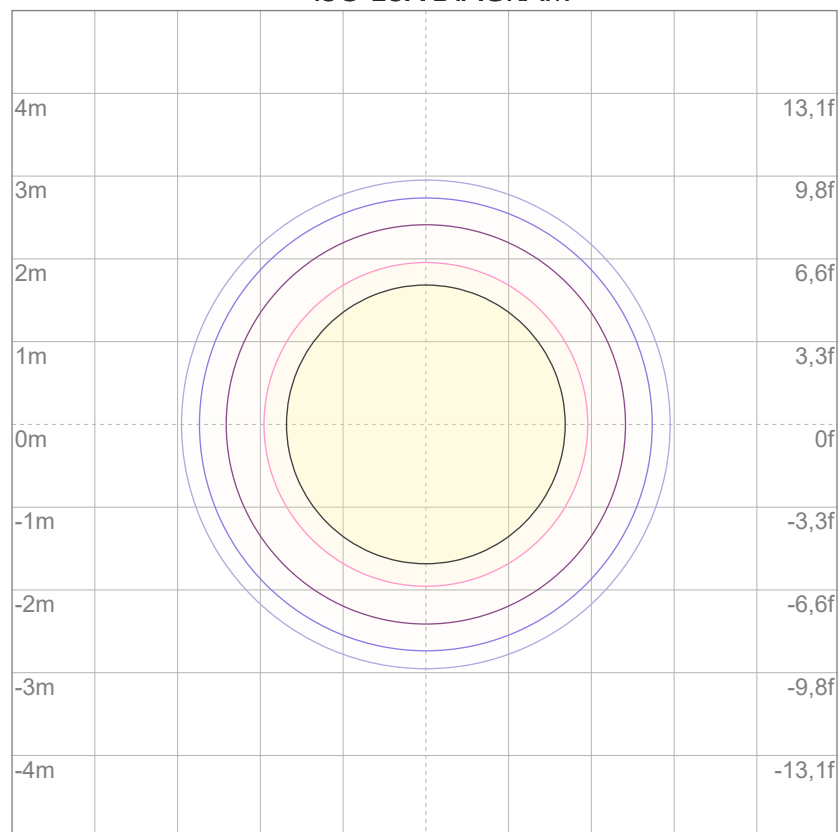
10%	347 cd
20%	693 cd
30%	1040 cd
40%	1387 cd
50%	1733 cd
60%	2080 cd
70%	2427 cd
80%	2774 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3467 cd

## ISO LUX DIAGRAM



3%	1,04 lx
5%	1,73 lx
10%	3,47 lx
30%	10,4 lx
50%	17,3 lx

### Conditions:

Number of c-planes: 2

Lux at center: 34,7 lx

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