



# Photometric Test Report



## EclDisplay CRMXFC

**Zoomable Wash Lens 25-50°**

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:

466 lm

Peak candela output:

566 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

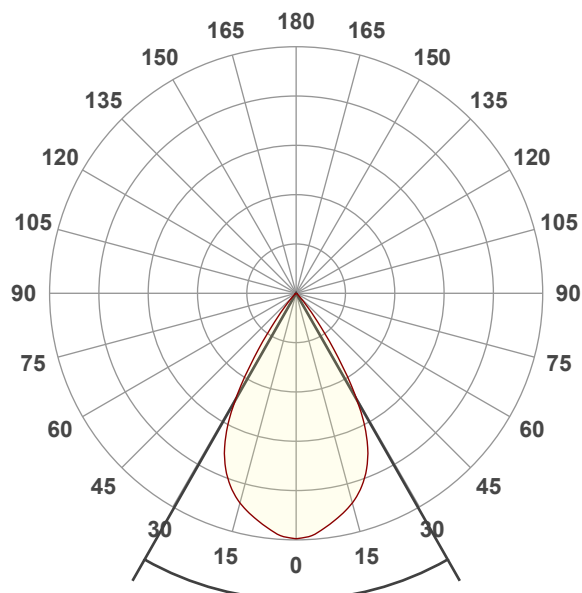
Full On

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:27:18

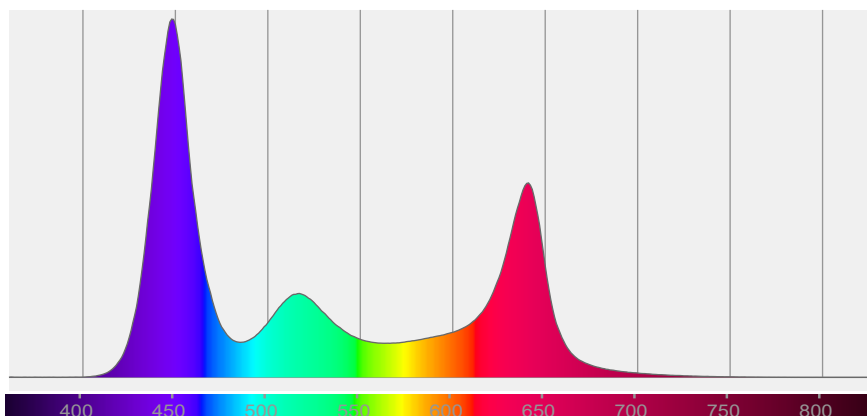


Beam angle 50%: 59,3°

Field angle 10%: 77,6°

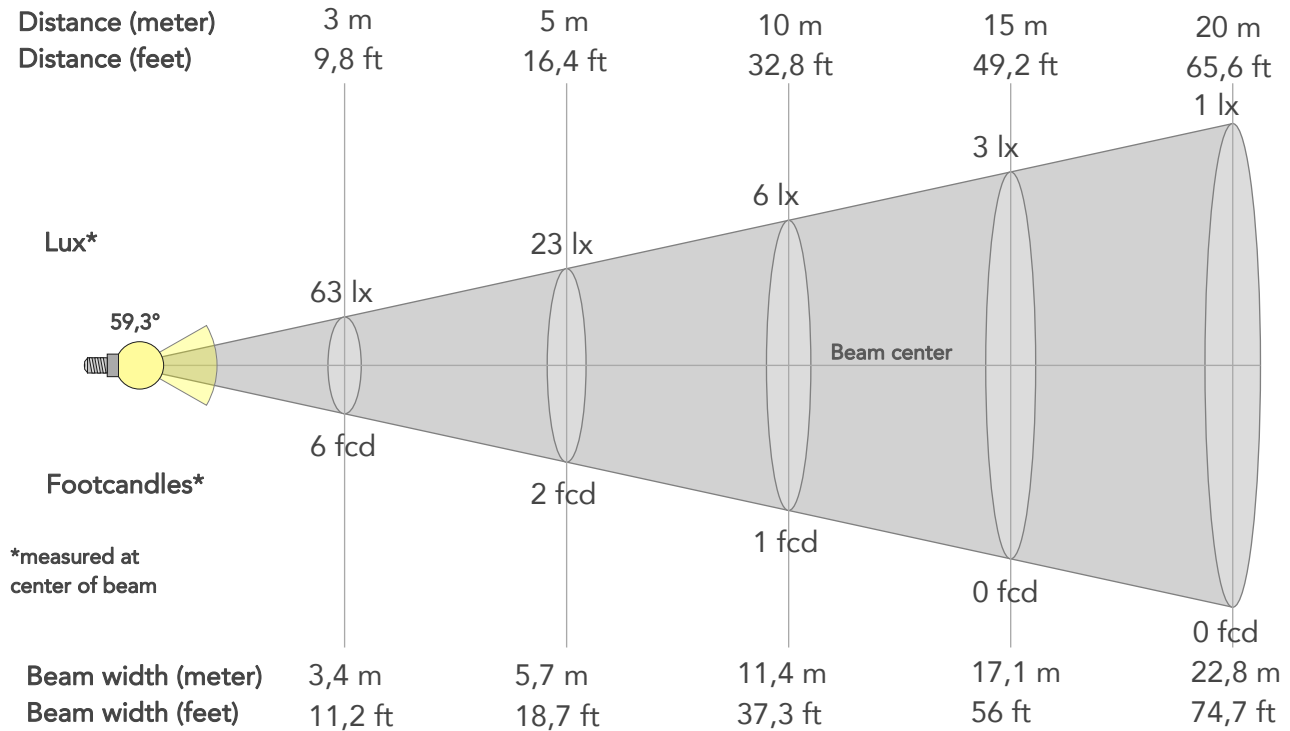
Cut off angle 2.5%: 89,3°

**Spectra**



# BEAM DETAILS

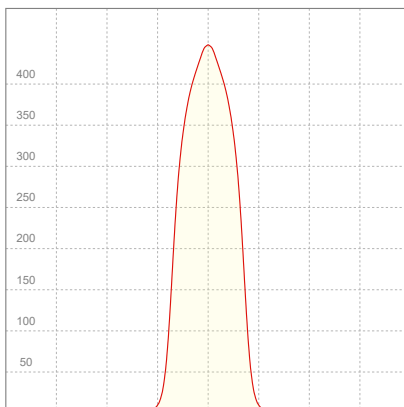
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,3°	77,6°	89,3°	99,8%	98,5%



## 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	566lx	141lx	63lx	35lx	23lx	10lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx
Footcand.	53fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,6m	5,7m	8,5m	11,4m	17,1m	22,8m	28,5m	34,2m	45,5m	56,9m
Beam wid.	3,8ft	7,5ft	11,2ft	14,9ft	18,7ft	28ft	37,3ft	56ft	74,7ft	93,4ft	112ft	149,4ft	186,7ft

## LINEAR DISTRIBUTION DIAGRAM

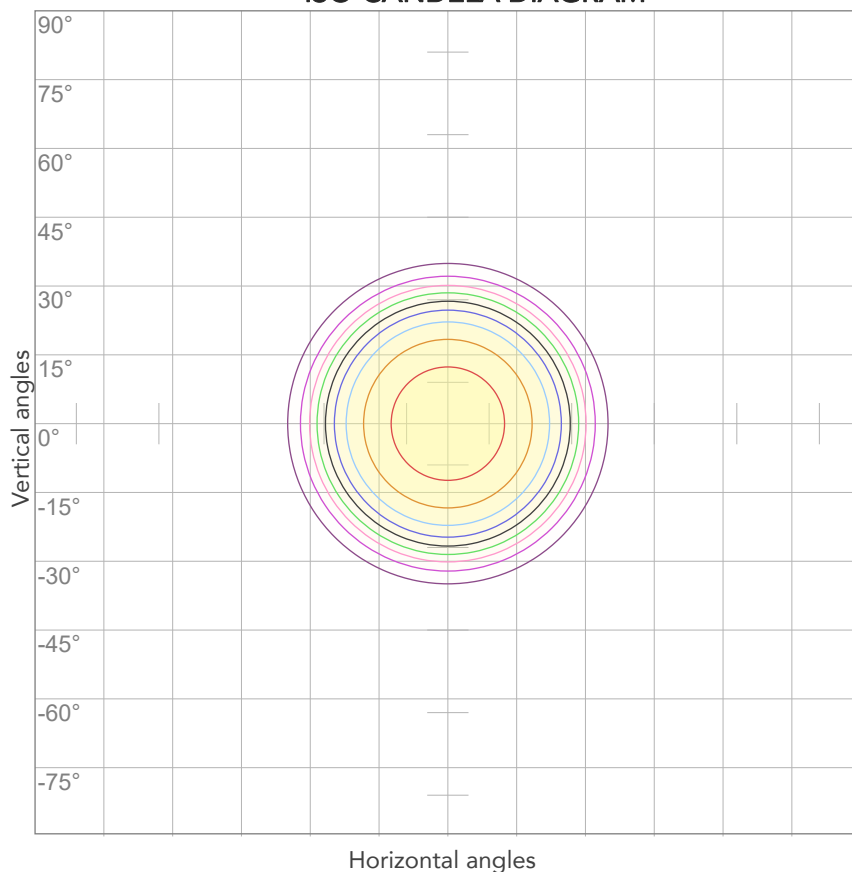


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,155A	32,6W	0,94	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



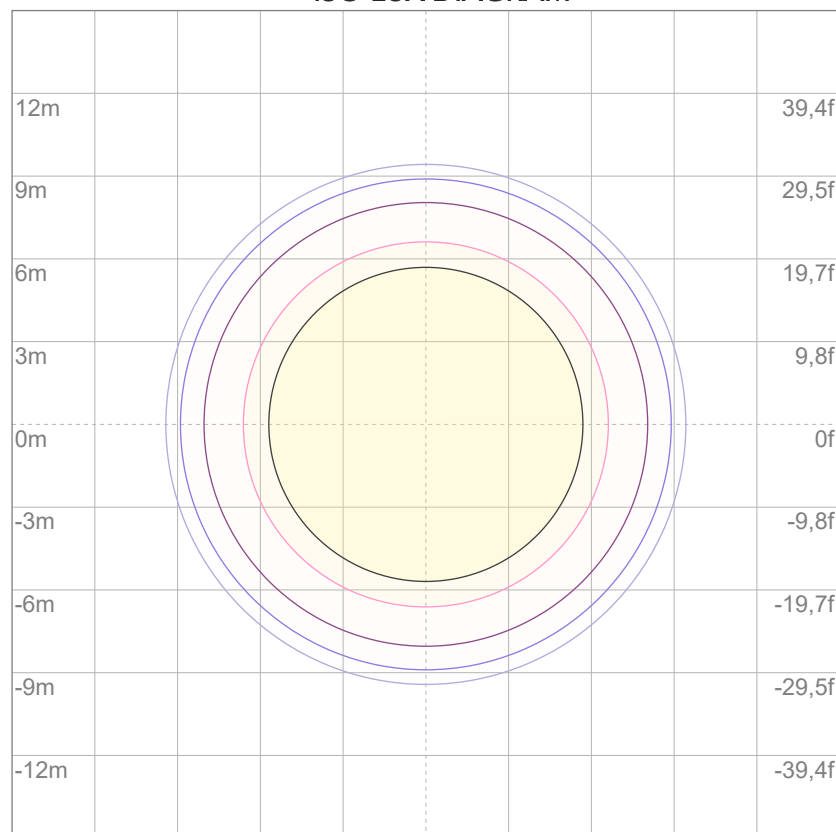
10%	57 cd
20%	113 cd
30%	170 cd
40%	226 cd
50%	283 cd
60%	339 cd
70%	396 cd
80%	453 cd

### Conditions:

Number of c-planes: 2

Candela at center: 566 cd

## ISO LUX DIAGRAM



3%	0,170 lx
5%	0,283 lx
10%	0,566 lx
30%	1,70 lx
50%	2,83 lx

### Conditions:

Number of c-planes: 2

Lux at center: 5,66 lx

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



Total lumen output:

357 lm

Peak candela output:

1433 cd

PRODUCT NAME:

ECLDISPLAYFC

MEASURAMENT CONDITIONS:

Beam angle:

Wash 25-50 Min Zoom

Target:

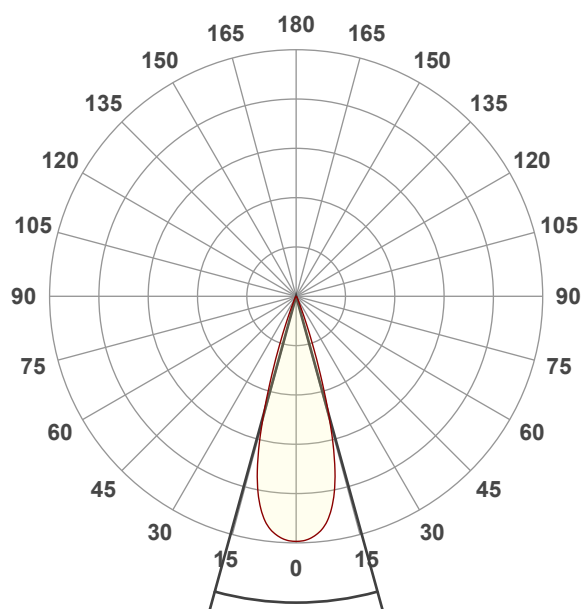
Full On

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:29:07

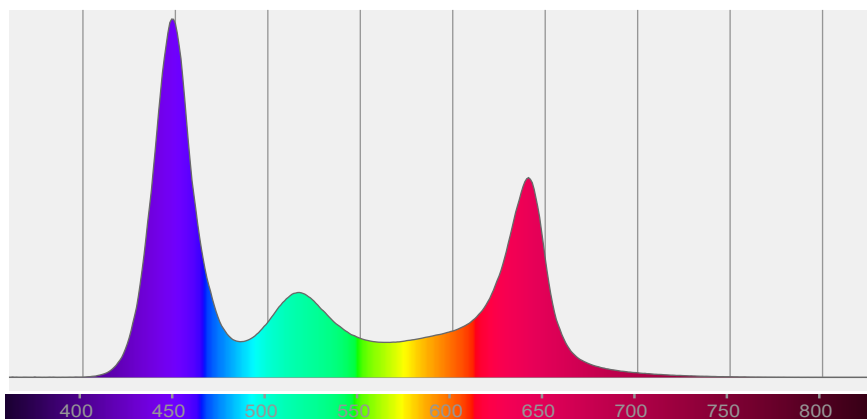


Beam angle 50%: 30,8°

Field angle 10%: 42°

Cut off angle 2.5%: 51,4°

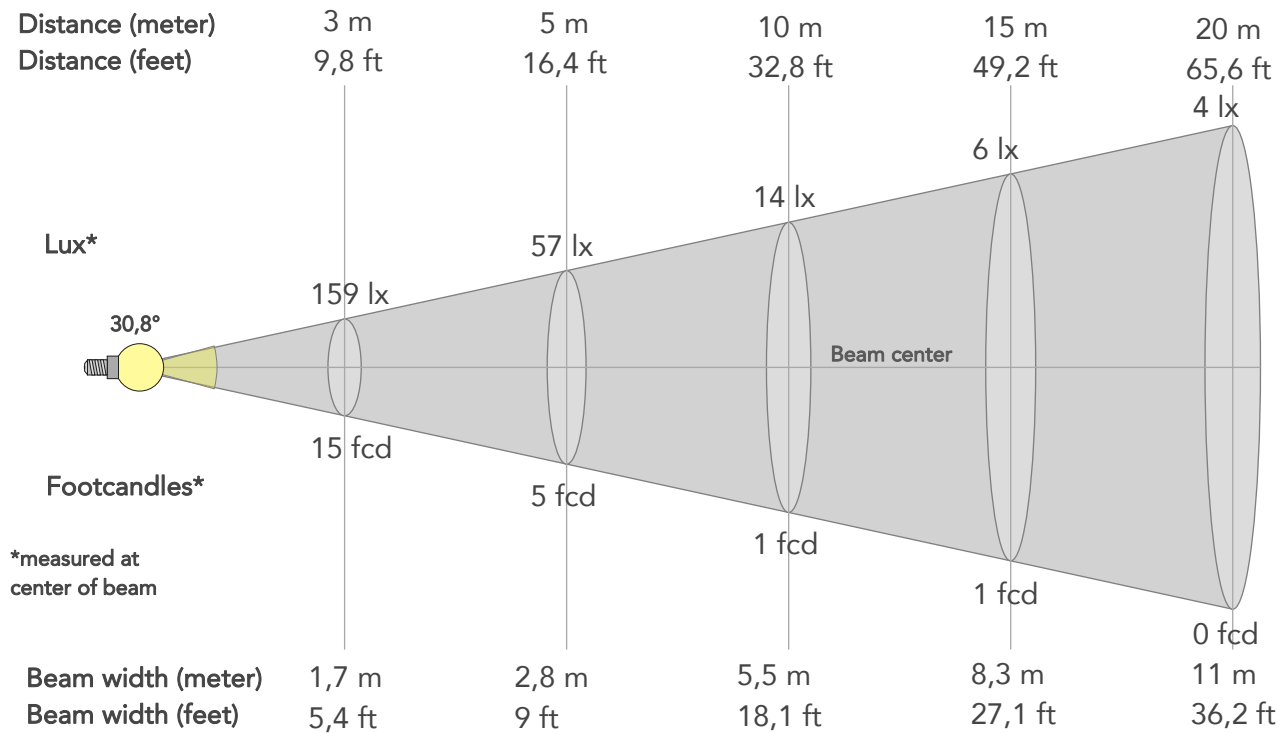
Spectra





# BEAM DETAILS

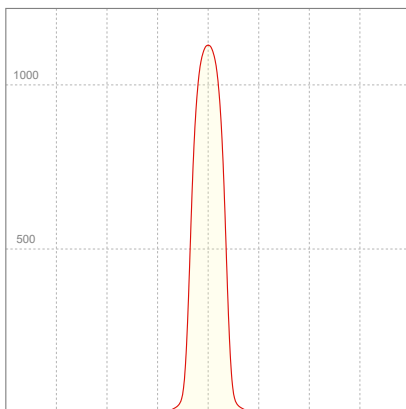
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,8°	42°	51,4°	99,9%	99,6%



## 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	1433lx	358lx	159lx	90lx	57lx	25lx	14lx	6lx	4lx	2lx	2lx	1lx	1lx
Footcand.	133fcd	33fcd	15fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11m	13,8m	16,5m	22m	27,6m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,6ft	18,1ft	27,1ft	36,2ft	45,2ft	54,2ft	72,3ft	90,4ft

## LINEAR DISTRIBUTION DIAGRAM

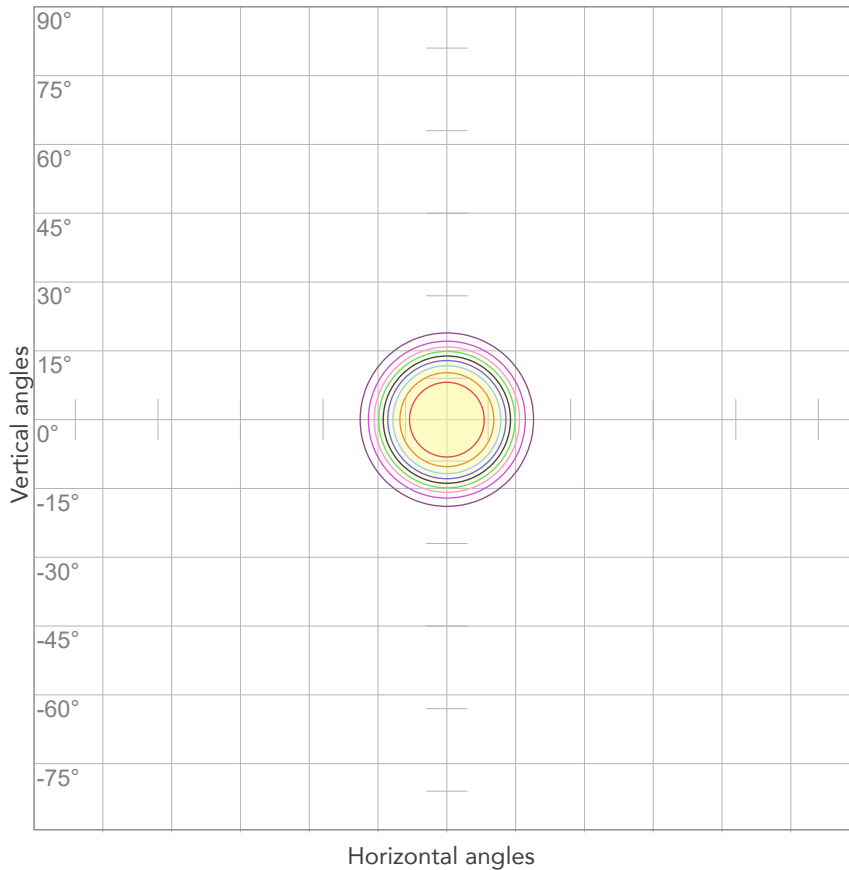


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,154A	32,6W	0,94	11lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



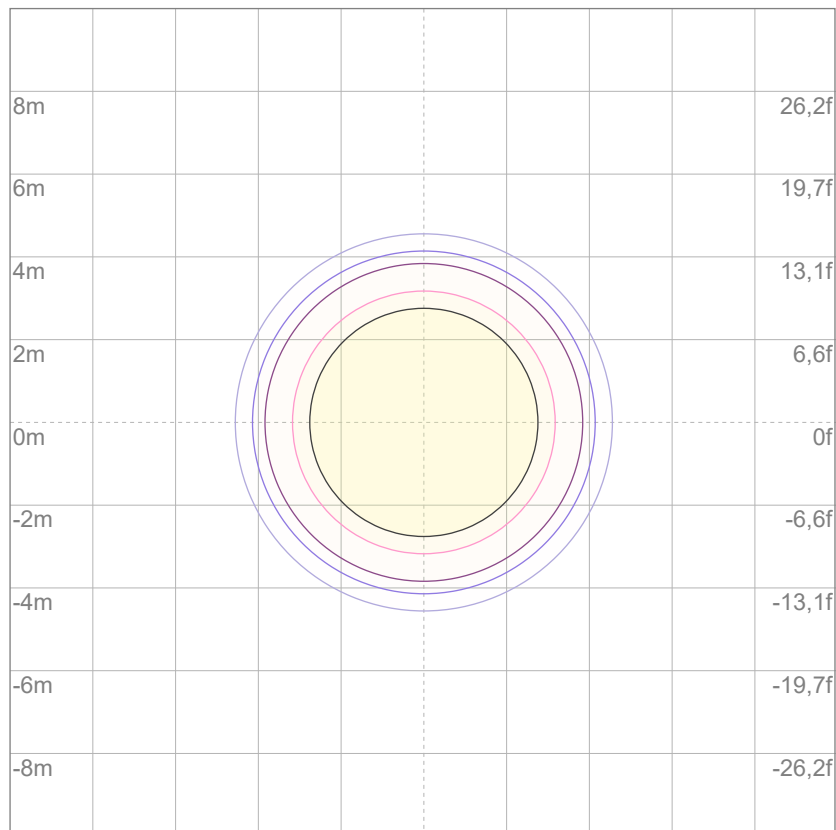
10%	143 cd
20%	287 cd
30%	430 cd
40%	573 cd
50%	716 cd
60%	860 cd
70%	1003 cd
80%	1146 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1433 cd

## ISO LUX DIAGRAM



3%	0,430 lx
5%	0,716 lx
10%	1,43 lx
30%	4,30 lx
50%	7,16 lx

### Conditions:

Number of c-planes: 2

Lux at center: 14,3 lx

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



Total lumen output:

127 lm

Peak candela output:

159 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

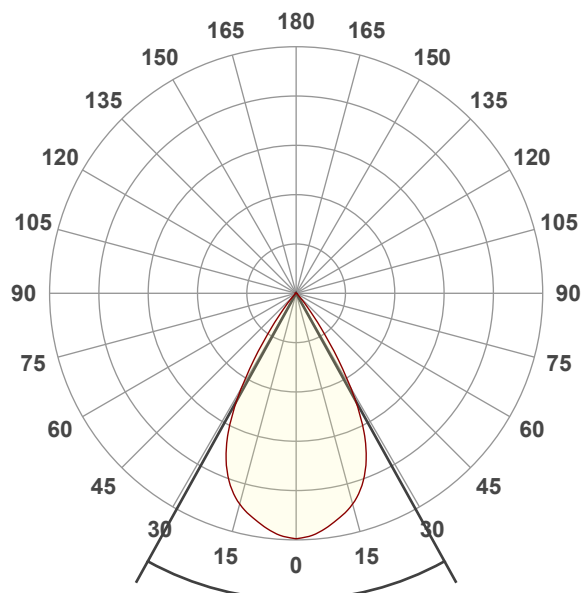
Red

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:05:14

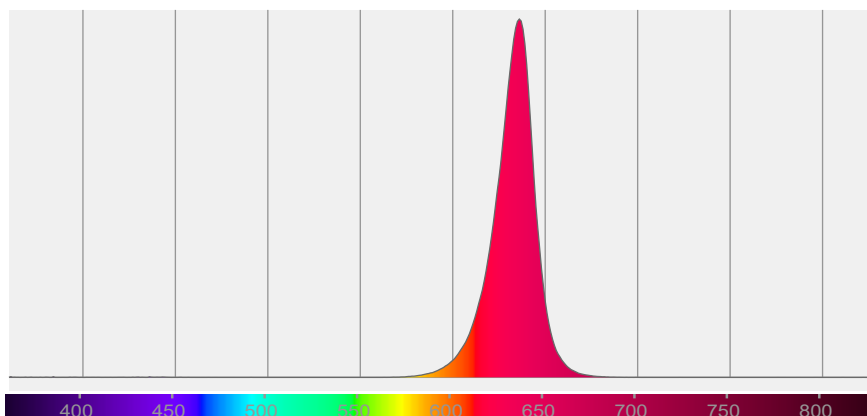


Beam angle 50%: 57,9°

Field angle 10%: 76,2°

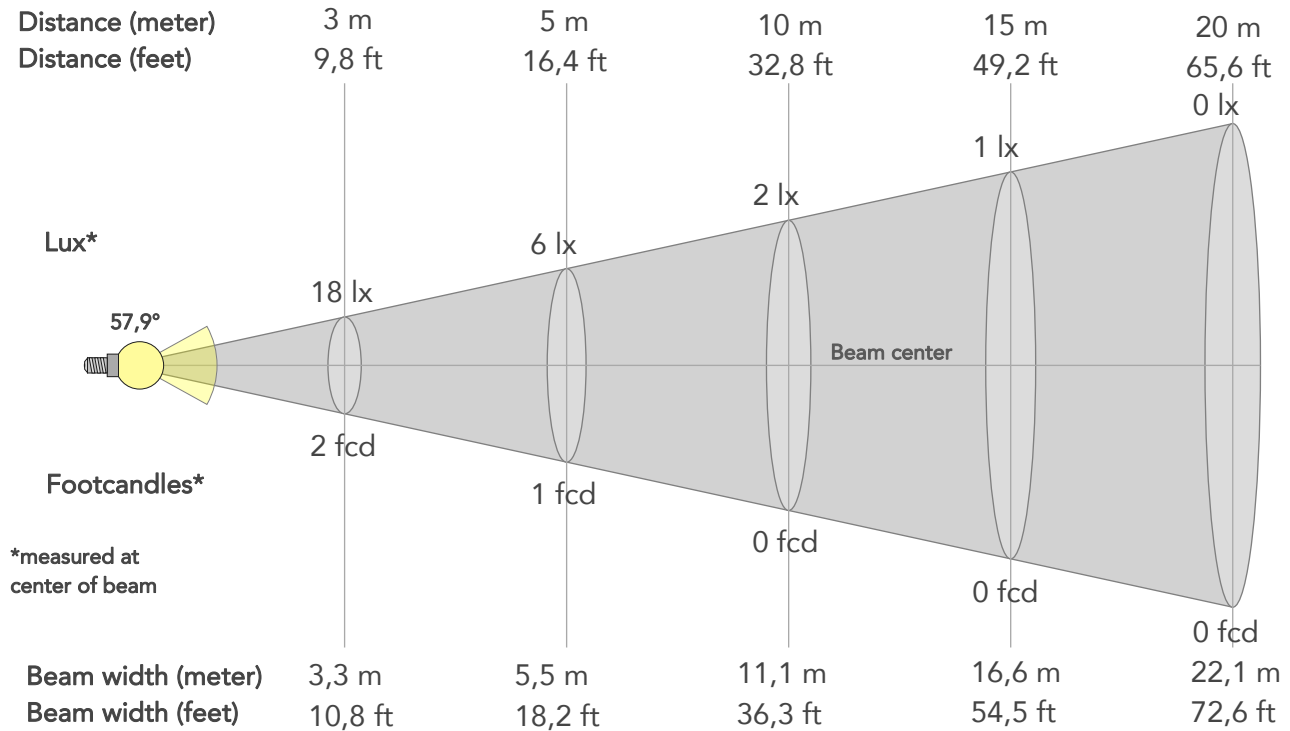
Cut off angle 2.5%: 87,8°

Spectra



# BEAM DETAILS

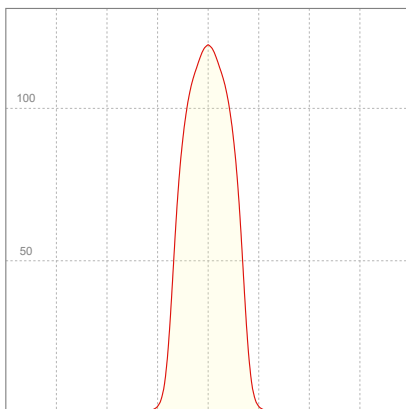
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
57,9°	76,2°	87,8°	99,6%	98,3%



## 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	159lx	40lx	18lx	10lx	6lx	3lx	2lx	1lx	0lx	0lx	0lx	0lx	0lx
Footcand.	15fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,2m	3,3m	4,4m	5,5m	8,3m	11,1m	16,6m	22,1m	27,7m	33,2m	44,3m	55,4m
Beam wid.	3,7ft	7,3ft	10,8ft	14,5ft	18,2ft	27,2ft	36,3ft	54,5ft	72,6ft	90,8ft	108,9ft	145,3ft	181,6ft

## LINEAR DISTRIBUTION DIAGRAM

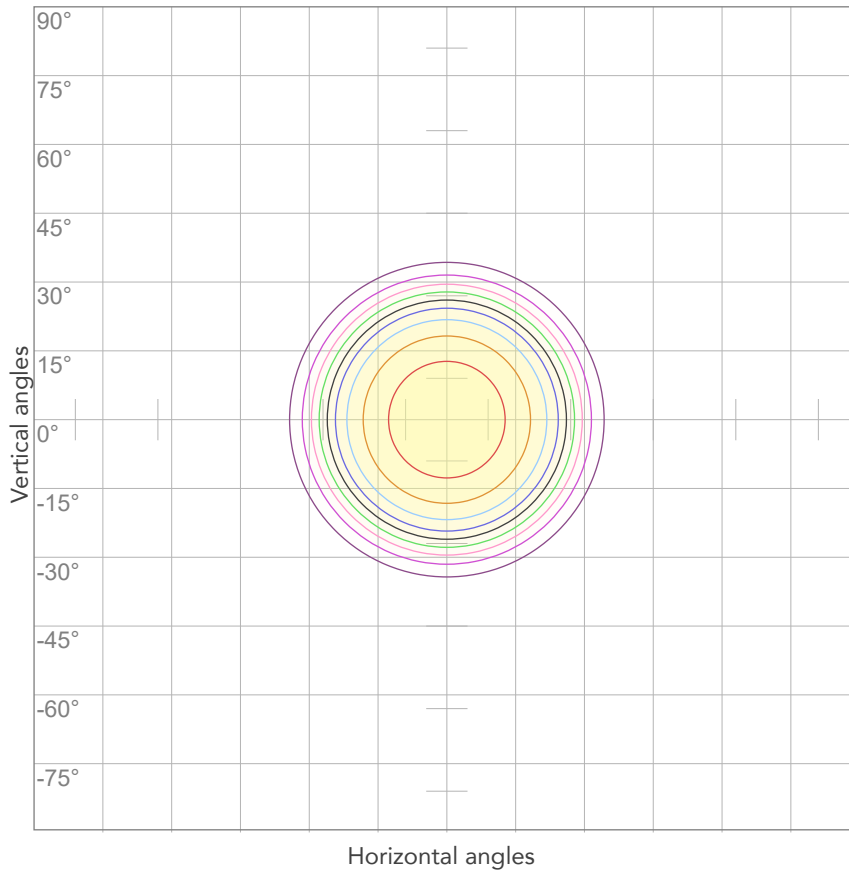


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
227V	0,069A	13,2W	0,85	10lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



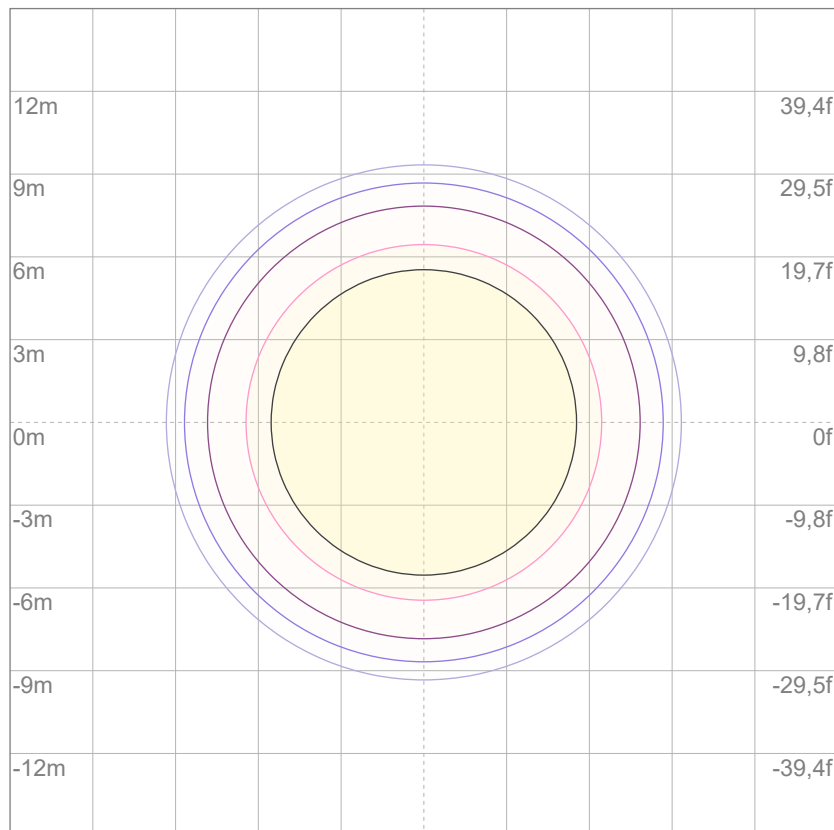
10%	16 cd
20%	32 cd
30%	48 cd
40%	64 cd
50%	80 cd
60%	95 cd
70%	111 cd
80%	127 cd

### Conditions:

Number of c-planes: 2

Candela at center: 159 cd

## ISO LUX DIAGRAM



3%	47,7m lx
5%	79,6m lx
10%	0,159 lx
30%	0,477 lx
50%	0,796 lx

### Conditions:

Number of c-planes: 2

Lux at center: 1,59 lx

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



Total lumen output:

96,8 lm

Peak candela output:

382 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Min Zoom

Target:

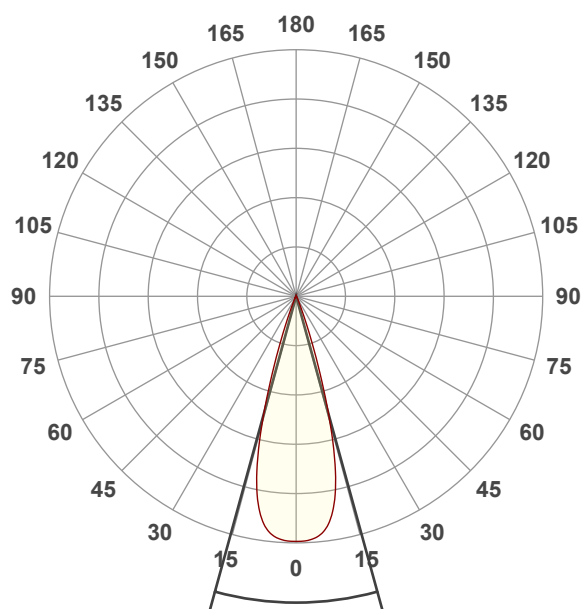
Red

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:14:41

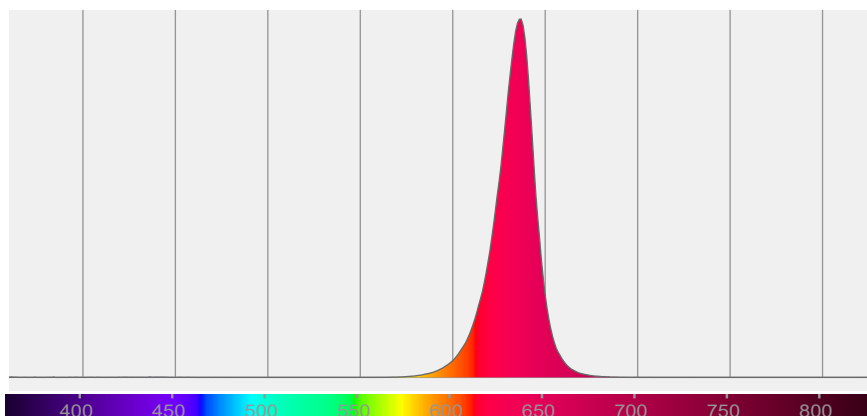


Beam angle 50%: 30,7°

Field angle 10%: 42°

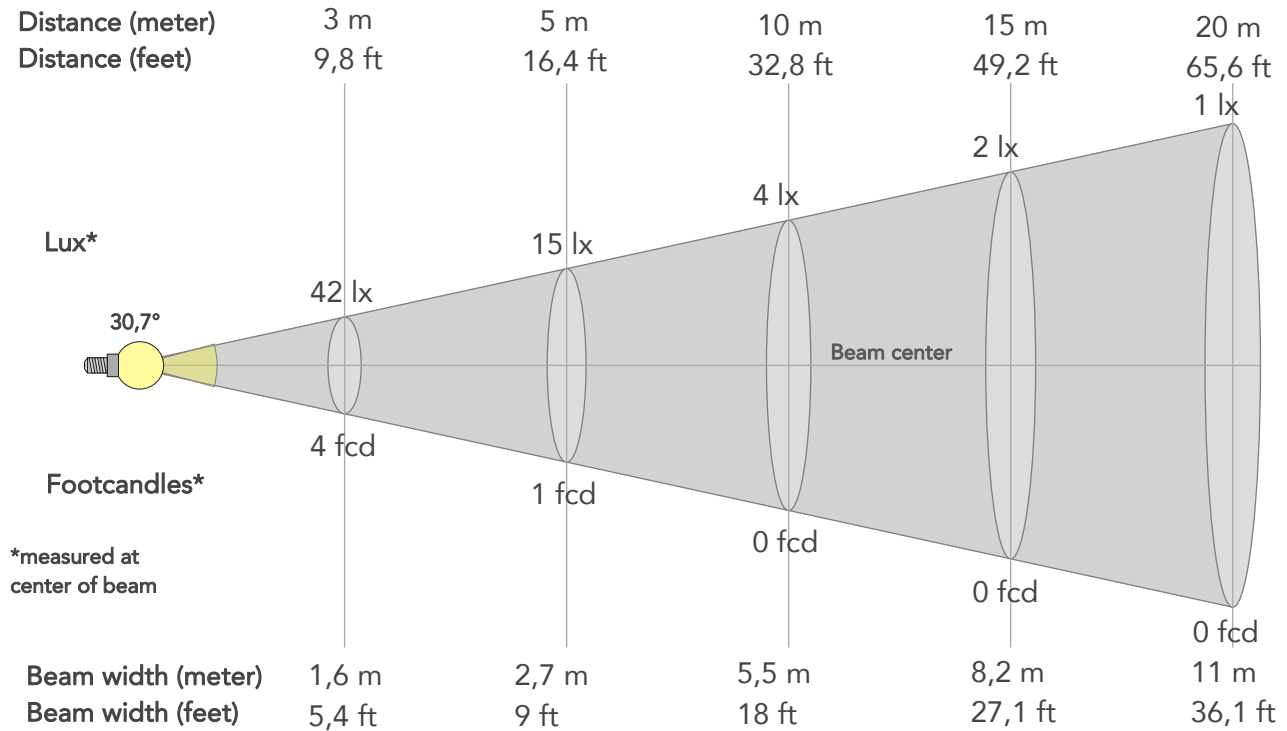
Cut off angle 2.5%: 51,7°

**Spectra**



# BEAM DETAILS

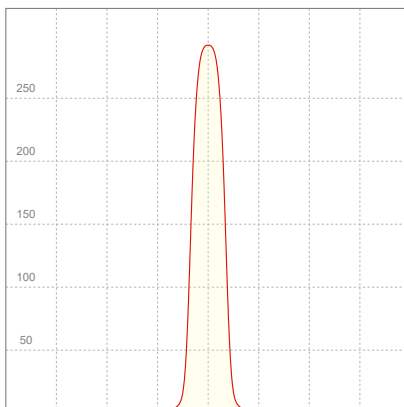
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,7°	42°	51,7°	99,7%	99,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	382lx	95lx	42lx	24lx	15lx	7lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx
Footcand.	35fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,2m	2,7m	4,1m	5,5m	8,2m	11m	13,7m	16,5m	22m	27,5m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,5ft	18ft	27,1ft	36,1ft	45,1ft	54,1ft	72,1ft	90,2ft

## LINEAR DISTRIBUTION DIAGRAM

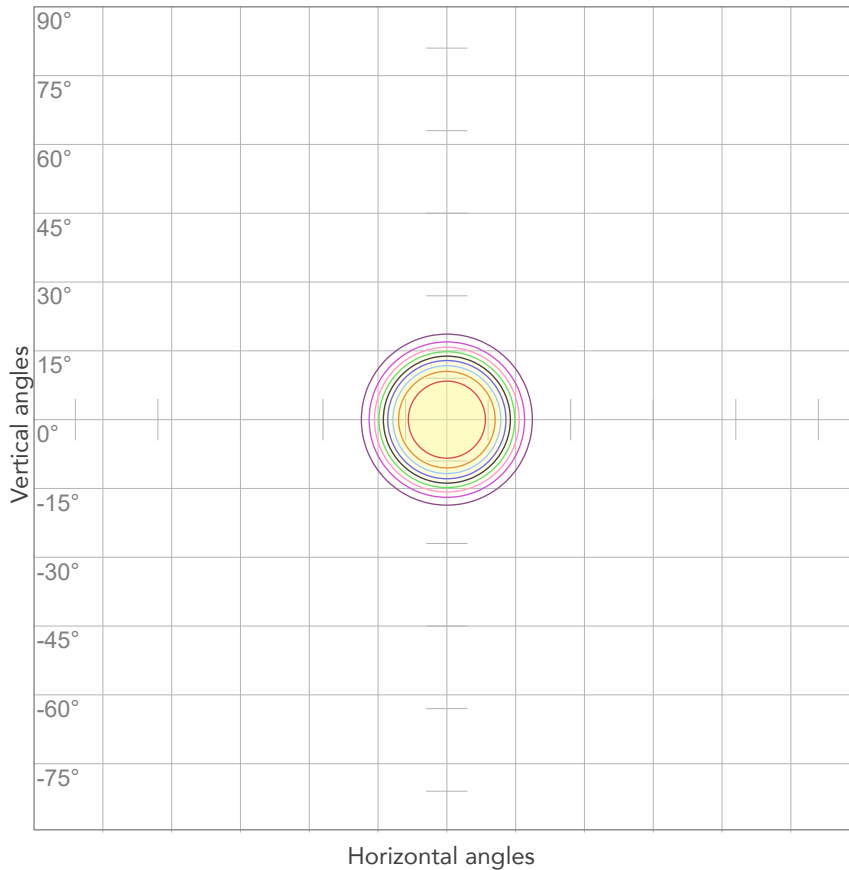


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,070A	13,3W	0,85	7lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



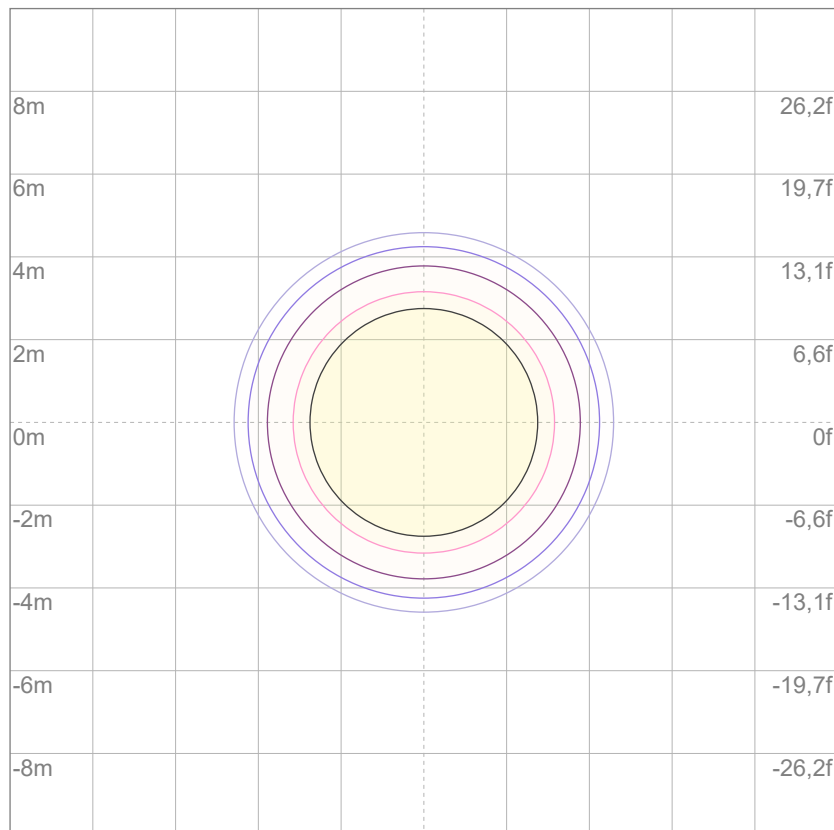
10%	38 cd
20%	76 cd
30%	115 cd
40%	153 cd
50%	191 cd
60%	229 cd
70%	267 cd
80%	305 cd

### Conditions:

Number of c-planes: 2

Candela at center: 382 cd

## ISO LUX DIAGRAM



3%	0,115 lx
5%	0,191 lx
10%	0,382 lx
30%	1,15 lx
50%	1,91 lx

### Conditions:

Number of c-planes: 2

Lux at center: 3,82 lx

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





Total lumen output:

258 lm

Peak candela output:

311 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

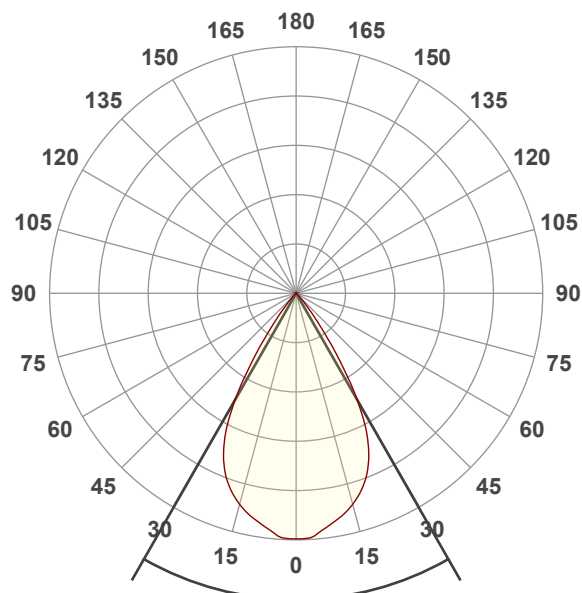
Green

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:07:04

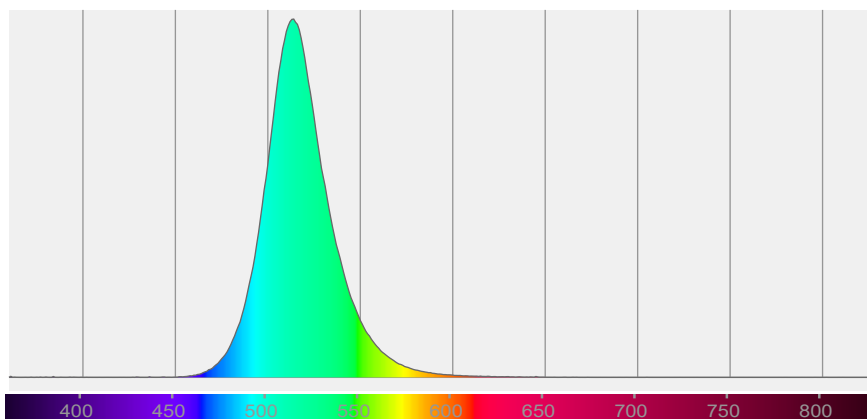


Beam angle 50%: 59,6°

Field angle 10%: 77,2°

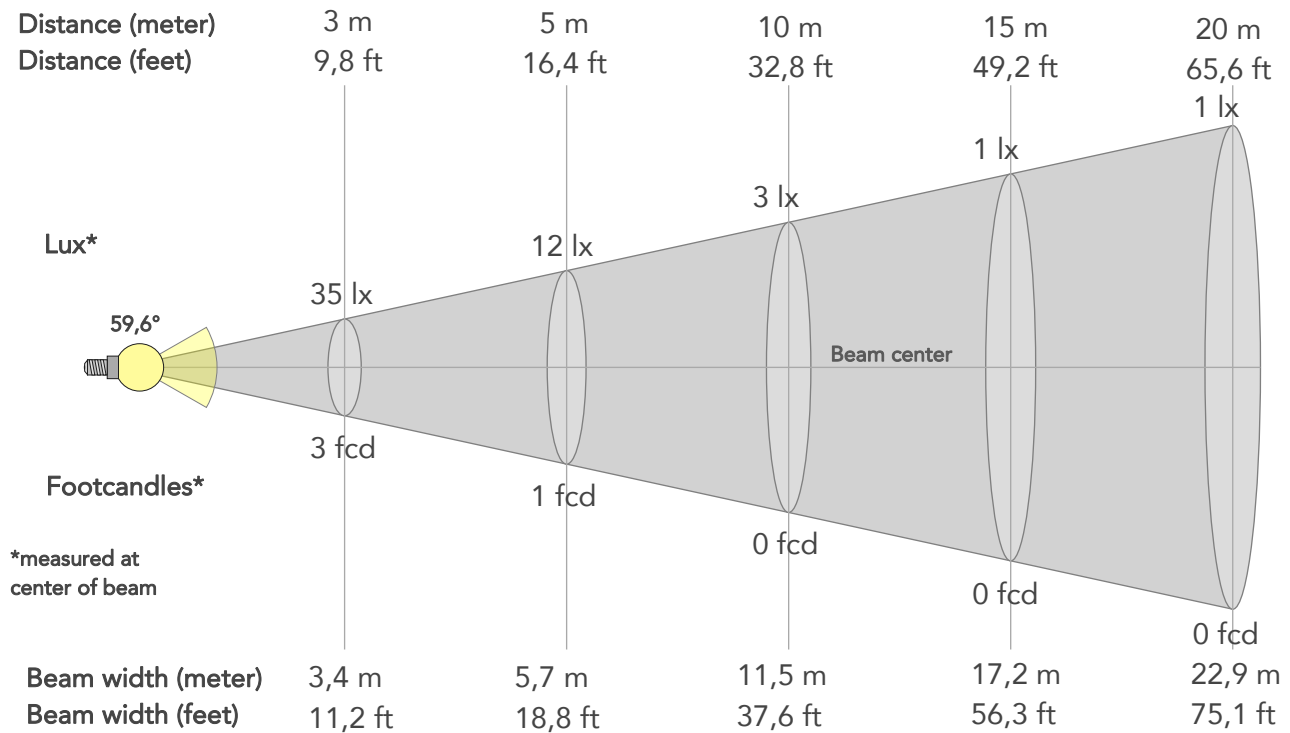
Cut off angle 2.5%: 88,7°

Spectra



# BEAM DETAILS

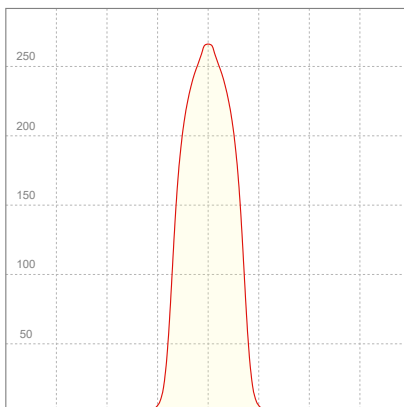
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,6°	77,2°	88,7°	99,7%	98,4%



## 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	311lx	78lx	35lx	19lx	12lx	6lx	3lx	1lx	1lx	0lx	0lx	0lx	0lx
Footcand.	29fcd	7fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,6m	5,7m	8,6m	11,5m	17,2m	22,9m	28,6m	34,4m	45,8m	57,3m
Beam wid.	3,8ft	7,6ft	11,2ft	15ft	18,8ft	28,2ft	37,6ft	56,3ft	75,1ft	93,9ft	112,7ft	150,2ft	187,8ft

## LINEAR DISTRIBUTION DIAGRAM

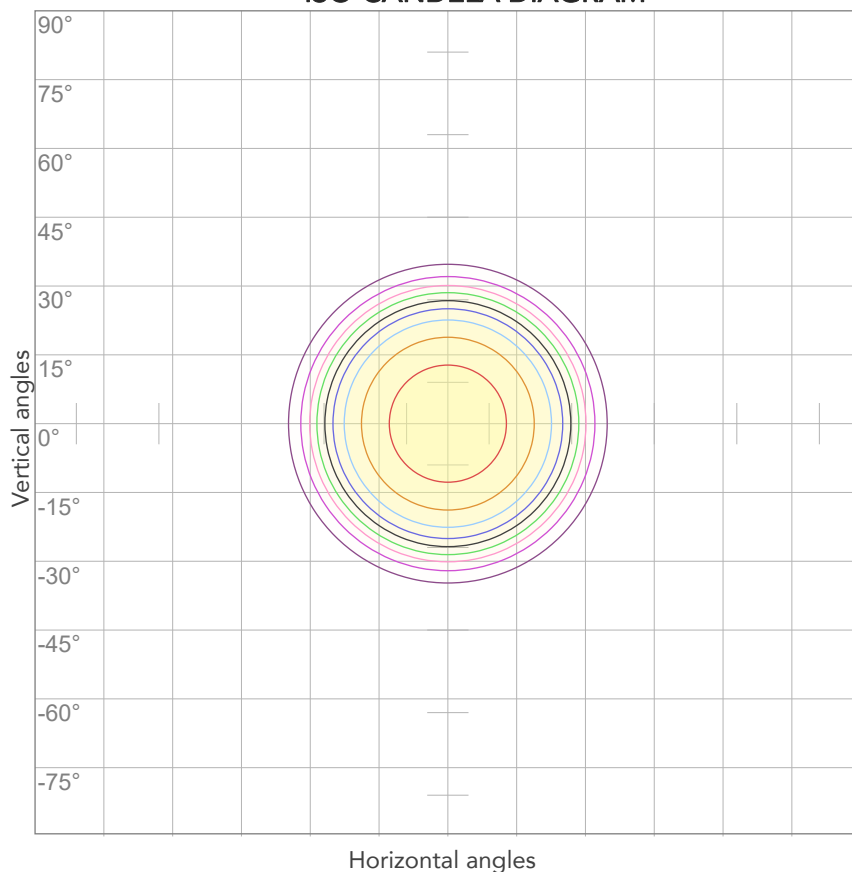


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,093A	18,4W	0,89	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



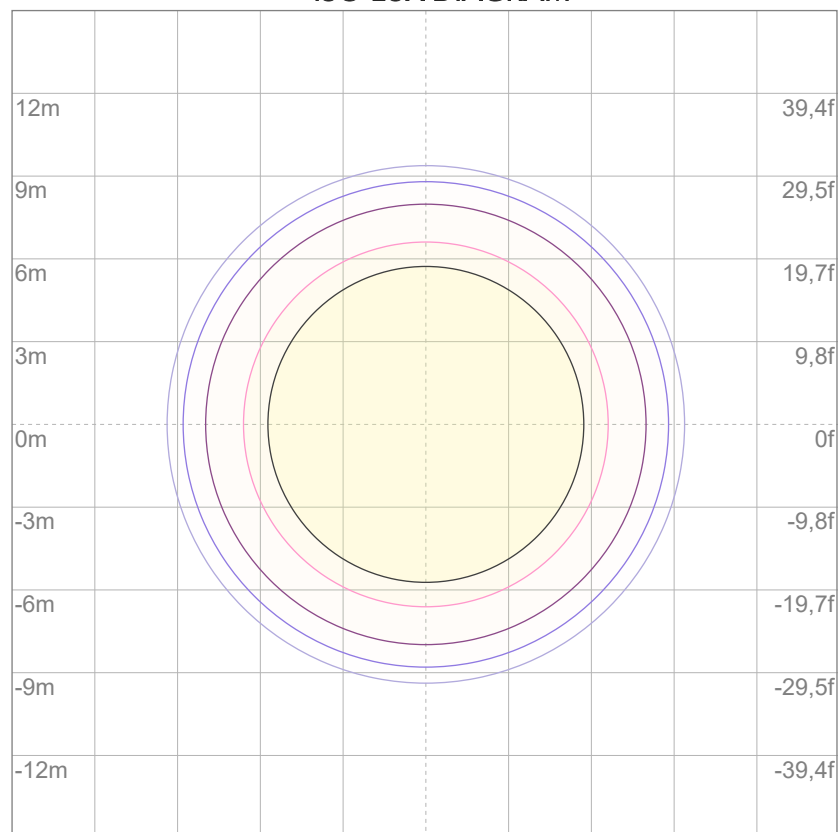
10%	31 cd
20%	62 cd
30%	93 cd
40%	124 cd
50%	155 cd
60%	186 cd
70%	217 cd
80%	248 cd

### Conditions:

Number of c-planes: 2

Candela at center: 311 cd

## ISO LUX DIAGRAM



3%	93,2m lx
5%	0,155 lx
10%	0,311 lx
30%	0,932 lx
50%	1,55 lx

### Conditions:

Number of c-planes: 2

Lux at center: 3,11 lx

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



Total lumen output:

195 lm

Peak candela output:

780 cd

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Min Zoom

Target:

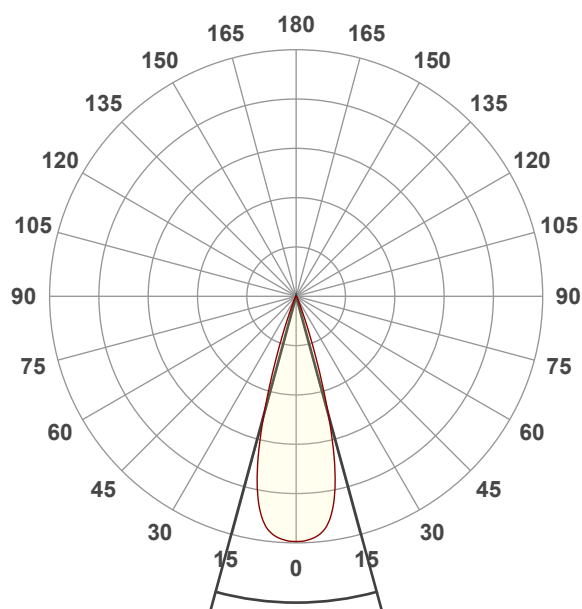
Green

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:17:24

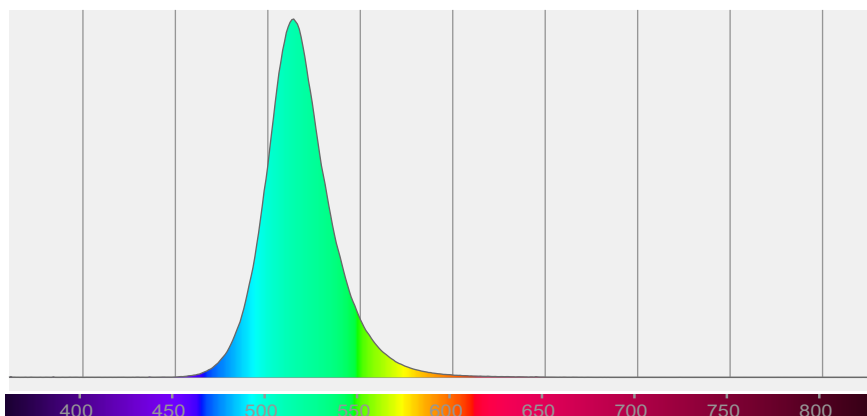


Beam angle 50%: 30,5°

Field angle 10%: 41,6°

Cut off angle 2.5%: 51,7°

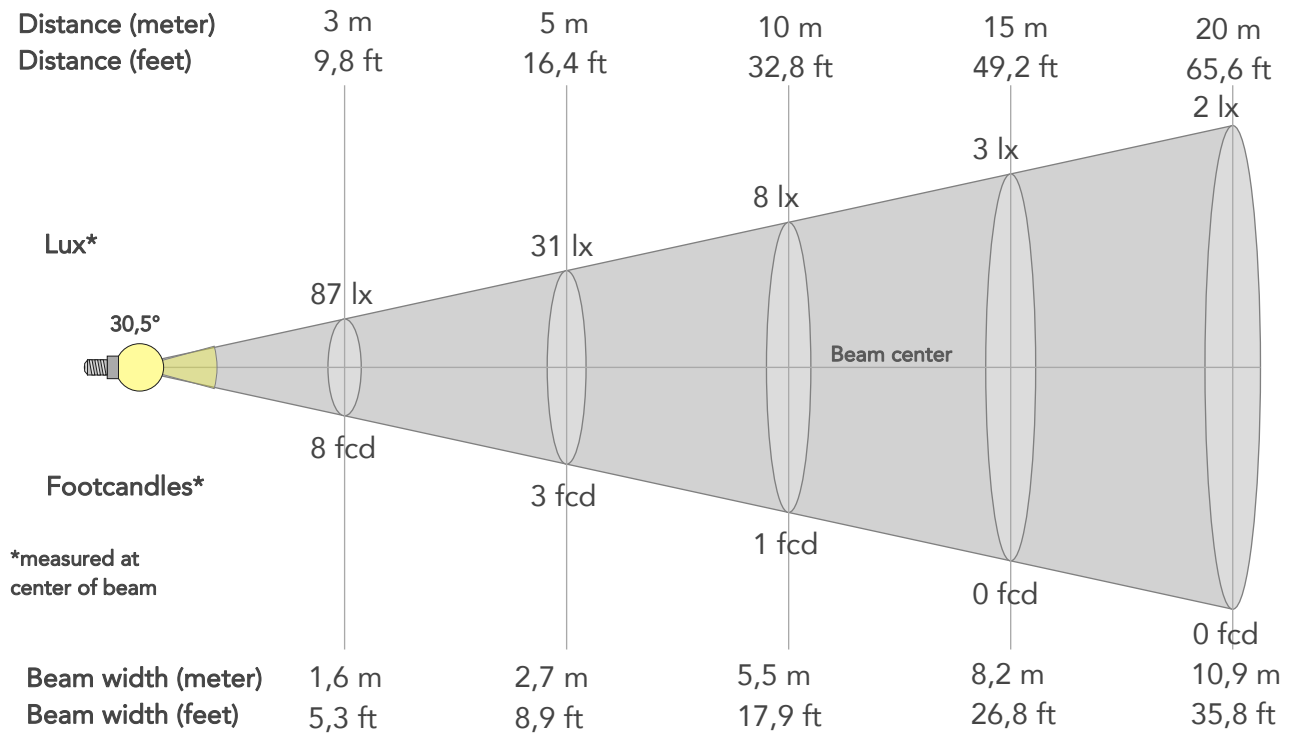
Spectra



# BEAM DETAILS



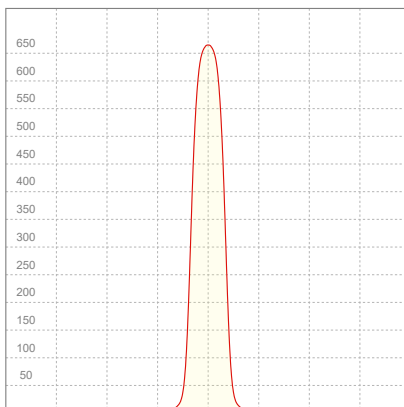
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,5°	41,6°	51,7°	99,6%	99,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	780lx	195lx	87lx	49lx	31lx	14lx	8lx	3lx	2lx	1lx	1lx	0lx	0lx
Footcand.	72fcd	18fcd	8fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,2m	2,7m	4,1m	5,5m	8,2m	10,9m	13,6m	16,4m	21,8m	27,3m
Beam wid.	1,8ft	3,6ft	5,3ft	7,1ft	8,9ft	13,4ft	17,9ft	26,8ft	35,8ft	44,7ft	53,6ft	71,5ft	89,4ft

## LINEAR DISTRIBUTION DIAGRAM

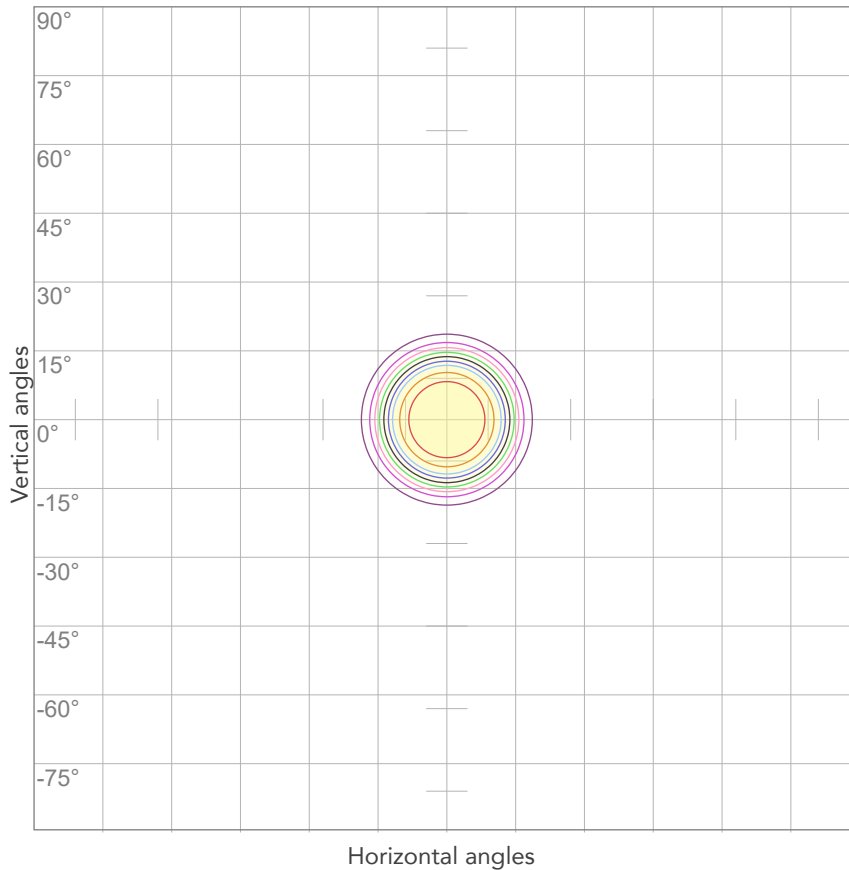


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
223V	0,093A	18,5W	0,89	11lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



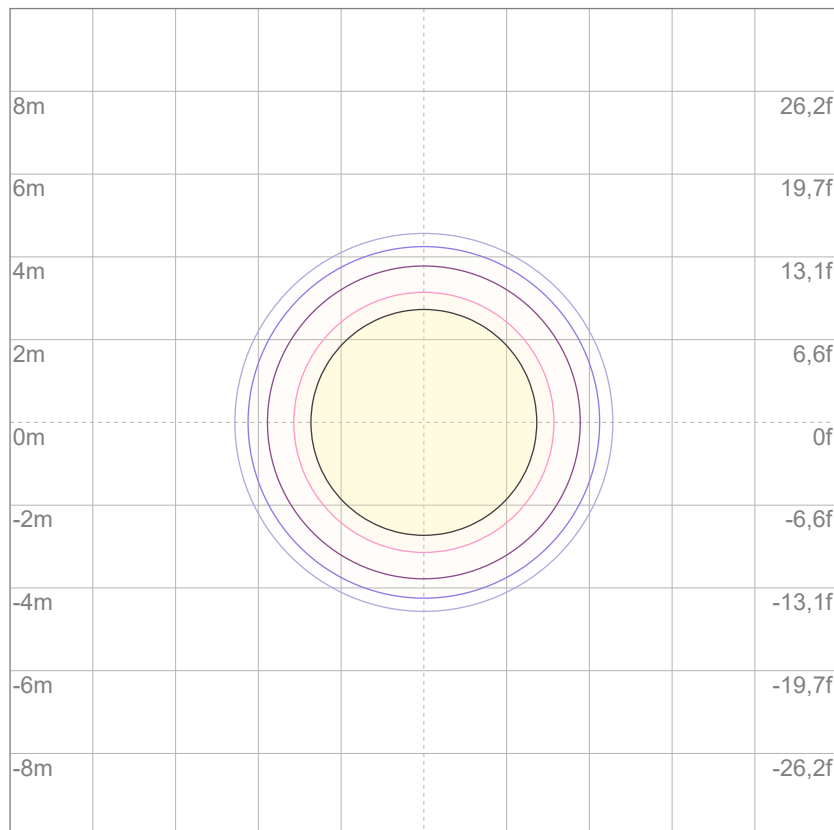
10%	78 cd
20%	156 cd
30%	234 cd
40%	312 cd
50%	390 cd
60%	468 cd
70%	546 cd
80%	624 cd

### Conditions:

Number of c-planes: 2

Candela at center: 780 cd

## ISO LUX DIAGRAM



3%	0,234 lx
5%	0,390 lx
10%	0,780 lx
30%	2,34 lx
50%	3,90 lx

### Conditions:

Number of c-planes: 2

Lux at center: 7,80 lx

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



Total lumen output:

62,4 lm

Peak candela output:

74,7 cd

PRODUCT NAME:

ECLDISPLAYFC

MEASURAMENT CONDITIONS:

Beam angle:

Wash 25-50 Max Zoom

Target:

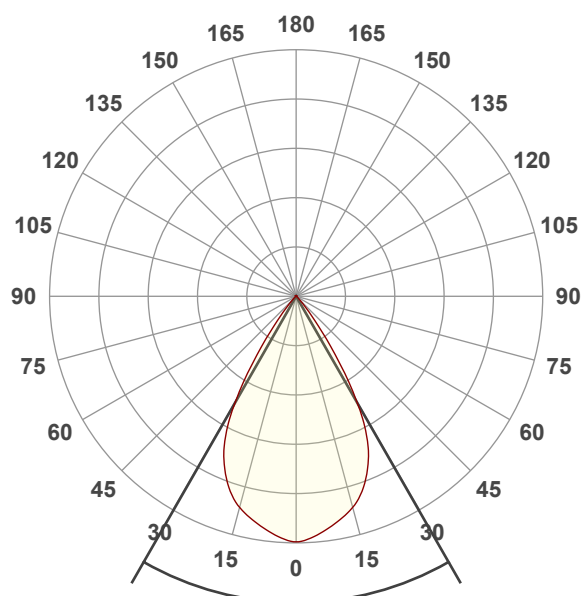
Blue

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:08:38

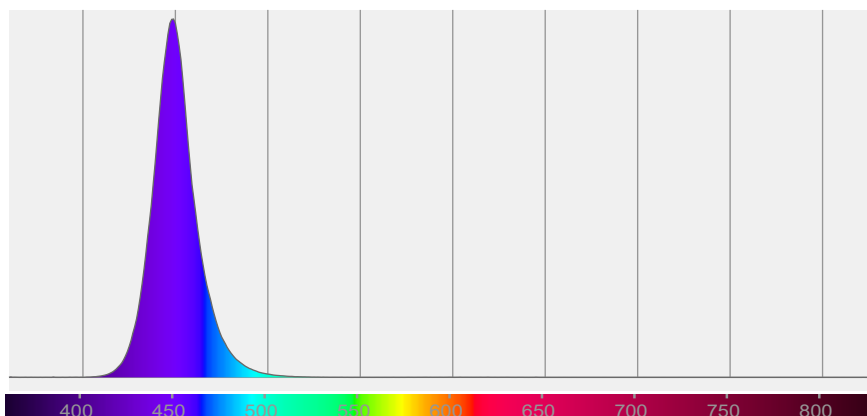


Beam angle 50%: 59,7°

Field angle 10%: 77,5°

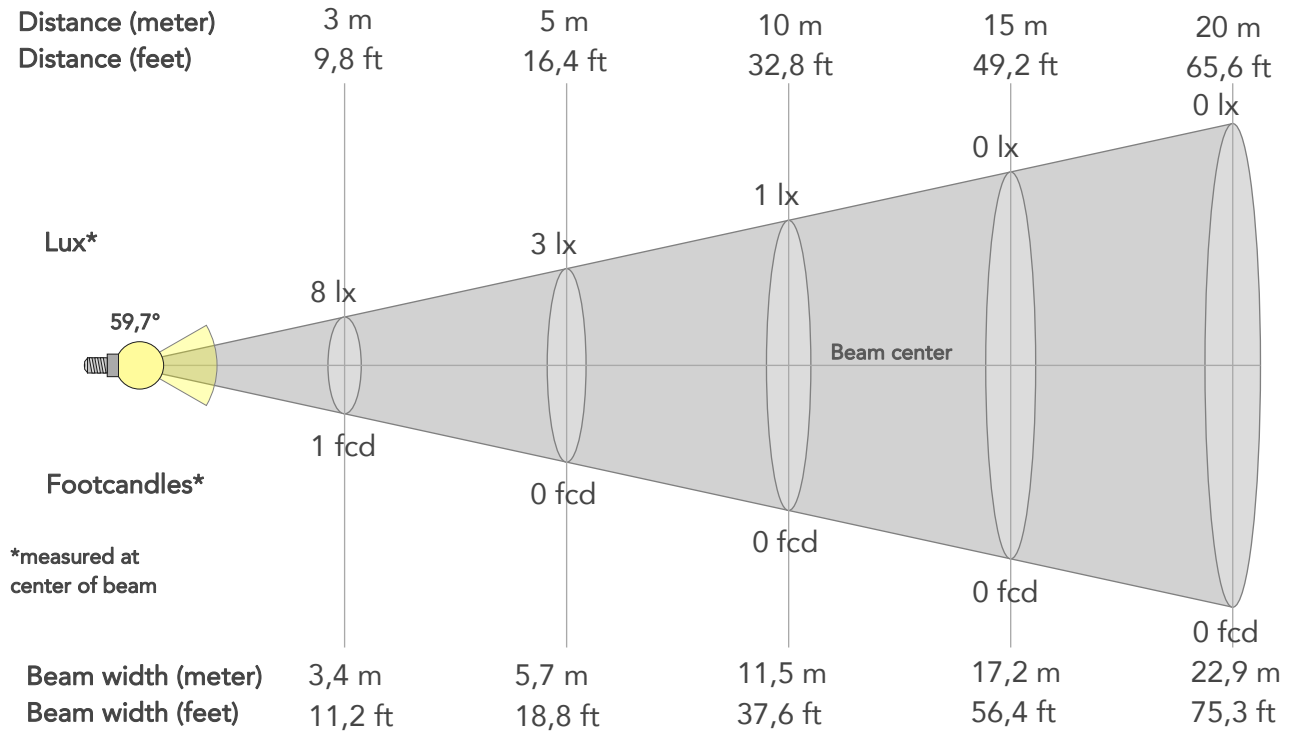
Cut off angle 2.5%: 89,2°

Spectra



# BEAM DETAILS

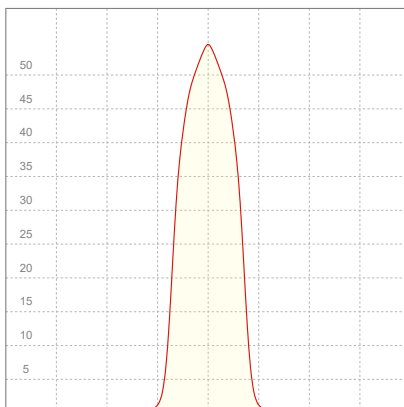
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,7°	77,5°	89,2°	99,5%	98,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	75lx	19lx	8lx	5lx	3lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx
Footcand.	7fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,6m	5,7m	8,6m	11,5m	17,2m	22,9m	28,7m	34,4m	45,9m	57,4m
Beam wid.	3,8ft	7,6ft	11,2ft	15ft	18,8ft	28,2ft	37,6ft	56,4ft	75,3ft	94,1ft	112,9ft	150,5ft	188,2ft

## LINEAR DISTRIBUTION DIAGRAM



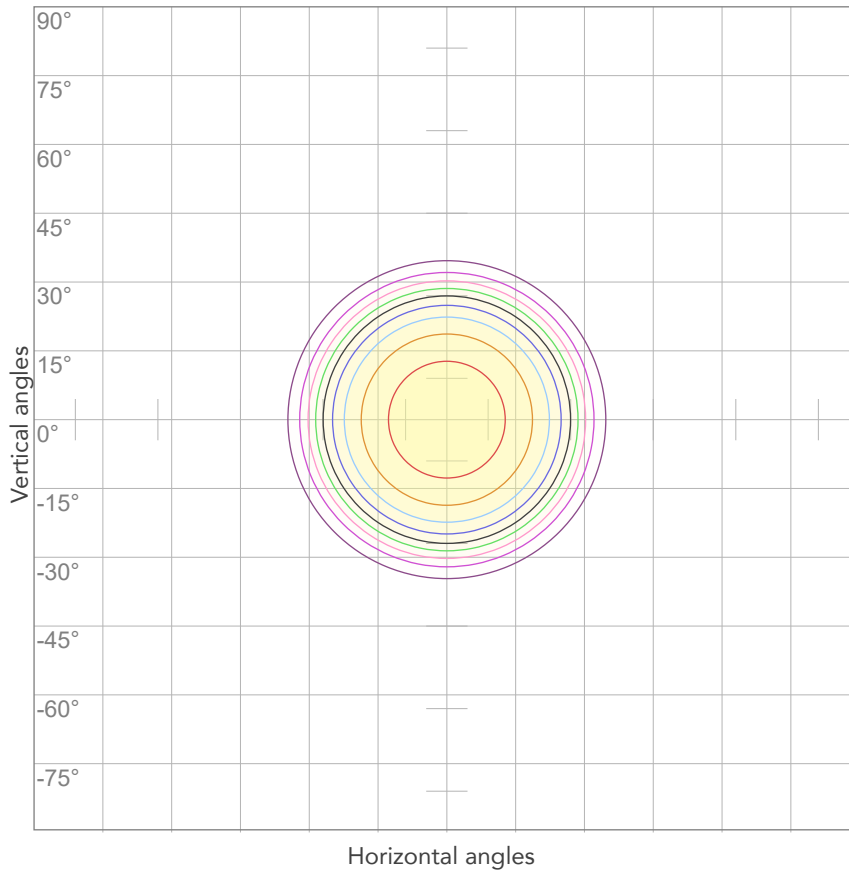
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
224V	0,085A	16,6W	0,88	4lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



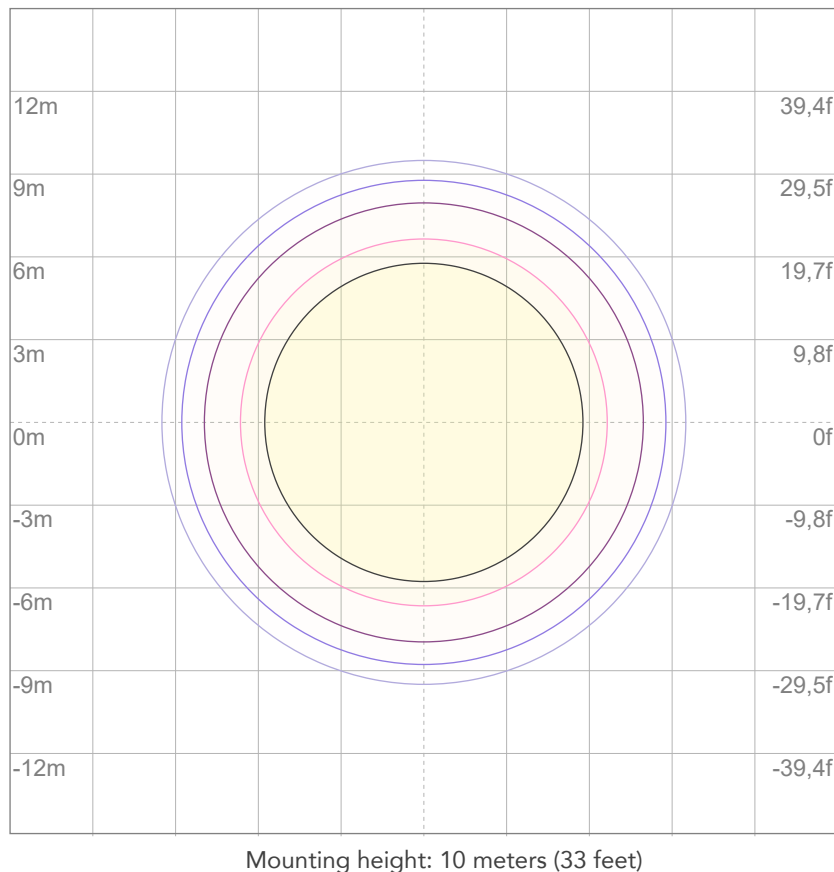
10%	7 cd
20%	15 cd
30%	22 cd
40%	30 cd
50%	37 cd
60%	45 cd
70%	52 cd
80%	60 cd

### Conditions:

Number of c-planes: 2

Candela at center: 75 cd

## ISO LUX DIAGRAM



3%	22,4m lx
5%	37,4m lx
10%	74,7m lx
30%	0,224 lx
50%	0,374 lx

### Conditions:

Number of c-planes: 2

Lux at center: 0,747 lx

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



Total lumen output:

47,2 lm

Peak candela output:

195 cd

PRODUCT NAME:

ECLDISPLAYFC

MEASURAMENT CONDITIONS:

Beam angle:

Wash 25-50 Min Zoom

Target:

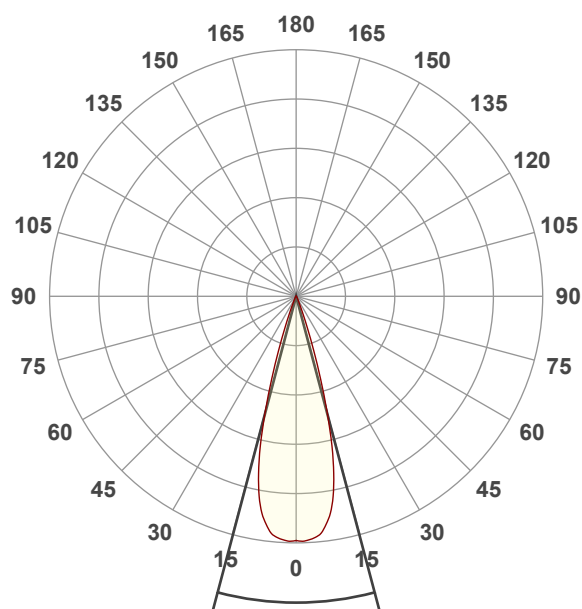
Blue

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:19:48

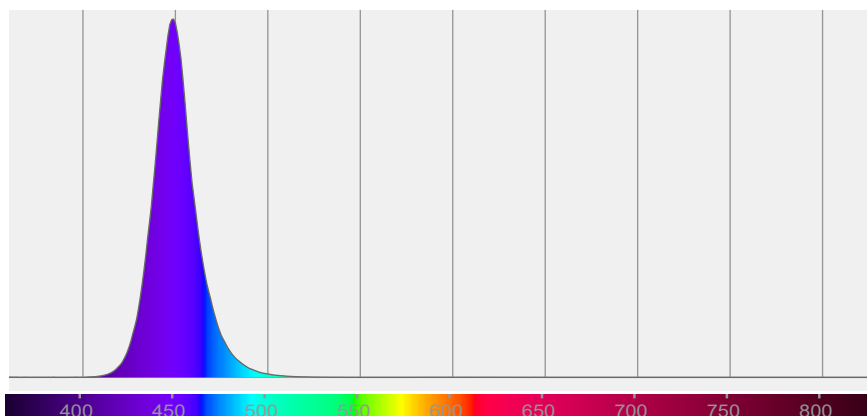


Beam angle 50%: 29,7°

Field angle 10%: 41,1°

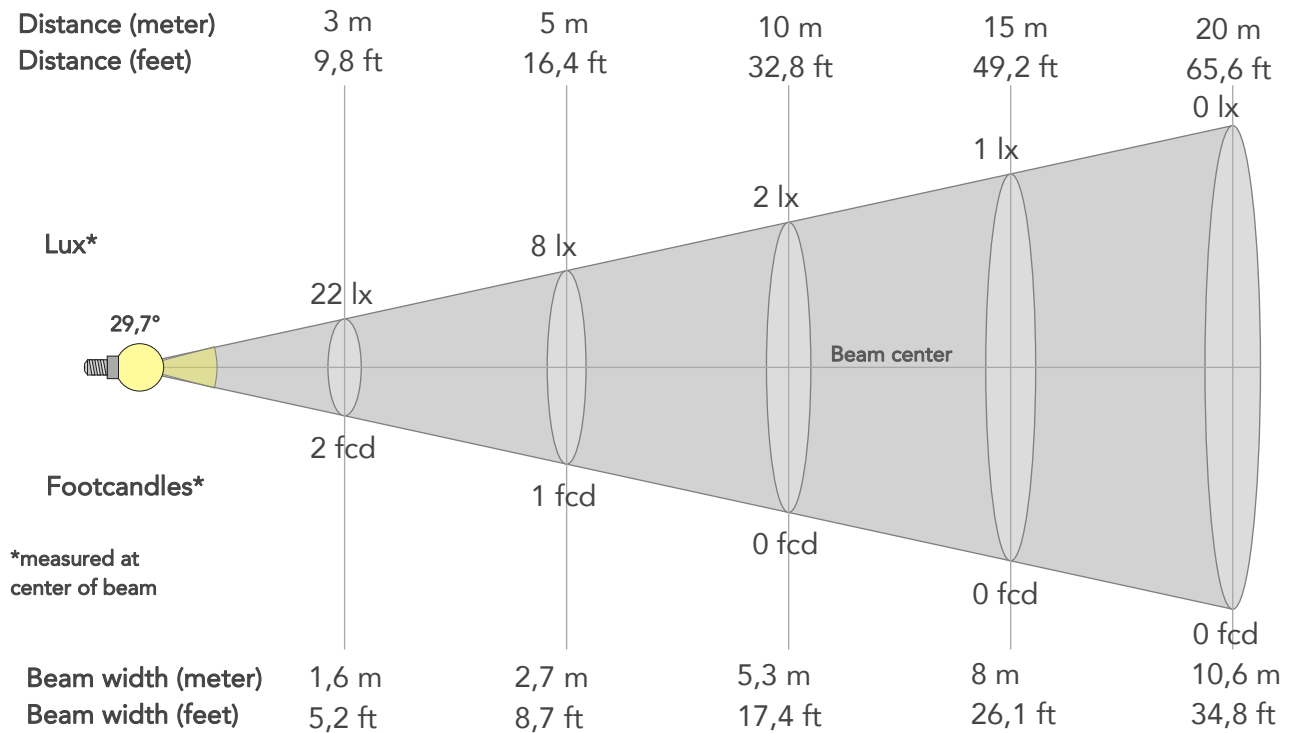
Cut off angle 2.5%: 50,7°

Spectra



# BEAM DETAILS

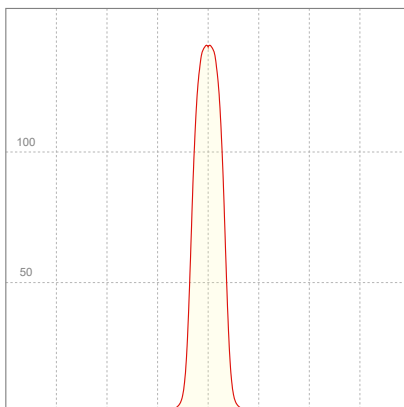
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,7°	41,1°	50,7°	98,7%	98,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	194lx	49lx	22lx	12lx	8lx	3lx	2lx	1lx	0lx	0lx	0lx	0lx	0lx
Footcand.	18fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,1m	2,7m	4m	5,3m	8m	10,6m	13,3m	15,9m	21,2m	26,5m
Beam wid.	1,7ft	3,5ft	5,2ft	6,9ft	8,7ft	13ft	17,4ft	26,1ft	34,8ft	43,5ft	52,2ft	69,6ft	87ft

## LINEAR DISTRIBUTION DIAGRAM

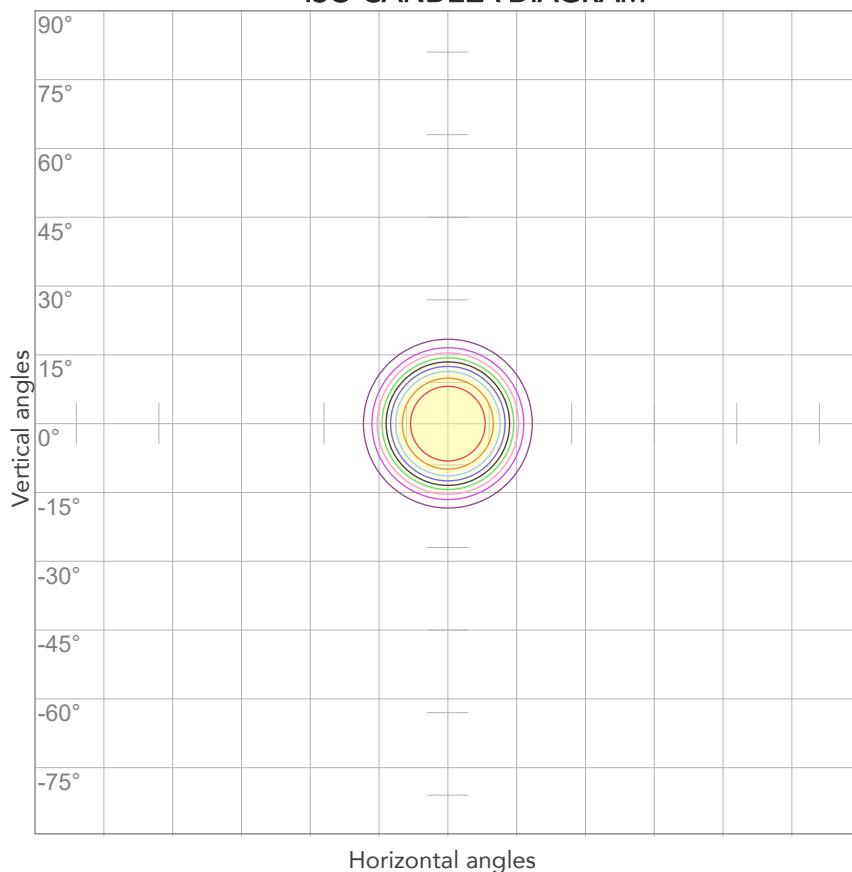


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,084A	16,5W	0,88	3lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



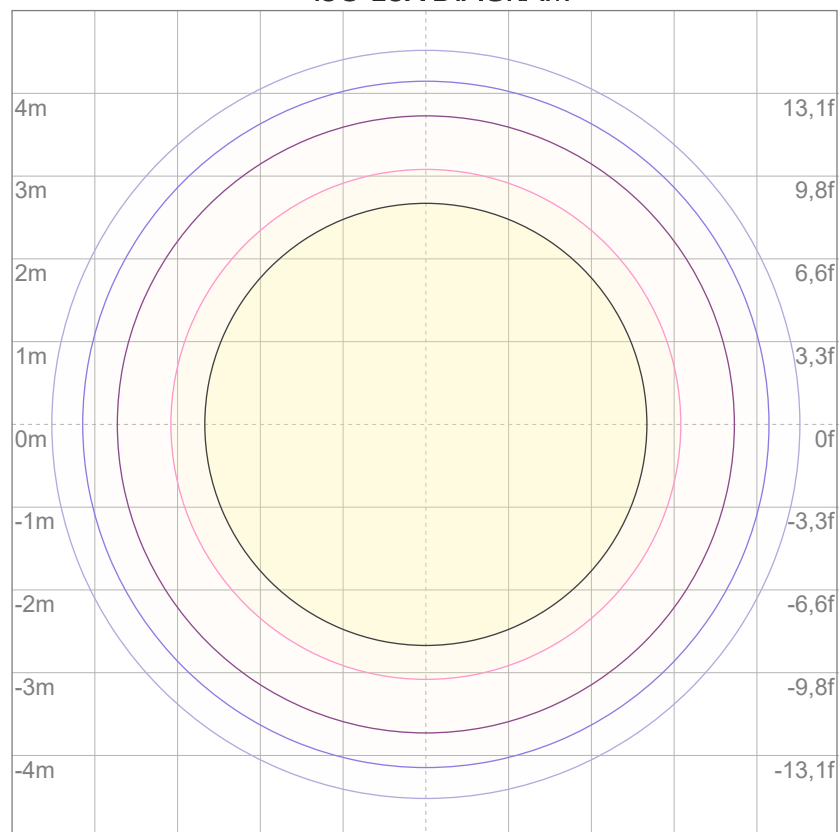
10%	19 cd
20%	39 cd
30%	58 cd
40%	78 cd
50%	97 cd
60%	117 cd
70%	136 cd
80%	155 cd

### Conditions:

Number of c-planes: 2

Candela at center: 194 cd

## ISO LUX DIAGRAM



3%	58,3m lx
5%	97,1m lx
10%	0,194 lx
30%	0,583 lx
50%	0,971 lx

### Conditions:

Number of c-planes: 2

Lux at center: 1,94 lx

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



Total lumen output:

317 lm

Peak candela output:

388 cd

Light quality:

CRI: 78,9

Color temperature:

3188 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

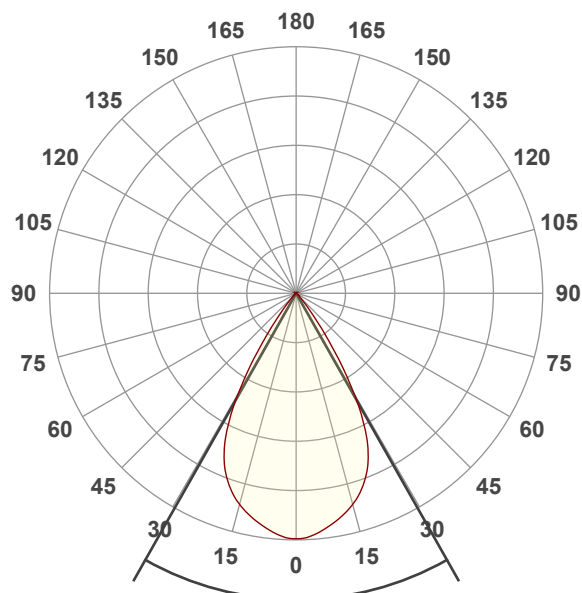
White

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:10:55

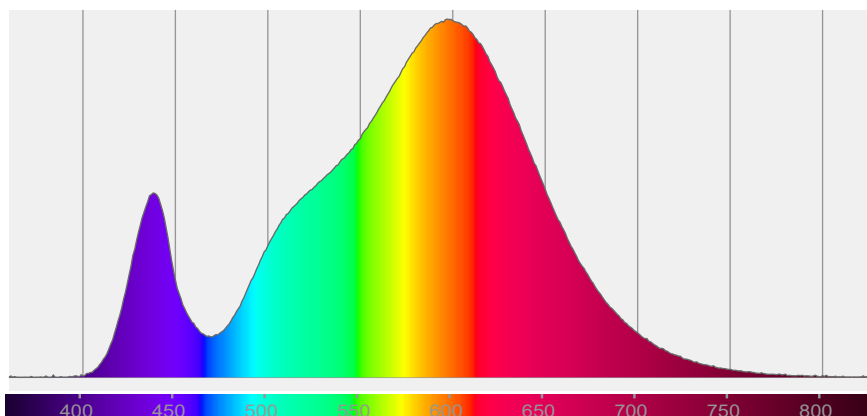


Beam angle 50%: 59°

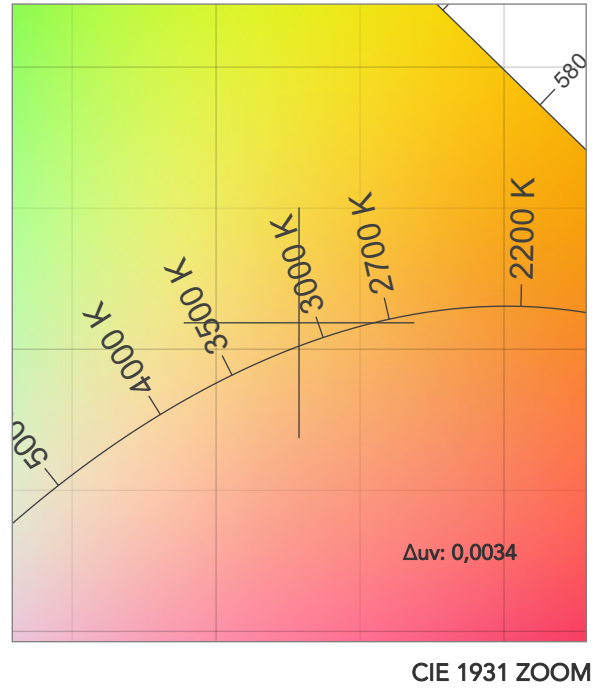
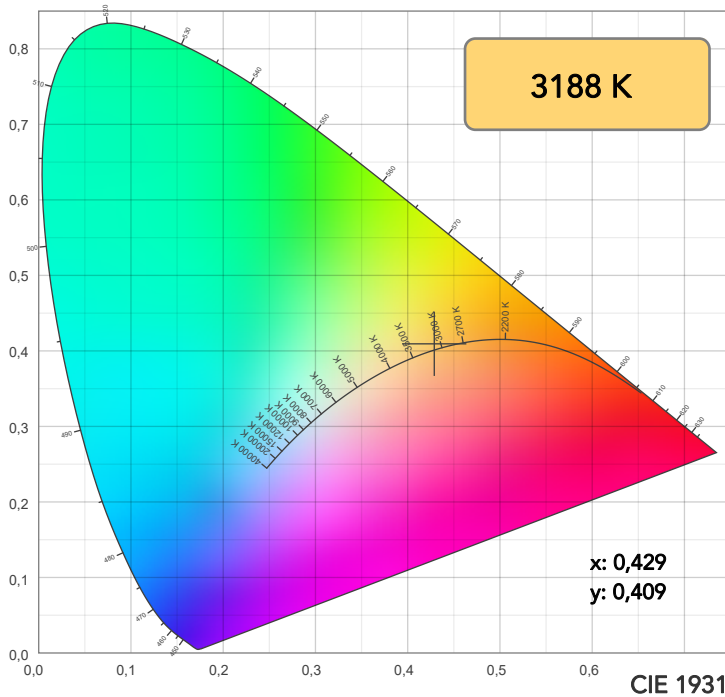
Field angle 10%: 76,4°

Cut off angle 2.5%: 87,9°

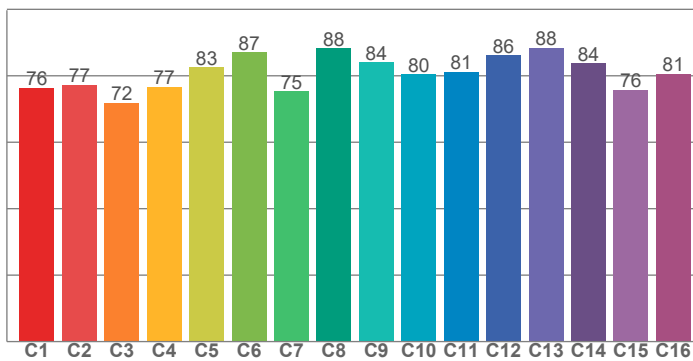
**Spectra**



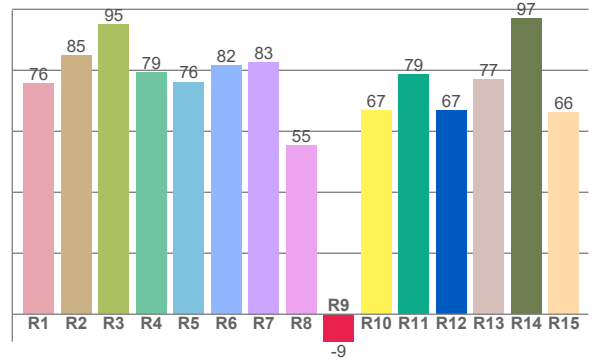
# COLOR DETAILS



TM30: 80,6



CRI: 78,9 (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
75,7	84,9	95,0	79,3	76,2	81,6	82,8	55,4	-9,0	66,8	78,6	66,9	77,2	97,0	66,2

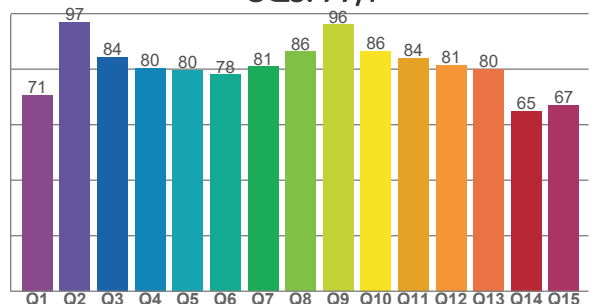
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
76,4	77,2	71,9	76,7	82,6	87,0	75,4	88,3	84,1	80,4	81,1	86,2	88,3	83,8	75,8	80,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
70,8	96,9	84,3	80,5	79,7	78,0	80,9	86,4	96,0	86,5	84,0	81,4	80,1	65,0	67,1

CQS: 79,1



## COLOR PARAMETERS

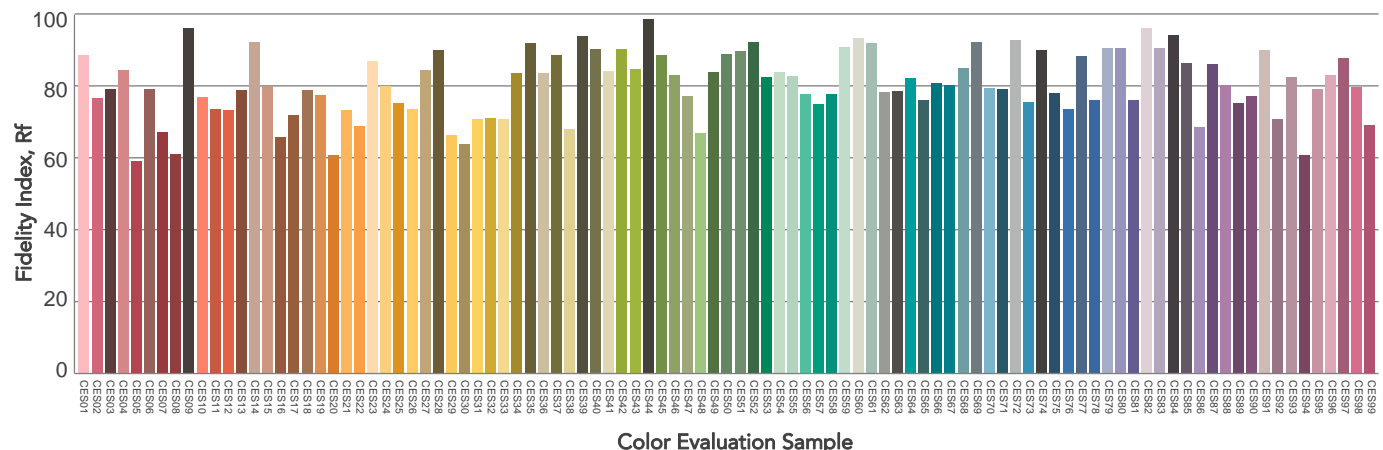
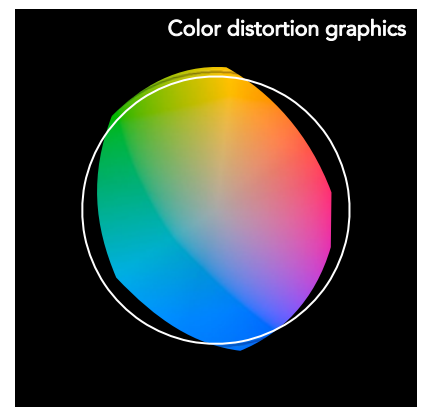
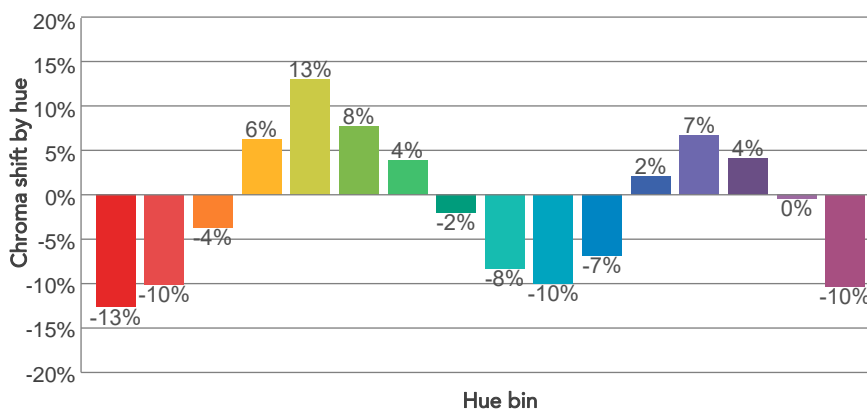
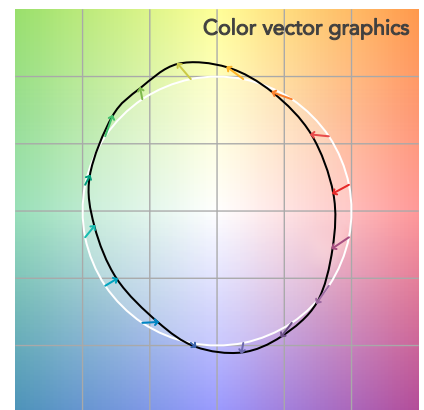
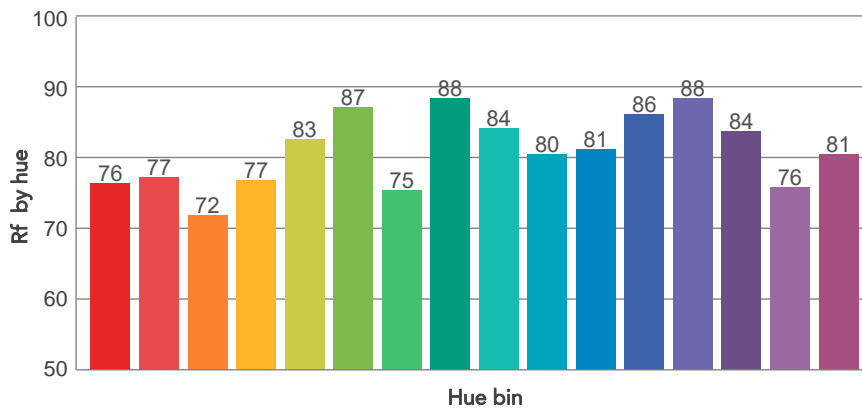
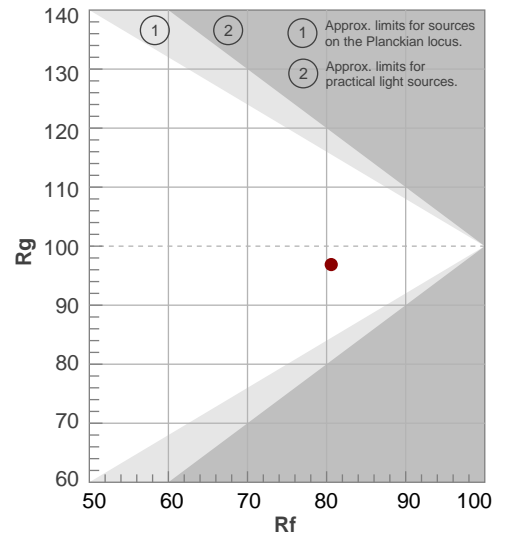
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3188 K	78,9	-9,0	80,6	96,9	79,1	56	0,429	0,409	0,0034

# TM30 DETAILS

**Rf 80,6**  
Fidelity index Rf

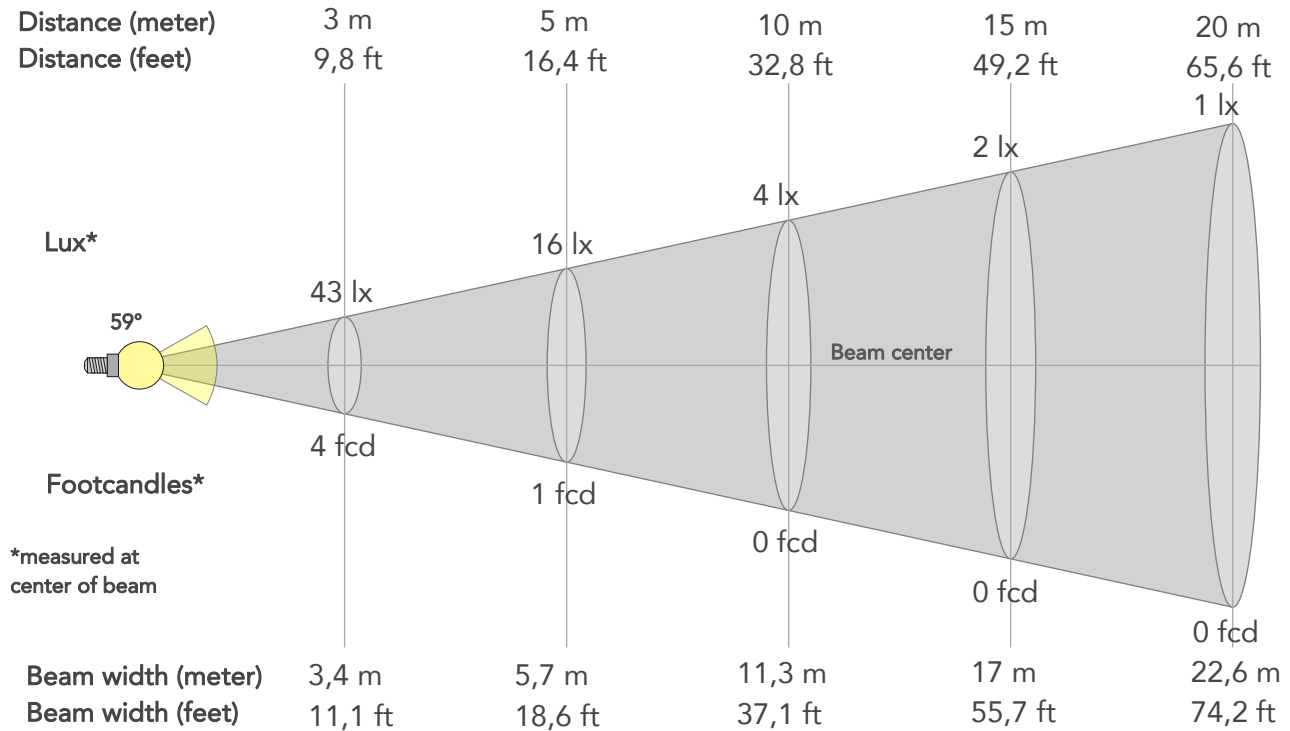
**Rg 96,9**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	76	-13%	-4%
2	77	-10%	8%
3	72	-4%	15%
4	77	6%	13%
5	83	13%	7%
6	87	8%	-3%
7	75	4%	-15%
8	88	-2%	-7%
9	84	-8%	-7%
10	80	-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

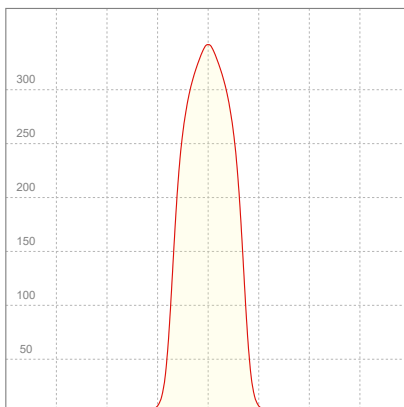
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59°	76,4°	87,9°	99,7%	98,4%



## 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	388lx	97lx	43lx	24lx	16lx	7lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx
Footcand.	36fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,5m	5,7m	8,5m	11,3m	17m	22,6m	28,3m	33,9m	45,2m	56,6m
Beam wid.	3,7ft	7,5ft	11,1ft	14,8ft	18,6ft	27,8ft	37,1ft	55,7ft	74,2ft	92,8ft	111,3ft	148,4ft	185,5ft

## LINEAR DISTRIBUTION DIAGRAM



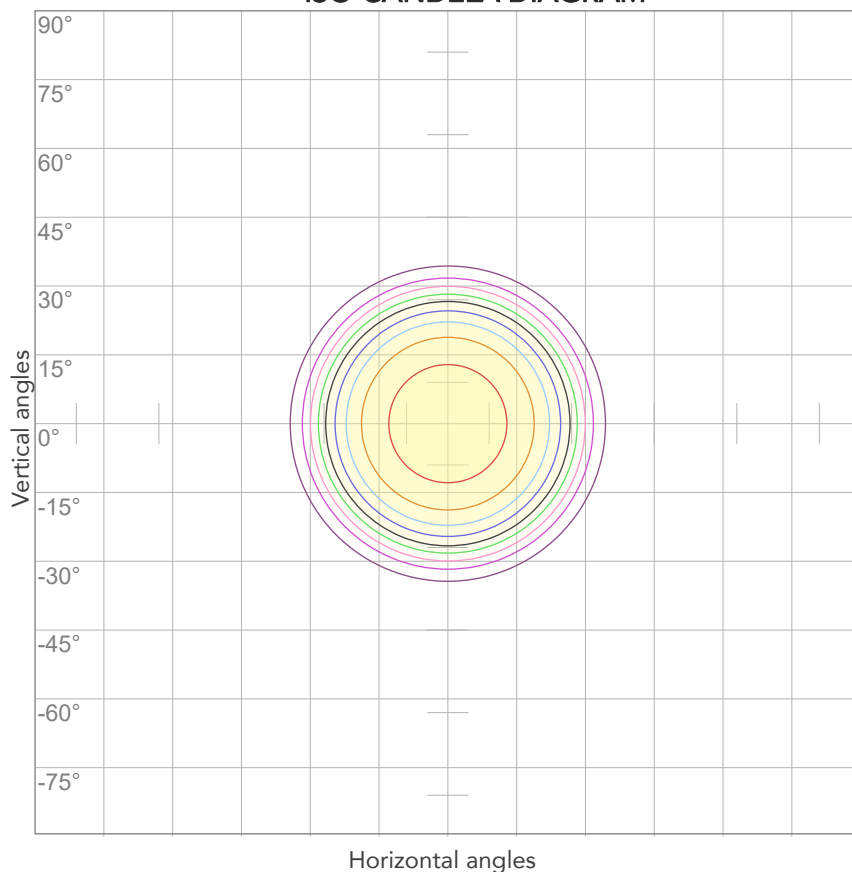
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,092A	18,4W	0,89	17lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



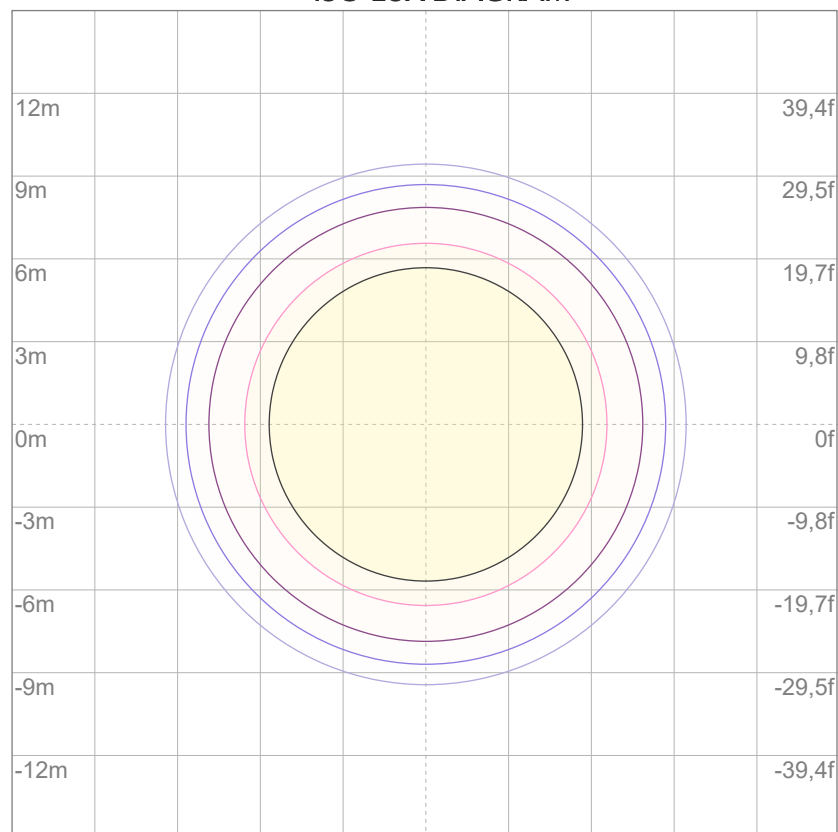
10%	39 cd
20%	78 cd
30%	116 cd
40%	155 cd
50%	194 cd
60%	233 cd
70%	272 cd
80%	310 cd

### Conditions:

Number of c-planes: 2

Candela at center: 388 cd

## ISO LUX DIAGRAM



3%	0,116 lx
5%	0,194 lx
10%	0,388 lx
30%	1,16 lx
50%	1,94 lx

### Conditions:

Number of c-planes: 2

Lux at center: 3,88 lx

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



Total lumen output:

252 lm

Peak candela output:

995 cd

Light quality:

CRI: 78,9

Color temperature:

3157 K

PRODUCT NAME:

ECLDISPLAYFC

MEASURAMENT CONDITIONS:

Beam angle:

Wash 25-50 Min Zoom

Target:

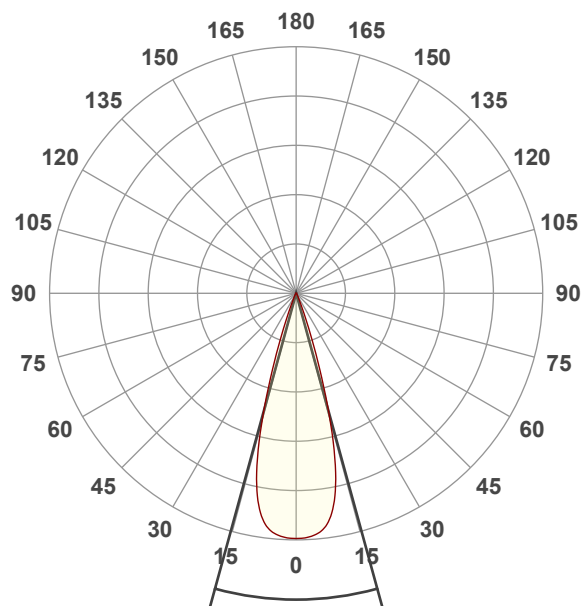
White

Operator:

Paolo Carvone

Date and time:

18/09/2020 15:22:39

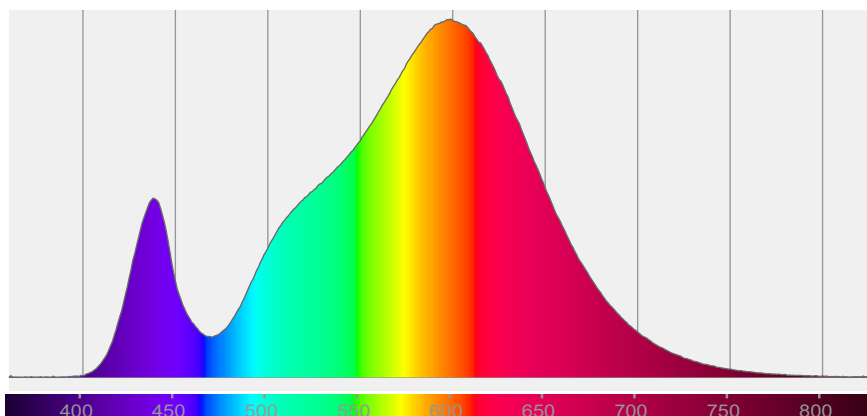


Beam angle 50%: 30,7°

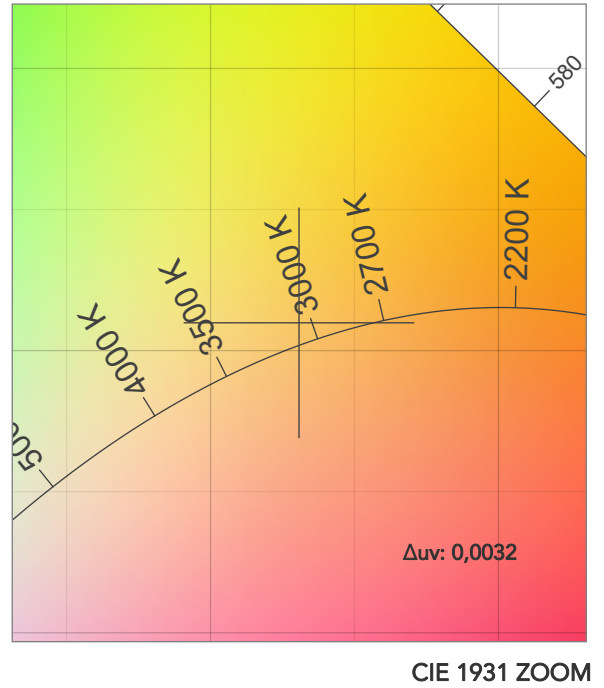
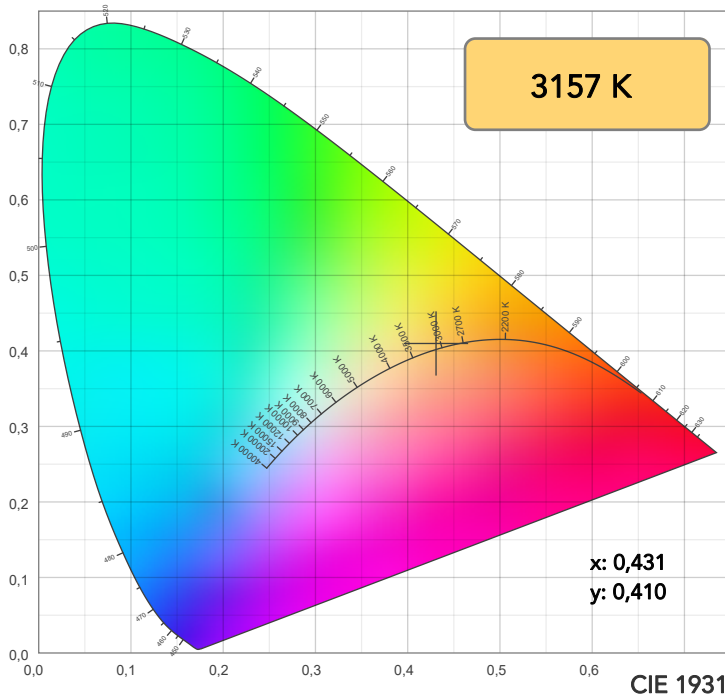
Field angle 10%: 42°

Cut off angle 2.5%: 51,8°

Spectra

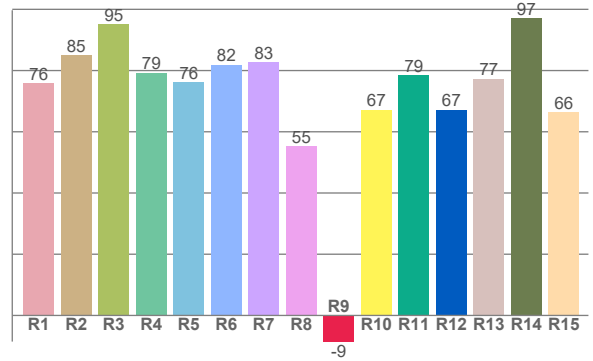
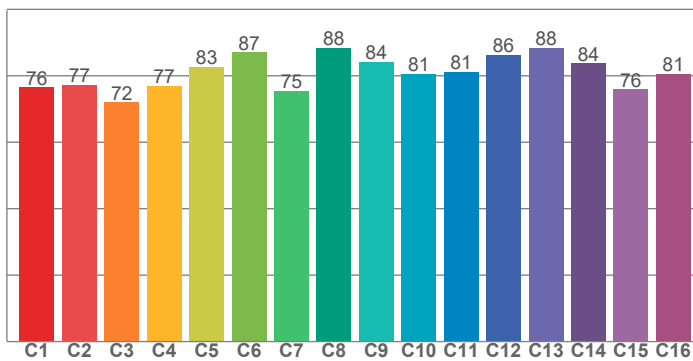


# COLOR DETAILS



TM30: 80,7

CRI: 78,9 (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
75,8	85,1	95,2	79,3	76,3	81,9	82,7	55,4	-8,5	67,2	78,6	67,2	77,3	97,2	66,3

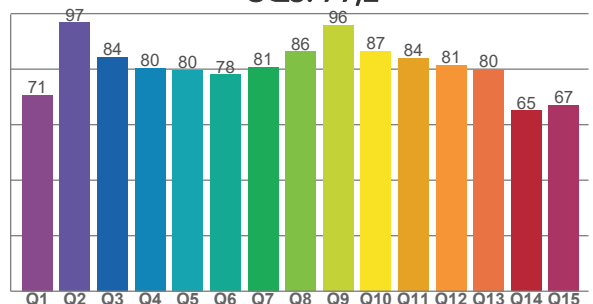
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
76,5	77,3	72,0	76,9	82,7	87,1	75,4	88,3	84,2	80,5	81,2	86,2	88,3	83,7	75,8	80,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
70,7	96,8	84,3	80,5	79,7	78,0	80,8	86,3	95,9	86,5	84,1	81,5	80,1	65,1	67,1

CQS: 79,2



## COLOR PARAMETERS

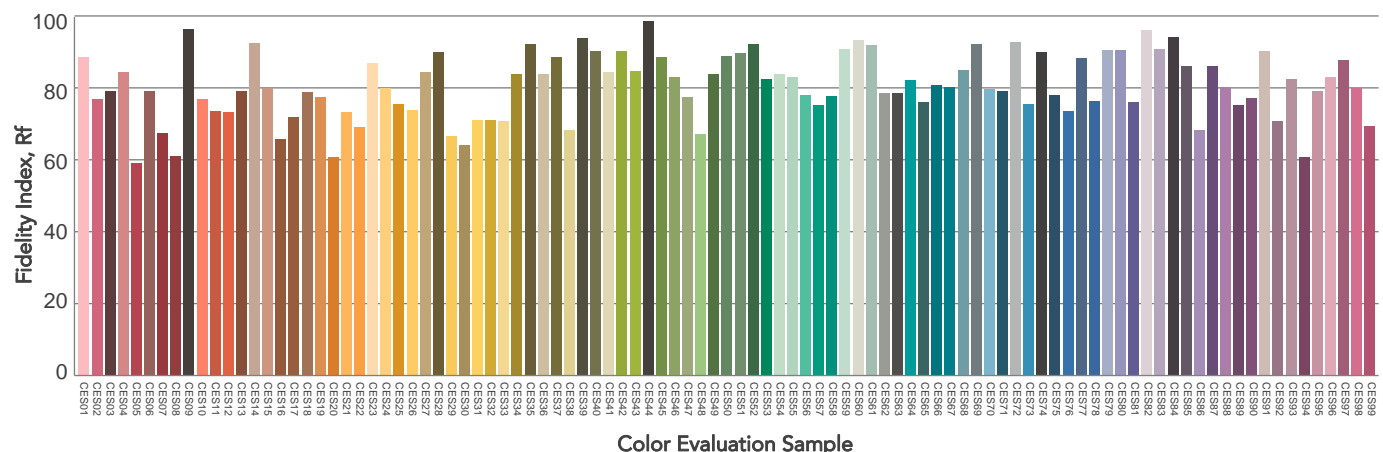
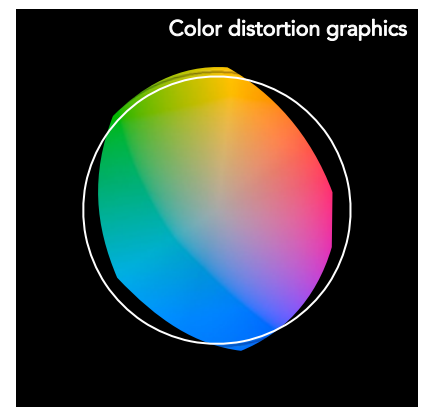
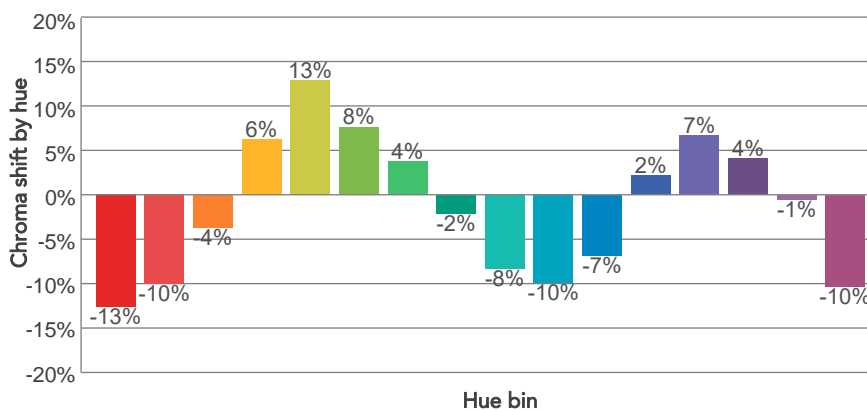
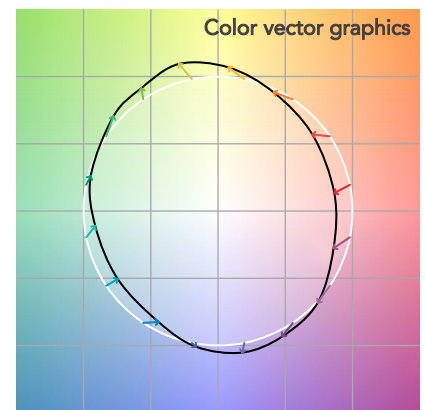
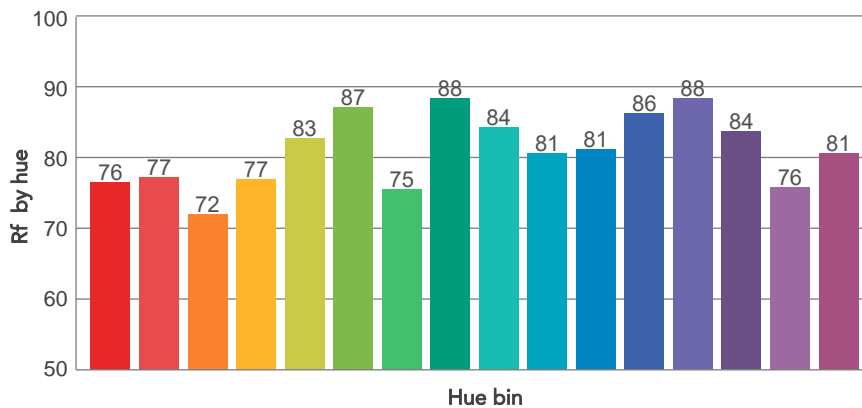
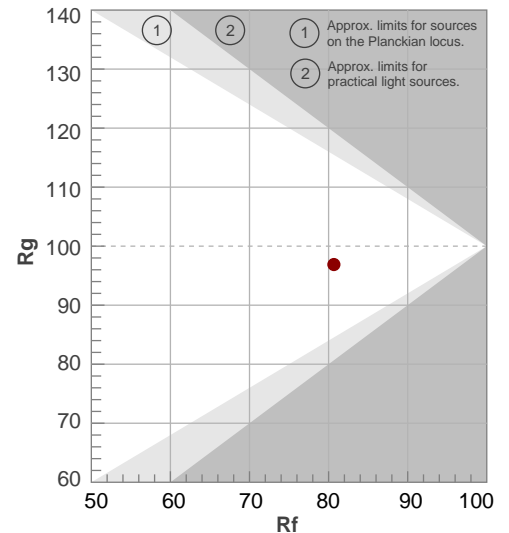
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3157 K	78,9	-8,5	80,7	96,9	79,2	56	0,431	0,410	0,0032

# TM30 DETAILS

**Rf 80,7**  
Fidelity index Rf

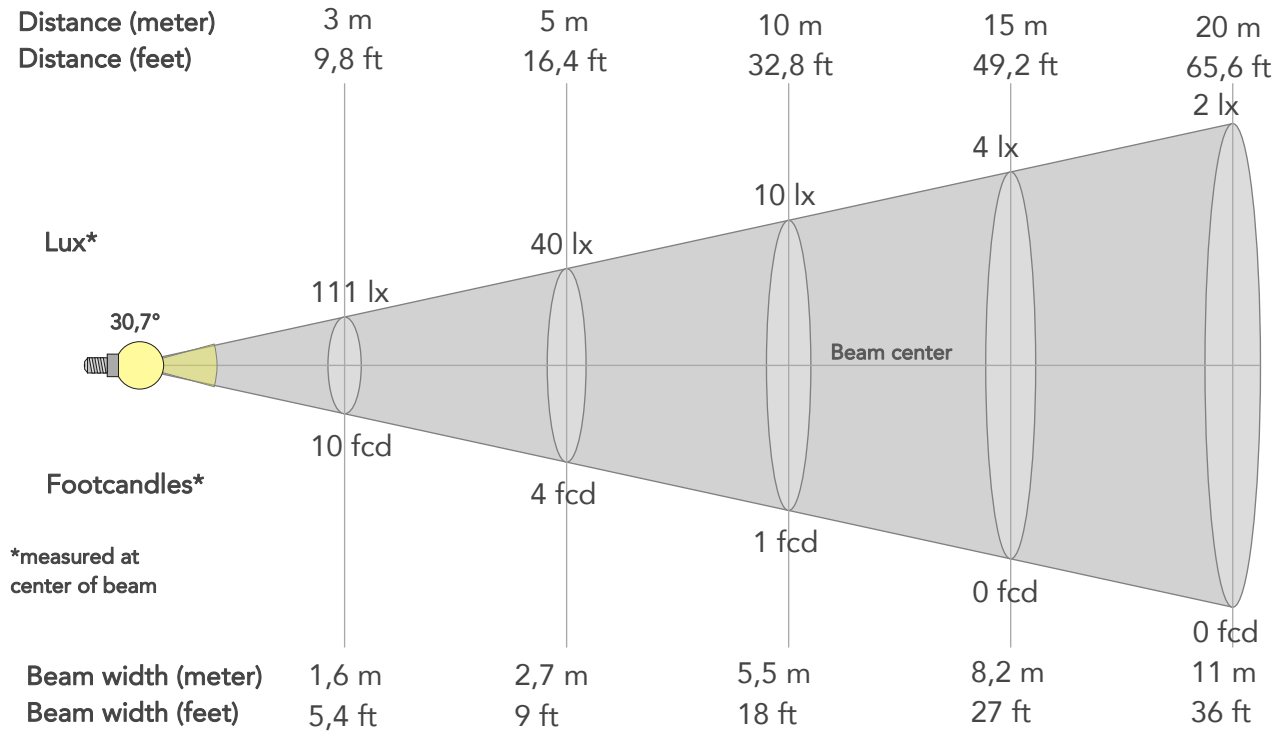
**Rg 96,9**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	76	-13%	-4%
2	77	-10%	8%
3	72	-4%	15%
4	77	6%	13%
5	83	13%	7%
6	87	8%	-3%
7	75	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	-1%	-15%
16	81	-10%	-10%



# BEAM DETAILS

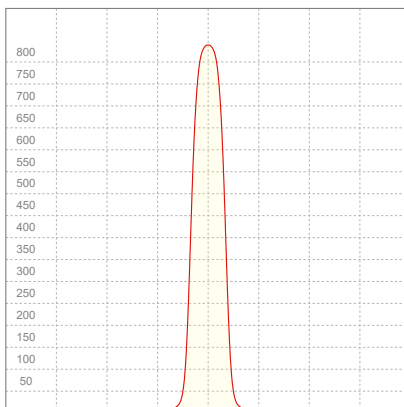
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,7°	42°	51,8°	99,7%	99,2%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	995lx	249lx	111lx	62lx	40lx	18lx	10lx	4lx	2lx	2lx	1lx	1lx	0lx
Footcand.	92fcd	23fcd	10fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,2m	2,7m	4,1m	5,5m	8,2m	11m	13,7m	16,5m	22m	27,5m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,5ft	18ft	27ft	36ft	45,1ft	54,1ft	72,1ft	90,1ft

## LINEAR DISTRIBUTION DIAGRAM

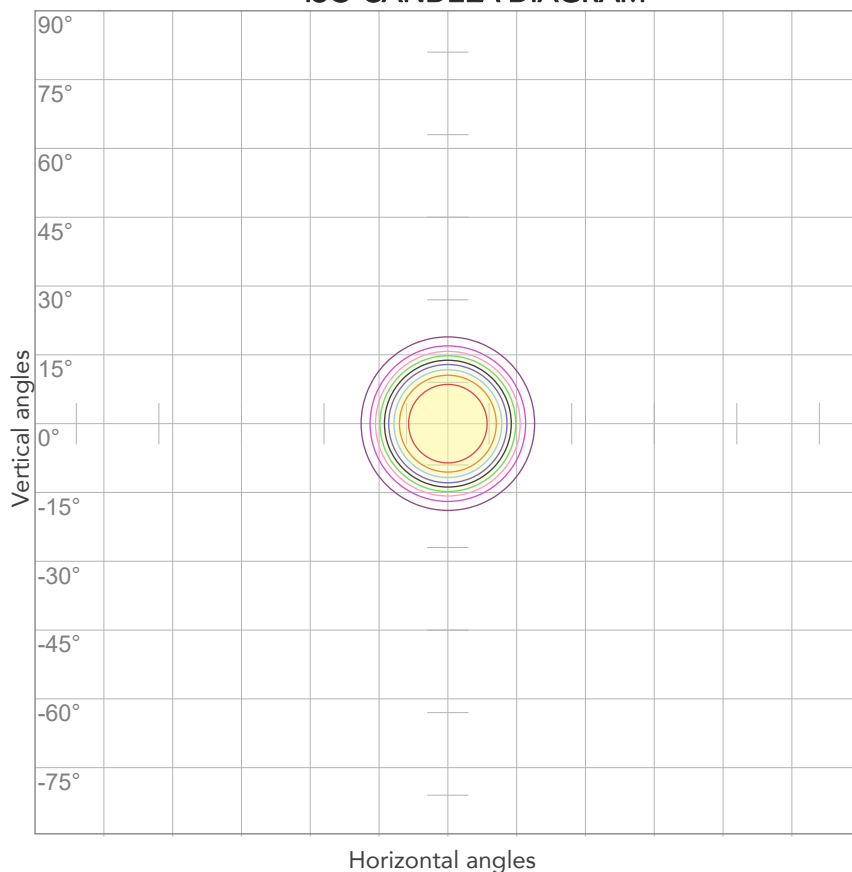


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
224V	0,092A	18,3W	0,89	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



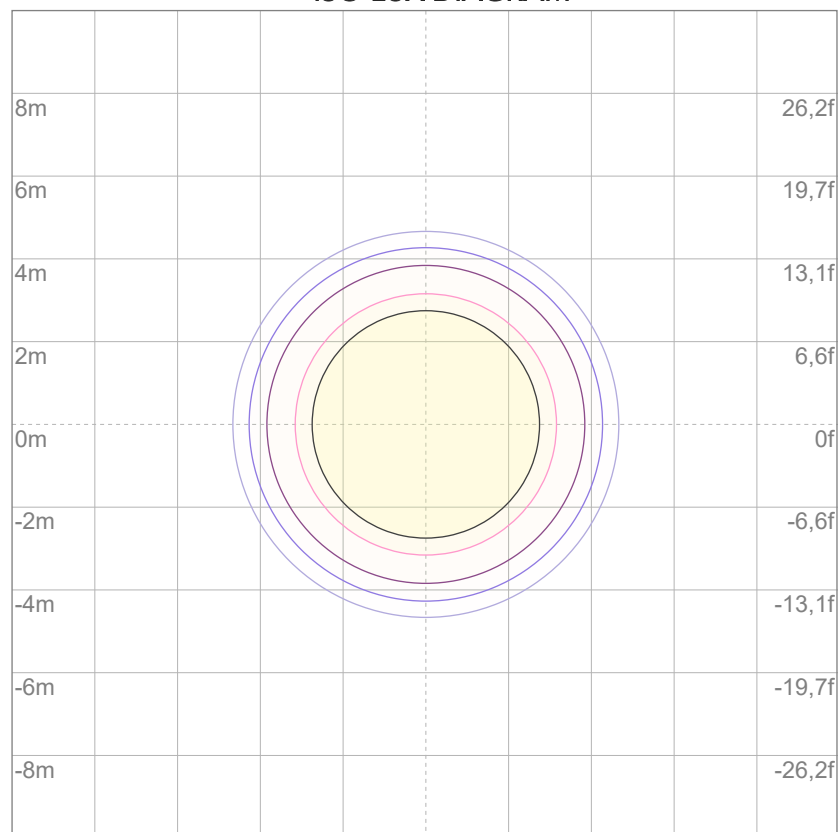
10%	99 cd
20%	199 cd
30%	298 cd
40%	398 cd
50%	497 cd
60%	597 cd
70%	696 cd
80%	796 cd

### Conditions:

Number of c-planes: 2

Candela at center: 995 cd

## ISO LUX DIAGRAM



3%	0,298 lx
5%	0,497 lx
10%	0,995 lx
30%	2,98 lx
50%	4,97 lx

### Conditions:

Number of c-planes: 2

Lux at center: 9,95 lx

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



Total lumen output:

409 lm

Peak candela output:

496 cd

Light quality:

CRI: 92,7

Color temperature:

2856 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

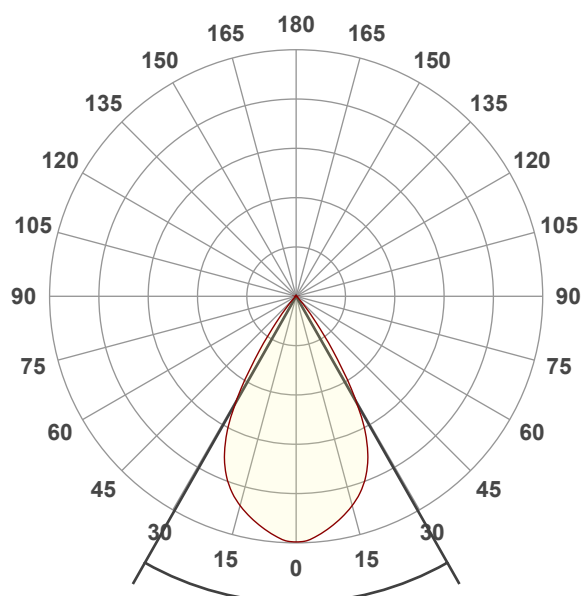
2800K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:49:55

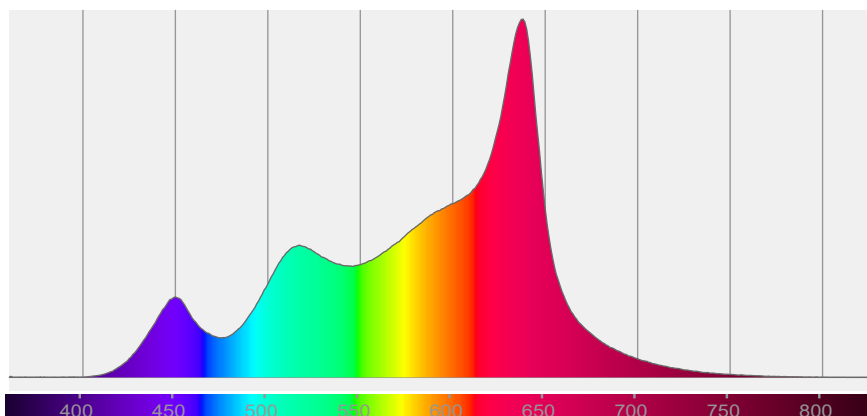


Beam angle 50%: 59,2°

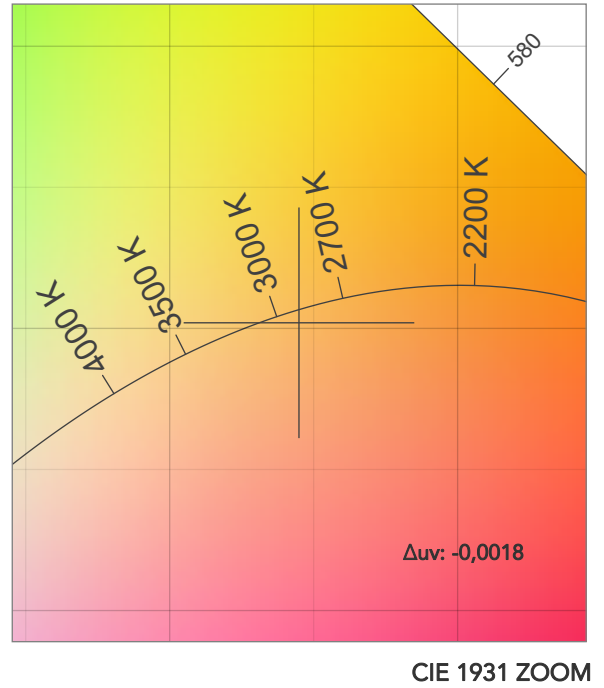
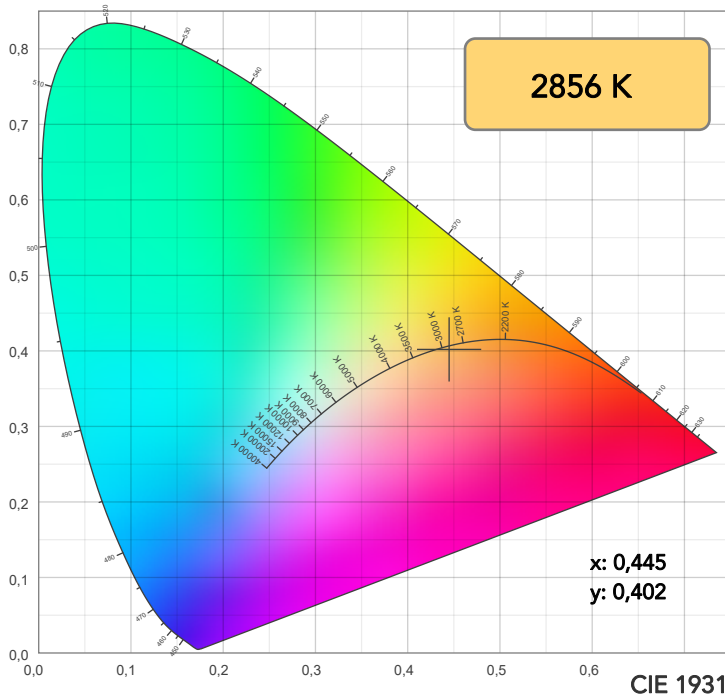
Field angle 10%: 77,6°

Cut off angle 2.5%: 89,2°

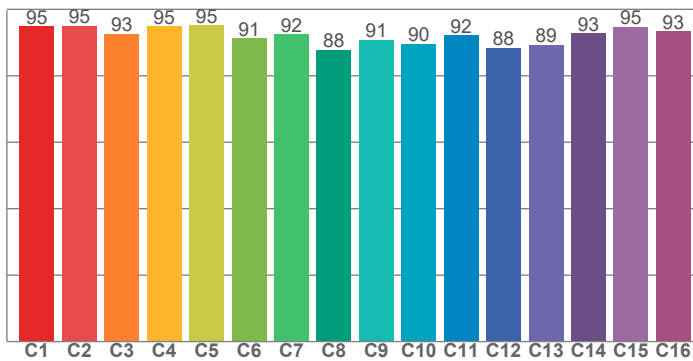
**Spectra**



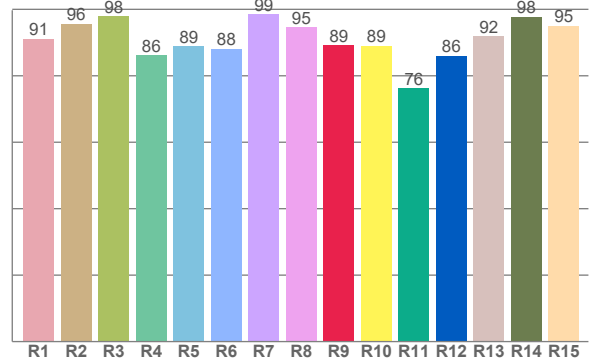
# COLOR DETAILS



**TM30: 92,6**



**CRI: 92,7 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,2	95,7	98,0	86,2	88,9	88,2	98,5	94,7	89,2	89,0	76,3	86,1	91,8	97,7	95,1

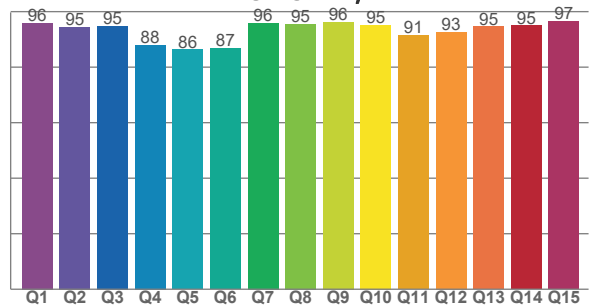
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	95,1	92,6	94,9	95,1	91,2	92,4	87,9	90,9	89,6	92,2	88,4	89,3	92,8	94,8	93,4

CQS Q values

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

**CQS: 92,2**



## COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2856 K	92,7	89,2	92,6	104,7	92,2	83	0,445	0,402	-0,0018



## TM30 DETAILS

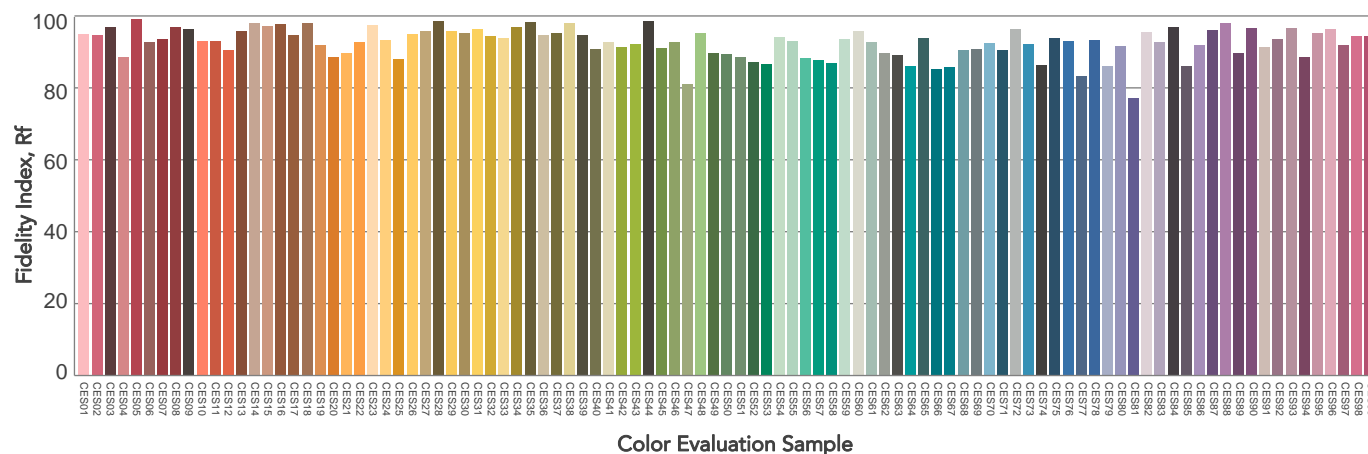
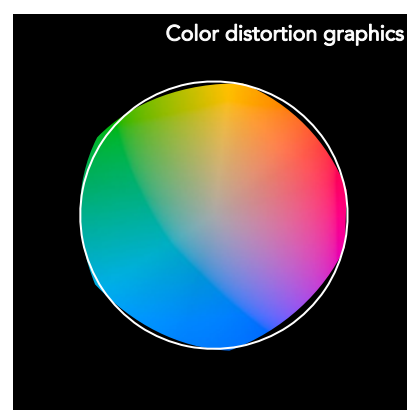
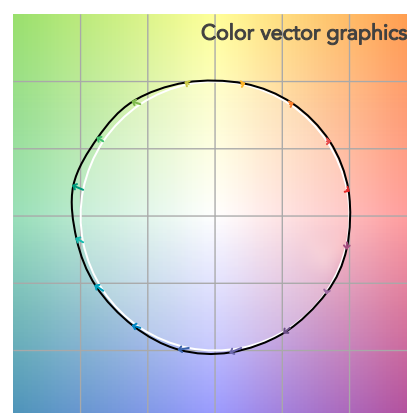
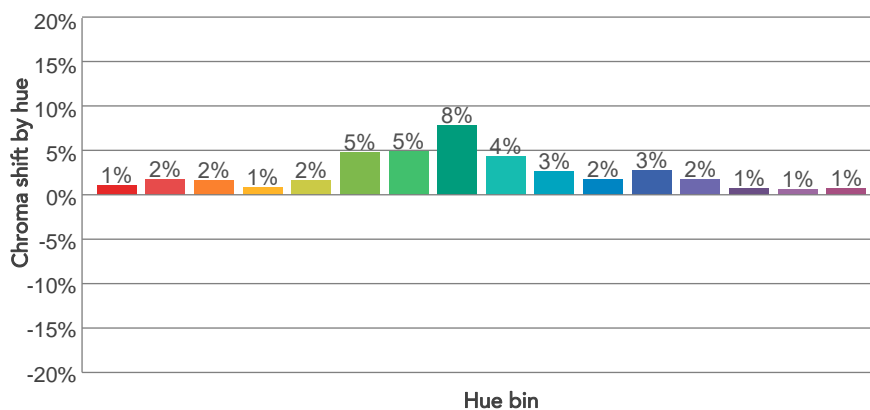
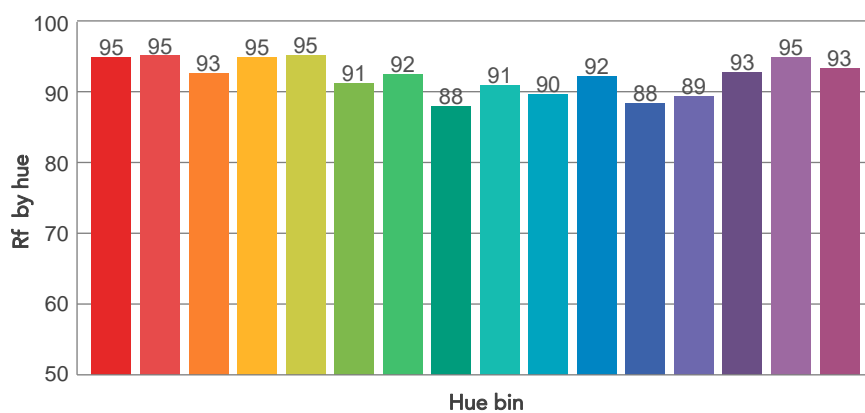
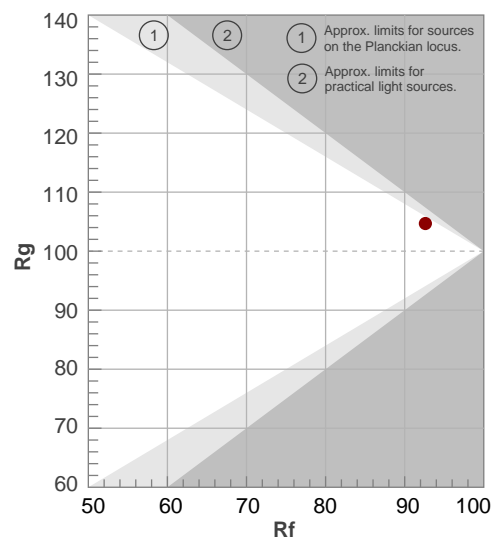
Rf 92,6

Fidelity index  $R_f$

Rg 104,7

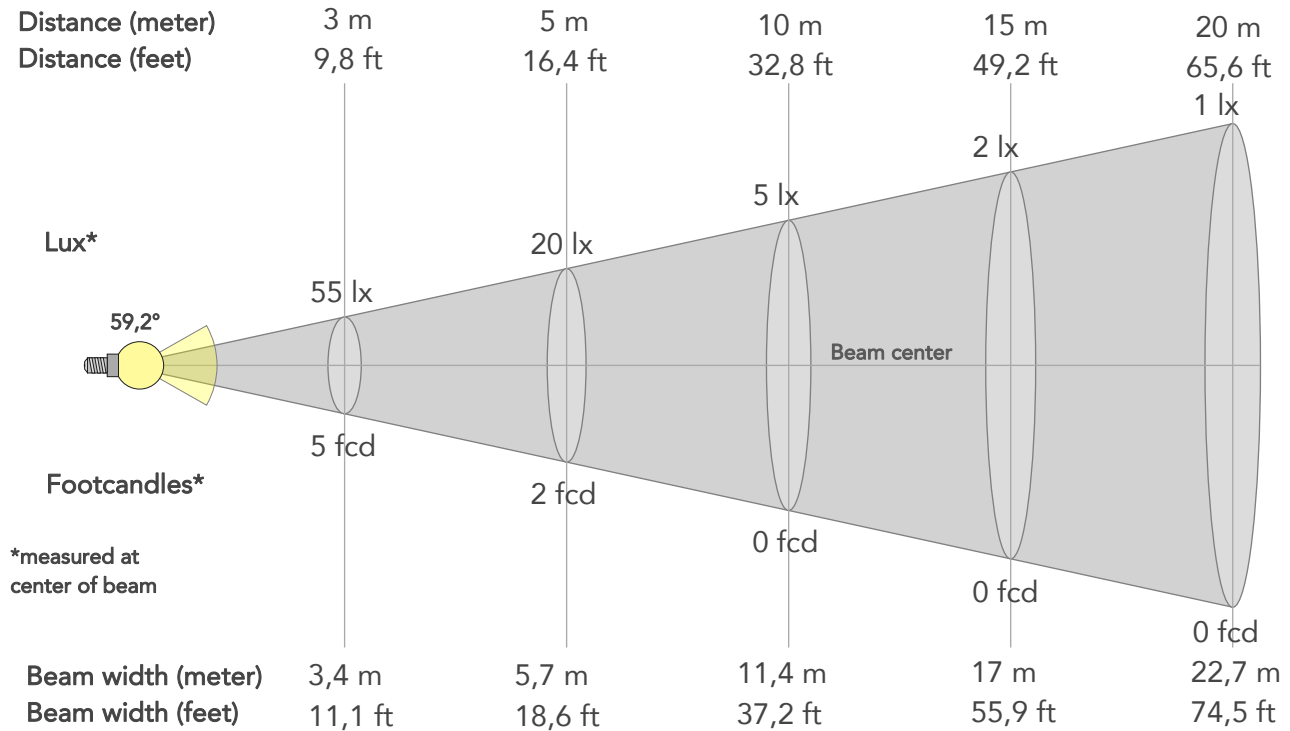
## Gammut index

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



# BEAM DETAILS

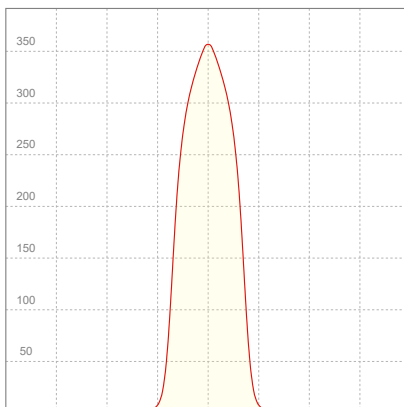
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,2°	77,6°	89,2°	99,7%	98,3%



## 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	496lx	124lx	55lx	31lx	20lx	9lx	5lx	2lx	1lx	1lx	1lx	0lx	0lx
Footcand.	46fcd	12fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,5m	5,7m	8,5m	11,4m	17m	22,7m	28,4m	34,1m	45,4m	56,8m
Beam wid.	3,7ft	7,5ft	11,1ft	14,9ft	18,6ft	27,9ft	37,2ft	55,9ft	74,5ft	93,1ft	111,7ft	148,9ft	186,2ft

## LINEAR DISTRIBUTION DIAGRAM

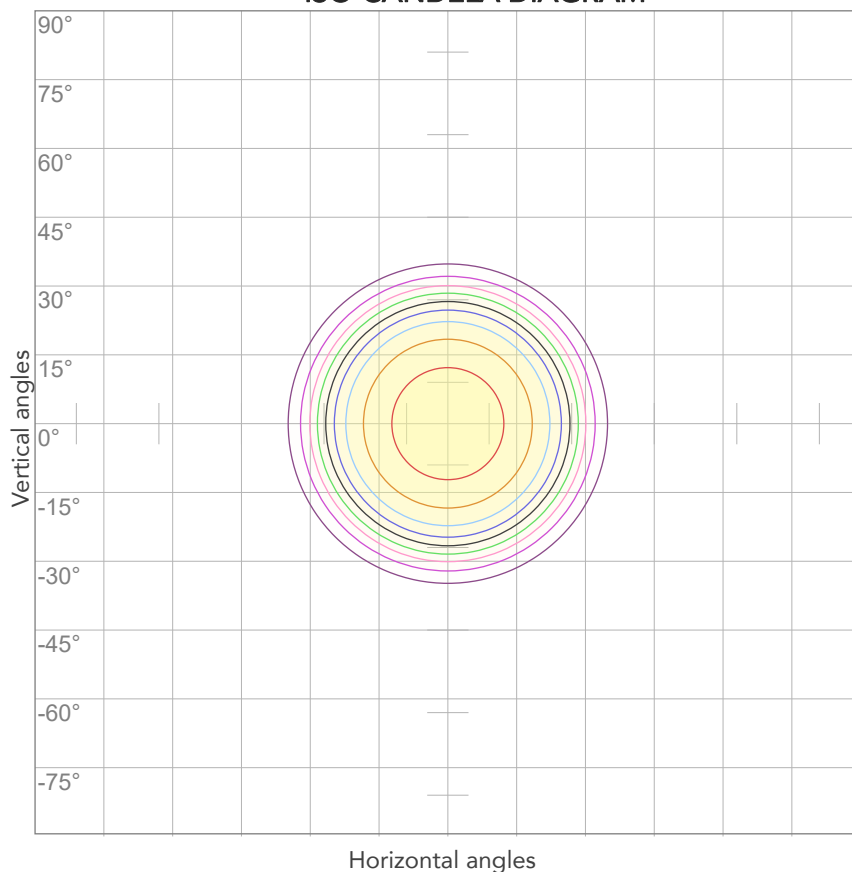


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,110A	22,4W	0,91	18lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



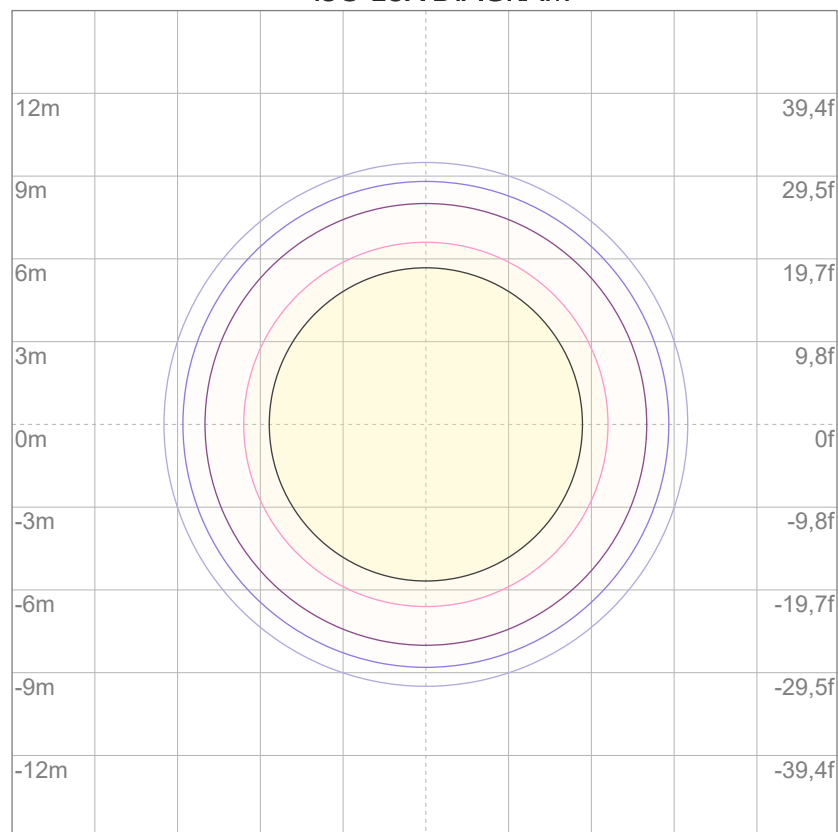
10%	50 cd
20%	99 cd
30%	149 cd
40%	198 cd
50%	248 cd
60%	298 cd
70%	347 cd
80%	397 cd

### Conditions:

Number of c-planes: 2

Candela at center: 496 cd

## ISO LUX DIAGRAM



3%	0,149 lx
5%	0,248 lx
10%	0,496 lx
30%	1,49 lx
50%	2,48 lx

### Conditions:

Number of c-planes: 2

Lux at center: 4,96 lx

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



Total lumen output:

304 lm

Peak candela output:

1222 cd

Light quality:

CRI: 92,6

Color temperature:

2816 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Min Zoom

Target:

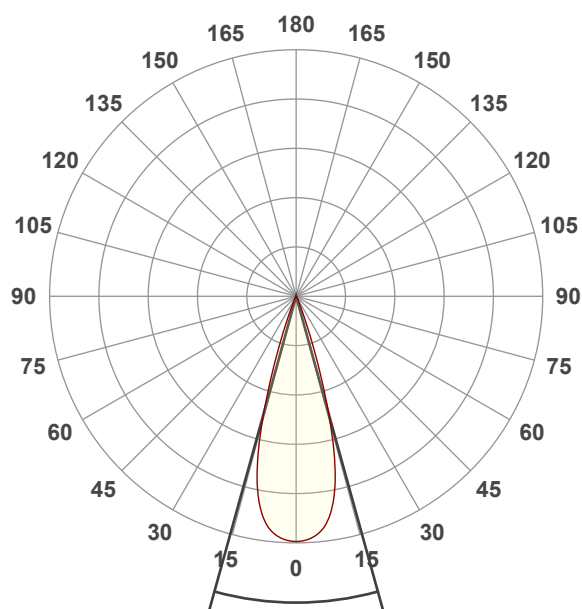
2800K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:38:35

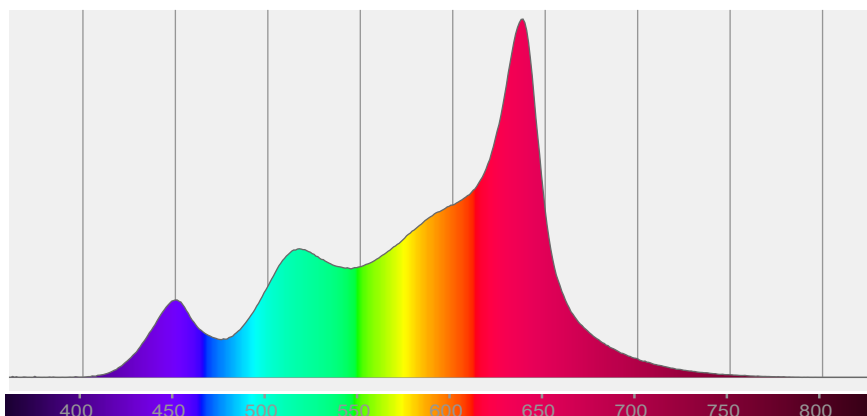


Beam angle 50%: 30,9°

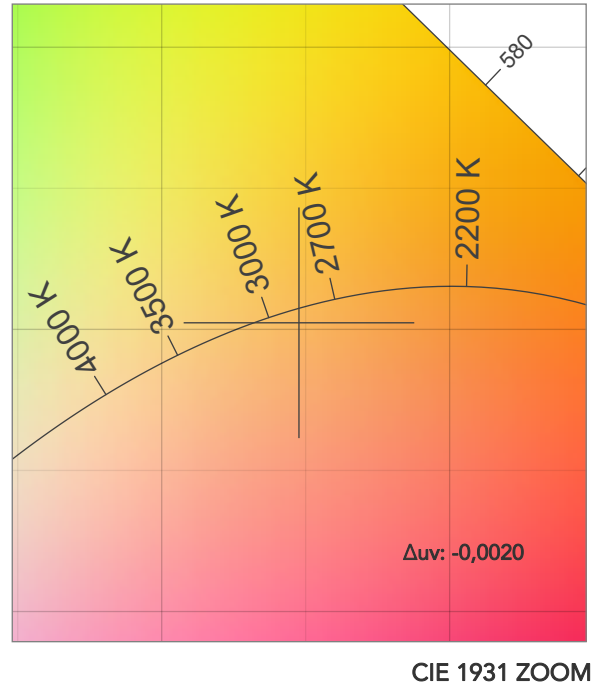
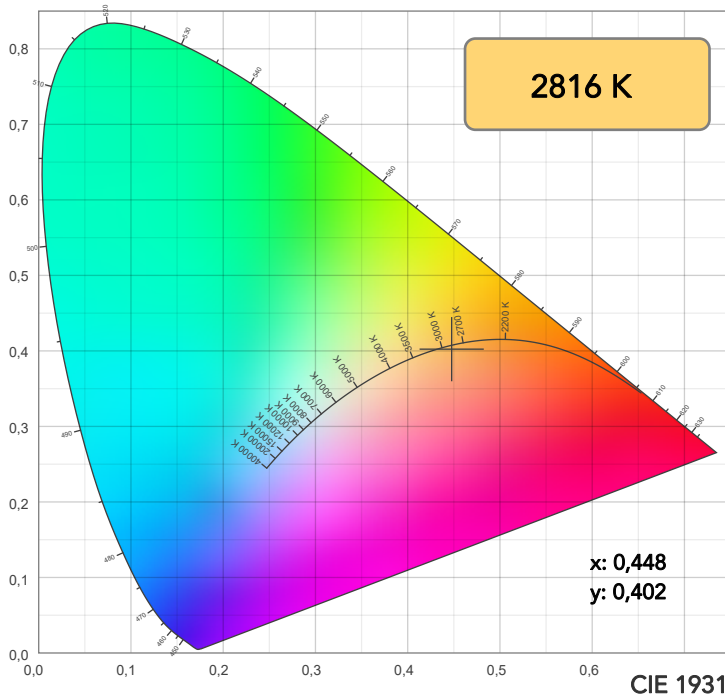
Field angle 10%: 42,1°

Cut off angle 2.5%: 50,8°

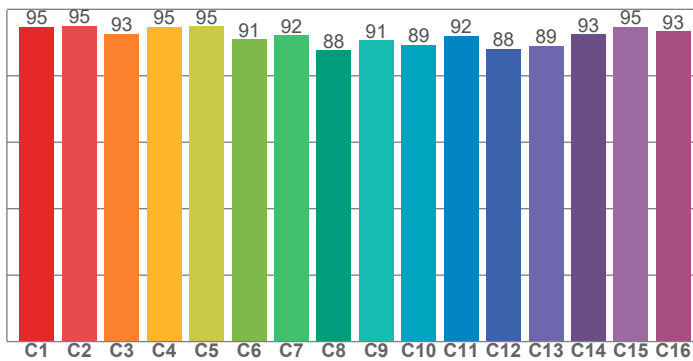
Spectra



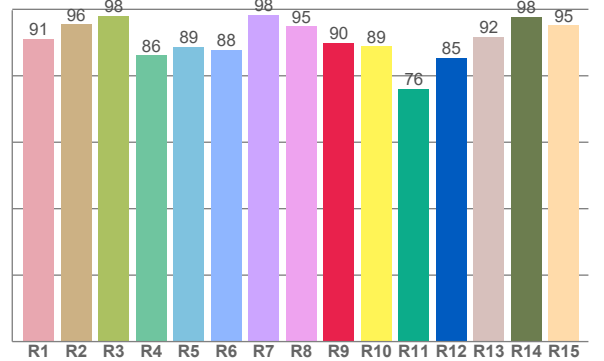
# COLOR DETAILS



TM30: 92,4



CRI: 92,6 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,1	95,6	98,0	86,2	88,8	87,9	98,4	95,0	89,9	88,8	76,1	85,4	91,7	97,8	95,2

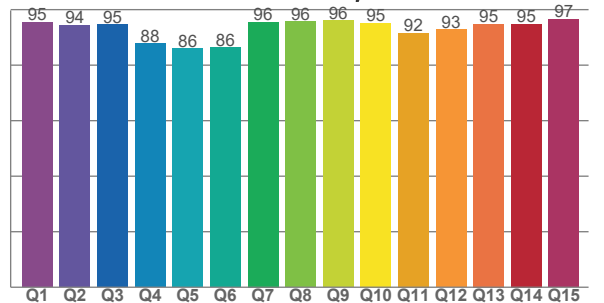
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	95,0	92,5	94,8	94,9	91,0	92,1	87,6	90,6	89,2	91,9	88,1	89,0	92,5	94,7	93,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,4	94,3	94,7	87,7	86,0	86,4	95,6	95,6	96,1	95,2	91,6	92,8	94,8	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	Δuv
2816 K	92,6	89,9	92,4	104,8	92,1	83	0,448	0,402	-0,0020

## TM30 DETAILS

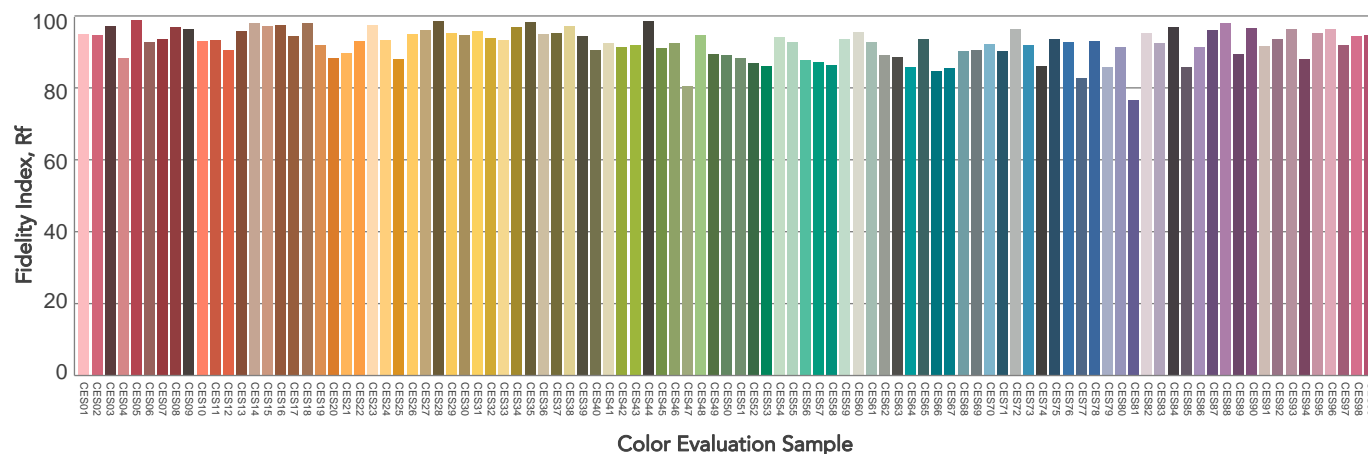
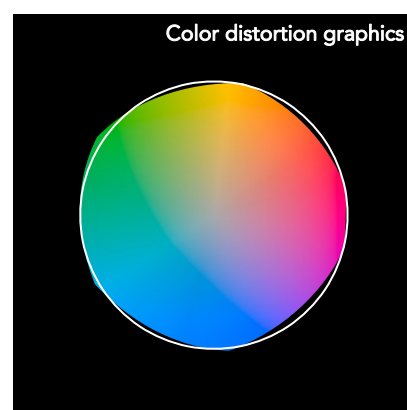
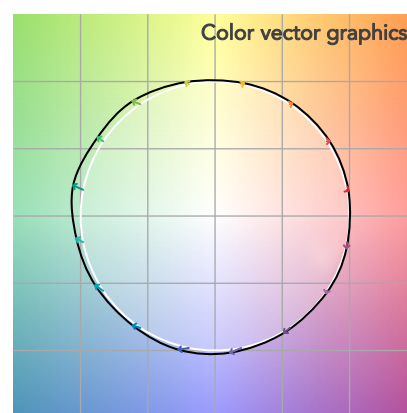
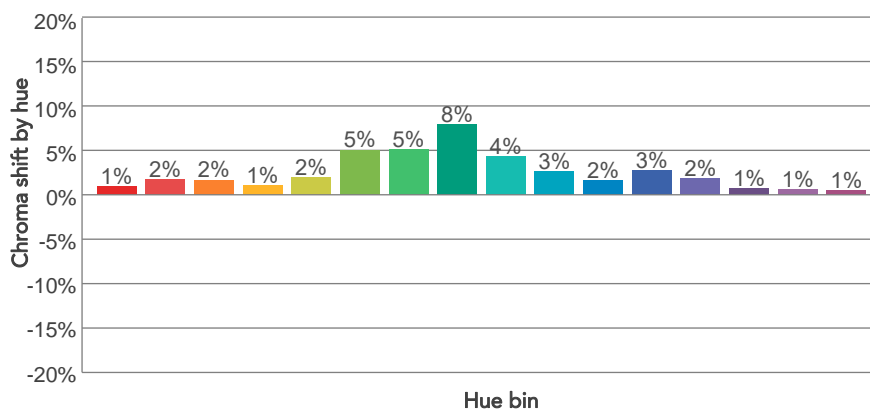
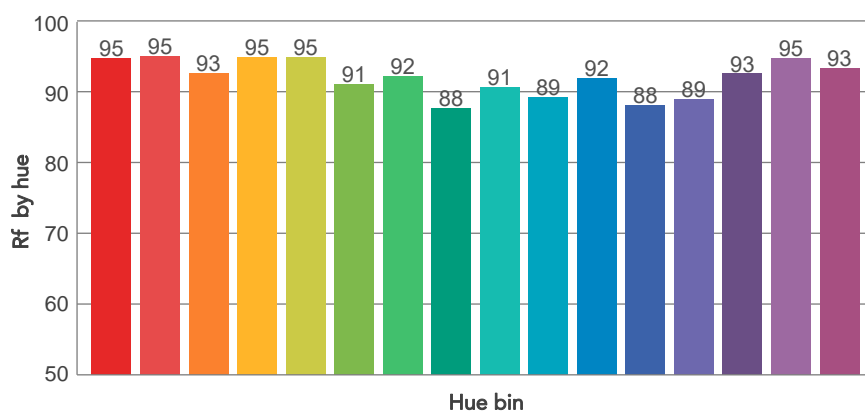
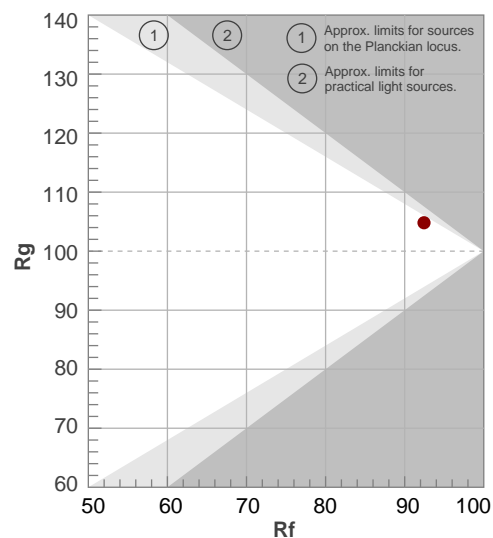
Rf 92,4

Fidelity index  $R_f$

Rg 104,8

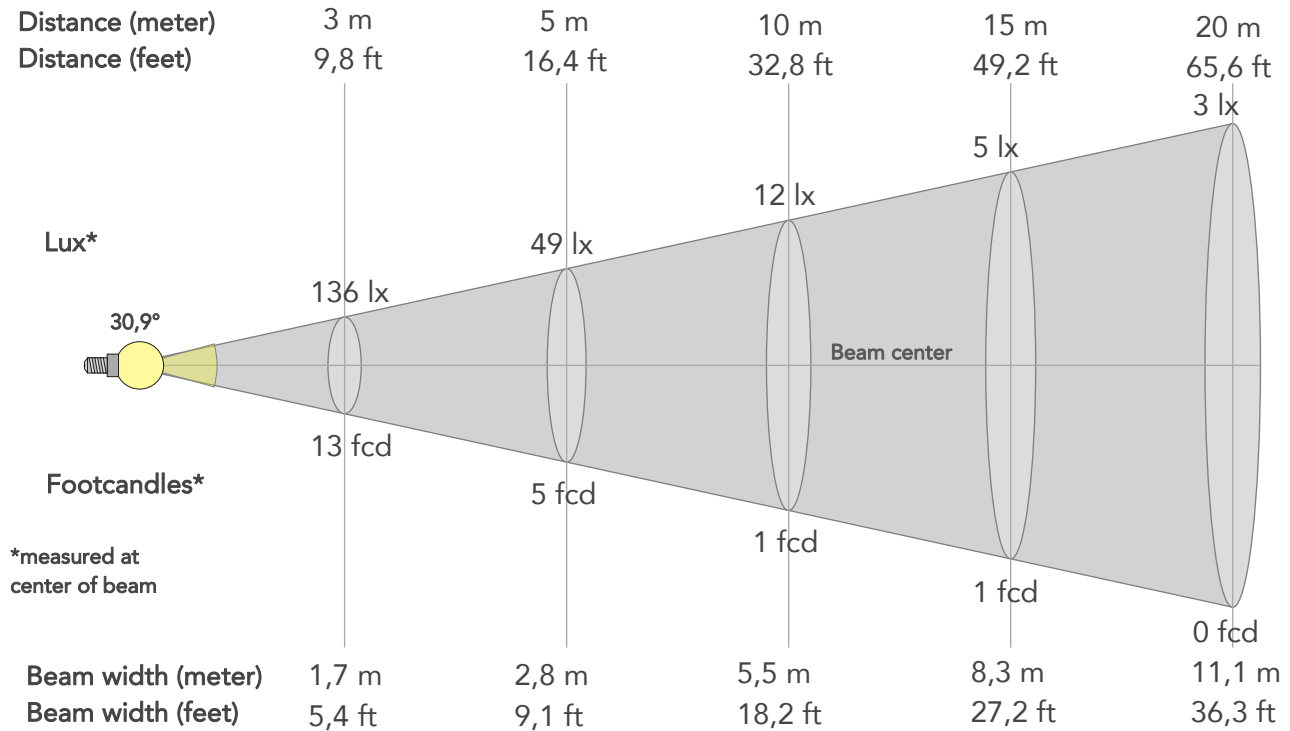
## Gammut index

		Graphic shifts (%)	
Hue Bin	$R_f$	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%	-9%
14	93	1%	-6%
15	95	1%	-2%
16	93	1%	-4%



# BEAM DETAILS

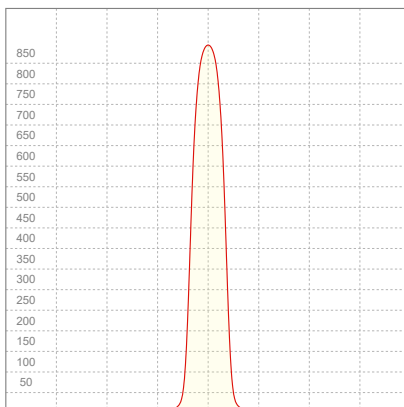
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,9°	42,1°	50,8°	100,0%	99,9%



## 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	1222lx	306lx	136lx	76lx	49lx	22lx	12lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	114fcd	28fcd	13fcd	7fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,5m	8,3m	11,1m	13,8m	16,6m	22,1m	27,7m
Beam wid.	1,8ft	3,7ft	5,4ft	7,3ft	9,1ft	13,6ft	18,2ft	27,2ft	36,3ft	45,4ft	54,5ft	72,6ft	90,8ft

## LINEAR DISTRIBUTION DIAGRAM

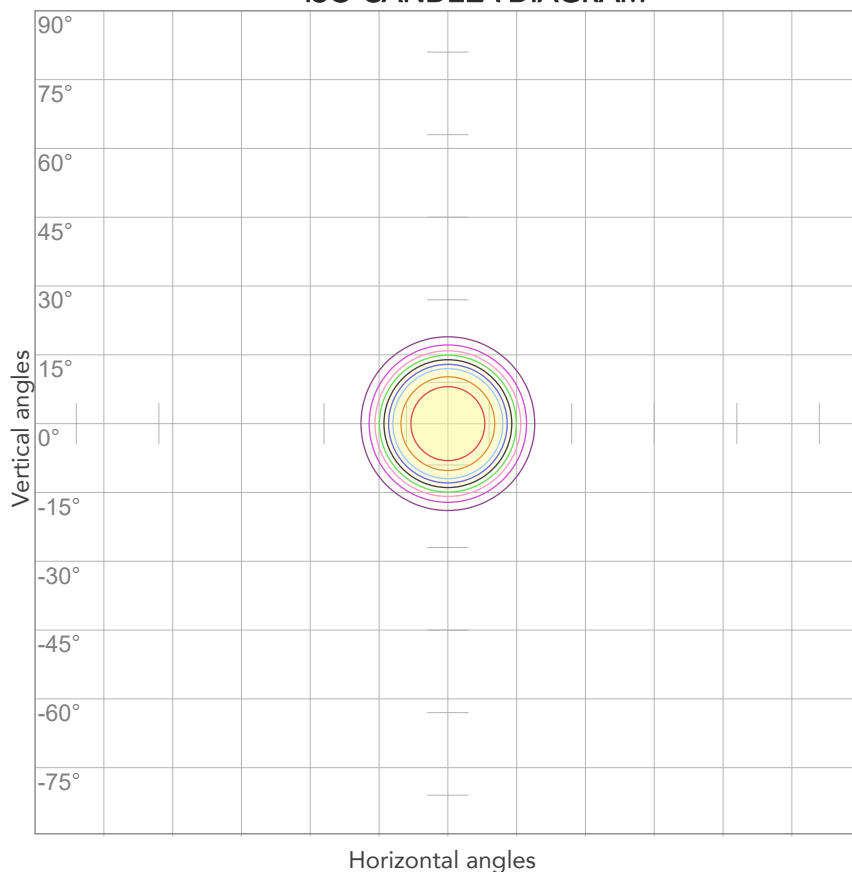


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	0,110A	22,5W	0,91	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



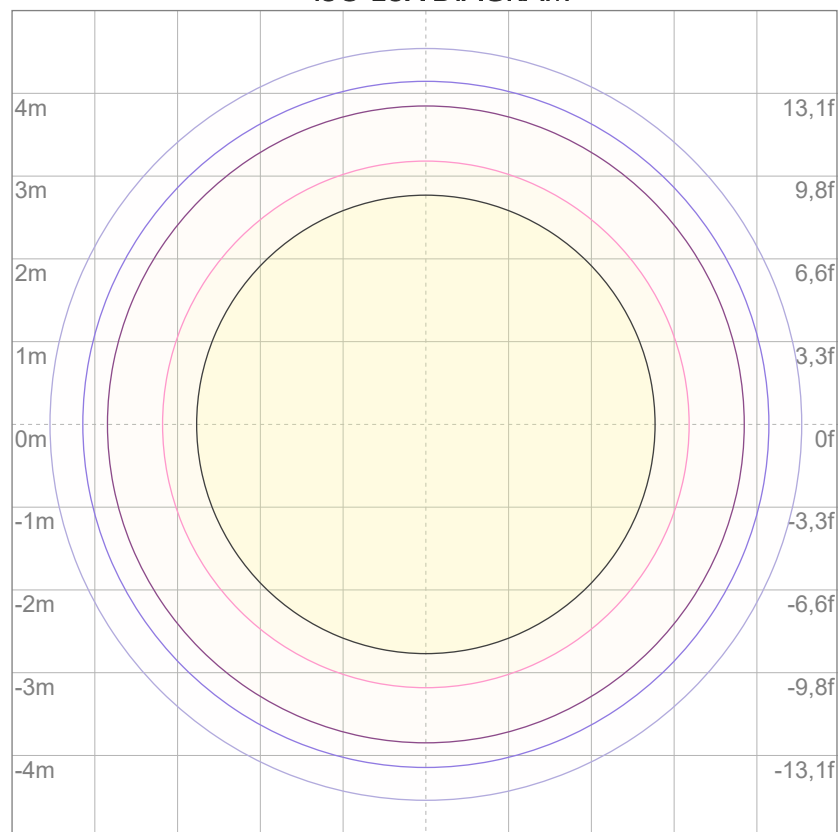
10%	122 cd
20%	244 cd
30%	367 cd
40%	489 cd
50%	611 cd
60%	733 cd
70%	855 cd
80%	978 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1222 cd

## ISO LUX DIAGRAM



3%	0,367 lx
5%	0,611 lx
10%	1,22 lx
30%	3,67 lx
50%	6,11 lx

### Conditions:

Number of c-planes: 2

Lux at center: 12,2 lx

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





Total lumen output:

414 lm

Peak candela output:

503 cd

Light quality:

CRI: 93,5

Color temperature:

3204 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

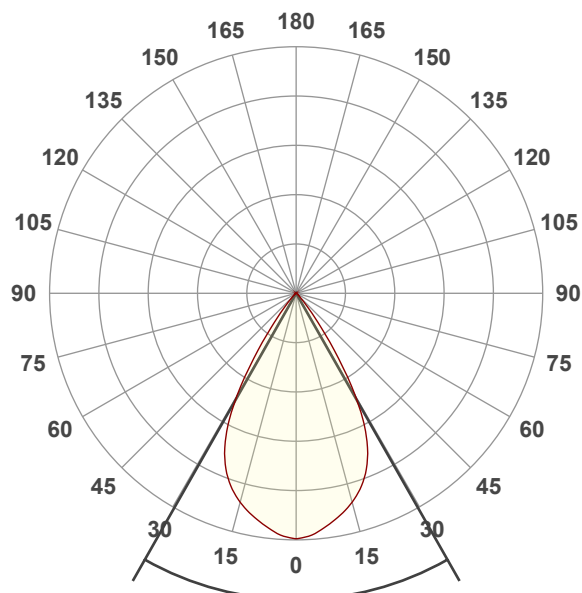
3200K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:51:27

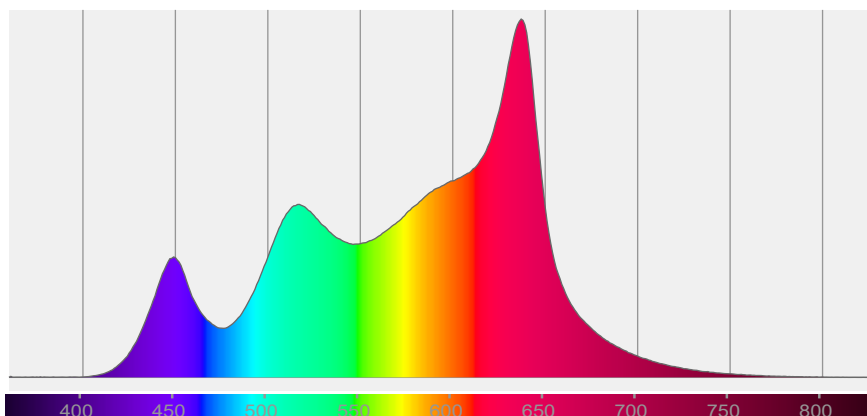


Beam angle 50%: 59,2°

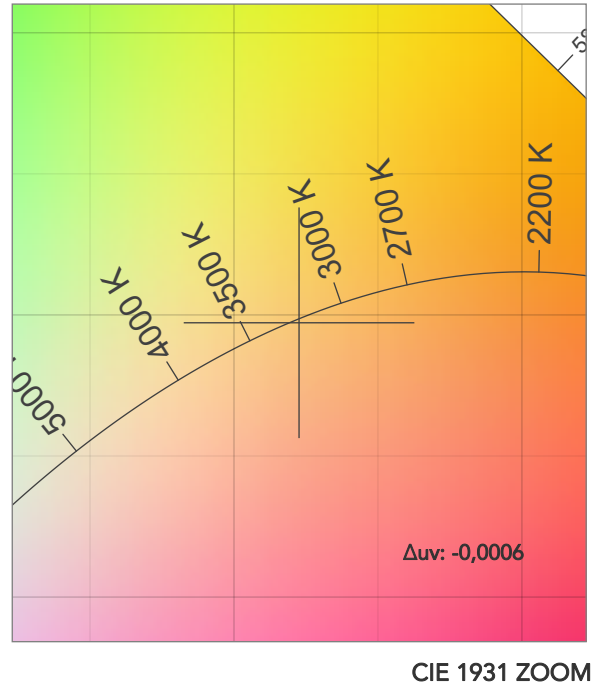
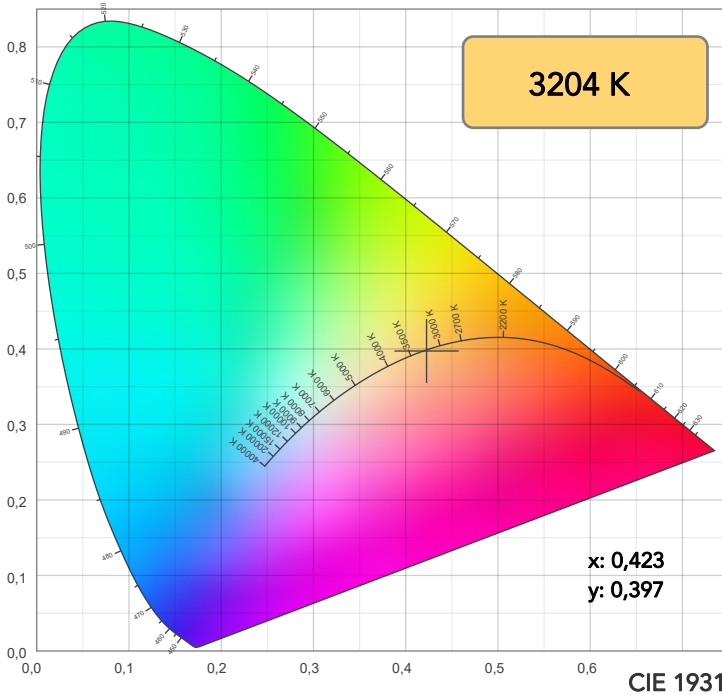
Field angle 10%: 77,5°

Cut off angle 2.5%: 89,6°

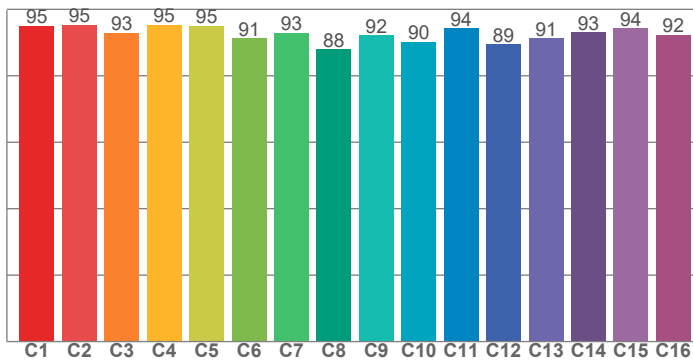
**Spectra**



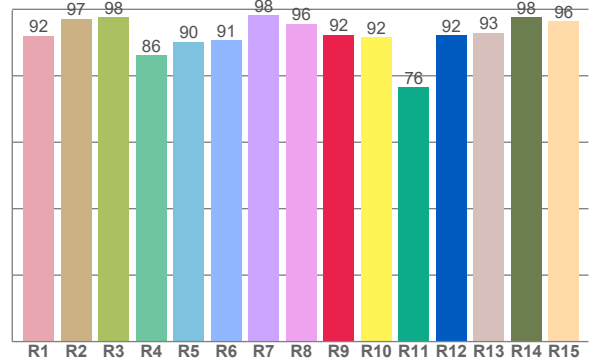
# COLOR DETAILS



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
92,0	97,1	97,6	86,2	90,2	90,6	98,2	95,6	92,3	91,5	76,5	92,2	92,9	97,6	96,4

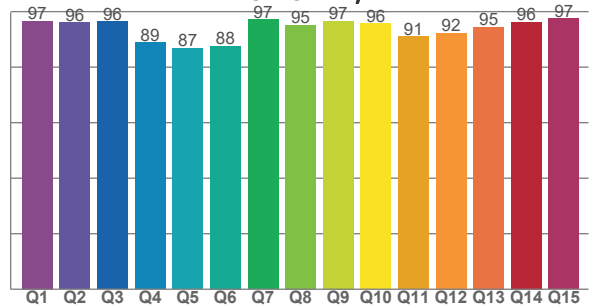
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,0	95,3	92,9	95,4	95,1	91,3	92,9	87,9	92,1	90,2	94,3	89,4	91,3	93,0	94,3	92,4

CQS Q values

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

CQS: 92,7



## COLOR PARAMETERS

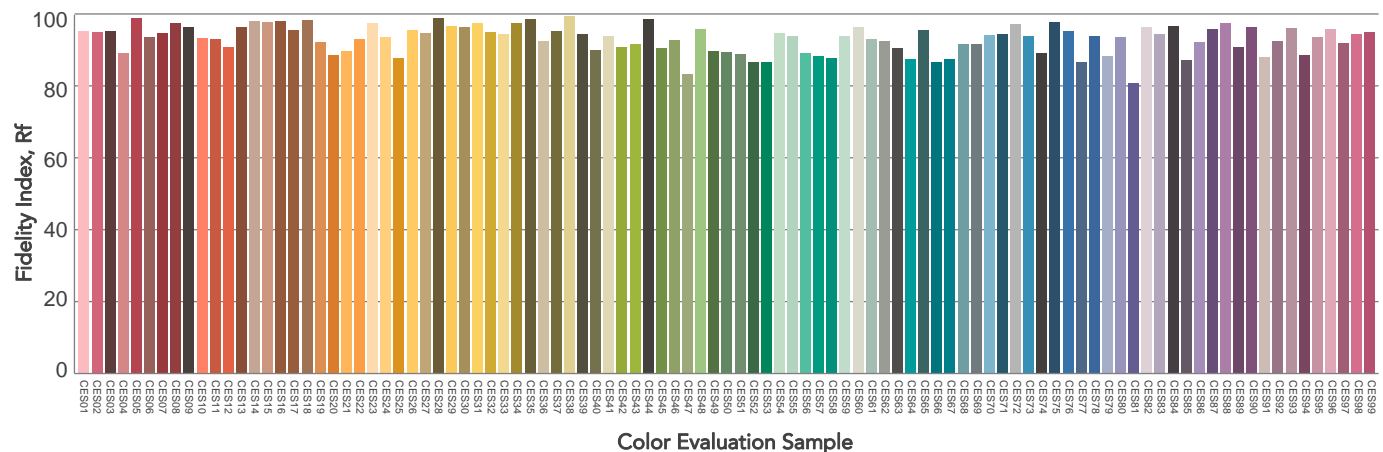
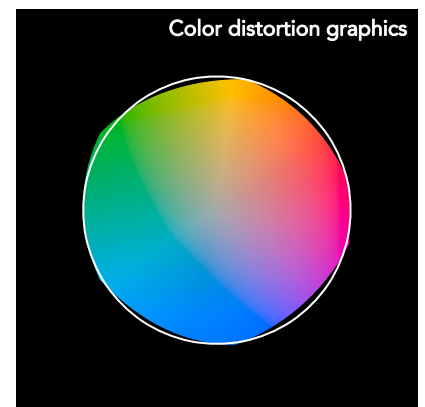
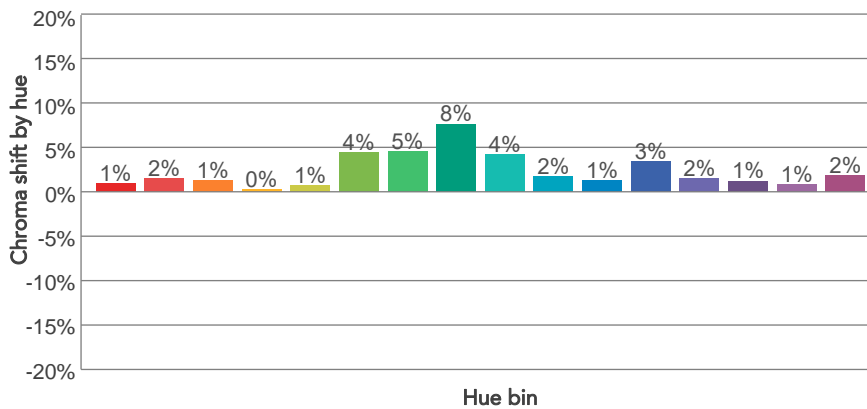
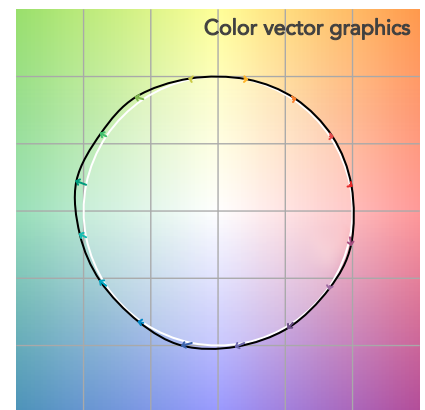
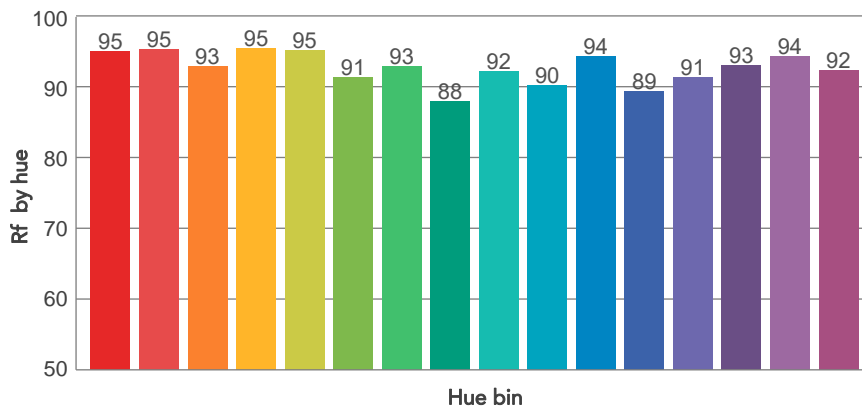
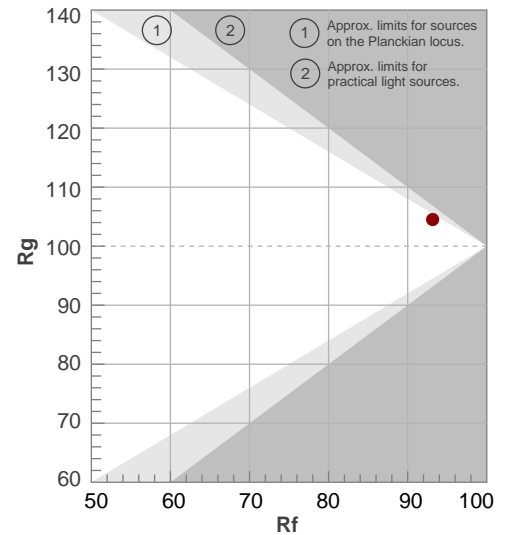
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
3204 K	93,5	92,3	93,2	104,5	92,7	83	0,423	0,397	-0,0006

# TM30 DETAILS

**Rf 93,2**  
Fidelity index Rf

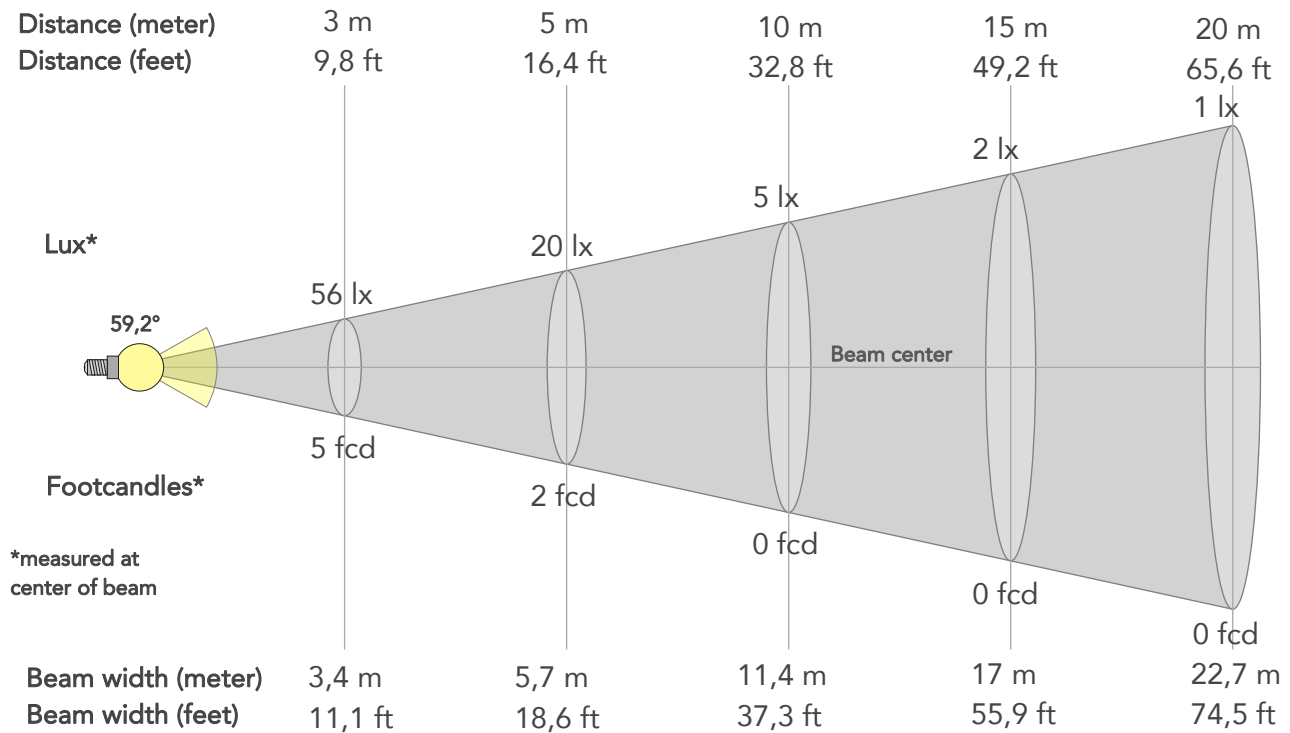
**Rg 104,5**  
Gammut index

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



# BEAM DETAILS

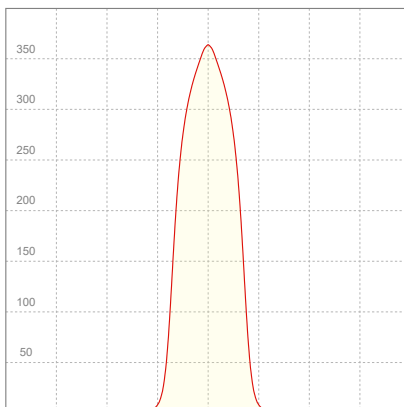
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,2°	77,5°	89,6°	99,6%	98,2%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	503lx	126lx	56lx	31lx	20lx	9lx	5lx	2lx	1lx	1lx	1lx	0lx	0lx
Footcand.	47fcd	12fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,5m	5,7m	8,5m	11,4m	17m	22,7m	28,4m	34,1m	45,4m	56,8m
Beam wid.	3,7ft	7,5ft	11,1ft	14,9ft	18,6ft	27,9ft	37,3ft	55,9ft	74,5ft	93,2ft	111,8ft	149,1ft	186,3ft

## LINEAR DISTRIBUTION DIAGRAM

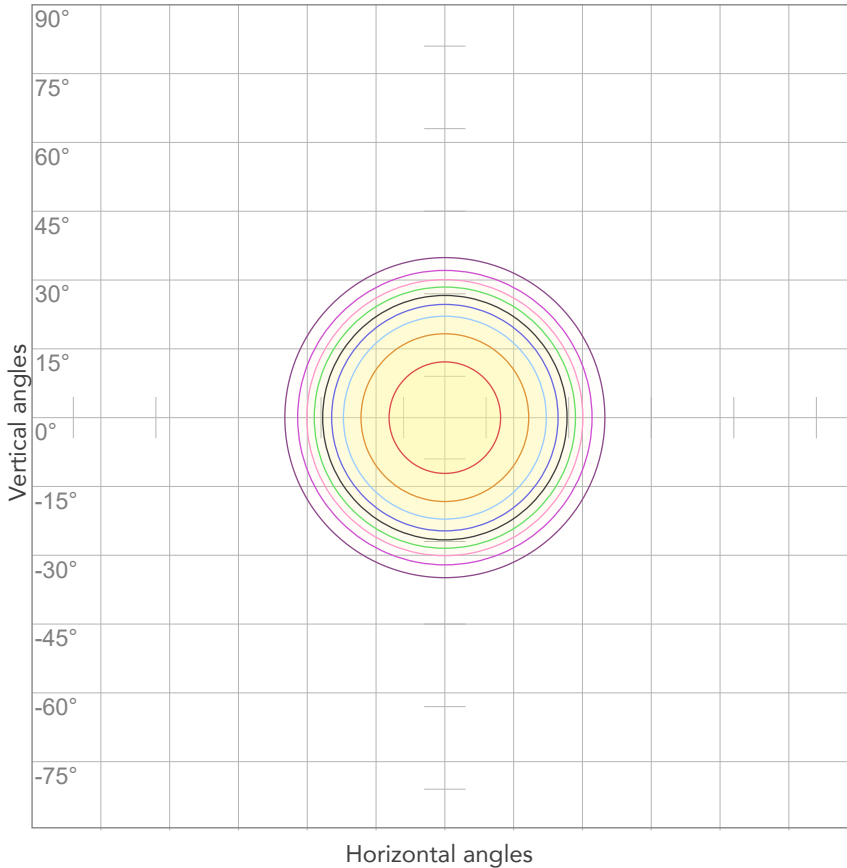


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,111A	22,8W	0,91	18lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



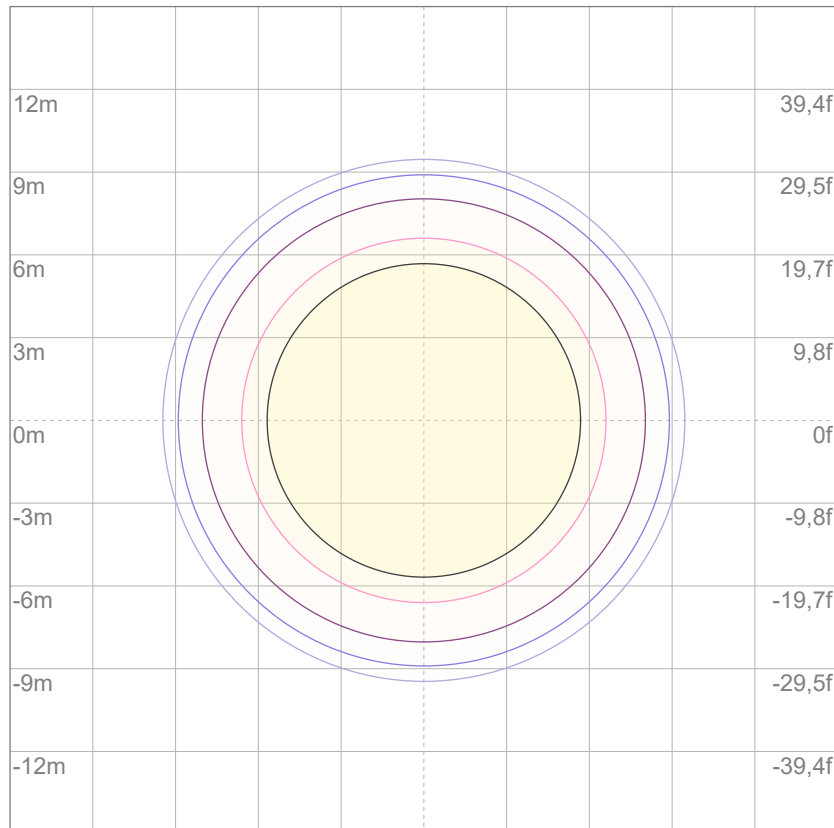
10%	50 cd
20%	101 cd
30%	151 cd
40%	201 cd
50%	251 cd
60%	302 cd
70%	352 cd
80%	402 cd

### Conditions:

Number of c-planes: 2

Candela at center: 503 cd

## ISO LUX DIAGRAM



3%	0,151 lx
5%	0,251 lx
10%	0,503 lx
30%	1,51 lx
50%	2,51 lx

### Conditions:

Number of c-planes: 2

Lux at center: 5,03 lx

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



Total lumen output:

308 lm

Peak candela output:

1215 cd

Light quality:

CRI: 93,4

Color temperature:

3160 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Min Zoom

Target:

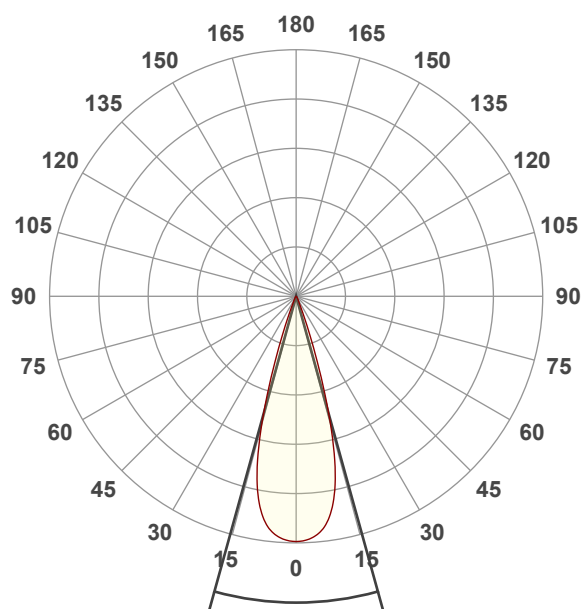
3200K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:40:45

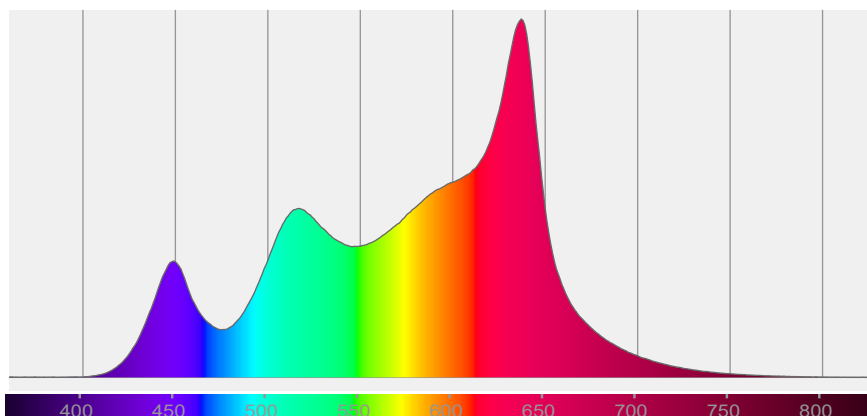


Beam angle 50%: 31°

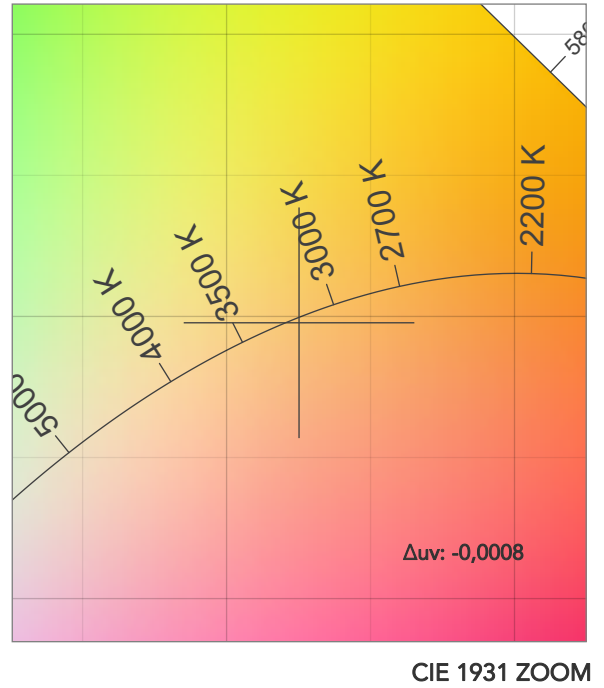
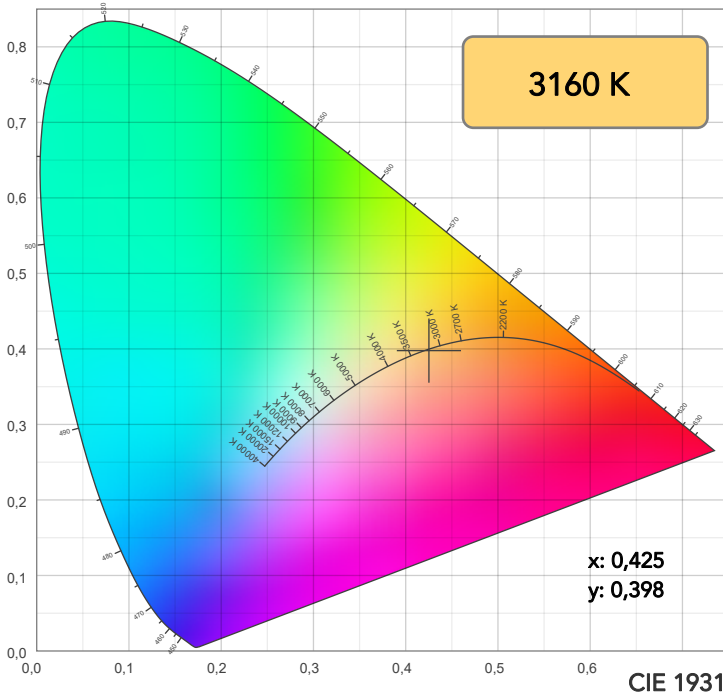
Field angle 10%: 41,9°

Cut off angle 2.5%: 51,6°

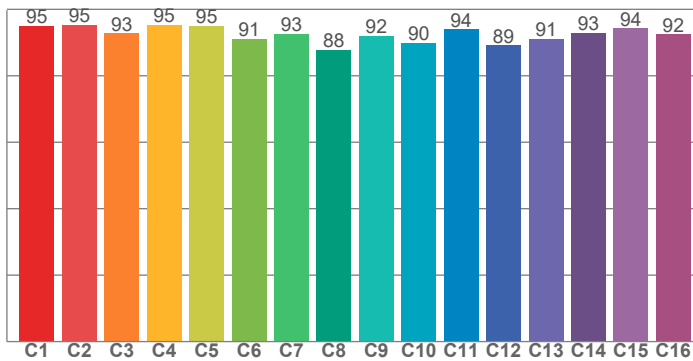
**Spectra**



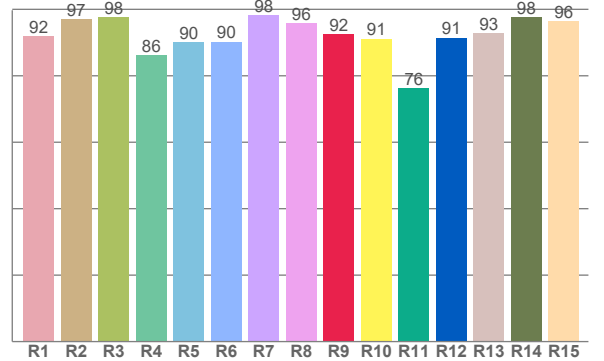
# COLOR DETAILS



TM30: 93,0



CRI: 93,4 (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
91,9	97,0	97,7	86,1	90,0	90,3	98,2	95,7	92,4	91,1	76,2	91,5	92,8	97,6	96,4

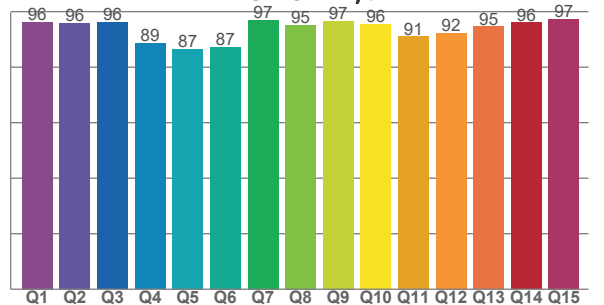
TM30 C values, 16 binned values out of total of 99 C values

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

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,3	95,9	96,2	88,6	86,5	87,3	96,9	95,2	96,7	95,6	91,0	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	$\Delta uv$
3160 K	93,4	92,4	93,0	104,6	92,6	83	0,425	0,398	-0,0008

## TM30 DETAILS

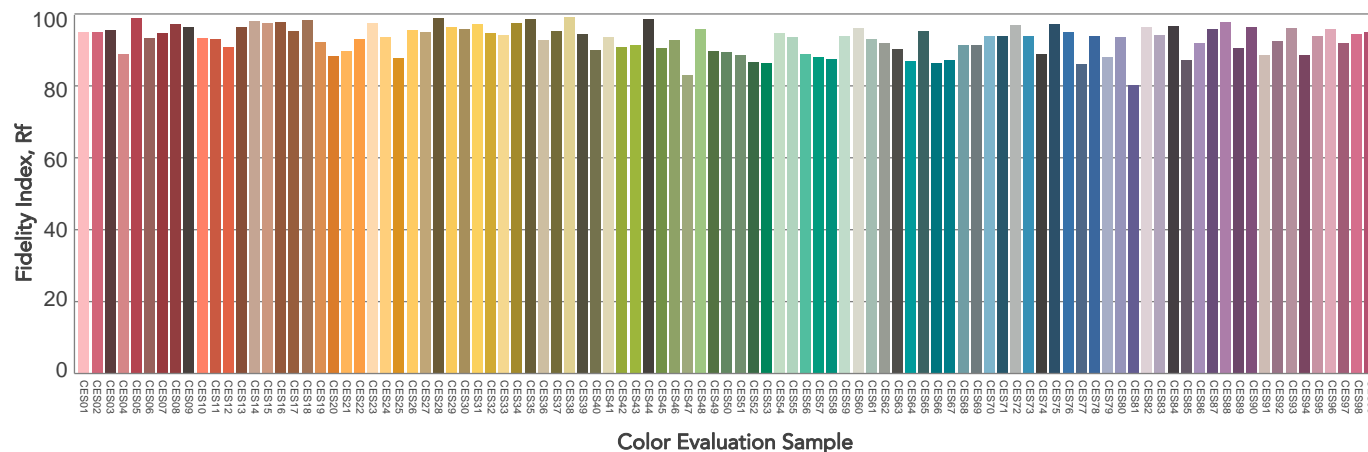
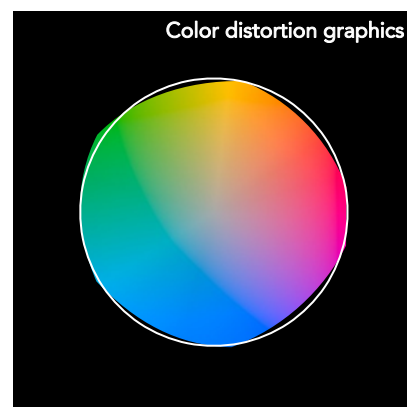
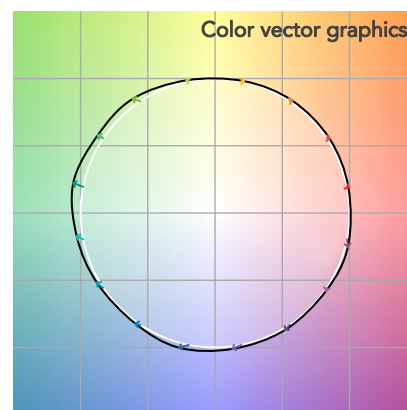
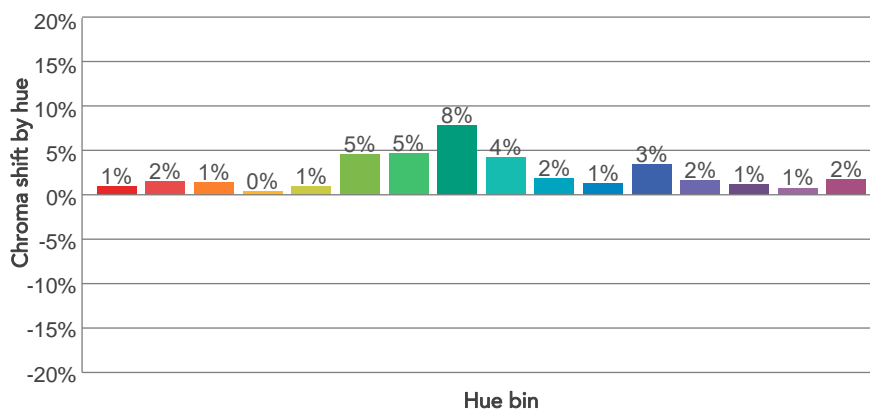
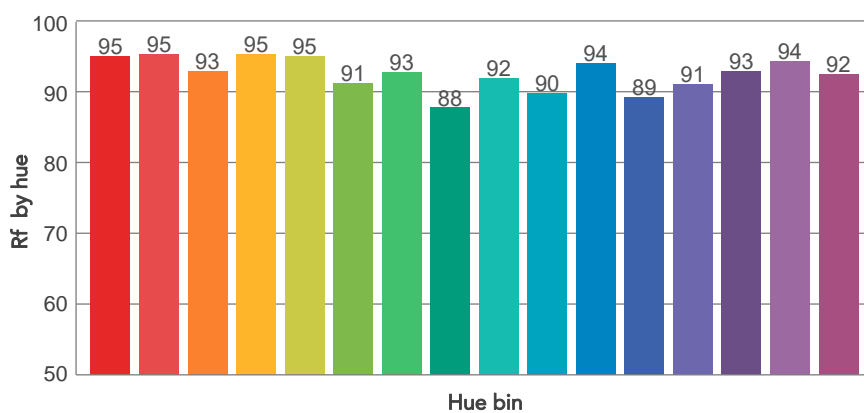
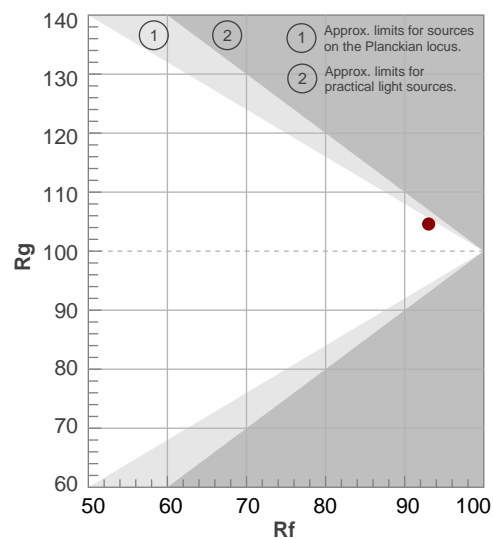
Rf 93,0

Fidelity index  $R_f$

Rg 104,6

## Gammut index

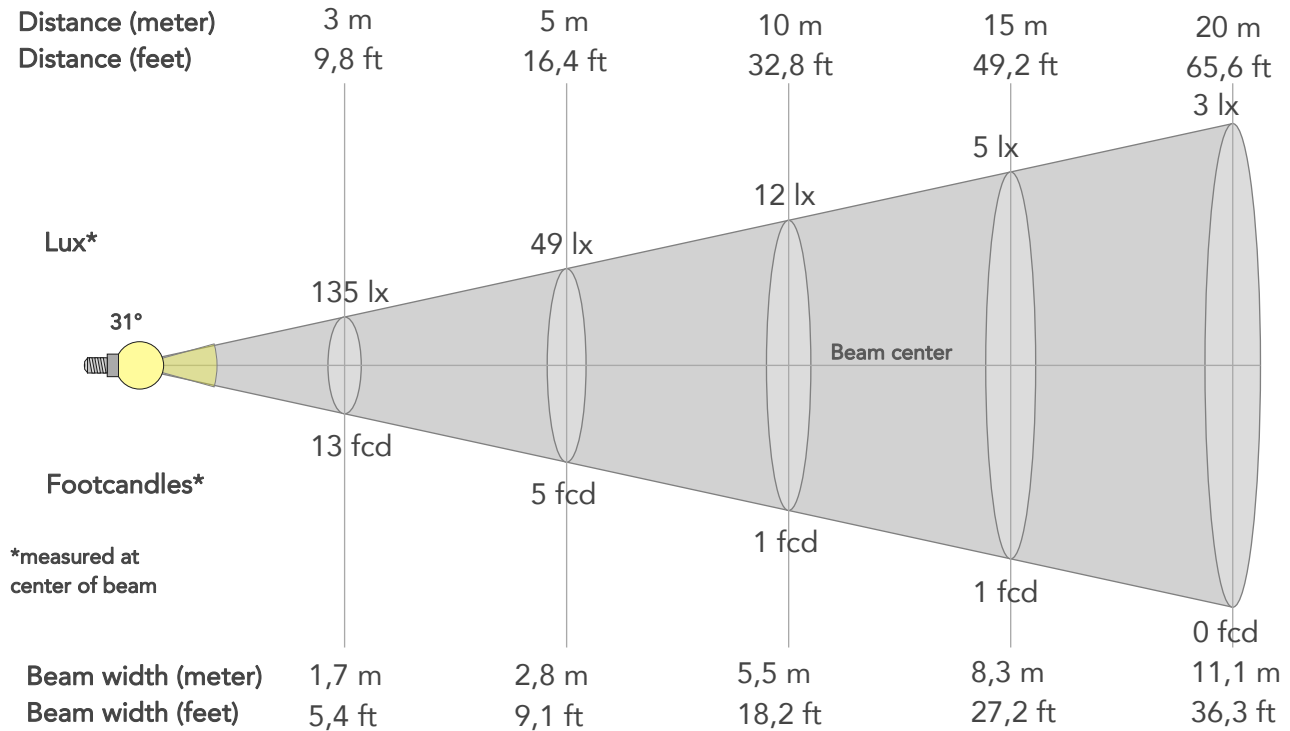
		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	95	1%	-1%
2	95	2%	-1%
3	93	1%	-1%
4	95	0%	-2%
5	95	1%	2%
6	91	5%	4%
7	93	5%	0%
8	88	8%	-1%
9	92	4%	-3%
10	90	2%	-6%
11	94	1%	-3%
12	89	3%	-7%
13	91	2%	-7%
14	93	1%	-5%
15	94	1%	-2%
16	92	2%	-5%





# BEAM DETAILS

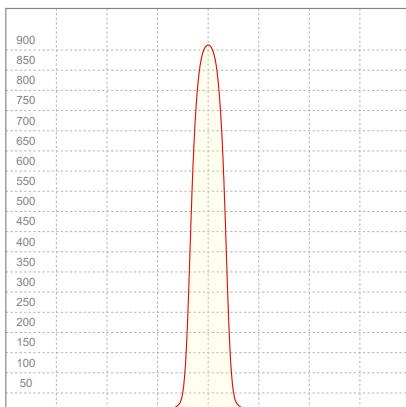
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31°	41,9°	51,6°	99,9%	99,3%



## 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	1215lx	304lx	135lx	76lx	49lx	22lx	12lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	113fcd	28fcd	13fcd	7fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,5m	8,3m	11,1m	13,8m	16,6m	22,1m	27,7m
Beam wid.	1,8ft	3,7ft	5,4ft	7,3ft	9,1ft	13,6ft	18,2ft	27,2ft	36,3ft	45,4ft	54,5ft	72,6ft	90,8ft

## LINEAR DISTRIBUTION DIAGRAM

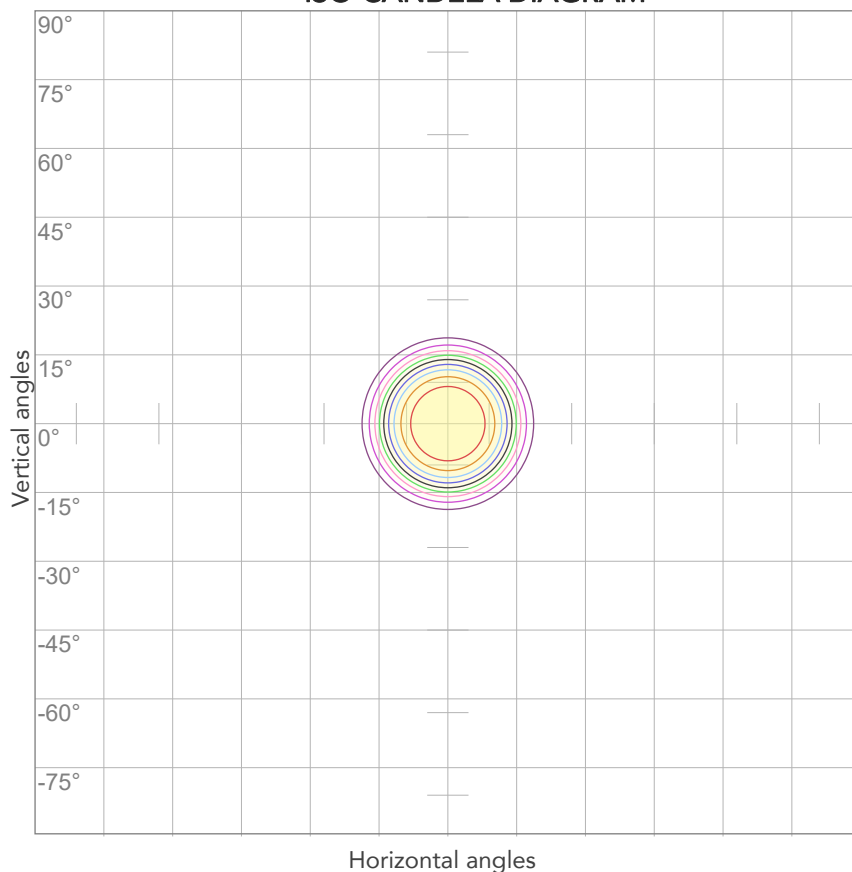


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	0,111A	22,8W	0,91	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



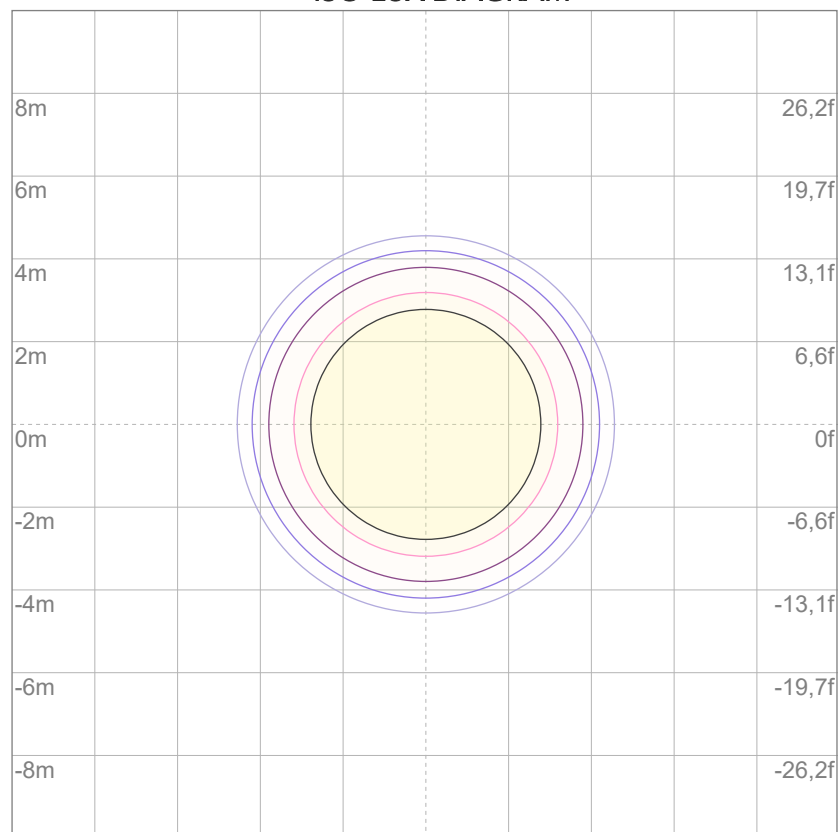
10%	121 cd
20%	243 cd
30%	364 cd
40%	486 cd
50%	607 cd
60%	729 cd
70%	850 cd
80%	972 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1215 cd

## ISO LUX DIAGRAM



3%	0,364 lx
5%	0,607 lx
10%	1,21 lx
30%	3,64 lx
50%	6,07 lx

### Conditions:

Number of c-planes: 2

Lux at center: 12,1 lx

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



Total lumen output:

432 lm

Peak candela output:

521 cd

Light quality:

CRI: 93,8

Color temperature:

3953 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

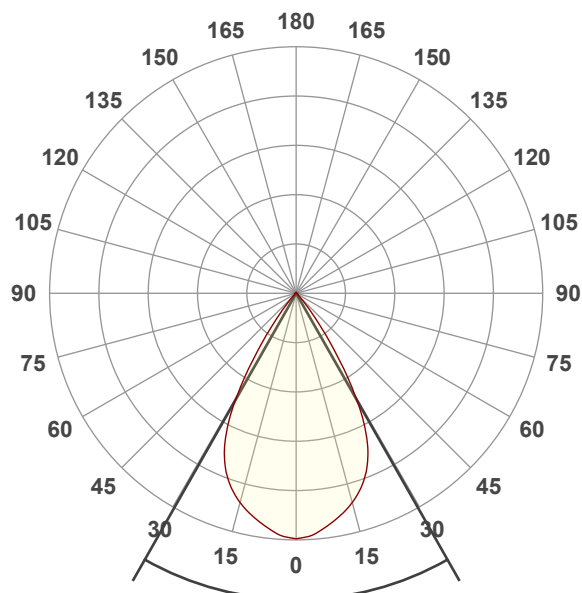
4000K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:53:24

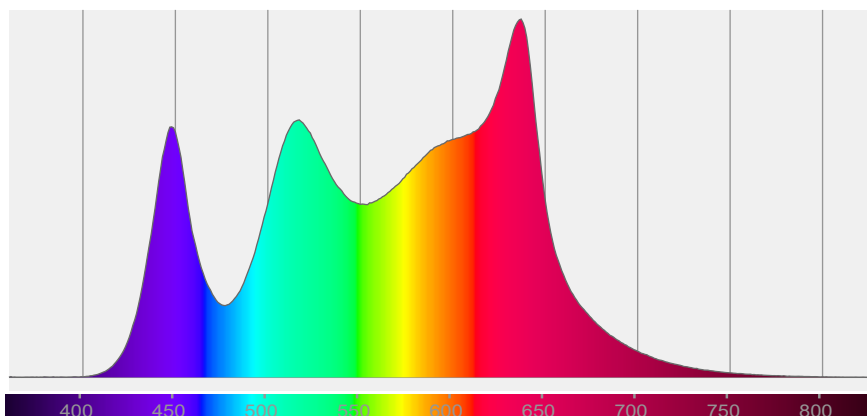


Beam angle 50%: 59,2°

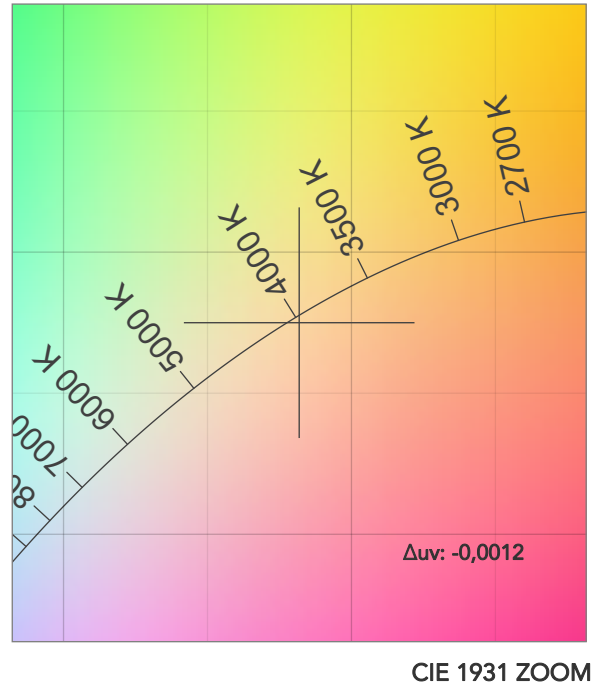
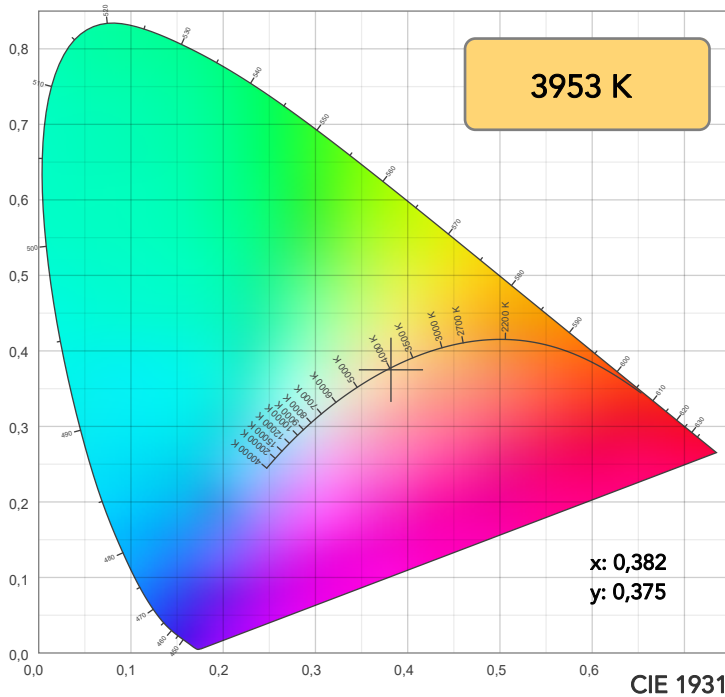
Field angle 10%: 77,8°

Cut off angle 2.5%: 89,4°

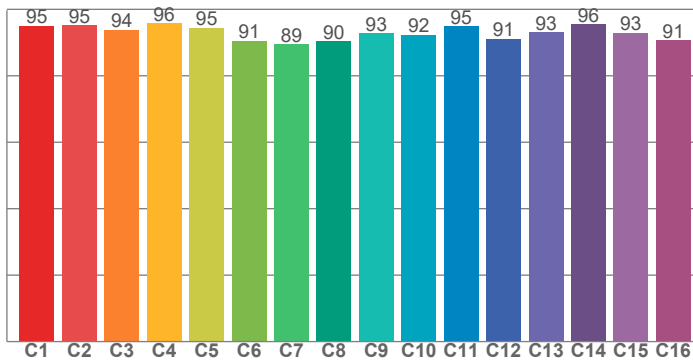
**Spectra**



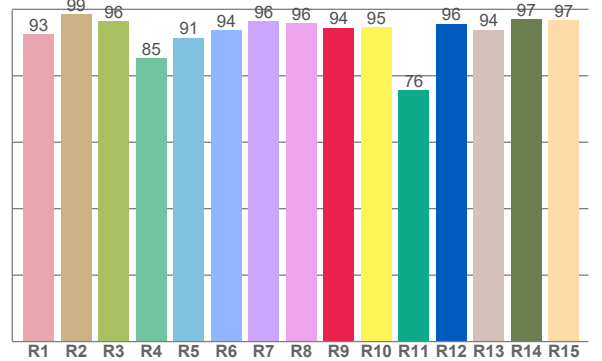
## COLOR DETAILS



**TM30: 93,3**



**CRI: 93,8 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92,6	98,6	96,4	85,2	91,5	93,6	96,5	95,8	94,5	94,6	75,7	95,7	93,8	97,0	96,8

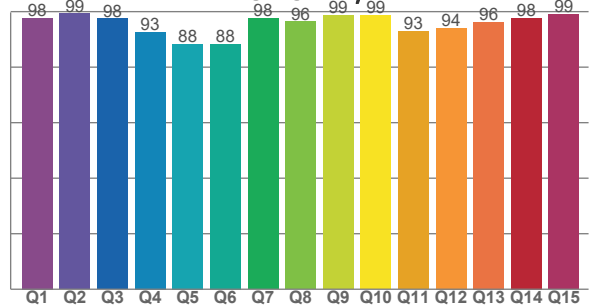
TM30 C values, 16 binned values out of total of 99 C values

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

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,7	99,3	97,5	92,7	88,4	88,3	97,6	96,4	98,7	98,7	92,9	94,1	96,3	97,8	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
3953 K	93,8	94,5	93,3	105,4	94,4	82	0,382	0,375	-0,0012

## TM30 DETAILS

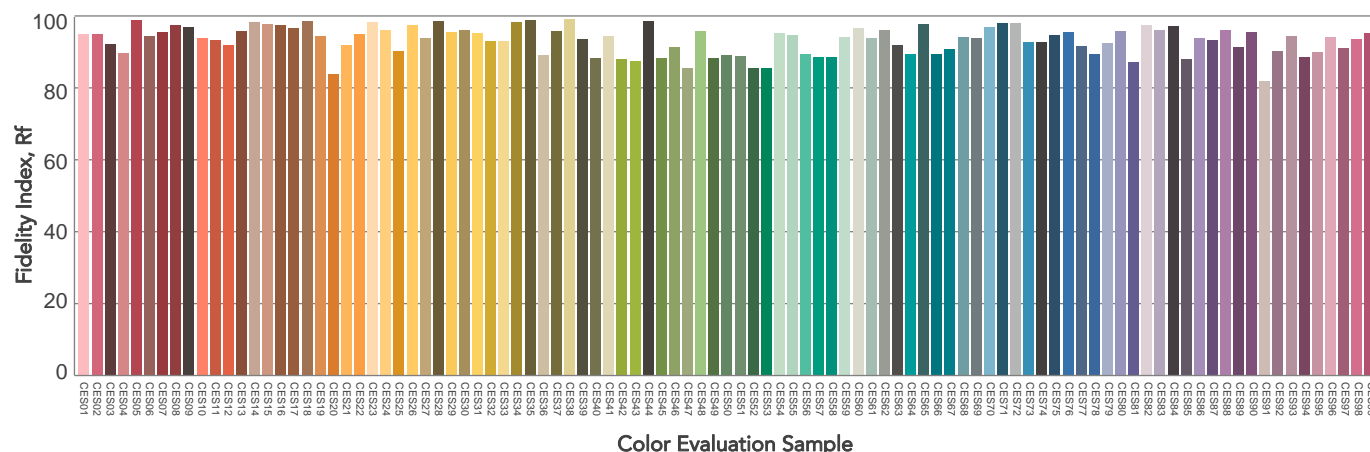
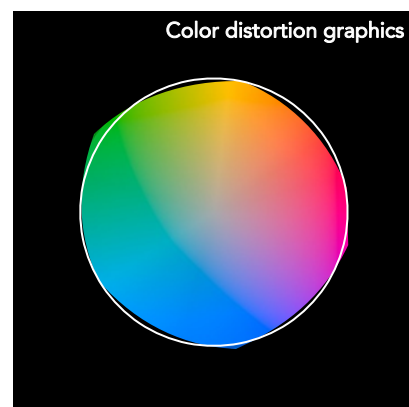
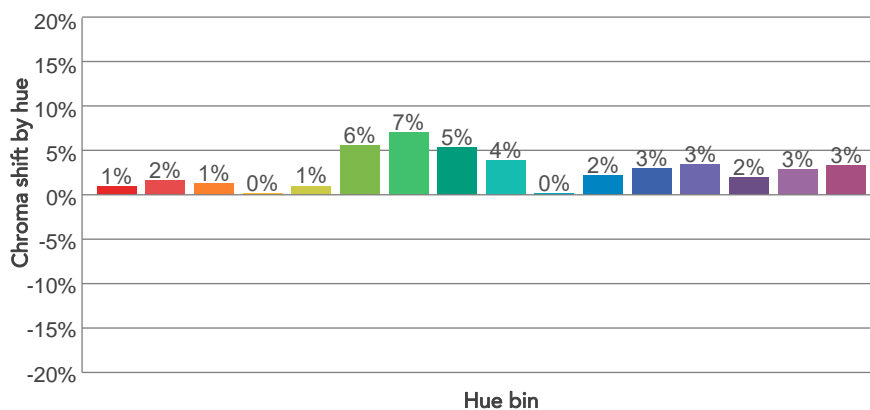
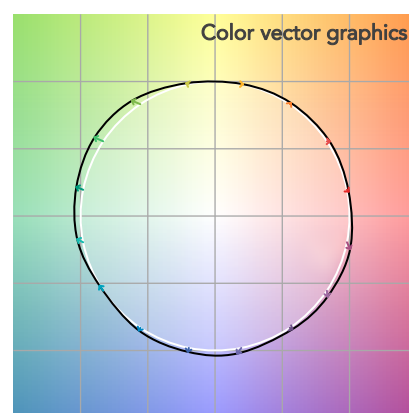
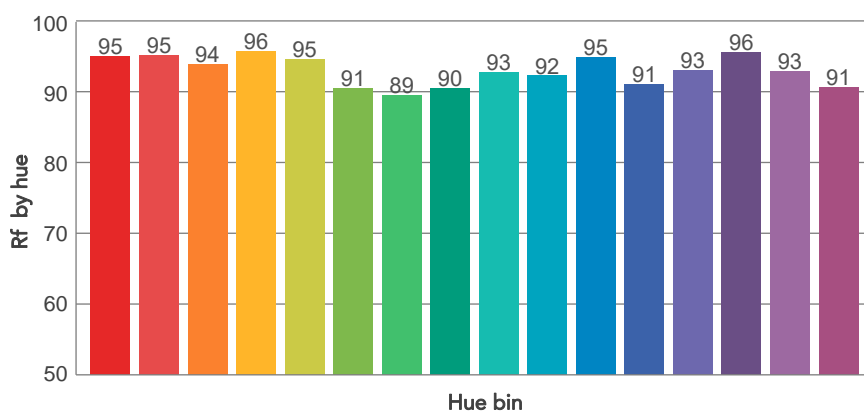
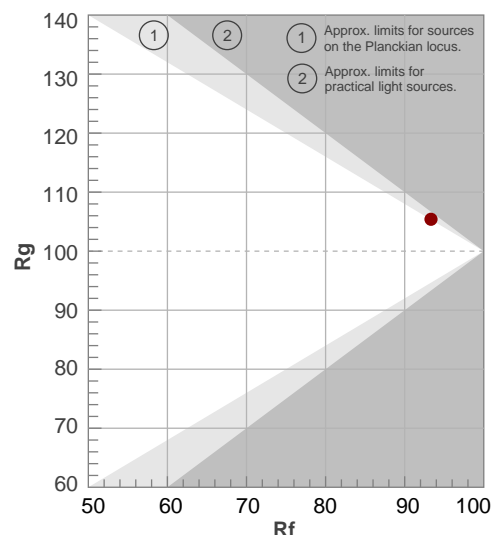
**Rf 93,3**

Fidelity index Rf

**Rg 105,4**

Gammut index

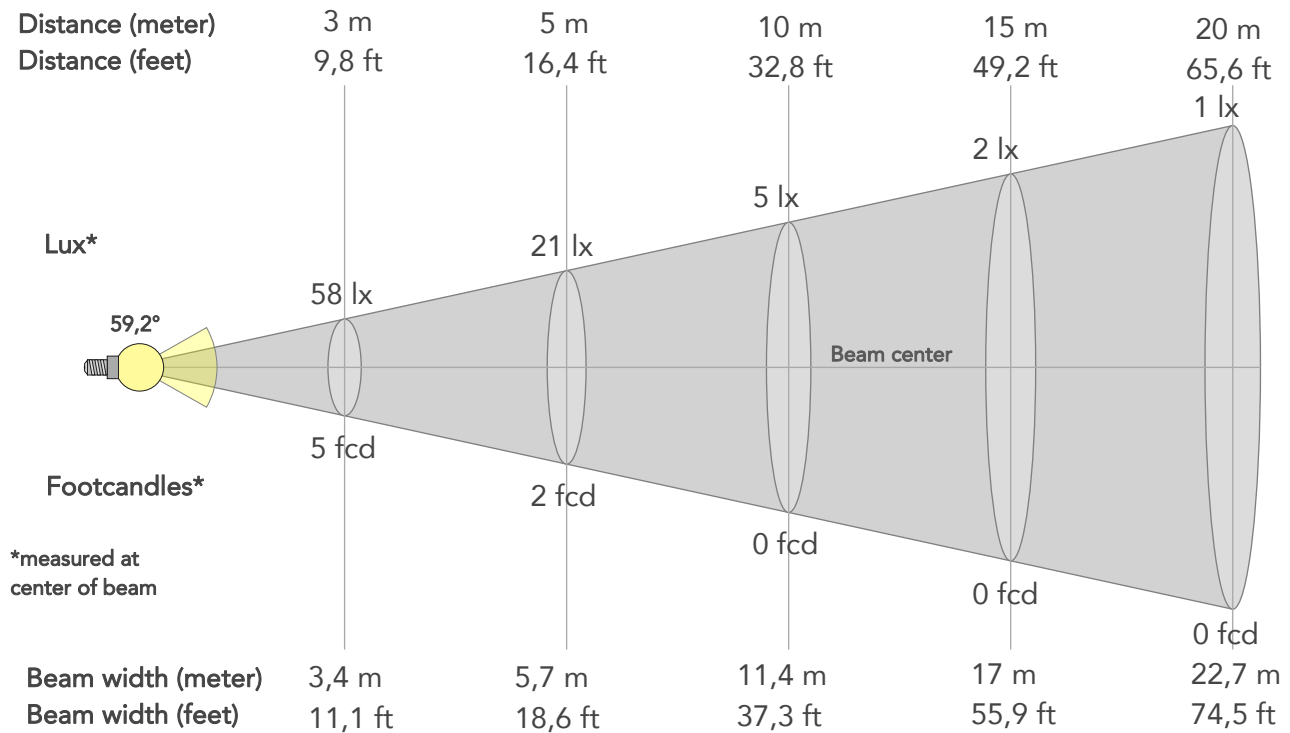
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	-2%
2	95	2%	-1%
3	94	1%	0%
4	96	0%	-1%
5	95	1%	2%
6	91	6%	4%
7	89	7%	1%
8	90	5%	-1%
9	93	4%	-3%
10	92	0%	-5%
11	95	2%	0%
12	91	3%	0%
13	93	3%	-4%
14	96	2%	1%
15	93	3%	-3%
16	91	3%	-5%



# BEAM DETAILS



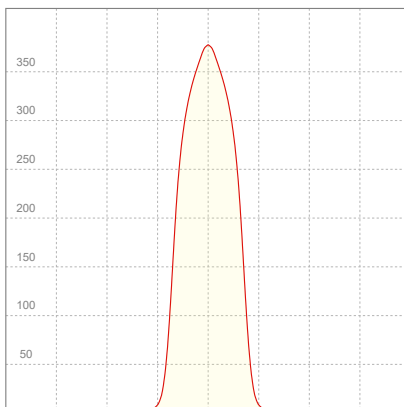
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,2°	77,8°	89,4°	99,5%	98,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	521lx	130lx	58lx	33lx	21lx	9lx	5lx	2lx	1lx	1lx	1lx	0lx	0lx
Footcand.	48fcd	12fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,5m	5,7m	8,5m	11,4m	17m	22,7m	28,4m	34,1m	45,5m	56,8m
Beam wid.	3,8ft	7,5ft	11,1ft	14,9ft	18,6ft	28ft	37,3ft	55,9ft	74,5ft	93,2ft	111,8ft	149,1ft	186,4ft

## LINEAR DISTRIBUTION DIAGRAM

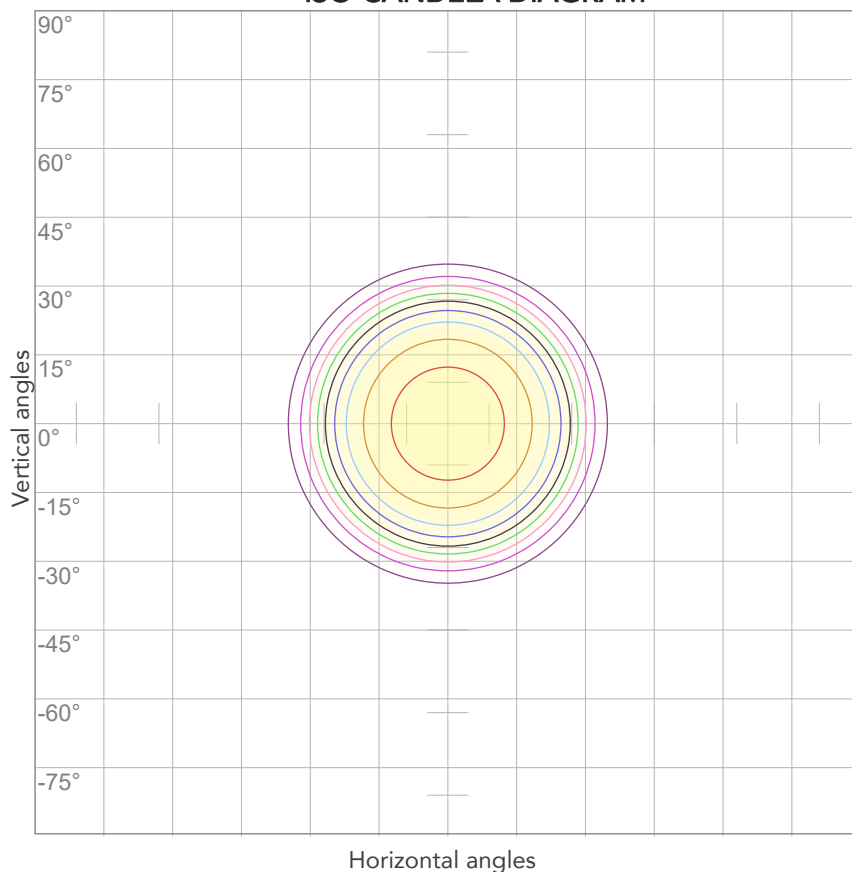


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
226V	0,115A	23,7W	0,91	18lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



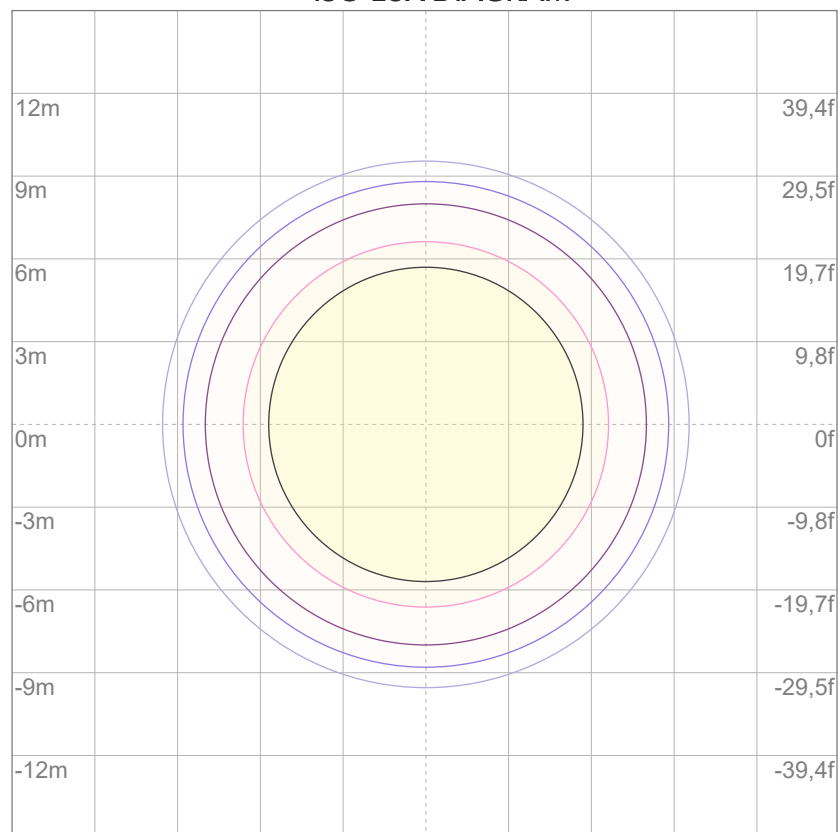
10%	52 cd
20%	104 cd
30%	156 cd
40%	208 cd
50%	260 cd
60%	313 cd
70%	365 cd
80%	417 cd

### Conditions:

Number of c-planes: 2

Candela at center: 521 cd

## ISO LUX DIAGRAM



3%	0,156 lx
5%	0,260 lx
10%	0,521 lx
30%	1,56 lx
50%	2,60 lx

### Conditions:

Number of c-planes: 2

Lux at center: 5,21 lx

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



Total lumen output:

322 lm

Peak candela output:

1268 cd

Light quality:

CRI: 93,7

Color temperature:

3889 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Min Zoom

Target:

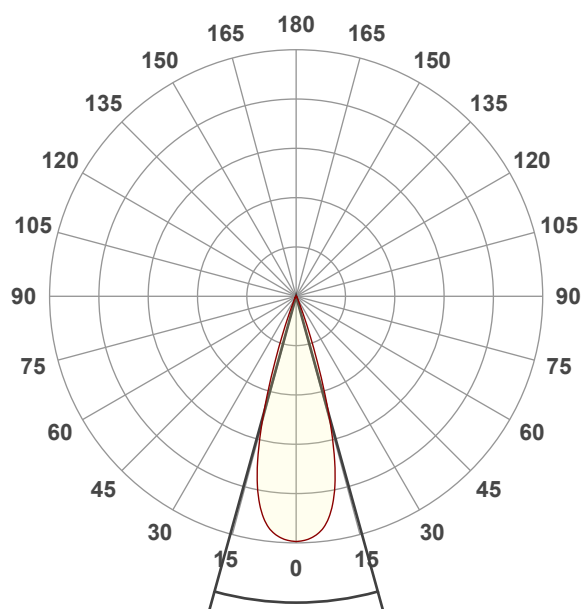
4000K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:42:31

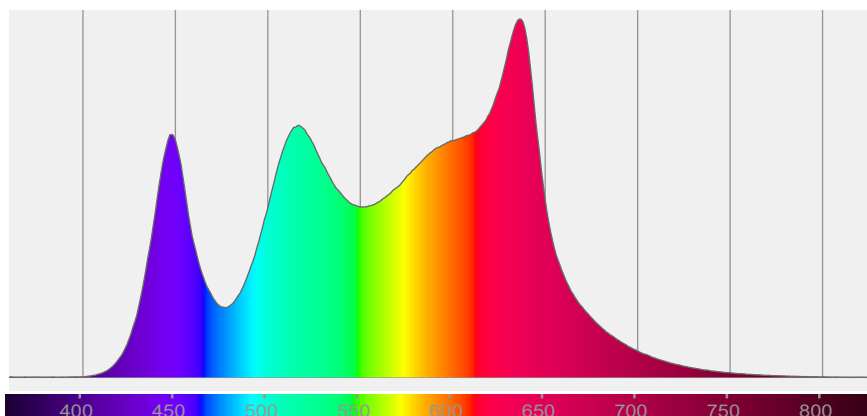


Beam angle 50%: 30,9°

Field angle 10%: 42,1°

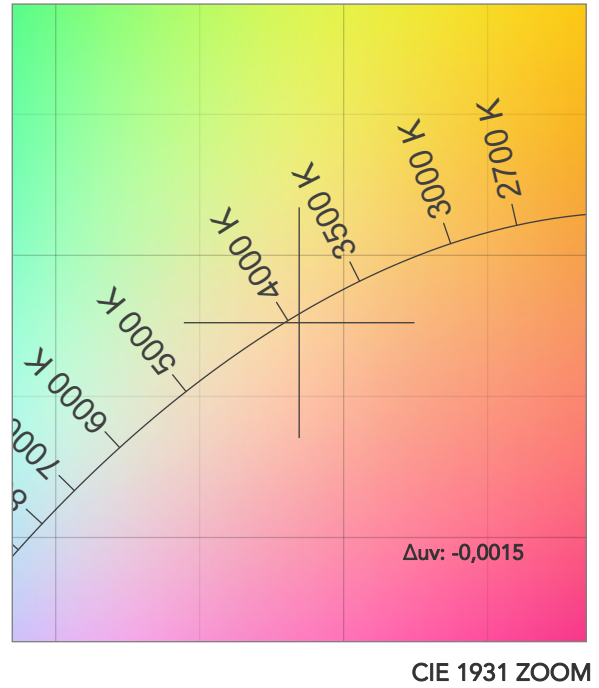
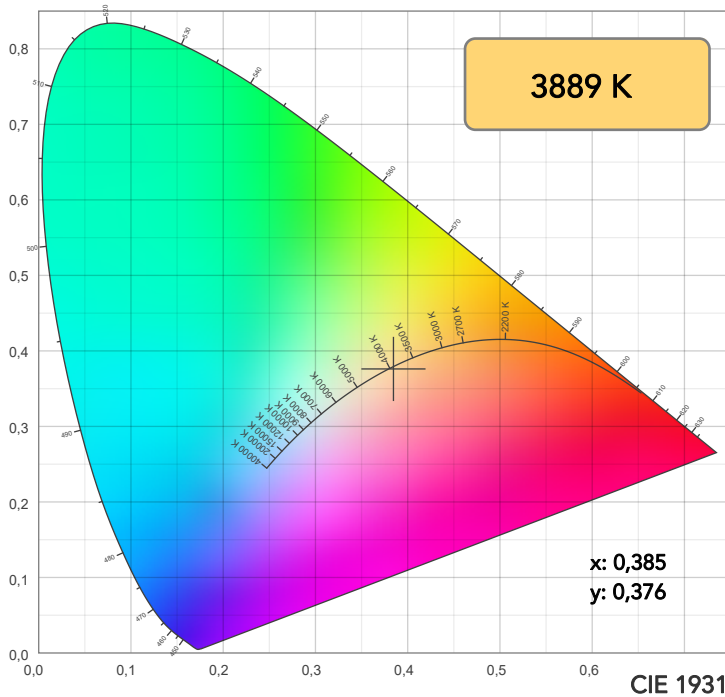
Cut off angle 2.5%: 51,9°

**Spectra**

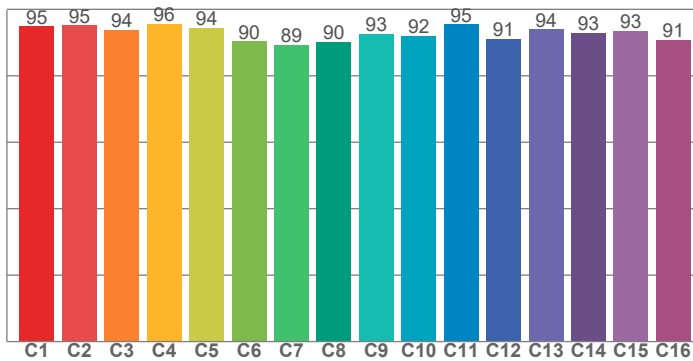




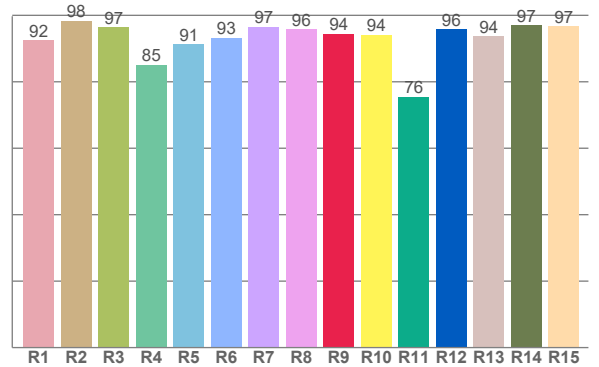
## COLOR DETAILS



**TM30: 93,3**



**CRI: 93,7 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92,4	98,4	96,5	85,1	91,3	93,3	96,5	95,9	94,4	94,2	75,5	95,9	93,6	97,1	96,7

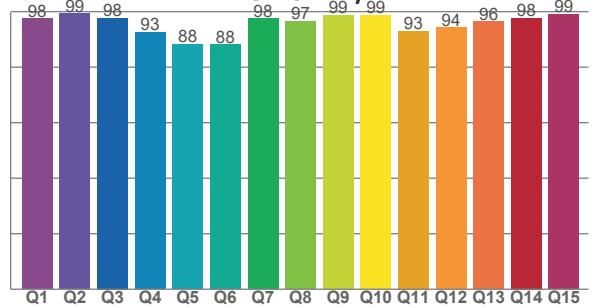
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,9	95,1	93,8	95,7	94,5	90,4	89,3	90,3	92,6	91,9	95,4	91,1	93,9	92,9	93,5	90,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,5	99,3	97,7	92,6	88,2	88,1	97,5	96,5	98,7	98,7	93,0	94,2	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	Δuv
3889 K	93,7	94,4	93,3	105,6	94,4	81	0,385	0,376	-0,0015

## TM30 DETAILS

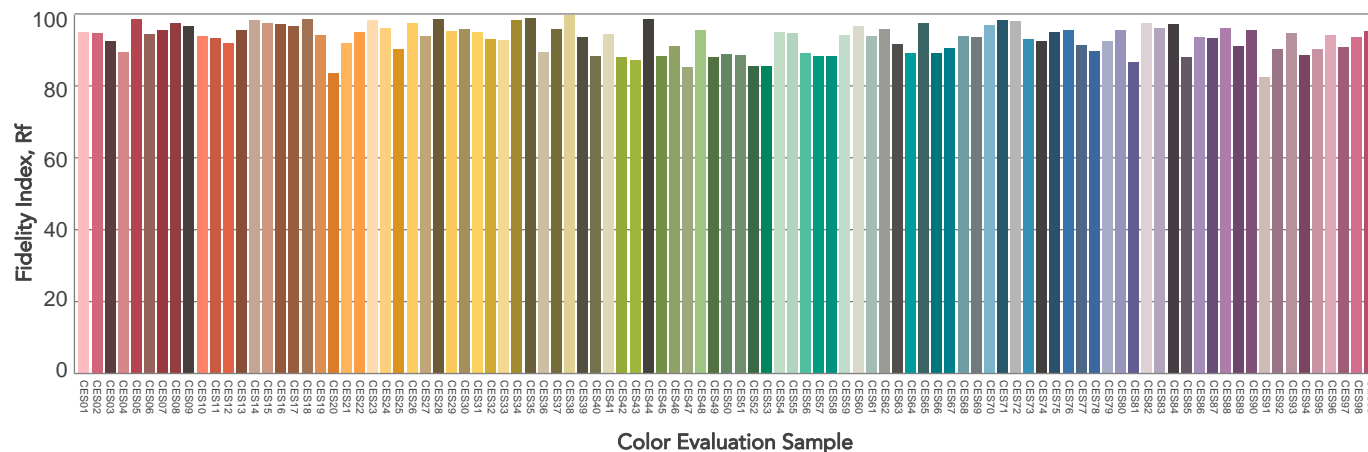
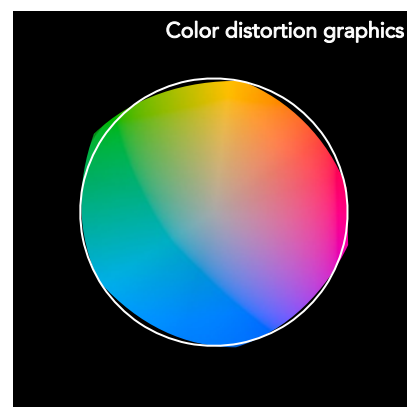
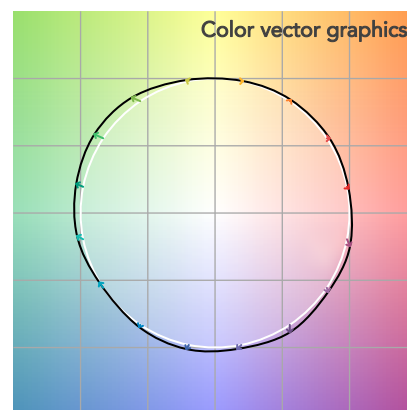
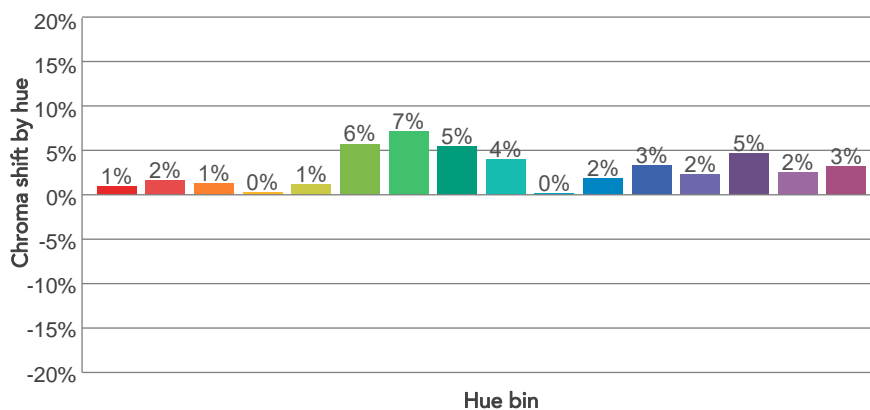
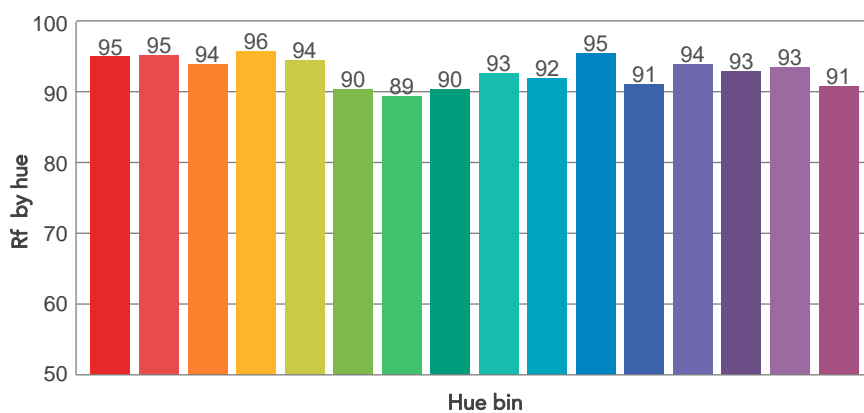
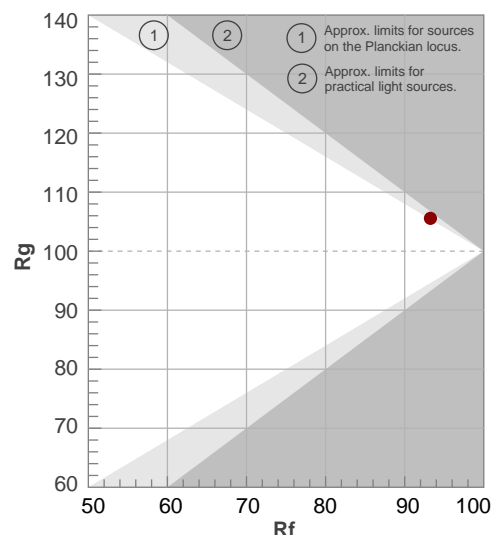
**Rf 93,3**

Fidelity index  $R_f$

Rg 105,6

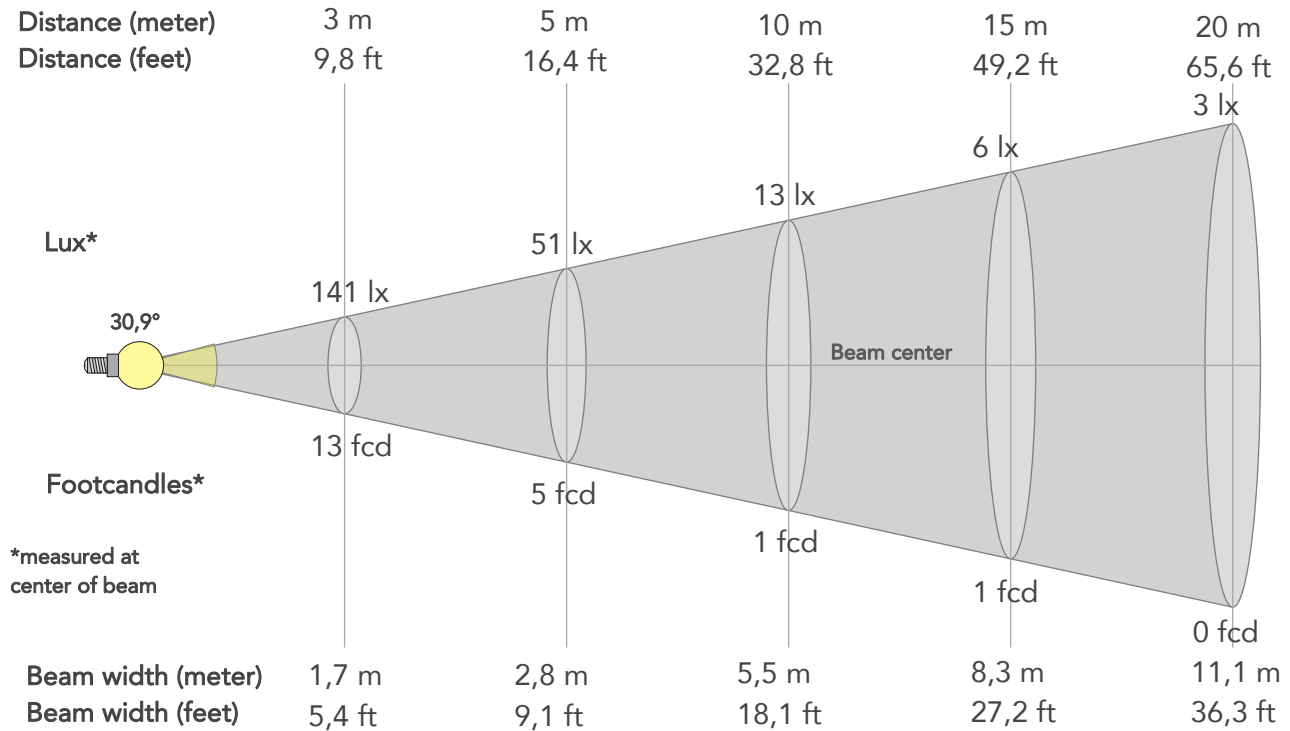
## Gammut index

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



# BEAM DETAILS

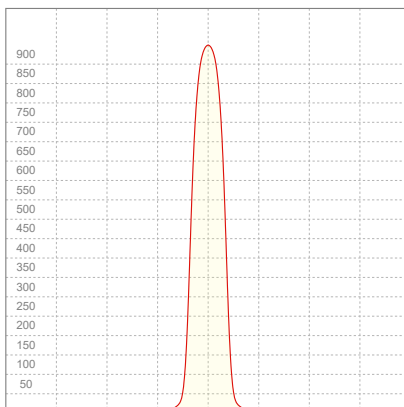
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,9°	42,1°	51,9°	99,8%	99,1%



## 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	1268lx	317lx	141lx	79lx	51lx	23lx	13lx	6lx	3lx	2lx	1lx	1lx	1lx
Footcand.	118fcd	29fcd	13fcd	7fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11,1m	13,8m	16,6m	22,1m	27,7m
Beam wid.	1,8ft	3,7ft	5,4ft	7,2ft	9,1ft	13,6ft	18,1ft	27,2ft	36,3ft	45,4ft	54,4ft	72,6ft	90,7ft

## LINEAR DISTRIBUTION DIAGRAM

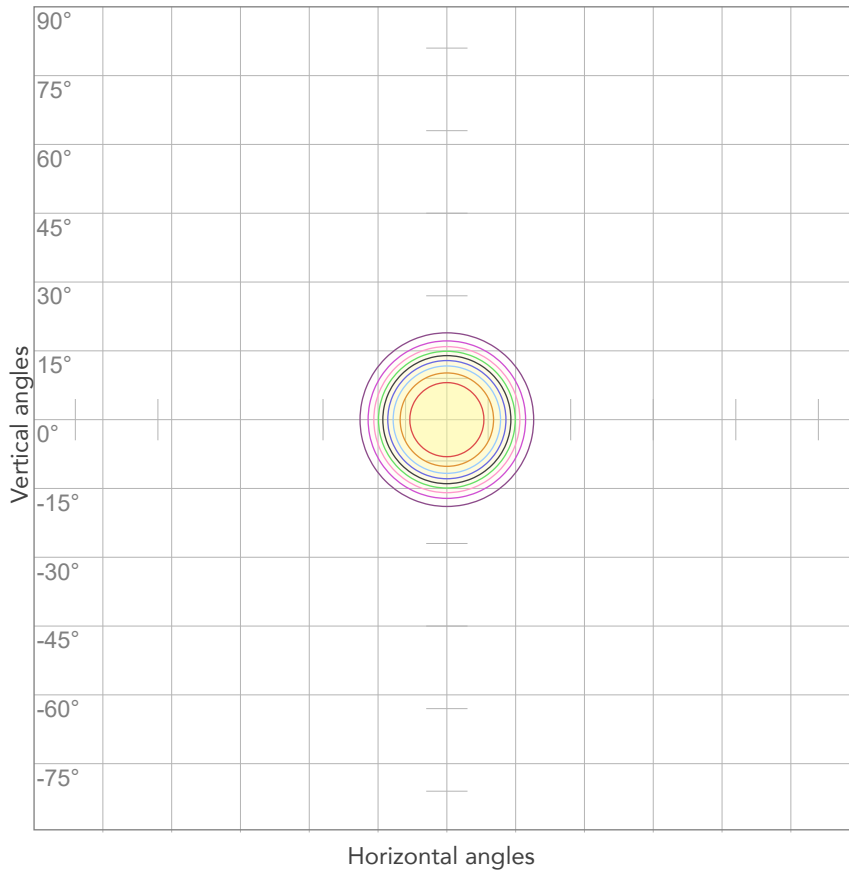


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,115A	23,7W	0,91	14lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



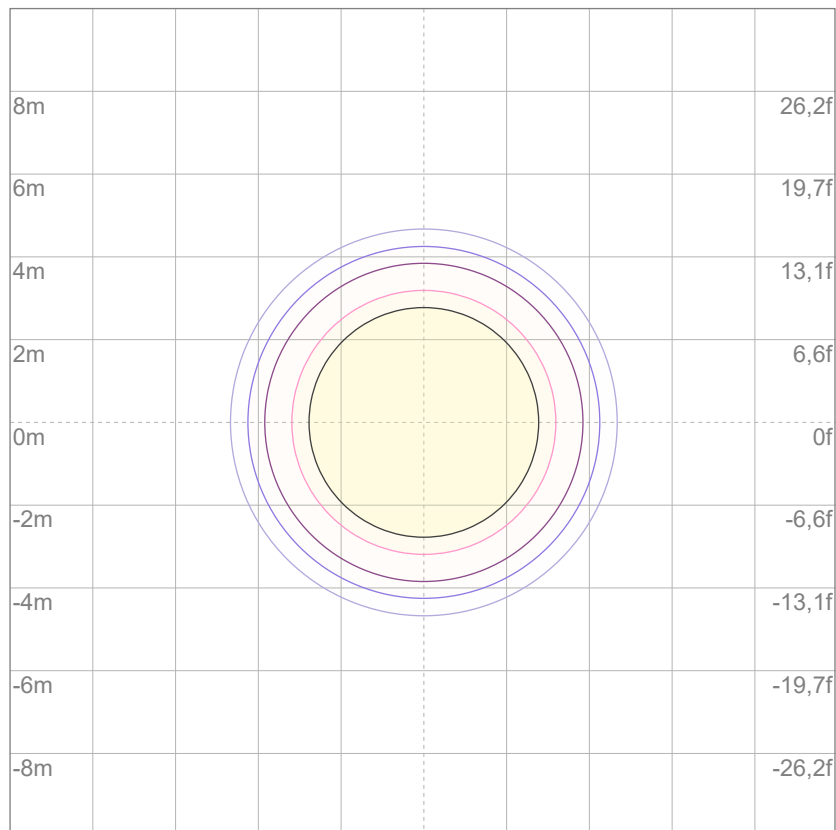
10%	127 cd
20%	254 cd
30%	380 cd
40%	507 cd
50%	634 cd
60%	761 cd
70%	887 cd
80%	1014 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1268 cd

## ISO LUX DIAGRAM



3%	0,380 lx
5%	0,634 lx
10%	1,27 lx
30%	3,80 lx
50%	6,34 lx

### Conditions:

Number of c-planes: 2

Lux at center: 12,7 lx

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



Total lumen output:

466 lm

Peak candela output:

562 cd

Light quality:

CRI: 91,9

Color temperature:

5632 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

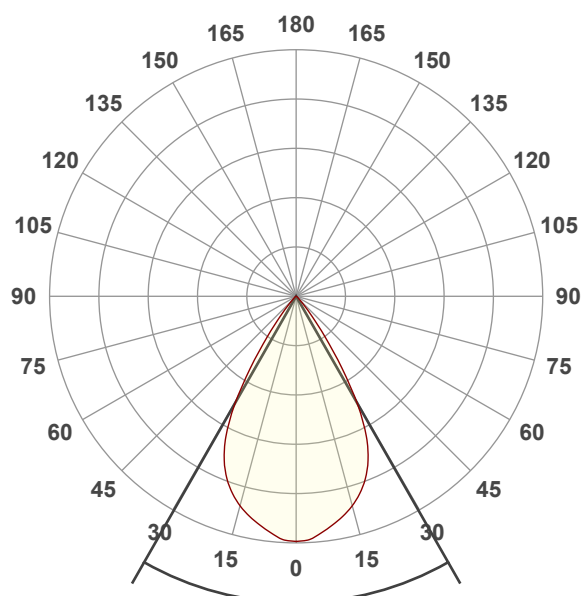
5600K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:55:18

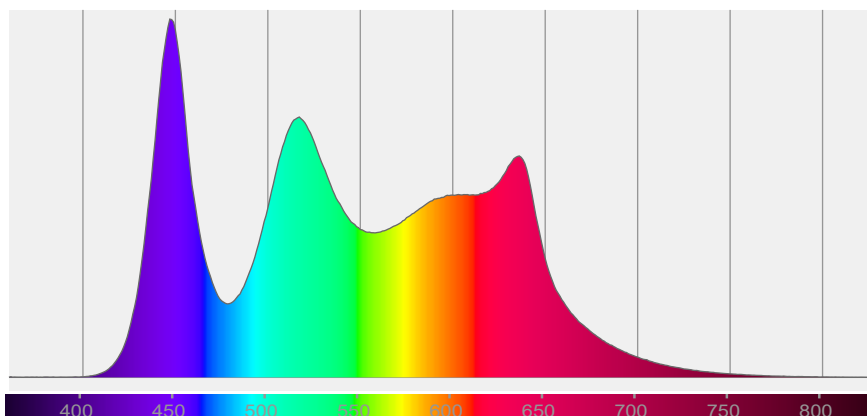


Beam angle 50%: 59,5°

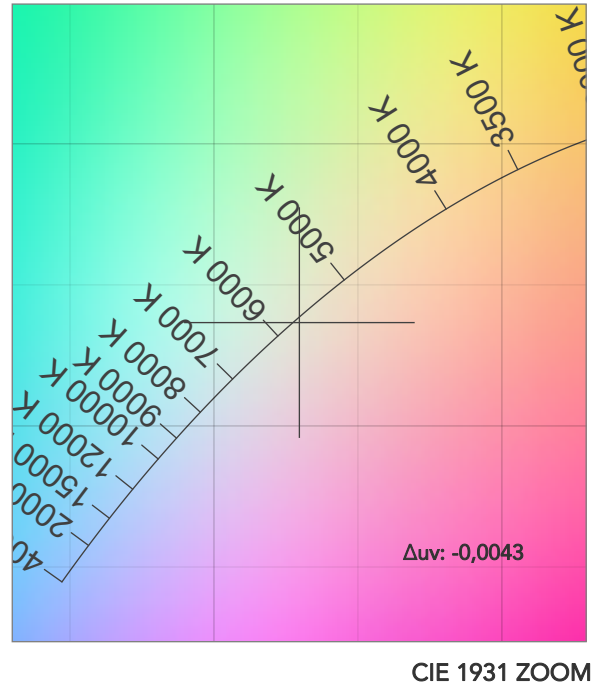
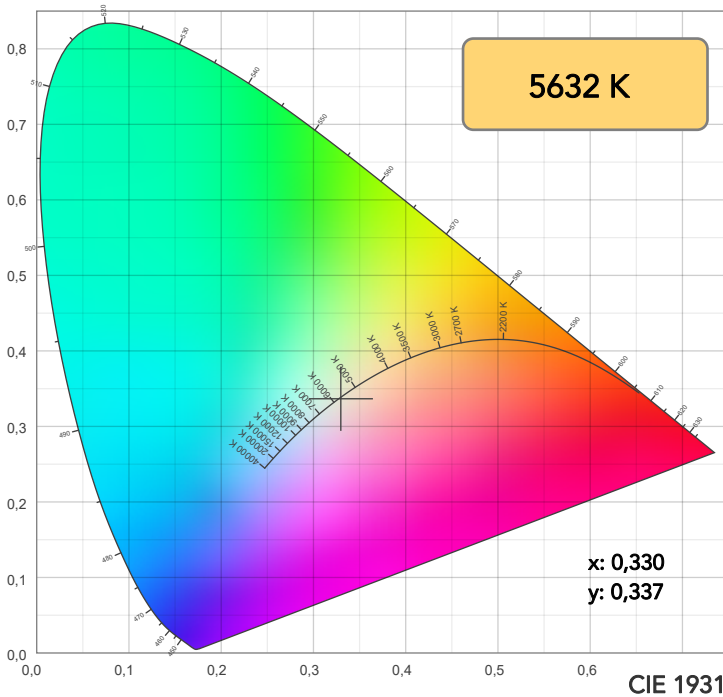
Field angle 10%: 77,4°

Cut off angle 2.5%: 89,1°

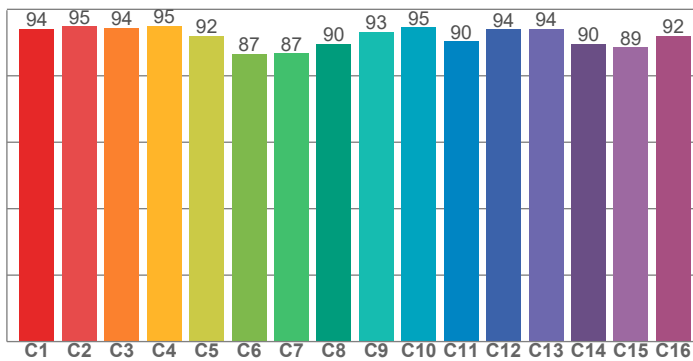
**Spectra**



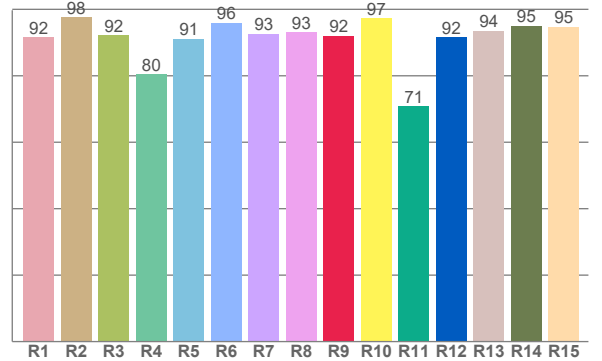
# COLOR DETAILS



TM30: 91,9



CRI: 91,9 (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
91,6	97,7	92,3	80,4	91,1	96,0	92,7	93,1	92,0	97,4	70,8	91,6	93,5	95,0	94,8

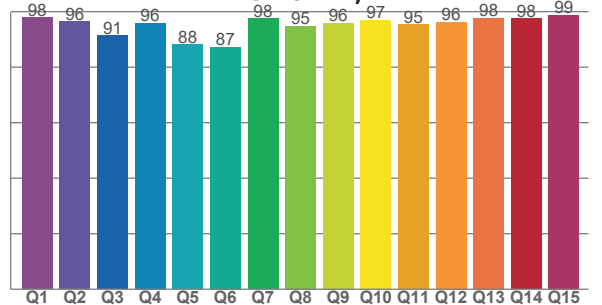
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,1	94,9	94,4	95,0	92,0	86,6	86,7	89,5	93,2	94,6	90,4	94,0	94,2	89,6	88,5	92,0

CQS Q values

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

CQS: 94,1



## COLOR PARAMETERS

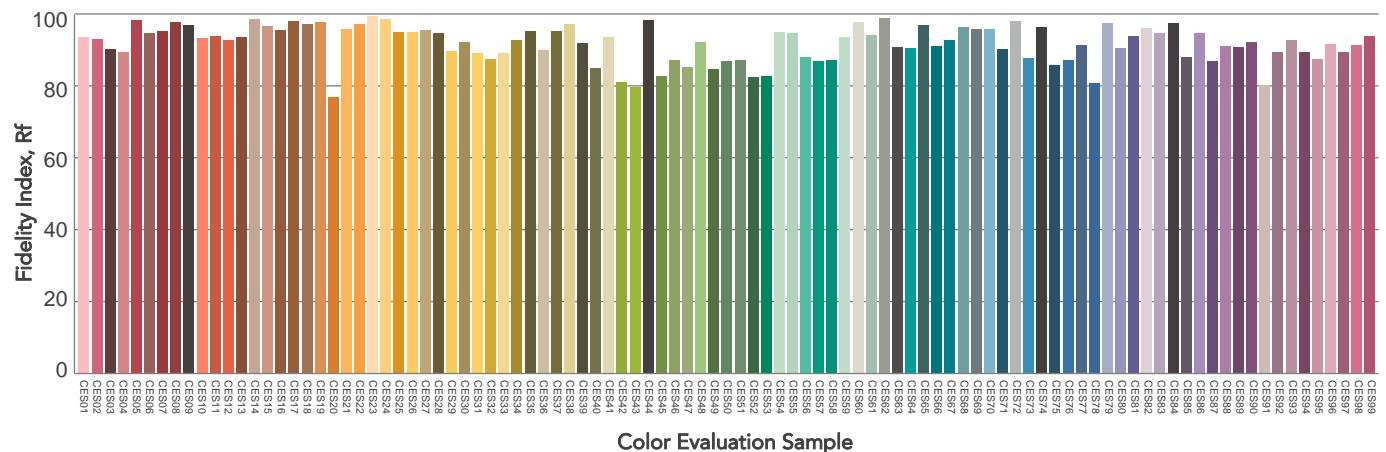
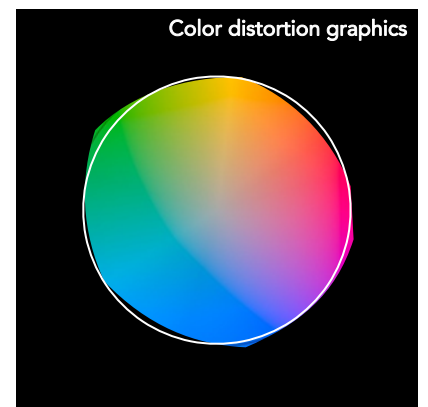
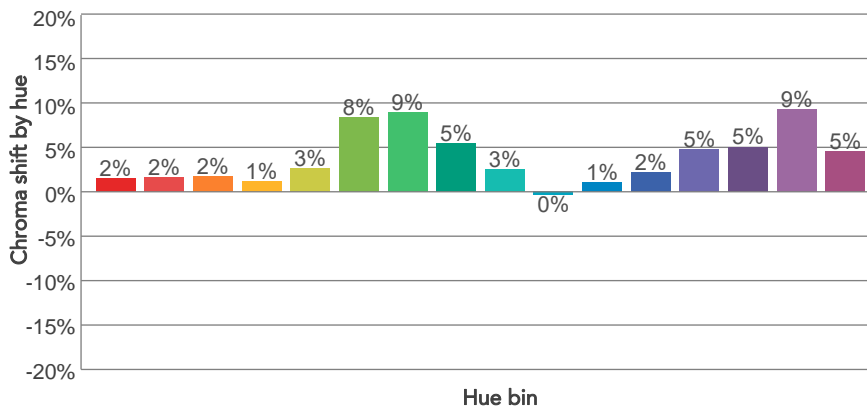
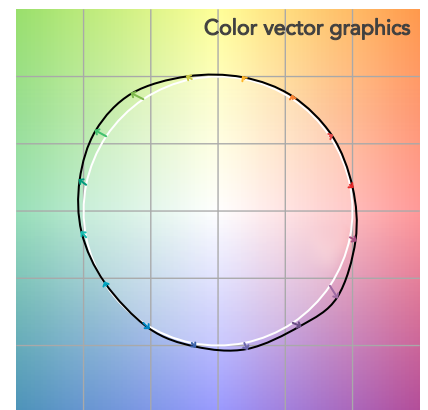
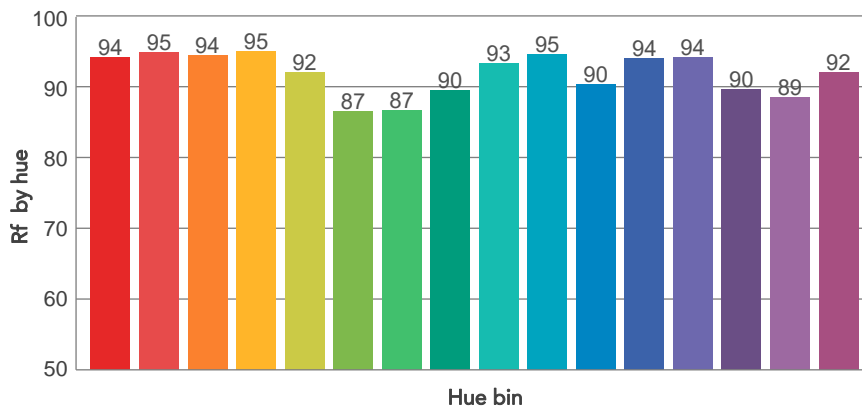
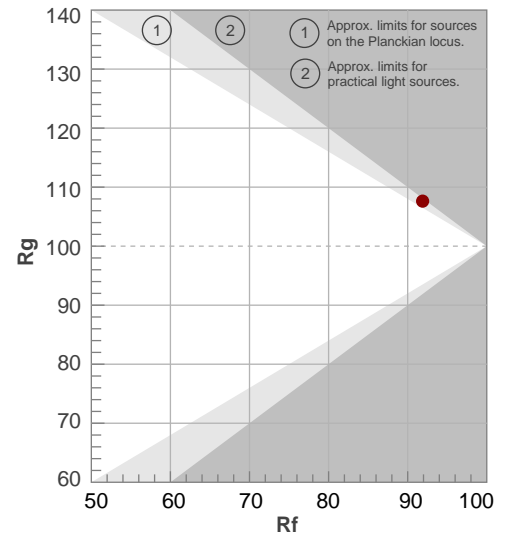
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5632 K	91,9	92,0	91,9	107,6	94,1	83	0,330	0,337	-0,0043

# TM30 DETAILS

**Rf 91,9**  
Fidelity index Rf

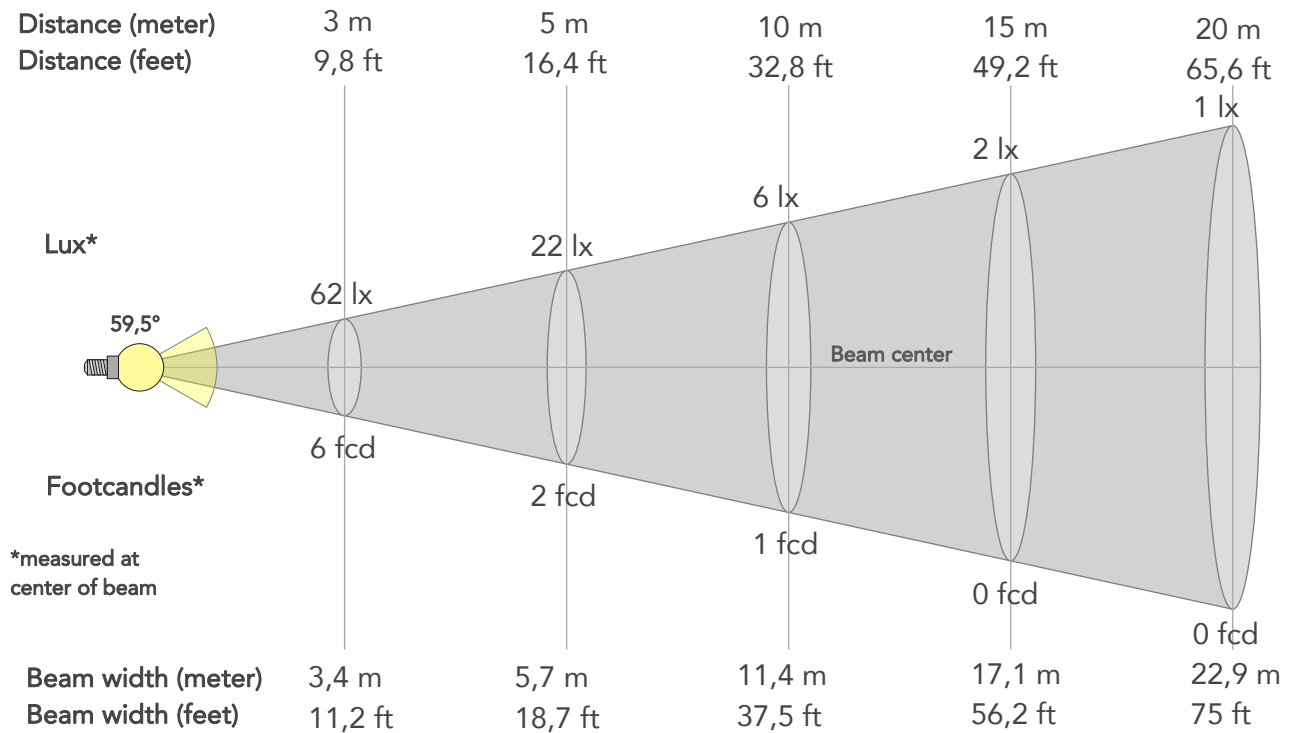
**Rg 107,6**  
Gammut index

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	87	9%	1%
8	90	5%	-3%
9	93	3%	-4%
10	95	0%	-2%
11	90	1%	5%
12	94	2%	3%
13	94	5%	1%
14	90	5%	3%
15	89	9%	-4%
16	92	5%	-1%



# BEAM DETAILS

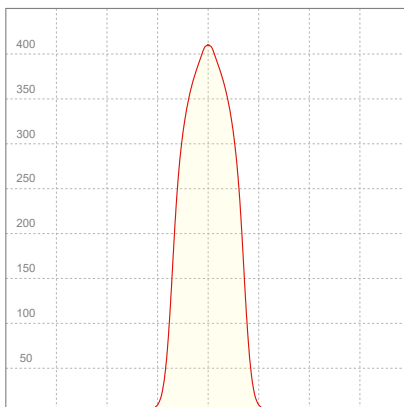
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,5°	77,4°	89,1°	99,5%	98,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	562lx	140lx	62lx	35lx	22lx	10lx	6lx	2lx	1lx	1lx	1lx	0lx	0lx
Footcand.	52fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,6m	5,7m	8,6m	11,4m	17,1m	22,9m	28,6m	34,3m	45,7m	57,1m
Beam wid.	3,8ft	7,5ft	11,2ft	15ft	18,7ft	28,1ft	37,5ft	56,2ft	75ft	93,7ft	112,5ft	150ft	187,4ft

## LINEAR DISTRIBUTION DIAGRAM



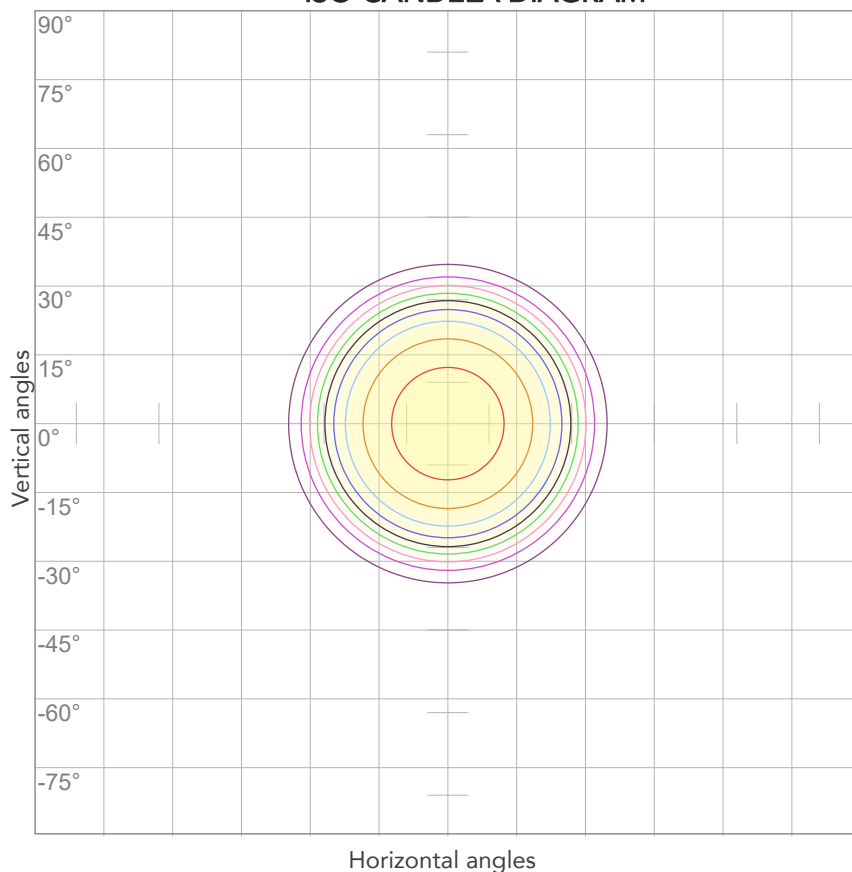
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,125A	26,0W	0,92	18lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



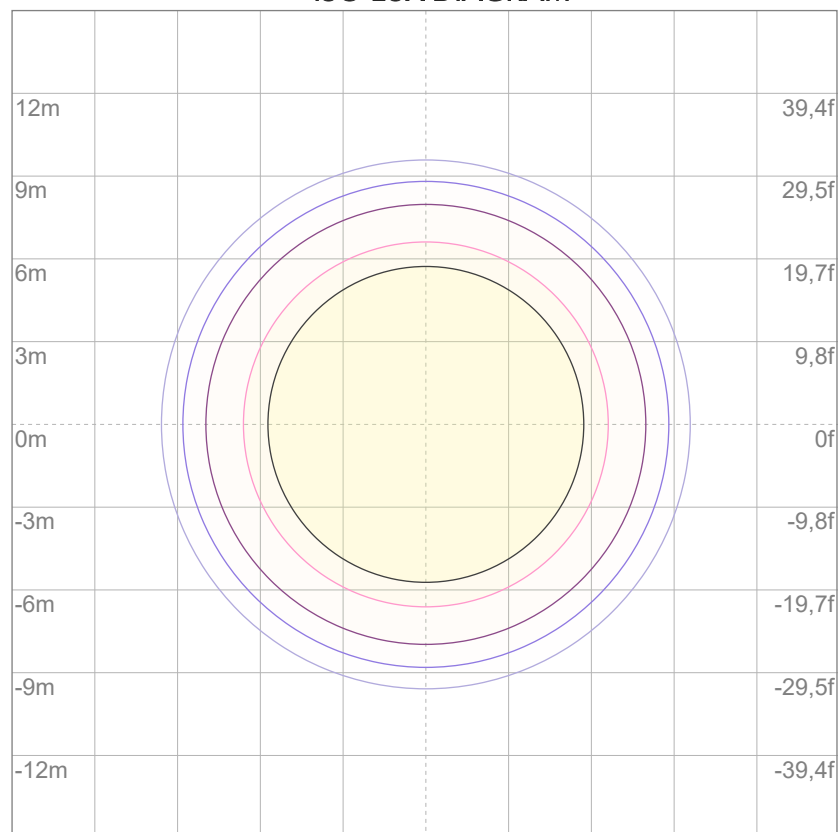
10%	56 cd
20%	112 cd
30%	168 cd
40%	225 cd
50%	281 cd
60%	337 cd
70%	393 cd
80%	449 cd

### Conditions:

Number of c-planes: 2

Candela at center: 562 cd

## ISO LUX DIAGRAM



3%	0,168 lx
5%	0,281 lx
10%	0,562 lx
30%	1,68 lx
50%	2,81 lx

### Conditions:

Number of c-planes: 2

Lux at center: 5,62 lx

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



Total lumen output:

349 lm

Peak candela output:

1372 cd

Light quality:

CRI: 91,8

Color temperature:

5512 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Min Zoom

Target:

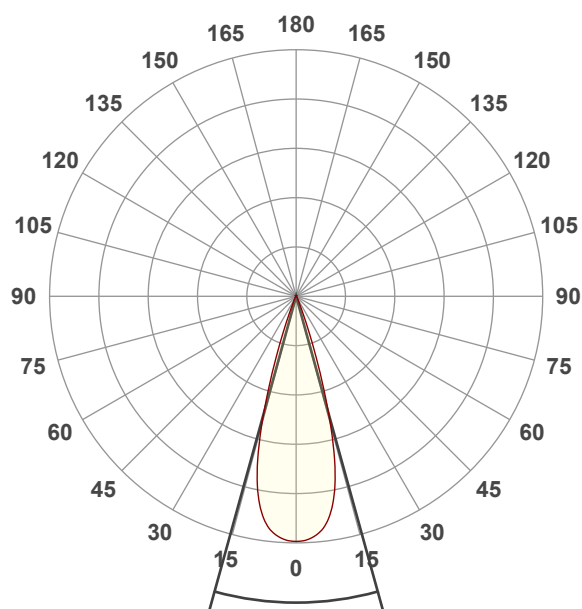
5600K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:44:22

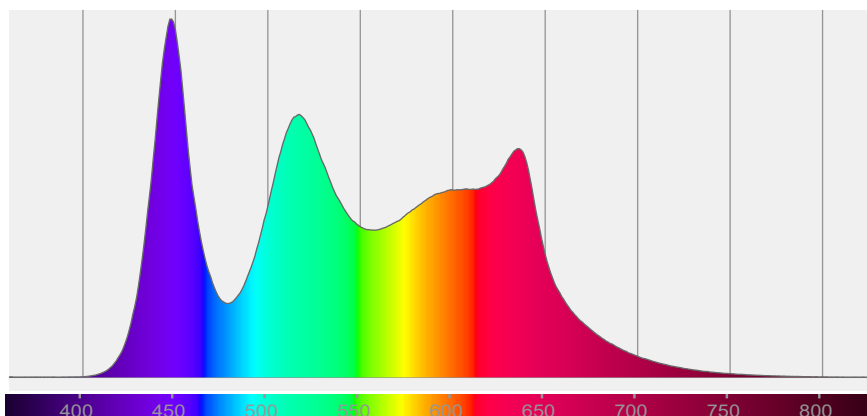


Beam angle 50%: 30,9°

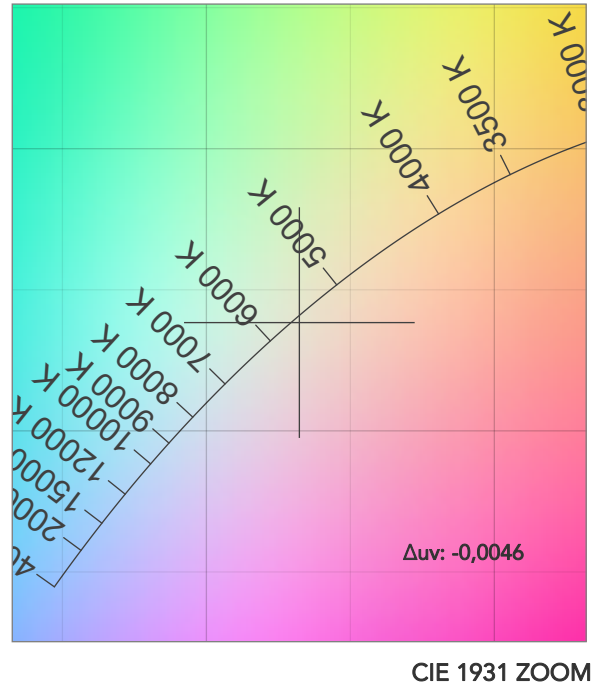
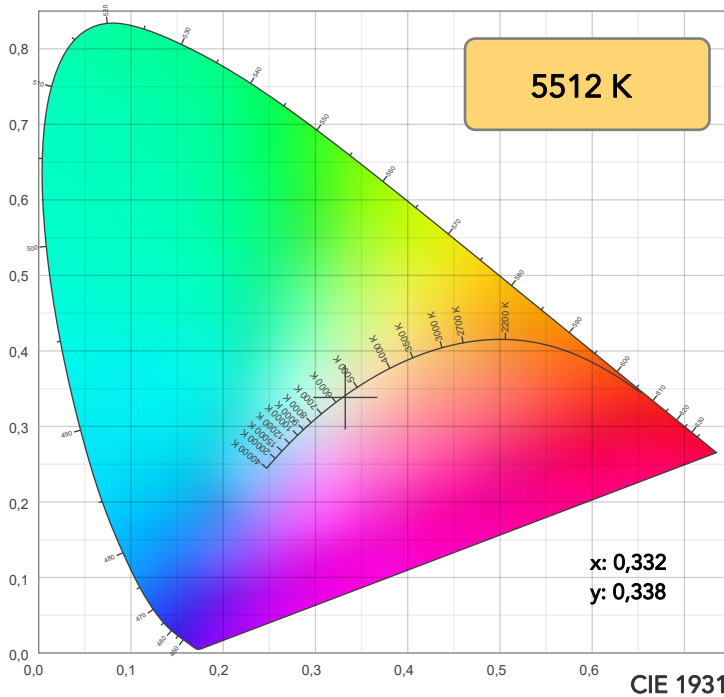
Field angle 10%: 42,1°

Cut off angle 2.5%: 52,2°

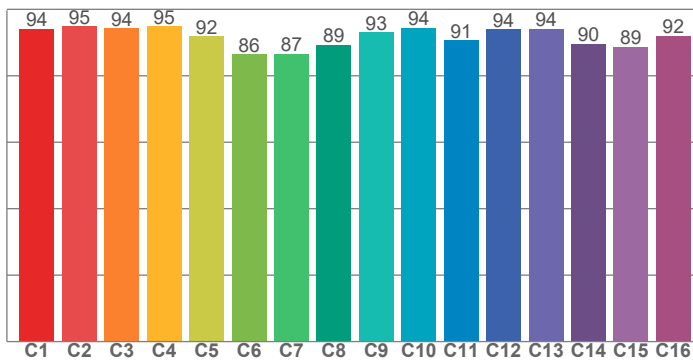
**Spectra**



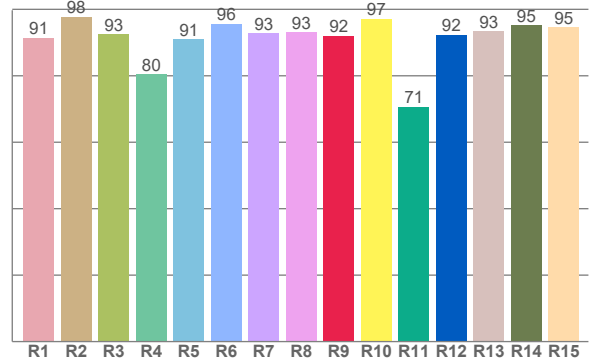
# COLOR DETAILS



TM30: 91,8



CRI: 91,8 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,5	97,7	92,5	80,4	90,9	95,7	92,7	93,1	92,1	97,2	70,7	92,3	93,3	95,1	94,6

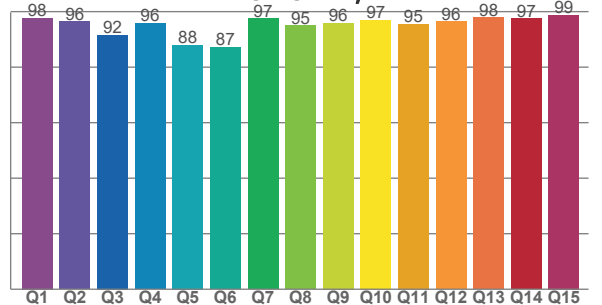
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,1	94,8	94,3	94,9	91,9	86,5	86,5	89,3	93,0	94,4	90,6	94,0	94,2	89,6	88,7	92,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,6	96,5	91,5	95,8	88,0	87,1	97,5	95,0	95,9	96,9	95,5	96,5	97,9	97,5	98,8

CQS: 94,1



## COLOR PARAMETERS

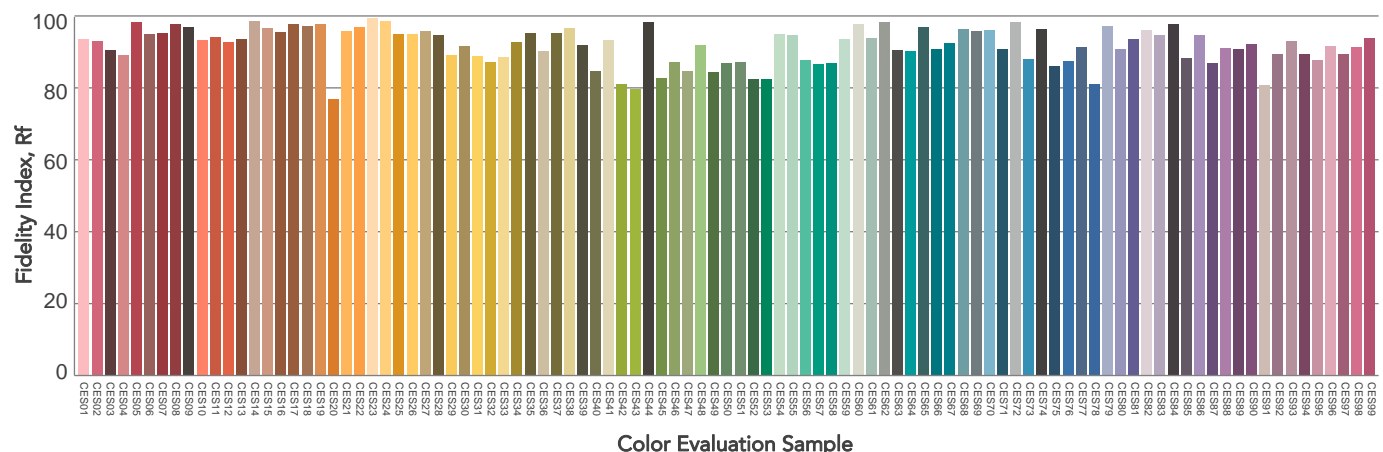
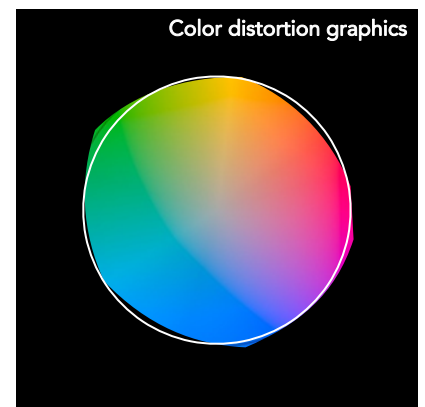
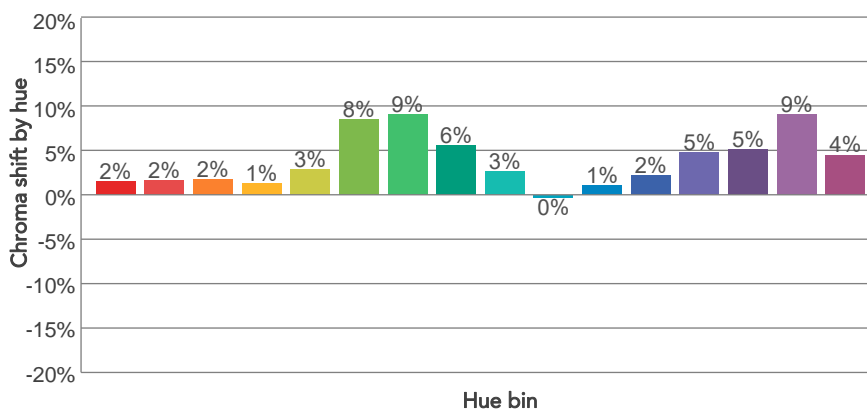
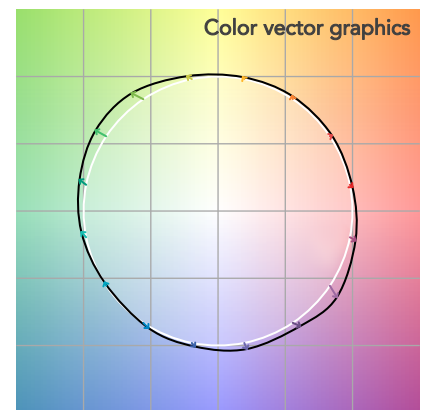
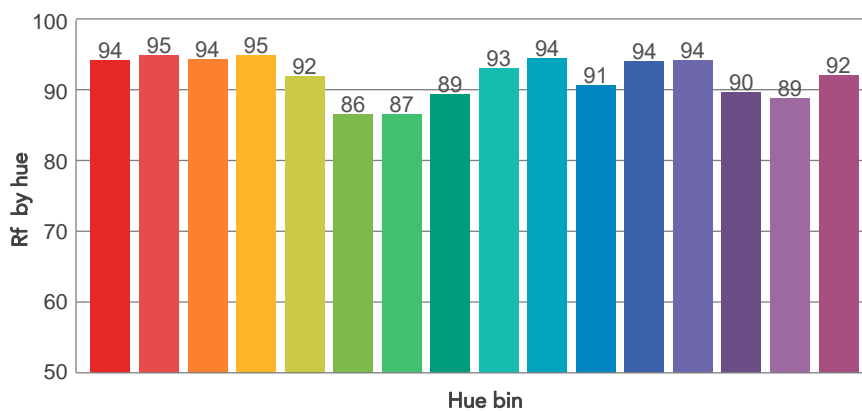
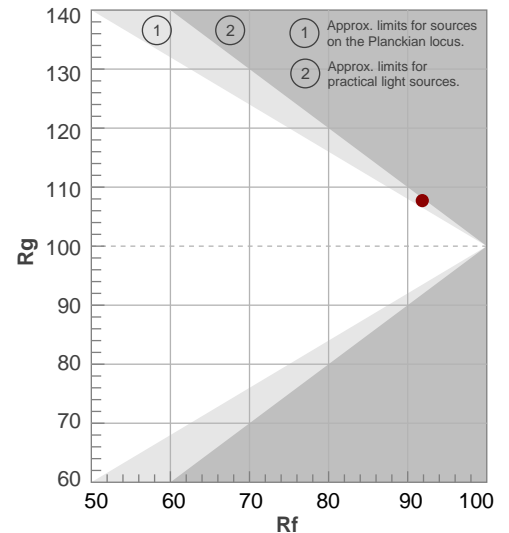
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5512 K	91,8	92,1	91,8	107,7	94,1	83	0,332	0,338	-0,0046

# TM30 DETAILS

**Rf 91,8**  
Fidelity index Rf

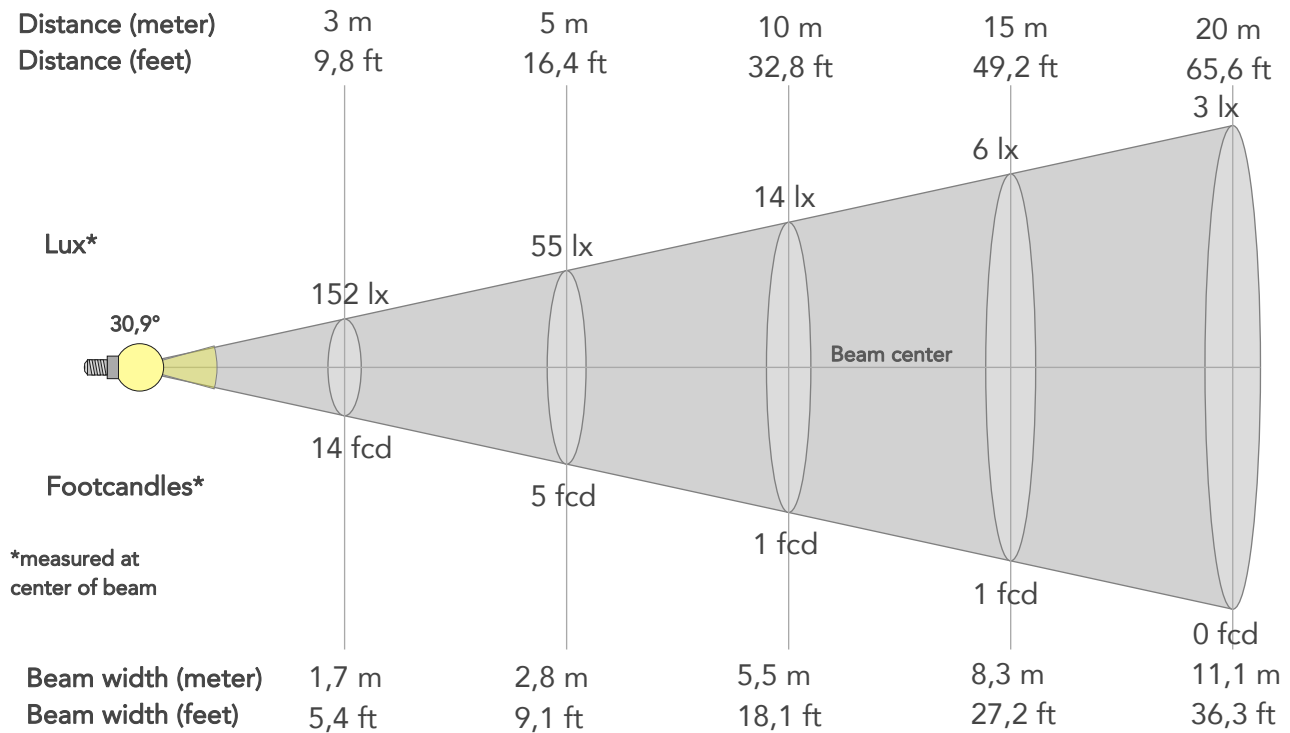
**Rg 107,7**  
Gammut index

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	8%	5%
7	87	9%	1%
8	89	6%	-3%
9	93	3%	-4%
10	94	0%	-3%
11	91	1%	5%
12	94	2%	3%
13	94	5%	1%
14	90	5%	3%
15	89	9%	-4%
16	92	4%	-1%



# BEAM DETAILS

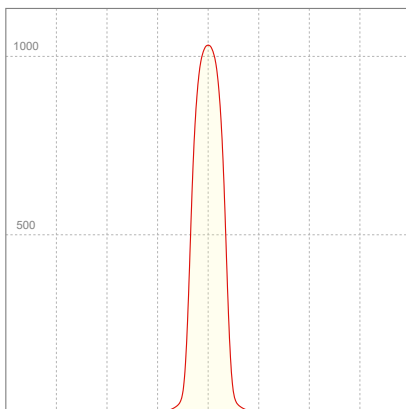
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,9°	42,1°	52,2°	99,8%	99,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1372lx	343lx	152lx	86lx	55lx	24lx	14lx	6lx	3lx	2lx	2lx	1lx	1lx
Footcand.	127fcd	32fcd	14fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11,1m	13,8m	16,6m	22,1m	27,6m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9,1ft	13,6ft	18,1ft	27,2ft	36,3ft	45,3ft	54,4ft	72,5ft	90,7ft

## LINEAR DISTRIBUTION DIAGRAM

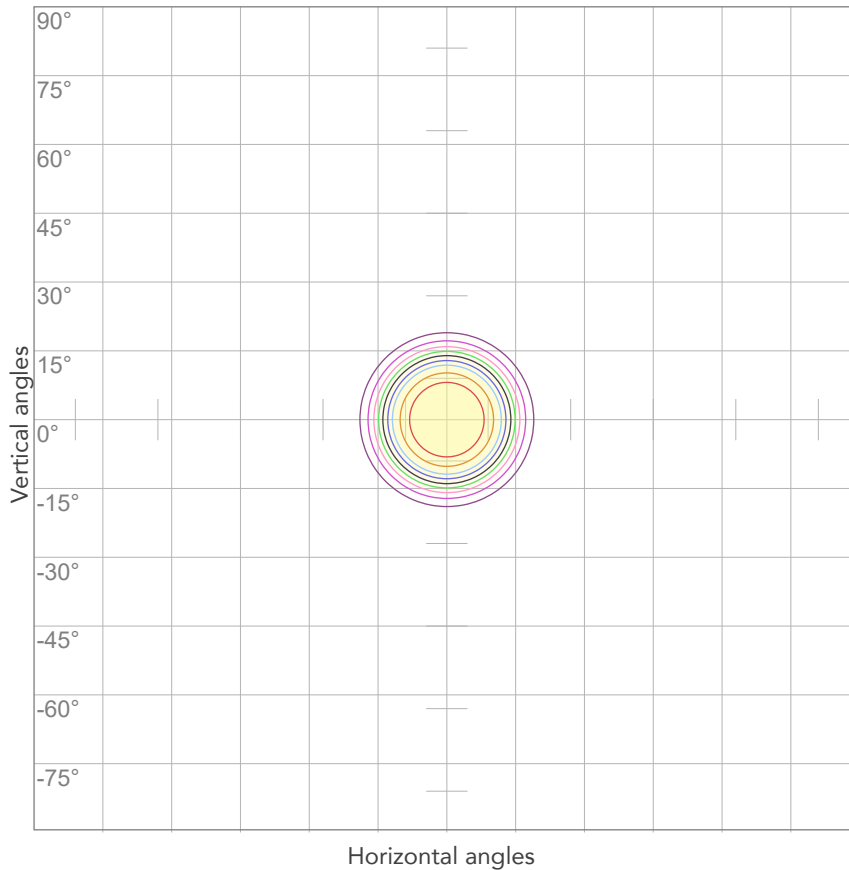


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,126A	26,0W	0,92	13lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



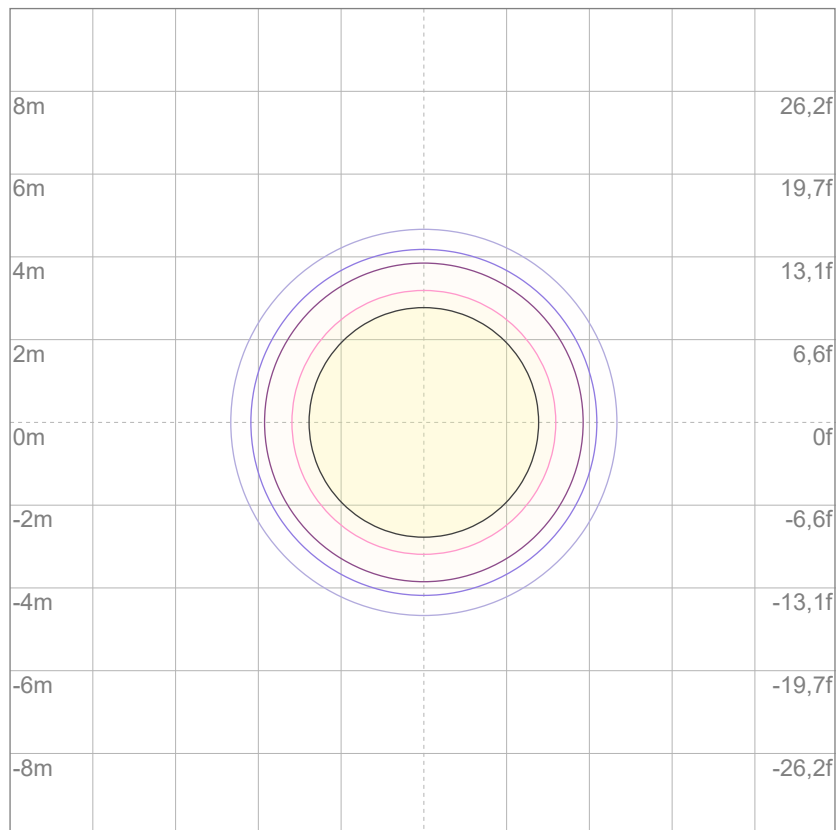
10%	137 cd
20%	274 cd
30%	412 cd
40%	549 cd
50%	686 cd
60%	823 cd
70%	960 cd
80%	1098 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1372 cd

## ISO LUX DIAGRAM



3%	0,412 lx
5%	0,686 lx
10%	1,37 lx
30%	4,12 lx
50%	6,86 lx

### Conditions:

Number of c-planes: 2

Lux at center: 13,7 lx

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



Total lumen output:

469 lm

Peak candela output:

566 cd

Light quality:

CRI: 91,6

Color temperature:

6088 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Max Zoom

Target:

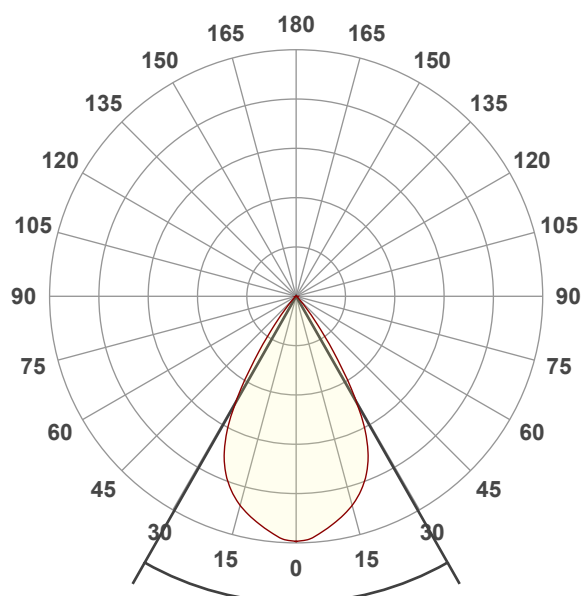
6000K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:48:17

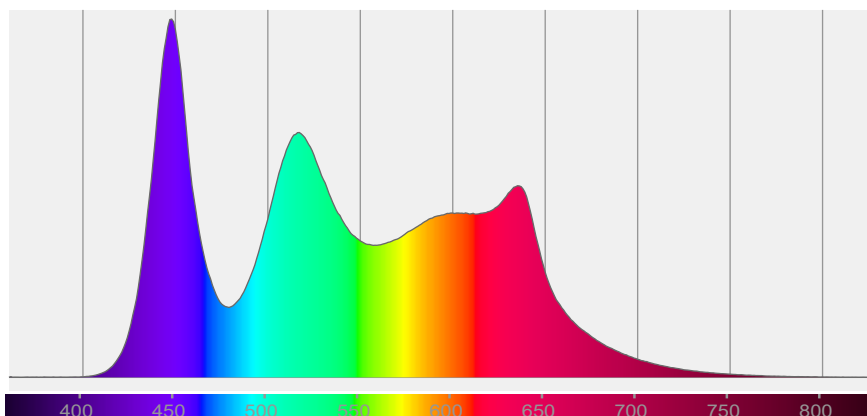


Beam angle 50%: 59,2°

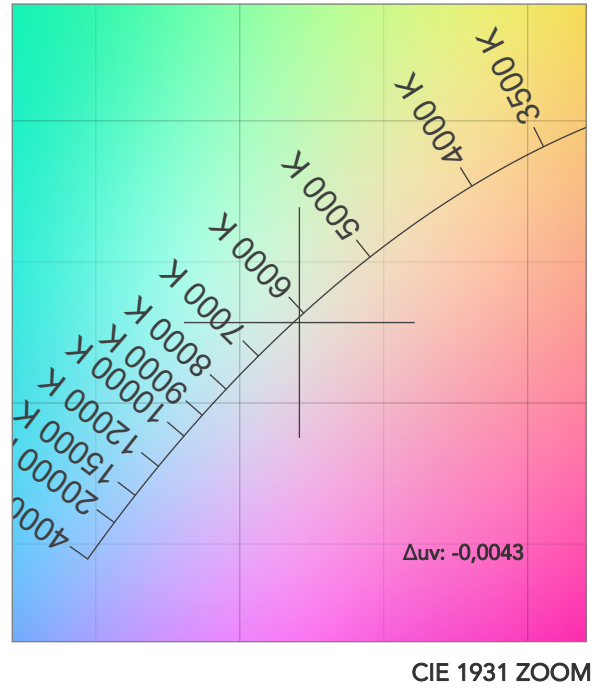
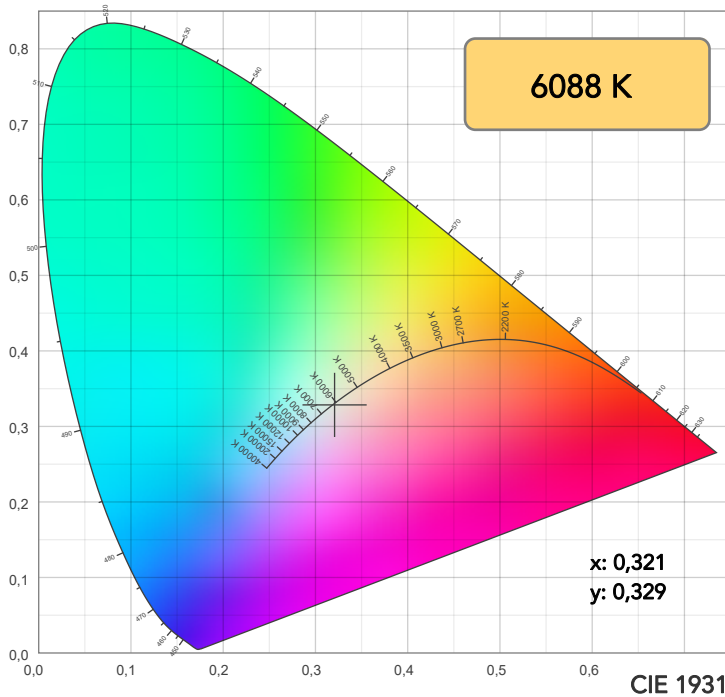
Field angle 10%: 77,7°

Cut off angle 2.5%: 89,5°

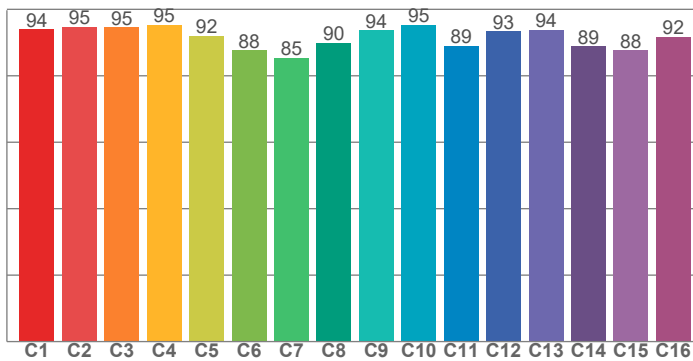
**Spectra**



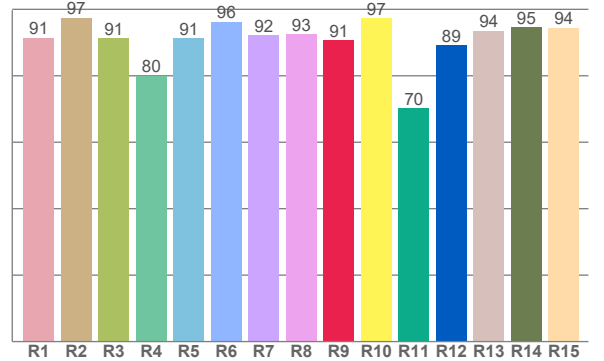
# COLOR DETAILS



**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
91,5	97,4	91,3	80,0	91,3	96,3	92,3	92,5	90,7	97,4	70,2	89,2	93,5	94,5	94,5

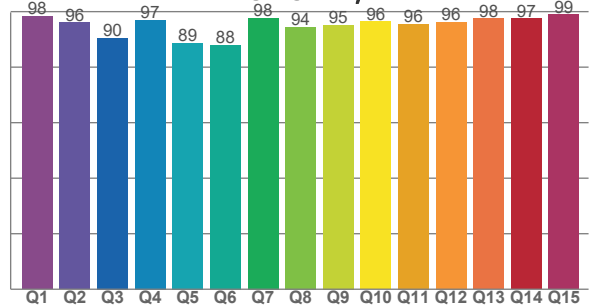
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,0	94,8	94,6	95,3	92,0	87,7	85,4	89,9	93,6	95,3	89,1	93,4	93,8	88,9	87,6	91,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,3	96,1	90,4	96,9	88,7	87,9	97,7	94,4	95,2	96,4	95,6	96,2	97,5	97,5	98,9

**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	Δuv
6088 K	91,6	90,7	91,7	107,8	94,1	83	0,321	0,329	-0,0043

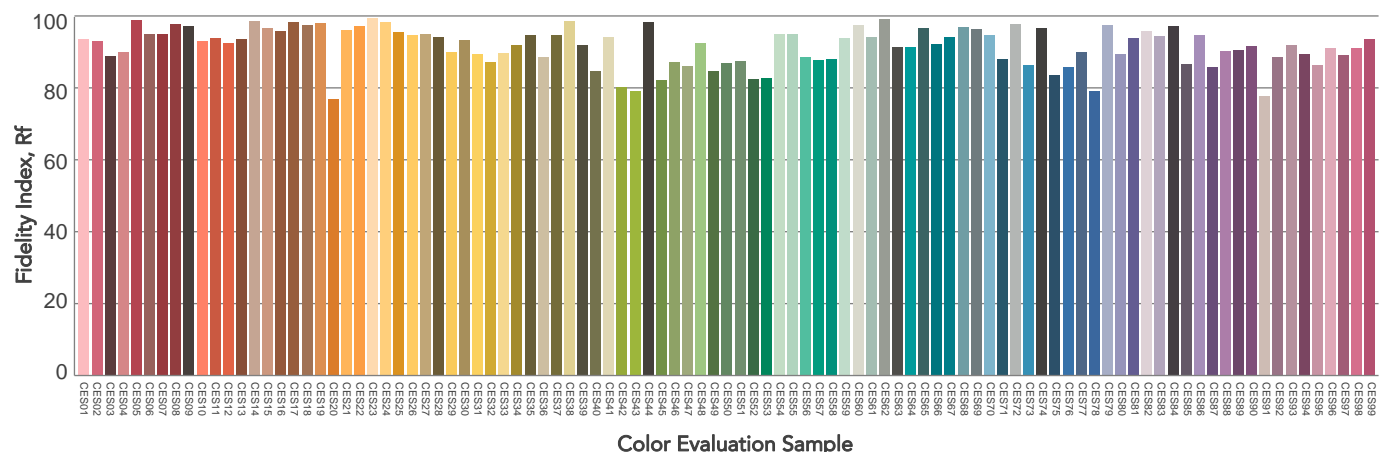
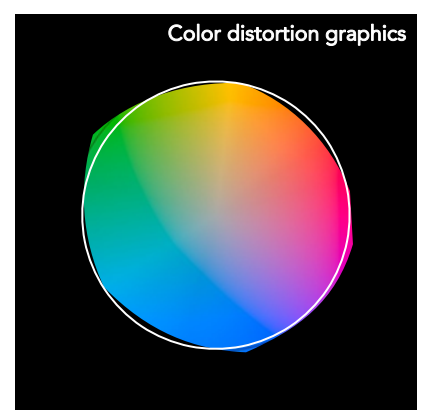
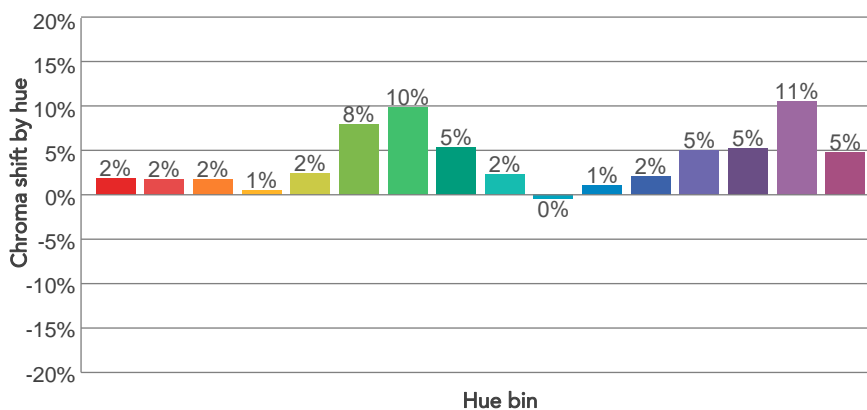
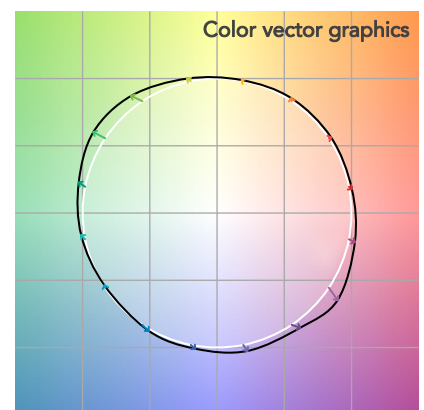
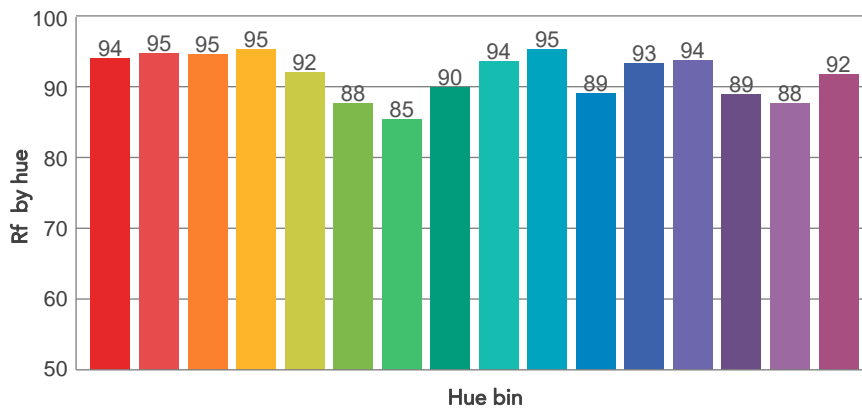
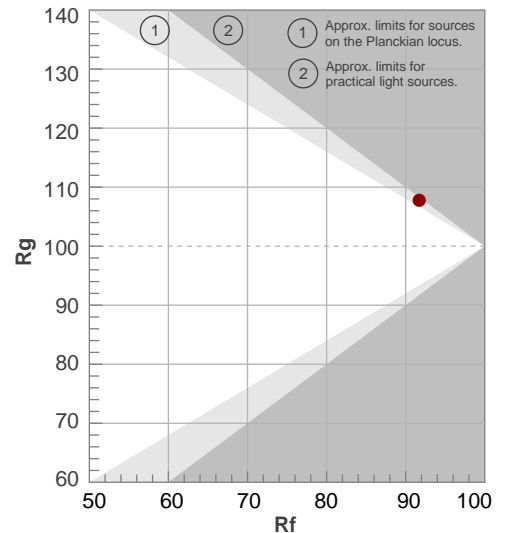


# TM30 DETAILS

**Rf 91,7**  
Fidelity index Rf

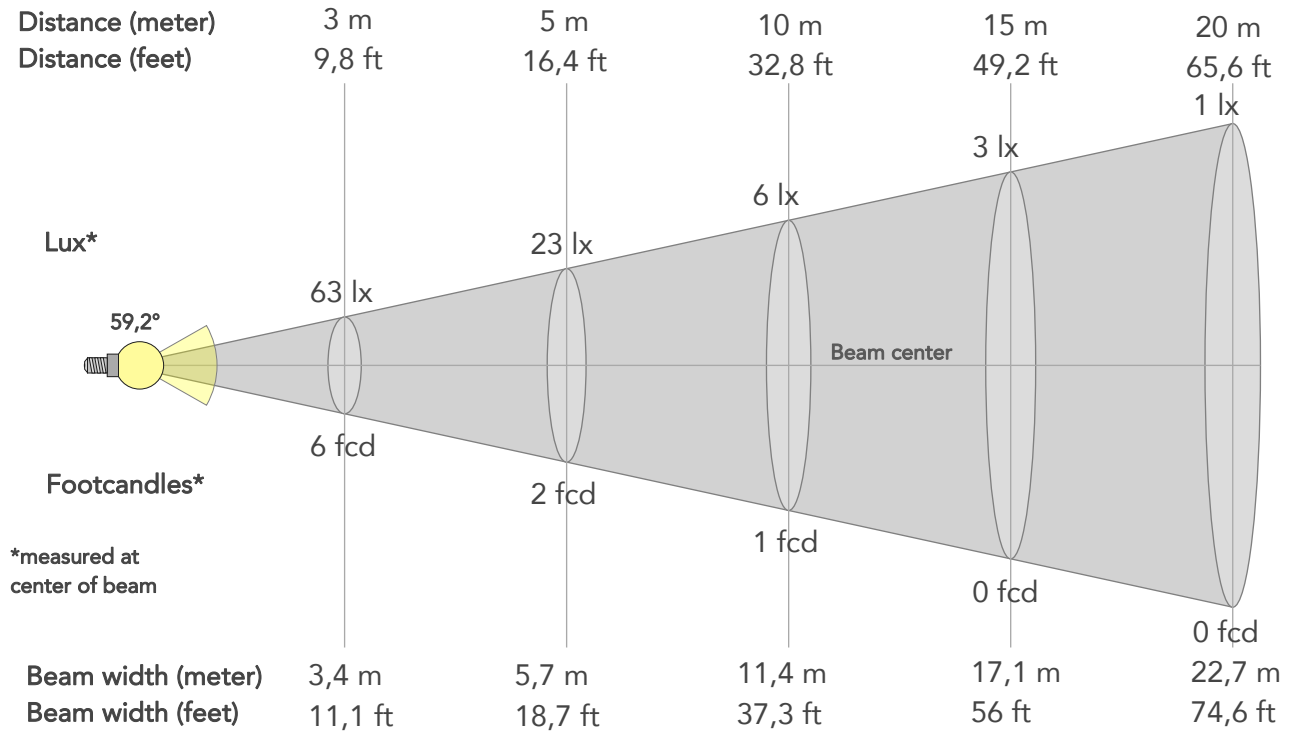
**Rg 107,8**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	2%	-2%
2	95	2%	0%
3	95	2%	1%
4	95	1%	1%
5	92	2%	2%
6	88	8%	5%
7	85	10%	1%
8	90	5%	-2%
9	94	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

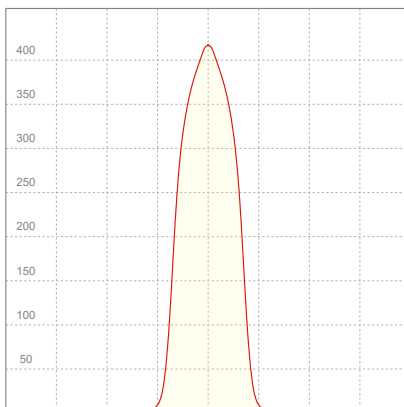
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
59,2°	77,7°	89,5°	99,5%	98,0%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	566lx	142lx	63lx	35lx	23lx	10lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx
Footcand.	53fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,3m	3,4m	4,5m	5,7m	8,5m	11,4m	17,1m	22,7m	28,4m	34,1m	45,5m	56,9m
Beam wid.	3,8ft	7,5ft	11,1ft	14,9ft	18,7ft	28ft	37,3ft	56ft	74,6ft	93,3ft	111,9ft	149,2ft	186,5ft

## LINEAR DISTRIBUTION DIAGRAM

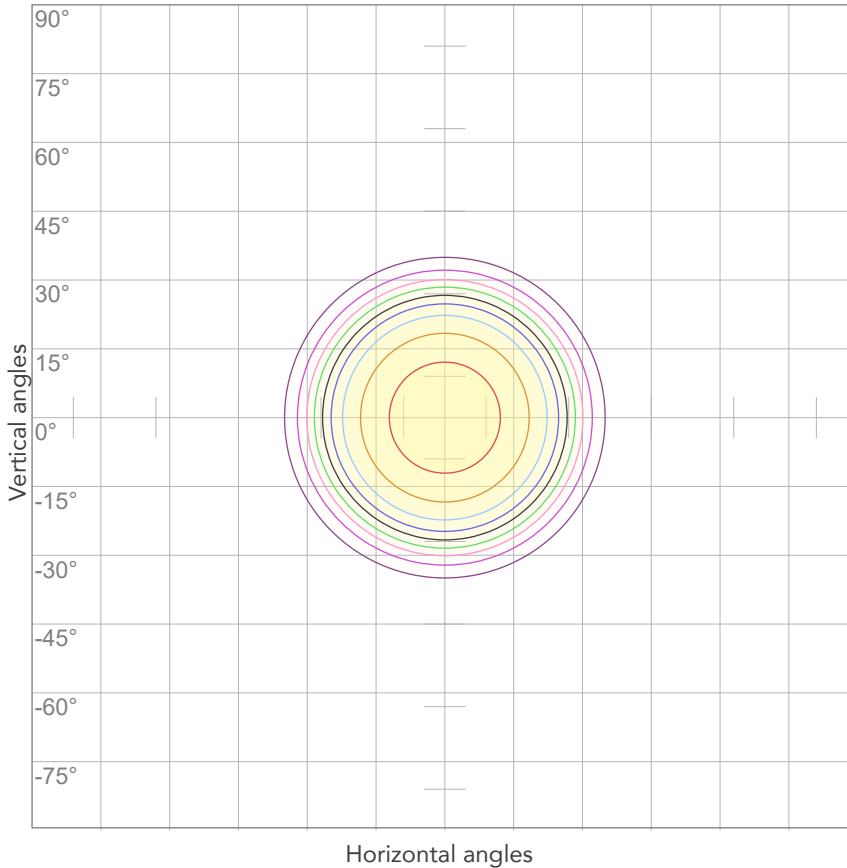


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,128A	26,5W	0,92	18lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



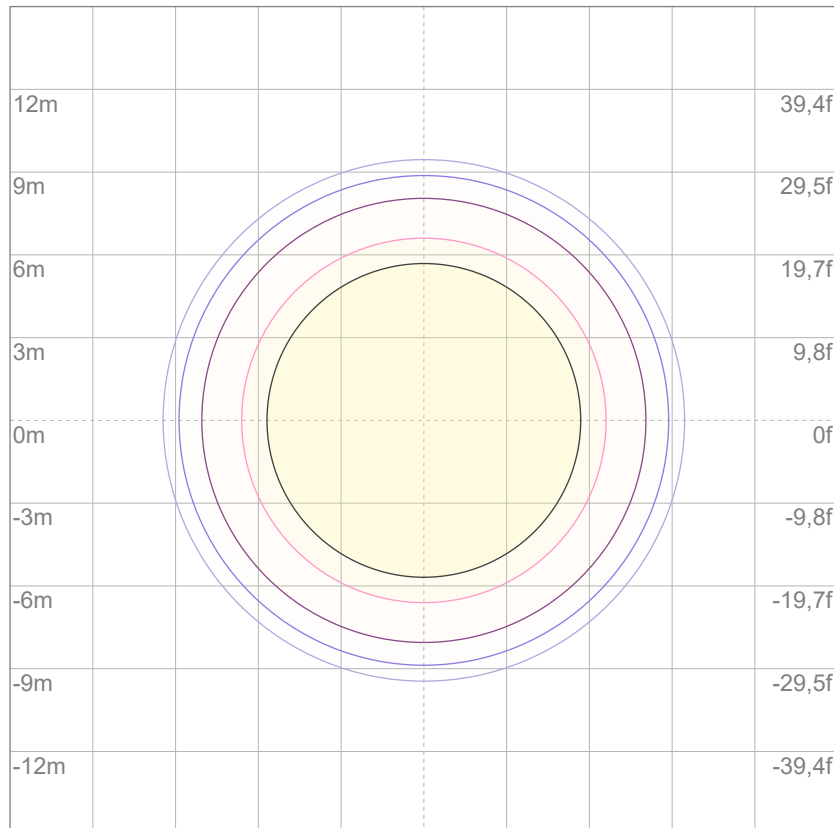
10%	57 cd
20%	113 cd
30%	170 cd
40%	227 cd
50%	283 cd
60%	340 cd
70%	396 cd
80%	453 cd

### Conditions:

Number of c-planes: 2

Candela at center: 566 cd

## ISO LUX DIAGRAM



3%	0,170 lx
5%	0,283 lx
10%	0,566 lx
30%	1,70 lx
50%	2,83 lx

### Conditions:

Number of c-planes: 2

Lux at center: 5,66 lx

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



Total lumen output:

351 lm

Peak candela output:

1383 cd

Light quality:

CRI: 91,5

Color temperature:

5949 K

**PRODUCT NAME:**

ECLDISPLAYFC

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 25-50 Min Zoom

Target:

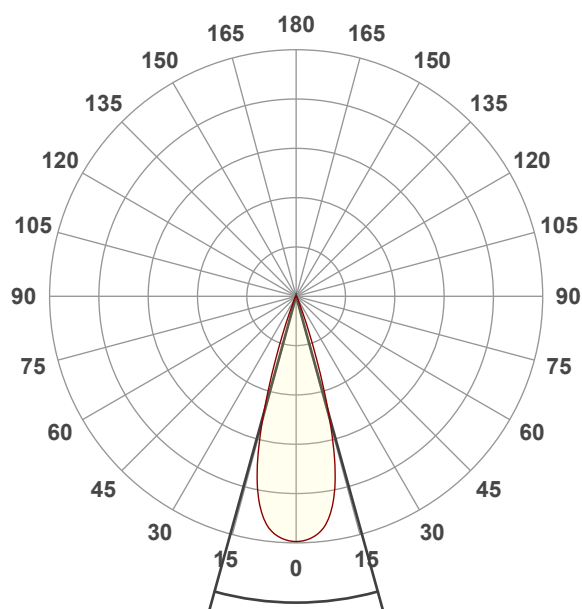
6000K

Operator:

Paolo Carvone

Date and time:

14/01/2021 12:46:35

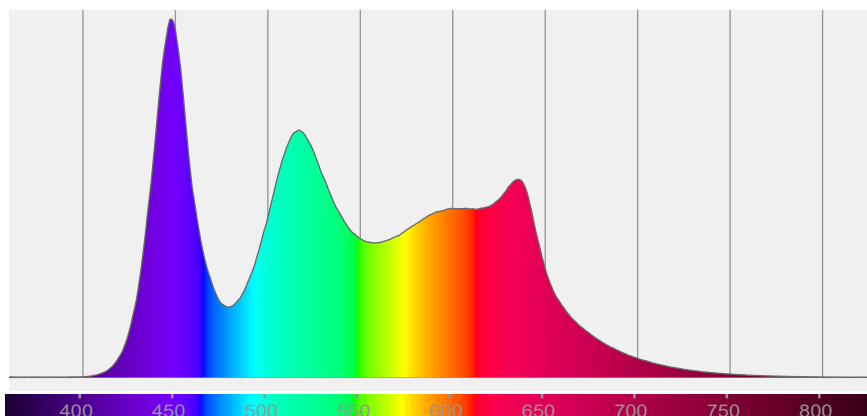


Beam angle 50%: 30,9°

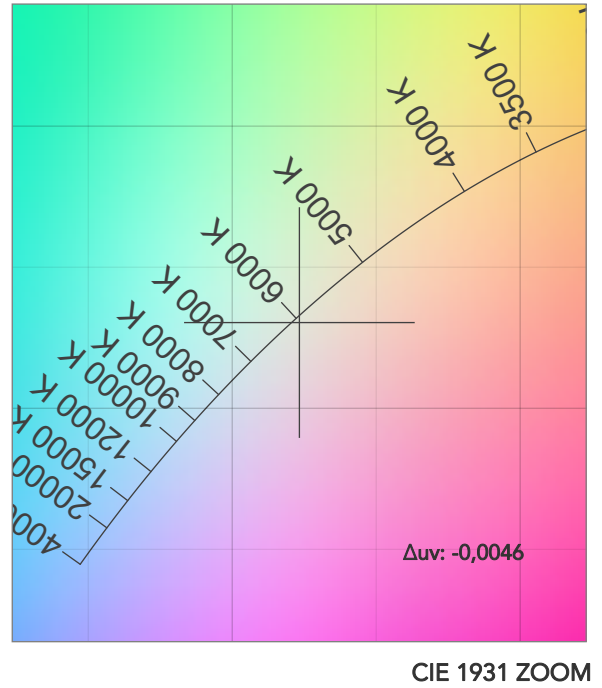
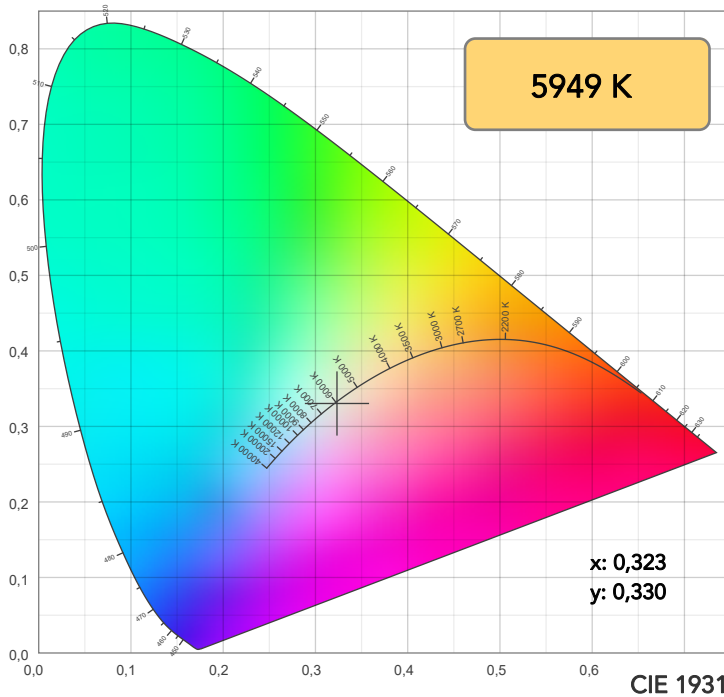
Field angle 10%: 42°

Cut off angle 2.5%: 51,9°

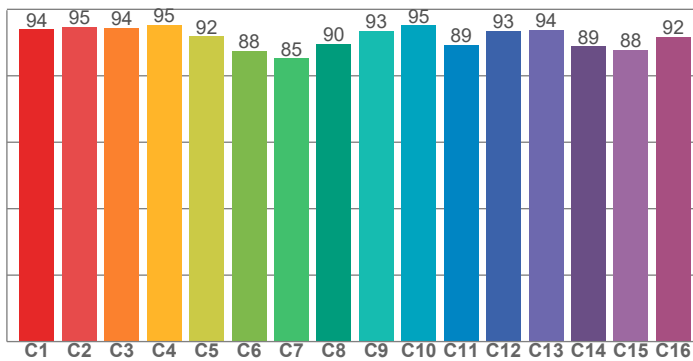
**Spectra**



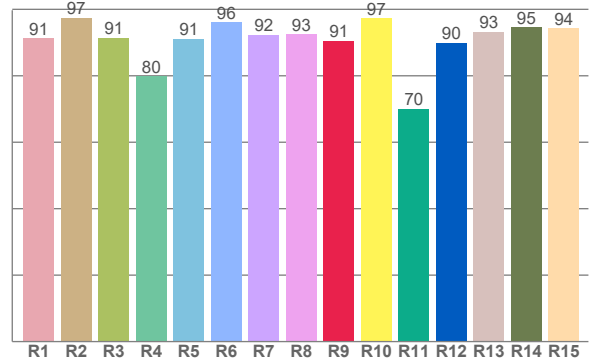
## COLOR DETAILS



TM30: 91,7



CRI: 91,5 (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
91,3	97,5	91,5	79,9	91,1	96,0	92,3	92,5	90,6	97,3	70,1	89,9	93,3	94,6	94,3

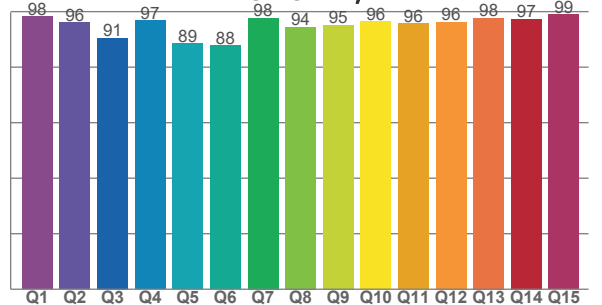
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,0	94,7	94,5	95,3	91,9	87,5	85,3	89,7	93,5	95,1	89,3	93,4	93,8	88,9	87,8	91,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,2	96,1	90,5	96,8	88,5	87,7	97,7	94,5	95,2	96,4	95,6	96,3	97,6	97,4	98,9

CQS: 94,1



## COLOR PARAMETERS

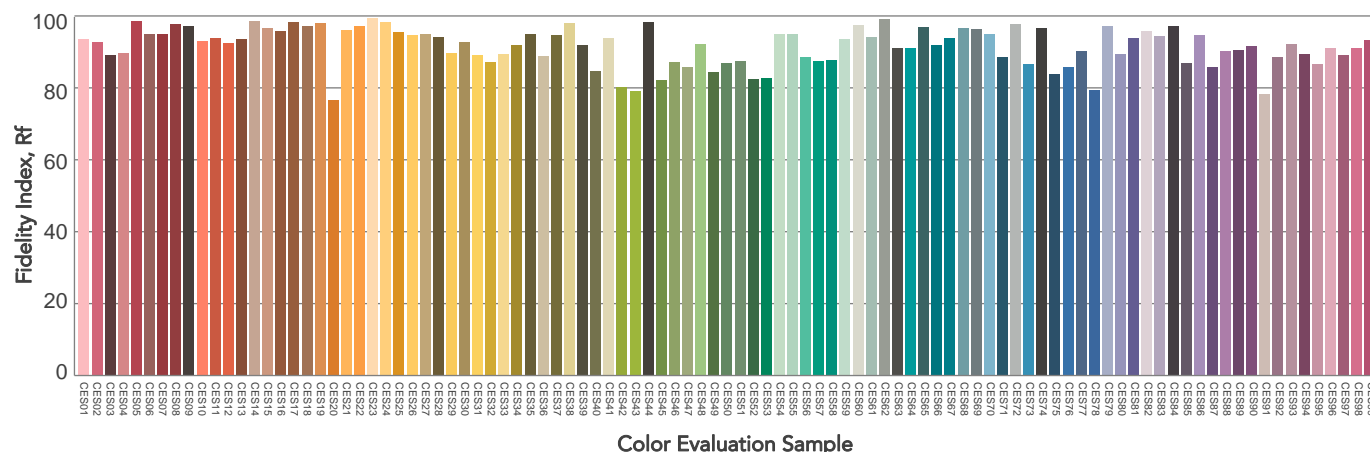
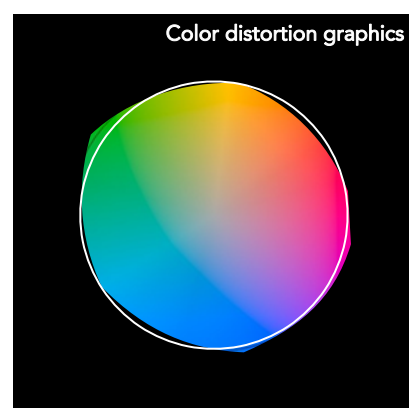
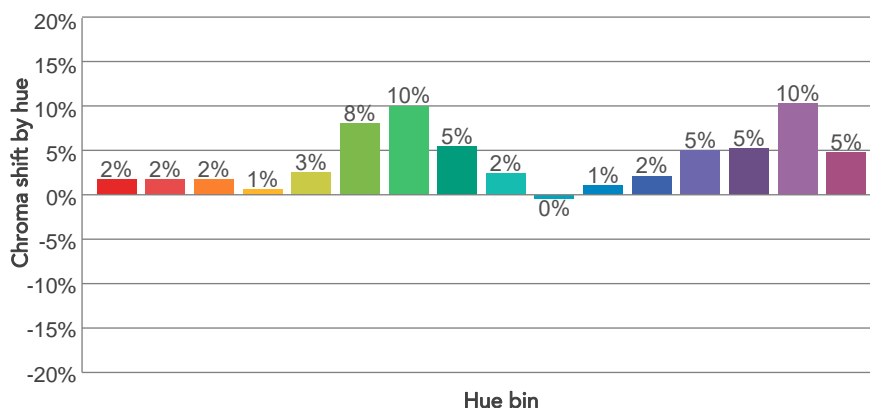
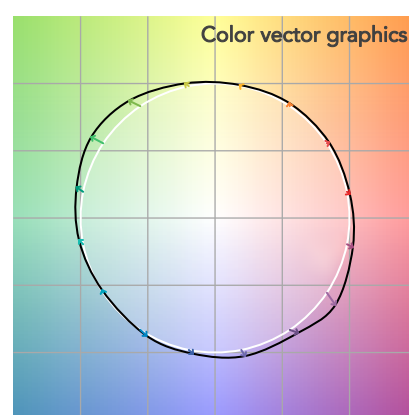
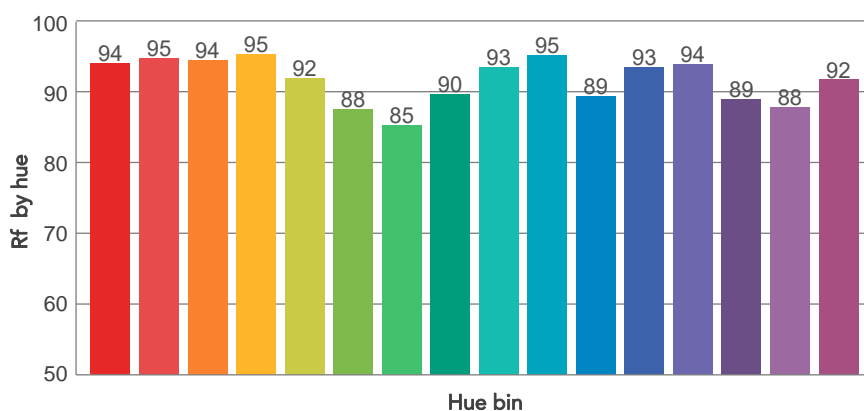
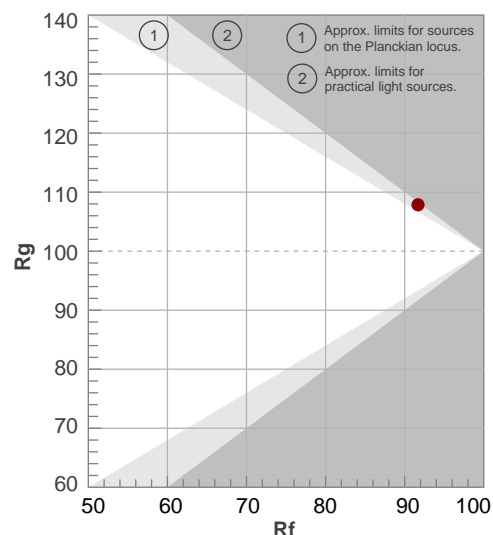
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5949 K	91,5	90,6	91,7	107,9	94,1	83	0,323	0,330	-0,0046

## TM30 DETAILS

**Rf 91,7**  
Fidelity index Rf

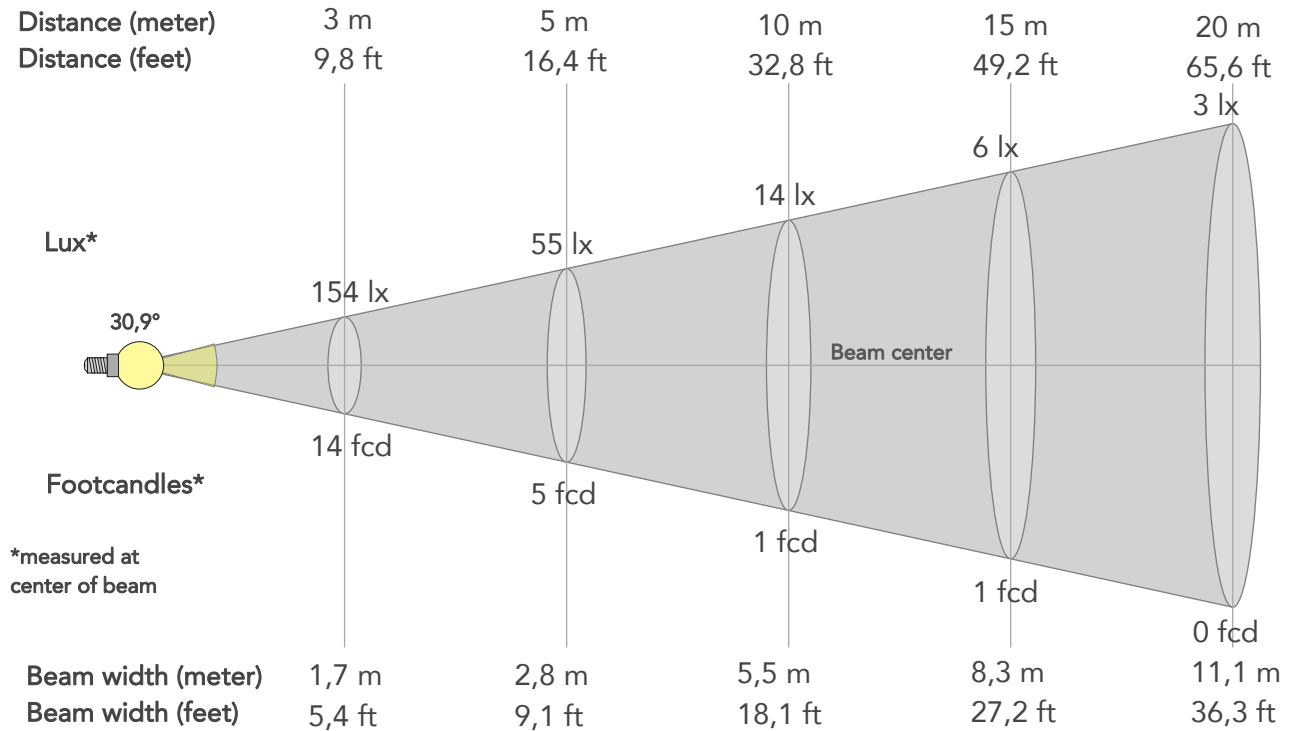
**Rg 107,9**  
Gammut index

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%	2%
6	88	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	92	5%	-1%



# BEAM DETAILS

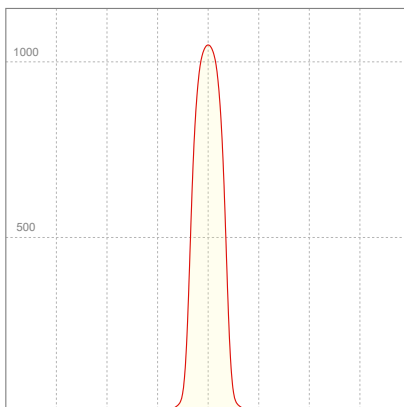
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,9°	42°	51,9°	99,8%	99,1%



## 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	1383lx	346lx	154lx	86lx	55lx	25lx	14lx	6lx	3lx	2lx	2lx	1lx	1lx
Footcand.	129fcd	32fcd	14fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11,1m	13,8m	16,6m	22,1m	27,6m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9,1ft	13,6ft	18,1ft	27,2ft	36,3ft	45,3ft	54,4ft	72,6ft	90,7ft

## LINEAR DISTRIBUTION DIAGRAM

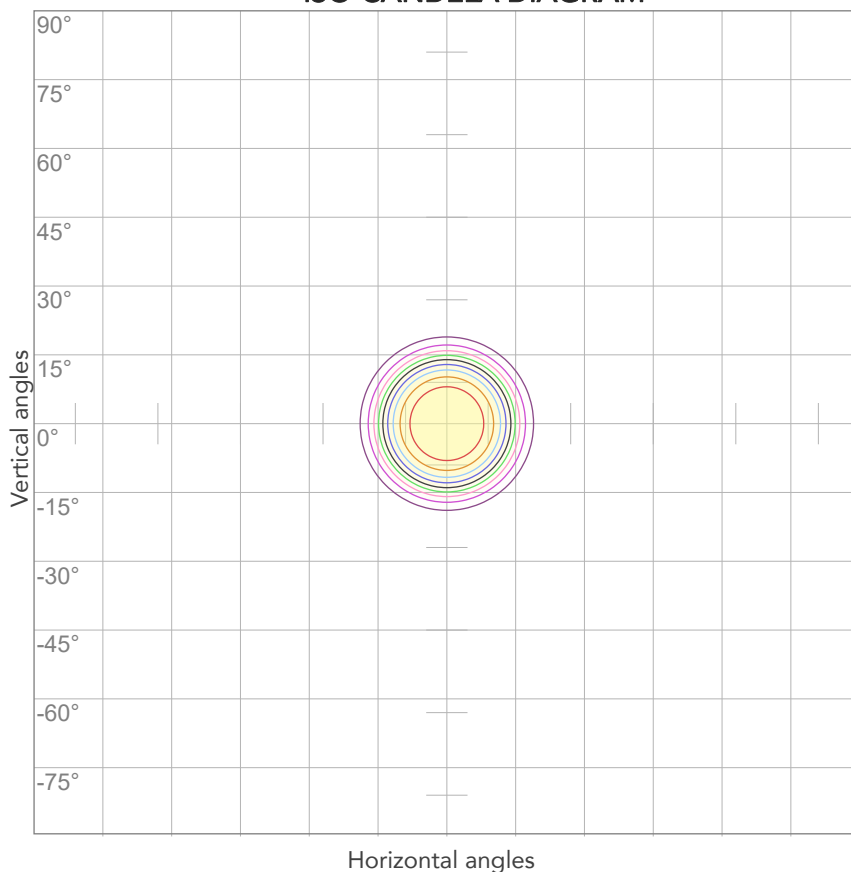


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,128A	26,5W	0,92	13lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



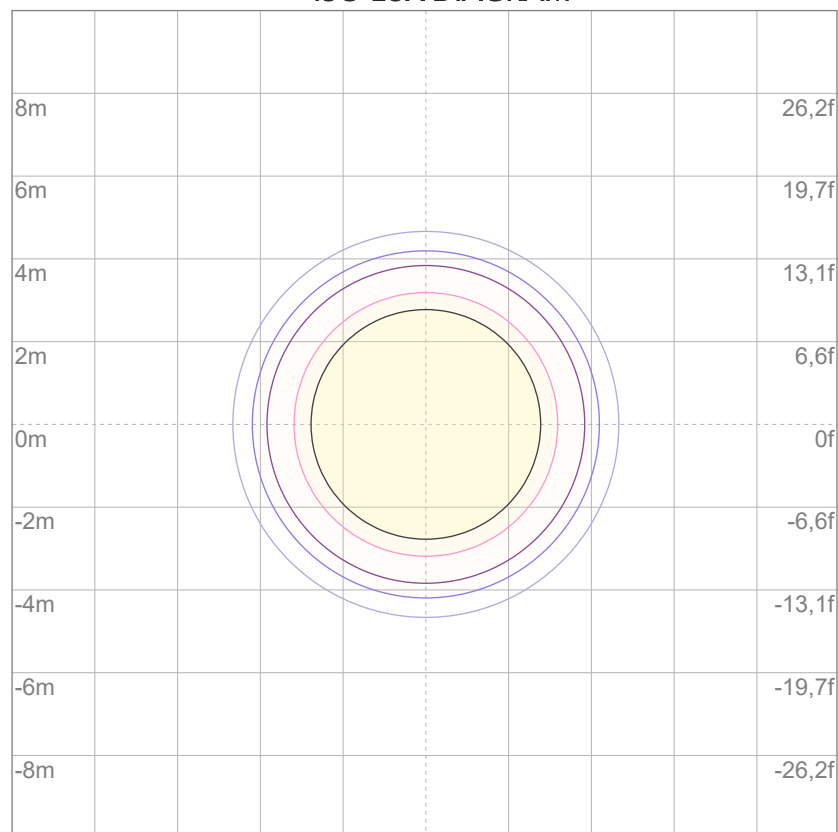
10%	138 cd
20%	277 cd
30%	415 cd
40%	553 cd
50%	692 cd
60%	830 cd
70%	968 cd
80%	1107 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1383 cd

## ISO LUX DIAGRAM



3%	0,415 lx
5%	0,692 lx
10%	1,38 lx
30%	4,15 lx
50%	6,92 lx

### Conditions:

Number of c-planes: 2

Lux at center: 13,8 lx

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