

# Photometric Test Report



## **ECLFRESNELJTW**

Full colour and Tunable White with colour correction LED Fresnel to replace 650 W

\*this report is valid also for ECLFRESNELJPTW version.

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## 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:

2952 lm

Total candela output:

3614 cd

PRODUCT NAME:

ECLFRESNELJTW

MEASUREMENT CONDITIONS:

Beam angle:

45°

Target:

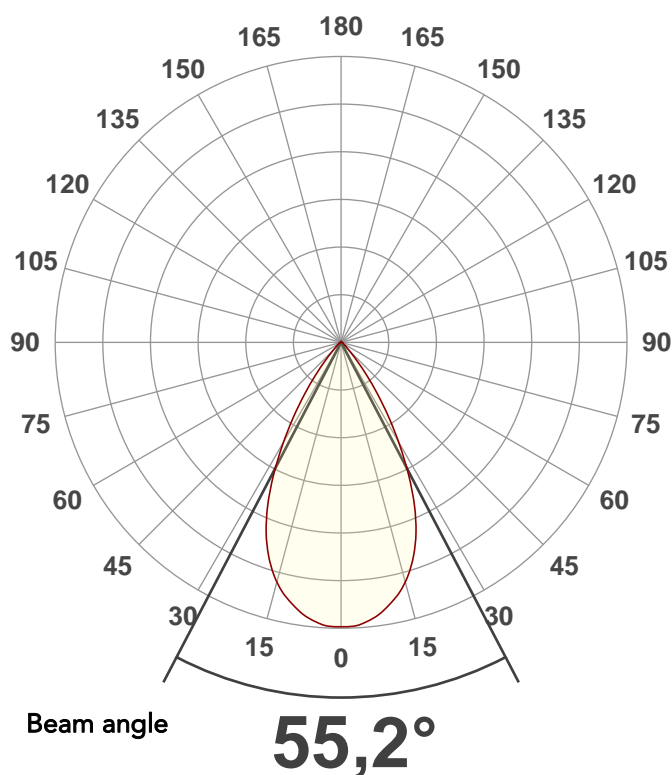
Full on

Operator:

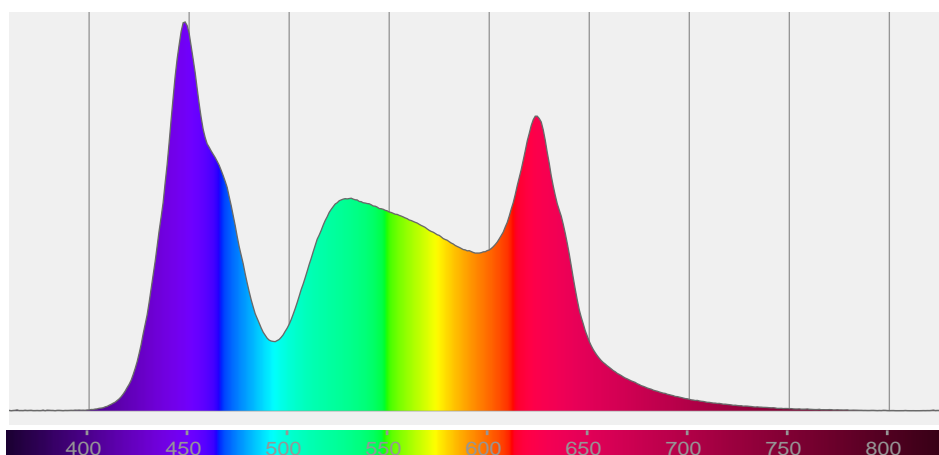
Paolo Carvone

Date and time:

06/02/2020 16:32:44

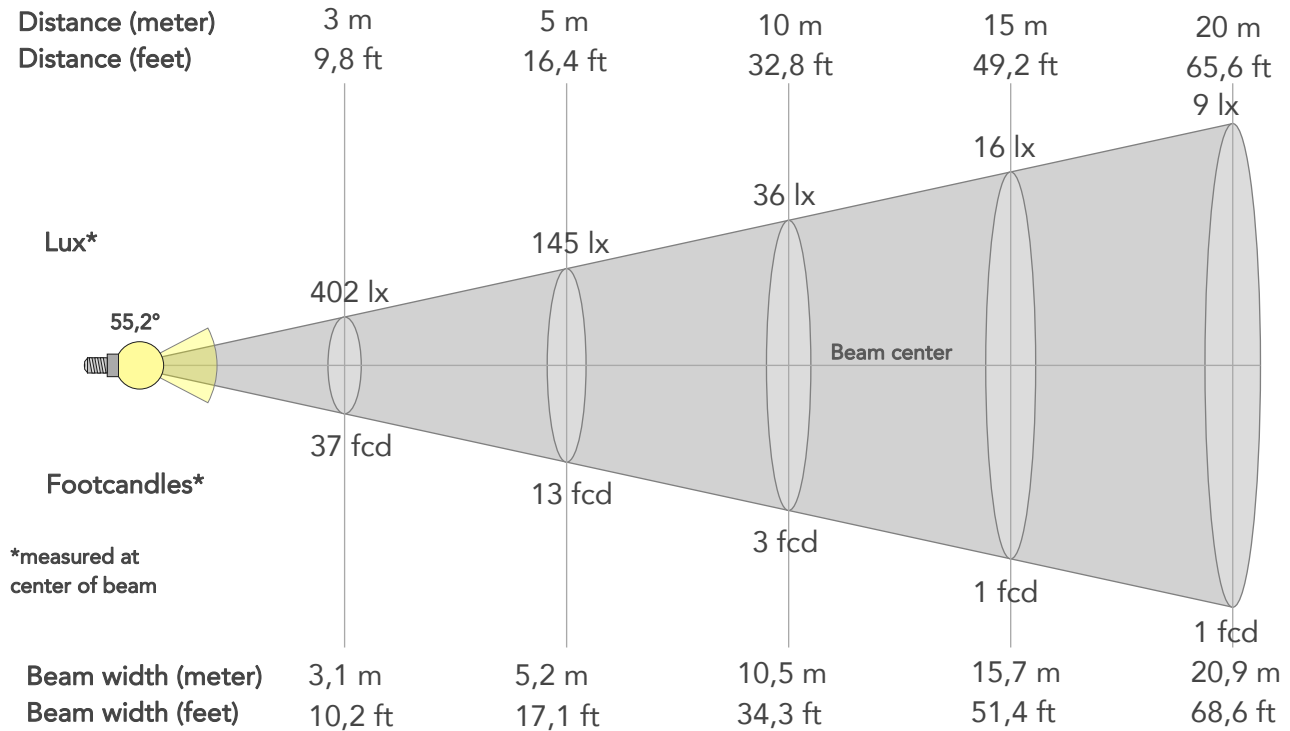


Spectra



## BEAM DETAILS

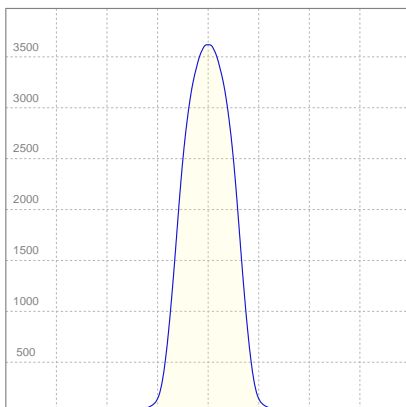
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,2°	80,3°	96,9°	97,8%	94,9%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3614lx	903lx	402lx	226lx	145lx	64lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	336fcd	84fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,8m	10,5m	15,7m	20,9m	26,1m	31,4m	41,8m	52,3m
Beam wid.	3,4ft	6,9ft	10,2ft	13,7ft	17,1ft	25,7ft	34,3ft	51,4ft	68,6ft	85,7ft	102,9ft	137,1ft	171,4ft

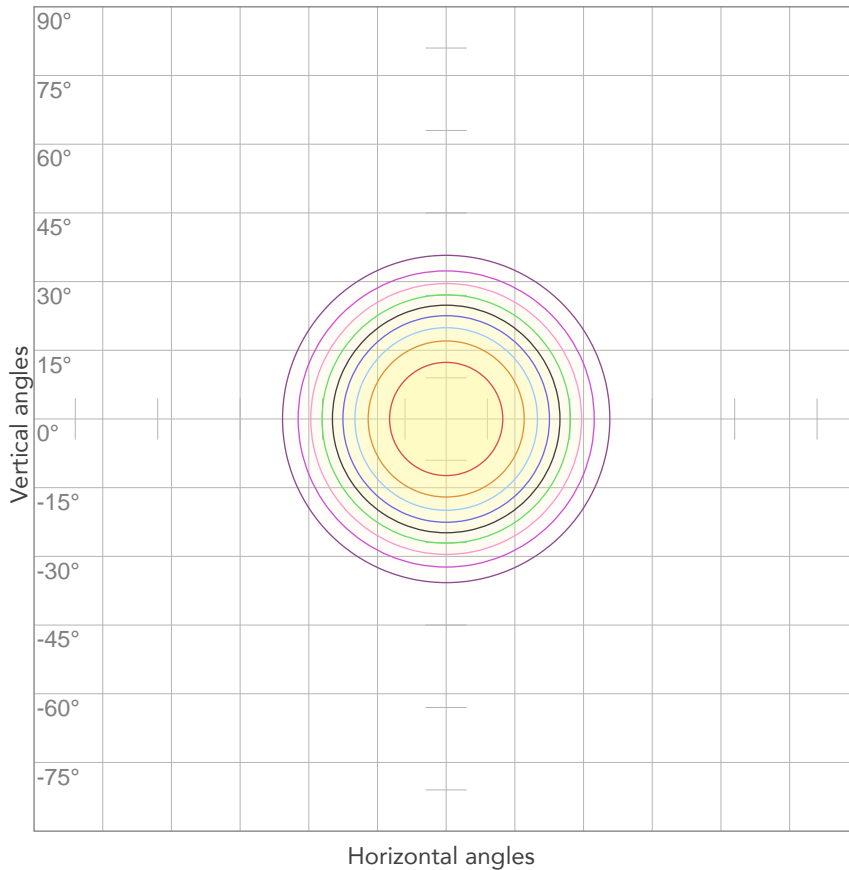
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,434A	91,8W	32lm/W

## ISO CANDELA DIAGRAM



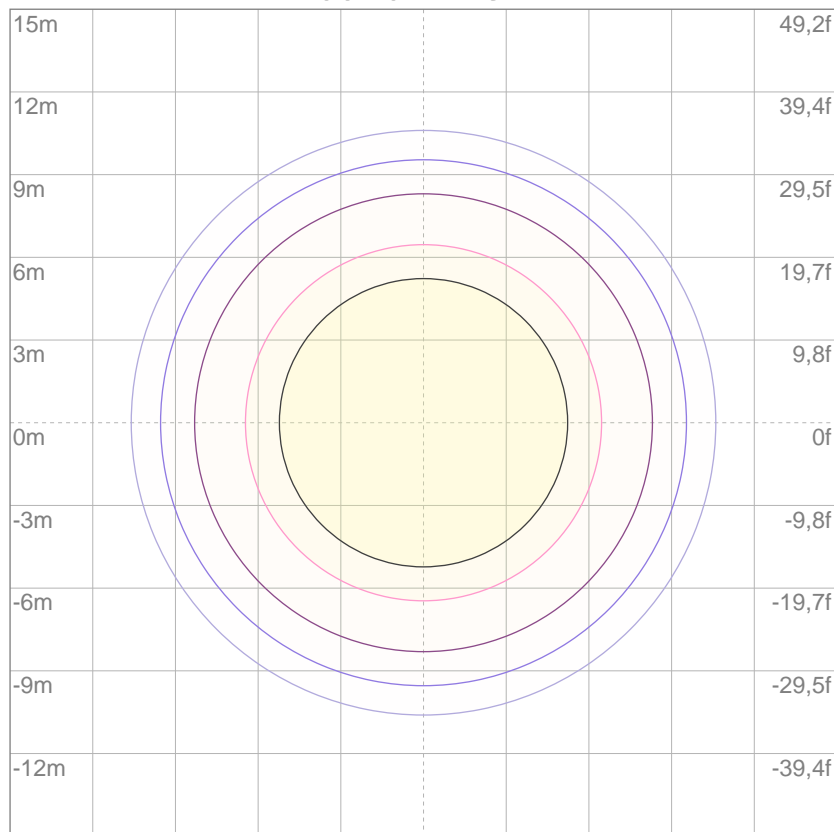
10%	361 cd
20%	723 cd
30%	1084 cd
40%	1446 cd
50%	1807 cd
60%	2168 cd
70%	{LUX_1M70} cd
80%	2891 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3614 cd

## ISO LUX DIAGRAM



3%	1,08 lx
5%	1,81 lx
10%	3,61 lx
30%	10,8 lx
50%	18,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 36,1 lx

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



Total lumen output:

2750 lm

Total candela output:

10048 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

30°

Target:

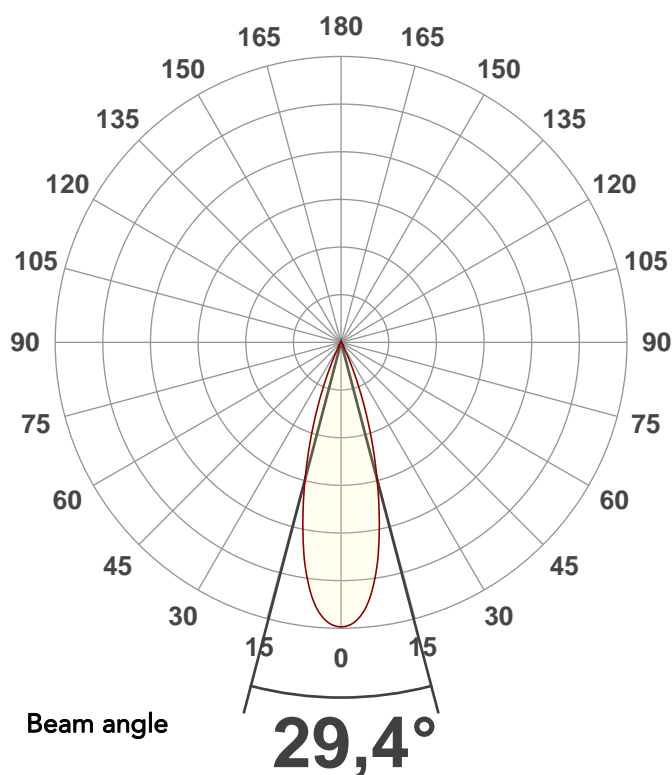
Full on

Operator:

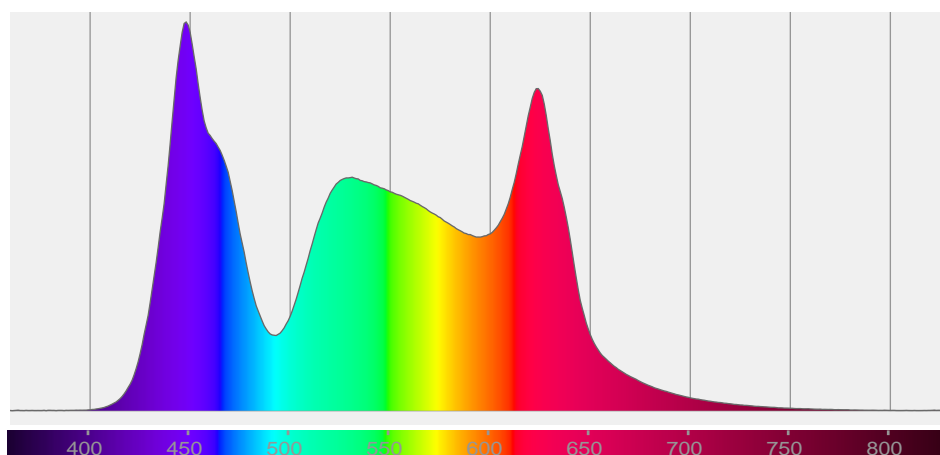
Paolo Carvone

Date and time:

06/02/2020 17:16:24



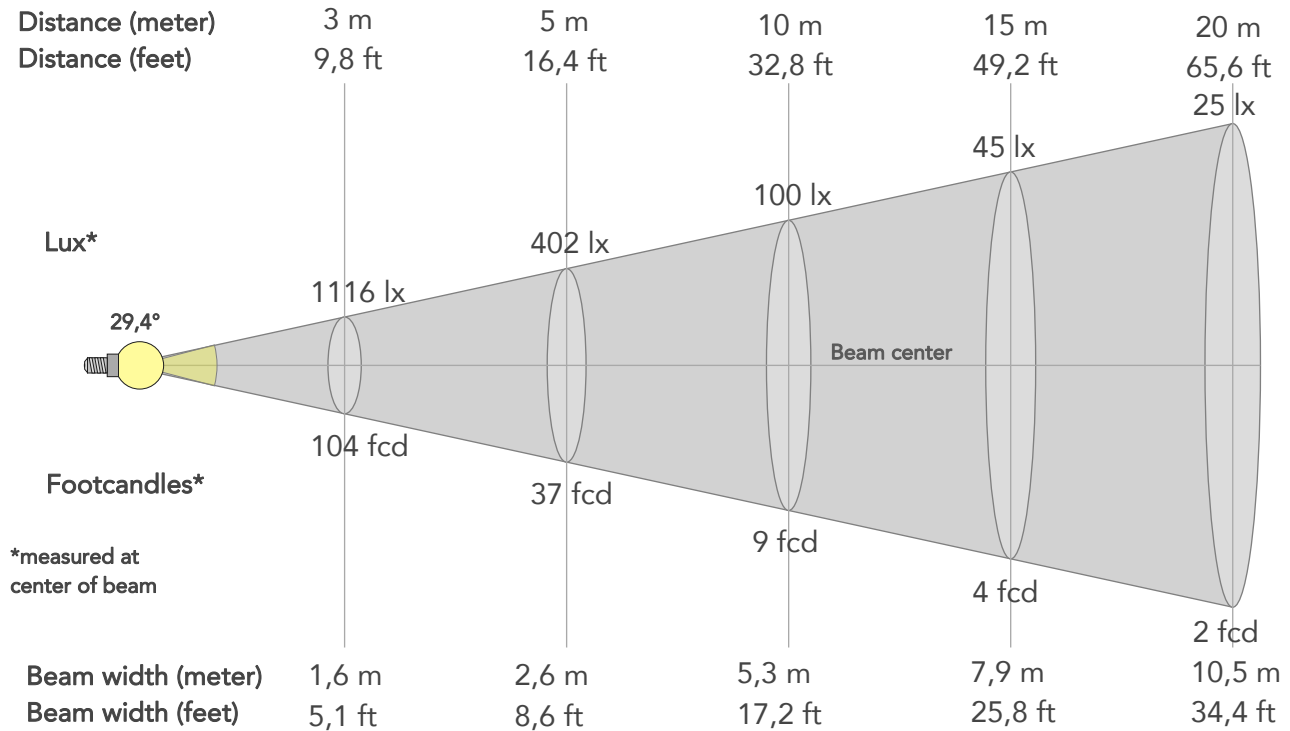
Spectra





## BEAM DETAILS

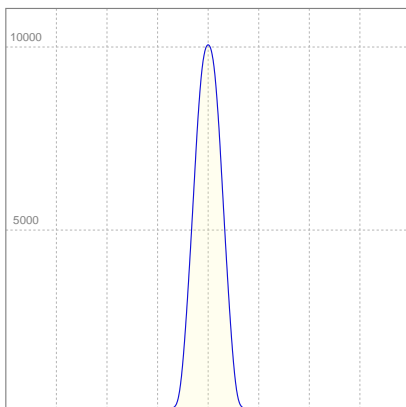
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,4°	47,6°	56,7°	97,9%	95,9%



### 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	10048lx	2512lx	1116lx	628lx	402lx	179lx	100lx	45lx	25lx	16lx	11lx	6lx	4lx
Footcand.	934fcd	233fcd	104fcd	58fcd	37fcd	17fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,1m	2,6m	3,9m	5,3m	7,9m	10,5m	13,1m	15,8m	21m	26,3m
Beam wid.	1,7ft	3,5ft	5,1ft	6,9ft	8,6ft	12,9ft	17,2ft	25,8ft	34,4ft	43,1ft	51,7ft	68,9ft	86,1ft

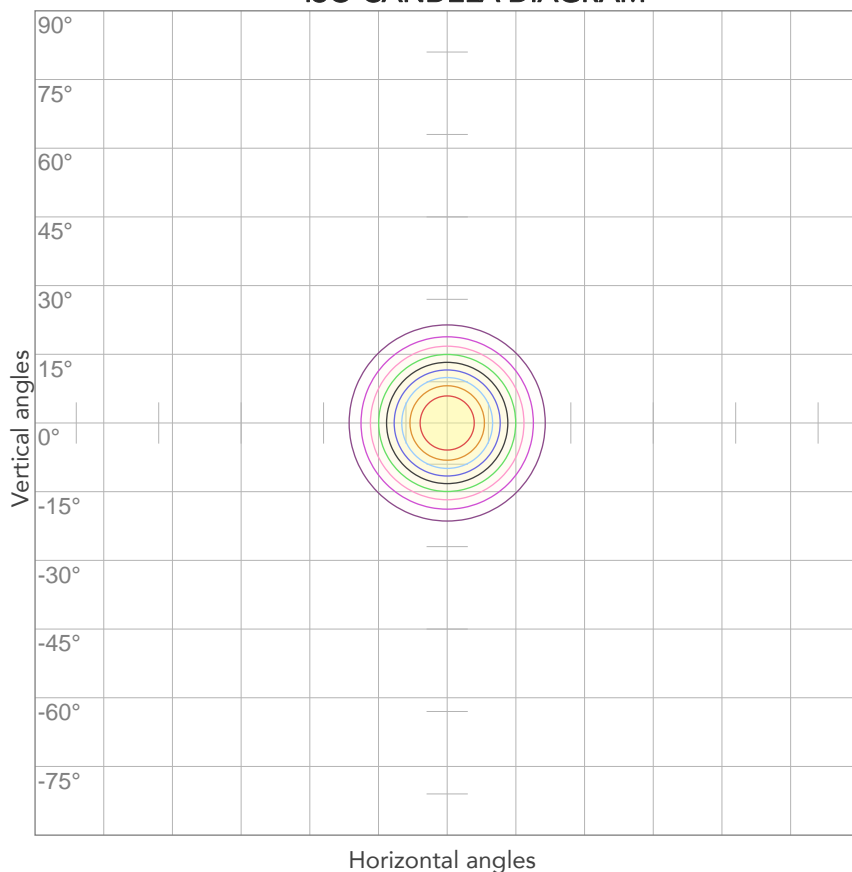
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,432A	91,0W	30lm/W

## ISO CANDELA DIAGRAM



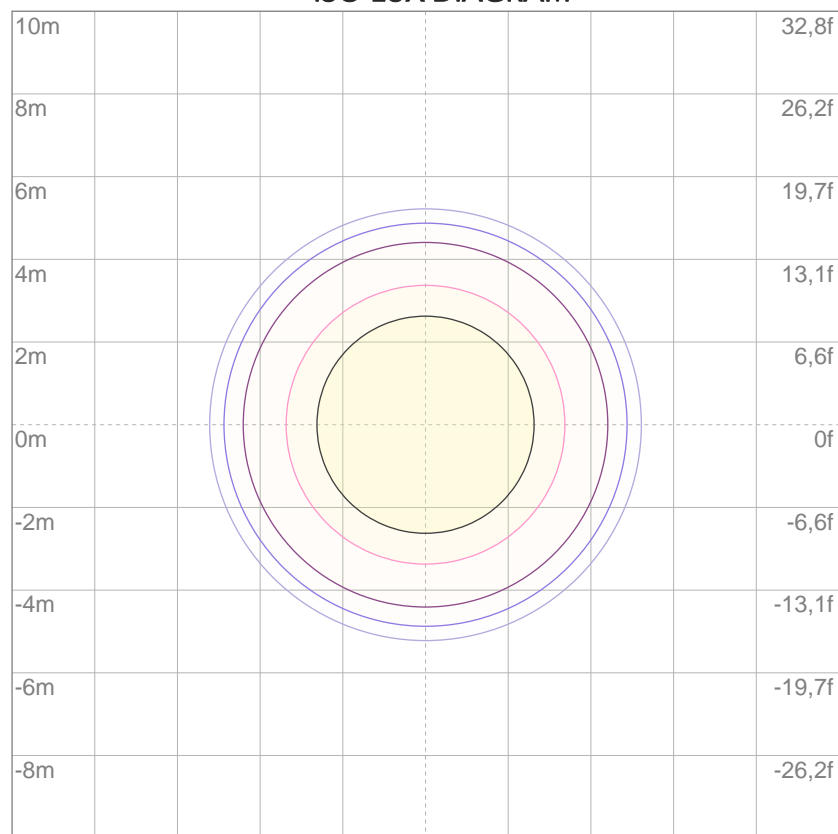
10%	1005 cd
20%	2010 cd
30%	3015 cd
40%	4019 cd
50%	5024 cd
60%	6029 cd
70%	{LUX_1M70} cd
80%	8039 cd

### Conditions:

Number of c-planes: 2

Candela at center: 10048 cd

## ISO LUX DIAGRAM



3%	3,01 lx
5%	5,02 lx
10%	10,0 lx
30%	30,1 lx
50%	50,2 lx

### Conditions:

Number of c-planes: 2

Lux at center: 100 lx

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



Total lumen output:

1610 lm

Total candela output:

17734 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

15°

Target:

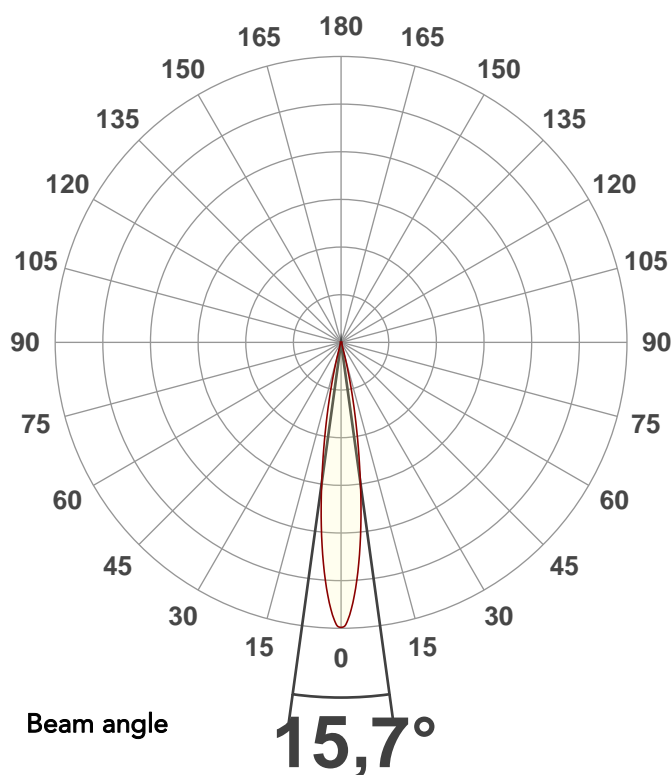
Full on

Operator:

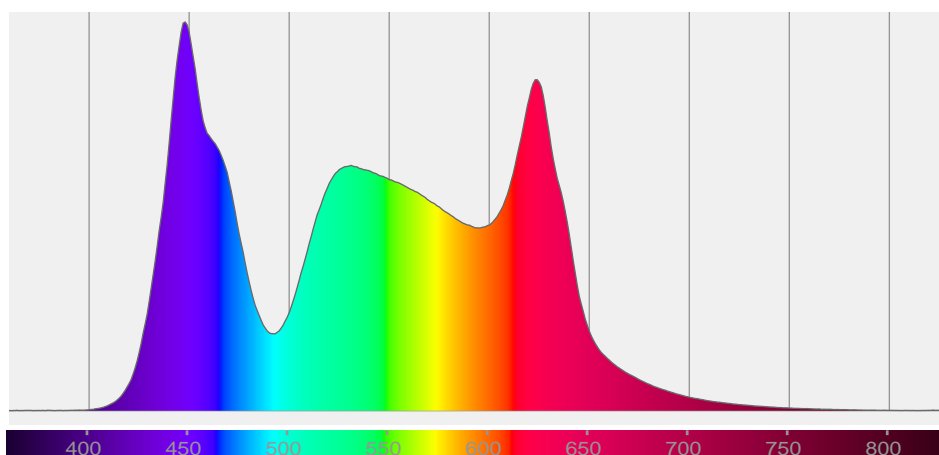
Paolo Carvone

Date and time:

06/02/2020 17:57:58

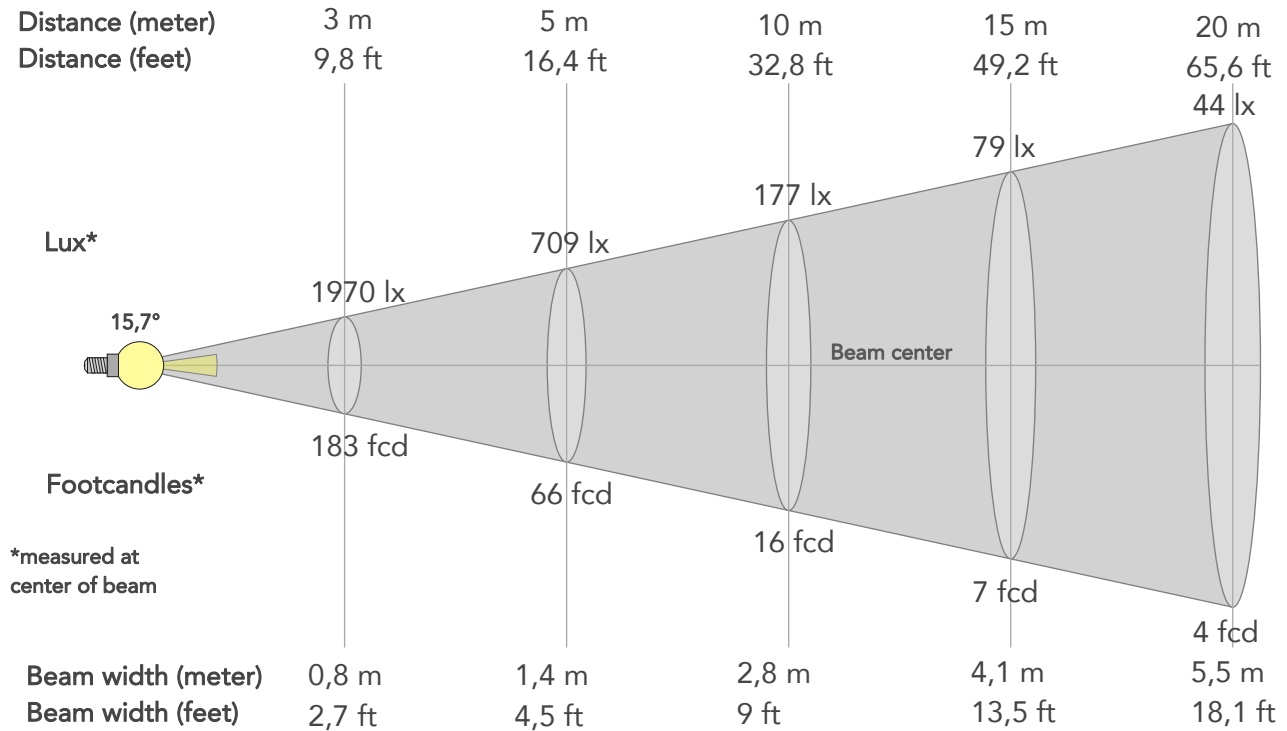


Spectra



## BEAM DETAILS

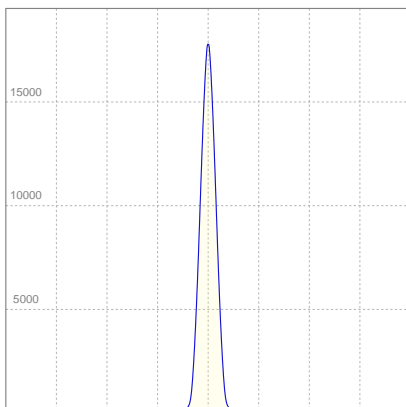
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,7°	27,4°	33,4°	97,7%	95,0%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	17734lx	4433lx	1970lx	1108lx	709lx	315lx	177lx	79lx	44lx	28lx	20lx	11lx	7lx
Footcand.	1647fcd	412fcd	183fcd	103fcd	66fcd	29fcd	16fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,1m	5,5m	6,9m	8,3m	11m	13,8m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,8ft	9ft	13,5ft	18,1ft	22,6ft	27,1ft	36,1ft	45,1ft

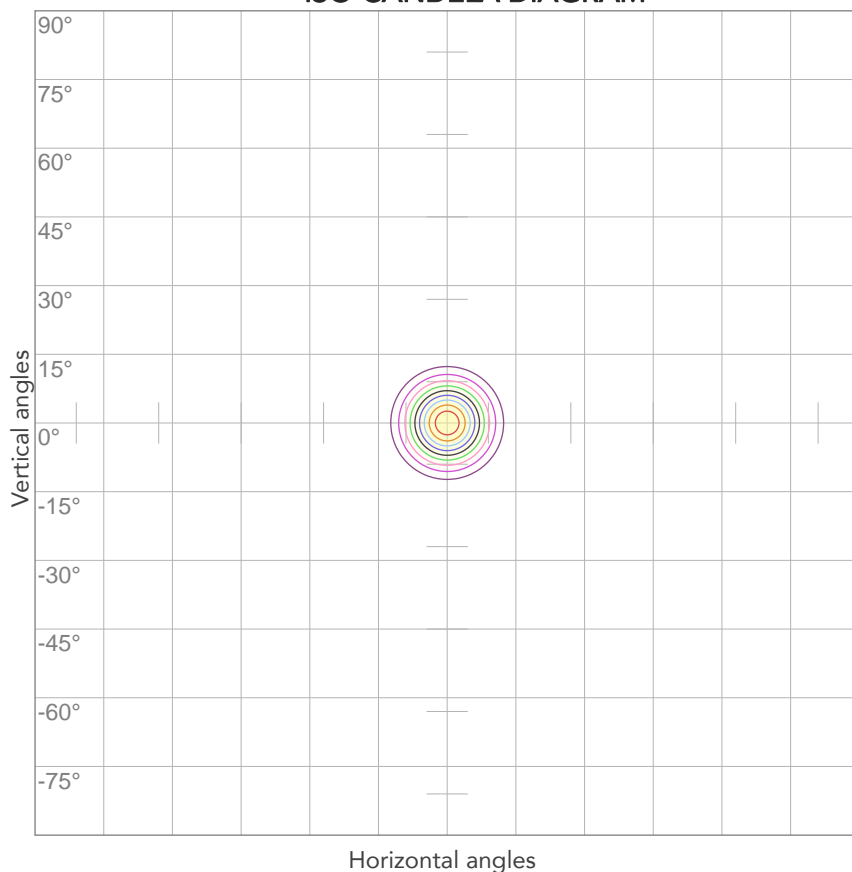
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,437A	91,0W	18lm/W

## ISO CANDELA DIAGRAM



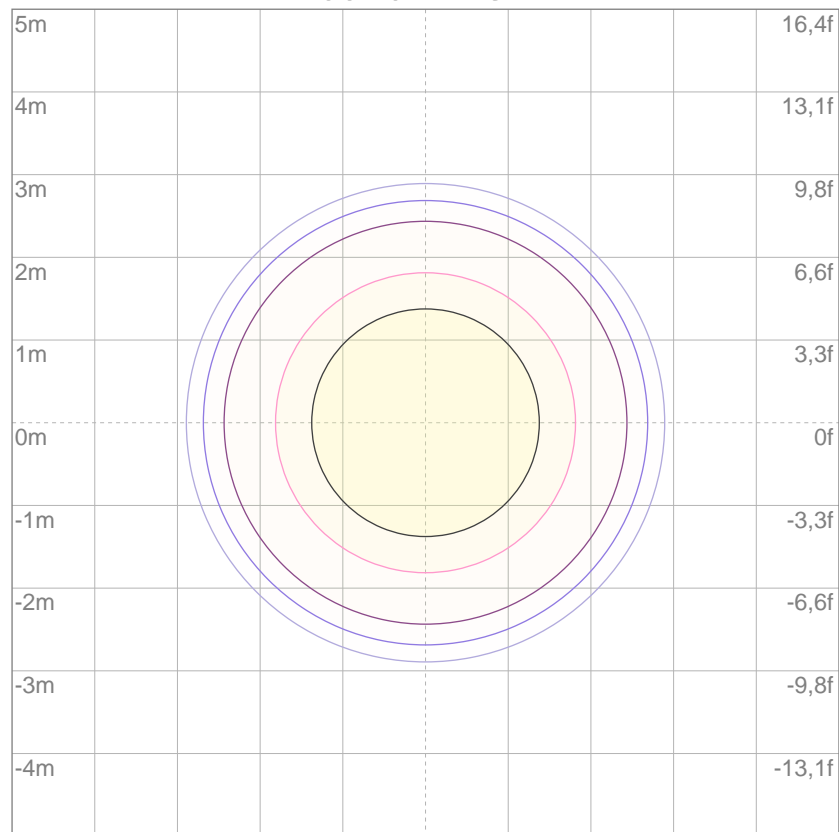
10%	1773 cd
20%	3547 cd
30%	5320 cd
40%	7093 cd
50%	8867 cd
60%	10640 cd
70%	{LUX_1M70} cd
80%	14187 cd

### Conditions:

Number of c-planes: 2

Candela at center: 17734 cd

## ISO LUX DIAGRAM



3%	5,32 lx
5%	8,87 lx
10%	17,7 lx
30%	53,2 lx
50%	88,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 177 lx

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



Total lumen output:

320 lm

Total candela output:

352 cd

PRODUCT NAME:

ECLFRESNELJTW

MEASUREMENT CONDITIONS:

Beam angle:

45°

Target:

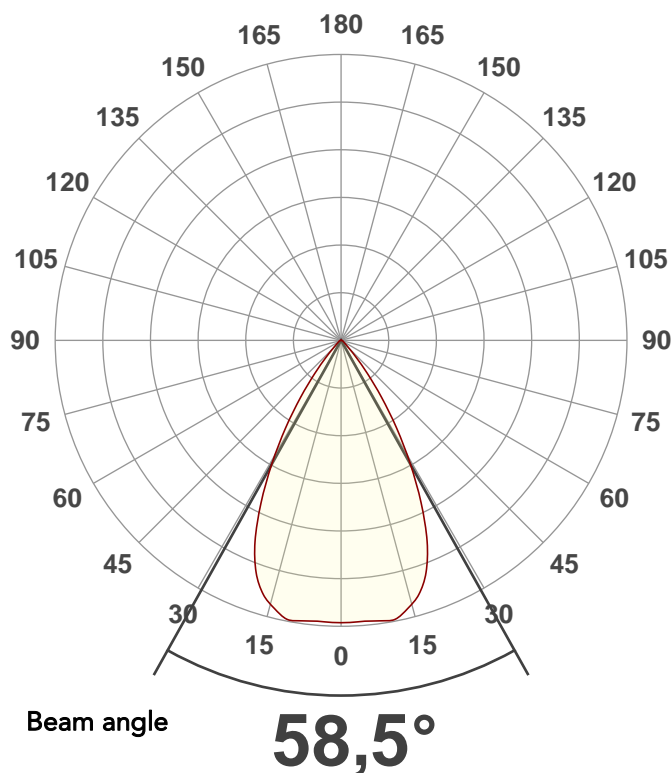
Red

Operator:

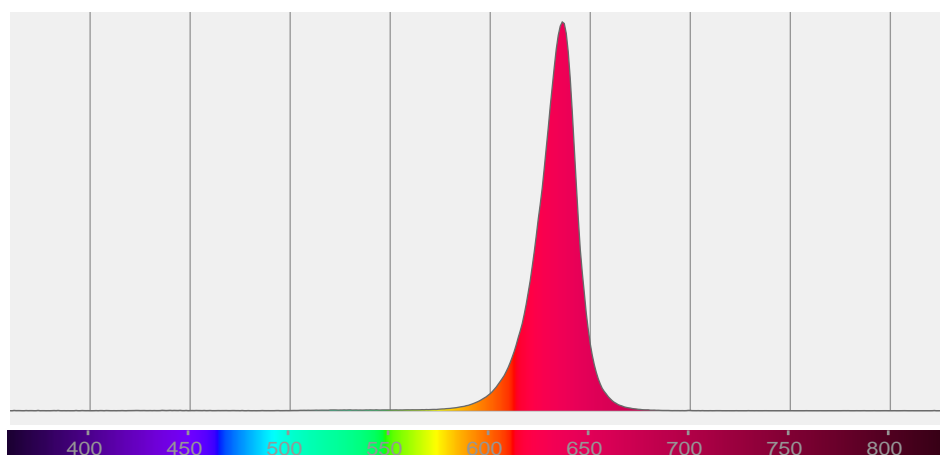
Paolo Carvone

Date and time:

06/02/2020 16:38:46

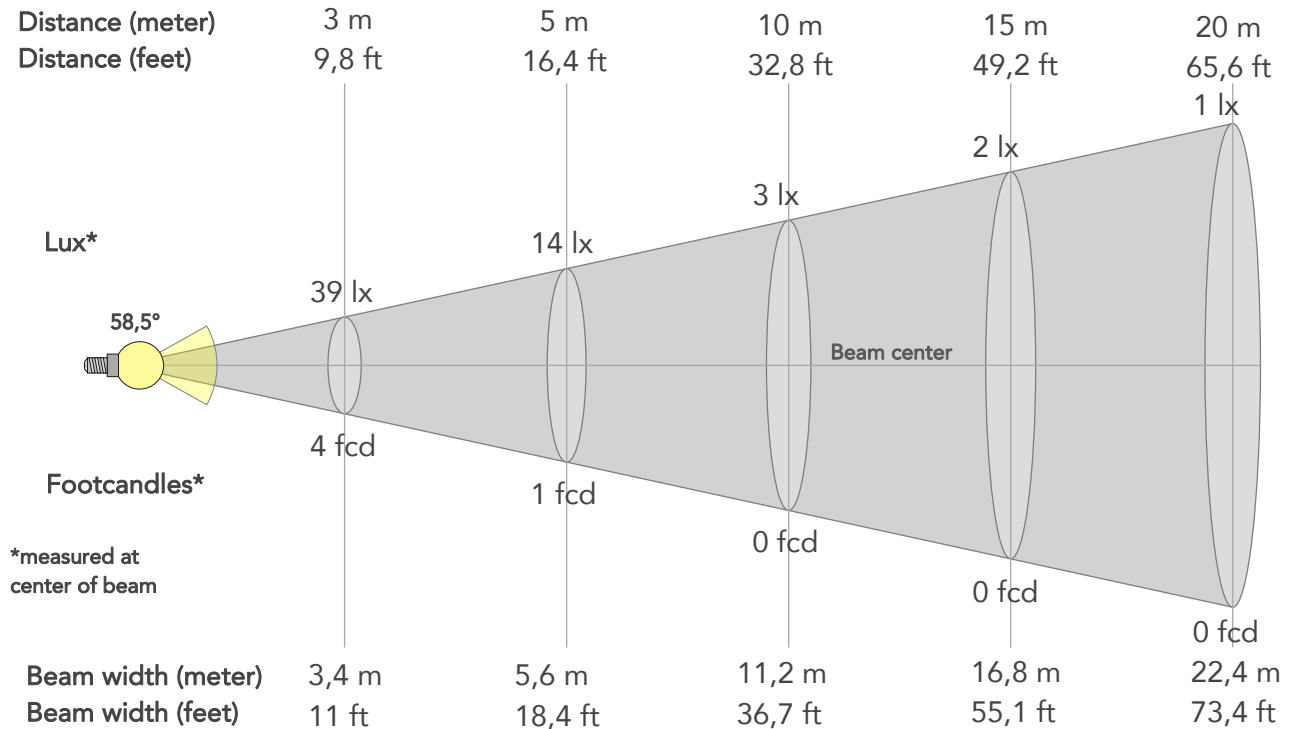


Spectra



## BEAM DETAILS

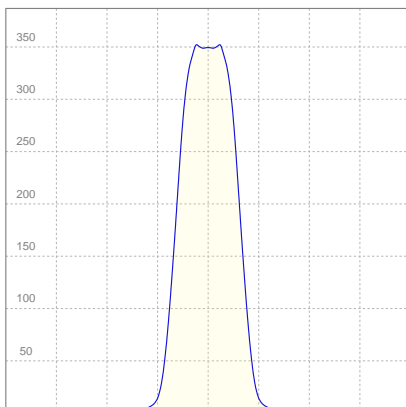
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
58,5°	81,3°	97,1°	97,8%	95,0%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	349lx	87lx	39lx	22lx	14lx	6lx	3lx	2lx	1lx	1lx	0lx	0lx	0lx
Footcand.	32fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,2m	3,4m	4,5m	5,6m	8,4m	11,2m	16,8m	22,4m	28m	33,6m	44,8m	56m
Beam wid.	3,7ft	7,4ft	11ft	14,7ft	18,4ft	27,5ft	36,7ft	55,1ft	73,4ft	91,8ft	110,1ft	146,9ft	183,6ft

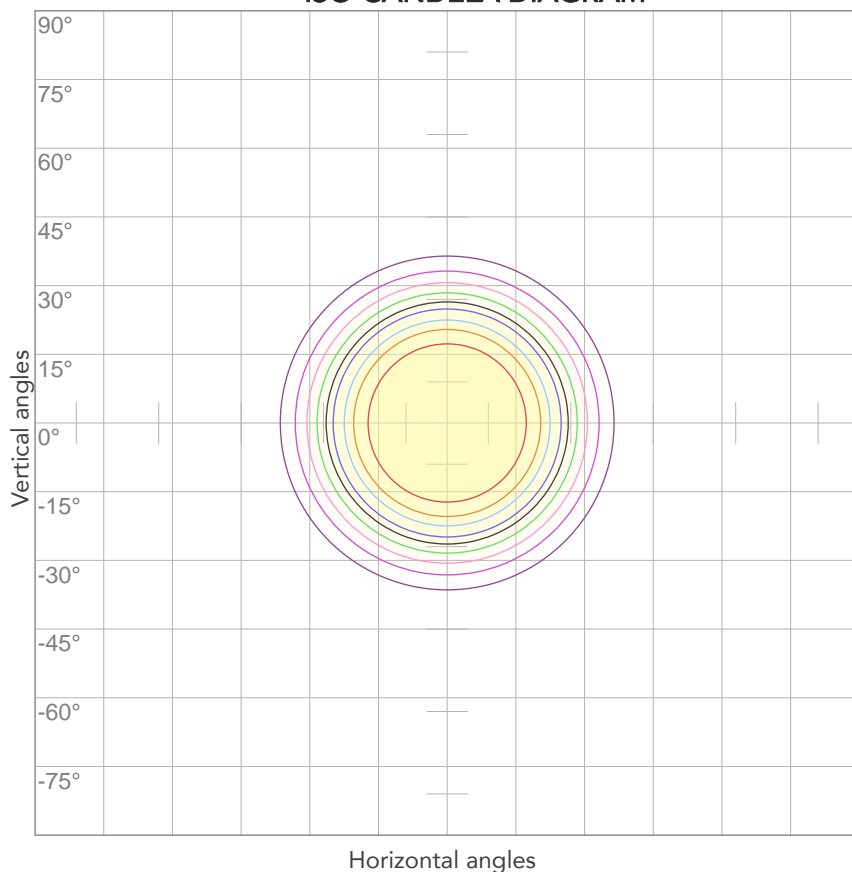
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,166A	17,3W	18lm/W

## ISO CANDELA DIAGRAM



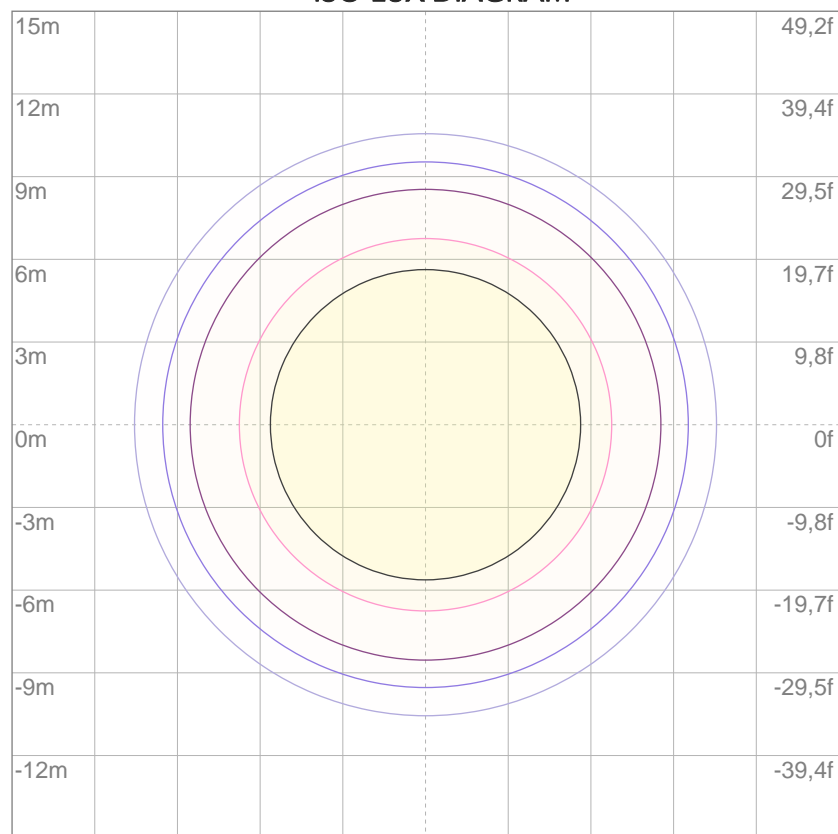
10%	35 cd
20%	70 cd
30%	105 cd
40%	140 cd
50%	175 cd
60%	210 cd
70%	{LUX_1M70} cd
80%	279 cd

### Conditions:

Number of c-planes: 2

Candela at center: 349 cd

## ISO LUX DIAGRAM



3%	0,105 lx
5%	0,175 lx
10%	0,349 lx
30%	1,05 lx
50%	1,75 lx

### Conditions:

Number of c-planes: 2

Lux at center: 3,49 lx

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





Total lumen output:

287 lm

Total candela output:

971 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

30°

Target:

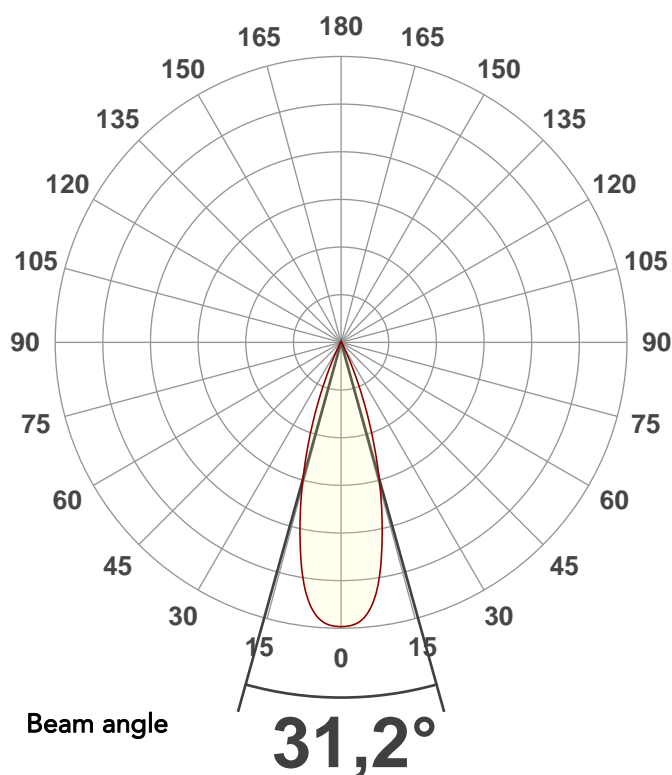
Red

Operator:

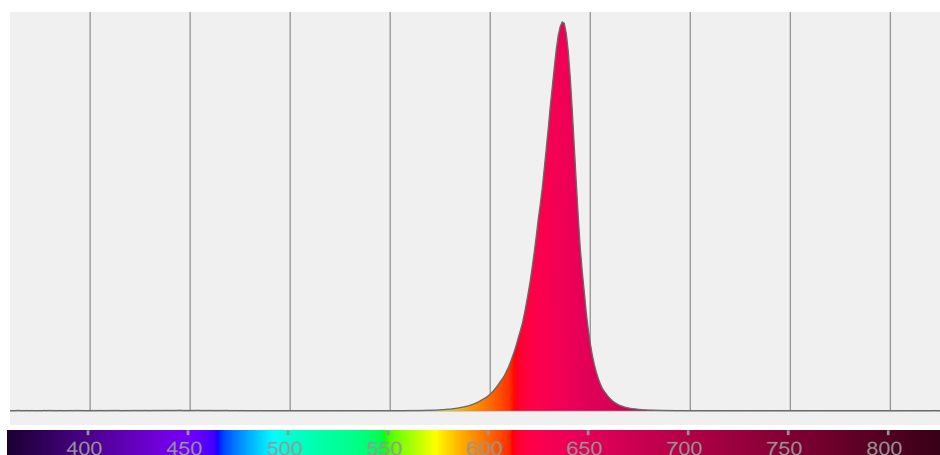
Paolo Carvone

Date and time:

06/02/2020 17:25:46



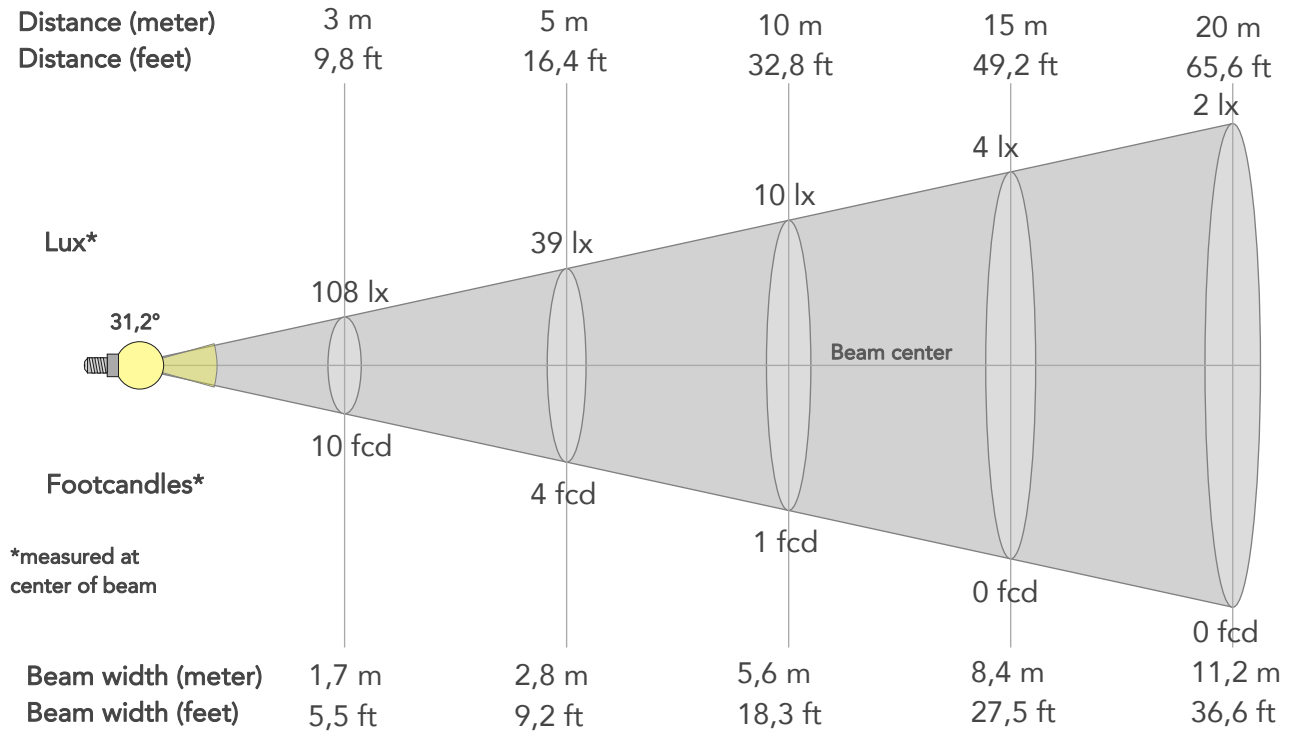
Spectra



## BEAM DETAILS



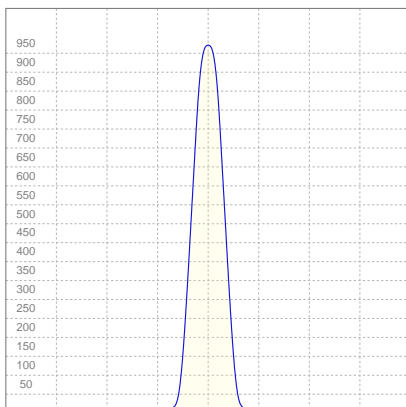
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,2°	48,5°	57,3°	97,8%	96,0%



### 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	971lx	243lx	108lx	61lx	39lx	17lx	10lx	4lx	2lx	2lx	1lx	1lx	0lx
Footcand.	90fcd	23fcd	10fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,6m	8,4m	11,2m	14m	16,7m	22,3m	27,9m
Beam wid.	1,8ft	3,7ft	5,5ft	7,3ft	9,2ft	13,7ft	18,3ft	27,5ft	36,6ft	45,8ft	54,9ft	73,2ft	91,5ft

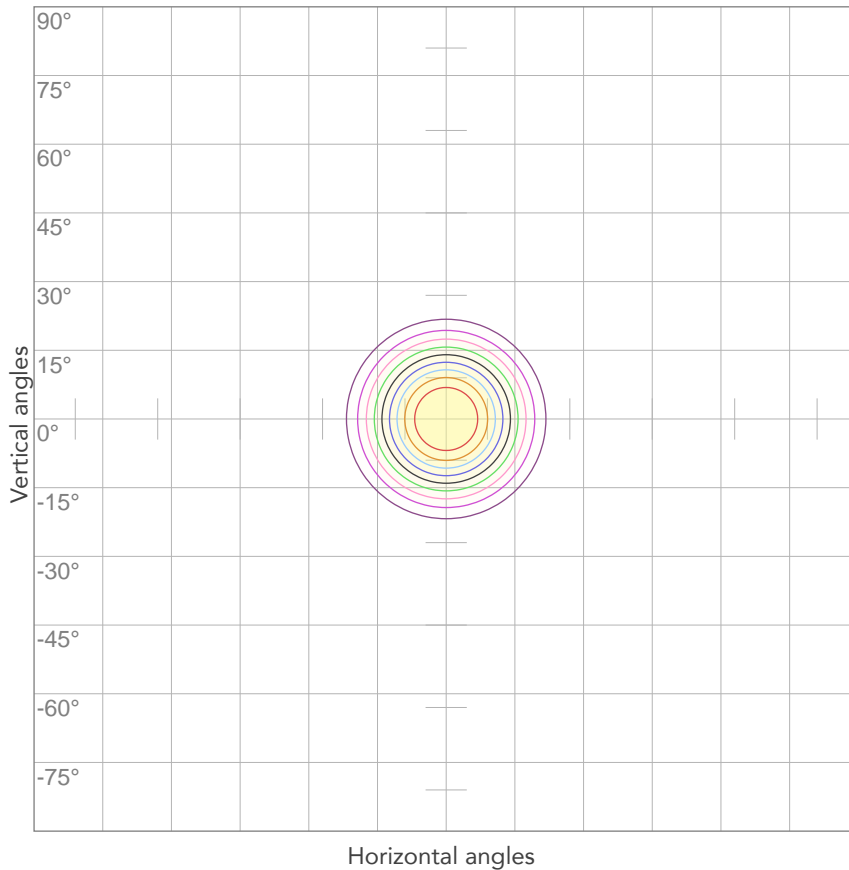
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,163A	16,7W	17lm/W

## ISO CANDELA DIAGRAM



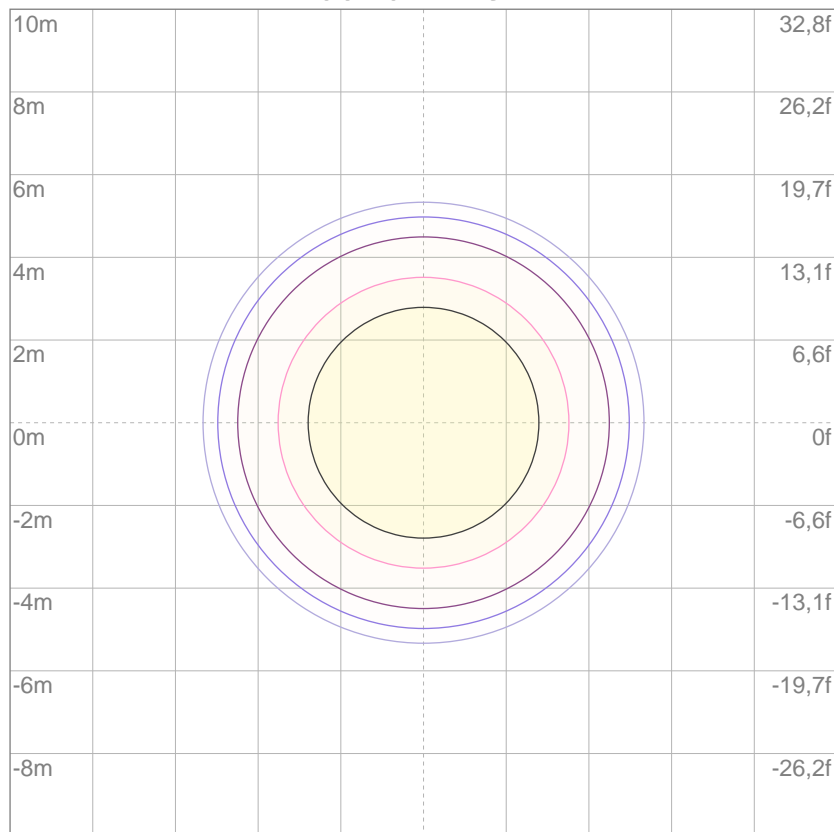
10%	97 cd
20%	194 cd
30%	291 cd
40%	388 cd
50%	486 cd
60%	583 cd
70%	{LUX_1M70} cd
80%	777 cd

### Conditions:

Number of c-planes: 2

Candela at center: 971 cd

## ISO LUX DIAGRAM



3%	0,291 lx
5%	0,486 lx
10%	0,971 lx
30%	2,91 lx
50%	4,86 lx

### Conditions:

Number of c-planes: 2

Lux at center: 9,71 lx

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



Total lumen output:

163 lm

Total candela output:

1762 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

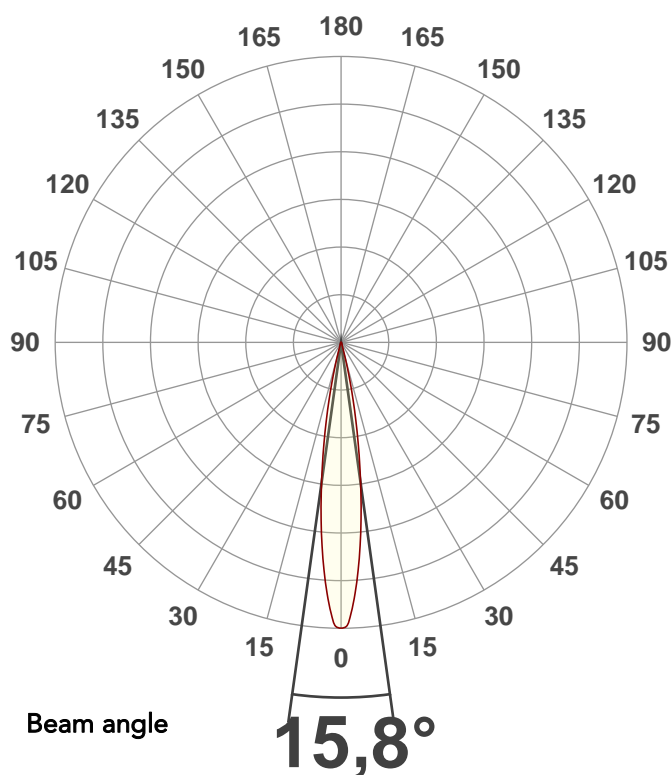
Red

Operator:

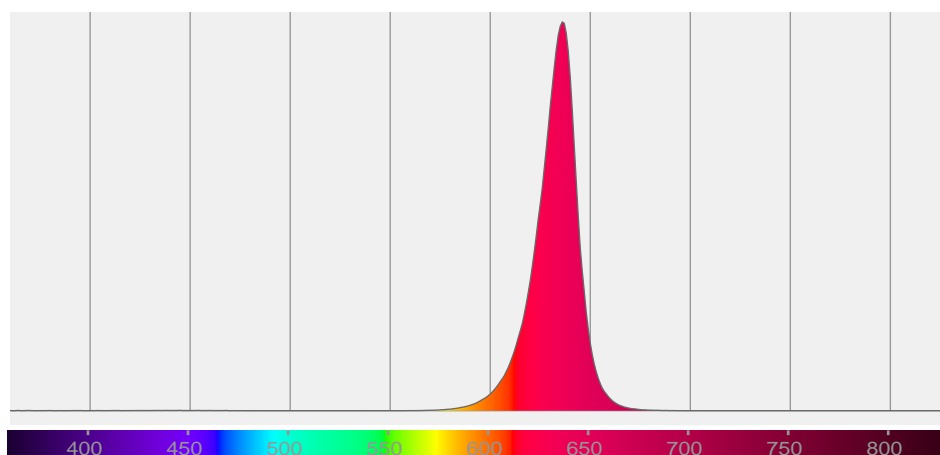
Paolo Carvone

Date and time:

06/02/2020 18:12:37



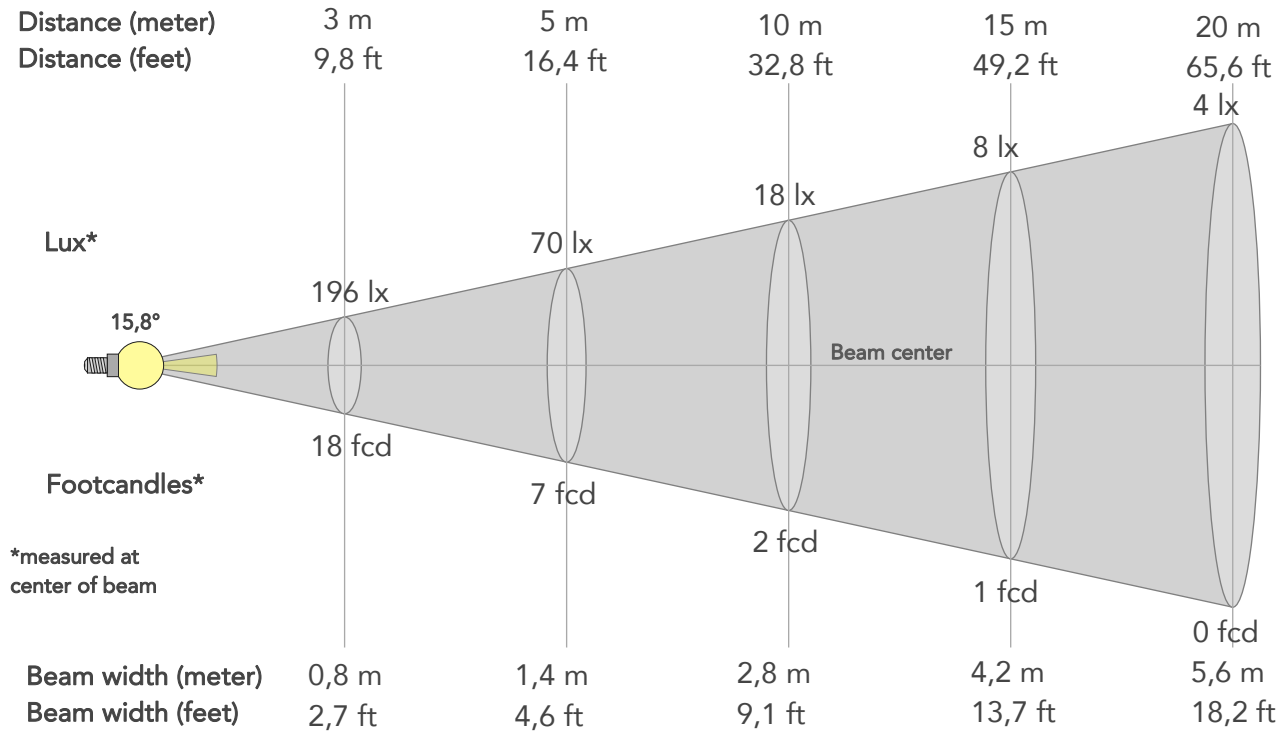
Spectra



## BEAM DETAILS



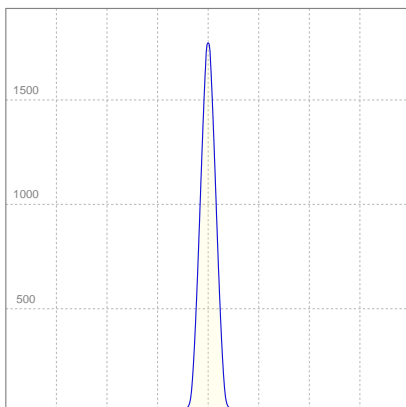
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,8°	27,6°	33,6°	97,2%	94,6%



### 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	1762lx	441lx	196lx	110lx	70lx	31lx	18lx	8lx	4lx	3lx	2lx	1lx	1lx
Footcand.	164fcd	41fcd	18fcd	10fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,2m	5,6m	6,9m	8,3m	11,1m	13,9m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,6ft	6,8ft	9,1ft	13,7ft	18,2ft	22,8ft	27,3ft	36,5ft	45,6ft

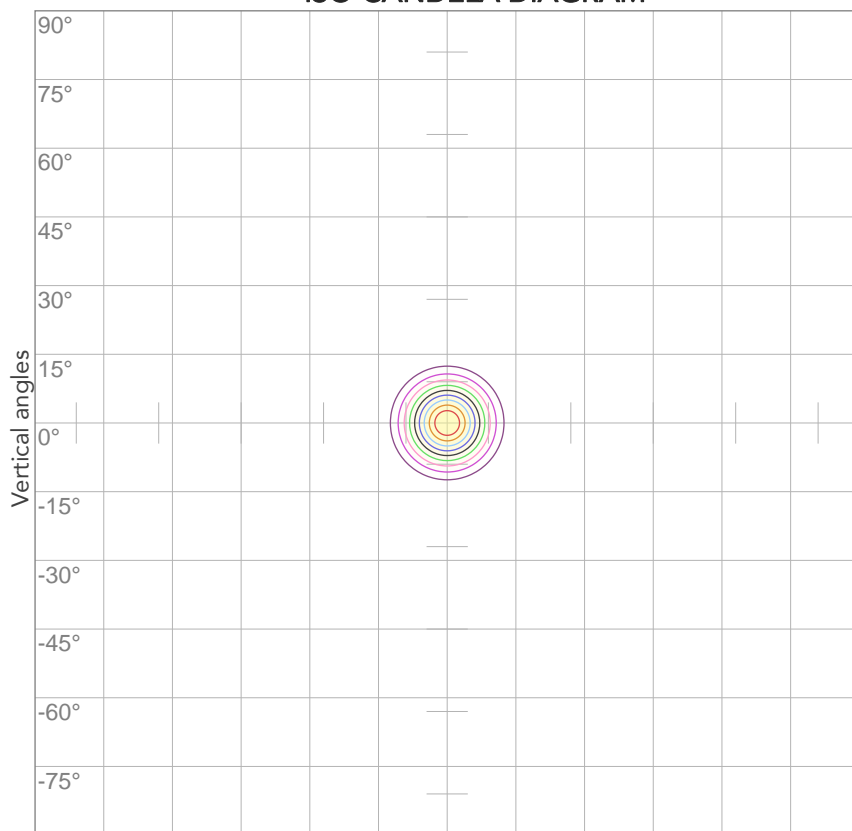
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,155A	16,7W	10lm/W

## ISO CANDELA DIAGRAM



Horizontal angles

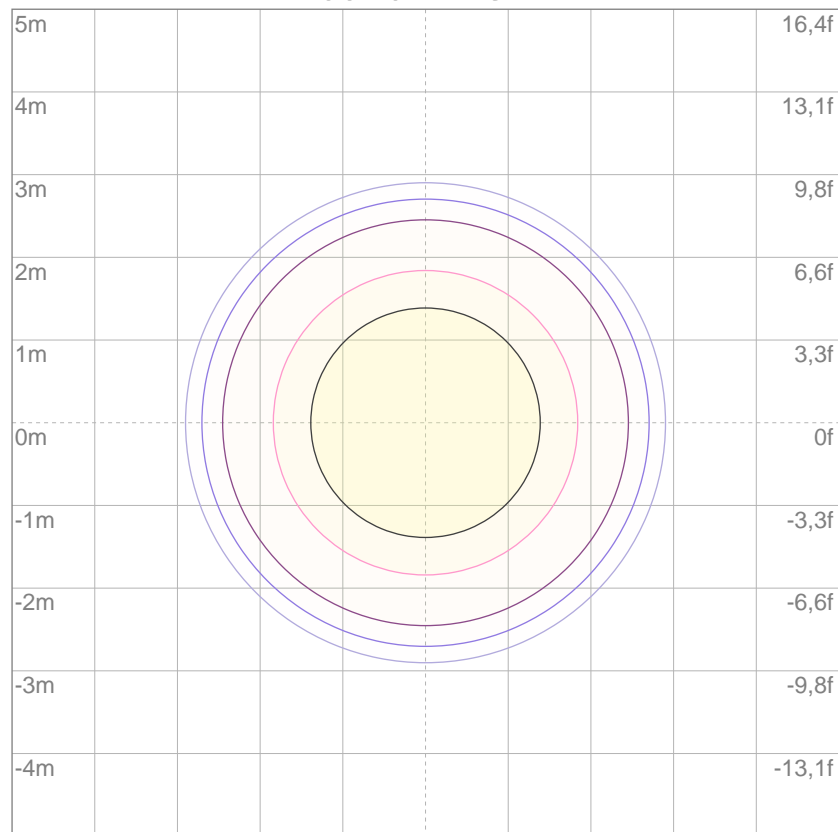
10%	176 cd
20%	352 cd
30%	529 cd
40%	705 cd
50%	881 cd
60%	1057 cd
70%	{LUX_1M70} cd
80%	1410 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1762 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,529 lx
5%	0,881 lx
10%	1,76 lx
30%	5,29 lx
50%	8,81 lx

### Conditions:

Number of c-planes: 2

Lux at center: 17,6 lx

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



Total lumen output:

999 lm

Total candela output:

1189 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

45°

Target:

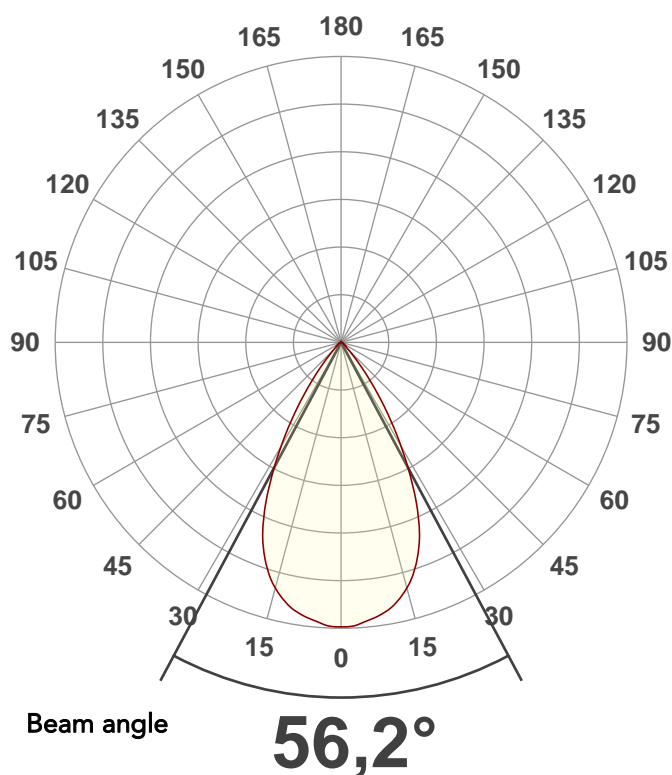
Orange

Operator:

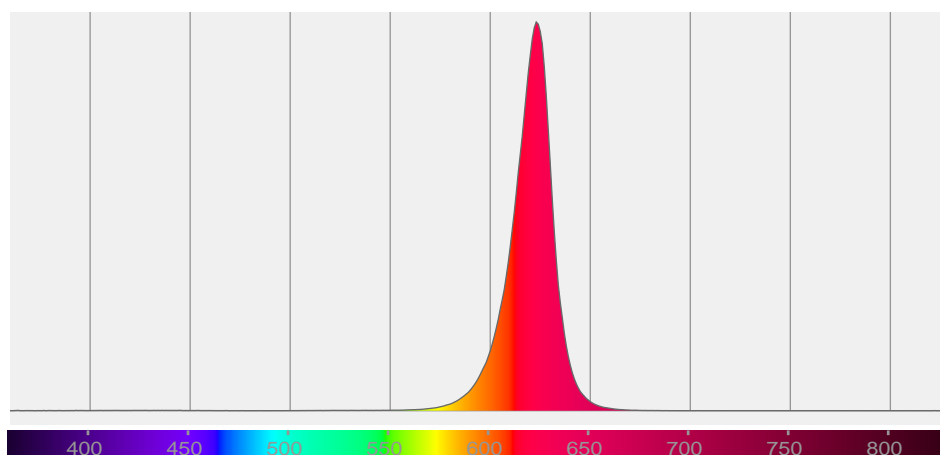
Paolo Carvone

Date and time:

06/02/2020 16:37:28

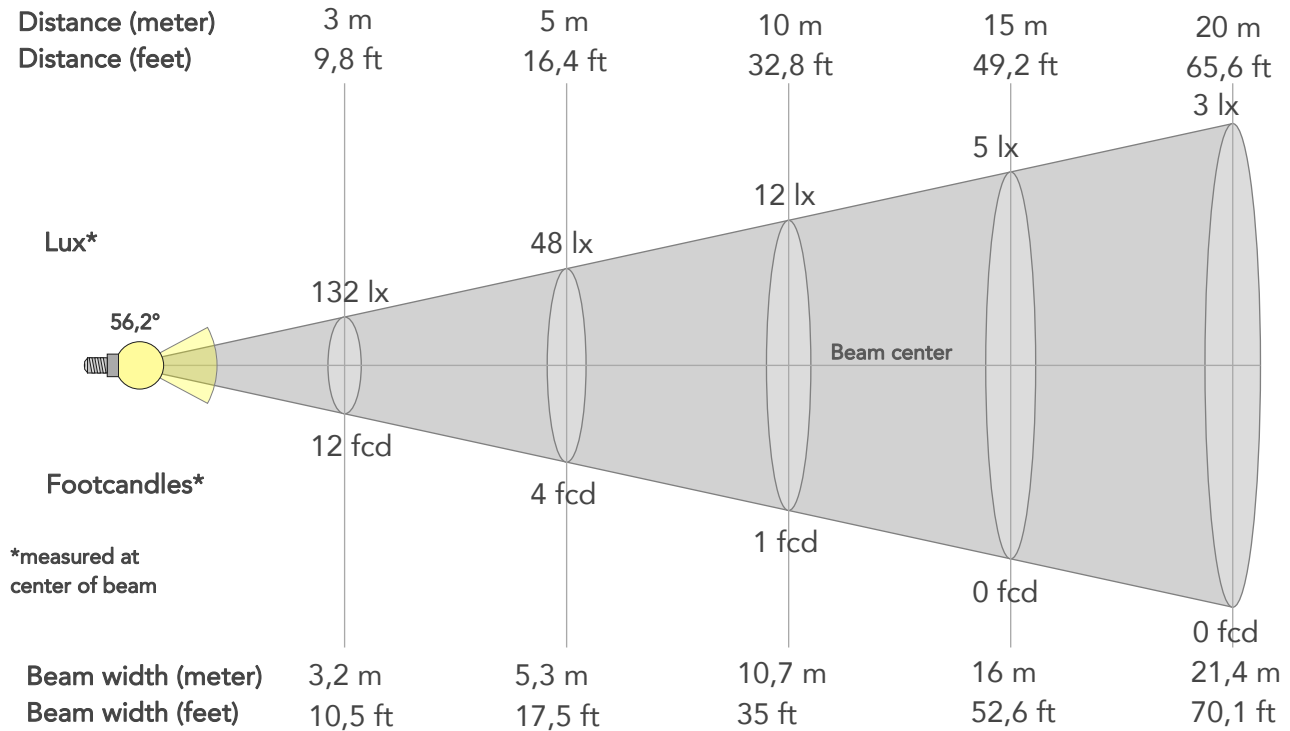


Spectra



## BEAM DETAILS

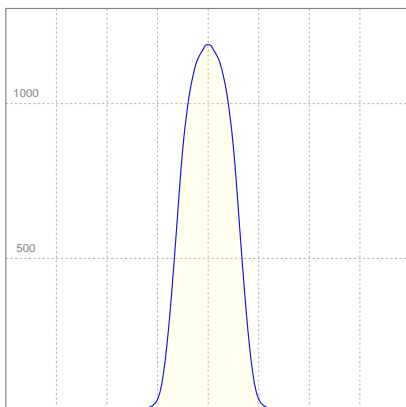
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
56,2°	80,5°	95,9°	97,8%	95,0%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1189lx	297lx	132lx	74lx	48lx	21lx	12lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	110fcd	28fcd	12fcd	7fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,1m	3,2m	4,3m	5,3m	8m	10,7m	16m	21,4m	26,7m	32m	42,7m	53,4m
Beam wid.	3,5ft	7ft	10,5ft	14ft	17,5ft	26,3ft	35ft	52,6ft	70,1ft	87,6ft	105,1ft	140,1ft	175,2ft

### LINEAR DISTRIBUTION DIAGRAM

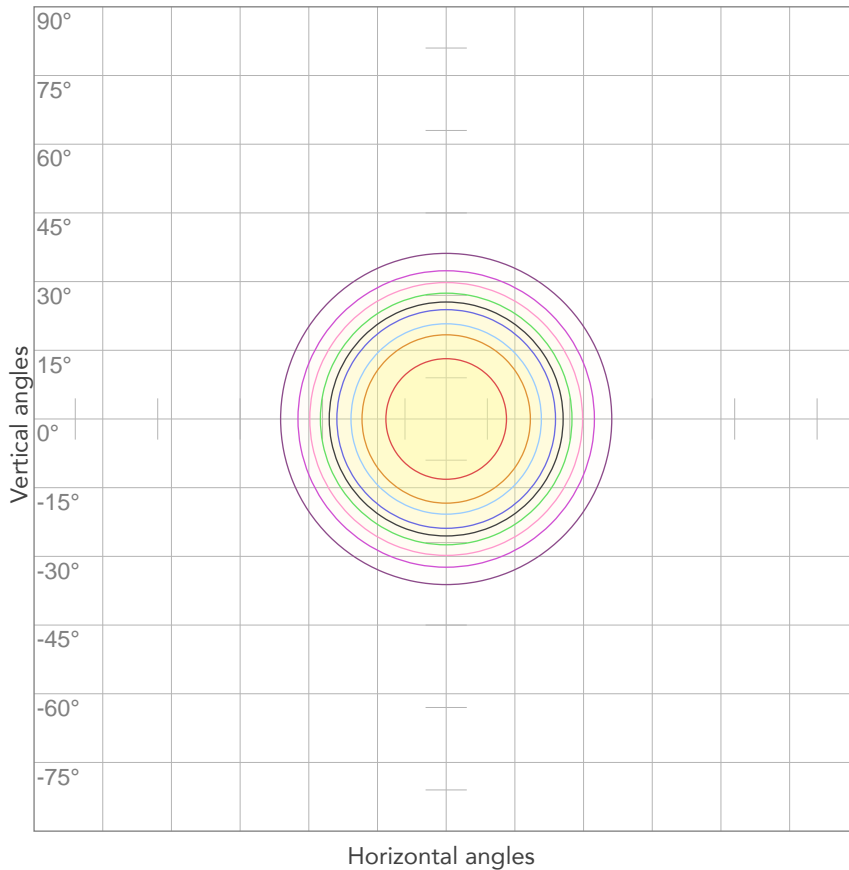


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,320A	34,0W	29lm/W



## ISO CANDELA DIAGRAM



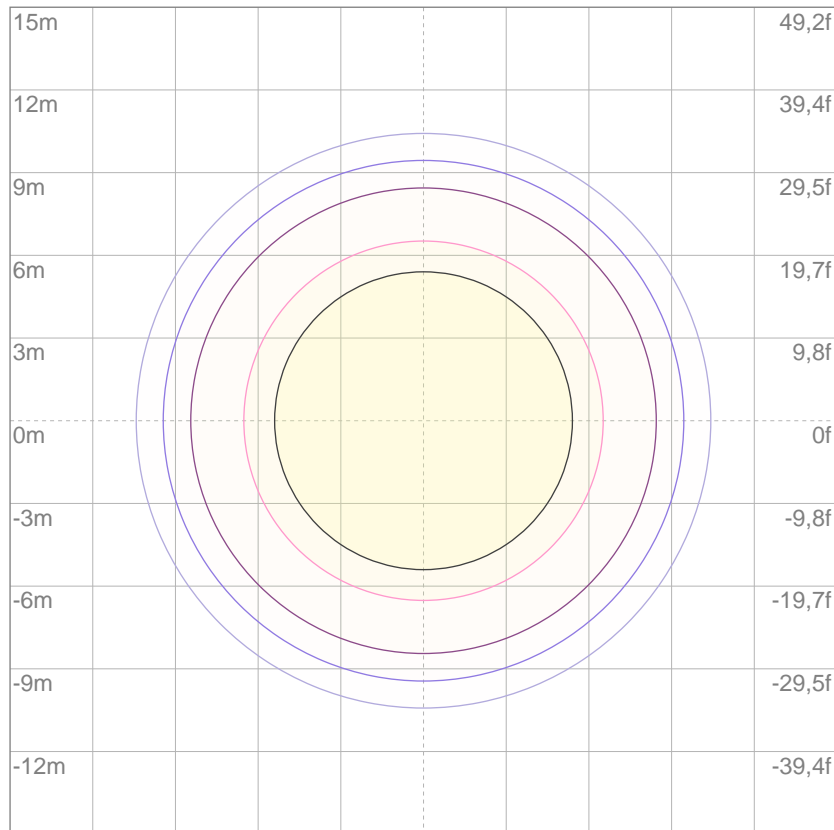
10%	119 cd
20%	238 cd
30%	357 cd
40%	475 cd
50%	594 cd
60%	713 cd
70%	{LUX_1M70} cd
80%	951 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1189 cd

## ISO LUX DIAGRAM



3%	0,357 lx
5%	0,594 lx
10%	1,19 lx
30%	3,57 lx
50%	5,94 lx

### Conditions:

Number of c-planes: 2

Lux at center: 11,9 lx

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



Total lumen output:

910 lm

Total candela output:

3297 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

30°

Target:

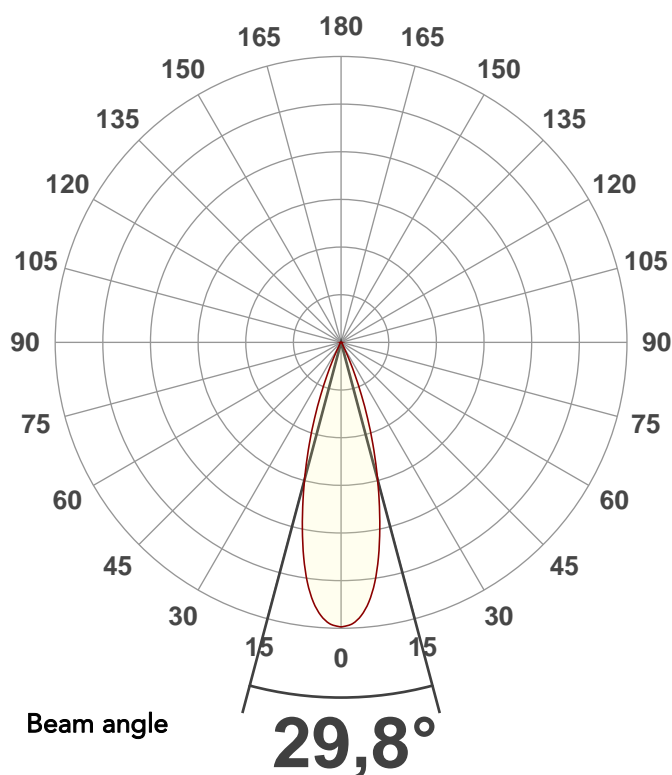
Orange

Operator:

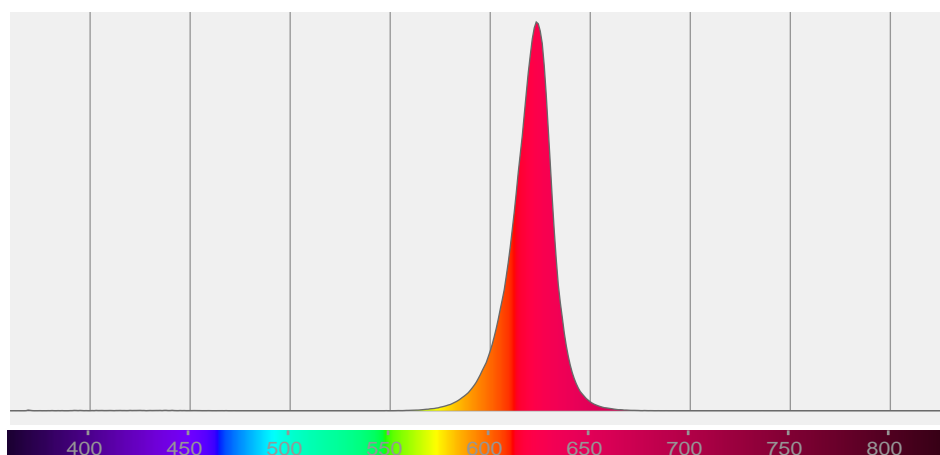
Paolo Carvone

Date and time:

06/02/2020 17:24:06

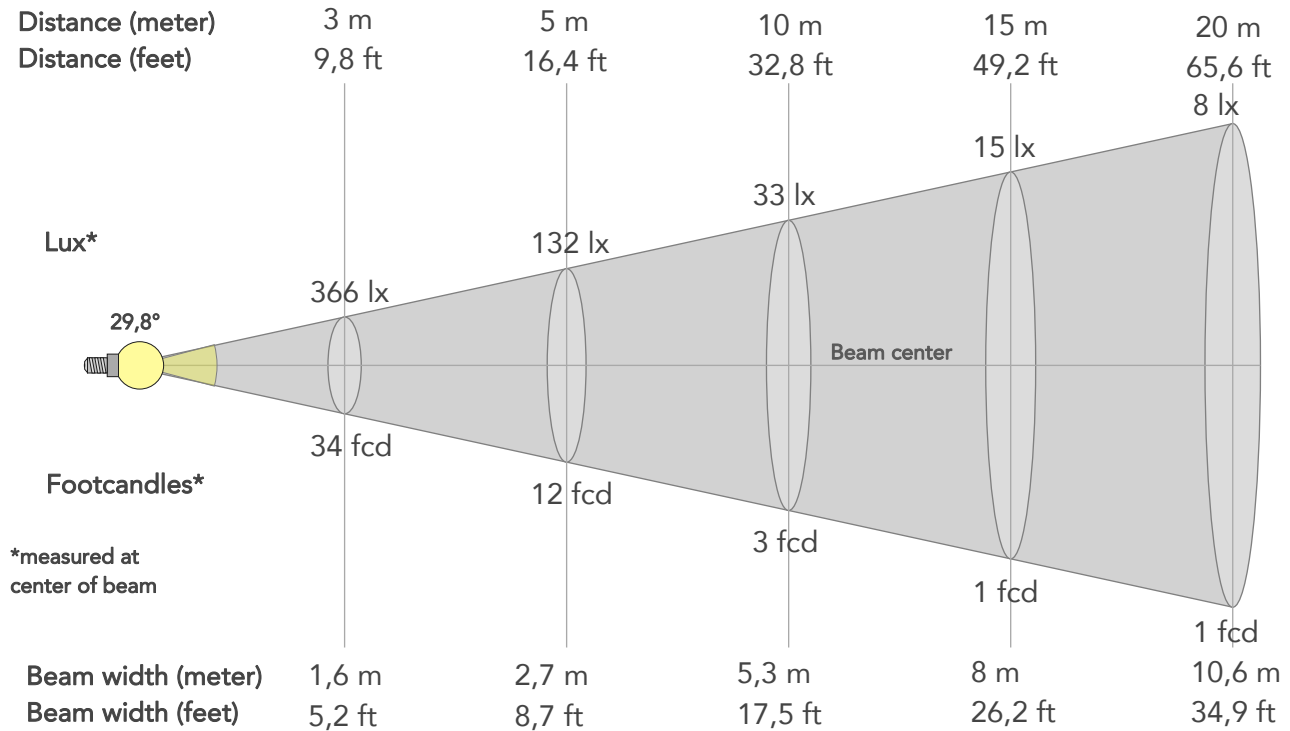


Spectra



## BEAM DETAILS

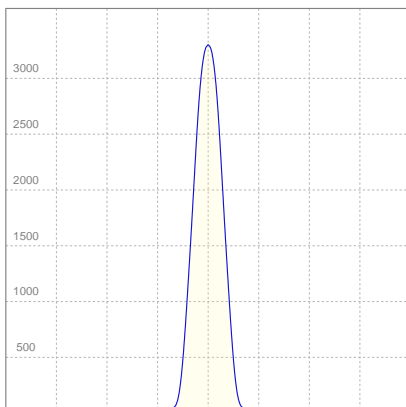
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,8°	47,9°	56,7°	98,3%	96,6%



### 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	3297lx	824lx	366lx	206lx	132lx	59lx	33lx	15lx	8lx	5lx	4lx	2lx	1lx
Footcand.	306fcd	77fcd	34fcd	19fcd	12fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,1m	2,7m	4m	5,3m	8m	10,6m	13,3m	16m	21,3m	26,6m
Beam wid.	1,8ft	3,5ft	5,2ft	7ft	8,7ft	13,1ft	17,5ft	26,2ft	34,9ft	43,7ft	52,4ft	69,9ft	87,3ft

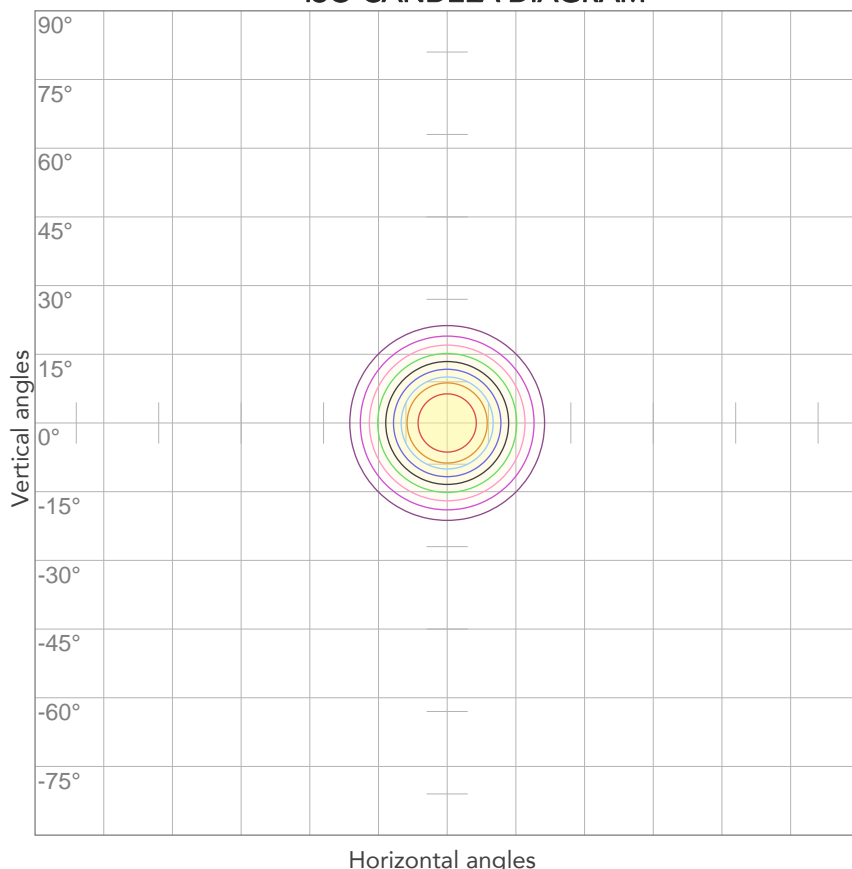
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,314A	33,4W	27lm/W

## ISO CANDELA DIAGRAM



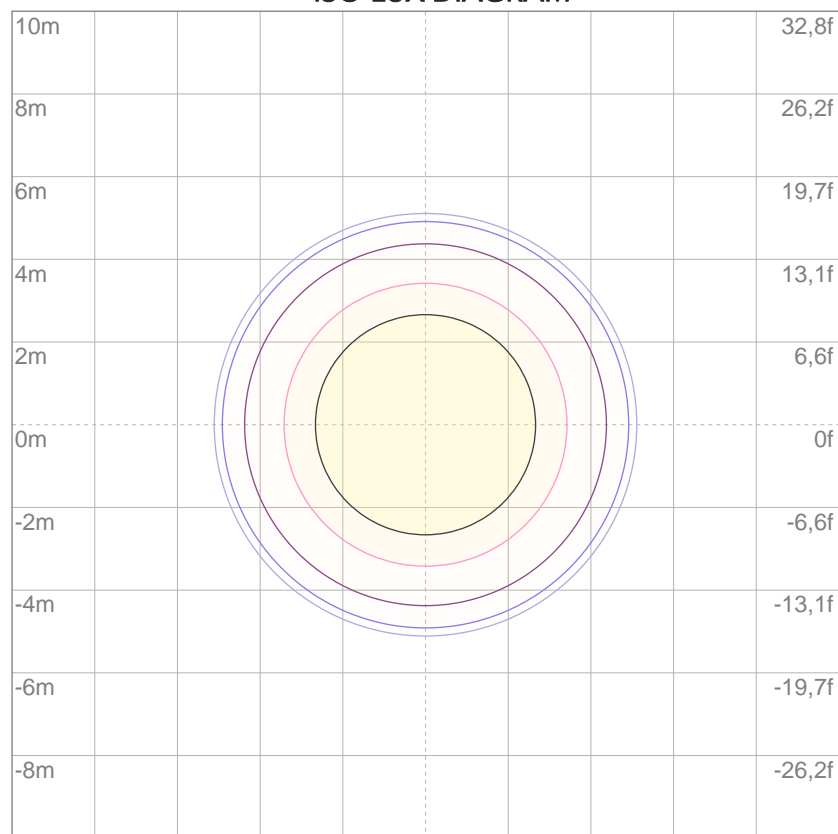
10%	330 cd
20%	659 cd
30%	989 cd
40%	1319 cd
50%	1648 cd
60%	1978 cd
70%	{LUX_1M70} cd
80%	2638 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3297 cd

## ISO LUX DIAGRAM



3%	0,989 lx
5%	1,65 lx
10%	3,30 lx
30%	9,89 lx
50%	16,5 lx

### Conditions:

Number of c-planes: 2

Lux at center: 33,0 lx

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



Total lumen output:

510 lm

Total candela output:

5856 cd

PRODUCT NAME:

ECLFRESNELJTW

MEASURAMENT CONDITIONS:

Beam angle:

15°

Target:

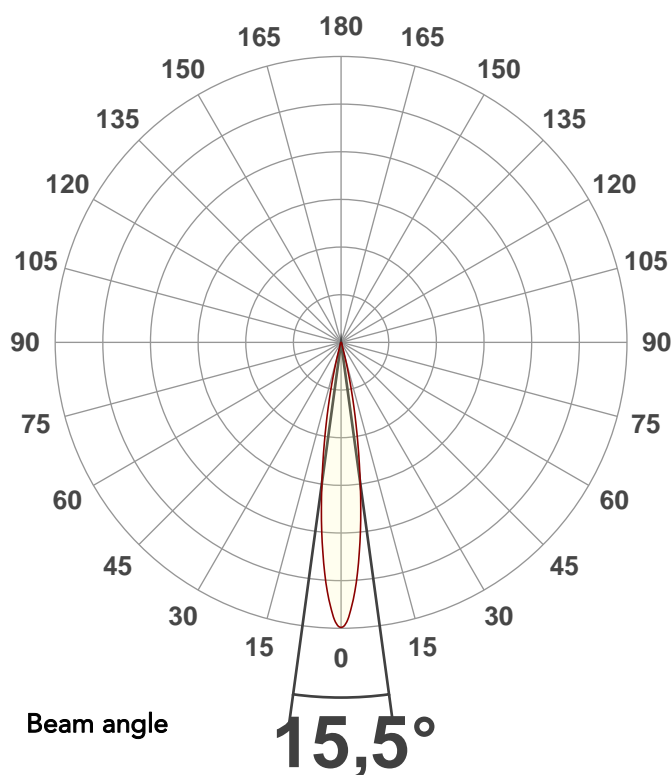
Orange

Operator:

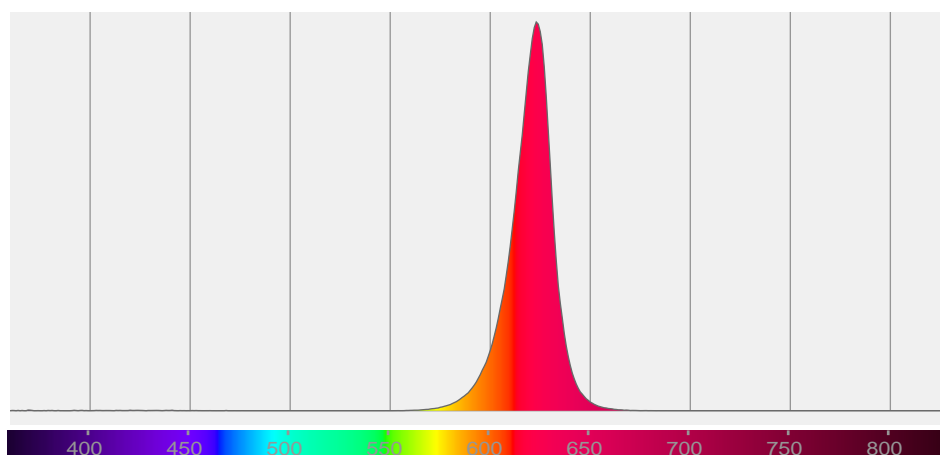
Paolo Carvone

Date and time:

06/02/2020 18:10:05



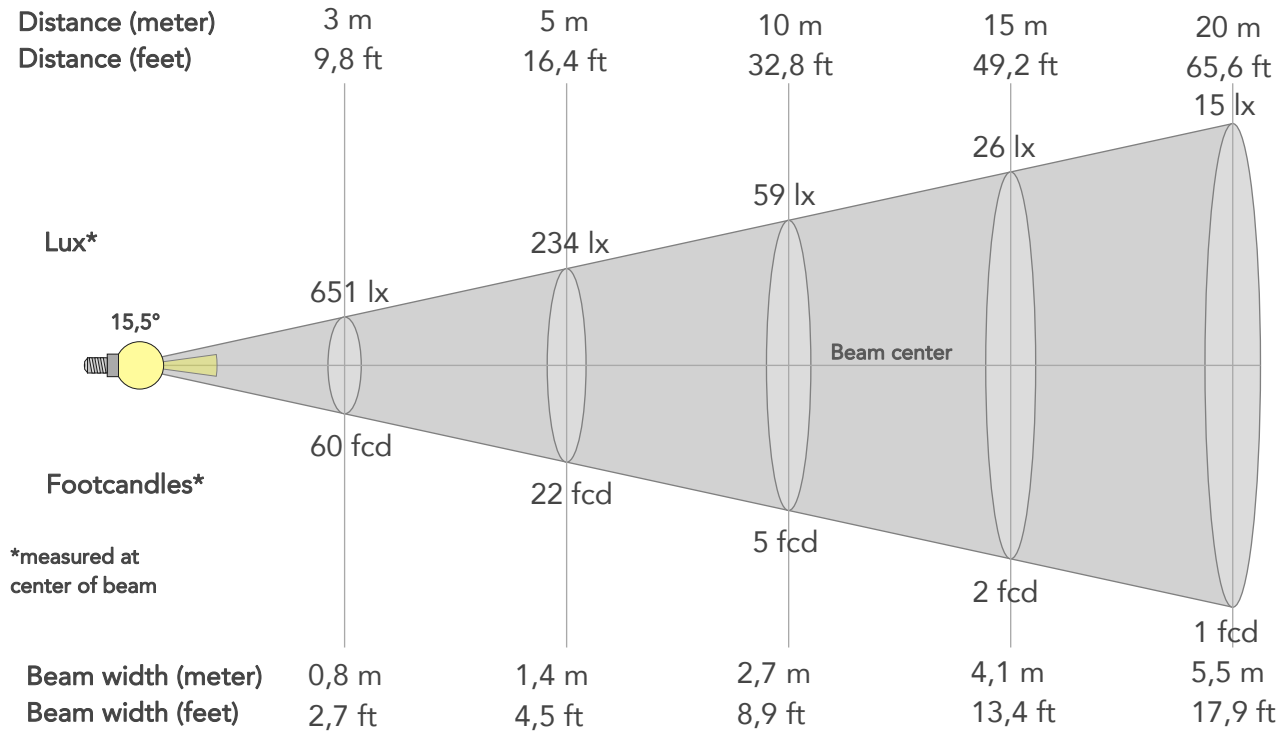
Spectra



## BEAM DETAILS



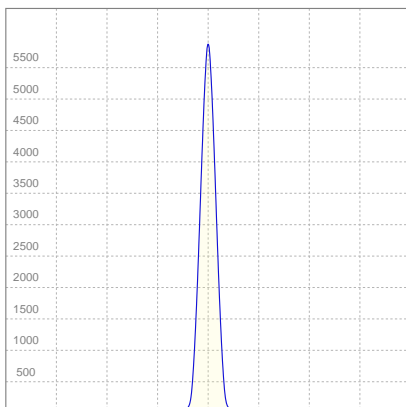
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,5°	27,2°	33°	98,5%	96,4%



### 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	5856lx	1464lx	651lx	366lx	234lx	104lx	59lx	26lx	15lx	9lx	7lx	4lx	2lx
Footcand.	544fcd	136fcd	60fcd	34fcd	22fcd	10fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2m	2,7m	4,1m	5,5m	6,8m	8,2m	10,9m	13,6m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	8,9ft	13,4ft	17,9ft	22,3ft	26,8ft	35,8ft	44,7ft

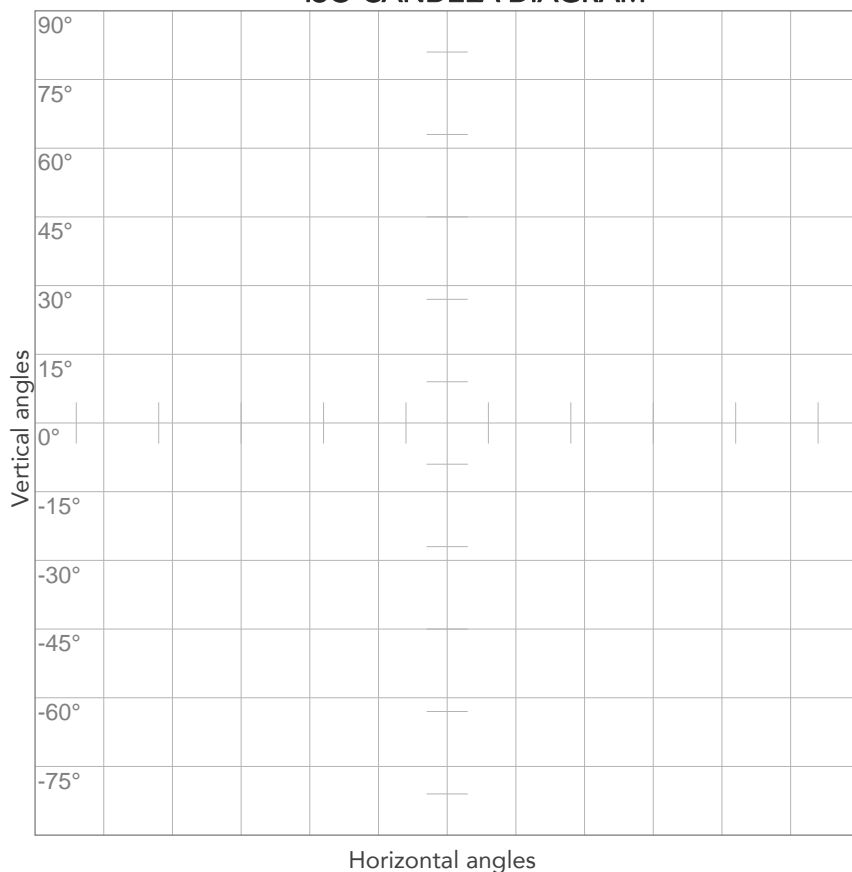
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,186A	37,6W	14lm/W

## ISO CANDELA DIAGRAM



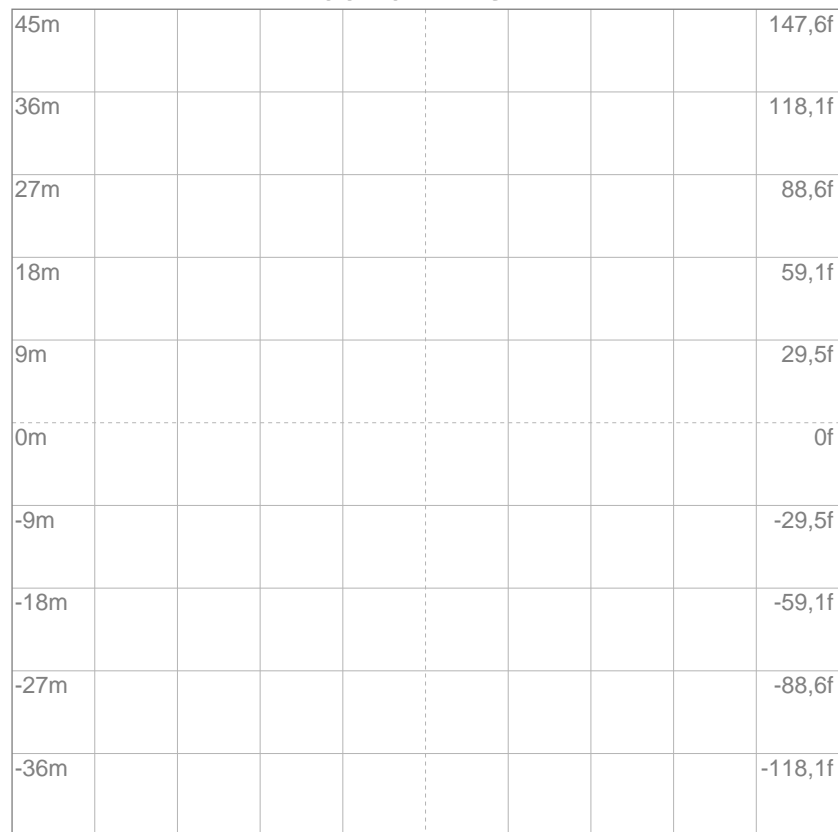
10%	586 cd
20%	1171 cd
30%	1757 cd
40%	2343 cd
50%	2928 cd
60%	3514 cd
70%	{LUX_1M70} cd
80%	4685 cd

### Conditions:

Number of c-planes: 2

Candela at center: 5856 cd

## ISO LUX DIAGRAM



3%	1,76 lx
5%	2,93 lx
10%	5,86 lx
30%	17,6 lx
50%	29,3 lx

### Conditions:

Number of c-planes: 2

Lux at center: 58,6 lx

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



Total lumen output:

346 lm

Total candela output:

399 cd

PRODUCT NAME:

ECLFRESNELJTW

MEASUREMENT CONDITIONS:

Beam angle:

45°

Target:

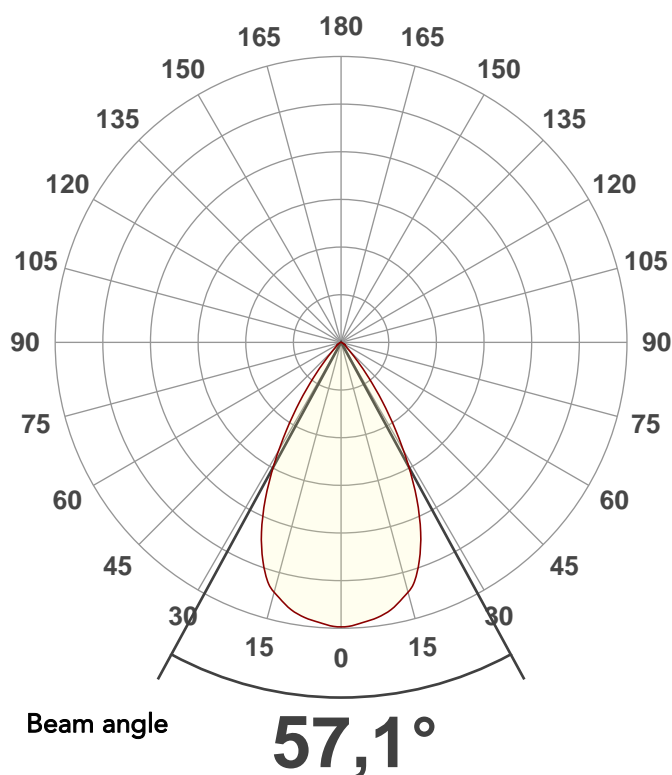
Green

Operator:

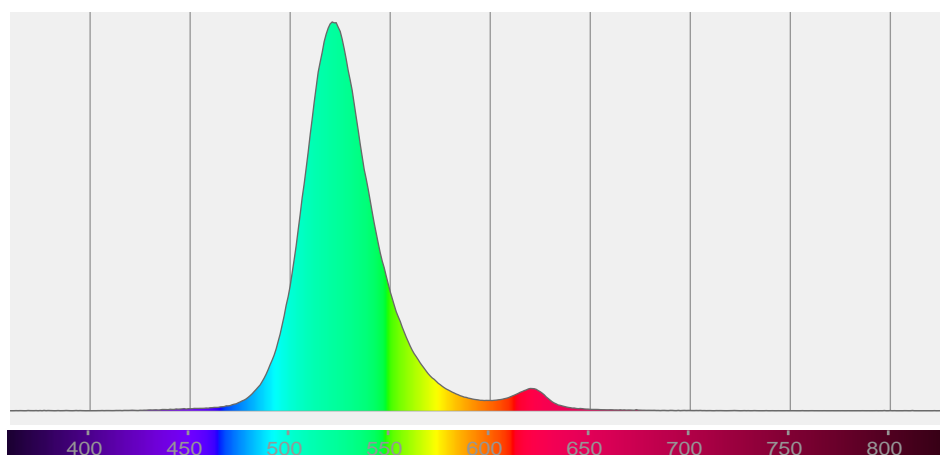
Paolo Carvone

Date and time:

06/02/2020 16:34:31



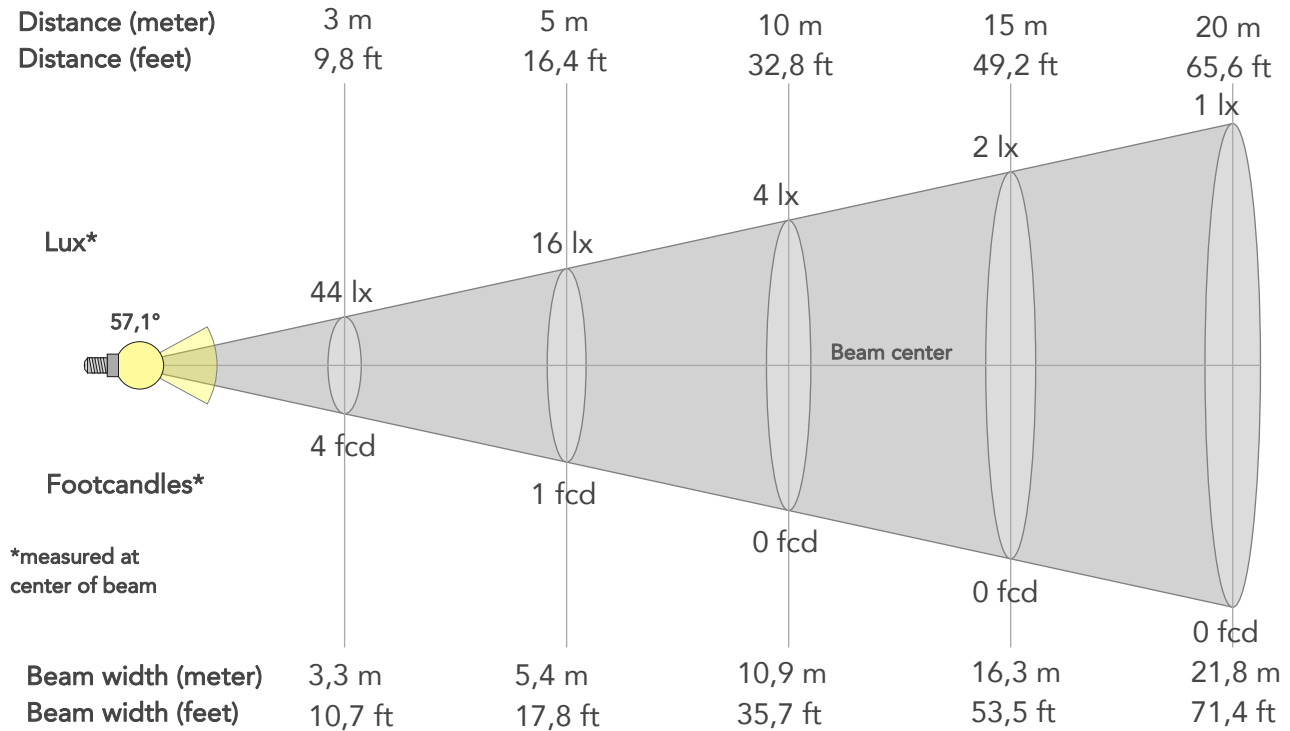
Spectra





## BEAM DETAILS

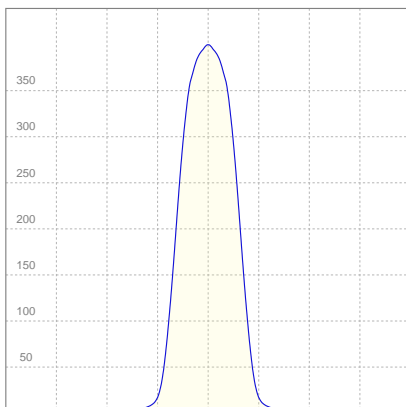
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
57,1°	81,2°	98,8°	97,7%	94,6%



### 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	399lx	100lx	44lx	25lx	16lx	7lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx
Footcand.	37fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,2m	3,3m	4,4m	5,4m	8,2m	10,9m	16,3m	21,8m	27,2m	32,6m	43,5m	54,4m
Beam wid.	3,6ft	7,2ft	10,7ft	14,2ft	17,8ft	26,8ft	35,7ft	53,5ft	71,4ft	89,2ft	107ft	142,7ft	178,4ft

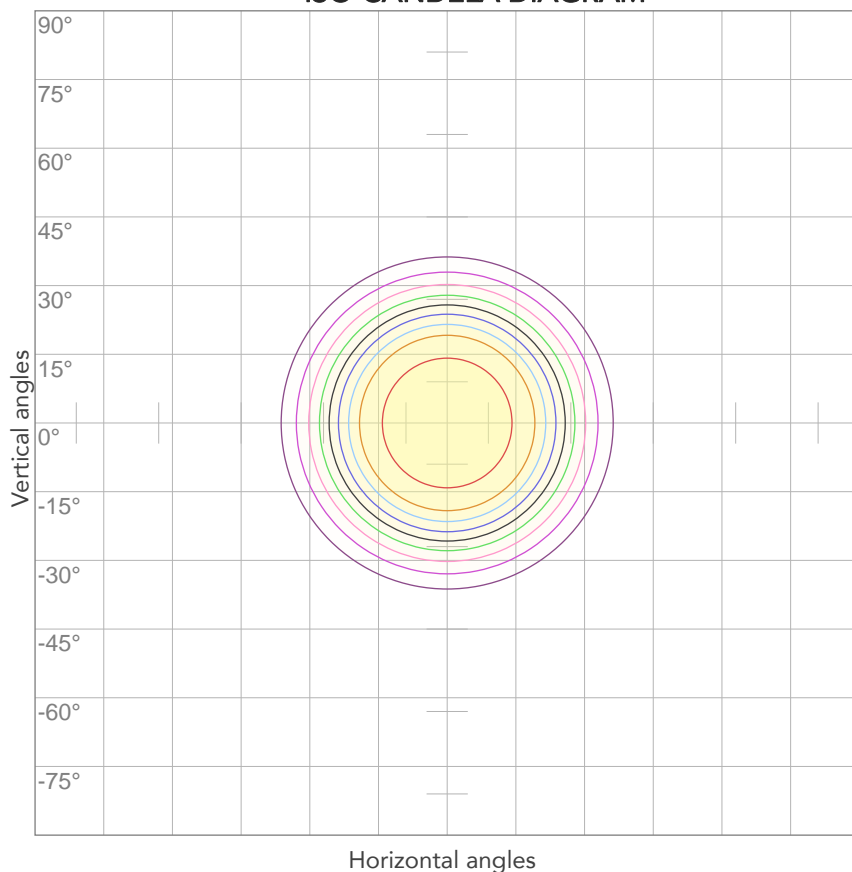
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,185A	19,6W	18lm/W

## ISO CANDELA DIAGRAM



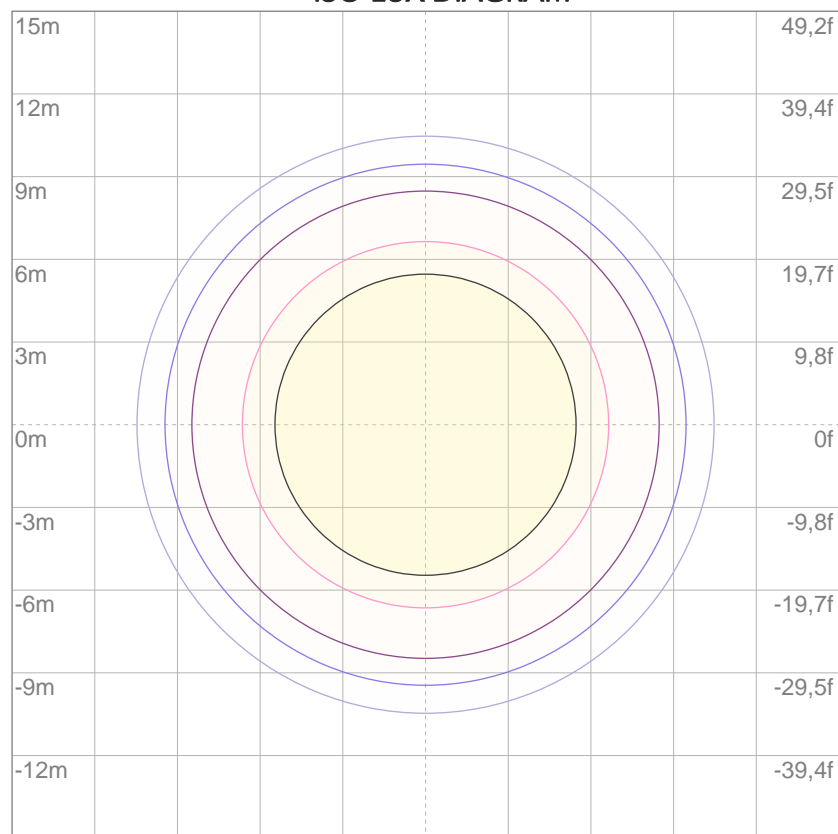
10%	40 cd
20%	80 cd
30%	120 cd
40%	160 cd
50%	200 cd
60%	240 cd
70%	{LUX_1M70} cd
80%	319 cd

### Conditions:

Number of c-planes: 2

Candela at center: 399 cd

## ISO LUX DIAGRAM



3%	0,120 lx
5%	0,200 lx
10%	0,399 lx
30%	1,20 lx
50%	2,00 lx

### Conditions:

Number of c-planes: 2

Lux at center: 3,99 lx

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



Total lumen output:

309 lm

Total candela output:

1127 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

30°

Target:

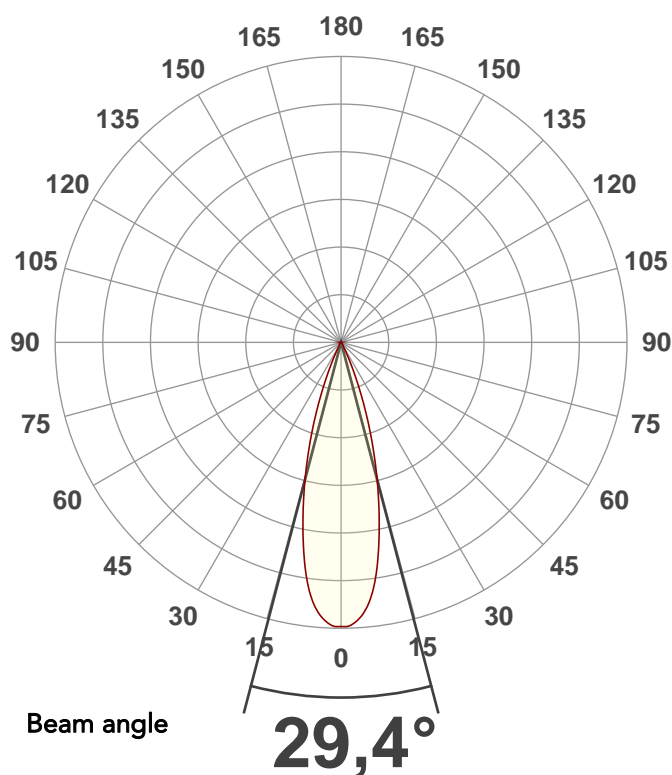
Green

Operator:

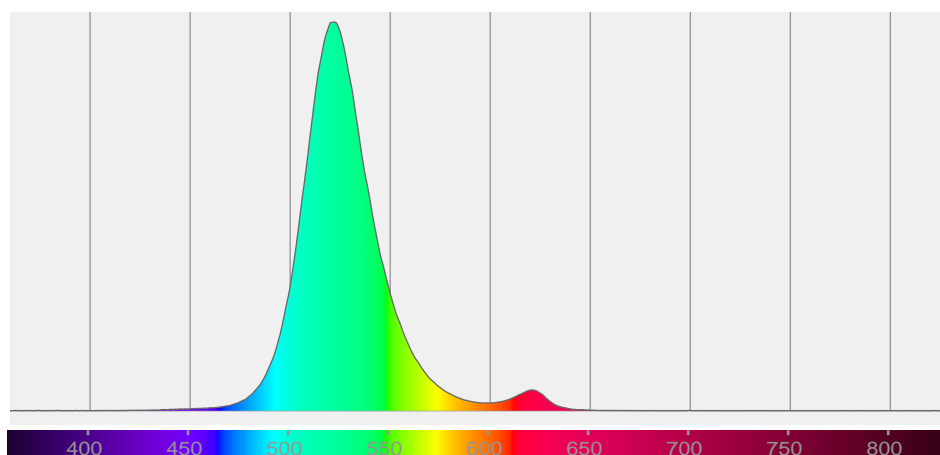
Paolo Carvone

Date and time:

06/02/2020 17:18:52

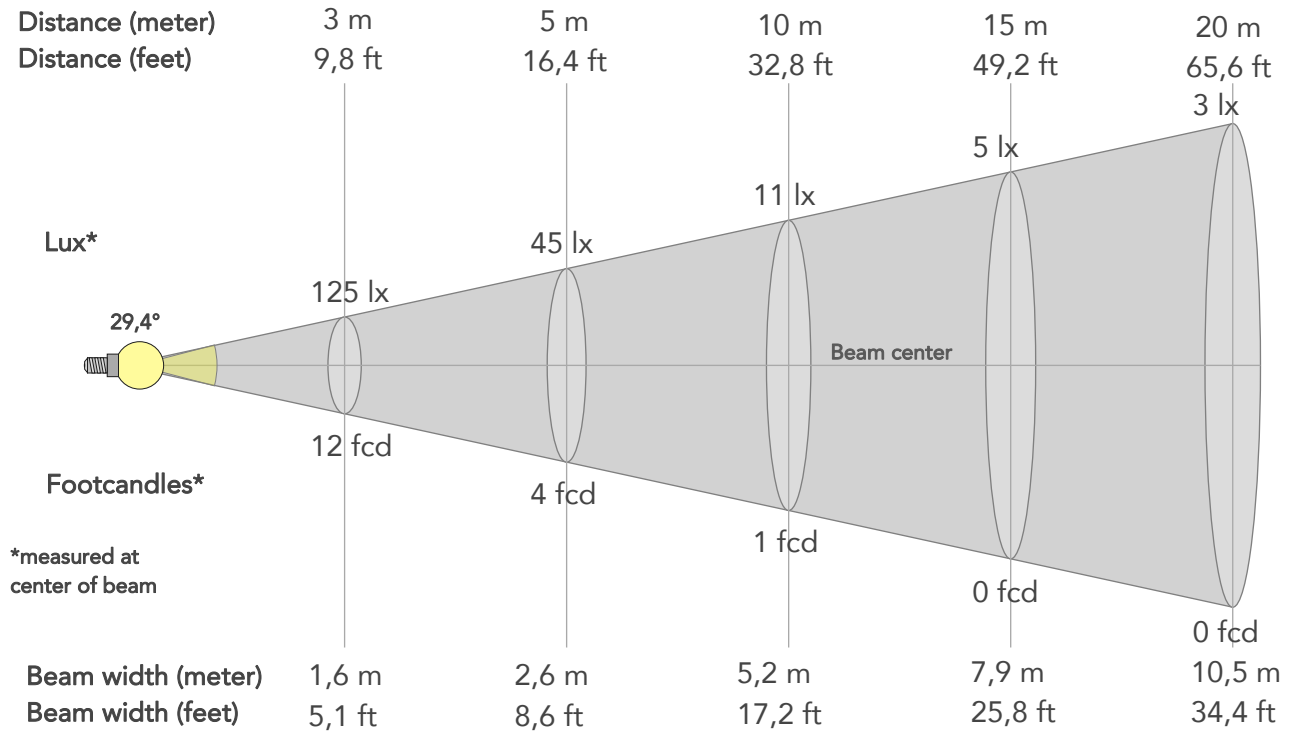


Spectra



## BEAM DETAILS

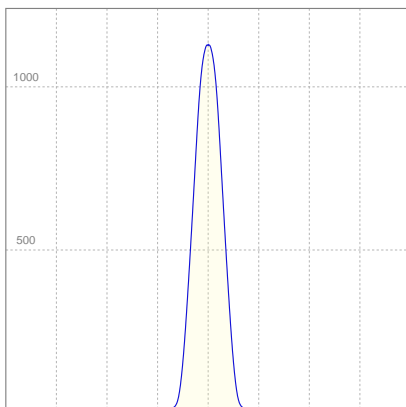
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,4°	47,5°	56,5°	98,0%	96,0%



### 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	1127lx	282lx	125lx	70lx	45lx	20lx	11lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	105fcd	26fcd	12fcd	7fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,6m	2,1m	2,6m	3,9m	5,2m	7,9m	10,5m	13,1m	15,7m	21m	26,2m
Beam wid.	1,7ft	3,5ft	5,1ft	6,9ft	8,6ft	12,9ft	17,2ft	25,8ft	34,4ft	43ft	51,6ft	68,9ft	86,1ft

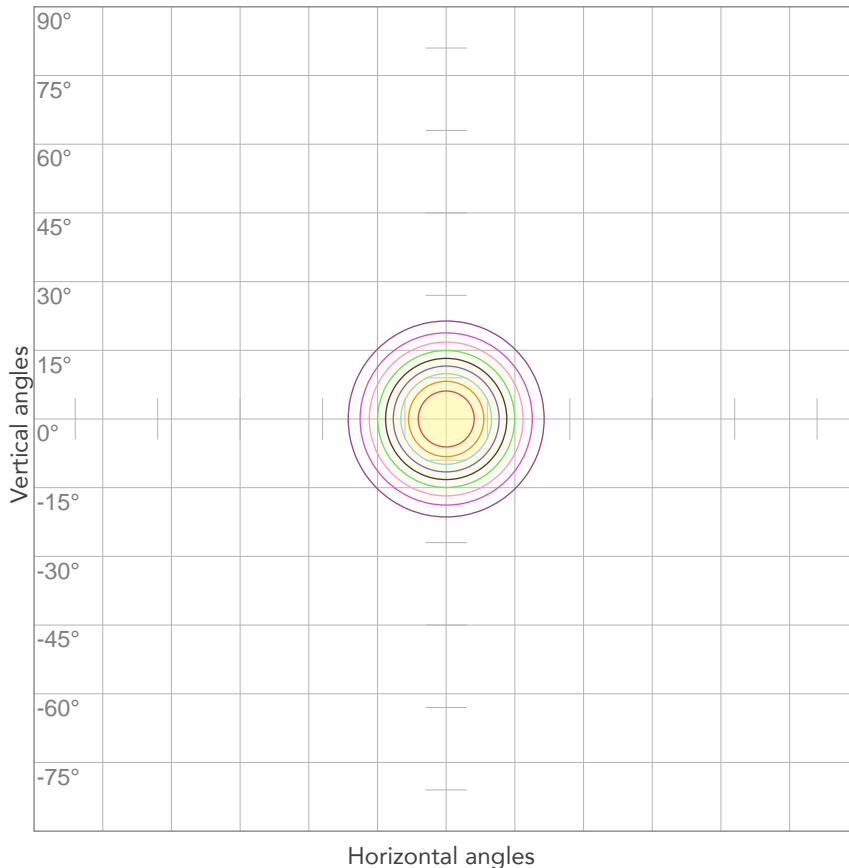
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,186A	19,1W	16lm/W

## ISO CANDELA DIAGRAM



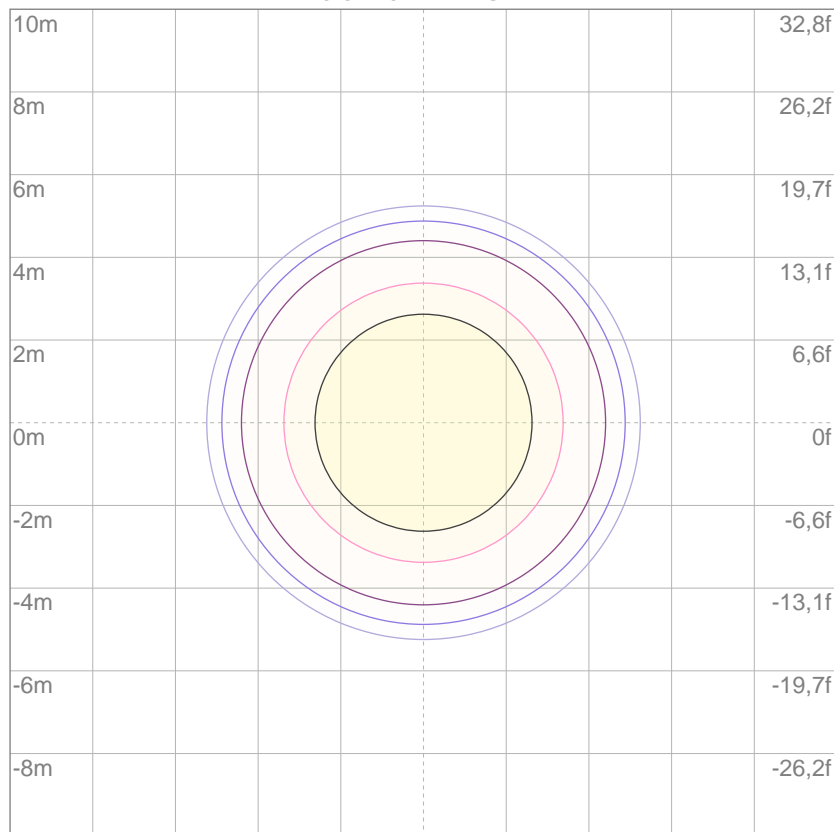
10%	113 cd
20%	225 cd
30%	338 cd
40%	451 cd
50%	564 cd
60%	676 cd
70%	{LUX_1M70} cd
80%	902 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1127 cd

## ISO LUX DIAGRAM



3%	0,338 lx
5%	0,564 lx
10%	1,13 lx
30%	3,38 lx
50%	5,64 lx

### Conditions:

Number of c-planes: 2

Lux at center: 11,3 lx

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



Total lumen output:

175 lm

Total candela output:

1895 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

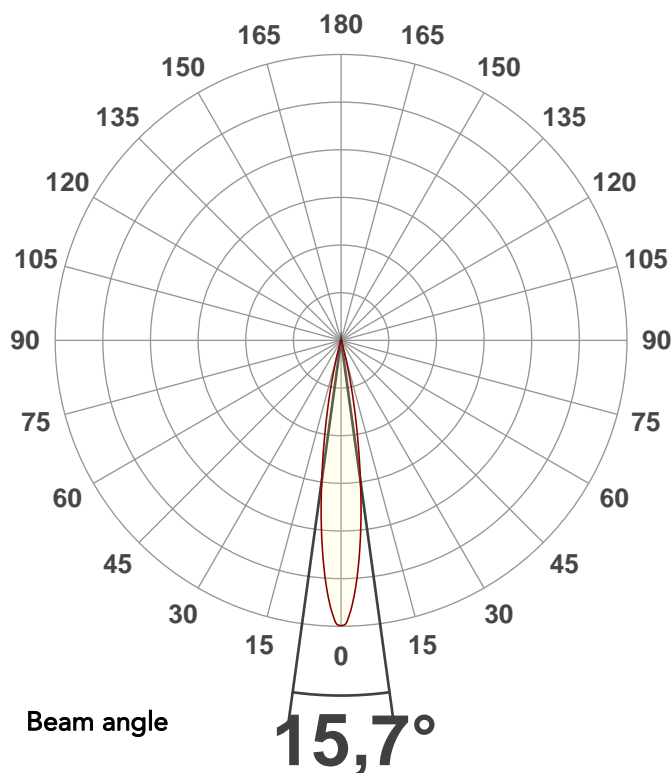
Green

Operator:

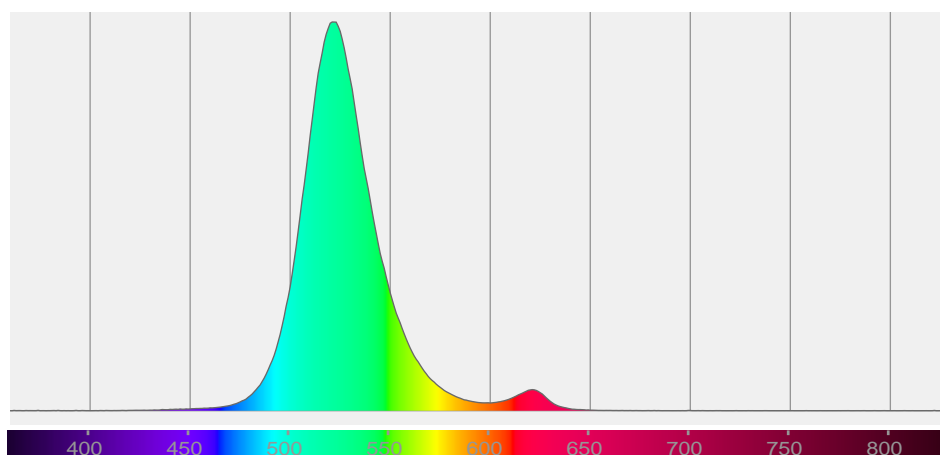
Paolo Carvone

Date and time:

06/02/2020 18:00:21

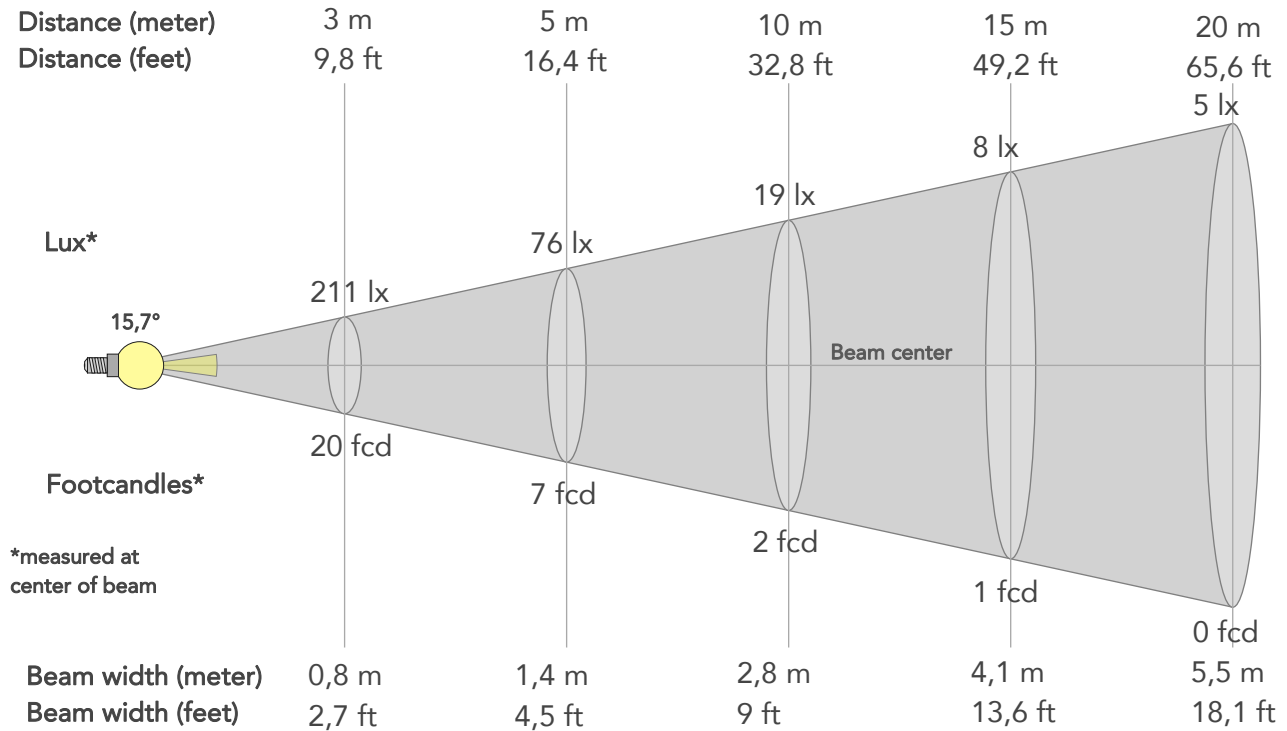


Spectra



## BEAM DETAILS

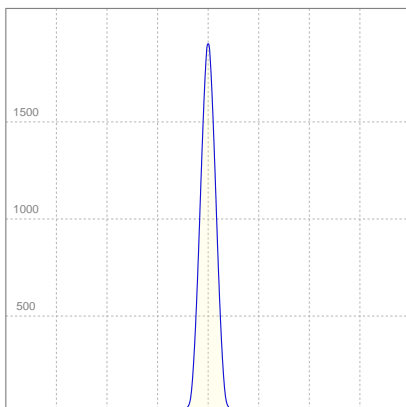
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,7°	27,5°	33,7°	97,3%	94,4%



### 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	1895lx	474lx	211lx	118lx	76lx	34lx	19lx	8lx	5lx	3lx	2lx	1lx	1lx
Footcand.	176fcd	44fcd	20fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,1m	5,5m	6,9m	8,3m	11m	13,8m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,8ft	9ft	13,6ft	18,1ft	22,6ft	27,1ft	36,1ft	45,2ft

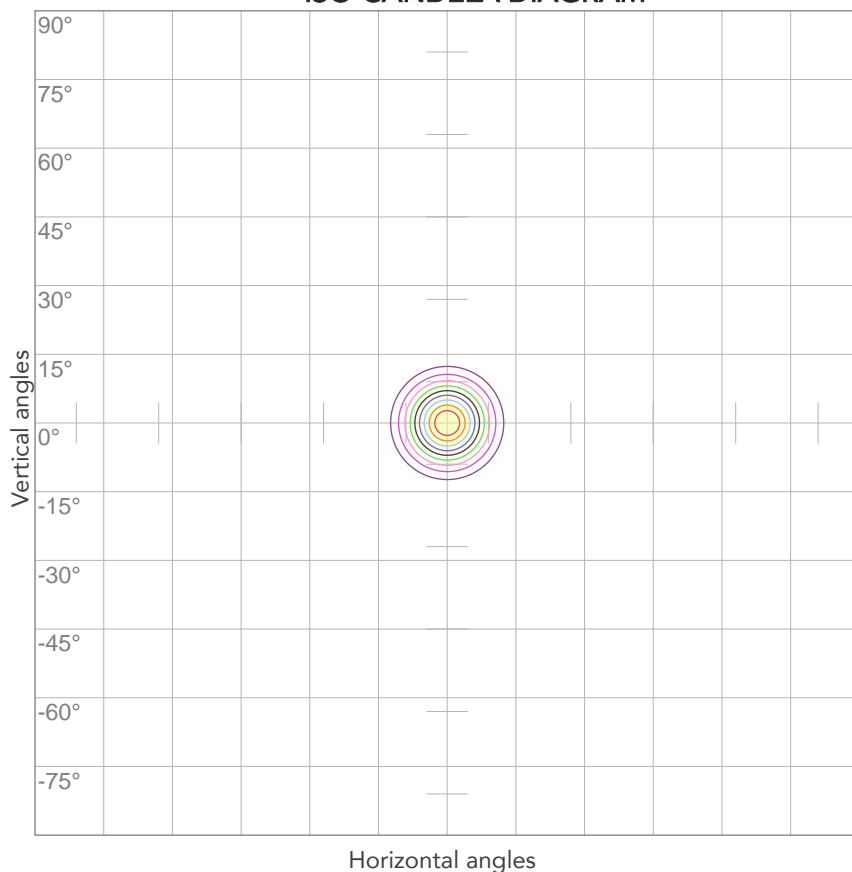
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,182A	19,0W	9lm/W

## ISO CANDELA DIAGRAM



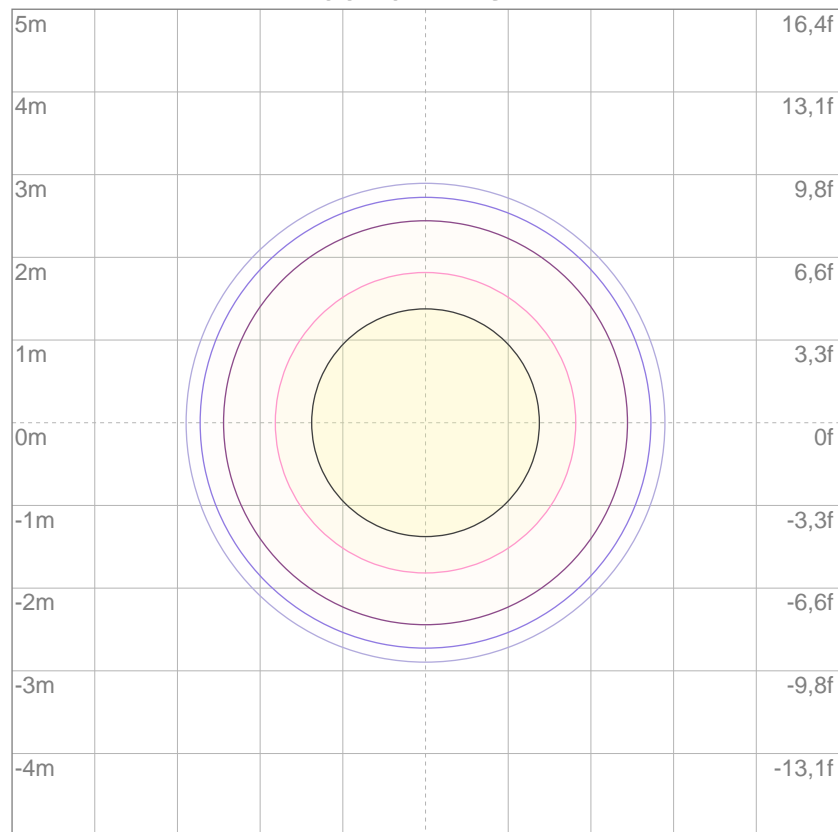
10%	189 cd
20%	379 cd
30%	568 cd
40%	758 cd
50%	947 cd
60%	1137 cd
70%	{LUX_1M70} cd
80%	1516 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1895 cd

## ISO LUX DIAGRAM



3%	0,568 lx
5%	0,947 lx
10%	1,89 lx
30%	5,68 lx
50%	9,47 lx

### Conditions:

Number of c-planes: 2

Lux at center: 18,9 lx

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





Total lumen output:

202 lm

Total candela output:

226 cd

PRODUCT NAME:

ECLFRESNELJTW

MEASUREMENT CONDITIONS:

Beam angle:

45°

Target:

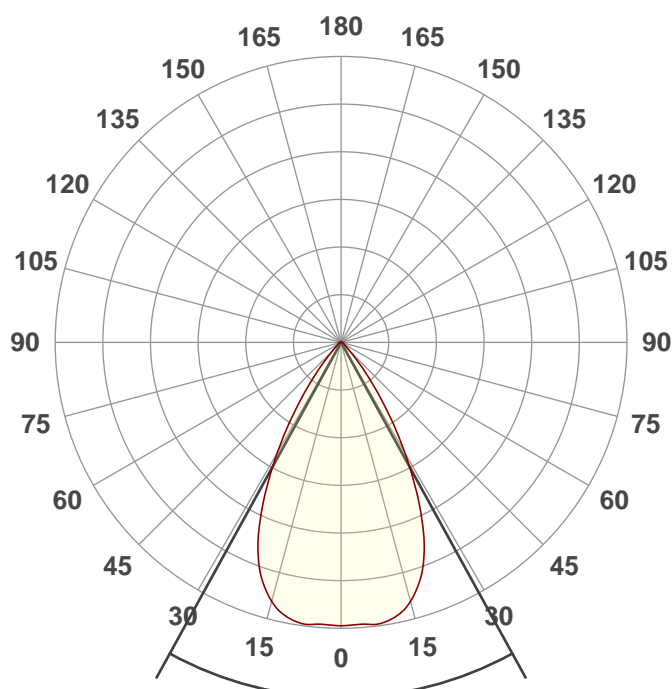
Royal blue

Operator:

Paolo Carvone

Date and time:

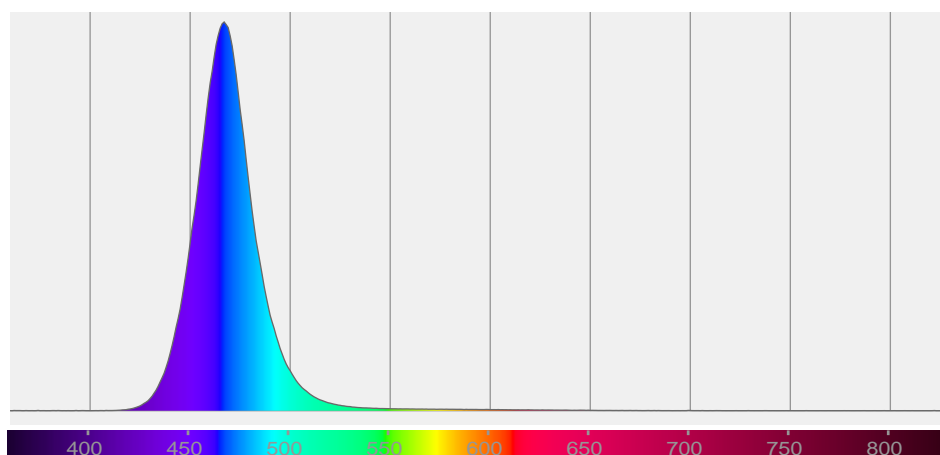
06/02/2020 16:40:27



Beam angle

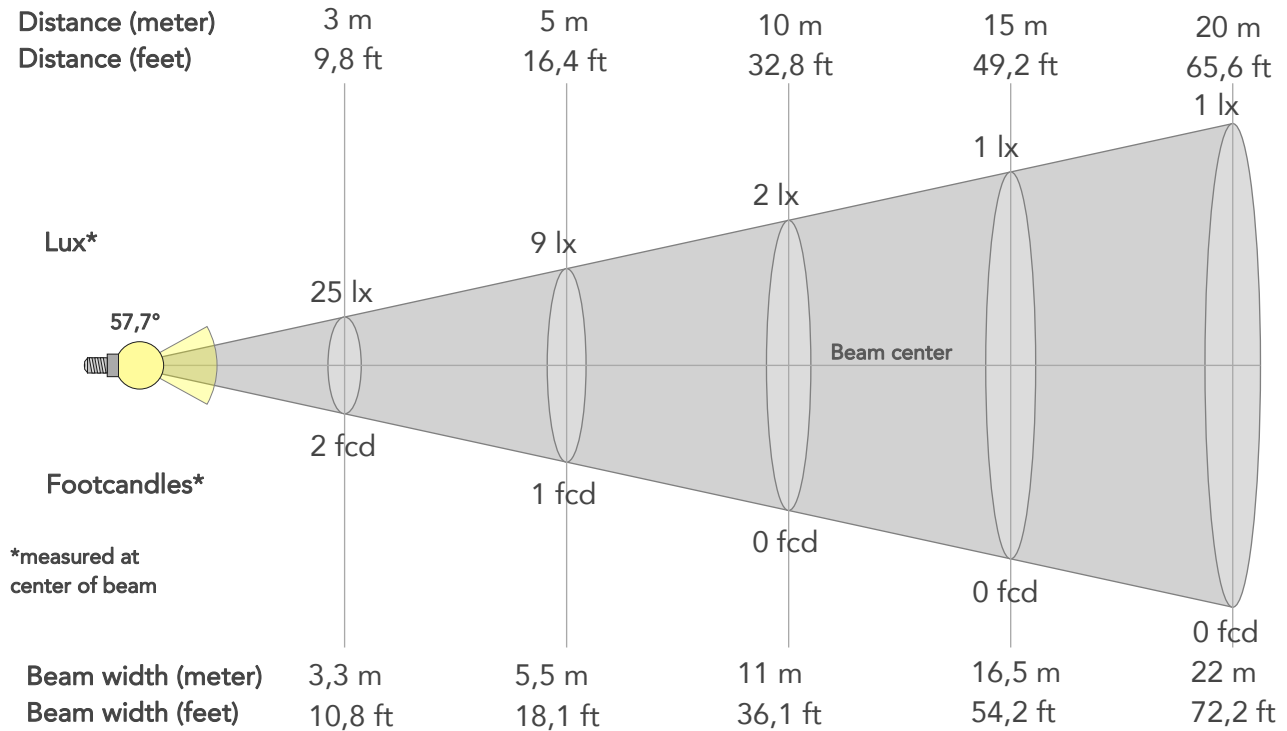
57,7°

Spectra



## BEAM DETAILS

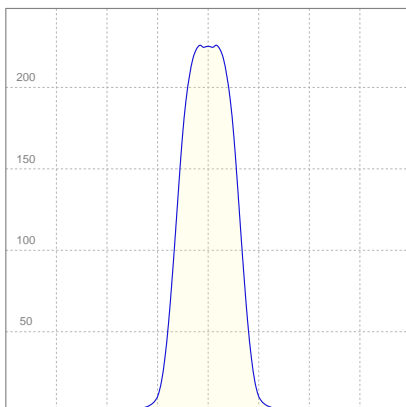
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
57,7°	81,7°	100,3°	97,8%	94,5%



### 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	225lx	56lx	25lx	14lx	9lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx	0lx
Footcand.	21fcd	5fcd	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	11m	16,5m	22m	27,5m	33m	44m	55m
Beam wid.	3,6ft	7,3ft	10,8ft	14,4ft	18,1ft	27,1ft	36,1ft	54,2ft	72,2ft	90,3ft	108,3ft	144,4ft	180,5ft

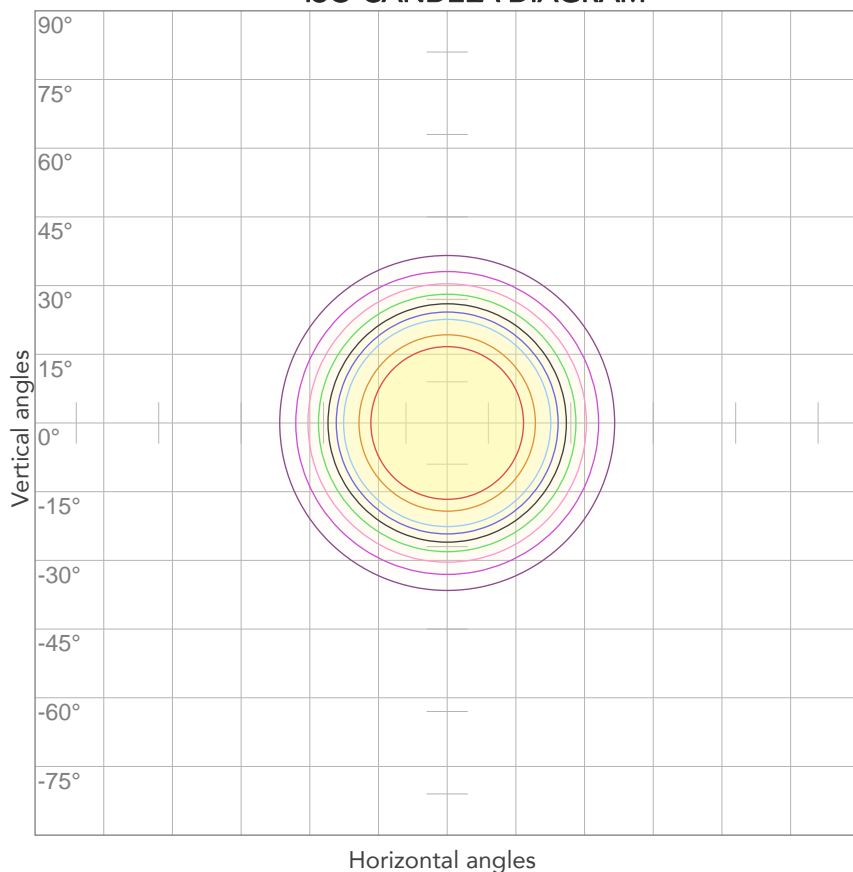
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,227A	24,6W	8lm/W

## ISO CANDELA DIAGRAM



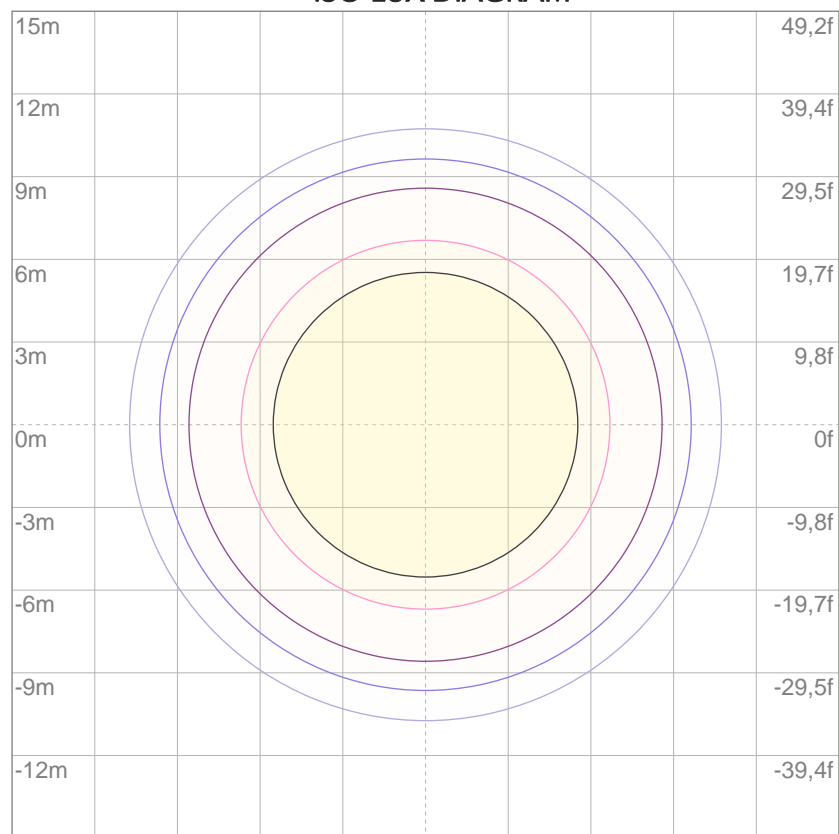
10%	23 cd
20%	45 cd
30%	68 cd
40%	90 cd
50%	113 cd
60%	135 cd
70%	{LUX_1M70} cd
80%	180 cd

### Conditions:

Number of c-planes: 2

Candela at center: 225 cd

## ISO LUX DIAGRAM



3%	67,5m lx
5%	0,113 lx
10%	0,225 lx
30%	0,675 lx
50%	1,13 lx

### Conditions:

Number of c-planes: 2

Lux at center: 2,25 lx

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



Total lumen output:

175 lm

Total candela output:

631 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

30°

Target:

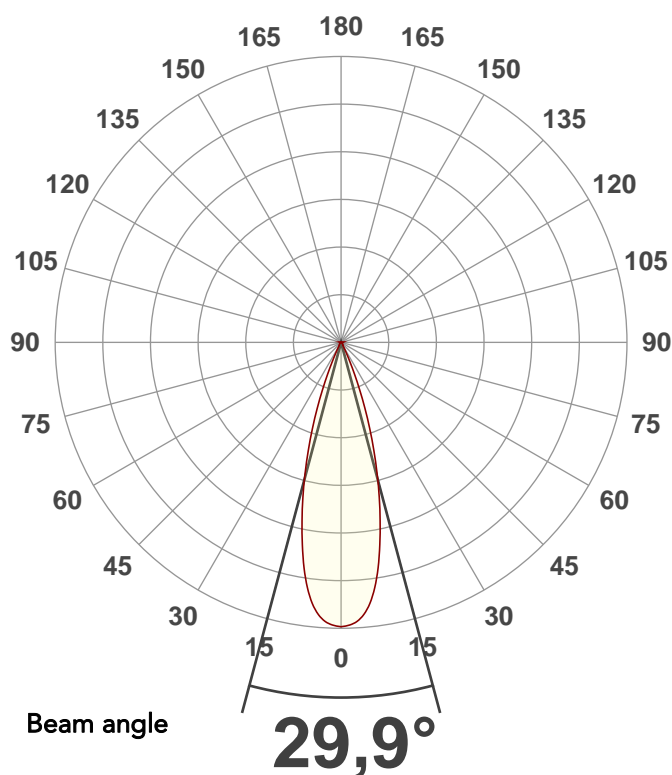
Royal blue

Operator:

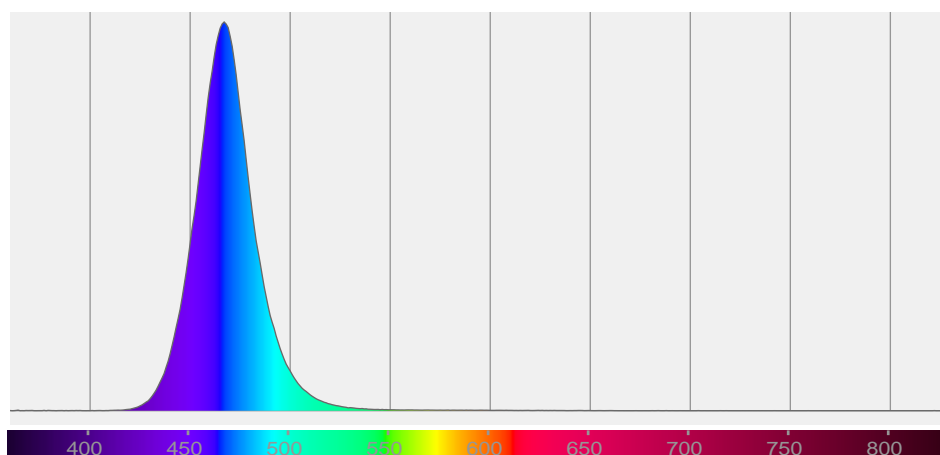
Paolo Carvone

Date and time:

06/02/2020 17:27:59

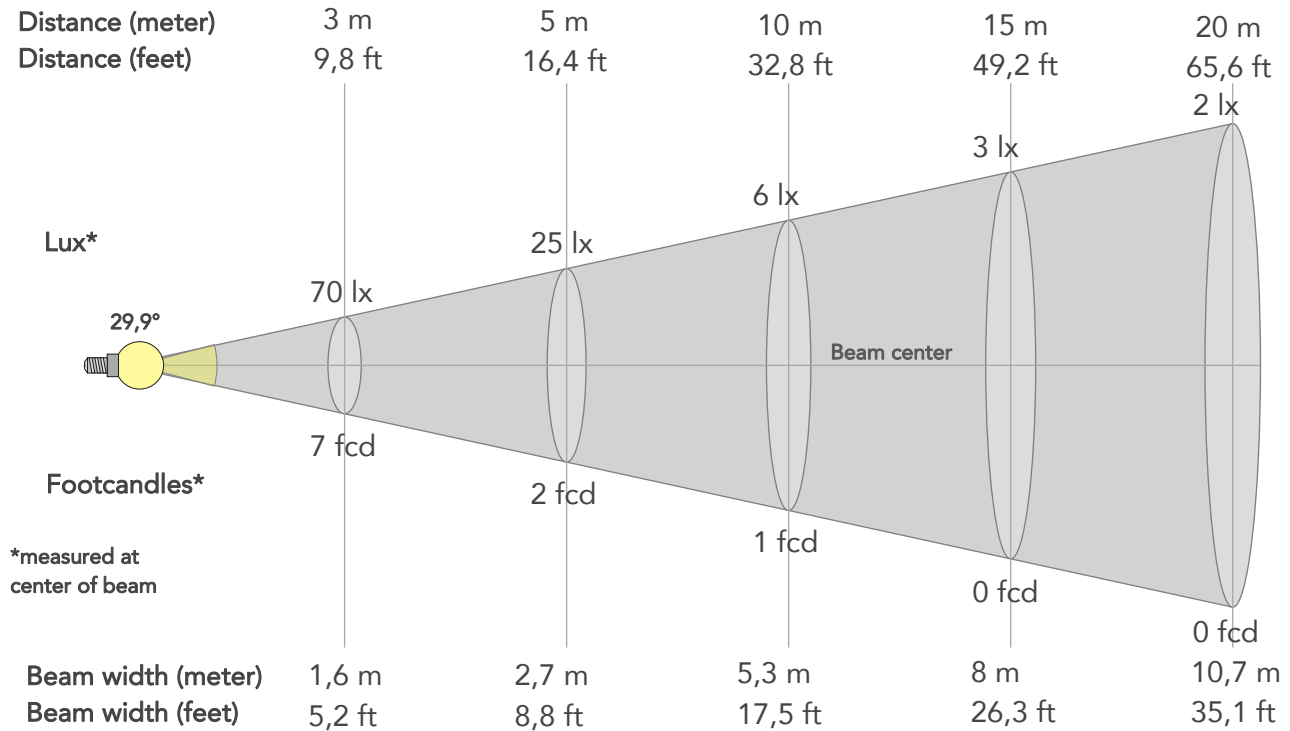


Spectra



## BEAM DETAILS

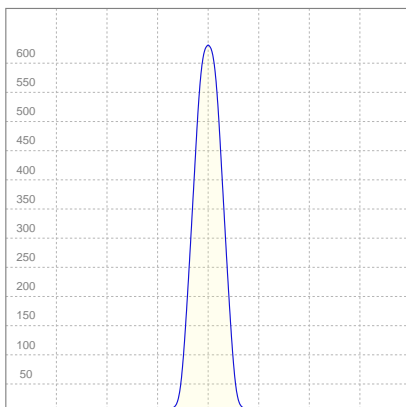
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,9°	47,3°	56,6°	98,2%	96,2%



### 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	631lx	158lx	70lx	39lx	25lx	11lx	6lx	3lx	2lx	1lx	1lx	0lx	0lx
Footcand.	59fcd	15fcd	7fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,1m	2,7m	4m	5,3m	8m	10,7m	13,4m	16m	21,4m	26,7m
Beam wid.	1,8ft	3,5ft	5,2ft	7ft	8,8ft	13,2ft	17,5ft	26,3ft	35,1ft	43,8ft	52,6ft	70,1ft	87,7ft

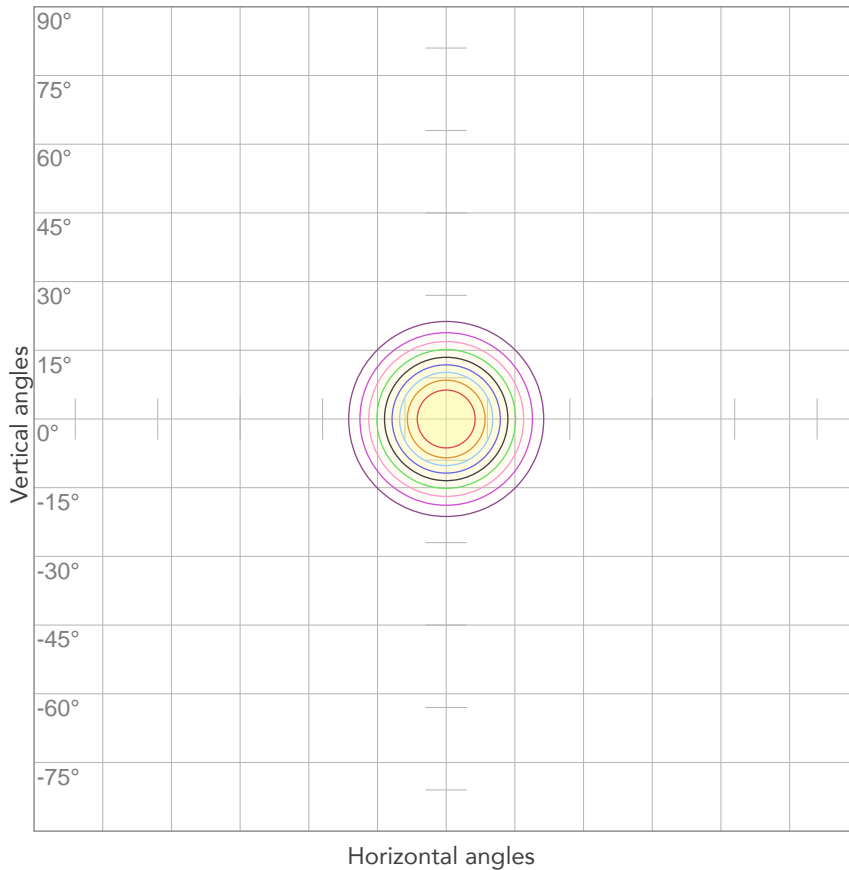
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,229A	23,9W	7lm/W

## ISO CANDELA DIAGRAM



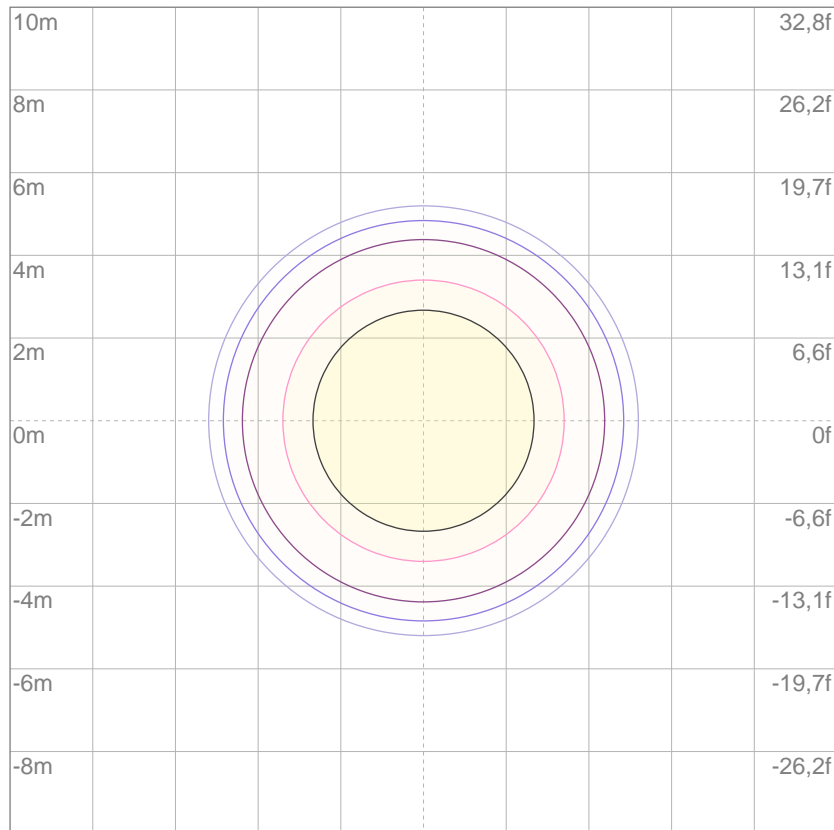
10%	63 cd
20%	126 cd
30%	189 cd
40%	252 cd
50%	315 cd
60%	378 cd
70%	{LUX_1M70} cd
80%	505 cd

### Conditions:

Number of c-planes: 2

Candela at center: 631 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,189 lx
5%	0,315 lx
10%	0,631 lx
30%	1,89 lx
50%	3,15 lx

### Conditions:

Number of c-planes: 2

Lux at center: 6,31 lx

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



Total lumen output:

99,7 lm

Total candela output:

1039 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

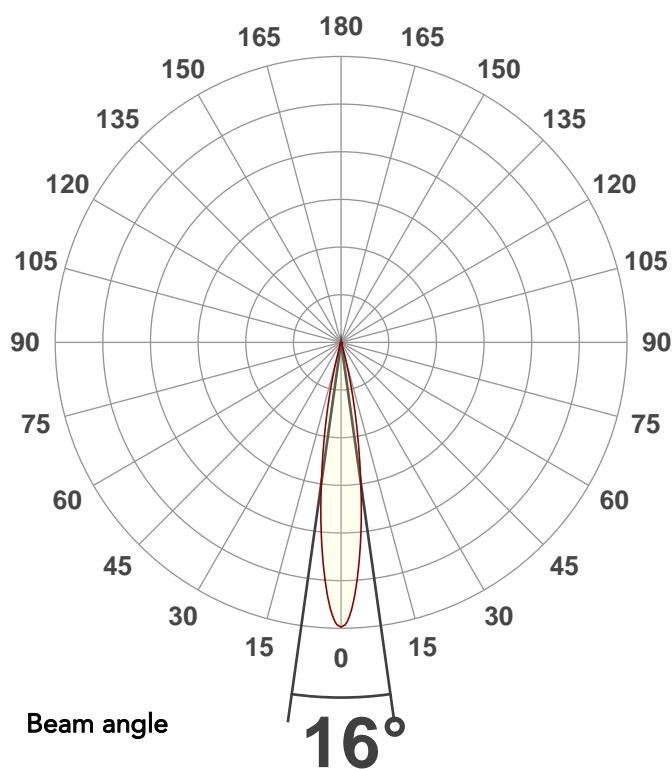
Royal blue

Operator:

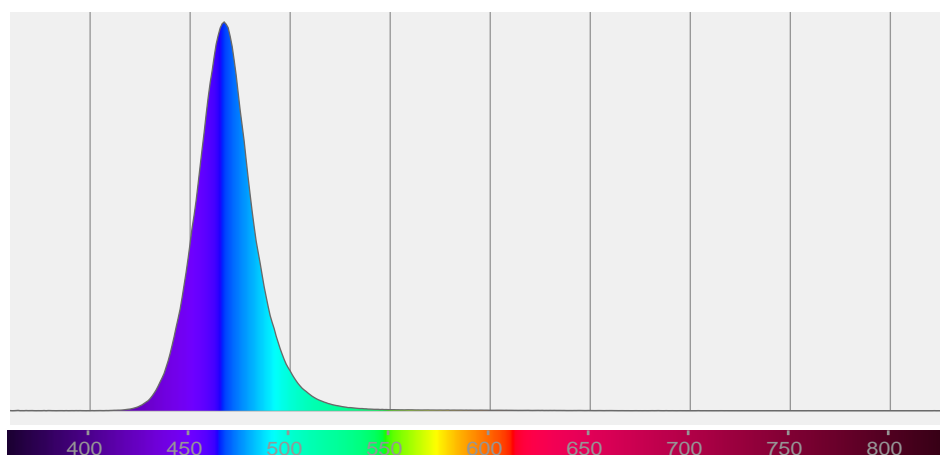
Paolo Carvone

Date and time:

06/02/2020 18:14:59

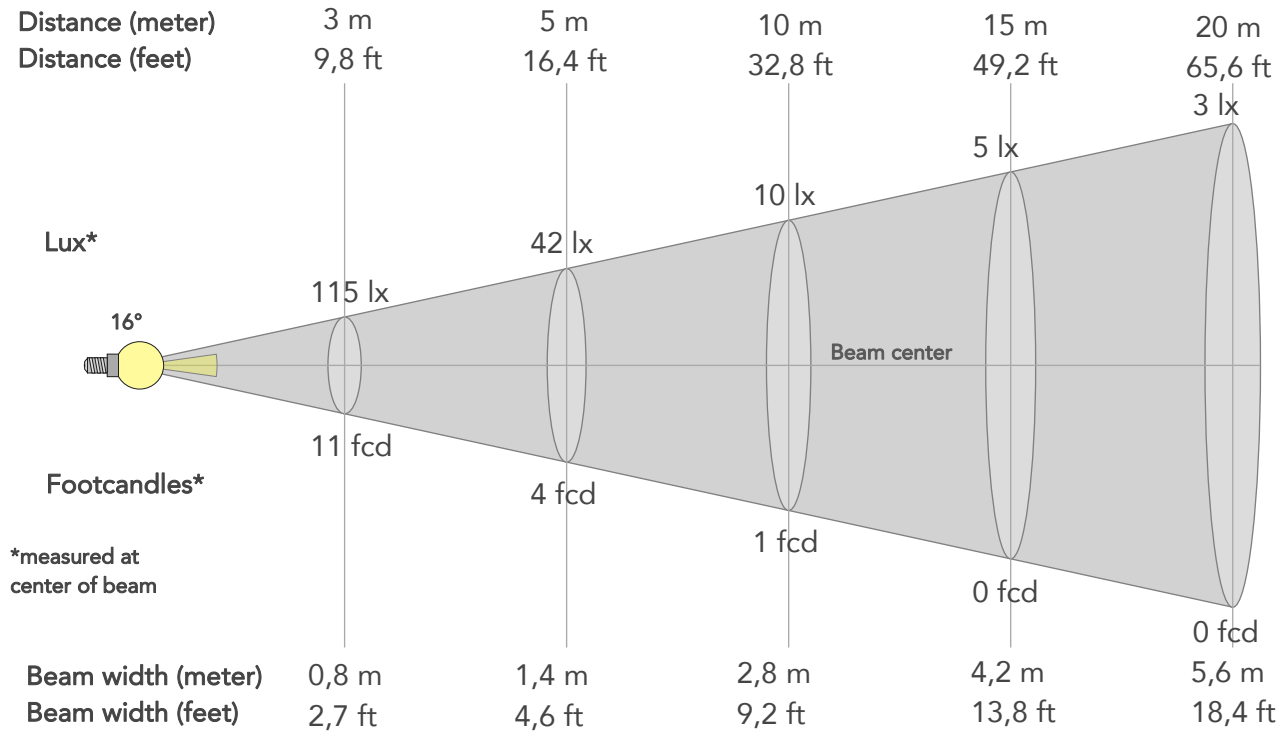


Spectra



## BEAM DETAILS

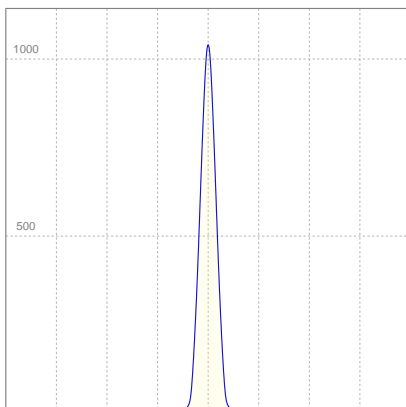
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16°	28°	34,1°	97,3%	94,3%



### 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	1039lx	260lx	115lx	65lx	42lx	18lx	10lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	97fcd	24fcd	11fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,2m	5,6m	7m	8,4m	11,2m	14m
Beam wid.	0,9ft	1,9ft	2,7ft	3,7ft	4,6ft	6,9ft	9,2ft	13,8ft	18,4ft	23ft	27,6ft	36,8ft	46ft

### LINEAR DISTRIBUTION DIAGRAM

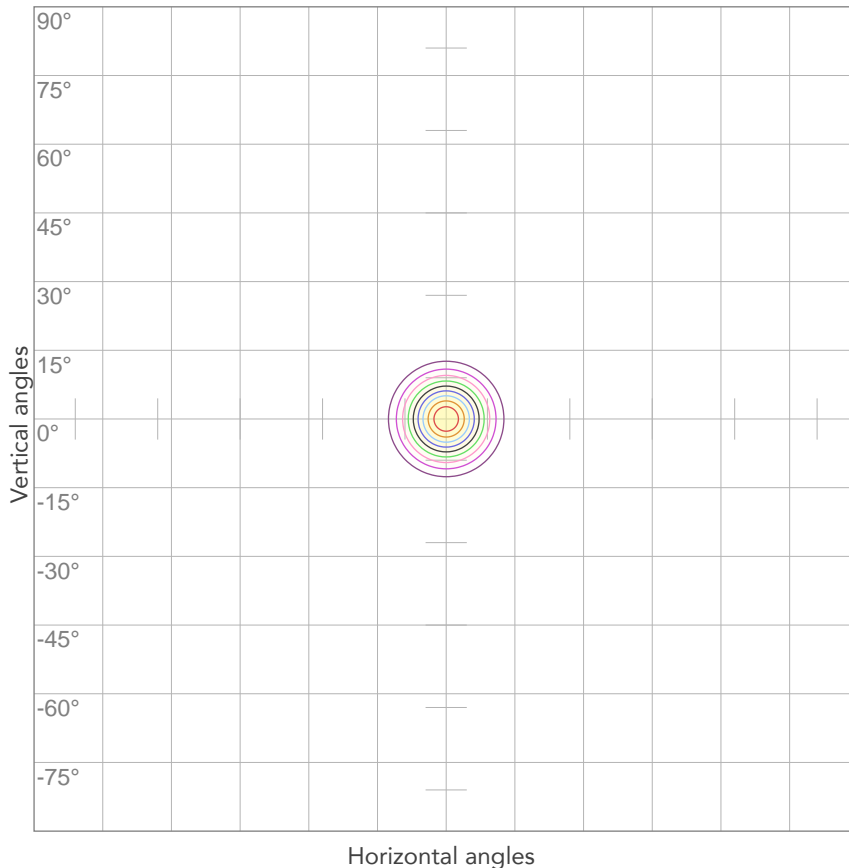


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,247A	23,9W	4lm/W



## ISO CANDELA DIAGRAM



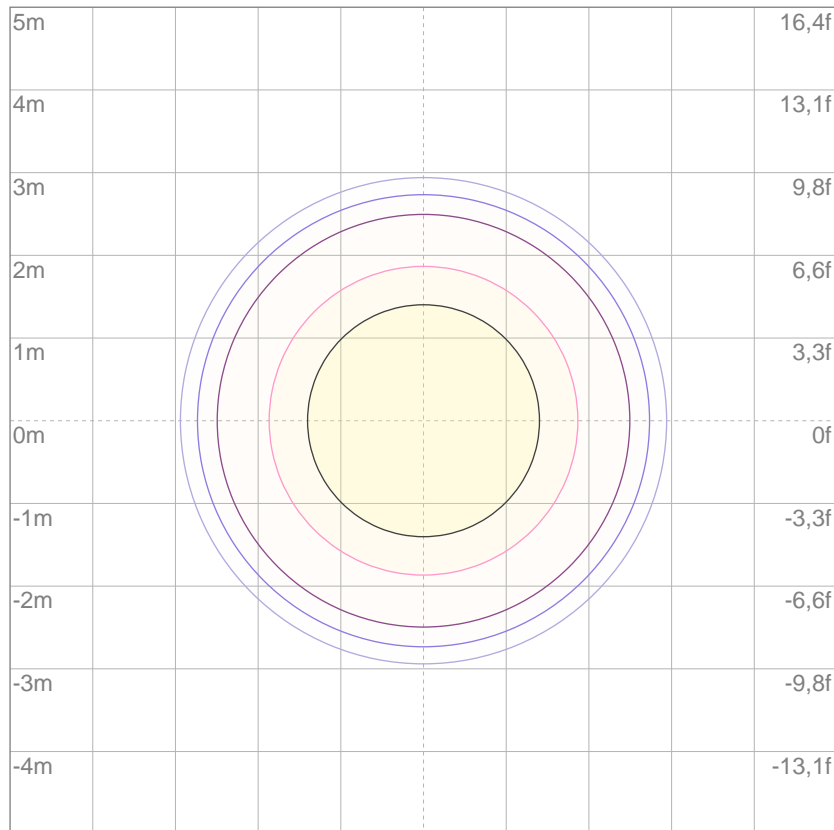
10%	104 cd
20%	208 cd
30%	312 cd
40%	416 cd
50%	519 cd
60%	623 cd
70%	{LUX_1M70} cd
80%	831 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1039 cd

## ISO LUX DIAGRAM



3%	0,312 lx
5%	0,519 lx
10%	1,04 lx
30%	3,12 lx
50%	5,19 lx

### Conditions:

Number of c-planes: 2

Lux at center: 10,4 lx

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



Total lumen output:

136 lm

Total candela output:

161 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

45°

Target:

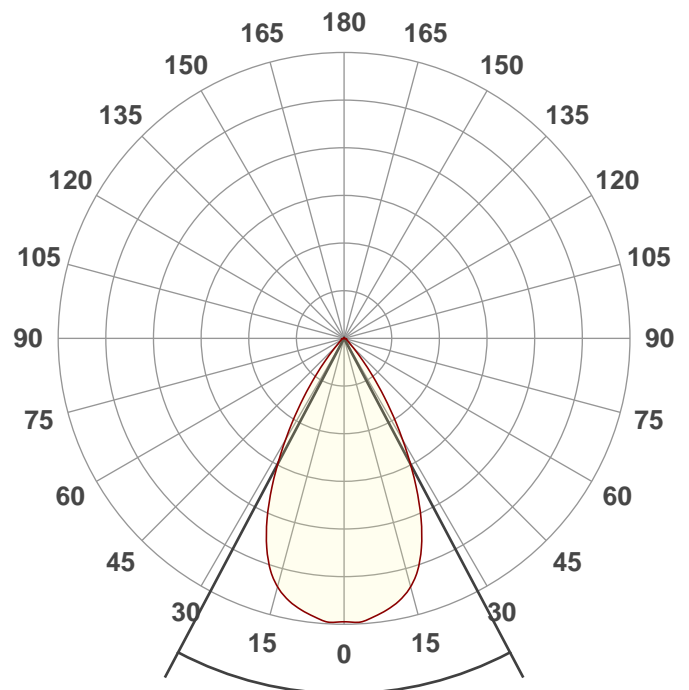
Blue

Operator:

Paolo Carvone

Date and time:

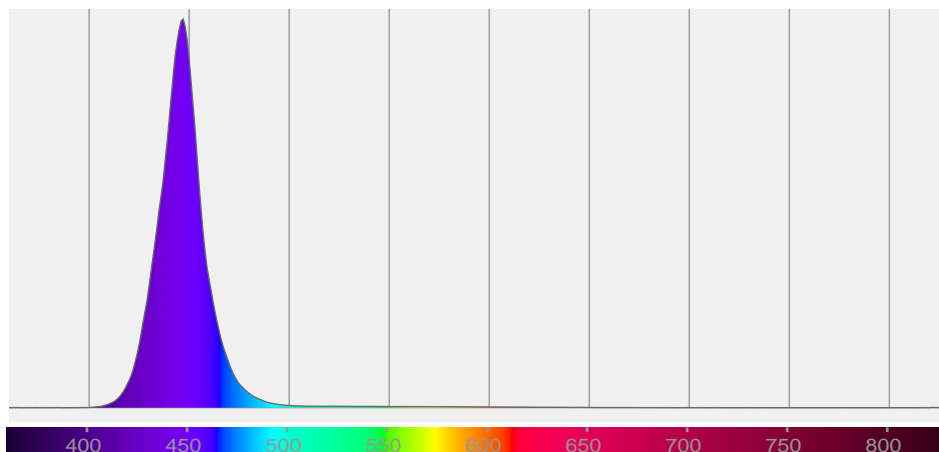
06/02/2020 16:42:41



Beam angle

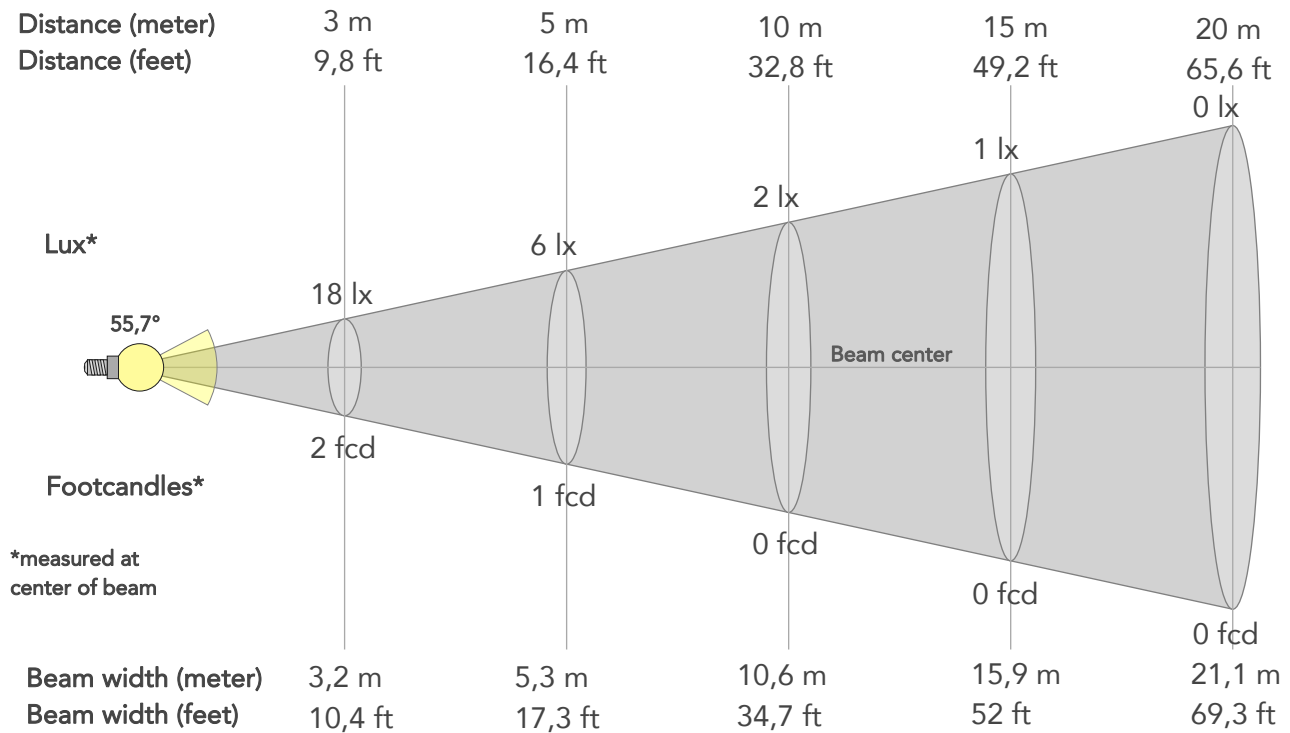
**55,7°**

Spectra



## BEAM DETAILS

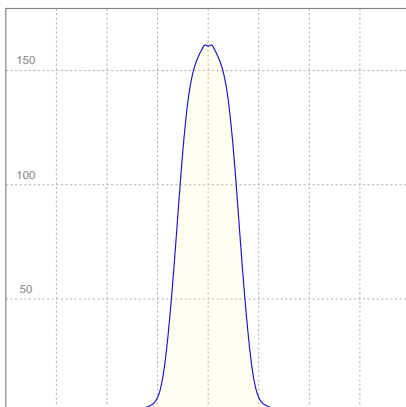
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,7°	80,4°	98,7°	97,6%	94,4%



### 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	161lx	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	2,1m	3,2m	4,2m	5,3m	7,9m	10,6m	15,9m	21,1m	26,4m	31,7m	42,3m	52,8m
Beam wid.	3,5ft	7ft	10,4ft	13,8ft	17,3ft	26ft	34,7ft	52ft	69,3ft	86,7ft	104ft	138,7ft	173,3ft

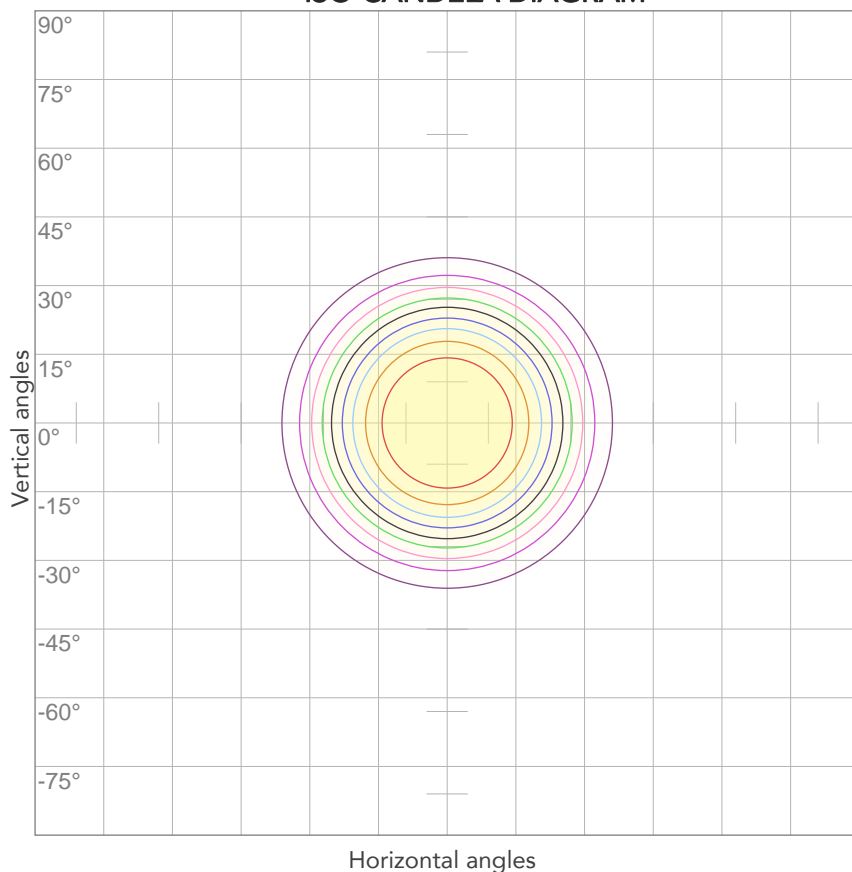
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,222A	24,2W	6lm/W

## ISO CANDELA DIAGRAM



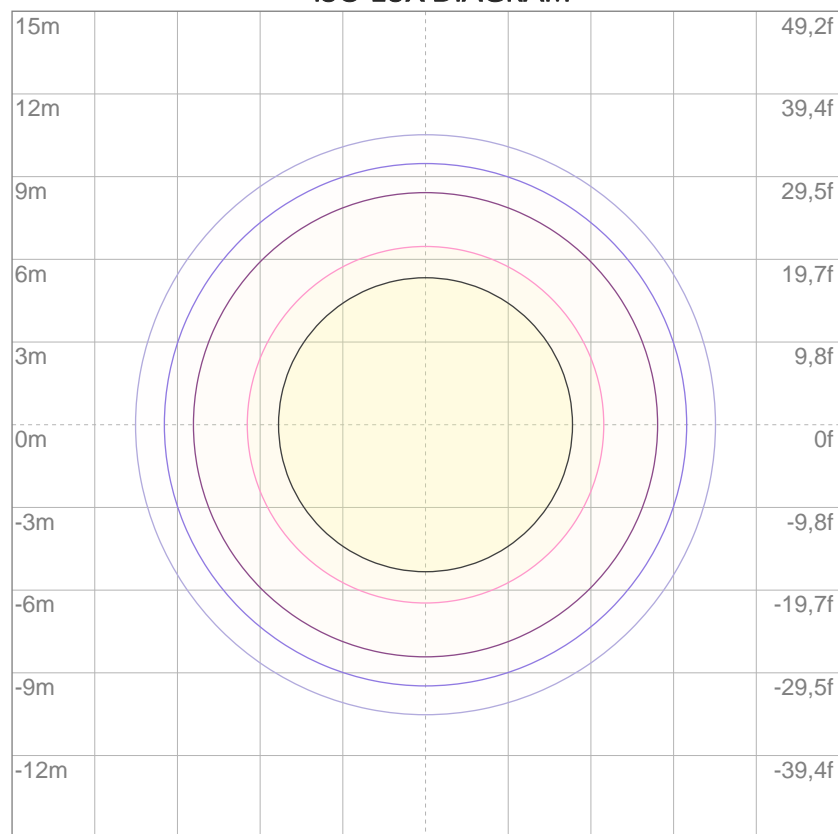
10%	16 cd
20%	32 cd
30%	48 cd
40%	64 cd
50%	80 cd
60%	96 cd
70%	{LUX_1M70} cd
80%	129 cd

### Conditions:

Number of c-planes: 2

Candela at center: 161 cd

## ISO LUX DIAGRAM



3%	48,2m lx
5%	80,3m lx
10%	0,161 lx
30%	0,482 lx
50%	0,803 lx

### Conditions:

Number of c-planes: 2

Lux at center: 1,61 lx

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



Total lumen output:

110 lm

Total candela output:

417 cd

PRODUCT NAME:

ECLFRESNELJTW

MEASURAMENT CONDITIONS:

Beam angle:

30°

Target:

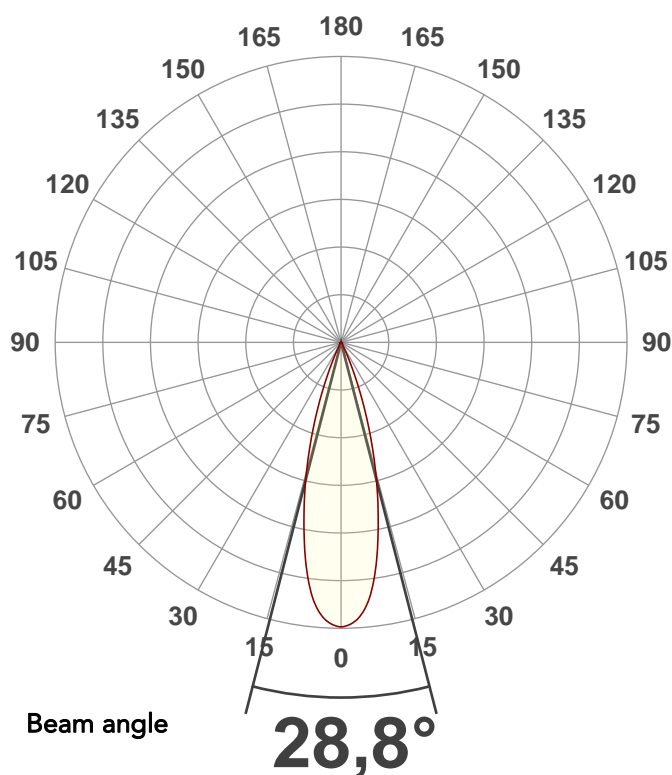
blue

Operator:

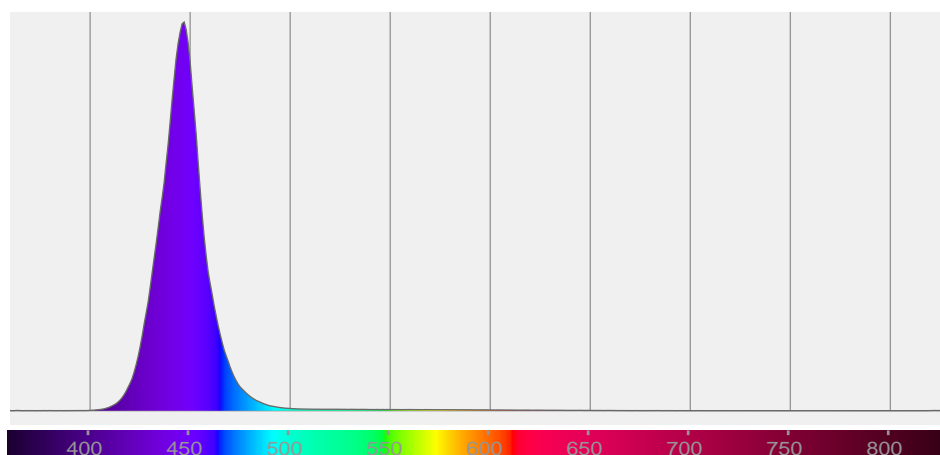
Paolo Carvone

Date and time:

06/02/2020 17:13:39

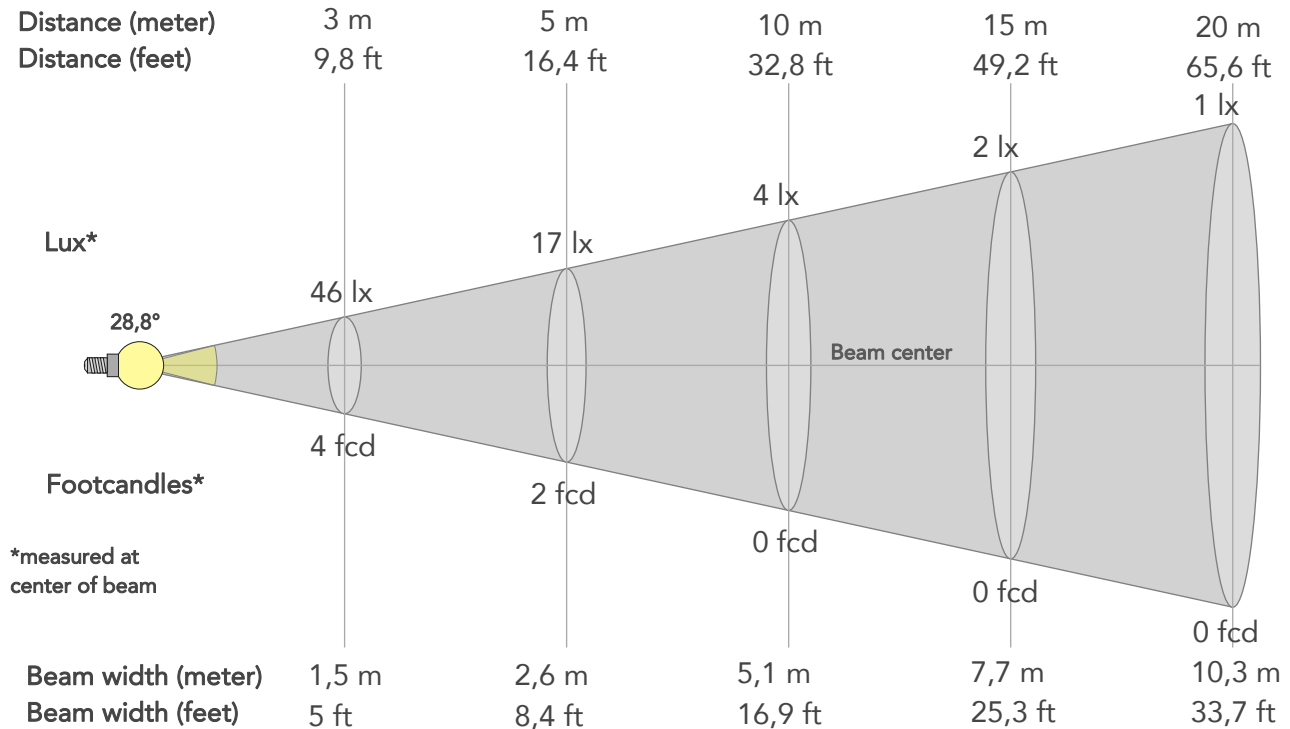


Spectra



## BEAM DETAILS

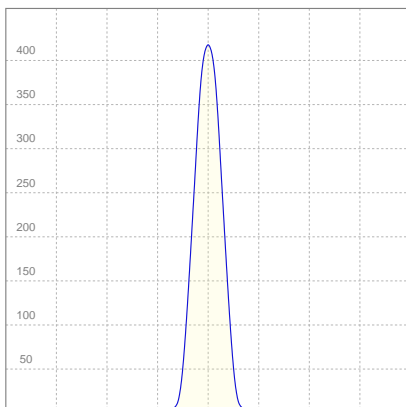
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
28,8°	46,7°	55,5°	98,0%	95,9%



### 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	417lx	104lx	46lx	26lx	17lx	7lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx
Footcand.	39fcd	10fcd	4fcd	2fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,5m	2,1m	2,6m	3,9m	5,1m	7,7m	10,3m	12,9m	15,4m	20,6m	25,7m
Beam wid.	1,7ft	3,4ft	5ft	6,7ft	8,4ft	12,6ft	16,9ft	25,3ft	33,7ft	42,2ft	50,6ft	67,4ft	84,3ft

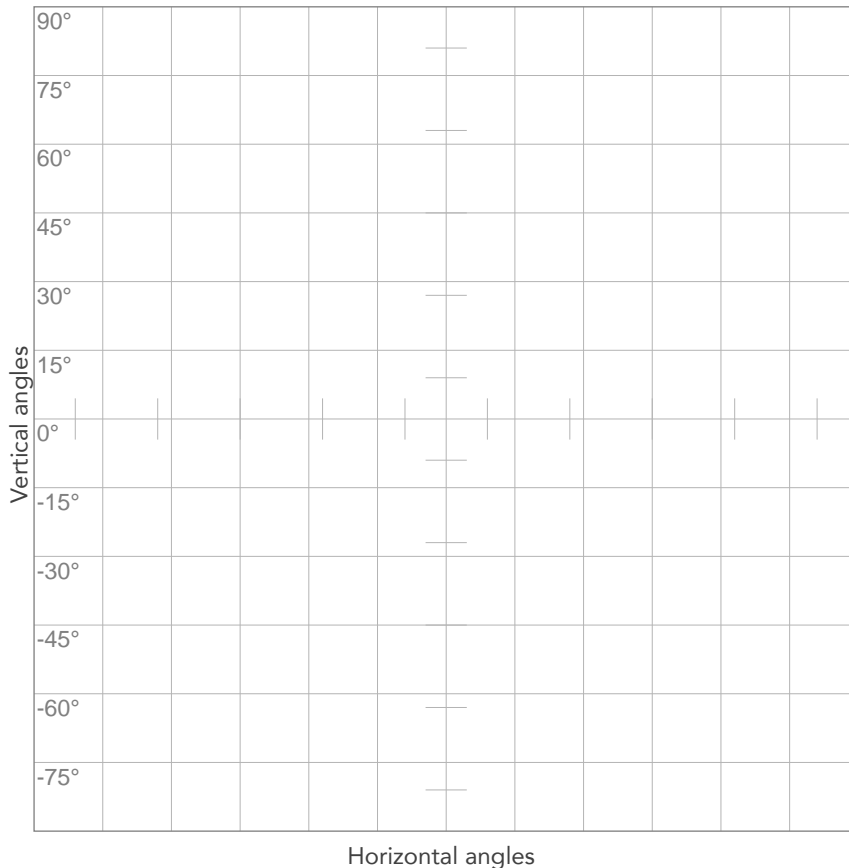
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,207A	21,9W	5lm/W

## ISO CANDELA DIAGRAM



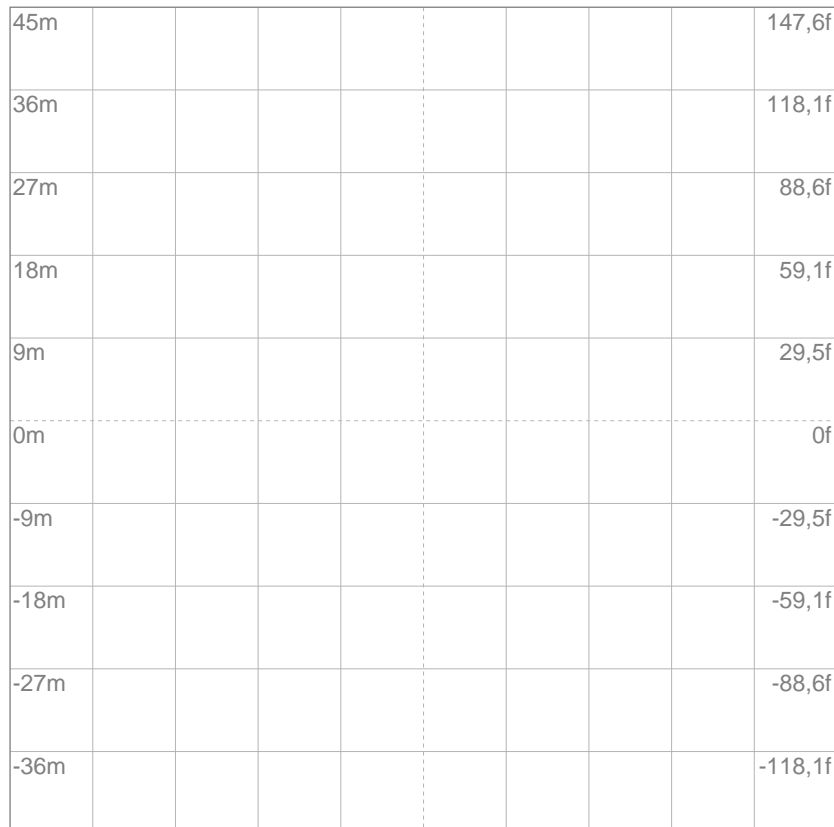
10%	42 cd
20%	83 cd
30%	125 cd
40%	167 cd
50%	209 cd
60%	250 cd
70%	{LUX_1M70} cd
80%	334 cd

### Conditions:

Number of c-planes: 2

Candela at center: 417 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,125 lx
5%	0,209 lx
10%	0,417 lx
30%	1,25 lx
50%	2,09 lx

### Conditions:

Number of c-planes: 2

Lux at center: 4,17 lx

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



Total lumen output:

57,6 lm

Total candela output:

610 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

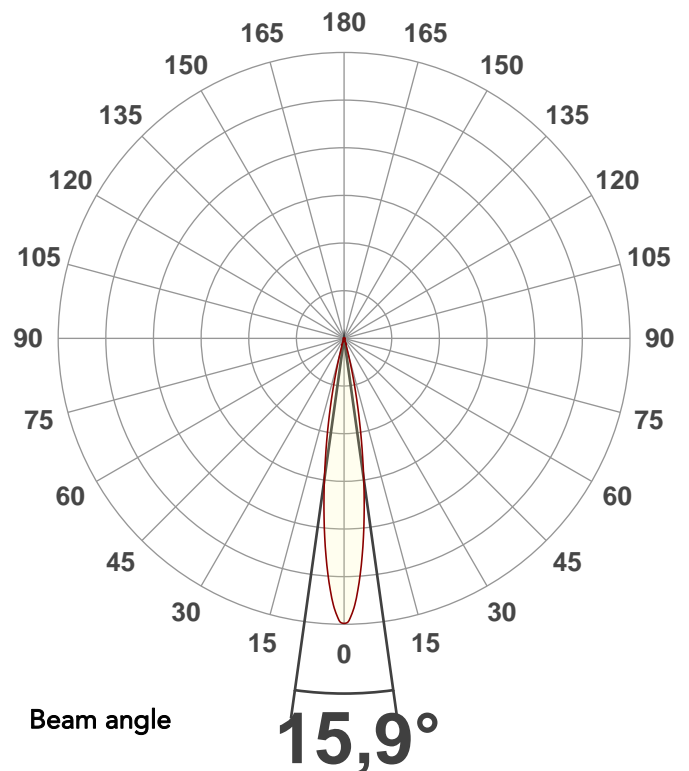
Blue

Operator:

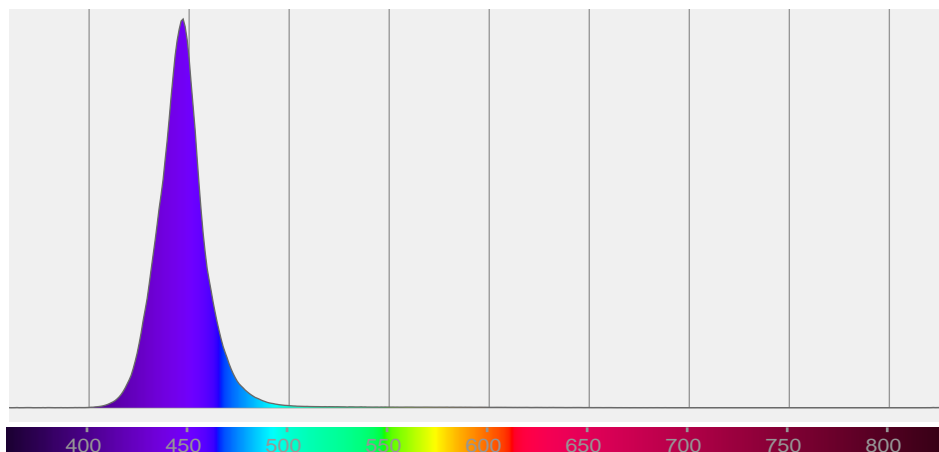
Paolo Carvone

Date and time:

06/02/2020 17:56:05



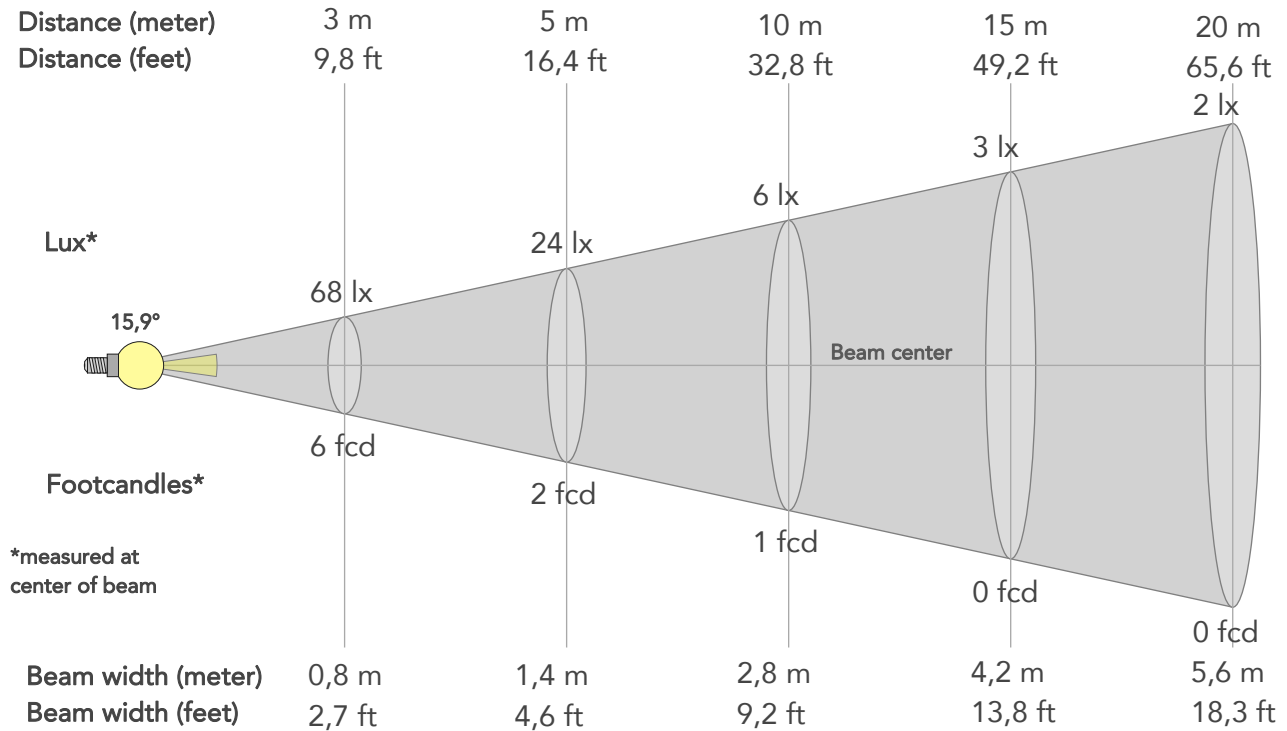
Spectra





## BEAM DETAILS

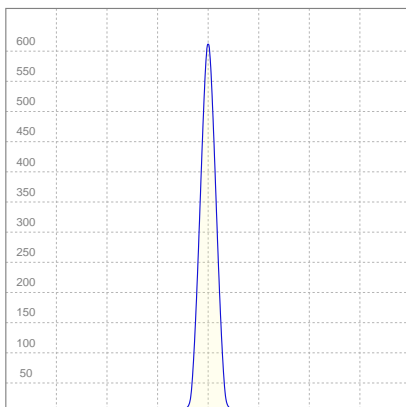
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,9°	27,8°	33,8°	97,0%	94,1%



### 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	610lx	152lx	68lx	38lx	24lx	11lx	6lx	3lx	2lx	1lx	1lx	0lx	0lx
Footcand.	57fcd	14fcd	6fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,2m	5,6m	7m	8,4m	11,2m	14m
Beam wid.	0,9ft	1,8ft	2,7ft	3,7ft	4,6ft	6,9ft	9,2ft	13,8ft	18,3ft	22,9ft	27,5ft	36,7ft	45,9ft

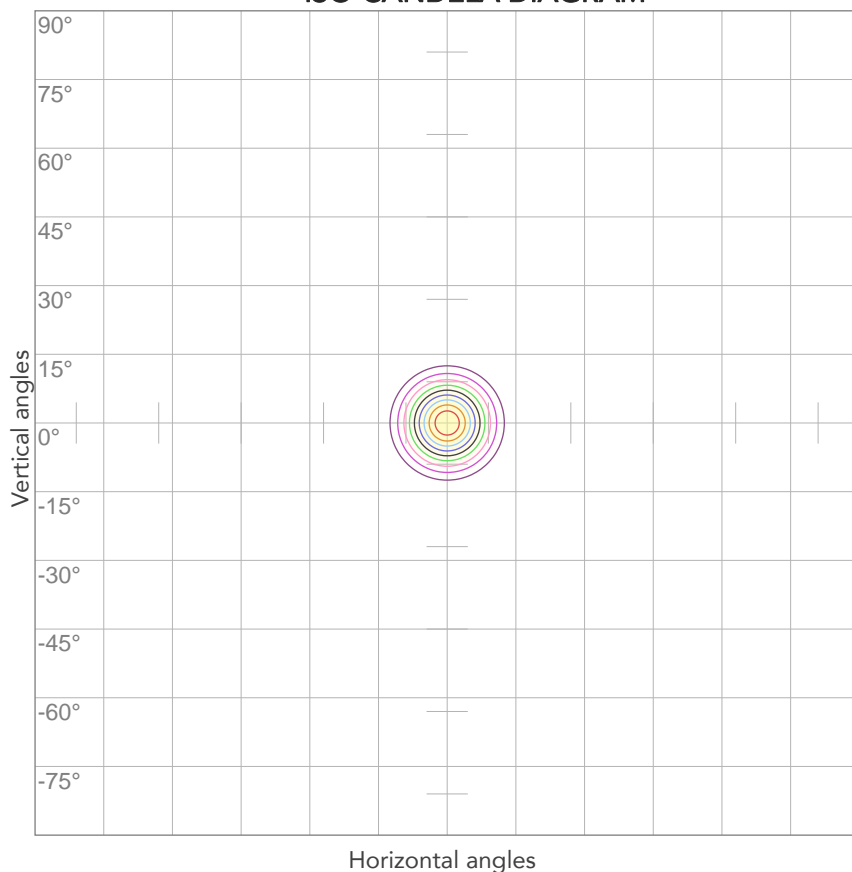
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,228A	21,3W	3lm/W

## ISO CANDELA DIAGRAM



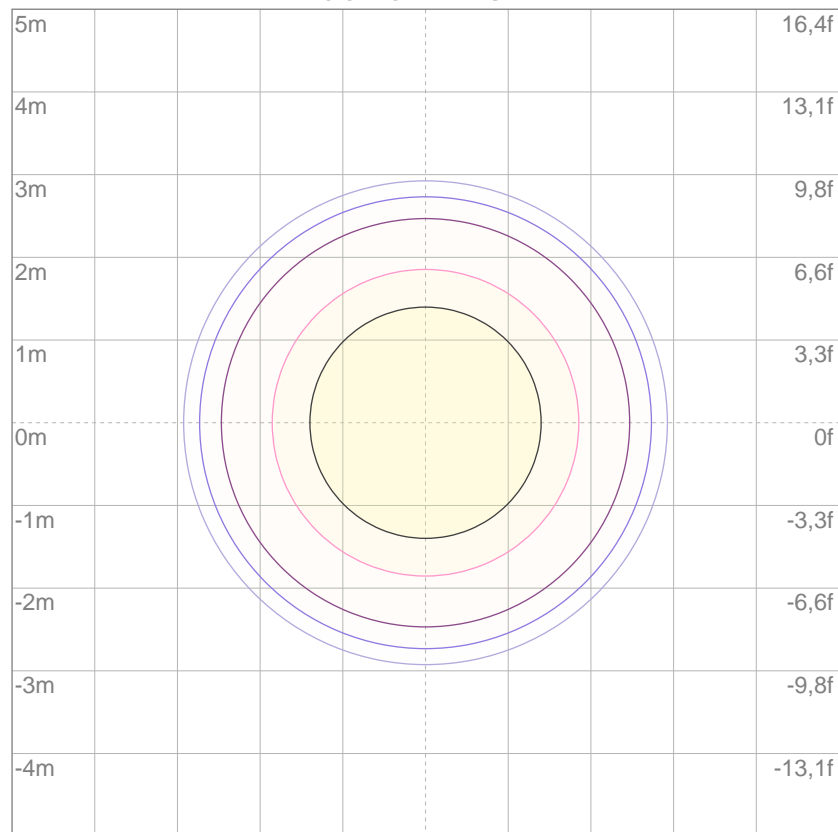
10%	61 cd
20%	122 cd
30%	183 cd
40%	244 cd
50%	305 cd
60%	366 cd
70%	{LUX_1M70} cd
80%	488 cd

### Conditions:

Number of c-planes: 2

Candela at center: 610 cd

## ISO LUX DIAGRAM



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

### Conditions:

Number of c-planes: 2

Lux at center: 6,10 lx

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



Total lumen output:

2404 lm

Total candela output:

2992 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

45°

Target:

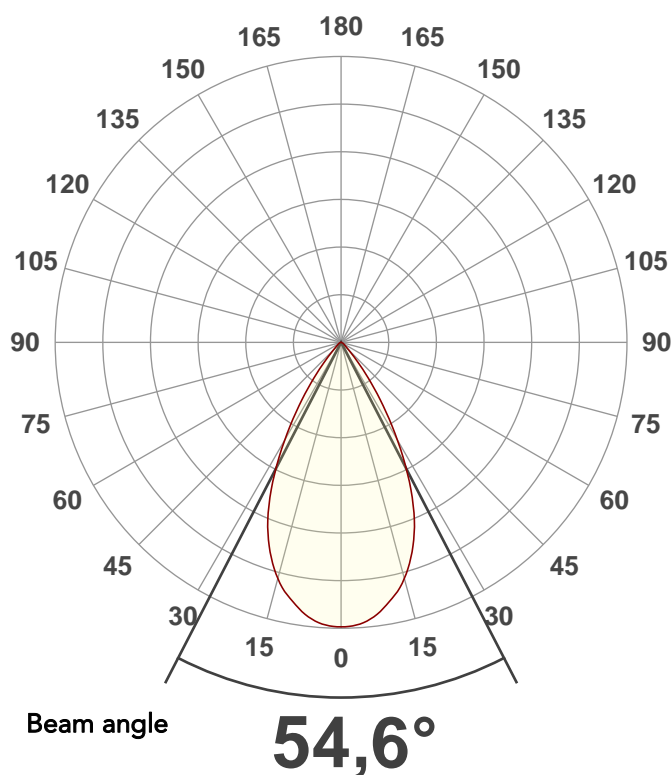
Lime

Operator:

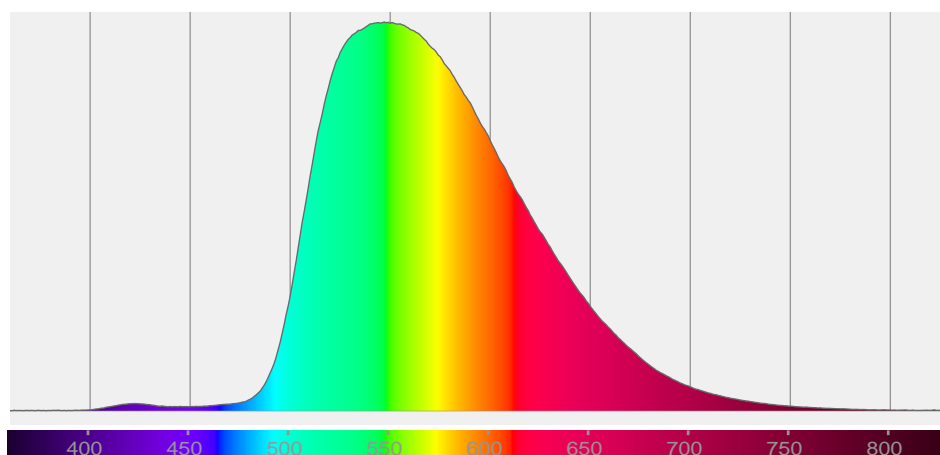
Paolo Carvone

Date and time:

06/02/2020 16:36:01



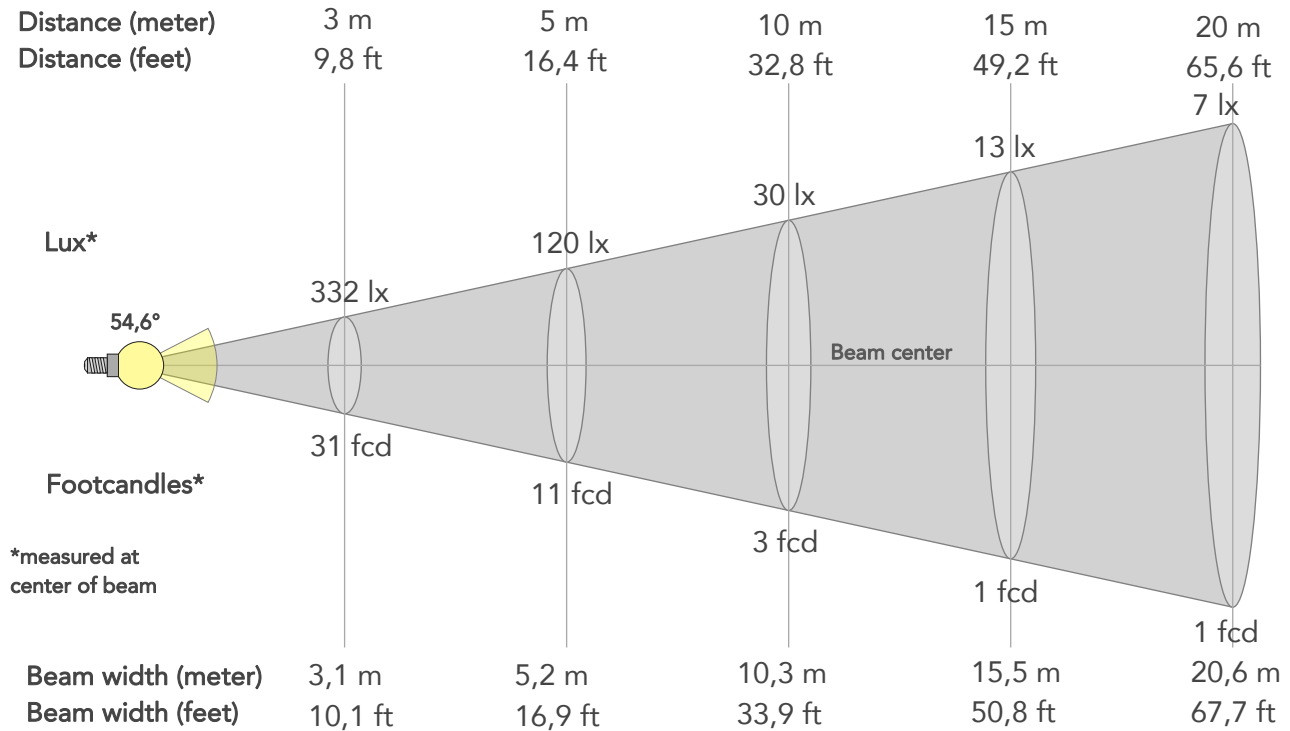
Spectra



## BEAM DETAILS



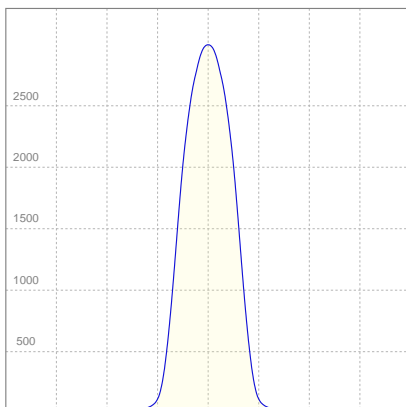
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54,6°	79,9°	96,8°	97,7%	94,7%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	2992lx	748lx	332lx	187lx	120lx	53lx	30lx	13lx	7lx	5lx	3lx	2lx	1lx
Footcand.	278fcd	69fcd	31fcd	17fcd	11fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,1m	5,2m	7,7m	10,3m	15,5m	20,6m	25,8m	31m	41,3m	51,6m
Beam wid.	3,4ft	6,8ft	10,1ft	13,5ft	16,9ft	25,4ft	33,9ft	50,8ft	67,7ft	84,7ft	101,6ft	135,5ft	169,3ft

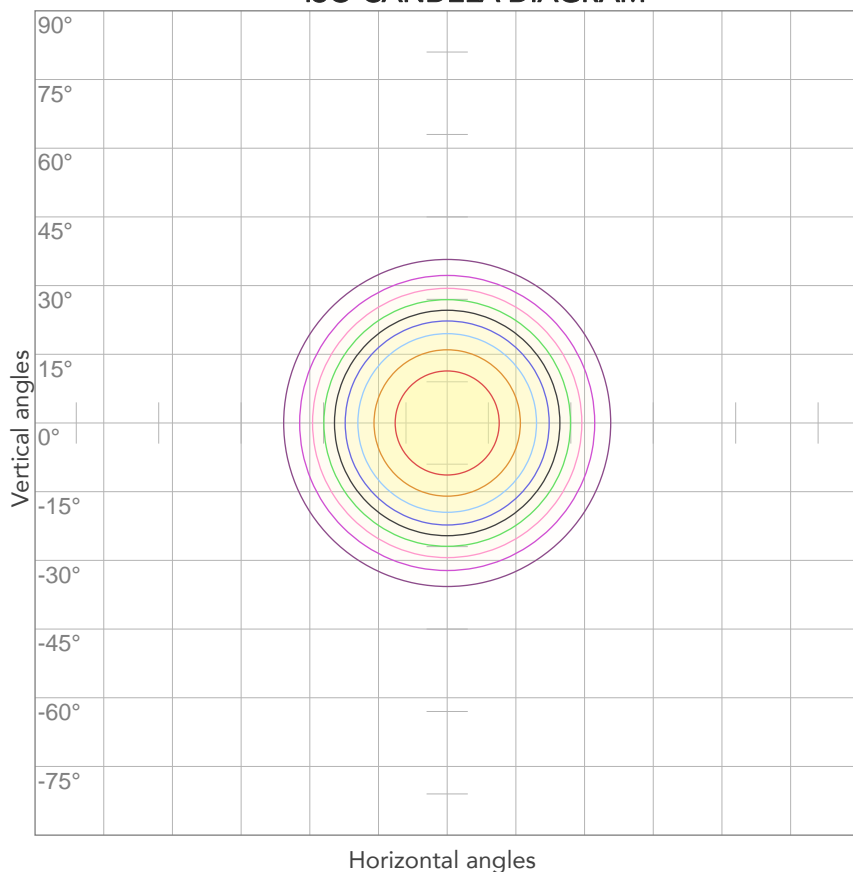
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,271A	56,4W	43lm/W

## ISO CANDELA DIAGRAM



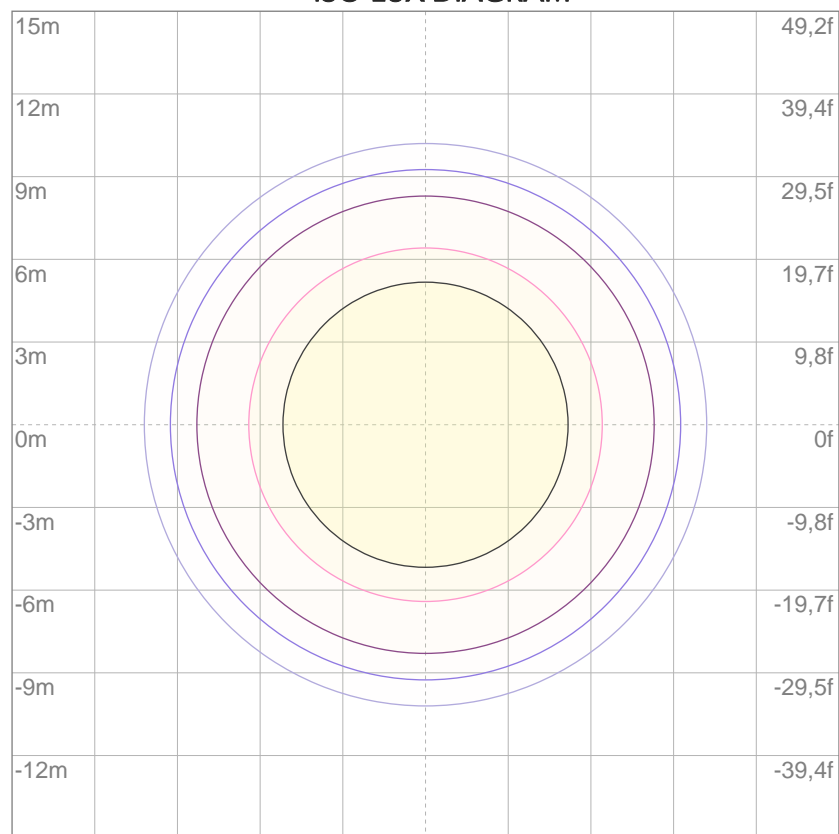
10%	299 cd
20%	598 cd
30%	898 cd
40%	1197 cd
50%	1496 cd
60%	1795 cd
70%	{LUX_1M70} cd
80%	2394 cd

### Conditions:

Number of c-planes: 2

Candela at center: 2992 cd

## ISO LUX DIAGRAM



3%	0,898 lx
5%	1,50 lx
10%	2,99 lx
30%	8,98 lx
50%	15,0 lx

### Conditions:

Number of c-planes: 2

Lux at center: 29,9 lx

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



Total lumen output:

2235 lm

Total candela output:

8228 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

30°

Target:

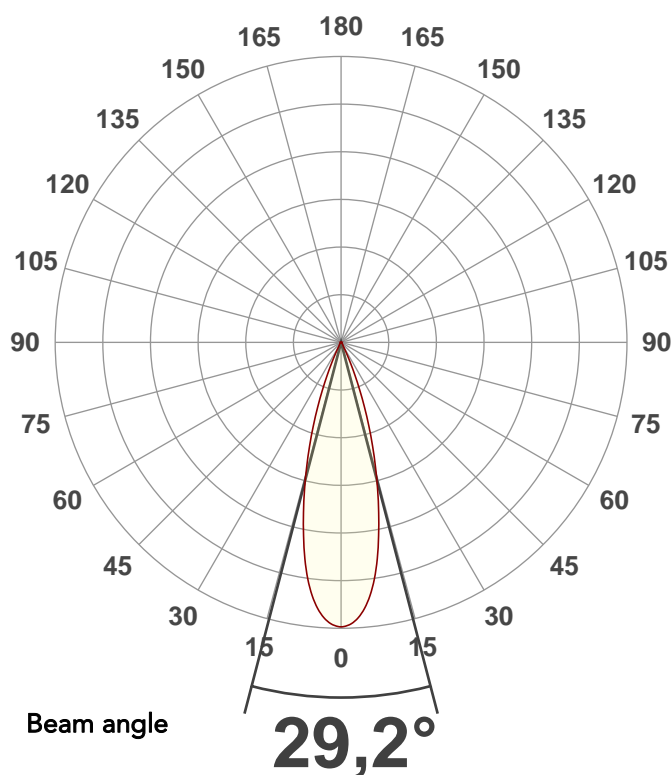
Lime

Operator:

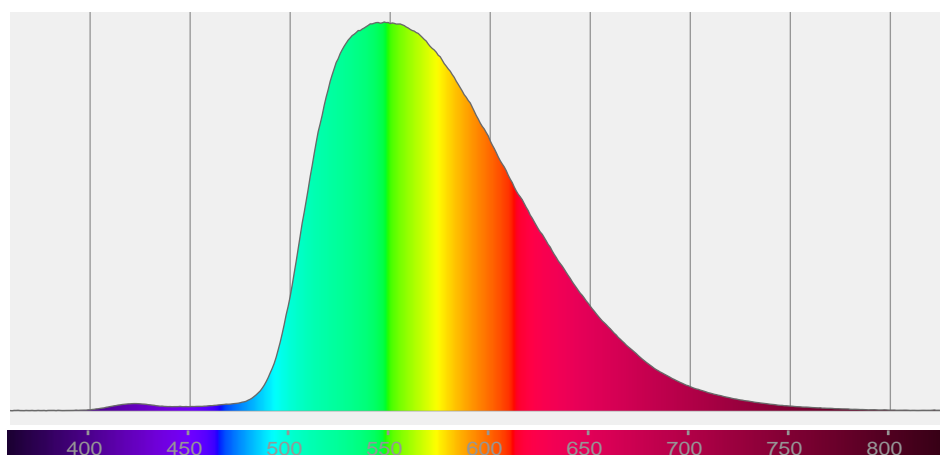
Paolo Carvone

Date and time:

06/02/2020 17:21:21

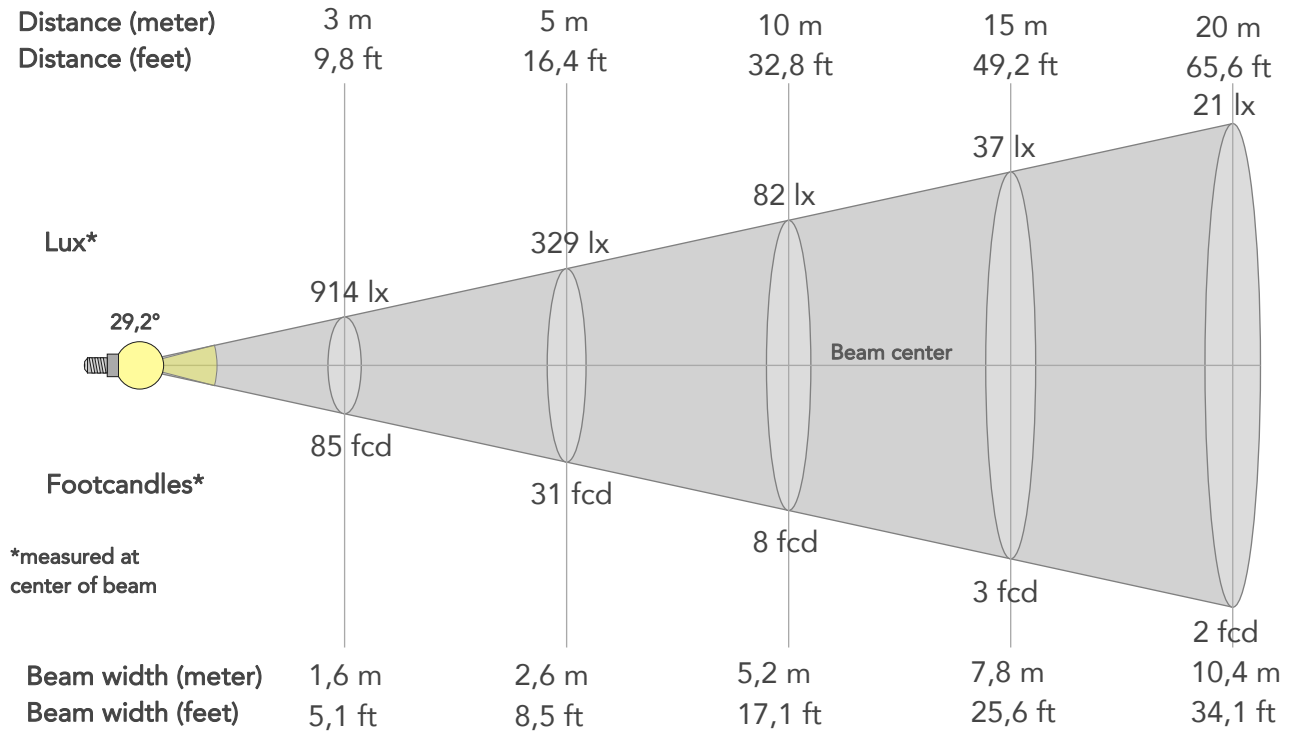


Spectra



## BEAM DETAILS

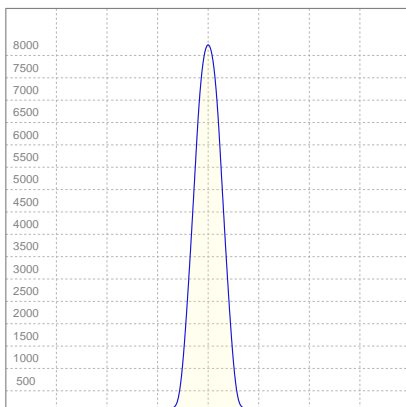
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,2°	47,6°	56,6°	97,8%	95,8%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	8228lx	2057lx	914lx	514lx	329lx	146lx	82lx	37lx	21lx	13lx	9lx	5lx	3lx
Footcand.	764fcd	191fcd	85fcd	48fcd	31fcd	14fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,6m	2,1m	2,6m	3,9m	5,2m	7,8m	10,4m	13m	15,6m	20,8m	26m
Beam wid.	1,7ft	3,4ft	5,1ft	6,8ft	8,5ft	12,8ft	17,1ft	25,6ft	34,1ft	42,7ft	51,2ft	68,3ft	85,3ft

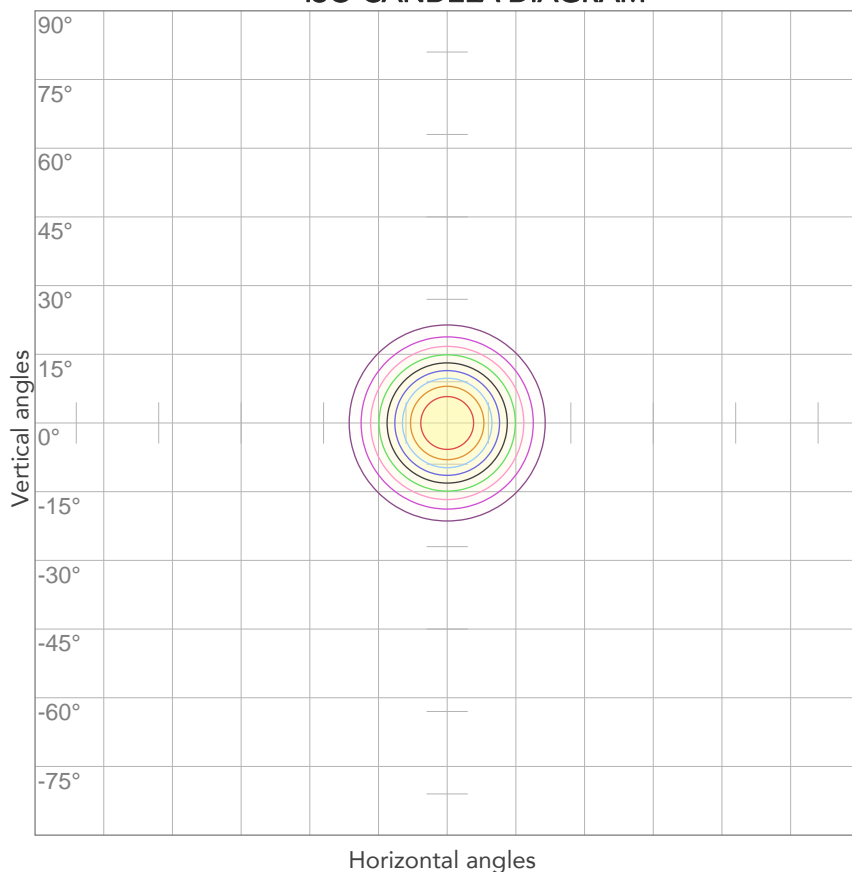
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,266A	55,5W	40lm/W

## ISO CANDELA DIAGRAM



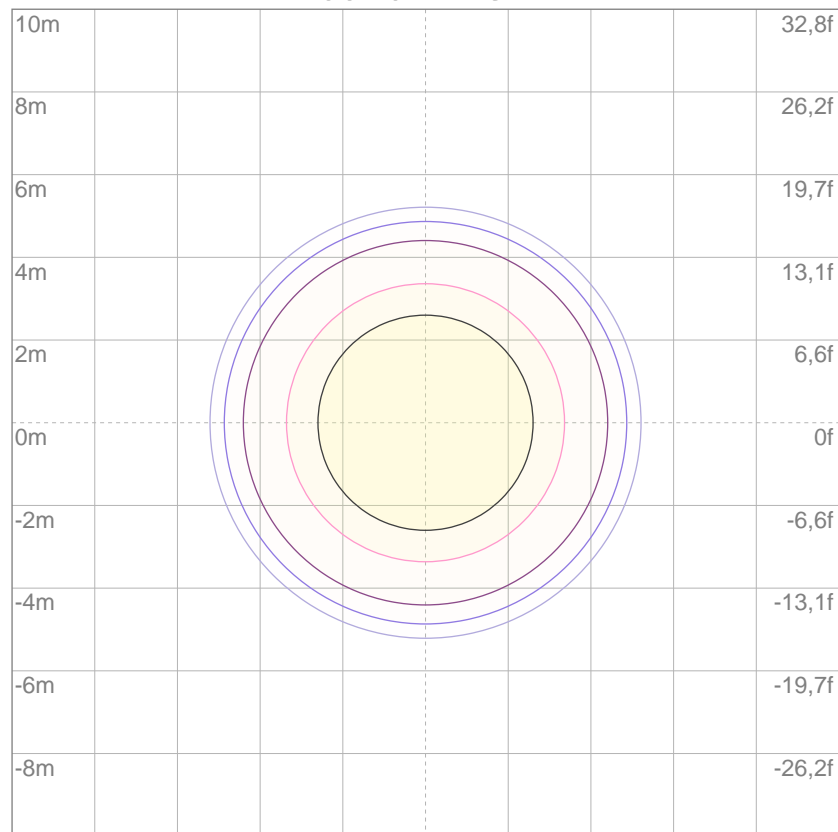
10%	823 cd
20%	1646 cd
30%	2468 cd
40%	3291 cd
50%	4114 cd
60%	4937 cd
70%	{LUX_1M70} cd
80%	6583 cd

### Conditions:

Number of c-planes: 2

Candela at center: 8228 cd

## ISO LUX DIAGRAM



3%	2,47 lx
5%	4,11 lx
10%	8,23 lx
30%	24,7 lx
50%	41,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 82,3 lx

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





Total lumen output:

1331 lm

Total candela output:

14603 cd

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

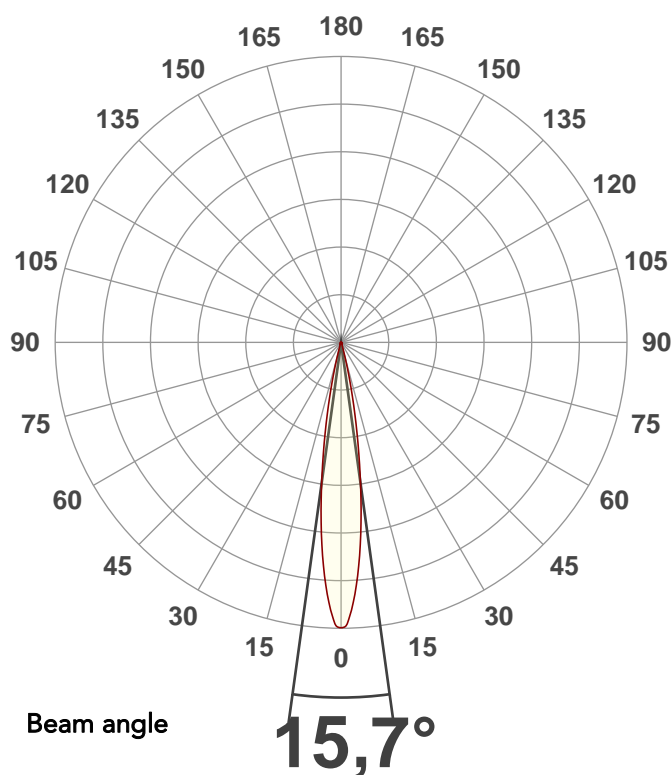
Lime

Operator:

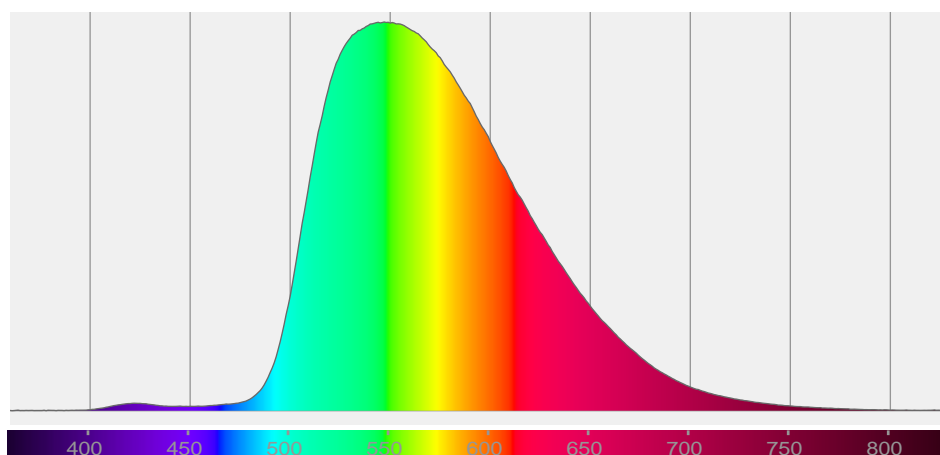
Paolo Carvone

Date and time:

06/02/2020 18:03:48



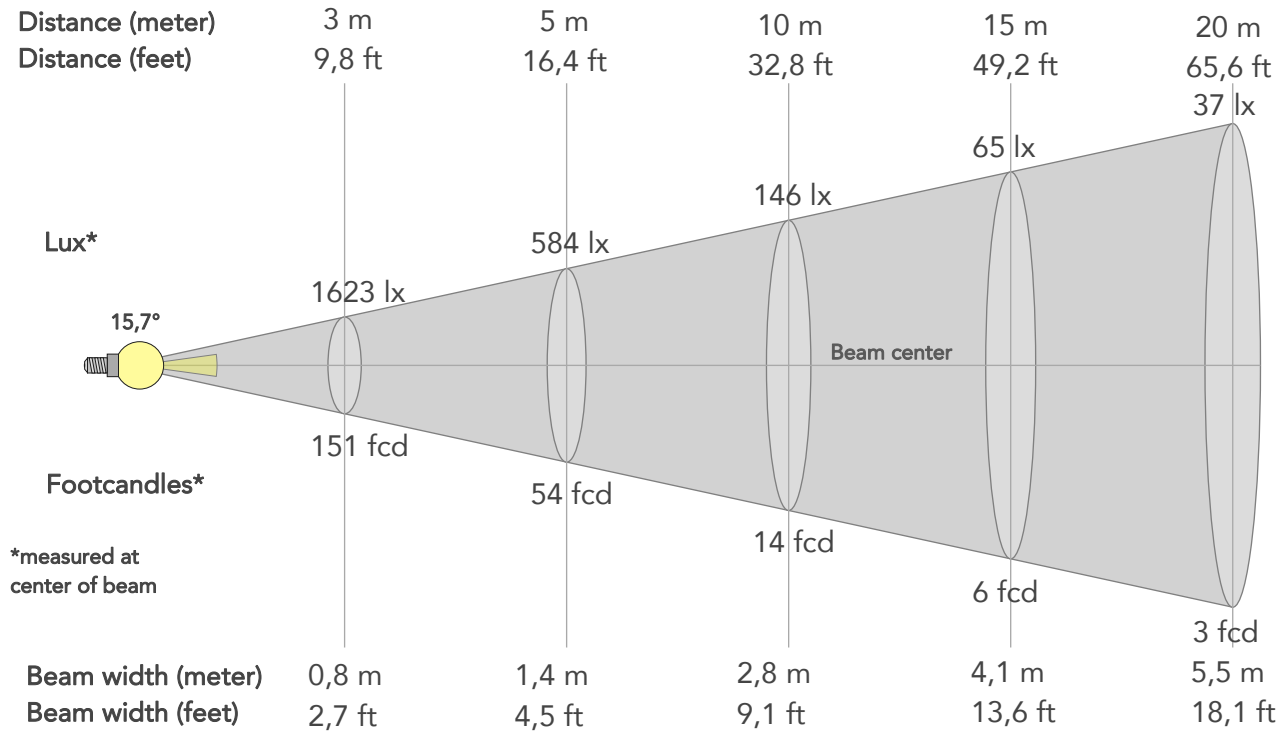
Spectra



## BEAM DETAILS



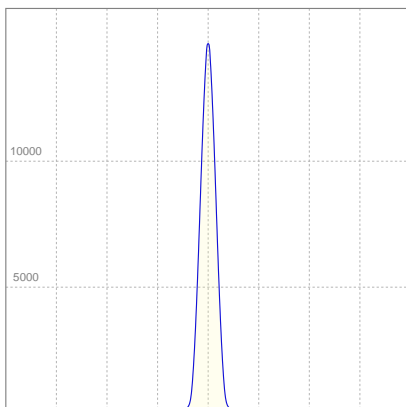
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,7°	27,3°	33,4°	97,4%	94,6%



### 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	14603lx	3651lx	1623lx	913lx	584lx	260lx	146lx	65lx	37lx	23lx	16lx	9lx	6lx
Footcand.	1357fcd	339fcd	151fcd	85fcd	54fcd	24fcd	14fcd	6fcd	3fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,1m	5,5m	6,9m	8,3m	11m	13,8m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,8ft	9,1ft	13,6ft	18,1ft	22,6ft	27,2ft	36,2ft	45,3ft

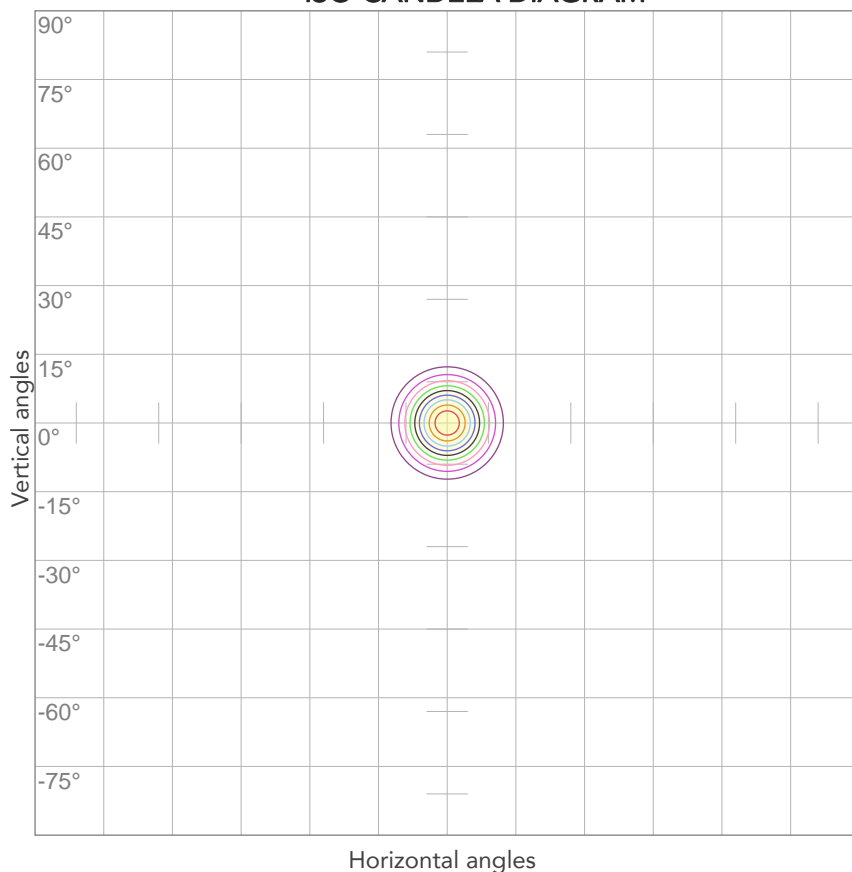
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
223V	0,268A	55,6W	24lm/W

## ISO CANDELA DIAGRAM



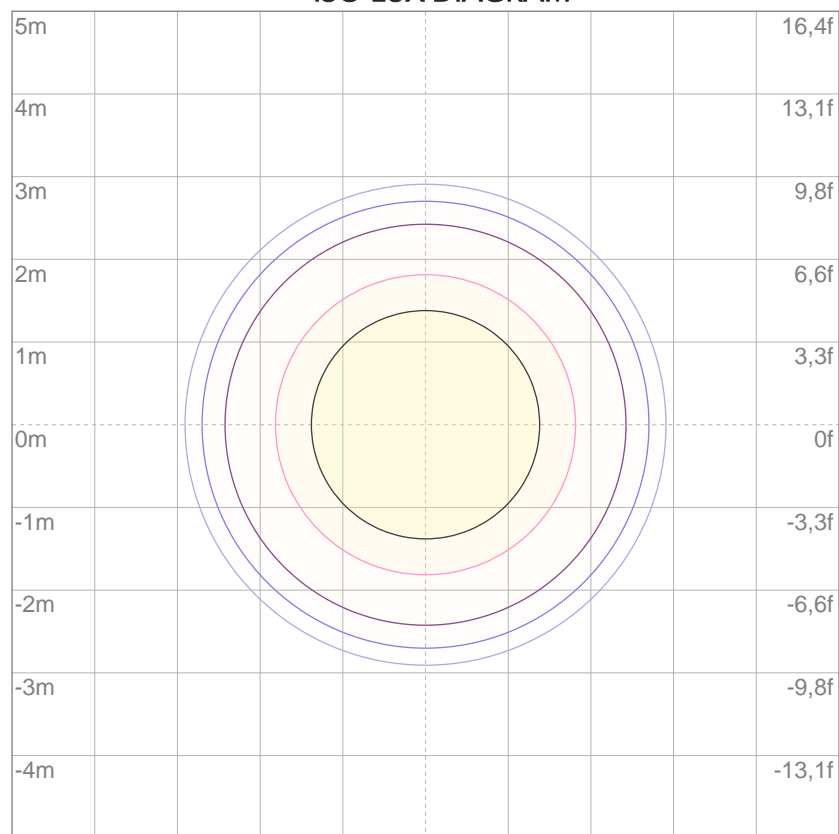
10%	1460 cd
20%	2921 cd
30%	4381 cd
40%	5841 cd
50%	7302 cd
60%	8762 cd
70%	{LUX_1M70} cd
80%	11683 cd

### Conditions:

Number of c-planes: 2

Candela at center: 14603 cd

## ISO LUX DIAGRAM



3%	4,38 lx
5%	7,30 lx
10%	14,6 lx
30%	43,8 lx
50%	73,0 lx

### Conditions:

Number of c-planes: 2

Lux at center: 146 lx

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



Total lumen output:

3355 lm

Total candela output:

4084 cd

Light quality:

CRI: 88,7

Color temperature:

2685 K

PRODUCT NAME:

ECLFRESNELJTW

MEASURAMENT CONDITIONS:

Beam angle:

45°

Target:

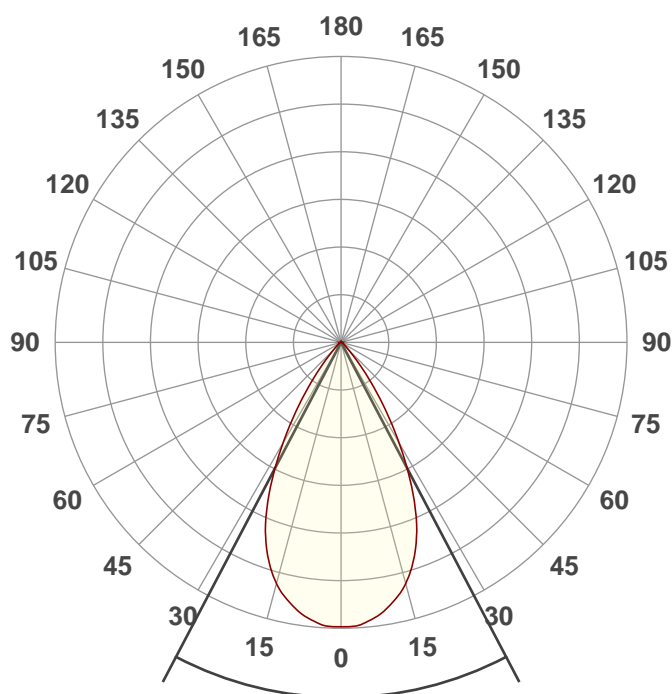
2800K

Operator:

Paolo Carvone

Date and time:

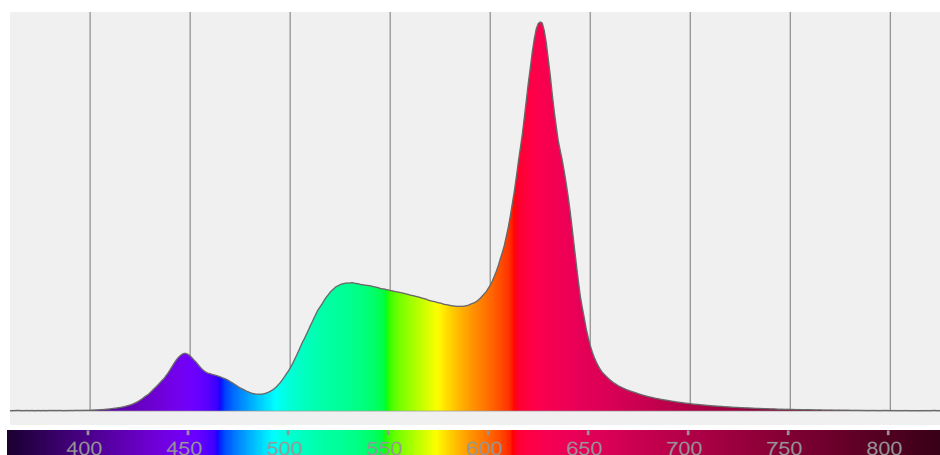
06/02/2020 16:45:40

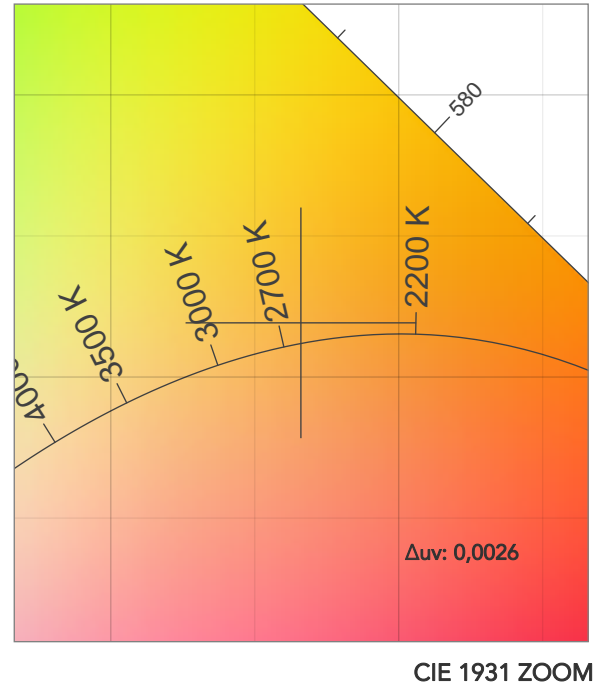
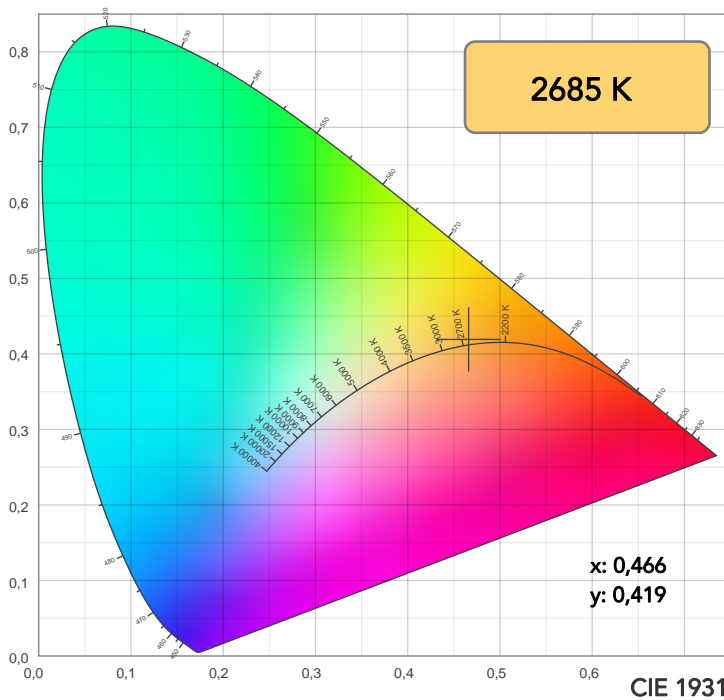


Beam angle

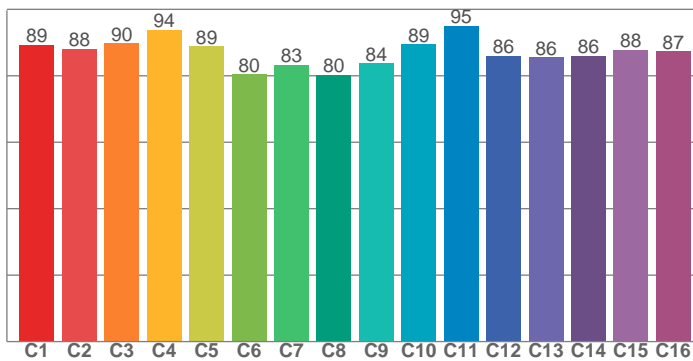
55,4°

Spectra

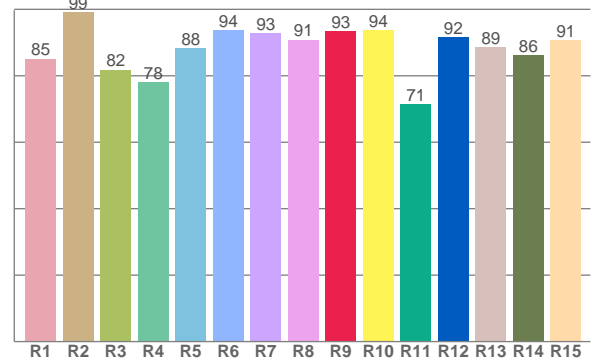




TM30: 88,1



CRI: 88,7 (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
85,2	99,2	81,8	78,1	88,2	93,8	92,8	90,9	93,4	93,7	71,4	91,7	88,6	86,1	90,7

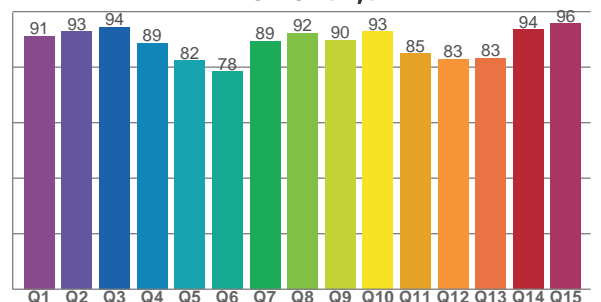
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
89,4	88,2	89,8	93,8	88,8	80,4	83,3	80,2	83,7	89,5	95,0	86,0	85,5	86,0	87,8	87,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,3	92,8	94,4	88,8	82,4	78,4	89,4	92,2	89,7	92,9	84,9	82,8	83,3	93,5	95,7

CQS: 87,5



## COLOR PARAMETERS

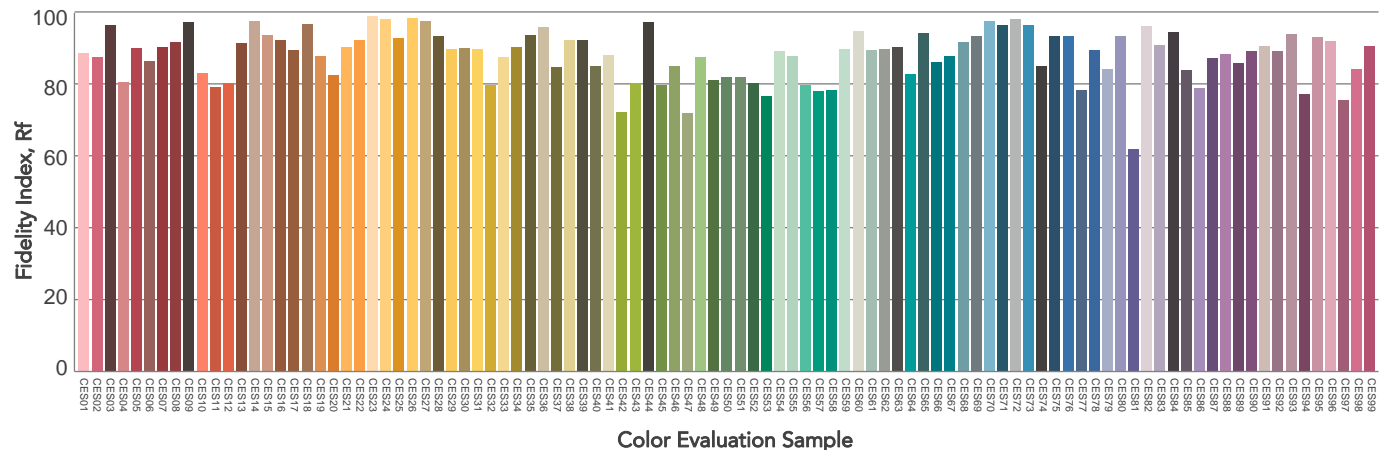
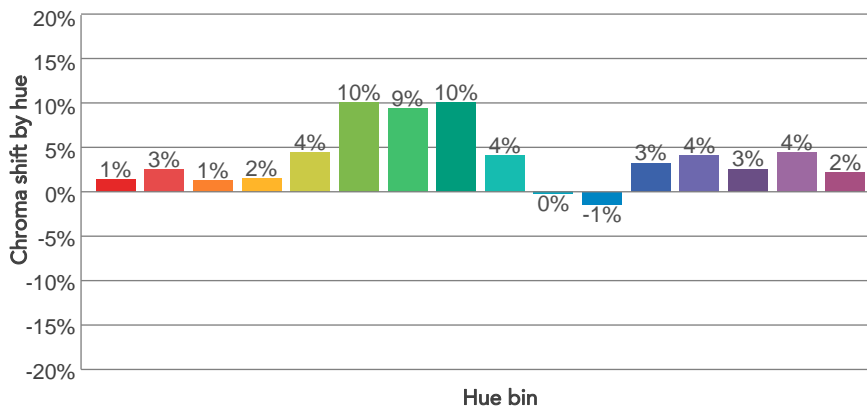
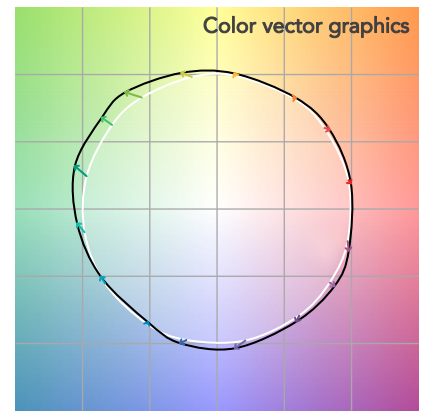
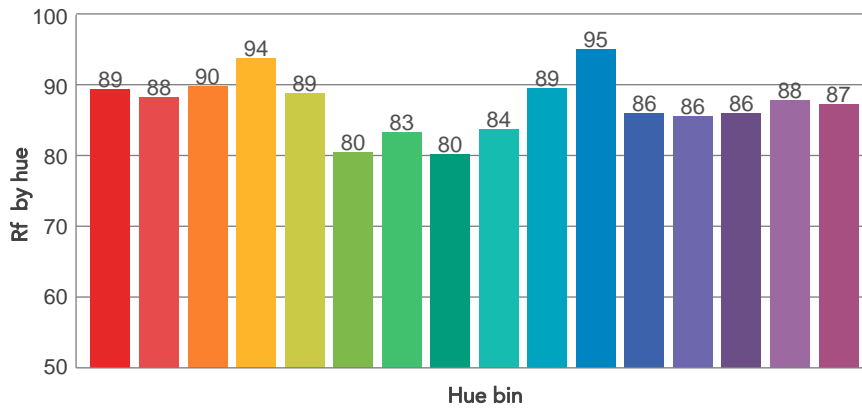
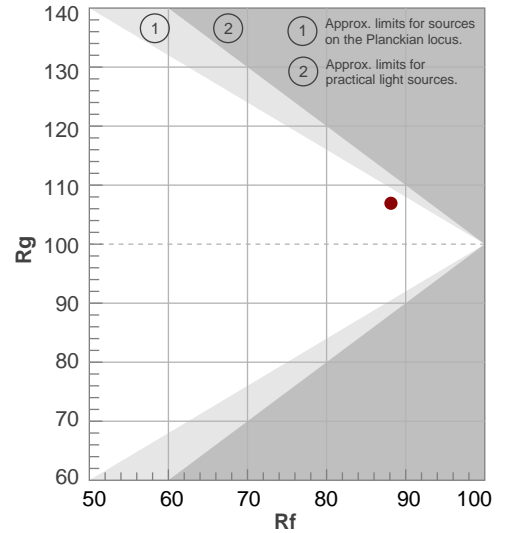
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2685 K	88,7	93,4	88,1	106,9	87,5	76	0,466	0,419	0,0026

# TM30 DETAILS

**Rf 88,1**  
Fidelity index Rf

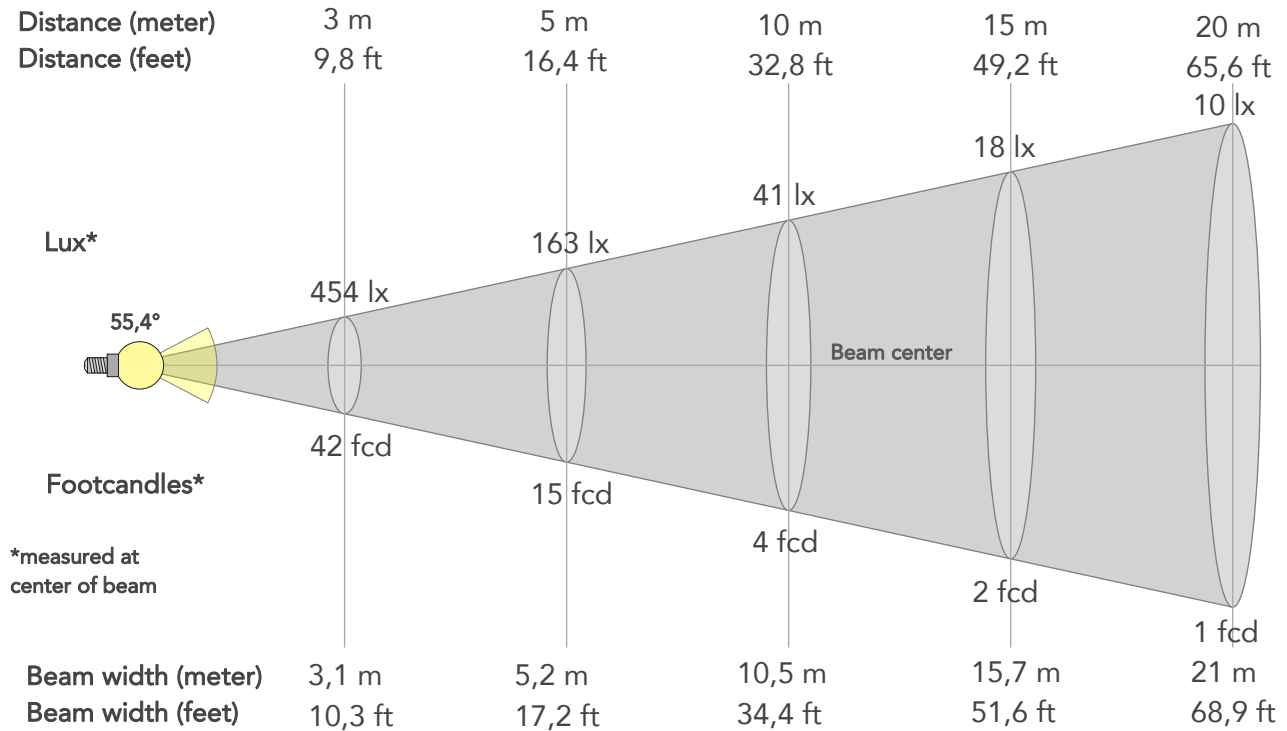
**Rg 106,9**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	89	1%	-3%
2	88	3%	-3%
3	90	1%	-2%
4	94	2%	1%
5	89	4%	7%
6	80	10%	8%
7	83	9%	0%
8	80	10%	-6%
9	84	4%	-7%
10	89	0%	-6%
11	95	-1%	0%
12	86	3%	-4%
13	86	4%	-9%
14	86	3%	-4%
15	88	4%	0%
16	87	2%	-7%



## BEAM DETAILS

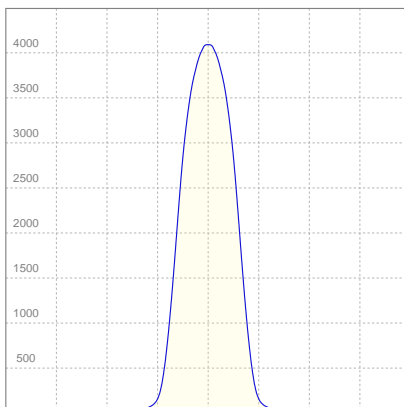
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,4°	80,2°	96,4°	97,8%	94,8%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	4084lx	1021lx	454lx	255lx	163lx	73lx	41lx	18lx	10lx	7lx	5lx	3lx	2lx
Footcand.	379fcd	95fcd	42fcd	24fcd	15fcd	7fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,9m	10,5m	15,7m	21m	26,2m	31,5m	42m	52,5m
Beam wid.	3,5ft	6,9ft	10,3ft	13,8ft	17,2ft	25,8ft	34,4ft	51,6ft	68,9ft	86,1ft	103,3ft	137,7ft	172,2ft

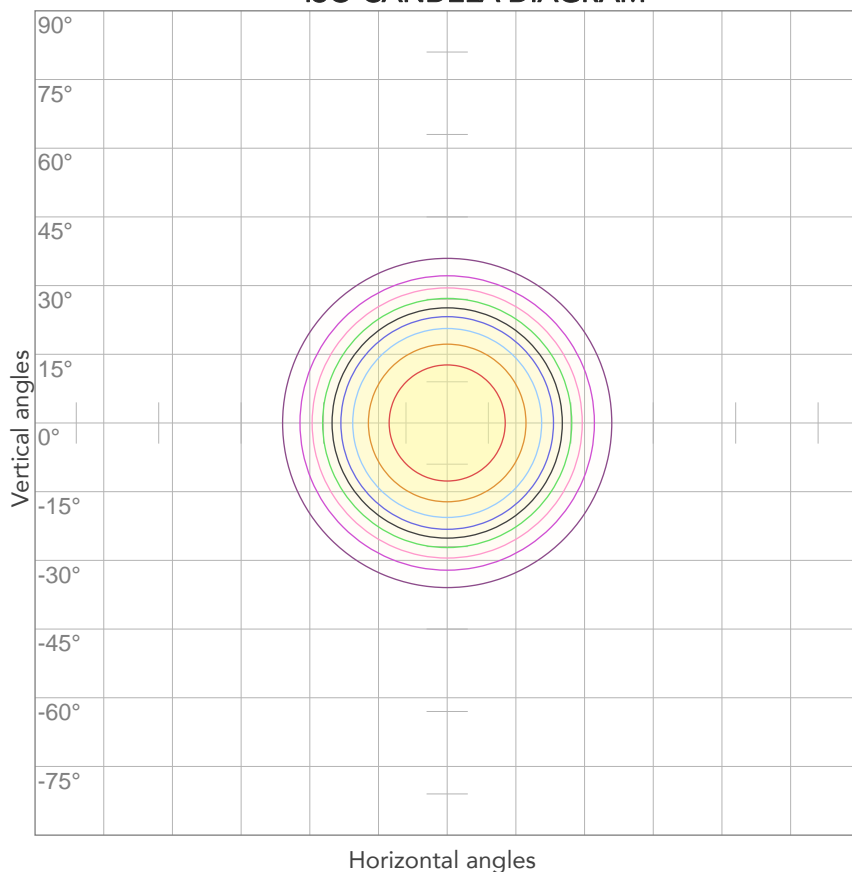
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,442A	93,6W	36lm/W

## ISO CANDELA DIAGRAM



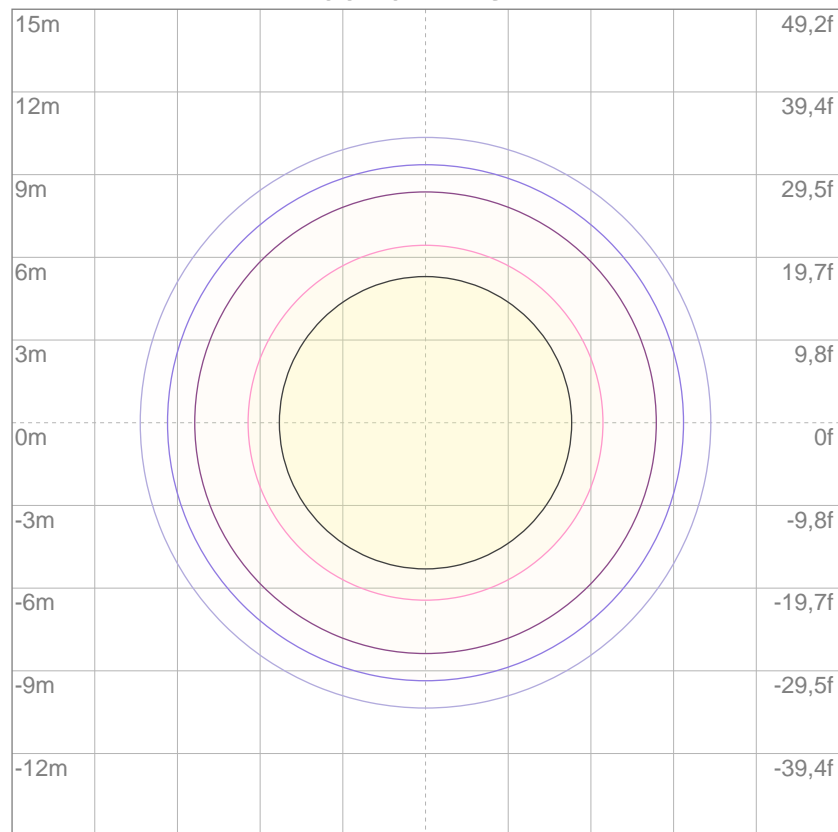
10%	408 cd
20%	817 cd
30%	1225 cd
40%	1634 cd
50%	2042 cd
60%	2450 cd
70%	2859 cd
80%	3267 cd

### Conditions:

Number of c-planes: 2

Candela at center: 4084 cd

## ISO LUX DIAGRAM



3%	1,23 lx
5%	2,04 lx
10%	4,08 lx
30%	12,3 lx
50%	20,4 lx

### Conditions:

Number of c-planes: 2

Lux at center: 40,8 lx

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





Total lumen output:

3033 lm

Total candela output:

11135 cd

Light quality:

CRI: 88,7

Color temperature:

2680 K

PRODUCT NAME:

ECLFRESNELJTW

MEASURAMENT CONDITIONS:

Beam angle:

30°

Target:

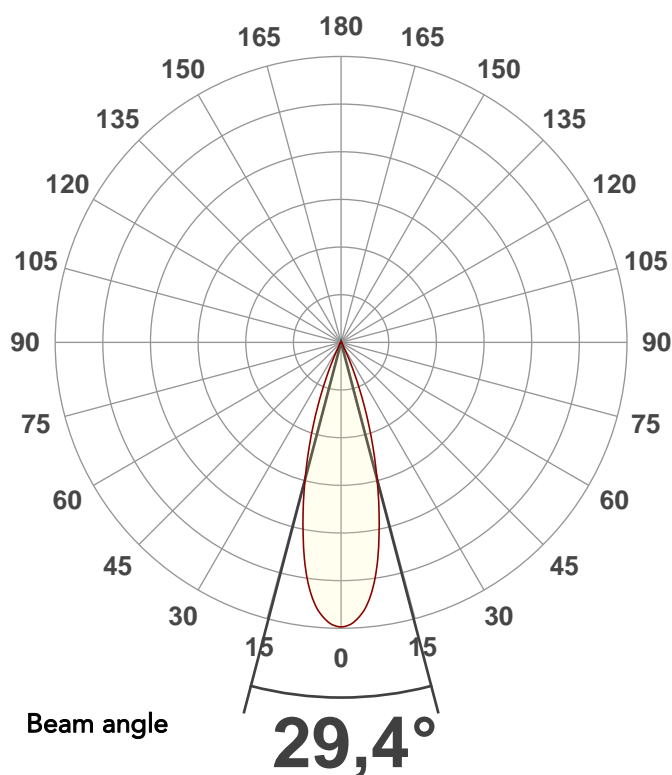
2800K

Operator:

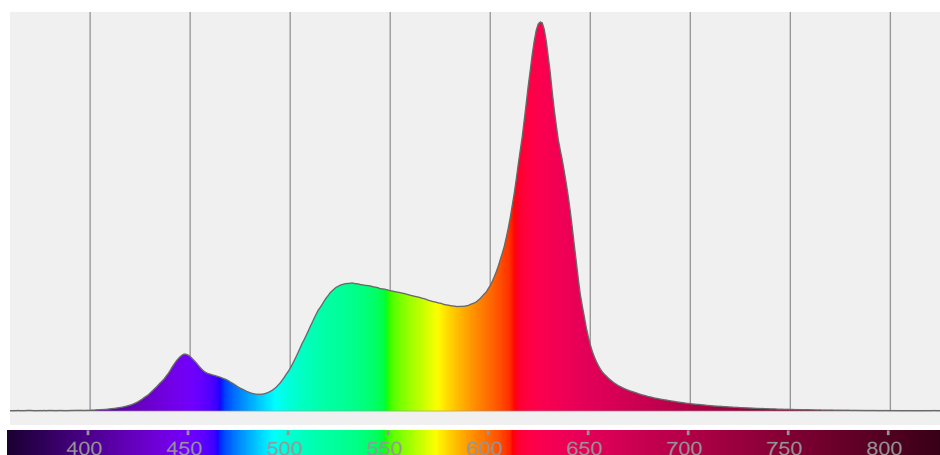
Paolo Carvone

Date and time:

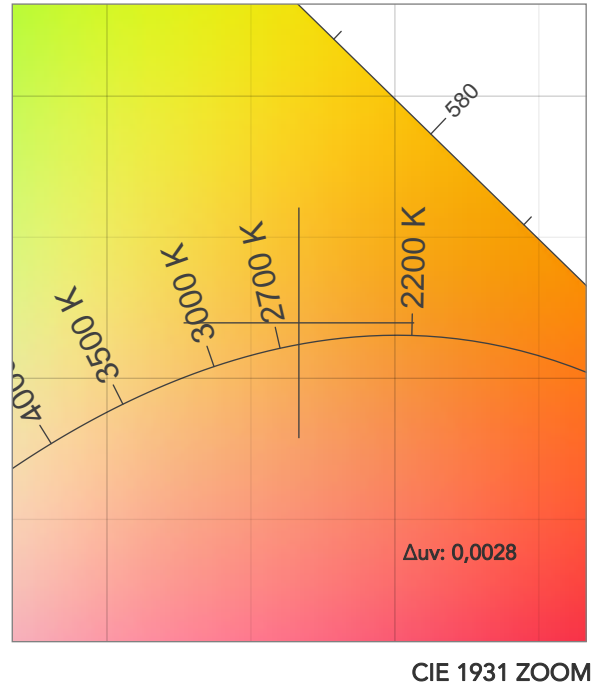
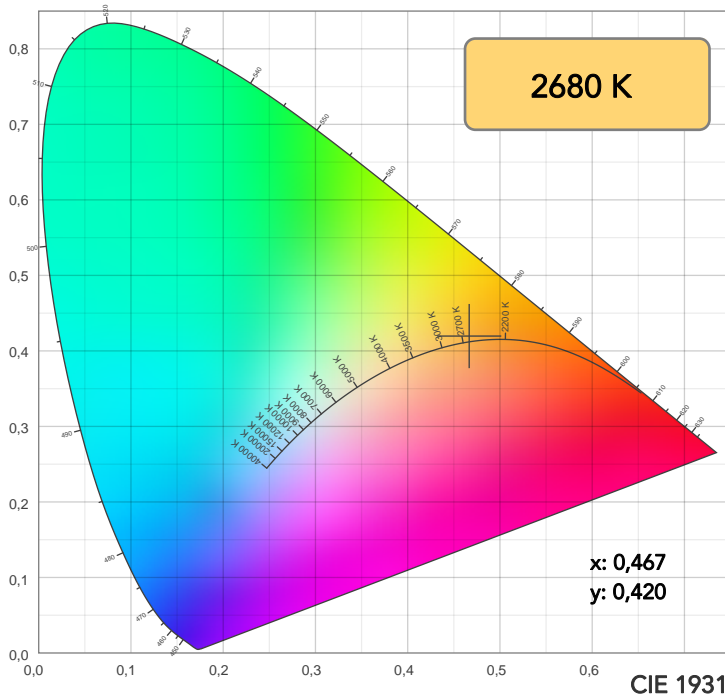
06/02/2020 17:02:00



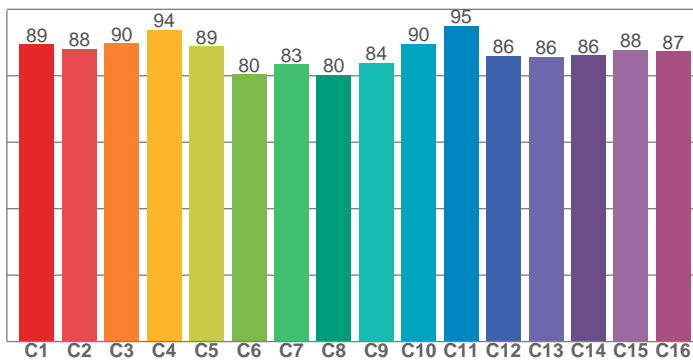
Spectra



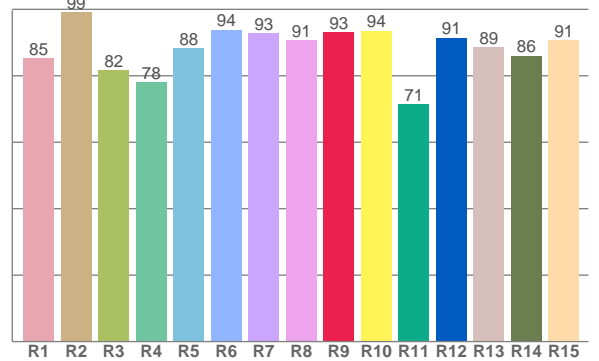
## COLOR DETAILS



TM30: 88,2



CRI: 88,7 (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
85,2	99,2	81,7	78,1	88,3	93,9	92,7	90,6	93,1	93,5	71,4	91,5	88,6	86,0	90,7

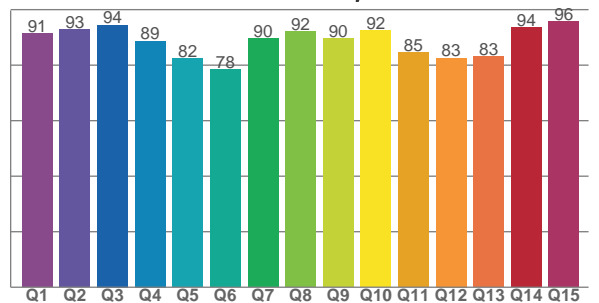
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
89,4	88,1	89,8	93,9	88,9	80,5	83,4	80,4	83,8	89,6	95,0	86,0	85,6	86,1	87,8	87,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,4	92,8	94,4	88,7	82,4	78,5	89,5	92,1	89,5	92,4	84,6	82,6	83,2	93,5	95,7

CQS: 87,4



## COLOR PARAMETERS

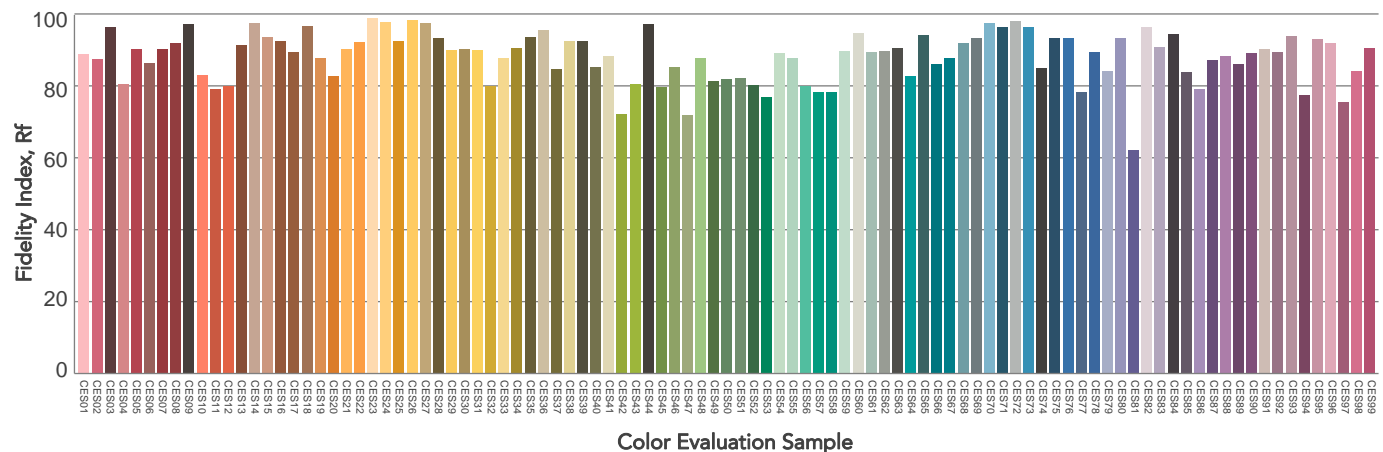
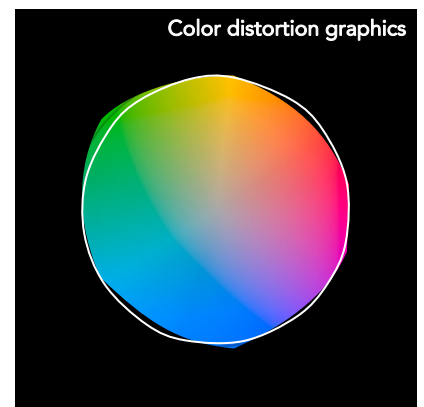
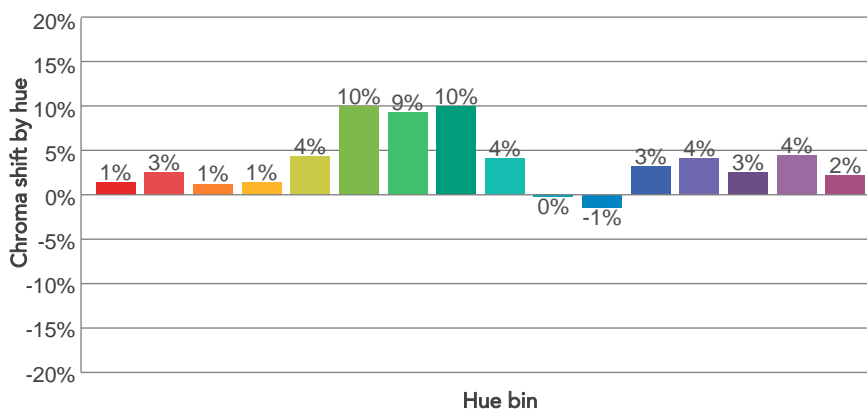
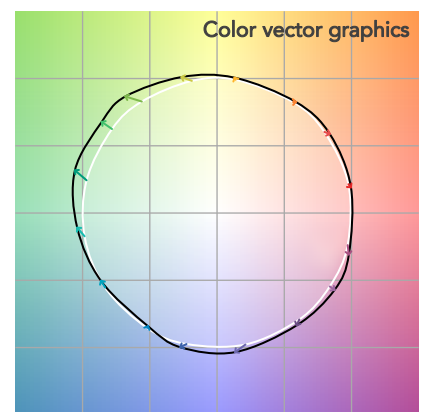
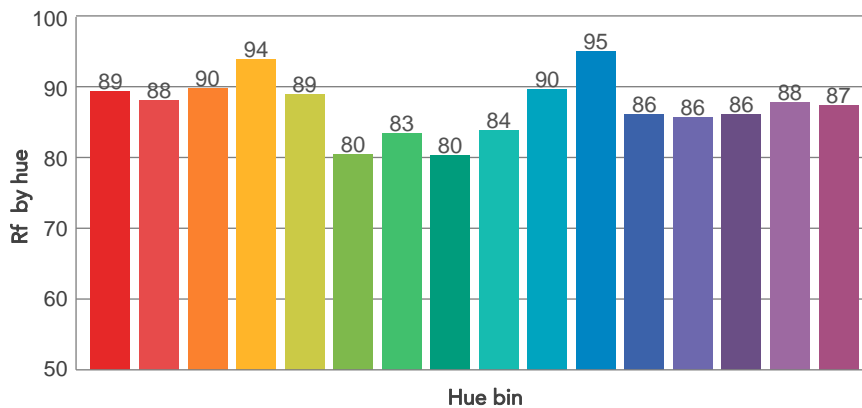
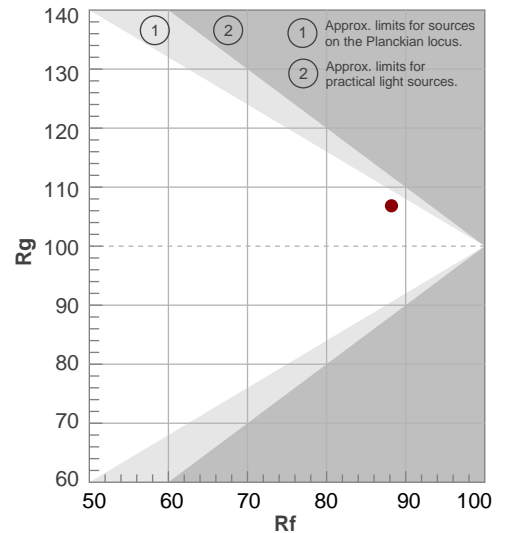
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2680 K	88,7	93,1	88,2	106,8	87,4	76	0,467	0,420	0,0028

# TM30 DETAILS

**Rf 88,2**  
Fidelity index Rf

**Rg 106,8**  
Gammut index

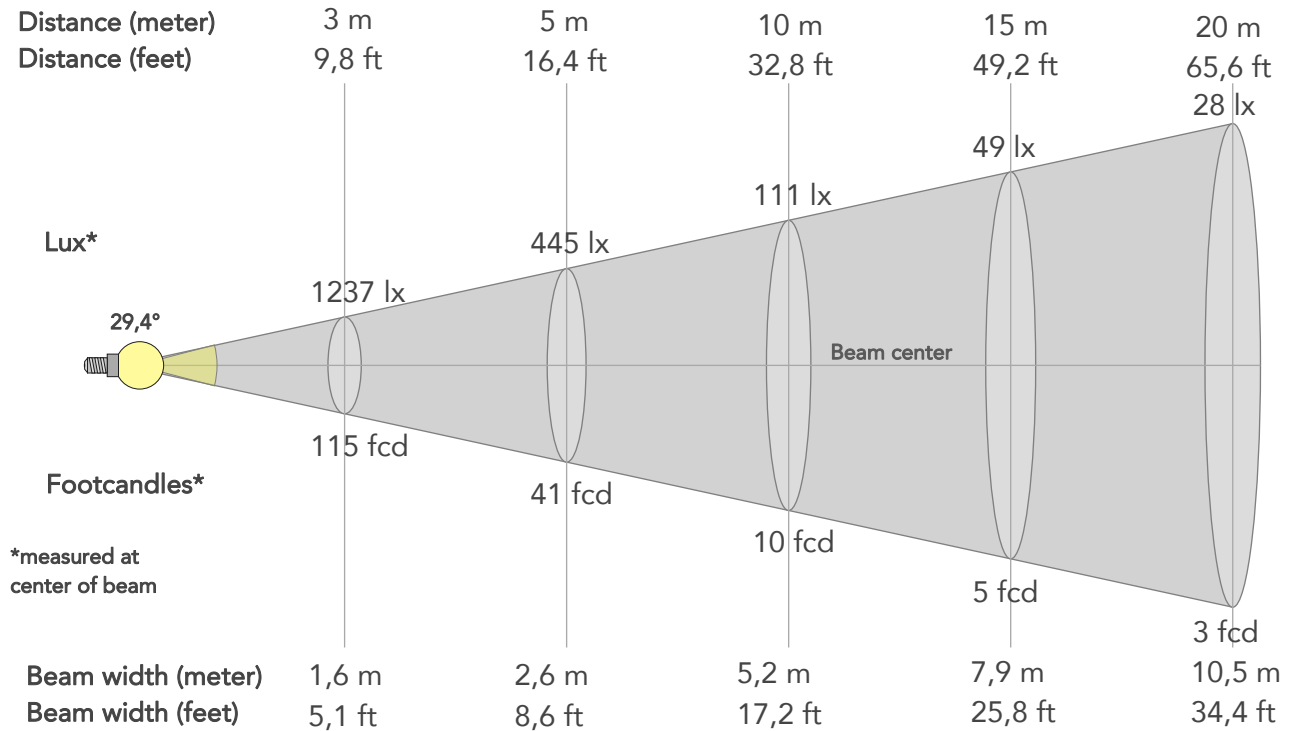
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	89	1%	-3%
2	88	3%	-3%
3	90	1%	-2%
4	94	1%	1%
5	89	4%	7%
6	80	10%	8%
7	83	9%	0%
8	80	10%	-6%
9	84	4%	-7%
10	90	0%	-6%
11	95	-1%	0%
12	86	3%	-4%
13	86	4%	-9%
14	86	3%	-4%
15	88	4%	0%
16	87	2%	-7%



## BEAM DETAILS



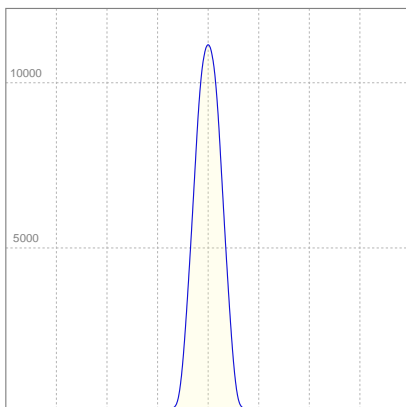
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,4°	47,7°	56,6°	98,3%	96,4%



### 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	11135lx	2784lx	1237lx	696lx	445lx	198lx	111lx	49lx	28lx	18lx	12lx	7lx	4lx
Footcand.	1035fcd	259fcd	115fcd	65fcd	41fcd	18fcd	10fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1m	1,6m	2,1m	2,6m	3,9m	5,2m	7,9m	10,5m	13,1m	15,7m	21m	26,2m
Beam wid.	1,7ft	3,5ft	5,1ft	6,9ft	8,6ft	12,9ft	17,2ft	25,8ft	34,4ft	43ft	51,7ft	68,9ft	86,1ft

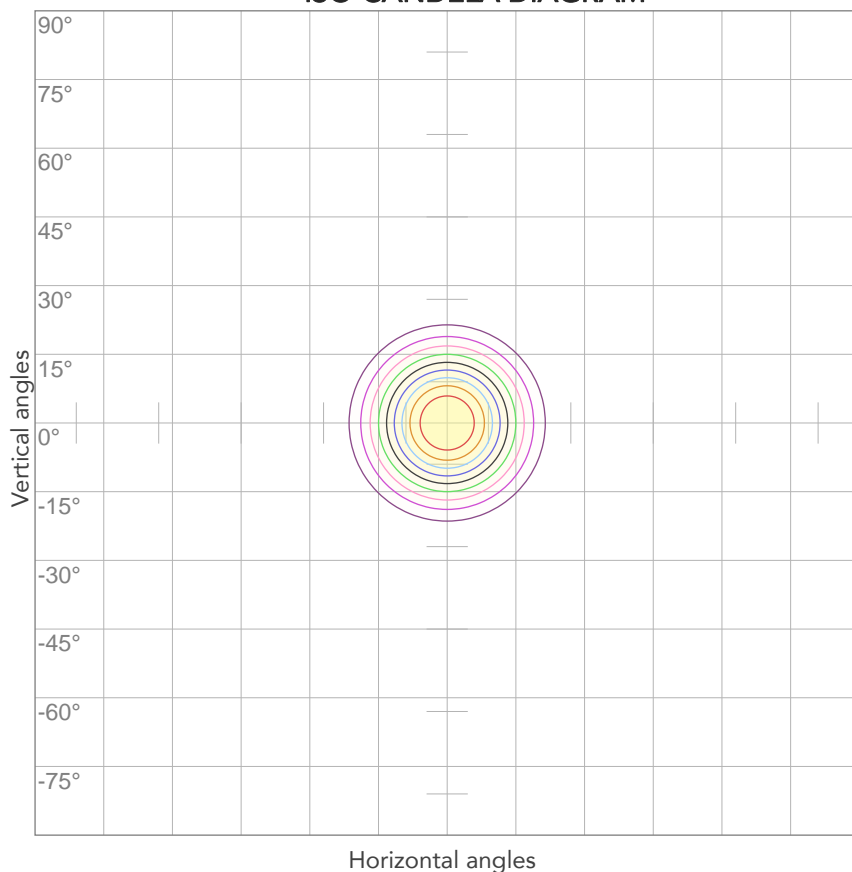
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,435A	91,8W	33lm/W

## ISO CANDELA DIAGRAM



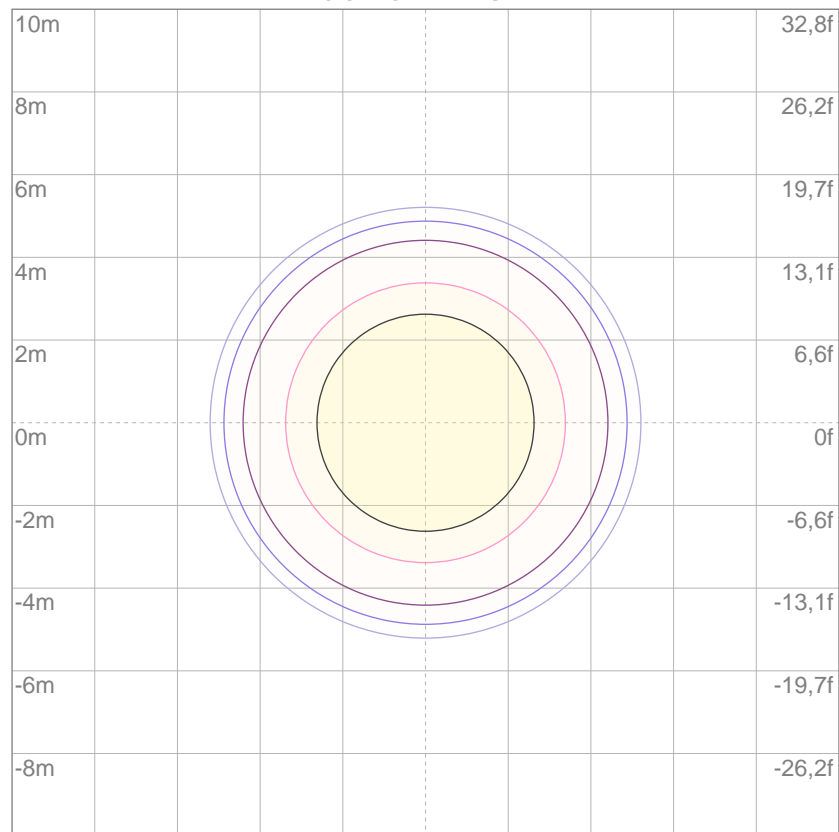
10%	1114 cd
20%	2227 cd
30%	3341 cd
40%	4454 cd
50%	5568 cd
60%	6681 cd
70%	7795 cd
80%	8908 cd

### Conditions:

Number of c-planes: 2

Candela at center: 11135 cd

## ISO LUX DIAGRAM



3%	3,34 lx
5%	5,57 lx
10%	11,1 lx
30%	33,4 lx
50%	55,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 111 lx

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



Total lumen output:

1758 lm

Total candela output:

19977 cd

Light quality:

CRI: 89,8

Color temperature:

2721 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

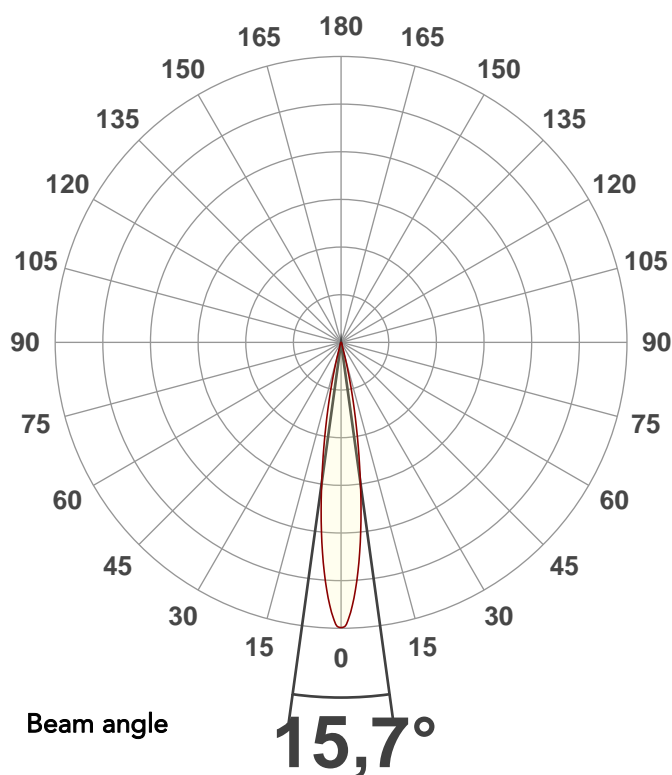
2800K

Operator:

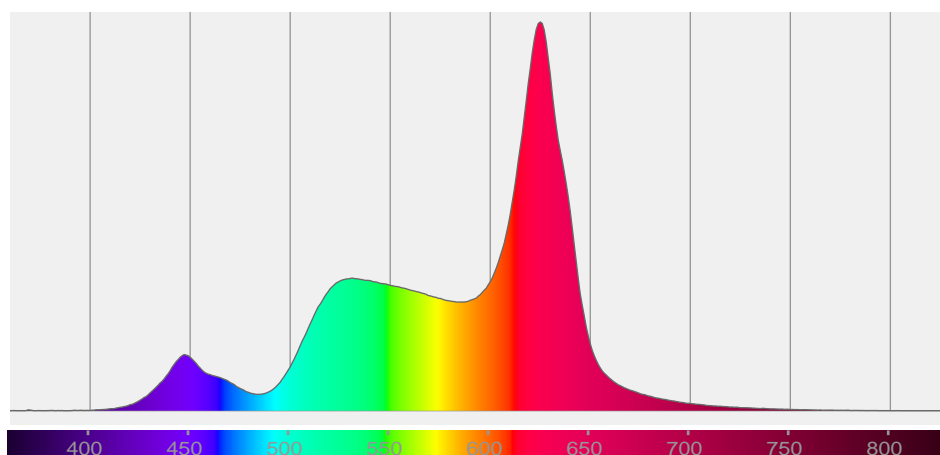
Paolo Carvone

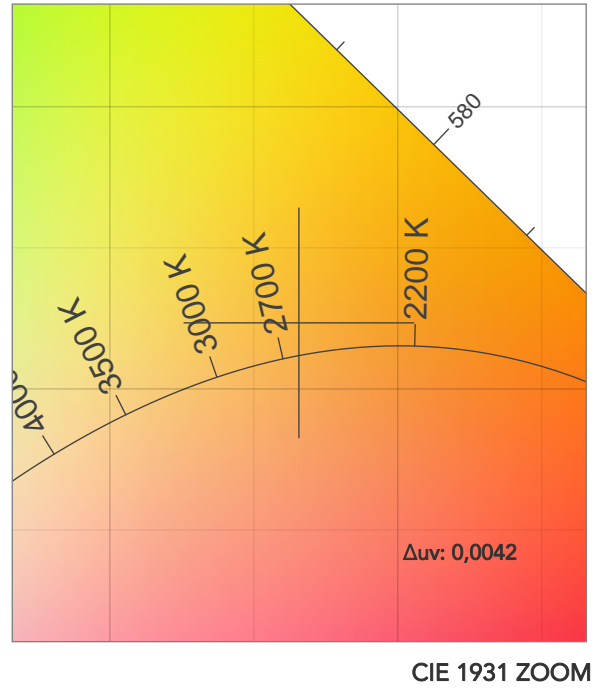
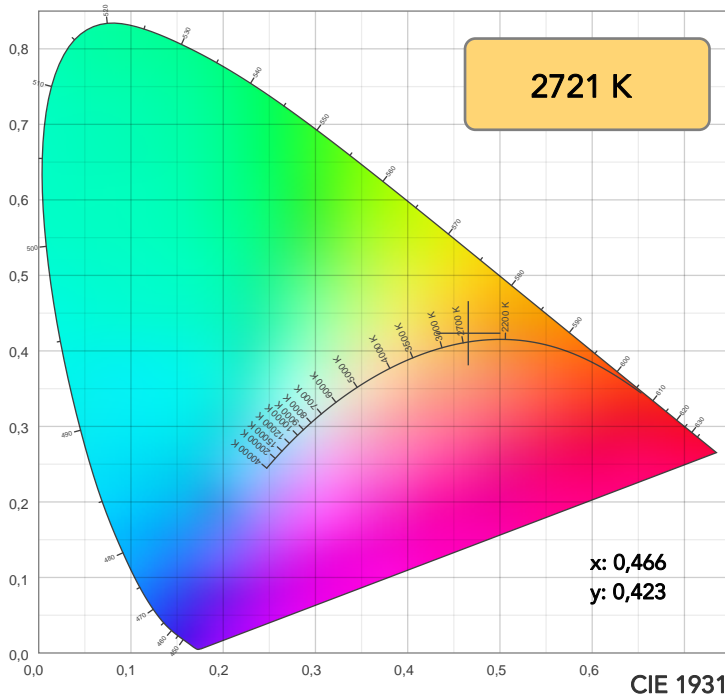
Date and time:

06/02/2020 17:31:58

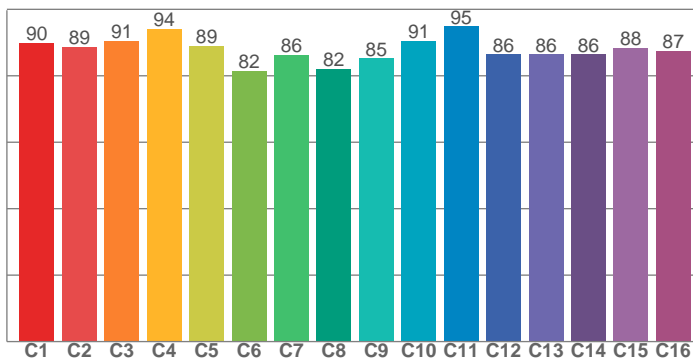


Spectra

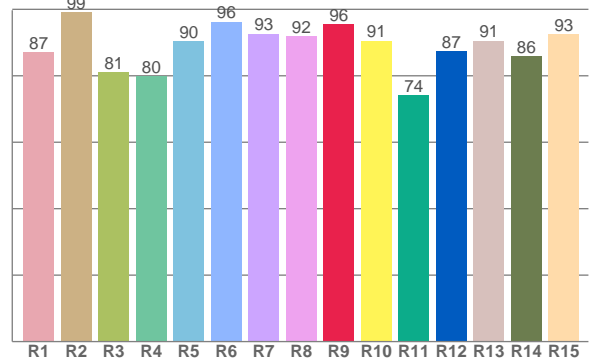




TM30: 88,8



CRI: 89,8 (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
87,1	99,1	81,1	79,9	90,4	96,3	92,6	92,0	95,6	90,5	74,1	87,4	90,6	85,9	92,6

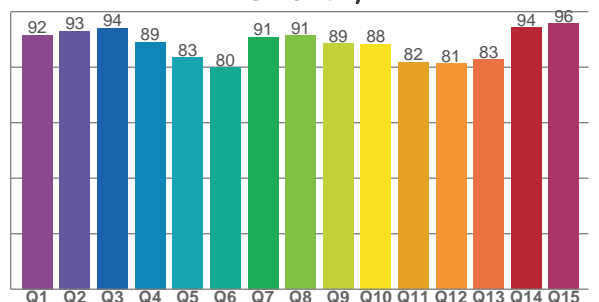
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
89,8	88,7	90,5	94,1	88,9	81,5	86,3	82,1	85,2	90,6	94,9	86,4	86,4	86,4	88,4	87,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,6	93,0	94,2	89,1	83,4	79,8	90,9	91,3	88,5	88,4	81,8	81,3	82,8	94,3	95,7

CQS: 87,1



## COLOR PARAMETERS

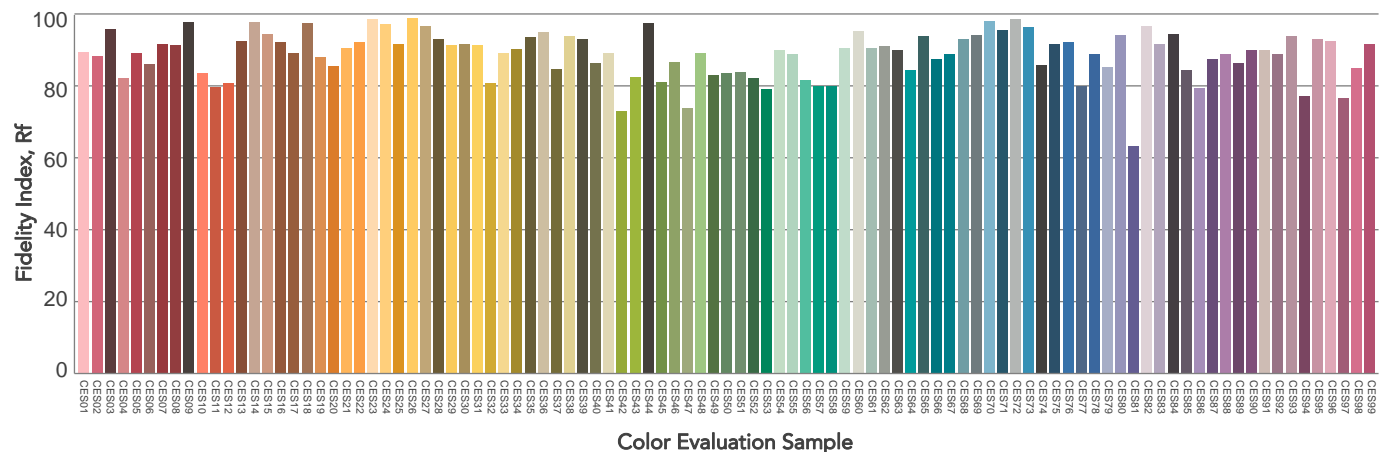
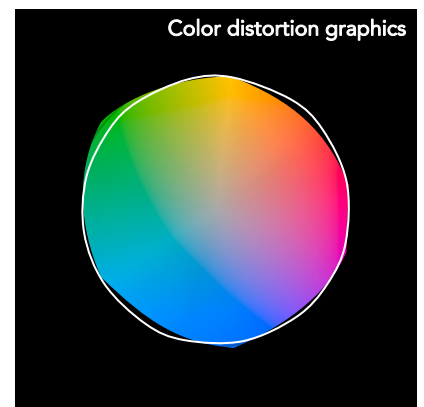
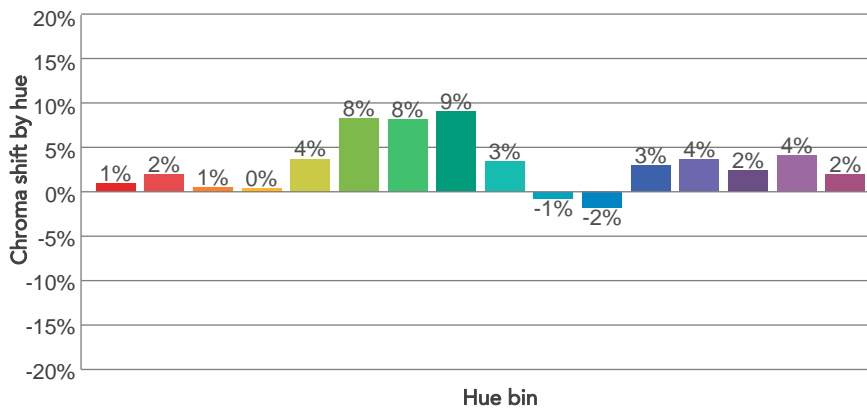
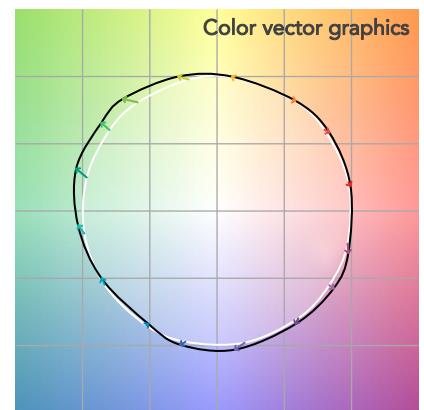
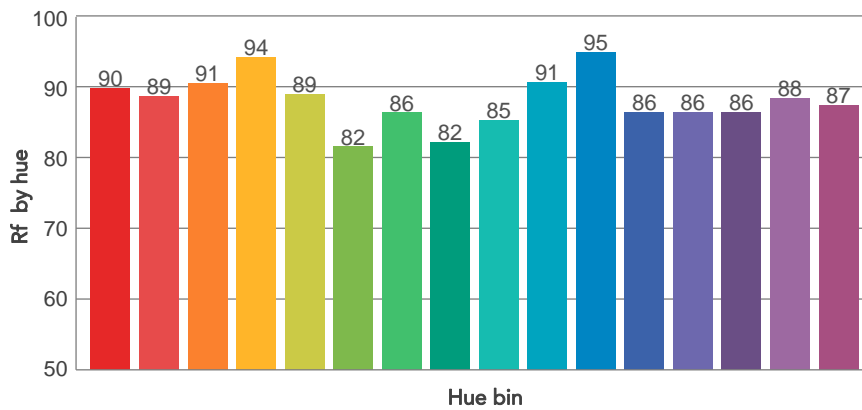
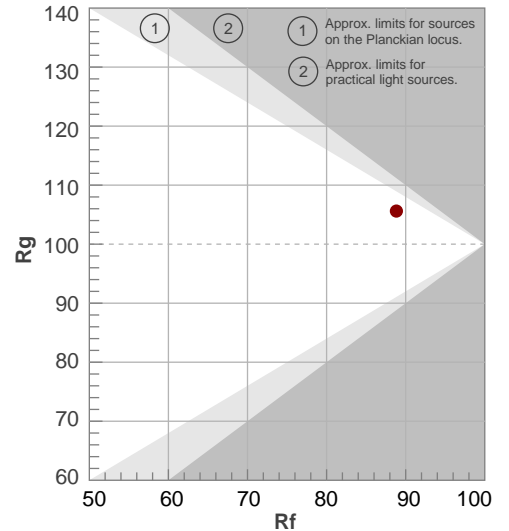
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2721 K	89,8	95,6	88,8	105,6	87,1	78	0,466	0,423	0,0042

# TM30 DETAILS

**Rf 88,8**  
Fidelity index Rf

**Rg 105,6**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	90	1%	-3%
2	89	2%	-4%
3	91	1%	-2%
4	94	0%	1%
5	89	4%	7%
6	82	8%	8%
7	86	8%	-1%
8	82	9%	-5%
9	85	3%	-7%
10	91	-1%	-5%
11	95	-2%	1%
12	86	3%	-3%
13	86	4%	-8%
14	86	2%	-4%
15	88	4%	0%
16	87	2%	-7%

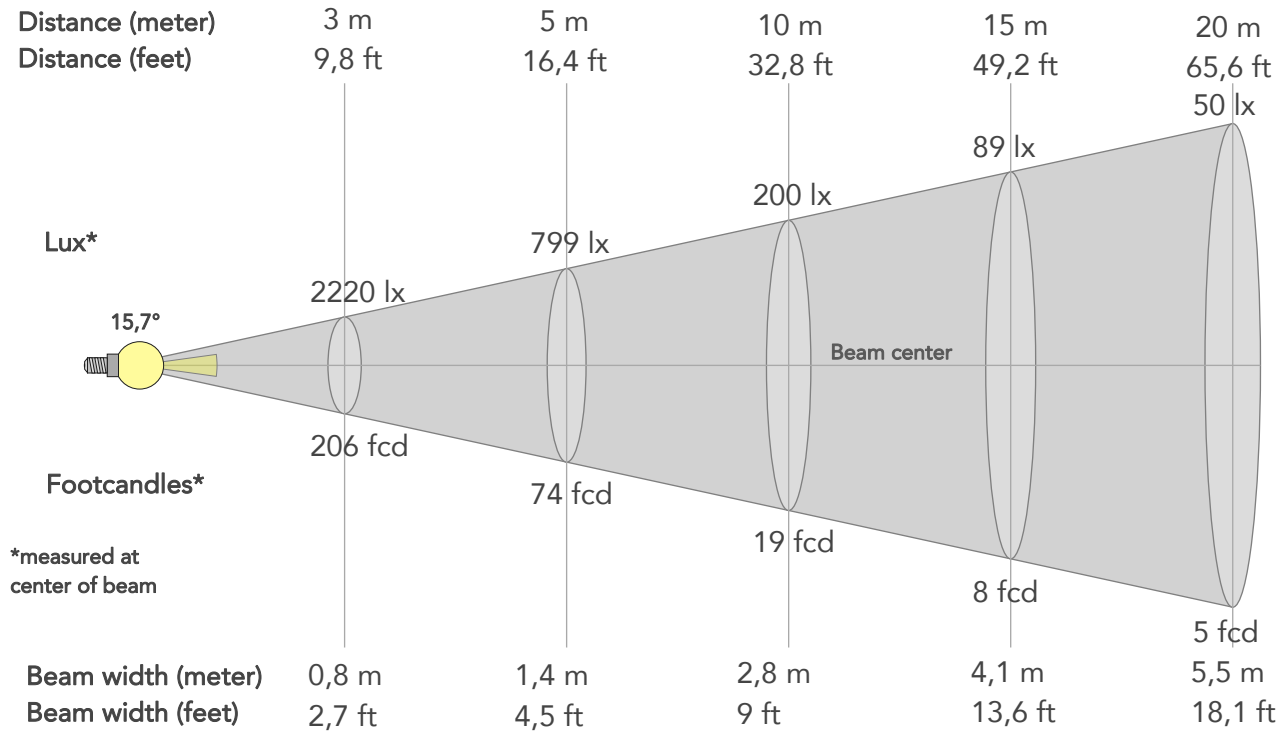




## BEAM DETAILS



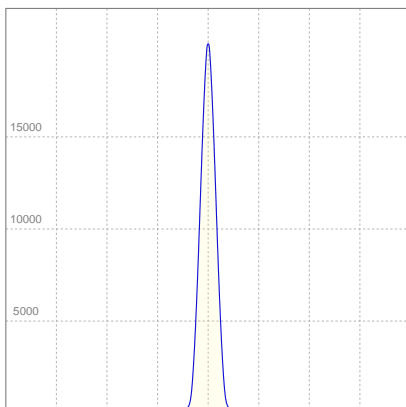
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,7°	27,3°	33,3°	99,0%	97,0%



### 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	19977lx	4994lx	2220lx	1249lx	799lx	355lx	200lx	89lx	50lx	32lx	22lx	12lx	8lx
Footcand.	1856fcd	464fcd	206fcd	116fcd	74fcd	33fcd	19fcd	8fcd	5fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,1m	5,5m	6,9m	8,3m	11m	13,8m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,8ft	9ft	13,6ft	18,1ft	22,6ft	27,1ft	36,1ft	45,2ft

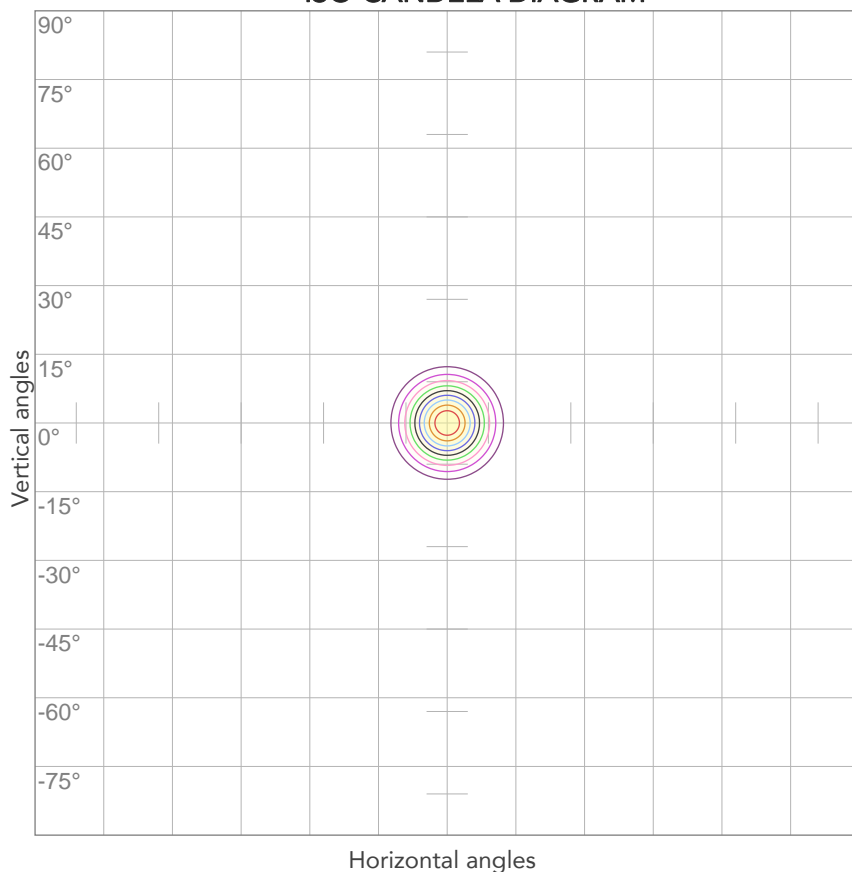
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,441A	92,8W	19lm/W

## ISO CANDELA DIAGRAM



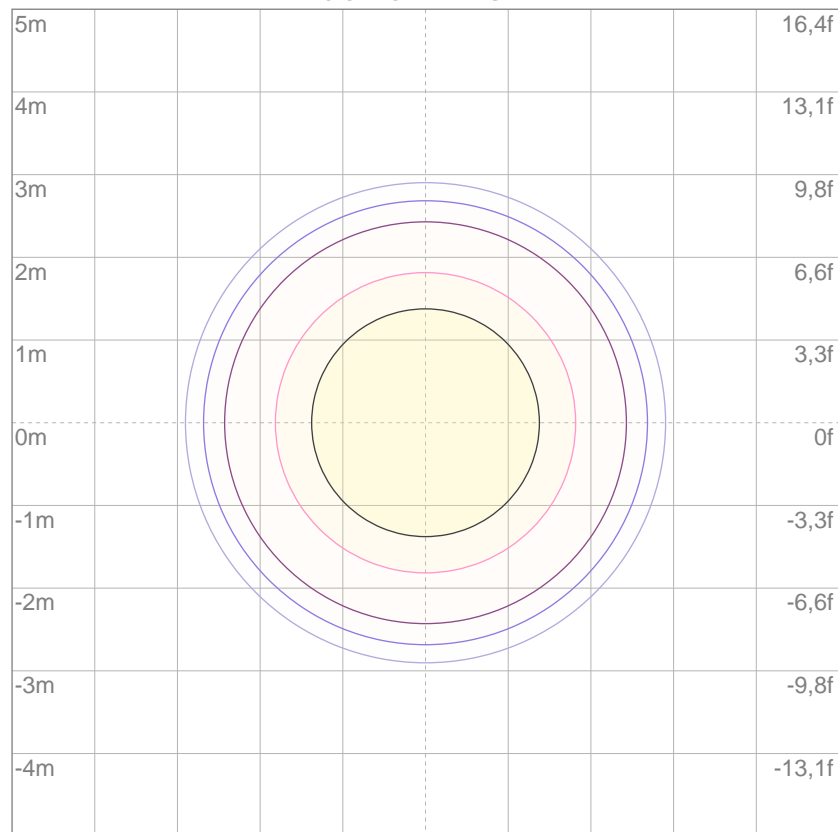
10%	1998 cd
20%	3995 cd
30%	5993 cd
40%	7991 cd
50%	9988 cd
60%	11986 cd
70%	13984 cd
80%	15981 cd

### Conditions:

Number of c-planes: 2

Candela at center: 19977 cd

## ISO LUX DIAGRAM



3%	5,99 lx
5%	9,99 lx
10%	20,0 lx
30%	59,9 lx
50%	99,9 lx

### Conditions:

Number of c-planes: 2

Lux at center: 200 lx

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



Total lumen output:

3207 lm

Total candela output:

3904 cd

Light quality:

CRI: 90,3

Color temperature:

3048 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

45°

Target:

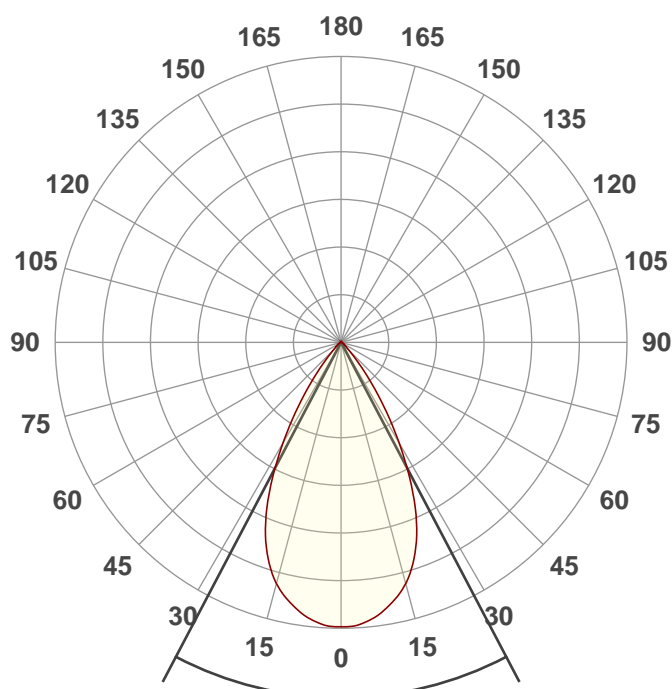
3200K

Operator:

Paolo Carvone

Date and time:

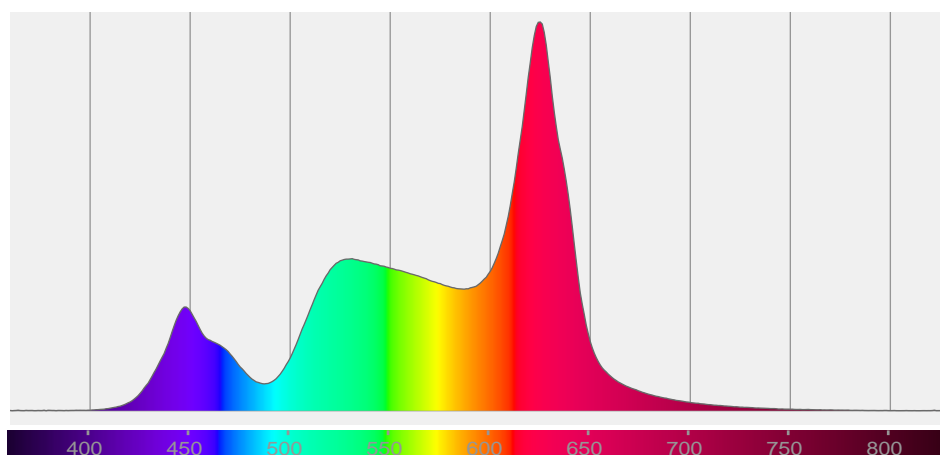
06/02/2020 16:47:46

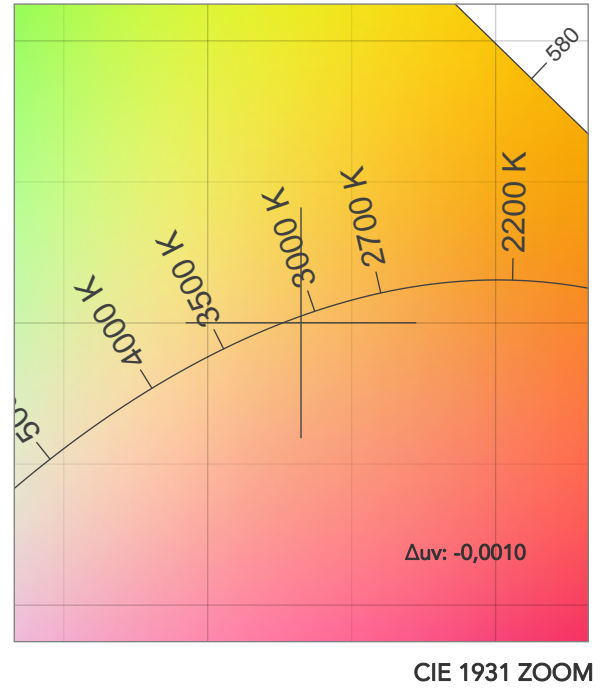
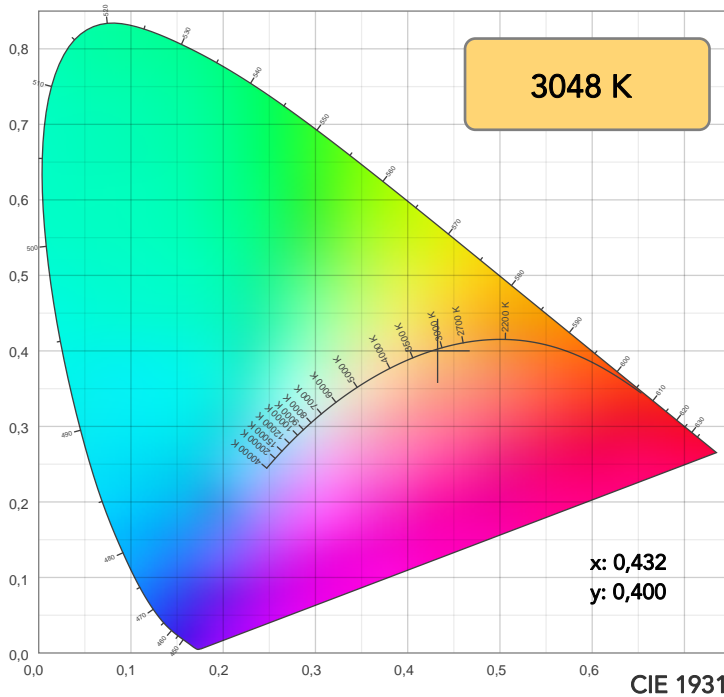


Beam angle

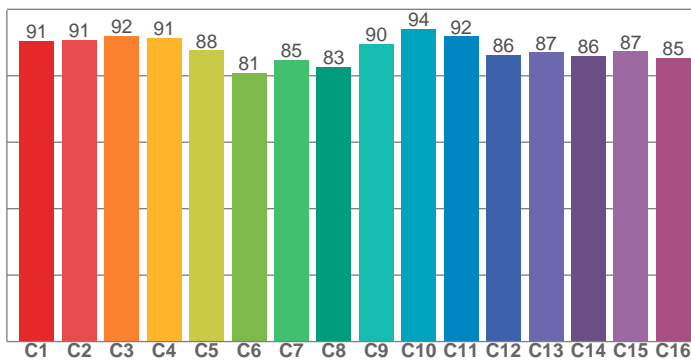
**55,4°**

Spectra

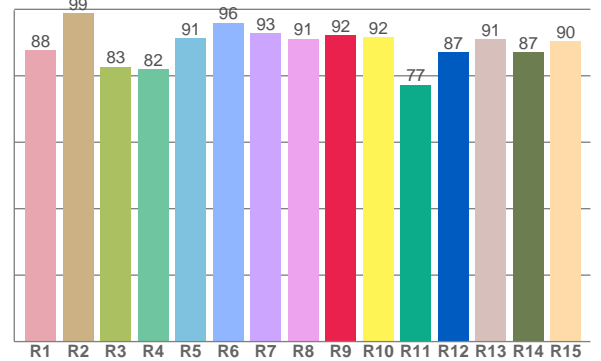




TM30: 88,7



CRI: 90,3 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
87,7	98,7	82,7	81,9	91,2	96,0	92,8	91,1	92,1	91,7	77,3	87,2	91,0	87,0	90,4

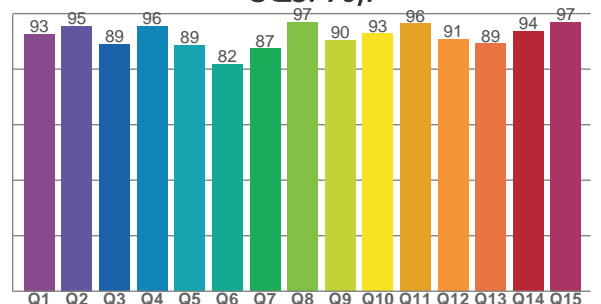
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90,5	90,8	92,0	91,5	87,6	80,8	84,8	82,7	89,6	94,1	91,8	86,2	87,1	86,1	87,3	85,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,6	95,5	88,9	95,5	88,6	81,9	87,4	97,0	90,4	92,8	96,4	90,9	89,3	93,6	96,9

CQS: 90,7



## COLOR PARAMETERS

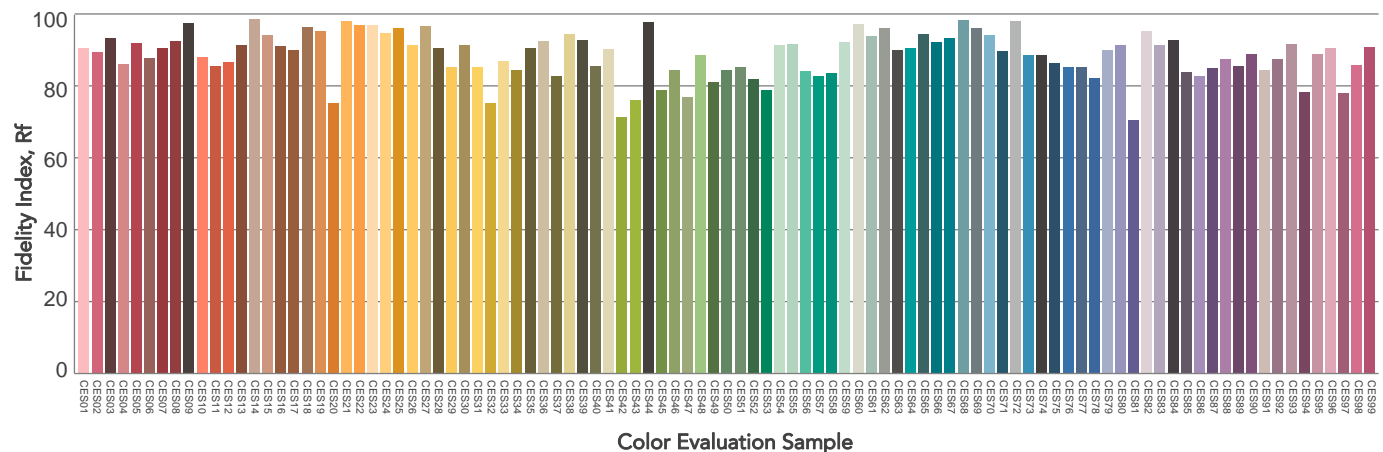
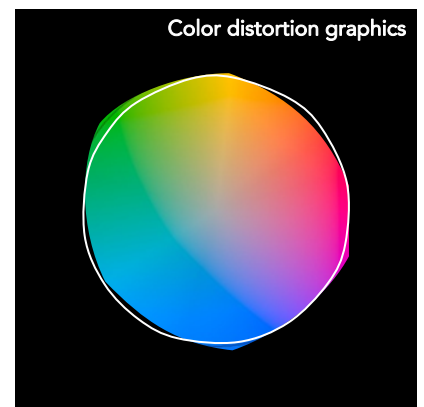
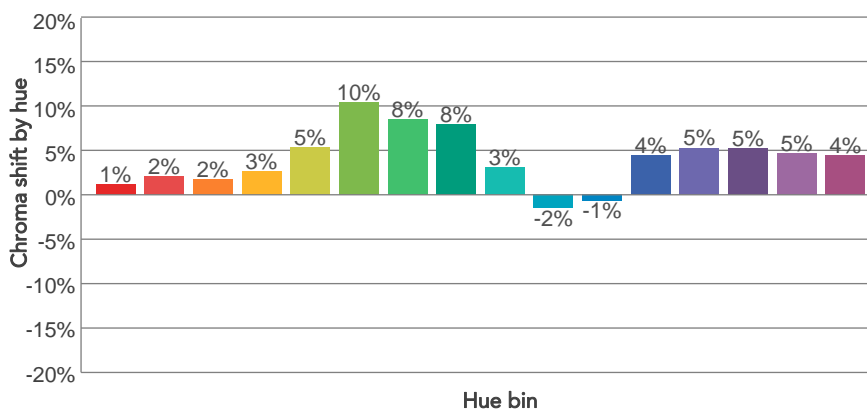
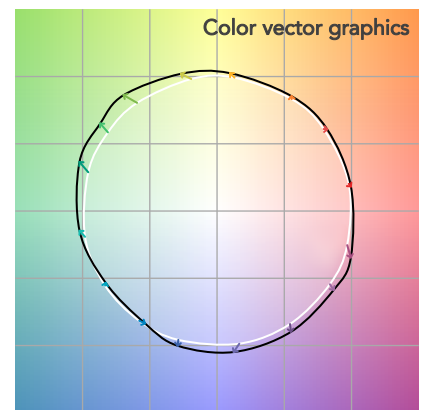
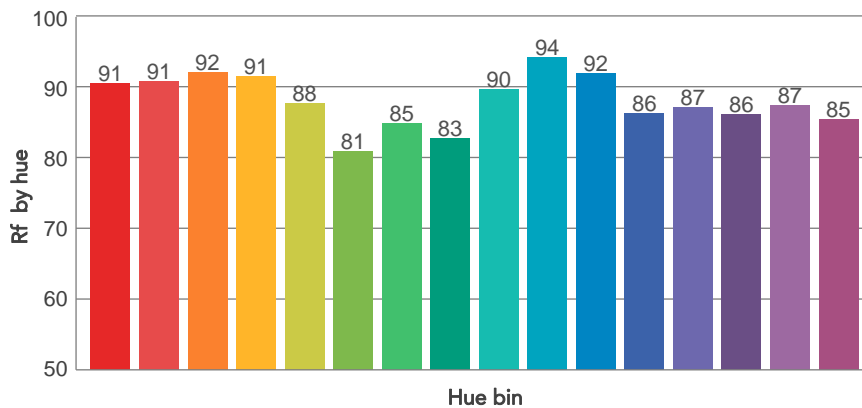
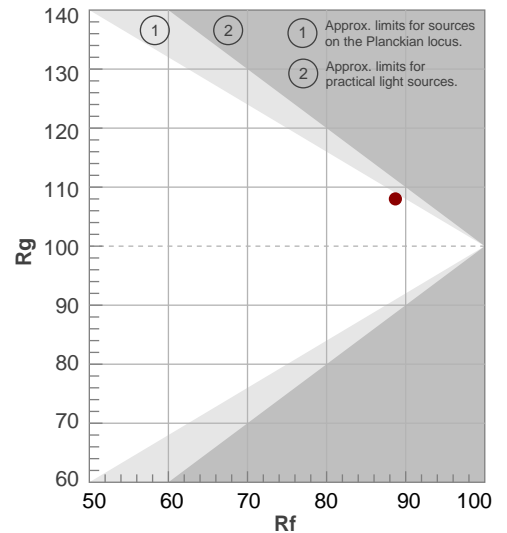
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3048 K	90,3	92,1	88,7	108,0	90,7	80	0,432	0,400	-0,0010

# TM30 DETAILS

**Rf 88,7**  
Fidelity index Rf

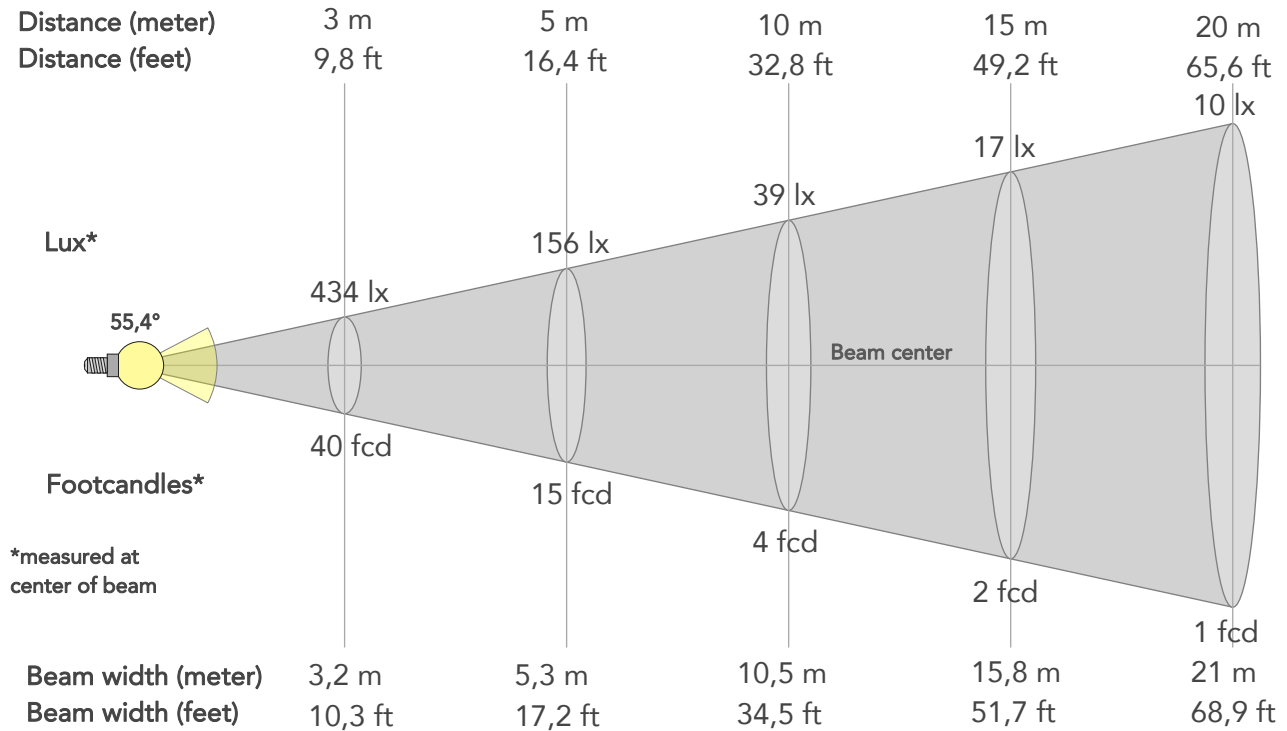
**Rg 108,0**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	1%	-2%
2	91	2%	-2%
3	92	2%	1%
4	91	3%	4%
5	88	5%	7%
6	81	10%	5%
7	85	8%	-2%
8	83	8%	-6%
9	90	3%	-5%
10	94	-2%	-1%
11	92	-1%	5%
12	86	4%	0%
13	87	5%	-5%
14	86	5%	-3%
15	87	5%	-2%
16	85	4%	-8%



## BEAM DETAILS

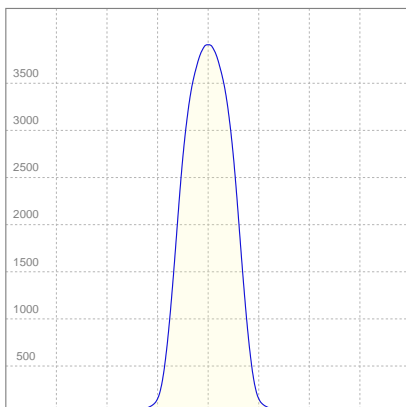
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,4°	80,3°	96,7°	97,8%	94,9%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3904lx	976lx	434lx	244lx	156lx	69lx	39lx	17lx	10lx	6lx	4lx	2lx	2lx
Footcand.	363fcd	91fcd	40fcd	23fcd	15fcd	6fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1,1m	2,1m	3,2m	4,2m	5,3m	7,9m	10,5m	15,8m	21m	26,3m	31,5m	42m	52,5m
Beam wid.	3,5ft	6,9ft	10,3ft	13,8ft	17,2ft	25,8ft	34,5ft	51,7ft	68,9ft	86,2ft	103,4ft	137,8ft	172,3ft

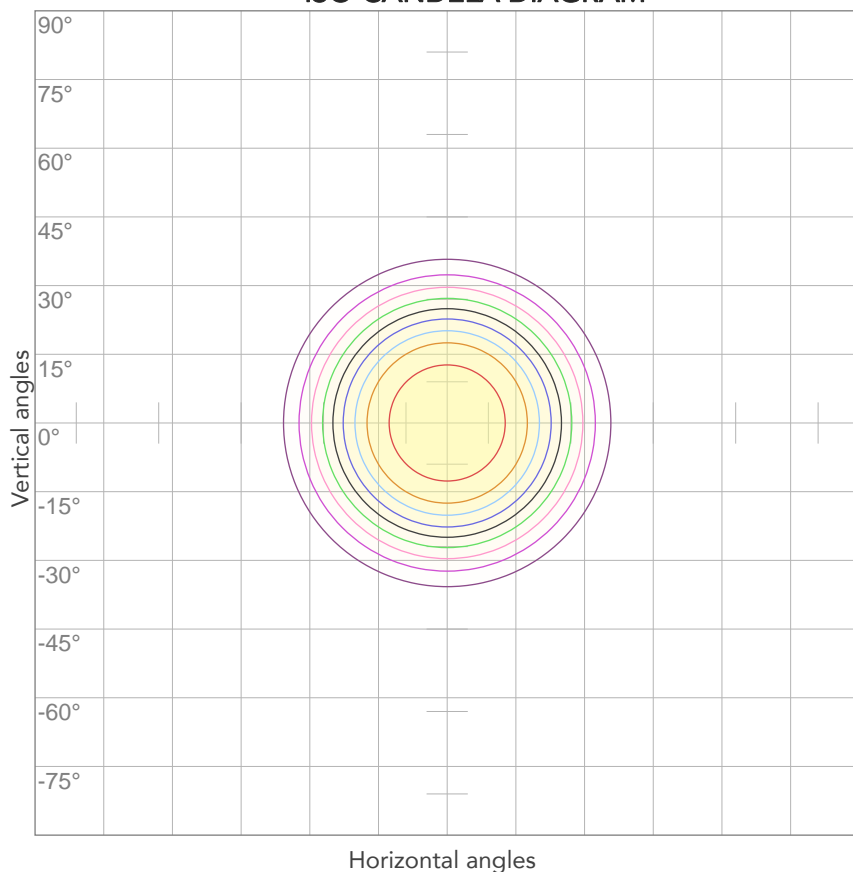
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,429A	90,4W	35lm/W

## ISO CANDELA DIAGRAM



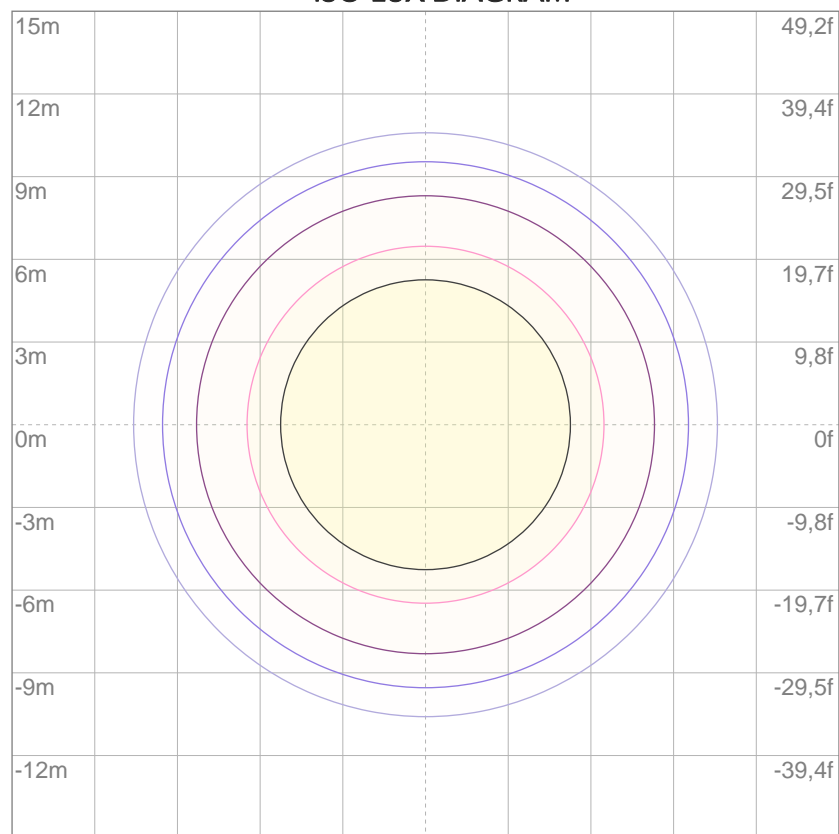
10%	390 cd
20%	781 cd
30%	1171 cd
40%	1561 cd
50%	1952 cd
60%	2342 cd
70%	2732 cd
80%	3123 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3904 cd

## ISO LUX DIAGRAM



3%	1,17 lx
5%	1,95 lx
10%	3,90 lx
30%	11,7 lx
50%	19,5 lx

### Conditions:

Number of c-planes: 2

Lux at center: 39,0 lx

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



Total lumen output:

2938 lm

Total candela output:

10821 cd

Light quality:

CRI: 90,4

Color temperature:

3047 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

30°

Target:

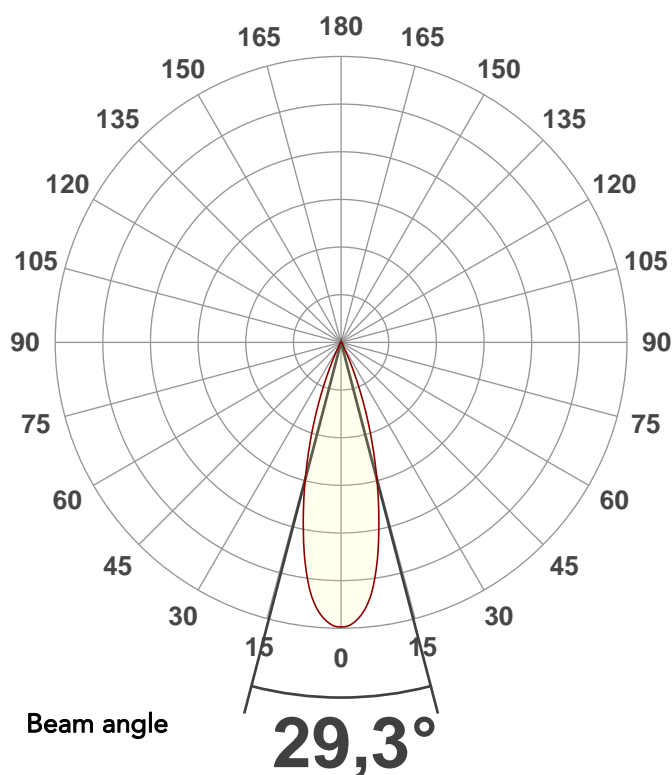
3200K

Operator:

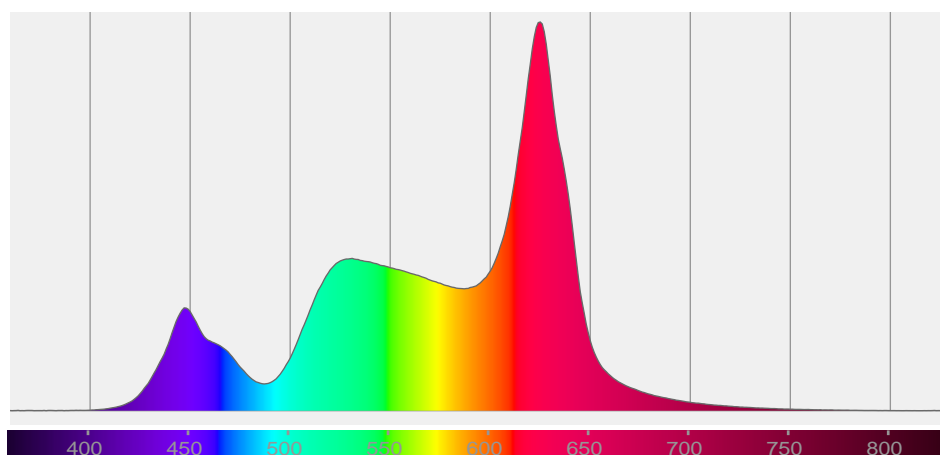
Paolo Carvone

Date and time:

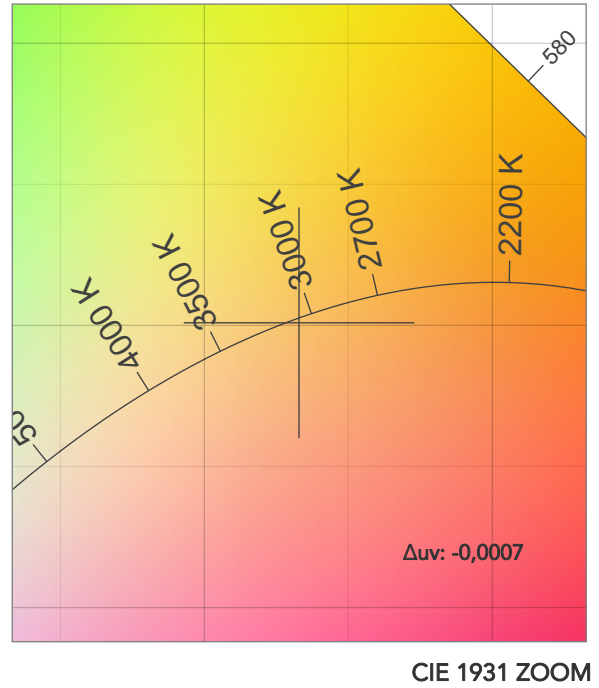
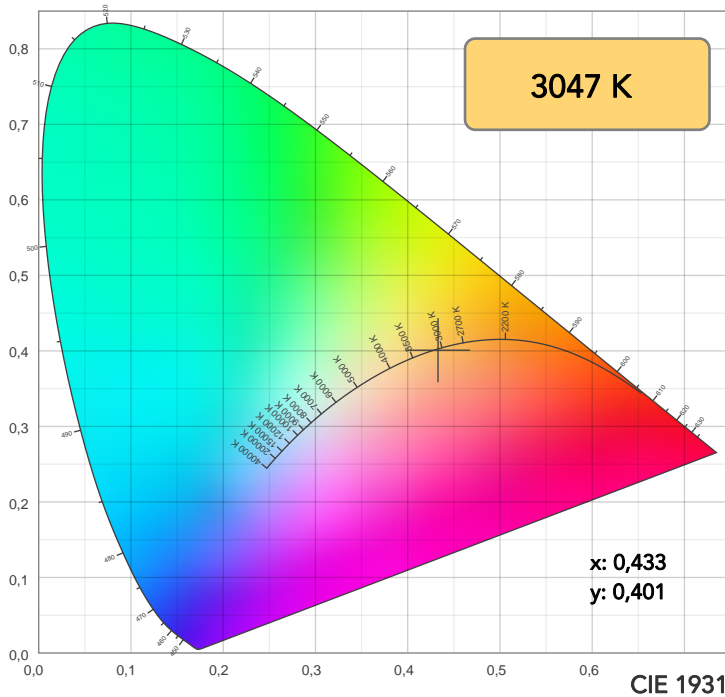
06/02/2020 16:59:58



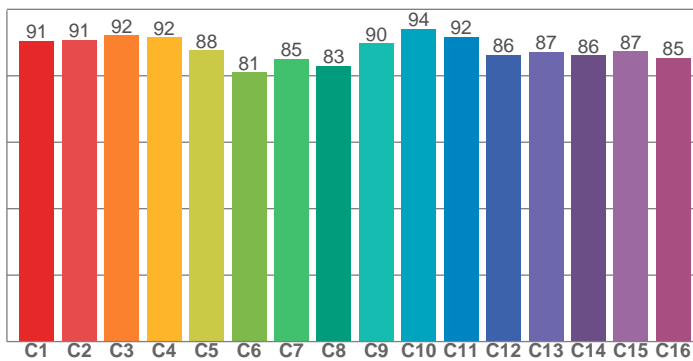
Spectra



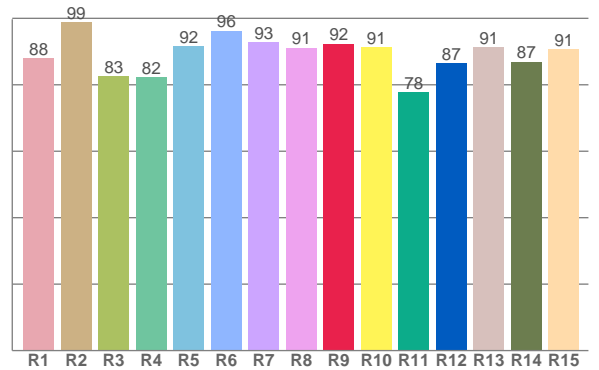




TM30: 88,8



CRI: 90,4 (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
88,0	98,7	82,6	82,2	91,5	96,3	92,7	91,2	92,4	91,2	77,7	86,6	91,2	86,9	90,7

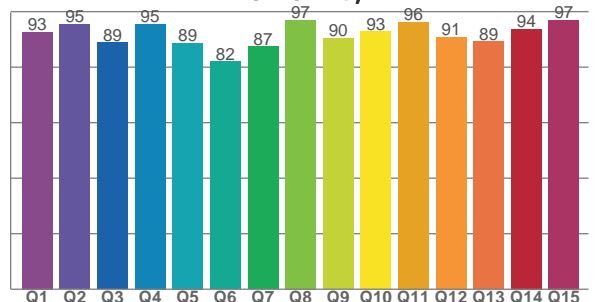
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90,6	90,8	92,1	91,6	87,7	81,1	85,1	82,9	89,8	94,2	91,7	86,3	87,1	86,1	87,4	85,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,7	95,4	88,9	95,5	88,7	82,0	87,5	96,9	90,4	92,8	96,2	90,8	89,2	93,8	96,9

CQS: 90,7



## COLOR PARAMETERS

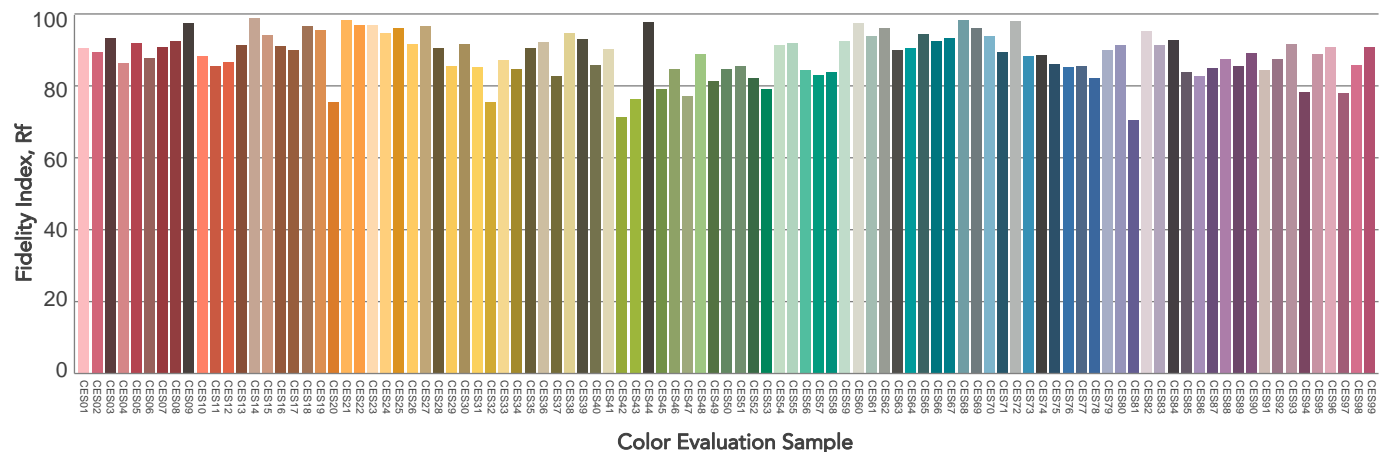
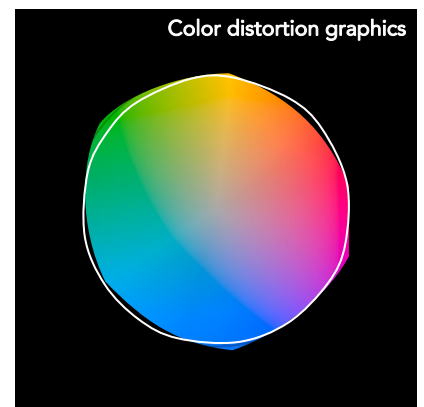
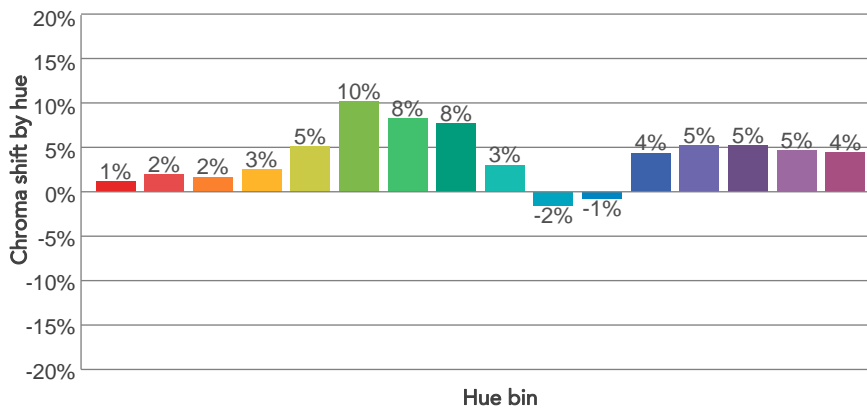
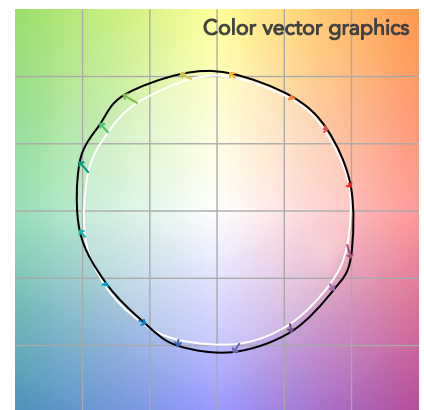
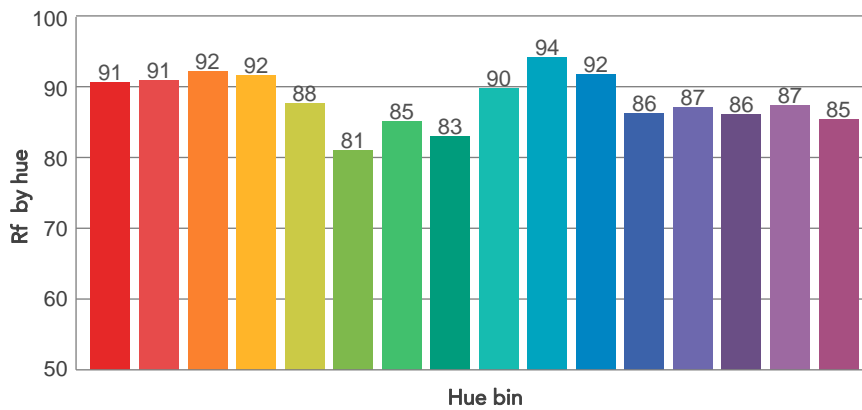
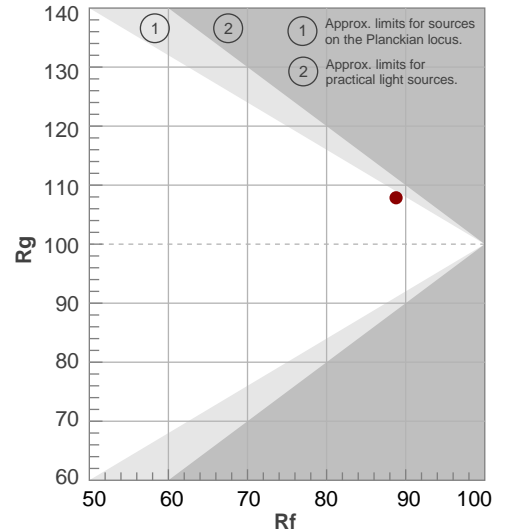
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3047 K	90,4	92,4	88,8	107,9	90,7	80	0,433	0,401	-0,0007

# TM30 DETAILS

**Rf 88,8**  
Fidelity index Rf

**Rg 107,9**  
Gammut index

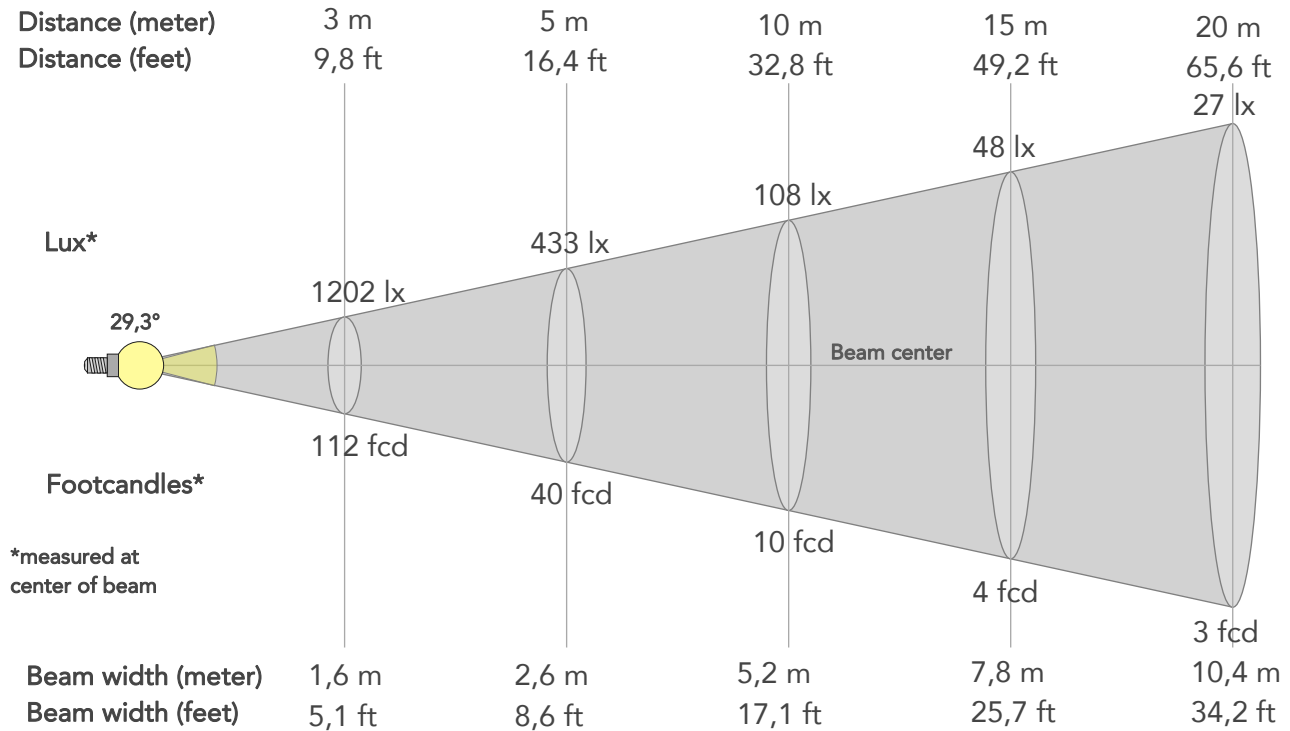
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	1%	-2%
2	91	2%	-2%
3	92	2%	1%
4	92	3%	4%
5	88	5%	7%
6	81	10%	5%
7	85	8%	-2%
8	83	8%	-6%
9	90	3%	-5%
10	94	-2%	-1%
11	92	-1%	5%
12	86	4%	0%
13	87	5%	-5%
14	86	5%	-3%
15	87	5%	-2%
16	85	4%	-8%



## BEAM DETAILS



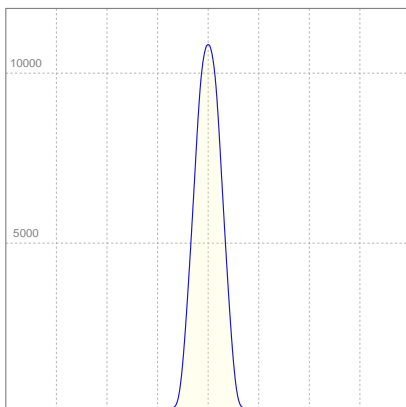
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,3°	47,6°	56,7°	98,2%	96,2%



### 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	10821lx	2705lx	1202lx	676lx	433lx	192lx	108lx	48lx	27lx	17lx	12lx	7lx	4lx
Footcand.	1005fcd	251fcd	112fcd	63fcd	40fcd	18fcd	10fcd	4fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1m	1,6m	2,1m	2,6m	3,9m	5,2m	7,8m	10,4m	13m	15,7m	20,9m	26,1m
Beam wid.	1,7ft	3,4ft	5,1ft	6,8ft	8,6ft	12,8ft	17,1ft	25,7ft	34,2ft	42,8ft	51,4ft	68,5ft	85,6ft

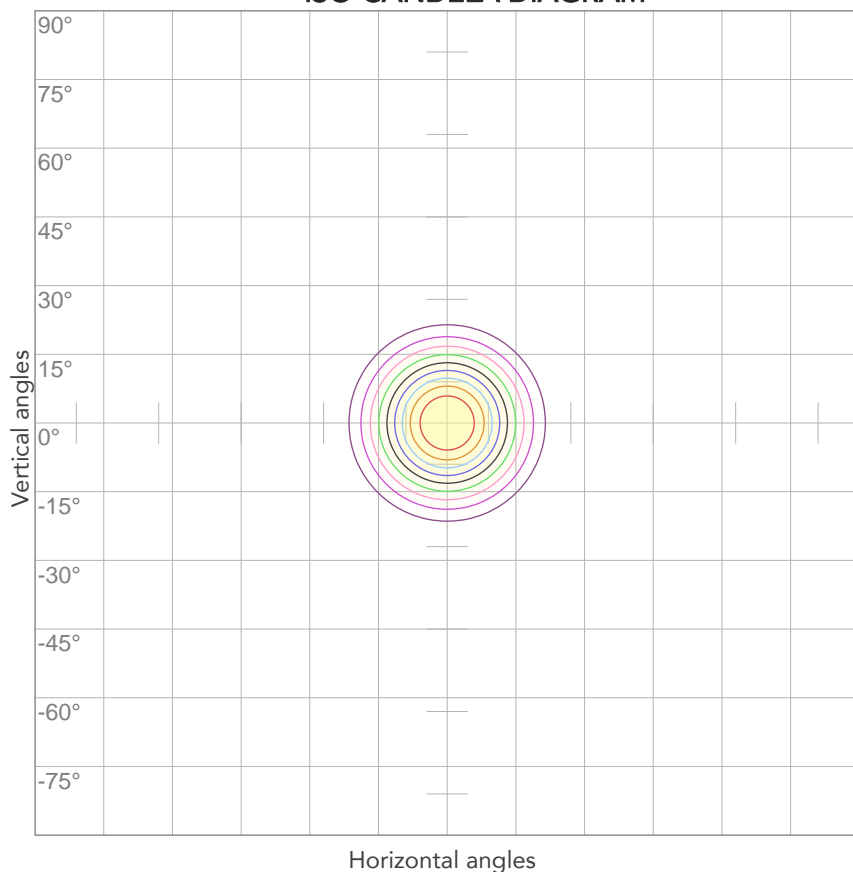
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,424A	89,2W	33lm/W

## ISO CANDELA DIAGRAM



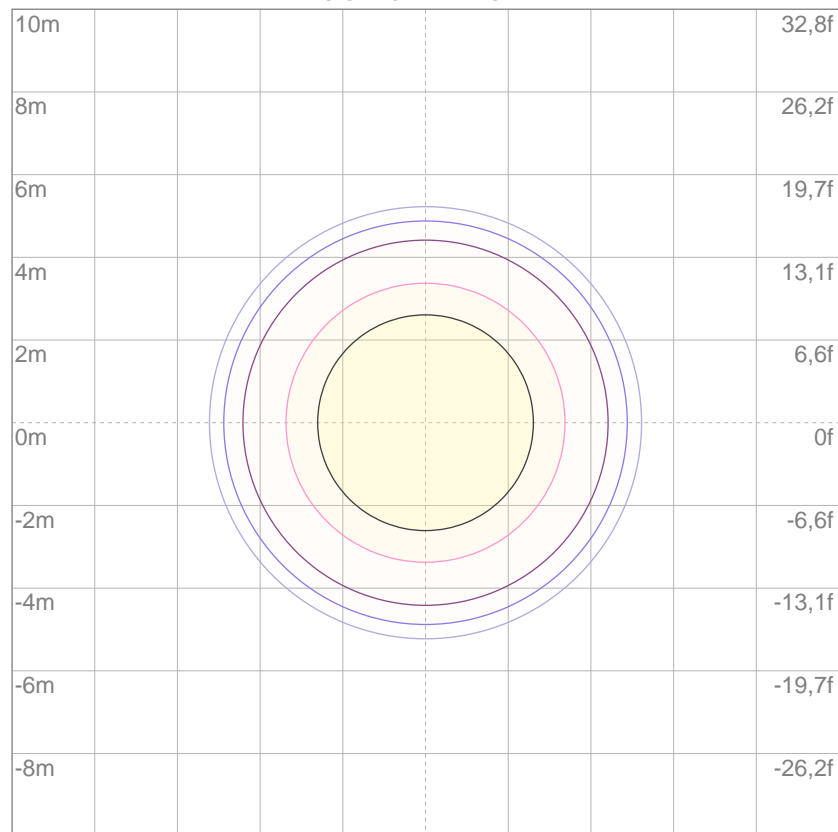
10%	1082 cd
20%	2164 cd
30%	3246 cd
40%	4329 cd
50%	5411 cd
60%	6493 cd
70%	7575 cd
80%	8657 cd

### Conditions:

Number of c-planes: 2

Candela at center: 10821 cd

## ISO LUX DIAGRAM



3%	3,25 lx
5%	5,41 lx
10%	10,8 lx
30%	32,5 lx
50%	54,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 108 lx

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



Total lumen output:

1724 lm

Total candela output:

19117 cd

Light quality:

CRI: 91,2

Color temperature:

3078 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

15°

Target:

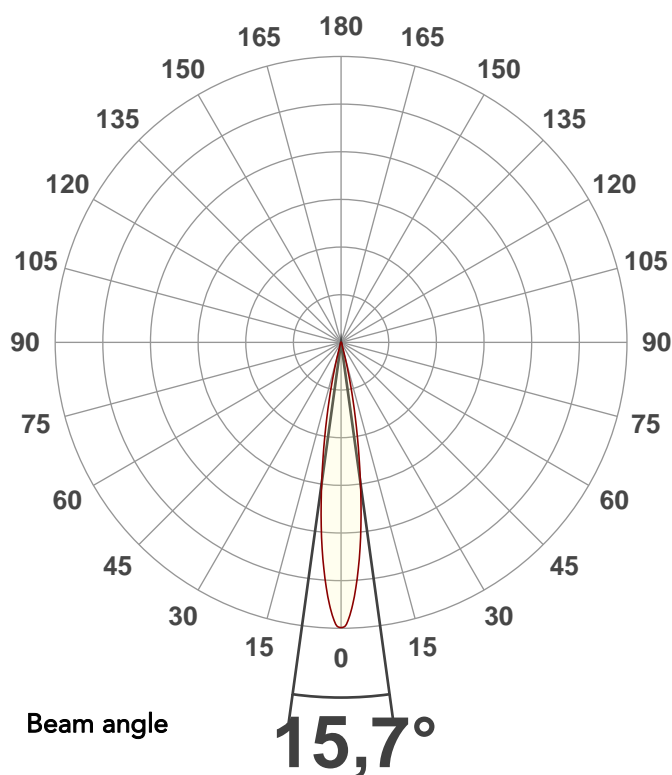
3200K

Operator:

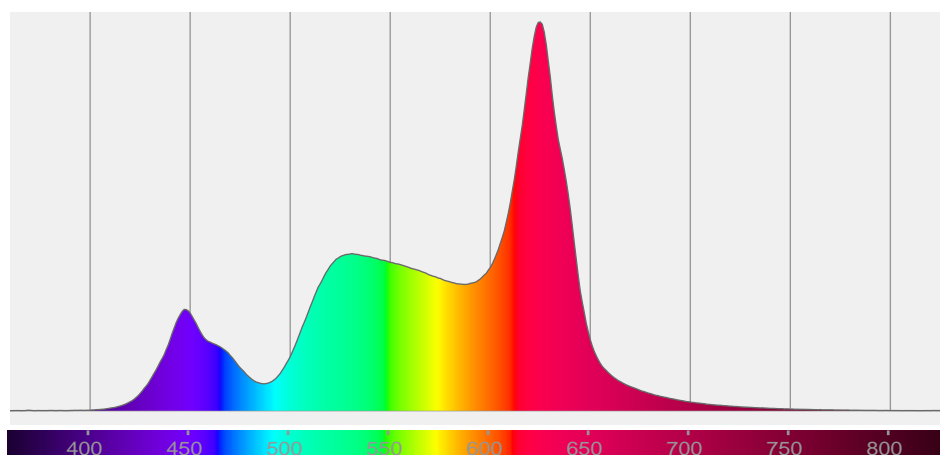
Paolo Carvone

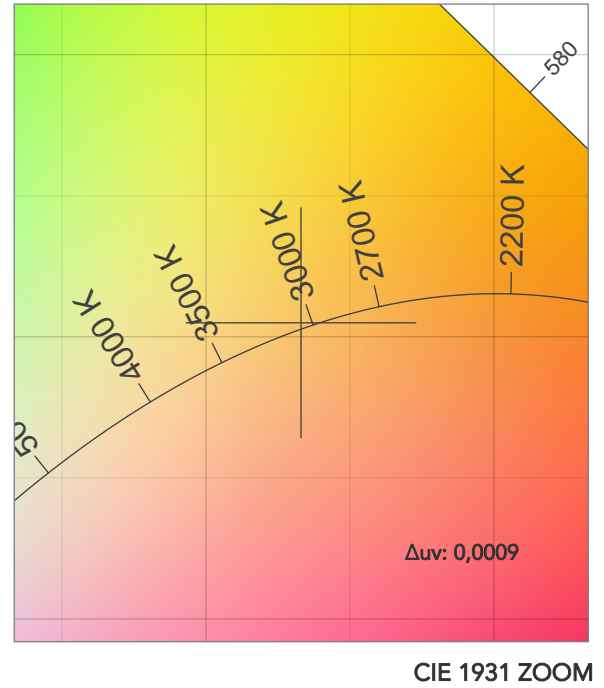
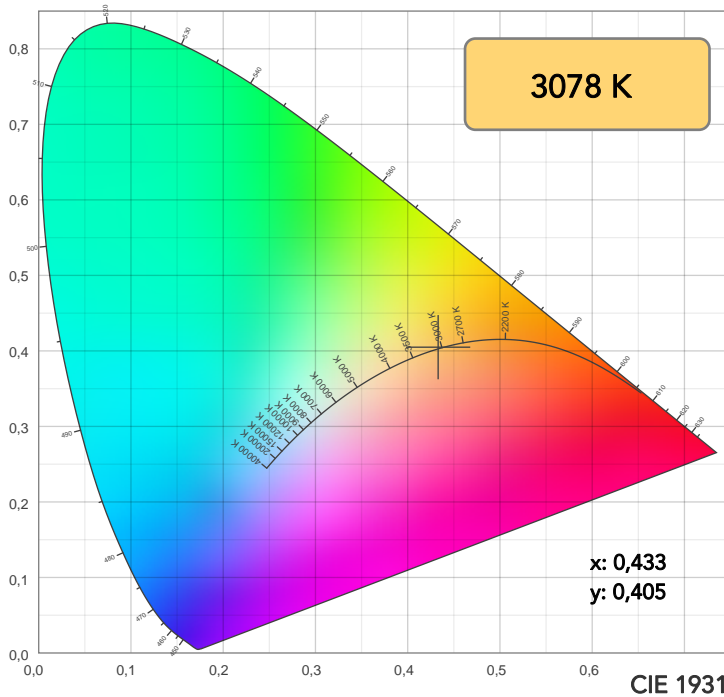
Date and time:

06/02/2020 17:39:28

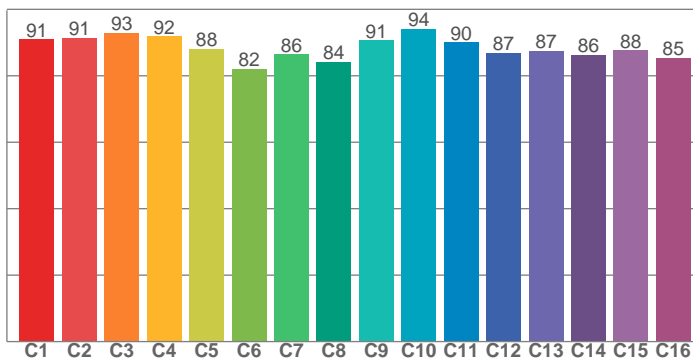


Spectra

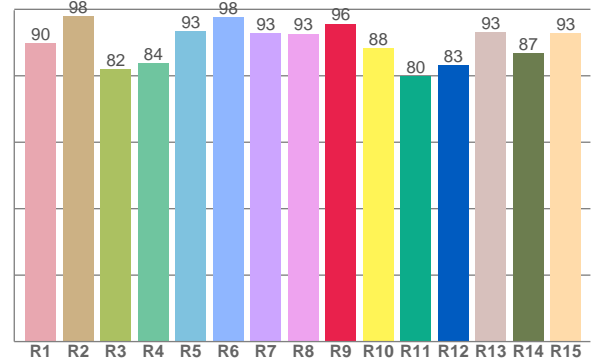




TM30: 89,2



CRI: 91,2 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
89,8	97,9	82,0	83,7	93,4	97,6	92,7	92,6	95,6	88,4	79,8	83,2	93,1	86,8	92,7

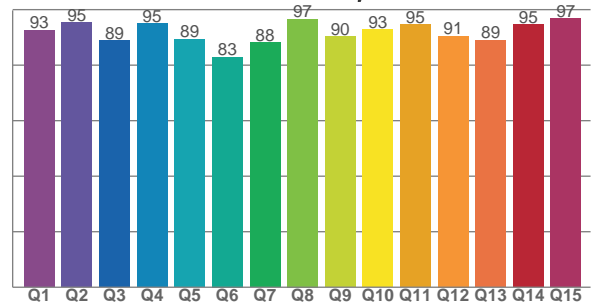
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90,9	91,5	92,9	91,8	88,2	82,2	86,4	84,2	90,7	94,0	90,0	87,0	87,5	86,3	87,6	85,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,5	95,4	88,8	94,9	89,3	82,9	88,1	96,7	90,3	92,9	94,7	90,6	89,0	94,7	96,7

CQS: 90,9



## COLOR PARAMETERS

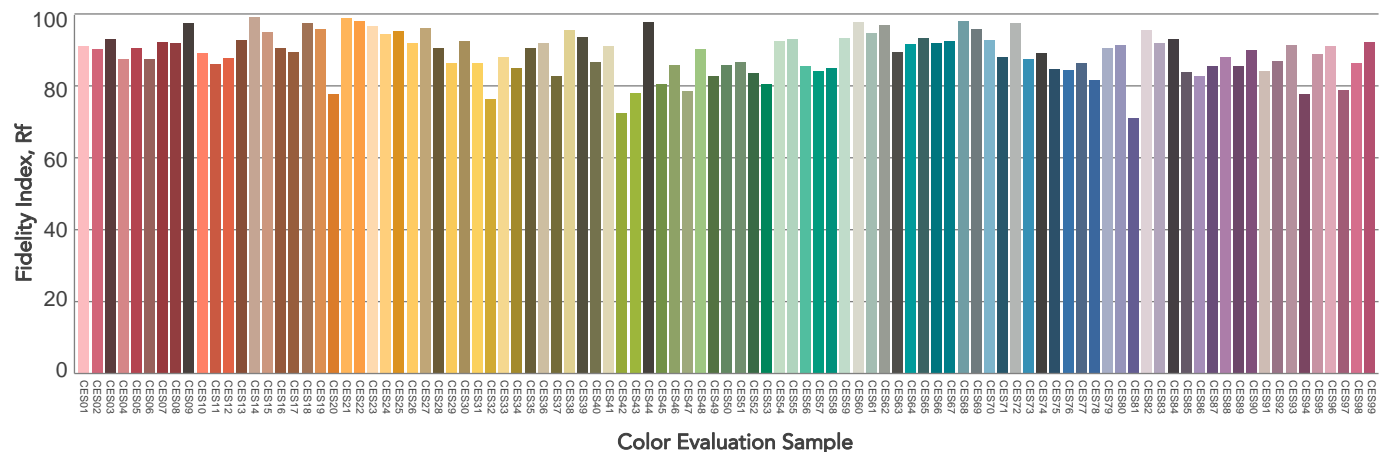
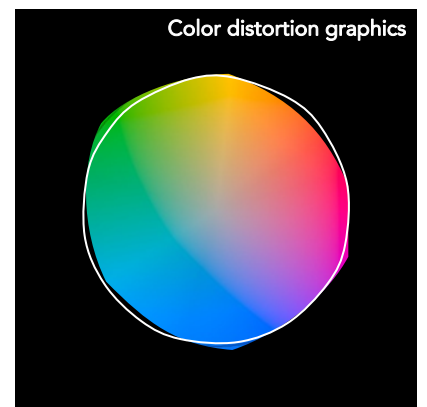
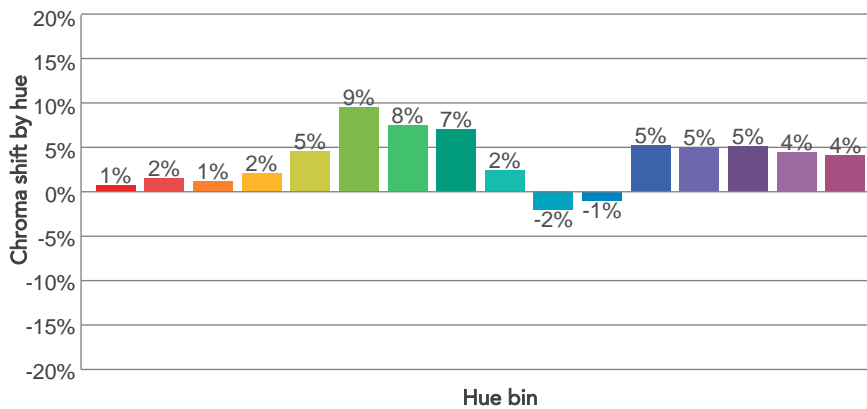
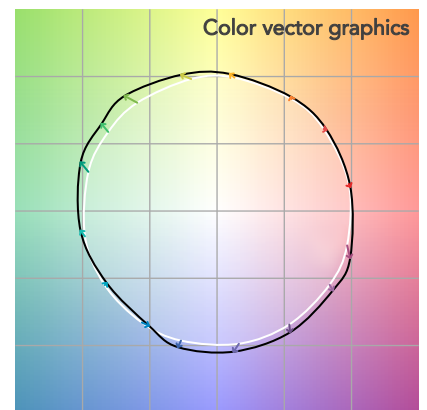
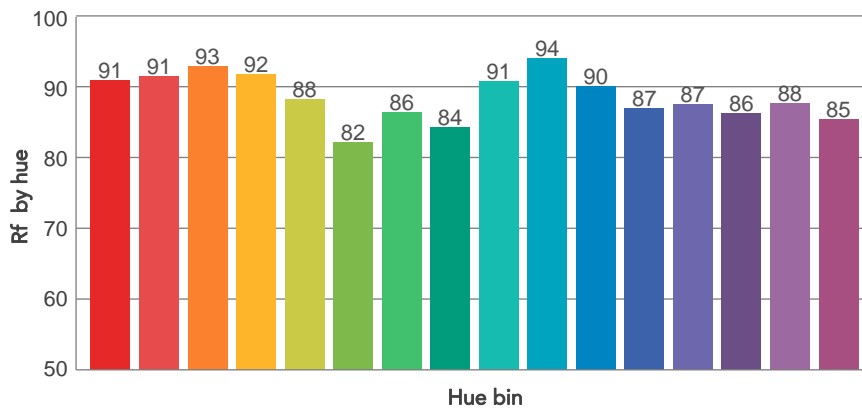
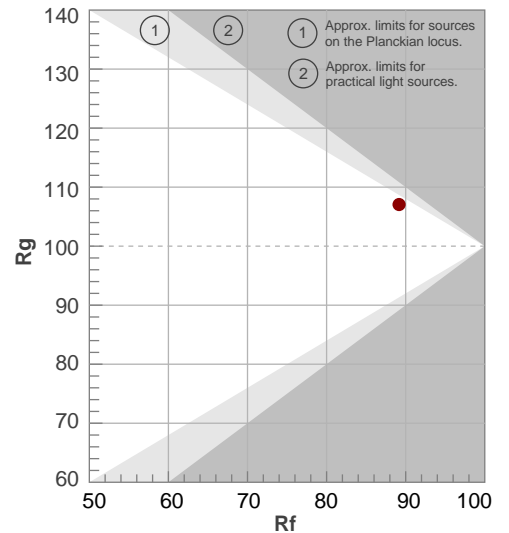
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3078 K	91,2	95,6	89,2	107,1	90,9	81	0,433	0,405	0,0009

# TM30 DETAILS

**Rf 89,2**  
Fidelity index Rf

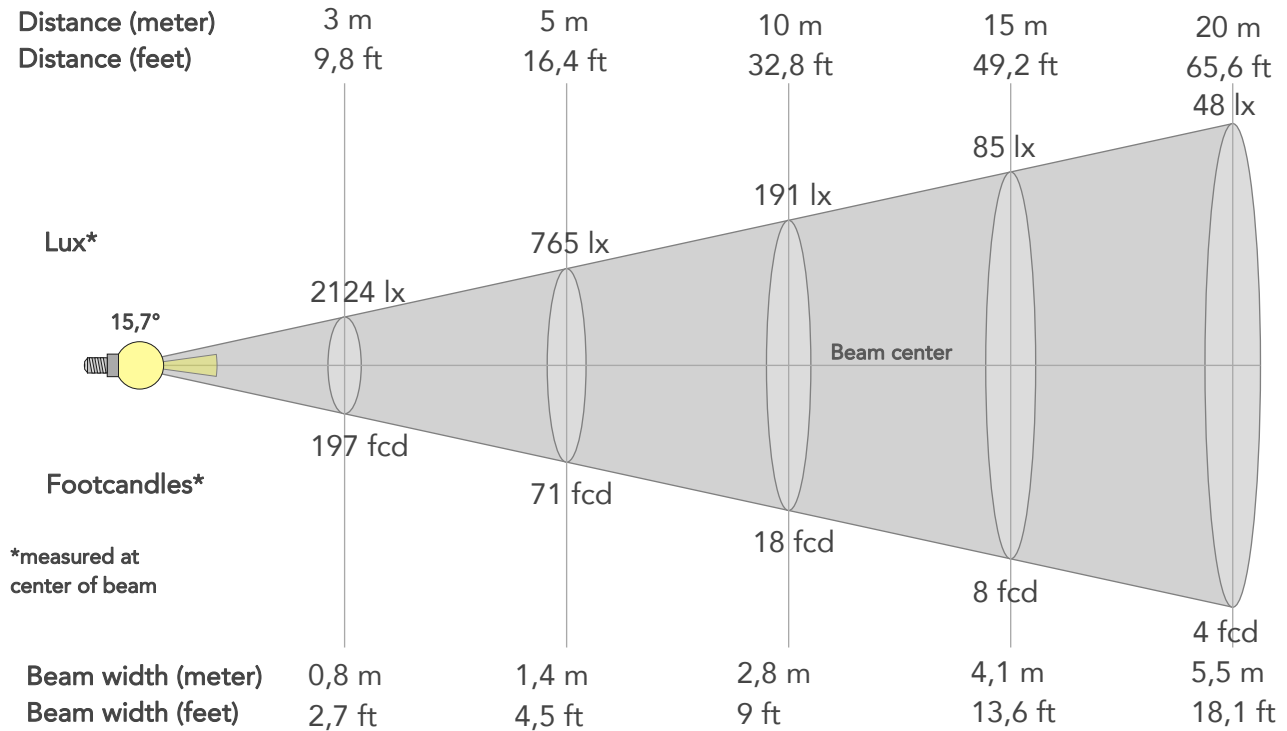
**Rg 107,1**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	1%	-2%
2	91	2%	-2%
3	93	1%	1%
4	92	2%	4%
5	88	5%	7%
6	82	9%	5%
7	86	8%	-2%
8	84	7%	-6%
9	91	2%	-5%
10	94	-2%	-1%
11	90	-1%	6%
12	87	5%	-1%
13	87	5%	-5%
14	86	5%	-3%
15	88	4%	-2%
16	85	4%	-9%



## BEAM DETAILS

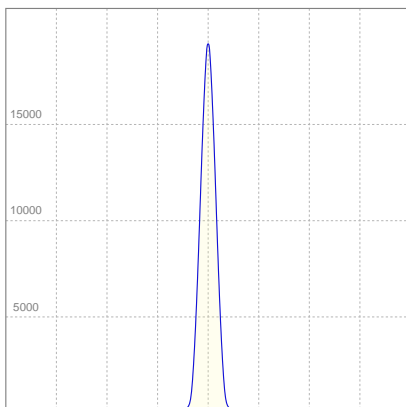
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,7°	27,4°	33,5°	98,1%	95,5%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	19117lx	4779lx	2124lx	1195lx	765lx	340lx	191lx	85lx	48lx	31lx	21lx	12lx	8lx
Footcand.	1776fcd	444fcd	197fcd	111fcd	71fcd	32fcd	18fcd	8fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,1m	5,5m	6,9m	8,3m	11m	13,8m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,8ft	9ft	13,6ft	18,1ft	22,6ft	27,1ft	36,2ft	45,2ft

### LINEAR DISTRIBUTION DIAGRAM

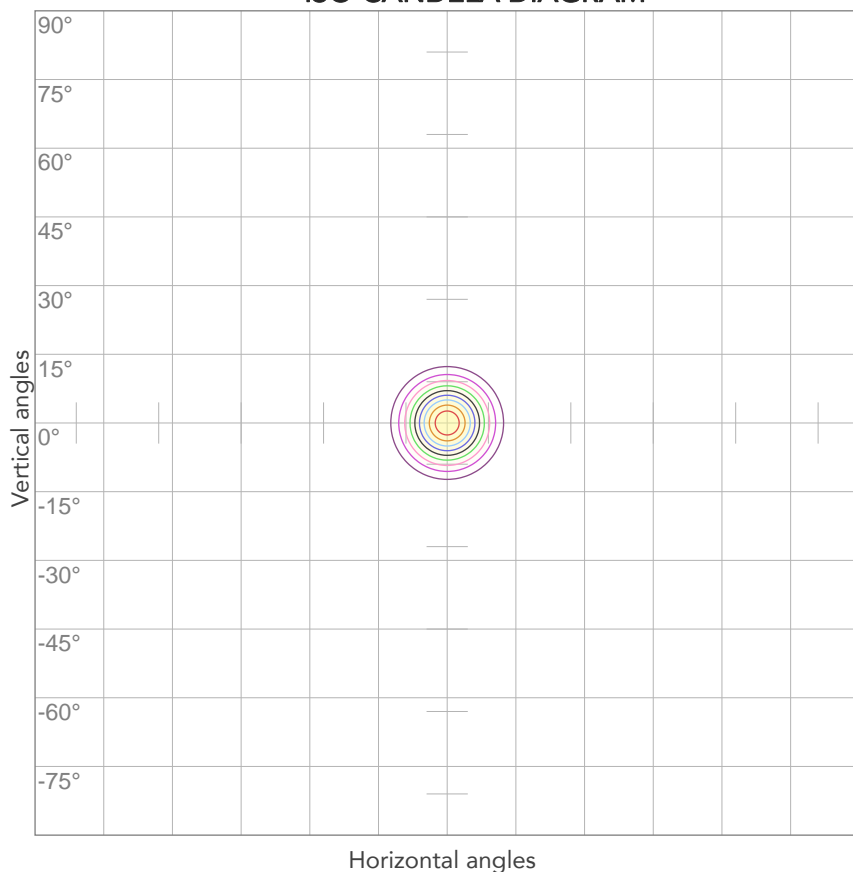


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,429A	89,7W	19lm/W



## ISO CANDELA DIAGRAM



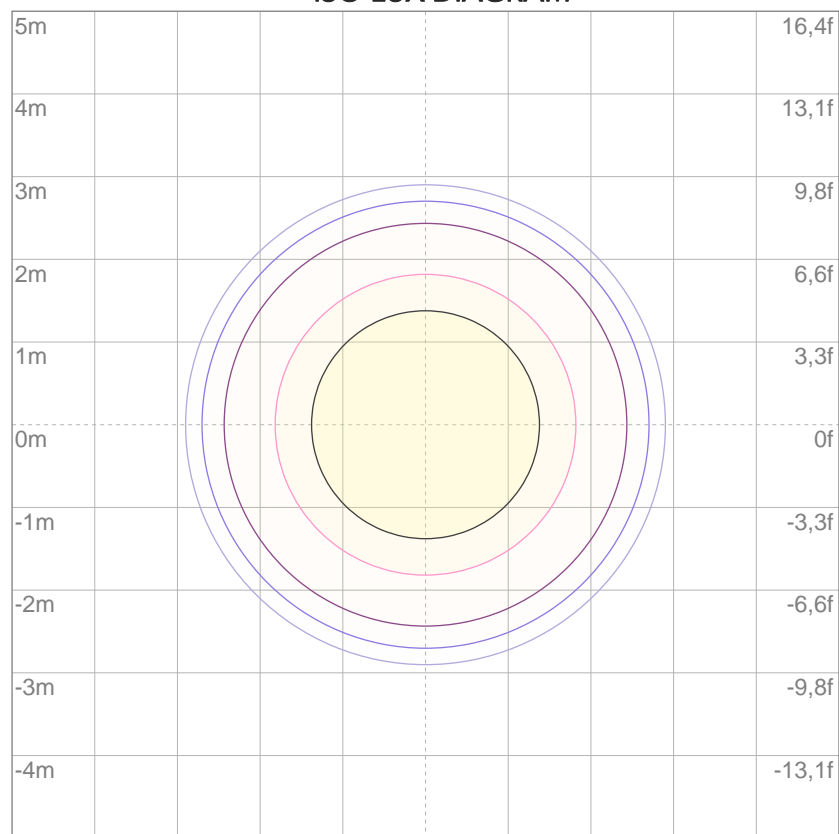
10%	1912 cd
20%	3823 cd
30%	5735 cd
40%	7647 cd
50%	9558 cd
60%	11470 cd
70%	13382 cd
80%	15294 cd

### Conditions:

Number of c-planes: 2

Candela at center: 19117 cd

## ISO LUX DIAGRAM



3%	5,74 lx
5%	9,56 lx
10%	19,1 lx
30%	57,4 lx
50%	95,6 lx

### Conditions:

Number of c-planes: 2

Lux at center: 191 lx

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



Total lumen output:

3065 lm

Total candela output:

3749 cd

Light quality:

CRI: 91,7

Color temperature:

3811 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

45°

Target:

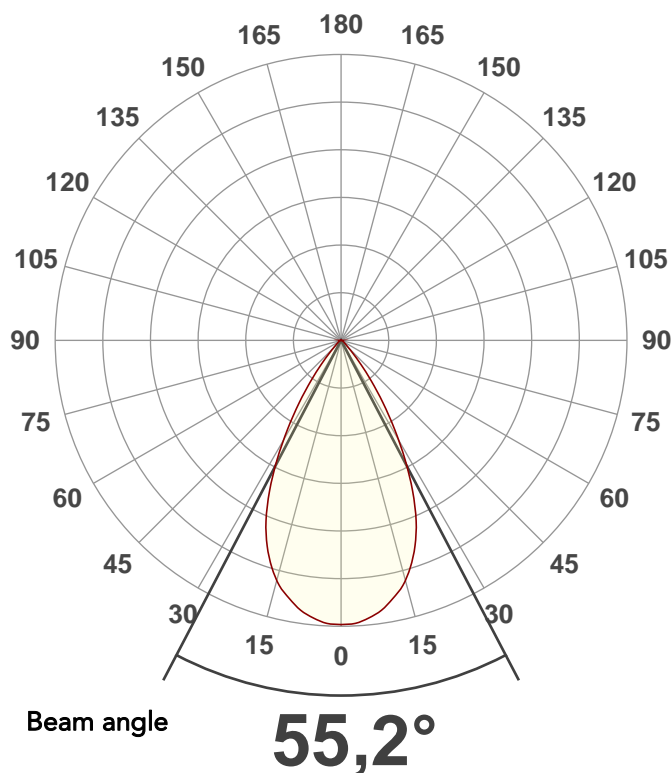
4000K

Operator:

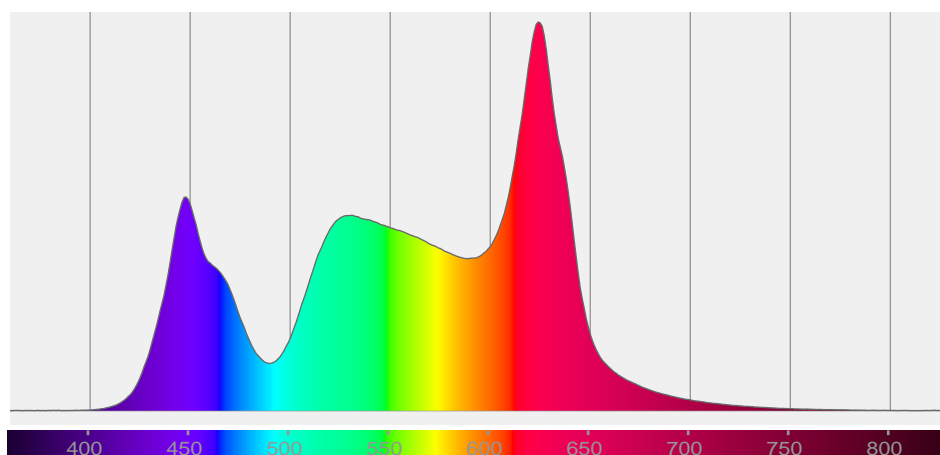
Paolo Carvone

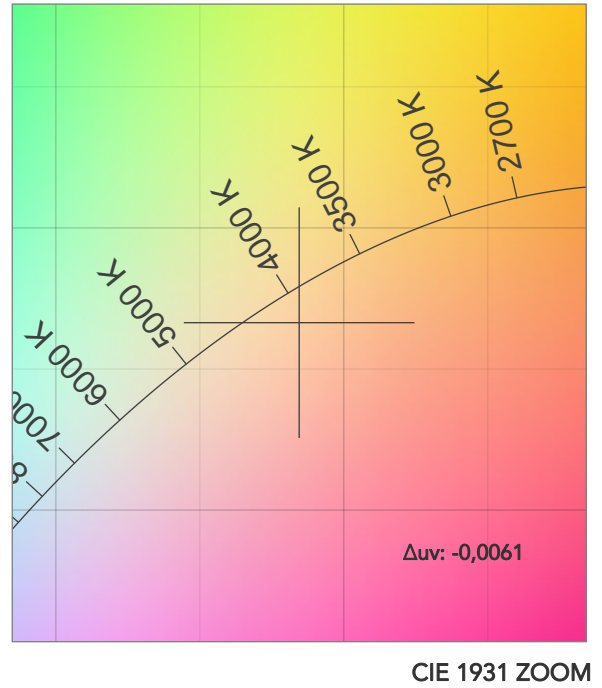
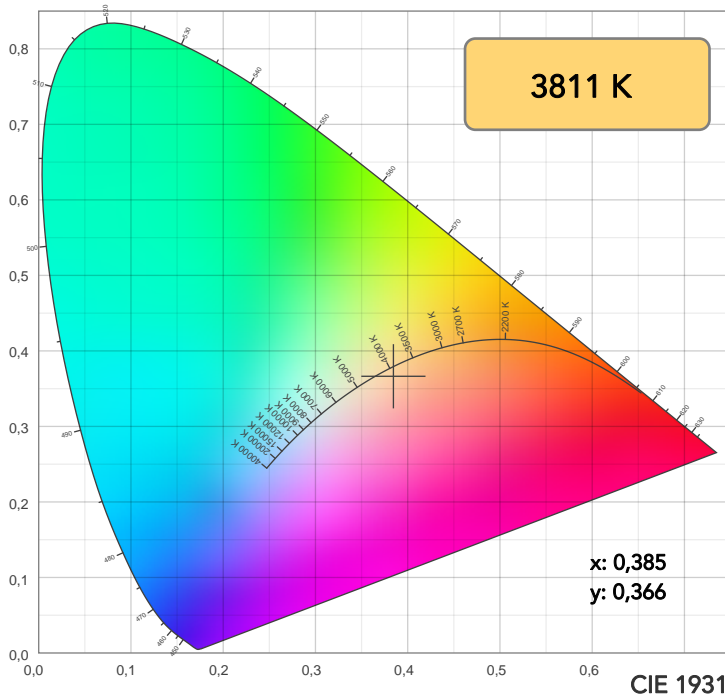
Date and time:

06/02/2020 16:49:27

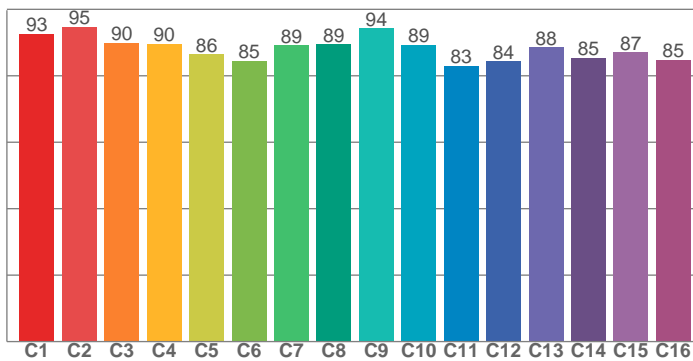


Spectra

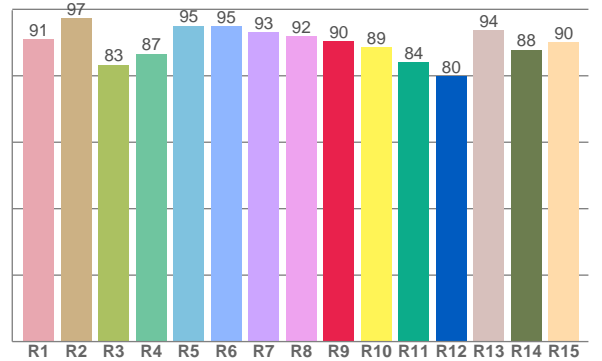




TM30: 88,5



CRI: 91,7 (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
91,0	97,4	83,3	86,6	95,0	95,0	93,2	91,9	90,3	88,5	84,1	79,9	93,8	87,8	90,1

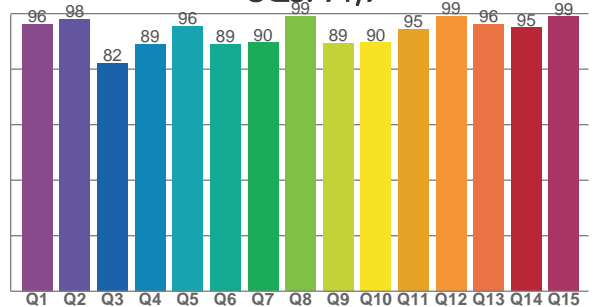
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,6	94,6	89,9	89,6	86,4	84,5	89,1	89,4	94,2	89,4	82,9	84,4	88,5	85,4	87,0	84,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,2	98,1	82,2	89,0	95,6	88,9	89,6	99,1	89,5	89,5	94,5	99,2	96,3	95,0	98,9

CQS: 91,9



## COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
3811 K	91,7	90,3	88,5	107,1	91,9	84	0,385	0,366	-0,0061

# TM30 DETAILS

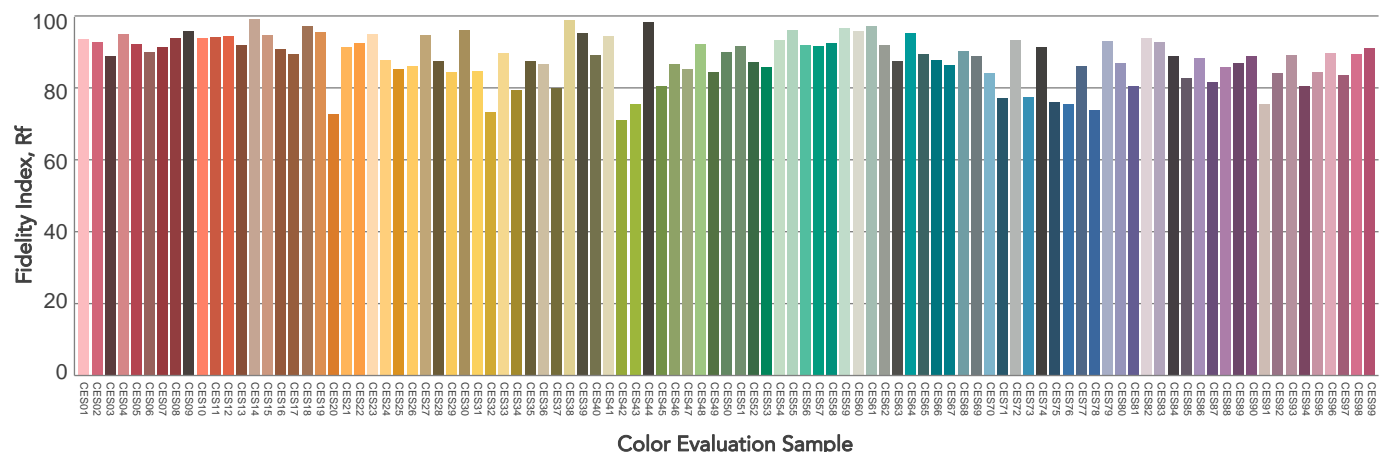
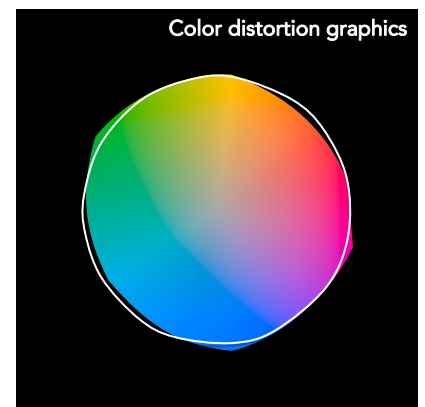
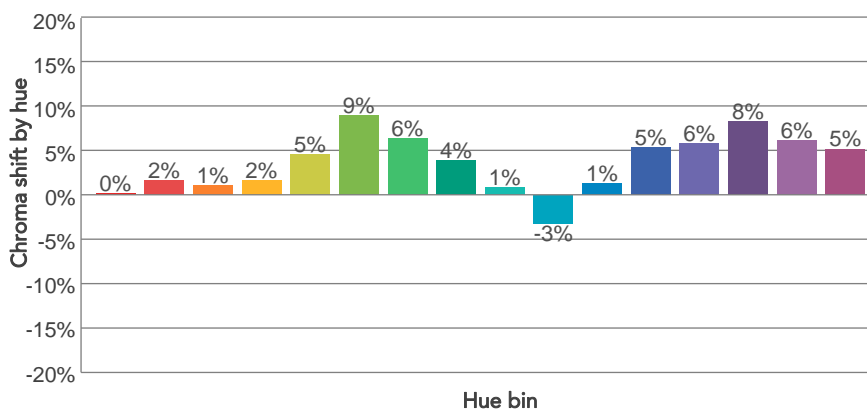
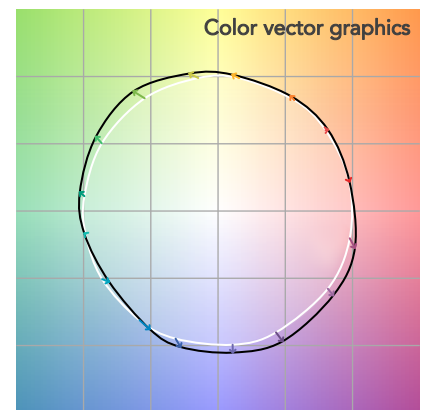
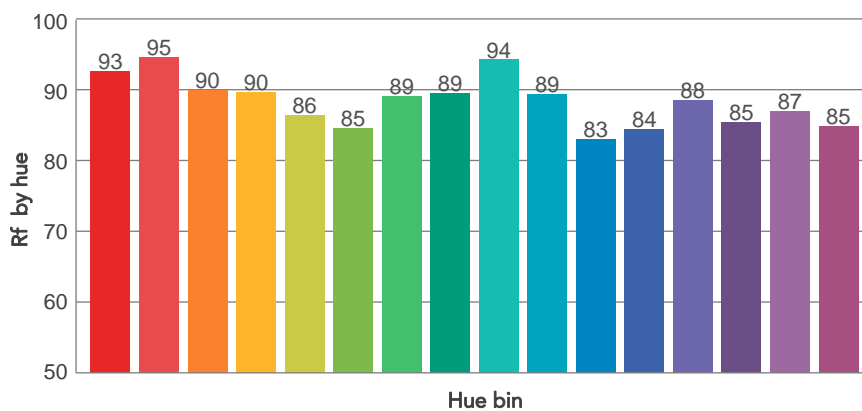
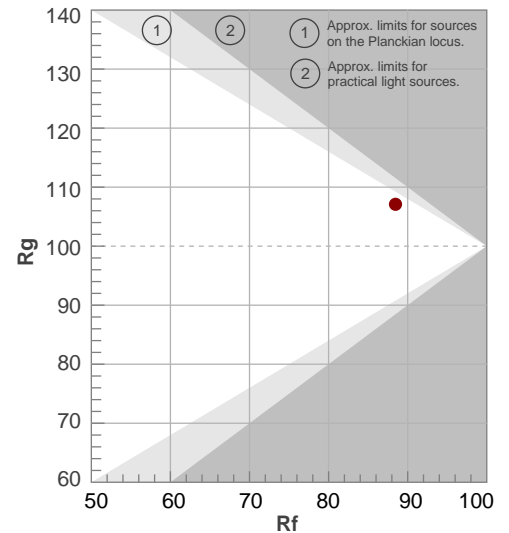
**Rf 88,5**

Fidelity index Rf

**Rg 107,1**

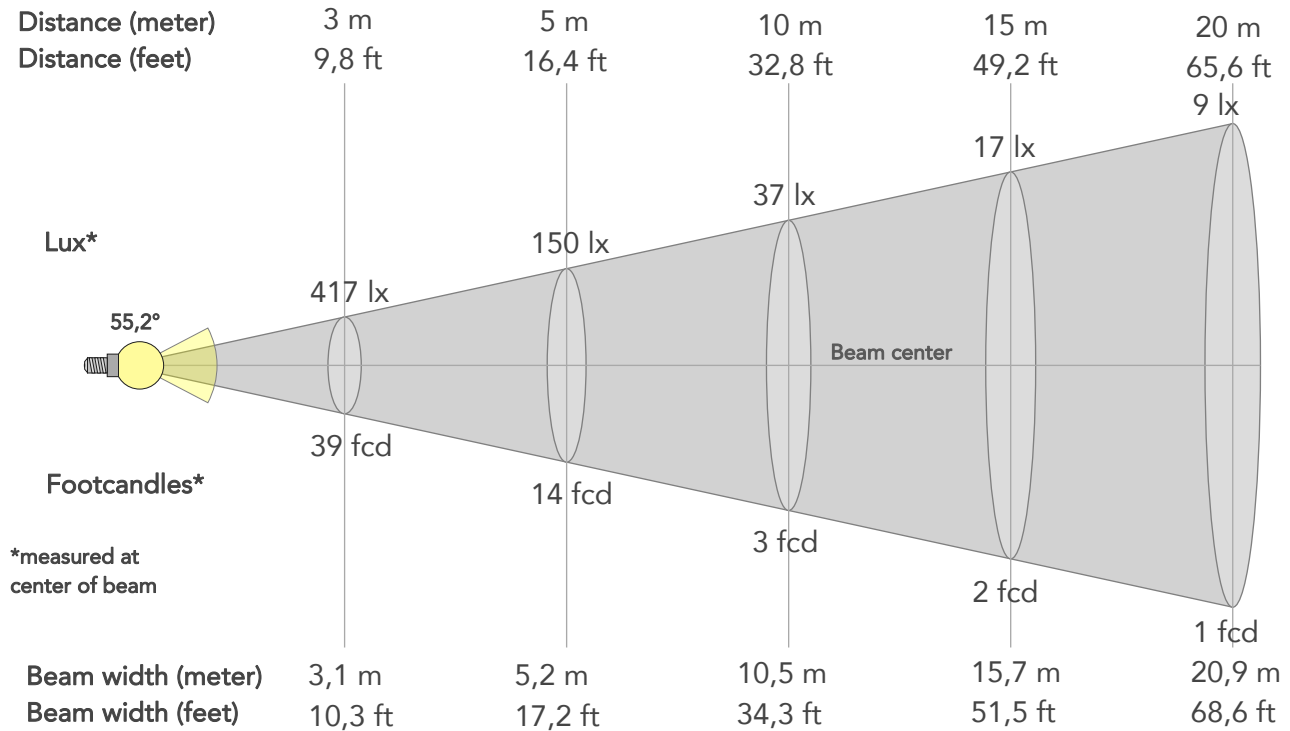
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	0%	-1%
2	95	2%	-1%
3	90	1%	4%
4	90	2%	5%
5	86	5%	6%
6	85	9%	4%
7	89	6%	-2%
8	89	4%	-2%
9	94	1%	-1%
10	89	-3%	4%
11	83	1%	10%
12	84	5%	5%
13	88	6%	-1%
14	85	8%	0%
15	87	6%	-2%
16	85	5%	-6%



## BEAM DETAILS

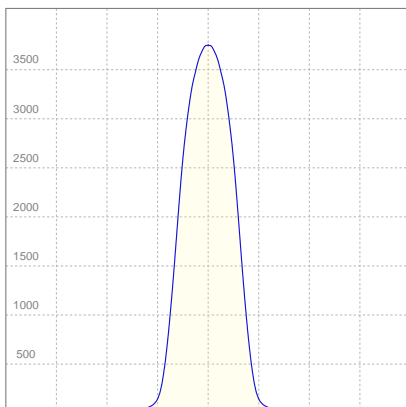
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,2°	80,2°	96,6°	97,7%	94,7%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3749lx	937lx	417lx	234lx	150lx	67lx	37lx	17lx	9lx	6lx	4lx	2lx	1lx
Footcand.	348fcd	87fcd	39fcd	22fcd	14fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,8m	10,5m	15,7m	20,9m	26,2m	31,4m	41,8m	52,3m
Beam wid.	3,5ft	6,9ft	10,3ft	13,7ft	17,2ft	25,7ft	34,3ft	51,5ft	68,6ft	85,8ft	102,9ft	137,3ft	171,6ft

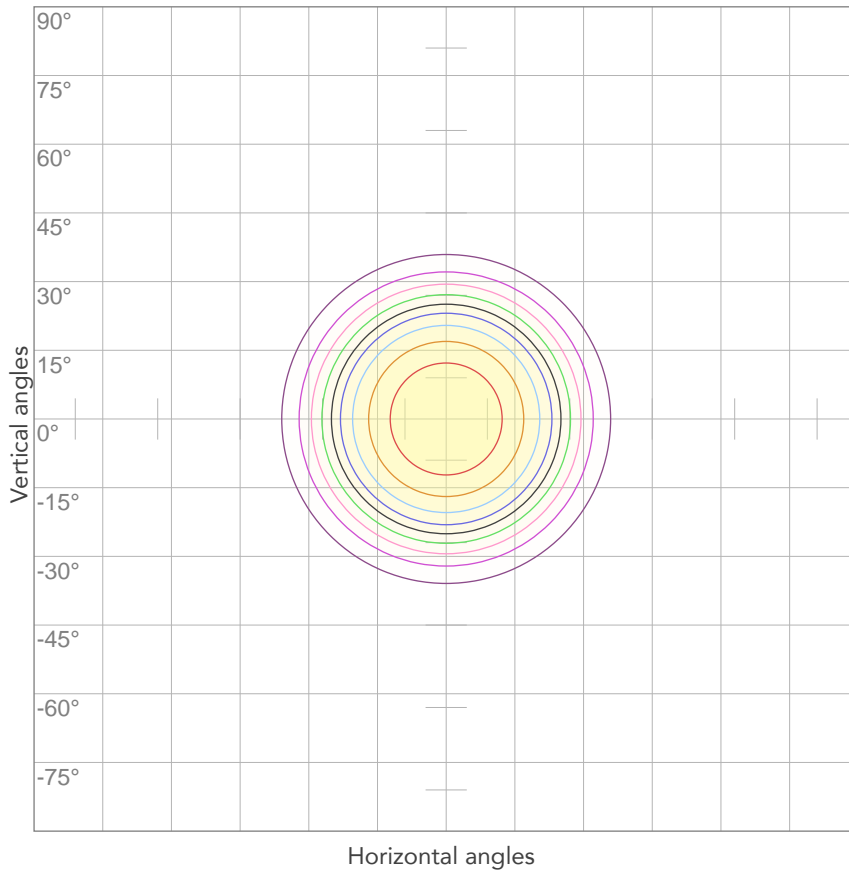
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,426A	89,5W	34lm/W

## ISO CANDELA DIAGRAM



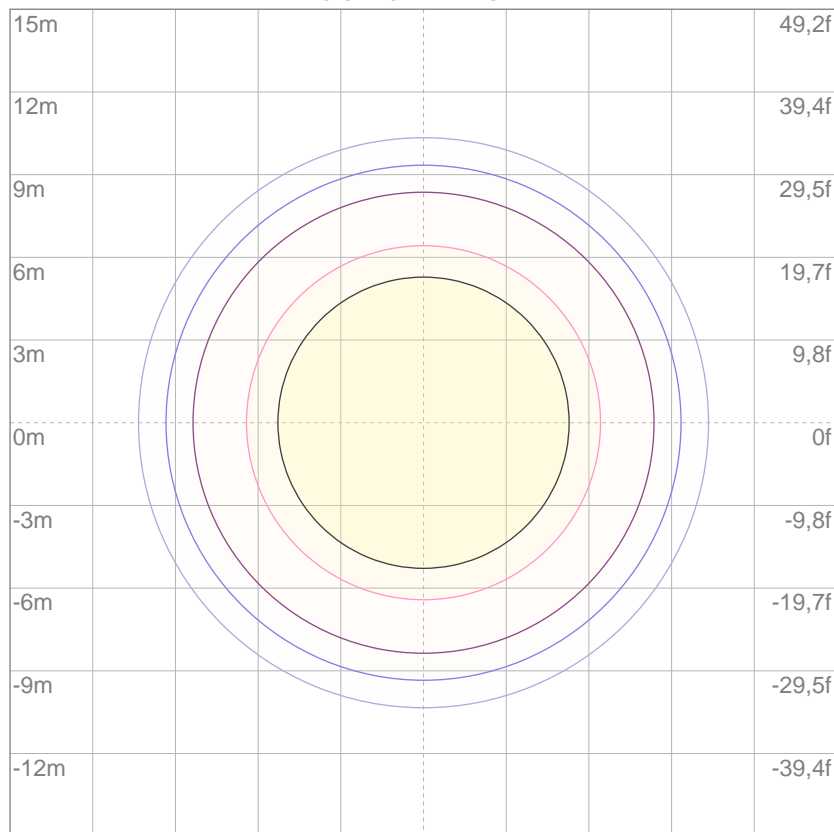
10%	375 cd
20%	750 cd
30%	1125 cd
40%	1500 cd
50%	1875 cd
60%	2250 cd
70%	2625 cd
80%	2999 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3749 cd

## ISO LUX DIAGRAM



3%	1,12 lx
5%	1,87 lx
10%	3,75 lx
30%	11,2 lx
50%	18,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 37,5 lx

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



Total lumen output:

2826 lm

Total candela output:

10381 cd

Light quality:

CRI: 91,9

Color temperature:

3814 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

30°

Target:

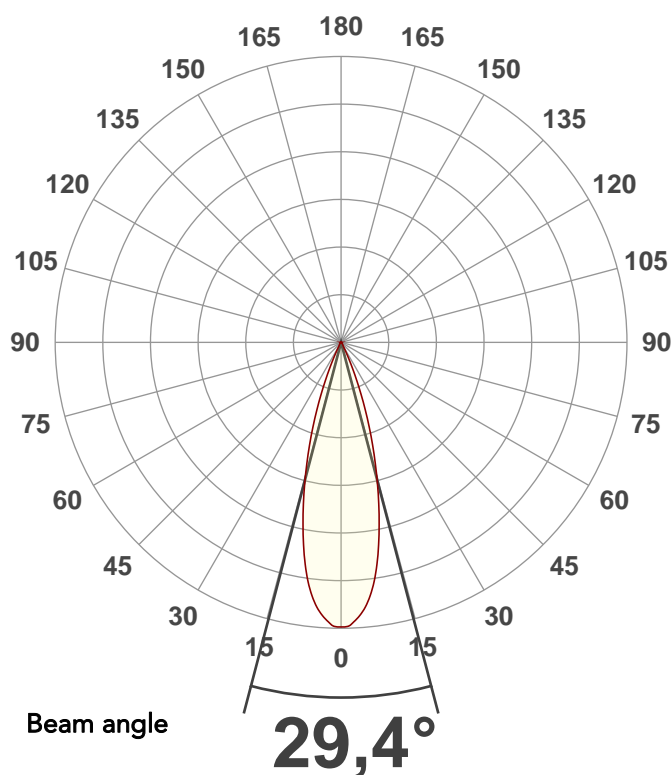
4000K

Operator:

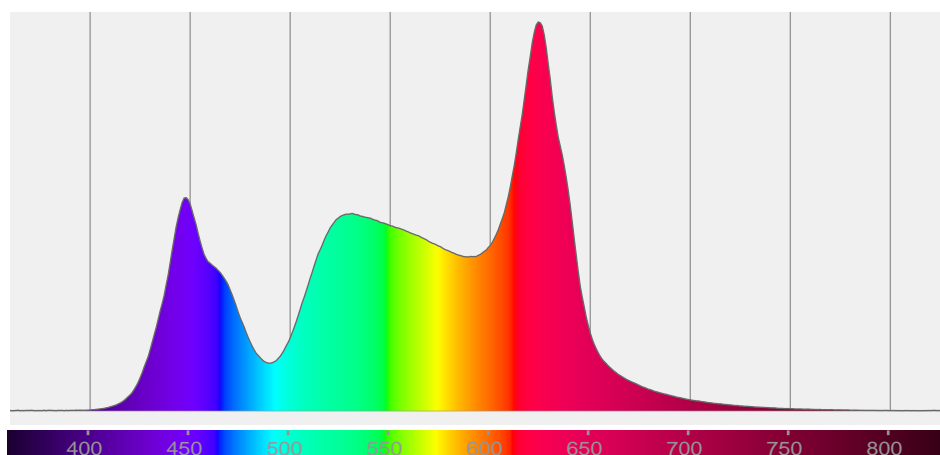
Paolo Carvone

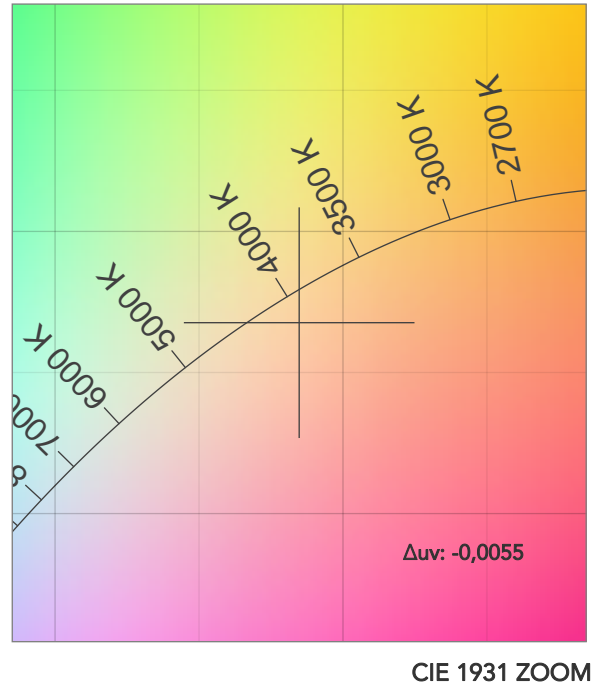
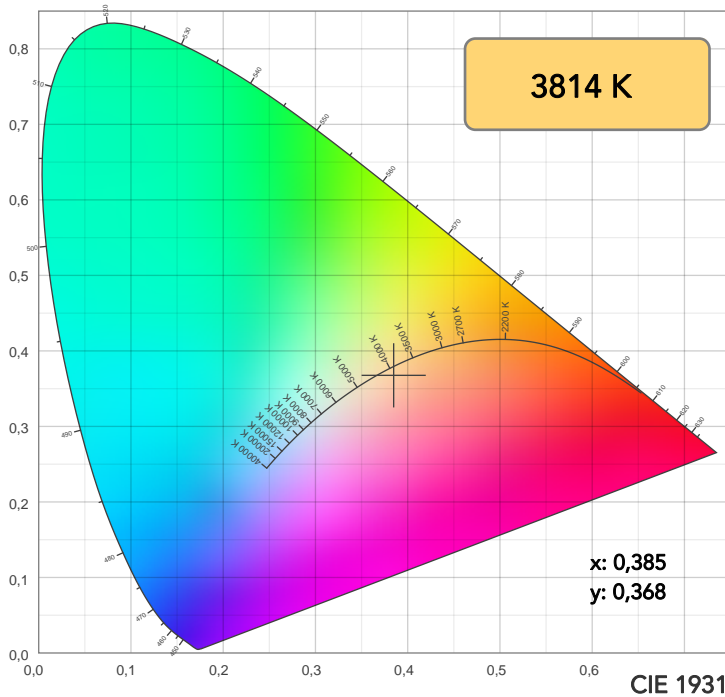
Date and time:

06/02/2020 17:04:41

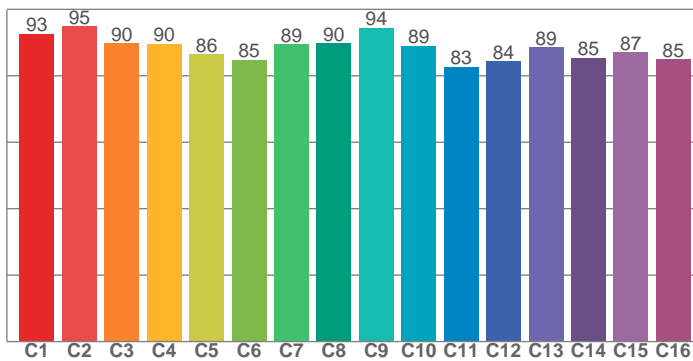


Spectra

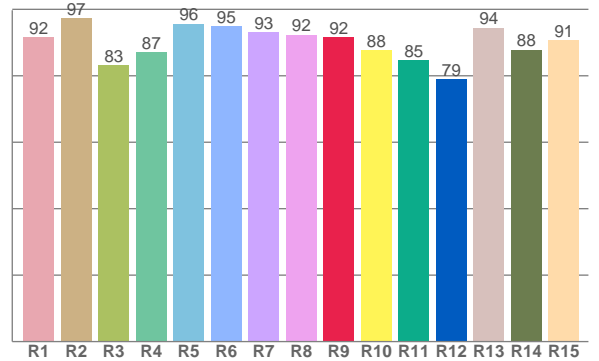




TM30: 88,5



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	97,2	83,2	87,1	95,7	94,9	93,2	92,3	91,6	87,7	84,7	79,0	94,4	87,8	90,8

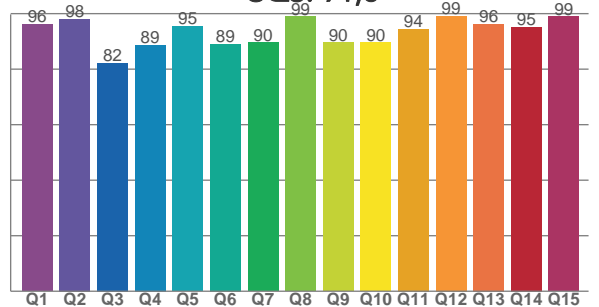
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,6	94,9	89,8	89,6	86,4	84,8	89,5	89,8	94,3	89,0	82,7	84,3	88,5	85,4	87,1	84,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,1	98,1	82,2	88,7	95,4	89,1	89,6	99,0	89,6	89,5	94,4	99,2	96,3	95,2	99,0

CQS: 91,8



## COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
3814 K	91,9	91,6	88,5	106,8	91,8	84	0,385	0,368	-0,0055

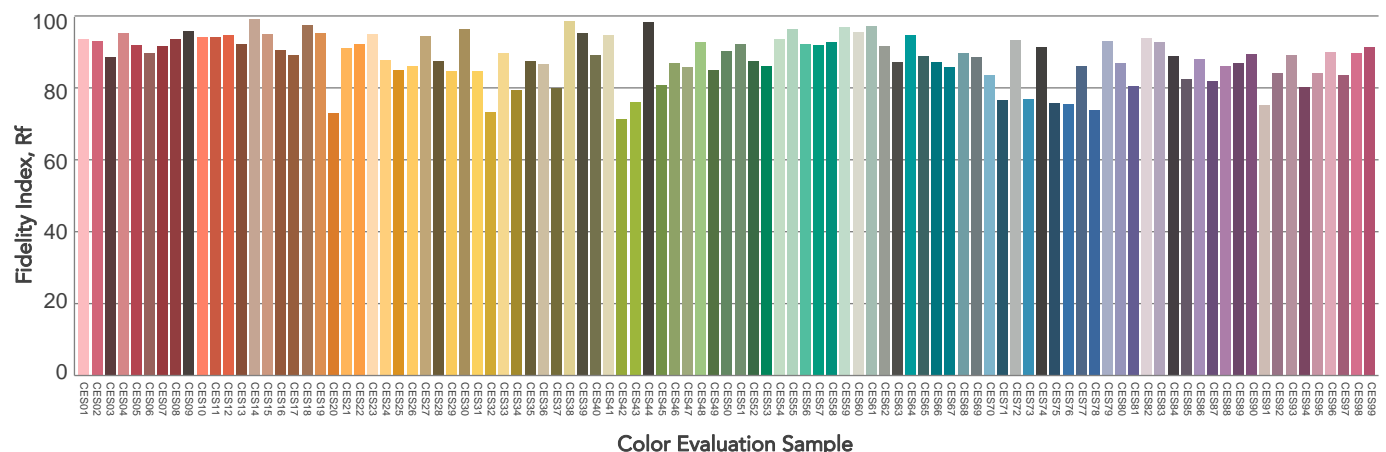
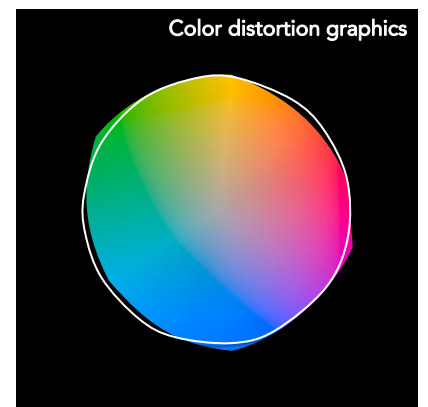
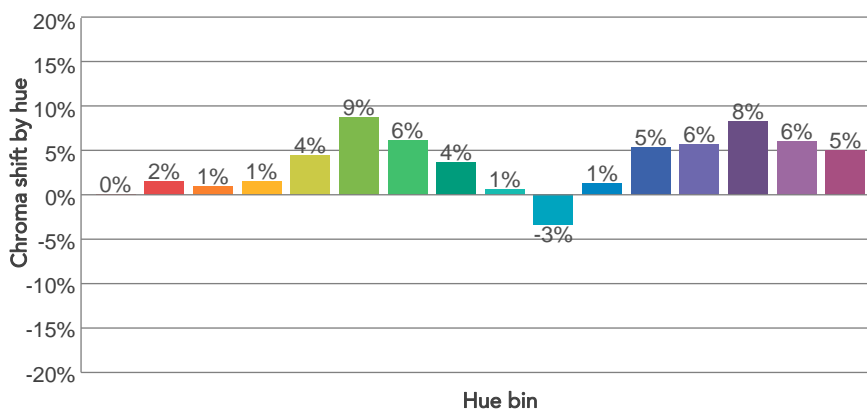
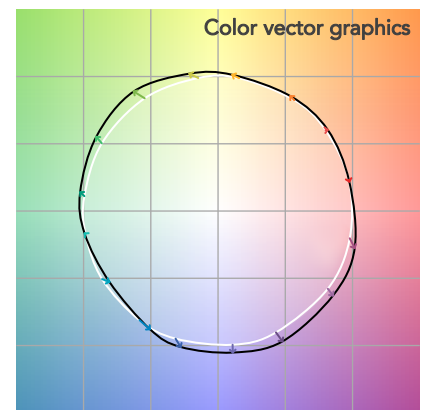
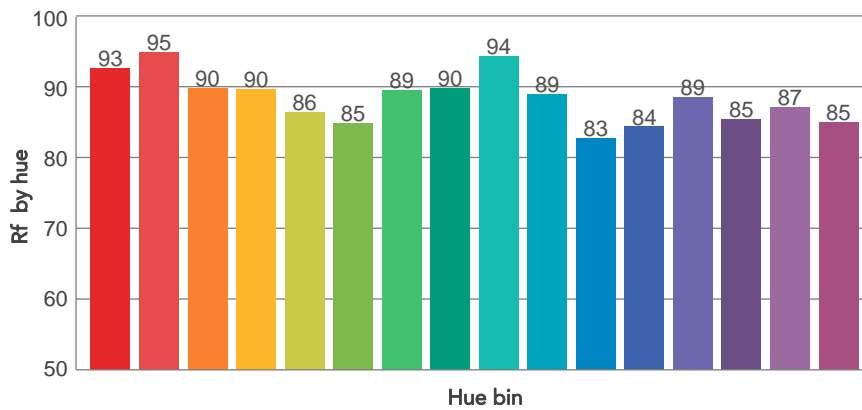
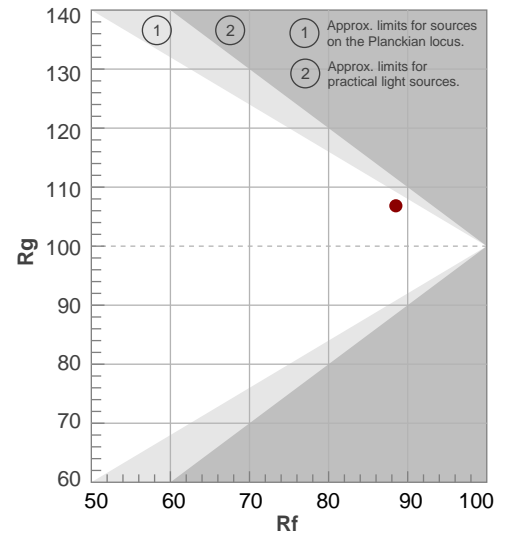


# TM30 DETAILS

**Rf 88,5**  
Fidelity index Rf

**Rg 106,8**  
Gammut index

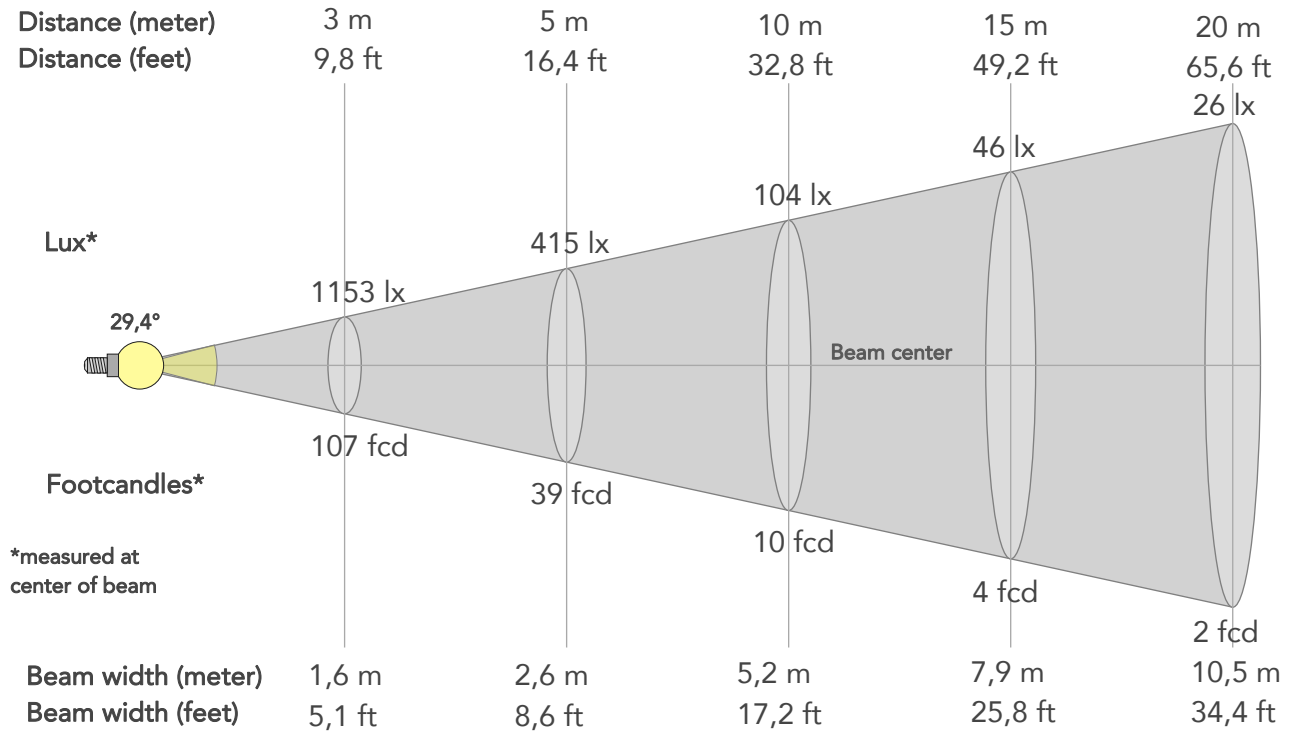
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	0%	-1%
2	95	2%	-1%
3	90	1%	4%
4	90	1%	5%
5	86	4%	6%
6	85	9%	4%
7	89	6%	-2%
8	90	4%	-2%
9	94	1%	-1%
10	89	-3%	5%
11	83	1%	10%
12	84	5%	5%
13	89	6%	-1%
14	85	8%	0%
15	87	6%	-2%
16	85	5%	-6%



## BEAM DETAILS



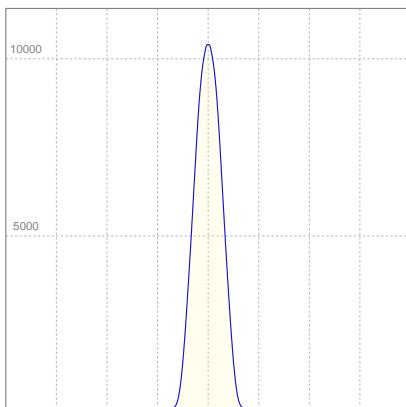
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,4°	47,6°	56,5°	98,2%	96,2%



### 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	10381lx	2595lx	1153lx	649lx	415lx	185lx	104lx	46lx	26lx	17lx	12lx	6lx	4lx
Footcand.	964fcd	241fcd	107fcd	60fcd	39fcd	17fcd	10fcd	4fcd	2fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1m	1,6m	2,1m	2,6m	3,9m	5,2m	7,9m	10,5m	13,1m	15,7m	21m	26,2m
Beam wid.	1,7ft	3,5ft	5,1ft	6,9ft	8,6ft	12,9ft	17,2ft	25,8ft	34,4ft	43ft	51,6ft	68,8ft	86ft

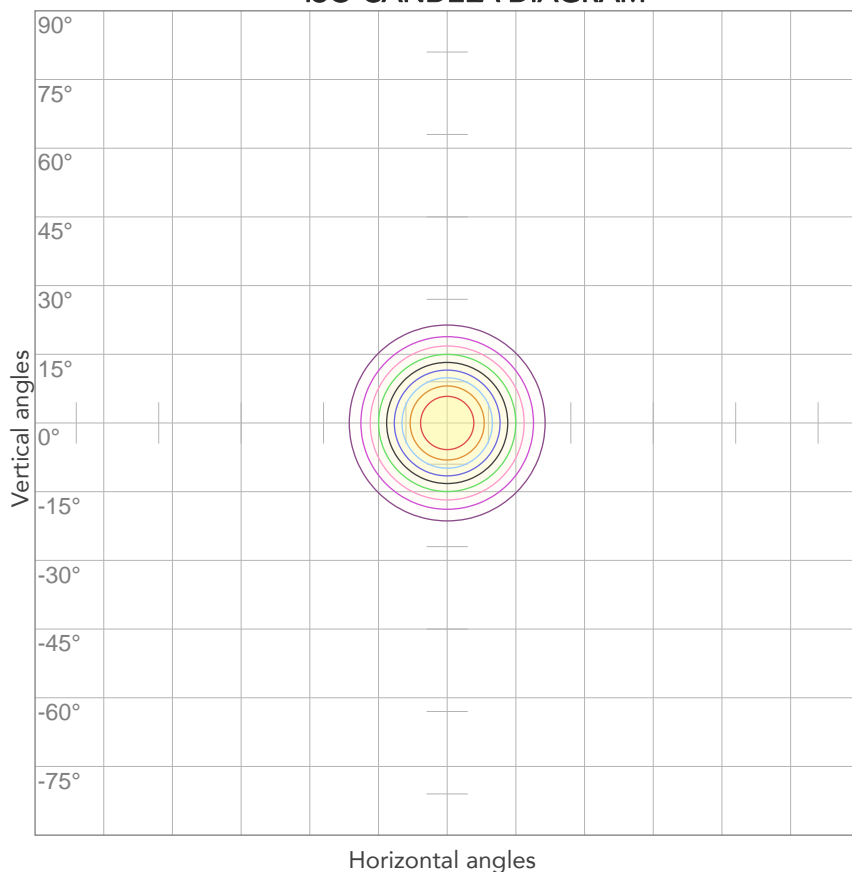
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,417A	87,9W	32lm/W

## ISO CANDELA DIAGRAM



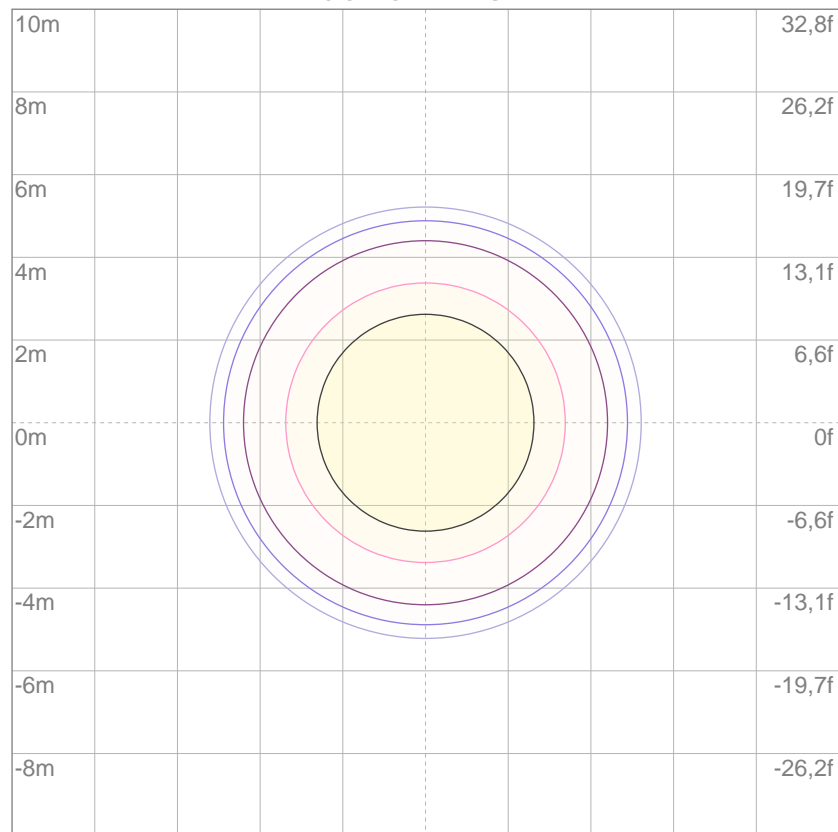
10%	1038 cd
20%	2076 cd
30%	3114 cd
40%	4153 cd
50%	5191 cd
60%	6229 cd
70%	7267 cd
80%	8305 cd

### Conditions:

Number of c-planes: 2

Candela at center: 10381 cd

## ISO LUX DIAGRAM



3%	3,11 lx
5%	5,19 lx
10%	10,4 lx
30%	31,1 lx
50%	51,9 lx

### Conditions:

Number of c-planes: 2

Lux at center: 104 lx

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



Total lumen output:

1653 lm

Total candela output:

18544 cd

Light quality:

CRI: 92,6

Color temperature:

3811 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

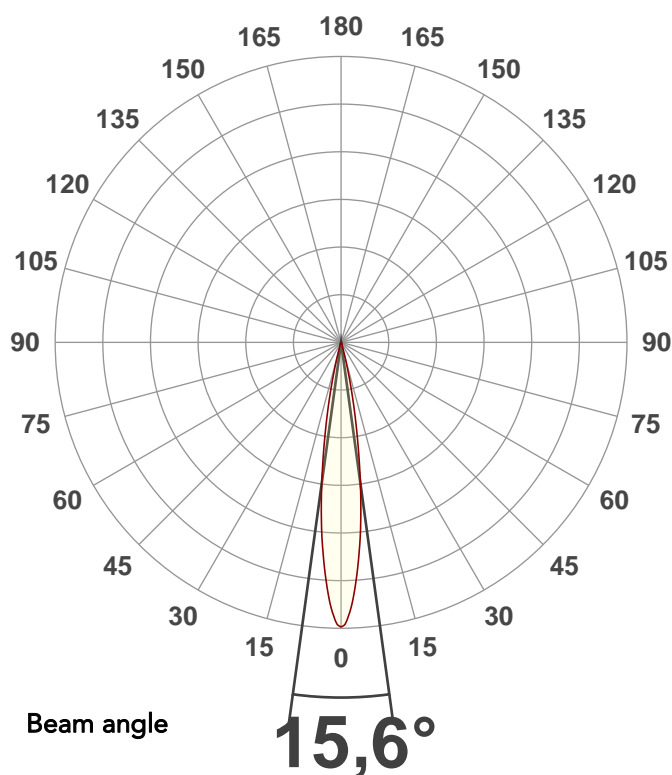
4000K

Operator:

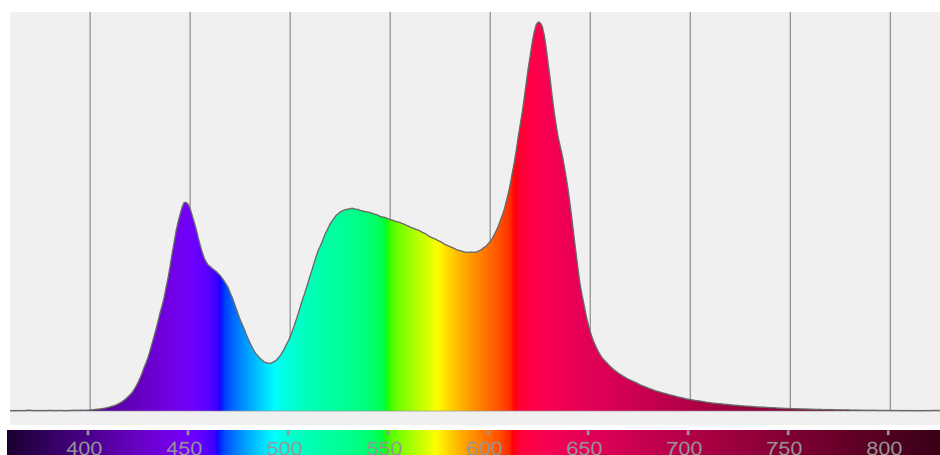
Paolo Carvone

Date and time:

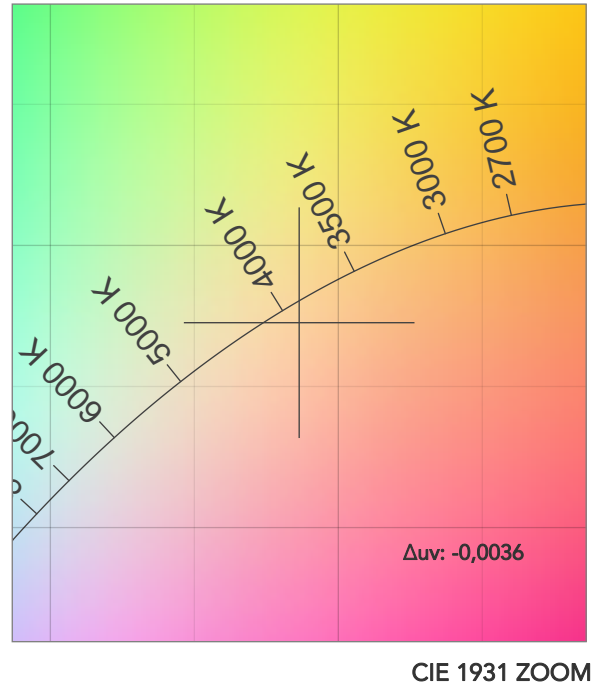
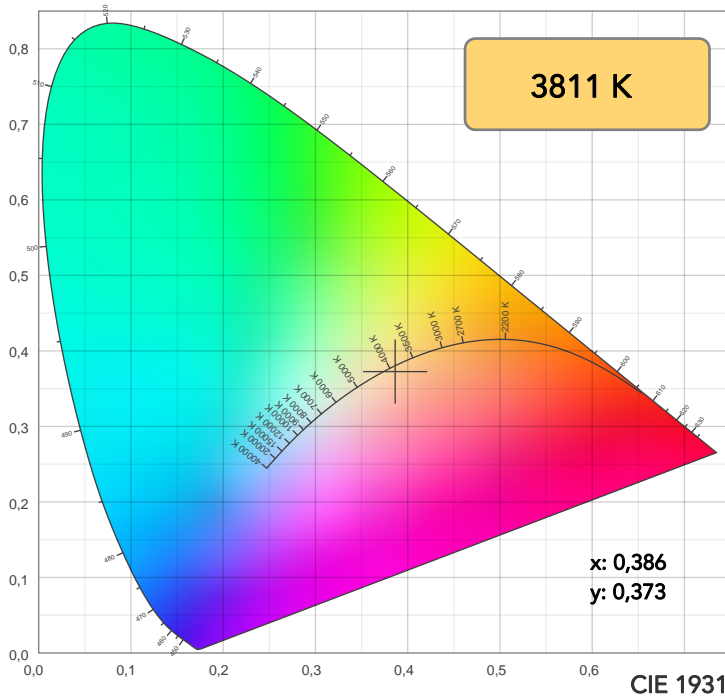
06/02/2020 17:42:48



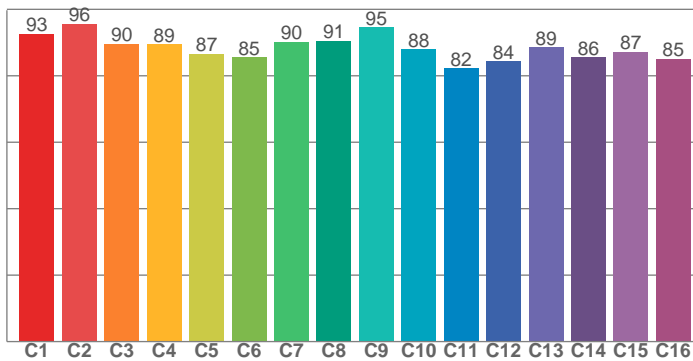
Spectra



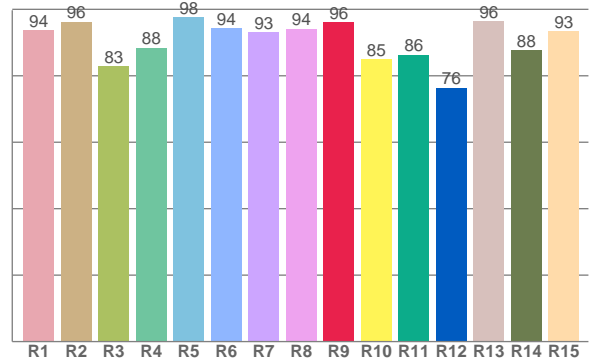
## COLOR DETAILS



TM30: 88,6



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
93,7	96,3	82,8	88,4	97,6	94,3	93,2	94,1	96,2	84,9	86,3	76,4	96,5	87,8	93,4

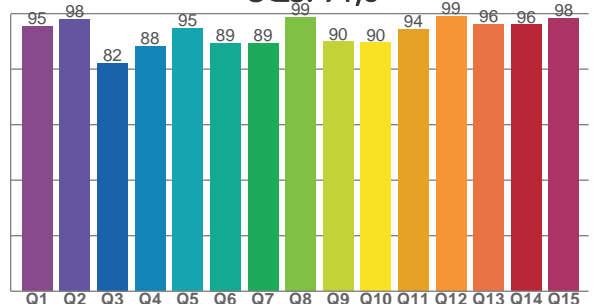
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,7	95,6	89,6	89,5	86,6	85,5	90,2	90,5	94,6	87,9	82,2	84,3	88,5	85,5	87,2	85,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,4	98,1	82,3	88,3	94,7	89,4	89,3	98,7	89,9	89,6	94,4	99,1	96,2	96,0	98,4

CQS: 91,8



## COLOR PARAMETERS

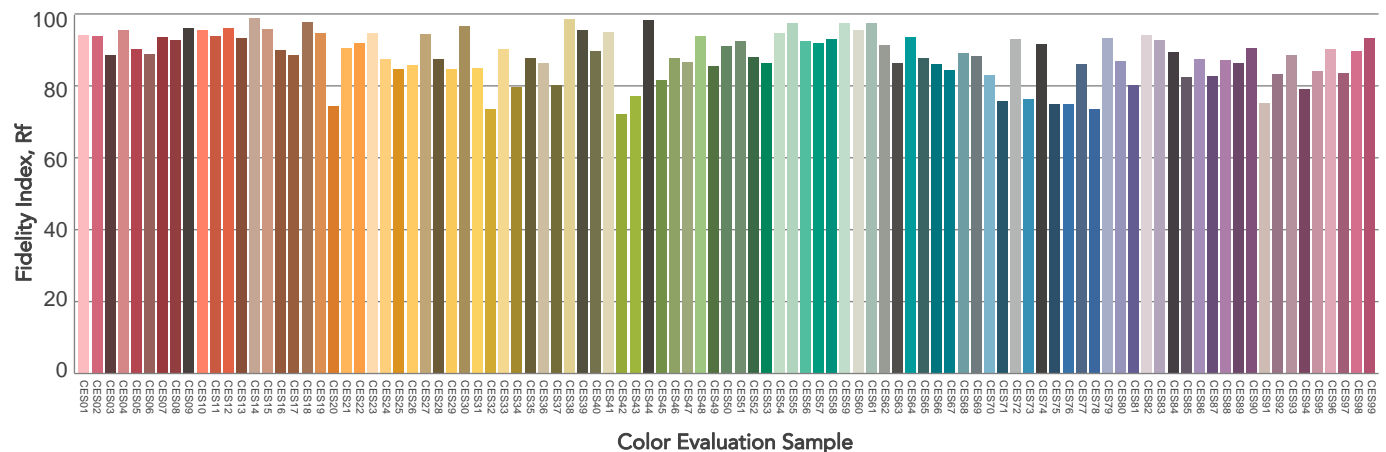
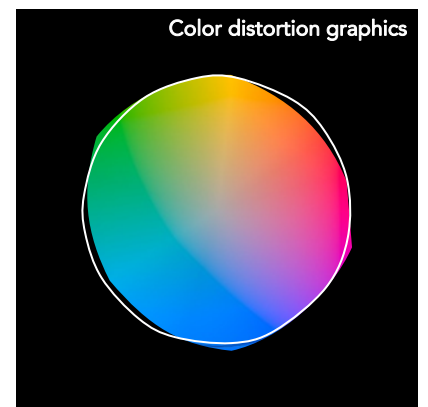
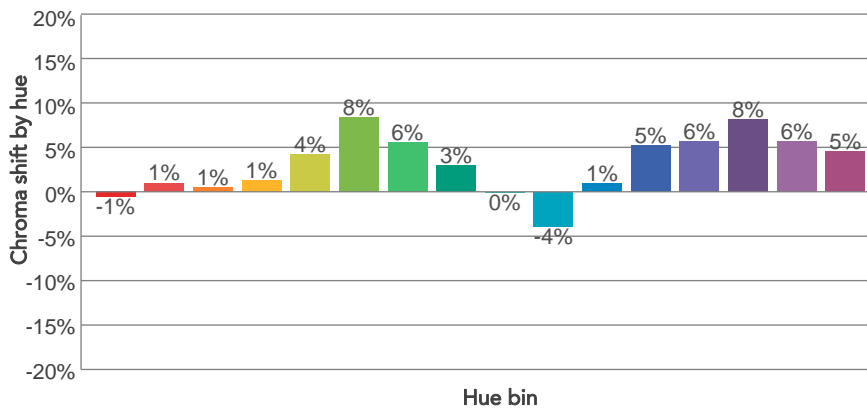
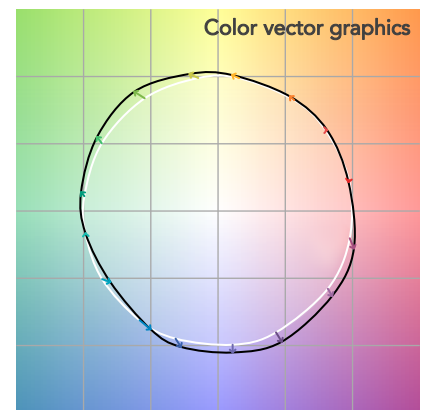
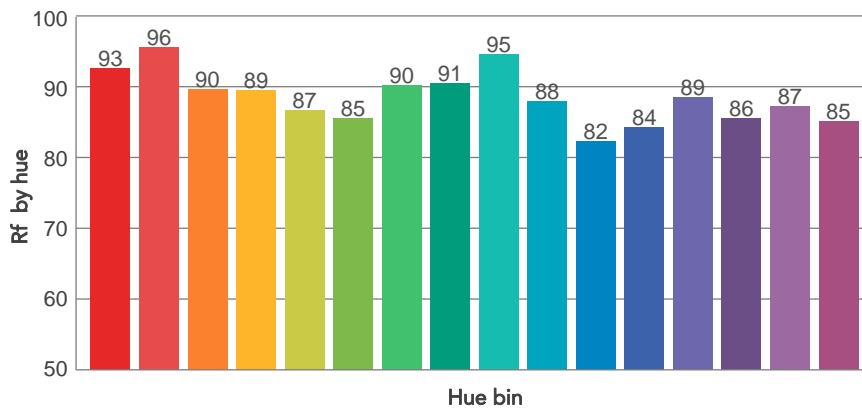
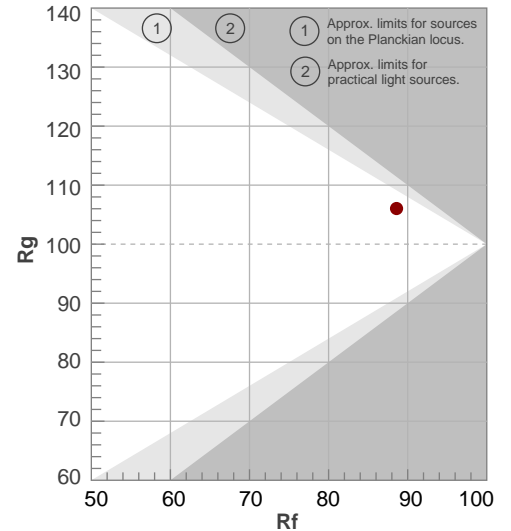
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
3811 K	92,6	96,2	88,6	106,0	91,8	84	0,386	0,373	-0,0036

# TM30 DETAILS

**Rf 88,6**  
Fidelity index Rf

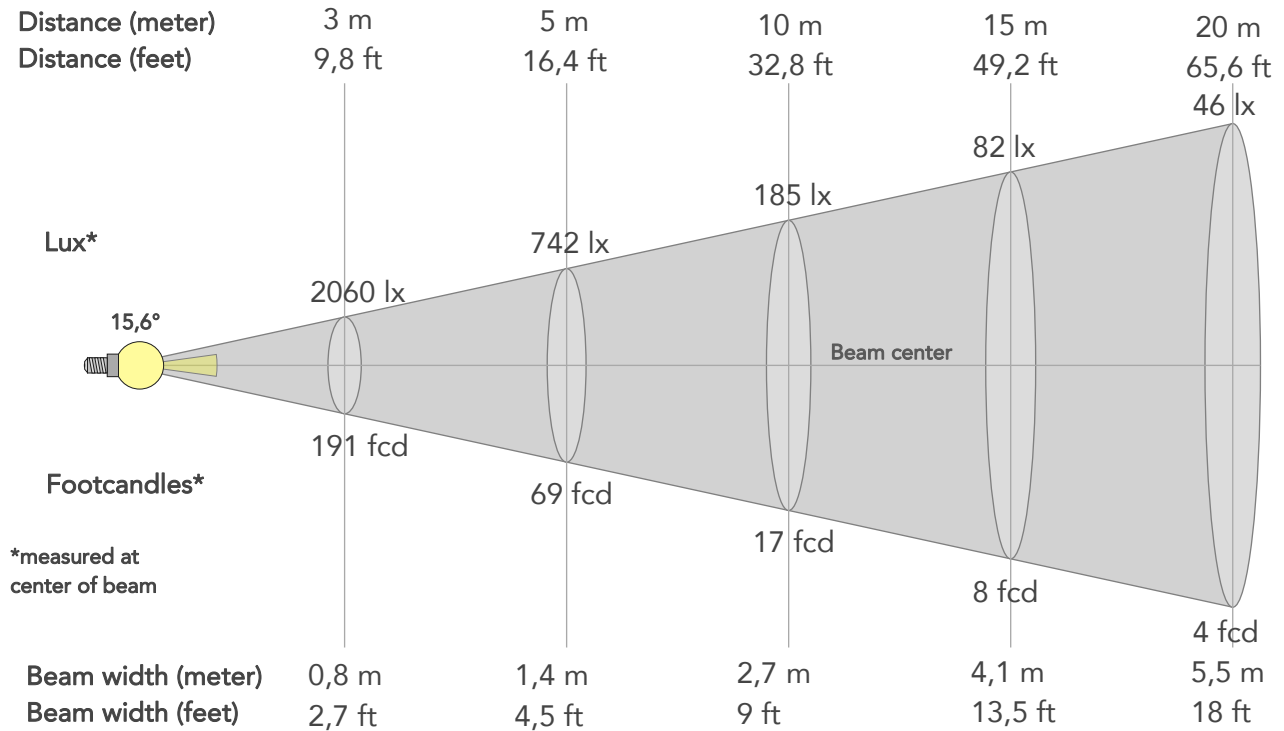
**Rg 106,0**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	-1%	-2%
2	96	1%	-1%
3	90	1%	4%
4	89	1%	6%
5	87	4%	6%
6	85	8%	4%
7	90	6%	-2%
8	91	3%	-2%
9	95	0%	-1%
10	88	-4%	5%
11	82	1%	11%
12	84	5%	5%
13	89	6%	-1%
14	86	8%	0%
15	87	6%	-3%
16	85	5%	-7%



## BEAM DETAILS

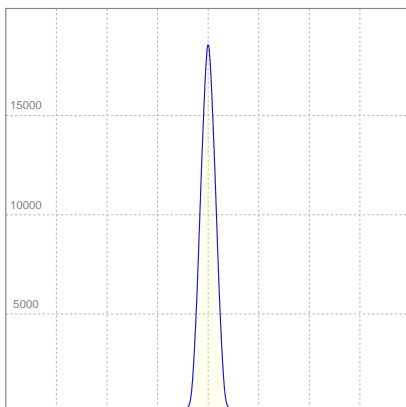
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,6°	27,3°	33,2°	98,1%	95,5%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	18544lx	4636lx	2060lx	1159lx	742lx	330lx	185lx	82lx	46lx	30lx	21lx	12lx	7lx
Footcand.	1723fcd	431fcd	191fcd	108fcd	69fcd	31fcd	17fcd	8fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2,1m	2,7m	4,1m	5,5m	6,9m	8,2m	11m	13,7m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	9ft	13,5ft	18ft	22,5ft	27ft	36ft	45ft

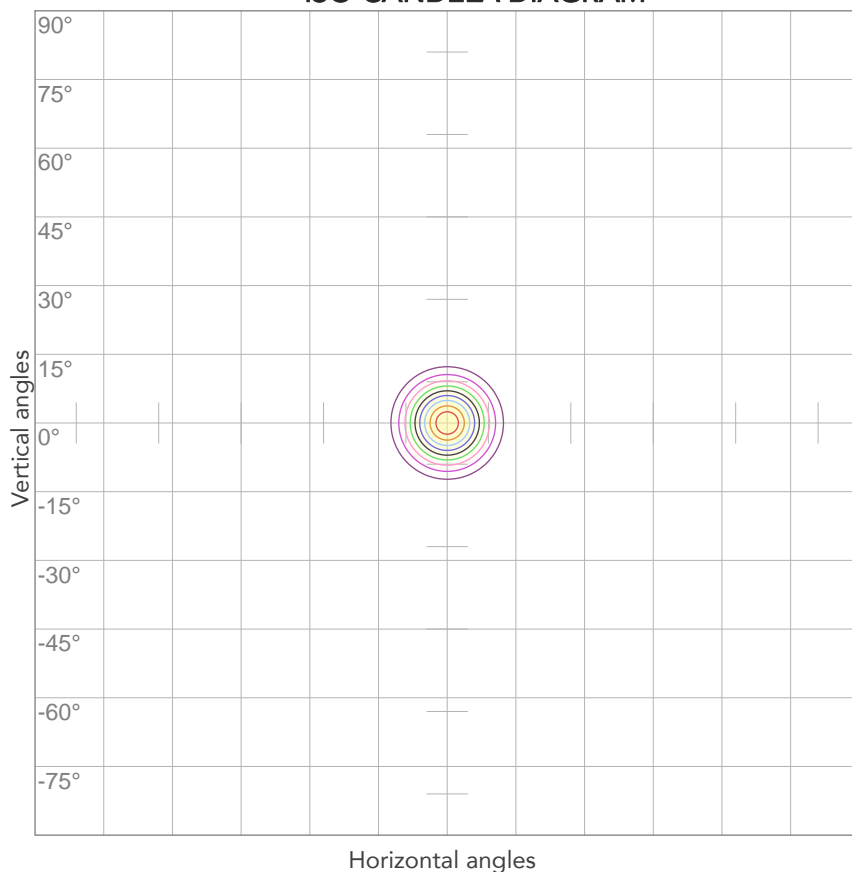
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,422A	88,0W	19lm/W

## ISO CANDELA DIAGRAM



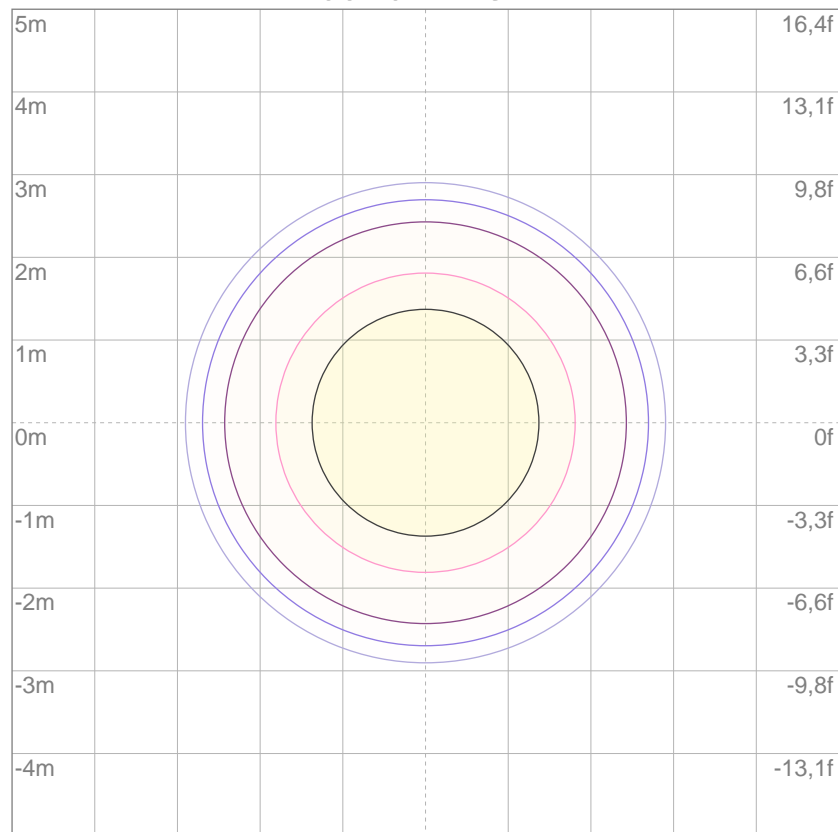
10%	1854 cd
20%	3709 cd
30%	5563 cd
40%	7418 cd
50%	9272 cd
60%	11126 cd
70%	12981 cd
80%	14835 cd

### Conditions:

Number of c-planes: 2

Candela at center: 18544 cd

## ISO LUX DIAGRAM



3%	5,56 lx
5%	9,27 lx
10%	18,5 lx
30%	55,6 lx
50%	92,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 185 lx

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





Total lumen output:

2956 lm

Total candela output:

3617 cd

Light quality:

CRI: 92,0

Color temperature:

5290 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

45°

Target:

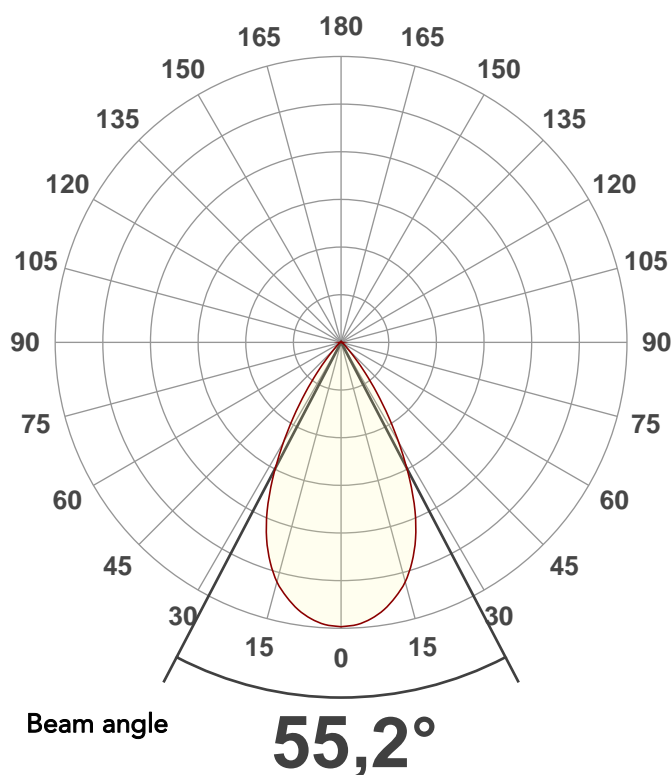
5600K

Operator:

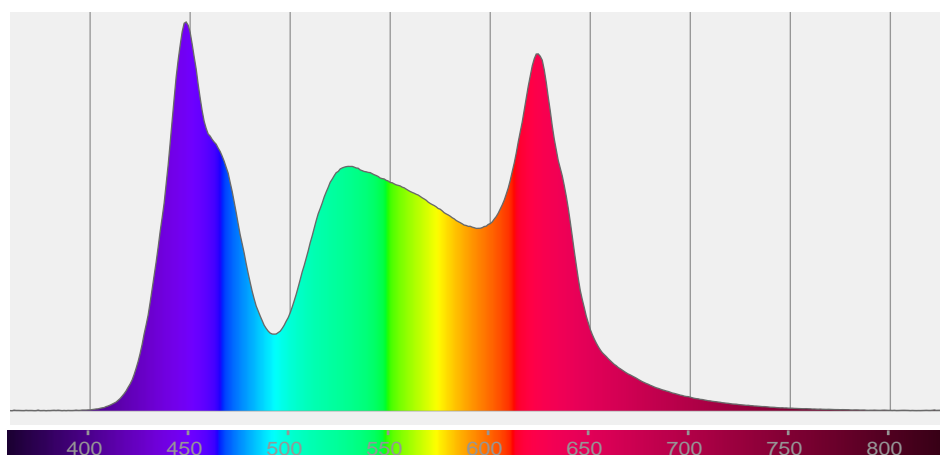
Paolo Carvone

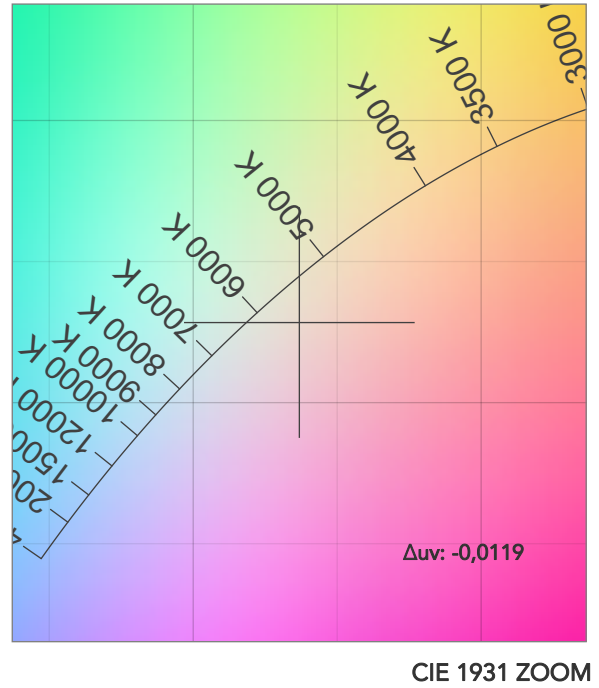
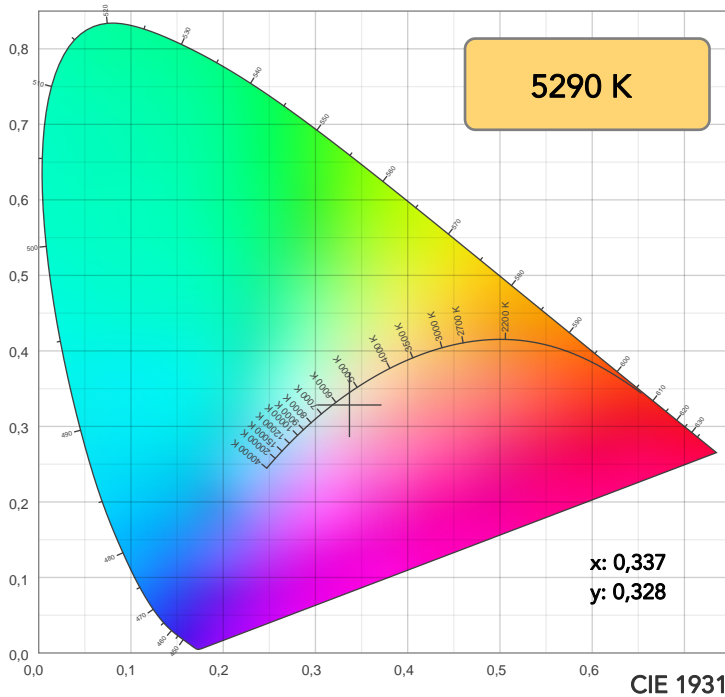
Date and time:

06/02/2020 16:51:16

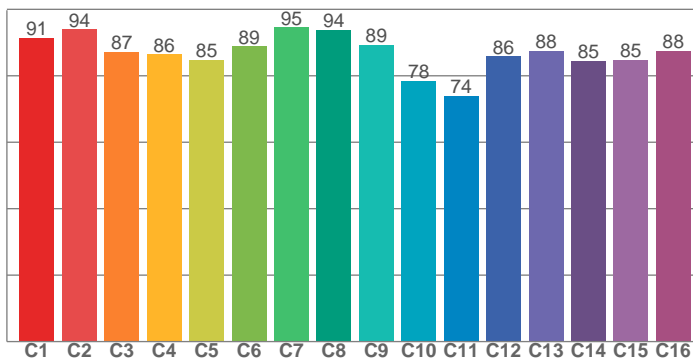


Spectra

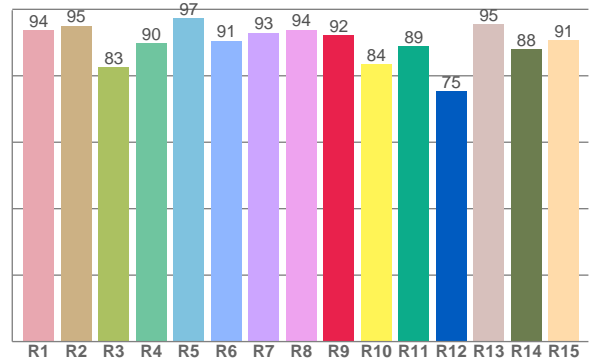




TM30: 86,8



CRI: 92,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93,8	95,1	82,6	89,8	97,2	90,5	93,0	93,9	92,3	83,5	88,8	75,3	95,5	87,9	90,8

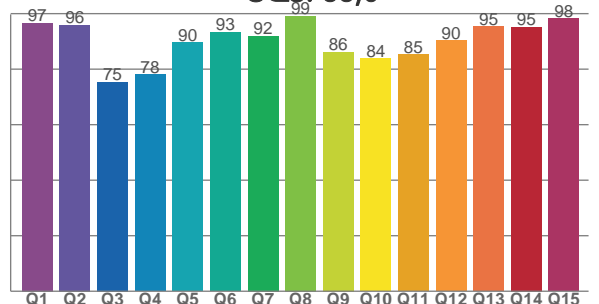
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,5	93,9	87,2	86,5	84,9	88,8	94,6	93,8	89,3	78,4	73,9	85,8	87,6	84,6	84,8	87,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,7	95,9	75,4	78,1	89,5	93,3	91,9	99,2	86,2	83,7	85,3	90,4	95,4	95,2	98,2

CQS: 88,0



## COLOR PARAMETERS

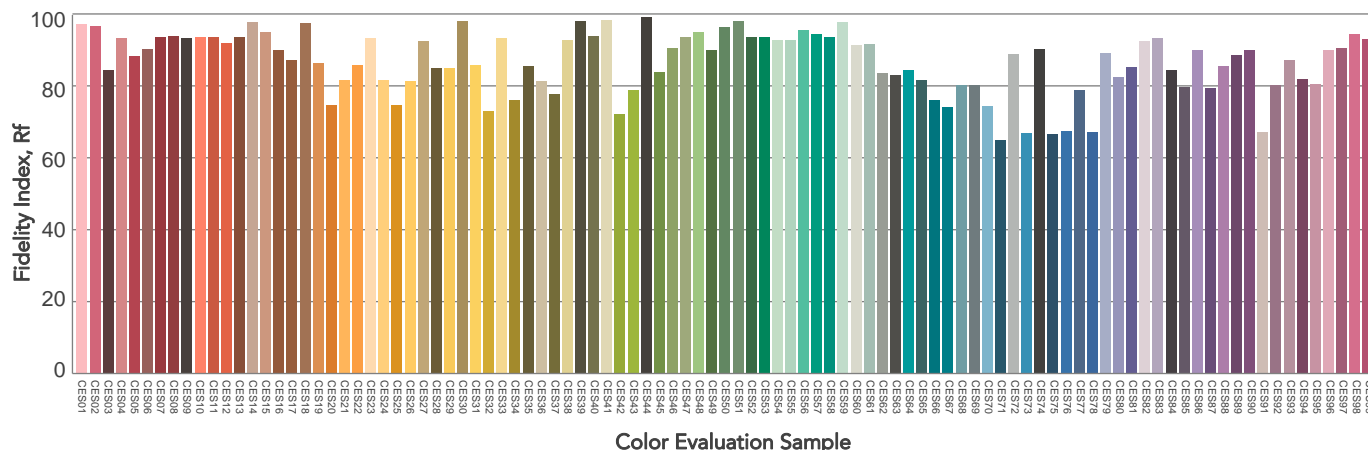
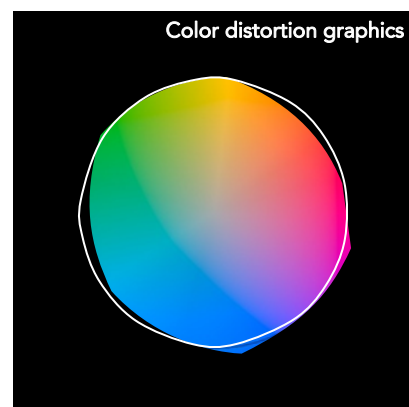
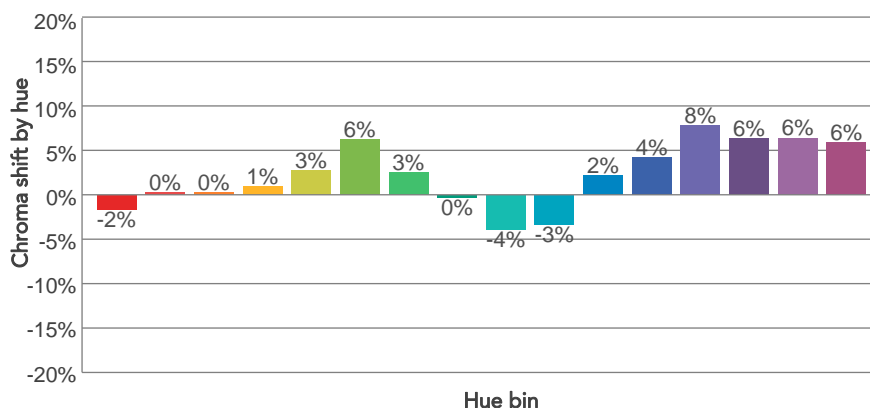
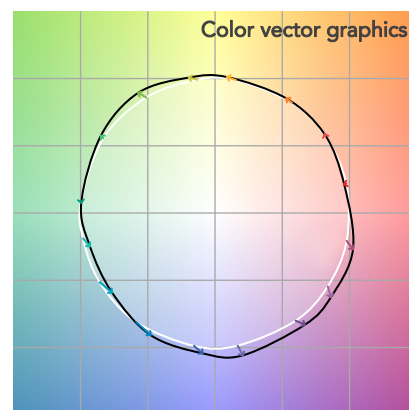
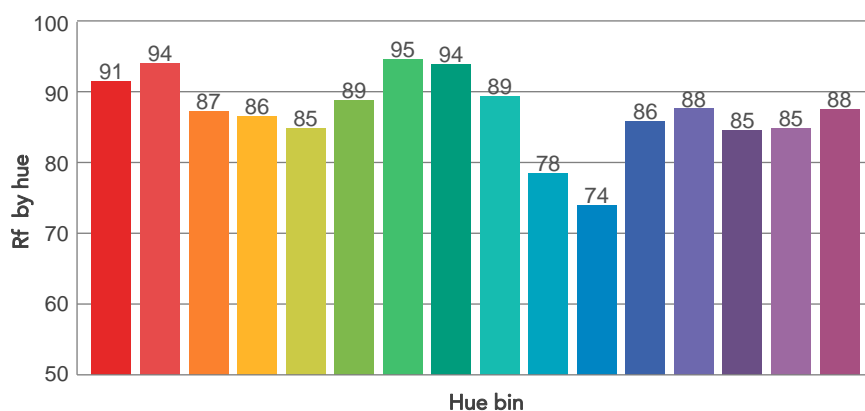
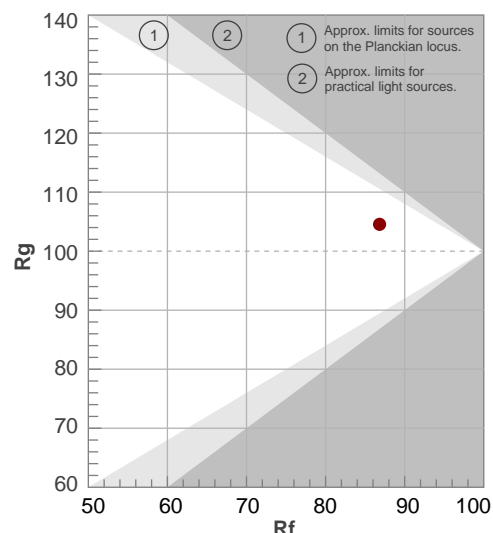
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5290 K	92,0	92,3	86,8	104,5	88,0	86	0,337	0,328	-0,0119

# TM30 DETAILS

**Rf 86,8**  
Fidelity index Rf

**Rg 104,5**  
Gammut index

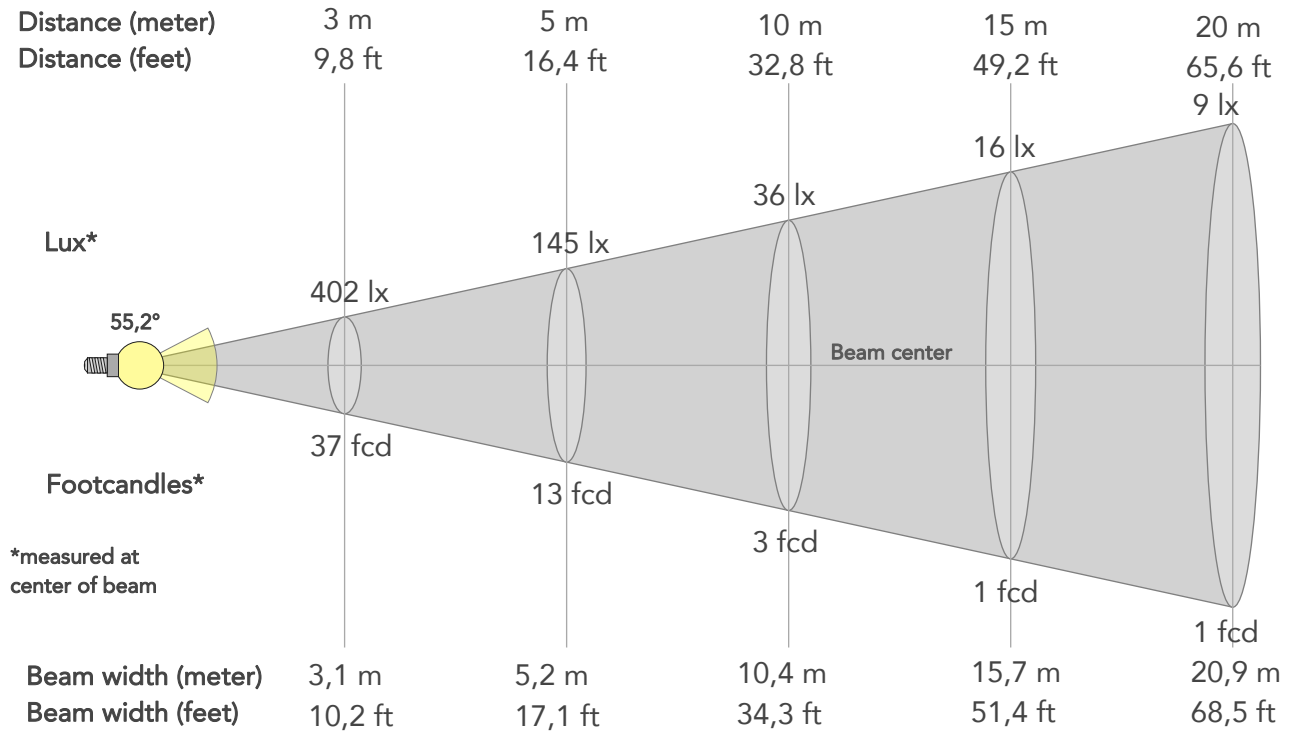
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-2%	0%
2	94	0%	1%
3	87	0%	5%
4	86	1%	7%
5	85	3%	6%
6	89	6%	3%
7	95	3%	-1%
8	94	0%	1%
9	89	-4%	7%
10	78	-3%	11%
11	74	2%	14%
12	86	4%	7%
13	88	8%	2%
14	85	6%	4%
15	85	6%	-5%
16	88	6%	-5%



## BEAM DETAILS



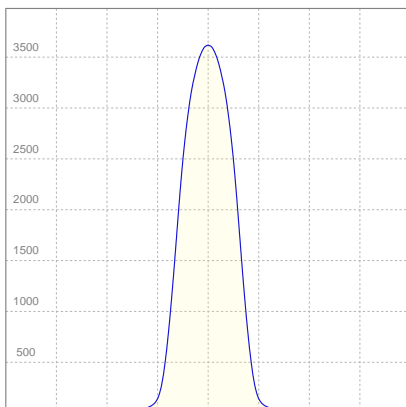
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,2°	80,3°	97,2°	97,7%	94,6%



### 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	3617lx	904lx	402lx	226lx	145lx	64lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	336fcd	84fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,8m	10,4m	15,7m	20,9m	26,1m	31,3m	41,8m	52,2m
Beam wid.	3,4ft	6,9ft	10,2ft	13,7ft	17,1ft	25,7ft	34,3ft	51,4ft	68,5ft	85,7ft	102,8ft	137,1ft	171,3ft

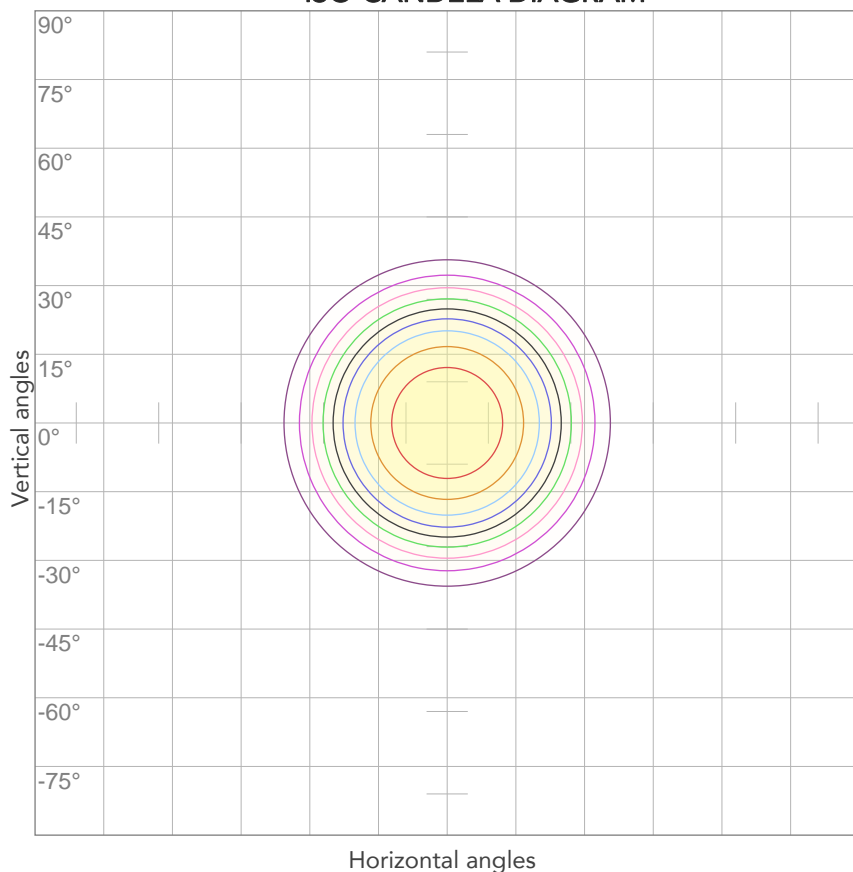
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,425A	89,6W	33lm/W

## ISO CANDELA DIAGRAM



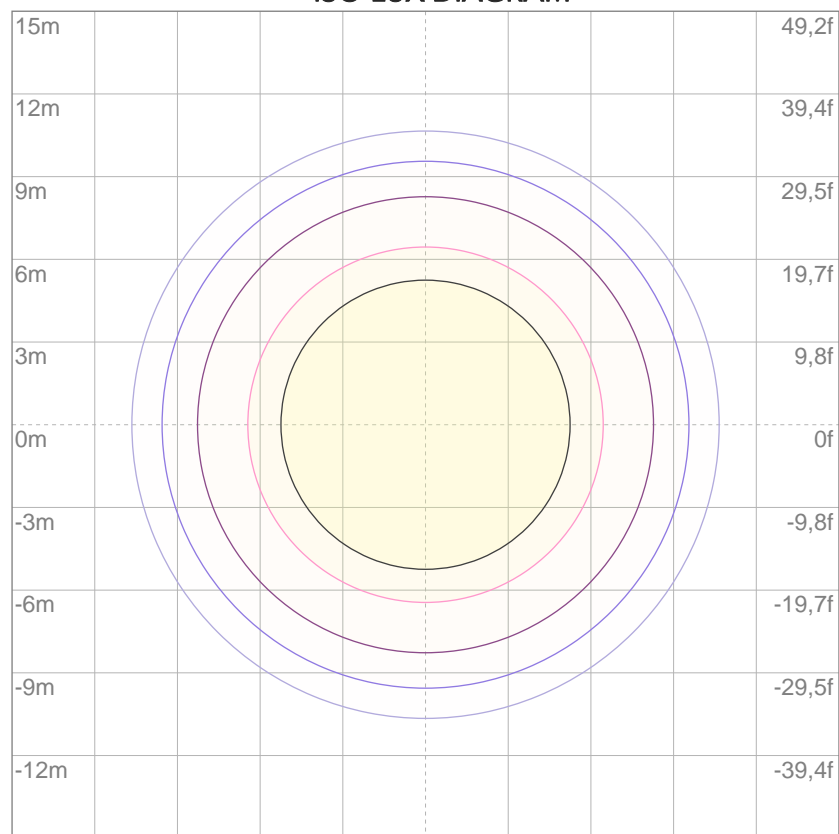
10%	362 cd
20%	723 cd
30%	1085 cd
40%	1447 cd
50%	1809 cd
60%	2170 cd
70%	2532 cd
80%	2894 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3617 cd

## ISO LUX DIAGRAM



3%	1,09 lx
5%	1,81 lx
10%	3,62 lx
30%	10,9 lx
50%	18,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 36,2 lx

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



Total lumen output:

2723 lm

Total candela output:

9938 cd

Light quality:

CRI: 92,2

Color temperature:

5253 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

30°

Target:

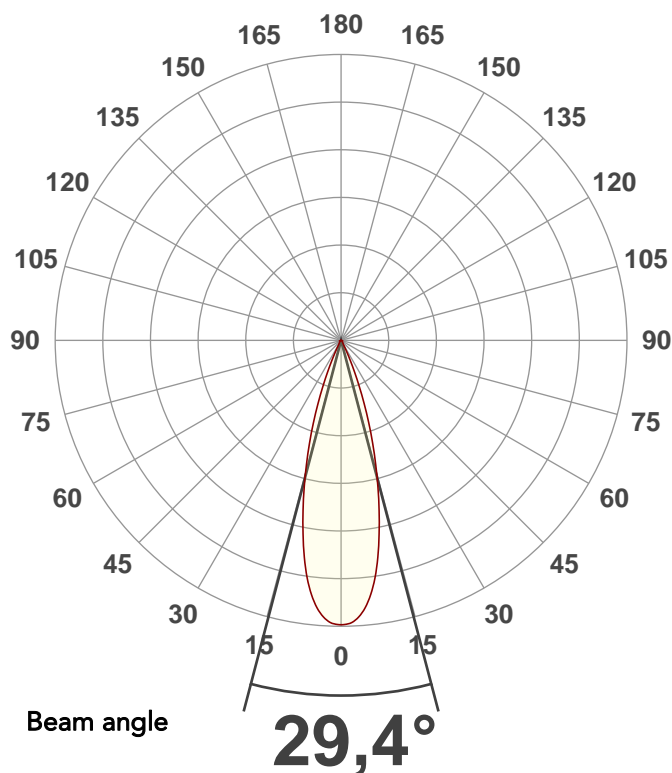
5600K

Operator:

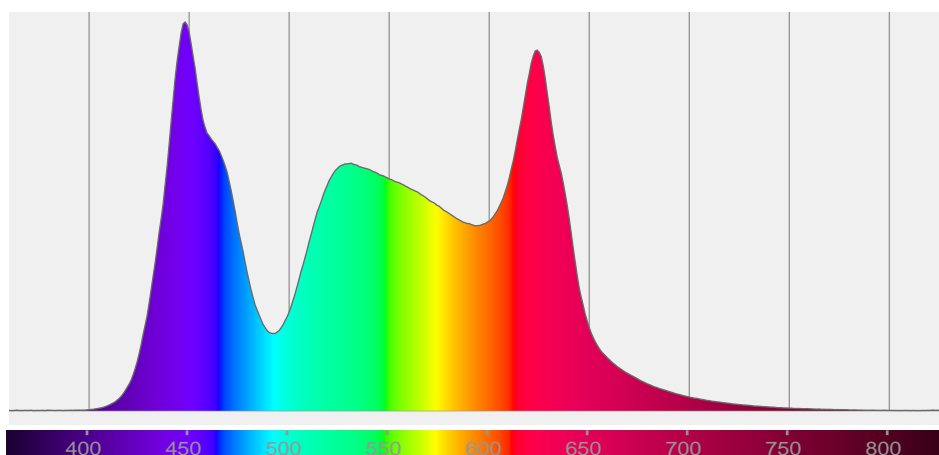
Paolo Carvone

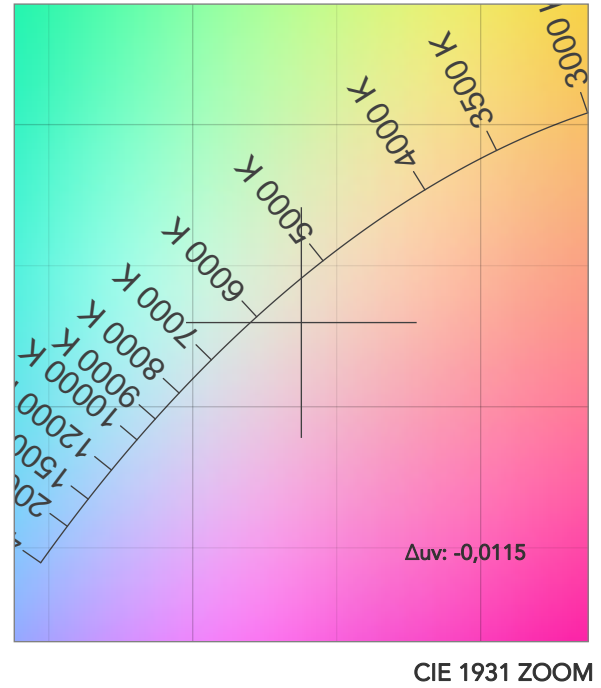
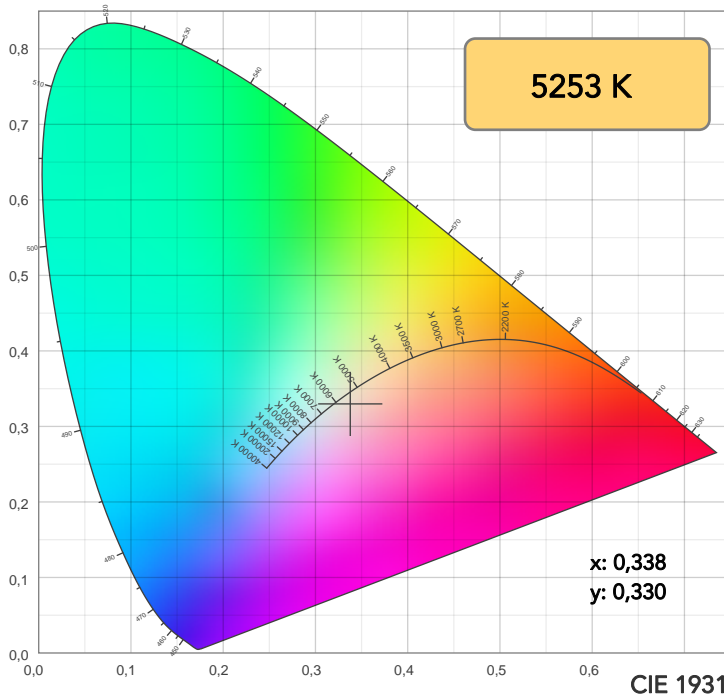
Date and time:

06/02/2020 17:08:30

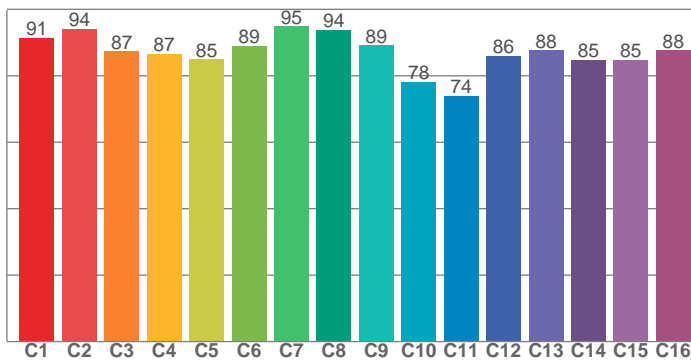


Spectra

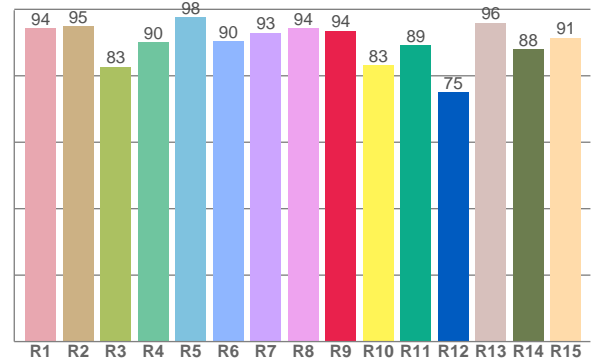




TM30: 86,9



CRI: 92,2 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
94,3	95,0	82,7	90,2	97,6	90,5	93,0	94,3	93,5	83,1	89,2	75,0	95,9	88,0	91,5

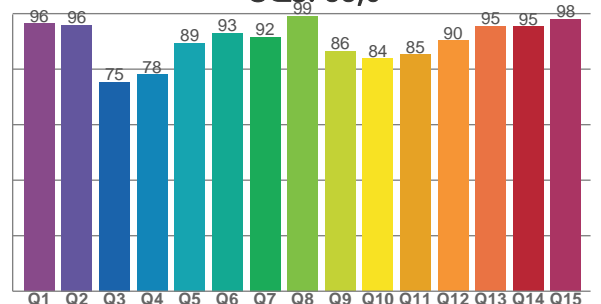
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,5	94,1	87,3	86,5	84,9	89,0	94,8	93,8	89,2	78,2	73,9	86,0	87,6	84,8	84,8	87,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,5	96,0	75,4	78,1	89,3	93,1	91,6	99,2	86,4	83,8	85,3	90,3	95,4	95,4	97,9

CQS: 88,0



## COLOR PARAMETERS

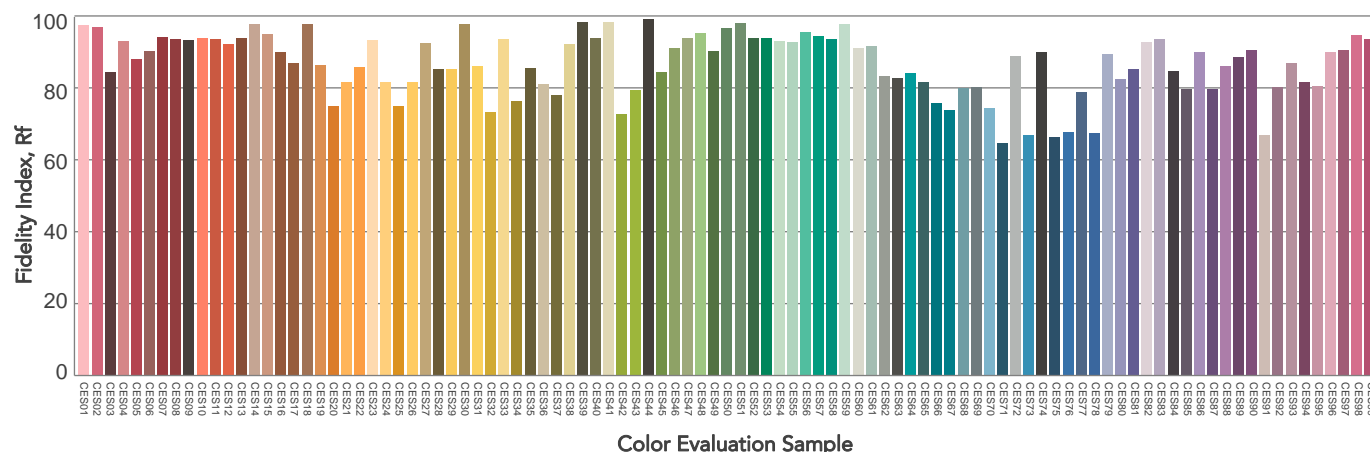
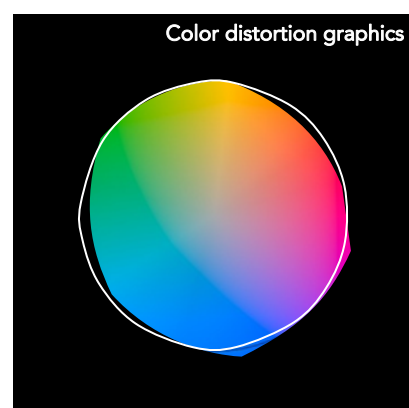
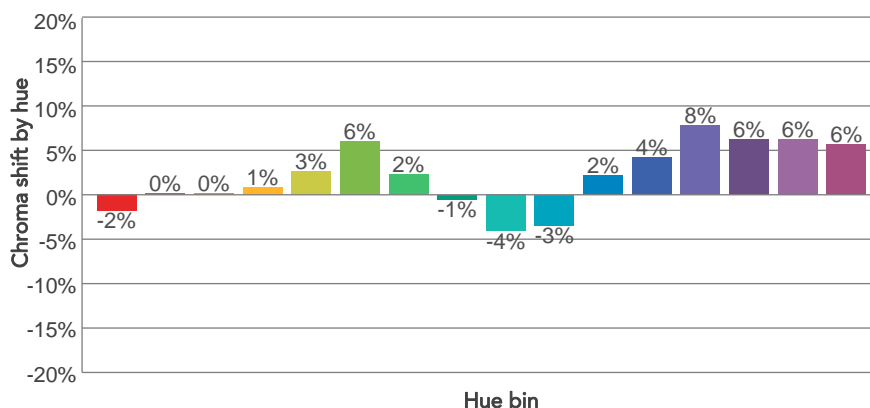
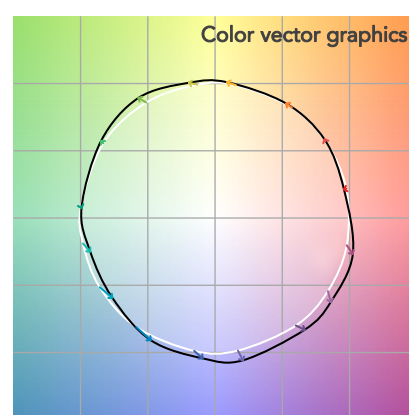
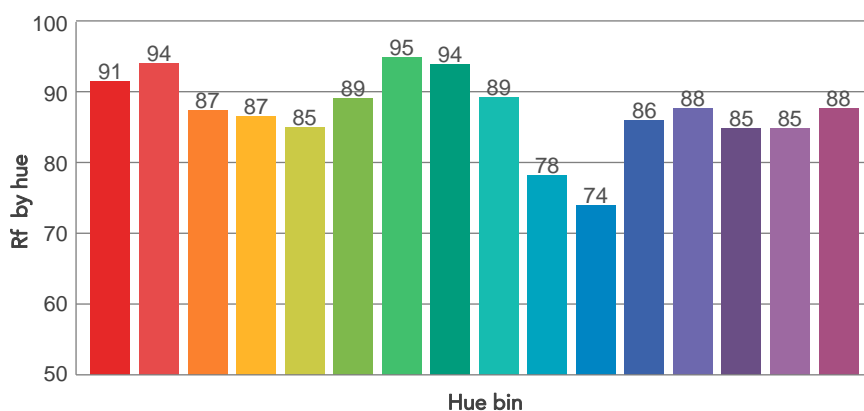
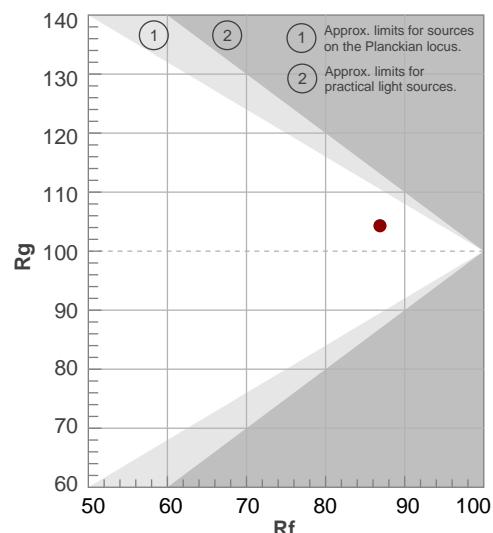
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5253 K	92,2	93,5	86,9	104,3	88,0	86	0,338	0,330	-0,0115

# TM30 DETAILS

**Rf 86,9**  
Fidelity index Rf

**Rg 104,3**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-2%	0%
2	94	0%	1%
3	87	0%	5%
4	87	1%	7%
5	85	3%	6%
6	89	6%	3%
7	95	2%	-1%
8	94	-1%	1%
9	89	-4%	7%
10	78	-3%	12%
11	74	2%	14%
12	86	4%	7%
13	88	8%	2%
14	85	6%	4%
15	85	6%	-6%
16	88	6%	-5%

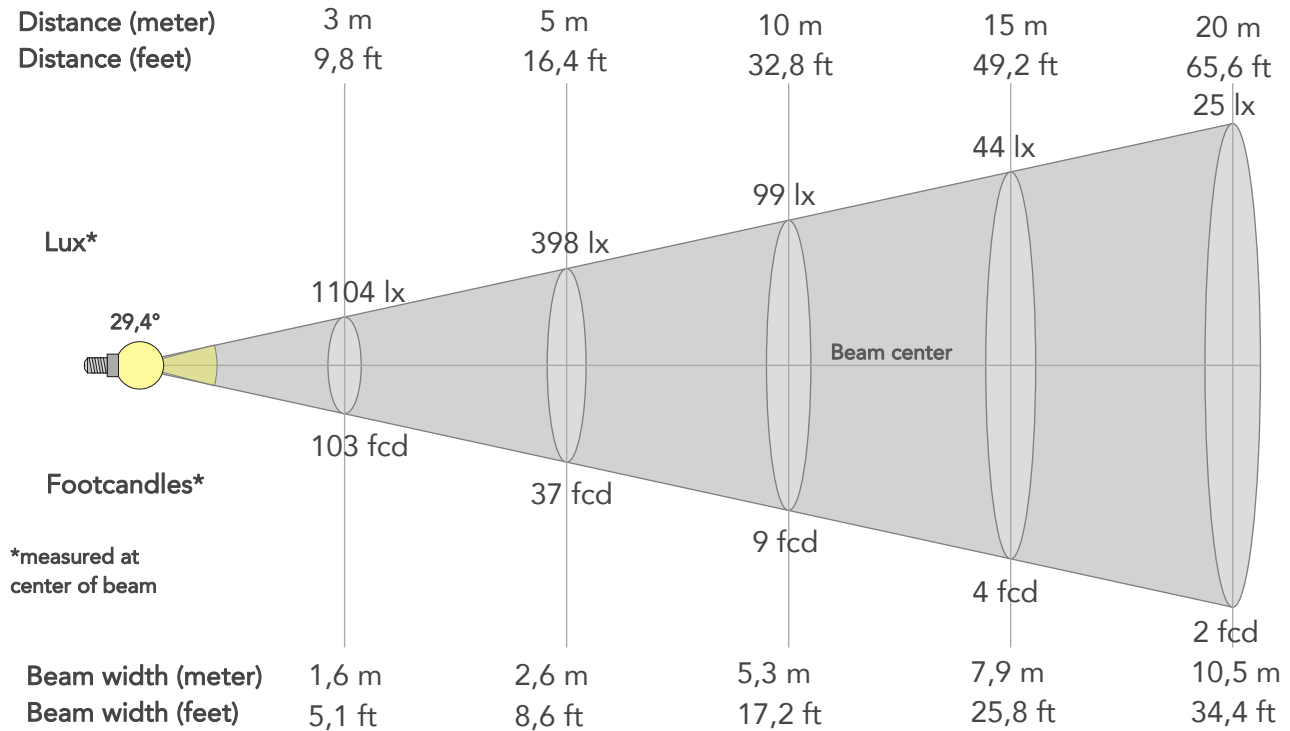




## BEAM DETAILS



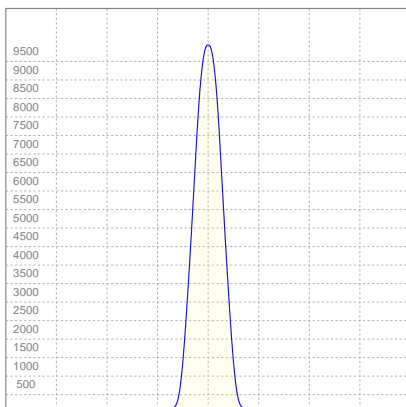
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,4°	47,6°	56,7°	97,9%	96,0%



### 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	9938lx	2484lx	1104lx	621lx	398lx	177lx	99lx	44lx	25lx	16lx	11lx	6lx	4lx
Footcand.	923fcd	231fcd	103fcd	58fcd	37fcd	16fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,1m	2,6m	3,9m	5,3m	7,9m	10,5m	13,1m	15,8m	21m	26,3m
Beam wid.	1,7ft	3,5ft	5,1ft	6,9ft	8,6ft	12,9ft	17,2ft	25,8ft	34,4ft	43,1ft	51,7ft	68,9ft	86,1ft

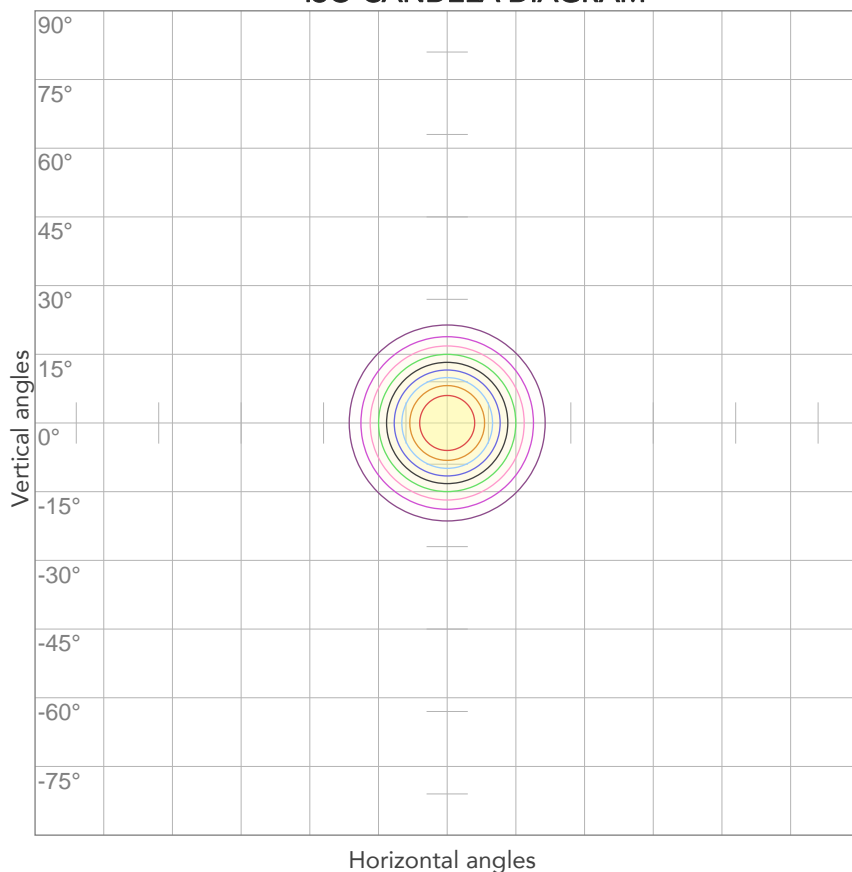
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,421A	88,5W	31lm/W

## ISO CANDELA DIAGRAM



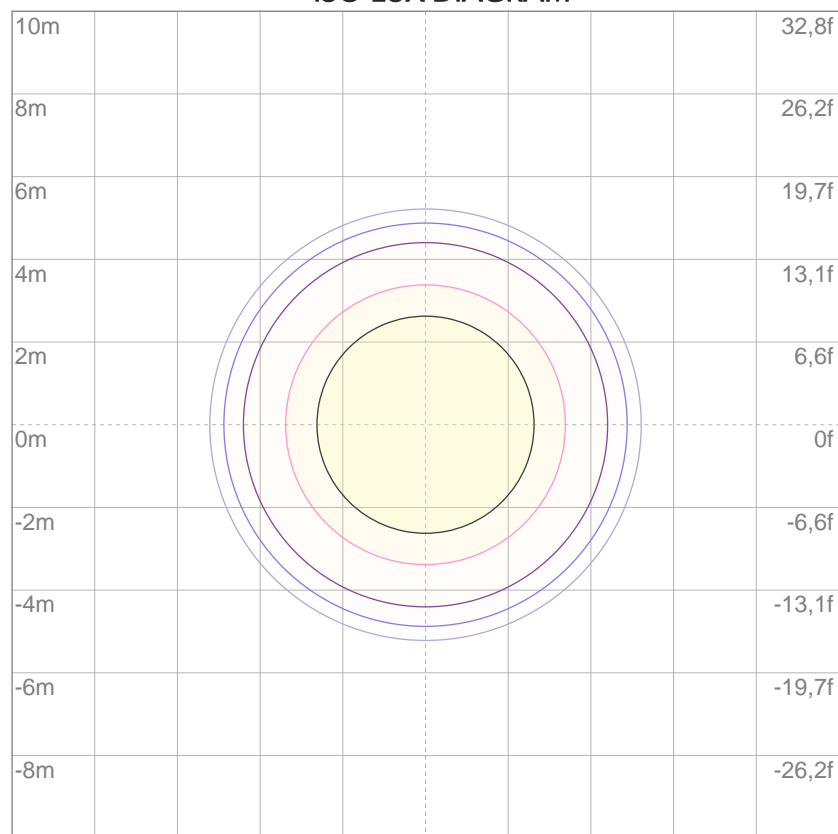
10%	994 cd
20%	1988 cd
30%	2981 cd
40%	3975 cd
50%	4969 cd
60%	5963 cd
70%	6956 cd
80%	7950 cd

### Conditions:

Number of c-planes: 2

Candela at center: 9938 cd

## ISO LUX DIAGRAM



3%	2,98 lx
5%	4,97 lx
10%	9,94 lx
30%	29,8 lx
50%	49,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 99,4 lx

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



Total lumen output:

1603 lm

Total candela output:

17878 cd

Light quality:

CRI: 92,7

Color temperature:

5155 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASUREMENT CONDITIONS:**

Beam angle:

15°

Target:

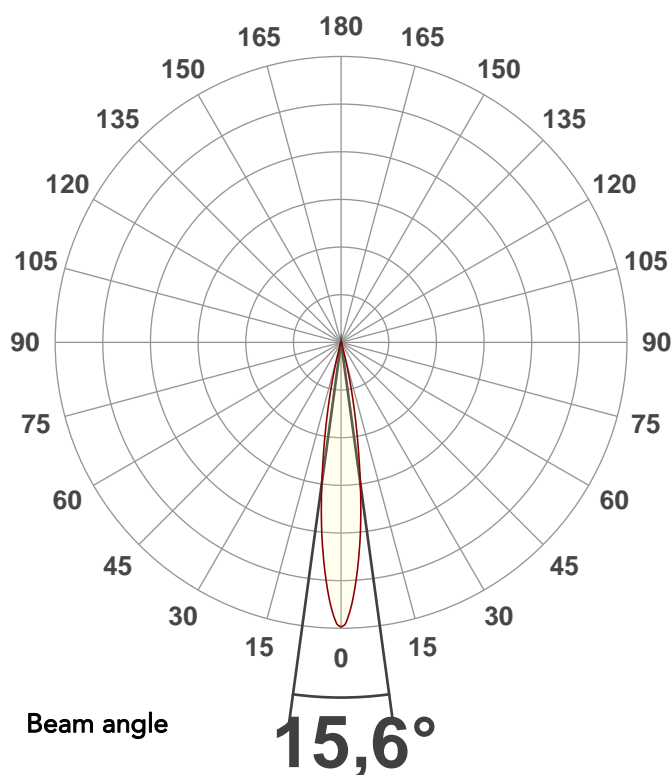
5600K

Operator:

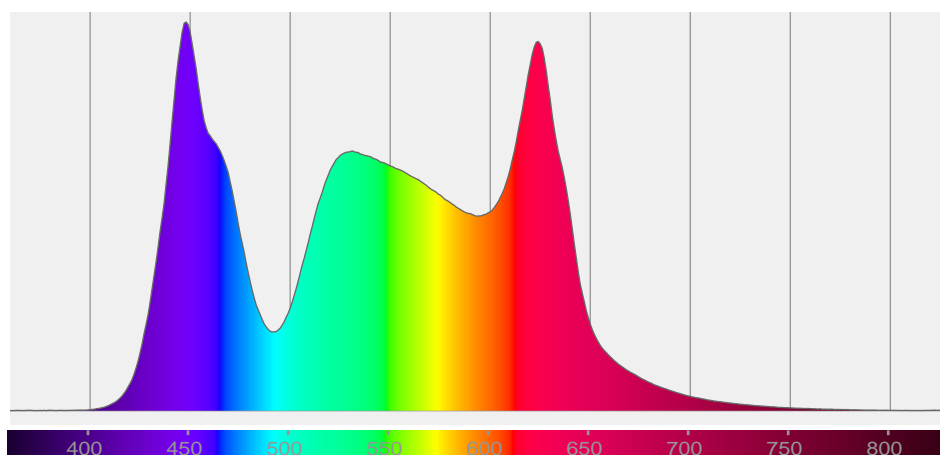
Paolo Carvone

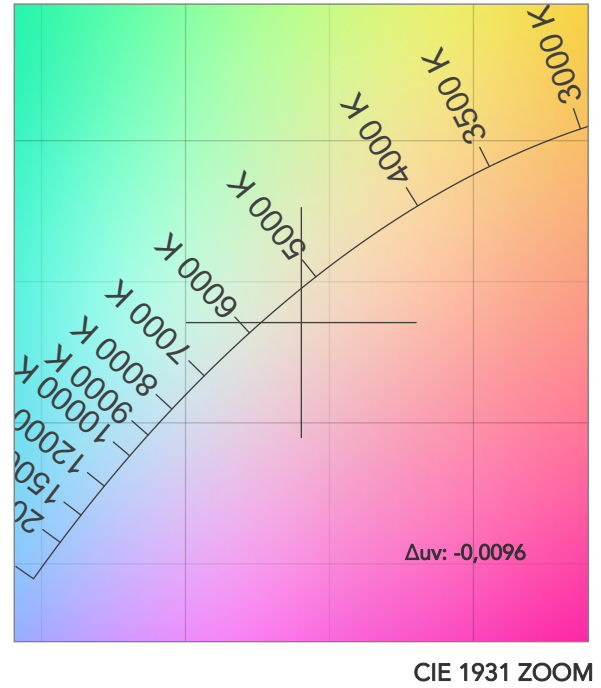
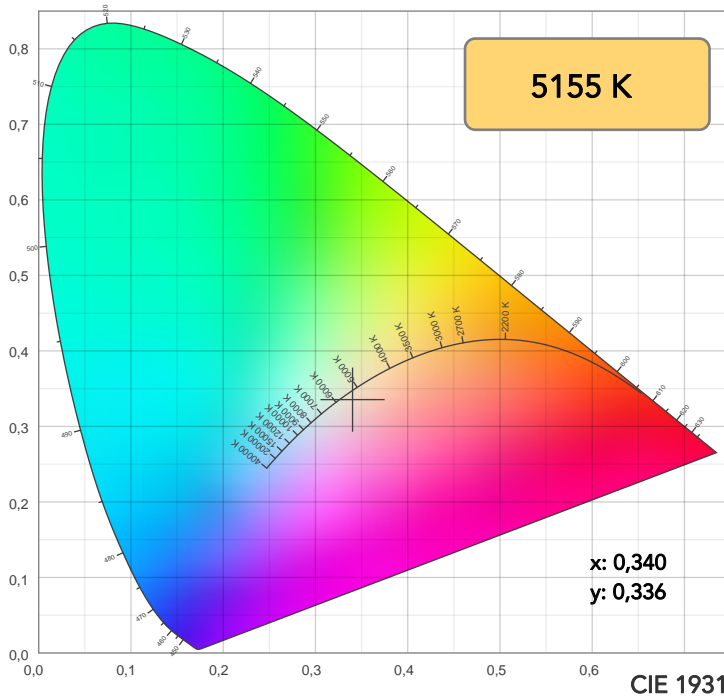
Date and time:

06/02/2020 17:45:55

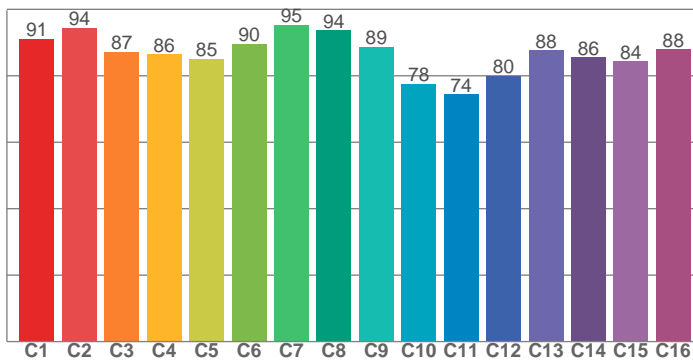


Spectra

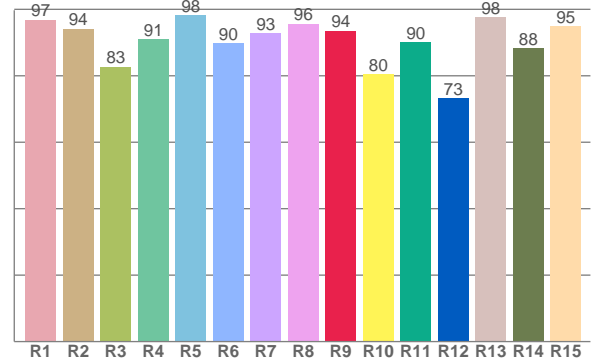




TM30: 86,9



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
96,8	94,2	82,7	91,0	98,2	89,8	92,8	95,7	93,6	80,5	90,2	73,2	97,5	88,2	94,9

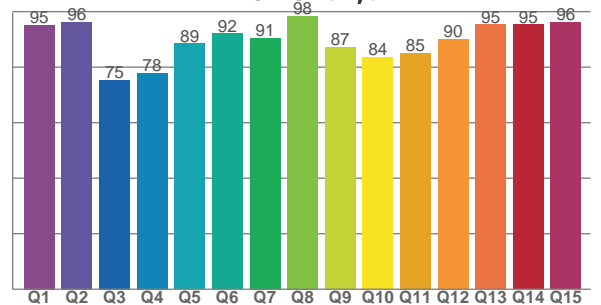
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,2	94,4	87,2	86,4	85,1	89,6	95,3	93,6	88,8	77,5	74,3	79,9	87,6	85,6	84,4	87,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,2	96,2	75,4	77,8	88,5	92,1	90,5	98,4	87,2	83,7	85,2	90,2	95,4	95,4	96,1

CQS: 87,8



## COLOR PARAMETERS

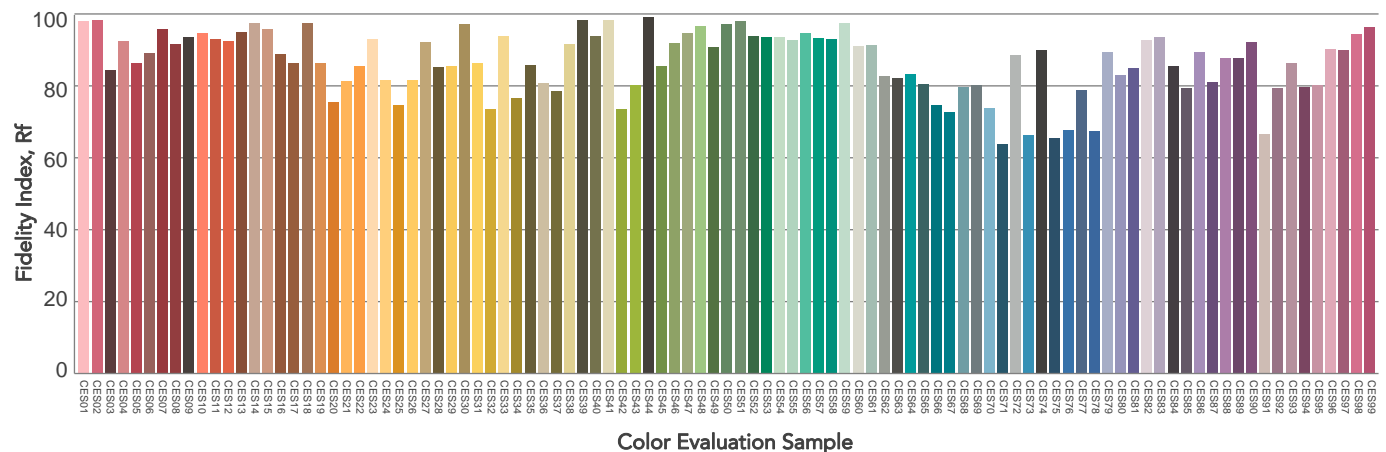
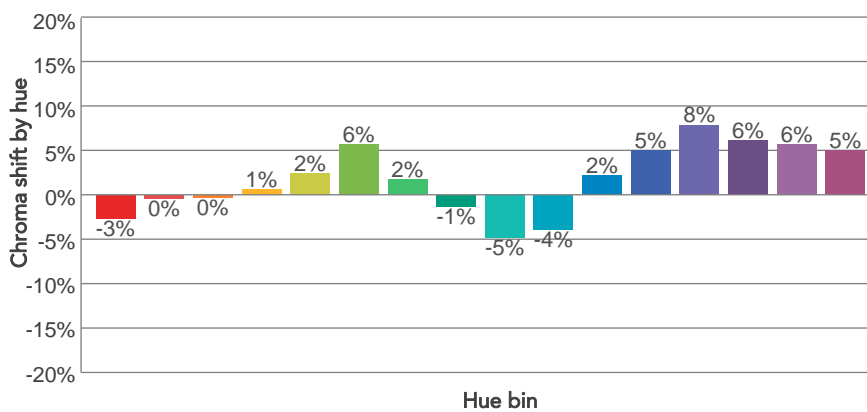
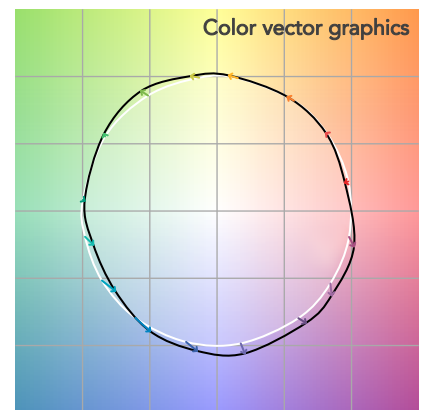
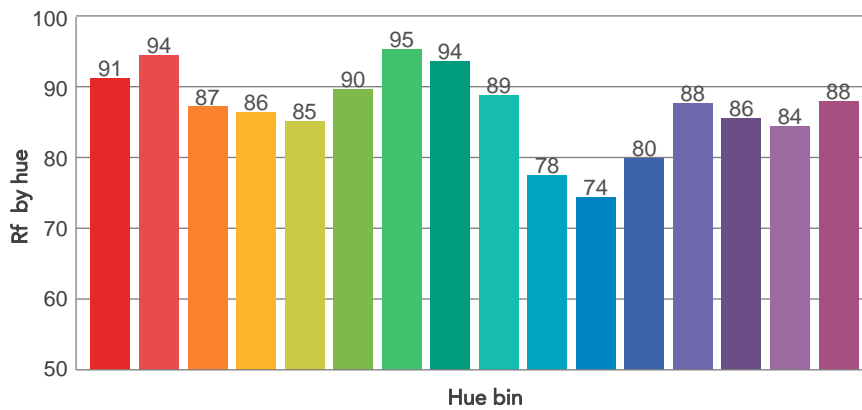
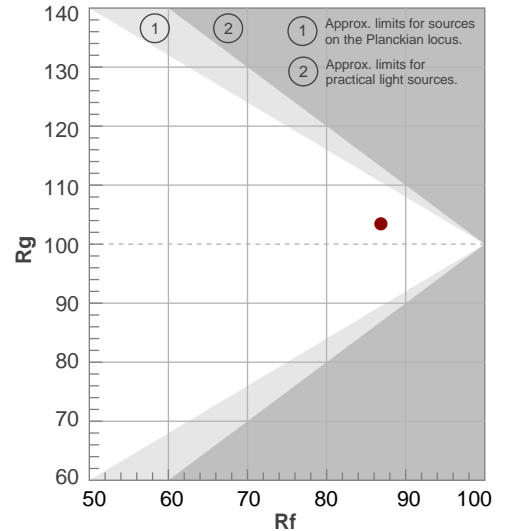
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5155 K	92,7	93,6	86,9	103,4	87,8	85	0,340	0,336	-0,0096

# TM30 DETAILS

**Rf 86,9**  
Fidelity index Rf

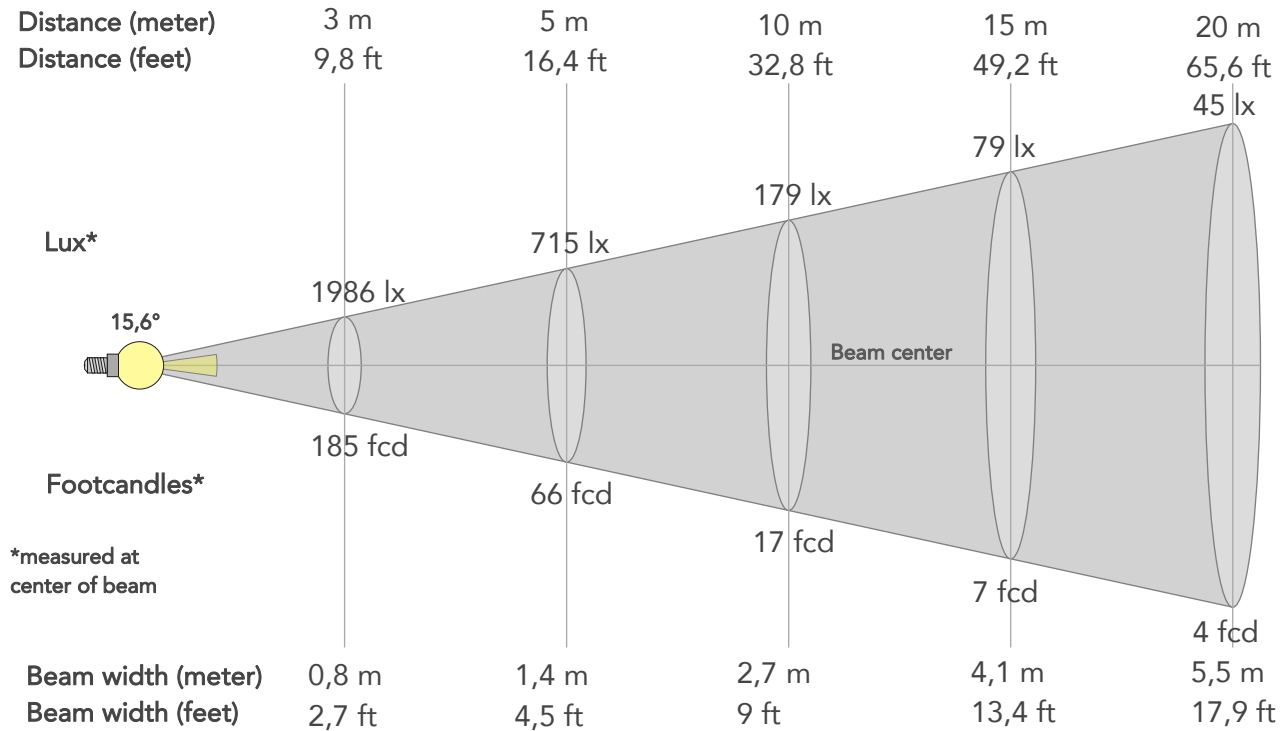
**Rg 103,4**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-3%	0%
2	94	0%	1%
3	87	0%	6%
4	86	1%	7%
5	85	2%	6%
6	90	6%	3%
7	95	2%	-1%
8	94	-1%	1%
9	89	-5%	7%
10	78	-4%	12%
11	74	2%	15%
12	80	5%	9%
13	88	8%	1%
14	86	6%	3%
15	84	6%	-7%
16	88	5%	-6%



## BEAM DETAILS

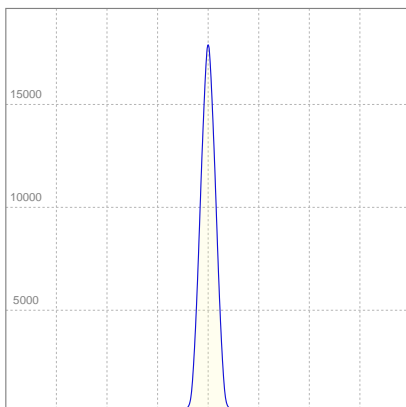
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,6°	27,3°	33,3°	97,7%	95,0%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	17878lx	4469lx	1986lx	1117lx	715lx	318lx	179lx	79lx	45lx	29lx	20lx	11lx	7lx
Footcand.	1661fcd	415fcd	185fcd	104fcd	66fcd	30fcd	17fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,5m	0,8m	1,1m	1,4m	2,1m	2,7m	4,1m	5,5m	6,8m	8,2m	10,9m	13,7m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,7ft	9ft	13,4ft	17,9ft	22,4ft	26,9ft	35,9ft	44,8ft

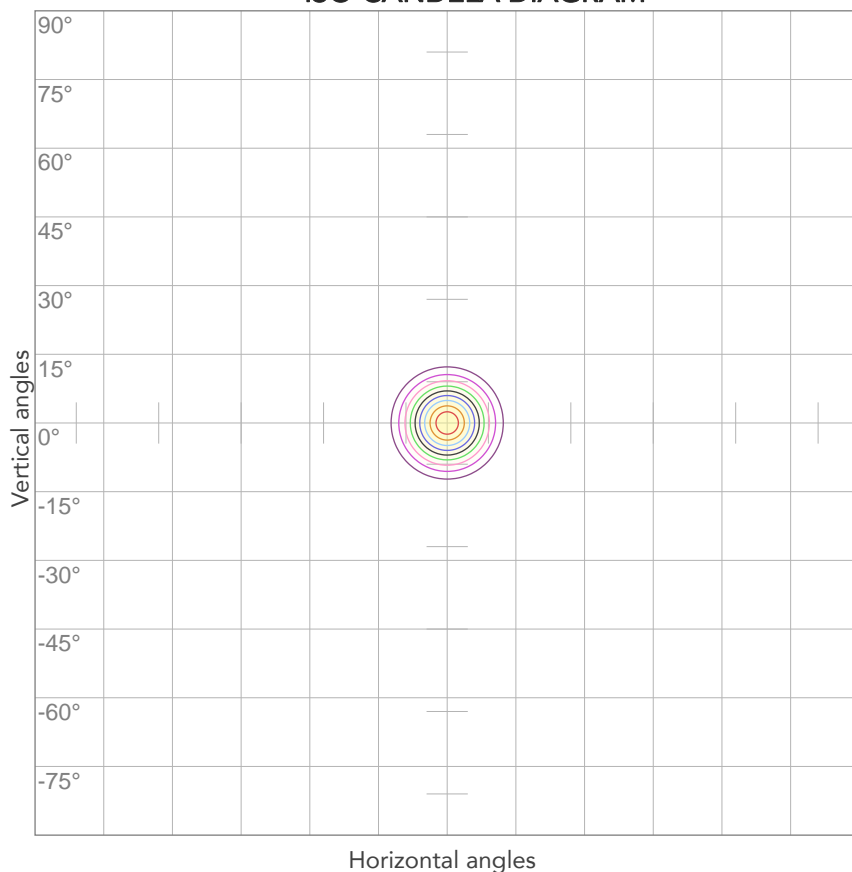
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,427A	89,2W	18lm/W

## ISO CANDELA DIAGRAM



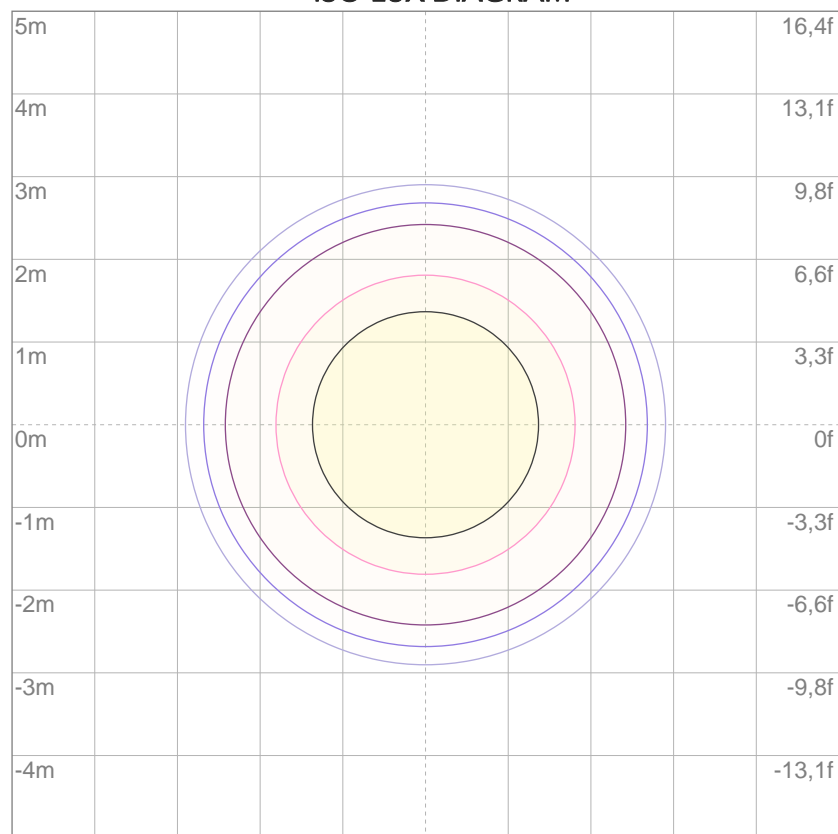
10%	1788 cd
20%	3576 cd
30%	5363 cd
40%	7151 cd
50%	8939 cd
60%	10727 cd
70%	12515 cd
80%	14302 cd

### Conditions:

Number of c-planes: 2

Candela at center: 17878 cd

## ISO LUX DIAGRAM



3%	5,36 lx
5%	8,94 lx
10%	17,9 lx
30%	53,6 lx
50%	89,4 lx

### Conditions:

Number of c-planes: 2

Lux at center: 179 lx

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



Total lumen output:

2935 lm

Total candela output:

3587 cd

Light quality:

CRI: 92,1

Color temperature:

5647 K

PRODUCT NAME:

ECLFRESNELJTW

MEASURAMENT CONDITIONS:

Beam angle:

45°

Target:

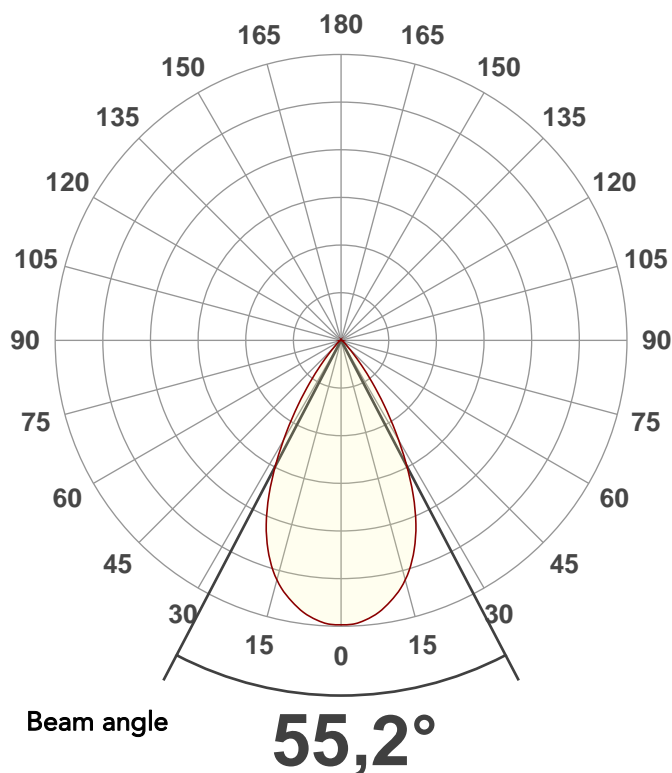
6000K

Operator:

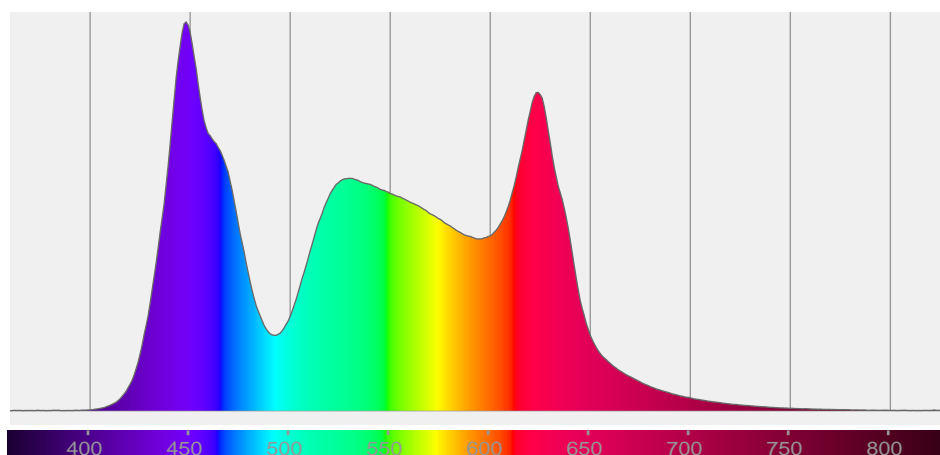
Paolo Carvone

Date and time:

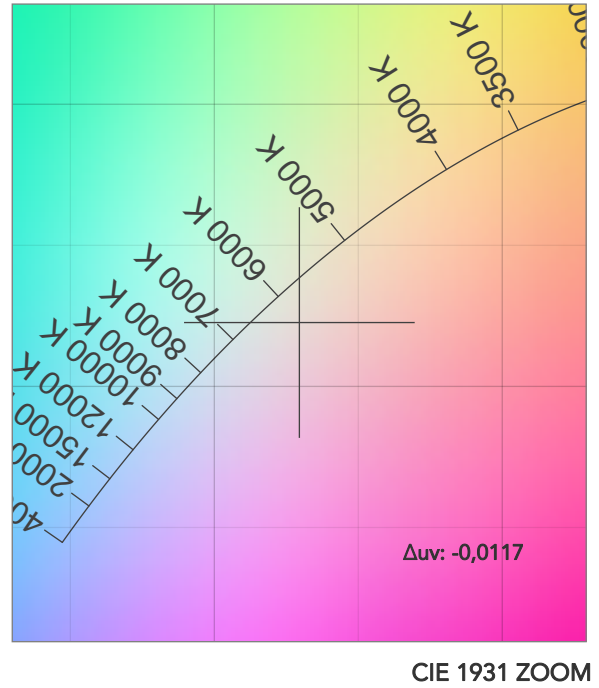
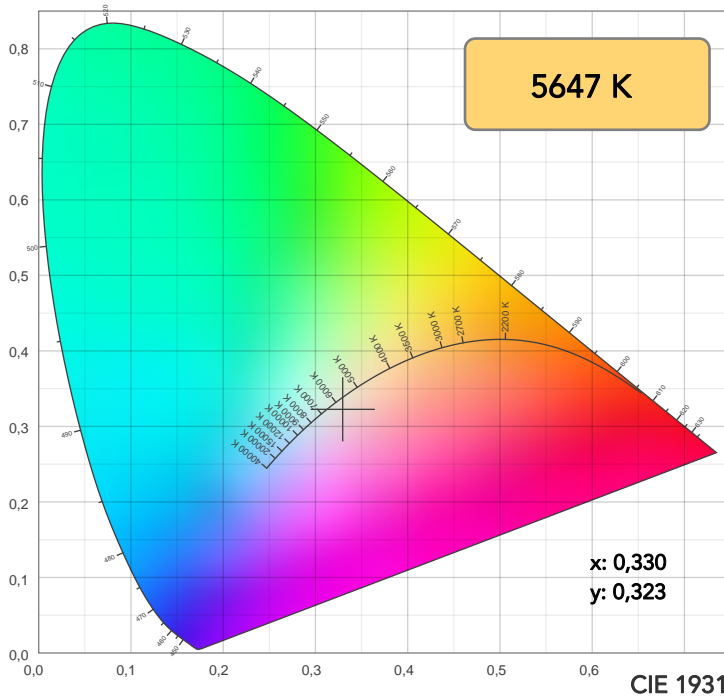
06/02/2020 16:52:51



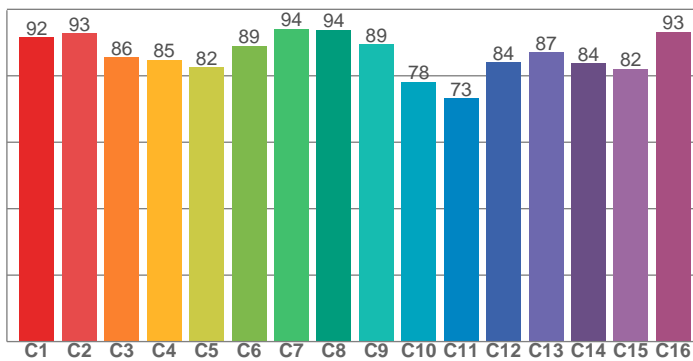
Spectra



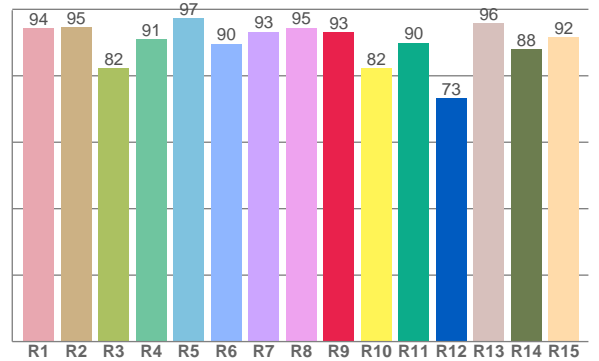




TM30: 86,2



CRI: 92,1 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
94,4	94,7	82,3	90,9	97,3	89,6	93,2	94,5	93,0	82,3	89,9	73,2	95,9	87,9	91,5

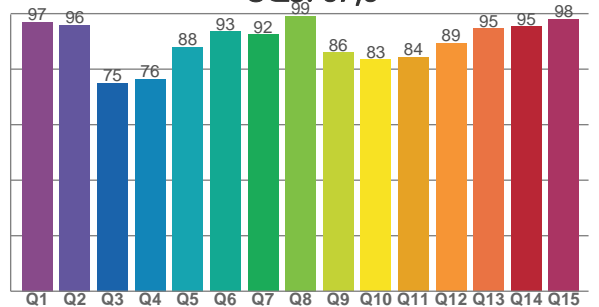
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,5	92,7	85,6	84,8	82,5	89,0	94,1	93,9	89,5	78,1	73,2	84,1	87,1	83,7	82,1	93,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,0	95,9	75,0	76,4	88,0	93,5	92,4	99,2	86,0	83,4	84,4	89,4	94,6	95,4	98,1

CQS: 87,5



## COLOR PARAMETERS

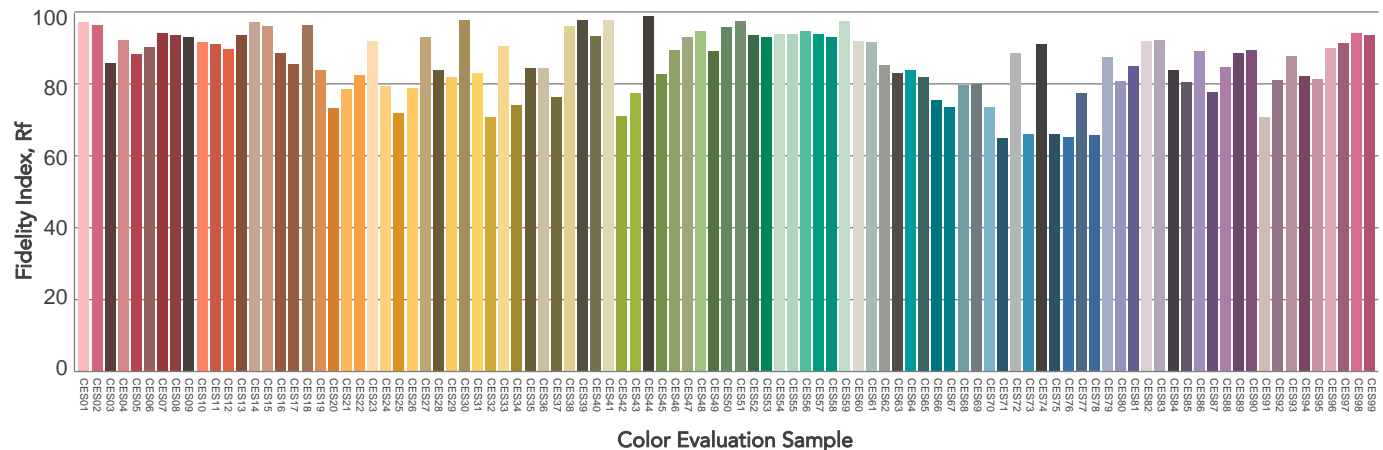
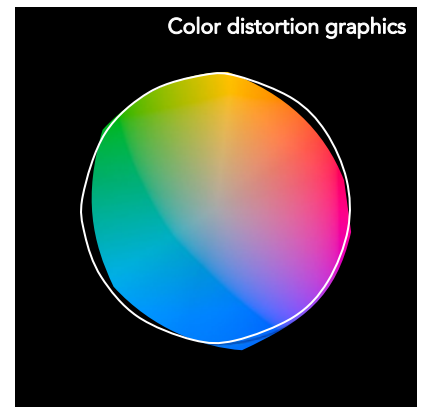
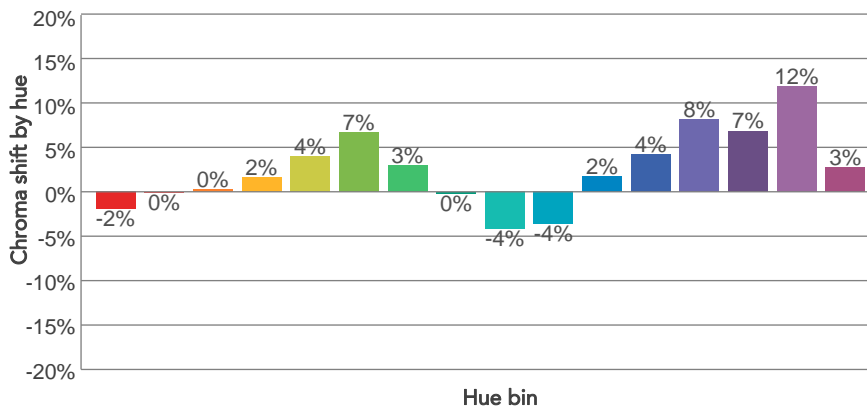
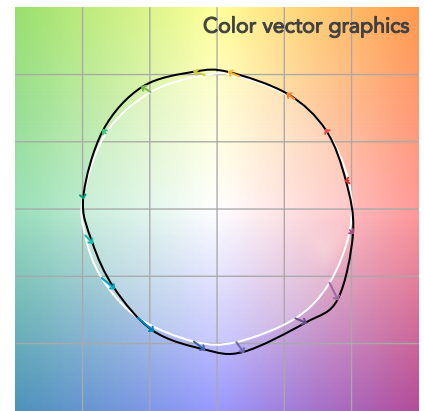
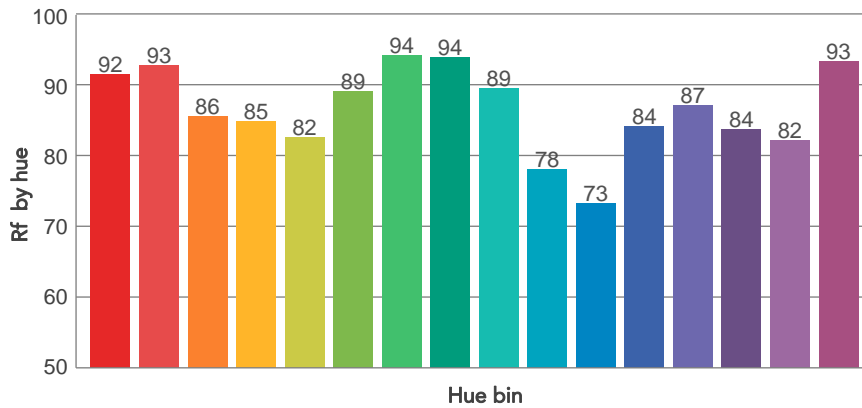
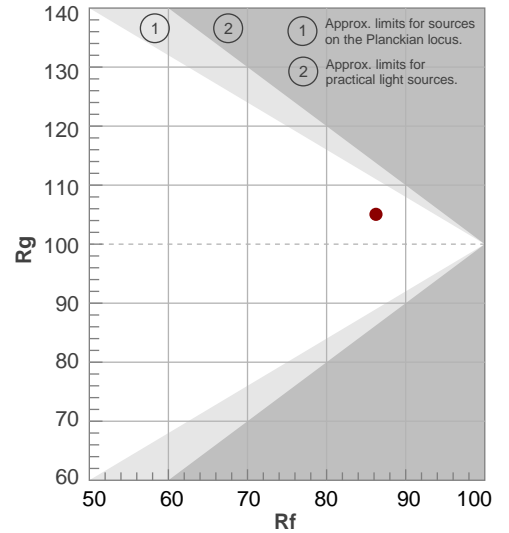
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5647 K	92,1	93,0	86,2	105,1	87,5	86	0,330	0,323	-0,0117

# TM30 DETAILS

**Rf 86,2**  
Fidelity index Rf

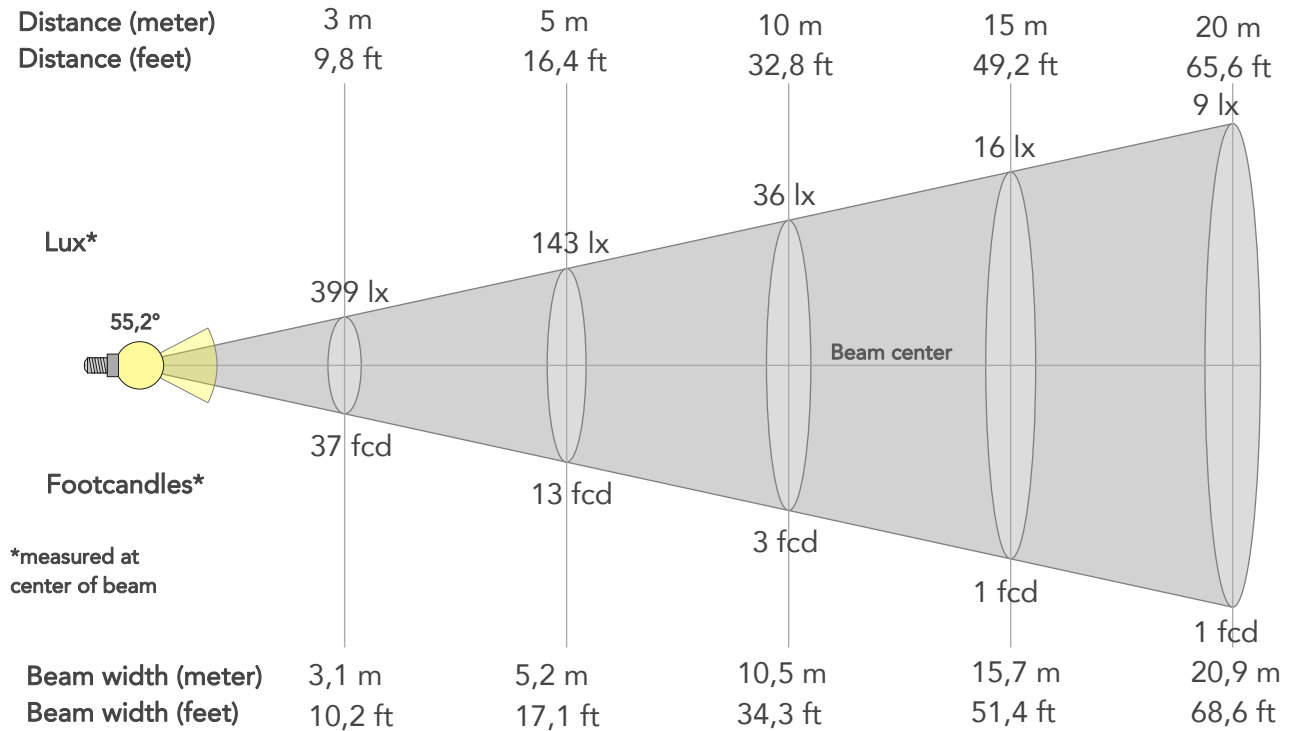
**Rg 105,1**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-2%	0%
2	93	0%	2%
3	86	0%	6%
4	85	2%	8%
5	82	4%	7%
6	89	7%	3%
7	94	3%	-1%
8	94	0%	1%
9	89	-4%	6%
10	78	-4%	11%
11	73	2%	15%
12	84	4%	8%
13	87	8%	4%
14	84	7%	5%
15	82	12%	-7%
16	93	3%	-2%



## BEAM DETAILS

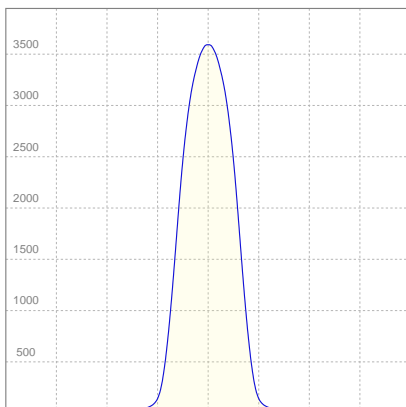
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,2°	80,4°	97,1°	97,7%	94,6%



### 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	3587lx	897lx	399lx	224lx	143lx	64lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	333fcd	83fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,8m	10,5m	15,7m	20,9m	26,1m	31,4m	41,8m	52,3m
Beam wid.	3,4ft	6,9ft	10,2ft	13,7ft	17,1ft	25,7ft	34,3ft	51,4ft	68,6ft	85,7ft	102,8ft	137,1ft	171,4ft

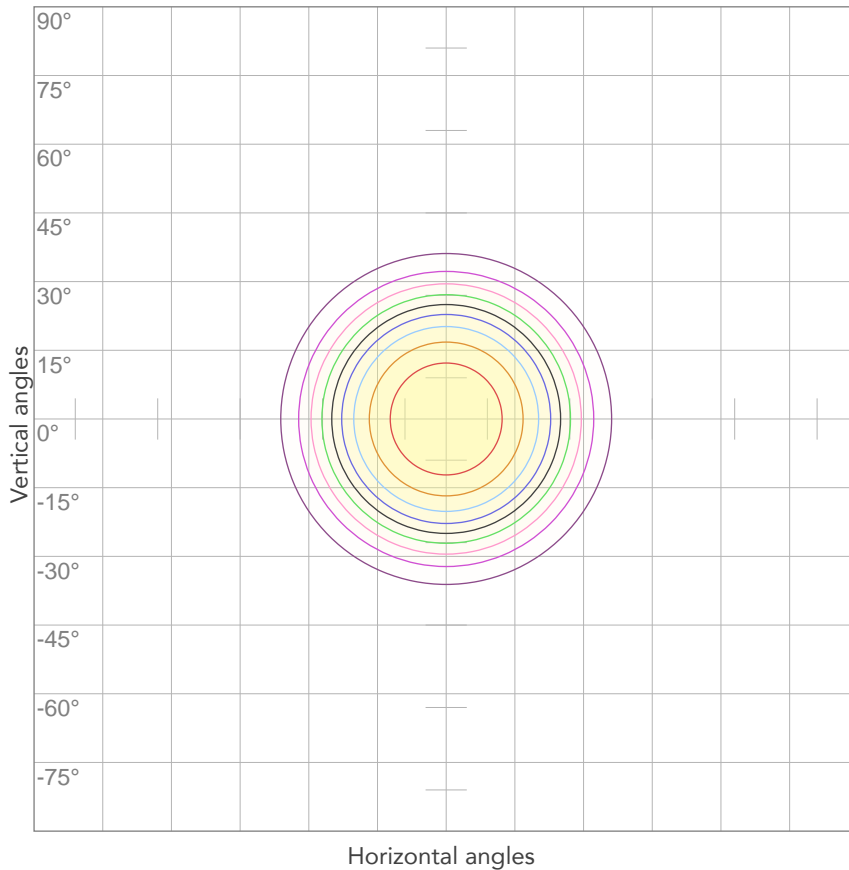
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,425A	89,5W	33lm/W

## ISO CANDELA DIAGRAM



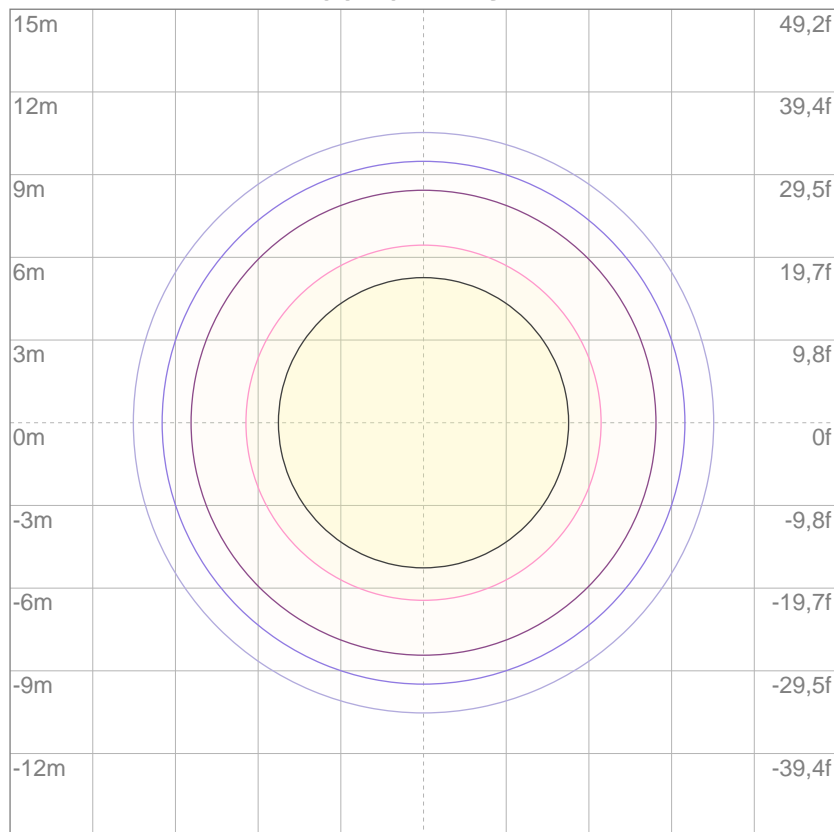
10%	359 cd
20%	717 cd
30%	1076 cd
40%	1435 cd
50%	1794 cd
60%	2152 cd
70%	2511 cd
80%	2870 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3587 cd

## ISO LUX DIAGRAM



3%	1,08 lx
5%	1,79 lx
10%	3,59 lx
30%	10,8 lx
50%	17,9 lx

### Conditions:

Number of c-planes: 2

Lux at center: 35,9 lx

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



Total lumen output:

2710 lm

Total candela output:

9959 cd

Light quality:

CRI: 92,3

Color temperature:

5609 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

30°

Target:

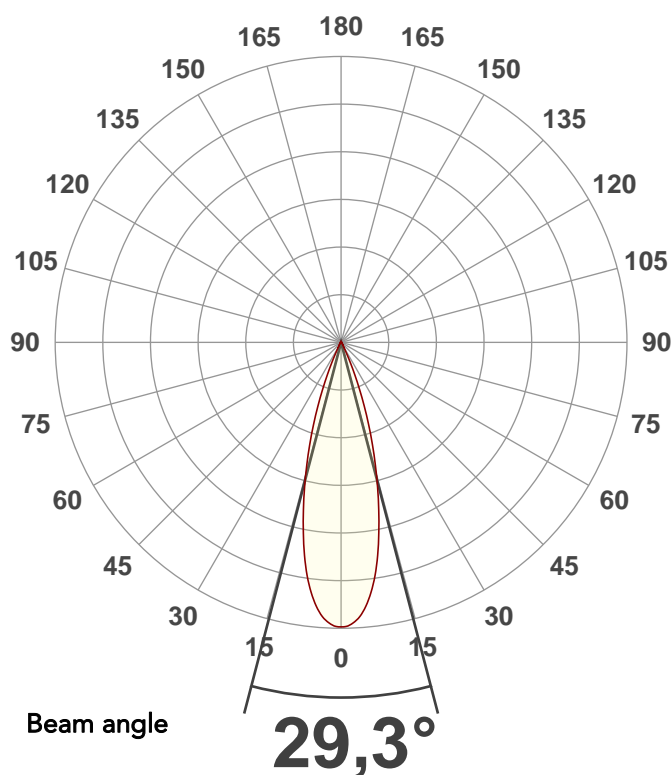
6000K

Operator:

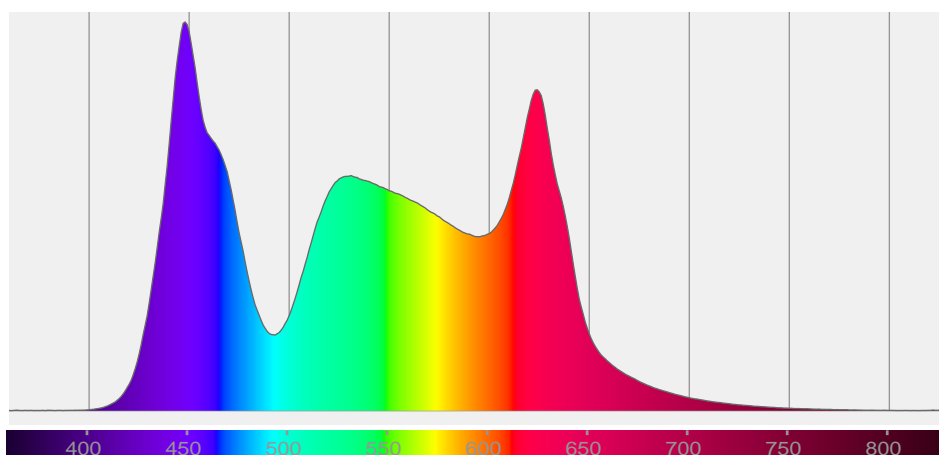
Paolo Carvone

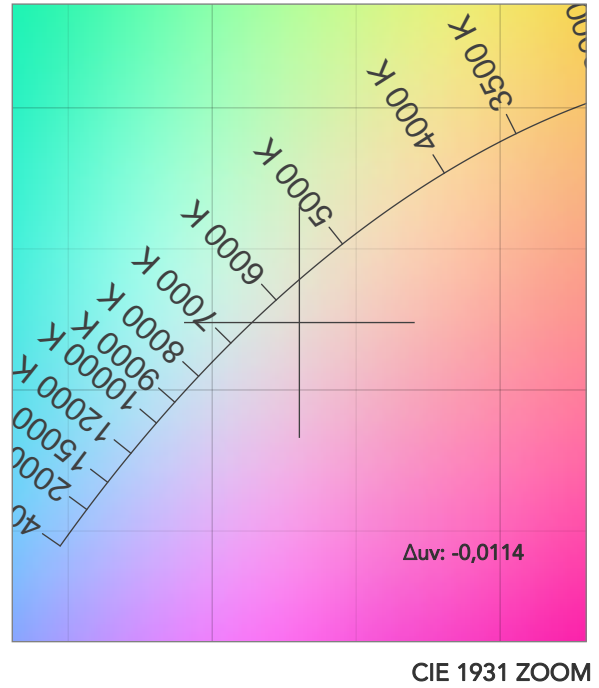
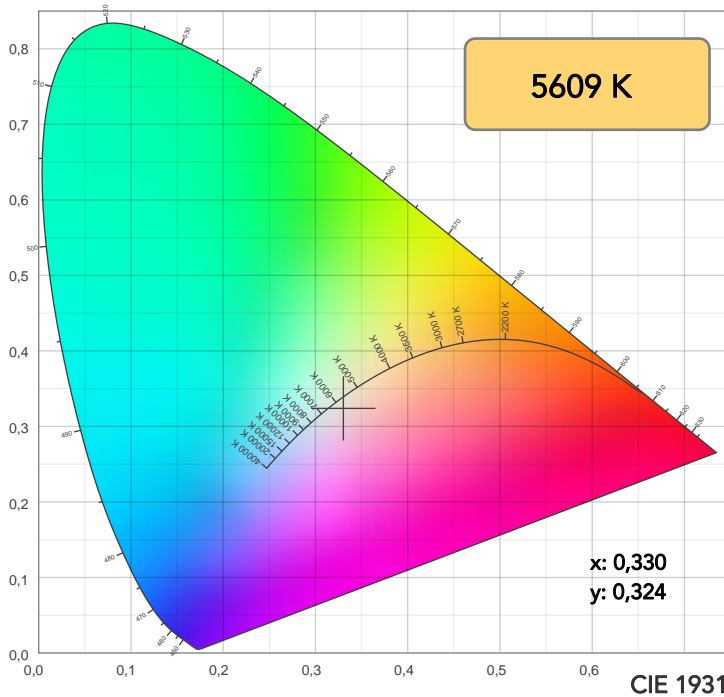
Date and time:

06/02/2020 17:10:46

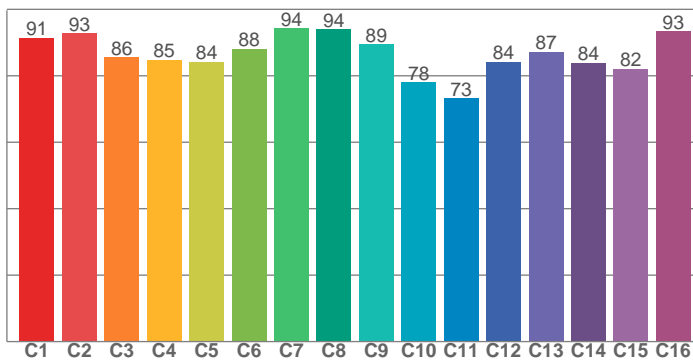


Spectra

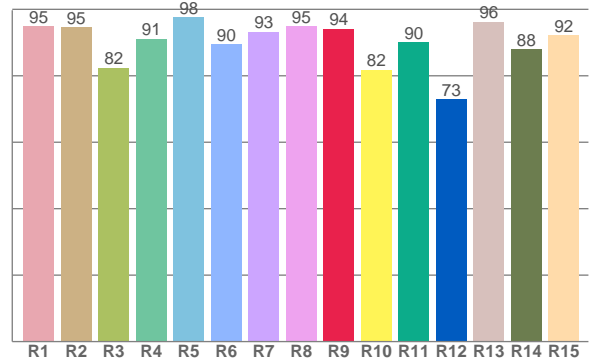




TM30: 86,3



CRI: 92,3 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
94,9	94,6	82,4	91,2	97,6	89,5	93,2	94,9	94,1	81,8	90,2	72,9	96,3	88,0	92,2

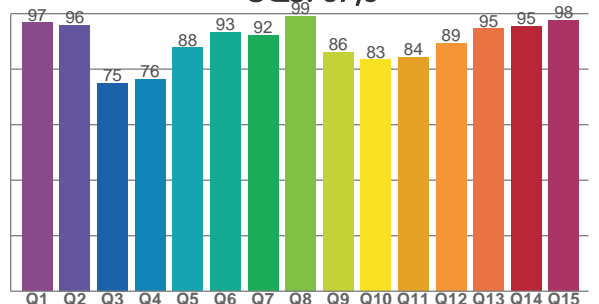
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,5	92,8	85,5	84,8	84,2	88,0	94,2	93,9	89,4	78,0	73,2	84,1	87,1	83,9	82,1	93,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,8	95,9	75,0	76,4	87,8	93,3	92,2	99,1	86,2	83,4	84,3	89,4	94,6	95,4	97,7

CQS: 87,5



## COLOR PARAMETERS

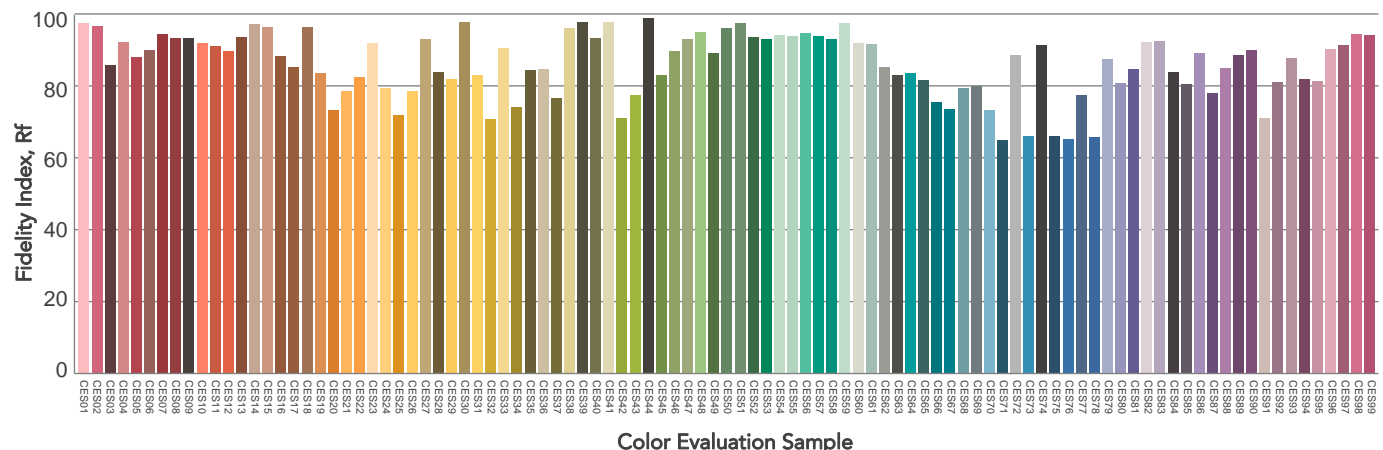
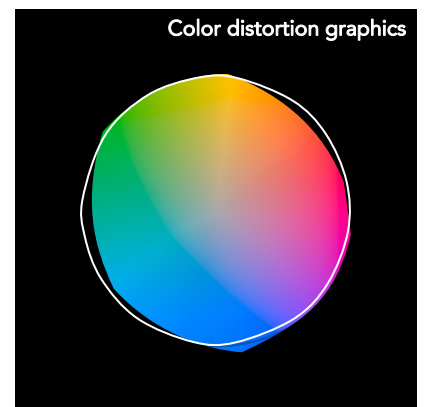
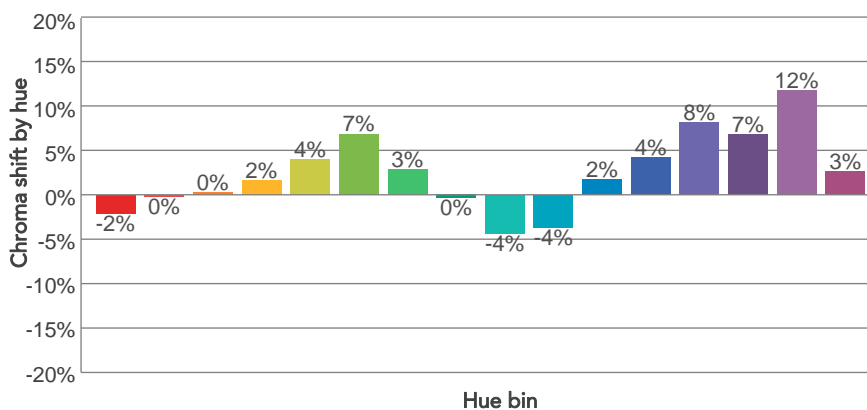
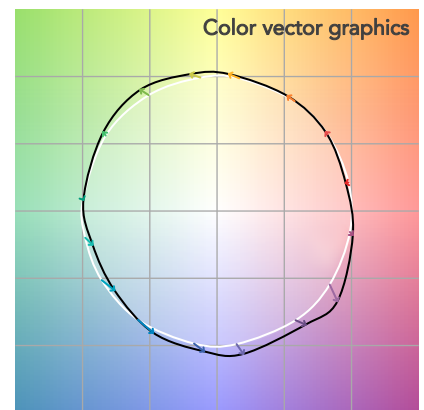
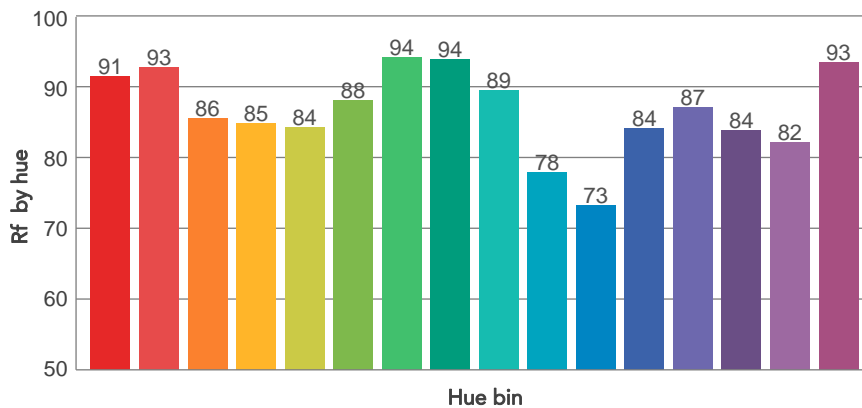
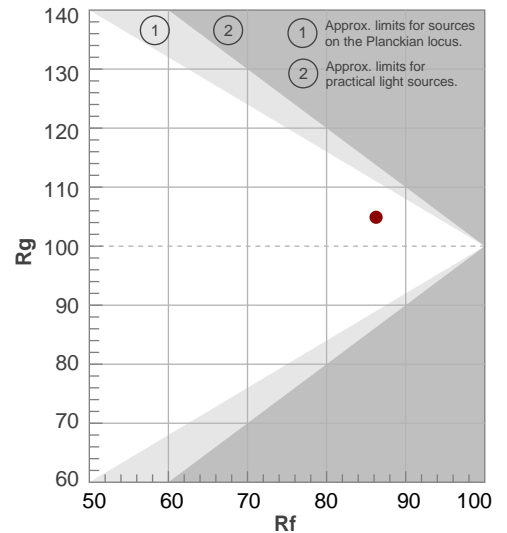
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5609 K	92,3	94,1	86,3	104,9	87,5	86	0,330	0,324	-0,0114

# TM30 DETAILS

**Rf 86,3**  
Fidelity index Rf

**Rg 104,9**  
Gammut index

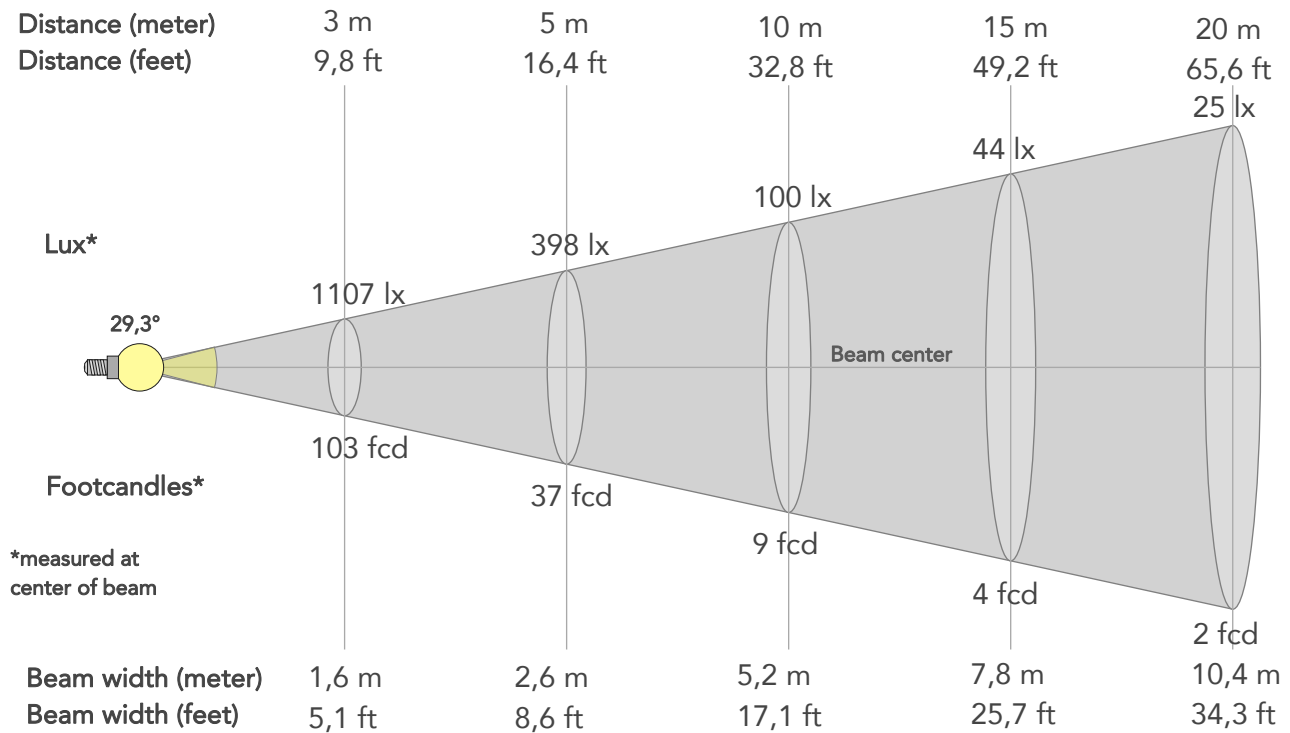
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-2%	0%
2	93	0%	2%
3	86	0%	7%
4	85	2%	8%
5	84	4%	7%
6	88	7%	3%
7	94	3%	-1%
8	94	0%	0%
9	89	-4%	6%
10	78	-4%	11%
11	73	2%	15%
12	84	4%	8%
13	87	8%	4%
14	84	7%	4%
15	82	12%	-7%
16	93	3%	-2%



## BEAM DETAILS



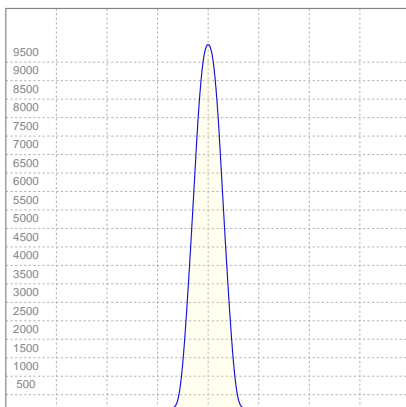
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,3°	47,6°	56,6°	97,9%	95,9%



### 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	9959lx	2490lx	1107lx	622lx	398lx	177lx	100lx	44lx	25lx	16lx	11lx	6lx	4lx
Footcand.	925fcd	231fcd	103fcd	58fcd	37fcd	16fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1m	1,6m	2,1m	2,6m	3,9m	5,2m	7,8m	10,4m	13,1m	15,7m	20,9m	26,1m
Beam wid.	1,7ft	3,4ft	5,1ft	6,8ft	8,6ft	12,8ft	17,1ft	25,7ft	34,3ft	42,8ft	51,4ft	68,5ft	85,6ft

### LINEAR DISTRIBUTION DIAGRAM

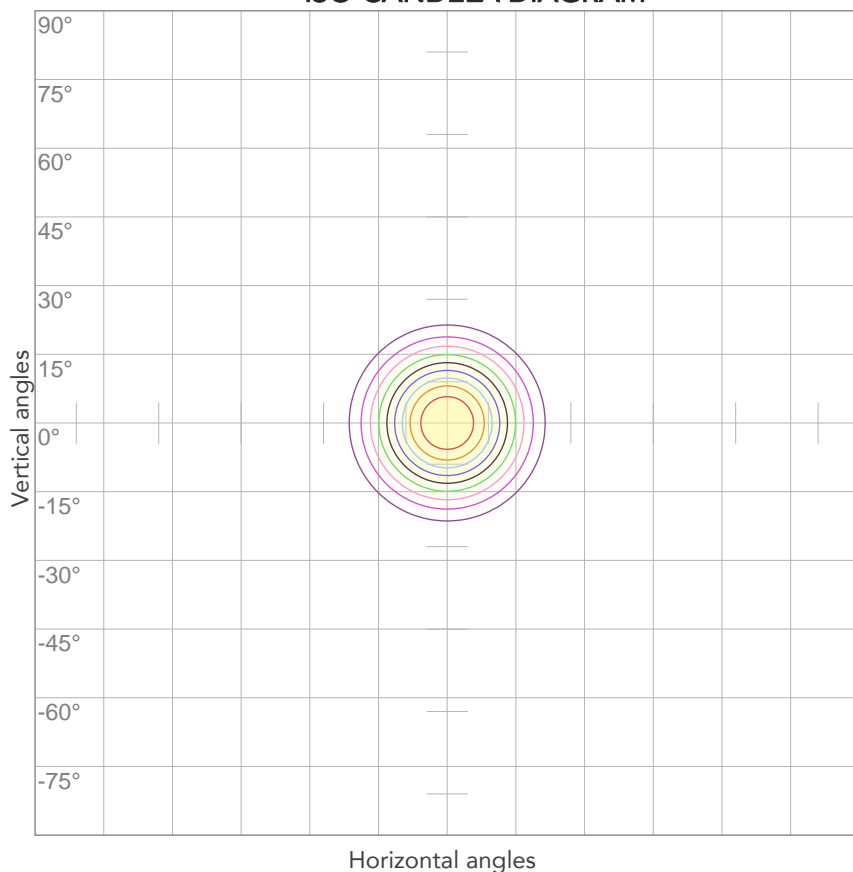


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,421A	88,6W	31lm/W



## ISO CANDELA DIAGRAM



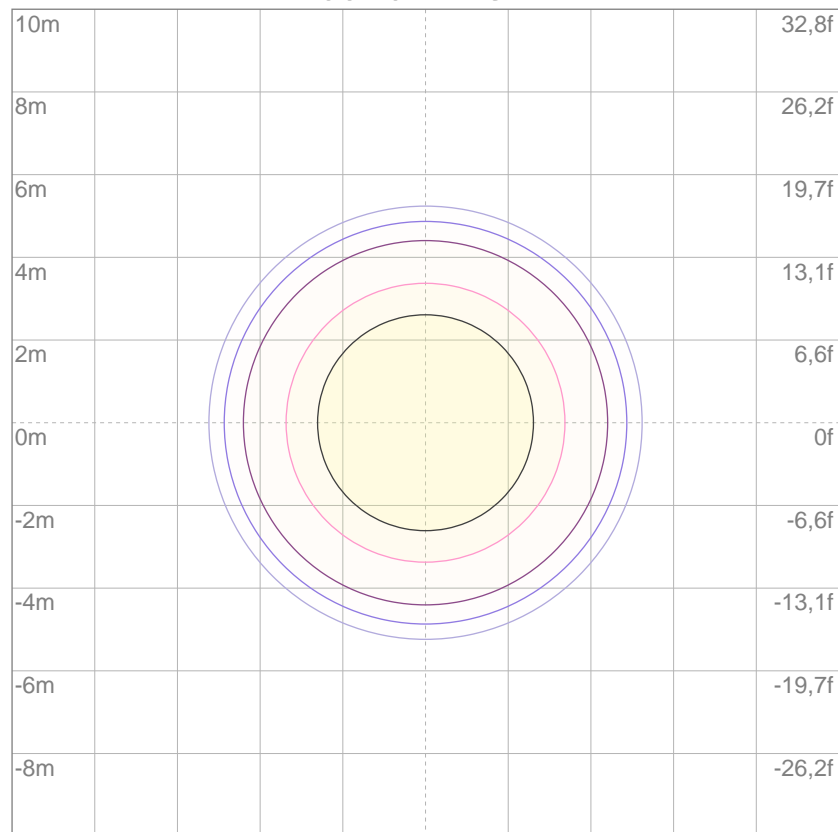
10%	996 cd
20%	1992 cd
30%	2988 cd
40%	3983 cd
50%	4979 cd
60%	5975 cd
70%	6971 cd
80%	7967 cd

### Conditions:

Number of c-planes: 2

Candela at center: 9959 cd

## ISO LUX DIAGRAM



3%	2,99 lx
5%	4,98 lx
10%	9,96 lx
30%	29,9 lx
50%	49,8 lx

### Conditions:

Number of c-planes: 2

Lux at center: 99,6 lx

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



Total lumen output:

1596 lm

Total candela output:

17519 cd

Light quality:

CRI: 92,6

Color temperature:

5419 K

**PRODUCT NAME:**

**ECLFRESNELJTW**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

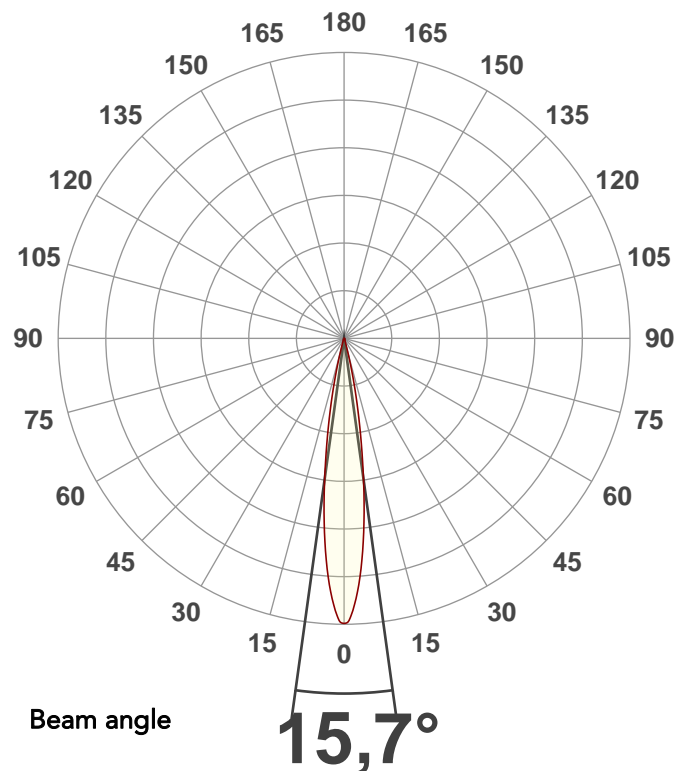
6000K

Operator:

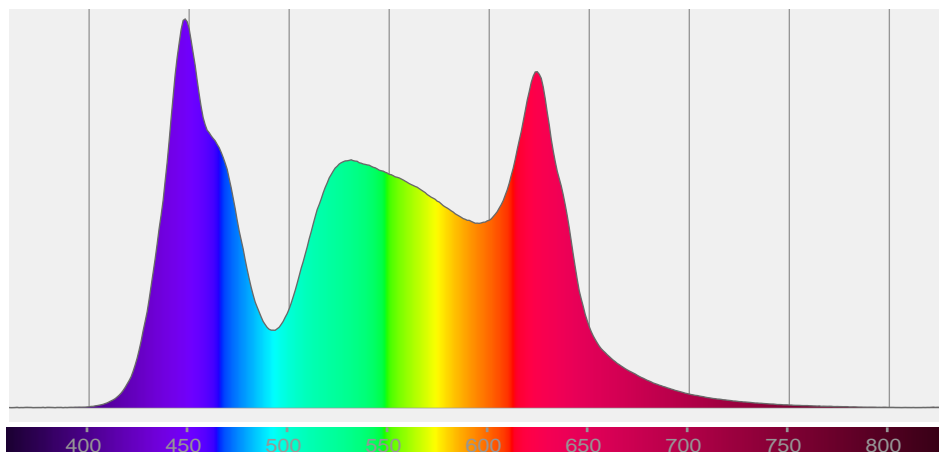
Paolo Carvone

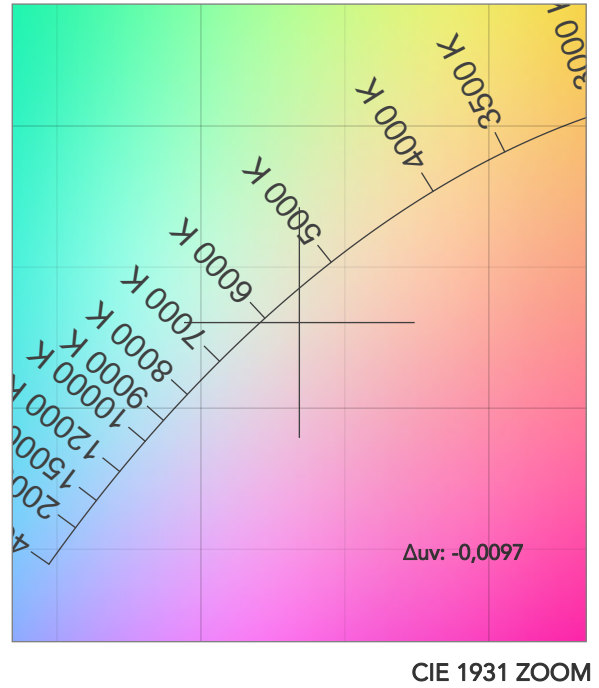
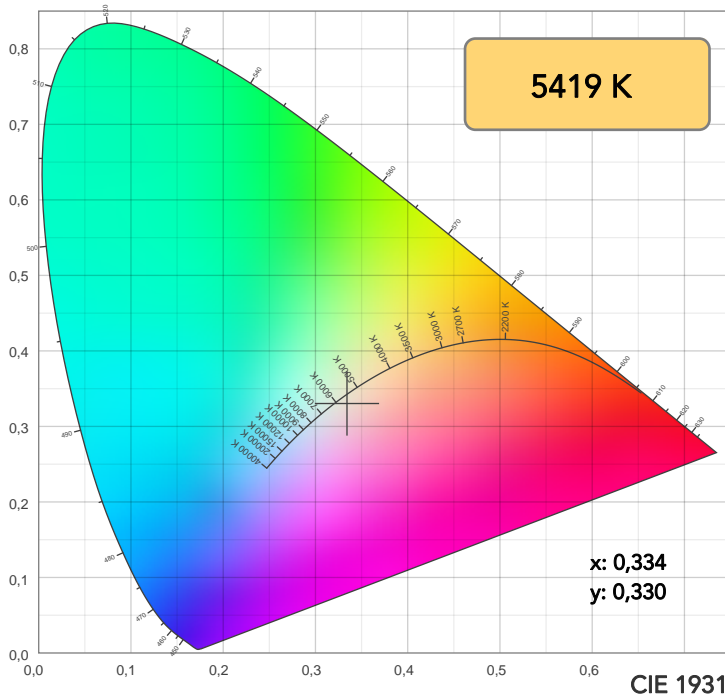
Date and time:

06/02/2020 17:49:52

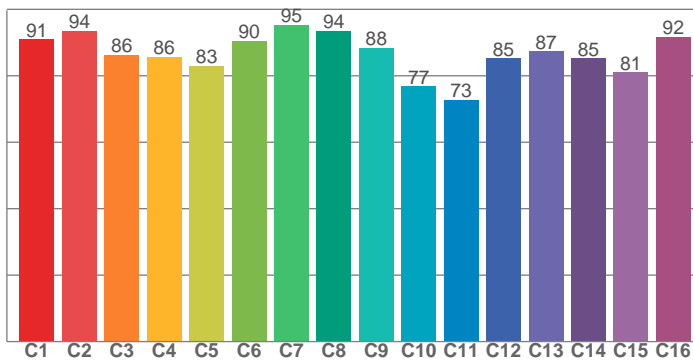


Spectra

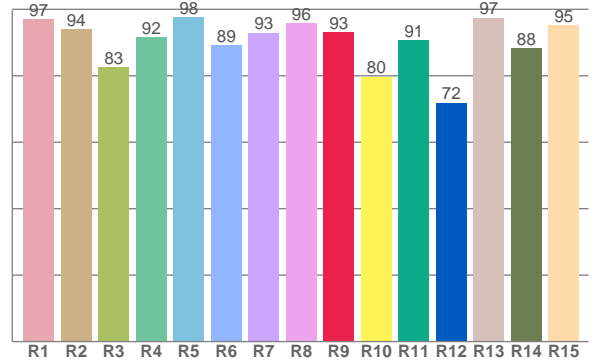




TM30: 86,5



CRI: 92,6 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97,0	93,9	82,6	91,6	97,6	89,1	92,9	95,9	93,2	79,7	90,7	71,9	97,4	88,2	95,2

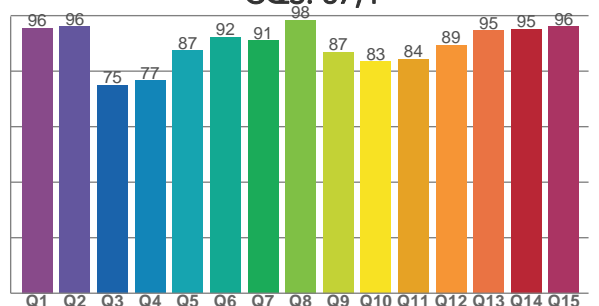
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90,9	93,5	86,2	85,7	83,0	90,5	95,4	93,5	88,4	76,8	72,8	85,3	87,4	85,3	81,0	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,6	96,1	75,0	76,5	87,4	92,2	91,0	98,5	86,9	83,4	84,4	89,4	94,7	95,2	96,1

CQS: 87,4



## COLOR PARAMETERS

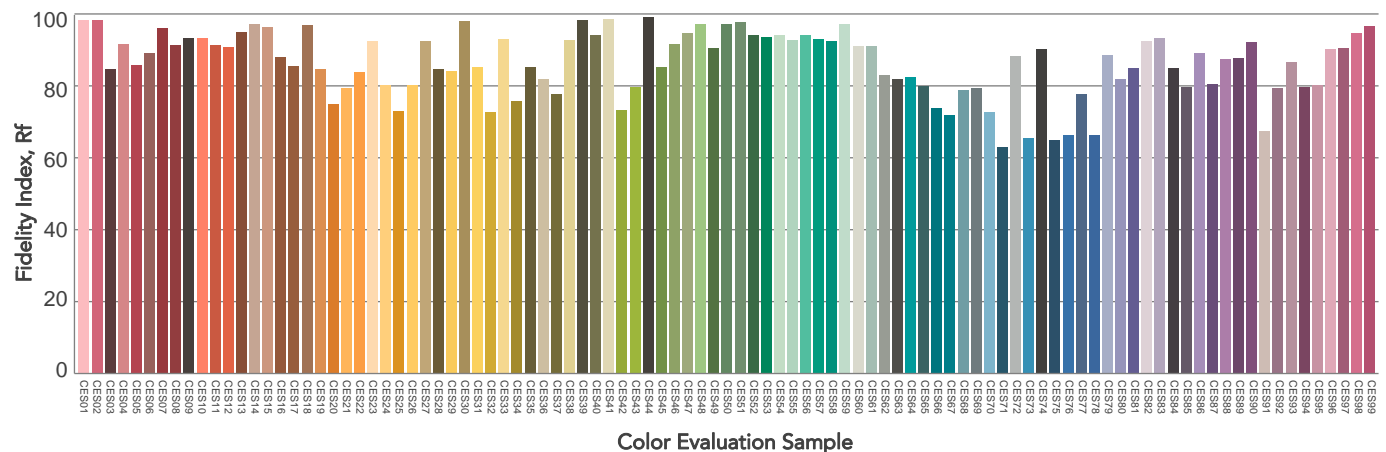
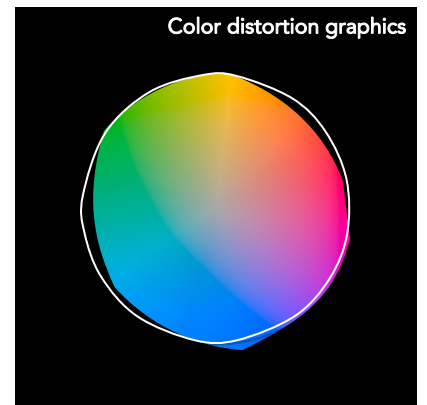
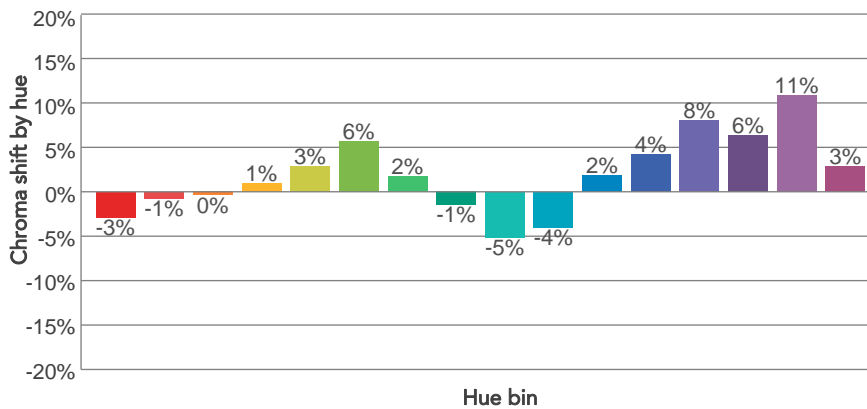
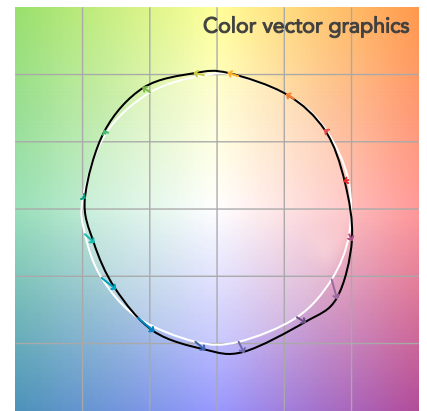
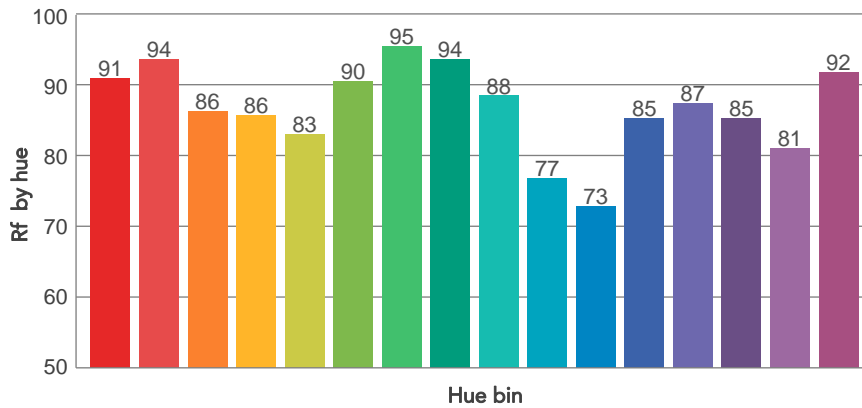
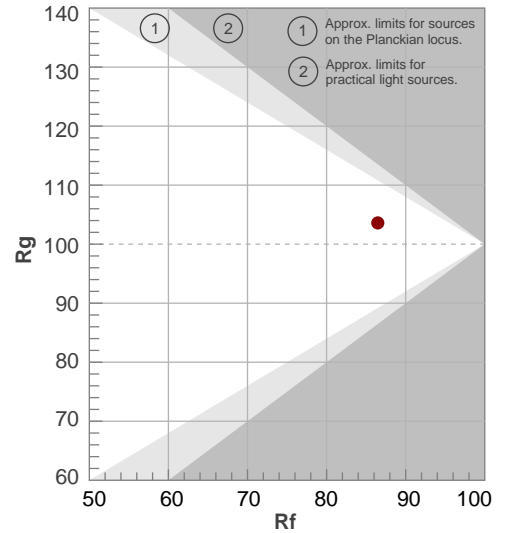
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5419 K	92,6	93,2	86,5	103,6	87,4	85	0,334	0,330	-0,0097

# TM30 DETAILS

**Rf 86,5**  
Fidelity index Rf

**Rg 103,6**  
Gammut index

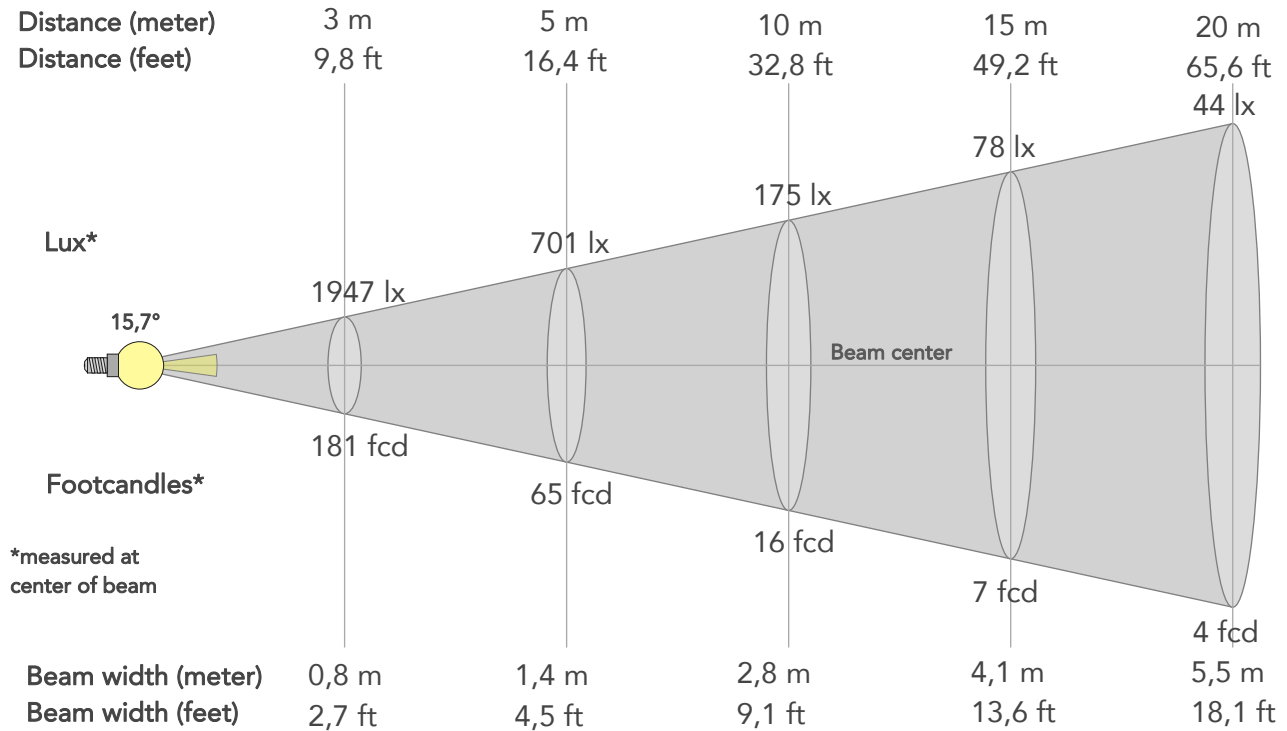
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-3%	0%
2	94	-1%	2%
3	86	0%	6%
4	86	1%	8%
5	83	3%	6%
6	90	6%	2%
7	95	2%	-1%
8	94	-1%	1%
9	88	-5%	7%
10	77	-4%	12%
11	73	2%	15%
12	85	4%	8%
13	87	8%	2%
14	85	6%	3%
15	81	11%	-9%
16	92	3%	-4%



## BEAM DETAILS



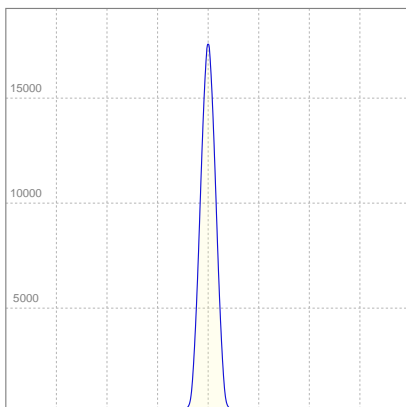
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,7°	27,4°	33,4°	97,6%	94,9%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	17519lx	4380lx	1947lx	1095lx	701lx	311lx	175lx	78lx	44lx	28lx	19lx	11lx	7lx
Footcand.	1628fcd	407fcd	181fcd	102fcd	65fcd	29fcd	16fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,8m	1,1m	1,4m	2,1m	2,8m	4,1m	5,5m	6,9m	8,3m	11m	13,8m
Beam wid.	0,9ft	1,8ft	2,7ft	3,6ft	4,5ft	6,8ft	9,1ft	13,6ft	18,1ft	22,6ft	27,2ft	36,2ft	45,3ft

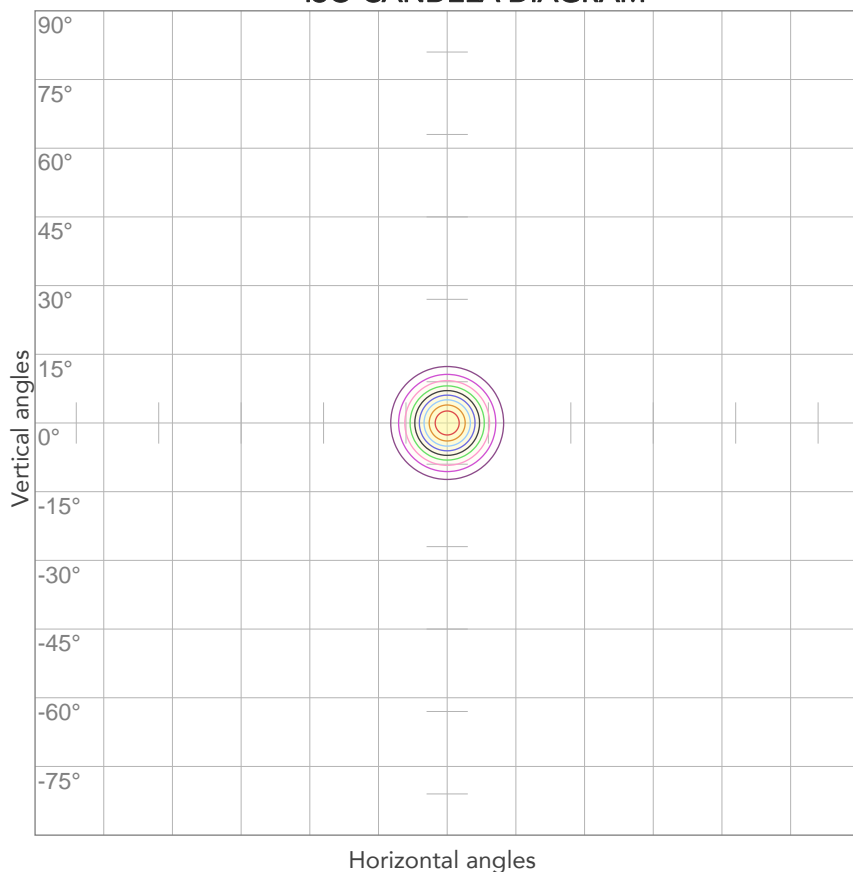
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,427A	89,4W	18lm/W

## ISO CANDELA DIAGRAM



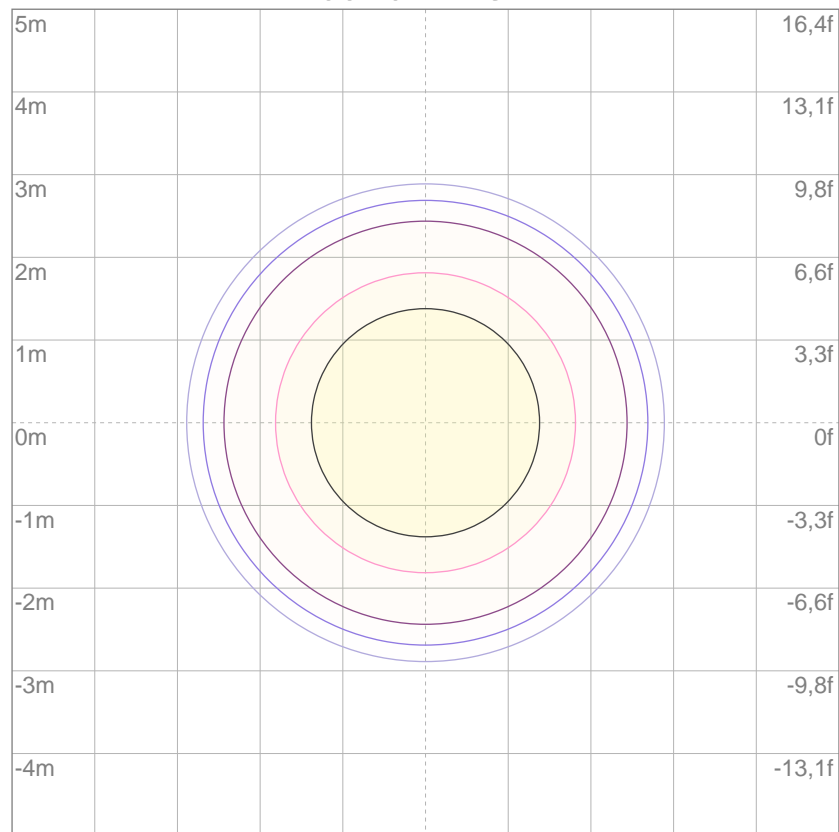
10%	1752 cd
20%	3504 cd
30%	5256 cd
40%	7008 cd
50%	8759 cd
60%	10511 cd
70%	12263 cd
80%	14015 cd

### Conditions:

Number of c-planes: 2

Candela at center: 17519 cd

## ISO LUX DIAGRAM



3%	5,26 lx
5%	8,76 lx
10%	17,5 lx
30%	52,6 lx
50%	87,6 lx

### Conditions:

Number of c-planes: 2

Lux at center: 175 lx

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