

# Photometric Test Report



## ECLPANELTWCJR4x1

230W Tunable White and colourful LED  
4x1 soft light with pixels and lighting effects

## CONTENTS

Table of contents	2
Testing process	4
Color preset Full on	
Filter HD	5
Filter MD	8
Filter LD	11
Filter INT	14
Color preset Red	
Filter HD	17
Filter MD	20
Filter LD	23
Filter INT	26
Color preset Green	
Filter HD	29
Filter MD	32
Filter LD	35
Filter INT	38
Color preset Blue	
Filter HD	41
Filter MD	44
Filter LD	47
Filter INT	50
Color preset White	
Filter HD	53
Filter MD	56
Filter LD	59
Filter INT	62
Color temperature 2800K	
Filter HD	65
Filter MD	70
Filter LD	75
Filter INT	80

**Color temperature 3200K**

Filter HD	85
Filter MD	90
Filter LD	95
Filter INT	100

**Color temperature 4000K**

Filter HD	105
Filter MD	110
Filter LD	115
Filter INT	120

**Color temperature 5600K**

Filter HD	125
Filter MD	130
Filter LD	135
Filter INT	140

**Color temperature 6000K**

Filter HD	145
Filter MD	150
Filter LD	155
Filter INT	160

## 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:

12287 lm

Peak candela output:

4304 cd



PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter HD

Target:

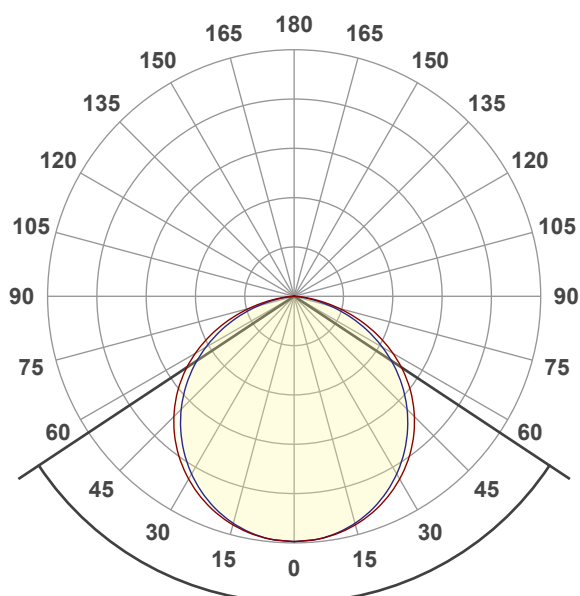
Full On HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:35:24

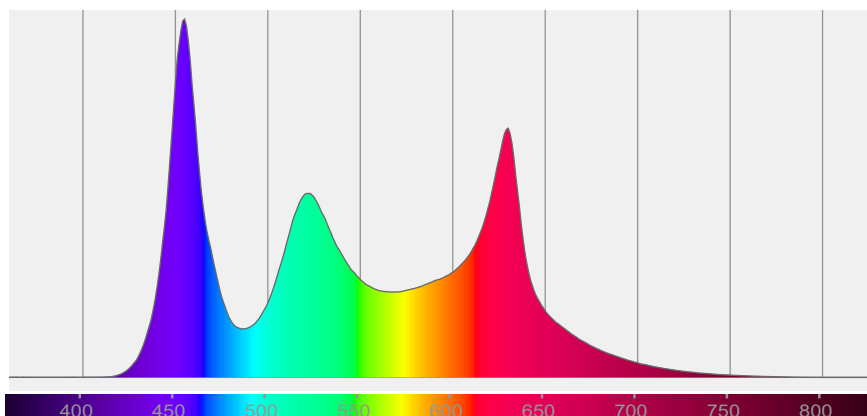


Beam angle 50%: 112,9°

Field angle 10%: 158,3°

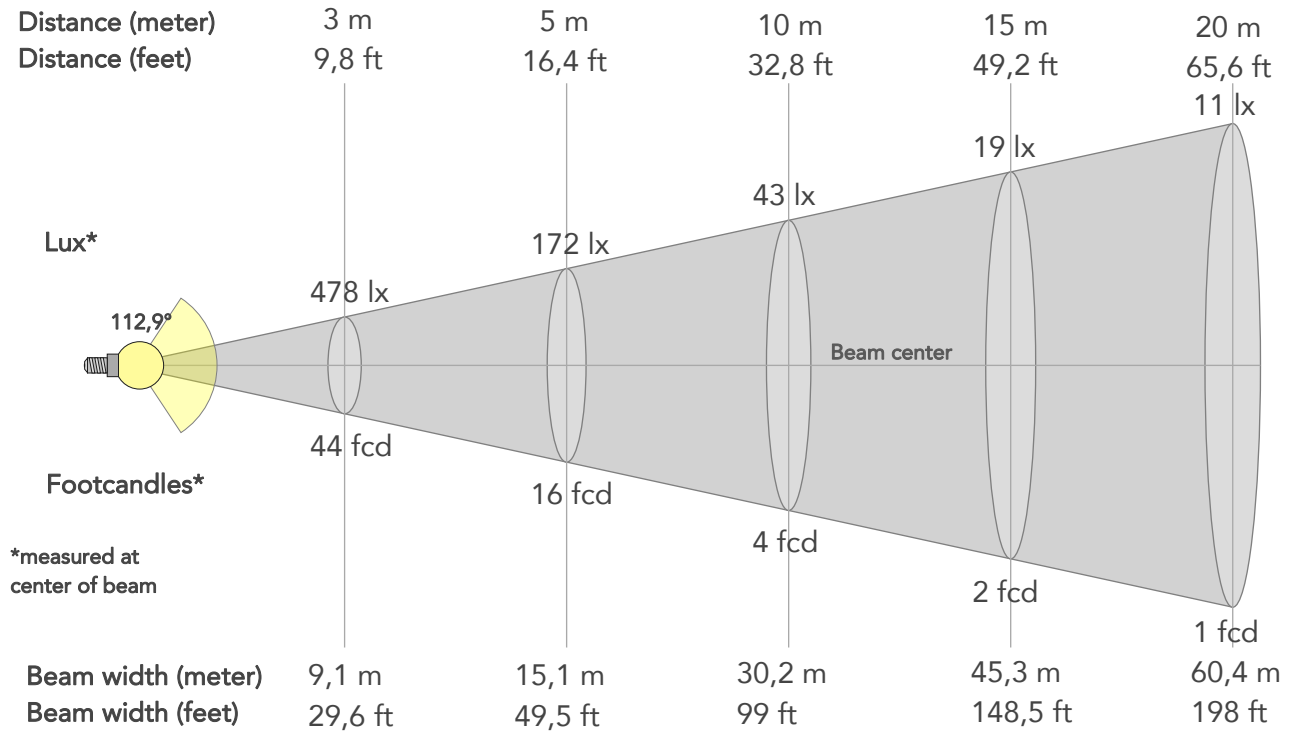
Cut off angle 2.5%: 169°

Spectra



## BEAM DETAILS

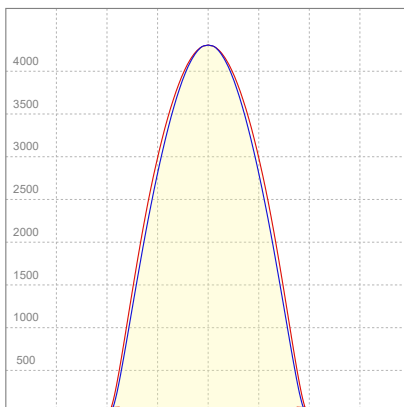
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
112,9°	158,3°	169°	79,2%	53,8%



### 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	4304lx	1076lx	478lx	269lx	172lx	77lx	43lx	19lx	11lx	7lx	5lx	3lx	2lx
Footcand.	400fcd	100fcd	44fcd	25fcd	16fcd	7fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9,1m	12,1m	15,1m	22,6m	30,2m	45,3m	60,4m	75,5m	90,6m	120,7m	150,9m
Beam wid.	10ft	19,9ft	29,6ft	39,5ft	49,5ft	74,3ft	99ft	148,5ft	198ft	247,5ft	297ft	396ft	495,1ft

### LINEAR DISTRIBUTION DIAGRAM

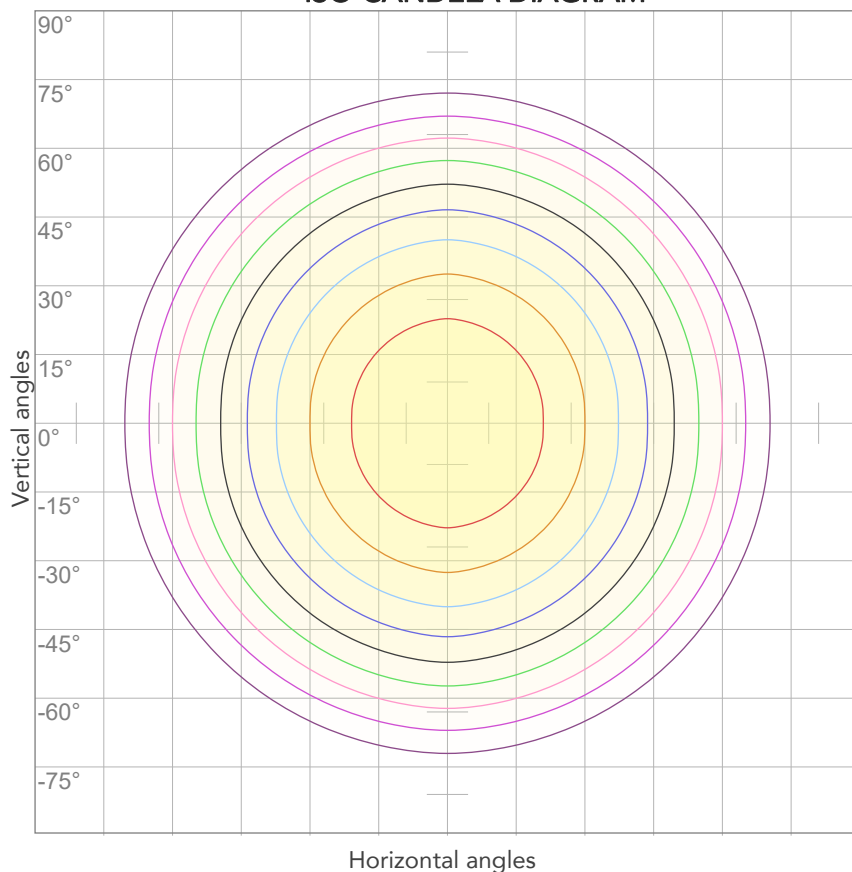


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,13A	232,6W	53lm/W

Power FC
0,93

## ISO CANDELA DIAGRAM



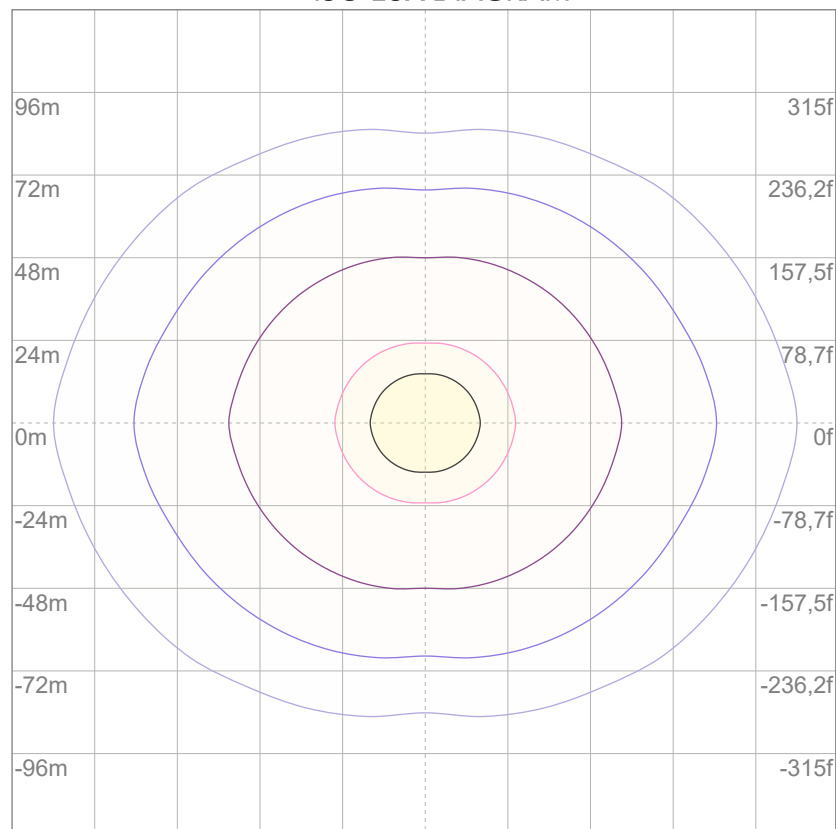
10%	430 cd
20%	861 cd
30%	1291 cd
40%	1722 cd
50%	2152 cd
60%	2582 cd
70%	3013 cd
80%	3443 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4304 cd

## ISO LUX DIAGRAM



3%	1,29 lx
5%	2,15 lx
10%	4,30 lx
30%	12,9 lx
50%	21,5 lx

### Conditions:

Number of c-planes: 4

Lux at center: 43,0 lx

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

Total lumen output:

14294 lm

Peak candela output:

5637 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter MD

Target:

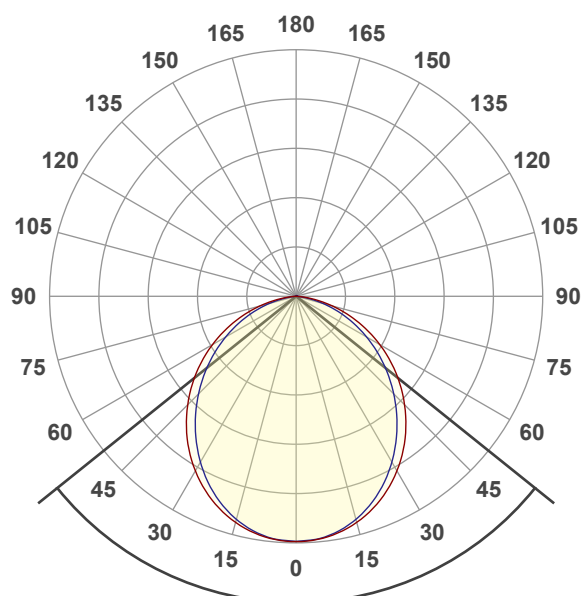
Full On HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 16:57:12

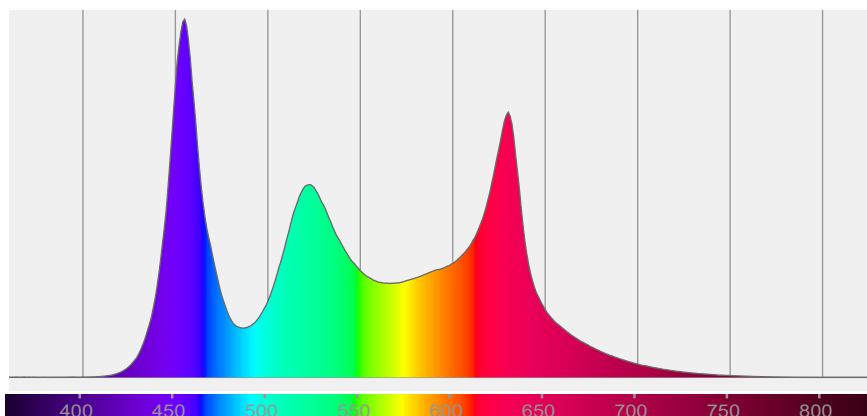


Beam angle 50%: 102,5°

Field angle 10%: 154,6°

Cut off angle 2.5%: 167,2°

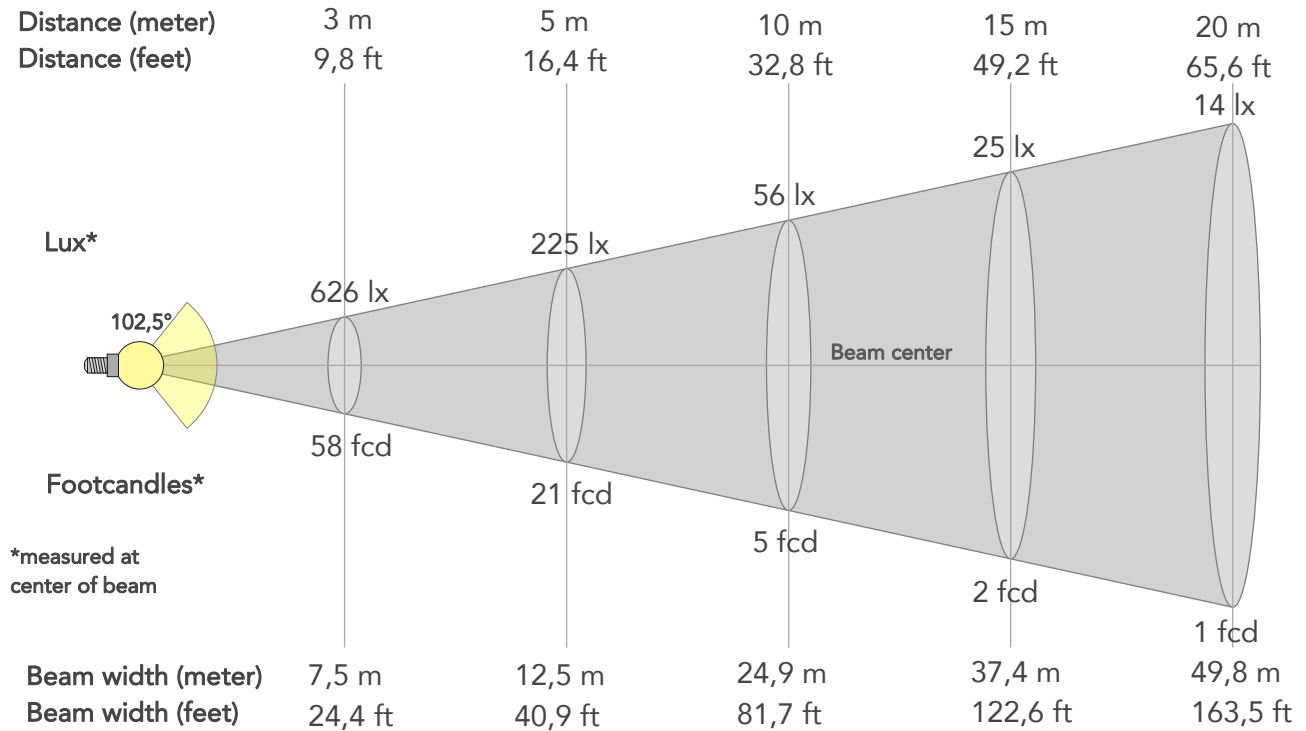
**Spectra**





## BEAM DETAILS

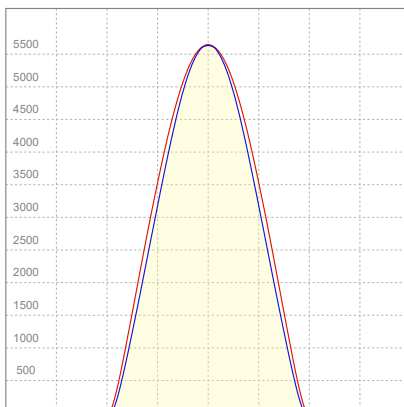
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,5°	154,6°	167,2°	81,7%	57,3%



### 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	5635lx	1409lx	626lx	352lx	225lx	100lx	56lx	25lx	14lx	9lx	6lx	4lx	2lx
Footcand.	524fcd	131fcd	58fcd	33fcd	21fcd	9fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,5m	10m	12,5m	18,7m	24,9m	37,4m	49,8m	62,3m	74,8m	99,7m	124,6m
Beam wid.	8,2ft	16,4ft	24,4ft	32,6ft	40,9ft	61,3ft	81,7ft	122,6ft	163,5ft	204,3ft	245,2ft	326,9ft	408,7ft

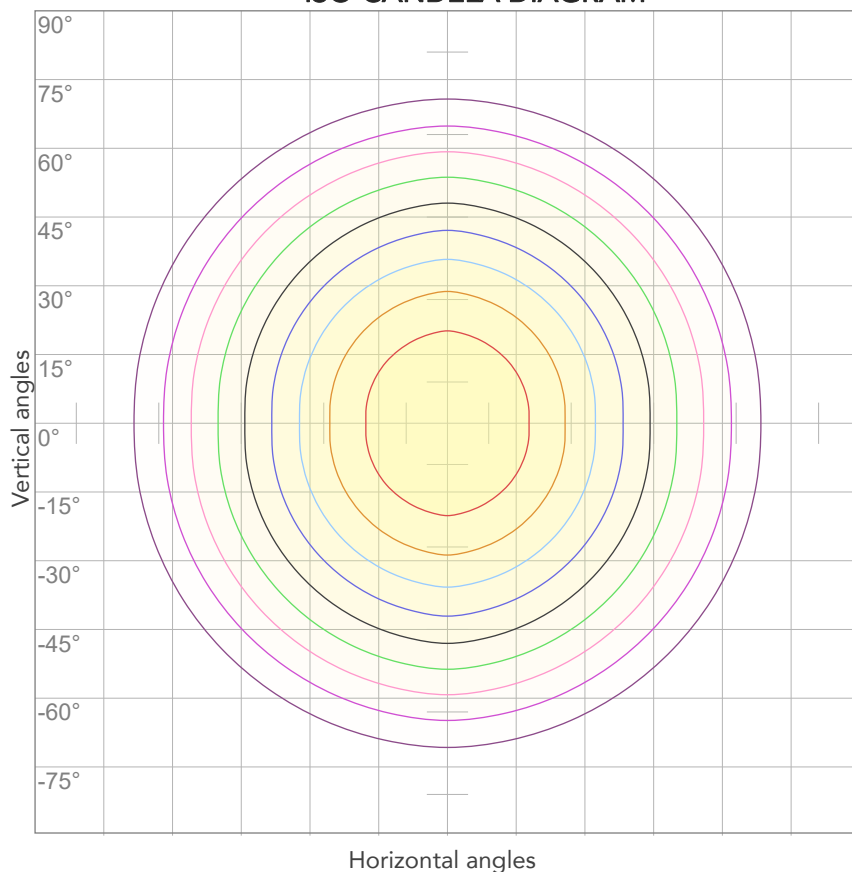
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	1,12A	231,2W	62lm/W
Power FC			
0,92			

## ISO CANDELA DIAGRAM



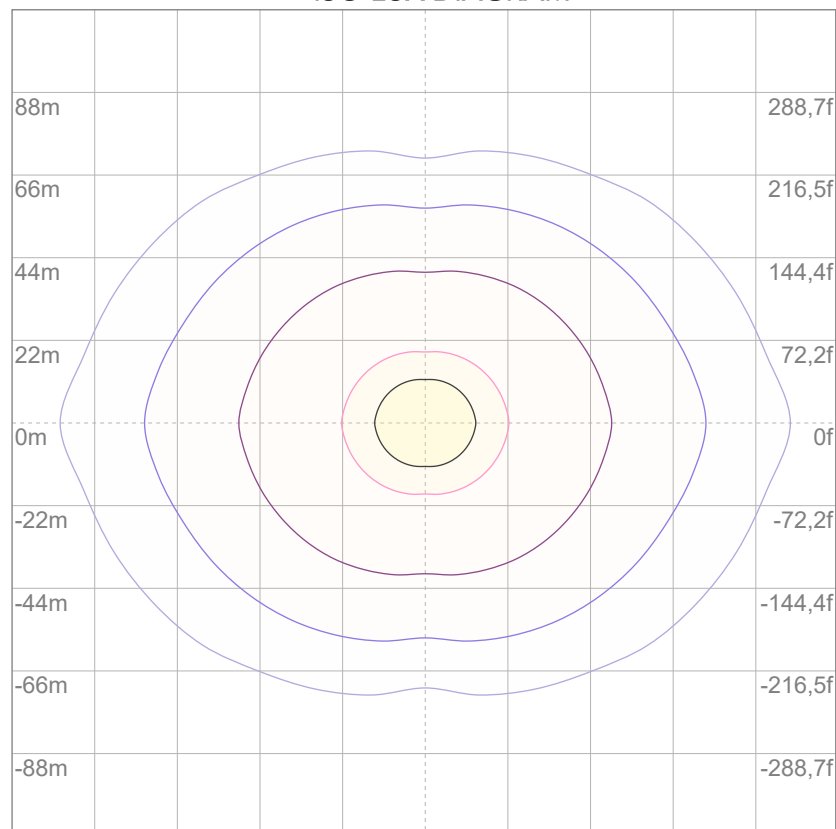
10%	564 cd
20%	1127 cd
30%	1691 cd
40%	2254 cd
50%	2818 cd
60%	3381 cd
70%	3945 cd
80%	4508 cd

### Conditions:

Number of c-planes: 4

Candela at center: 5635 cd

## ISO LUX DIAGRAM



3%	1,69 lx
5%	2,82 lx
10%	5,64 lx
30%	16,9 lx
50%	28,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 56,4 lx

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

Total lumen output:

15066 lm

Peak candela output:

6035 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter LD

Target:

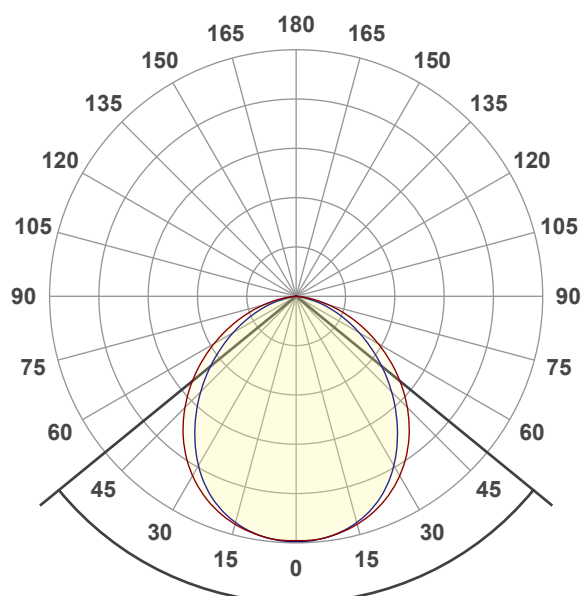
Full On HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:21:56

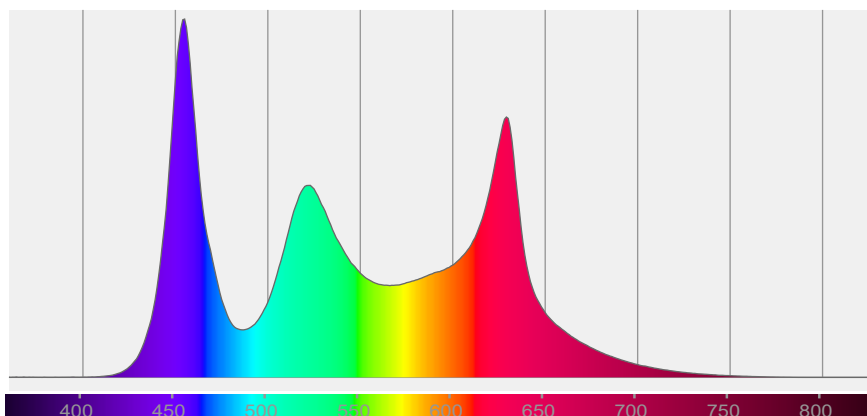


Beam angle 50%: 101,5°

Field angle 10%: 152°

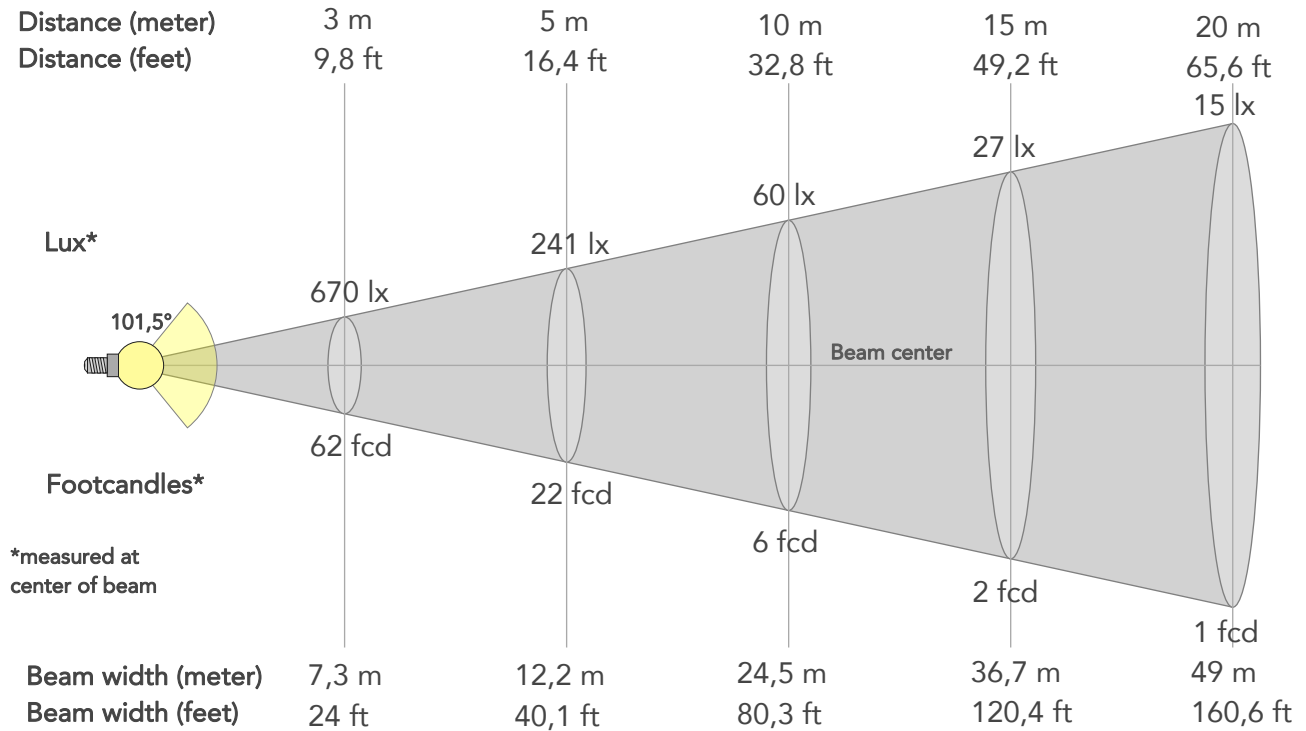
Cut off angle 2.5%: 165,7°

**Spectra**



## BEAM DETAILS

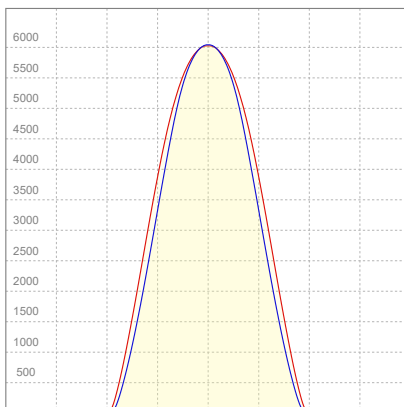
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
101,5°	152°	165,7°	83,4%	59,1%



### 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	6027lx	1507lx	670lx	377lx	241lx	107lx	60lx	27lx	15lx	10lx	7lx	4lx	2lx
Footcand.	560fcd	140fcd	62fcd	35fcd	22fcd	10fcd	6fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,4m	4,9m	7,3m	9,8m	12,2m	18,4m	24,5m	36,7m	49m	61,2m	73,4m	97,9m	122,4m
Beam wid.	8,1ft	16,2ft	24ft	32,1ft	40,1ft	60,2ft	80,3ft	120,4ft	160,6ft	200,7ft	240,9ft	321,2ft	401,5ft

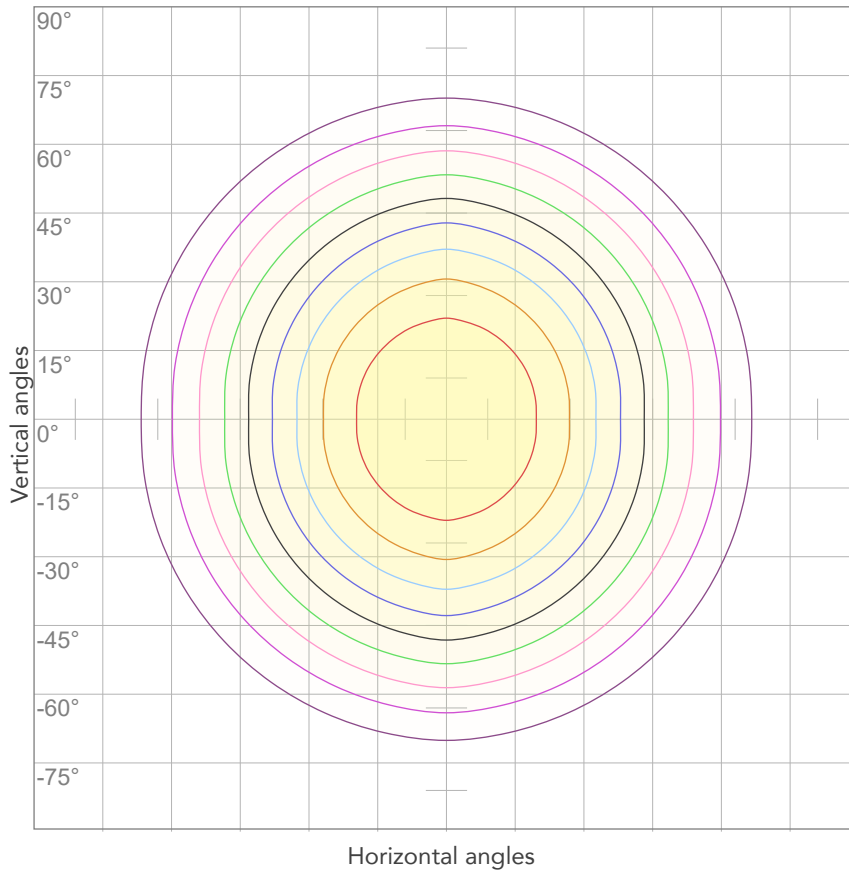
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	1,14A	234,7W	64lm/W
Power FC			
0,92			

## ISO CANDELA DIAGRAM



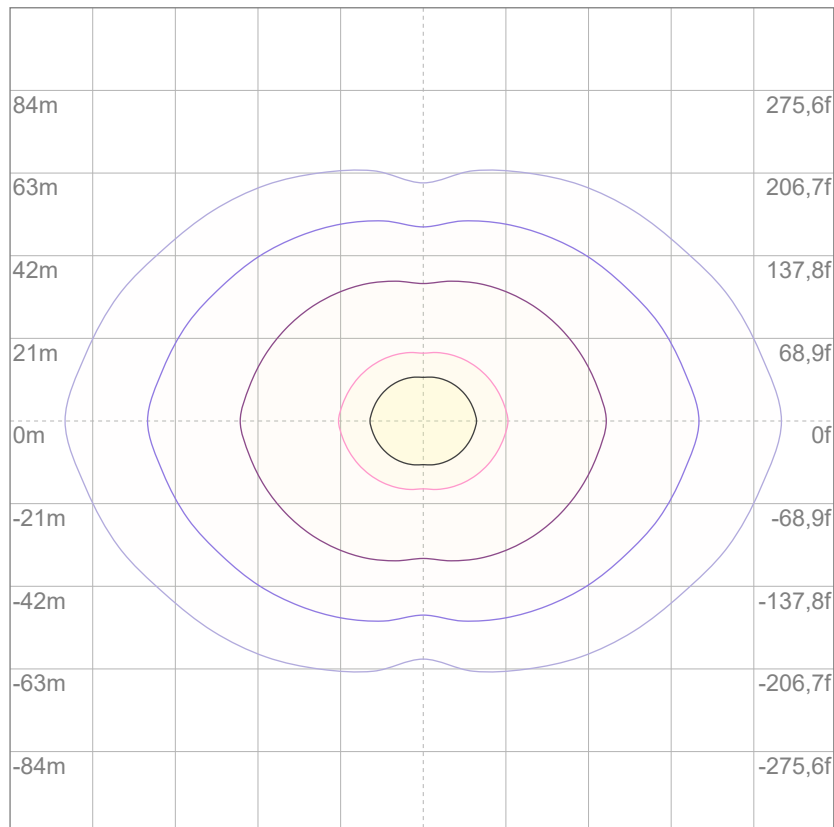
10%	603 cd
20%	1205 cd
30%	1808 cd
40%	2411 cd
50%	3013 cd
60%	3616 cd
70%	4219 cd
80%	4821 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6027 cd

## ISO LUX DIAGRAM



3%	1,81 lx
5%	3,01 lx
10%	6,03 lx
30%	18,1 lx
50%	30,1 lx

### Conditions:

Number of c-planes: 4

Lux at center: 60,3 lx

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

Total lumen output:

12842 lm

Peak candela output:

8106 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter INT

Target:

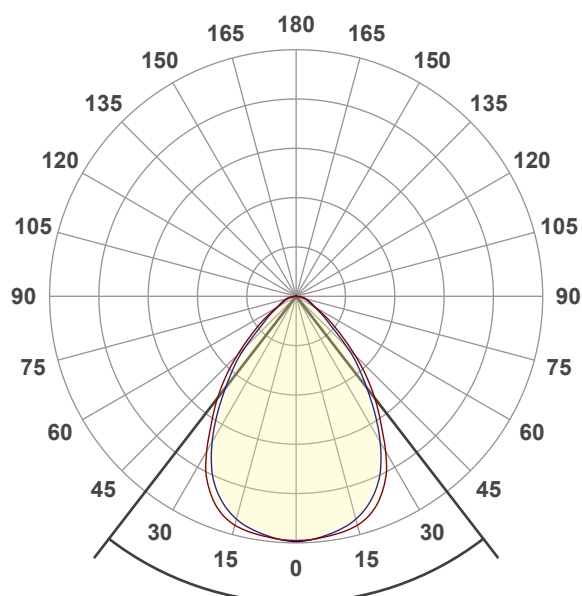
Full On HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 18:09:02

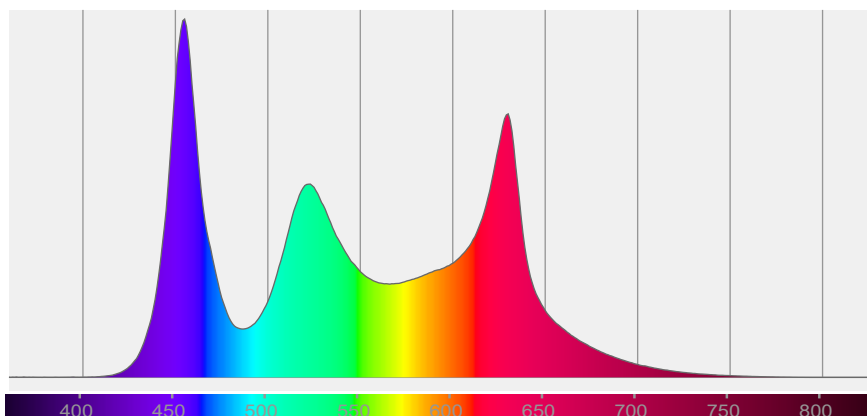


Beam angle 50%: 75,3°

Field angle 10%: 117,4°

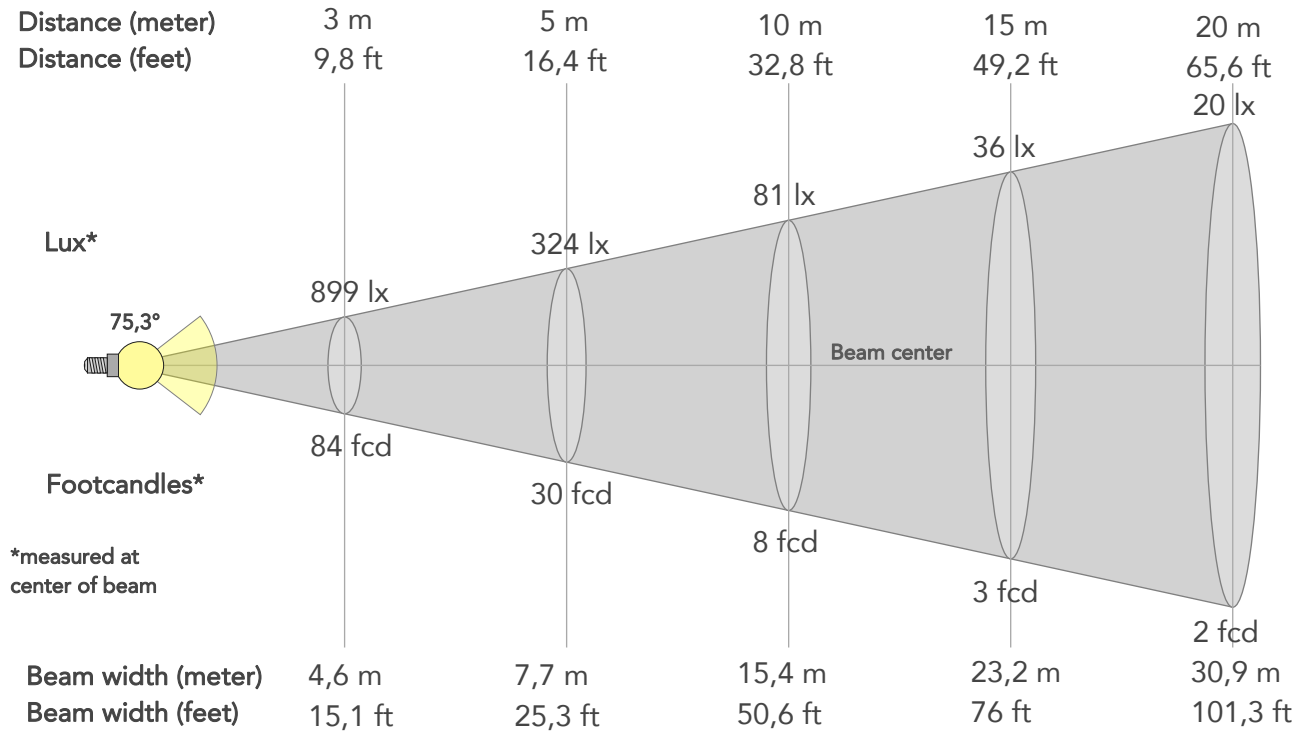
Cut off angle 2.5%: 159,3°

**Spectra**



## BEAM DETAILS

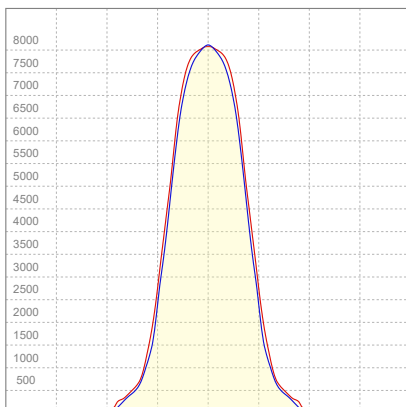
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75,3°	117,4°	159,3°	92,5%	77,9%



### 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	8092lx	2023lx	899lx	506lx	324lx	144lx	81lx	36lx	20lx	13lx	9lx	5lx	3lx
Footcand.	752fcd	188fcd	84fcd	47fcd	30fcd	13fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	1,5m	3,1m	4,6m	6,2m	7,7m	11,6m	15,4m	23,2m	30,9m	38,6m	46,3m	61,8m	77,2m
Beam wid.	5,1ft	10,2ft	15,1ft	20,2ft	25,3ft	38ft	50,6ft	76ft	101,3ft	126,6ft	151,9ft	202,6ft	253,2ft

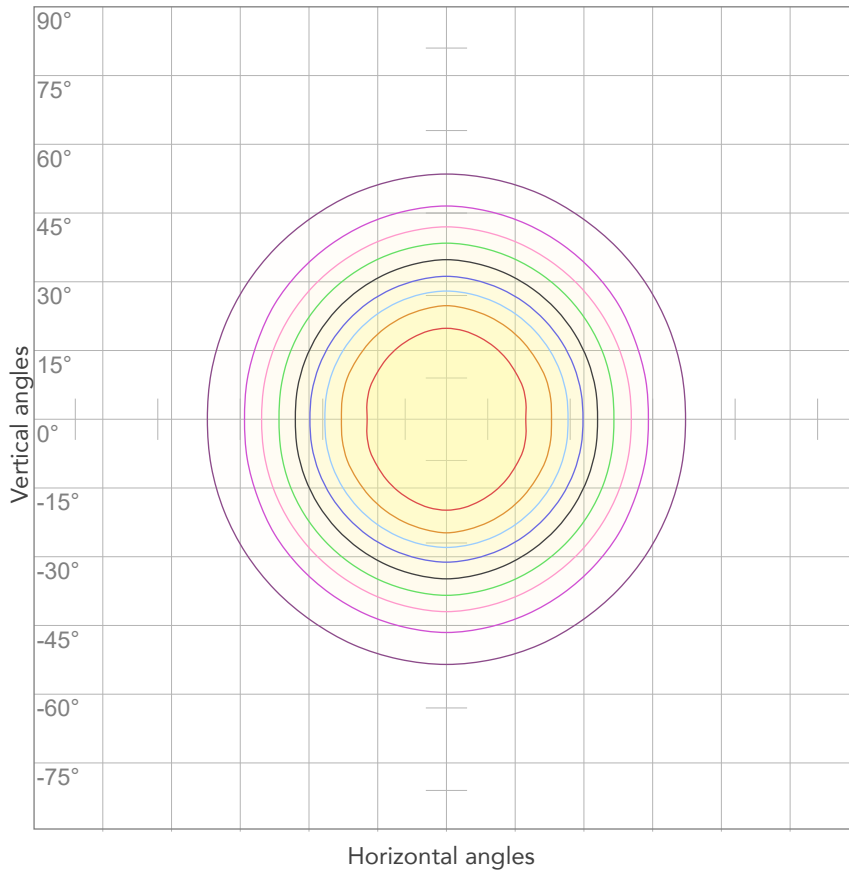
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	1,12A	232,6W	55lm/W
Power FC			
0,92			

## ISO CANDELA DIAGRAM



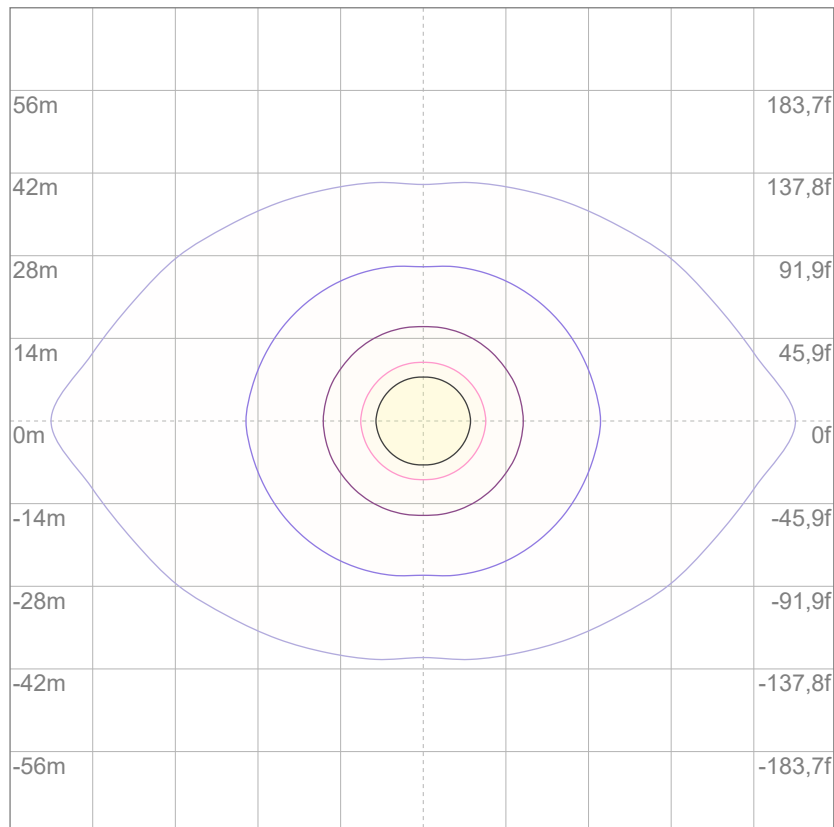
10%	809 cd
20%	1618 cd
30%	2428 cd
40%	3237 cd
50%	4046 cd
60%	4855 cd
70%	5665 cd
80%	6474 cd

### Conditions:

Number of c-planes: 4

Candela at center: 8092 cd

## ISO LUX DIAGRAM



3%	2,43 lx
5%	4,05 lx
10%	8,09 lx
30%	24,3 lx
50%	40,5 lx

### Conditions:

Number of c-planes: 4

Lux at center: 80,9 lx

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



Total lumen output:

1666 lm

Peak candela output:

585 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter HD

Target:

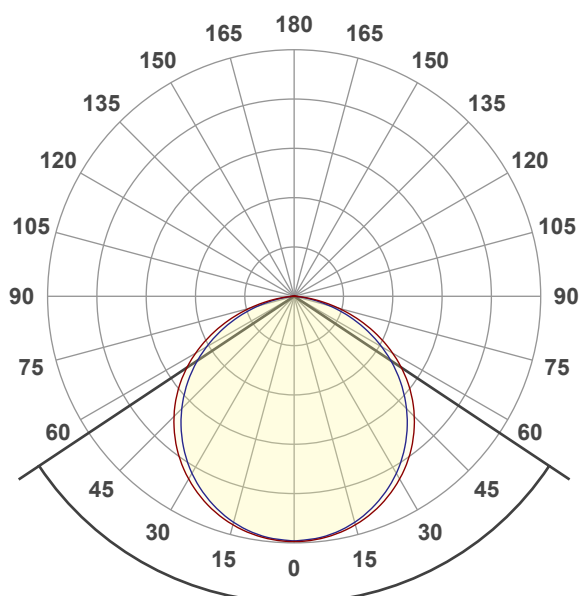
Red HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:39:48

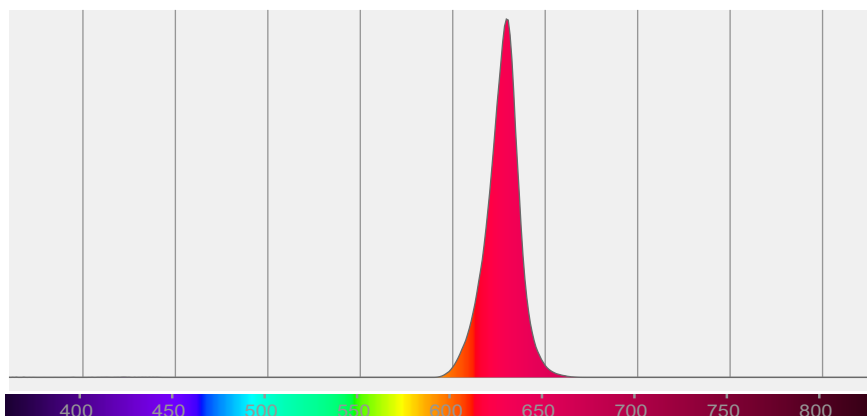


Beam angle 50%: 112,8°

Field angle 10%: 158,1°

Cut off angle 2.5%: 168,9°

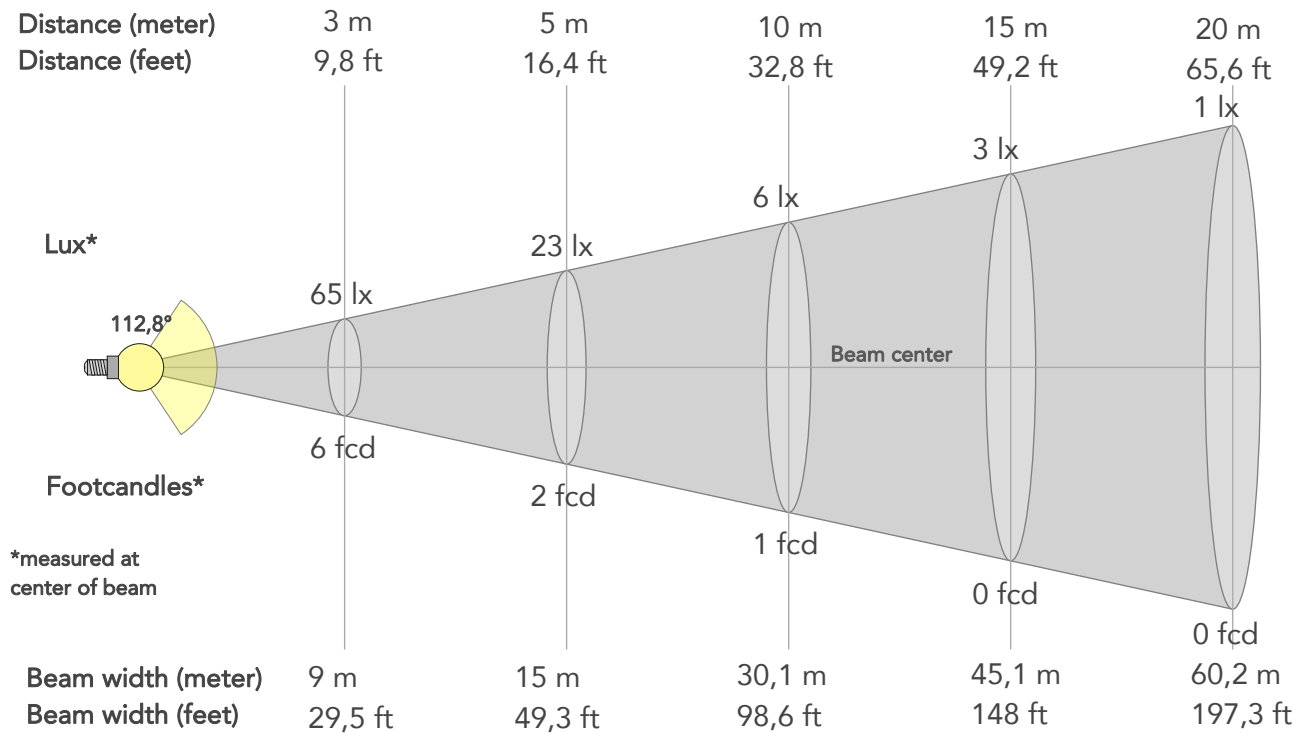
**Spectra**



# BEAM DETAILS



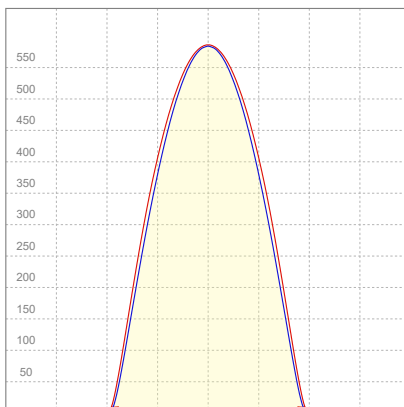
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
112,8°	158,1°	168,9°	79,3%	54,0%



## 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	585lx	146lx	65lx	37lx	23lx	10lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx
Footcand.	54fcd	14fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9m	12m	15m	22,6m	30,1m	45,1m	60,2m	75,2m	90,2m	120,3m	150,4m
Beam wid.	9,9ft	19,9ft	29,5ft	39,4ft	49,3ft	74ft	98,6ft	148ft	197,3ft	246,6ft	295,9ft	394,6ft	493,2ft

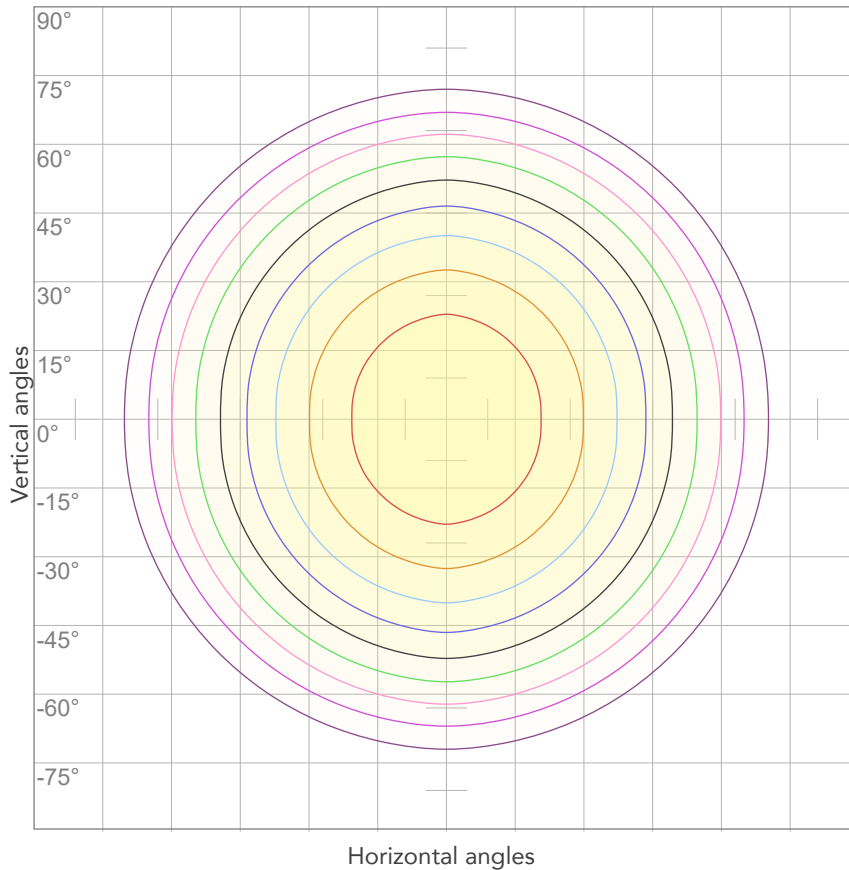
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,368A	53,7W	31lm/W
Power FC			
0,65			

## ISO CANDELA DIAGRAM



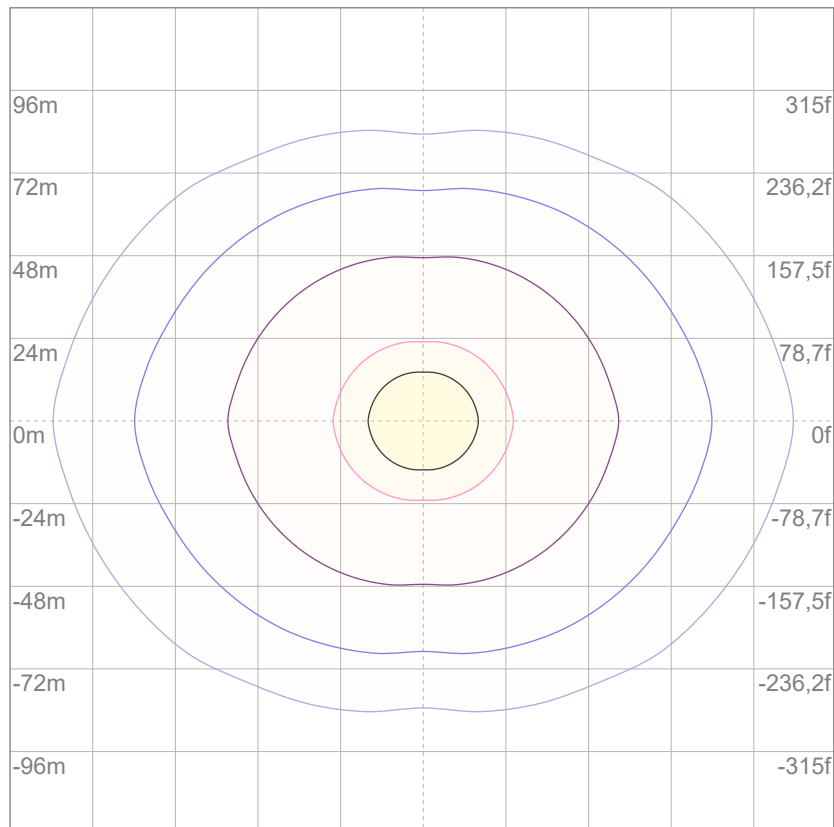
10%	58 cd
20%	117 cd
30%	175 cd
40%	234 cd
50%	292 cd
60%	351 cd
70%	409 cd
80%	468 cd

### Conditions:

Number of c-planes: 4

Candela at center: 585 cd

## ISO LUX DIAGRAM



3%	0,175 lx
5%	0,292 lx
10%	0,585 lx
30%	1,75 lx
50%	2,92 lx

### Conditions:

Number of c-planes: 4

Lux at center: 5,85 lx

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

Total lumen output:

1934 lm

Peak candela output:

762 cd



PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter MD

Target:

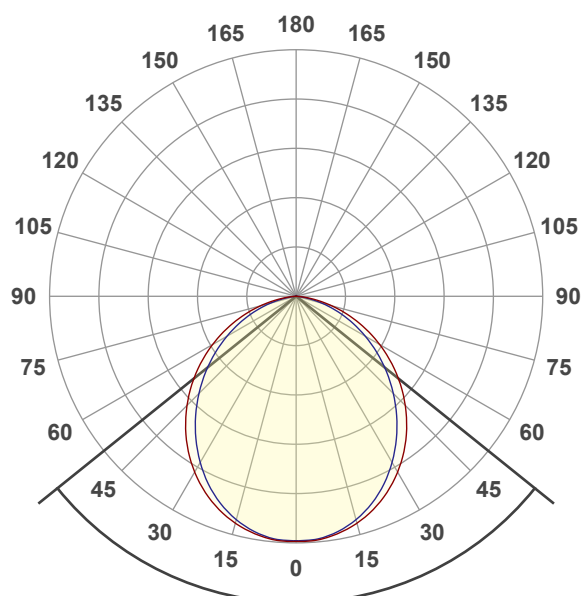
Red HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 16:59:32

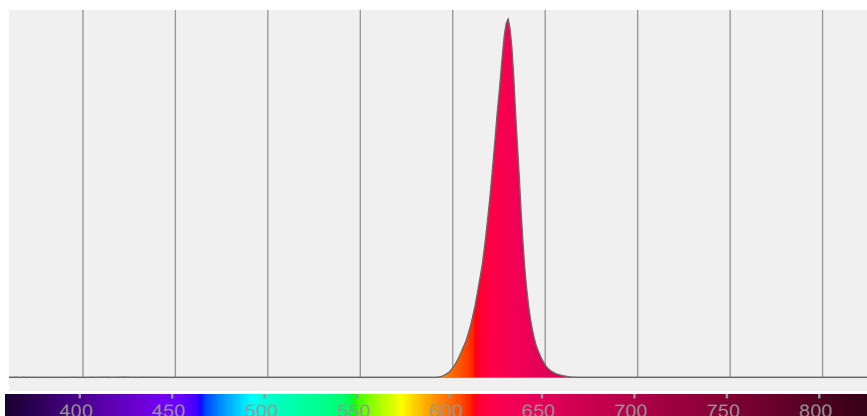


Beam angle 50%: 102,4°

Field angle 10%: 154,2°

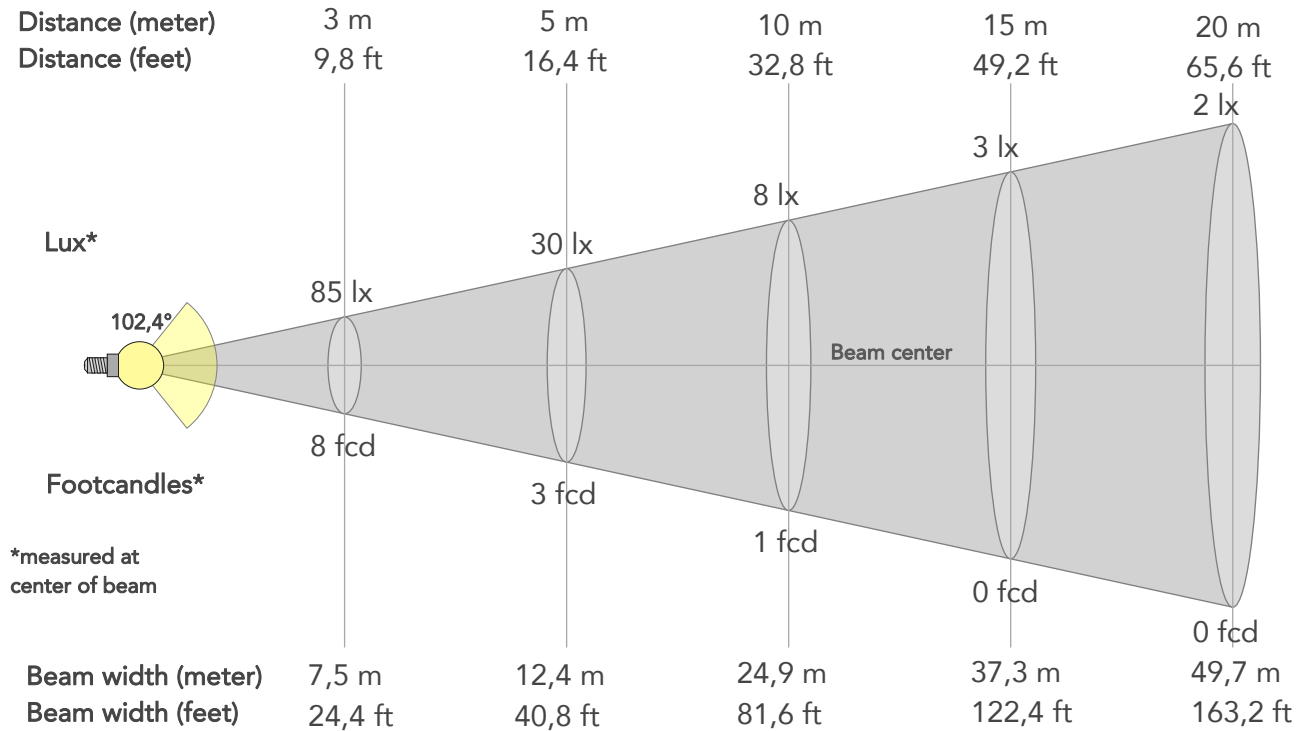
Cut off angle 2.5%: 167,1°

Spectra



## BEAM DETAILS

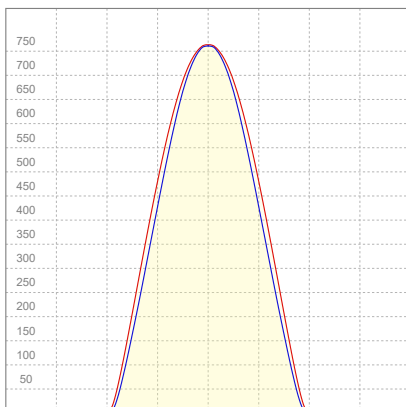
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,4°	154,2°	167,1°	81,7%	57,4%



### 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	762lx	190lx	85lx	48lx	30lx	14lx	8lx	3lx	2lx	1lx	1lx	0lx	0lx
Footcand.	71fcd	18fcd	8fcd	4fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,5m	9,9m	12,4m	18,7m	24,9m	37,3m	49,7m	62,2m	74,6m	99,5m	124,4m
Beam wid.	8,2ft	16,4ft	24,4ft	32,6ft	40,8ft	61,2ft	81,6ft	122,4ft	163,2ft	204ft	244,7ft	326,3ft	407,9ft

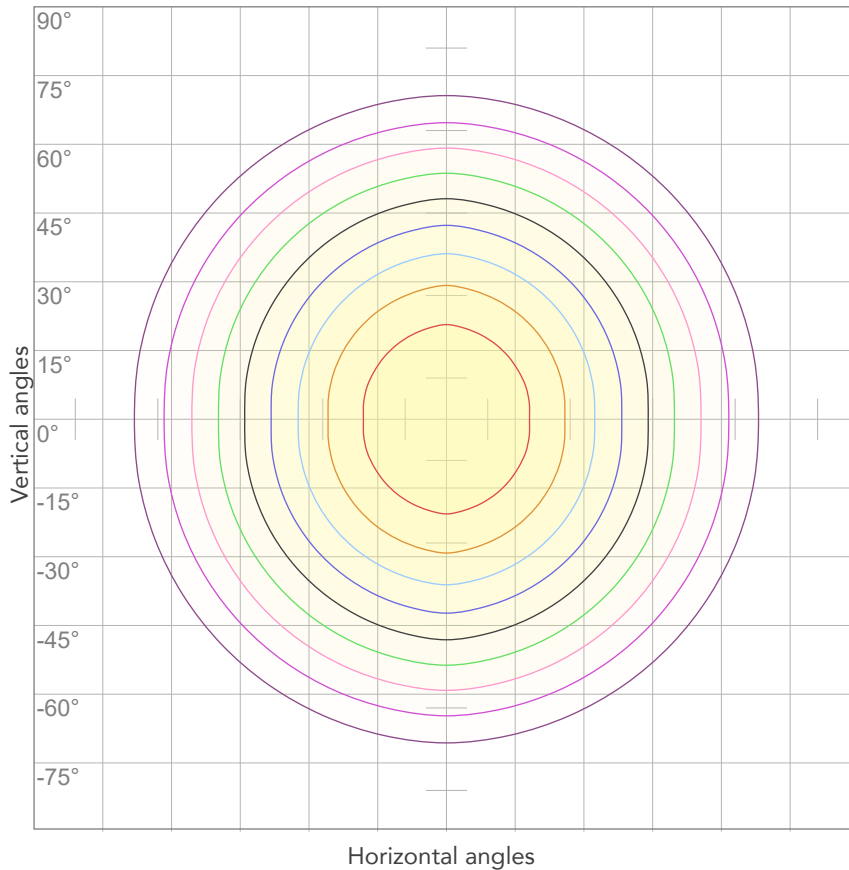
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,372A	54,7W	35lm/W
Power FC			
0,66			

## ISO CANDELA DIAGRAM



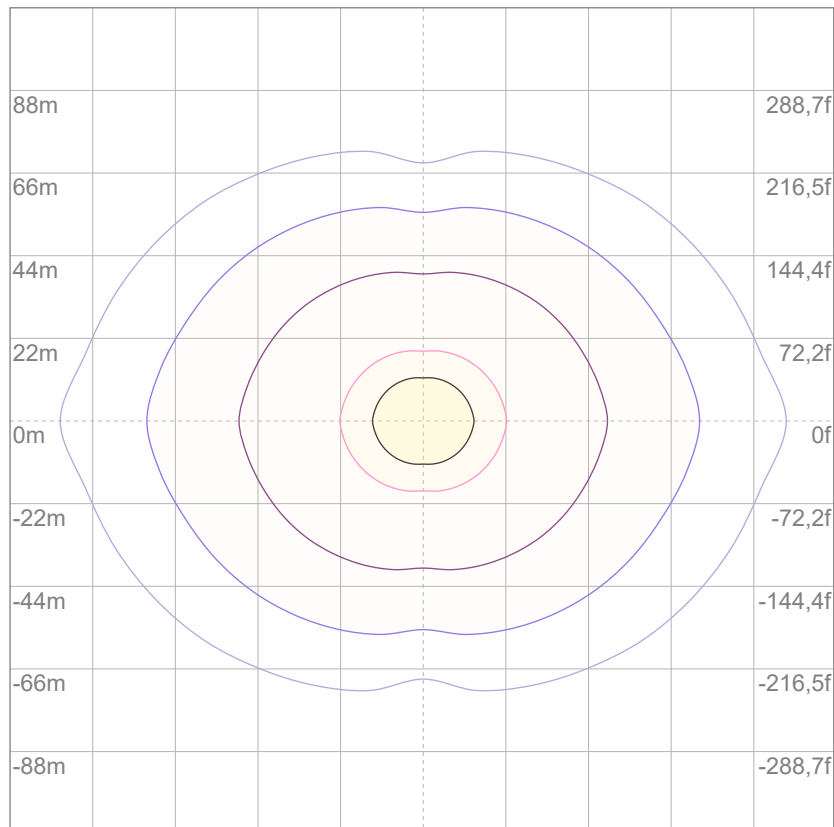
10%	76 cd
20%	152 cd
30%	228 cd
40%	305 cd
50%	381 cd
60%	457 cd
70%	533 cd
80%	609 cd

### Conditions:

Number of c-planes: 4

Candela at center: 762 cd

## ISO LUX DIAGRAM



3%	0,228 lx
5%	0,381 lx
10%	0,762 lx
30%	2,28 lx
50%	3,81 lx

### Conditions:

Number of c-planes: 4

Lux at center: 7,62 lx

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

Total lumen output:

2034 lm

Peak candela output:

796 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter LD

Target:

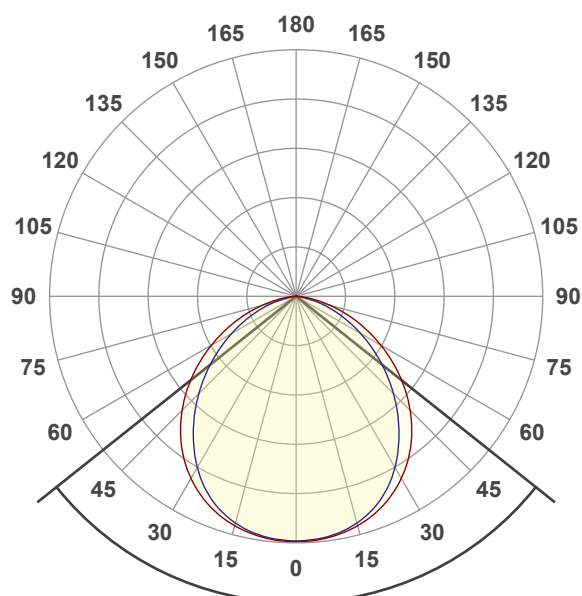
Red HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:25:47

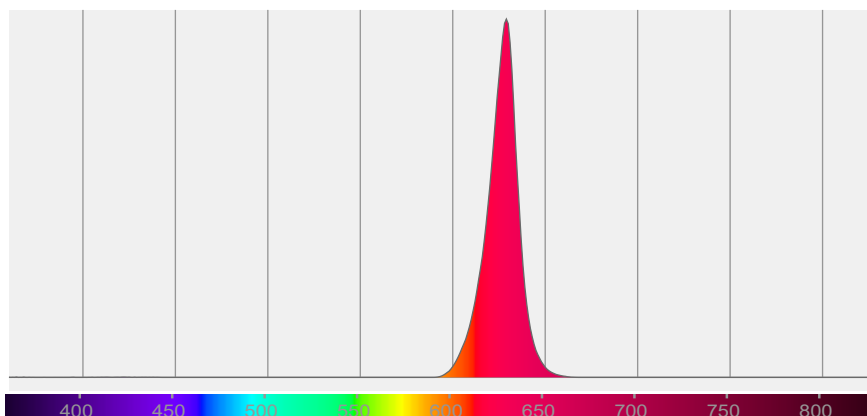


Beam angle 50%: 103°

Field angle 10%: 152,2°

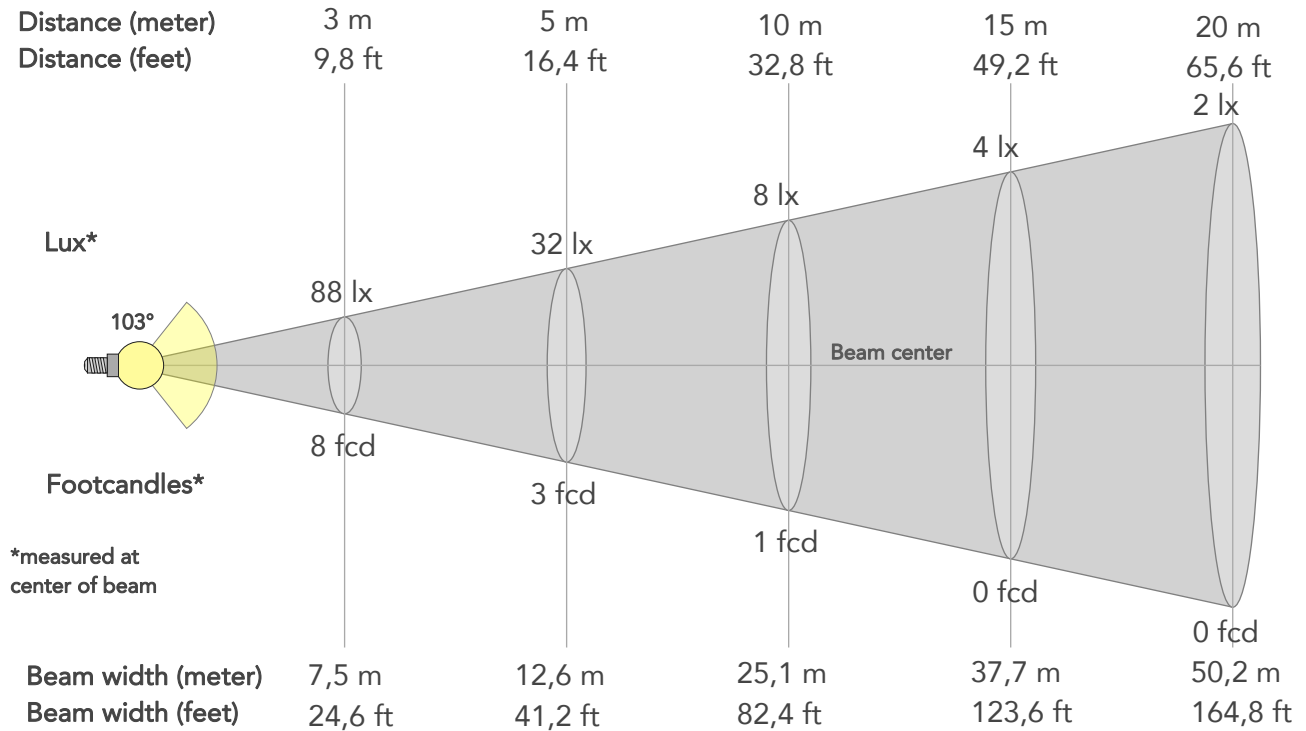
Cut off angle 2.5%: 166°

**Spectra**



## BEAM DETAILS

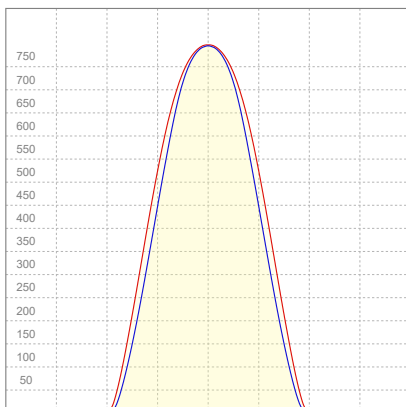
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
103°	152,2°	166°	82,8%	58,5%



### 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	796lx	199lx	88lx	50lx	32lx	14lx	8lx	4lx	2lx	1lx	1lx	0lx	0lx
Footcand.	74fcd	18fcd	8fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,5m	10m	12,6m	18,8m	25,1m	37,7m	50,2m	62,8m	75,4m	100,5m	125,6m
Beam wid.	8,3ft	16,6ft	24,6ft	32,9ft	41,2ft	61,8ft	82,4ft	123,6ft	164,8ft	206ft	247,2ft	329,6ft	412ft

### LINEAR DISTRIBUTION DIAGRAM

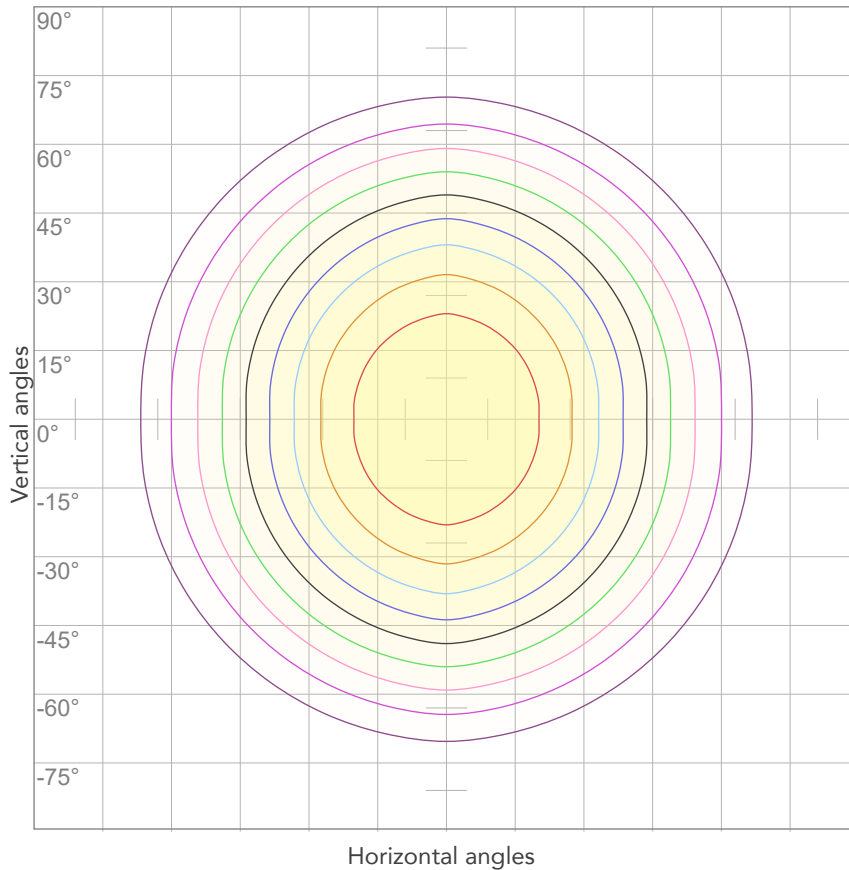


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,371A	53,3W	38lm/W
Power FC			
0,64			



## ISO CANDELA DIAGRAM



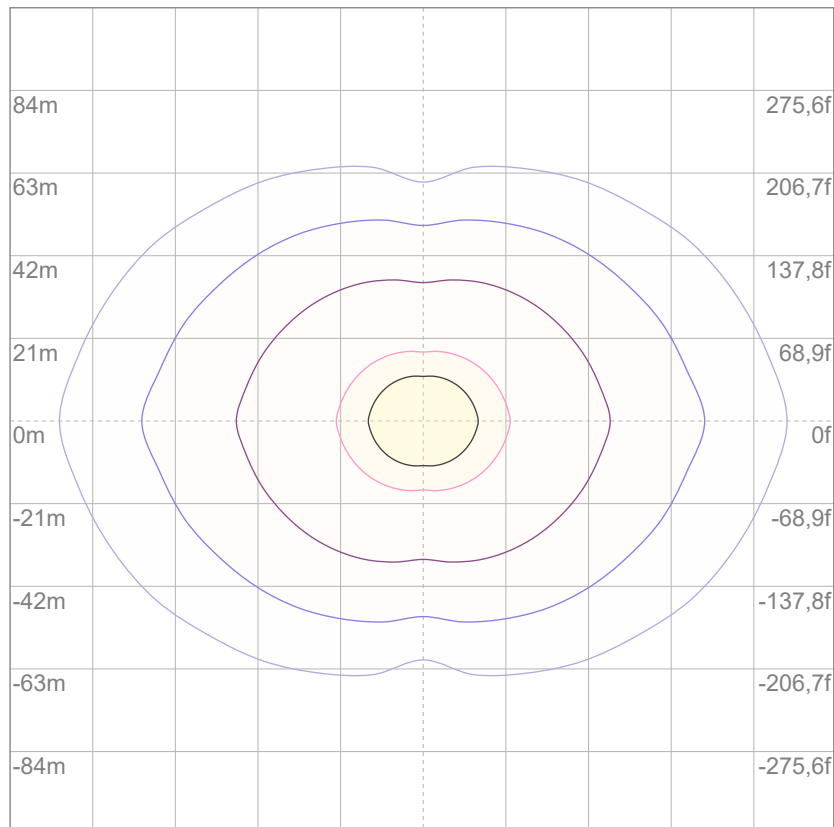
10%	80 cd
20%	159 cd
30%	239 cd
40%	318 cd
50%	398 cd
60%	477 cd
70%	557 cd
80%	636 cd

### Conditions:

Number of c-planes: 4

Candela at center: 796 cd

## ISO LUX DIAGRAM



3%	0,239 lx
5%	0,398 lx
10%	0,796 lx
30%	2,39 lx
50%	3,98 lx

### Conditions:

Number of c-planes: 4

Lux at center: 7,96 lx

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

Total lumen output:

1722 lm

Peak candela output:

1082 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter INT

Target:

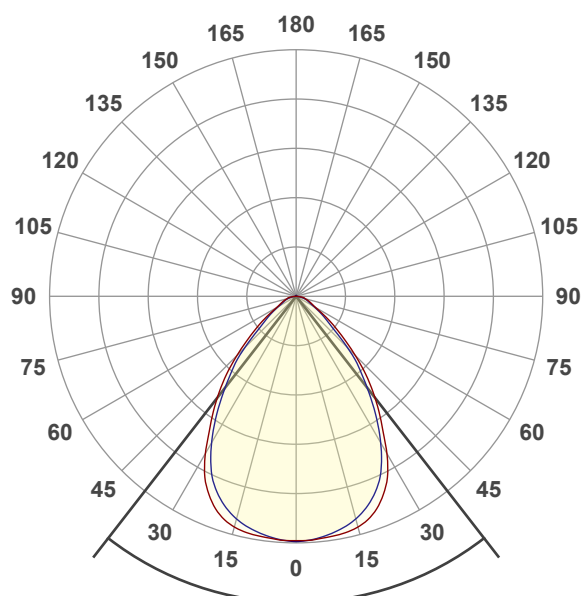
Red HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 18:13:40

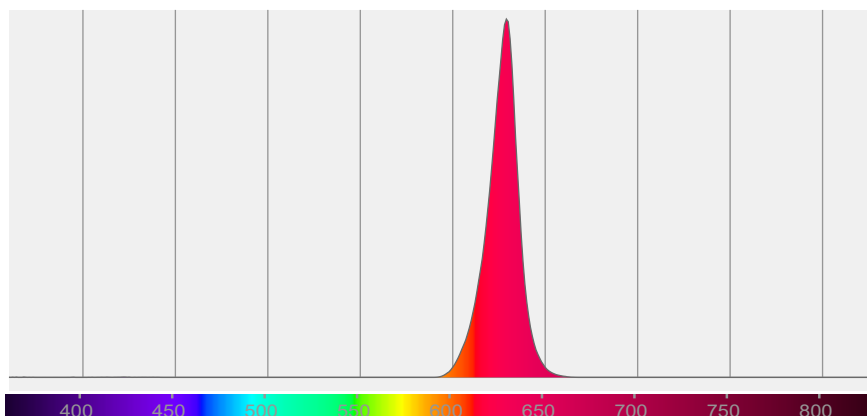


Beam angle 50%: 75,7°

Field angle 10%: 117°

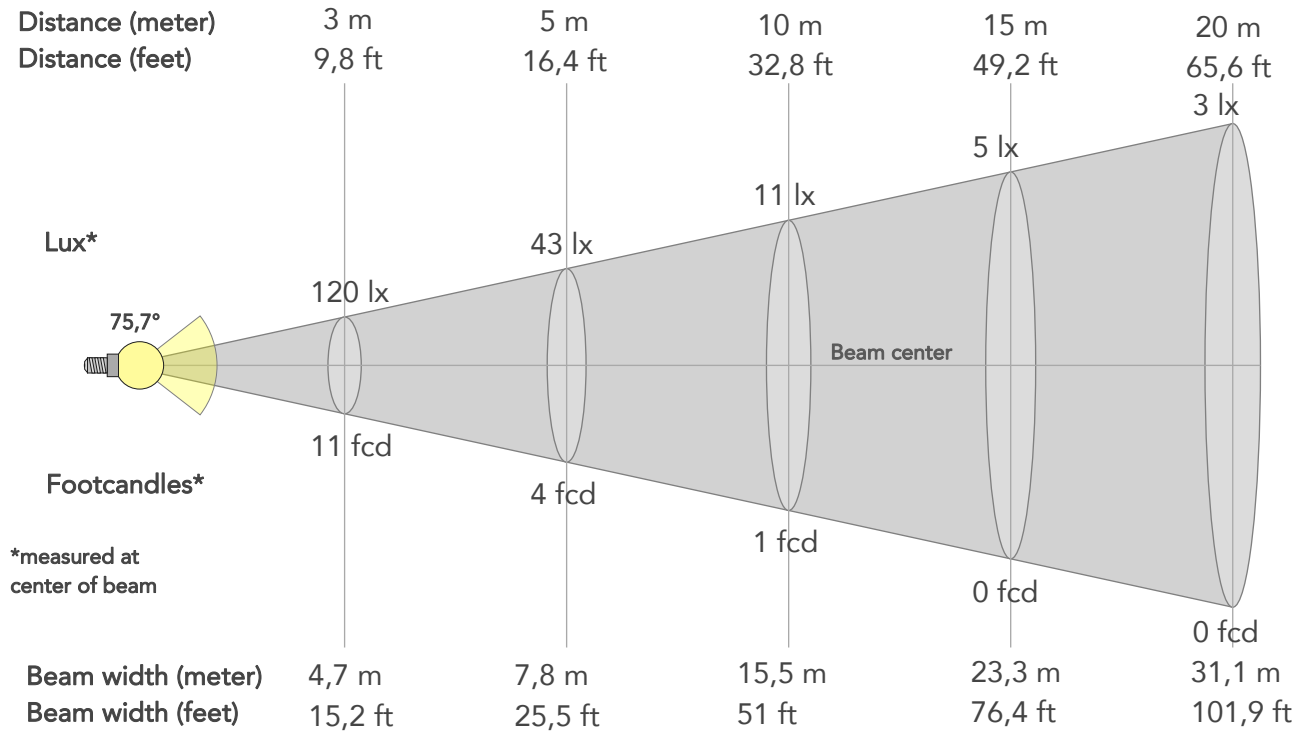
Cut off angle 2.5%: 158,7°

**Spectra**



## BEAM DETAILS

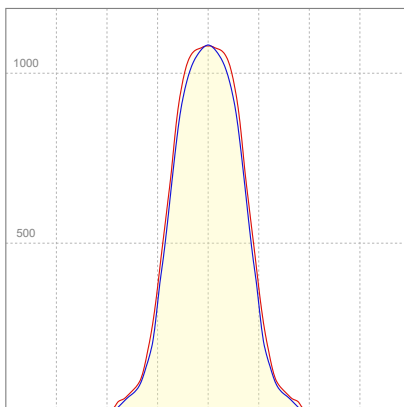
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75,7°	117°	158,7°	92,7%	78,2%



### 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	1081lx	270lx	120lx	68lx	43lx	19lx	11lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	100fcd	25fcd	11fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,6m	3,1m	4,7m	6,2m	7,8m	11,7m	15,5m	23,3m	31,1m	38,8m	46,6m	62,2m	77,7m
Beam wid.	5,1ft	10,3ft	15,2ft	20,4ft	25,5ft	38,2ft	51ft	76,4ft	101,9ft	127,4ft	152,9ft	203,9ft	254,8ft

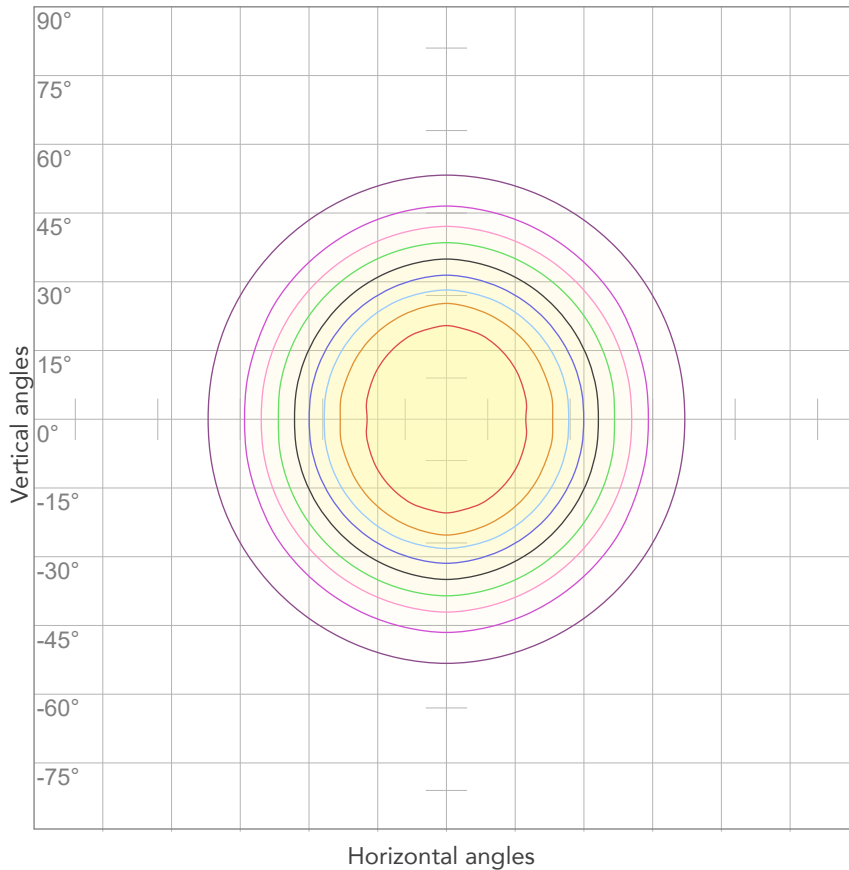
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,366A	53,8W	32lm/W
Power FC			
0,65			

## ISO CANDELA DIAGRAM



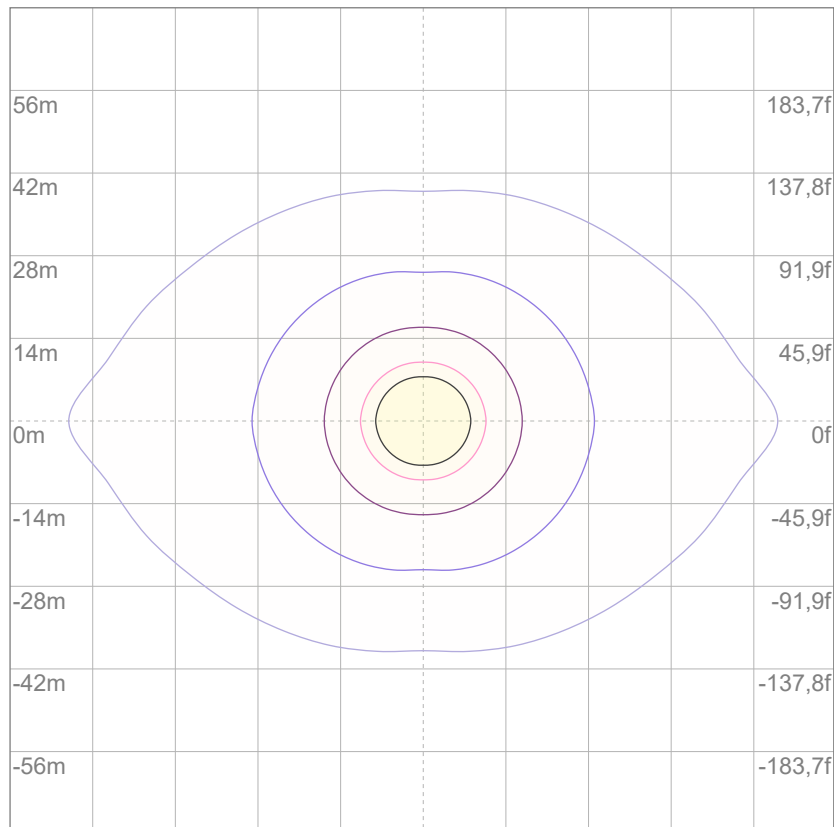
10%	108 cd
20%	216 cd
30%	324 cd
40%	432 cd
50%	540 cd
60%	649 cd
70%	757 cd
80%	865 cd

### Conditions:

Number of c-planes: 4

Candela at center: 1081 cd

## ISO LUX DIAGRAM



3%	0,324 lx
5%	0,540 lx
10%	1,08 lx
30%	3,24 lx
50%	5,40 lx

### Conditions:

Number of c-planes: 4

Lux at center: 10,8 lx

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

Total lumen output:

4257 lm

Peak candela output:

1489 cd



PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter HD

Target:

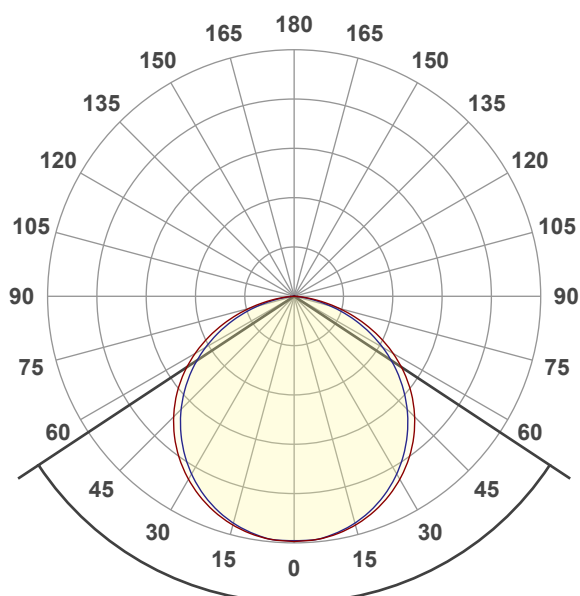
Green HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:37:31

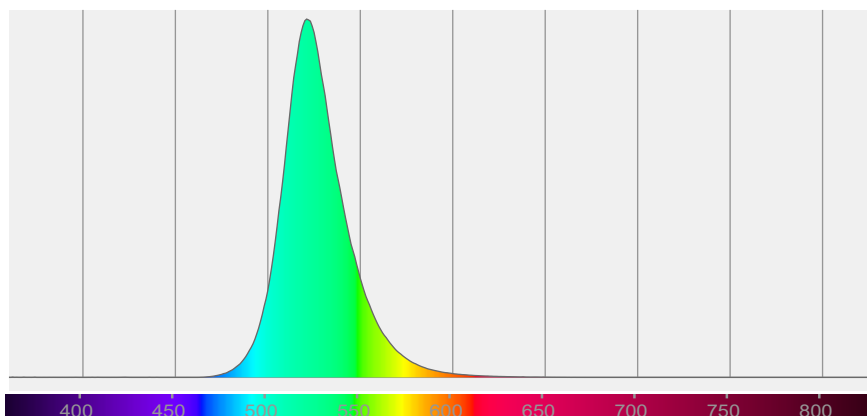


Beam angle 50%: 113,1°

Field angle 10%: 158,3°

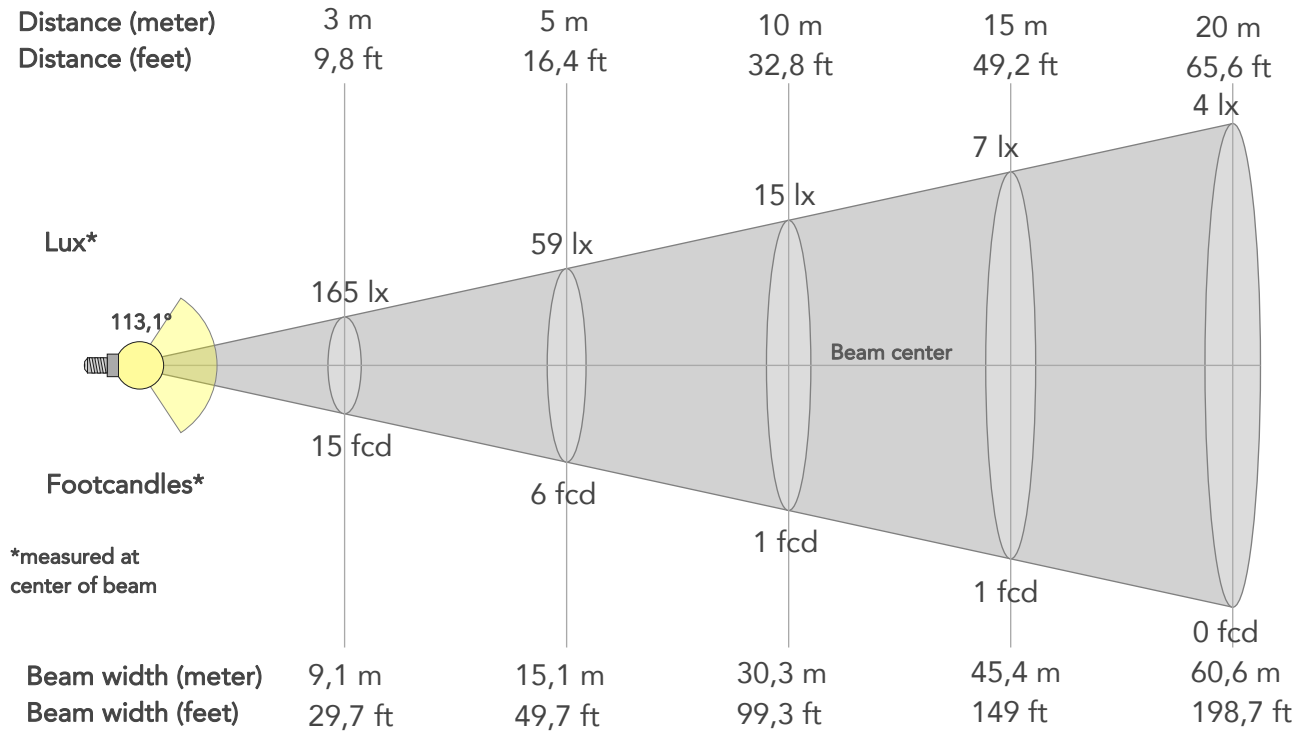
Cut off angle 2.5%: 169°

Spectra



## BEAM DETAILS

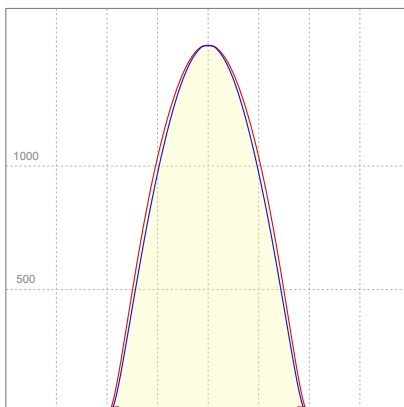
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
113,1°	158,3°	169°	79,2%	53,8%



### 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	1487lx	372lx	165lx	93lx	59lx	26lx	15lx	7lx	4lx	2lx	2lx	1lx	1lx
Footcand.	138fcd	35fcd	15fcd	9fcd	6fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6,1m	9,1m	12,1m	15,1m	22,7m	30,3m	45,4m	60,6m	75,7m	90,9m	121,1m	151,4m
Beam wid.	10ft	20ft	29,7ft	39,7ft	49,7ft	74,5ft	99,3ft	149ft	198,7ft	248,4ft	298ft	397,4ft	496,7ft

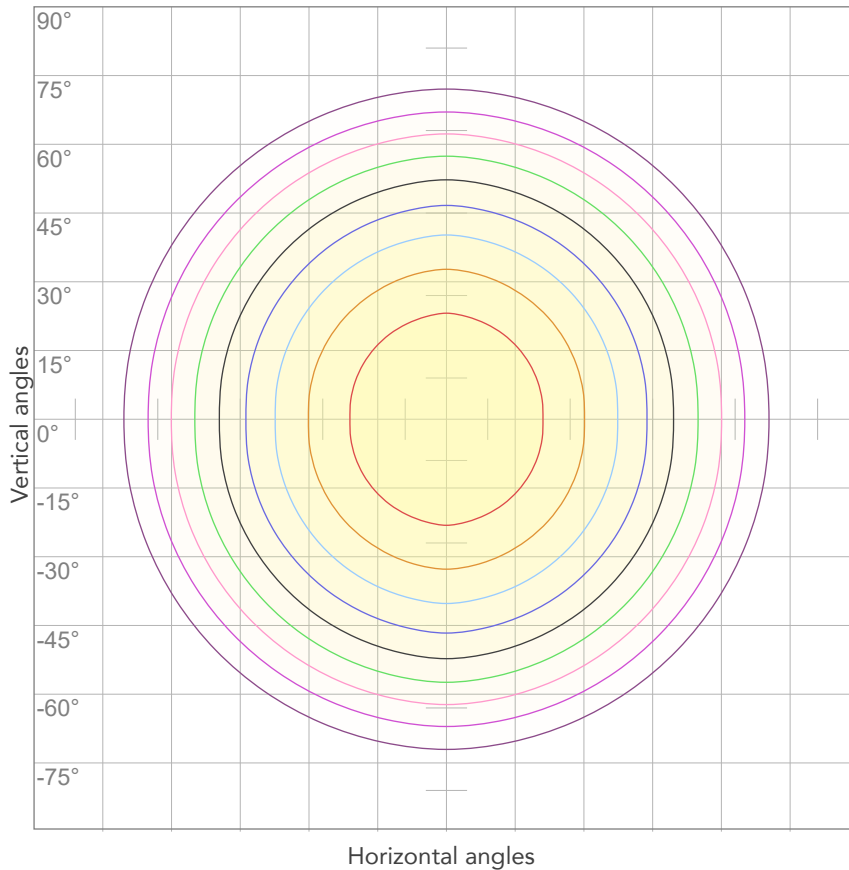
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,481A	80,3W	53lm/W
Power FC			
0,75			

## ISO CANDELA DIAGRAM



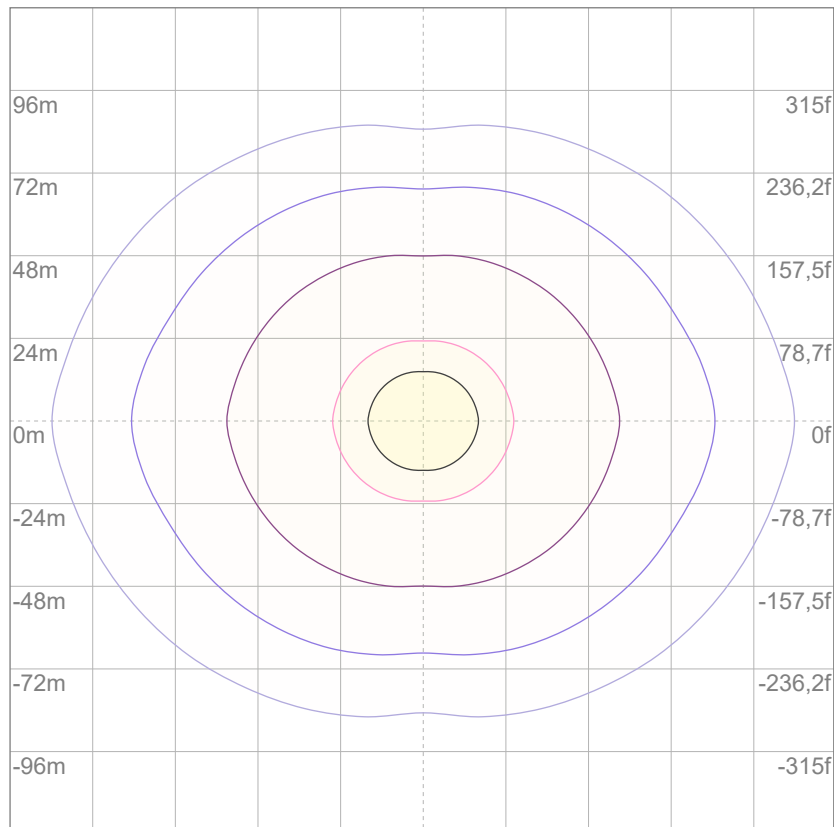
10%	149 cd
20%	297 cd
30%	446 cd
40%	595 cd
50%	743 cd
60%	892 cd
70%	1041 cd
80%	1189 cd

### Conditions:

Number of c-planes: 4

Candela at center: 1487 cd

## ISO LUX DIAGRAM



3%	0,446 lx
5%	0,743 lx
10%	1,49 lx
30%	4,46 lx
50%	7,43 lx

### Conditions:

Number of c-planes: 4

Lux at center: 14,9 lx

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

Total lumen output:

3249 lm

Peak candela output:

1268 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter MD

Target:

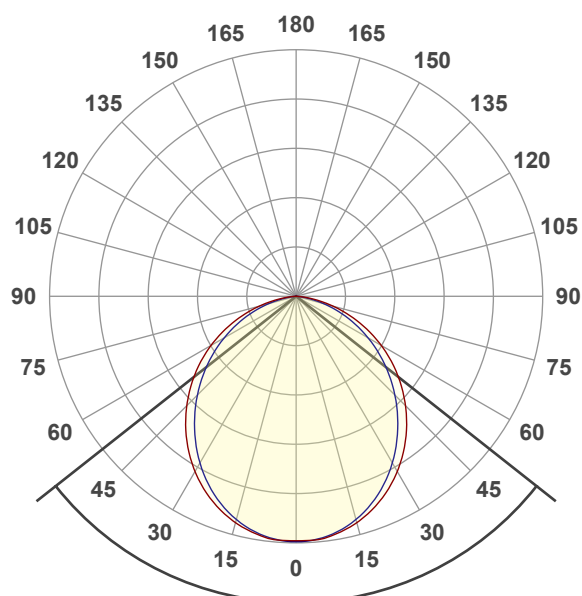
Green HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:01:18

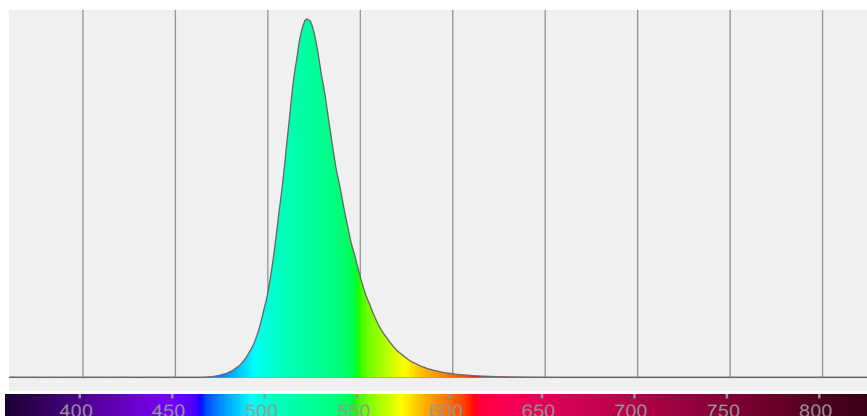


Beam angle 50%: 103,4°

Field angle 10%: 154,9°

Cut off angle 2.5%: 167,5°

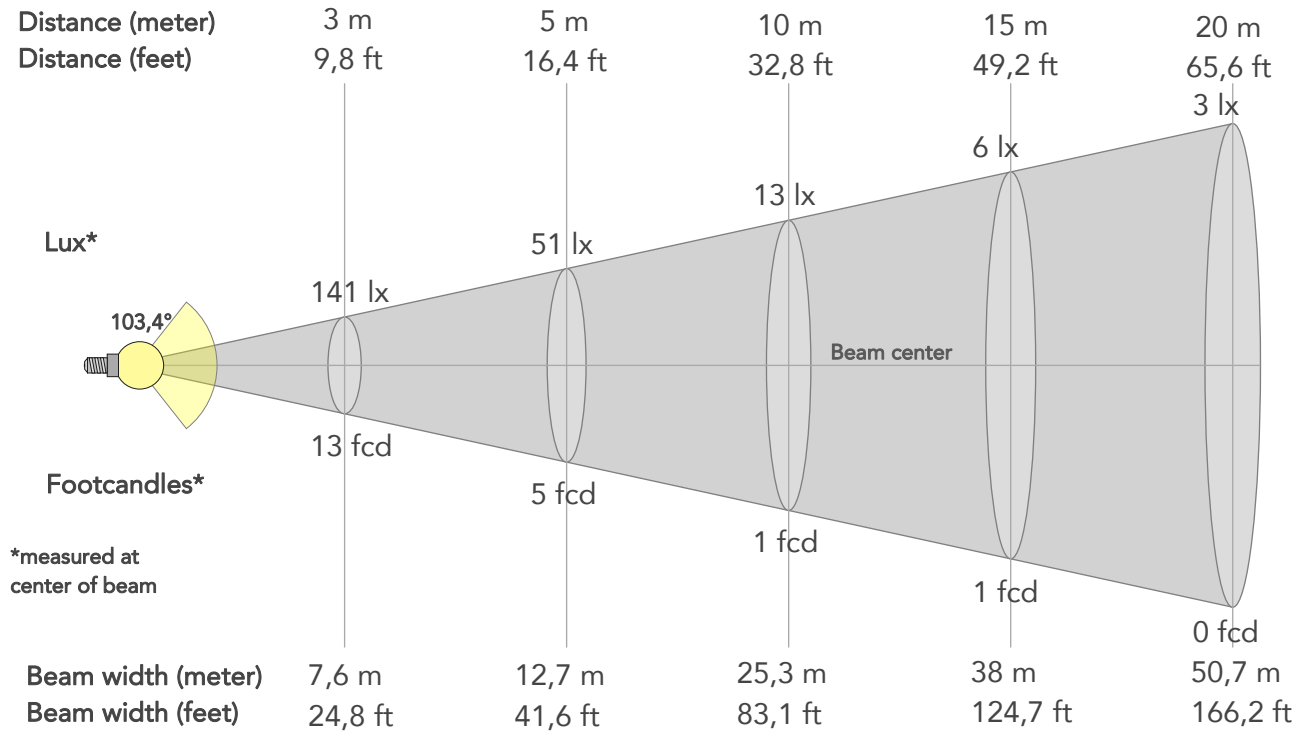
**Spectra**





## BEAM DETAILS

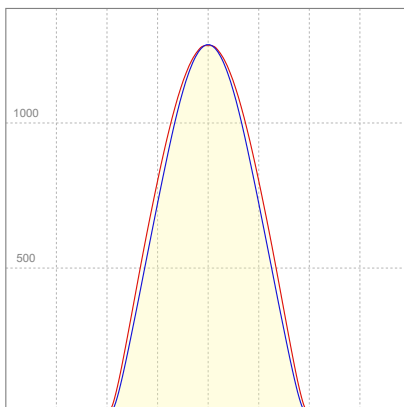
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
103,4°	154,9°	167,5°	81,4%	56,9%



### 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	1266lx	317lx	141lx	79lx	51lx	23lx	13lx	6lx	3lx	2lx	1lx	1lx	1lx
Footcand.	118fcd	29fcd	13fcd	7fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	2,5m	5,1m	7,6m	10,1m	12,7m	19m	25,3m	38m	50,7m	63,3m	76m	101,3m	126,7m
Beam wid.	8,4ft	16,7ft	24,8ft	33,2ft	41,6ft	62,3ft	83,1ft	124,7ft	166,2ft	207,8ft	249,3ft	332,4ft	415,5ft

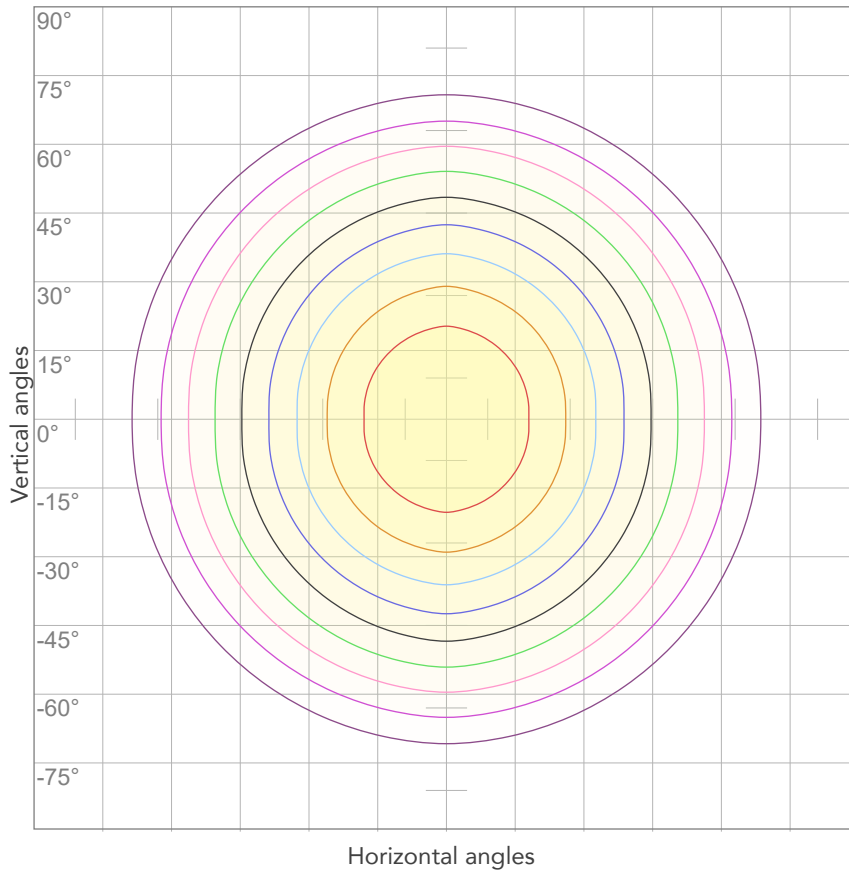
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,377A	55,4W	59lm/W
Power FC			
0,66			

## ISO CANDELA DIAGRAM



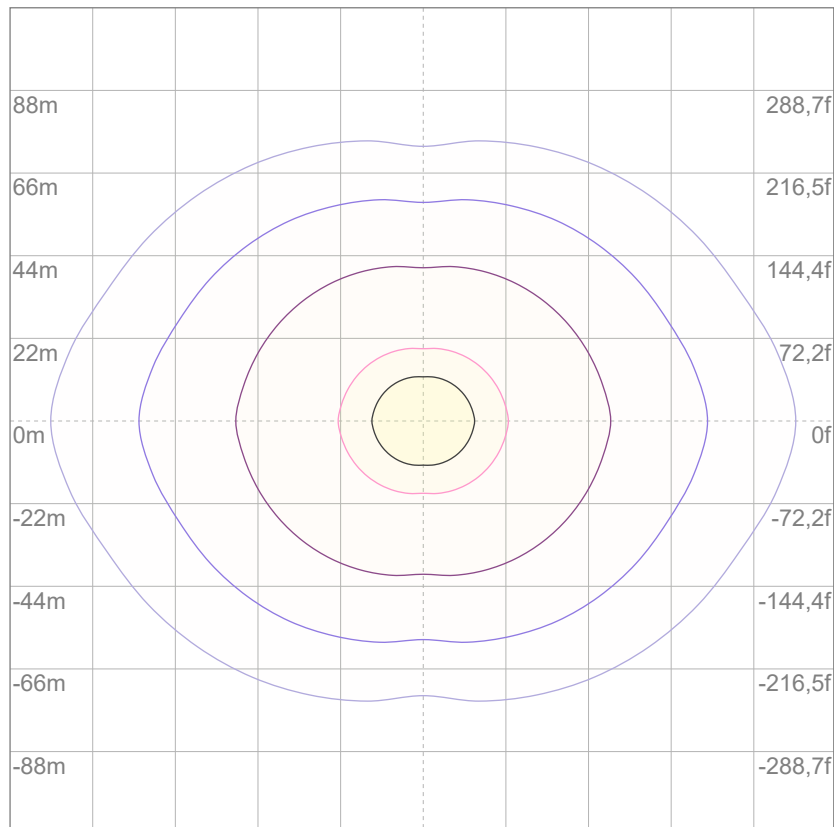
10%	127 cd
20%	253 cd
30%	380 cd
40%	507 cd
50%	633 cd
60%	760 cd
70%	886 cd
80%	1013 cd

### Conditions:

Number of c-planes: 4

Candela at center: 1266 cd

## ISO LUX DIAGRAM



3%	0,380 lx
5%	0,633 lx
10%	1,27 lx
30%	3,80 lx
50%	6,33 lx

### Conditions:

Number of c-planes: 4

Lux at center: 12,7 lx

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

Total lumen output:

5199 lm

Peak candela output:

2045 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter LD

Target:

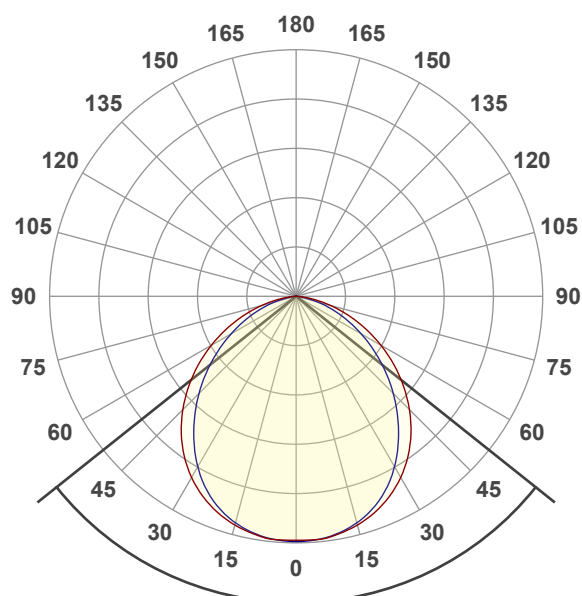
Green HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:23:53

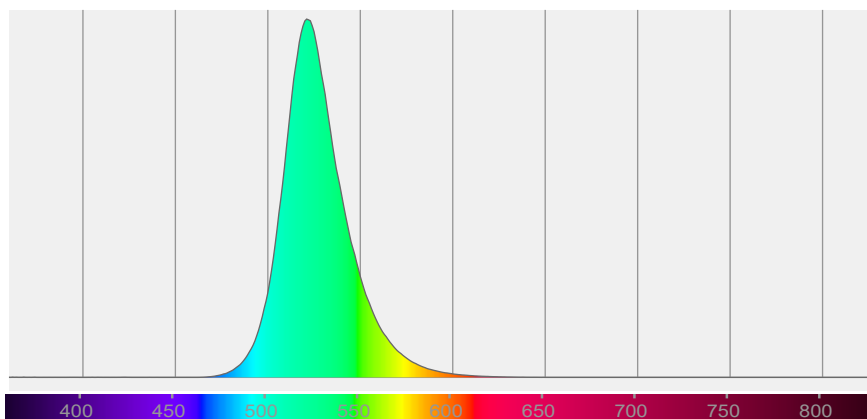


Beam angle 50%: 102,9°

Field angle 10%: 152,5°

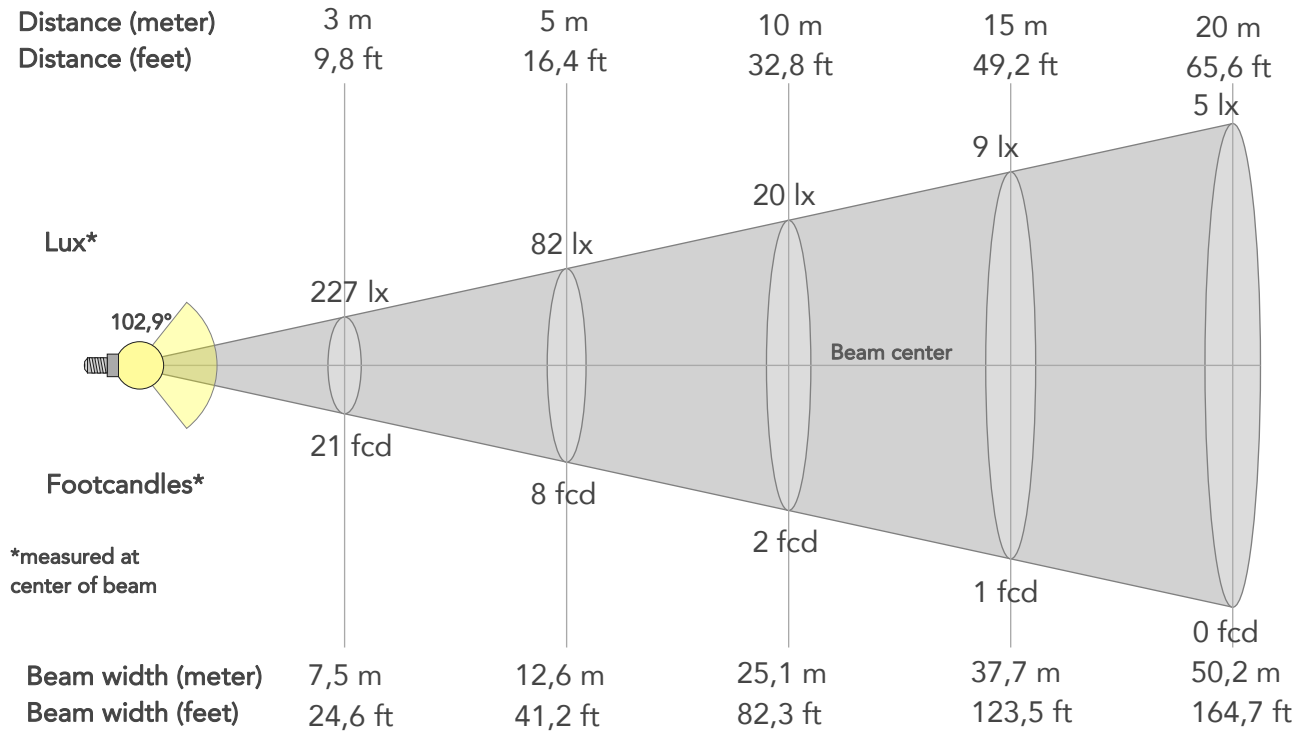
Cut off angle 2.5%: 166,2°

**Spectra**



## BEAM DETAILS

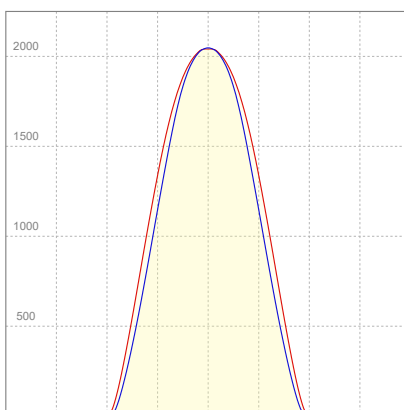
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,9°	152,5°	166,2°	82,9%	58,5%



### 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	2042lx	510lx	227lx	128lx	82lx	36lx	20lx	9lx	5lx	3lx	2lx	1lx	1lx
Footcand.	190fcd	47fcd	21fcd	12fcd	8fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,5m	10m	12,6m	18,8m	25,1m	37,7m	50,2m	62,8m	75,3m	100,4m	125,5m
Beam wid.	8,3ft	16,6ft	24,6ft	32,9ft	41,2ft	61,7ft	82,3ft	123,5ft	164,7ft	205,8ft	247ft	329,3ft	411,6ft

### LINEAR DISTRIBUTION DIAGRAM

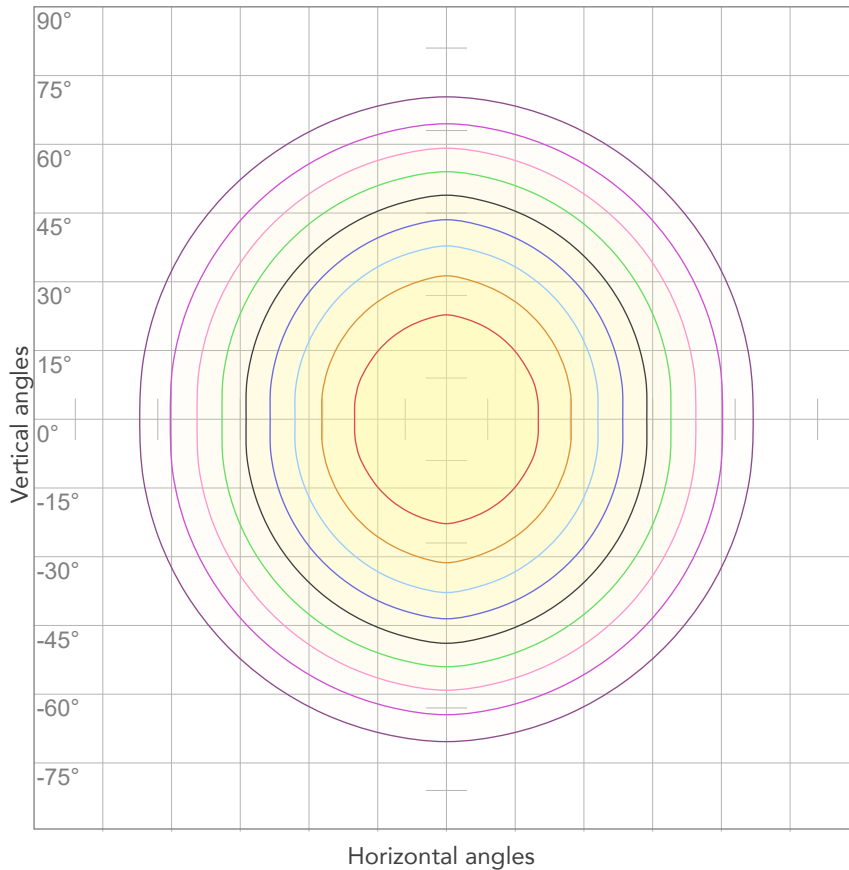


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,480A	80,7W	64lm/W

Power FC
0,75

## ISO CANDELA DIAGRAM



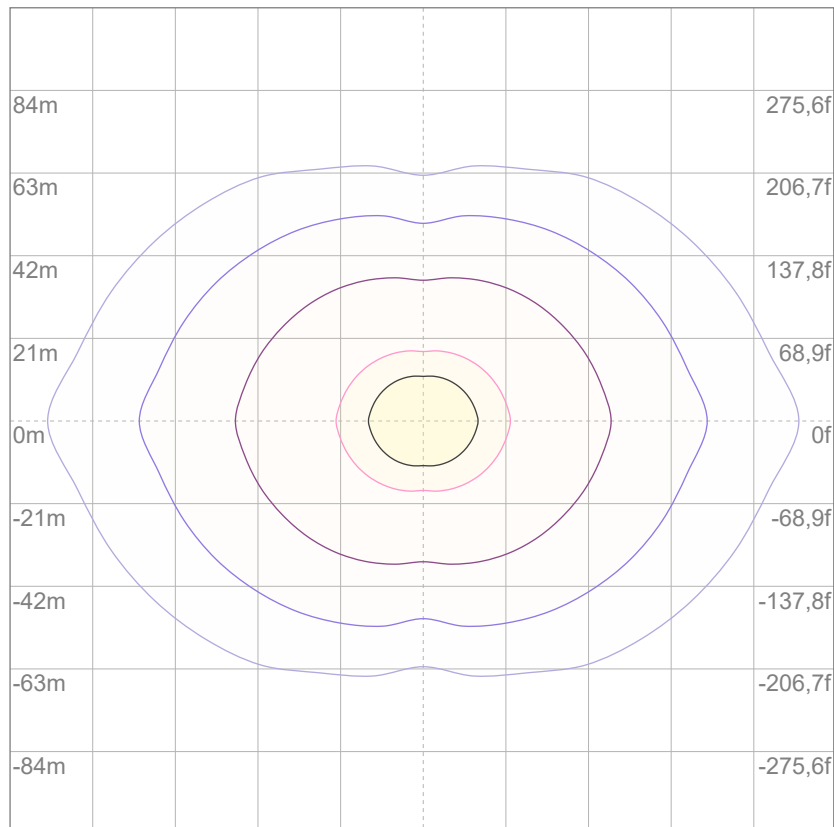
10%	204 cd
20%	408 cd
30%	613 cd
40%	817 cd
50%	1021 cd
60%	1225 cd
70%	1429 cd
80%	1633 cd

### Conditions:

Number of c-planes: 4

Candela at center: 2042 cd

## ISO LUX DIAGRAM



3%	0,613 lx
5%	1,02 lx
10%	2,04 lx
30%	6,13 lx
50%	10,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 20,4 lx

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

Total lumen output:

4408 lm

Peak candela output:

2754 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter INT

Target:

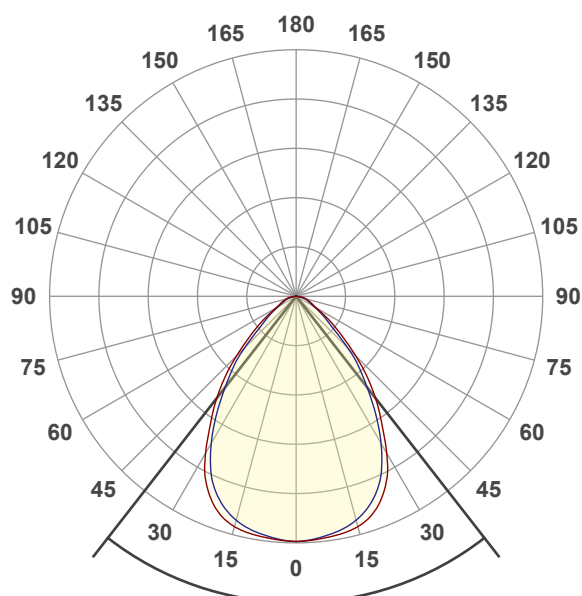
Green HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 18:11:21

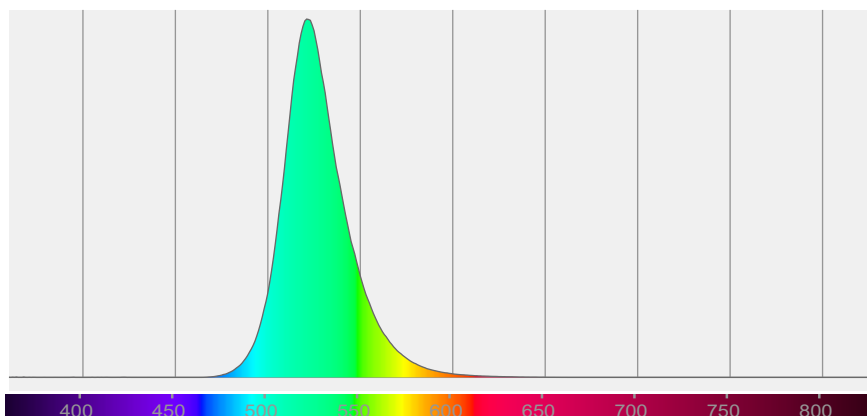


Beam angle 50%: 75,9°

Field angle 10%: 117,6°

Cut off angle 2.5%: 159,2°

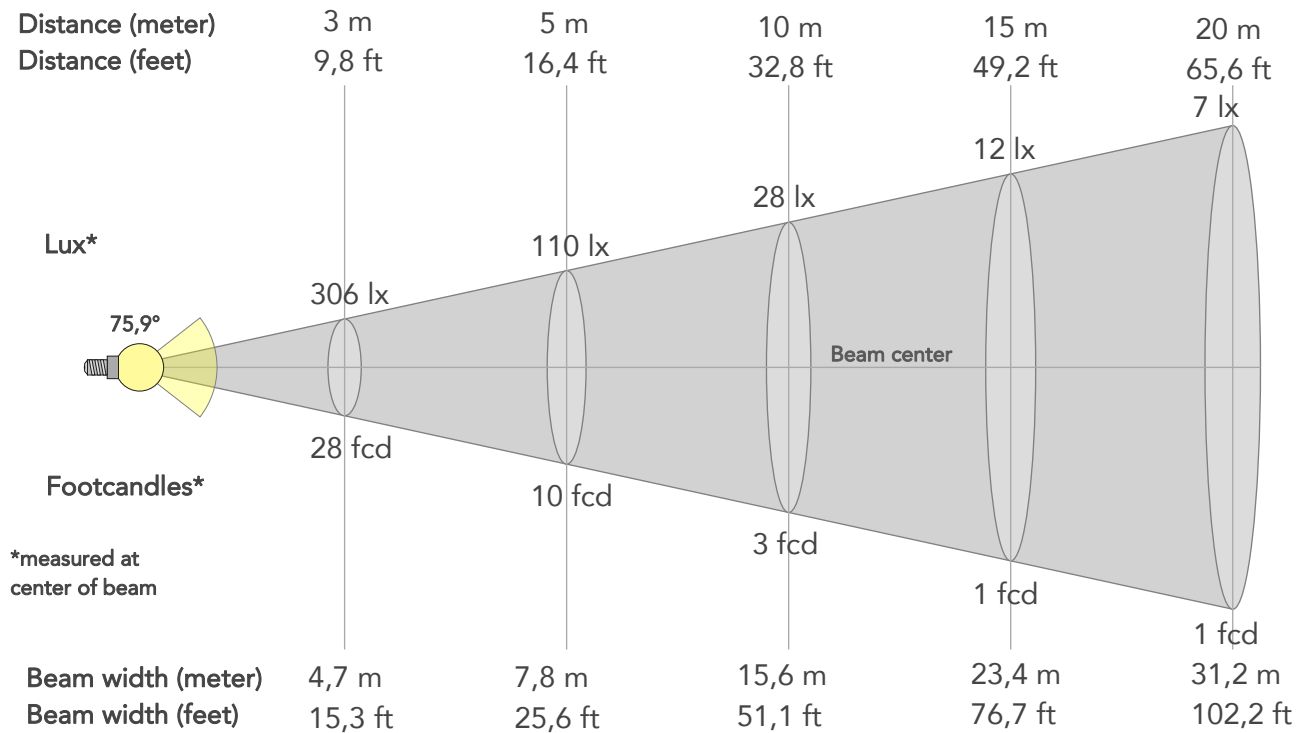
**Spectra**



# BEAM DETAILS



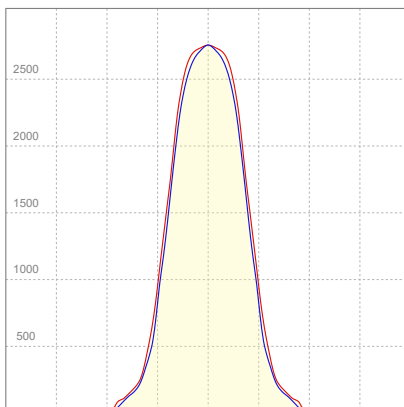
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75,9°	117,6°	159,2°	92,5%	78,0%



## 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	2754lx	688lx	306lx	172lx	110lx	49lx	28lx	12lx	7lx	4lx	3lx	2lx	1lx
Footcand.	256fcd	64fcd	28fcd	16fcd	10fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,6m	3,1m	4,7m	6,2m	7,8m	11,7m	15,6m	23,4m	31,2m	39m	46,8m	62,3m	77,9m
Beam wid.	5,1ft	10,3ft	15,3ft	20,4ft	25,6ft	38,3ft	51,1ft	76,7ft	102,2ft	127,8ft	153,4ft	204,5ft	255,6ft

## LINEAR DISTRIBUTION DIAGRAM

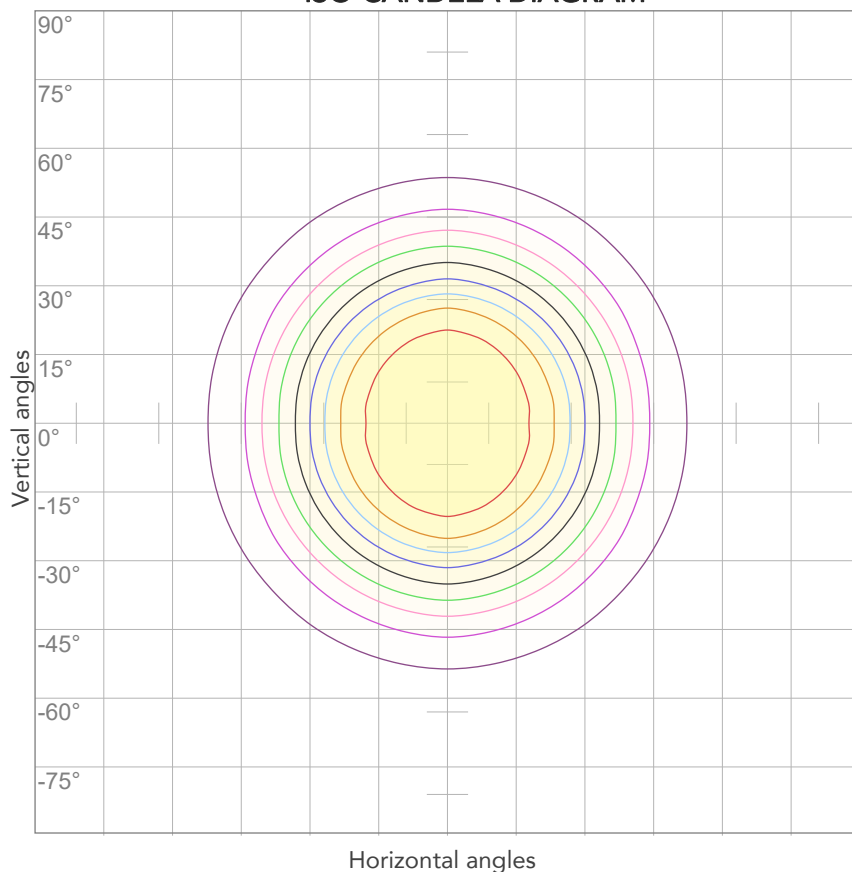


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,477A	80,4W	55lm/W

Power FC
0,75

## ISO CANDELA DIAGRAM



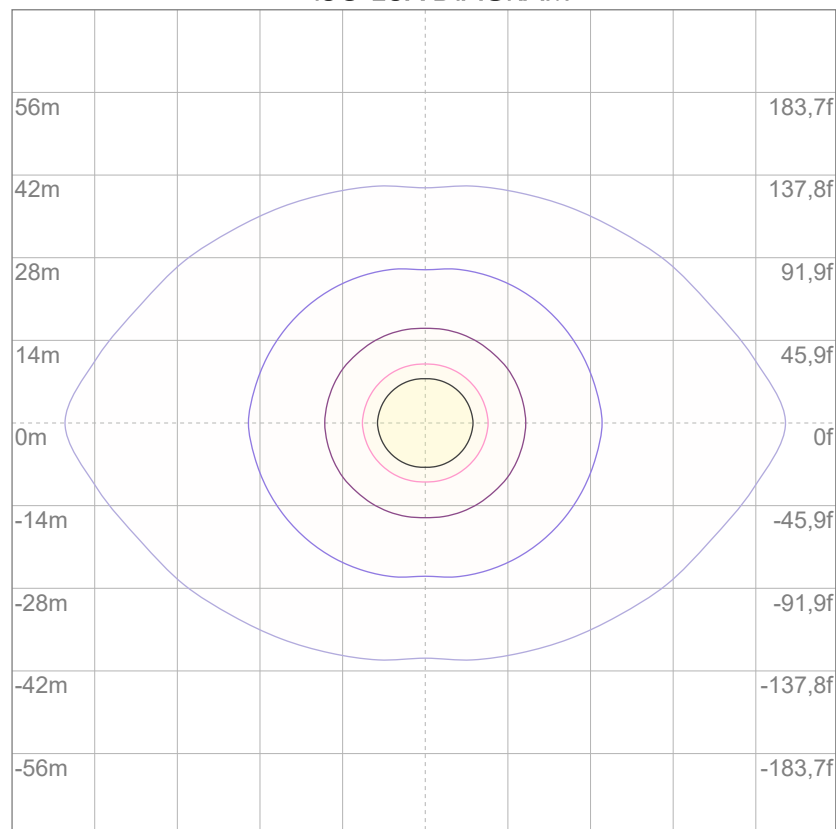
10%	275 cd
20%	551 cd
30%	826 cd
40%	1102 cd
50%	1377 cd
60%	1652 cd
70%	1928 cd
80%	2203 cd

### Conditions:

Number of c-planes: 4

Candela at center: 2754 cd

## ISO LUX DIAGRAM



3%	0,826 lx
5%	1,38 lx
10%	2,75 lx
30%	8,26 lx
50%	13,8 lx

### Conditions:

Number of c-planes: 4

Lux at center: 27,5 lx

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



Total lumen output:

513 lm

Peak candela output:

182 cd



PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter HD

Target:

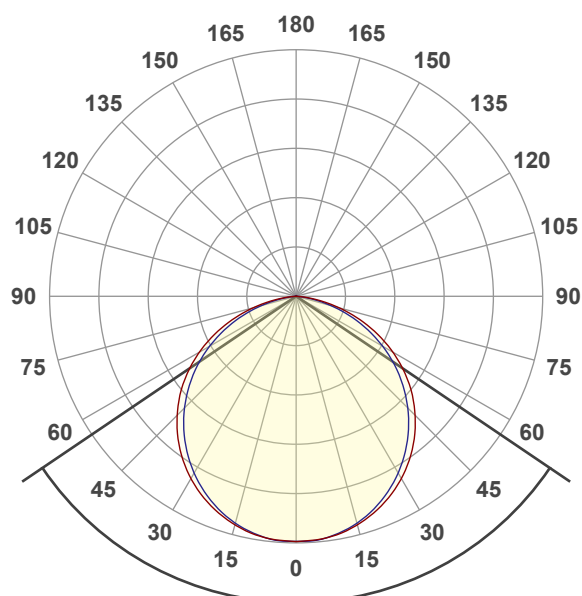
Blue HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:33:30

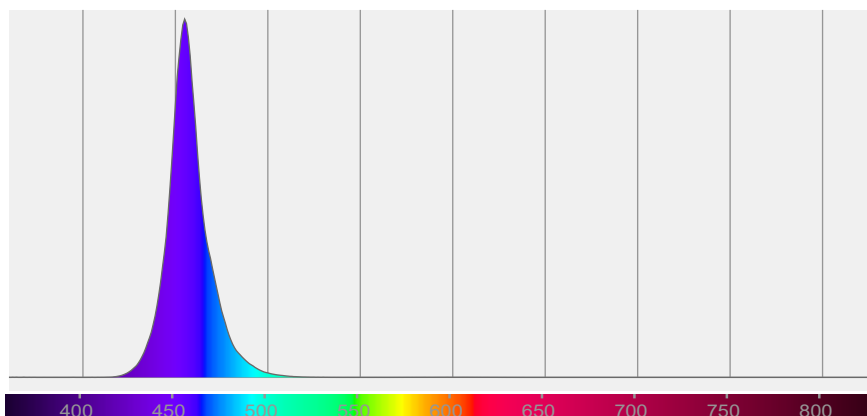


Beam angle 50%: 111,8°

Field angle 10%: 157,6°

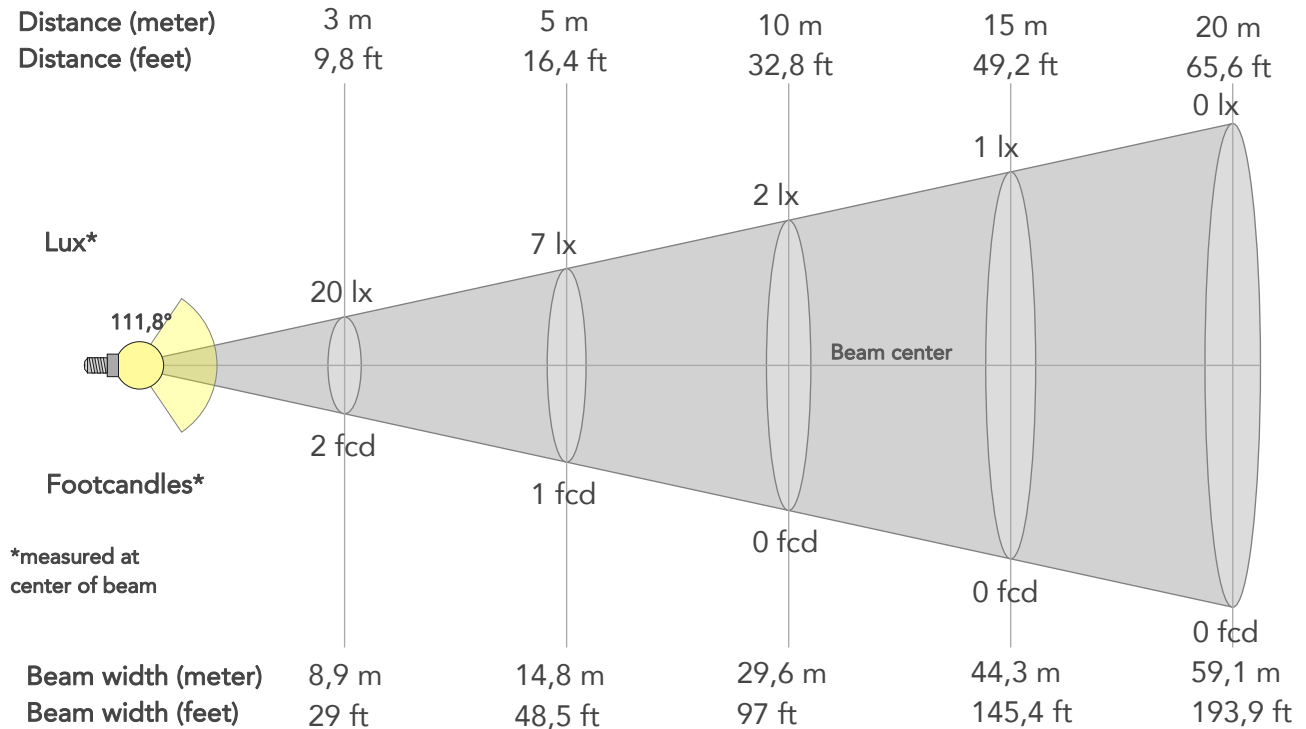
Cut off angle 2.5%: 168,6°

Spectra



## BEAM DETAILS

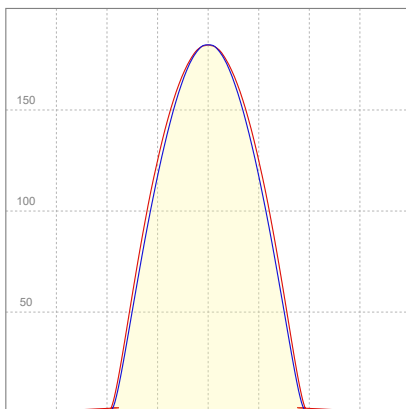
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
111,8°	157,6°	168,6°	79,7%	54,3%



### 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	182lx	45lx	20lx	11lx	7lx	3lx	2lx	1lx	0lx	0lx	0lx	0lx	0lx
Footcand.	17fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	3m	5,9m	8,9m	11,8m	14,8m	22,2m	29,6m	44,3m	59,1m	73,9m	88,7m	118,2m	147,8m
Beam wid.	9,8ft	19,5ft	29ft	38,7ft	48,5ft	72,7ft	97ft	145,4ft	193,9ft	242,4ft	290,9ft	387,9ft	484,8ft

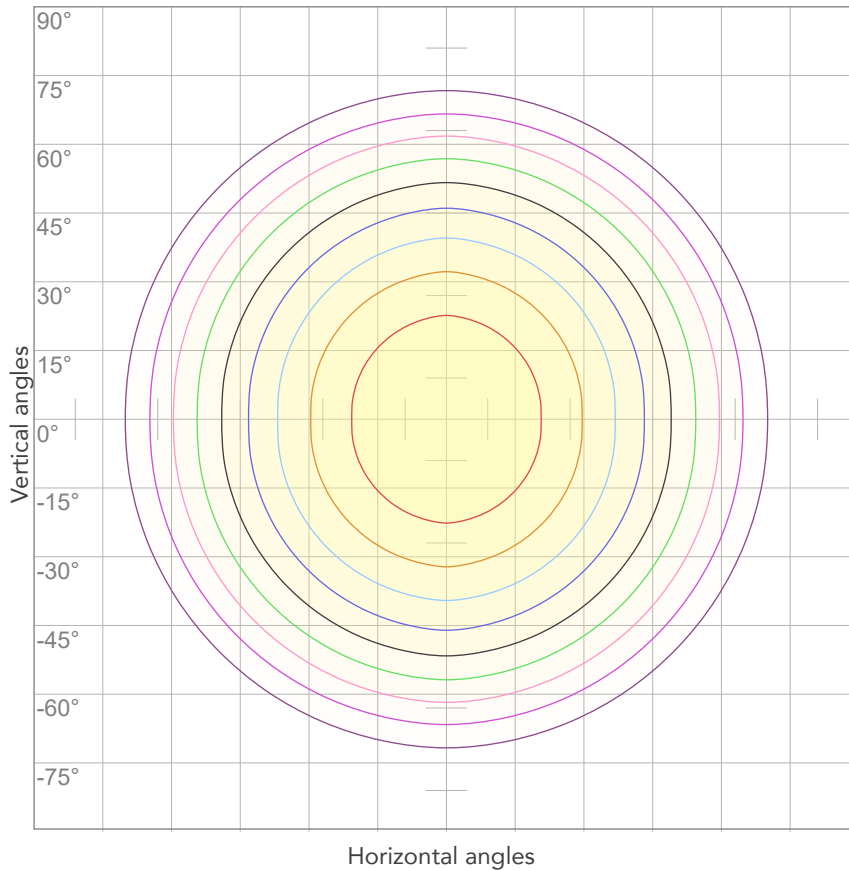
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,337A	47,2W	11lm/W
Power FC			
0,62			

## ISO CANDELA DIAGRAM



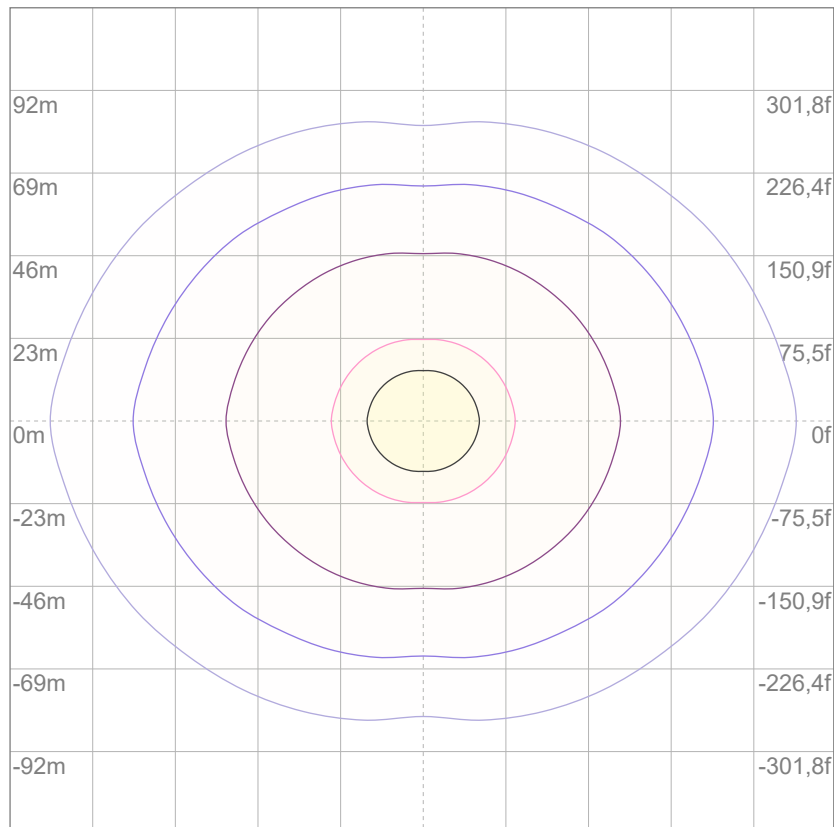
10%	18 cd
20%	36 cd
30%	55 cd
40%	73 cd
50%	91 cd
60%	109 cd
70%	127 cd
80%	146 cd

### Conditions:

Number of c-planes: 4

Candela at center: 182 cd

## ISO LUX DIAGRAM



3%	54,6m lx
5%	91,0m lx
10%	0,182 lx
30%	0,546 lx
50%	0,910 lx

### Conditions:

Number of c-planes: 4

Lux at center: 1,82 lx

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

Total lumen output:

369 lm

Peak candela output:

142 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter MD

Target:

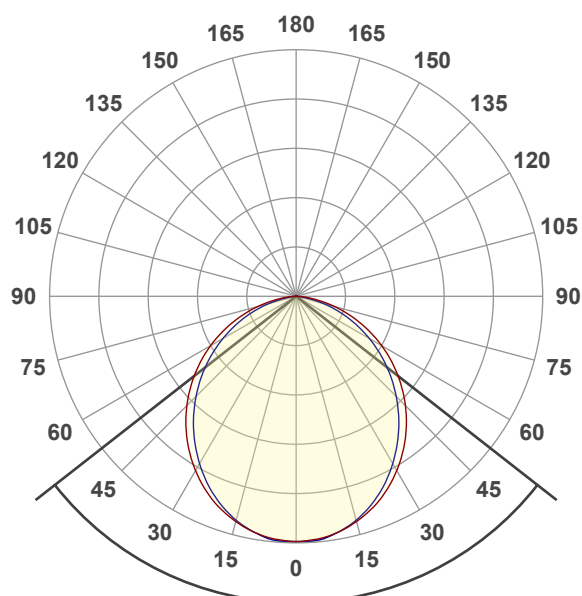
Blue HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:06:06

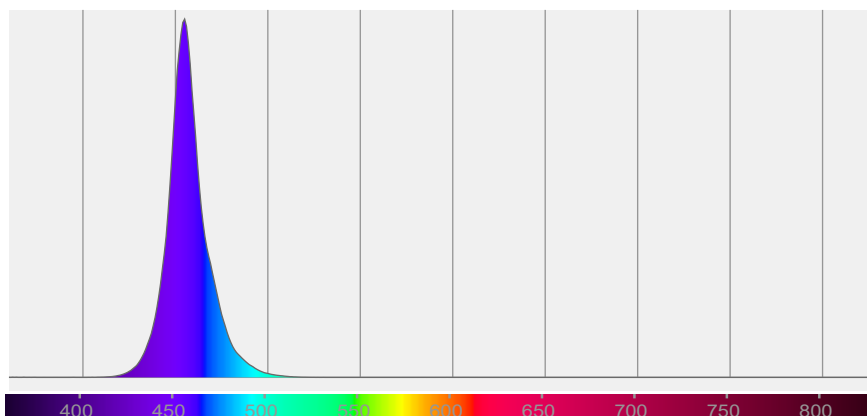


Beam angle 50%: 104°

Field angle 10%: 155,4°

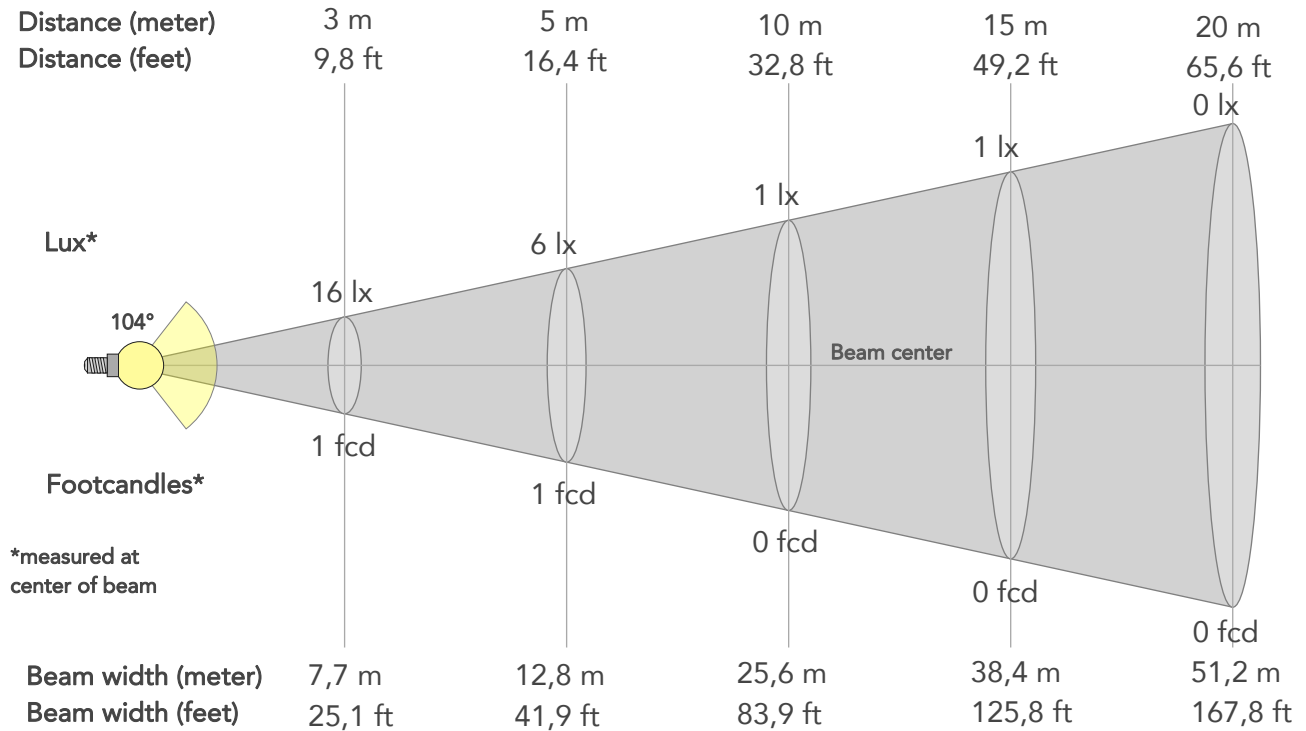
Cut off angle 2.5%: 168,8°

**Spectra**



## BEAM DETAILS

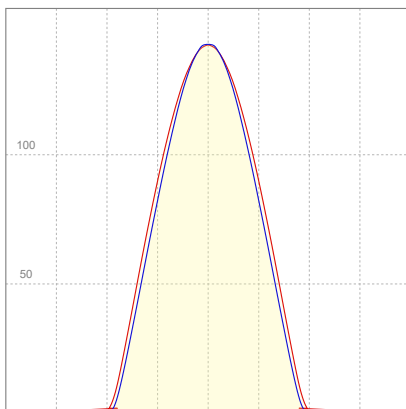
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
104°	155,4°	168,8°	80,8%	56,3%



### 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	142lx	36lx	16lx	9lx	6lx	3lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx
Footcand.	13fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	2,6m	5,1m	7,7m	10,2m	12,8m	19,2m	25,6m	38,4m	51,2m	63,9m	76,7m	102,3m	127,9m
Beam wid.	8,4ft	16,9ft	25,1ft	33,5ft	41,9ft	62,9ft	83,9ft	125,8ft	167,8ft	209,7ft	251,7ft	335,6ft	419,4ft

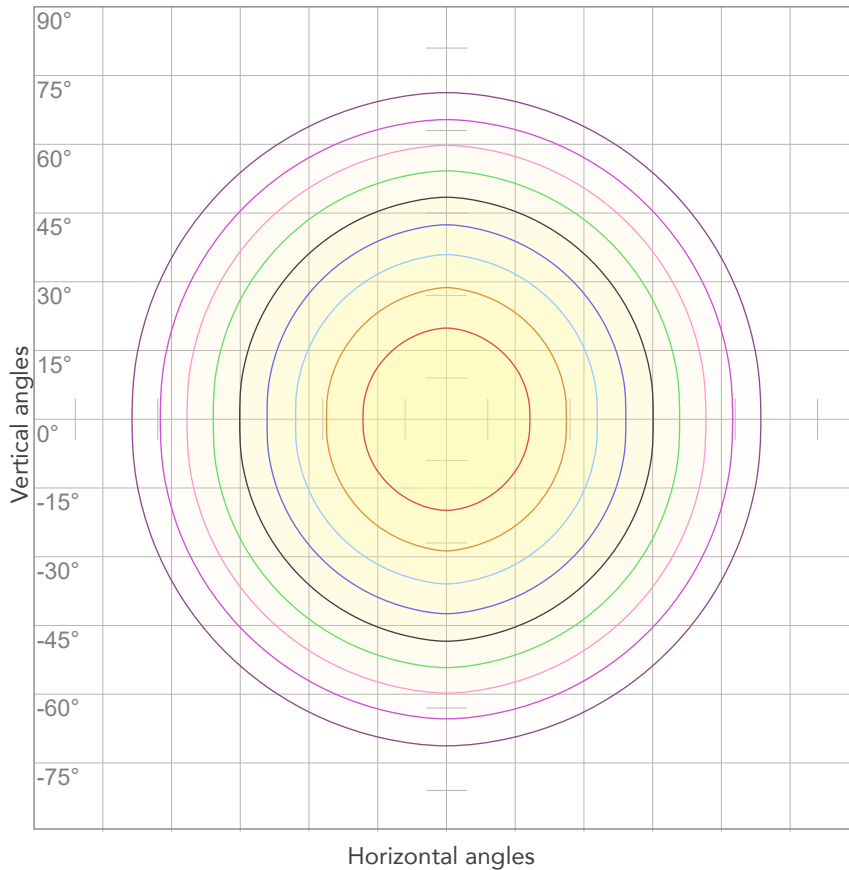
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	0,285A	34,2W	11lm/W
Power FC			
0,54			

## ISO CANDELA DIAGRAM



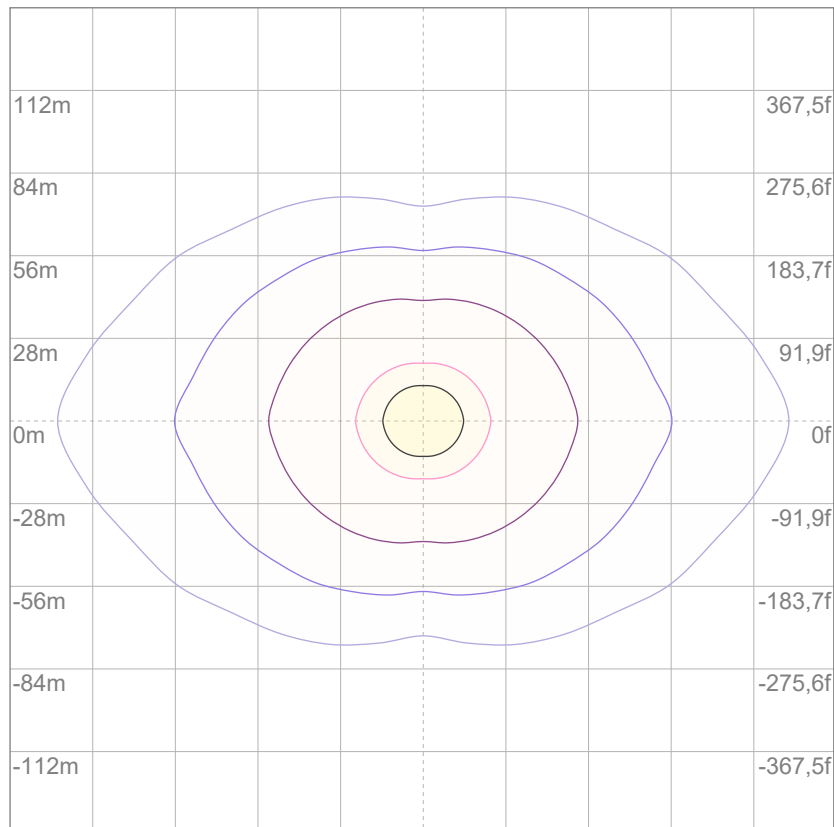
10%	14 cd
20%	28 cd
30%	43 cd
40%	57 cd
50%	71 cd
60%	85 cd
70%	100 cd
80%	114 cd

### Conditions:

Number of c-planes: 4

Candela at center: 142 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	42,7m lx
5%	71,2m lx
10%	0,142 lx
30%	0,427 lx
50%	0,712 lx

### Conditions:

Number of c-planes: 4

Lux at center: 1,42 lx

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

Total lumen output:

584 lm

Peak candela output:

231 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter LD

Target:

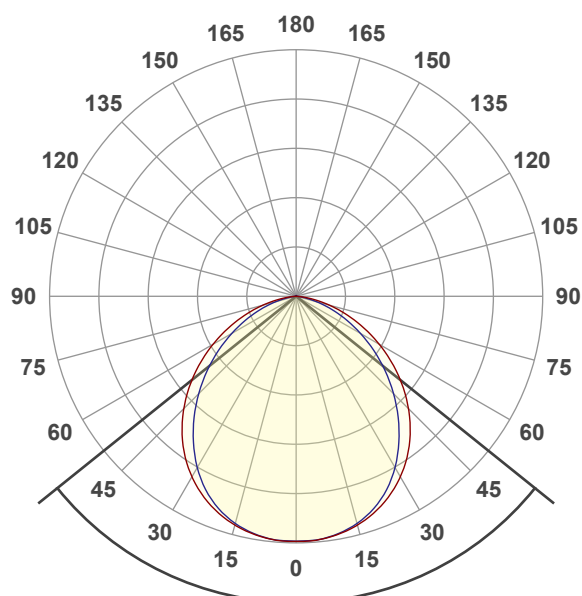
Blue HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:19:13

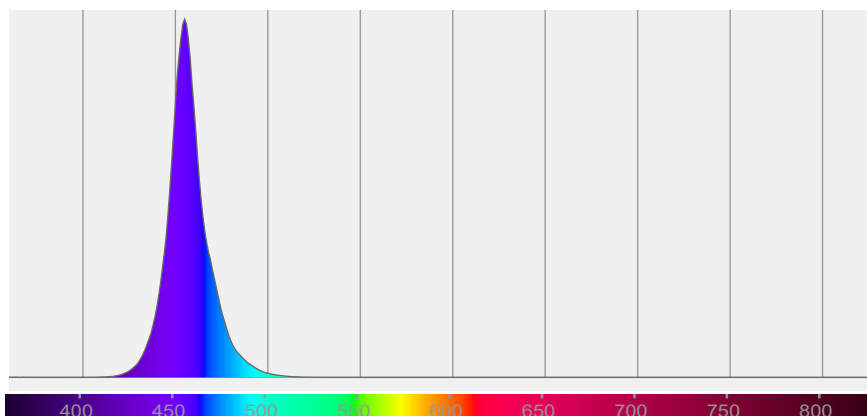


Beam angle 50%: 102,5°

Field angle 10%: 151,9°

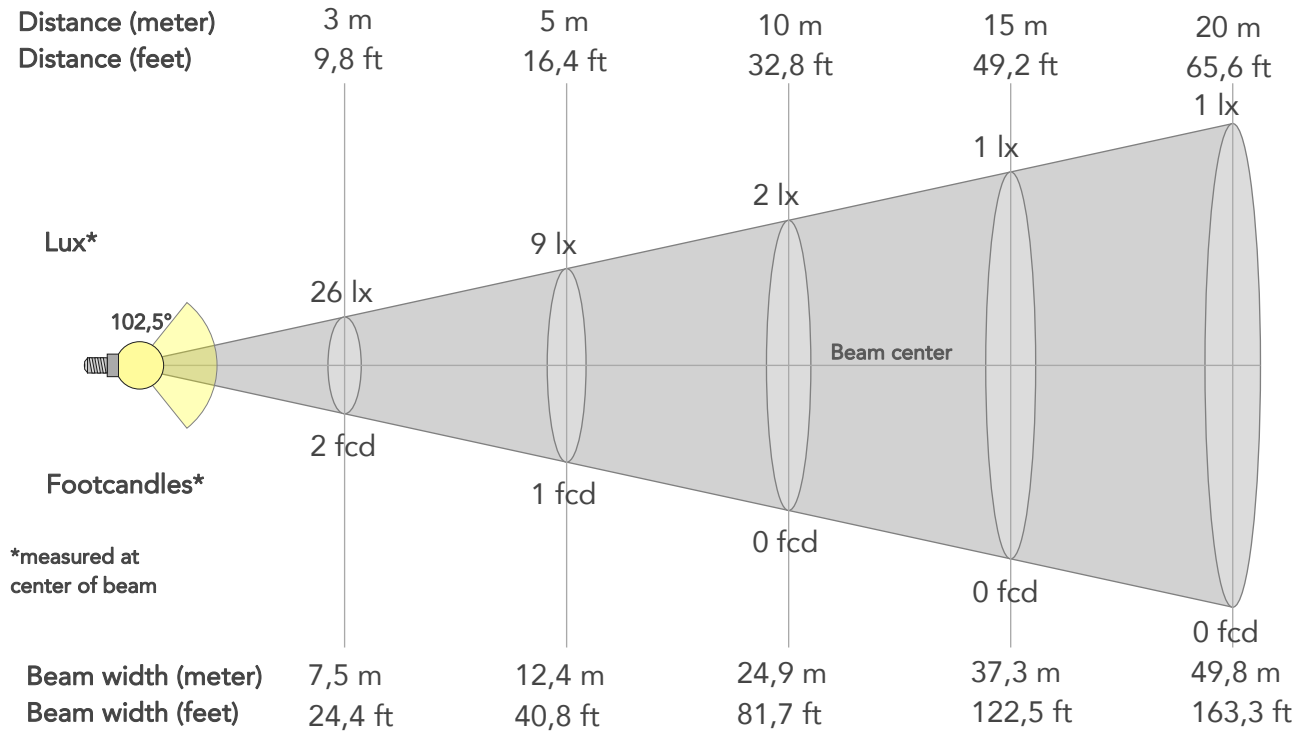
Cut off angle 2.5%: 165,9°

**Spectra**



## BEAM DETAILS

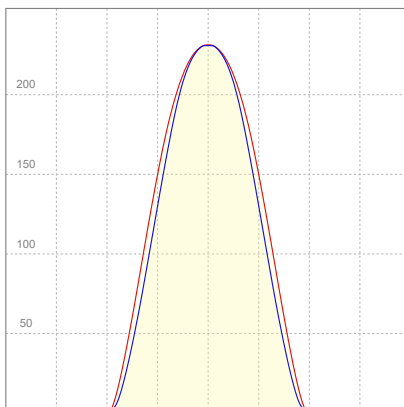
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,5°	151,9°	165,9°	83,2%	58,9%



### 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	231lx	58lx	26lx	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.	2,5m	5m	7,5m	10m	12,4m	18,7m	24,9m	37,3m	49,8m	62,2m	74,7m	99,6m	124,5m
Beam wid.	8,2ft	16,4ft	24,4ft	32,6ft	40,8ft	61,3ft	81,7ft	122,5ft	163,3ft	204,2ft	245ft	326,7ft	408,3ft

### LINEAR DISTRIBUTION DIAGRAM



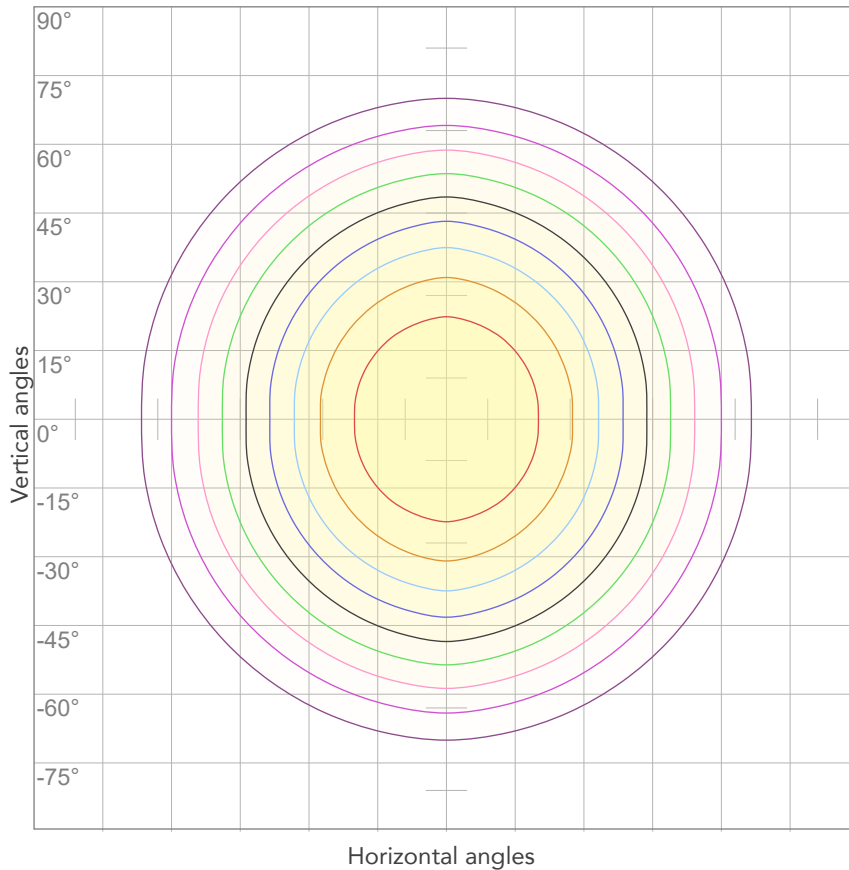
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,349A	47,3W	12lm/W

Power FC
0,61



## ISO CANDELA DIAGRAM



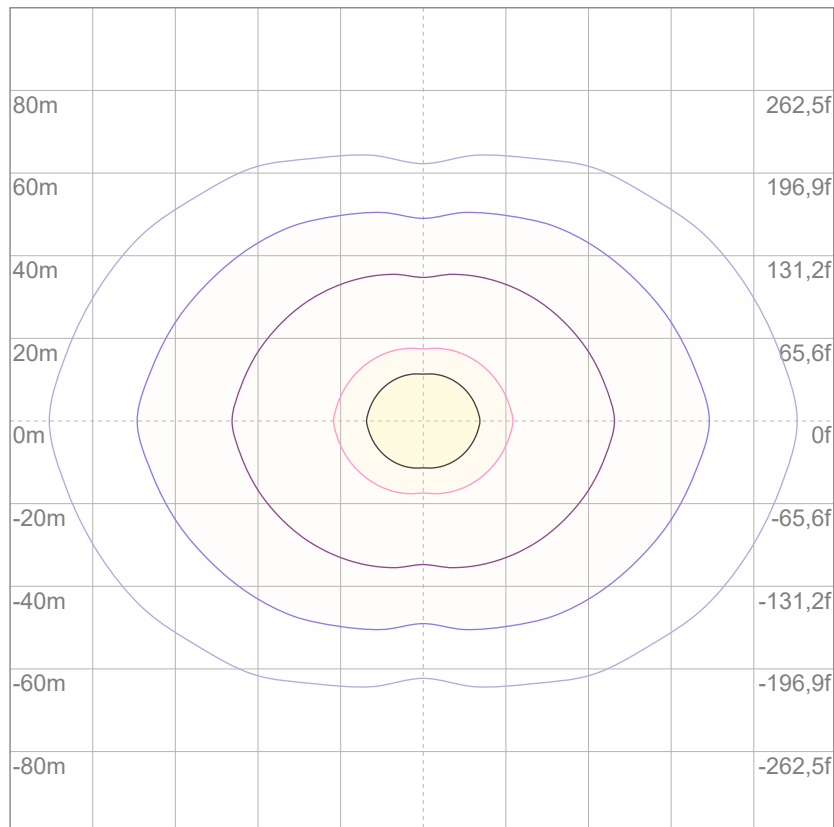
10%	23 cd
20%	46 cd
30%	69 cd
40%	92 cd
50%	115 cd
60%	139 cd
70%	162 cd
80%	185 cd

### Conditions:

Number of c-planes: 4

Candela at center: 231 cd

## ISO LUX DIAGRAM



3%	69,3m lx
5%	0,115 lx
10%	0,231 lx
30%	0,693 lx
50%	1,15 lx

### Conditions:

Number of c-planes: 4

Lux at center: 2,31 lx

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

Total lumen output:

502 lm

Peak candela output:

325 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter INT

Target:

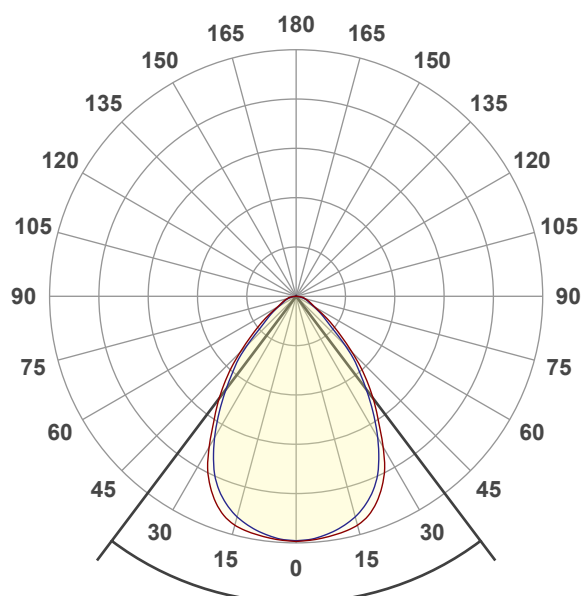
Blue HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 18:06:41

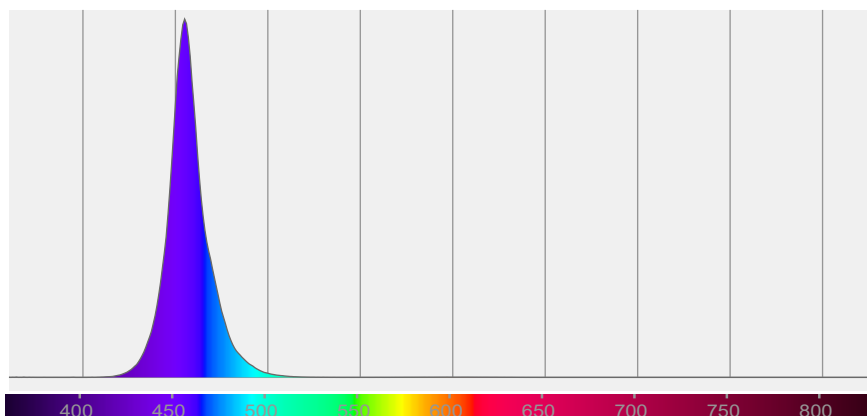


Beam angle 50%: 74°

Field angle 10%: 116,3°

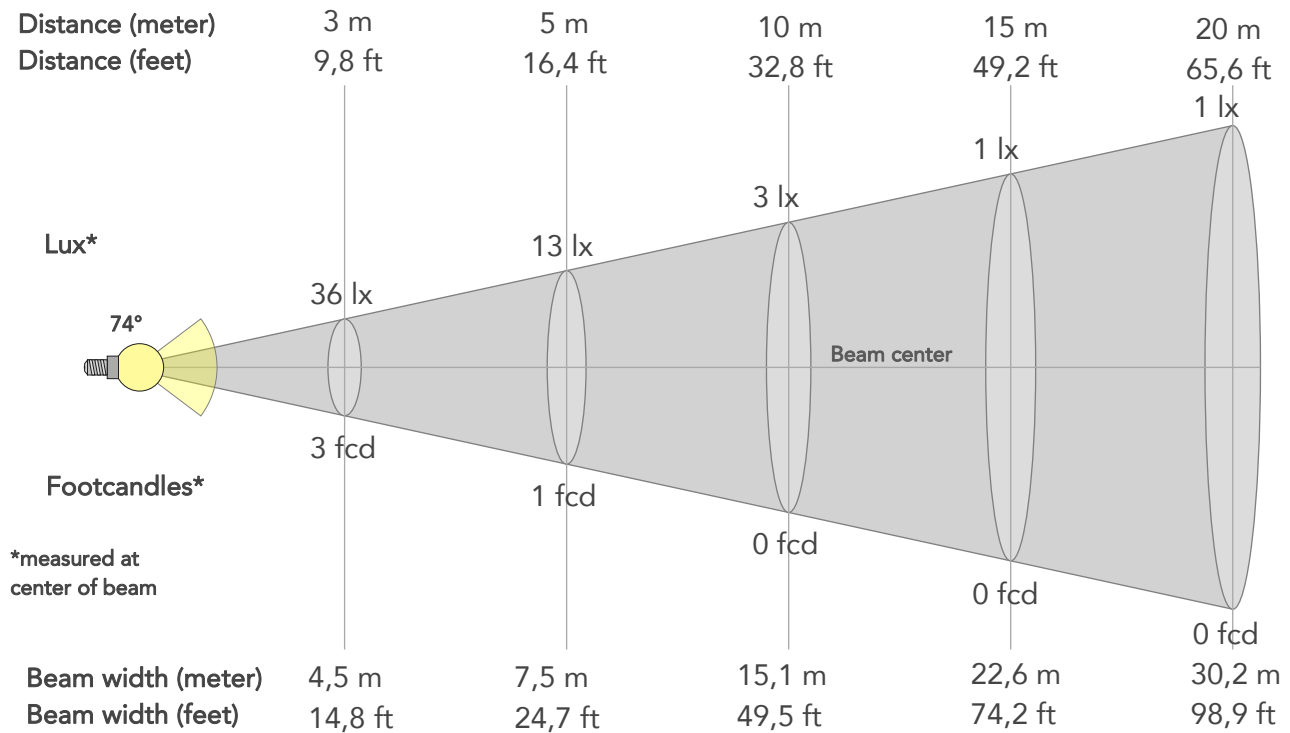
Cut off angle 2.5%: 158,4°

**Spectra**



## BEAM DETAILS

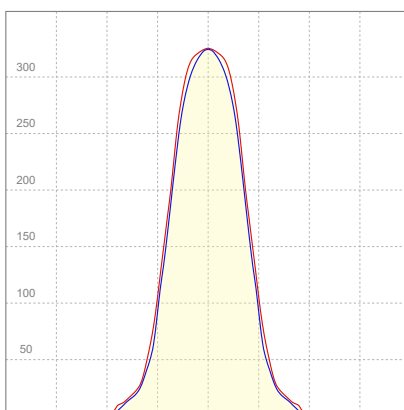
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
74°	116,3°	158,4°	92,6%	78,4%



### 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	325lx	81lx	36lx	20lx	13lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx	0lx
Footcand.	30fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,5m	3m	4,5m	6m	7,5m	11,3m	15,1m	22,6m	30,2m	37,7m	45,2m	60,3m	75,4m
Beam wid.	5ft	10ft	14,8ft	19,8ft	24,7ft	37,1ft	49,5ft	74,2ft	98,9ft	123,6ft	148,4ft	197,8ft	247,3ft

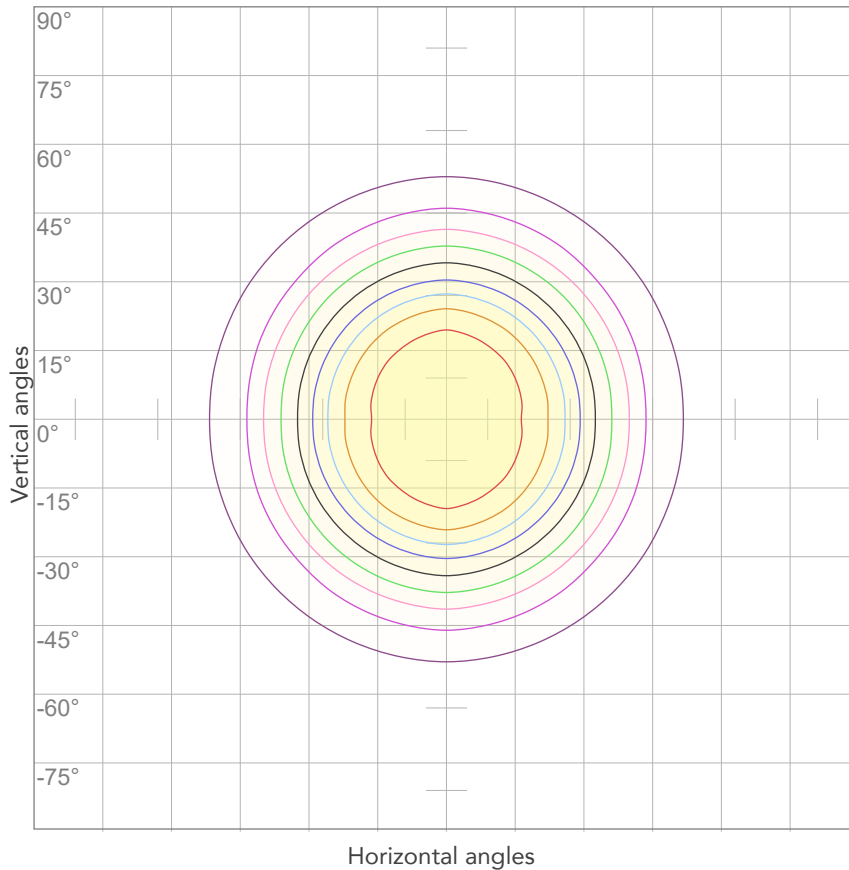
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,337A	47,2W	11lm/W
Power FC			
0,62			

## ISO CANDELA DIAGRAM



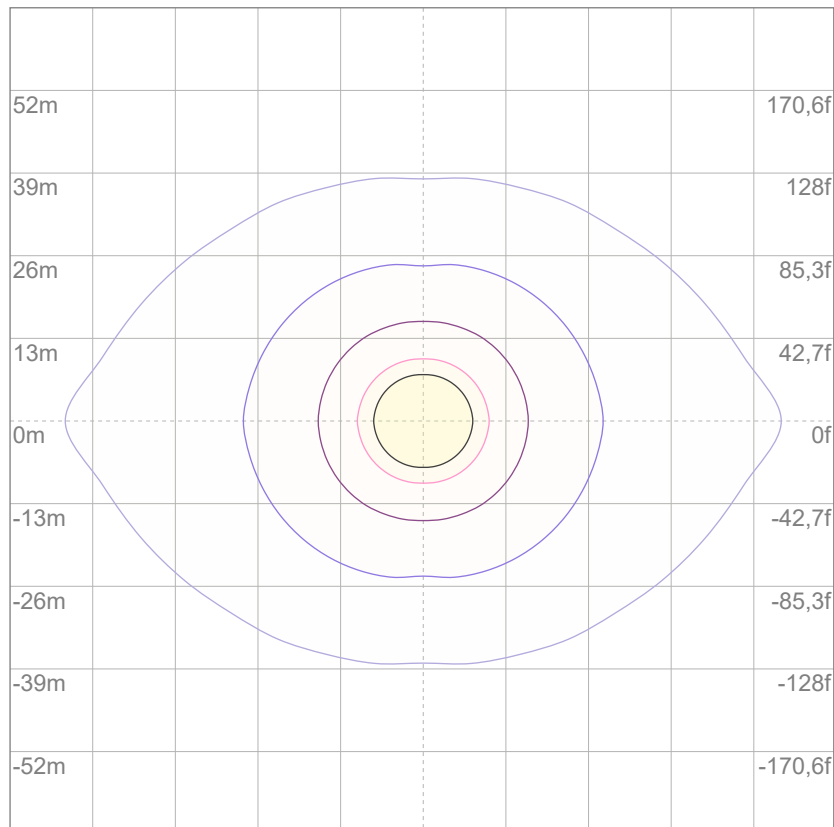
10%	32 cd
20%	65 cd
30%	97 cd
40%	130 cd
50%	162 cd
60%	195 cd
70%	227 cd
80%	260 cd

### Conditions:

Number of c-planes: 4

Candela at center: 325 cd

## ISO LUX DIAGRAM



3%	97,5m lx
5%	0,162 lx
10%	0,325 lx
30%	0,975 lx
50%	1,62 lx

### Conditions:

Number of c-planes: 4

Lux at center: 3,25 lx

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

Total lumen output:

10393 lm

Peak candela output:

3647 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter HD

Target:

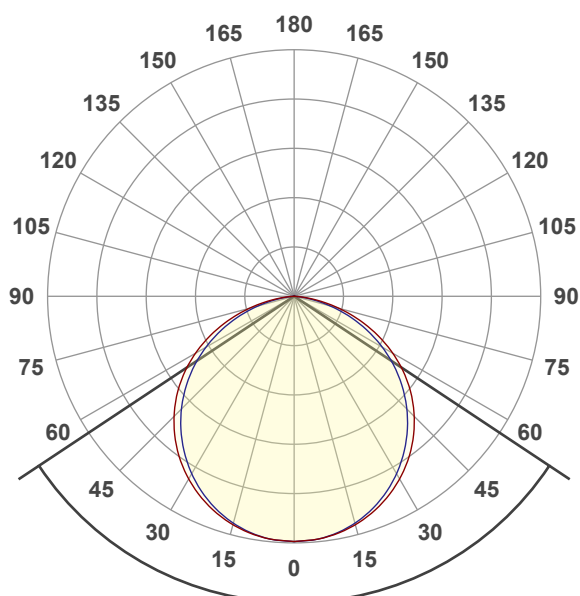
White HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:42:01

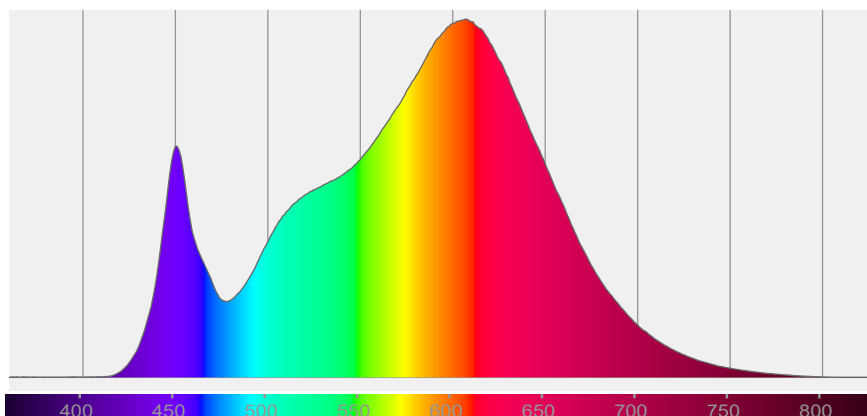


Beam angle 50%: 112,8°

Field angle 10%: 158,3°

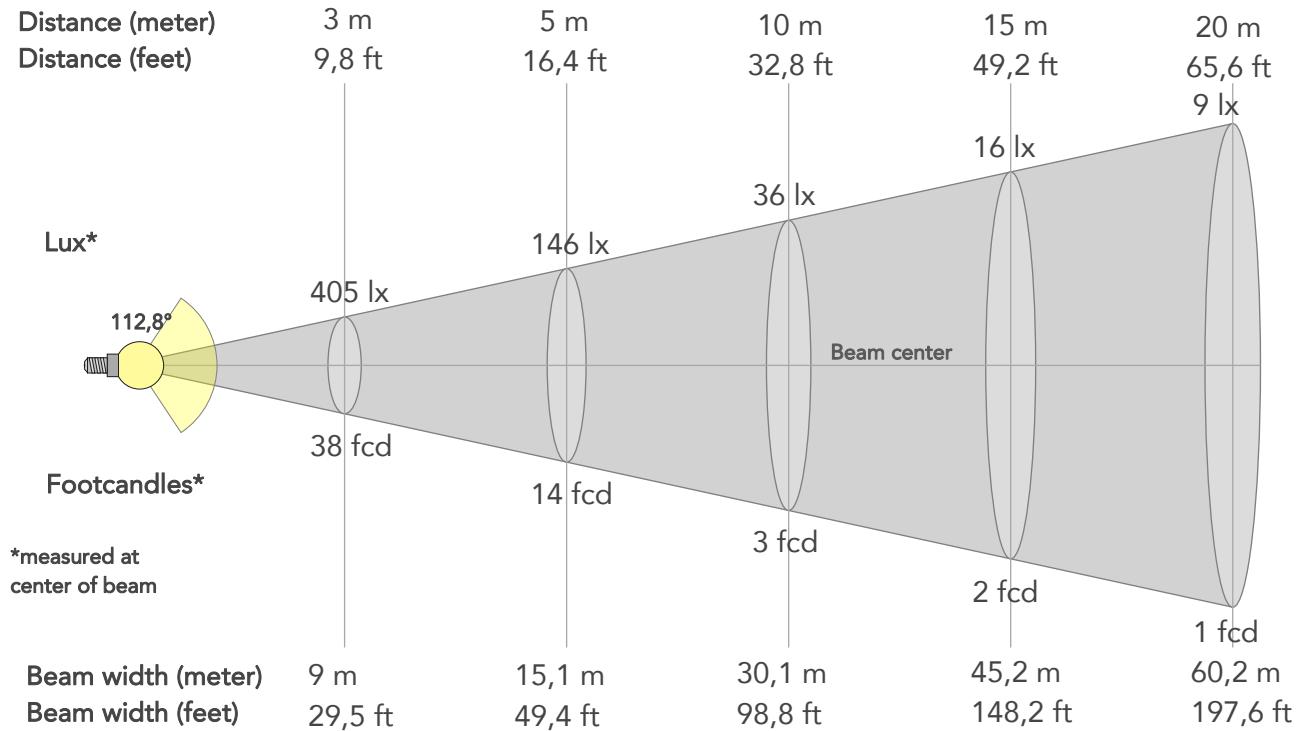
Cut off angle 2.5%: 169°

**Spectra**



## BEAM DETAILS

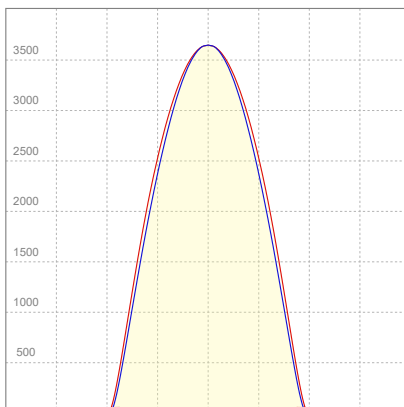
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
112,8°	158,3°	169°	79,3%	53,9%



### 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	3646lx	912lx	405lx	228lx	146lx	65lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	339fcd	85fcd	38fcd	21fcd	14fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9m	12m	15,1m	22,6m	30,1m	45,2m	60,2m	75,3m	90,4m	120,5m	150,6m
Beam wid.	9,9ft	19,9ft	29,5ft	39,5ft	49,4ft	74,1ft	98,8ft	148,2ft	197,6ft	247ft	296,4ft	395,2ft	494ft

### LINEAR DISTRIBUTION DIAGRAM

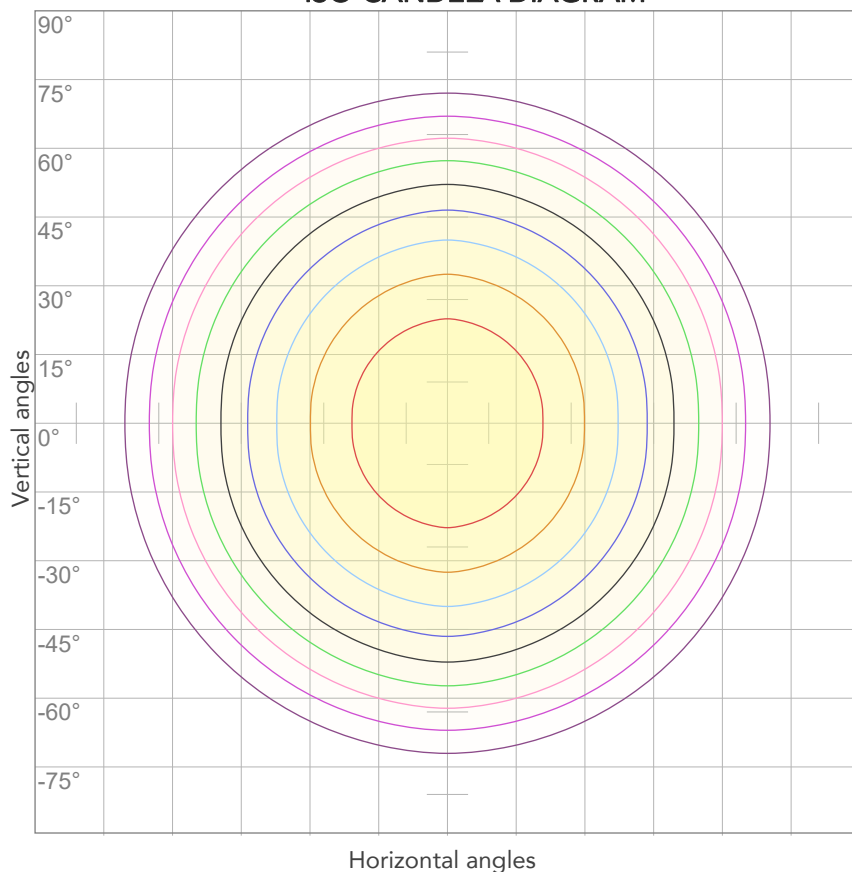


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,798A	155,8W	67lm/W

Power FC
0,87

## ISO CANDELA DIAGRAM



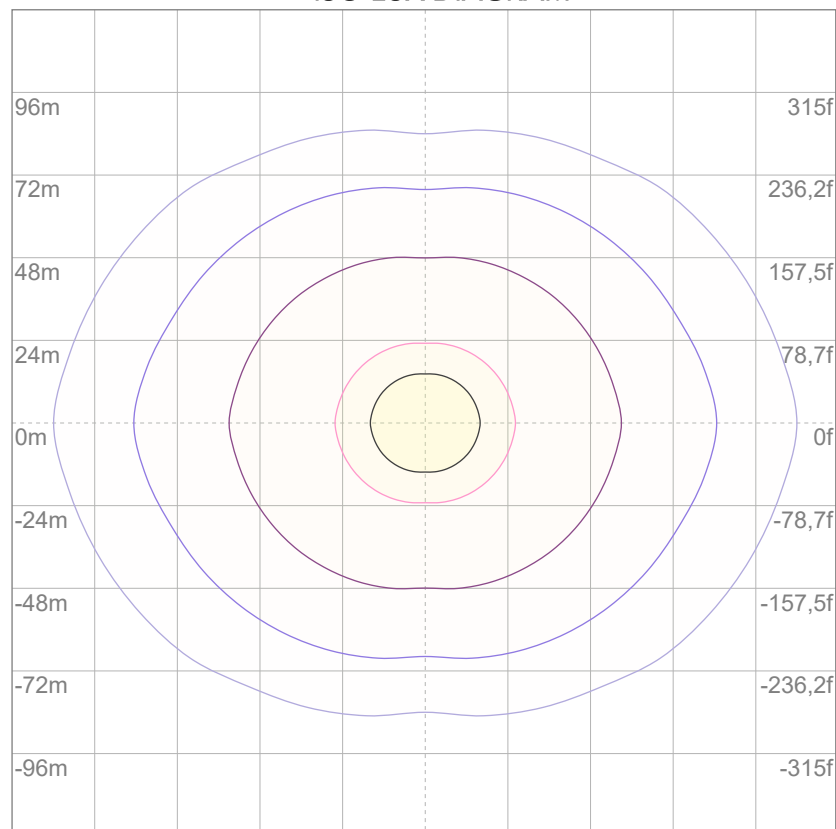
10%	365 cd
20%	729 cd
30%	1094 cd
40%	1458 cd
50%	1823 cd
60%	2188 cd
70%	2552 cd
80%	2917 cd

### Conditions:

Number of c-planes: 4

Candela at center: 3646 cd

## ISO LUX DIAGRAM



3%	1,09 lx
5%	1,82 lx
10%	3,65 lx
30%	10,9 lx
50%	18,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 36,5 lx

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

Total lumen output:

12448 lm

Peak candela output:

4932 cd



PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter MD

Target:

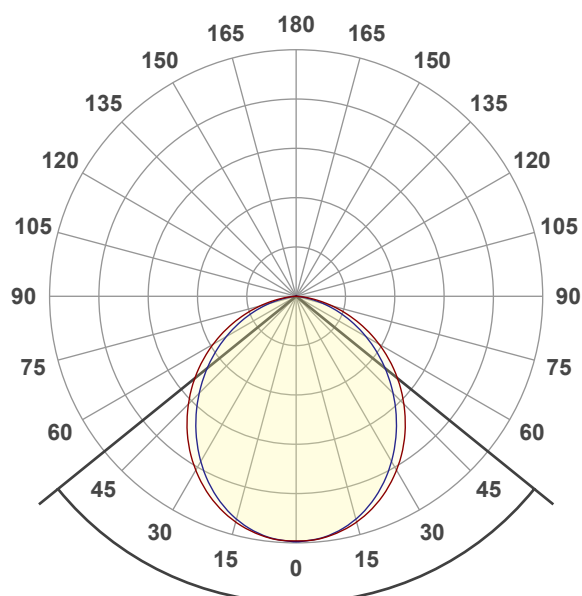
White HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:07:50

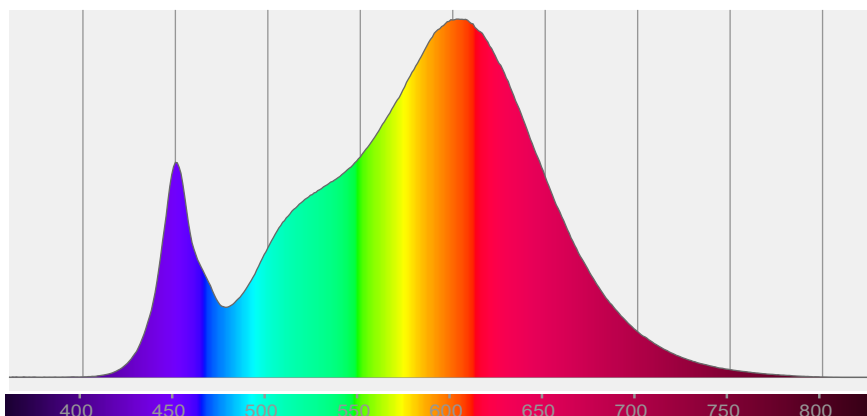


Beam angle 50%: 102,1°

Field angle 10%: 154,6°

Cut off angle 2.5%: 167,4°

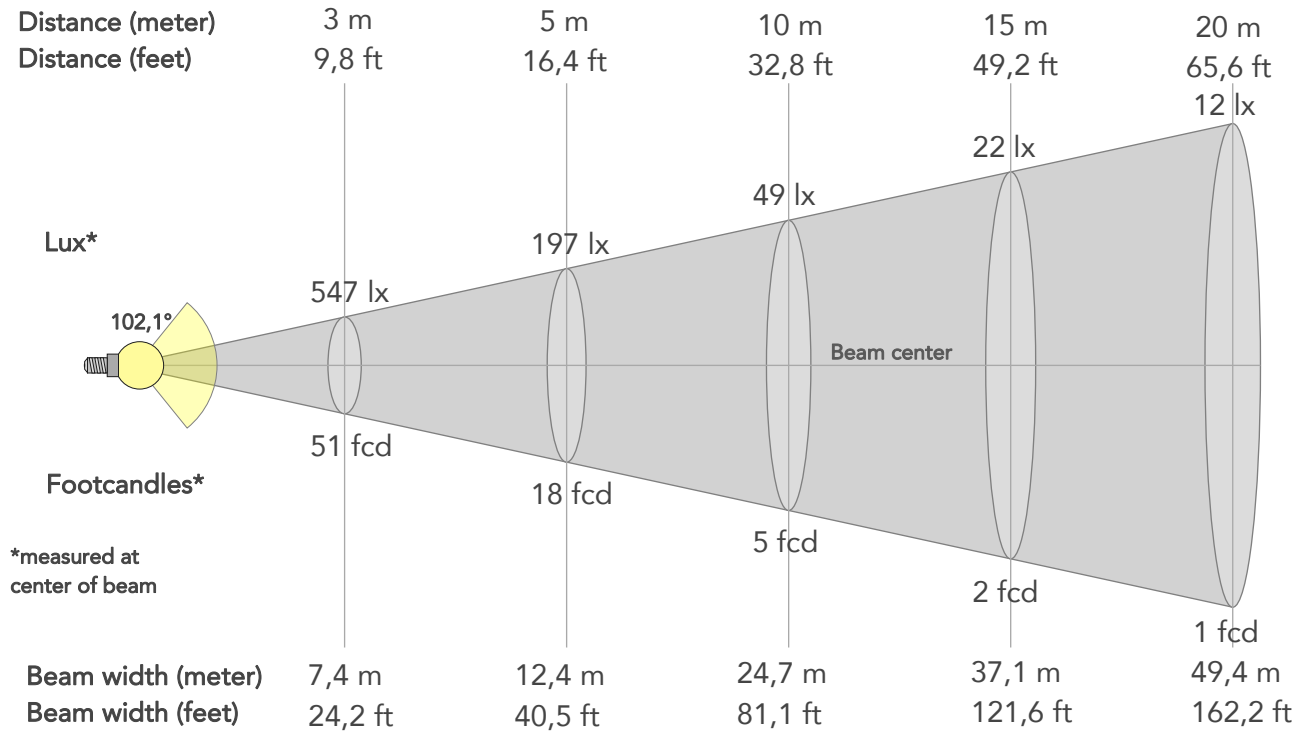
Spectra





## BEAM DETAILS

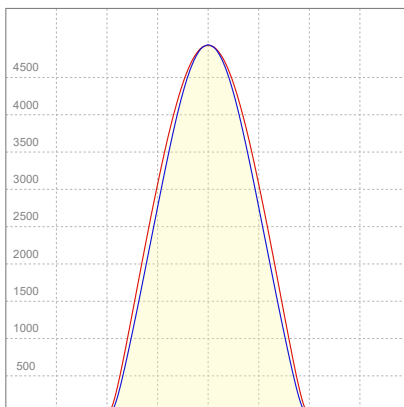
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,1°	154,6°	167,4°	81,7%	57,3%



### 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	4926lx	1231lx	547lx	308lx	197lx	88lx	49lx	22lx	12lx	8lx	5lx	3lx	2lx
Footcand.	458fcd	114fcd	51fcd	29fcd	18fcd	8fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,5m	4,9m	7,4m	9,9m	12,4m	18,5m	24,7m	37,1m	49,4m	61,8m	74,2m	98,9m	123,6m
Beam wid.	8,2ft	16,3ft	24,2ft	32,4ft	40,5ft	60,8ft	81,1ft	121,6ft	162,2ft	202,7ft	243,3ft	324,3ft	405,4ft

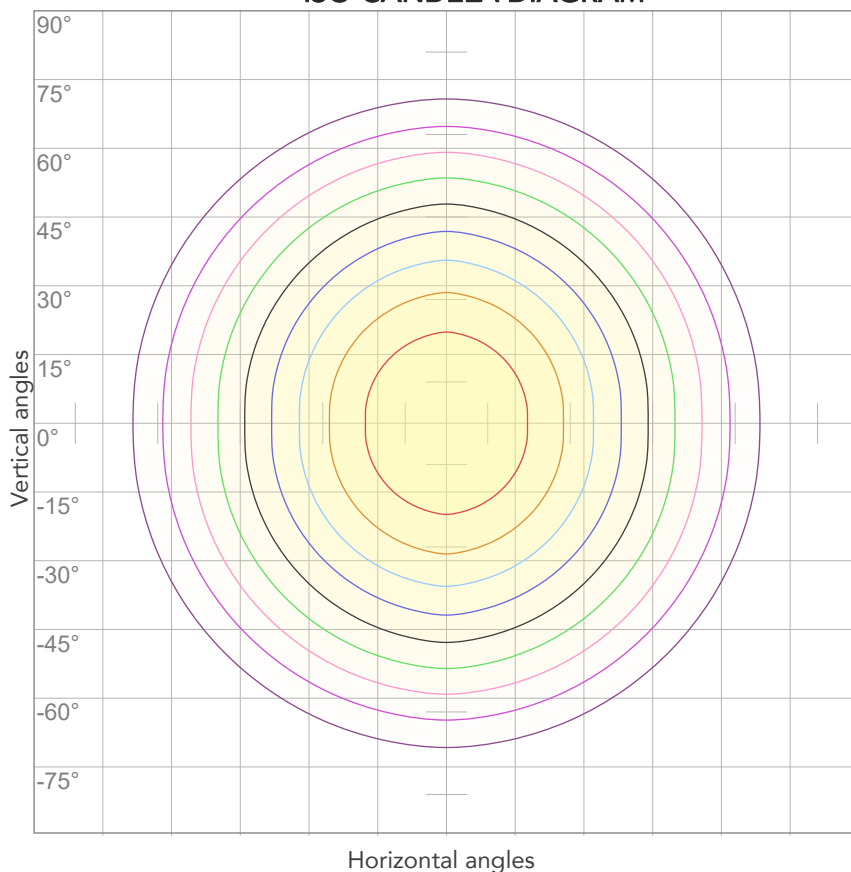
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
221V	0,803A	156,1W	80lm/W
Power FC			
0,88			

## ISO CANDELA DIAGRAM



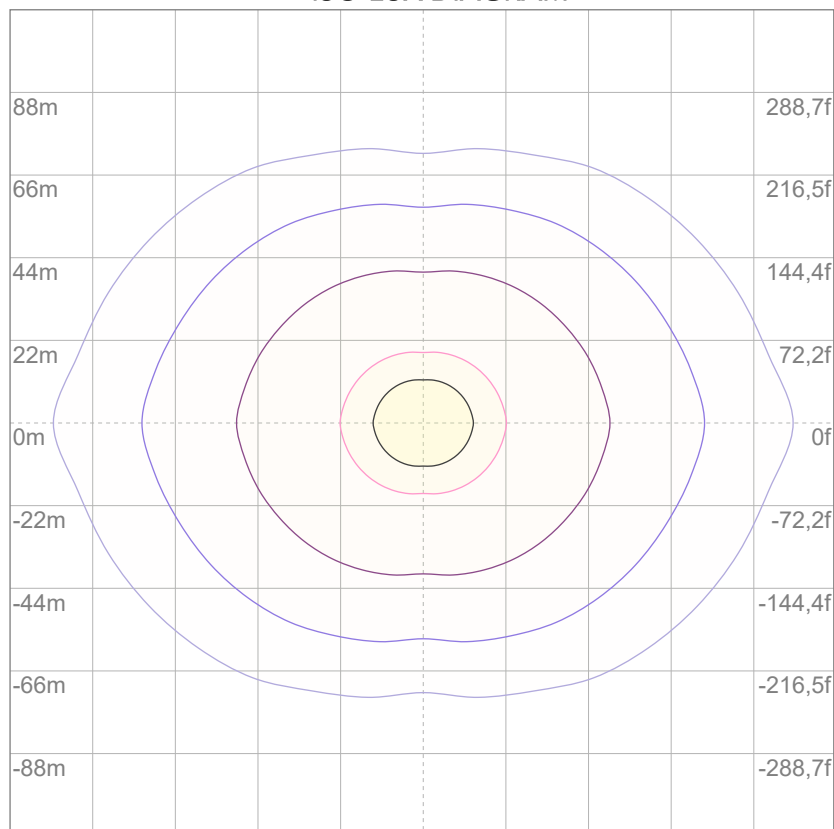
10%	493 cd
20%	985 cd
30%	1478 cd
40%	1970 cd
50%	2463 cd
60%	2955 cd
70%	3448 cd
80%	3941 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4926 cd

## ISO LUX DIAGRAM



3%	1,48 lx
5%	2,46 lx
10%	4,93 lx
30%	14,8 lx
50%	24,6 lx

### Conditions:

Number of c-planes: 4

Lux at center: 49,3 lx

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

Total lumen output:

12844 lm

Peak candela output:

5197 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter LD

Target:

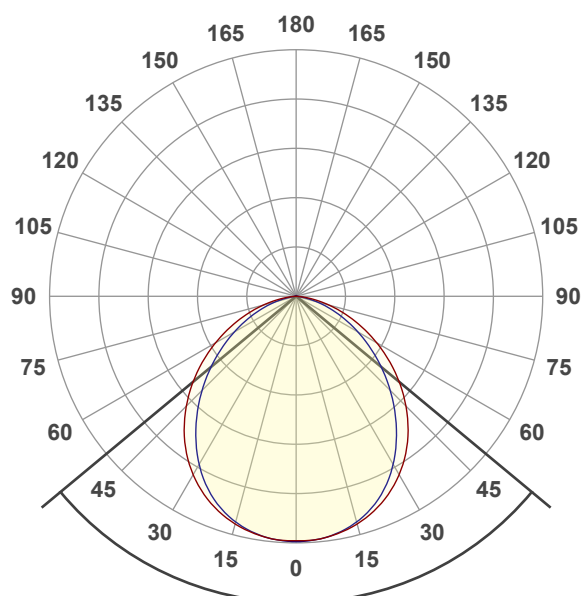
White HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:28:01

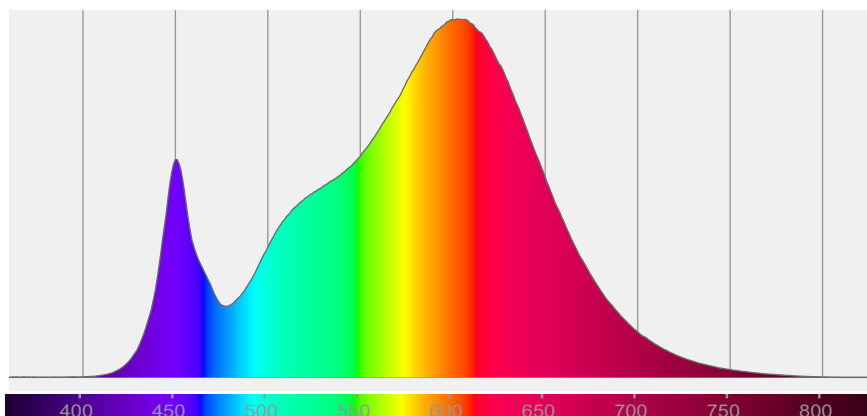


Beam angle 50%: 100,6°

Field angle 10%: 151,8°

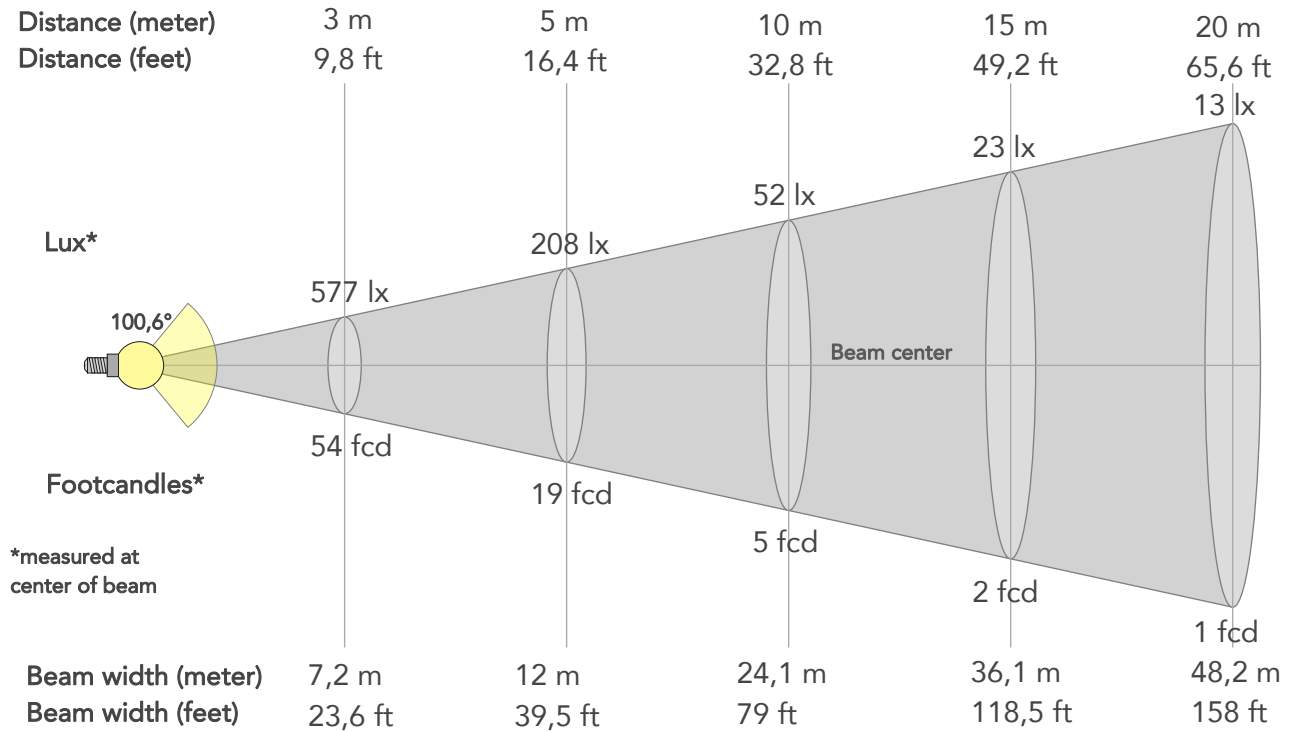
Cut off angle 2.5%: 165,9°

**Spectra**



## BEAM DETAILS

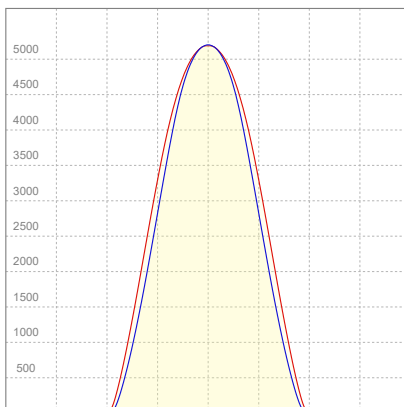
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
100,6°	151,8°	165,9°	83,4%	59,3%



### 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	5190lx	1298lx	577lx	324lx	208lx	92lx	52lx	23lx	13lx	8lx	6lx	3lx	2lx
Footcand.	482fcd	121fcd	54fcd	30fcd	19fcd	9fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,4m	4,8m	7,2m	9,6m	12m	18,1m	24,1m	36,1m	48,2m	60,2m	72,3m	96,3m	120,4m
Beam wid.	7,9ft	15,9ft	23,6ft	31,6ft	39,5ft	59,3ft	79ft	118,5ft	158ft	197,5ft	237ft	316ft	395ft

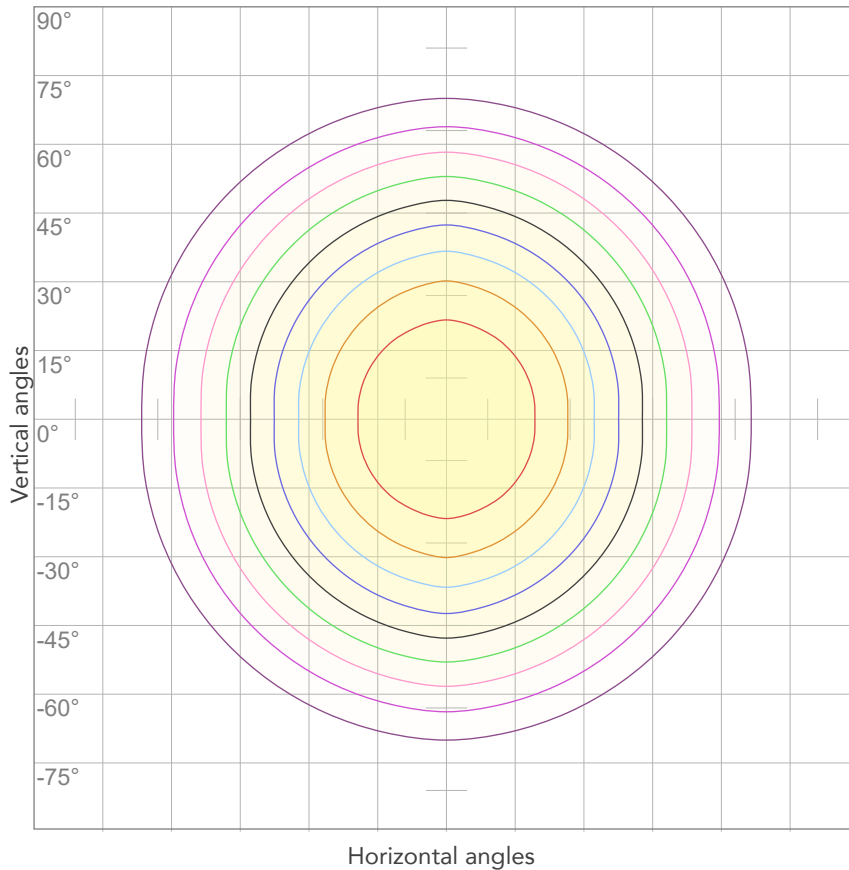
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,797A	155,9W	82lm/W
Power FC			
0,87			

## ISO CANDELA DIAGRAM



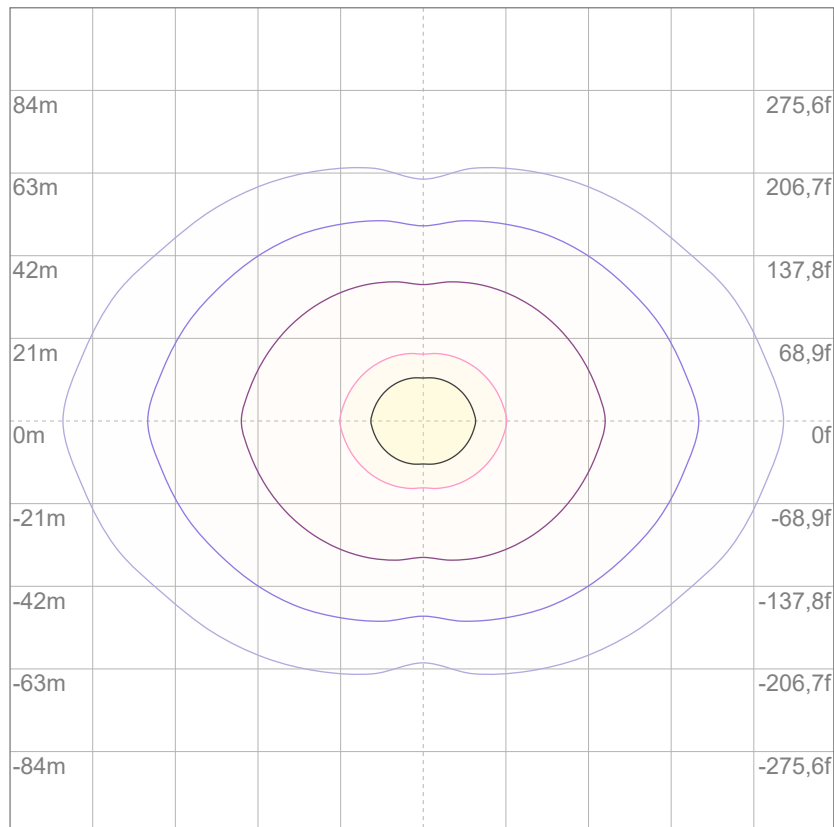
10%	519 cd
20%	1038 cd
30%	1557 cd
40%	2076 cd
50%	2595 cd
60%	3114 cd
70%	3633 cd
80%	4152 cd

### Conditions:

Number of c-planes: 4

Candela at center: 5190 cd

## ISO LUX DIAGRAM



3%	1,56 lx
5%	2,60 lx
10%	5,19 lx
30%	15,6 lx
50%	26,0 lx

### Conditions:

Number of c-planes: 4

Lux at center: 51,9 lx

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

Total lumen output:

11003 lm

Peak candela output:

6978 cd



**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter INT

Target:

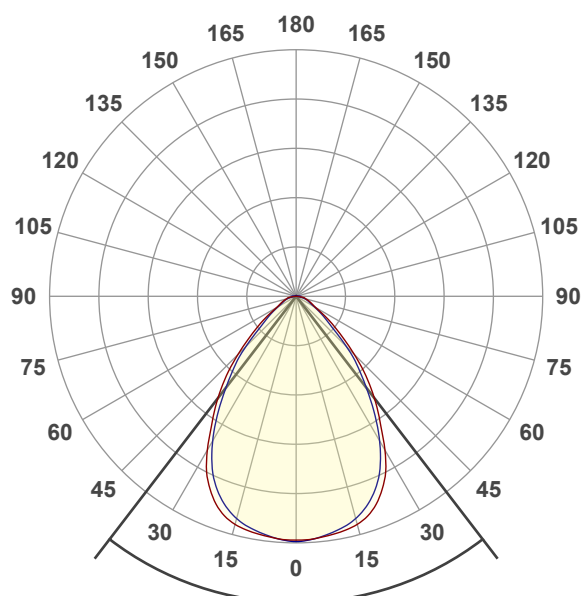
White HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 18:16:04

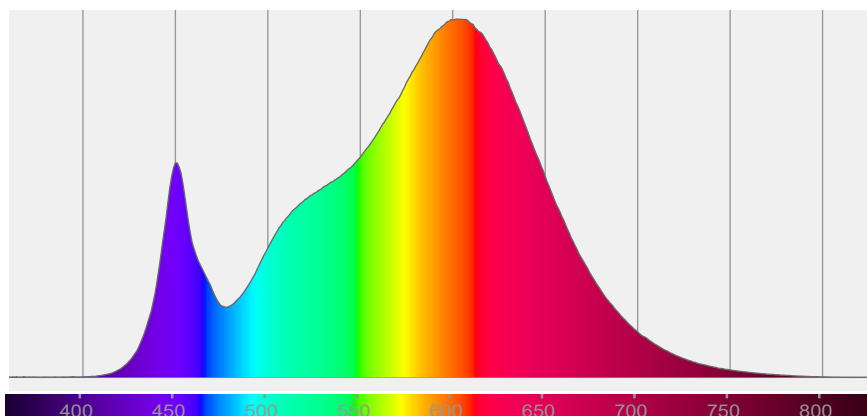


Beam angle 50%: 75°

Field angle 10%: 117,3°

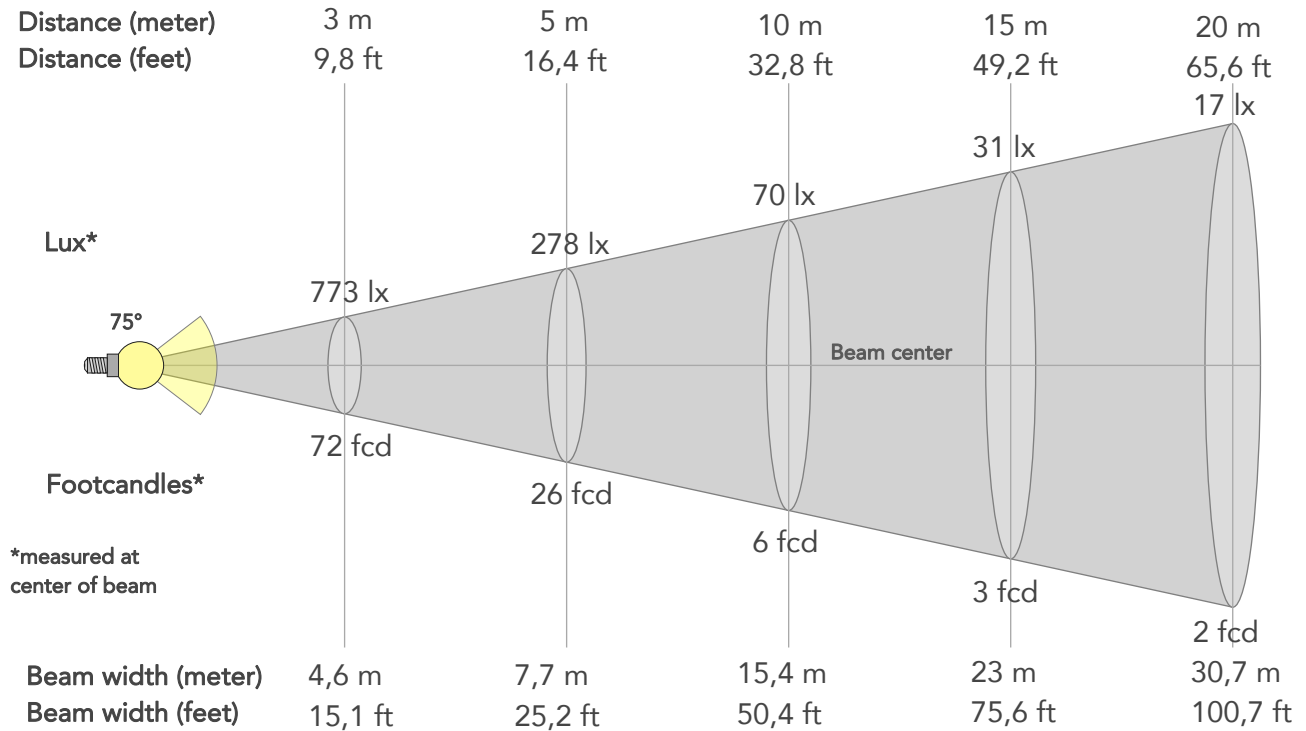
Cut off angle 2.5%: 159,7°

**Spectra**



## BEAM DETAILS

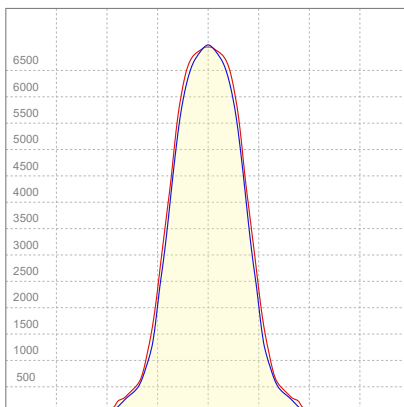
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75°	117,3°	159,7°	92,3%	77,8%



### 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	6960lx	1740lx	773lx	435lx	278lx	124lx	70lx	31lx	17lx	11lx	8lx	4lx	3lx
Footcand.	647fcd	162fcd	72fcd	40fcd	26fcd	11fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	1,5m	3,1m	4,6m	6,1m	7,7m	11,5m	15,4m	23m	30,7m	38,4m	46,1m	61,4m	76,8m
Beam wid.	5,1ft	10,1ft	15,1ft	20,1ft	25,2ft	37,8ft	50,4ft	75,6ft	100,7ft	125,9ft	151,1ft	201,5ft	251,9ft

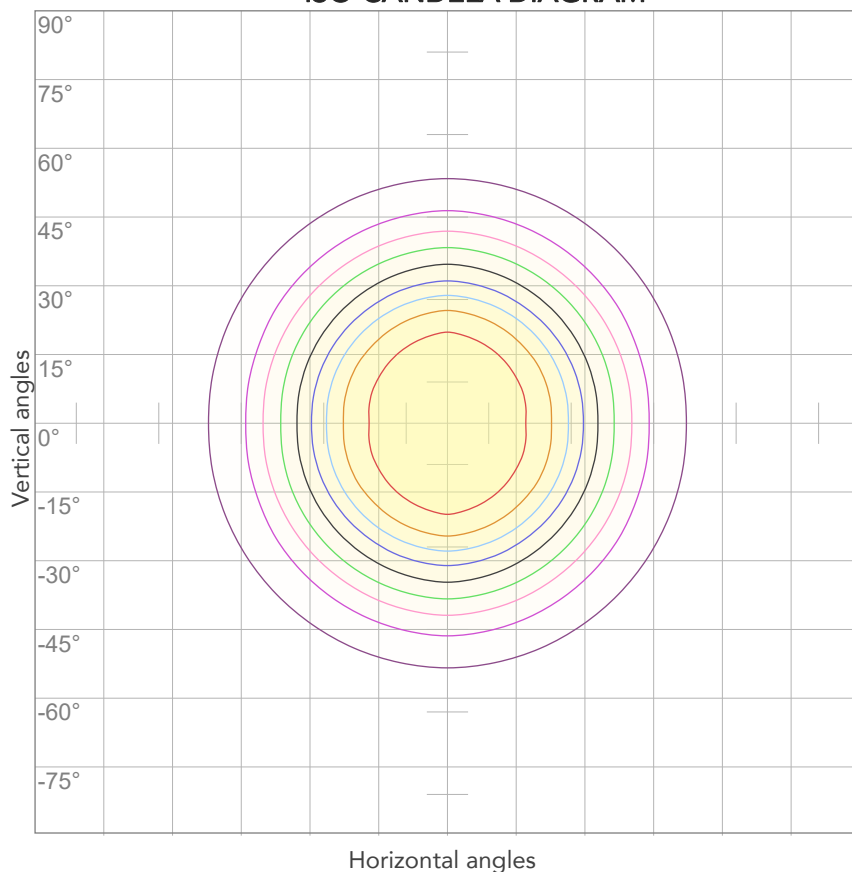
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,795A	155,8W	71lm/W
Power FC			
0,87			

## ISO CANDELA DIAGRAM



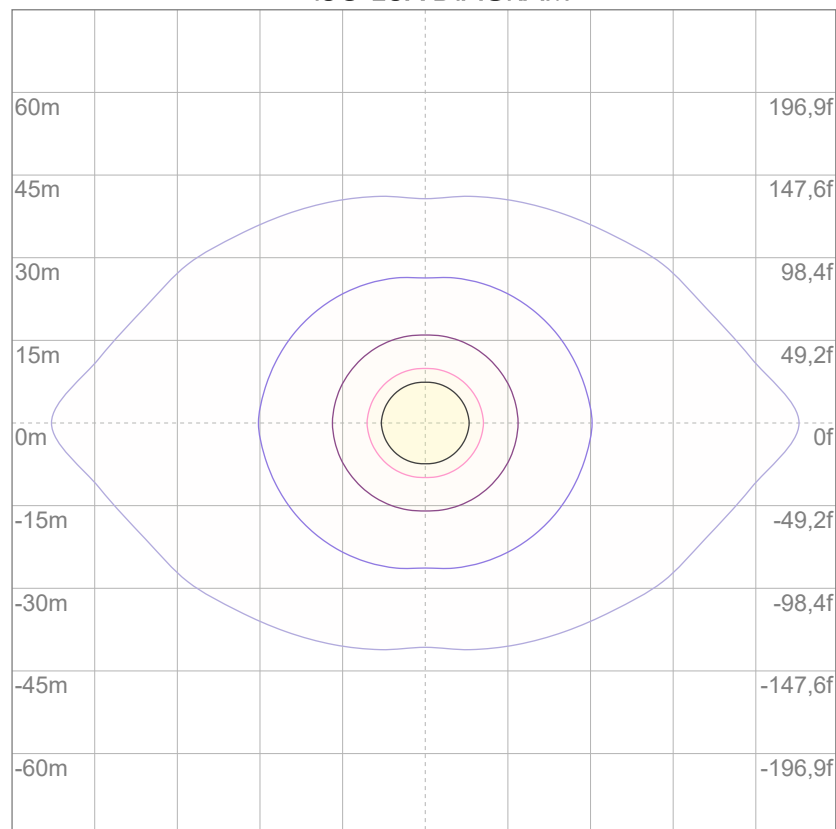
10%	696 cd
20%	1392 cd
30%	2088 cd
40%	2784 cd
50%	3480 cd
60%	4176 cd
70%	4872 cd
80%	5568 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6960 cd

## ISO LUX DIAGRAM



3%	2,09 lx
5%	3,48 lx
10%	6,96 lx
30%	20,9 lx
50%	34,8 lx

### Conditions:

Number of c-planes: 4

Lux at center: 69,6 lx

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





Total lumen output:

13230 lm

Peak candela output:

4648 cd

Light quality:

CRI: 91,9

Color temperature:

2850 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter HD

Target:

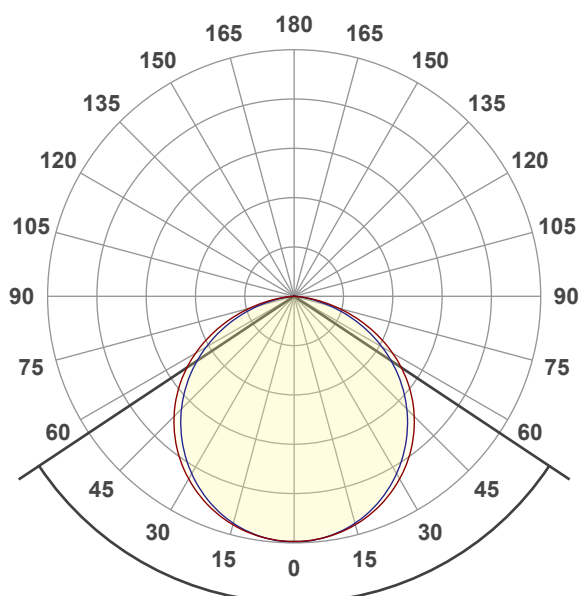
2800K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:22:33

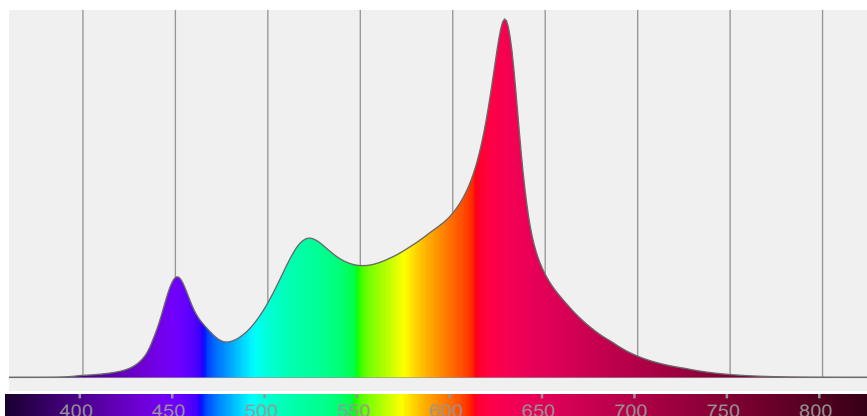


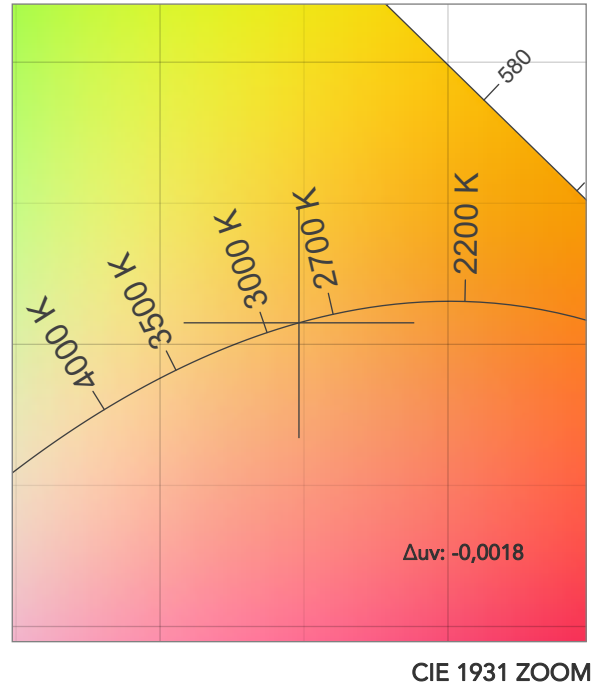
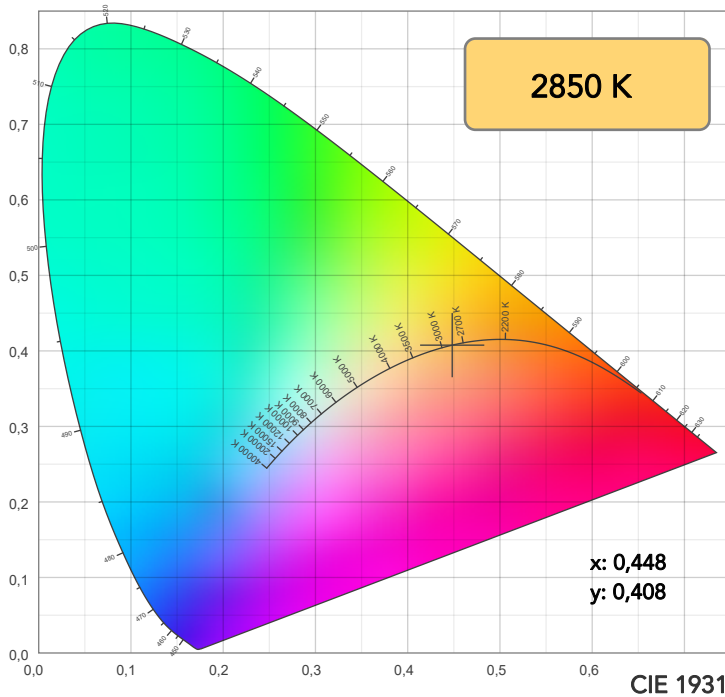
Beam angle 50%: 112,8°

Field angle 10%: 158,1°

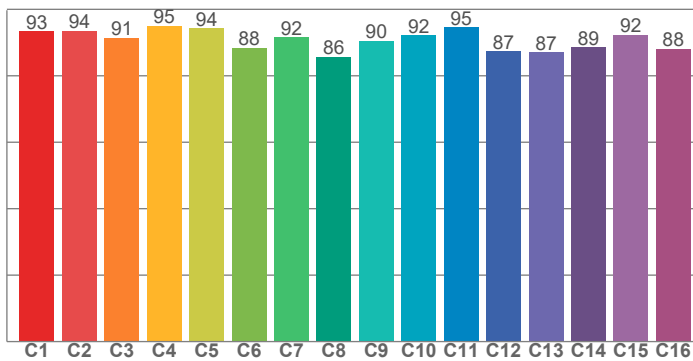
Cut off angle 2.5%: 168,7°

Spectra

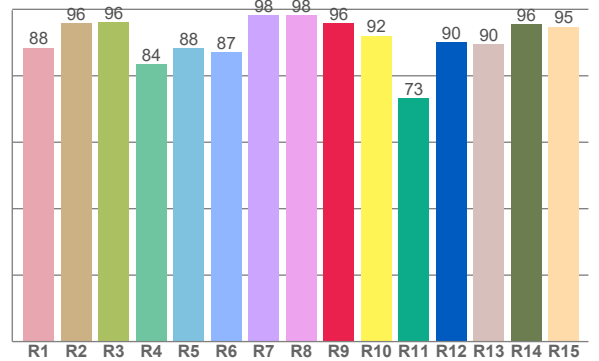




TM30: 91,5



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
88,4	95,7	96,1	83,5	88,2	87,1	98,2	98,2	95,9	92,0	73,3	90,1	89,6	95,6	94,8

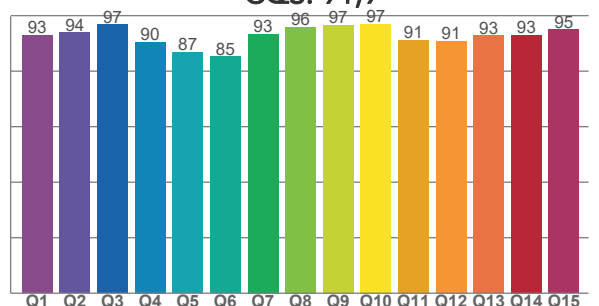
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,4	93,5	91,4	94,9	94,3	88,5	91,5	85,7	90,5	92,2	94,6	87,4	87,0	88,6	92,3	88,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,9	93,8	96,8	90,5	86,8	85,3	93,4	95,9	96,7	97,0	91,3	90,9	92,8	93,0	95,0

CQS: 91,9



## COLOR PARAMETERS

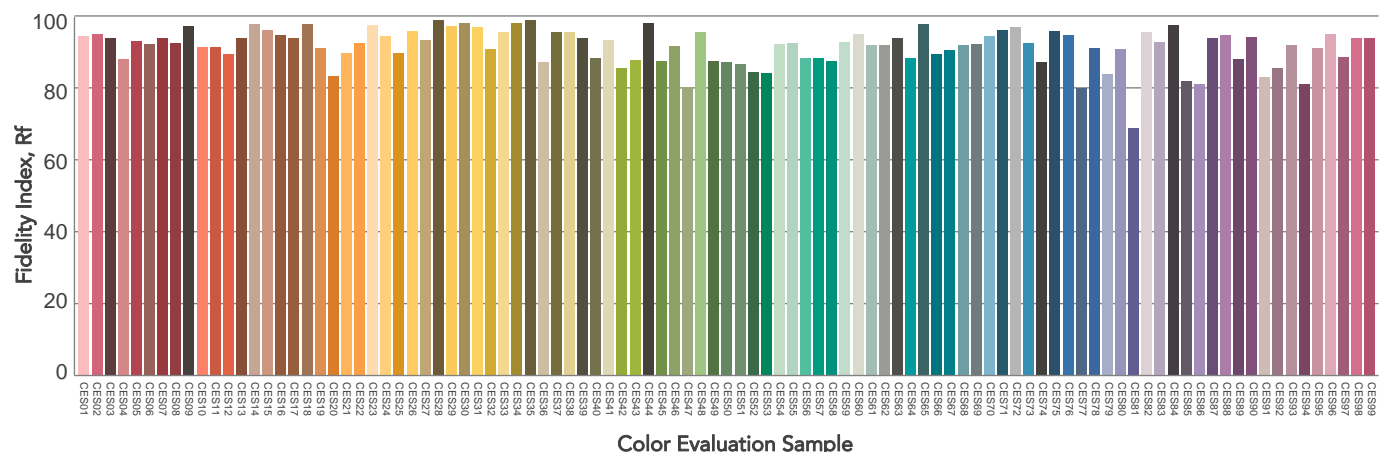
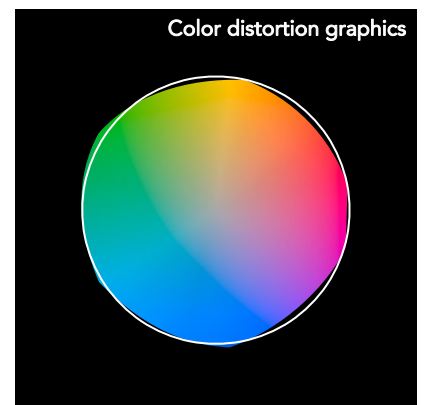
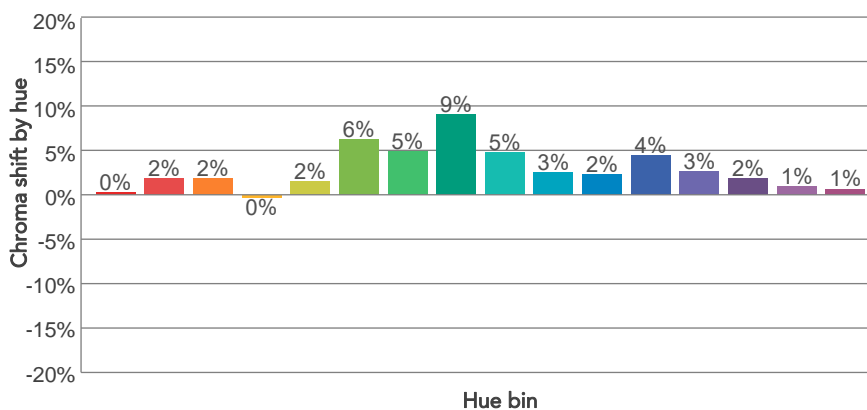
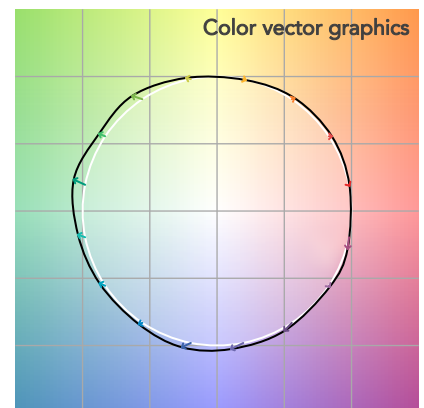
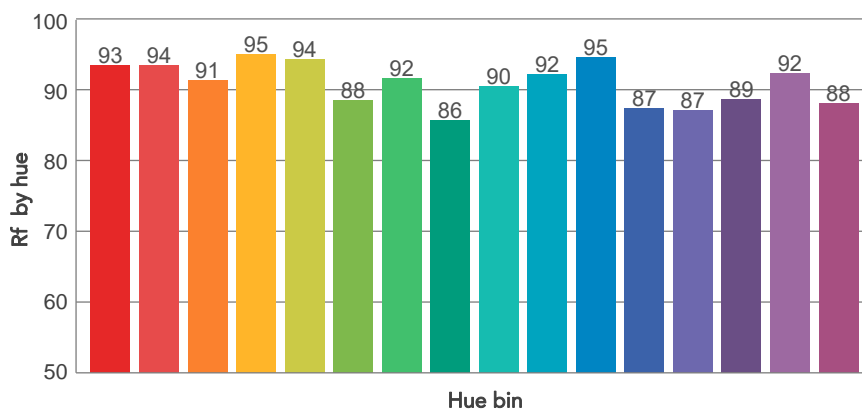
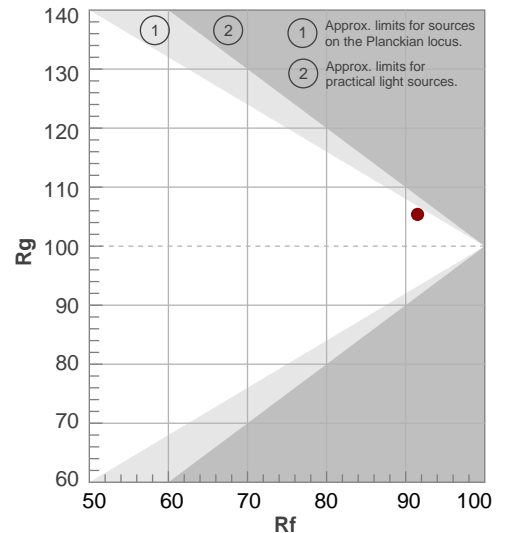
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2850 K	91,9	95,9	91,5	105,4	91,9	80	0,448	0,408	-0,0018

# TM30 DETAILS

**Rf 91,5**  
Fidelity index Rf

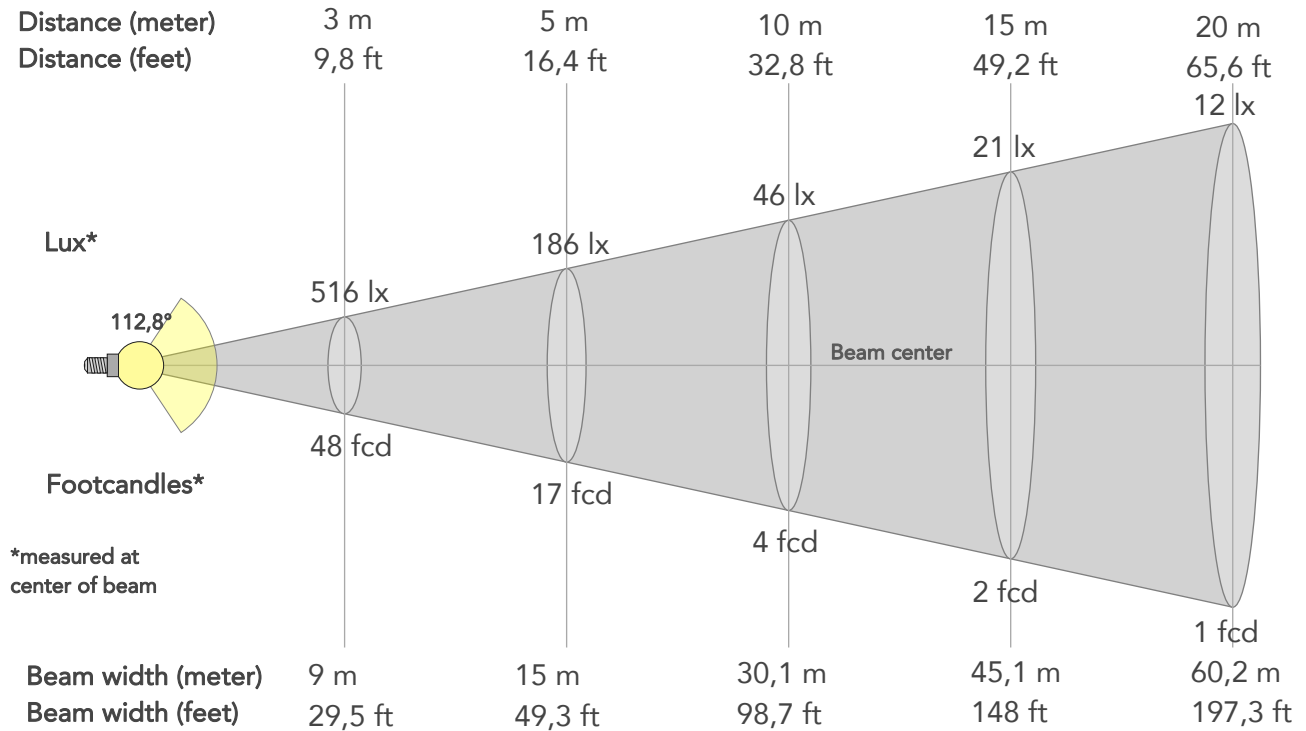
**Rg 105,4**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	0%	-1%
2	94	2%	-1%
3	91	2%	-1%
4	95	0%	-2%
5	94	2%	3%
6	88	6%	5%
7	92	5%	1%
8	86	9%	-2%
9	90	5%	-3%
10	92	3%	-4%
11	95	2%	-2%
12	87	4%	-6%
13	87	3%	-10%
14	89	2%	-8%
15	92	1%	0%
16	88	1%	-9%



## BEAM DETAILS

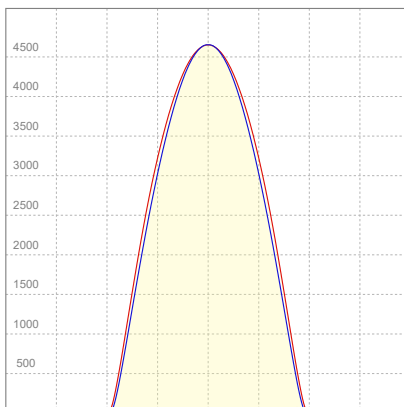
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
112,8°	158,1°	168,7°	79,4%	54,0%



### 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	4647lx	1162lx	516lx	290lx	186lx	83lx	46lx	21lx	12lx	7lx	5lx	3lx	2lx
Footcand.	432fcd	108fcd	48fcd	27fcd	17fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9m	12m	15m	22,6m	30,1m	45,1m	60,2m	75,2m	90,2m	120,3m	150,4m
Beam wid.	9,9ft	19,9ft	29,5ft	39,4ft	49,3ft	74ft	98,7ft	148ft	197,3ft	246,7ft	296ft	394,6ft	493,3ft

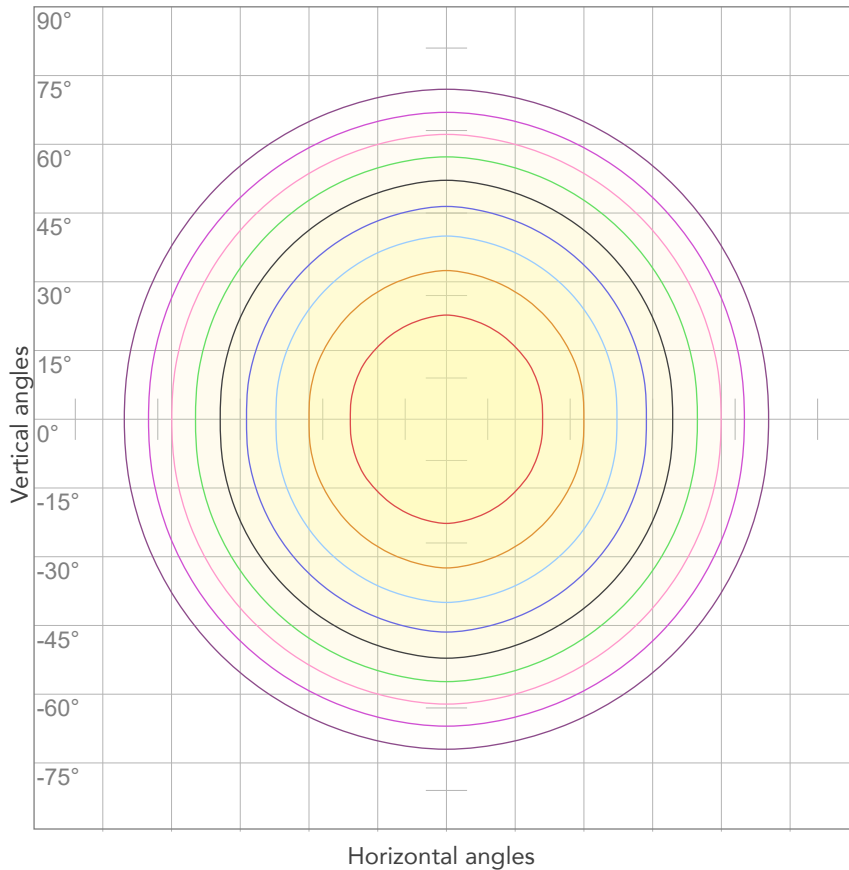
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,06A	218,2W	61lm/W

## ISO CANDELA DIAGRAM



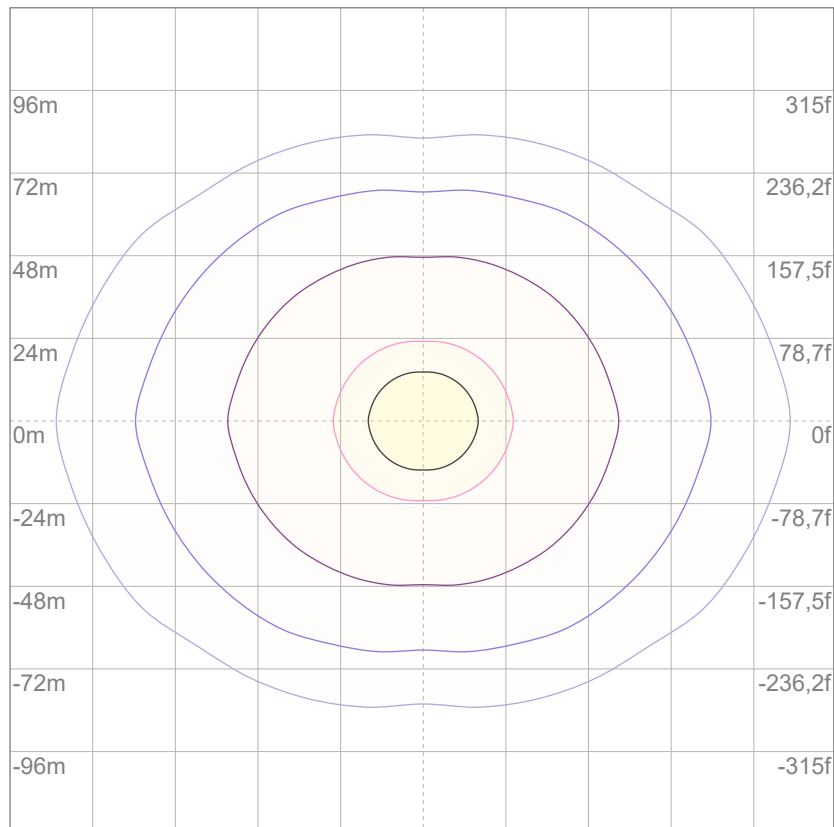
10%	465 cd
20%	929 cd
30%	1394 cd
40%	1859 cd
50%	2323 cd
60%	2788 cd
70%	3253 cd
80%	3717 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4647 cd

## ISO LUX DIAGRAM



3%	1,39 lx
5%	2,32 lx
10%	4,65 lx
30%	13,9 lx
50%	23,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 46,5 lx

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



Total lumen output:

15535 lm

Peak candela output:

6161 cd

Light quality:

CRI: 93,6

Color temperature:

2861 K

**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter MD

Target:

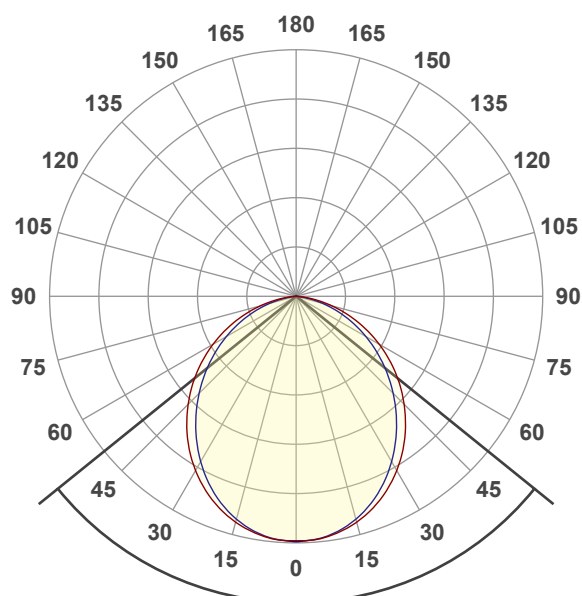
2800K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 16:48:24

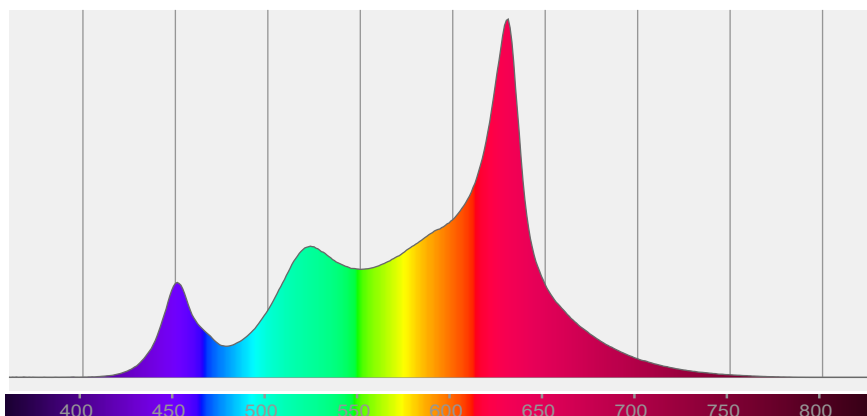


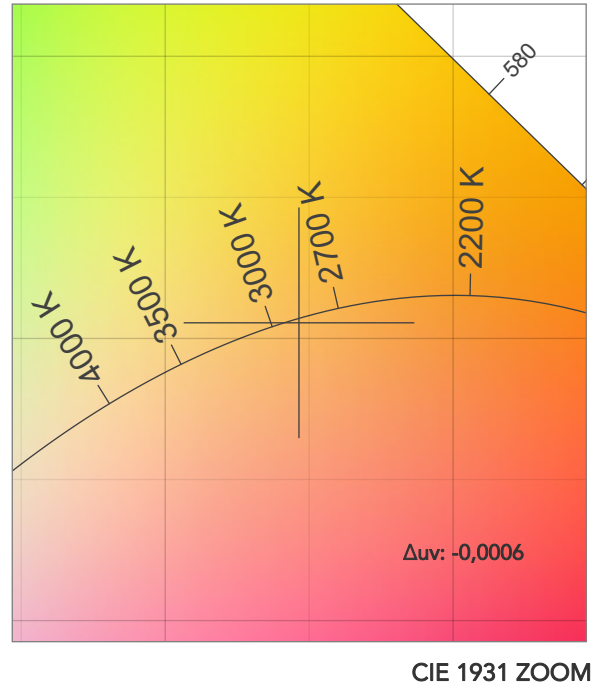
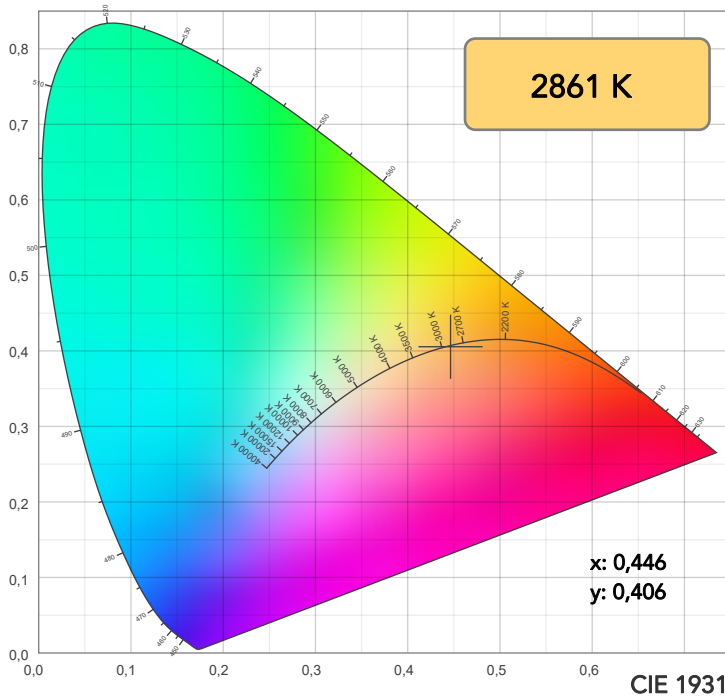
Beam angle 50%: 102,2°

Field angle 10%: 154,4°

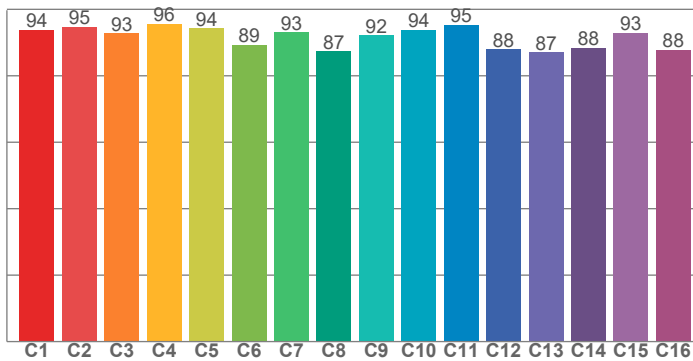
Cut off angle 2.5%: 166,9°

**Spectra**

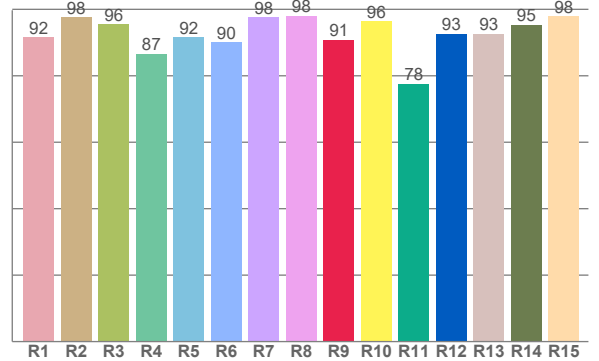




TM30: 92,3



CRI: 93,6 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,6	97,7	95,5	86,7	91,5	90,1	97,6	98,0	90,8	96,5	77,6	92,6	92,6	95,3	97,8

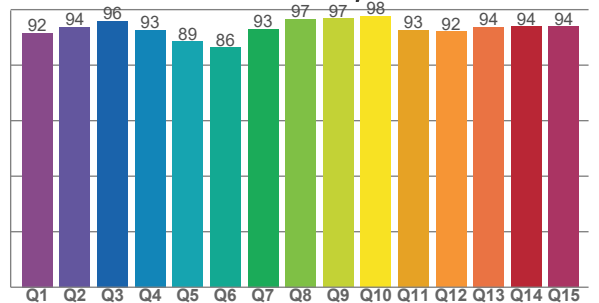
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,8	94,7	92,8	95,7	94,3	89,2	93,1	87,4	92,1	93,8	95,3	88,0	87,0	88,5	92,9	87,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,7	93,6	95,9	92,6	88,6	86,3	93,1	96,7	96,8	97,7	92,6	92,1	93,7	93,9	94,0

CQS: 92,5



## COLOR PARAMETERS

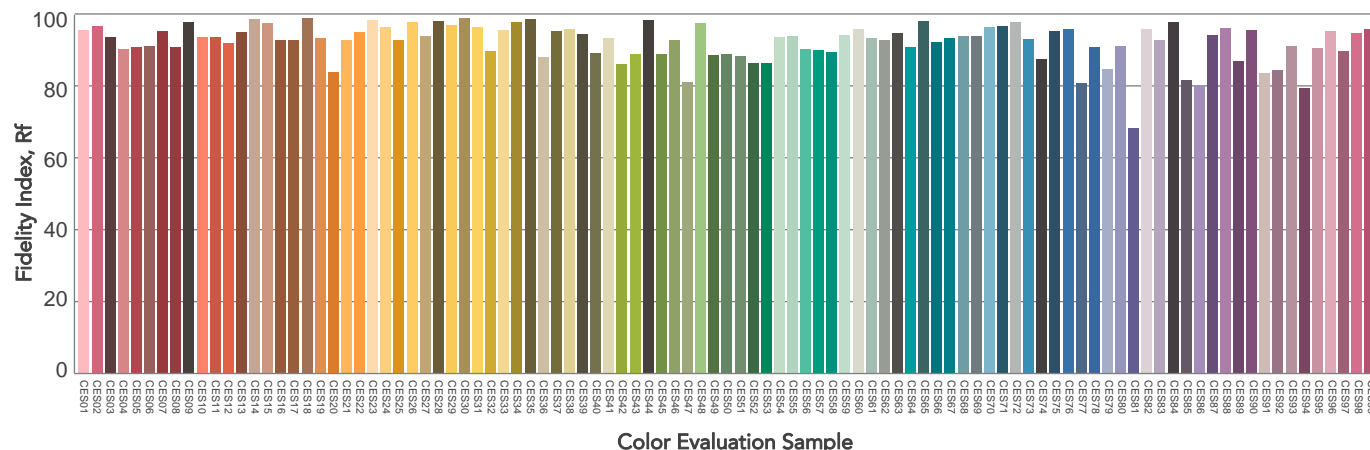
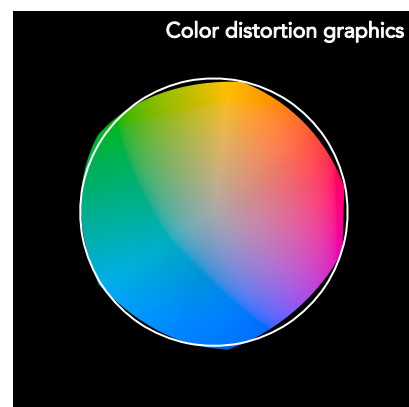
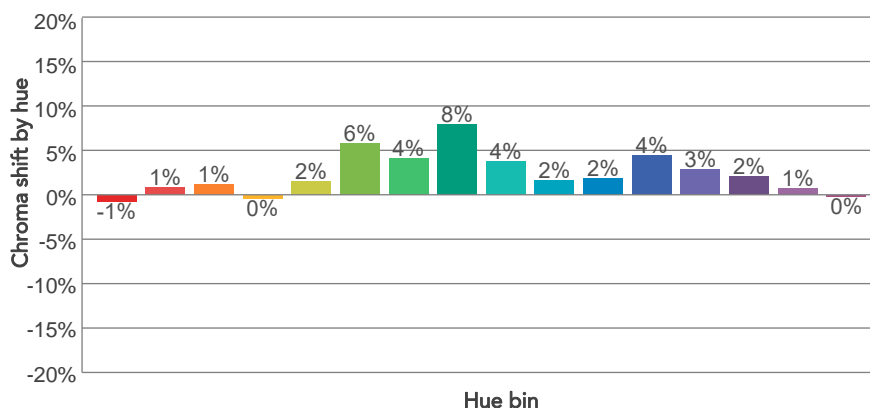
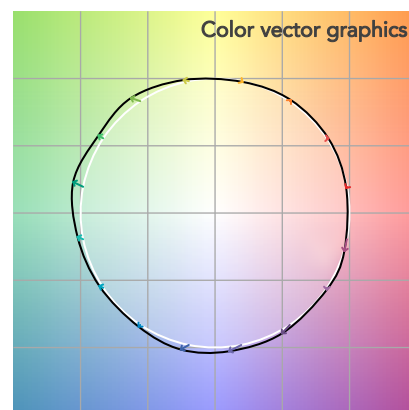
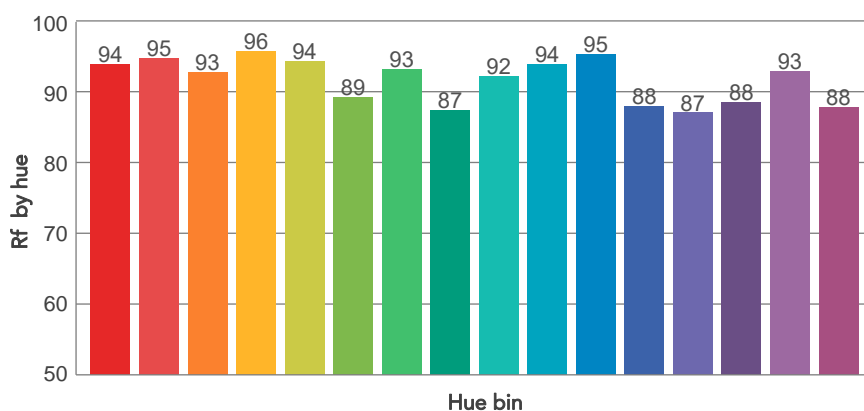
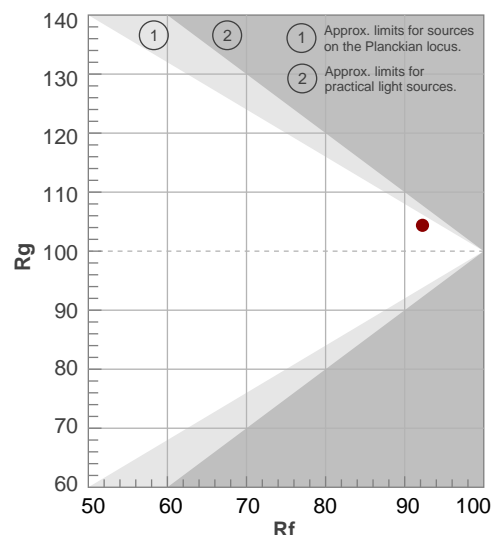
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2861 K	93,6	90,8	92,3	104,4	92,5	82	0,446	0,406	-0,0006

# TM30 DETAILS

**Rf 92,3**  
Fidelity index Rf

**Rg 104,4**  
Gammut index

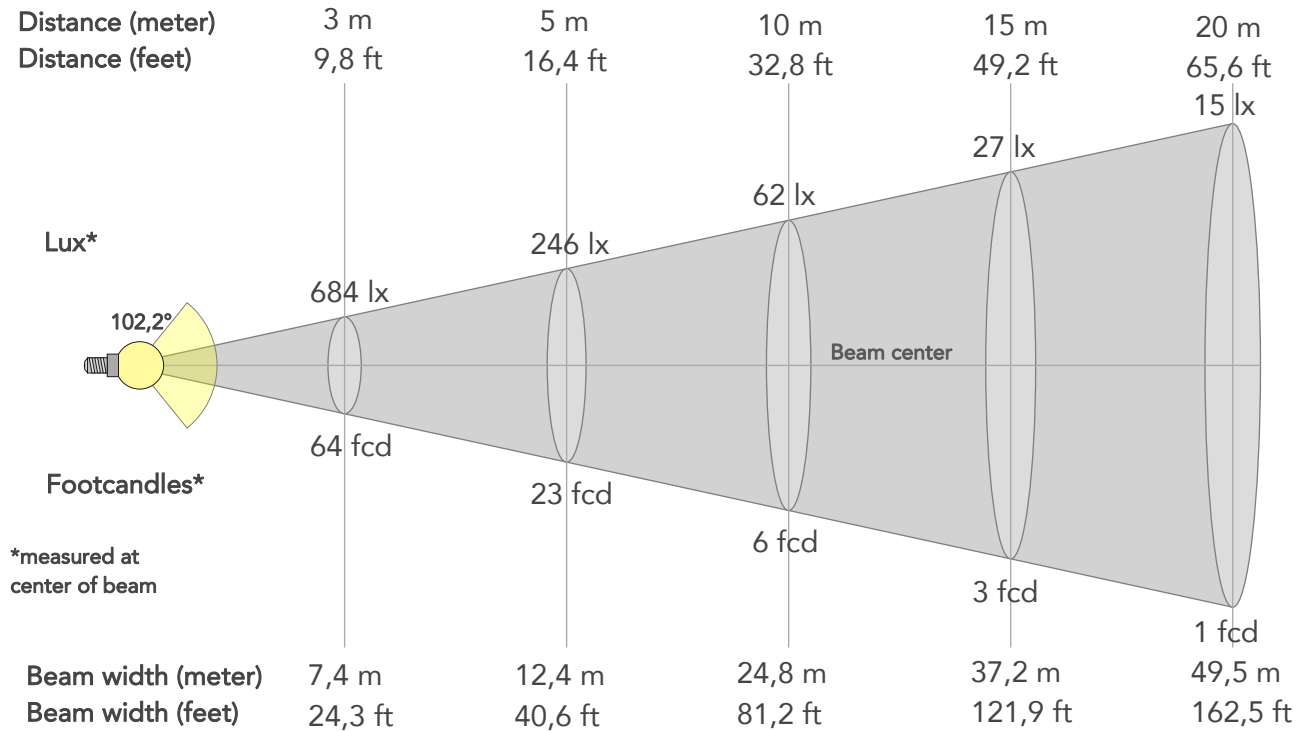
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	-1%
2	95	1%	-1%
3	93	1%	0%
4	96	0%	-1%
5	94	2%	4%
6	89	6%	4%
7	93	4%	0%
8	87	8%	-2%
9	92	4%	-3%
10	94	2%	-3%
11	95	2%	0%
12	88	4%	-5%
13	87	3%	-10%
14	88	2%	-8%
15	93	1%	-1%
16	88	0%	-9%





## BEAM DETAILS

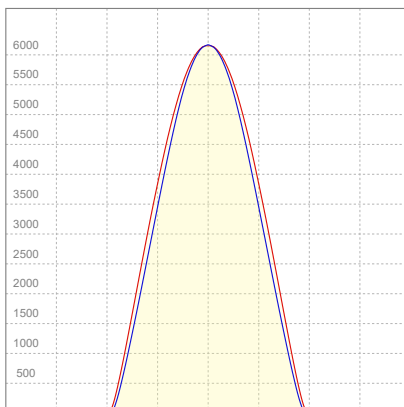
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,2°	154,4°	166,9°	81,8%	57,4%



### 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	6152lx	1538lx	684lx	385lx	246lx	109lx	62lx	27lx	15lx	10lx	7lx	4lx	2lx
Footcand.	572fcd	143fcd	64fcd	36fcd	23fcd	10fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,4m	9,9m	12,4m	18,6m	24,8m	37,2m	49,5m	61,9m	74,3m	99,1m	123,8m
Beam wid.	8,2ft	16,3ft	24,3ft	32,4ft	40,6ft	60,9ft	81,2ft	121,9ft	162,5ft	203,1ft	243,7ft	325ft	406,2ft

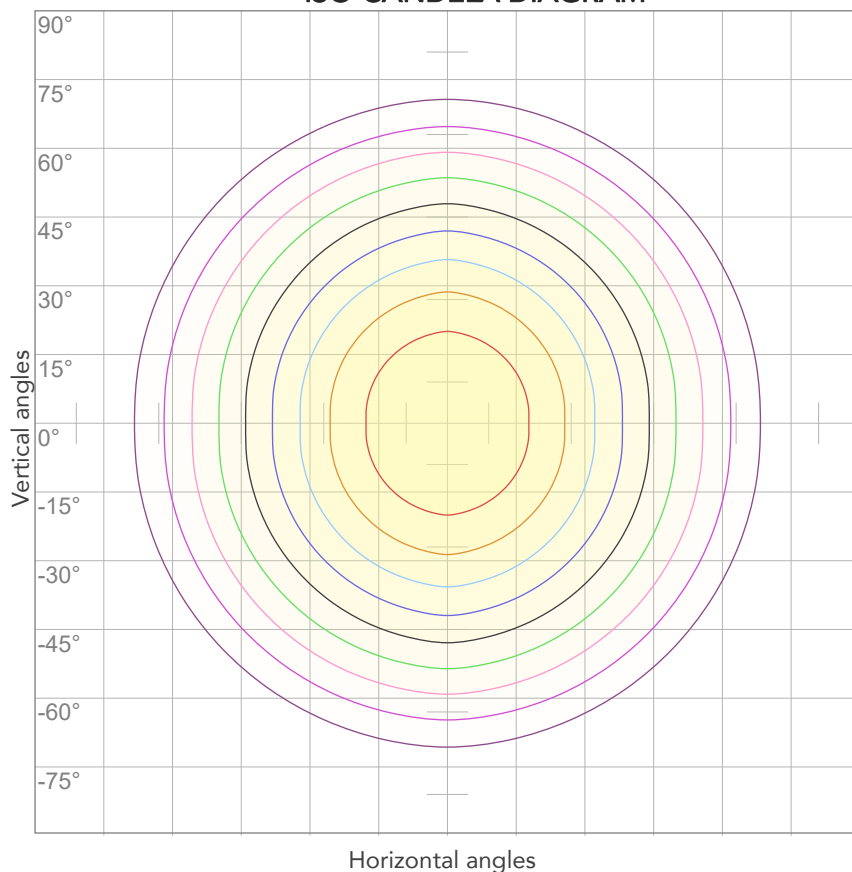
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	1,07A	218,4W	71lm/W

## ISO CANDELA DIAGRAM



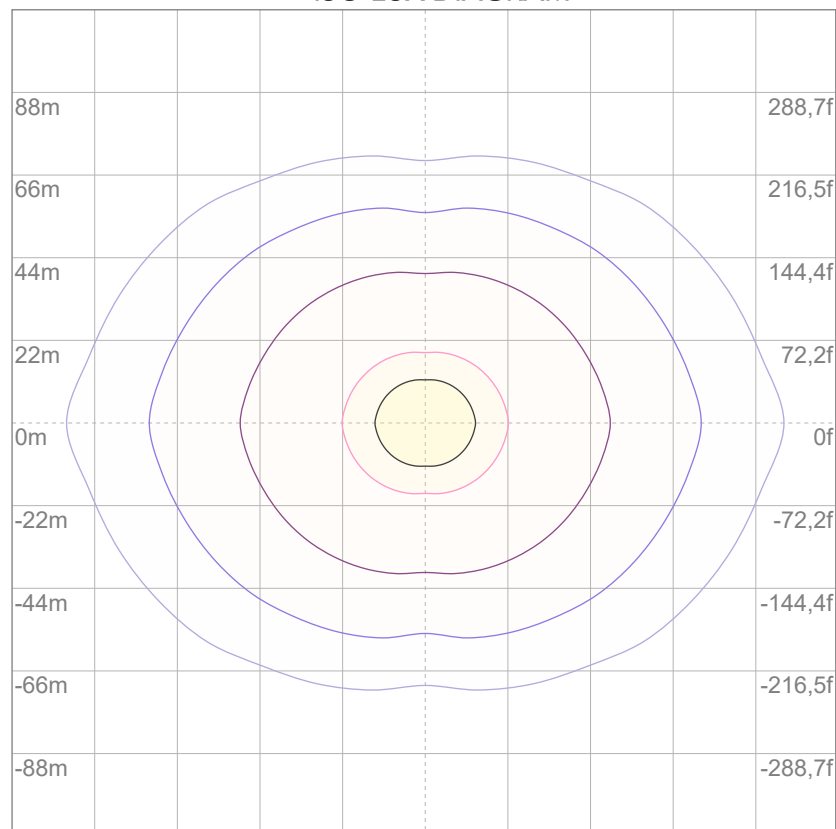
10%	615 cd
20%	1230 cd
30%	1846 cd
40%	2461 cd
50%	3076 cd
60%	3691 cd
70%	4307 cd
80%	4922 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6152 cd

## ISO LUX DIAGRAM



3%	1,85 lx
5%	3,08 lx
10%	6,15 lx
30%	18,5 lx
50%	30,8 lx

### Conditions:

Number of c-planes: 4

Lux at center: 61,5 lx

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



Total lumen output:

16448 lm

Peak candela output:

6643 cd

Light quality:

CRI: 93,2

Color temperature:

2855 K

**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter LD

Target:

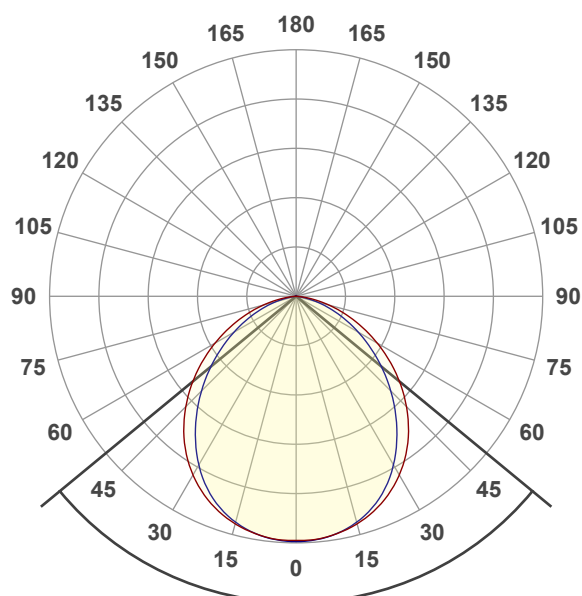
2800K HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:07:46

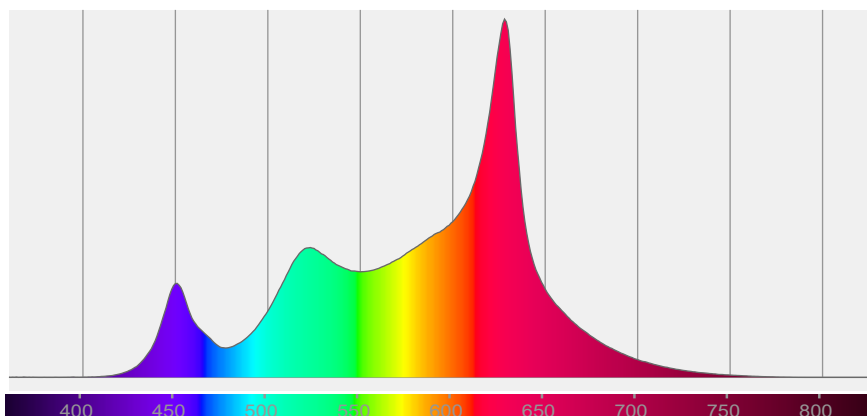


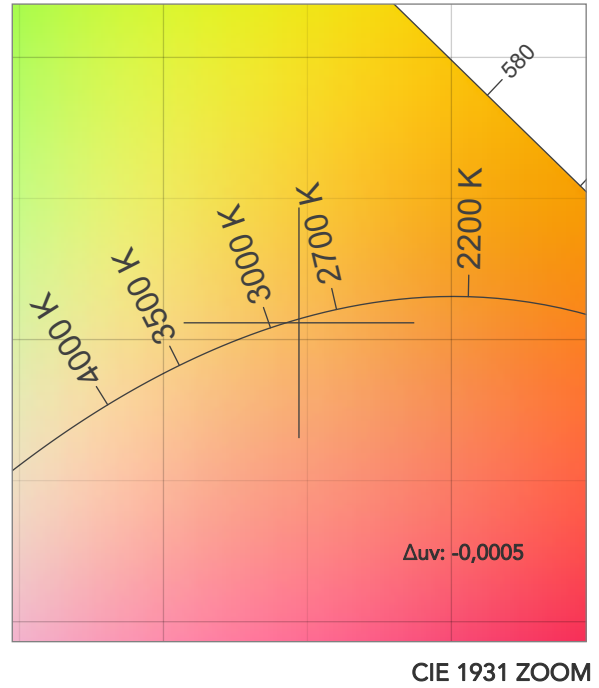
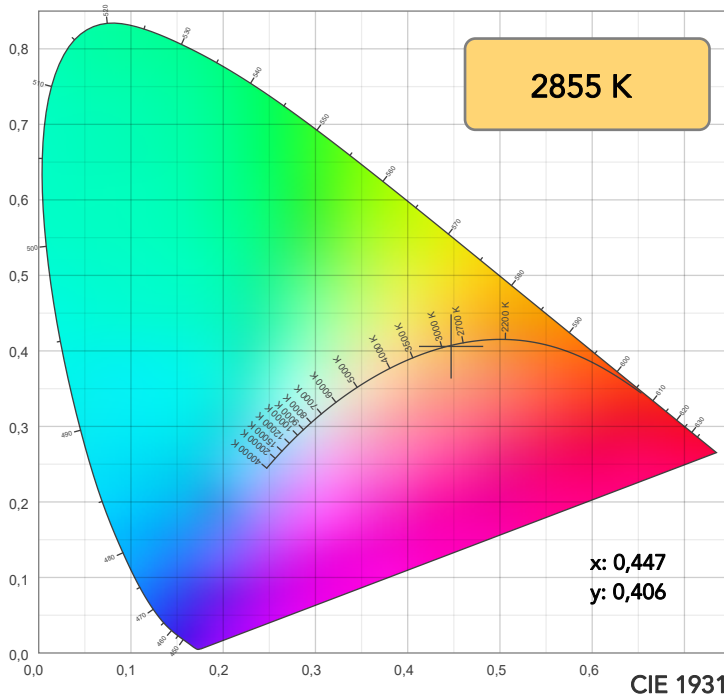
Beam angle 50%: 101°

Field angle 10%: 151,6°

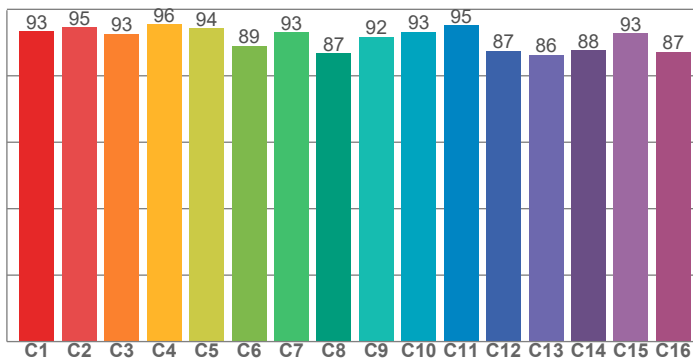
Cut off angle 2.5%: 165,4°

**Spectra**

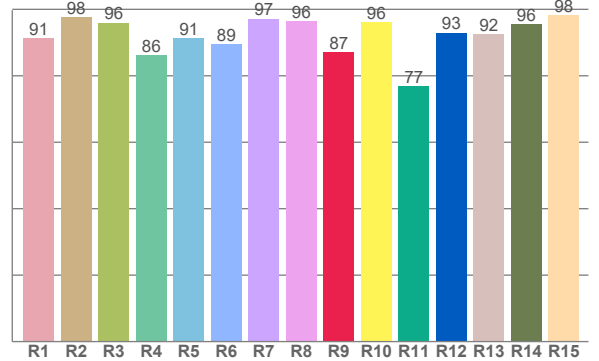




TM30: 91,9



CRI: 93,2 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,4	97,6	96,0	86,3	91,3	89,5	97,1	96,5	87,2	96,2	76,8	92,9	92,4	95,5	98,2

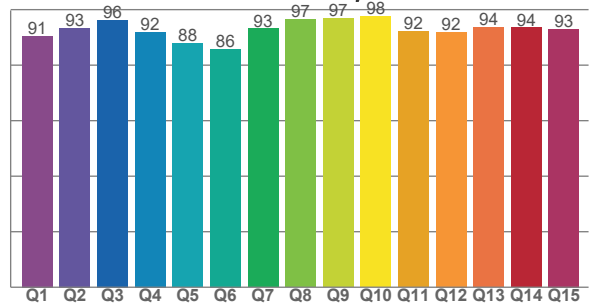
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,4	94,5	92,6	95,5	94,3	89,0	93,1	86,7	91,7	93,2	95,2	87,5	86,3	87,6	92,8	87,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90,6	93,4	96,3	91,9	87,9	85,8	93,2	96,5	96,9	97,6	92,2	91,9	93,7	93,6	93,0

CQS: 92,1



## COLOR PARAMETERS

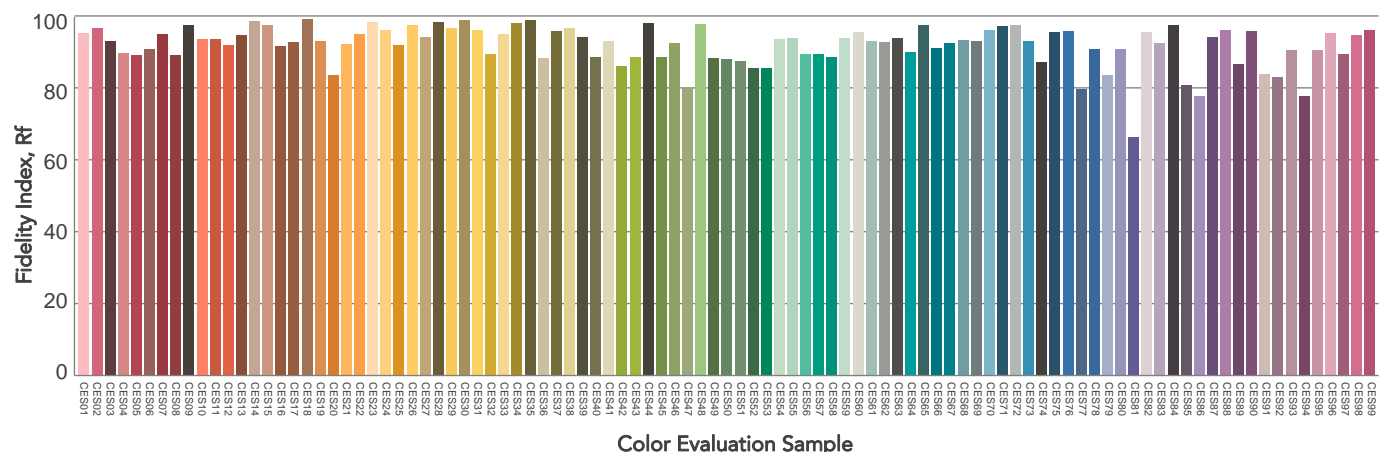
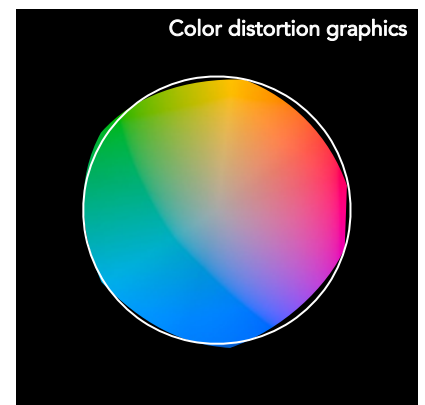
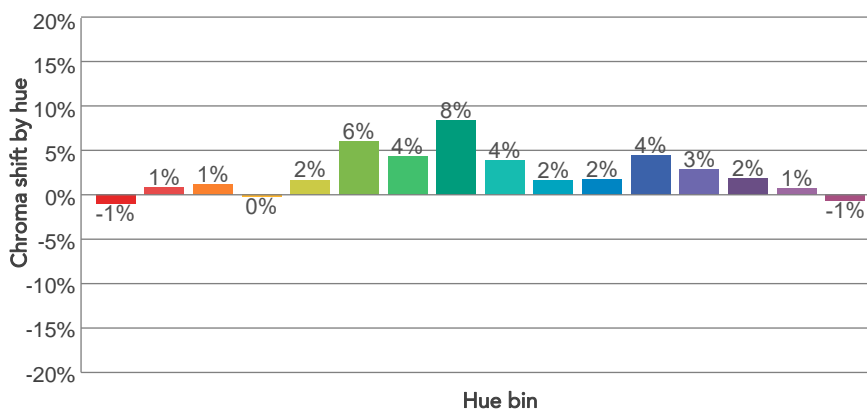
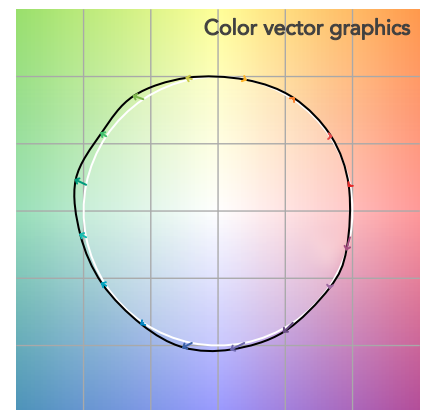
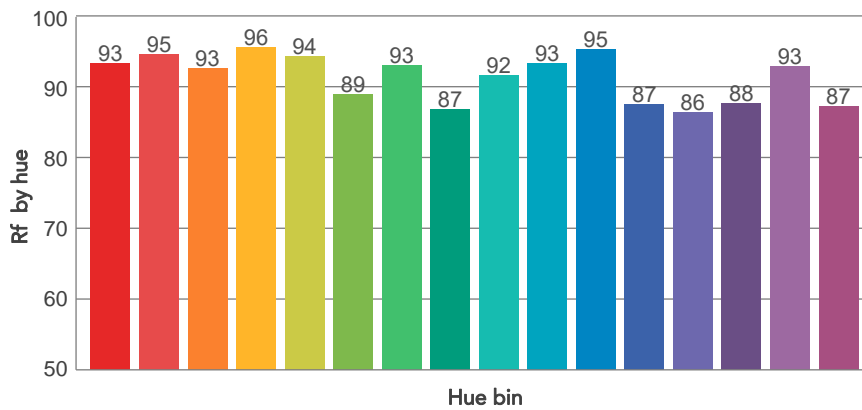
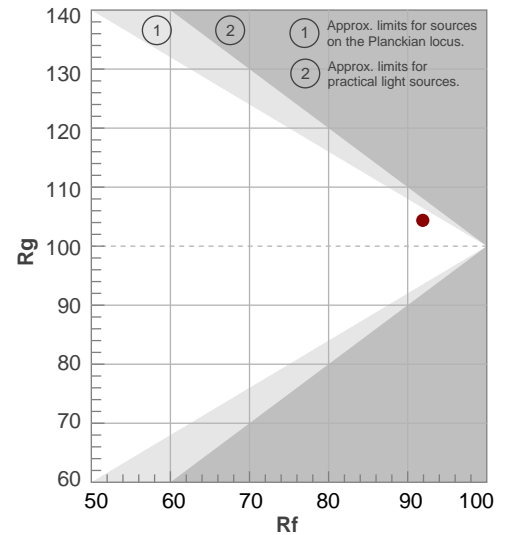
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2855 K	93,2	87,2	91,9	104,4	92,1	80	0,447	0,406	-0,0005

# TM30 DETAILS

**Rf 91,9**  
Fidelity index Rf

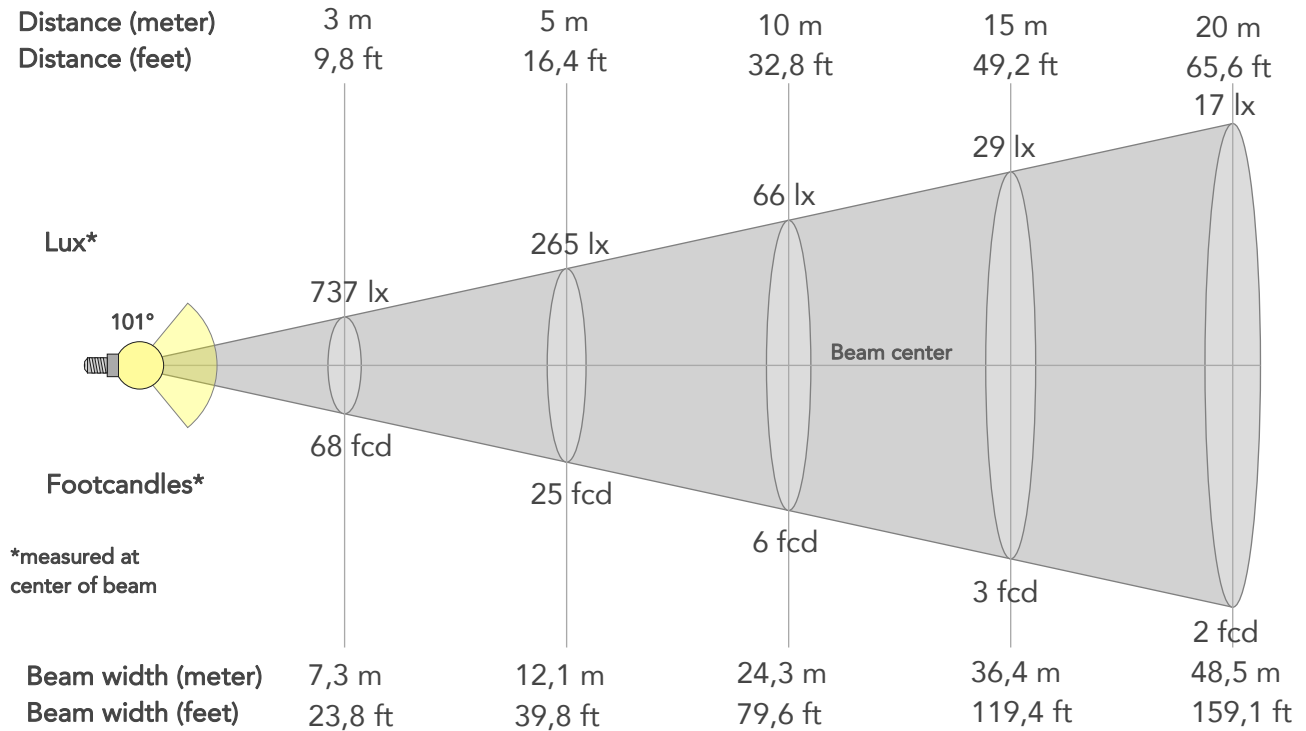
**Rg 104,4**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	-1%	-1%
2	95	1%	-1%
3	93	1%	0%
4	96	0%	-1%
5	94	2%	4%
6	89	6%	5%
7	93	4%	0%
8	87	8%	-2%
9	92	4%	-3%
10	93	2%	-3%
11	95	2%	-1%
12	87	4%	-6%
13	86	3%	-10%
14	88	2%	-9%
15	93	1%	-1%
16	87	-1%	-9%



## BEAM DETAILS

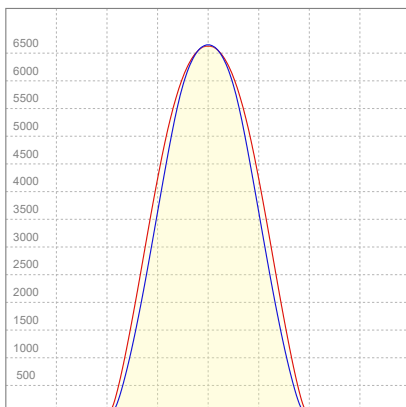
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
101°	151,6°	165,4°	83,6%	59,4%



### 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	6630lx	1657lx	737lx	414lx	265lx	118lx	66lx	29lx	17lx	11lx	7lx	4lx	3lx
Footcand.	616fcd	154fcd	68fcd	38fcd	25fcd	11fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,4m	4,9m	7,3m	9,7m	12,1m	18,2m	24,3m	36,4m	48,5m	60,6m	72,8m	97m	121,3m
Beam wid.	8ft	16ft	23,8ft	31,8ft	39,8ft	59,7ft	79,6ft	119,4ft	159,1ft	198,9ft	238,7ft	318,3ft	397,8ft

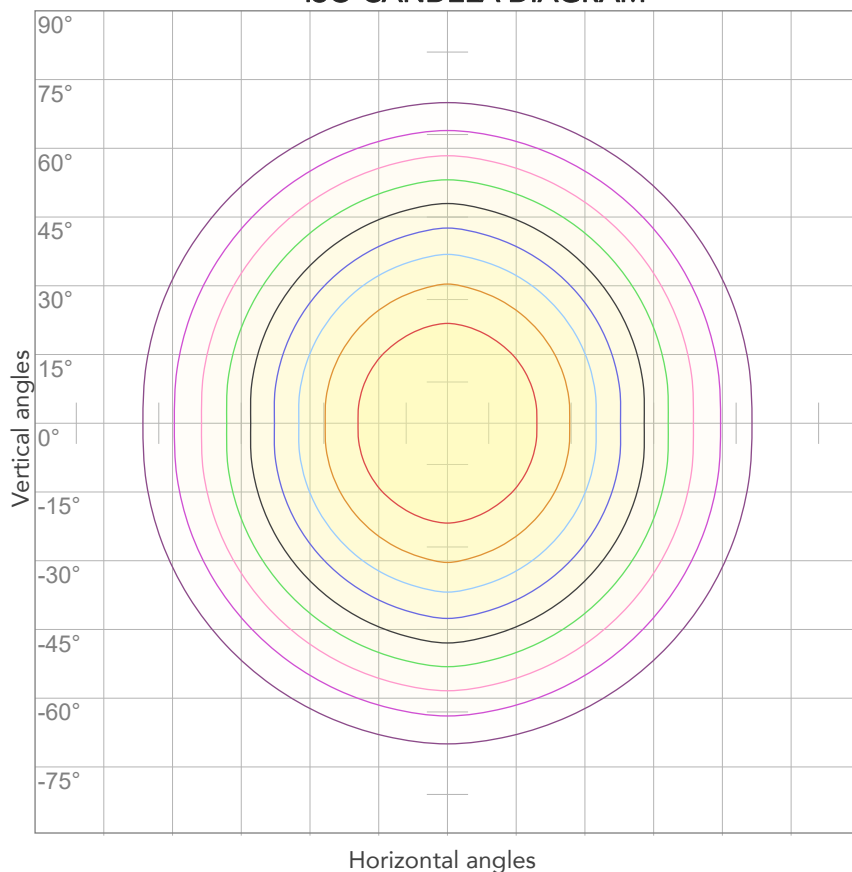
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	1,07A	219,8W	75lm/W

## ISO CANDELA DIAGRAM



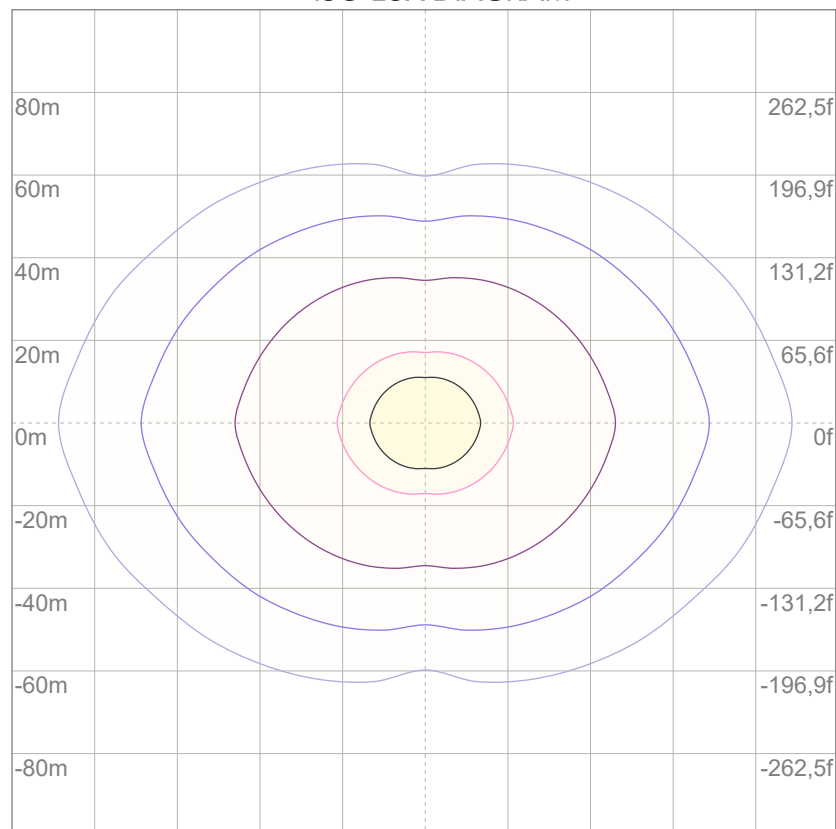
10%	663 cd
20%	1326 cd
30%	1989 cd
40%	2652 cd
50%	3315 cd
60%	3978 cd
70%	4641 cd
80%	5304 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6630 cd

## ISO LUX DIAGRAM



3%	1,99 lx
5%	3,31 lx
10%	6,63 lx
30%	19,9 lx
50%	33,1 lx

### Conditions:

Number of c-planes: 4

Lux at center: 66,3 lx

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



Total lumen output:

13764 lm

Peak candela output:

8783 cd

Light quality:

CRI: 93,5

Color temperature:

2855 K

**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter INT

Target:

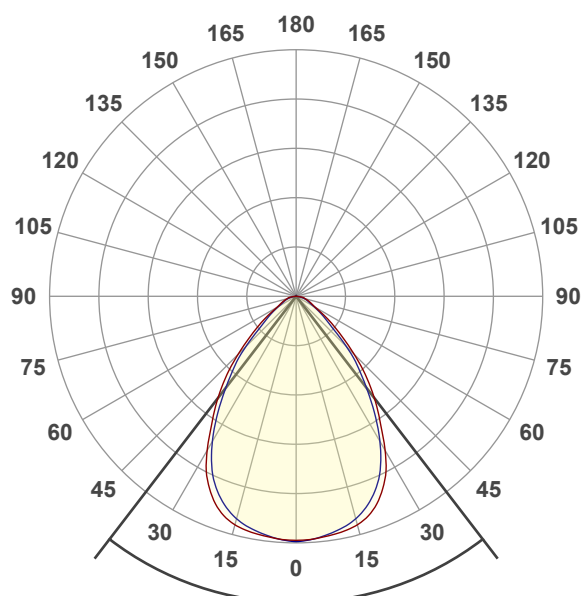
2800K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:49:59

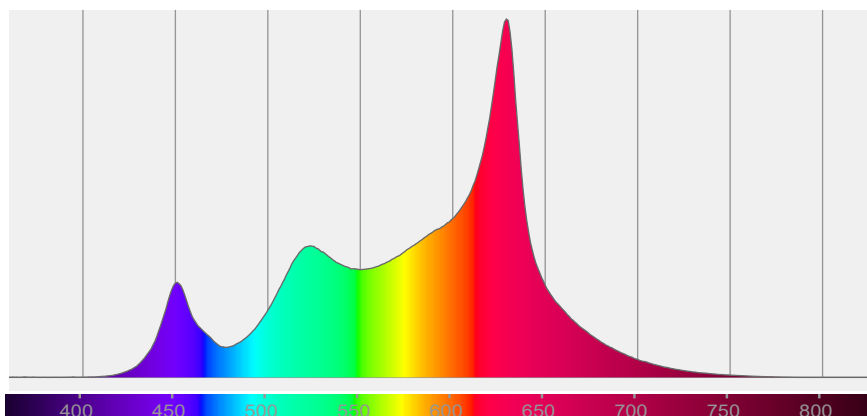


Beam angle 50%: 75,1°

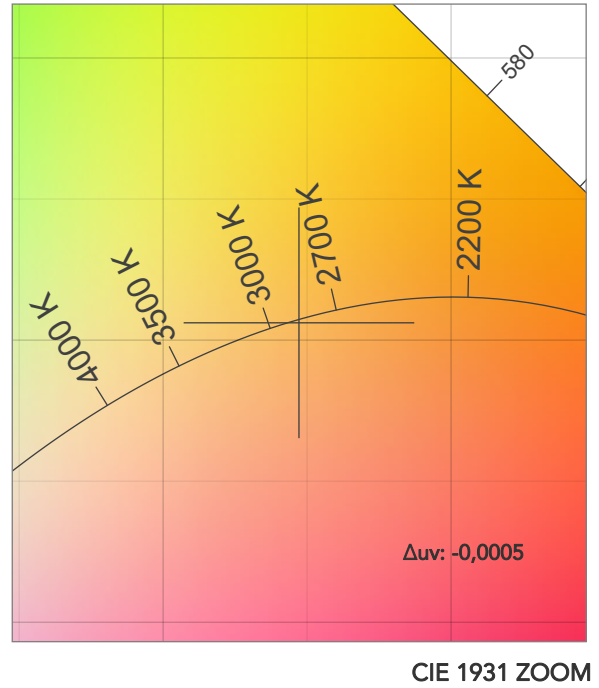
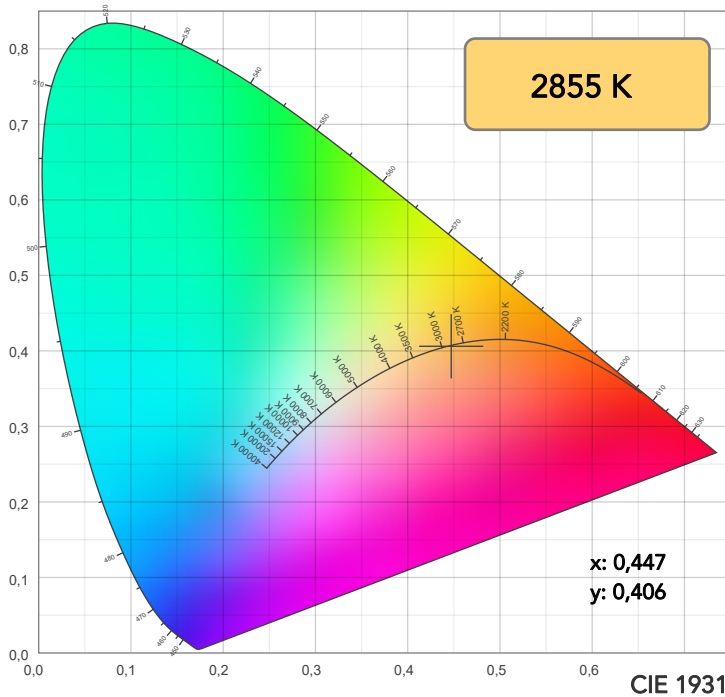
Field angle 10%: 116,9°

Cut off angle 2.5%: 158,3°

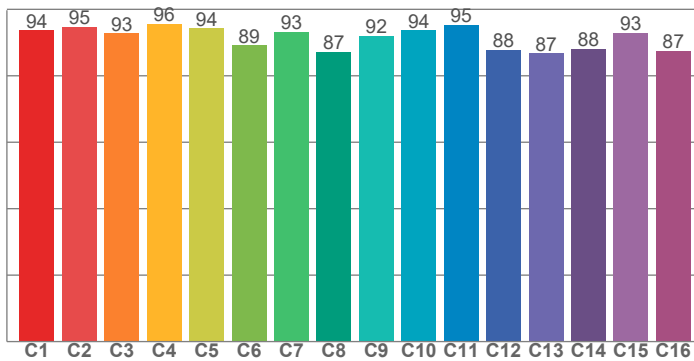
**Spectra**



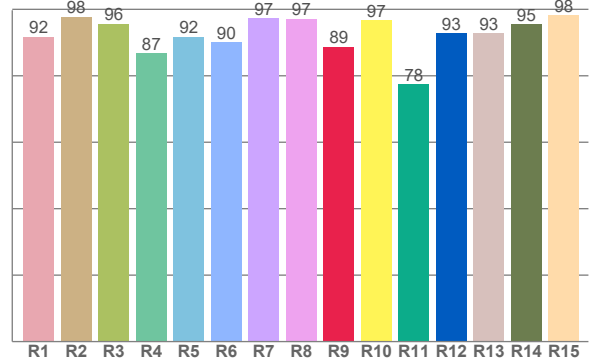




TM30: 92,2



CRI: 93,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,8	97,8	95,7	86,7	91,7	90,1	97,4	97,2	88,8	96,7	77,5	92,9	92,8	95,4	98,3

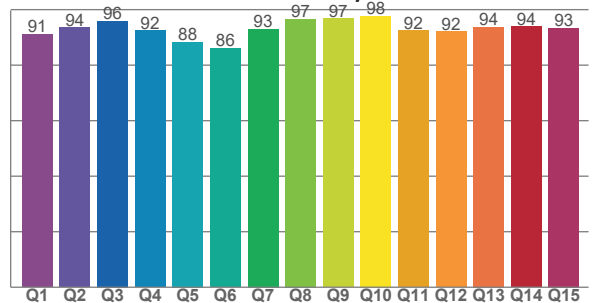
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,6	94,7	92,8	95,7	94,3	89,1	93,2	87,2	92,0	93,7	95,3	87,8	86,8	88,1	92,9	87,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,1	93,5	96,0	92,4	88,3	86,1	93,0	96,7	96,8	97,7	92,5	92,1	93,8	93,9	93,5

CQS: 92,3



## COLOR PARAMETERS

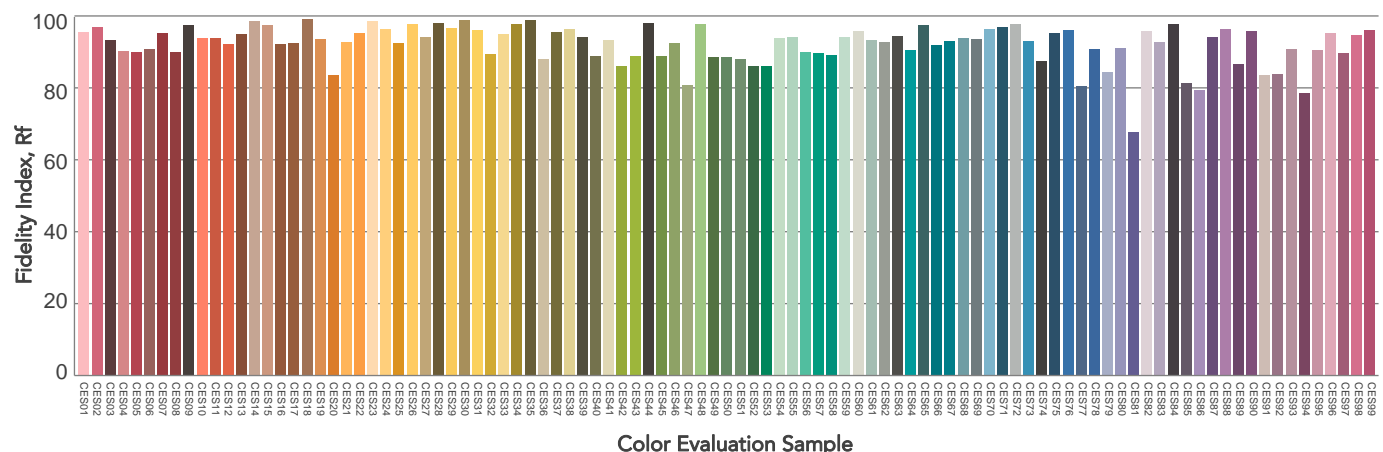
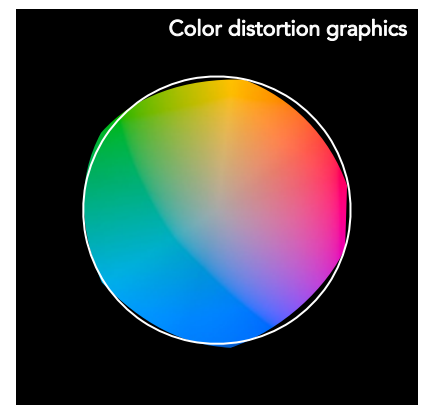
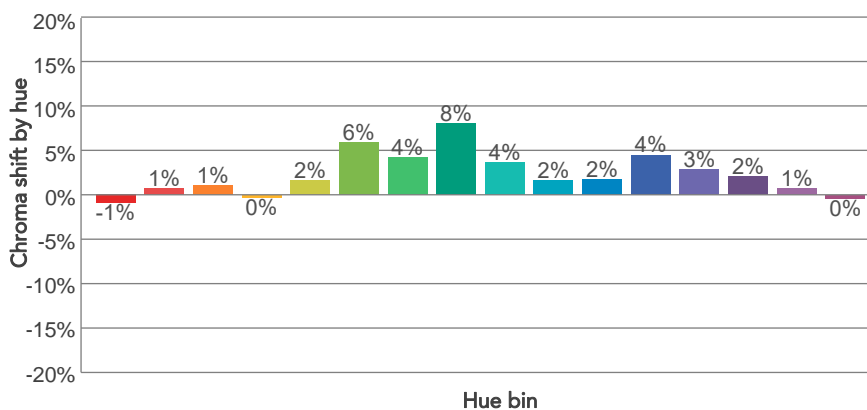
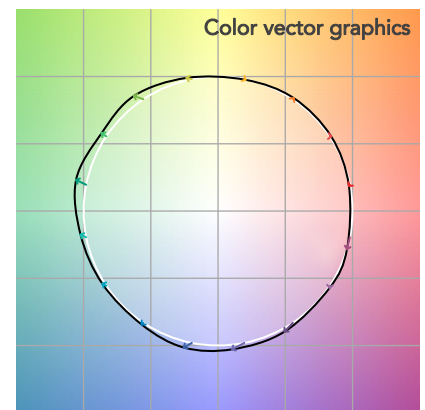
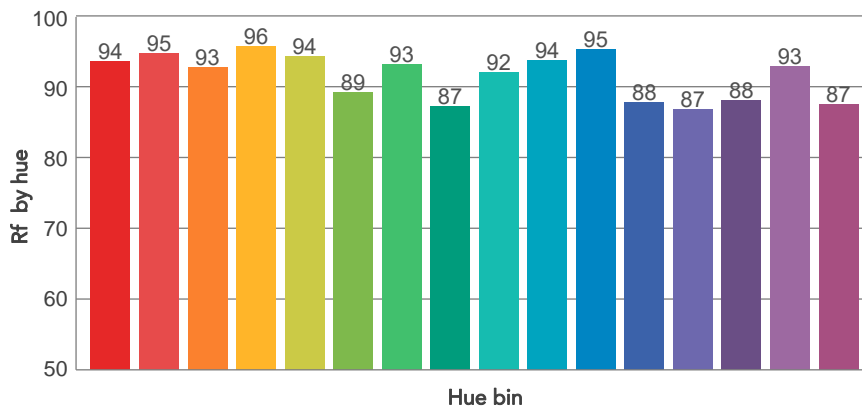
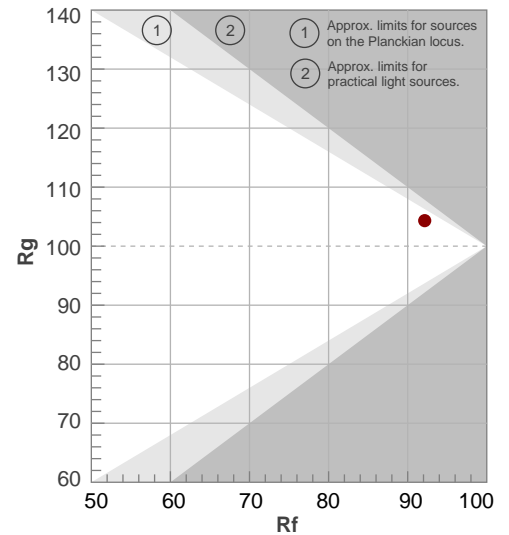
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2855 K	93,5	88,8	92,2	104,3	92,3	81	0,447	0,406	-0,0005

# TM30 DETAILS

**Rf 92,2**  
Fidelity index Rf

**Rg 104,3**  
Gammut index

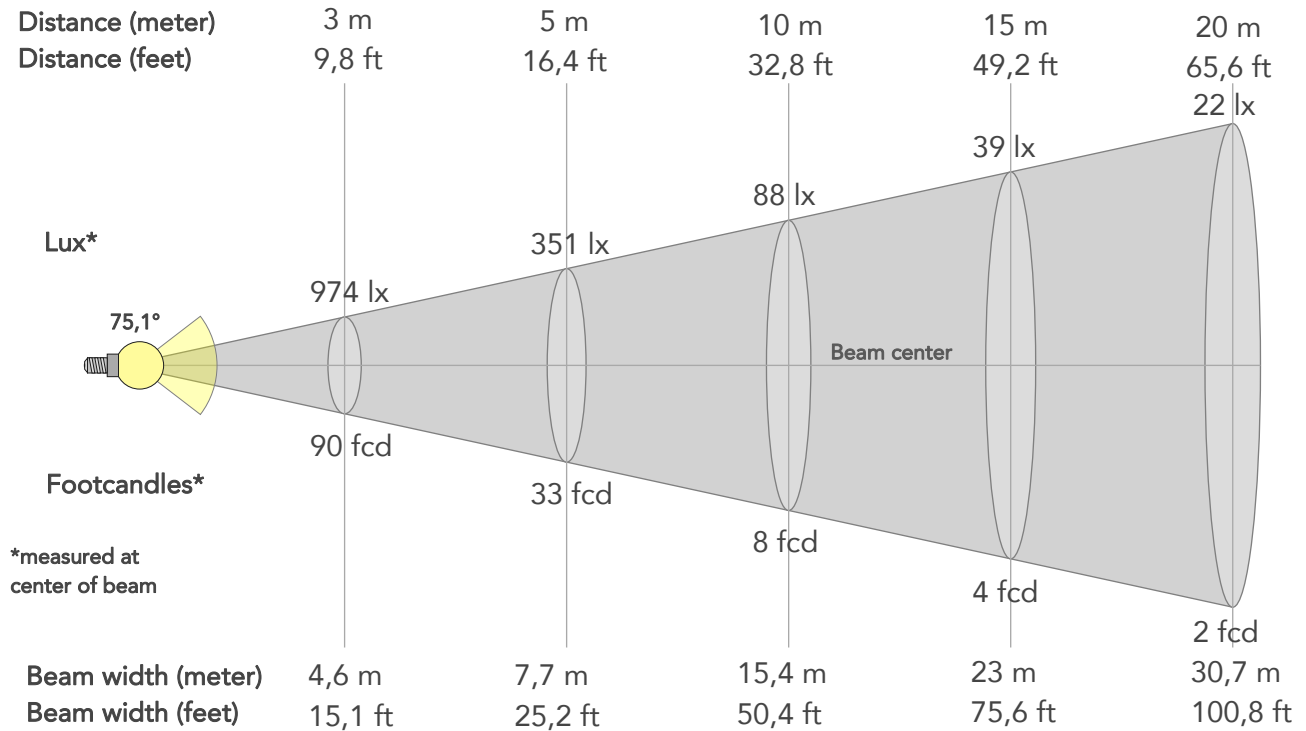
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	-1%
2	95	1%	-1%
3	93	1%	0%
4	96	0%	-1%
5	94	2%	4%
6	89	6%	4%
7	93	4%	0%
8	87	8%	-2%
9	92	4%	-3%
10	94	2%	-3%
11	95	2%	0%
12	88	4%	-5%
13	87	3%	-10%
14	88	2%	-9%
15	93	1%	-1%
16	87	0%	-9%



## BEAM DETAILS



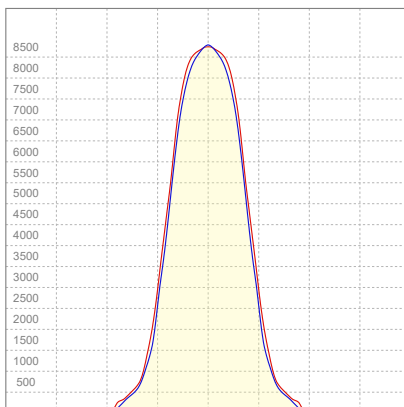
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75,1°	116,9°	158,3°	92,9%	78,4%



### 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	8763lx	2191lx	974lx	548lx	351lx	156lx	88lx	39lx	22lx	14lx	10lx	5lx	4lx
Footcand.	814fcd	204fcd	90fcd	51fcd	33fcd	14fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	1,5m	3,1m	4,6m	6,1m	7,7m	11,5m	15,4m	23m	30,7m	38,4m	46,1m	61,5m	76,8m
Beam wid.	5,1ft	10,1ft	15,1ft	20,1ft	25,2ft	37,8ft	50,4ft	75,6ft	100,8ft	126ft	151,2ft	201,6ft	252ft

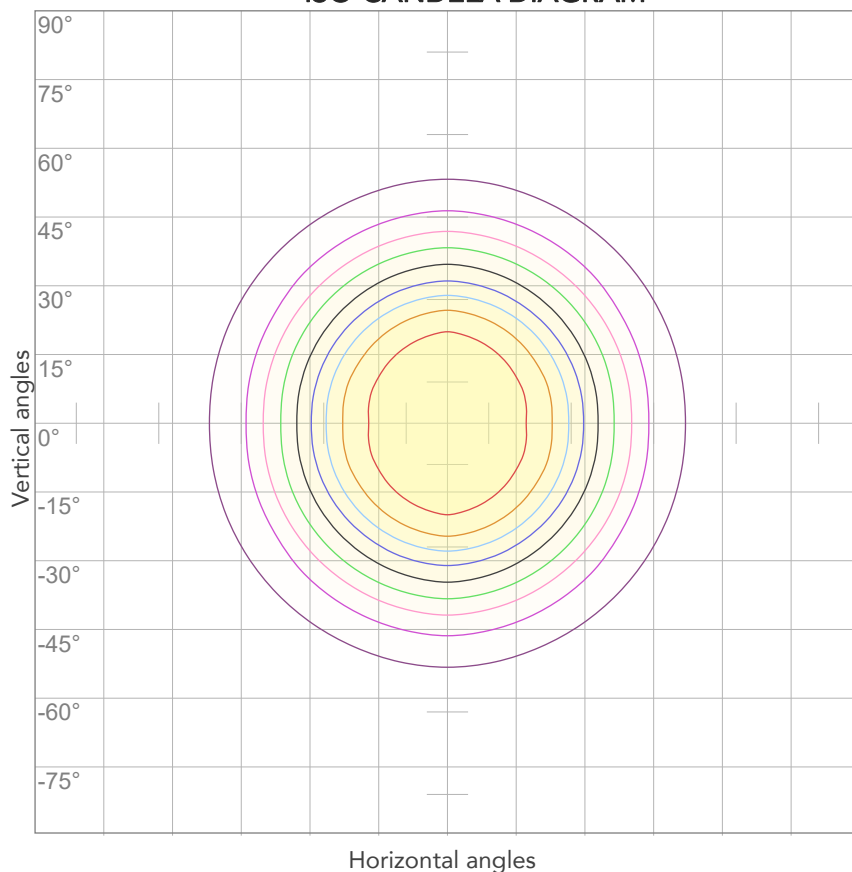
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,06A	217,9W	63lm/W

## ISO CANDELA DIAGRAM



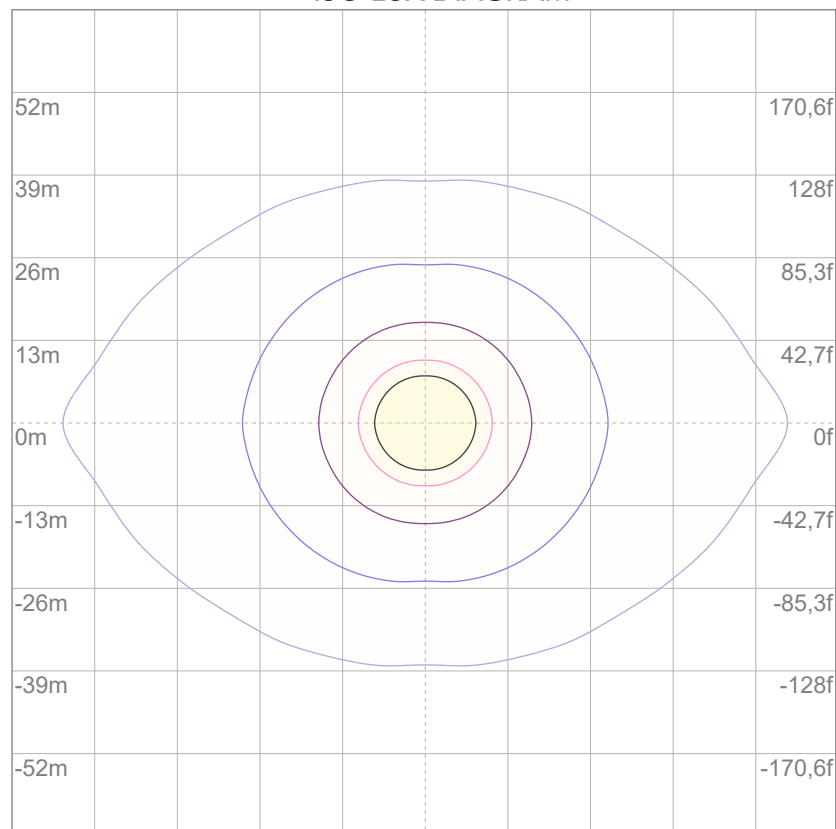
10%	876 cd
20%	1753 cd
30%	2629 cd
40%	3505 cd
50%	4382 cd
60%	5258 cd
70%	6134 cd
80%	7011 cd

### Conditions:

Number of c-planes: 4

Candela at center: 8763 cd

## ISO LUX DIAGRAM



3%	2,63 lx
5%	4,38 lx
10%	8,76 lx
30%	26,3 lx
50%	43,8 lx

### Conditions:

Number of c-planes: 4

Lux at center: 87,6 lx

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



Total lumen output:

13789 lm

Peak candela output:

4841 cd

Light quality:

CRI: 91,2

Color temperature:

3219 K

**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter HD

Target:

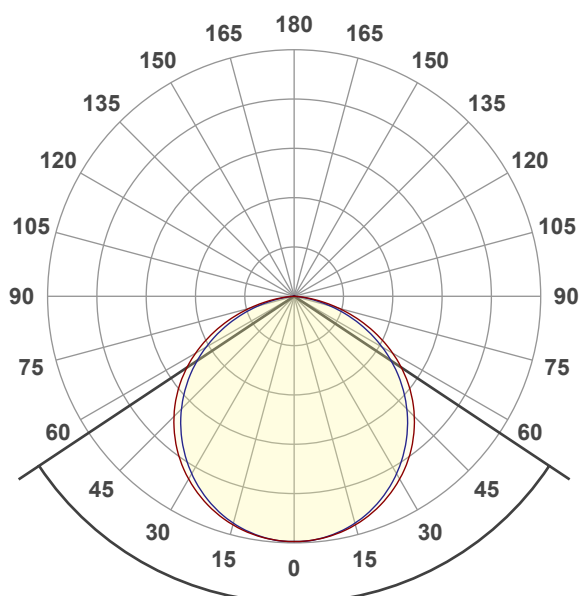
3200K HQ

Operator:

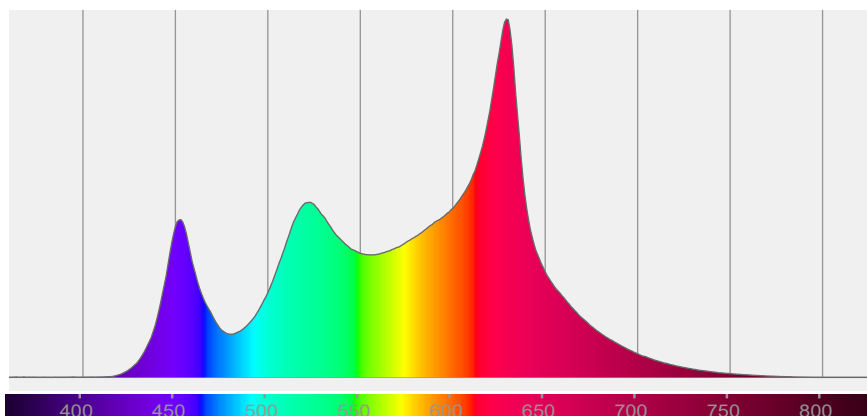
Paolo Carvone

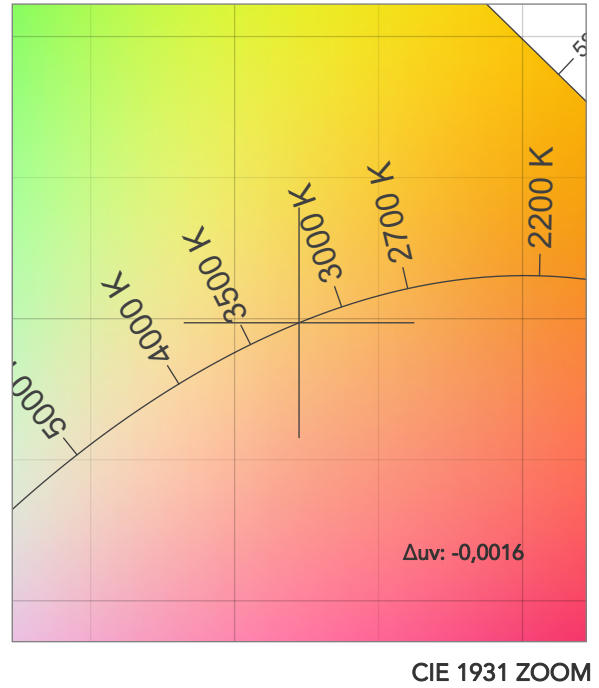
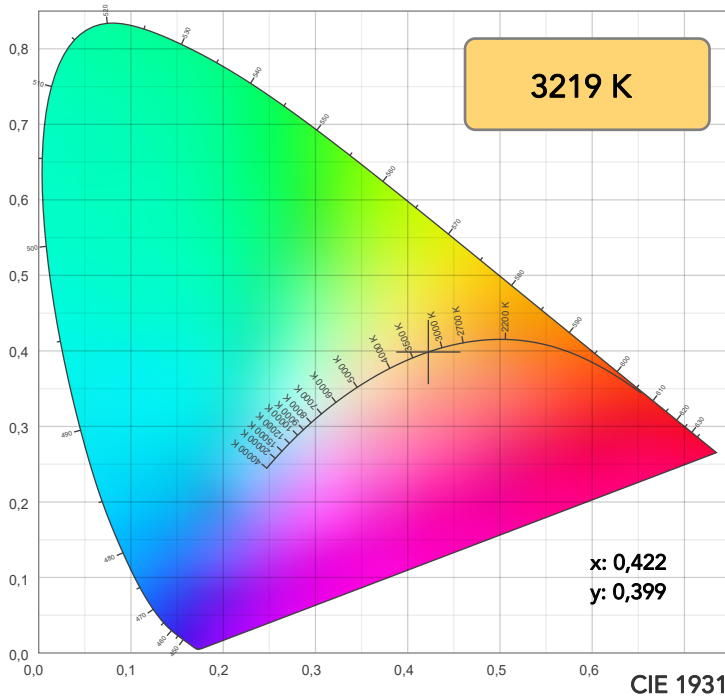
Date and time:

10/01/2022 17:24:16

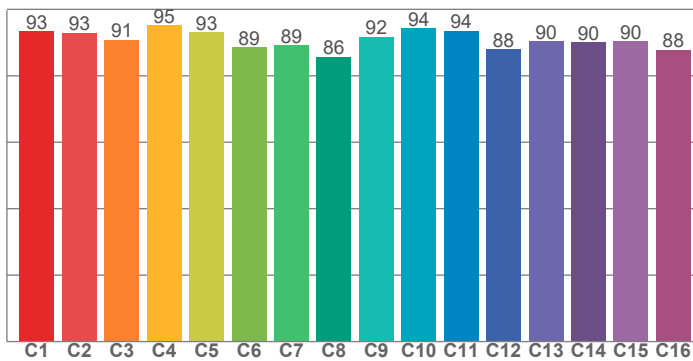


**Spectra**

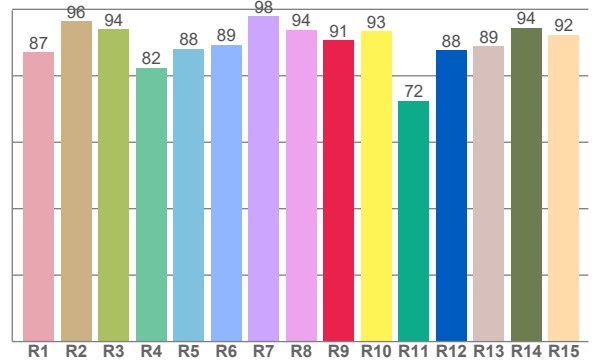




TM30: 91,6



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
87,2	96,3	94,0	82,4	88,2	89,4	97,8	93,9	90,7	93,4	72,5	87,7	88,9	94,5	92,3

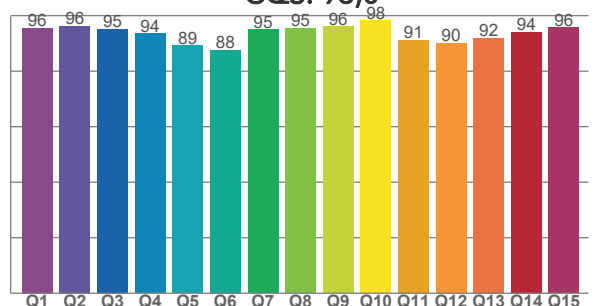
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,4	93,0	90,8	95,1	93,0	88,6	89,2	85,7	91,7	94,3	93,6	87,9	90,4	90,0	90,4	87,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,6	96,2	95,3	93,5	89,2	87,6	95,0	95,4	96,1	98,3	91,2	90,2	92,0	94,1	95,8

CQS: 93,0



## COLOR PARAMETERS

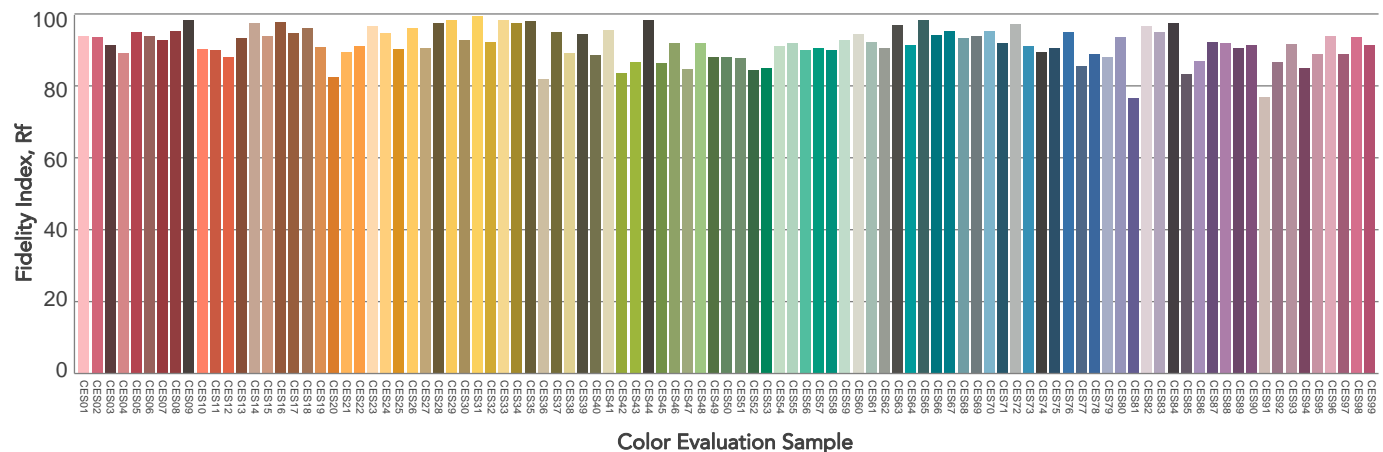
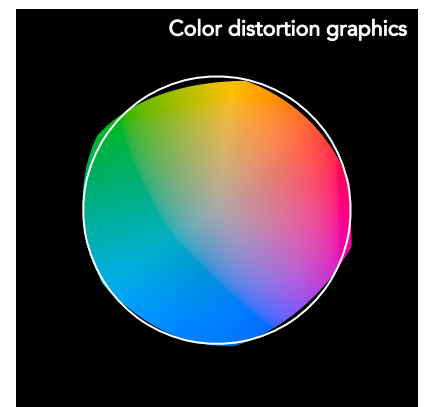
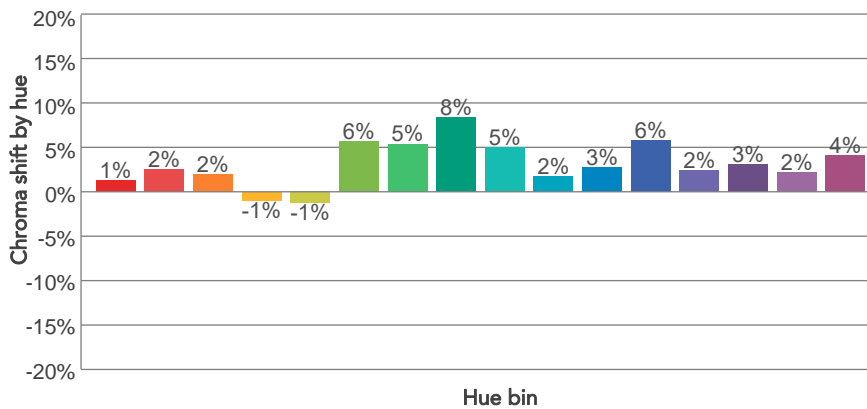
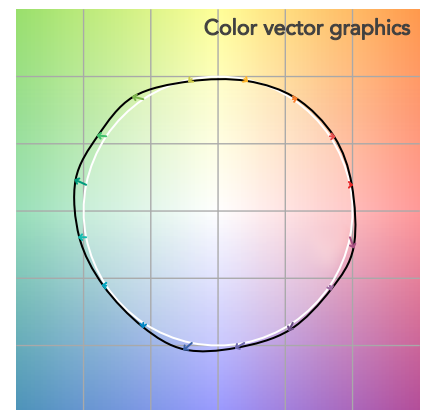
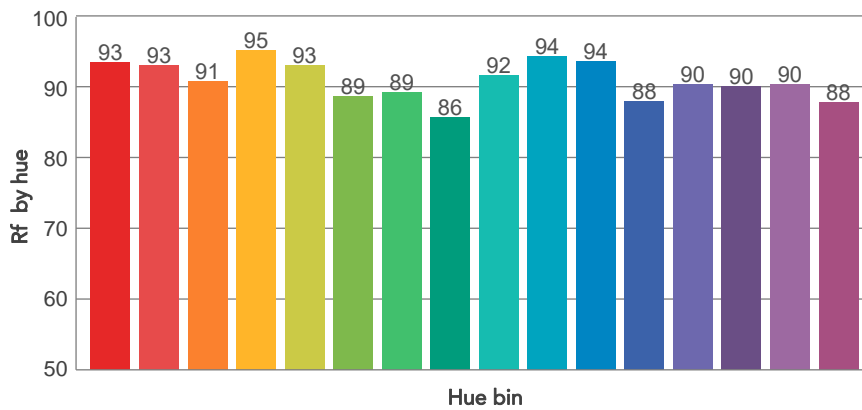
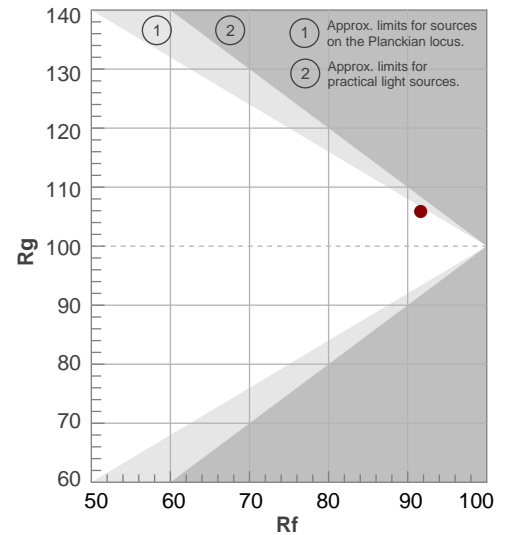
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
3219 K	91,2	90,7	91,6	105,9	93,0	82	0,422	0,399	-0,0016

# TM30 DETAILS

**Rf 91,6**  
Fidelity index Rf

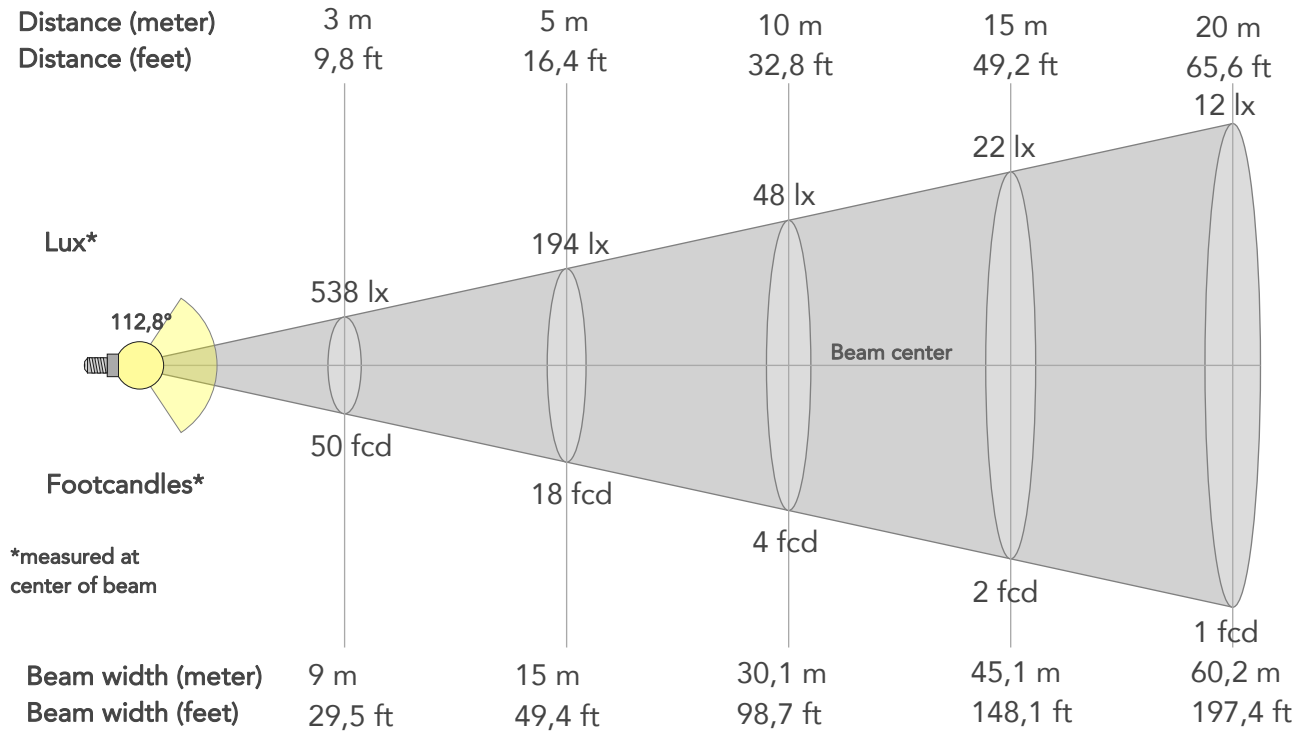
**Rg 105,9**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	1%	0%
2	93	2%	-2%
3	91	2%	-2%
4	95	-1%	-2%
5	93	-1%	2%
6	89	6%	5%
7	89	5%	3%
8	86	8%	-2%
9	92	5%	-1%
10	94	2%	-2%
11	94	3%	1%
12	88	6%	-4%
13	90	2%	-7%
14	90	3%	-5%
15	90	2%	-2%
16	88	4%	-7%



## BEAM DETAILS

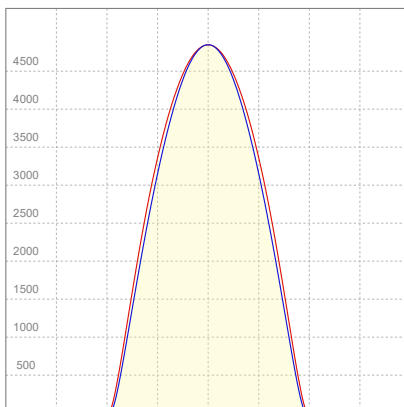
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
112,8°	158,2°	168,7°	79,4%	54,0%



### 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	4841lx	1210lx	538lx	303lx	194lx	86lx	48lx	22lx	12lx	8lx	5lx	3lx	2lx
Footcand.	450fcd	112fcd	50fcd	28fcd	18fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9m	12m	15m	22,6m	30,1m	45,1m	60,2m	75,2m	90,3m	120,4m	150,5m
Beam wid.	9,9ft	19,9ft	29,5ft	39,4ft	49,4ft	74ft	98,7ft	148,1ft	197,4ft	246,8ft	296,1ft	394,8ft	493,5ft

### LINEAR DISTRIBUTION DIAGRAM

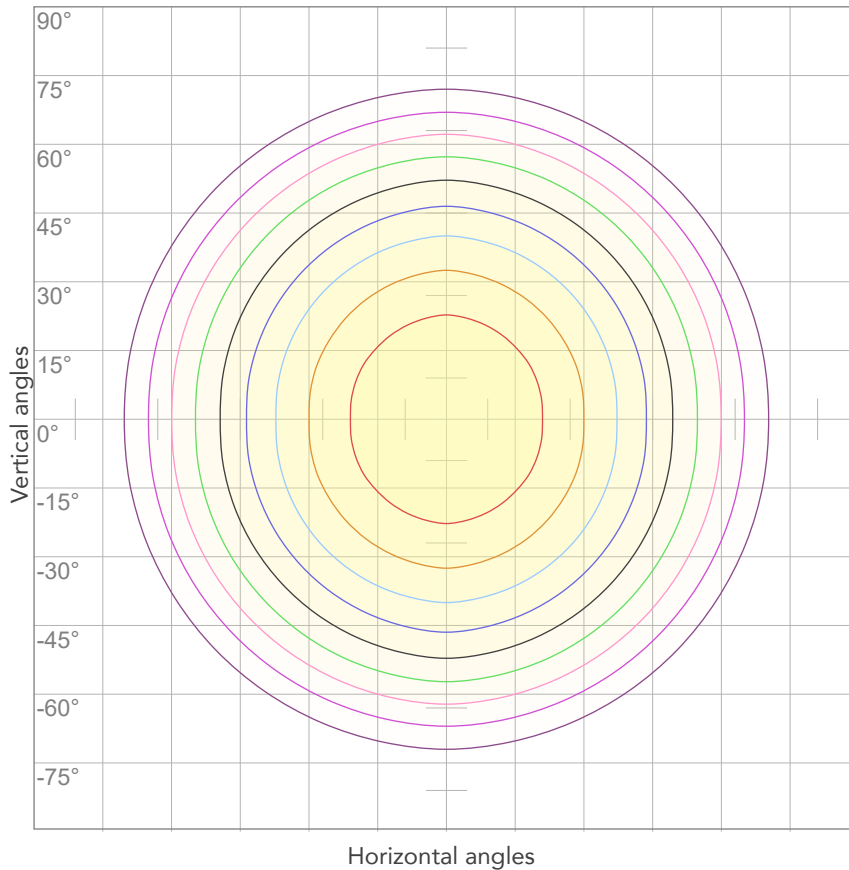


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	1,11A	230,6W	60lm/W



## ISO CANDELA DIAGRAM



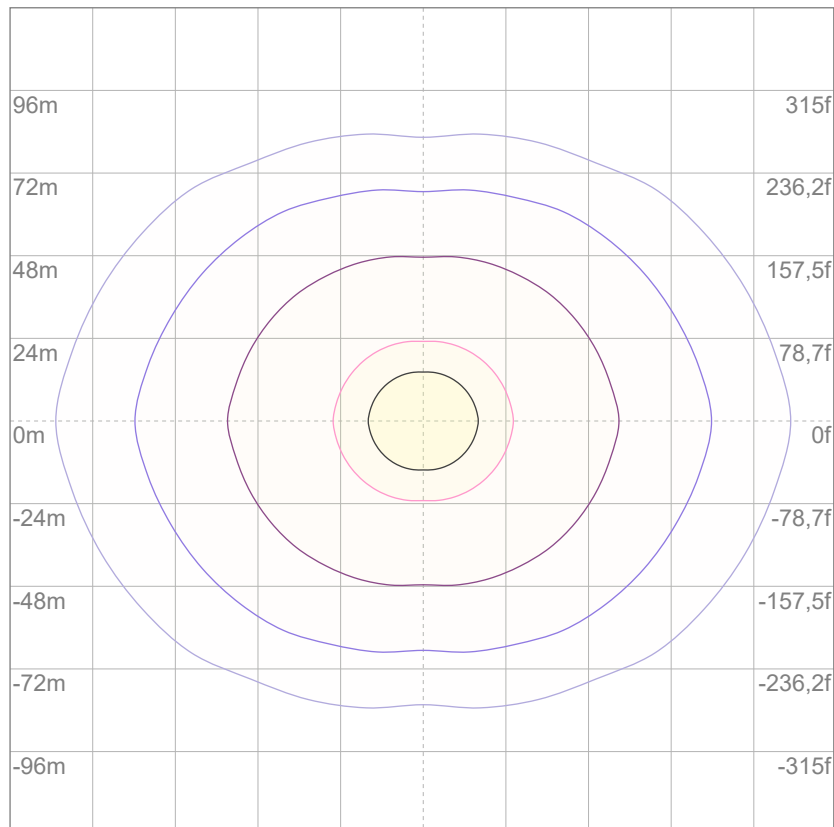
10%	484 cd
20%	968 cd
30%	1452 cd
40%	1936 cd
50%	2420 cd
60%	2904 cd
70%	3388 cd
80%	3872 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4841 cd

## ISO LUX DIAGRAM



3%	1,45 lx
5%	2,42 lx
10%	4,84 lx
30%	14,5 lx
50%	24,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 48,4 lx

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



Total lumen output:

16260 lm

Peak candela output:

6432 cd

Light quality:

CRI: 93,5

Color temperature:

3277 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter MD

Target:

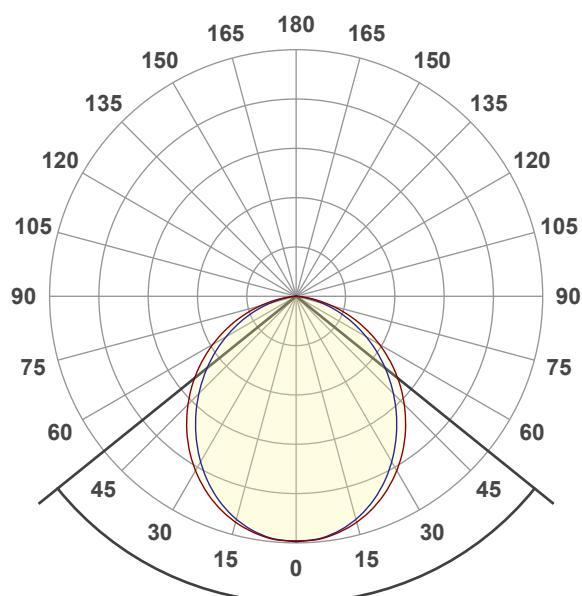
3200K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 16:49:56

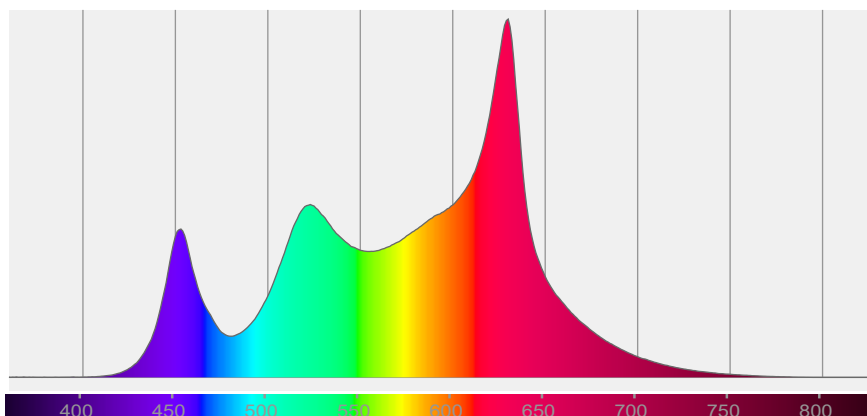


Beam angle 50%: 102,3°

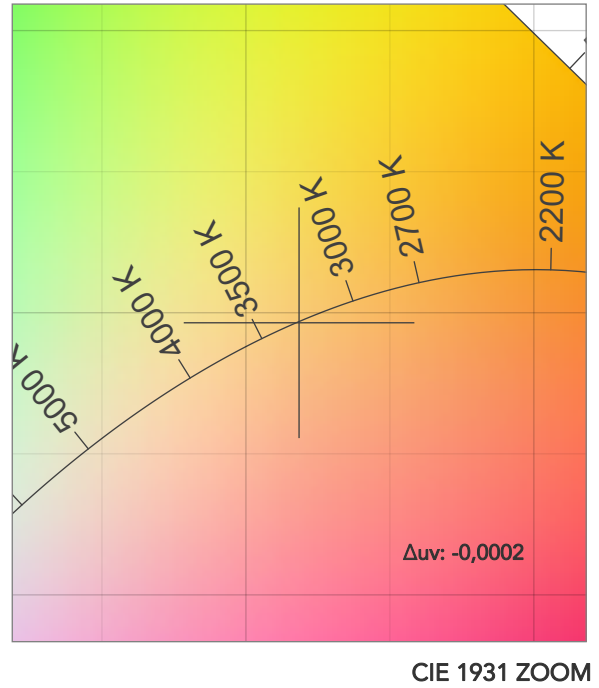
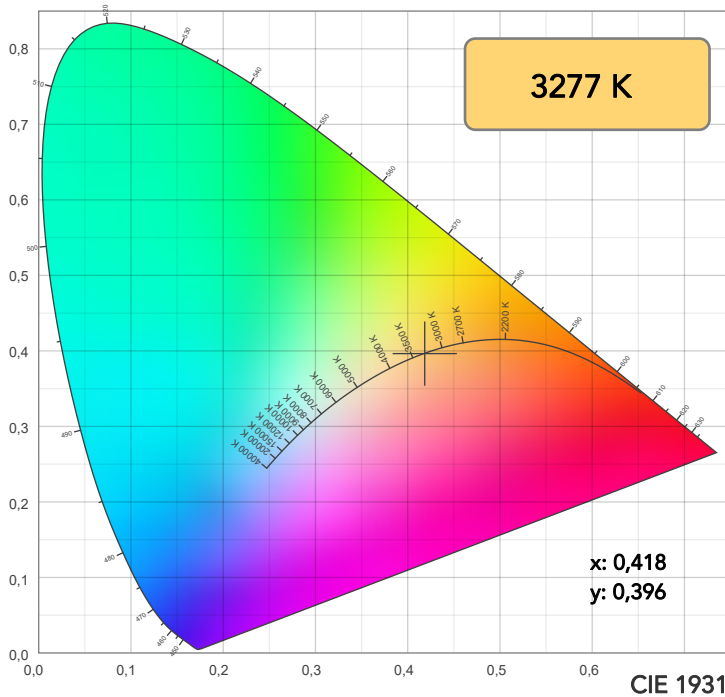
Field angle 10%: 154,6°

Cut off angle 2.5%: 167,2°

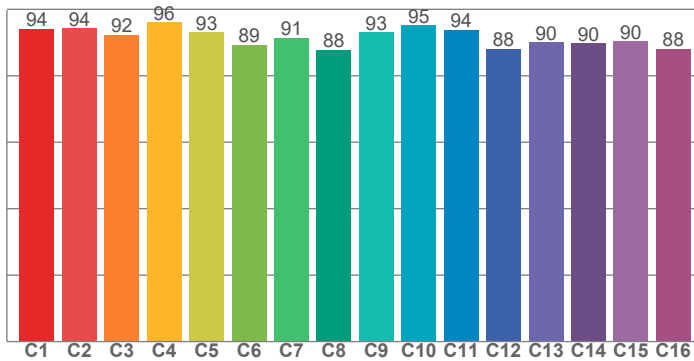
Spectra



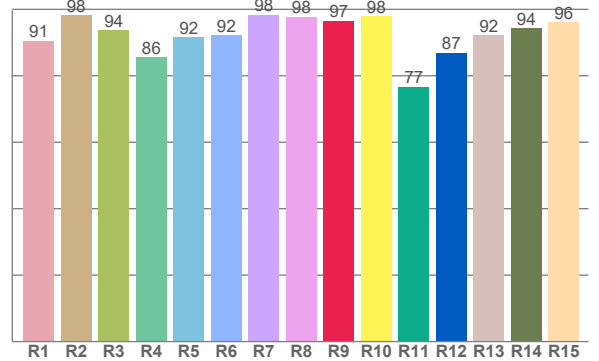
## COLOR DETAILS



TM30: 92,3



CRI: 93,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
90,6	98,3	93,6	85,6	91,6	92,2	98,4	97,8	96,6	97,9	76,7	87,0	92,1	94,4	96,1

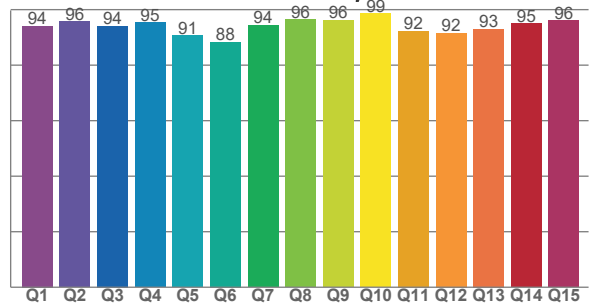
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,1	94,3	92,4	96,1	93,1	89,4	91,4	87,8	93,1	95,2	93,8	88,1	90,1	89,8	90,4	88,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,2	95,8	94,2	95,4	90,7	88,4	94,3	96,4	96,2	98,6	92,4	91,5	93,0	95,0	96,0

CQS: 93,5



## 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	$\Delta uv$
3277 K	93,5	96,6	92,3	104,8	93,5	85	0,418	0,396	-0,0002

# TM30 DETAILS

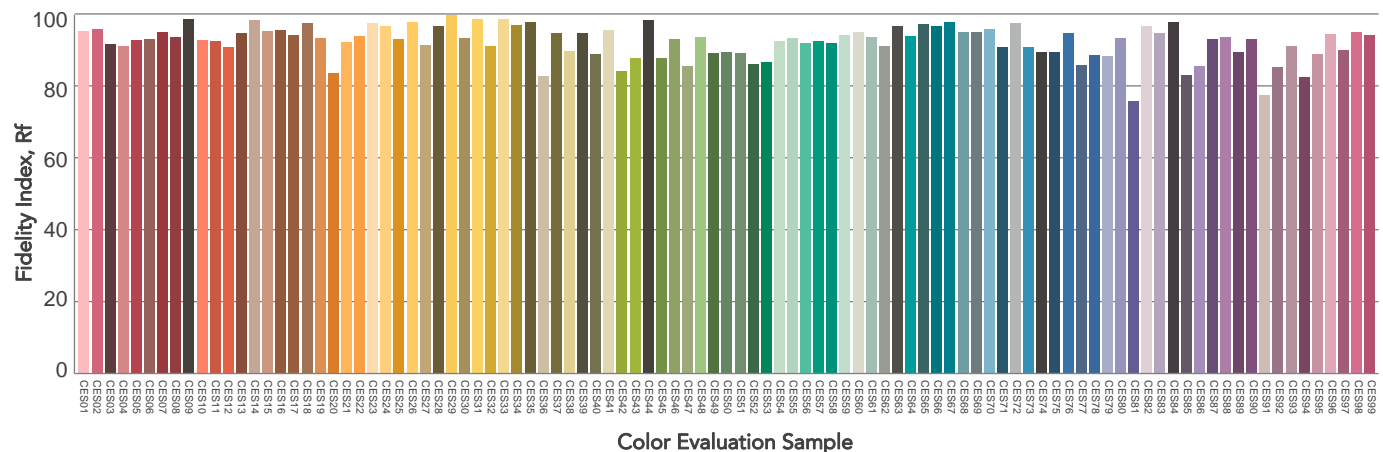
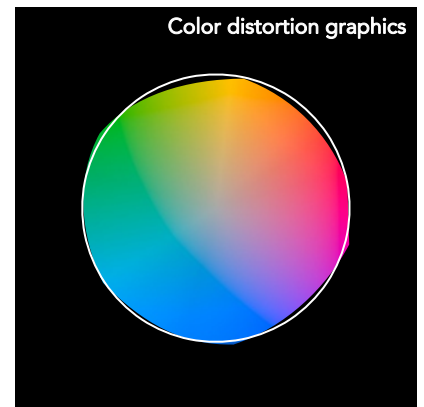
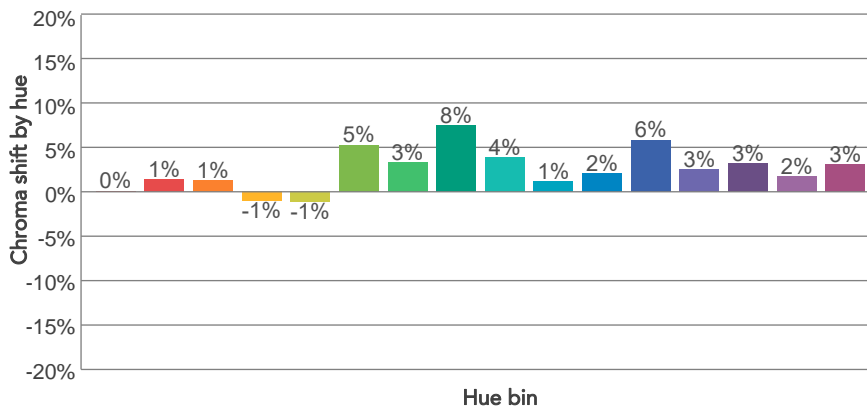
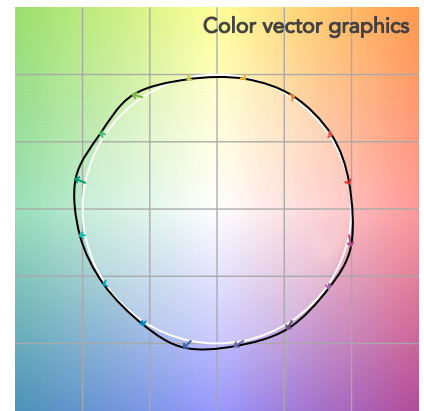
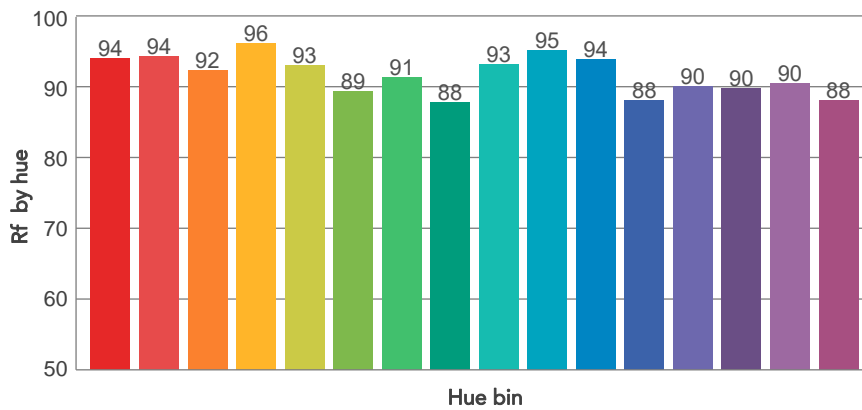
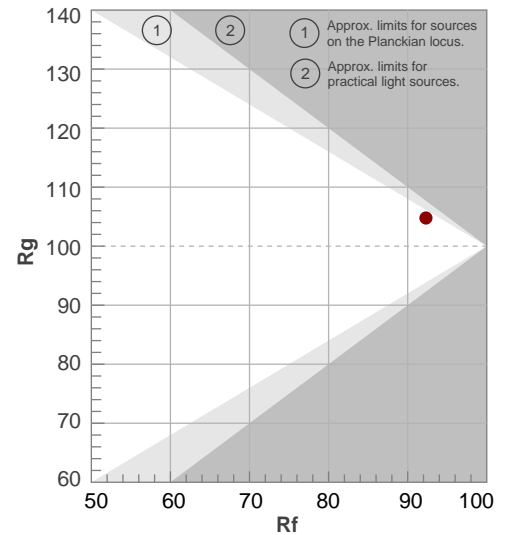
**Rf 92,3**

Fidelity index Rf

**Rg 104,8**

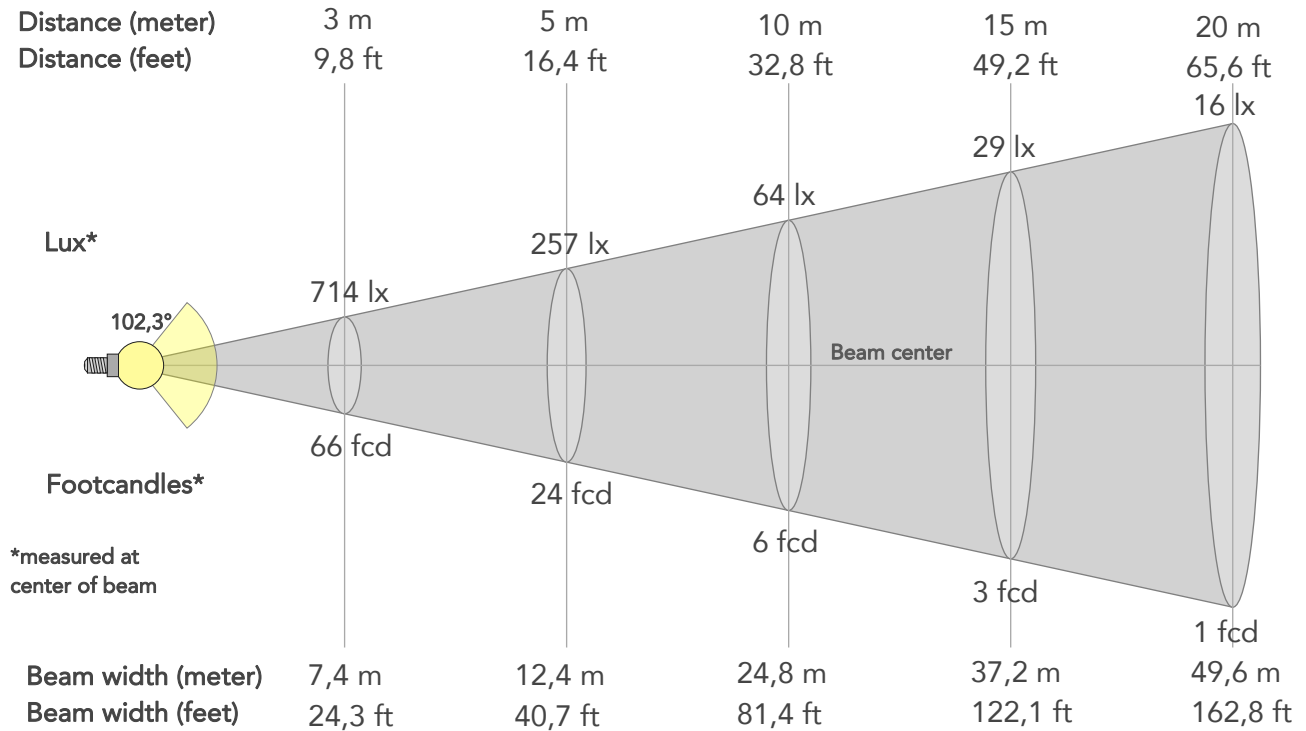
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	0%
2	94	1%	-1%
3	92	1%	-1%
4	96	-1%	-1%
5	93	-1%	3%
6	89	5%	5%
7	91	3%	2%
8	88	8%	-2%
9	93	4%	-1%
10	95	1%	0%
11	94	2%	2%
12	88	6%	-4%
13	90	3%	-7%
14	90	3%	-6%
15	90	2%	-3%
16	88	3%	-7%



## BEAM DETAILS

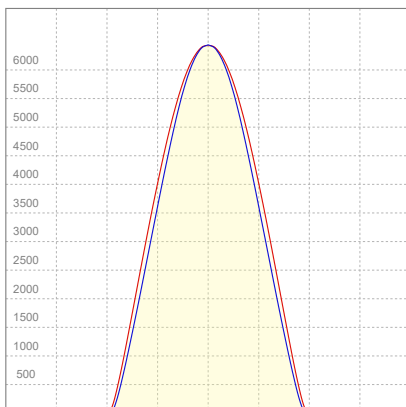
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,3°	154,6°	167,2°	81,7%	57,3%



### 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	6424lx	1606lx	714lx	402lx	257lx	114lx	64lx	29lx	16lx	10lx	7lx	4lx	3lx
Footcand.	597fcd	149fcd	66fcd	37fcd	24fcd	11fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,4m	9,9m	12,4m	18,6m	24,8m	37,2m	49,6m	62,1m	74,5m	99,3m	124,1m
Beam wid.	8,2ft	16,4ft	24,3ft	32,5ft	40,7ft	61,1ft	81,4ft	122,1ft	162,8ft	203,5ft	244,2ft	325,6ft	407,1ft

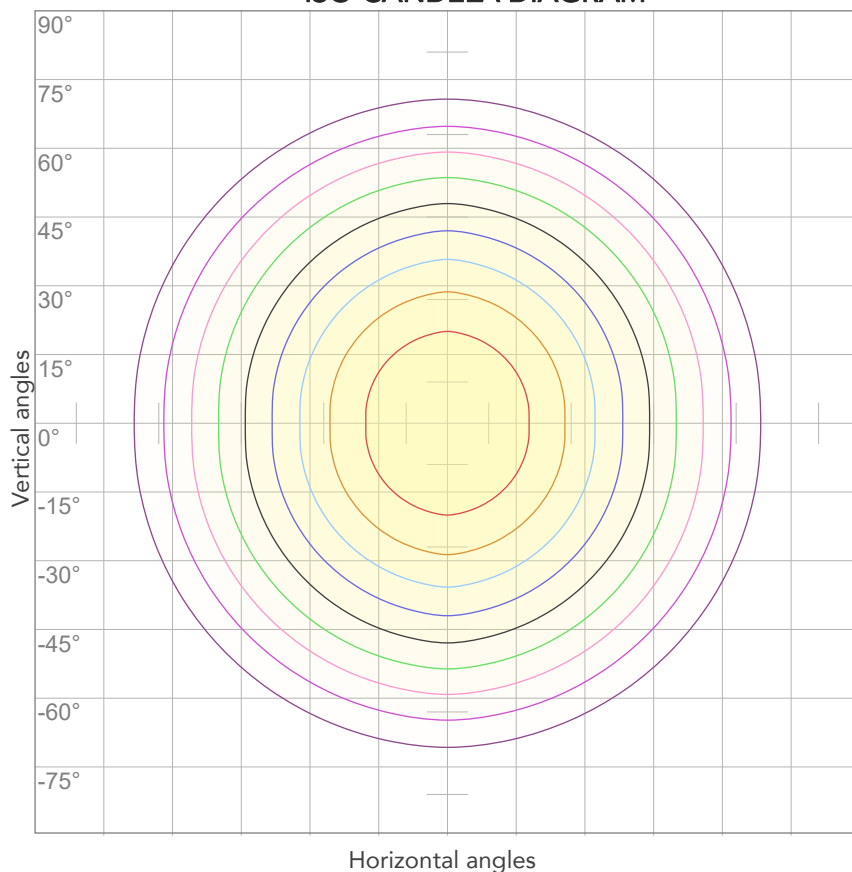
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	1,13A	231,1W	70lm/W

## ISO CANDELA DIAGRAM



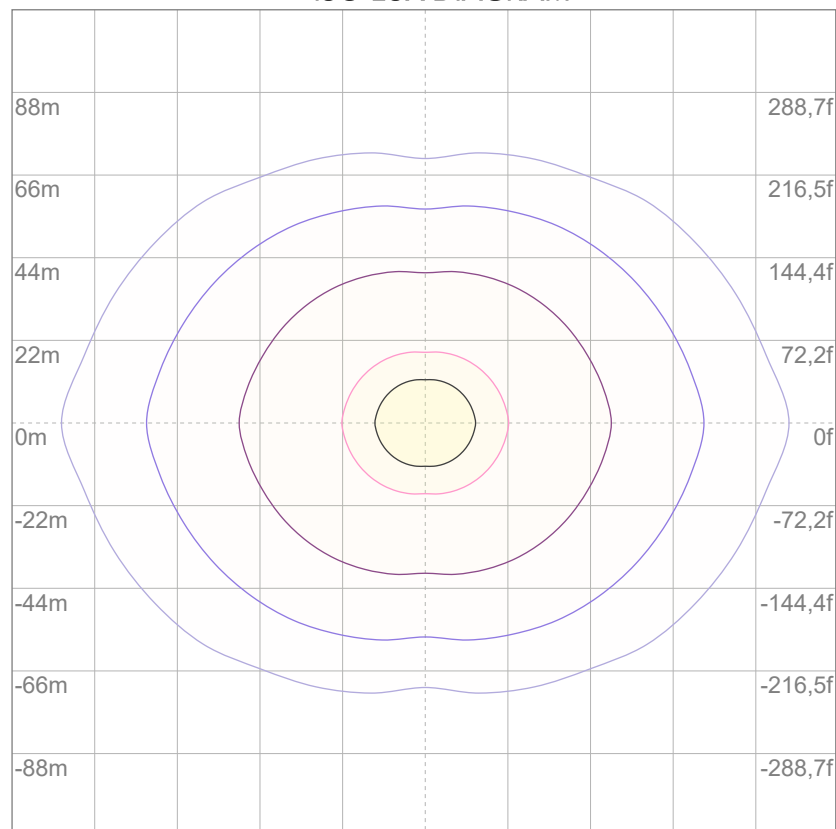
10%	642 cd
20%	1285 cd
30%	1927 cd
40%	2570 cd
50%	3212 cd
60%	3854 cd
70%	4497 cd
80%	5139 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6424 cd

## ISO LUX DIAGRAM



3%	1,93 lx
5%	3,21 lx
10%	6,42 lx
30%	19,3 lx
50%	32,1 lx

### Conditions:

Number of c-planes: 4

Lux at center: 64,2 lx

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



Total lumen output:

17083 lm

Peak candela output:

6872 cd

Light quality:

CRI: 93,6

Color temperature:

3221 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter LD

Target:

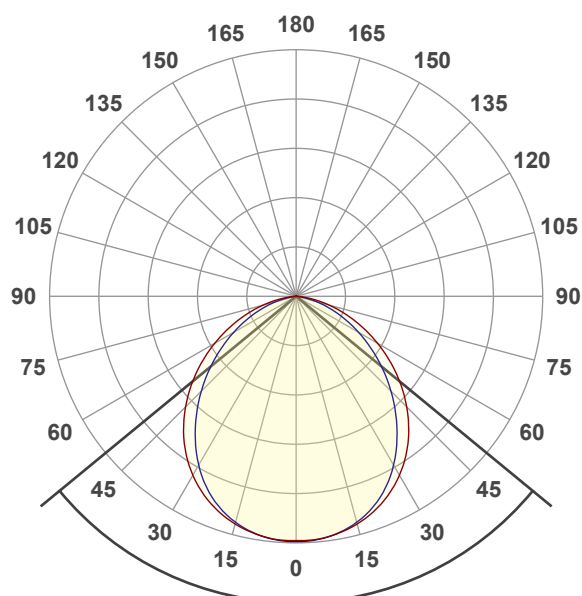
3200K HQ

Operator:

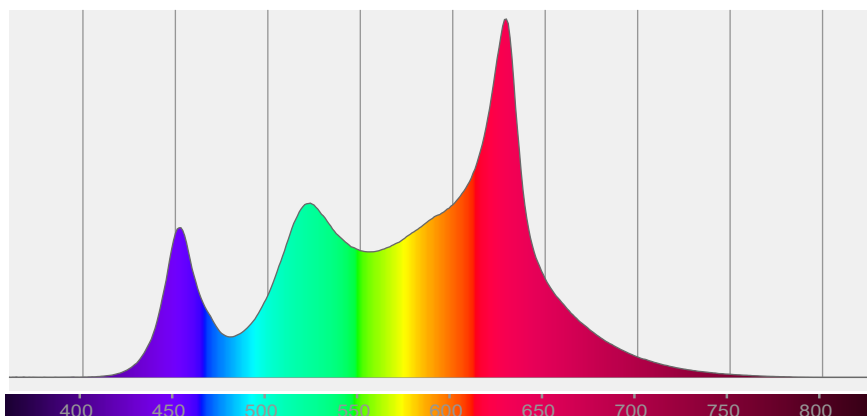
Paolo Carvone

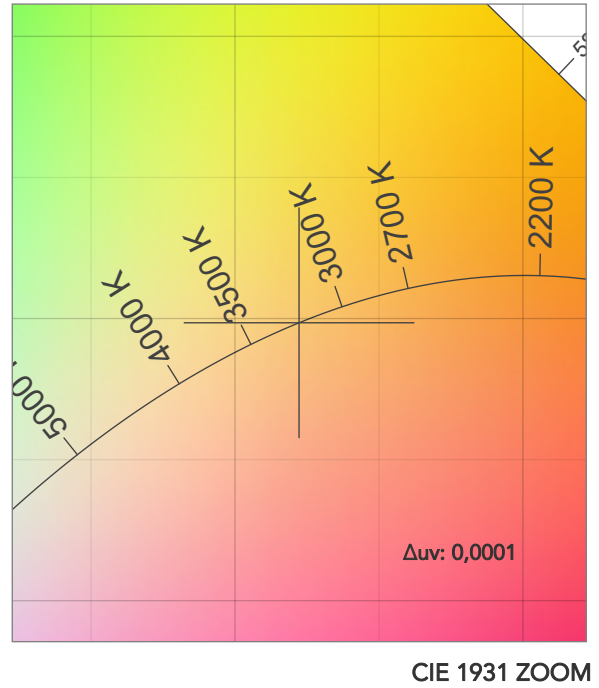
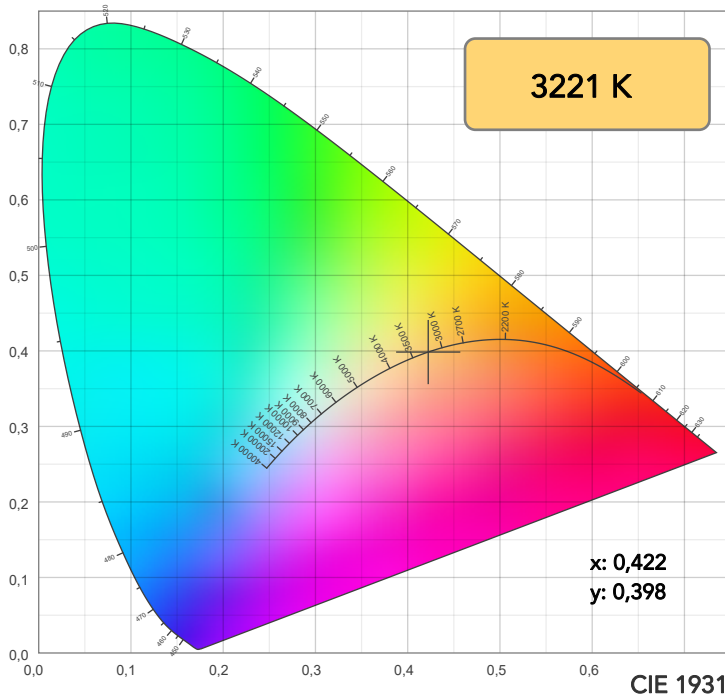
Date and time:

11/01/2022 09:09:59

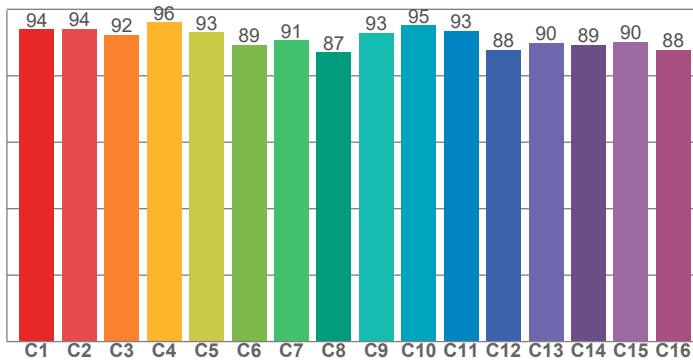


Spectra

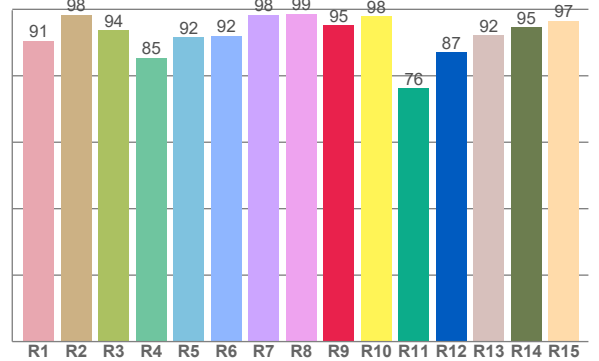




TM30: 92,2



CRI: 93,6 (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
90,6	98,4	93,8	85,5	91,6	92,1	98,4	98,7	95,2	98,0	76,3	87,1	92,1	94,5	96,5

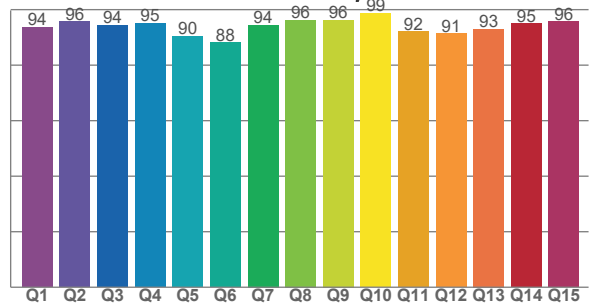
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,9	94,2	92,3	96,0	93,1	89,3	90,6	87,0	93,0	95,2	93,4	87,9	89,9	89,3	90,2	87,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93,7	95,7	94,4	95,1	90,4	88,2	94,5	96,3	96,3	98,7	92,1	91,4	93,0	94,9	95,7

CQS: 93,4



## 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	$\Delta uv$
3221 K	93,6	95,2	92,2	104,8	93,4	83	0,422	0,398	0,0001

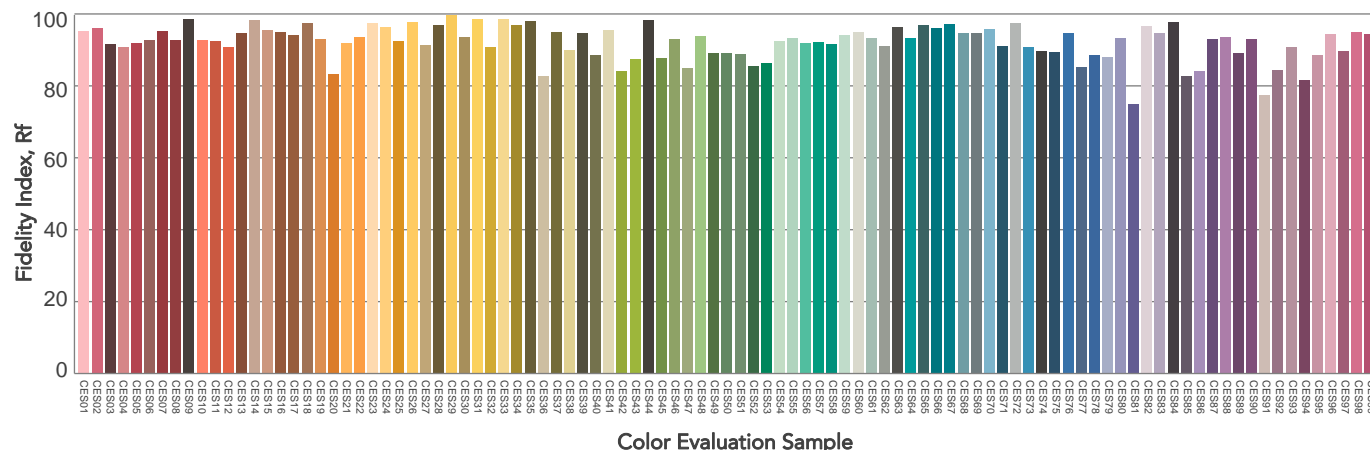
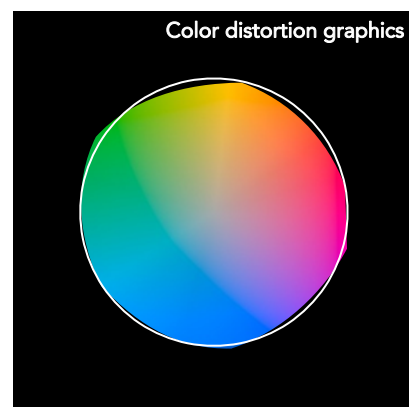
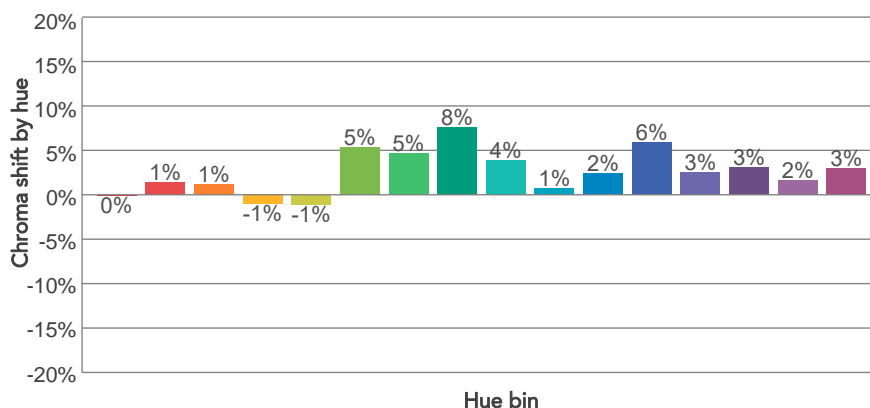
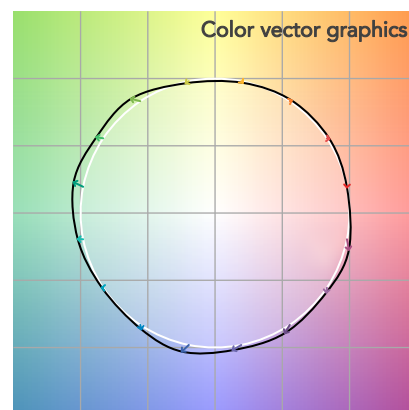
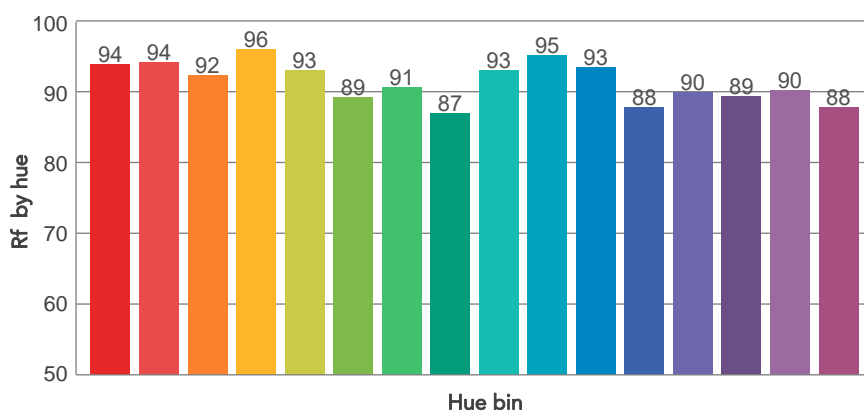
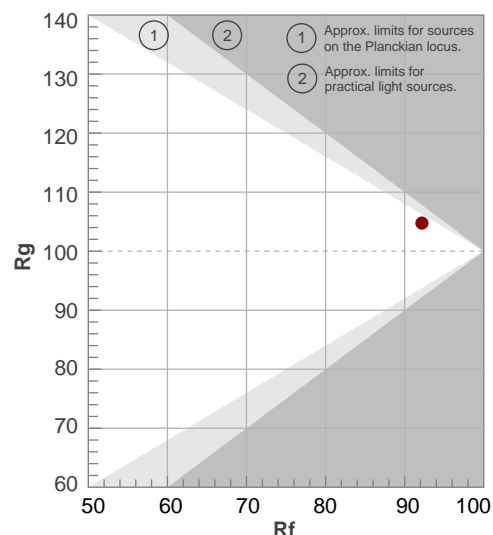


# TM30 DETAILS

**Rf 92,2**  
Fidelity index Rf

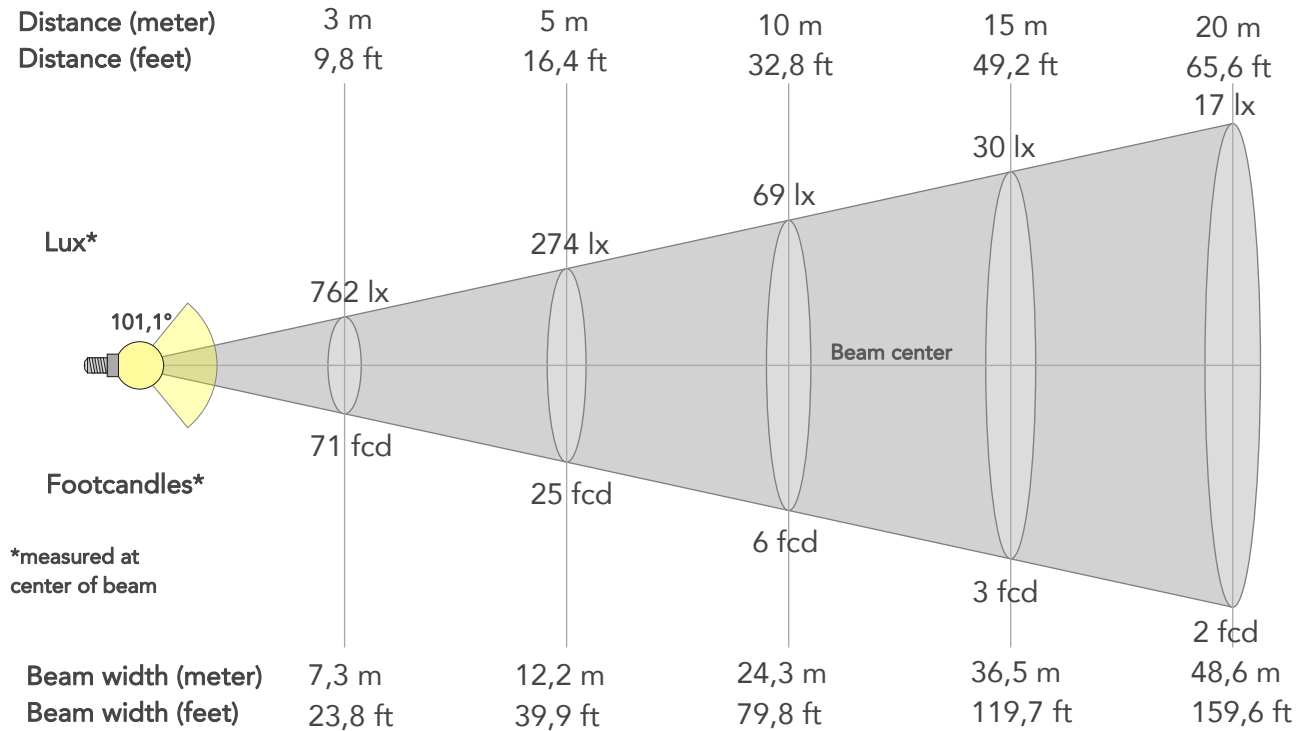
**Rg 104,8**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	0%
2	94	1%	-1%
3	92	1%	-1%
4	96	-1%	-1%
5	93	-1%	3%
6	89	5%	5%
7	91	5%	2%
8	87	8%	-2%
9	93	4%	-1%
10	95	1%	-1%
11	93	2%	2%
12	88	6%	-4%
13	90	3%	-7%
14	89	3%	-6%
15	90	2%	-3%
16	88	3%	-7%



## BEAM DETAILS

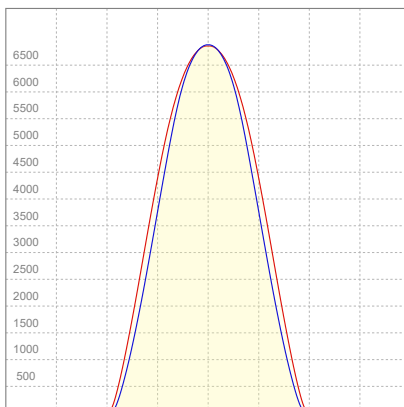
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
101,1°	151,9°	165,8°	83,4%	59,2%



### 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	6861lx	1715lx	762lx	429lx	274lx	122lx	69lx	30lx	17lx	11lx	8lx	4lx	3lx
Footcand.	637fcd	159fcd	71fcd	40fcd	25fcd	11fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,4m	4,9m	7,3m	9,7m	12,2m	18,2m	24,3m	36,5m	48,6m	60,8m	73m	97,3m	121,6m
Beam wid.	8ft	16,1ft	23,8ft	31,9ft	39,9ft	59,8ft	79,8ft	119,7ft	159,6ft	199,4ft	239,3ft	319,1ft	398,9ft

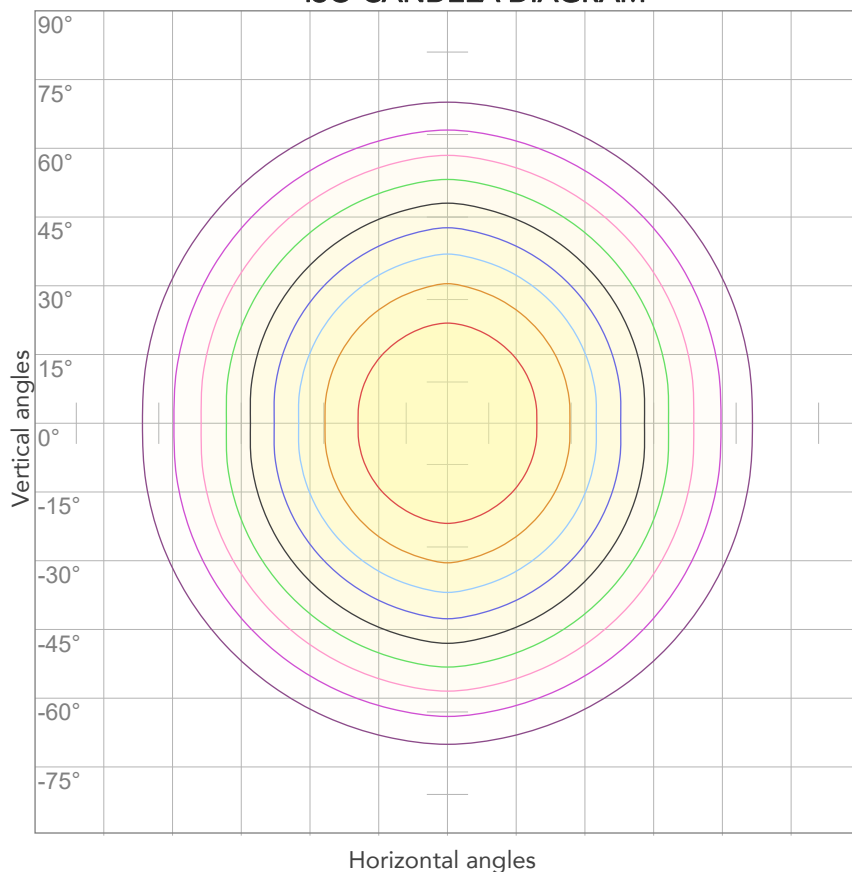
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	1,13A	231,4W	74lm/W

## ISO CANDELA DIAGRAM



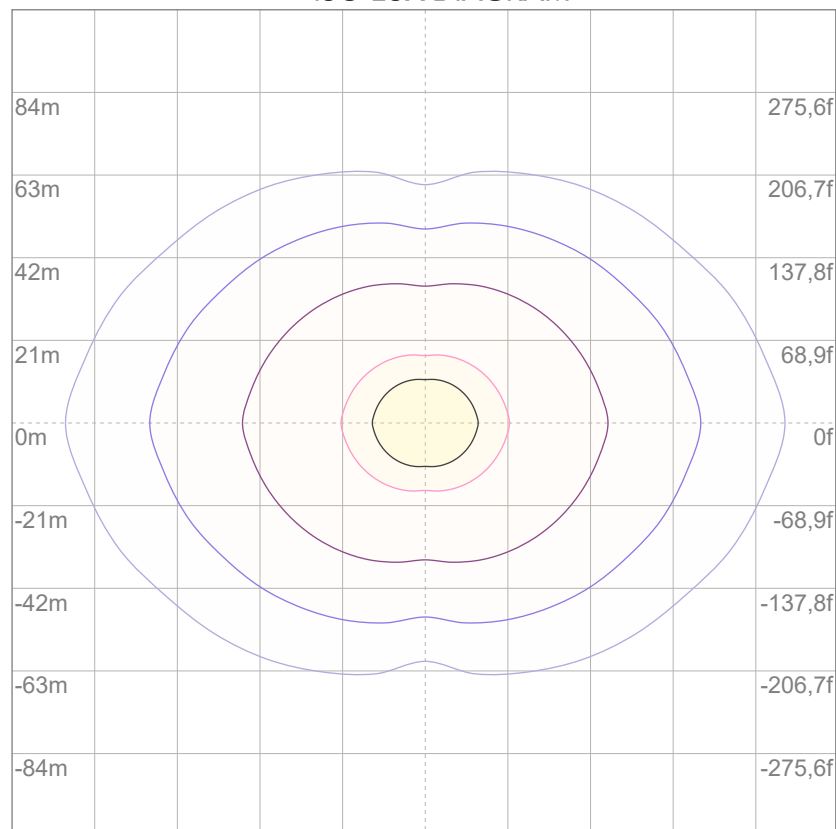
10%	686 cd
20%	1372 cd
30%	2058 cd
40%	2744 cd
50%	3430 cd
60%	4116 cd
70%	4802 cd
80%	5489 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6861 cd

## ISO LUX DIAGRAM



3%	2,06 lx
5%	3,43 lx
10%	6,86 lx
30%	20,6 lx
50%	34,3 lx

### Conditions:

Number of c-planes: 4

Lux at center: 68,6 lx

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



Total lumen output:

14390 lm

Peak candela output:

9128 cd

Light quality:

CRI: 93,6

Color temperature:

3274 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter INT

Target:

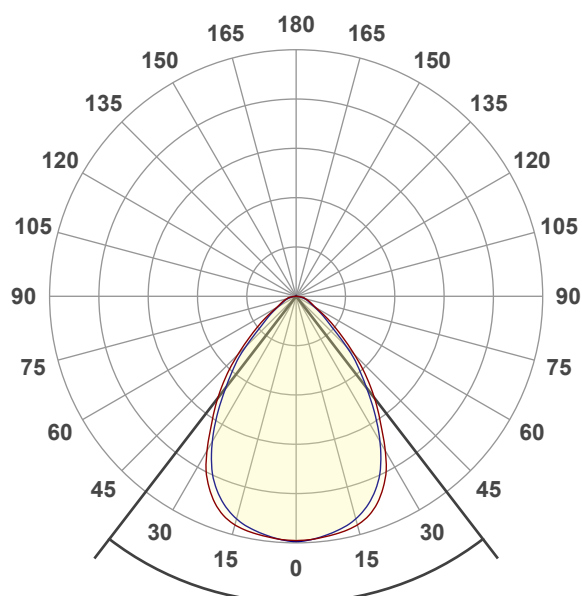
3200K HQ

Operator:

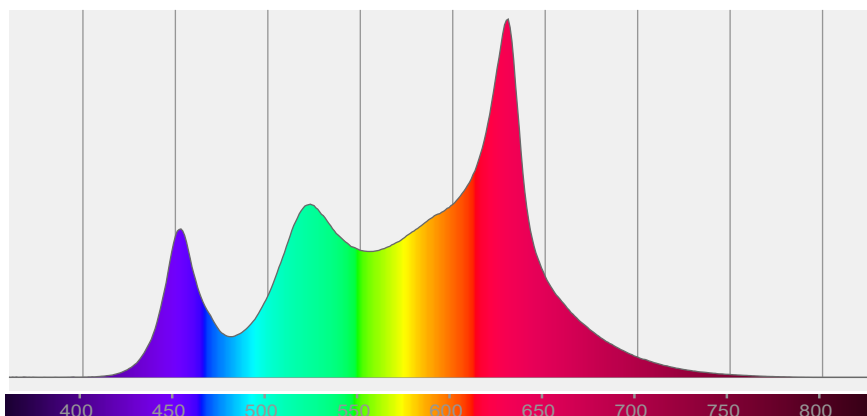
Paolo Carvone

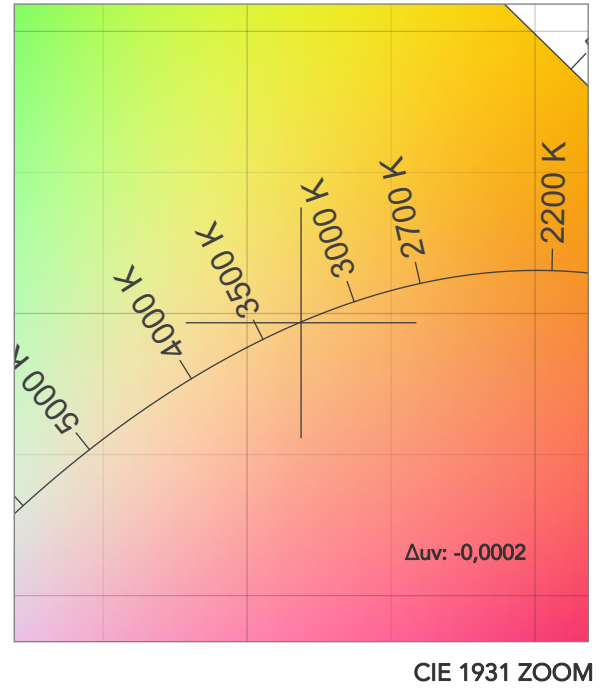
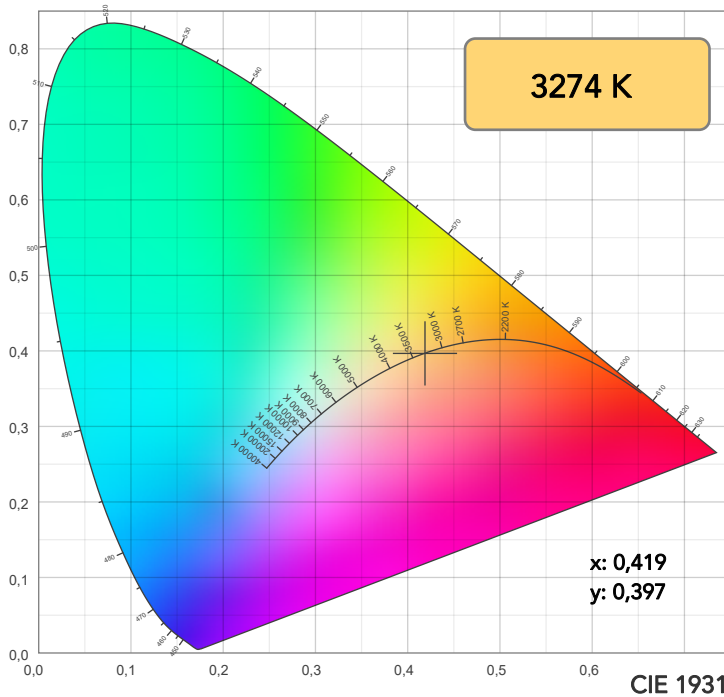
Date and time:

10/01/2022 17:53:24

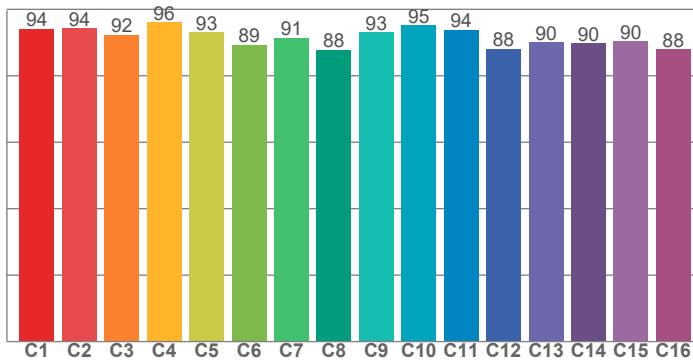


Spectra

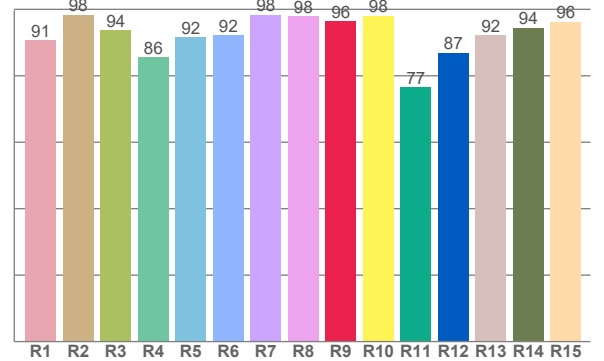




TM30: 92,3



CRI: 93,6 (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
90,6	98,4	93,6	85,6	91,7	92,2	98,4	98,0	96,4	98,0	76,6	87,0	92,2	94,4	96,3

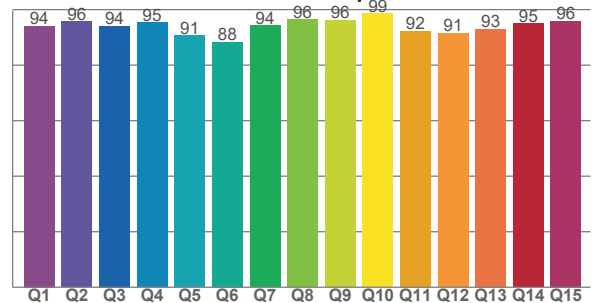
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,1	94,3	92,4	96,1	93,0	89,3	91,4	87,7	93,1	95,1	93,8	88,0	90,1	89,7	90,4	88,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,1	95,7	94,2	95,3	90,6	88,3	94,3	96,4	96,2	98,6	92,3	91,5	93,0	95,0	96,0

CQS: 93,5



## COLOR PARAMETERS

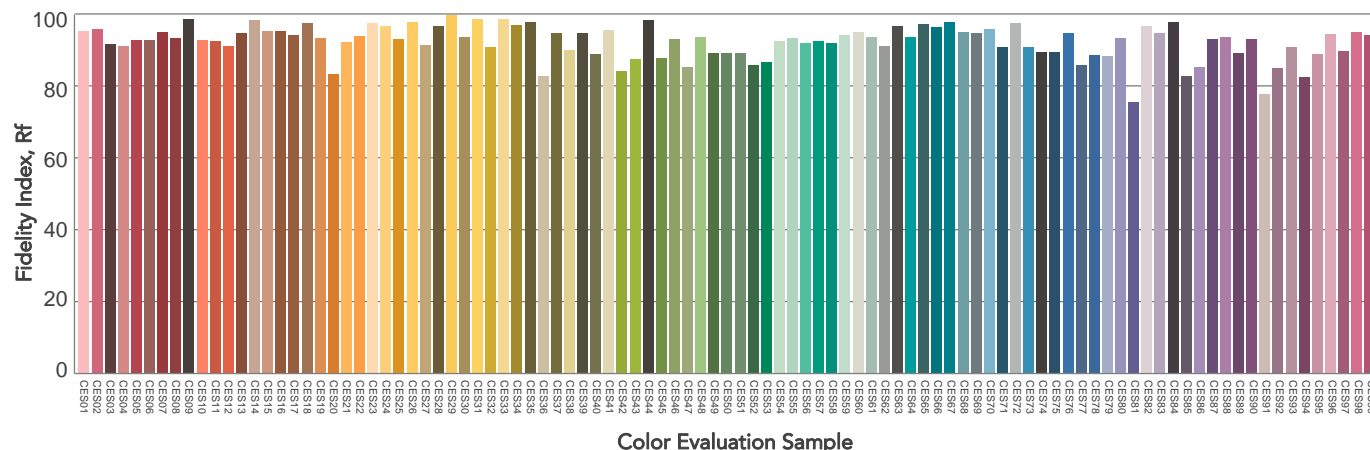
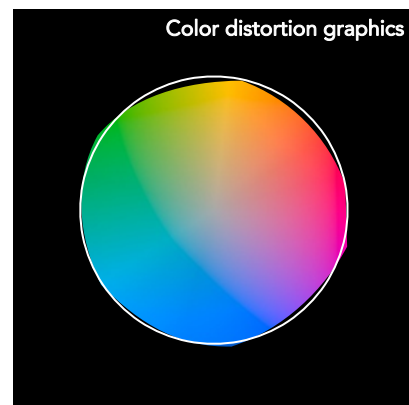
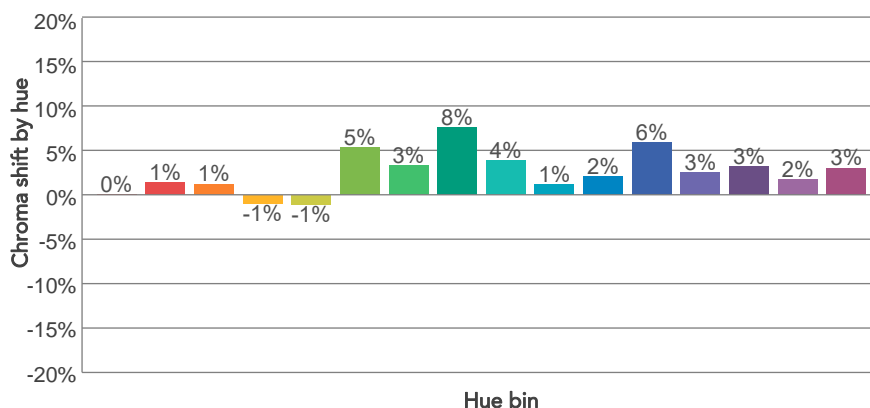
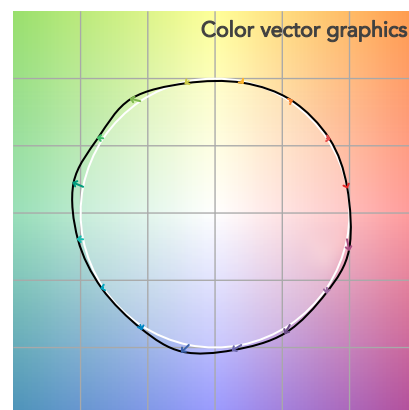
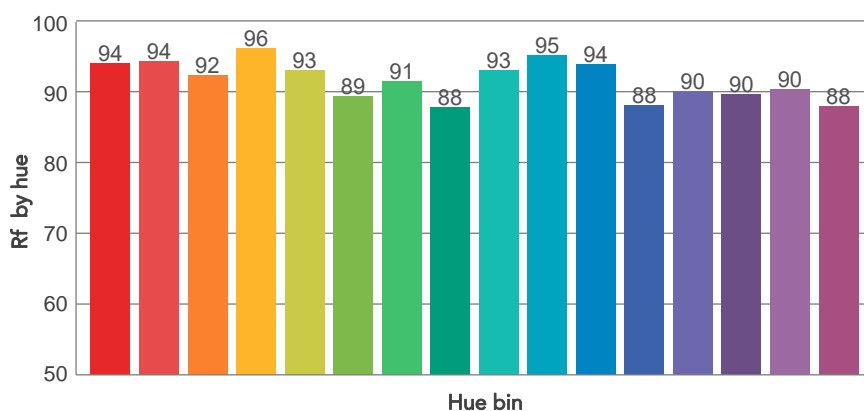
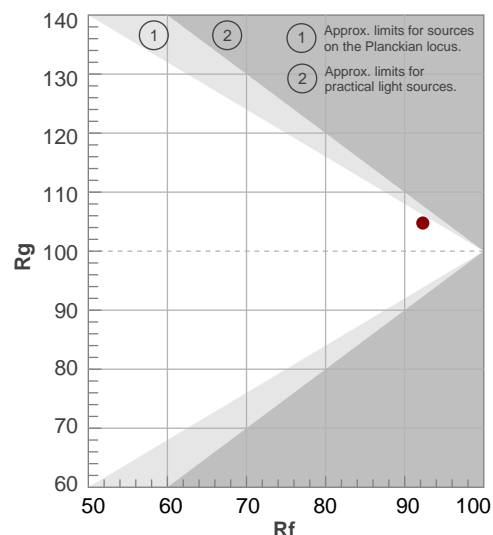
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3274 K	93,6	96,4	92,3	104,8	93,5	85	0,419	0,397	-0,0002

# TM30 DETAILS

**Rf 92,3**  
Fidelity index Rf

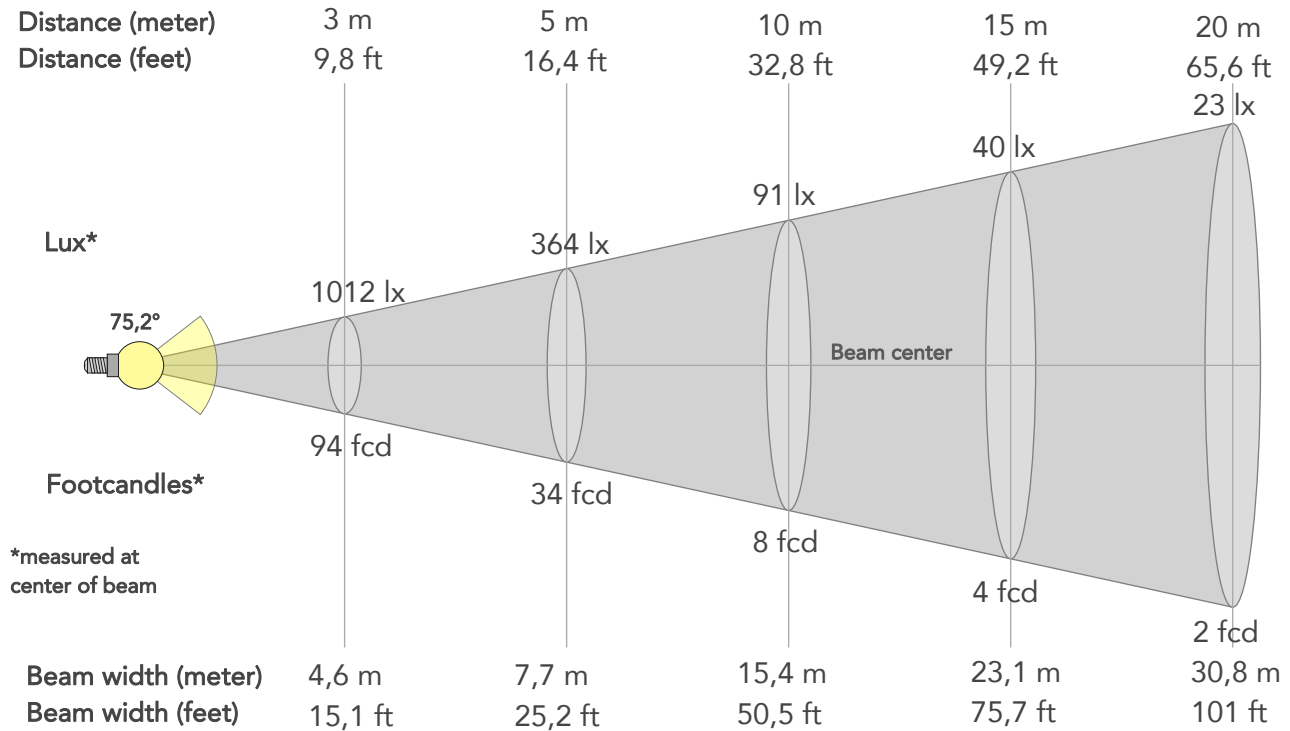
**Rg 104,8**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	0%
2	94	1%	-1%
3	92	1%	-1%
4	96	-1%	-1%
5	93	-1%	3%
6	89	5%	5%
7	91	3%	2%
8	88	8%	-2%
9	93	4%	-1%
10	95	1%	0%
11	94	2%	2%
12	88	6%	-4%
13	90	3%	-7%
14	90	3%	-6%
15	90	2%	-3%
16	88	3%	-7%



## BEAM DETAILS

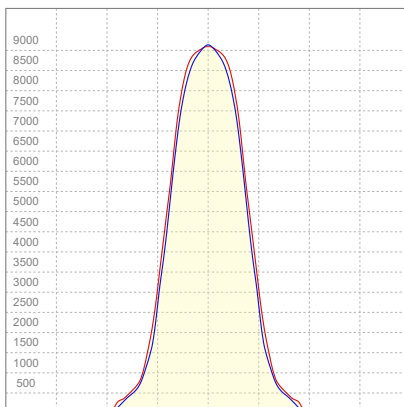
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75,2°	117,2°	159,1°	92,6%	78,1%



### 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	9111lx	2278lx	1012lx	569lx	364lx	162lx	91lx	40lx	23lx	15lx	10lx	6lx	4lx
Footcand.	846fcd	212fcd	94fcd	53fcd	34fcd	15fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	1,5m	3,1m	4,6m	6,2m	7,7m	11,5m	15,4m	23,1m	30,8m	38,5m	46,2m	61,6m	77m
Beam wid.	5,1ft	10,2ft	15,1ft	20,2ft	25,2ft	37,9ft	50,5ft	75,7ft	101ft	126,2ft	151,4ft	201,9ft	252,4ft

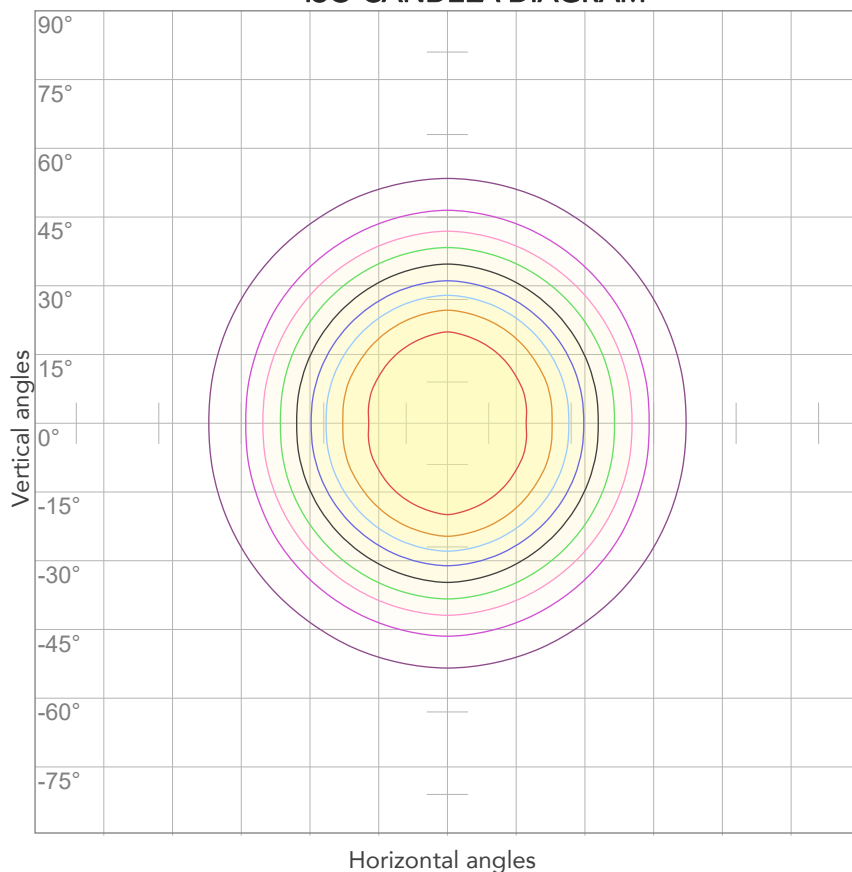
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
221V	1,13A	230,9W	62lm/W

## ISO CANDELA DIAGRAM



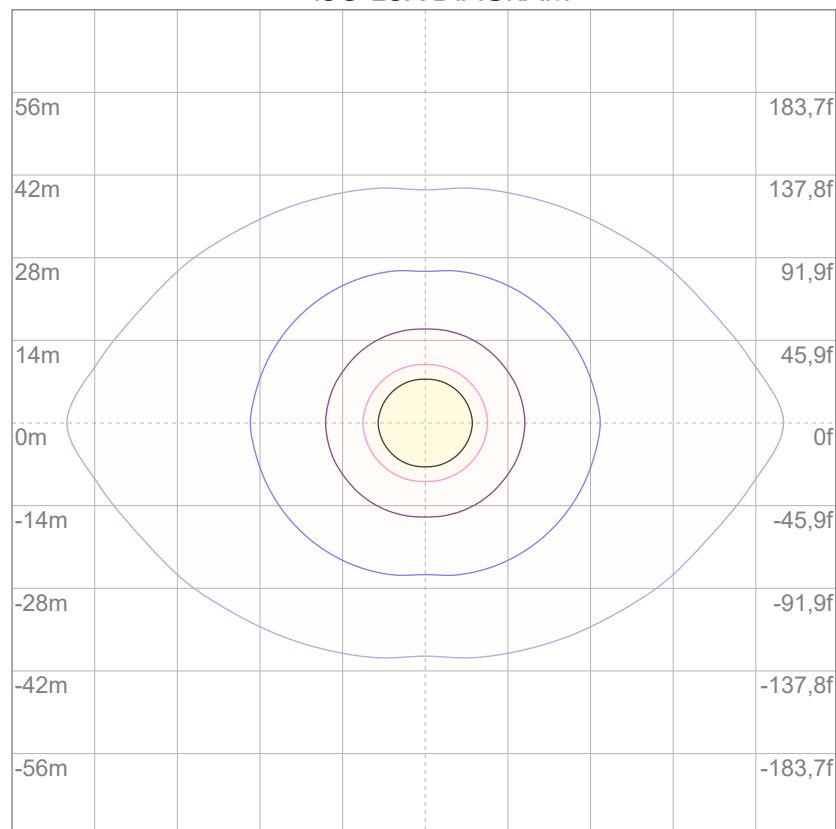
10%	911 cd
20%	1822 cd
30%	2733 cd
40%	3645 cd
50%	4556 cd
60%	5467 cd
70%	6378 cd
80%	7289 cd

### Conditions:

Number of c-planes: 4

Candela at center: 9111 cd

## ISO LUX DIAGRAM



3%	2,73 lx
5%	4,56 lx
10%	9,11 lx
30%	27,3 lx
50%	45,6 lx

### Conditions:

Number of c-planes: 4

Lux at center: 91,1 lx

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





Total lumen output:

13779 lm

Peak candela output:

4827 cd

Light quality:

CRI: 91,0

Color temperature:

4095 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter HD

Target:

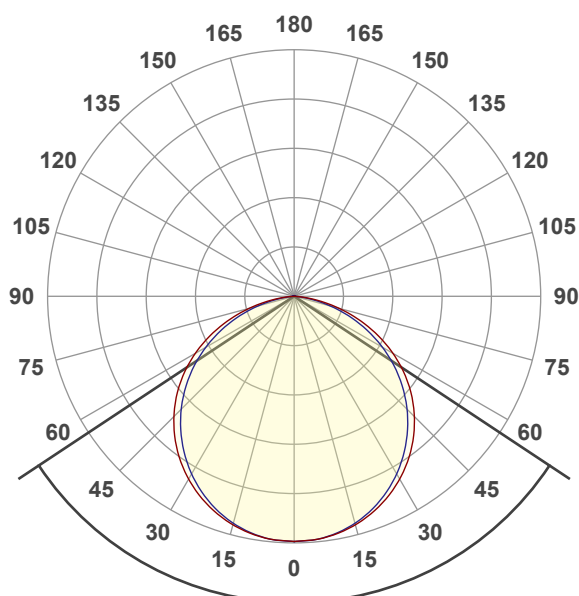
4000K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:25:54

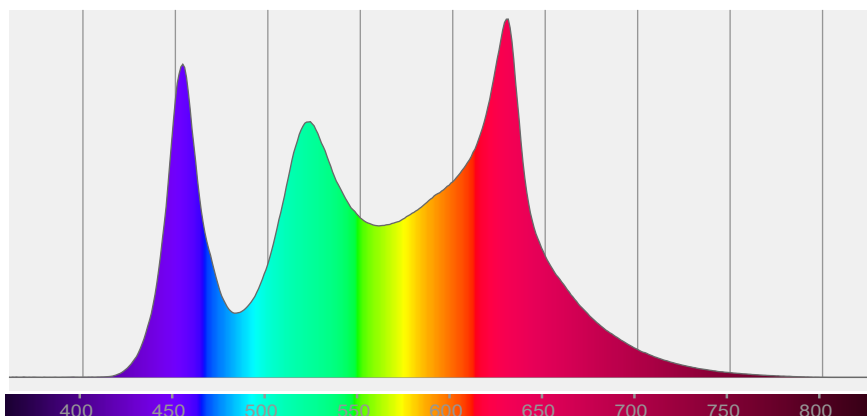


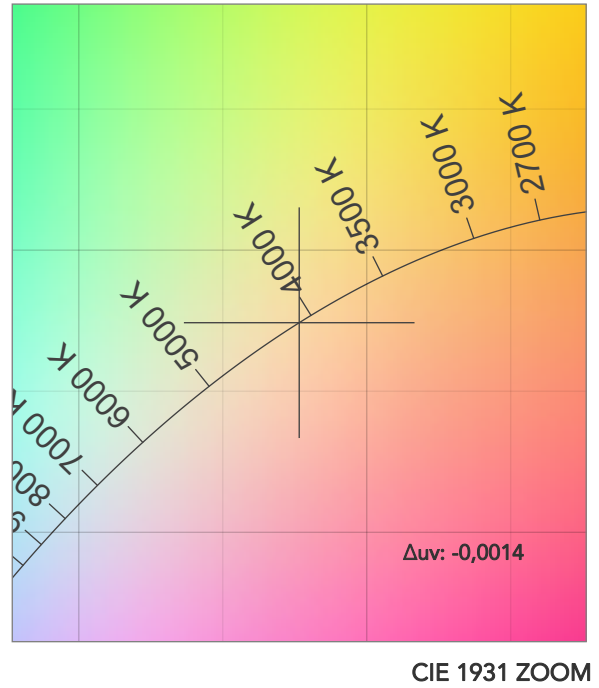
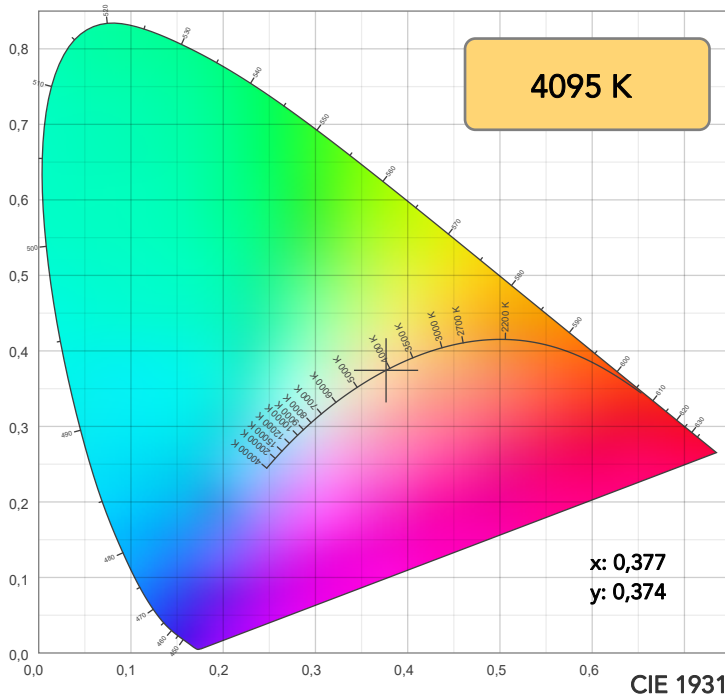
Beam angle 50%: 112,9°

Field angle 10%: 158,3°

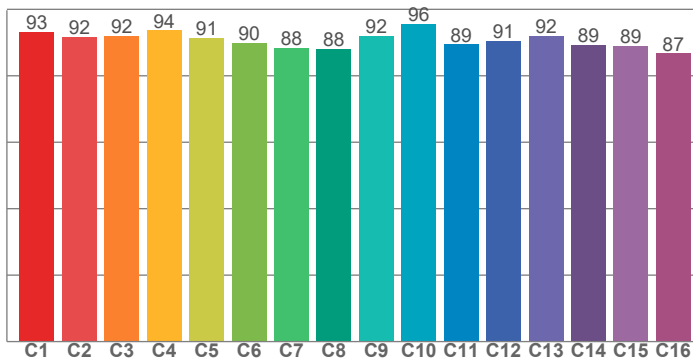
Cut off angle 2.5%: 169°

Spectra

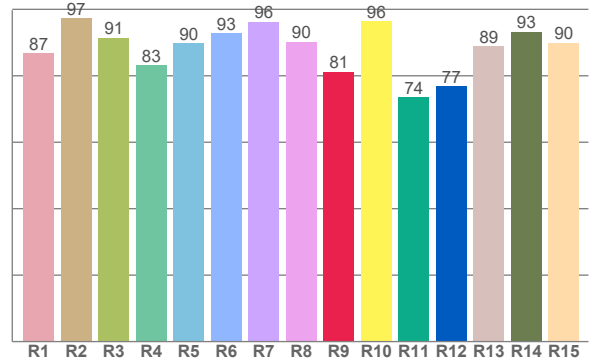




TM30: 91,2



CRI: 91,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
86,8	97,4	91,4	83,2	89,8	92,7	96,2	90,2	81,2	96,3	73,6	76,8	89,0	93,3	89,9

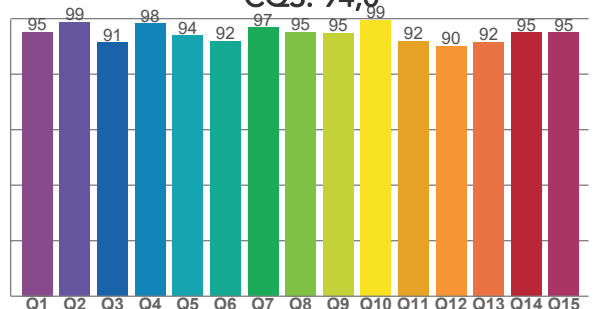
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,3	91,7	92,0	93,7	91,5	90,0	88,4	88,0	92,0	95,6	89,5	90,6	92,0	89,3	89,1	86,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,2	98,7	91,4	98,3	94,0	91,8	96,8	95,2	94,8	99,4	92,0	90,1	91,6	95,0	95,0

CQS: 94,0



## COLOR PARAMETERS

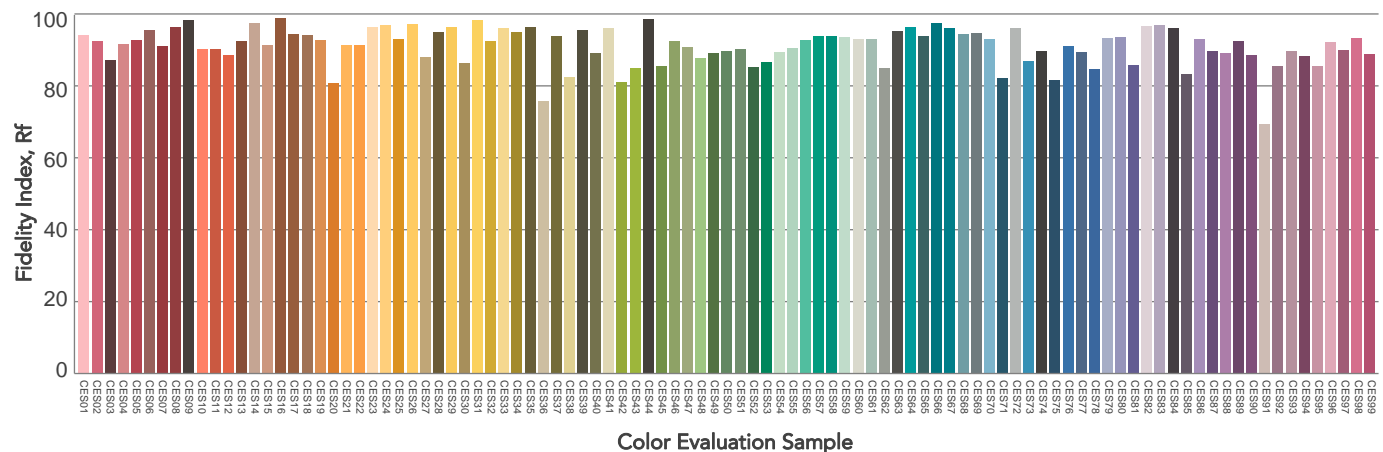
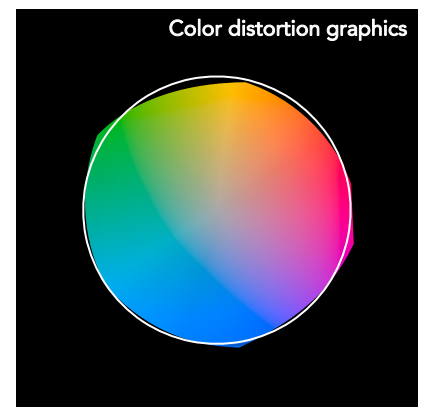
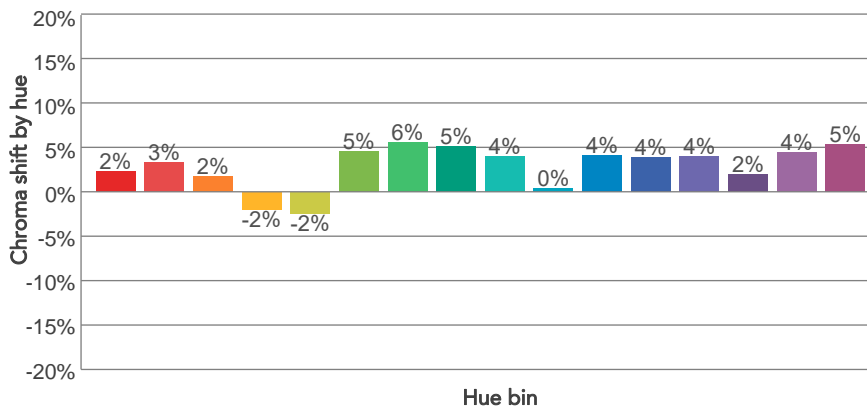
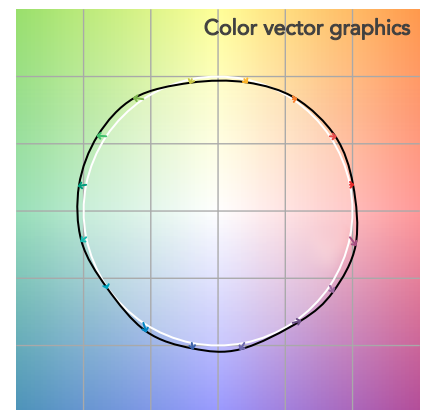
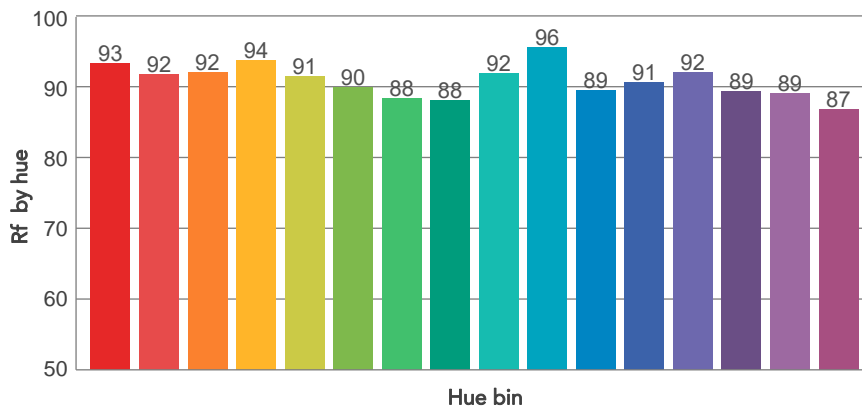
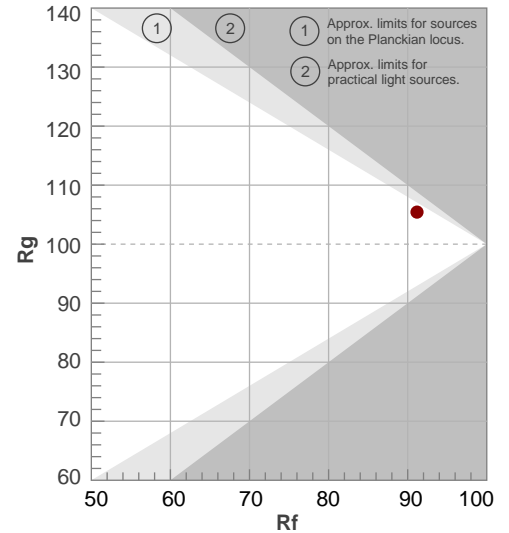
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
4095 K	91,0	81,2	91,2	105,4	94,0	85	0,377	0,374	-0,0014

# TM30 DETAILS

**Rf 91,2**  
Fidelity index Rf

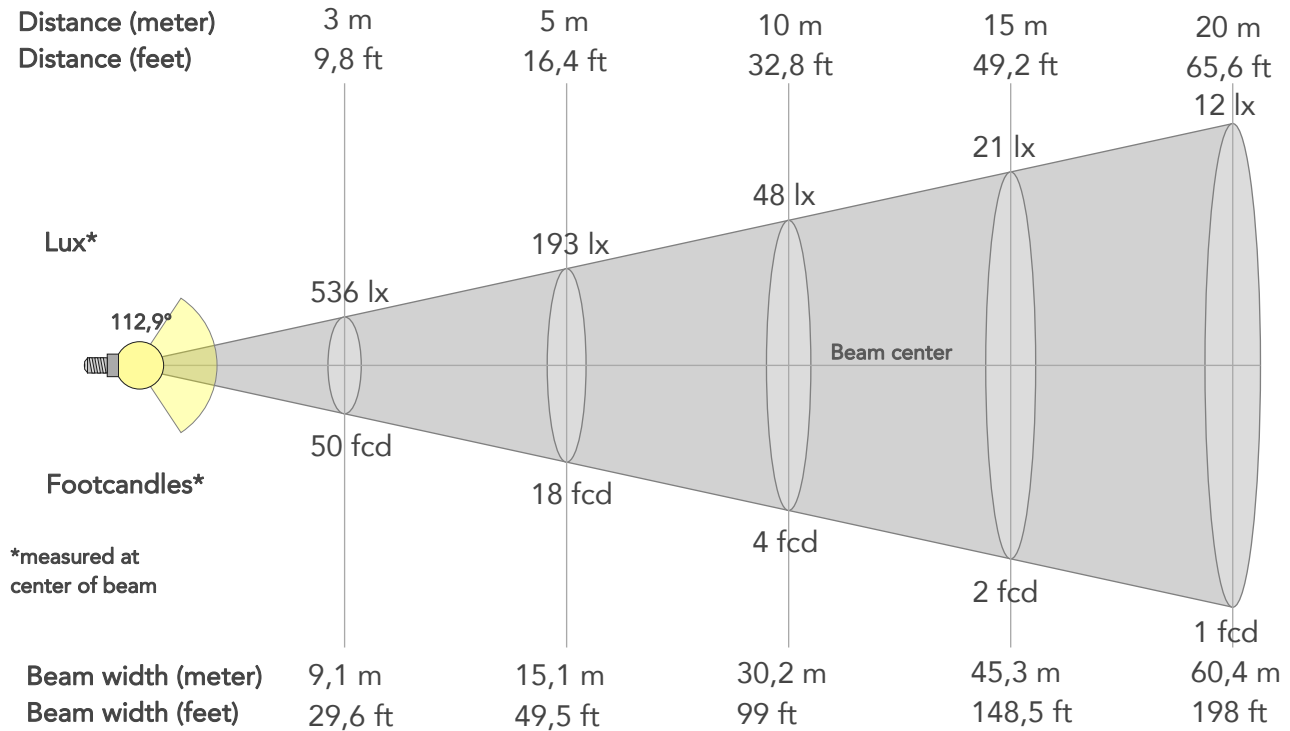
**Rg 105,4**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	2%	0%
2	92	3%	-2%
3	92	2%	-2%
4	94	-2%	-2%
5	91	-2%	2%
6	90	5%	5%
7	88	6%	3%
8	88	5%	2%
9	92	4%	2%
10	96	0%	2%
11	89	4%	5%
12	91	4%	1%
13	92	4%	-4%
14	89	2%	5%
15	89	4%	-2%
16	87	5%	-5%



## BEAM DETAILS

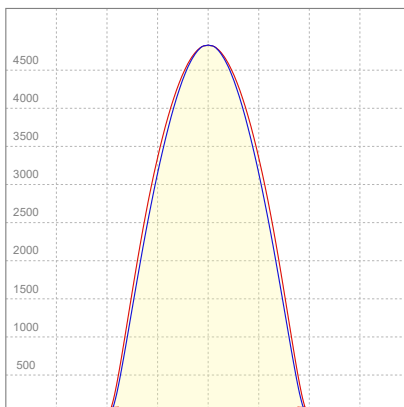
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
112,9°	158,3°	169°	79,2%	53,8%



### 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	4826lx	1207lx	536lx	302lx	193lx	86lx	48lx	21lx	12lx	8lx	5lx	3lx	2lx
Footcand.	448fcd	112fcd	50fcd	28fcd	18fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9,1m	12,1m	15,1m	22,6m	30,2m	45,3m	60,4m	75,5m	90,5m	120,7m	150,9m
Beam wid.	10ft	19,9ft	29,6ft	39,5ft	49,5ft	74,2ft	99ft	148,5ft	198ft	247,5ft	297ft	396ft	495ft

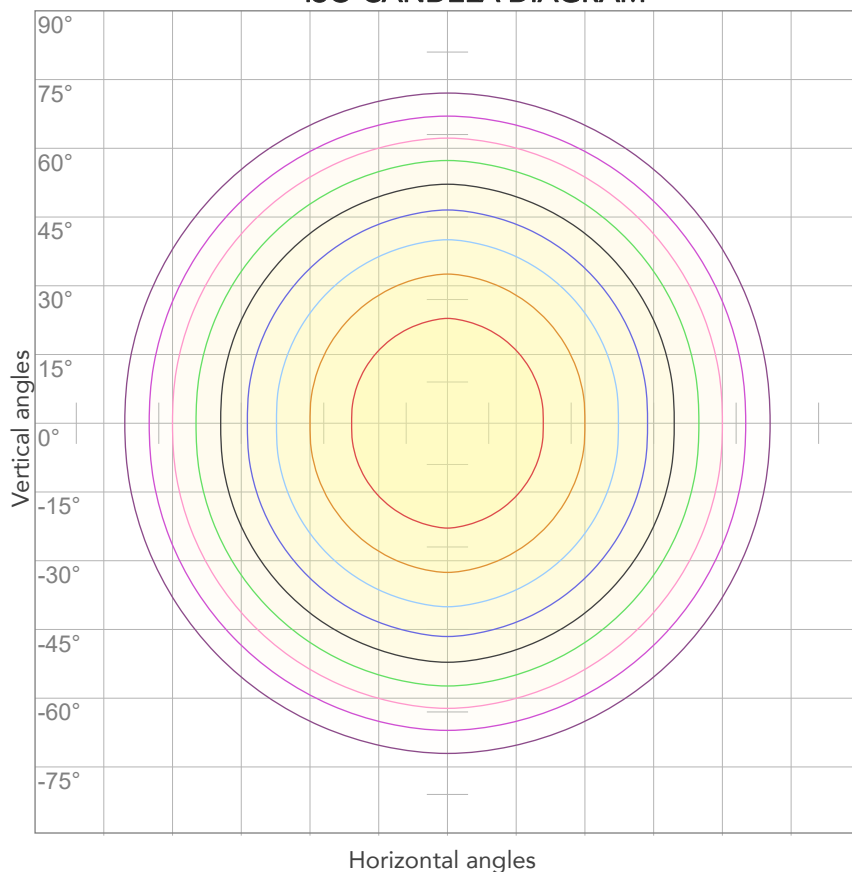
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	1,14A	236,8W	58lm/W

## ISO CANDELA DIAGRAM



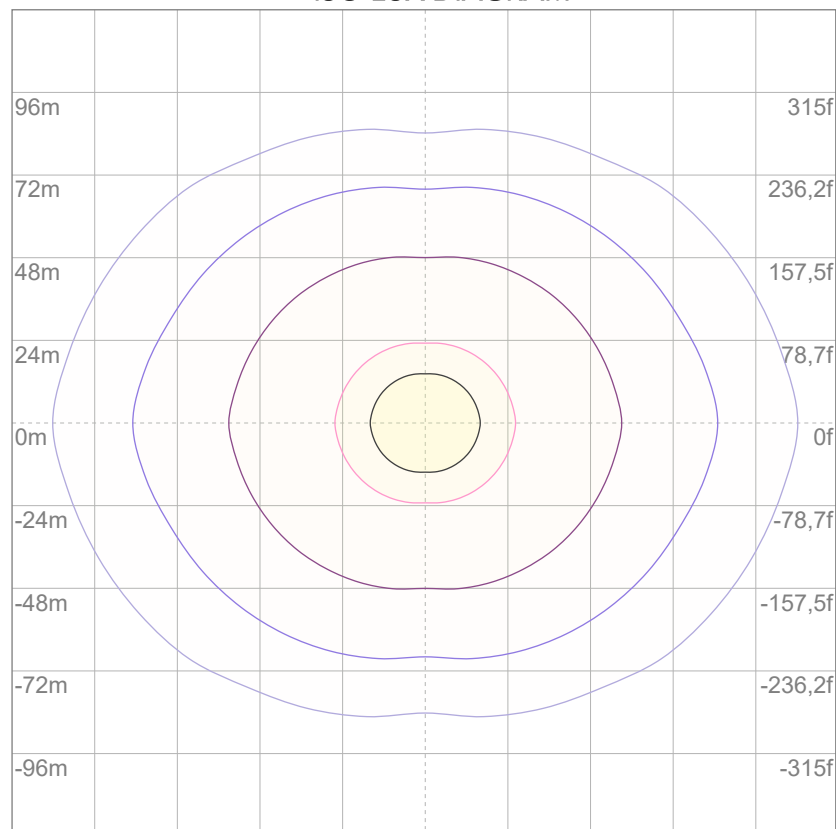
10%	483 cd
20%	965 cd
30%	1448 cd
40%	1930 cd
50%	2413 cd
60%	2896 cd
70%	3378 cd
80%	3861 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4826 cd

## ISO LUX DIAGRAM



3%	1,45 lx
5%	2,41 lx
10%	4,83 lx
30%	14,5 lx
50%	24,1 lx

### Conditions:

Number of c-planes: 4

Lux at center: 48,3 lx

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



Total lumen output:

16168 lm

Peak candela output:

6383 cd

Light quality:

CRI: 93,4

Color temperature:

4025 K

**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter MD

Target:

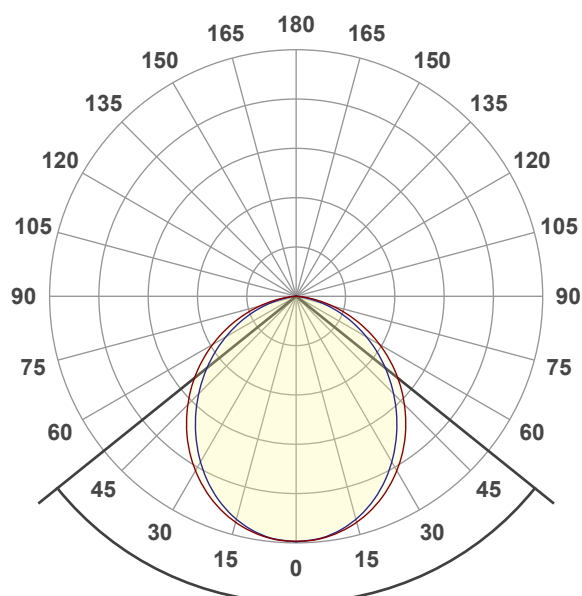
4000K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 16:51:30

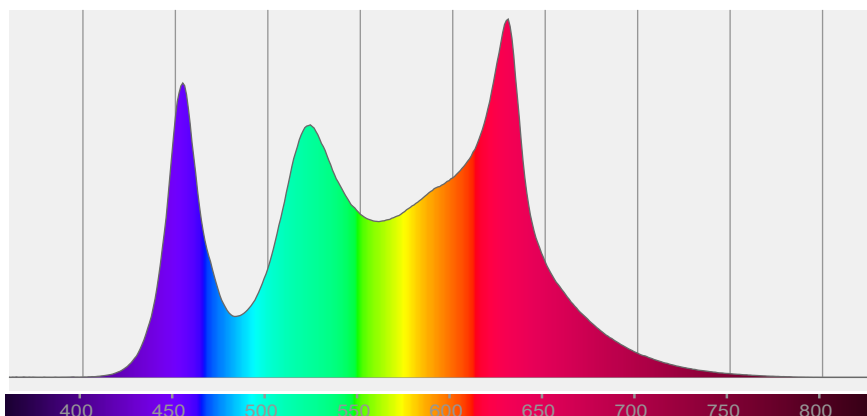


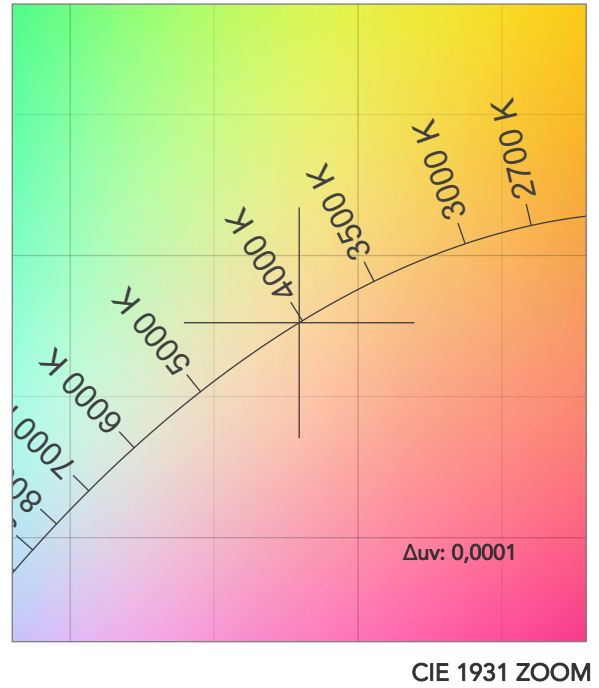
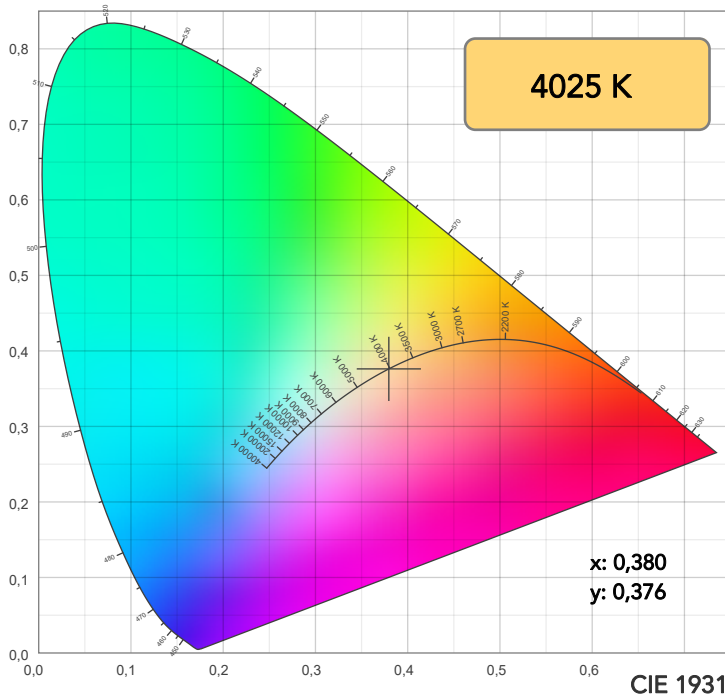
Beam angle 50%: 102,4°

Field angle 10%: 154,6°

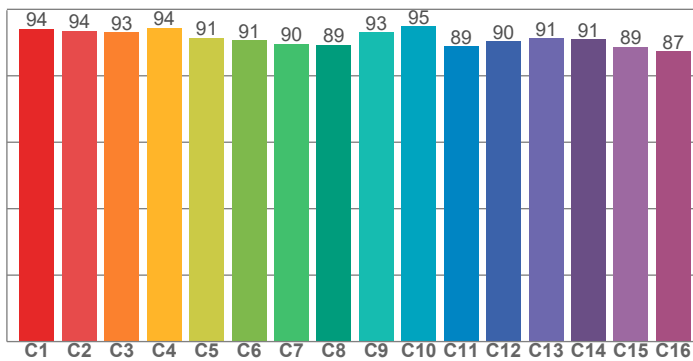
Cut off angle 2.5%: 167,3°

**Spectra**

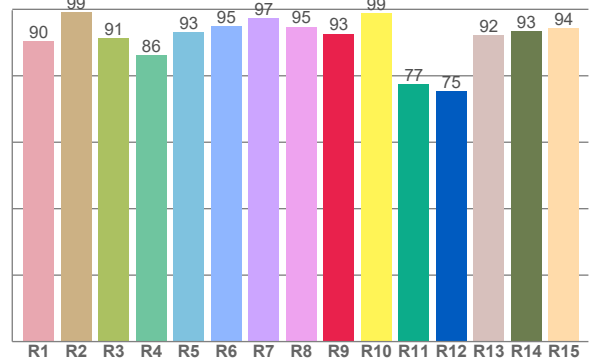




**TM30: 91,6**



**CRI: 93,4 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
90,3	99,2	91,3	86,2	93,1	94,9	97,3	94,7	92,6	98,9	77,4	75,4	92,2	93,3	94,2

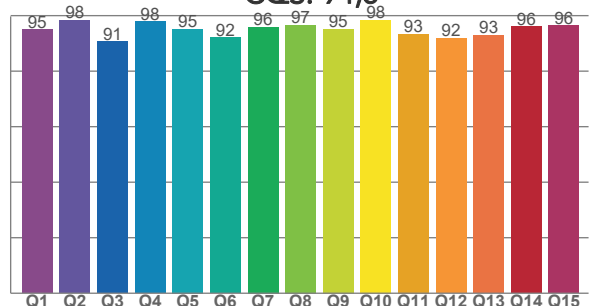
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,2	93,5	93,1	94,4	91,4	90,6	89,6	89,4	93,1	94,8	88,8	90,3	91,3	91,0	88,8	87,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,0	98,3	90,6	97,8	95,2	92,1	95,9	96,6	95,2	98,5	93,4	91,8	92,9	96,0	96,5

**CQS: 94,5**

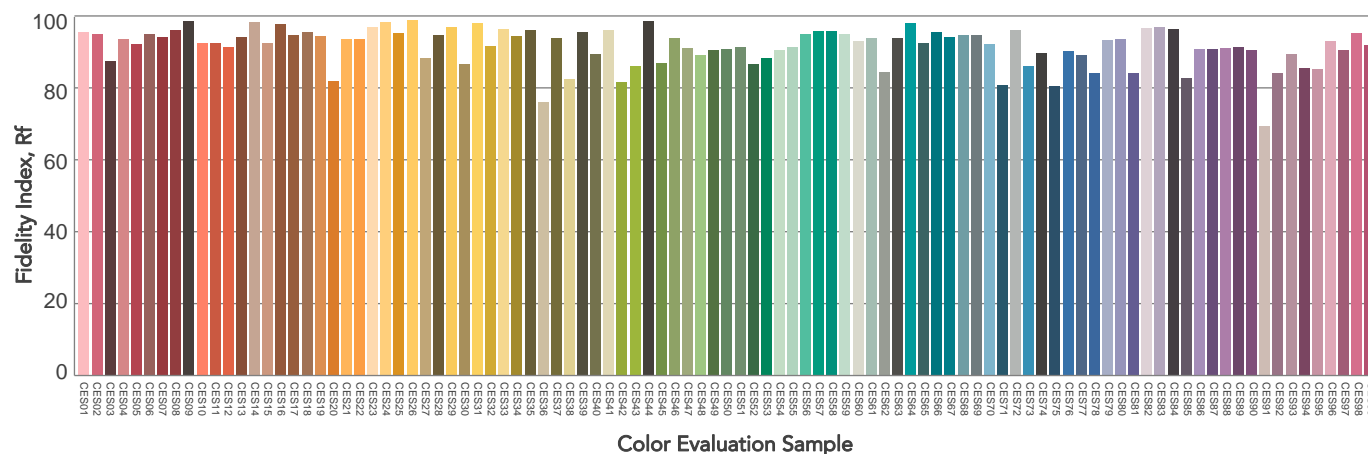
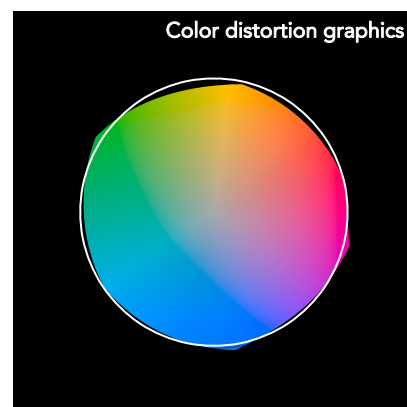
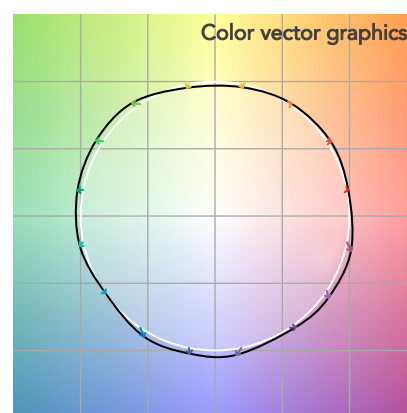
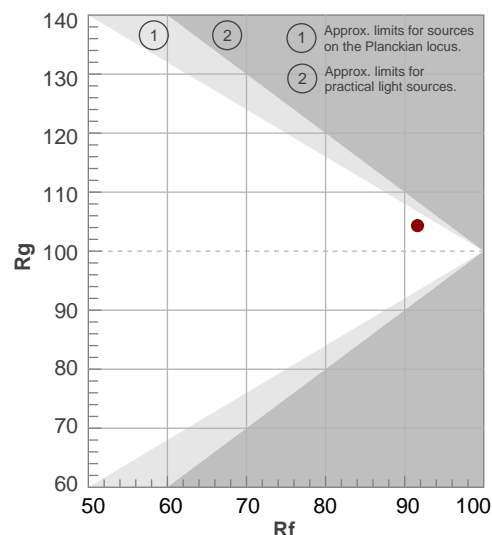


## COLOR PARAMETERS

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	$\Delta uv$
4025 K	93,4	92,6	91,6	104,3	94,5	86	0,380	0,376	0,0001

## Gammut index

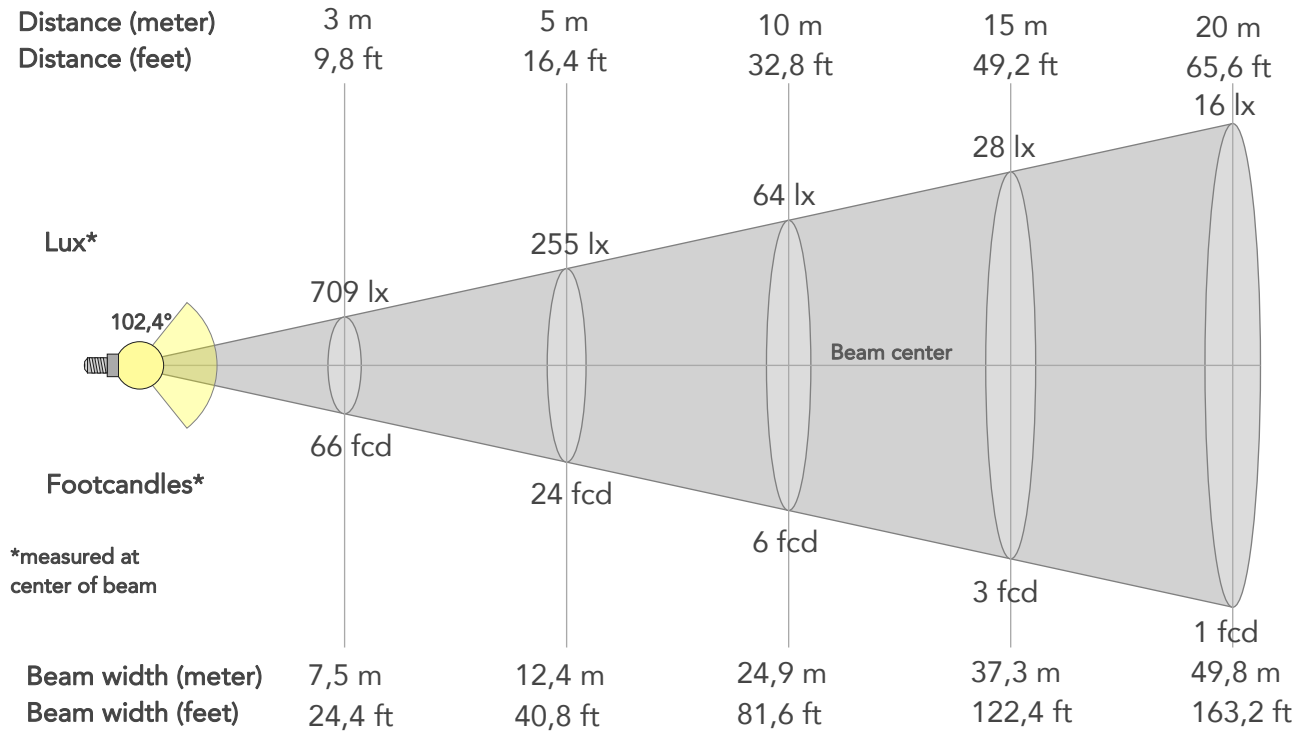
		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	94	1%	0%
2	94	2%	-2%
3	93	1%	-1%
4	94	-2%	-2%
5	91	-2%	2%
6	91	4%	5%
7	90	5%	3%
8	89	4%	2%
9	93	3%	2%
10	95	0%	3%
11	89	4%	6%
12	90	4%	2%
13	91	4%	-4%
14	91	2%	4%
15	89	4%	-4%
16	87	4%	-6%





## BEAM DETAILS

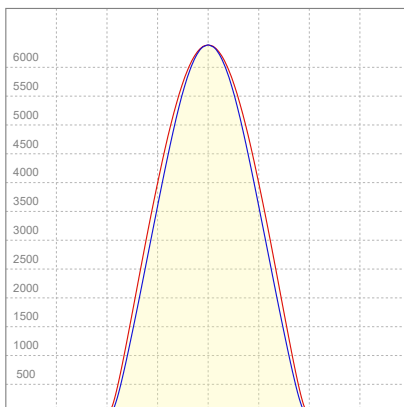
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,4°	154,6°	167,3°	81,7%	57,3%



### 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	6379lx	1595lx	709lx	399lx	255lx	113lx	64lx	28lx	16lx	10lx	7lx	4lx	3lx
Footcand.	593fcd	148fcd	66fcd	37fcd	24fcd	11fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,5m	10m	12,4m	18,7m	24,9m	37,3m	49,8m	62,2m	74,6m	99,5m	124,4m
Beam wid.	8,2ft	16,4ft	24,4ft	32,6ft	40,8ft	61,2ft	81,6ft	122,4ft	163,2ft	204ft	244,8ft	326,4ft	408ft

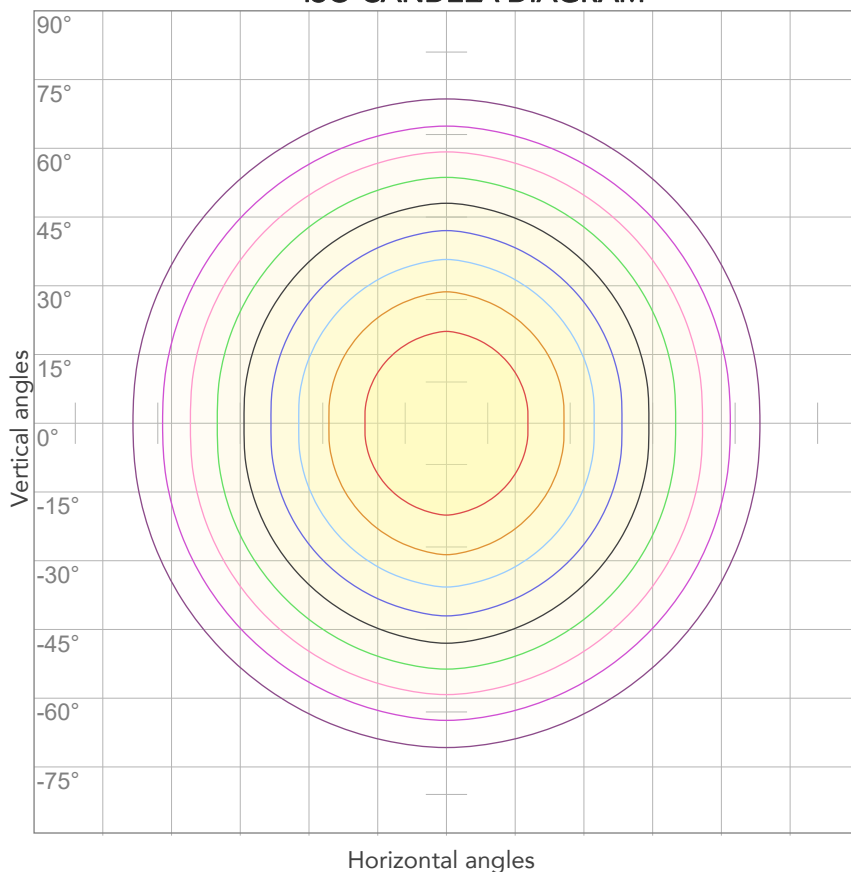
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
221V	1,15A	236W	69lm/W

## ISO CANDELA DIAGRAM



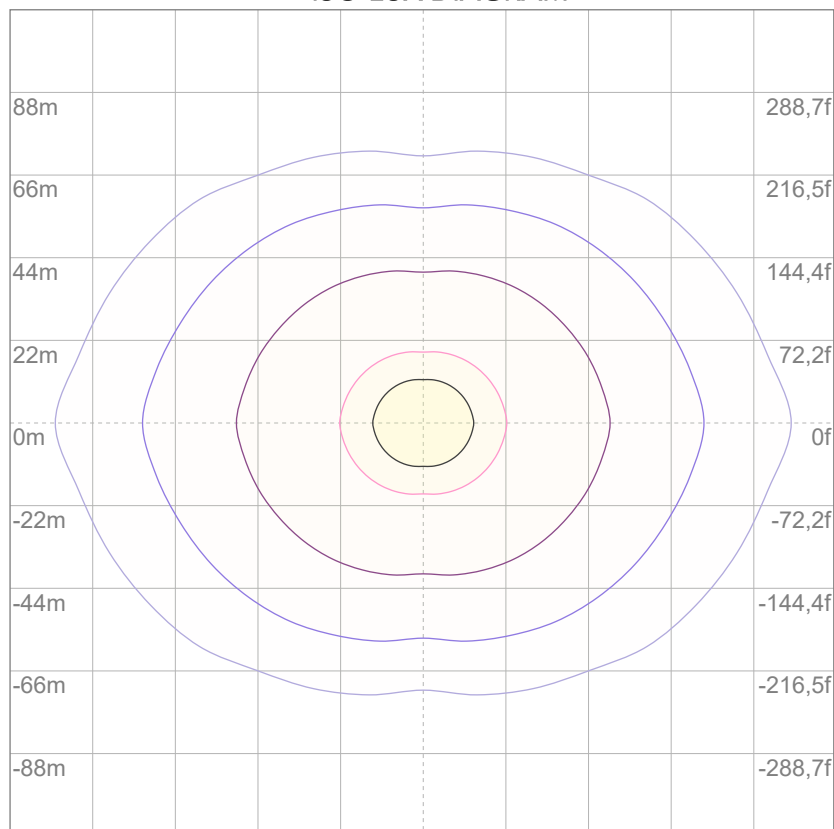
10%	638 cd
20%	1276 cd
30%	1914 cd
40%	2551 cd
50%	3189 cd
60%	3827 cd
70%	4465 cd
80%	5103 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6379 cd

## ISO LUX DIAGRAM



3%	1,91 lx
5%	3,19 lx
10%	6,38 lx
30%	19,1 lx
50%	31,9 lx

### Conditions:

Number of c-planes: 4

Lux at center: 63,8 lx

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



Total lumen output:

16975 lm

Peak candela output:

6817 cd

Light quality:

CRI: 93,4

Color temperature:

4101 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter LD

Target:

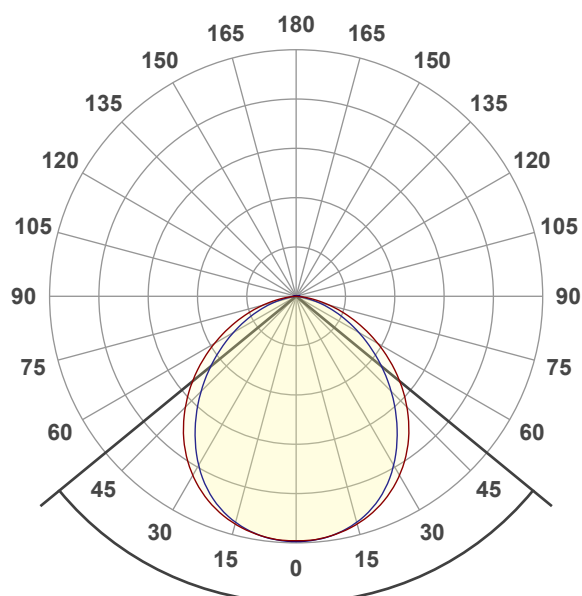
4000K HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:11:59

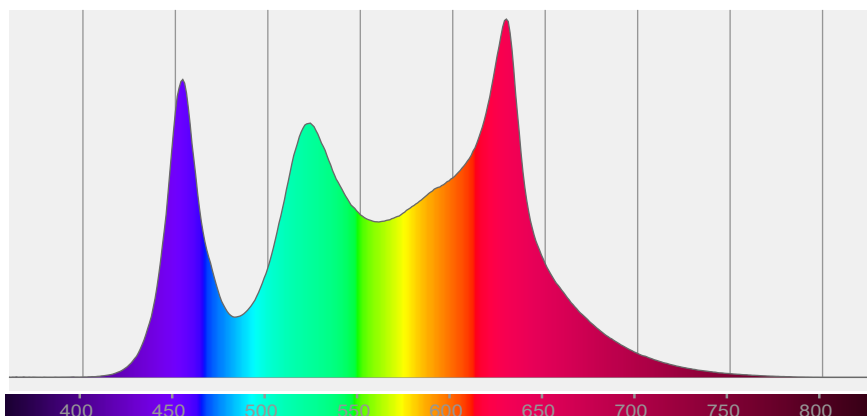


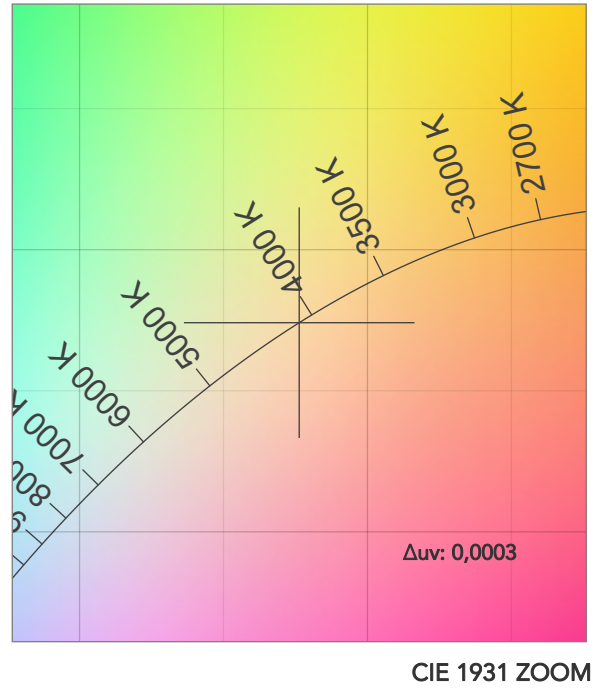
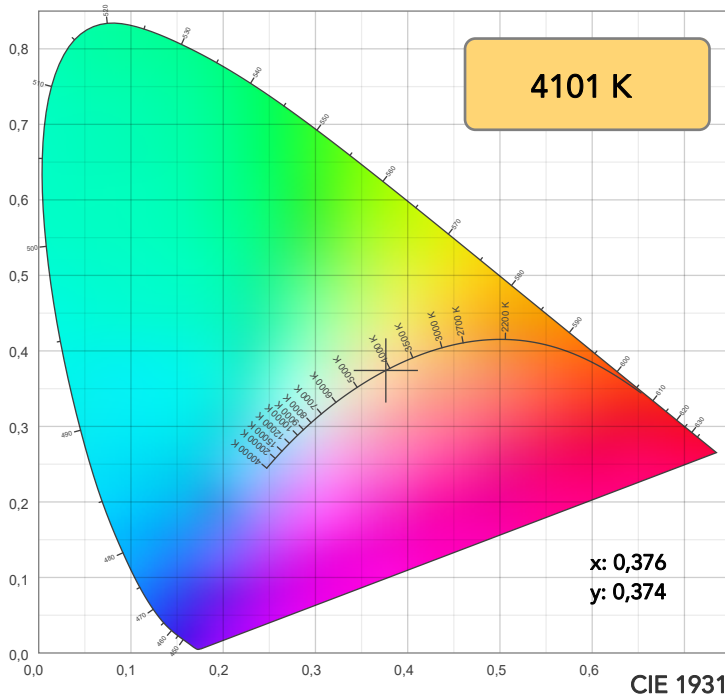
Beam angle 50%: 101,3°

Field angle 10%: 152°

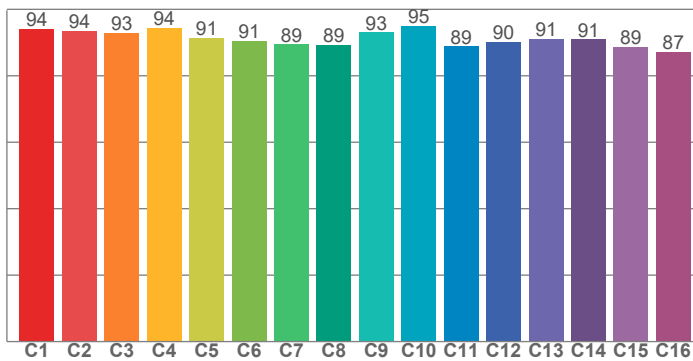
Cut off angle 2.5%: 165,9°

Spectra

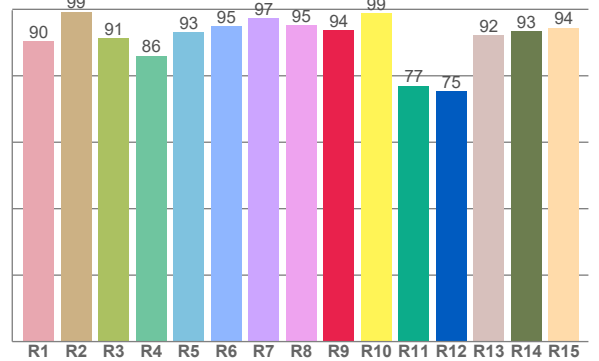




TM30: 91,6



CRI: 93,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
90,3	99,3	91,4	86,0	93,1	94,8	97,4	95,2	93,8	98,8	77,0	75,3	92,2	93,4	94,4

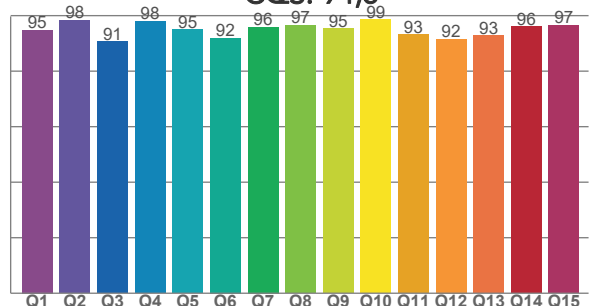
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,1	93,5	93,0	94,5	91,4	90,5	89,5	89,3	93,0	94,9	88,8	90,2	91,1	91,0	88,7	87,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,9	98,3	90,7	97,9	94,9	91,9	95,9	96,5	95,3	98,6	93,2	91,7	92,9	96,0	96,5

CQS: 94,5



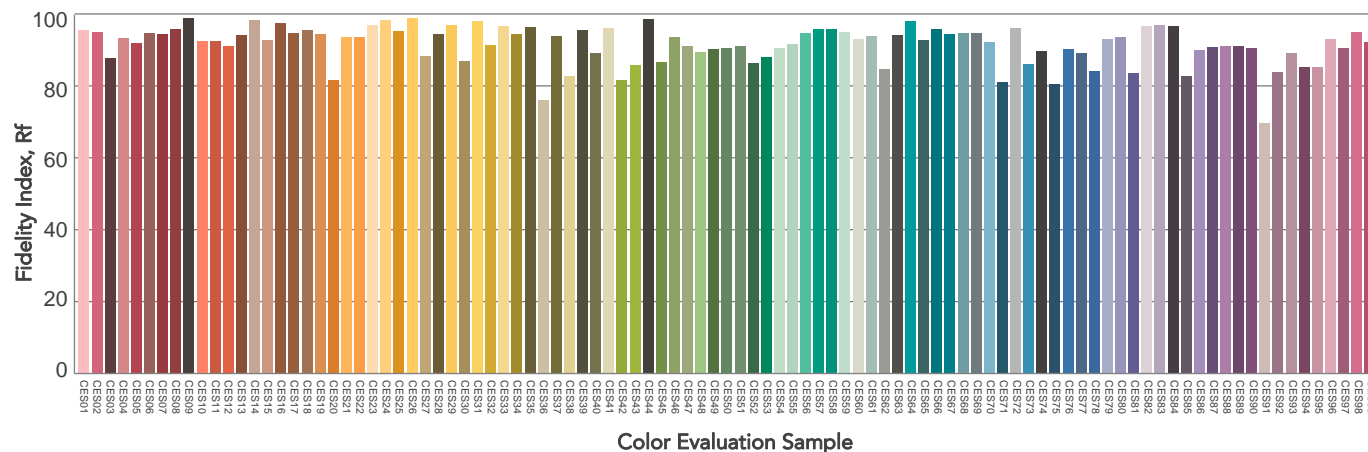
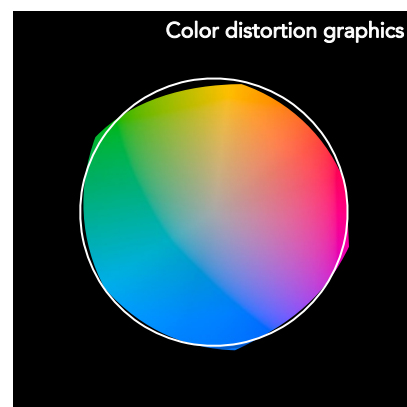
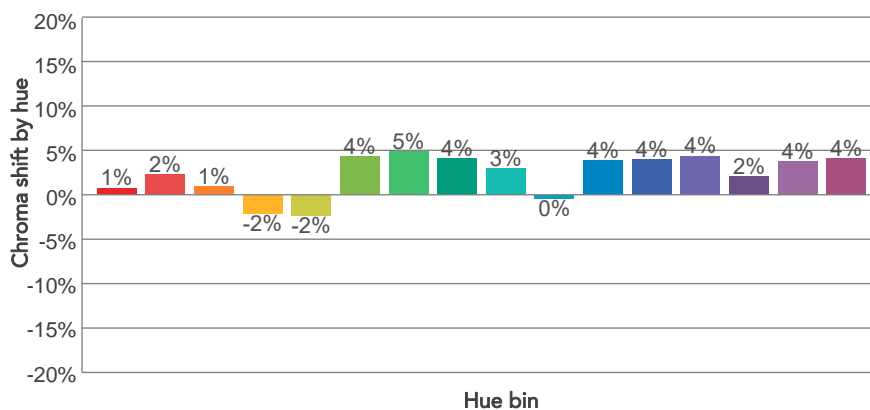
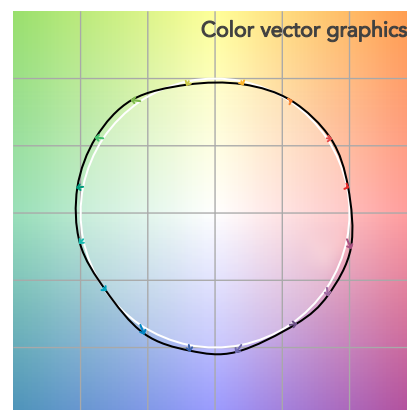
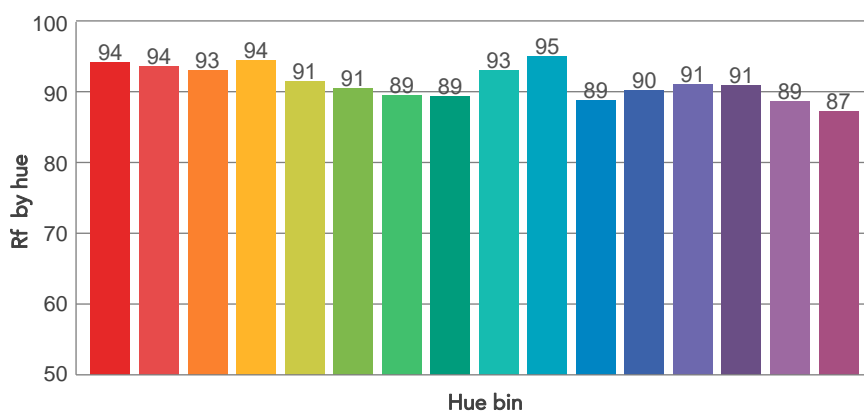
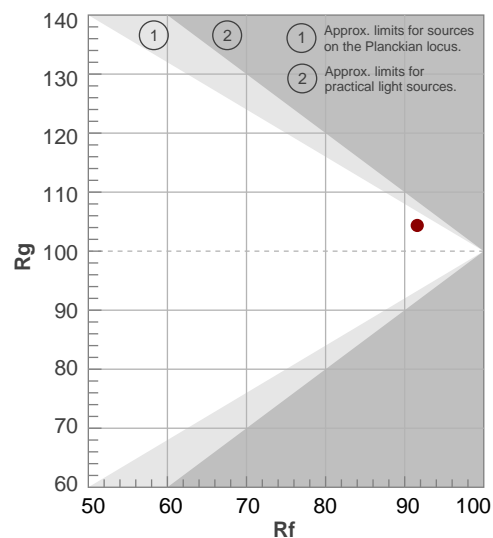
## COLOR PARAMETERS

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	$\Delta uv$
4101 K	93,4	93,8	91,6	104,4	94,5	86	0,376	0,374	0,0003

Fidelity index  $R_f$

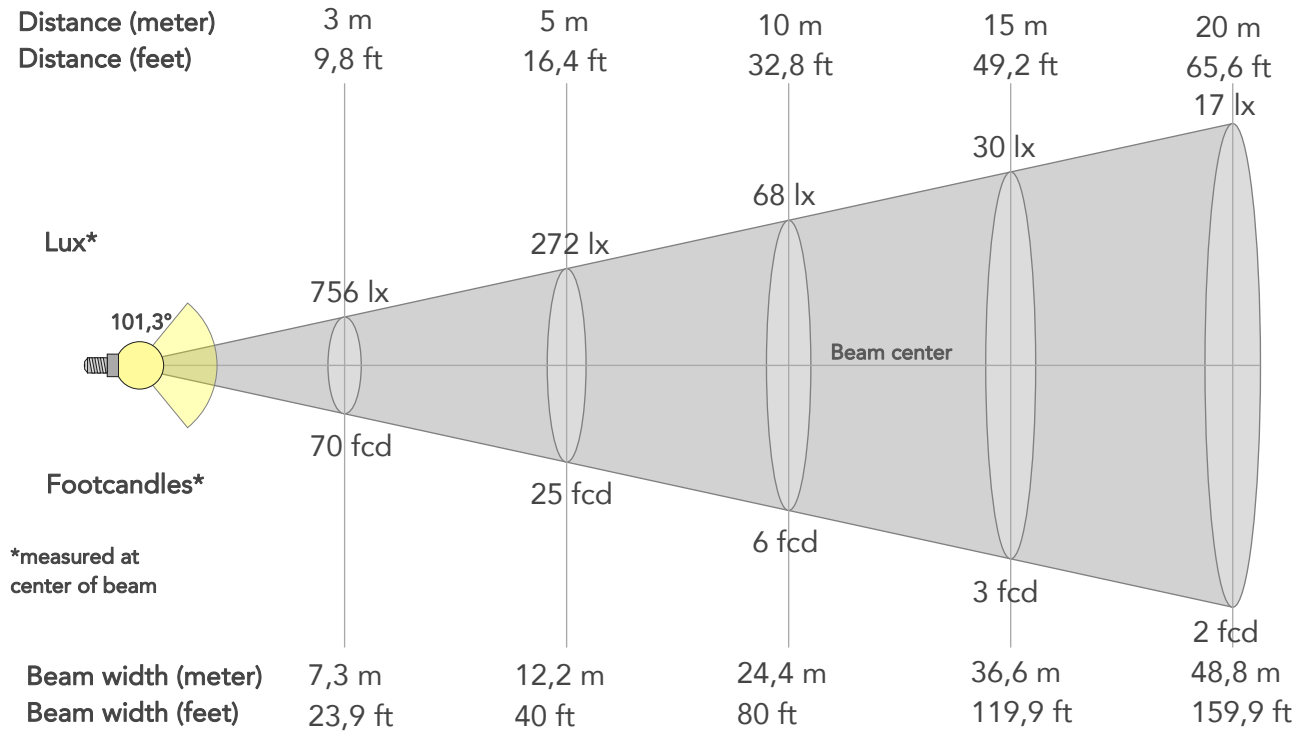
## Gammut index

		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	94	1%	-1%
2	94	2%	-2%
3	93	1%	-1%
4	94	-2%	-2%
5	91	-2%	2%
6	91	4%	5%
7	89	5%	3%
8	89	4%	1%
9	93	3%	2%
10	95	0%	2%
11	89	4%	6%
12	90	4%	2%
13	91	4%	-5%
14	91	2%	4%
15	89	4%	-4%
16	87	4%	-6%



## BEAM DETAILS

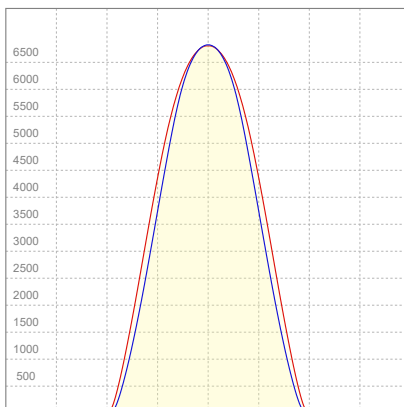
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
101,3°	152°	165,9°	83,4%	59,2%



### 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	6807lx	1702lx	756lx	425lx	272lx	121lx	68lx	30lx	17lx	11lx	8lx	4lx	3lx
Footcand.	632fcd	158fcd	70fcd	40fcd	25fcd	11fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,4m	4,9m	7,3m	9,8m	12,2m	18,3m	24,4m	36,6m	48,8m	60,9m	73,1m	97,5m	121,9m
Beam wid.	8ft	16,1ft	23,9ft	31,9ft	40ft	60ft	80ft	119,9ft	159,9ft	199,9ft	239,9ft	319,8ft	399,8ft

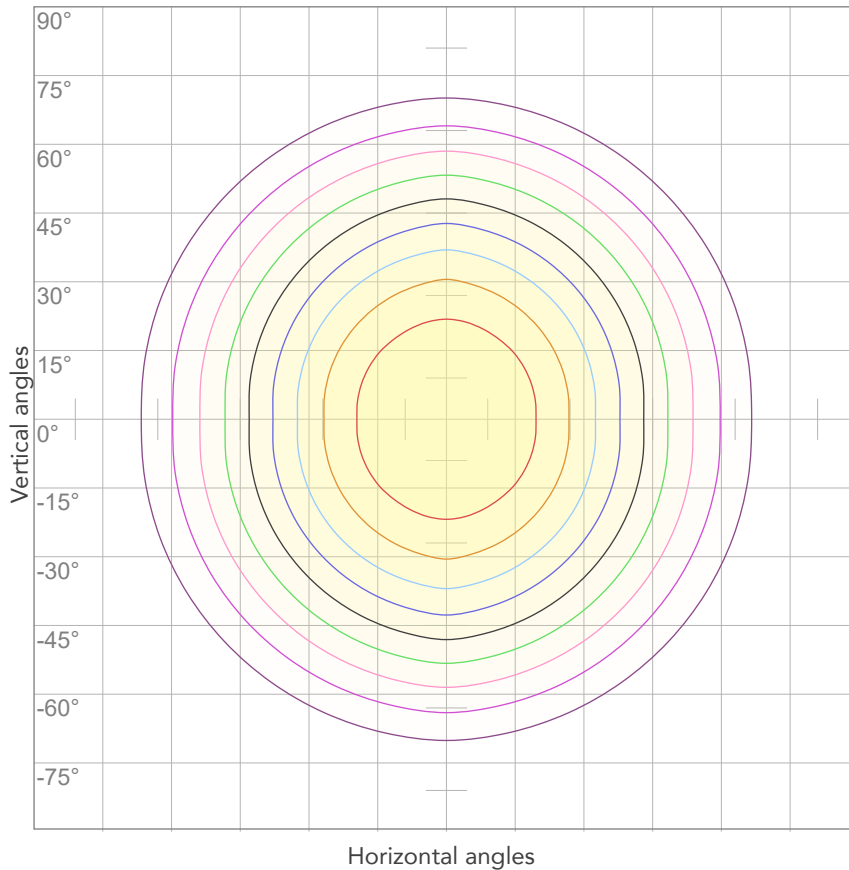
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,15A	237,3W	72lm/W

## ISO CANDELA DIAGRAM



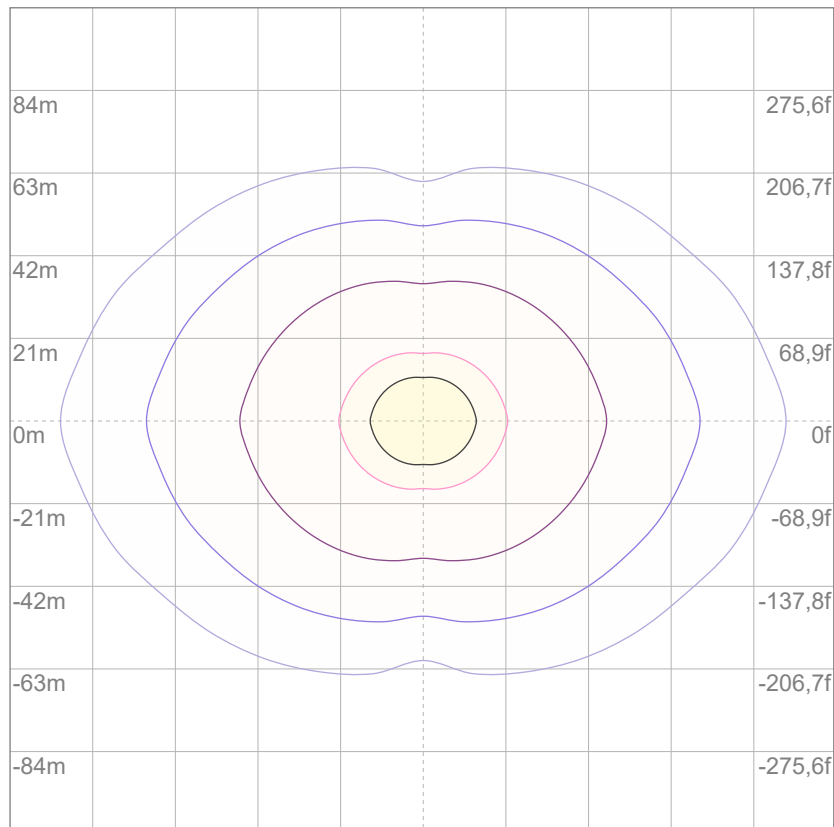
10%	681 cd
20%	1361 cd
30%	2042 cd
40%	2723 cd
50%	3404 cd
60%	4084 cd
70%	4765 cd
80%	5446 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6807 cd

## ISO LUX DIAGRAM



3%	2,04 lx
5%	3,40 lx
10%	6,81 lx
30%	20,4 lx
50%	34,0 lx

### Conditions:

Number of c-planes: 4

Lux at center: 68,1 lx

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



Total lumen output:

14313 lm

Peak candela output:

9049 cd

Light quality:

CRI: 93,4

Color temperature:

4080 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter INT

Target:

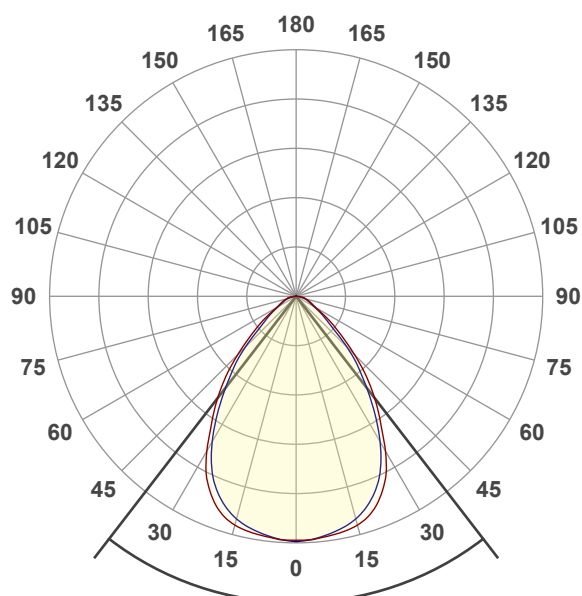
4000K HQ

Operator:

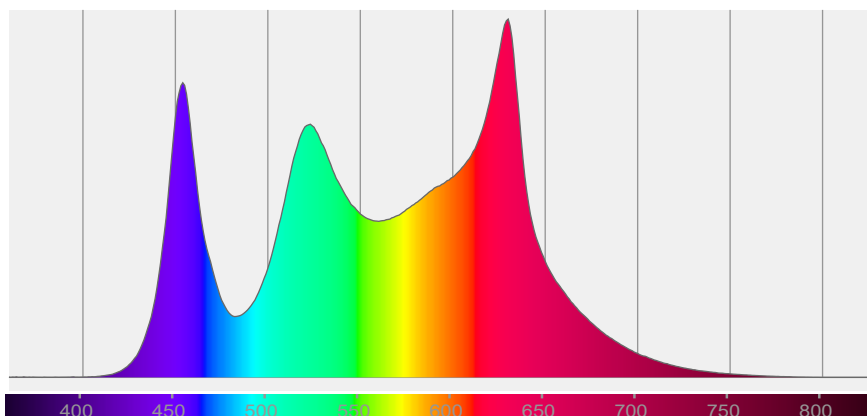
Paolo Carvone

Date and time:

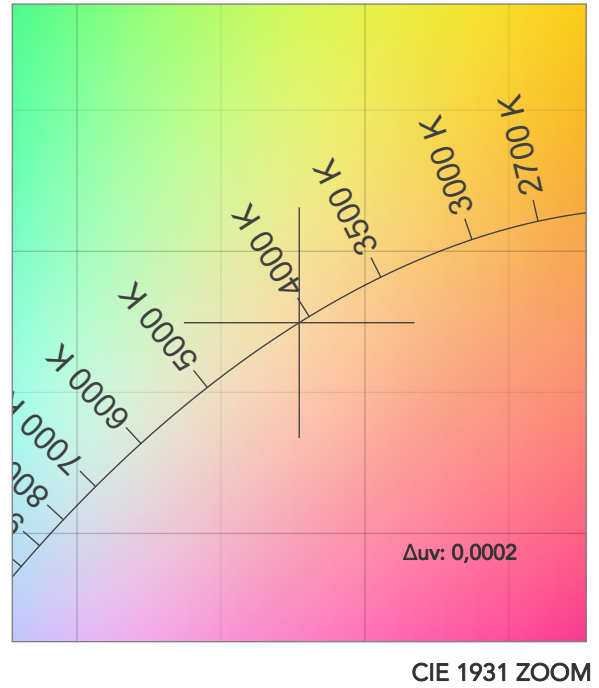
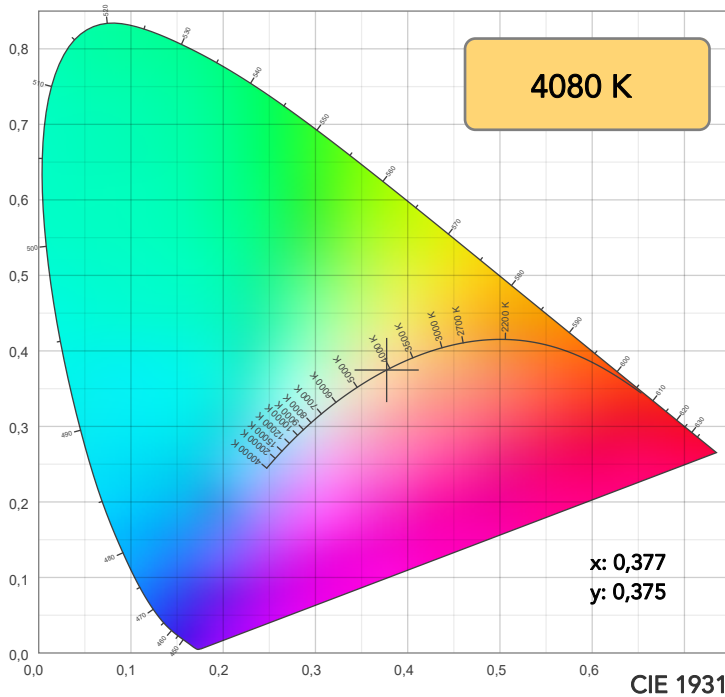
10/01/2022 17:56:06



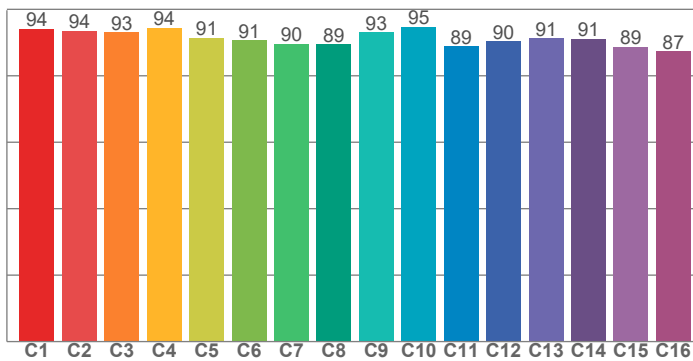
Spectra



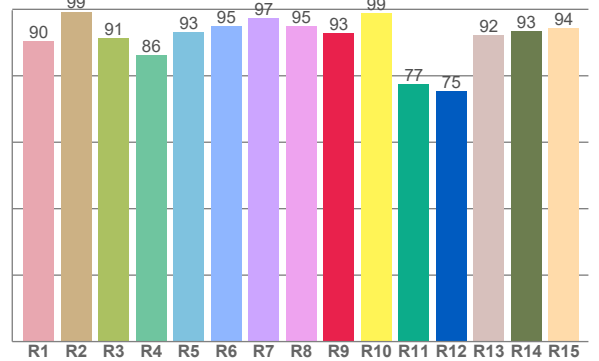




TM30: 91,6



CRI: 93,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
90,4	99,3	91,3	86,3	93,1	94,9	97,3	94,8	92,9	98,8	77,4	75,4	92,3	93,3	94,3

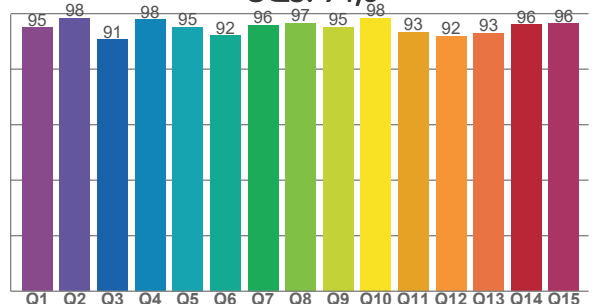
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,2	93,5	93,1	94,4	91,4	90,7	89,6	89,4	93,1	94,8	88,8	90,3	91,3	91,0	88,8	87,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,0	98,3	90,6	97,8	95,2	92,1	95,9	96,6	95,2	98,5	93,4	91,8	92,9	96,1	96,5

CQS: 94,5



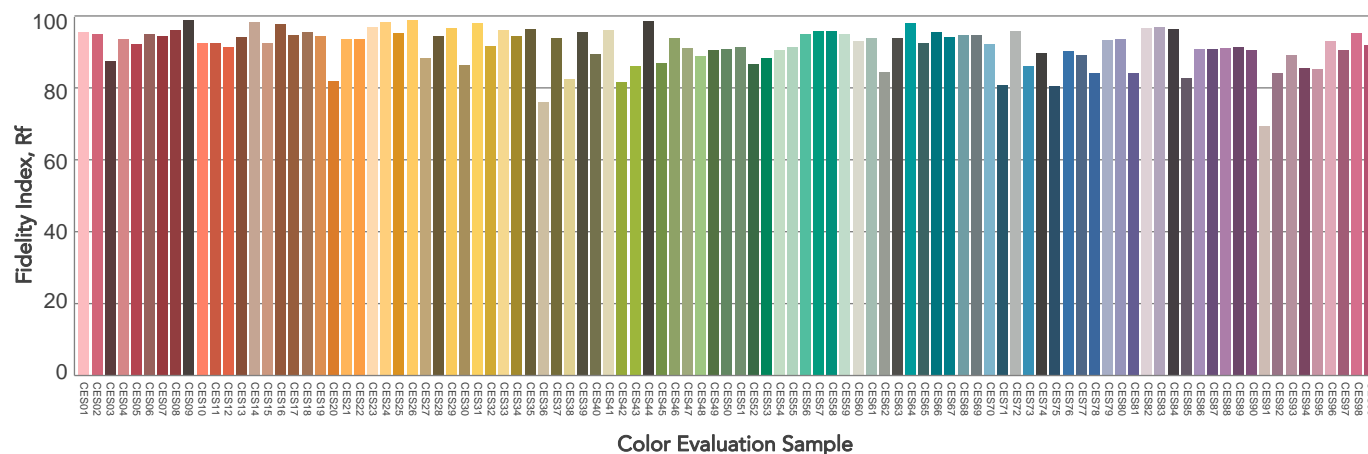
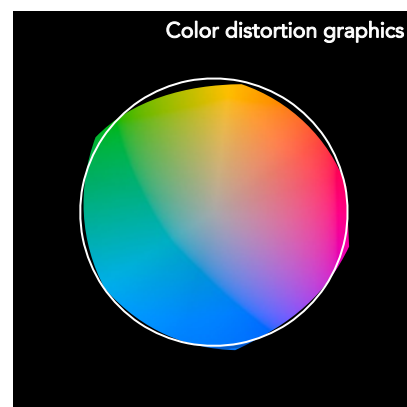
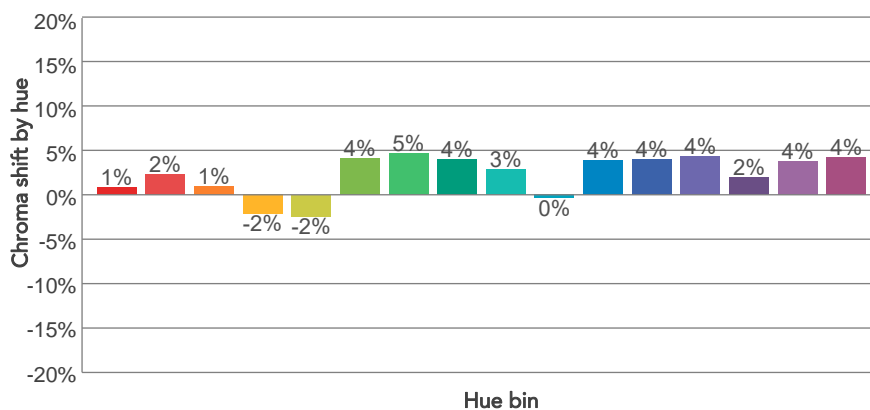
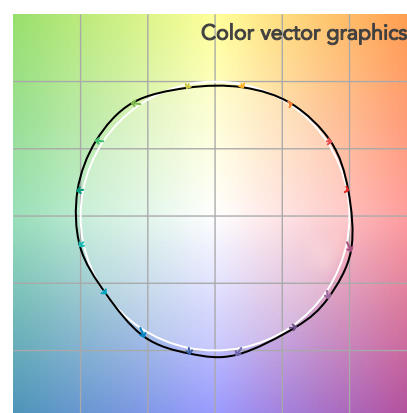
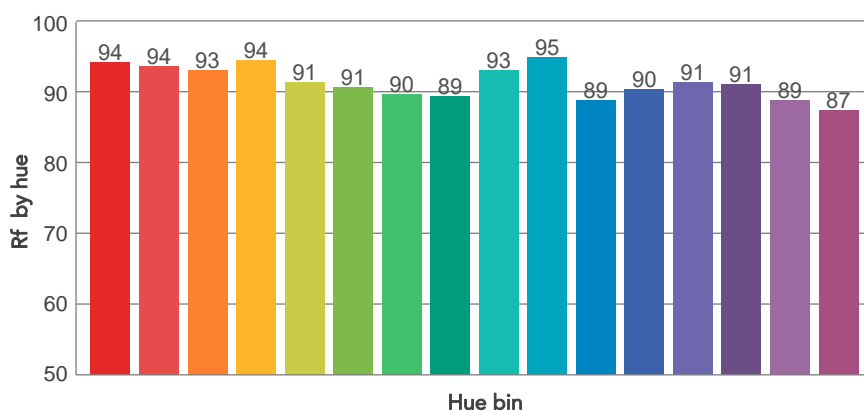
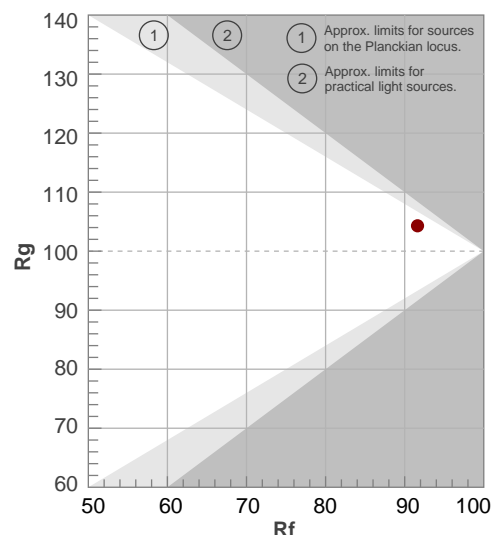
## COLOR PARAMETERS

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	$\Delta uv$
4080 K	93,4	92,9	91,6	104,3	94,5	87	0,377	0,375	0,0002

Fidelity index  $R_f$

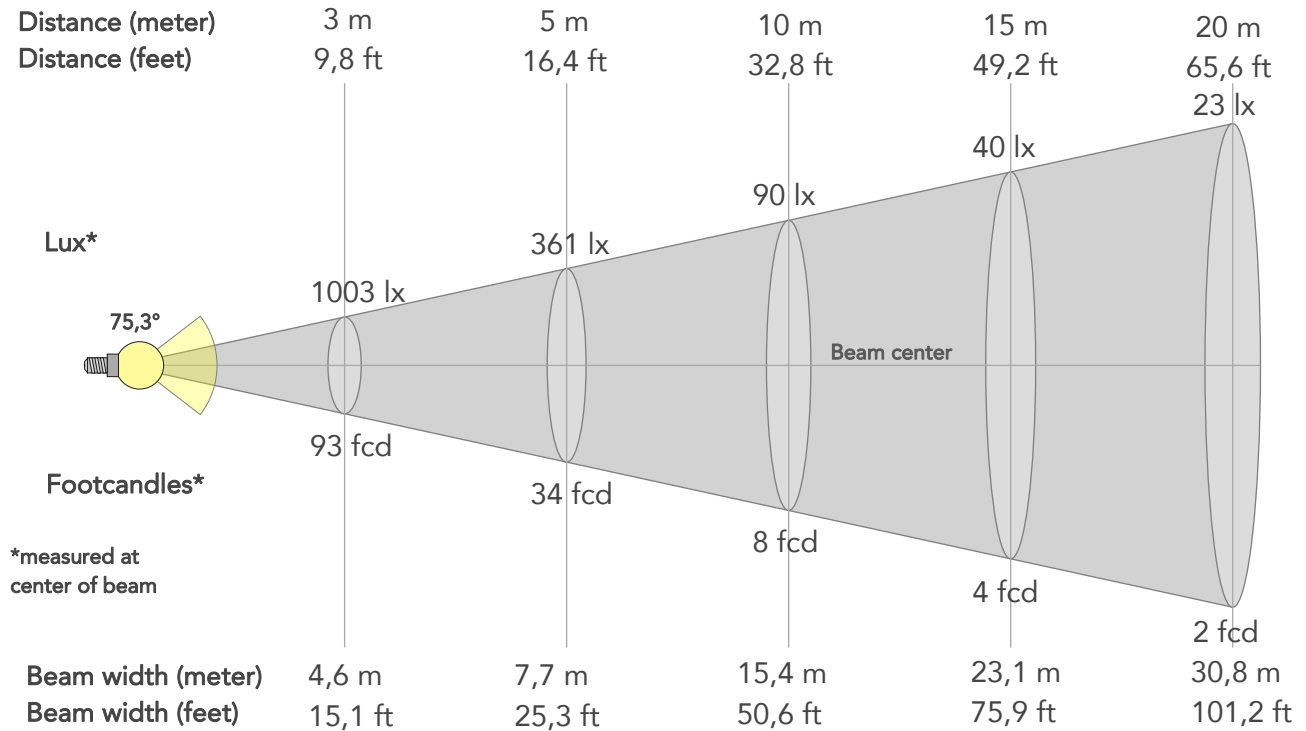
## Gammut index

		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	94	1%	0%
2	94	2%	-2%
3	93	1%	-1%
4	94	-2%	-2%
5	91	-2%	2%
6	91	4%	5%
7	90	5%	3%
8	89	4%	2%
9	93	3%	2%
10	95	0%	3%
11	89	4%	6%
12	90	4%	2%
13	91	4%	-4%
14	91	2%	4%
15	89	4%	-4%
16	87	4%	-6%



## BEAM DETAILS

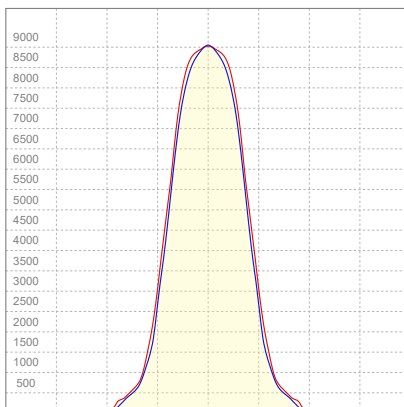
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>75,3°</b>	<b>117,4°</b>	<b>159,4°</b>	<b>92,4%</b>	<b>77,9%</b>



### 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	9029lx	2257lx	1003lx	564lx	361lx	161lx	90lx	40lx	23lx	14lx	10lx	6lx	4lx
Footcand.	839fcd	210fcd	93fcd	52fcd	34fcd	15fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	1,5m	3,1m	4,6m	6,2m	7,7m	11,6m	15,4m	23,1m	30,8m	38,6m	46,3m	61,7m	77,1m
Beam wid.	5,1ft	10,2ft	15,1ft	20,2ft	25,3ft	37,9ft	50,6ft	75,9ft	101,2ft	126,5ft	151,8ft	202,4ft	252,9ft

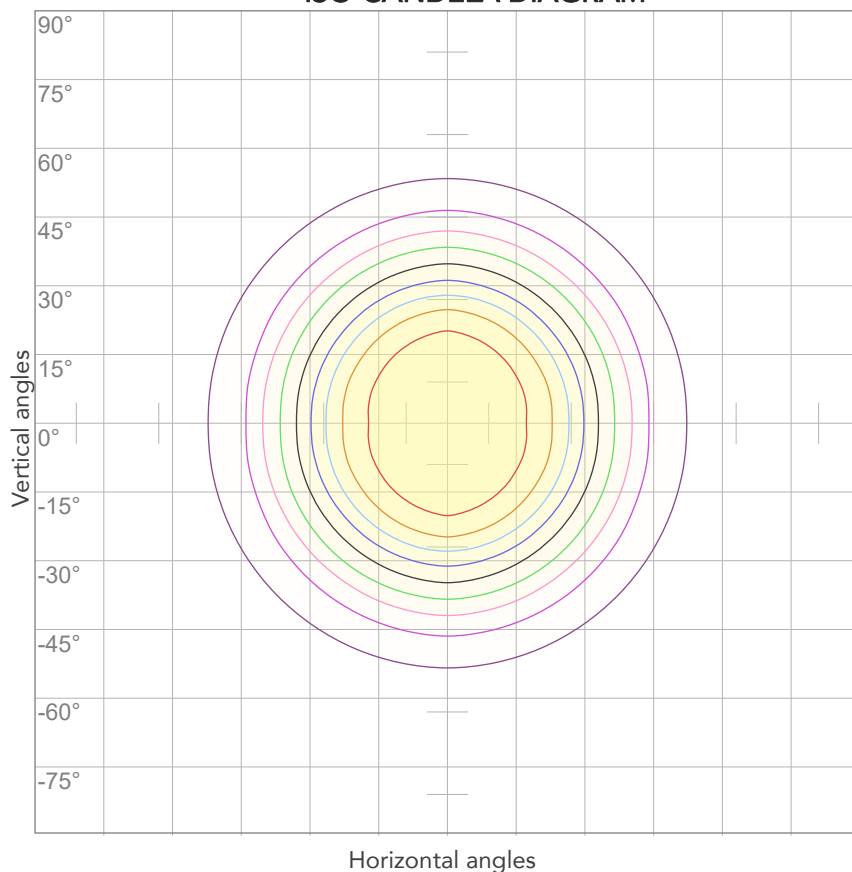
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
<b>221V</b>	<b>1,15A</b>	<b>235,9W</b>	<b>61lm/W</b>

## ISO CANDELA DIAGRAM



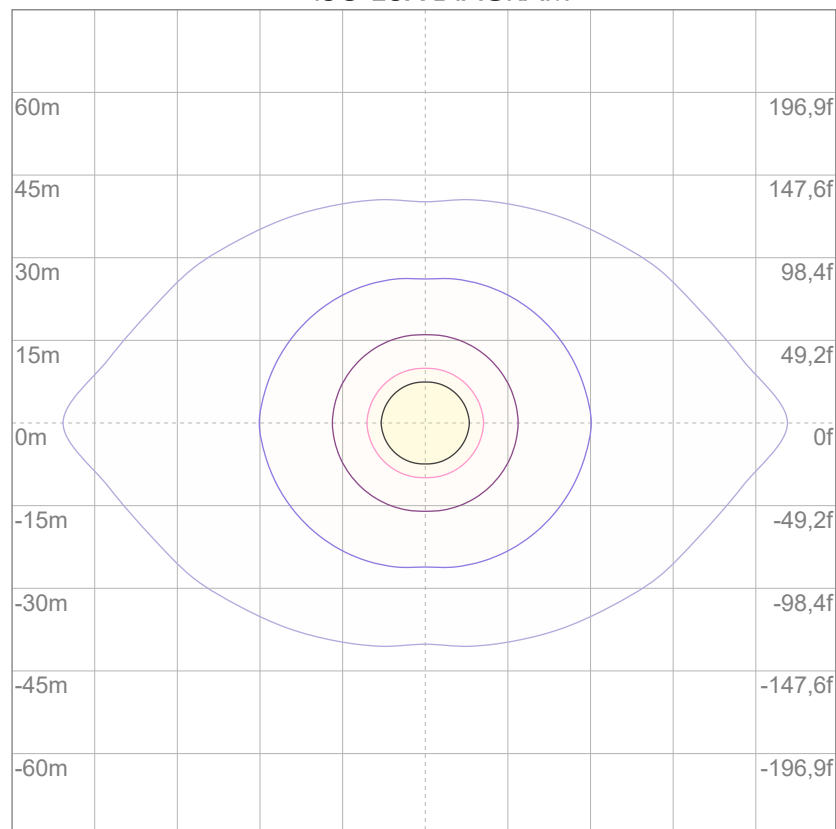
10%	903 cd
20%	1806 cd
30%	2709 cd
40%	3612 cd
50%	4515 cd
60%	5418 cd
70%	6320 cd
80%	7223 cd

### Conditions:

Number of c-planes: 4

Candela at center: 9029 cd

## ISO LUX DIAGRAM



3%	2,71 lx
5%	4,51 lx
10%	9,03 lx
30%	27,1 lx
50%	45,1 lx

### Conditions:

Number of c-planes: 4

Lux at center: 90,3 lx

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



Total lumen output:

13213 lm

Peak candela output:

4623 cd

Light quality:

CRI: 91,9

Color temperature:

5632 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter HD

Target:

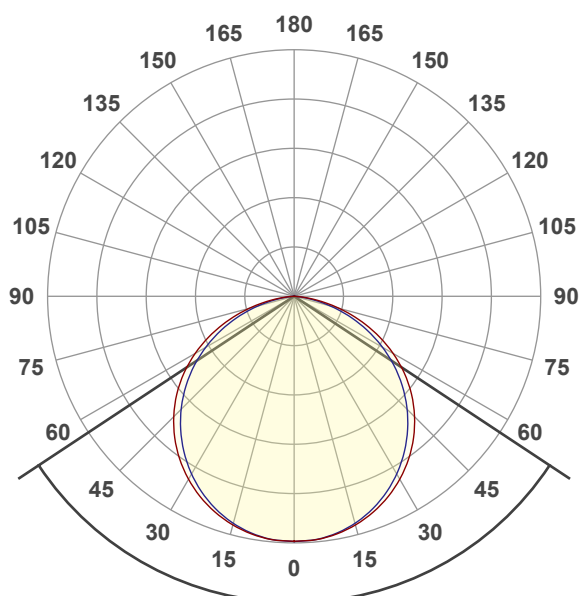
5600K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:27:37

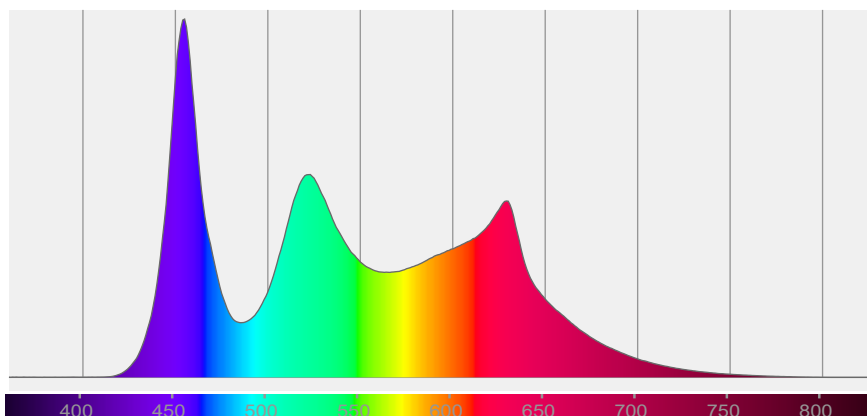


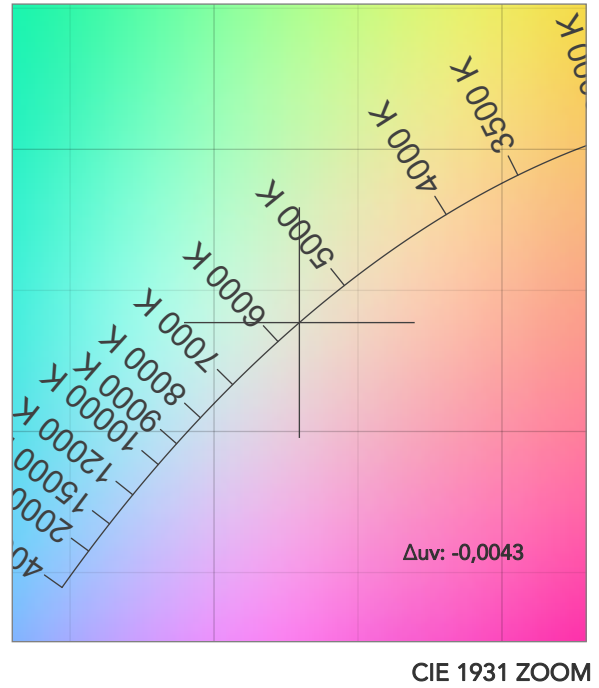
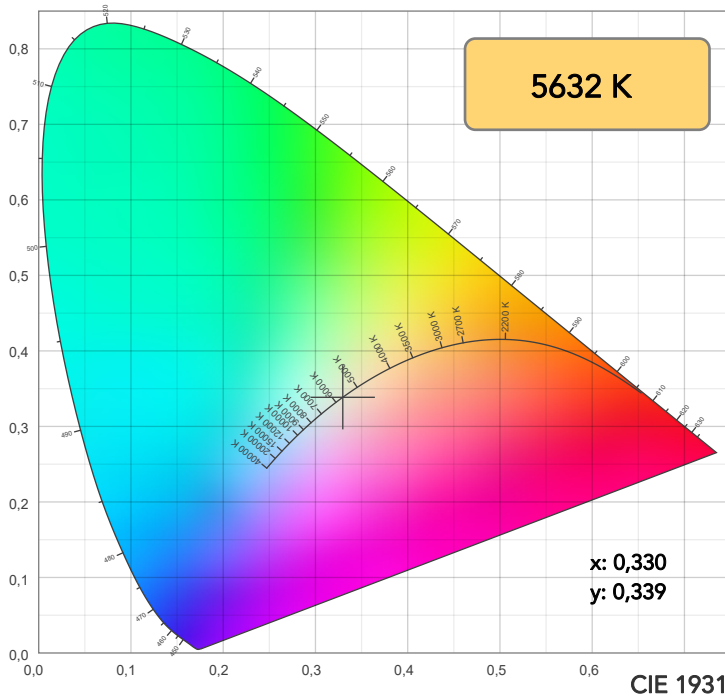
Beam angle 50%: 113°

Field angle 10%: 158,3°

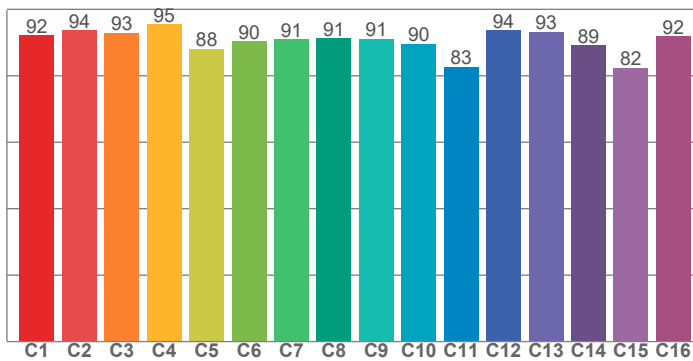
Cut off angle 2.5%: 169,1°

Spectra

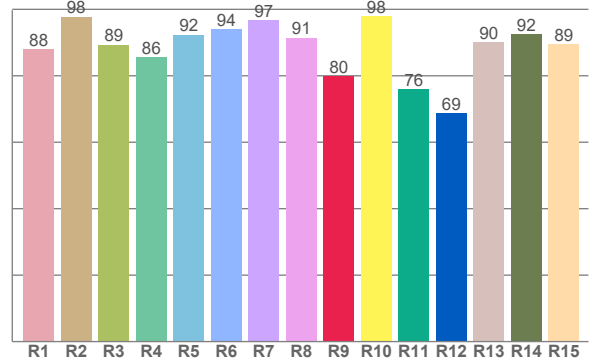




TM30: 90,2



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
88,1	97,7	89,3	85,6	92,4	94,0	96,8	91,4	79,9	97,9	75,9	68,6	90,1	92,4	89,4

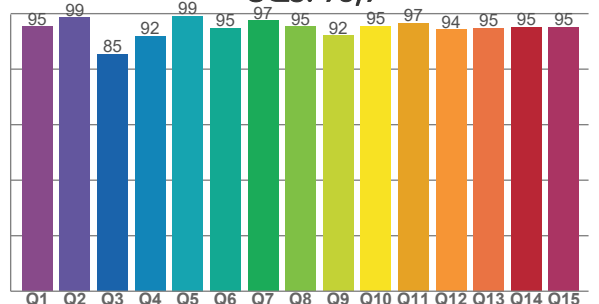
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,2	93,7	92,9	95,4	88,0	90,4	91,0	91,2	91,1	89,6	82,7	93,7	93,2	89,1	82,4	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,3	98,6	85,3	91,8	99,1	94,8	97,4	95,4	92,0	95,4	96,6	94,3	94,8	95,1	95,1

CQS: 93,9



## COLOR PARAMETERS

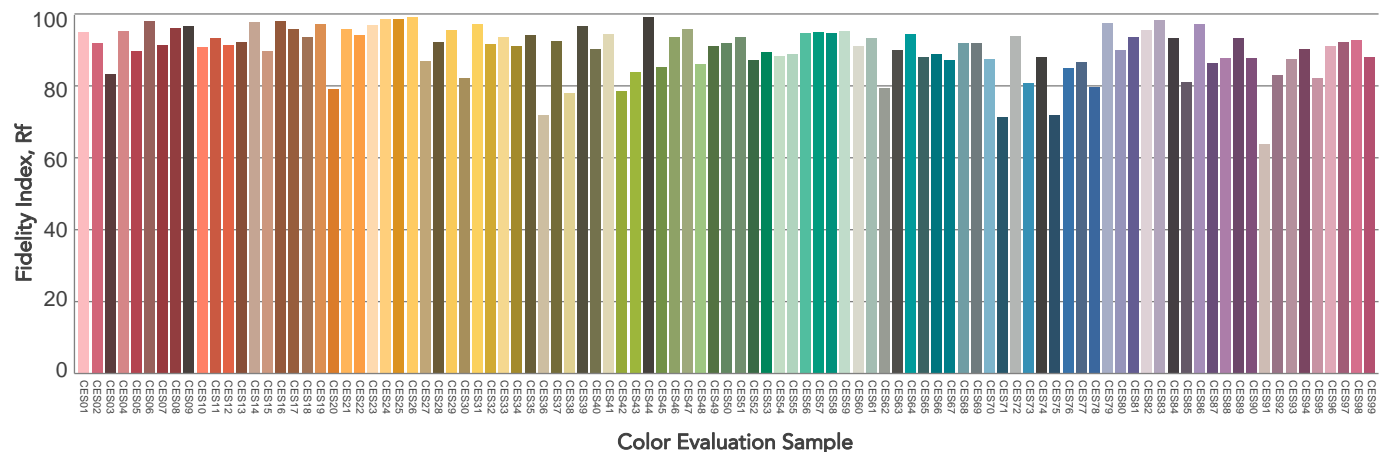
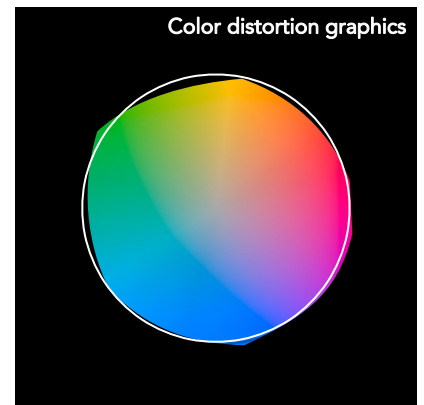
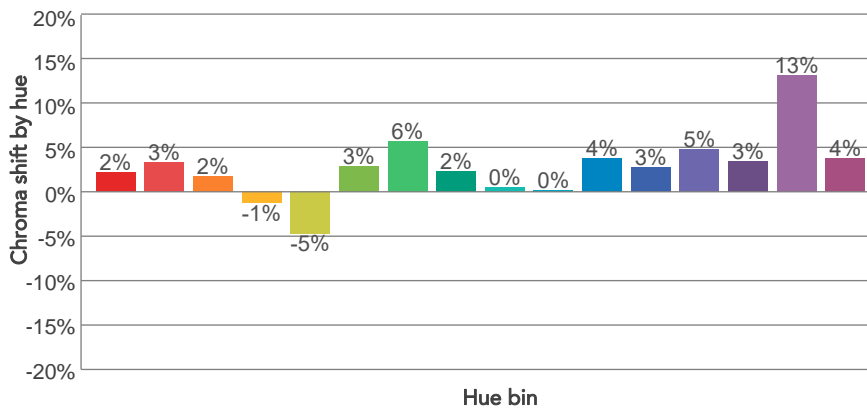
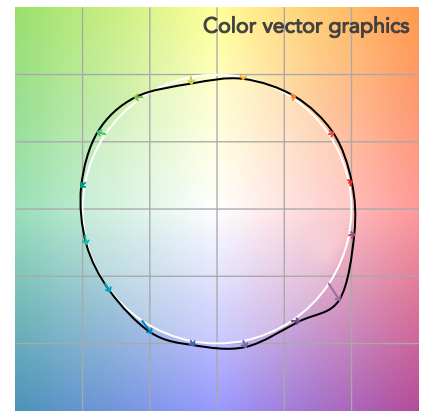
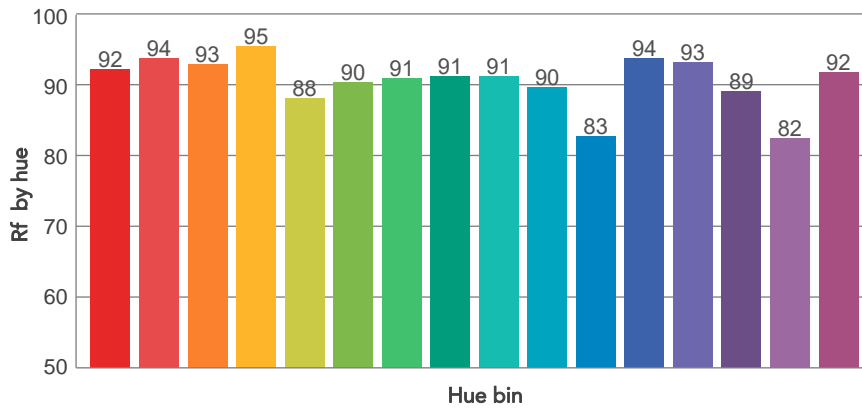
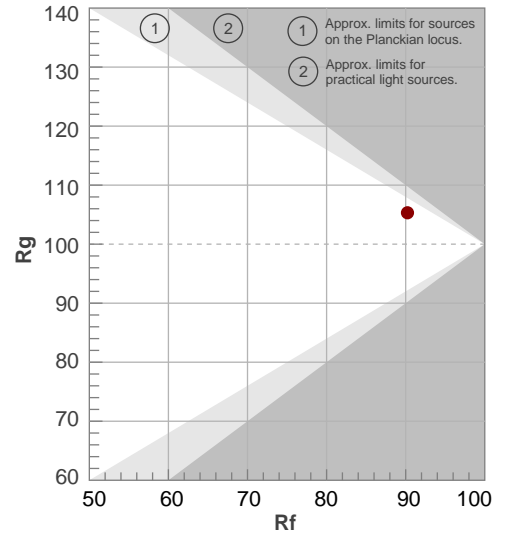
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5632 K	91,9	79,9	90,2	105,3	93,9	91	0,330	0,339	-0,0043

# TM30 DETAILS

**Rf 90,2**  
Fidelity index Rf

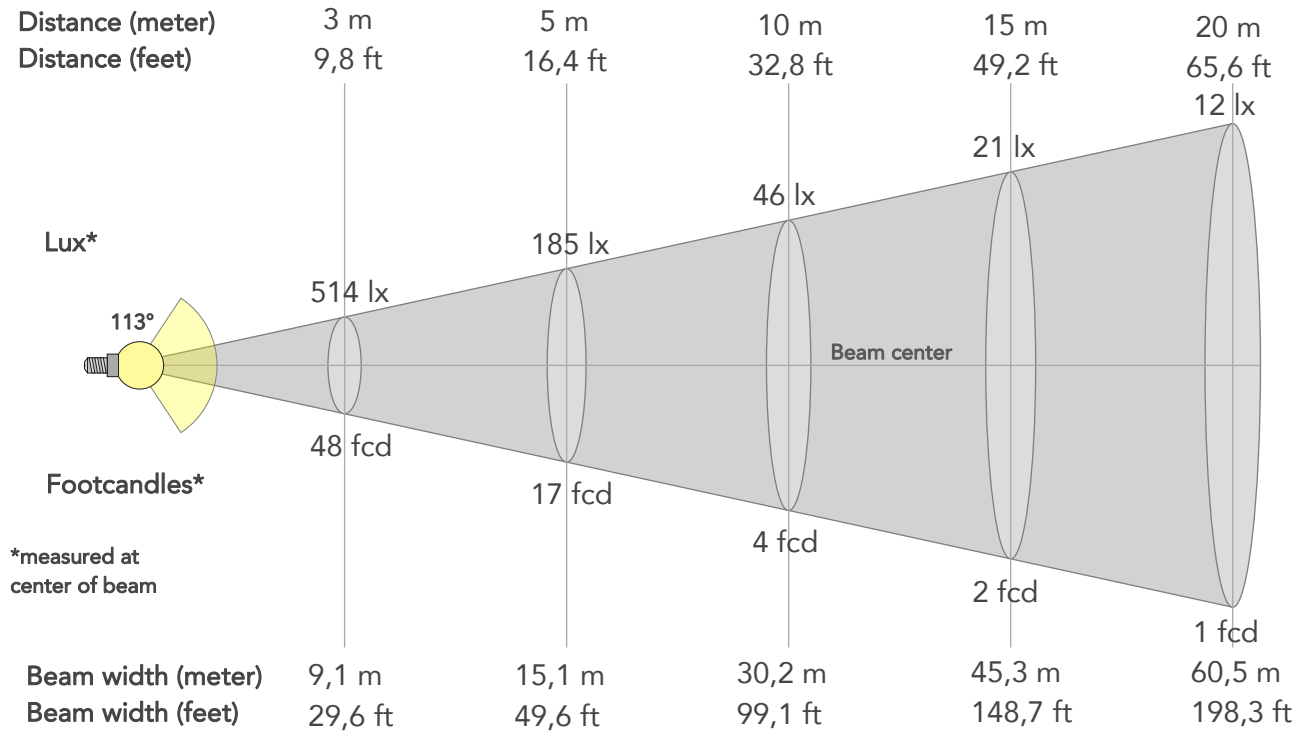
**Rg 105,3**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	2%	0%
2	94	3%	-1%
3	93	2%	-2%
4	95	-1%	0%
5	88	-5%	0%
6	90	3%	5%
7	91	6%	2%
8	91	2%	3%
9	91	0%	6%
10	90	0%	6%
11	83	4%	10%
12	94	3%	3%
13	93	5%	1%
14	89	3%	4%
15	82	13%	-6%
16	92	4%	1%



## BEAM DETAILS

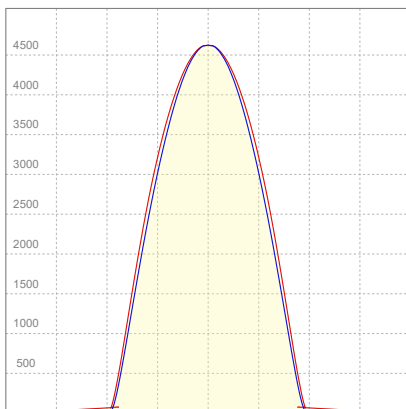
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
113°	158,3°	169,1°	79,2%	53,8%



### 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	4622lx	1156lx	514lx	289lx	185lx	82lx	46lx	21lx	12lx	7lx	5lx	3lx	2lx
Footcand.	429fcd	107fcd	48fcd	27fcd	17fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9,1m	12,1m	15,1m	22,7m	30,2m	45,3m	60,5m	75,6m	90,7m	120,9m	151,1m
Beam wid.	10ft	20ft	29,6ft	39,6ft	49,6ft	74,4ft	99,1ft	148,7ft	198,3ft	247,9ft	297,4ft	396,6ft	495,7ft

### LINEAR DISTRIBUTION DIAGRAM

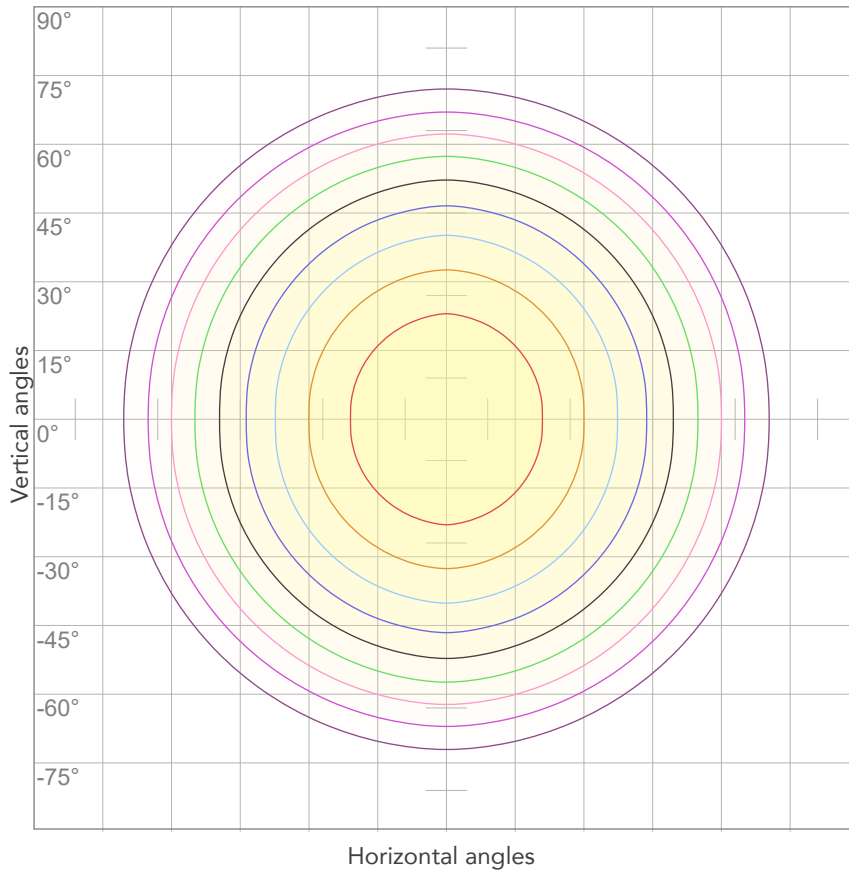


### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,14A	236,1W	56lm/W



## ISO CANDELA DIAGRAM



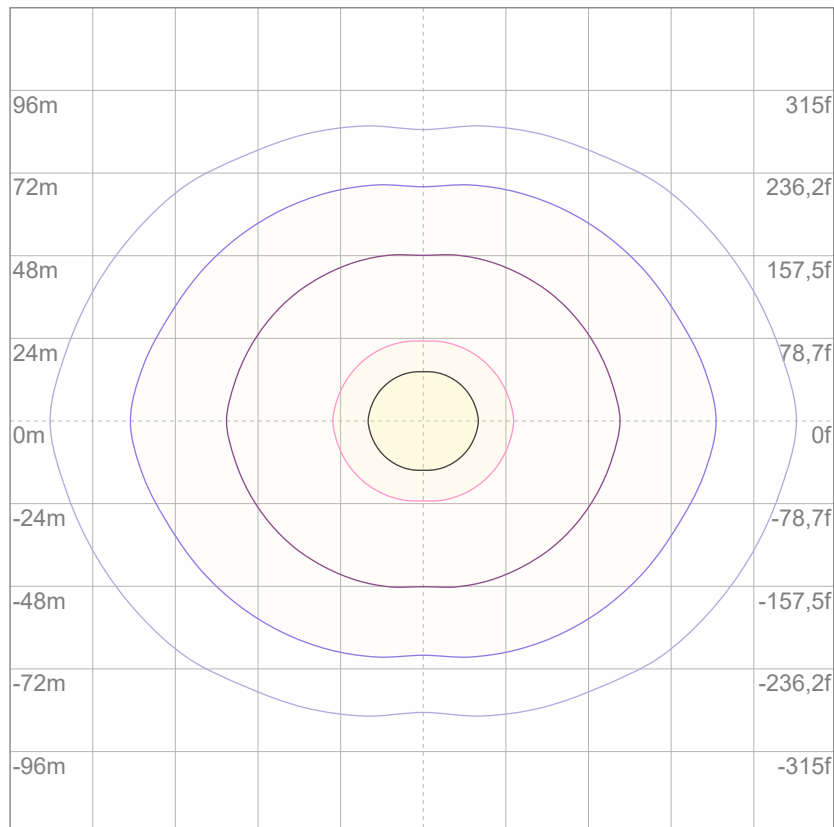
10%	462 cd
20%	924 cd
30%	1387 cd
40%	1849 cd
50%	2311 cd
60%	2773 cd
70%	3235 cd
80%	3698 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4622 cd

## ISO LUX DIAGRAM



3%	1,39 lx
5%	2,31 lx
10%	4,62 lx
30%	13,9 lx
50%	23,1 lx

### Conditions:

Number of c-planes: 4

Lux at center: 46,2 lx

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



Total lumen output:

15570 lm

Peak candela output:

6133 cd

Light quality:

CRI: 94,0

Color temperature:

5611 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter MD

Target:

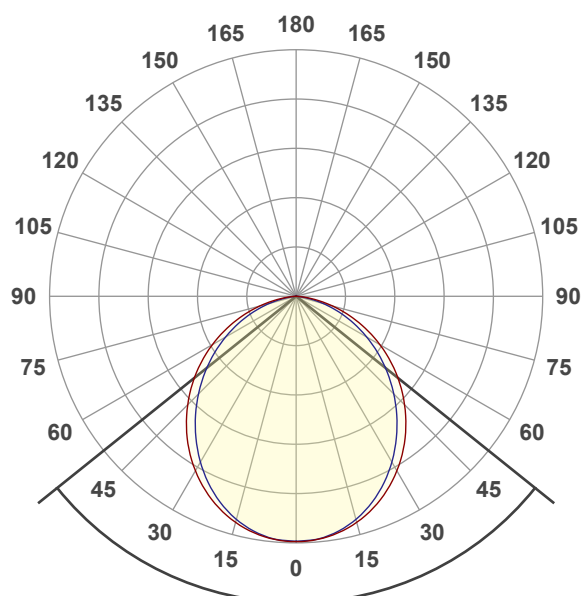
5600K HQ

Operator:

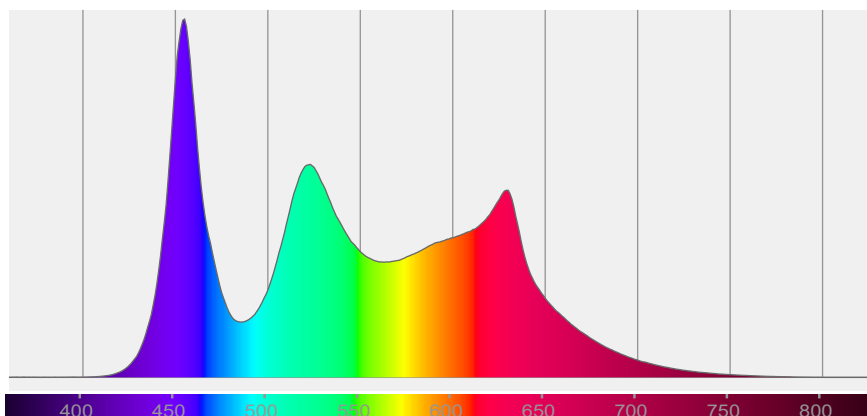
Paolo Carvone

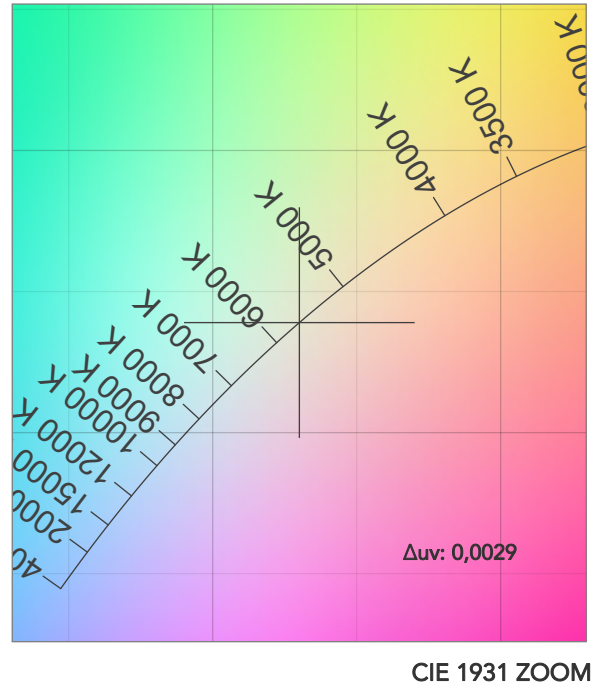
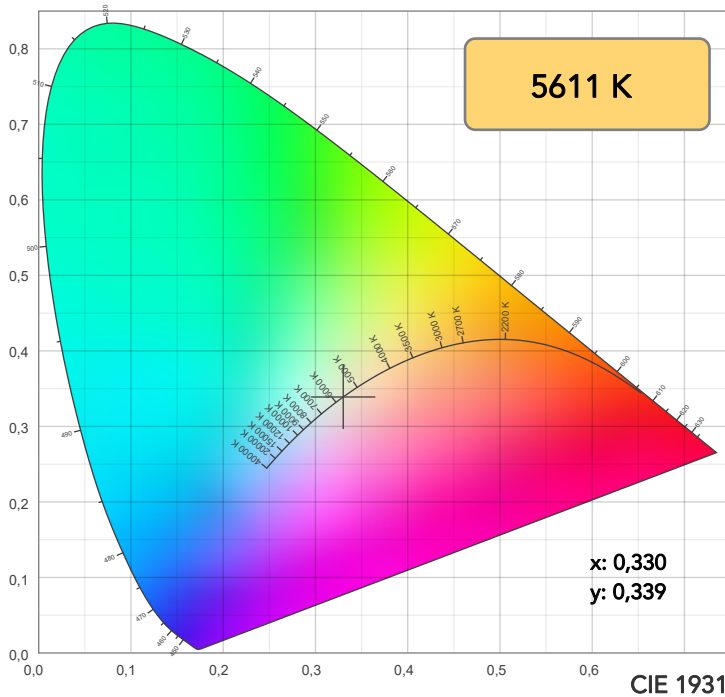
Date and time:

10/01/2022 16:53:12

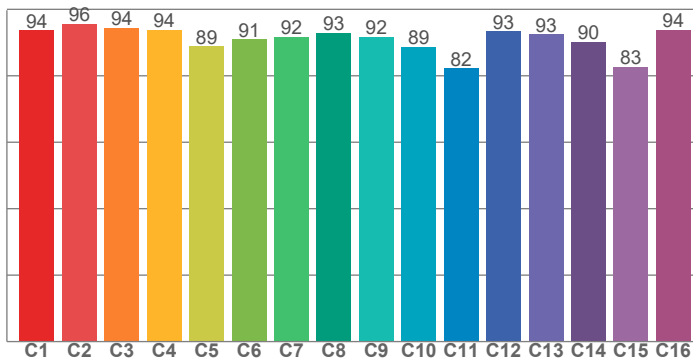


Spectra

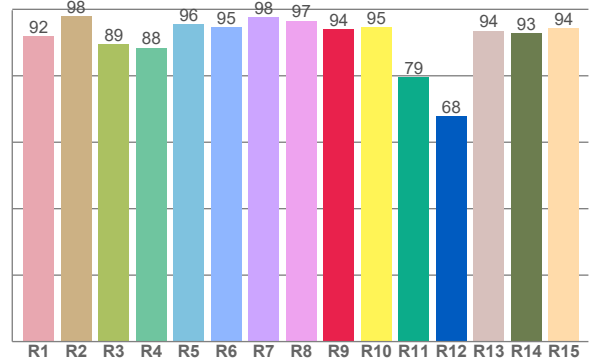




TM30: 90,8



CRI: 94,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,8	98,0	89,5	88,4	95,6	94,6	97,7	96,6	94,1	94,7	79,5	67,8	93,5	92,7	94,2

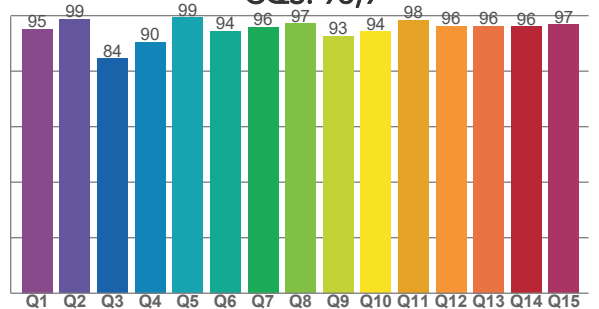
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,7	95,7	94,5	93,8	88,9	90,9	91,8	92,9	91,7	88,7	82,2	93,3	92,5	90,2	82,6	93,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,2	98,7	84,5	90,4	99,4	94,5	95,9	97,1	92,7	94,3	98,4	96,3	96,3	96,1	96,8

CQS: 93,9



## COLOR PARAMETERS

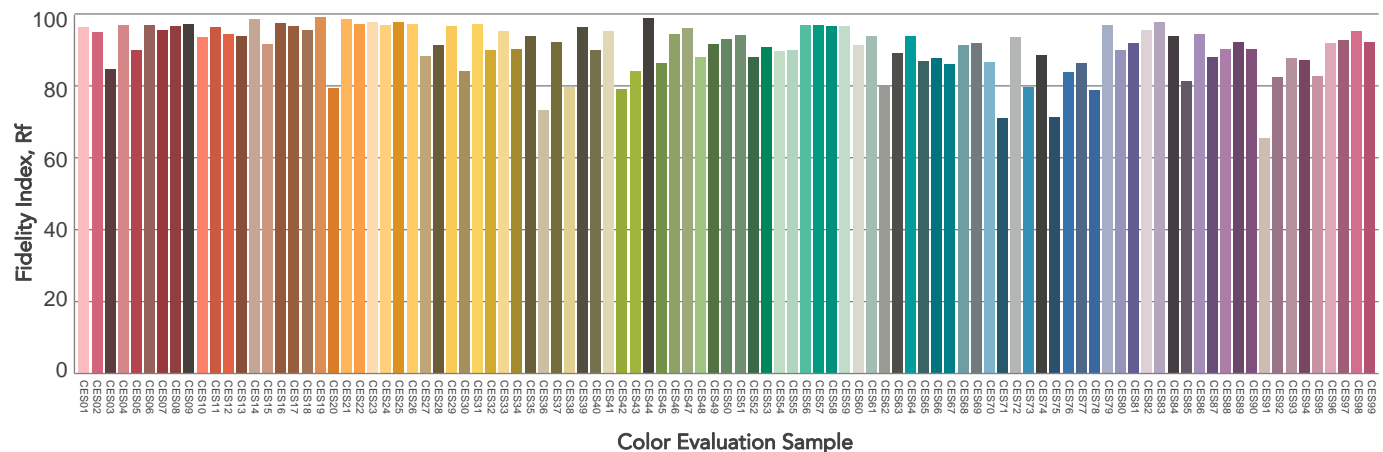
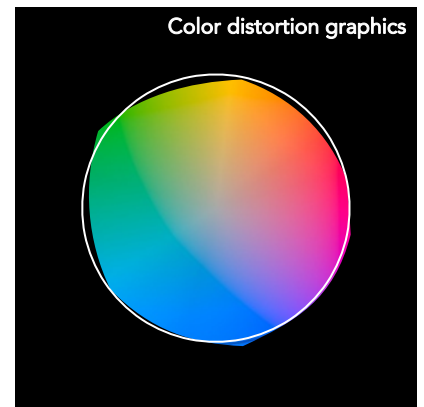
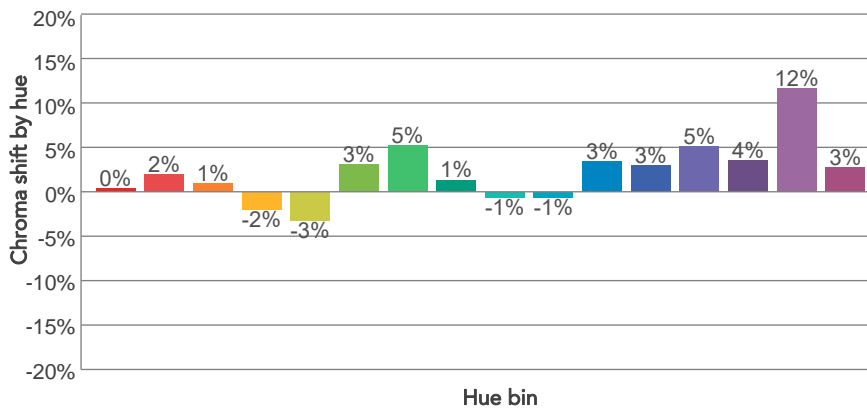
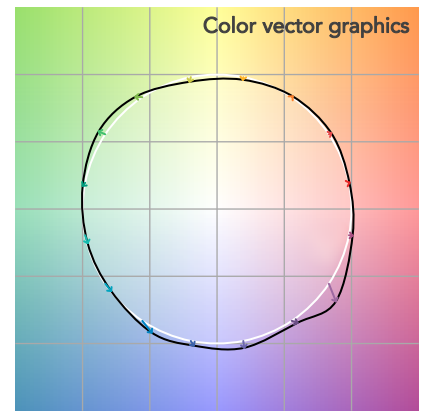
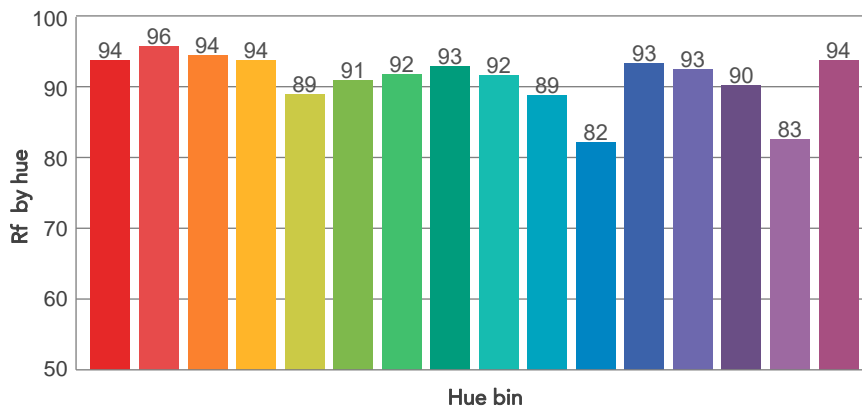
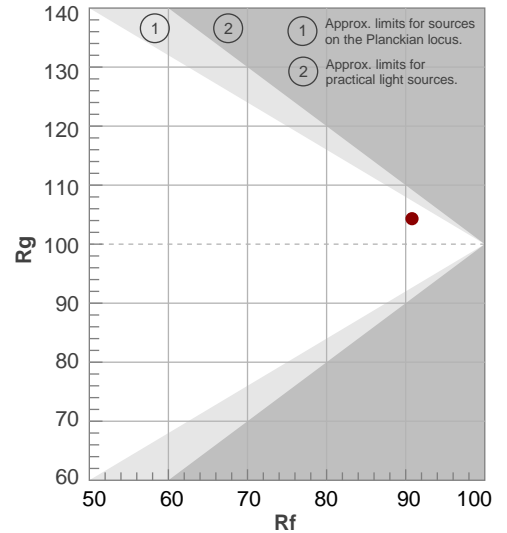
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5611 K	94,0	94,1	90,8	104,3	93,9	92	0,330	0,339	0,0029

# TM30 DETAILS

**Rf 90,8**  
Fidelity index Rf

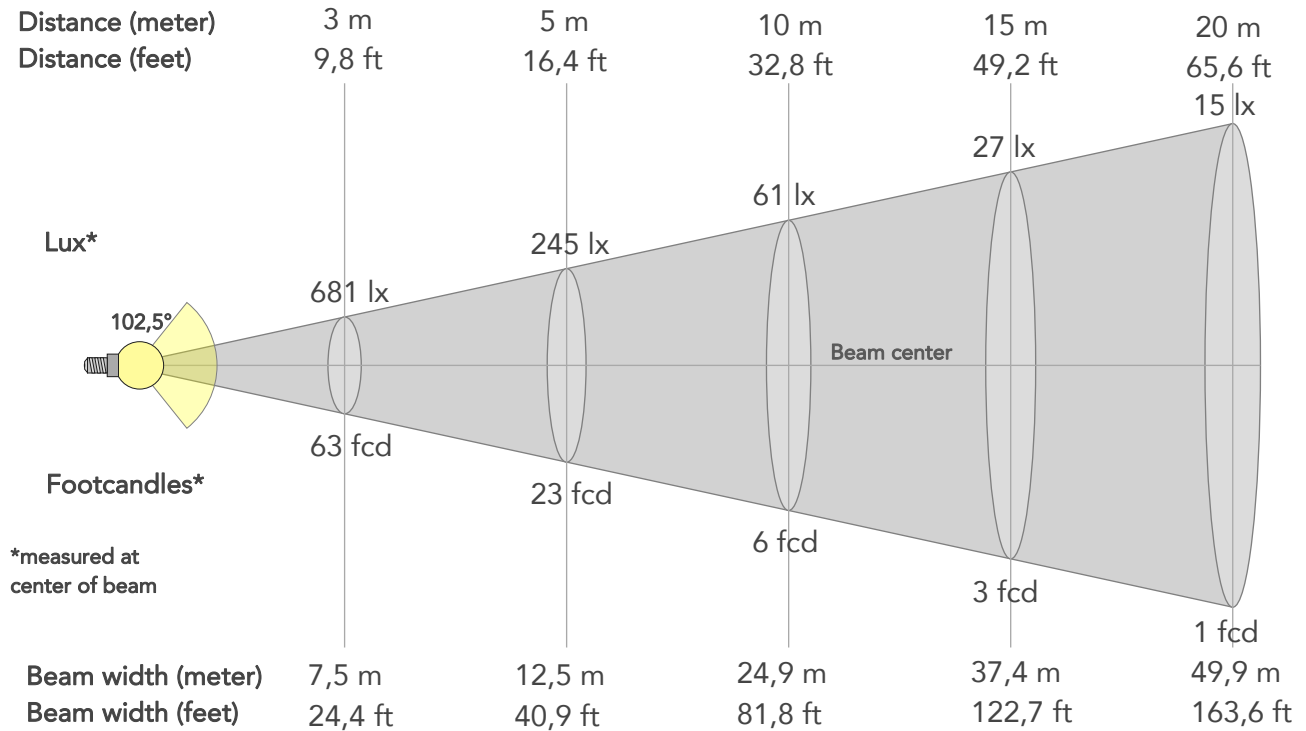
**Rg 104,3**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	0%
2	96	2%	0%
3	94	1%	0%
4	94	-2%	0%
5	89	-3%	2%
6	91	3%	4%
7	92	5%	1%
8	93	1%	3%
9	92	-1%	6%
10	89	-1%	7%
11	82	3%	11%
12	93	3%	3%
13	93	5%	0%
14	90	4%	3%
15	83	12%	-8%
16	94	3%	0%



## BEAM DETAILS

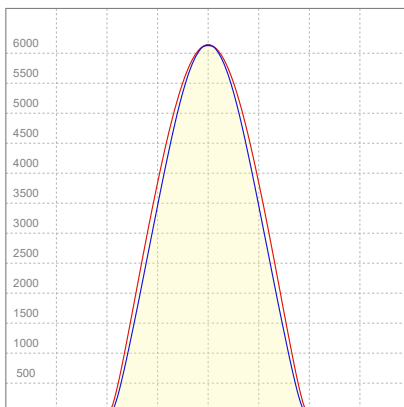
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,5°	154,7°	167,4°	81,6%	57,2%



### 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	6131lx	1533lx	681lx	383lx	245lx	109lx	61lx	27lx	15lx	10lx	7lx	4lx	2lx
Footcand.	570fcd	142fcd	63fcd	36fcd	23fcd	10fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,5m	10m	12,5m	18,7m	24,9m	37,4m	49,9m	62,3m	74,8m	99,7m	124,7m
Beam wid.	8,2ft	16,5ft	24,4ft	32,7ft	40,9ft	61,3ft	81,8ft	122,7ft	163,6ft	204,5ft	245,4ft	327,2ft	408,9ft

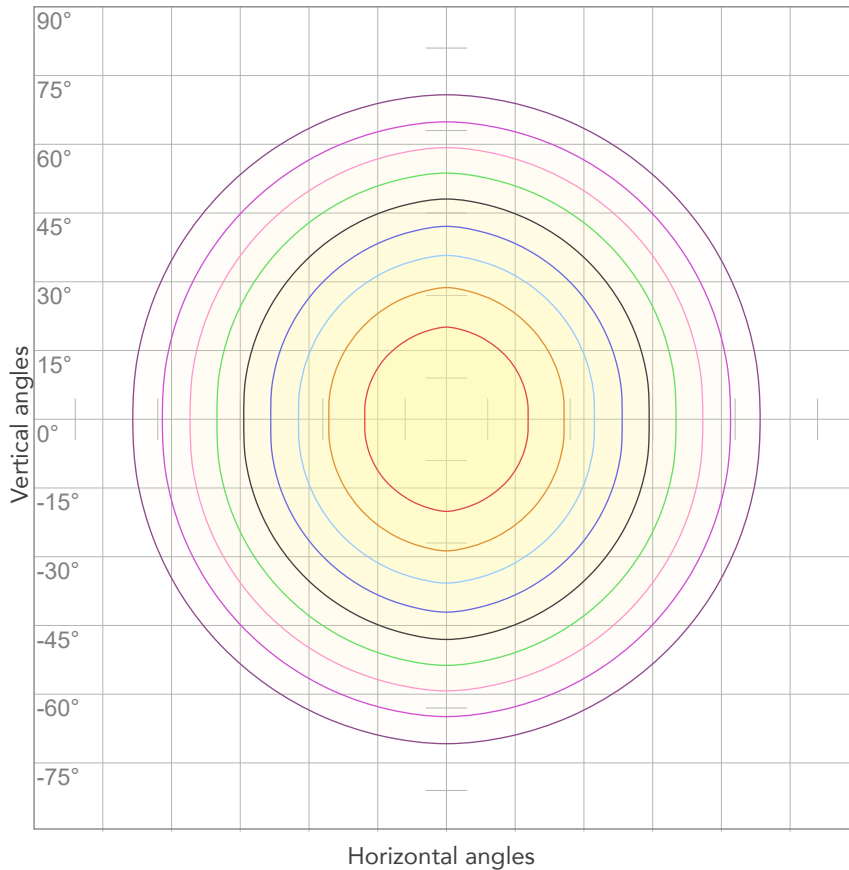
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,14A	236,1W	66lm/W

## ISO CANDELA DIAGRAM



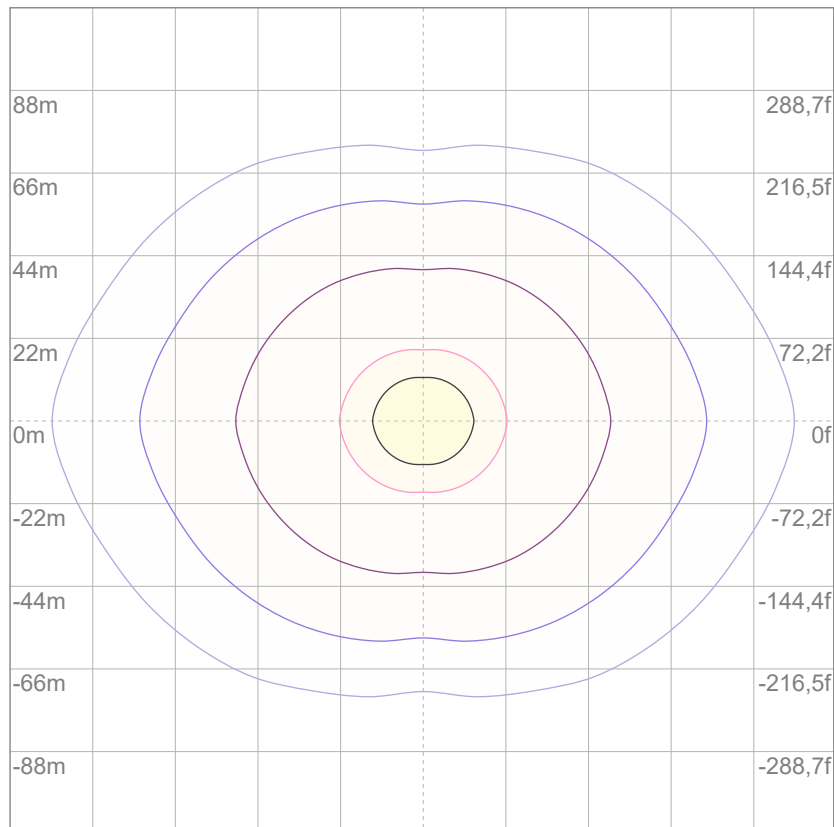
10%	613 cd
20%	1226 cd
30%	1839 cd
40%	2453 cd
50%	3066 cd
60%	3679 cd
70%	4292 cd
80%	4905 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6131 cd

## ISO LUX DIAGRAM



3%	1,84 lx
5%	3,07 lx
10%	6,13 lx
30%	18,4 lx
50%	30,7 lx

### Conditions:

Number of c-planes: 4

Lux at center: 61,3 lx

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



Total lumen output:

16244 lm

Peak candela output:

6508 cd

Light quality:

CRI: 94,0

Color temperature:

5656 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter LD

Target:

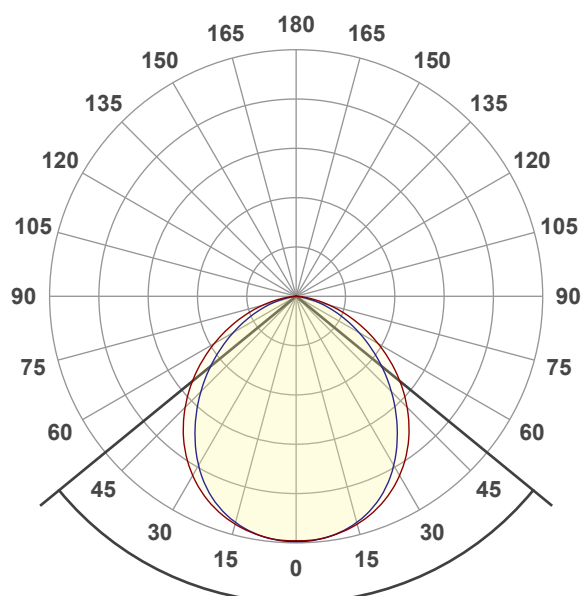
5600K HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:13:37

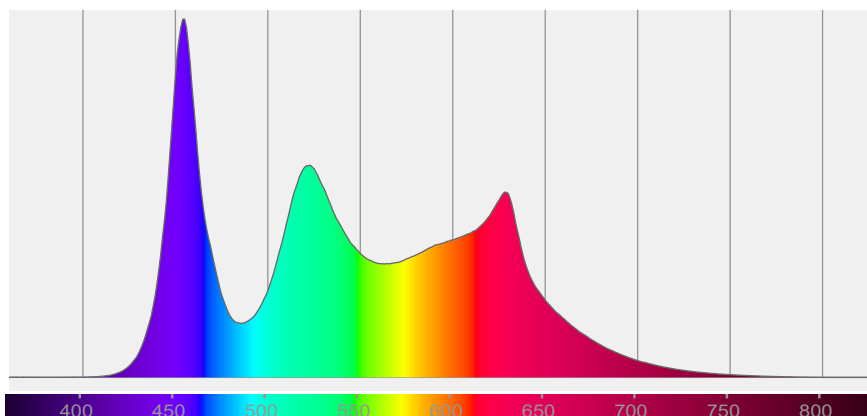


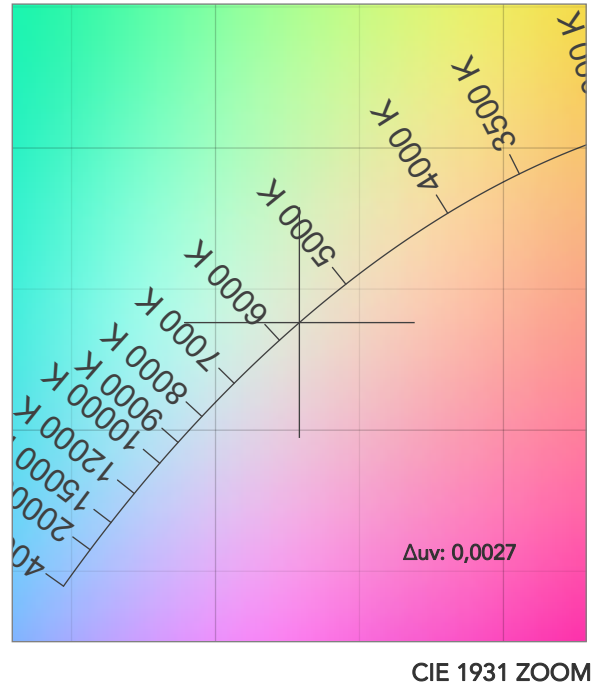
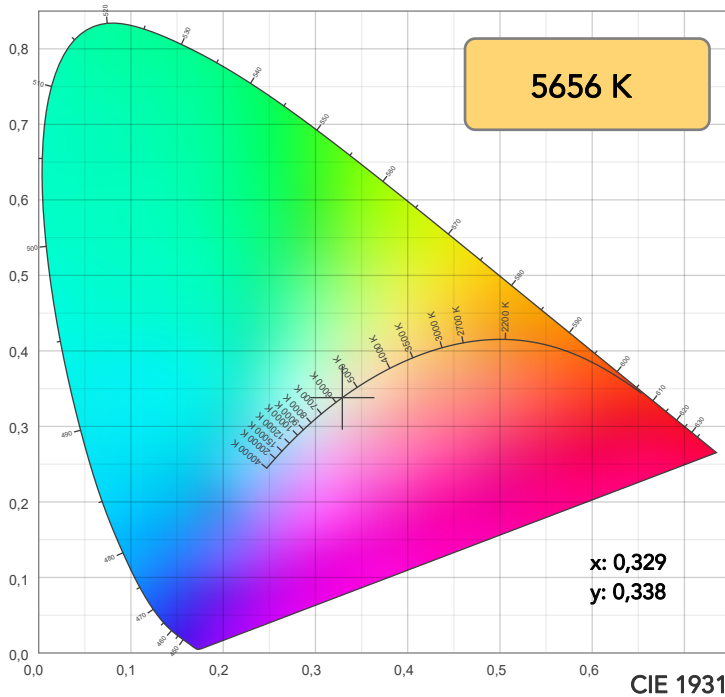
Beam angle 50%: 101,4°

Field angle 10%: 152,1°

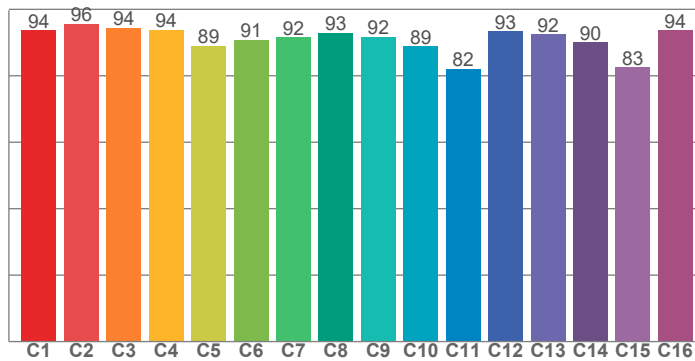
Cut off angle 2.5%: 166°

Spectra

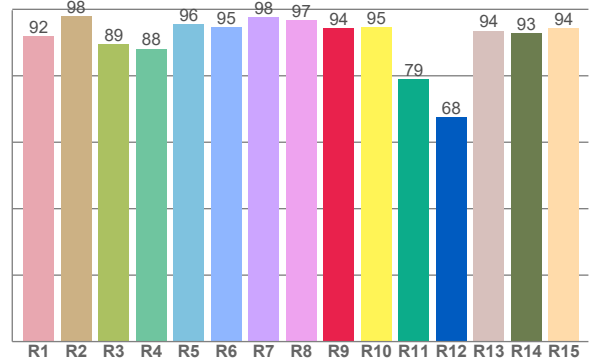




TM30: 90,8



CRI: 94,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
91,8	97,9	89,5	88,1	95,6	94,6	97,6	96,7	94,4	94,6	79,0	67,6	93,6	92,7	94,3

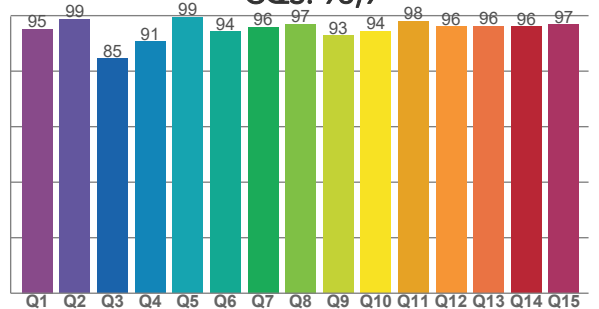
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,6	95,6	94,4	93,8	88,9	90,8	91,5	92,9	91,7	88,9	82,1	93,3	92,4	90,1	82,5	93,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,1	98,7	84,5	90,7	99,4	94,3	95,9	97,0	92,8	94,4	98,1	96,1	96,2	96,1	96,8

CQS: 93,9



## 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	$\Delta uv$
5656 K	94,0	94,4	90,8	104,4	93,9	91	0,329	0,338	0,0027

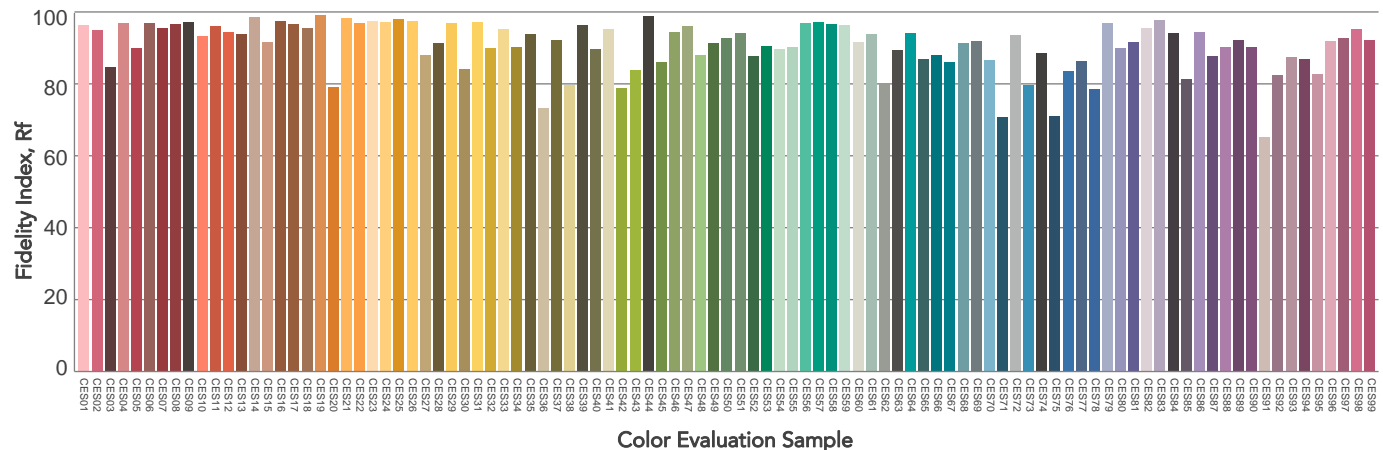
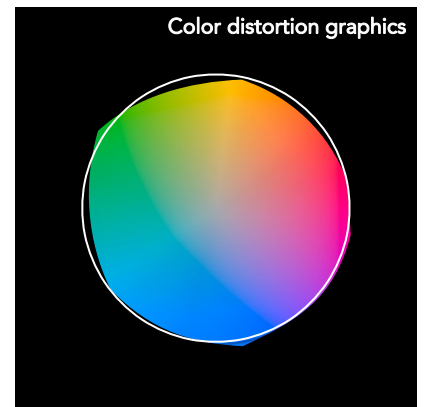
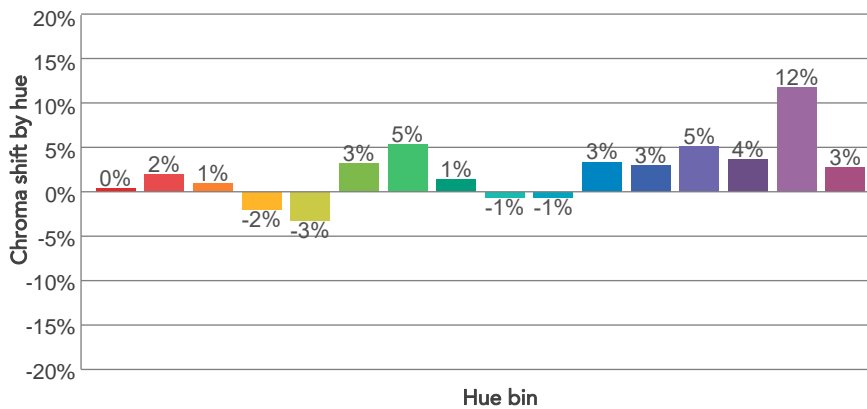
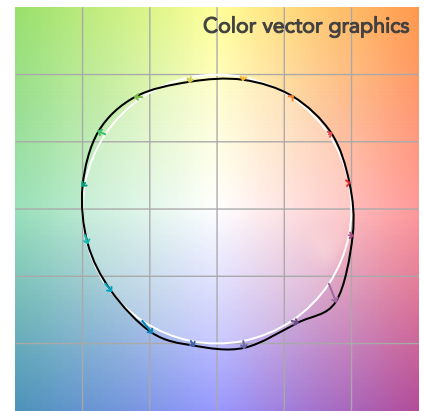
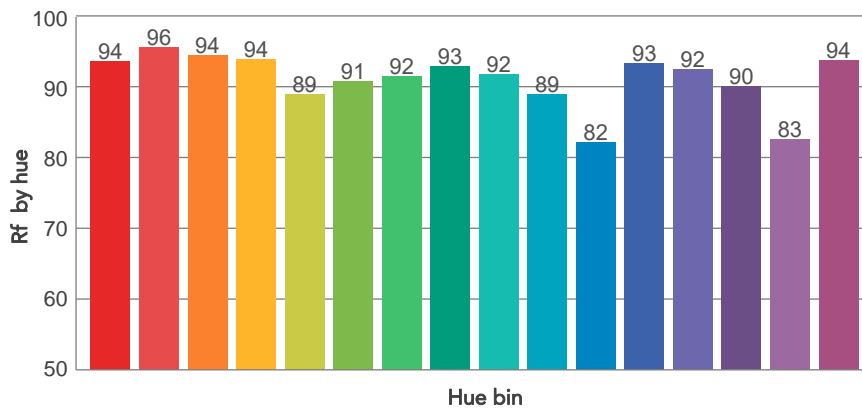
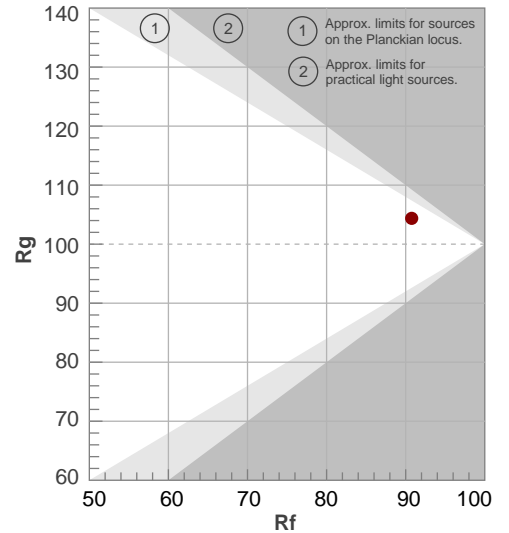


# TM30 DETAILS

**Rf 90,8**  
Fidelity index Rf

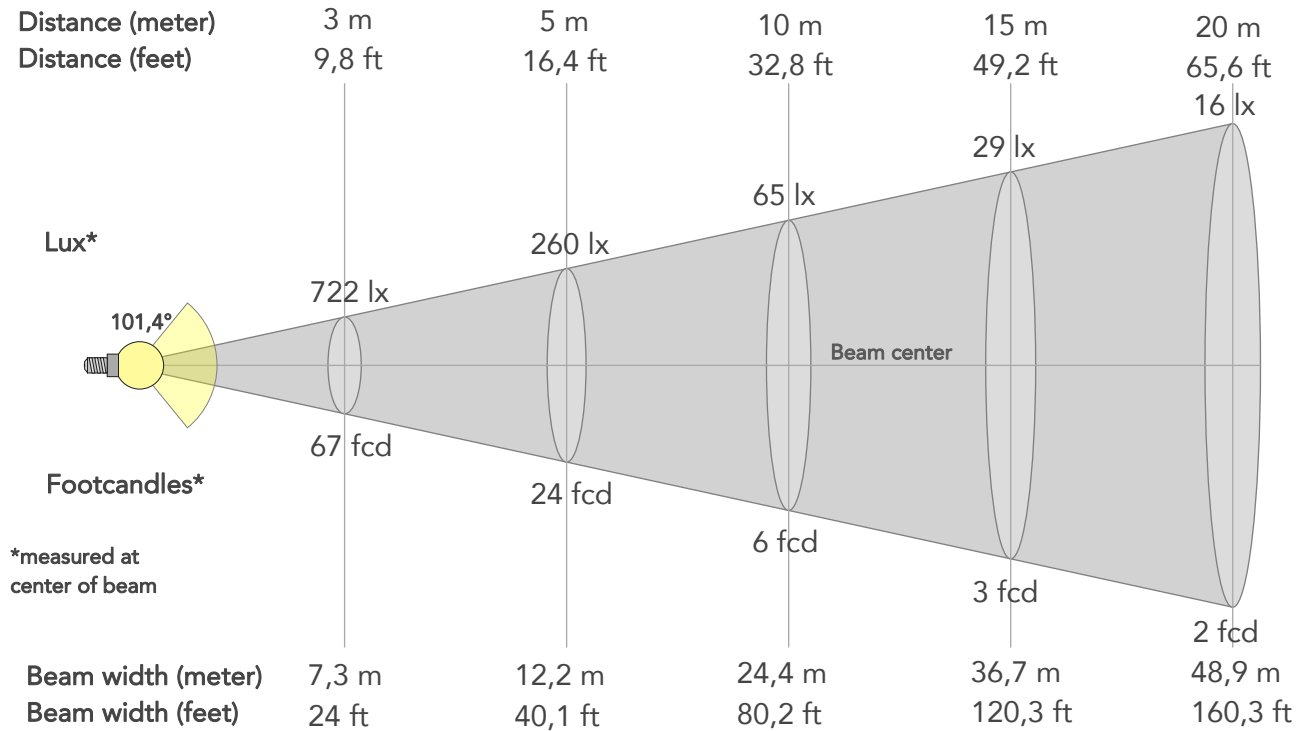
**Rg 104,4**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	0%
2	96	2%	0%
3	94	1%	0%
4	94	-2%	0%
5	89	-3%	2%
6	91	3%	4%
7	92	5%	1%
8	93	1%	3%
9	92	-1%	6%
10	89	-1%	7%
11	82	3%	11%
12	93	3%	3%
13	92	5%	0%
14	90	4%	3%
15	83	12%	-8%
16	94	3%	0%



## BEAM DETAILS

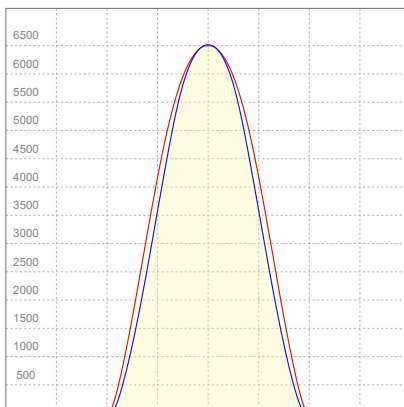
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
101,4°	152,1°	166°	83,3%	59,1%



### 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	6499lx	1625lx	722lx	406lx	260lx	116lx	65lx	29lx	16lx	10lx	7lx	4lx	3lx
Footcand.	604fcd	151fcd	67fcd	38fcd	24fcd	11fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,4m	4,9m	7,3m	9,8m	12,2m	18,3m	24,4m	36,7m	48,9m	61,1m	73,3m	97,8m	122,2m
Beam wid.	8,1ft	16,1ft	24ft	32ft	40,1ft	60,1ft	80,2ft	120,3ft	160,3ft	200,4ft	240,5ft	320,7ft	400,9ft

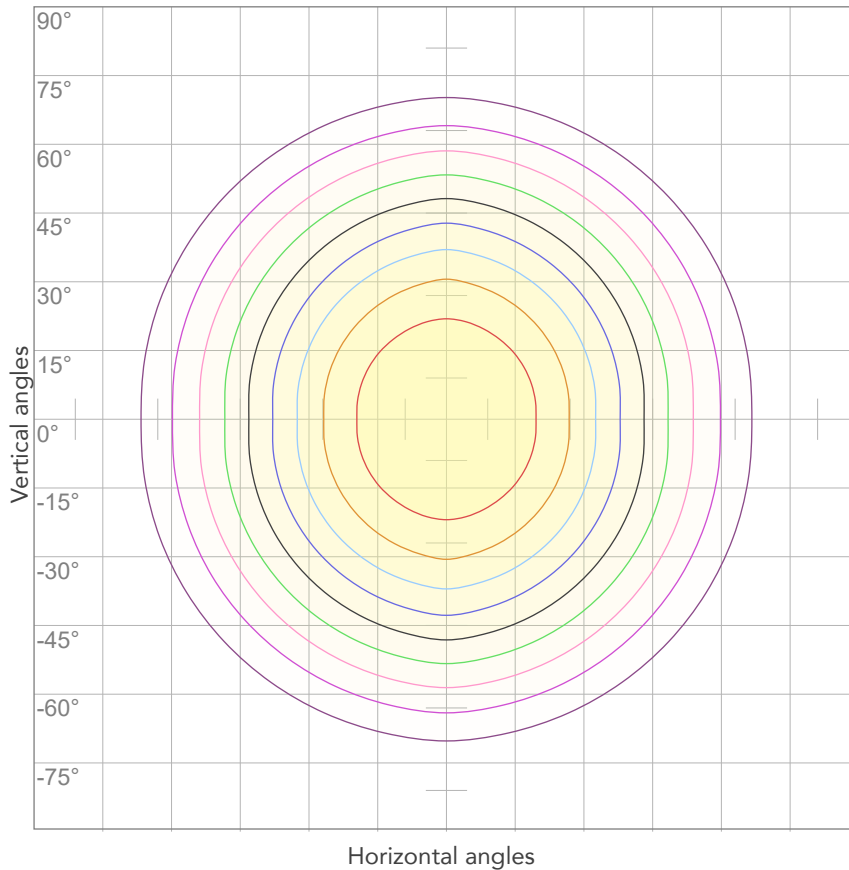
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,15A	236,6W	69lm/W

## ISO CANDELA DIAGRAM



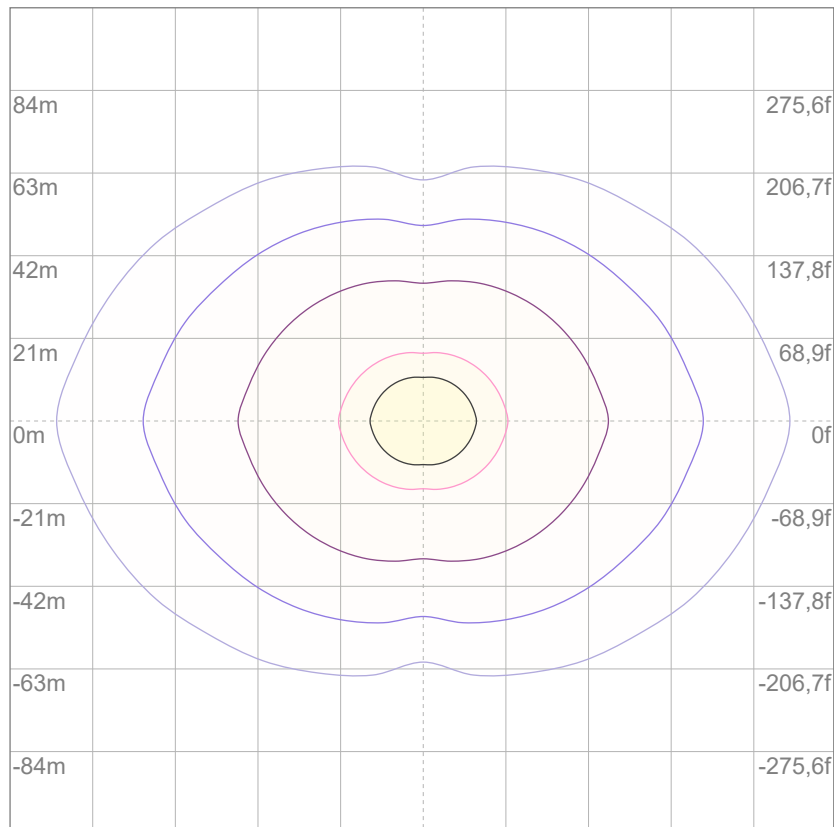
10%	650 cd
20%	1300 cd
30%	1950 cd
40%	2600 cd
50%	3249 cd
60%	3899 cd
70%	4549 cd
80%	5199 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6499 cd

## ISO LUX DIAGRAM



3%	1,95 lx
5%	3,25 lx
10%	6,50 lx
30%	19,5 lx
50%	32,5 lx

### Conditions:

Number of c-planes: 4

Lux at center: 65,0 lx

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



Total lumen output:

13770 lm

Peak candela output:

8680 cd

Light quality:

CRI: 94,1

Color temperature:

5606 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter INT

Target:

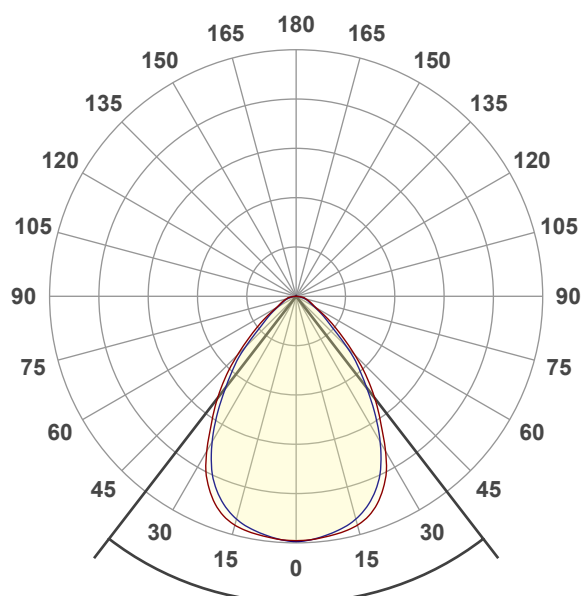
5600K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 18:02:08

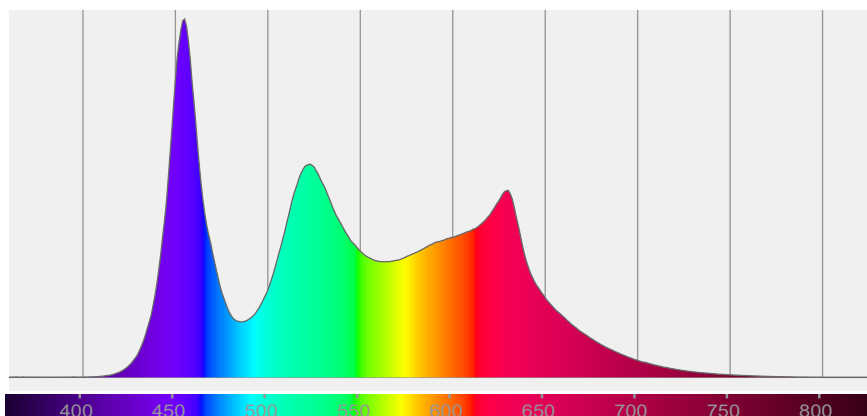


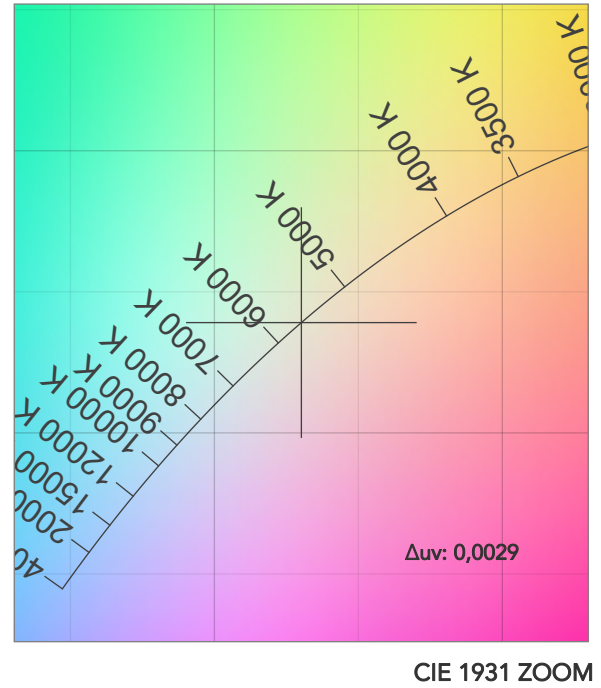
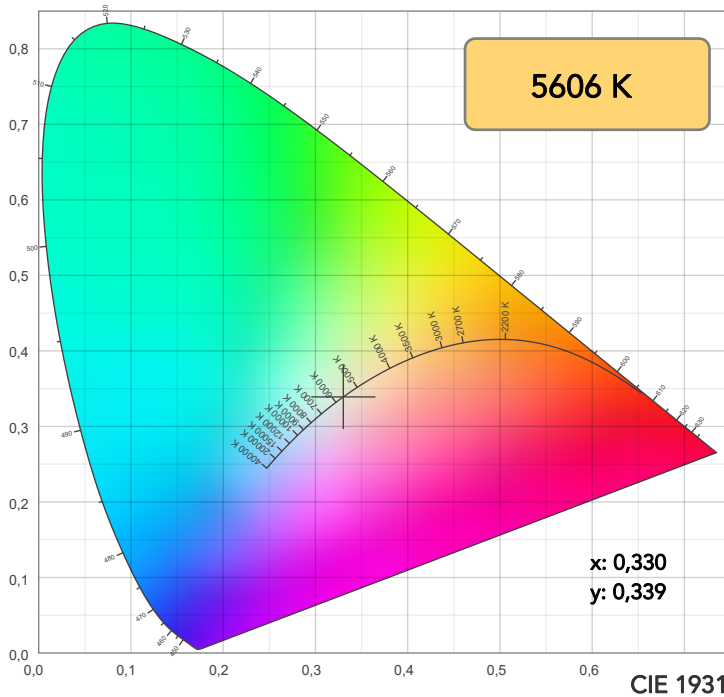
Beam angle 50%: 75,3°

Field angle 10%: 117,5°

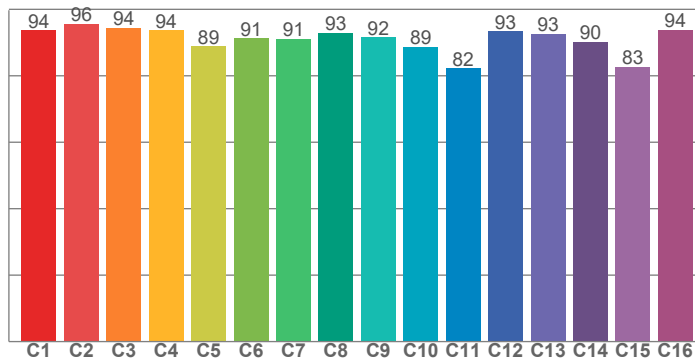
Cut off angle 2.5%: 159,7°

Spectra

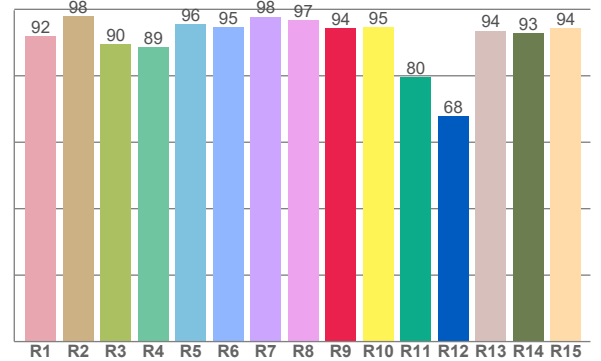




TM30: 90,8



CRI: 94,1 (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
91,9	98,0	89,5	88,5	95,6	94,6	97,8	96,6	94,2	94,7	79,6	67,8	93,6	92,7	94,3

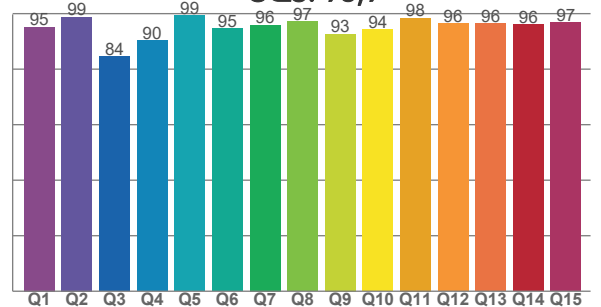
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,7	95,7	94,5	93,7	88,9	91,3	91,1	92,9	91,6	88,7	82,2	93,4	92,5	90,2	82,6	93,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,2	98,7	84,5	90,4	99,3	94,6	95,9	97,2	92,7	94,3	98,4	96,4	96,4	96,1	96,8

CQS: 93,9



## COLOR PARAMETERS

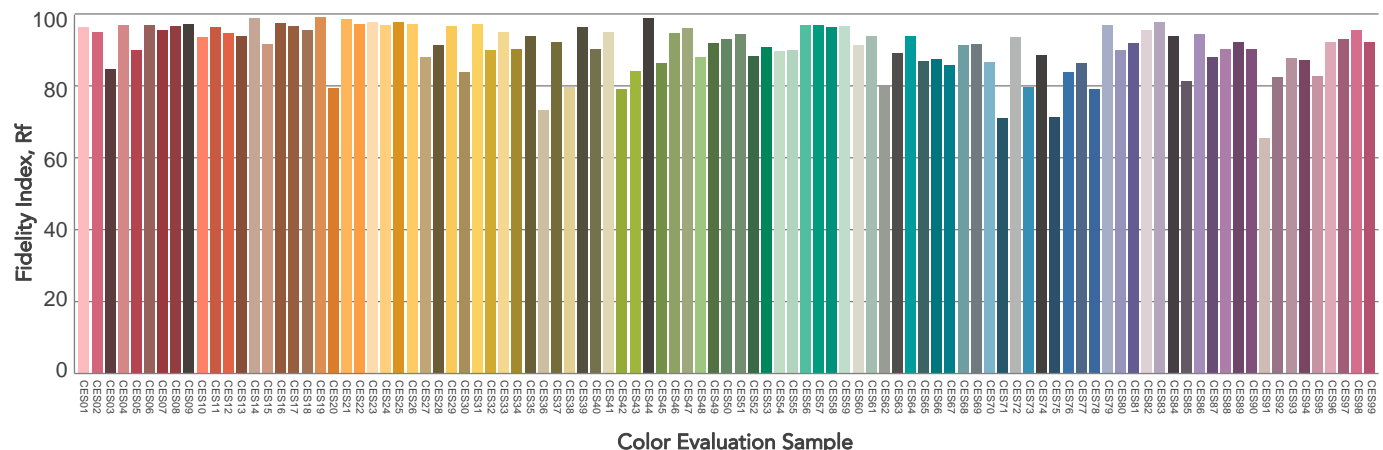
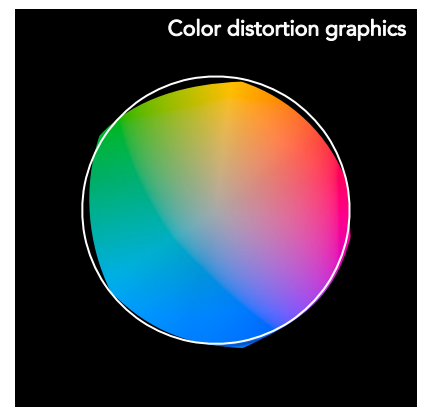
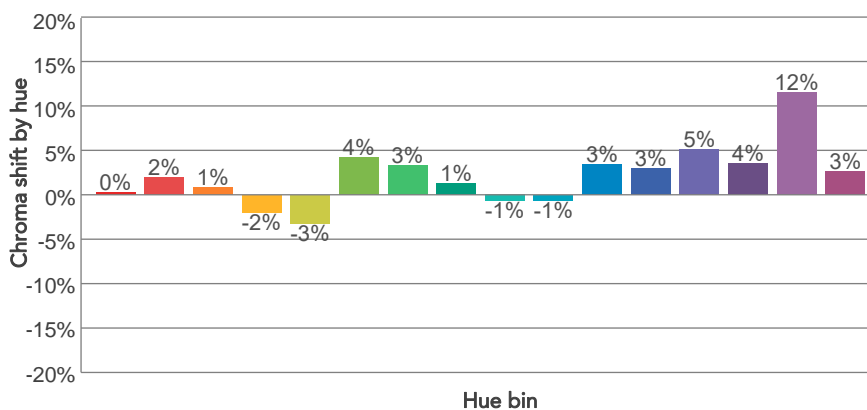
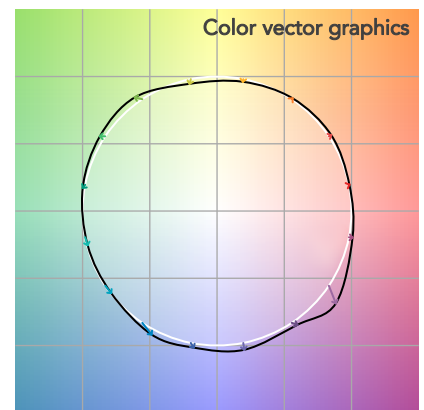
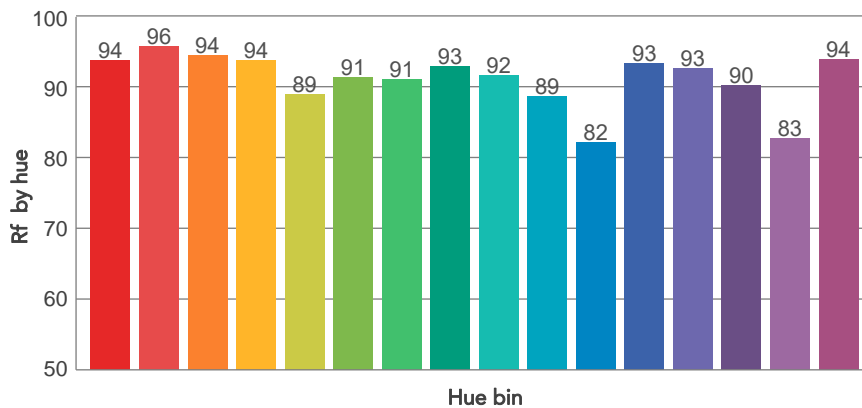
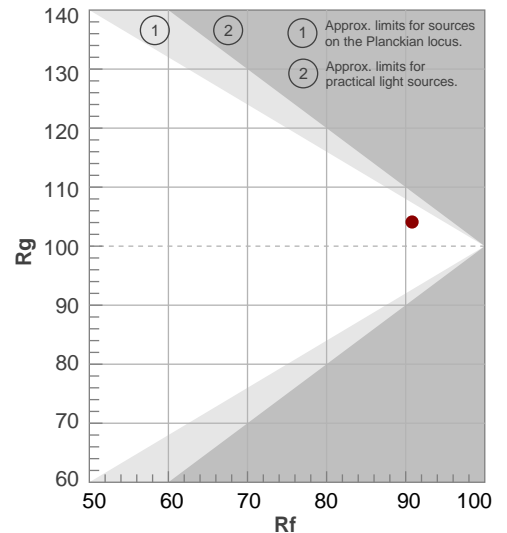
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5606 K	94,1	94,2	90,8	104,1	93,9	92	0,330	0,339	0,0029

# TM30 DETAILS

**Rf 90,8**  
Fidelity index Rf

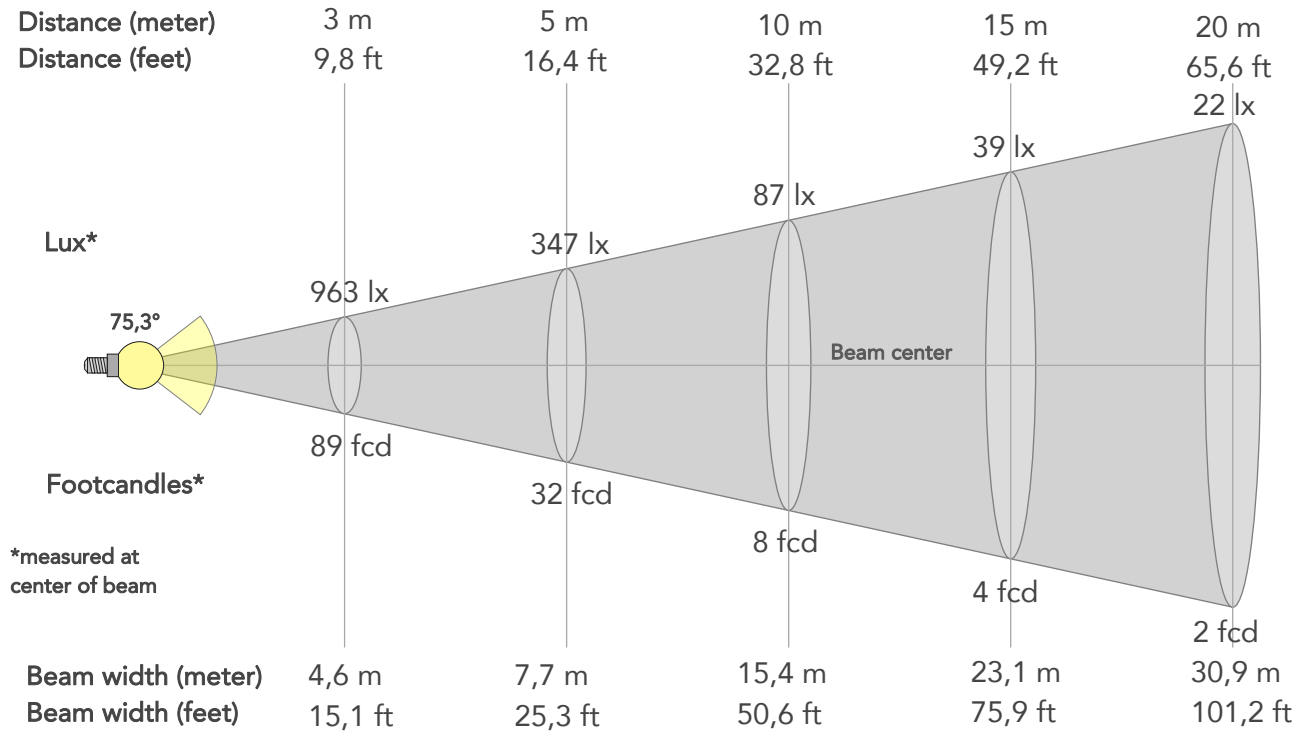
**Rg 104,1**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	0%
2	96	2%	0%
3	94	1%	0%
4	94	-2%	0%
5	89	-3%	2%
6	91	4%	4%
7	91	3%	2%
8	93	1%	3%
9	92	-1%	6%
10	89	-1%	7%
11	82	3%	11%
12	93	3%	3%
13	93	5%	0%
14	90	4%	3%
15	83	12%	-8%
16	94	3%	0%



## BEAM DETAILS

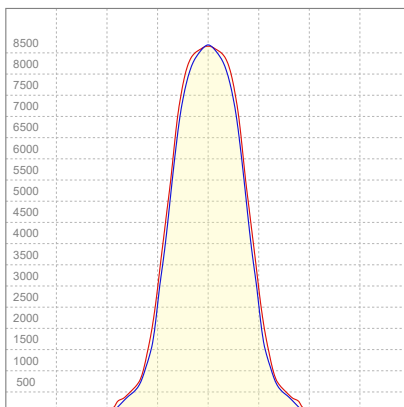
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75,3°	117,5°	159,7°	92,3%	77,8%



### 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	8667lx	2167lx	963lx	542lx	347lx	154lx	87lx	39lx	22lx	14lx	10lx	5lx	3lx
Footcand.	805fcd	201fcd	89fcd	50fcd	32fcd	14fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	1,5m	3,1m	4,6m	6,2m	7,7m	11,6m	15,4m	23,1m	30,9m	38,6m	46,3m	61,7m	77,2m
Beam wid.	5,1ft	10,2ft	15,1ft	20,2ft	25,3ft	38ft	50,6ft	75,9ft	101,2ft	126,6ft	151,9ft	202,5ft	253,1ft

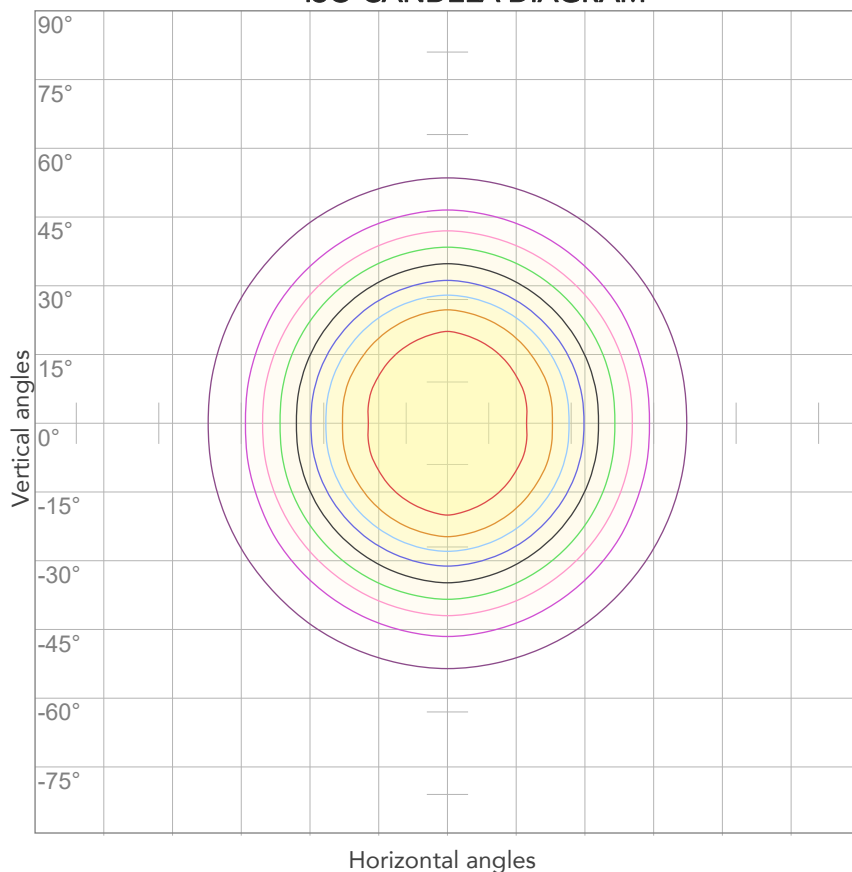
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
220V	1,15A	235,7W	58lm/W

## ISO CANDELA DIAGRAM



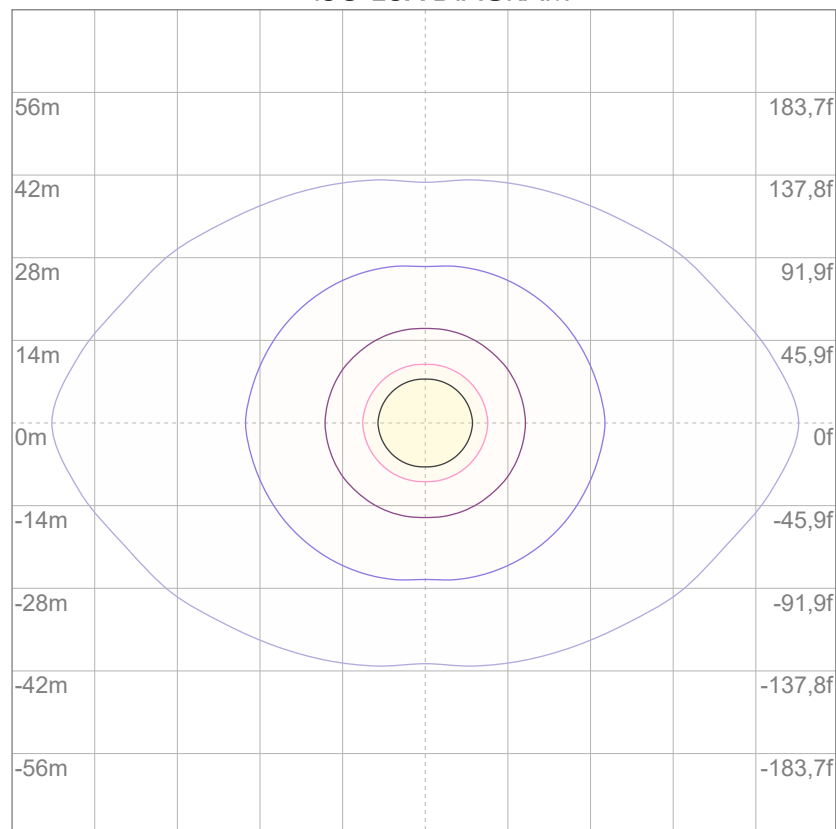
10%	867 cd
20%	1733 cd
30%	2600 cd
40%	3467 cd
50%	4333 cd
60%	5200 cd
70%	6067 cd
80%	6933 cd

### Conditions:

Number of c-planes: 4

Candela at center: 8667 cd

## ISO LUX DIAGRAM



3%	2,60 lx
5%	4,33 lx
10%	8,67 lx
30%	26,0 lx
50%	43,3 lx

### Conditions:

Number of c-planes: 4

Lux at center: 86,7 lx

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





Total lumen output:

13082 lm

Peak candela output:

4582 cd

Light quality:

CRI: 92,4

Color temperature:

6029 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter HD

Target:

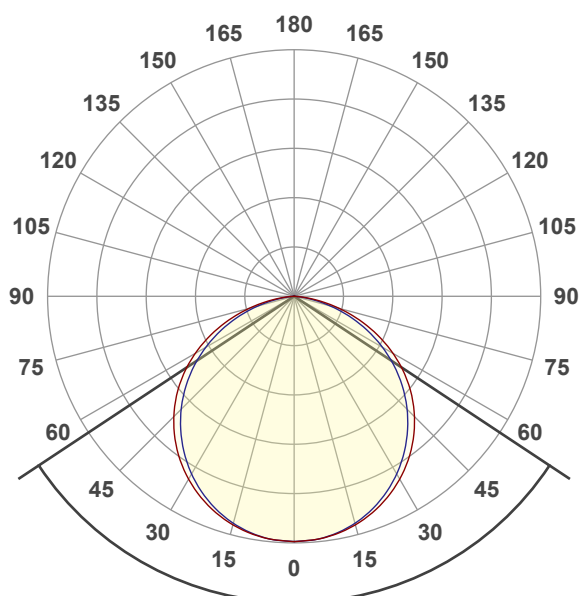
6000K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 17:31:31

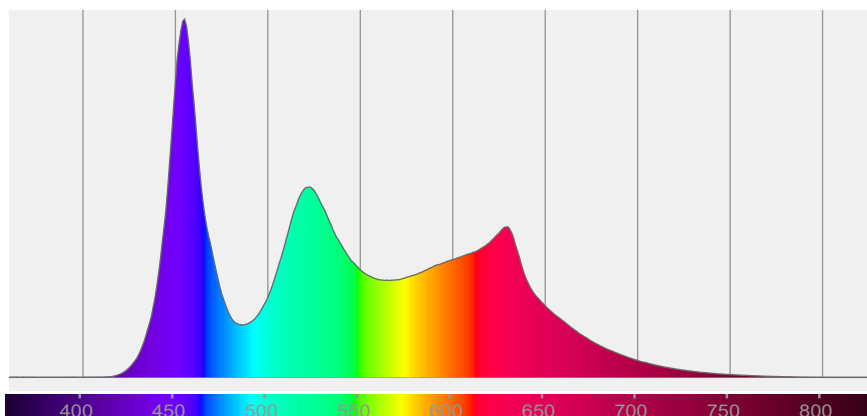


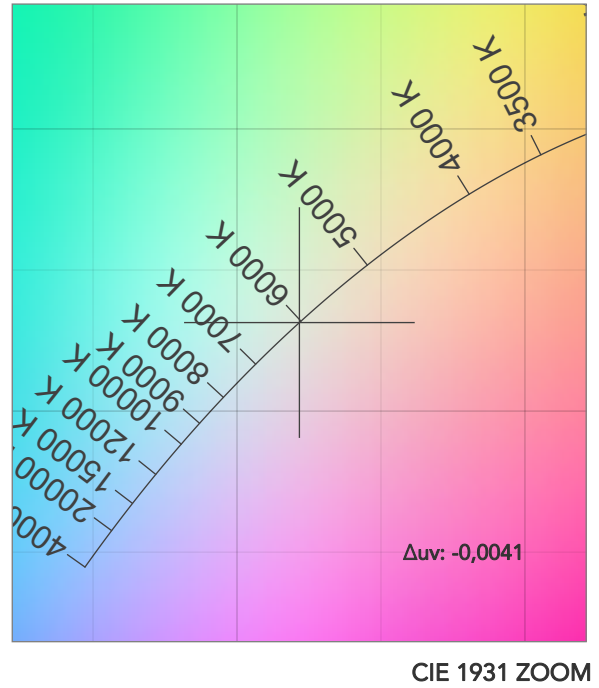
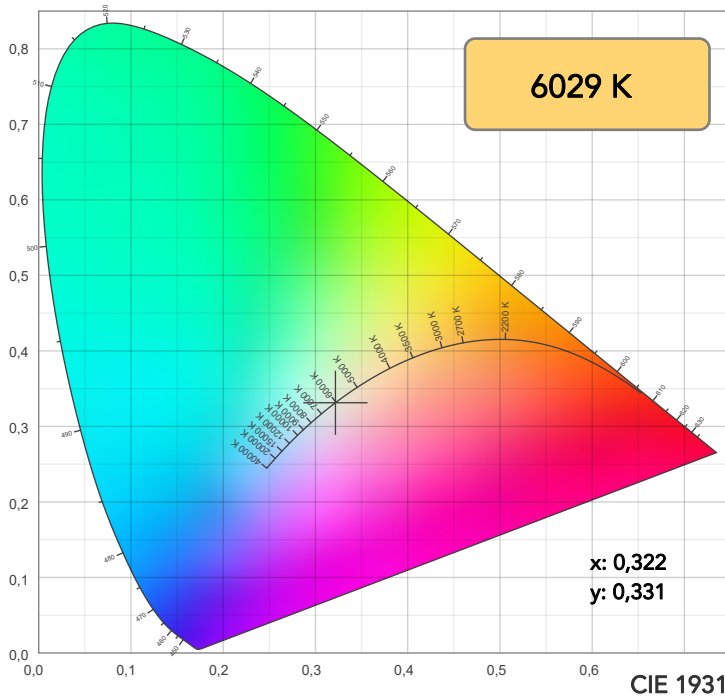
Beam angle 50%: 113°

Field angle 10%: 158,3°

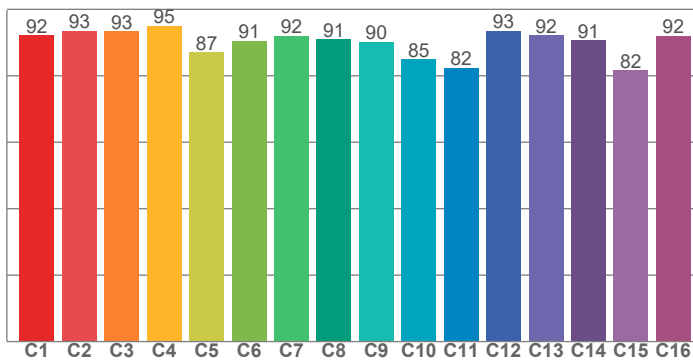
Cut off angle 2.5%: 169°

Spectra

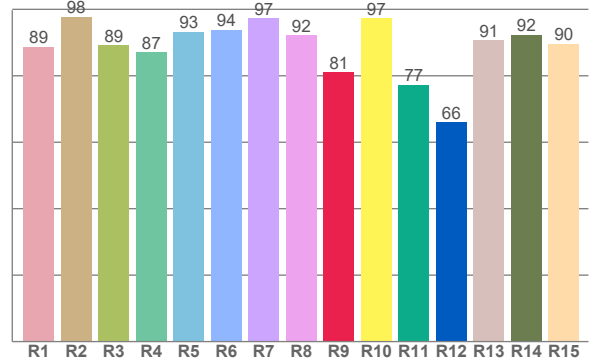




TM30: 89,8



CRI: 92,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
88,7	97,8	89,1	87,0	93,2	93,9	97,3	92,2	81,0	97,4	77,3	66,0	90,6	92,4	89,7

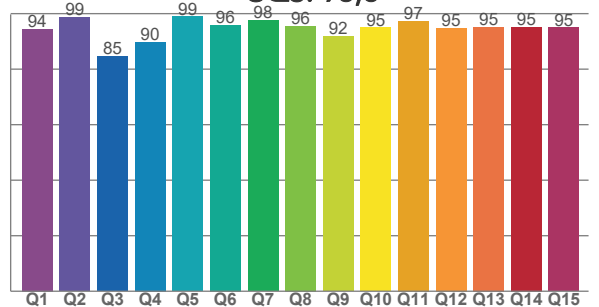
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,1	93,5	93,3	95,0	87,1	90,5	92,0	91,0	90,2	84,9	82,3	93,5	92,1	90,7	81,6	92,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,5	98,7	84,7	89,8	98,9	96,0	97,6	95,6	91,9	95,0	97,3	94,8	95,1	95,2	95,0

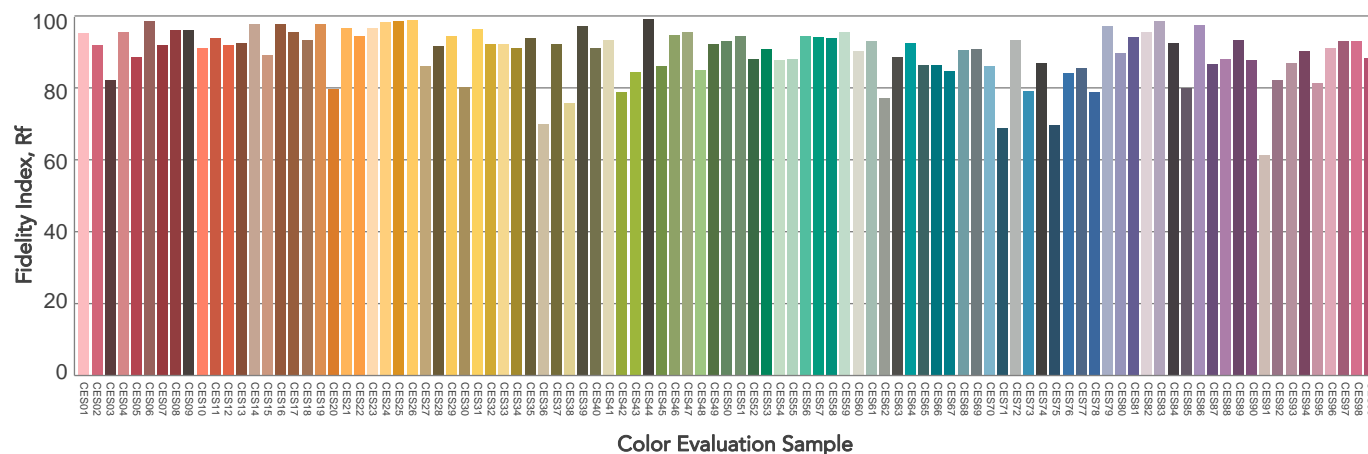
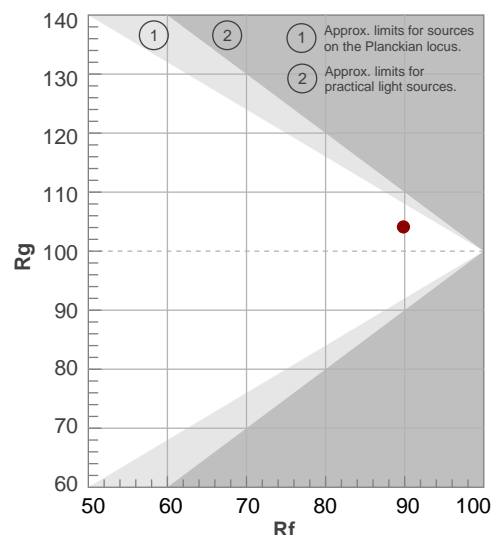
CQS: 93,6



## COLOR PARAMETERS

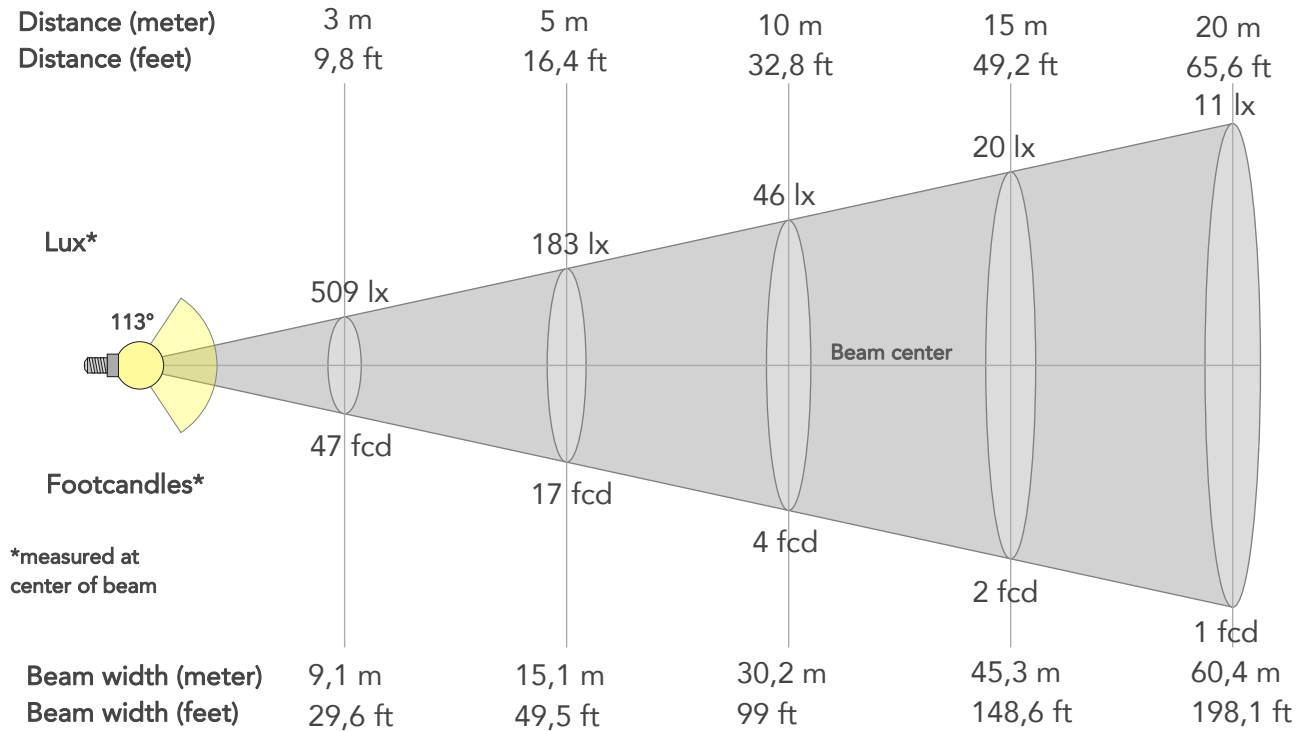
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6029 K	92,4	81,0	89,8	104,1	93,6	91	0,322	0,331	-0,0041

## Gammut index



## BEAM DETAILS

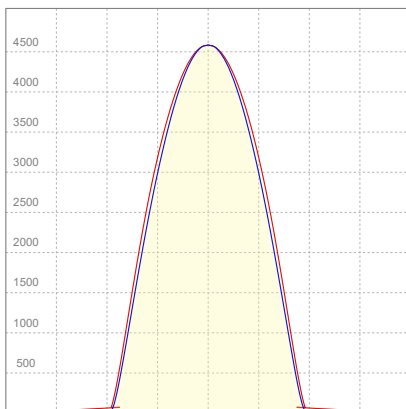
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
113°	158,3°	169°	79,2%	53,8%



### 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	4581lx	1145lx	509lx	286lx	183lx	81lx	46lx	20lx	11lx	7lx	5lx	3lx	2lx
Footcand.	426fcd	106fcd	47fcd	27fcd	17fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	3m	6m	9,1m	12,1m	15,1m	22,6m	30,2m	45,3m	60,4m	75,5m	90,6m	120,8m	151m
Beam wid.	10ft	19,9ft	29,6ft	39,6ft	49,5ft	74,3ft	99ft	148,6ft	198,1ft	247,6ft	297,1ft	396,1ft	495,2ft

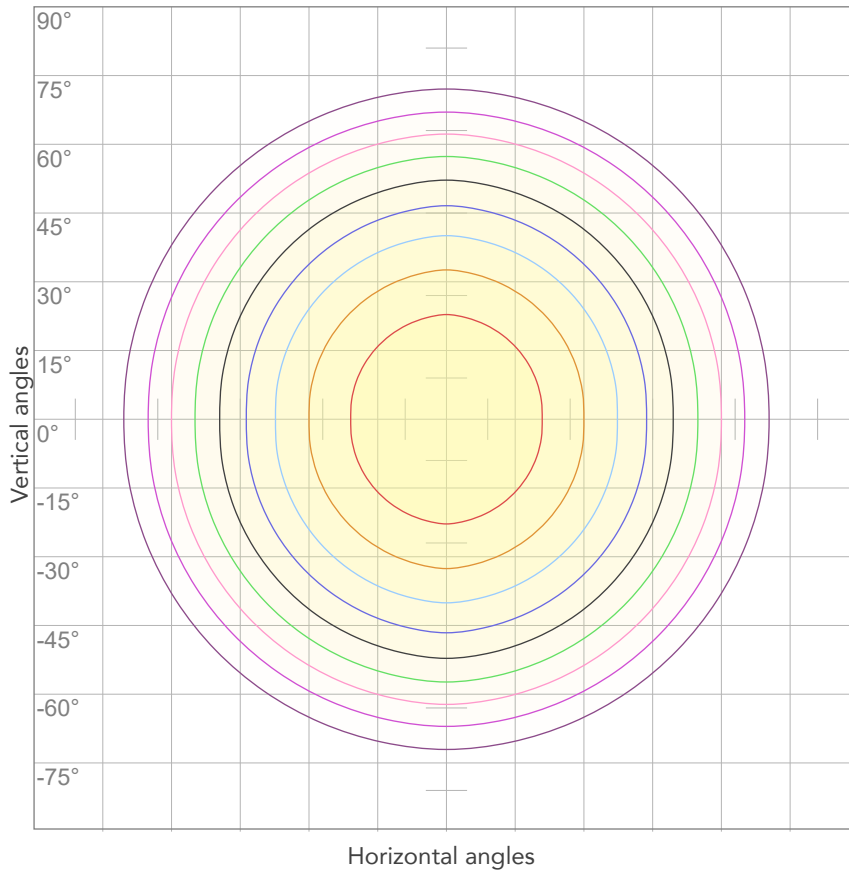
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,14A	236,3W	55lm/W

## ISO CANDELA DIAGRAM



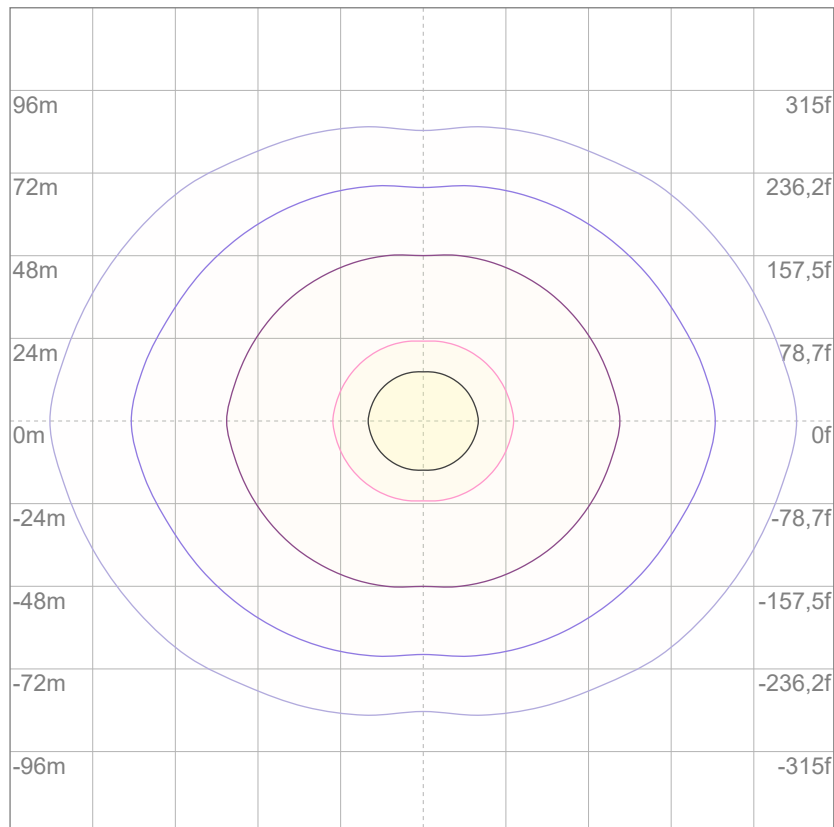
10%	458 cd
20%	916 cd
30%	1374 cd
40%	1833 cd
50%	2291 cd
60%	2749 cd
70%	3207 cd
80%	3665 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4581 cd

## ISO LUX DIAGRAM



3%	1,37 lx
5%	2,29 lx
10%	4,58 lx
30%	13,7 lx
50%	22,9 lx

### Conditions:

Number of c-planes: 4

Lux at center: 45,8 lx

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



Total lumen output:

15463 lm

Peak candela output:

6088 cd

Light quality:

CRI: 94,3

Color temperature:

6056 K

PRODUCT NAME:

ECLPANELTWCJR4X1

MEASURAMENT CONDITIONS:

Beam angle:

Filter MD

Target:

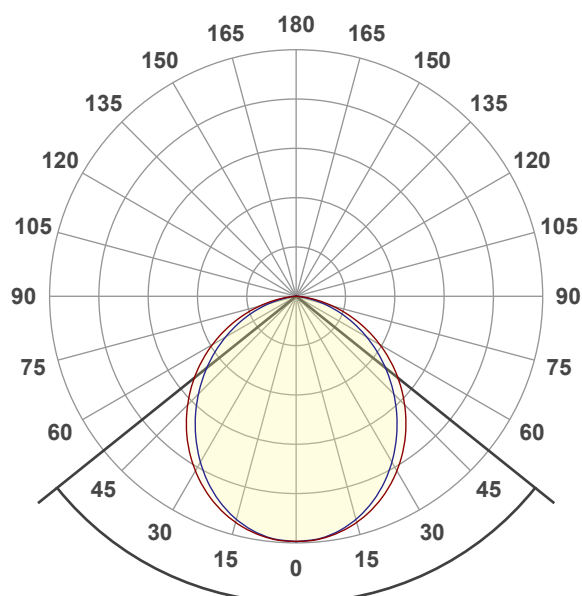
6000K HQ

Operator:

Paolo Carvone

Date and time:

10/01/2022 16:54:48

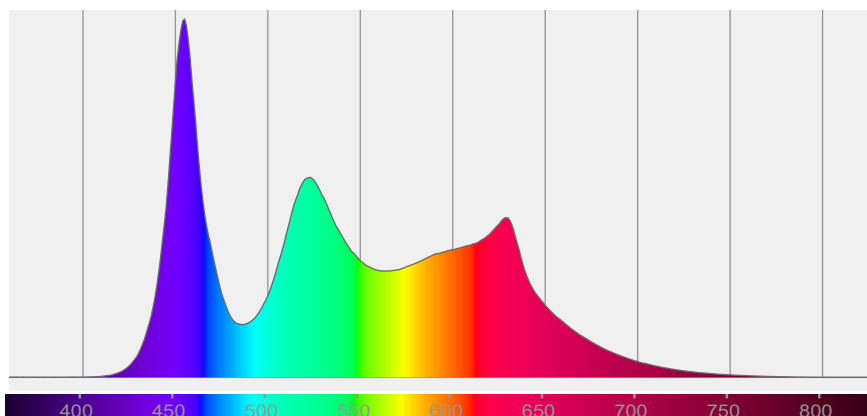


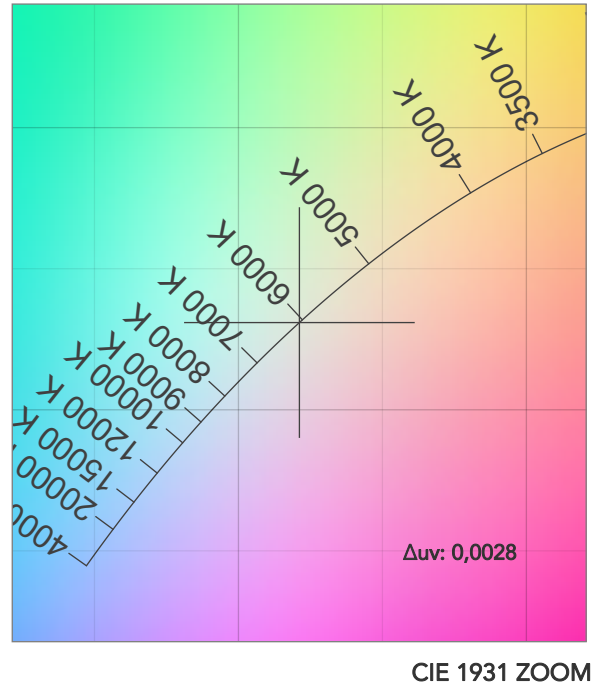
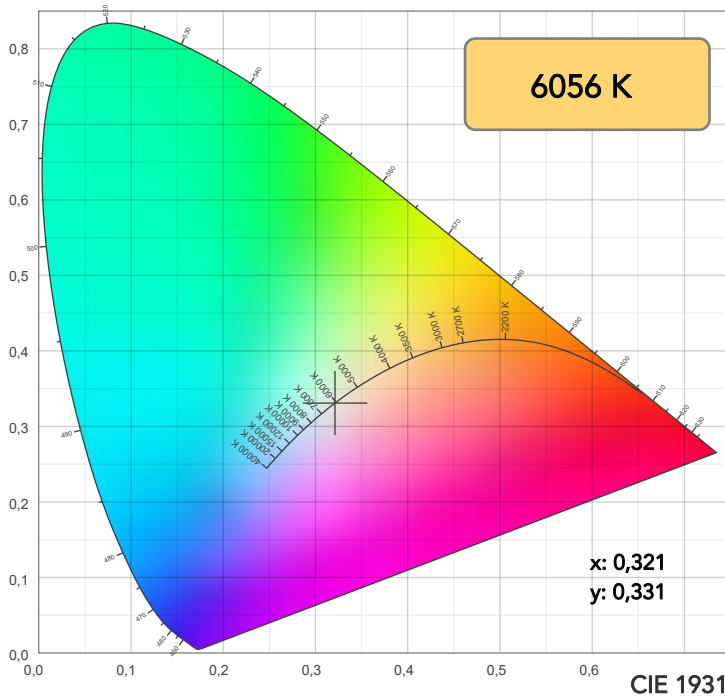
Beam angle 50%: 102,6°

Field angle 10%: 154,8°

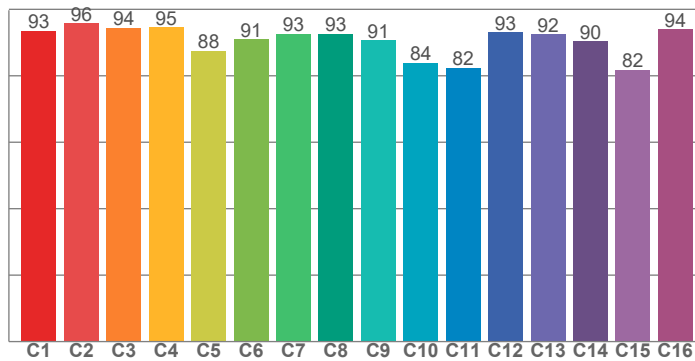
Cut off angle 2.5%: 167,4°

Spectra

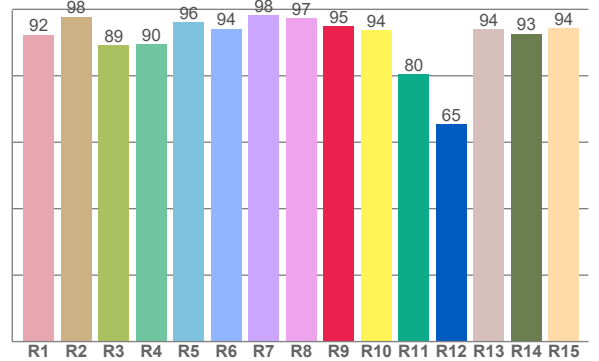




TM30: 90,4



CRI: 94,3 (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
92,4	97,8	89,3	89,5	96,2	94,2	98,2	97,2	95,0	93,8	80,5	65,3	94,0	92,7	94,4

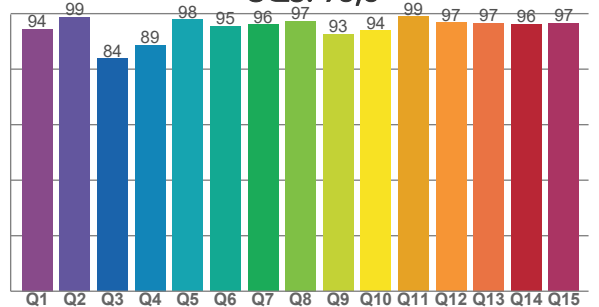
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,5	95,8	94,5	94,6	87,6	91,0	92,6	92,5	90,7	84,0	82,4	93,1	92,4	90,3	81,9	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,4	98,7	83,8	88,7	97,9	95,4	96,1	97,3	92,5	93,9	98,9	96,8	96,6	96,2	96,5

CQS: 93,6



## COLOR PARAMETERS

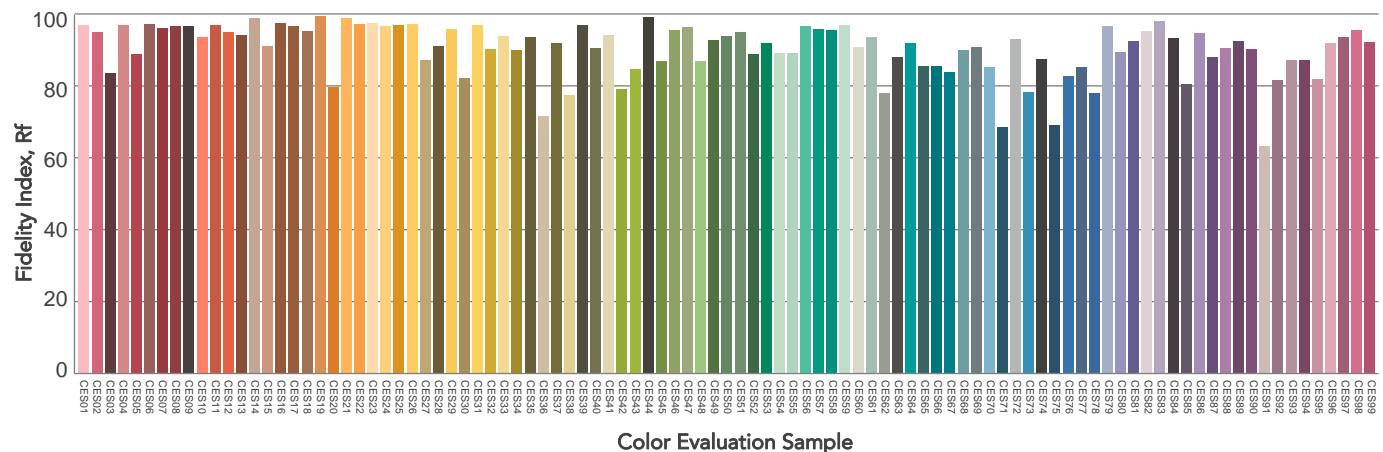
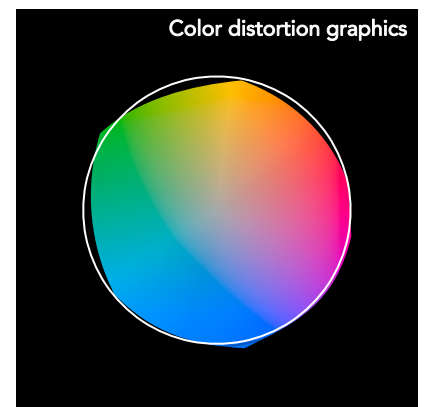
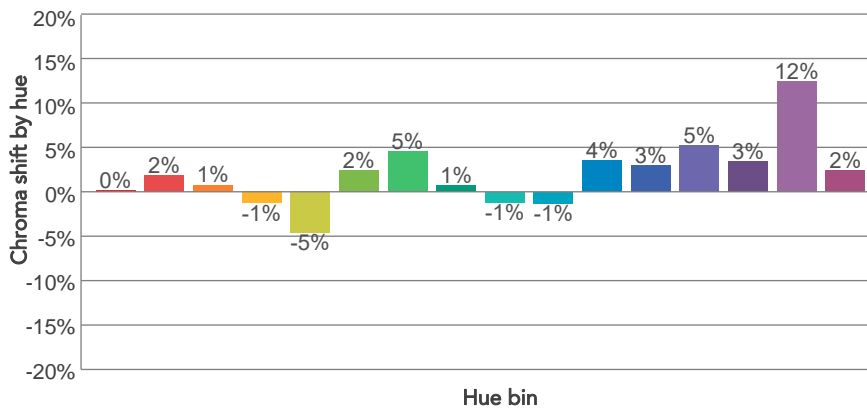
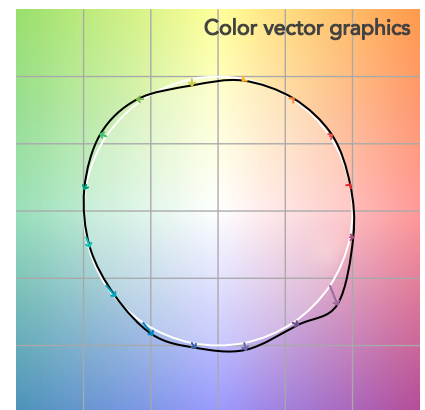
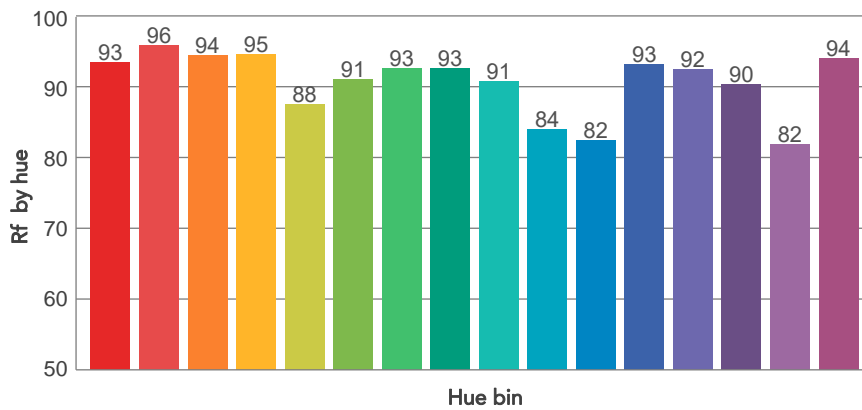
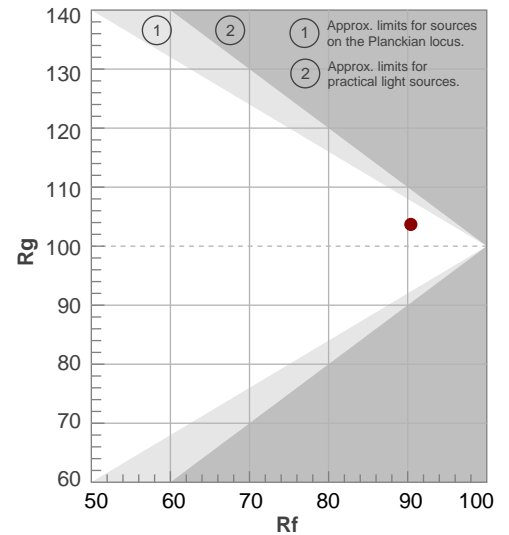
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
6056 K	94,3	95,0	90,4	103,7	93,6	92	0,321	0,331	0,0028

# TM30 DETAILS

**Rf 90,4**  
Fidelity index Rf

**Rg 103,7**  
Gammut index

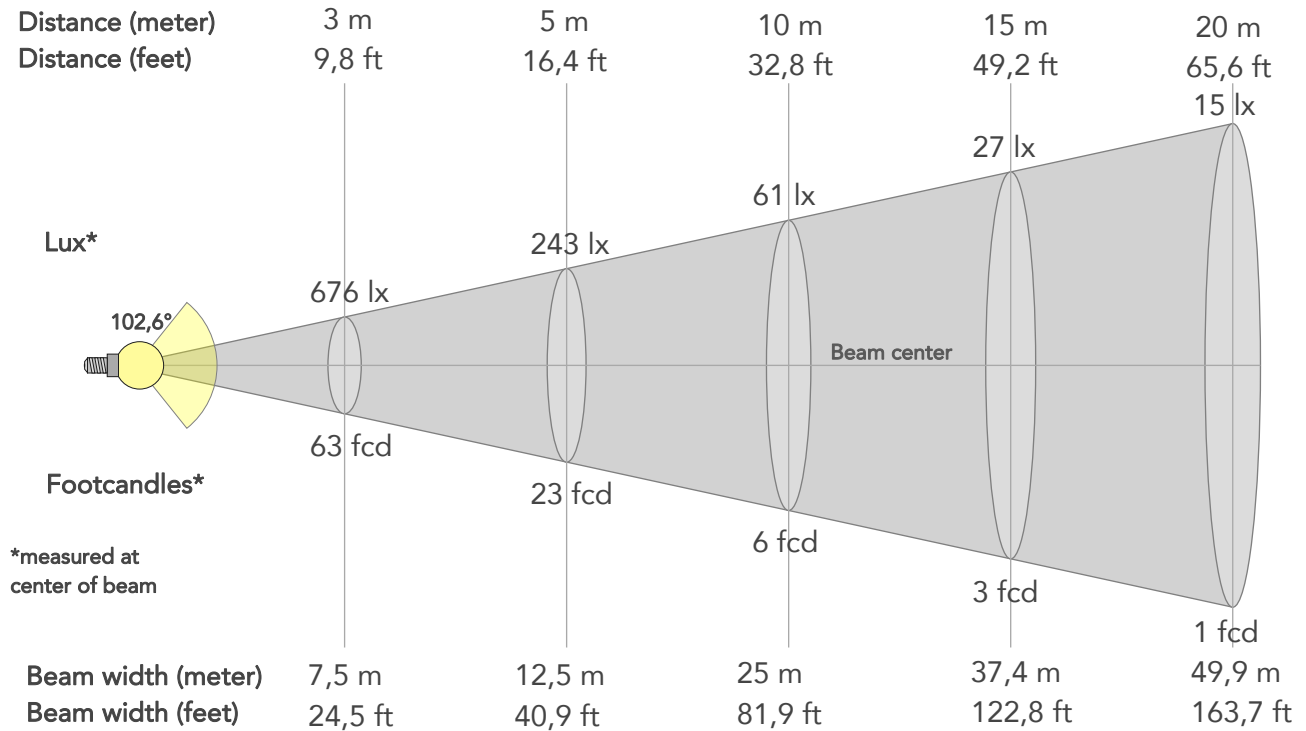
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	0%	0%
2	96	2%	0%
3	94	1%	0%
4	95	-1%	1%
5	88	-5%	1%
6	91	2%	4%
7	93	5%	1%
8	93	1%	3%
9	91	-1%	7%
10	84	-1%	10%
11	82	4%	11%
12	93	3%	3%
13	92	5%	0%
14	90	3%	3%
15	82	12%	-8%
16	94	2%	0%





## BEAM DETAILS

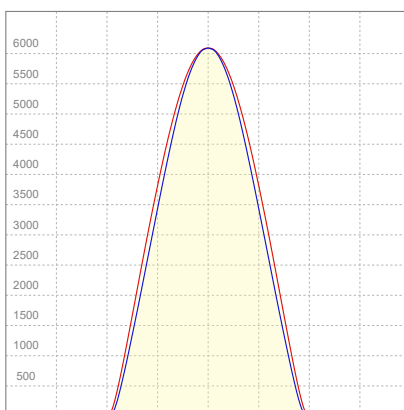
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,6°	154,8°	167,4°	81,6%	57,2%



### 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	6086lx	1521lx	676lx	380lx	243lx	108lx	61lx	27lx	15lx	10lx	7lx	4lx	2lx
Footcand.	565fcd	141fcd	63fcd	35fcd	23fcd	10fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,5m	5m	7,5m	10m	12,5m	18,7m	25m	37,4m	49,9m	62,4m	74,9m	99,8m	124,8m
Beam wid.	8,2ft	16,5ft	24,5ft	32,7ft	40,9ft	61,4ft	81,9ft	122,8ft	163,7ft	204,7ft	245,6ft	327,4ft	409,3ft

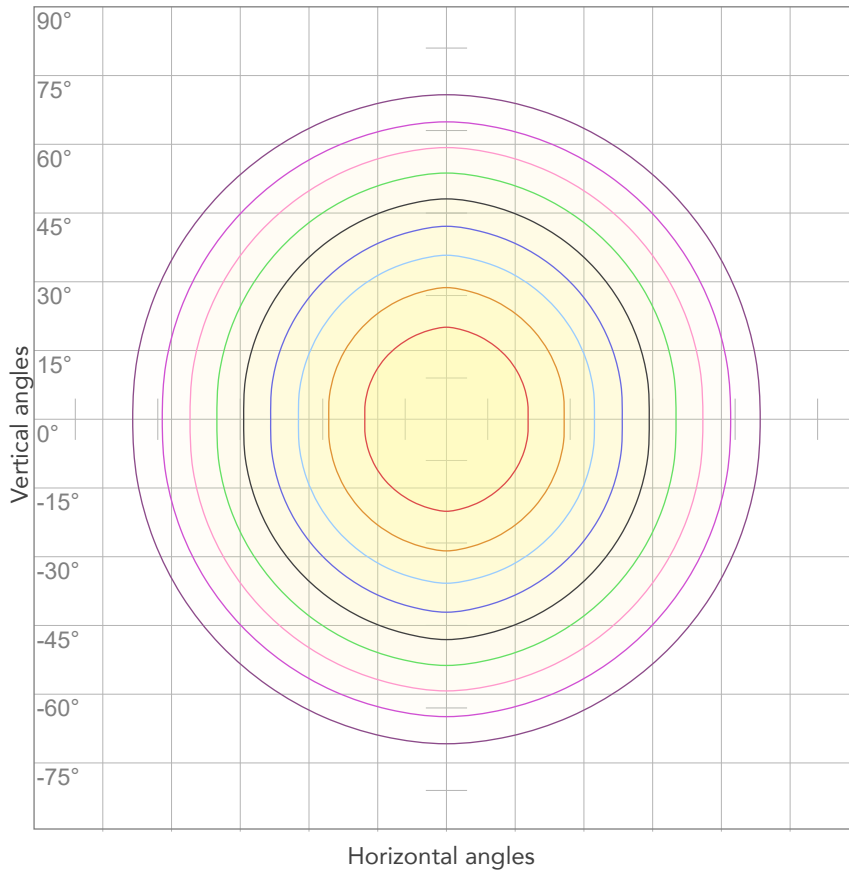
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	1,15A	236,4W	65lm/W

## ISO CANDELA DIAGRAM



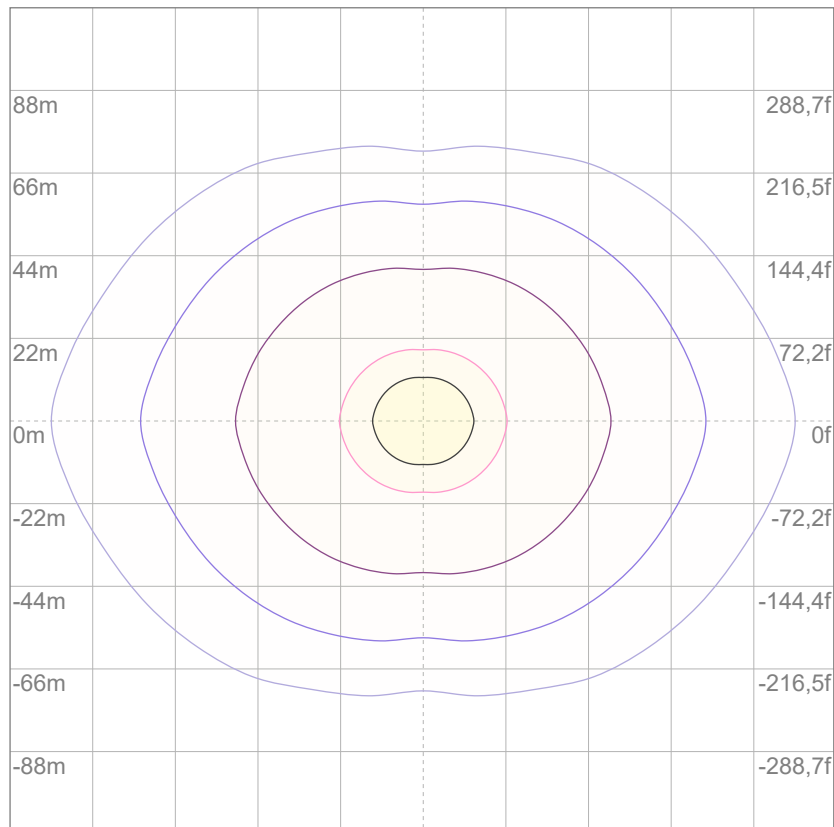
10%	609 cd
20%	1217 cd
30%	1826 cd
40%	2434 cd
50%	3043 cd
60%	3651 cd
70%	4260 cd
80%	4868 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6086 cd

## ISO LUX DIAGRAM



3%	1,83 lx
5%	3,04 lx
10%	6,09 lx
30%	18,3 lx
50%	30,4 lx

### Conditions:

Number of c-planes: 4

Lux at center: 60,9 lx

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



Total lumen output:

16085 lm

Peak candela output:

6453 cd

Light quality:

CRI: 94,3

Color temperature:

6011 K

**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter LD

Target:

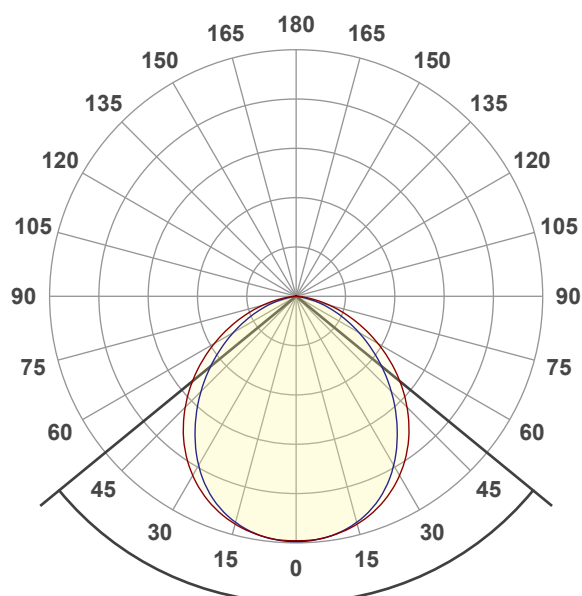
6000K HQ

Operator:

Paolo Carvone

Date and time:

11/01/2022 09:15:09

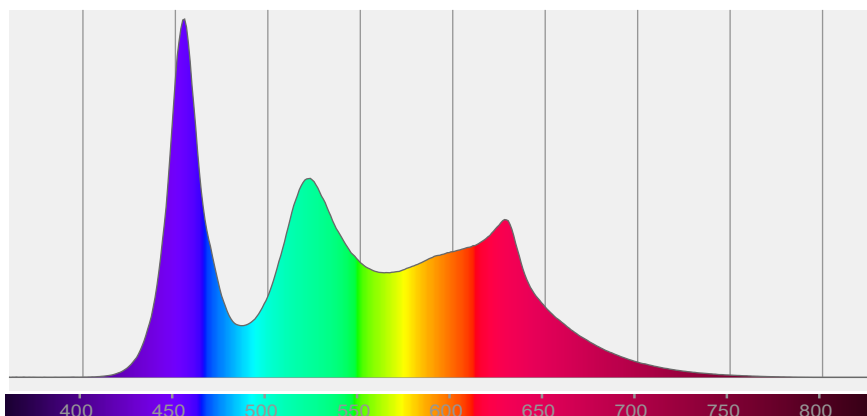


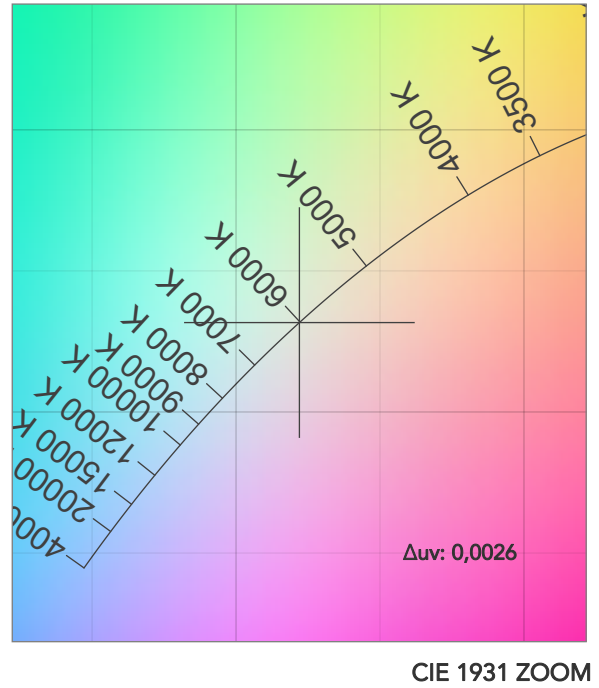
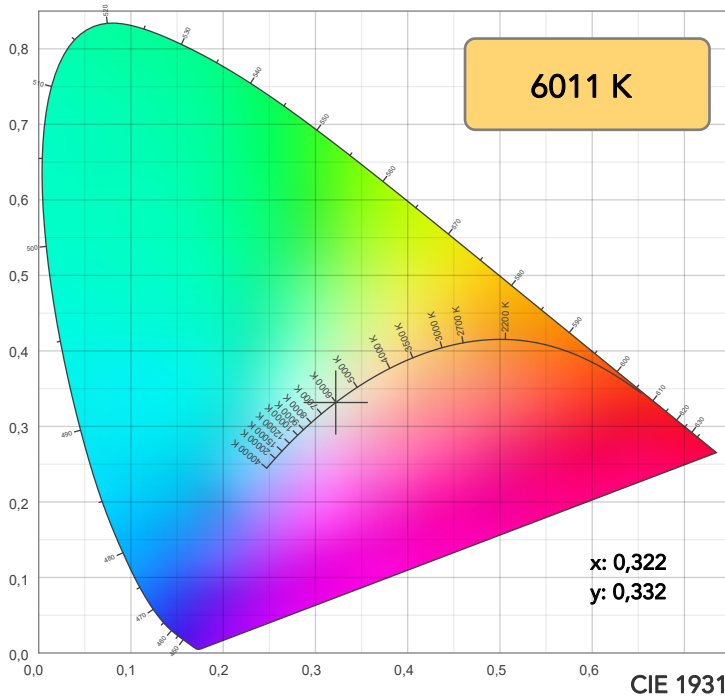
Beam angle 50%: 101,4°

Field angle 10%: 152°

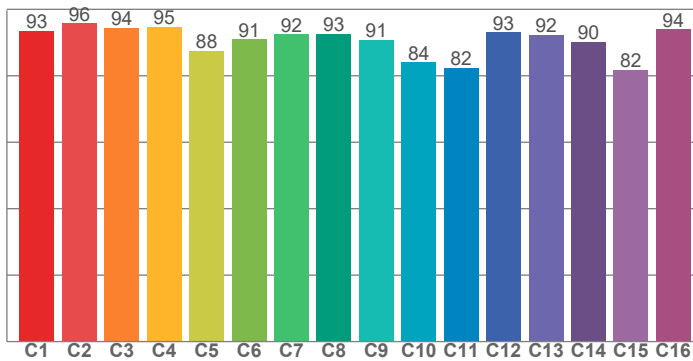
Cut off angle 2.5%: 165,9°

**Spectra**

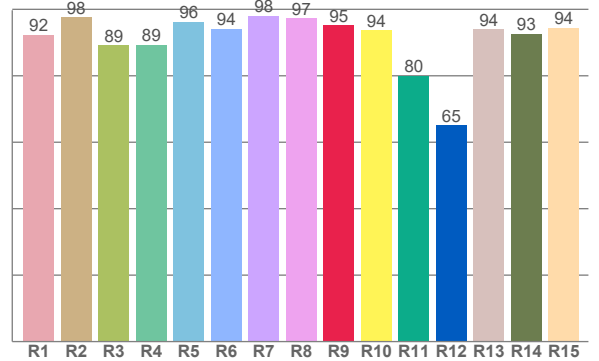




TM30: 90,4



CRI: 94,3 (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
92,4	97,7	89,2	89,3	96,2	94,2	98,1	97,3	95,2	93,7	80,0	65,1	94,0	92,7	94,5

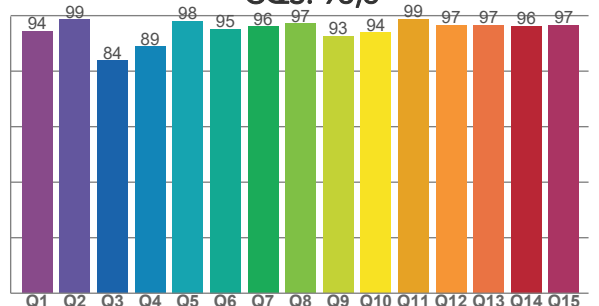
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,5	95,8	94,4	94,7	87,6	90,9	92,4	92,6	90,8	84,0	82,3	93,1	92,3	90,2	81,7	93,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,4	98,6	83,8	88,8	98,1	95,2	96,1	97,2	92,5	93,9	98,7	96,6	96,5	96,2	96,5

CQS: 93,6



## COLOR PARAMETERS

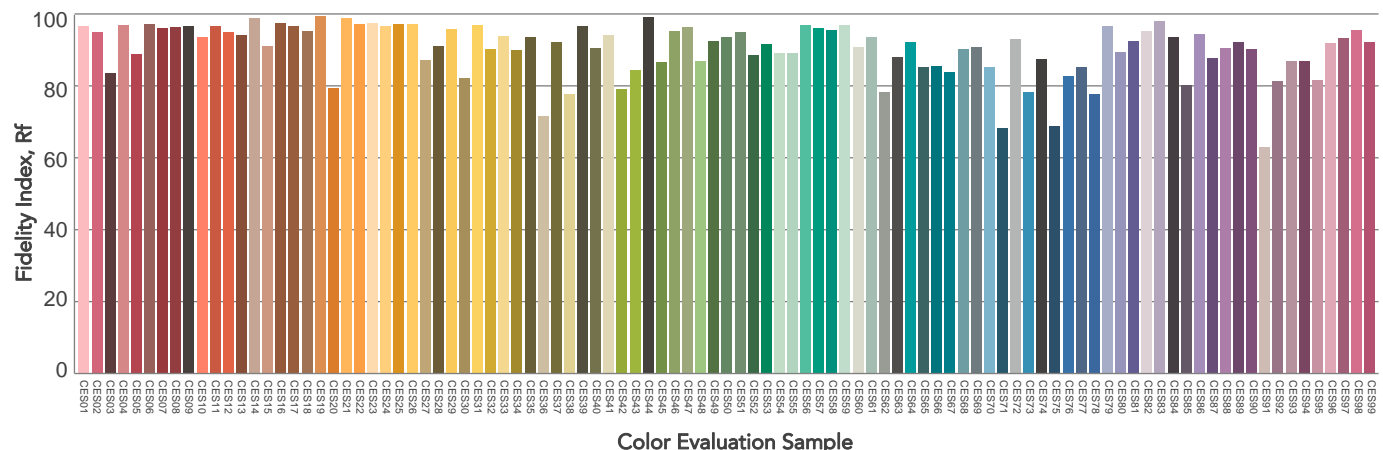
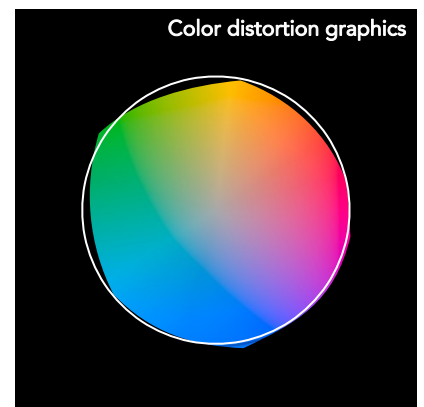
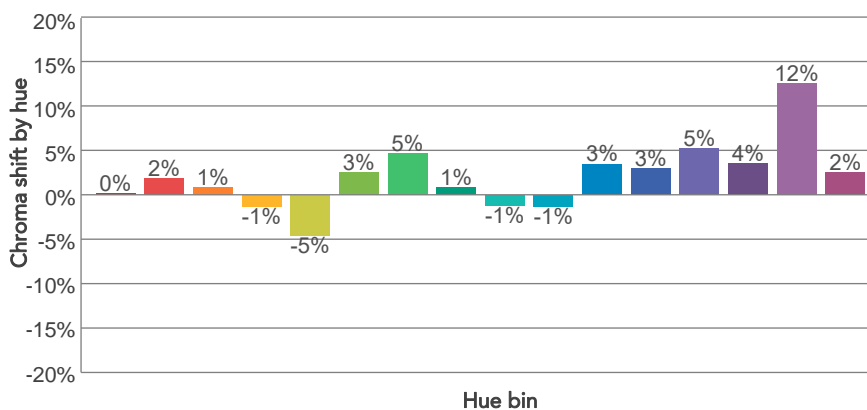
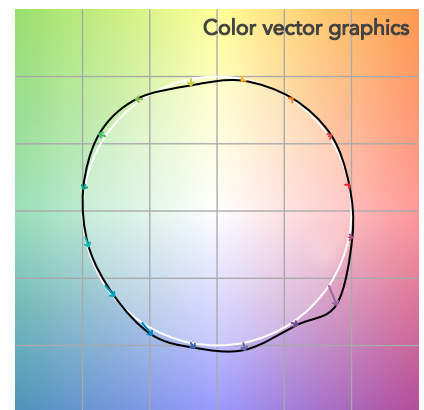
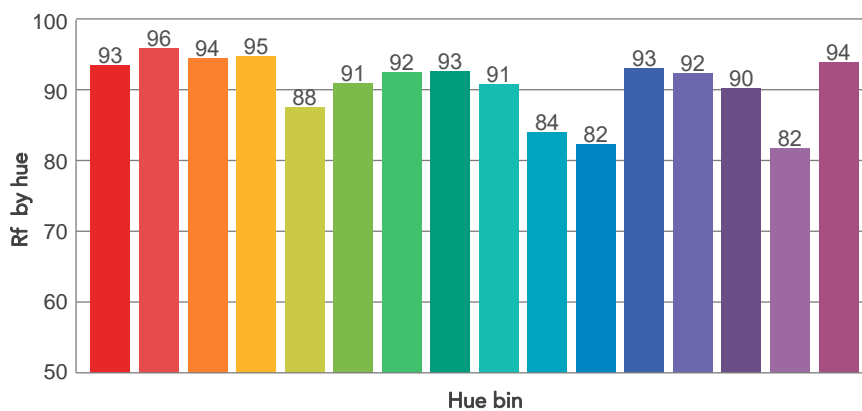
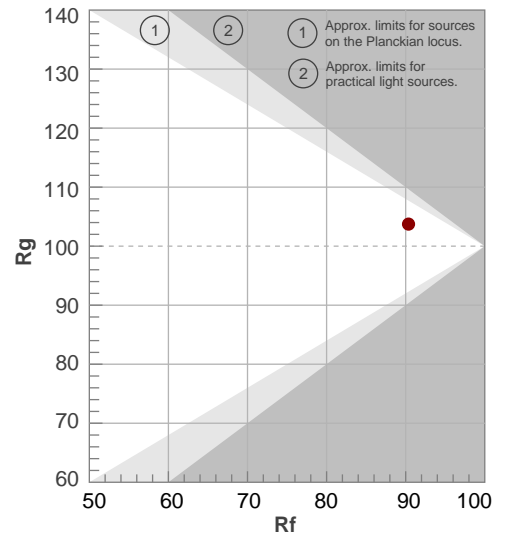
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
6011 K	94,3	95,2	90,4	103,7	93,6	92	0,322	0,332	0,0026

# TM30 DETAILS

**Rf 90,4**  
Fidelity index Rf

**Rg 103,7**  
Gammut index

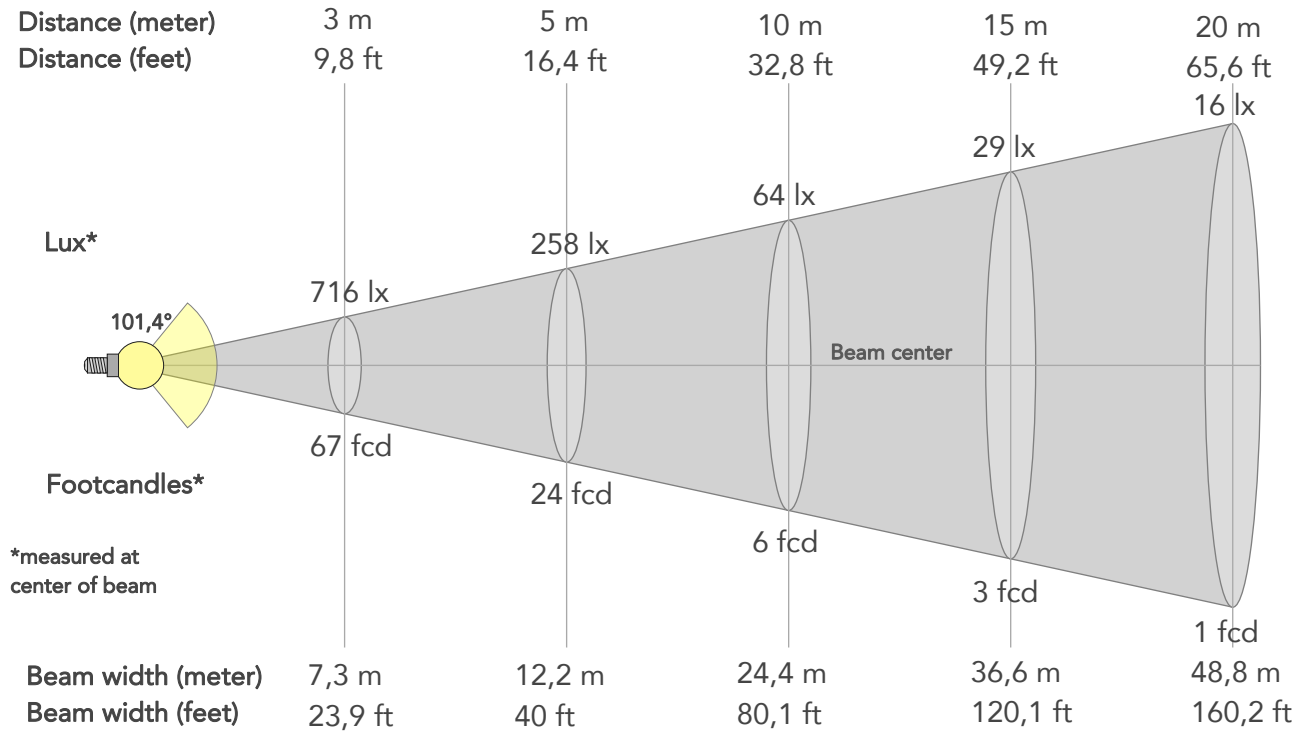
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	0%	0%
2	96	2%	0%
3	94	1%	0%
4	95	-1%	1%
5	88	-5%	1%
6	91	3%	4%
7	92	5%	1%
8	93	1%	3%
9	91	-1%	7%
10	84	-1%	10%
11	82	3%	11%
12	93	3%	3%
13	92	5%	0%
14	90	4%	3%
15	82	12%	-9%
16	94	2%	0%



## BEAM DETAILS



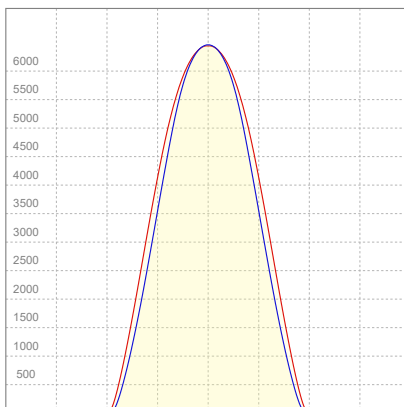
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
101,4°	152°	165,9°	83,4%	59,2%



### 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	6444lx	1611lx	716lx	403lx	258lx	115lx	64lx	29lx	16lx	10lx	7lx	4lx	3lx
Footcand.	599fcd	150fcd	67fcd	37fcd	24fcd	11fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	2,4m	4,9m	7,3m	9,8m	12,2m	18,3m	24,4m	36,6m	48,8m	61m	73,3m	97,7m	122,1m
Beam wid.	8,1ft	16,1ft	23,9ft	32ft	40ft	60,1ft	80,1ft	120,1ft	160,2ft	200,2ft	240,3ft	320,4ft	400,5ft

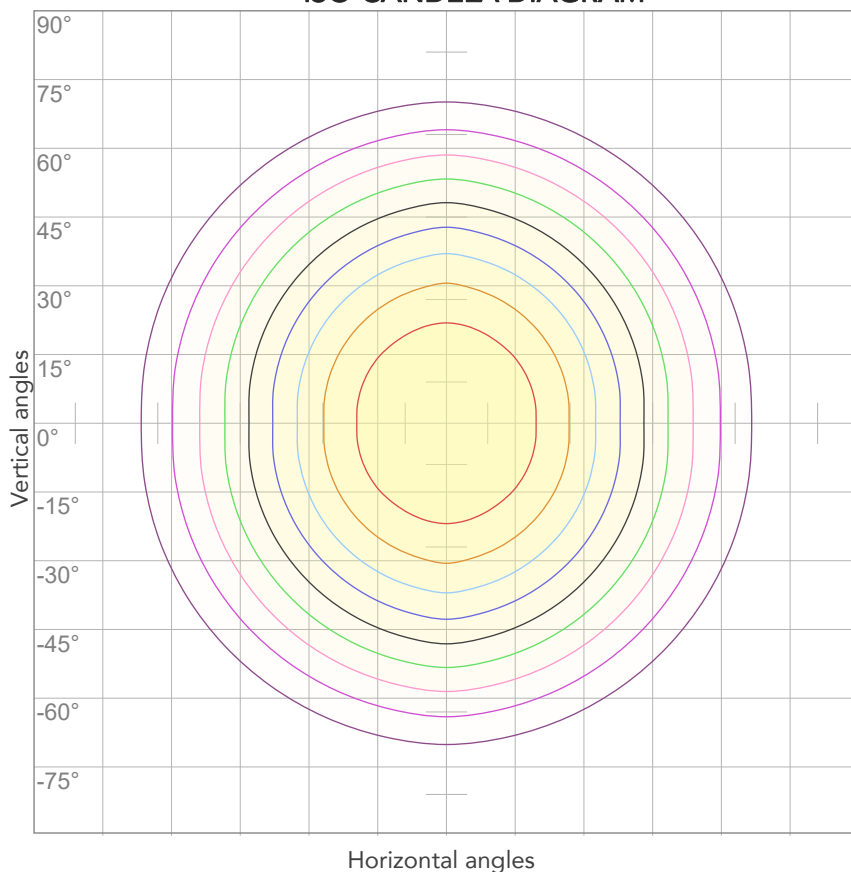
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	1,15A	236,9W	68lm/W

## ISO CANDELA DIAGRAM



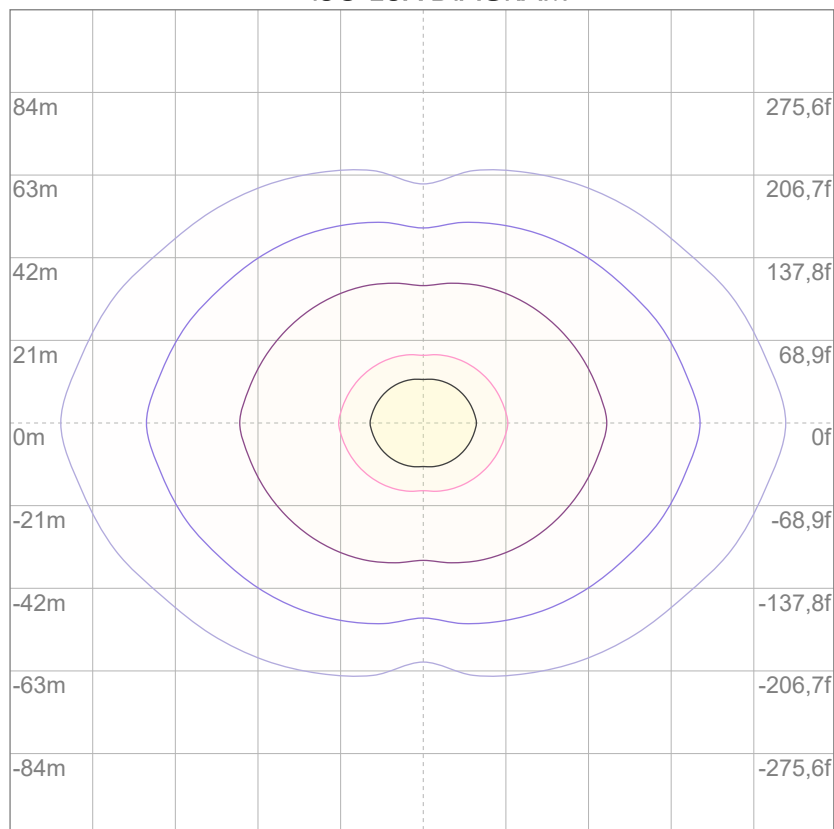
10%	644 cd
20%	1289 cd
30%	1933 cd
40%	2578 cd
50%	3222 cd
60%	3866 cd
70%	4511 cd
80%	5155 cd

### Conditions:

Number of c-planes: 4

Candela at center: 6444 cd

## ISO LUX DIAGRAM



3%	1,93 lx
5%	3,22 lx
10%	6,44 lx
30%	19,3 lx
50%	32,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 64,4 lx

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



Total lumen output:

13683 lm

Peak candela output:

8623 cd

Light quality:

CRI: 94,4

Color temperature:

6049 K

**PRODUCT NAME:**

ECLPANELTWCJR4X1

**MEASURAMENT CONDITIONS:**

Beam angle:

Filter INT

Target:

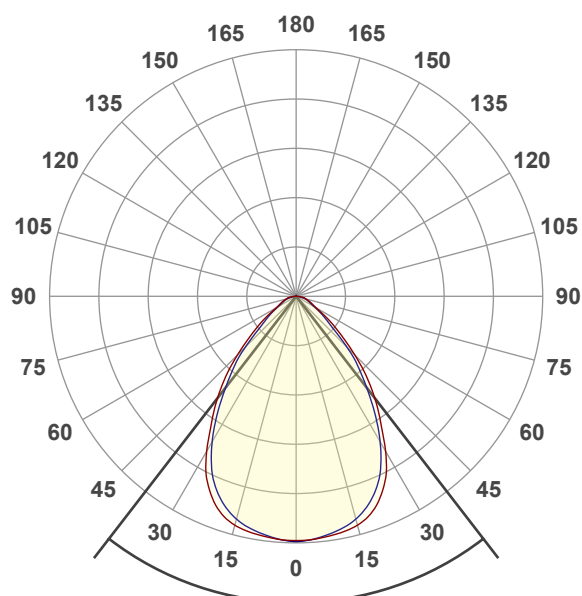
6000K HQ

Operator:

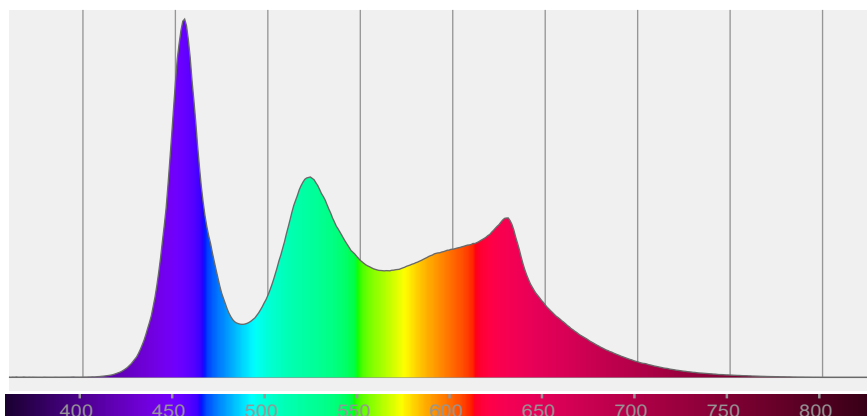
Paolo Carvone

Date and time:

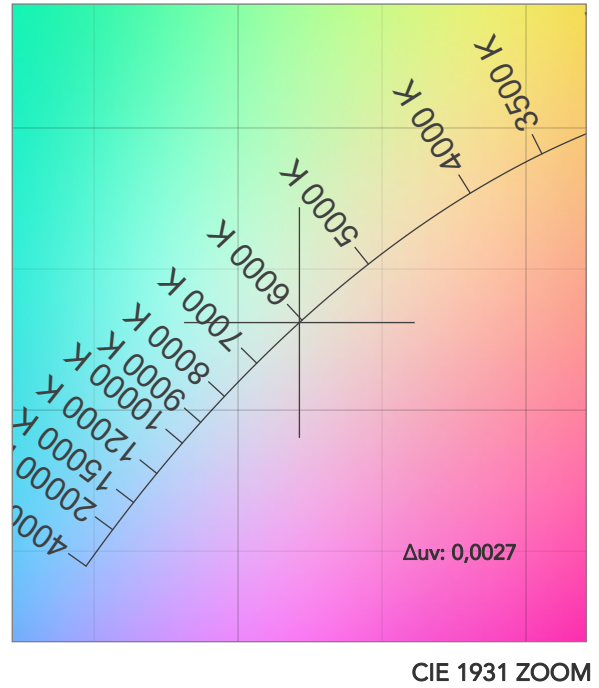
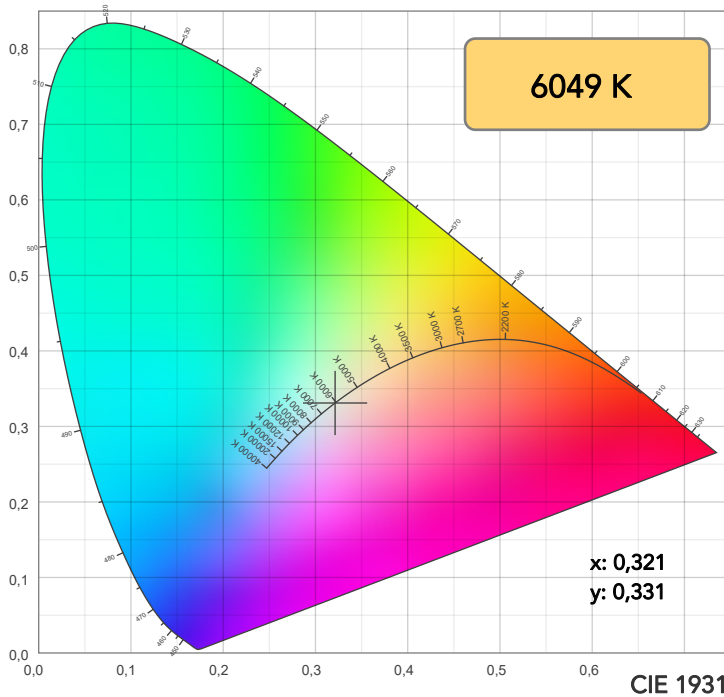
10/01/2022 18:04:19



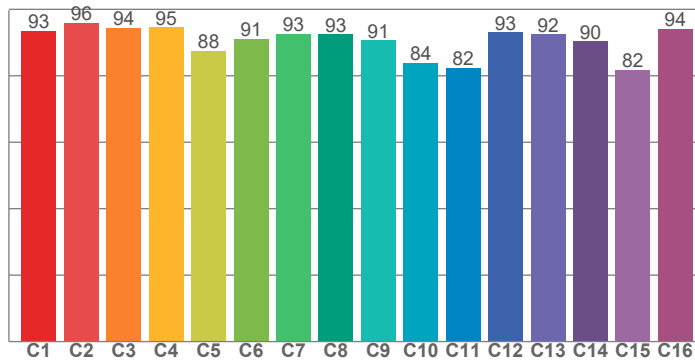
**Spectra**



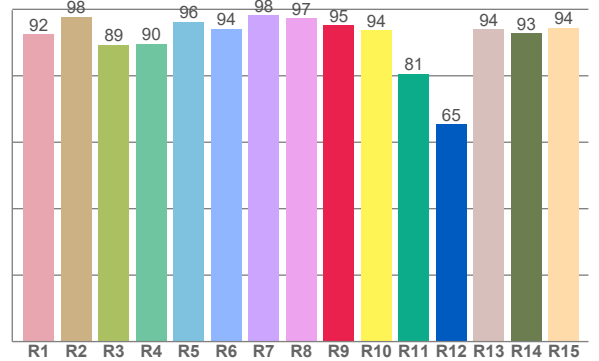




TM30: 90,4



CRI: 94,4 (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
92,4	97,8	89,3	89,7	96,2	94,2	98,2	97,3	95,1	93,8	80,6	65,3	94,0	92,7	94,4

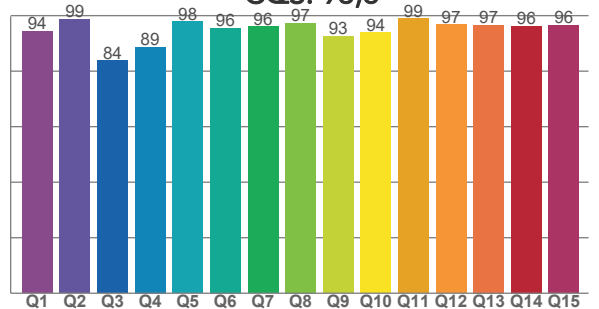
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,5	95,9	94,5	94,6	87,5	91,1	92,7	92,5	90,7	83,9	82,5	93,1	92,4	90,4	81,9	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,4	98,7	83,8	88,6	97,8	95,5	96,1	97,3	92,6	93,9	98,9	96,8	96,7	96,2	96,5

CQS: 93,6



## COLOR PARAMETERS

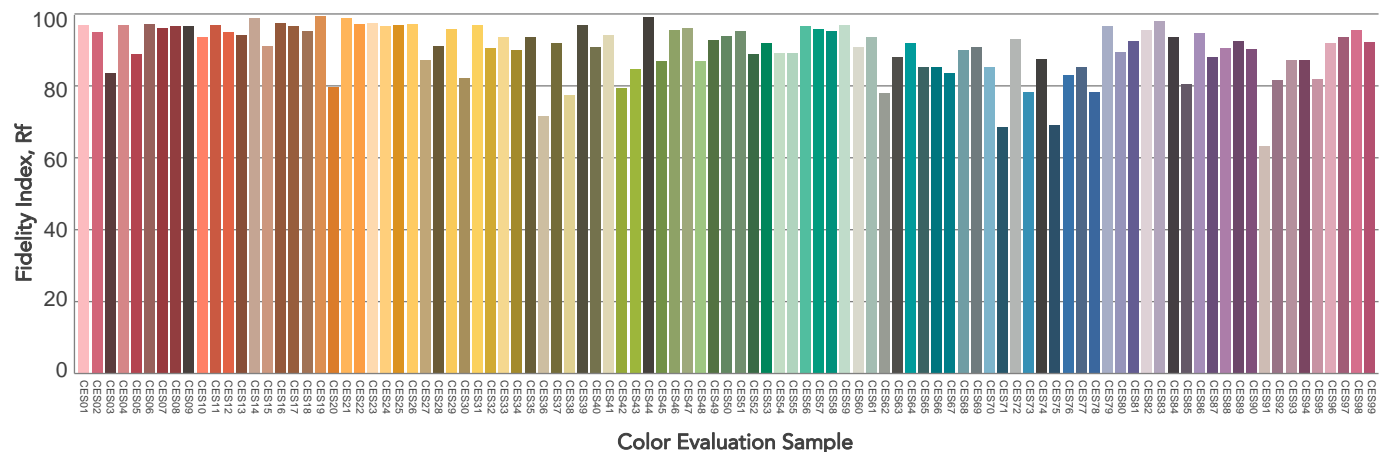
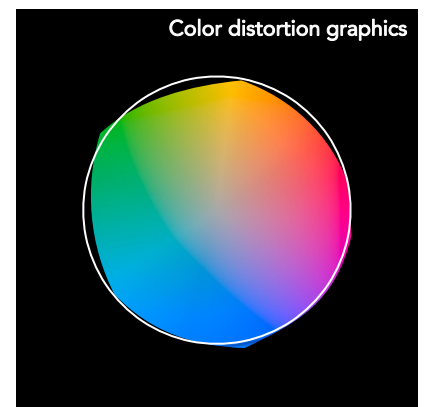
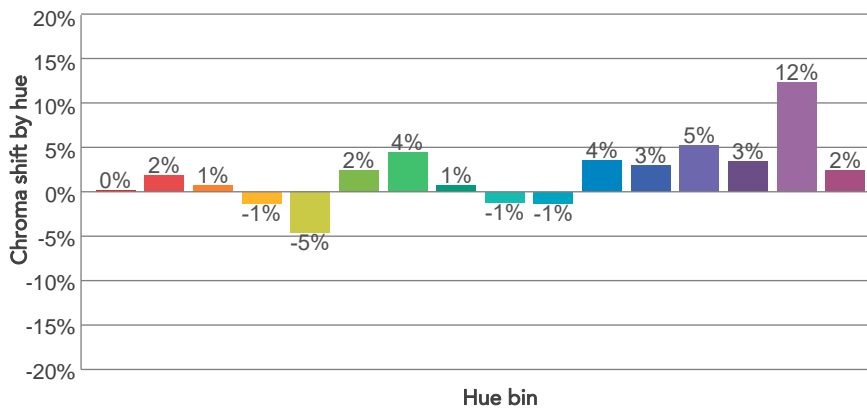
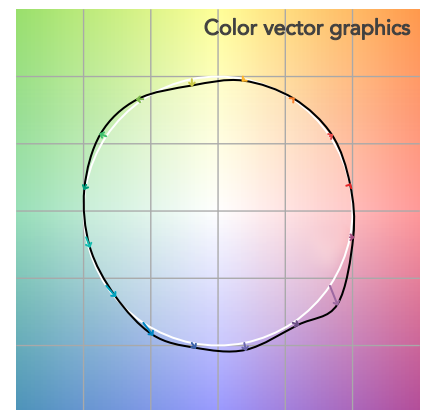
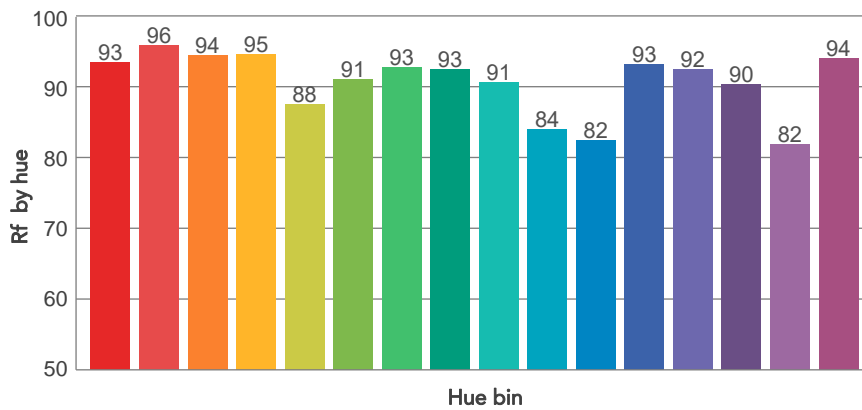
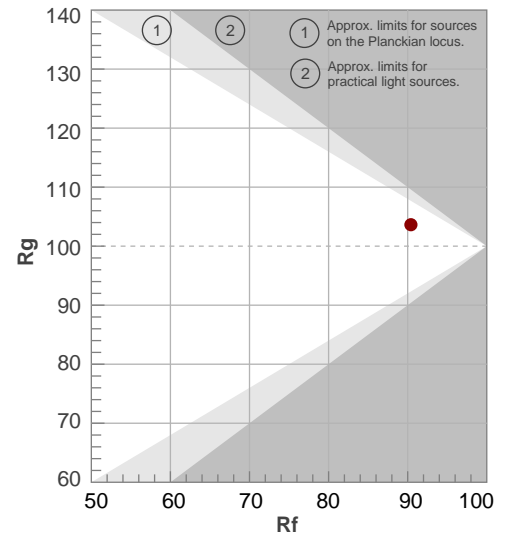
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
6049 K	94,4	95,1	90,4	103,6	93,6	92	0,321	0,331	0,0027

# TM30 DETAILS

**Rf 90,4**  
Fidelity index Rf

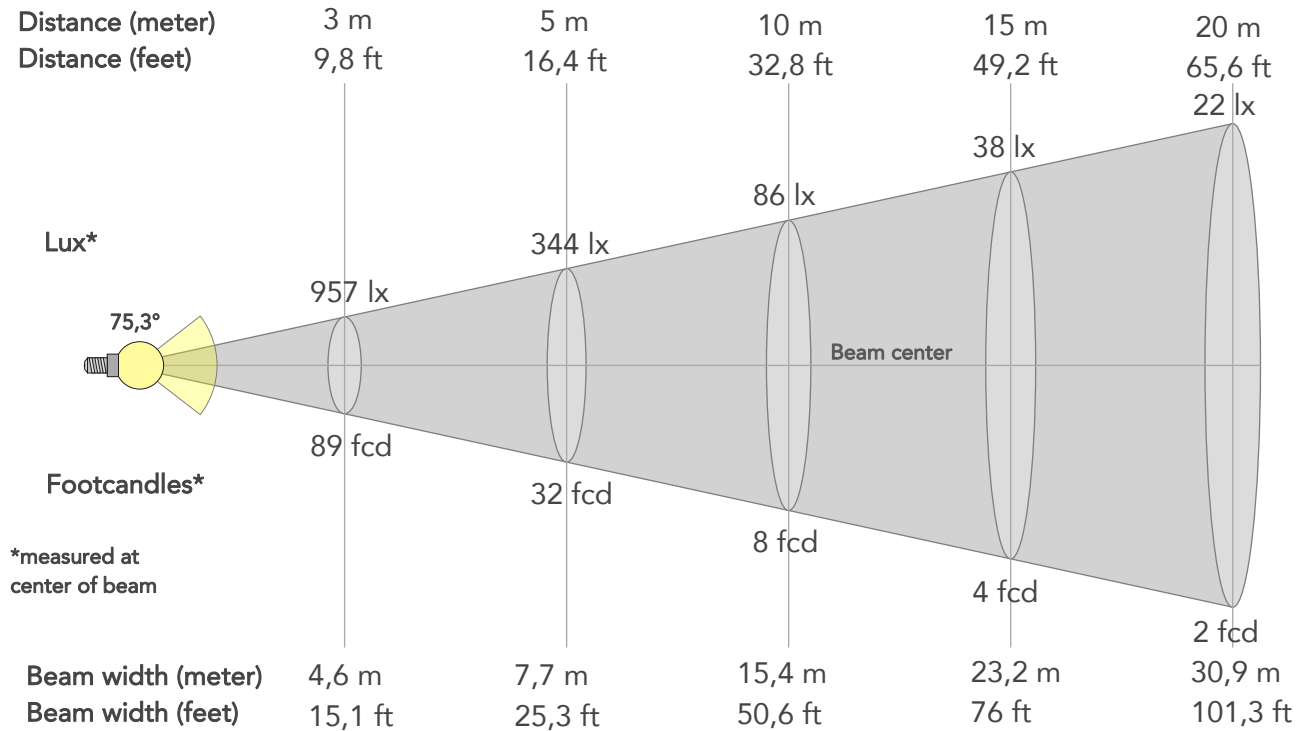
**Rg 103,6**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	0%	0%
2	96	0%	0%
3	94	1%	0%
4	95	-1%	1%
5	88	-5%	1%
6	91	2%	4%
7	93	4%	1%
8	93	1%	3%
9	91	-1%	7%
10	84	-1%	10%
11	82	4%	11%
12	93	3%	3%
13	92	5%	0%
14	90	3%	3%
15	82	12%	-8%
16	94	2%	0%



## BEAM DETAILS

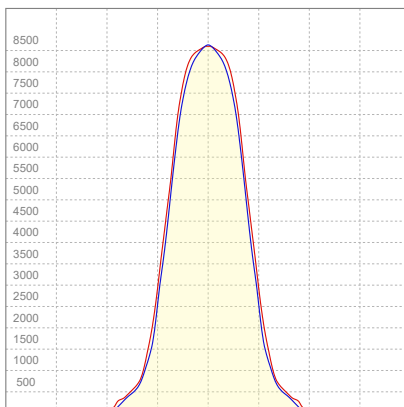
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
75,3°	117,4°	159,7°	92,3%	77,8%



### 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	8609lx	2152lx	957lx	538lx	344lx	153lx	86lx	38lx	22lx	14lx	10lx	5lx	3lx
Footcand.	800fcd	200fcd	89fcd	50fcd	32fcd	14fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	1,5m	3,1m	4,6m	6,2m	7,7m	11,6m	15,4m	23,2m	30,9m	38,6m	46,3m	61,8m	77,2m
Beam wid.	5,1ft	10,2ft	15,1ft	20,2ft	25,3ft	38ft	50,6ft	76ft	101,3ft	126,6ft	151,9ft	202,6ft	253,2ft

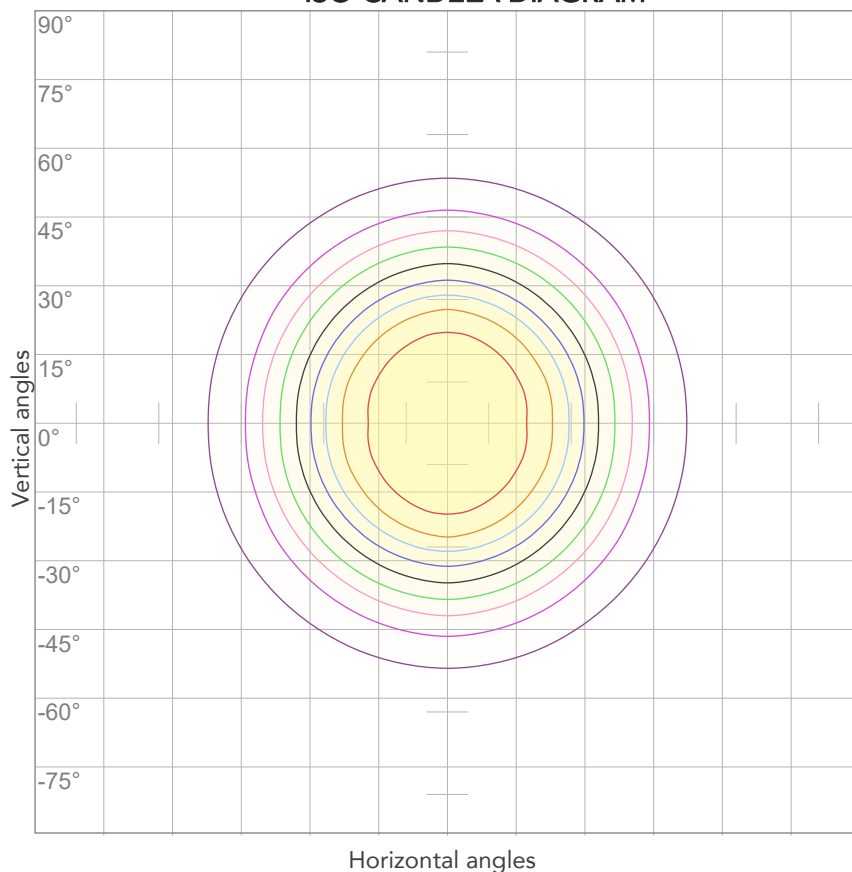
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	1,14A	236,1W	58lm/W

## ISO CANDELA DIAGRAM



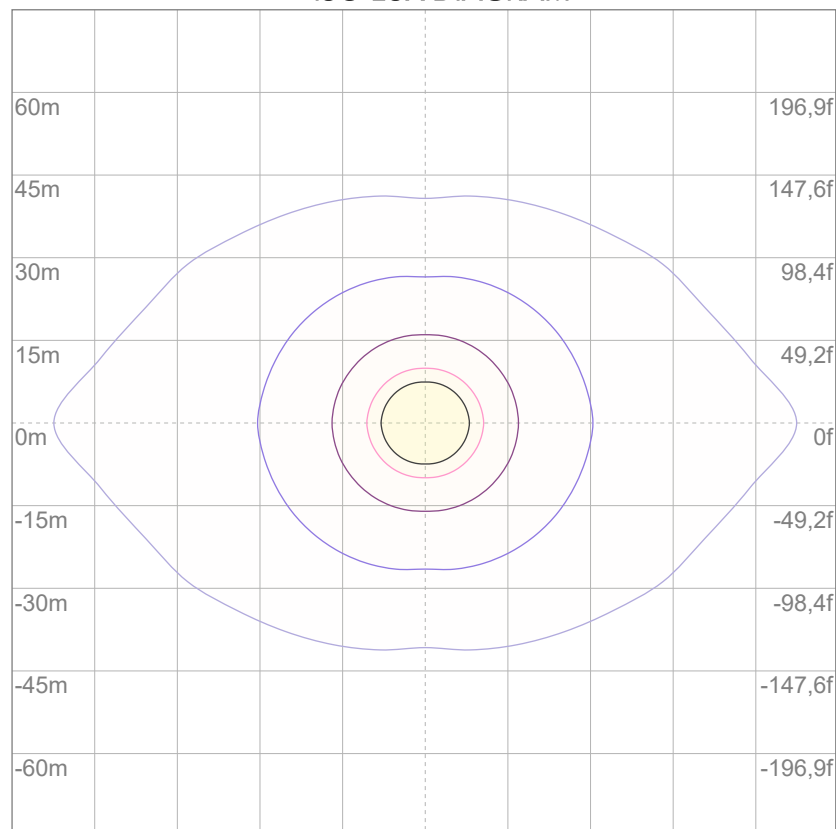
10%	861 cd
20%	1722 cd
30%	2583 cd
40%	3444 cd
50%	4305 cd
60%	5165 cd
70%	6026 cd
80%	6887 cd

### Conditions:

Number of c-planes: 4

Candela at center: 8609 cd

## ISO LUX DIAGRAM



3%	2,58 lx
5%	4,30 lx
10%	8,61 lx
30%	25,8 lx
50%	43,0 lx

### Conditions:

Number of c-planes: 4

Lux at center: 86,1 lx

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