

# Photometric Test Report



## **GALLERYECLDY**

35 W zoomable LED ellipsoidals with static white LED source and framing shutter

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## TESTING PROCESS

Prolights has its own optical testing laboratory in order to provide accurate photometric reports for its lighting products. The testing laboratory contains certain variety of precise lighting measurement systems that ensure an optimal reading of all the characteristic parameters of the lighting devices. All measurements are made at a controlled room temperature of 20°C without any external light sources. This photometric report is obtained through the data measured by a high precision measurement system and analyzed by a dedicate software.

### Prolights measurement instrument

Prolights measurement instrument is a complete measurement system for any light source. It's equipped with two-axis goniometer, that enables to measure the full 3D distribution field of the light source. This instrument measures the light intensity, the beam angle and the most significative colors parameters, like color temperature, spectral distribution, CRI, CQS, TM-30 with a very high accuracy rate.

**Please Note:** All measurements are made with light source at operating temperature. Before starting the measurement, the instrument analyzes the process of the light source during the heating phase. The measuring process of all the parameters begins only when the light emission is stable, that is with a variation of less than 0.5% in a 15 minutes time frame.

### Prolights measurement software

The software provides user friendly interface for the operator who does the measurements, and it also analyzes and processes all the collected data by the instrument. With this software it is possible to see the measured data in real-time and it is possible to examine all the measured data and graphics afterwards as well. All information is collected in a specific Prolights template, and the software creates also IES and LDT files, which are widely used to transfer the photometric data, and to develop lighting system.

Additionally, the fixtures are rechecked using various hand-held instruments like Sekonic C-700 and Gossen Mavospec Base, this is done to ensure, that the data in the photometric report are as accurate as possible.



Total lumen output:

2425 lm

Peak candela output:

11384 cd

Light quality:

CRI: 81,0

Color temperature:

5251 K

**PRODUCT NAME:**

**GALLERYECLDY**

**MEASURAMENT CONDITIONS:**

Beam angle:

Max Zoom

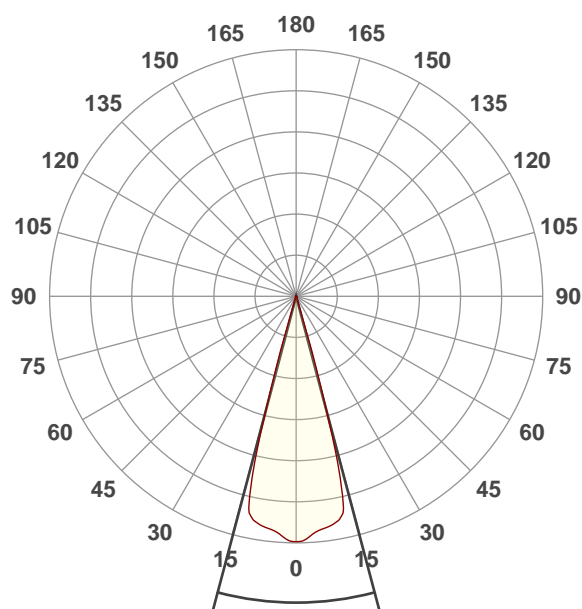
Target:

Operator:

Paolo Carvone

Date and time:

13/03/2020 14:29:33

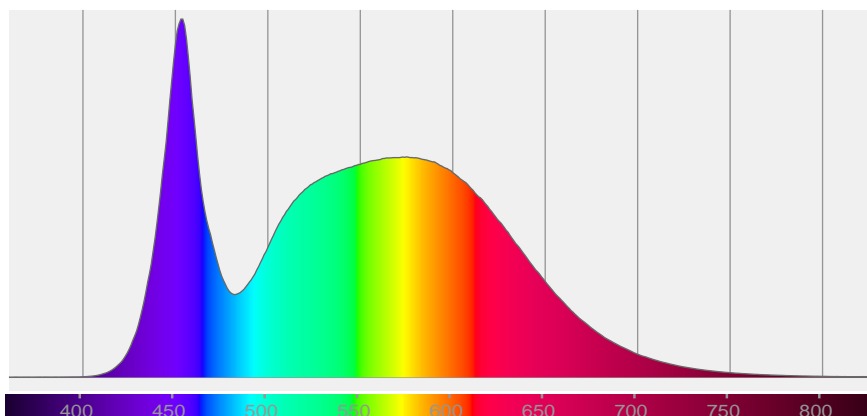


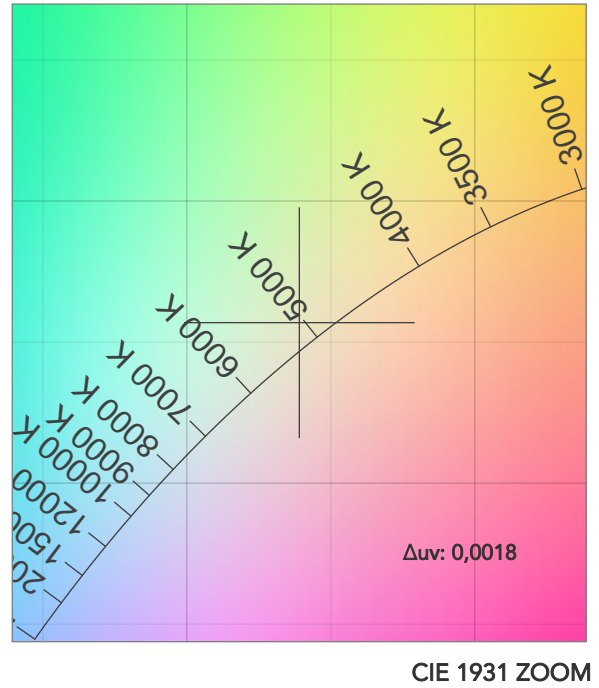
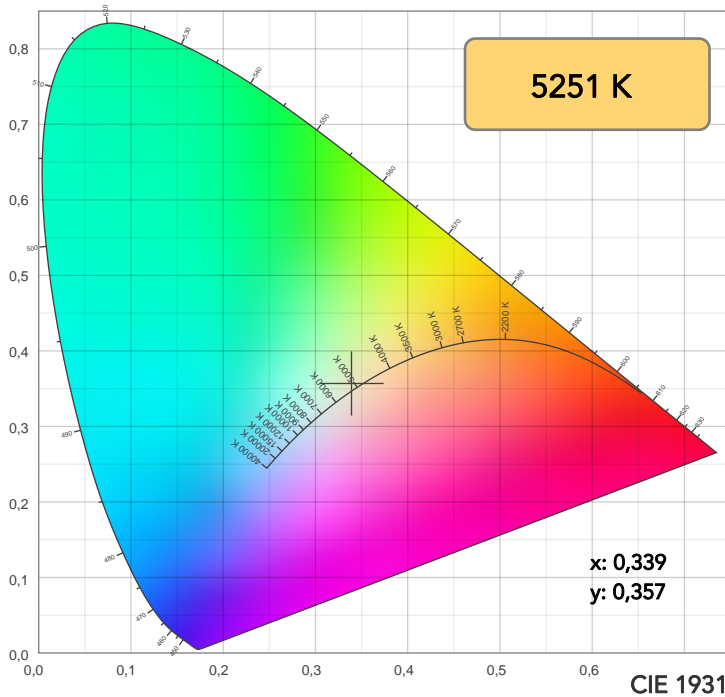
Beam angle 50%: 29,7°

Field angle 10%: 33,5°

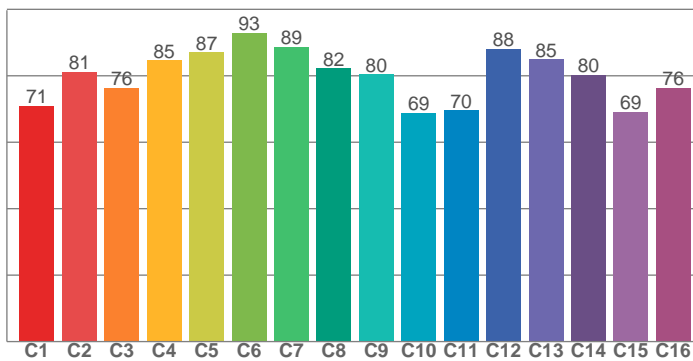
Cut off angle 2.5%: 35,5°

Spectra

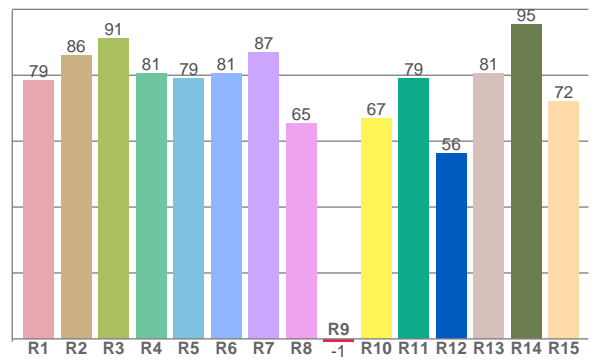




TM30: 80,0



CRI: 81,0 (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
78,6	86,1	91,3	80,5	79,0	80,7	86,8	65,4	-0,8	66,8	79,0	56,4	80,5	95,3	72,1

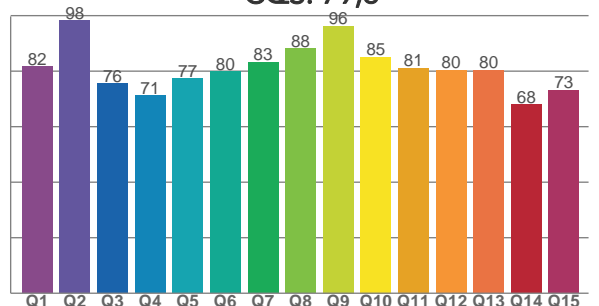
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
71,0	81,2	76,3	84,6	87,0	93,0	88,7	82,3	80,5	68,9	69,5	88,1	85,0	80,2	69,2	76,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81,6	98,2	75,6	71,1	77,3	79,9	83,2	88,1	96,3	85,1	81,1	80,3	80,3	67,9	73,1

CQS: 79,6



## COLOR PARAMETERS

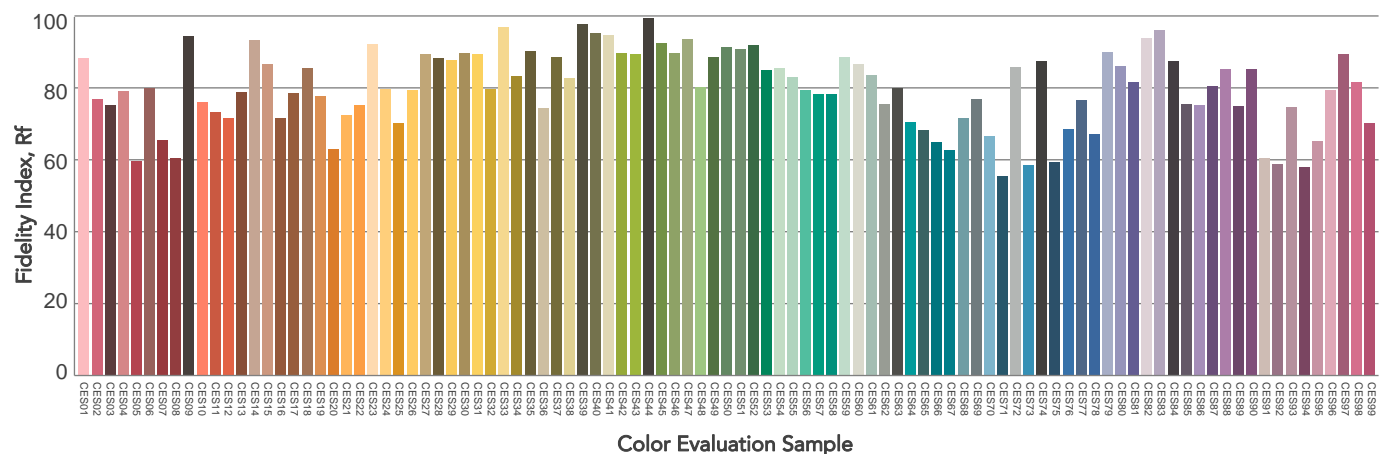
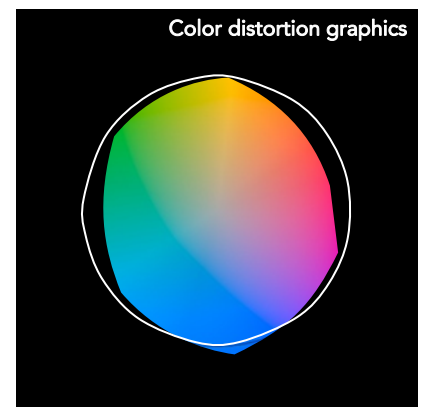
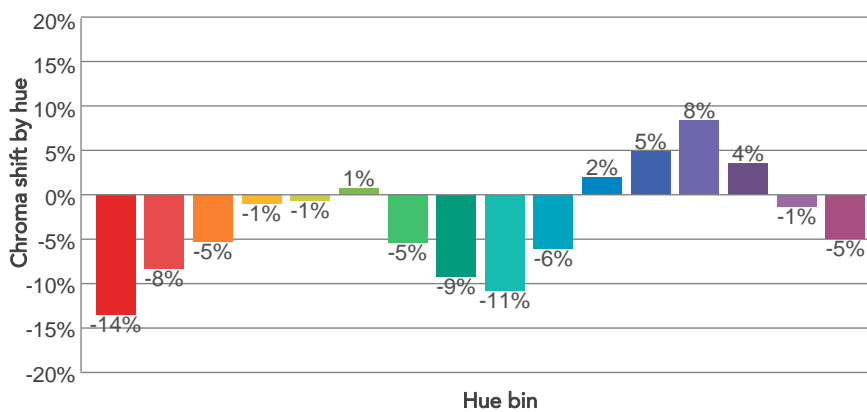
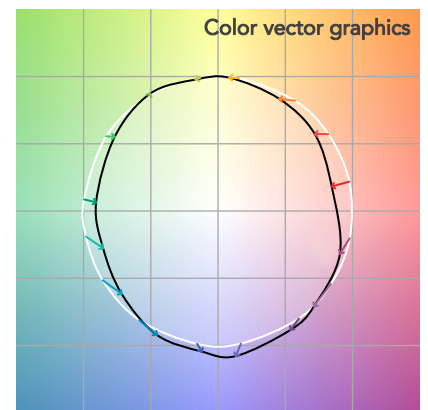
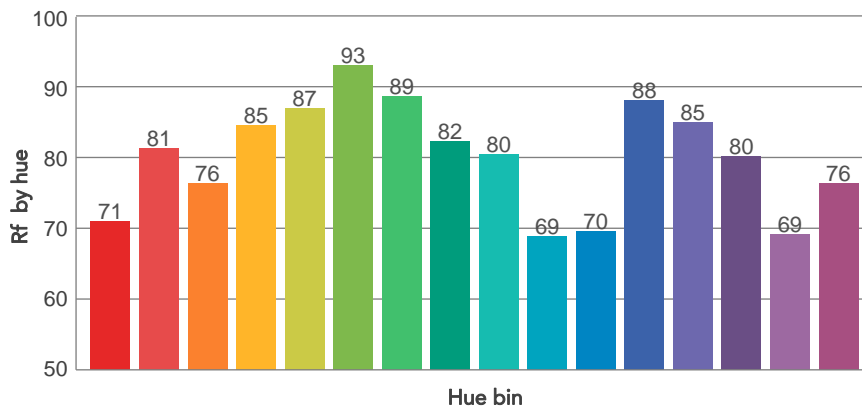
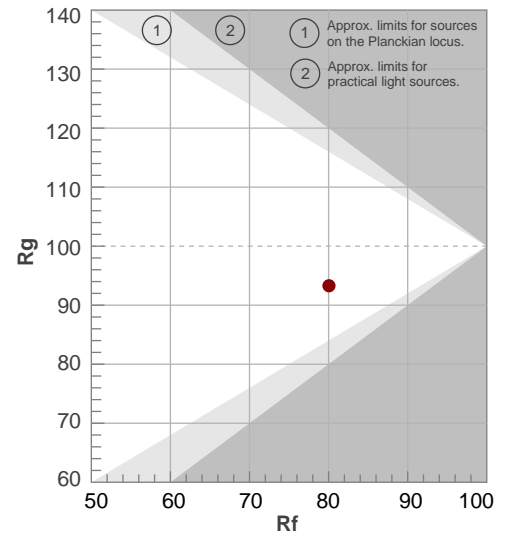
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
5251 K	81,0	-0,8	80,0	93,3	79,6	67	0,339	0,357	0,0018

# TM30 DETAILS

**Rf 80,0**  
Fidelity index Rf

**Rg 93,3**  
Gammut index

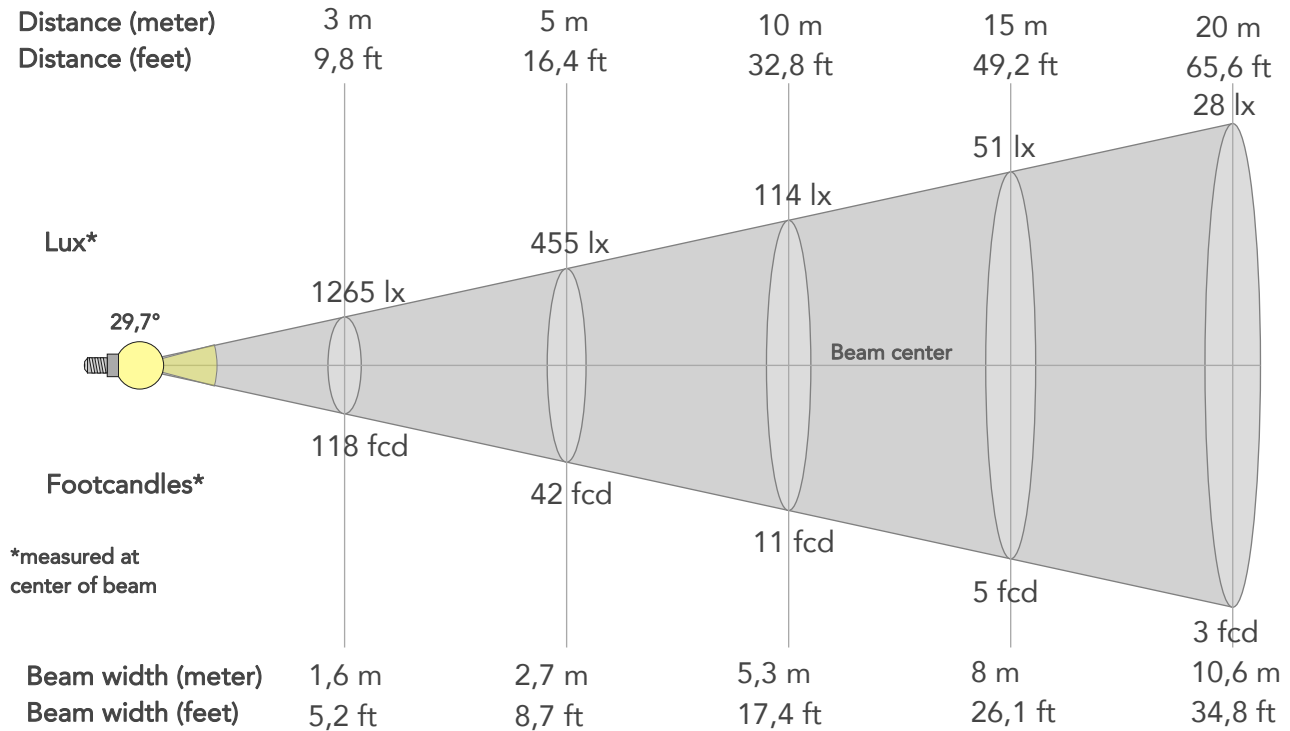
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	71	-14%	-1%
2	81	-8%	6%
3	76	-5%	10%
4	85	-1%	7%
5	87	-1%	4%
6	93	1%	-1%
7	89	-5%	-3%
8	82	-9%	0%
9	80	-11%	11%
10	69	-6%	16%
11	70	2%	17%
12	88	5%	5%
13	85	8%	-6%
14	80	4%	-10%
15	69	-1%	-21%
16	76	-5%	-13%



## BEAM DETAILS



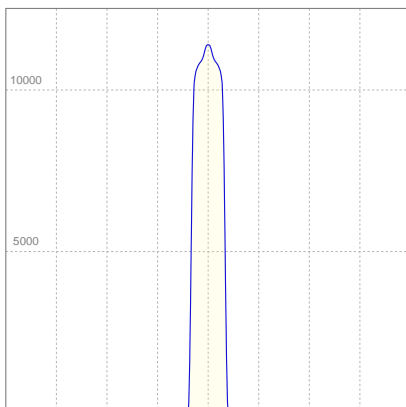
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,7°	33,5°	35,5°	97,9%	96,5%



### 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	11384lx	2846lx	1265lx	711lx	455lx	202lx	114lx	51lx	28lx	18lx	13lx	7lx	5lx
Footcand.	1058fcd	264fcd	118fcd	66fcd	42fcd	19fcd	11fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,1m	2,7m	4m	5,3m	8m	10,6m	13,3m	15,9m	21,2m	26,5m
Beam wid.	1,7ft	3,5ft	5,2ft	6,9ft	8,7ft	13ft	17,4ft	26,1ft	34,8ft	43,5ft	52,2ft	69,5ft	86,9ft

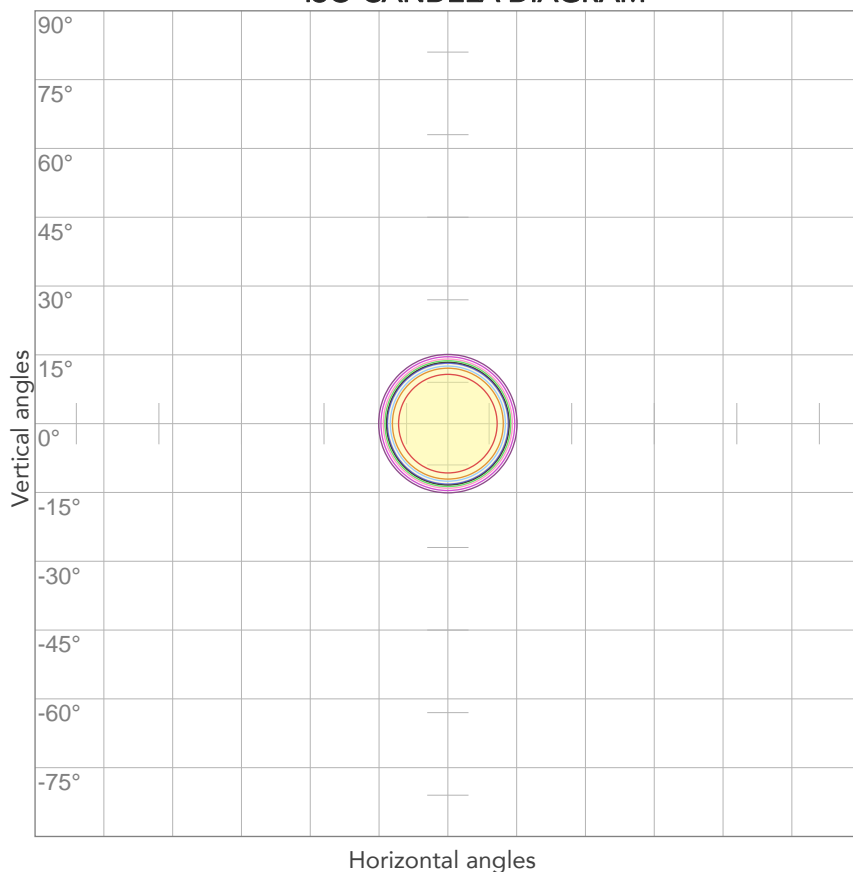
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,191A	41,2W	59lm/W

## ISO CANDELA DIAGRAM



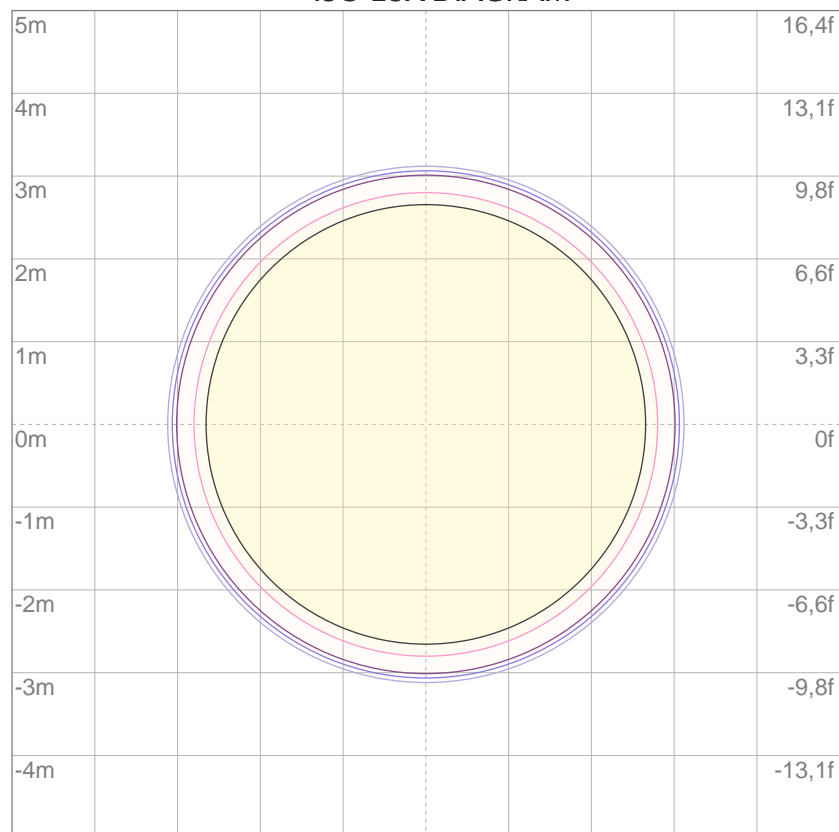
10%	1138 cd
20%	2277 cd
30%	3415 cd
40%	4554 cd
50%	5692 cd
60%	6830 cd
70%	7969 cd
80%	9107 cd

### Conditions:

Number of c-planes: 2

Candela at center: 11384 cd

## ISO LUX DIAGRAM



3%	3,42 lx
5%	5,69 lx
10%	11,4 lx
30%	34,2 lx
50%	56,9 lx

### Conditions:

Number of c-planes: 2

Lux at center: 114 lx

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





Total lumen output:

2095 lm

Peak candela output:

44811 cd

Light quality:

CRI: 80,7

Color temperature:

5204 K

**PRODUCT NAME:**  
**GALLERYECLDY**

**MEASURAMENT CONDITIONS:**

Beam angle:

Min Zoom

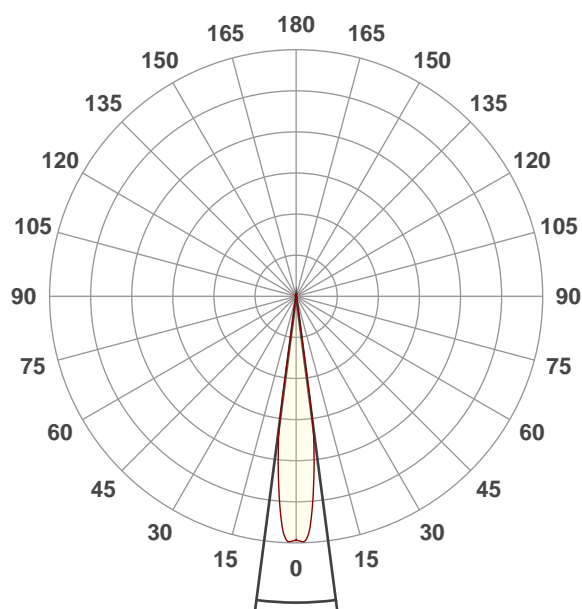
Target:

Operator:

Paolo Carvone

Date and time:

13/03/2020 14:26:05

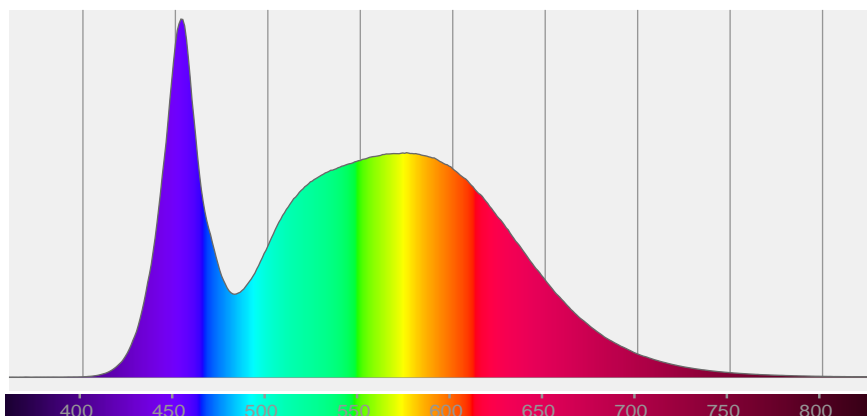


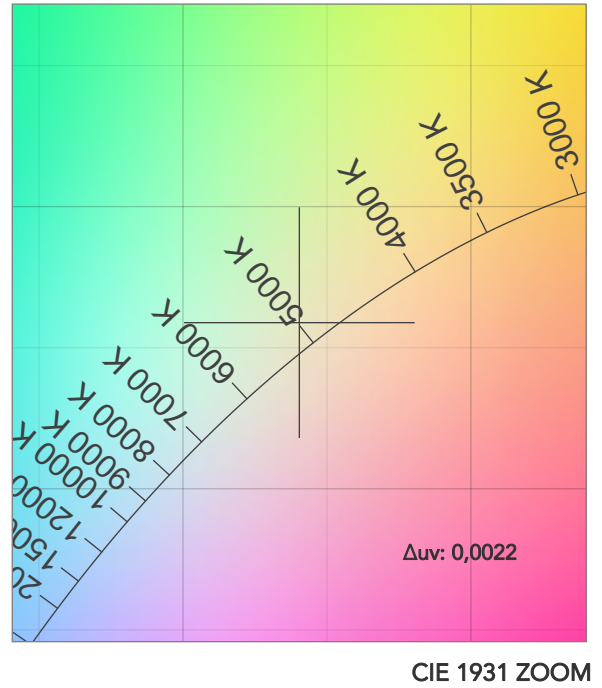
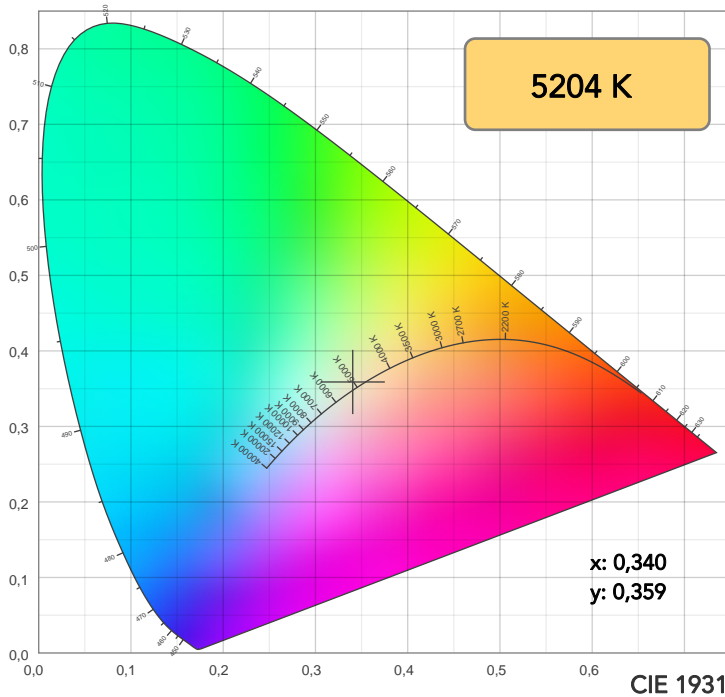
Beam angle 50%: 14,9°

Field angle 10%: 16,9°

Cut off angle 2.5%: 18,2°

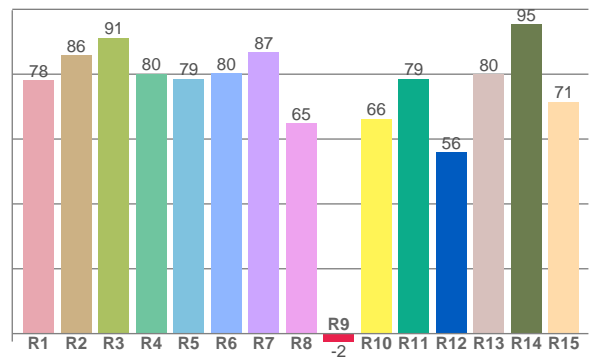
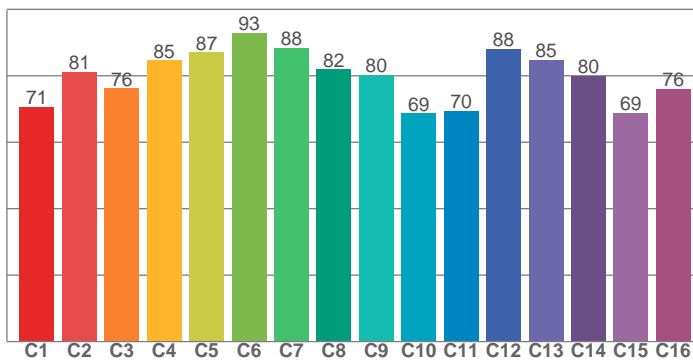
Spectra





TM30: 79,9

CRI: 80,7 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
78,1	85,8	91,3	80,2	78,6	80,4	86,7	64,8	-2,5	66,3	78,6	56,0	80,1	95,3	71,5

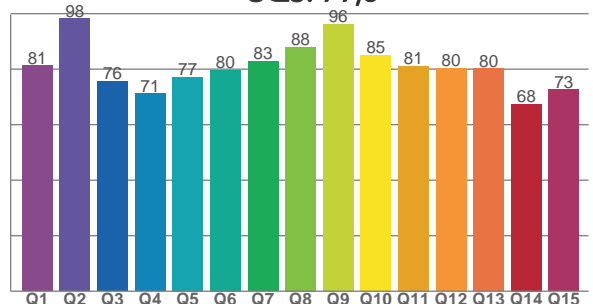
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
70,6	81,1	76,2	84,6	87,0	92,9	88,4	82,0	80,3	68,7	69,5	88,2	84,8	79,9	68,8	76,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81,3	98,3	75,6	71,2	77,2	79,7	82,9	87,9	96,3	85,1	81,2	80,3	80,2	67,5	72,7

CQS: 79,5



## COLOR PARAMETERS

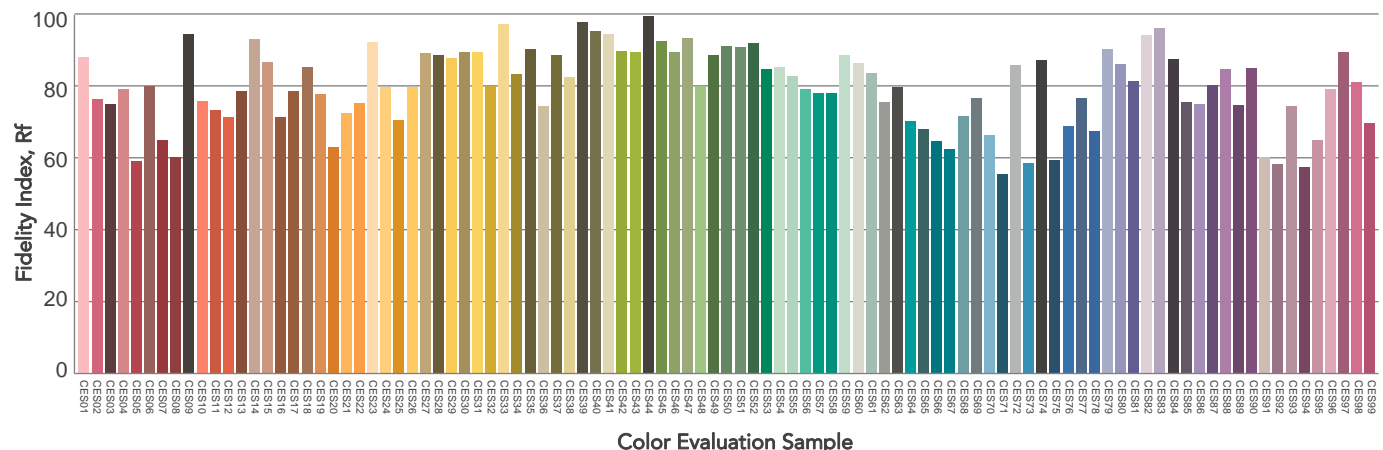
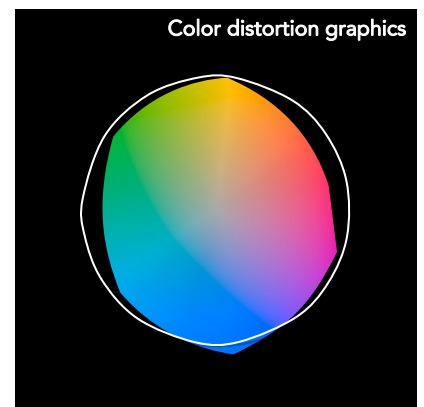
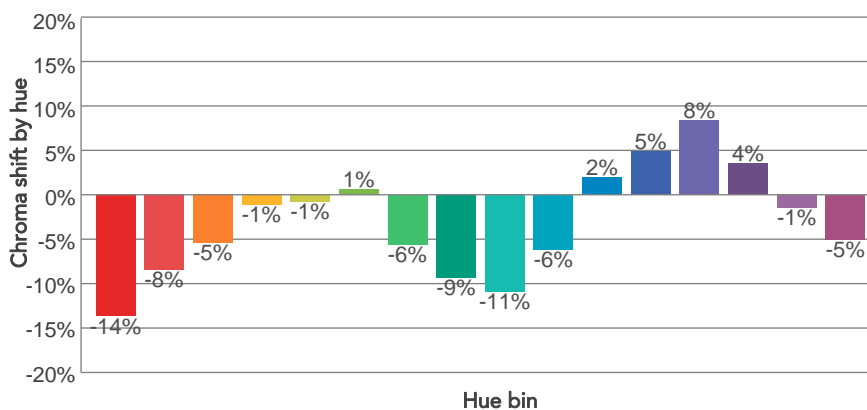
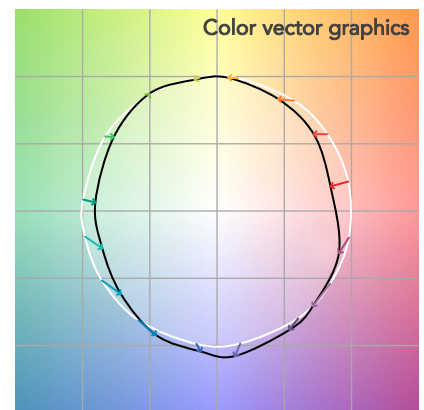
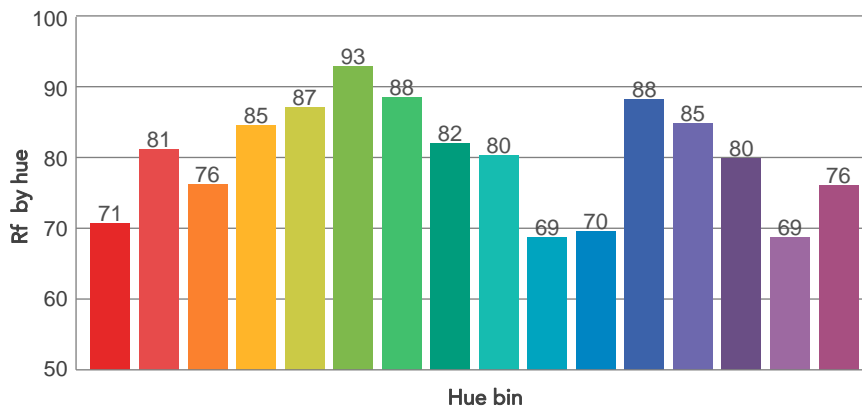
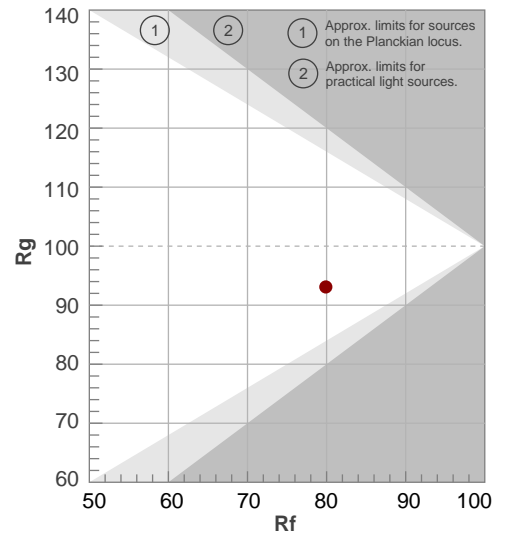
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5204 K	80,7	-2,5	79,9	93,1	79,5	67	0,340	0,359	0,0022

# TM30 DETAILS

**Rf 79,9**  
Fidelity index Rf

**Rg 93,1**  
Gammut index

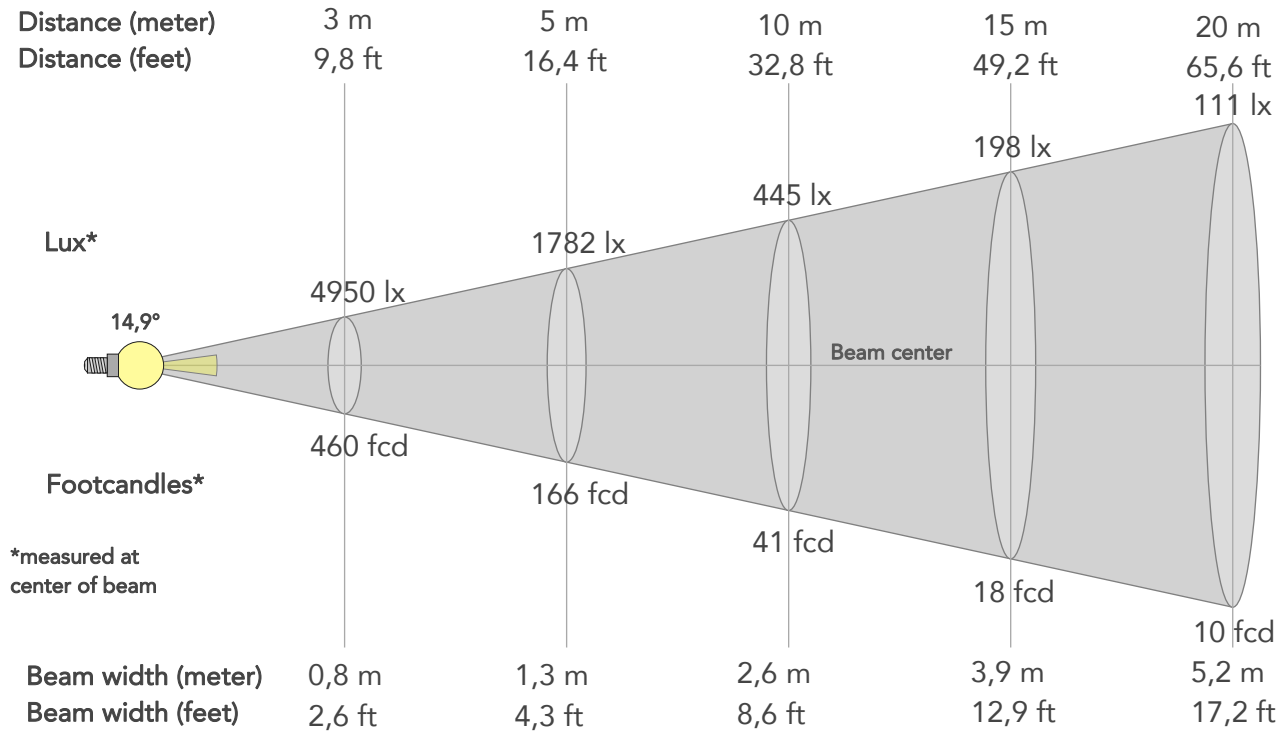
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	71	-14%	-1%
2	81	-8%	6%
3	76	-5%	10%
4	85	-1%	7%
5	87	-1%	4%
6	93	1%	-1%
7	88	-6%	-3%
8	82	-9%	0%
9	80	-11%	11%
10	69	-6%	16%
11	70	2%	17%
12	88	5%	4%
13	85	8%	-6%
14	80	4%	-10%
15	69	-1%	-21%
16	76	-5%	-13%



## BEAM DETAILS



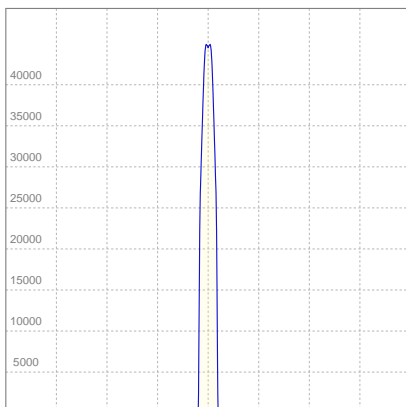
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14,9°	16,9°	18,2°	99,8%	99,6%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	44546lx	11137lx	4950lx	2784lx	1782lx	792lx	445lx	198lx	111lx	71lx	49lx	28lx	18lx
Footcand.	4138fcd	1035fcd	460fcd	259fcd	166fcd	74fcd	41fcd	18fcd	10fcd	7fcd	5fcd	3fcd	2fcd
Beam wid.	0,3m	0,5m	0,8m	1m	1,3m	2m	2,6m	3,9m	5,2m	6,5m	7,8m	10,5m	13,1m
Beam wid.	0,9ft	1,7ft	2,6ft	3,4ft	4,3ft	6,4ft	8,6ft	12,9ft	17,2ft	21,4ft	25,7ft	34,3ft	42,9ft

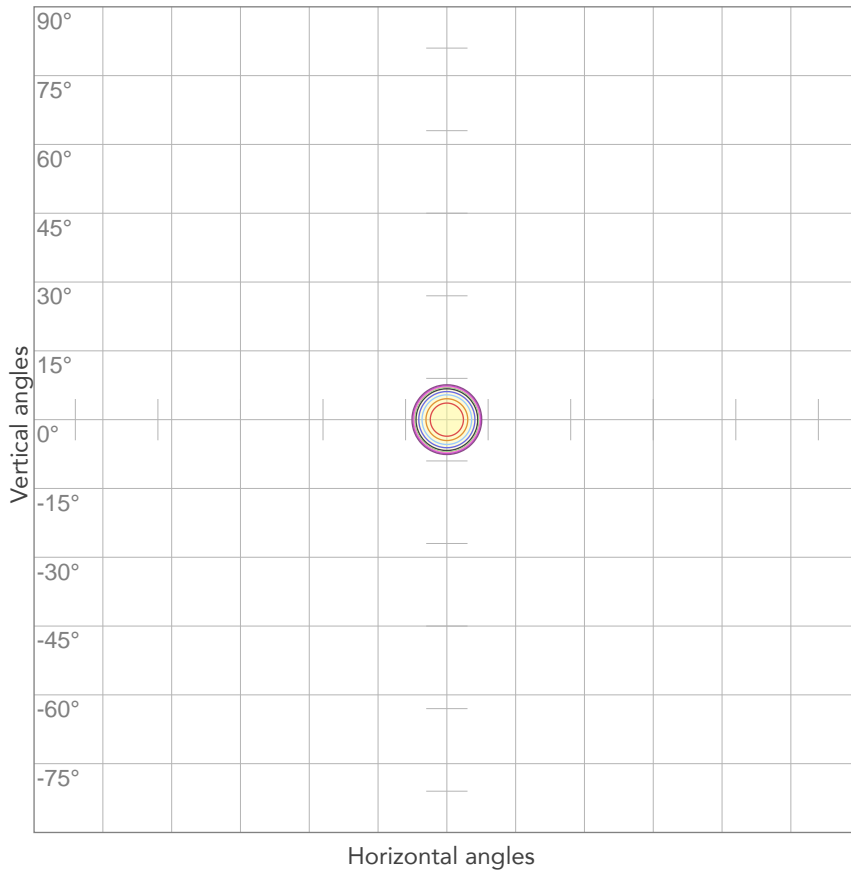
### LINEAR DISTRIBUTION DIAGRAM



### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,191A	41,2W	51lm/W

## ISO CANDELA DIAGRAM



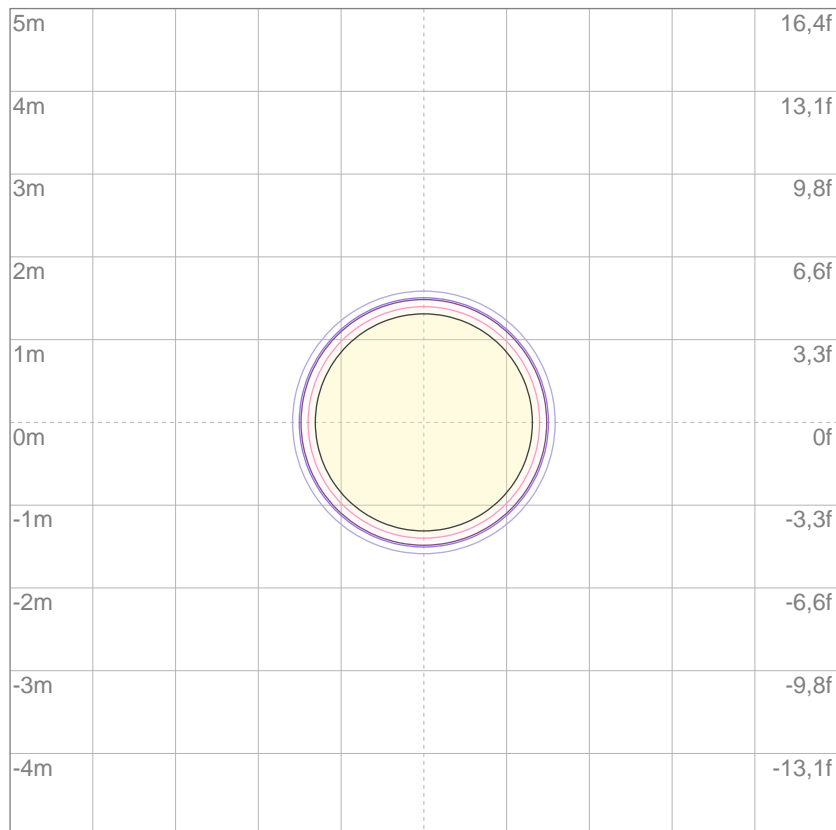
10%	4455 cd
20%	8909 cd
30%	13364 cd
40%	17819 cd
50%	22273 cd
60%	26728 cd
70%	31182 cd
80%	35637 cd

### Conditions:

Number of c-planes: 2

Candela at center: 44546 cd

## ISO LUX DIAGRAM



3%	13,4 lx
5%	22,3 lx
10%	44,5 lx
30%	134 lx
50%	223 lx

### Conditions:

Number of c-planes: 2

Lux at center: 445 lx

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