



Photometric Test Report



ECLPENDANT S DY

50W Single Color House Light with
Passive Cooling

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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:

4045 lm

Peak candela output:

27903 cd

Light quality:

CRI: 95,2

Color temperature:

5466 K

PRODUCT NAME:
ECLPENDANTS DY

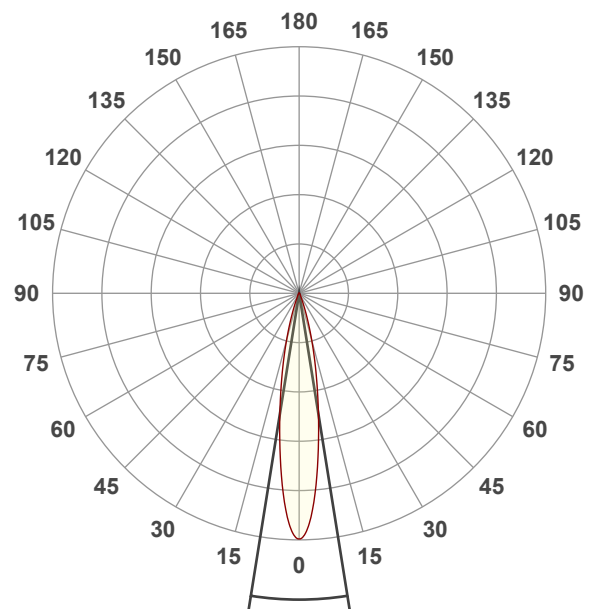
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
Full On

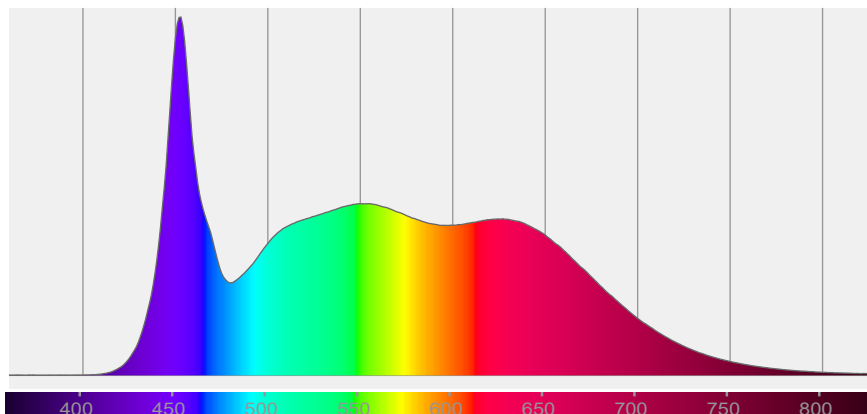
Operator:
Salvatore Giglio

Date and time:
05/02/2024 13:15:43

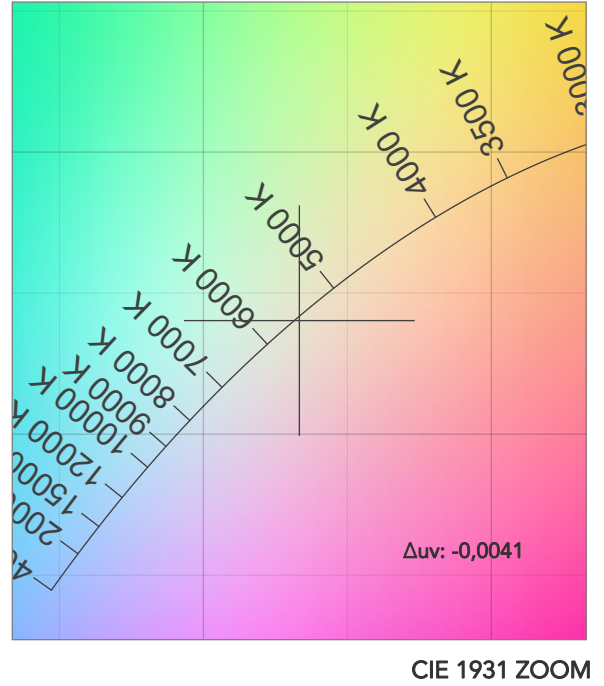
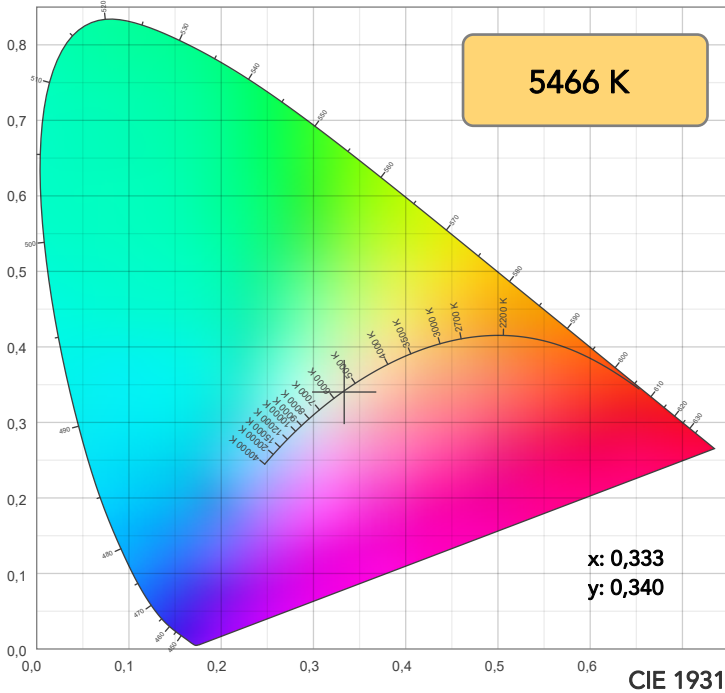


Beam angle 50%: 18,1°
Field angle 10%: 36,4°
Cut off angle 2.5%: 48,2°

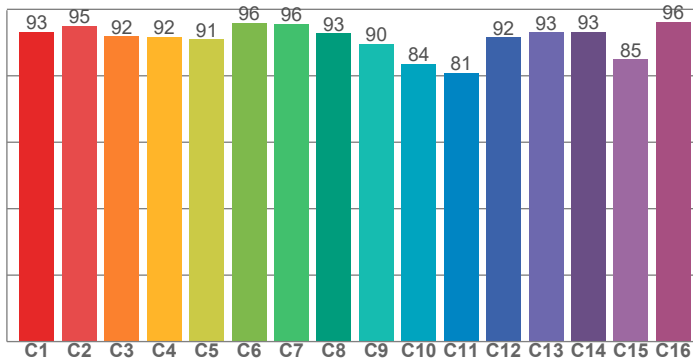
Spectra



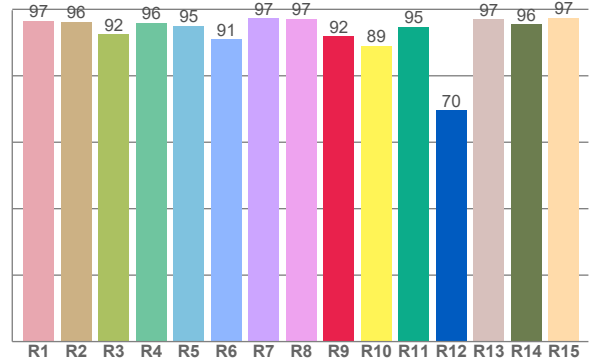
COLOR DETAILS



TM30: 90,9



CRI: 95,2 (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
96,6	96,2	92,4	95,9	95,1	91,1	97,3	97,2	91,8	89,0	94,8	69,6	97,1	95,6	97,4

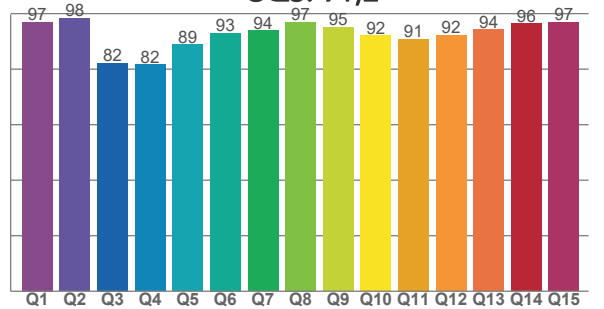
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,3	95,0	91,8	91,7	91,0	95,8	95,6	92,8	89,6	83,7	80,8	91,5	93,0	93,2	84,9	96,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,0	98,3	82,3	81,6	88,9	93,1	94,0	97,0	95,1	92,0	90,8	92,2	94,3	96,4	96,9

CQS: 91,2



COLOR PARAMETERS

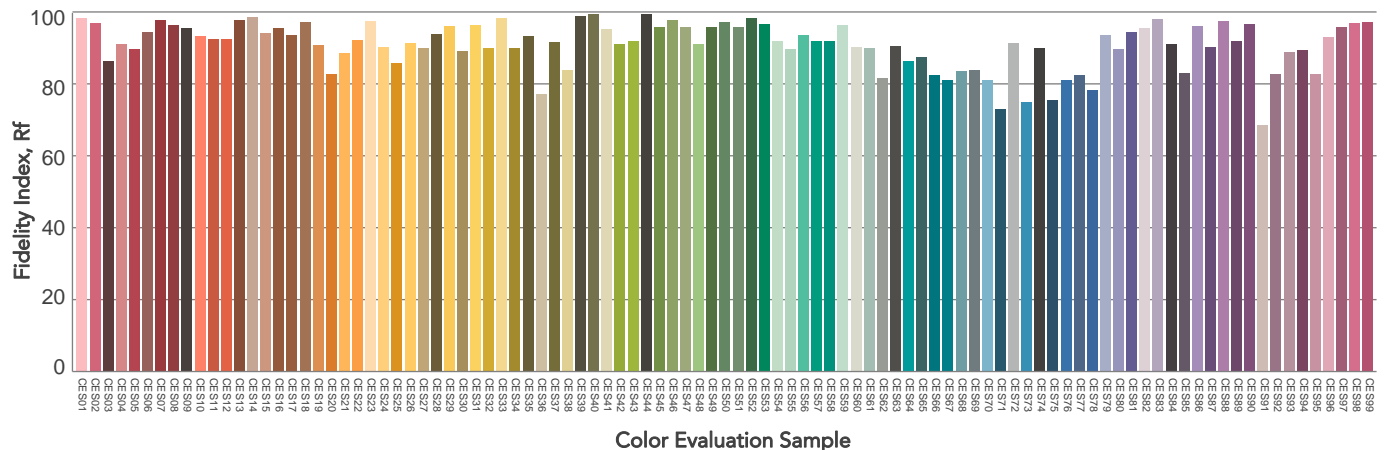
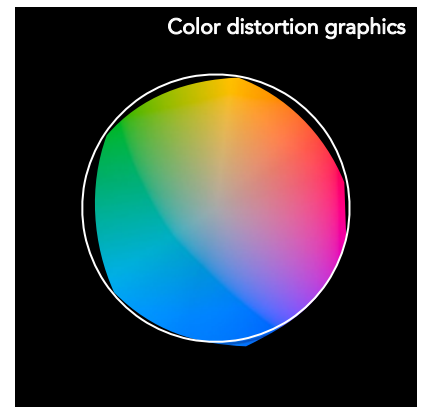
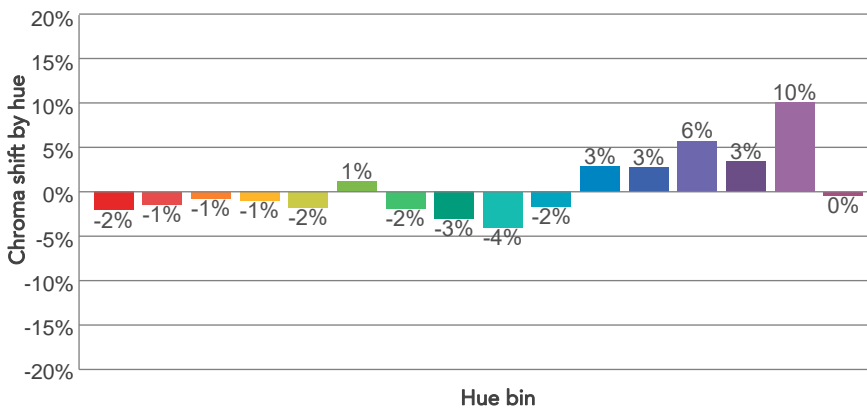
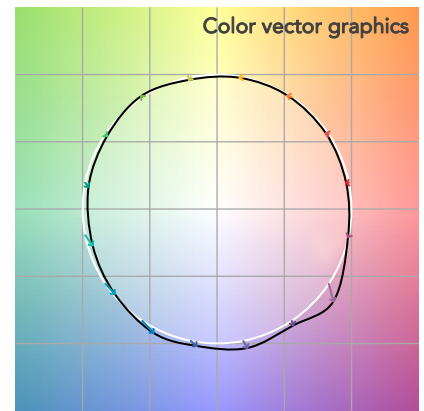
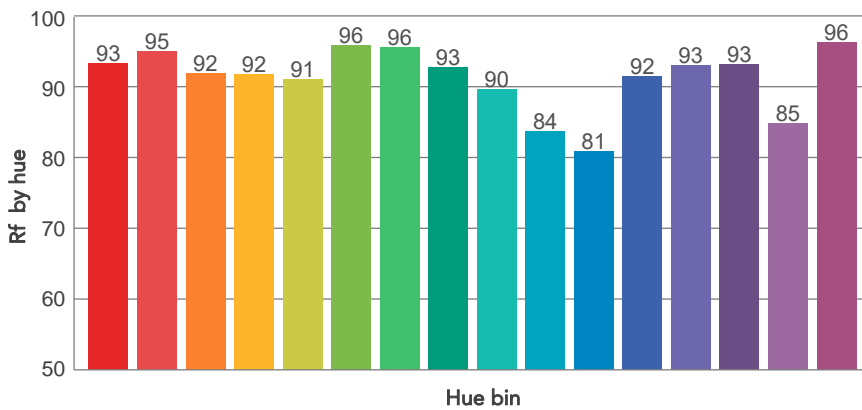
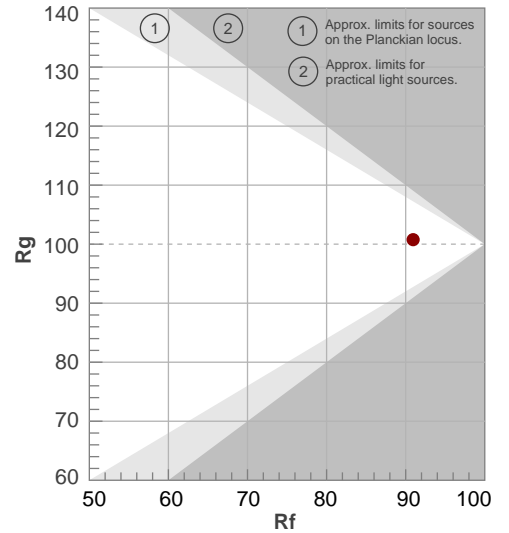
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5466 K	95,2	91,8	90,9	100,8	91,2	96	0,333	0,340	-0,0041

TM30 DETAILS

Rf 90,9
Fidelity index Rf

Rg 100,8
Gammut index

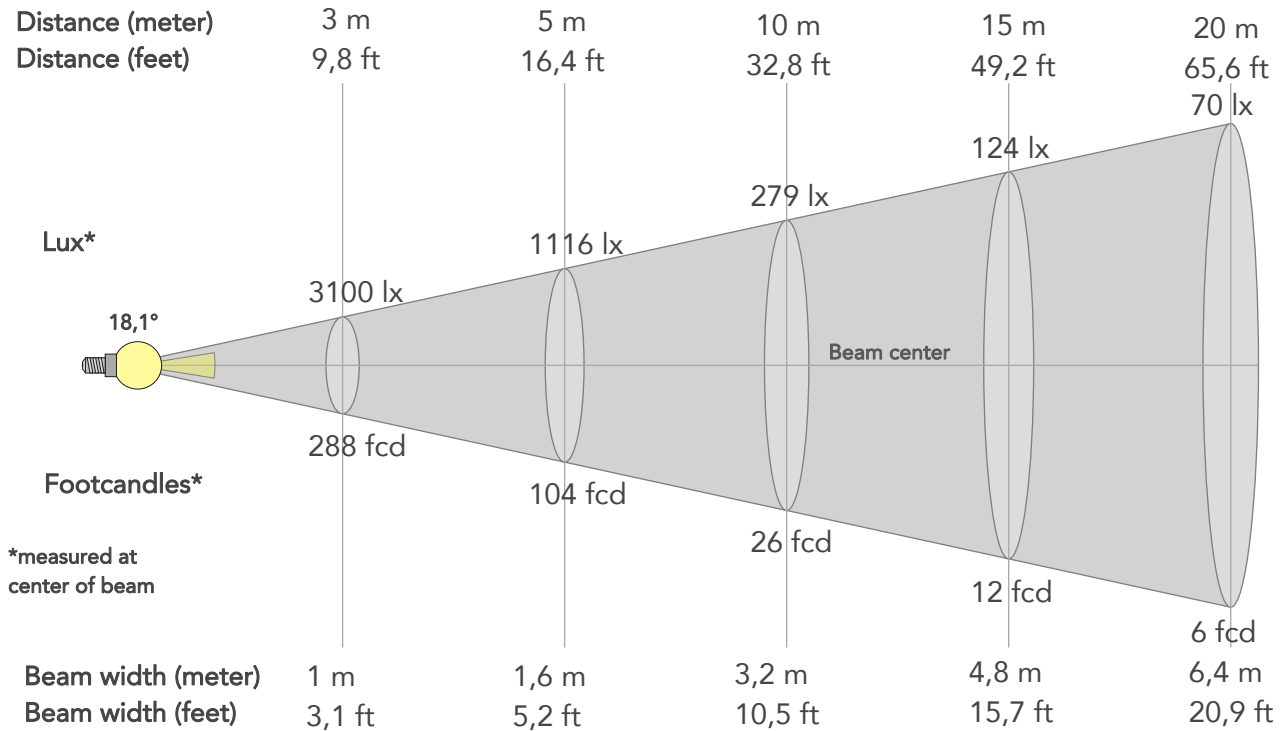
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-2%	0%
2	95	-1%	2%
3	92	-1%	3%
4	92	-1%	3%
5	91	-2%	2%
6	96	1%	0%
7	96	-2%	0%
8	93	-3%	3%
9	90	-4%	8%
10	84	-2%	10%
11	81	3%	12%
12	92	3%	5%
13	93	6%	2%
14	93	3%	-1%
15	85	10%	-9%
16	96	0%	-2%



BEAM DETAILS



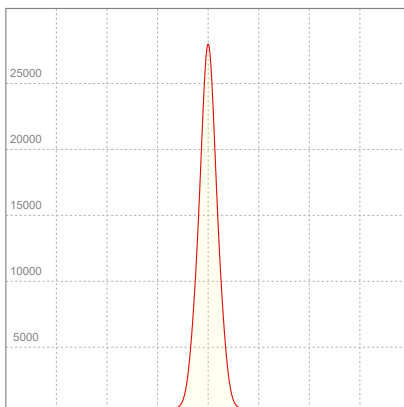
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,1°	36,4°	48,2°	98,2%	95,3%



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	27903lx	6976lx	3100lx	1744lx	1116lx	496lx	279lx	124lx	70lx	45lx	31lx	17lx	11lx
Footcand.	2592fcd	648fcd	288fcd	162fcd	104fcd	46fcd	26fcd	12fcd	6fcd	4fcd	3fcd	2fcd	1fcd
Beam wid.	0,3m	0,6m	1m	1,3m	1,6m	2,4m	3,2m	4,8m	6,4m	8m	9,6m	12,8m	16m
Beam wid.	1,1ft	2,1ft	3,1ft	4,2ft	5,2ft	7,9ft	10,5ft	15,7ft	20,9ft	26,2ft	31,4ft	41,9ft	52,4ft

LINEAR DISTRIBUTION DIAGRAM

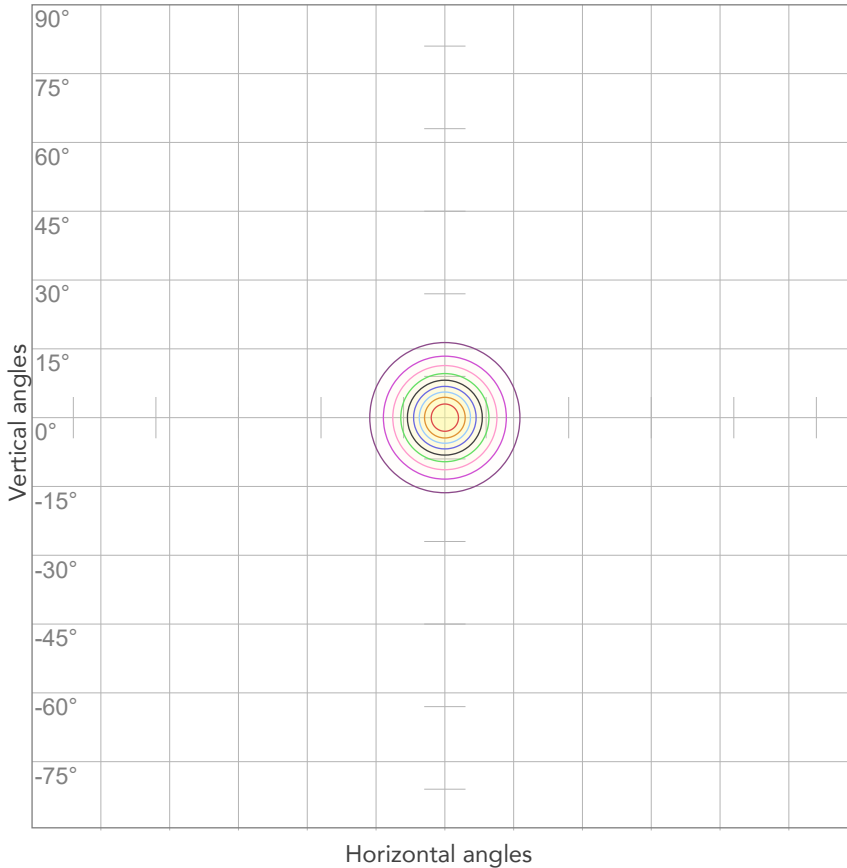


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
223V	0,290A	60,4W	0,93	67lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



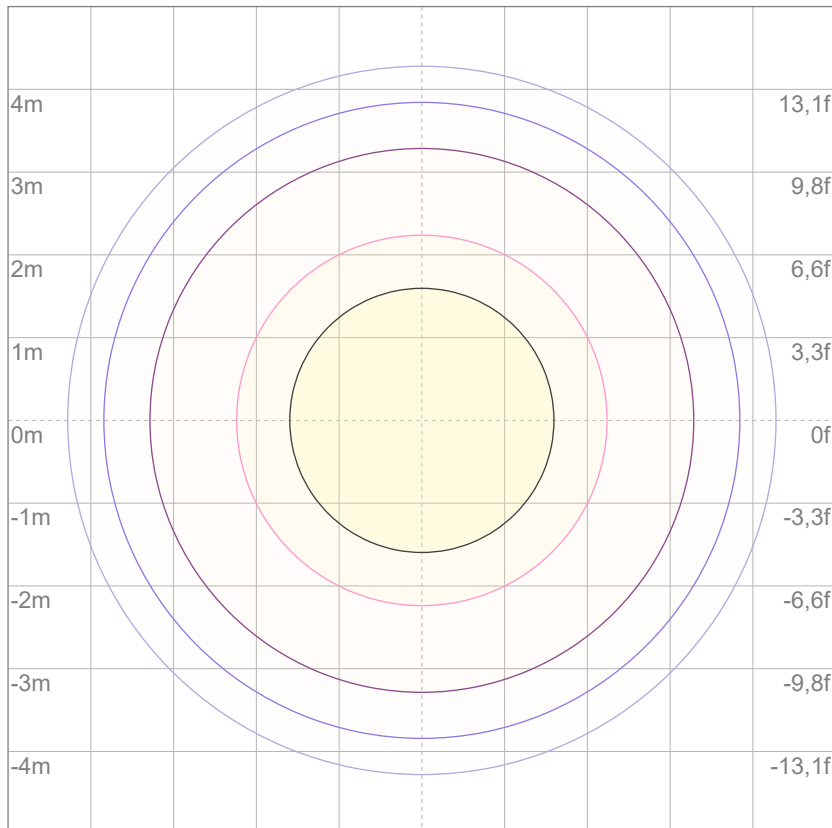
10%	2790 cd
20%	5581 cd
30%	8371 cd
40%	11161 cd
50%	13952 cd
60%	16742 cd
70%	19532 cd
80%	22323 cd

Conditions:

Number of c-planes: 2

Candela at center: 27903 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	8,37 lx
5%	14,0 lx
10%	27,9 lx
30%	83,7 lx
50%	140 lx

Conditions:

Number of c-planes: 2

Lux at center: 279 lx

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



Total lumen output:

4011 lm

Peak candela output:

8820 cd

Light quality:

CRI: 95,3

Color temperature:

5470 K

PRODUCT NAME:
ECLPENDANTS DY

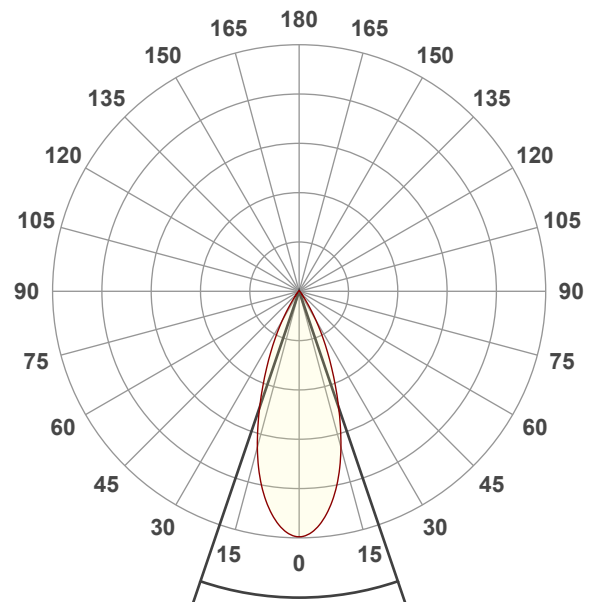
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
Full On

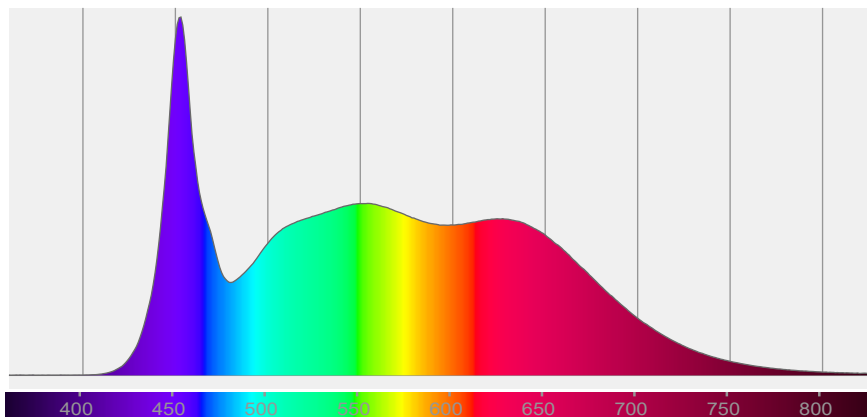
Operator:
Salvatore Giglio

Date and time:
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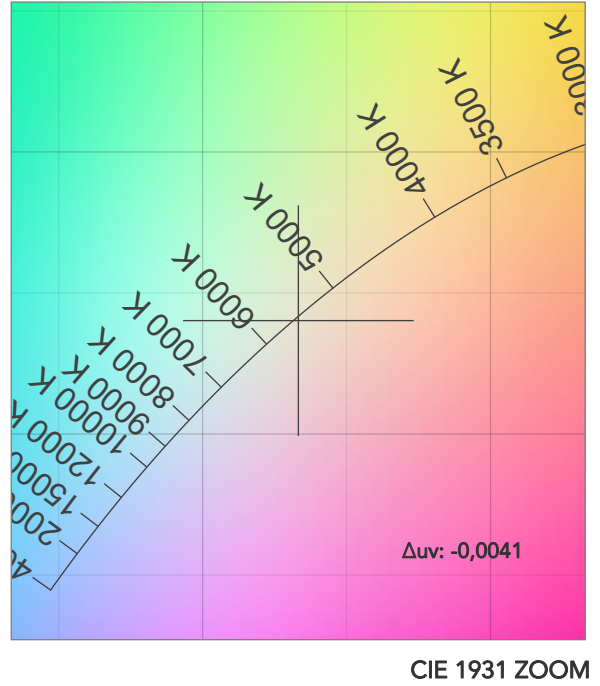
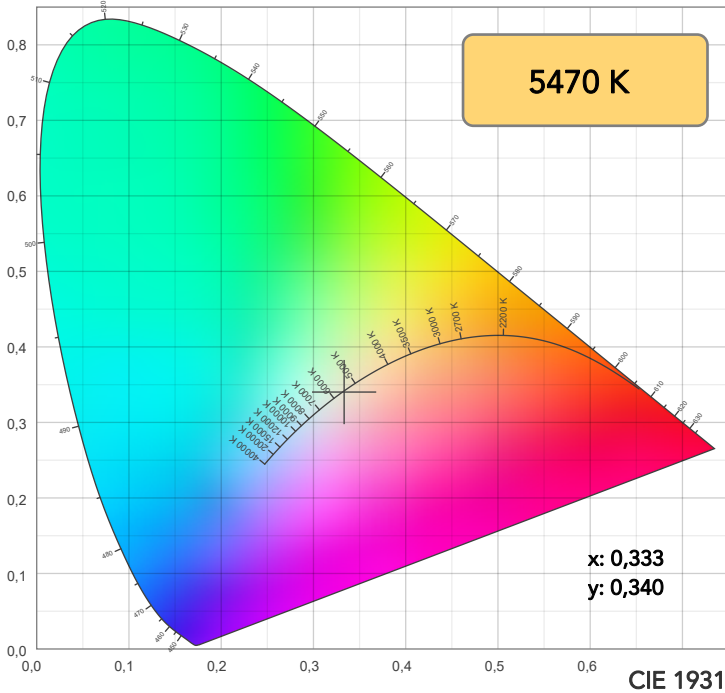


Beam angle 50%: 37,6°
Field angle 10%: 63,7°
Cut off angle 2.5%: 78,1°

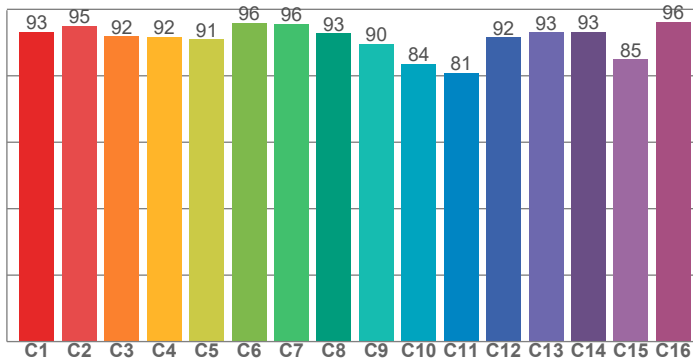
Spectra



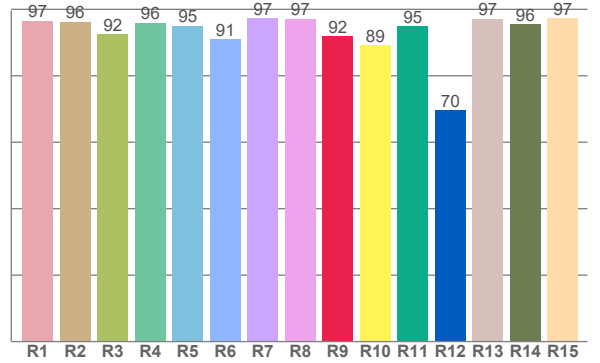
COLOR DETAILS



TM30: 90,9



CRI: 95,3 (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
96,6	96,3	92,5	96,0	95,1	91,1	97,3	97,2	91,8	89,1	94,8	69,6	97,1	95,6	97,4

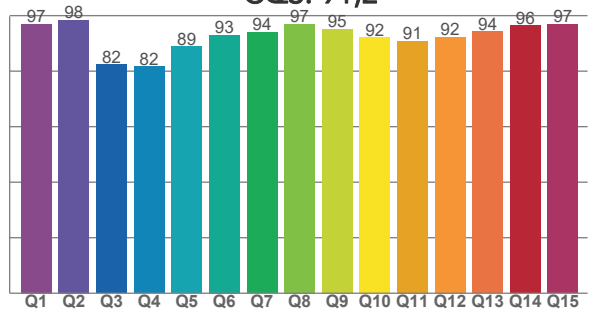
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,2	95,0	91,9	91,7	91,0	95,9	95,6	92,7	89,5	83,6	80,8	91,6	93,1	93,2	84,9	96,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,9	98,4	82,3	81,6	88,9	93,0	94,0	97,0	95,1	92,1	90,8	92,2	94,3	96,4	96,9

CQS: 91,2



COLOR PARAMETERS

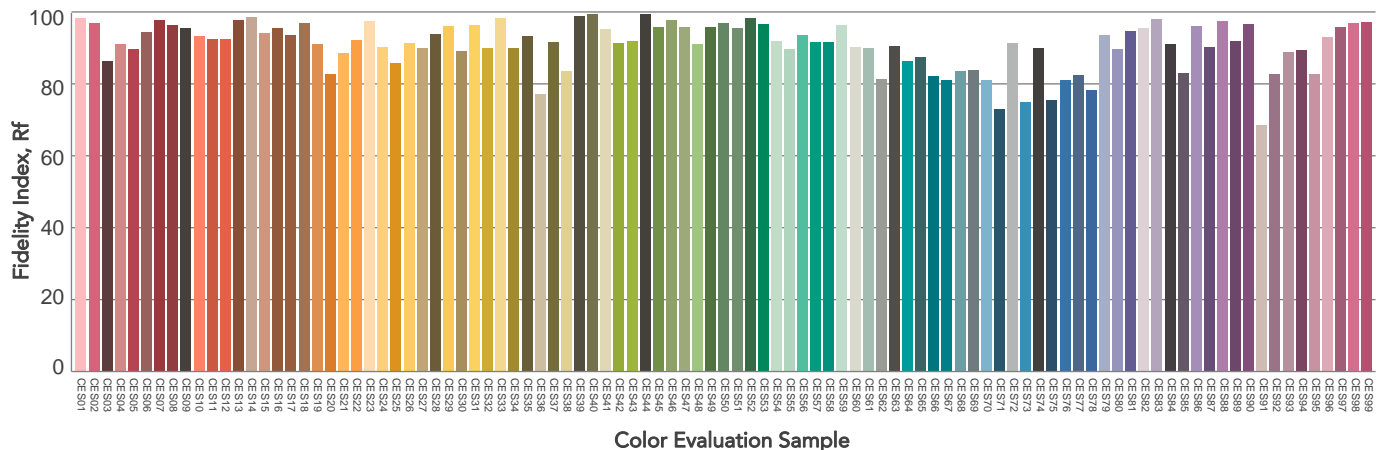
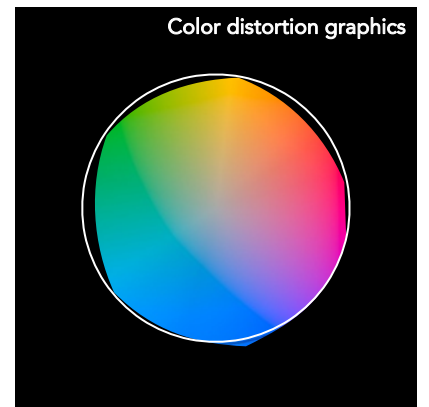
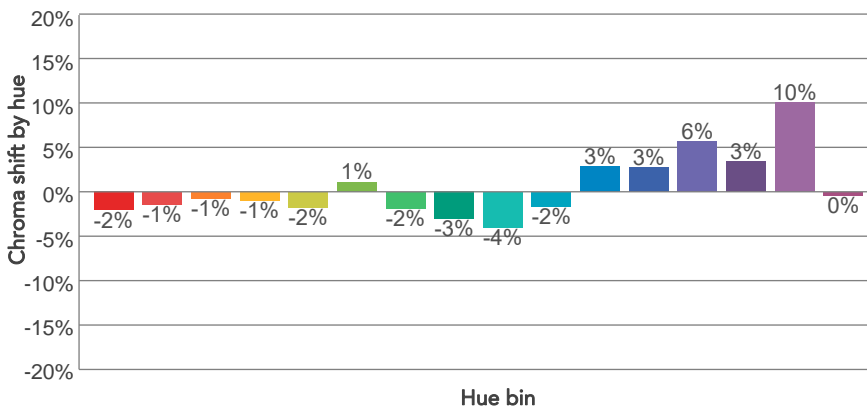
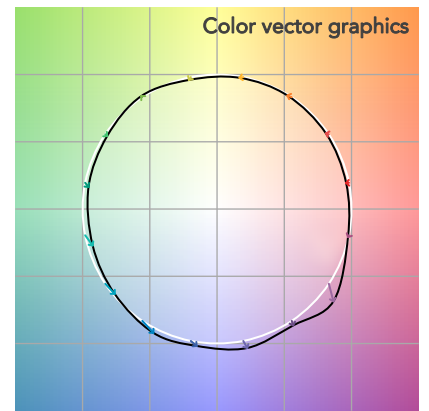
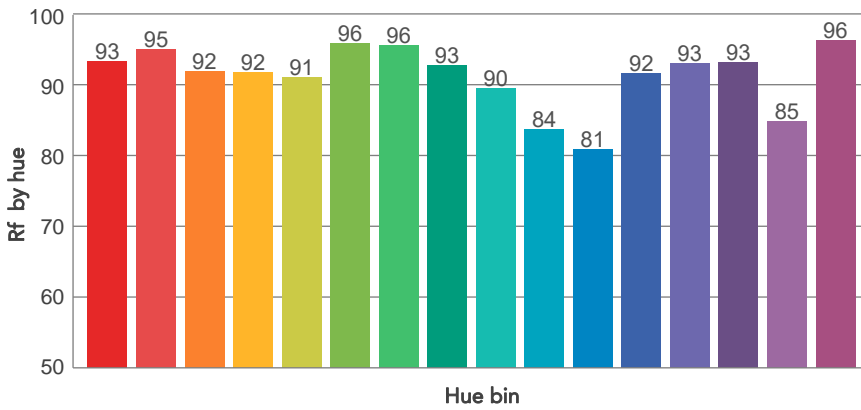
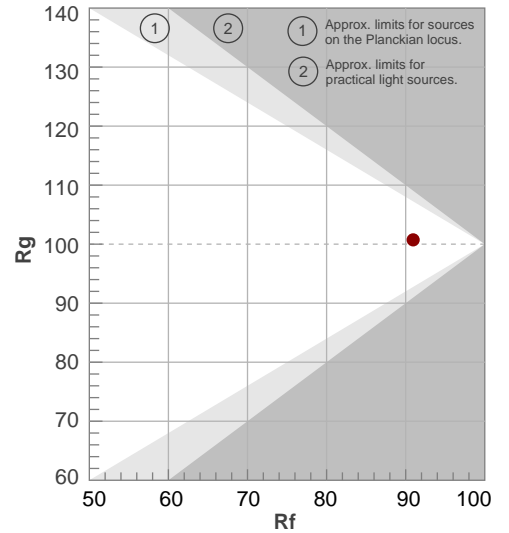
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5470 K	95,3	91,8	90,9	100,7	91,2	96	0,333	0,340	-0,0041

TM30 DETAILS

Rf 90,9
Fidelity index Rf

Rg 100,7
Gammut index

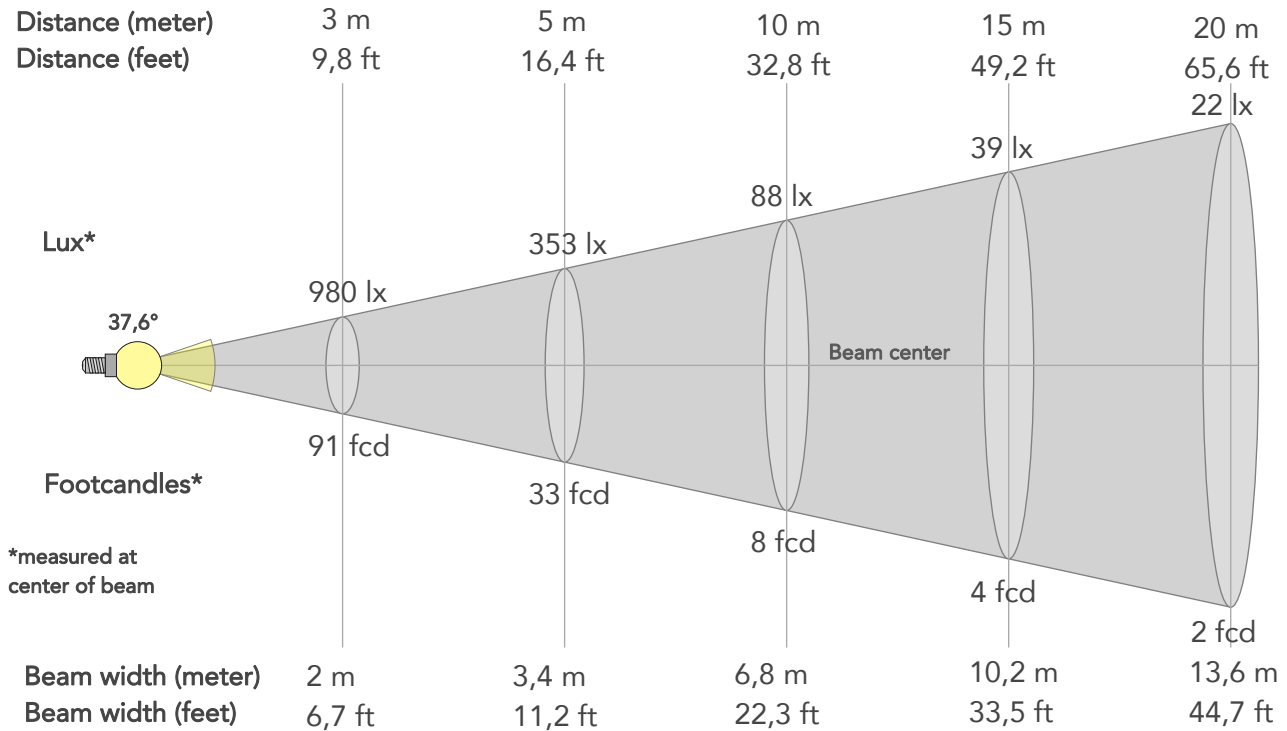
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-2%	0%
2	95	-1%	2%
3	92	-1%	3%
4	92	-1%	3%
5	91	-2%	2%
6	96	1%	0%
7	96	-2%	0%
8	93	-3%	3%
9	90	-4%	8%
10	84	-2%	10%
11	81	3%	12%
12	92	3%	5%
13	93	6%	2%
14	93	3%	-1%
15	85	10%	-9%
16	96	0%	-1%



BEAM DETAILS



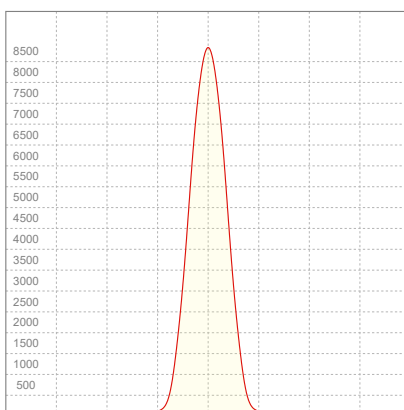
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37,6°	63,7°	78,1°	98,5%	95,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	8820lx	2205lx	980lx	551lx	353lx	157lx	88lx	39lx	22lx	14lx	10lx	6lx	4lx
Footcand.	819fcd	205fcd	91fcd	51fcd	33fcd	15fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,7m	1,4m	2m	2,7m	3,4m	5,1m	6,8m	10,2m	13,6m	17m	20,4m	27,2m	34m
Beam wid.	2,2ft	4,5ft	6,7ft	8,9ft	11,2ft	16,7ft	22,3ft	33,5ft	44,7ft	55,8ft	67ft	89,3ft	111,7ft

LINEAR DISTRIBUTION DIAGRAM

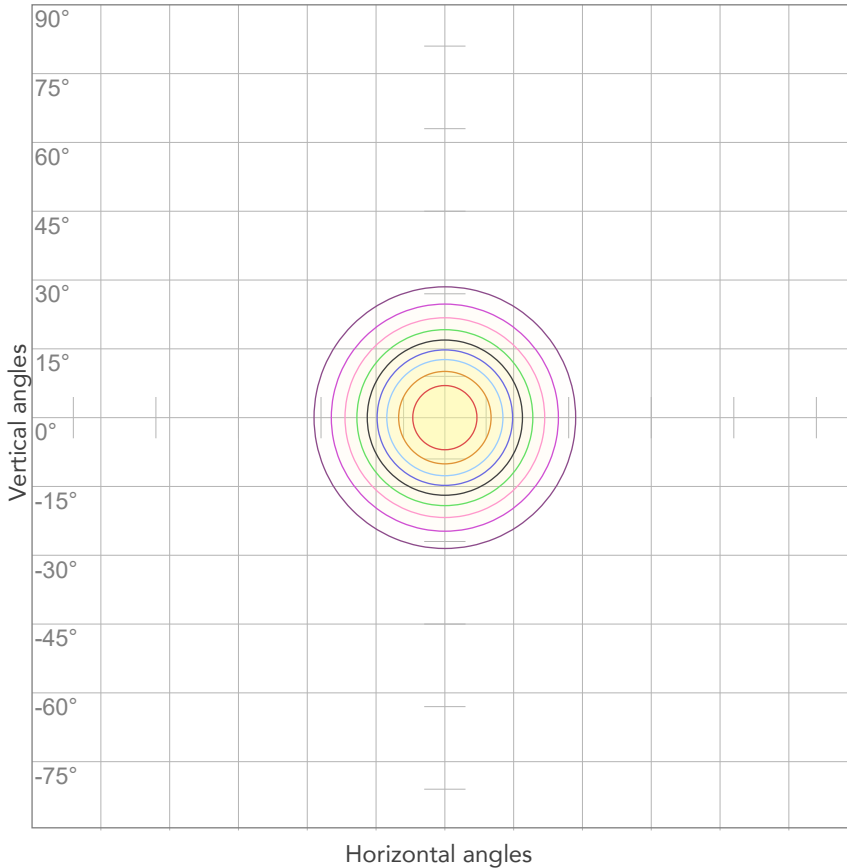


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
222V	0,290A	60,3W	0,94	67lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



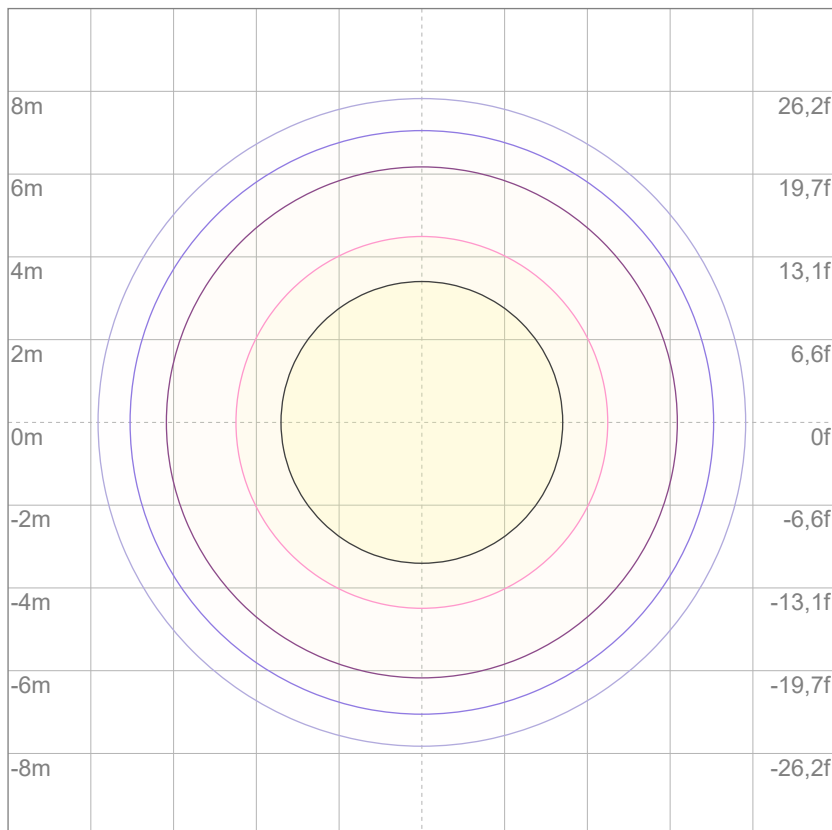
10%	882 cd
20%	1764 cd
30%	2646 cd
40%	3528 cd
50%	4410 cd
60%	5292 cd
70%	6174 cd
80%	7056 cd

Conditions:

Number of c-planes: 2

Candela at center: 8820 cd

ISO LUX DIAGRAM



3%	2,65 lx
5%	4,41 lx
10%	8,82 lx
30%	26,5 lx
50%	44,1 lx

Conditions:

Number of c-planes: 2

Lux at center: 88,2 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

3818 lm

Peak candela output:

3557 cd

Light quality:

CRI: 95,3

Color temperature:

5482 K

PRODUCT NAME:
ECLPENDANTS DY

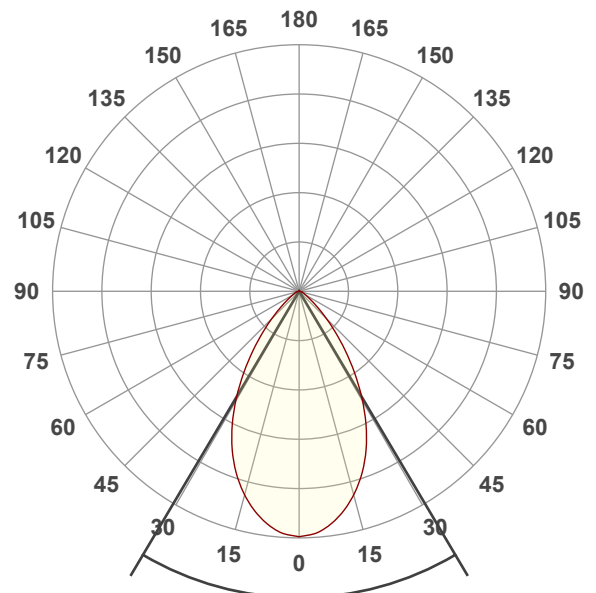
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
Full On

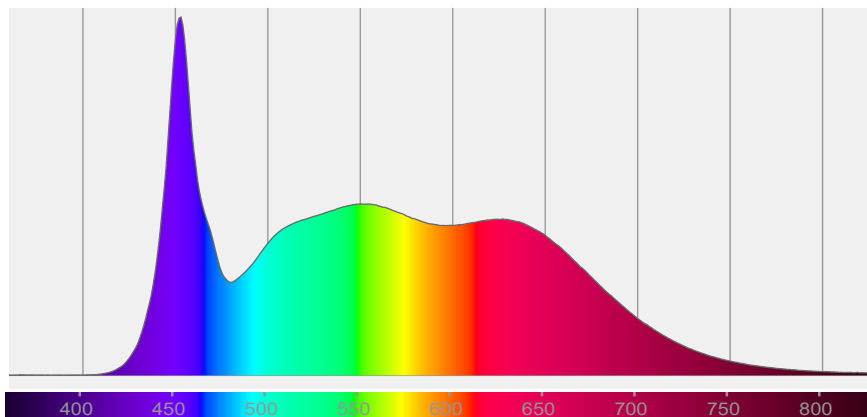
Operator:
Salvatore Giglio

Date and time:
05/02/2024 13:23:49

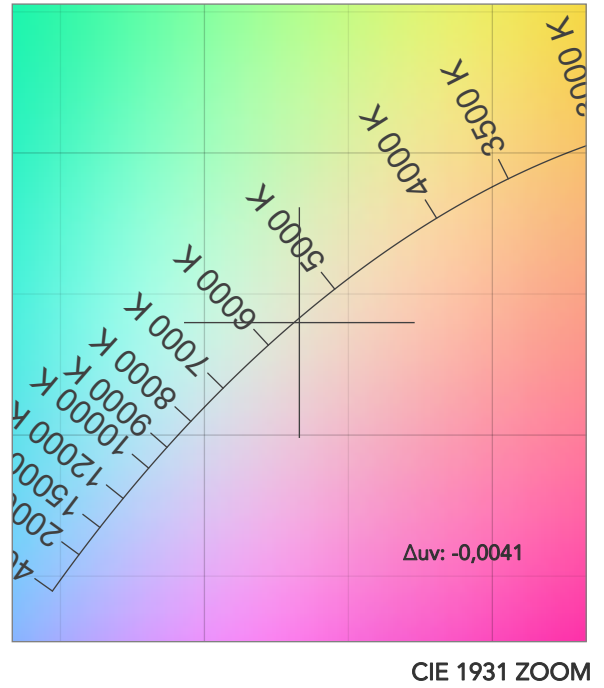
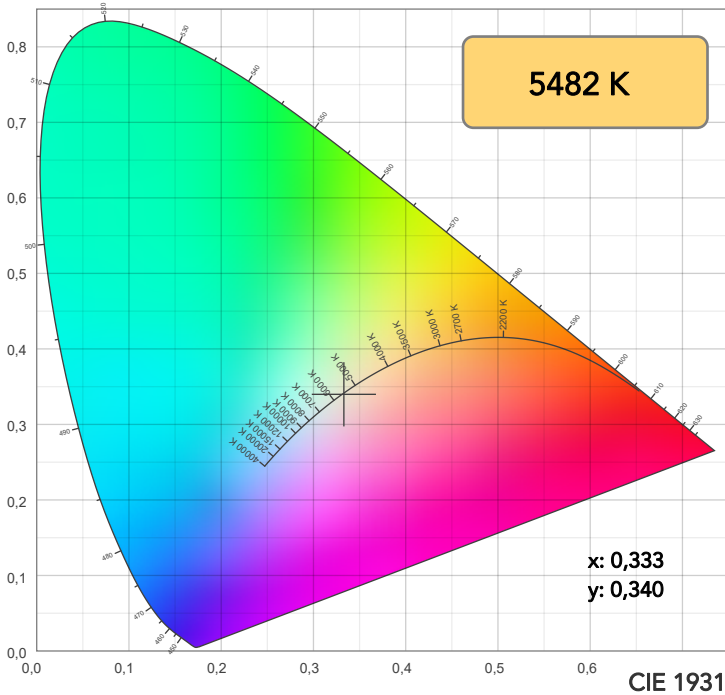


Beam angle 50%: 61,3°
Field angle 10%: 98,2°
Cut off angle 2.5%: 126,8°

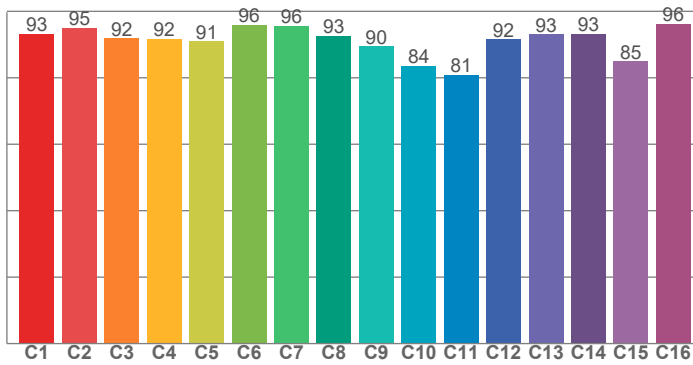
Spectra



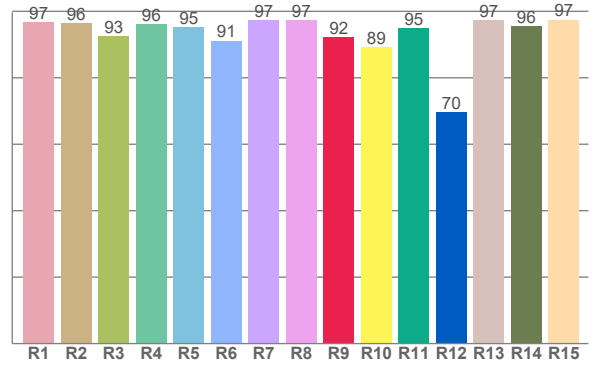
COLOR DETAILS



TM30: 91,0



CRI: 95,3 (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
96,7	96,3	92,5	96,0	95,2	91,2	97,4	97,3	92,1	89,3	94,9	69,7	97,2	95,6	97,4

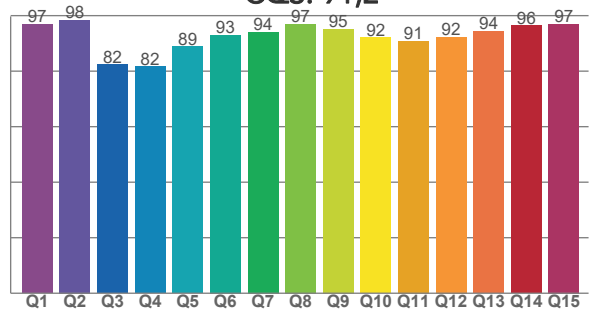
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,3	95,0	91,9	91,8	91,0	95,9	95,6	92,7	89,5	83,6	80,9	91,6	93,1	93,2	84,9	96,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,9	98,4	82,4	81,6	88,9	93,1	94,1	97,0	95,1	92,1	90,9	92,3	94,3	96,4	96,9

CQS: 91,2



COLOR PARAMETERS

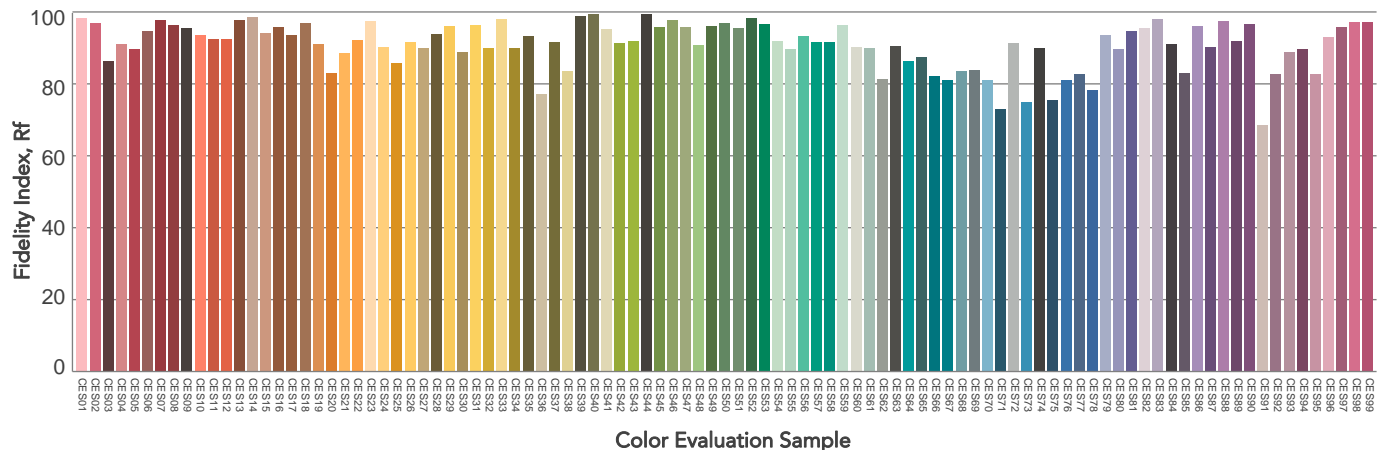
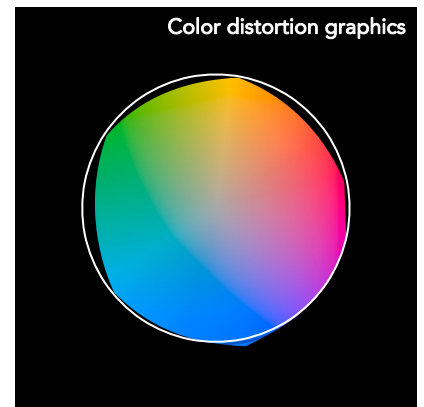
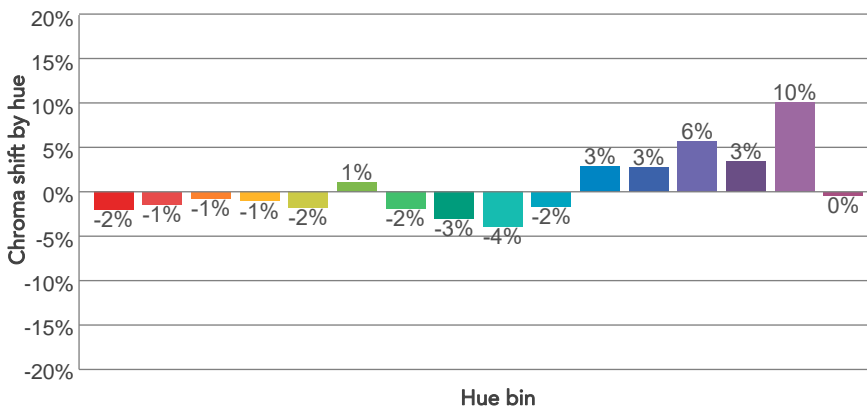
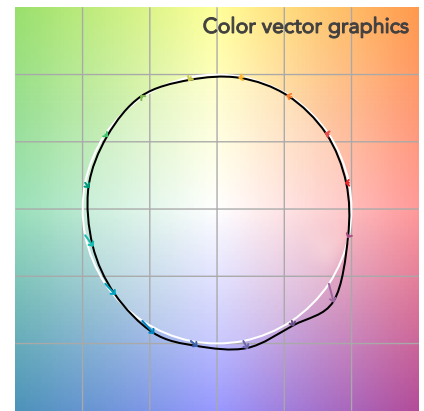
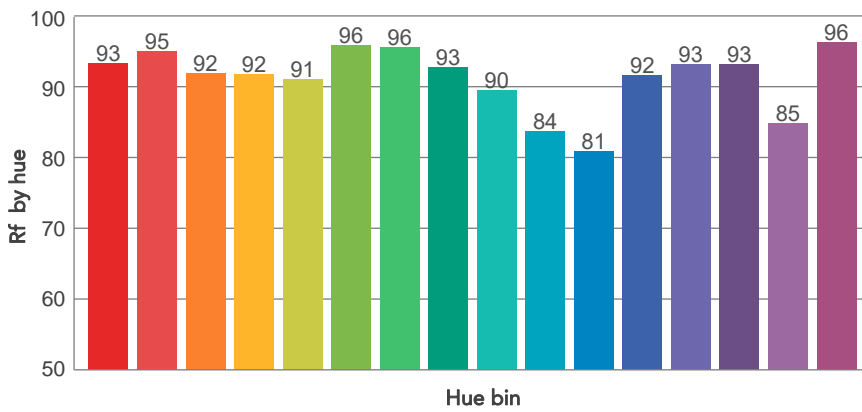
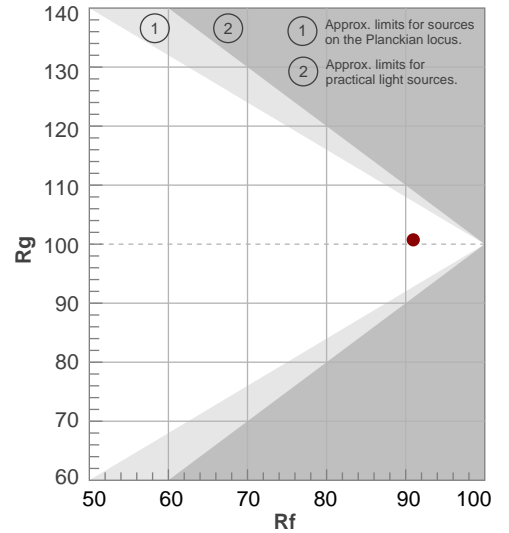
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5482 K	95,3	92,1	91,0	100,7	91,2	96	0,333	0,340	-0,0041

TM30 DETAILS

Rf 91,0
Fidelity index Rf

Rg 100,7
Gammut index

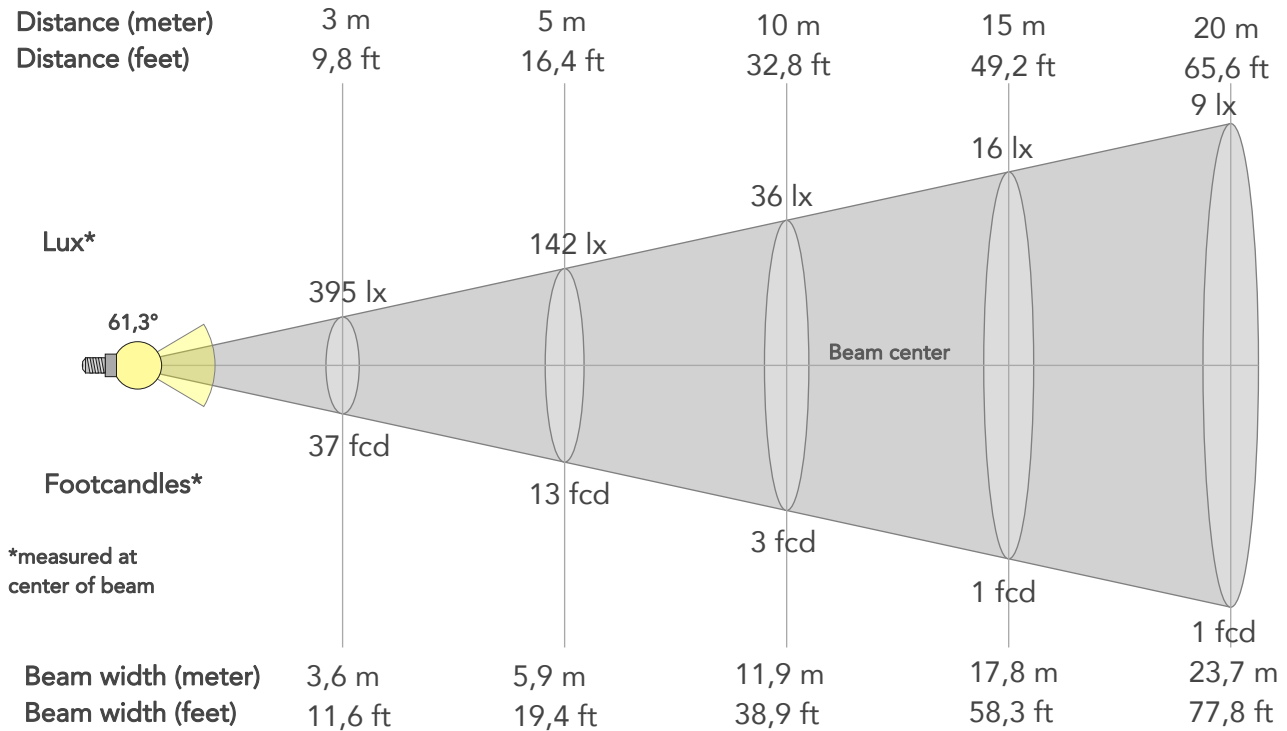
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-2%	0%
2	95	-1%	2%
3	92	-1%	3%
4	92	-1%	3%
5	91	-2%	2%
6	96	1%	0%
7	96	-2%	0%
8	93	-3%	3%
9	90	-4%	9%
10	84	-2%	10%
11	81	3%	12%
12	92	3%	5%
13	93	6%	2%
14	93	3%	-1%
15	85	10%	-9%
16	96	0%	-1%



BEAM DETAILS



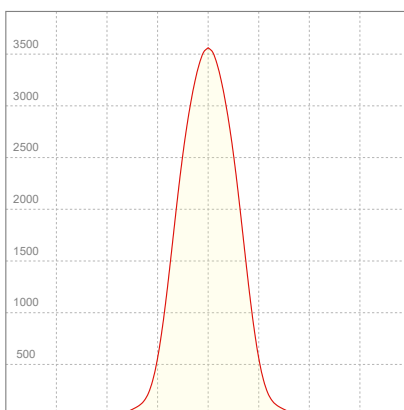
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
61,3°	98,2°	126,8°	96,8%	87,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3557lx	889lx	395lx	222lx	142lx	63lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	330fcd	83fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1,2m	2,4m	3,6m	4,7m	5,9m	8,9m	11,9m	17,8m	23,7m	29,6m	35,6m	47,4m	59,3m
Beam wid.	3,9ft	7,8ft	11,6ft	15,5ft	19,4ft	29,2ft	38,9ft	58,3ft	77,8ft	97,2ft	116,6ft	155,5ft	194,4ft

LINEAR DISTRIBUTION DIAGRAM

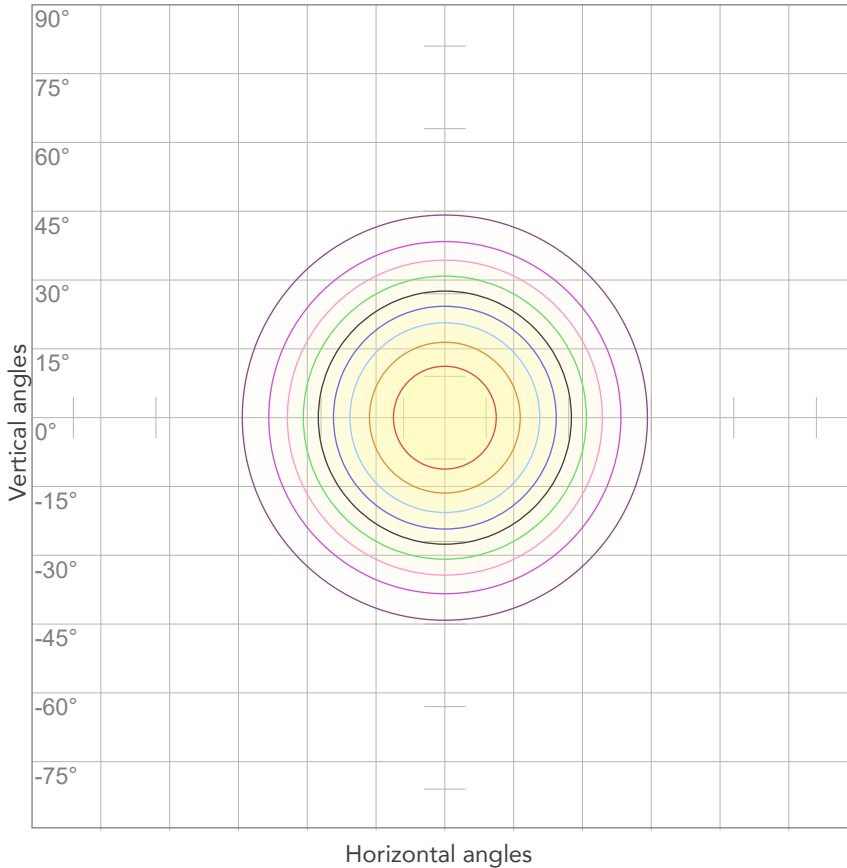


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
223V	0,289A	60,1W	0,93	64lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



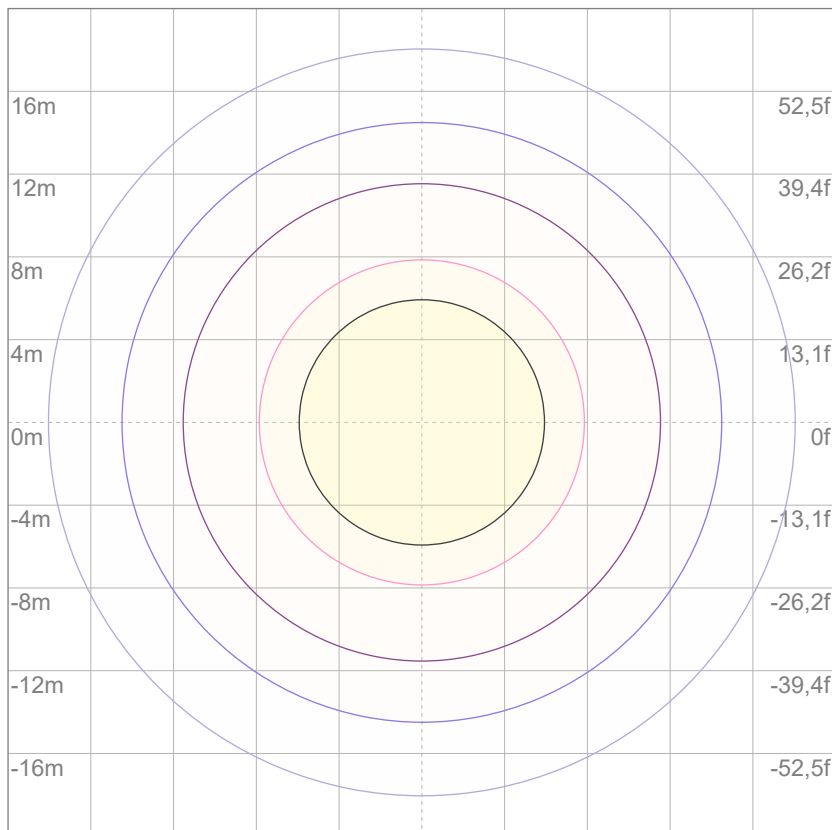
10%	356 cd
20%	711 cd
30%	1067 cd
40%	1423 cd
50%	1778 cd
60%	2134 cd
70%	2490 cd
80%	2845 cd

Conditions:

Number of c-planes: 2

Candela at center: 3557 cd

ISO LUX DIAGRAM



3%	1,07 lx
5%	1,78 lx
10%	3,56 lx
30%	10,7 lx
50%	17,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 35,6 lx

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

Mounting height: 10 meters (33 feet)