



Photometric Test Report



ECLPENDANT S NW

50W Single Color House Light with
Passive Cooling

CONTENTS

Table of contents	2
Testing process	3
Color preset Full on	
Beam angle 20°	4
Beam angle 40°	9
Beam angle 60°	14

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:

3851 lm

Peak candela output:

26978 cd

Light quality:

CRI: 95,3

Color temperature:

3950 K

PRODUCT NAME:
ECLPENDANTS NW

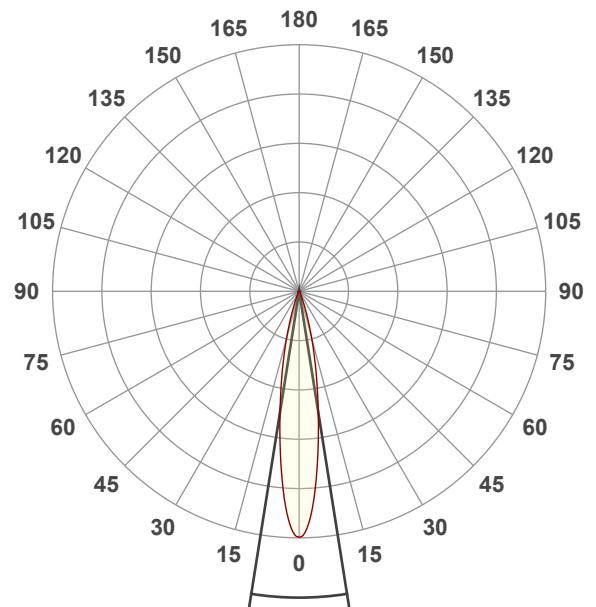
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
Full On

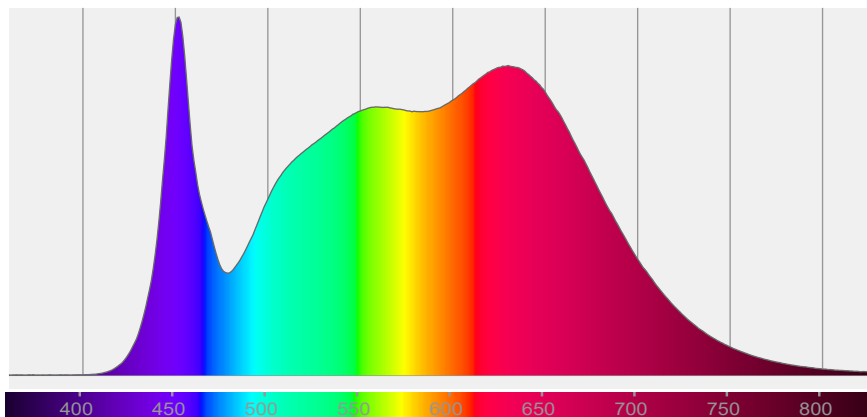
Operator:
Salvatore Giglio

Date and time:
05/02/2024 14:52:32

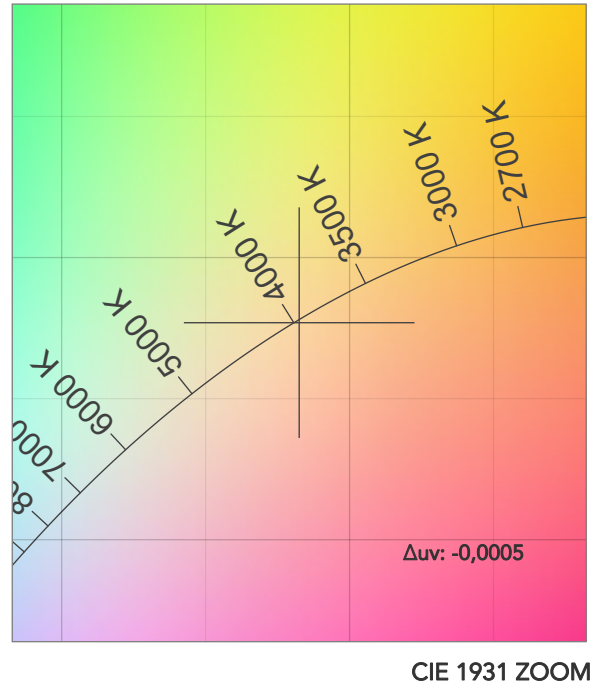
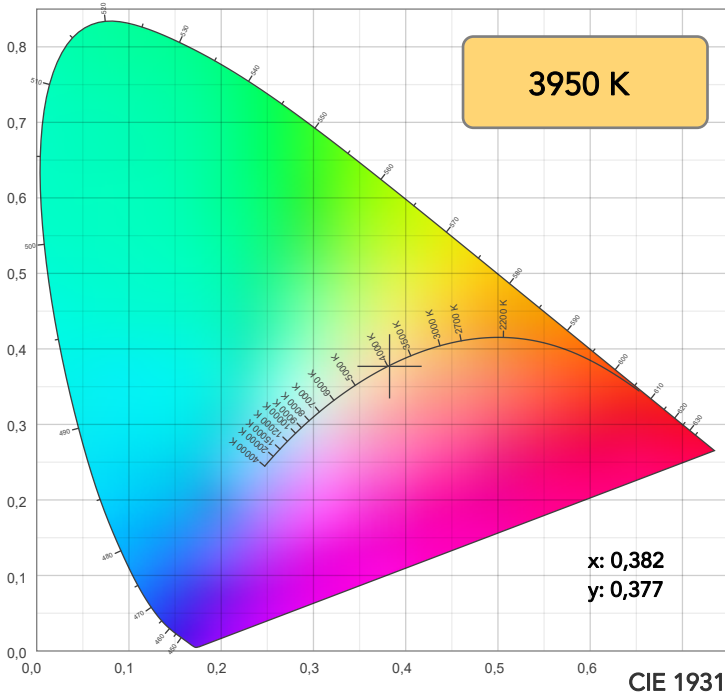


Beam angle 50%: 18°
Field angle 10%: 36,1°
Cut off angle 2.5%: 47,2°

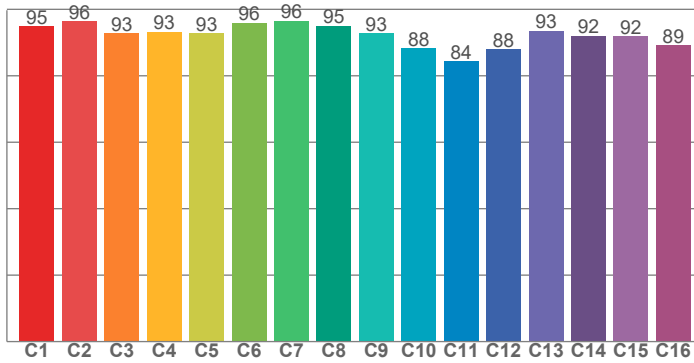
Spectra



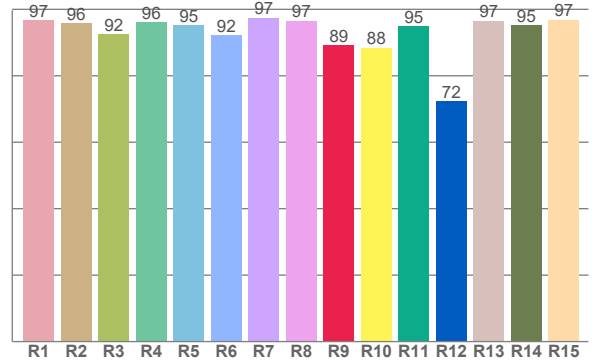
COLOR DETAILS



TM30: 92,3



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
96,8	95,9	92,4	96,1	95,3	92,2	97,5	96,5	89,2	88,4	95,0	72,4	96,5	95,2	96,9

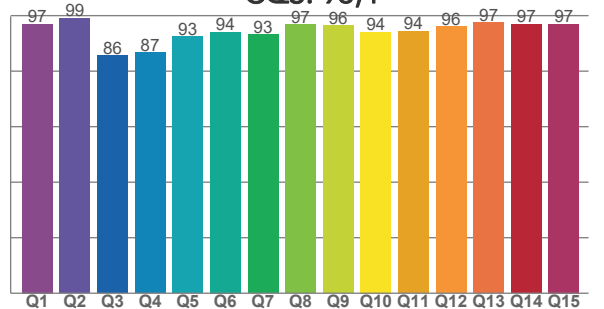
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,9	96,4	92,8	93,1	92,8	95,8	96,5	95,0	92,8	88,2	84,4	88,0	93,4	91,9	91,8	89,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,1	99,0	85,6	86,7	92,5	94,2	93,2	96,8	96,4	94,1	94,4	96,1	97,5	96,9	97,0

CQS: 93,4



COLOR PARAMETERS

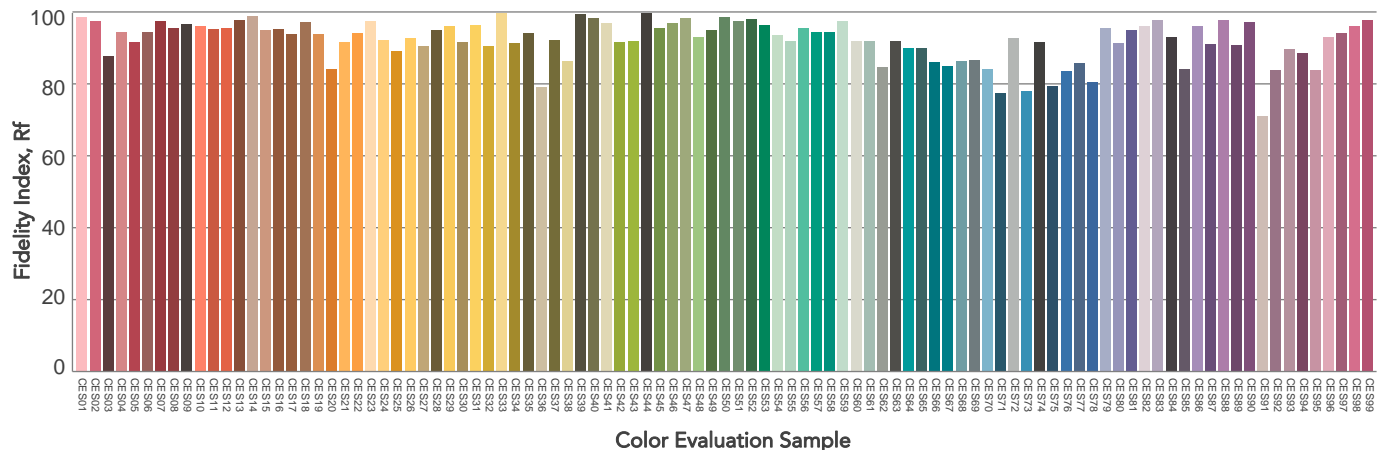
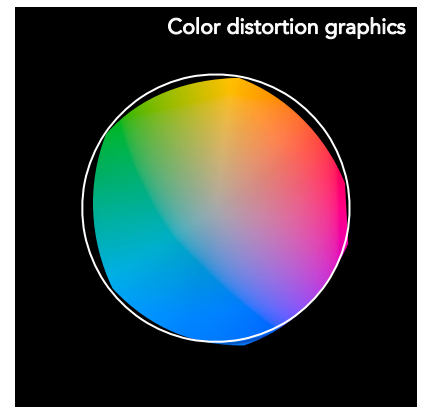
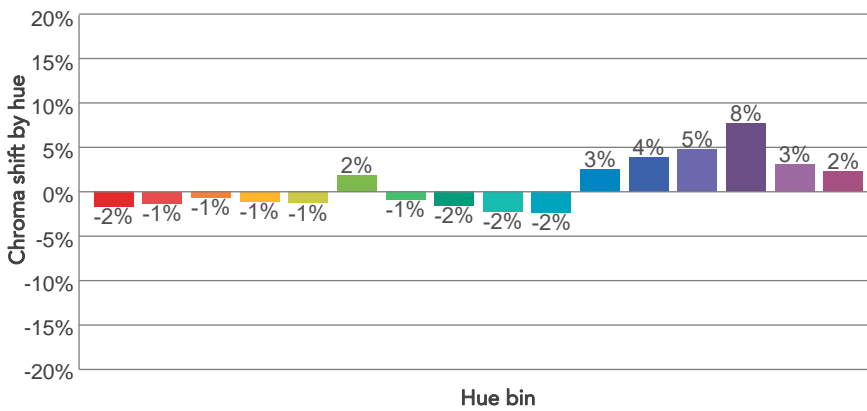
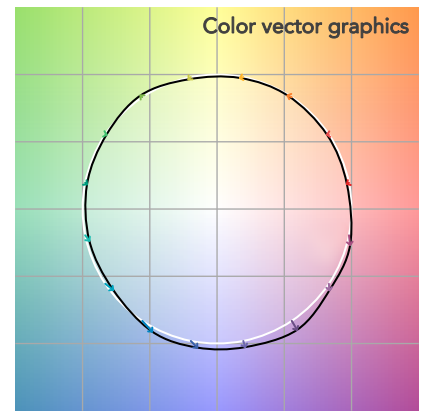
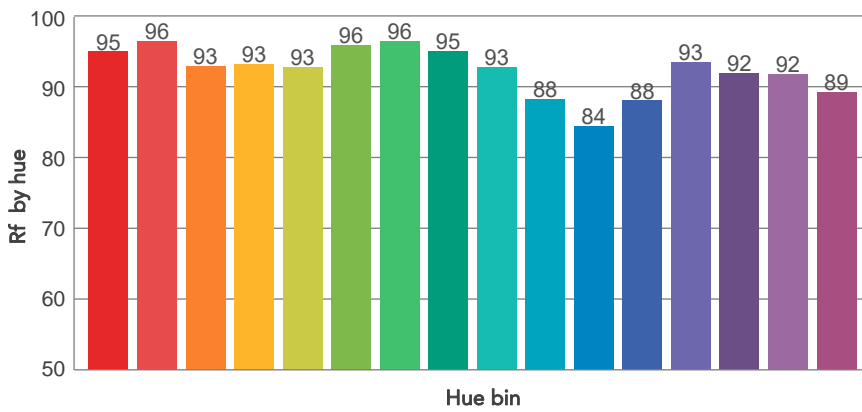
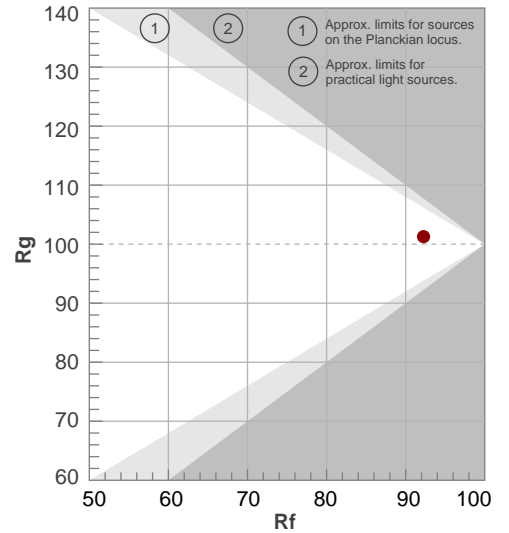
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3950 K	95,3	89,2	92,3	101,3	93,4	96	0,382	0,377	-0,0005

TM30 DETAILS

Rf 92,3
Fidelity index Rf

Rg 101,3
Gammut index

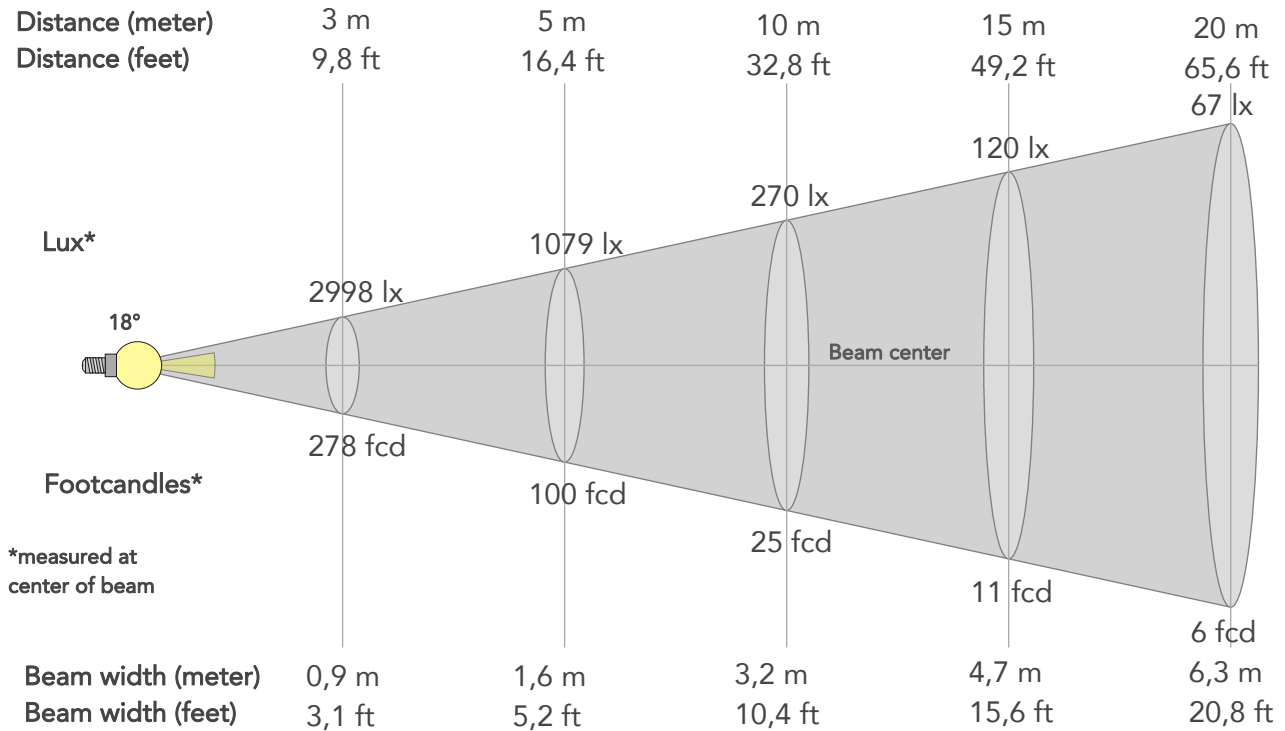
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	-1%
2	96	-1%	1%
3	93	-1%	3%
4	93	-1%	2%
5	93	-1%	2%
6	96	2%	0%
7	96	-1%	0%
8	95	-2%	1%
9	93	-2%	5%
10	88	-2%	7%
11	84	3%	10%
12	88	4%	6%
13	93	5%	0%
14	92	8%	0%
15	92	3%	-4%
16	89	2%	-7%



BEAM DETAILS



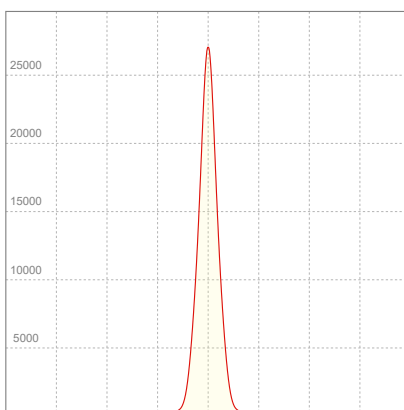
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18°	36,1°	47,2°	98,0%	95,1%



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	26978lx	6744lx	2998lx	1686lx	1079lx	480lx	270lx	120lx	67lx	43lx	30lx	17lx	11lx
Footcand.	2506fcd	627fcd	278fcd	157fcd	100fcd	45fcd	25fcd	11fcd	6fcd	4fcd	3fcd	2fcd	1fcd
Beam wid.	0,3m	0,6m	0,9m	1,3m	1,6m	2,4m	3,2m	4,7m	6,3m	7,9m	9,5m	12,7m	15,8m
Beam wid.	1ft	2,1ft	3,1ft	4,1ft	5,2ft	7,8ft	10,4ft	15,6ft	20,8ft	25,9ft	31,1ft	41,5ft	51,9ft

LINEAR DISTRIBUTION DIAGRAM

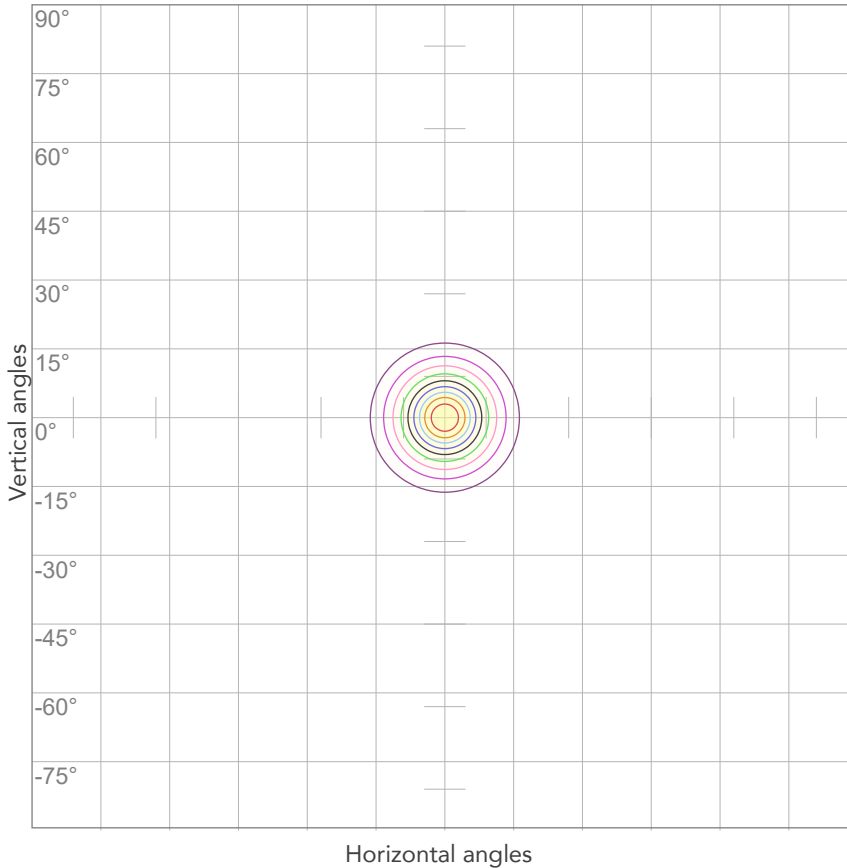


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
222V	0,293A	60,7W	0,93	63lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



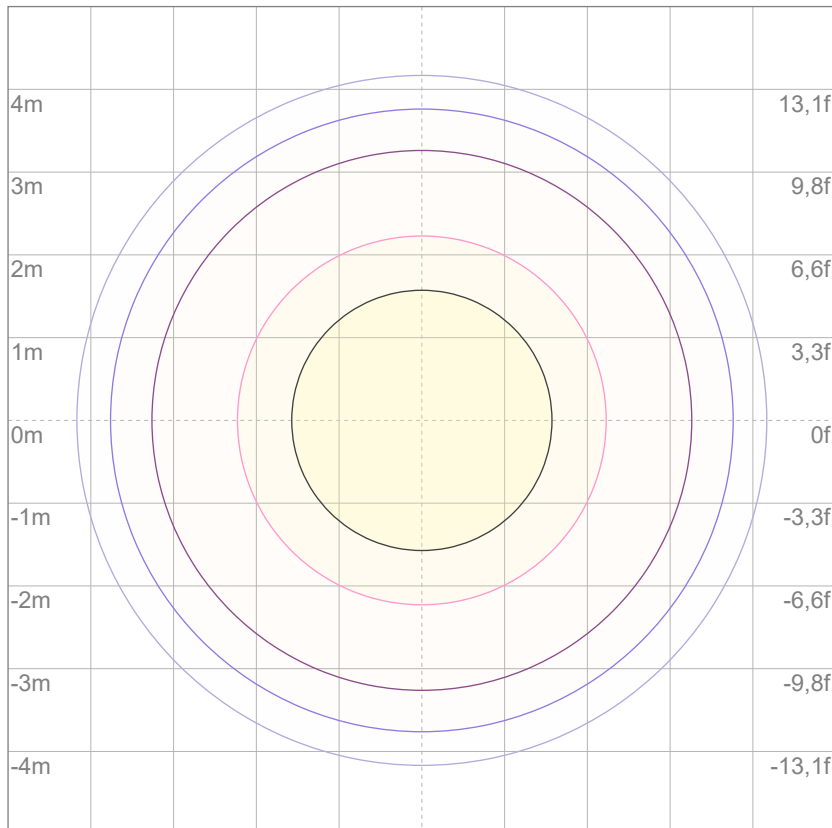
10%	2698 cd
20%	5396 cd
30%	8093 cd
40%	10791 cd
50%	13489 cd
60%	16187 cd
70%	18885 cd
80%	21582 cd

Conditions:

Number of c-planes: 2

Candela at center: 26978 cd

ISO LUX DIAGRAM



3%	8,09 lx
5%	13,5 lx
10%	27,0 lx
30%	80,9 lx
50%	135 lx

Conditions:

Number of c-planes: 2

Lux at center: 270 lx

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



Total lumen output:

3776 lm

Peak candela output:

8405 cd

Light quality:

CRI: 95,4

Color temperature:

3947 K

PRODUCT NAME:
ECLPENDANTS NW

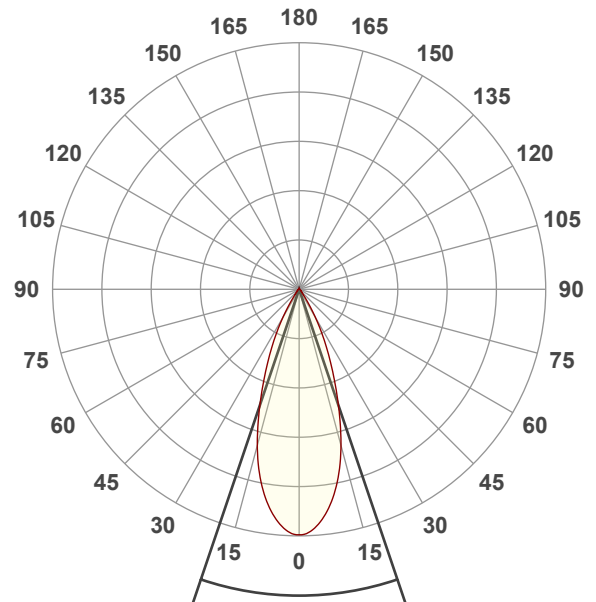
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
Full On

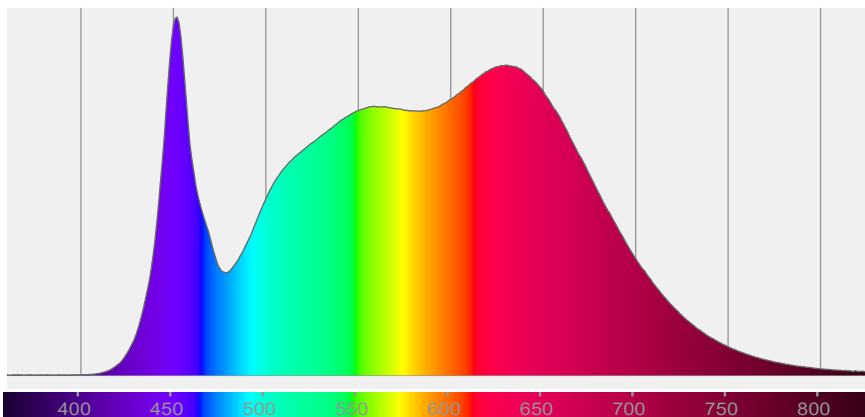
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Salvatore Giglio

Date and time:
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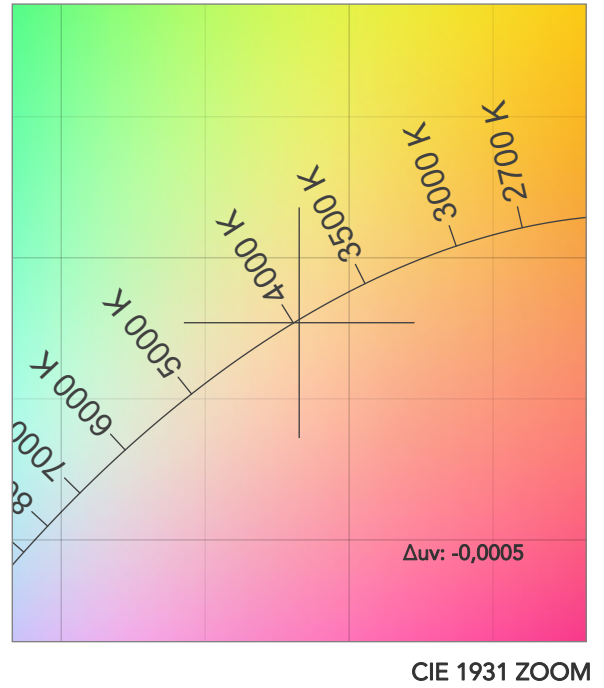
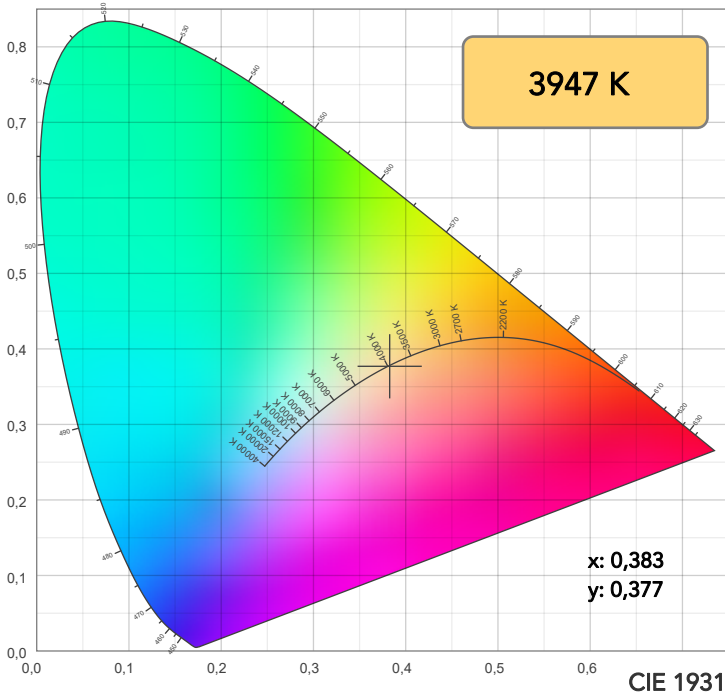


Beam angle 50%: 37,4°
Field angle 10%: 63,1°
Cut off angle 2.5%: 77,1°

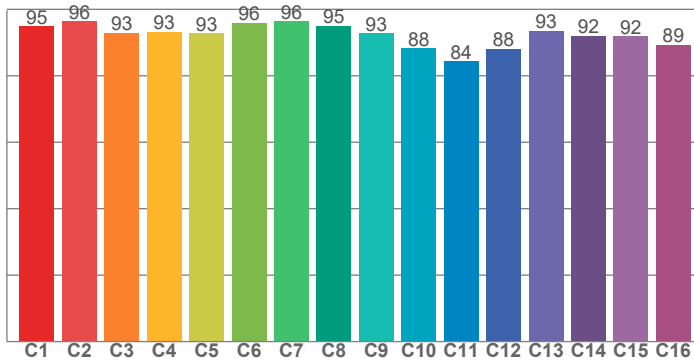
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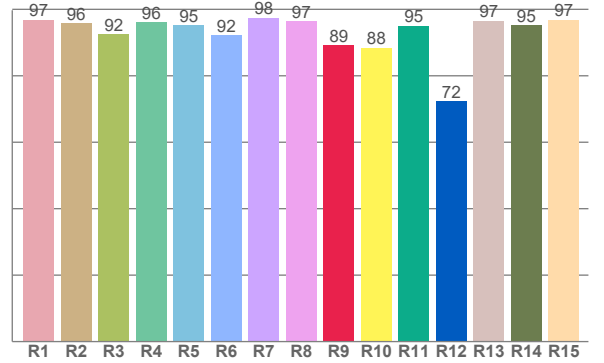
COLOR DETAILS



TM30: 92,3



CRI: 95,4 (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
96,8	95,9	92,5	96,2	95,3	92,3	97,5	96,5	89,1	88,5	95,0	72,4	96,5	95,2	96,9

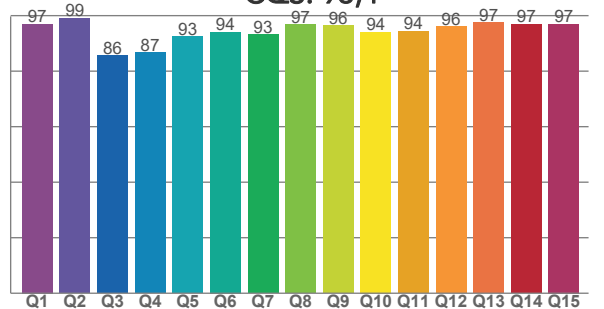
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,9	96,4	92,8	93,1	92,8	95,9	96,4	95,0	92,8	88,2	84,4	88,0	93,5	92,0	91,8	89,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,0	99,1	85,6	86,7	92,5	94,2	93,2	96,8	96,4	94,1	94,4	96,1	97,5	96,9	97,0

CQS: 93,4



COLOR PARAMETERS

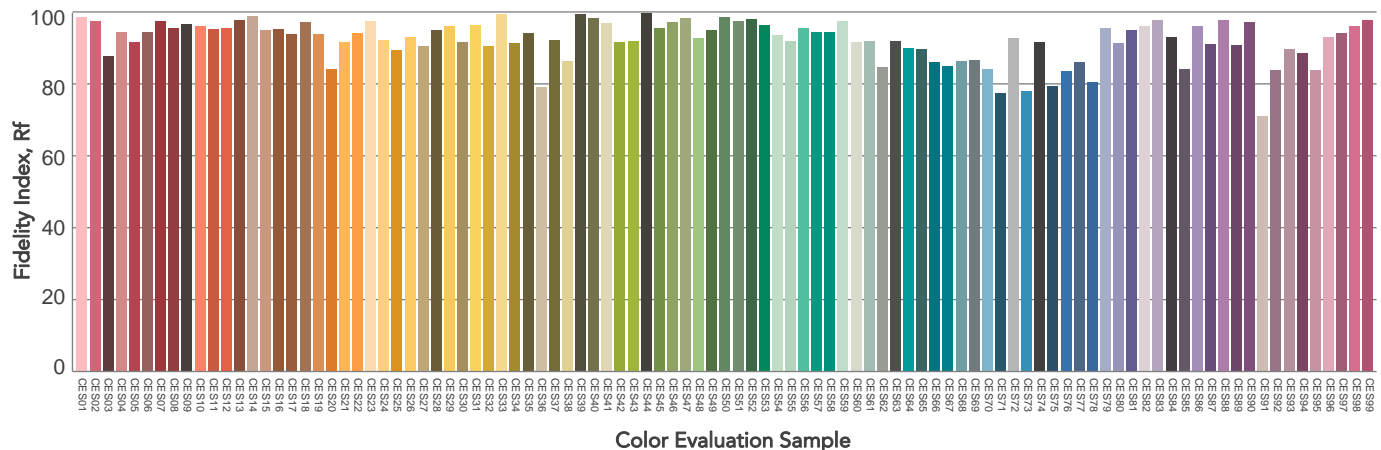
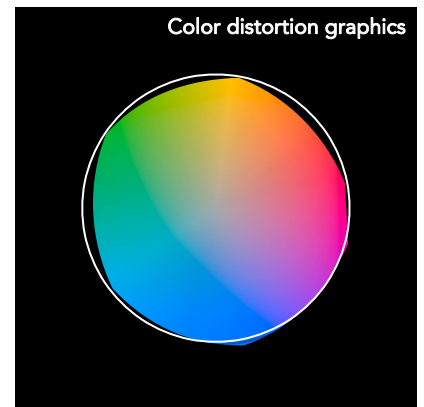
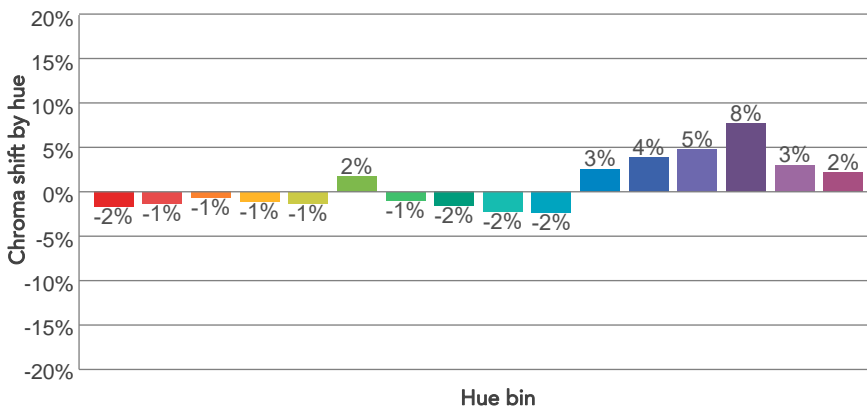
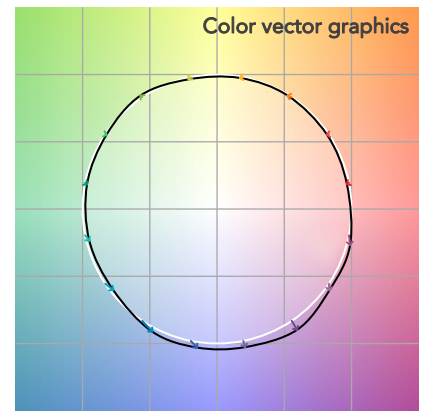
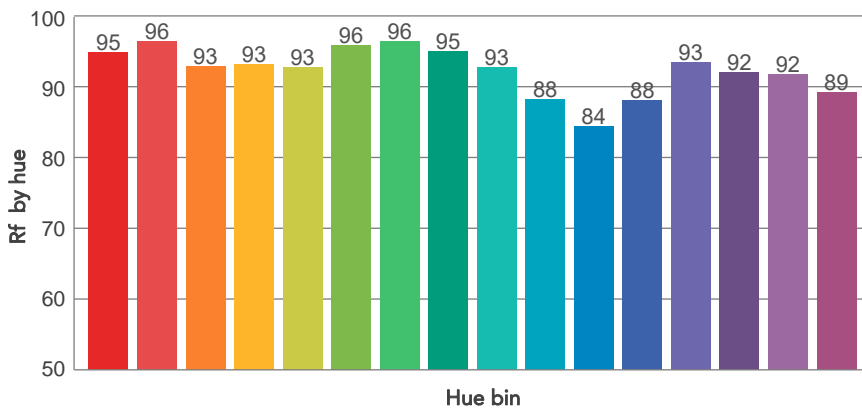
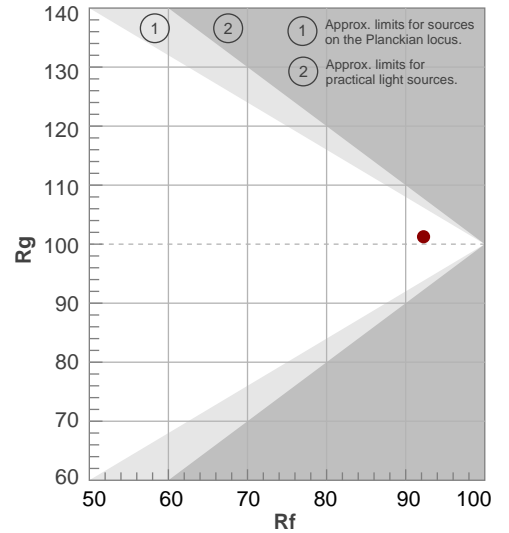
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3947 K	95,4	89,1	92,3	101,3	93,4	96	0,383	0,377	-0,0005

TM30 DETAILS

Rf 92,3
Fidelity index Rf

Rg 101,3
Gammut index

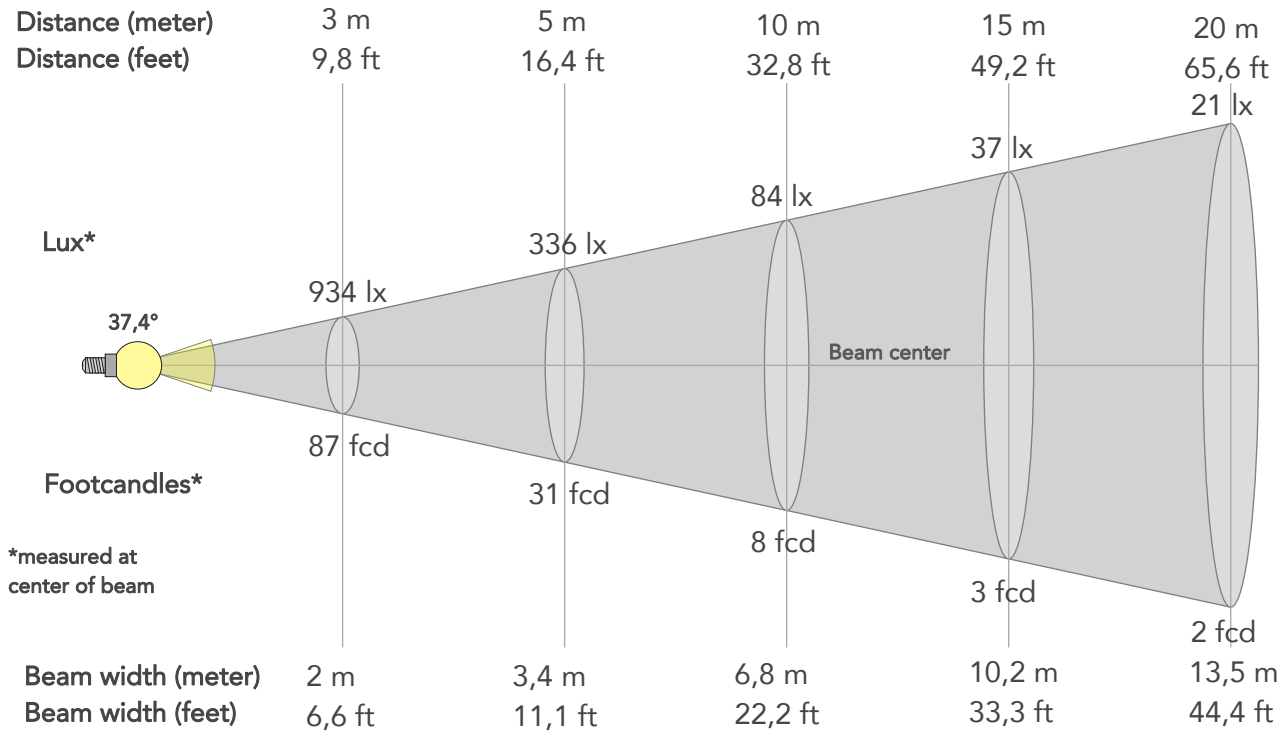
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	-1%
2	96	-1%	1%
3	93	-1%	3%
4	93	-1%	2%
5	93	-1%	2%
6	96	2%	0%
7	96	-1%	0%
8	95	-2%	1%
9	93	-2%	5%
10	88	-2%	7%
11	84	3%	10%
12	88	4%	6%
13	93	5%	0%
14	92	8%	0%
15	92	3%	-4%
16	89	2%	-7%



BEAM DETAILS



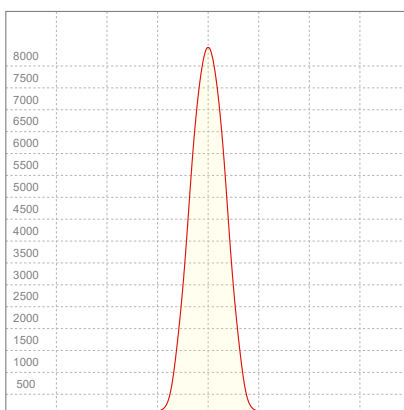
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37,4°	63,1°	77,1°	98,5%	95,8%



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	8405lx	2101lx	934lx	525lx	336lx	149lx	84lx	37lx	21lx	13lx	9lx	5lx	3lx
Footcand.	781fcd	195fcd	87fcd	49fcd	31fcd	14fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,7m	1,4m	2m	2,7m	3,4m	5,1m	6,8m	10,2m	13,5m	16,9m	20,3m	27,1m	33,9m
Beam wid.	2,2ft	4,5ft	6,6ft	8,9ft	11,1ft	16,7ft	22,2ft	33,3ft	44,4ft	55,5ft	66,6ft	88,9ft	111,1ft

LINEAR DISTRIBUTION DIAGRAM

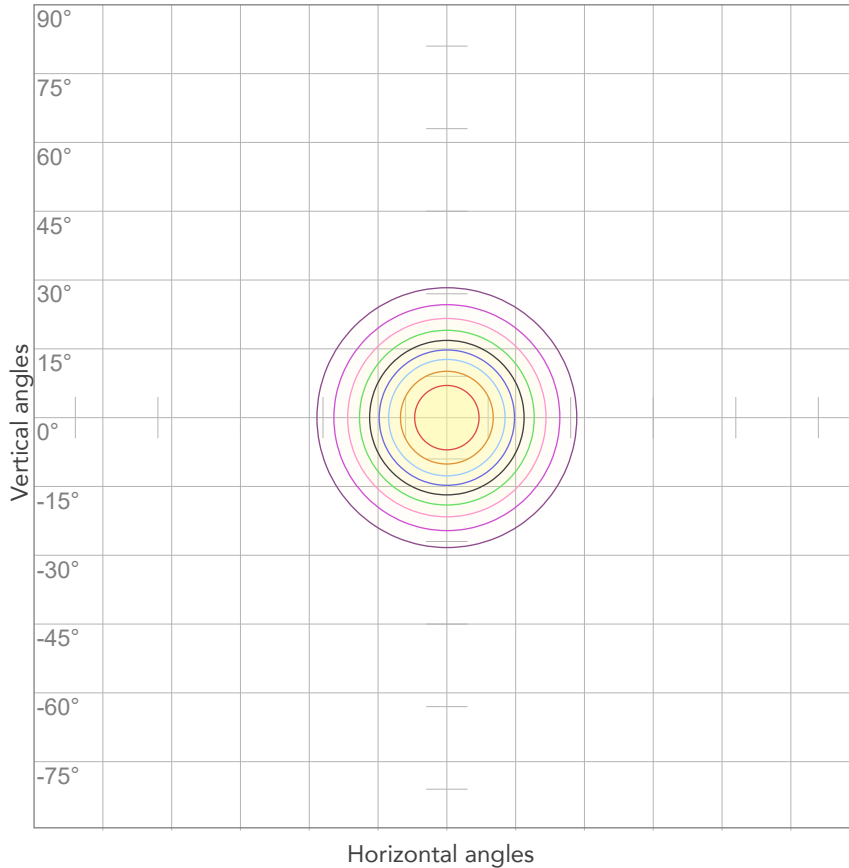


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
222V	0,291A	60,5W	0,93	62lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



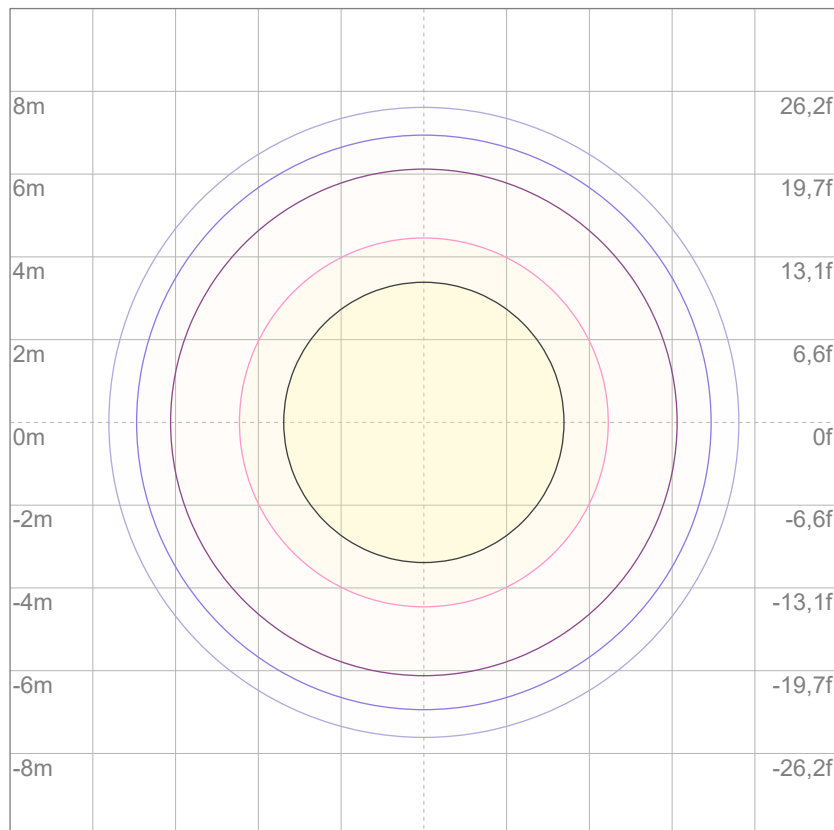
10%	841 cd
20%	1681 cd
30%	2522 cd
40%	3362 cd
50%	4203 cd
60%	5043 cd
70%	5884 cd
80%	6724 cd

Conditions:

Number of c-planes: 2

Candela at center: 8405 cd

ISO LUX DIAGRAM



3%	2,52 lx
5%	4,20 lx
10%	8,41 lx
30%	25,2 lx
50%	42,0 lx

Conditions:

Number of c-planes: 2

Lux at center: 84,1 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:

3627 lm

Peak candela output:

3376 cd

Light quality:

CRI: 95,4

Color temperature:

3957 K

PRODUCT NAME:
ECLPENDANTS NW

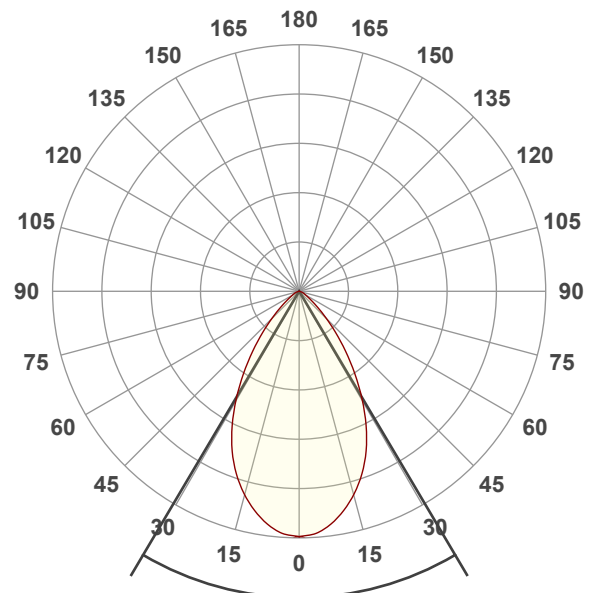
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
Full On

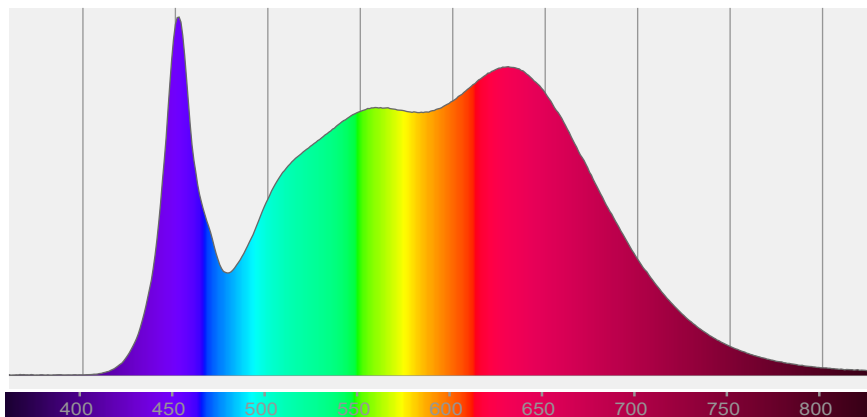
Operator:
Salvatore Giglio

Date and time:
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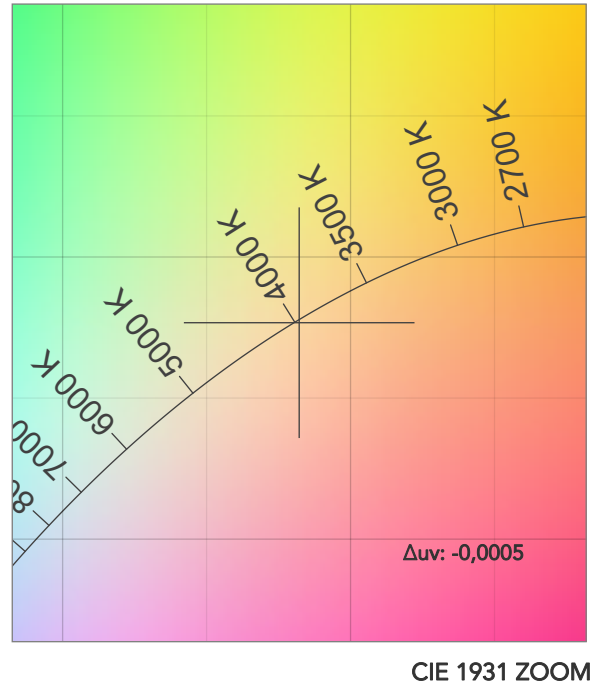
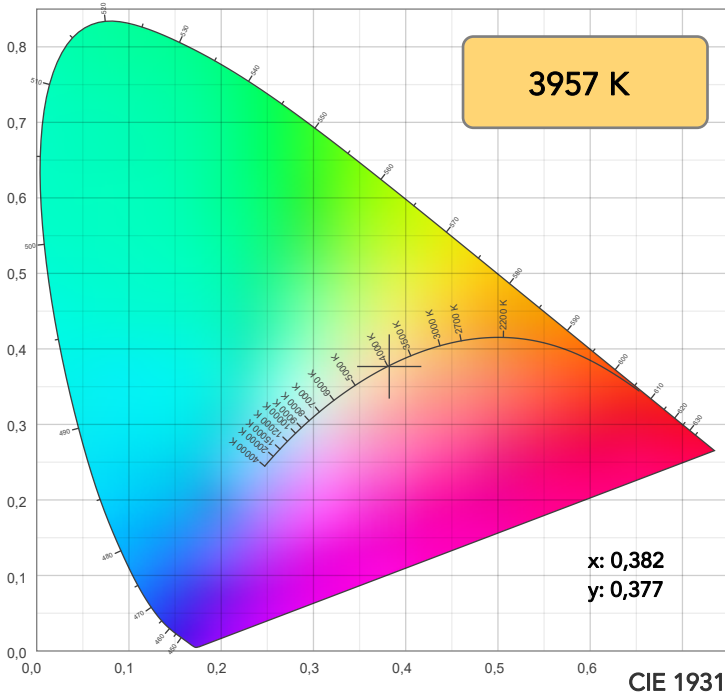


Beam angle 50%: 61,2°
Field angle 10%: 98,3°
Cut off angle 2.5%: 126,6°

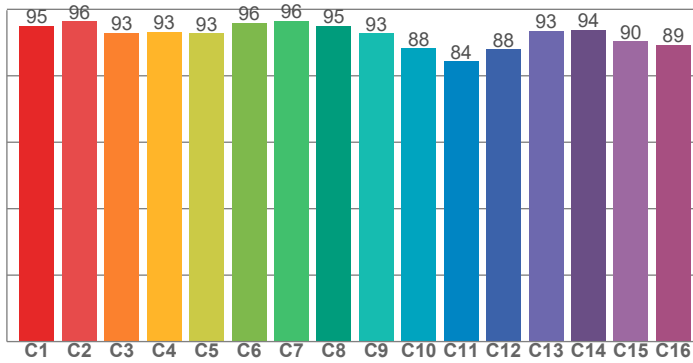
Spectra



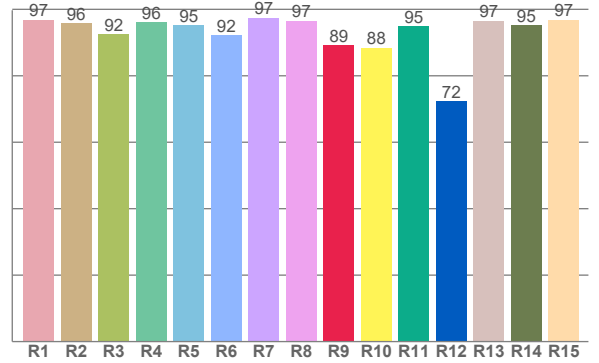
COLOR DETAILS



TM30: 92,3



CRI: 95,4 (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
96,8	95,9	92,4	96,2	95,3	92,3	97,5	96,6	89,2	88,5	95,0	72,4	96,6	95,2	96,9

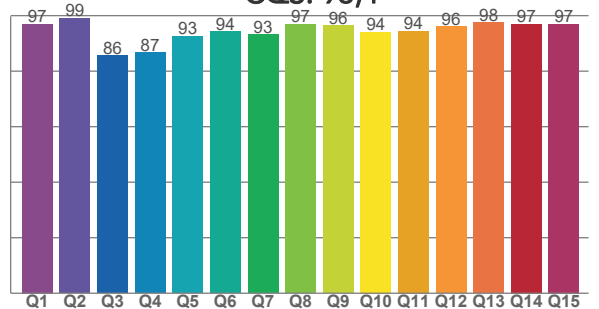
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,9	96,4	92,9	93,1	92,8	95,8	96,5	95,0	92,8	88,2	84,4	88,0	93,5	93,9	90,3	89,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,1	99,0	85,6	86,7	92,5	94,2	93,2	96,9	96,4	94,1	94,4	96,1	97,5	96,9	97,1

CQS: 93,4



COLOR PARAMETERS

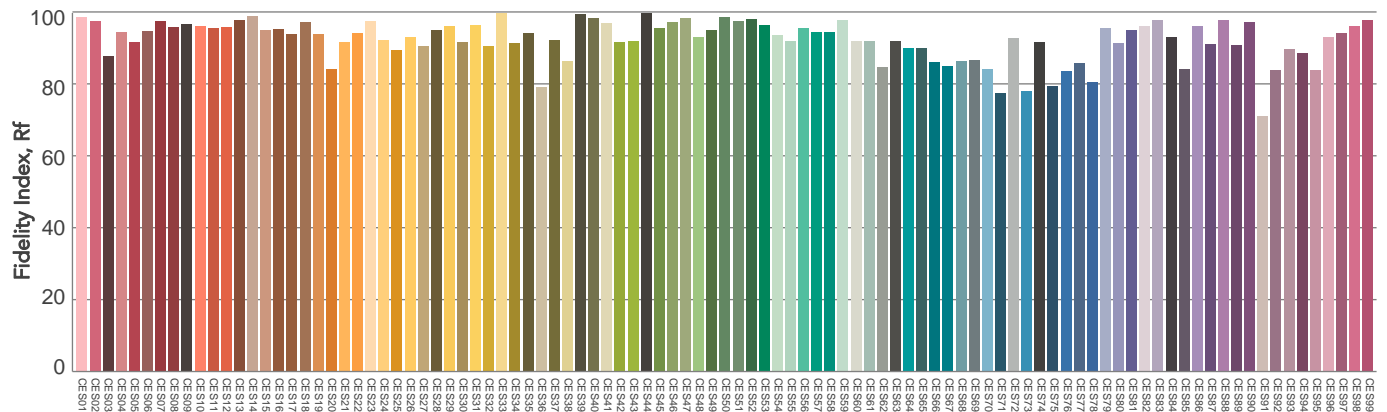
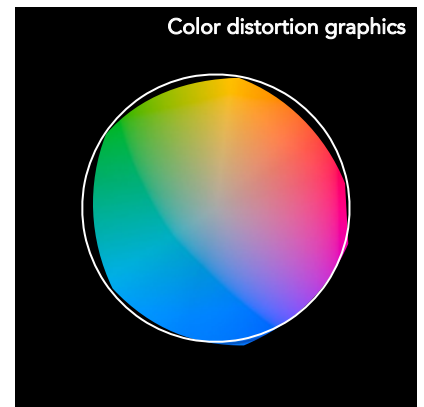
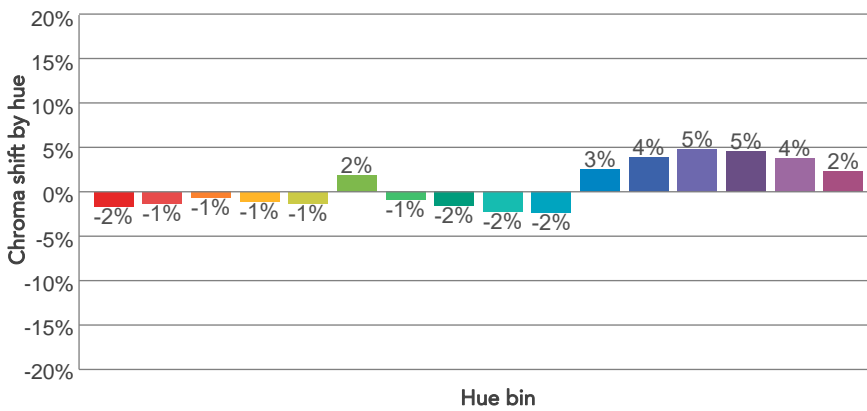
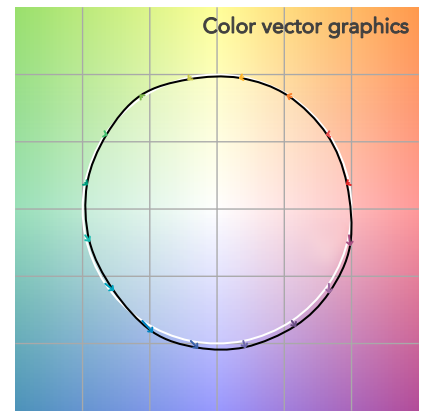
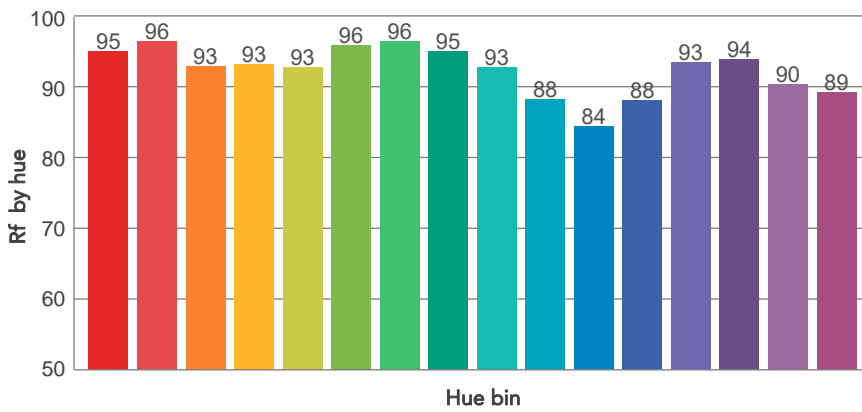
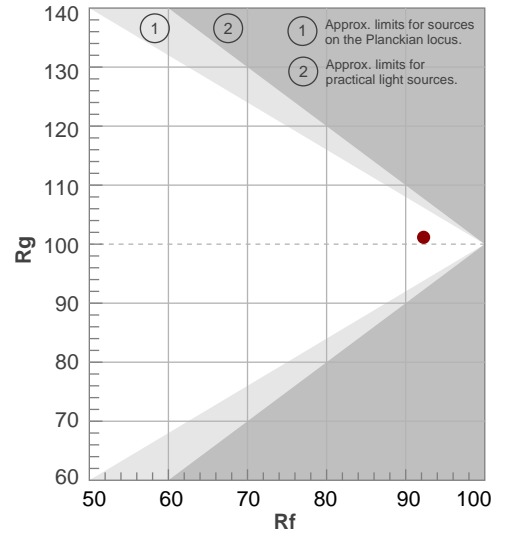
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3957 K	95,4	89,2	92,3	101,2	93,4	96	0,382	0,377	-0,0005

TM30 DETAILS

Rf 92,3
Fidelity index Rf

Rg 101,2
Gammut index

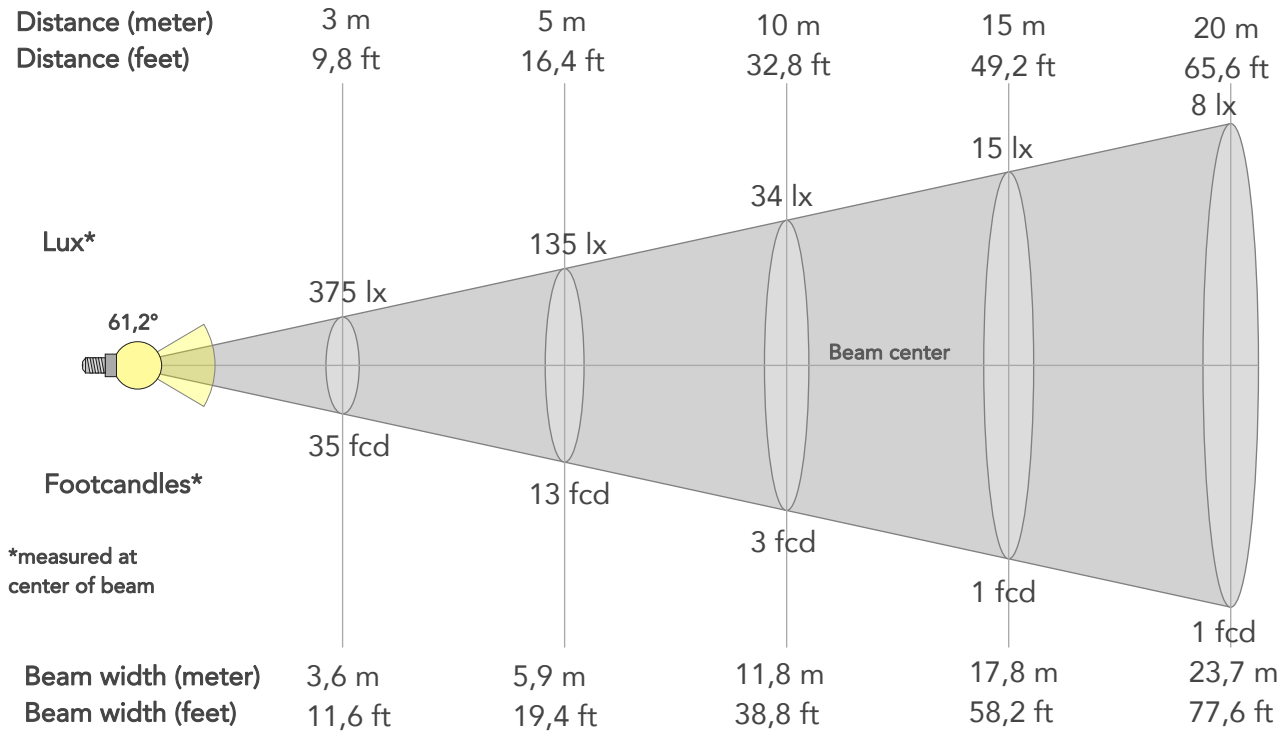
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	-1%
2	96	-1%	1%
3	93	-1%	3%
4	93	-1%	2%
5	93	-1%	2%
6	96	2%	0%
7	96	-1%	0%
8	95	-2%	1%
9	93	-2%	5%
10	88	-2%	7%
11	84	3%	10%
12	88	4%	6%
13	93	5%	0%
14	94	5%	0%
15	90	4%	-5%
16	89	2%	-7%



BEAM DETAILS



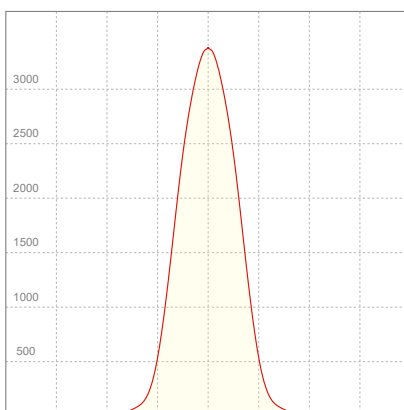
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
61,2°	98,3°	126,6°	96,7%	87,6%



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	3376lx	844lx	375lx	211lx	135lx	60lx	34lx	15lx	8lx	5lx	4lx	2lx	1lx
Footcand.	314fcd	78fcd	35fcd	20fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1,2m	2,4m	3,6m	4,7m	5,9m	8,9m	11,8m	17,8m	23,7m	29,6m	35,5m	47,3m	59,2m
Beam wid.	3,9ft	7,8ft	11,6ft	15,5ft	19,4ft	29,1ft	38,8ft	58,2ft	77,6ft	97,1ft	116,5ft	155,3ft	194,1ft

LINEAR DISTRIBUTION DIAGRAM

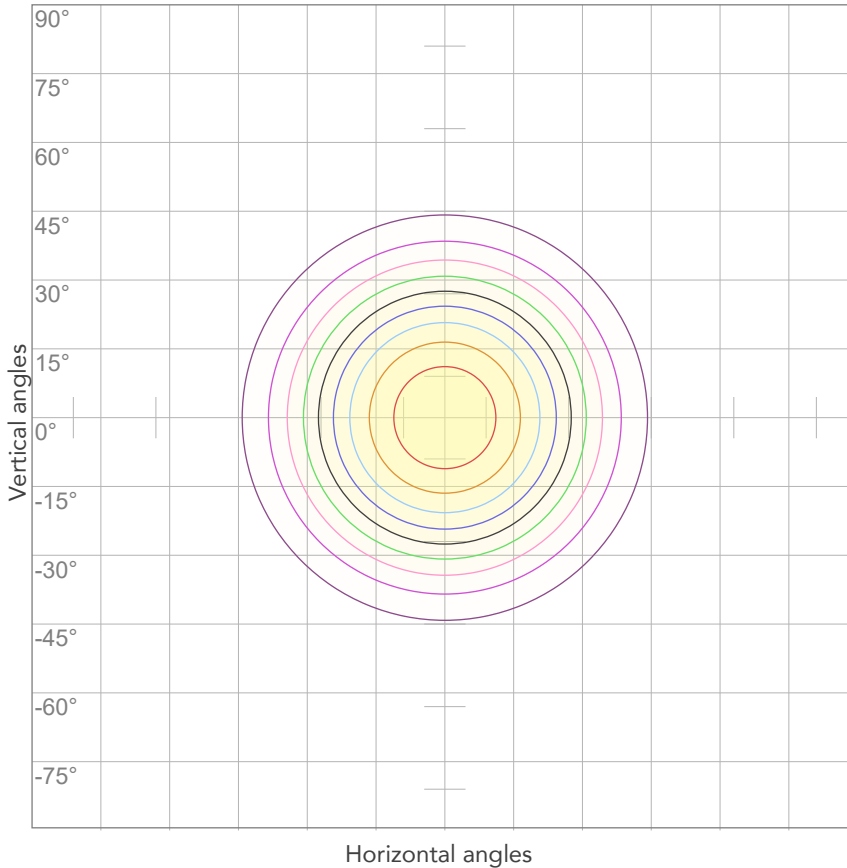


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
223V	0,291A	60,5W	0,93	60lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



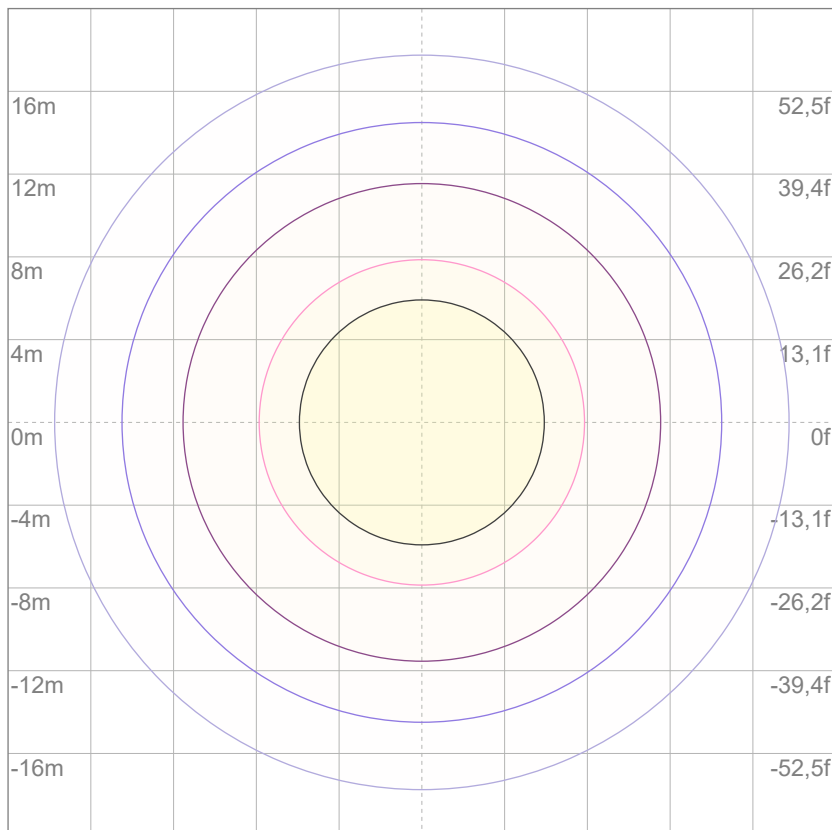
10%	338 cd
20%	675 cd
30%	1013 cd
40%	1350 cd
50%	1688 cd
60%	2026 cd
70%	2363 cd
80%	2701 cd

Conditions:

Number of c-planes: 2

Candela at center: 3376 cd

ISO LUX DIAGRAM



3%	1,01 lx
5%	1,69 lx
10%	3,38 lx
30%	10,1 lx
50%	16,9 lx

Conditions:

Number of c-planes: 2

Lux at center: 33,8 lx

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