



Photometric Test Report



ECLPENDANTJR NW

100W White LED source

innovative pendant light

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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:

7401 lm

Peak candela output:

38111 cd

Light quality:

CRI: 96,3

Color temperature:

4005 K

PRODUCT NAME:

ECLPENDANTJR NW

MEASURAMENT CONDITIONS:

Beam angle:

20°

Target:

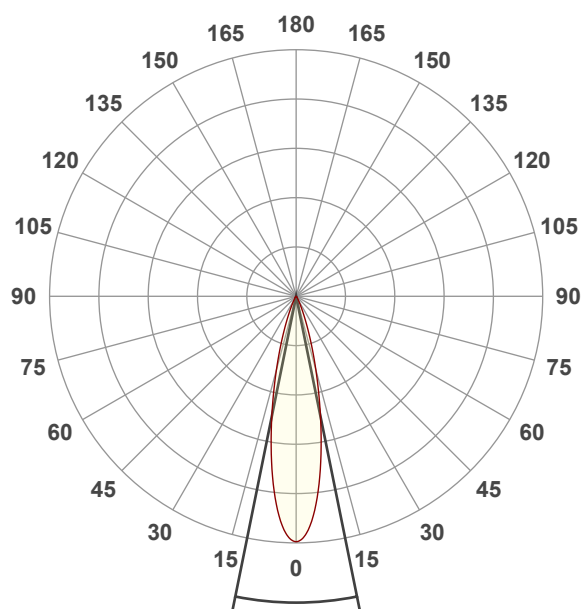
Full On

Operator:

Paolo Carvone

Date and time:

13/10/2022 14:28:14

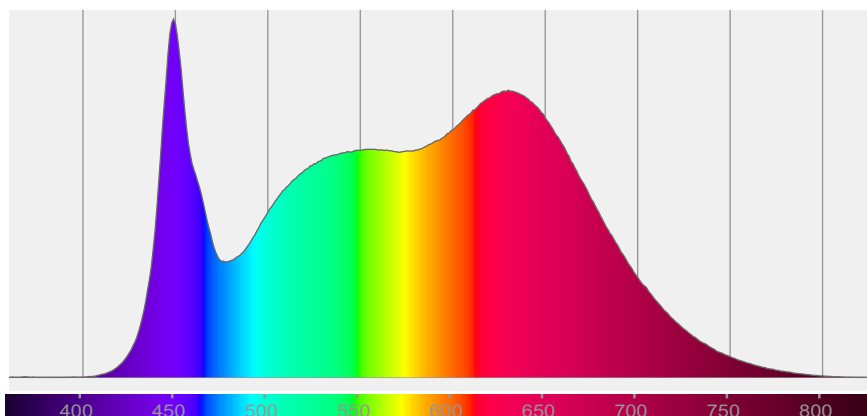


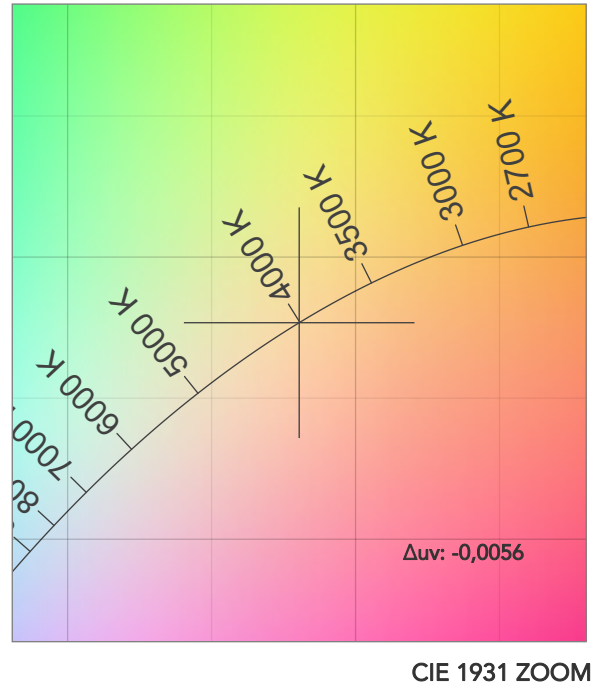
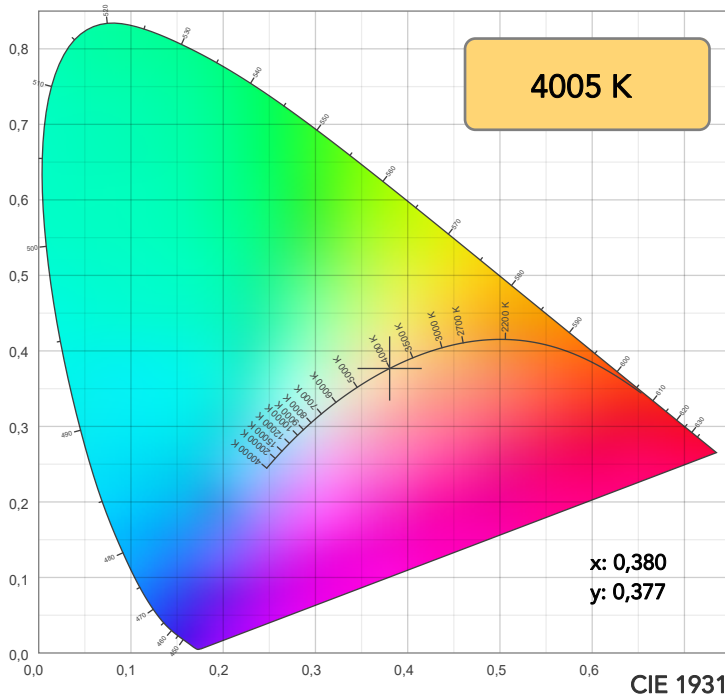
Beam angle 50%: 22,9°

Field angle 10%: 42,7°

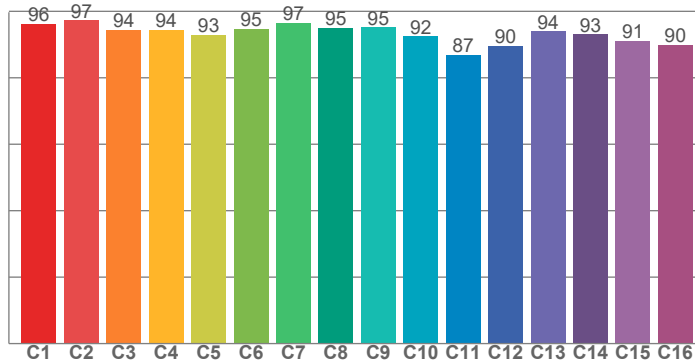
Cut off angle 2.5%: 56,2°

Spectra

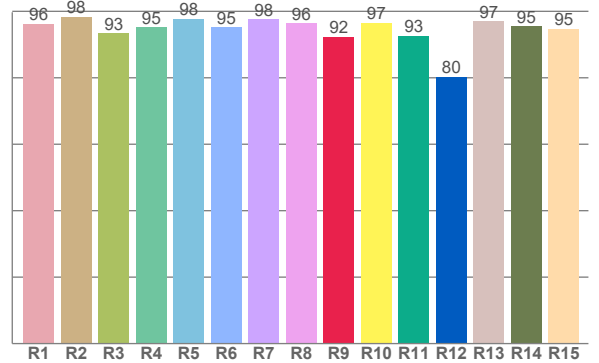




TM30: 93,3



CRI: 96,3 (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
96,3	98,4	93,5	95,1	97,8	95,2	97,6	96,5	92,3	96,6	92,7	80,3	96,9	95,5	94,8

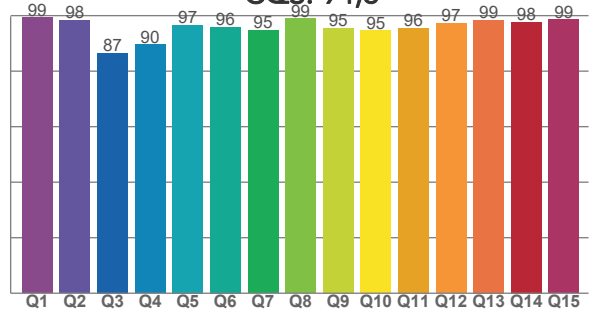
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,3	97,3	94,4	94,4	92,9	94,6	96,6	95,1	95,2	92,5	86,8	89,7	93,9	93,1	91,1	89,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,3	98,3	86,6	89,6	96,7	95,9	94,7	99,0	95,5	94,7	95,5	97,2	98,5	97,8	98,6

CQS: 94,6

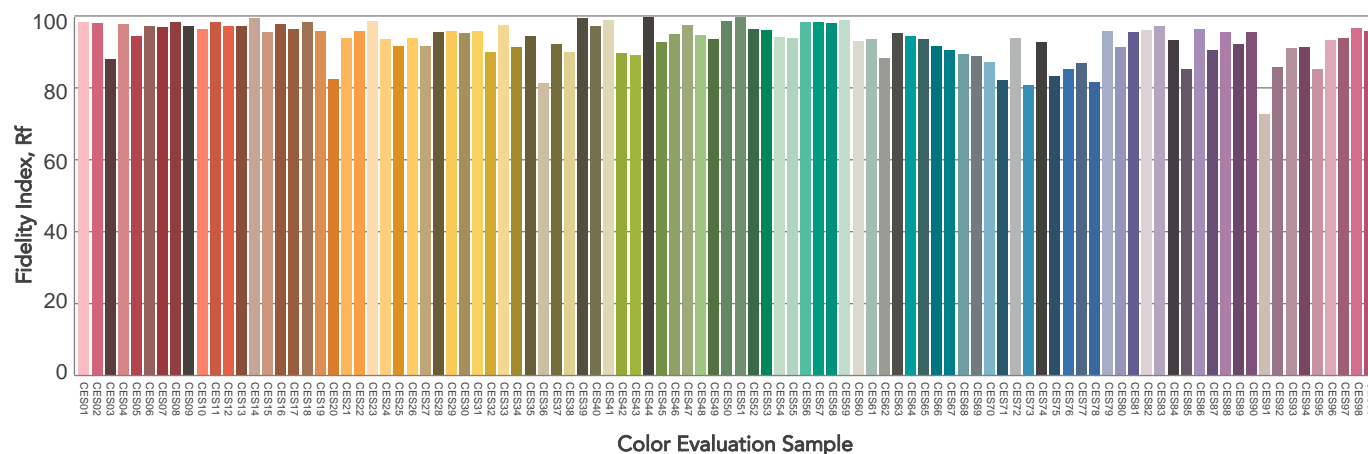
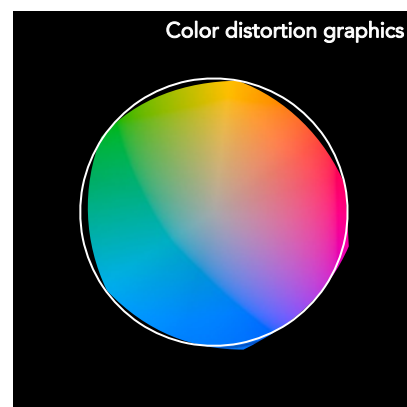
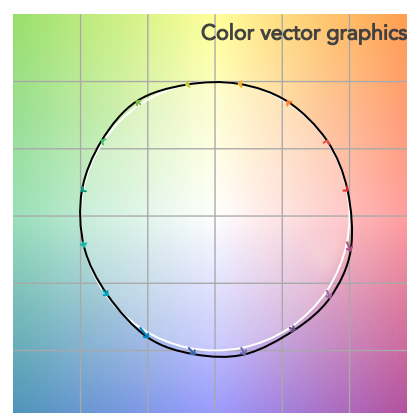
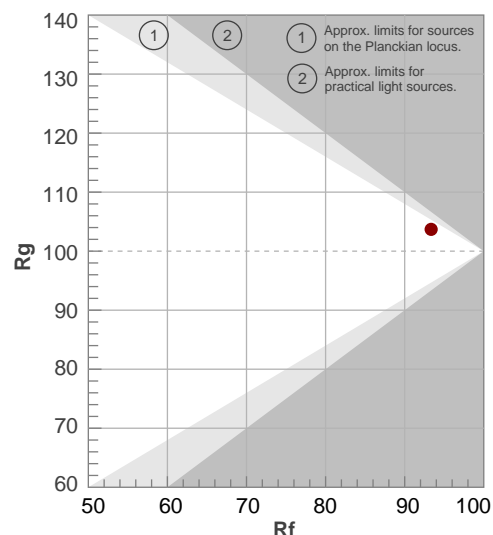


COLOR PARAMETERS

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
4005 K	96,3	92,3	93,3	103,7	94,6	97	0,380	0,377	-0,0056

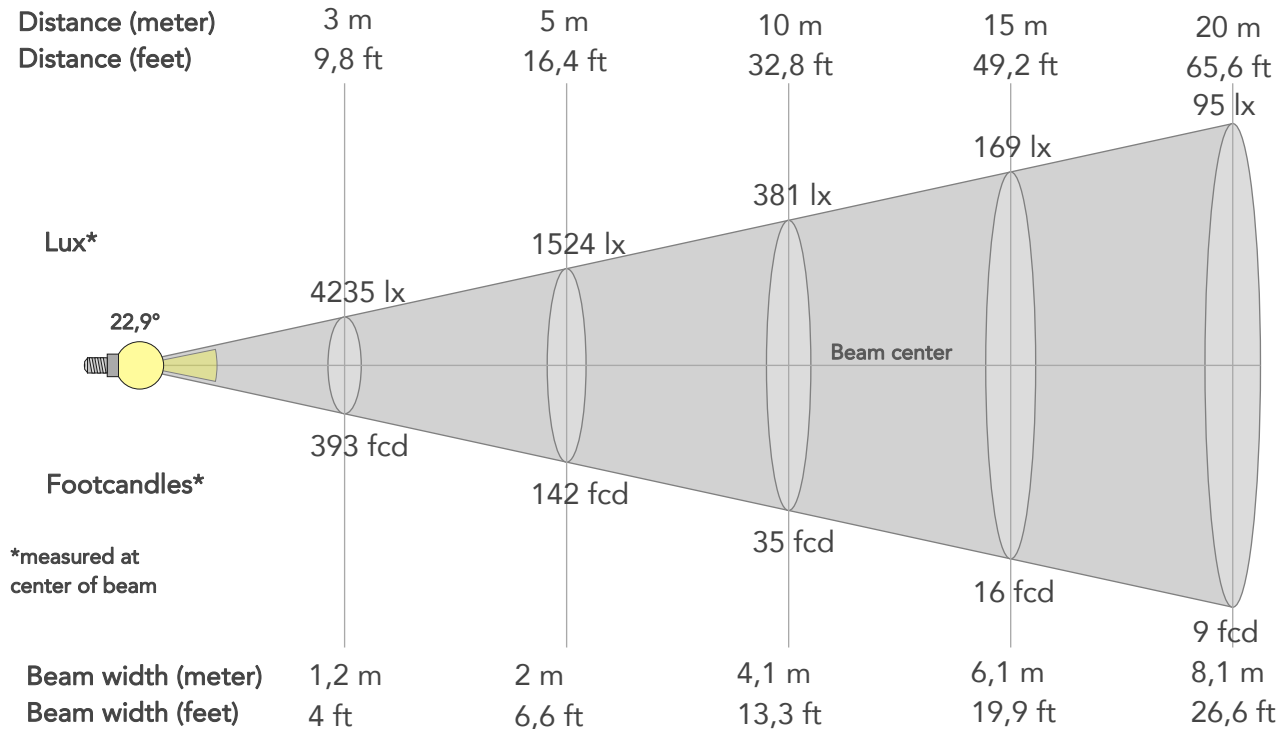
Gammut index

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	96	0%	0%
2	97	0%	0%
3	94	1%	2%
4	94	0%	2%
5	93	0%	2%
6	95	3%	1%
7	97	1%	0%
8	95	1%	1%
9	95	0%	3%
10	92	-1%	4%
11	87	3%	9%
12	90	4%	5%
13	94	5%	2%
14	93	3%	2%
15	91	5%	-3%
16	90	4%	-5%



BEAM DETAILS

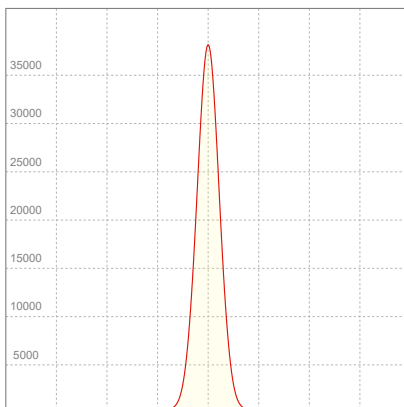
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22,9°	42,7°	56,2°	100,0%	99,0%



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	3811lx	9528lx	4235lx	2382lx	1524lx	678lx	381lx	169lx	95lx	61lx	42lx	24lx	15lx
Footcand.	3541fcd	885fcd	393fcd	221fcd	142fcd	63fcd	35fcd	16fcd	9fcd	6fcd	4fcd	2fcd	1fcd
Beam wid.	0,4m	0,8m	1,2m	1,6m	2m	3m	4,1m	6,1m	8,1m	10,1m	12,2m	16,2m	20,3m
Beam wid.	1,3ft	2,7ft	4ft	5,3ft	6,6ft	10ft	13,3ft	19,9ft	26,6ft	33,2ft	39,9ft	53,2ft	66,5ft

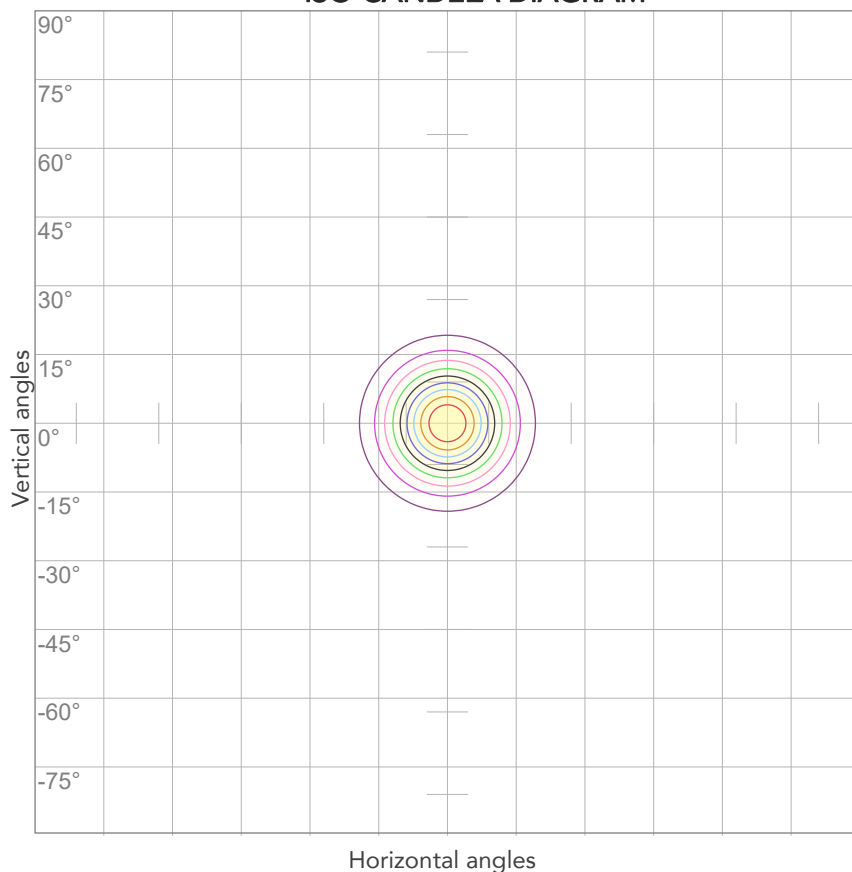
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,511A	106,3W	70lm/W

ISO CANDELA DIAGRAM



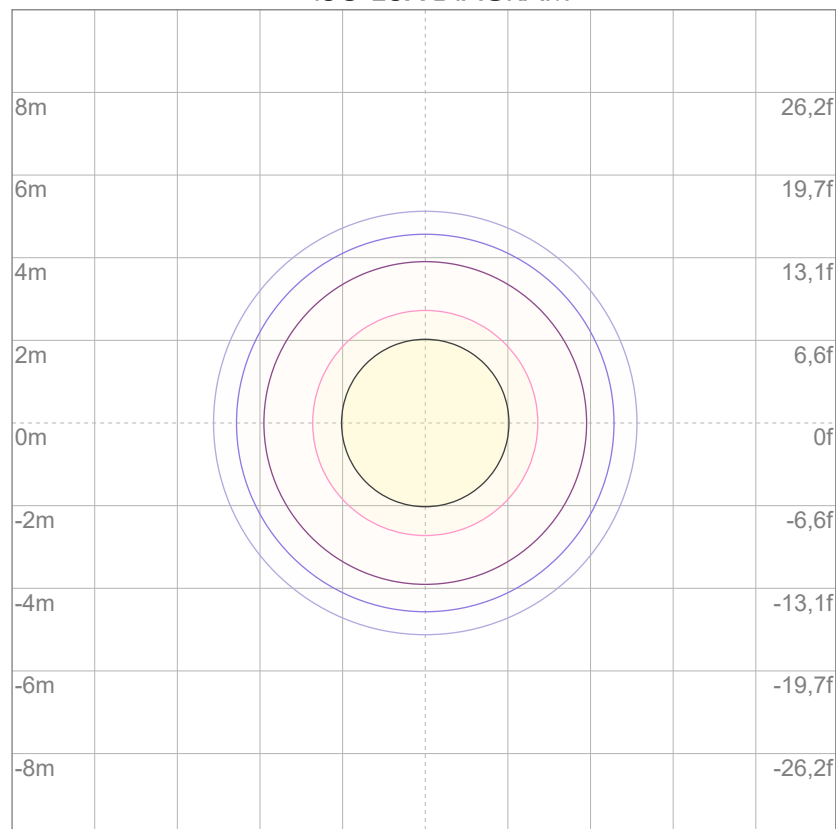
10%	3811 cd
20%	7622 cd
30%	11433 cd
40%	15244 cd
50%	19055 cd
60%	22866 cd
70%	26677 cd
80%	30489 cd

Conditions:

Number of c-planes: 2

Candela at center: 38111 cd

ISO LUX DIAGRAM



3%	11,4 lx
5%	19,1 lx
10%	38,1 lx
30%	114 lx
50%	191 lx

Conditions:

Number of c-planes: 2

Lux at center: 381 lx

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



Total lumen output:

7338 lm

Peak candela output:

15246 cd

Light quality:

CRI: 96,3

Color temperature:

4014 K

PRODUCT NAME:

ECLPENDANTJR NW

MEASURAMENT CONDITIONS:

Beam angle:

40°

Target:

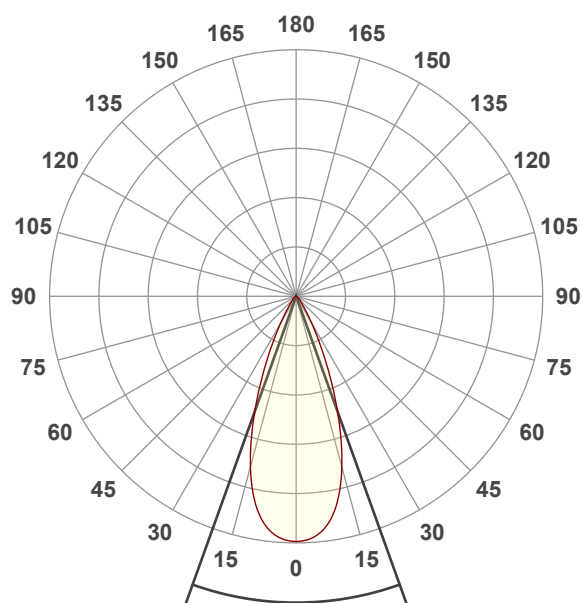
Full On

Operator:

Paolo Carvone

Date and time:

13/10/2022 14:31:40

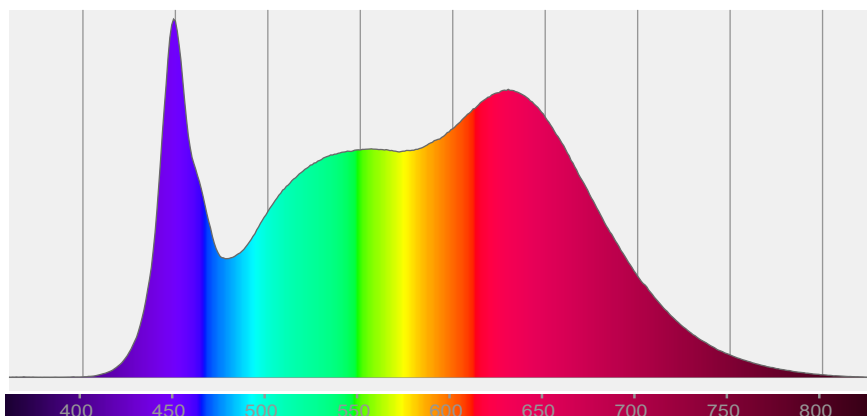


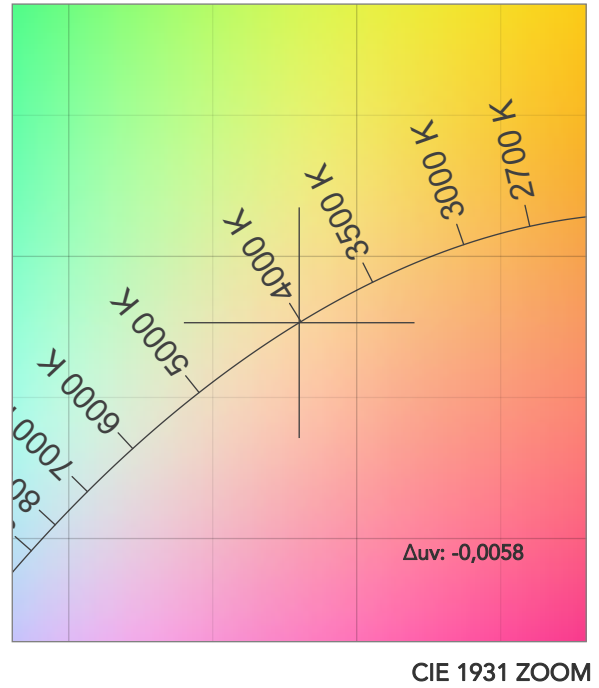
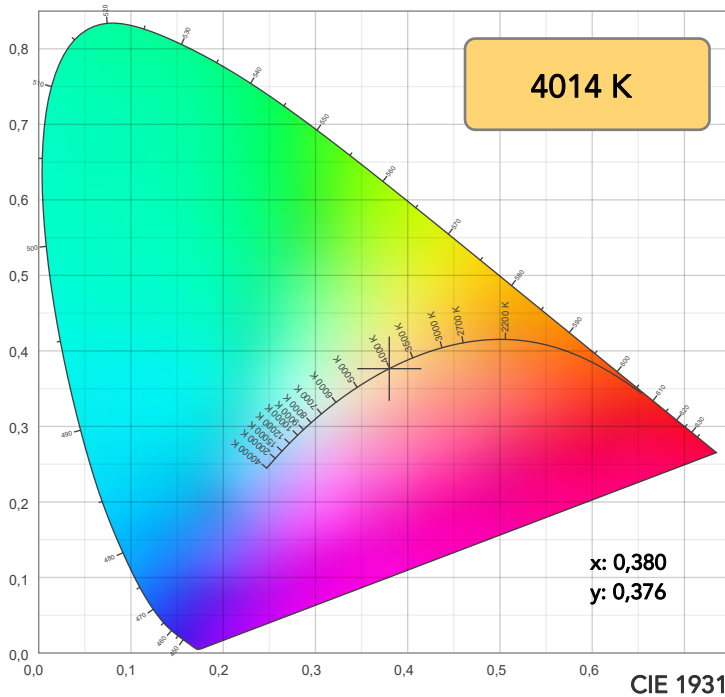
Beam angle 50%: 39,5°

Field angle 10%: 63,1°

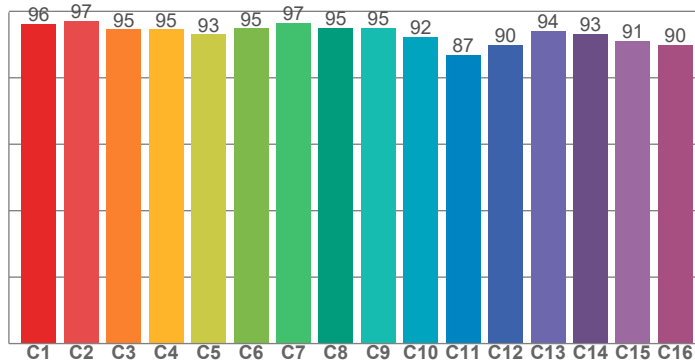
Cut off angle 2.5%: 84,9°

Spectra

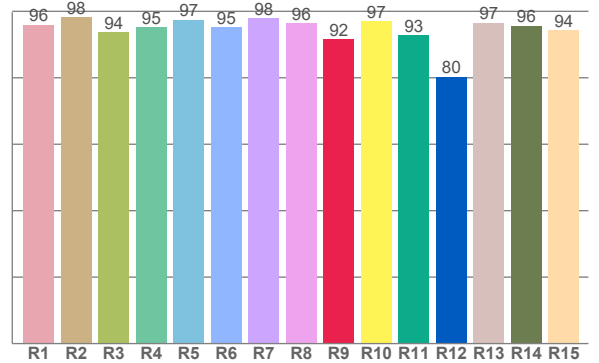




TM30: 93,4



CRI: 96,3 (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
96,0	98,3	93,8	95,3	97,5	95,2	97,9	96,4	91,6	97,0	92,7	80,3	96,6	95,7	94,4

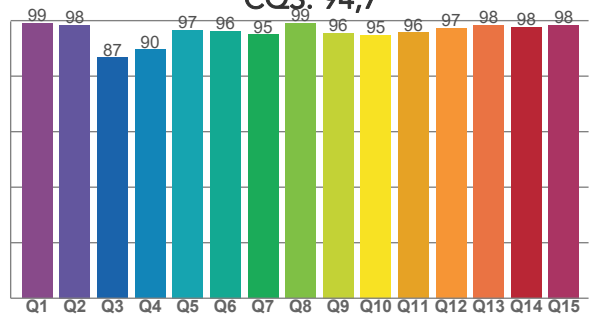
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,2	97,2	94,5	94,5	93,0	94,8	96,6	95,0	95,0	92,4	86,9	89,9	94,1	93,2	91,2	90,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,0	98,4	86,8	89,6	96,7	96,3	95,0	99,0	95,5	94,8	95,6	97,3	98,5	97,6	98,4

CQS: 94,7



COLOR PARAMETERS

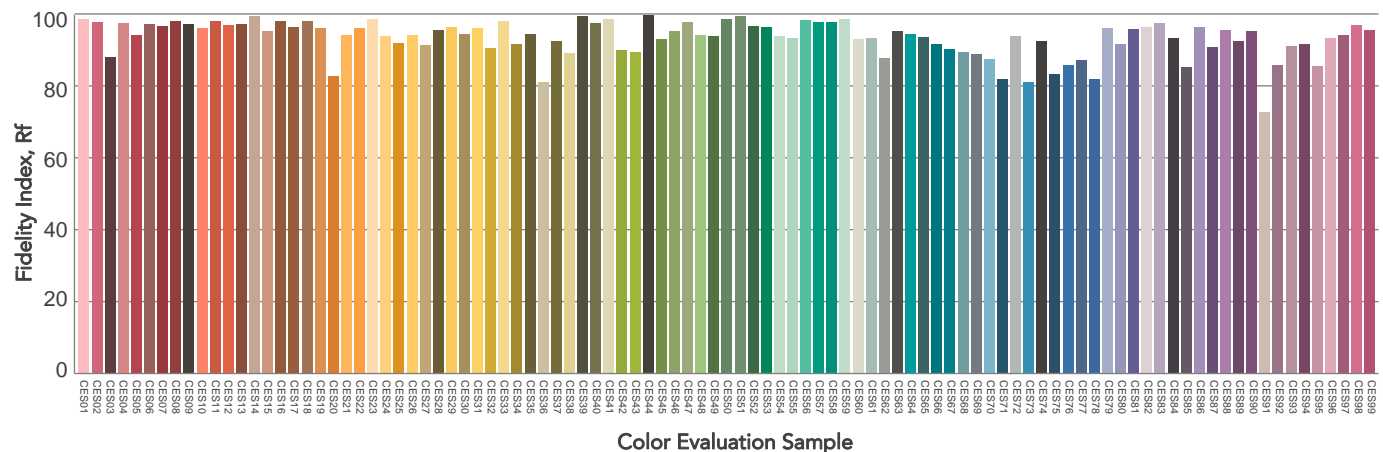
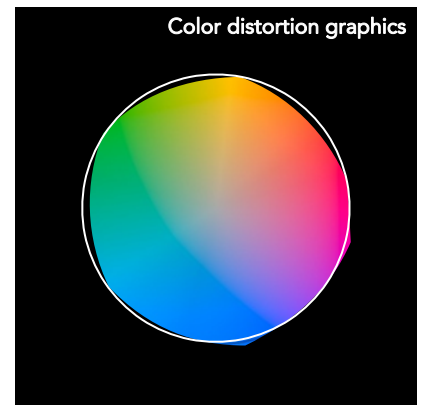
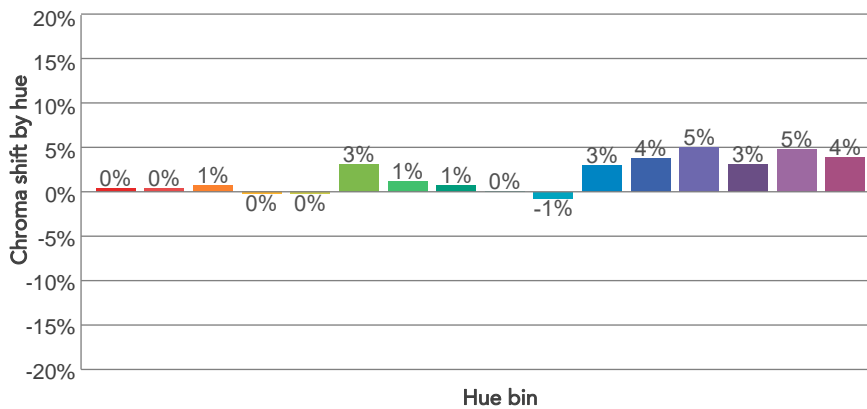
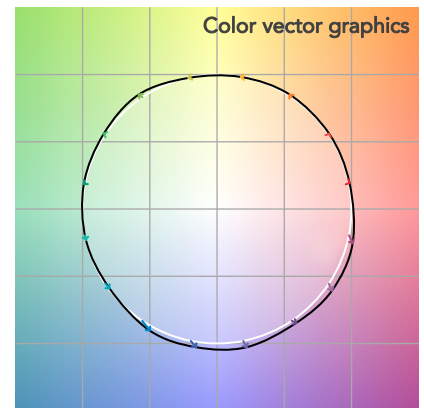
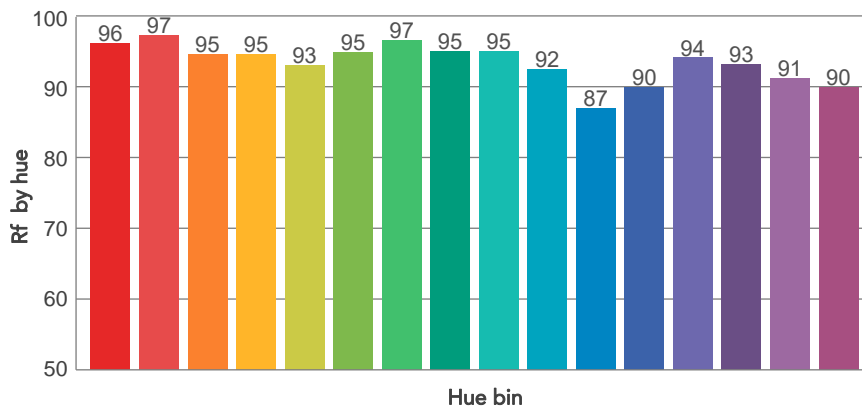
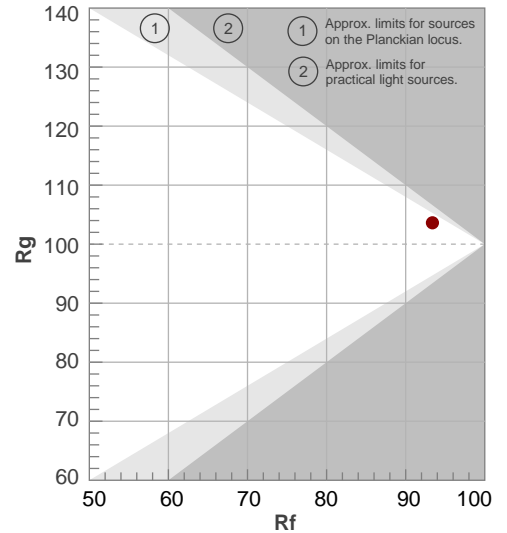
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4014 K	96,3	91,6	93,4	103,6	94,7	97	0,380	0,376	-0,0058

TM30 DETAILS

Rf 93,4
Fidelity index Rf

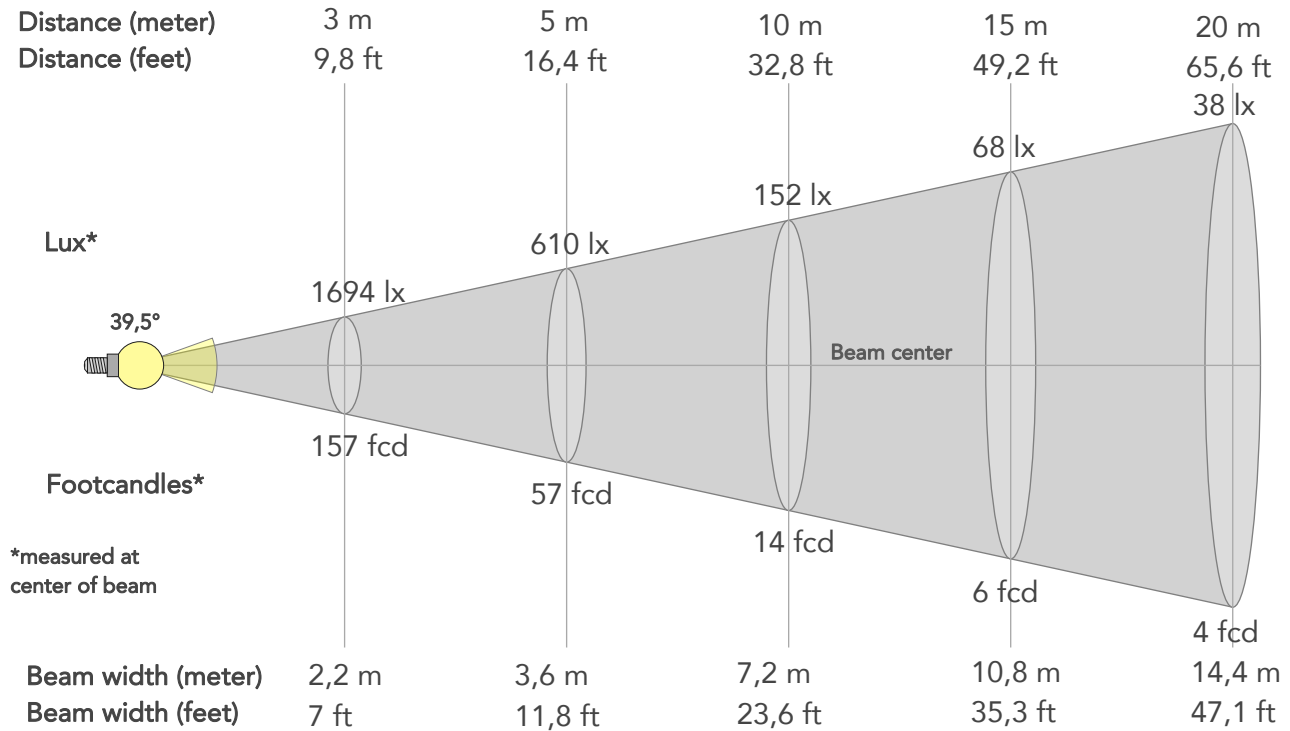
Rg 103,6
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	0%
2	97	0%	0%
3	95	1%	2%
4	95	0%	2%
5	93	0%	2%
6	95	3%	1%
7	97	1%	0%
8	95	1%	1%
9	95	0%	3%
10	92	-1%	5%
11	87	3%	8%
12	90	4%	5%
13	94	5%	2%
14	93	3%	2%
15	91	5%	-3%
16	90	4%	-5%



BEAM DETAILS

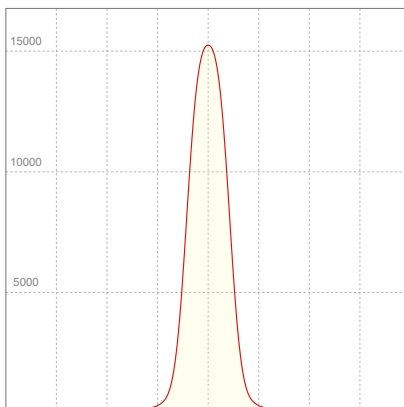
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
39,5°	63,1°	84,9°	99,1%	95,7%



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	15246lx	3811lx	1694lx	953lx	610lx	271lx	152lx	68lx	38lx	24lx	17lx	10lx	6lx
Footcand.	1416fcd	354fcd	157fcd	89fcd	57fcd	25fcd	14fcd	6fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,7m	1,4m	2,2m	2,9m	3,6m	5,4m	7,2m	10,8m	14,4m	18m	21,5m	28,7m	35,9m
Beam wid.	2,4ft	4,7ft	7ft	9,4ft	11,8ft	17,7ft	23,6ft	35,3ft	47,1ft	58,9ft	70,7ft	94,2ft	117,8ft

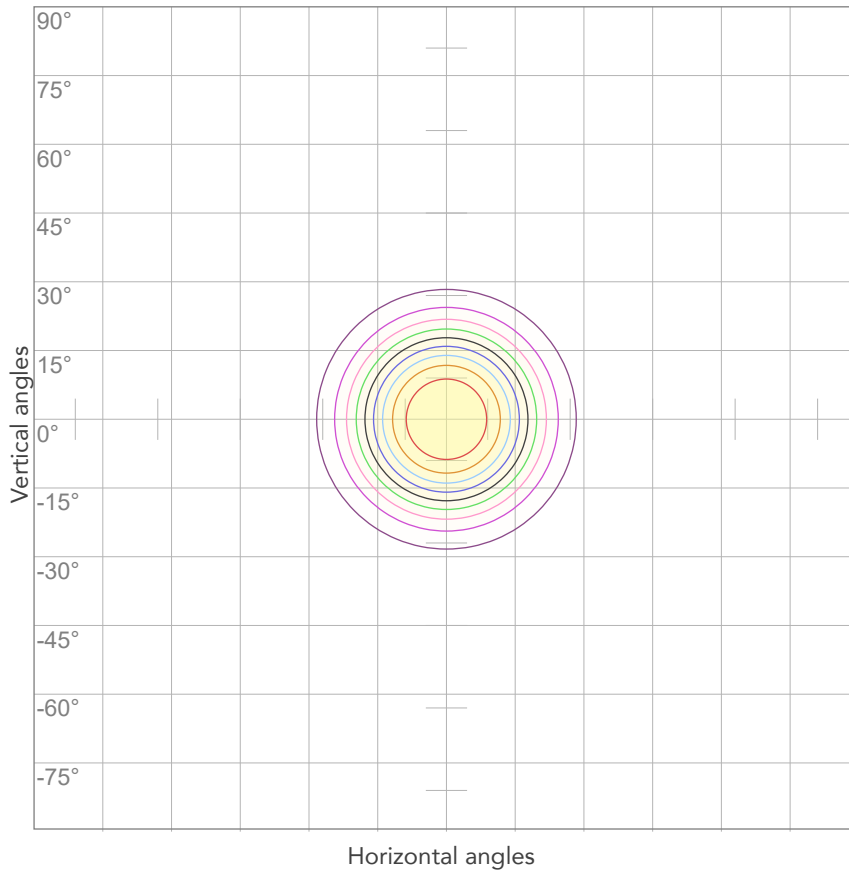
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,507A	105,3W	70lm/W

ISO CANDELA DIAGRAM



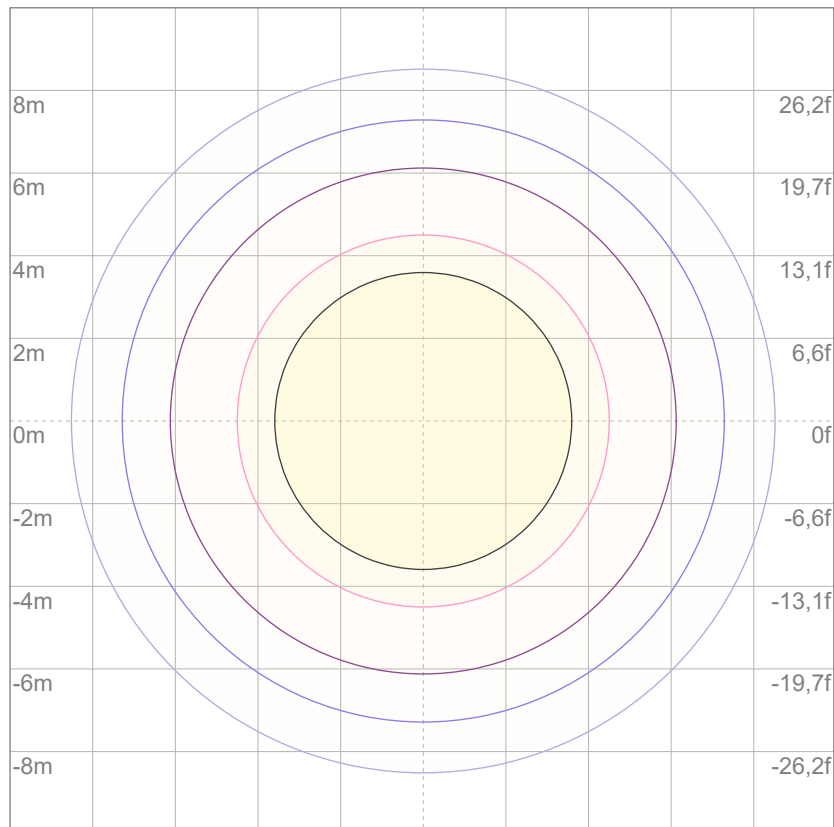
10%	1525 cd
20%	3049 cd
30%	4574 cd
40%	6098 cd
50%	7623 cd
60%	9147 cd
70%	10672 cd
80%	12197 cd

Conditions:

Number of c-planes: 2

Candela at center: 15246 cd

ISO LUX DIAGRAM



3%	4,57 lx
5%	7,62 lx
10%	15,2 lx
30%	45,7 lx
50%	76,2 lx

Conditions:

Number of c-planes: 2

Lux at center: 152 lx

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



Total lumen output:

7075 lm

Peak candela output:

8638 cd

Light quality:

CRI: 96,3

Color temperature:

4017 K

PRODUCT NAME:

ECLPENDANTJR NW

MEASURAMENT CONDITIONS:

Beam angle:

60°

Target:

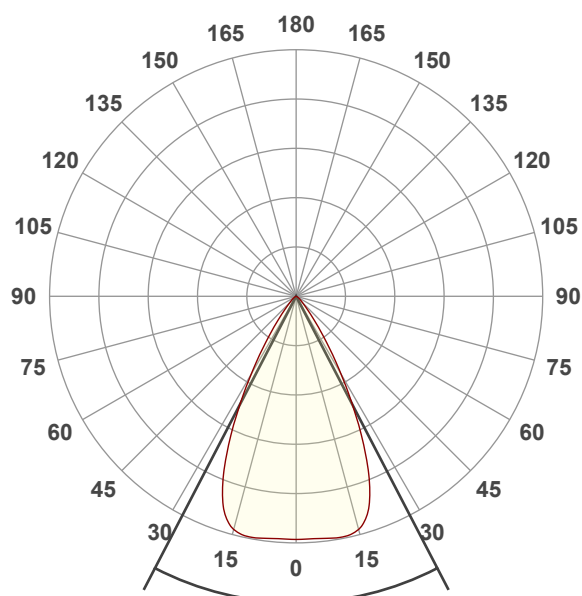
Full On

Operator:

Paolo Carvone

Date and time:

13/10/2022 14:33:57

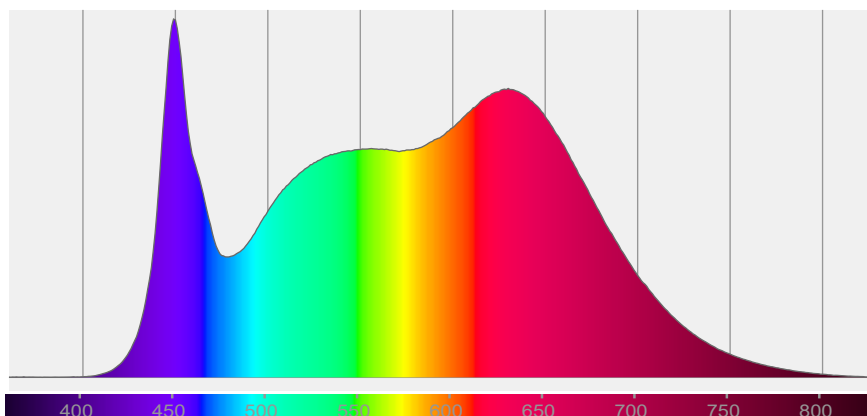


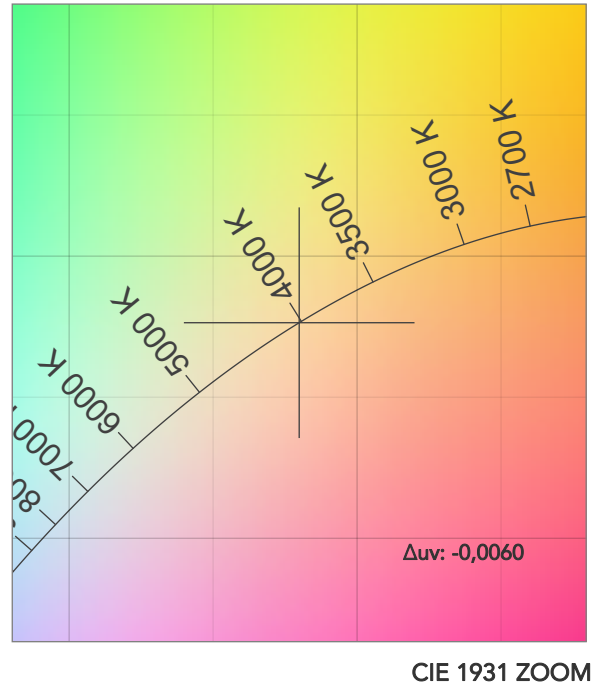
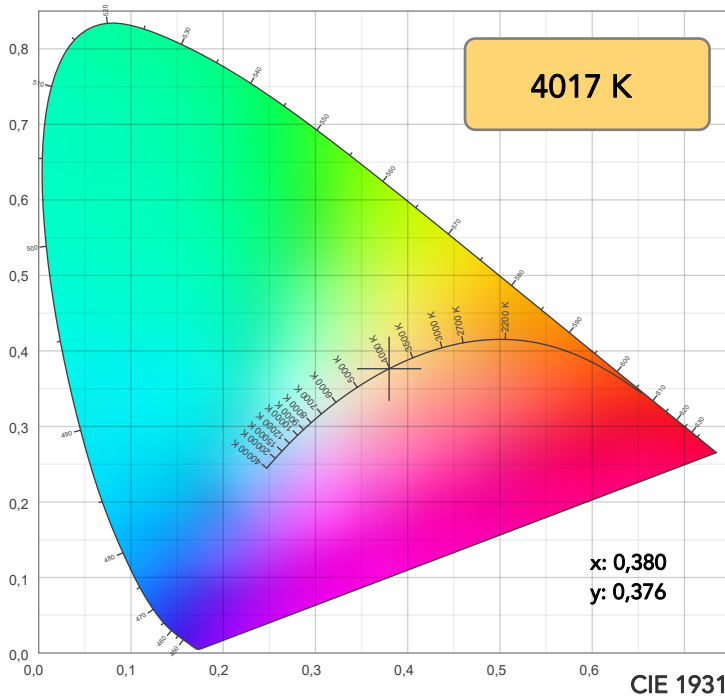
Beam angle 50%: 54,9°

Field angle 10%: 77,1°

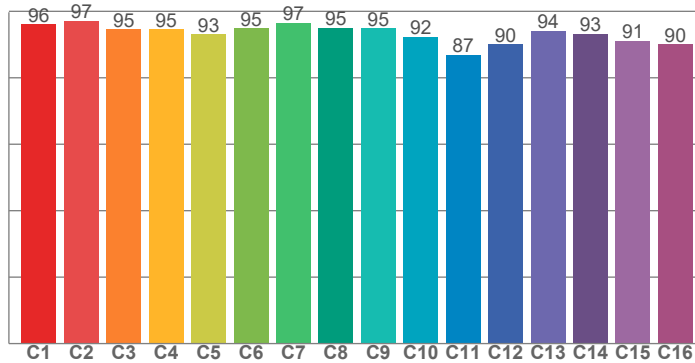
Cut off angle 2.5%: 97,8°

Spectra

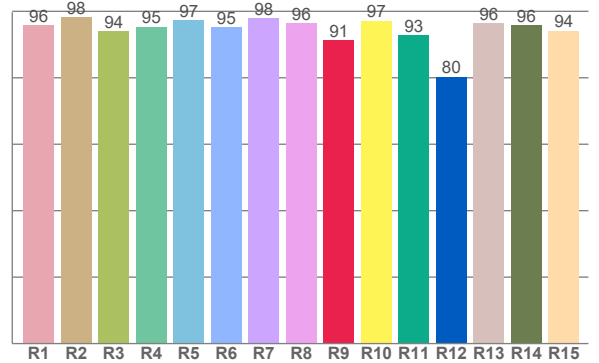




TM30: 93,4



CRI: 96,3 (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
95,8	98,2	94,0	95,3	97,3	95,2	98,0	96,3	91,3	97,2	92,7	80,3	96,4	95,7	94,2

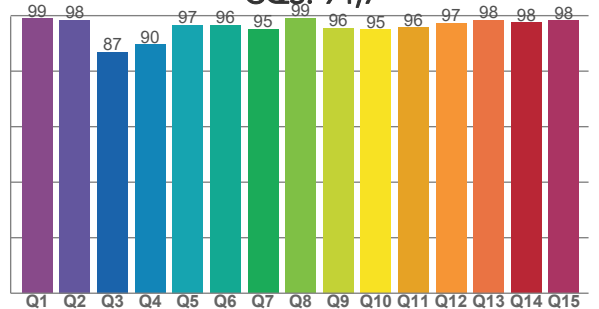
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,1	97,1	94,6	94,6	93,1	94,9	96,5	95,0	94,8	92,3	87,0	90,1	94,1	93,2	91,2	90,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,9	98,5	86,8	89,6	96,7	96,5	95,1	99,1	95,6	94,9	95,7	97,3	98,4	97,5	98,2

CQS: 94,7



COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4017 K	96,3	91,3	93,4	103,6	94,7	97	0,380	0,376	-0,0060

TM30 DETAILS

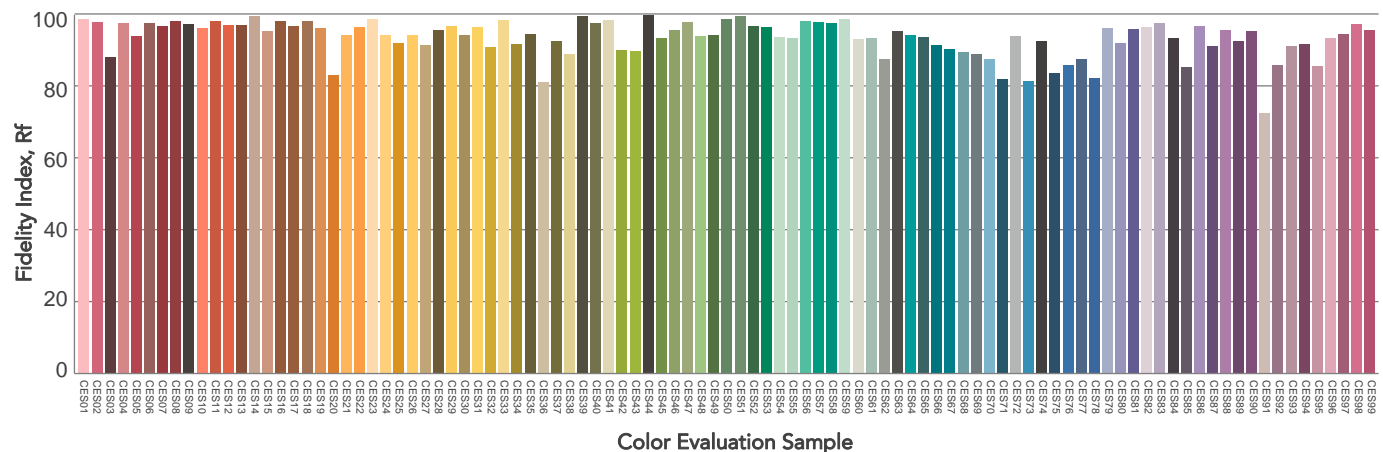
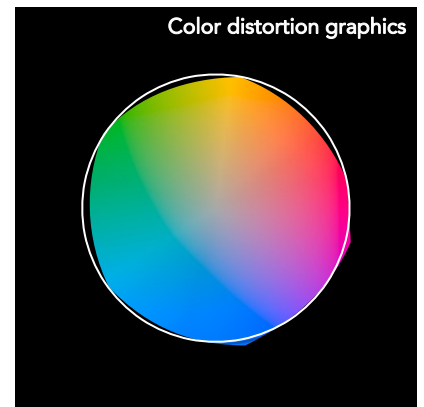
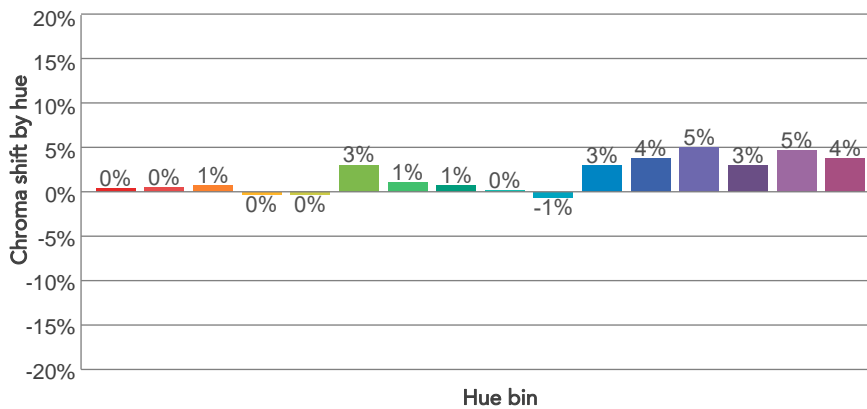
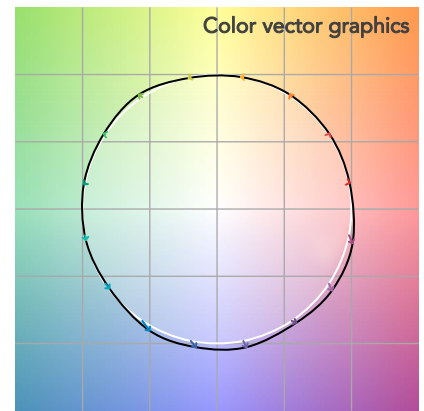
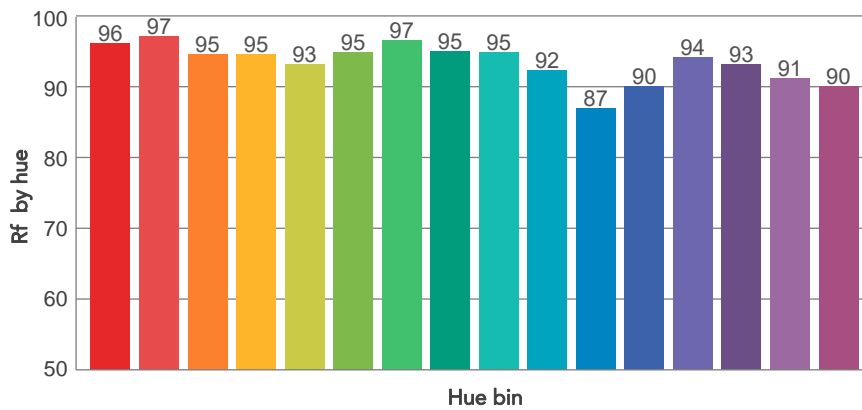
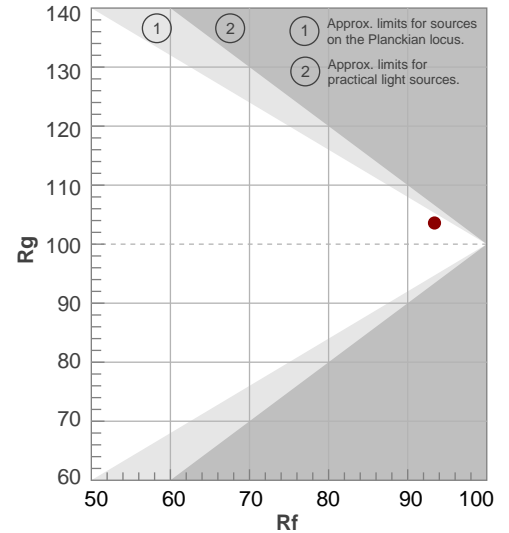
Rf 93,4

Fidelity index Rf

Rg 103,6

Gammut index

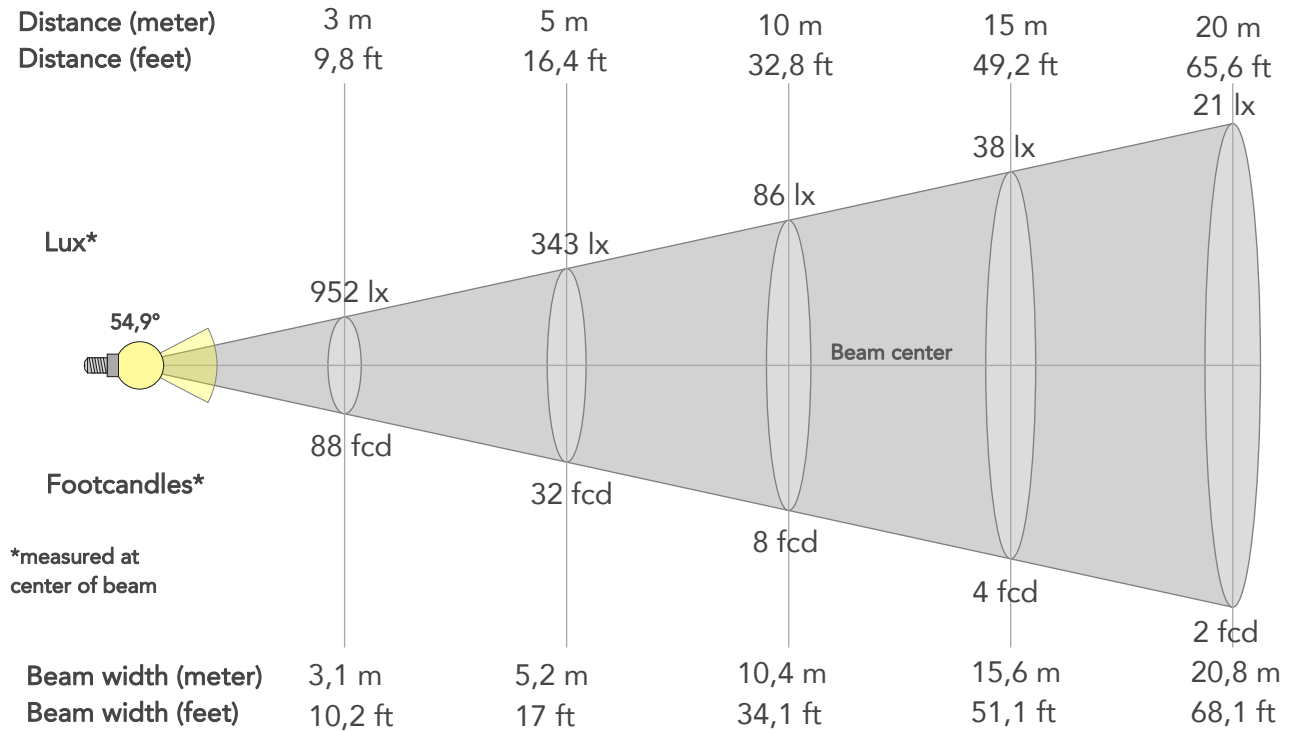
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	0%
2	97	0%	0%
3	95	1%	2%
4	95	0%	2%
5	93	0%	2%
6	95	3%	1%
7	97	1%	0%
8	95	1%	1%
9	95	0%	4%
10	92	-1%	5%
11	87	3%	8%
12	90	4%	5%
13	94	5%	1%
14	93	3%	2%
15	91	5%	-3%
16	90	4%	-5%



BEAM DETAILS



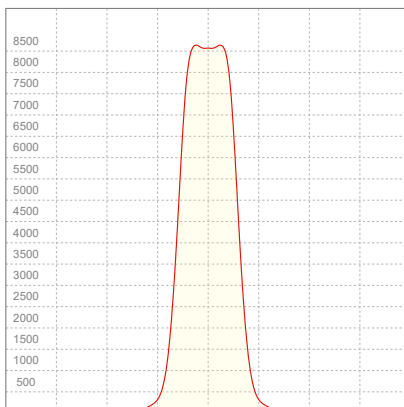
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54,9°	77,1°	97,8°	99,4%	96,4%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	8569lx	2142lx	952lx	536lx	343lx	152lx	86lx	38lx	21lx	14lx	10lx	5lx	3lx
Footcand.	796fcd	199fcd	88fcd	50fcd	32fcd	14fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,8m	10,4m	15,6m	20,8m	26m	31,2m	41,5m	51,9m
Beam wid.	3,4ft	6,9ft	10,2ft	13,6ft	17ft	25,5ft	34,1ft	51,1ft	68,1ft	85,2ft	102,2ft	136,3ft	170,3ft

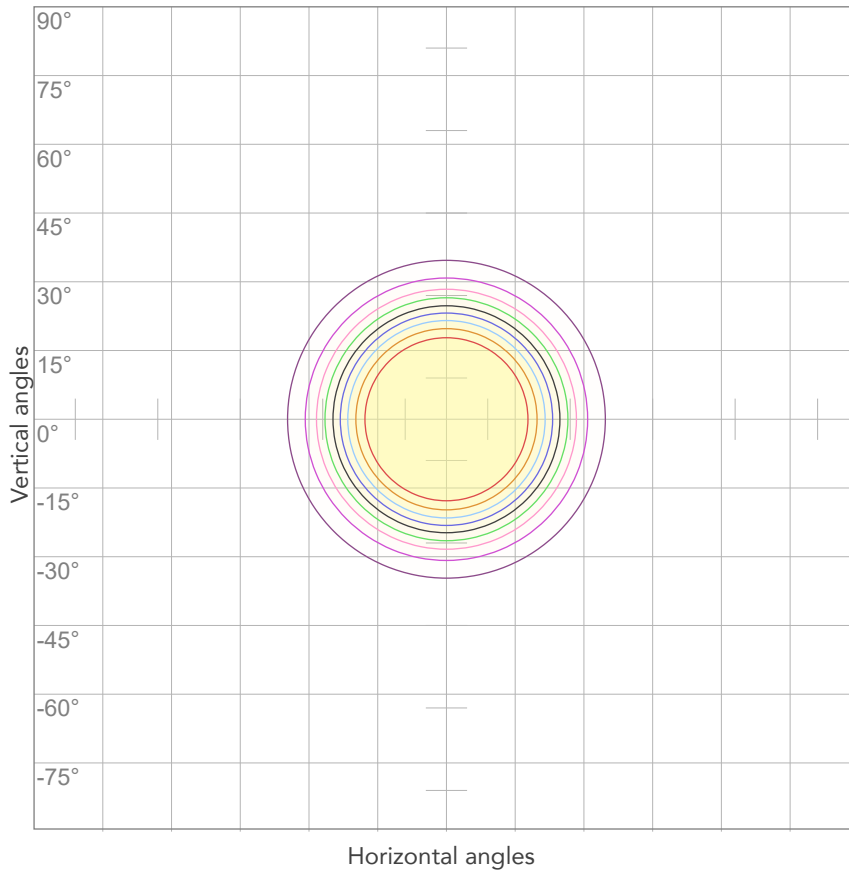
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,505A	104,7W	68lm/W

ISO CANDELA DIAGRAM



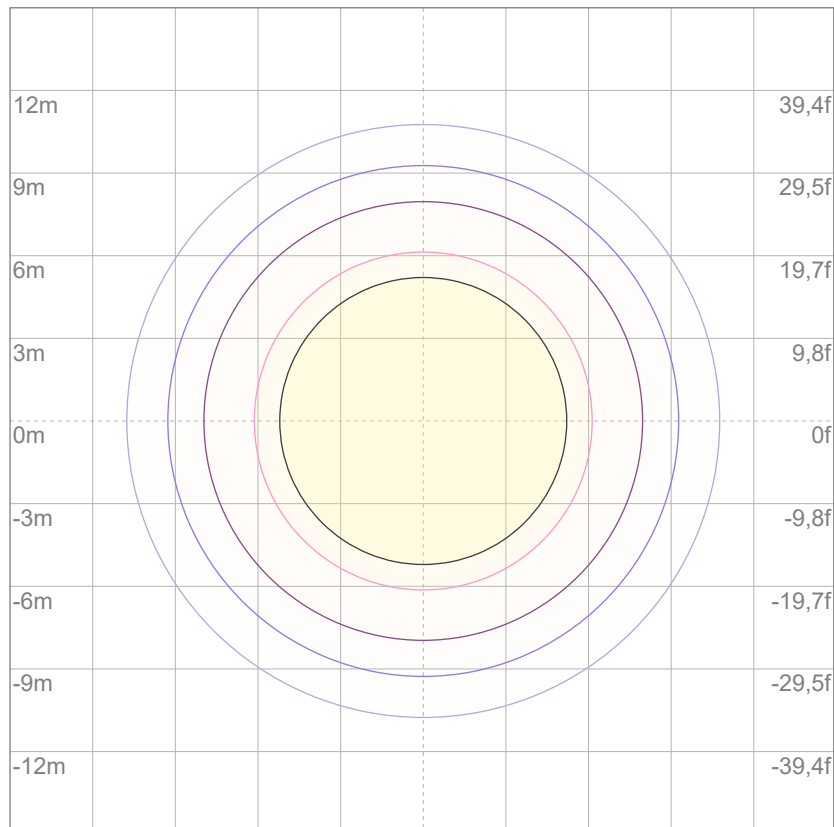
10%	857 cd
20%	1714 cd
30%	2571 cd
40%	3428 cd
50%	4284 cd
60%	5141 cd
70%	5998 cd
80%	6855 cd

Conditions:

Number of c-planes: 2

Candela at center: 8569 cd

ISO LUX DIAGRAM



3%	2,57 lx
5%	4,28 lx
10%	8,57 lx
30%	25,7 lx
50%	42,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 85,7 lx

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