



Photometric Test Report



ECLPENDANTJR DY

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:

7706 lm

Peak candela output:

39994 cd

Light quality:

CRI: 94,8

Color temperature:

5617 K

PRODUCT NAME:
ECLPENDANTJR DY

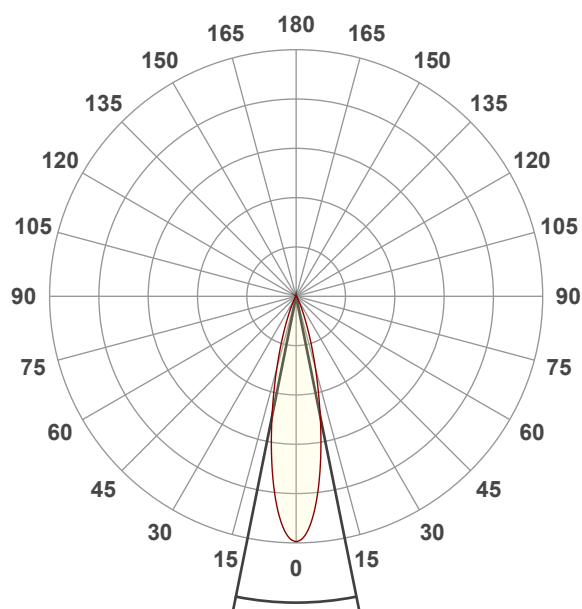
MEASURAMENT CONDITIONS:

Beam angle:
20°

Target:
Full On

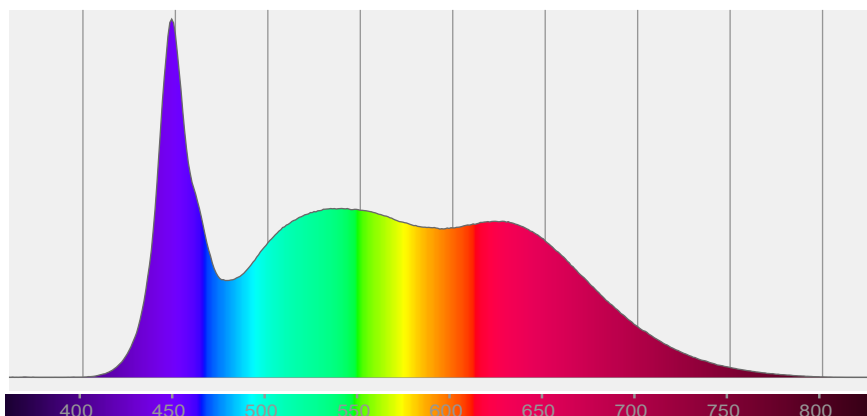
Operator:
Paolo Carvone

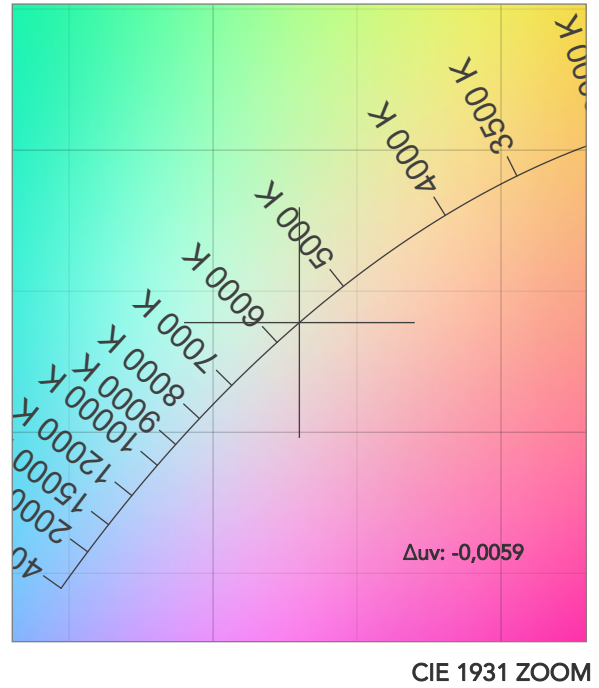
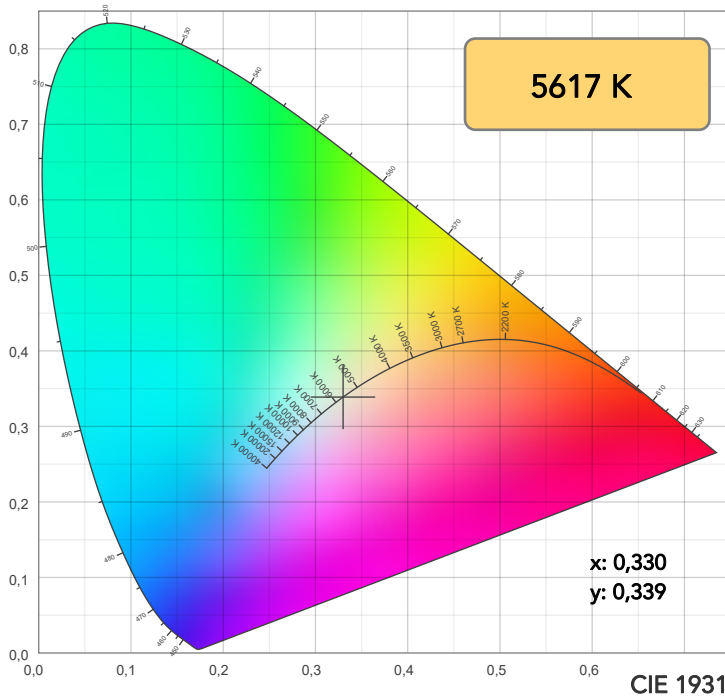
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13/10/2022 13:45:49



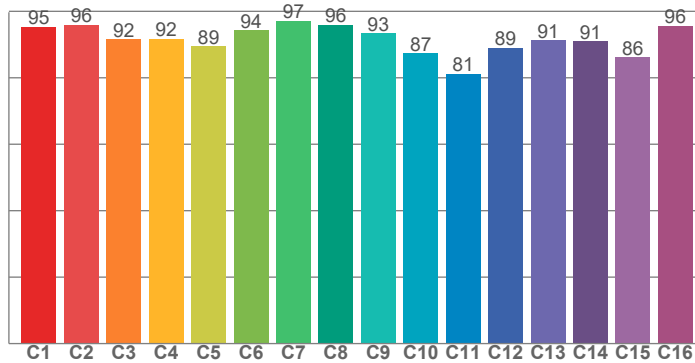
Beam angle 50%: 22,7°
Field angle 10%: 42,5°
Cut off angle 2.5%: 56°

Spectra

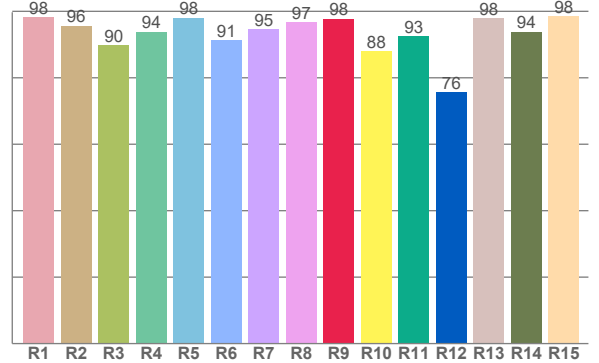




TM30: 91,4



CRI: 94,8 (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
98,2	95,6	89,7	93,8	98,0	91,3	94,6	96,8	97,8	88,0	92,6	75,6	98,0	93,8	98,5

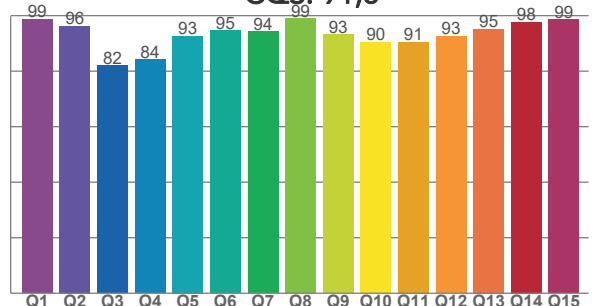
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,4	95,9	91,6	91,8	89,4	94,2	97,1	95,9	93,3	87,3	81,2	89,1	91,3	90,9	86,2	95,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,7	96,3	82,0	84,2	92,6	94,7	94,3	98,9	93,1	90,4	90,5	92,6	95,1	97,7	98,5

CQS: 91,8



COLOR PARAMETERS

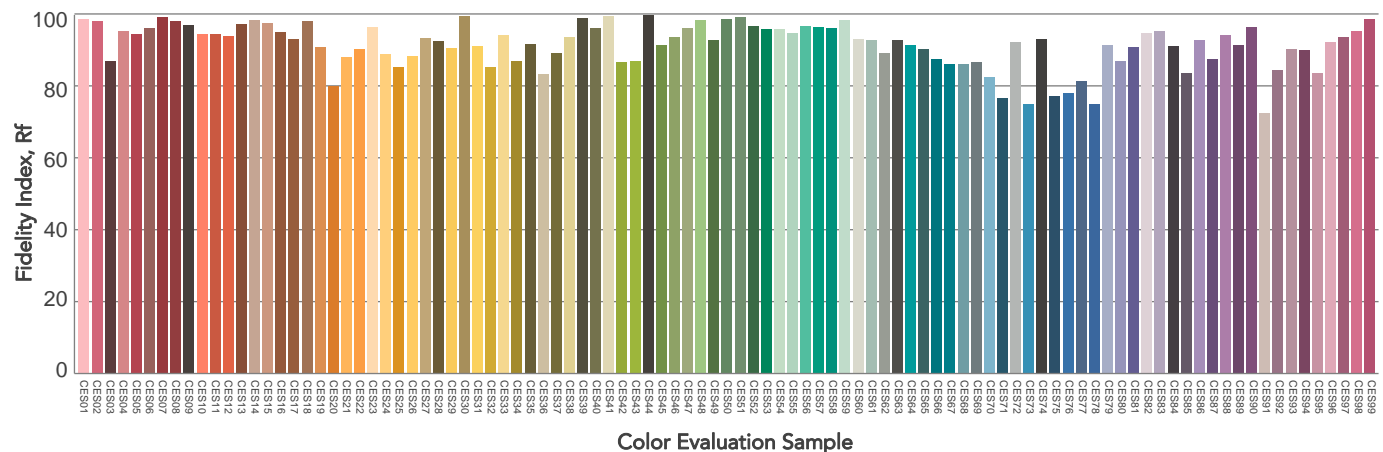
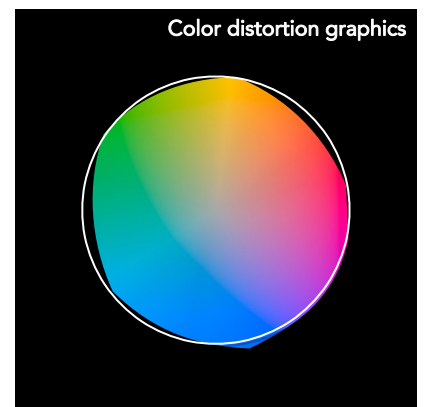
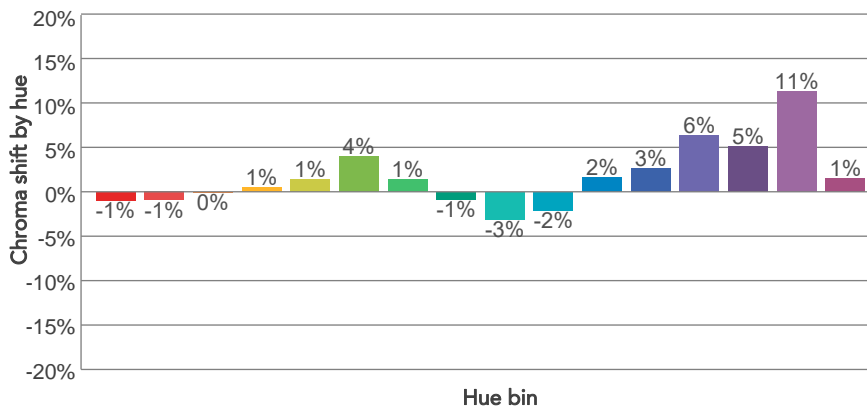
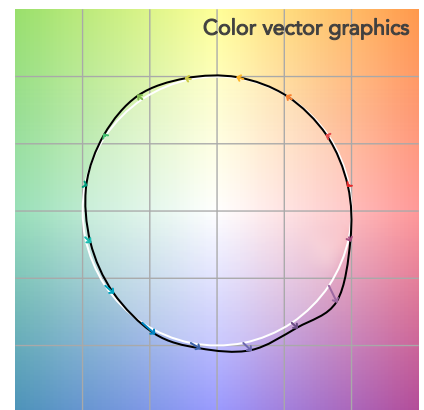
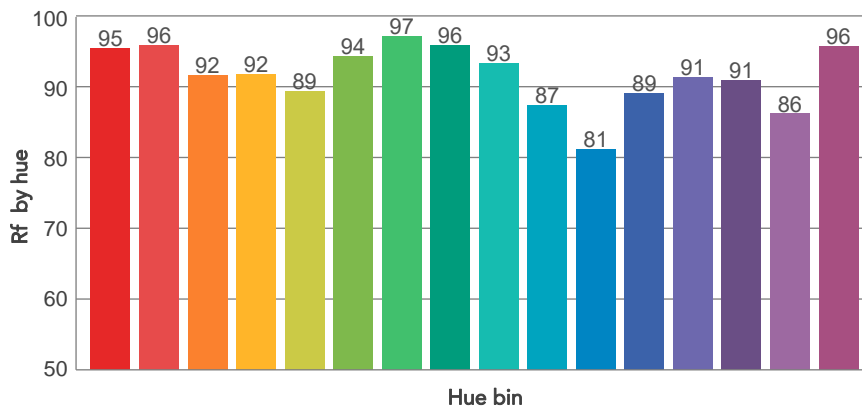
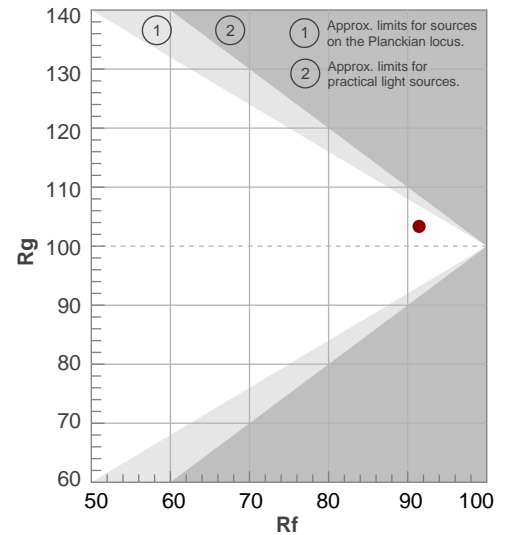
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5617 K	94,8	97,8	91,4	103,4	91,8	97	0,330	0,339	-0,0059

TM30 DETAILS

Rf 91,4
Fidelity index Rf

Rg 103,4
Gammut index

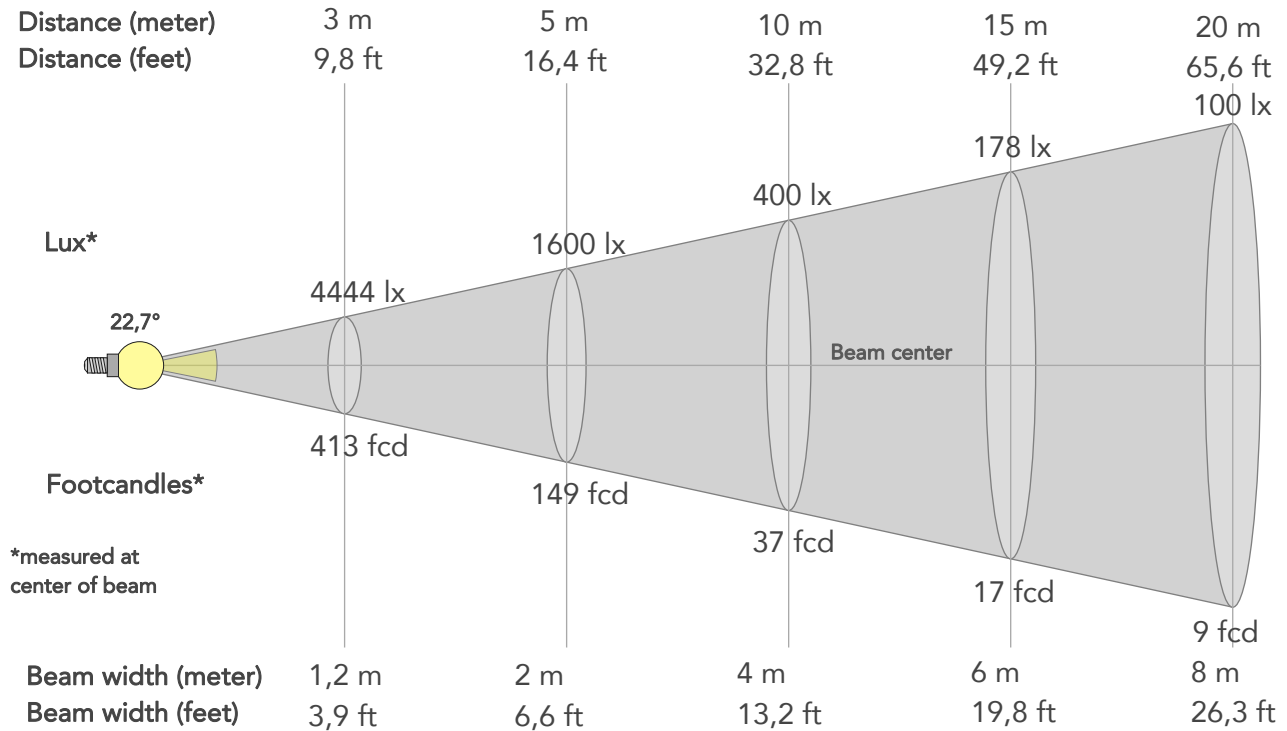
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-1%
2	96	-1%	2%
3	92	0%	4%
4	92	1%	4%
5	89	1%	4%
6	94	4%	1%
7	97	1%	-1%
8	96	-1%	0%
9	93	-3%	4%
10	87	-2%	8%
11	81	2%	12%
12	89	3%	7%
13	91	6%	5%
14	91	5%	1%
15	86	11%	-7%
16	96	1%	-2%



BEAM DETAILS



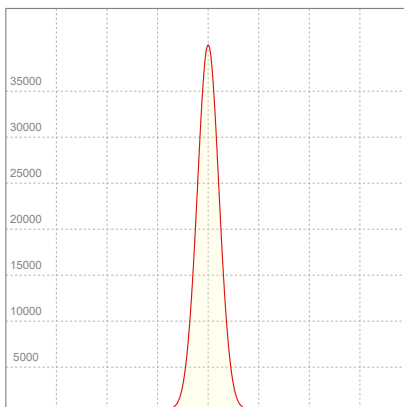
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22,7°	42,5°	56°	100,0%	98,9%



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	39994lx	9999lx	4444lx	2500lx	1600lx	711lx	400lx	178lx	100lx	64lx	44lx	25lx	16lx
Footcand.	3716fcd	929fcd	413fcd	232fcd	149fcd	66fcd	37fcd	17fcd	9fcd	6fcd	4fcd	2fcd	1fcd
Beam wid.	0,4m	0,8m	1,2m	1,6m	2m	3m	4m	6m	8m	10m	12m	16,1m	20,1m
Beam wid.	1,3ft	2,7ft	3,9ft	5,3ft	6,6ft	9,9ft	13,2ft	19,8ft	26,3ft	32,9ft	39,5ft	52,7ft	65,8ft

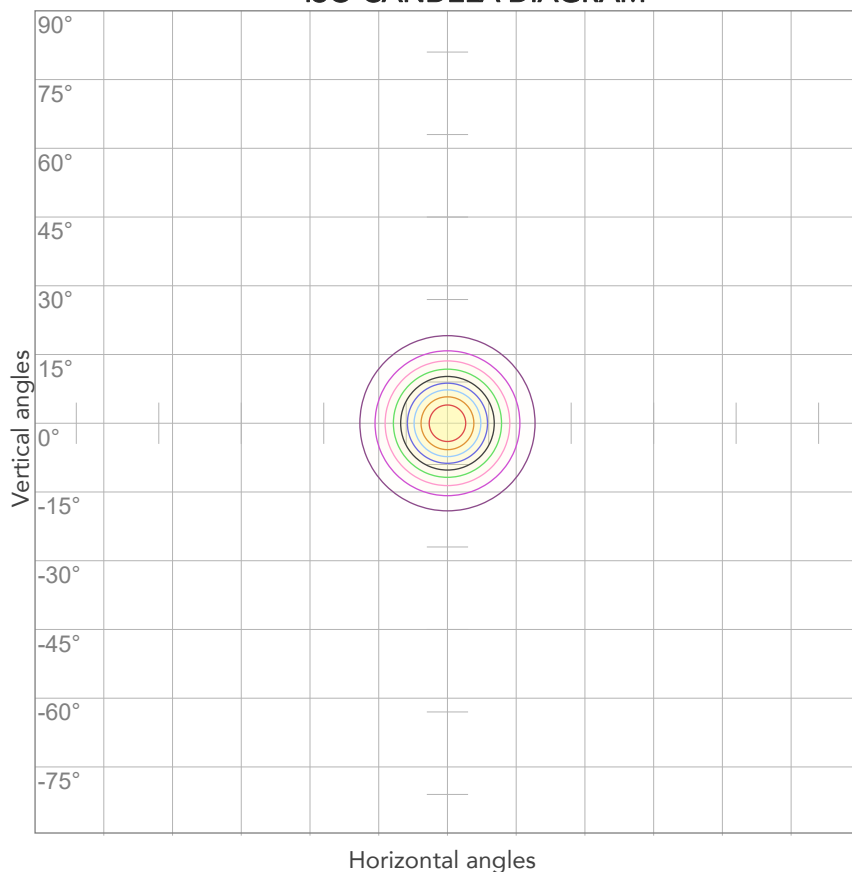
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,496A	103,4W	75lm/W

ISO CANDELA DIAGRAM



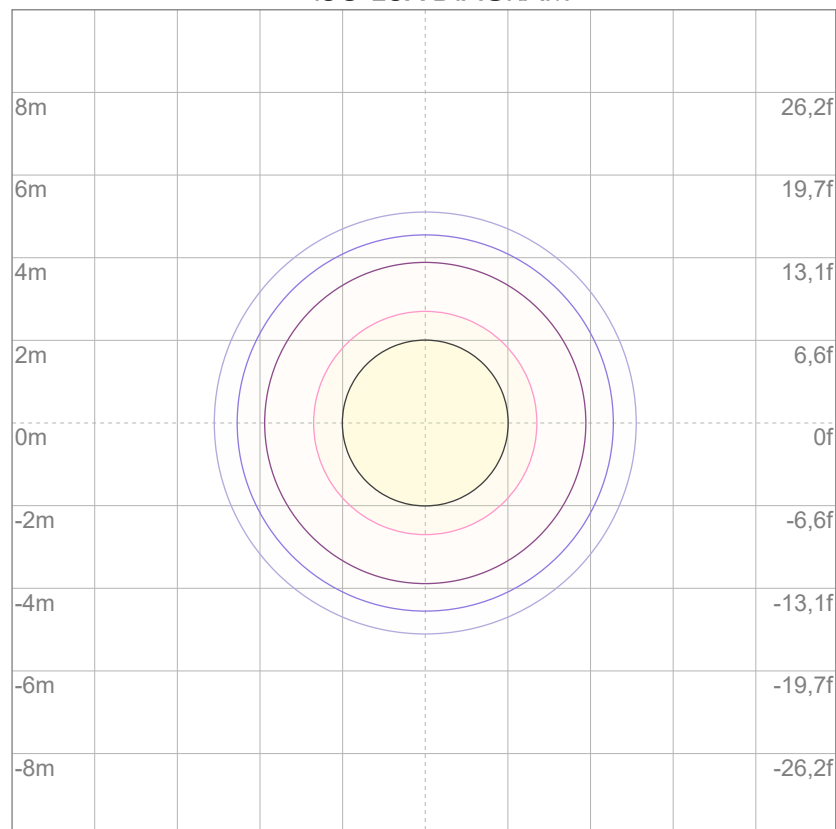
10%	3999 cd
20%	7999 cd
30%	11998 cd
40%	15998 cd
50%	19997 cd
60%	23996 cd
70%	27996 cd
80%	31995 cd

Conditions:

Number of c-planes: 2

Candela at center: 39994 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	12,0 lx
5%	20,0 lx
10%	40,0 lx
30%	120 lx
50%	200 lx

Conditions:

Number of c-planes: 2

Lux at center: 400 lx

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



Total lumen output:

7762 lm

Peak candela output:

16184 cd

Light quality:

CRI: 94,9

Color temperature:

5637 K

PRODUCT NAME:
ECLPENDANTJR DY

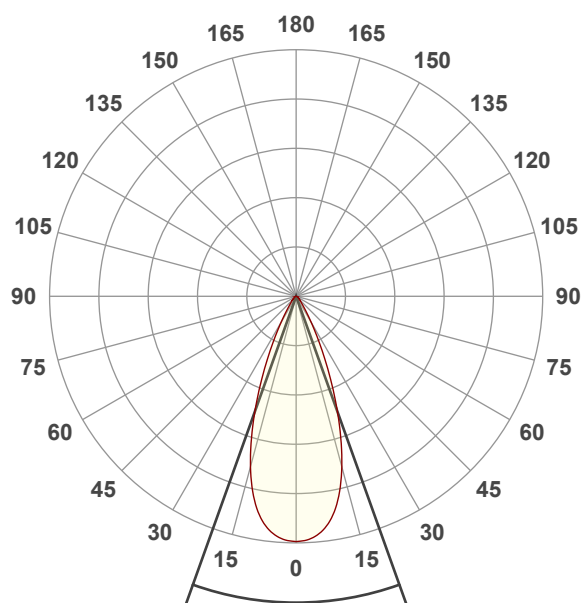
MEASURAMENT CONDITIONS:

Beam angle:
40°

Target:
Full On

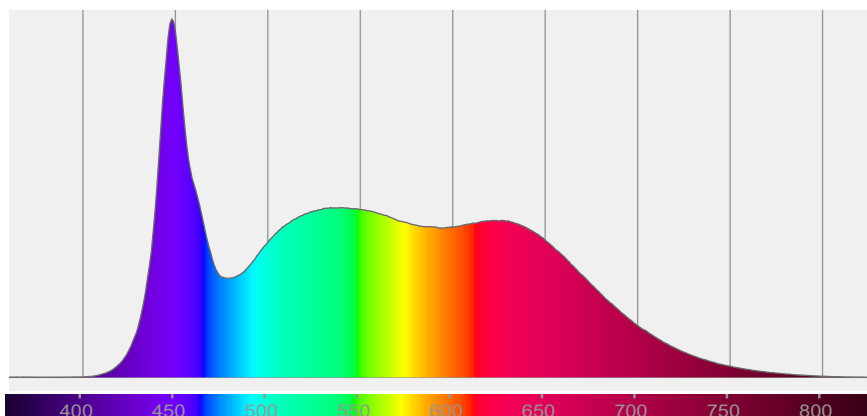
Operator:
Paolo Carvone

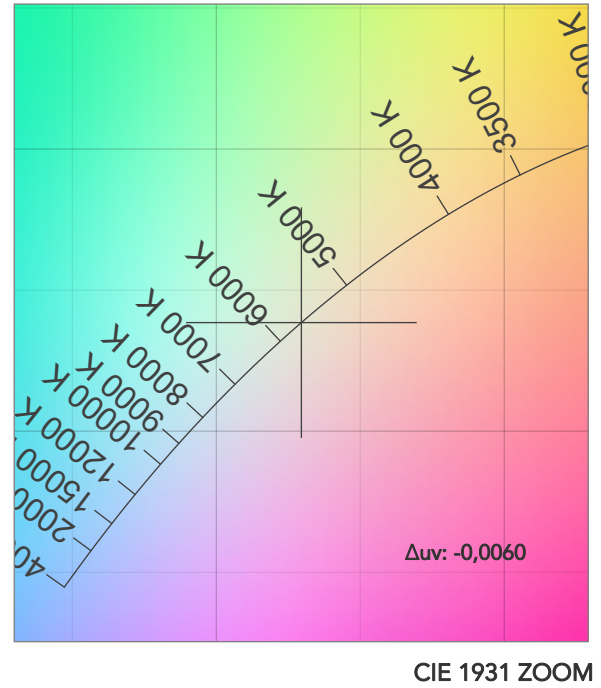
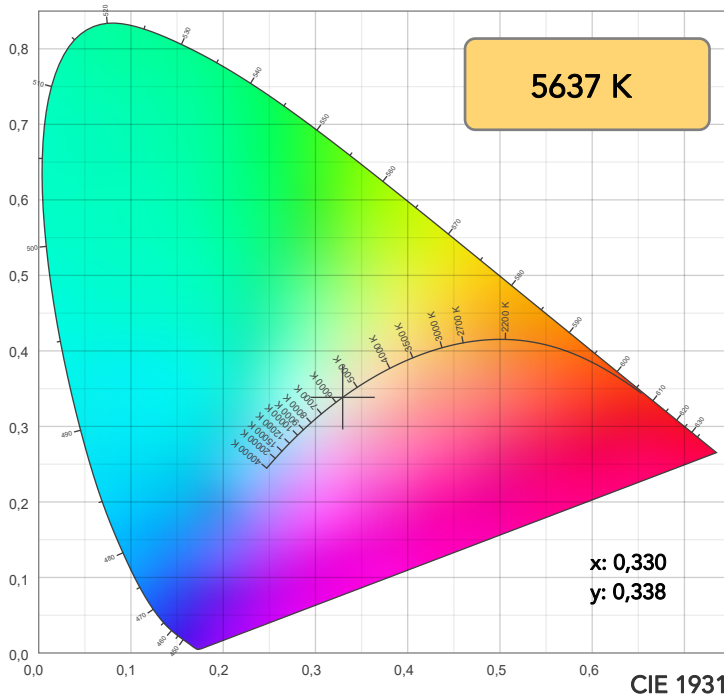
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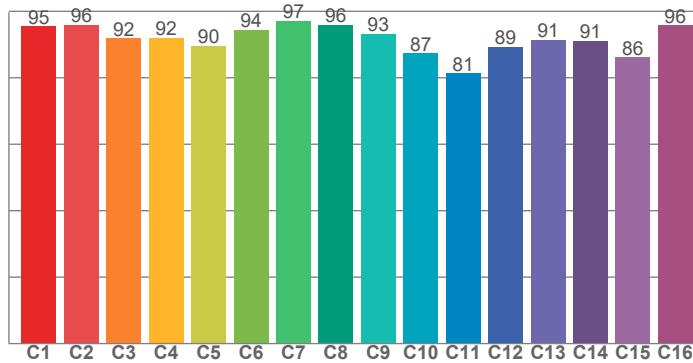
Beam angle 50%: 39,4°
Field angle 10%: 62,8°
Cut off angle 2.5%: 85°

Spectra

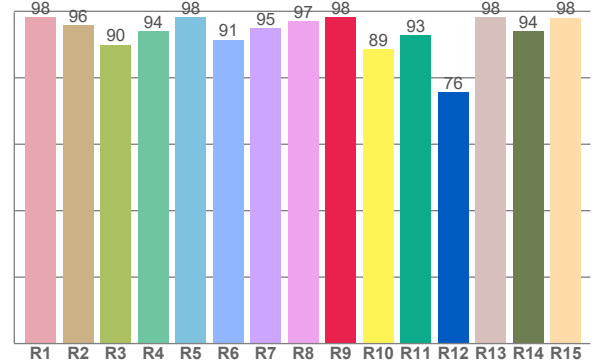




TM30: 91,6



CRI: 94,9 (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
98,1	95,9	89,9	94,1	98,2	91,5	94,9	96,9	98,2	88,6	92,7	75,7	98,2	94,0	98,1

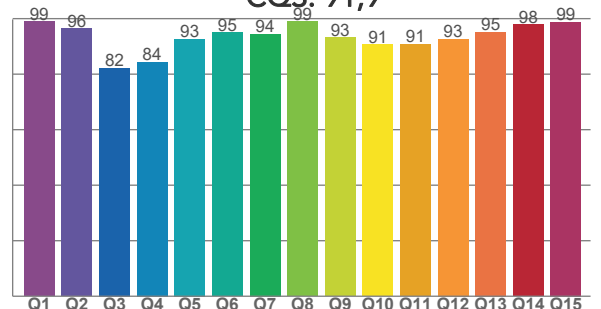
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,4	95,9	91,8	91,9	89,6	94,5	97,1	95,9	93,2	87,3	81,4	89,3	91,5	91,1	86,2	95,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,9	96,4	82,2	84,3	92,7	95,0	94,5	99,0	93,2	90,6	90,7	92,7	95,3	97,9	98,8

CQS: 91,9



COLOR PARAMETERS

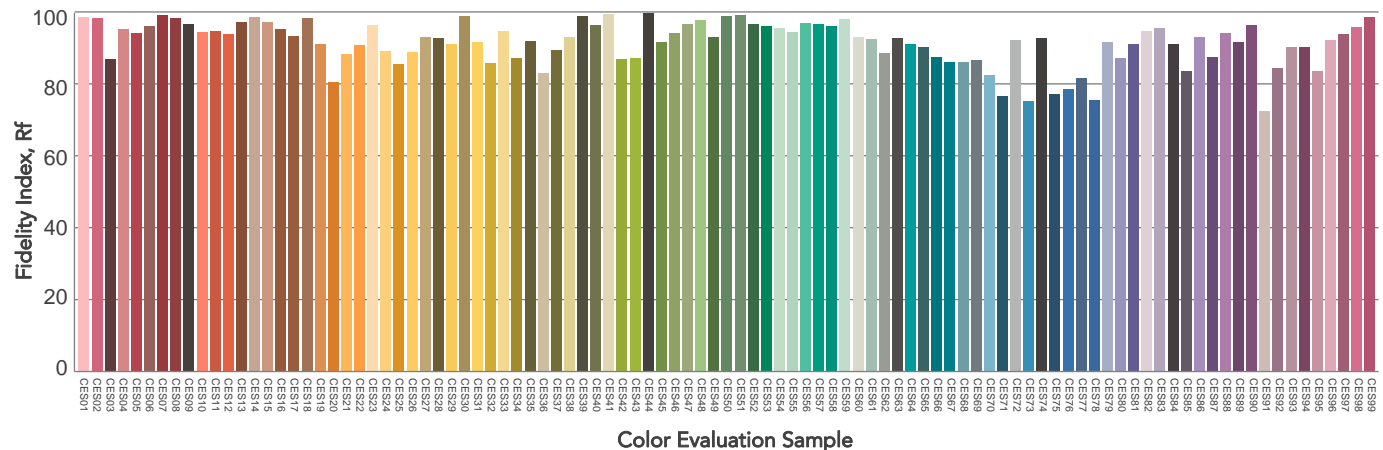
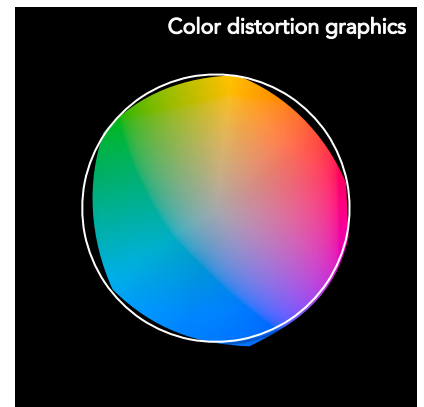
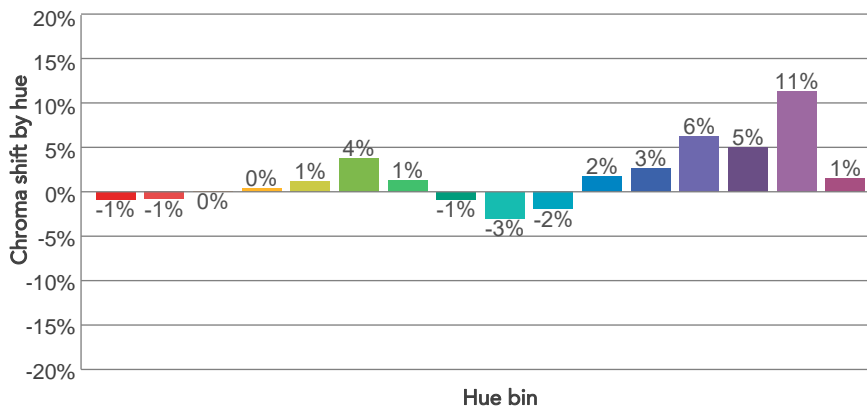
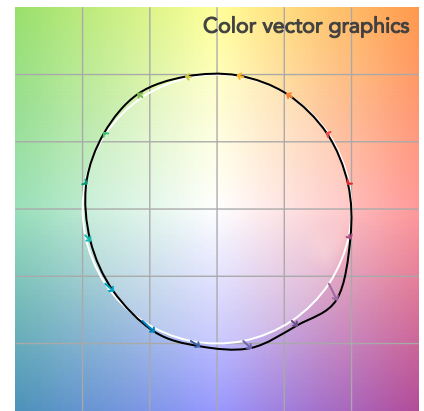
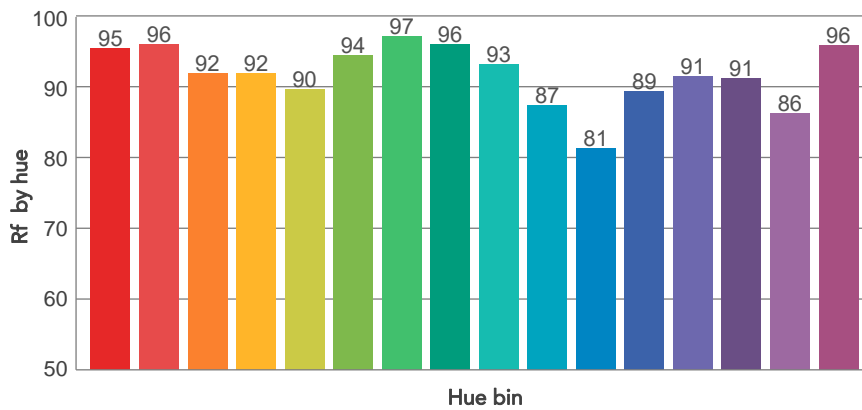
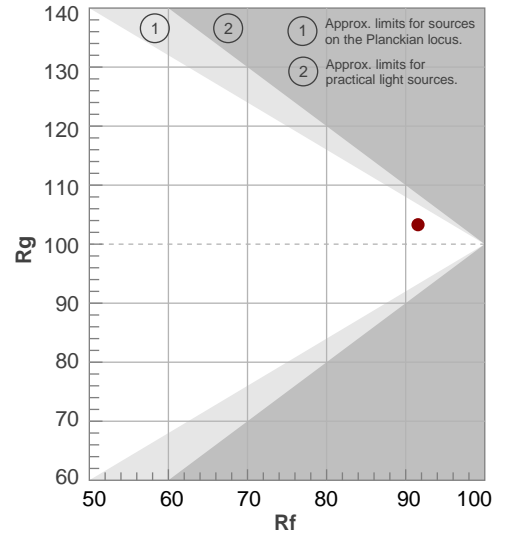
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5637 K	94,9	98,2	91,6	103,3	91,9	97	0,330	0,338	-0,0060

TM30 DETAILS

Rf 91,6
Fidelity index Rf

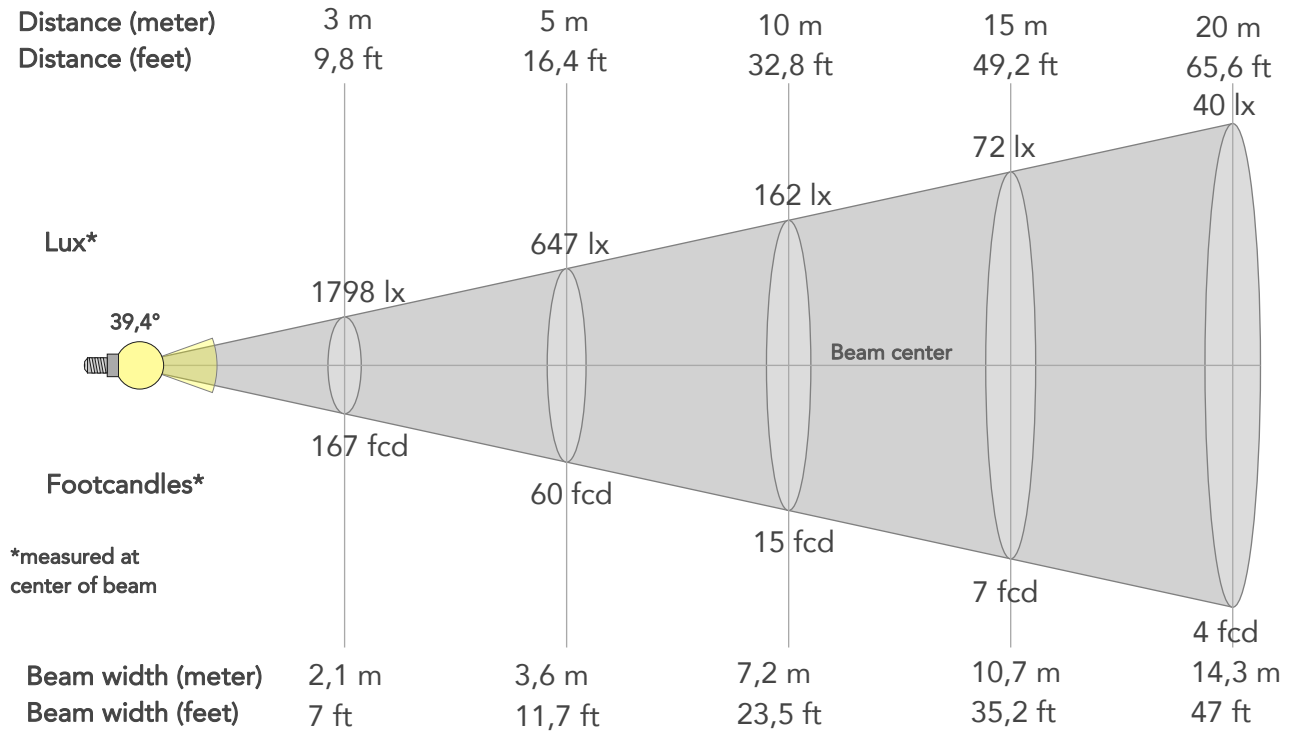
Rg 103,3
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-1%
2	96	-1%	-1%
3	92	0%	4%
4	92	0%	4%
5	90	1%	3%
6	94	4%	1%
7	97	1%	0%
8	96	-1%	0%
9	93	-3%	5%
10	87	-2%	8%
11	81	2%	12%
12	89	3%	7%
13	91	6%	4%
14	91	5%	1%
15	86	11%	-7%
16	96	1%	-2%



BEAM DETAILS

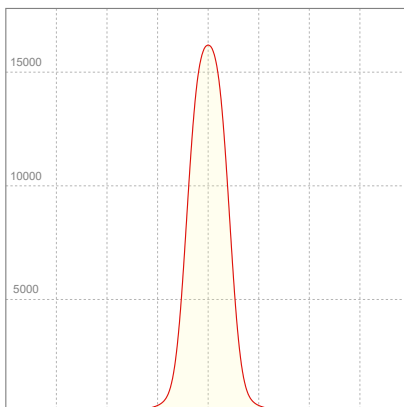
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
39,4°	62,8°	85°	99,0%	95,4%



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	16184lx	4046lx	1798lx	1012lx	647lx	288lx	162lx	72lx	40lx	26lx	18lx	10lx	6lx
Footcand.	1504fcd	376fcd	167fcd	94fcd	60fcd	27fcd	15fcd	7fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,7m	1,4m	2,1m	2,9m	3,6m	5,4m	7,2m	10,7m	14,3m	17,9m	21,5m	28,6m	35,8m
Beam wid.	2,4ft	4,7ft	7ft	9,4ft	11,7ft	17,6ft	23,5ft	35,2ft	47ft	58,7ft	70,5ft	93,9ft	117,4ft

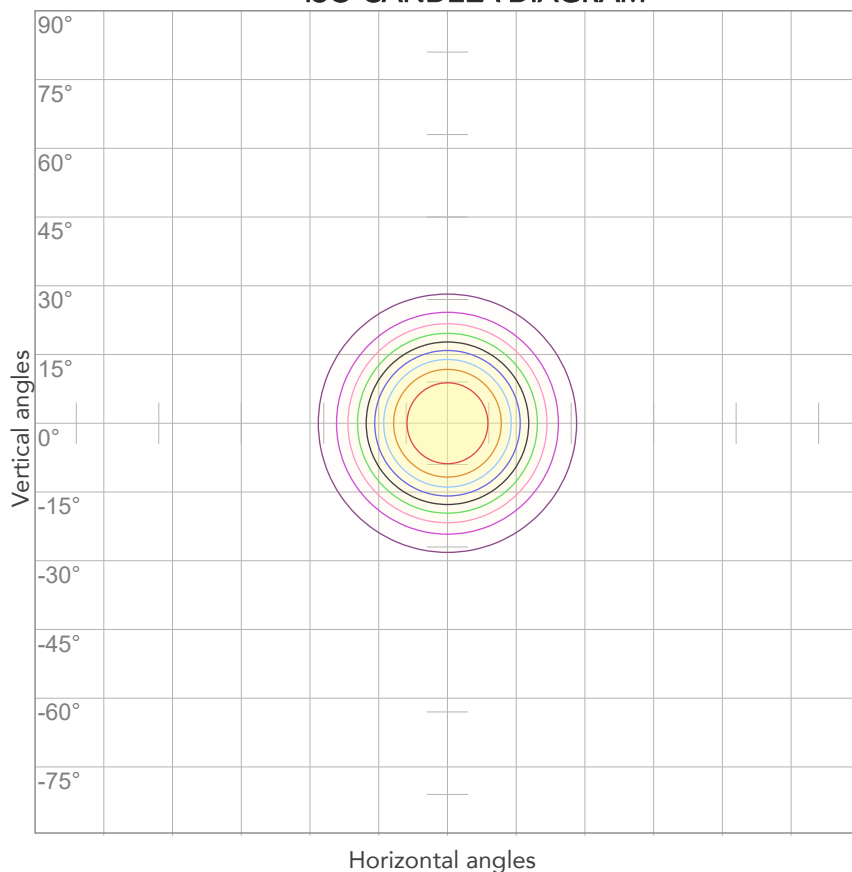
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,493A	102,6W	76lm/W

ISO CANDELA DIAGRAM



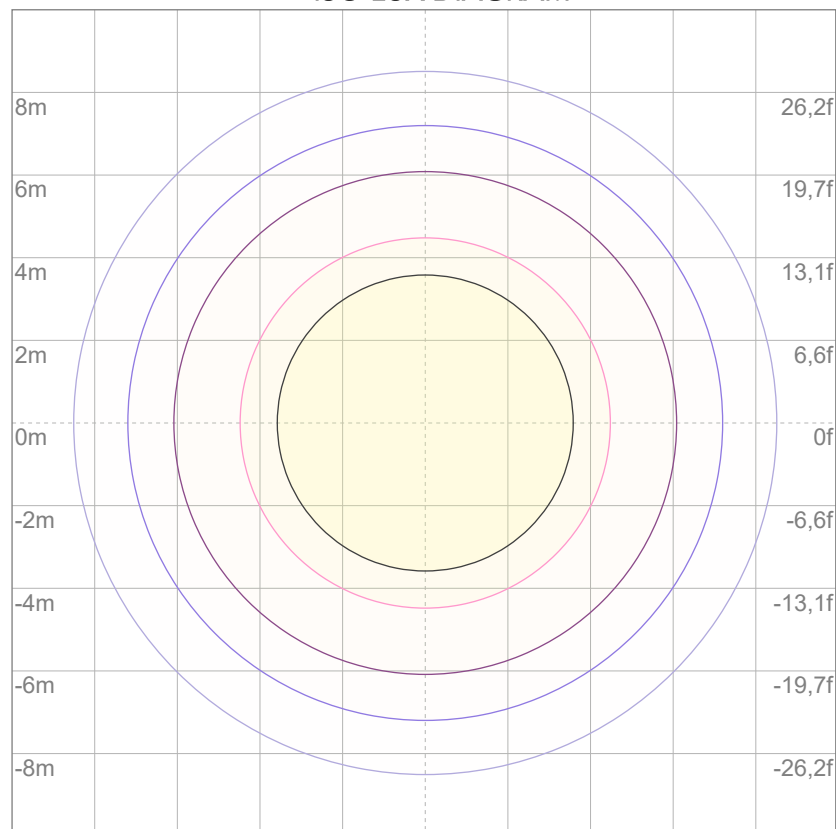
10%	1618 cd
20%	3237 cd
30%	4855 cd
40%	6474 cd
50%	8092 cd
60%	9711 cd
70%	11329 cd
80%	12947 cd

Conditions:

Number of c-planes: 2

Candela at center: 16184 cd

ISO LUX DIAGRAM



3%	4,86 lx
5%	8,09 lx
10%	16,2 lx
30%	48,6 lx
50%	80,9 lx

Conditions:

Number of c-planes: 2

Lux at center: 162 lx

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



Total lumen output:

7442 lm

Peak candela output:

9236 cd

Light quality:

CRI: 95,0

Color temperature:

5613 K

PRODUCT NAME:
ECLPENDANTJR DY

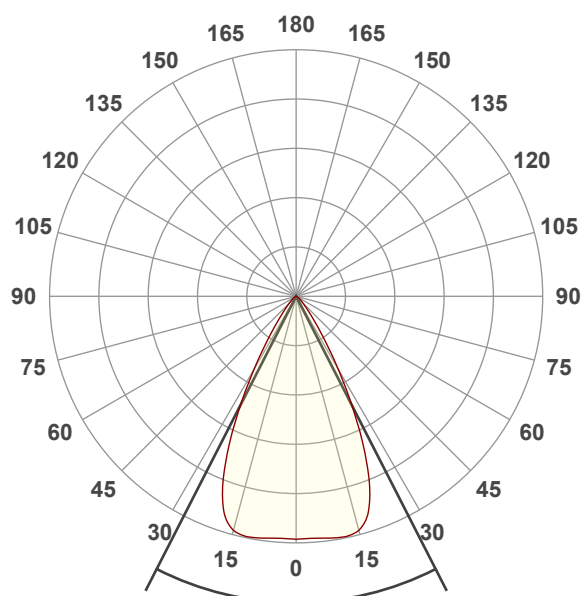
MEASURAMENT CONDITIONS:

Beam angle:
60°

Target:
Full On

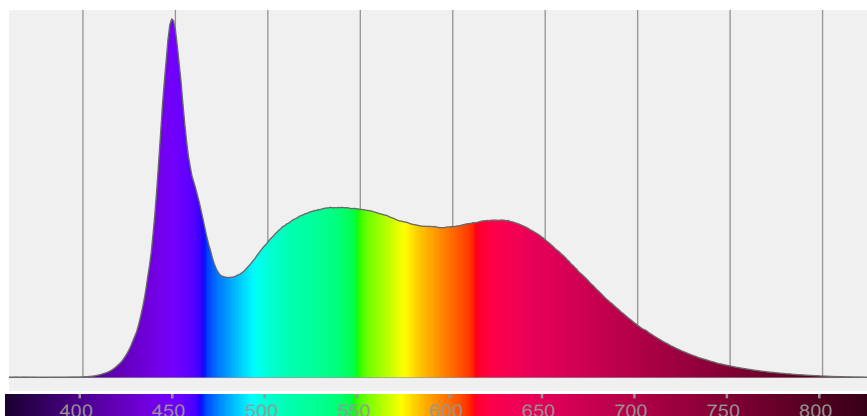
Operator:
Paolo Carvone

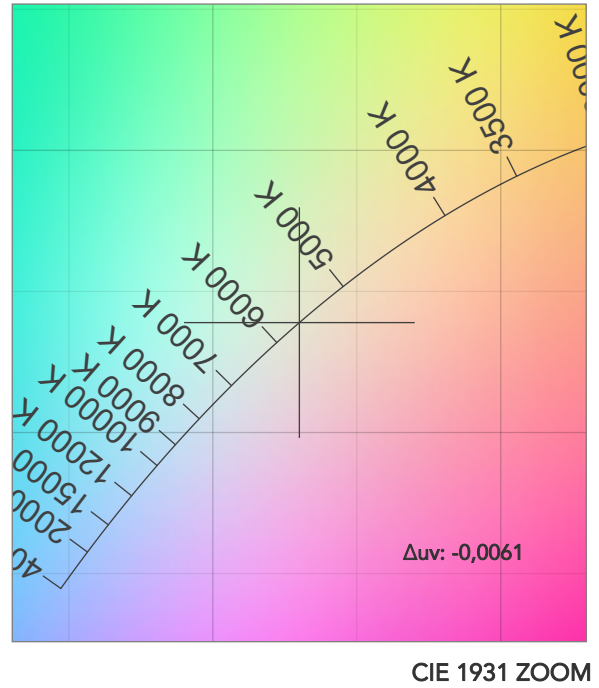
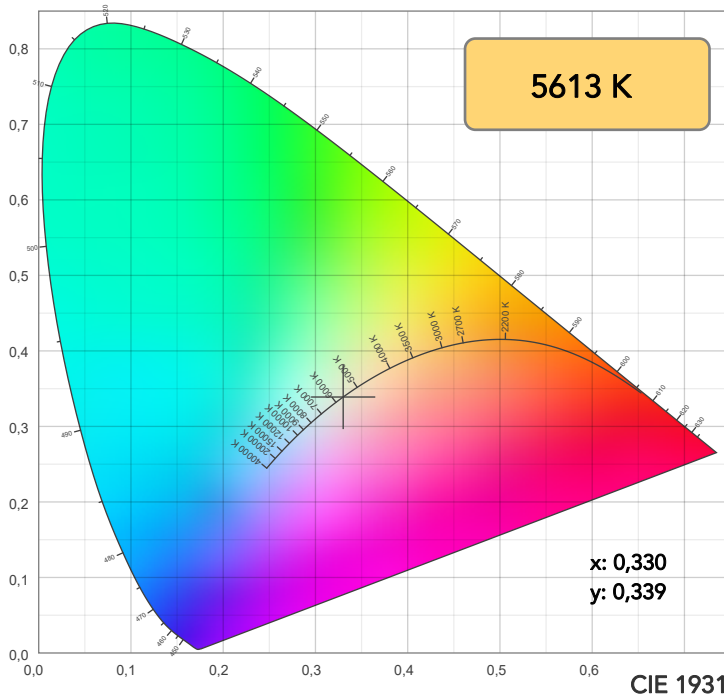
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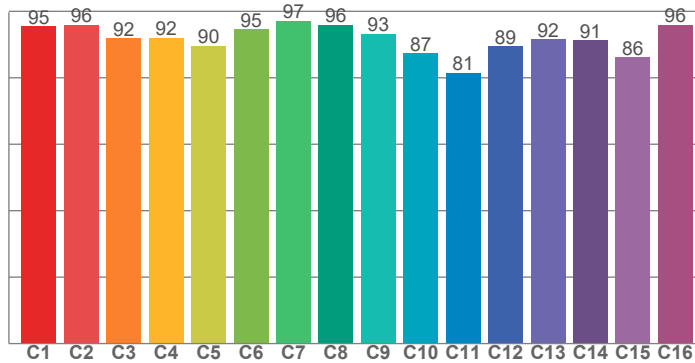
Beam angle 50%: 54,2°
Field angle 10%: 76,2°
Cut off angle 2.5%: 99,2°

Spectra

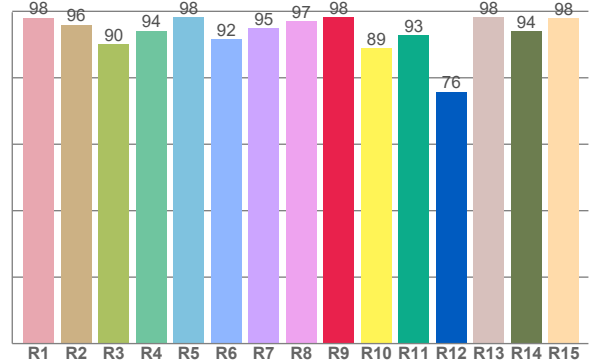




TM30: 91,6



CRI: 95,0 (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
98,1	96,0	90,0	94,2	98,2	91,6	95,0	97,0	98,3	88,9	92,8	75,8	98,2	94,0	97,9

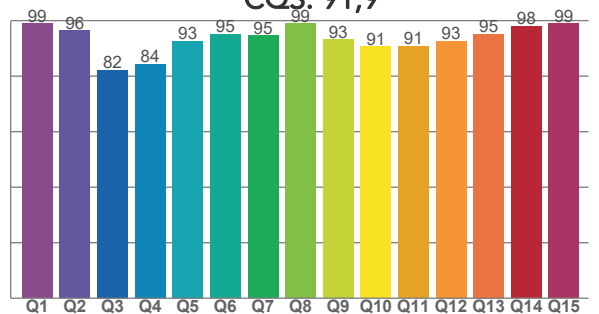
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,4	95,9	91,9	92,0	89,6	94,5	97,1	95,9	93,2	87,3	81,4	89,4	91,5	91,2	86,2	95,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,0	96,5	82,2	84,3	92,7	95,1	94,6	99,0	93,2	90,7	90,8	92,7	95,3	98,0	98,9

CQS: 91,9



COLOR PARAMETERS

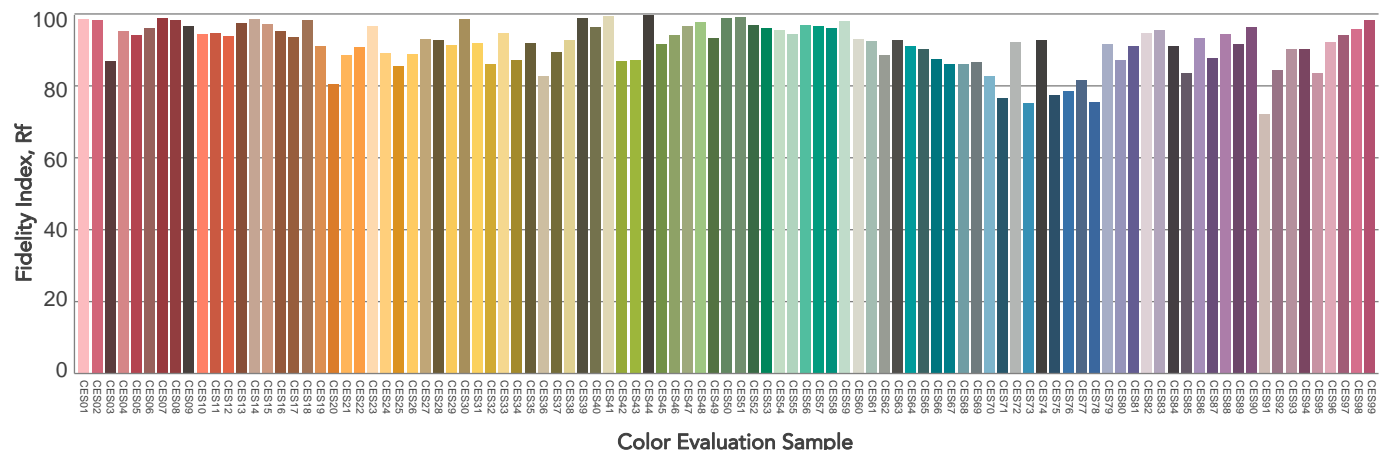
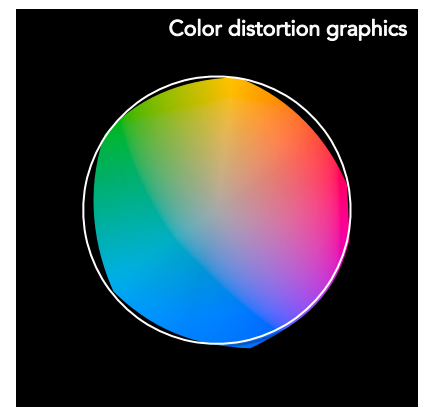
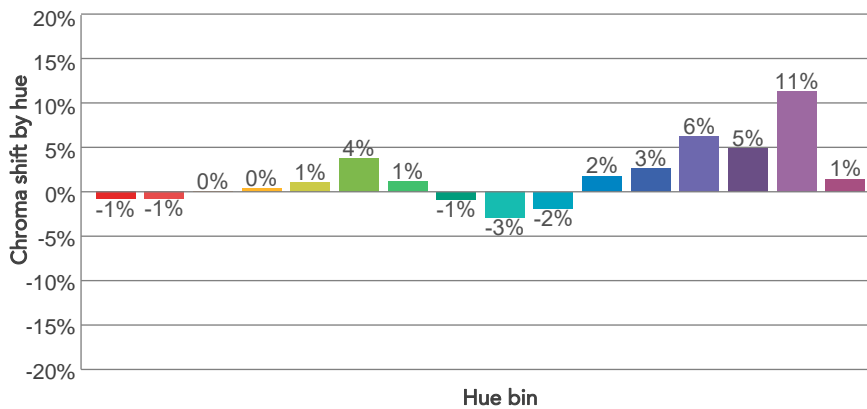
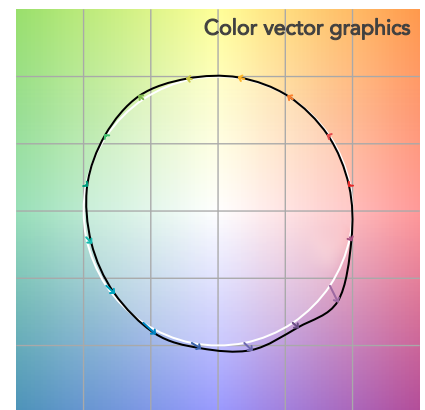
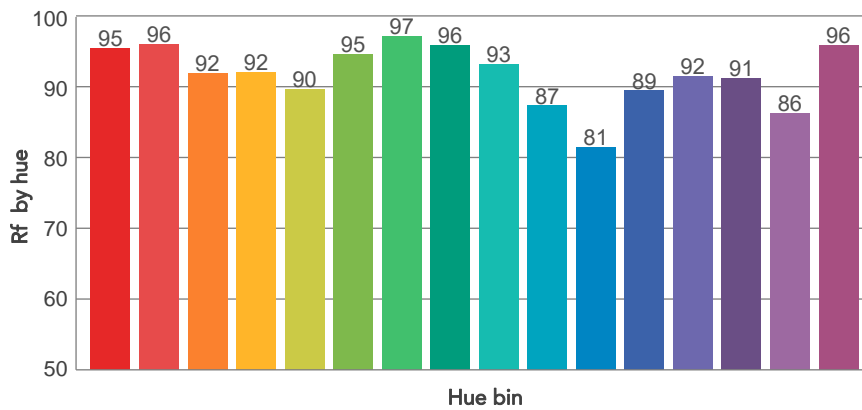
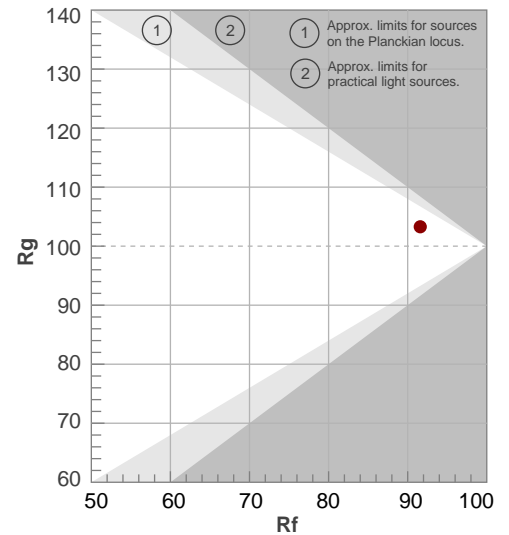
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5613 K	95,0	98,3	91,6	103,3	91,9	97	0,330	0,339	-0,0061

TM30 DETAILS

Rf 91,6
Fidelity index Rf

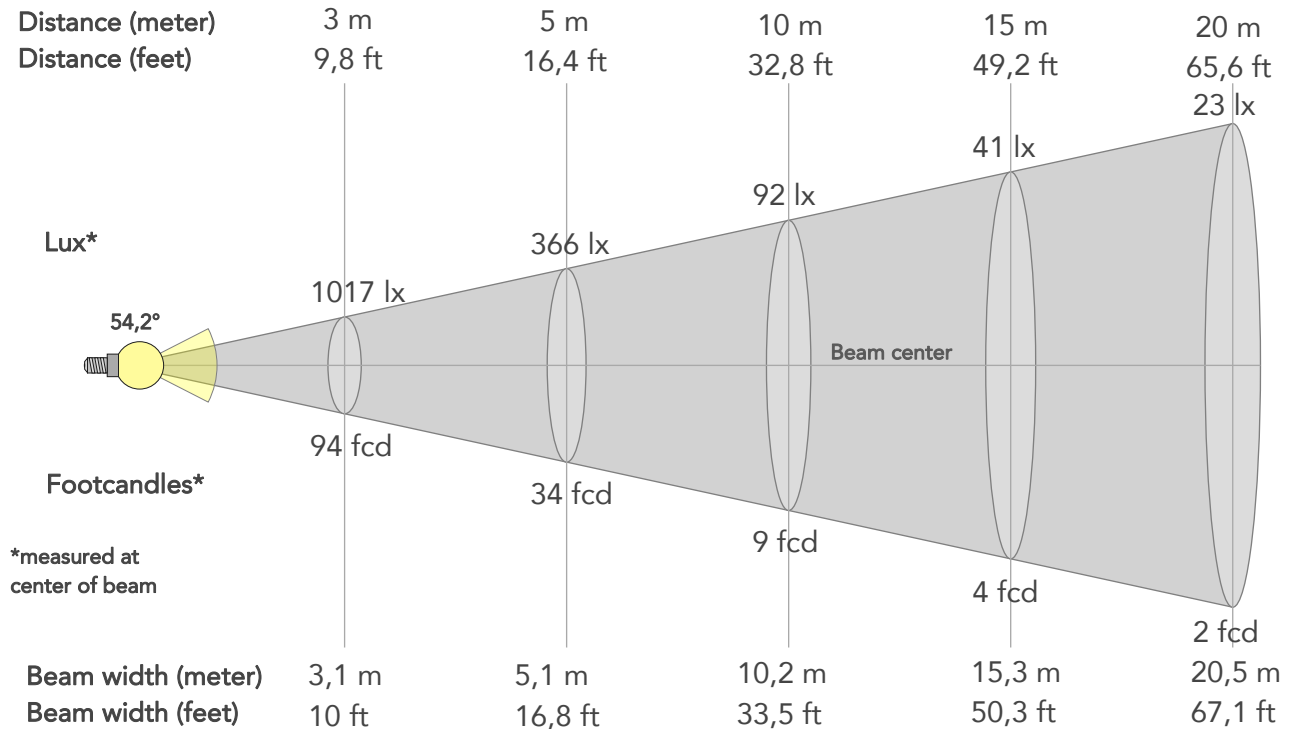
Rg 103,3
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-1%
2	96	-1%	2%
3	92	0%	4%
4	92	0%	4%
5	90	1%	3%
6	95	4%	1%
7	97	1%	0%
8	96	-1%	0%
9	93	-3%	5%
10	87	-2%	8%
11	81	2%	12%
12	89	3%	7%
13	92	6%	4%
14	91	5%	1%
15	86	11%	-6%
16	96	1%	-2%



BEAM DETAILS

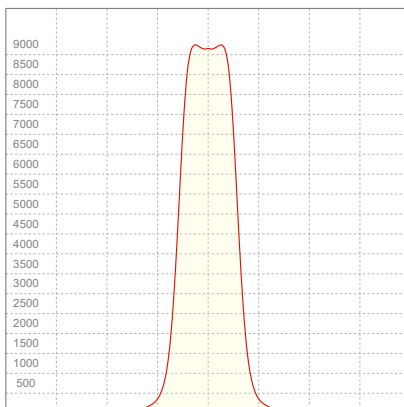
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54,2°	76,2°	99,2°	99,4%	96,1%



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	9152lx	2288lx	1017lx	572lx	366lx	163lx	92lx	41lx	23lx	15lx	10lx	6lx	4lx
Footcand.	850fcd	213fcd	94fcd	53fcd	34fcd	15fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	1m	2m	3,1m	4,1m	5,1m	7,7m	10,2m	15,3m	20,5m	25,6m	30,7m	40,9m	51,1m
Beam wid.	3,4ft	6,8ft	10ft	13,4ft	16,8ft	25,2ft	33,5ft	50,3ft	67,1ft	83,9ft	100,6ft	134,2ft	167,7ft

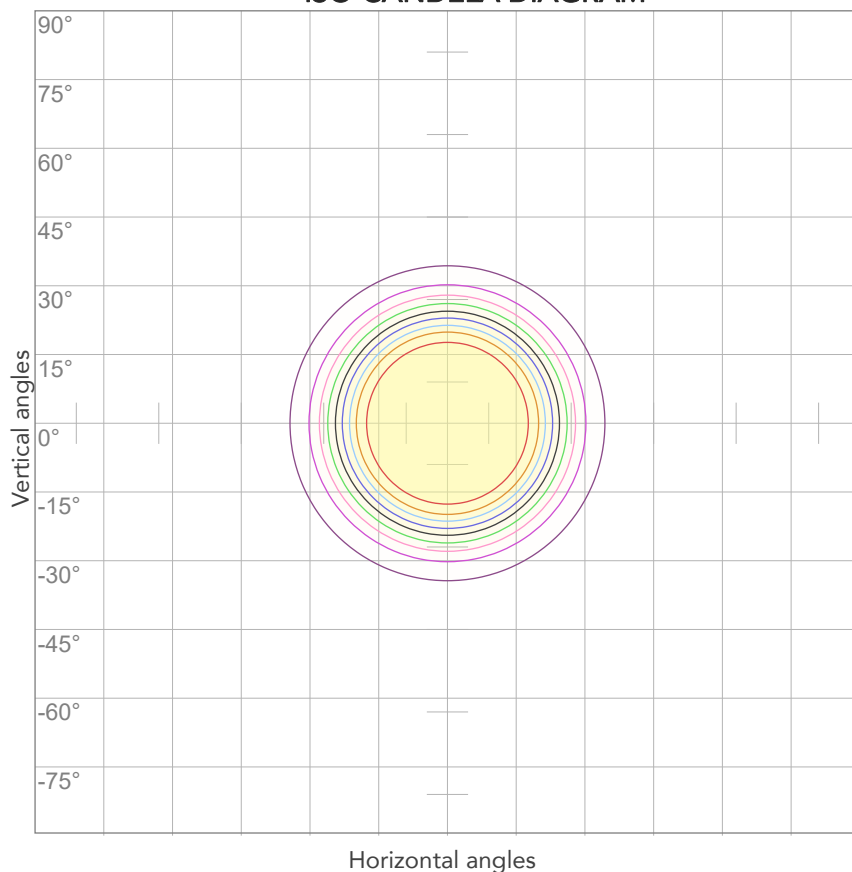
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,488A	102,5W	73lm/W

ISO CANDELA DIAGRAM



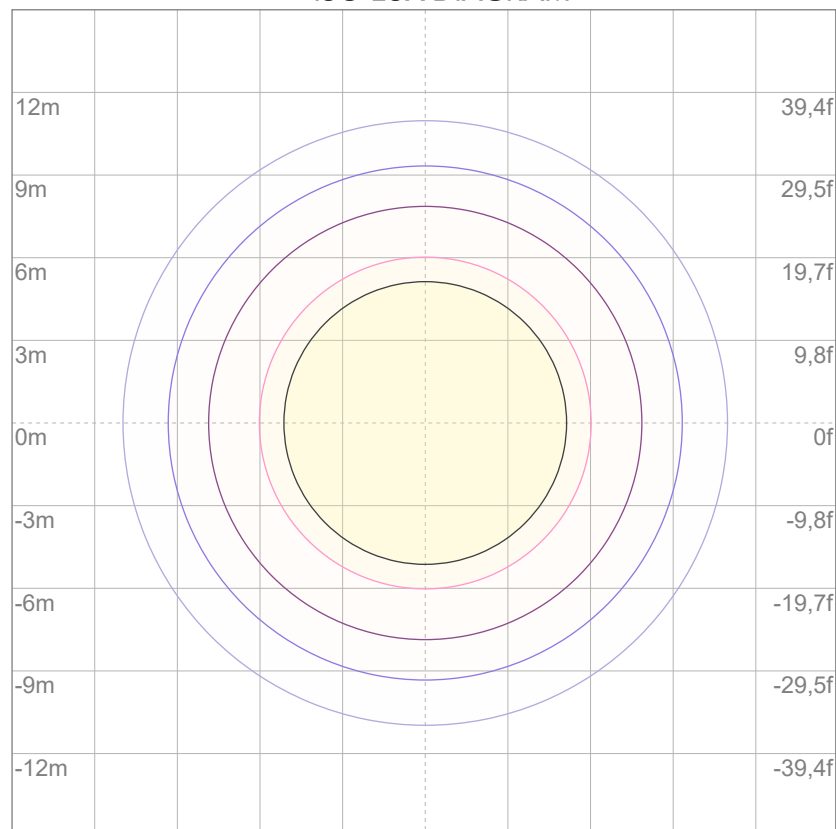
10%	915 cd
20%	1830 cd
30%	2746 cd
40%	3661 cd
50%	4576 cd
60%	5491 cd
70%	6407 cd
80%	7322 cd

Conditions:

Number of c-planes: 2

Candela at center: 9152 cd

ISO LUX DIAGRAM



3%	2,75 lx
5%	4,58 lx
10%	9,15 lx
30%	27,5 lx
50%	45,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 91,5 lx

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