

Photometric Test Report



GALLERYECLNW

35 W zoomable LED ellipsoids 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:

2236 lm

Peak candela output:

9237 cd

Light quality:

CRI: 89,7

Color temperature:

4227 K

PRODUCT NAME:

Gallery Ecl NW

MEASUREMENT CONDITIONS:

Beam angle:

Max Zoom

Target:

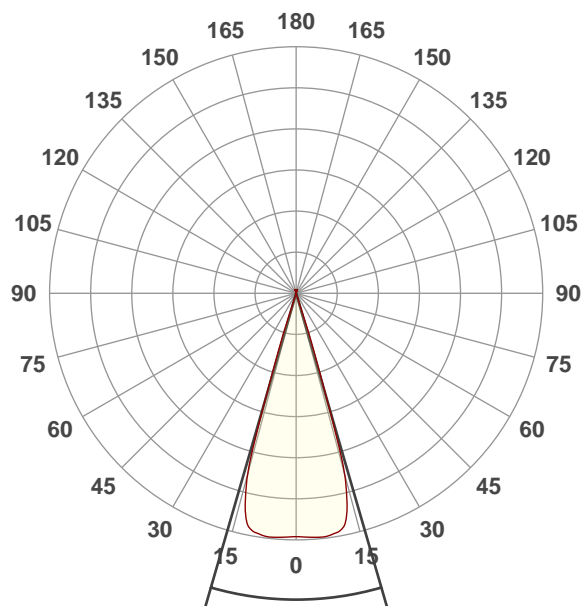
4000K

Operator:

Paolo Carvone

Date and time:

15/12/2020 16:56:19

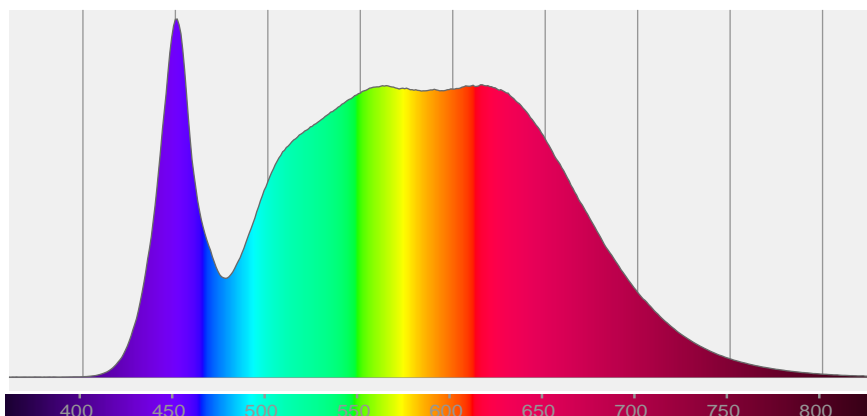


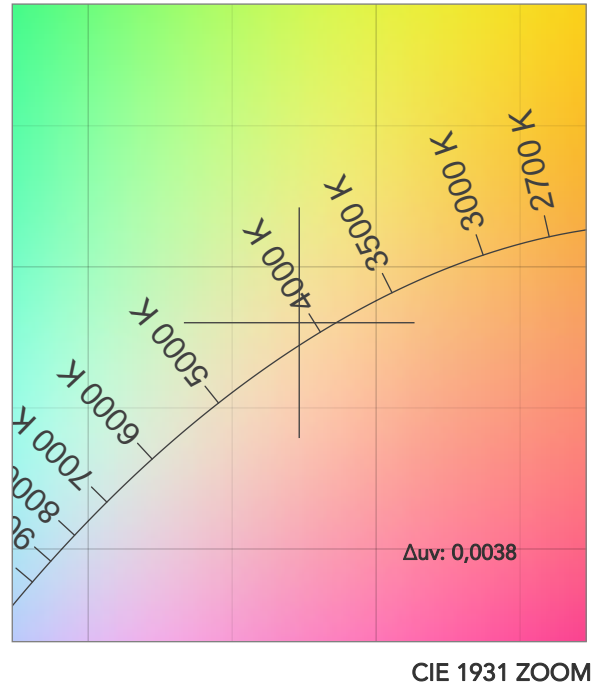
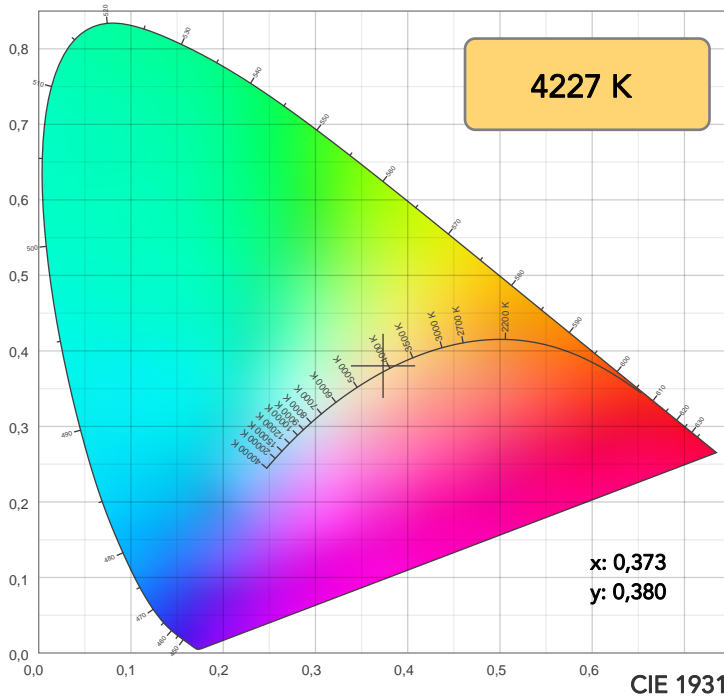
Beam angle 50%: 32,3°

Field angle 10%: 36,2°

Cut off angle 2.5%: 37,2°

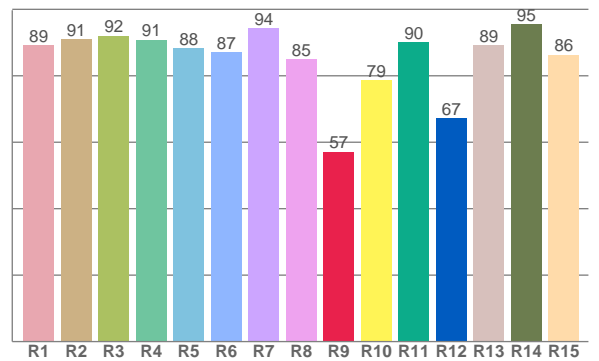
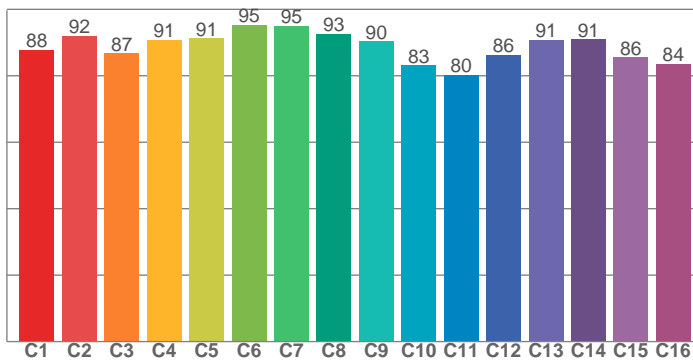
Spectra





TM30: 88,8

CRI: 89,7 (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
89,1	91,0	92,1	90,8	88,3	87,1	94,4	84,9	57,2	78,6	90,1	67,1	89,2	95,4	86,3

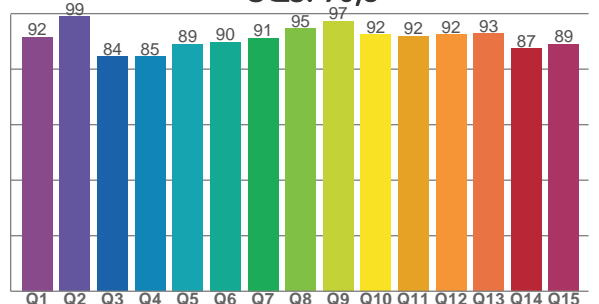
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
87,7	92,1	86,7	90,8	91,2	95,3	95,0	92,6	90,3	83,2	80,3	86,3	90,7	90,9	85,6	83,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,7	98,9	84,5	84,6	89,0	89,8	91,1	94,6	97,3	92,5	92,0	92,4	92,8	87,4	89,0

CQS: 90,3



COLOR PARAMETERS

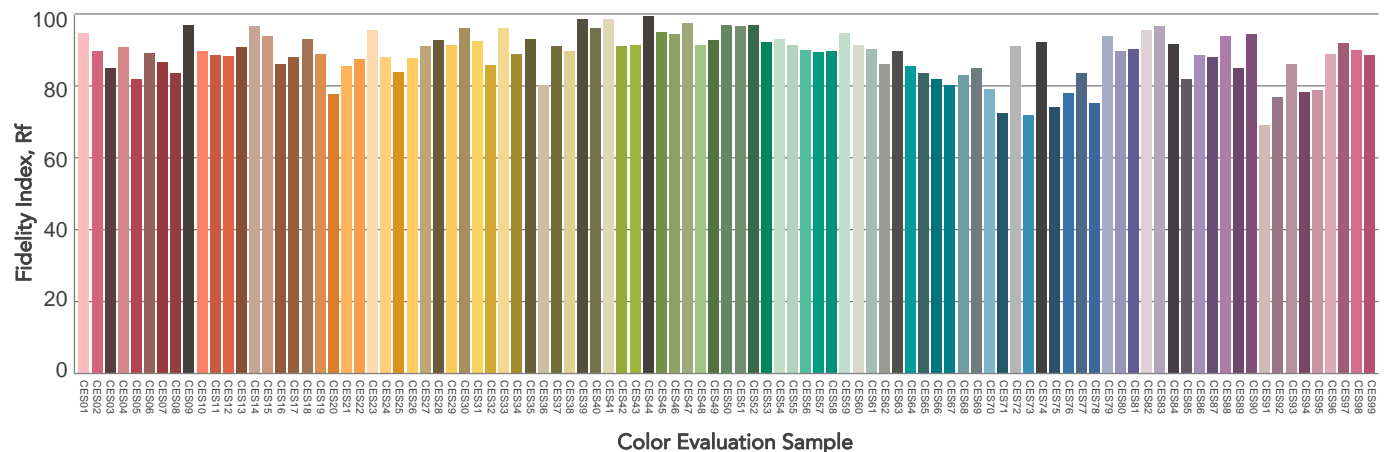
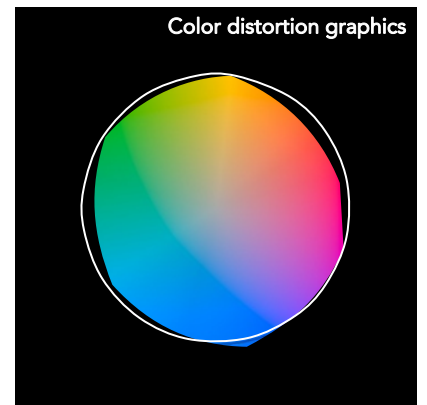
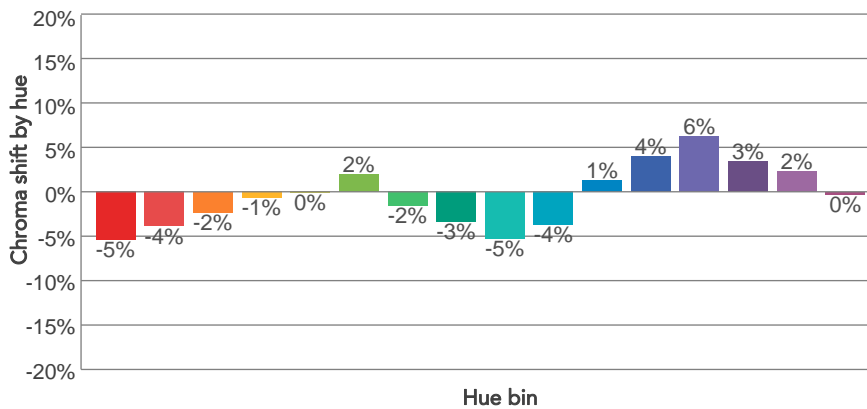
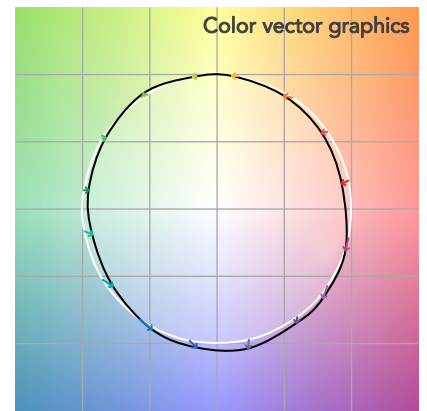
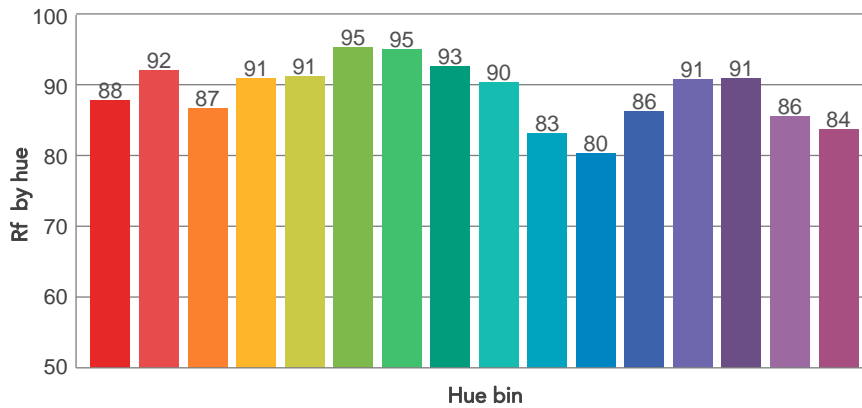
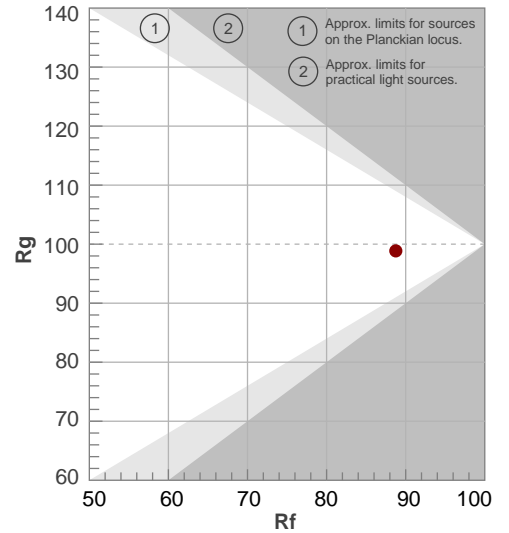
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4227 K	89,7	57,2	88,8	98,9	90,3	90	0,373	0,380	0,0038

TM30 DETAILS

Rf 88,8
Fidelity index Rf

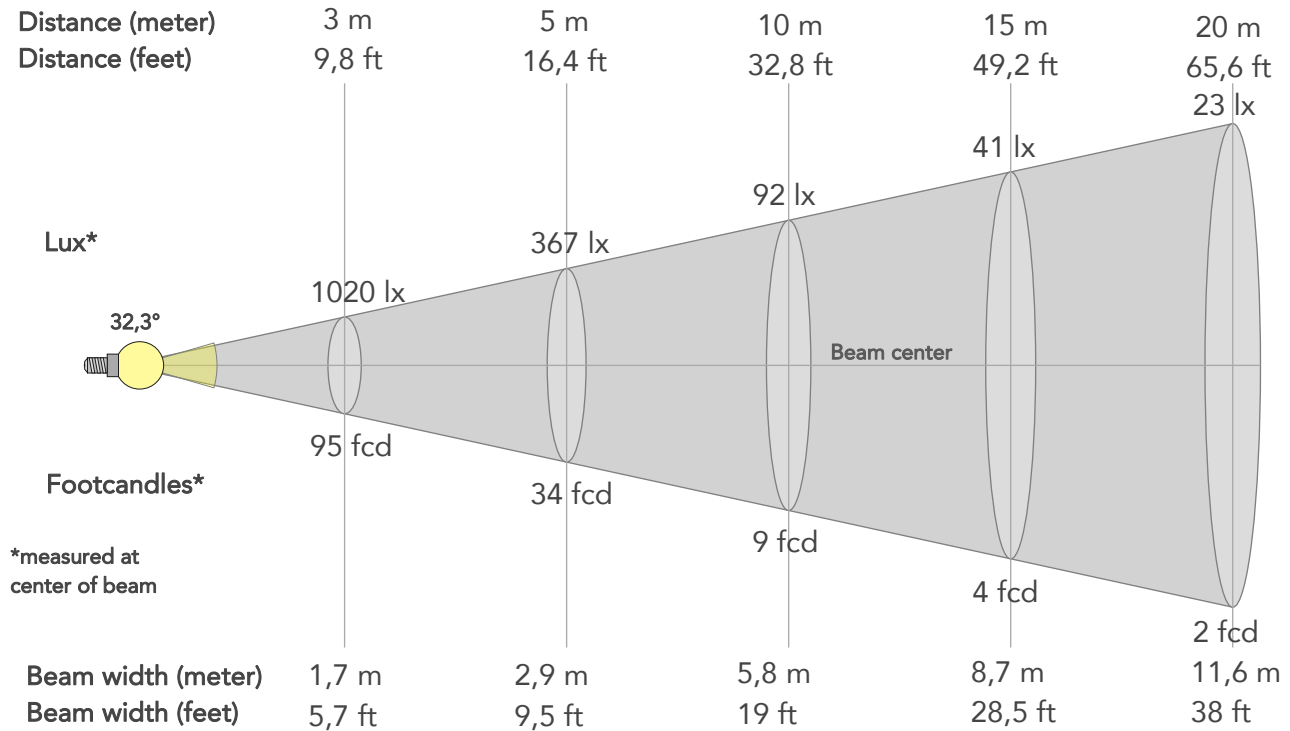
Rg 98,9
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	88	-5%	-1%
2	92	-4%	2%
3	87	-2%	6%
4	91	-1%	4%
5	91	0%	3%
6	95	2%	0%
7	95	-2%	-2%
8	93	-3%	-1%
9	90	-5%	4%
10	83	-4%	8%
11	80	1%	11%
12	86	4%	6%
13	91	6%	-2%
14	91	3%	-3%
15	86	2%	-9%
16	84	0%	-9%



BEAM DETAILS

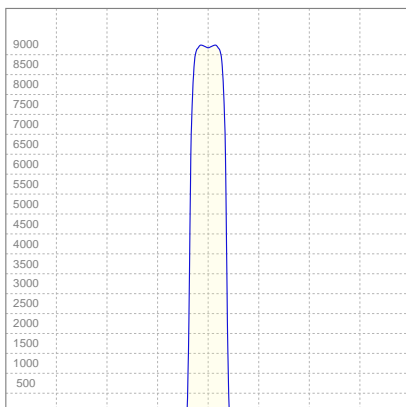
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
32,3°	36,2°	37,2°	100,0%	100,0%



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	9176lx	2294lx	1020lx	573lx	367lx	163lx	92lx	41lx	23lx	15lx	10lx	6lx	4lx
Footcand.	852fcd	213fcd	95fcd	53fcd	34fcd	15fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,6m	1,2m	1,7m	2,3m	2,9m	4,3m	5,8m	8,7m	11,6m	14,5m	17,4m	23,2m	29m
Beam wid.	1,9ft	3,8ft	5,7ft	7,6ft	9,5ft	14,3ft	19ft	28,5ft	38ft	47,5ft	57ft	76ft	95ft

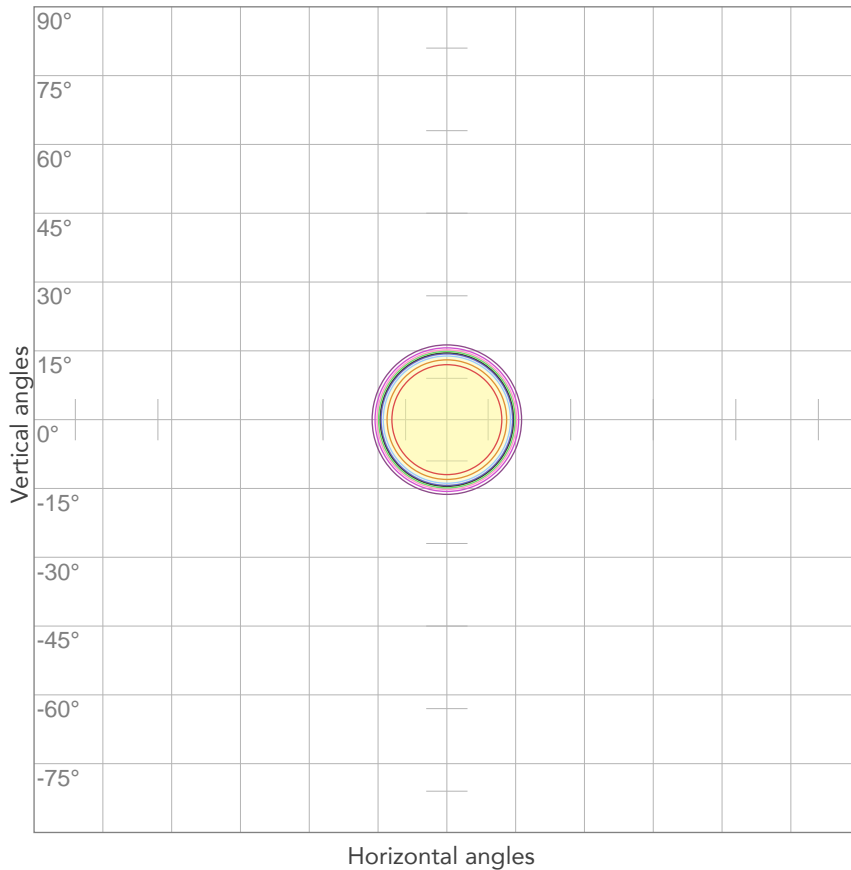
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
222V	0,203A	43,7W	51lm/W
Power FC			
0.97V			

ISO CANDELA DIAGRAM



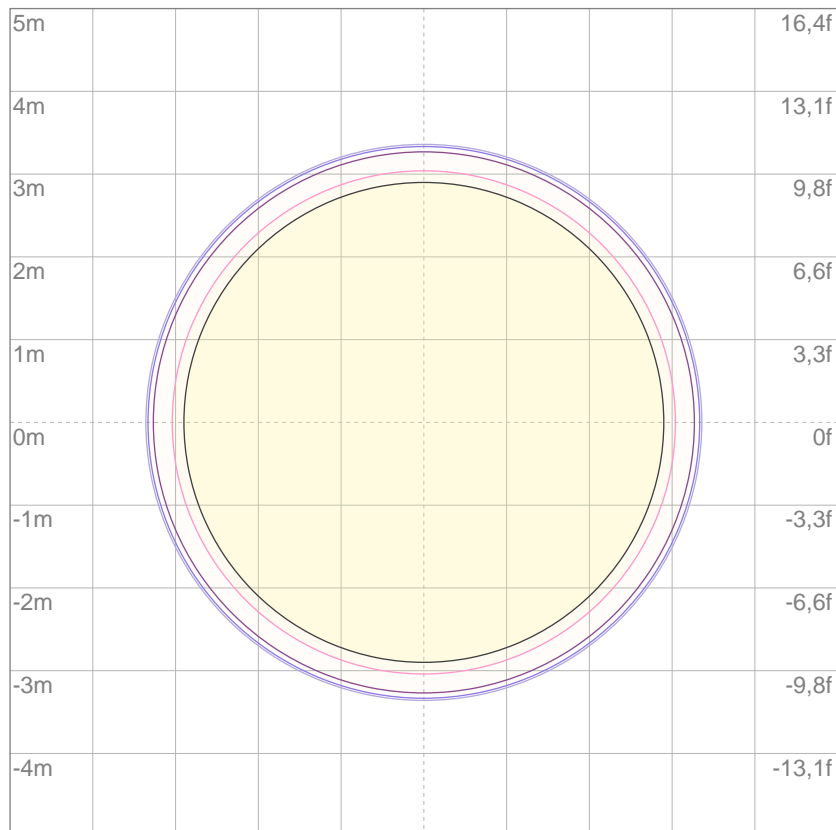
10%	918 cd
20%	1835 cd
30%	2753 cd
40%	3670 cd
50%	4588 cd
60%	5505 cd
70%	6423 cd
80%	7340 cd

Conditions:

Number of c-planes: 2

Candela at center: 9176 cd

ISO LUX DIAGRAM



3%	2,75 lx
5%	4,59 lx
10%	9,18 lx
30%	27,5 lx
50%	45,9 lx

Conditions:

Number of c-planes: 2

Lux at center: 91,8 lx

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



Total lumen output:

1947 lm

Peak candela output:

33091 cd

Light quality:

CRI: 89,7

Color temperature:

4133 K

PRODUCT NAME:

Gallery Ecl NW

MEASURAMENT CONDITIONS:

Beam angle:

Min Zoom

Target:

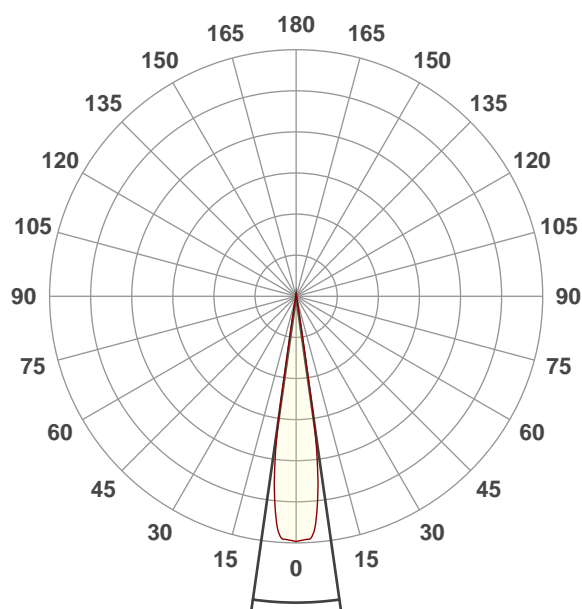
4000K

Operator:

Paolo Carvone

Date and time:

15/12/2020 16:58:31

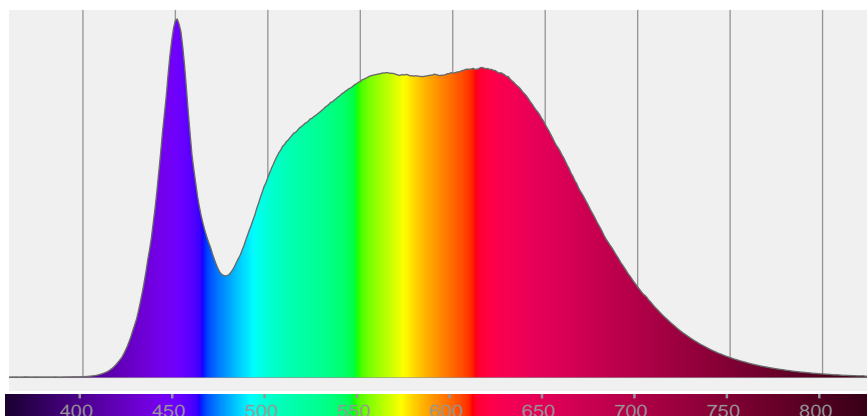


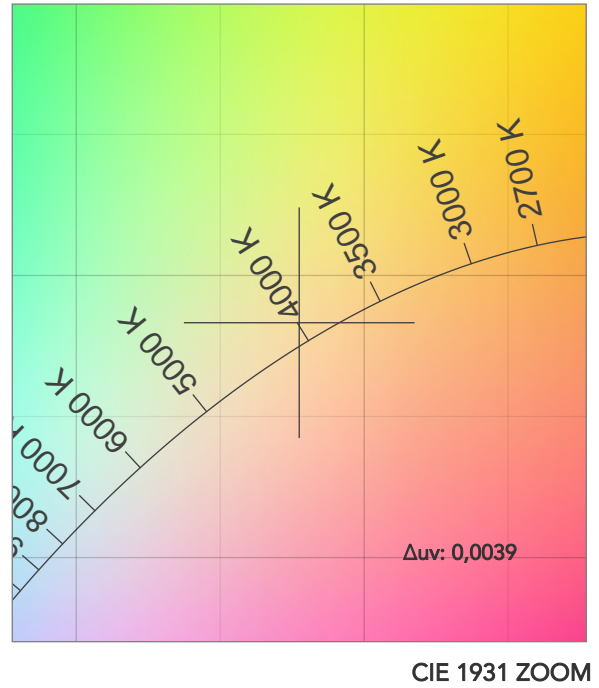
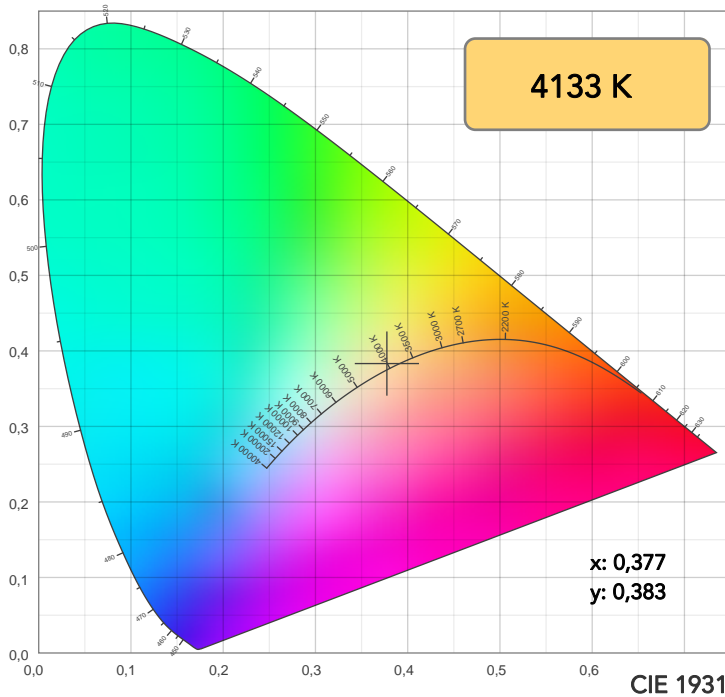
Beam angle 50%: 16,2°

Field angle 10%: 18,9°

Cut off angle 2.5%: 20,2°

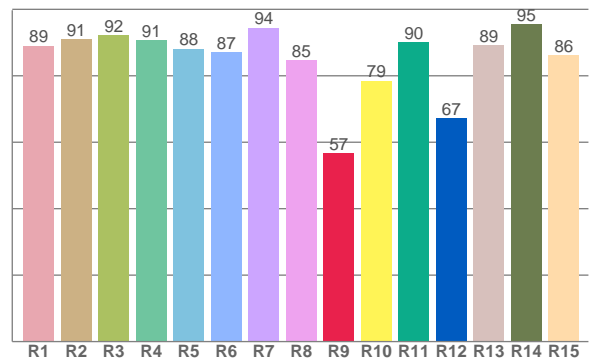
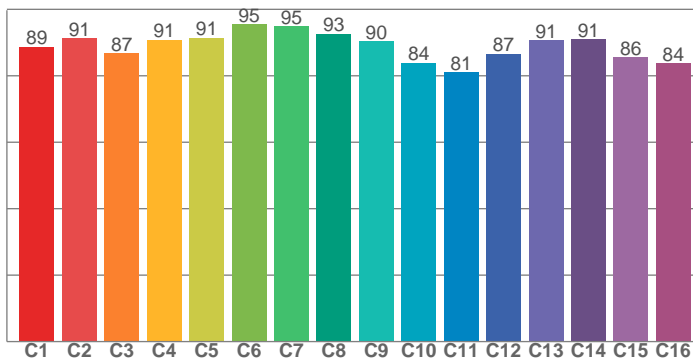
Spectra





TM30: 88,8

CRI: 89,7 (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
89,0	91,0	92,2	90,8	88,1	87,1	94,4	84,6	56,7	78,6	90,0	67,2	89,1	95,4	86,1

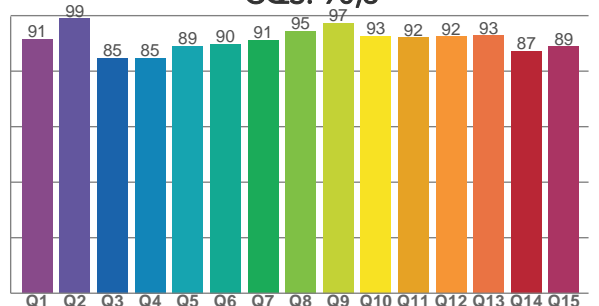
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88,6	91,2	86,7	90,9	91,3	95,4	94,9	92,6	90,4	83,8	81,0	86,5	90,7	91,0	85,5	83,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,5	98,9	84,7	84,7	89,0	89,7	91,1	94,5	97,3	92,6	92,0	92,4	92,8	87,3	88,8

CQS: 90,3



COLOR PARAMETERS

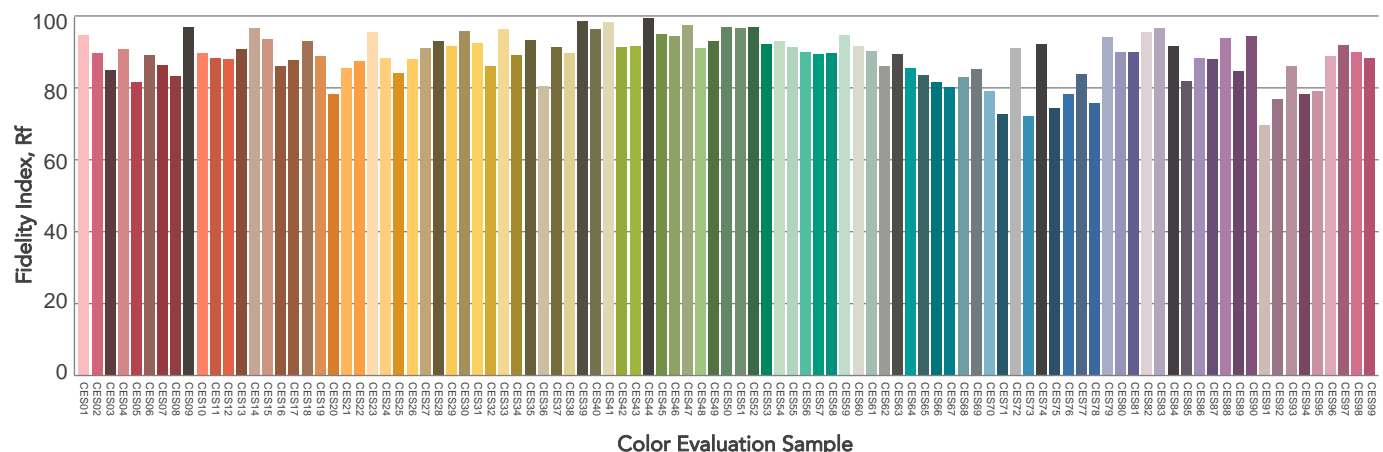
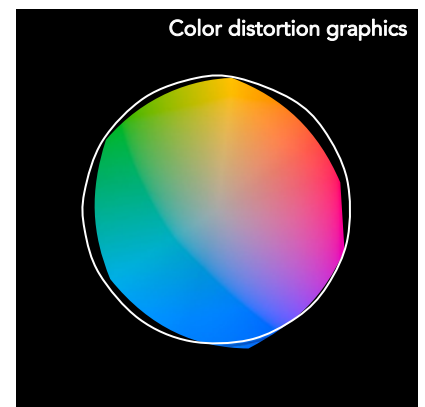
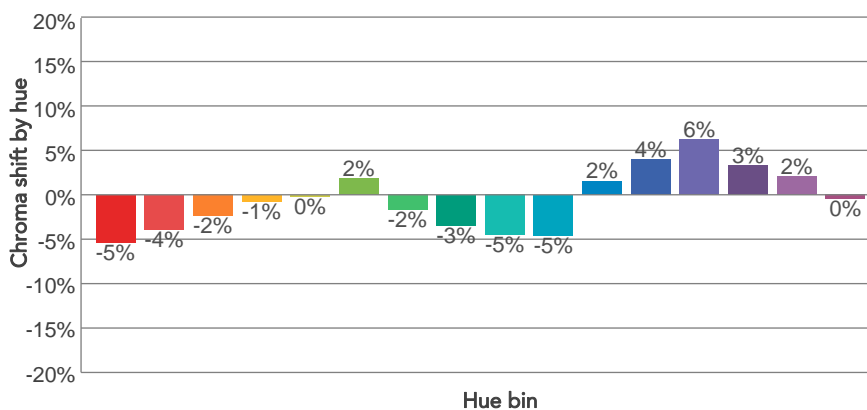
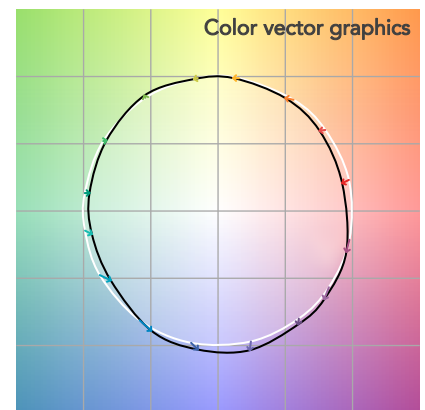
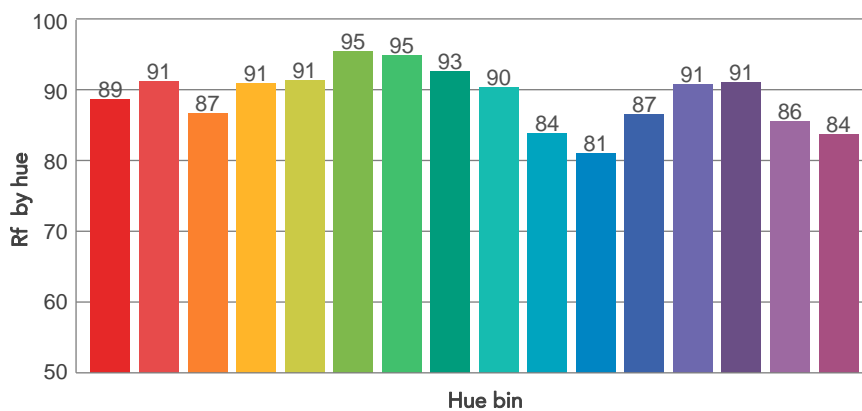
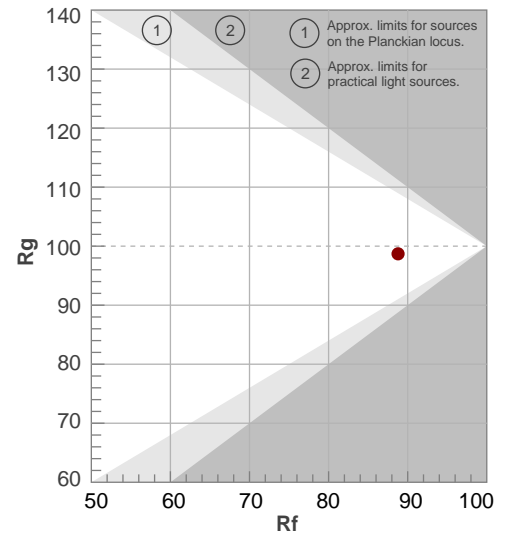
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4133 K	89,7	56,7	88,8	98,7	90,3	90	0,377	0,383	0,0039

TM30 DETAILS

Rf 88,8
Fidelity index Rf

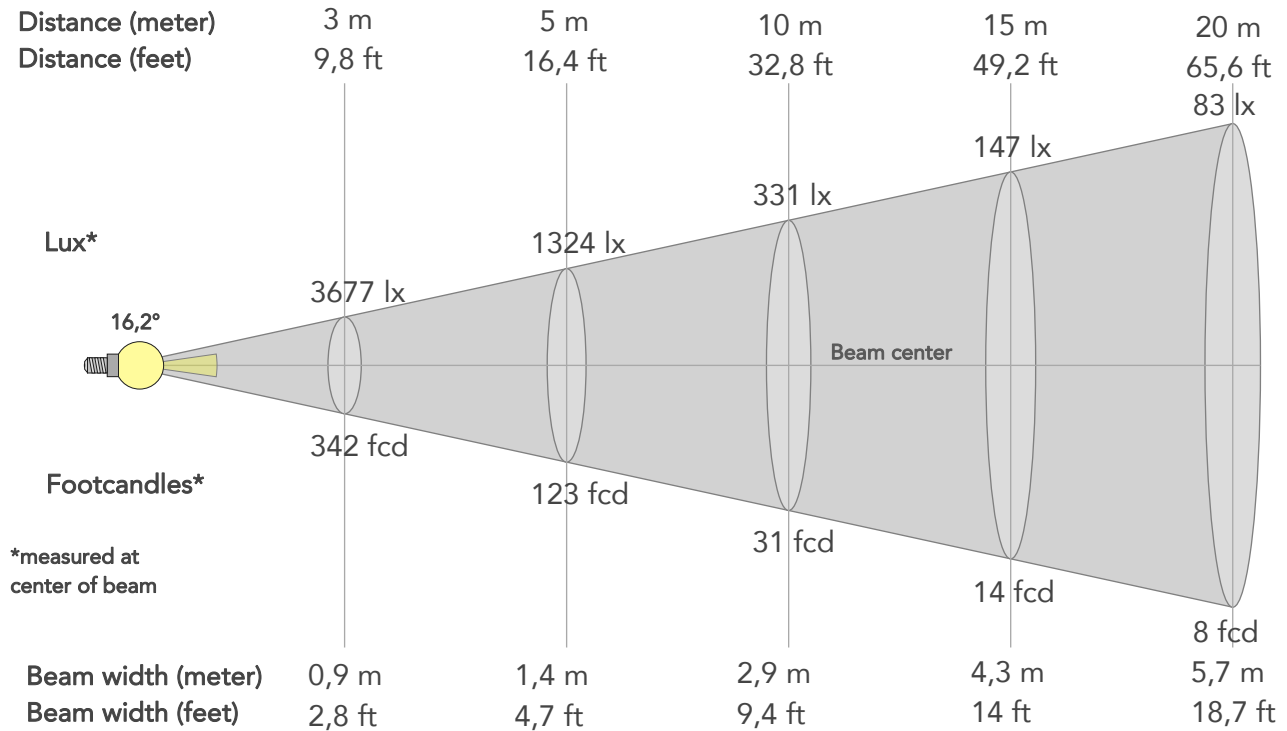
Rg 98,7
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	89	-5%	-1%
2	91	-4%	2%
3	87	-2%	6%
4	91	-1%	4%
5	91	0%	3%
6	95	2%	0%
7	95	-2%	-2%
8	93	-3%	-1%
9	90	-5%	4%
10	84	-5%	8%
11	81	2%	11%
12	87	4%	6%
13	91	6%	-2%
14	91	3%	-3%
15	86	2%	-9%
16	84	0%	-9%



BEAM DETAILS

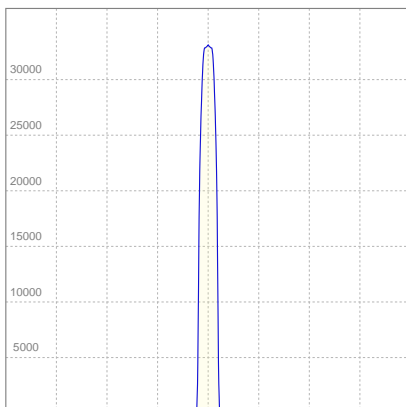
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,2°	18,9°	20,2°	100,0%	100,0%



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	33091lx	8273lx	3677lx	2068lx	1324lx	588lx	331lx	147lx	83lx	53lx	37lx	21lx	13lx
Footcand.	3074fcd	769fcd	342fcd	192fcd	123fcd	55fcd	31fcd	14fcd	8fcd	5fcd	3fcd	2fcd	1fcd
Beam wid.	0,3m	0,6m	0,9m	1,1m	1,4m	2,1m	2,9m	4,3m	5,7m	7,1m	8,6m	11,4m	14,3m
Beam wid.	0,9ft	1,9ft	2,8ft	3,7ft	4,7ft	7ft	9,4ft	14ft	18,7ft	23,4ft	28,1ft	37,4ft	46,8ft

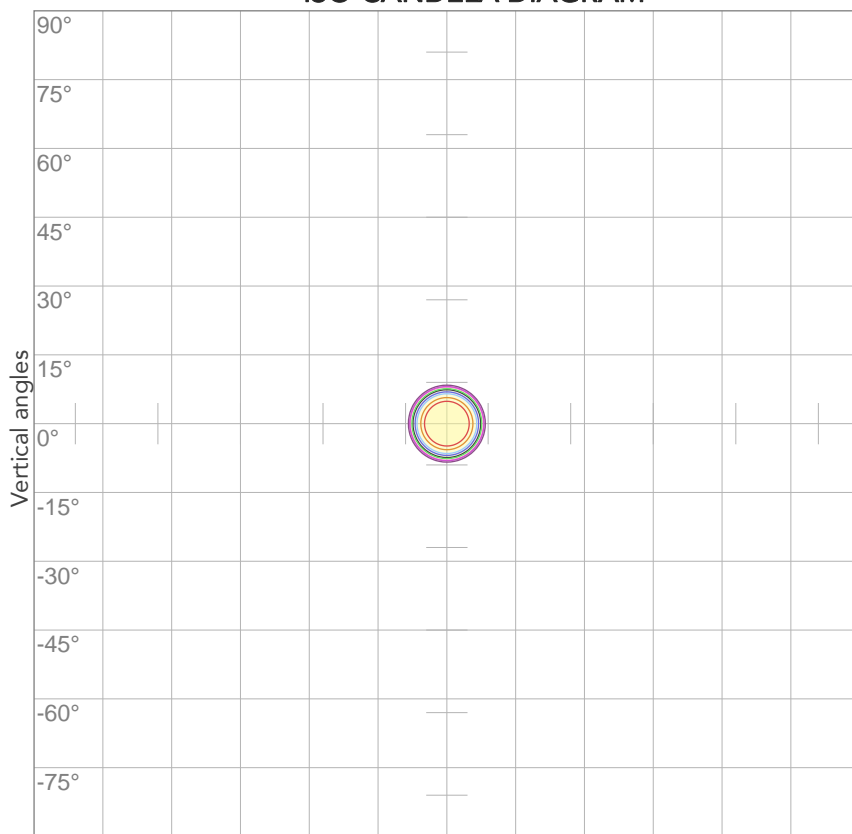
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,201A	43,4W	45lm/W
Power FC			
0.97V			

ISO CANDELA DIAGRAM



Horizontal angles

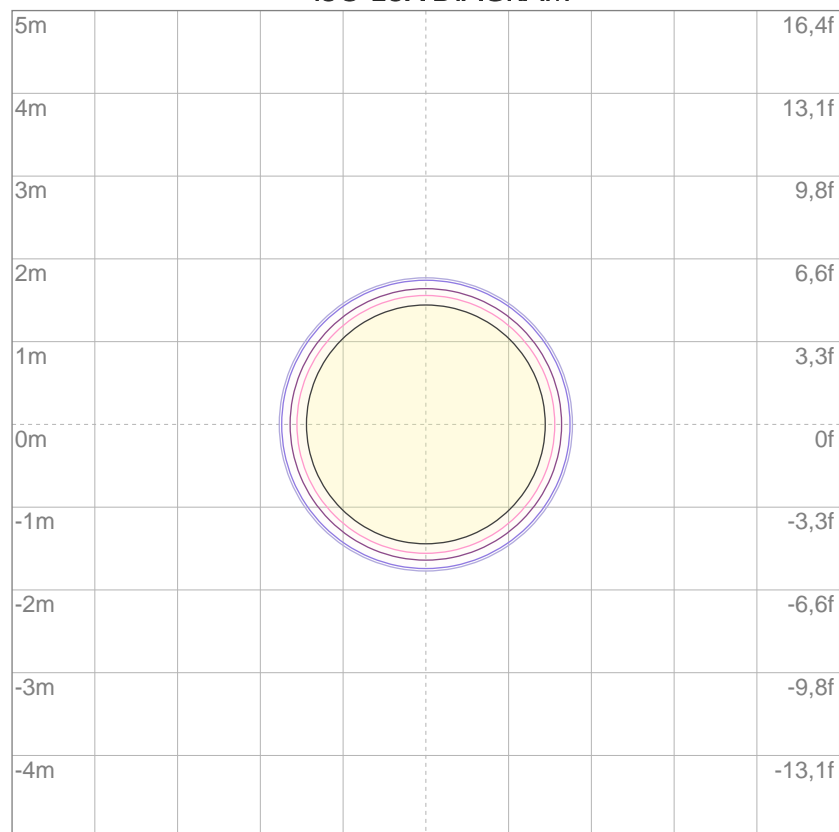
10%	3309 cd
20%	6618 cd
30%	9927 cd
40%	13236 cd
50%	16545 cd
60%	19855 cd
70%	23164 cd
80%	26473 cd

Conditions:

Number of c-planes: 2

Candela at center: 33091 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	9,93 lx
5%	16,5 lx
10%	33,1 lx
30%	99,3 lx
50%	165 lx

Conditions:

Number of c-planes: 2

Lux at center: 331 lx

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