

Photometric Test Report



Mosaico XL+

600W IP66 zoomable LED image projector with
CMY 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:

23570 lm

Peak candela output:

41787 cd

Light quality:

CRI: 65,7

Color temperature:

6346 K

PRODUCT NAME:

MOSAICO XL PLUS

MEASURAMENT CONDITIONS:

Beam angle:

Max Zoom

Target:

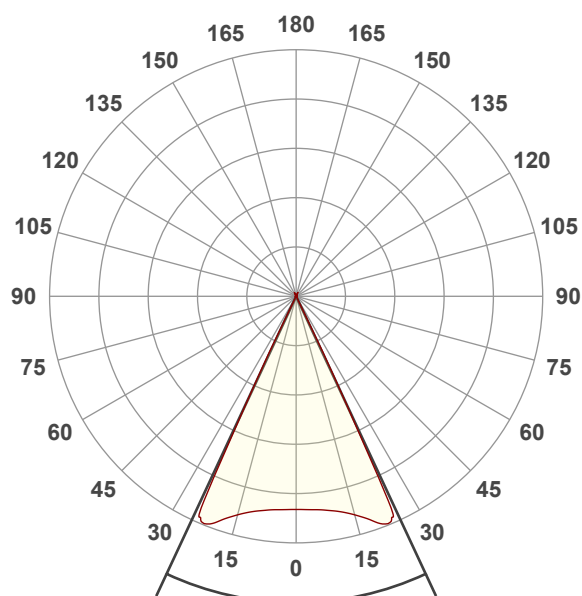
Full on

Operator:

Giuseppe della Peruta

Date and time:

07/08/2025 10:44:03

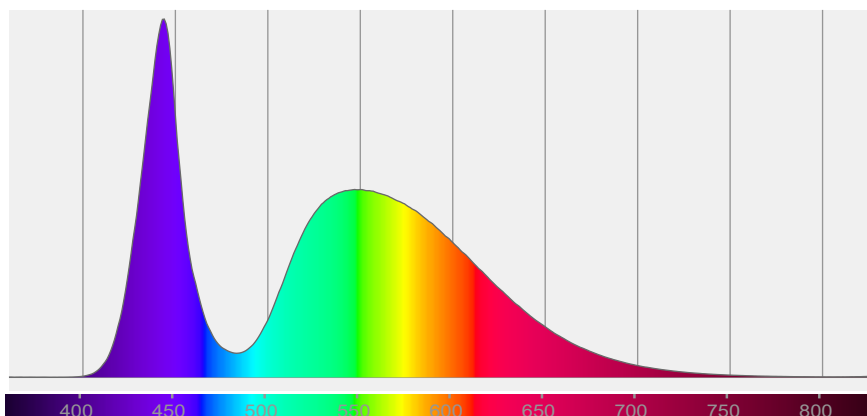


Beam angle 50%: 50°

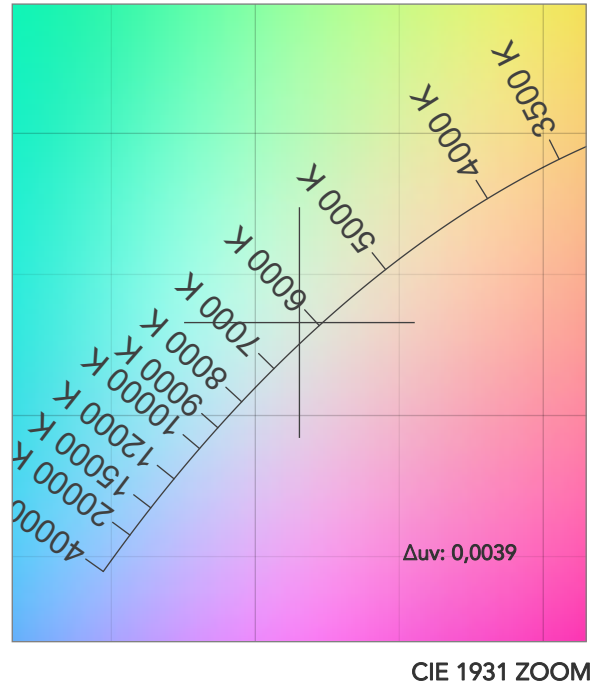
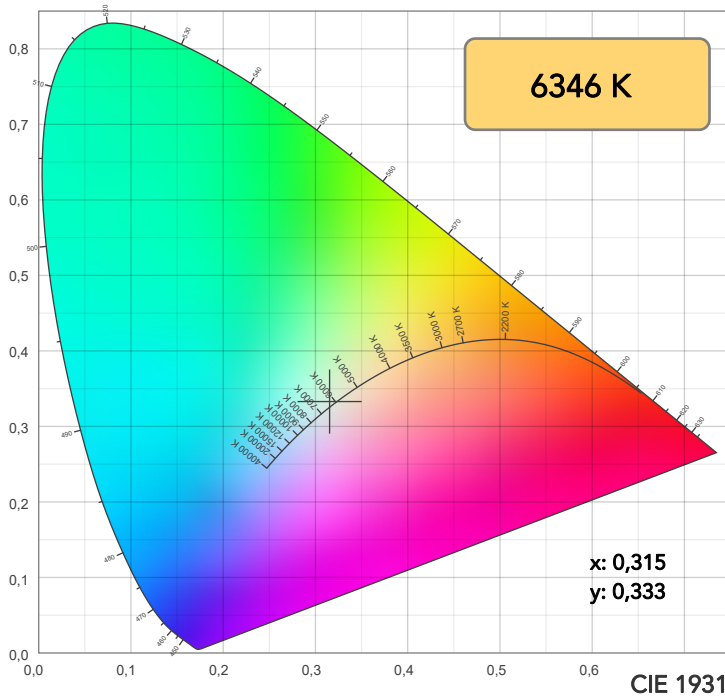
Field angle 10%: 52,1°

Cut off angle 2.5%: 52,5°

Spectra

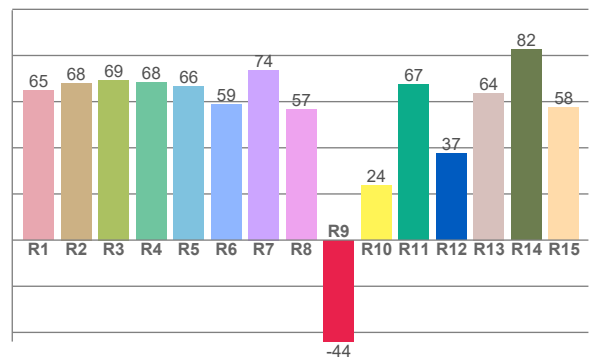
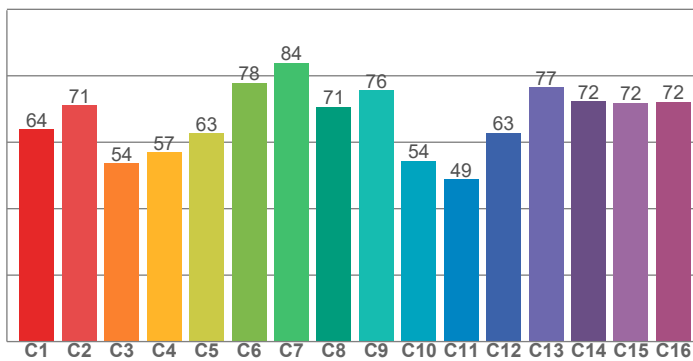


COLOR DETAILS



TM30: 66,4

CRI: 65,7 (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
64,8	68,1	69,4	68,2	66,5	58,7	73,7	56,5	-44,0	23,6	67,4	37,4	63,7	82,5	57,6

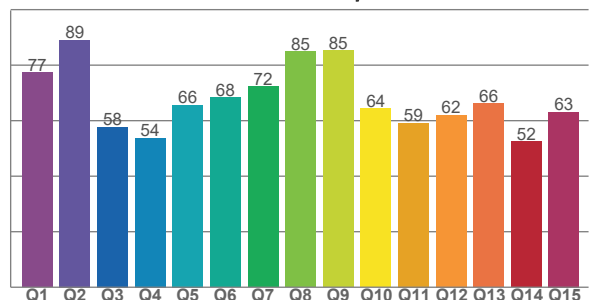
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
64,0	71,1	53,7	56,9	62,7	77,9	83,9	70,7	75,6	54,4	48,8	62,9	76,5	72,3	71,8	72,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77,4	89,0	57,7	53,8	65,6	68,3	72,3	84,9	85,2	64,4	59,1	62,1	66,1	52,5	63,1

CQS: 66,2



COLOR PARAMETERS

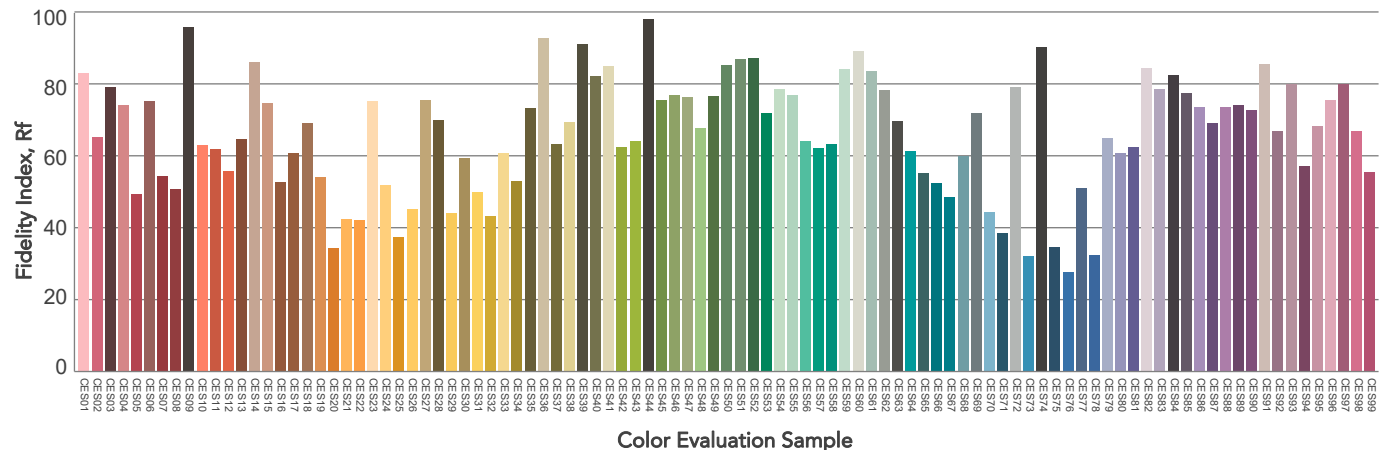
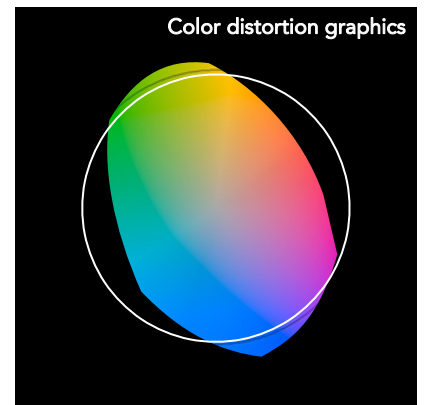
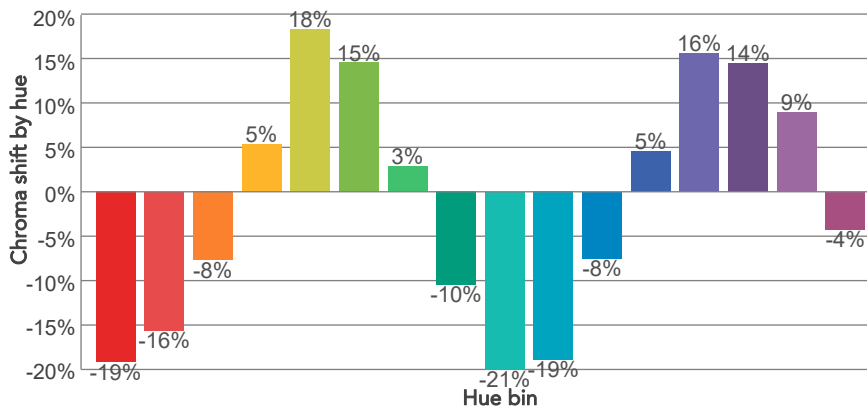
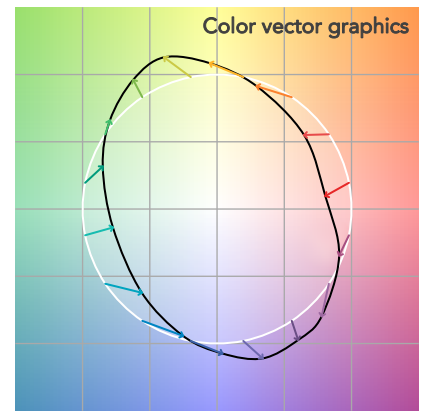
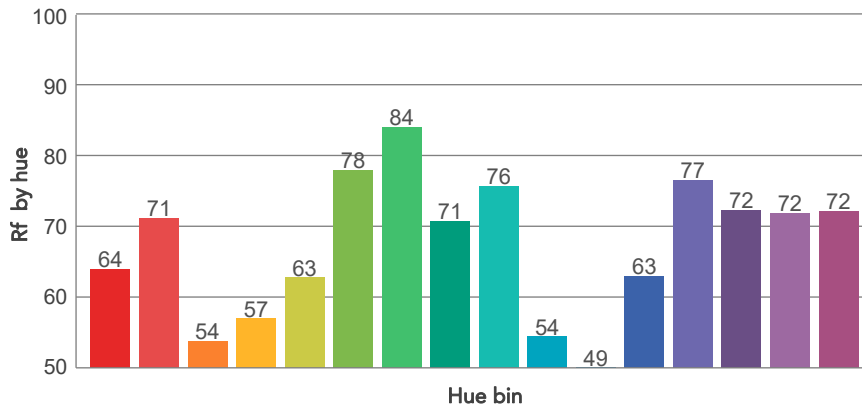
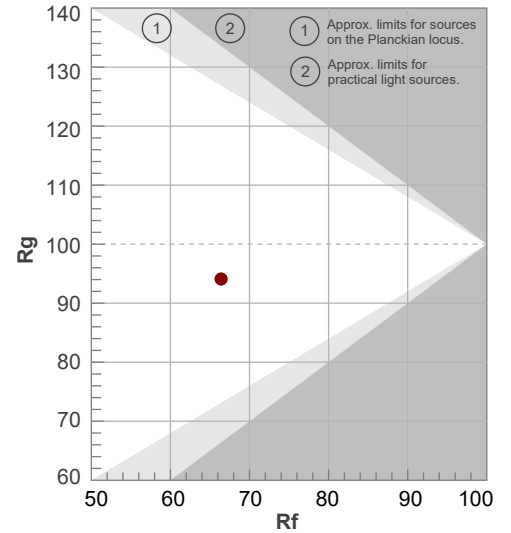
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6346 K	65,7	-44,0	66,4	94,1	66,2	42	0,315	0,333	0,0039

TM30 DETAILS

Rf 66,4
Fidelity index Rf

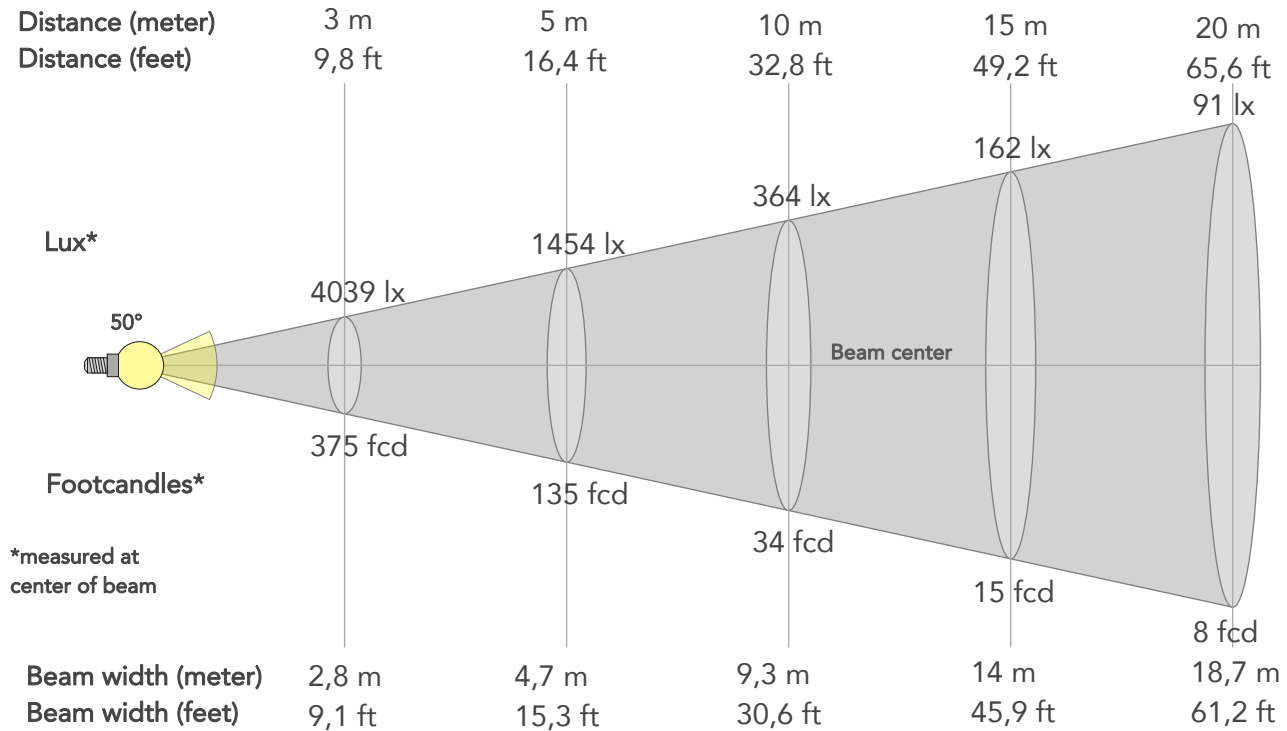
Rg 94,1
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	64	-19%	-6%
2	71	-16%	10%
3	54	-8%	26%
4	57	5%	26%
5	63	18%	17%
6	78	15%	-2%
7	84	3%	-11%
8	71	-10%	-14%
9	76	-21%	-2%
10	54	-19%	21%
11	49	-8%	31%
12	63	5%	25%
13	77	16%	12%
14	72	14%	-4%
15	72	9%	-23%
16	72	-4%	-16%



BEAM DETAILS

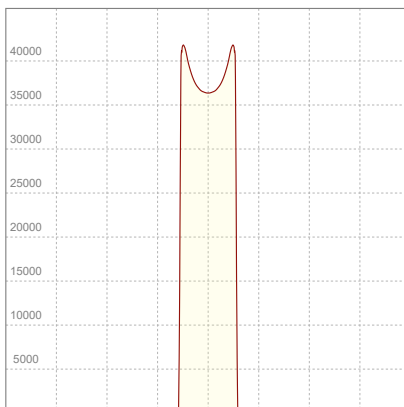
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
50°	52,1°	52,5°	99,7%	99,5%



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	36354lx	9089lx	4039lx	2272lx	1454lx	646lx	364lx	162lx	91lx	58lx	40lx	23lx	15lx
Footcand.	3377fcd	844fcd	375fcd	211fcd	135fcd	60fcd	34fcd	15fcd	8fcd	5fcd	4fcd	2fcd	1fcd
Beam wid.	0,9m	1,9m	2,8m	3,7m	4,7m	7m	9,3m	14m	18,7m	23,3m	28m	37,3m	46,7m
Beam wid.	3,1ft	6,2ft	9,1ft	12,2ft	15,3ft	23ft	30,6ft	45,9ft	61,2ft	76,5ft	91,8ft	122,5ft	153,1ft

LINEAR DISTRIBUTION DIAGRAM

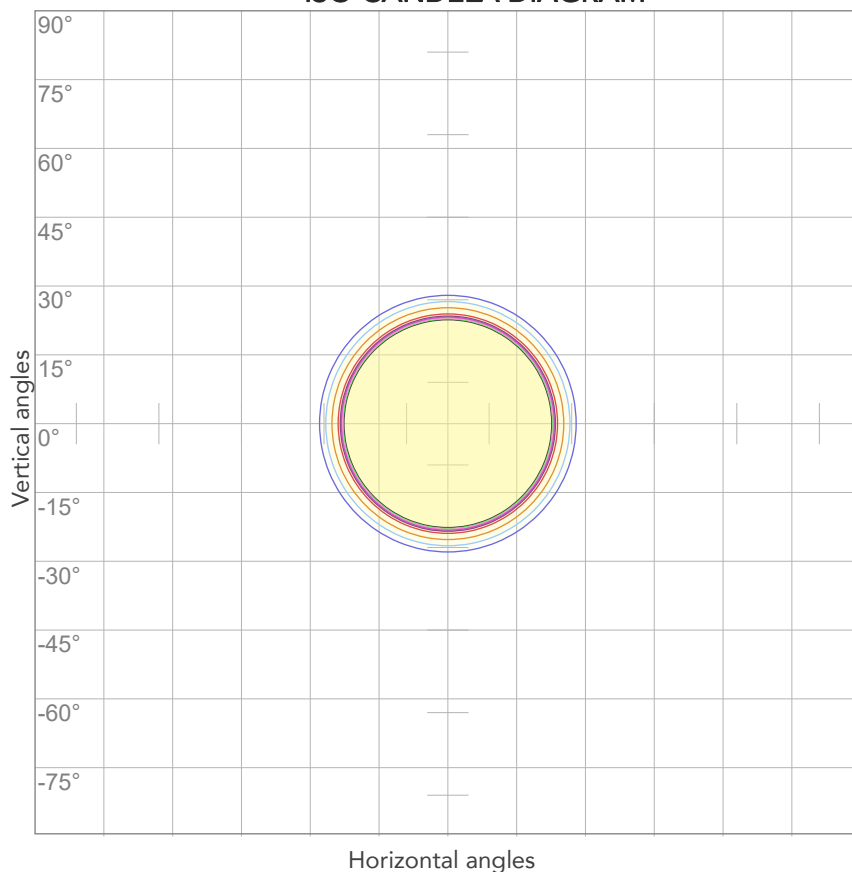


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	2,86A	642,5W	1,0	37lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



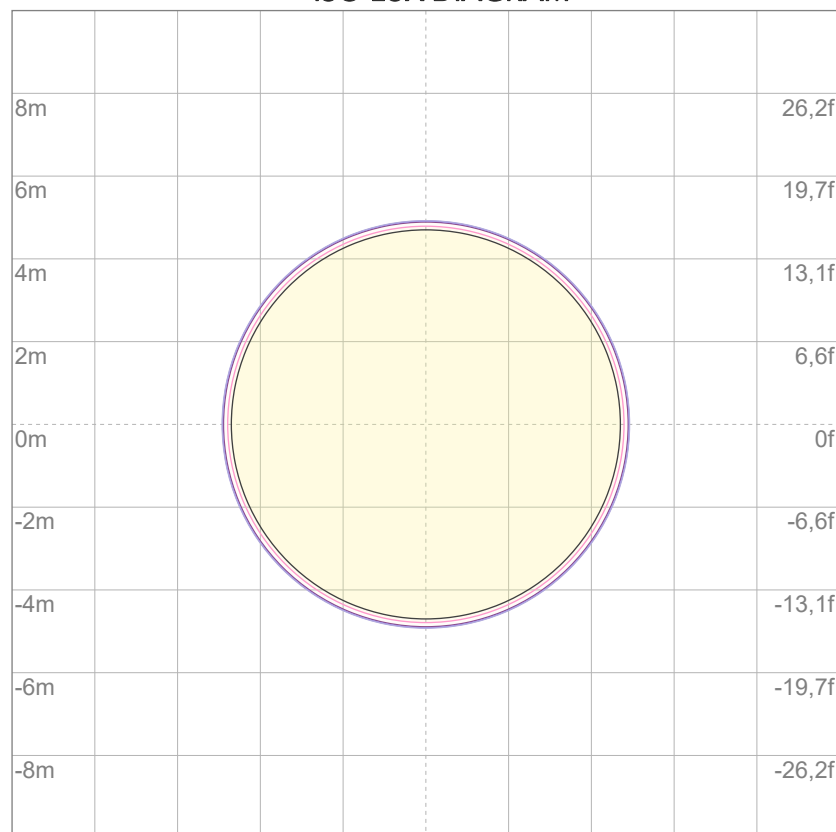
10%	3635 cd
20%	7271 cd
30%	10906 cd
40%	14542 cd
50%	18177 cd
60%	21812 cd
70%	25448 cd
80%	29083 cd

Conditions:

Number of c-planes: 2

Candela at center: 36354 cd

ISO LUX DIAGRAM



3%	10,9 lx
5%	18,2 lx
10%	36,4 lx
30%	109 lx
50%	182 lx

Conditions:

Number of c-planes: 2

Lux at center: 364 lx

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



Total lumen output:

22394 lm

Peak candela output:

589685 cd

Light quality:

CRI: 65,7

Color temperature:

6323 K

PRODUCT NAME:

MOSAICO XL PLUS

MEASURAMENT CONDITIONS:

Beam angle:

Mid Zoom

Target:

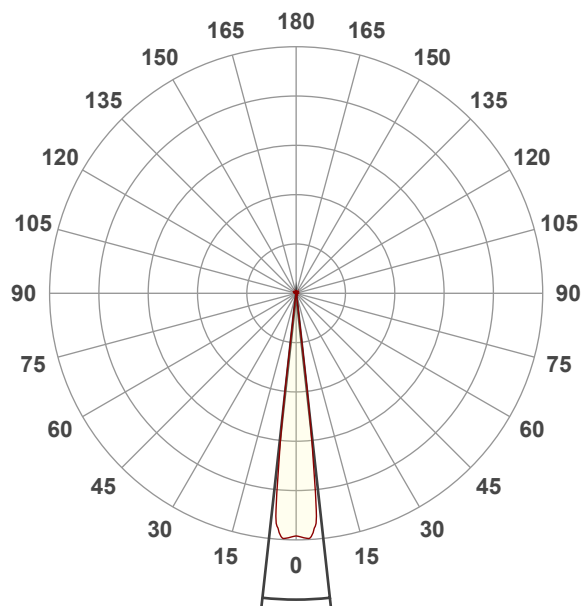
Full on

Operator:

Giuseppe della Peruta

Date and time:

07/08/2025 10:40:46

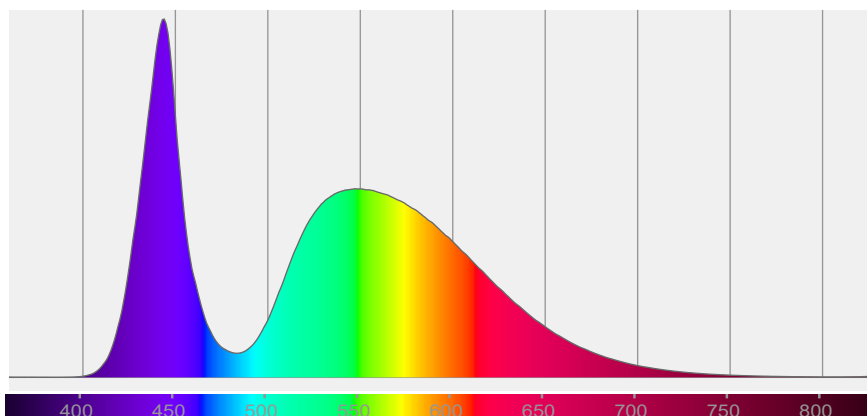


Beam angle 50%: 12,6°

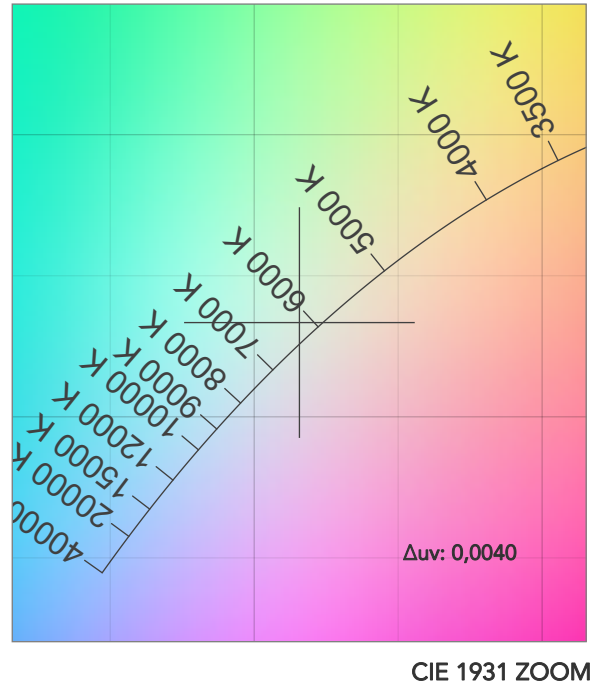
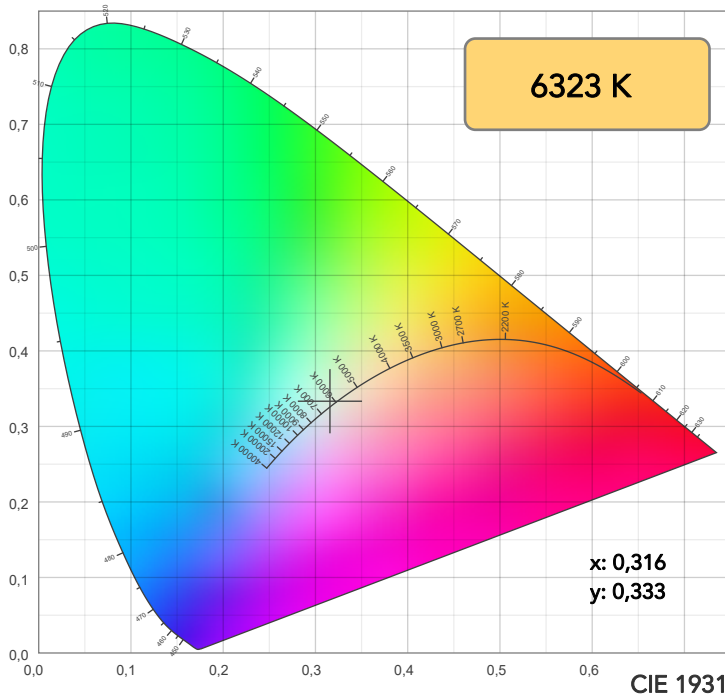
Field angle 10%: 14,4°

Cut off angle 2.5%: 15,6°

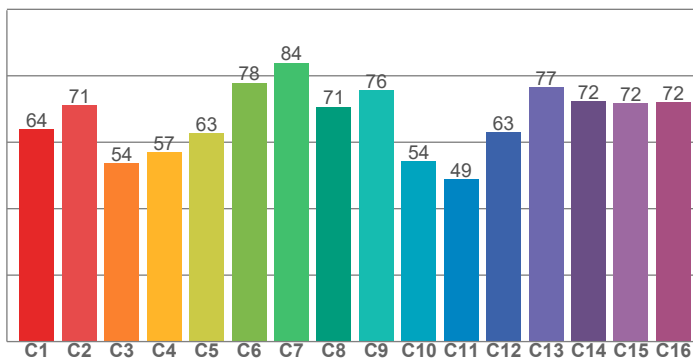
Spectra



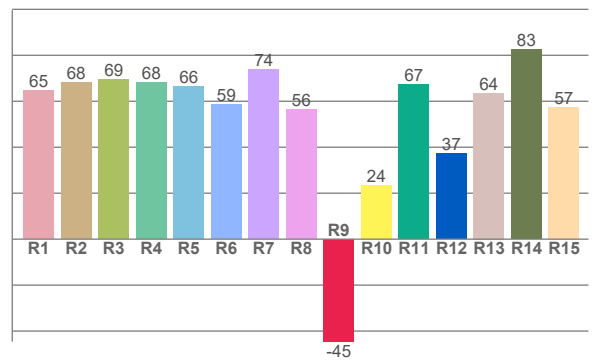
COLOR DETAILS



TM30: 66,4



CRI: 65,7 (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
64,7	68,0	69,4	68,2	66,3	58,7	73,7	56,3	-44,6	23,6	67,3	37,3	63,6	82,5	57,5

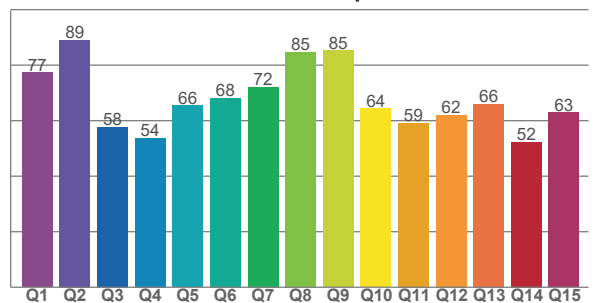
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
63,8	71,1	53,6	56,9	62,7	77,9	83,9	70,6	75,6	54,3	48,8	62,9	76,5	72,3	71,7	72,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77,3	89,1	57,6	53,7	65,5	68,2	72,2	84,8	85,2	64,4	59,1	62,0	66,1	52,3	62,9

CQS: 66,1



COLOR PARAMETERS

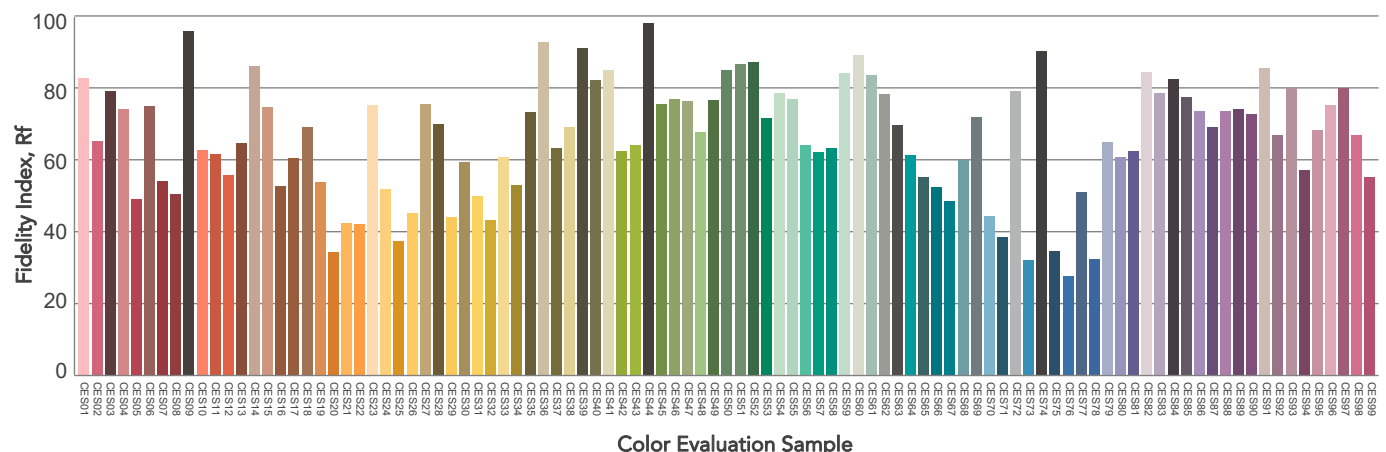
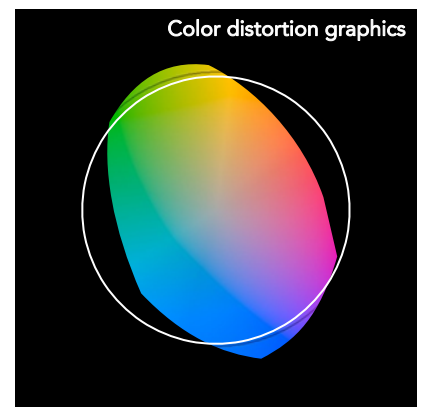
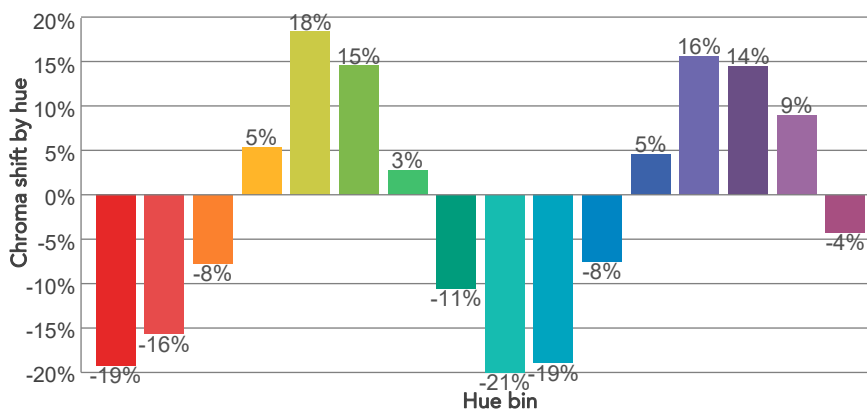
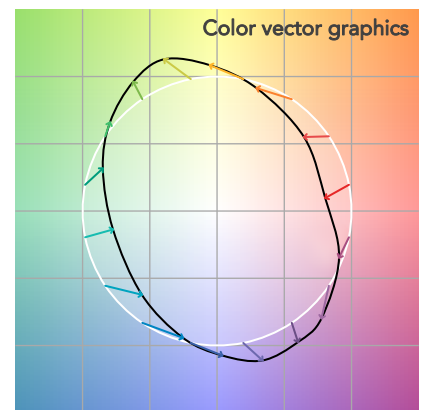
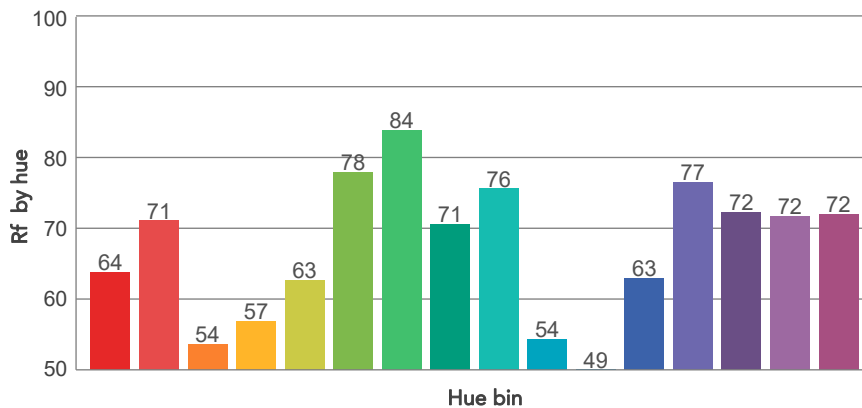
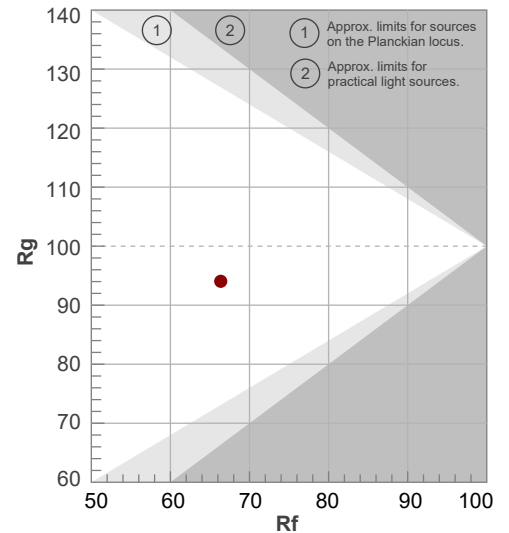
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6323 K	65,7	-44,6	66,4	94,0	66,1	42	0,316	0,333	0,0040

TM30 DETAILS

Rf 66,4
Fidelity index Rf

Rg 94,0
Gammut index

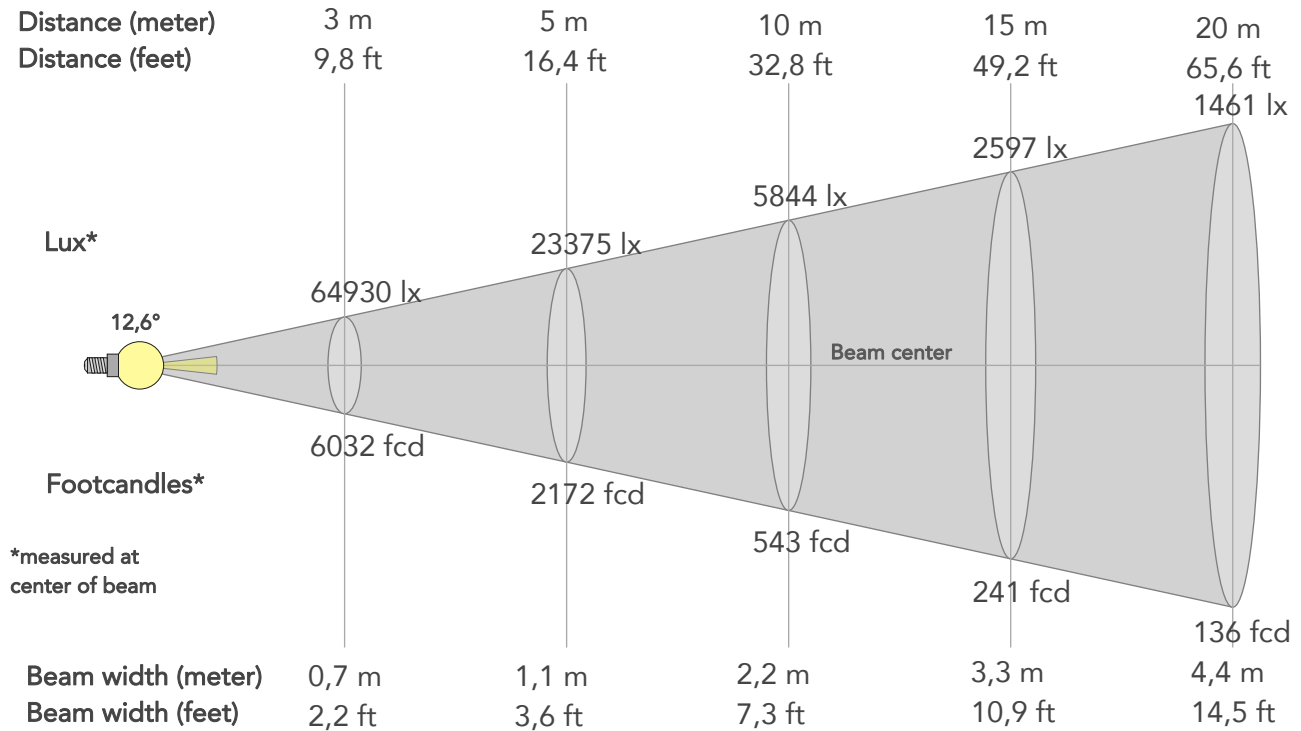
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	64	-19%	-6%
2	71	-16%	10%
3	54	-8%	26%
4	57	5%	26%
5	63	18%	17%
6	78	15%	-2%
7	84	3%	-11%
8	71	-11%	-14%
9	76	-21%	-2%
10	54	-19%	21%
11	49	-8%	31%
12	63	5%	25%
13	77	16%	12%
14	72	14%	-4%
15	72	9%	-23%
16	72	-4%	-16%



BEAM DETAILS



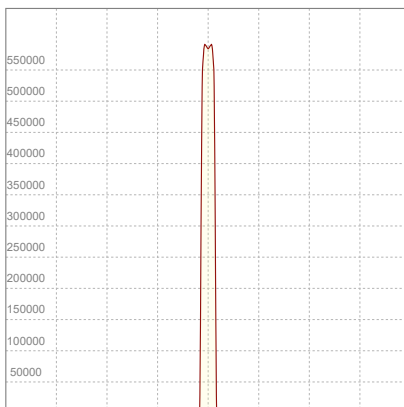
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,6°	14,4°	15,6°	99,3%	99,2%



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	584373lx	146093lx	64930lx	36523lx	23375lx	10389lx	5844lx	2597lx	1461lx	935lx	649lx	365lx	234lx
Footcand.	54290fcd	13572fcd	6032fcd	3393fcd	2172fcd	965fcd	543fcd	241fcd	136fcd	87fcd	60fcd	34fcd	22fcd
Beam wid.	0,2m	0,4m	0,7m	0,9m	1,1m	1,7m	2,2m	3,3m	4,4m	5,5m	6,6m	8,9m	11,1m
Beam wid.	0,7ft	1,5ft	2,2ft	2,9ft	3,6ft	5,4ft	7,3ft	10,9ft	14,5ft	18,2ft	21,8ft	29,1ft	36,3ft

LINEAR DISTRIBUTION DIAGRAM

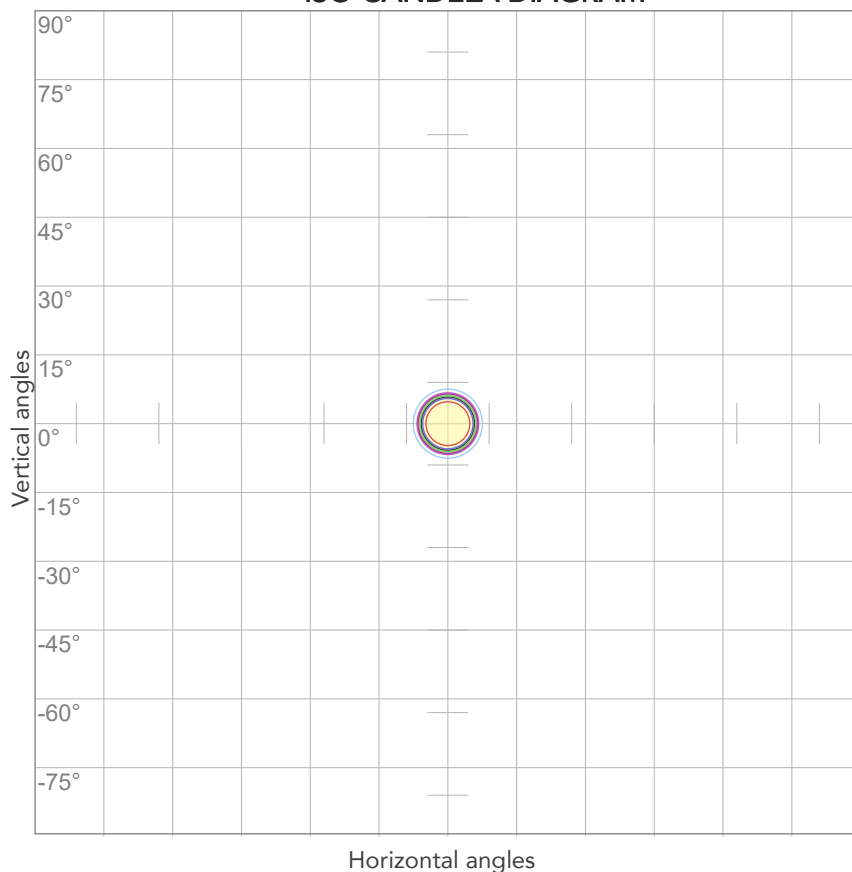


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	2,86A	642,5W	1,0	35lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



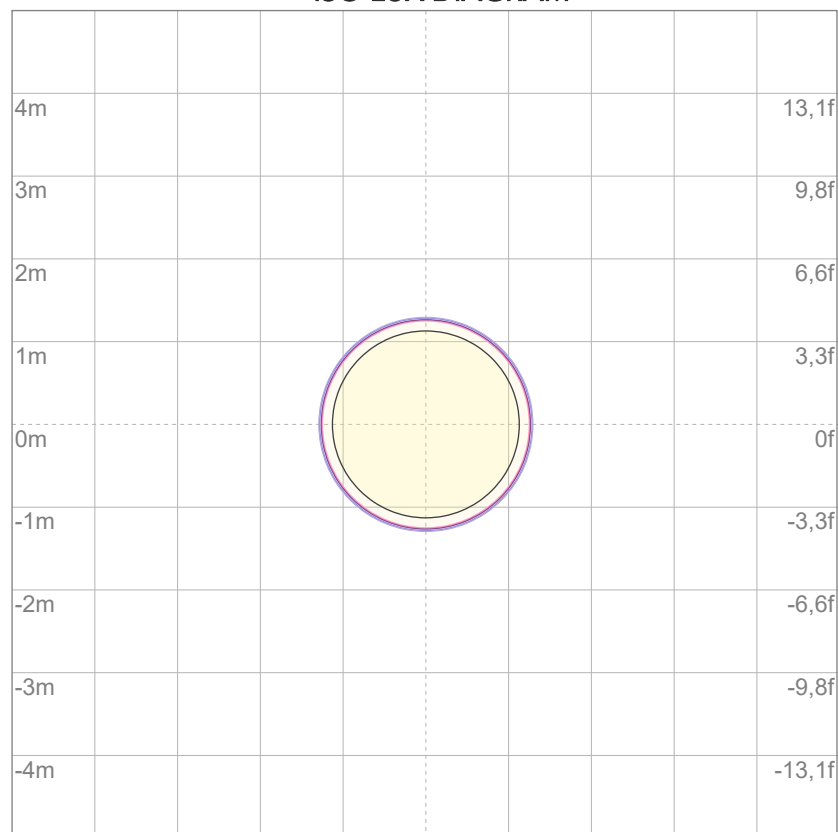
10%	58437 cd
20%	116875 cd
30%	175312 cd
40%	233749 cd
50%	292186 cd
60%	350624 cd
70%	409061 cd
80%	467498 cd

Conditions:

Number of c-planes: 2

Candela at center: 584373 cd

ISO LUX DIAGRAM



3%	175 lx
5%	292 lx
10%	584 lx
30%	1753 lx
50%	2922 lx

Conditions:

Number of c-planes: 2

Lux at center: 5844 lx

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



Total lumen output:

17404 lm

Peak candela output:

1499048 cd

Light quality:

CRI: 65,8

Color temperature:

6271 K

PRODUCT NAME:

MOSAICO XL PLUS

MEASURAMENT CONDITIONS:

Beam angle:

Min Zoom

Target:

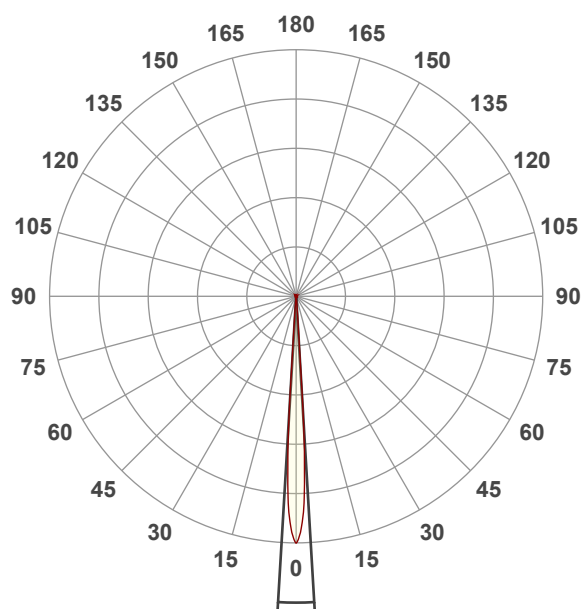
Full on

Operator:

Giuseppe della Peruta

Date and time:

07/08/2025 10:37:31

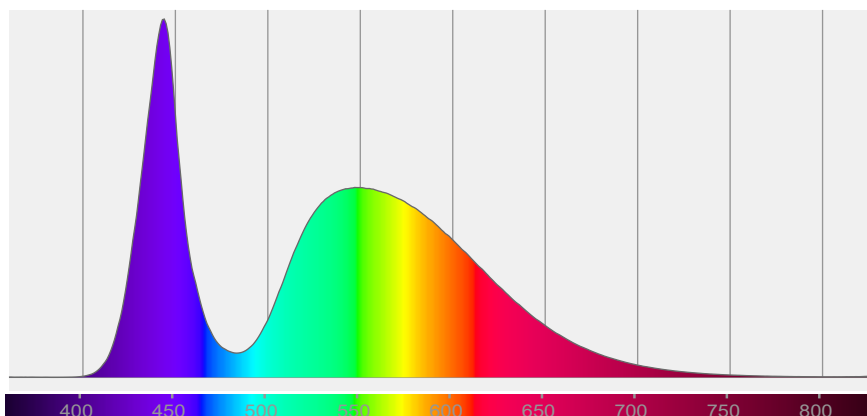


Beam angle 50%: 6,8°

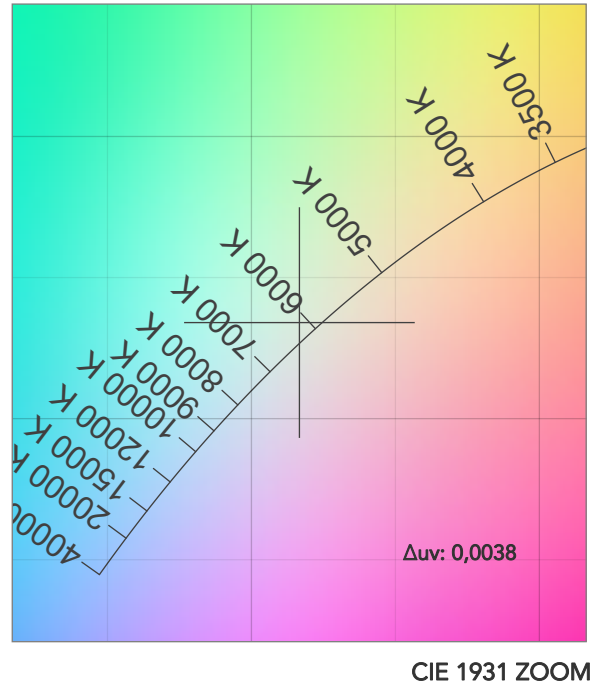
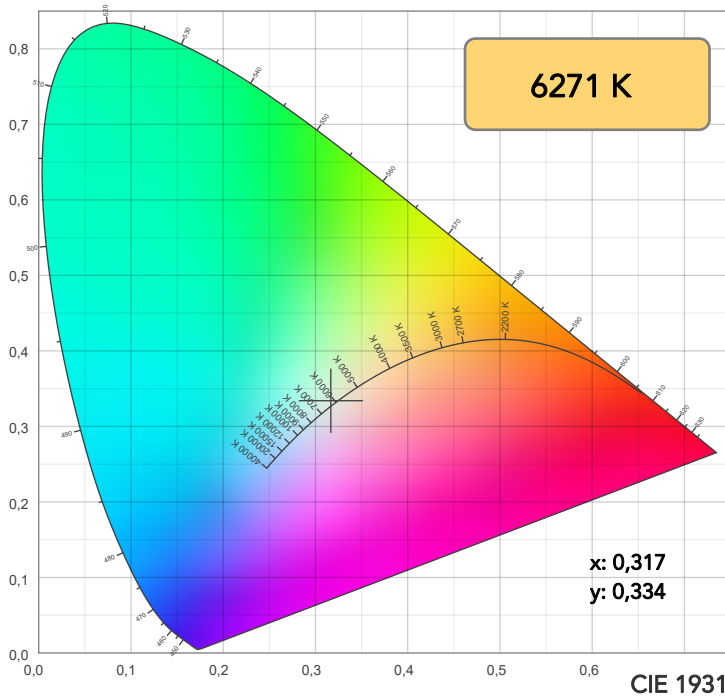
Field angle 10%: 8,5°

Cut off angle 2.5%: 10°

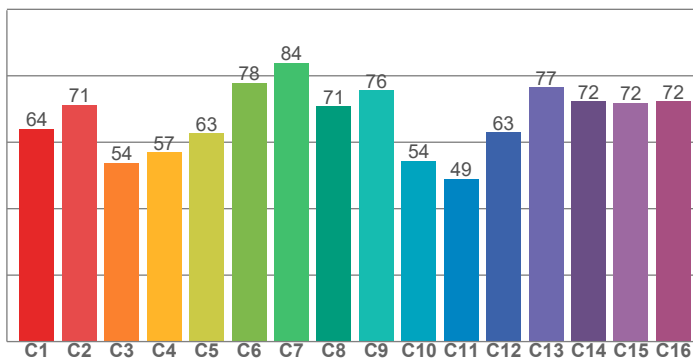
Spectra



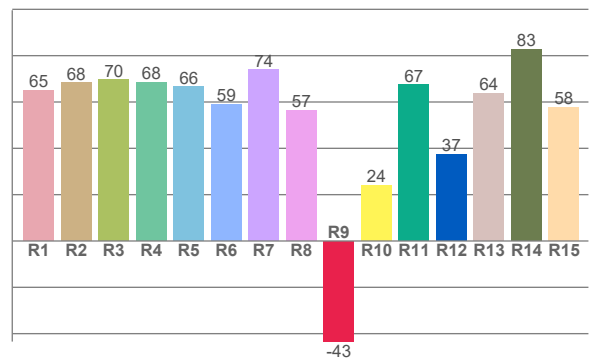
COLOR DETAILS



TM30: 66,5



CRI: 65,8 (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
64,9	68,2	69,6	68,3	66,5	58,8	73,8	56,5	-43,4	24,0	67,4	37,4	63,9	82,6	57,8

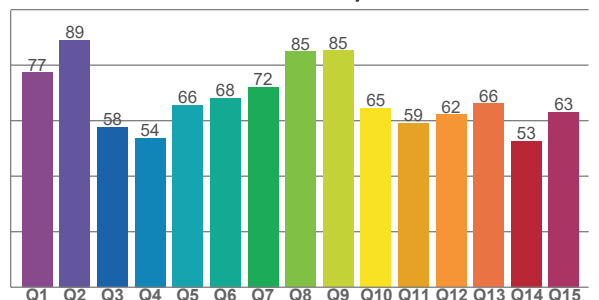
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
64,1	71,2	53,8	57,0	62,7	77,9	83,9	70,8	75,7	54,5	49,0	63,0	76,6	72,3	71,9	72,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77,3	89,1	57,6	53,8	65,6	68,2	72,2	84,8	85,2	64,5	59,2	62,2	66,2	52,6	63,1

CQS: 66,3



COLOR PARAMETERS

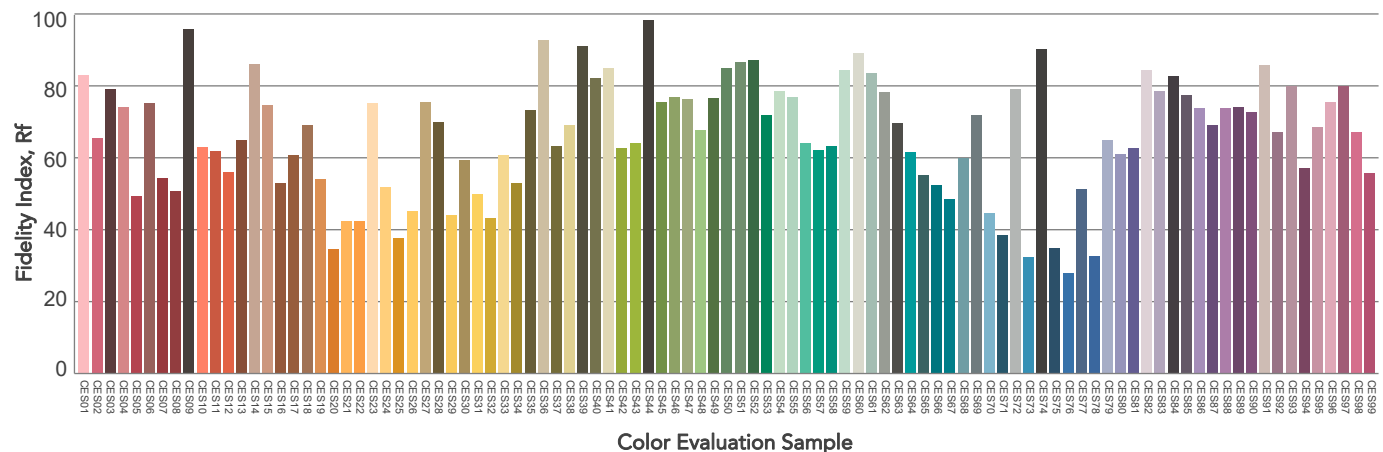
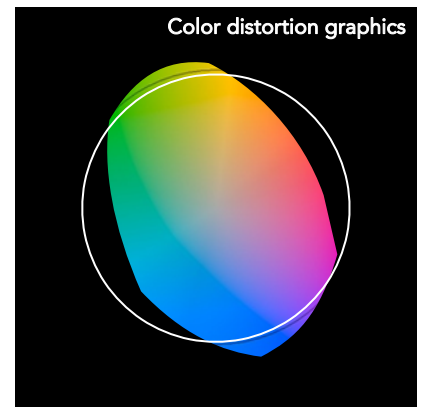
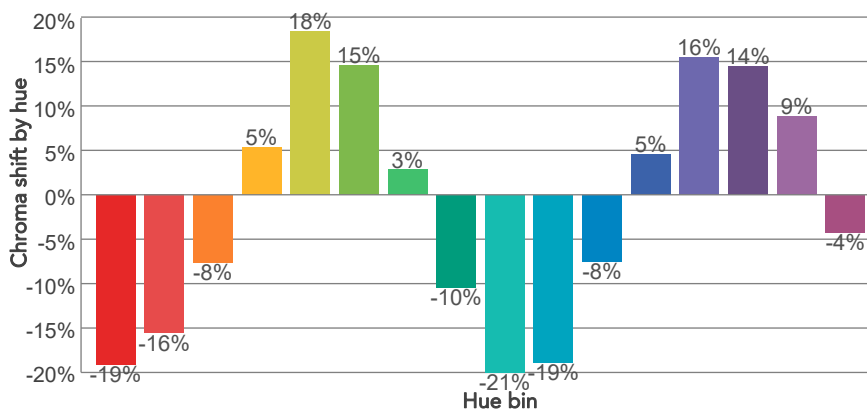
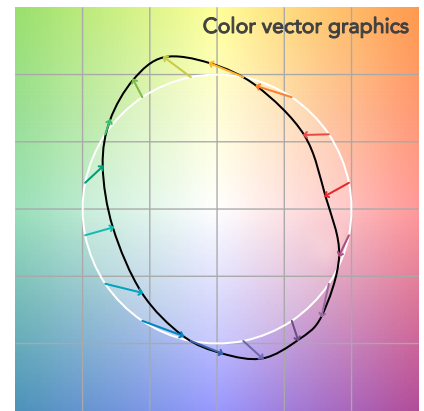
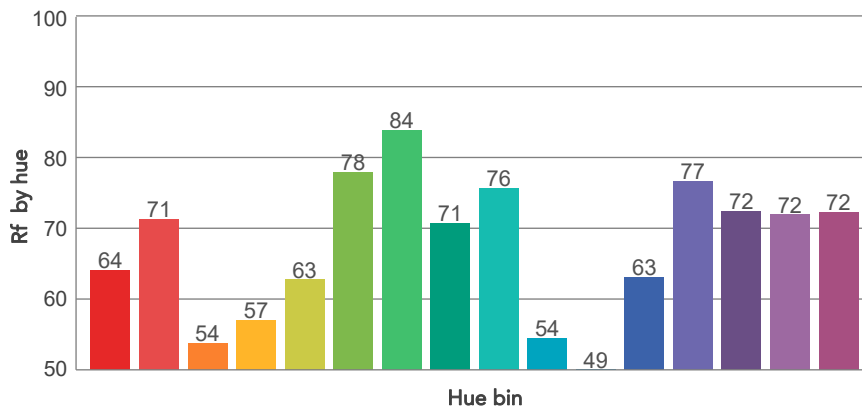
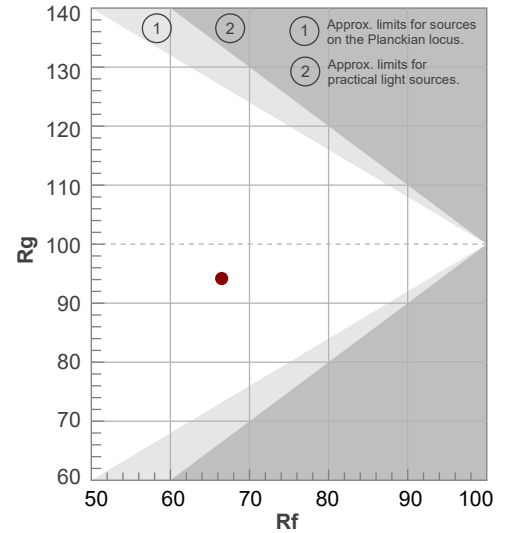
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6271 K	65,8	-43,4	66,5	94,2	66,3	42	0,317	0,334	0,0038

TM30 DETAILS

Rf 66,5
Fidelity index Rf

Rg 94,2
Gammut index

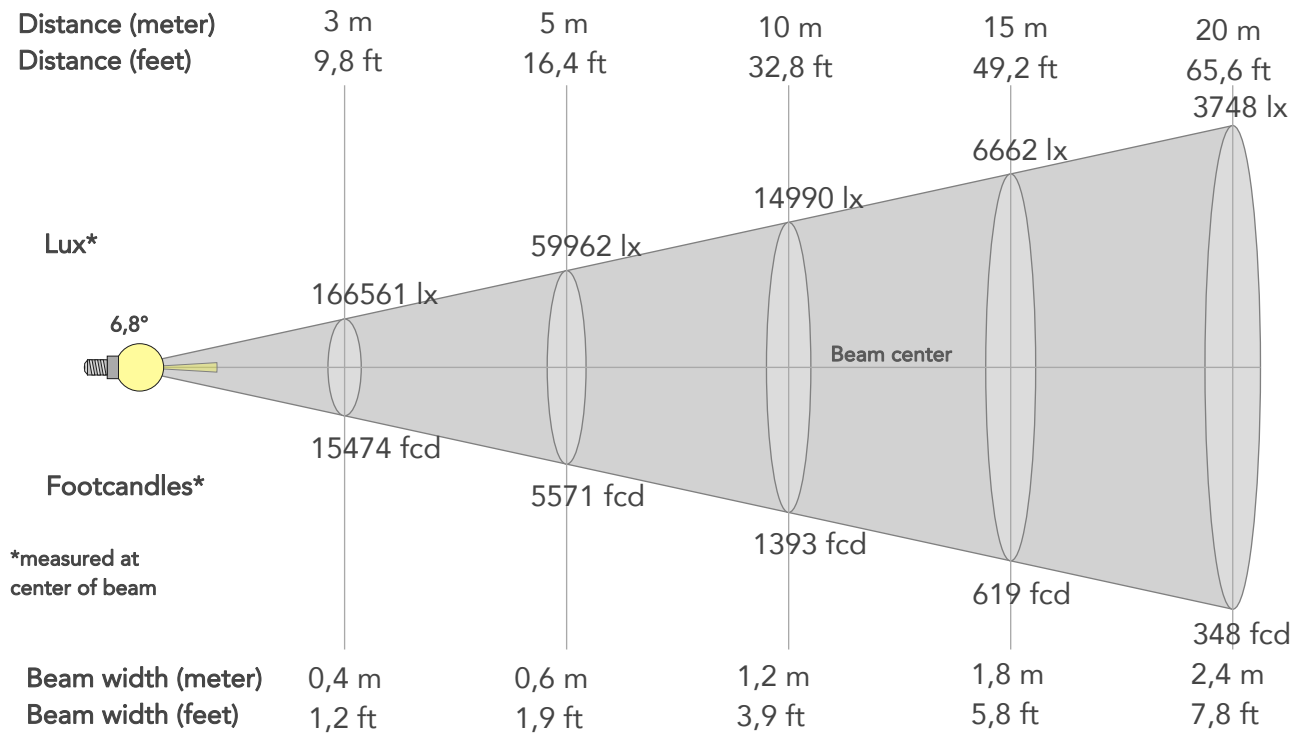
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	64	-19%	-6%
2	71	-16%	10%
3	54	-8%	26%
4	57	5%	26%
5	63	18%	17%
6	78	15%	-2%
7	84	3%	-11%
8	71	-10%	-14%
9	76	-21%	-2%
10	54	-19%	21%
11	49	-8%	31%
12	63	5%	25%
13	77	16%	11%
14	72	14%	-4%
15	72	9%	-23%
16	72	-4%	-16%



BEAM DETAILS



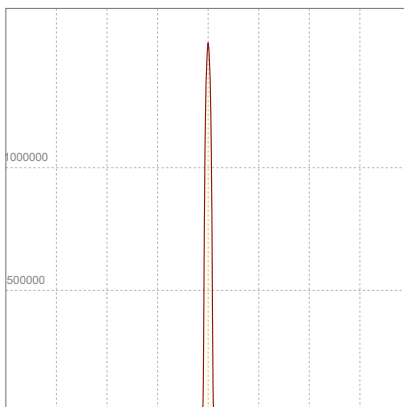
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
6,8°	8,5°	10°	94,8%	93,5%



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	1499047lx	374762lx	166561lx	93690lx	59962lx	26650lx	14990lx	6662lx	3748lx	2398lx	1666lx	937lx	600lx
Footcand.	139266fcd	34817fcd	15474fcd	8704fcd	5571fcd	2476fcd	1393fcd	619fcd	348fcd	223fcd	155fcd	87fcd	56fcd
Beam wid.	0,1m	0,2m	0,4m	0,5m	0,6m	0,9m	1,2m	1,8m	2,4m	3m	3,5m	4,7m	5,9m
Beam wid.	0,4ft	0,8ft	1,2ft	1,5ft	1,9ft	2,9ft	3,9ft	5,8ft	7,8ft	9,7ft	11,6ft	15,5ft	19,4ft

LINEAR DISTRIBUTION DIAGRAM

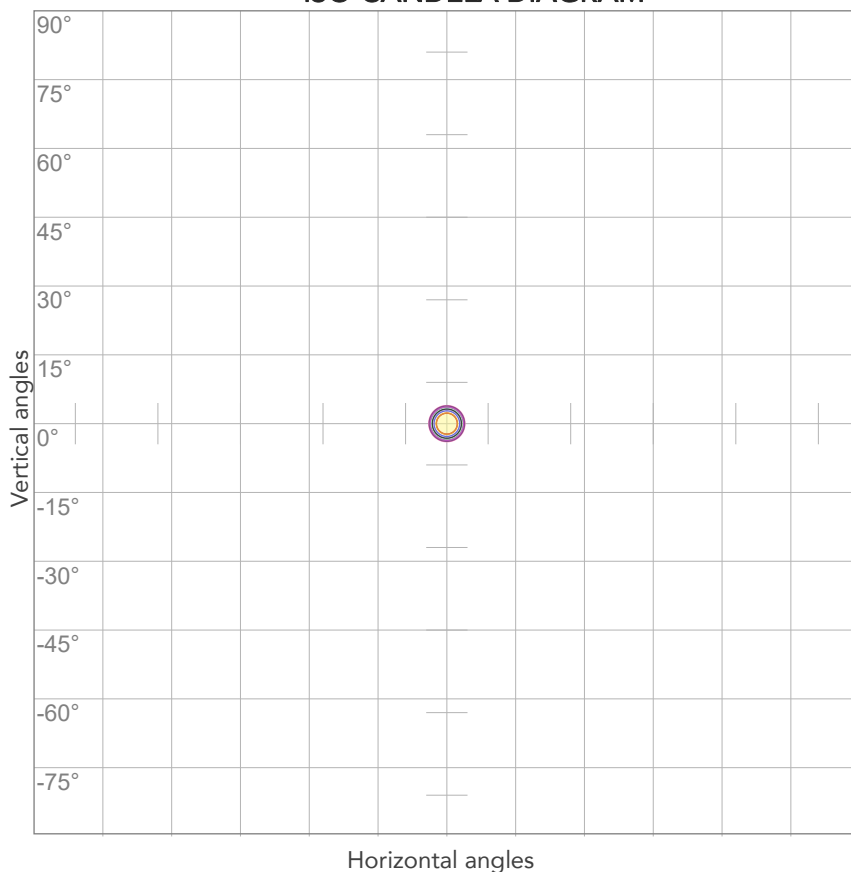


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	2,86A	642,1W	1,0	27lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



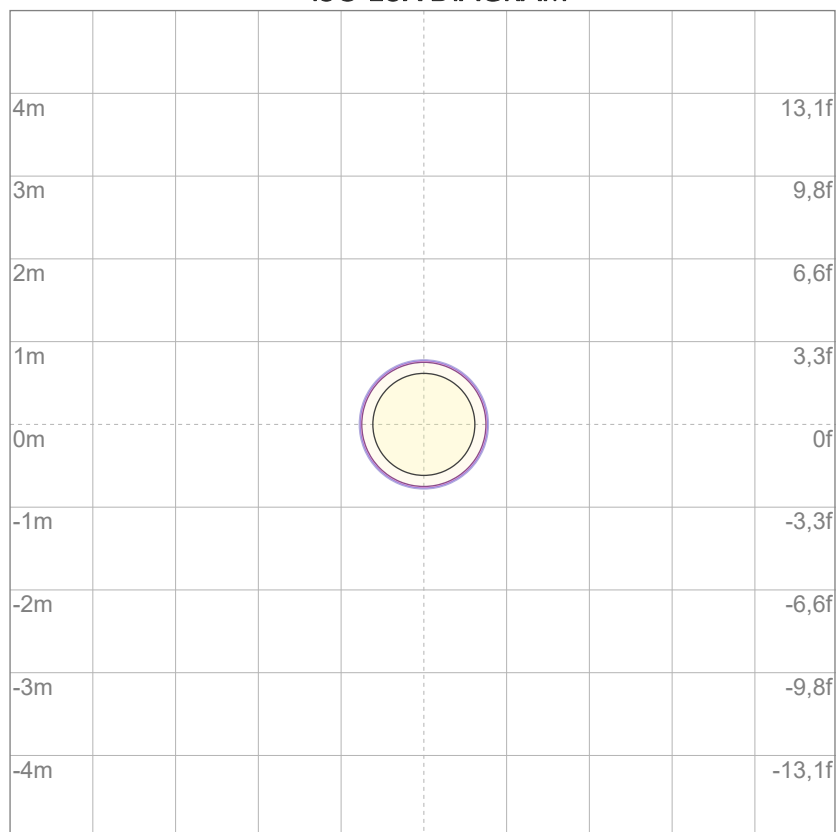
10%	149905 cd
20%	299809 cd
30%	449714 cd
40%	599619 cd
50%	749524 cd
60%	899428 cd
70%	1049333 cd
80%	1199238 cd

Conditions:

Number of c-planes: 2

Candela at center: 1499047 cd

ISO LUX DIAGRAM



3%	450 lx
5%	750 lx
10%	1499 lx
30%	4497 lx
50%	7495 lx

Conditions:

Number of c-planes: 2

Lux at center: 15,0K lx

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