

Photometric Test Report



ECLDISPLAYCASVW

PROFILE LENS 50°

35W variable white LED gallery light,
from 2700K to 5600K
(CASAMBI control on-board)

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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:

1181 lm

Peak candela output:

2407 cd

Light quality:

CRI: 96,9

Color temperature:

4321 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 50°

Target:

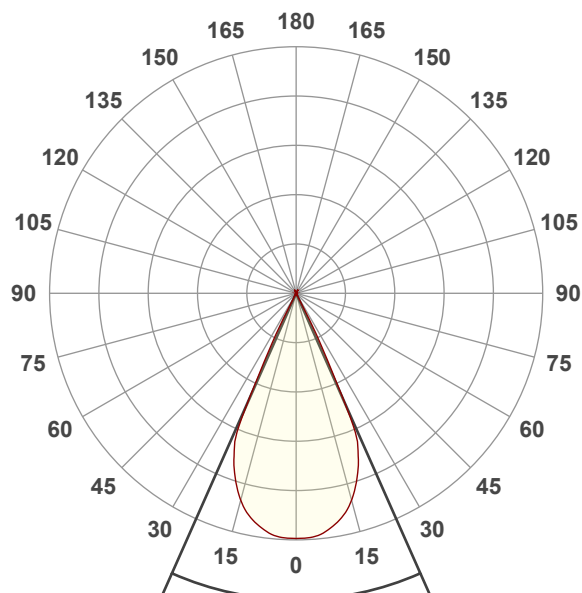
Full On

Operator:

Salvatore Giglio

Date and time:

05/02/2024 10:14:12

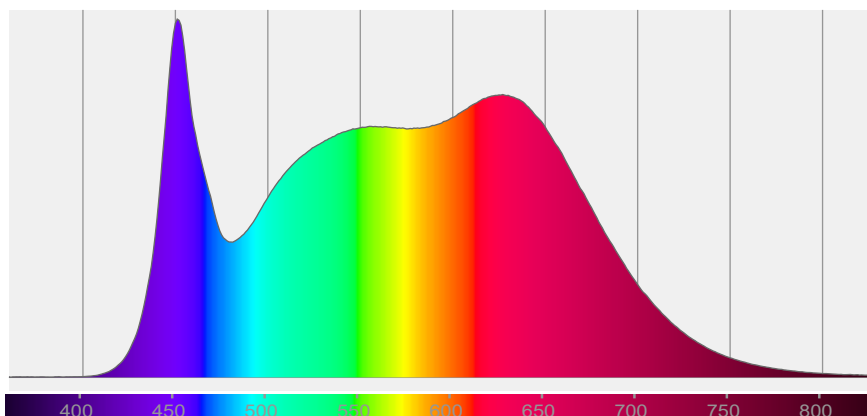


Beam angle 50%: 47,8°

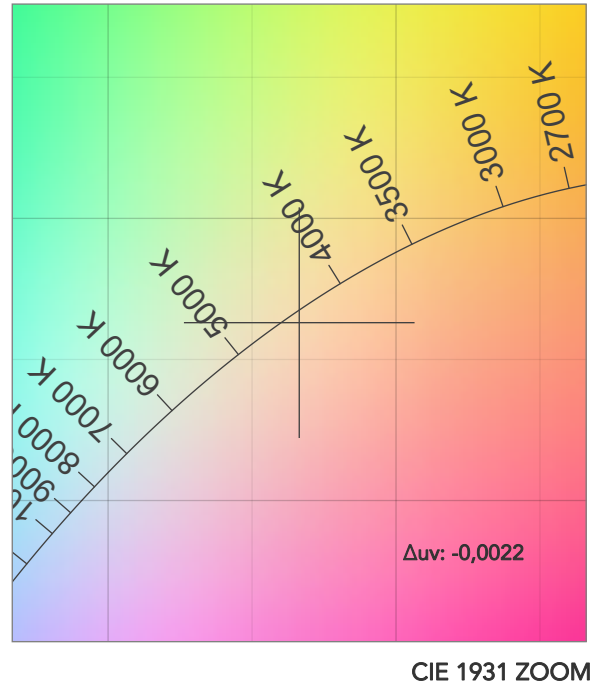
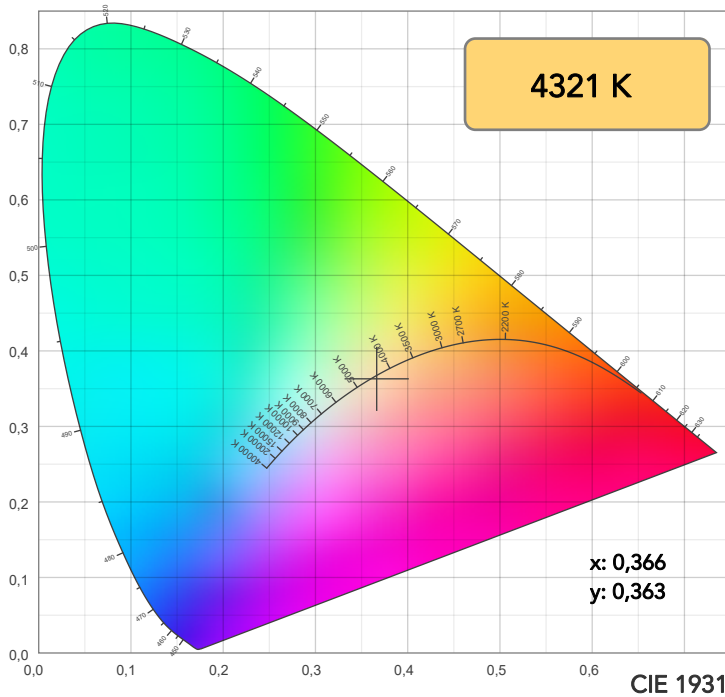
Field angle 10%: 54,4°

Cut off angle 2.5%: 56,1°

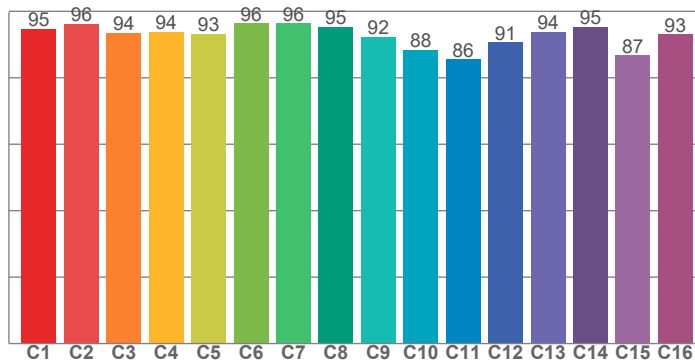
Spectra



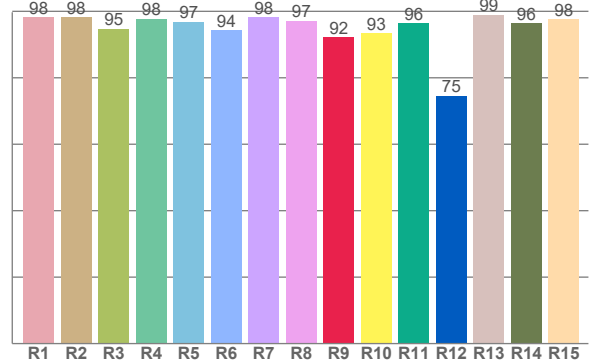
COLOR DETAILS



TM30: 92,7



CRI: 96,9 (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
98,3	98,2	94,8	97,7	96,8	94,3	98,2	97,1	92,2	93,4	96,5	74,6	99,0	96,5	97,7

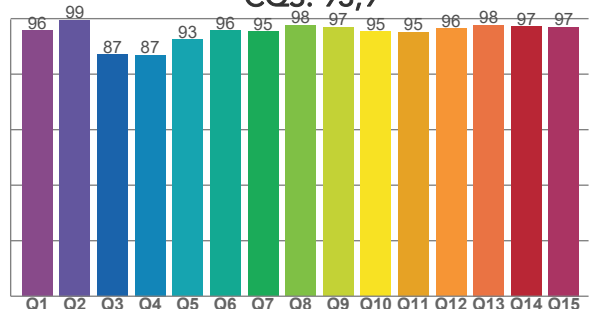
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,2	93,5	93,7	93,3	96,3	96,3	95,3	92,4	88,5	85,5	90,7	93,8	95,3	86,8	93,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,8	99,5	87,0	86,9	92,5	95,6	95,4	97,6	96,9	95,3	95,1	96,5	97,6	97,2	96,9

CQS: 93,9



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
4321 K	96,9	92,2	92,7	101,1	93,9	97	0,366	0,363	-0,0022

TM30 DETAILS

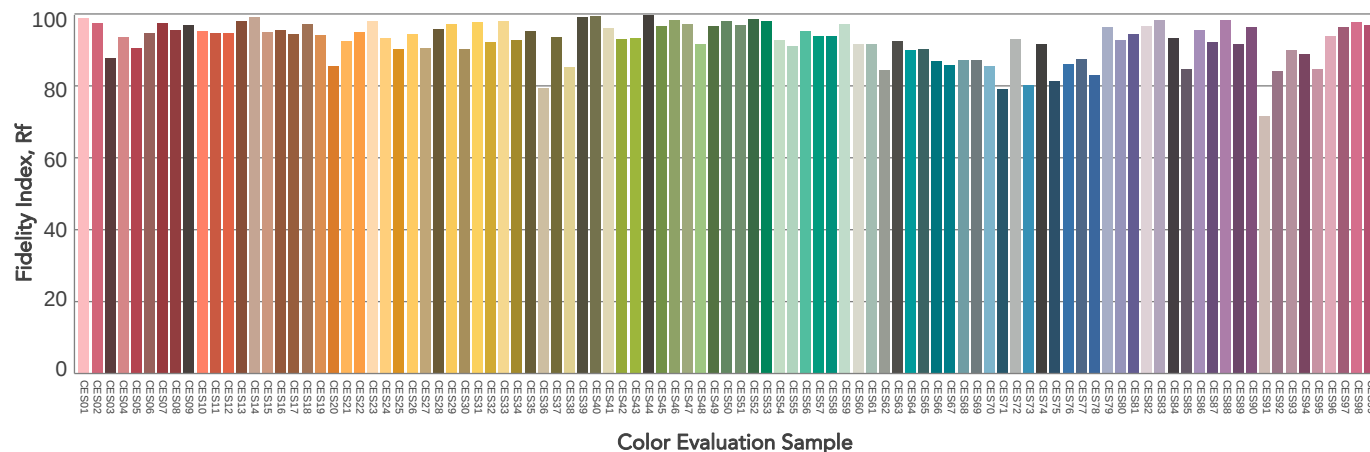
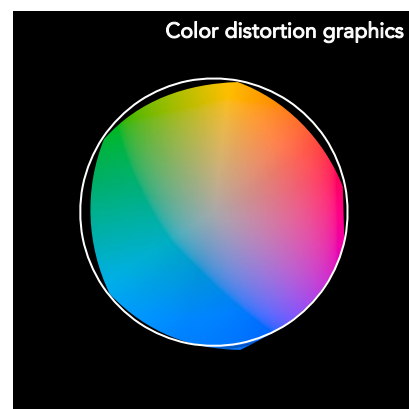
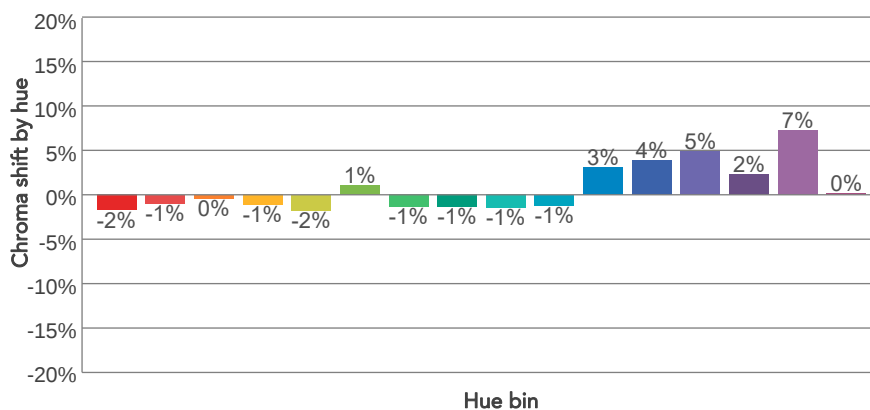
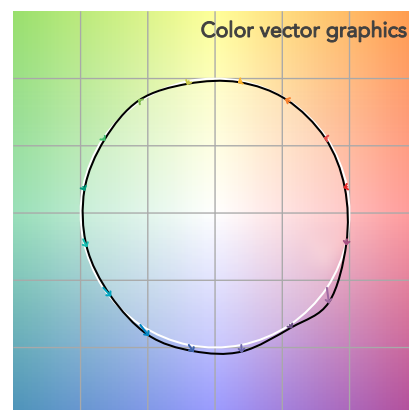
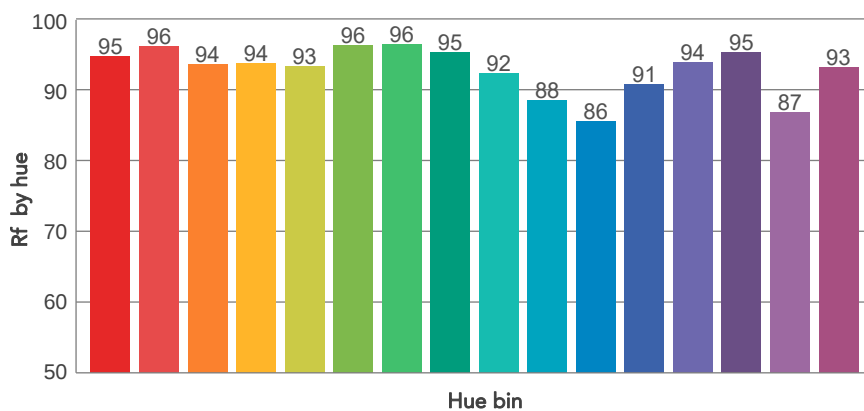
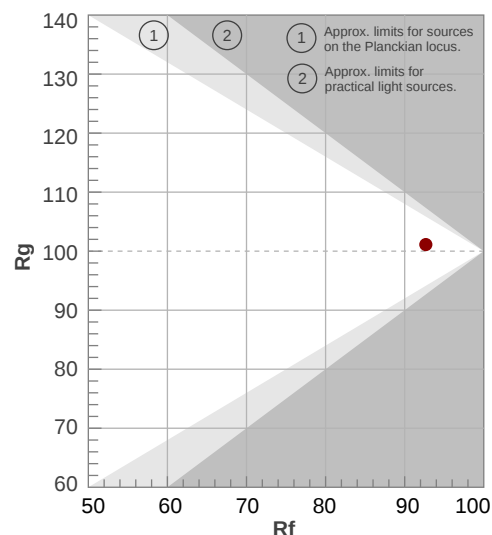
Rf 92,7

Fidelity index Rf

Rg 101,1

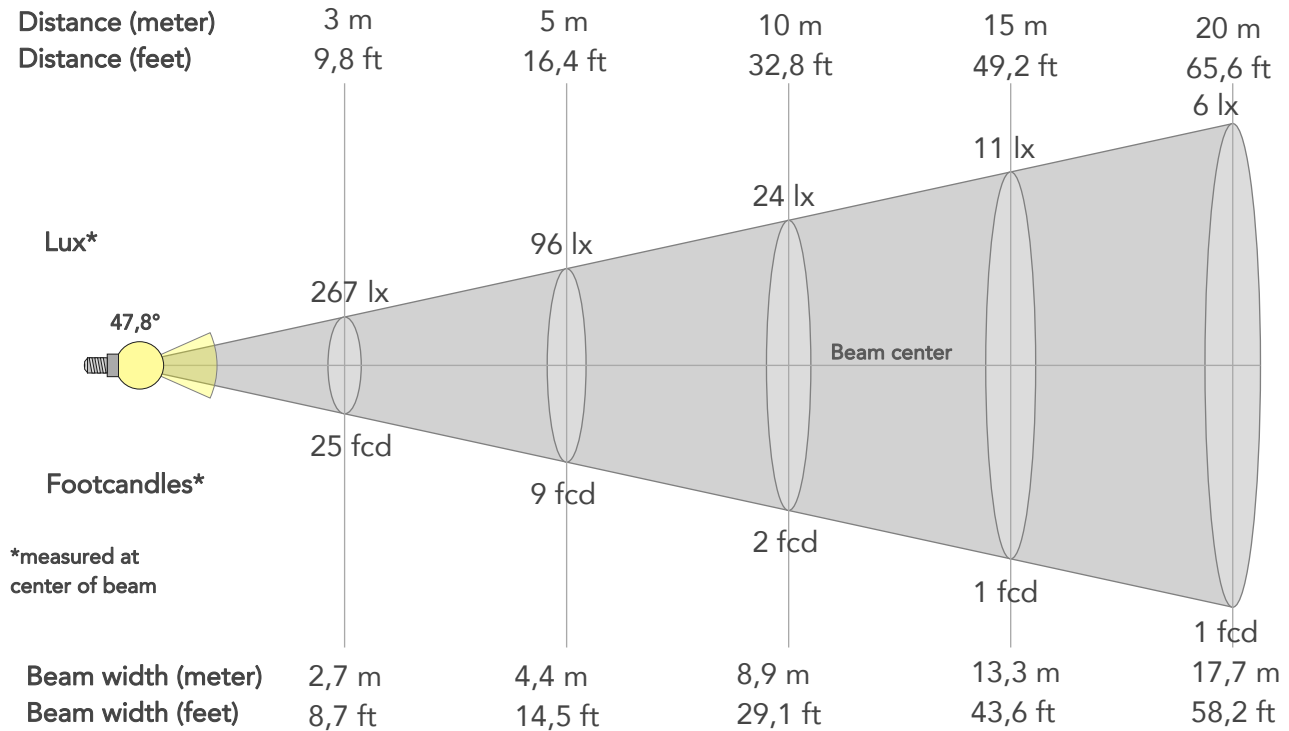
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	0%
2	96	-1%	1%
3	94	0%	3%
4	94	-1%	2%
5	93	-2%	1%
6	96	1%	0%
7	96	-1%	0%
8	95	-1%	2%
9	92	-1%	5%
10	88	-1%	8%
11	86	3%	9%
12	91	4%	4%
13	94	5%	-1%
14	95	2%	0%
15	87	7%	-8%
16	93	0%	-4%



BEAM DETAILS

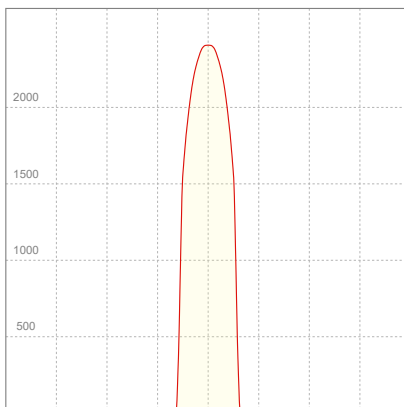
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,8°	54,4°	56,1°	99,1%	98,8%



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	2407lx	602lx	267lx	150lx	96lx	43lx	24lx	11lx	6lx	4lx	3lx	2lx	1lx
Footcand.	224fcd	56fcd	25fcd	14fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,8m	2,7m	3,5m	4,4m	6,7m	8,9m	13,3m	17,7m	22,2m	26,6m	35,5m	44,4m
Beam wid.	2,9ft	5,9ft	8,7ft	11,6ft	14,5ft	21,8ft	29,1ft	43,6ft	58,2ft	72,7ft	87,3ft	116,4ft	145,5ft

LINEAR DISTRIBUTION DIAGRAM

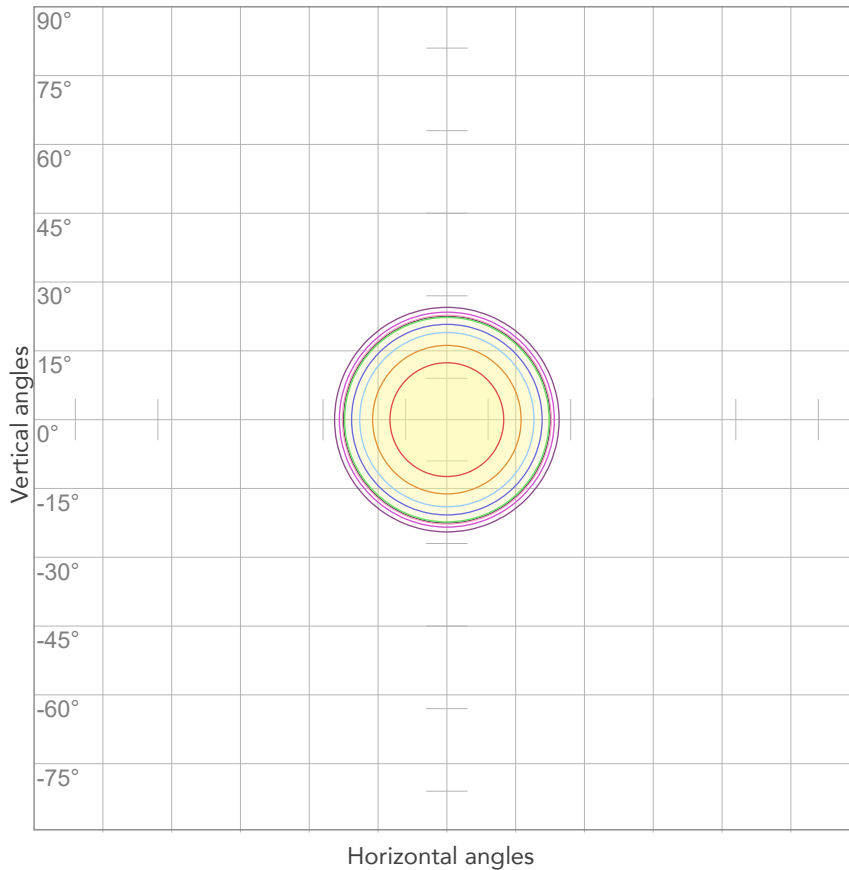


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
224V	0,163A	34,0W	0,93	35lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



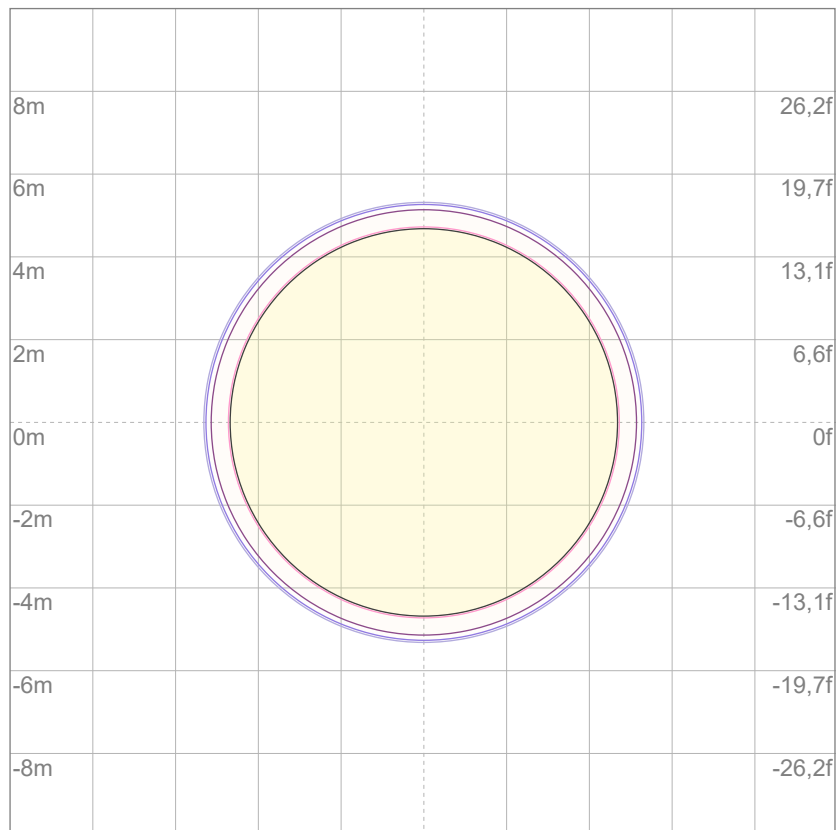
10%	241 cd
20%	481 cd
30%	722 cd
40%	963 cd
50%	1203 cd
60%	1444 cd
70%	1685 cd
80%	1925 cd

Conditions:

Number of c-planes: 2

Candela at center: 2407 cd

ISO LUX DIAGRAM



3%	0,722 lx
5%	1,20 lx
10%	2,41 lx
30%	7,22 lx
50%	12,0 lx

Conditions:

Number of c-planes: 2

Lux at center: 24,1 lx

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



Total lumen output:

573 lm

Peak candela output:

1189 cd

Light quality:

CRI: 97,9

Color temperature:

2711 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 50°

Target:

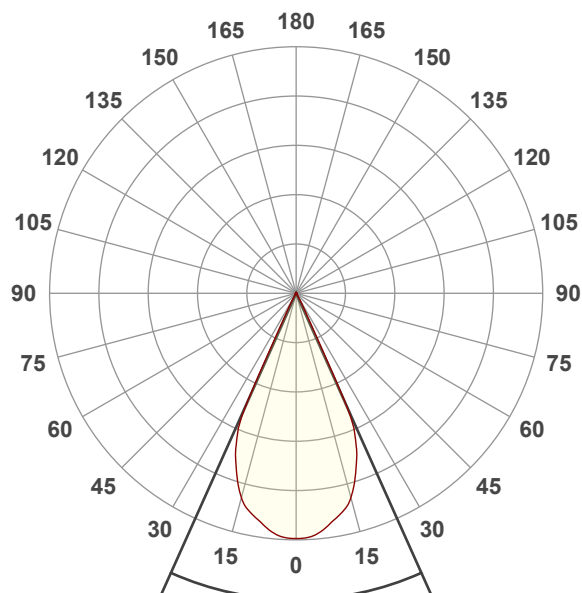
Warm White

Operator:

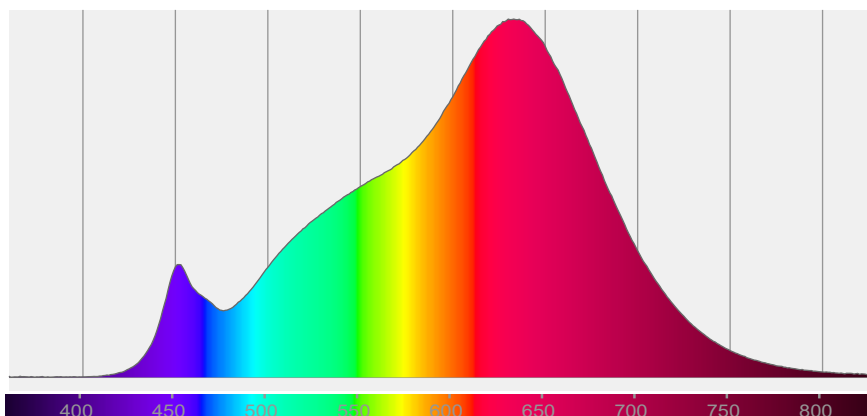
Salvatore Giglio

Date and time:

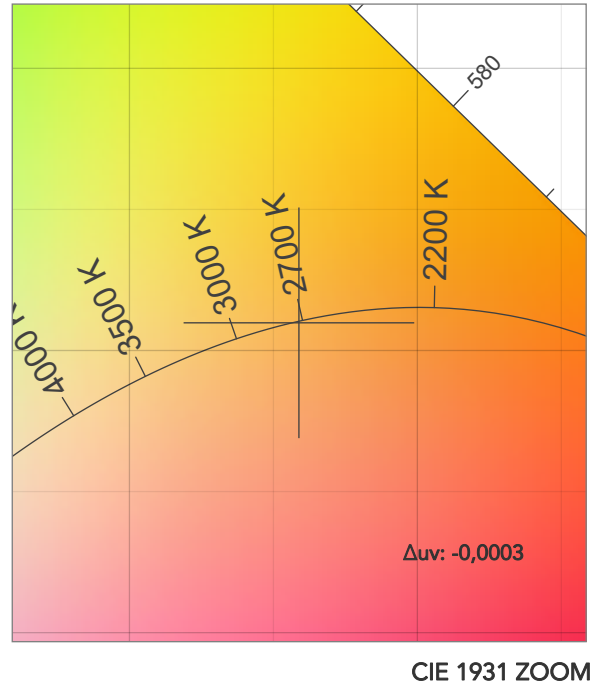
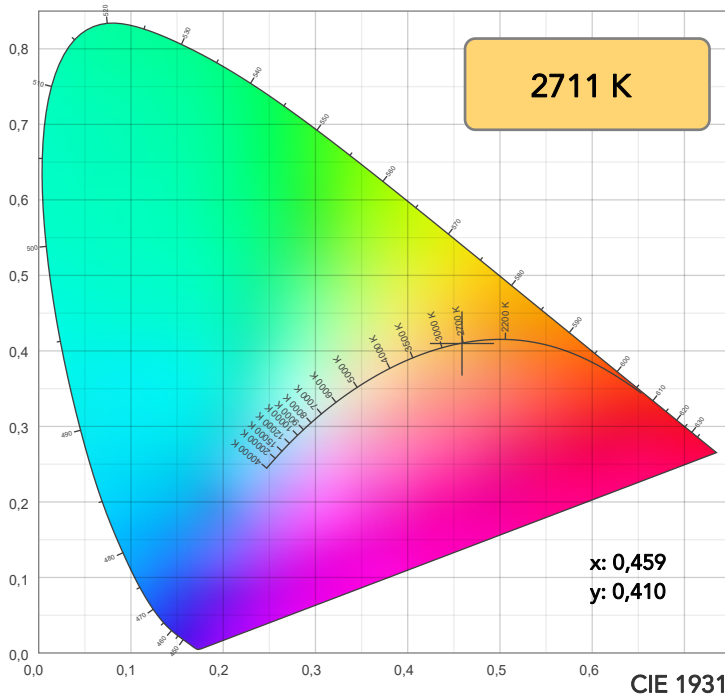
05/02/2024 10:18:09



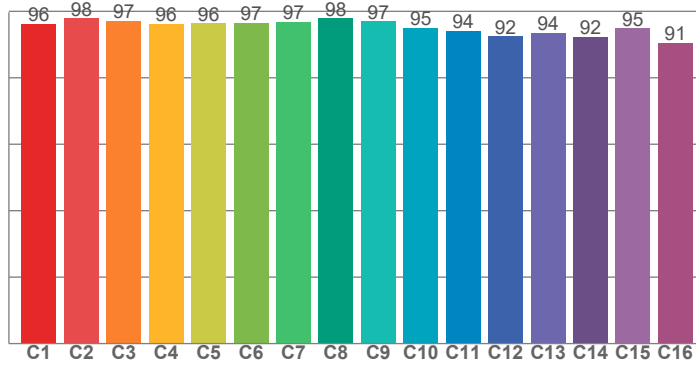
Spectra



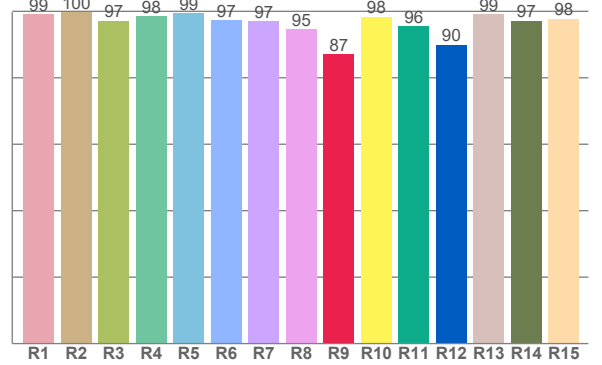
COLOR DETAILS



TM30: 95,4



CRI: 97,9 (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
99,2	99,7	97,2	98,5	99,4	97,3	97,1	94,6	87,1	98,4	95,6	90,0	99,1	97,2	97,8

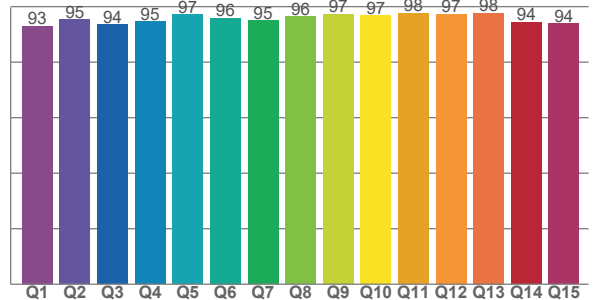
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,3	97,9	97,1	96,3	96,4	96,6	96,8	97,8	97,0	95,0	94,1	92,4	93,5	92,3	94,8	90,5

CQS Q values

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

CQS: 95,2



COLOR PARAMETERS

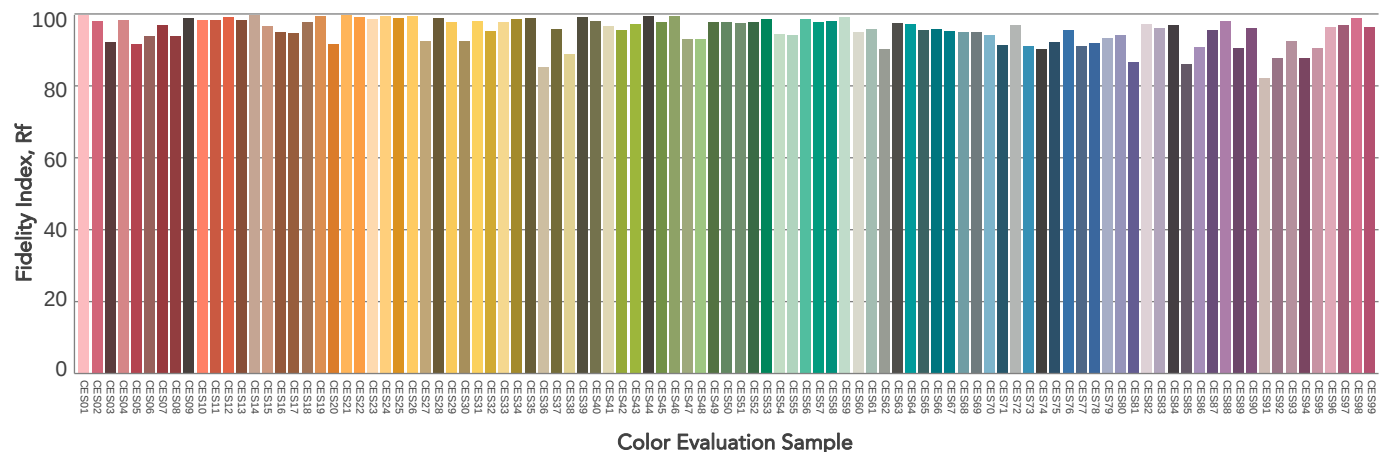
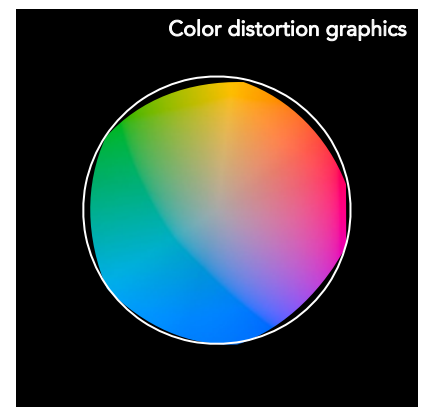
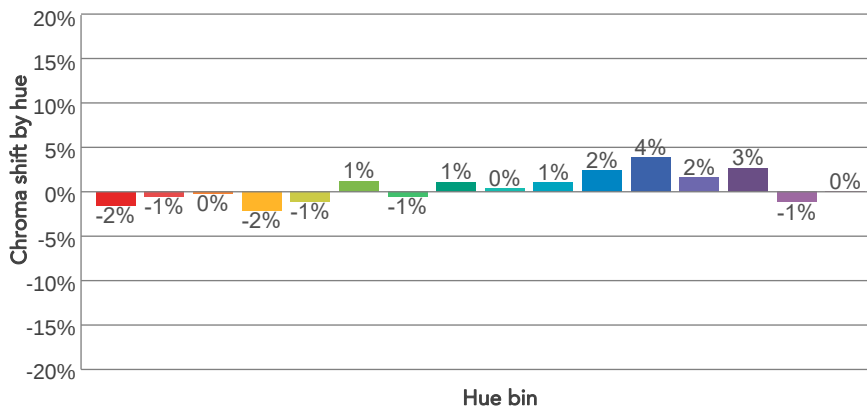
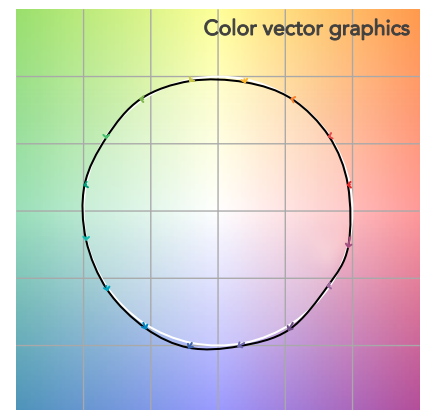
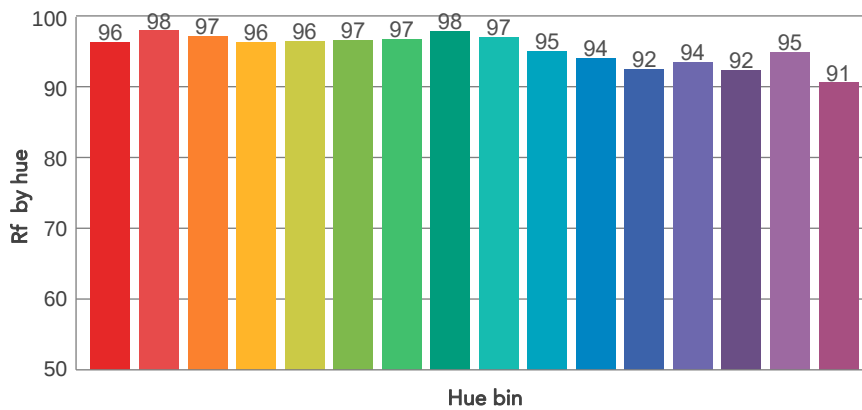
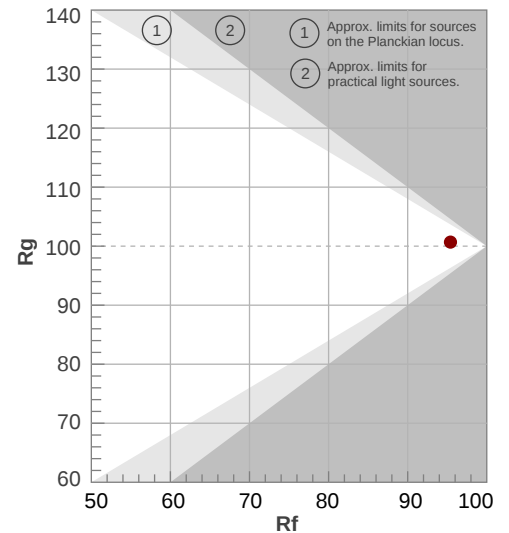
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2711 K	97,9	87,1	95,4	100,7	95,2	97	0,459	0,410	-0,0003

TM30 DETAILS

Rf 95,4
Fidelity index Rf

Rg 100,7
Gammut index

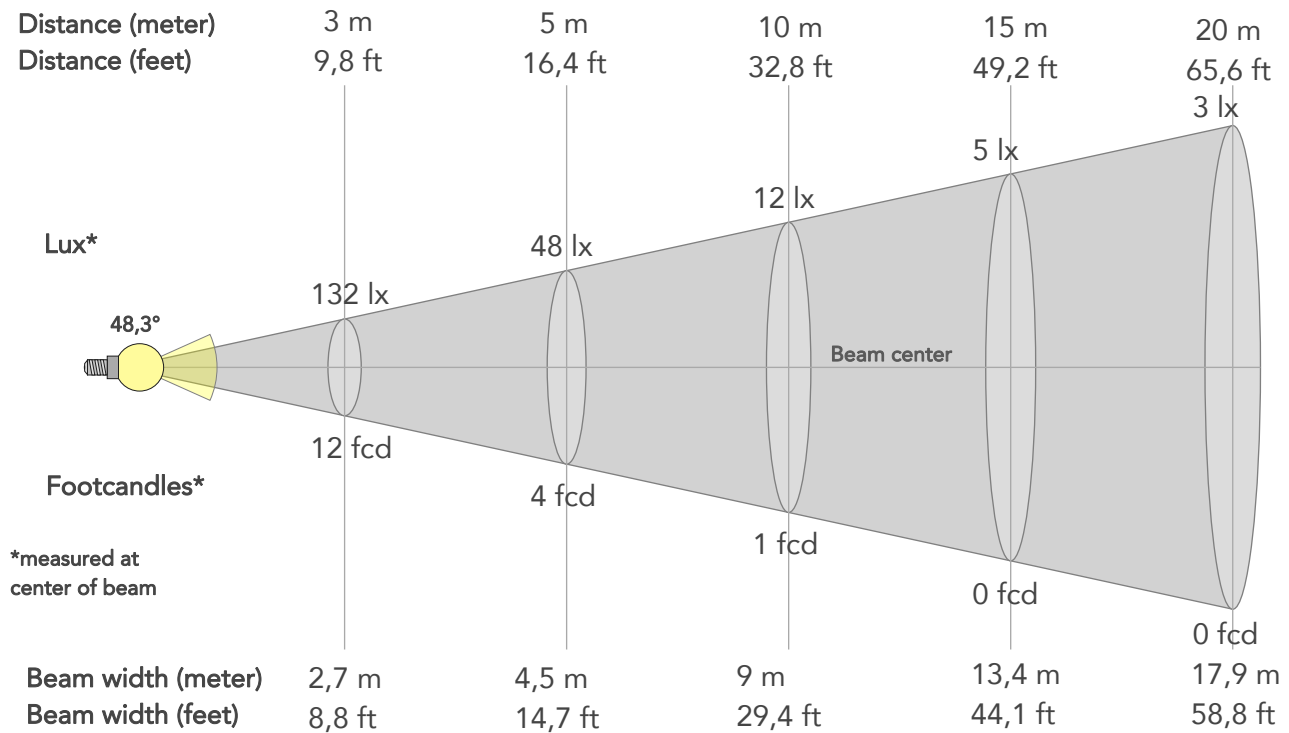
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-2%	0%
2	98	-1%	0%
3	97	0%	1%
4	96	-2%	-1%
5	96	-1%	2%
6	97	1%	2%
7	97	-1%	1%
8	98	1%	1%
9	97	0%	2%
10	95	1%	3%
11	94	2%	4%
12	92	4%	-1%
13	94	2%	-5%
14	92	3%	-5%
15	95	-1%	-1%
16	91	0%	-7%



BEAM DETAILS



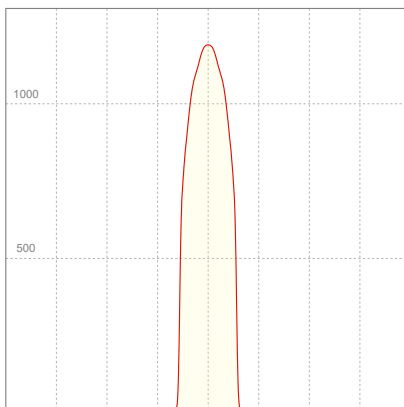
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
48,3°	52,9°	56,7°	98,9%	98,6%



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	1189lx	297lx	132lx	74lx	48lx	21lx	12lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	110fcd	28fcd	12fcd	7fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,8m	2,7m	3,6m	4,5m	6,7m	9m	13,4m	17,9m	22,4m	26,9m	35,8m	44,8m
Beam wid.	3ft	5,9ft	8,8ft	11,7ft	14,7ft	22ft	29,4ft	44,1ft	58,8ft	73,5ft	88,2ft	117,6ft	146,9ft

LINEAR DISTRIBUTION DIAGRAM

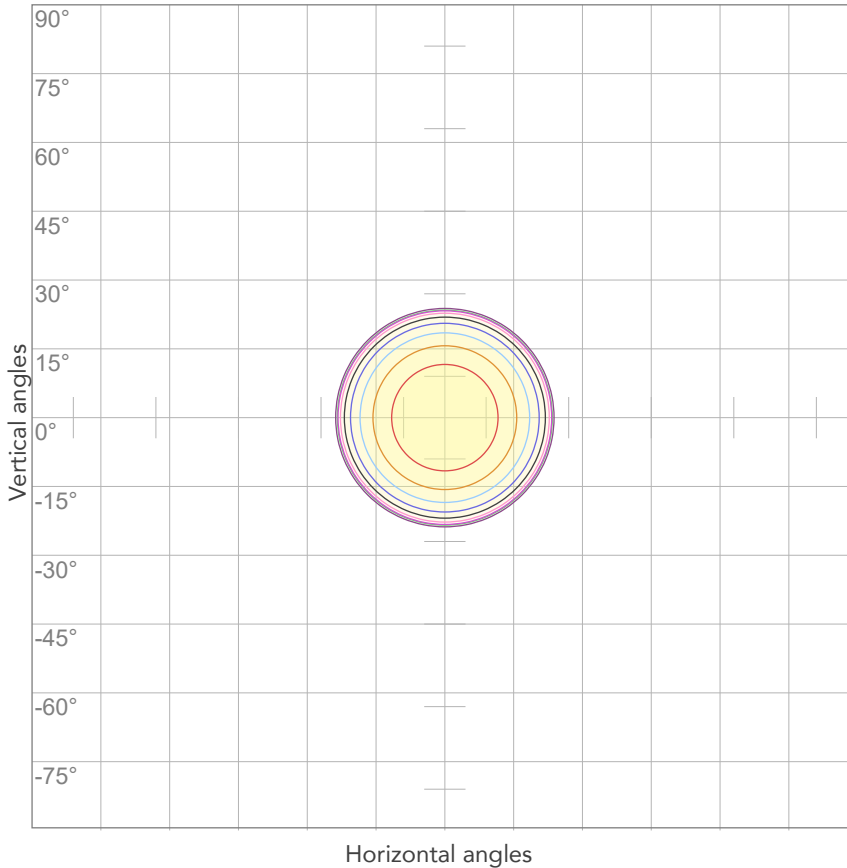


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,113A	21,9W	0,86	26lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



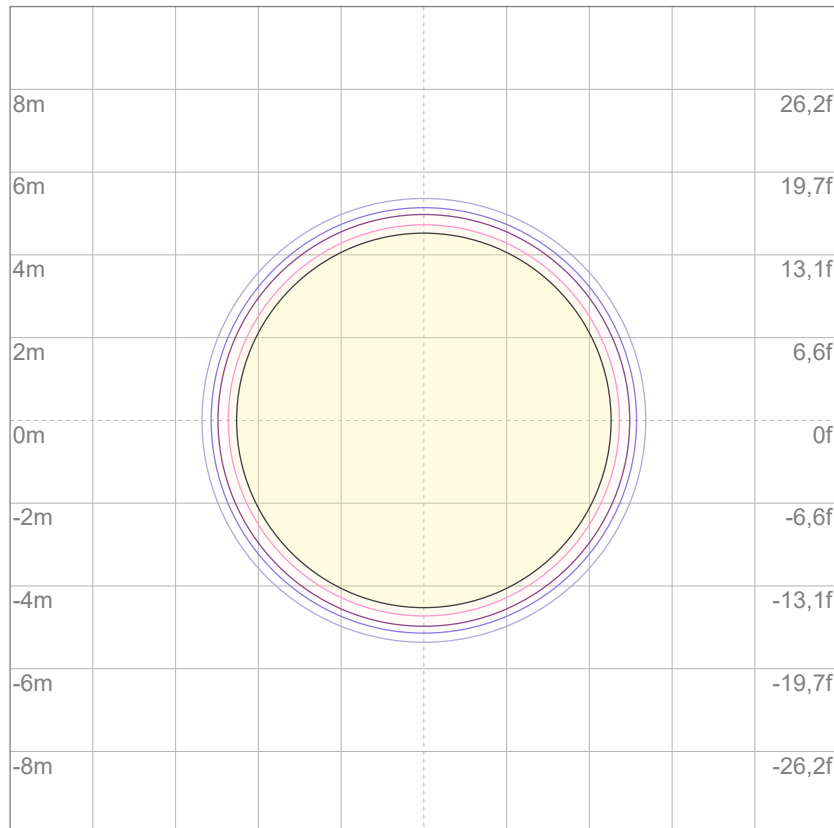
10%	119 cd
20%	238 cd
30%	357 cd
40%	476 cd
50%	595 cd
60%	714 cd
70%	832 cd
80%	951 cd

Conditions:

Number of c-planes: 2

Candela at center: 1189 cd

ISO LUX DIAGRAM



3%	0,357 lx
5%	0,595 lx
10%	1,19 lx
30%	3,57 lx
50%	5,95 lx

Conditions:

Number of c-planes: 2

Lux at center: 11,9 lx

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

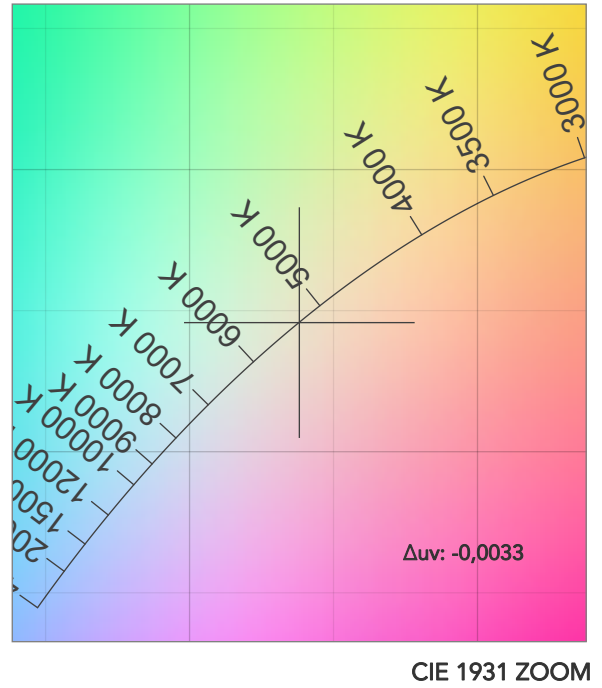
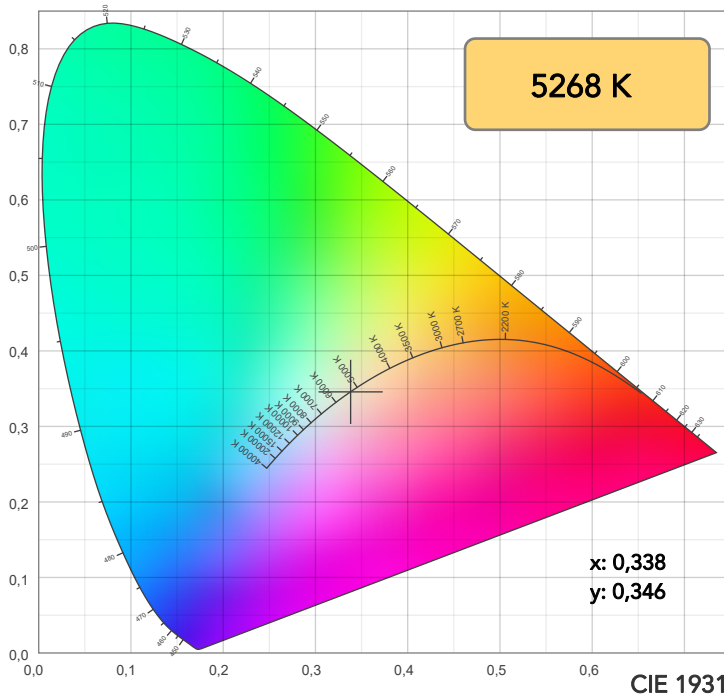
1225 lm

2490 cd

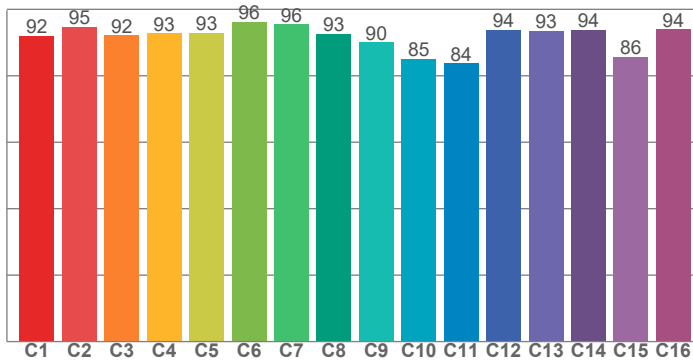
CRI: 95,1

5268 K

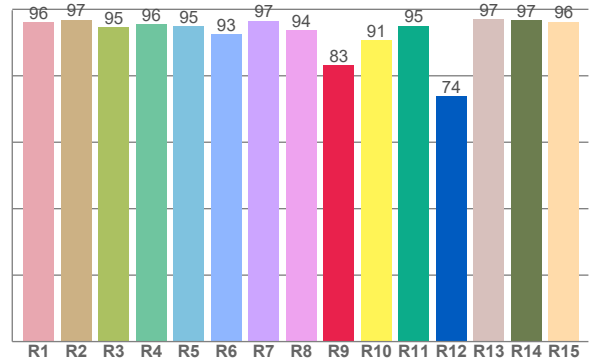
COLOR DETAILS



TM30: 91,6



CRI: 95,1 (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
96,2	96,9	94,6	95,6	94,9	92,6	96,6	93,7	83,1	90,7	95,1	73,8	97,0	96,7	96,2

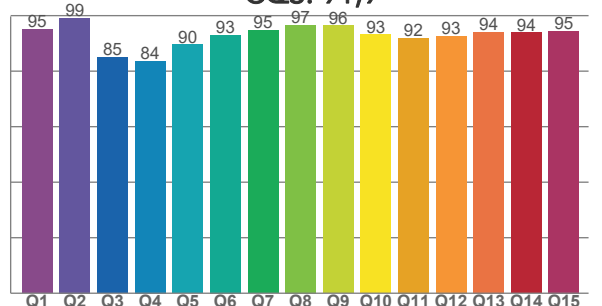
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,1	94,8	92,1	92,8	92,9	96,2	95,5	92,6	90,1	85,1	83,8	93,8	93,5	93,8	85,7	94,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,1	99,2	85,0	83,7	89,5	93,0	94,7	96,6	96,5	93,2	91,9	92,7	94,1	93,9	94,5

CQS: 91,9



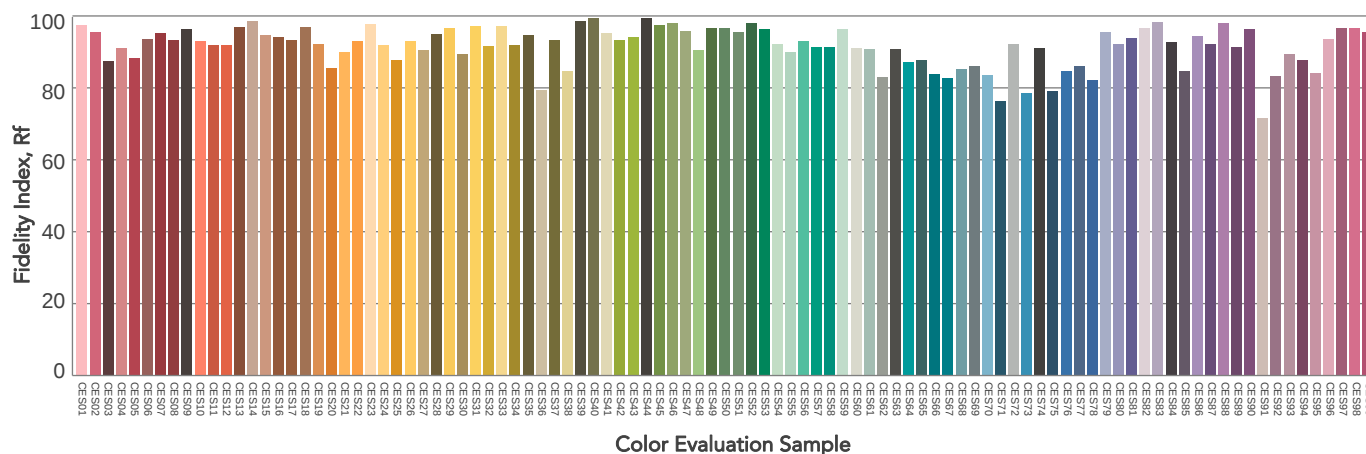
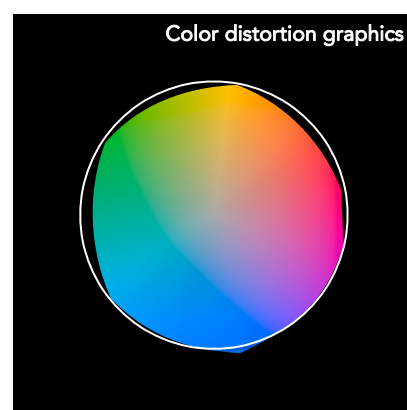
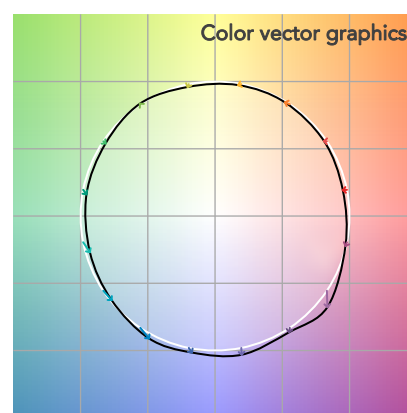
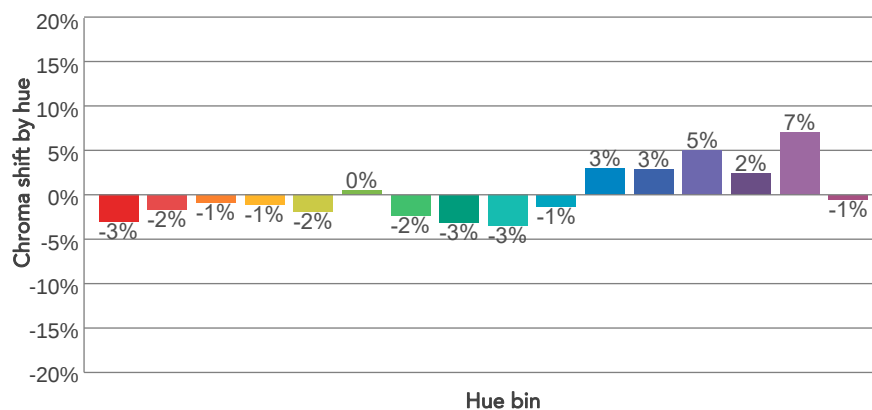
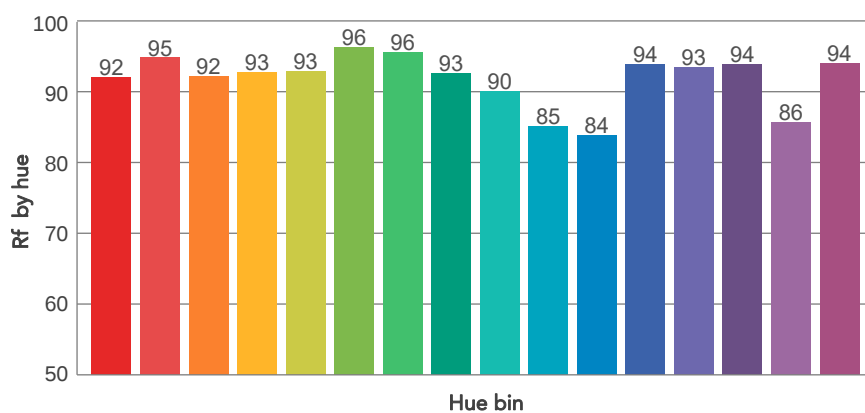
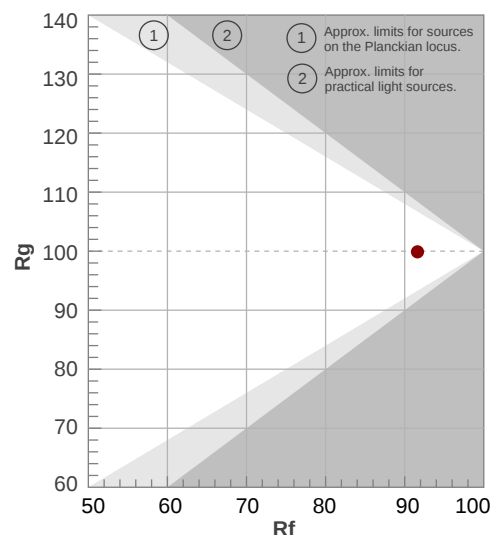
COLOR PARAMETERS

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
5268 K	95,1	83,1	91,6	99,9	91,9	96	0,338	0,346	-0,0033

Fidelity index R_f

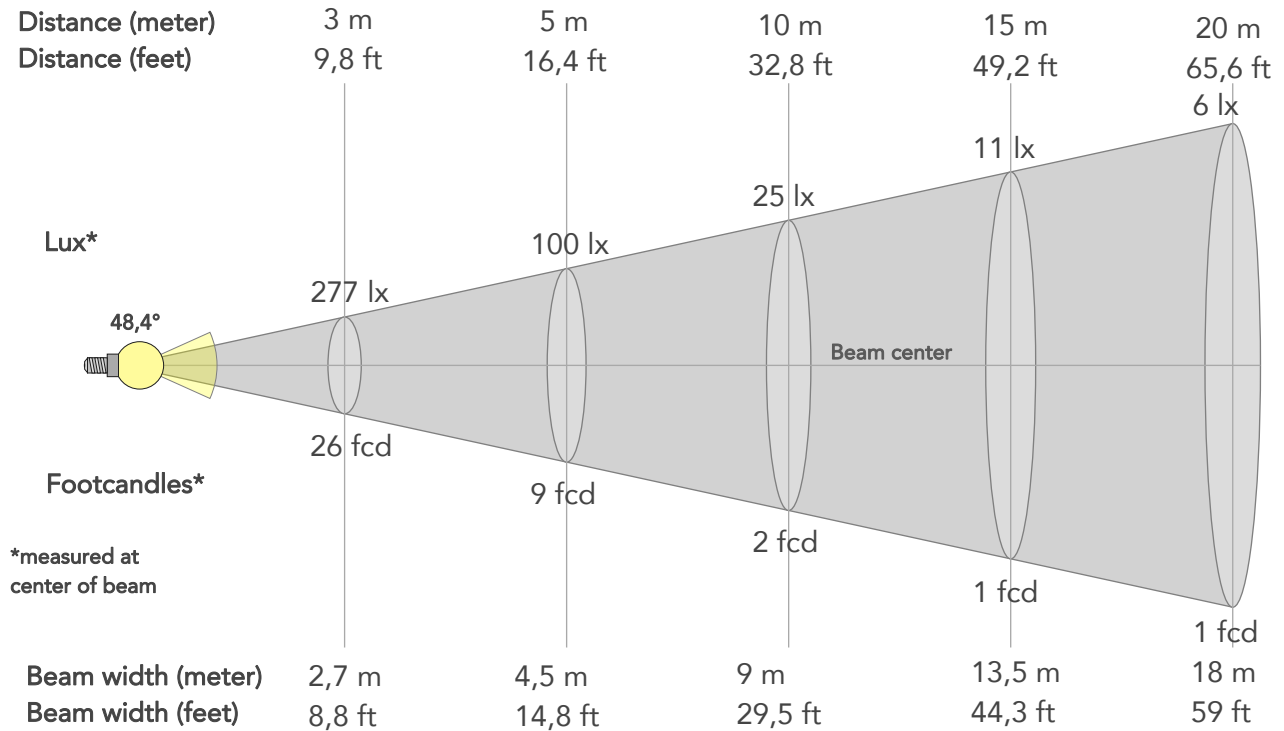
Gammut index

		Graphic shifts (%)	
Hue Bin	R_i	Chroma	Hue
1	92	-3%	0%
2	95	-2%	1%
3	92	-1%	4%
4	93	-1%	2%
5	93	-2%	1%
6	96	0%	0%
7	96	-2%	0%
8	93	-3%	3%
9	90	-3%	8%
10	85	-1%	9%
11	84	3%	10%
12	94	3%	3%
13	93	5%	-1%
14	94	2%	-2%
15	86	7%	-10%
16	94	-1%	-3%



BEAM DETAILS

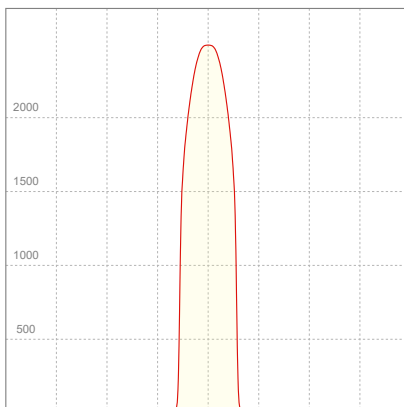
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
48,4°	53°	56,8°	99,1%	98,9%



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	2490lx	623lx	277lx	156lx	100lx	44lx	25lx	11lx	6lx	4lx	3lx	2lx	1lx
Footcand.	231fcd	58fcd	26fcd	14fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,8m	2,7m	3,6m	4,5m	6,7m	9m	13,5m	18m	22,5m	27m	36m	45m
Beam wid.	3ft	5,9ft	8,8ft	11,8ft	14,8ft	22,1ft	29,5ft	44,3ft	59ft	73,8ft	88,5ft	118,1ft	147,6ft

LINEAR DISTRIBUTION DIAGRAM

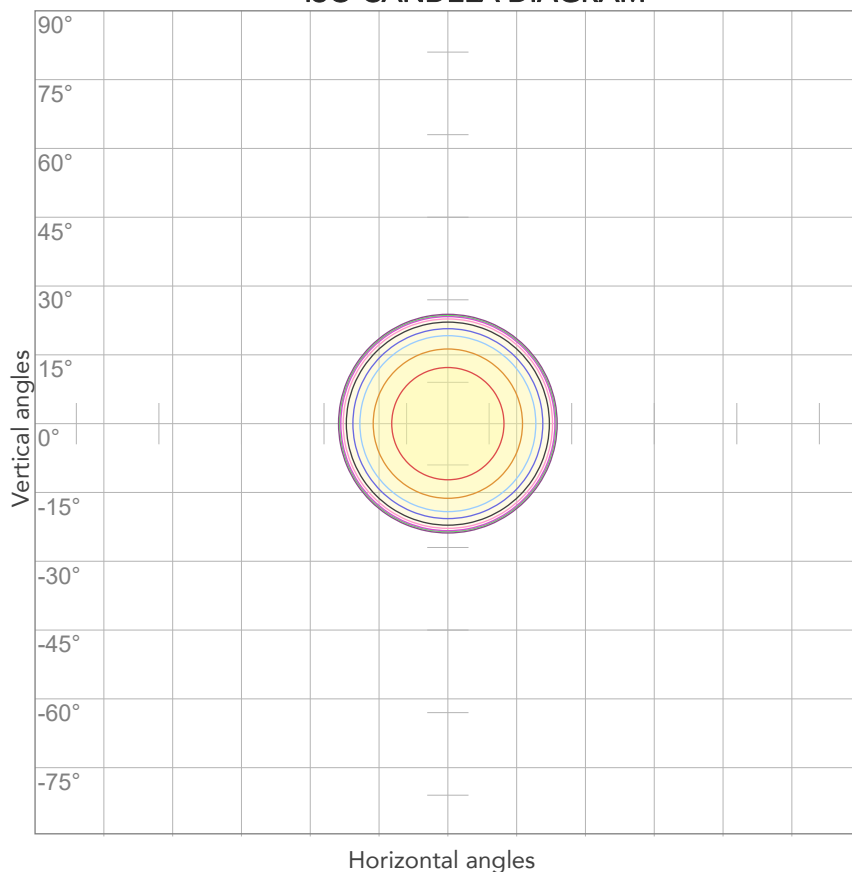


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,160A	33,3W	0,93	37lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



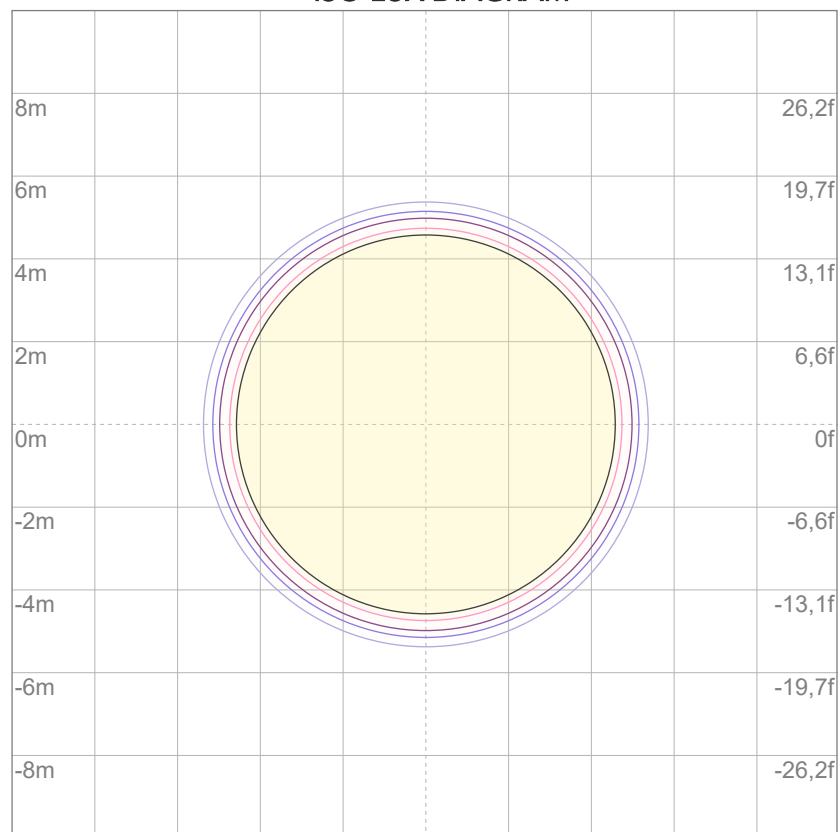
10%	249 cd
20%	498 cd
30%	747 cd
40%	996 cd
50%	1245 cd
60%	1494 cd
70%	1743 cd
80%	1992 cd

Conditions:

Number of c-planes: 2

Candela at center: 2490 cd

ISO LUX DIAGRAM



3%	0,747 lx
5%	1,25 lx
10%	2,49 lx
30%	7,47 lx
50%	12,5 lx

Conditions:

Number of c-planes: 2

Lux at center: 24,9 lx

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