

Photometric Test Report



ECLDISPLAYCASVW

PROFILE LENS 36°

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:

1197 lm

Peak candela output:

5617 cd

Light quality:

CRI: 97,0

Color temperature:

4461 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 36°

Target:

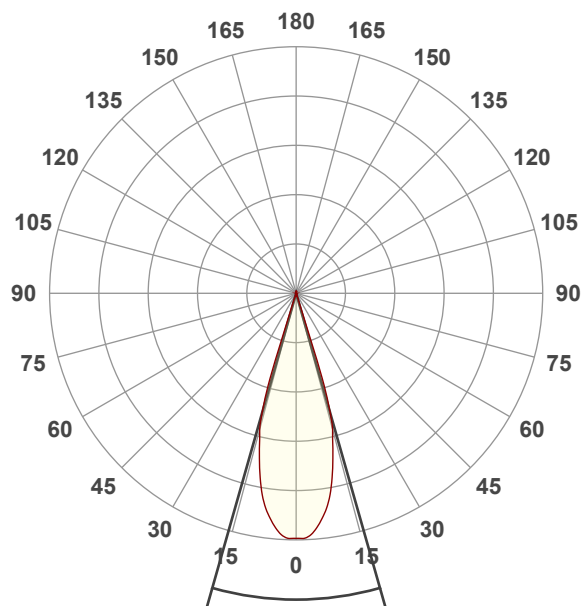
Full On

Operator:

Salvatore Giglio

Date and time:

05/02/2024 10:27:09

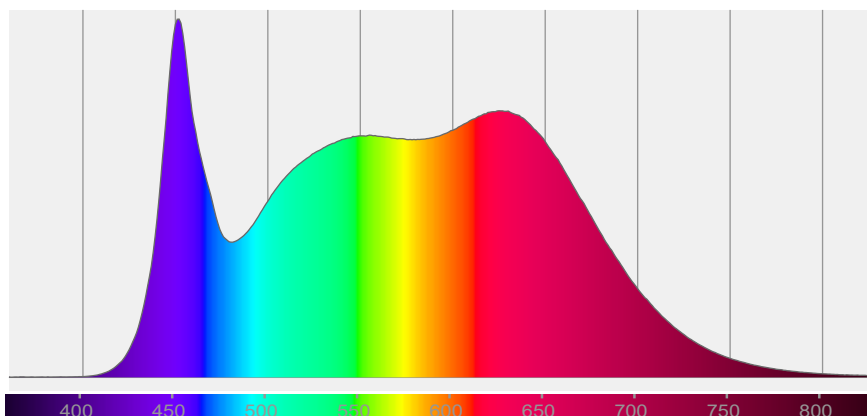


Beam angle 50%: 31,8°

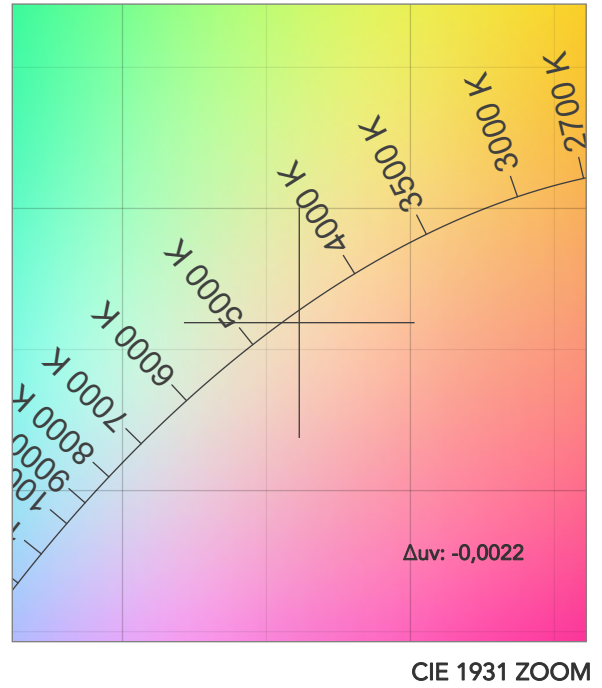
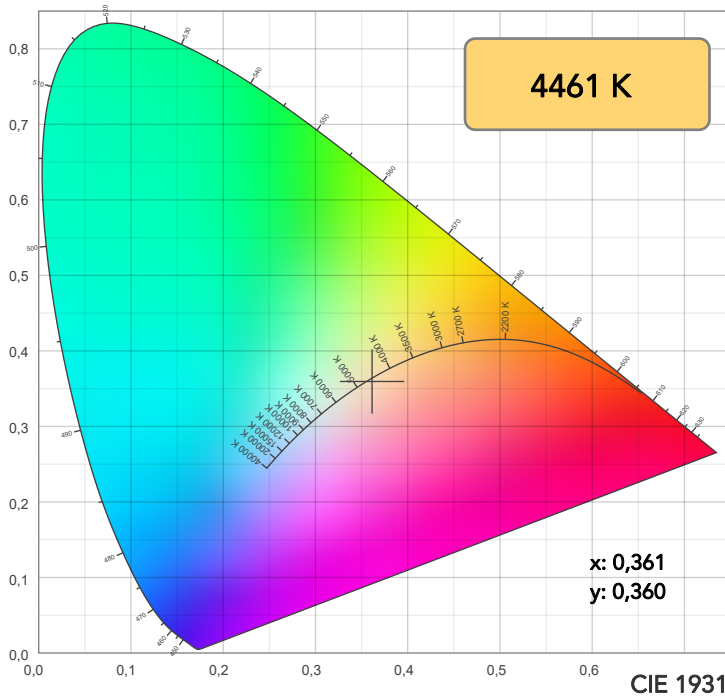
Field angle 10%: 36,5°

Cut off angle 2.5%: 37,7°

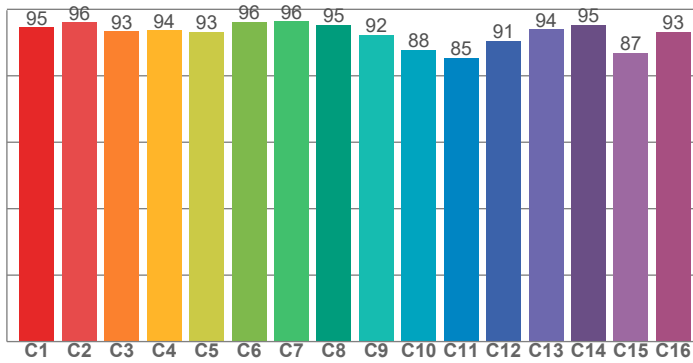
Spectra



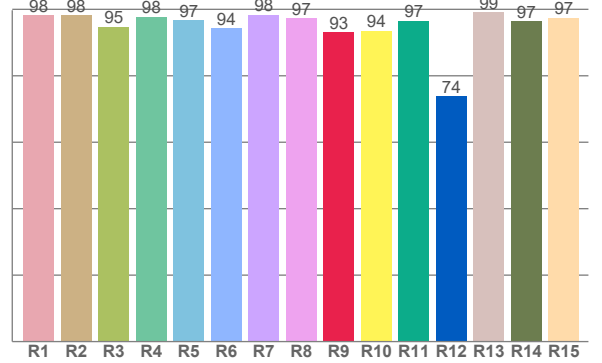
COLOR DETAILS



TM30: 92,7



CRI: 97,0 (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
98,3	98,3	94,7	97,8	96,7	94,2	98,4	97,4	93,1	93,6	96,5	73,9	99,2	96,5	97,5

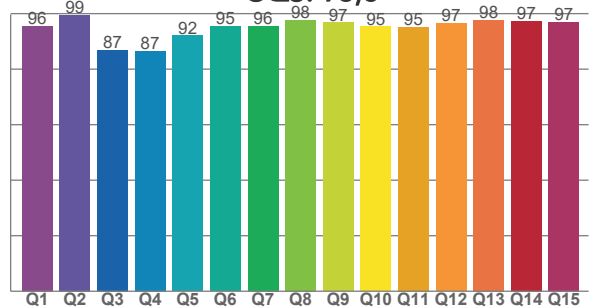
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,6	96,1	93,4	93,7	93,3	96,3	96,4	95,3	92,4	87,7	85,4	90,6	93,9	95,2	86,9	93,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,5	99,5	86,9	86,5	92,1	95,4	95,6	97,7	96,8	95,4	95,1	96,5	97,8	97,4	97,0

CQS: 93,8



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
4461 K	97,0	93,1	92,7	101,2	93,8	97	0,361	0,360	-0,0022

TM30 DETAILS

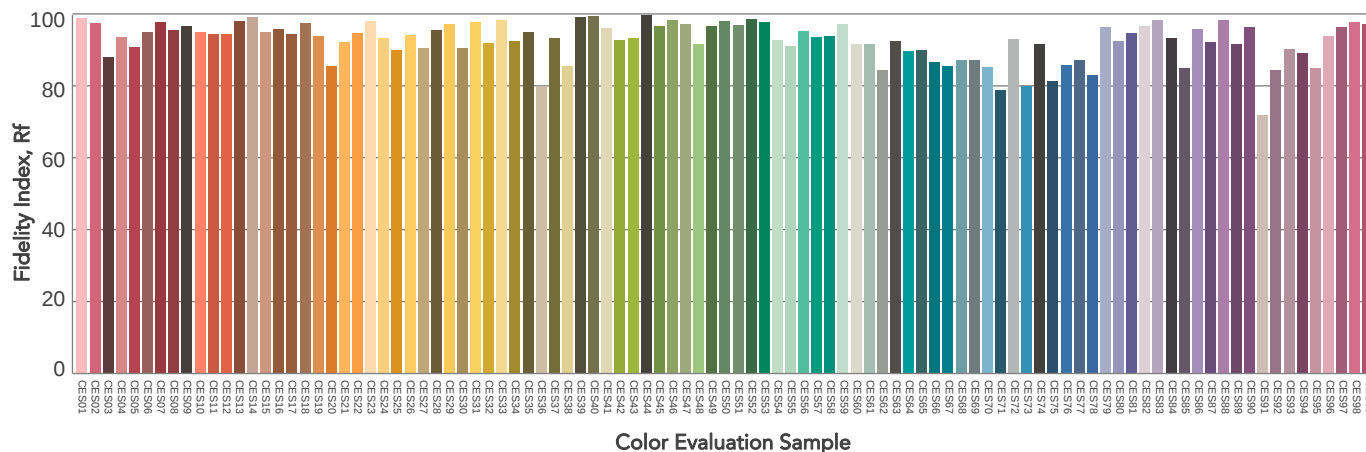
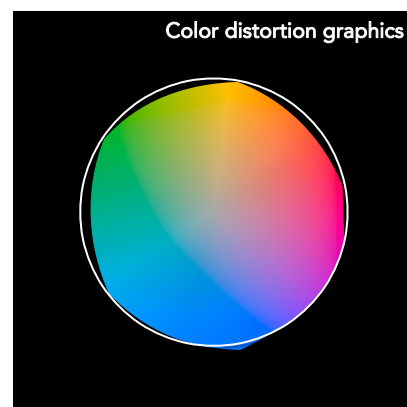
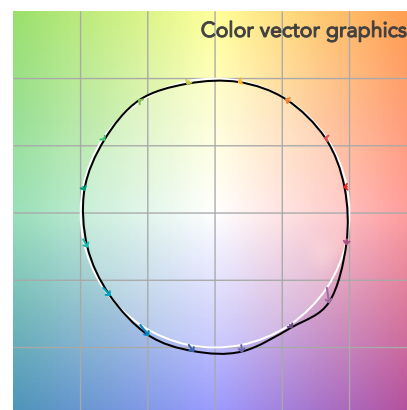
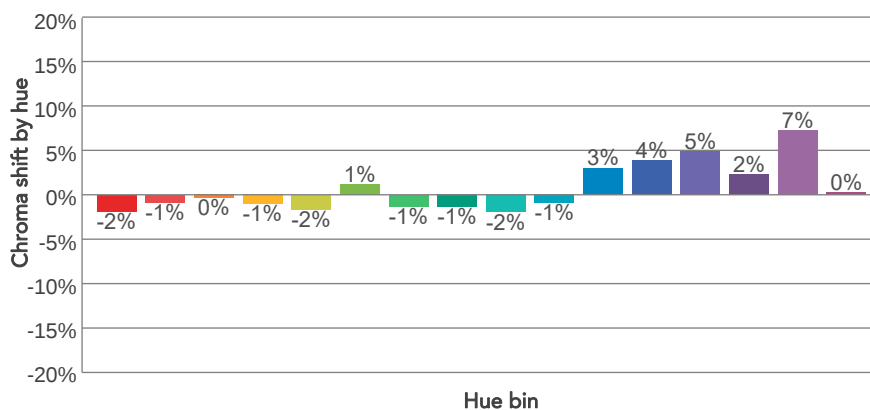
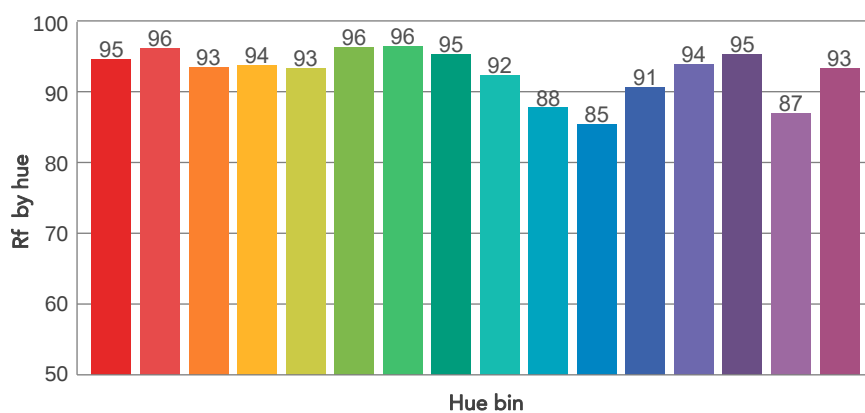
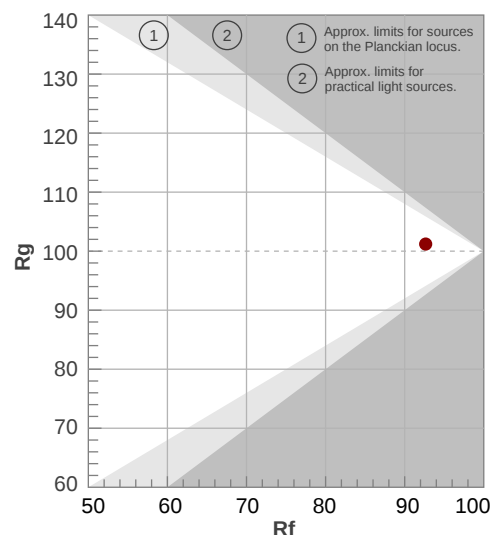
Rf 92,7

Fidelity index R_f

Rg 101,2

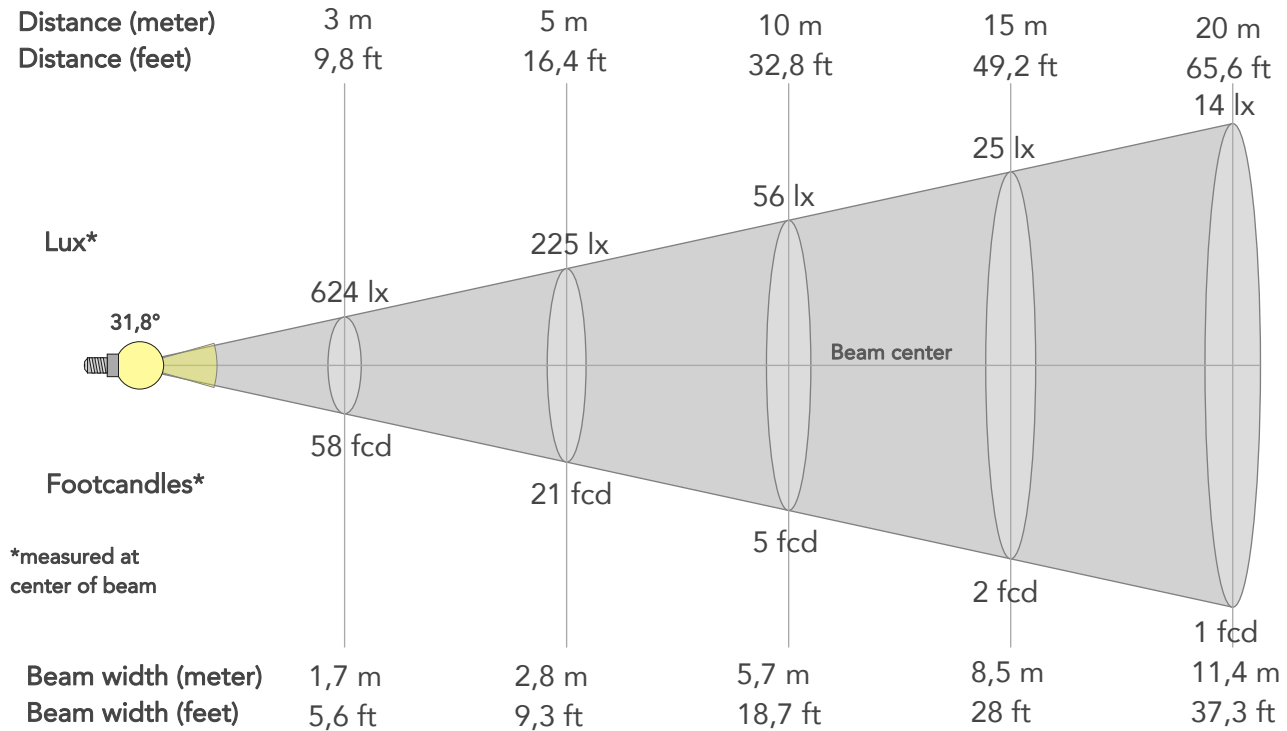
Gammut index

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	95	-2%	0%
2	96	-1%	1%
3	93	0%	3%
4	94	-1%	2%
5	93	-2%	1%
6	96	1%	0%
7	96	-1%	0%
8	95	-1%	2%
9	92	-2%	6%
10	88	-1%	7%
11	85	3%	9%
12	91	4%	4%
13	94	5%	0%
14	95	2%	0%
15	87	7%	-8%
16	93	0%	-4%



BEAM DETAILS

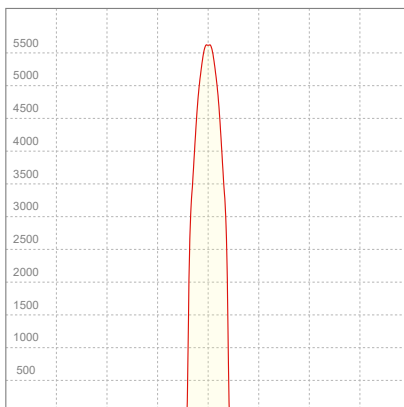
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,8°	36,5°	37,7°	98,9%	98,7%



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	5617lx	1404lx	624lx	351lx	225lx	100lx	56lx	25lx	14lx	9lx	6lx	4lx	2lx
Footcand.	522fcd	130fcd	58fcd	33fcd	21fcd	9fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,8m	4,3m	5,7m	8,5m	11,4m	14,2m	17,1m	22,8m	28,4m
Beam wid.	1,9ft	3,8ft	5,6ft	7,5ft	9,3ft	14ft	18,7ft	28ft	37,3ft	46,7ft	56ft	74,6ft	93,3ft

LINEAR DISTRIBUTION DIAGRAM

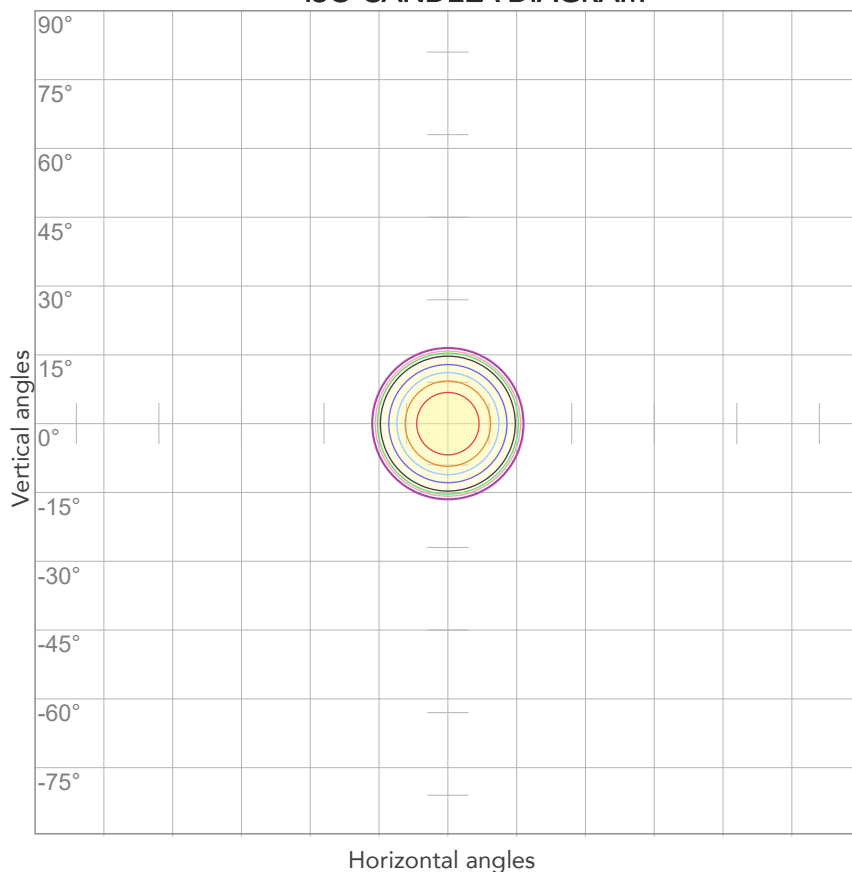


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,161A	33,7W	0,93	36lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



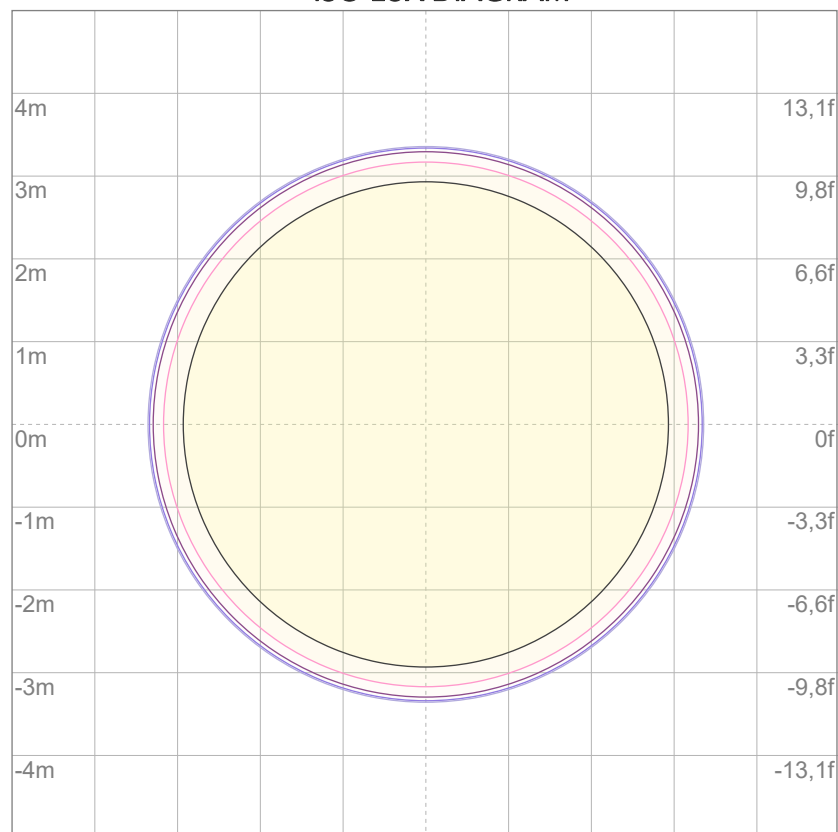
10%	562 cd
20%	1123 cd
30%	1685 cd
40%	2247 cd
50%	2808 cd
60%	3370 cd
70%	3932 cd
80%	4494 cd

Conditions:

Number of c-planes: 2

Candela at center: 5617 cd

ISO LUX DIAGRAM



3%	1,69 lx
5%	2,81 lx
10%	5,62 lx
30%	16,9 lx
50%	28,1 lx

Conditions:

Number of c-planes: 2

Lux at center: 56,2 lx

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



Total lumen output:

582 lm

Peak candela output:

2772 cd

Light quality:

CRI: 97,9

Color temperature:

2761 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 36°

Target:

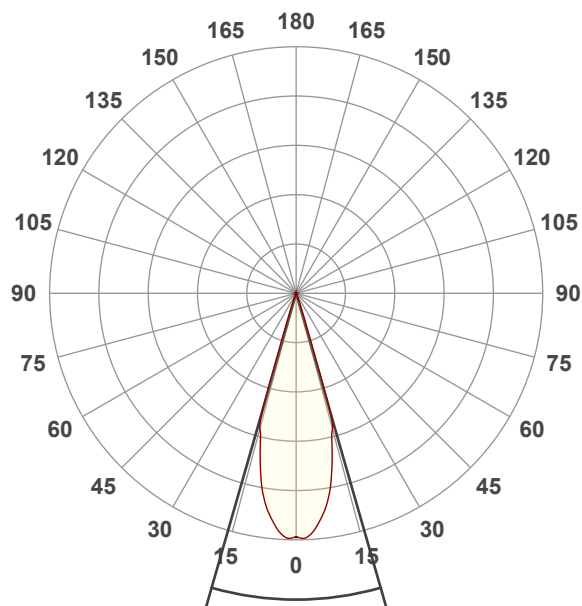
Warm White

Operator:

Salvatore Giglio

Date and time:

05/02/2024 10:29:47

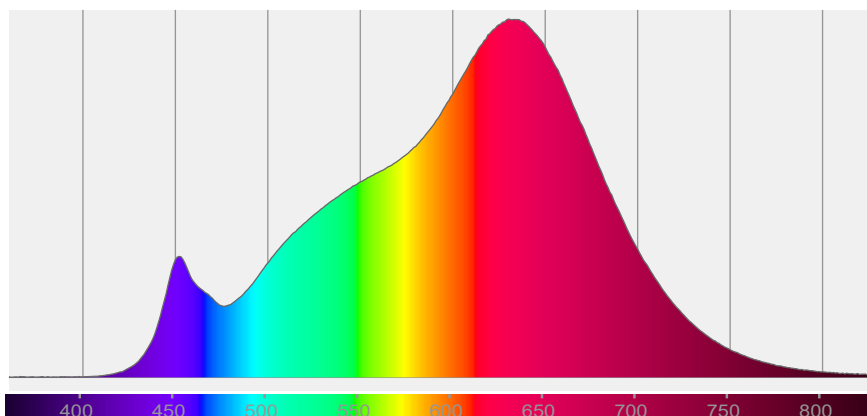


Beam angle 50%: 32°

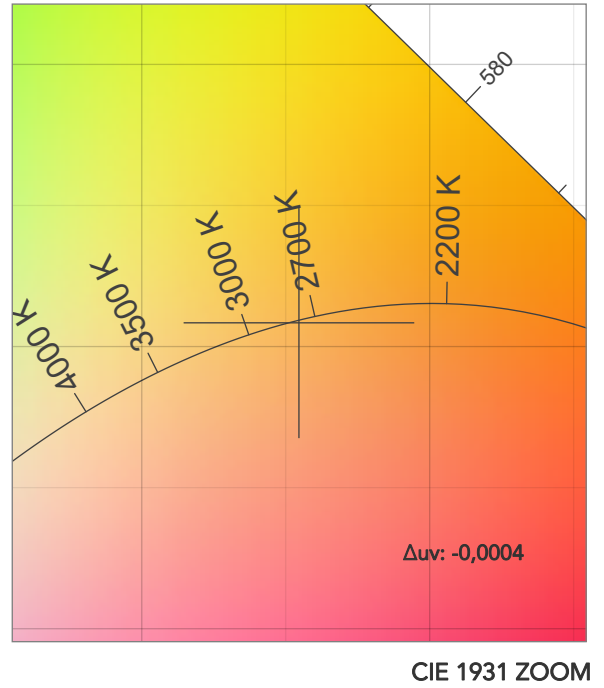
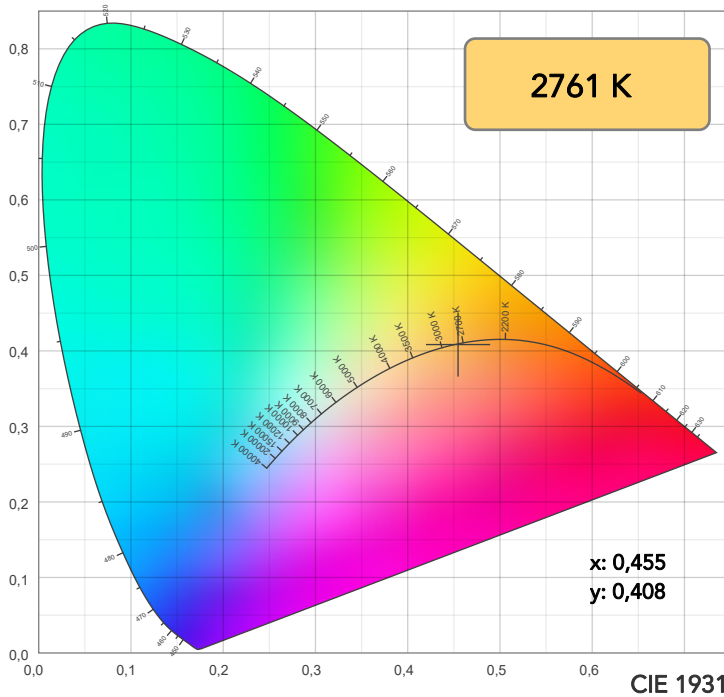
Field angle 10%: 36,5°

Cut off angle 2.5%: 39,2°

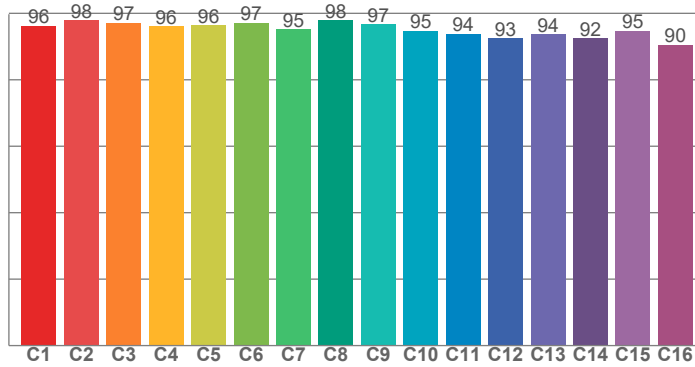
Spectra



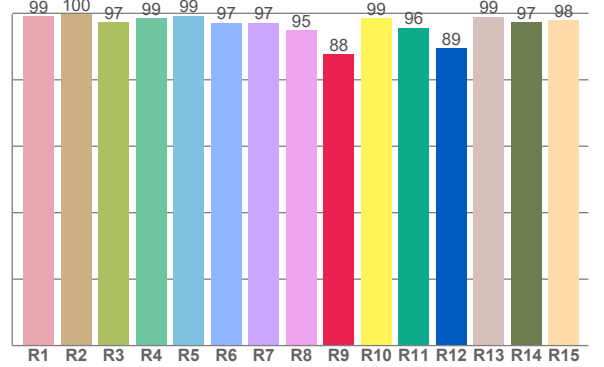
COLOR DETAILS



TM30: 95,3



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
99,1	99,7	97,3	98,5	99,3	97,2	97,2	94,9	87,8	98,6	95,7	89,5	99,0	97,3	98,0

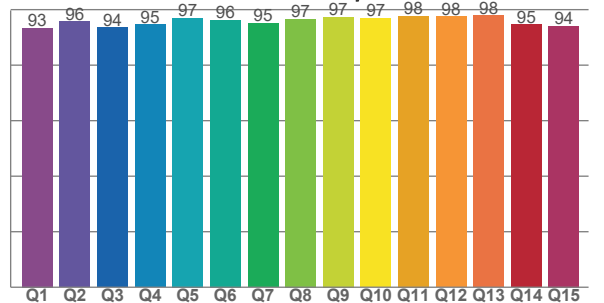
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,3	97,9	97,1	96,1	96,4	97,1	95,2	97,9	96,7	94,7	93,8	92,5	93,7	92,4	94,8	90,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93,3	95,7	93,6	94,6	97,1	96,3	95,1	96,6	97,4	96,9	97,7	97,5	97,8	94,6	94,2

CQS: 95,4



COLOR PARAMETERS

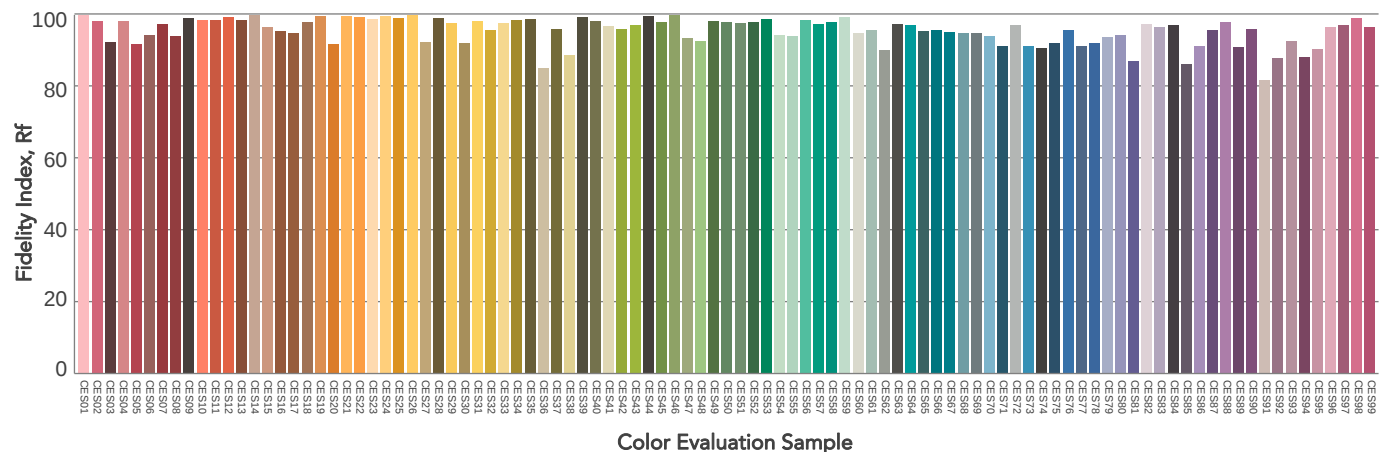
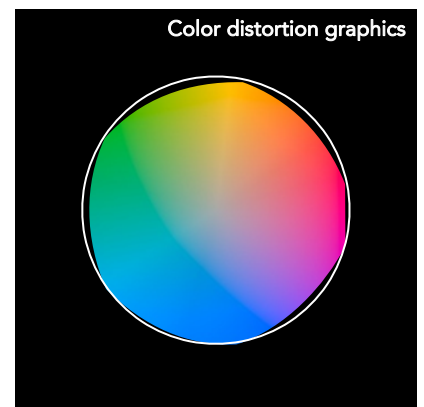
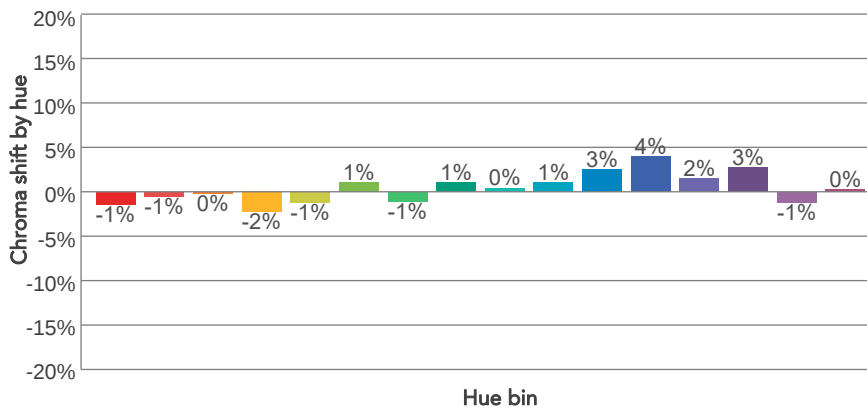
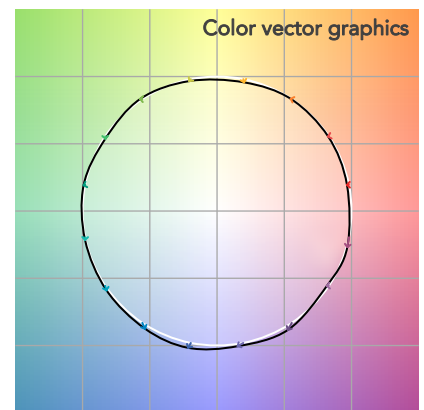
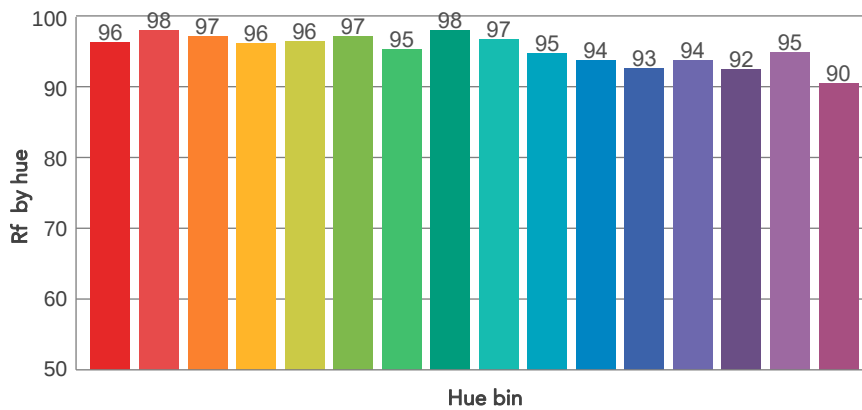
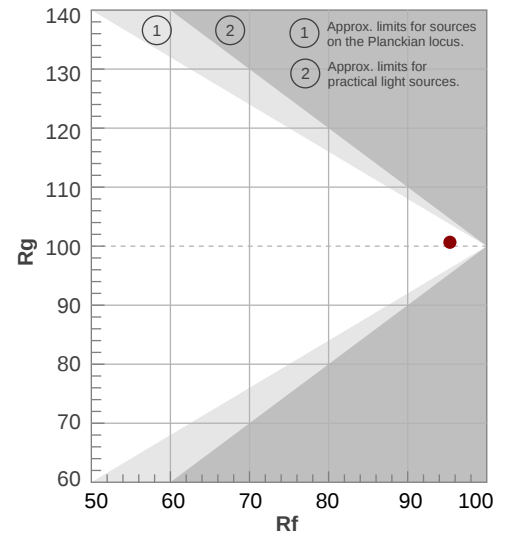
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2761 K	97,9	87,8	95,3	100,7	95,4	97	0,455	0,408	-0,0004

TM30 DETAILS

Rf 95,3
Fidelity index Rf

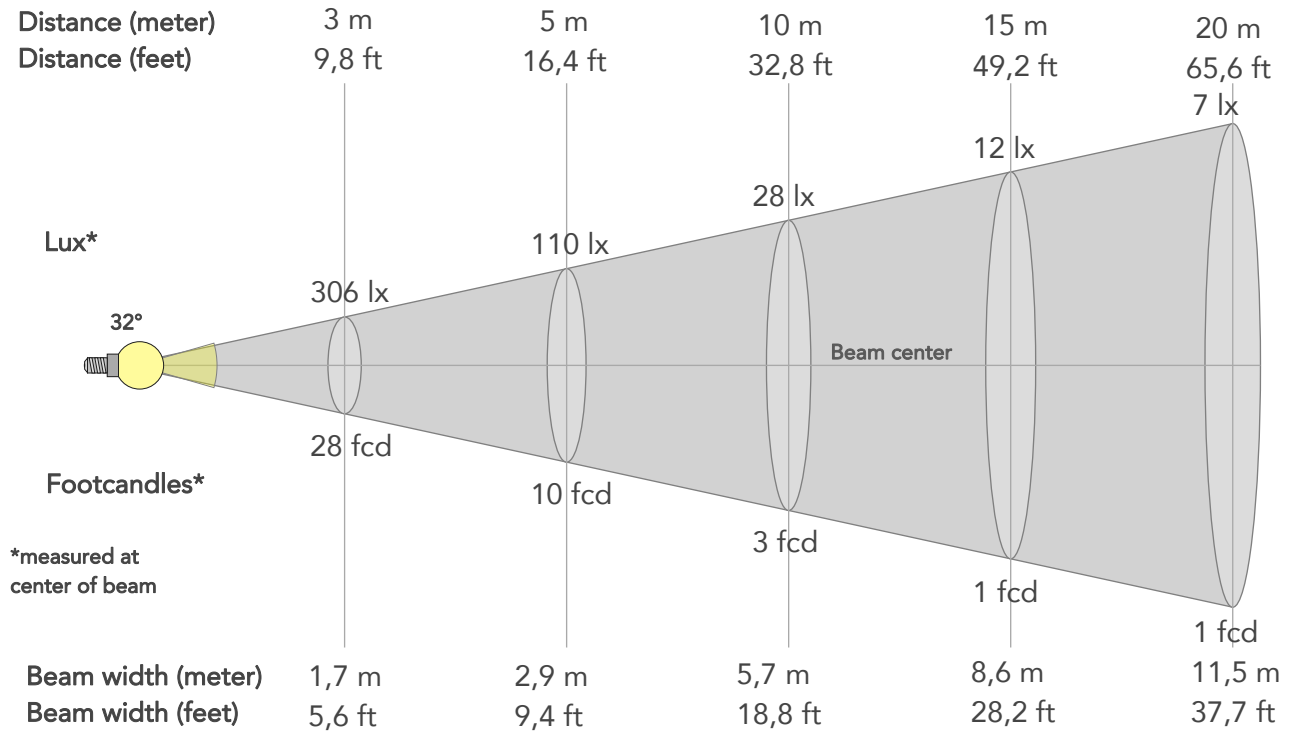
Rg 100,7
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	0%
2	98	-1%	0%
3	97	0%	1%
4	96	-2%	-1%
5	96	-1%	1%
6	97	1%	1%
7	95	-1%	1%
8	98	1%	1%
9	97	0%	2%
10	95	1%	3%
11	94	3%	4%
12	93	4%	-1%
13	94	2%	-5%
14	92	3%	-5%
15	95	-1%	-1%
16	90	0%	-7%



BEAM DETAILS

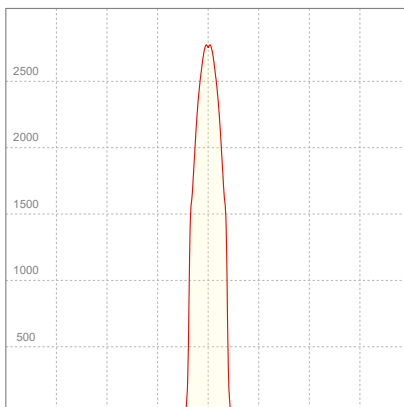
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
32°	36,5°	39,2°	98,8%	98,6%



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	2755lx	689lx	306lx	172lx	110lx	49lx	28lx	12lx	7lx	4lx	3lx	2lx	1lx
Footcand.	256fcd	64fcd	28fcd	16fcd	10fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,9m	4,3m	5,7m	8,6m	11,5m	14,4m	17,2m	23m	28,7m
Beam wid.	1,9ft	3,8ft	5,6ft	7,5ft	9,4ft	14,1ft	18,8ft	28,2ft	37,7ft	47,1ft	56,5ft	75,3ft	94,2ft

LINEAR DISTRIBUTION DIAGRAM

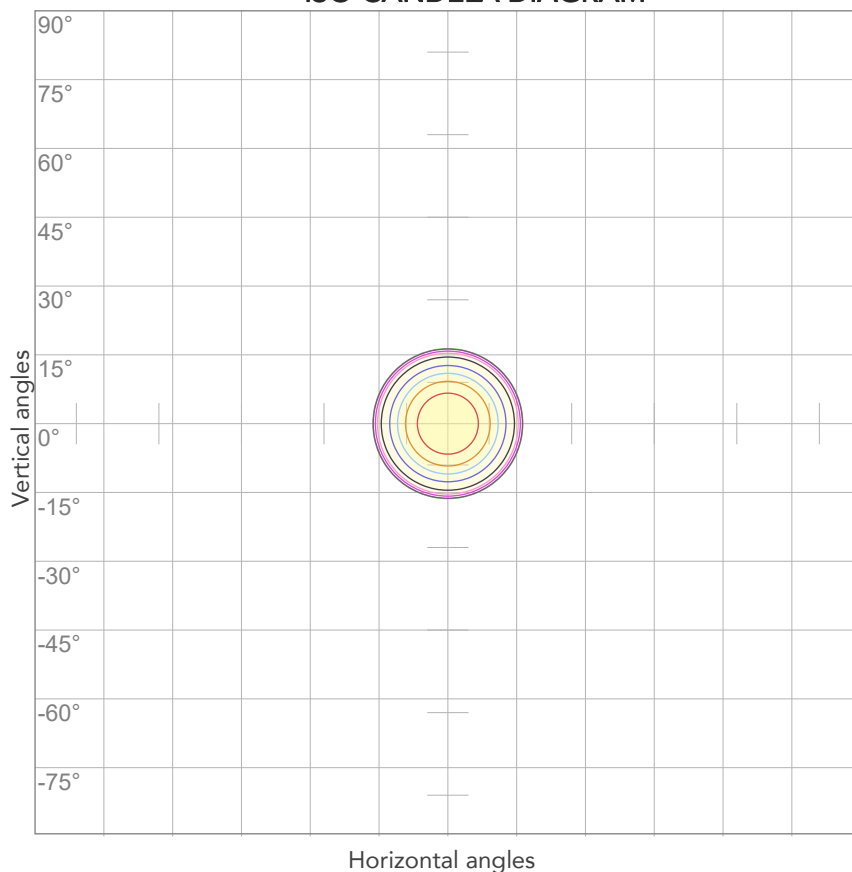


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,112A	21,8W	0,86	27lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



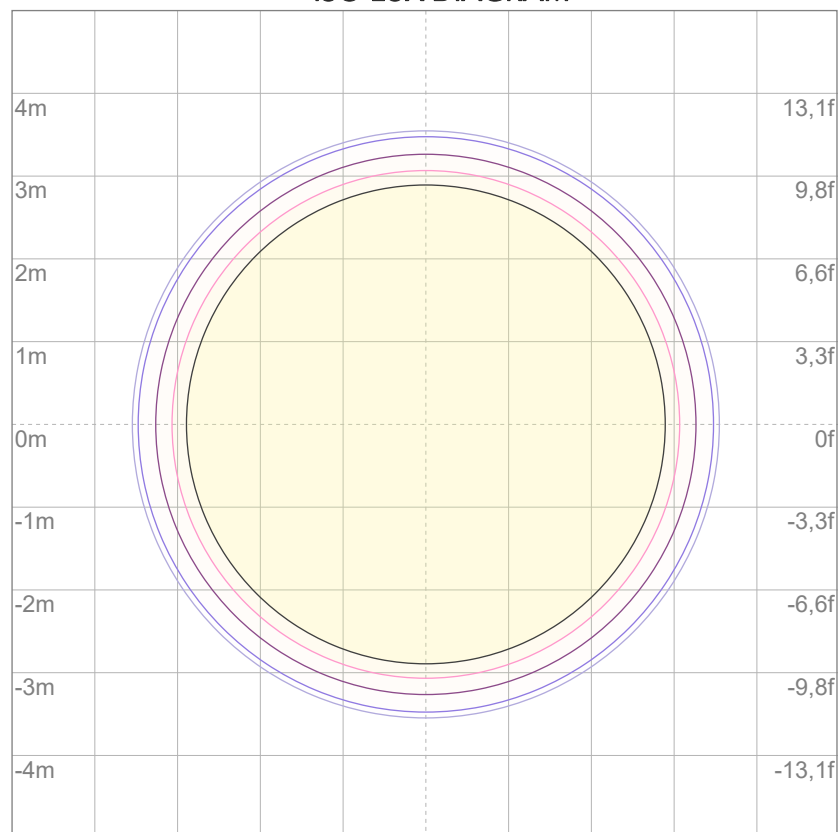
10%	275 cd
20%	551 cd
30%	826 cd
40%	1102 cd
50%	1377 cd
60%	1653 cd
70%	1928 cd
80%	2204 cd

Conditions:

Number of c-planes: 2

Candela at center: 2755 cd

ISO LUX DIAGRAM



3%	0,826 lx
5%	1,38 lx
10%	2,75 lx
30%	8,26 lx
50%	13,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 27,5 lx

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



Total lumen output:

1242 lm

Peak candela output:

5807 cd

Light quality:

CRI: 95,3

Color temperature:

5483 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 36°

Target:

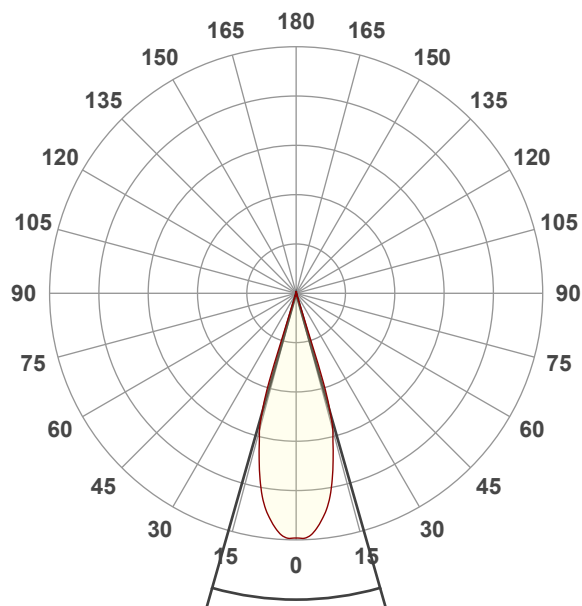
Cold White

Operator:

Salvatore Giglio

Date and time:

05/02/2024 10:32:26

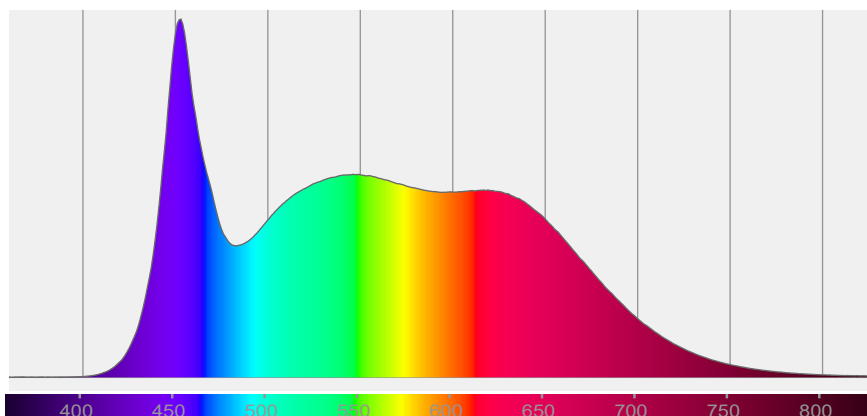


Beam angle 50%: 31,8°

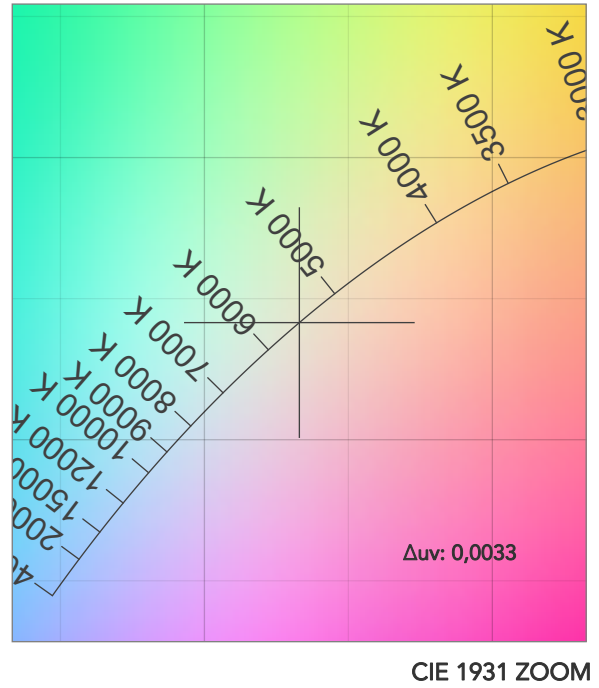
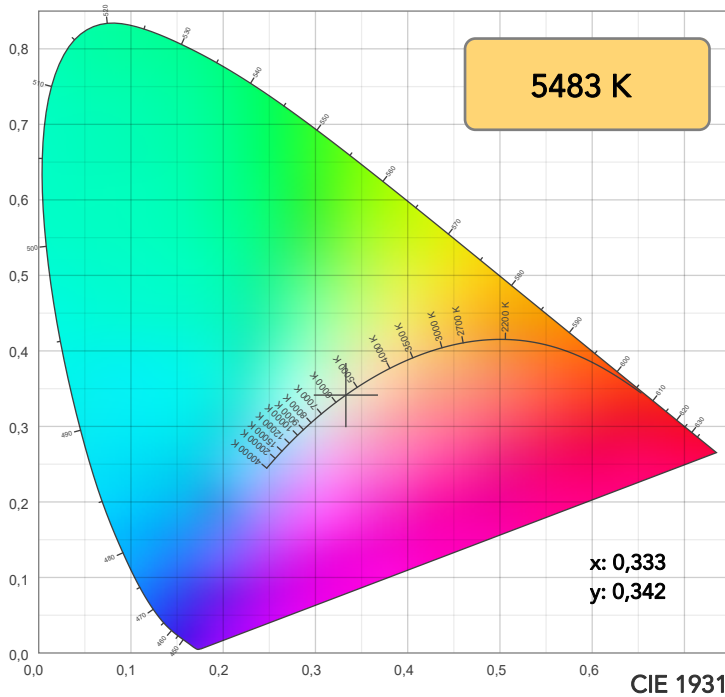
Field angle 10%: 36,4°

Cut off angle 2.5%: 38°

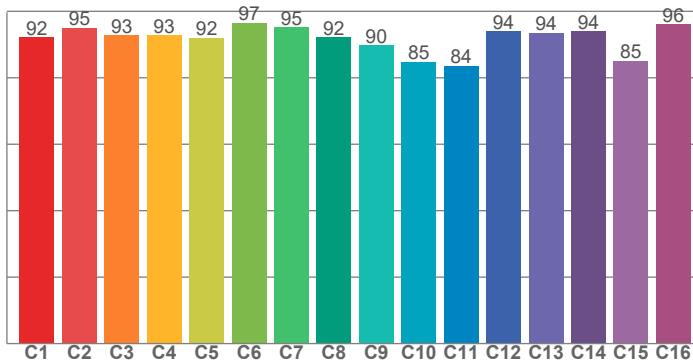
Spectra



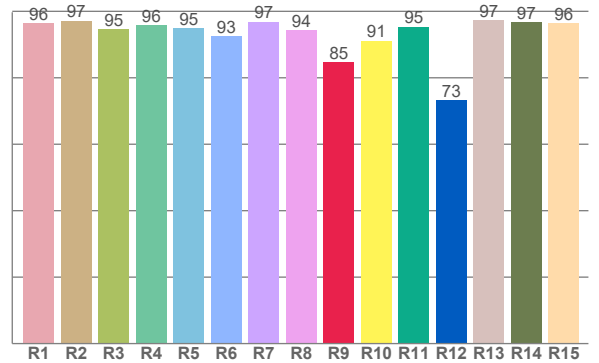
COLOR DETAILS



TM30: 91,6



CRI: 95,3 (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
96,4	97,1	94,6	95,8	94,9	92,6	96,9	94,3	84,7	91,1	95,3	73,2	97,4	96,8	96,4

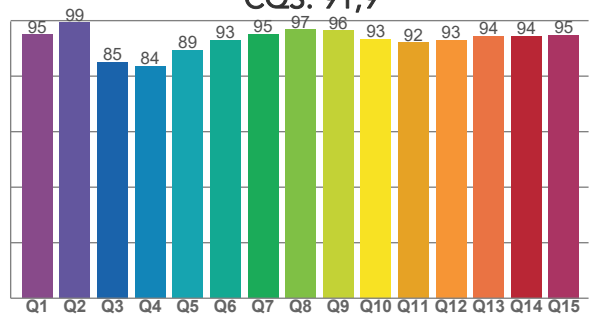
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,1	95,0	92,8	92,8	91,9	96,6	95,2	92,2	89,7	84,8	83,7	94,0	93,5	94,0	85,2	96,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,9	99,3	85,2	83,6	89,3	92,9	95,1	96,8	96,4	93,4	92,1	93,0	94,4	94,3	94,8

CQS: 91,9



COLOR PARAMETERS

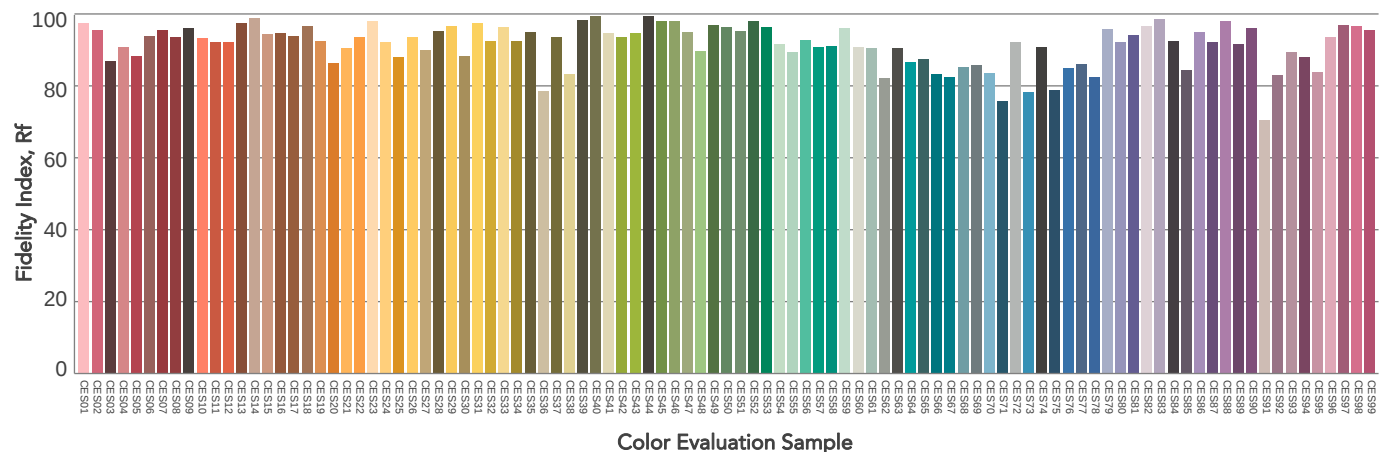
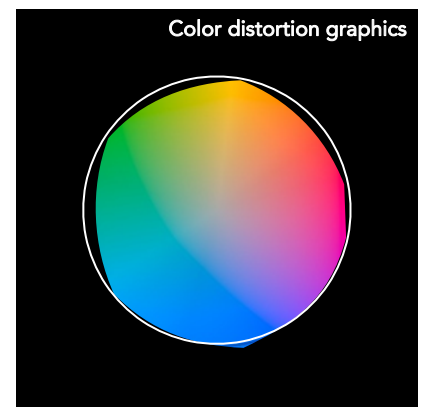
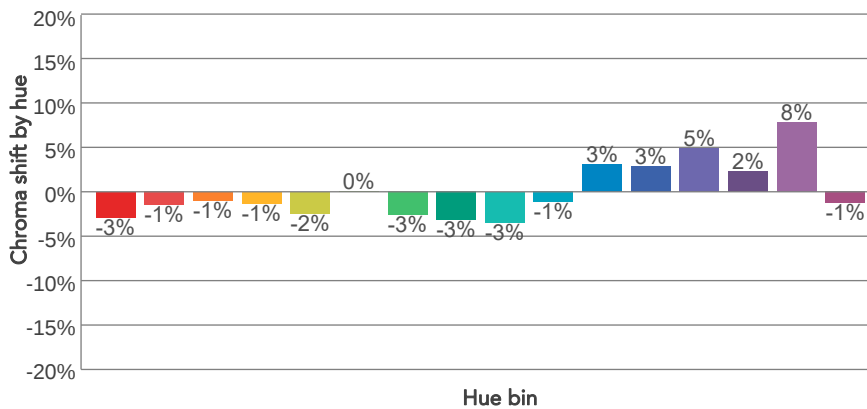
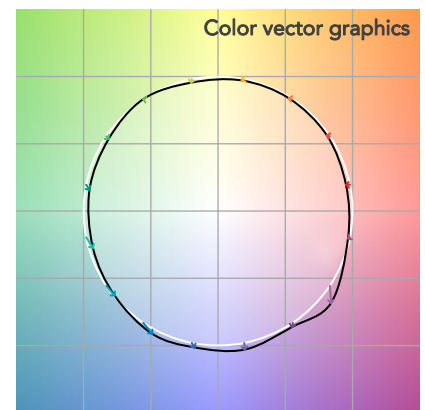
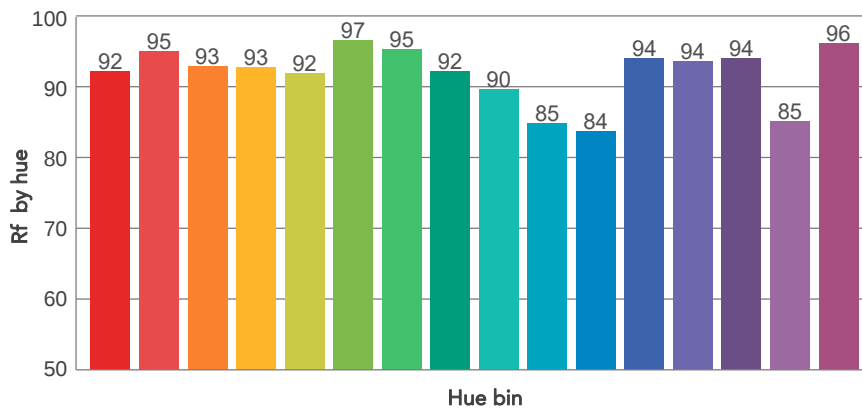
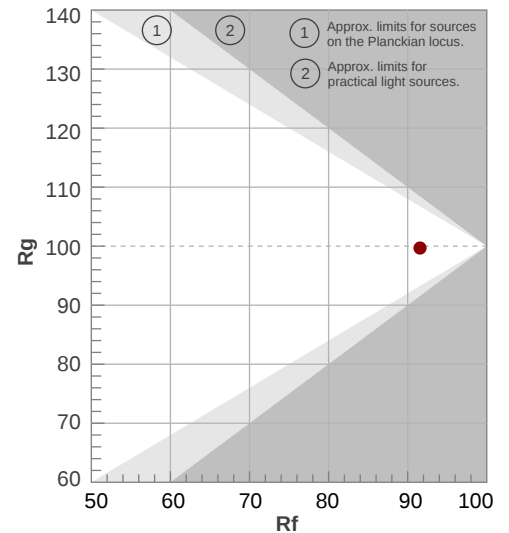
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5483 K	95,3	84,7	91,6	99,7	91,9	97	0,333	0,342	0,0033

TM30 DETAILS

Rf 91,6
Fidelity index Rf

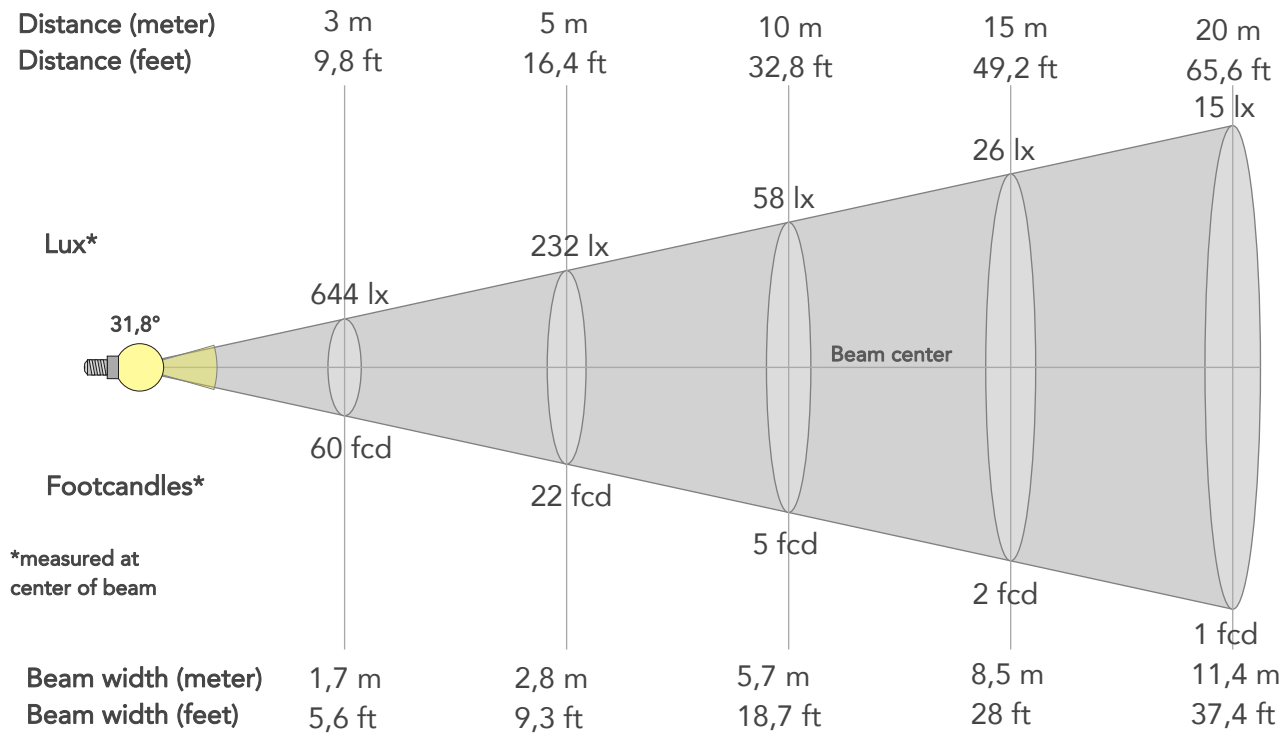
Rg 99,7
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	0%
2	95	-1%	2%
3	93	-1%	3%
4	93	-1%	2%
5	92	-2%	1%
6	97	0%	0%
7	95	-3%	1%
8	92	-3%	3%
9	90	-3%	9%
10	85	-1%	10%
11	84	3%	10%
12	94	3%	3%
13	94	5%	-1%
14	94	2%	-2%
15	85	8%	-10%
16	96	-1%	-1%



BEAM DETAILS

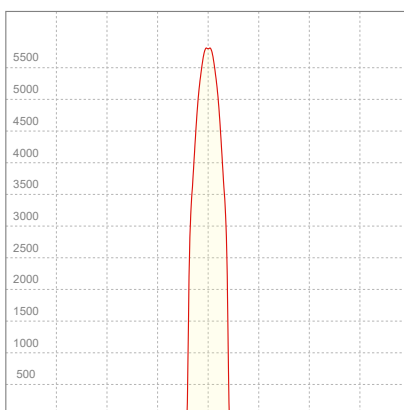
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,8°	36,4°	38°	99,0%	98,9%



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	5800lx	1450lx	644lx	363lx	232lx	103lx	58lx	26lx	15lx	9lx	6lx	4lx	2lx
Footcand.	539fcd	135fcd	60fcd	34fcd	22fcd	10fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,3m	2,8m	4,3m	5,7m	8,5m	11,4m	14,2m	17,1m	22,8m	28,5m
Beam wid.	1,9ft	3,8ft	5,6ft	7,5ft	9,3ft	14ft	18,7ft	28ft	37,4ft	46,7ft	56,1ft	74,8ft	93,5ft

LINEAR DISTRIBUTION DIAGRAM

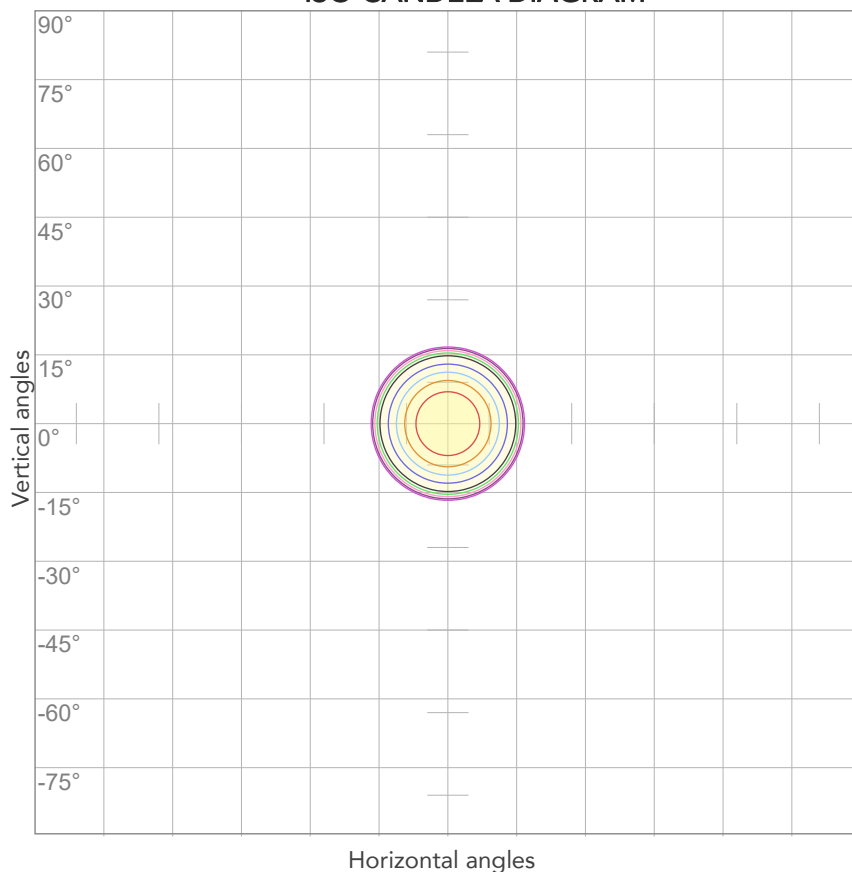


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,159A	33,1W	0,93	38lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



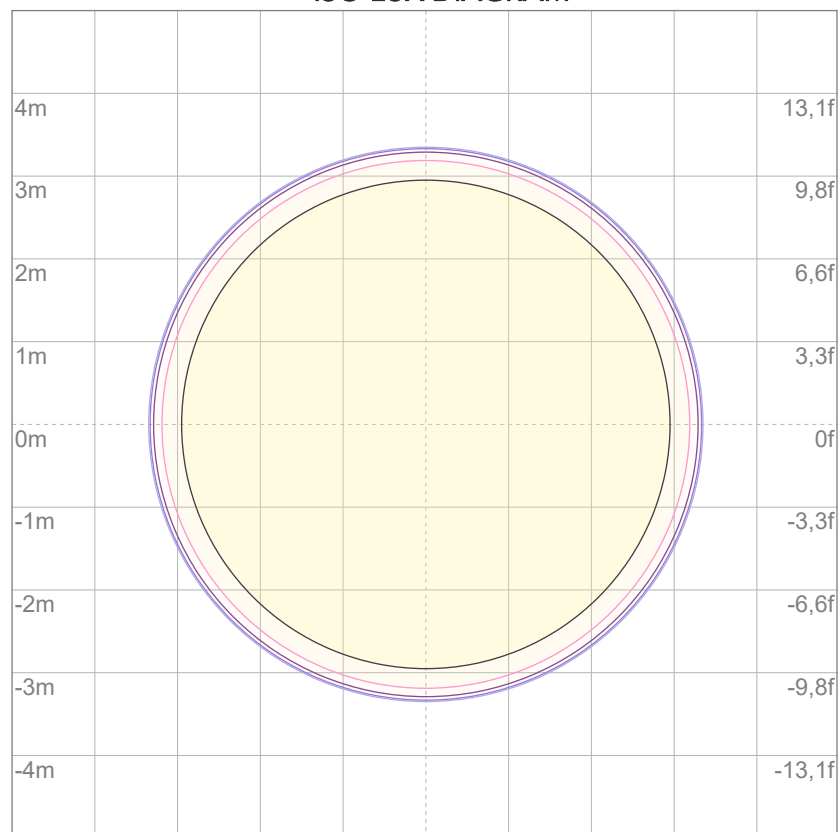
10%	580 cd
20%	1160 cd
30%	1740 cd
40%	2320 cd
50%	2900 cd
60%	3480 cd
70%	4060 cd
80%	4640 cd

Conditions:

Number of c-planes: 2

Candela at center: 5800 cd

ISO LUX DIAGRAM



3%	1,74 lx
5%	2,90 lx
10%	5,80 lx
30%	17,4 lx
50%	29,0 lx

Conditions:

Number of c-planes: 2

Lux at center: 58,0 lx

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