



Photometric Test Report



ECLDISPLAYCASVW

PROFILE LENS 18°

35W variable white LED gallery light,
from 2700K to 5600K

(CASAMBI control on-board)

CONTENTS

Table of contents	2
Testing process	3
Color temperature Full On	4
Color temperature Warm White	9
Color temperature Cold White	14

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:

1128 lm

Peak candela output:

17634 cd

Light quality:

CRI: 97,1

Color temperature:

4535 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 18°

Target:

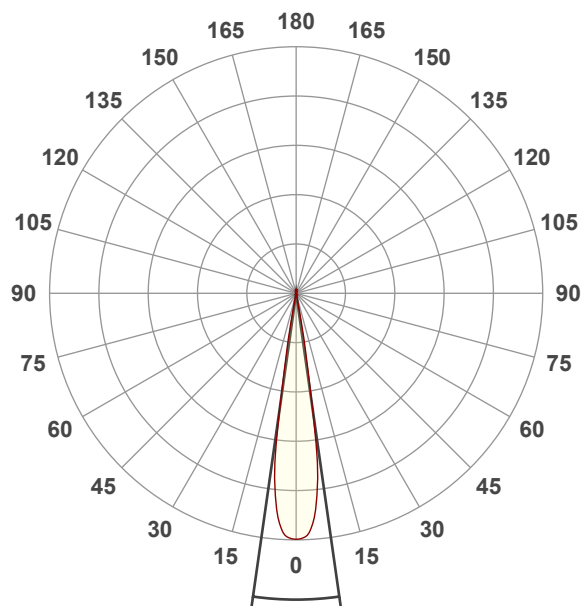
Full On

Operator:

Salvatore Giglio

Date and time:

05/02/2024 10:40:38

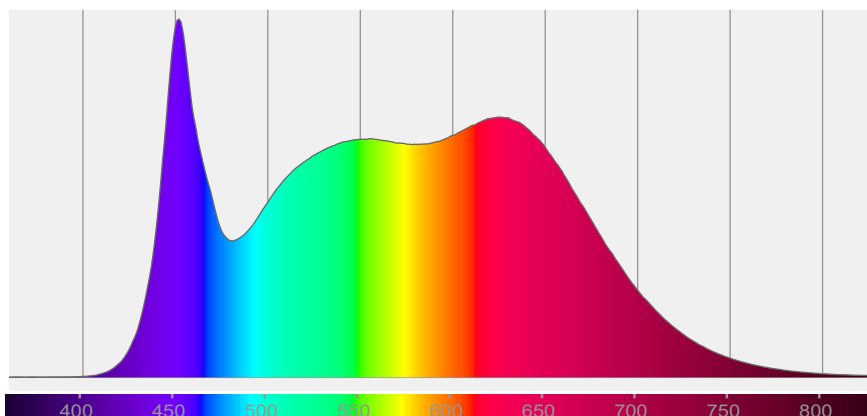


Beam angle 50%: 16,2°

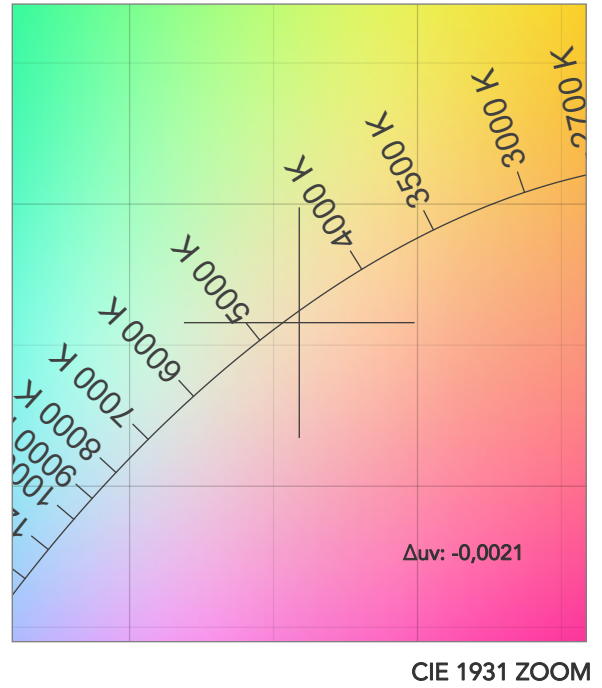
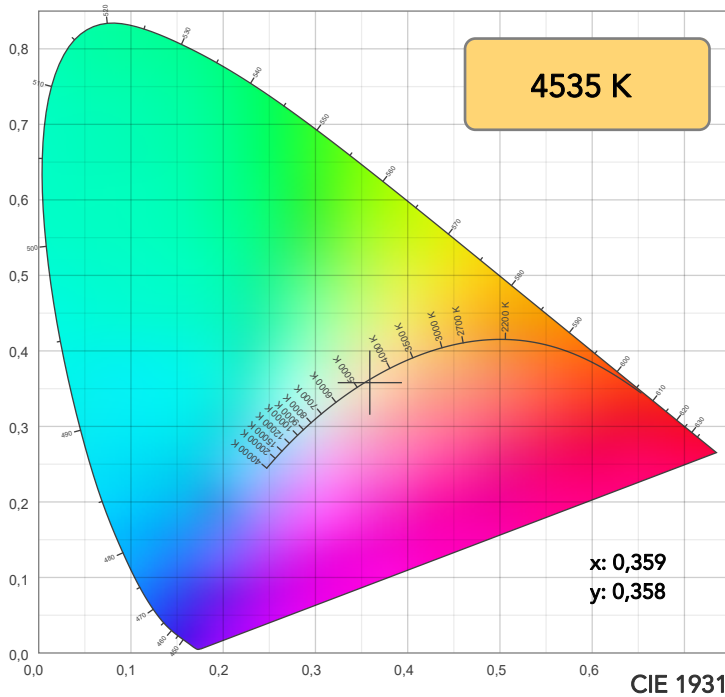
Field angle 10%: 21°

Cut off angle 2.5%: 22,3°

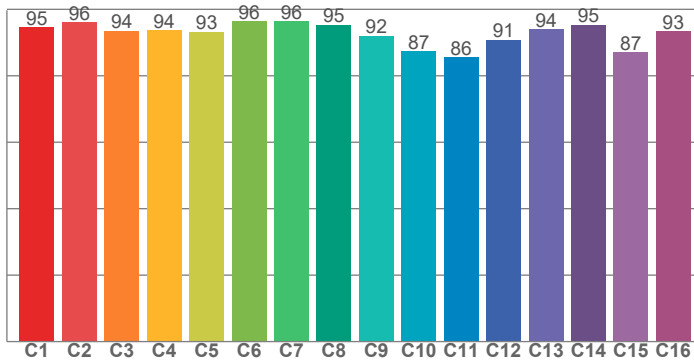
Spectra



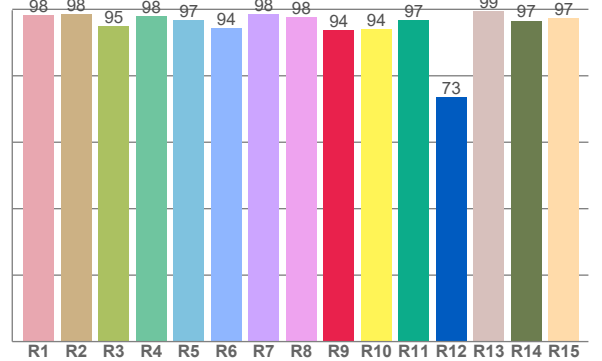
COLOR DETAILS



TM30: 92,7



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

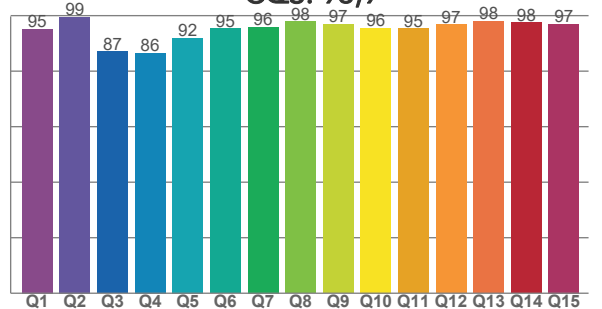
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,6	96,1	93,6	93,7	93,3	96,3	96,3	95,3	92,0	87,3	85,5	90,7	94,0	95,3	87,0	93,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,2	99,5	87,1	86,5	91,9	95,3	95,9	97,8	96,9	95,6	95,3	96,8	97,9	97,5	97,0

CQS: 93,9



COLOR PARAMETERS

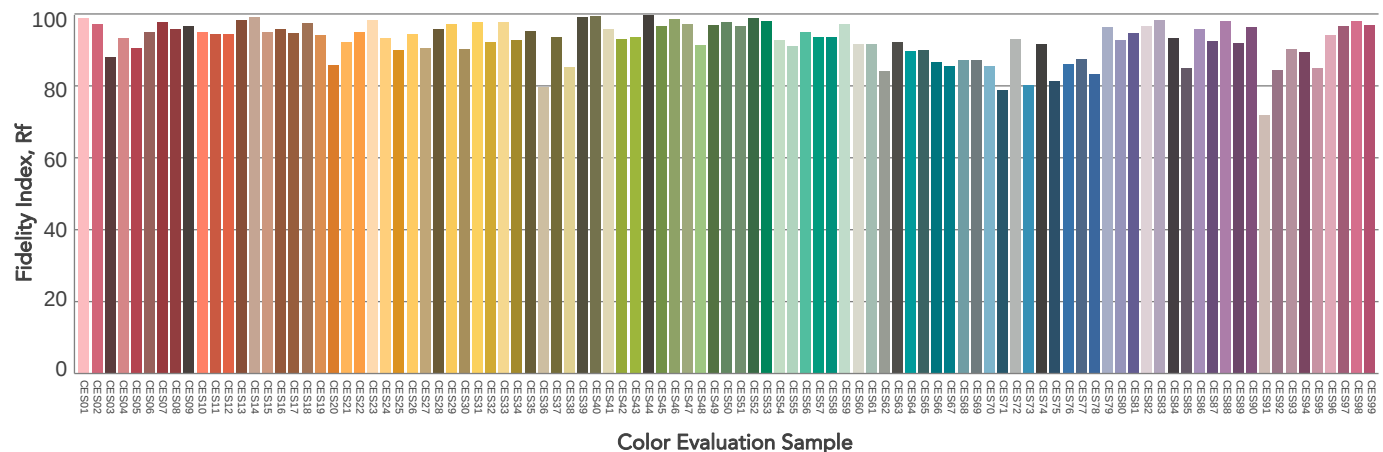
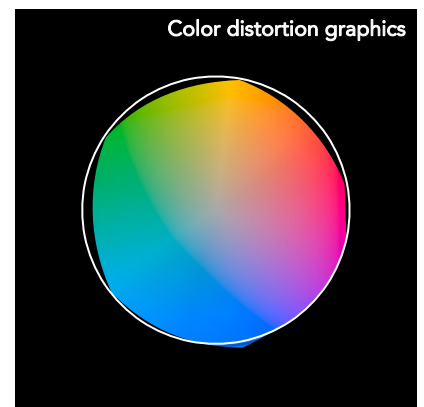
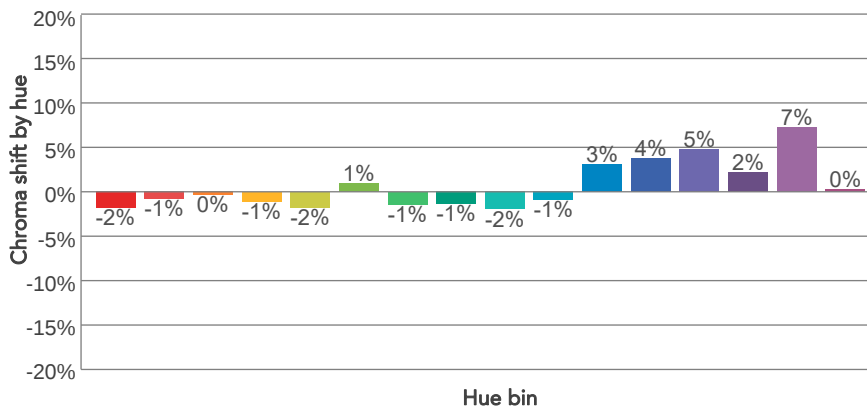
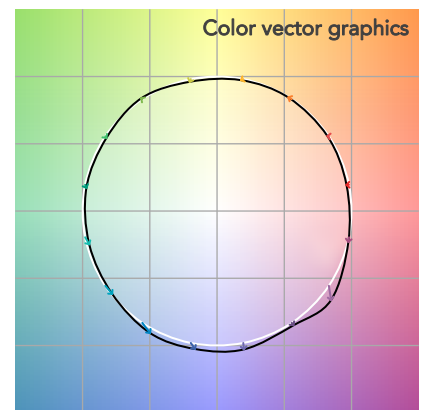
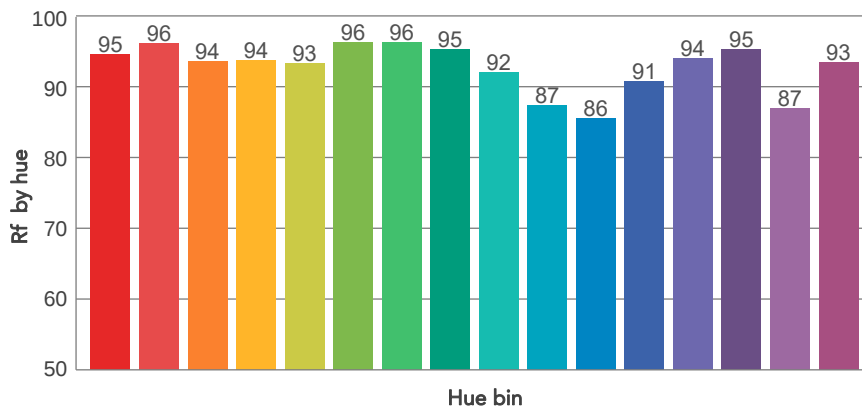
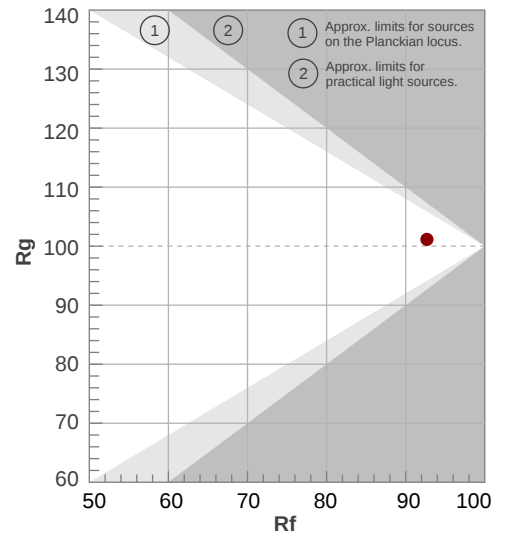
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4535 K	97,1	93,8	92,7	101,1	93,9	97	0,359	0,358	-0,0021

TM30 DETAILS

Rf 92,7
Fidelity index Rf

Rg 101,1
Gammut index

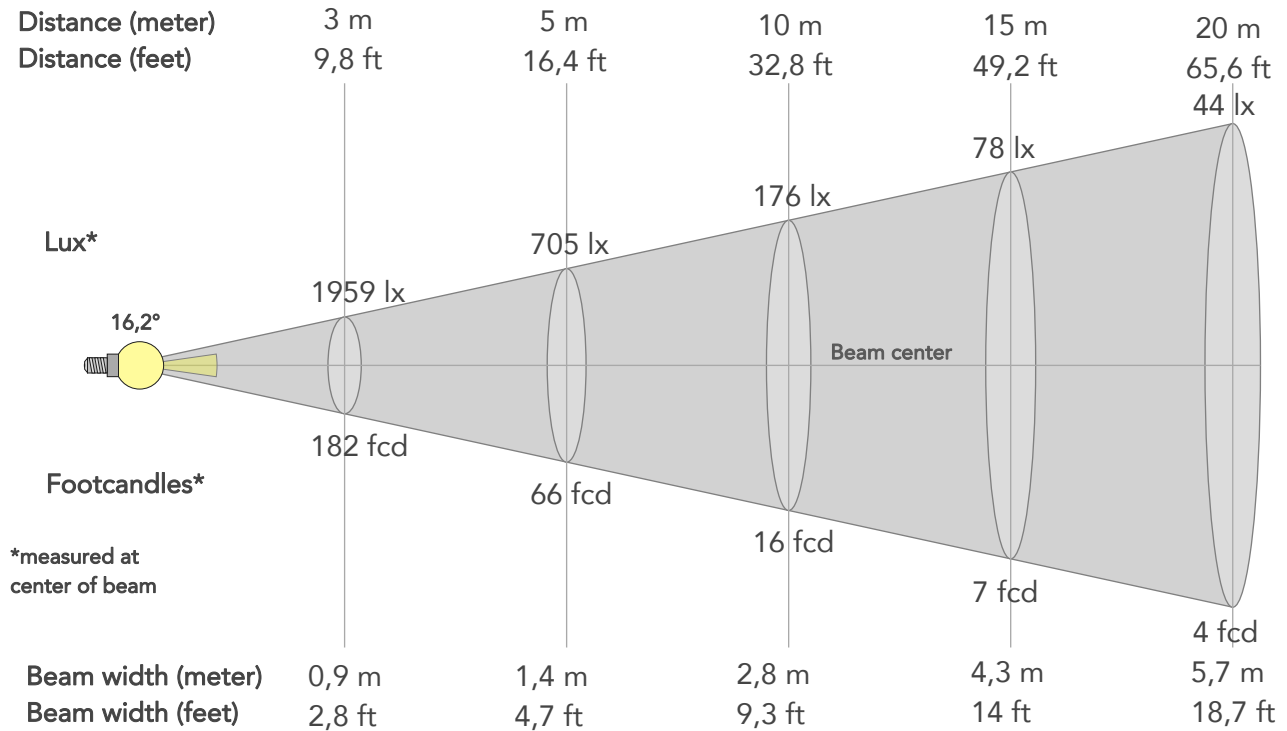
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	0%
2	96	-1%	1%
3	94	0%	3%
4	94	-1%	2%
5	93	-2%	1%
6	96	1%	0%
7	96	-1%	0%
8	95	-1%	2%
9	92	-2%	6%
10	87	-1%	8%
11	86	3%	9%
12	91	4%	4%
13	94	5%	0%
14	95	2%	0%
15	87	7%	-8%
16	93	0%	-3%



BEAM DETAILS



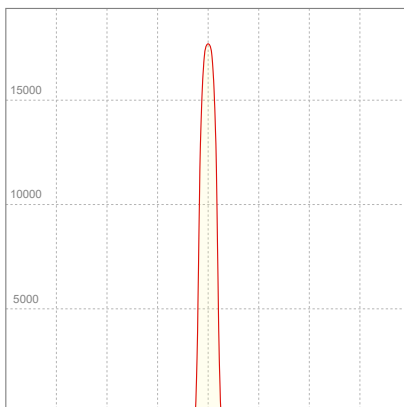
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,2°	21°	22,3°	98,2%	98,0%



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	17634lx	4408lx	1959lx	1102lx	705lx	313lx	176lx	78lx	44lx	28lx	20lx	11lx	7lx
Footcand.	1638fcd	410fcd	182fcd	102fcd	66fcd	29fcd	16fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,9m	1,1m	1,4m	2,1m	2,8m	4,3m	5,7m	7,1m	8,5m	11,4m	14,2m
Beam wid.	0,9ft	1,9ft	2,8ft	3,7ft	4,7ft	7ft	9,3ft	14ft	18,7ft	23,3ft	28ft	37,3ft	46,7ft

LINEAR DISTRIBUTION DIAGRAM

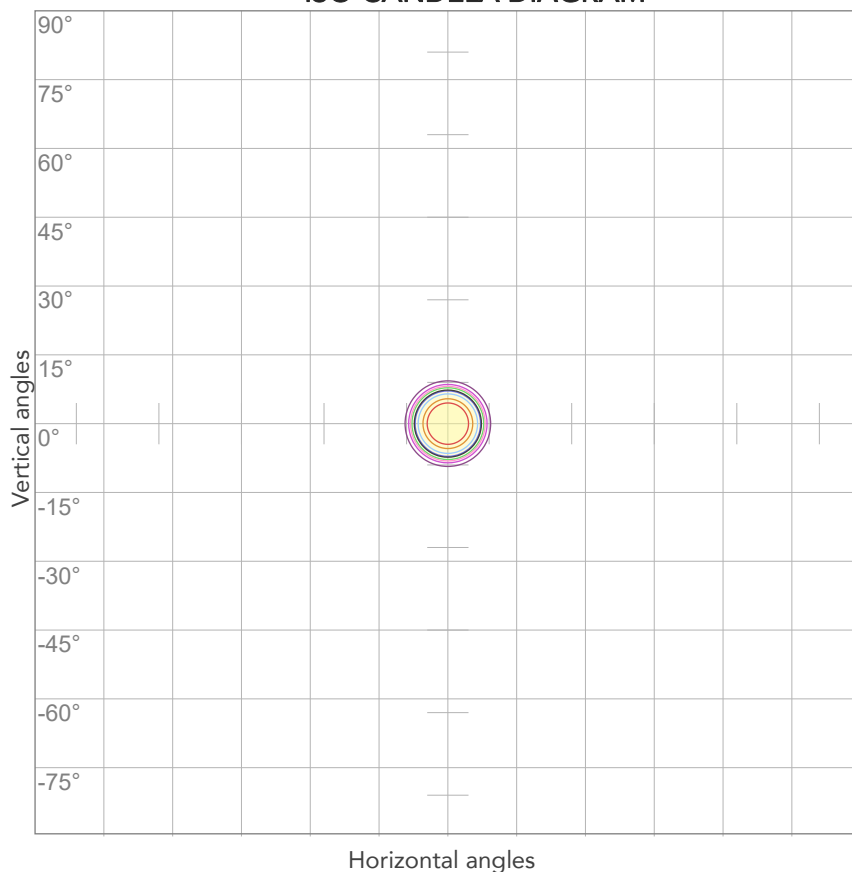


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,161A	33,5W	0,93	34lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



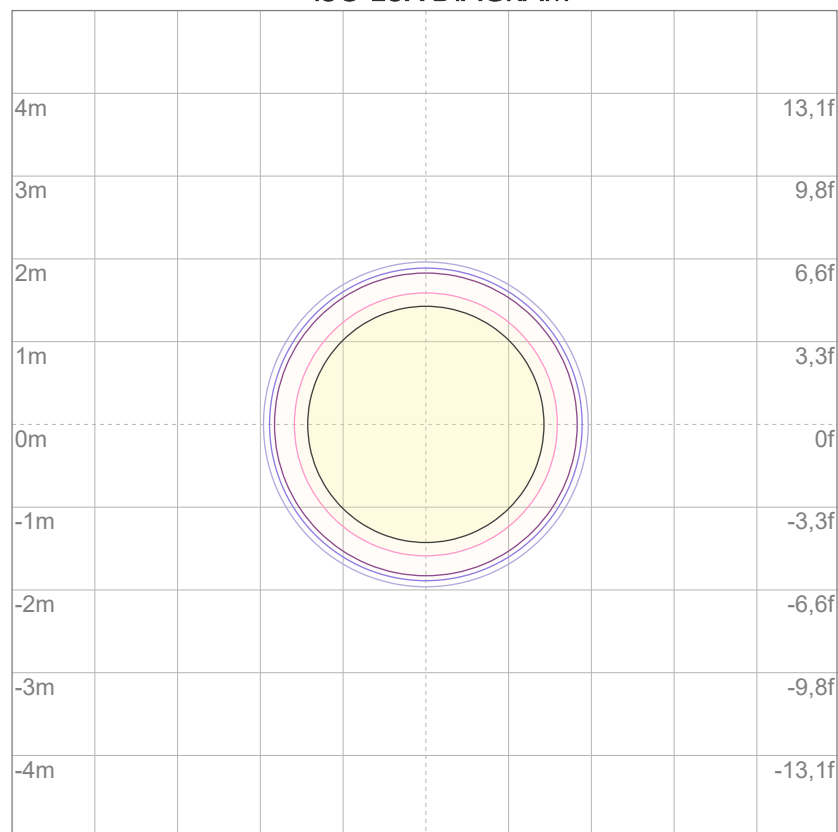
10%	1763 cd
20%	3527 cd
30%	5290 cd
40%	7054 cd
50%	8817 cd
60%	10580 cd
70%	12344 cd
80%	14107 cd

Conditions:

Number of c-planes: 2

Candela at center: 17634 cd

ISO LUX DIAGRAM



3%	5,29 lx
5%	8,82 lx
10%	17,6 lx
30%	52,9 lx
50%	88,2 lx

Conditions:

Number of c-planes: 2

Lux at center: 176 lx

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



Total lumen output:

525 lm

Peak candela output:

8456 cd

Light quality:

CRI: 97,8

Color temperature:

2768 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 18°

Target:

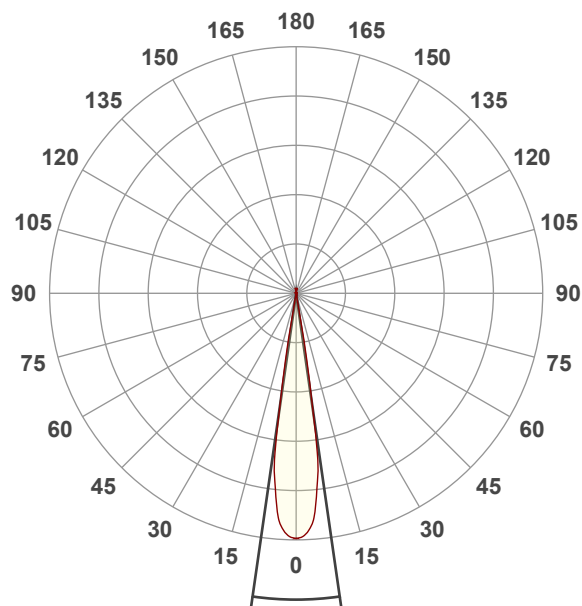
Warm White

Operator:

Salvatore Giglio

Date and time:

05/02/2024 10:41:59

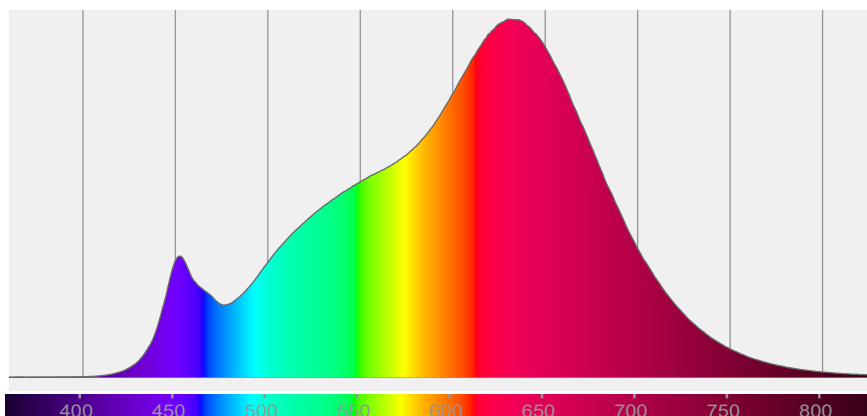


Beam angle 50%: 16,4°

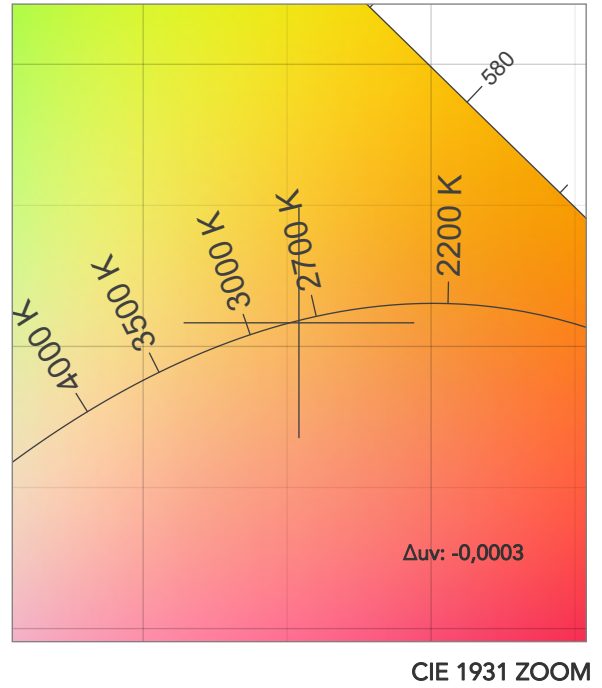
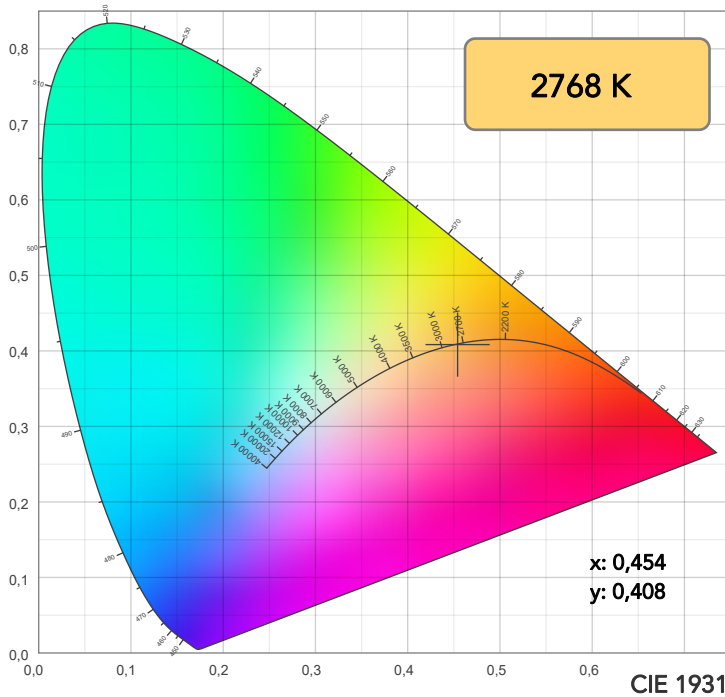
Field angle 10%: 20°

Cut off angle 2.5%: 20,8°

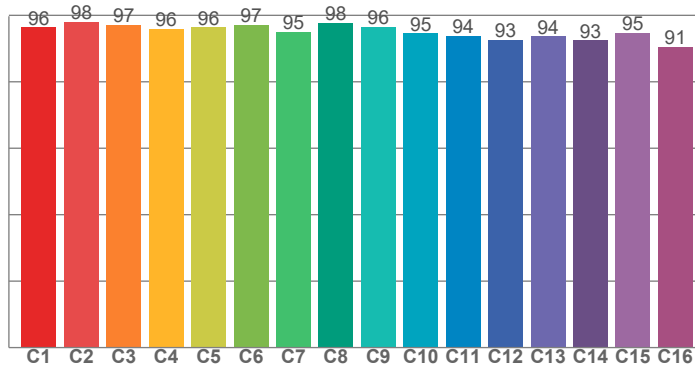
Spectra



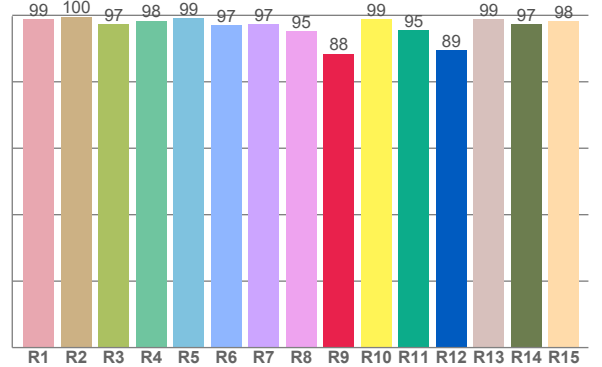
COLOR DETAILS



TM30: 95,3



CRI: 97,8 (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
98,8	99,6	97,3	98,3	99,1	97,1	97,3	95,2	88,5	98,9	95,4	89,4	98,8	97,3	98,2

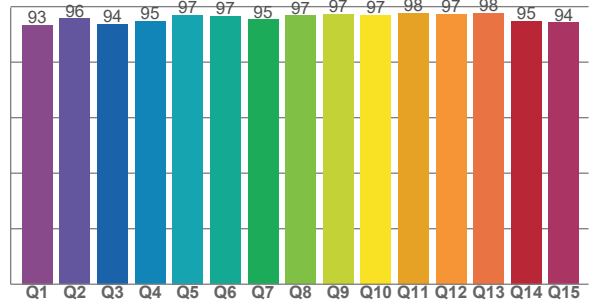
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,3	98,0	97,1	95,9	96,4	97,2	95,1	97,8	96,5	94,6	93,8	92,6	93,7	92,5	94,7	90,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93,3	95,7	93,7	94,7	97,1	96,5	95,4	96,8	97,4	97,0	97,8	97,4	97,8	94,8	94,3

CQS: 95,5



COLOR PARAMETERS

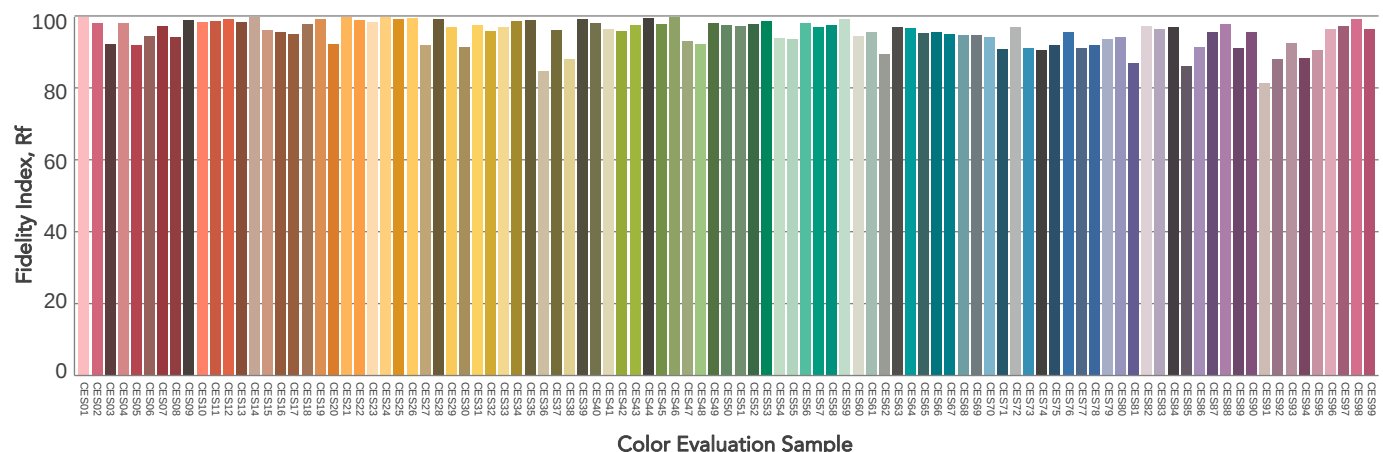
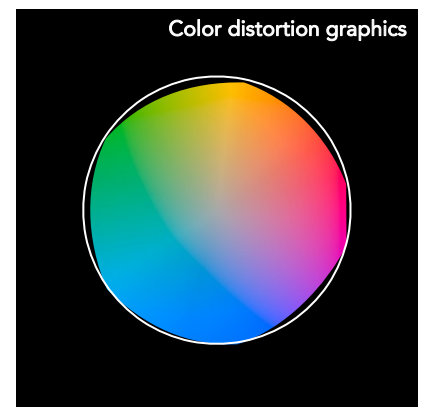
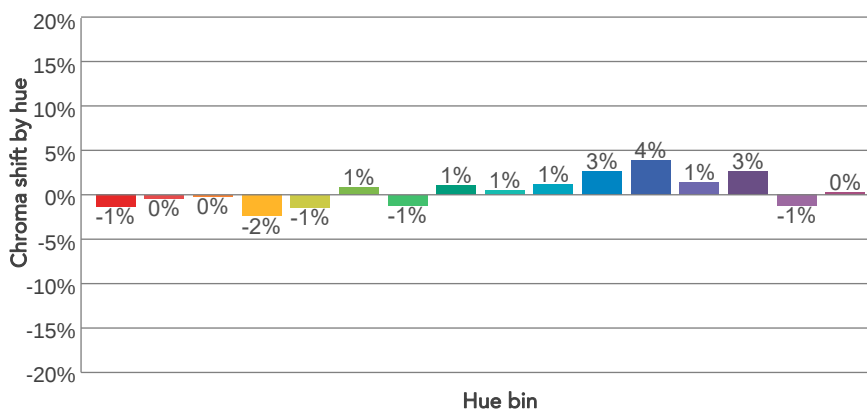
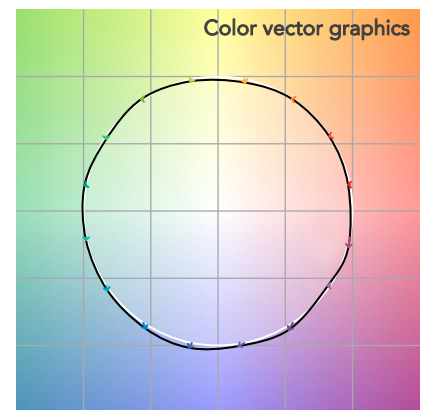
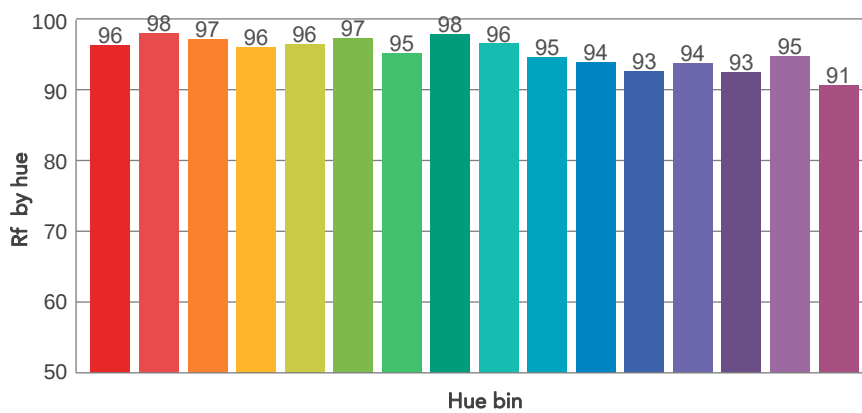
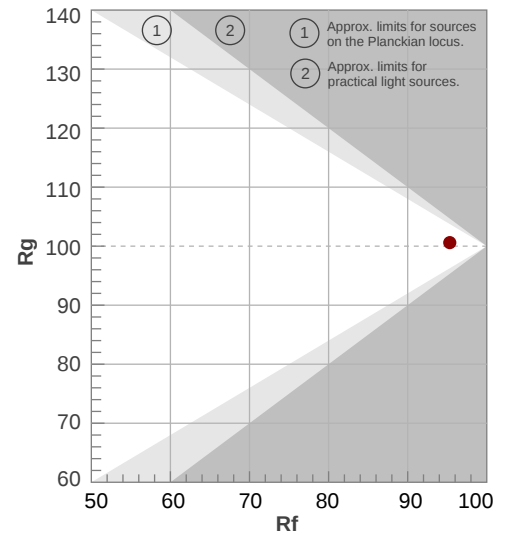
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2768 K	97,8	88,5	95,3	100,6	95,5	97	0,454	0,408	-0,0003

TM30 DETAILS

Rf 95,3
Fidelity index Rf

Rg 100,6
Gammut index

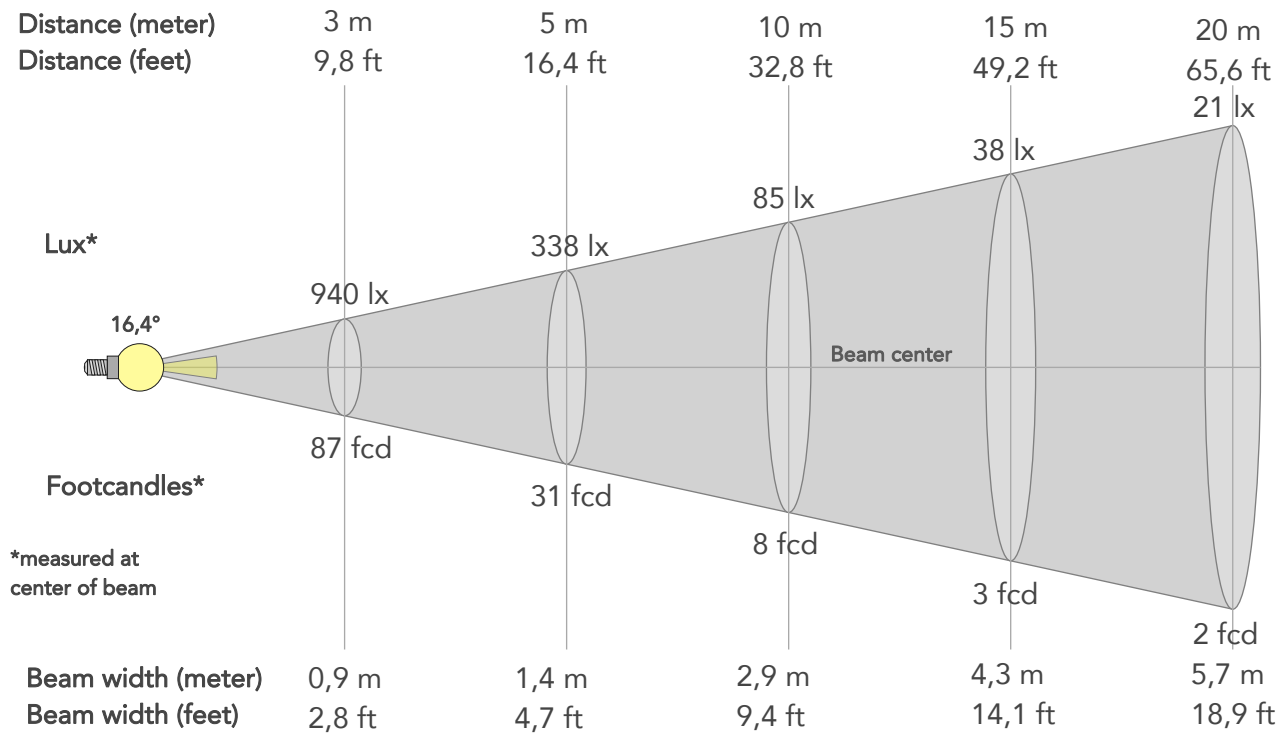
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	0%
2	98	0%	0%
3	97	0%	1%
4	96	-2%	-1%
5	96	-1%	1%
6	97	1%	1%
7	95	-1%	2%
8	98	1%	1%
9	96	1%	2%
10	95	1%	3%
11	94	3%	4%
12	93	4%	-1%
13	94	1%	-5%
14	93	3%	-5%
15	95	-1%	-1%
16	91	0%	-7%



BEAM DETAILS



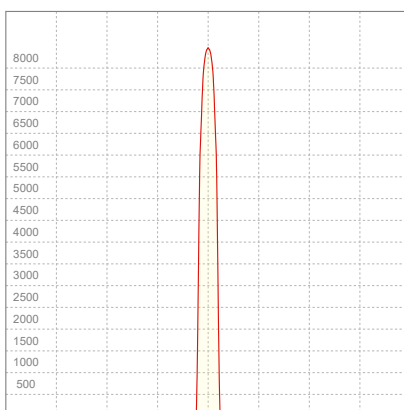
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,4°	20°	20,8°	99,2%	98,8%



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	8456lx	2114lx	940lx	528lx	338lx	150lx	85lx	38lx	21lx	14lx	9lx	5lx	3lx
Footcand.	786fcd	196fcd	87fcd	49fcd	31fcd	14fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,3m	0,6m	0,9m	1,1m	1,4m	2,2m	2,9m	4,3m	5,7m	7,2m	8,6m	11,5m	14,4m
Beam wid.	0,9ft	1,9ft	2,8ft	3,8ft	4,7ft	7,1ft	9,4ft	14,1ft	18,9ft	23,6ft	28,3ft	37,7ft	47,1ft

LINEAR DISTRIBUTION DIAGRAM

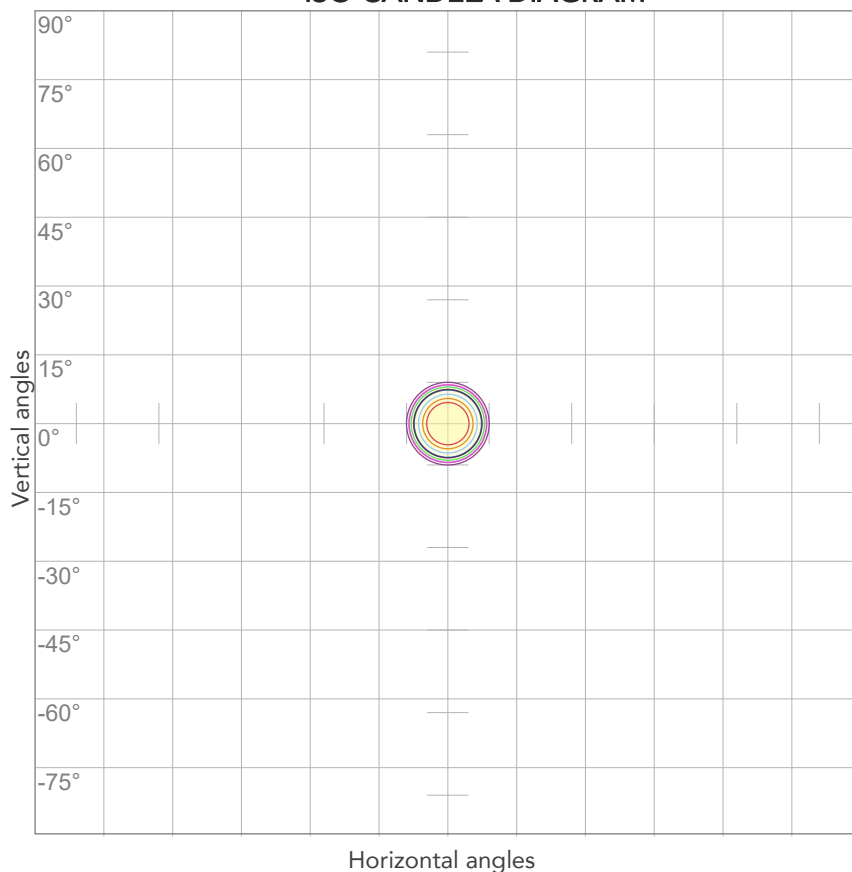


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,112A	21,7W	0,86	24lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



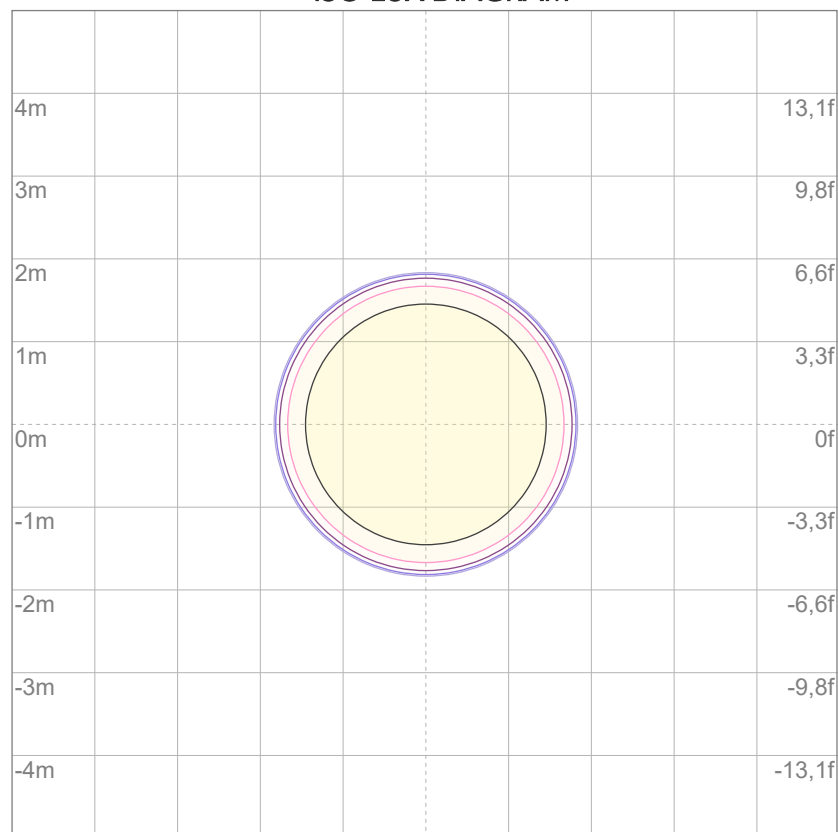
10%	846 cd
20%	1691 cd
30%	2537 cd
40%	3382 cd
50%	4228 cd
60%	5073 cd
70%	5919 cd
80%	6765 cd

Conditions:

Number of c-planes: 2

Candela at center: 8456 cd

ISO LUX DIAGRAM



3%	2,54 lx
5%	4,23 lx
10%	8,46 lx
30%	25,4 lx
50%	42,3 lx

Conditions:

Number of c-planes: 2

Lux at center: 84,6 lx

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



Total lumen output:

1180 lm

Peak candela output:

18456 cd

Light quality:

CRI: 95,5

Color temperature:

5573 K

PRODUCT NAME:

ECLDISPLAYVW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 18°

Target:

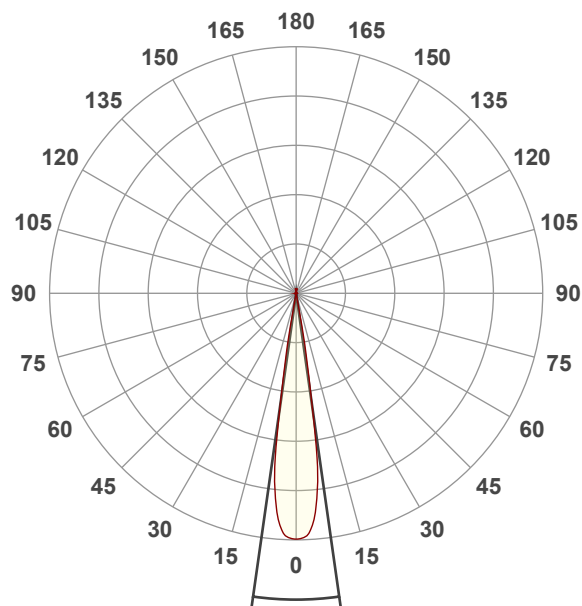
Cold White

Operator:

Salvatore Giglio

Date and time:

05/02/2024 10:43:04

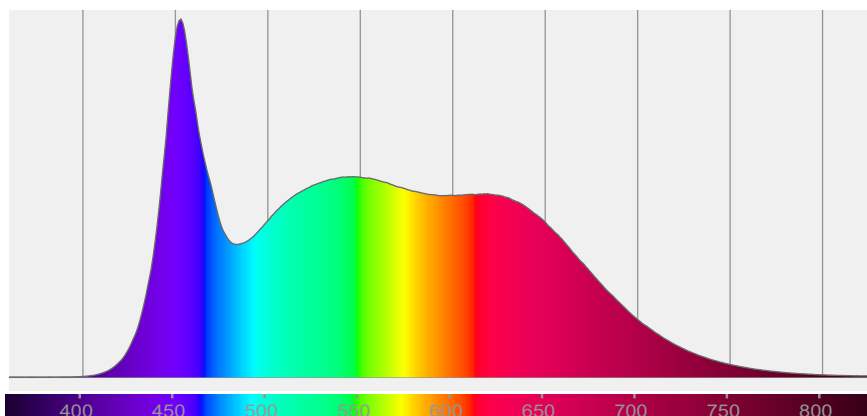


Beam angle 50%: 16,2°

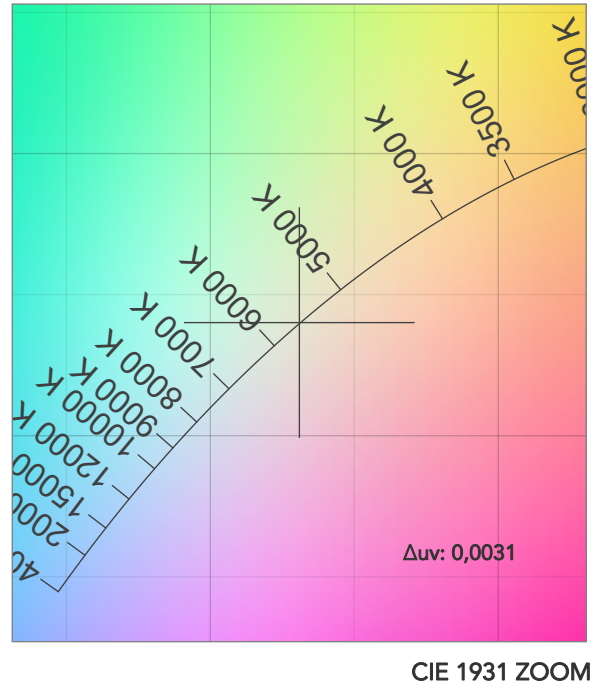
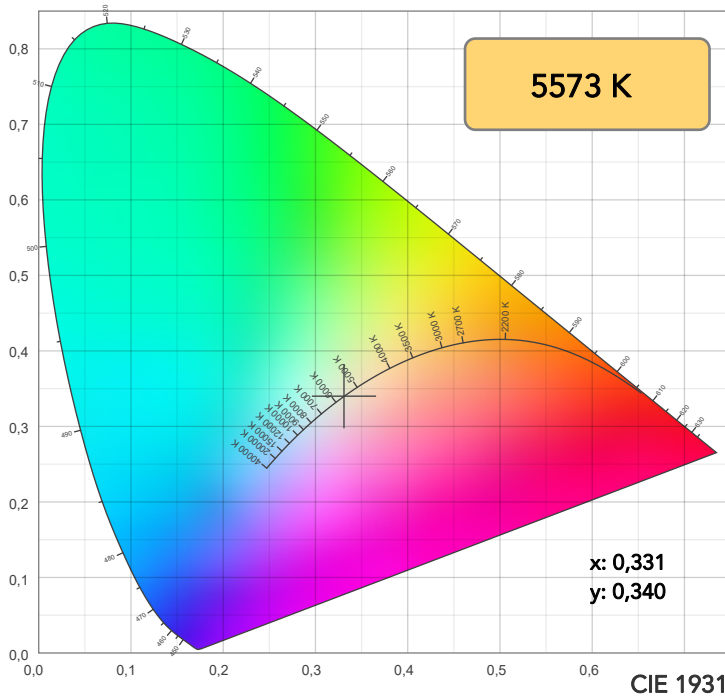
Field angle 10%: 20,9°

Cut off angle 2.5%: 22,1°

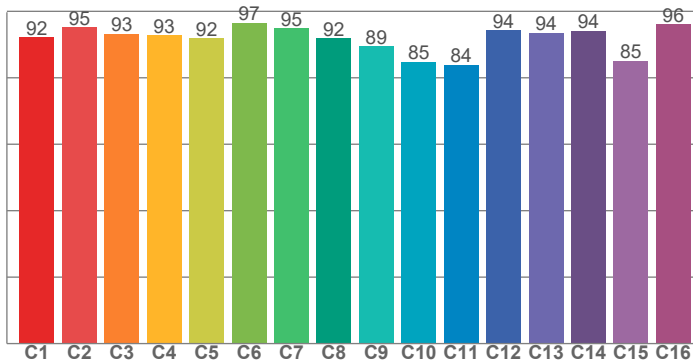
Spectra



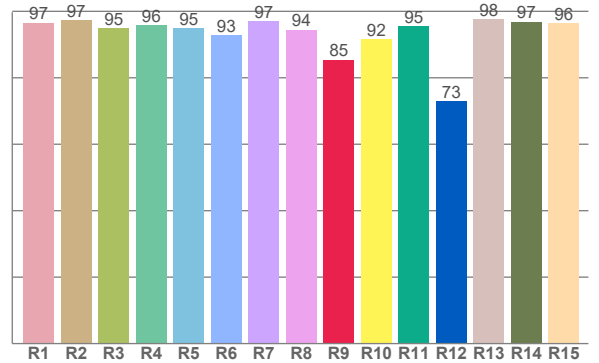
COLOR DETAILS



TM30: 91,5



CRI: 95,5 (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
96,5	97,4	94,8	95,8	94,9	92,8	97,0	94,5	85,5	91,6	95,4	73,0	97,6	96,9	96,4

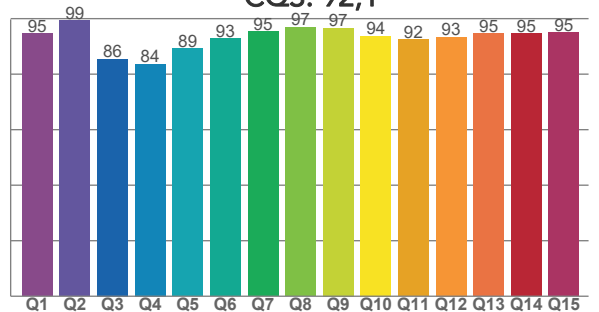
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,1	95,1	93,1	92,8	91,8	96,6	94,9	91,8	89,4	84,7	83,8	94,3	93,6	94,1	85,0	96,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,6	99,4	85,5	83,6	89,2	92,8	95,4	96,9	96,6	93,8	92,5	93,4	94,7	94,6	95,0

CQS: 92,1



COLOR PARAMETERS

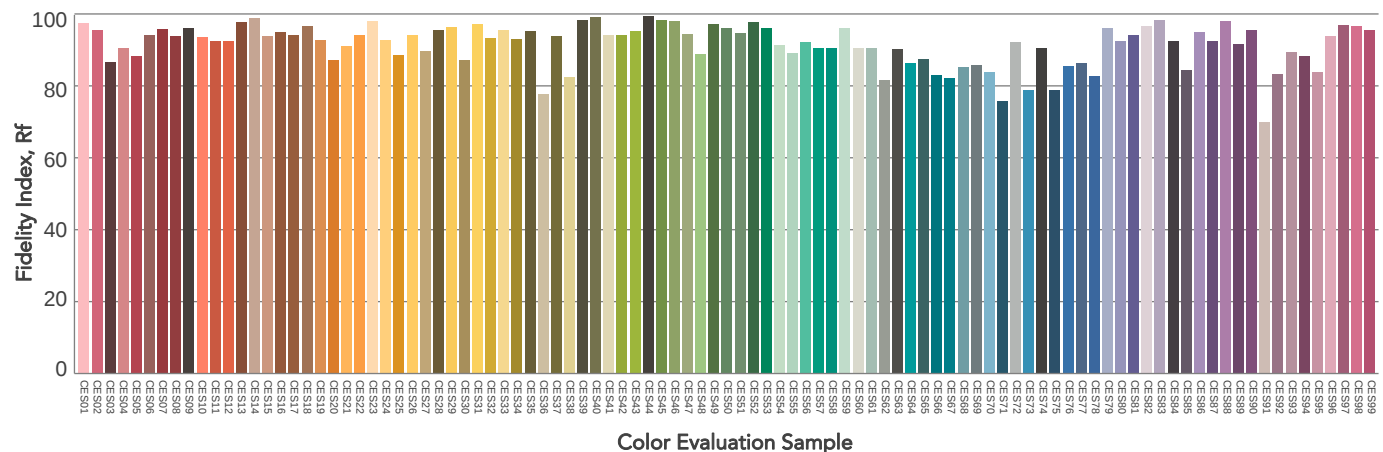
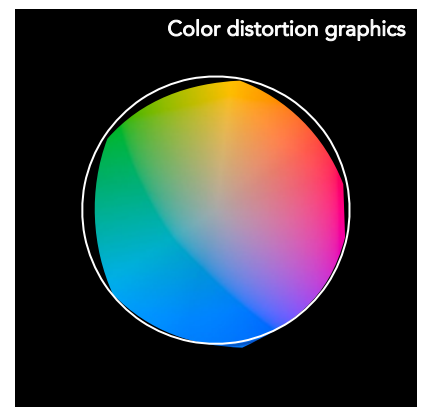
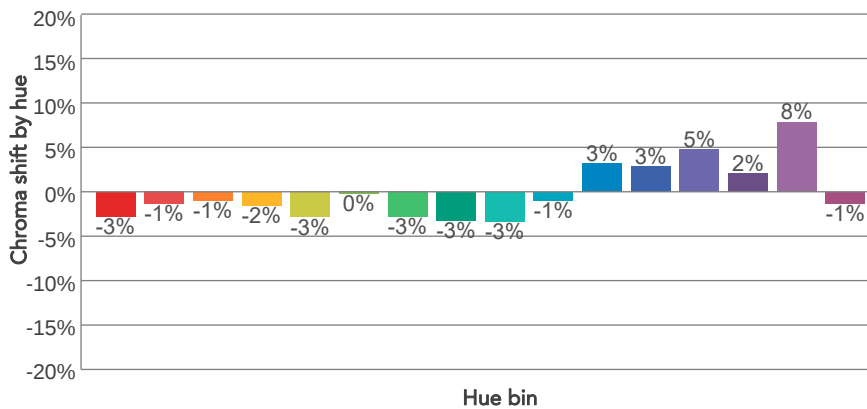
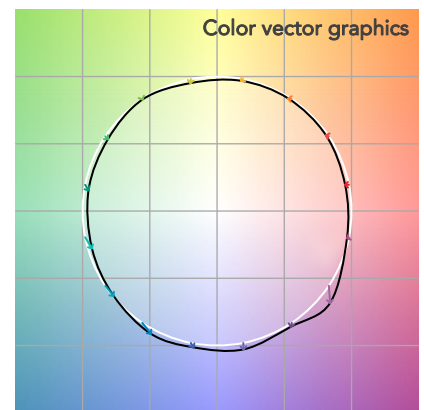
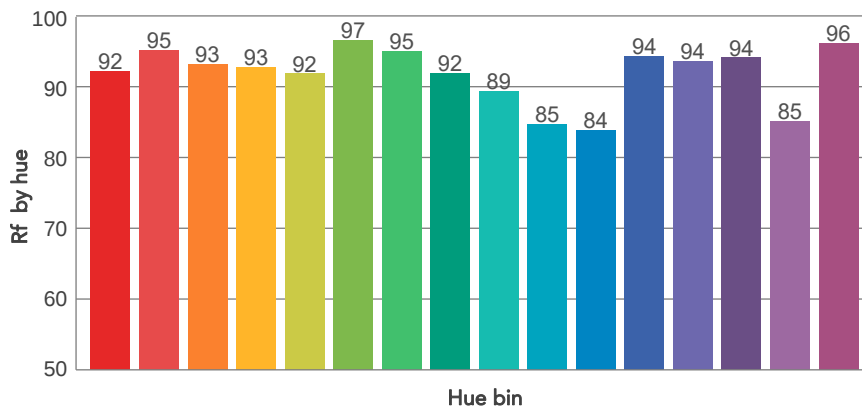
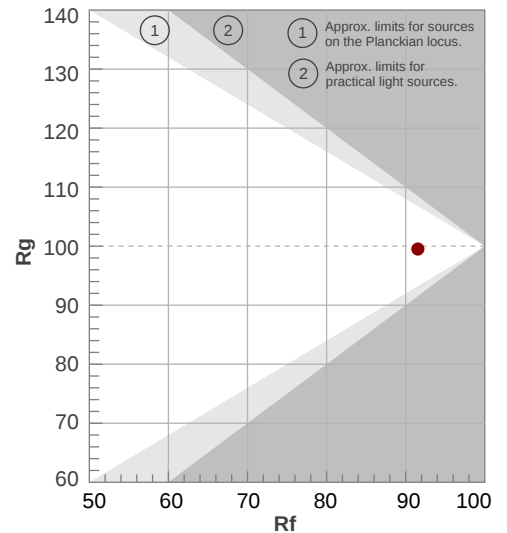
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5573 K	95,5	85,5	91,5	99,5	92,1	97	0,331	0,340	0,0031

TM30 DETAILS

Rf 91,5
Fidelity index Rf

Rg 99,5
Gammut index

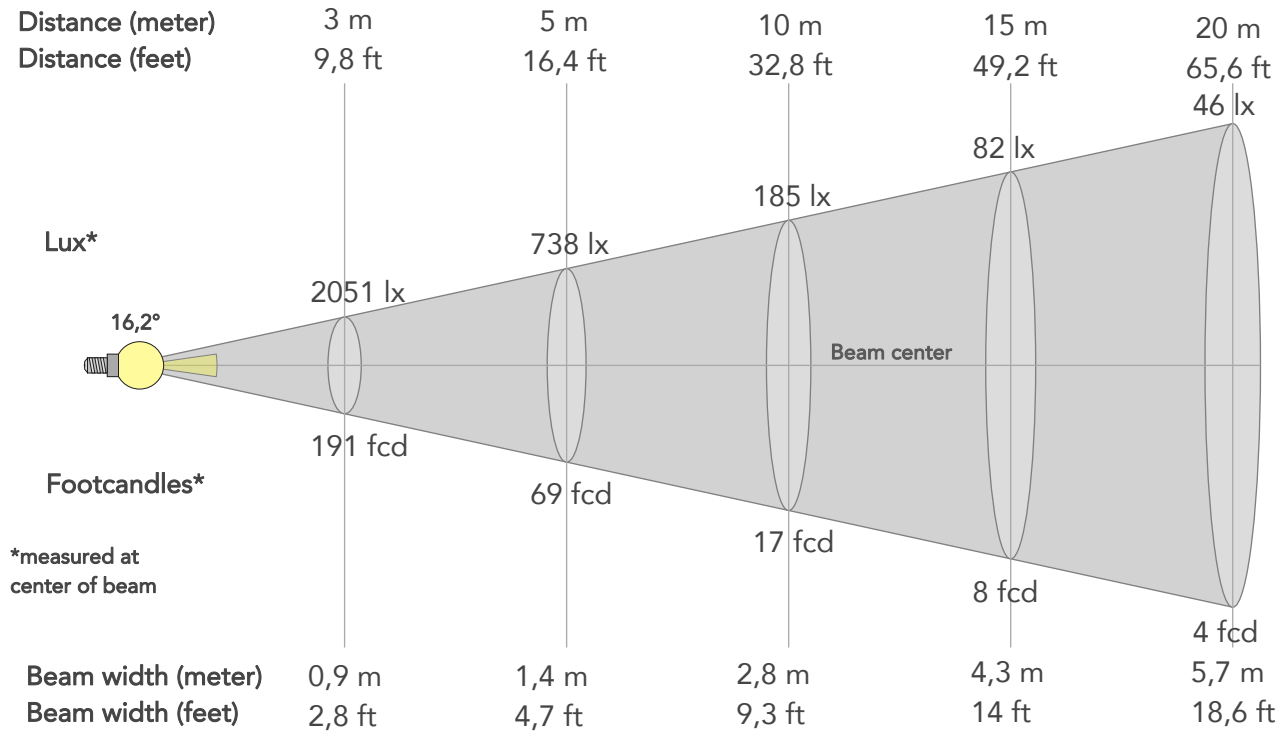
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	0%
2	95	-1%	2%
3	93	-1%	2%
4	93	-2%	1%
5	92	-3%	1%
6	97	0%	0%
7	95	-3%	1%
8	92	-3%	3%
9	89	-3%	9%
10	85	-1%	10%
11	84	3%	10%
12	94	3%	2%
13	94	5%	-1%
14	94	2%	-2%
15	85	8%	-10%
16	96	-1%	-1%



BEAM DETAILS



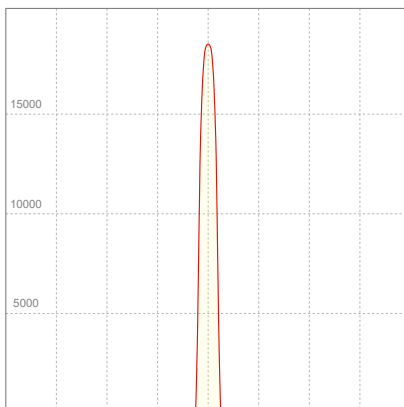
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,2°	20,9°	22,1°	98,2%	98,0%



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	18456lx	4614lx	2051lx	1153lx	738lx	328lx	185lx	82lx	46lx	30lx	21lx	12lx	7lx
Footcand.	1715fcd	429fcd	191fcd	107fcd	69fcd	30fcd	17fcd	8fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,9m	1,1m	1,4m	2,1m	2,8m	4,3m	5,7m	7,1m	8,5m	11,4m	14,2m
Beam wid.	0,9ft	1,9ft	2,8ft	3,7ft	4,7ft	7ft	9,3ft	14ft	18,6ft	23,3ft	27,9ft	37,3ft	46,6ft

LINEAR DISTRIBUTION DIAGRAM

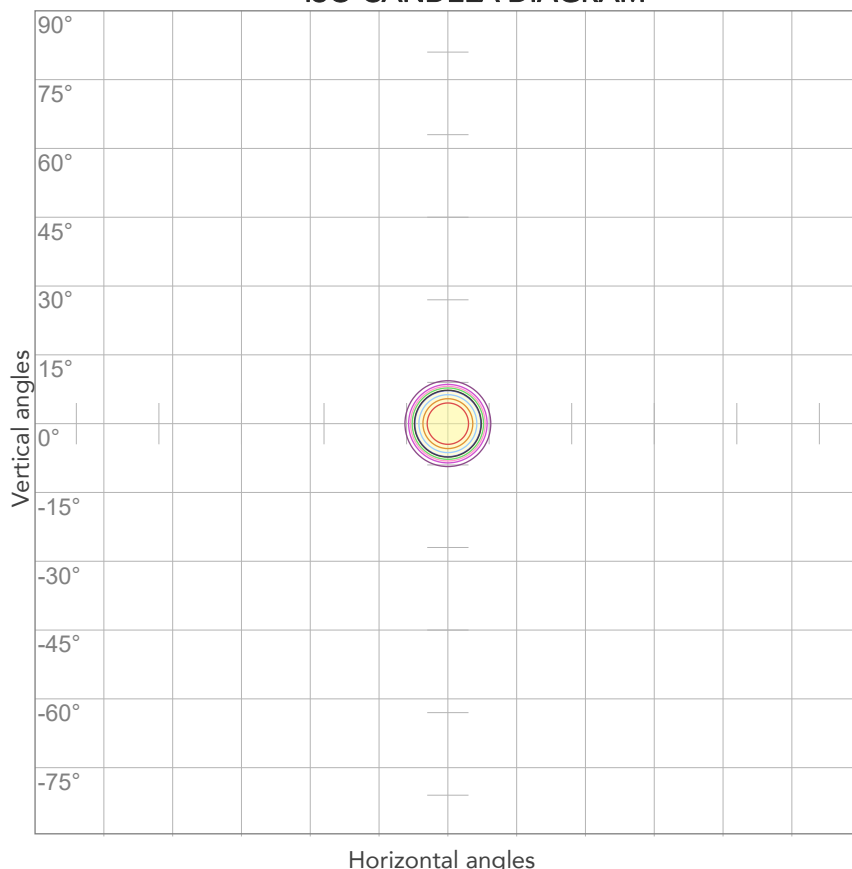


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,158A	32,9W	0,93	36lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



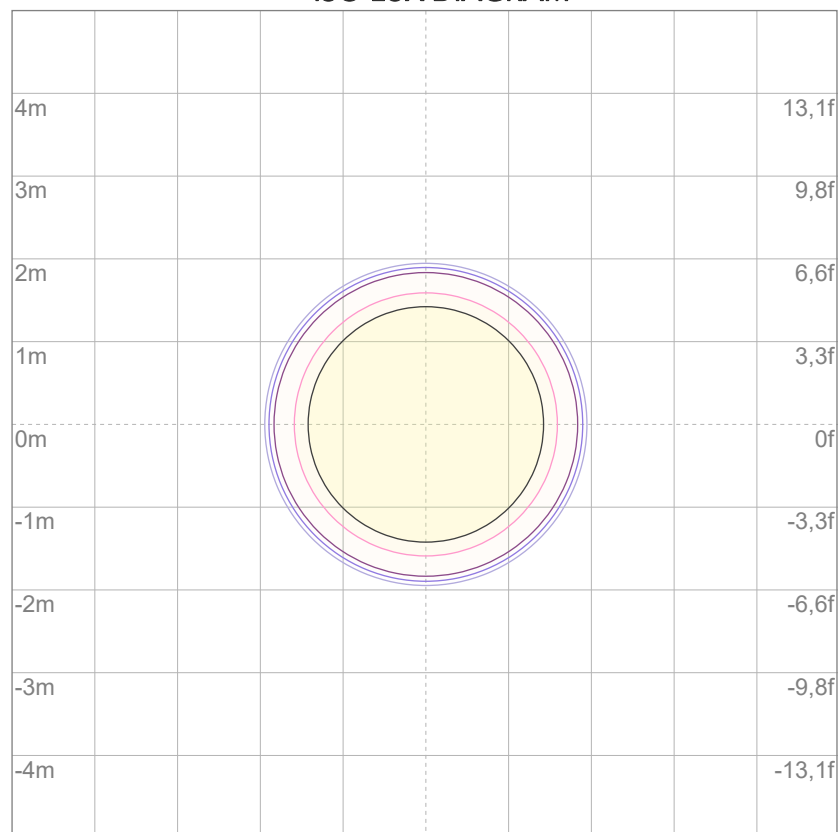
10%	1846 cd
20%	3691 cd
30%	5537 cd
40%	7382 cd
50%	9228 cd
60%	11073 cd
70%	12919 cd
80%	14765 cd

Conditions:

Number of c-planes: 2

Candela at center: 18456 cd

ISO LUX DIAGRAM



3%	5,54 lx
5%	9,23 lx
10%	18,5 lx
30%	55,4 lx
50%	92,3 lx

Conditions:

Number of c-planes: 2

Lux at center: 185 lx

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