

Photometric Test Report



EclDisplay CASVW

PROFILE LENS 8°

35W Variable White LED gallery
light from 2700K to 5600K with
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:

648 lm

Peak candela output:

47588 cd

Light quality:

CRI: 96,0

Color temperature:

4250 K

PRODUCT NAME:

ECLDISPLAY VW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 8°

Target:

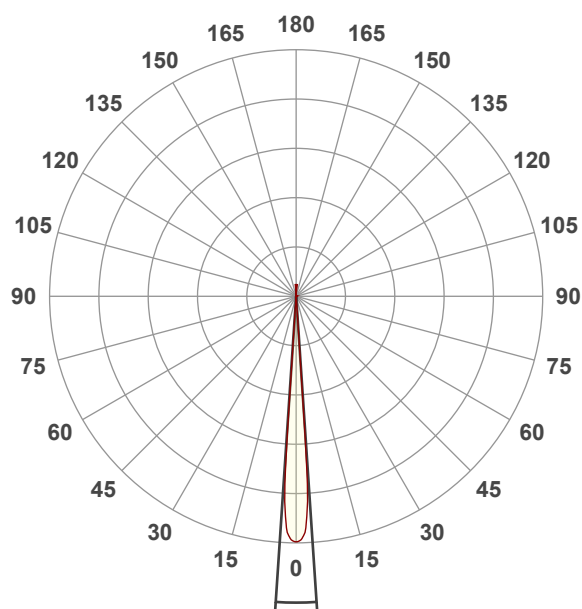
Full On

Operator:

Giacomo Matteo

Date and time:

17/06/2024 17:00:17

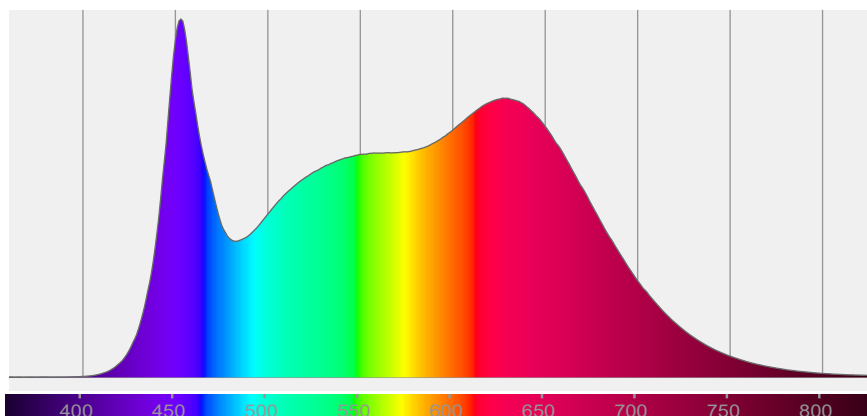


Beam angle 50%: 7,6°

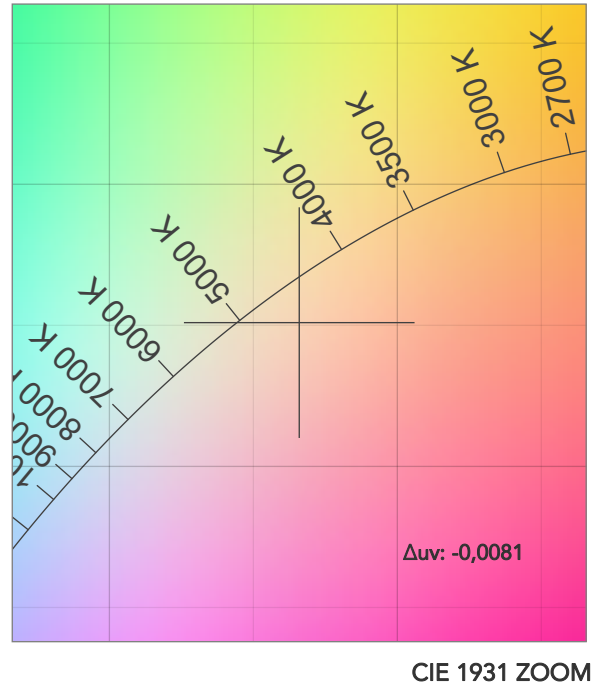
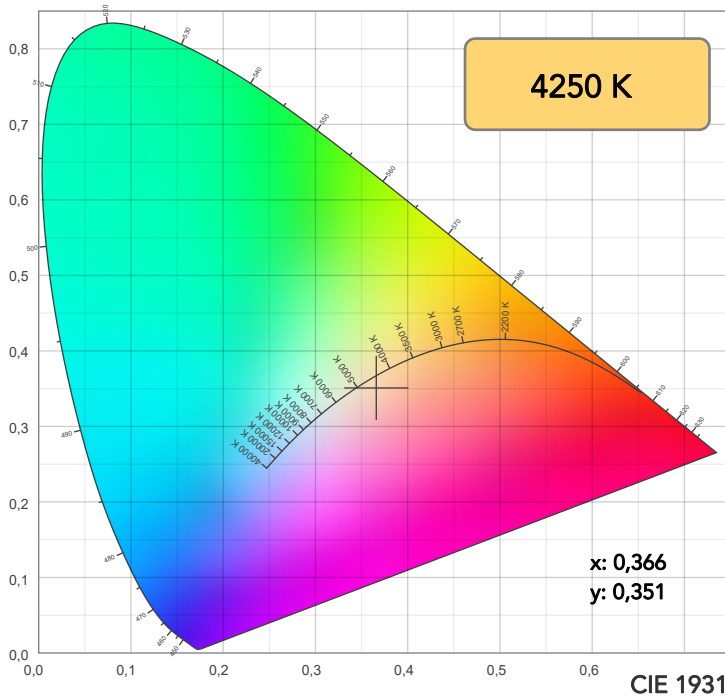
Field angle 10%: 8,8°

Cut off angle 2.5%: 9°

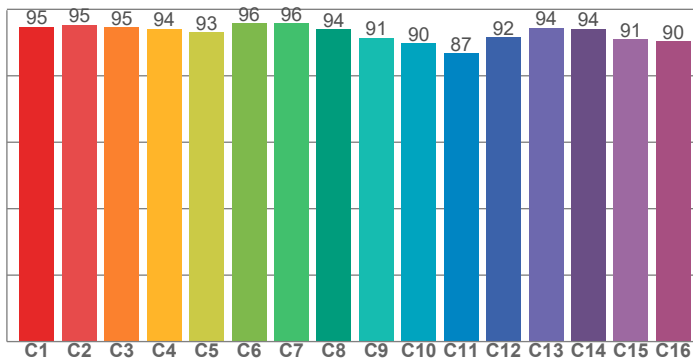
Spectra



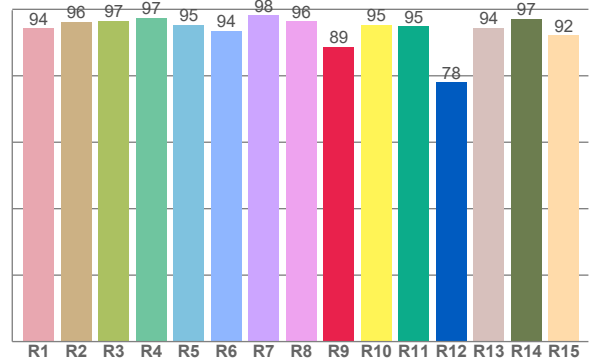
COLOR DETAILS



TM30: 92,8



CRI: 96,0 (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
94,3	96,2	96,5	97,5	95,4	93,5	98,3	96,4	88,7	95,4	95,0	78,1	94,5	97,2	92,1

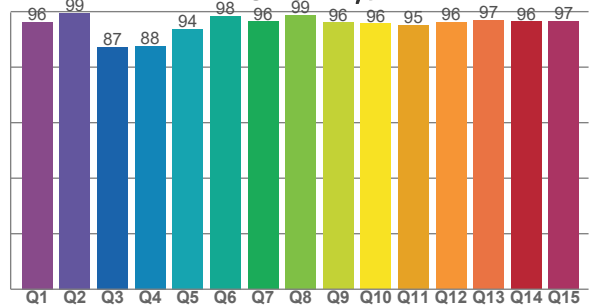
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	95,4	94,6	94,2	93,1	95,8	95,7	94,0	91,5	89,8	86,7	91,6	94,5	94,1	90,9	90,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,3	99,5	87,2	87,6	93,7	98,5	96,4	98,7	96,1	95,7	95,3	96,1	96,9	96,4	96,5

CQS: 94,3



COLOR PARAMETERS

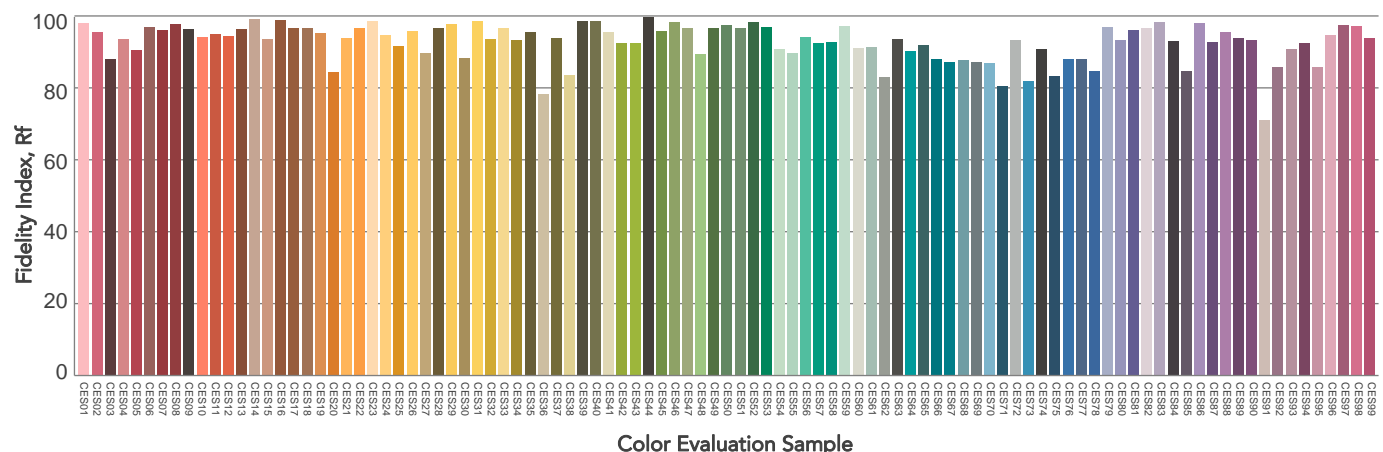
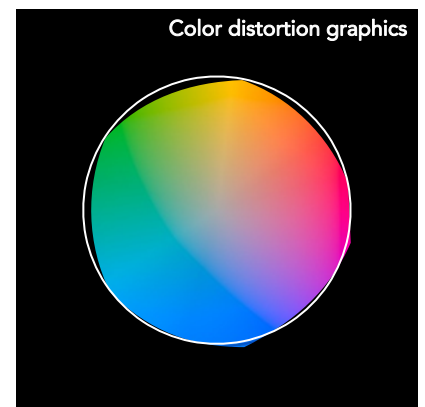
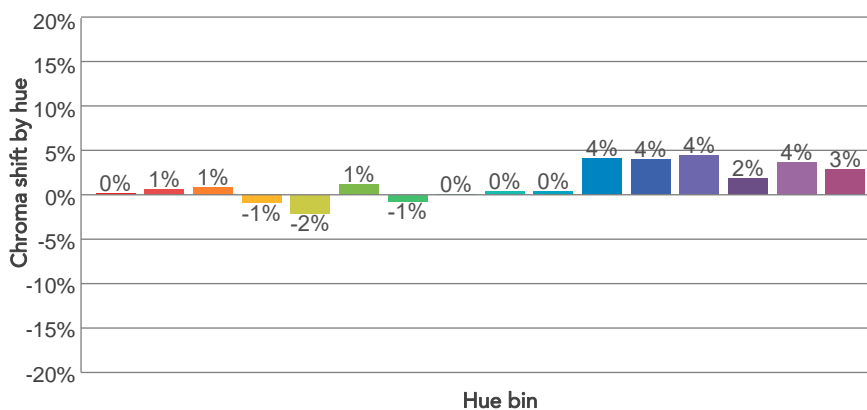
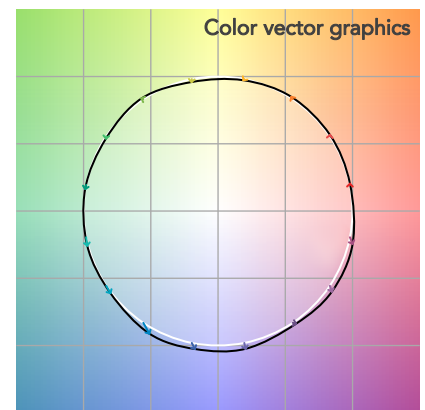
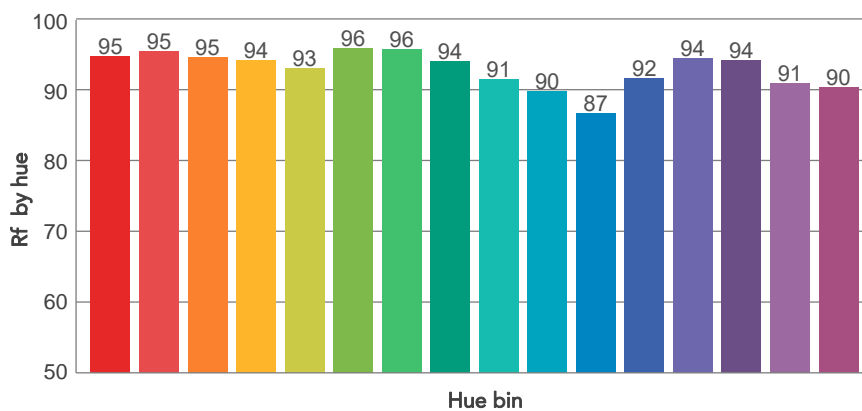
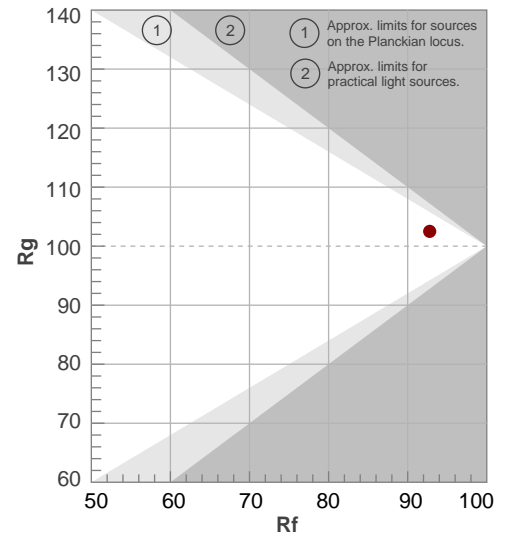
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4250 K	96,0	88,7	92,8	102,5	94,3	98	0,366	0,351	-0,0081

TM30 DETAILS

Rf 92,8
Fidelity index Rf

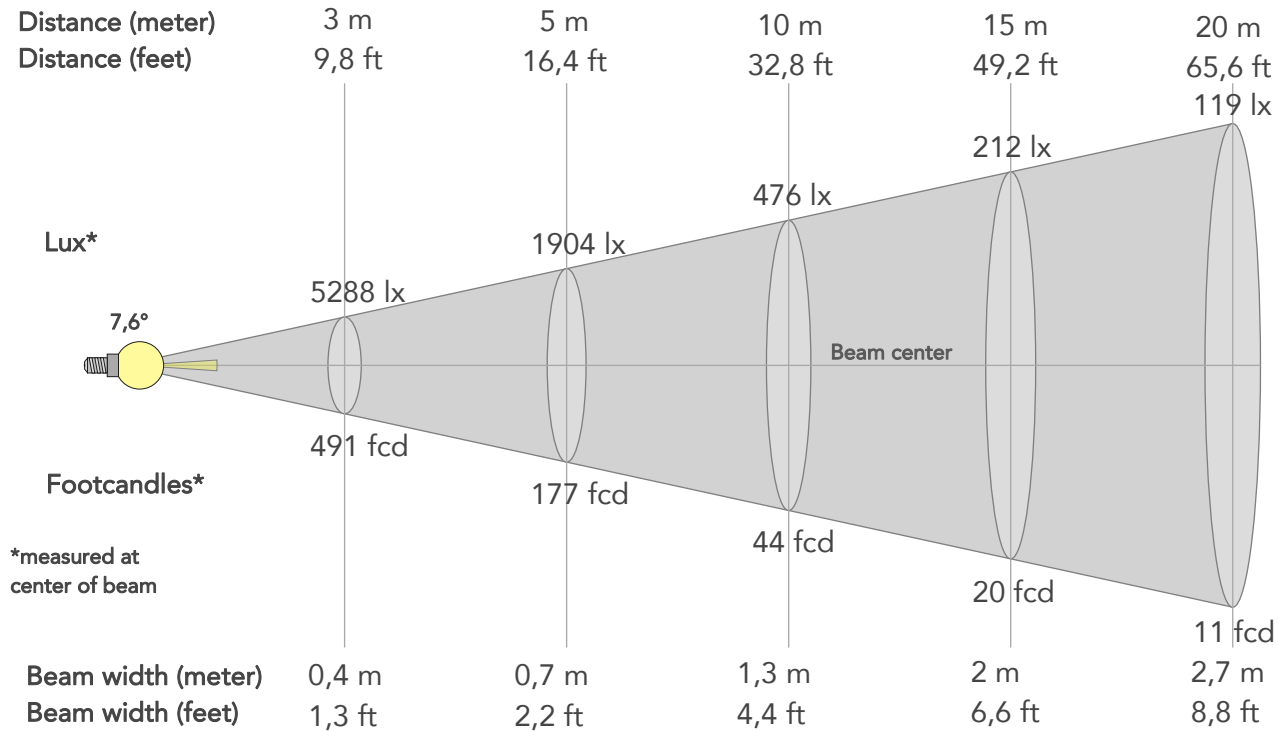
Rg 102,5
Gammut index

		Graphic shifts (%)	
Hue Bin	R _f	Chroma	Hue
1	95	0%	1%
2	95	1%	1%
3	95	1%	2%
4	94	-1%	0%
5	93	-2%	1%
6	96	1%	1%
7	96	-1%	1%
8	94	0%	3%
9	91	0%	6%
10	90	0%	6%
11	87	4%	8%
12	92	4%	3%
13	94	4%	0%
14	94	2%	2%
15	91	4%	-3%
16	90	3%	-4%



BEAM DETAILS

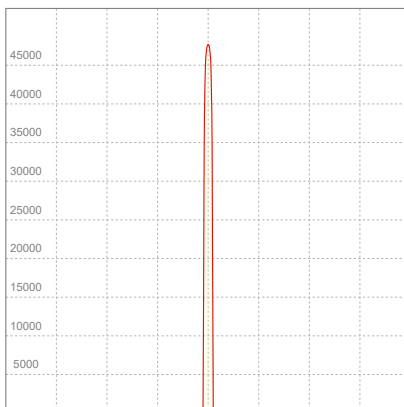
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
7,6°	8,8°	9°	98,9%	98,5%



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	47588lx	11897lx	5288lx	2974lx	1904lx	846lx	476lx	212lx	119lx	76lx	53lx	30lx	19lx
Footcand.	4421fcd	1105fcd	491fcd	276fcd	177fcd	79fcd	44fcd	20fcd	11fcd	7fcd	5fcd	3fcd	2fcd
Beam wid.	0,1m	0,3m	0,4m	0,5m	0,7m	1m	1,3m	2m	2,7m	3,3m	4m	5,3m	6,7m
Beam wid.	0,4ft	0,9ft	1,3ft	1,8ft	2,2ft	3,3ft	4,4ft	6,6ft	8,8ft	11ft	13,1ft	17,5ft	21,9ft

LINEAR DISTRIBUTION DIAGRAM

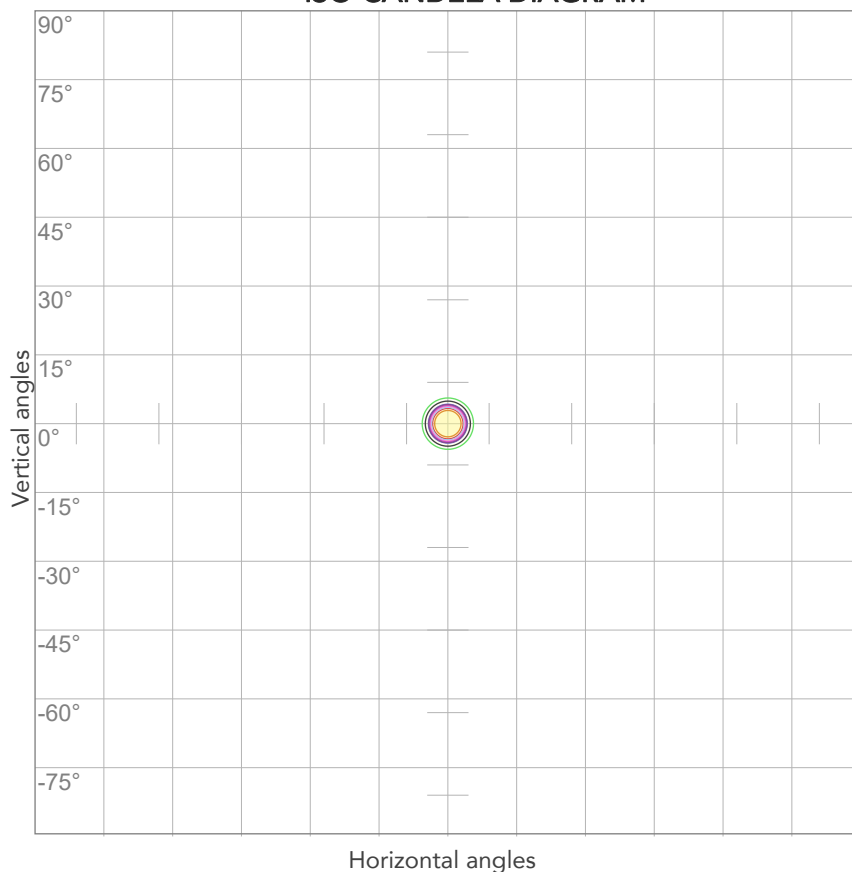


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
228V	0,147A	31,8W	0,95	20lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



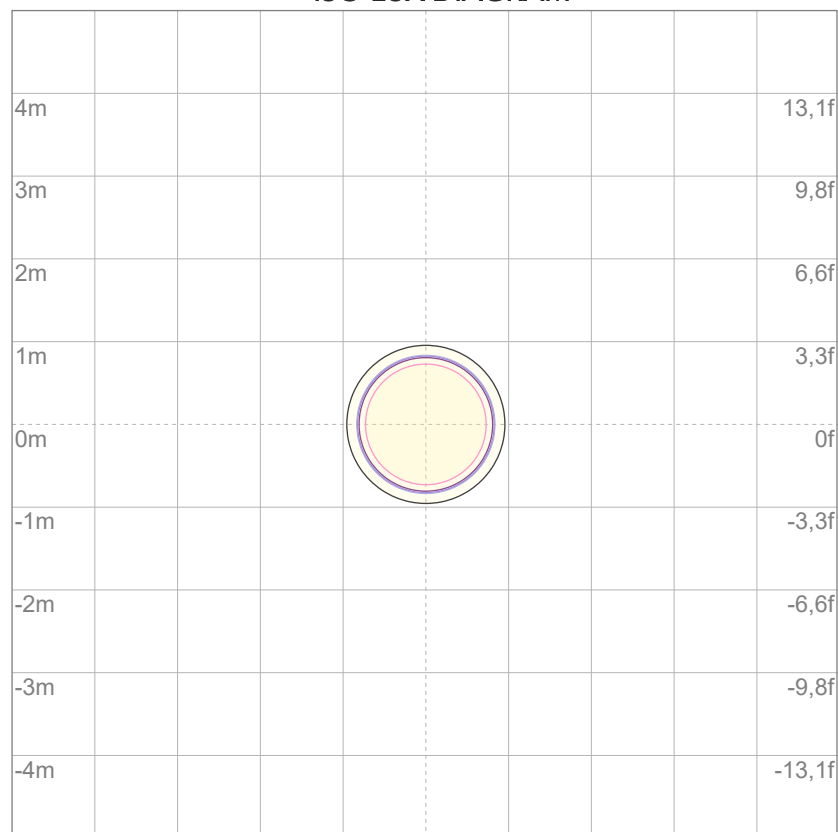
10%	4759 cd
20%	9518 cd
30%	14276 cd
40%	19035 cd
50%	23794 cd
60%	28553 cd
70%	33312 cd
80%	38070 cd

Conditions:

Number of c-planes: 2

Candela at center: 47588 cd

ISO LUX DIAGRAM



3%	14,3 lx
5%	23,8 lx
10%	47,6 lx
30%	143 lx
50%	238 lx

Conditions:

Number of c-planes: 2

Lux at center: 476 lx

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



Total lumen output:

523 lm

Peak candela output:

37813 cd

Light quality:

CRI: 96,4

Color temperature:

2716 K

PRODUCT NAME:

ECLDISPLAY VW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 8°

Target:

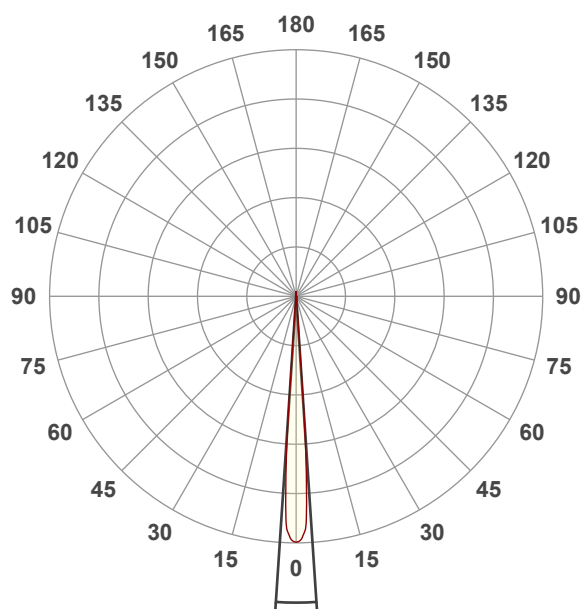
Warm White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 17:04:10

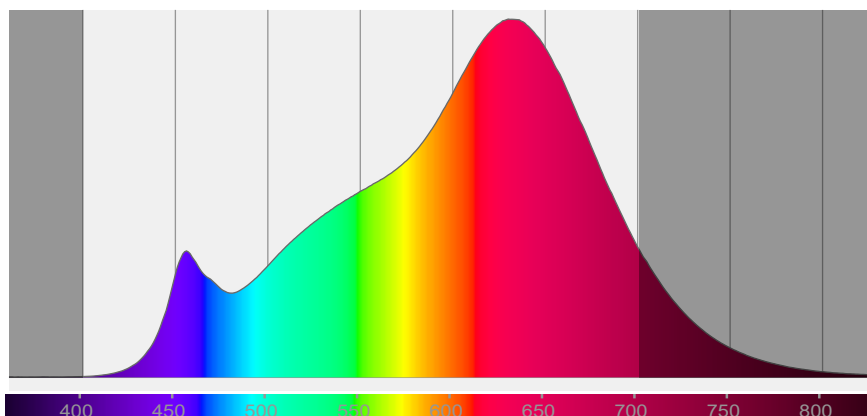


Beam angle 50%: 7,6°

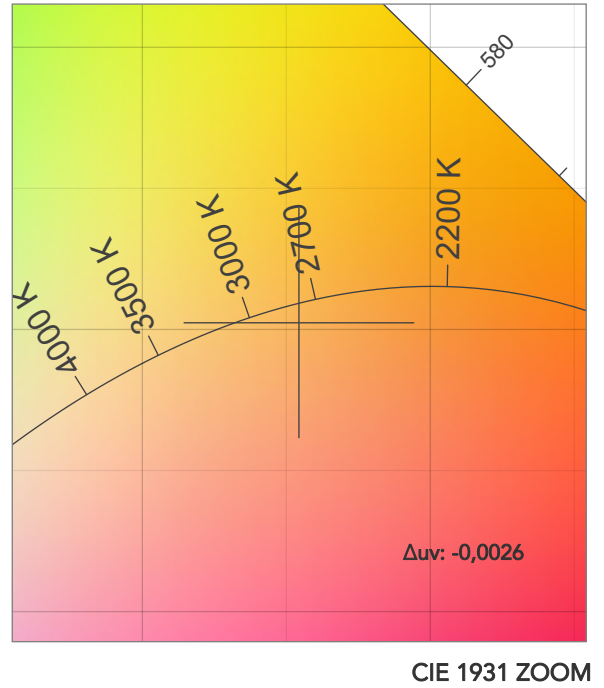
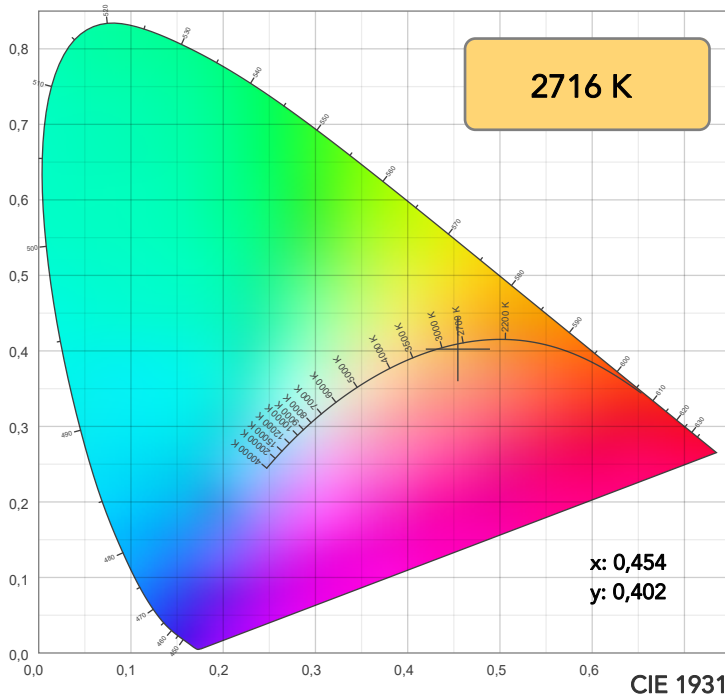
Field angle 10%: 9,1°

Cut off angle 2.5%: 10,2°

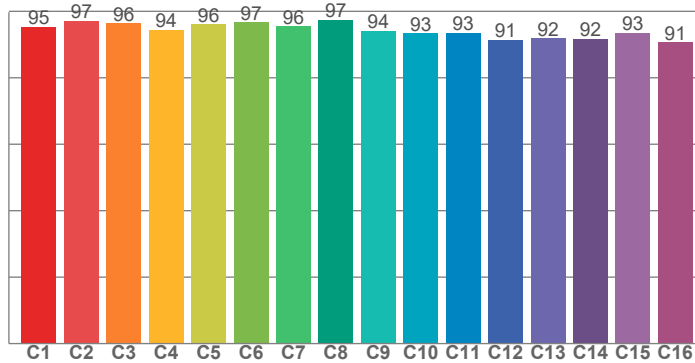
Spectra



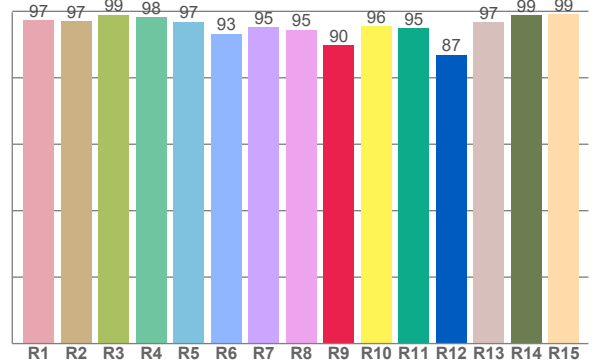
COLOR DETAILS



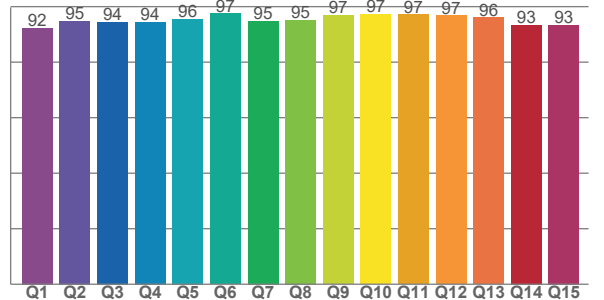
TM30: 94,4



CRI: 96,4 (R1-R8)



CQS: 94,9



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
97,3	97,1	99,0	98,3	96,9	93,2	95,2	94,5	89,8	95,5	94,9	87,0	96,6	98,8	99,1

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
95,3	97,1	96,4	94,4	96,1	96,6	95,5	97,3	94,2	93,4	93,5	91,4	91,9	91,7	93,5	90,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,4	94,9	94,4	94,4	95,6	97,4	94,9	95,2	96,9	97,2	97,1	96,8	96,1	93,4	93,5

COLOR PARAMETERS

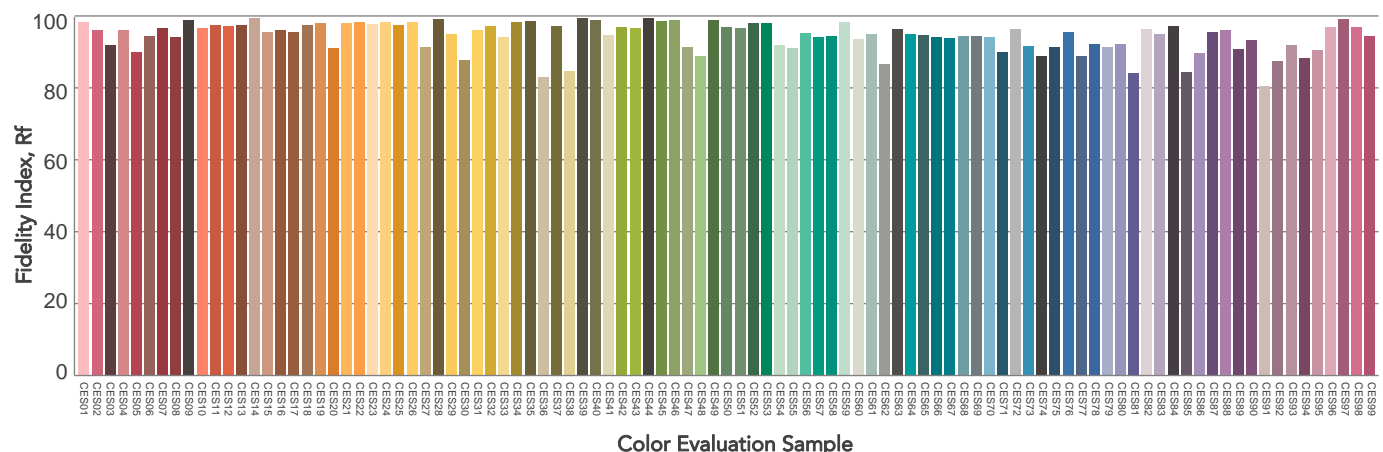
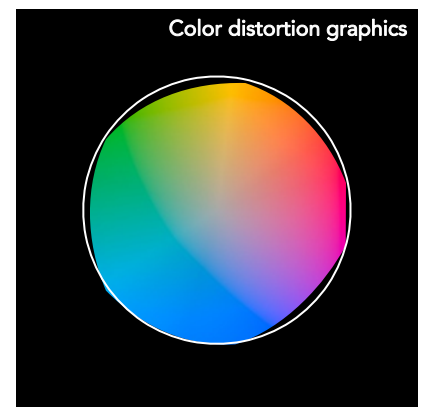
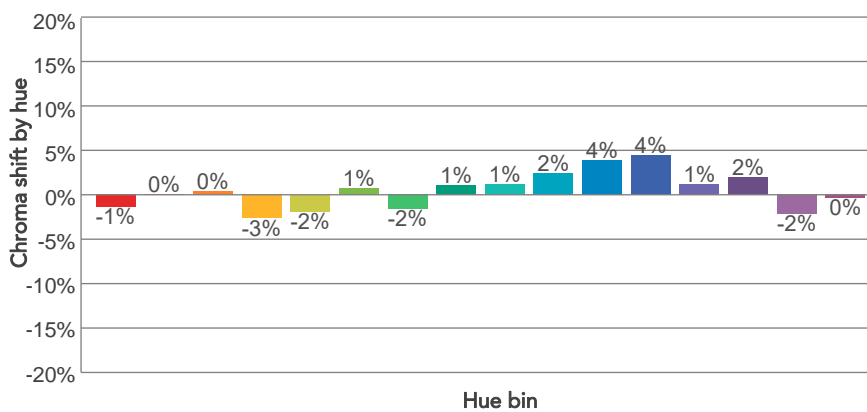
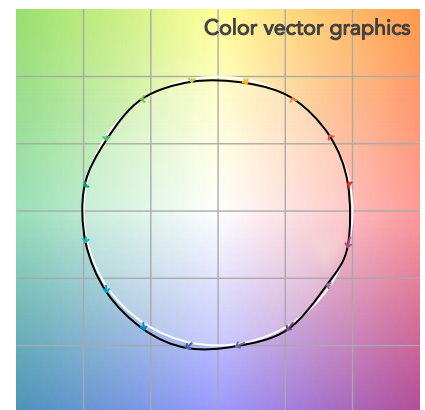
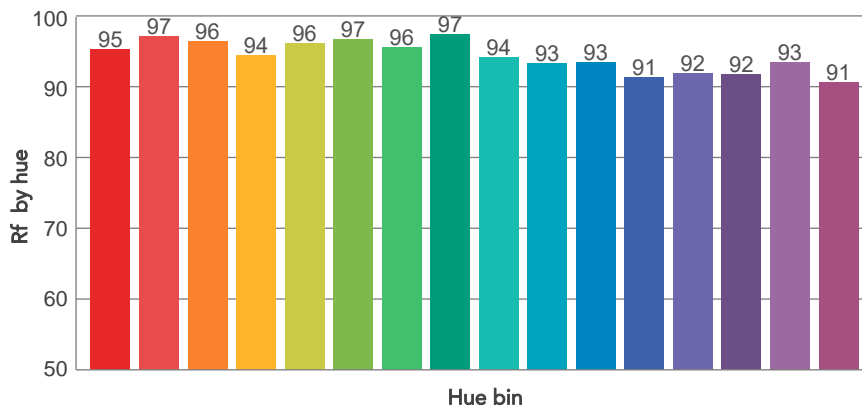
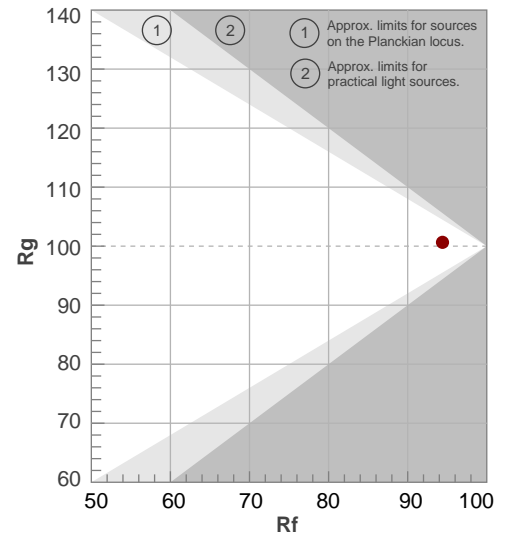
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2716 K	96,4	89,8	94,4	100,6	94,9	97	0,454	0,402	-0,0026

TM30 DETAILS

Rf 94,4
Fidelity index Rf

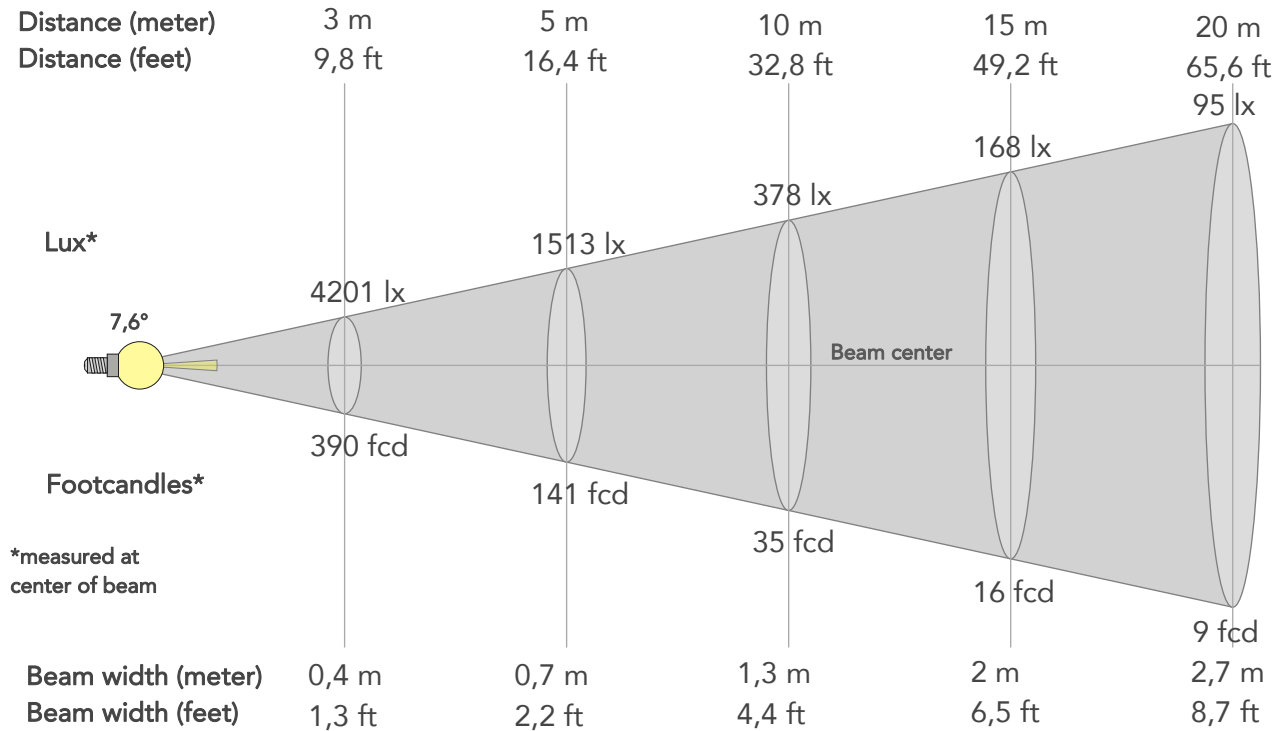
Rg 100,6
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	97	0%	0%
3	96	0%	0%
4	94	-3%	-2%
5	96	-2%	0%
6	97	1%	1%
7	96	-2%	2%
8	97	1%	1%
9	94	1%	3%
10	93	2%	4%
11	93	4%	3%
12	91	4%	-3%
13	92	1%	-6%
14	92	2%	-6%
15	93	-2%	-1%
16	91	0%	-7%



BEAM DETAILS

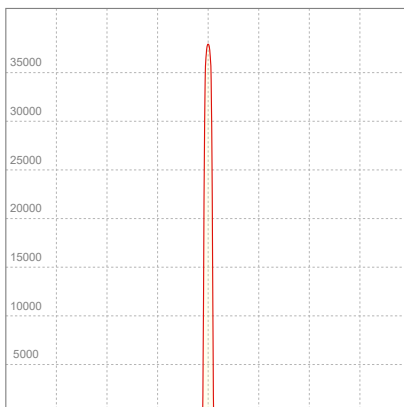
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
7,6°	9,1°	10,2°	98,6%	98,0%



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	37813lx	9453lx	4201lx	2363lx	1513lx	672lx	378lx	168lx	95lx	61lx	42lx	24lx	15lx
Footcand.	3513fcd	878fcd	390fcd	220fcd	141fcd	62fcd	35fcd	16fcd	9fcd	6fcd	4fcd	2fcd	1fcd
Beam wid.	0,1m	0,3m	0,4m	0,5m	0,7m	1m	1,3m	2m	2,7m	3,3m	4m	5,3m	6,6m
Beam wid.	0,4ft	0,9ft	1,3ft	1,7ft	2,2ft	3,3ft	4,4ft	6,5ft	8,7ft	10,9ft	13,1ft	17,4ft	21,8ft

LINEAR DISTRIBUTION DIAGRAM

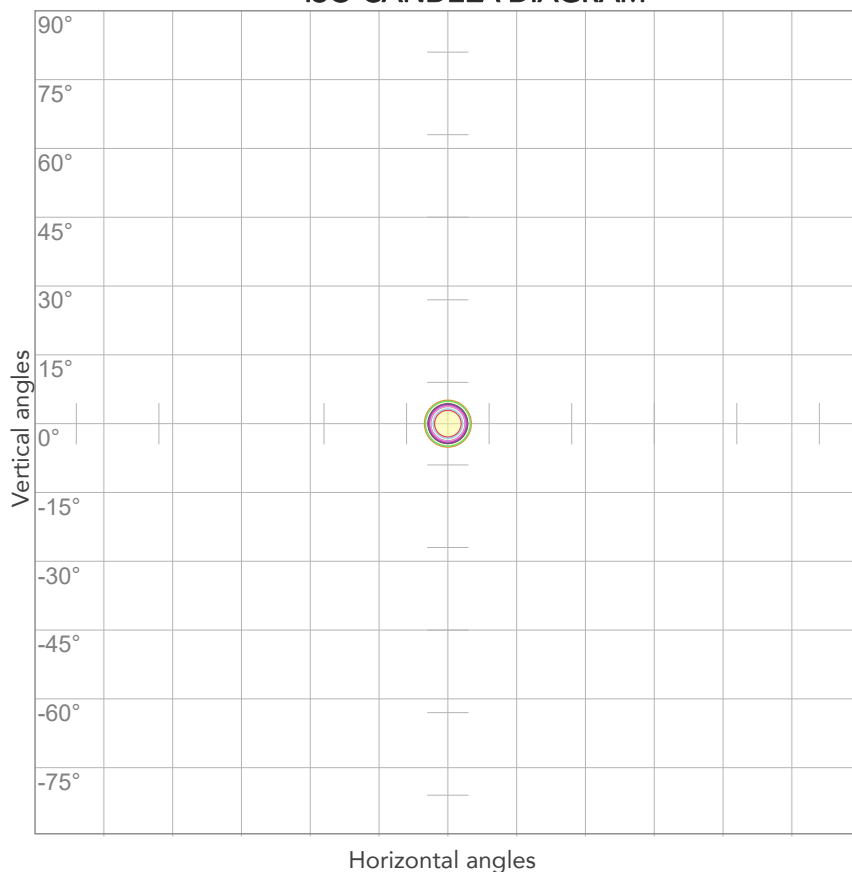


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,146A	31,3W	0,95	17lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



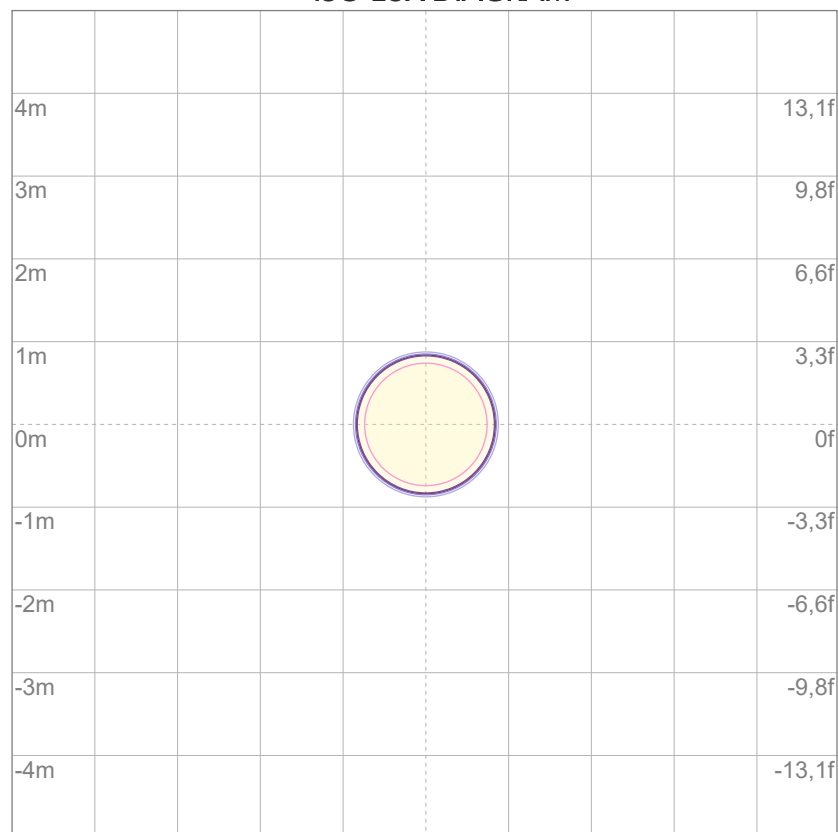
10%	3781 cd
20%	7563 cd
30%	11344 cd
40%	15125 cd
50%	18907 cd
60%	22688 cd
70%	26469 cd
80%	30251 cd

Conditions:

Number of c-planes: 2

Candela at center: 37813 cd

ISO LUX DIAGRAM



3%	11,3 lx
5%	18,9 lx
10%	37,8 lx
30%	113 lx
50%	189 lx

Conditions:

Number of c-planes: 2

Lux at center: 378 lx

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



Total lumen output:

701 lm

Peak candela output:

51275 cd

Light quality:

CRI: 95,4

Color temperature:

6533 K

PRODUCT NAME:

ECLDISPLAY VW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 8°

Target:

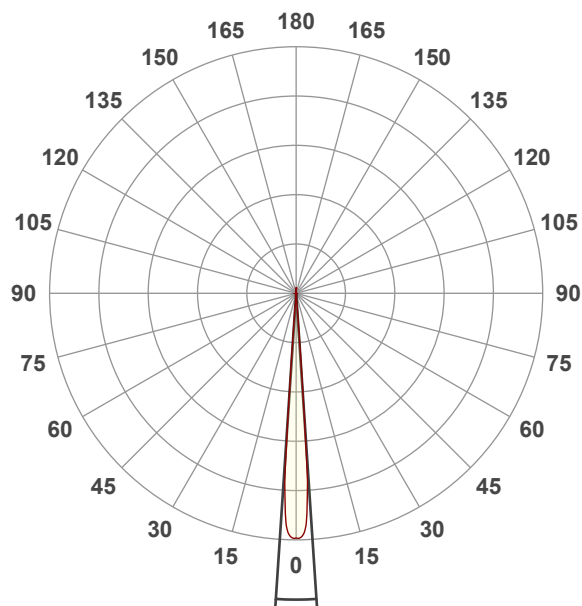
Cold White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 17:05:31

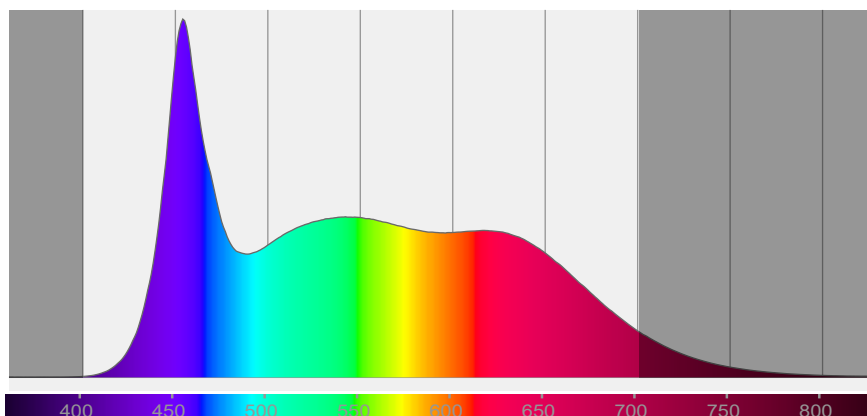


Beam angle 50%: 7,6°

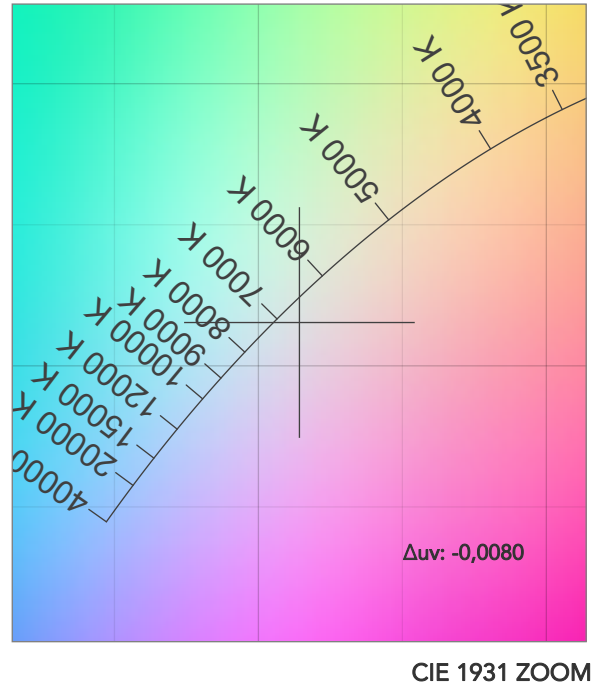
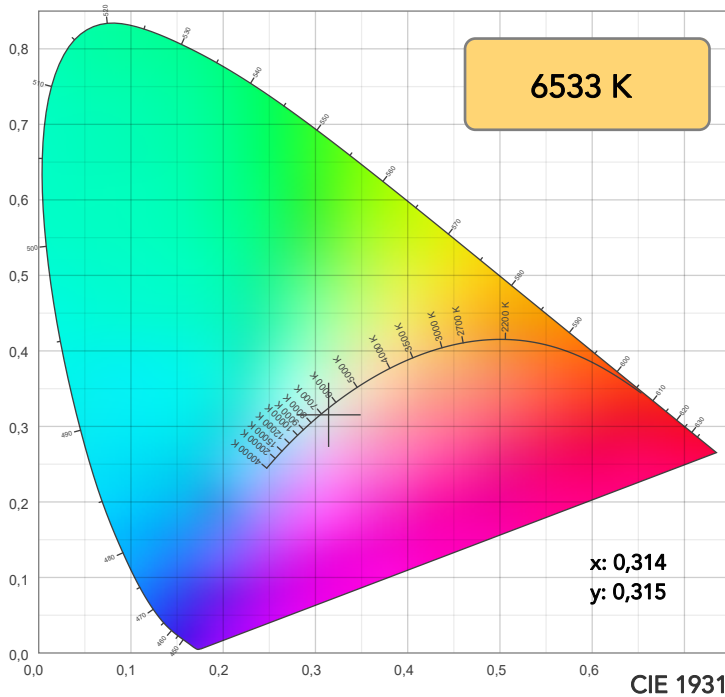
Field angle 10%: 8,8°

Cut off angle 2.5%: 9°

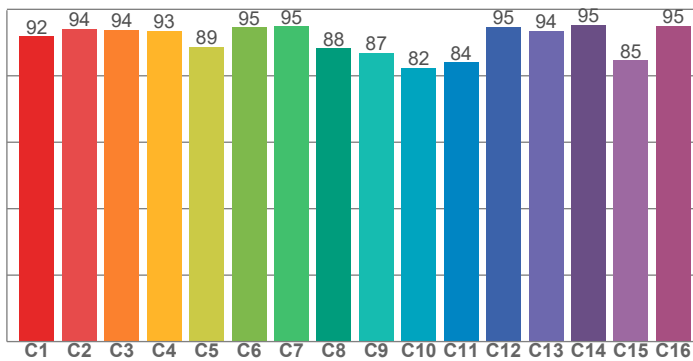
Spectra



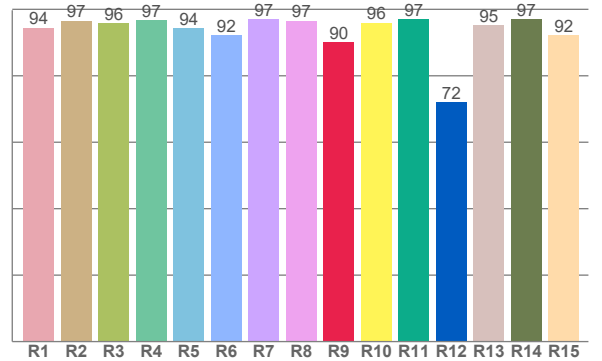
COLOR DETAILS



TM30: 90,6



CRI: 95,4 (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
94,4	96,5	95,8	96,8	94,2	92,2	97,1	96,6	90,2	95,9	97,1	72,1	95,3	97,1	92,2

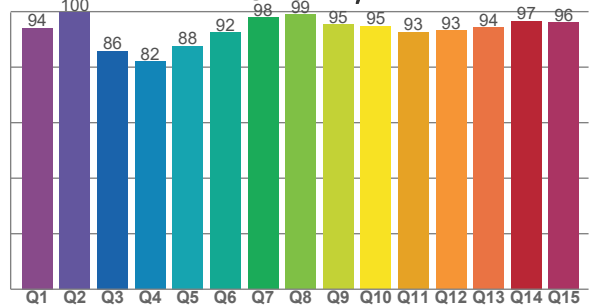
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,8	94,1	93,8	93,5	88,7	94,6	94,8	88,3	86,9	82,4	84,0	94,7	93,6	95,2	84,7	95,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,1	99,6	85,8	82,0	87,7	92,4	97,8	98,9	95,4	94,7	92,6	93,2	94,2	96,6	96,1

CQS: 91,9



COLOR PARAMETERS

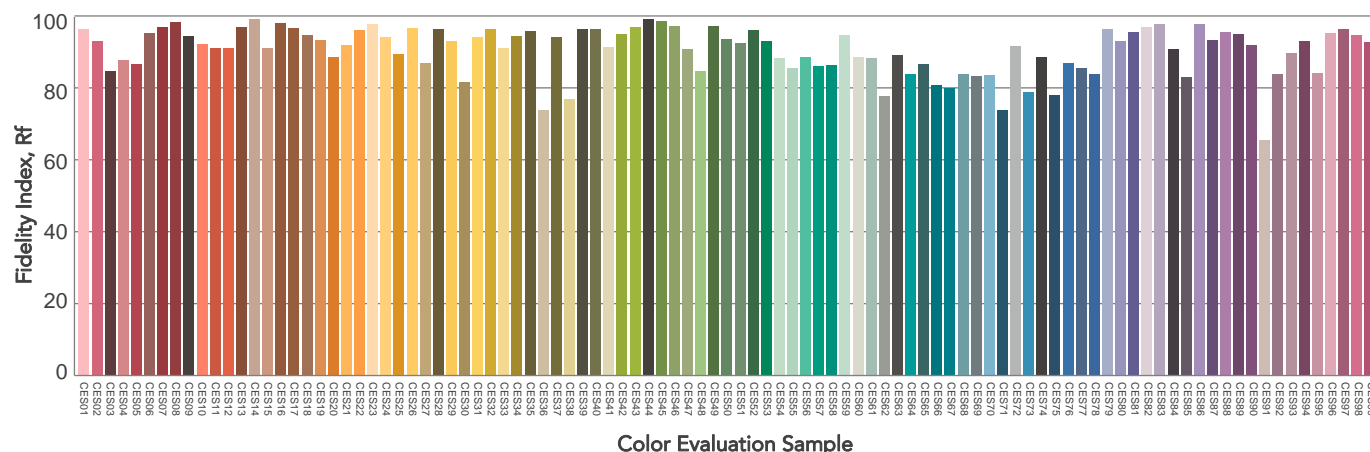
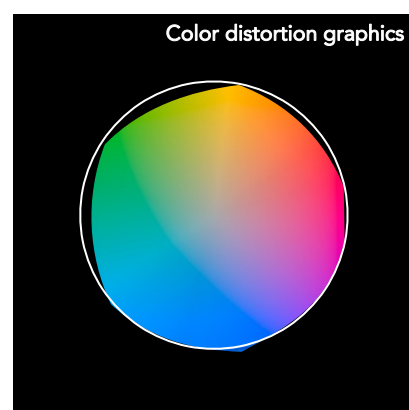
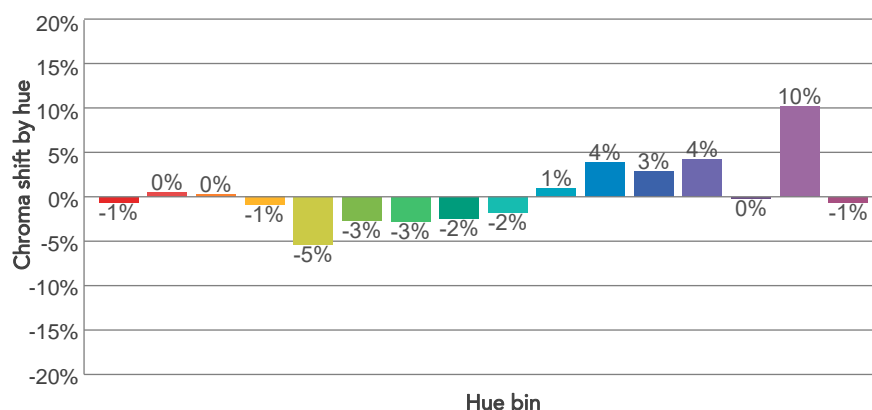
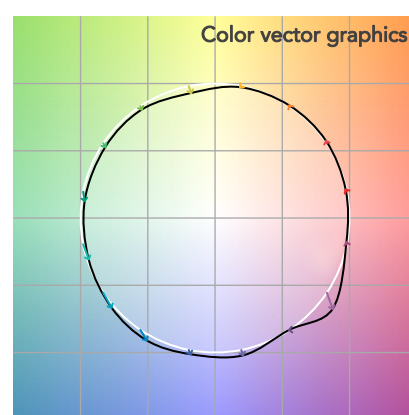
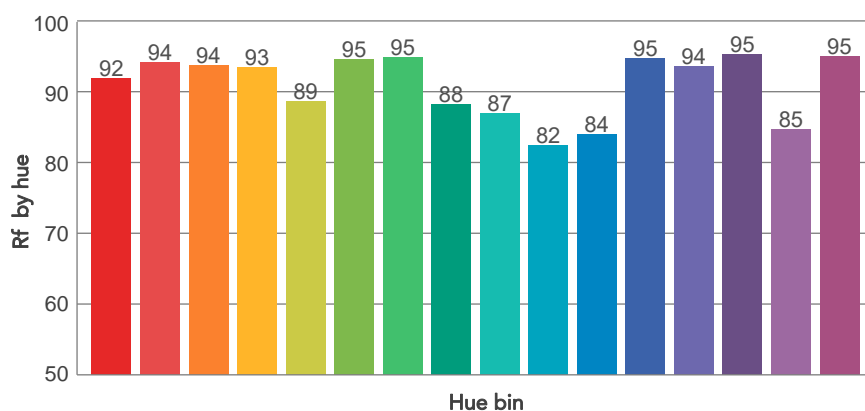
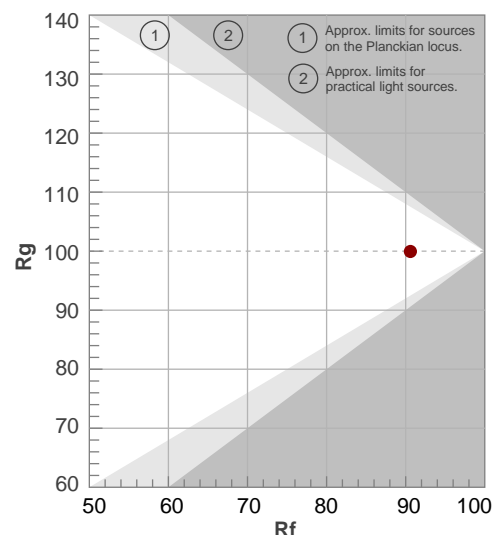
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6533 K	95,4	90,2	90,6	99,9	91,9	96	0,314	0,315	-0,0080

TM30 DETAILS

Rf 90,6
Fidelity index Rf

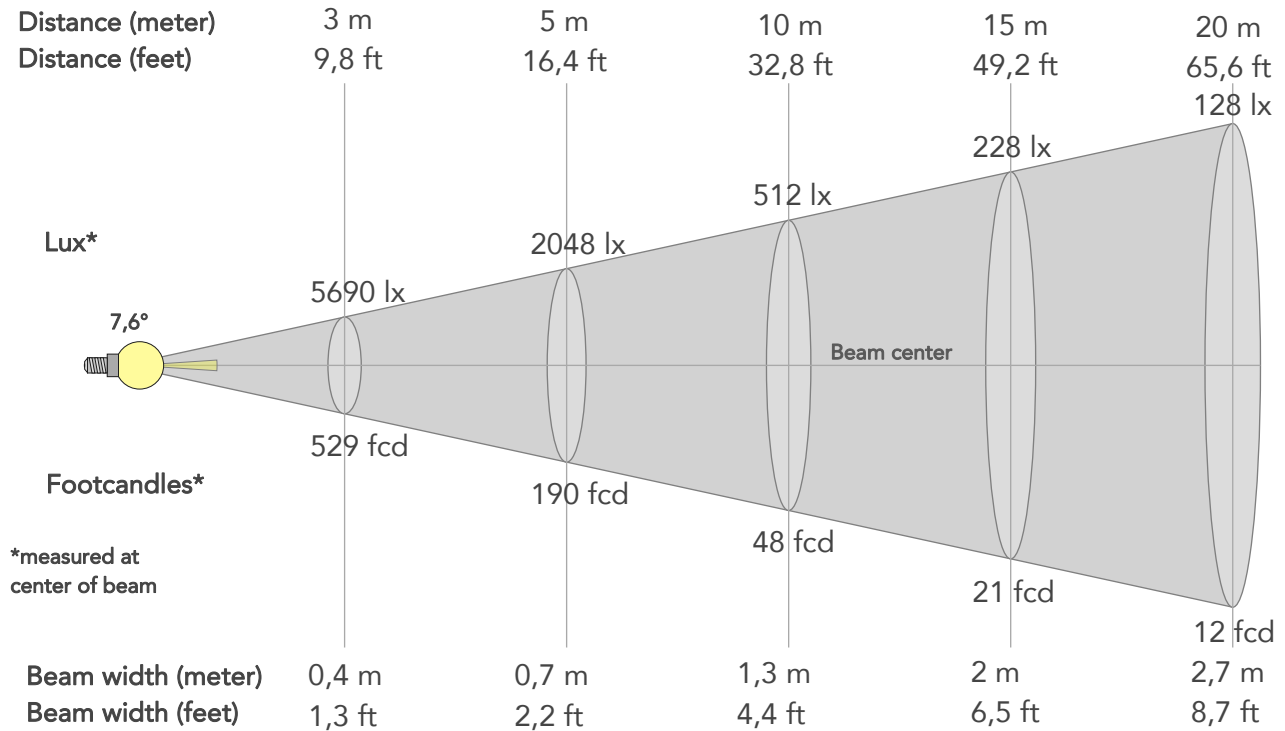
Rg 99,9
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	-1%	2%
2	94	0%	2%
3	94	0%	1%
4	93	-1%	1%
5	89	-5%	-1%
6	95	-3%	1%
7	95	-3%	1%
8	88	-2%	6%
9	87	-2%	12%
10	82	1%	13%
11	84	4%	8%
12	95	3%	2%
13	94	4%	1%
14	95	0%	0%
15	85	10%	-8%
16	95	-1%	1%



BEAM DETAILS

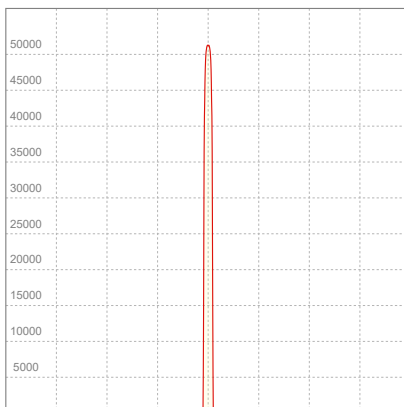
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
7,6°	8,8°	9°	98,9%	98,4%



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	51208lx	12802lx	5690lx	3201lx	2048lx	910lx	512lx	228lx	128lx	82lx	57lx	32lx	20lx
Footcand.	4757fcd	1189fcd	529fcd	297fcd	190fcd	85fcd	48fcd	21fcd	12fcd	8fcd	5fcd	3fcd	2fcd
Beam wid.	0,1m	0,3m	0,4m	0,5m	0,7m	1m	1,3m	2m	2,7m	3,3m	4m	5,3m	6,6m
Beam wid.	0,4ft	0,9ft	1,3ft	1,7ft	2,2ft	3,3ft	4,4ft	6,5ft	8,7ft	10,9ft	13,1ft	17,4ft	21,8ft

LINEAR DISTRIBUTION DIAGRAM

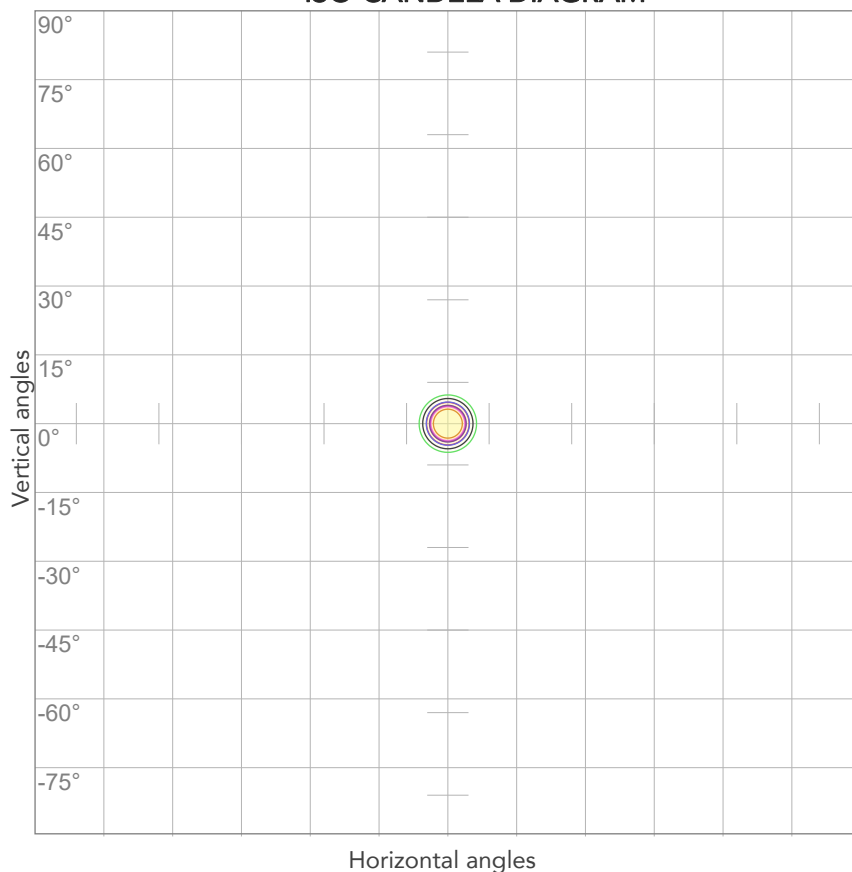


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,148A	31,7W	0,95	22lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



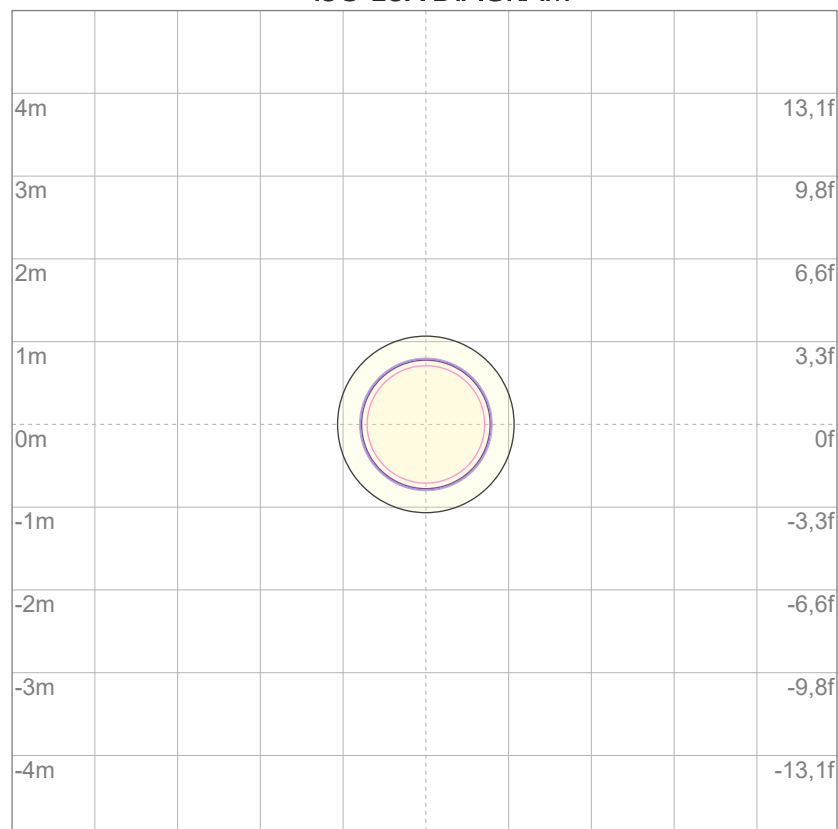
10%	5121 cd
20%	10242 cd
30%	15363 cd
40%	20483 cd
50%	25604 cd
60%	30725 cd
70%	35846 cd
80%	40967 cd

Conditions:

Number of c-planes: 2

Candela at center: 51208 cd

ISO LUX DIAGRAM



3%	15,4 lx
5%	25,6 lx
10%	51,2 lx
30%	154 lx
50%	256 lx

Conditions:

Number of c-planes: 2

Lux at center: 512 lx

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