

# Photometric Test Report



## EclDisplay DATVW

PROFILE LENS 36°

35W variable white LED gallery light,  
with data control  
(DMX, Dali T6, Knob-dimming)

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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:

949 lm

Peak candela output:

4839 cd

Light quality:

CRI: 96,2

Color temperature:

4226 K

PRODUCT NAME:

ECLDISPLAY VW

MEASURAMENT CONDITIONS:

Beam angle:

Profile 36°

Target:

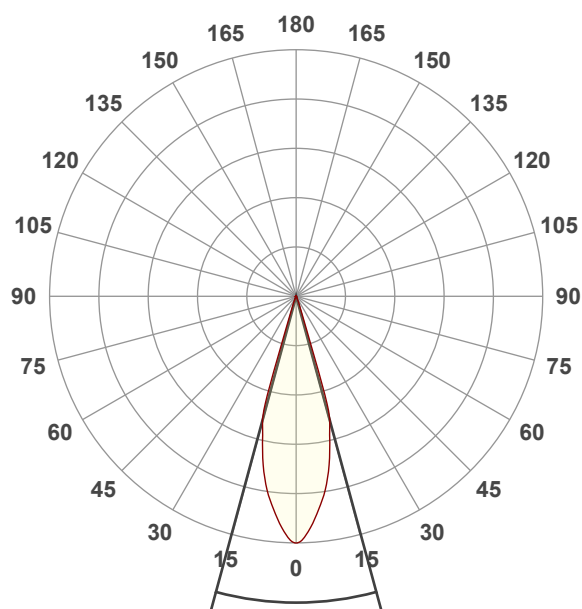
Full On

Operator:

Giacomo Matteo

Date and time:

18/06/2024 15:15:51

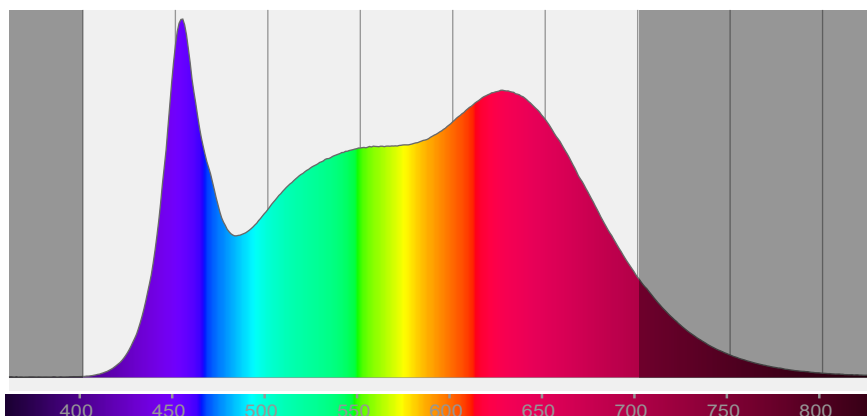


Beam angle 50%: 30,4°

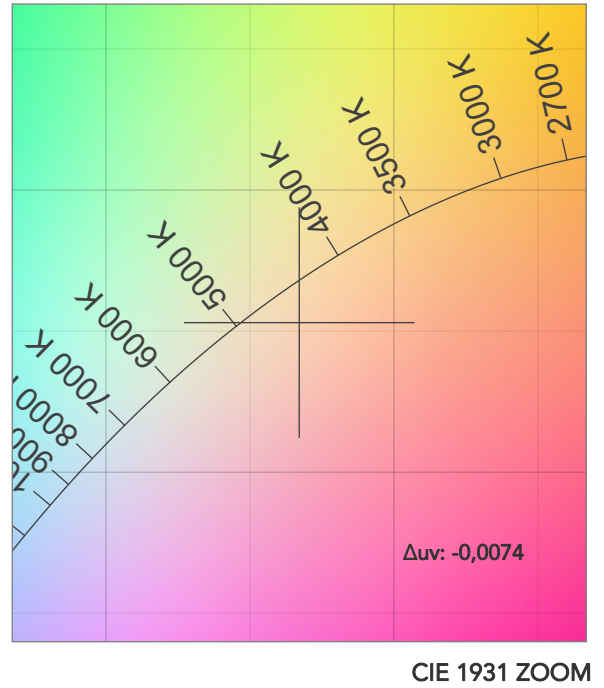
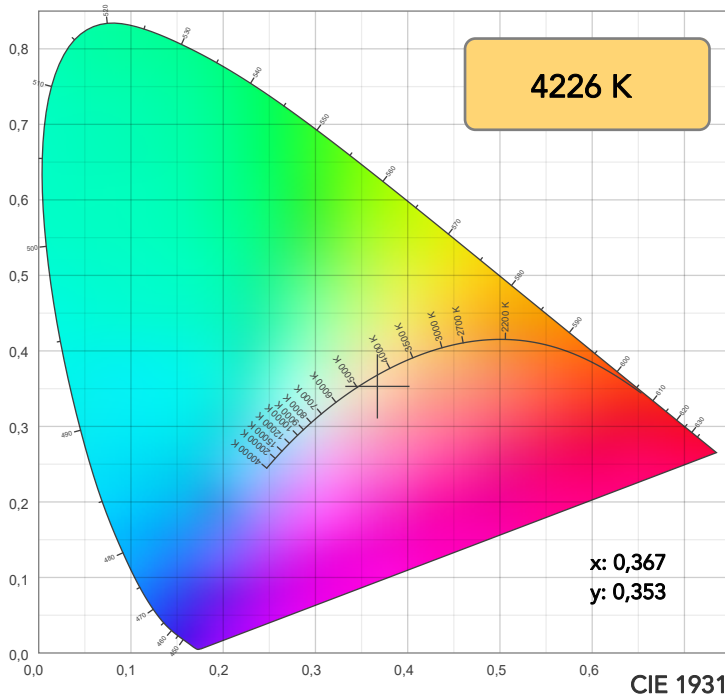
Field angle 10%: 36,7°

Cut off angle 2.5%: 40,5°

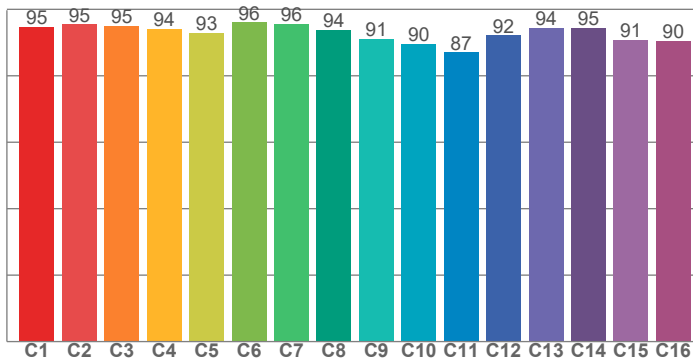
Spectra



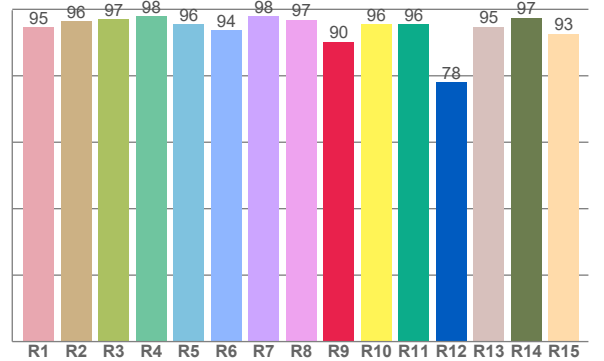
# COLOR DETAILS



**TM30: 92,8**



**CRI: 96,2 (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
94,6	96,3	96,9	97,9	95,6	93,7	98,0	96,8	90,2	95,5	95,6	78,0	94,8	97,4	92,7

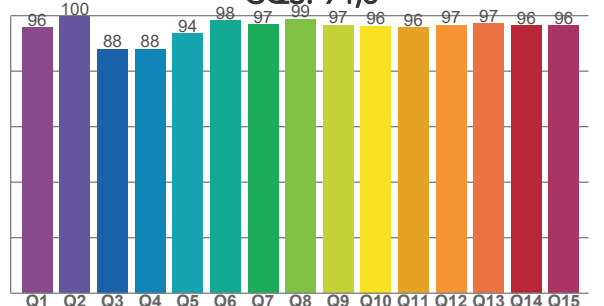
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,7	95,5	95,1	94,1	93,0	96,1	95,6	93,8	91,1	89,6	87,0	92,1	94,5	94,5	90,9	90,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,8	99,7	87,9	87,9	93,5	98,2	96,7	98,7	96,5	96,2	95,7	96,5	97,1	96,4	96,4

**CQS: 94,5**



## COLOR PARAMETERS

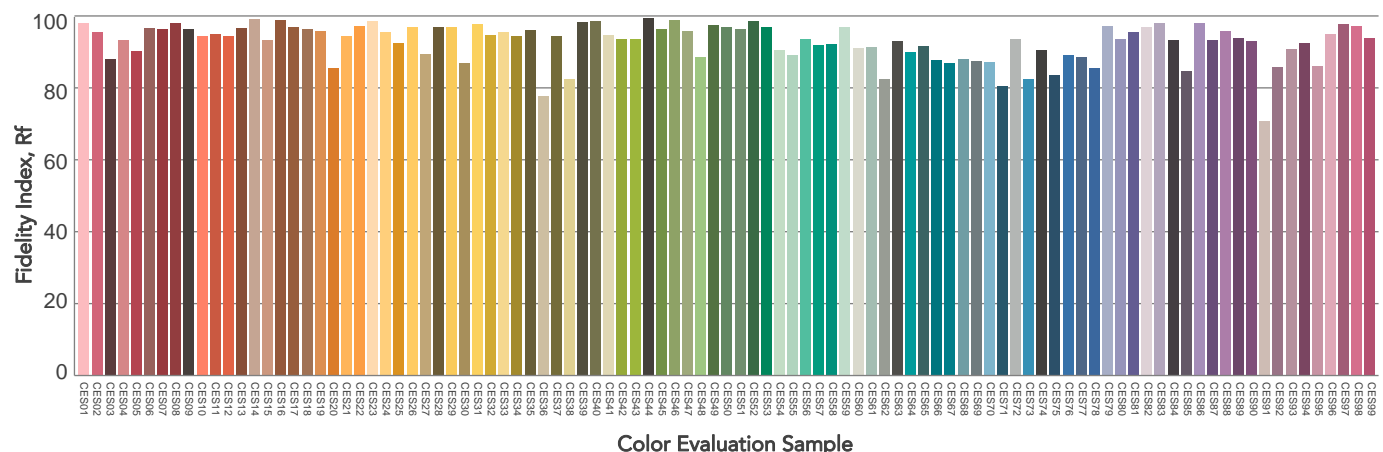
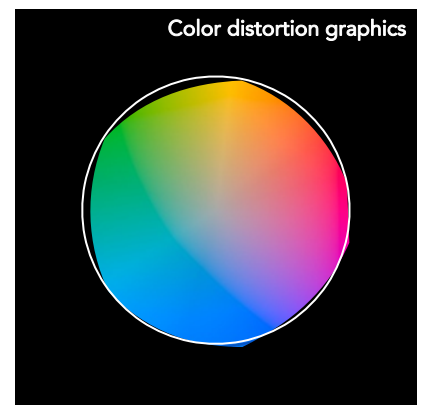
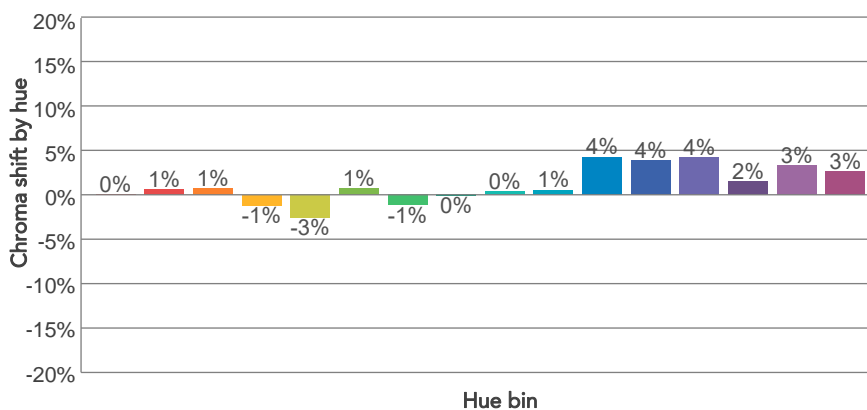
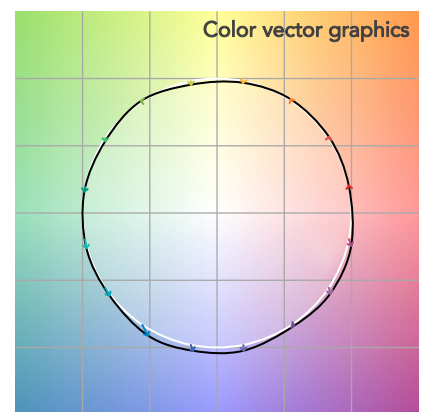
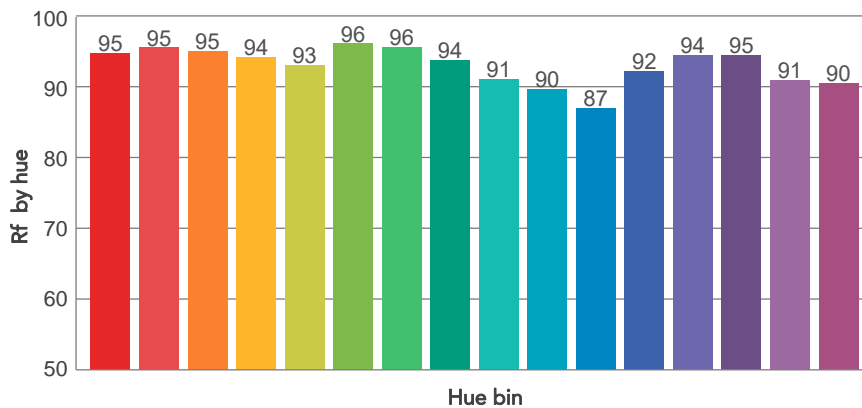
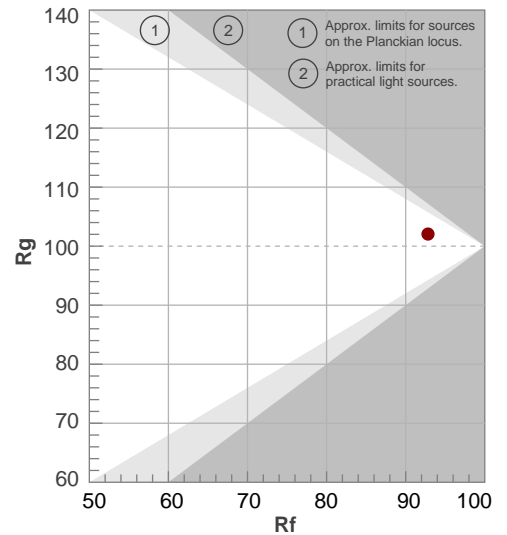
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
4226 K	96,2	90,2	92,8	102,1	94,5	98	0,367	0,353	-0,0074

# TM30 DETAILS

**Rf 92,8**  
Fidelity index Rf

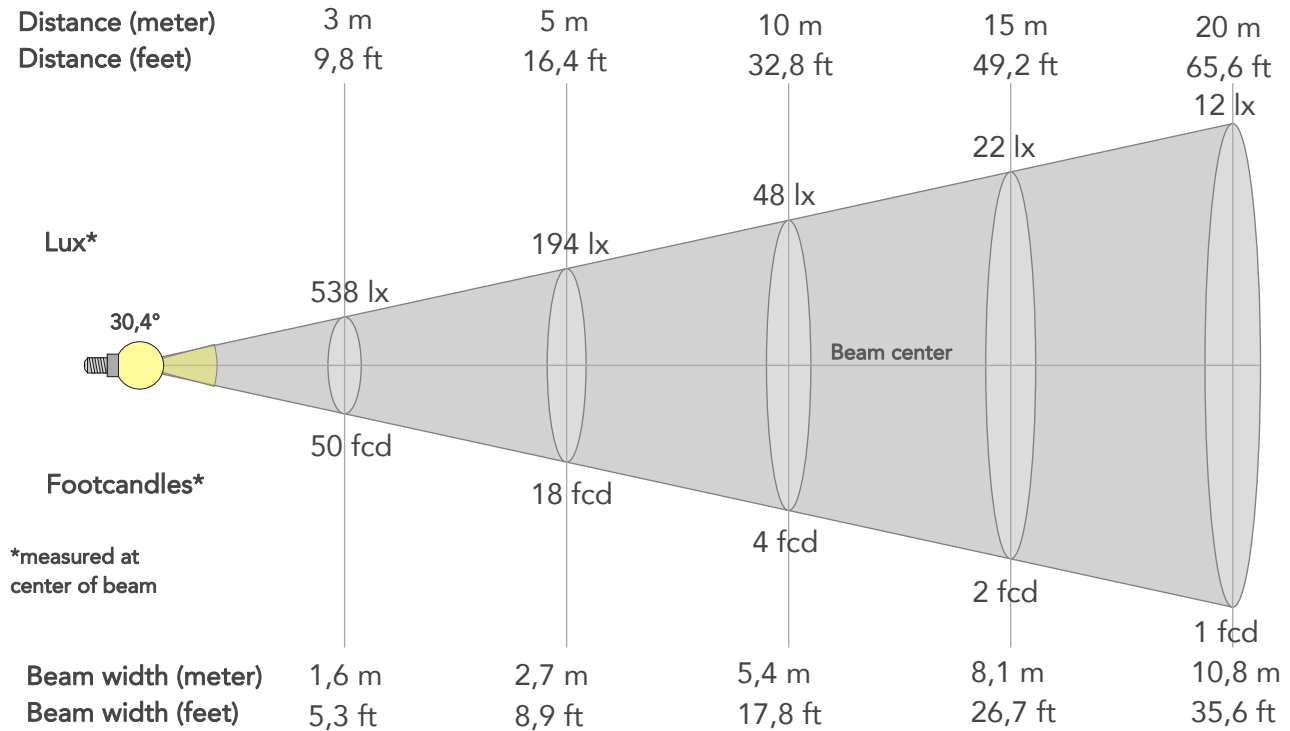
**Rg 102,1**  
Gammut index

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



# BEAM DETAILS

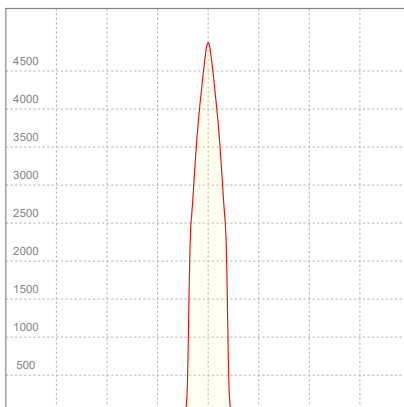
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,4°	36,7°	40,5°	99,8%	99,7%



## 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	4839lx	1210lx	538lx	302lx	194lx	86lx	48lx	22lx	12lx	8lx	5lx	3lx	2lx
Footcand.	450fcd	112fcd	50fcd	28fcd	18fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,2m	2,7m	4,1m	5,4m	8,1m	10,8m	13,6m	16,3m	21,7m	27,1m
Beam wid.	1,8ft	3,6ft	5,3ft	7,1ft	8,9ft	13,3ft	17,8ft	26,7ft	35,6ft	44,5ft	53,4ft	71,2ft	89ft

## LINEAR DISTRIBUTION DIAGRAM

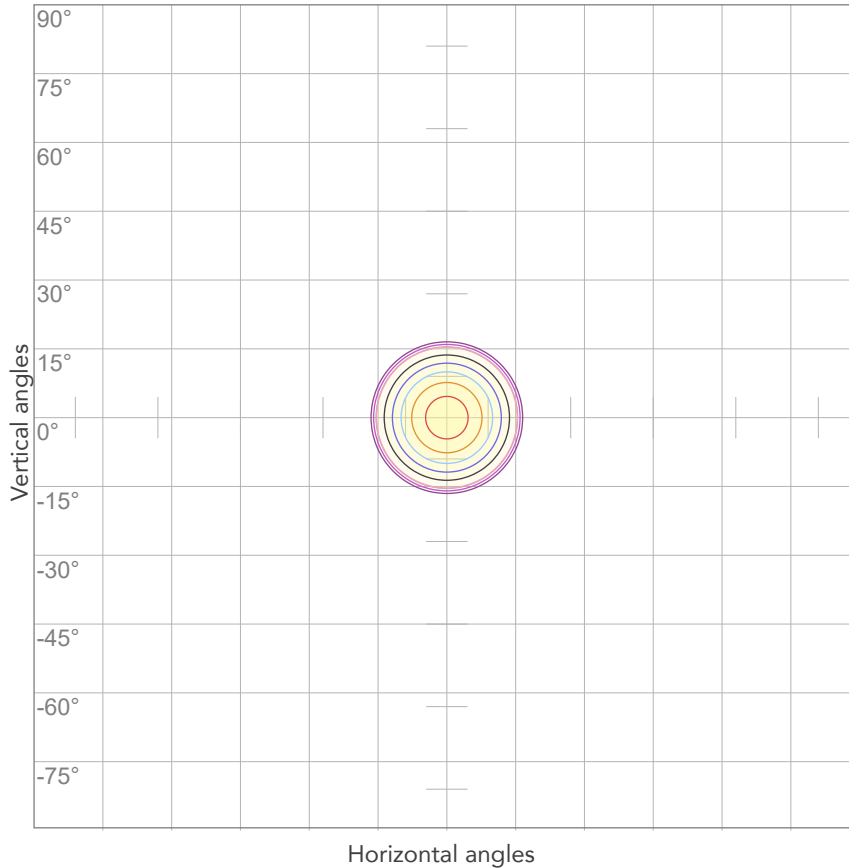


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	0,147A	31,6W	0,95	30lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



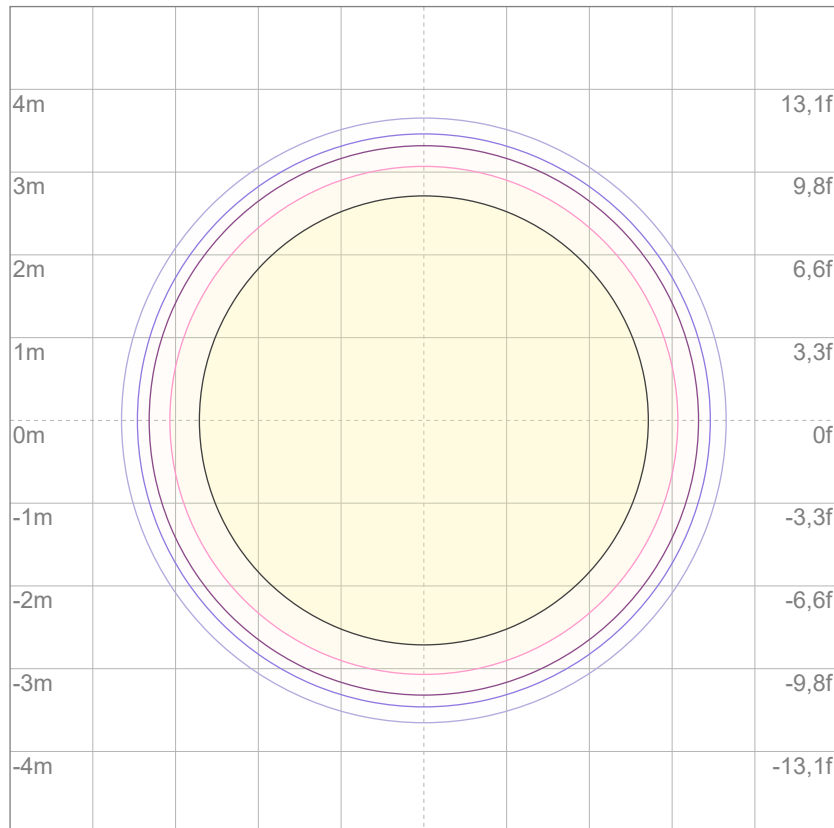
10%	484 cd
20%	968 cd
30%	1452 cd
40%	1936 cd
50%	2419 cd
60%	2903 cd
70%	3387 cd
80%	3871 cd

### Conditions:

Number of c-planes: 2

Candela at center: 4839 cd

## ISO LUX DIAGRAM



3%	1,45 lx
5%	2,42 lx
10%	4,84 lx
30%	14,5 lx
50%	24,2 lx

### Conditions:

Number of c-planes: 2

Lux at center: 48,4 lx

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





Total lumen output:

747 lm

Peak candela output:

3820 cd

Light quality:

CRI: 96,3

Color temperature:

2714 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 36°

Target:

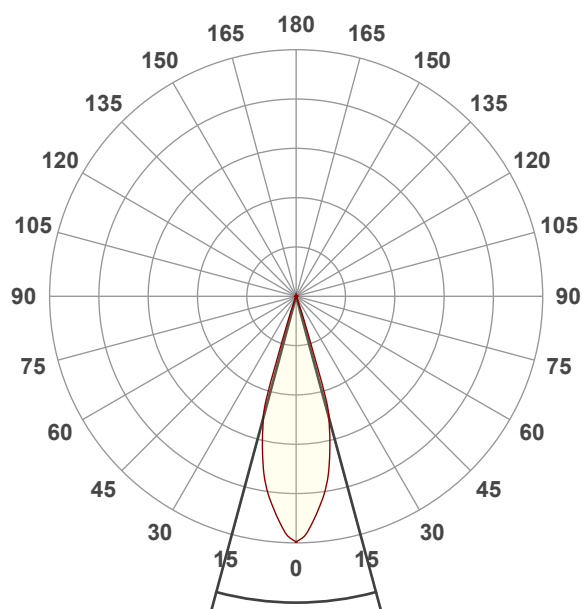
Warm White

Operator:

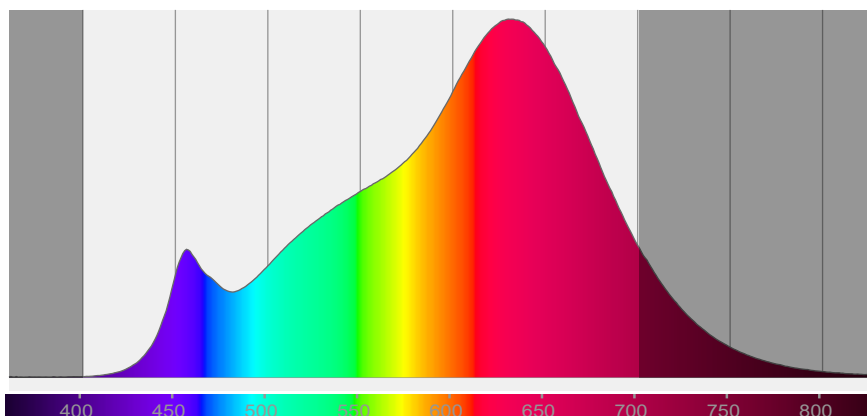
Giacomo Matteo

Date and time:

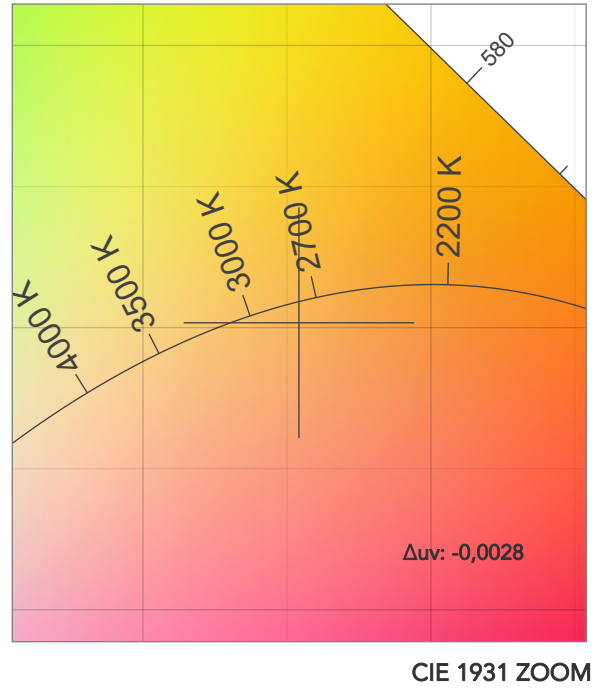
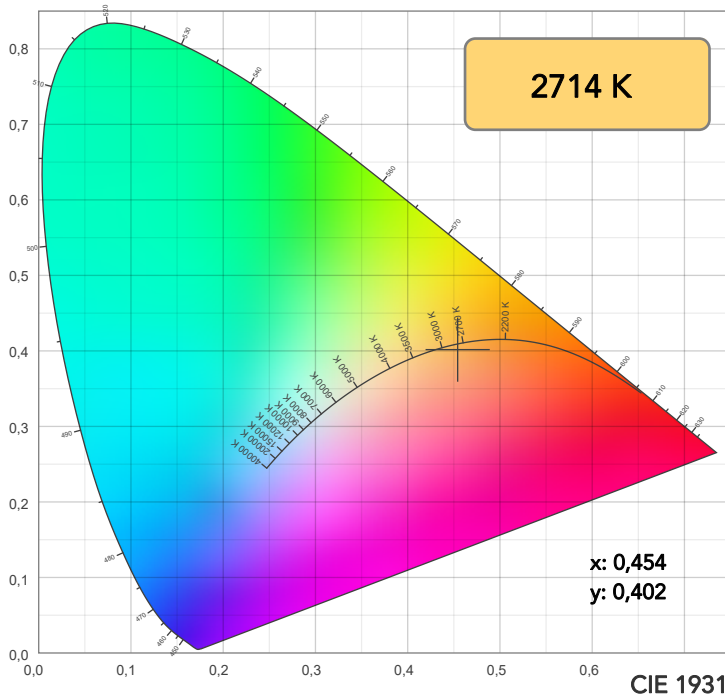
18/06/2024 15:13:00



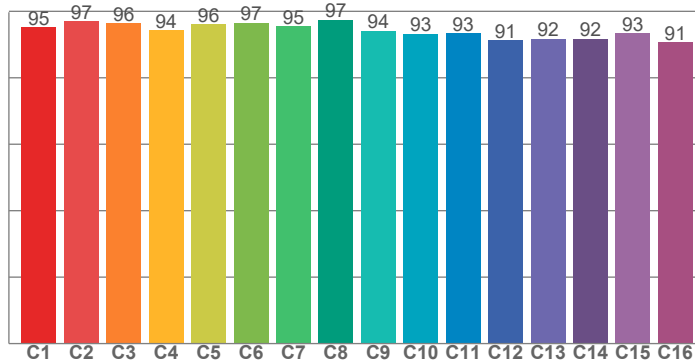
**Spectra**



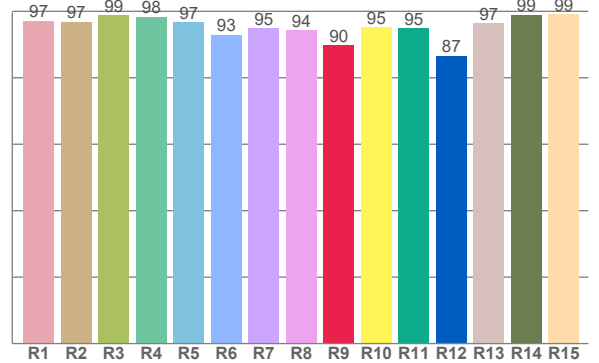
## COLOR DETAILS



TM30: 94,3



CRI: 96,3 (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
97,2	96,9	98,8	98,4	96,8	93,0	95,0	94,3	89,7	95,2	95,0	86,6	96,5	98,9	99,1

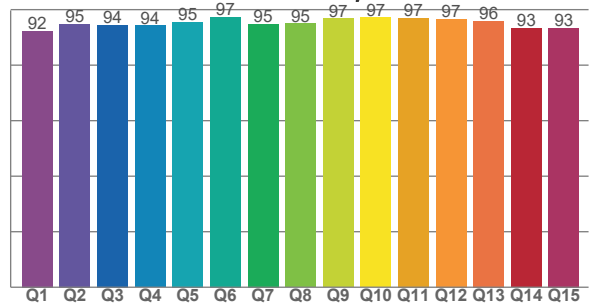
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,2	97,0	96,4	94,3	96,1	96,6	95,5	97,4	94,1	93,3	93,4	91,3	91,8	91,6	93,4	90,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,3	94,8	94,4	94,3	95,5	97,3	94,8	95,0	96,8	97,2	97,0	96,6	95,8	93,3	93,4

CQS: 94,8



## COLOR PARAMETERS

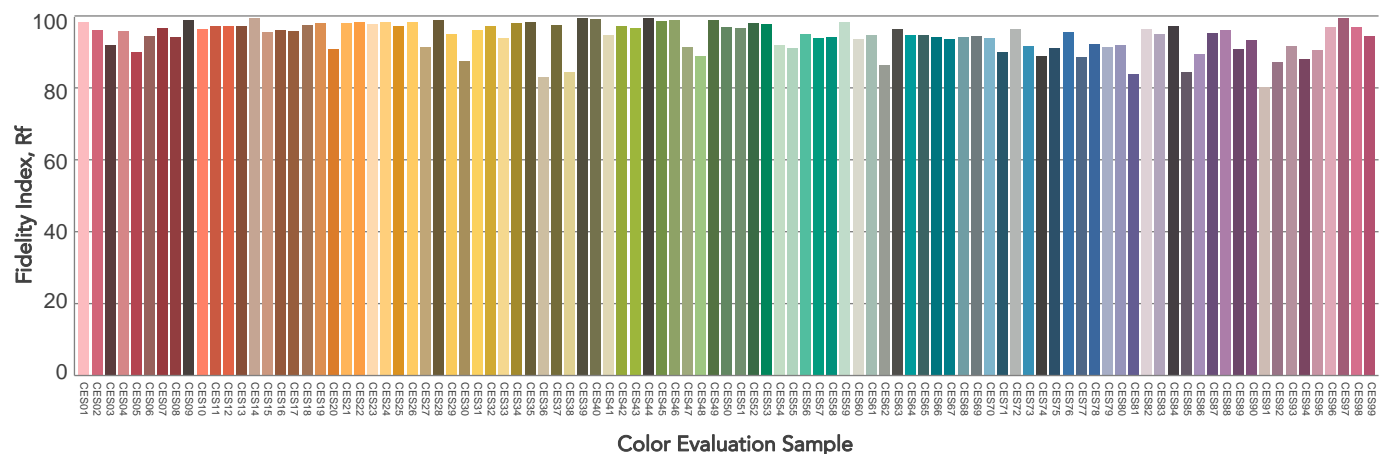
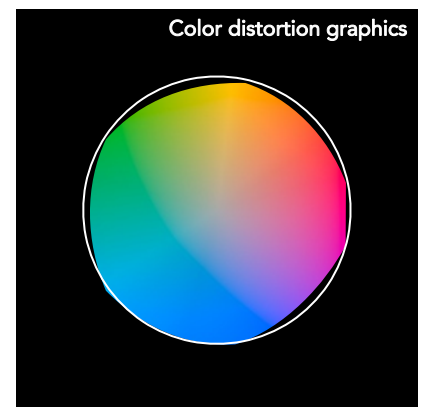
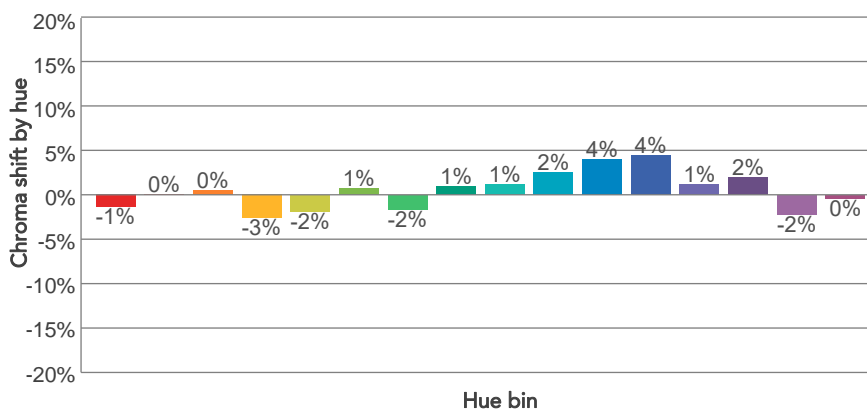
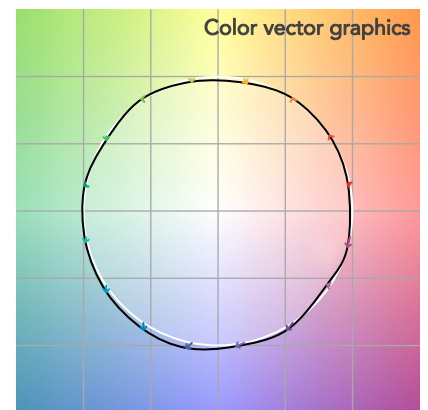
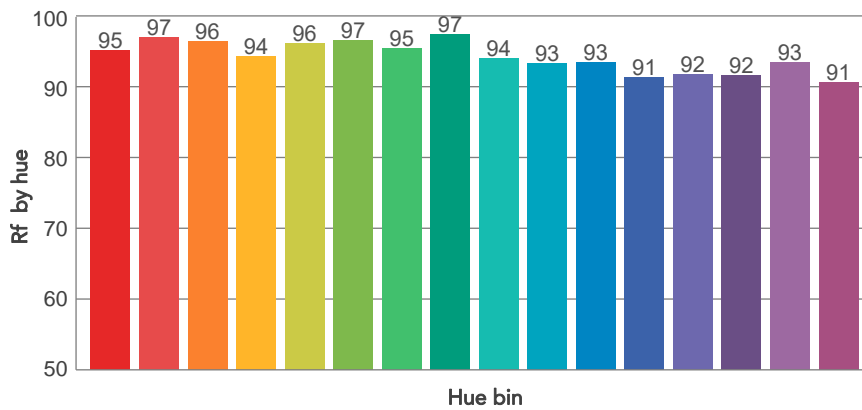
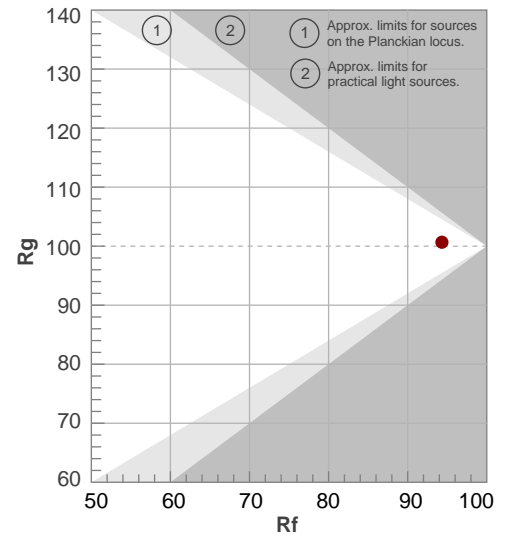
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2714 K	96,3	89,7	94,3	100,7	94,8	97	0,454	0,402	-0,0028

# TM30 DETAILS

**Rf 94,3**  
Fidelity index Rf

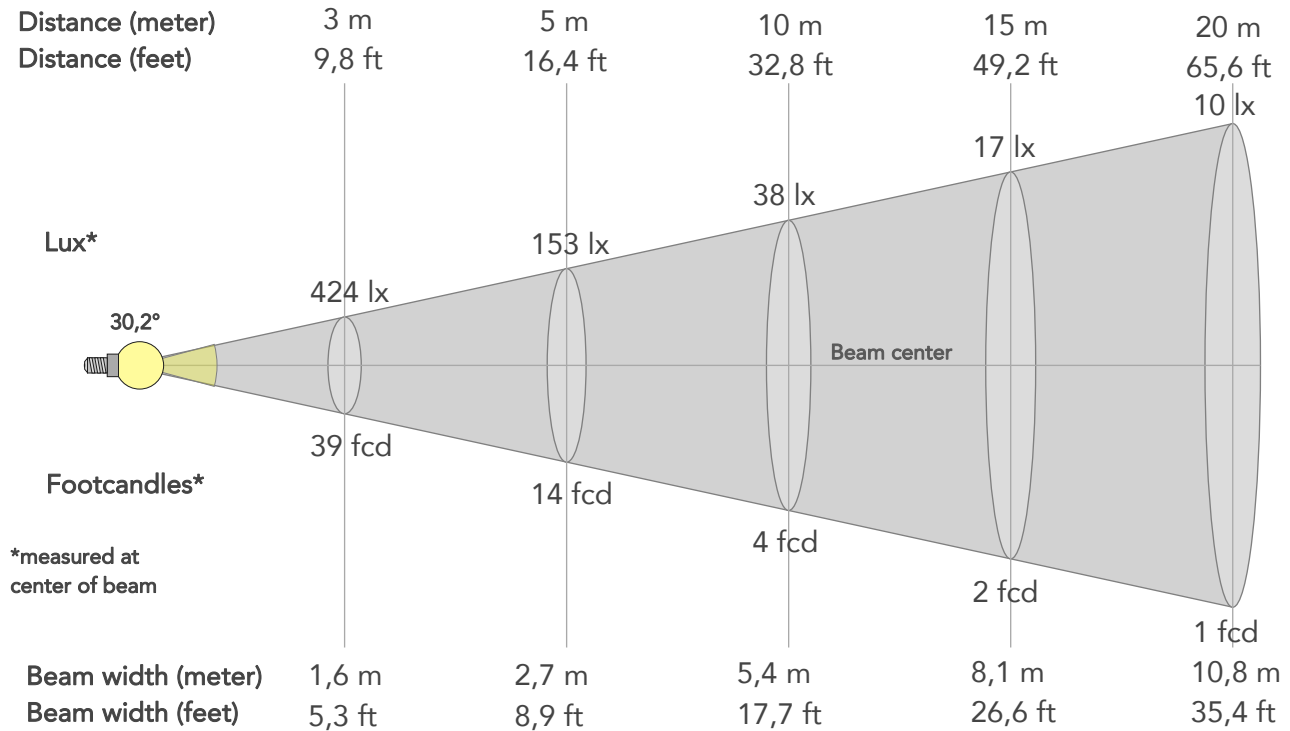
**Rg 100,7**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	97	0%	1%
3	96	0%	0%
4	94	-3%	-2%
5	96	-2%	0%
6	97	1%	1%
7	95	-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

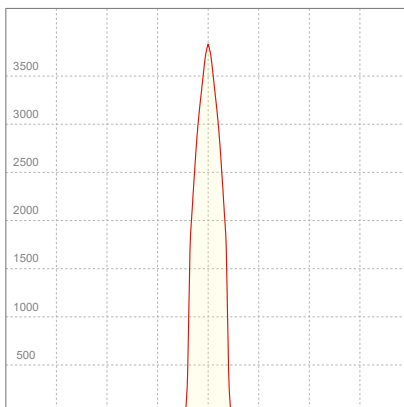
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,2°	36,9°	39,6°	99,8%	99,7%



## 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	3820lx	955lx	424lx	239lx	153lx	68lx	38lx	17lx	10lx	6lx	4lx	2lx	2lx
Footcand.	355fcd	89fcd	39fcd	22fcd	14fcd	6fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,2m	2,7m	4m	5,4m	8,1m	10,8m	13,5m	16,2m	21,6m	27m
Beam wid.	1,8ft	3,6ft	5,3ft	7,1ft	8,9ft	13,3ft	17,7ft	26,6ft	35,4ft	44,3ft	53,1ft	70,8ft	88,5ft

## LINEAR DISTRIBUTION DIAGRAM

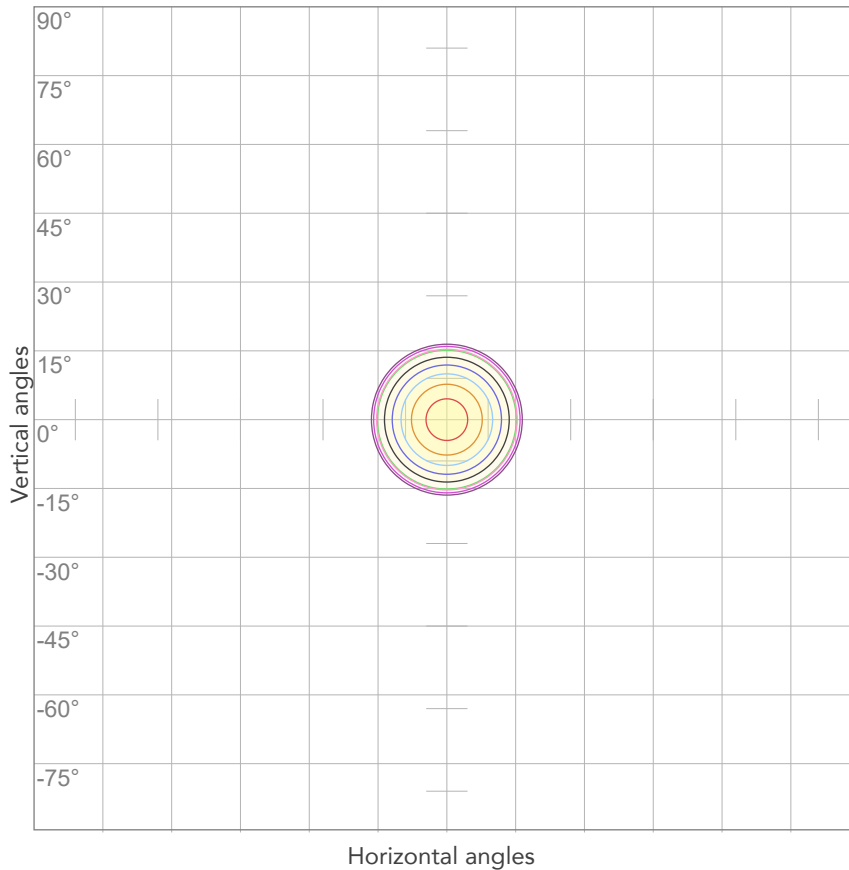


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
226V	0,145A	31,1W	0,95	24lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



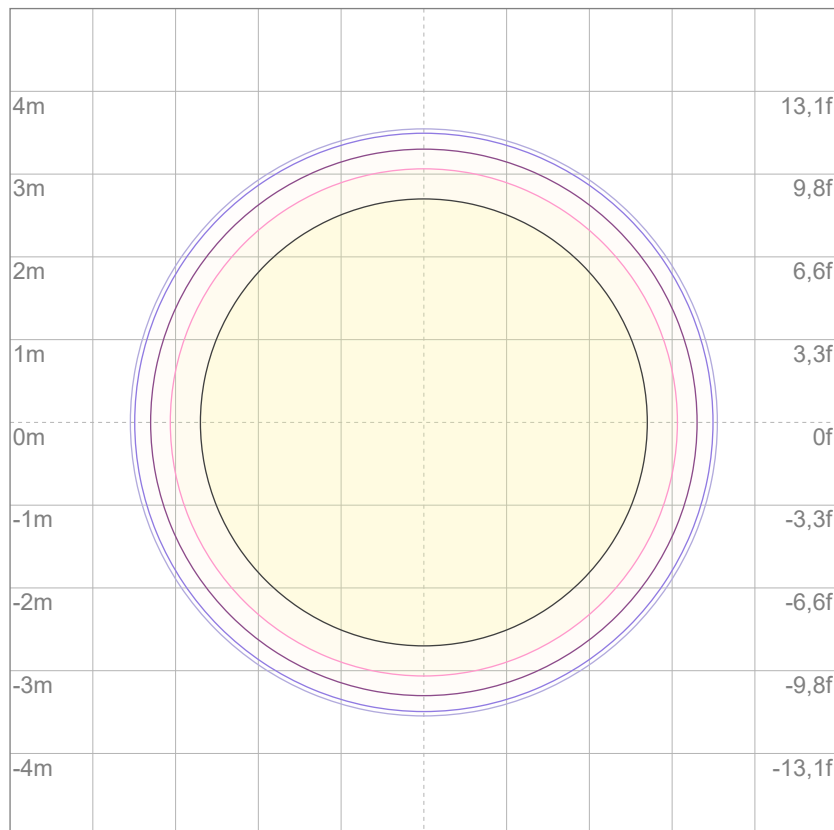
10%	382 cd
20%	764 cd
30%	1146 cd
40%	1528 cd
50%	1910 cd
60%	2292 cd
70%	2674 cd
80%	3056 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3820 cd

## ISO LUX DIAGRAM



3%	1,15 lx
5%	1,91 lx
10%	3,82 lx
30%	11,5 lx
50%	19,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 38,2 lx

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



Total lumen output:

1040 lm

Peak candela output:

5367 cd

Light quality:

CRI: 95,7

Color temperature:

6342 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 36°

Target:

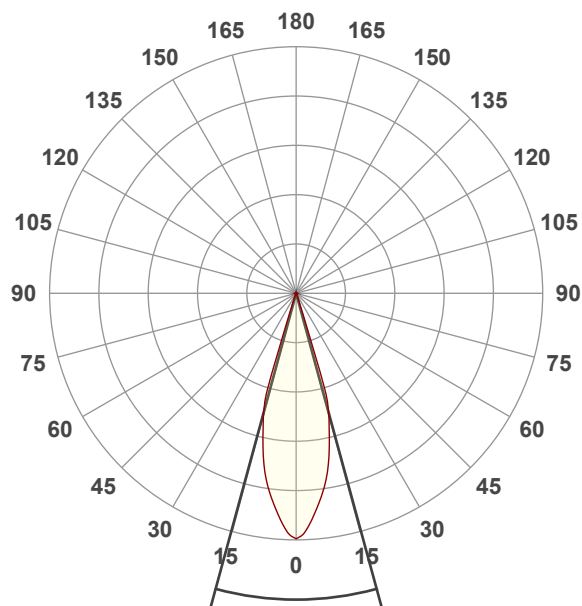
Cold White

Operator:

Giacomo Matteo

Date and time:

18/06/2024 15:14:40

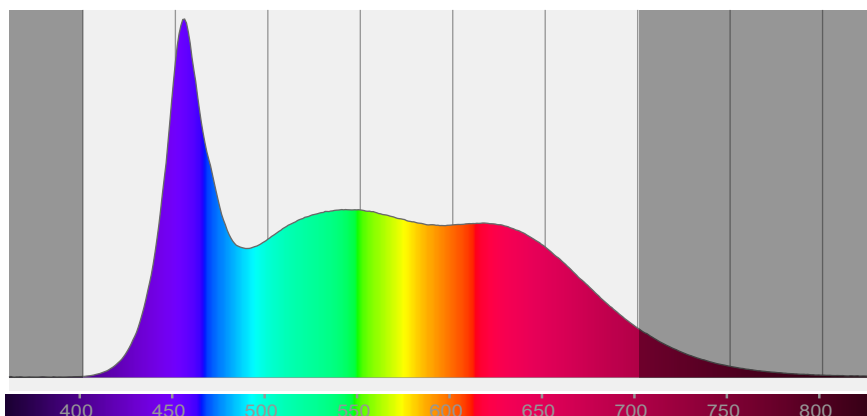


Beam angle 50%: 30,5°

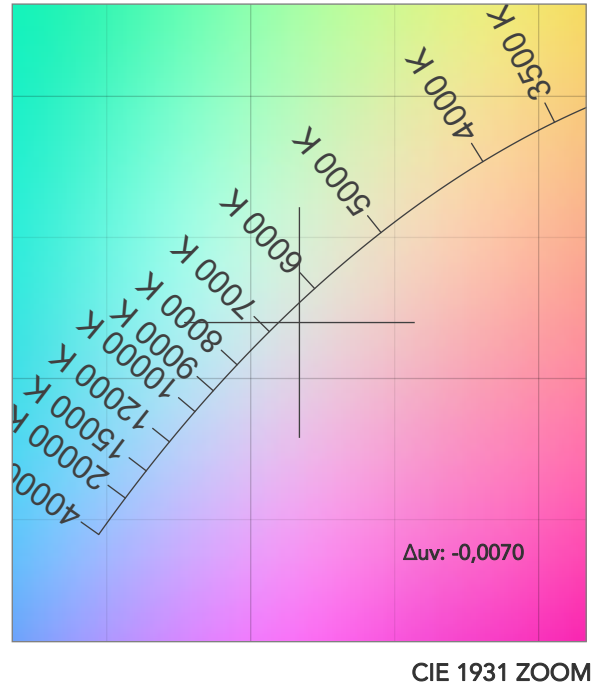
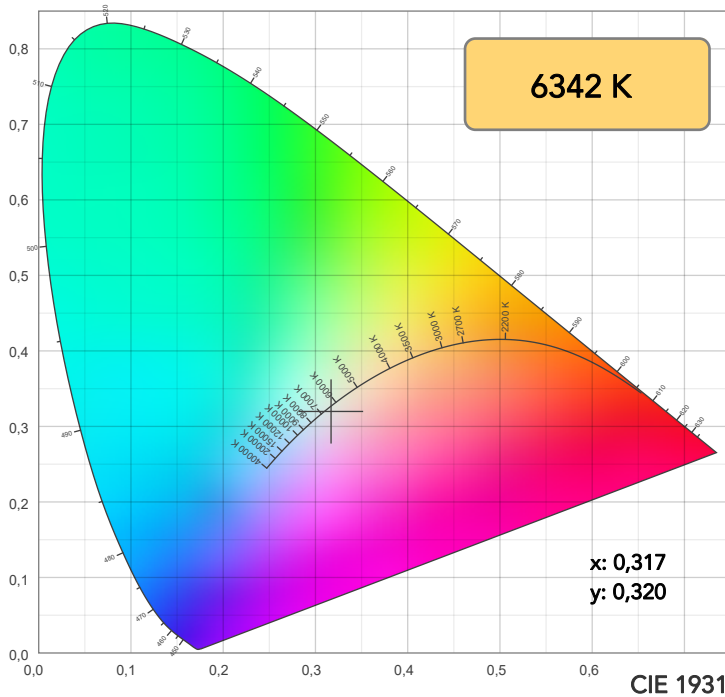
Field angle 10%: 36,2°

Cut off angle 2.5%: 38,6°

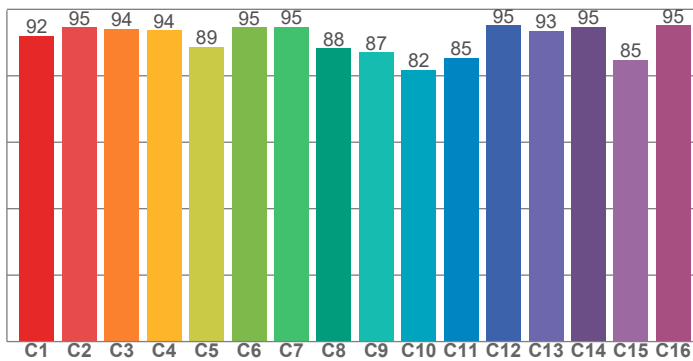
**Spectra**



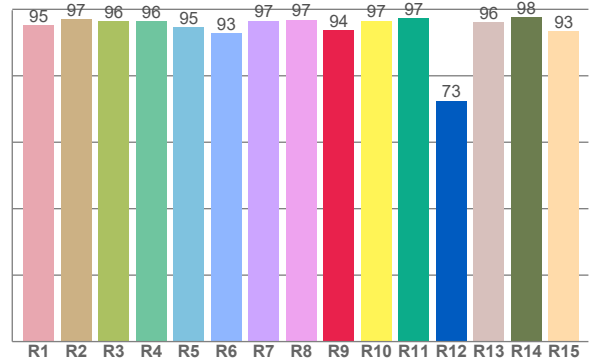
## COLOR DETAILS



**TM30: 90,8**



**CRI: 95,7 (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
95,3	97,0	96,4	96,5	94,6	92,7	96,6	96,8	93,7	96,5	97,4	72,5	96,1	97,6	93,3

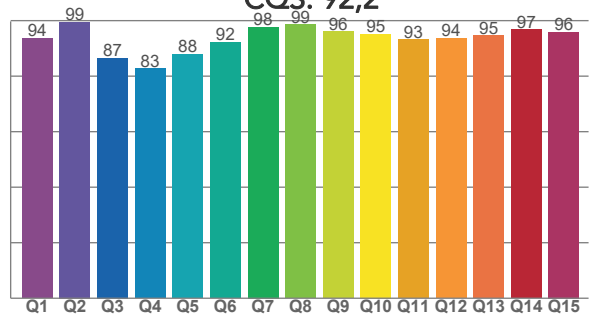
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,1	94,5	94,2	93,7	88,7	94,6	94,7	88,3	87,0	81,8	85,3	95,2	93,5	94,8	84,8	95,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93,6	99,5	86,5	82,7	87,9	92,2	97,8	98,5	96,1	95,3	93,2	93,7	94,6	96,8	96,0

**CQS: 92,2**



## 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	$\Delta uv$
6342 K	95,7	93,7	90,8	99,8	92,2	96	0,317	0,320	-0,0070

## TM30 DETAILS

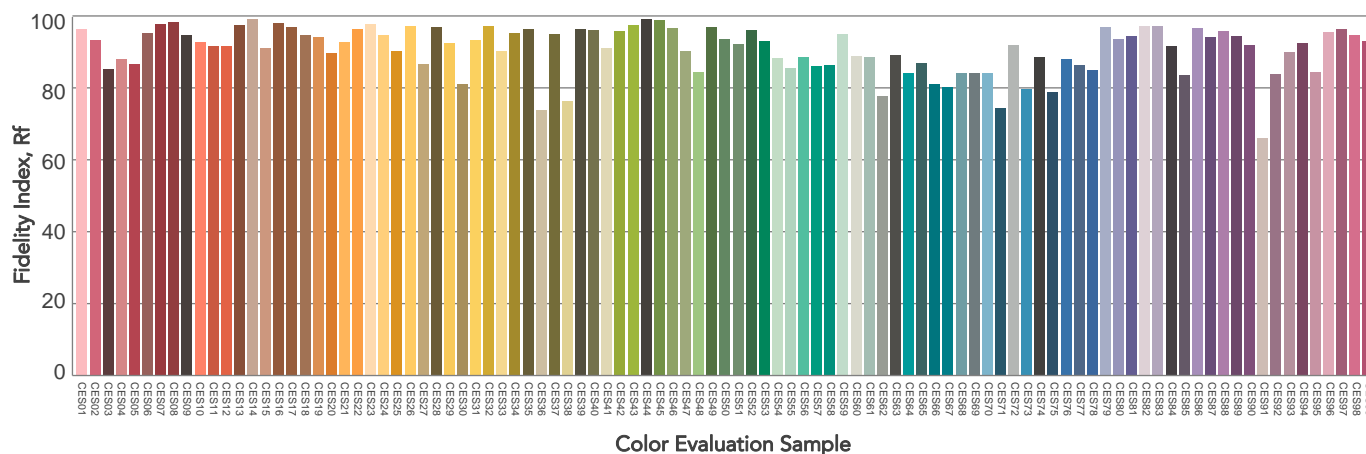
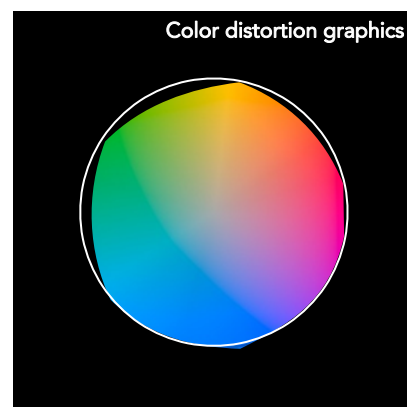
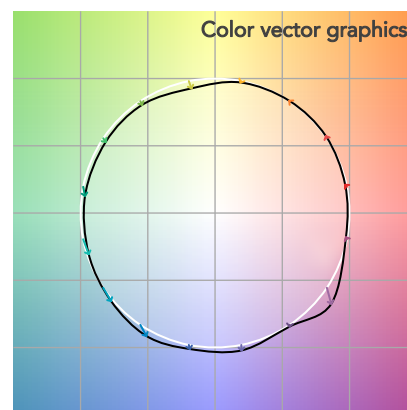
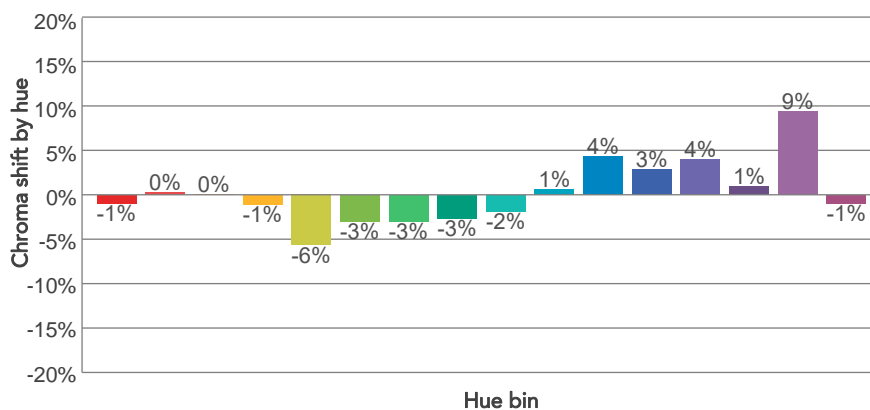
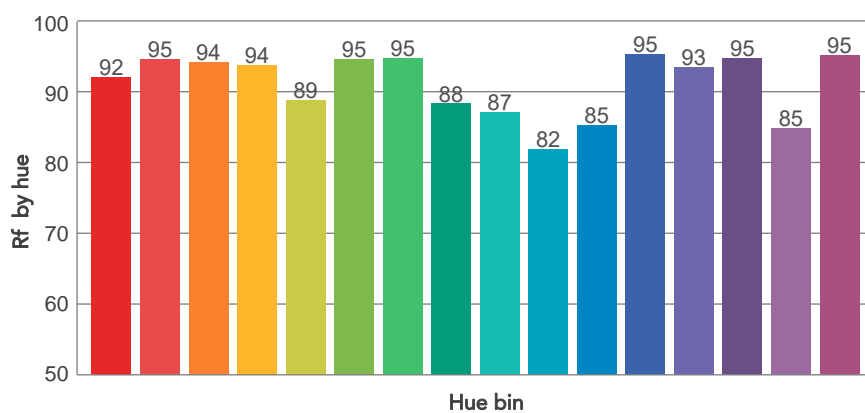
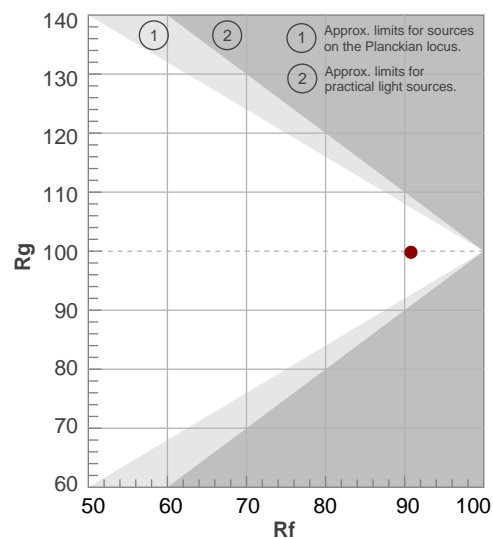
Rf 90,8

Fidelity index  $R_f$

Rg 99,8

## Gammut index

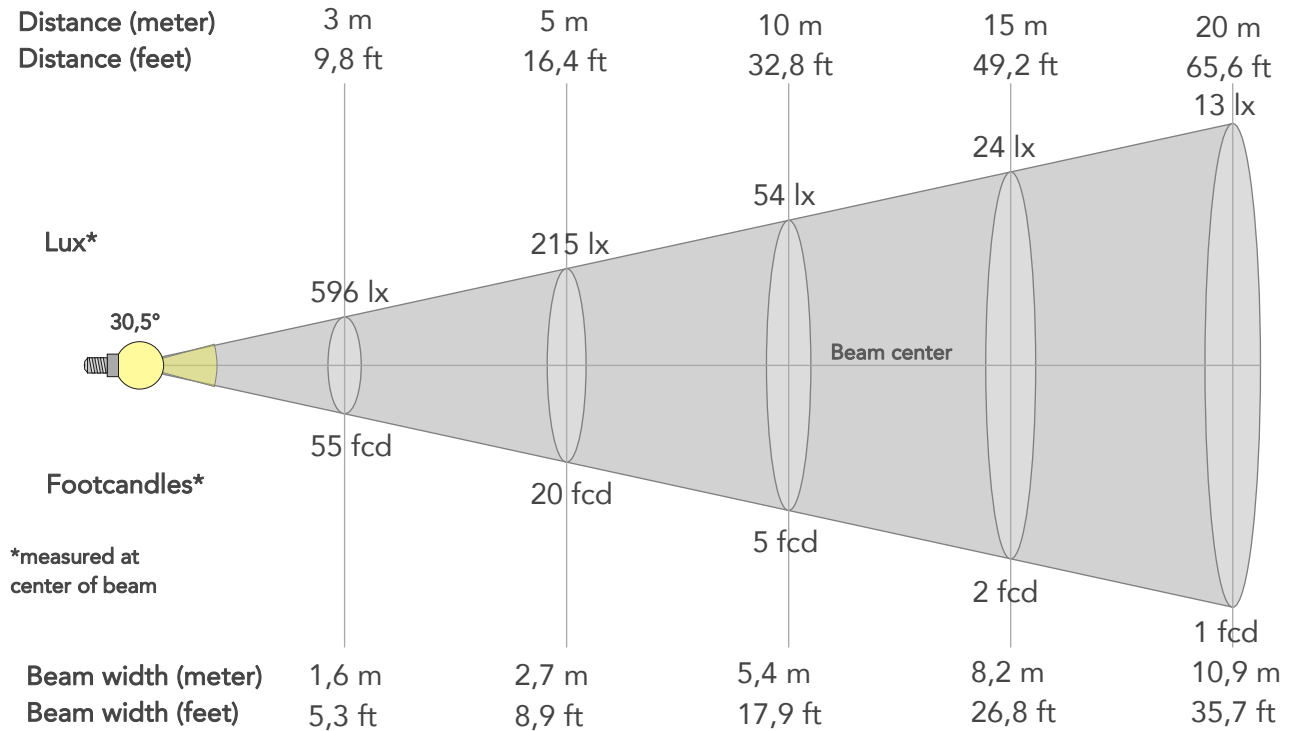
		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	92	-1%	2%
2	95	0%	2%
3	94	0%	0%
4	94	-1%	0%
5	89	-6%	-1%
6	95	-3%	0%
7	95	-3%	1%
8	88	-3%	6%
9	87	-2%	12%
10	82	1%	11%
11	85	4%	8%
12	95	3%	1%
13	93	4%	-1%
14	95	1%	-1%
15	85	9%	-8%
16	95	-1%	1%





# BEAM DETAILS

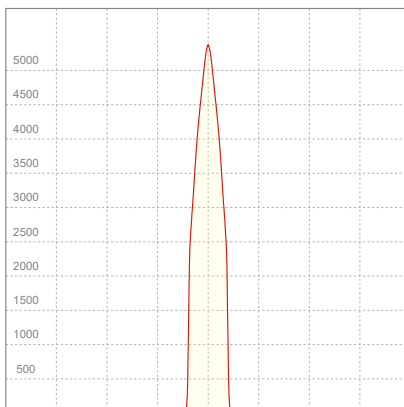
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,5°	36,2°	38,6°	99,7%	99,5%



## 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	5367lx	1342lx	596lx	335lx	215lx	95lx	54lx	24lx	13lx	9lx	6lx	3lx	2lx
Footcand.	499fcd	125fcd	55fcd	31fcd	20fcd	9fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,2m	2,7m	4,1m	5,4m	8,2m	10,9m	13,6m	16,3m	21,8m	27,2m
Beam wid.	1,8ft	3,6ft	5,3ft	7,1ft	8,9ft	13,4ft	17,9ft	26,8ft	35,7ft	44,7ft	53,6ft	71,5ft	89,3ft

## LINEAR DISTRIBUTION DIAGRAM

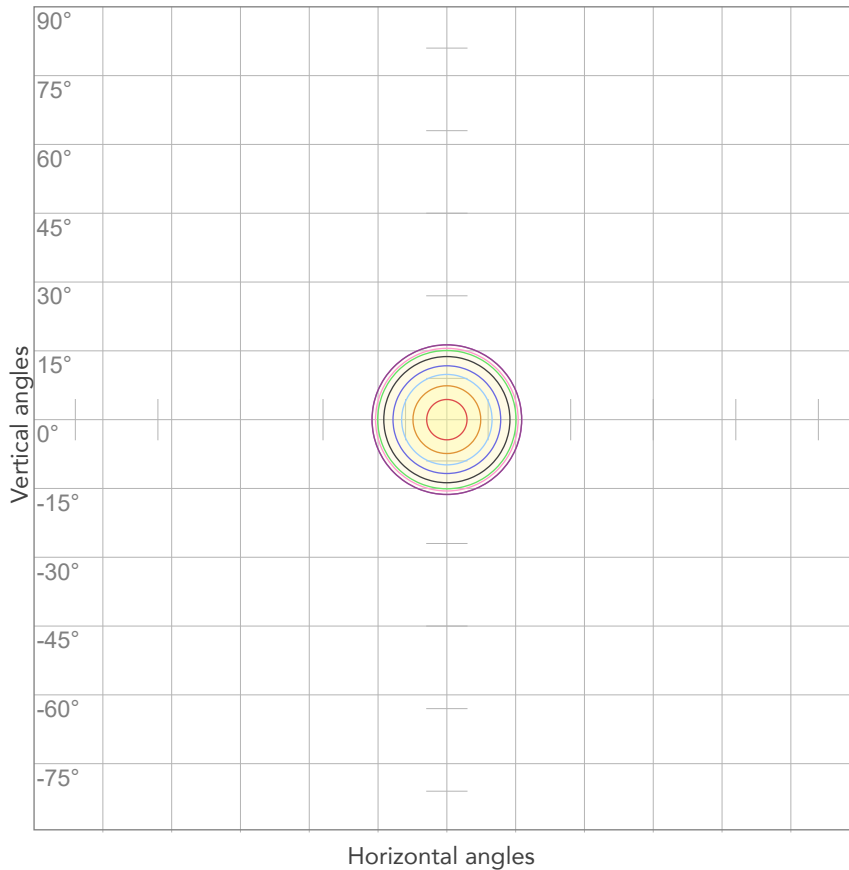


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	0,150A	32,2W	0,95	32lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



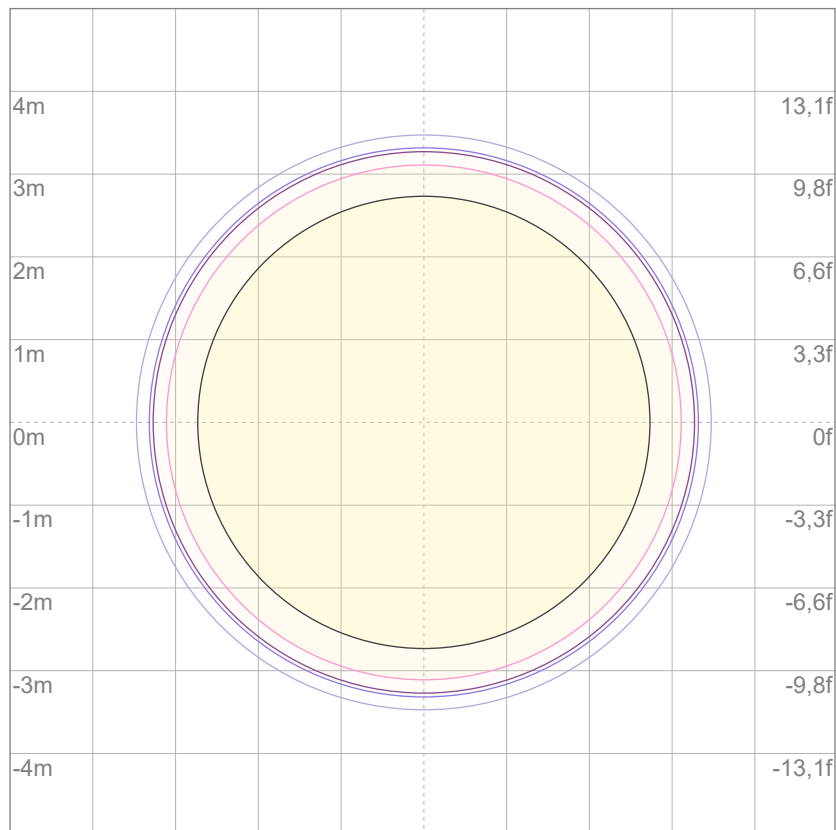
10%	537 cd
20%	1073 cd
30%	1610 cd
40%	2147 cd
50%	2684 cd
60%	3220 cd
70%	3757 cd
80%	4294 cd

### Conditions:

Number of c-planes: 2

Candela at center: 5367 cd

## ISO LUX DIAGRAM



3%	1,61 lx
5%	2,68 lx
10%	5,37 lx
30%	16,1 lx
50%	26,8 lx

### Conditions:

Number of c-planes: 2

Lux at center: 53,7 lx

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