

# Photometric Test Report



## EclDisplay CASVW

ZOOMABLE WASH LENS 25-50°

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

1370 lm

Peak candela output:

1901 cd

Light quality:

CRI: 97,7

Color temperature:

4196 K

PRODUCT NAME:

ECLDISPLAY VW

MEASURAMENT CONDITIONS:

Beam angle:

Wash 2550 Max Zoom

Target:

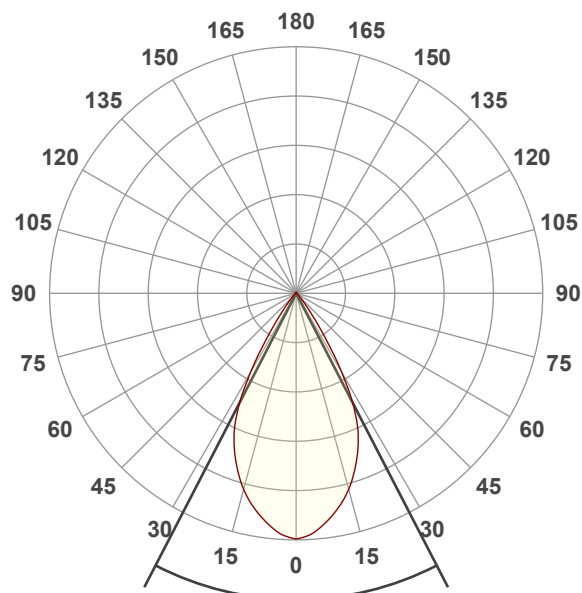
Full On

Operator:

Giacomo Matteo

Date and time:

17/06/2024 11:34:12

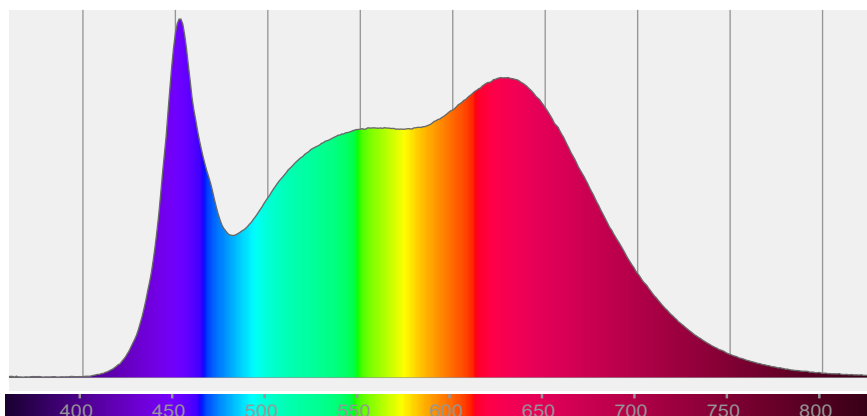


Beam angle 50%: 54,6°

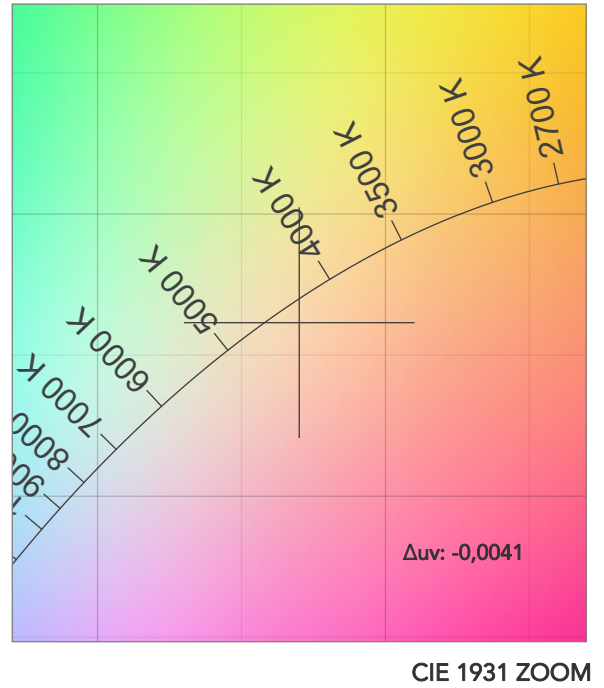
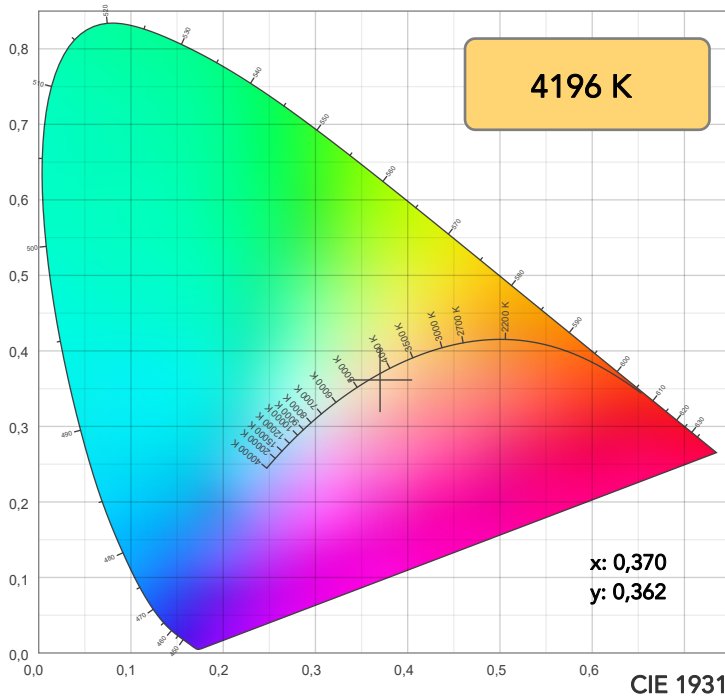
Field angle 10%: 73,7°

Cut off angle 2.5%: 89,2°

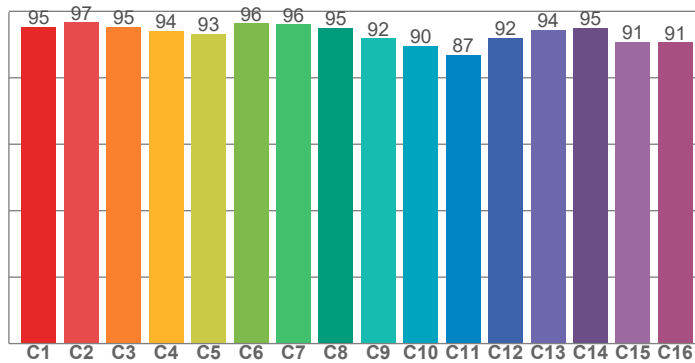
Spectra



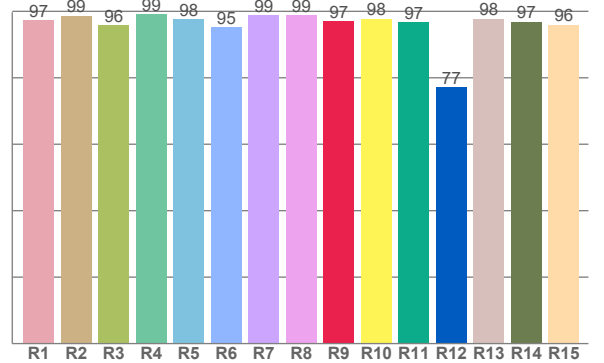
# COLOR DETAILS



TM30: 93,1



CRI: 97,7 (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
97,3	98,7	95,8	99,1	97,7	95,3	98,8	98,8	97,1	97,8	96,6	77,1	97,8	96,9	96,0

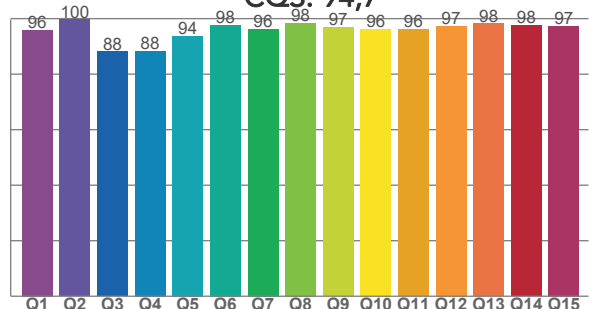
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,4	96,6	95,3	94,2	93,2	96,4	96,1	95,0	91,9	89,5	86,8	92,0	94,4	95,0	90,8	90,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,9	99,6	88,1	88,3	93,8	97,6	96,3	98,4	96,9	96,2	96,2	97,4	98,2	97,6	97,4

CQS: 94,7



## COLOR PARAMETERS

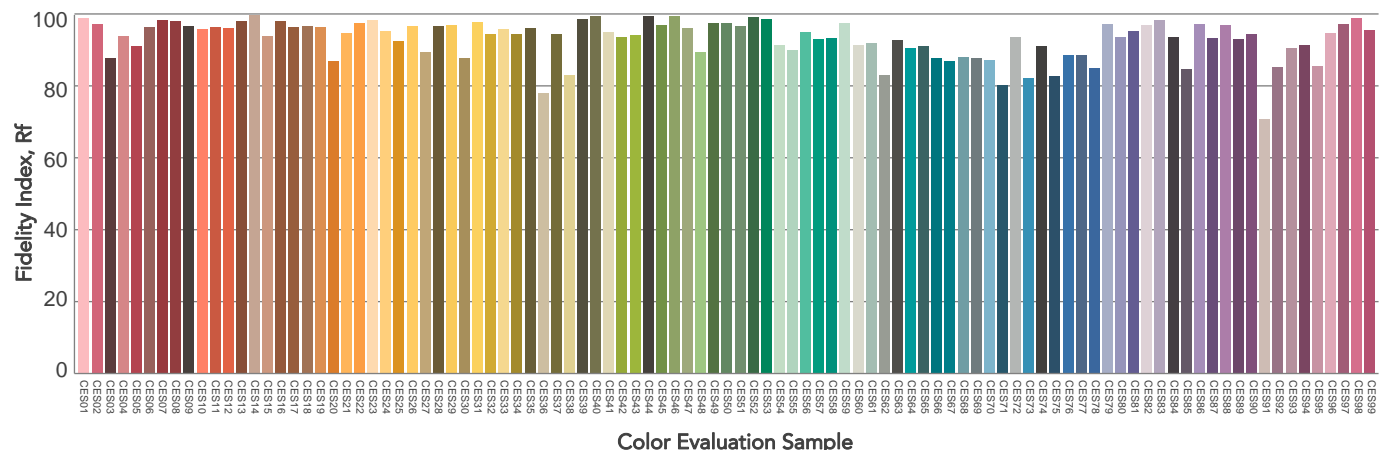
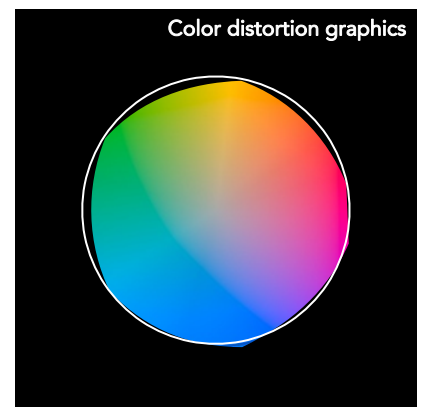
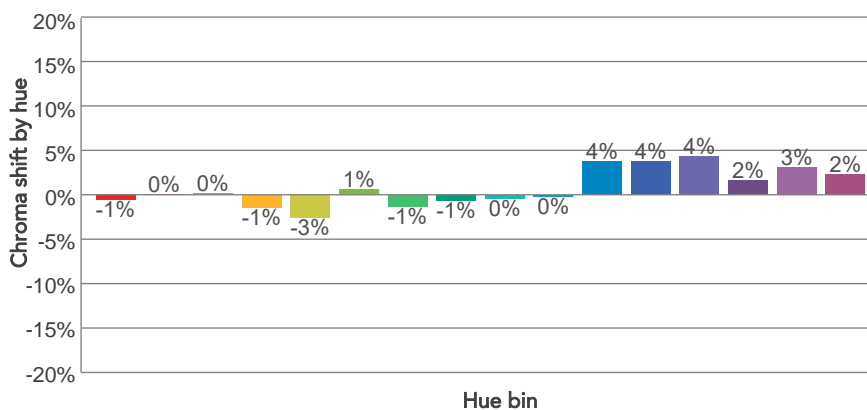
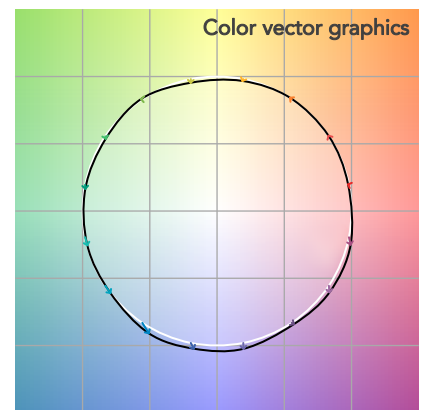
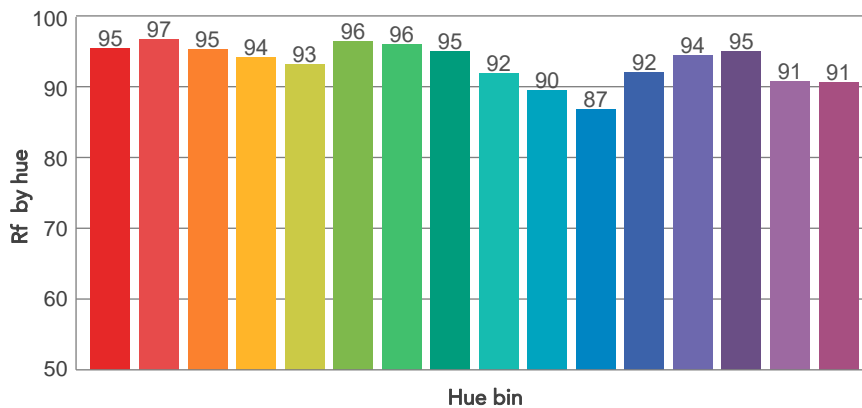
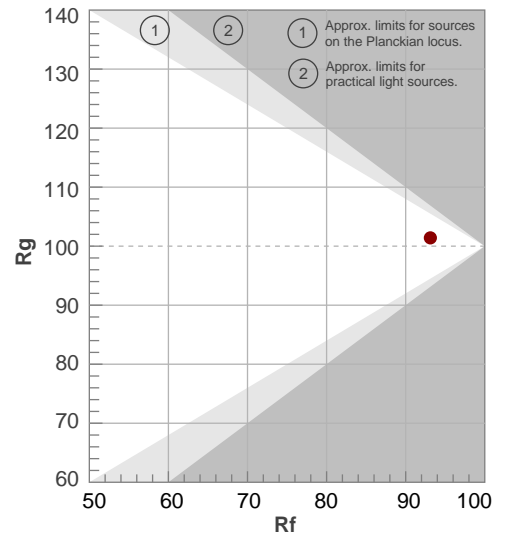
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4196 K	97,7	97,1	93,1	101,4	94,7	98	0,370	0,362	-0,0041

# TM30 DETAILS

**Rf 93,1**  
Fidelity index Rf

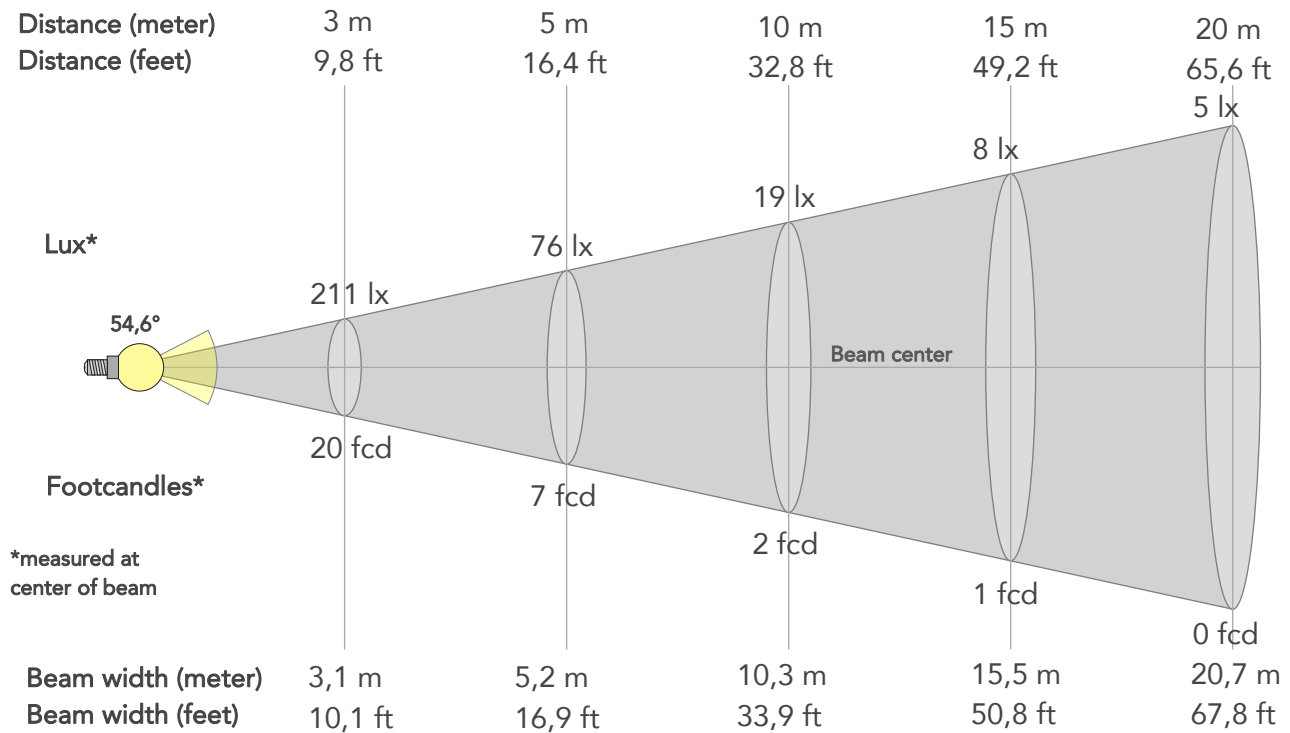
**Rg 101,4**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	0%
2	97	0%	0%
3	95	0%	2%
4	94	-1%	0%
5	93	-3%	1%
6	96	1%	1%
7	96	-1%	1%
8	95	-1%	3%
9	92	0%	6%
10	90	0%	7%
11	87	4%	8%
12	92	4%	3%
13	94	4%	-1%
14	95	2%	1%
15	91	3%	-4%
16	91	2%	-5%



# BEAM DETAILS

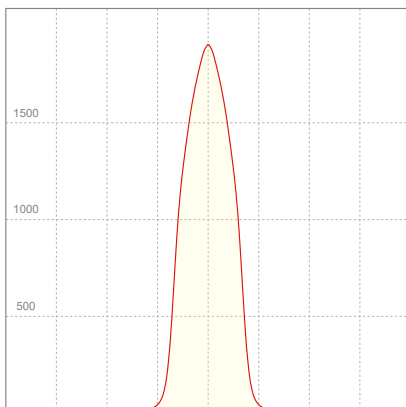
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54,6°	73,7°	89,2°	99,2%	97,0%



## 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	1901lx	475lx	211lx	119lx	76lx	34lx	19lx	8lx	5lx	3lx	2lx	1lx	1lx
Footcand.	177fcd	44fcd	20fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,1m	5,2m	7,7m	10,3m	15,5m	20,7m	25,8m	31m	41,3m	51,7m
Beam wid.	3,4ft	6,8ft	10,1ft	13,5ft	16,9ft	25,4ft	33,9ft	50,8ft	67,8ft	84,7ft	101,7ft	135,6ft	169,4ft

## LINEAR DISTRIBUTION DIAGRAM

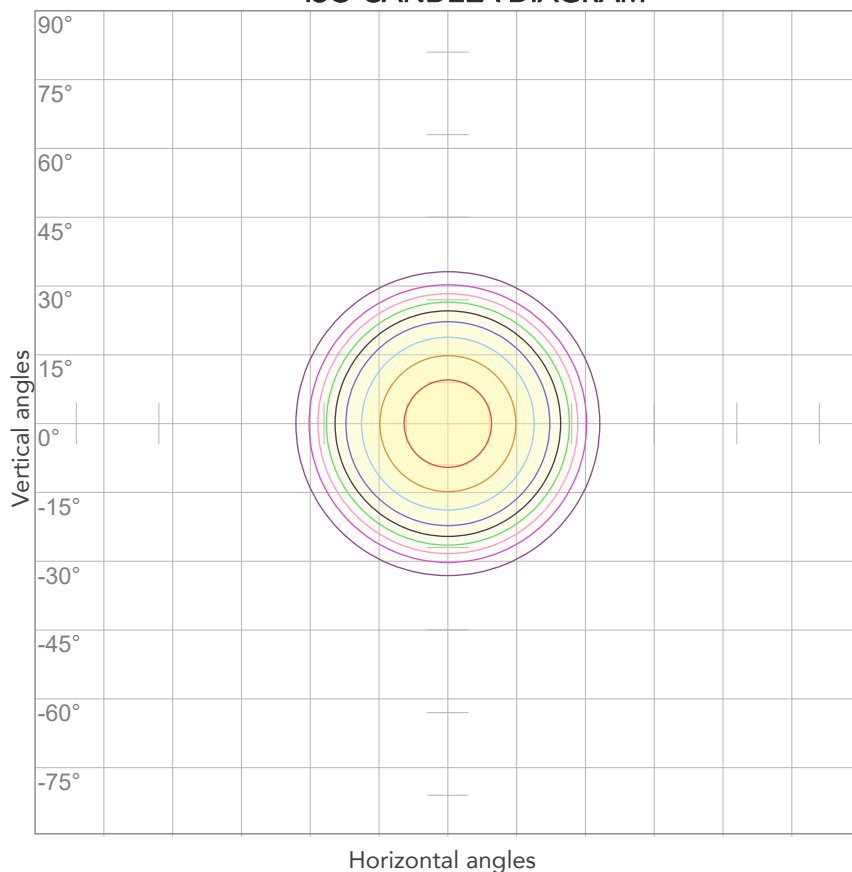


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
228V	0,149A	32,4W	0,95	42lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



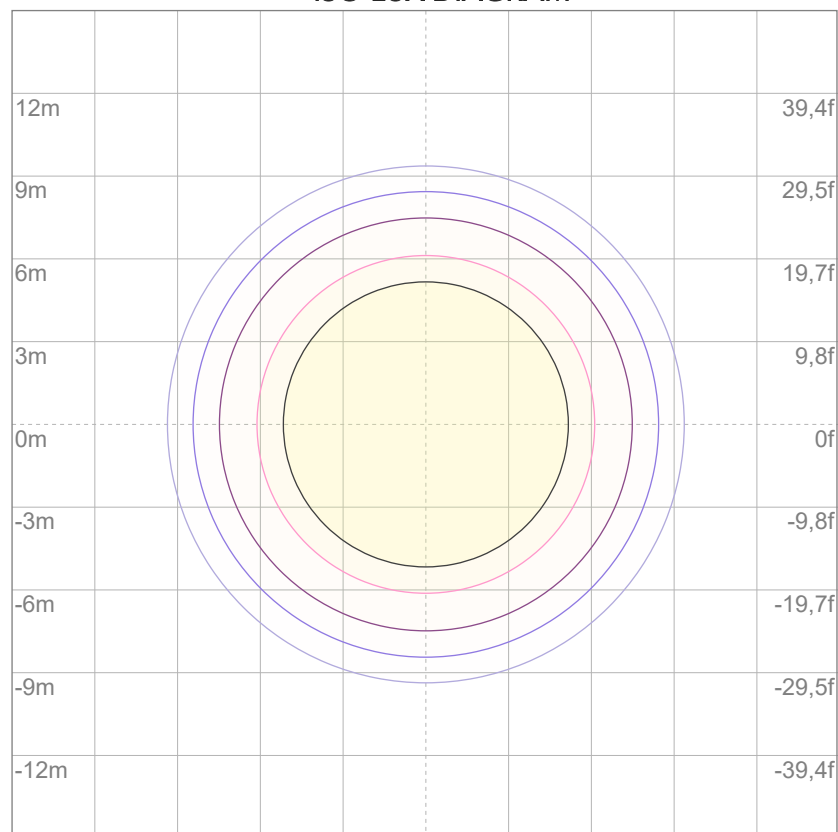
10%	190 cd
20%	380 cd
30%	570 cd
40%	760 cd
50%	950 cd
60%	1140 cd
70%	1331 cd
80%	1521 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1901 cd

## ISO LUX DIAGRAM



3%	0,570 lx
5%	0,950 lx
10%	1,90 lx
30%	5,70 lx
50%	9,50 lx

### Conditions:

Number of c-planes: 2

Lux at center: 19,0 lx

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





Total lumen output:

921 lm

Peak candela output:

4661 cd

Light quality:

CRI: 97,0

Color temperature:

4144 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 2550 Min Zoom

Target:

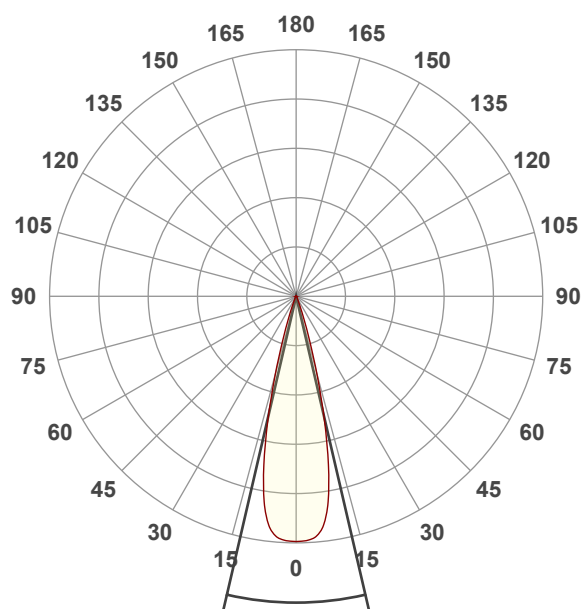
Full On

Operator:

Giacomo Matteo

Date and time:

17/06/2024 12:02:51

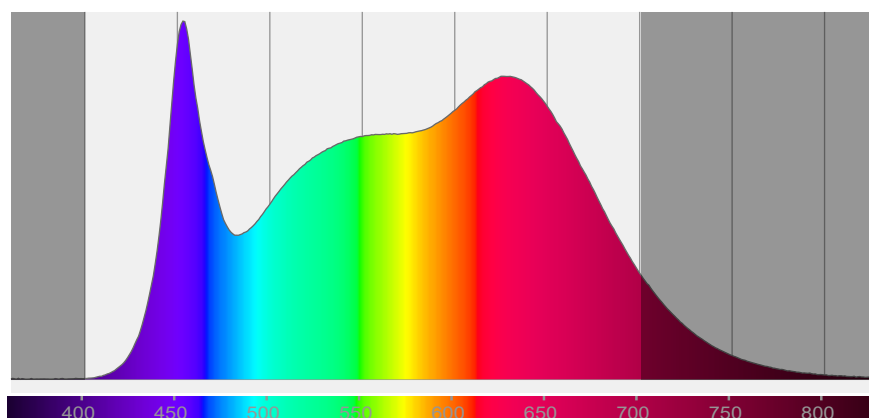


Beam angle 50%: 26,1°

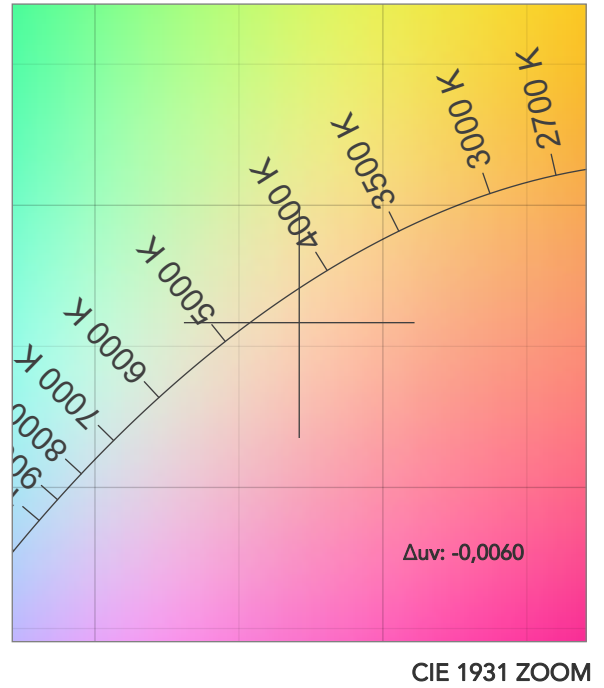
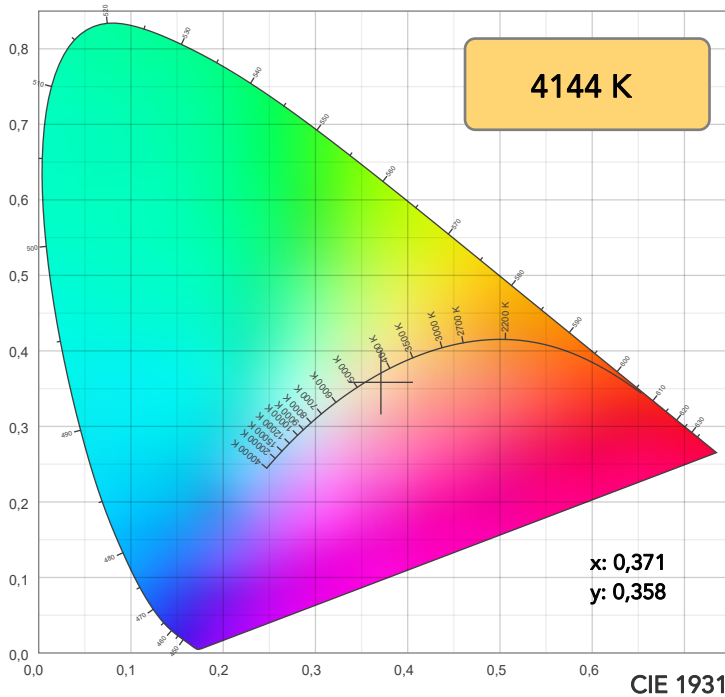
Field angle 10%: 37,7°

Cut off angle 2.5%: 47,4°

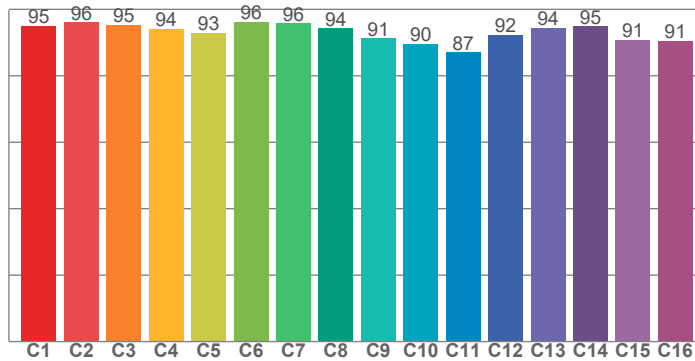
**Spectra**



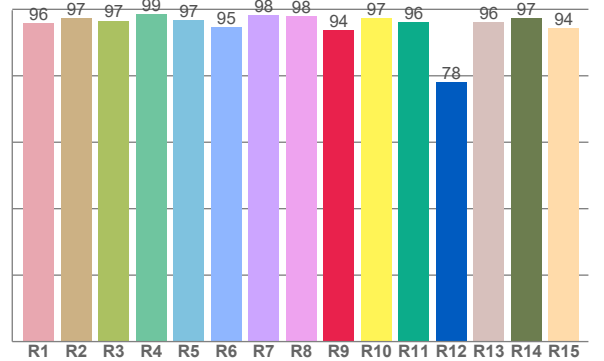
# COLOR DETAILS



**TM30: 93,0**



**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
95,9	97,4	96,6	98,6	96,7	94,6	98,3	97,9	93,7	97,4	96,2	78,1	96,1	97,2	94,3

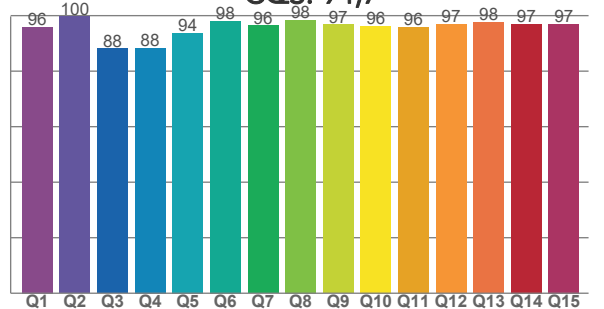
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,0	96,1	95,4	94,2	93,0	96,3	95,7	94,3	91,3	89,5	87,0	92,2	94,4	94,8	90,8	90,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,9	99,7	88,2	88,3	93,7	98,1	96,4	98,4	96,8	96,3	95,9	96,9	97,6	96,9	96,9

**CQS: 94,7**



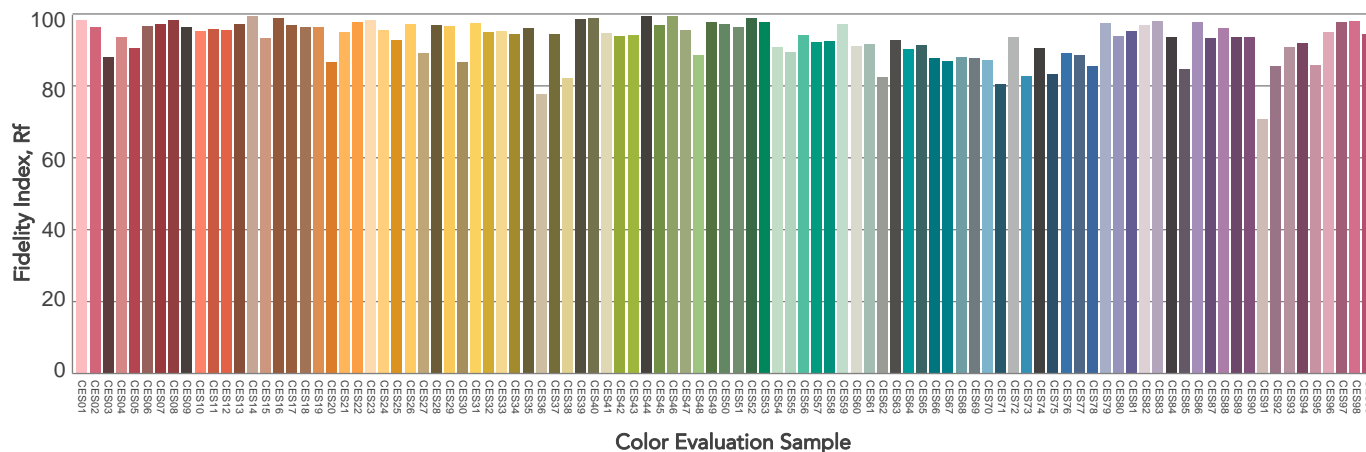
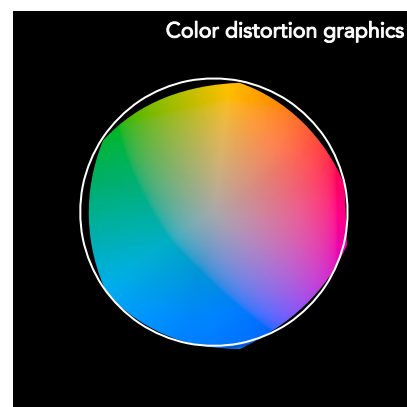
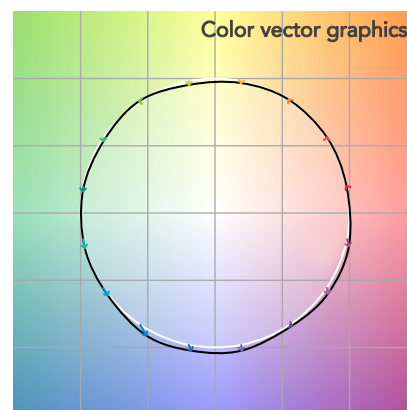
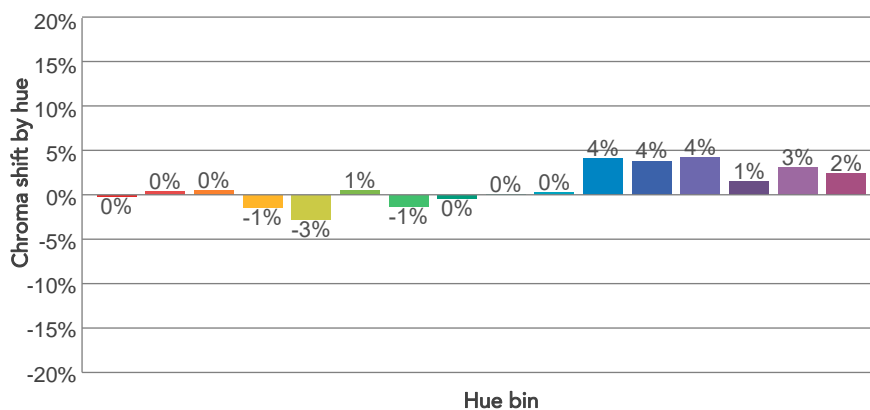
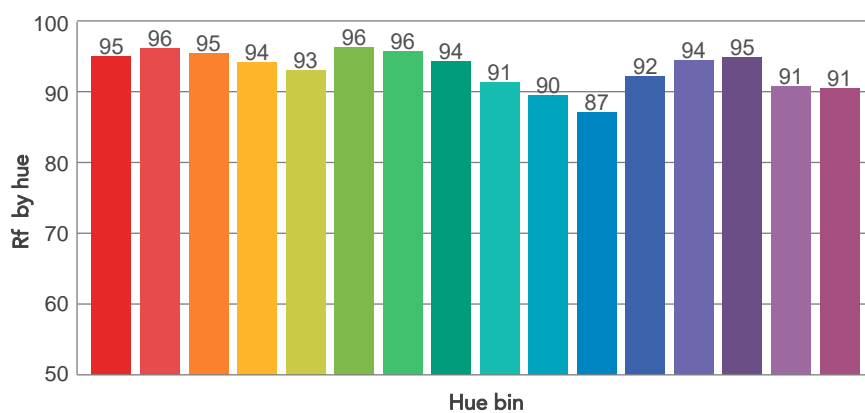
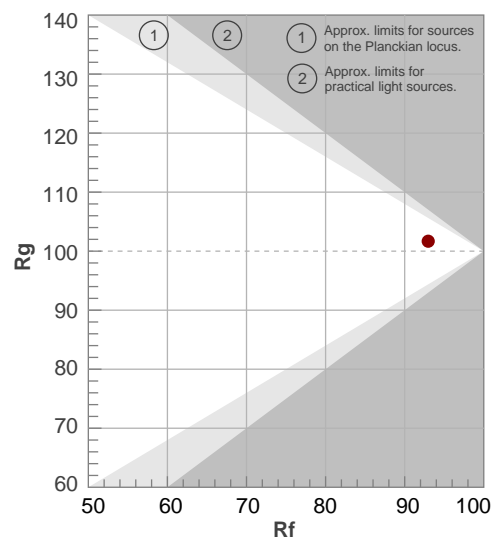
## COLOR PARAMETERS

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
4144 K	97,0	93,7	93,0	101,7	94,7	98	0,371	0,358	-0,0060

Fidelity index  $R_f$

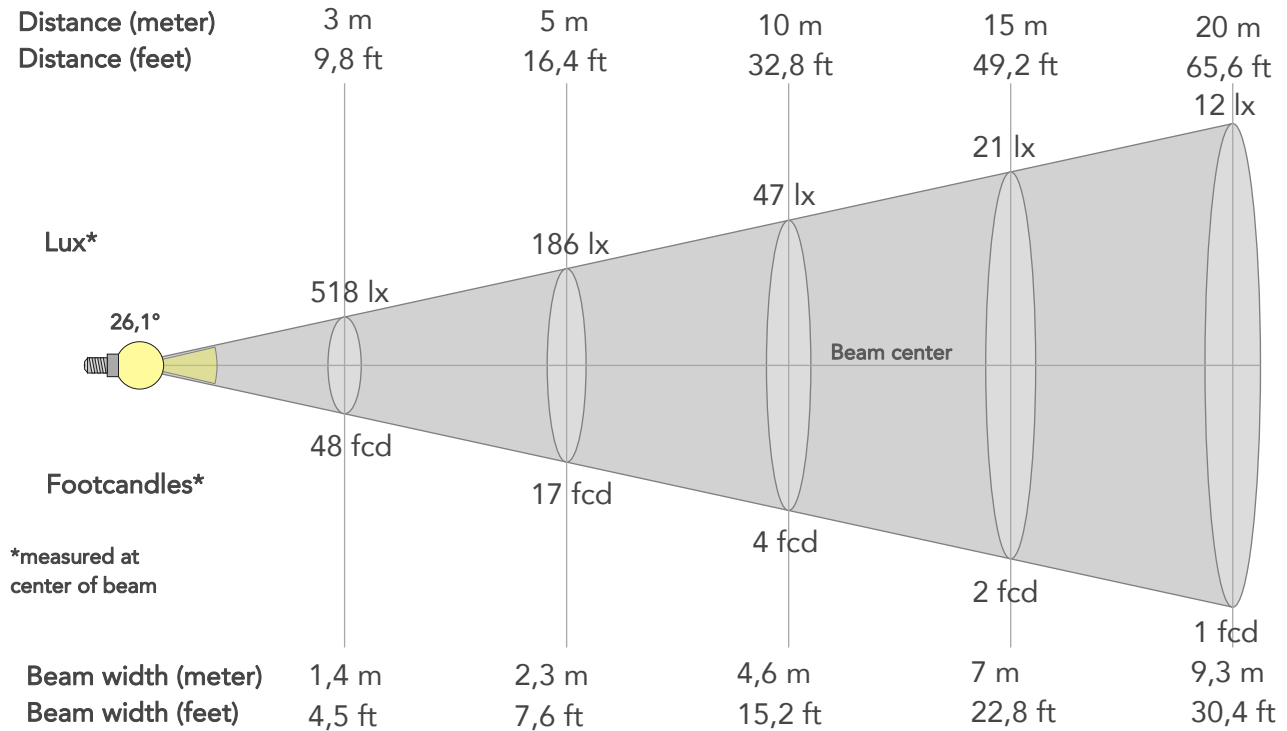
## Gammut index

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



# BEAM DETAILS

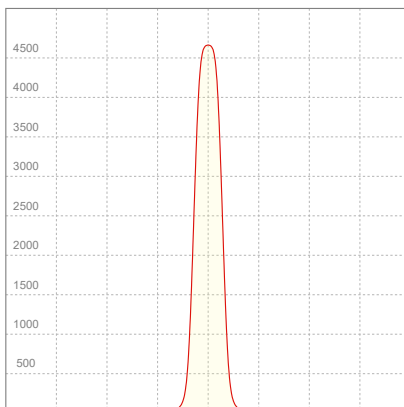
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,1°	37,7°	47,4°	99,3%	98,0%



## 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	4661lx	1165lx	518lx	291lx	186lx	83lx	47lx	21lx	12lx	7lx	5lx	3lx	2lx
Footcand.	433fcd	108fcd	48fcd	27fcd	17fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,9m	2,3m	3,5m	4,6m	7m	9,3m	11,6m	13,9m	18,6m	23,2m
Beam wid.	1,5ft	3,1ft	4,5ft	6,1ft	7,6ft	11,4ft	15,2ft	22,8ft	30,4ft	38,1ft	45,7ft	60,9ft	76,1ft

## LINEAR DISTRIBUTION DIAGRAM

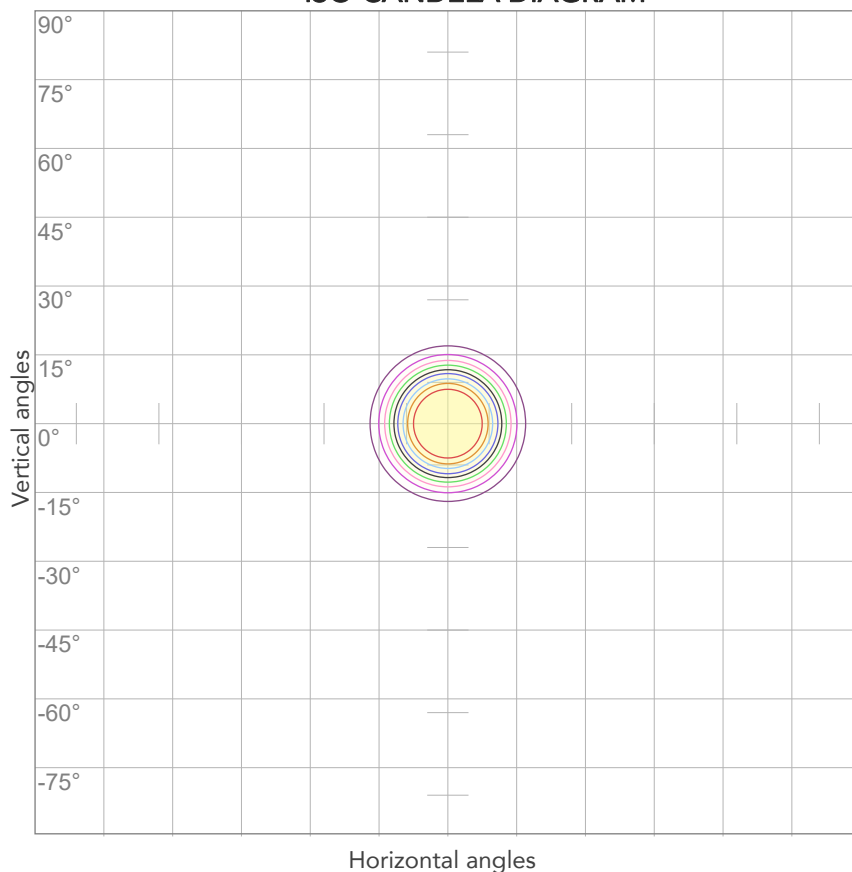


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
226V	0,148A	31,7W	0,95	29lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



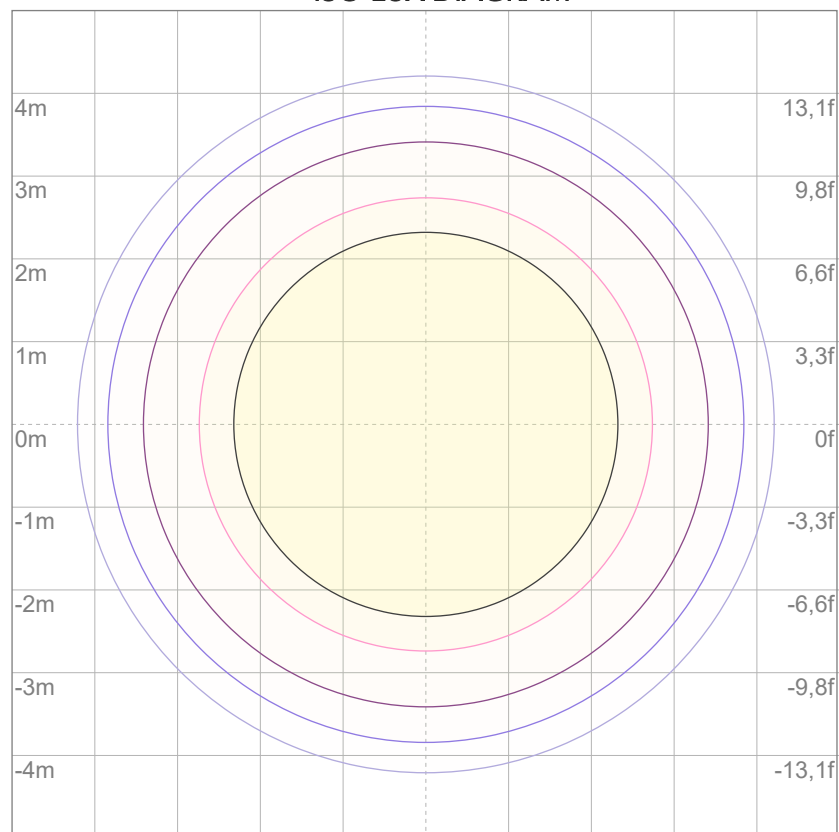
10%	466 cd
20%	932 cd
30%	1398 cd
40%	1864 cd
50%	2330 cd
60%	2796 cd
70%	3263 cd
80%	3729 cd

### Conditions:

Number of c-planes: 2

Candela at center: 4661 cd

## ISO LUX DIAGRAM



3%	1,40 lx
5%	2,33 lx
10%	4,66 lx
30%	14,0 lx
50%	23,3 lx

### Conditions:

Number of c-planes: 2

Lux at center: 46,6 lx

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



Total lumen output:

1063 lm

Peak candela output:

1472 cd

Light quality:

CRI: 97,1

Color temperature:

2745 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 2550 Max Zoom

Target:

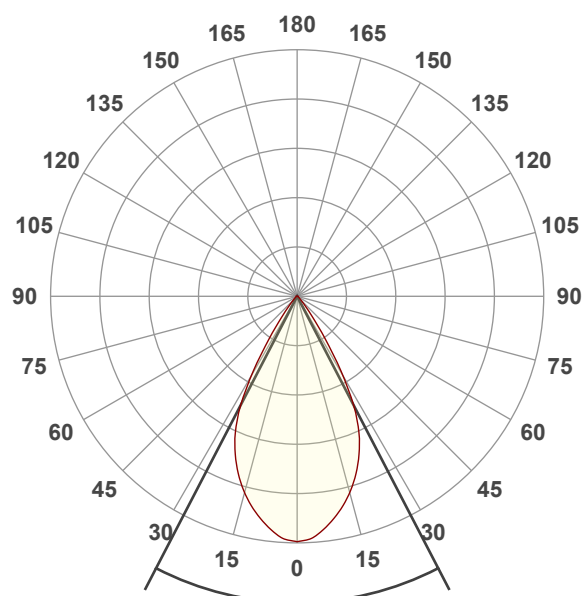
Warm White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 11:37:22

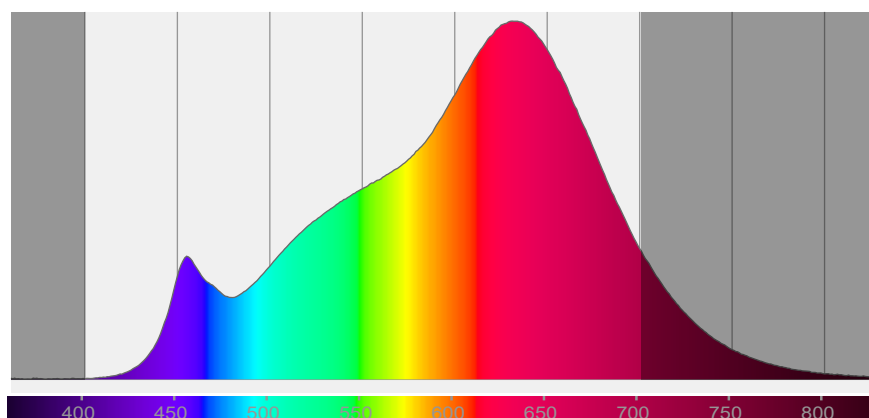


Beam angle 50%: 54,8°

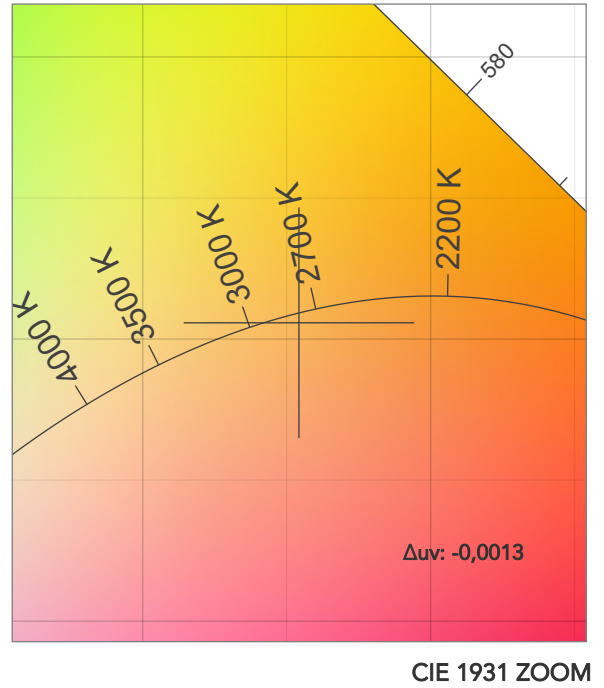
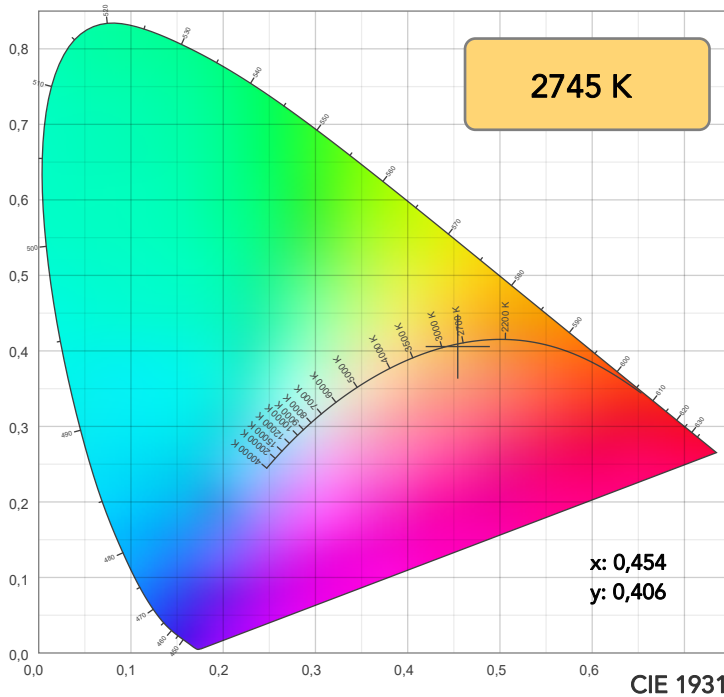
Field angle 10%: 73,9°

Cut off angle 2.5%: 89,1°

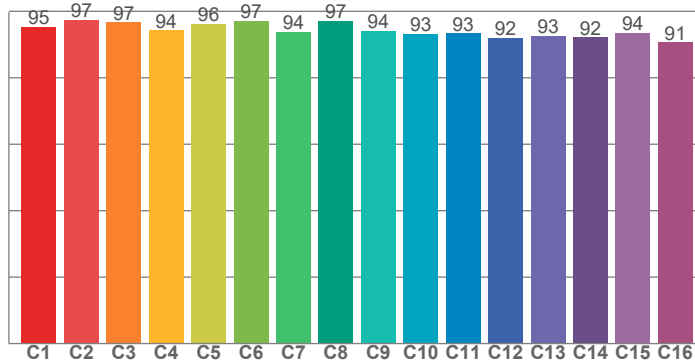
**Spectra**



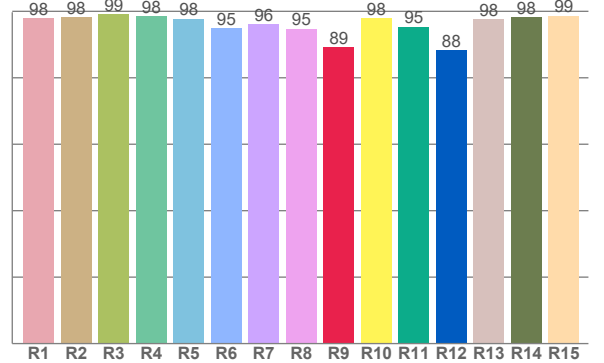
# COLOR DETAILS



TM30: 94,5



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
97,9	98,1	99,1	98,5	97,8	94,9	96,0	94,7	89,2	97,9	95,4	88,2	97,5	98,3	98,7

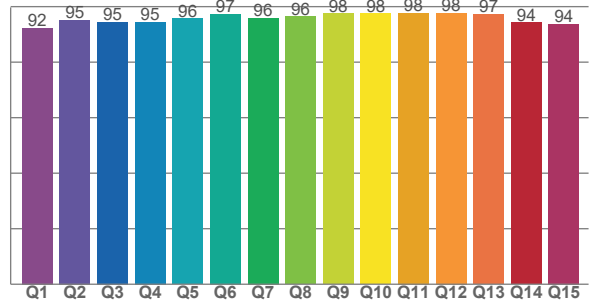
TM30 C values, 16 binned values out of total of 99 C values

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

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,3	95,1	94,5	94,5	95,7	97,3	95,9	96,4	97,5	97,5	97,7	97,7	97,2	94,2	93,7

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
2745 K	97,1	89,2	94,5	100,1	95,2	97	0,454	0,406	-0,0013

## TM30 DETAILS

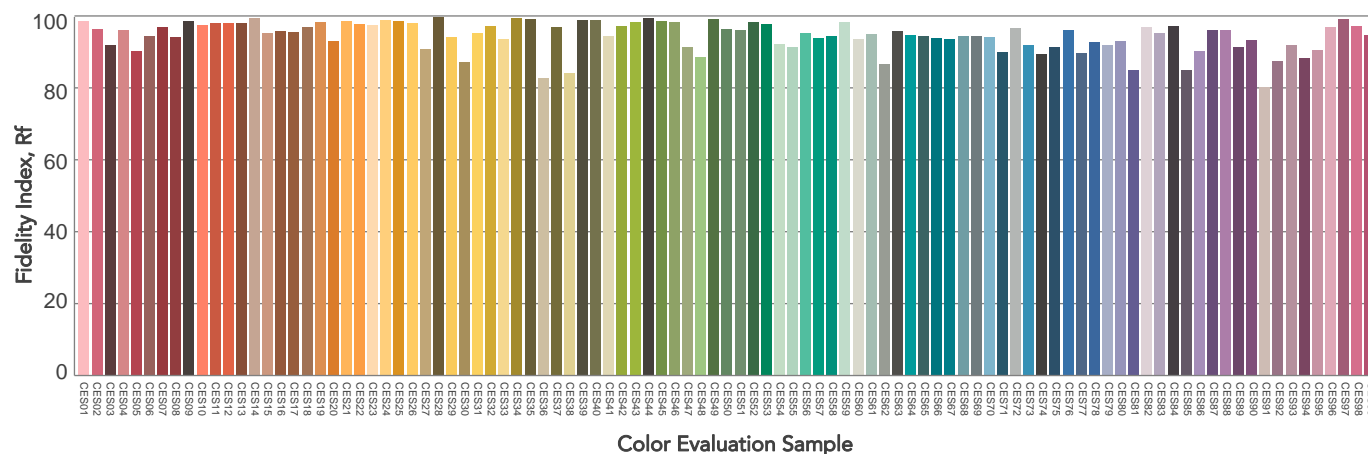
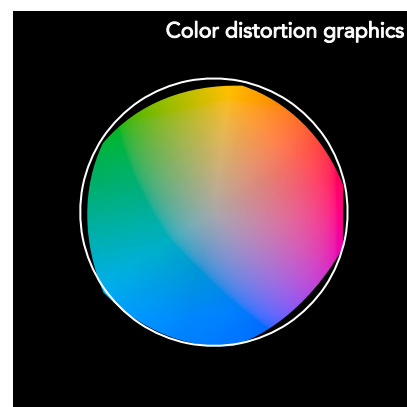
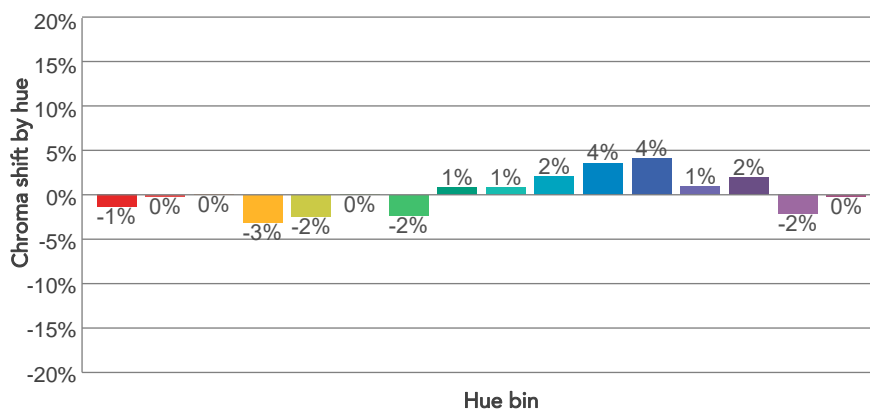
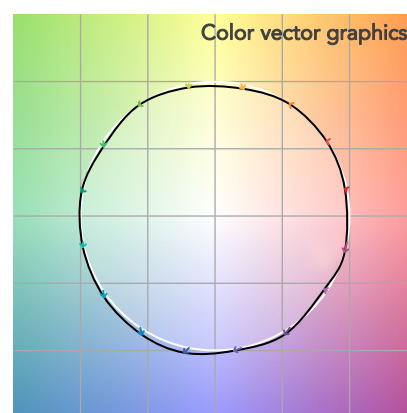
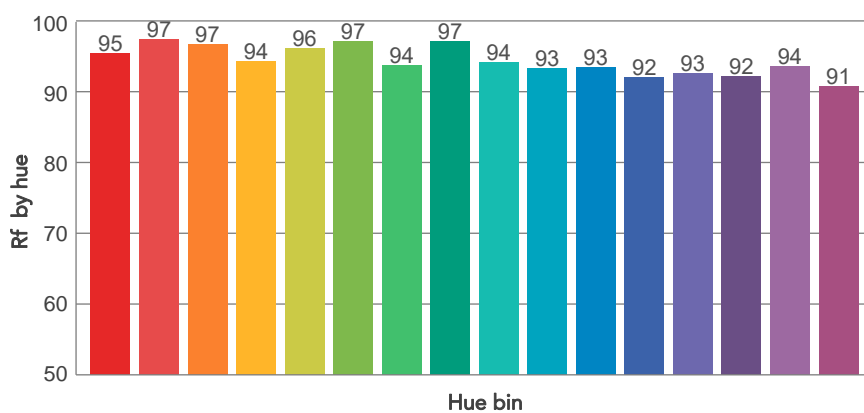
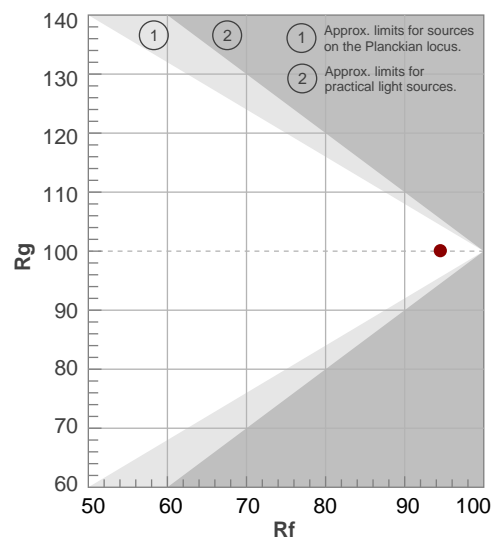
Rf 94,5

Fidelity index  $R_f$

Rg 100,1

## Gammut index

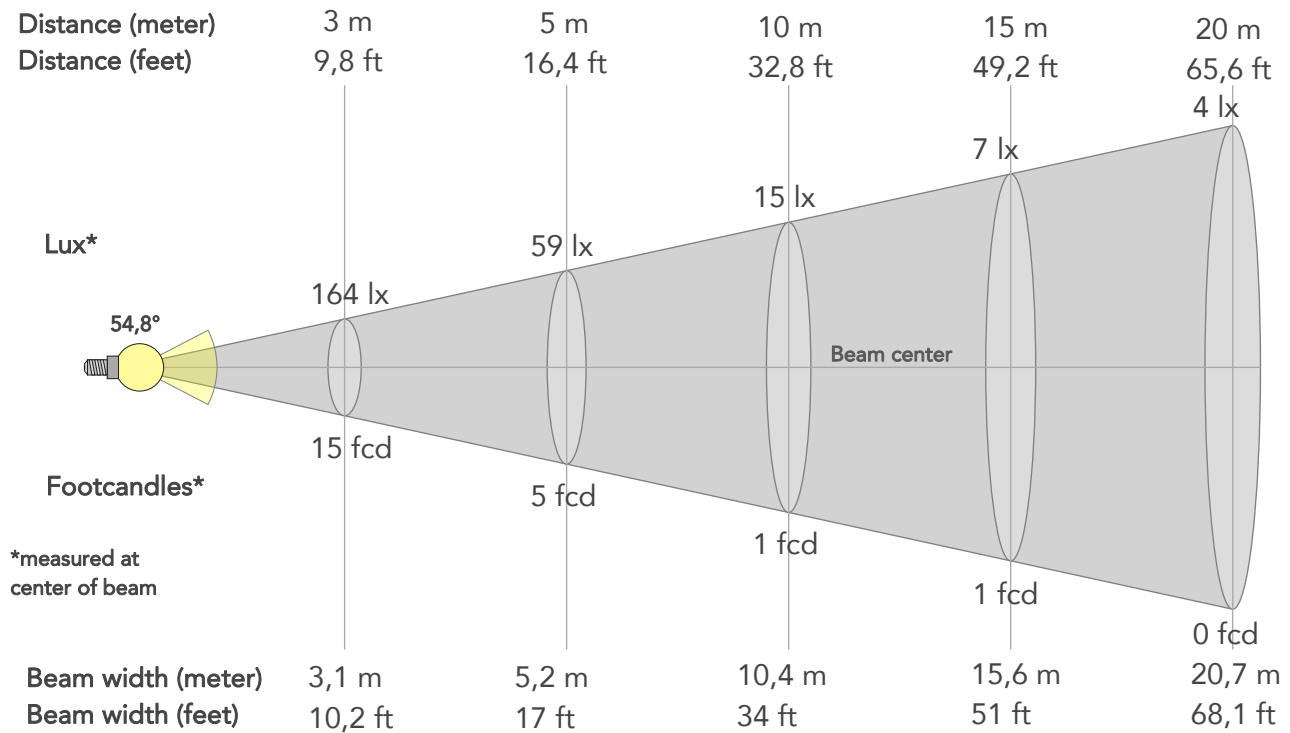
		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	95	-1%	1%
2	97	0%	0%
3	97	0%	0%
4	94	-3%	-2%
5	96	-2%	1%
6	97	0%	1%
7	94	-2%	3%
8	97	1%	2%
9	94	1%	3%
10	93	2%	4%
11	93	4%	4%
12	92	4%	-3%
13	93	1%	-6%
14	92	2%	-6%
15	94	-2%	0%
16	91	0%	-7%





# BEAM DETAILS

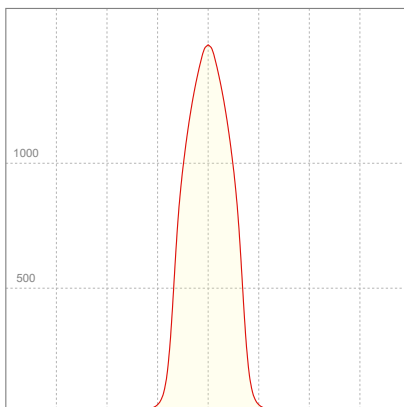
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54,8°	73,9°	89,1°	99,3%	97,1%



## 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	1472lx	368lx	164lx	92lx	59lx	26lx	15lx	7lx	4lx	2lx	2lx	1lx	1lx
Footcand.	137fcd	34fcd	15fcd	9fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,1m	5,2m	7,8m	10,4m	15,6m	20,7m	25,9m	31,1m	41,5m	51,9m
Beam wid.	3,4ft	6,8ft	10,2ft	13,6ft	17ft	25,5ft	34ft	51ft	68,1ft	85,1ft	102,1ft	136,1ft	170,1ft

## LINEAR DISTRIBUTION DIAGRAM

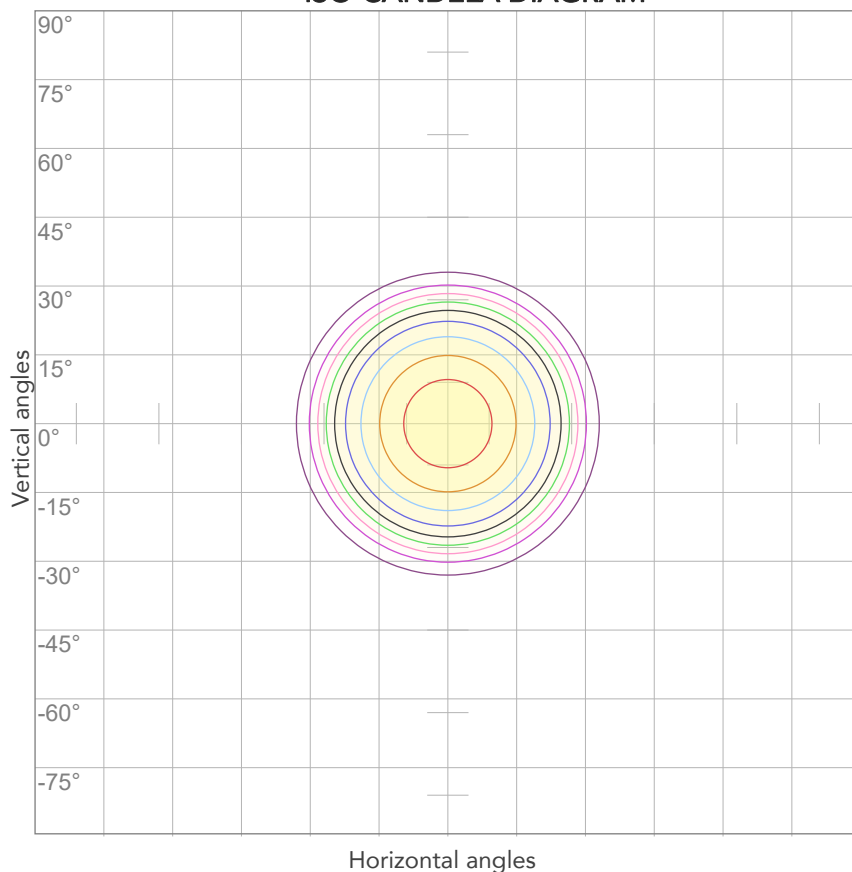


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
229V	0,146A	31,7W	0,95	33lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



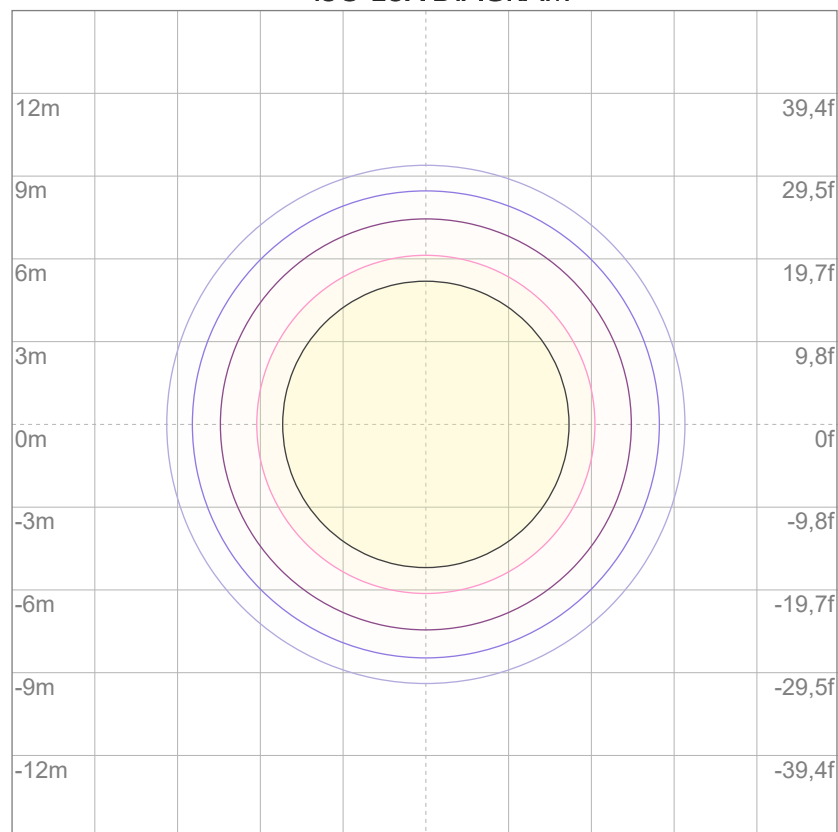
10%	147 cd
20%	294 cd
30%	442 cd
40%	589 cd
50%	736 cd
60%	883 cd
70%	1031 cd
80%	1178 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1472 cd

## ISO LUX DIAGRAM



3%	0,442 lx
5%	0,736 lx
10%	1,47 lx
30%	4,42 lx
50%	7,36 lx

### Conditions:

Number of c-planes: 2

Lux at center: 14,7 lx

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



Total lumen output:

718 lm

Peak candela output:

3637 cd

Light quality:

CRI: 96,7

Color temperature:

2693 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 2550 Min Zoom

Target:

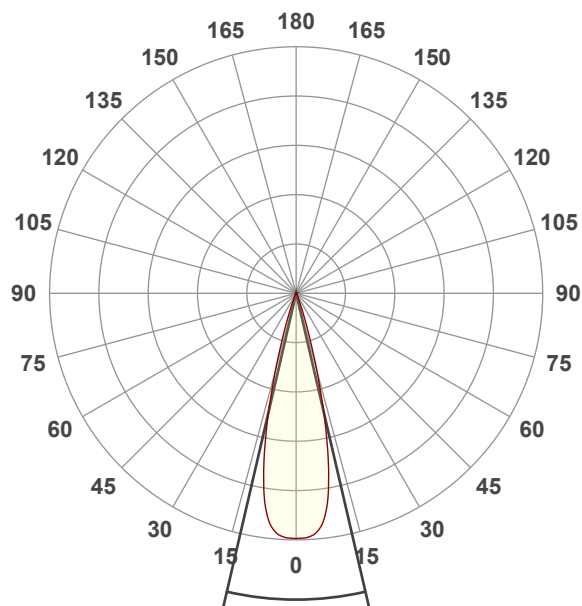
Warm White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 12:01:11

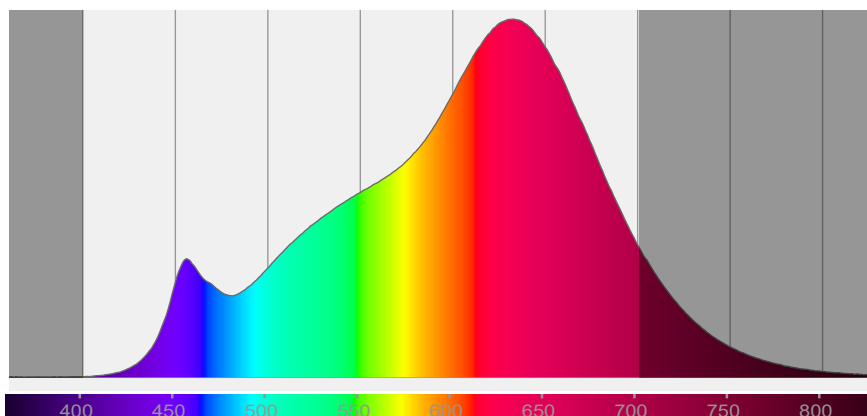


Beam angle 50%: 26,1°

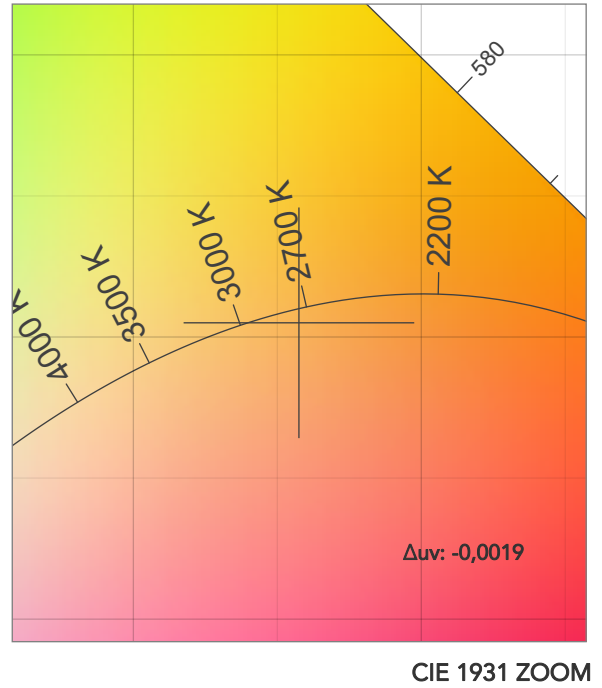
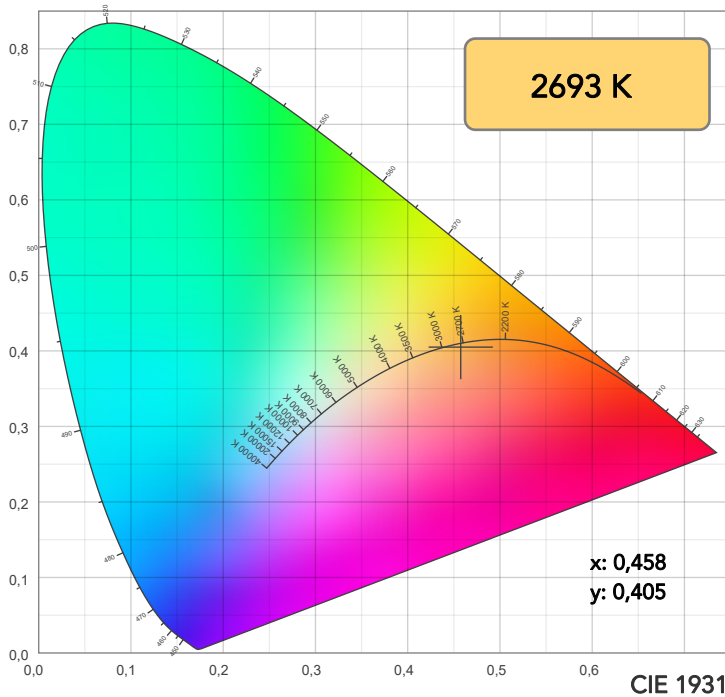
Field angle 10%: 37,7°

Cut off angle 2.5%: 47,4°

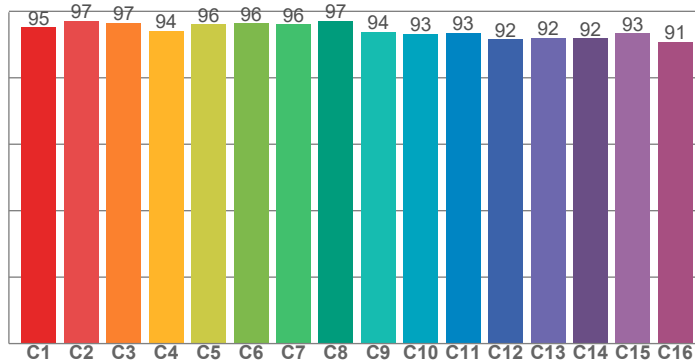
**Spectra**



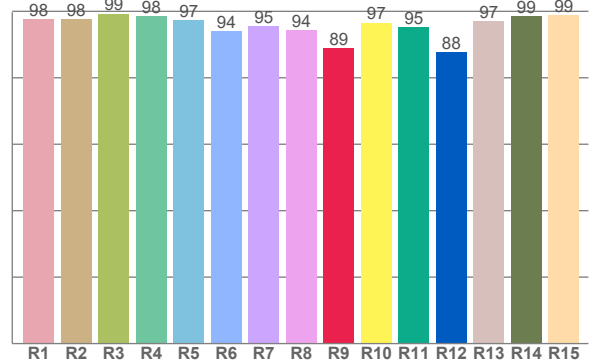
## COLOR DETAILS



TM30: 94,3



CRI: 96,7 (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
97,7	97,5	99,3	98,4	97,3	93,9	95,4	94,3	89,0	96,6	95,2	87,7	97,1	98,6	98,8

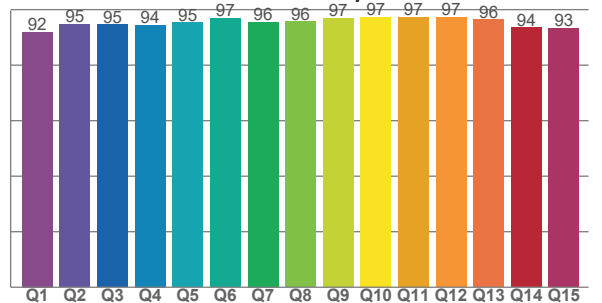
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,1	97,2	96,6	94,1	96,1	96,4	96,1	97,1	93,9	93,2	93,5	91,5	91,9	91,9	93,3	90,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,9	94,7	94,6	94,4	95,4	96,9	95,5	95,7	96,9	97,3	97,4	97,2	96,5	93,6	93,3

CQS: 94,9



## COLOR PARAMETERS

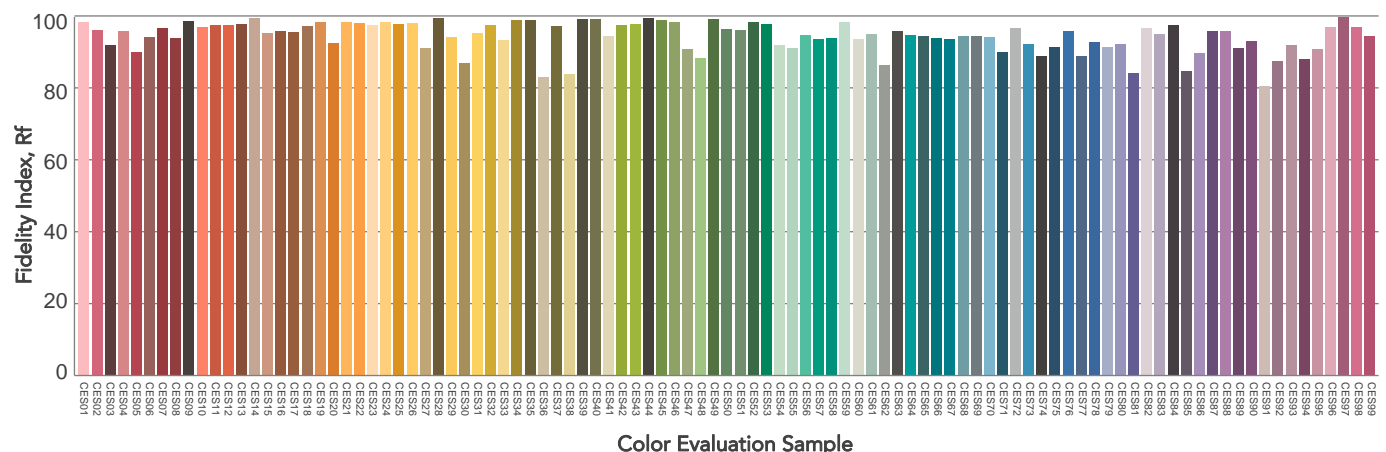
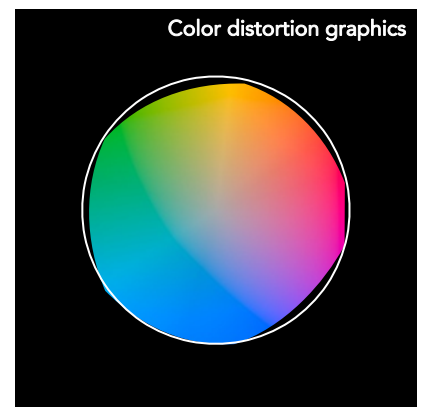
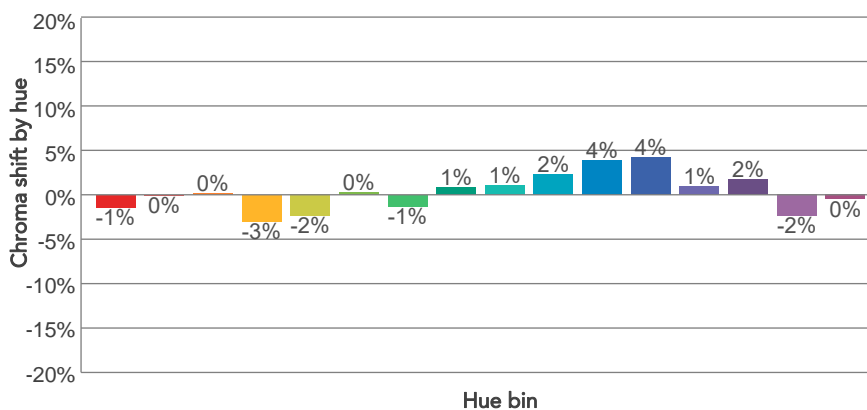
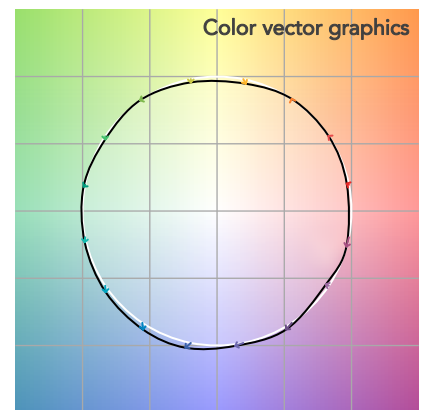
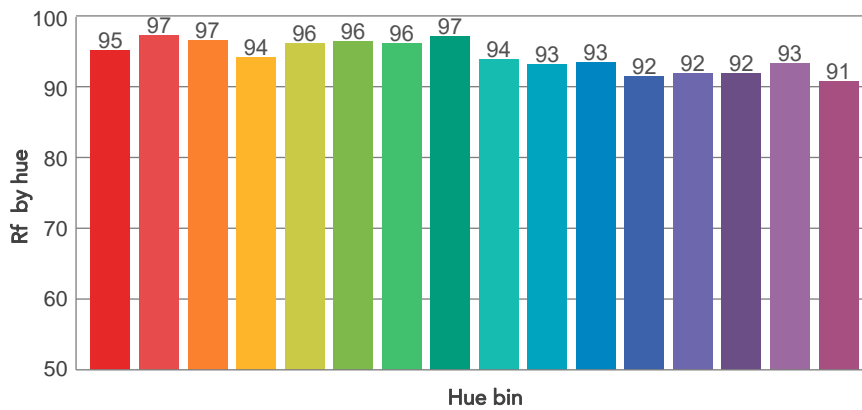
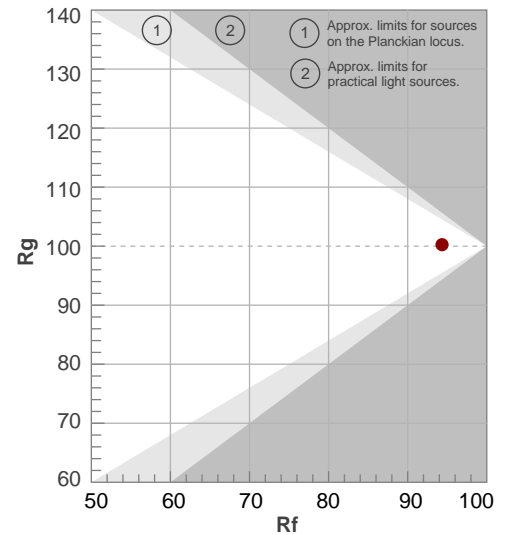
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2693 K	96,7	89,0	94,3	100,3	94,9	97	0,458	0,405	-0,0019

# TM30 DETAILS

**Rf 94,3**  
Fidelity index Rf

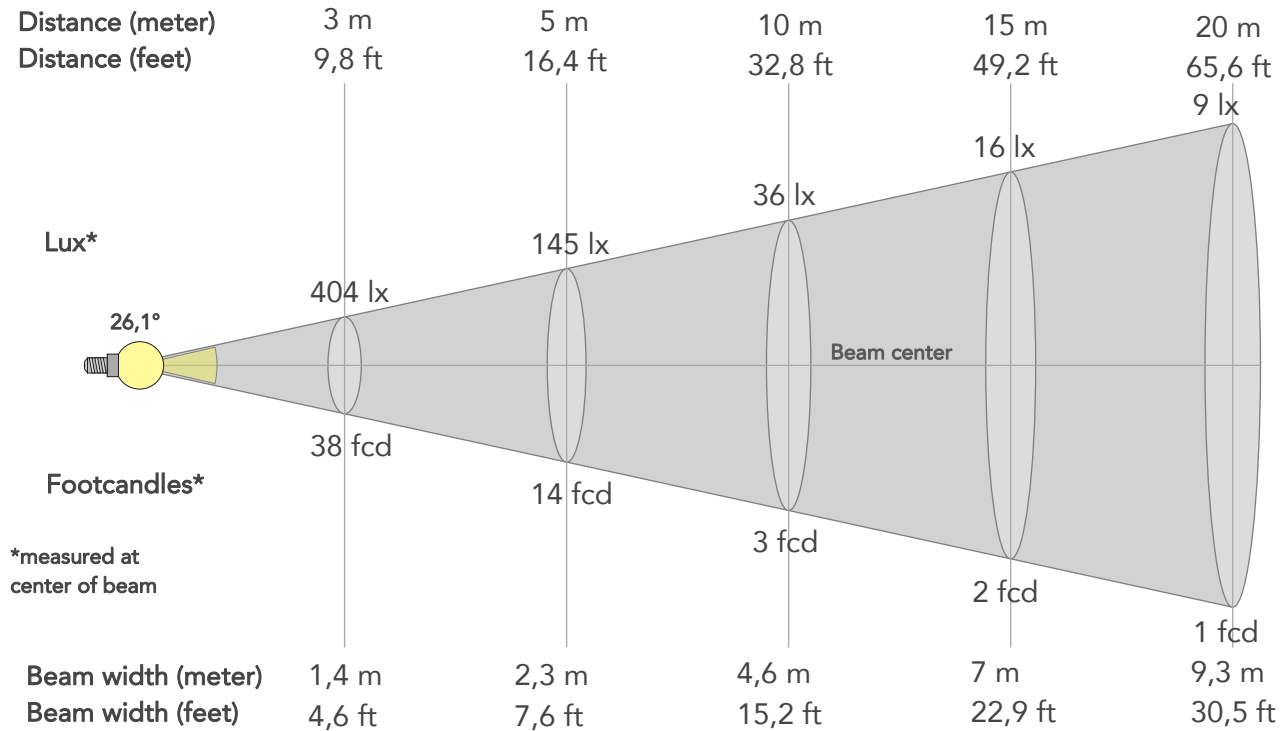
**Rg 100,3**  
Gammut index

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



# BEAM DETAILS

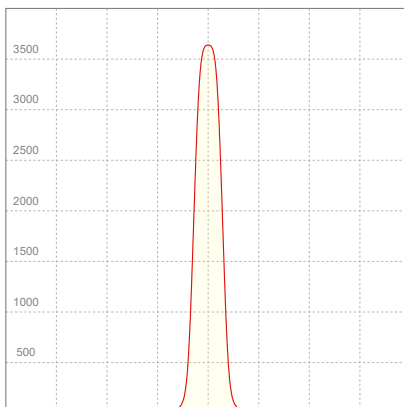
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,1°	37,7°	47,4°	99,1%	97,8%



## 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	3637lx	909lx	404lx	227lx	145lx	65lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	338fcd	84fcd	38fcd	21fcd	14fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,9m	2,3m	3,5m	4,6m	7m	9,3m	11,6m	13,9m	18,6m	23,2m
Beam wid.	1,5ft	3,1ft	4,6ft	6,1ft	7,6ft	11,4ft	15,2ft	22,9ft	30,5ft	38,1ft	45,7ft	60,9ft	76,2ft

## LINEAR DISTRIBUTION DIAGRAM

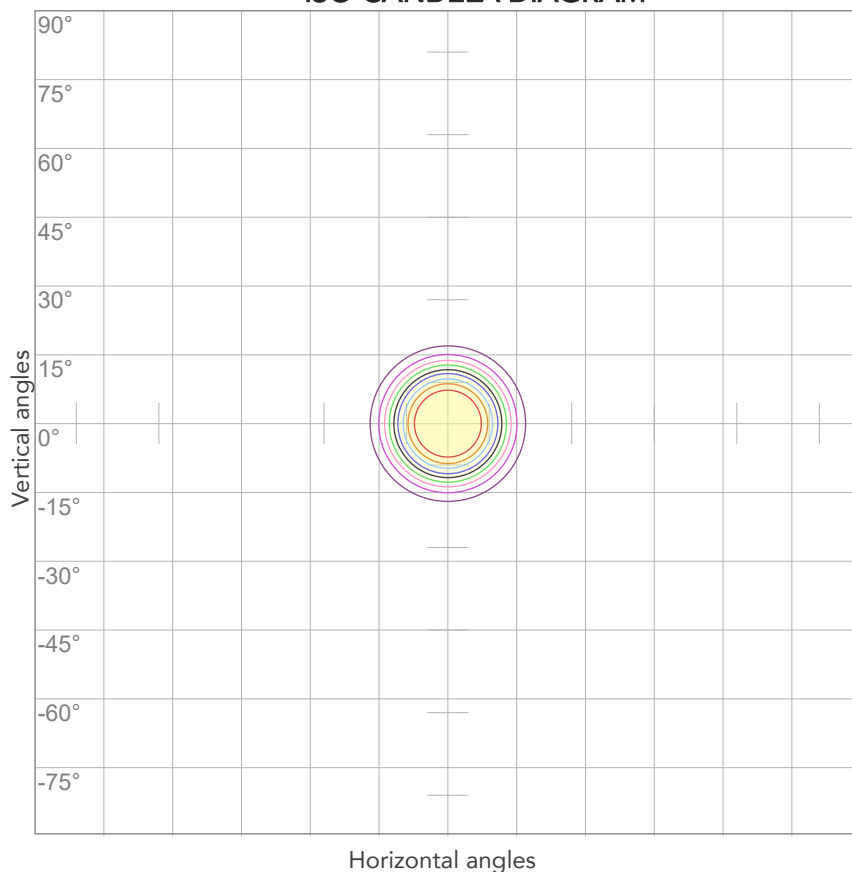


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
226V	0,146A	31,2W	0,95	23lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



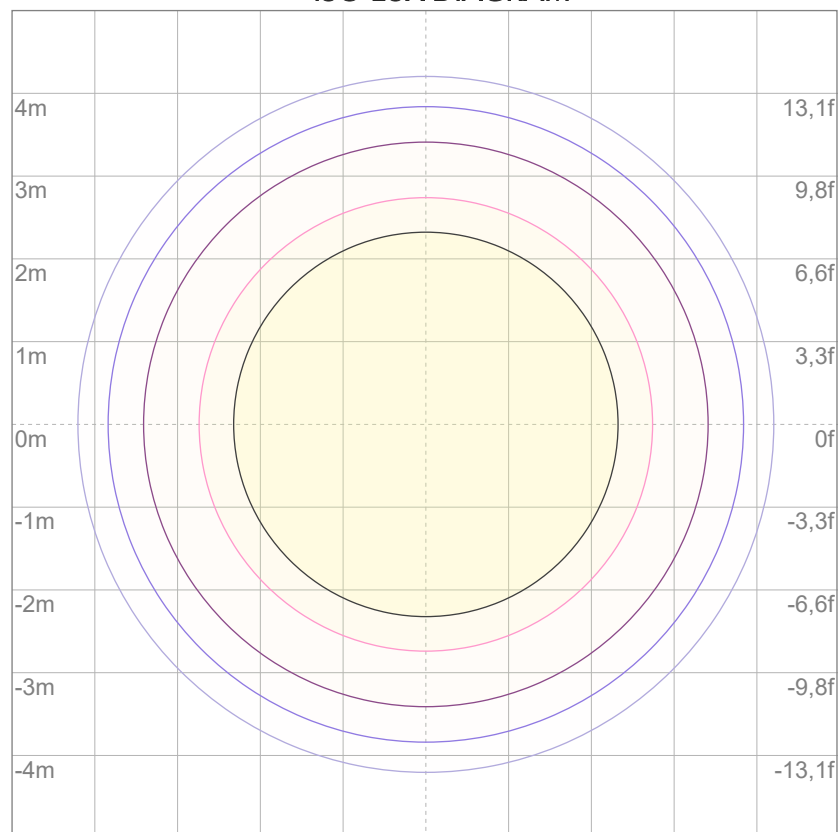
10%	364 cd
20%	727 cd
30%	1091 cd
40%	1455 cd
50%	1819 cd
60%	2182 cd
70%	2546 cd
80%	2910 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3637 cd

## ISO LUX DIAGRAM



3%	1,09 lx
5%	1,82 lx
10%	3,64 lx
30%	10,9 lx
50%	18,2 lx

### Conditions:

Number of c-planes: 2

Lux at center: 36,4 lx

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



Total lumen output:

1503 lm

Peak candela output:

2079 cd

Light quality:

CRI: 96,2

Color temperature:

6055 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 2550 Max Zoom

Target:

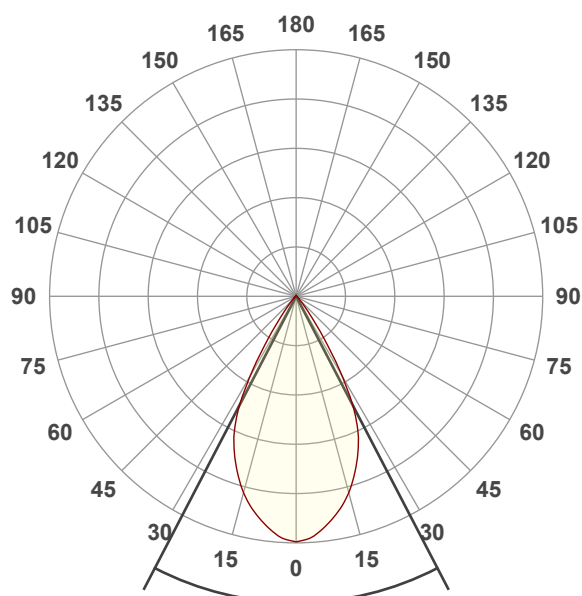
Cold White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 11:38:52

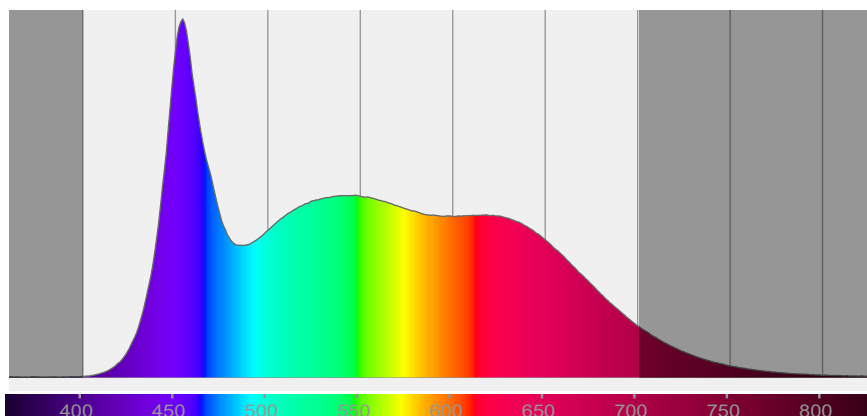


Beam angle 50%: 54,9°

Field angle 10%: 73,9°

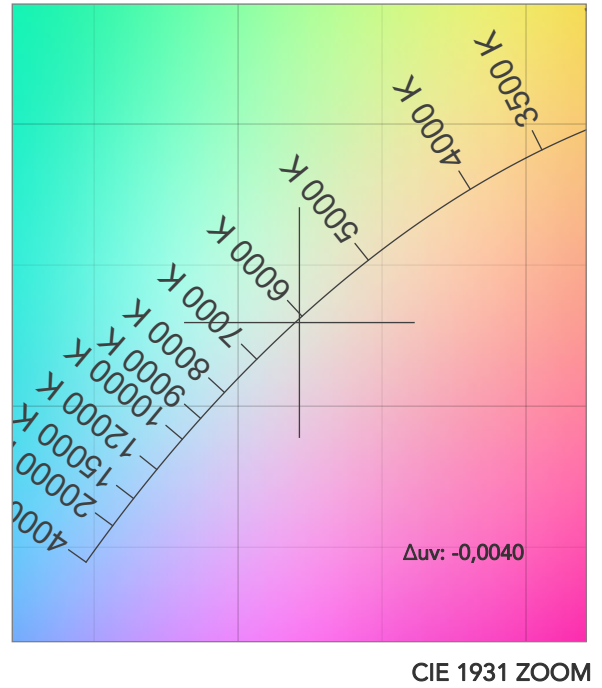
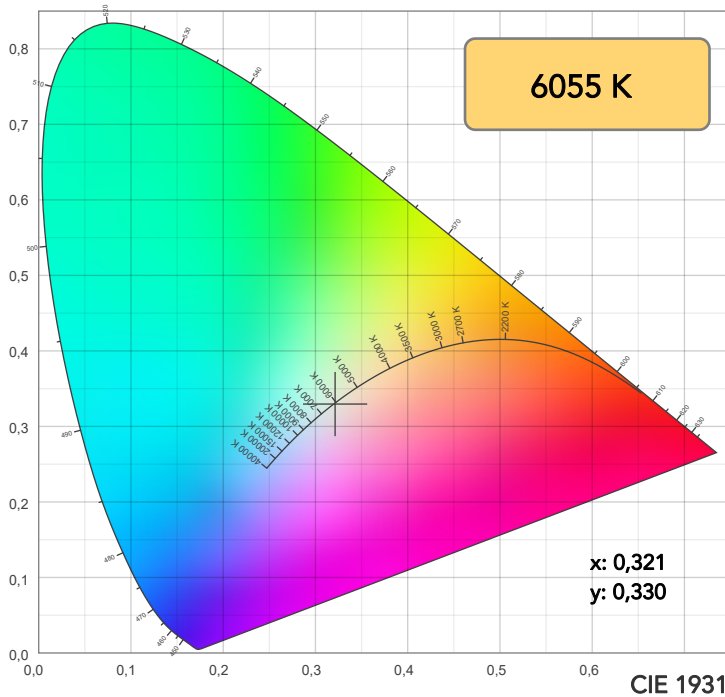
Cut off angle 2.5%: 89,3°

**Spectra**

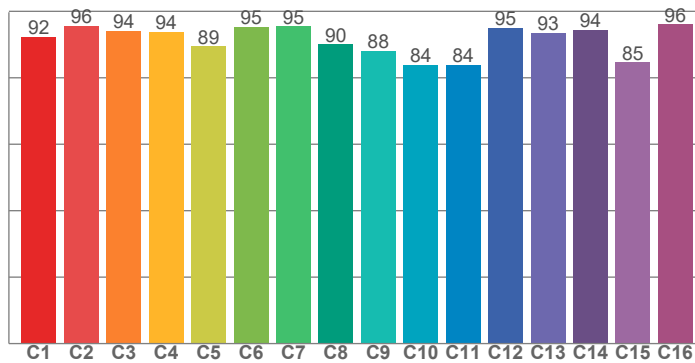




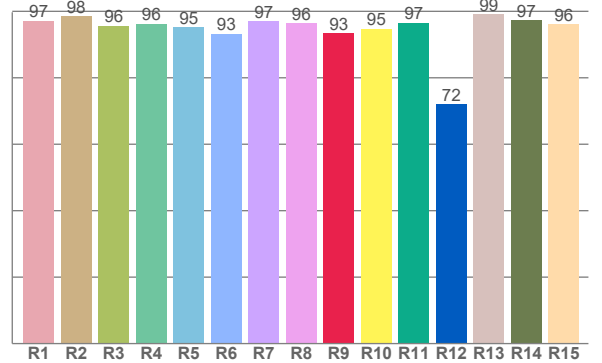
## COLOR DETAILS



TM30: 91,2



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
97,1	98,5	95,6	96,3	95,2	93,2	97,1	96,4	93,3	94,8	96,6	72,0	99,1	97,3	96,2

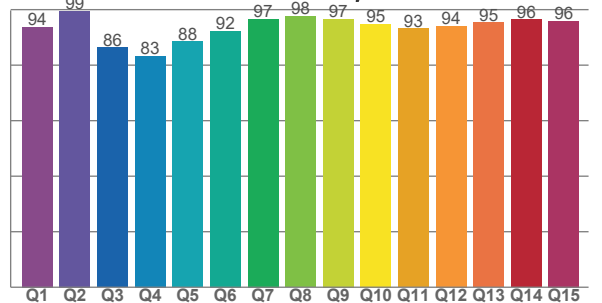
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,4	95,6	94,1	93,8	89,4	95,3	95,5	90,0	88,1	83,9	84,0	95,0	93,5	94,5	84,7	96,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93,8	99,4	86,3	83,3	88,5	92,3	96,6	97,6	96,6	94,9	93,2	94,1	95,4	96,4	95,9

CQS: 92,3



## 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	$\Delta uv$
6055 K	96,2	93,3	91,2	99,4	92,3	96	0,321	0,330	-0,0040

## TM30 DETAILS

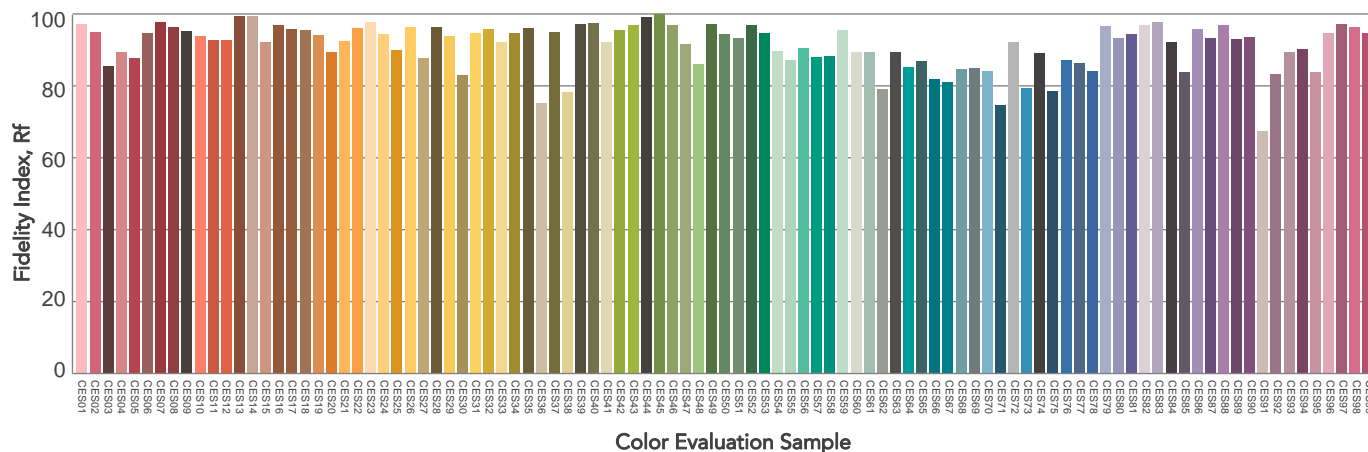
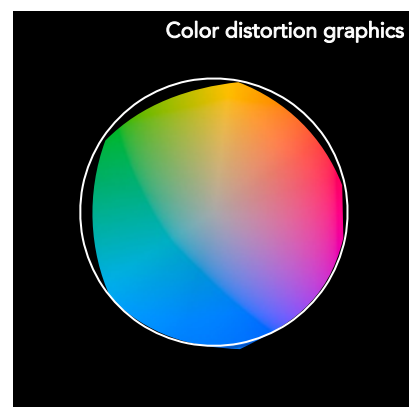
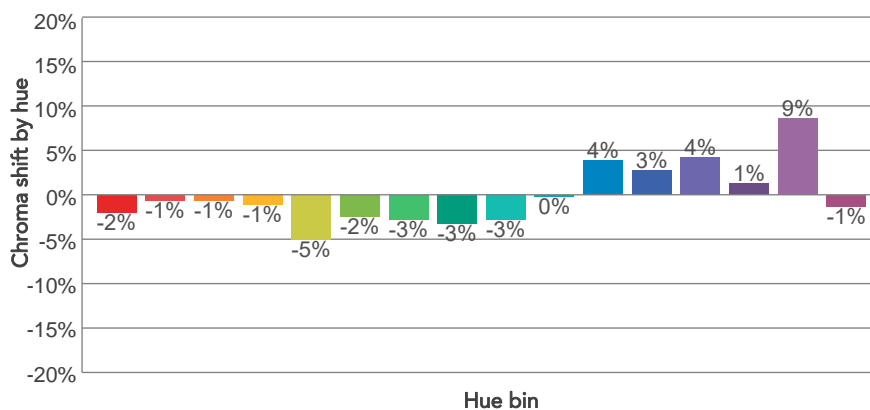
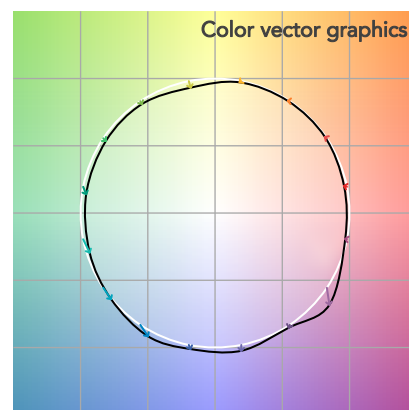
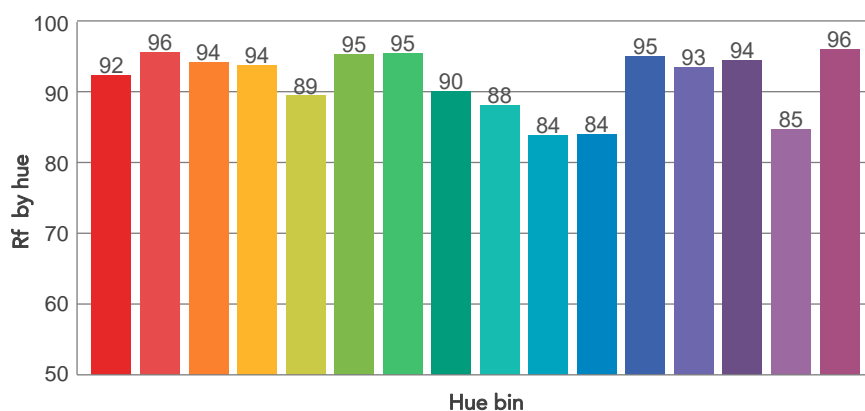
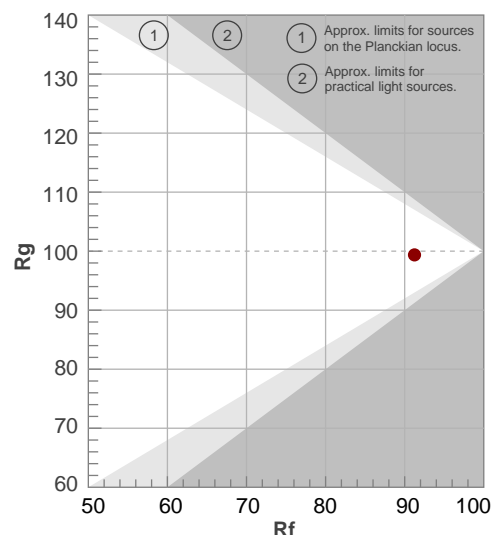
**Rf 91,2**

Fidelity index Rf

**Rg 99,4**

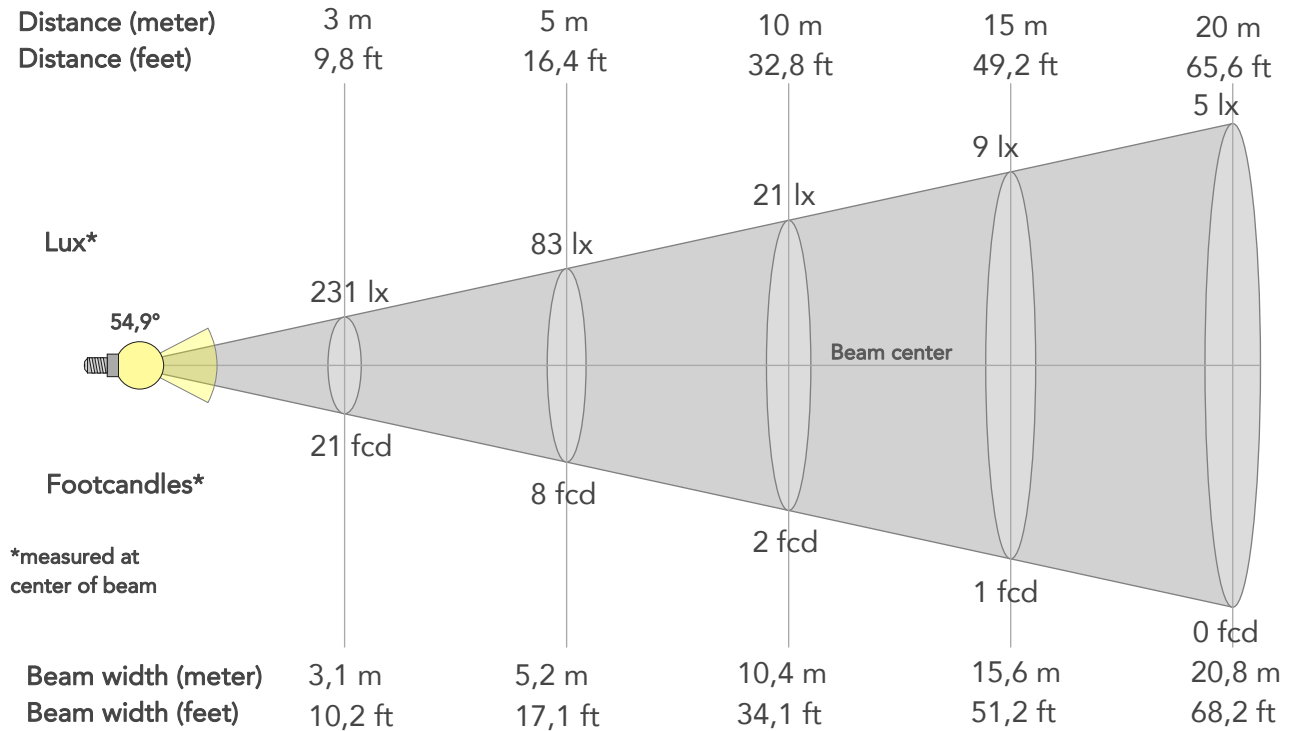
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-2%	1%
2	96	-1%	2%
3	94	-1%	1%
4	94	-1%	1%
5	89	-5%	0%
6	95	-2%	0%
7	95	-3%	1%
8	90	-3%	5%
9	88	-3%	11%
10	84	0%	10%
11	84	4%	9%
12	95	3%	2%
13	93	4%	-1%
14	94	1%	-2%
15	85	9%	-9%
16	96	-1%	0%



# BEAM DETAILS

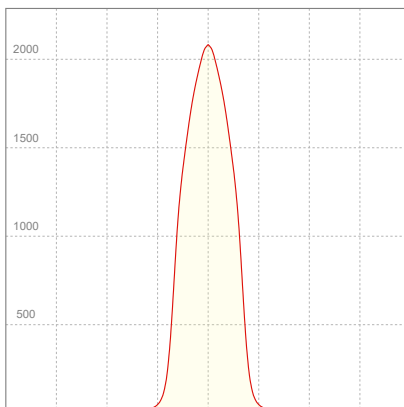
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54,9°	73,9°	89,3°	99,3%	97,1%



## 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	2079lx	520lx	231lx	130lx	83lx	37lx	21lx	9lx	5lx	3lx	2lx	1lx	1lx
Footcand.	193fcd	48fcd	21fcd	12fcd	8fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,8m	10,4m	15,6m	20,8m	26m	31,2m	41,6m	52m
Beam wid.	3,4ft	6,9ft	10,2ft	13,6ft	17,1ft	25,6ft	34,1ft	51,2ft	68,2ft	85,3ft	102,3ft	136,4ft	170,5ft

## LINEAR DISTRIBUTION DIAGRAM

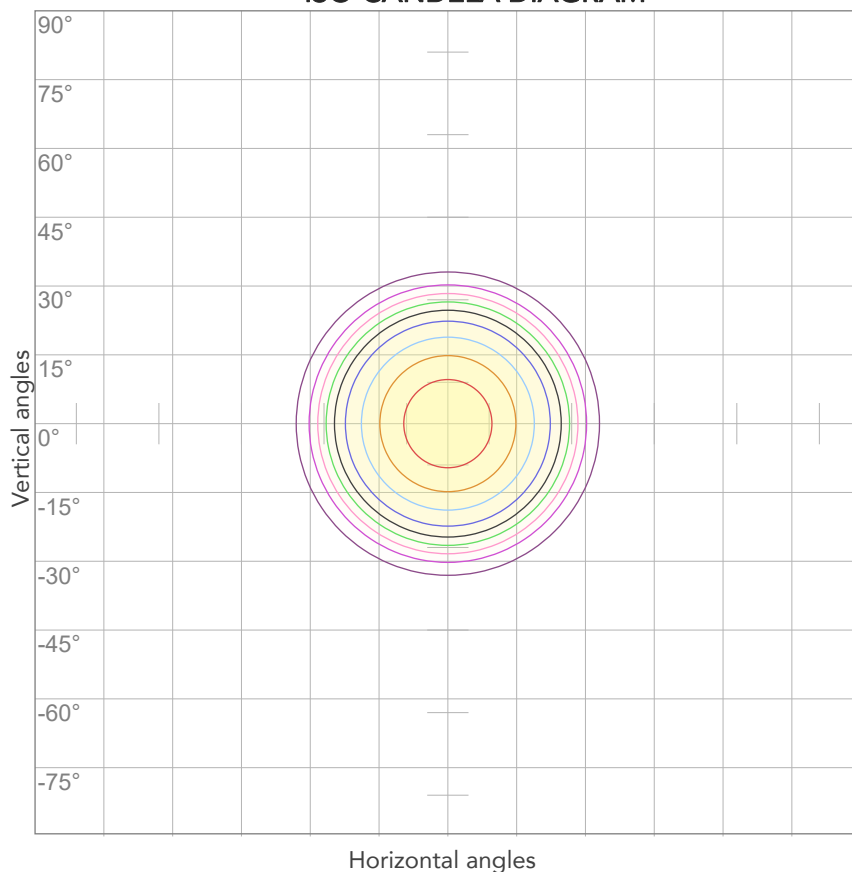


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
229V	0,147A	32,0W	0,95	47lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



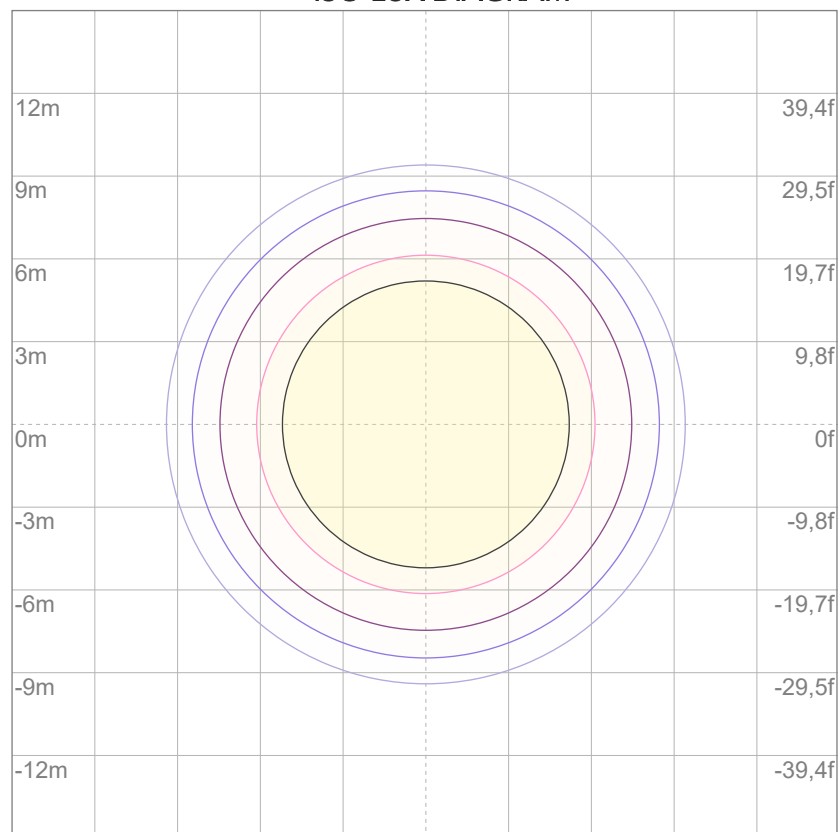
10%	208 cd
20%	416 cd
30%	624 cd
40%	832 cd
50%	1040 cd
60%	1248 cd
70%	1456 cd
80%	1664 cd

### Conditions:

Number of c-planes: 2

Candela at center: 2079 cd

## ISO LUX DIAGRAM



3%	0,624 lx
5%	1,04 lx
10%	2,08 lx
30%	6,24 lx
50%	10,4 lx

### Conditions:

Number of c-planes: 2

Lux at center: 20,8 lx

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



Total lumen output:

1019 lm

Peak candela output:

5135 cd

Light quality:

CRI: 96,2

Color temperature:

6081 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Wash 2550 Min Zoom

Target:

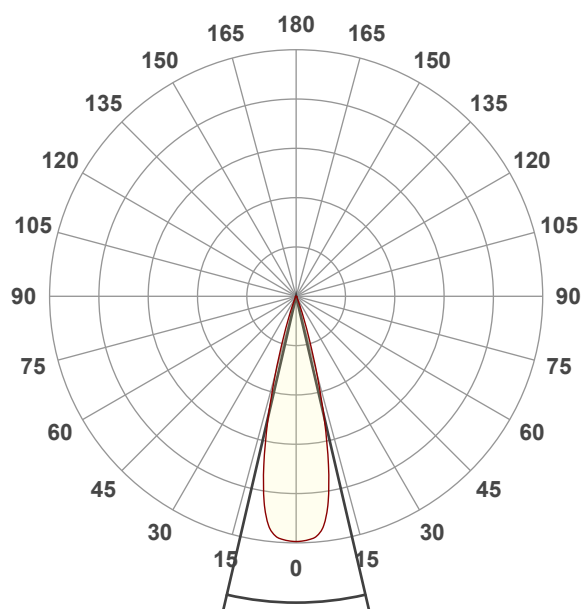
Cold White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 11:59:44

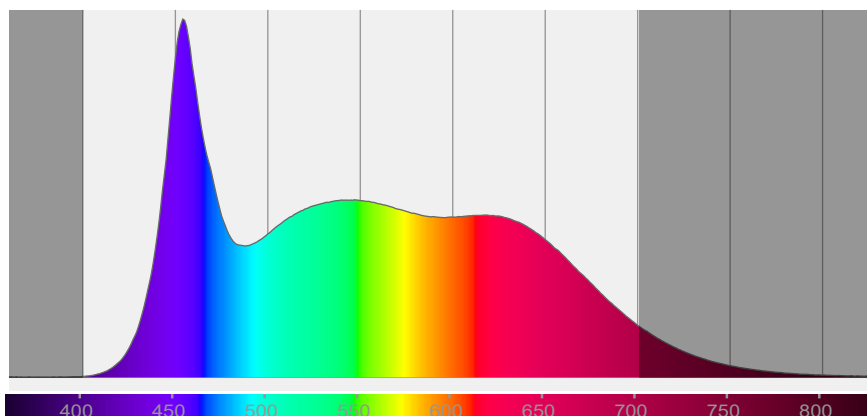


Beam angle 50%: 26,2°

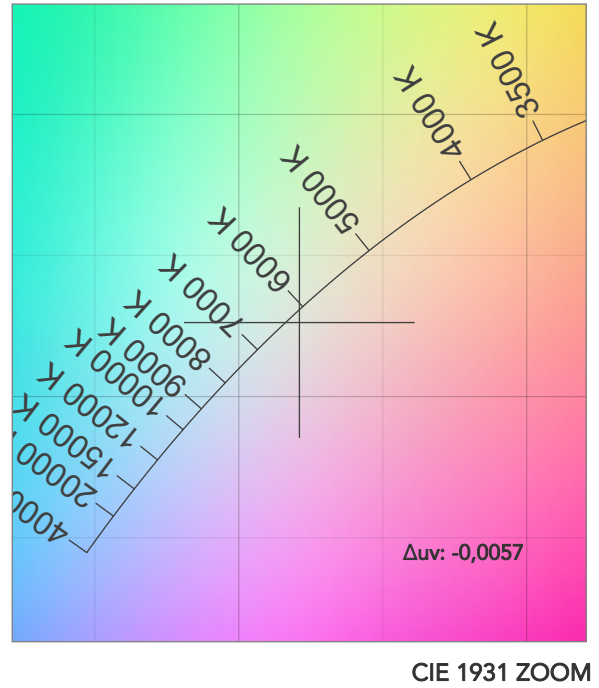
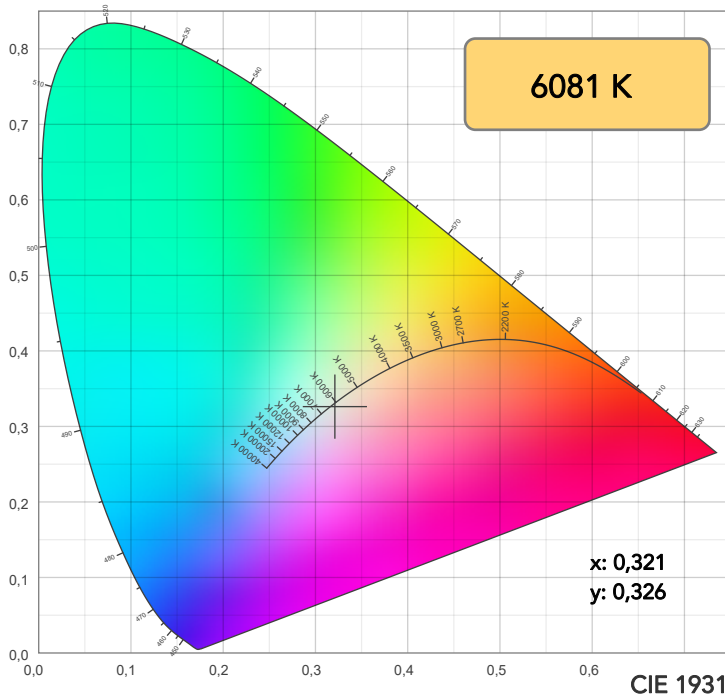
Field angle 10%: 37,7°

Cut off angle 2.5%: 47,6°

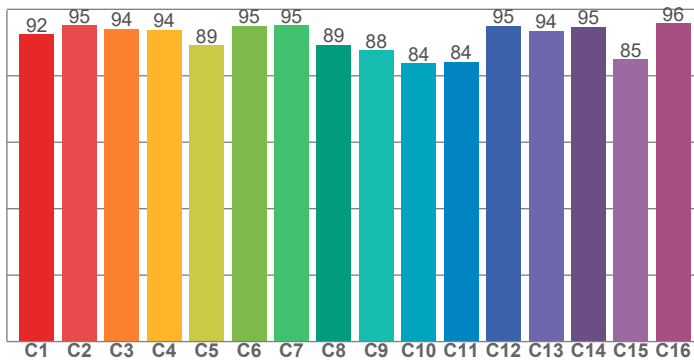
**Spectra**



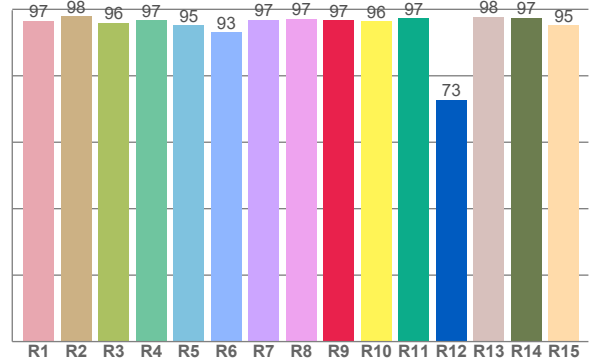
## COLOR DETAILS



**TM30: 91,1**



**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
96,6	98,0	96,0	96,7	95,2	93,2	96,9	97,1	96,8	96,4	97,3	72,7	97,8	97,4	95,2

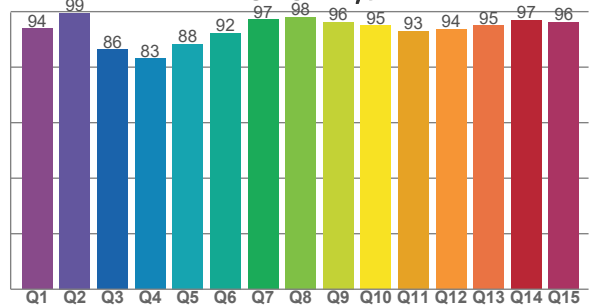
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,5	95,2	94,2	93,8	89,2	95,1	95,2	89,3	87,7	83,7	84,1	95,1	93,6	94,7	84,9	95,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,0	99,5	86,4	83,1	88,3	92,4	97,2	98,0	96,3	95,0	93,1	93,7	94,9	96,9	96,1

**CQS: 92,3**



## COLOR PARAMETERS

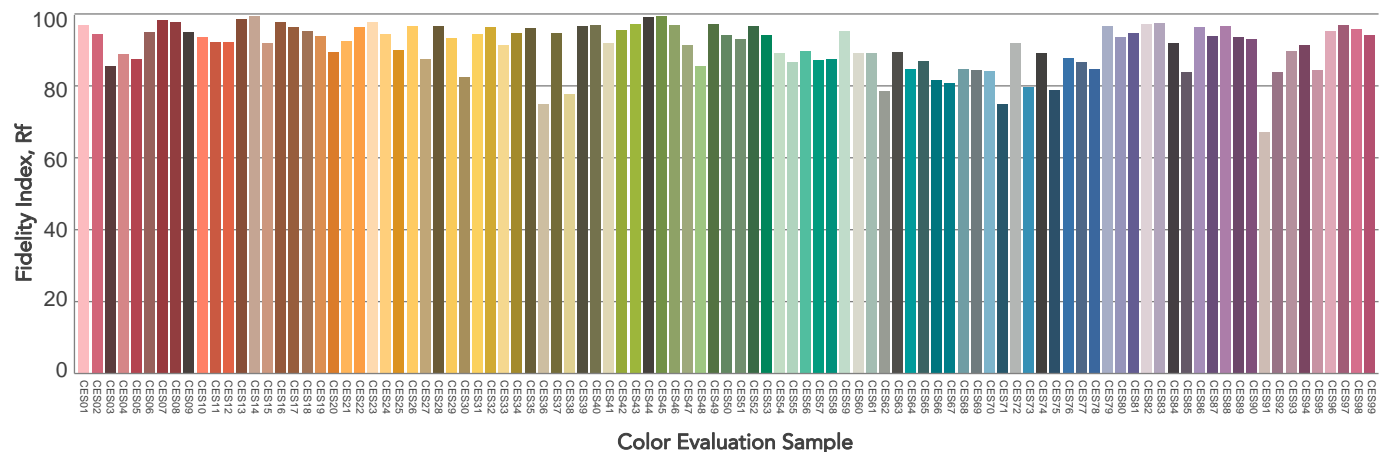
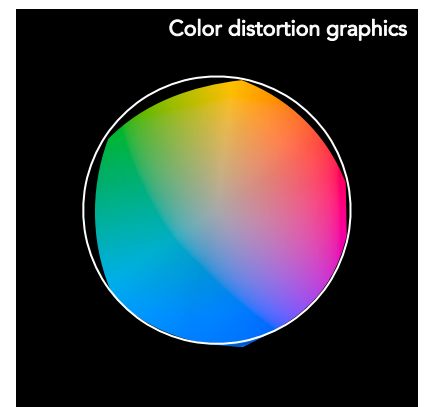
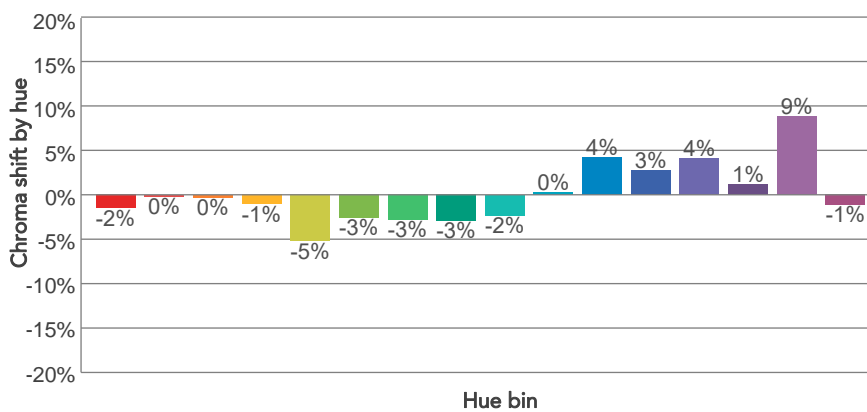
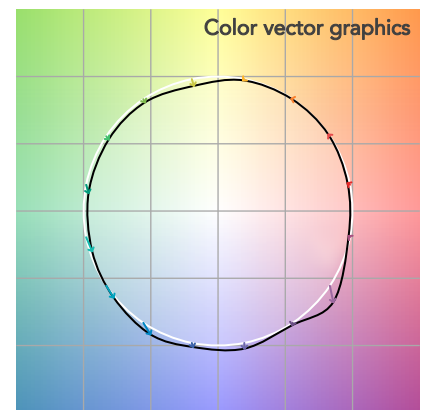
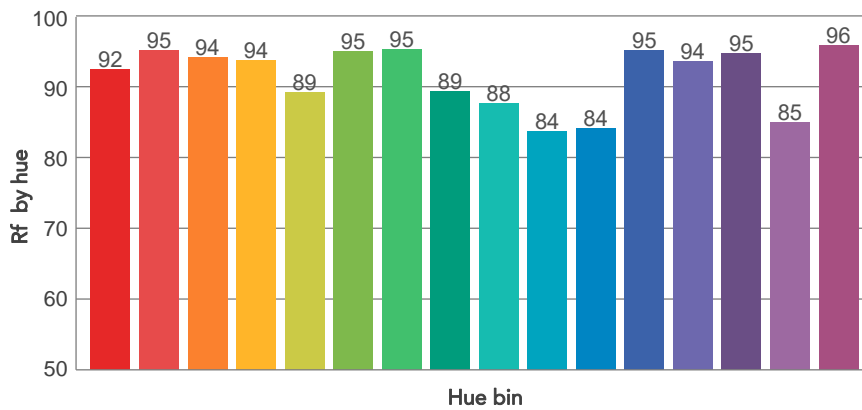
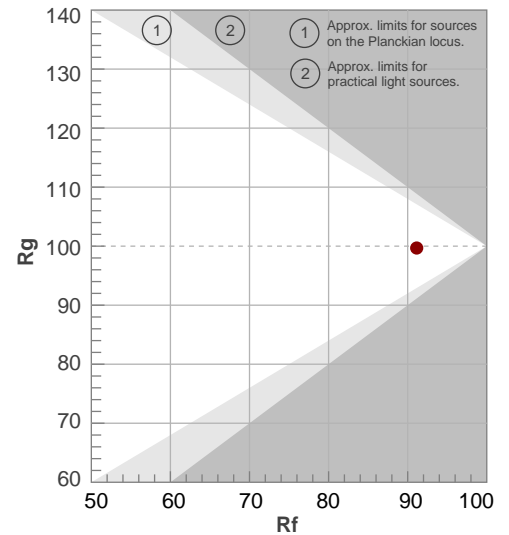
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
6081 K	96,2	96,8	91,1	99,7	92,3	96	0,321	0,326	-0,0057

# TM30 DETAILS

**Rf 91,1**  
Fidelity index Rf

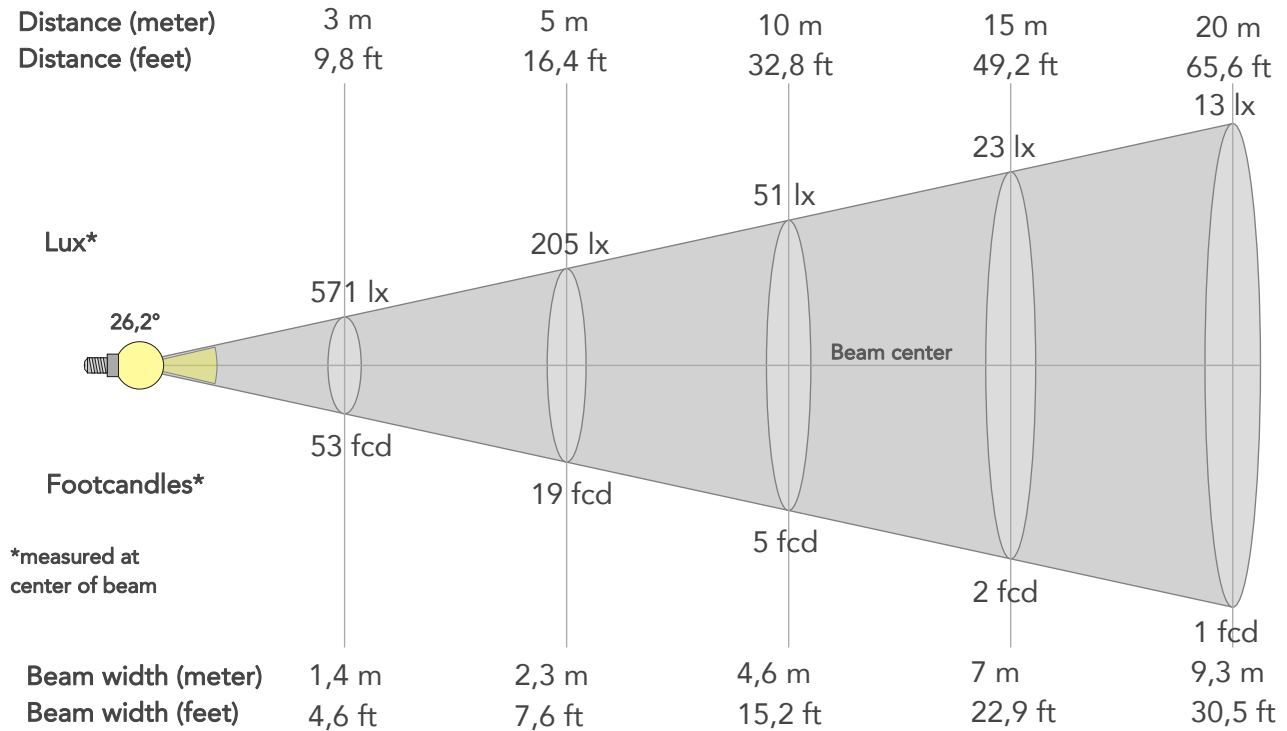
**Rg 99,7**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-2%	1%
2	95	0%	2%
3	94	0%	1%
4	94	-1%	1%
5	89	-5%	-1%
6	95	-3%	0%
7	95	-3%	1%
8	89	-3%	6%
9	88	-2%	11%
10	84	0%	10%
11	84	4%	9%
12	95	3%	2%
13	94	4%	-1%
14	95	1%	-1%
15	85	9%	-9%
16	96	-1%	1%



# BEAM DETAILS

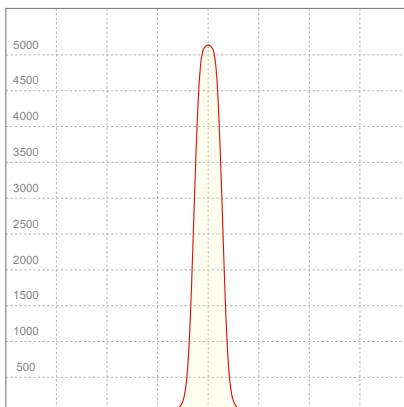
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,2°	37,7°	47,6°	99,1%	97,8%



## 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	5135lx	1284lx	571lx	321lx	205lx	91lx	51lx	23lx	13lx	8lx	6lx	3lx	2lx
Footcand.	477fcd	119fcd	53fcd	30fcd	19fcd	8fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,9m	2,3m	3,5m	4,6m	7m	9,3m	11,6m	13,9m	18,6m	23,2m
Beam wid.	1,5ft	3,1ft	4,6ft	6,1ft	7,6ft	11,4ft	15,2ft	22,9ft	30,5ft	38,1ft	45,7ft	60,9ft	76,2ft

## LINEAR DISTRIBUTION DIAGRAM



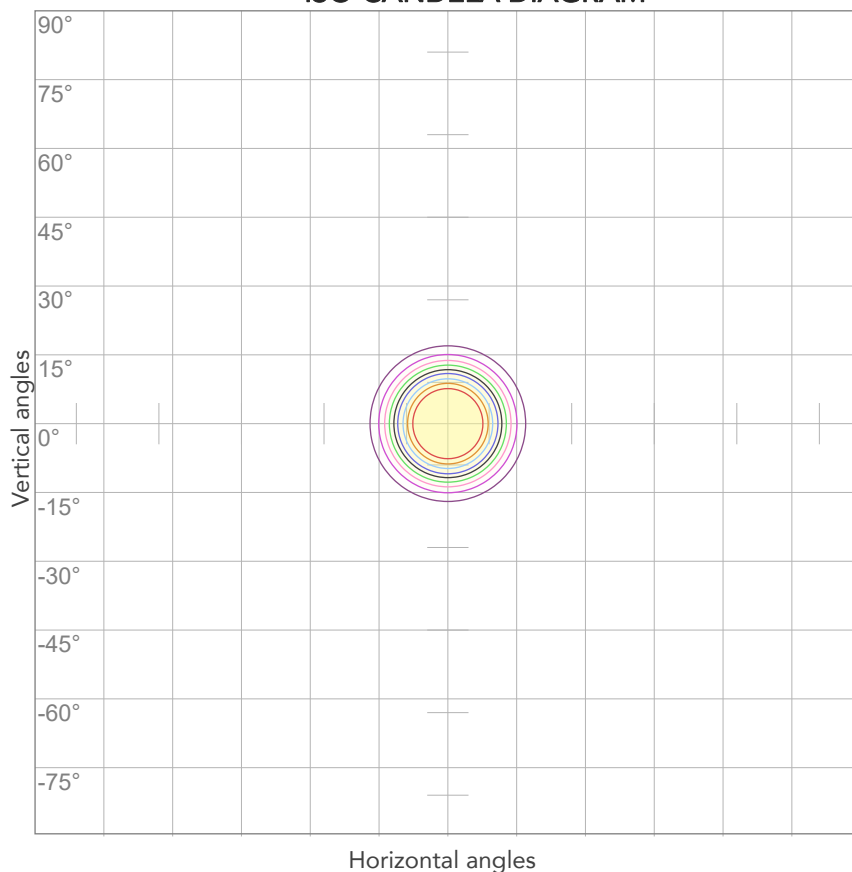
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	0,147A	31,6W	0,95	32lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



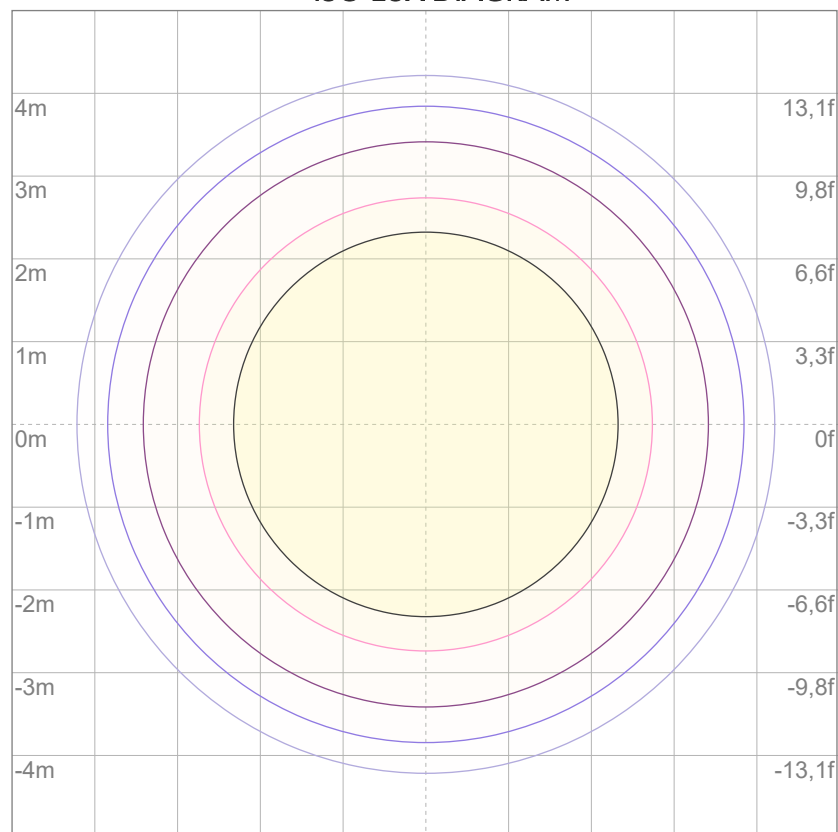
10%	513 cd
20%	1027 cd
30%	1540 cd
40%	2054 cd
50%	2567 cd
60%	3081 cd
70%	3594 cd
80%	4108 cd

### Conditions:

Number of c-planes: 2

Candela at center: 5135 cd

## ISO LUX DIAGRAM



3%	1,54 lx
5%	2,57 lx
10%	5,13 lx
30%	15,4 lx
50%	25,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 51,3 lx

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