



# Photometric Test Report



## **EclDisplay CRMXVW**

### **ZOOMABLE PROFILE LENS 20-40° HD**

35W Variable White LED Spotlight with  
Wireless CRMX and wired control,  
without lens

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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:

769 lm

Peak candela output:

3426 cd

Light quality:

CRI: 96,1

Color temperature:

4444 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 2040 Max Zoom

Target:

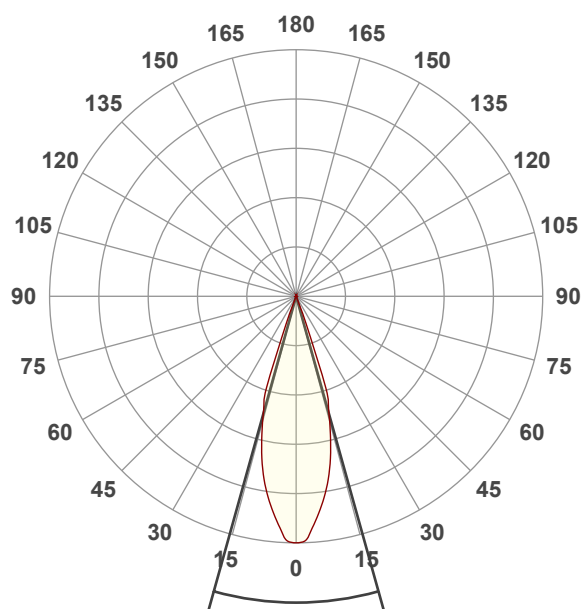
Full On

Operator:

Giacomo Matteo

Date and time:

17/06/2024 14:53:33

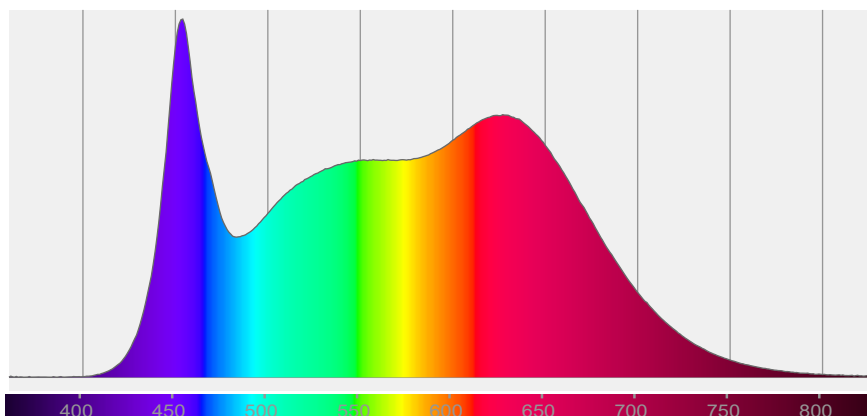


Beam angle 50%: 31,2°

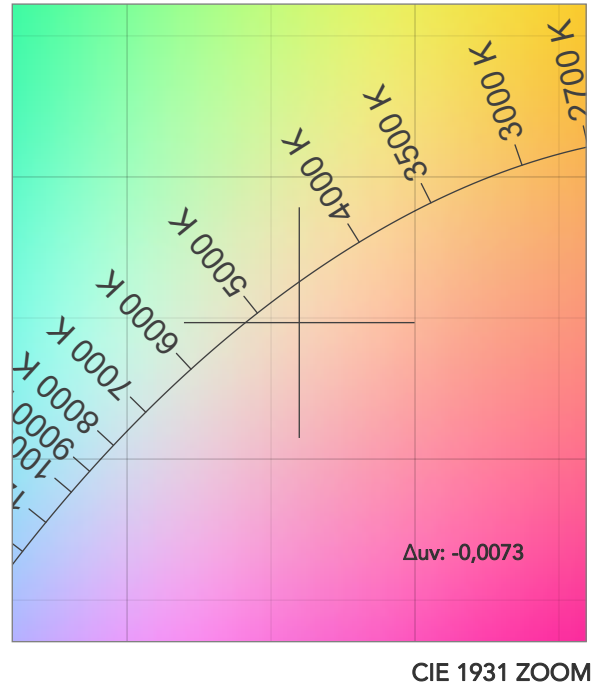
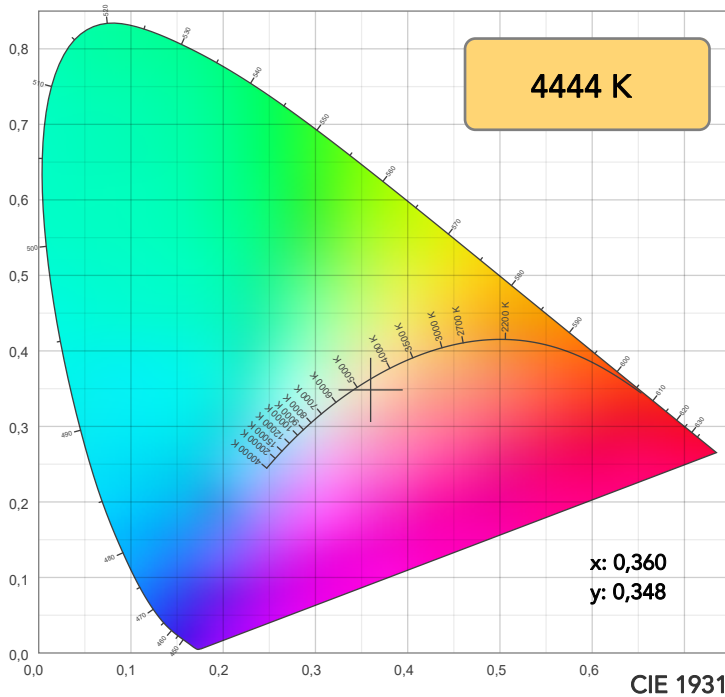
Field angle 10%: 40,6°

Cut off angle 2.5%: 43,2°

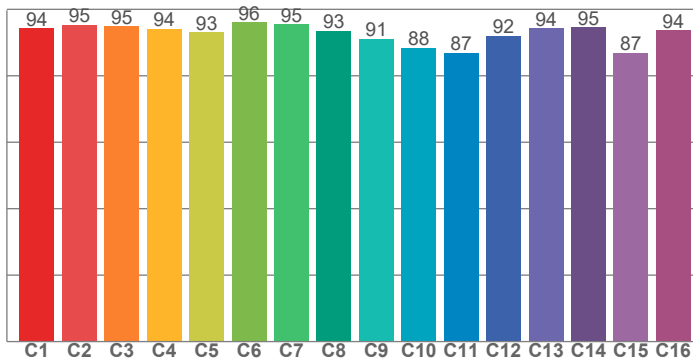
**Spectra**



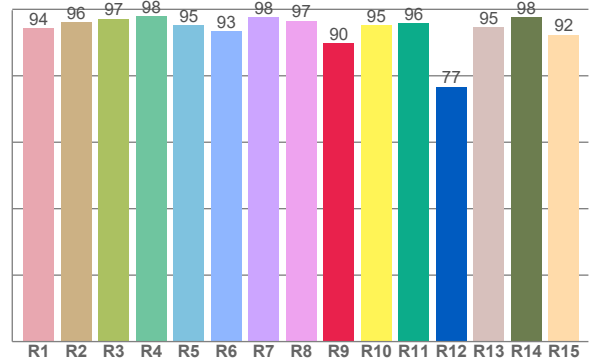
# COLOR DETAILS



**TM30: 92,7**



**CRI: 96,1 (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
94,4	96,2	97,1	97,9	95,3	93,5	97,6	96,6	89,8	95,3	95,8	76,7	94,6	97,6	92,3

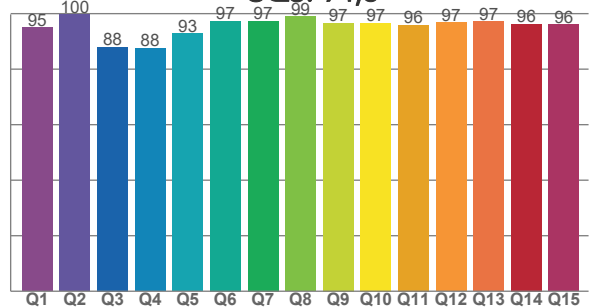
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,3	95,3	94,8	94,1	93,0	96,1	95,5	93,5	91,1	88,4	86,9	92,1	94,3	94,5	86,9	93,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,0	99,7	88,0	87,5	92,8	97,4	97,4	98,9	96,6	96,5	95,9	96,7	97,1	96,4	96,0

**CQS: 94,3**



## COLOR PARAMETERS

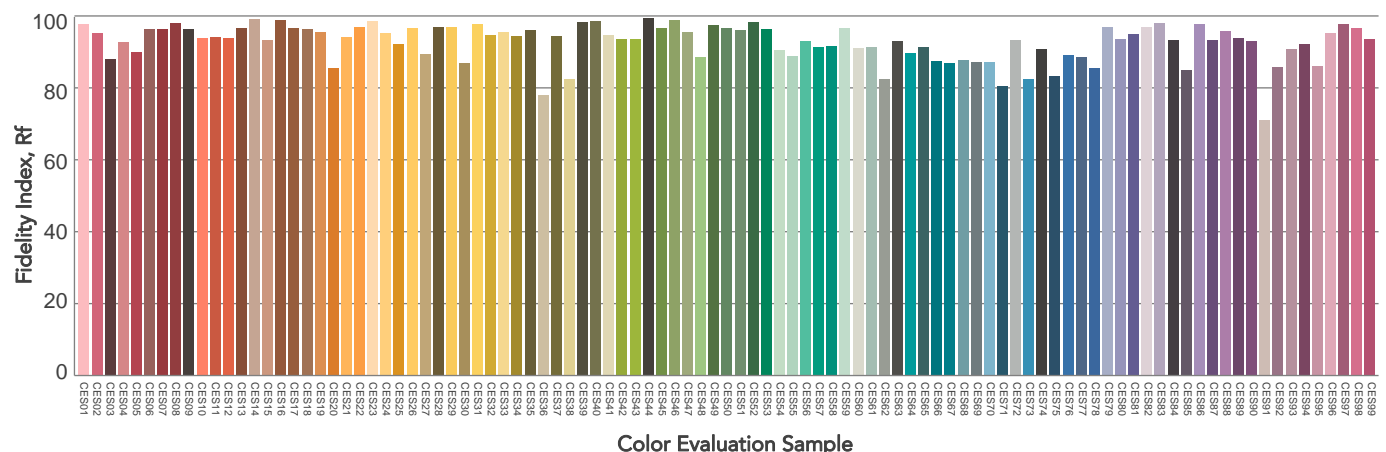
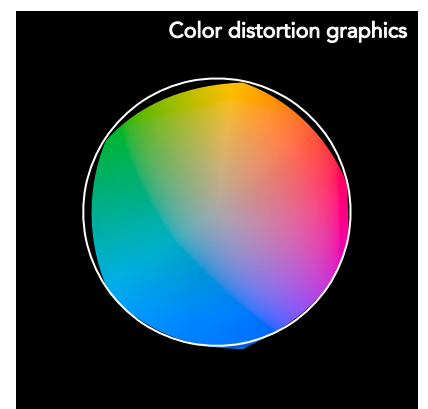
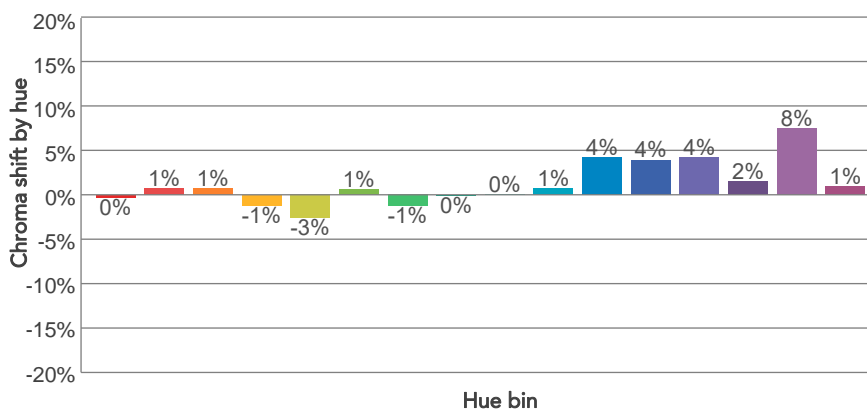
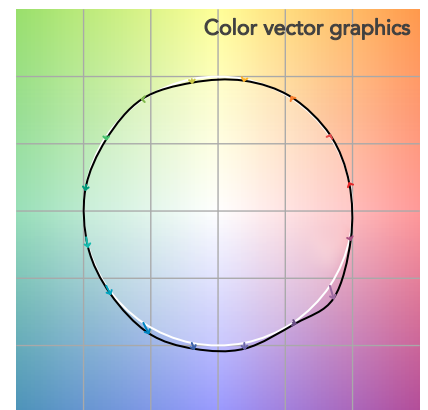
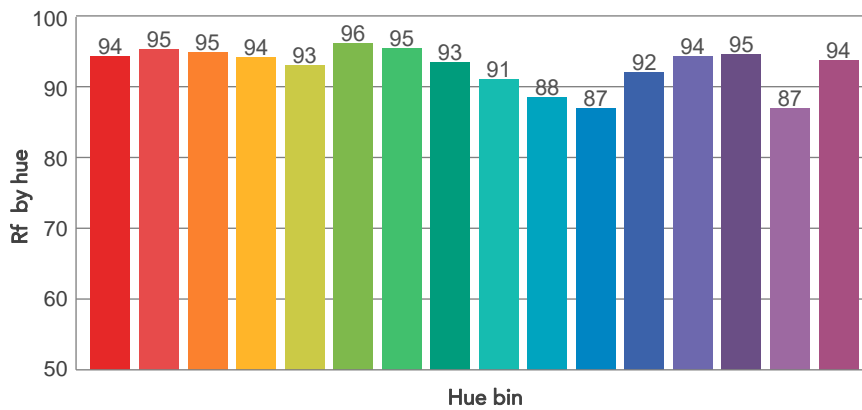
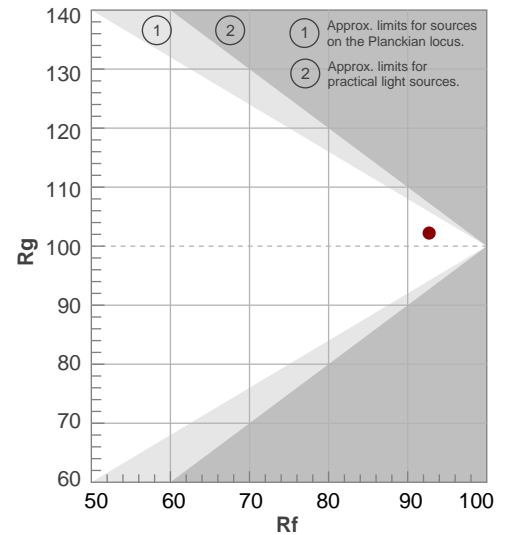
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
4444 K	96,1	89,8	92,7	102,2	94,3	98	0,360	0,348	-0,0073

# TM30 DETAILS

**Rf 92,7**  
Fidelity index Rf

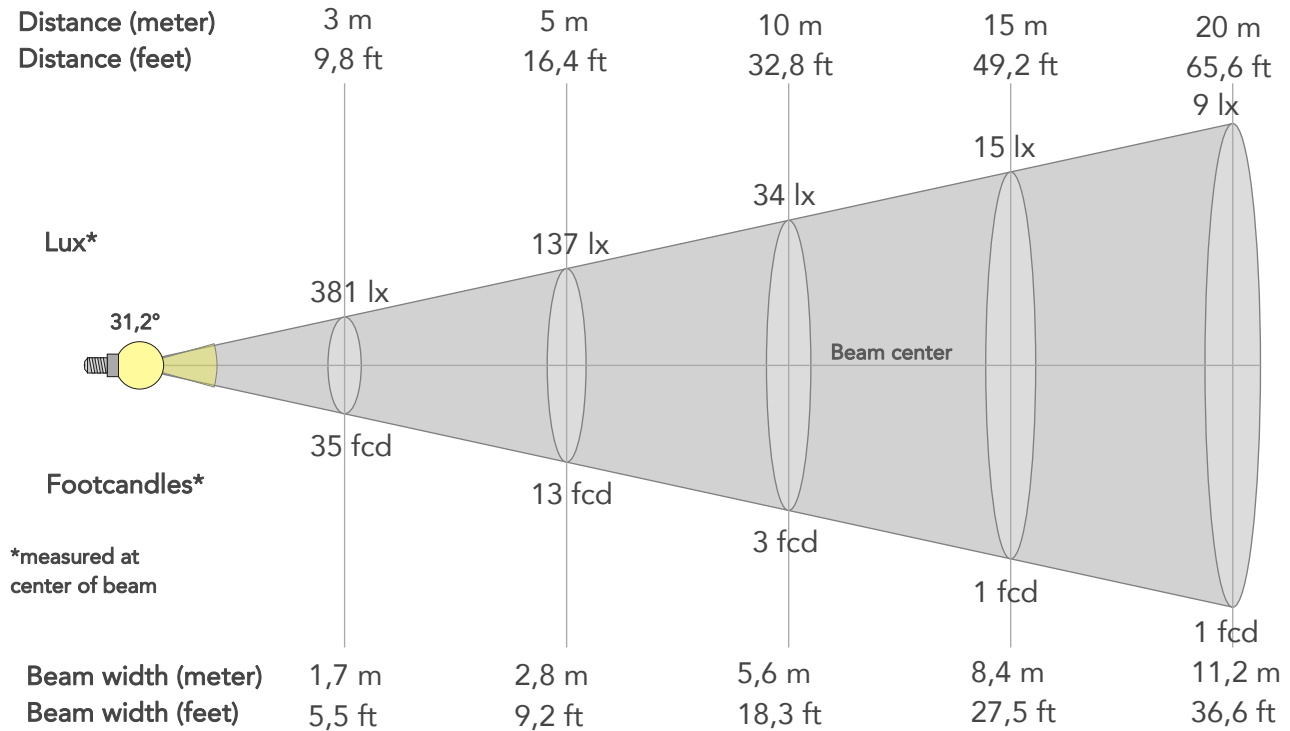
**Rg 102,2**  
Gammut index

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



# BEAM DETAILS

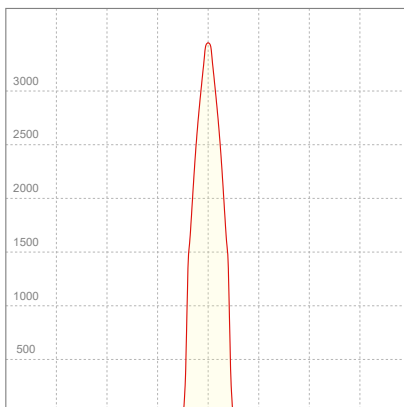
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,2°	40,6°	43,2°	99,7%	99,6%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	3426lx	857lx	381lx	214lx	137lx	61lx	34lx	15lx	9lx	5lx	4lx	2lx	1lx
Footcand.	318fcd	80fcd	35fcd	20fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,6m	8,4m	11,2m	14m	16,7m	22,3m	27,9m
Beam wid.	1,8ft	3,7ft	5,5ft	7,3ft	9,2ft	13,7ft	18,3ft	27,5ft	36,6ft	45,8ft	54,9ft	73,2ft	91,5ft

## LINEAR DISTRIBUTION DIAGRAM

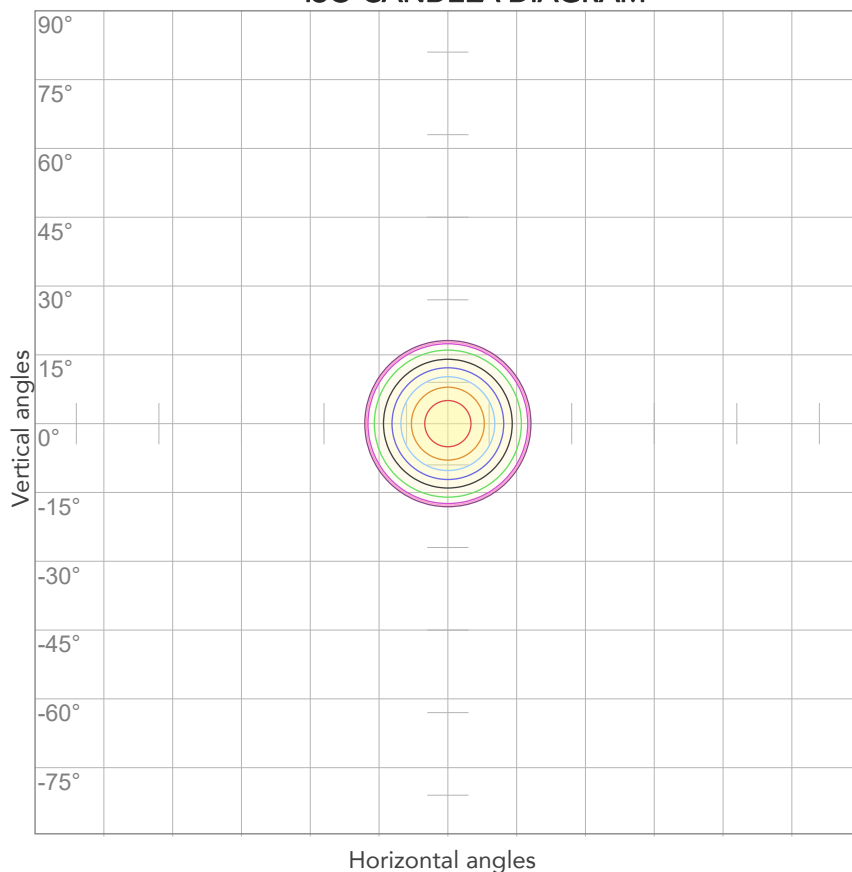


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
229V	0,146A	31,6W	0,95	24lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



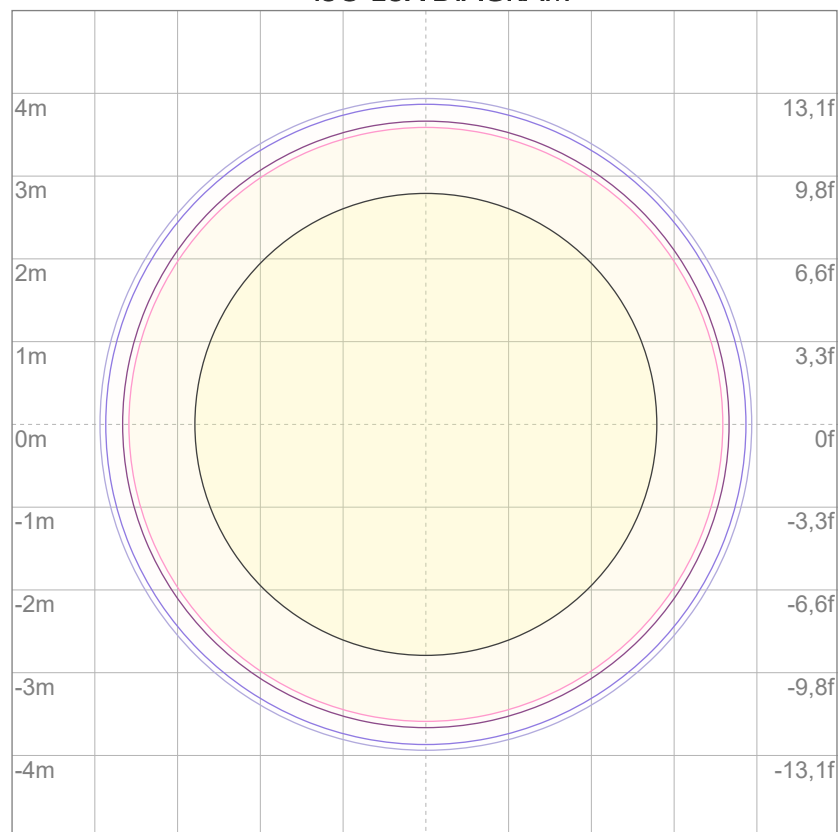
10%	343 cd
20%	685 cd
30%	1028 cd
40%	1371 cd
50%	1713 cd
60%	2056 cd
70%	2398 cd
80%	2741 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3426 cd

## ISO LUX DIAGRAM



3%	1,03 lx
5%	1,71 lx
10%	3,43 lx
30%	10,3 lx
50%	17,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 34,3 lx

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





Total lumen output:

802 lm

Peak candela output:

12574 cd

Light quality:

CRI: 95,8

Color temperature:

4440 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 2040 Min Zoom

Target:

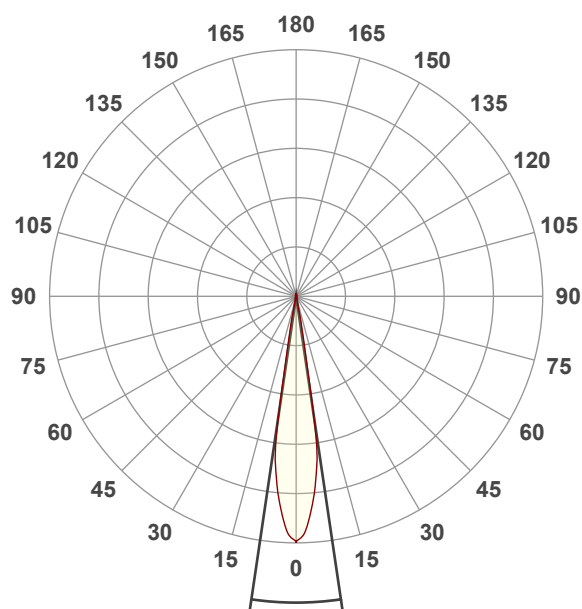
Full On

Operator:

Giacomo Matteo

Date and time:

17/06/2024 14:55:37

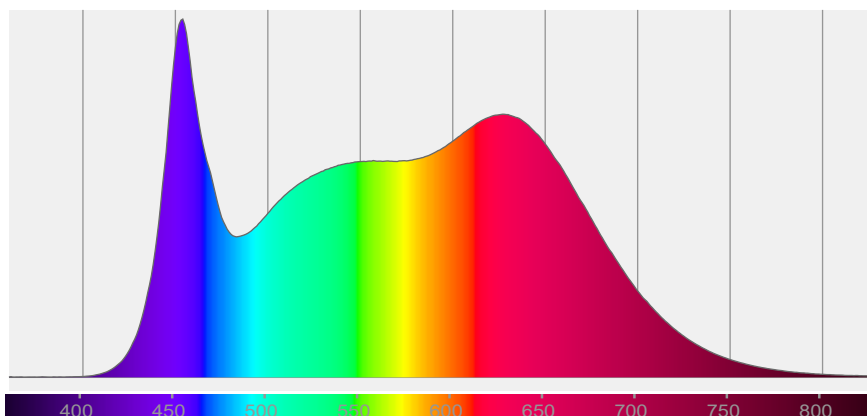


Beam angle 50%: 16,8°

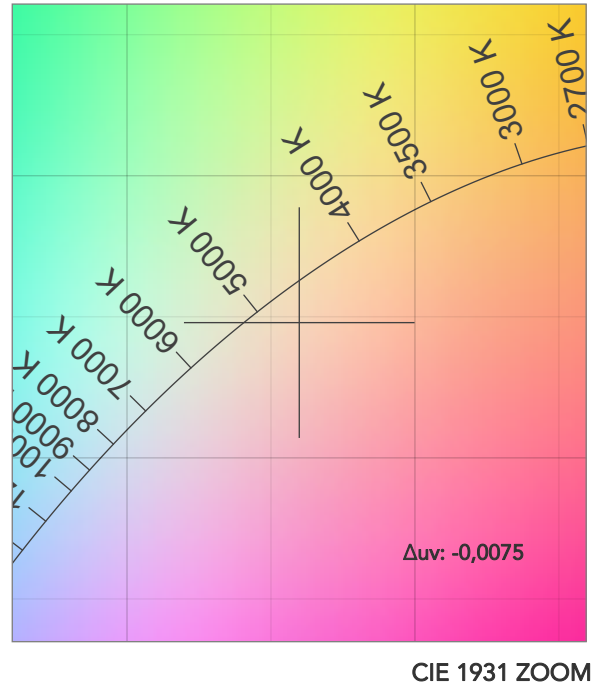
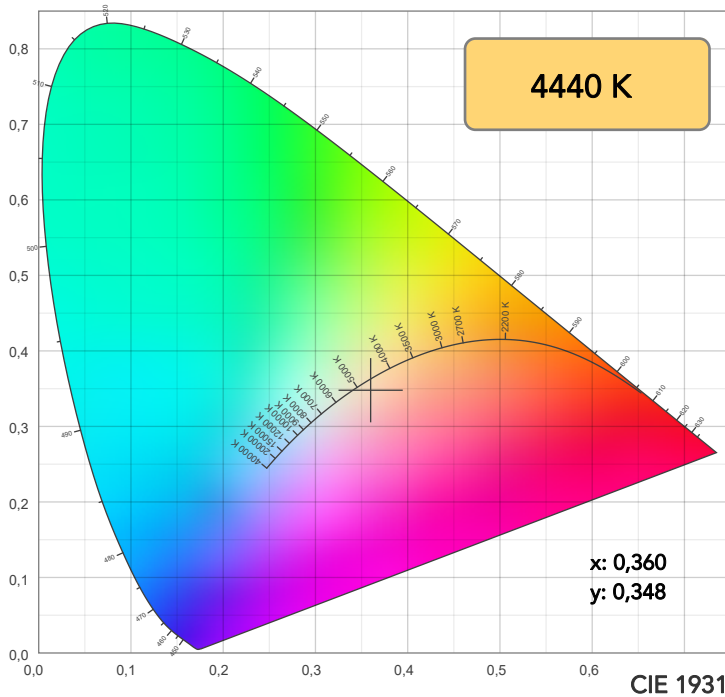
Field angle 10%: 21,5°

Cut off angle 2.5%: 23,4°

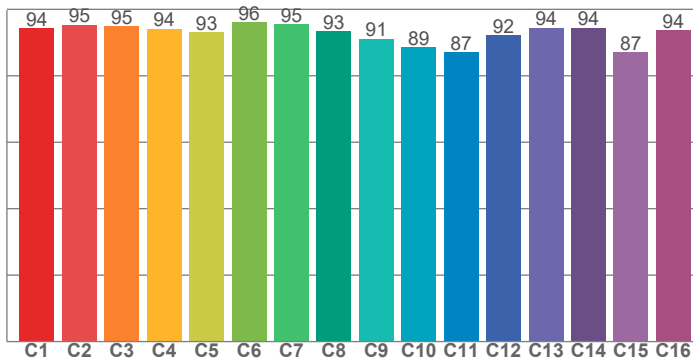
**Spectra**



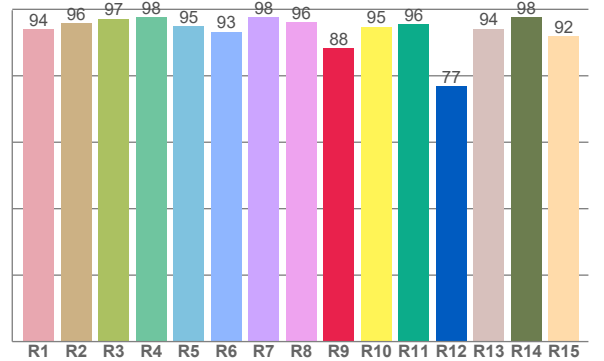
# COLOR DETAILS



TM30: 92,7



CRI: 95,8 (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
94,0	95,9	97,2	97,6	95,0	93,3	97,7	96,1	88,3	94,7	95,5	76,8	94,2	97,6	91,8

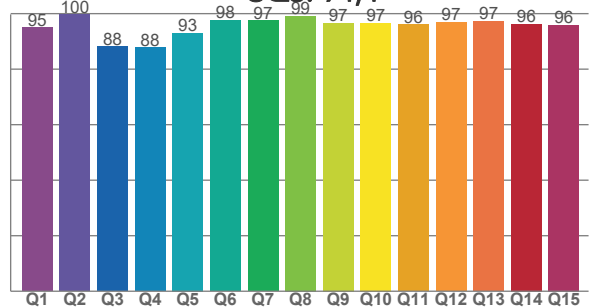
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,3	95,3	94,9	94,1	93,0	96,1	95,4	93,4	91,1	88,6	87,0	92,2	94,4	94,4	87,0	93,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,0	99,7	88,1	87,7	93,0	97,6	97,5	99,1	96,5	96,7	96,1	96,9	97,2	96,3	95,9

CQS: 94,4



## COLOR PARAMETERS

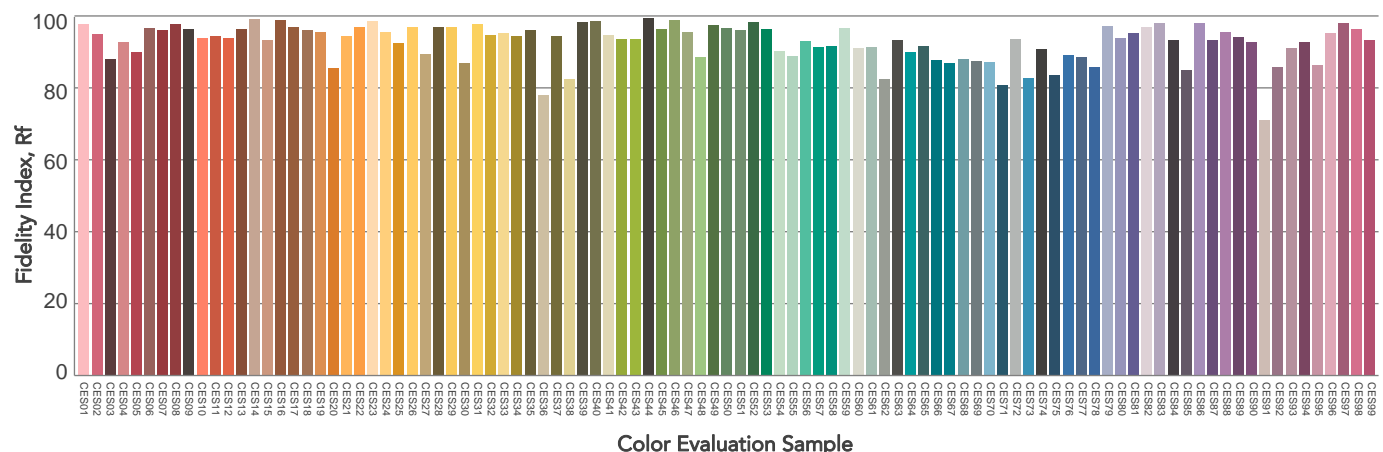
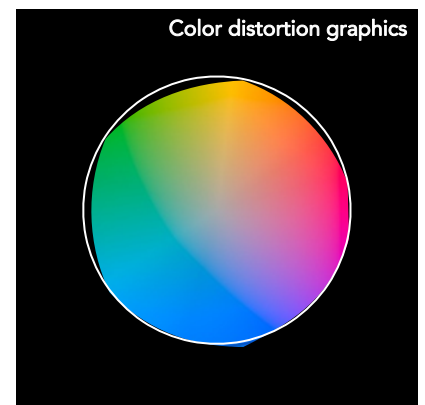
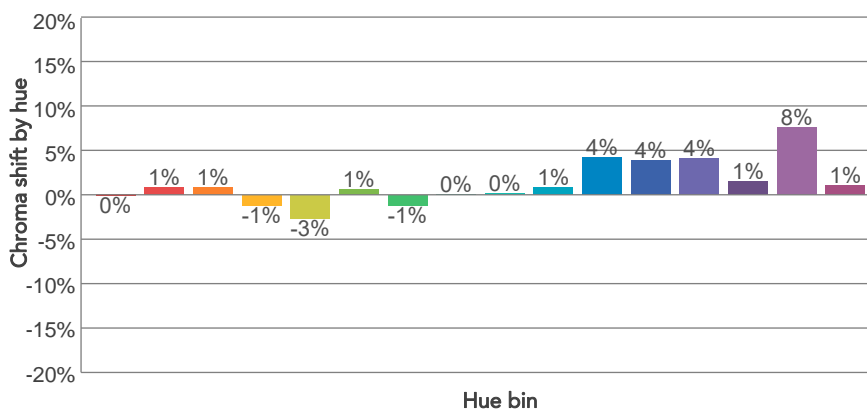
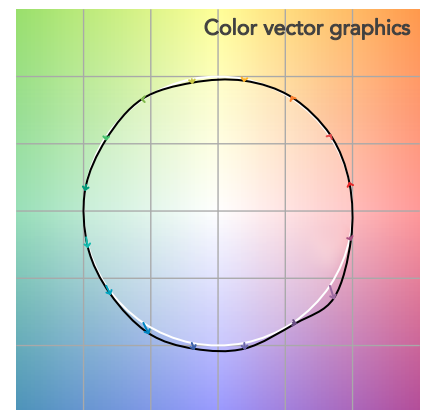
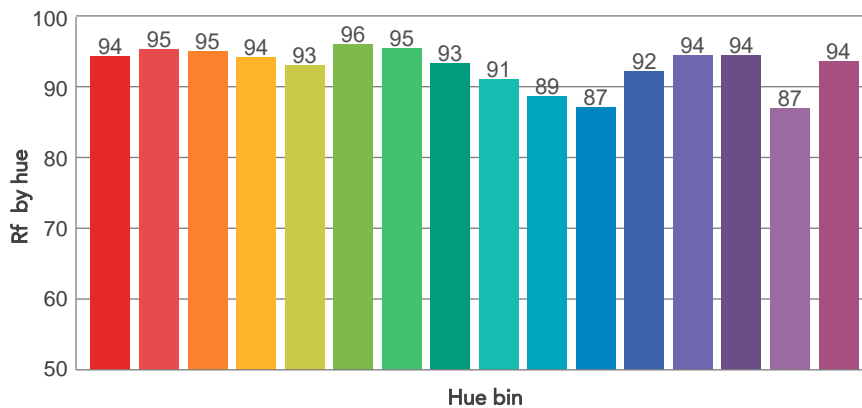
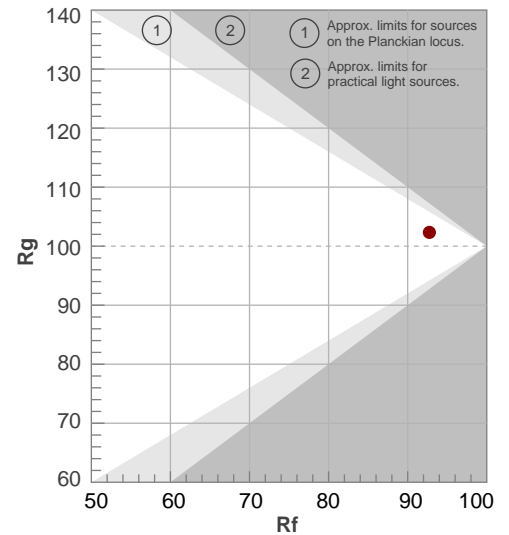
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
4440 K	95,8	88,3	92,7	102,3	94,4	98	0,360	0,348	-0,0075

# TM30 DETAILS

**Rf 92,7**  
Fidelity index Rf

**Rg 102,3**  
Gammut index

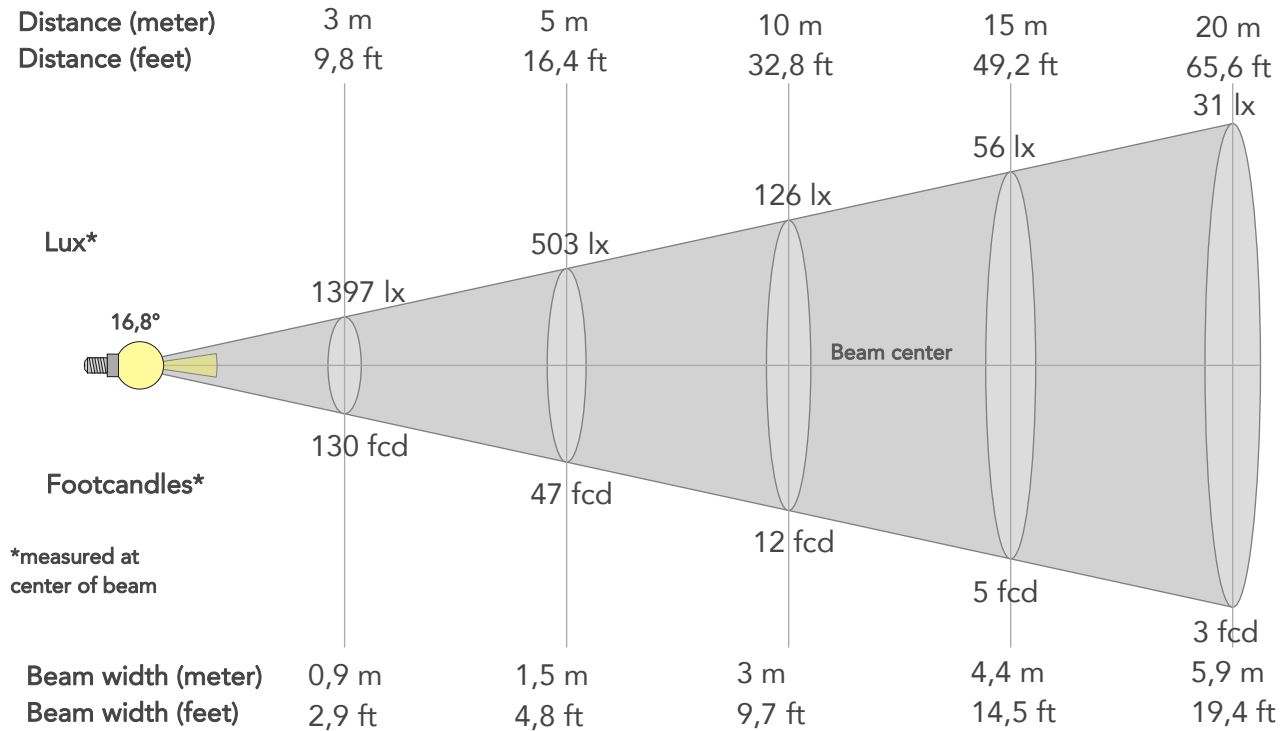
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	1%
2	95	1%	0%
3	95	1%	2%
4	94	-1%	0%
5	93	-3%	0%
6	96	1%	1%
7	95	-1%	2%
8	93	0%	4%
9	91	0%	7%
10	89	1%	7%
11	87	4%	7%
12	92	4%	2%
13	94	4%	-1%
14	94	1%	2%
15	87	8%	-6%
16	94	1%	-2%



# BEAM DETAILS



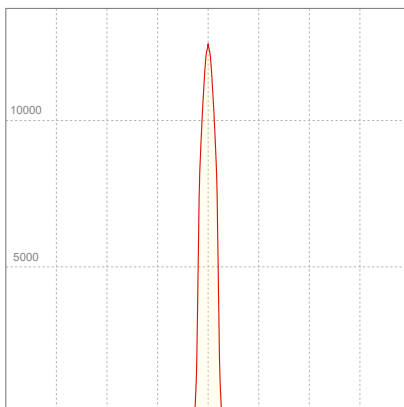
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,8°	21,5°	23,4°	99,4%	99,3%



## 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	12574lx	3144lx	1397lx	786lx	503lx	224lx	126lx	56lx	31lx	20lx	14lx	8lx	5lx
Footcand.	1168fcd	292fcd	130fcd	73fcd	47fcd	21fcd	12fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,5m	2,2m	3m	4,4m	5,9m	7,4m	8,9m	11,8m	14,8m
Beam wid.	1ft	1,9ft	2,9ft	3,9ft	4,8ft	7,3ft	9,7ft	14,5ft	19,4ft	24,2ft	29,1ft	38,8ft	48,4ft

## LINEAR DISTRIBUTION DIAGRAM

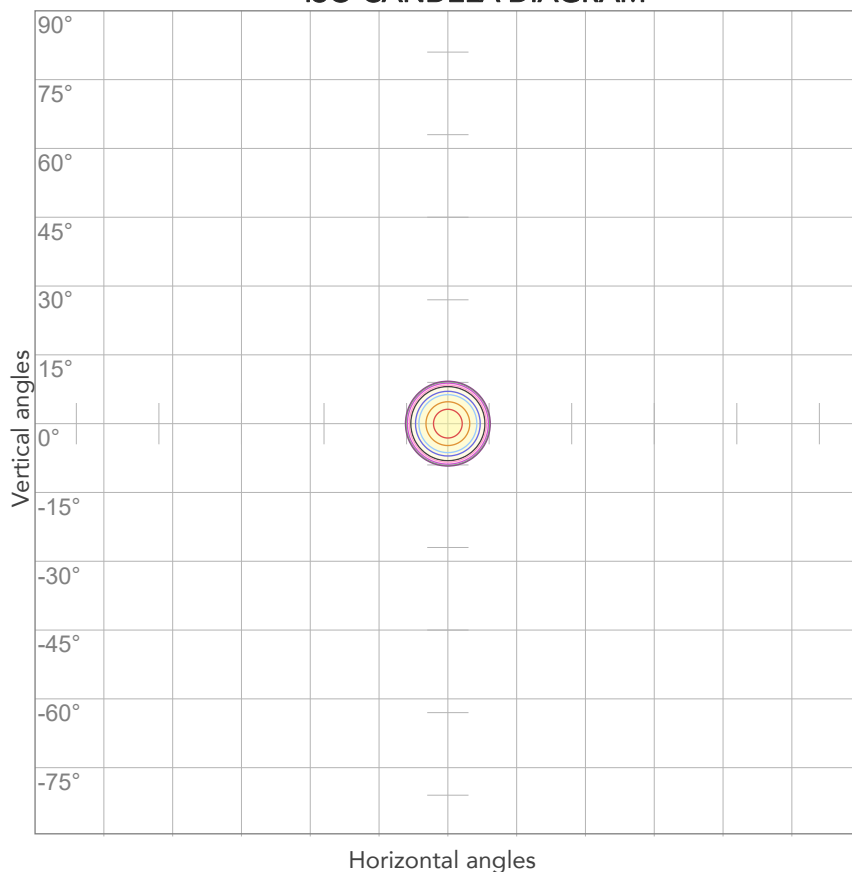


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
228V	0,146A	31,5W	0,95	25lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



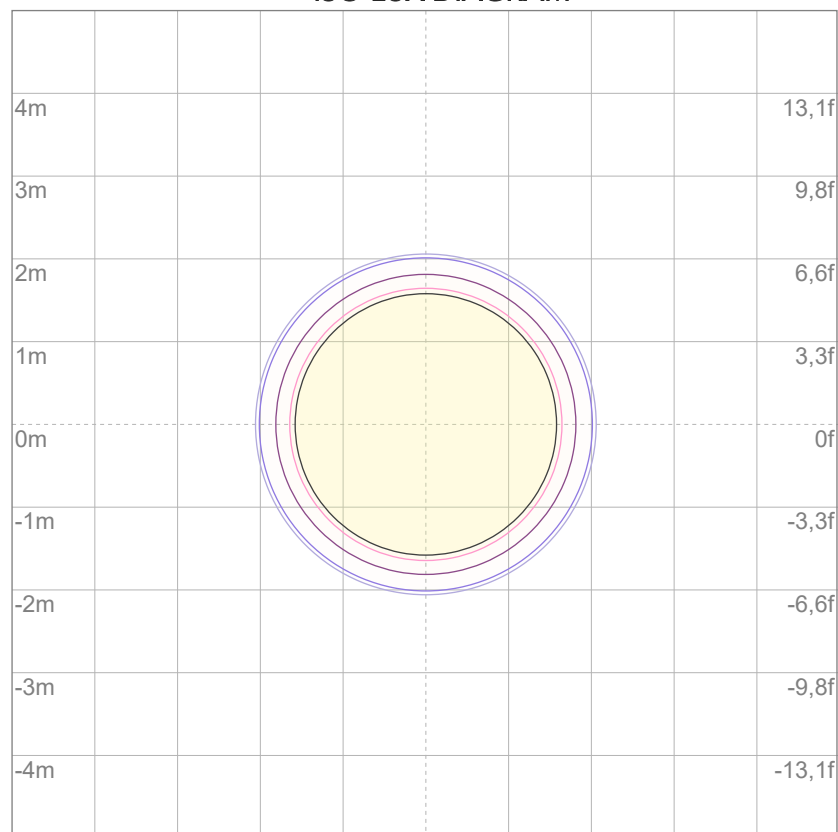
10%	1257 cd
20%	2515 cd
30%	3772 cd
40%	5030 cd
50%	6287 cd
60%	7544 cd
70%	8802 cd
80%	10059 cd

### Conditions:

Number of c-planes: 2

Candela at center: 12574 cd

## ISO LUX DIAGRAM



3%	3,77 lx
5%	6,29 lx
10%	12,6 lx
30%	37,7 lx
50%	62,9 lx

### Conditions:

Number of c-planes: 2

Lux at center: 126 lx

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



Total lumen output:

605 lm

Peak candela output:

2697 cd

Light quality:

CRI: 96,2

Color temperature:

2795 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 2040 Max Zoom

Target:

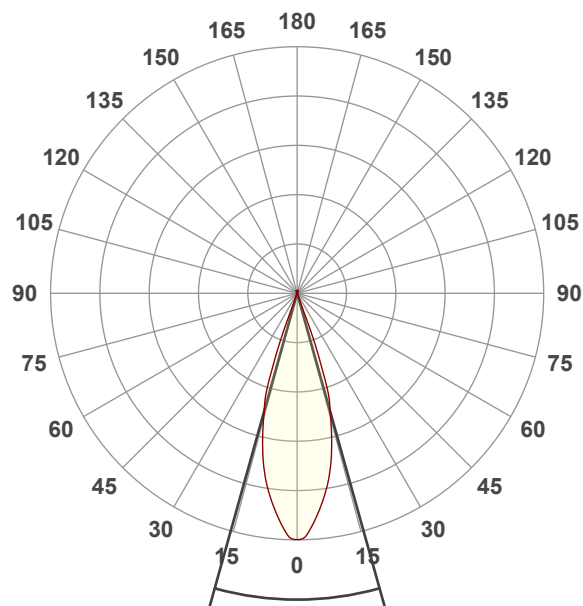
Warm White

Operator:

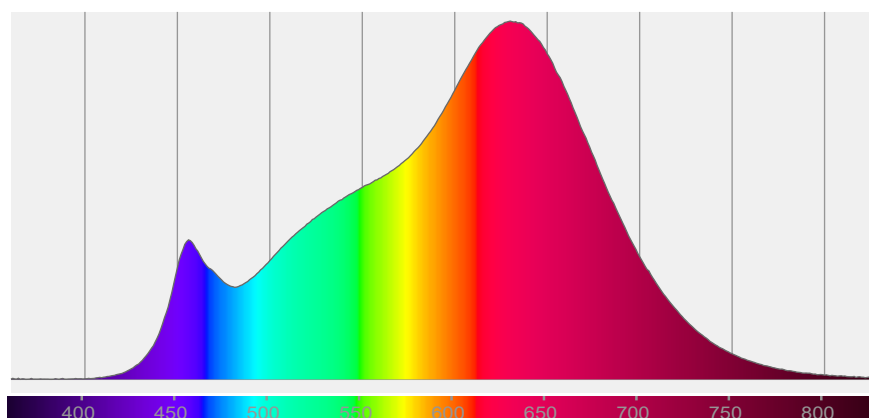
Giacomo Matteo

Date and time:

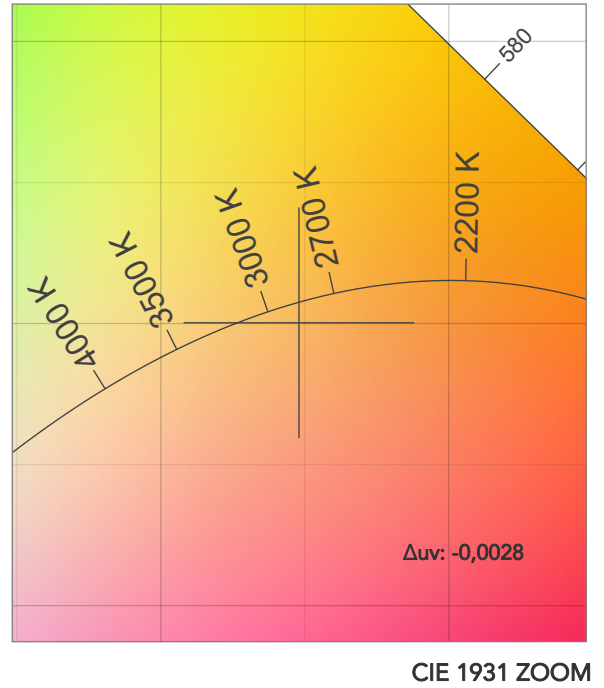
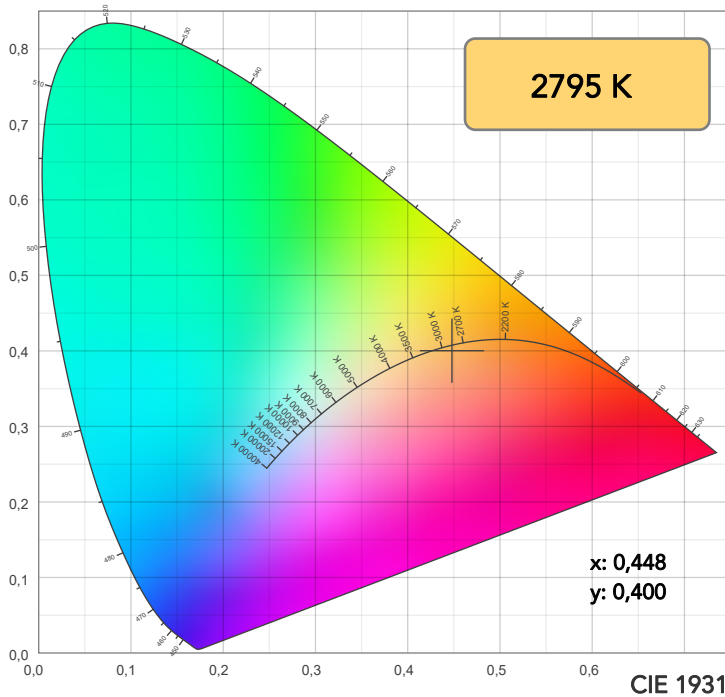
17/06/2024 14:48:14



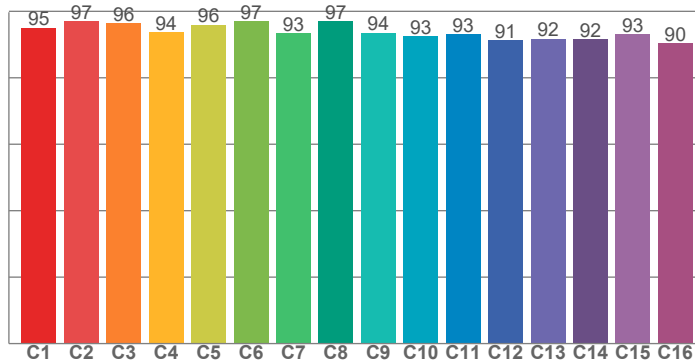
**Spectra**



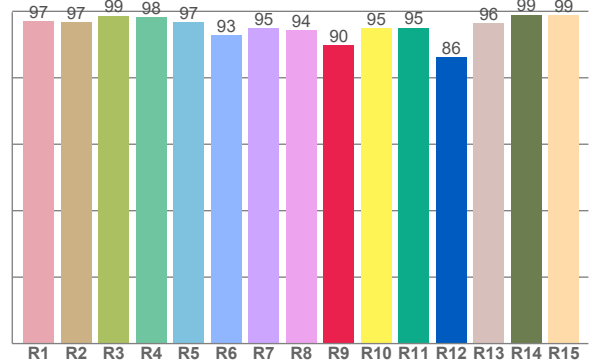
# COLOR DETAILS



TM30: 94,1



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
97,0	96,7	98,7	98,3	96,6	92,8	94,9	94,3	89,8	94,9	95,0	86,1	96,3	99,0	98,9

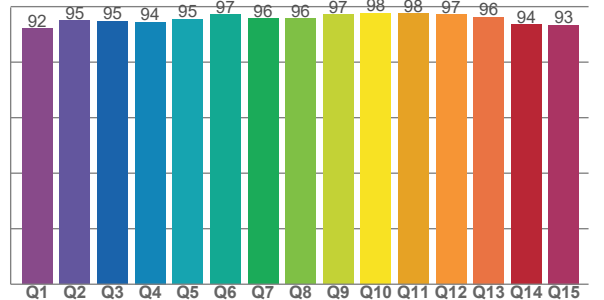
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,9	96,9	96,3	93,7	96,0	97,0	93,3	97,0	93,6	92,5	93,1	91,2	91,6	91,5	93,1	90,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,1	95,0	94,7	94,5	95,5	97,1	95,7	95,7	97,1	97,7	97,6	97,2	96,3	93,6	93,4

CQS: 95,1



## COLOR PARAMETERS

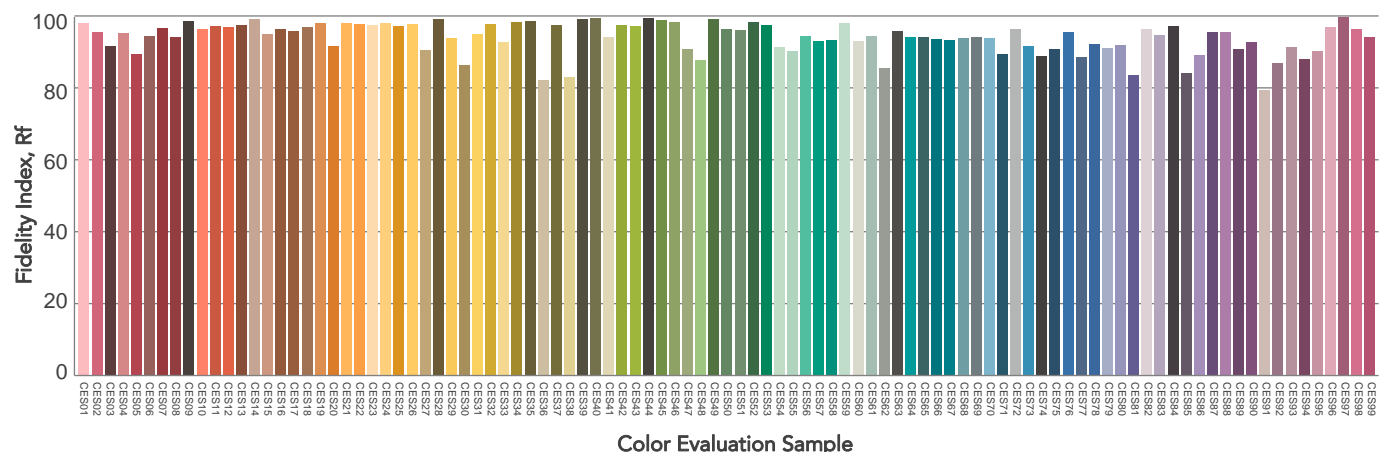
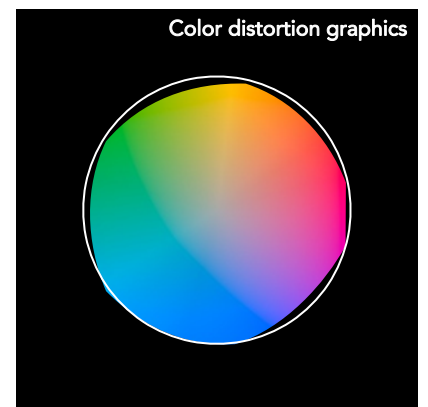
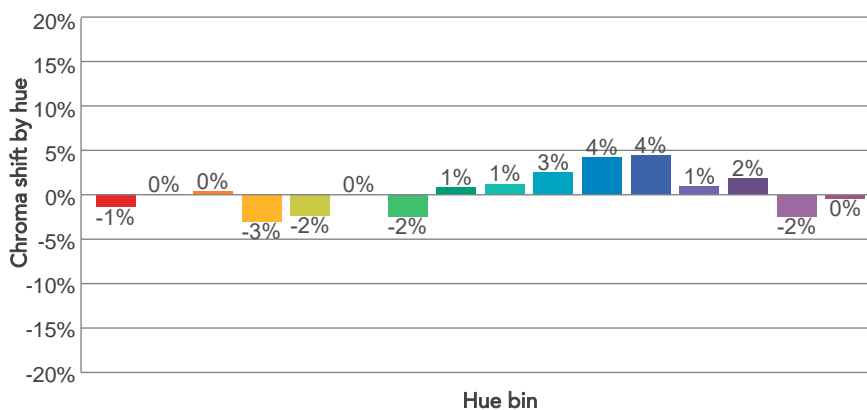
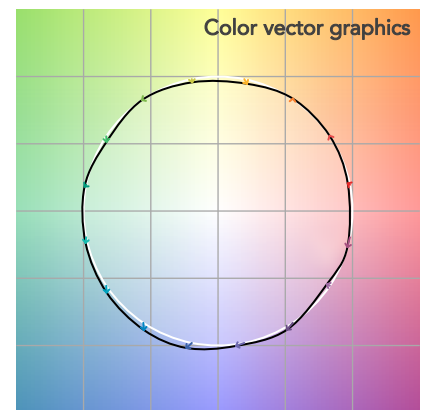
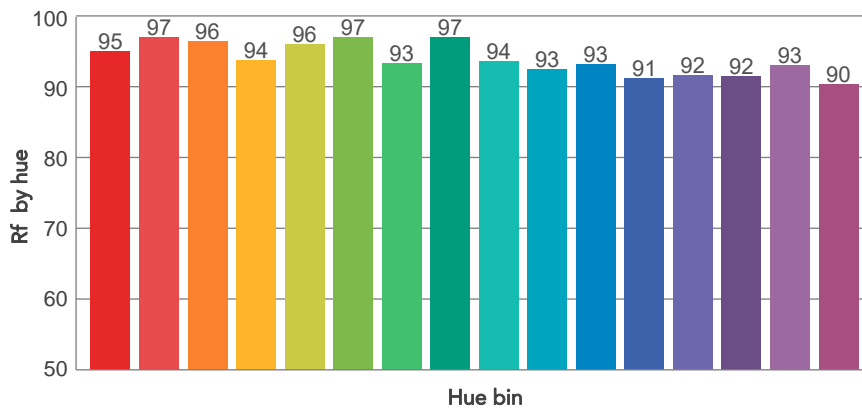
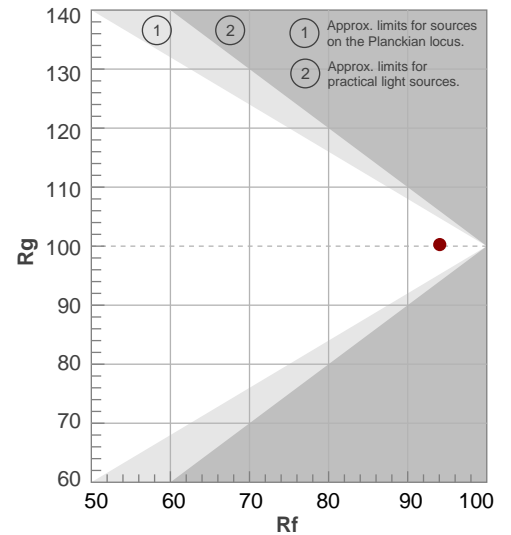
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2795 K	96,2	89,8	94,1	100,3	95,1	97	0,448	0,400	-0,0028

# TM30 DETAILS

**Rf 94,1**  
Fidelity index Rf

**Rg 100,3**  
Gammut index

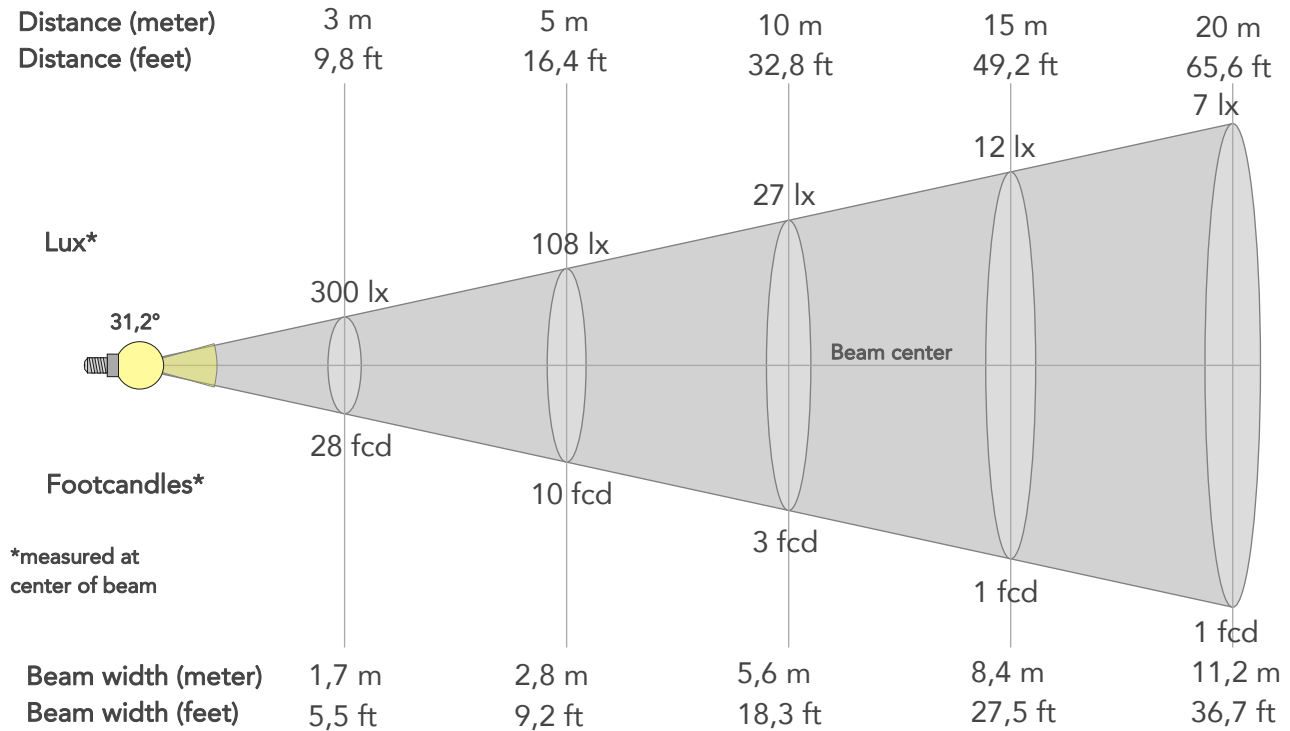
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	97	0%	0%
3	96	0%	0%
4	94	-3%	-3%
5	96	-2%	0%
6	97	0%	1%
7	93	-2%	3%
8	97	1%	2%
9	94	1%	4%
10	93	3%	4%
11	93	4%	3%
12	91	4%	-3%
13	92	1%	-7%
14	92	2%	-6%
15	93	-2%	0%
16	90	0%	-7%





# BEAM DETAILS

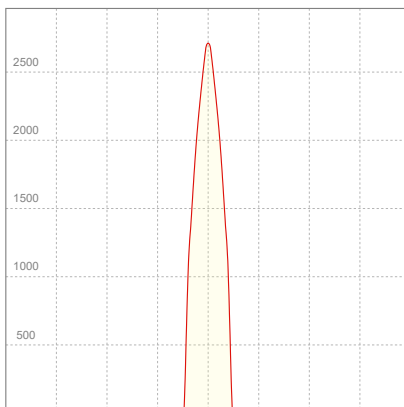
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,2°	41,1°	42,5°	99,7%	99,6%



## BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	2697lx	674lx	300lx	169lx	108lx	48lx	27lx	12lx	7lx	4lx	3lx	2lx	1lx
Footcand.	251fcd	63fcd	28fcd	16fcd	10fcd	4fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,2m	5,6m	8,4m	11,2m	14m	16,8m	22,3m	27,9m
Beam wid.	1,8ft	3,7ft	5,5ft	7,3ft	9,2ft	13,7ft	18,3ft	27,5ft	36,7ft	45,8ft	55ft	73,3ft	91,6ft

## LINEAR DISTRIBUTION DIAGRAM

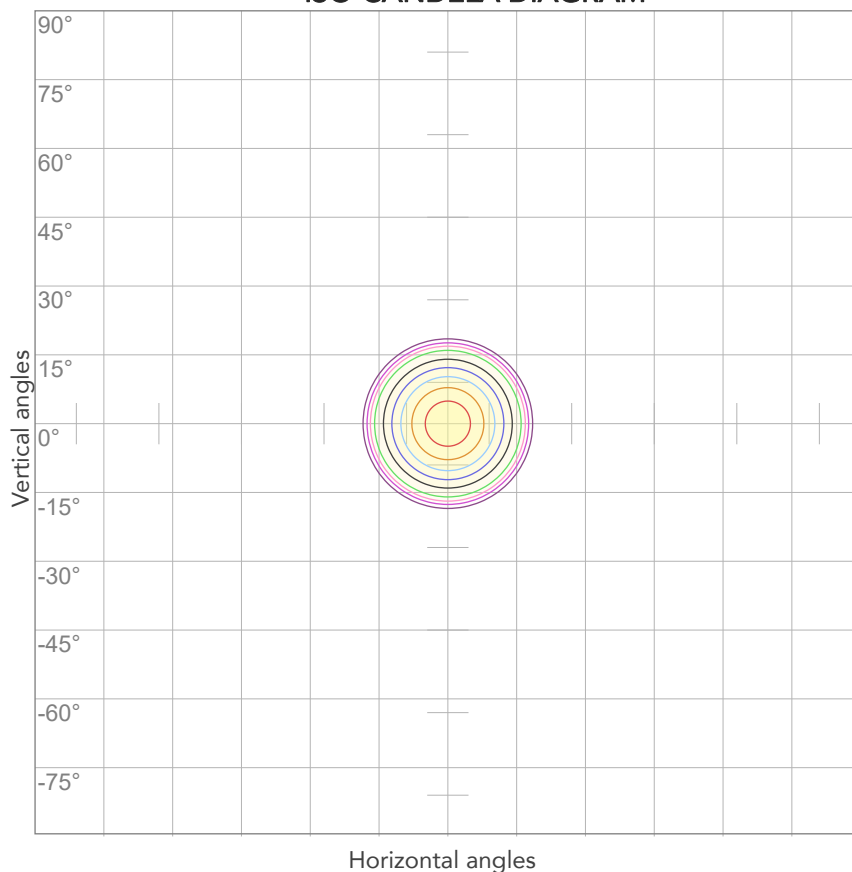


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
229V	0,144A	31,1W	0,95	19lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



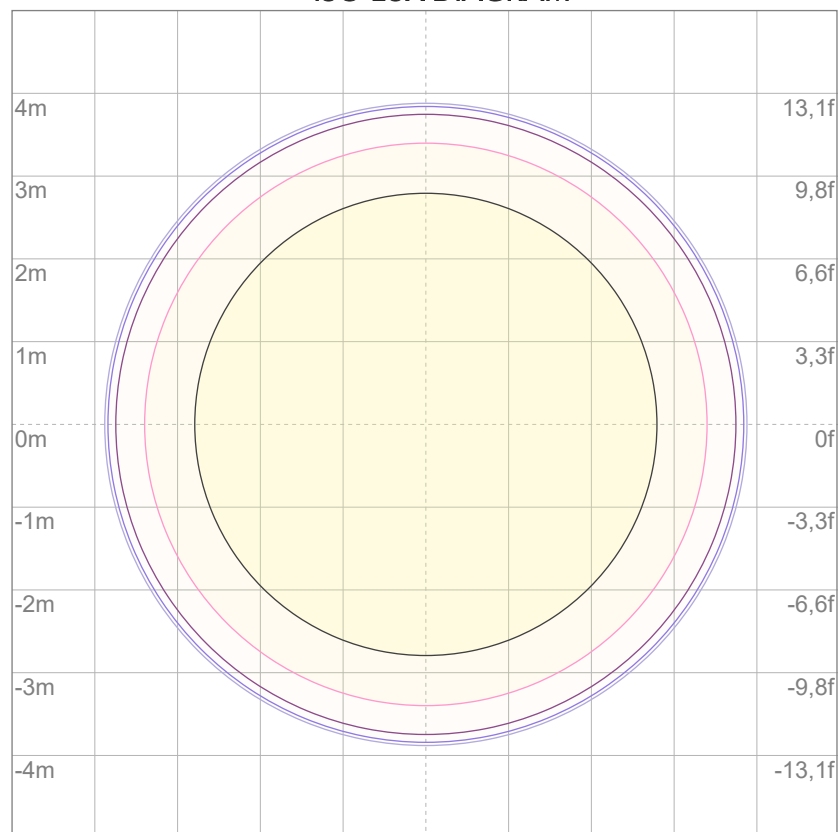
10%	270 cd
20%	539 cd
30%	809 cd
40%	1079 cd
50%	1348 cd
60%	1618 cd
70%	1888 cd
80%	2157 cd

### Conditions:

Number of c-planes: 2

Candela at center: 2697 cd

## ISO LUX DIAGRAM



3%	0,809 lx
5%	1,35 lx
10%	2,70 lx
30%	8,09 lx
50%	13,5 lx

### Conditions:

Number of c-planes: 2

Lux at center: 27,0 lx

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



Total lumen output:

623 lm

Peak candela output:

9891 cd

Light quality:

CRI: 95,9

Color temperature:

2790 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 2040 Min Zoom

Target:

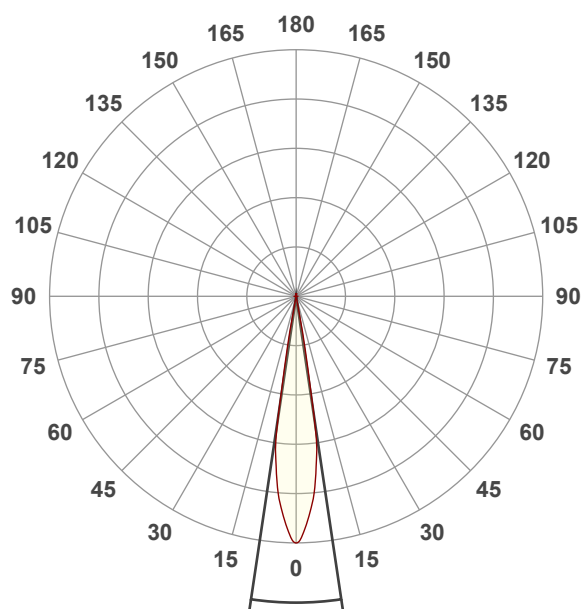
Warm White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 14:58:18

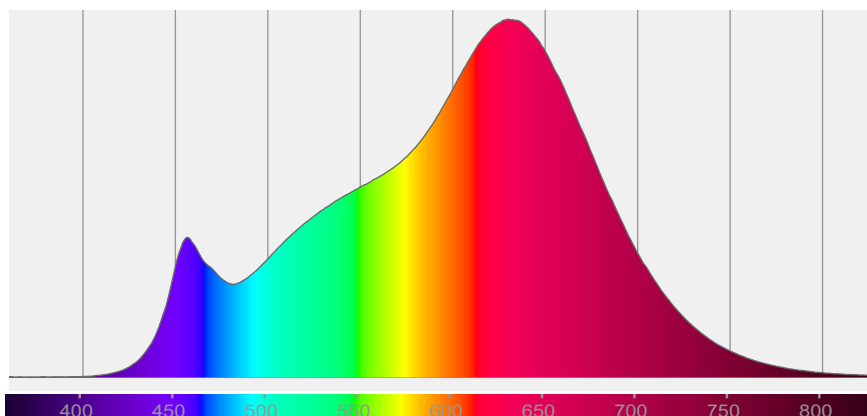


Beam angle 50%: 16,9°

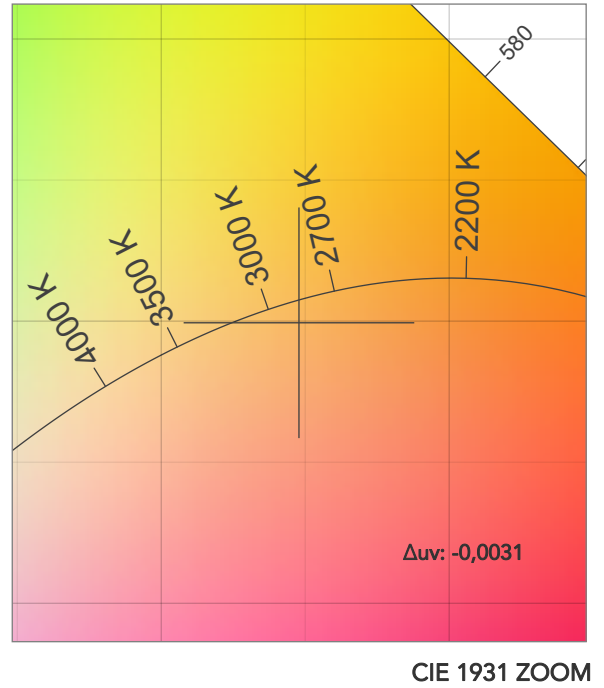
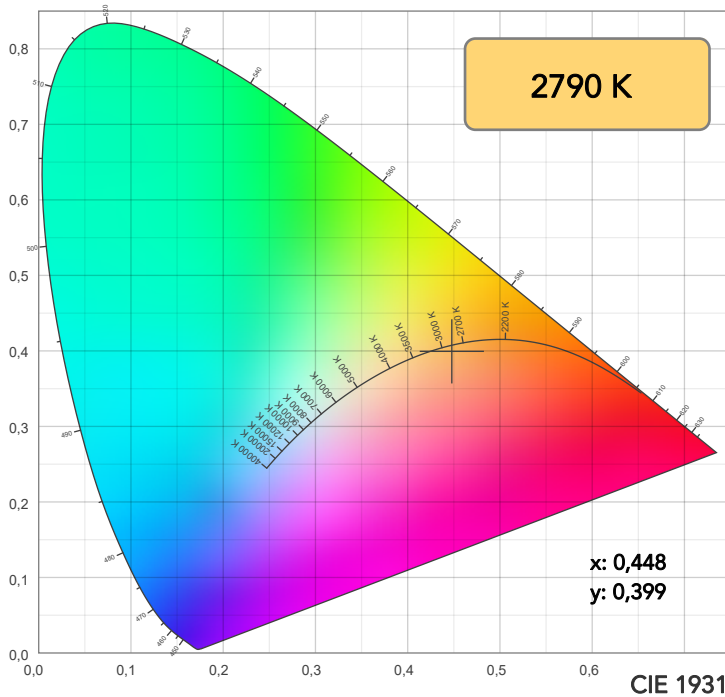
Field angle 10%: 21,1°

Cut off angle 2.5%: 22,1°

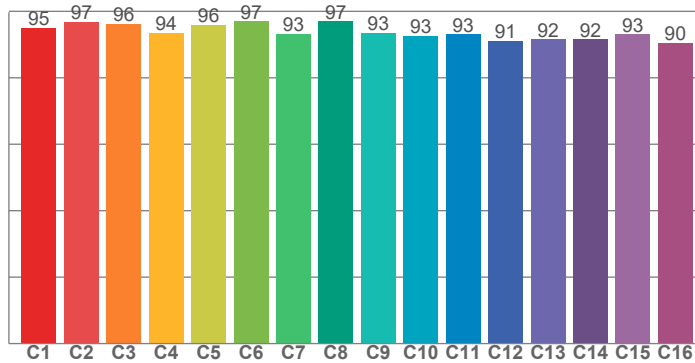
**Spectra**



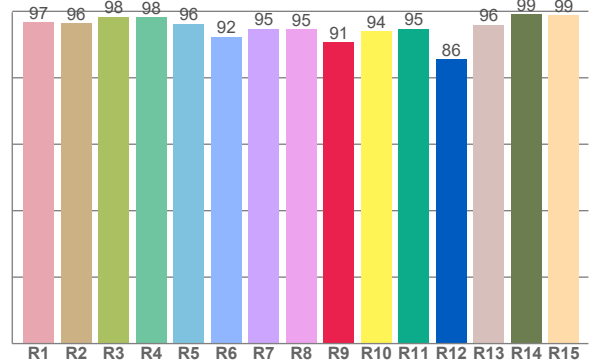
# COLOR DETAILS



TM30: 94,0



CRI: 95,9 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
96,7	96,4	98,4	98,1	96,3	92,3	94,8	94,6	90,6	94,1	94,8	85,6	96,0	99,1	98,8

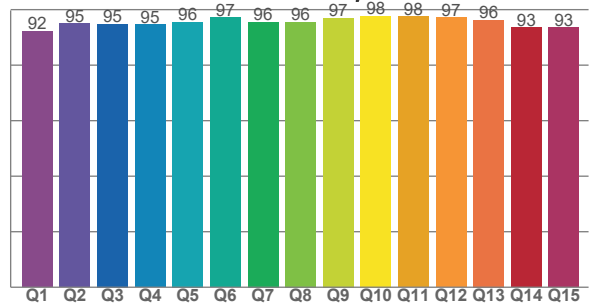
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,0	96,9	96,2	93,6	96,0	97,0	93,2	97,0	93,5	92,5	93,1	91,1	91,6	91,5	93,0	90,5

CQS Q values

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

CQS: 95,1



## COLOR PARAMETERS

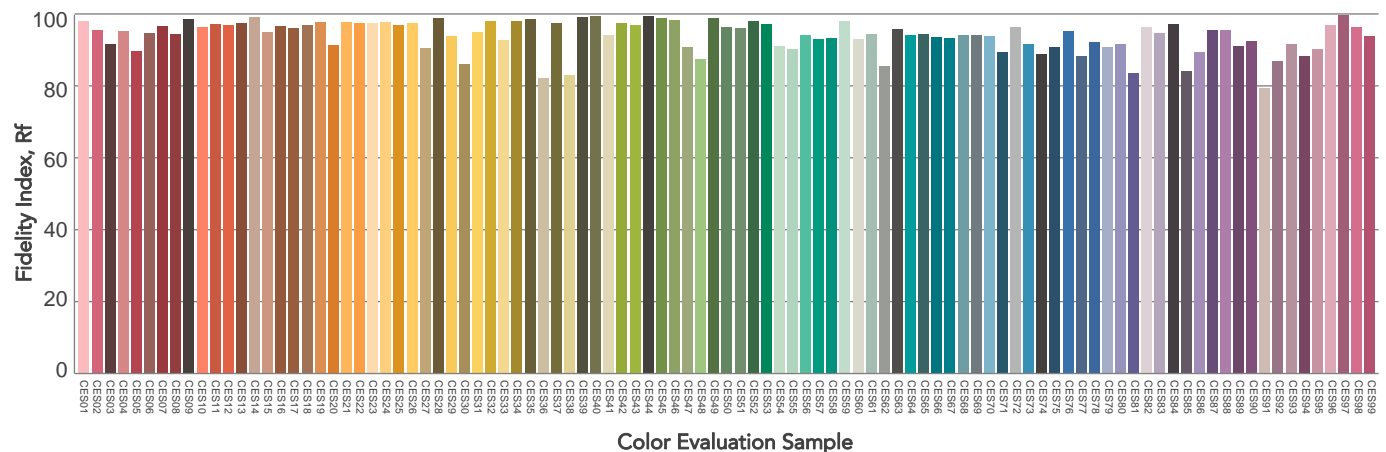
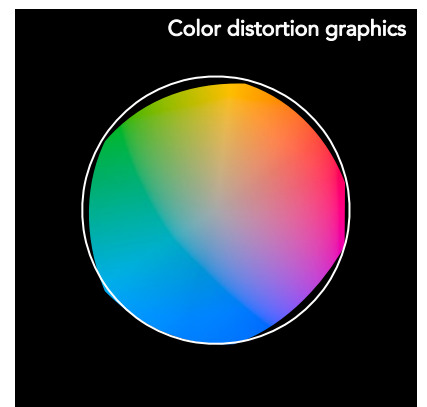
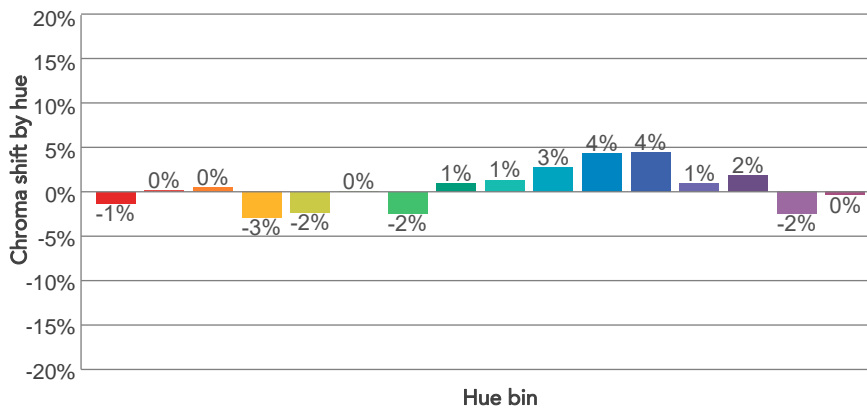
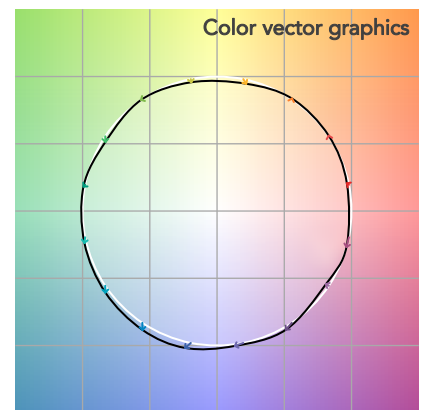
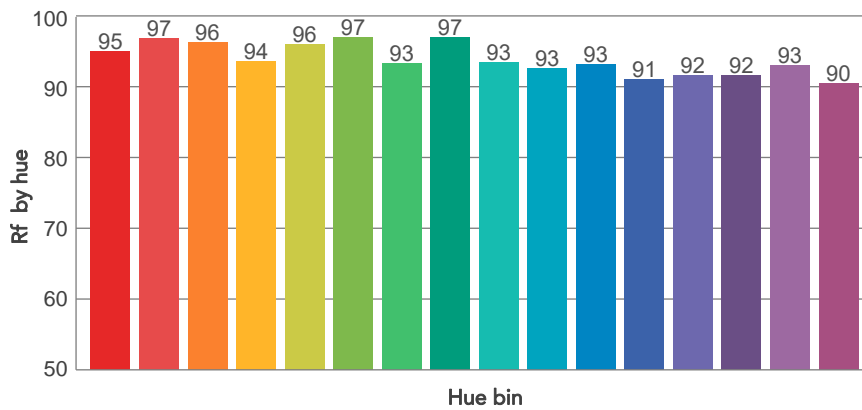
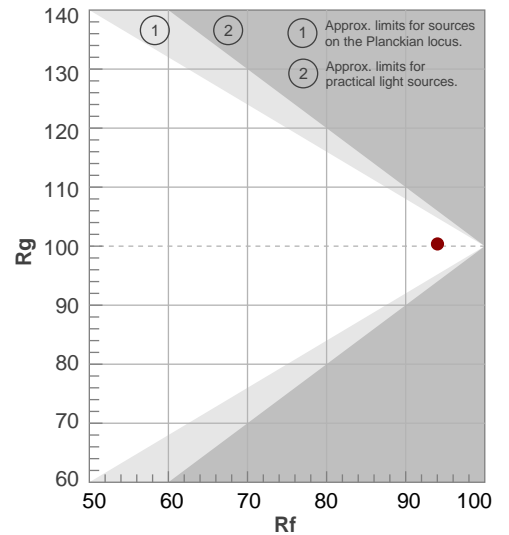
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
2790 K	95,9	90,6	94,0	100,4	95,1	97	0,448	0,399	-0,0031

# TM30 DETAILS

**Rf 94,0**  
Fidelity index Rf

**Rg 100,4**  
Gammut index

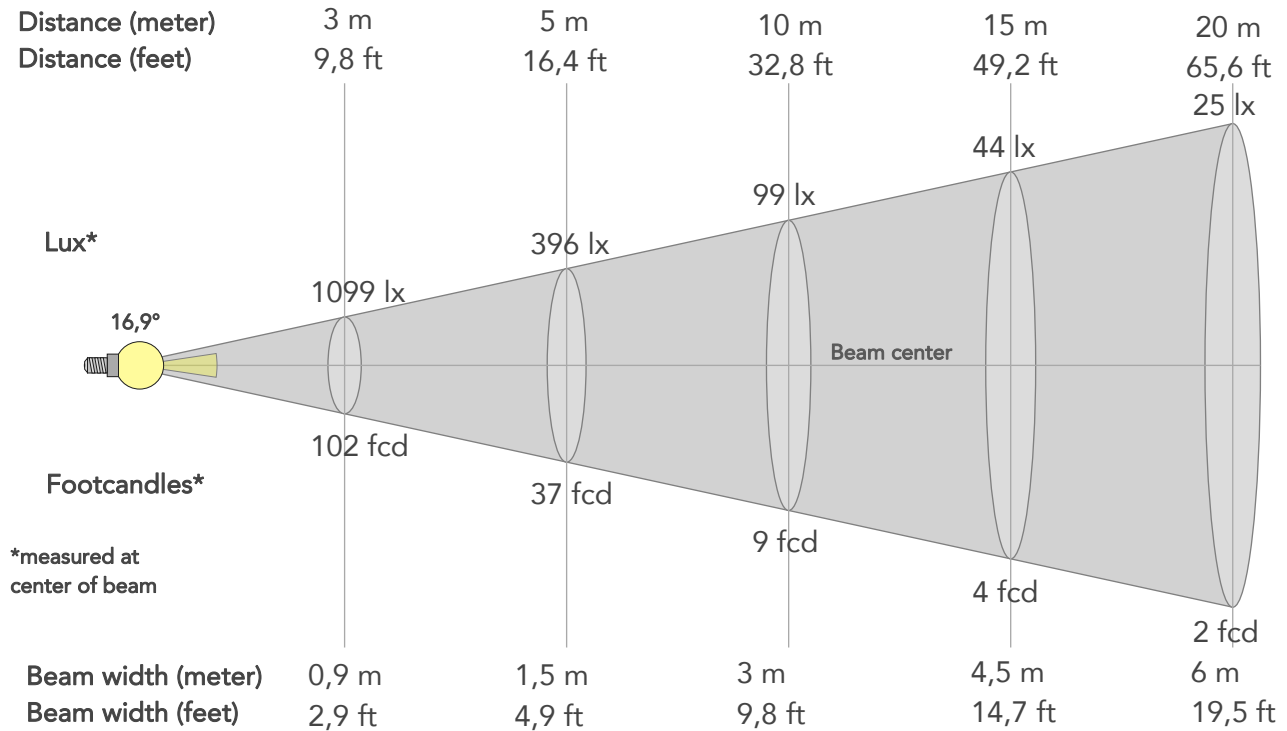
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	97	0%	0%
3	96	0%	0%
4	94	-3%	-3%
5	96	-2%	0%
6	97	0%	1%
7	93	-2%	3%
8	97	1%	2%
9	93	1%	4%
10	93	3%	4%
11	93	4%	3%
12	91	4%	-3%
13	92	1%	-7%
14	92	2%	-6%
15	93	-2%	0%
16	90	0%	-7%



# BEAM DETAILS



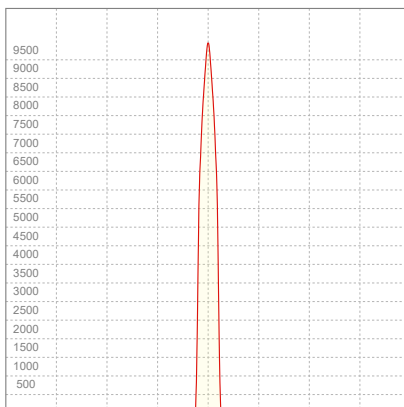
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,9°	21,1°	22,1°	99,4%	99,2%



## 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	9891lx	2473lx	1099lx	618lx	396lx	176lx	99lx	44lx	25lx	16lx	11lx	6lx	4lx
Footcand.	919fcd	230fcd	102fcd	57fcd	37fcd	16fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,5m	2,2m	3m	4,5m	6m	7,4m	8,9m	11,9m	14,9m
Beam wid.	1ft	2ft	2,9ft	3,9ft	4,9ft	7,3ft	9,8ft	14,7ft	19,5ft	24,4ft	29,3ft	39,1ft	48,9ft

## LINEAR DISTRIBUTION DIAGRAM

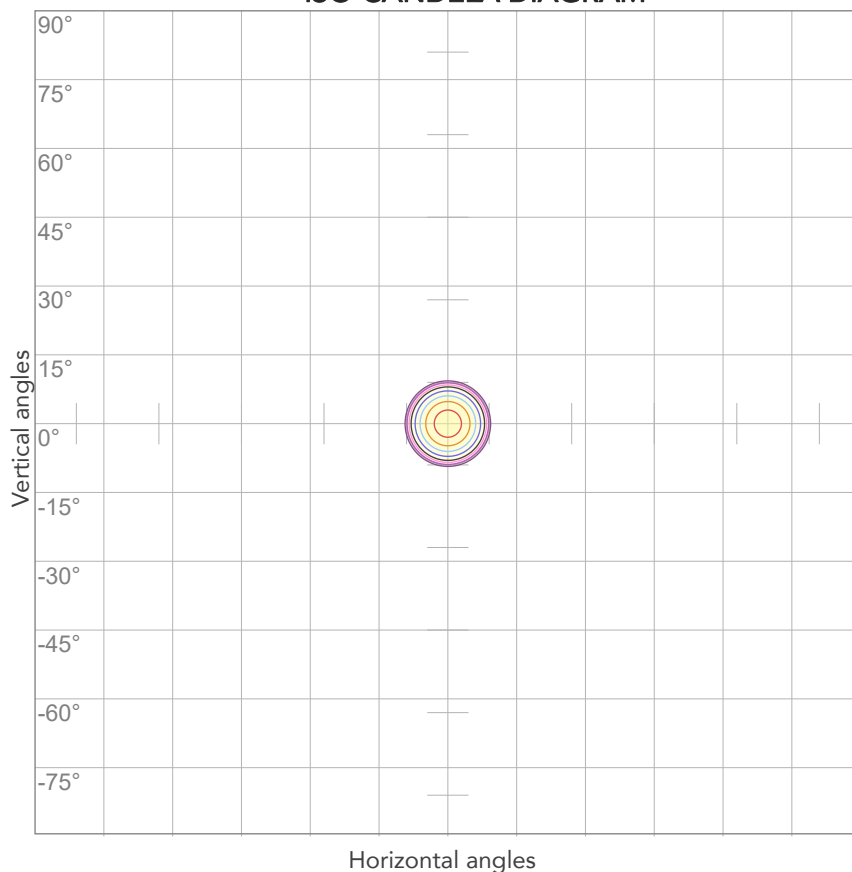


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
228V	0,144A	31,0W	0,95	20lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



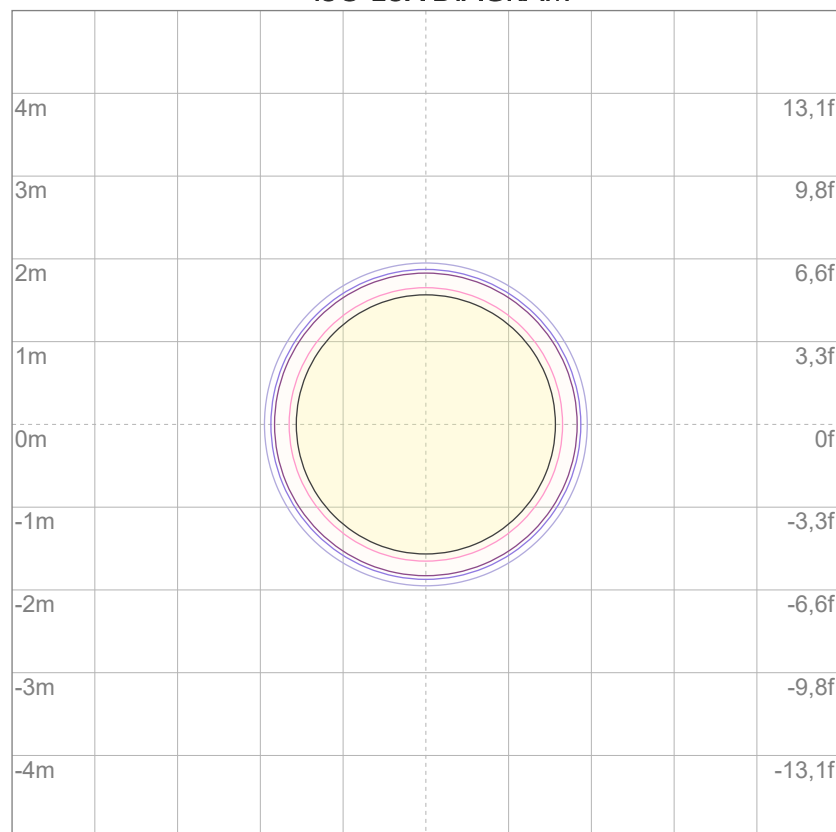
10%	989 cd
20%	1978 cd
30%	2967 cd
40%	3957 cd
50%	4946 cd
60%	5935 cd
70%	6924 cd
80%	7913 cd

### Conditions:

Number of c-planes: 2

Candela at center: 9891 cd

## ISO LUX DIAGRAM



3%	2,97 lx
5%	4,95 lx
10%	9,89 lx
30%	29,7 lx
50%	49,5 lx

### Conditions:

Number of c-planes: 2

Lux at center: 98,9 lx

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



Total lumen output:

855 lm

Peak candela output:

3872 cd

Light quality:

CRI: 95,5

Color temperature:

6791 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 2040 Max Zoom

Target:

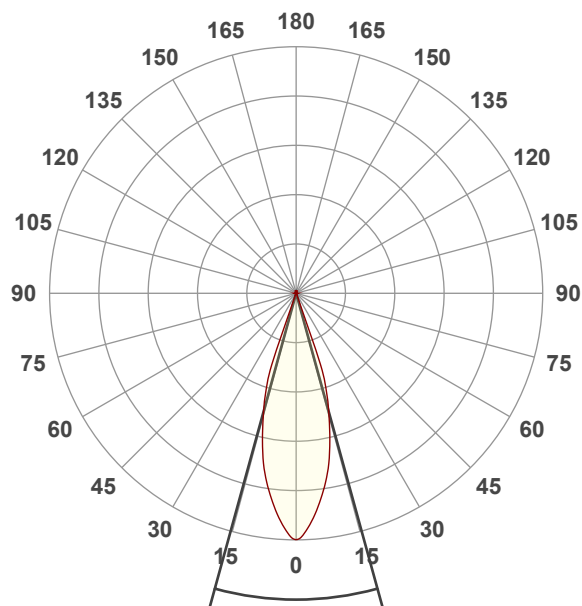
Cold White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 14:46:54

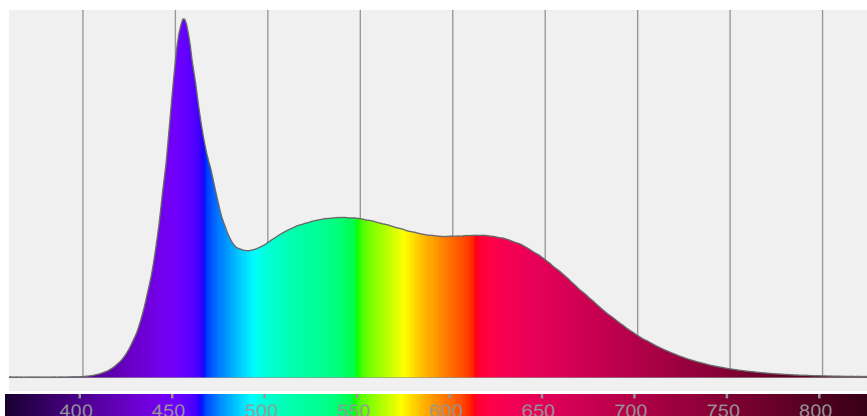


Beam angle 50%: 30,8°

Field angle 10%: 40,6°

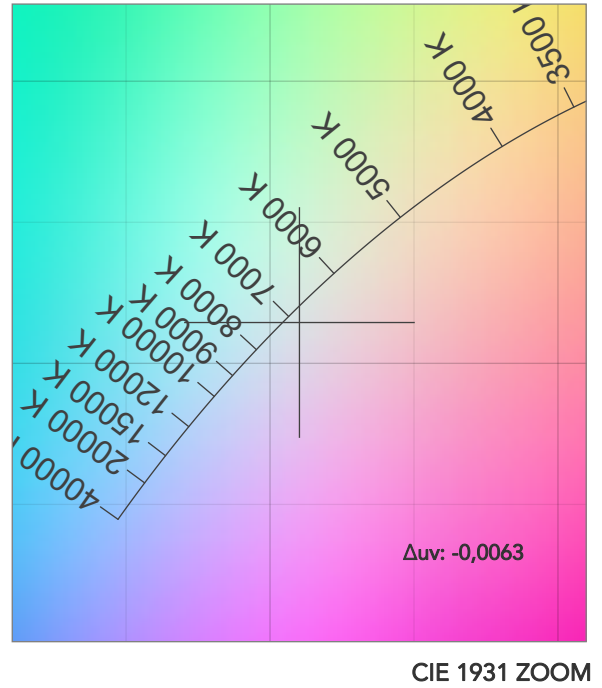
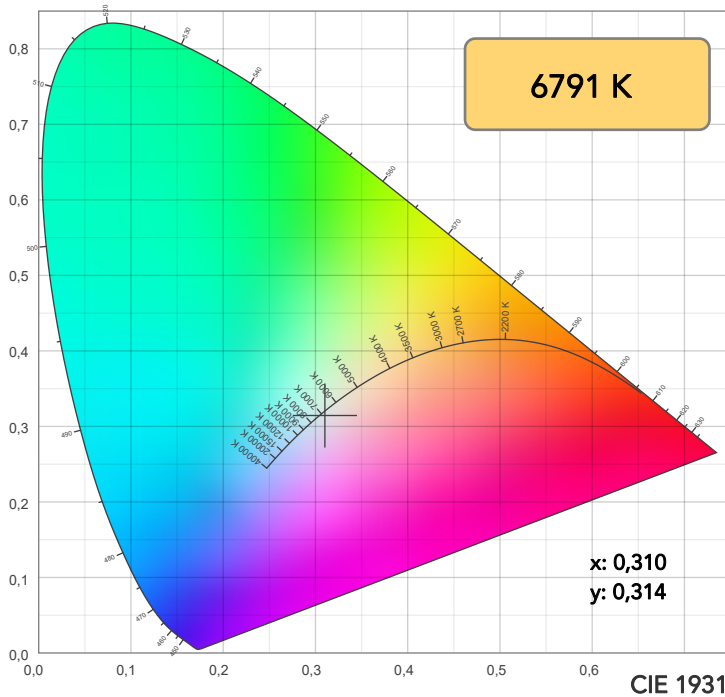
Cut off angle 2.5%: 41,7°

**Spectra**

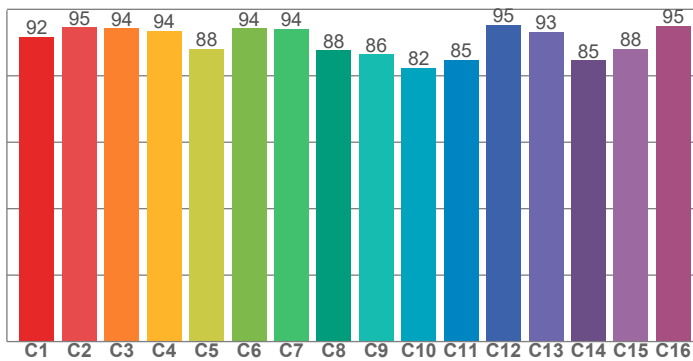




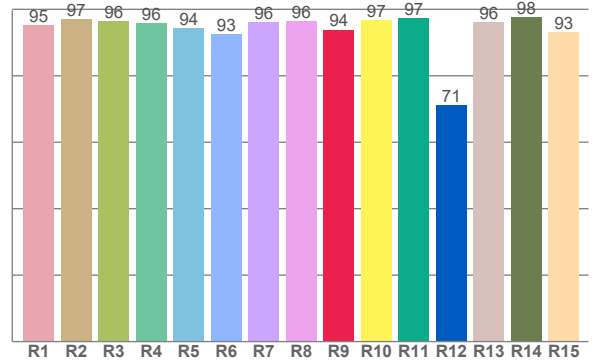
# COLOR DETAILS



TM30: 90,4



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
95,2	97,1	96,5	95,8	94,2	92,6	96,1	96,4	93,9	96,7	97,4	71,2	96,2	97,7	93,1

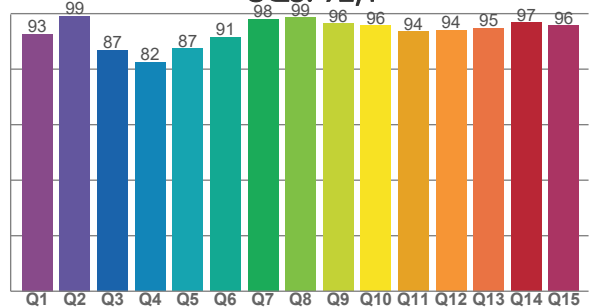
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,7	94,6	94,3	93,5	88,2	94,2	94,2	87,6	86,5	82,4	84,8	95,4	93,1	84,6	88,1	95,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,7	99,2	86,9	82,5	87,4	91,5	98,0	98,5	96,4	95,7	93,6	94,1	94,9	96,8	95,6

CQS: 92,1



## COLOR PARAMETERS

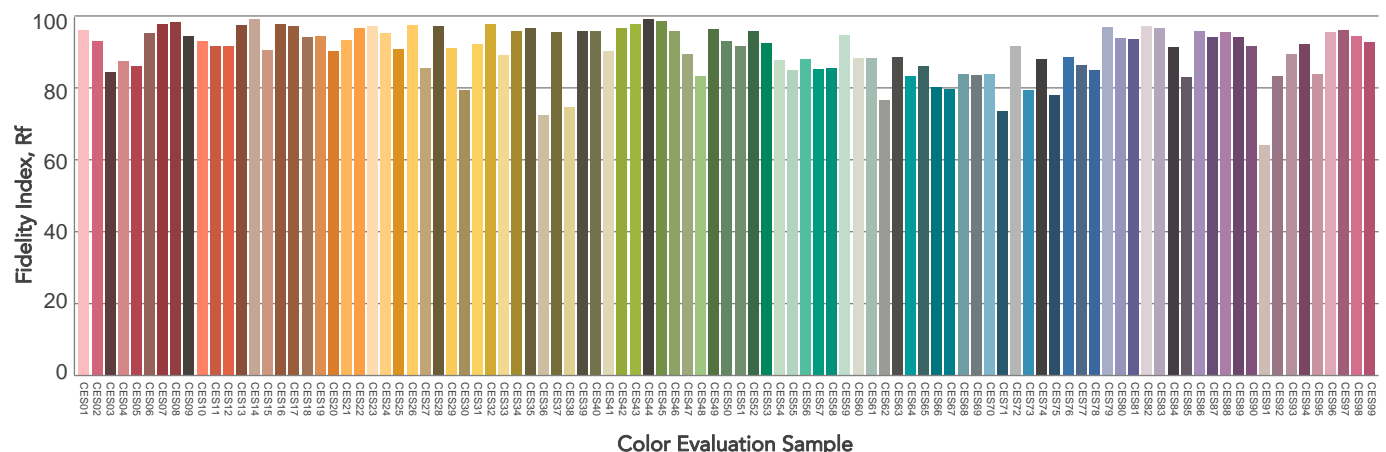
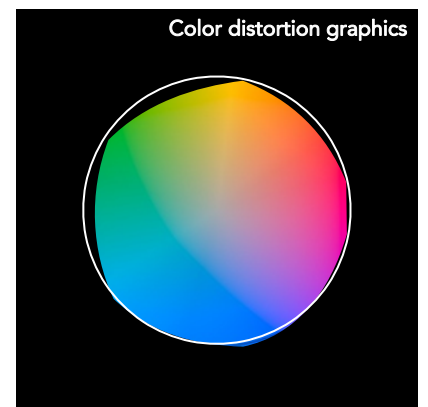
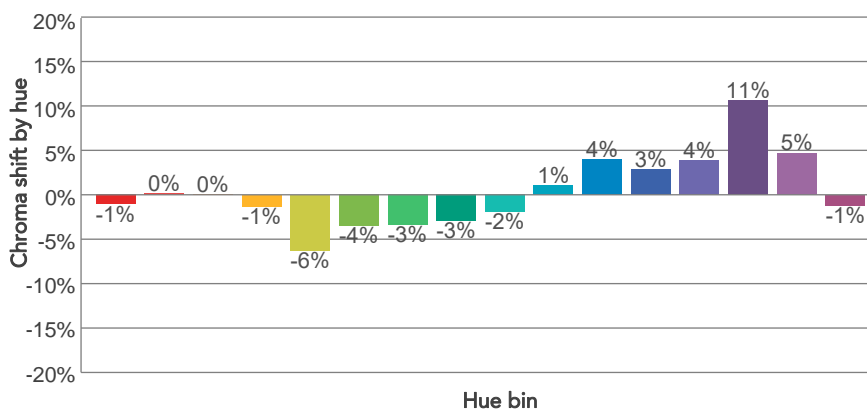
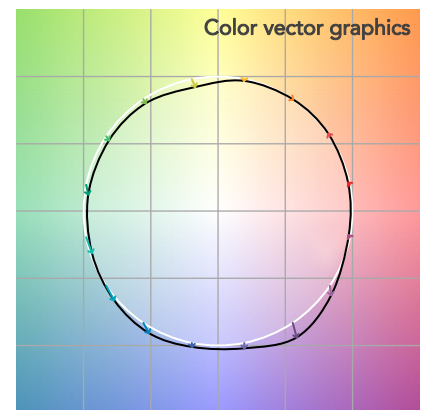
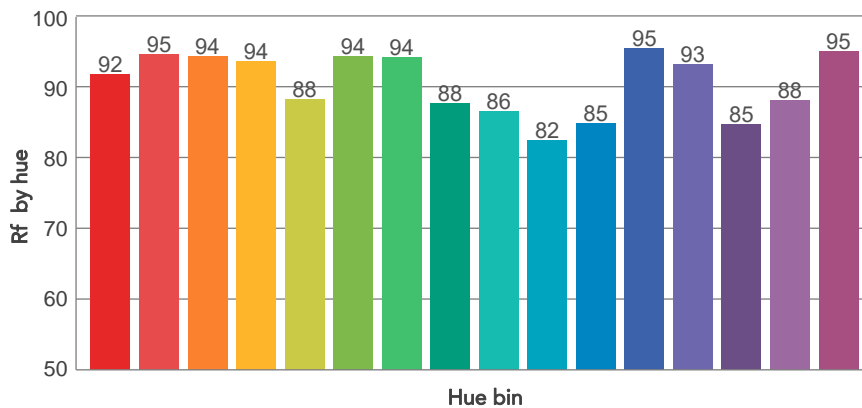
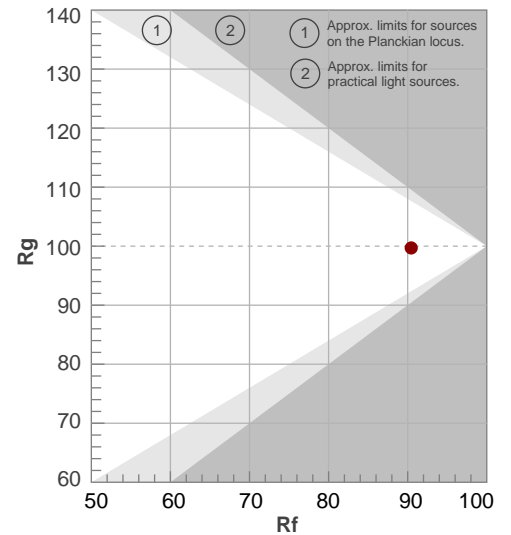
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
6791 K	95,5	93,9	90,4	99,7	92,1	96	0,310	0,314	-0,0063

# TM30 DETAILS

**Rf 90,4**  
Fidelity index Rf

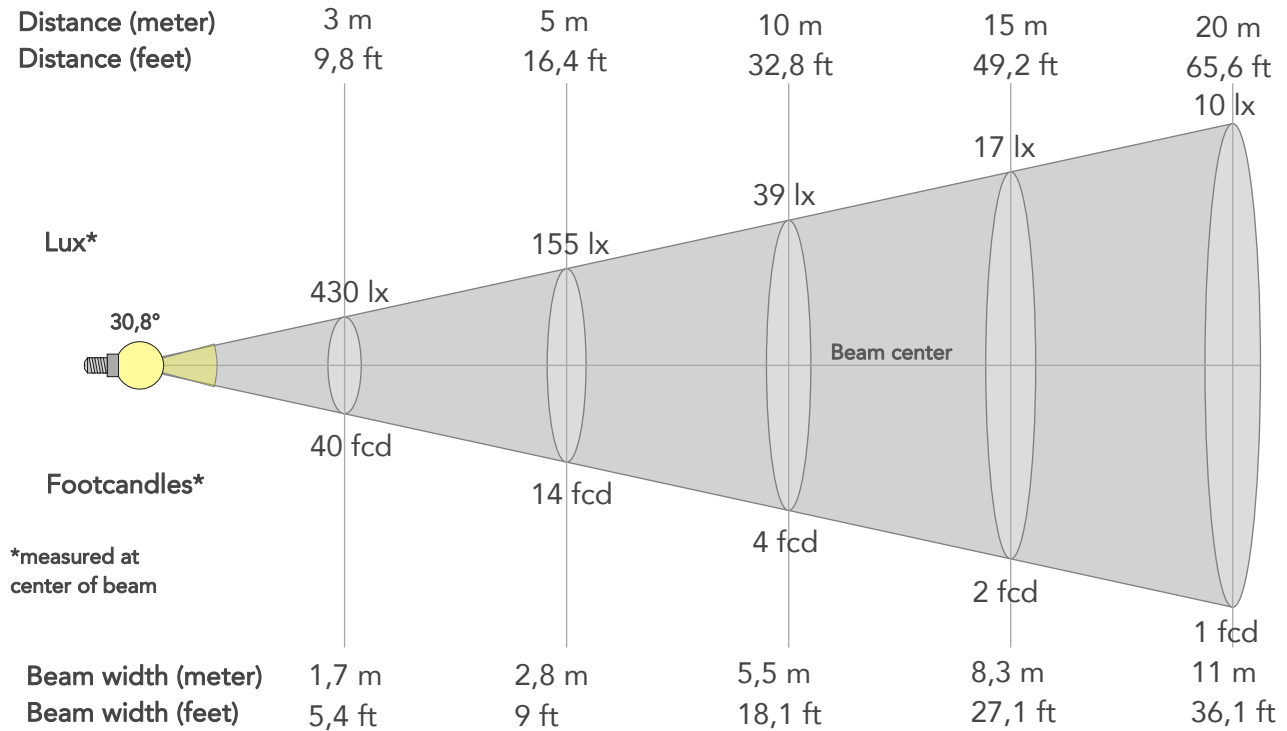
**Rg 99,7**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-1%	2%
2	95	0%	2%
3	94	0%	0%
4	94	-1%	0%
5	88	-6%	-1%
6	94	-4%	0%
7	94	-3%	1%
8	88	-3%	7%
9	86	-2%	12%
10	82	1%	12%
11	85	4%	8%
12	95	3%	1%
13	93	4%	-1%
14	85	11%	-4%
15	88	5%	-5%
16	95	-1%	1%



# BEAM DETAILS

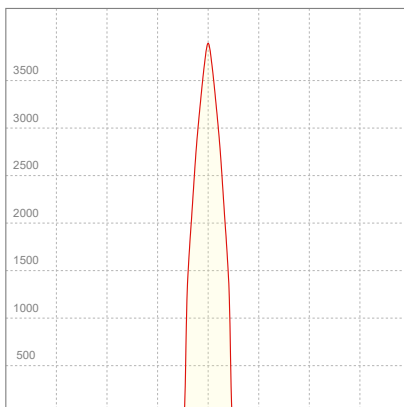
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,8°	40,6°	41,7°	99,6%	99,5%



## 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	3872lx	968lx	430lx	242lx	155lx	69lx	39lx	17lx	10lx	6lx	4lx	2lx	2lx
Footcand.	360fcd	90fcd	40fcd	22fcd	14fcd	6fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,1m	1,7m	2,2m	2,8m	4,1m	5,5m	8,3m	11m	13,8m	16,5m	22m	27,5m
Beam wid.	1,8ft	3,6ft	5,4ft	7,2ft	9ft	13,5ft	18,1ft	27,1ft	36,1ft	45,2ft	54,2ft	72,2ft	90,3ft

## LINEAR DISTRIBUTION DIAGRAM

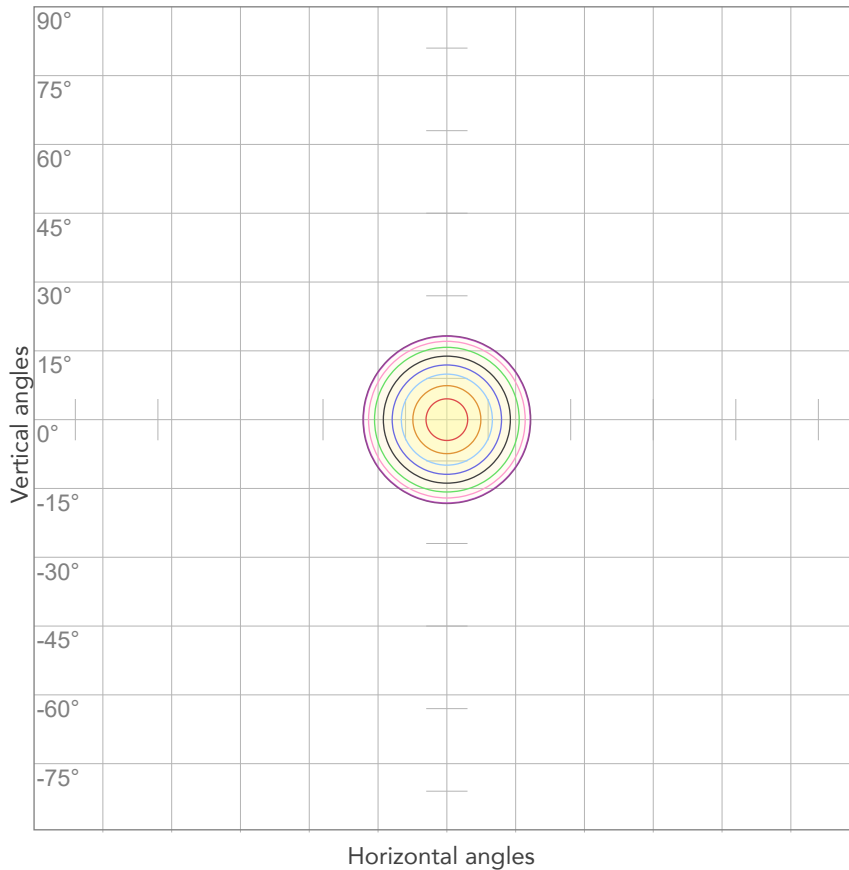


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
229V	0,145A	31,5W	0,95	27lm/W

# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



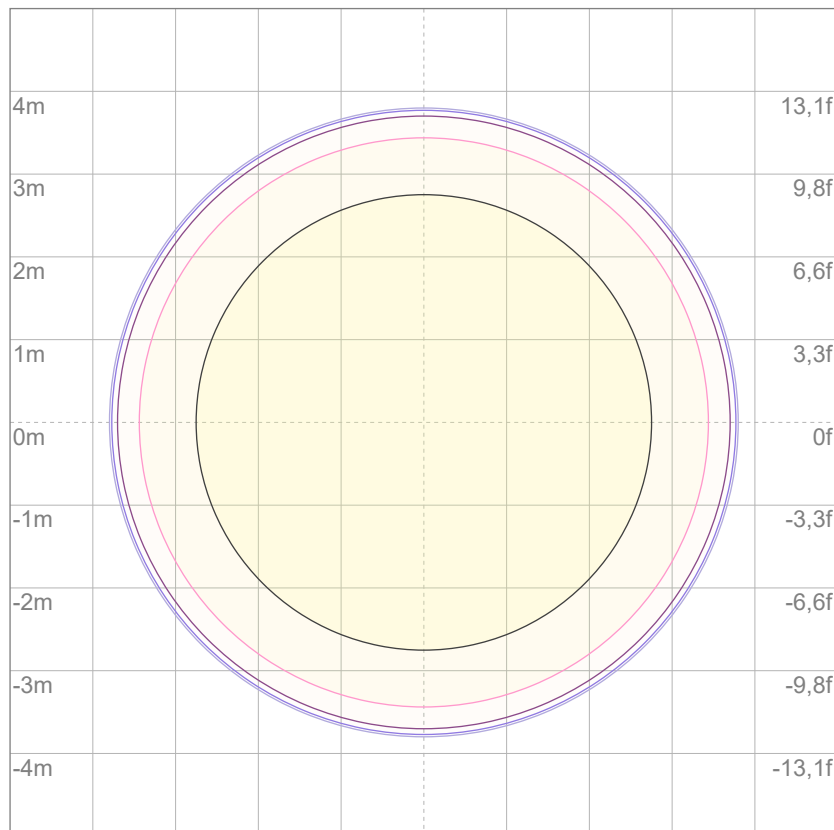
10%	387 cd
20%	774 cd
30%	1161 cd
40%	1549 cd
50%	1936 cd
60%	2323 cd
70%	2710 cd
80%	3097 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3872 cd

## ISO LUX DIAGRAM



3%	1,16 lx
5%	1,94 lx
10%	3,87 lx
30%	11,6 lx
50%	19,4 lx

### Conditions:

Number of c-planes: 2

Lux at center: 38,7 lx

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



Total lumen output:

875 lm

Peak candela output:

13995 cd

Light quality:

CRI: 95,3

Color temperature:

6811 K

**PRODUCT NAME:**

ECLDISPLAY VW

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 2040 Min Zoom

Target:

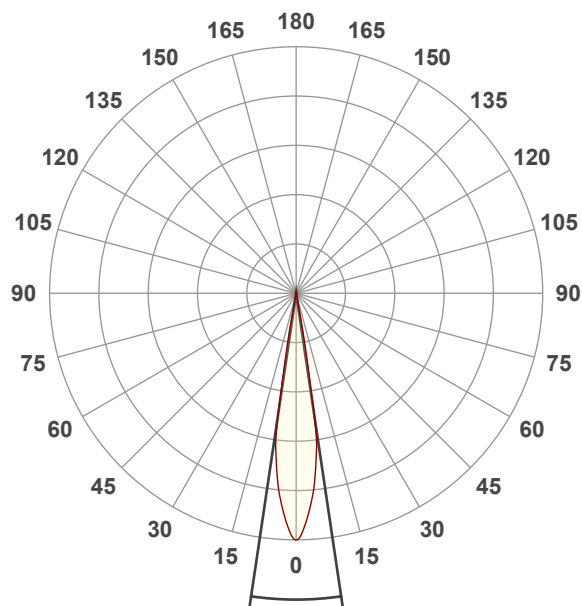
Cold White

Operator:

Giacomo Matteo

Date and time:

17/06/2024 14:57:01

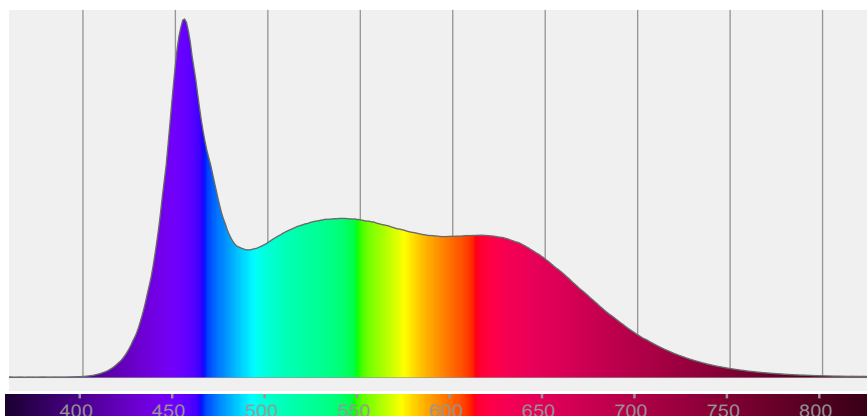


Beam angle 50%: 16,9°

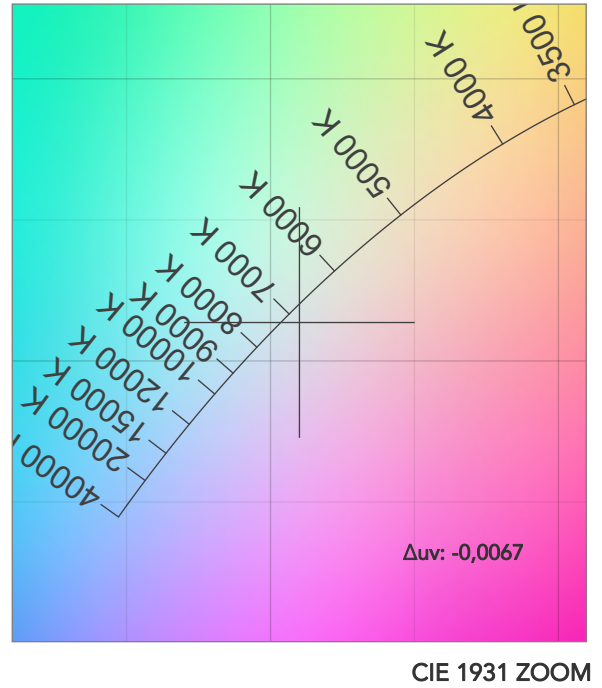
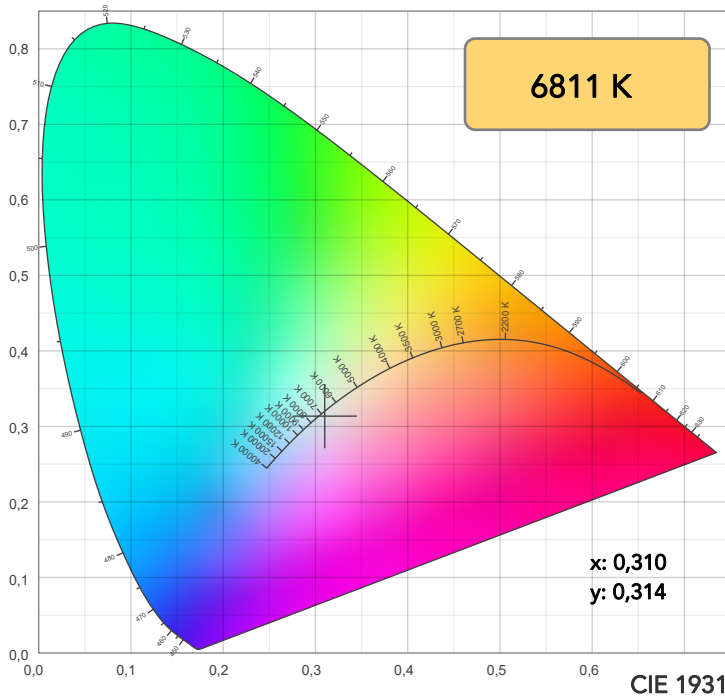
Field angle 10%: 21,1°

Cut off angle 2.5%: 22,1°

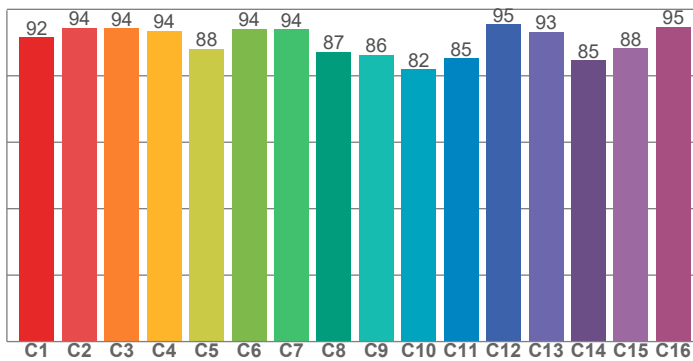
**Spectra**



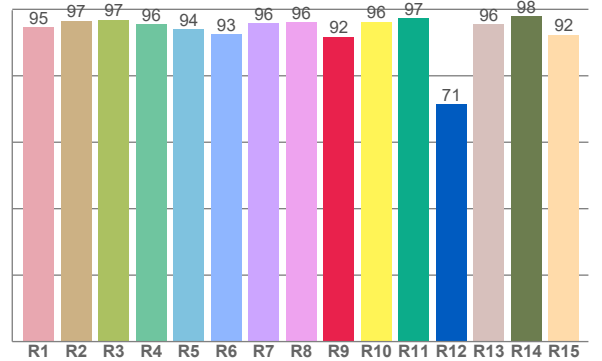
## COLOR DETAILS



TM30: 90,4



CRI: 95,3 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
94,7	96,6	96,8	95,5	93,9	92,5	95,9	96,0	91,8	96,2	97,3	71,4	95,5	97,9	92,4

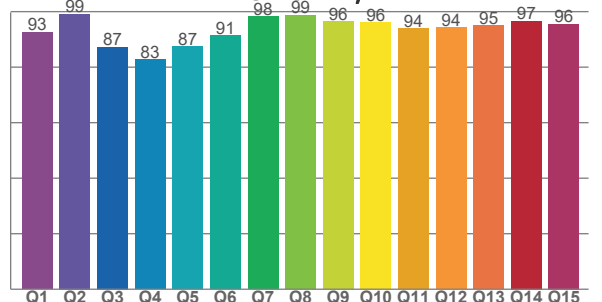
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,6	94,4	94,3	93,6	88,0	94,0	94,0	87,2	86,3	82,0	85,2	95,5	93,2	84,6	88,2	94,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,6	99,1	87,2	82,7	87,4	91,4	98,2	98,7	96,4	96,0	93,9	94,3	94,9	96,6	95,5

CQS: 92,2



## COLOR PARAMETERS

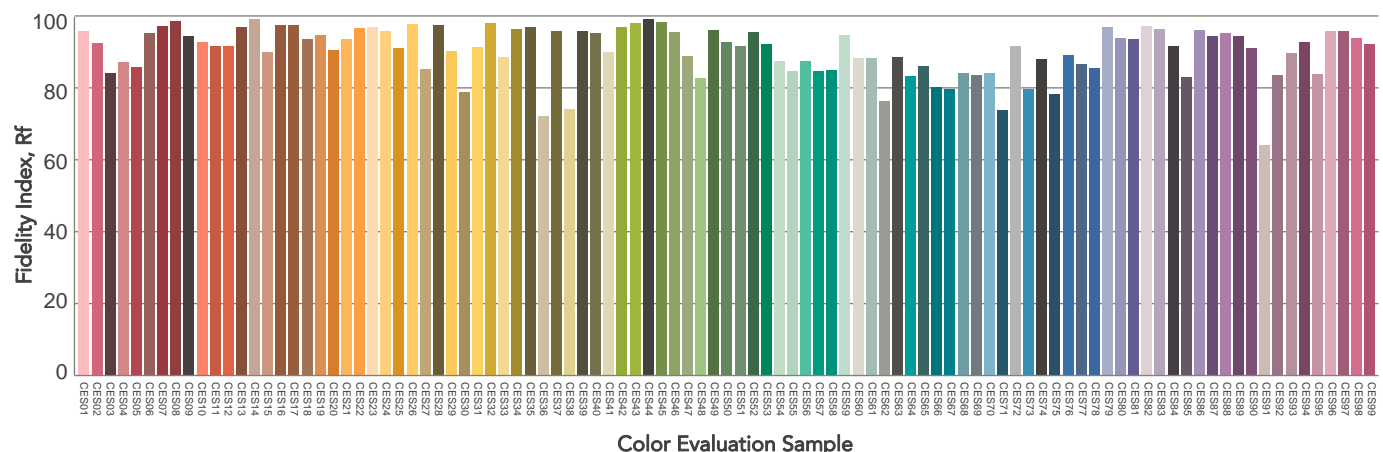
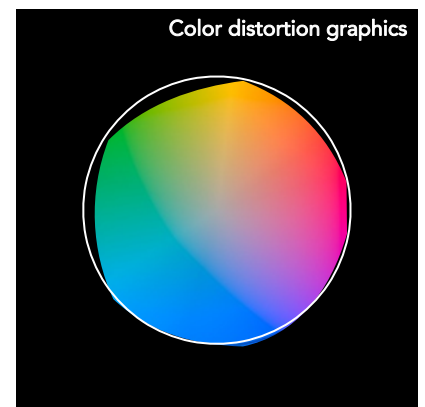
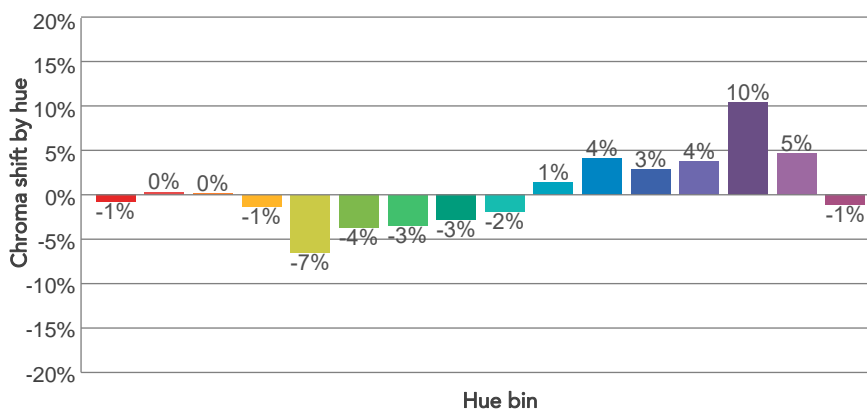
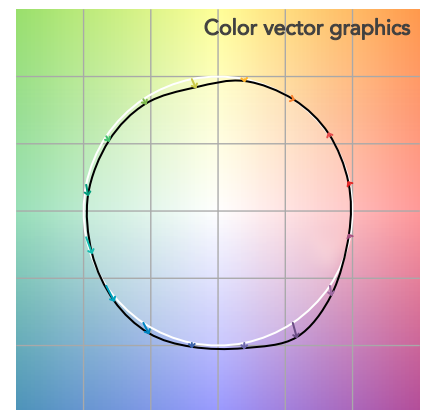
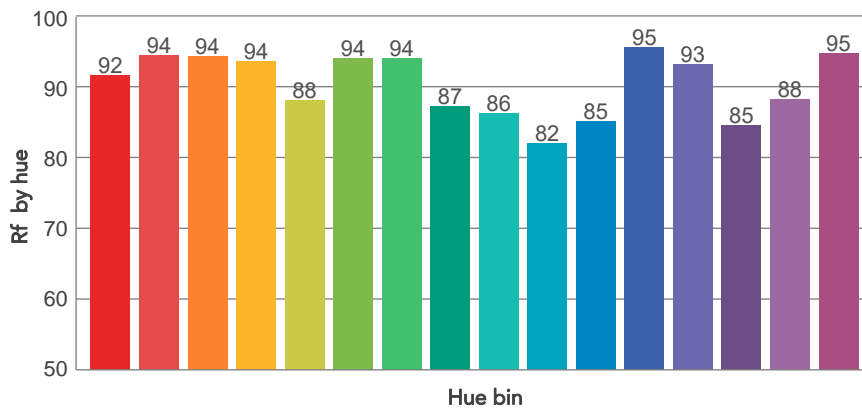
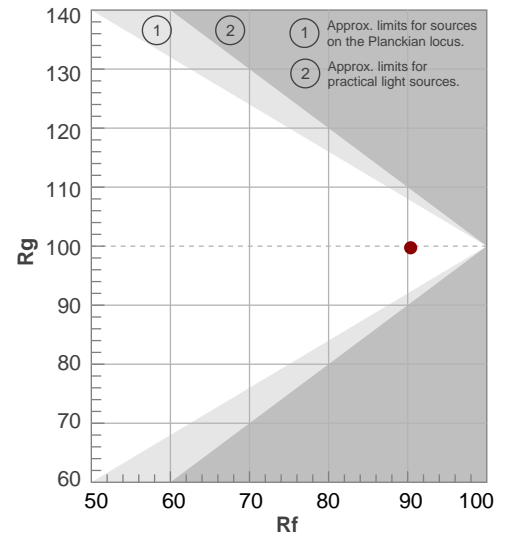
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
6811 K	95,3	91,8	90,4	99,7	92,2	96	0,310	0,314	-0,0067

# TM30 DETAILS

**Rf 90,4**  
Fidelity index Rf

**Rg 99,7**  
Gammut index

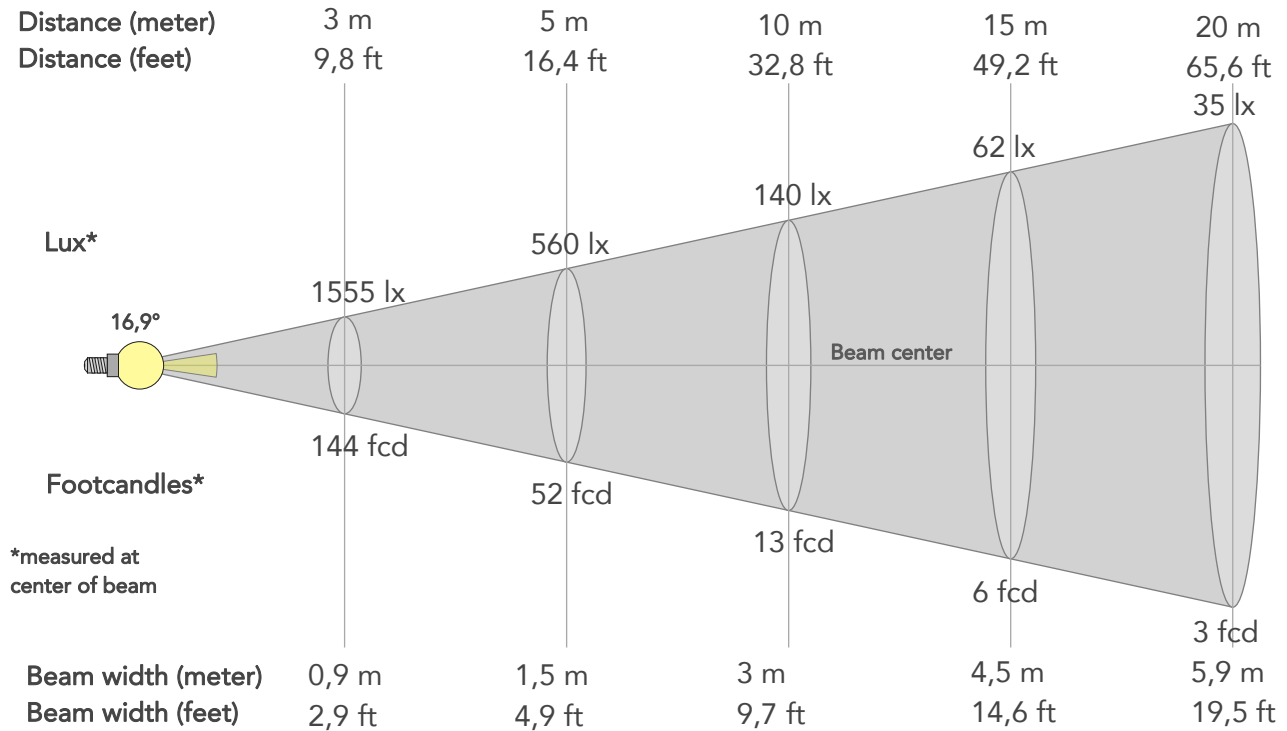
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-1%	2%
2	94	0%	2%
3	94	0%	-1%
4	94	-1%	0%
5	88	-7%	-2%
6	94	-4%	0%
7	94	-3%	2%
8	87	-3%	7%
9	86	-2%	12%
10	82	1%	12%
11	85	4%	7%
12	95	3%	1%
13	93	4%	-1%
14	85	10%	-3%
15	88	5%	-5%
16	95	-1%	2%



# BEAM DETAILS



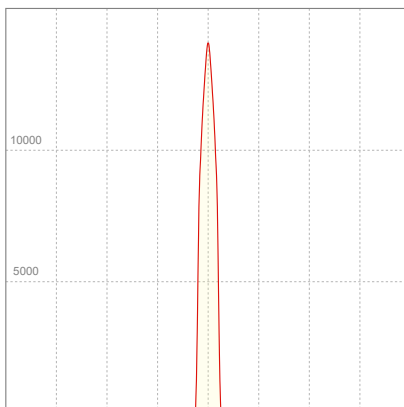
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,9°	21,1°	22,1°	99,5%	99,3%



## 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	13995lx	3499lx	1555lx	875lx	560lx	249lx	140lx	62lx	35lx	22lx	16lx	9lx	6lx
Footcand.	1300fcd	325fcd	144fcd	81fcd	52fcd	23fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,5m	2,2m	3m	4,5m	5,9m	7,4m	8,9m	11,9m	14,9m
Beam wid.	1ft	2ft	2,9ft	3,9ft	4,9ft	7,3ft	9,7ft	14,6ft	19,5ft	24,4ft	29,2ft	39ft	48,7ft

## LINEAR DISTRIBUTION DIAGRAM



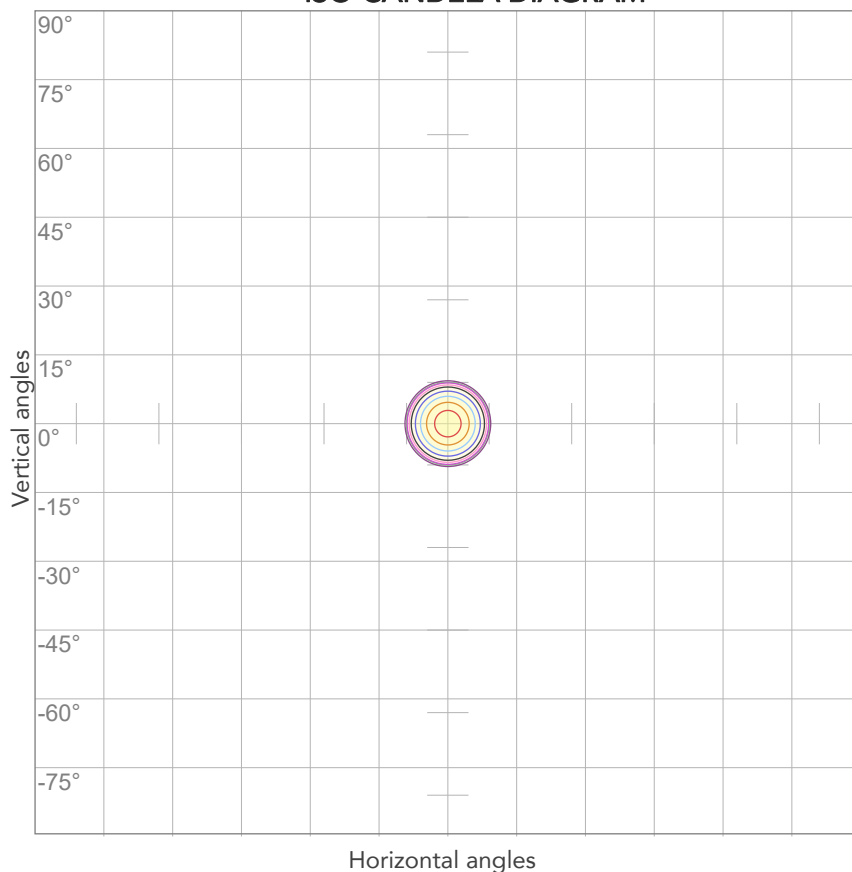
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
228V	0,145A	31,4W	0,95	28lm/W



# ISO DIAGRAMS

## ISO CANDELA DIAGRAM



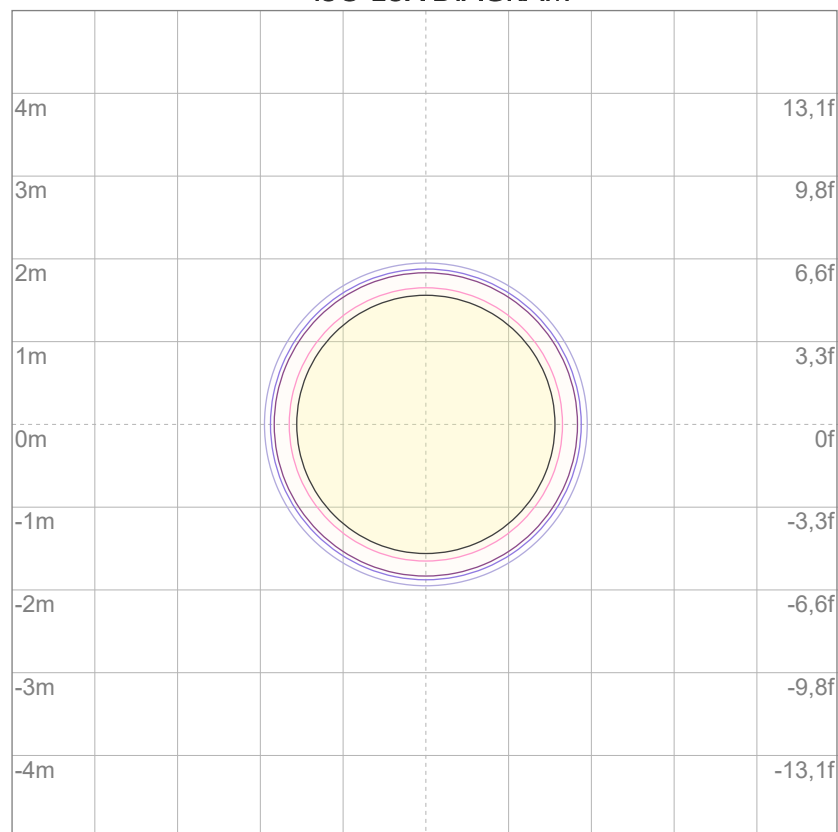
10%	1399 cd
20%	2799 cd
30%	4198 cd
40%	5598 cd
50%	6997 cd
60%	8397 cd
70%	9796 cd
80%	11196 cd

### Conditions:

Number of c-planes: 2

Candela at center: 13995 cd

## ISO LUX DIAGRAM



3%	4,20 lx
5%	7,00 lx
10%	14,0 lx
30%	42,0 lx
50%	70,0 lx

### Conditions:

Number of c-planes: 2

Lux at center: 140 lx

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