

# Photometric Test Report



## ECLMINI (DAT/CC)

PROFILE LENS 19°,26°,36°,50°

18W 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:

1101 lm

Peak candela output:

14533 cd

Light quality:

CRI: 92,8

Color temperature:

2834 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 19°

Target:

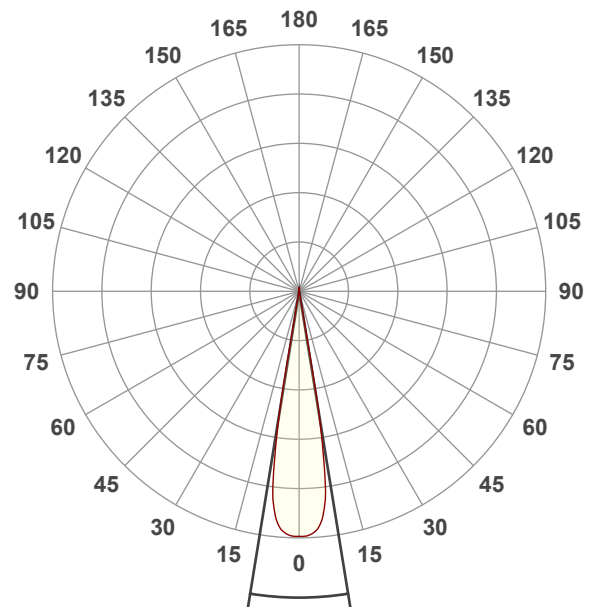
2700K

Operator:

Paolo Carvone

Date and time:

27/07/2022 14:14:01

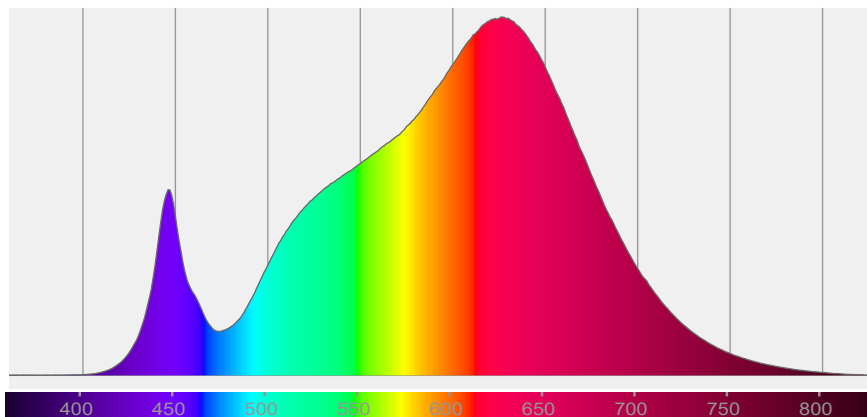


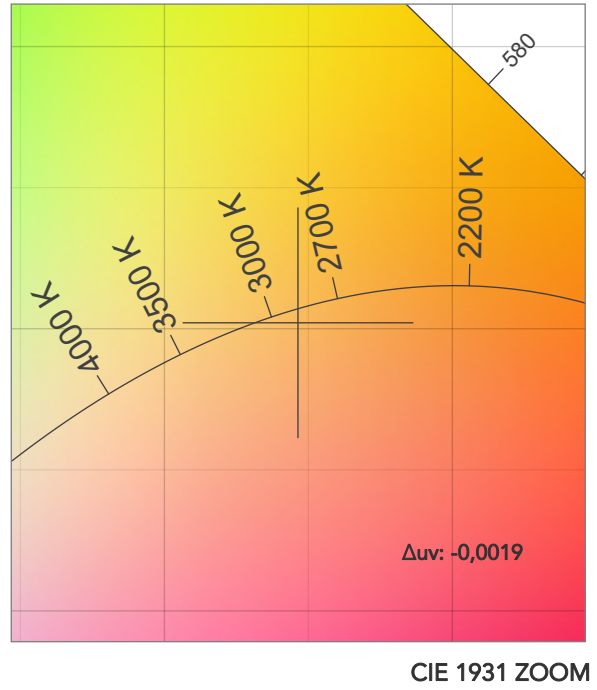
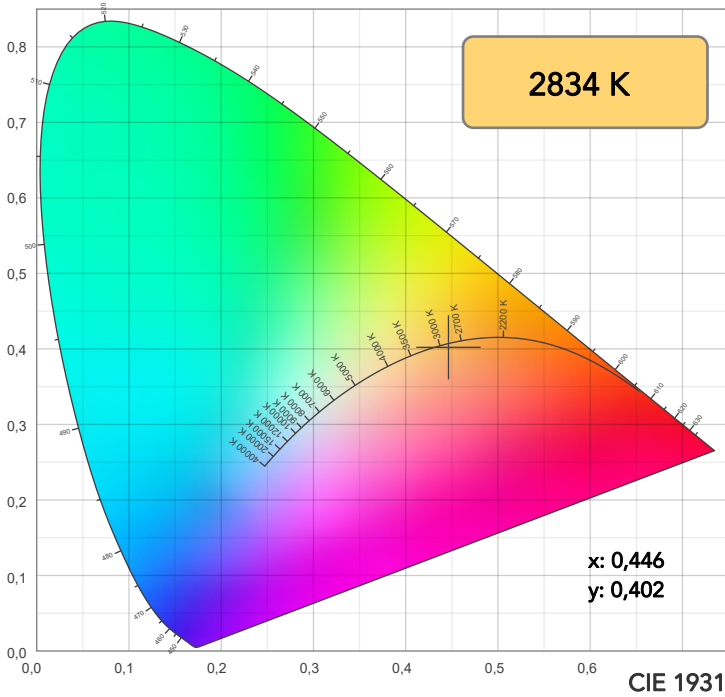
Beam angle 50%: 18,4°

Field angle 10%: 21°

Cut off angle 2.5%: 21,8°

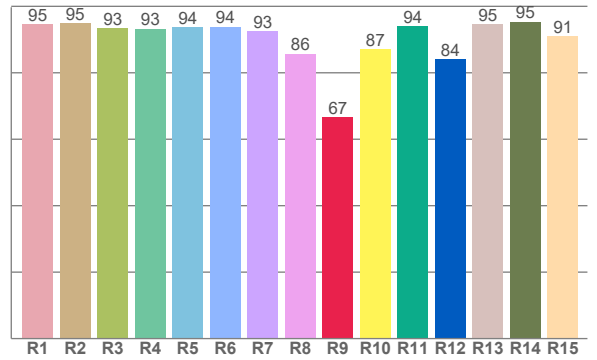
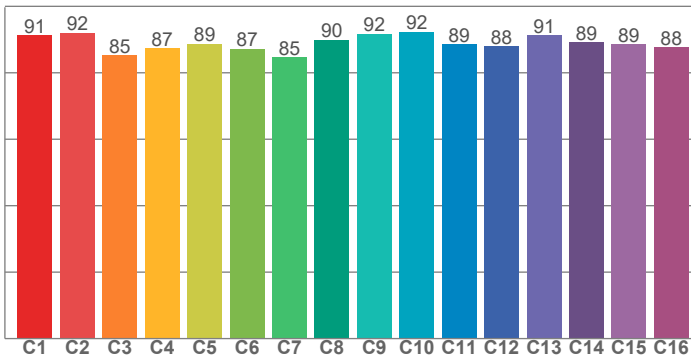
Spectra





TM30: 89,2

CRI: 92,8 (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
94,6	94,9	93,5	93,3	93,7	93,9	92,6	85,7	66,6	87,1	94,1	84,1	94,6	95,4	91,0

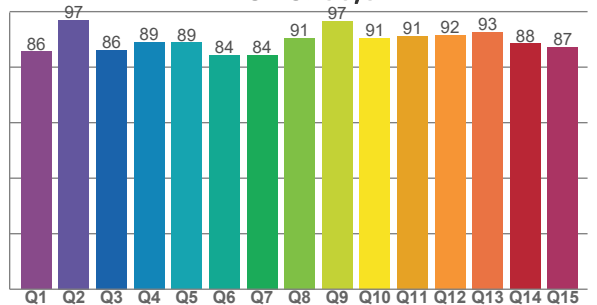
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,2	92,0	85,2	87,4	88,7	87,2	84,6	90,0	91,8	92,4	88,5	88,0	91,3	89,2	88,6	87,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85,6	97,0	86,2	89,1	88,9	84,3	84,5	90,6	96,5	90,5	91,2	91,6	92,7	88,5	87,1

CQS: 88,8



COLOR PARAMETERS

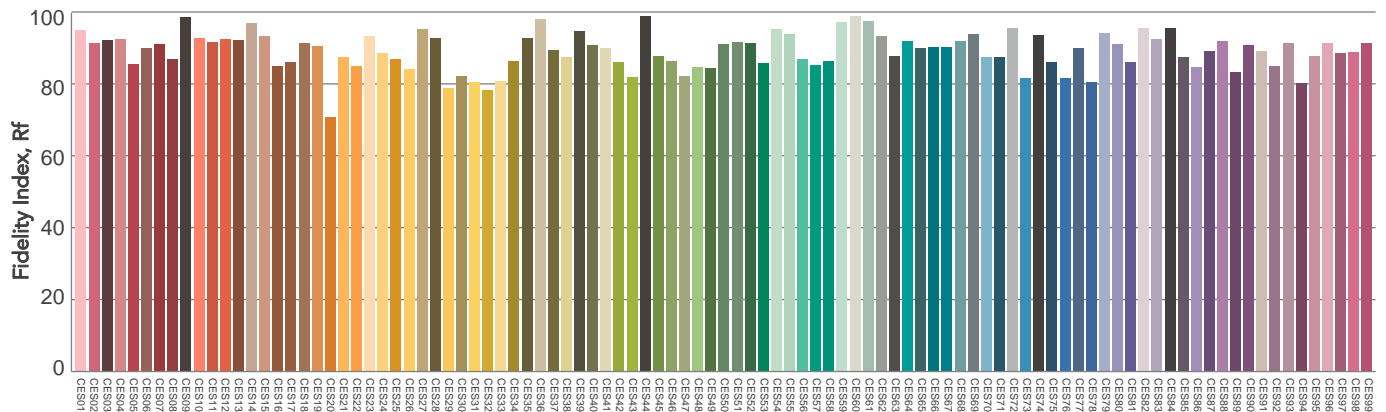
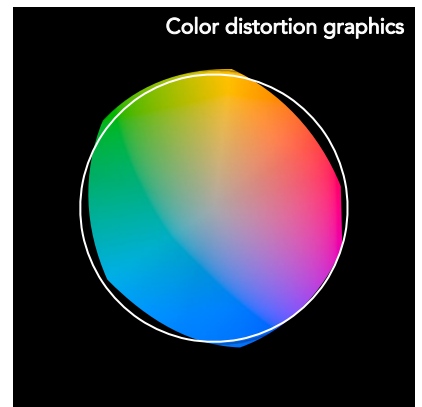
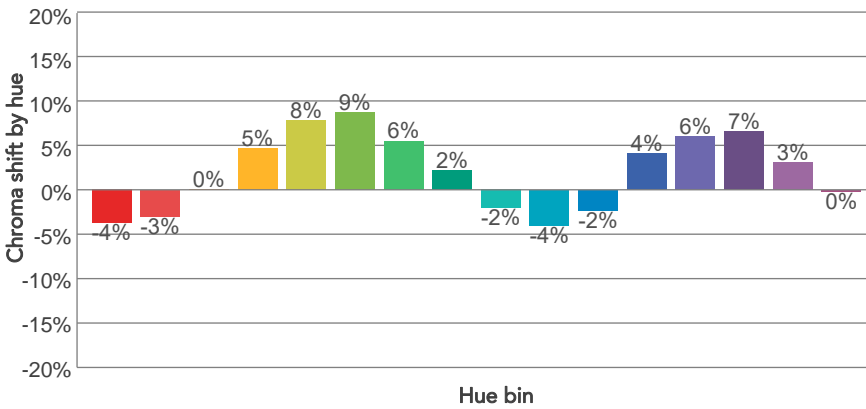
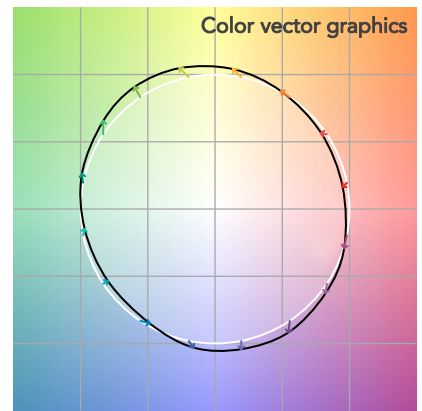
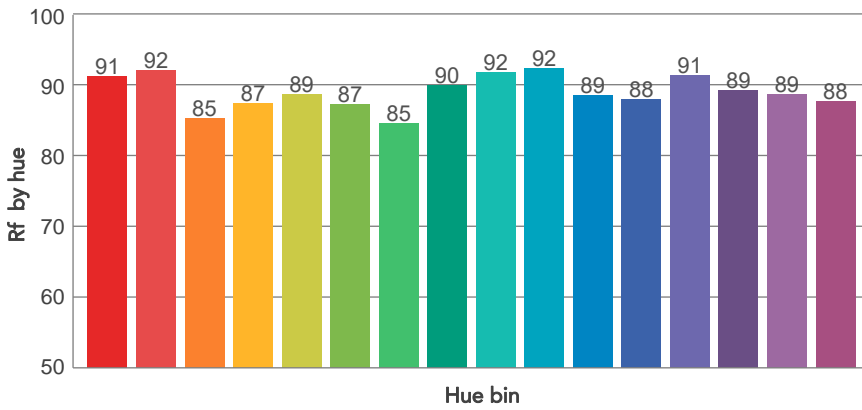
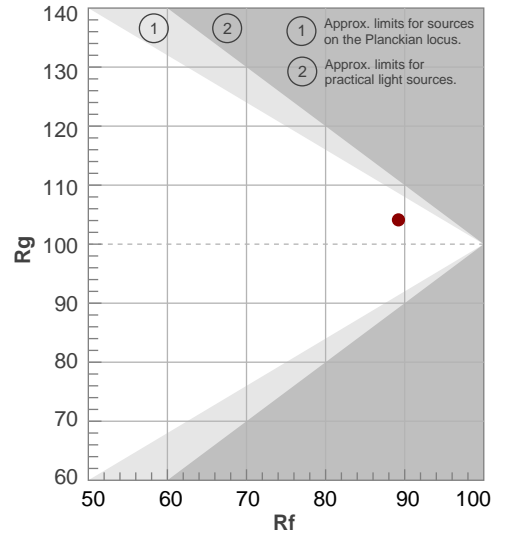
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2834 K	92,8	66,6	89,2	104,1	88,8	83	0,446	0,402	-0,0019

# TM30 DETAILS

**Rf 89,2**  
Fidelity index Rf

**Rg 104,1**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	92	-3%	3%
3	85	0%	8%
4	87	5%	7%
5	89	8%	6%
6	87	9%	-1%
7	85	6%	-8%
8	90	2%	-6%
9	92	-2%	-4%
10	92	-4%	0%
11	89	-2%	7%
12	88	4%	4%
13	91	6%	-1%
14	89	7%	-6%
15	89	3%	-6%
16	88	0%	-10%

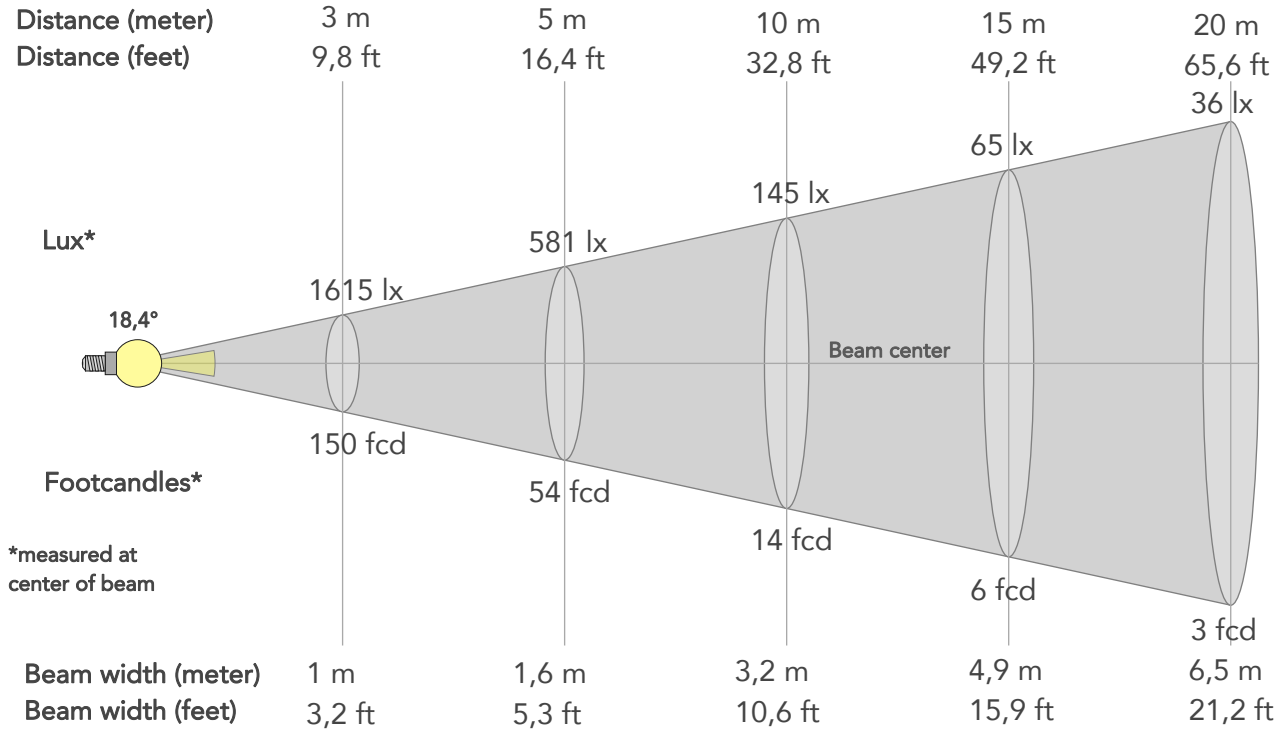


Color Evaluation Sample

# BEAM DETAILS



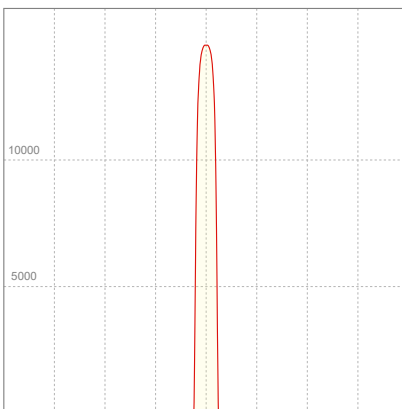
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,4°	21°	21,8°	100,0%	100,0%



## 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	14533lx	3633lx	1615lx	908lx	581lx	258lx	145lx	65lx	36lx	23lx	16lx	9lx	6lx
Footcand.	1350fcd	338fcd	150fcd	84fcd	54fcd	24fcd	14fcd	6fcd	3fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	1m	1,3m	1,6m	2,4m	3,2m	4,9m	6,5m	8,1m	9,7m	13m	16,2m
Beam wid.	1,1ft	2,1ft	3,2ft	4,2ft	5,3ft	8ft	10,6ft	15,9ft	21,2ft	26,6ft	31,9ft	42,5ft	53,1ft

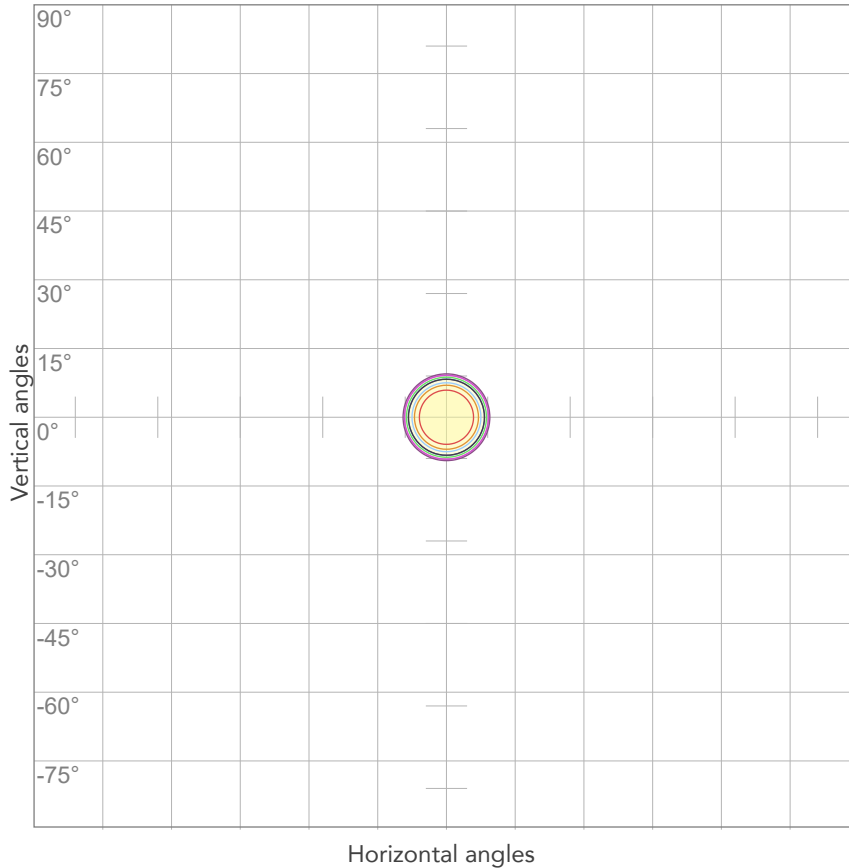
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,102A	20,6W	53lm/W
Power Fc			
0.9			

## ISO CANDELA DIAGRAM



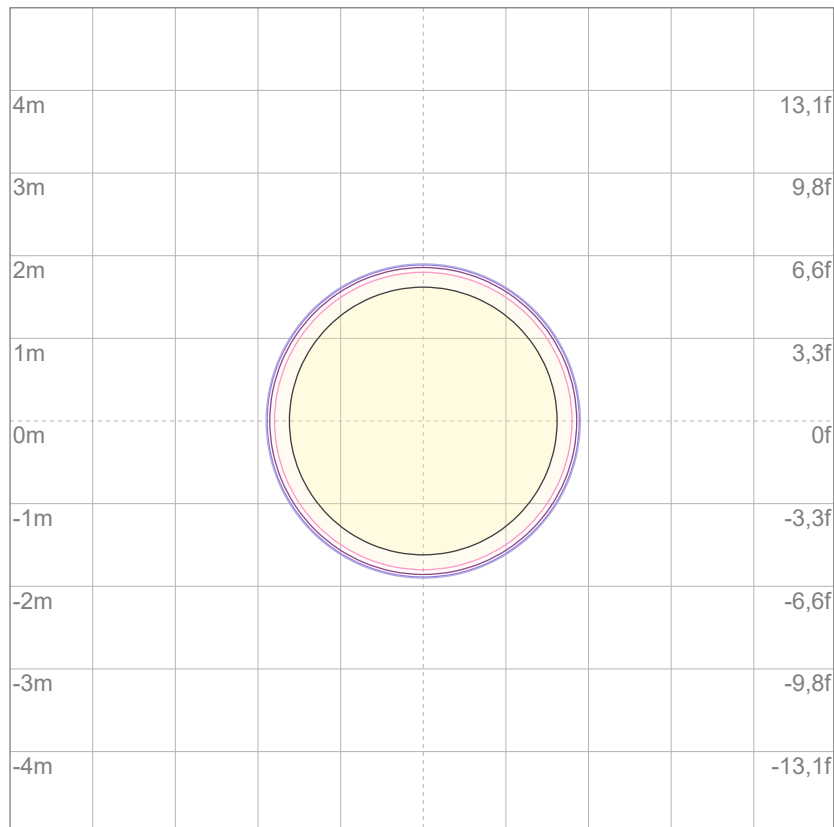
10%	1453 cd
20%	2907 cd
30%	4360 cd
40%	5813 cd
50%	7266 cd
60%	8720 cd
70%	10173 cd
80%	11626 cd

Conditions:

Number of c-planes: 2

Candela at center: 14533 cd

## ISO LUX DIAGRAM



3%	4,36 lx
5%	7,27 lx
10%	14,5 lx
30%	43,6 lx
50%	72,7 lx

Conditions:

Number of c-planes: 2

Lux at center: 145 lx

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

Mounting height: 10 meters (33 feet)





Total lumen output:

1116 lm

Peak candela output:

8324 cd

Light quality:

CRI: 92,6

Color temperature:

2829 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 26°

Target:

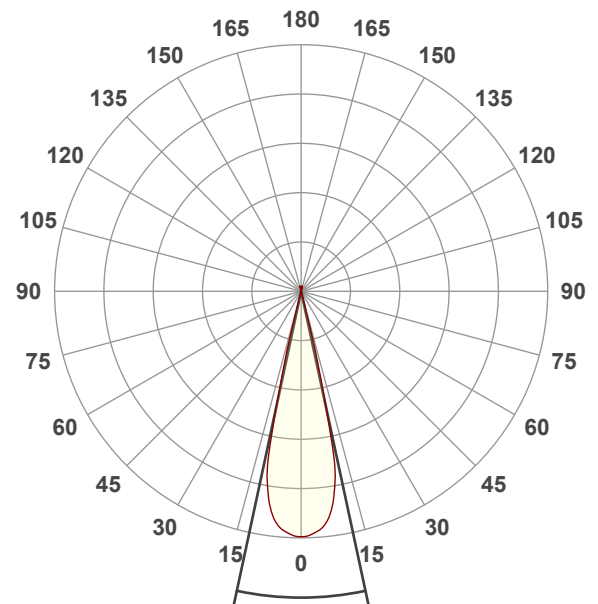
2700K

Operator:

Paolo Carvone

Date and time:

27/07/2022 14:19:42

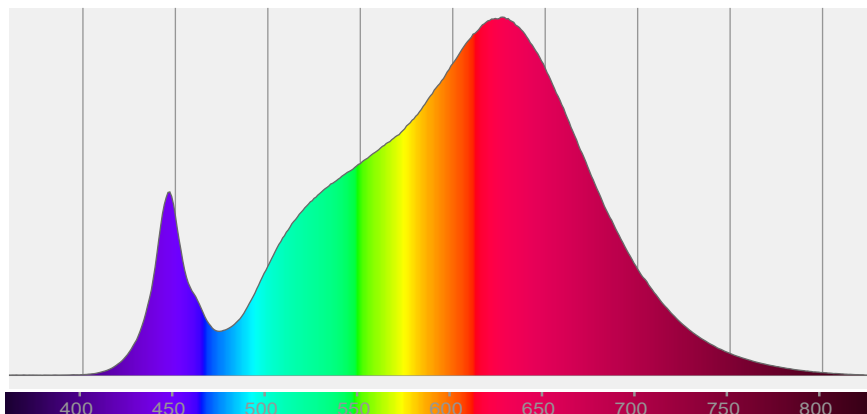


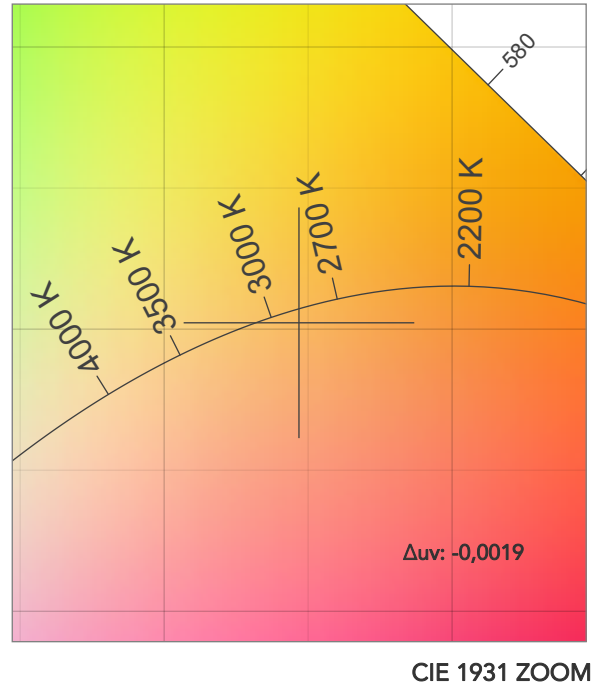
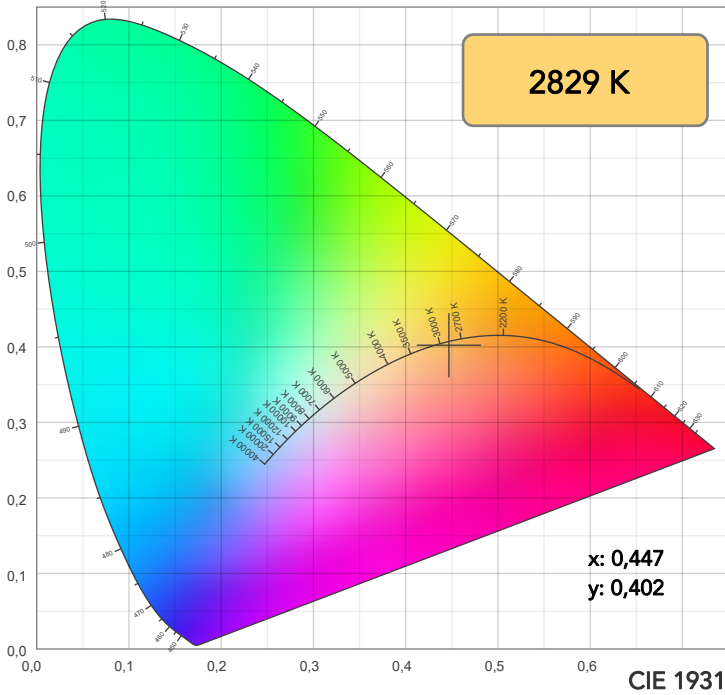
Beam angle 50%: 24,2°

Field angle 10%: 29°

Cut off angle 2.5%: 30,1°

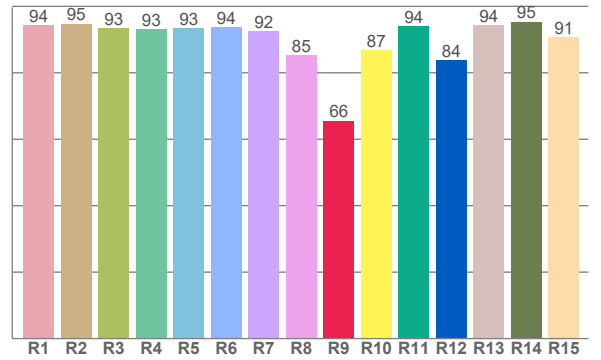
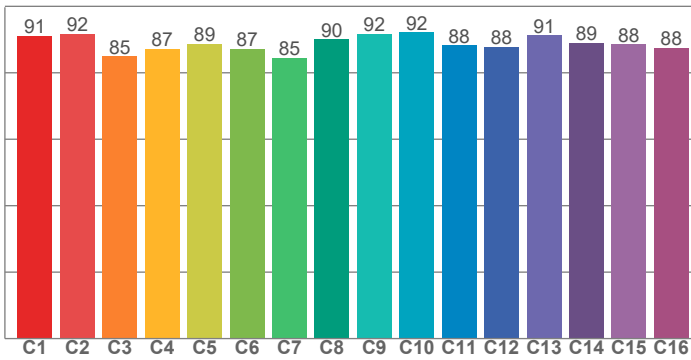
Spectra





TM30: 89,1

CRI: 92,6 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
94,3	94,8	93,5	93,2	93,4	93,7	92,4	85,2	65,6	86,7	94,0	83,7	94,3	95,3	90,7

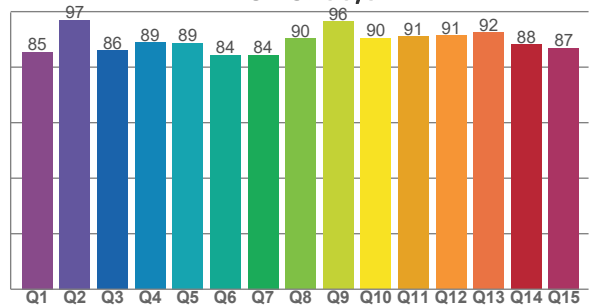
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,1	91,8	85,0	87,3	88,6	87,2	84,6	90,0	91,8	92,2	88,3	87,9	91,2	89,0	88,5	87,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85,4	97,0	85,9	88,8	88,8	84,3	84,3	90,4	96,5	90,4	91,0	91,4	92,4	88,1	86,9

CQS: 88,6



COLOR PARAMETERS

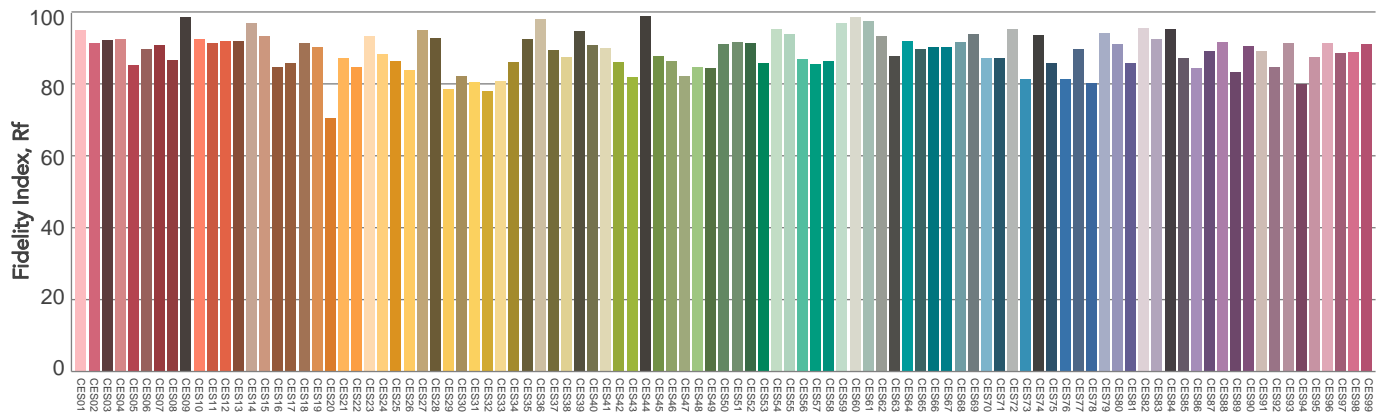
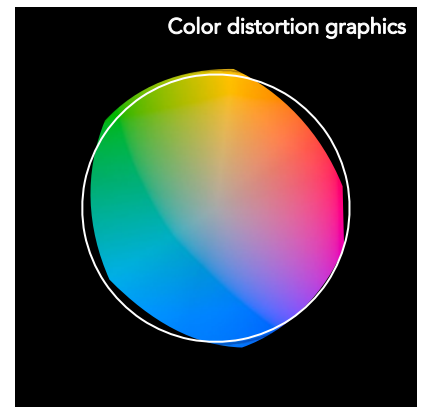
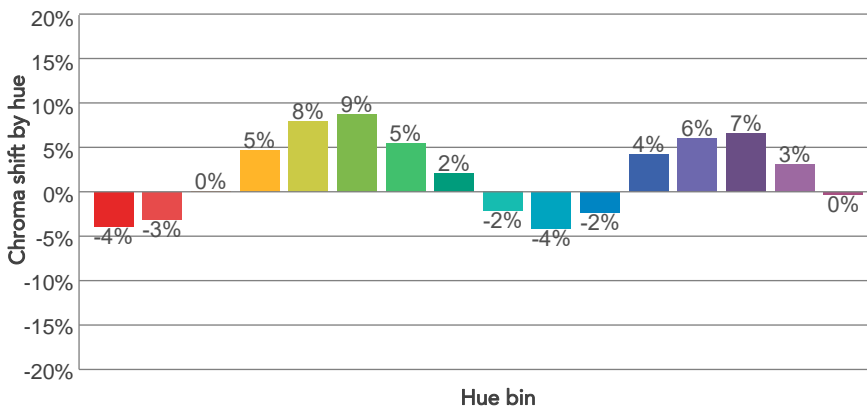
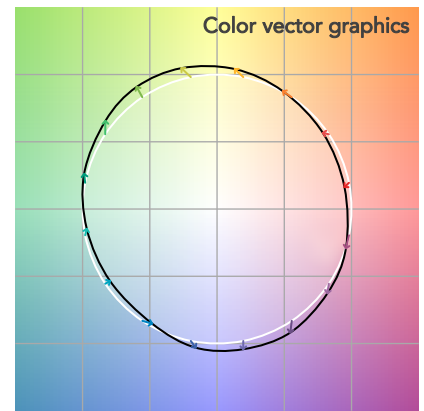
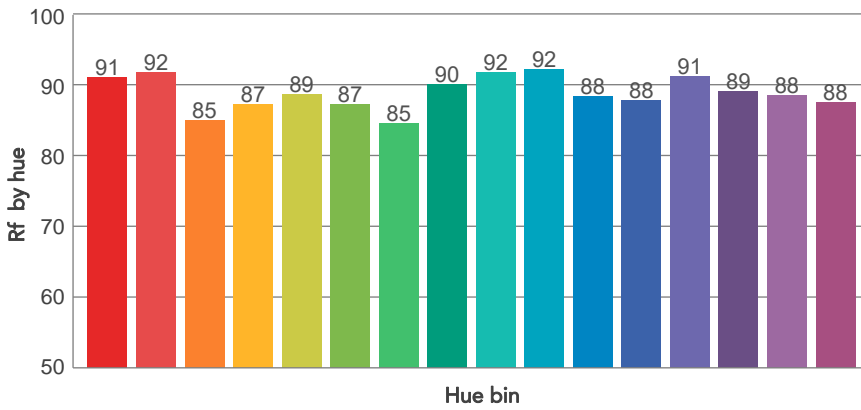
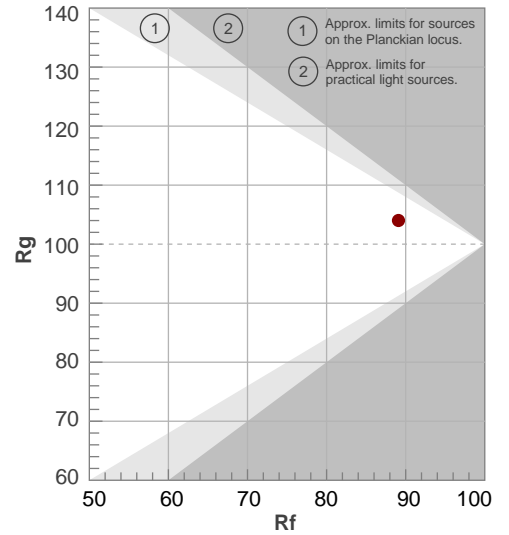
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2829 K	92,6	65,6	89,1	104,0	88,6	83	0,447	0,402	-0,0019

# TM30 DETAILS

**Rf 89,1**  
Fidelity index Rf

**Rg 104,0**  
Gammut index

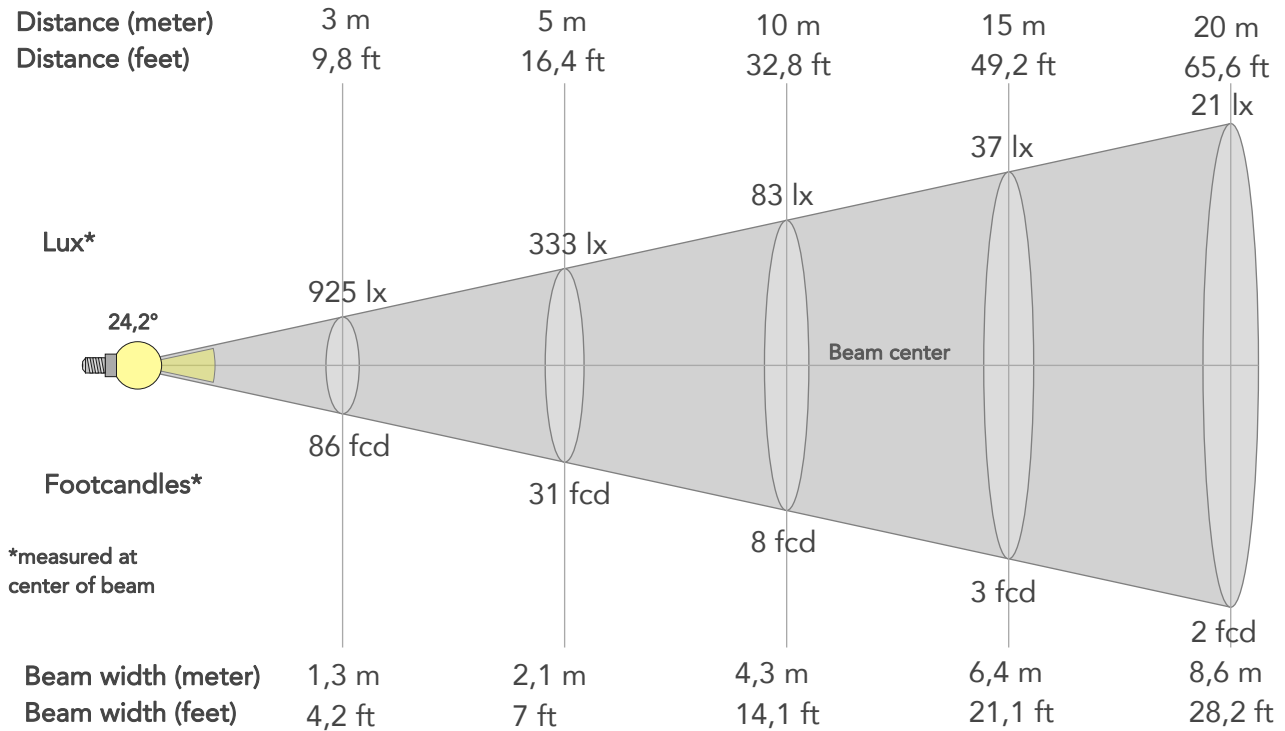
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	92	-3%	3%
3	85	0%	8%
4	87	5%	7%
5	89	8%	6%
6	87	9%	-1%
7	85	5%	-8%
8	90	2%	-6%
9	92	-2%	-4%
10	92	-4%	0%
11	88	-2%	7%
12	88	4%	5%
13	91	6%	-1%
14	89	7%	-6%
15	88	3%	-6%
16	88	0%	-10%



# BEAM DETAILS



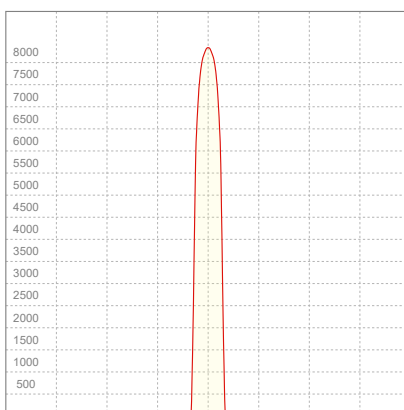
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24,2°	29°	30,1°	100,0%	100,0%



## 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	8324lx	2081lx	925lx	520lx	333lx	148lx	83lx	37lx	21lx	13lx	9lx	5lx	3lx
Footcand.	773fcd	193fcd	86fcd	48fcd	31fcd	14fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,4m	0,9m	1,3m	1,7m	2,1m	3,2m	4,3m	6,4m	8,6m	10,7m	12,9m	17,2m	21,5m
Beam wid.	1,4ft	2,8ft	4,2ft	5,6ft	7ft	10,6ft	14,1ft	21,1ft	28,2ft	35,2ft	42,3ft	56,4ft	70,4ft

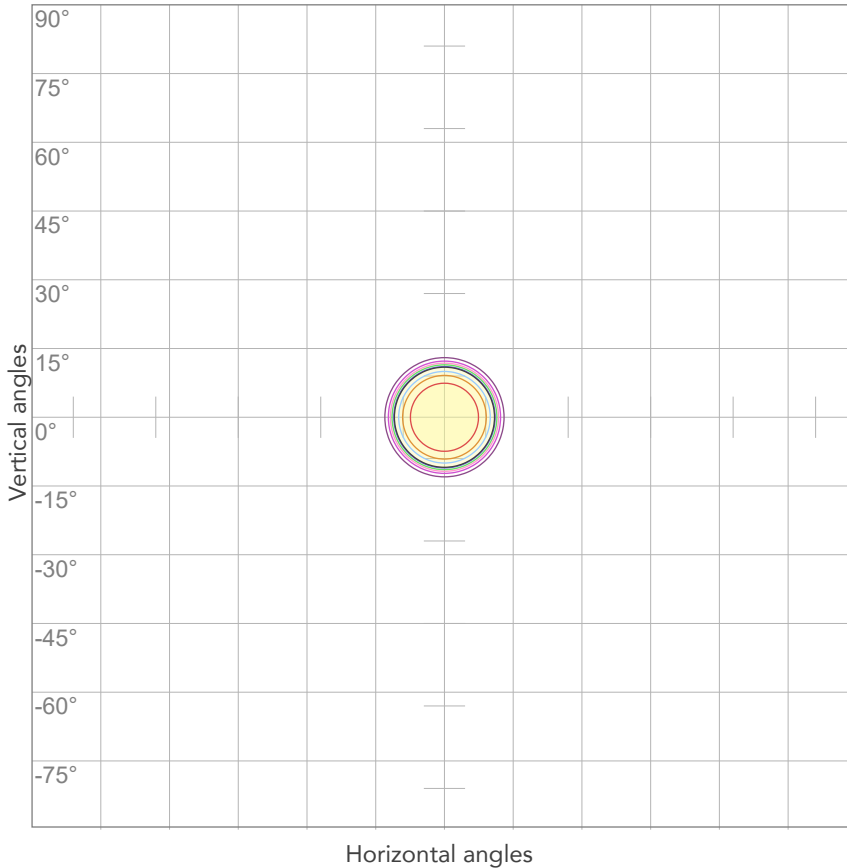
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,102A	20,6W	54lm/W
Power Fc			
0.9			

## ISO CANDELA DIAGRAM



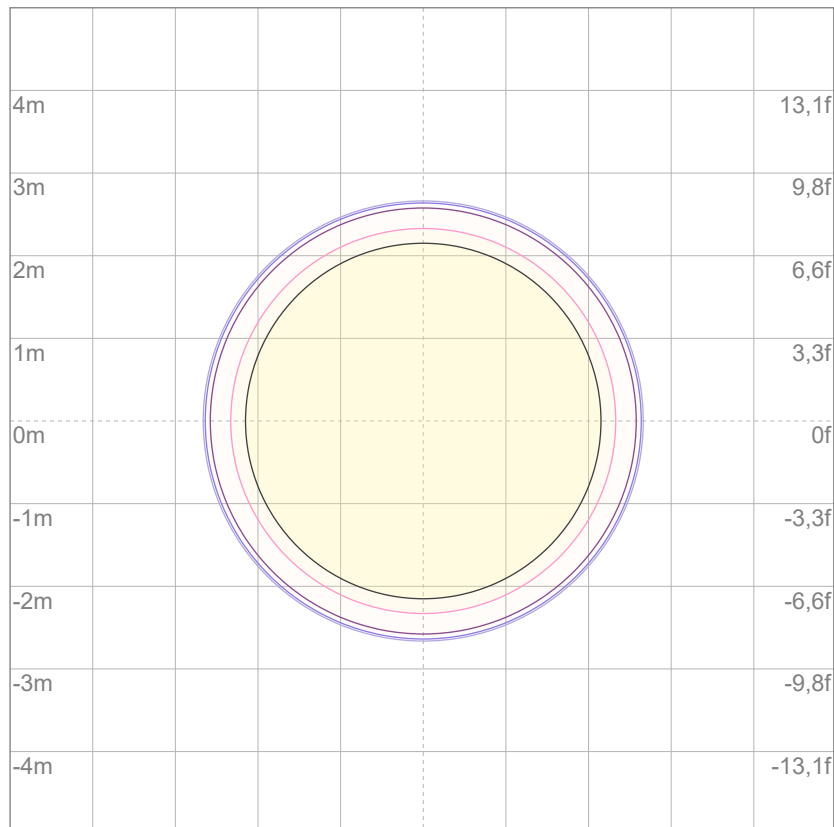
10%	832 cd
20%	1665 cd
30%	2497 cd
40%	3330 cd
50%	4162 cd
60%	4994 cd
70%	5827 cd
80%	6659 cd

Conditions:

Number of c-planes: 2

Candela at center: 8324 cd

## ISO LUX DIAGRAM



3%	2,50 lx
5%	4,16 lx
10%	8,32 lx
30%	25,0 lx
50%	41,6 lx

Conditions:

Number of c-planes: 2

Lux at center: 83,2 lx

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



Total lumen output:

1104 lm

Peak candela output:

4515 cd

Light quality:

CRI: 92,8

Color temperature:

2822 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 36°

Target:

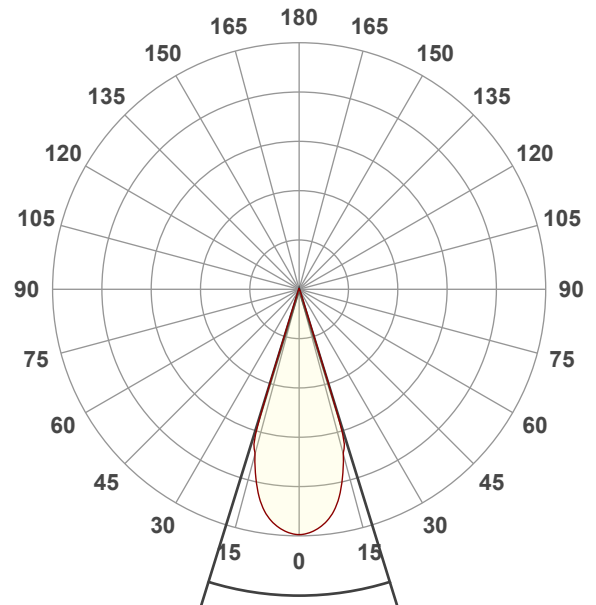
2700K

Operator:

Paolo Carvone

Date and time:

27/07/2022 14:24:52

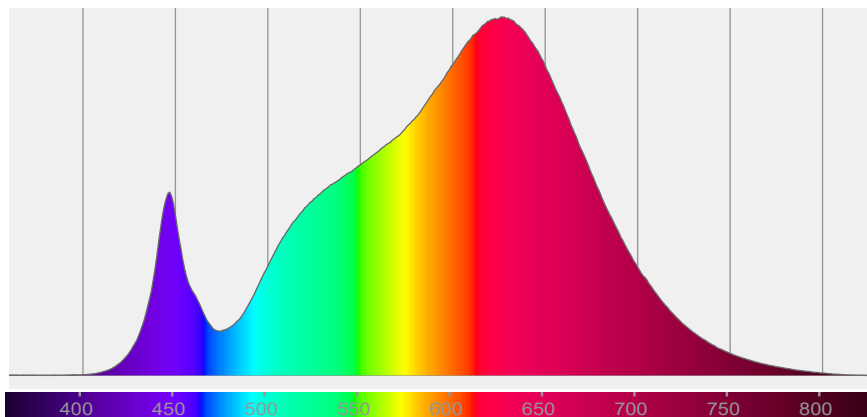


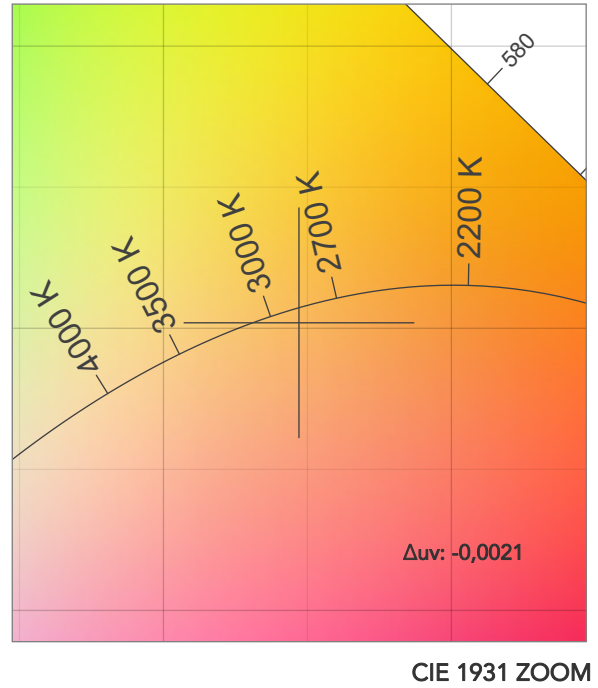
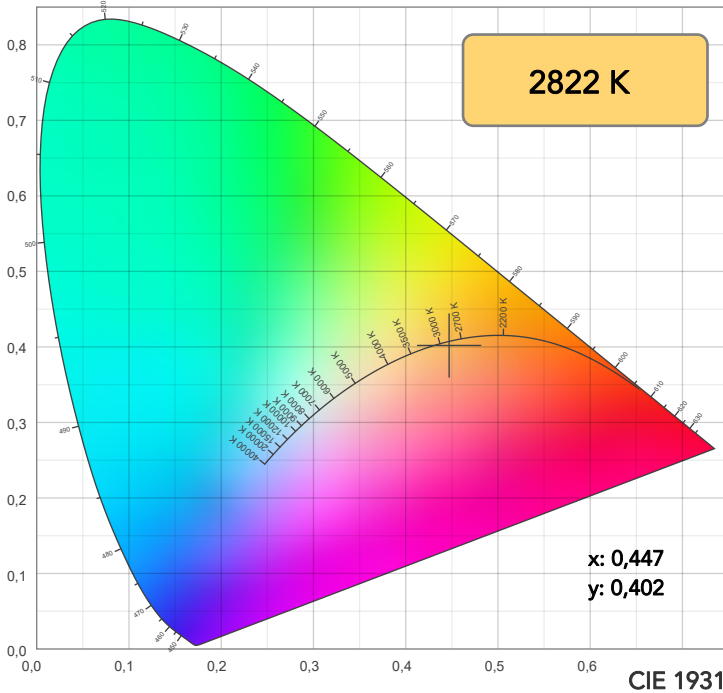
Beam angle 50%: 34,4°

Field angle 10%: 37,5°

Cut off angle 2.5%: 40,3°

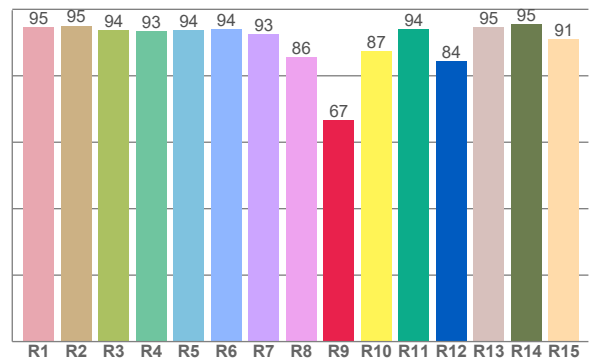
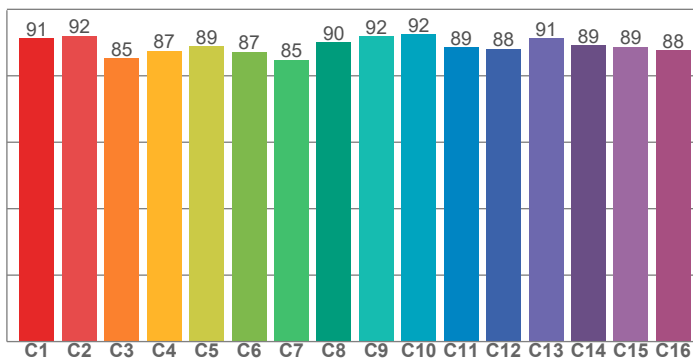
**Spectra**





TM30: 89,3

CRI: 92,8 (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
94,6	95,1	93,7	93,3	93,8	94,1	92,6	85,6	66,7	87,4	94,1	84,4	94,7	95,5	91,1

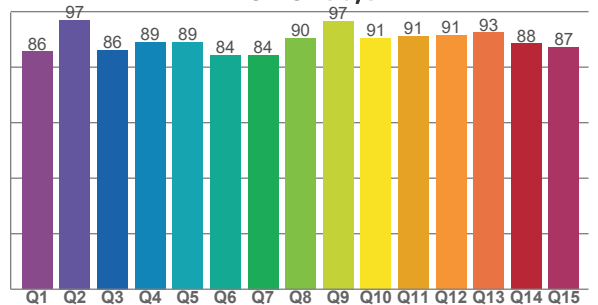
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,3	92,0	85,2	87,5	88,8	87,3	84,8	90,0	91,9	92,5	88,6	88,0	91,3	89,1	88,7	87,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85,6	97,0	86,1	89,1	89,0	84,4	84,4	90,4	96,6	90,5	91,1	91,4	92,5	88,5	87,2

CQS: 88,8



COLOR PARAMETERS

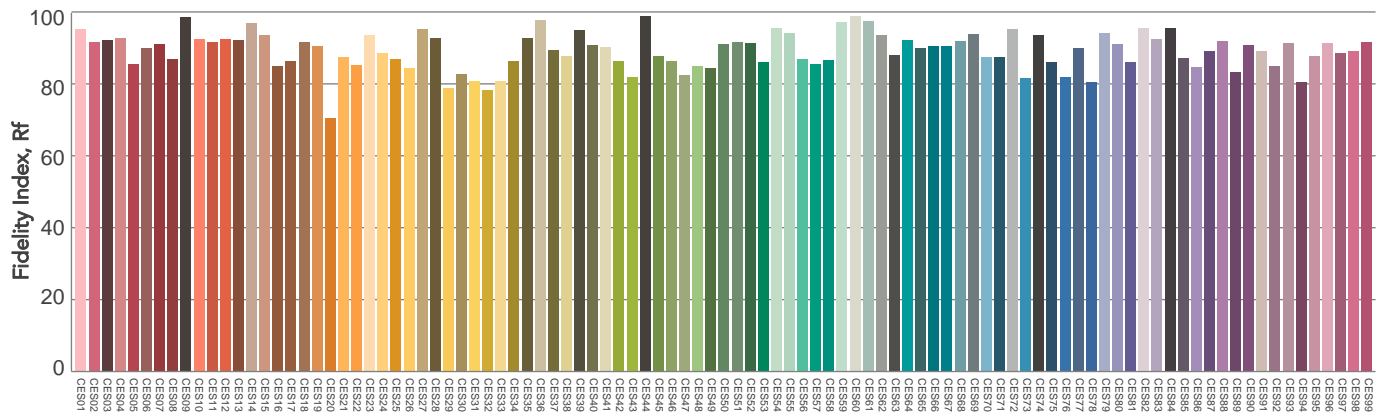
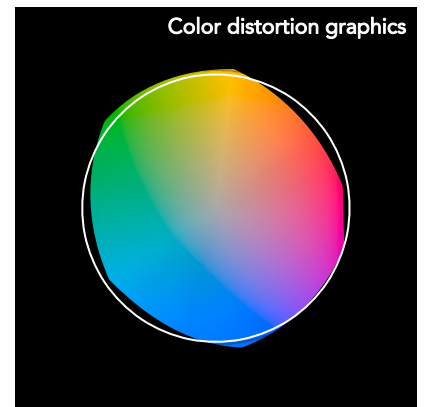
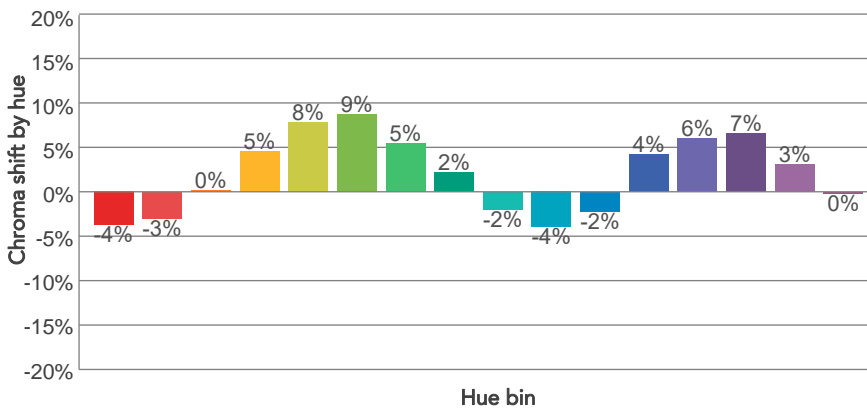
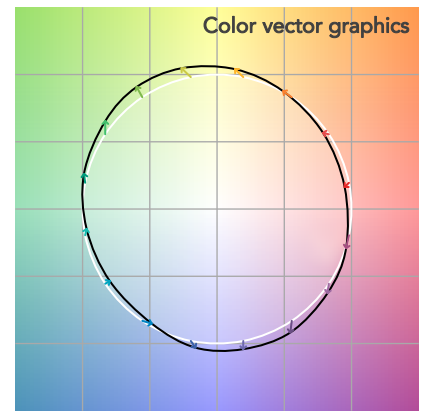
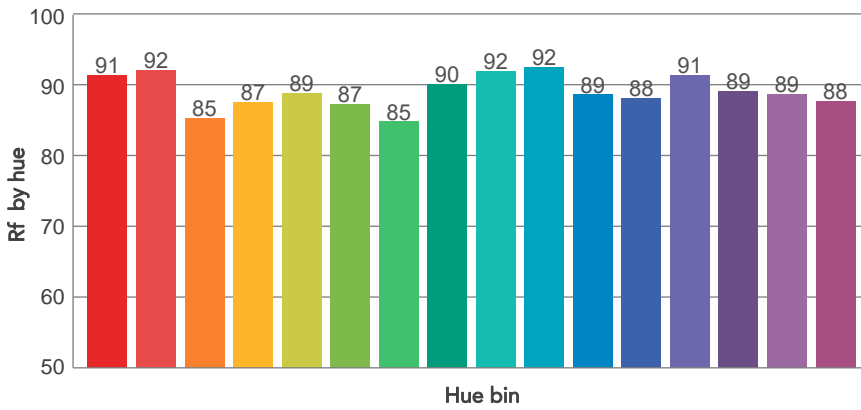
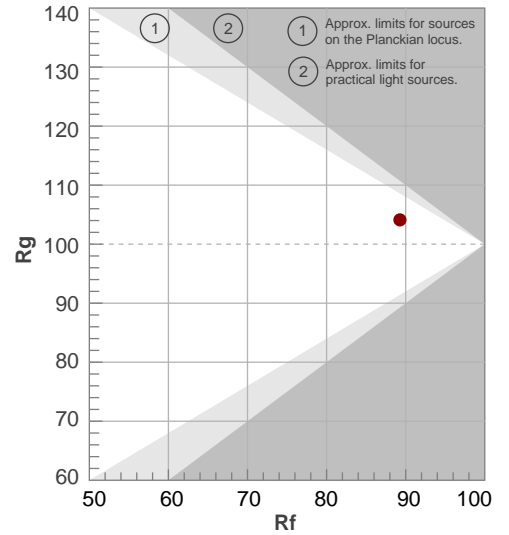
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2822 K	92,8	66,7	89,3	104,1	88,8	83	0,447	0,402	-0,0021

# TM30 DETAILS

**Rf 89,3**  
Fidelity index Rf

**Rg 104,1**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	92	-3%	3%
3	85	0%	8%
4	87	5%	7%
5	89	8%	5%
6	87	9%	-1%
7	85	5%	-8%
8	90	2%	-6%
9	92	-2%	-4%
10	92	-4%	0%
11	89	-2%	7%
12	88	4%	4%
13	91	6%	-1%
14	89	7%	-6%
15	89	3%	-6%
16	88	0%	-10%



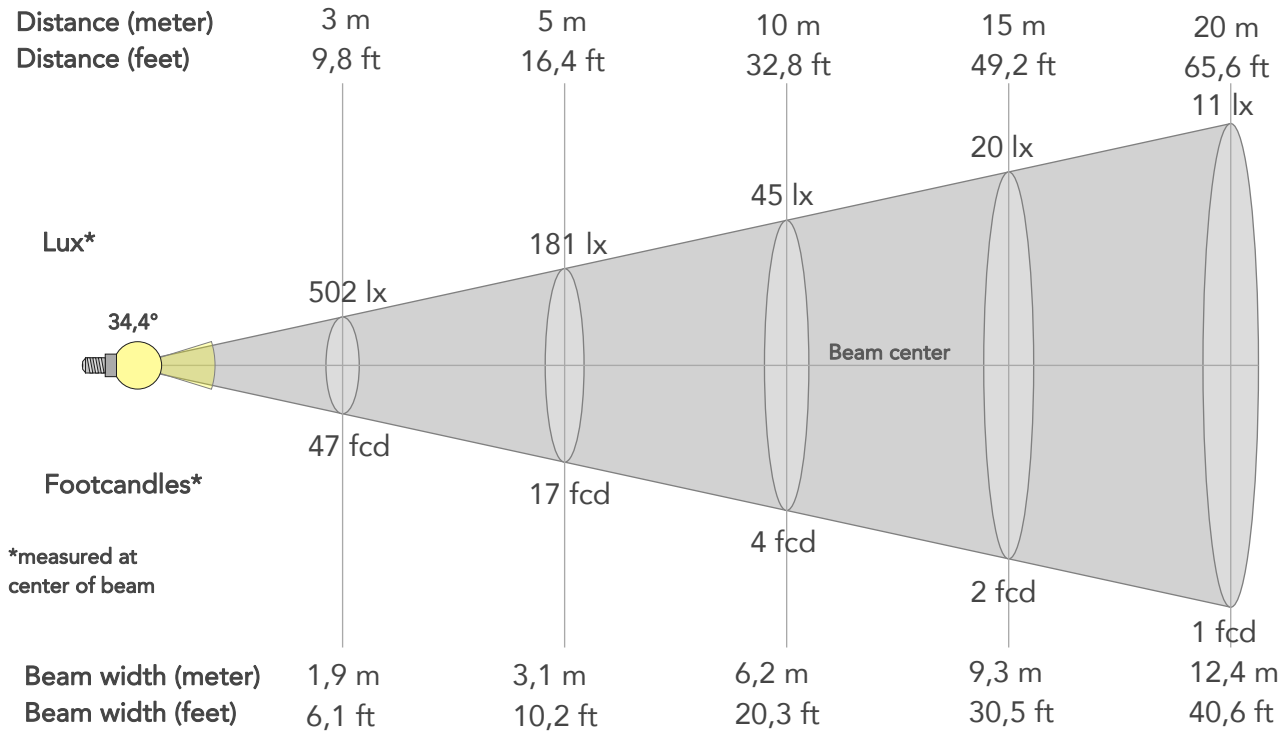
Color Evaluation Sample



# BEAM DETAILS



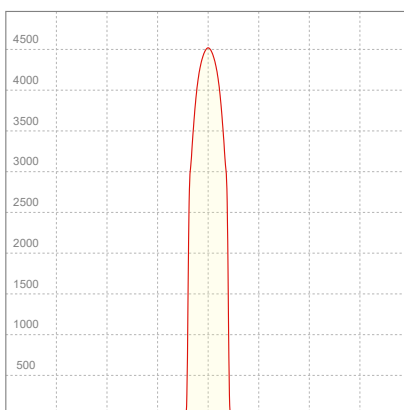
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
34,4°	37,5°	40,3°	100,0%	100,0%



## 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	4515lx	1129lx	502lx	282lx	181lx	80lx	45lx	20lx	11lx	7lx	5lx	3lx	2lx
Footcand.	419fcd	105fcd	47fcd	26fcd	17fcd	7fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,2m	1,9m	2,5m	3,1m	4,6m	6,2m	9,3m	12,4m	15,5m	18,6m	24,8m	31m
Beam wid.	2ft	4,1ft	6,1ft	8,1ft	10,2ft	15,2ft	20,3ft	30,5ft	40,6ft	50,8ft	61ft	81,3ft	101,6ft

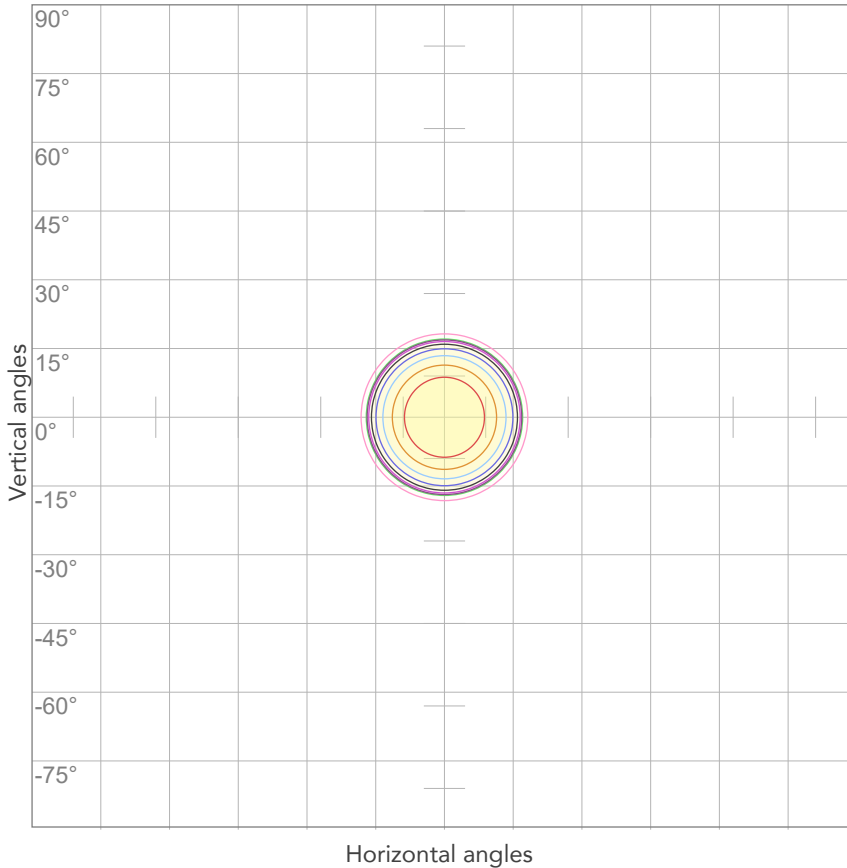
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,102A	20,6W	54lm/W
Power Fc			
0.9			

## ISO CANDELA DIAGRAM



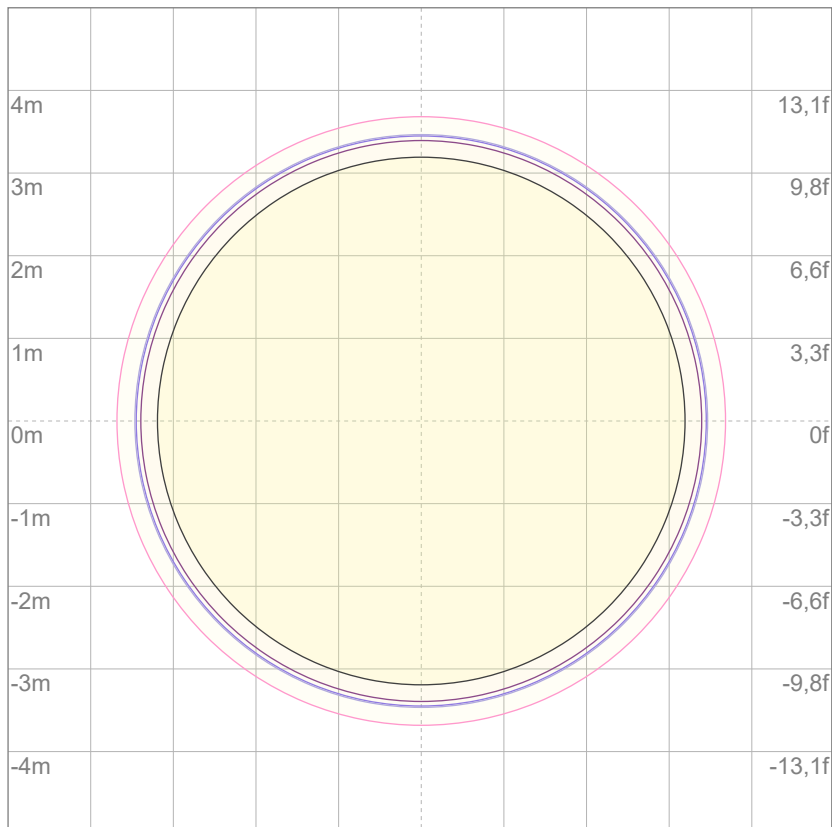
10%	451 cd
20%	903 cd
30%	1354 cd
40%	1806 cd
50%	2257 cd
60%	2709 cd
70%	3160 cd
80%	3612 cd

Conditions:

Number of c-planes: 2

Candela at center: 4515 cd

## ISO LUX DIAGRAM



3%	1,35 lx
5%	2,26 lx
10%	4,51 lx
30%	13,5 lx
50%	22,6 lx

Conditions:

Number of c-planes: 2

Lux at center: 45,1 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

1070 lm

Peak candela output:

2396 cd

Light quality:

CRI: 92,3

Color temperature:

2820 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 50°

Target:

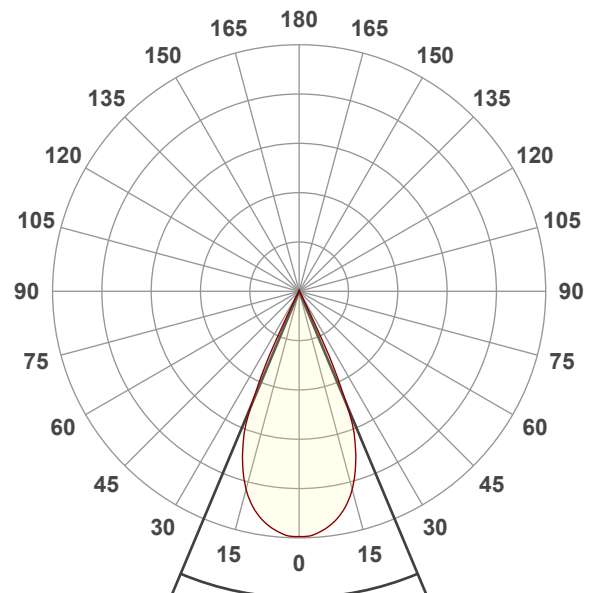
2700K

Operator:

Paolo Carvone

Date and time:

27/07/2022 14:30:04

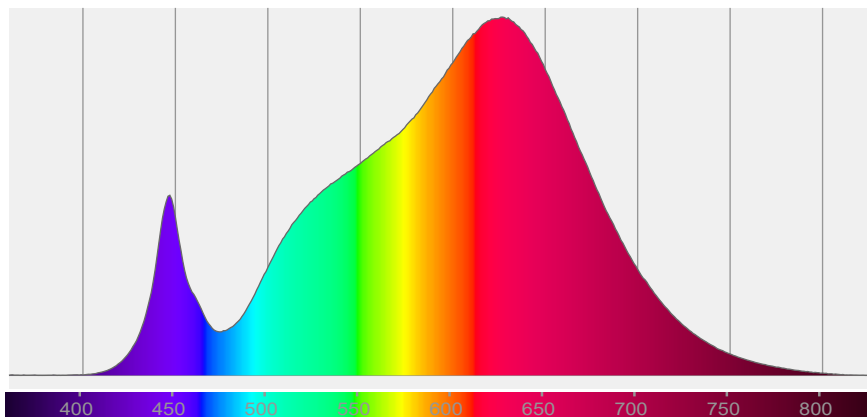


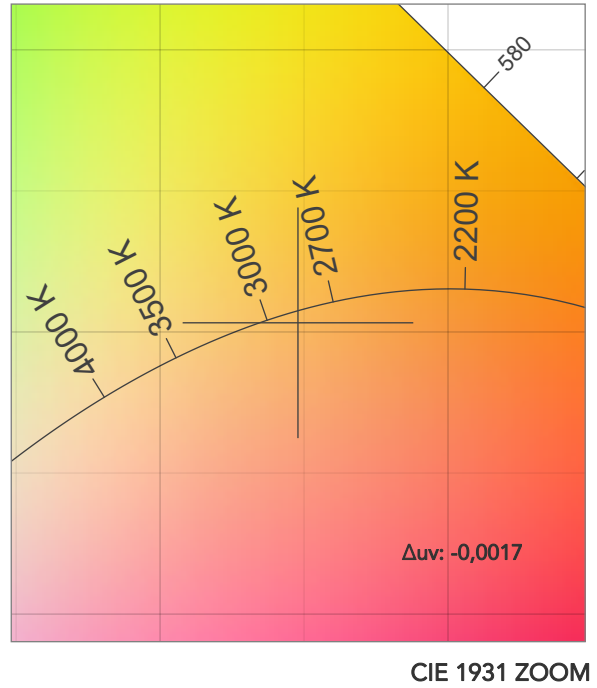
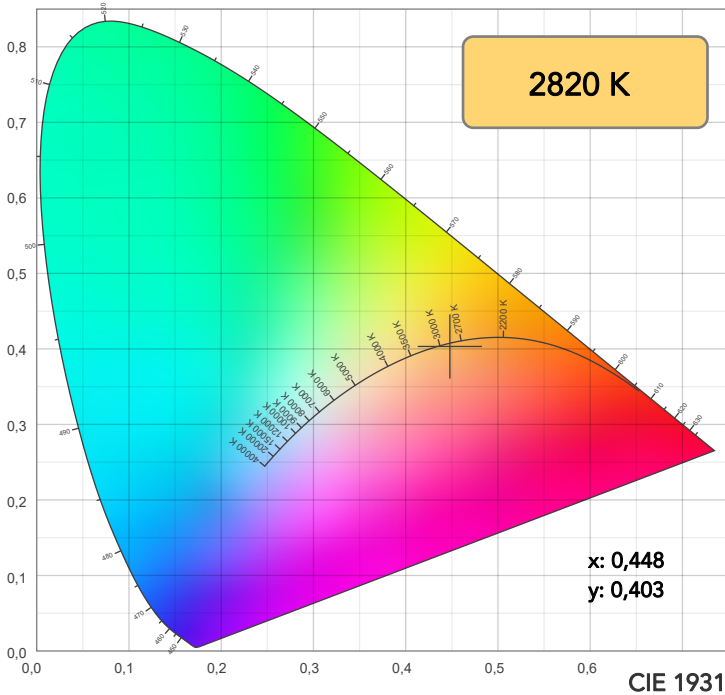
Beam angle 50%: 45,5°

Field angle 10%: 53,5°

Cut off angle 2.5%: 57,2°

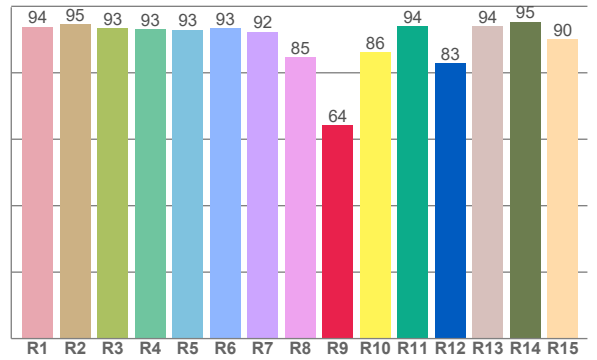
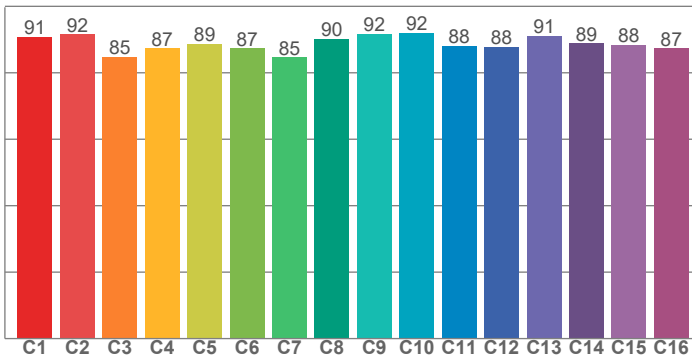
Spectra





TM30: 89,0

CRI: 92,3 (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
93,8	94,6	93,5	93,0	92,9	93,4	92,4	84,6	64,1	86,2	94,0	82,9	93,9	95,4	90,1

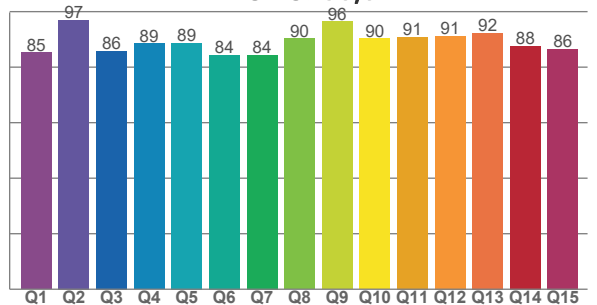
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90,9	91,6	84,8	87,3	88,8	87,4	84,7	90,2	91,8	92,1	88,1	87,8	91,2	88,9	88,4	87,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85,2	96,9	85,9	88,6	88,6	84,3	84,3	90,2	96,5	90,3	90,9	91,3	92,3	87,7	86,5

CQS: 88,5



COLOR PARAMETERS

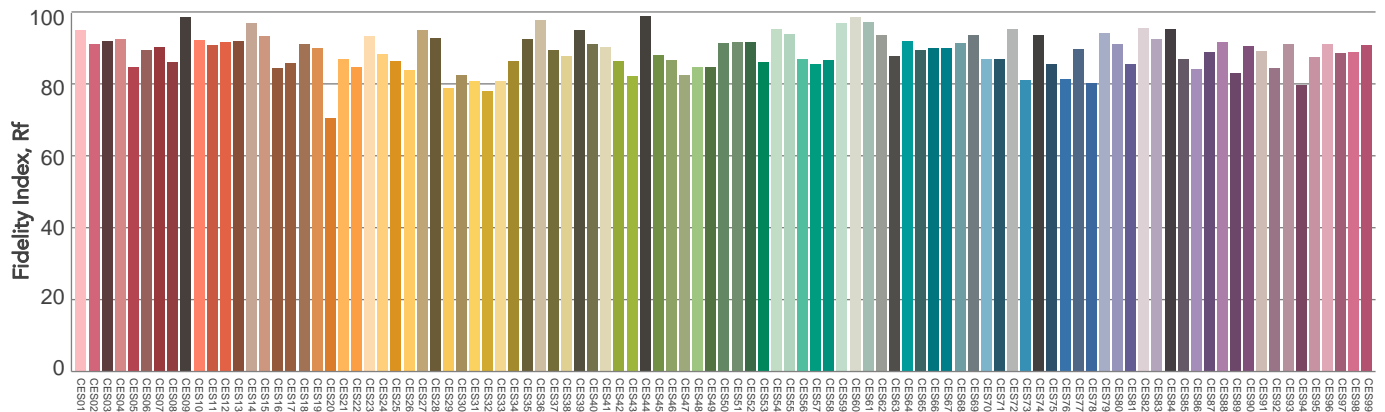
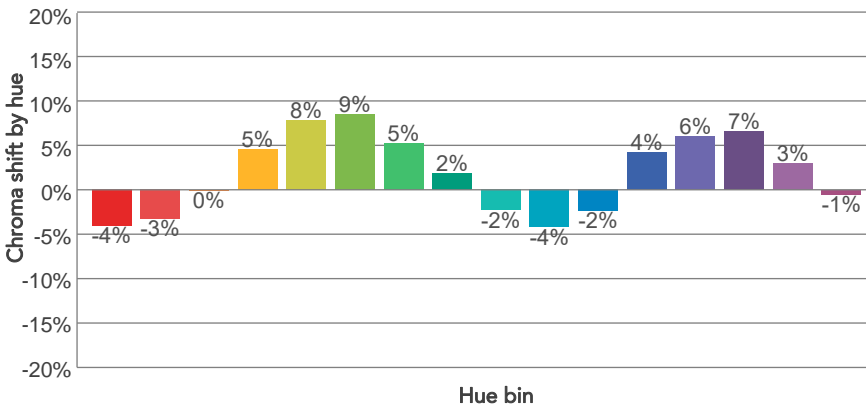
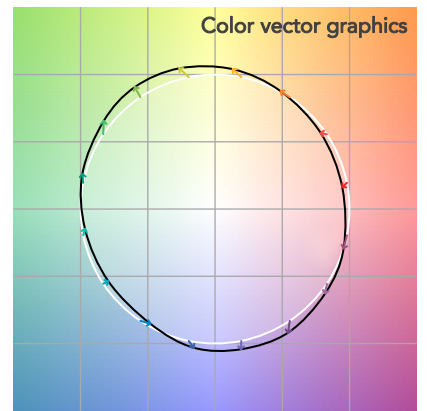
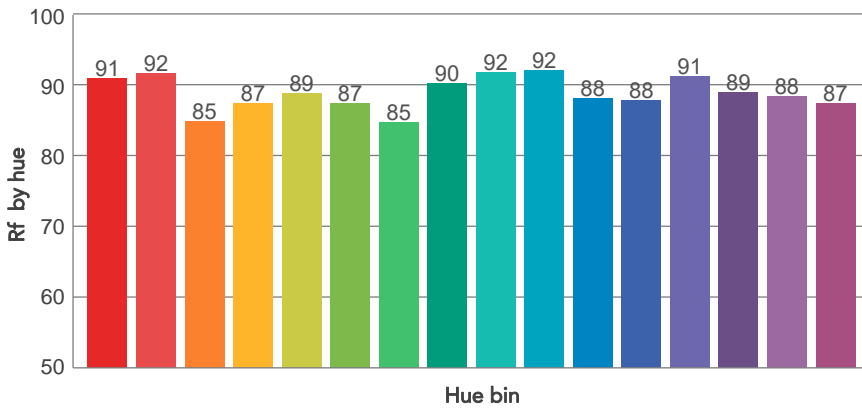
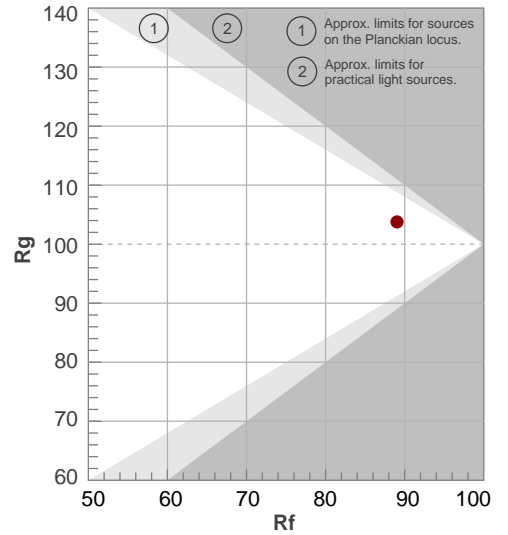
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2820 K	92,3	64,1	89,0	103,8	88,5	83	0,448	0,403	-0,0017

# TM30 DETAILS

**Rf 89,0**  
Fidelity index Rf

**Rg 103,8**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	92	-3%	3%
3	85	0%	8%
4	87	5%	7%
5	89	8%	6%
6	87	9%	-1%
7	85	5%	-8%
8	90	2%	-6%
9	92	-2%	-4%
10	92	-4%	1%
11	88	-2%	7%
12	88	4%	5%
13	91	6%	-1%
14	89	7%	-6%
15	88	3%	-7%
16	87	-1%	-10%

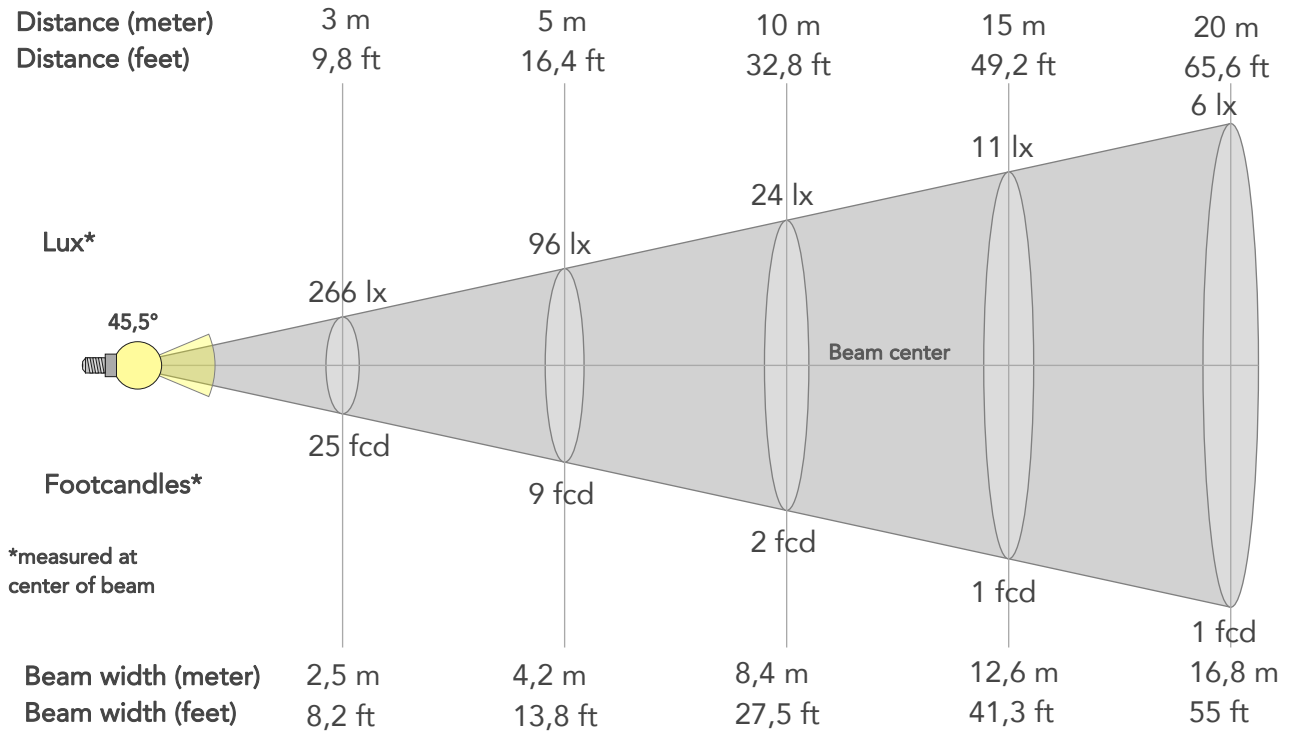


Color Evaluation Sample

# BEAM DETAILS



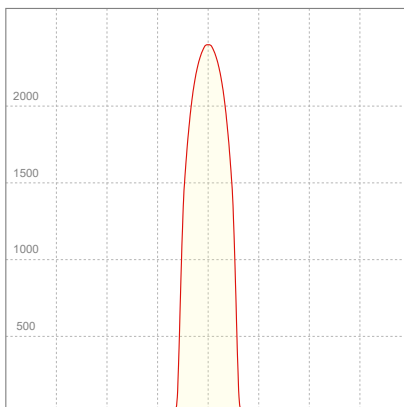
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
45,5°	53,5°	57,2°	100,0%	100,0%



## 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	2396lx	599lx	266lx	150lx	96lx	43lx	24lx	11lx	6lx	4lx	3lx	1lx	1lx
Footcand.	223fcd	56fcd	25fcd	14fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,8m	1,7m	2,5m	3,4m	4,2m	6,3m	8,4m	12,6m	16,8m	21m	25,2m	33,6m	42m
Beam wid.	2,8ft	5,5ft	8,2ft	11ft	13,8ft	20,6ft	27,5ft	41,3ft	55ft	68,8ft	82,6ft	110,1ft	137,6ft

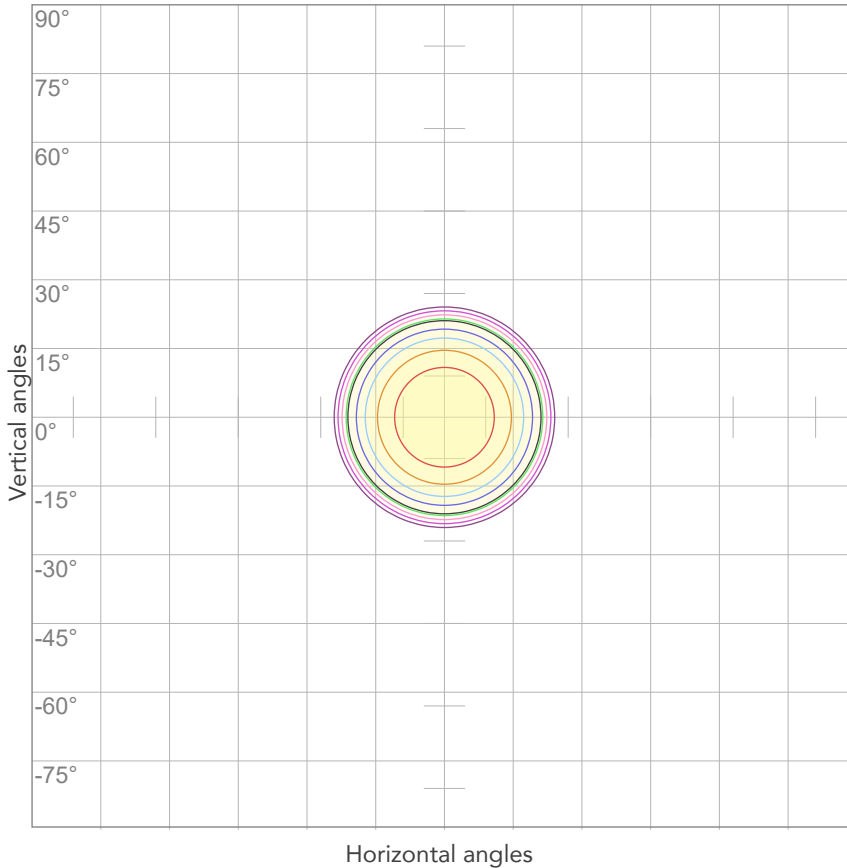
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,102A	20,5W	52lm/W
<b>Power Fc</b>			
0.9			

## ISO CANDELA DIAGRAM



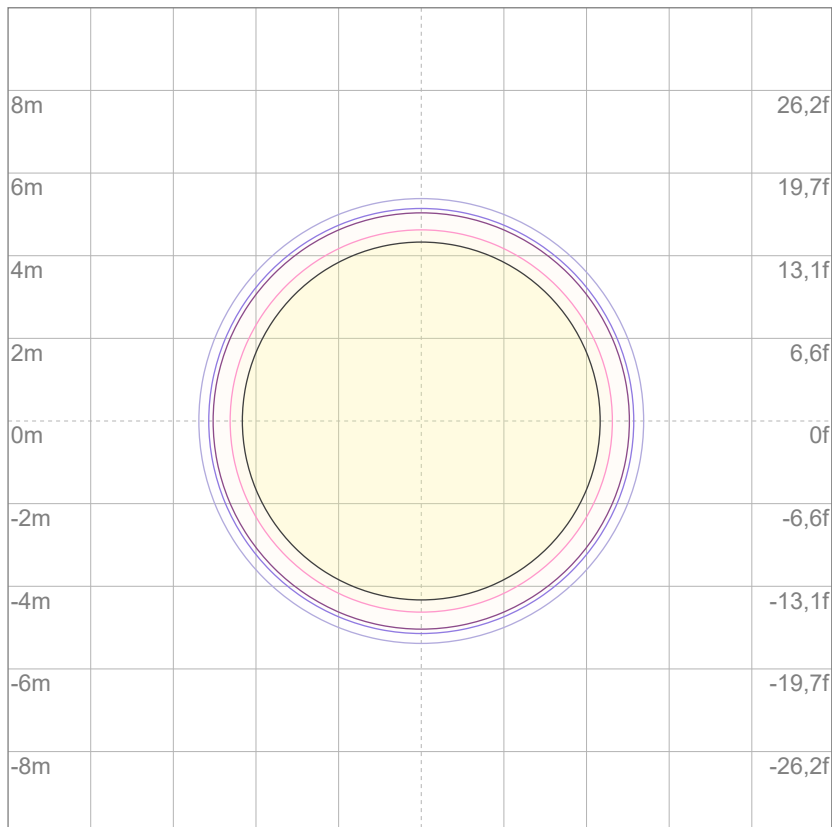
10%	240 cd
20%	479 cd
30%	719 cd
40%	959 cd
50%	1198 cd
60%	1438 cd
70%	1677 cd
80%	1917 cd

Conditions:

Number of c-planes: 2

Candela at center: 2396 cd

## ISO LUX DIAGRAM



3%	0,719 lx
5%	1,20 lx
10%	2,40 lx
30%	7,19 lx
50%	12,0 lx

Conditions:

Number of c-planes: 2

Lux at center: 24,0 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

1134 lm

Peak candela output:

14700 cd

Light quality:

CRI: 92,3

Color temperature:

3083 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 19°

Target:

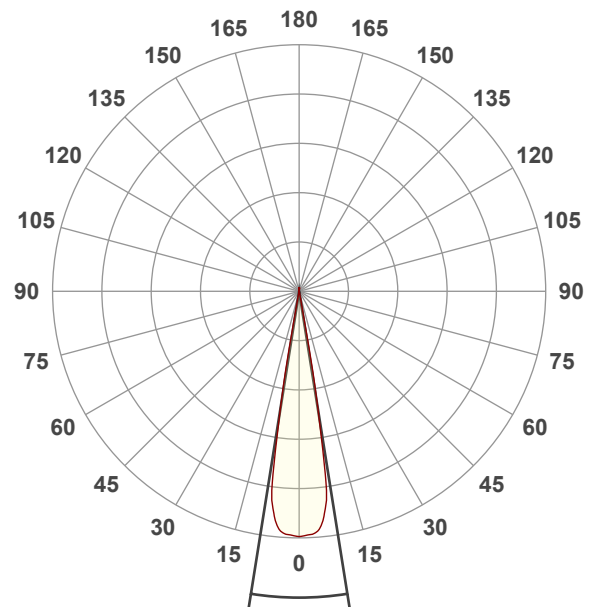
3000K

Operator:

Paolo Carvone

Date and time:

27/07/2022 15:09:21

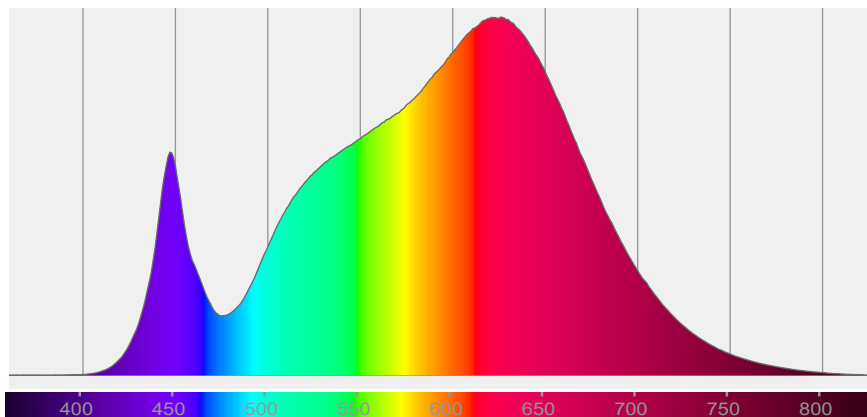


Beam angle 50%: 18,1°

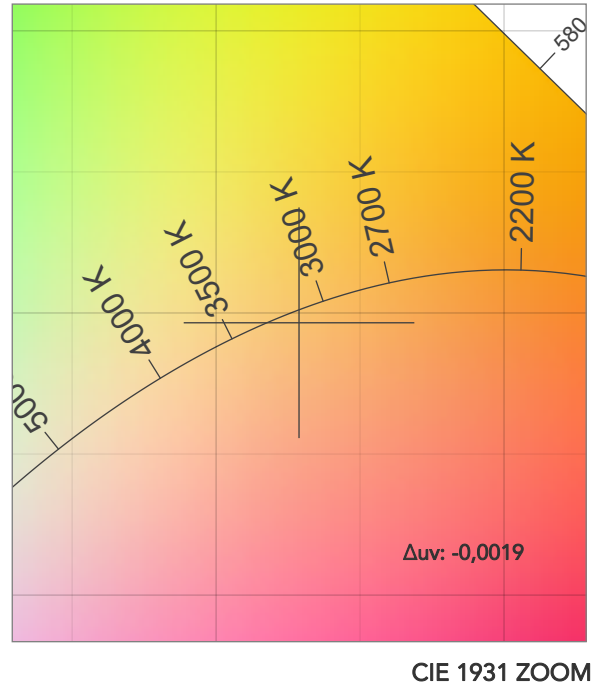
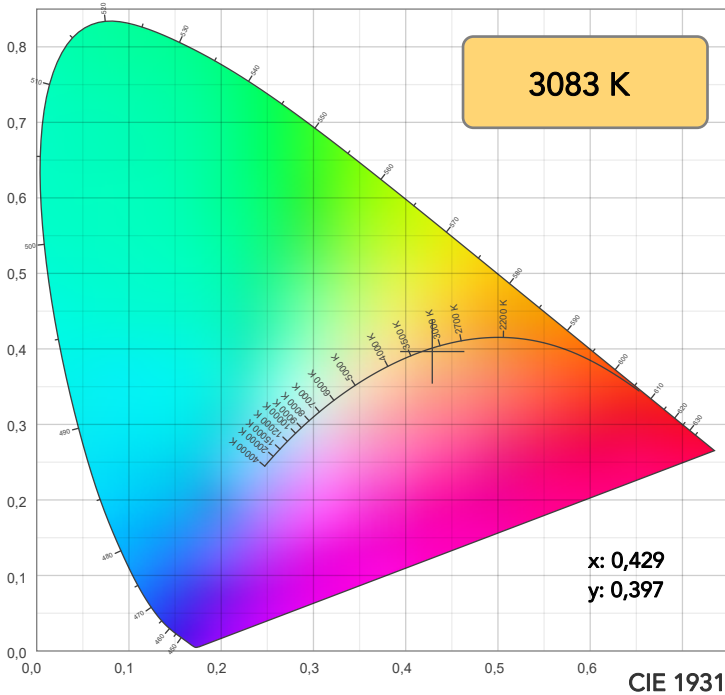
Field angle 10%: 21,4°

Cut off angle 2.5%: 22,3°

Spectra

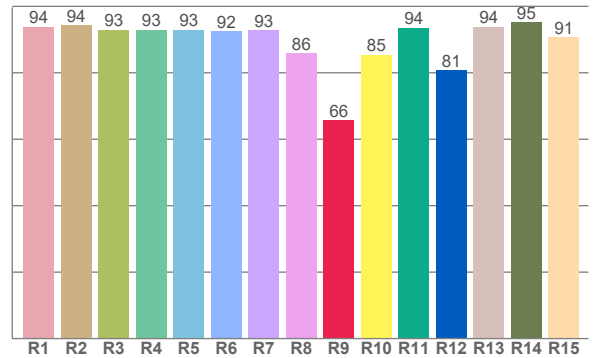
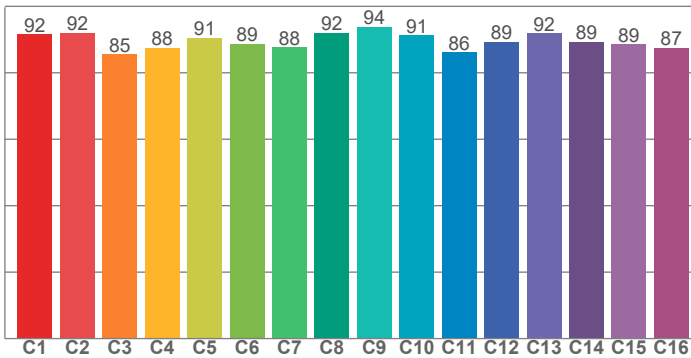






TM30: 89,7

CRI: 92,3 (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
93,9	94,3	92,9	93,0	92,9	92,5	92,8	85,8	65,7	85,4	93,6	80,8	93,8	95,2	90,8

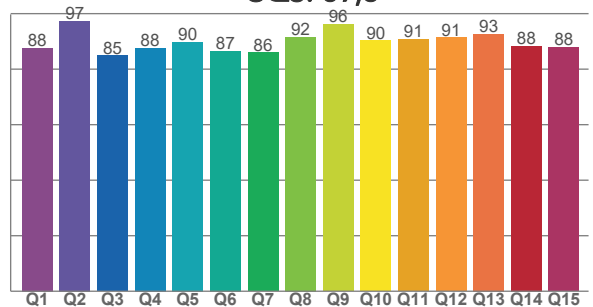
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,6	92,0	85,5	87,6	90,6	88,8	87,6	92,0	93,8	91,3	86,1	89,2	91,8	89,3	88,5	87,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87,6	97,3	84,8	87,7	89,8	86,5	86,0	91,6	96,1	90,3	90,8	91,4	92,6	88,4	87,9

CQS: 89,3



COLOR PARAMETERS

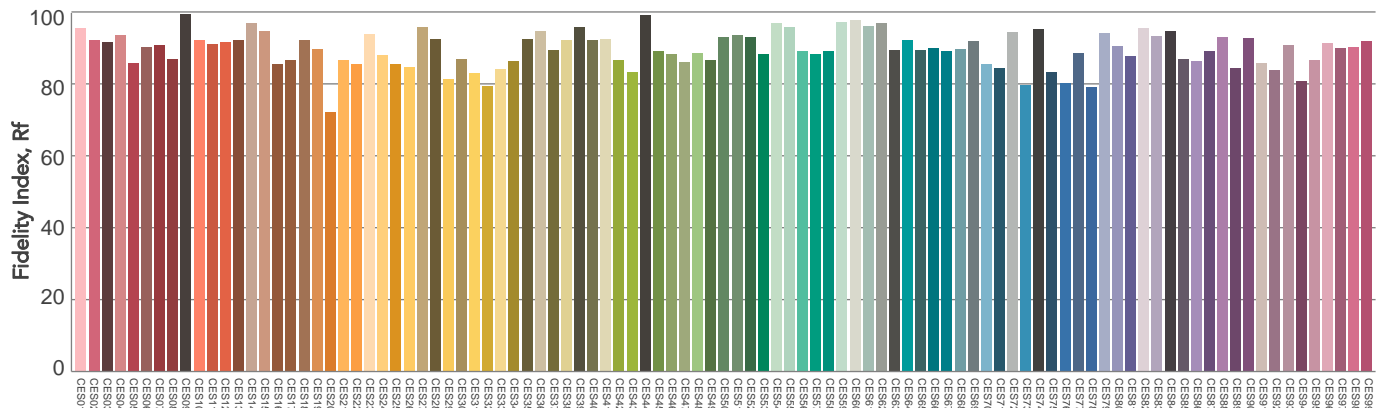
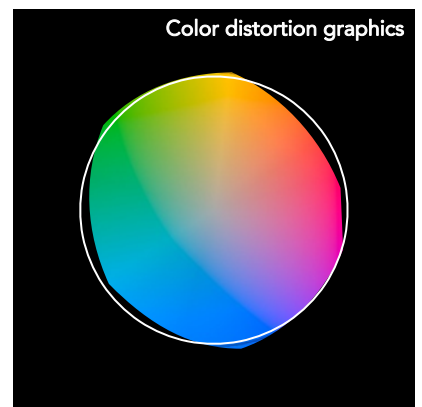
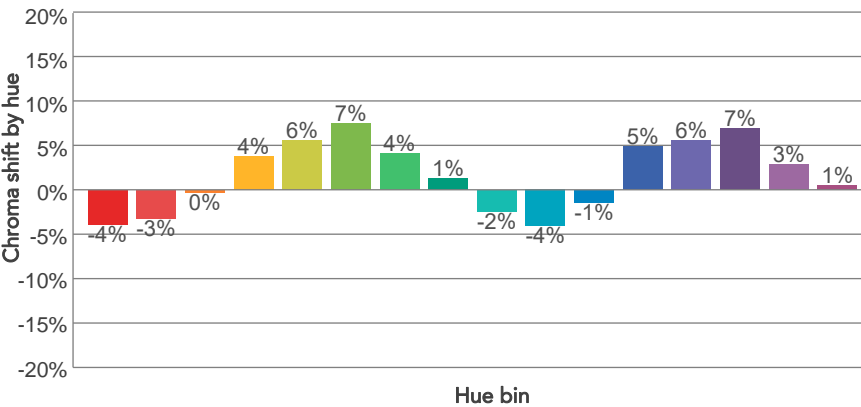
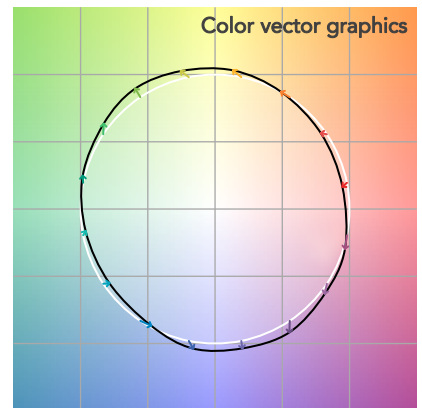
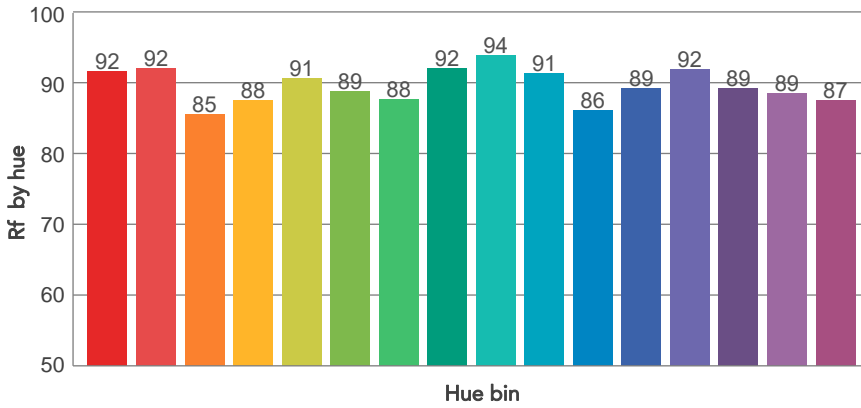
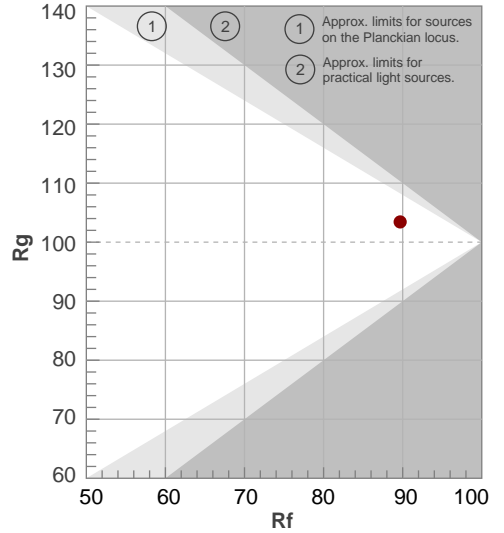
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	$\Delta uv$
3083 K	92,3	65,7	89,7	103,4	89,3	86	0,429	0,397	-0,0019

# TM30 DETAILS

**Rf 89,7**  
Fidelity index Rf

**Rg 103,4**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-2%
2	92	-3%	3%
3	85	0%	8%
4	88	4%	7%
5	91	6%	5%
6	89	7%	0%
7	88	4%	-7%
8	92	1%	-5%
9	94	-2%	-3%
10	91	-4%	2%
11	86	-1%	9%
12	89	5%	4%
13	92	6%	0%
14	89	7%	-5%
15	89	3%	-7%
16	87	1%	-10%

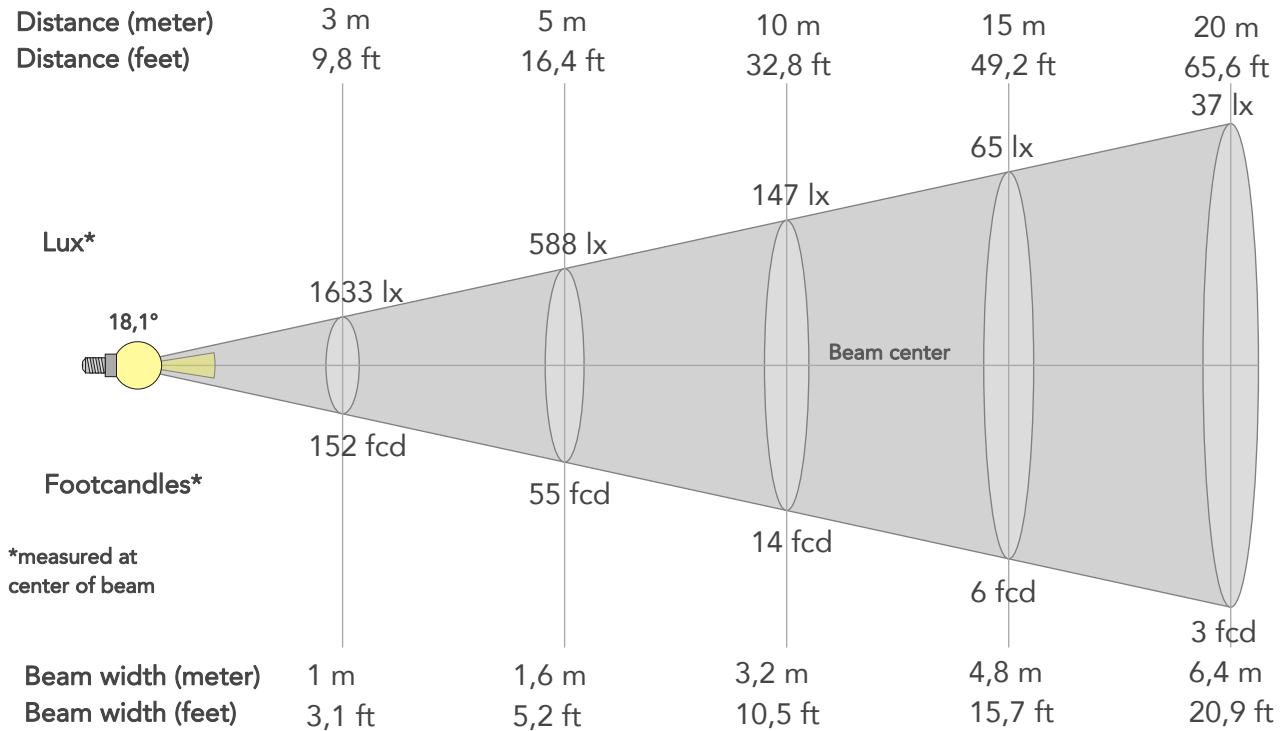


Color Evaluation Sample

# BEAM DETAILS



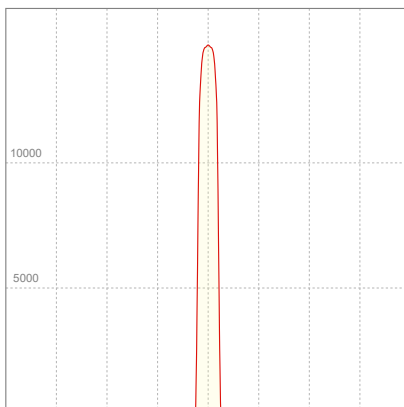
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,1°	21,4°	22,3°	100,0%	100,0%



## 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	14700lx	3675lx	1633lx	919lx	588lx	261lx	147lx	65lx	37lx	24lx	16lx	9lx	6lx
Footcand.	1366fcd	341fcd	152fcd	85fcd	55fcd	24fcd	14fcd	6fcd	3fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	1m	1,3m	1,6m	2,4m	3,2m	4,8m	6,4m	8m	9,6m	12,8m	15,9m
Beam wid.	1,1ft	2,1ft	3,1ft	4,2ft	5,2ft	7,8ft	10,5ft	15,7ft	20,9ft	26,1ft	31,4ft	41,8ft	52,3ft

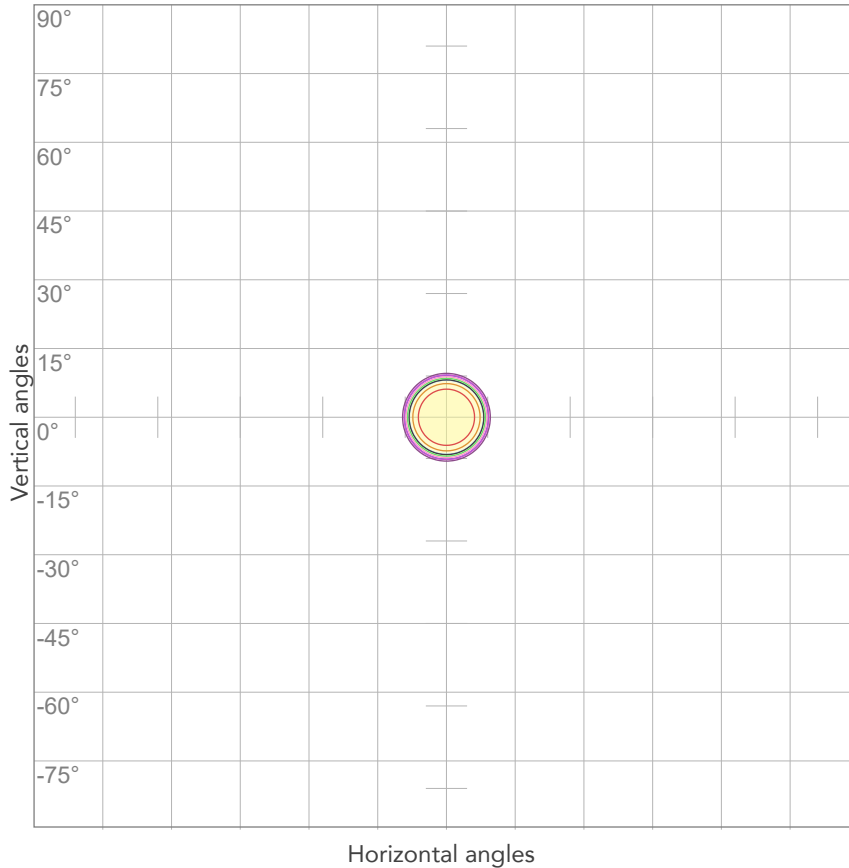
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,103A	20,7W	55lm/W
Power Fc			
0.9			

## ISO CANDELA DIAGRAM



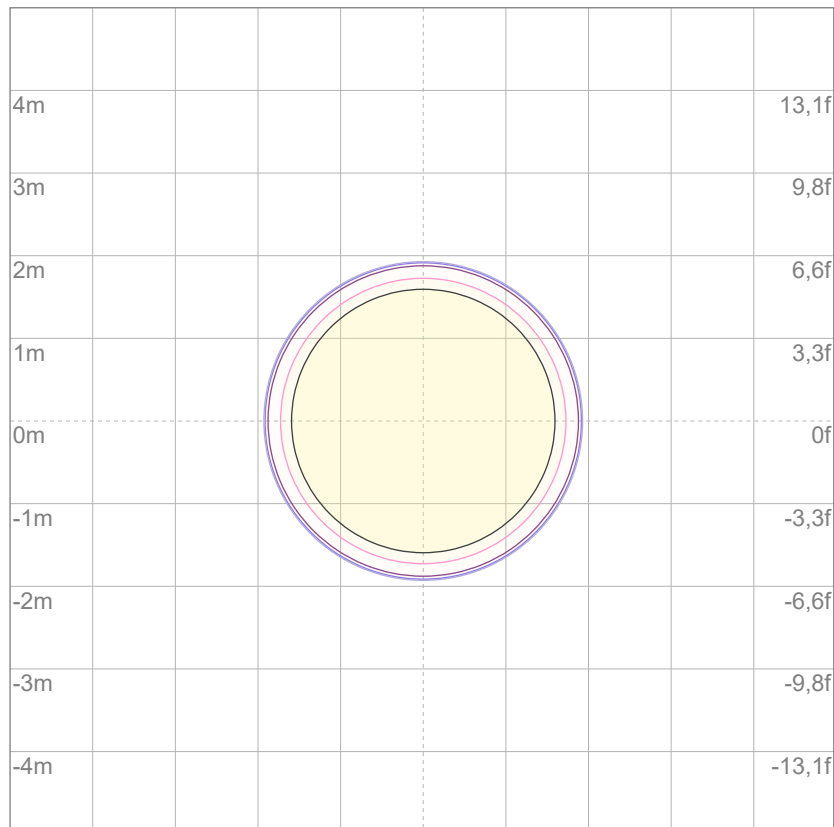
10%	1470 cd
20%	2940 cd
30%	4410 cd
40%	5880 cd
50%	7350 cd
60%	8820 cd
70%	10290 cd
80%	11760 cd

Conditions:

Number of c-planes: 2

Candela at center: 14700 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	4,41 lx
5%	7,35 lx
10%	14,7 lx
30%	44,1 lx
50%	73,5 lx

Conditions:

Number of c-planes: 2

Lux at center: 147 lx

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



Total lumen output:

1130 lm

Peak candela output:

8352 cd

Light quality:

CRI: 92,0

Color temperature:

3077 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASUREMENT CONDITIONS:**

Beam angle:

Profile 26°

Target:

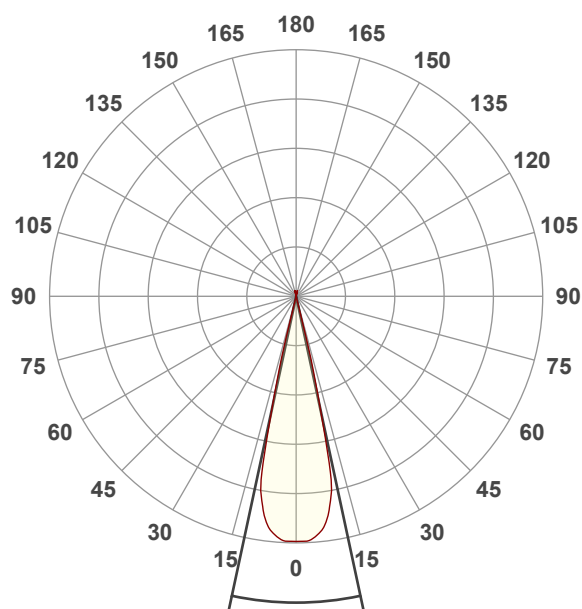
3000K

Operator:

Paolo Carvone

Date and time:

27/07/2022 15:12:22

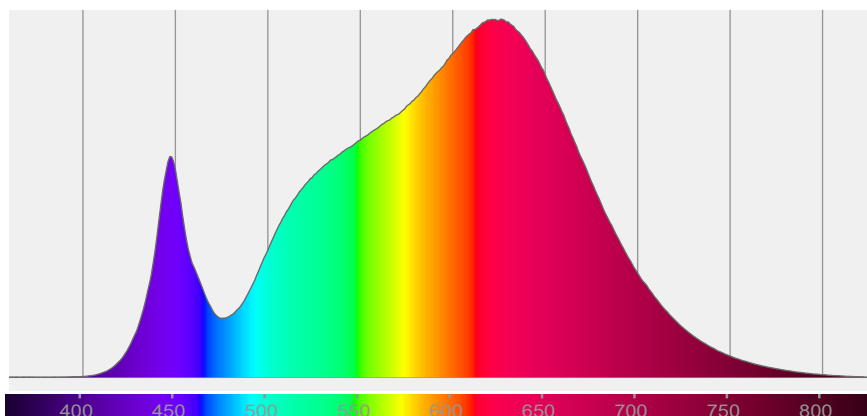


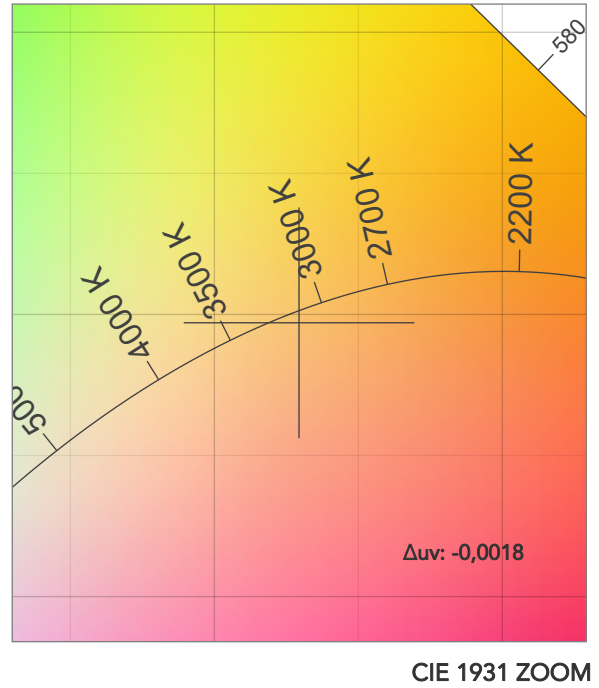
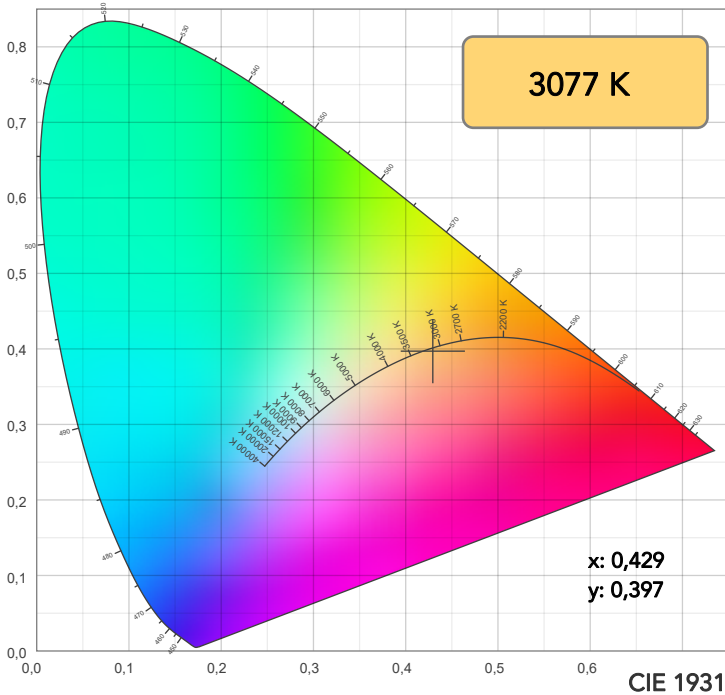
Beam angle 50%: 24,2°

Field angle 10%: 28,8°

Cut off angle 2.5%: 29,7°

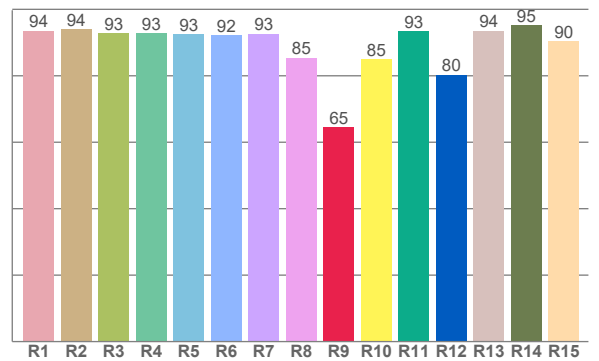
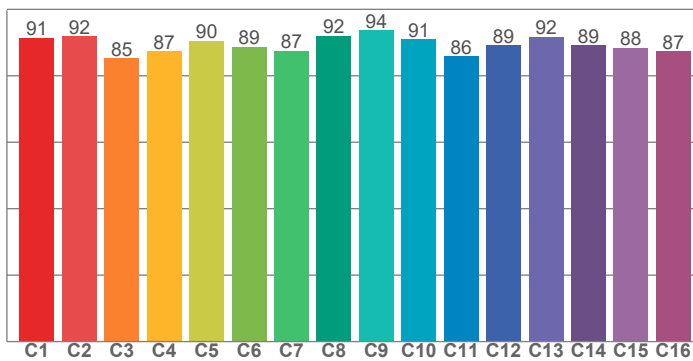
Spectra





TM30: 89,5

CRI: 92,0 (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
93,5	94,1	92,9	92,8	92,6	92,2	92,7	85,4	64,6	84,9	93,5	80,3	93,5	95,1	90,4

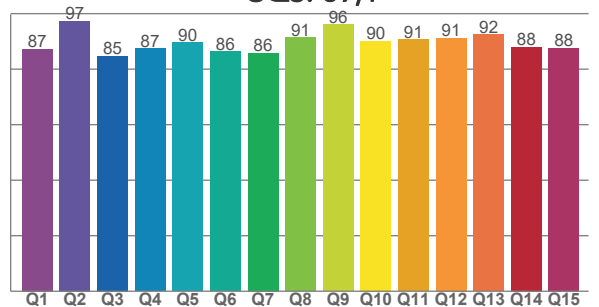
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,4	91,8	85,2	87,4	90,5	88,8	87,5	92,0	93,7	91,0	85,9	89,2	91,8	89,2	88,3	87,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87,3	97,3	84,7	87,4	89,6	86,4	85,8	91,4	96,1	90,2	90,6	91,3	92,4	88,0	87,6

CQS: 89,1



COLOR PARAMETERS

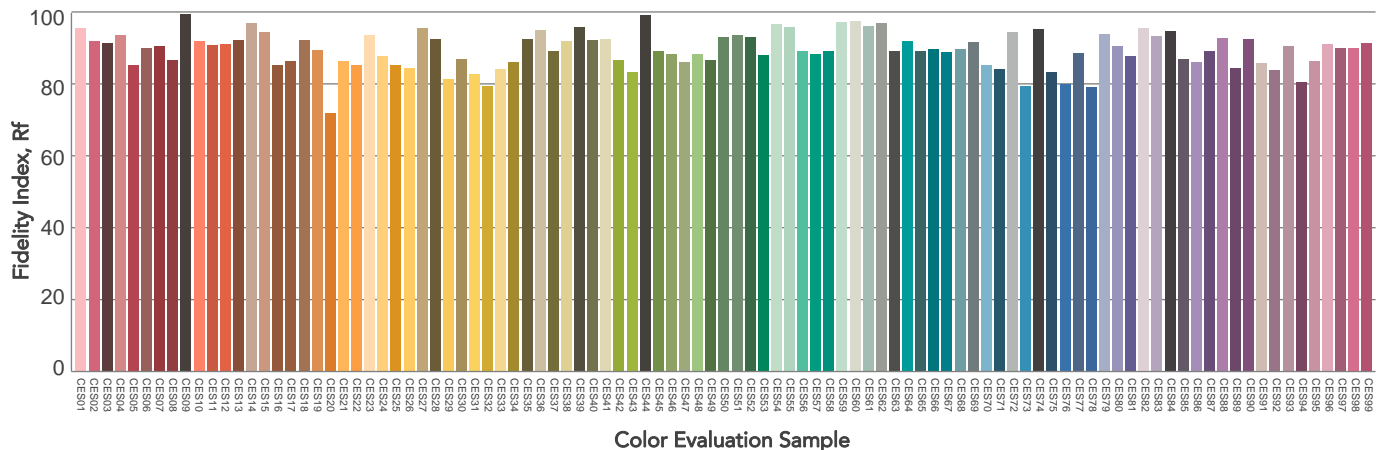
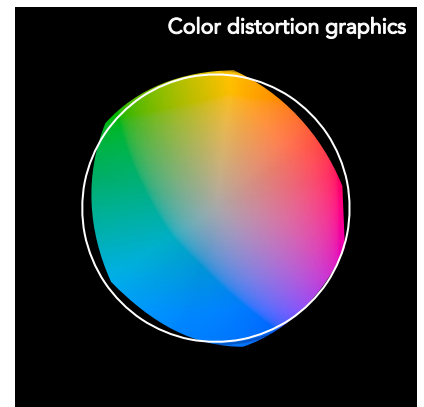
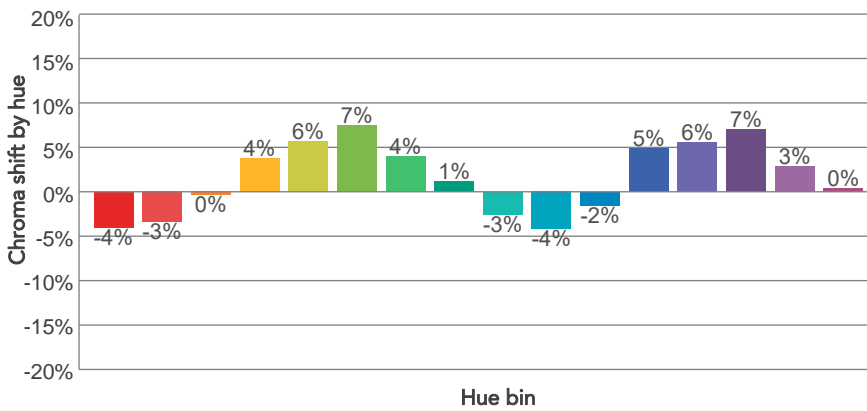
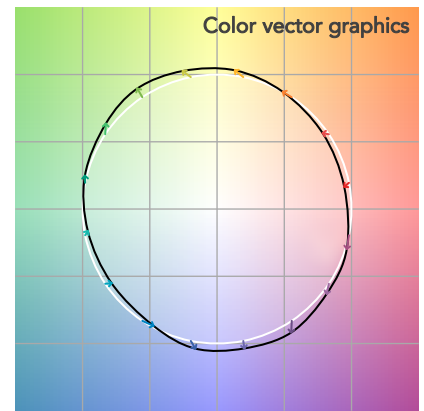
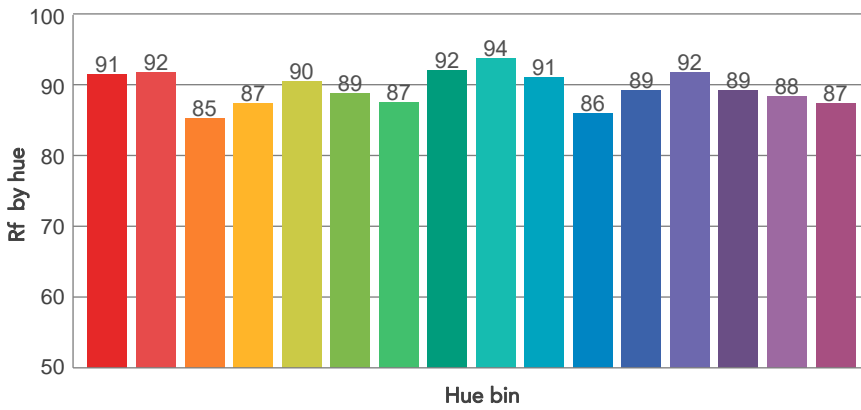
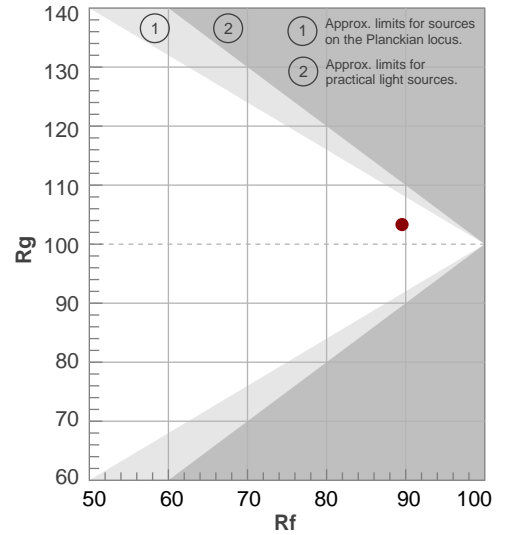
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3077 K	92,0	64,6	89,5	103,3	89,1	86	0,429	0,397	-0,0018

# TM30 DETAILS

**Rf 89,5**  
Fidelity index Rf

**Rg 103,3**  
Gammut index

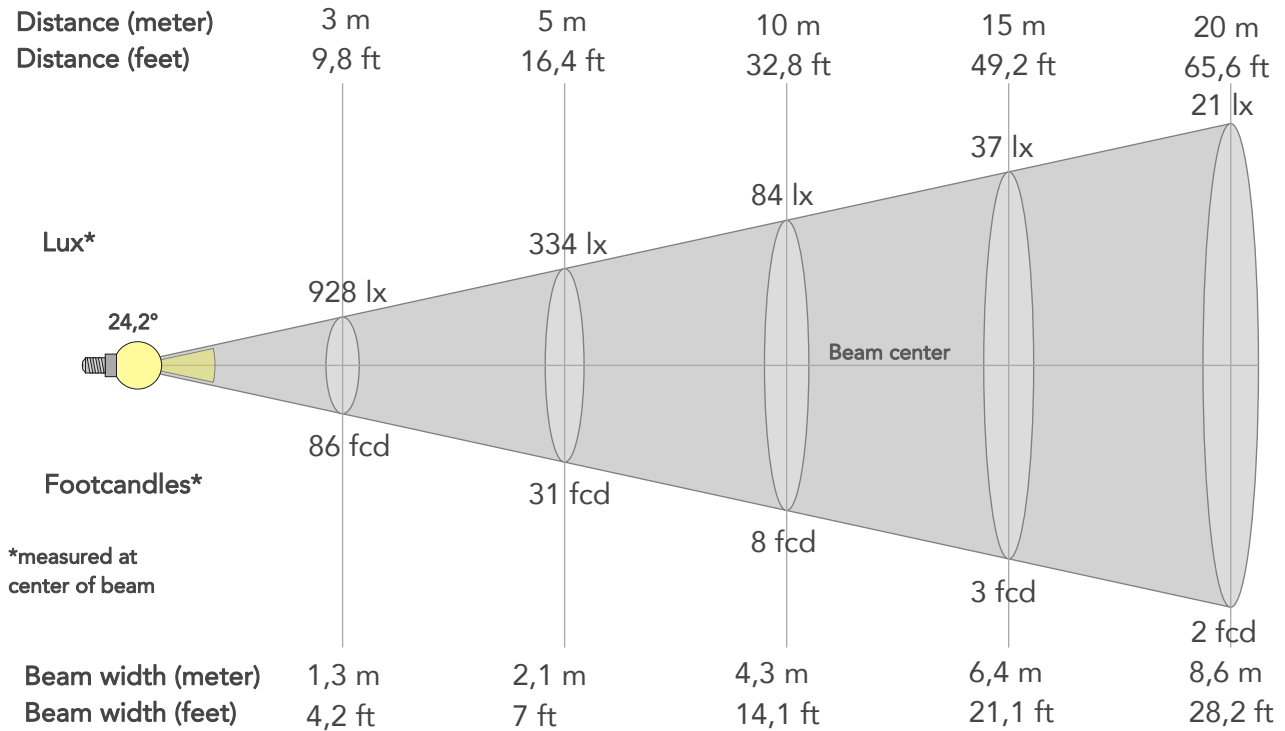
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	92	-3%	3%
3	85	0%	8%
4	87	4%	7%
5	90	6%	5%
6	89	7%	0%
7	87	4%	-7%
8	92	1%	-5%
9	94	-3%	-3%
10	91	-4%	2%
11	86	-2%	9%
12	89	5%	4%
13	92	6%	0%
14	89	7%	-5%
15	88	3%	-7%
16	87	0%	-10%



# BEAM DETAILS



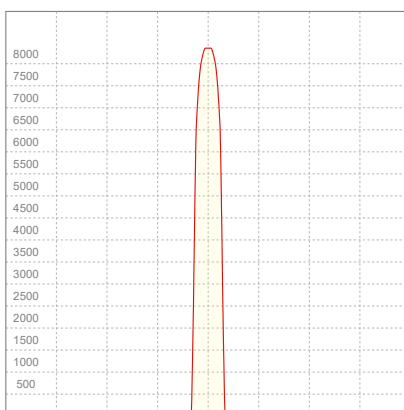
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24,2°	28,8°	29,7°	100,0%	100,0%



## 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	8352lx	2088lx	928lx	522lx	334lx	148lx	84lx	37lx	21lx	13lx	9lx	5lx	3lx
Footcand.	776fcd	194fcd	86fcd	48fcd	31fcd	14fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,4m	0,9m	1,3m	1,7m	2,1m	3,2m	4,3m	6,4m	8,6m	10,7m	12,9m	17,2m	21,5m
Beam wid.	1,4ft	2,8ft	4,2ft	5,6ft	7ft	10,6ft	14,1ft	21,1ft	28,2ft	35,2ft	42,2ft	56,3ft	70,4ft

## LINEAR DISTRIBUTION DIAGRAM

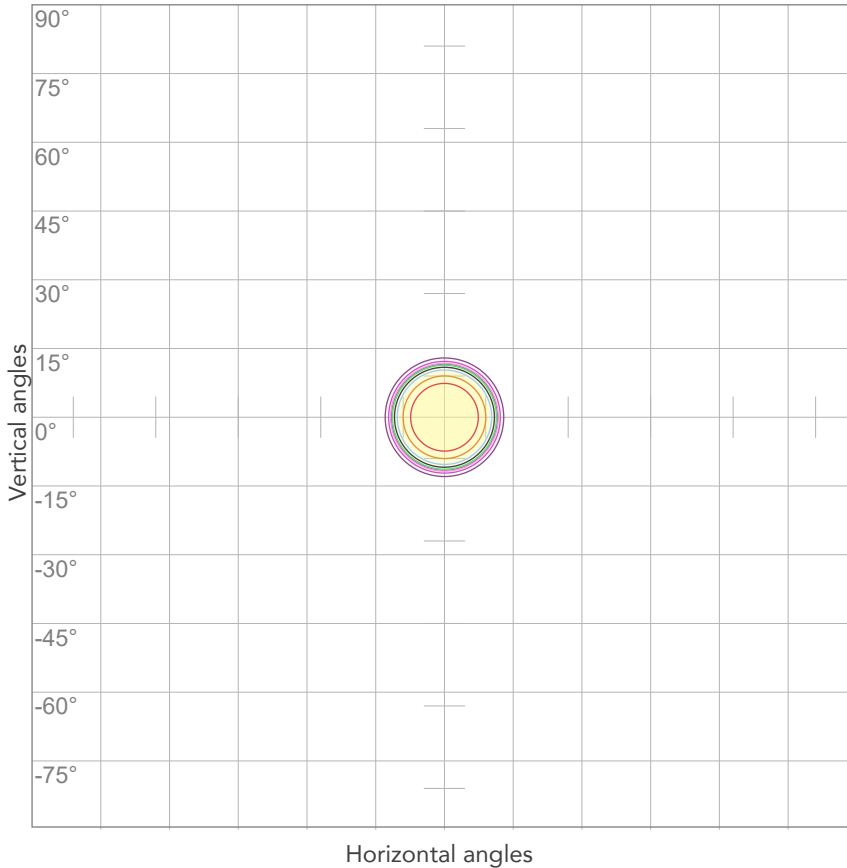


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,102A	20,6W	55lm/W
Power Fc			
0.9			



## ISO CANDELA DIAGRAM



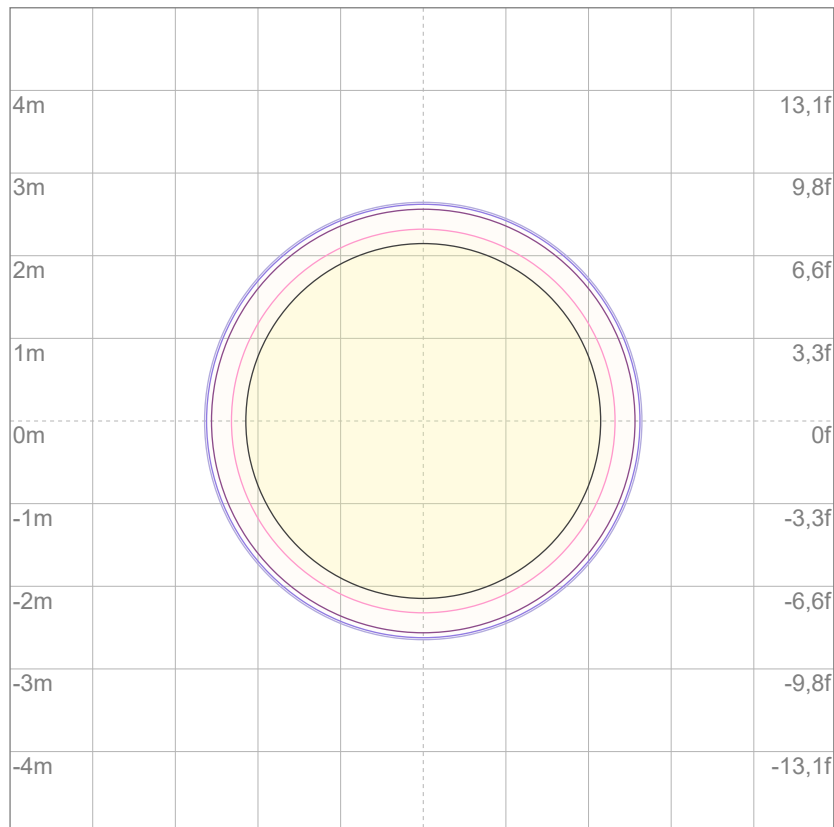
10%	835 cd
20%	1670 cd
30%	2506 cd
40%	3341 cd
50%	4176 cd
60%	5011 cd
70%	5846 cd
80%	6681 cd

Conditions:

Number of c-planes: 2

Candela at center: 8352 cd

## ISO LUX DIAGRAM



3%	2,51 lx
5%	4,18 lx
10%	8,35 lx
30%	25,1 lx
50%	41,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 83,5 lx

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



Total lumen output:

1144 lm

Peak candela output:

4591 cd

Light quality:

CRI: 92,3

Color temperature:

3072 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 36°

Target:

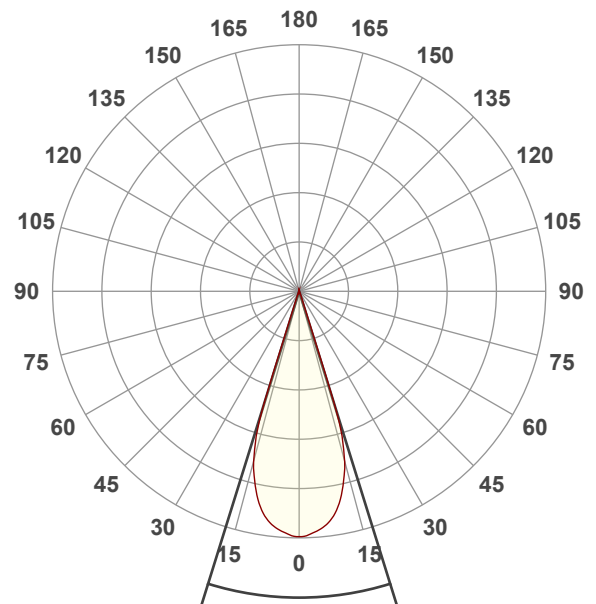
3000K

Operator:

Paolo Carvone

Date and time:

27/07/2022 15:15:56

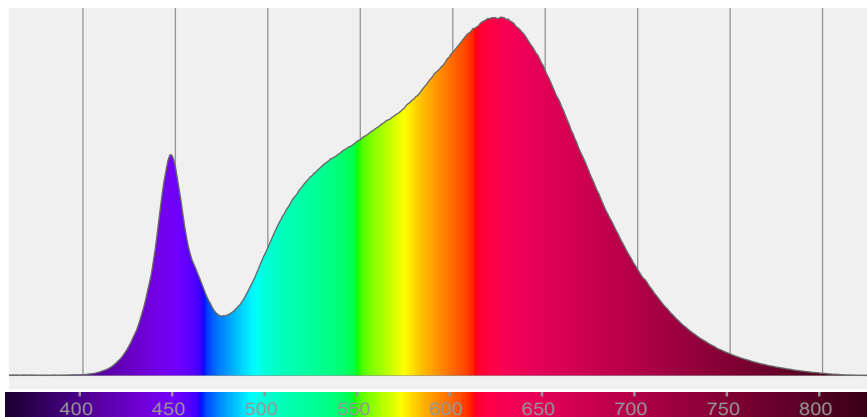


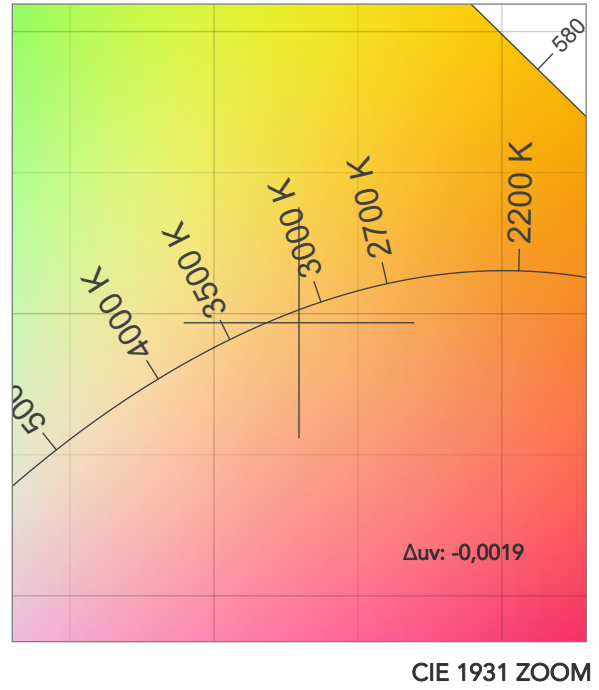
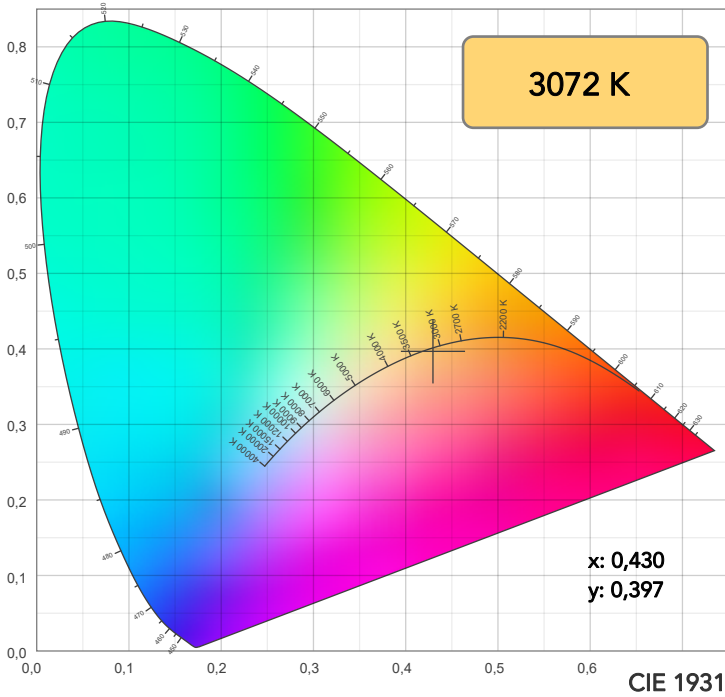
Beam angle 50%: 34,6°

Field angle 10%: 38°

Cut off angle 2.5%: 40,5°

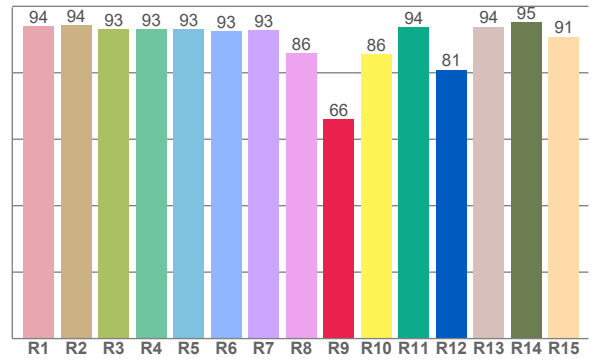
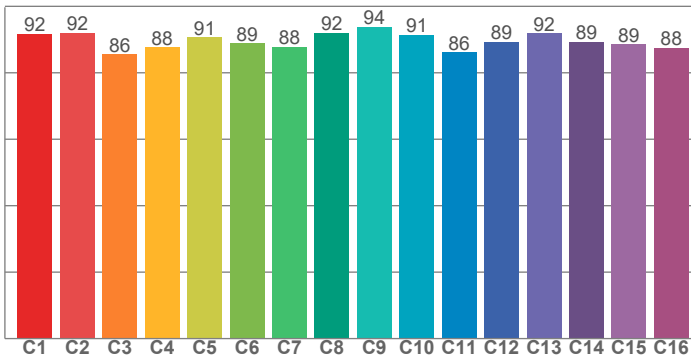
Spectra





TM30: 89,8

CRI: 92,3 (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
93,9	94,3	93,0	93,0	93,0	92,6	92,8	85,9	66,0	85,6	93,7	80,9	93,9	95,2	90,8

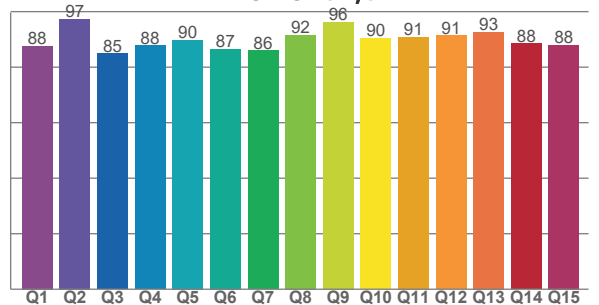
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,7	92,1	85,6	87,7	90,6	88,8	87,7	92,0	93,9	91,3	86,2	89,3	91,9	89,3	88,6	87,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87,6	97,3	84,9	87,7	89,9	86,6	86,0	91,6	96,2	90,4	90,8	91,4	92,6	88,4	87,9

CQS: 89,3



COLOR PARAMETERS

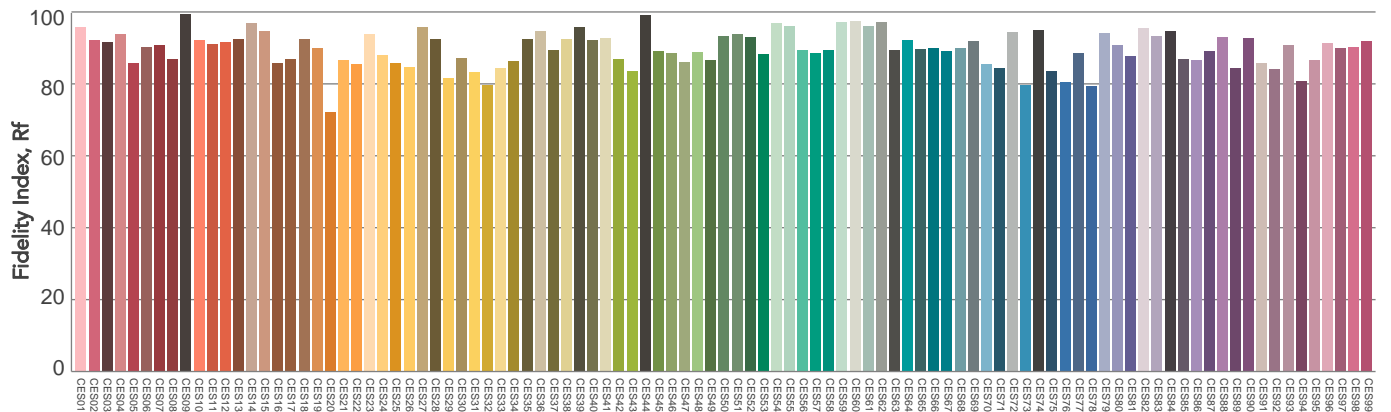
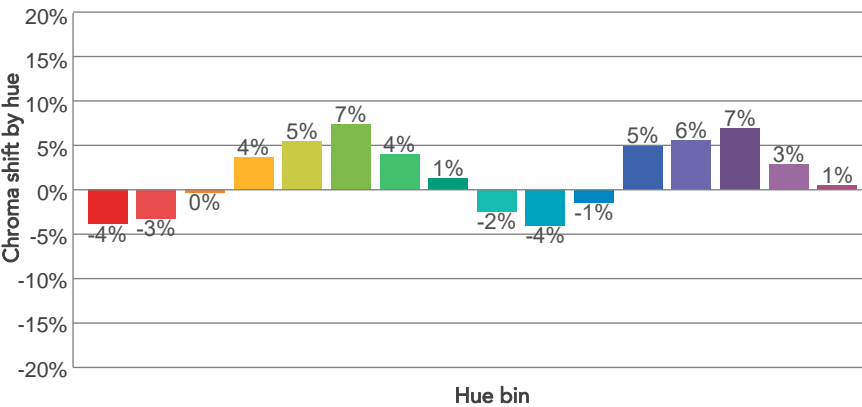
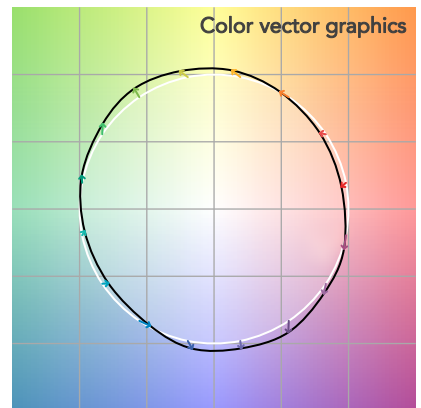
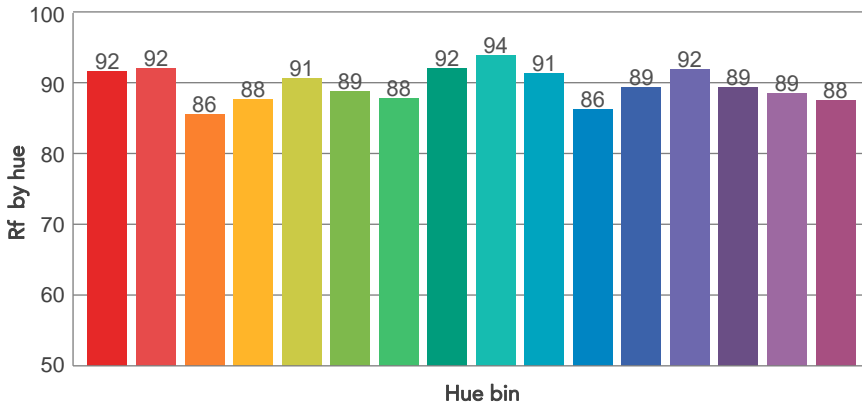
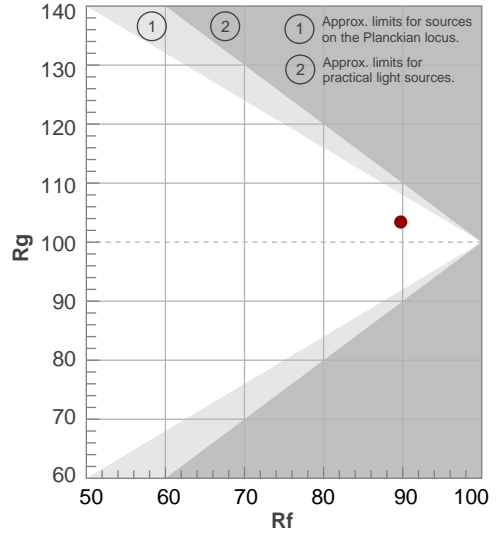
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3072 K	92,3	66,0	89,8	103,4	89,3	86	0,430	0,397	-0,0019

# TM30 DETAILS

**Rf 89,8**  
Fidelity index Rf

**Rg 103,4**  
Gammut index

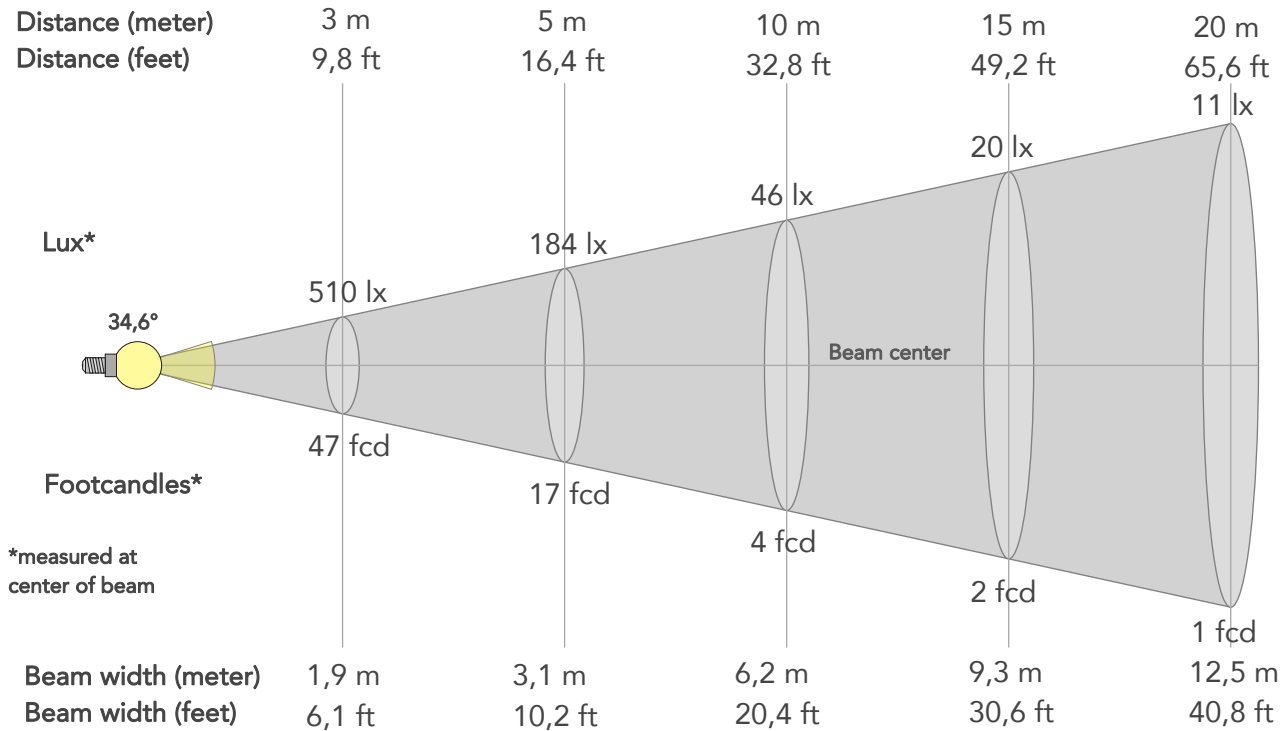
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-2%
2	92	-3%	3%
3	86	0%	8%
4	88	4%	7%
5	91	5%	5%
6	89	7%	0%
7	88	4%	-7%
8	92	1%	-5%
9	94	-2%	-3%
10	91	-4%	2%
11	86	-1%	9%
12	89	5%	4%
13	92	6%	0%
14	89	7%	-5%
15	89	3%	-7%
16	88	1%	-10%



# BEAM DETAILS



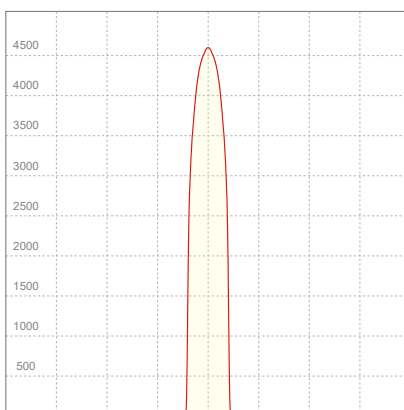
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
34,6°	38°	40,5°	100,0%	100,0%



## 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	4591lx	1148lx	510lx	287lx	184lx	82lx	46lx	20lx	11lx	7lx	5lx	3lx	2lx
Footcand.	427fcd	107fcd	47fcd	27fcd	17fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,6m	1,2m	1,9m	2,5m	3,1m	4,7m	6,2m	9,3m	12,5m	15,6m	18,7m	24,9m	31,1m
Beam wid.	2,1ft	4,1ft	6,1ft	8,2ft	10,2ft	15,3ft	20,4ft	30,6ft	40,8ft	51,1ft	61,3ft	81,7ft	102,1ft

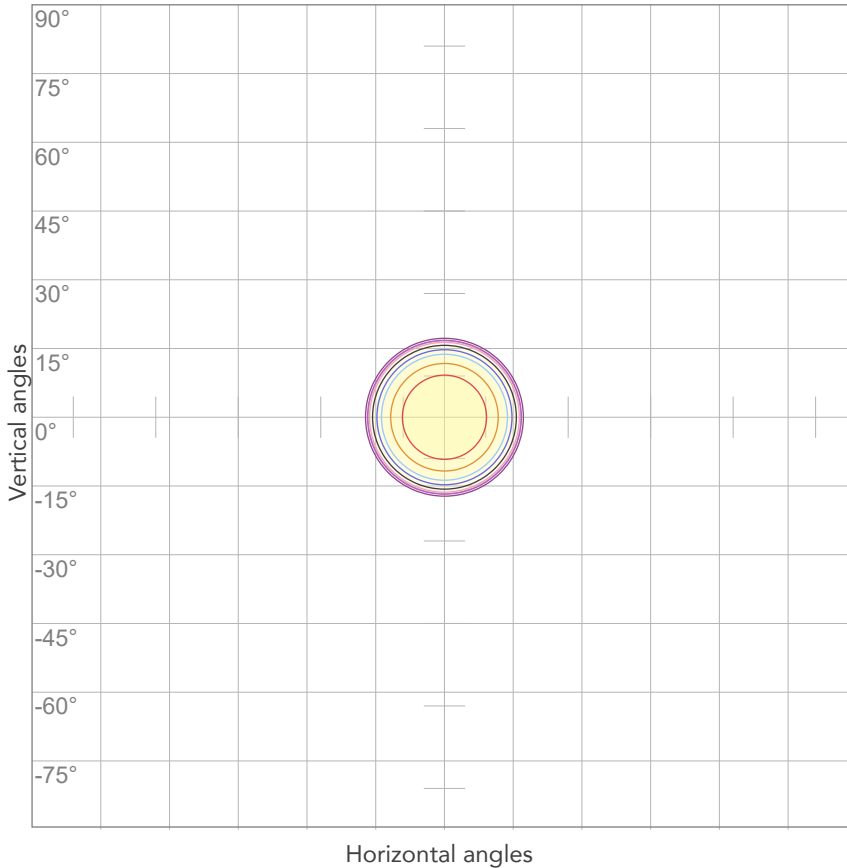
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	0,103A	20,6W	55lm/W
<b>Power Fc</b>			
0.9			

## ISO CANDELA DIAGRAM



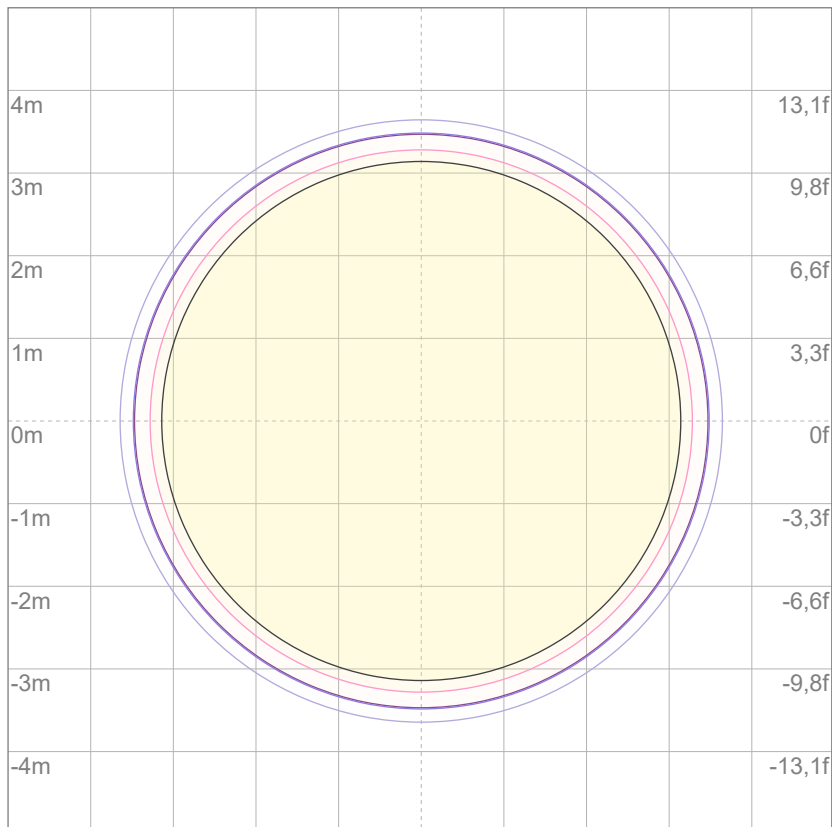
10%	459 cd
20%	918 cd
30%	1377 cd
40%	1837 cd
50%	2296 cd
60%	2755 cd
70%	3214 cd
80%	3673 cd

Conditions:

Number of c-planes: 2

Candela at center: 4591 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	1,38 lx
5%	2,30 lx
10%	4,59 lx
30%	13,8 lx
50%	23,0 lx

Conditions:

Number of c-planes: 2

Lux at center: 45,9 lx

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



Total lumen output:

1105 lm

Peak candela output:

2441 cd

Light quality:

CRI: 91,8

Color temperature:

3066 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 50°

Target:

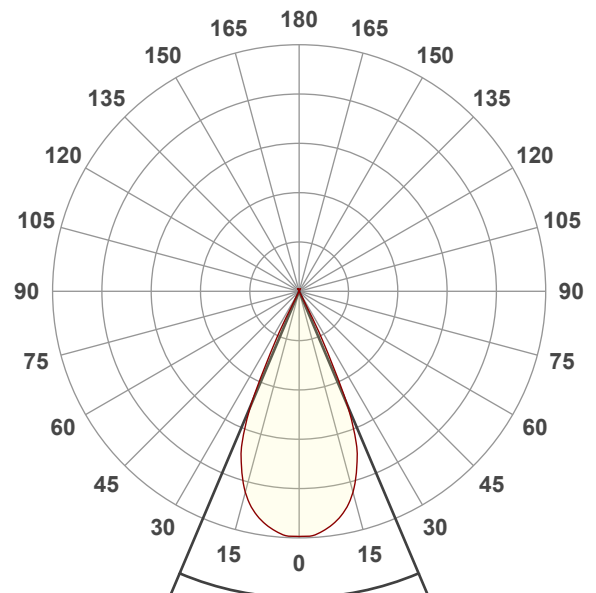
3000K

Operator:

Paolo Carvone

Date and time:

27/07/2022 15:19:12

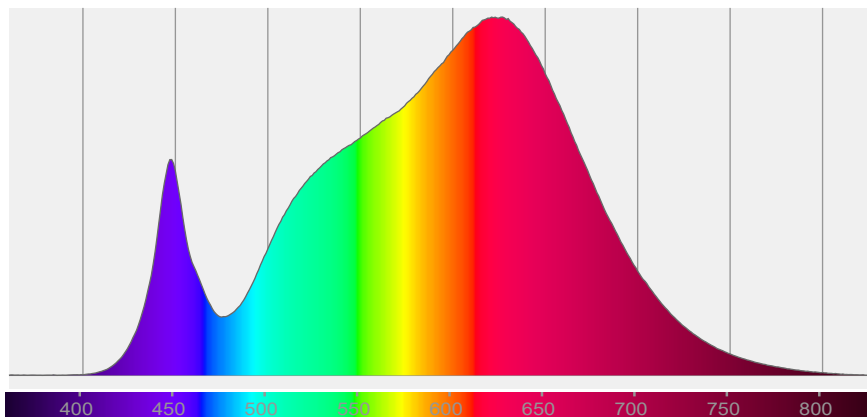


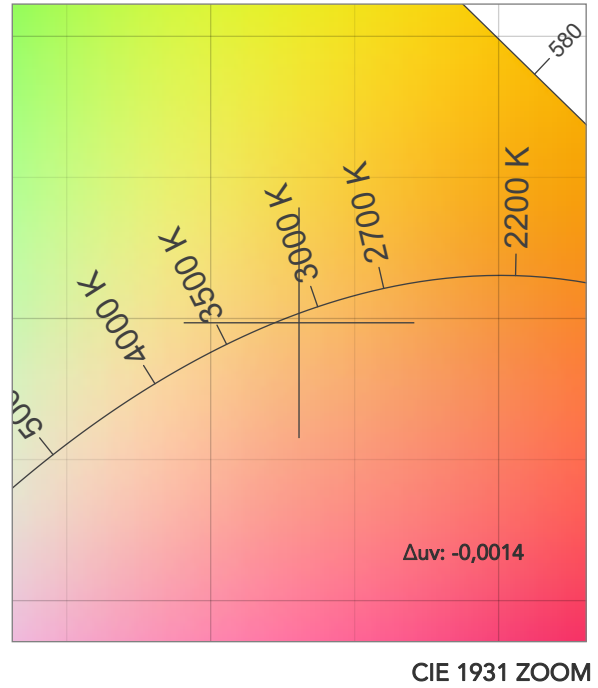
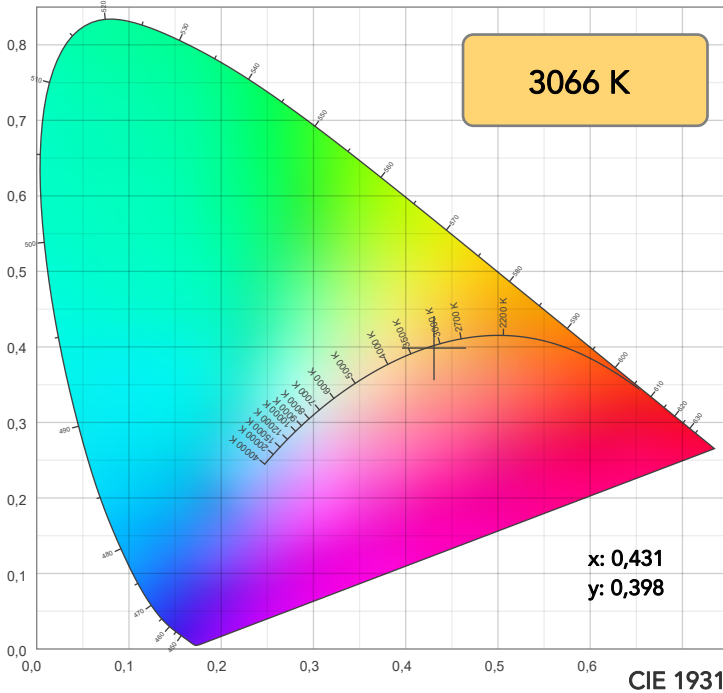
Beam angle 50%: 45,9°

Field angle 10%: 54°

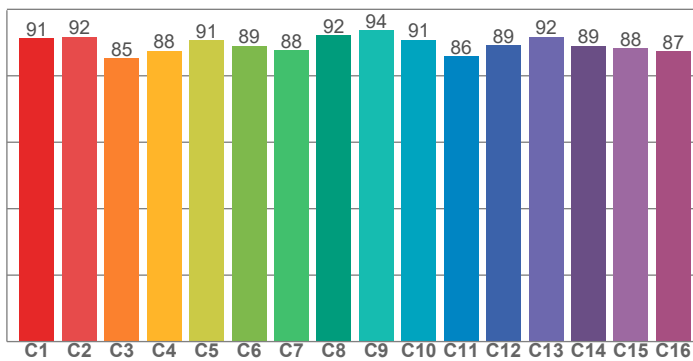
Cut off angle 2.5%: 55,8°

Spectra

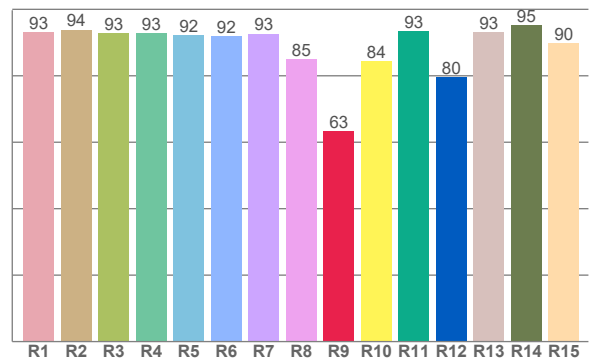




TM30: 89,5



CRI: 91,8 (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
93,2	93,9	92,8	92,7	92,2	91,9	92,6	84,9	63,3	84,4	93,4	79,6	93,2	95,1	89,8

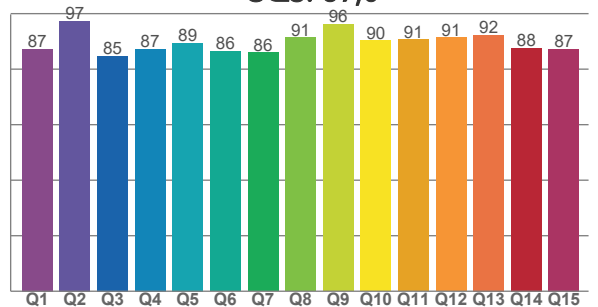
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,2	91,7	85,3	87,6	90,6	89,0	87,7	92,2	93,7	90,8	85,8	89,2	91,8	89,1	88,2	87,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87,2	97,3	84,8	87,3	89,4	86,4	85,9	91,4	96,1	90,3	90,7	91,3	92,3	87,6	87,3

CQS: 89,0



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	$\Delta uv$
3066 K	91,8	63,3	89,5	103,1	89,0	86	0,431	0,398	-0,0014

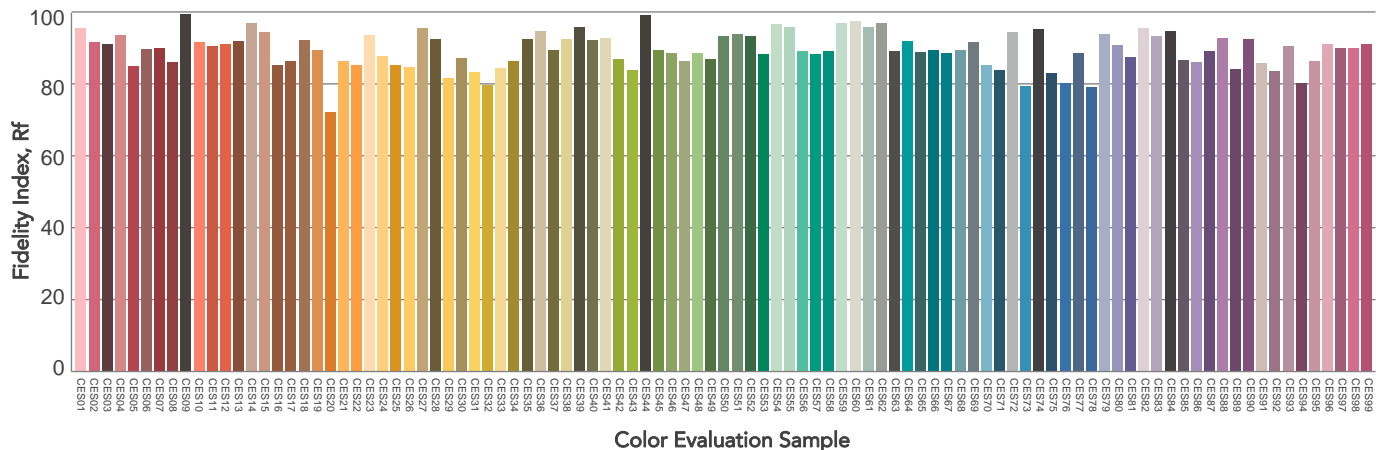
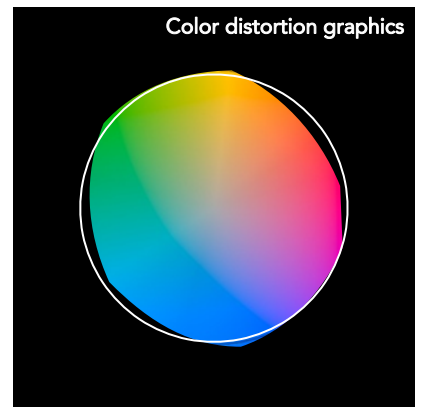
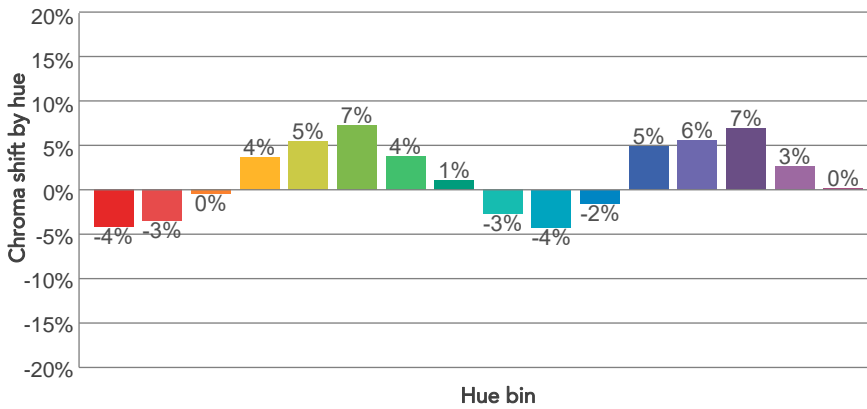
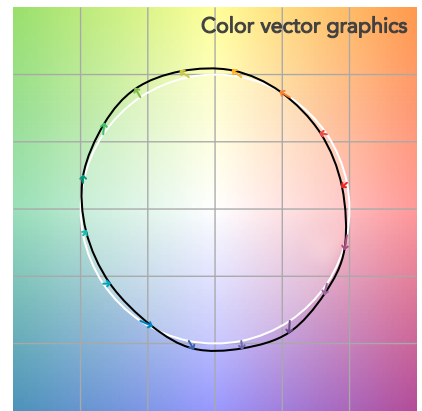
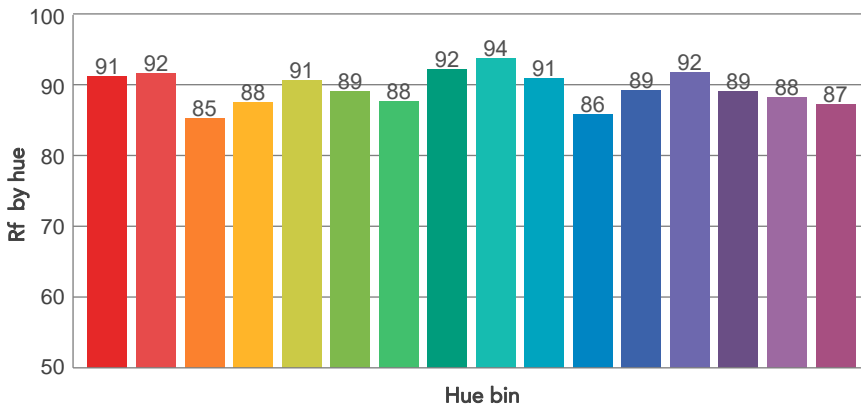
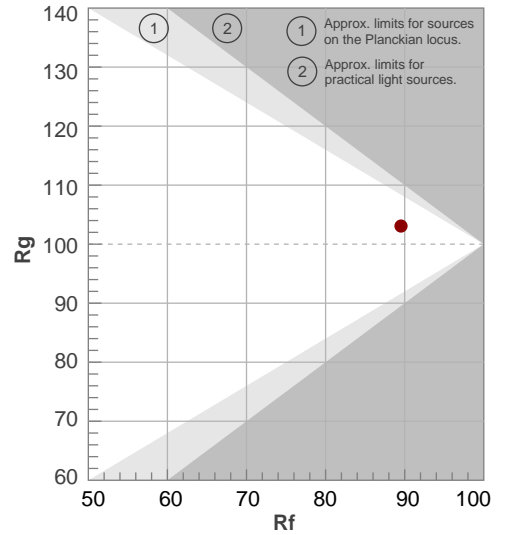


# TM30 DETAILS

**Rf 89,5**  
Fidelity index Rf

**Rg 103,1**  
Gammut index

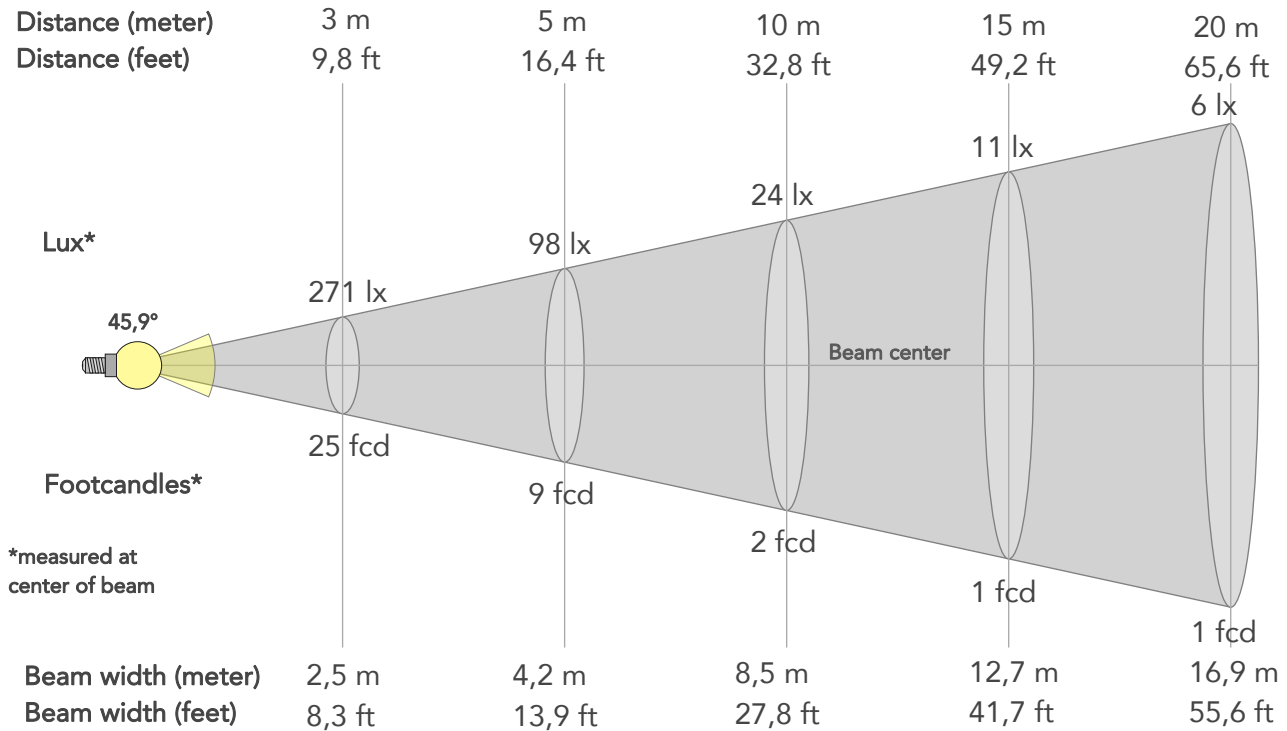
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	92	-3%	3%
3	85	0%	8%
4	88	4%	7%
5	91	5%	5%
6	89	7%	0%
7	88	4%	-7%
8	92	1%	-5%
9	94	-3%	-3%
10	91	-4%	2%
11	86	-2%	9%
12	89	5%	4%
13	92	6%	0%
14	89	7%	-5%
15	88	3%	-7%
16	87	0%	-10%



# BEAM DETAILS



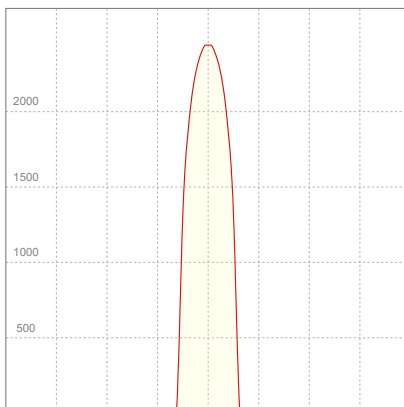
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
45,9°	54°	55,8°	100,0%	100,0%



## 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	2441lx	610lx	271lx	153lx	98lx	43lx	24lx	11lx	6lx	4lx	3lx	2lx	1lx
Footcand.	227fcd	57fcd	25fcd	14fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,8m	1,7m	2,5m	3,4m	4,2m	6,4m	8,5m	12,7m	16,9m	21,2m	25,4m	33,9m	42,4m
Beam wid.	2,8ft	5,6ft	8,3ft	11,1ft	13,9ft	20,8ft	27,8ft	41,7ft	55,6ft	69,5ft	83,4ft	111,2ft	138,9ft

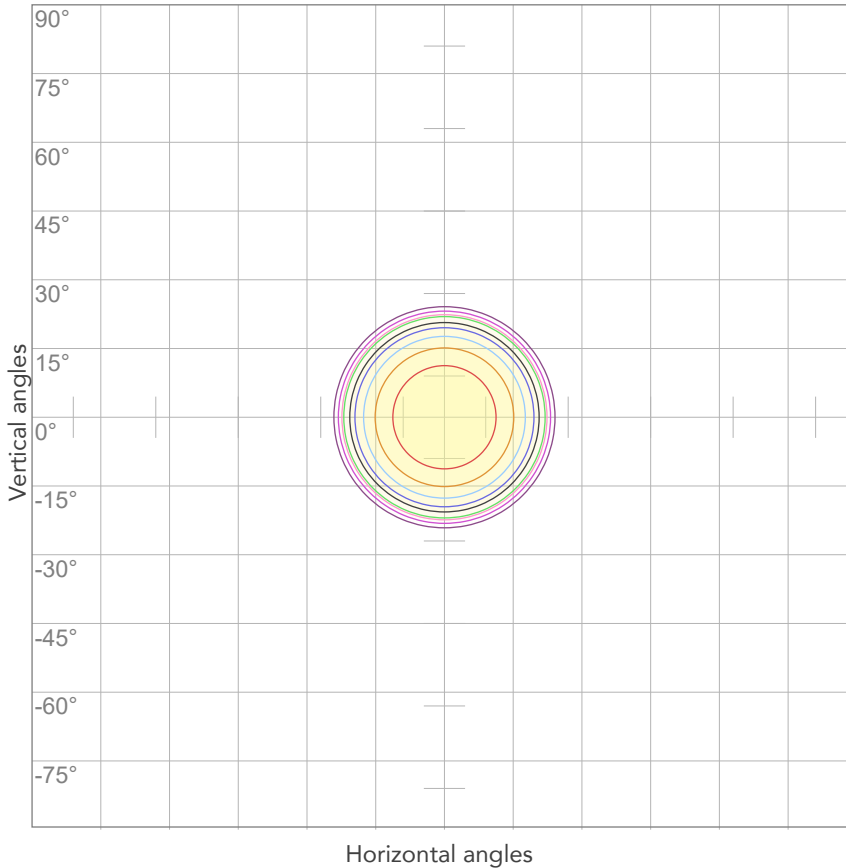
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,102A	20,6W	54lm/W
<b>Power Fc</b>			
0.9			

## ISO CANDELA DIAGRAM



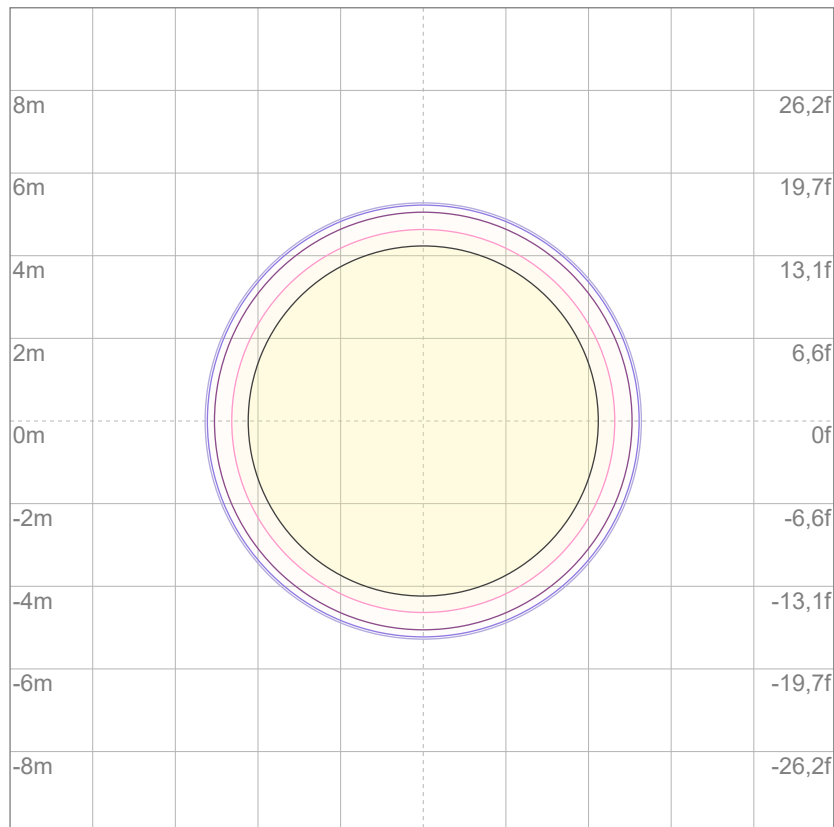
10%	244 cd
20%	488 cd
30%	732 cd
40%	976 cd
50%	1220 cd
60%	1464 cd
70%	1708 cd
80%	1953 cd

Conditions:

Number of c-planes: 2

Candela at center: 2441 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	0,732 lx
5%	1,22 lx
10%	2,44 lx
30%	7,32 lx
50%	12,2 lx

Conditions:

Number of c-planes: 2

Lux at center: 24,4 lx

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



Total lumen output:

1221 lm

Peak candela output:

15692 cd

Light quality:

CRI: 91,1

Color temperature:

4203 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 19°

Target:

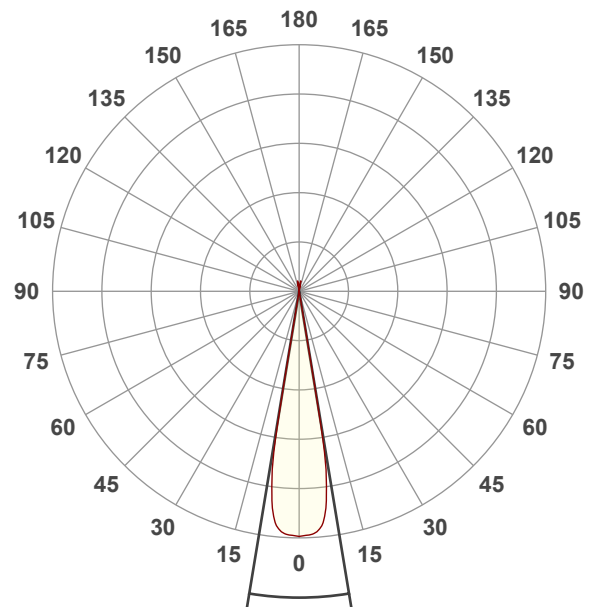
4000K

Operator:

Paolo Carvone

Date and time:

27/07/2022 15:38:19

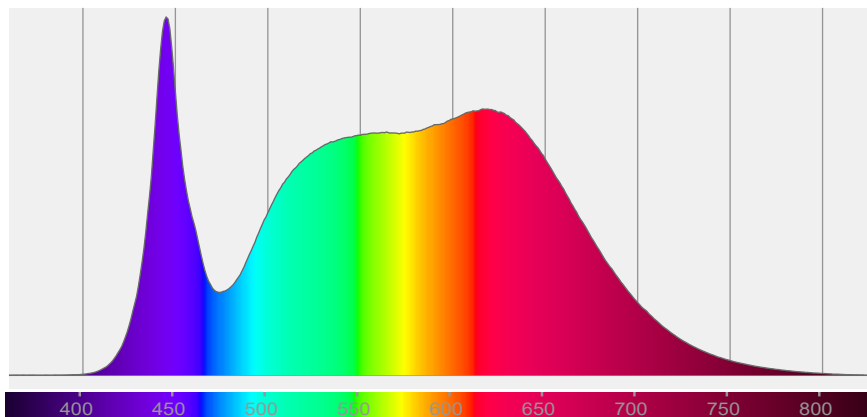


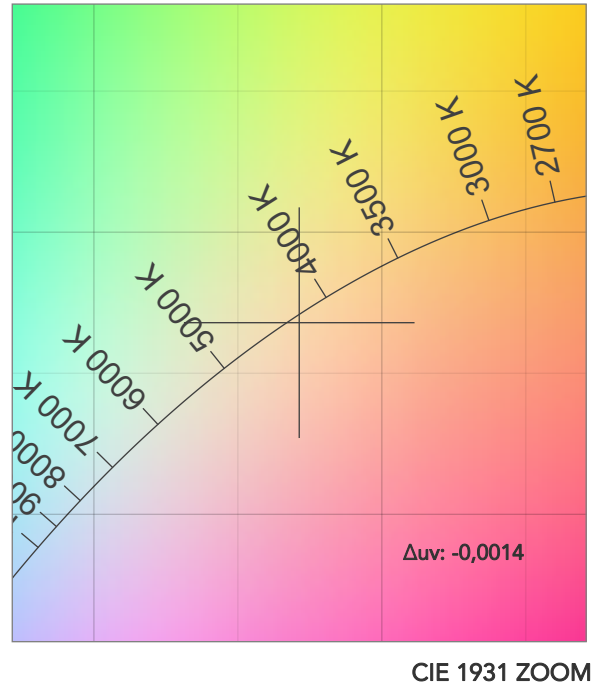
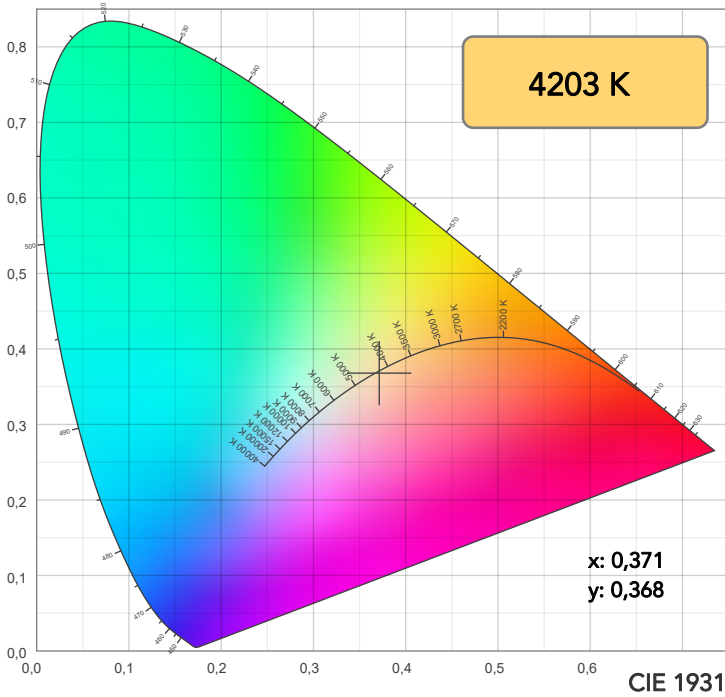
Beam angle 50%: 18,7°

Field angle 10%: 20,7°

Cut off angle 2.5%: 21,1°

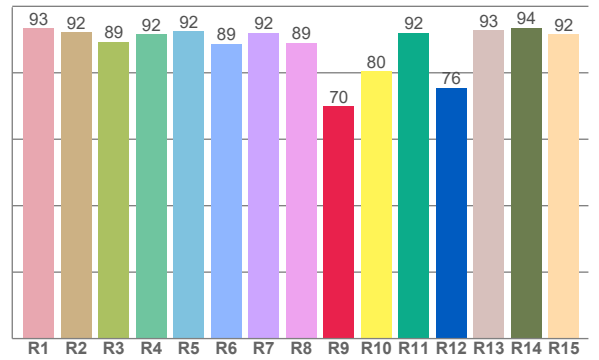
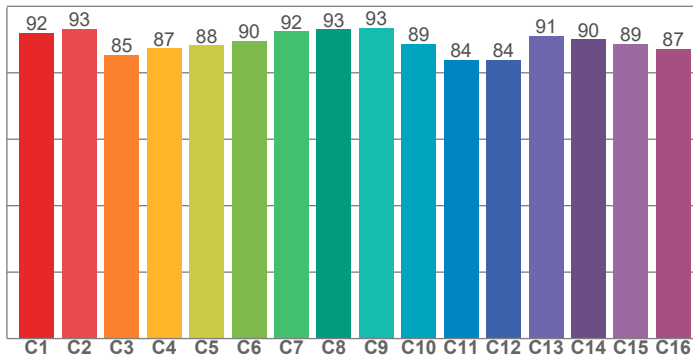
Spectra





TM30: 89,1

CRI: 91,1 (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
93,5	92,1	89,3	91,6	92,5	88,8	92,0	89,1	69,9	80,4	92,0	75,5	92,7	93,6	91,7

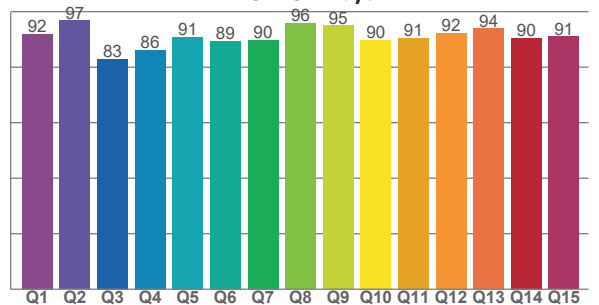
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,1	93,2	85,4	87,3	88,3	89,6	92,4	93,1	93,4	88,7	83,8	83,8	91,1	90,0	88,7	87,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,0	96,7	82,9	86,2	90,9	89,4	89,8	95,8	95,0	89,7	90,5	92,2	93,9	90,4	91,0

CQS: 90,5



COLOR PARAMETERS

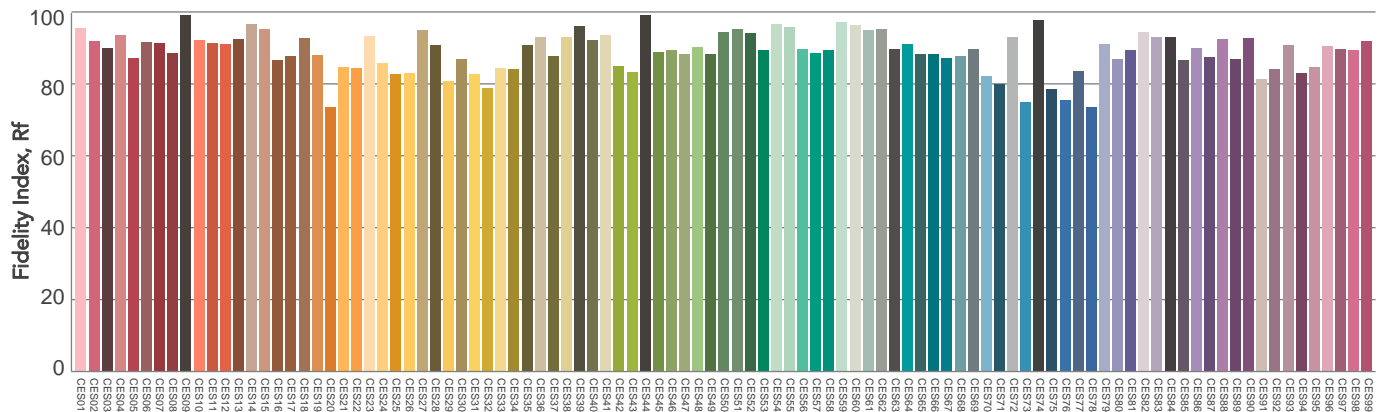
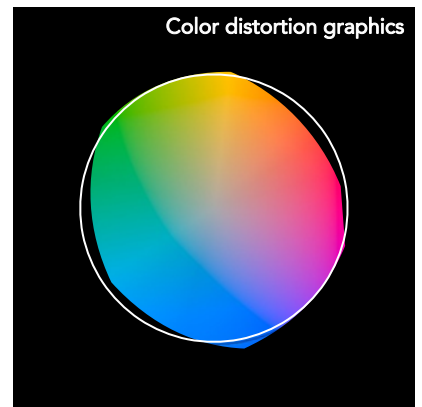
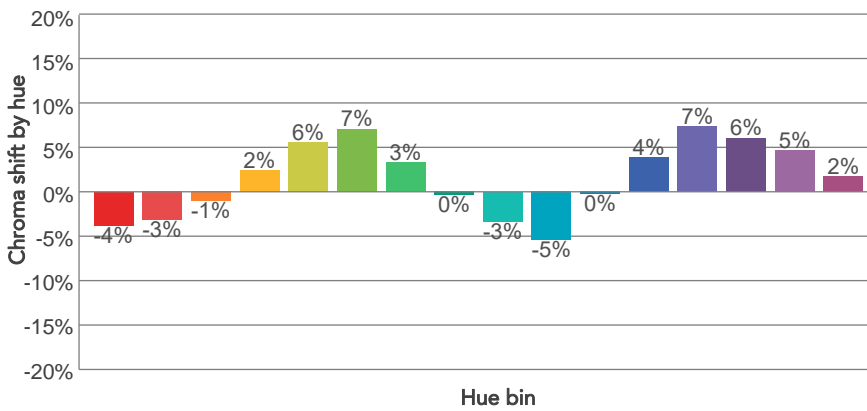
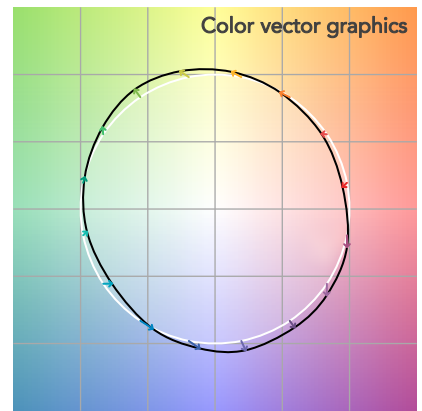
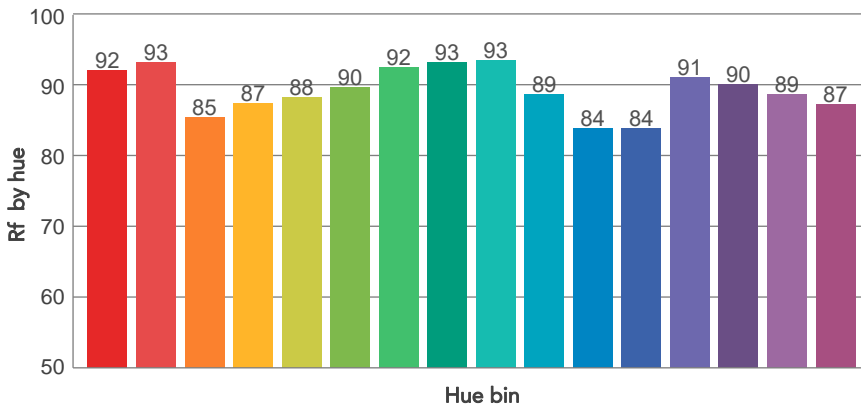
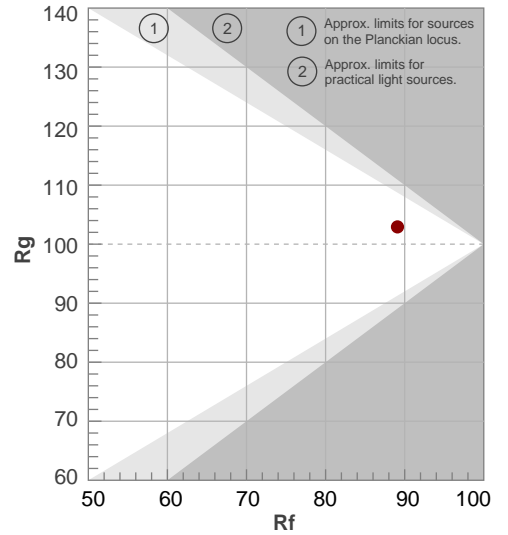
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4203 K	91,1	69,9	89,1	102,9	90,5	88	0,371	0,368	-0,0014

# TM30 DETAILS

**Rf 89,1**  
Fidelity index Rf

**Rg 102,9**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-2%
2	93	-3%	2%
3	85	-1%	8%
4	87	2%	8%
5	88	6%	5%
6	90	7%	0%
7	92	3%	-4%
8	93	0%	-4%
9	93	-3%	-2%
10	89	-5%	4%
11	84	0%	11%
12	84	4%	9%
13	91	7%	2%
14	90	6%	0%
15	89	5%	-7%
16	87	2%	-9%

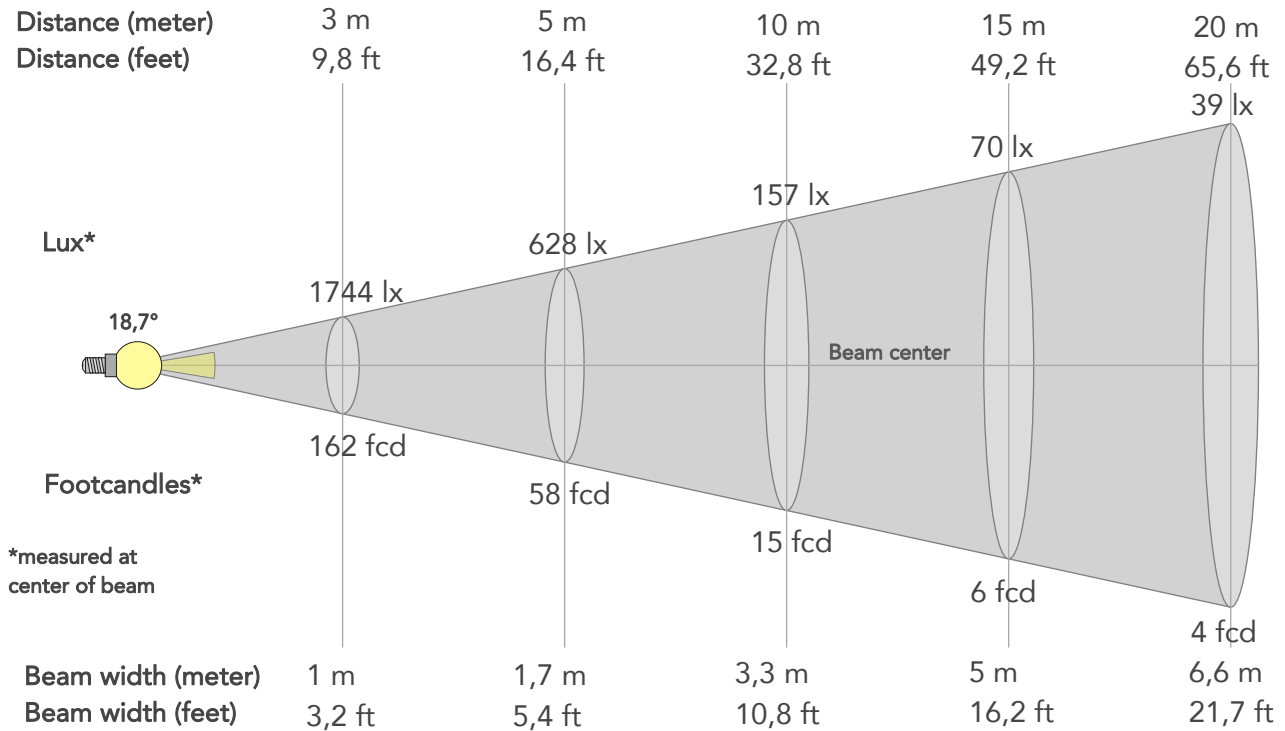


Color Evaluation Sample

# BEAM DETAILS



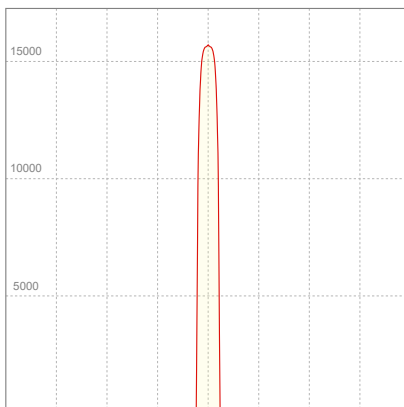
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,7°	20,7°	21,1°	100,0%	100,0%



## 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	15692lx	3923lx	1744lx	981lx	628lx	279lx	157lx	70lx	39lx	25lx	17lx	10lx	6lx
Footcand.	1458fcd	364fcd	162fcd	91fcd	58fcd	26fcd	15fcd	6fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,6m	8,3m	9,9m	13,2m	16,5m
Beam wid.	1,1ft	2,2ft	3,2ft	4,3ft	5,4ft	8,1ft	10,8ft	16,2ft	21,7ft	27,1ft	32,5ft	43,3ft	54,1ft

## LINEAR DISTRIBUTION DIAGRAM

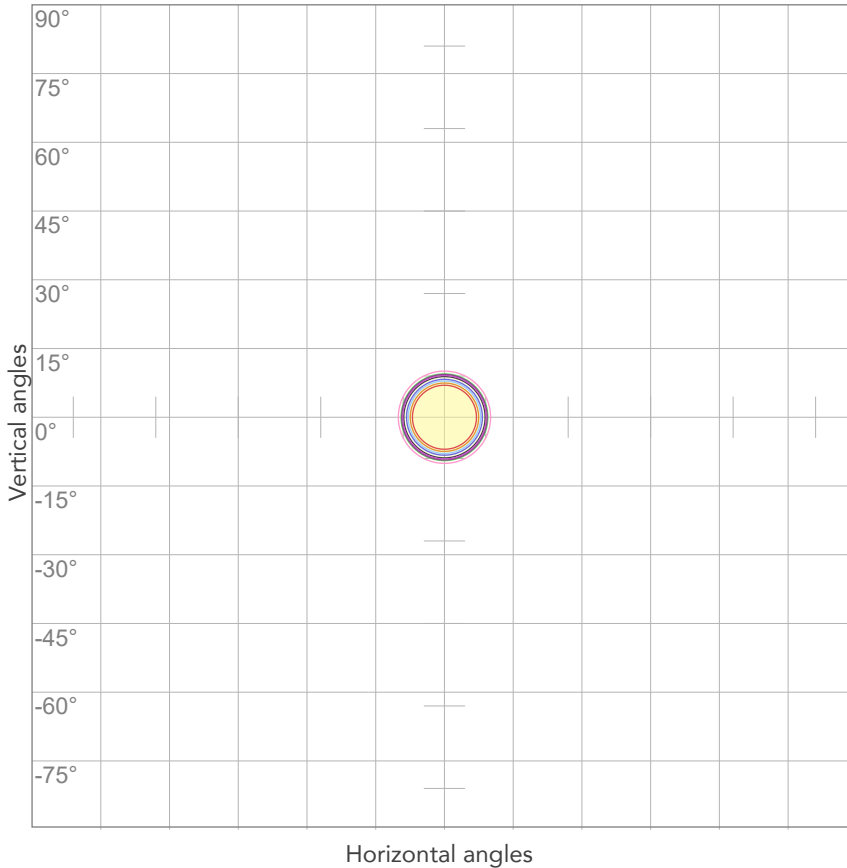


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,104A	21,0W	58lm/W

Power Fc
0.9

## ISO CANDELA DIAGRAM



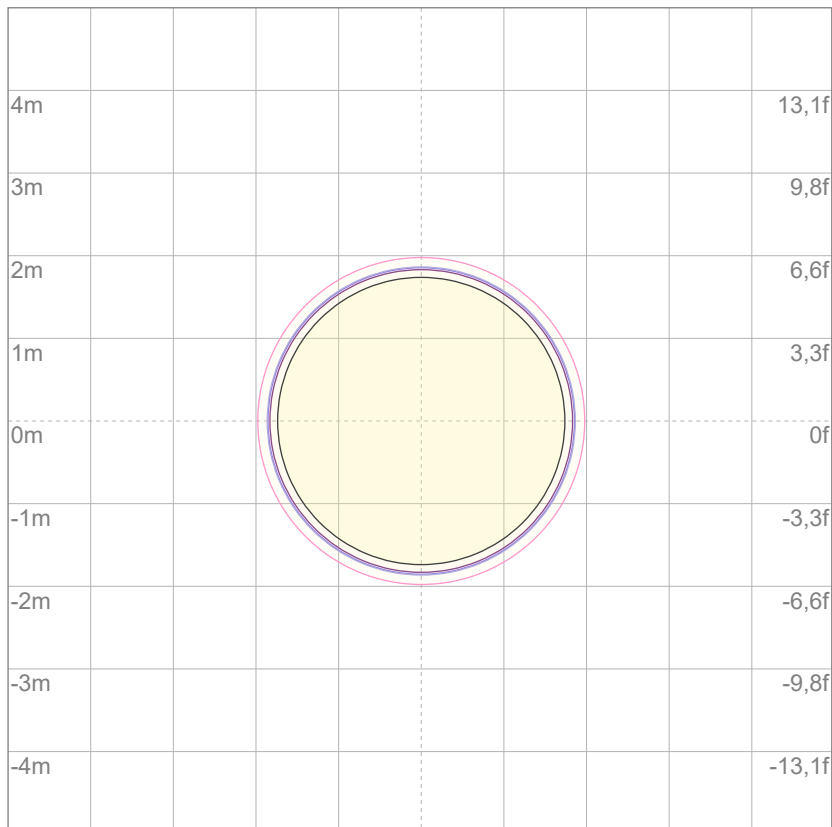
10%	1569 cd
20%	3138 cd
30%	4708 cd
40%	6277 cd
50%	7846 cd
60%	9415 cd
70%	10984 cd
80%	12553 cd

Conditions:

Number of c-planes: 2

Candela at center: 15692 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	4,71 lx
5%	7,85 lx
10%	15,7 lx
30%	47,1 lx
50%	78,5 lx

Conditions:

Number of c-planes: 2

Lux at center: 157 lx

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





Total lumen output:

1245 lm

Peak candela output:

8965 cd

Light quality:

CRI: 90,9

Color temperature:

4192 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASUREMENT CONDITIONS:**

Beam angle:

Profile 26°

Target:

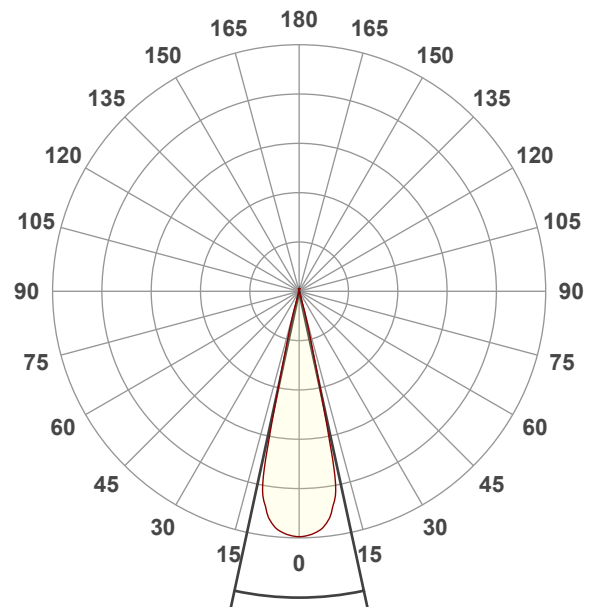
4000K

Operator:

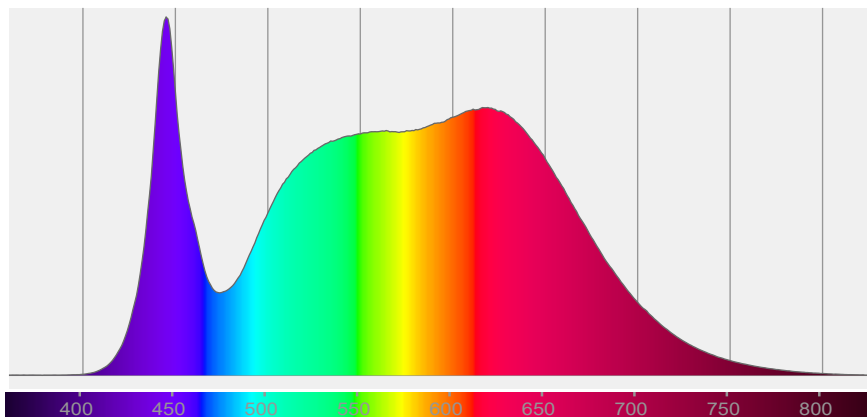
Paolo Carvone

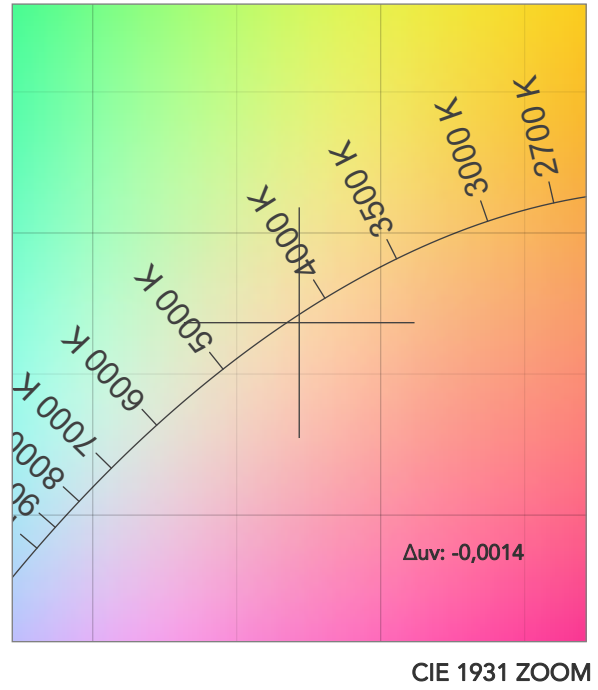
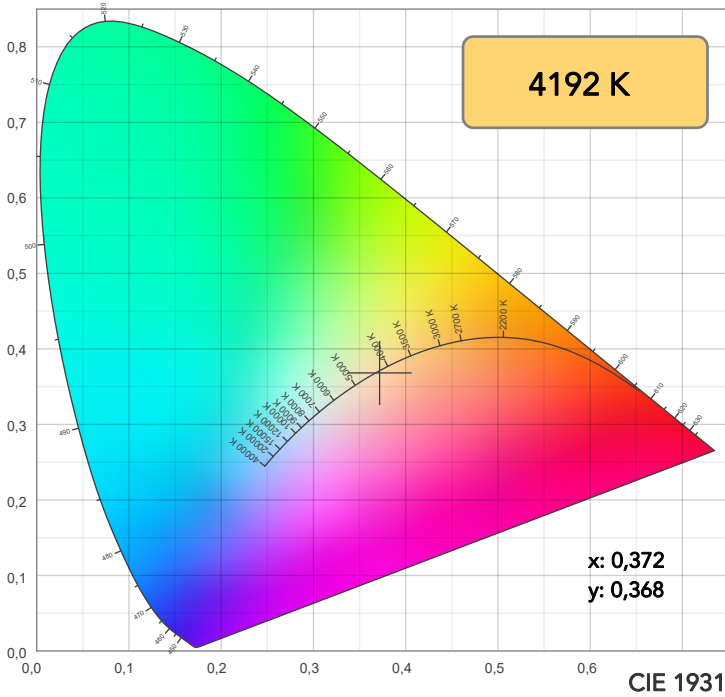
Date and time:

27/07/2022 15:41:02



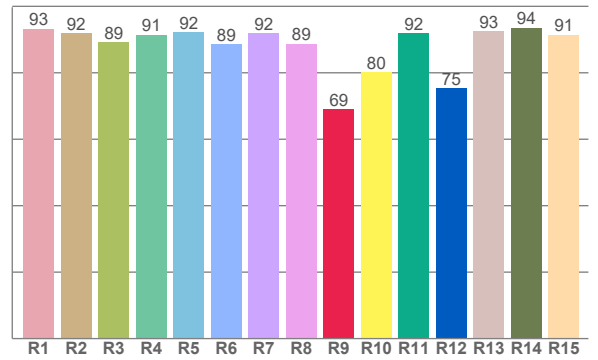
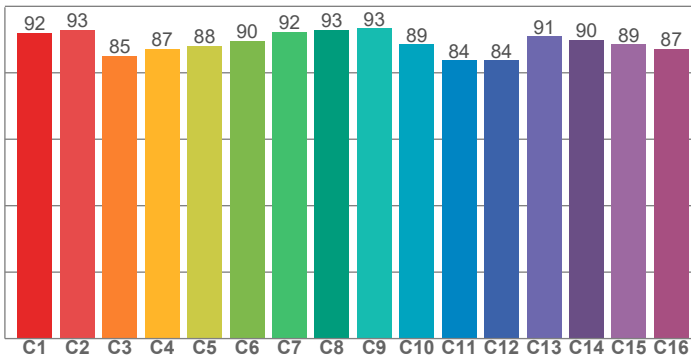
Spectra





TM30: 89,0

CRI: 90,9 (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
93,3	92,0	89,2	91,4	92,3	88,6	91,9	88,7	69,0	80,1	91,9	75,3	92,5	93,5	91,4

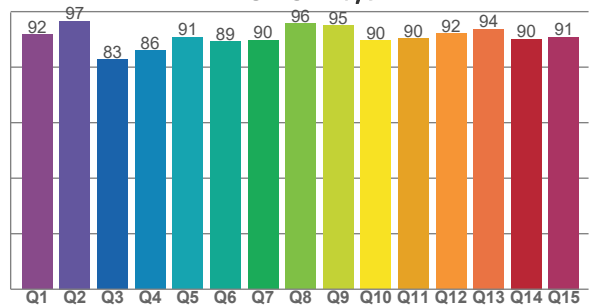
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,9	93,0	85,2	87,1	88,2	89,5	92,3	93,0	93,3	88,5	83,7	83,7	91,0	89,9	88,6	87,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,8	96,7	82,7	86,0	90,7	89,2	89,7	95,6	94,9	89,6	90,3	92,0	93,7	90,2	90,8

CQS: 90,3



COLOR PARAMETERS

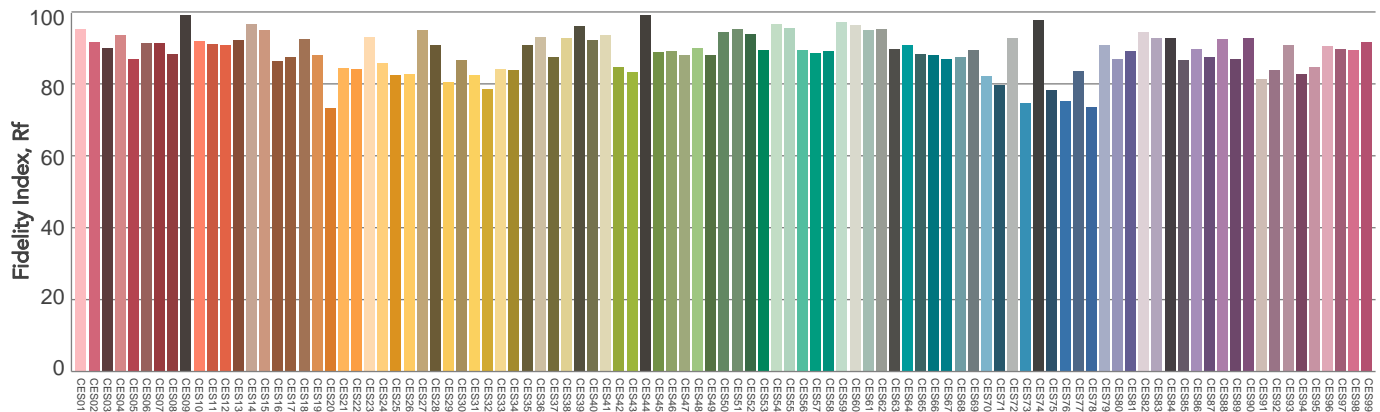
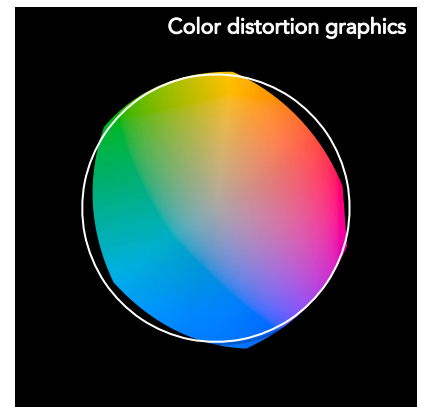
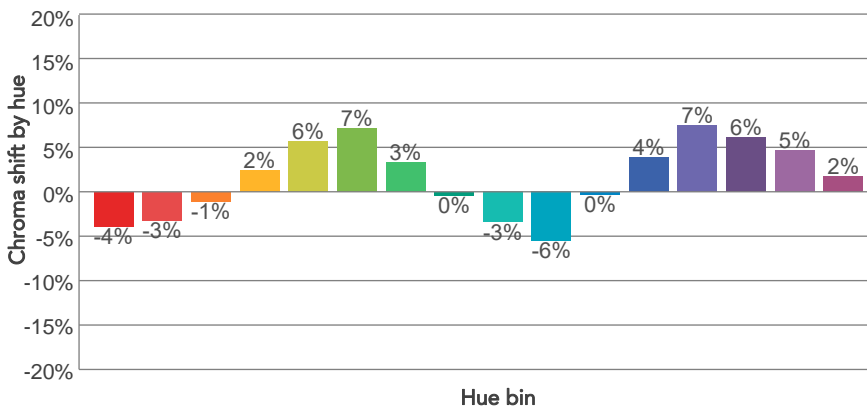
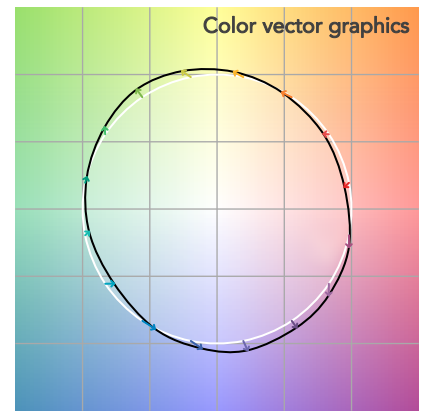
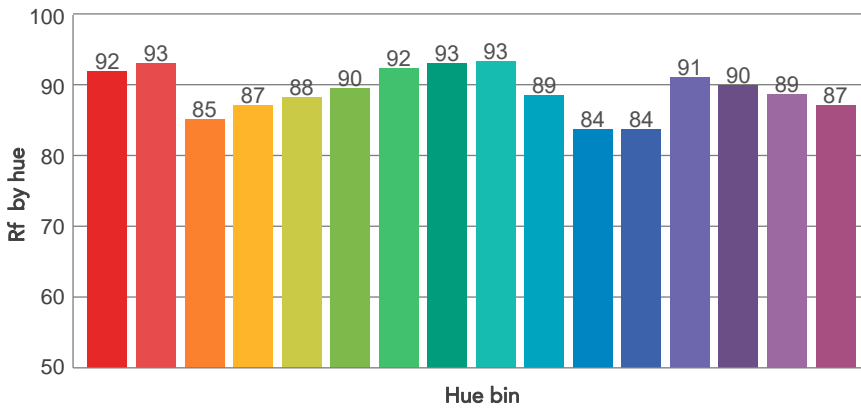
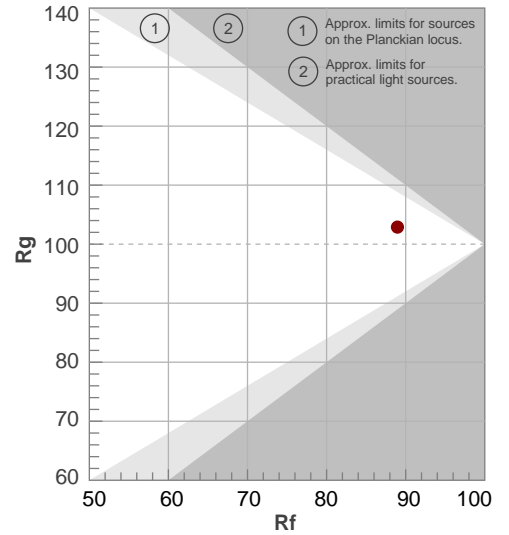
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4192 K	90,9	69,0	89,0	102,9	90,3	88	0,372	0,368	-0,0014

# TM30 DETAILS

**Rf 89,0**  
Fidelity index Rf

**Rg 102,9**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-2%
2	93	-3%	2%
3	85	-1%	8%
4	87	2%	8%
5	88	6%	6%
6	90	7%	0%
7	92	3%	-4%
8	93	0%	-4%
9	93	-3%	-2%
10	89	-6%	4%
11	84	0%	11%
12	84	4%	9%
13	91	7%	2%
14	90	6%	0%
15	89	5%	-7%
16	87	2%	-9%

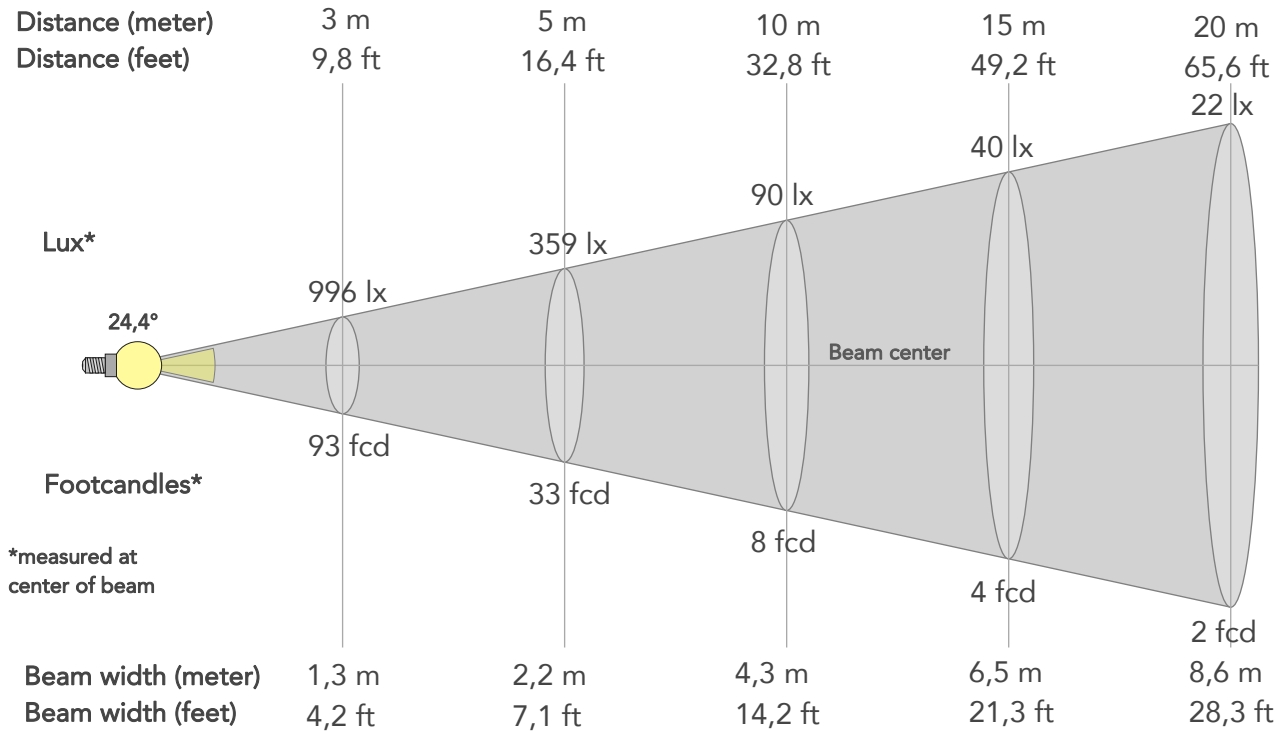


Color Evaluation Sample

# BEAM DETAILS



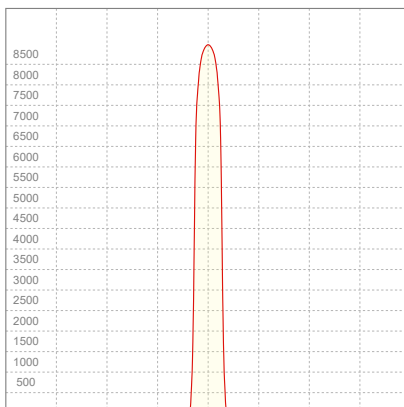
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24,4°	29,6°	31,6°	100,0%	100,0%



## 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	8965lx	2241lx	996lx	560lx	359lx	159lx	90lx	40lx	22lx	14lx	10lx	6lx	4lx
Footcand.	833fcd	208fcd	93fcd	52fcd	33fcd	15fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,4m	0,9m	1,3m	1,7m	2,2m	3,2m	4,3m	6,5m	8,6m	10,8m	13m	17,3m	21,6m
Beam wid.	1,4ft	2,9ft	4,2ft	5,7ft	7,1ft	10,6ft	14,2ft	21,3ft	28,3ft	35,4ft	42,5ft	56,7ft	70,9ft

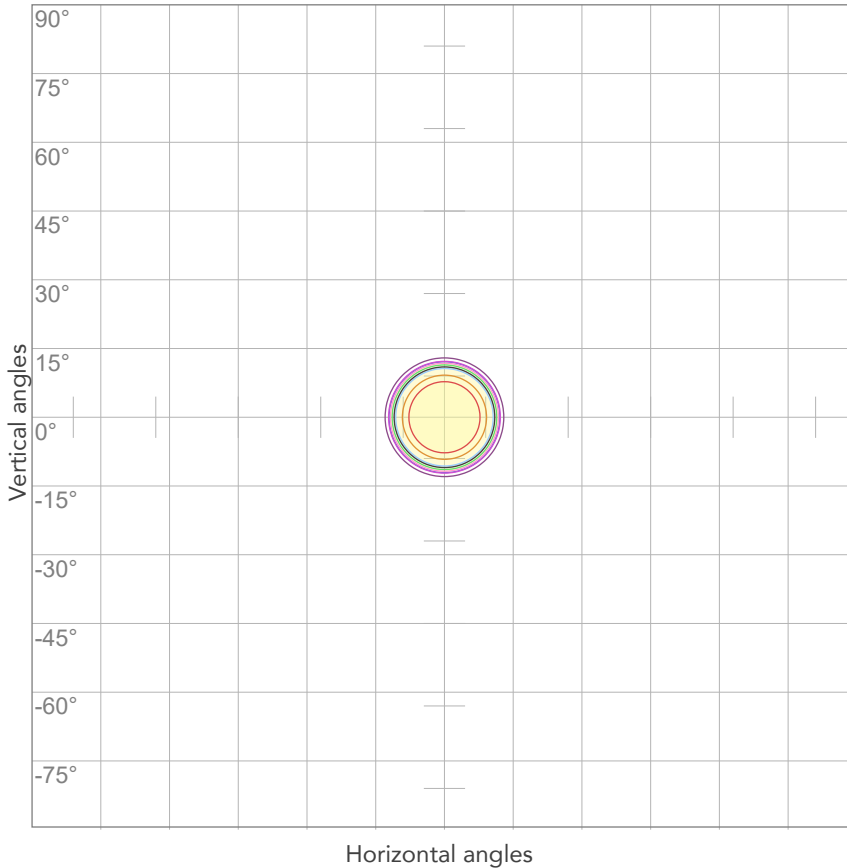
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,104A	21,0W	59lm/W
Power Fc			
0.9			

## ISO CANDELA DIAGRAM



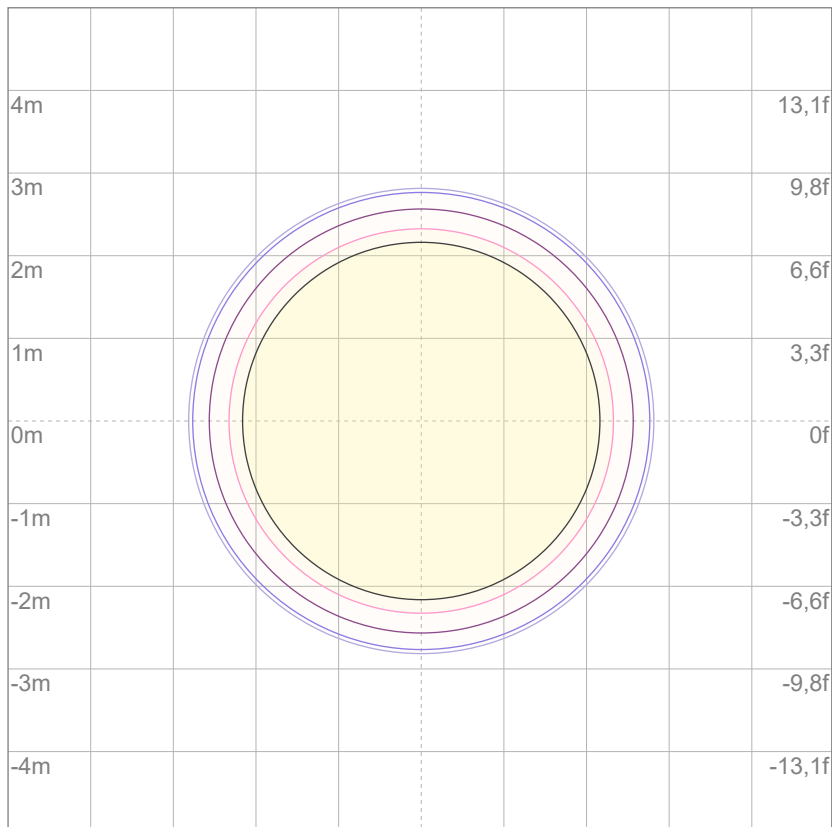
10%	897 cd
20%	1793 cd
30%	2690 cd
40%	3586 cd
50%	4483 cd
60%	5379 cd
70%	6276 cd
80%	7172 cd

Conditions:

Number of c-planes: 2

Candela at center: 8965 cd

## ISO LUX DIAGRAM



3%	2,69 lx
5%	4,48 lx
10%	8,97 lx
30%	26,9 lx
50%	44,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 89,7 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

1228 lm

Peak candela output:

4890 cd

Light quality:

CRI: 91,3

Color temperature:

4191 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 36°

Target:

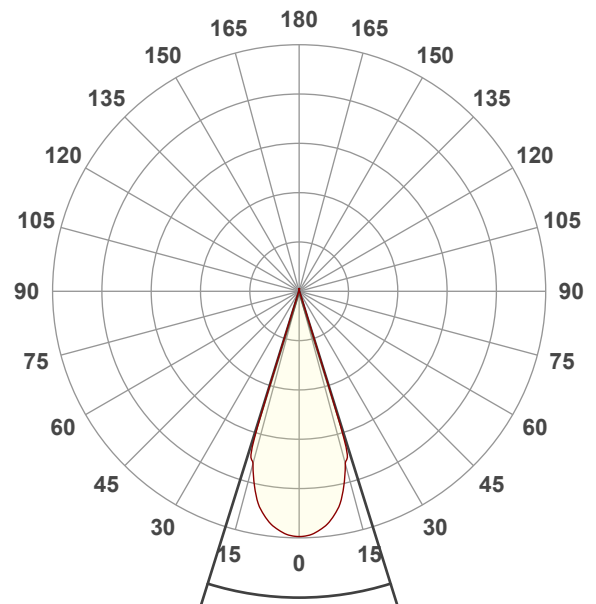
4000K

Operator:

Paolo Carvone

Date and time:

27/07/2022 15:43:41

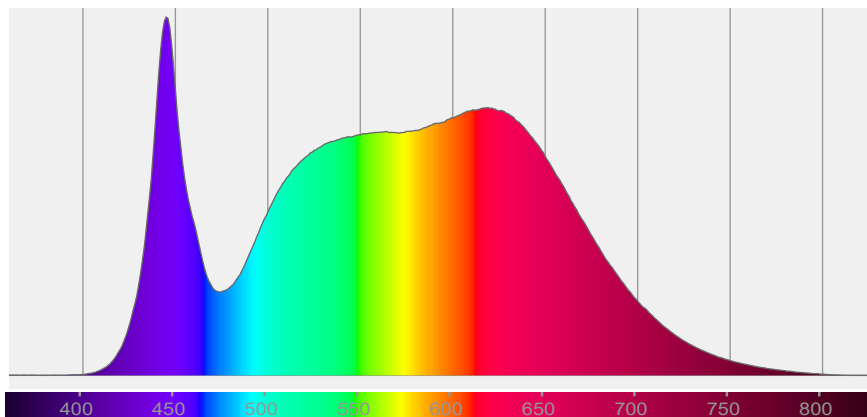


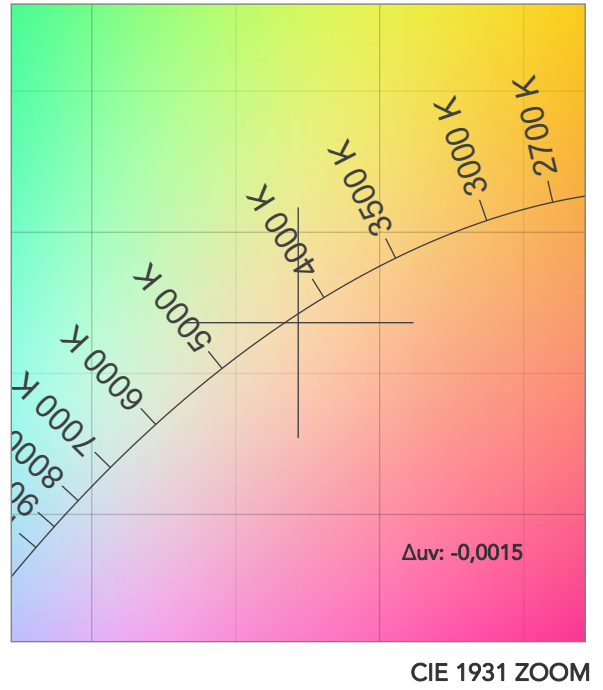
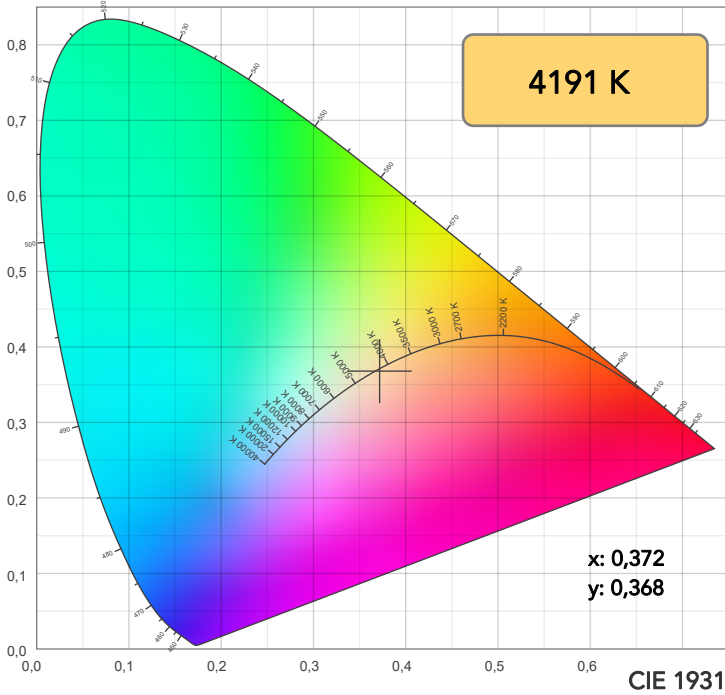
Beam angle 50%: 34,7°

Field angle 10%: 37,5°

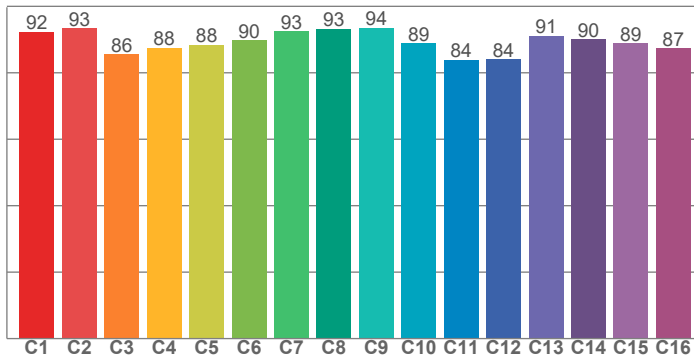
Cut off angle 2.5%: 39,6°

Spectra

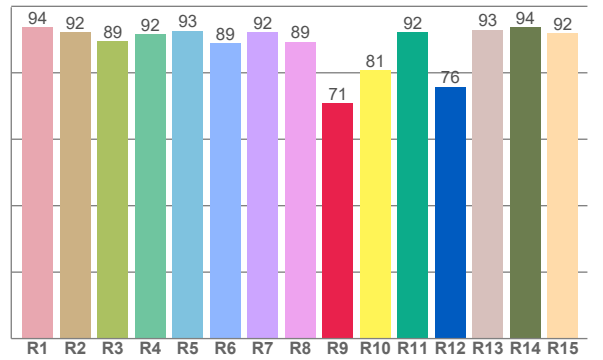




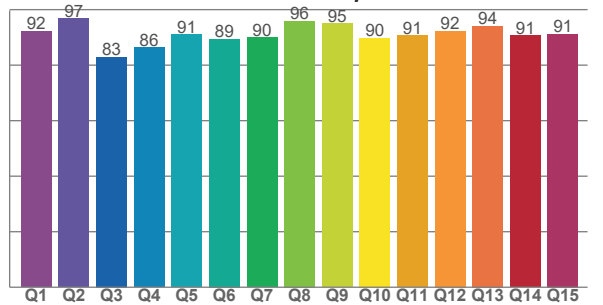
TM30: 89,2



CRI: 91,3 (R1-R8)



CQS: 90,6



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
93,7	92,3	89,4	91,7	92,7	89,0	92,1	89,3	70,8	80,8	92,1	75,8	93,0	93,6	91,9

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
92,2	93,3	85,6	87,5	88,4	89,7	92,5	93,2	93,6	88,9	84,0	84,0	91,1	90,1	88,8	87,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,2	96,8	83,0	86,3	91,1	89,5	89,9	95,8	95,0	89,8	90,6	92,3	94,0	90,7	91,3

COLOR PARAMETERS

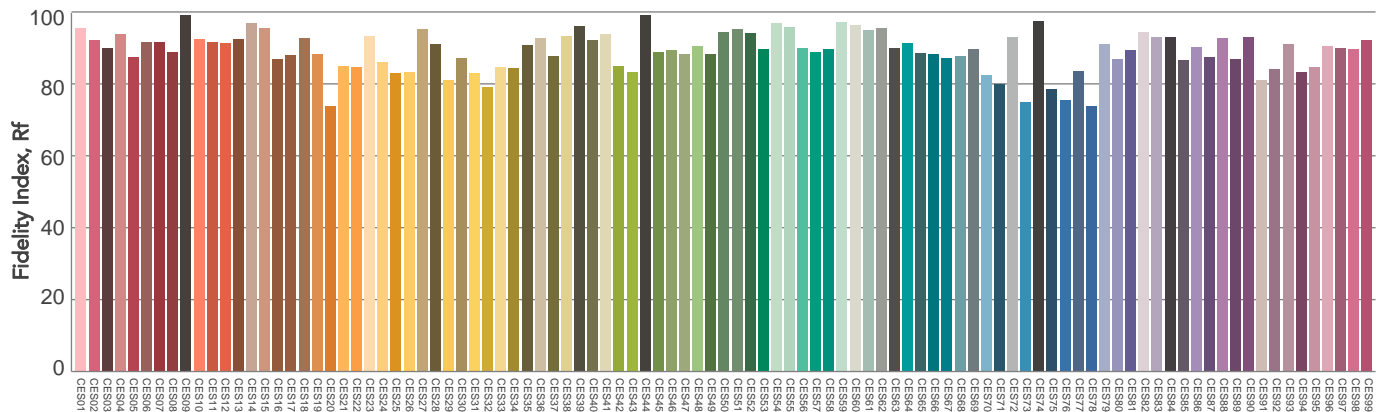
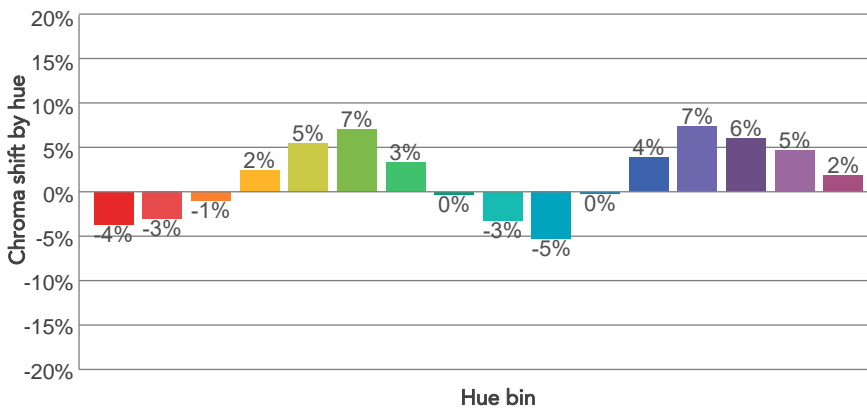
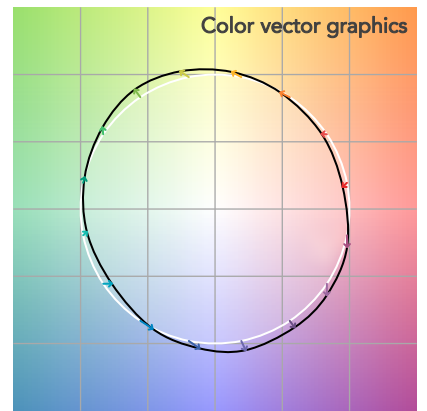
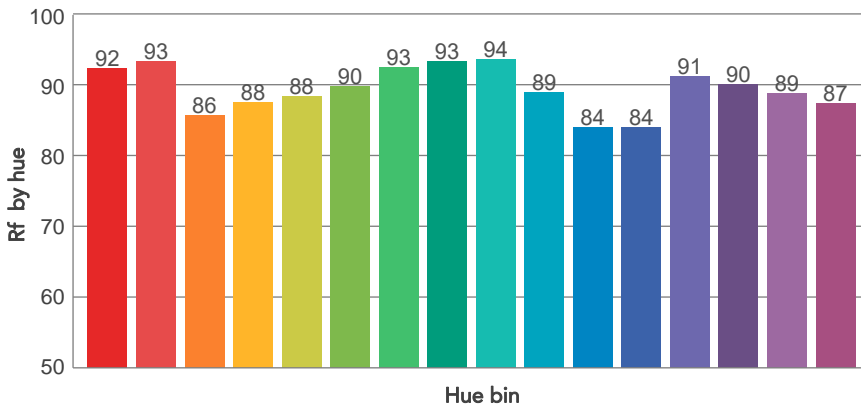
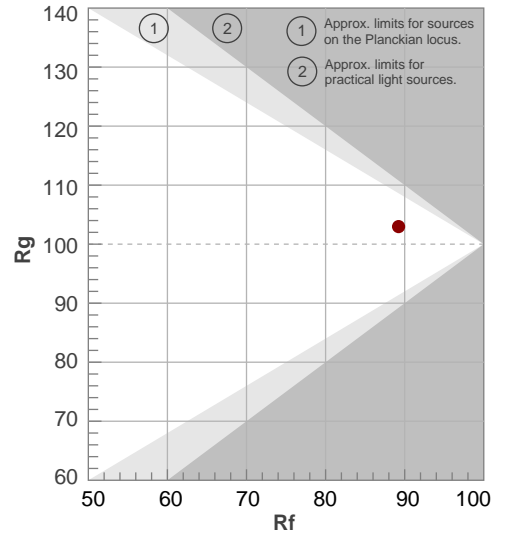
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4191 K	91,3	70,8	89,2	103,0	90,6	88	0,372	0,368	-0,0015

# TM30 DETAILS

**Rf 89,2**  
Fidelity index Rf

**Rg 103,0**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-2%
2	93	-3%	2%
3	86	-1%	8%
4	88	2%	7%
5	88	5%	5%
6	90	7%	0%
7	93	3%	-4%
8	93	0%	-4%
9	94	-3%	-2%
10	89	-5%	3%
11	84	0%	11%
12	84	4%	9%
13	91	7%	2%
14	90	6%	0%
15	89	5%	-7%
16	87	2%	-8%



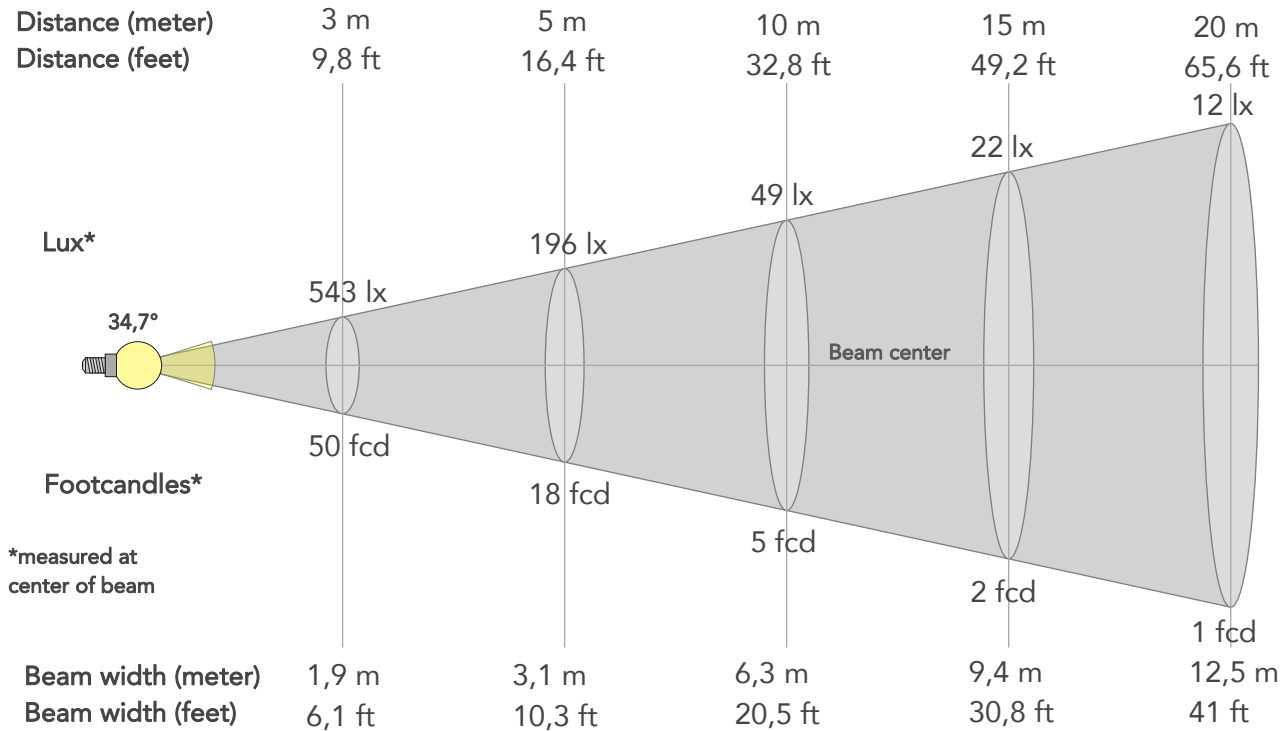
Color Evaluation Sample



# BEAM DETAILS



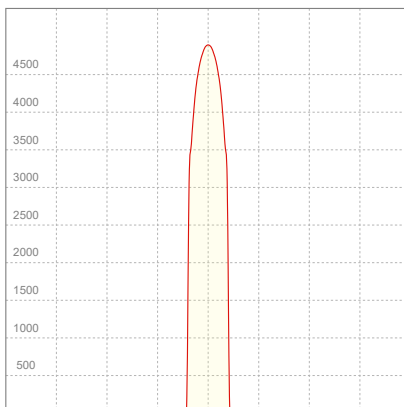
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
34,7°	37,5°	39,6°	100,0%	100,0%



## 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	4890lx	1222lx	543lx	306lx	196lx	87lx	49lx	22lx	12lx	8lx	5lx	3lx	2lx
Footcand.	454fcd	114fcd	50fcd	28fcd	18fcd	8fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,6m	1,3m	1,9m	2,5m	3,1m	4,7m	6,3m	9,4m	12,5m	15,6m	18,8m	25m	31,3m
Beam wid.	2,1ft	4,1ft	6,1ft	8,2ft	10,3ft	15,4ft	20,5ft	30,8ft	41ft	51,3ft	61,5ft	82,1ft	102,6ft

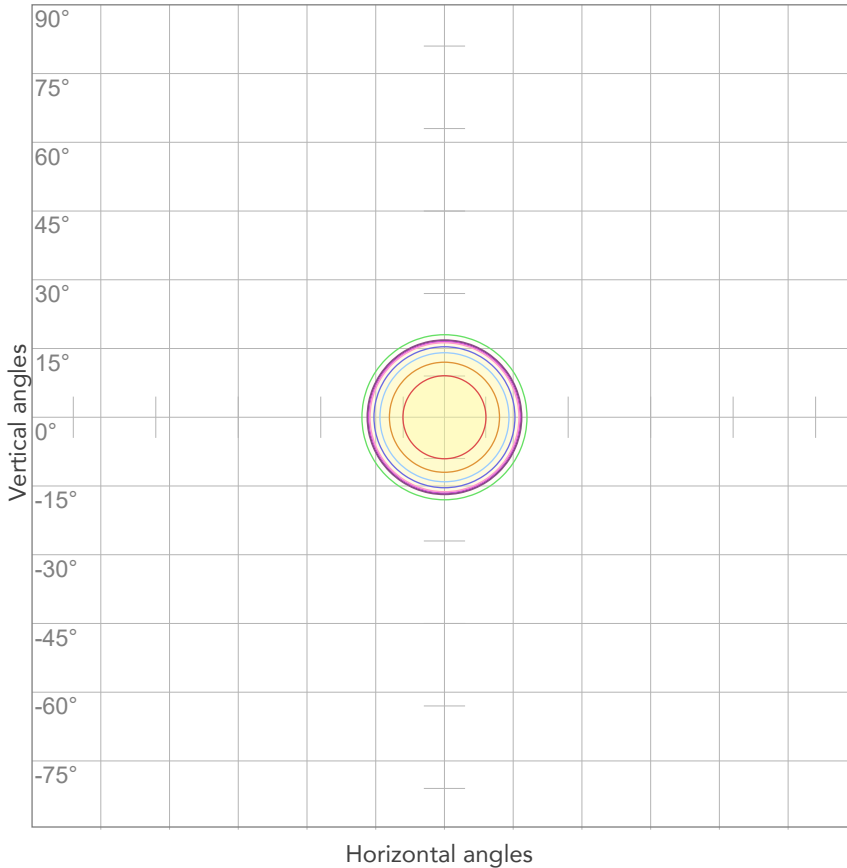
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,104A	21,0W	58lm/W
<b>Power Fc</b>			
0.9			

## ISO CANDELA DIAGRAM



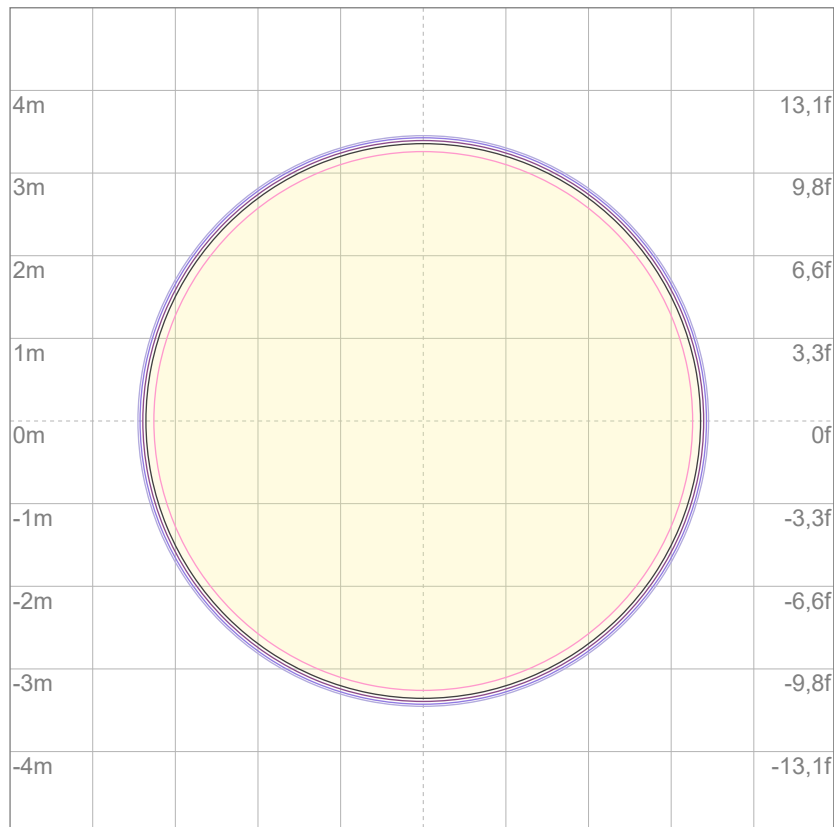
10%	489 cd
20%	978 cd
30%	1467 cd
40%	1956 cd
50%	2445 cd
60%	2934 cd
70%	3423 cd
80%	3912 cd

Conditions:

Number of c-planes: 2

Candela at center: 4890 cd

## ISO LUX DIAGRAM



3%	1,47 lx
5%	2,44 lx
10%	4,89 lx
30%	14,7 lx
50%	24,4 lx

Conditions:

Number of c-planes: 2

Lux at center: 48,9 lx

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



Total lumen output:

1191 lm

Peak candela output:

2609 cd

Light quality:

CRI: 90,7

Color temperature:

4167 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASUREMENT CONDITIONS:**

Beam angle:

Profile 50°

Target:

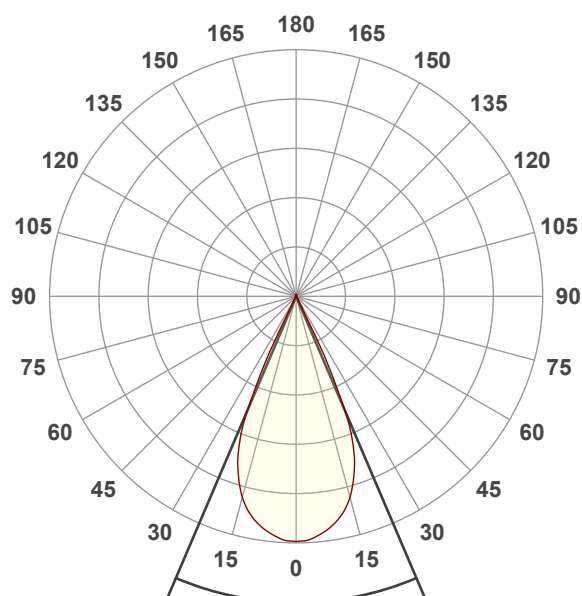
4000K

Operator:

Paolo Carvone

Date and time:

27/07/2022 15:47:34

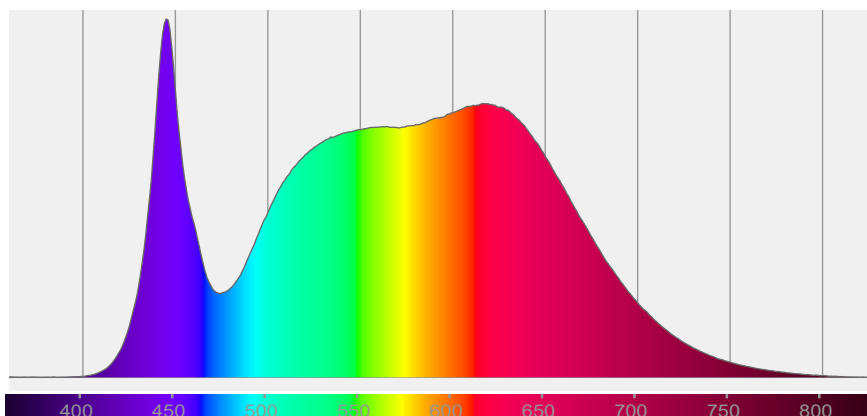


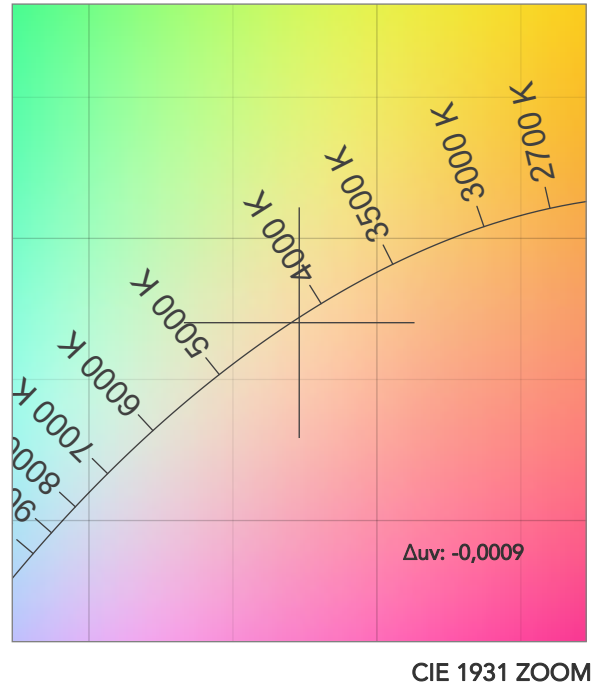
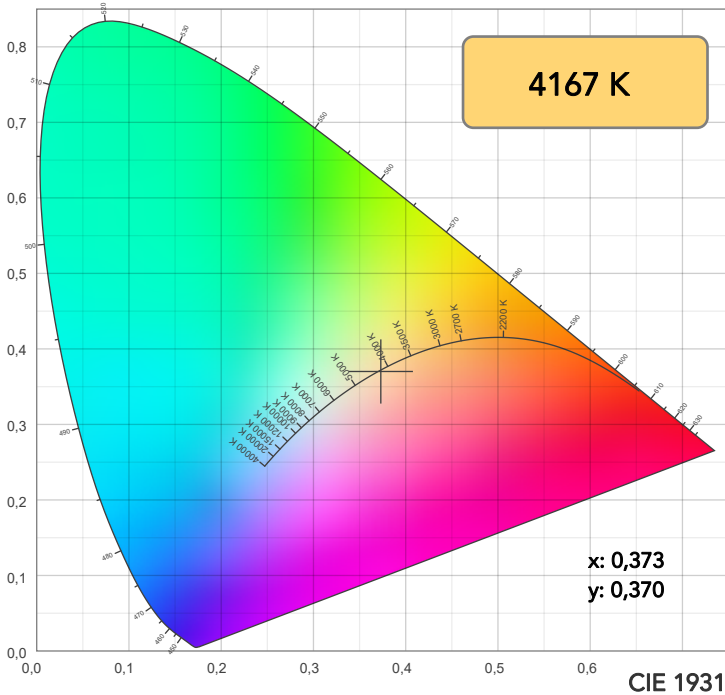
Beam angle 50%: 46,2°

Field angle 10%: 53,9°

Cut off angle 2.5%: 55,3°

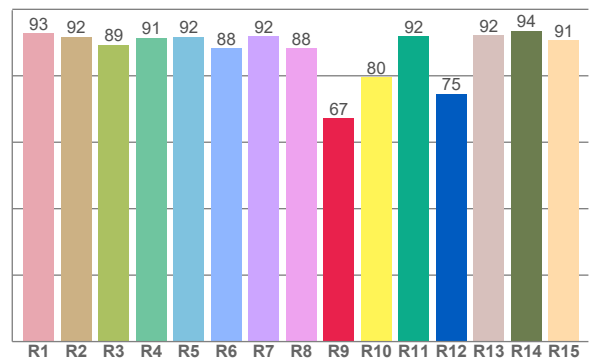
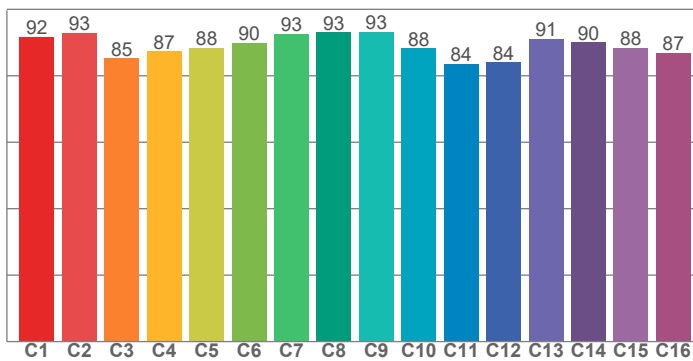
Spectra





TM30: 89,0

CRI: 90,7 (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
92,8	91,7	89,3	91,5	91,8	88,3	92,0	88,2	67,3	79,6	91,9	74,6	92,1	93,6	90,7

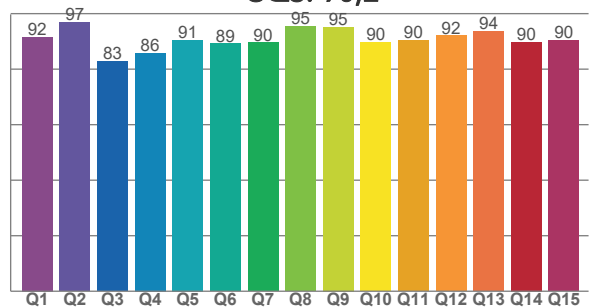
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,7	92,9	85,2	87,4	88,4	89,9	92,6	93,0	93,3	88,3	83,7	84,0	91,1	90,1	88,4	87,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,6	96,9	82,9	85,9	90,6	89,2	89,6	95,5	95,1	89,7	90,4	92,0	93,6	89,7	90,4

CQS: 90,2



COLOR PARAMETERS

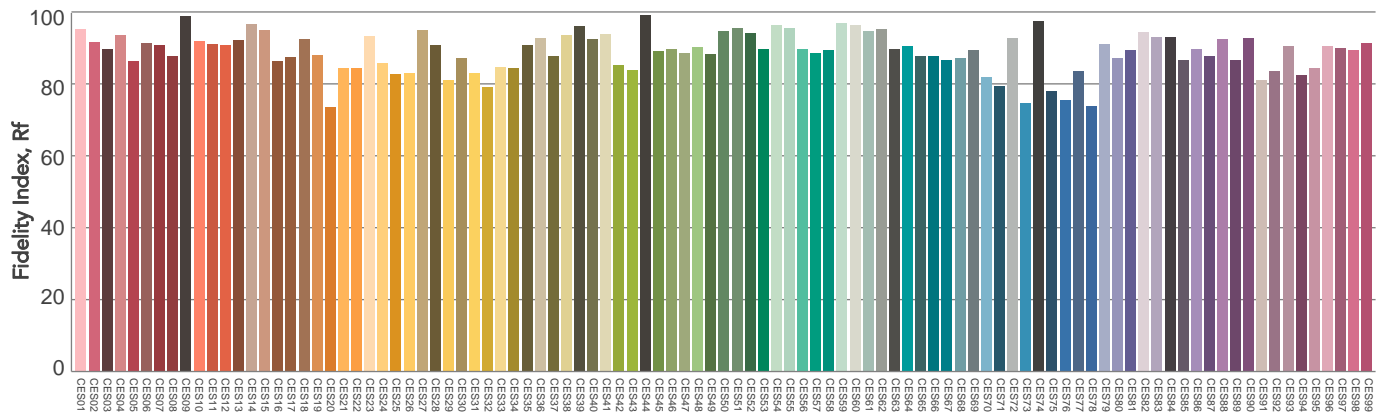
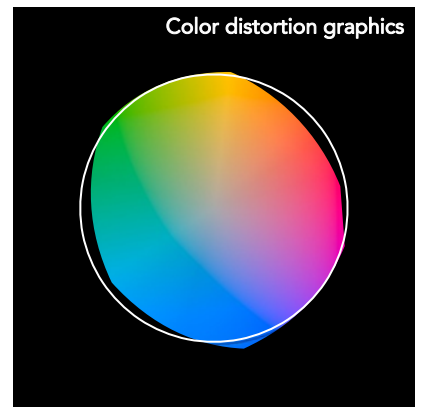
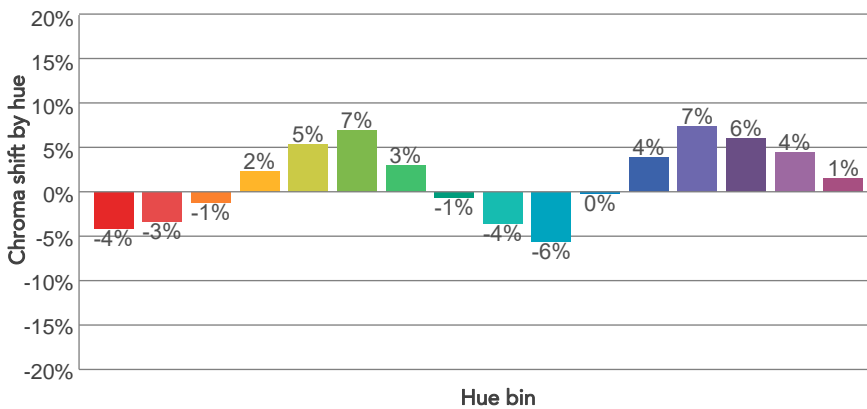
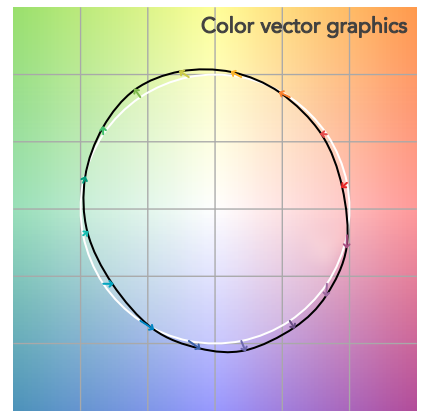
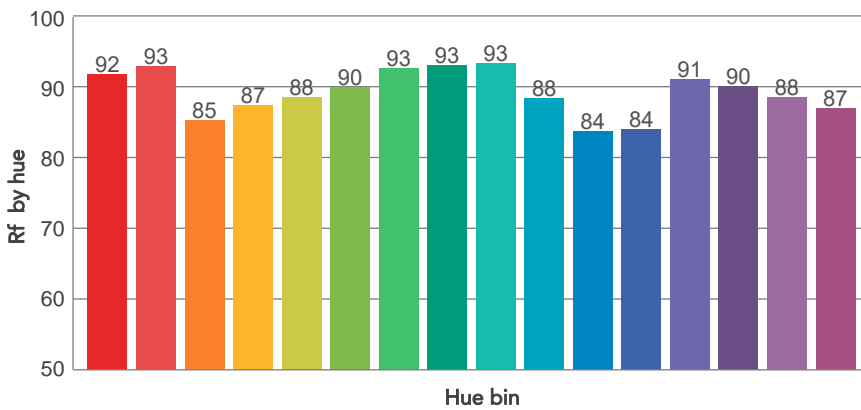
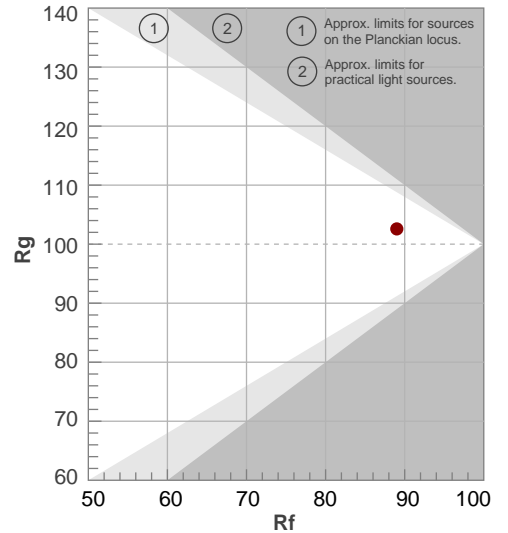
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4167 K	90,7	67,3	89,0	102,6	90,2	88	0,373	0,370	-0,0009

# TM30 DETAILS

**Rf 89,0**  
Fidelity index Rf

**Rg 102,6**  
Gammut index

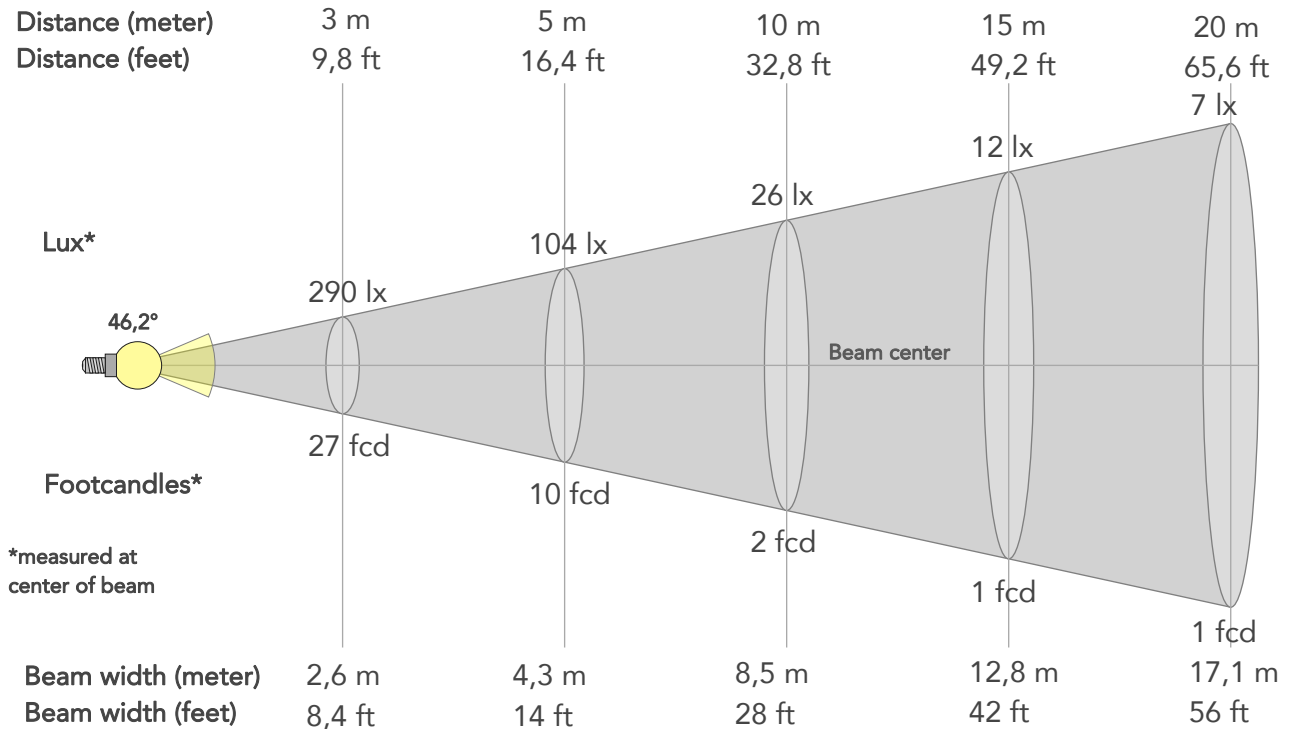
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-2%
2	93	-3%	2%
3	85	-1%	8%
4	87	2%	8%
5	88	5%	5%
6	90	7%	0%
7	93	3%	-4%
8	93	-1%	-4%
9	93	-4%	-2%
10	88	-6%	4%
11	84	0%	11%
12	84	4%	9%
13	91	7%	1%
14	90	6%	0%
15	88	4%	-7%
16	87	1%	-9%



# BEAM DETAILS



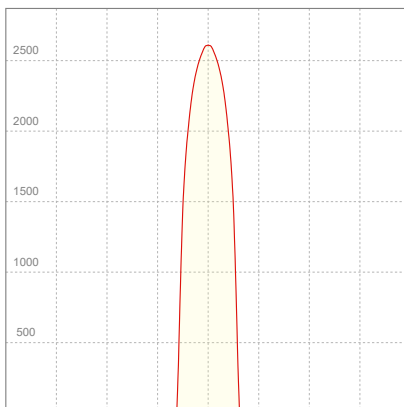
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,2°	53,9°	55,3°	100,0%	100,0%



## 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	2609lx	652lx	290lx	163lx	104lx	46lx	26lx	12lx	7lx	4lx	3lx	2lx	1lx
Footcand.	242fcd	61fcd	27fcd	15fcd	10fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,4m	4,3m	6,4m	8,5m	12,8m	17,1m	21,3m	25,6m	34,1m	42,7m
Beam wid.	2,8ft	5,6ft	8,4ft	11,2ft	14ft	21ft	28ft	42ft	56ft	70ft	84ft	112ft	140ft

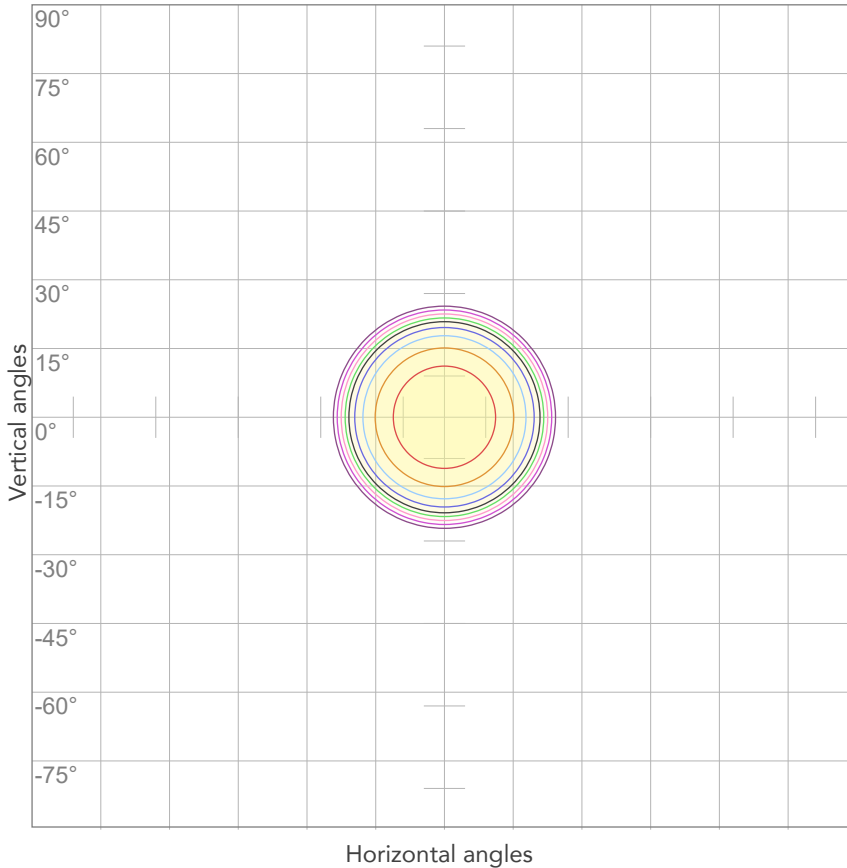
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,104A	21,0W	57lm/W
<b>Power Fc</b>			
0.9			

## ISO CANDELA DIAGRAM



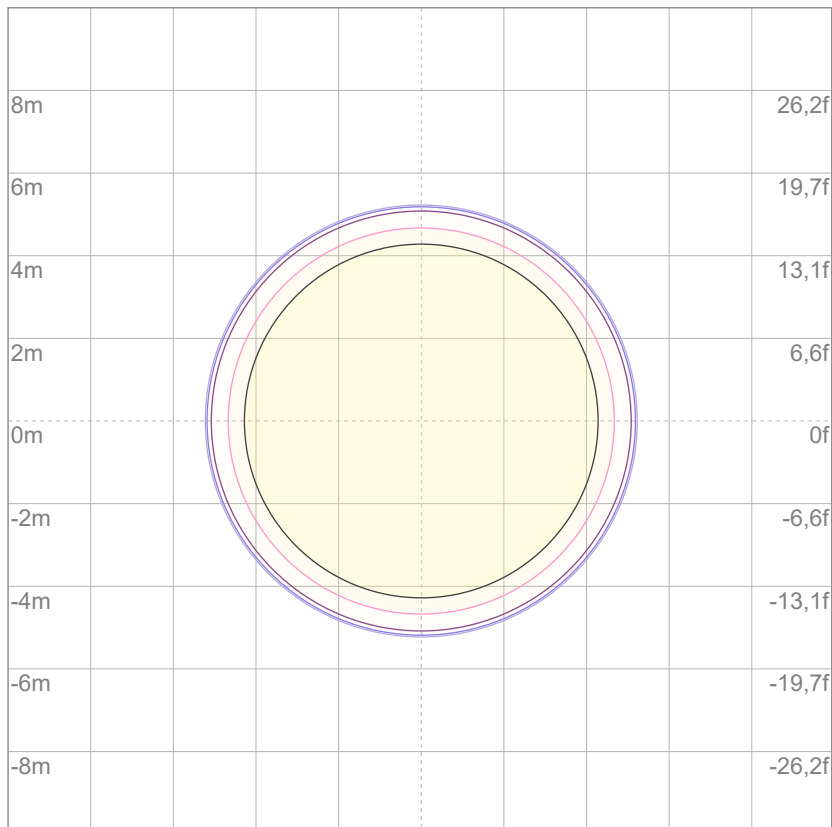
10%	261 cd
20%	522 cd
30%	783 cd
40%	1044 cd
50%	1305 cd
60%	1565 cd
70%	1826 cd
80%	2087 cd

Conditions:

Number of c-planes: 2

Candela at center: 2609 cd

## ISO LUX DIAGRAM



3%	0,783 lx
5%	1,30 lx
10%	2,61 lx
30%	7,83 lx
50%	13,0 lx

Conditions:

Number of c-planes: 2

Lux at center: 26,1 lx

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



Total lumen output:

1230 lm

Peak candela output:

15889 cd

Light quality:

CRI: 93,3

Color temperature:

5664 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 19°

Target:

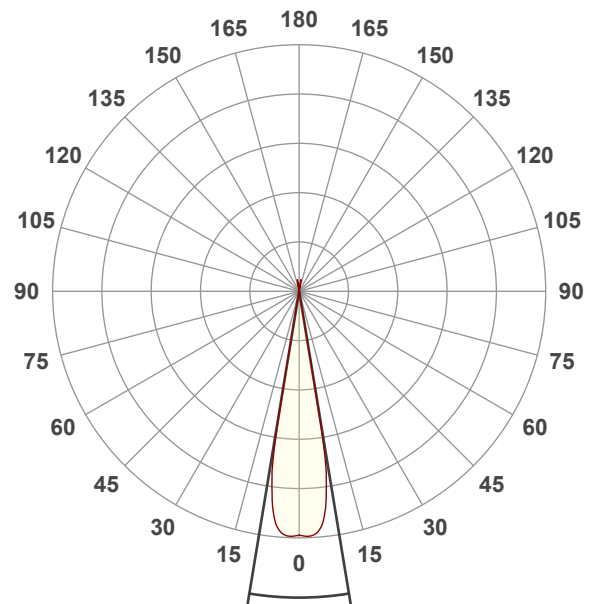
5600K

Operator:

Paolo Carvone

Date and time:

27/07/2022 16:08:09

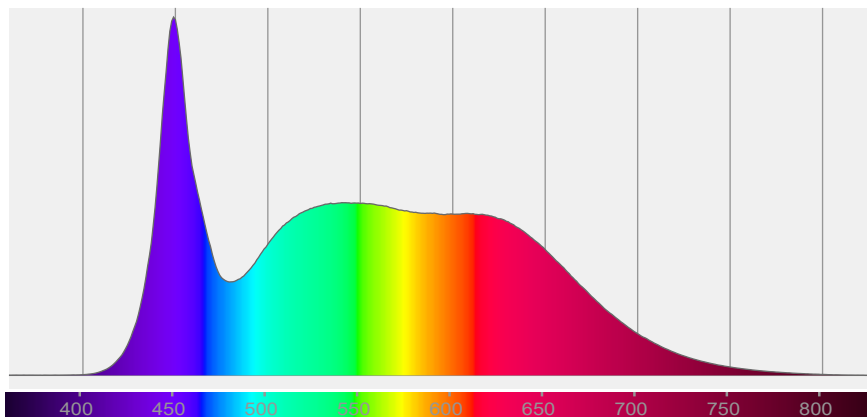


Beam angle 50%: 18,7°

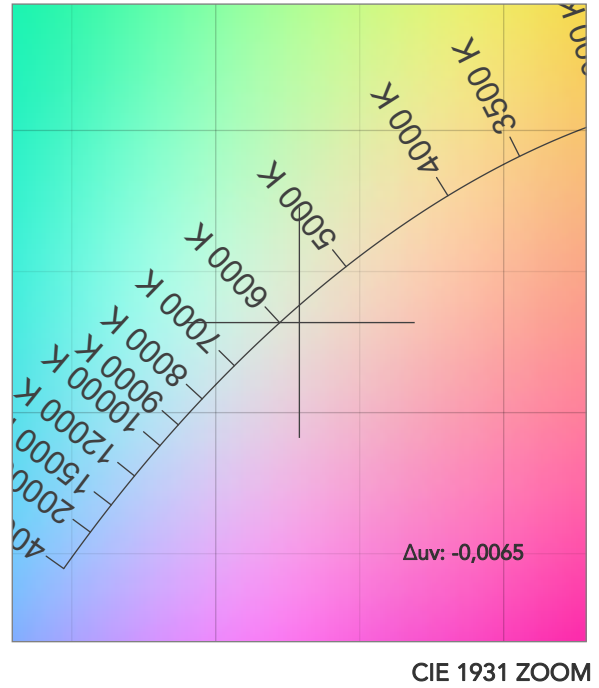
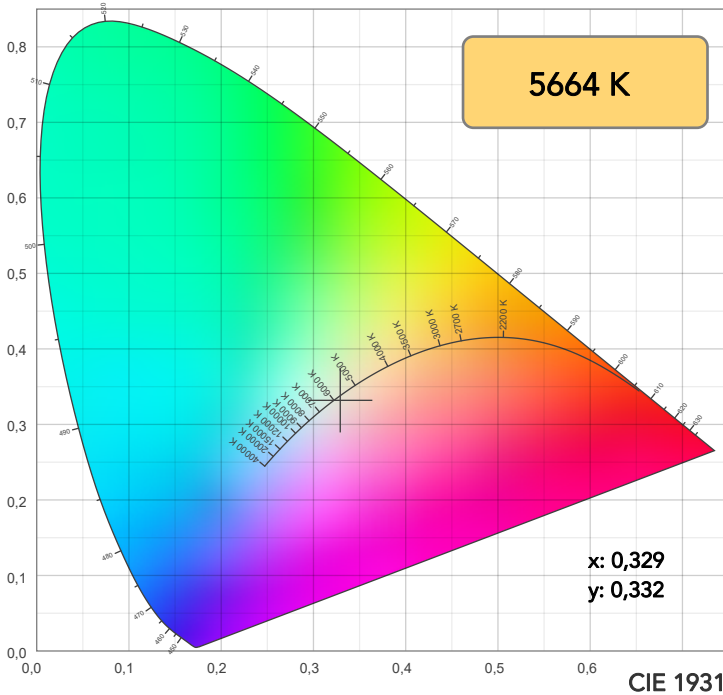
Field angle 10%: 20,6°

Cut off angle 2.5%: 21°

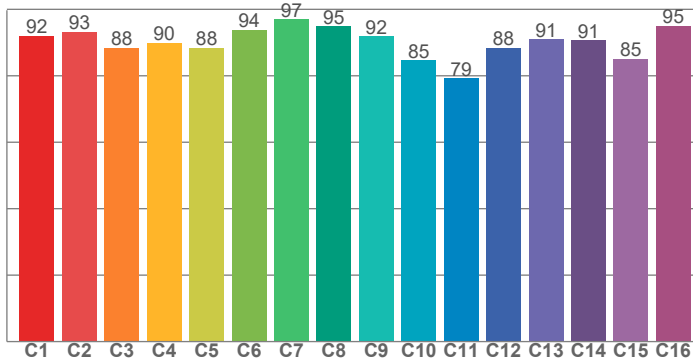
Spectra



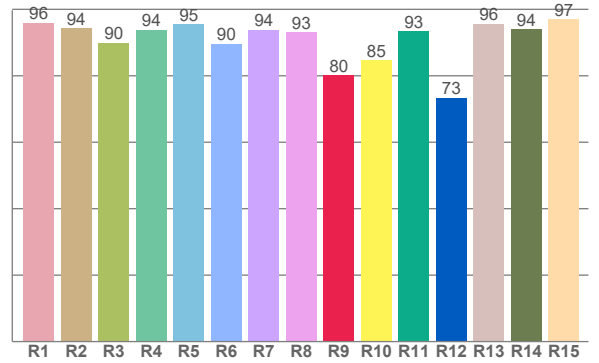




TM30: 89,9



CRI: 93,3 (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
96,0	94,3	89,9	93,9	95,4	89,6	93,8	93,1	80,1	84,7	93,4	73,3	95,7	94,0	96,9

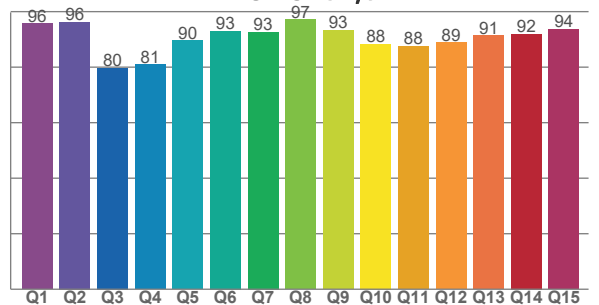
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,0	93,2	88,4	89,9	88,3	93,9	96,9	94,9	91,8	84,6	79,2	88,4	91,0	90,6	85,1	95,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,7	96,3	79,8	80,9	89,5	93,1	92,7	97,1	93,3	88,4	87,5	88,9	91,3	92,0	93,6

CQS: 89,5



COLOR PARAMETERS

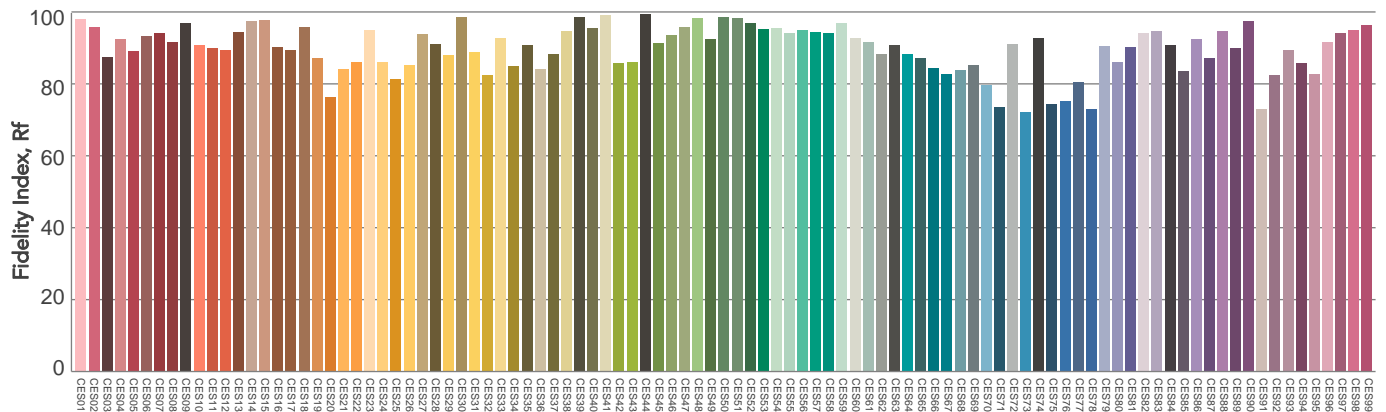
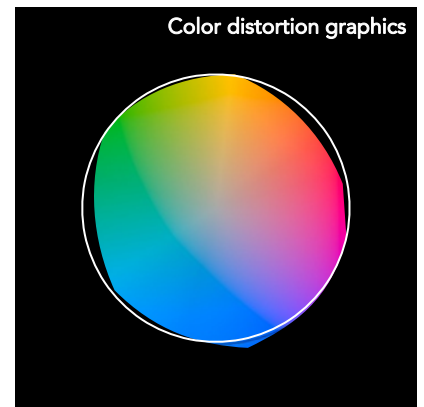
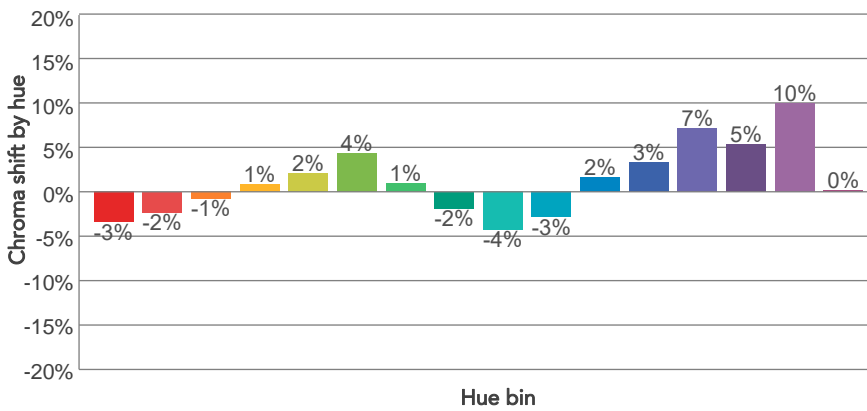
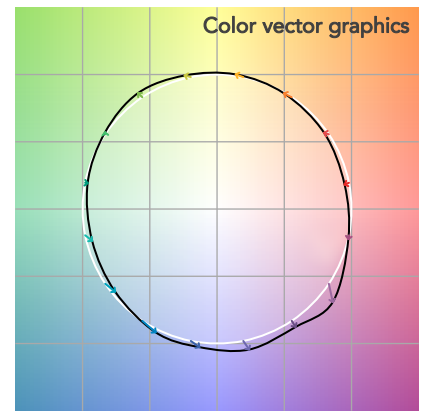
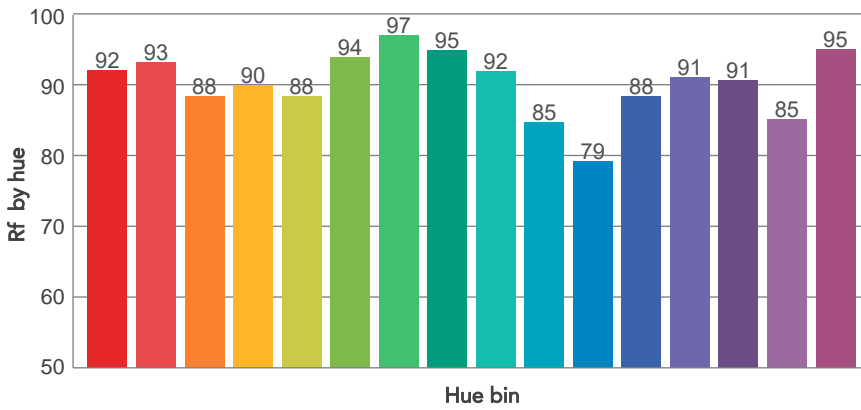
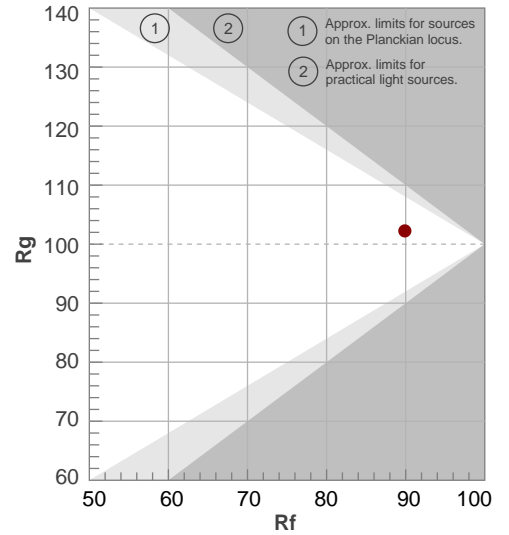
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5664 K	93,3	80,1	89,9	102,2	89,5	94	0,329	0,332	-0,0065

# TM30 DETAILS

**Rf 89,9**  
Fidelity index Rf

**Rg 102,2**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-1%
2	93	-2%	3%
3	88	-1%	6%
4	90	1%	6%
5	88	2%	4%
6	94	4%	1%
7	97	1%	-1%
8	95	-2%	0%
9	92	-4%	5%
10	85	-3%	9%
11	79	2%	13%
12	88	3%	7%
13	91	7%	3%
14	91	5%	0%
15	85	10%	-10%
16	95	0%	-3%

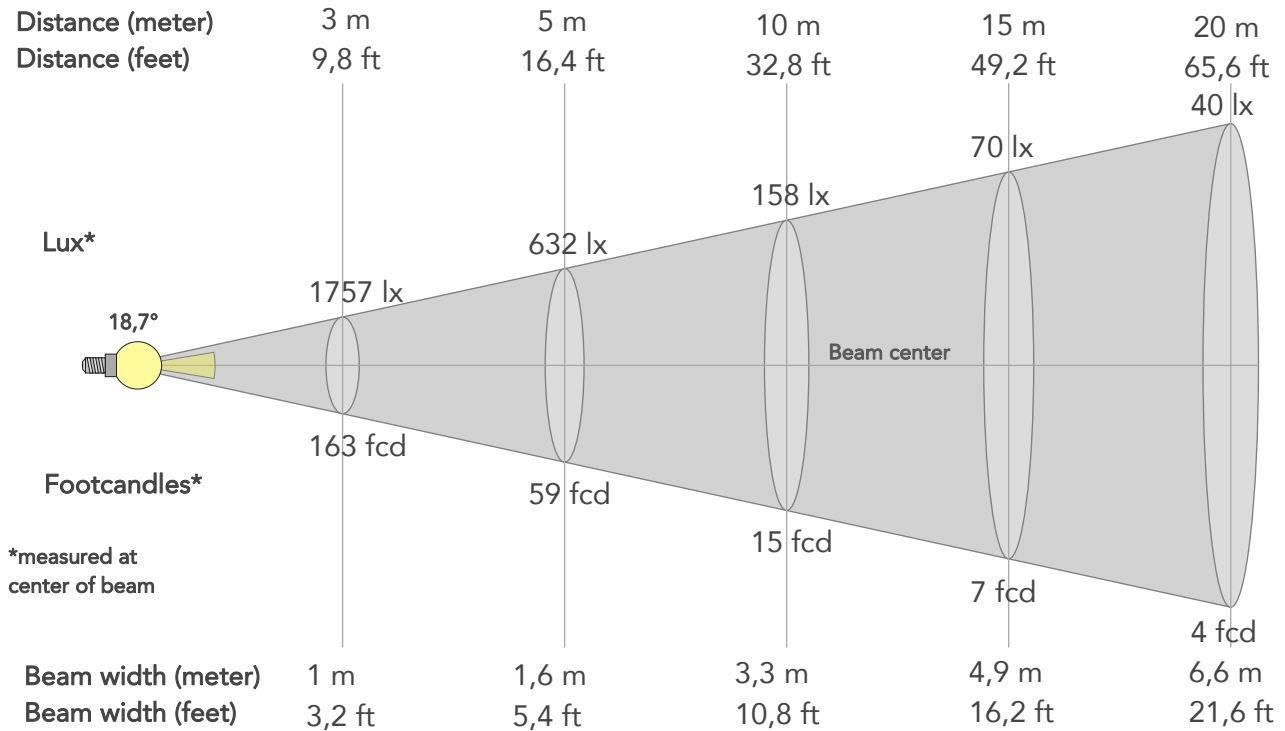


Color Evaluation Sample

# BEAM DETAILS



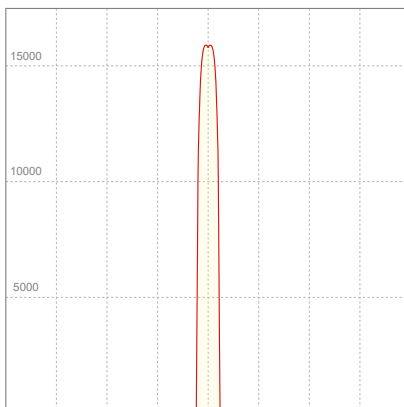
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,7°	20,6°	21°	100,0%	100,0%



## 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	15811lx	3953lx	1757lx	988lx	632lx	281lx	158lx	70lx	40lx	25lx	18lx	10lx	6lx
Footcand.	1469fcd	367fcd	163fcd	92fcd	59fcd	26fcd	15fcd	7fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,6m	2,5m	3,3m	4,9m	6,6m	8,2m	9,9m	13,2m	16,5m
Beam wid.	1,1ft	2,2ft	3,2ft	4,3ft	5,4ft	8,1ft	10,8ft	16,2ft	21,6ft	27ft	32,4ft	43,2ft	54ft

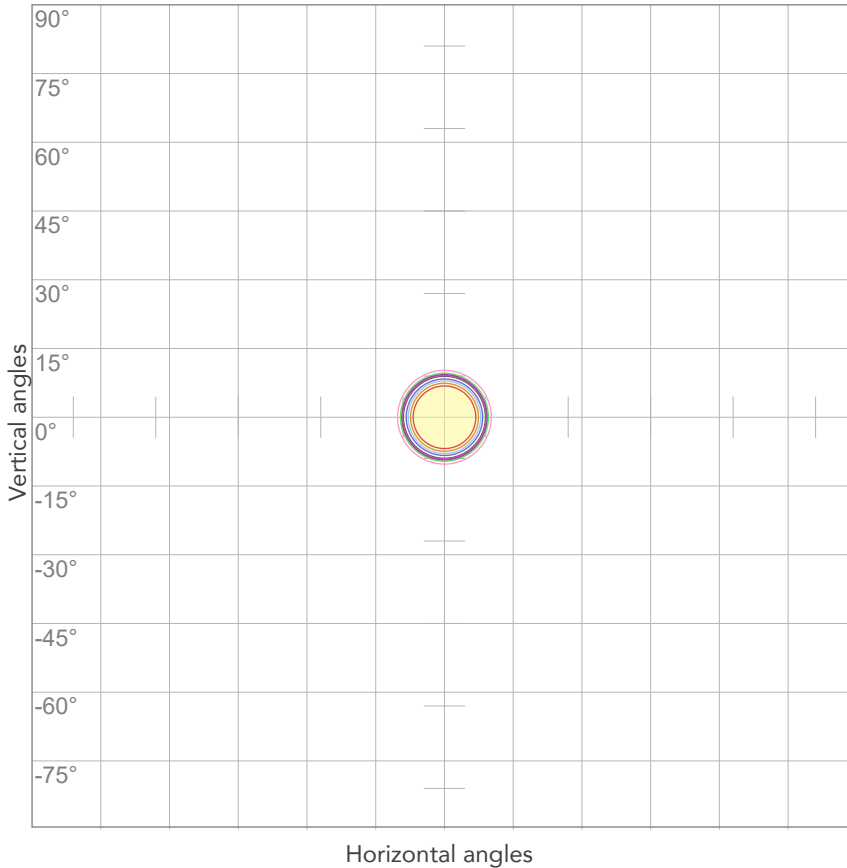
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,103A	20,7W	59lm/W
Power Fc			
0.9			

## ISO CANDELA DIAGRAM



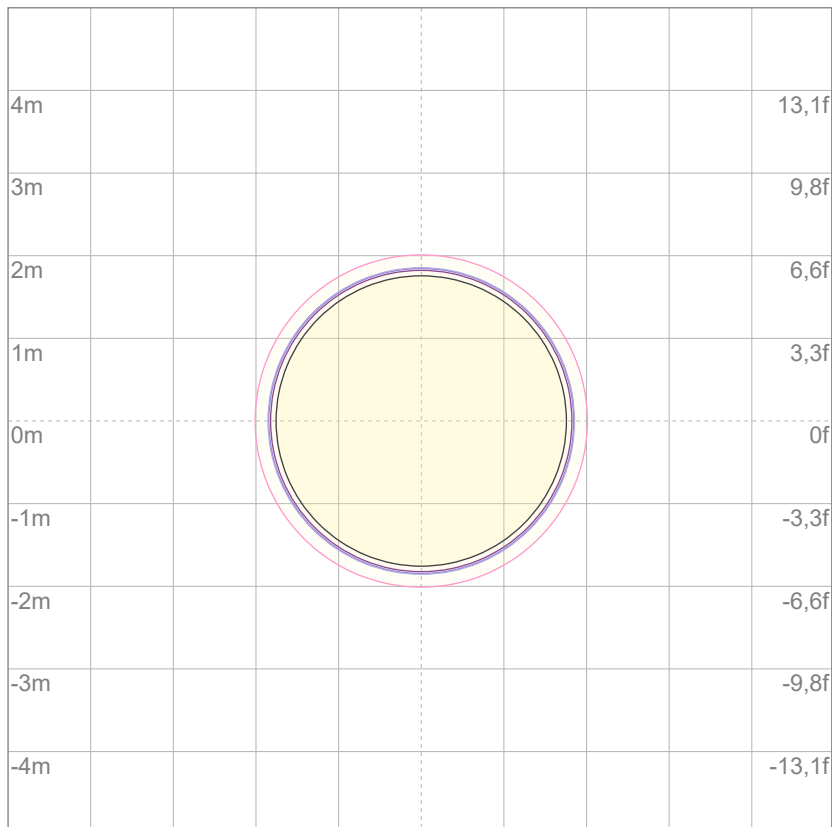
10%	1581 cd
20%	3162 cd
30%	4743 cd
40%	6324 cd
50%	7906 cd
60%	9487 cd
70%	11068 cd
80%	12649 cd

Conditions:

Number of c-planes: 2

Candela at center: 15811 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	4,74 lx
5%	7,91 lx
10%	15,8 lx
30%	47,4 lx
50%	79,1 lx

Conditions:

Number of c-planes: 2

Lux at center: 158 lx

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



Total lumen output:

1250 lm

Peak candela output:

9093 cd

Light quality:

CRI: 93,1

Color temperature:

5646 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 26°

Target:

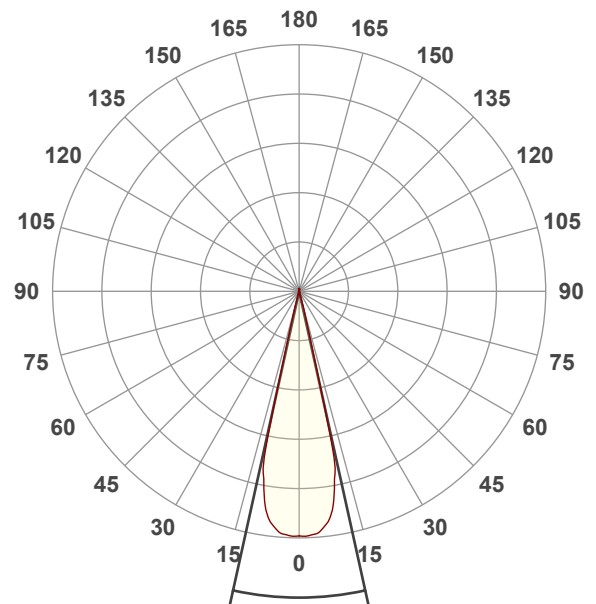
5600K

Operator:

Paolo Carvone

Date and time:

27/07/2022 16:11:02

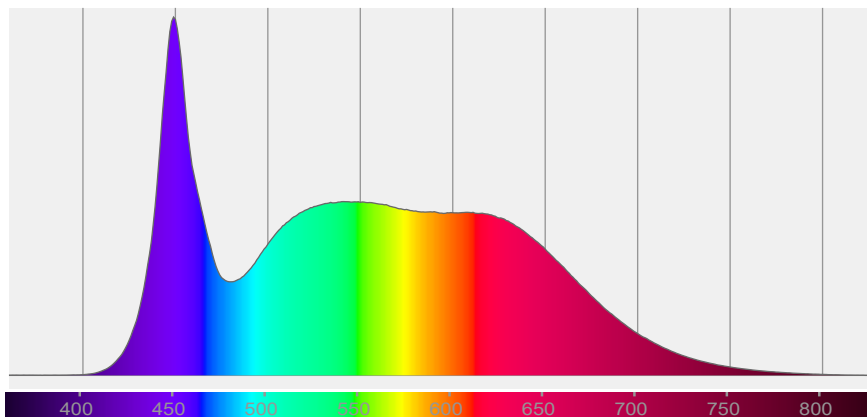


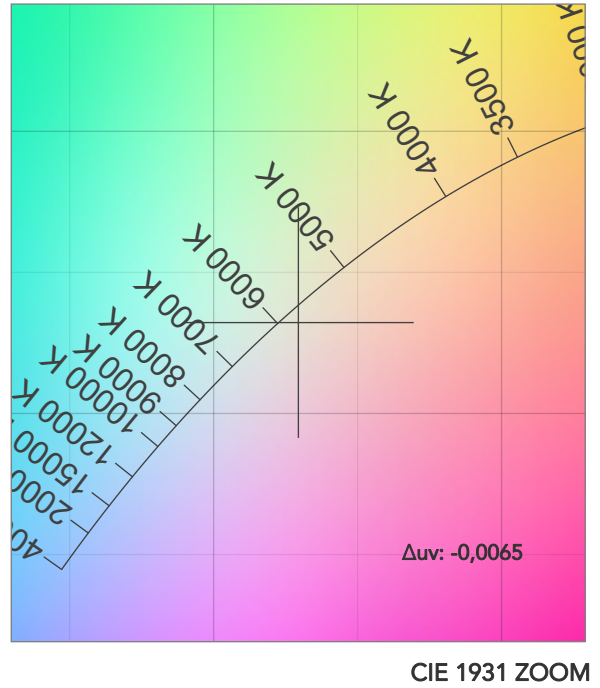
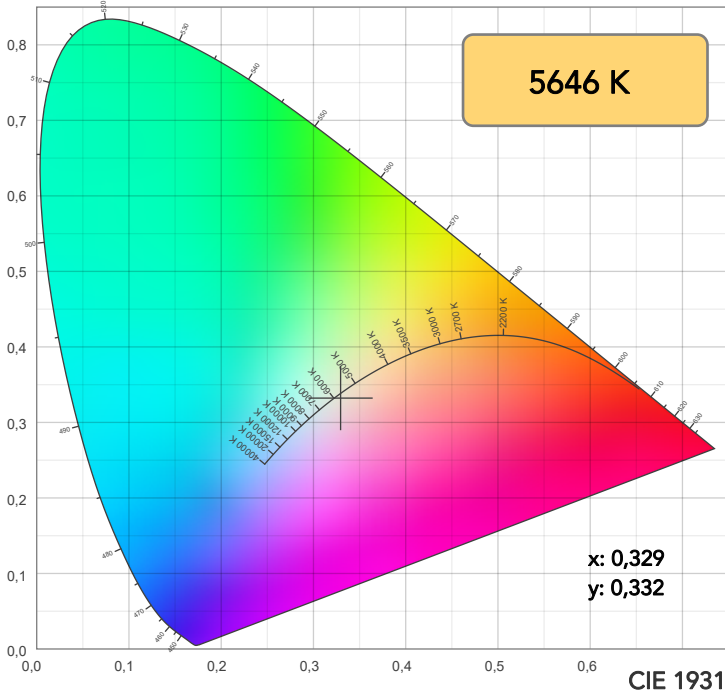
Beam angle 50%: 24,9°

Field angle 10%: 27,9°

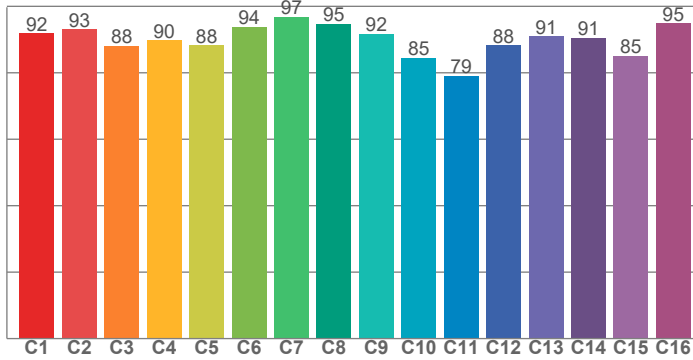
Cut off angle 2.5%: 29,5°

Spectra

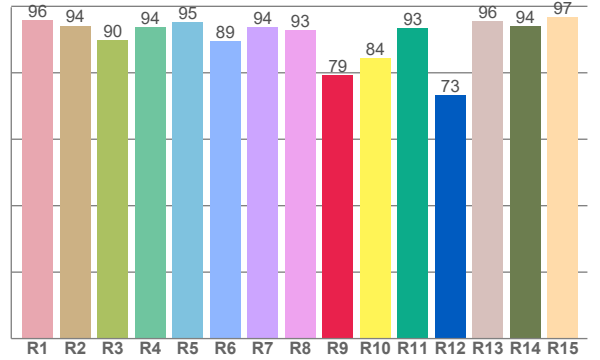




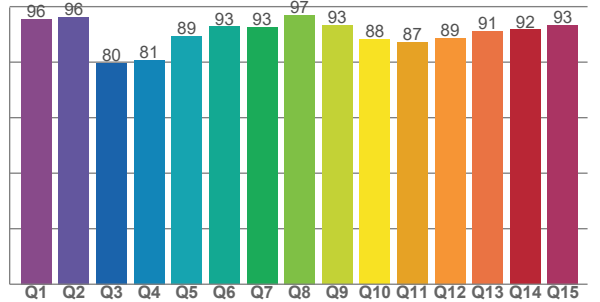
TM30: 89,8



CRI: 93,1 (R1-R8)



CQS: 89,3



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
95,8	94,1	89,9	93,8	95,2	89,5	93,7	92,8	79,2	84,4	93,4	73,3	95,5	94,0	96,7

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
91,9	93,0	88,2	89,7	88,3	93,8	96,9	94,8	91,8	84,5	79,1	88,3	90,9	90,5	85,1	94,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,5	96,3	79,6	80,7	89,4	92,9	92,6	97,0	93,3	88,2	87,3	88,7	91,1	91,7	93,4

COLOR PARAMETERS

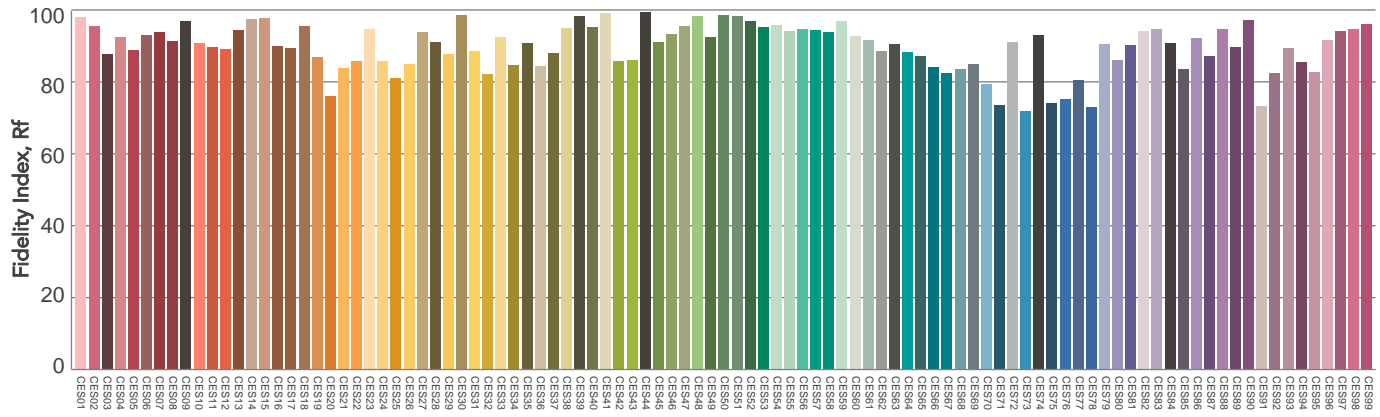
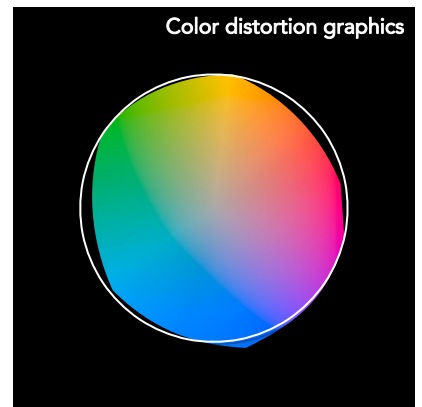
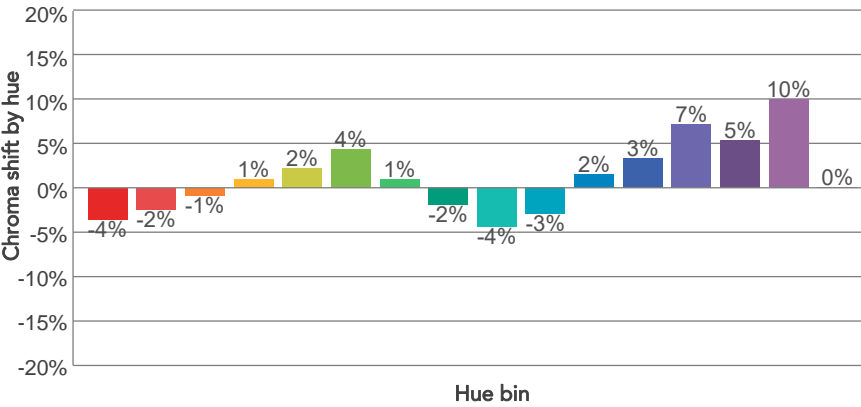
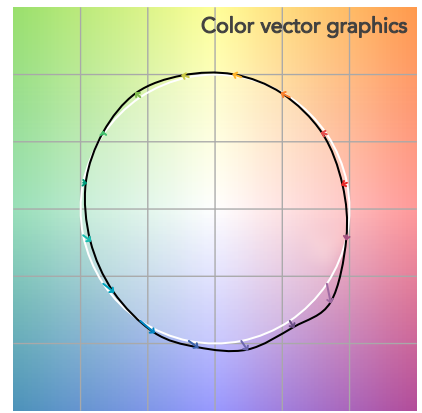
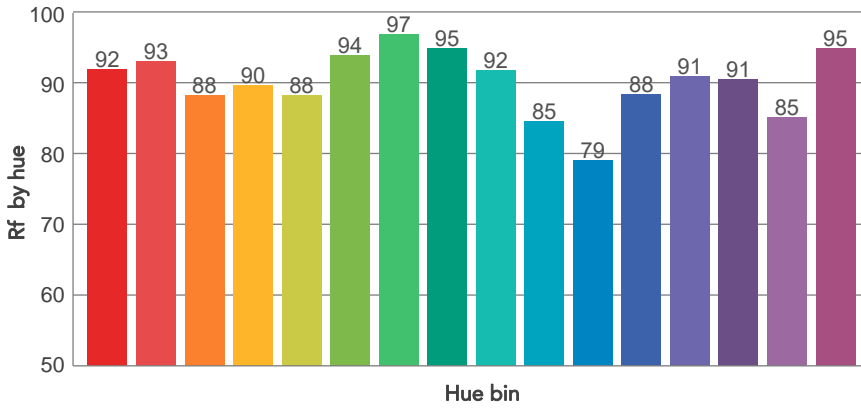
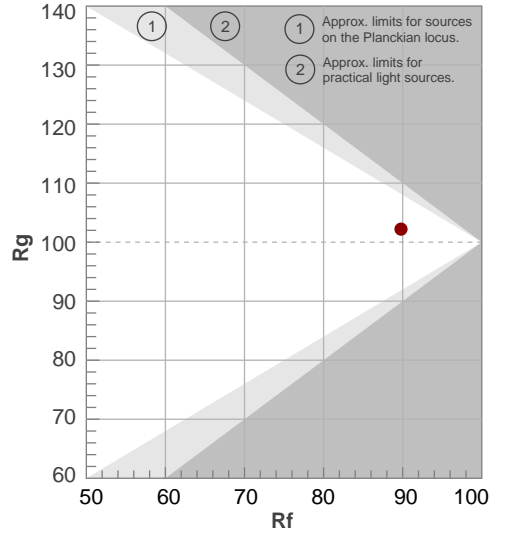
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5646 K	93,1	79,2	89,8	102,2	89,3	94	0,329	0,332	-0,0065

# TM30 DETAILS

**Rf 89,8**  
Fidelity index Rf

**Rg 102,2**  
Gammut index

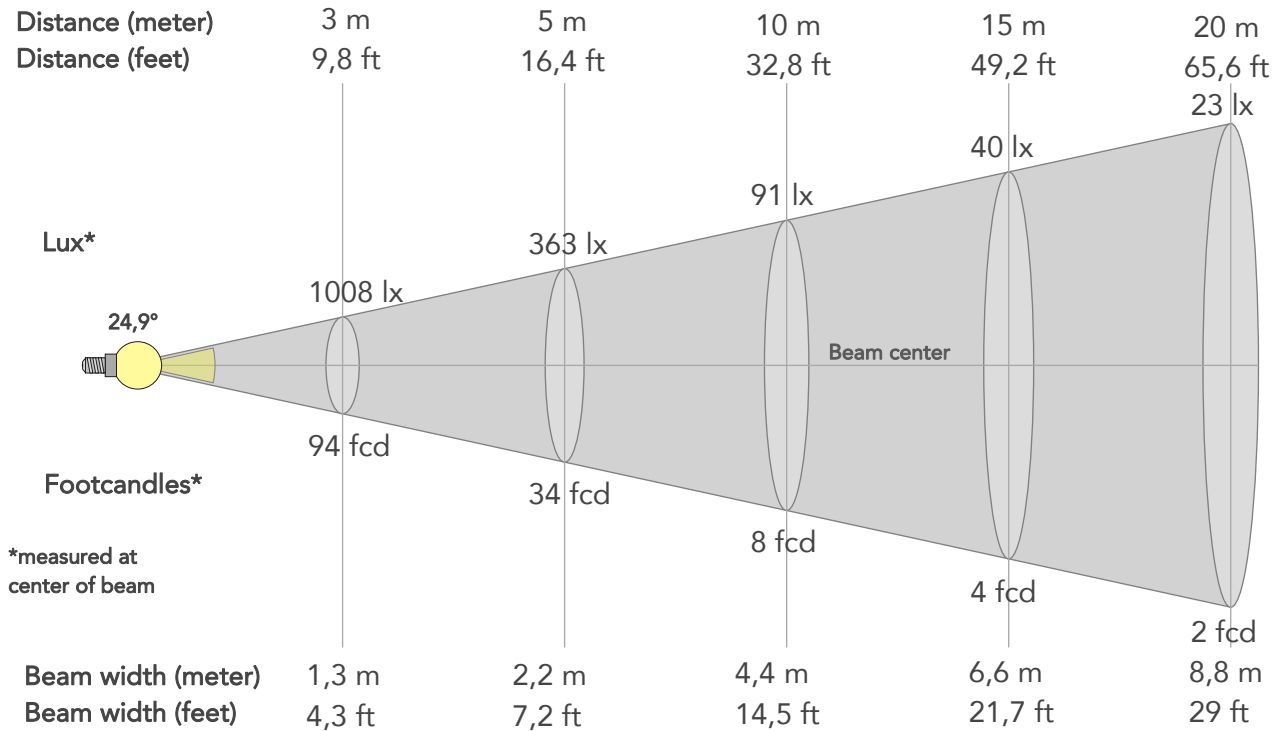
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	93	-2%	3%
3	88	-1%	6%
4	90	1%	6%
5	88	2%	4%
6	94	4%	1%
7	97	1%	-1%
8	95	-2%	0%
9	92	-4%	5%
10	85	-3%	9%
11	79	2%	13%
12	88	3%	7%
13	91	7%	3%
14	91	5%	0%
15	85	10%	-10%
16	95	0%	-3%



# BEAM DETAILS



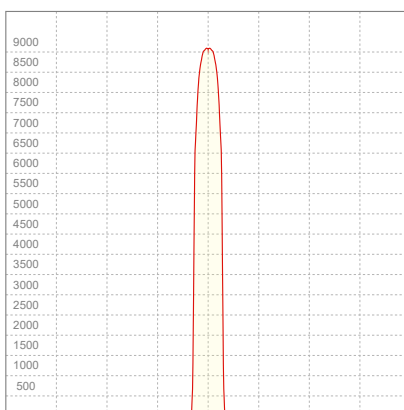
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24,9°	27,9°	29,5°	100,0%	100,0%



## 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	9075lx	2269lx	1008lx	567lx	363lx	161lx	91lx	40lx	23lx	15lx	10lx	6lx	4lx
Footcand.	843fcd	211fcd	94fcd	53fcd	34fcd	15fcd	8fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,4m	0,9m	1,3m	1,8m	2,2m	3,3m	4,4m	6,6m	8,8m	11m	13,3m	17,7m	22,1m
Beam wid.	1,5ft	2,9ft	4,3ft	5,8ft	7,2ft	10,9ft	14,5ft	21,7ft	29ft	36,2ft	43,5ft	58ft	72,5ft

## LINEAR DISTRIBUTION DIAGRAM

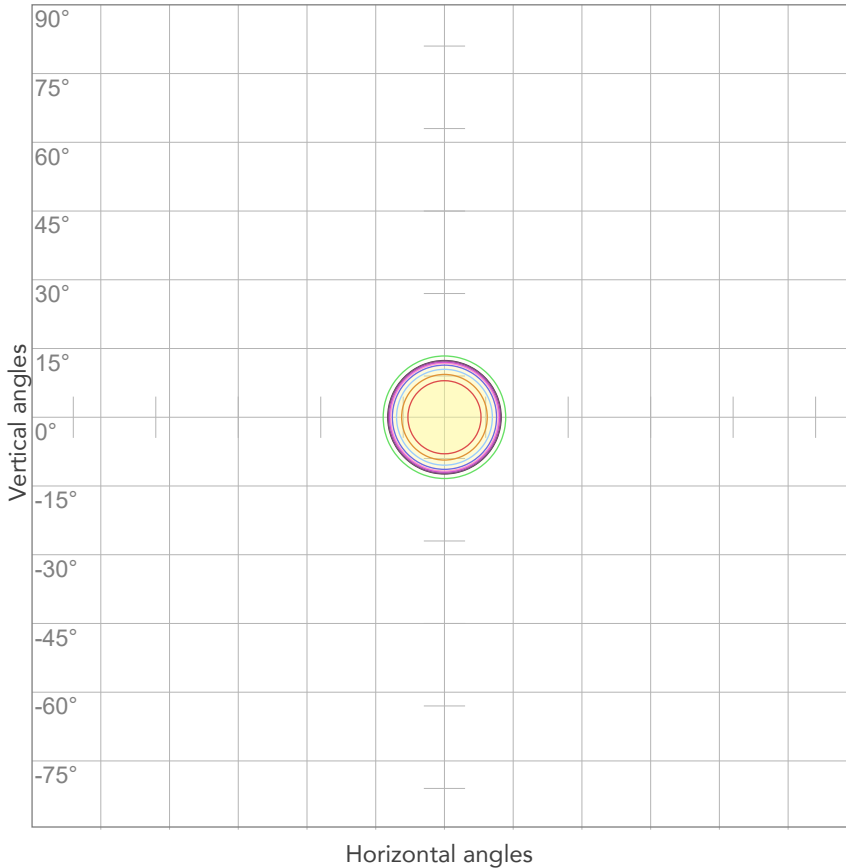


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,103A	20,7W	60lm/W
Power Fc			
0.9			



## ISO CANDELA DIAGRAM



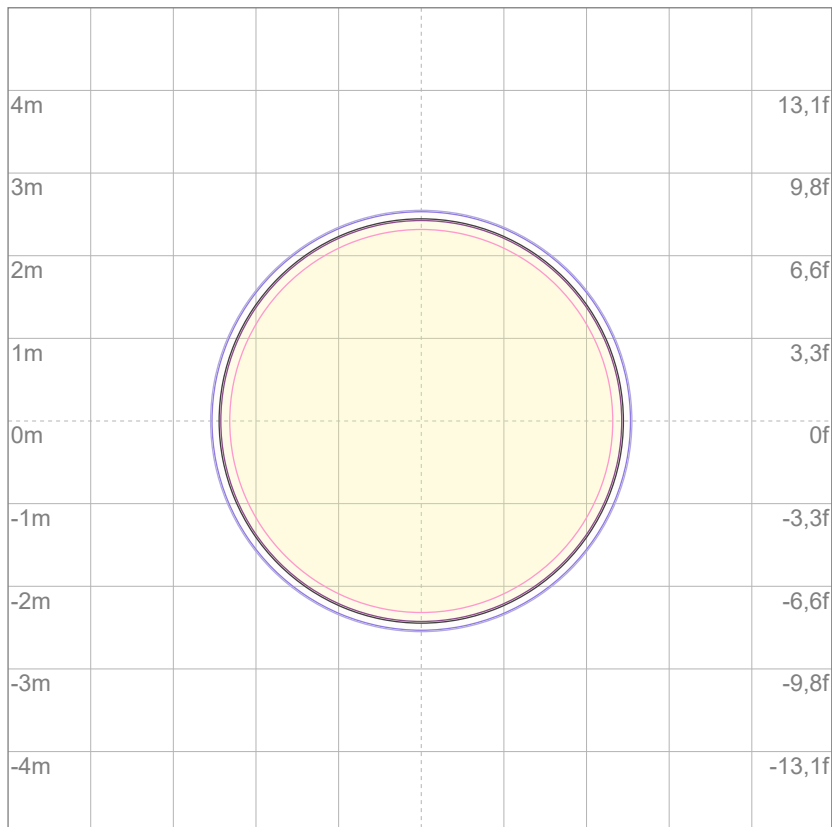
10%	907 cd
20%	1815 cd
30%	2722 cd
40%	3630 cd
50%	4537 cd
60%	5445 cd
70%	6352 cd
80%	7260 cd

Conditions:

Number of c-planes: 2

Candela at center: 9075 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	2,72 lx
5%	4,54 lx
10%	9,07 lx
30%	27,2 lx
50%	45,4 lx

Conditions:

Number of c-planes: 2

Lux at center: 90,7 lx

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



Total lumen output:

1251 lm

Peak candela output:

4956 cd

Light quality:

CRI: 93,4

Color temperature:

5642 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASUREMENT CONDITIONS:**

Beam angle:

Profile 36°

Target:

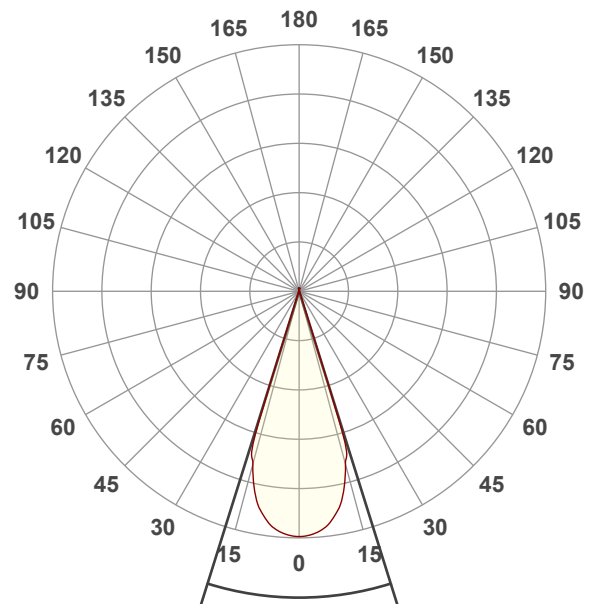
5600K

Operator:

Paolo Carvone

Date and time:

27/07/2022 16:14:27

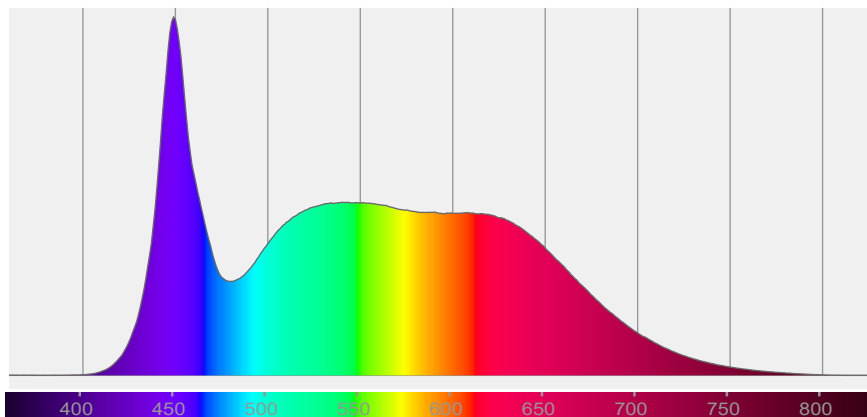


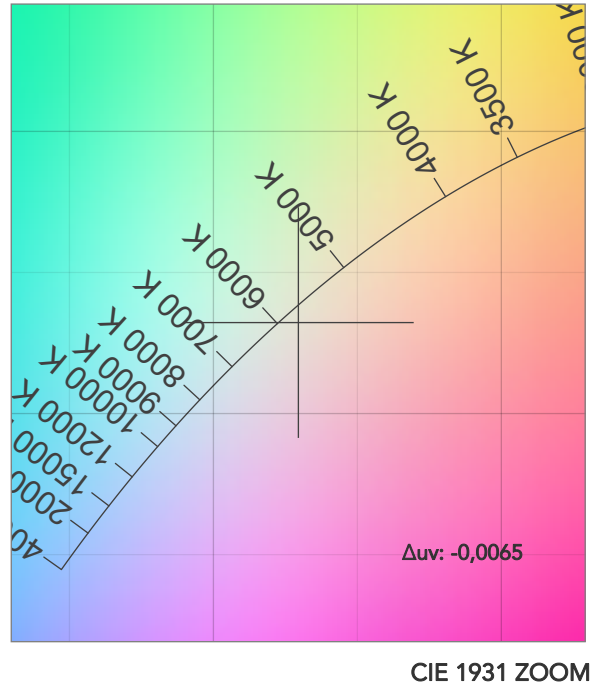
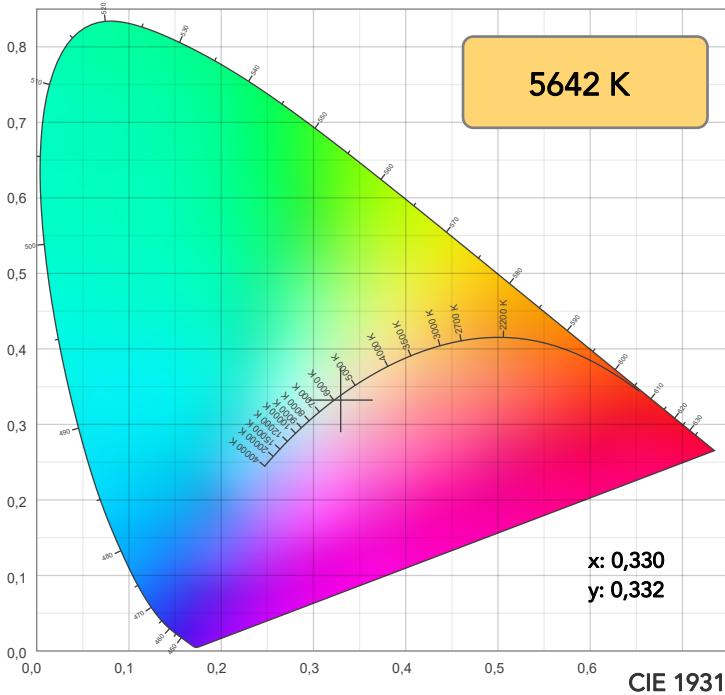
Beam angle 50%: 34,8°

Field angle 10%: 37,6°

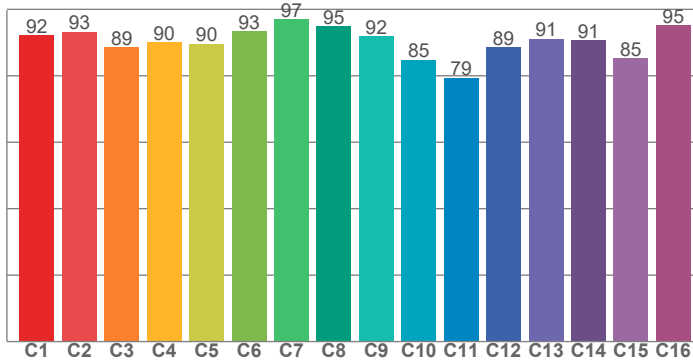
Cut off angle 2.5%: 39,5°

Spectra

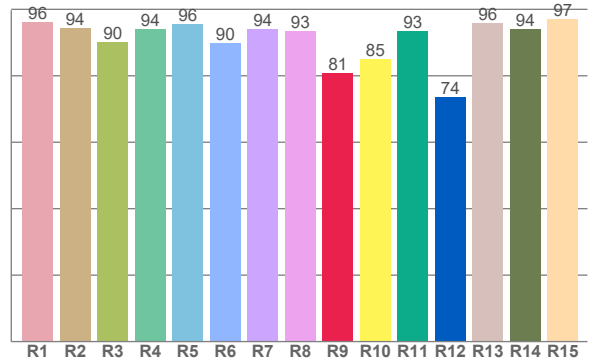




TM30: 90,0



CRI: 93,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
96,1	94,4	90,1	94,0	95,5	89,8	93,9	93,3	80,7	85,0	93,5	73,5	95,8	94,1	97,1

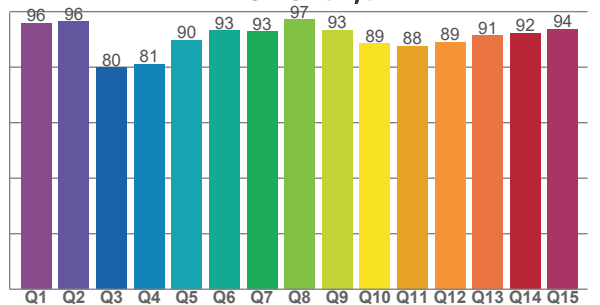
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,2	93,3	88,5	90,0	89,6	93,4	97,0	94,9	91,9	84,8	79,4	88,5	91,1	90,7	85,2	95,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,8	96,4	79,9	81,1	89,7	93,2	92,8	97,2	93,4	88,5	87,7	89,0	91,4	92,2	93,8

CQS: 89,6



COLOR PARAMETERS

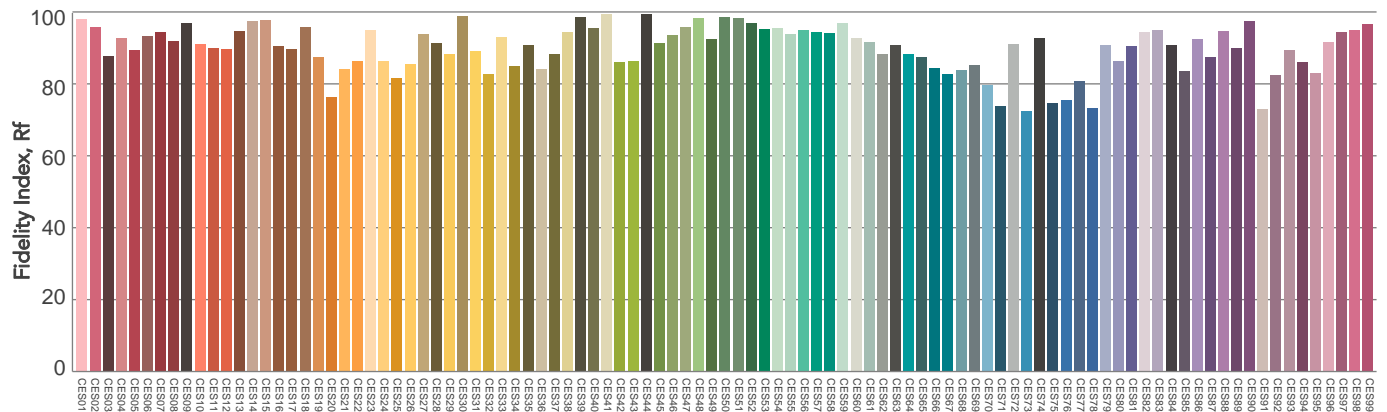
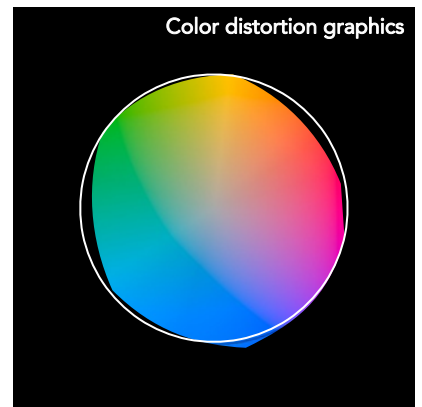
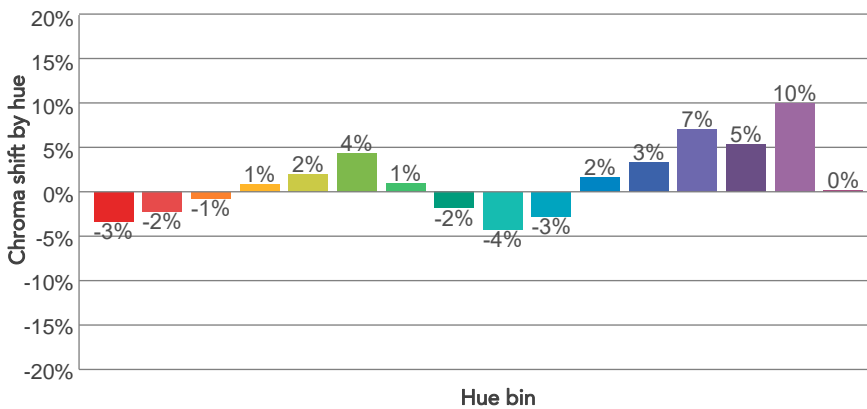
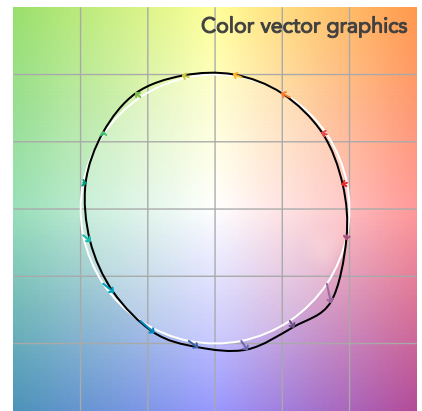
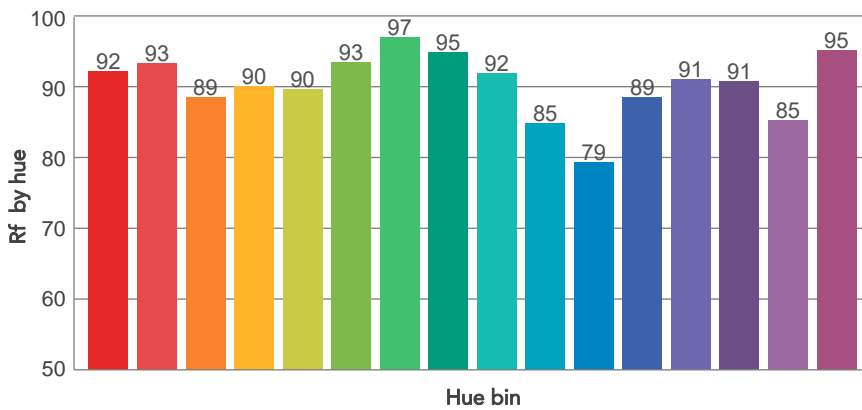
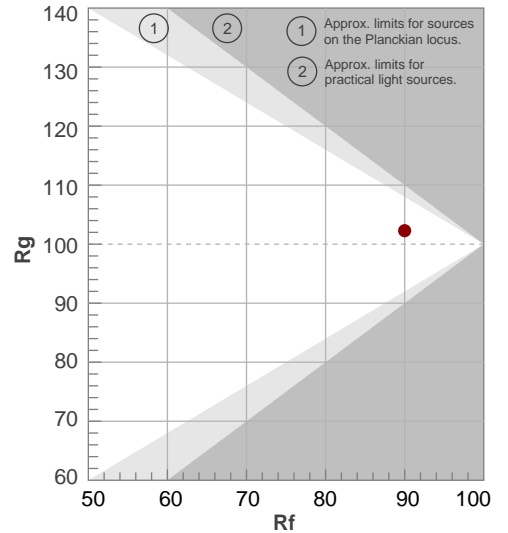
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5642 K	93,4	80,7	90,0	102,3	89,6	94	0,330	0,332	-0,0065

# TM30 DETAILS

**Rf 90,0**  
Fidelity index Rf

**Rg 102,3**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-1%
2	93	-2%	3%
3	89	-1%	6%
4	90	1%	6%
5	90	2%	4%
6	93	4%	1%
7	97	1%	-1%
8	95	-2%	0%
9	92	-4%	5%
10	85	-3%	9%
11	79	2%	13%
12	89	3%	7%
13	91	7%	3%
14	91	5%	0%
15	85	10%	-10%
16	95	0%	-3%

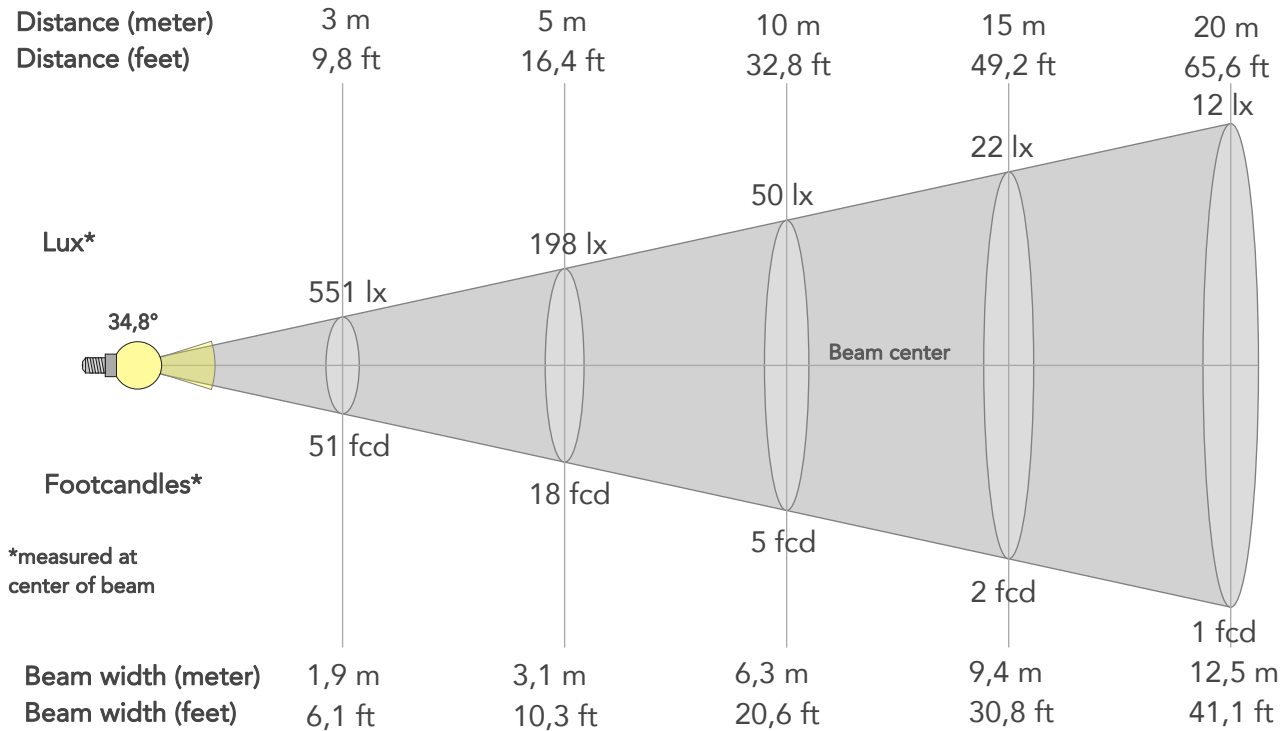


Color Evaluation Sample

# BEAM DETAILS



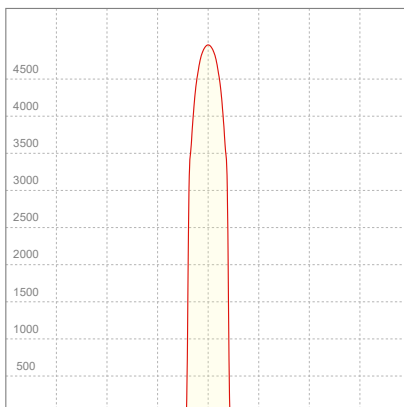
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
34,8°	37,6°	39,5°	100,0%	100,0%



## 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	4956lx	1239lx	551lx	310lx	198lx	88lx	50lx	22lx	12lx	8lx	6lx	3lx	2lx
Footcand.	460fcd	115fcd	51fcd	29fcd	18fcd	8fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,6m	1,3m	1,9m	2,5m	3,1m	4,7m	6,3m	9,4m	12,5m	15,7m	18,8m	25,1m	31,3m
Beam wid.	2,1ft	4,1ft	6,1ft	8,2ft	10,3ft	15,4ft	20,6ft	30,8ft	41,1ft	51,4ft	61,7ft	82,2ft	102,8ft

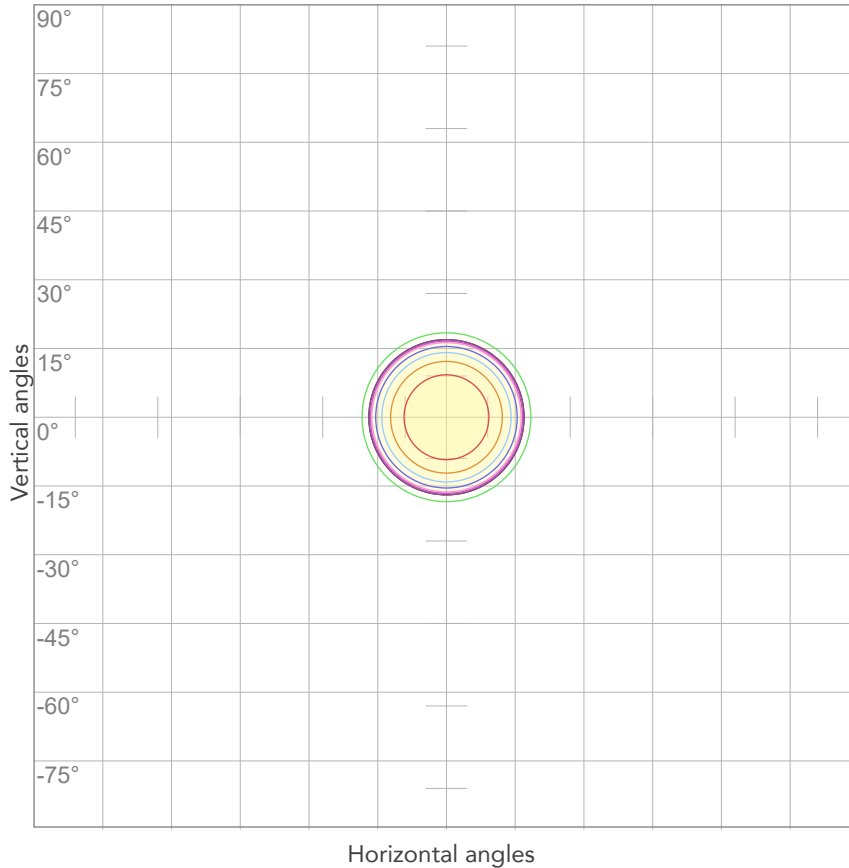
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,103A	20,7W	60lm/W
Power Fc			
0.9			

## ISO CANDELA DIAGRAM



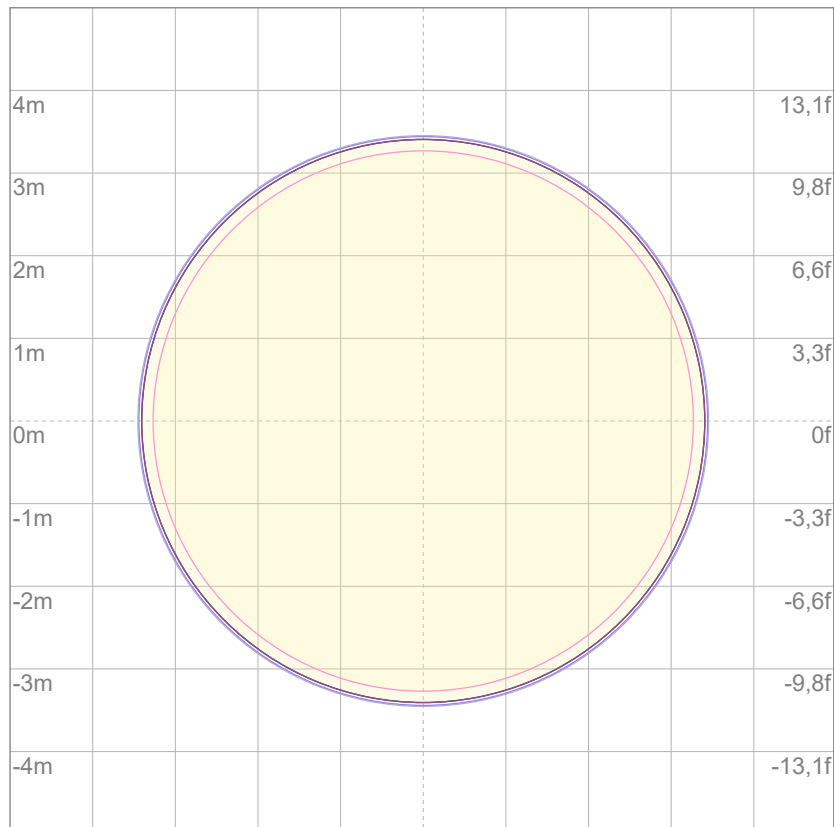
10%	496 cd
20%	991 cd
30%	1487 cd
40%	1982 cd
50%	2478 cd
60%	2973 cd
70%	3469 cd
80%	3965 cd

Conditions:

Number of c-planes: 2

Candela at center: 4956 cd

## ISO LUX DIAGRAM



3%	1,49 lx
5%	2,48 lx
10%	4,96 lx
30%	14,9 lx
50%	24,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 49,6 lx

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



Total lumen output:

1212 lm

Peak candela output:

2638 cd

Light quality:

CRI: 92,8

Color temperature:

5572 K

**PRODUCT NAME:**

ECLMINI DAT/CC

**MEASURAMENT CONDITIONS:**

Beam angle:

Profile 50°

Target:

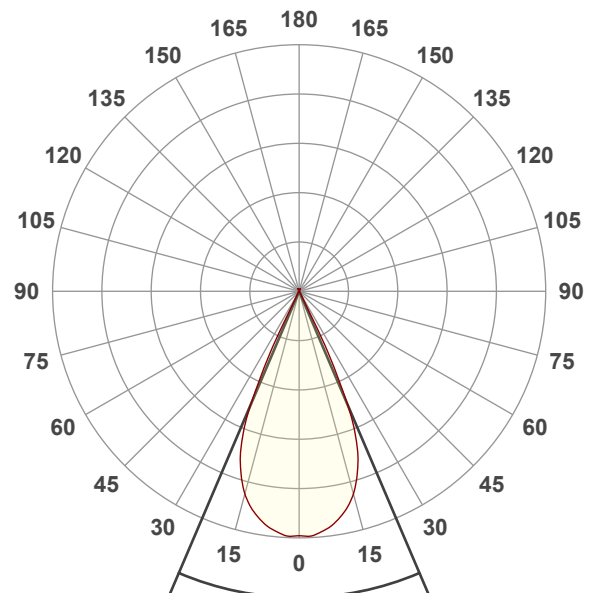
5600K

Operator:

Paolo Carvone

Date and time:

27/07/2022 16:17:49

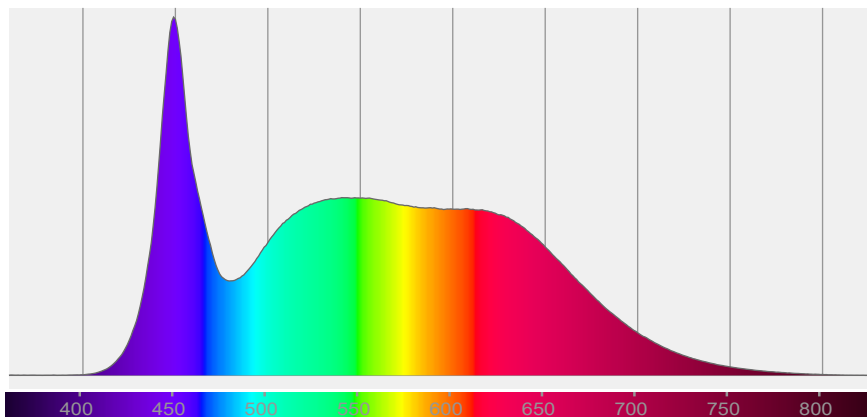


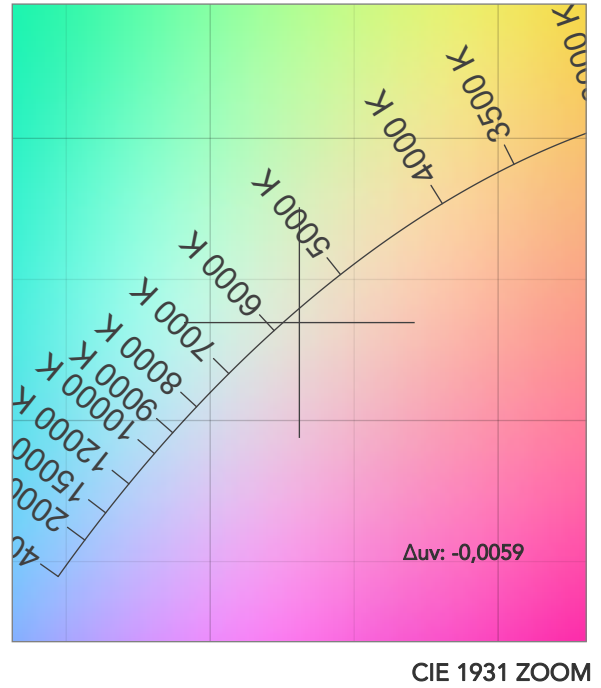
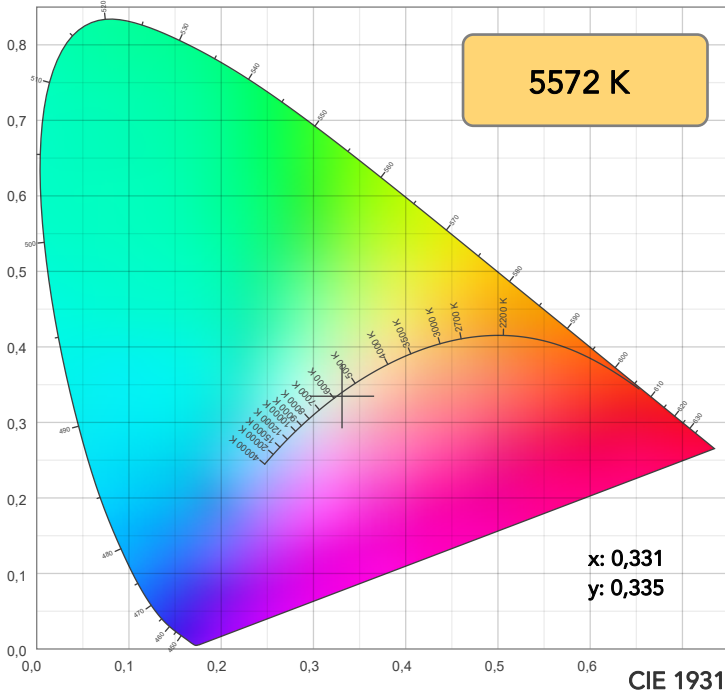
Beam angle 50%: 46,3°

Field angle 10%: 53,9°

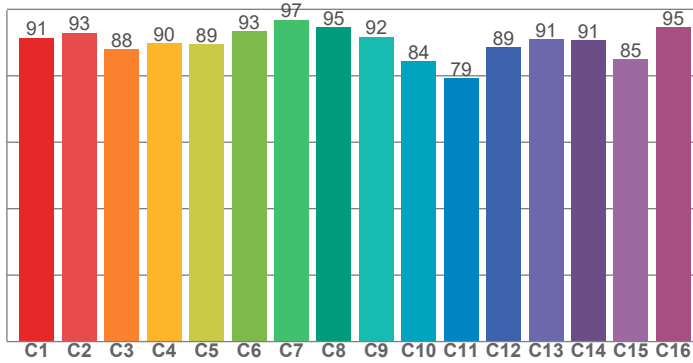
Cut off angle 2.5%: 55,4°

Spectra

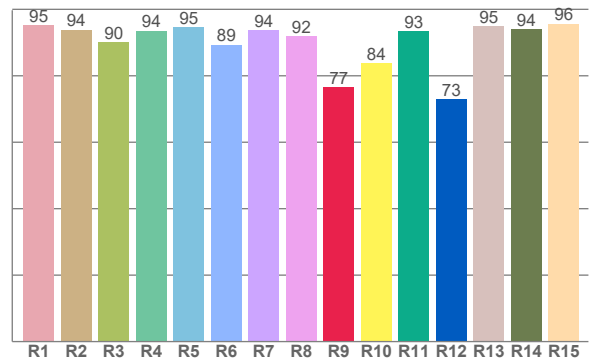




TM30: 89,7



CRI: 92,8 (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
95,3	93,9	90,0	93,6	94,6	89,3	93,6	92,0	76,6	83,7	93,3	72,9	95,0	94,1	95,7

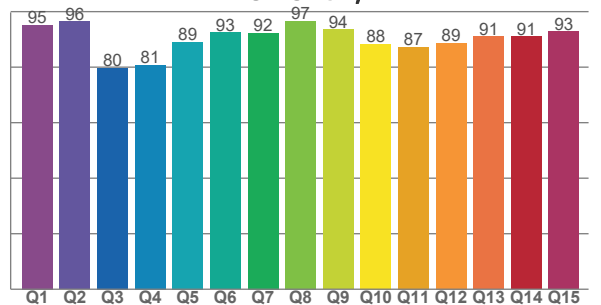
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,4	92,9	88,0	89,7	89,5	93,4	96,8	94,6	91,7	84,4	79,2	88,5	91,0	90,6	85,0	94,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,1	96,5	79,7	80,8	89,1	92,5	92,3	96,7	93,5	88,3	87,3	88,7	91,0	91,1	92,8

CQS: 89,2



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
5572 K	92,8	76,6	89,7	102,0	89,2	94	0,331	0,335	-0,0059

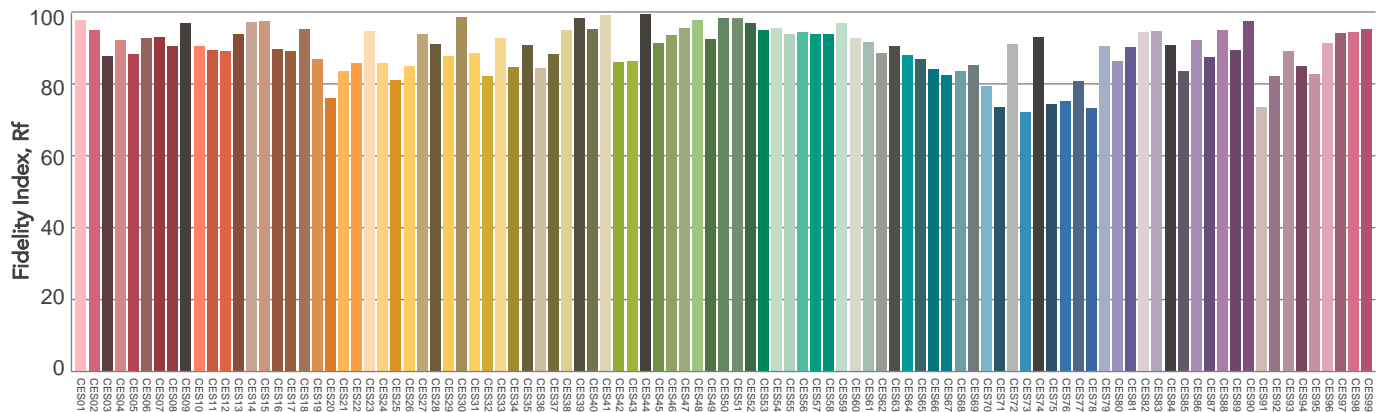
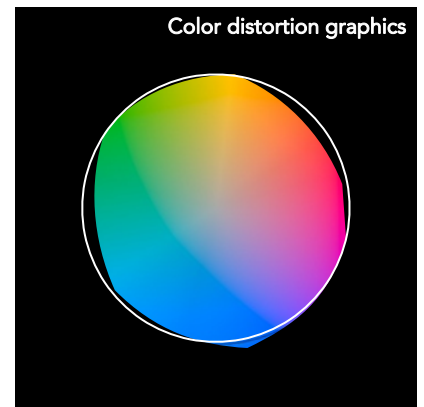
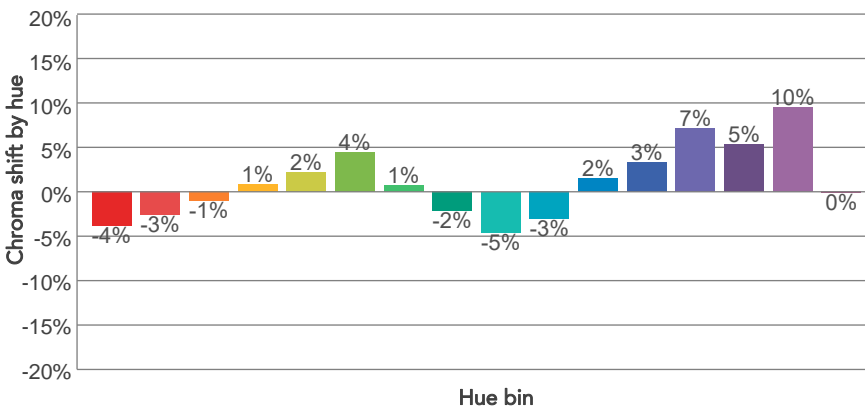
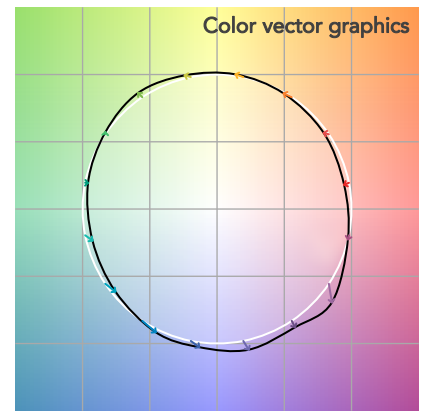
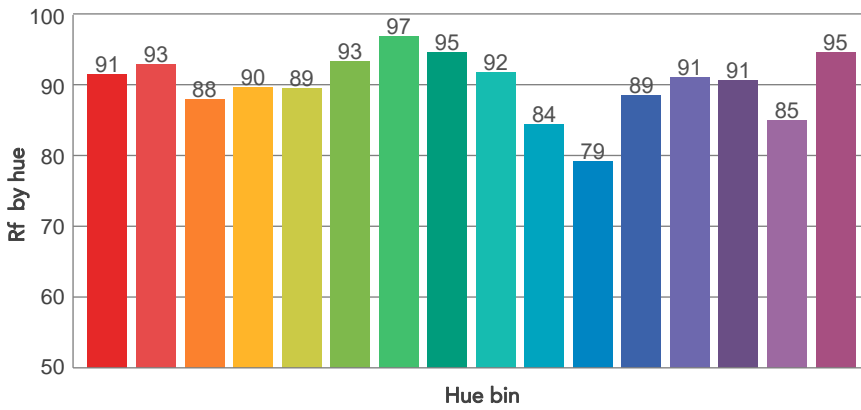
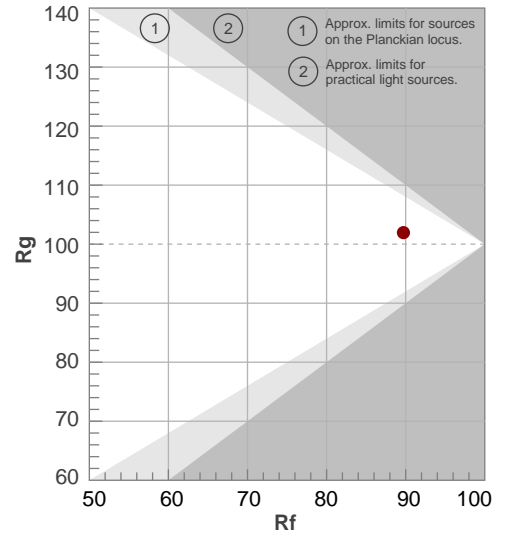


# TM30 DETAILS

**Rf 89,7**  
Fidelity index Rf

**Rg 102,0**  
Gammut index

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-1%
2	93	-3%	3%
3	88	-1%	7%
4	90	1%	6%
5	89	2%	4%
6	93	4%	1%
7	97	1%	-1%
8	95	-2%	0%
9	92	-5%	5%
10	84	-3%	9%
11	79	2%	13%
12	89	3%	7%
13	91	7%	3%
14	91	5%	-1%
15	85	10%	-10%
16	95	0%	-3%

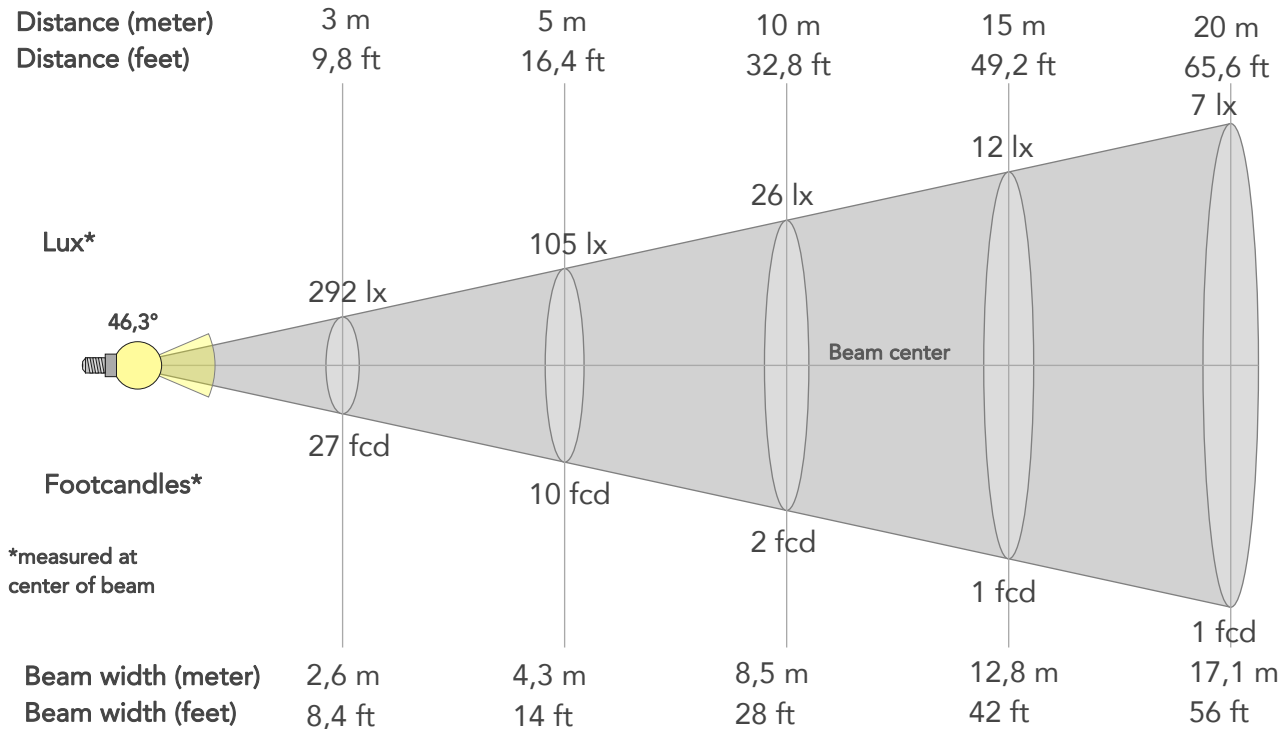


Color Evaluation Sample

# BEAM DETAILS



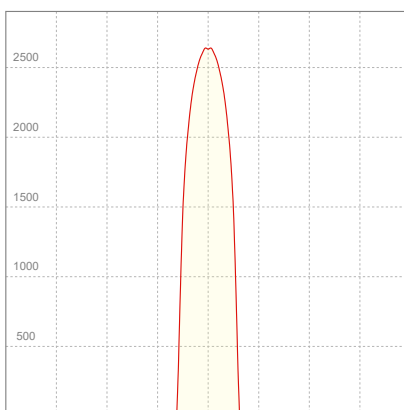
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,3°	53,9°	55,4°	100,0%	100,0%



## 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	2632lx	658lx	292lx	165lx	105lx	47lx	26lx	12lx	7lx	4lx	3lx	2lx	1lx
Footcand.	245fcd	61fcd	27fcd	15fcd	10fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,4m	4,3m	6,4m	8,5m	12,8m	17,1m	21,4m	25,6m	34,2m	42,7m
Beam wid.	2,8ft	5,6ft	8,4ft	11,2ft	14ft	21ft	28ft	42ft	56ft	70ft	84,1ft	112,1ft	140,1ft

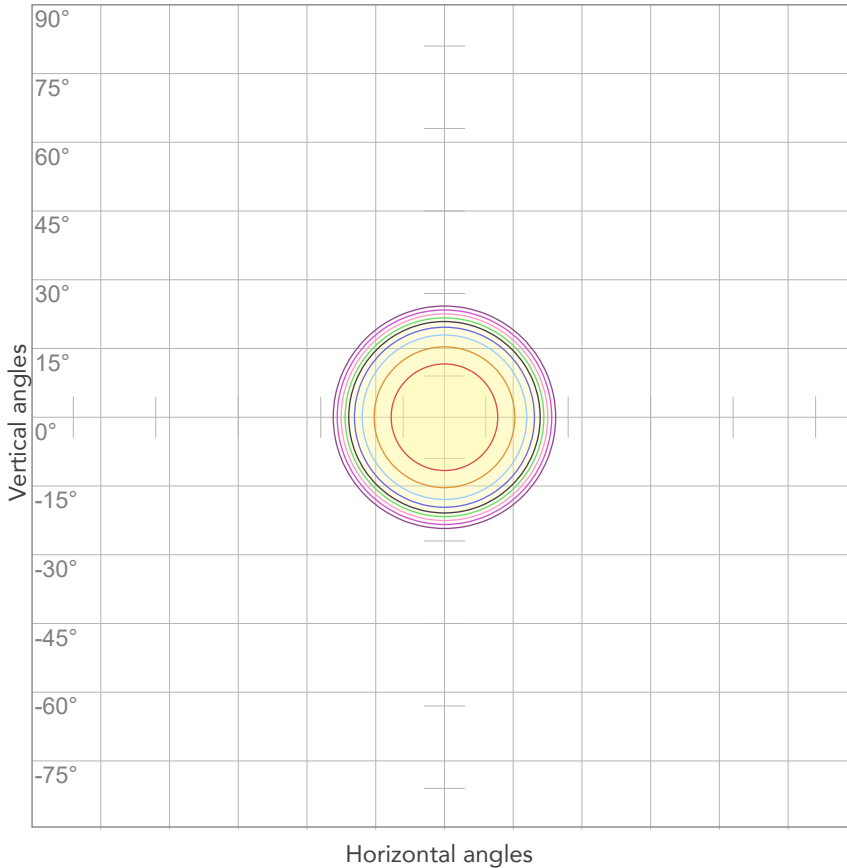
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,102A	20,7W	59lm/W
<b>Power Fc</b>			
0.9			

## ISO CANDELA DIAGRAM



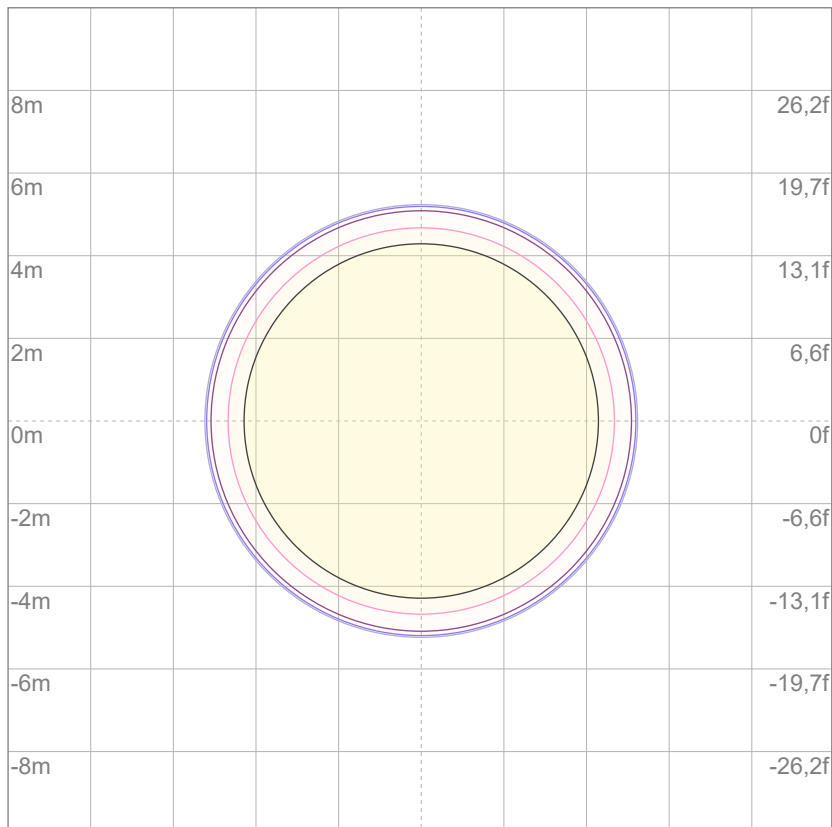
10%	263 cd
20%	526 cd
30%	790 cd
40%	1053 cd
50%	1316 cd
60%	1579 cd
70%	1842 cd
80%	2106 cd

Conditions:

Number of c-planes: 2

Candela at center: 2632 cd

## ISO LUX DIAGRAM



3%	0,790 lx
5%	1,32 lx
10%	2,63 lx
30%	7,90 lx
50%	13,2 lx

Conditions:

Number of c-planes: 2

Lux at center: 26,3 lx

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