

Photometric Test Report



EclProfile FWHPVW

450W high quality VariableWhite LED
ellipsoidal, compatible with PRL and PRLZ lenses

(ECLPRL10BK)

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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:

12866 lm

Peak candela output:

536723 cd

Light quality:

CRI: 97,6

Color temperature:

4210 K

PRODUCT NAME:

ECLFWHPVW

MEASUREMENT CONDITIONS:

Beam angle:

PRL10

Target:

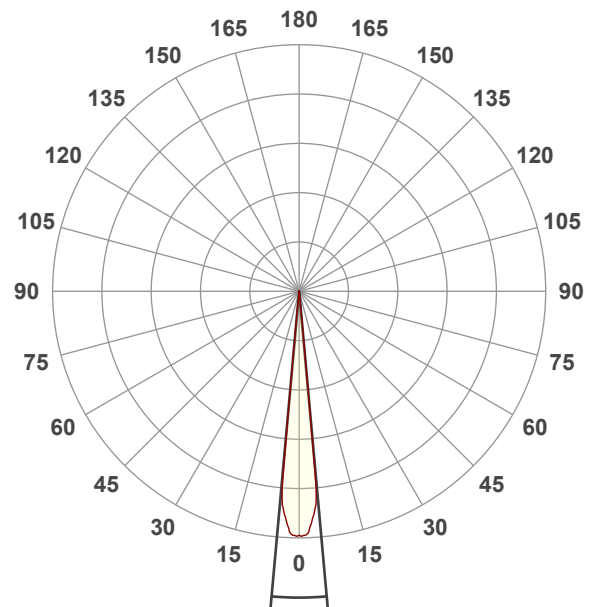
Full On

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:19:40

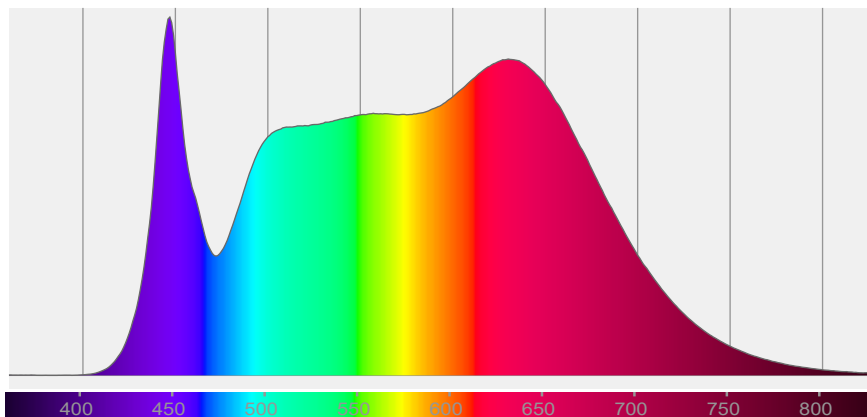


Beam angle 50%: 10,3°

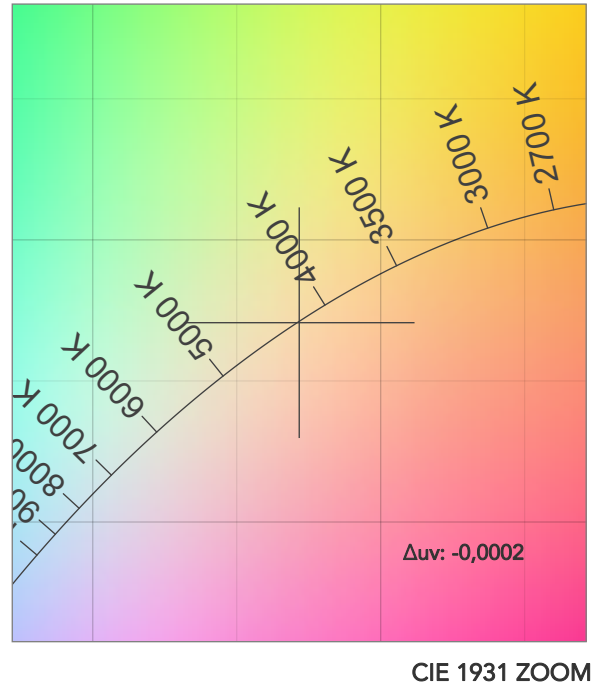
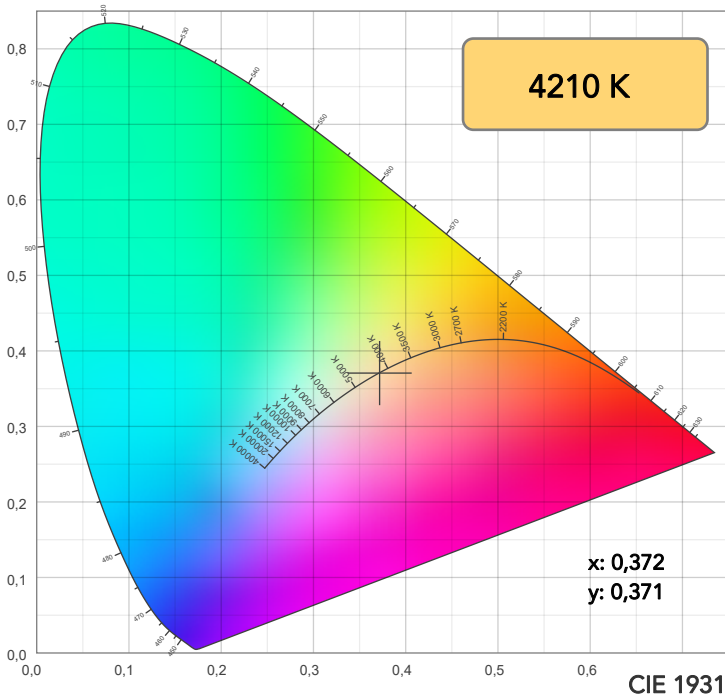
Field angle 10%: 11°

Cut off angle 2.5%: 11,5°

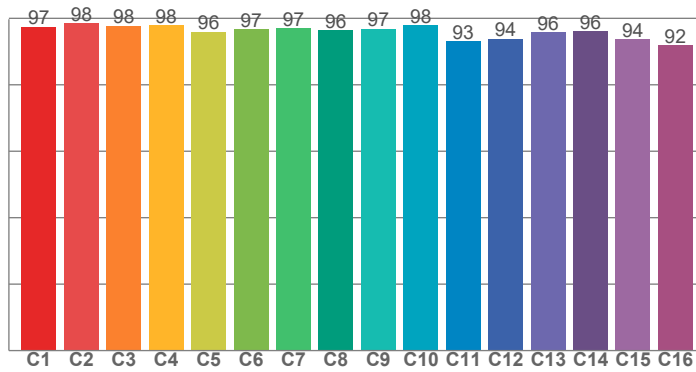
Spectra



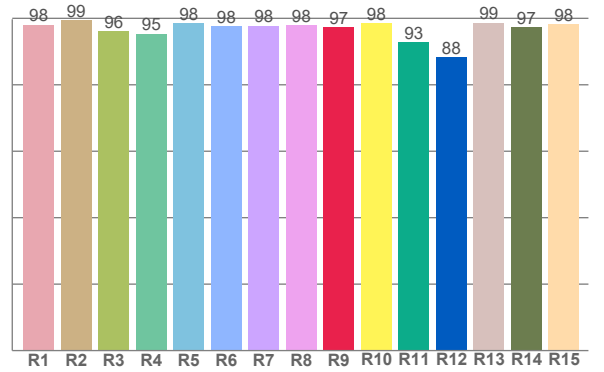
COLOR DETAILS



TM30: 96,1



CRI: 97,6 (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
98,1	99,4	96,0	95,4	98,5	97,7	97,8	97,8	97,3	98,5	92,7	88,3	98,7	97,4	98,2

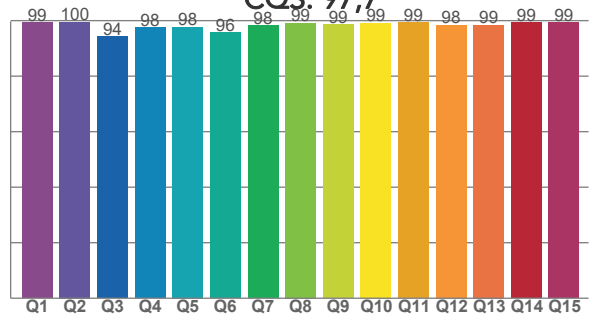
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
97,4	98,4	97,7	98,0	96,0	96,6	97,0	96,4	96,9	97,9	93,0	93,9	95,8	96,2	93,7	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,4	99,5	94,2	97,6	97,7	95,7	98,2	99,1	98,7	99,1	99,2	98,5	98,5	99,3	99,3

CQS: 97,7



COLOR PARAMETERS

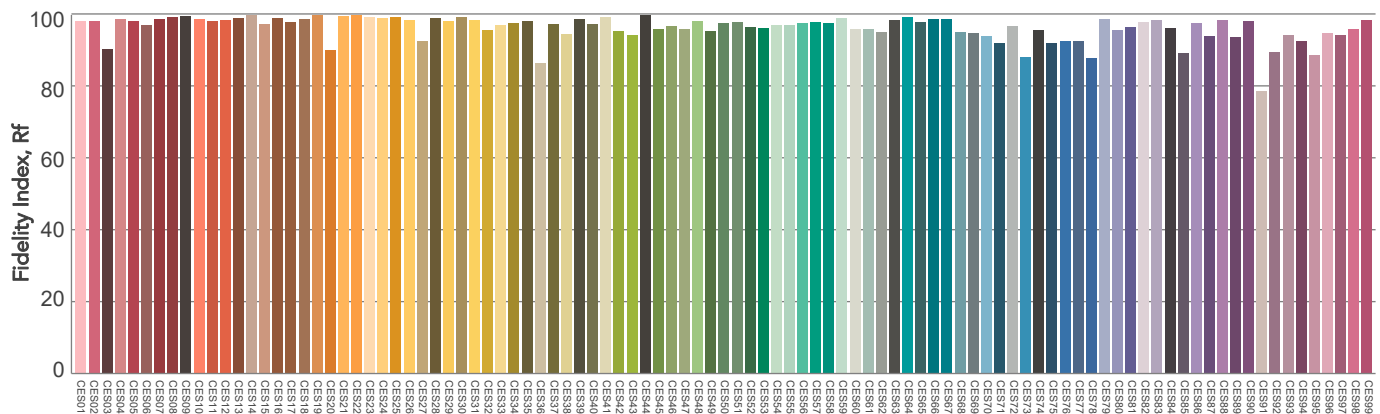
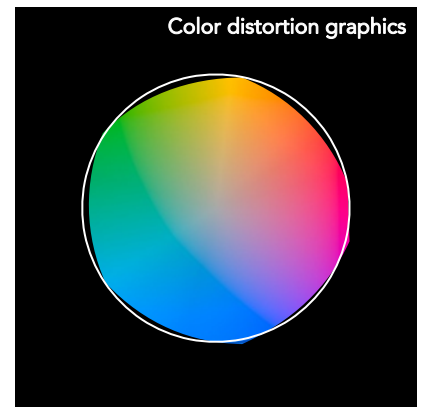
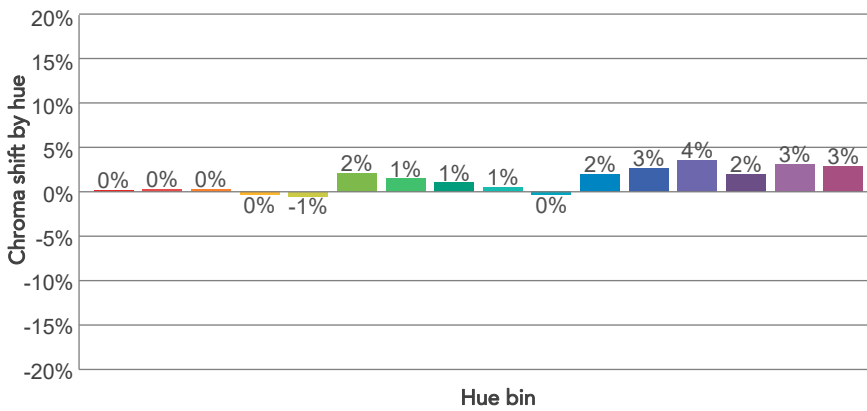
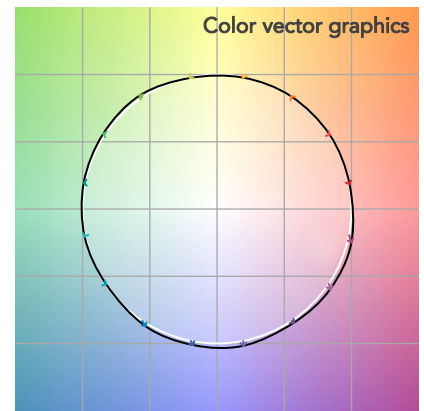
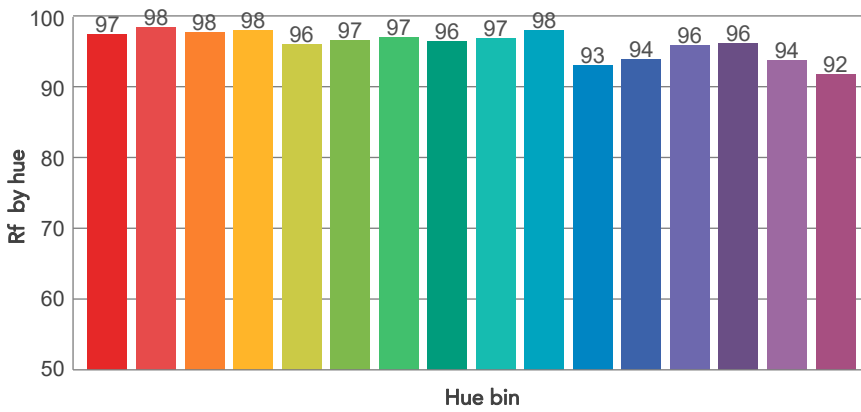
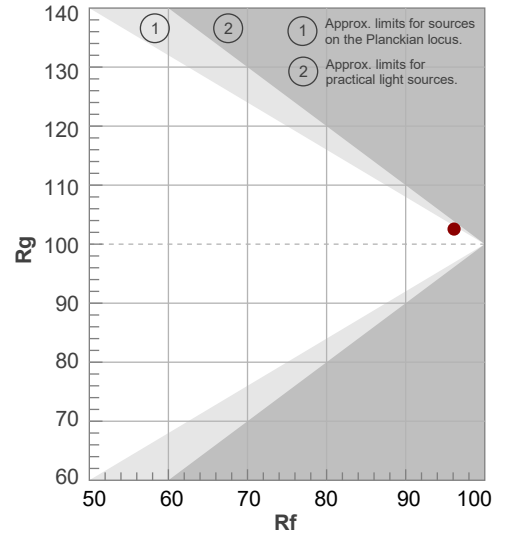
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4210 K	97,6	97,3	96,1	102,6	97,7	98	0,372	0,371	-0,0002

TM30 DETAILS

Rf 96,1
Fidelity index Rf

Rg 102,6
Gammut index

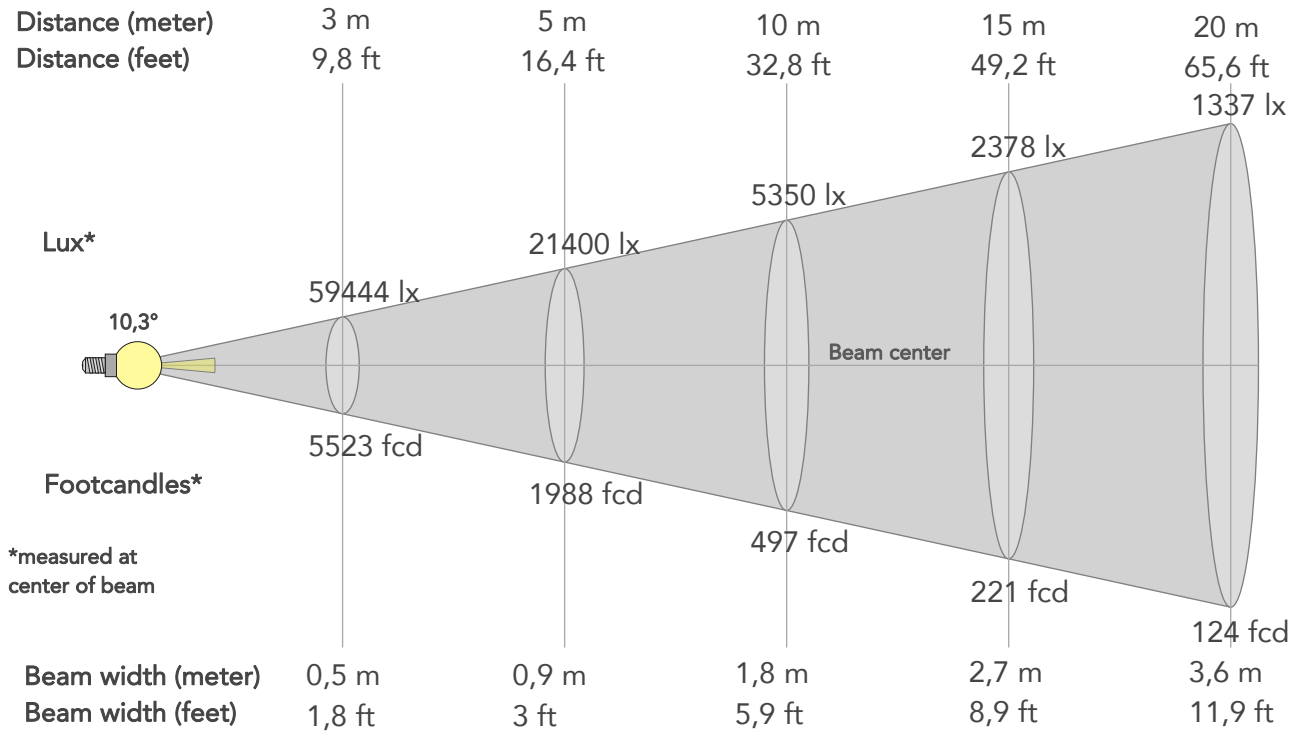
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	97	0%	-1%
2	98	0%	-1%
3	98	0%	1%
4	98	0%	0%
5	96	-1%	1%
6	97	2%	1%
7	97	1%	0%
8	96	1%	0%
9	97	1%	1%
10	98	0%	1%
11	93	2%	4%
12	94	3%	2%
13	96	4%	-1%
14	96	2%	1%
15	94	3%	-3%
16	92	3%	-5%



BEAM DETAILS



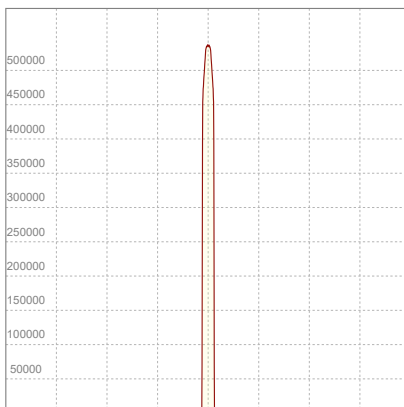
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	11°	11,5°	100,0%	100,0%



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	534999lx	133750lx	59444lx	33437lx	21400lx	9511lx	5350lx	2378lx	1337lx	856lx	594lx	334lx	214lx
Footcand.	49703fcd	12426fcd	5523fcd	3106fcd	1988fcd	884fcd	497fcd	221fcd	124fcd	80fcd	55fcd	31fcd	20fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,4m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	3ft	4,4ft	5,9ft	8,9ft	11,9ft	14,8ft	17,8ft	23,7ft	29,6ft

LINEAR DISTRIBUTION DIAGRAM

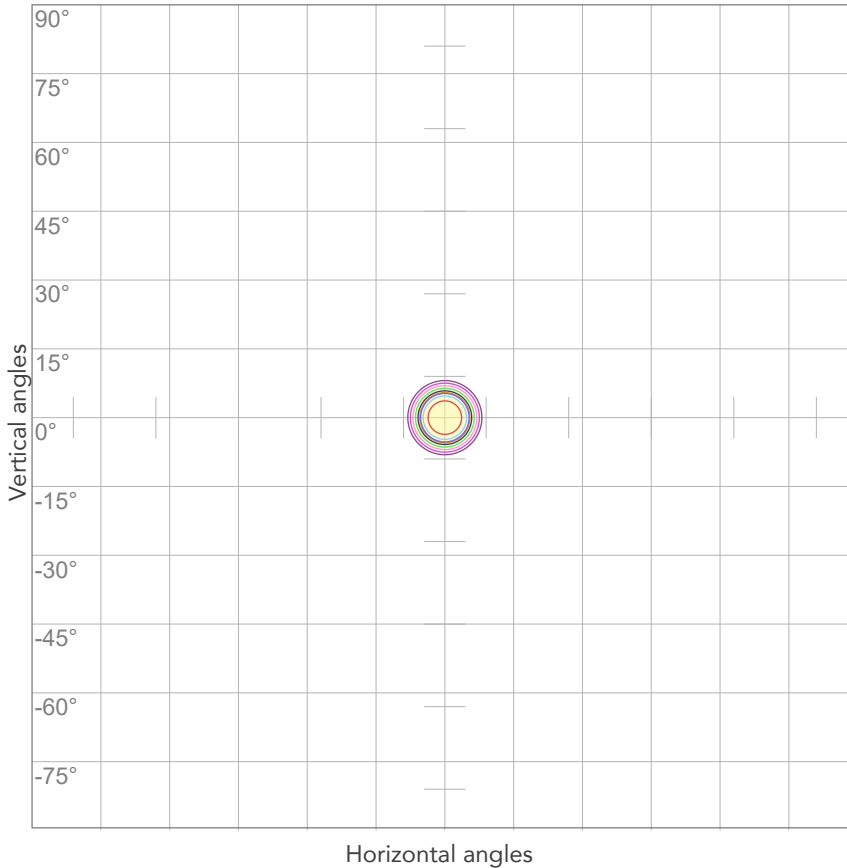


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
227V	2,01A	441,4W	0,97	29lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



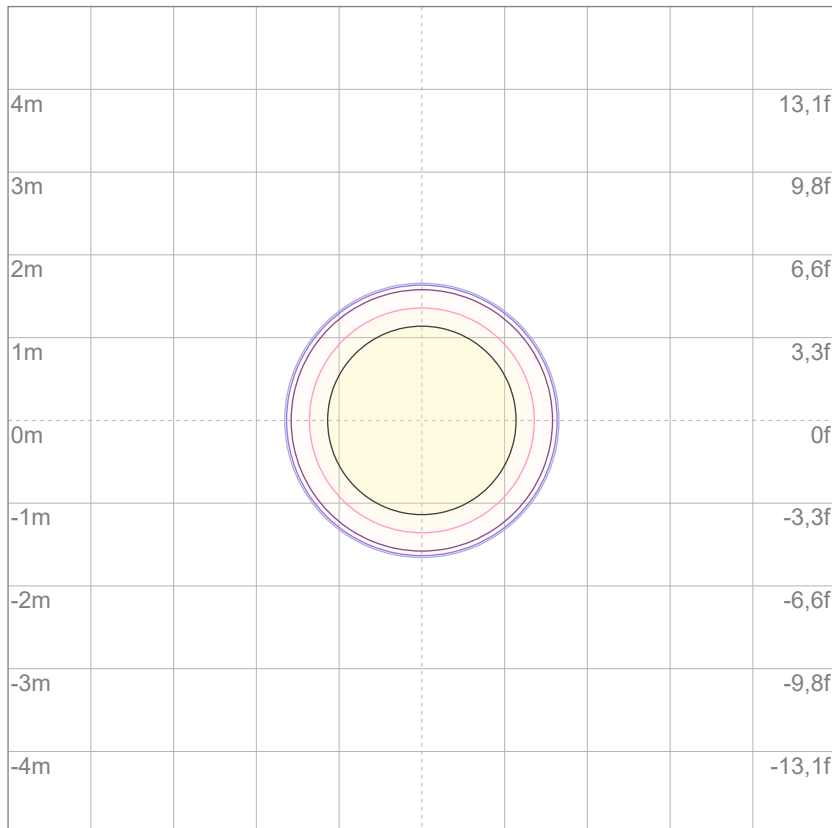
10%	53500 cd
20%	107000 cd
30%	160500 cd
40%	214000 cd
50%	267500 cd
60%	321000 cd
70%	374499 cd
80%	427999 cd

Conditions:

Number of c-planes: 2

Candela at center: 534999 cd

ISO LUX DIAGRAM



3%	160 lx
5%	267 lx
10%	535 lx
30%	1605 lx
50%	2675 lx

Conditions:

Number of c-planes: 2

Lux at center: 5350 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:

9657 lm

Peak candela output:

400675 cd

Light quality:

CRI: 97,0

Color temperature:

2620 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL10

Target:

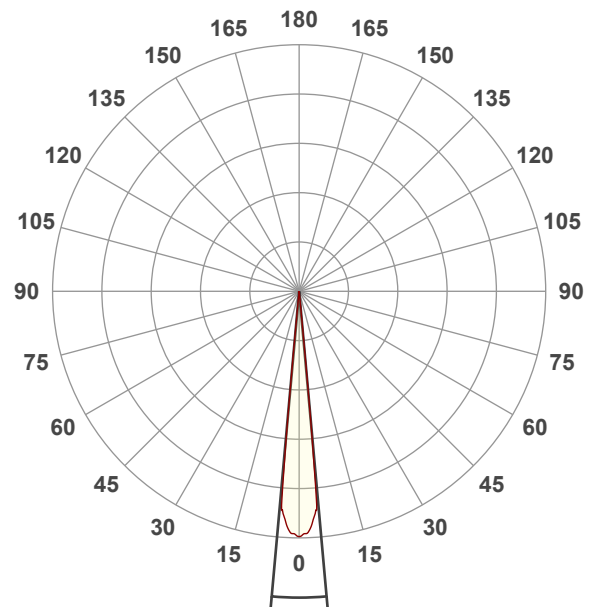
Warm White

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:23:54

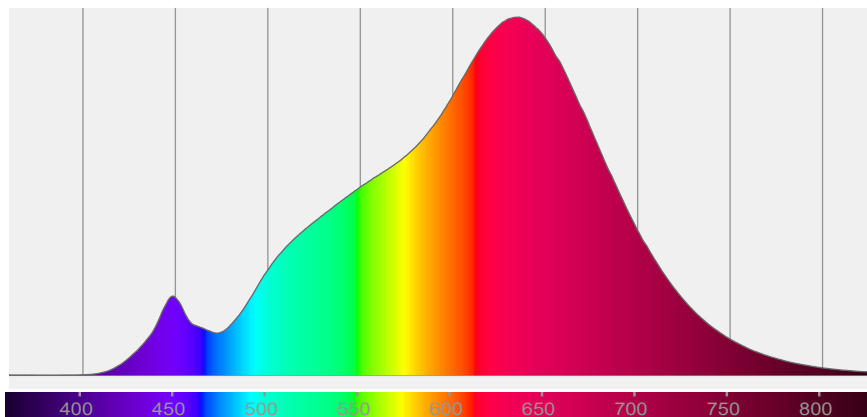


Beam angle 50%: 10,3°

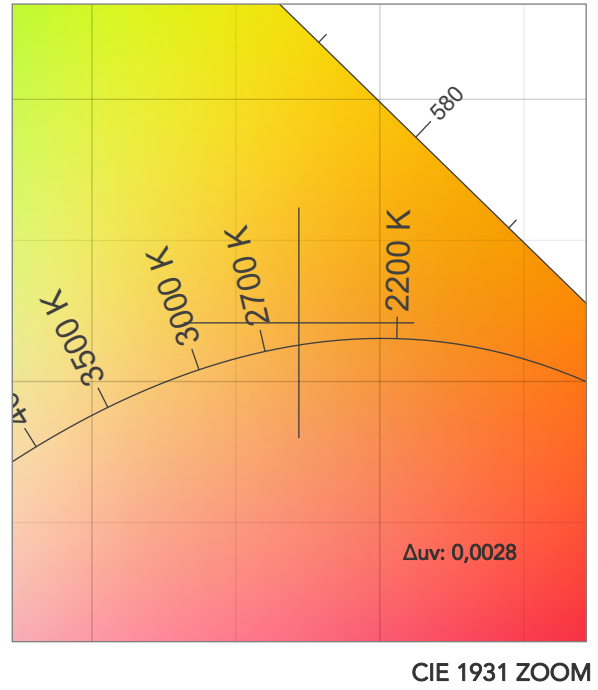
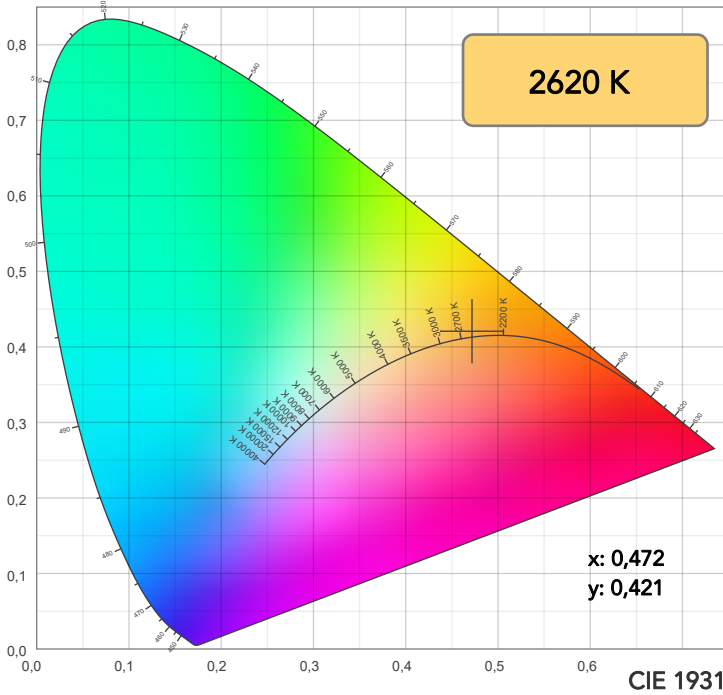
Field angle 10%: 11°

Cut off angle 2.5%: 11,6°

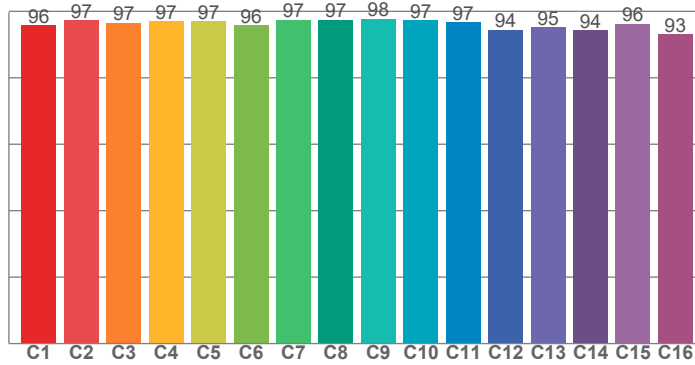
Spectra



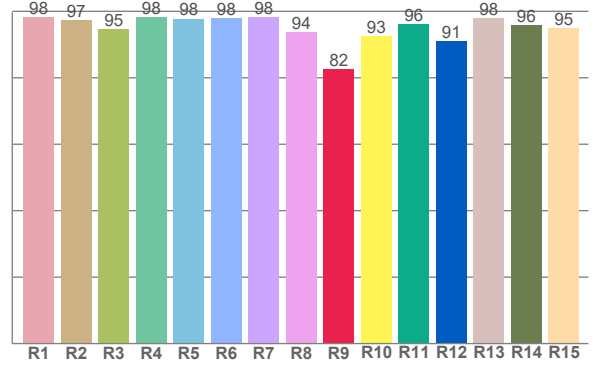
COLOR DETAILS



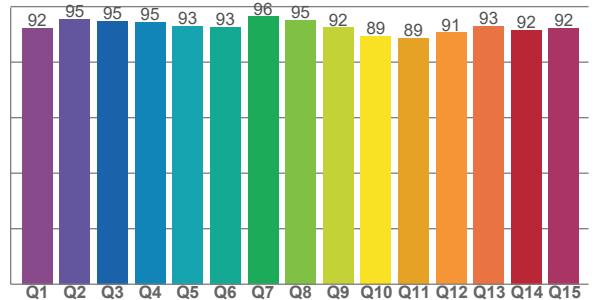
TM30: 96,3



CRI: 97,0 (R1-R8)



CQS: 92,3



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
98,3	97,2	94,6	98,3	97,8	97,9	98,2	93,6	82,5	92,6	96,2	91,1	97,9	95,9	94,9

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
95,8	97,2	96,6	97,1	97,1	95,8	97,4	97,4	97,8	97,3	96,7	94,4	95,1	94,3	96,3	93,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,2	95,5	94,8	94,5	93,1	92,7	96,4	95,1	92,5	89,4	88,7	90,6	93,0	91,6	92,3

COLOR PARAMETERS

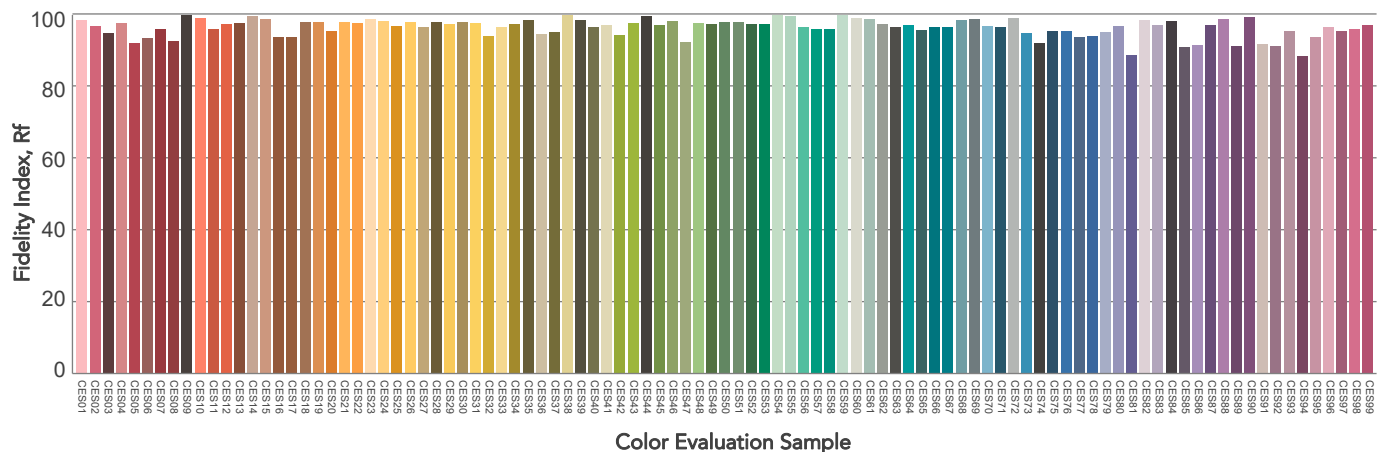
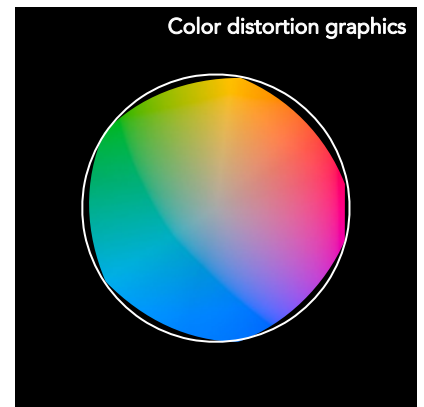
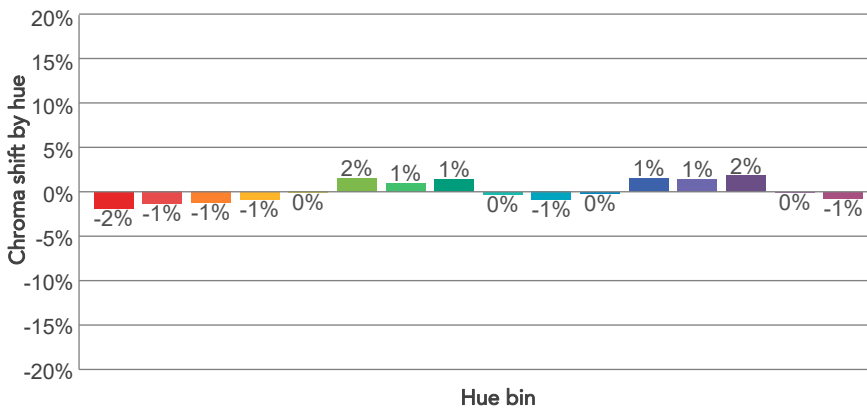
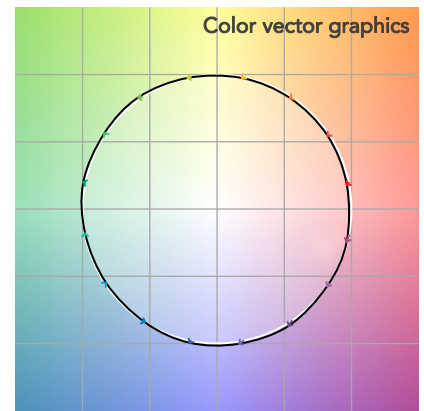
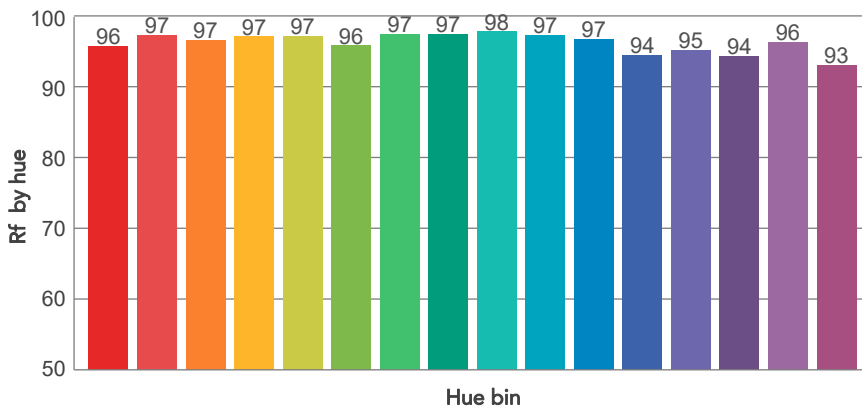
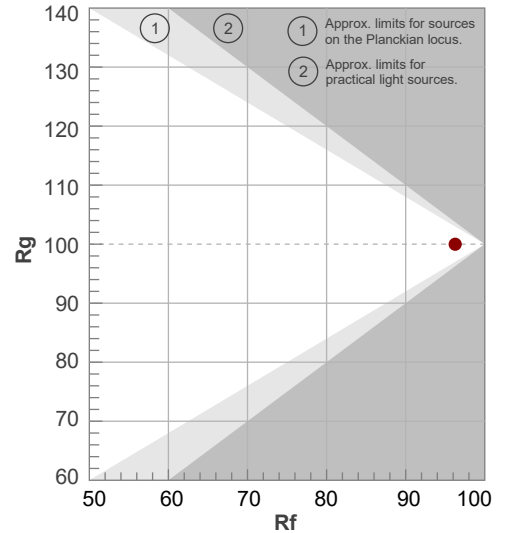
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2620 K	97,0	82,5	96,3	100,0	92,3	97	0,472	0,421	0,0028

TM30 DETAILS

Rf 96,3
Fidelity index Rf

Rg 100,0
Gammut index

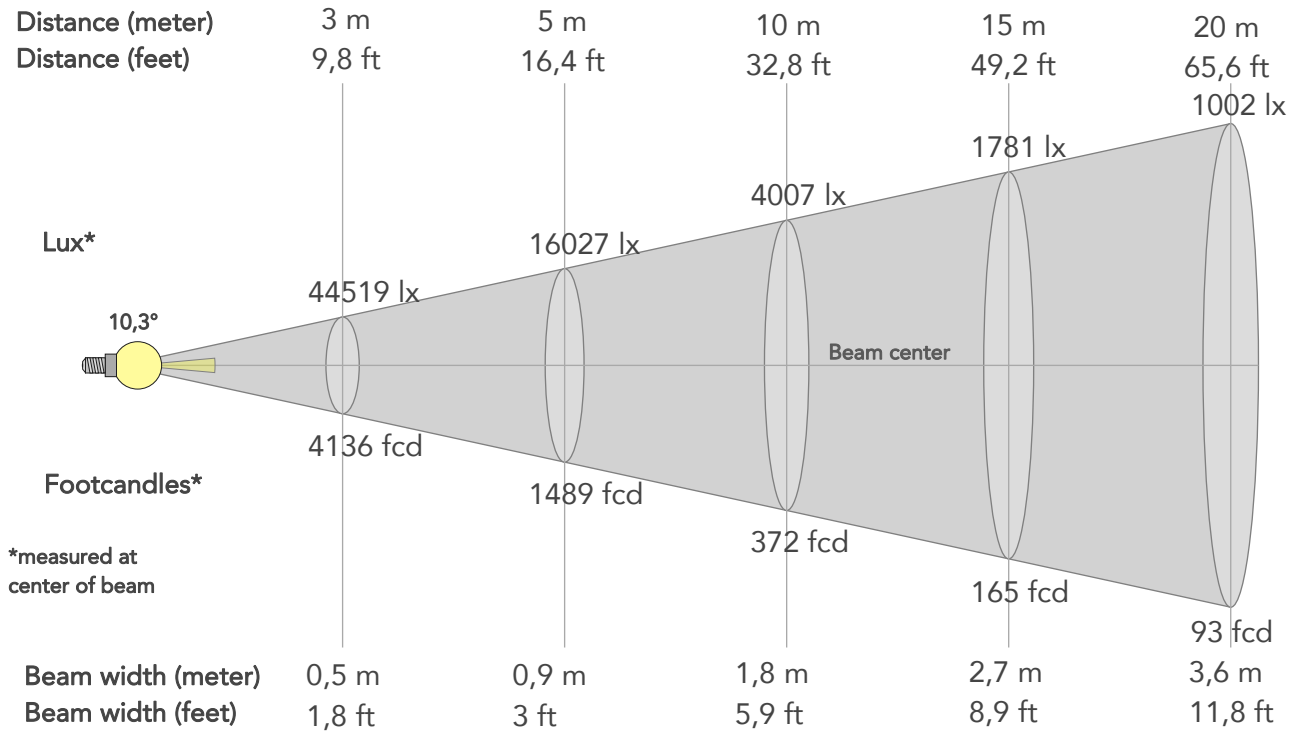
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-2%	-1%
2	97	-1%	0%
3	97	-1%	1%
4	97	-1%	1%
5	97	0%	2%
6	96	2%	2%
7	97	1%	0%
8	97	1%	0%
9	98	0%	-1%
10	97	-1%	0%
11	97	0%	2%
12	94	1%	-1%
13	95	1%	-3%
14	94	2%	-4%
15	96	0%	-2%
16	93	-1%	-5%



BEAM DETAILS



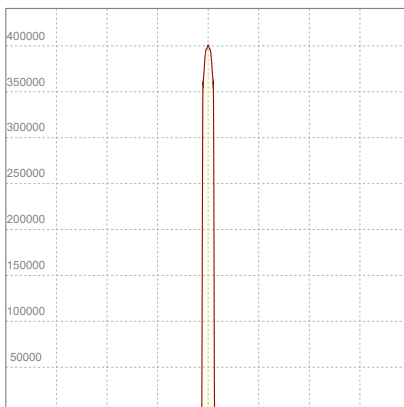
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	11°	11,6°	100,0%	100,0%



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	400675lx	100169lx	44519lx	25042lx	16027lx	7123lx	4007lx	1781lx	1002lx	641lx	445lx	250lx	160lx
Footcand.	37224fcd	9306fcd	4136fcd	2326fcd	1489fcd	662fcd	372fcd	165fcd	93fcd	60fcd	41fcd	23fcd	15fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,3m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	3ft	4,4ft	5,9ft	8,9ft	11,8ft	14,8ft	17,7ft	23,6ft	29,5ft

LINEAR DISTRIBUTION DIAGRAM

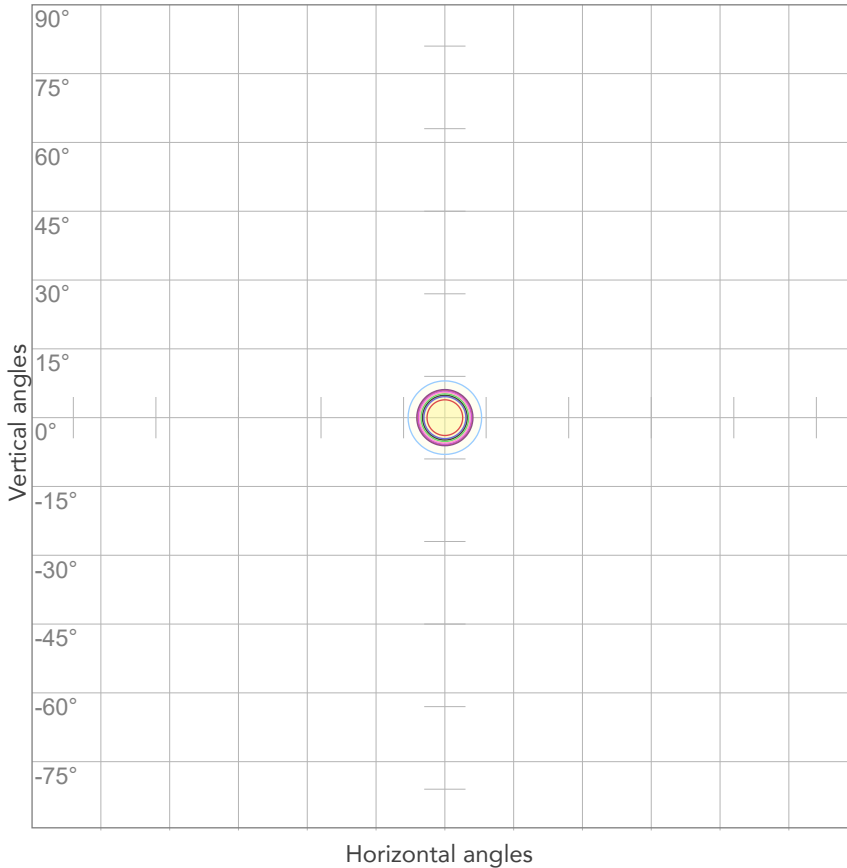


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
227V	1,75A	383,4W	0,96	25lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



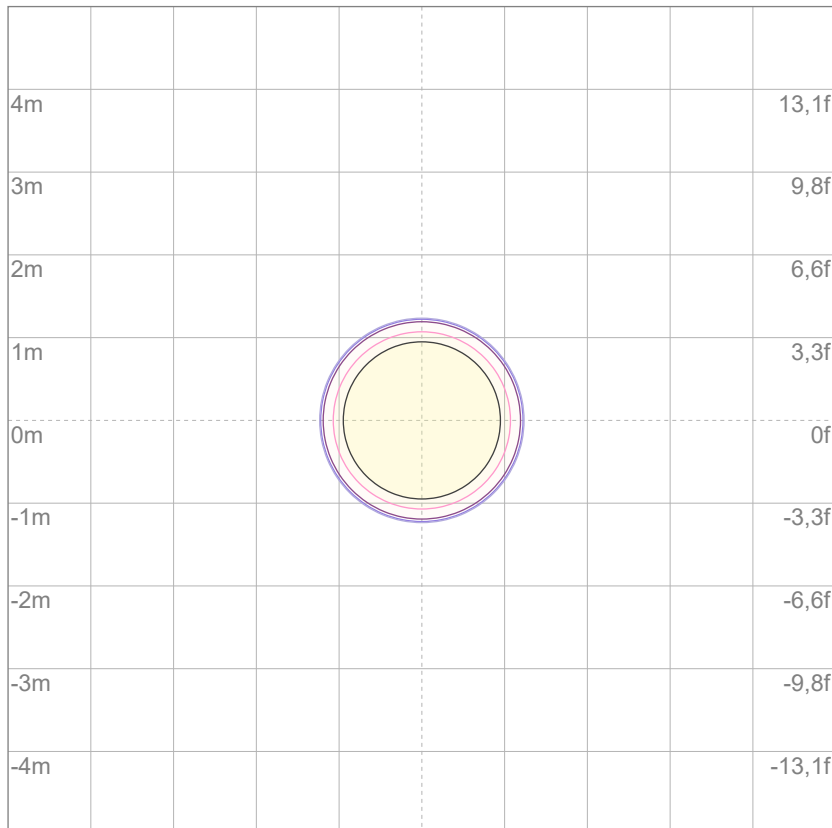
10%	40067 cd
20%	80135 cd
30%	120202 cd
40%	160270 cd
50%	200337 cd
60%	240405 cd
70%	280472 cd
80%	320540 cd

Conditions:

Number of c-planes: 2

Candela at center: 400675 cd

ISO LUX DIAGRAM



3%	120 lx
5%	200 lx
10%	401 lx
30%	1202 lx
50%	2003 lx

Conditions:

Number of c-planes: 2

Lux at center: 4007 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:

12328 lm

Peak candela output:

517990 cd

Light quality:

CRI: 94,8

Color temperature:

6663 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL10

Target:

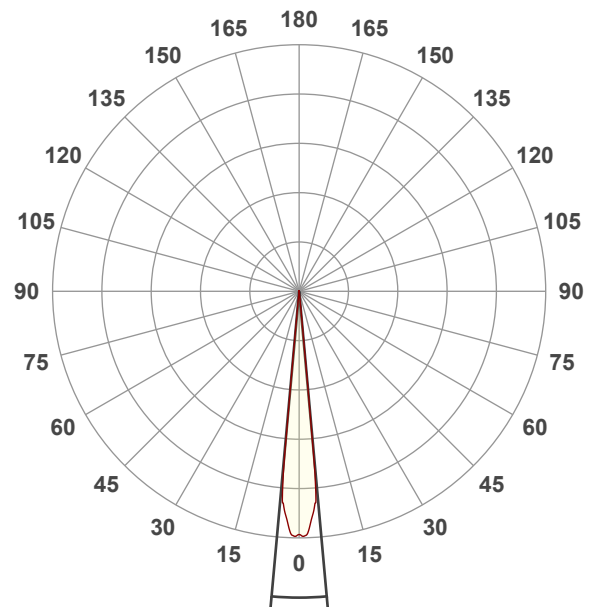
Cold White

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:28:05

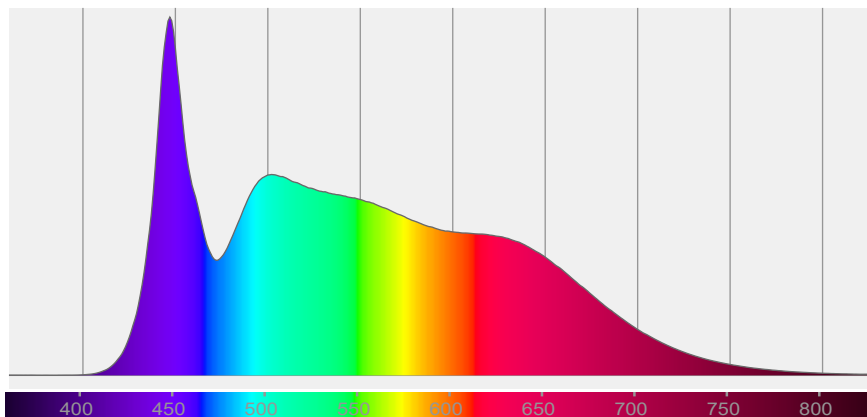


Beam angle 50%: 10,3°

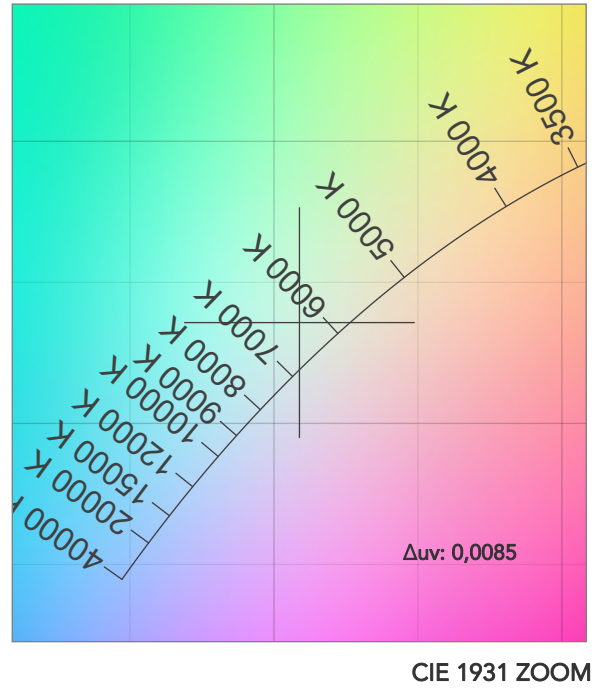
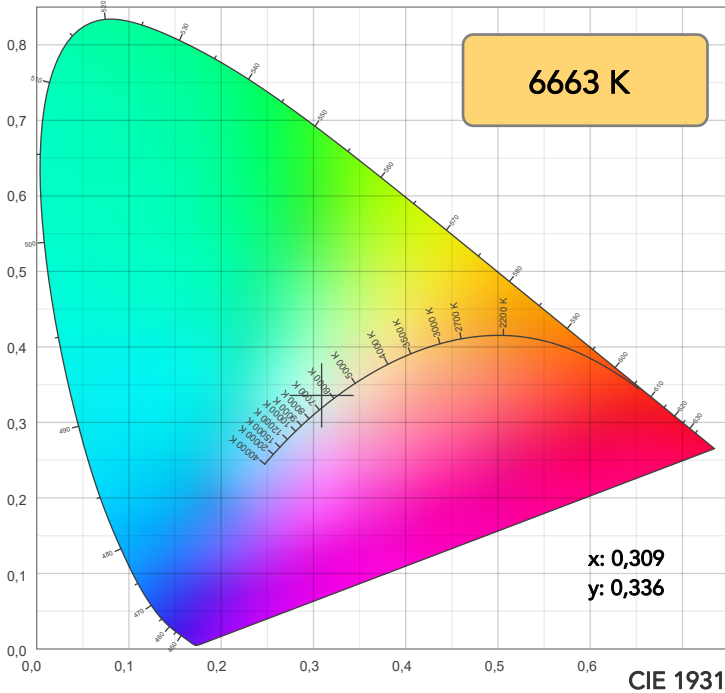
Field angle 10%: 11°

Cut off angle 2.5%: 11,5°

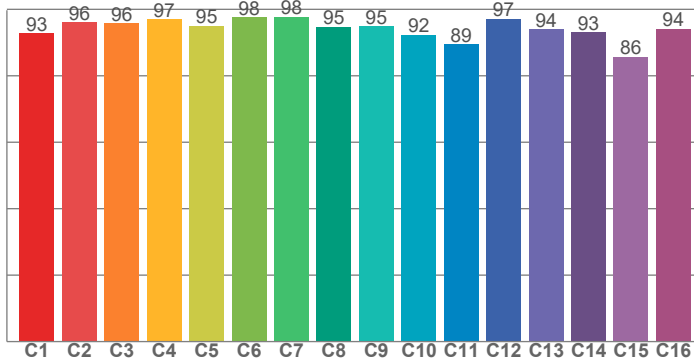
Spectra



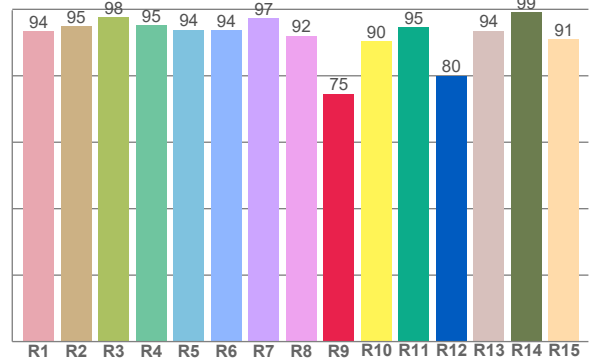
COLOR DETAILS



TM30: 94,2



CRI: 94,8 (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
93,5	95,0	97,7	95,1	93,9	93,6	97,4	92,1	74,6	90,4	94,5	80,0	93,6	99,2	91,1

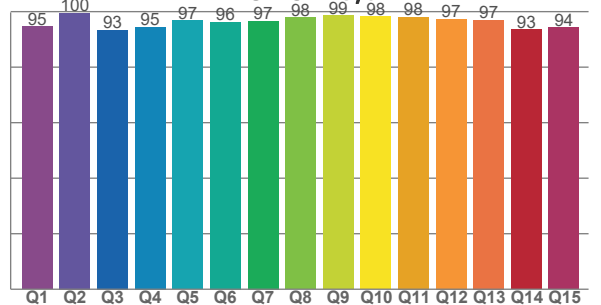
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,7	96,1	95,8	97,0	95,0	97,5	97,7	94,8	94,9	92,3	89,4	97,1	93,9	93,1	85,8	94,1

CQS Q values

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

CQS: 96,0



COLOR PARAMETERS

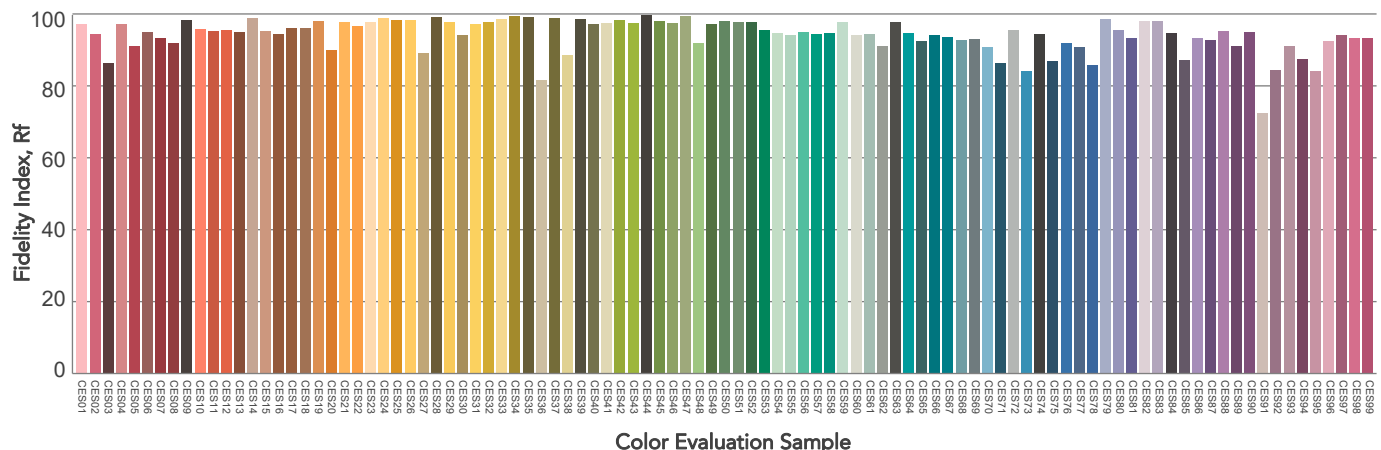
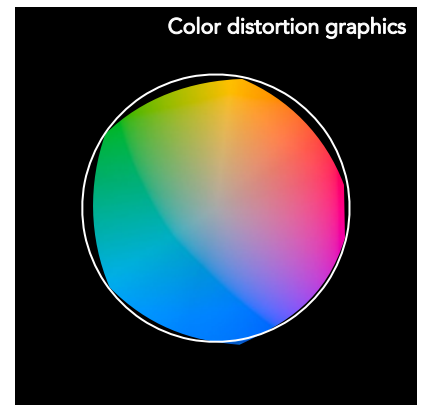
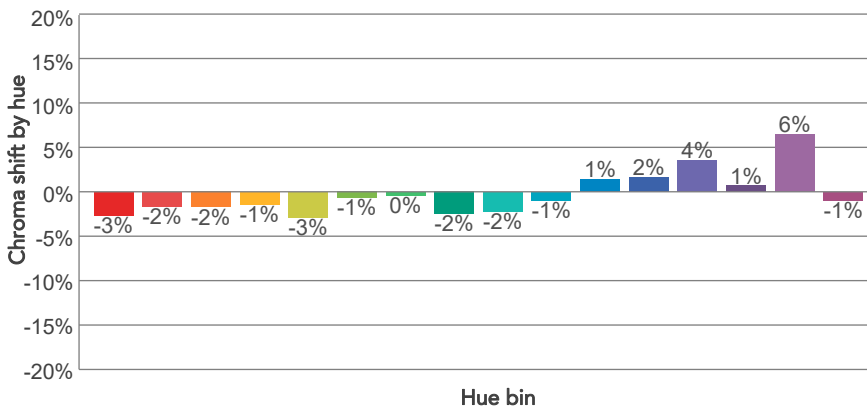
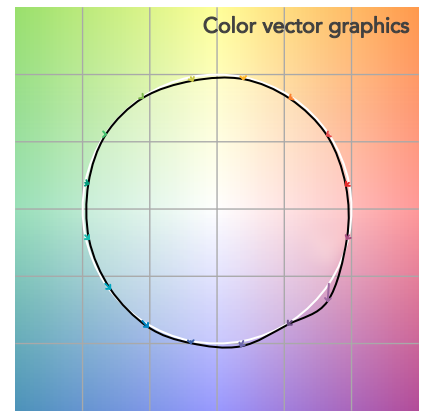
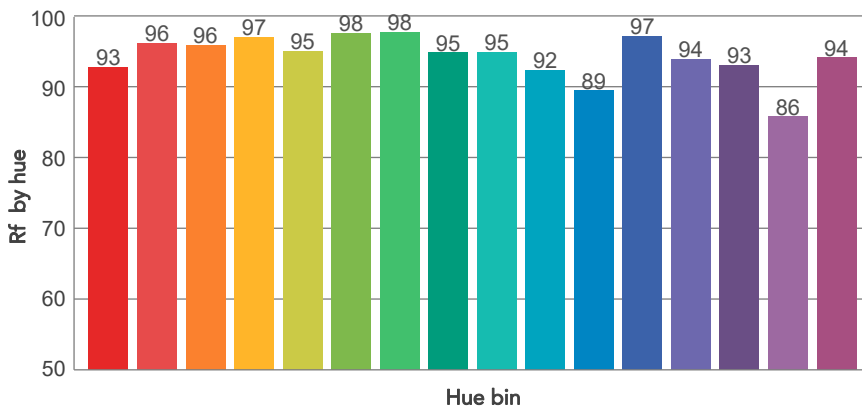
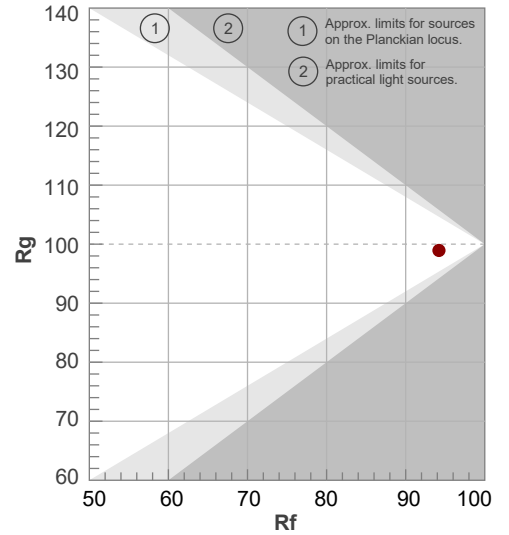
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6663 K	94,8	74,6	94,2	98,9	96,0	99	0,309	0,336	0,0085

TM30 DETAILS

Rf 94,2
Fidelity index Rf

Rg 98,9
Gammut index

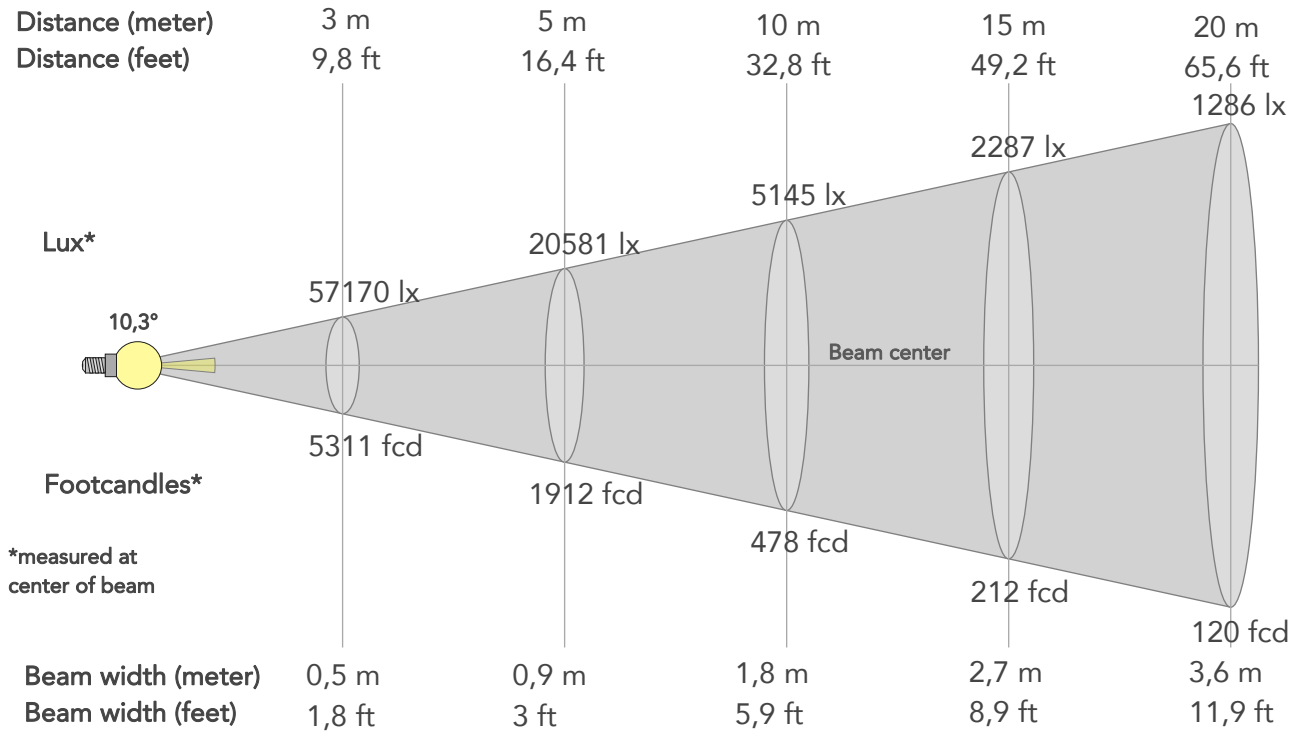
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-3%	-2%
2	96	-2%	0%
3	96	-2%	1%
4	97	-1%	0%
5	95	-3%	-1%
6	98	-1%	0%
7	98	0%	0%
8	95	-2%	0%
9	95	-2%	3%
10	92	-1%	5%
11	89	1%	6%
12	97	2%	0%
13	94	4%	-2%
14	93	1%	-4%
15	86	6%	-11%
16	94	-1%	-3%



BEAM DETAILS



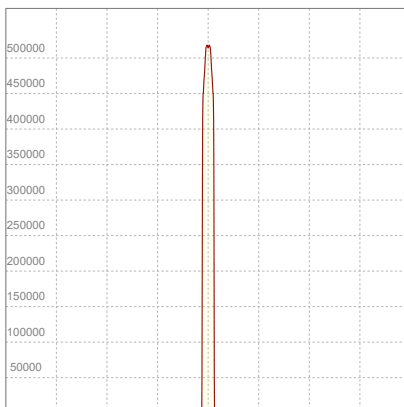
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	11°	11,5°	100,0%	100,0%



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	514534lx	128633lx	57170lx	32158lx	20581lx	9147lx	5145lx	2287lx	1286lx	823lx	572lx	322lx	206lx
Footcand.	47802fcd	11950fcd	5311fcd	2988fcd	1912fcd	850fcd	478fcd	212fcd	120fcd	76fcd	53fcd	30fcd	19fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,4m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	3ft	4,4ft	5,9ft	8,9ft	11,9ft	14,8ft	17,8ft	23,7ft	29,7ft

LINEAR DISTRIBUTION DIAGRAM

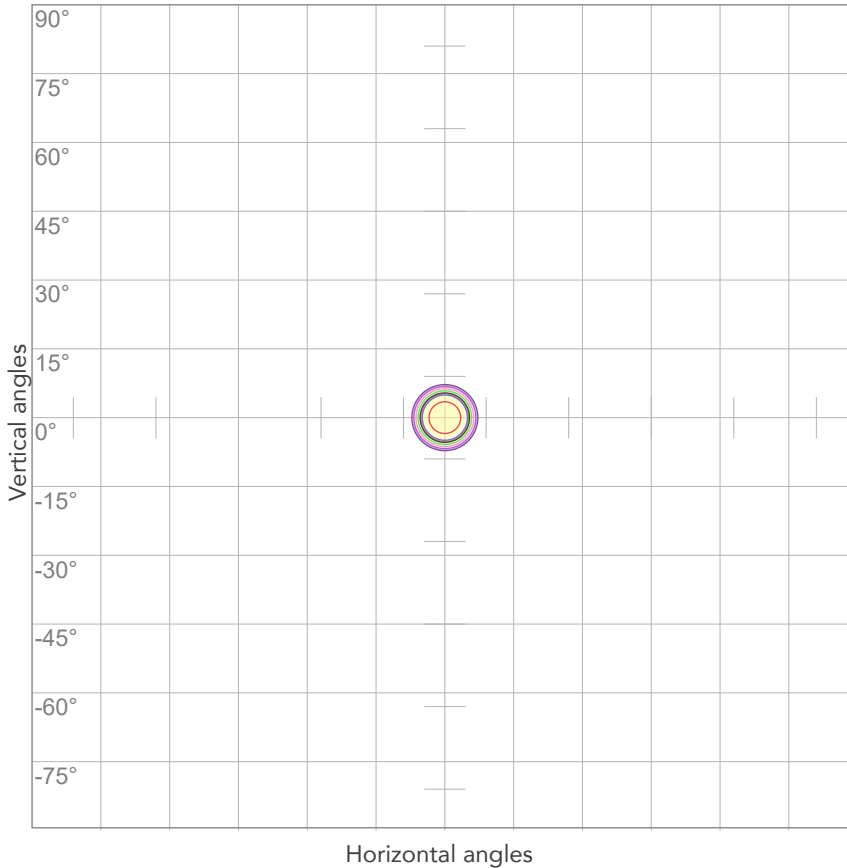


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	1,75A	380,2W	0,96	32lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



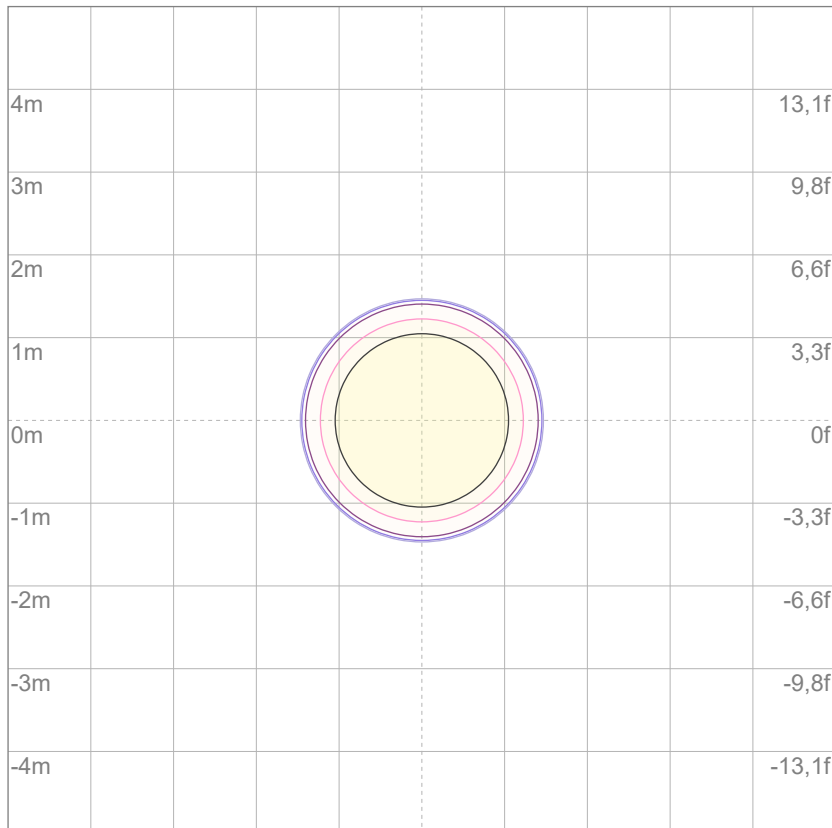
10%	51453 cd
20%	102907 cd
30%	154360 cd
40%	205813 cd
50%	257267 cd
60%	308720 cd
70%	360174 cd
80%	411627 cd

Conditions:

Number of c-planes: 2

Candela at center: 514534 cd

ISO LUX DIAGRAM



3%	154 lx
5%	257 lx
10%	515 lx
30%	1544 lx
50%	2573 lx

Conditions:

Number of c-planes: 2

Lux at center: 5145 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:

10415 lm

Peak candela output:

434331 cd

Light quality:

CRI: 97,7

Color temperature:

2792 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL10

Target:

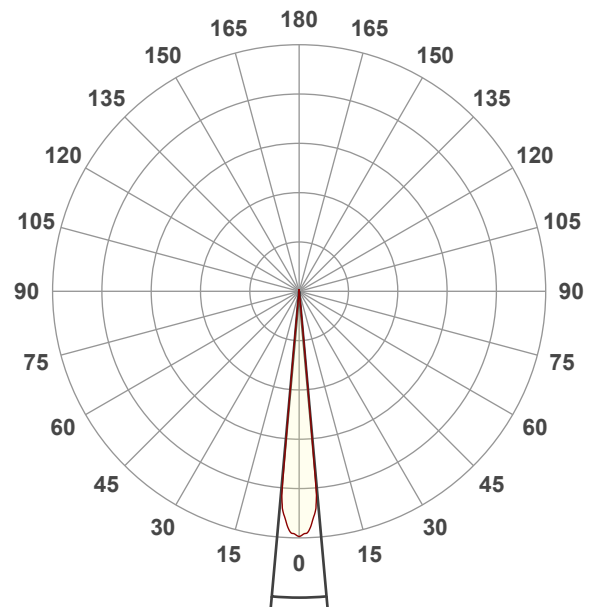
2800K

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:34:38

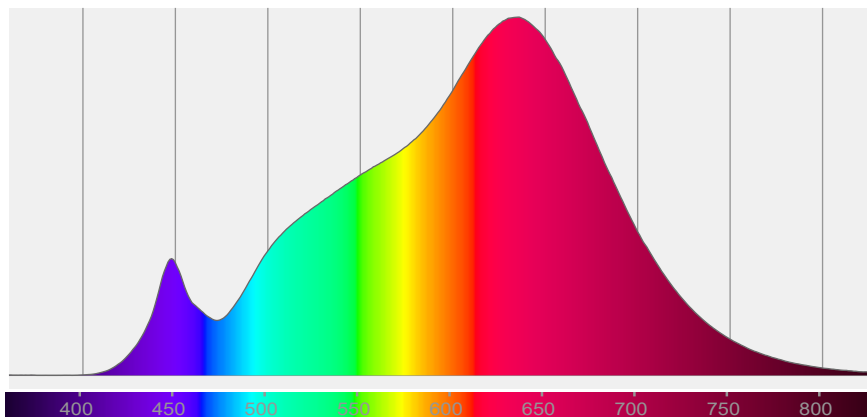


Beam angle 50%: 10,3°

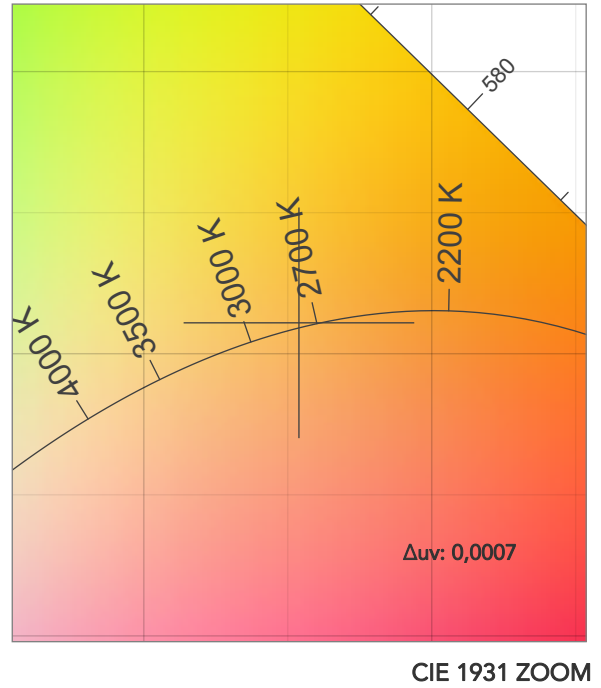
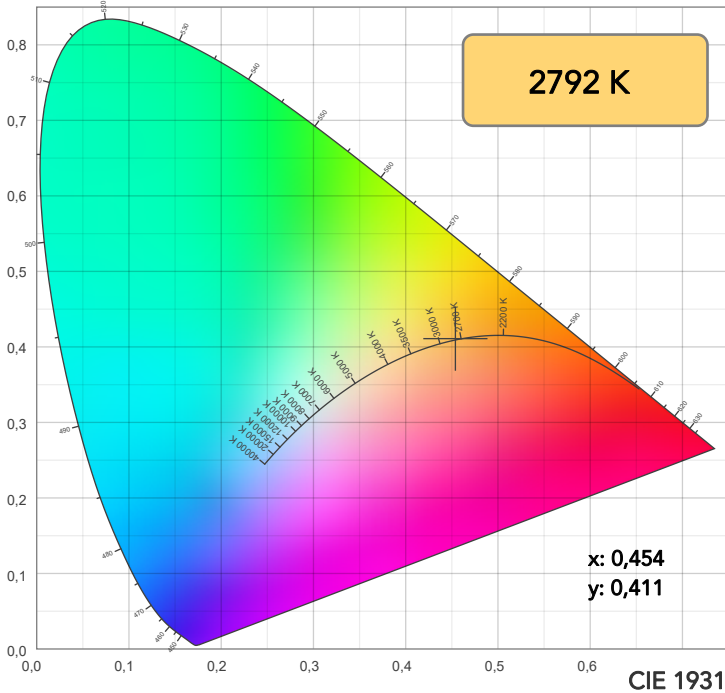
Field angle 10%: 11,1°

Cut off angle 2.5%: 11,4°

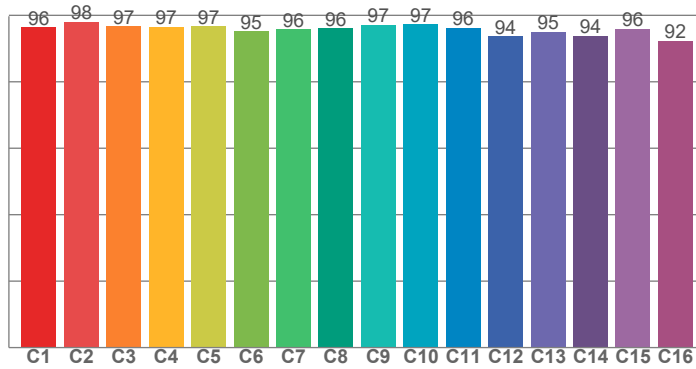
Spectra



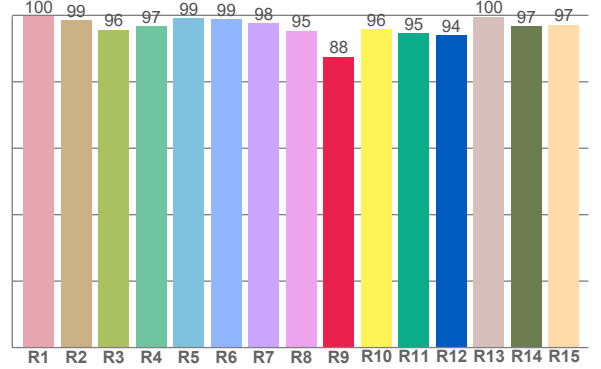
COLOR DETAILS



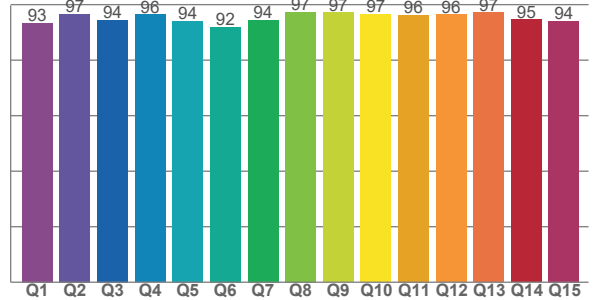
TM30: 96,0



CRI: 97,7 (R1-R8)



CQS: 95,0



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
99,8	98,6	95,7	96,8	99,1	98,8	97,7	95,4	87,5	95,7	94,5	93,9	99,6	96,6	97,2

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

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96,3	98,1	96,7	96,6	96,7	95,2	95,8	96,1	97,2	97,3	96,2	93,8	95,1	93,8	95,9	92,3

CQS Q values

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

COLOR PARAMETERS

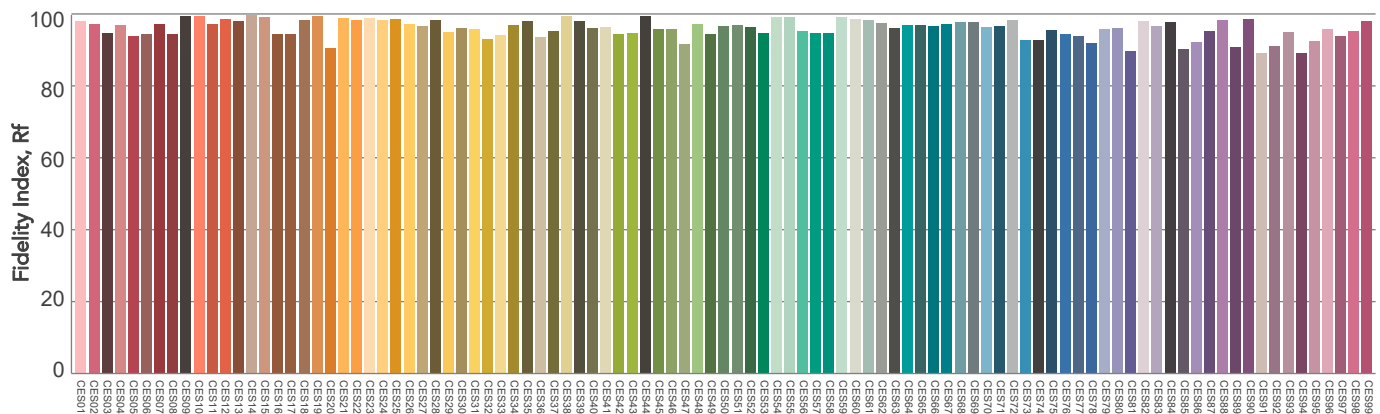
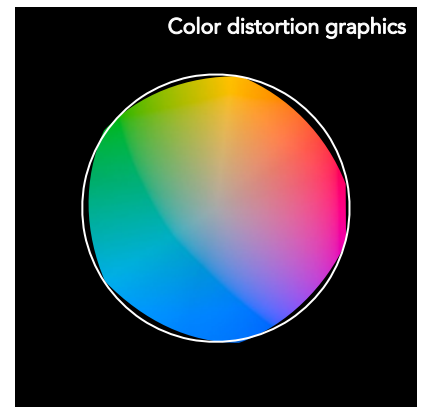
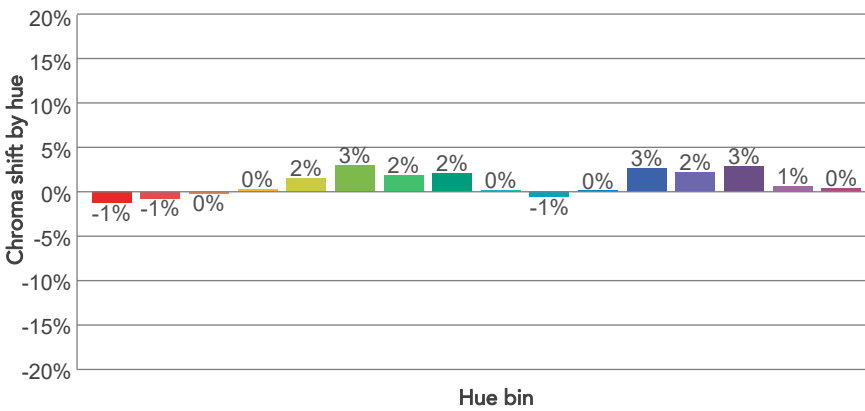
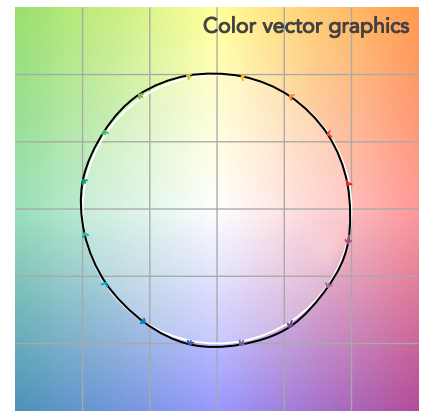
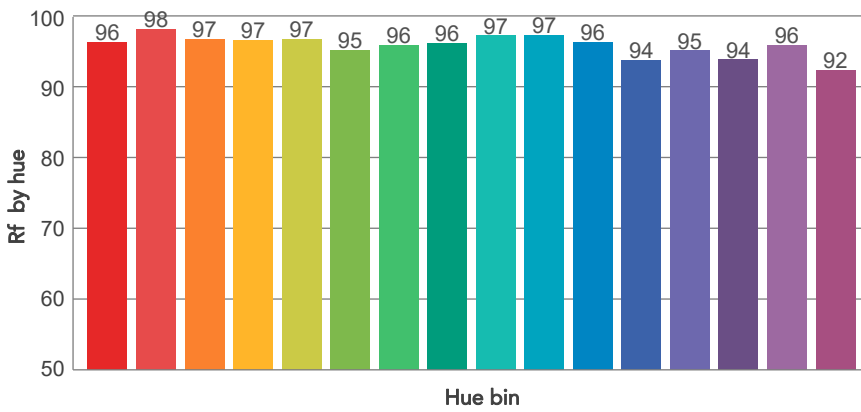
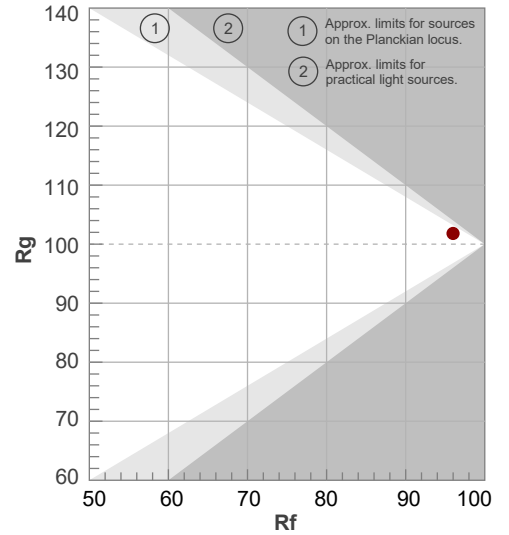
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2792 K	97,7	87,5	96,0	101,8	95,0	97	0,454	0,411	0,0007

TM30 DETAILS

Rf 96,0
Fidelity index Rf

Rg 101,8
Gammut index

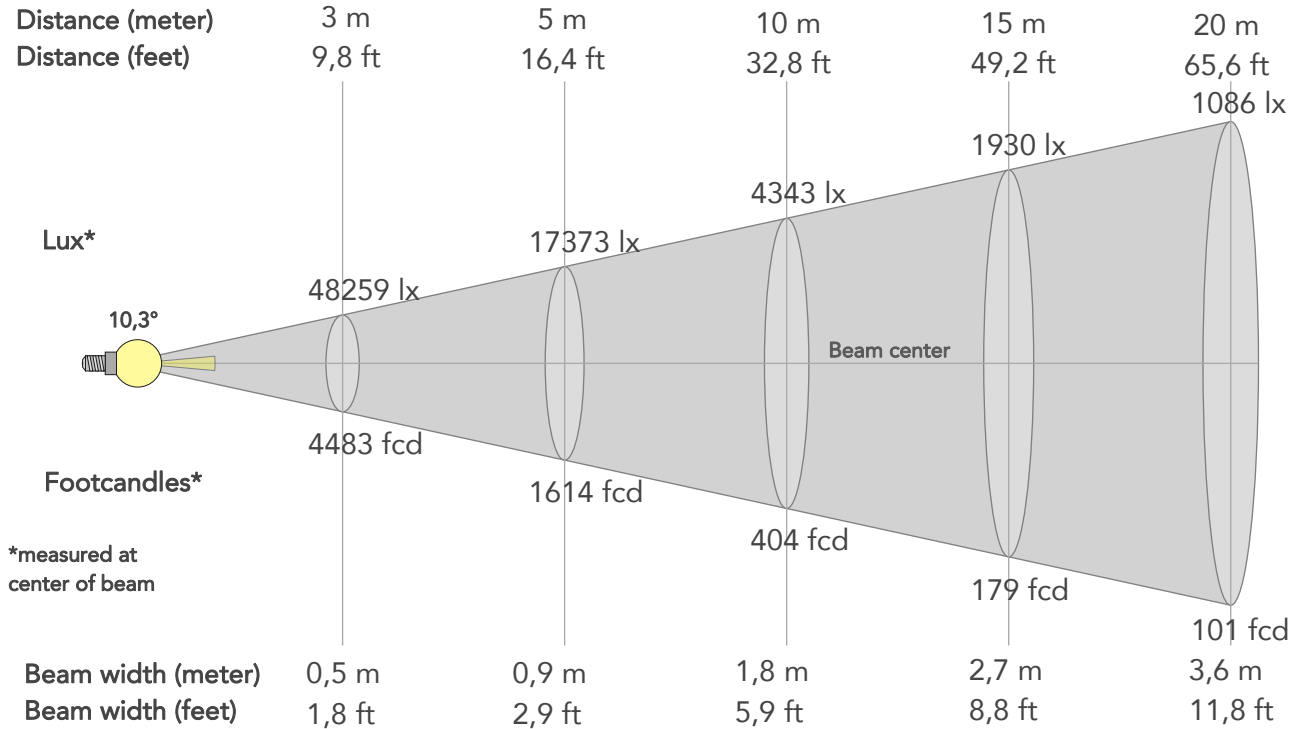
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	-1%
2	98	-1%	0%
3	97	0%	2%
4	97	0%	1%
5	97	2%	2%
6	95	3%	1%
7	96	2%	-2%
8	96	2%	-1%
9	97	0%	-1%
10	97	-1%	0%
11	96	0%	2%
12	94	3%	0%
13	95	2%	-3%
14	94	3%	-4%
15	96	1%	-2%
16	92	0%	-6%



BEAM DETAILS



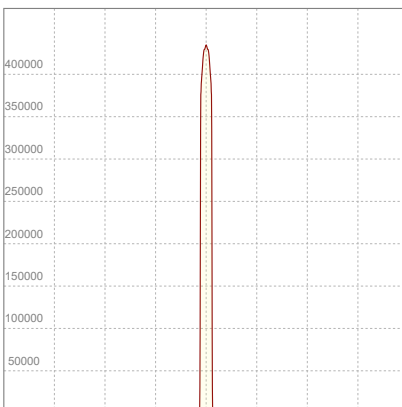
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	11,1°	11,4°	100,0%	100,0%



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	434331lx	108583lx	48259lx	27146lx	17373lx	7721lx	4343lx	1930lx	1086lx	695lx	483lx	271lx	174lx
Footcand.	40351fcd	10088fcd	4483fcd	2522fcd	1614fcd	717fcd	404fcd	179fcd	101fcd	65fcd	45fcd	25fcd	16fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,3m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	2,9ft	4,4ft	5,9ft	8,8ft	11,8ft	14,7ft	17,7ft	23,5ft	29,4ft

LINEAR DISTRIBUTION DIAGRAM

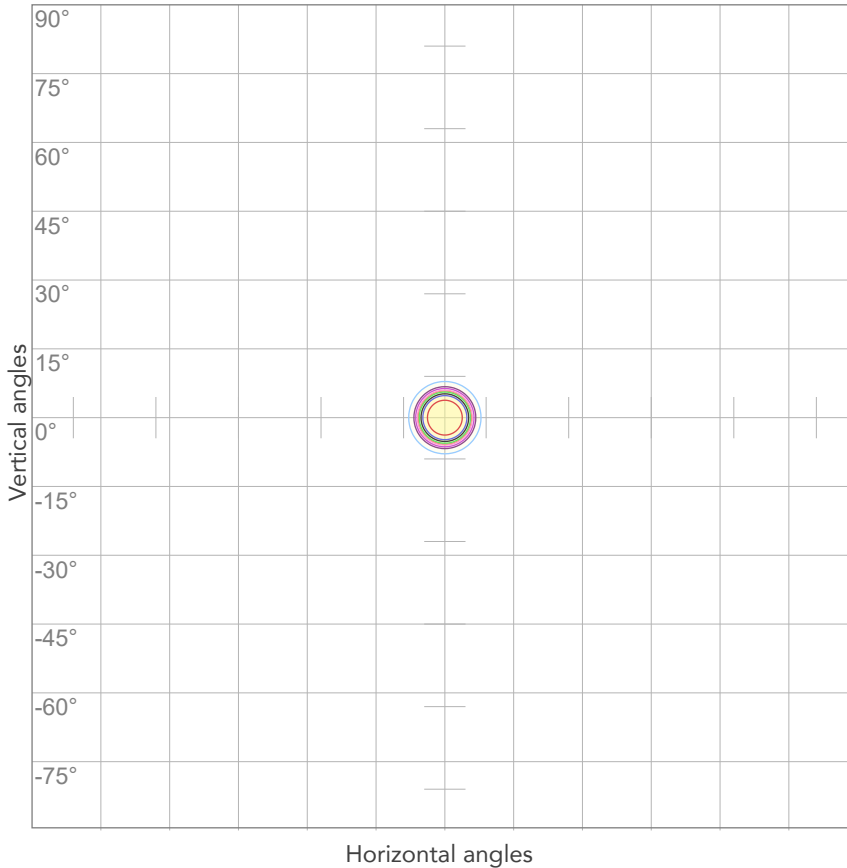


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	1,89A	411,9W	0,96	25lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



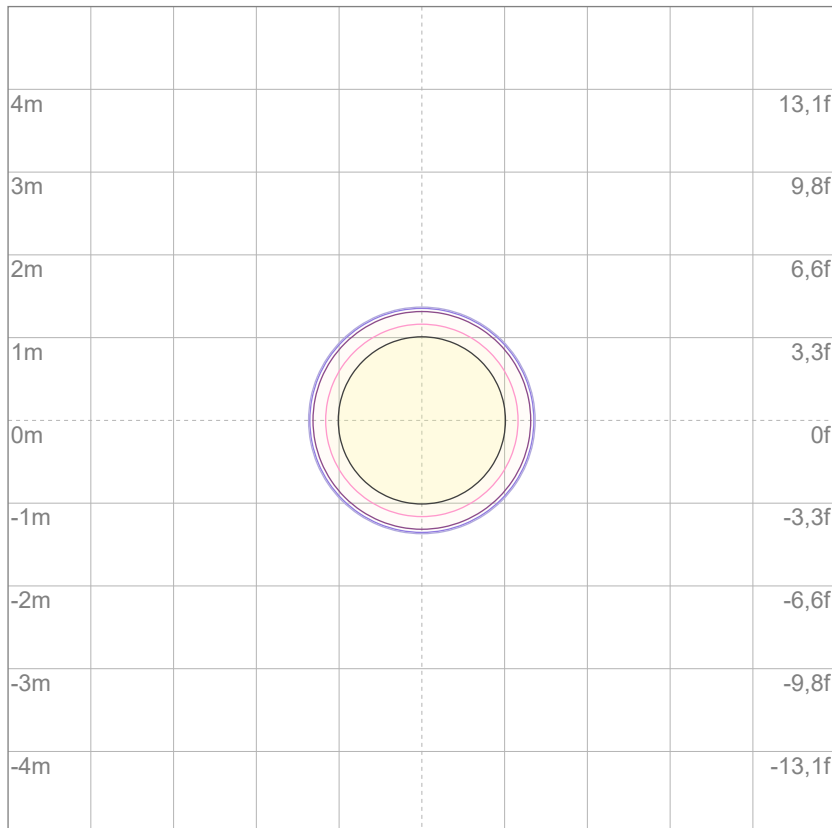
10%	43433 cd
20%	86866 cd
30%	130299 cd
40%	173732 cd
50%	217166 cd
60%	260599 cd
70%	304032 cd
80%	347465 cd

Conditions:

Number of c-planes: 2

Candela at center: 434331 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	130 lx
5%	217 lx
10%	434 lx
30%	1303 lx
50%	2172 lx

Conditions:

Number of c-planes: 2

Lux at center: 4343 lx

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



Total lumen output:

11548 lm

Peak candela output:

482074 cd

Light quality:

CRI: 97,5

Color temperature:

3205 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL10

Target:

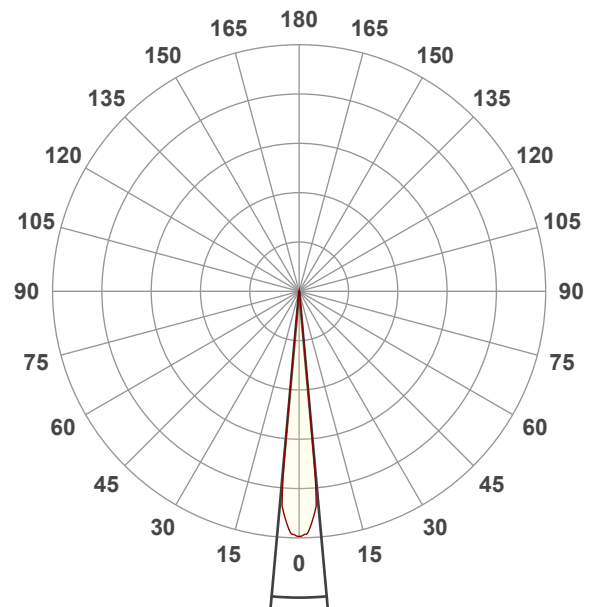
3200K

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:46:55

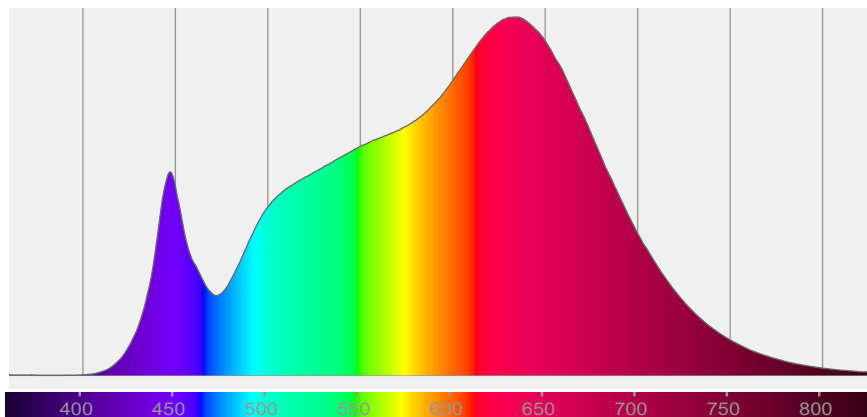


Beam angle 50%: 10,3°

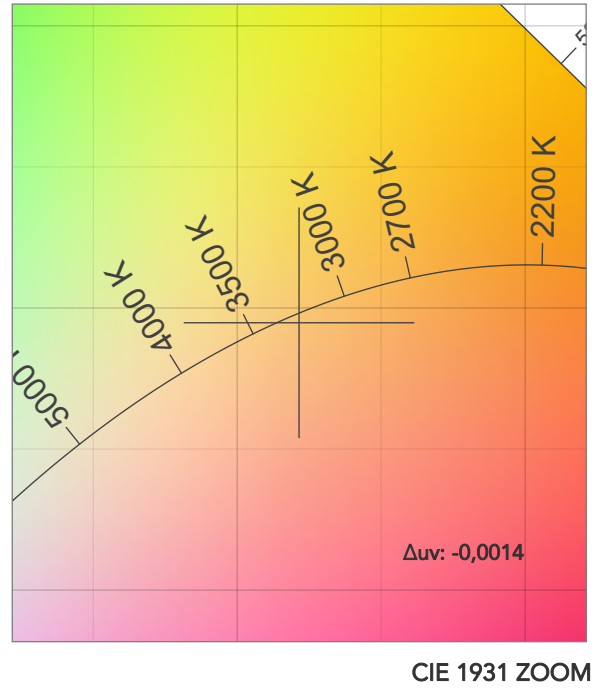
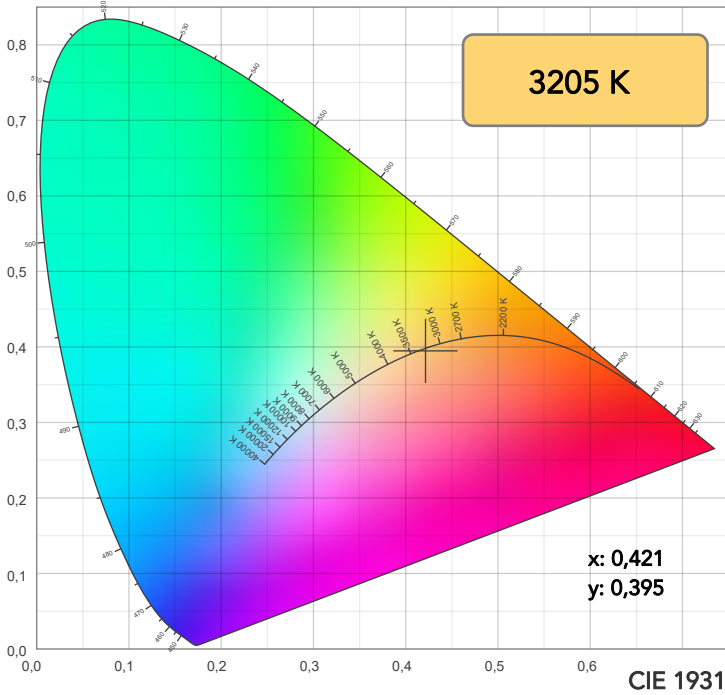
Field angle 10%: 10,9°

Cut off angle 2.5%: 11,5°

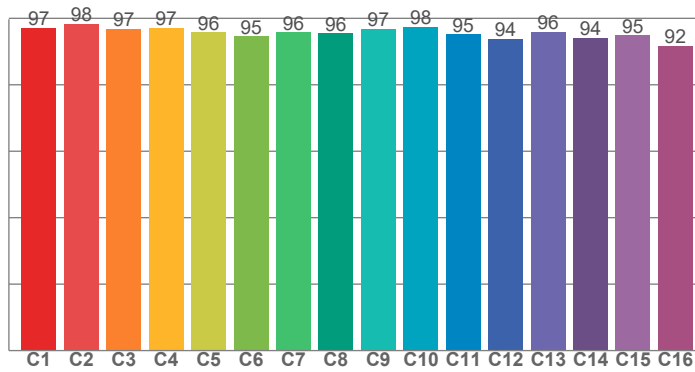
Spectra



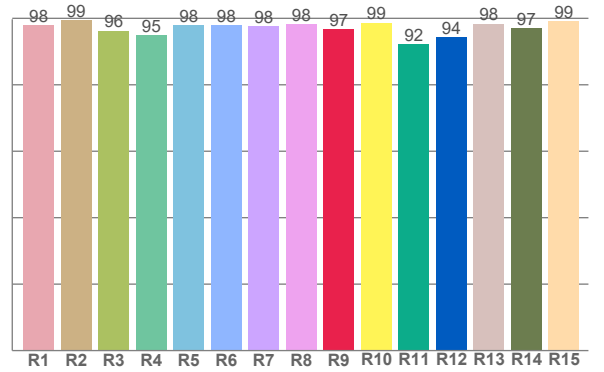
COLOR DETAILS



TM30: 95,9



CRI: 97,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,0	99,4	96,3	95,0	97,8	97,8	97,7	98,4	96,7	98,7	92,3	94,3	98,4	97,2	99,1

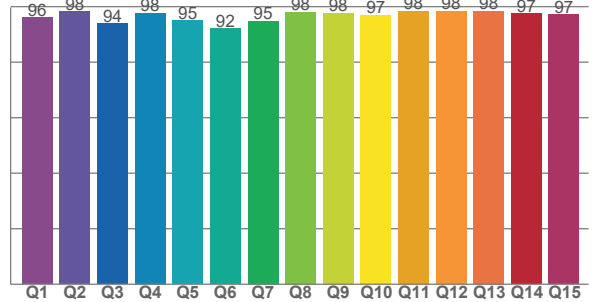
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
97,1	98,3	96,8	97,1	95,8	94,6	95,8	95,5	96,9	97,5	95,2	93,9	96,0	94,1	94,9	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,0	98,3	94,0	97,7	94,9	92,2	94,8	98,1	97,7	97,0	98,4	98,4	98,5	97,5	97,2

CQS: 96,0



COLOR PARAMETERS

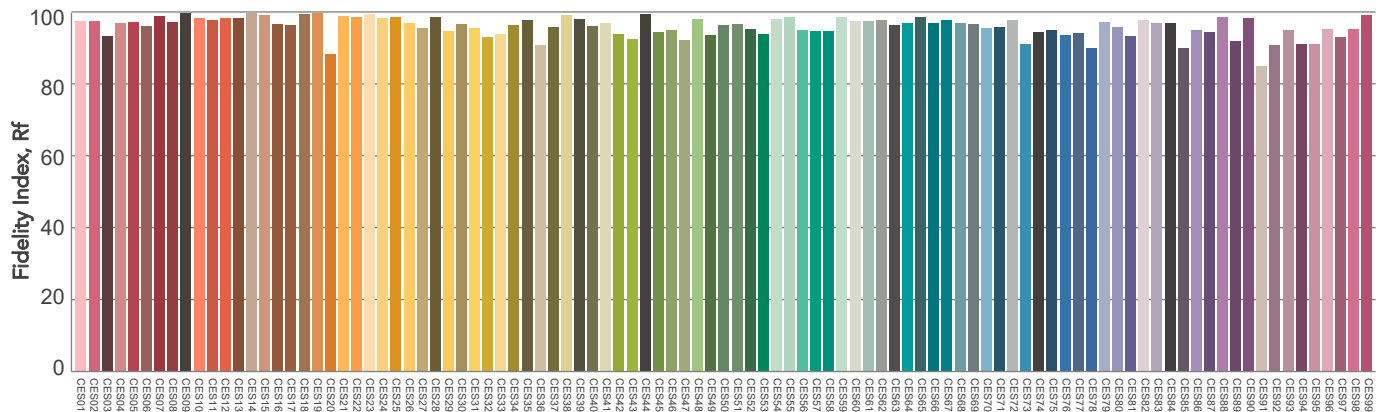
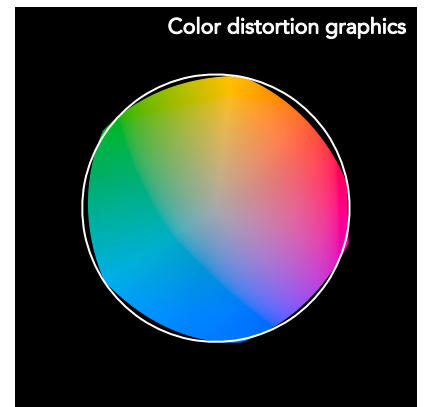
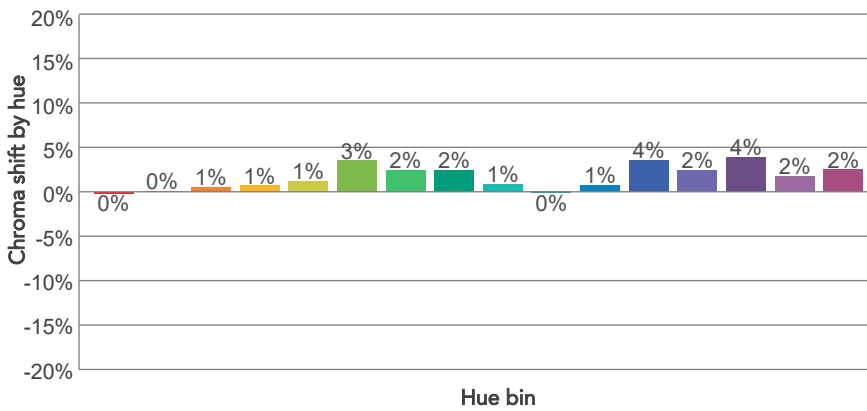
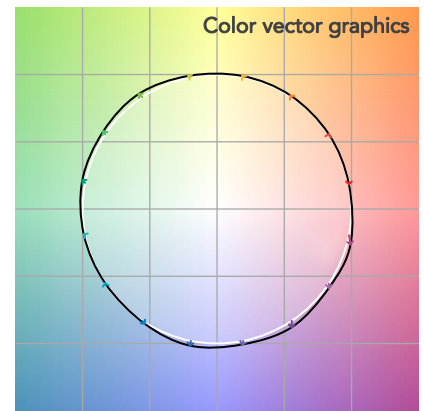
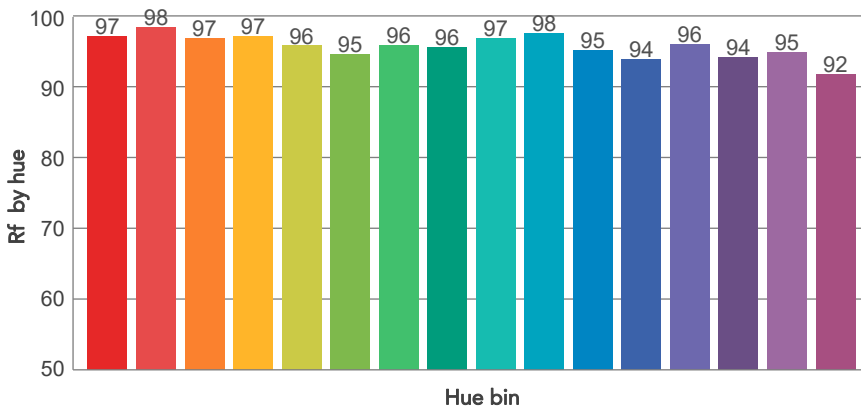
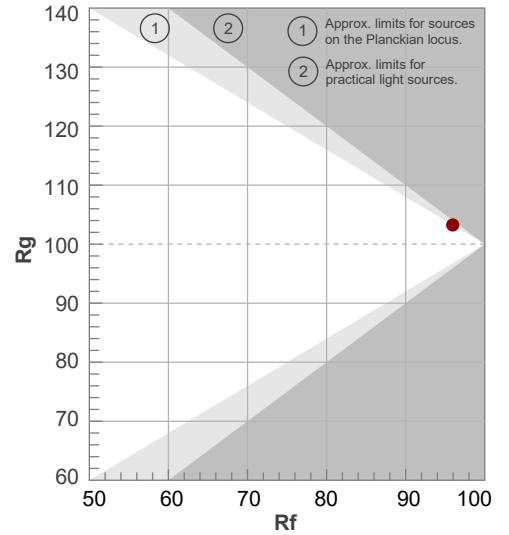
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3205 K	97,5	96,7	95,9	103,3	96,0	98	0,421	0,395	-0,0014

TM30 DETAILS

Rf 95,9
Fidelity index Rf

Rg 103,3
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	97	0%	-1%
2	98	0%	0%
3	97	1%	1%
4	97	1%	1%
5	96	1%	2%
6	95	3%	1%
7	96	2%	-1%
8	96	2%	-2%
9	97	1%	-1%
10	98	0%	0%
11	95	1%	3%
12	94	4%	0%
13	96	2%	-2%
14	94	4%	-3%
15	95	2%	-3%
16	92	2%	-6%

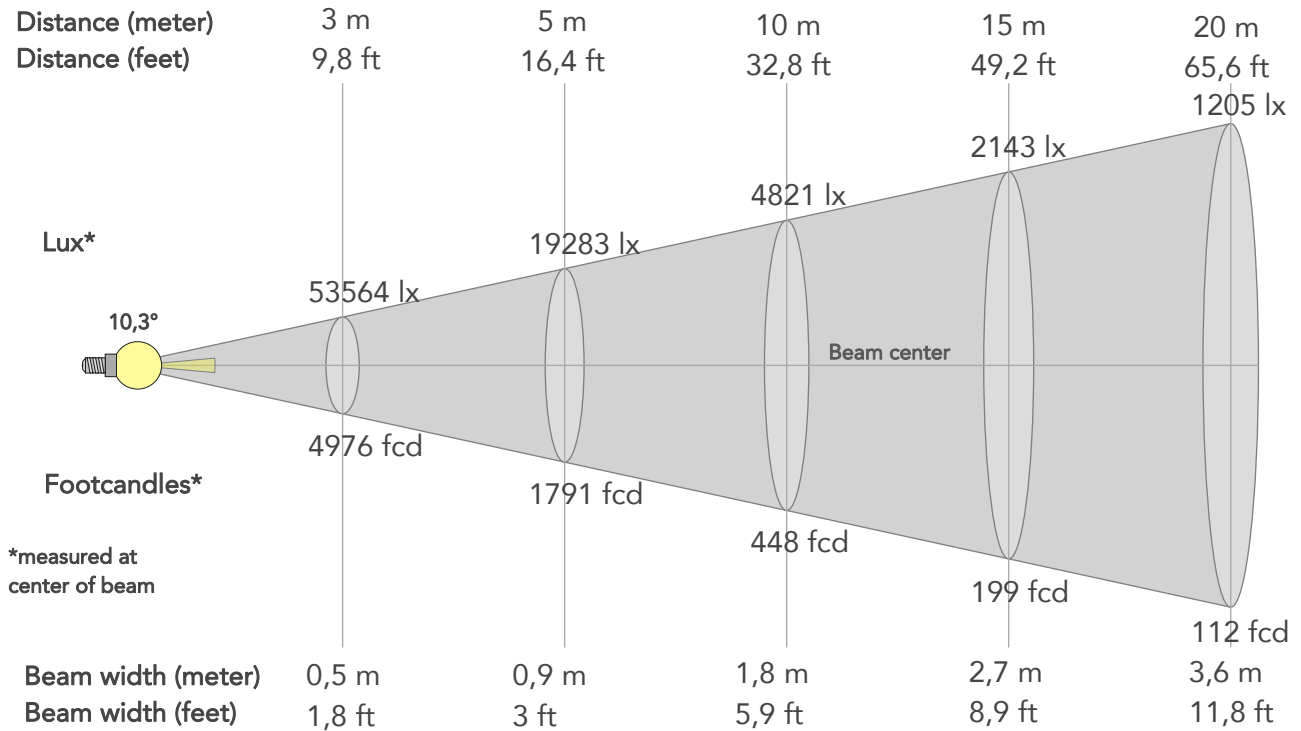


Color Evaluation Sample

BEAM DETAILS



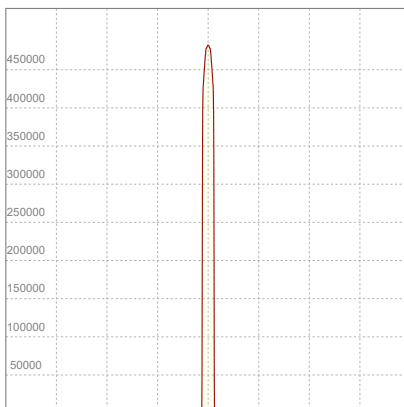
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	10,9°	11,5°	100,0%	100,0%



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	482074lx	120518lx	53564lx	30130lx	19283lx	8570lx	4821lx	2143lx	1205lx	771lx	536lx	301lx	193lx
Footcand.	44786fcd	11197fcd	4976fcd	2799fcd	1791fcd	796fcd	448fcd	199fcd	112fcd	72fcd	50fcd	28fcd	18fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,4m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	3ft	4,4ft	5,9ft	8,9ft	11,8ft	14,8ft	17,8ft	23,7ft	29,6ft

LINEAR DISTRIBUTION DIAGRAM

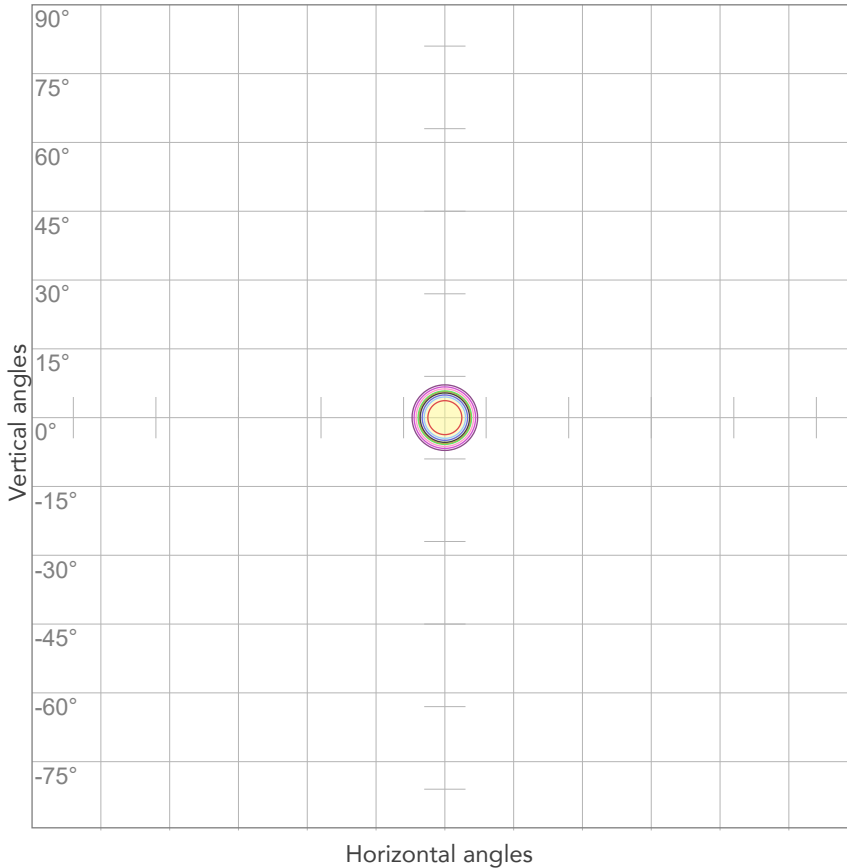


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
227V	1,98A	433,6W	0,96	27lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



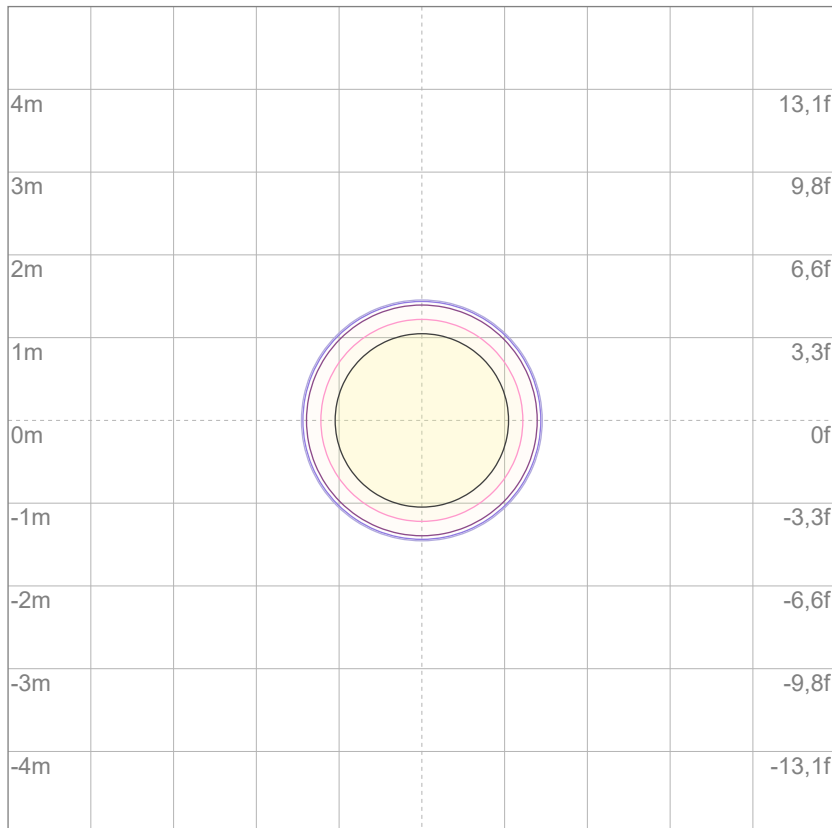
10%	48207 cd
20%	96415 cd
30%	144622 cd
40%	192830 cd
50%	241037 cd
60%	289244 cd
70%	337452 cd
80%	385659 cd

Conditions:

Number of c-planes: 2

Candela at center: 482074 cd

ISO LUX DIAGRAM



3%	145 lx
5%	241 lx
10%	482 lx
30%	1446 lx
50%	2410 lx

Conditions:

Number of c-planes: 2

Lux at center: 4821 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:

12590 lm

Peak candela output:

522945 cd

Light quality:

CRI: 97,5

Color temperature:

4046 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL10

Target:

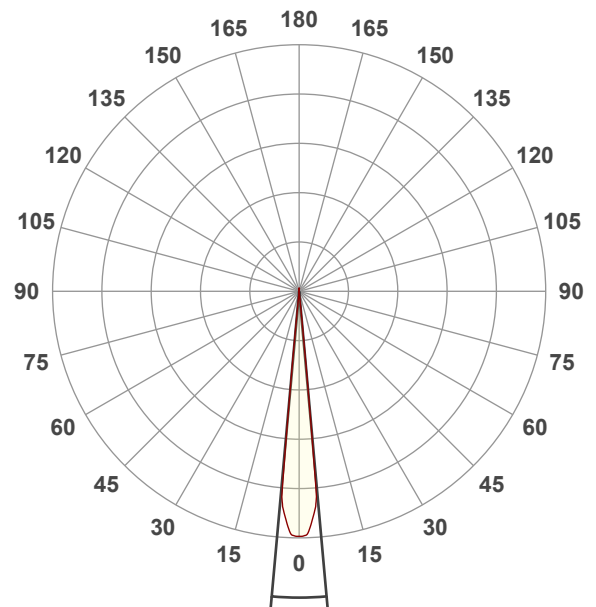
4000K

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:51:30

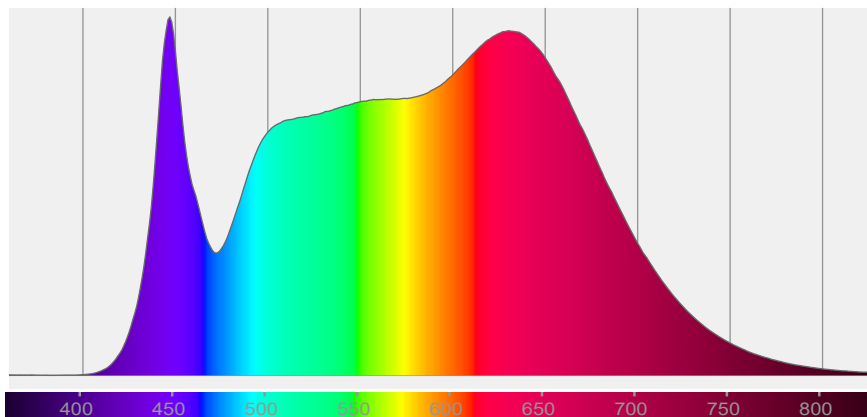


Beam angle 50%: 10,3°

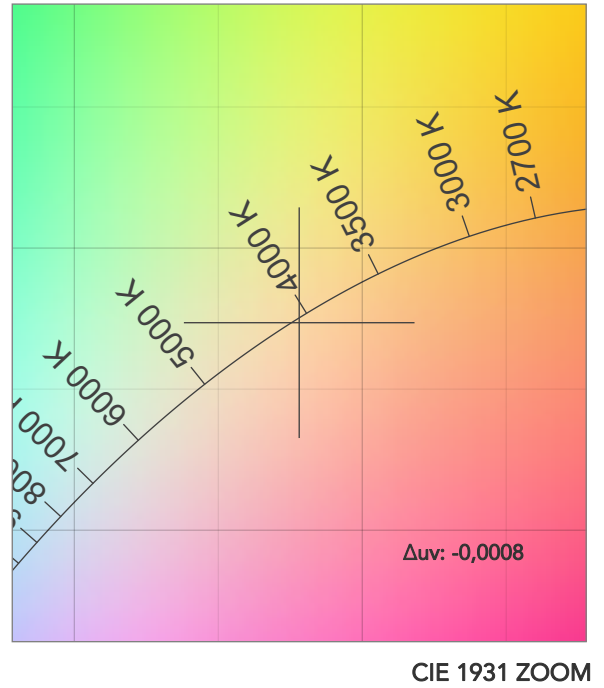
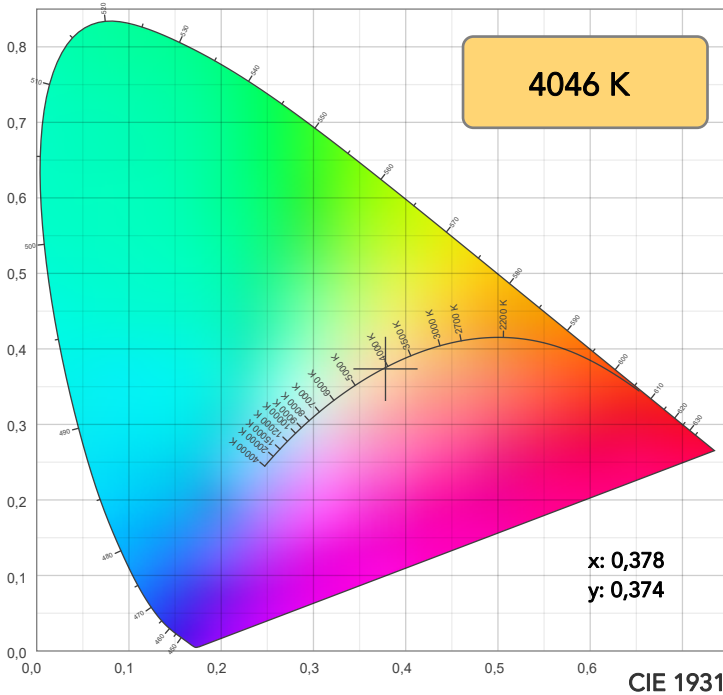
Field angle 10%: 11,2°

Cut off angle 2.5%: 11,4°

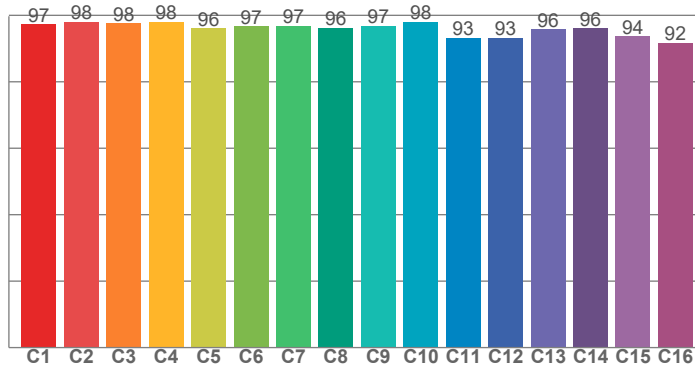
Spectra



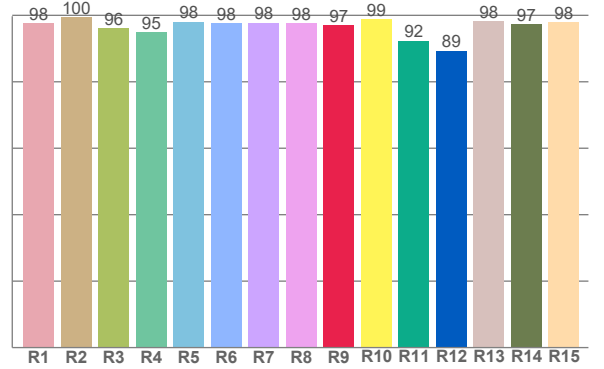
COLOR DETAILS



TM30: 96,1



CRI: 97,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97,7	99,6	96,0	95,0	98,1	97,8	97,8	97,7	97,0	98,8	92,4	89,3	98,3	97,4	97,9

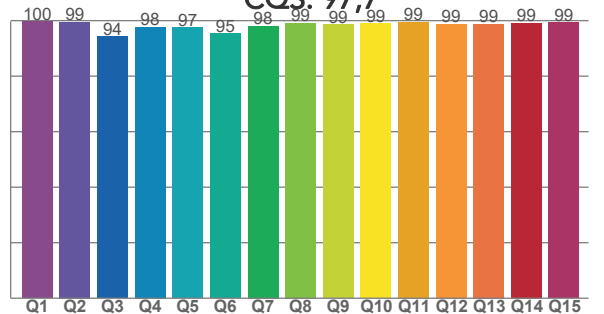
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
97,3	98,1	97,7	98,0	96,0	96,6	96,9	96,2	96,8	98,1	93,2	93,3	95,8	96,1	93,6	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,6	99,5	94,2	97,8	97,5	95,4	98,0	99,2	98,6	98,9	99,5	98,7	98,7	99,1	99,4

CQS: 97,7



COLOR PARAMETERS

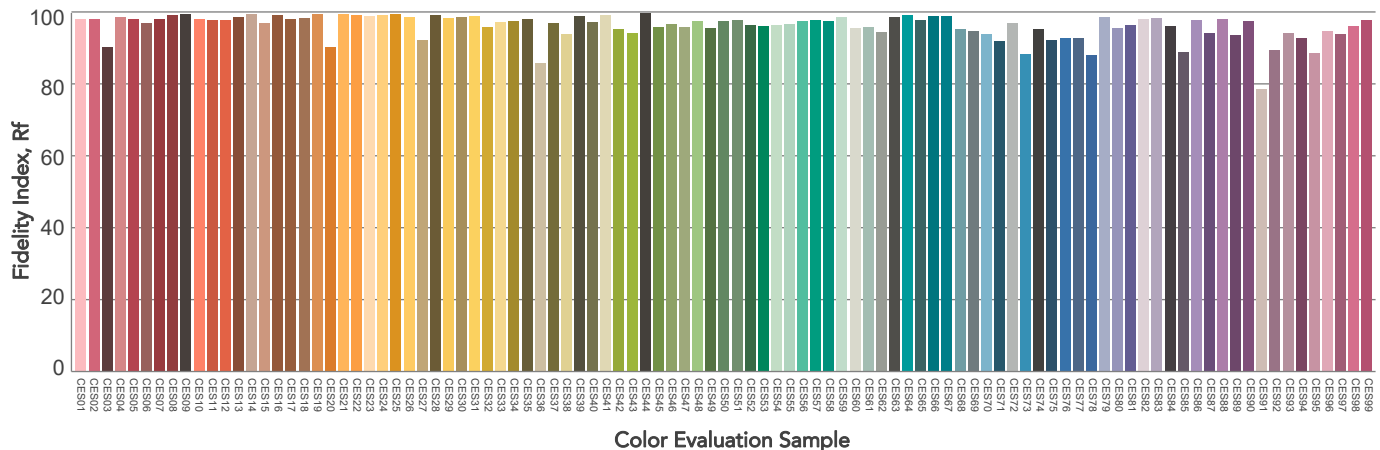
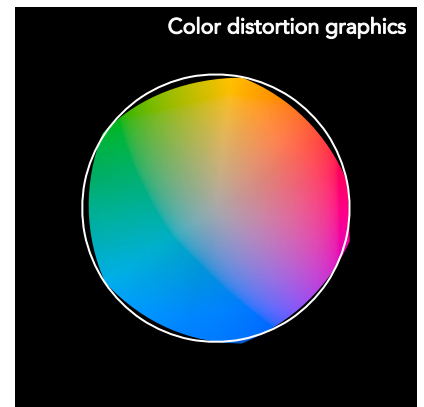
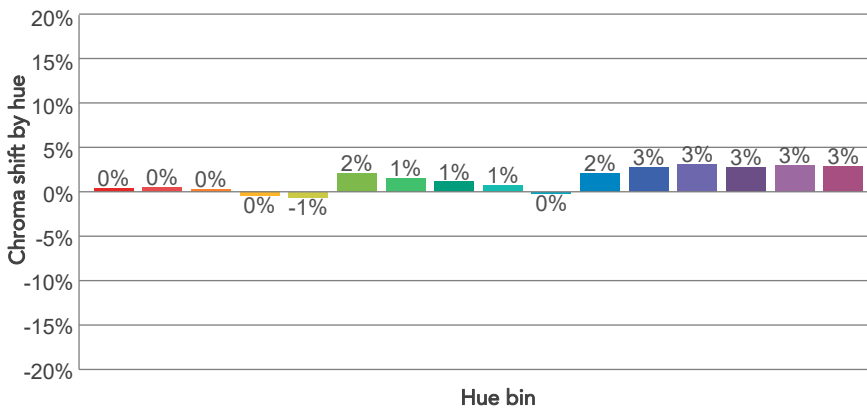
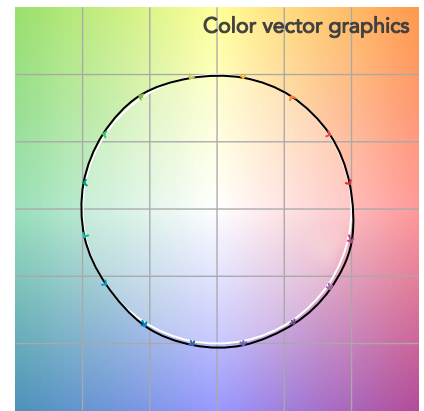
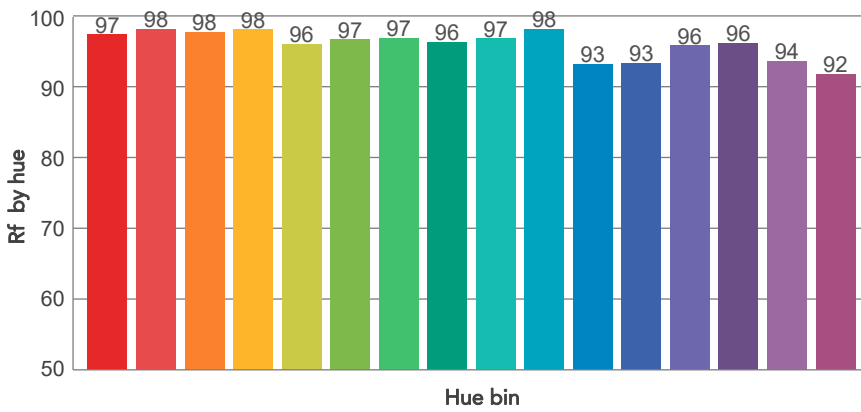
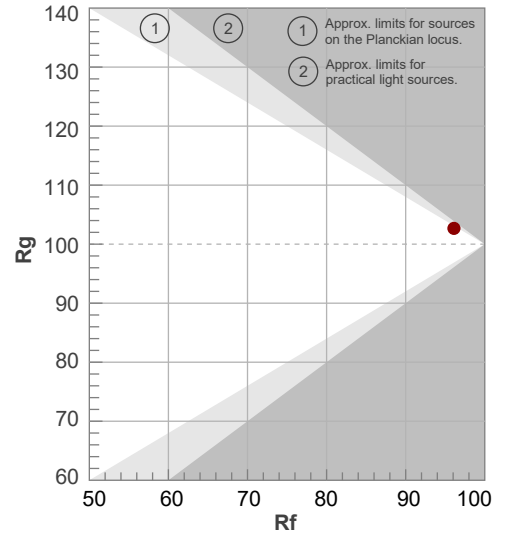
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4046 K	97,5	97,0	96,1	102,7	97,7	98	0,378	0,374	-0,0008

TM30 DETAILS

Rf 96,1
Fidelity index Rf

Rg 102,7
Gammut index

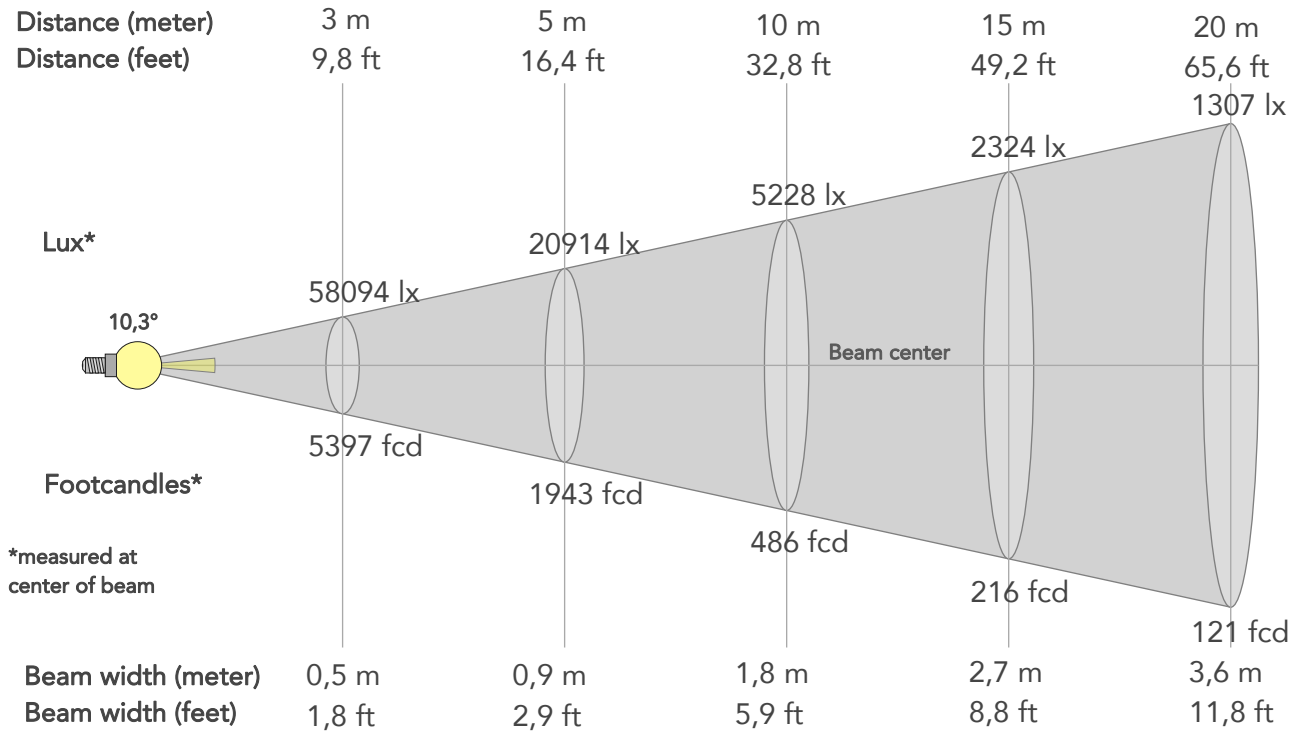
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	97	0%	-1%
2	98	0%	-1%
3	98	0%	1%
4	98	0%	0%
5	96	-1%	1%
6	97	2%	1%
7	97	1%	1%
8	96	1%	0%
9	97	1%	1%
10	98	0%	1%
11	93	2%	4%
12	93	3%	2%
13	96	3%	-1%
14	96	3%	0%
15	94	3%	-3%
16	92	3%	-5%



BEAM DETAILS



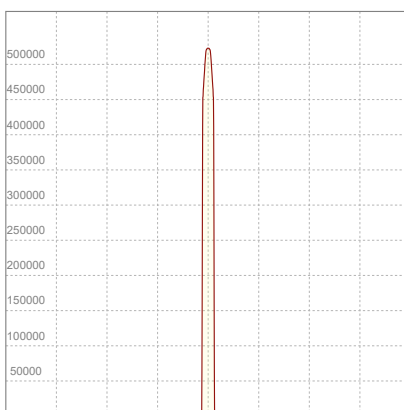
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	11,2°	11,4°	100,0%	100,0%



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	522847lx	130712lx	58094lx	32678lx	20914lx	9295lx	5228lx	2324lx	1307lx	837lx	581lx	327lx	209lx
Footcand.	48574fcd	12144fcd	5397fcd	3036fcd	1943fcd	864fcd	486fcd	216fcd	121fcd	78fcd	54fcd	30fcd	19fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,3m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	2,9ft	4,4ft	5,9ft	8,8ft	11,8ft	14,7ft	17,7ft	23,6ft	29,5ft

LINEAR DISTRIBUTION DIAGRAM

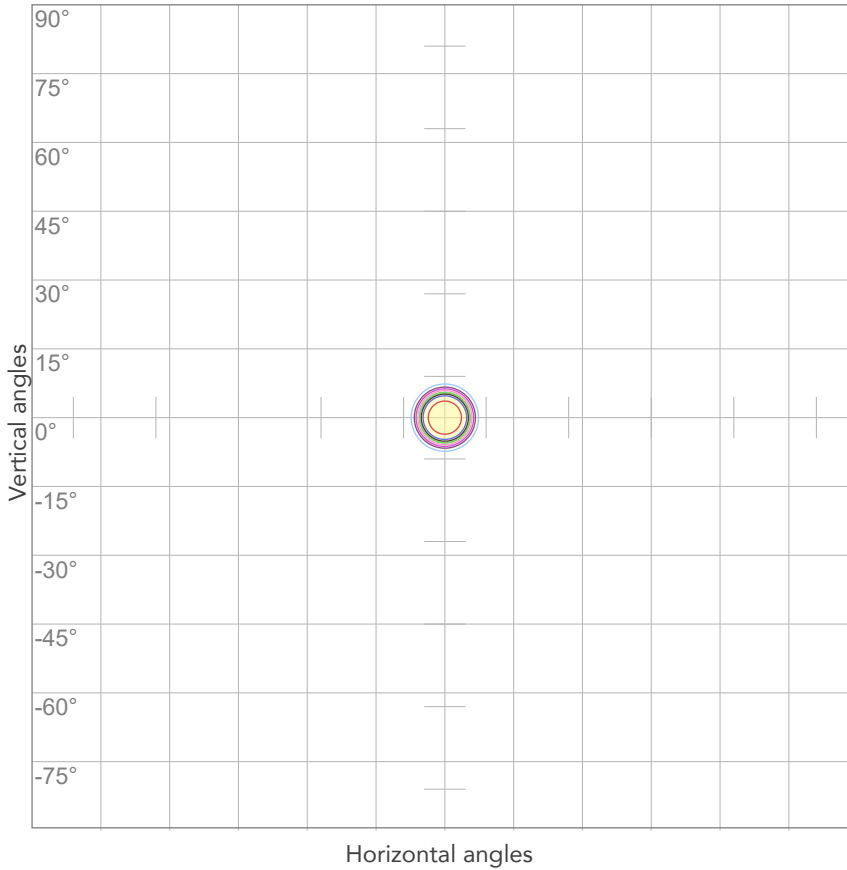


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
227V	1,99A	438,3W	0,97	29lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



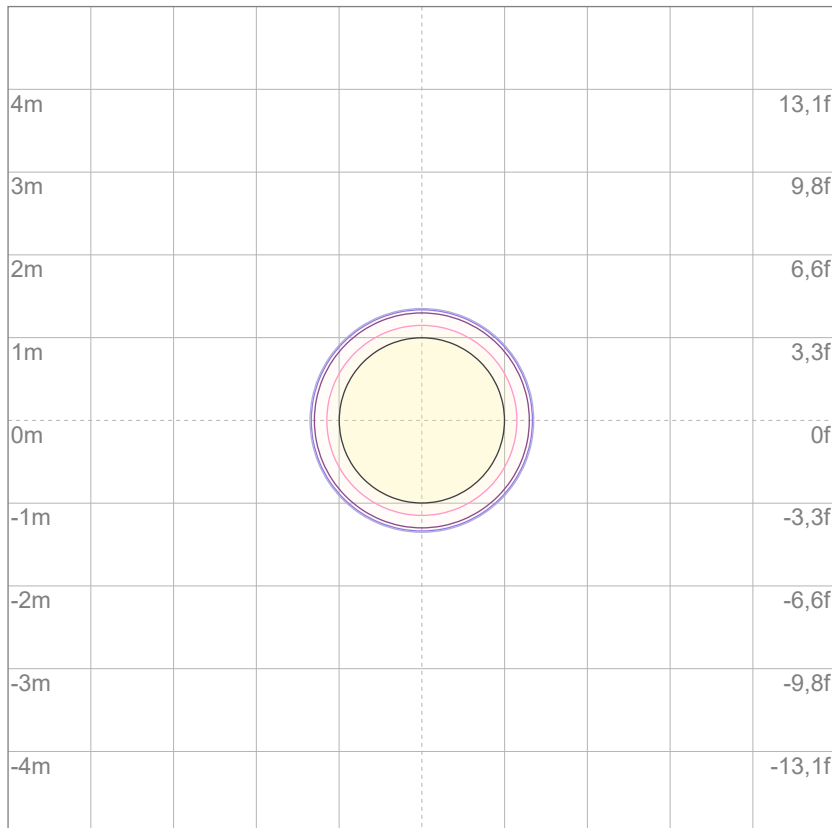
10%	52285 cd
20%	104569 cd
30%	156854 cd
40%	209139 cd
50%	261423 cd
60%	313708 cd
70%	365993 cd
80%	418277 cd

Conditions:

Number of c-planes: 2

Candela at center: 522847 cd

ISO LUX DIAGRAM



3%	157 lx
5%	261 lx
10%	523 lx
30%	1569 lx
50%	2614 lx

Conditions:

Number of c-planes: 2

Lux at center: 5228 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:

13489 lm

Peak candela output:

565061 cd

Light quality:

CRI: 97,3

Color temperature:

5638 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL10

Target:

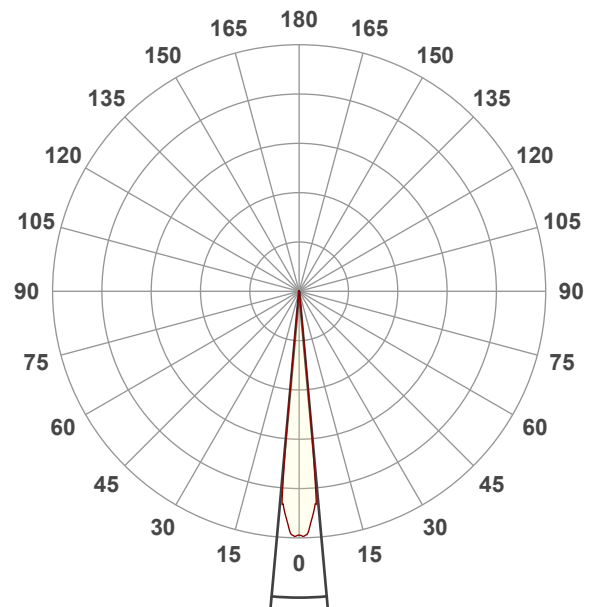
5600K

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:54:57

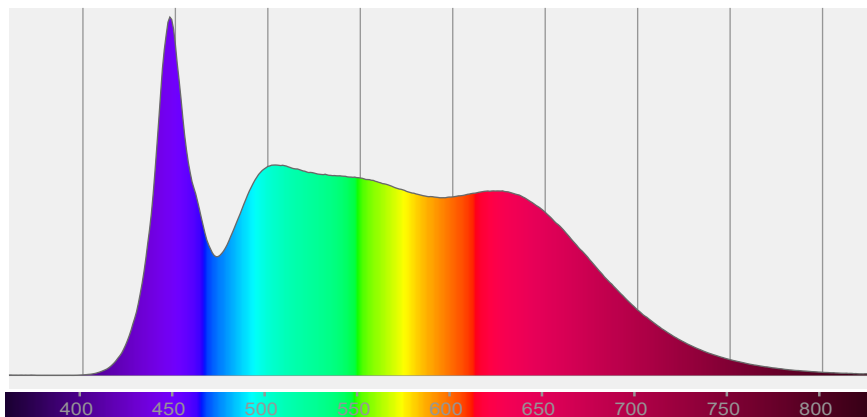


Beam angle 50%: 10,3°

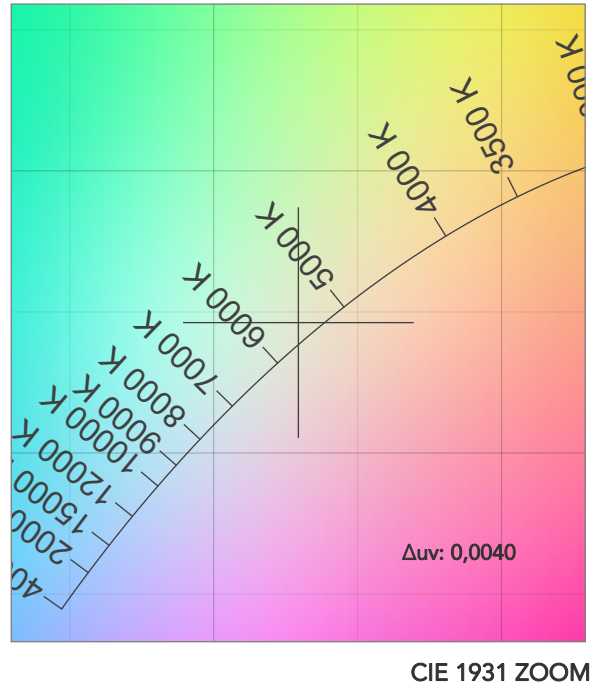
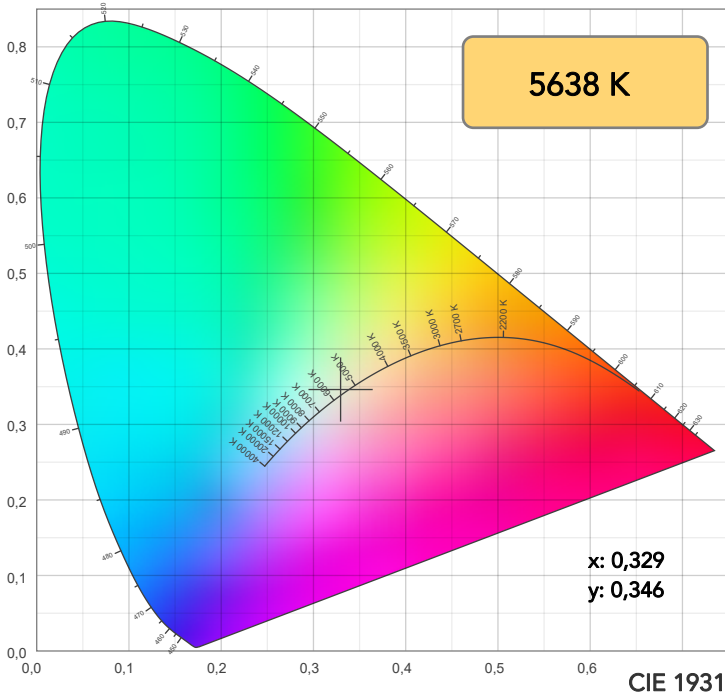
Field angle 10%: 11°

Cut off angle 2.5%: 11,6°

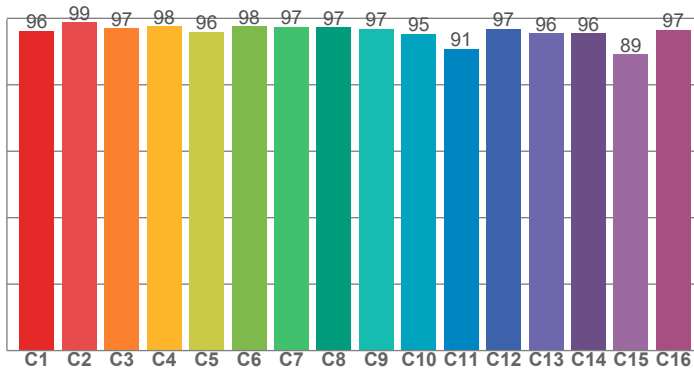
Spectra



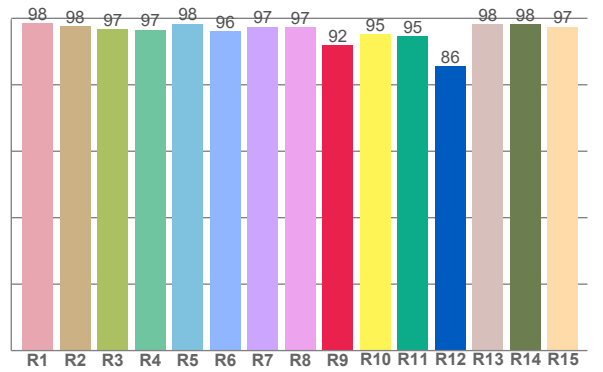
COLOR DETAILS



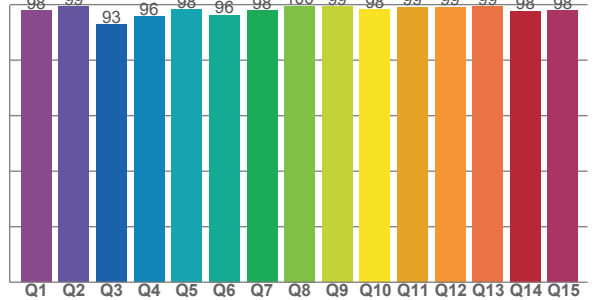
TM30: 95,8



CRI: 97,3 (R1-R8)



CQS: 97,3



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
98,5	97,7	96,7	96,6	98,4	96,1	97,5	97,3	91,9	95,3	94,6	85,5	98,2	98,3	97,5

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
96,3	98,8	97,0	97,6	95,9	97,6	97,5	97,4	96,8	95,3	90,8	96,9	95,6	95,5	89,2	96,5

CQS Q values

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

COLOR PARAMETERS

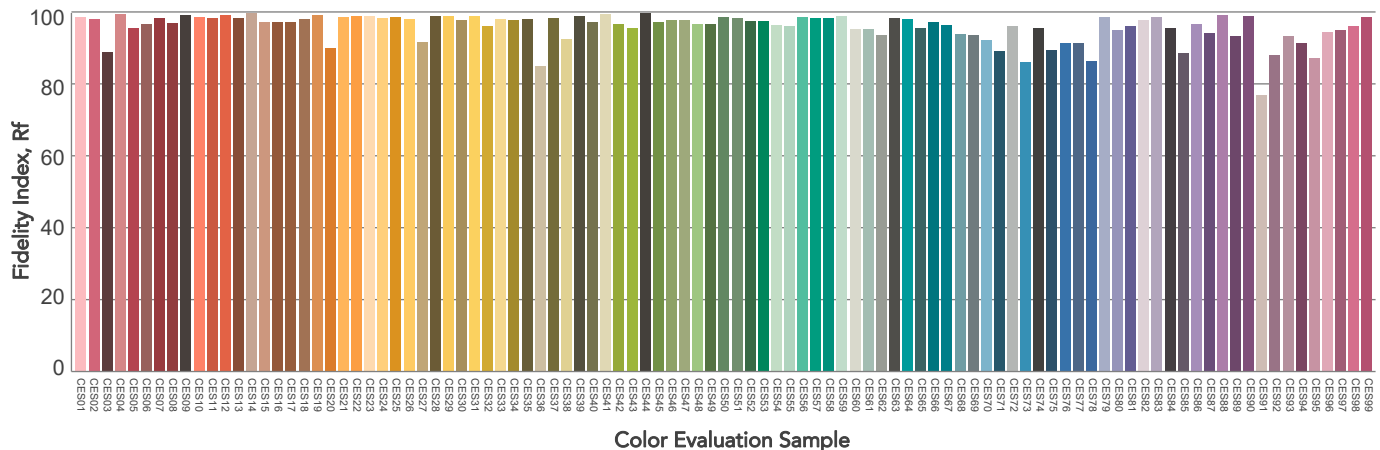
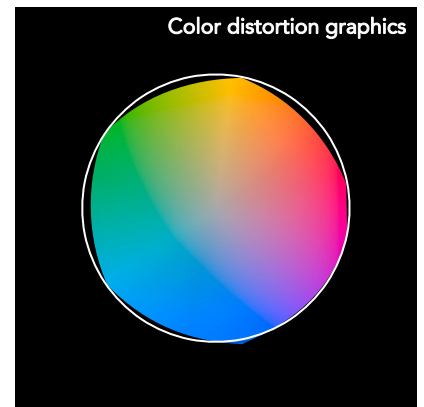
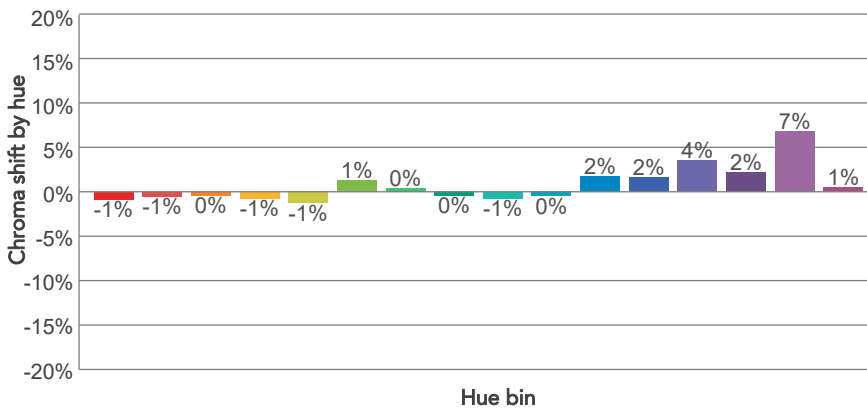
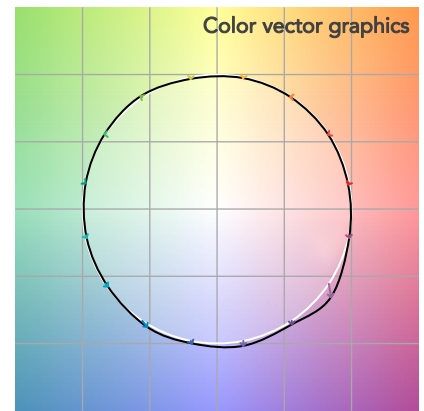
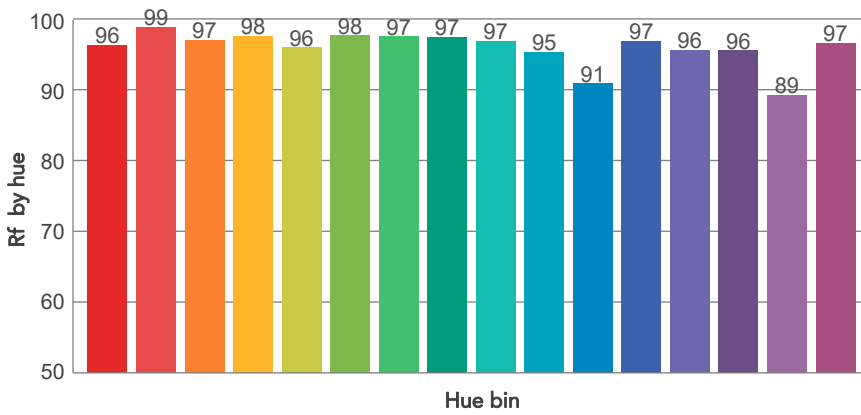
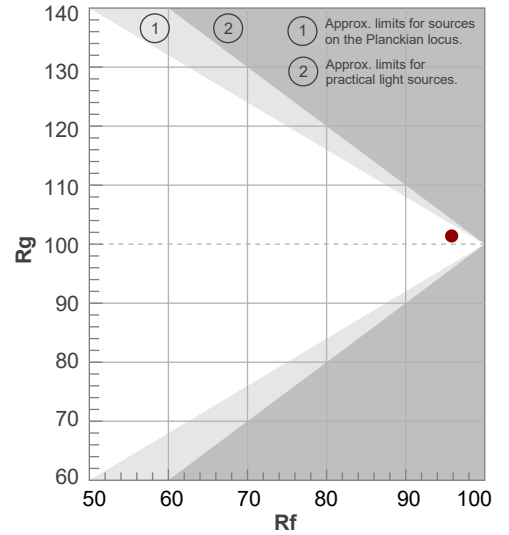
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5638 K	97,3	91,9	95,8	101,4	97,3	99	0,329	0,346	0,0040

TM30 DETAILS

Rf 95,8
Fidelity index Rf

Rg 101,4
Gammut index

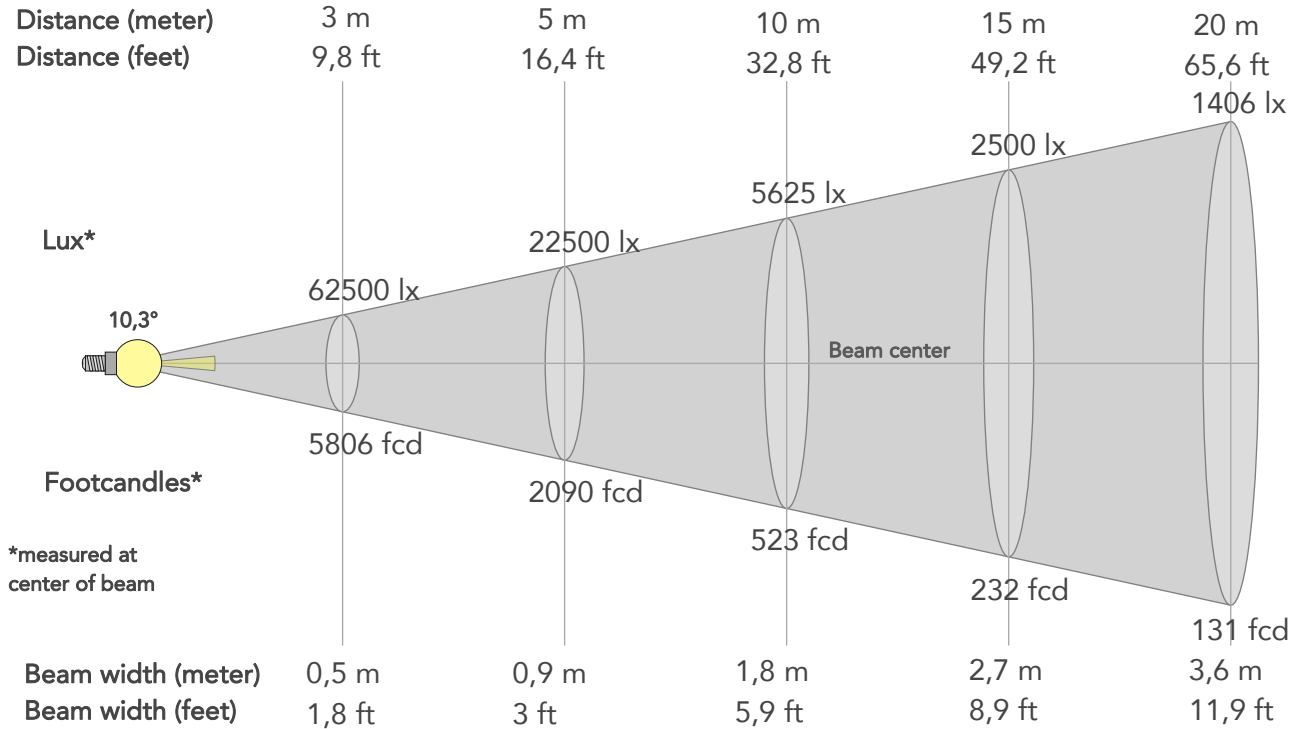
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	-1%
2	99	-1%	0%
3	97	0%	1%
4	98	-1%	0%
5	96	-1%	0%
6	98	1%	1%
7	97	0%	0%
8	97	0%	0%
9	97	-1%	2%
10	95	0%	3%
11	91	2%	5%
12	97	2%	1%
13	96	4%	-1%
14	96	2%	-1%
15	89	7%	-7%
16	97	1%	-2%



BEAM DETAILS



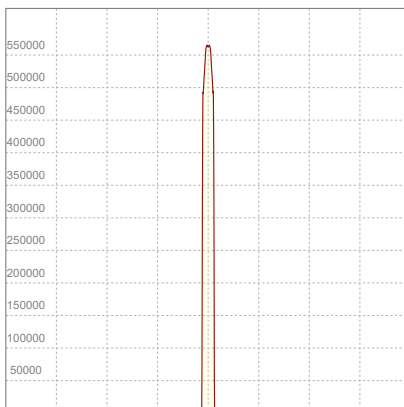
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	11°	11,6°	100,0%	100,0%



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	56250lx	14062lx	62500lx	35157lx	22500lx	10000lx	5625lx	2500lx	1406lx	900lx	625lx	352lx	225lx
Footcand.	52258fcd	13065fcd	5806fcd	3266fcd	2090fcd	929fcd	523fcd	232fcd	131fcd	84fcd	58fcd	33fcd	21fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,4m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	3ft	4,4ft	5,9ft	8,9ft	11,9ft	14,8ft	17,8ft	23,7ft	29,6ft

LINEAR DISTRIBUTION DIAGRAM

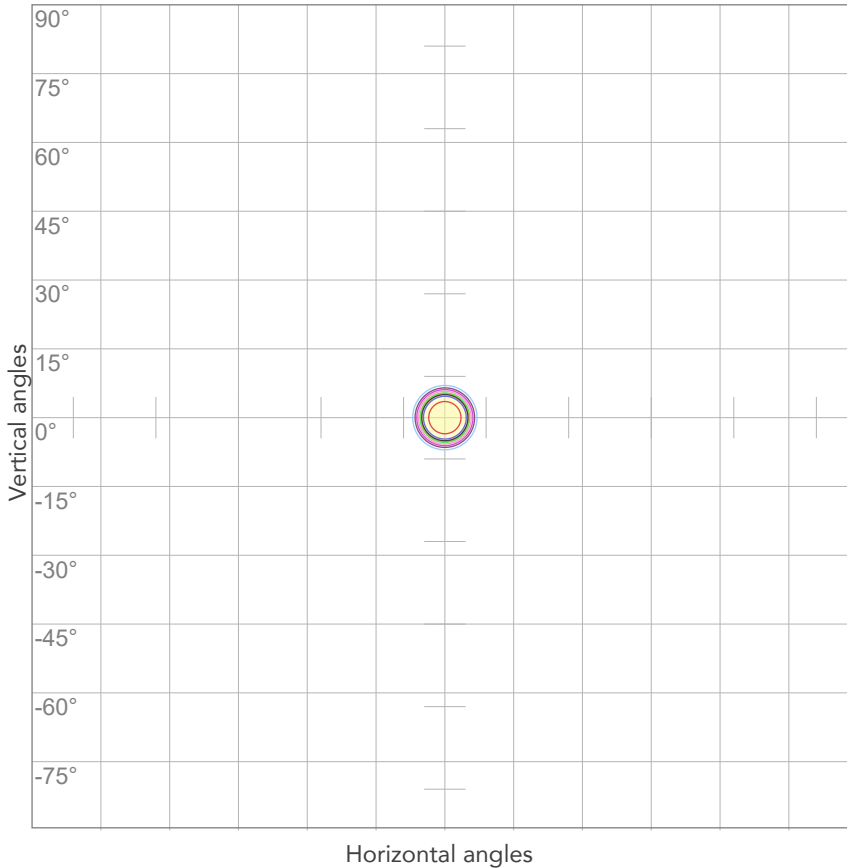


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	2,00A	435,2W	0,97	31lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



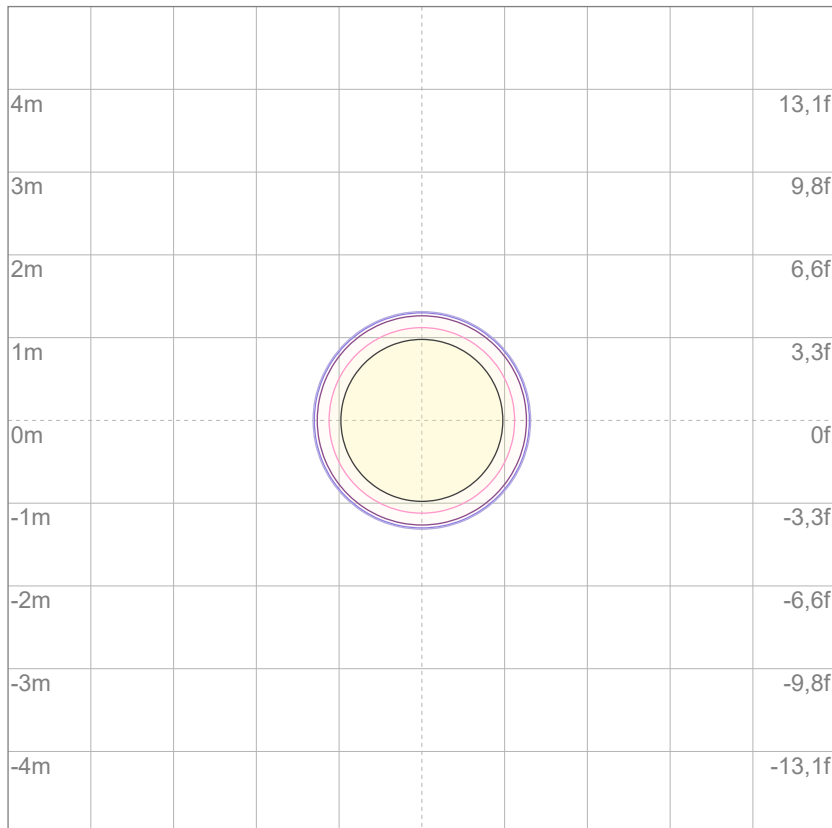
10%	56250 cd
20%	112501 cd
30%	168751 cd
40%	225002 cd
50%	281252 cd
60%	337503 cd
70%	393753 cd
80%	450003 cd

Conditions:

Number of c-planes: 2

Candela at center: 562504 cd

ISO LUX DIAGRAM



3%	169 lx
5%	281 lx
10%	563 lx
30%	1688 lx
50%	2813 lx

Conditions:

Number of c-planes: 2

Lux at center: 5625 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:

13392 lm

Peak candela output:

561114 cd

Light quality:

CRI: 96,6

Color temperature:

6043 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL10

Target:

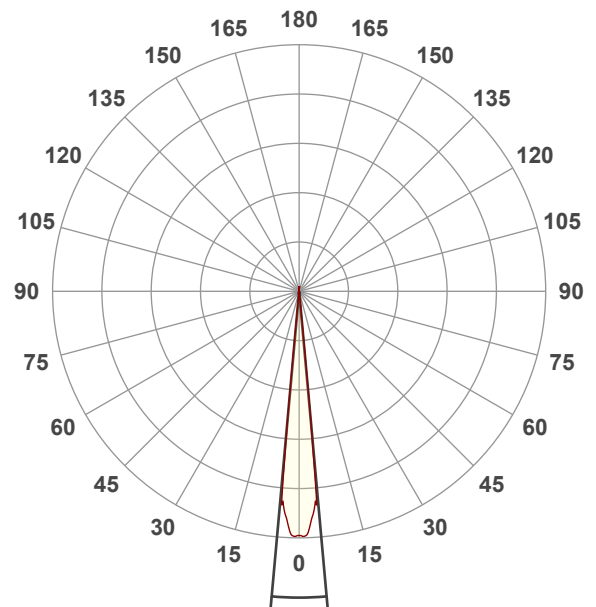
6000K

Operator:

Giuseppe della Peruta

Date and time:

09/01/2026 09:58:50

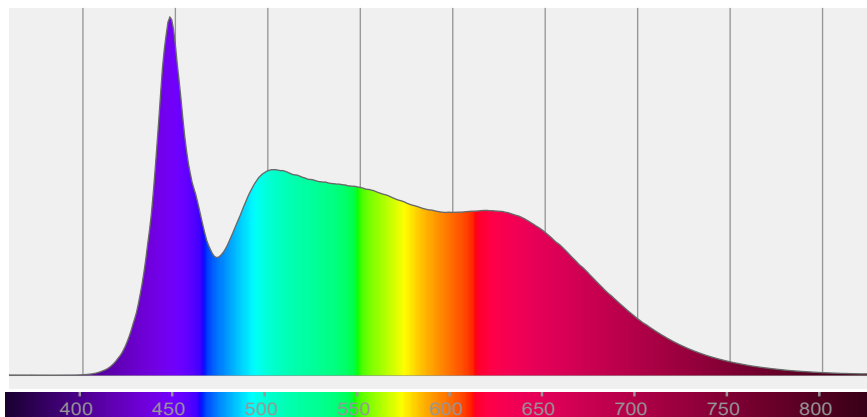


Beam angle 50%: 10,3°

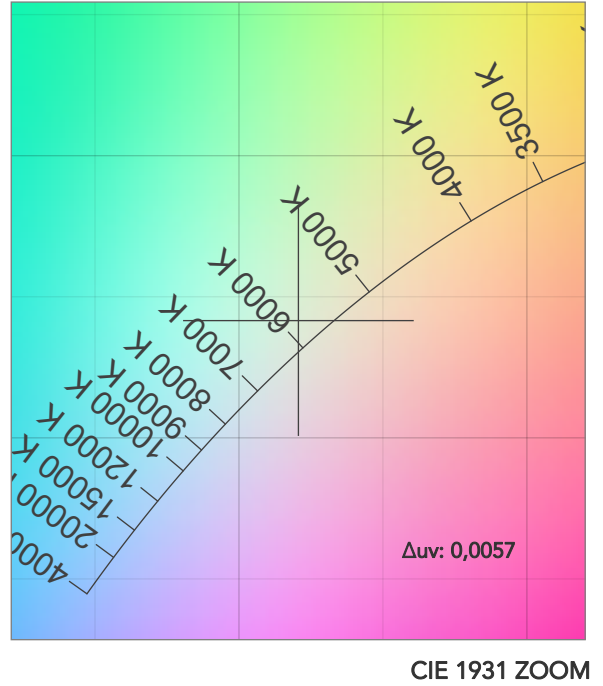
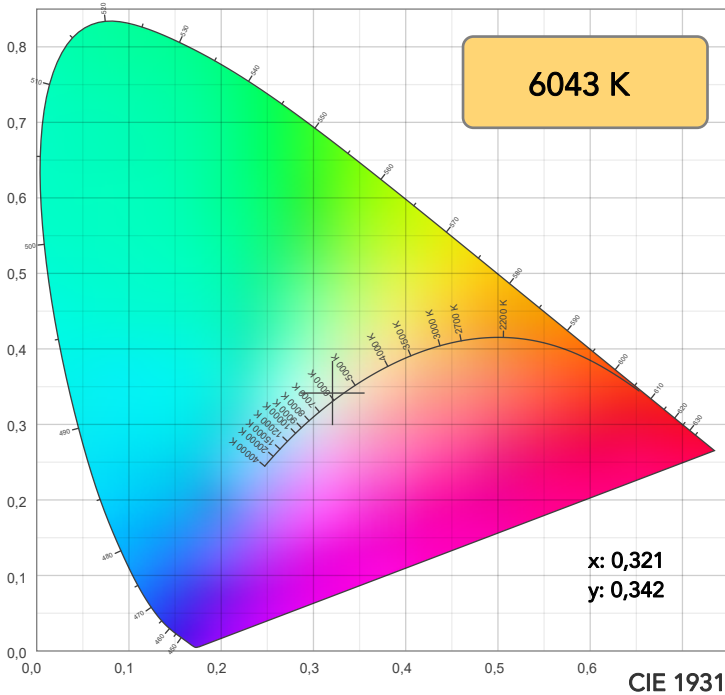
Field angle 10%: 11°

Cut off angle 2.5%: 11,2°

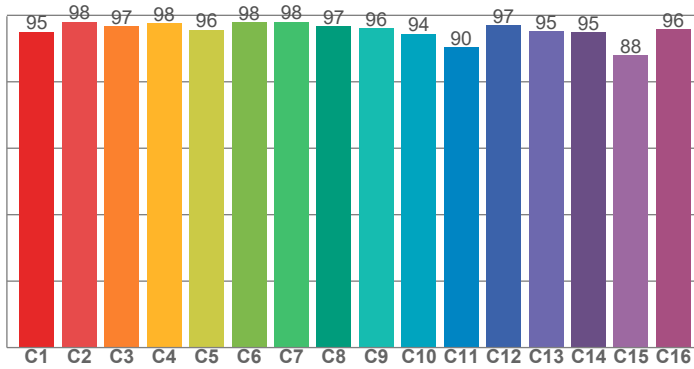
Spectra



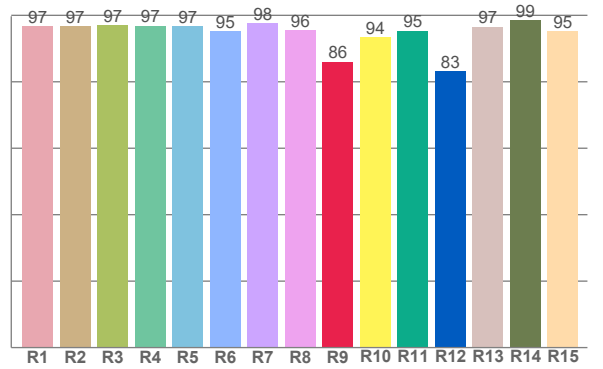
COLOR DETAILS



TM30: 95,3



CRI: 96,6 (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
96,8	96,7	97,0	96,9	96,8	95,3	97,6	95,6	86,1	93,5	95,4	83,2	96,6	98,6	95,2

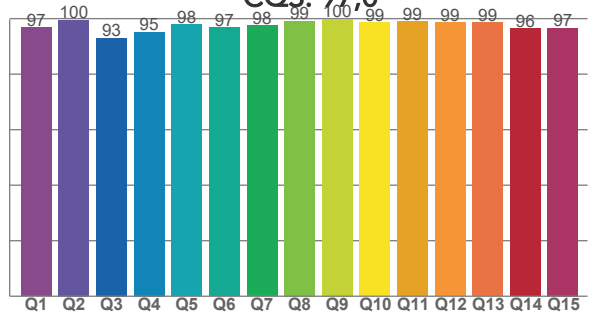
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,1	98,1	96,6	97,5	95,6	97,9	98,1	96,6	96,1	94,4	90,3	97,1	95,1	94,8	88,0	95,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,8	99,5	93,0	95,2	97,9	96,8	97,5	99,1	99,8	98,6	98,9	98,6	98,6	96,4	96,6

CQS: 97,0



COLOR PARAMETERS

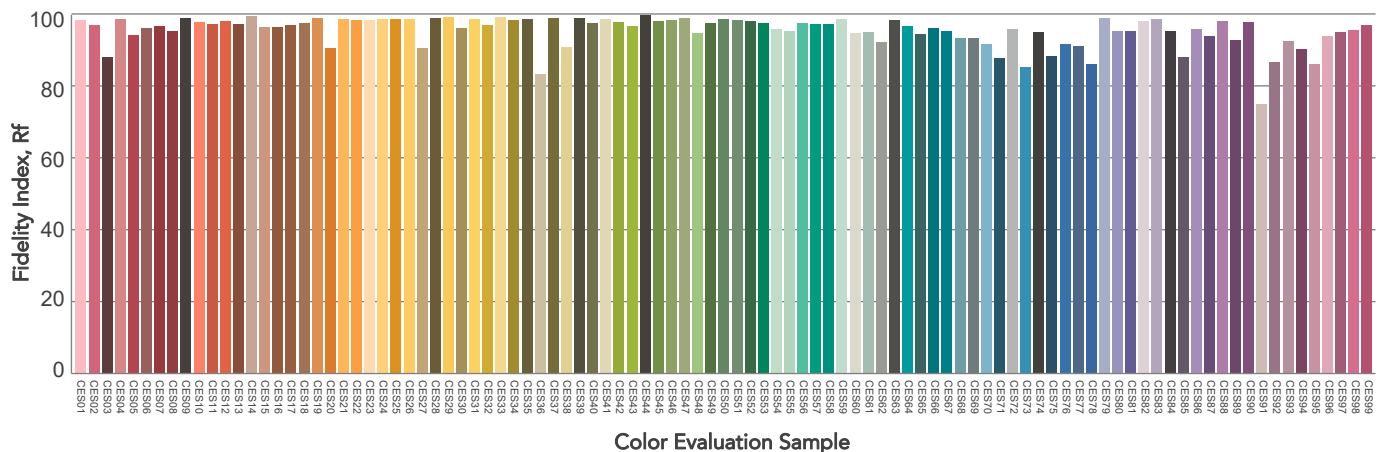
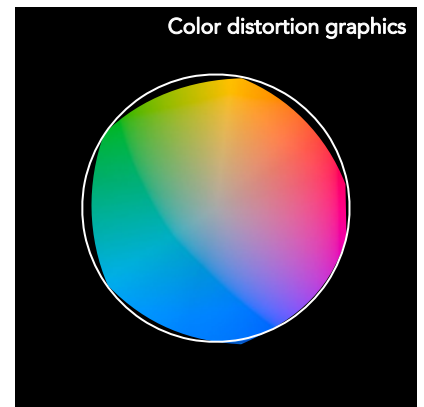
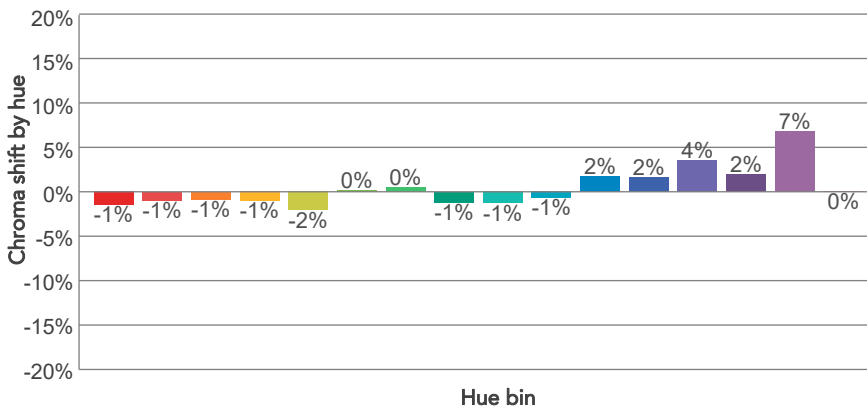
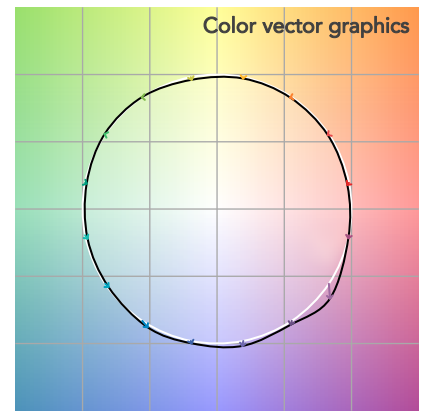
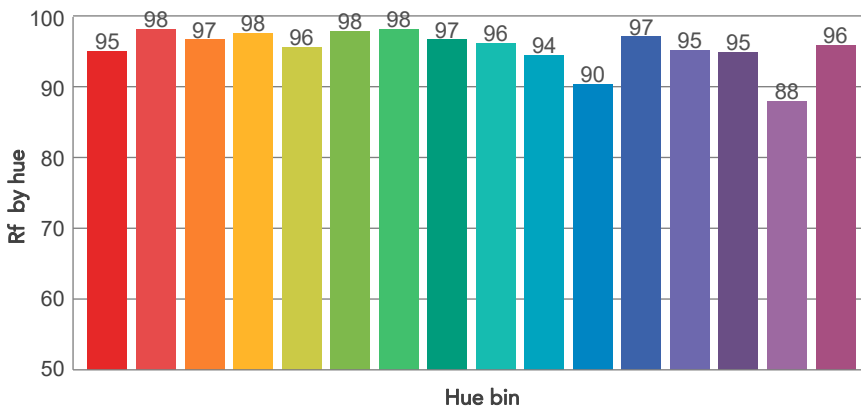
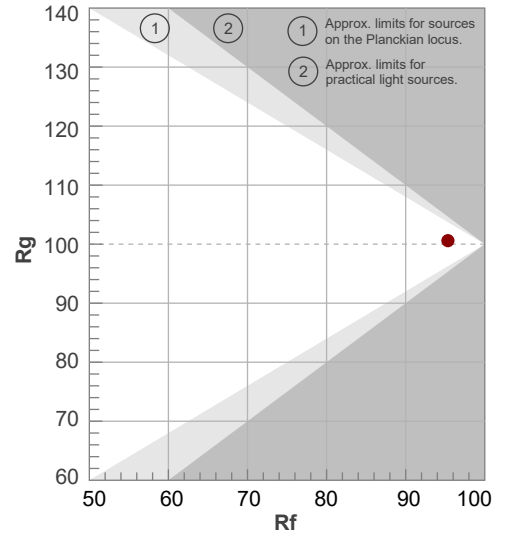
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6043 K	96,6	86,1	95,3	100,6	97,0	99	0,321	0,342	0,0057

TM30 DETAILS

Rf 95,3
Fidelity index Rf

Rg 100,6
Gammut index

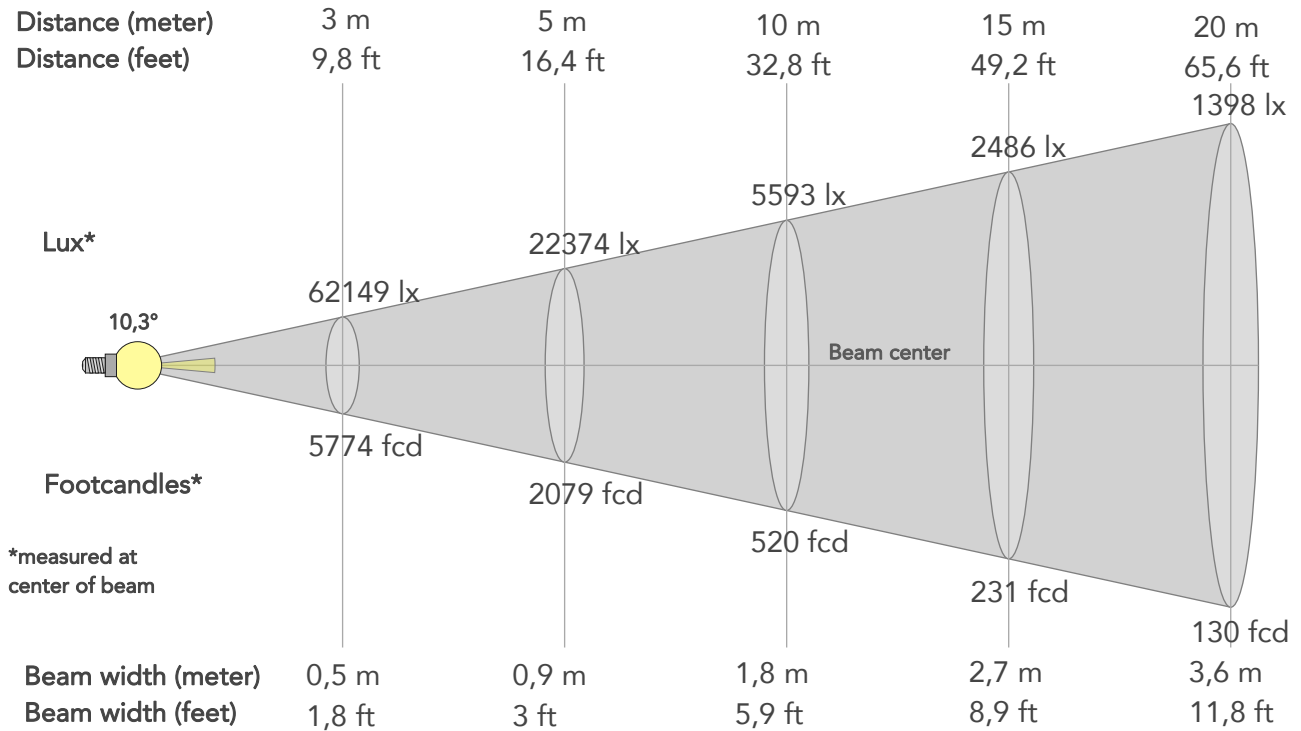
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-1%
2	98	-1%	0%
3	97	-1%	1%
4	98	-1%	0%
5	96	-2%	0%
6	98	0%	0%
7	98	0%	0%
8	97	-1%	0%
9	96	-1%	3%
10	94	-1%	3%
11	90	2%	6%
12	97	2%	1%
13	95	4%	-1%
14	95	2%	-2%
15	88	7%	-9%
16	96	0%	-2%



BEAM DETAILS



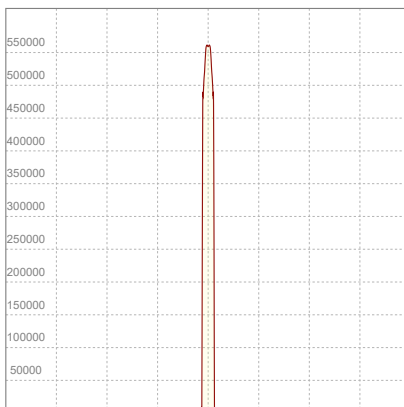
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,3°	11°	11,2°	100,0%	100,0%



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	559345lx	139836lx	62149lx	34959lx	22374lx	9944lx	5593lx	2486lx	1398lx	895lx	621lx	350lx	224lx
Footcand.	51965fcd	12991fcd	5774fcd	3248fcd	2079fcd	924fcd	520fcd	231fcd	130fcd	83fcd	58fcd	32fcd	21fcd
Beam wid.	0,2m	0,4m	0,5m	0,7m	0,9m	1,4m	1,8m	2,7m	3,6m	4,5m	5,4m	7,2m	9m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	3ft	4,4ft	5,9ft	8,9ft	11,8ft	14,8ft	17,7ft	23,6ft	29,5ft

LINEAR DISTRIBUTION DIAGRAM

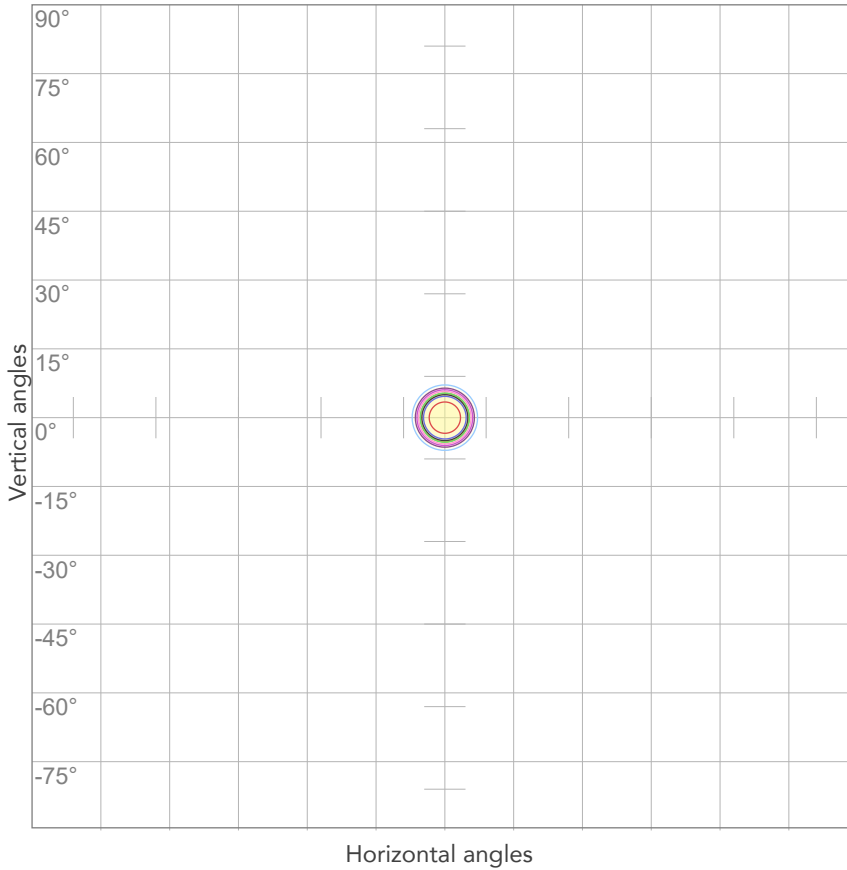


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
224V	1,97A	425,5W	0,97	31lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



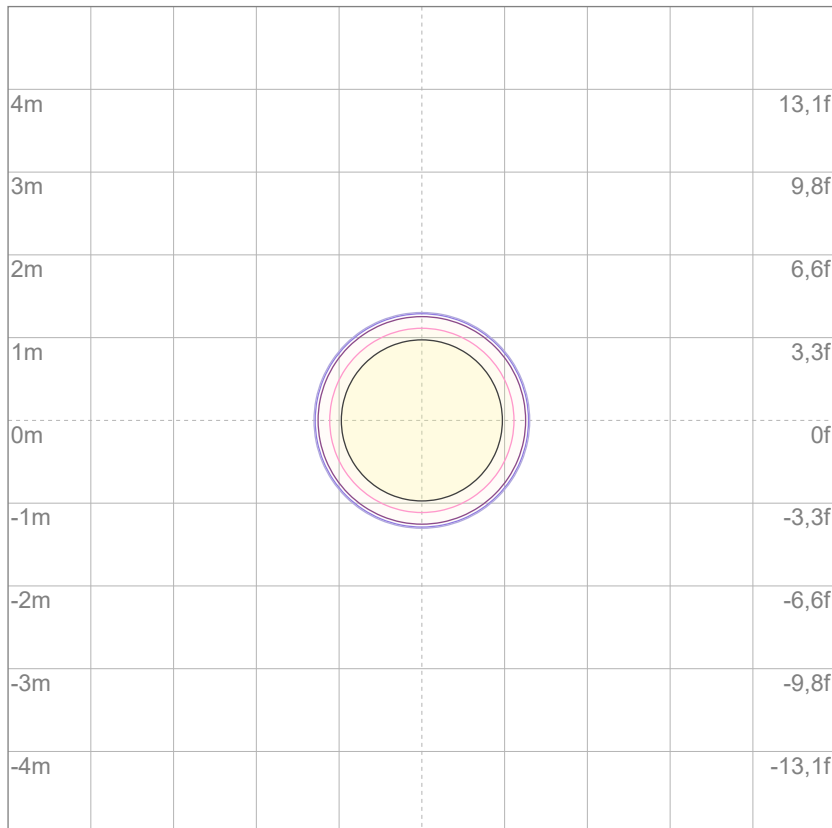
10%	55934 cd
20%	111869 cd
30%	167803 cd
40%	223738 cd
50%	279672 cd
60%	335607 cd
70%	391541 cd
80%	447476 cd

Conditions:

Number of c-planes: 2

Candela at center: 559345 cd

ISO LUX DIAGRAM



3%	168 lx
5%	280 lx
10%	559 lx
30%	1678 lx
50%	2797 lx

Conditions:

Number of c-planes: 2

Lux at center: 5593 lx

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

Mounting height: 10 meters (33 feet)