

Photometric Test Report



EclProfile FWHPVW

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

(ECLPRL90BK)

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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:

21591 lm

Peak candela output:

18339 cd

Light quality:

CRI: 96,0

Color temperature:

5894 K

PRODUCT NAME:

ECLFWHPVW

MEASUREMENT CONDITIONS:

Beam angle:

PRL90

Target:

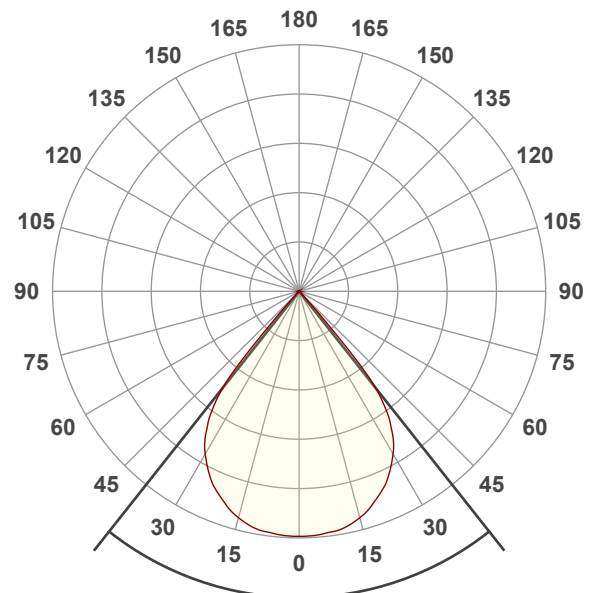
Full On

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 16:39:39

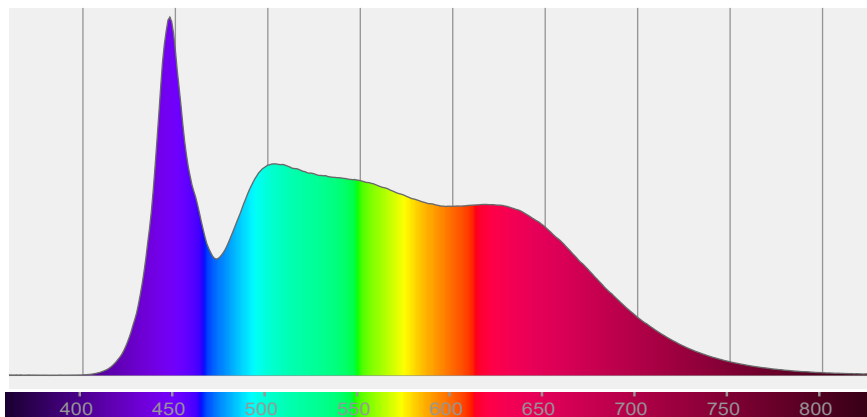


Beam angle 50%: 76,7°

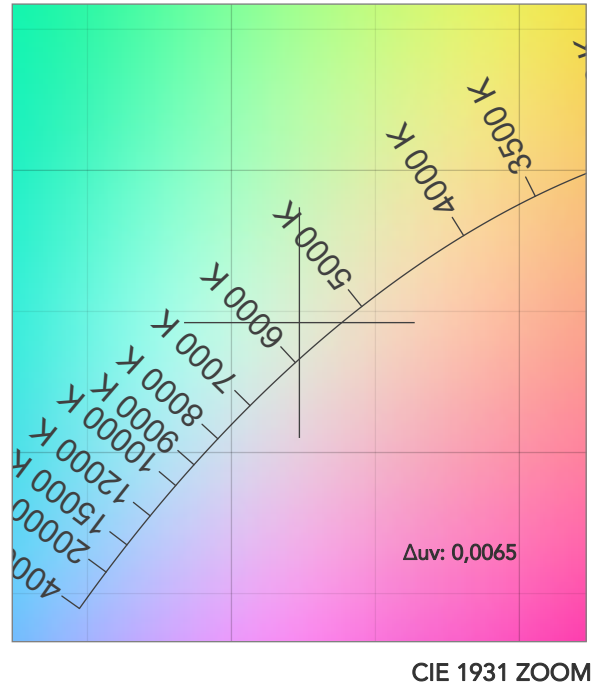
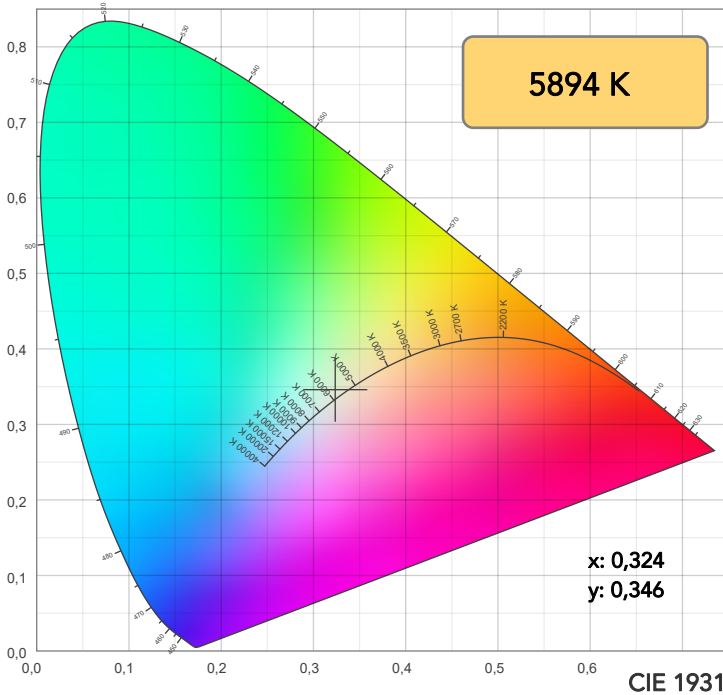
Field angle 10%: 84°

Cut off angle 2.5%: 86,4°

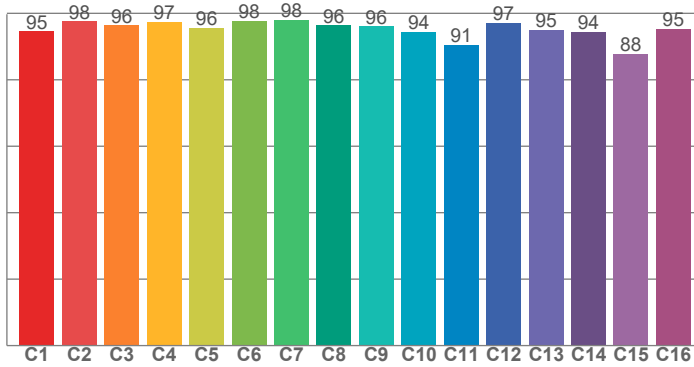
Spectra



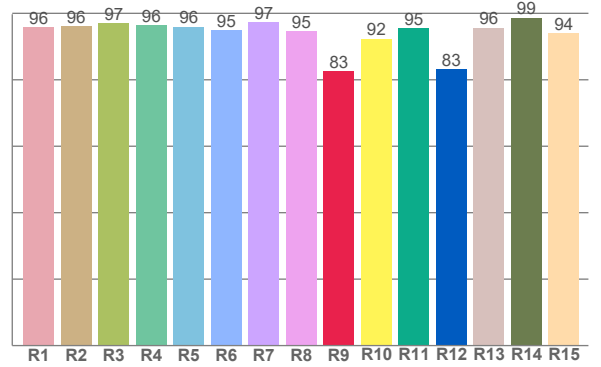
COLOR DETAILS



TM30: 95,2



CRI: 96,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95,9	96,1	97,0	96,5	96,0	94,8	97,4	94,5	82,7	92,4	95,4	83,1	95,7	98,7	94,0

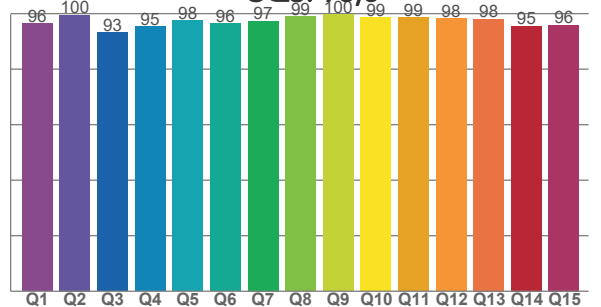
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,5	97,6	96,4	97,4	95,7	97,8	98,0	96,4	96,1	94,5	90,5	97,1	95,0	94,5	87,9	95,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,4	99,6	93,3	95,4	97,5	96,5	97,3	98,9	99,6	98,5	98,6	98,2	98,1	95,5	95,9

CQS: 96,8



COLOR PARAMETERS

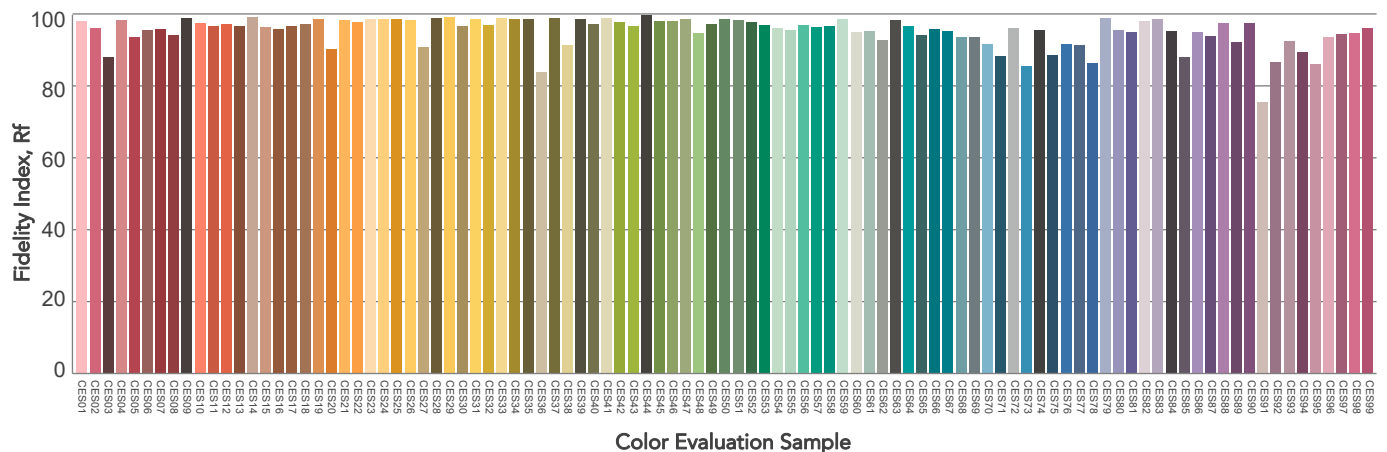
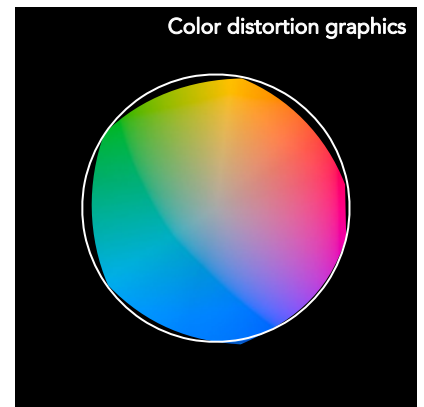
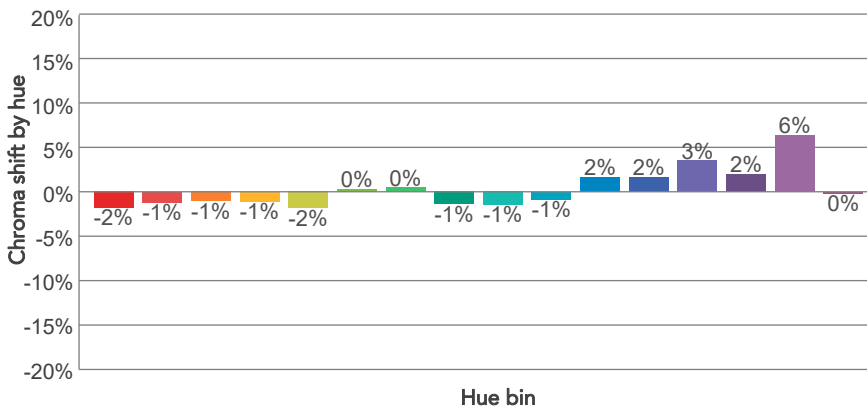
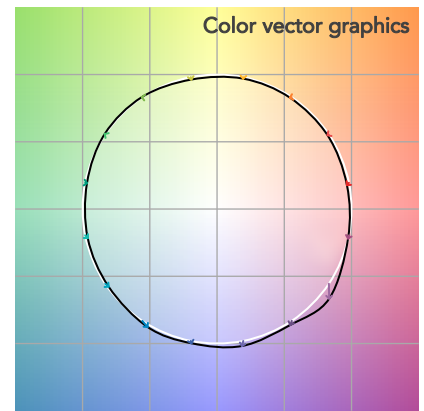
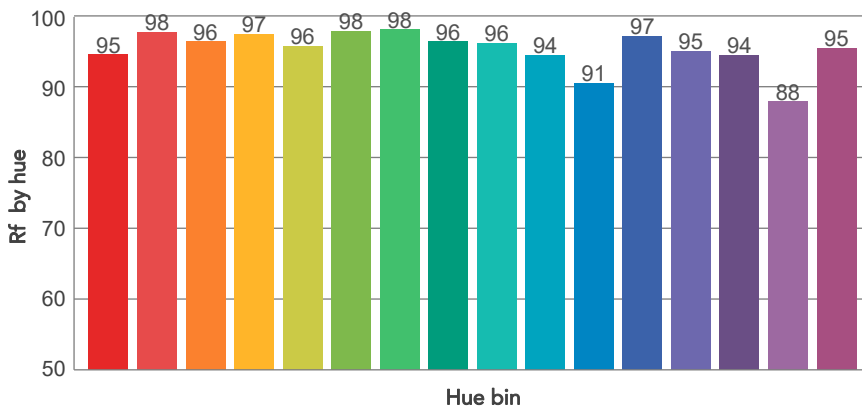
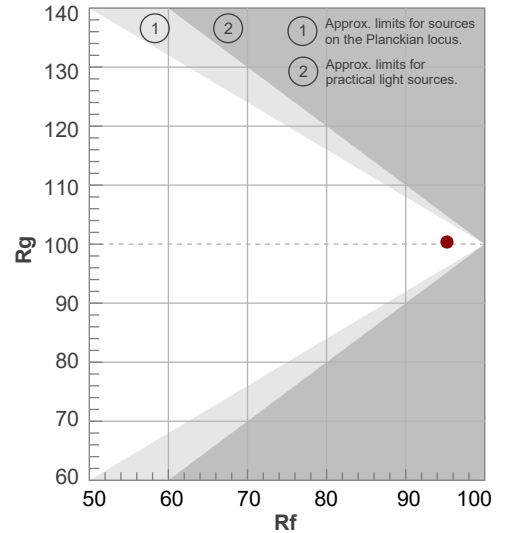
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5894 K	96,0	82,7	95,2	100,4	96,8	99	0,324	0,346	0,0065

TM30 DETAILS

Rf 95,2
Fidelity index Rf

Rg 100,4
Gammut index

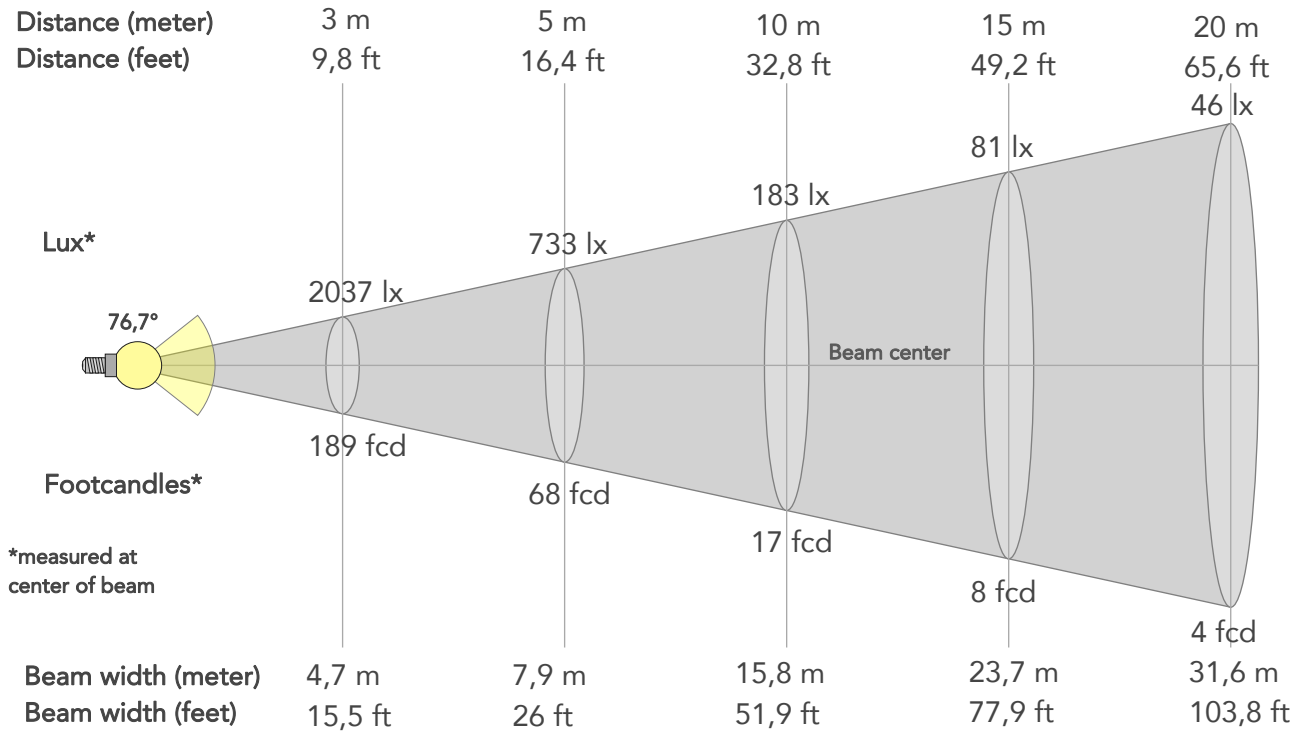
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	-1%
2	98	-1%	0%
3	96	-1%	1%
4	97	-1%	0%
5	96	-2%	0%
6	98	0%	0%
7	98	0%	0%
8	96	-1%	0%
9	96	-1%	2%
10	94	-1%	3%
11	91	2%	6%
12	97	2%	1%
13	95	3%	-2%
14	94	2%	-3%
15	88	6%	-9%
16	95	0%	-3%



BEAM DETAILS



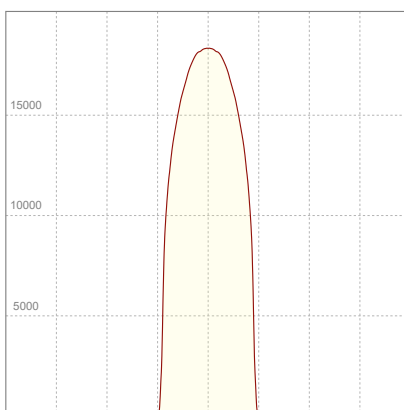
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,7°	84°	86,4°	99,7%	99,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	18334lx	4583lx	2037lx	1146lx	733lx	326lx	183lx	81lx	46lx	29lx	20lx	11lx	7lx
Footcand.	1703fcd	426fcd	189fcd	106fcd	68fcd	30fcd	17fcd	8fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,9m	15,8m	23,7m	31,6m	39,6m	47,5m	63,3m	79,1m
Beam wid.	5,2ft	10,4ft	15,5ft	20,7ft	26ft	38,9ft	51,9ft	77,9ft	103,8ft	129,8ft	155,7ft	207,6ft	259,5ft

LINEAR DISTRIBUTION DIAGRAM

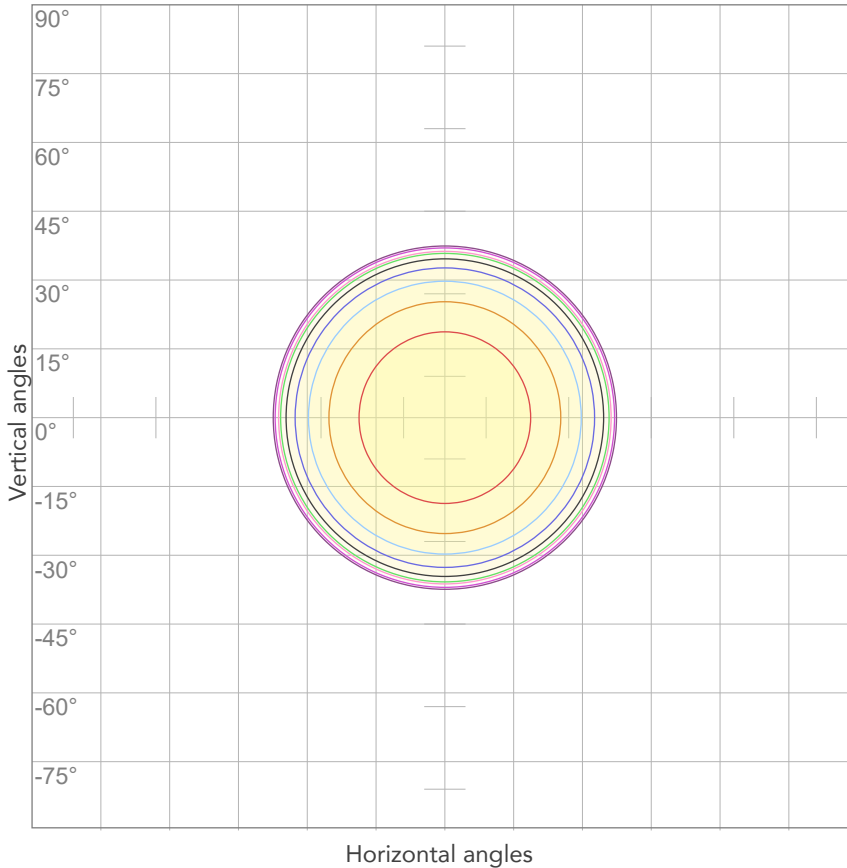


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	1,94A	425,8W	0,97	51lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



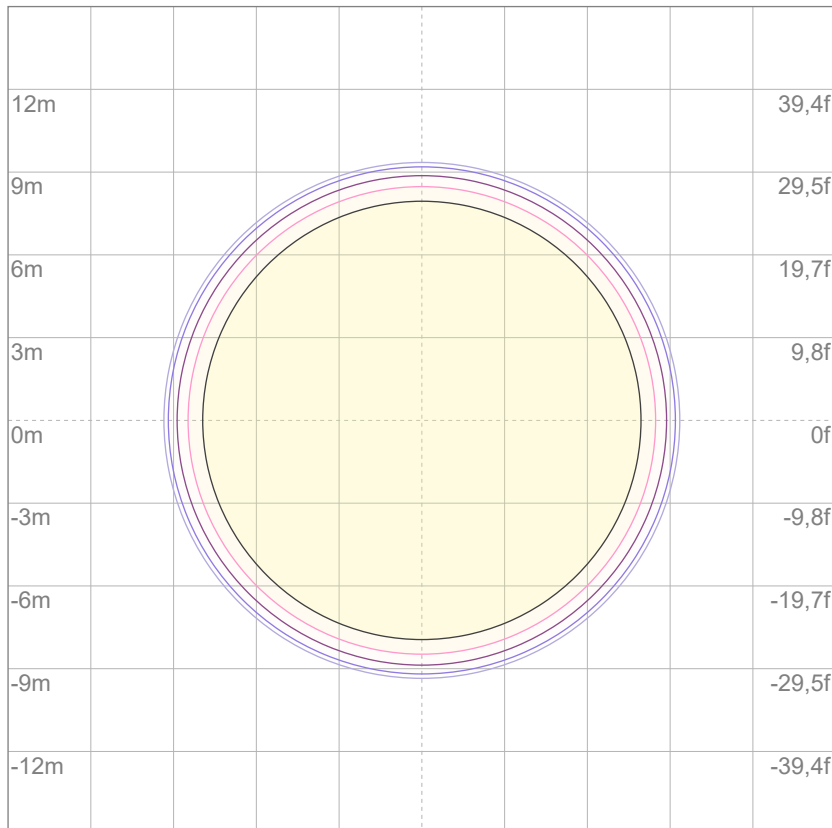
10%	1833 cd
20%	3667 cd
30%	5500 cd
40%	7334 cd
50%	9167 cd
60%	11000 cd
70%	12834 cd
80%	14667 cd

Conditions:

Number of c-planes: 2

Candela at center: 18334 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	5,50 lx
5%	9,17 lx
10%	18,3 lx
30%	55,0 lx
50%	91,7 lx

Conditions:

Number of c-planes: 2

Lux at center: 183 lx

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



Total lumen output:

15643 lm

Peak candela output:

13299 cd

Light quality:

CRI: 96,7

Color temperature:

2605 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL90

Target:

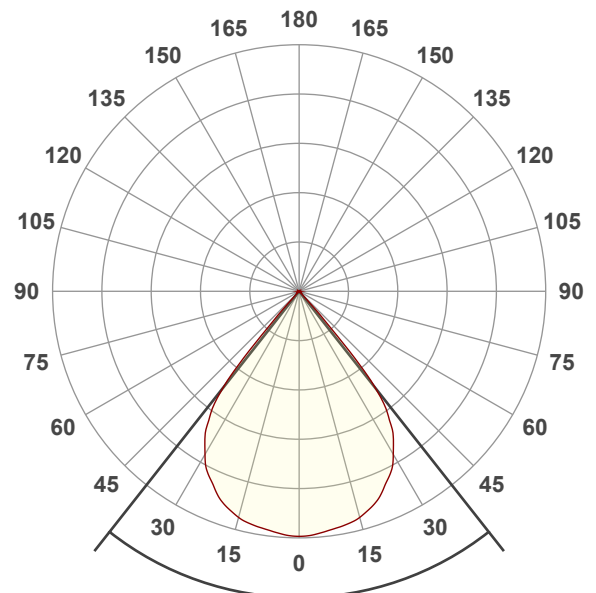
Warm White

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 16:43:30

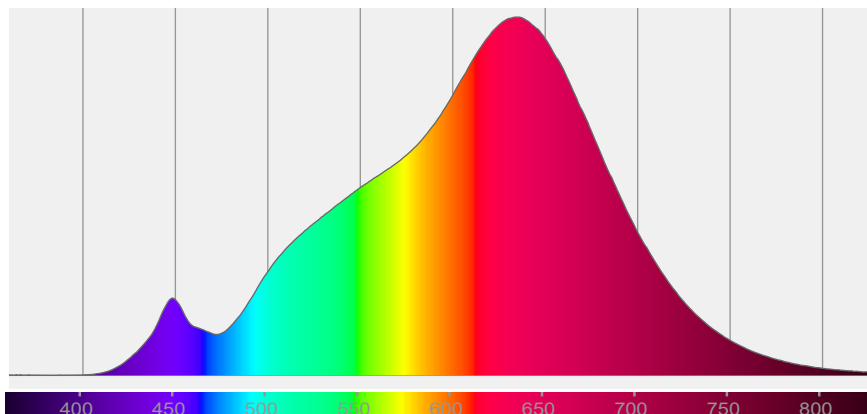


Beam angle 50%: 76,5°

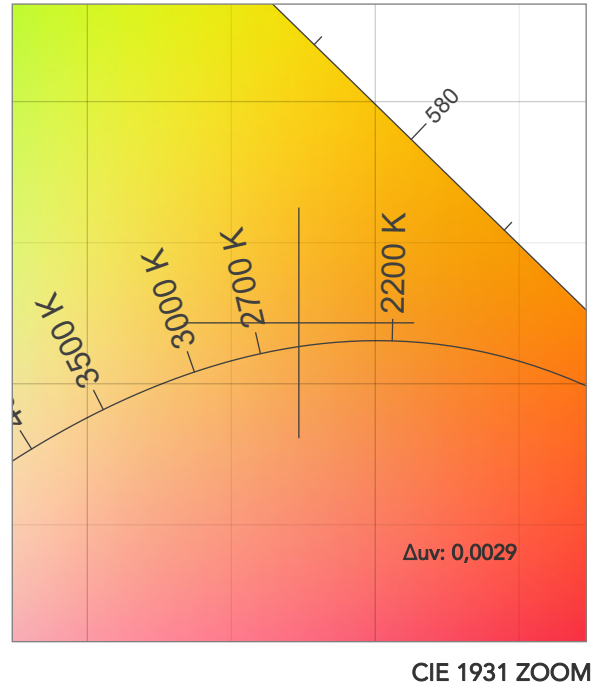
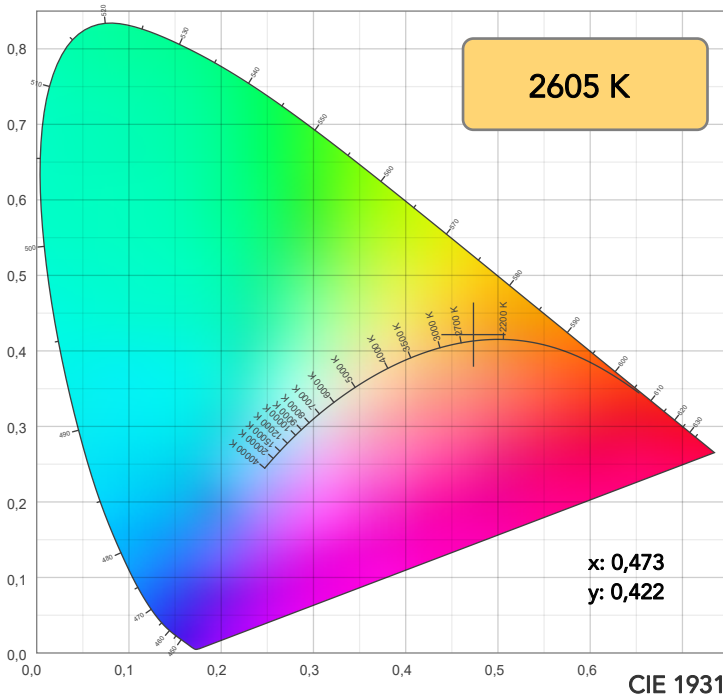
Field angle 10%: 84°

Cut off angle 2.5%: 86°

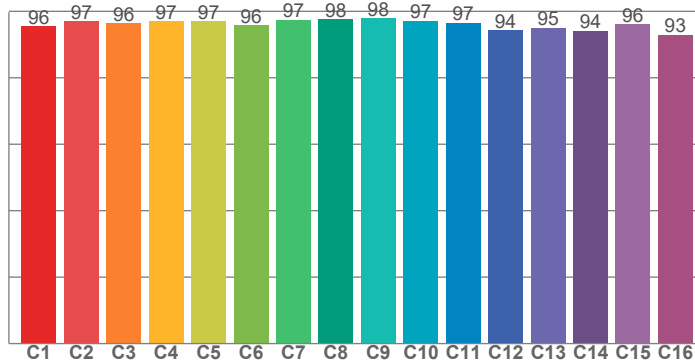
Spectra



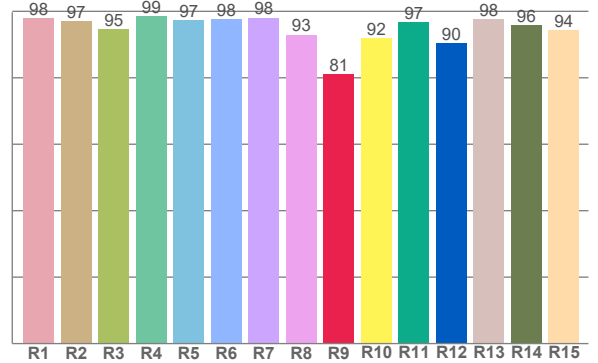
COLOR DETAILS



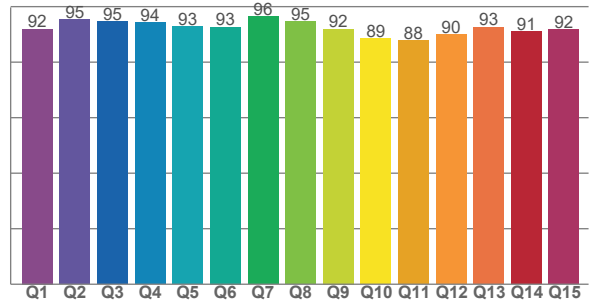
TM30: 96,1



CRI: 96,7 (R1-R8)



CQS: 91,9



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97,9	97,0	94,5	98,6	97,4	97,6	98,1	93,0	81,1	92,0	96,7	90,5	97,6	95,9	94,4

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
95,5	97,0	96,4	97,0	97,0	95,8	97,5	97,6	97,8	97,2	96,5	94,3	95,1	94,1	96,2	92,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,9	95,3	94,6	94,2	92,9	92,7	96,4	94,7	91,9	88,6	87,9	90,0	92,6	91,0	91,8

COLOR PARAMETERS

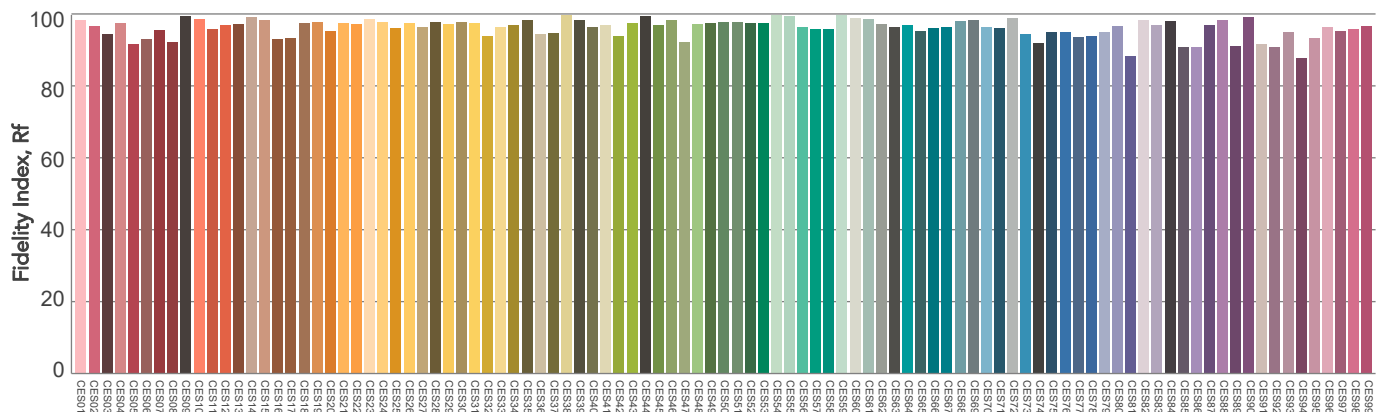
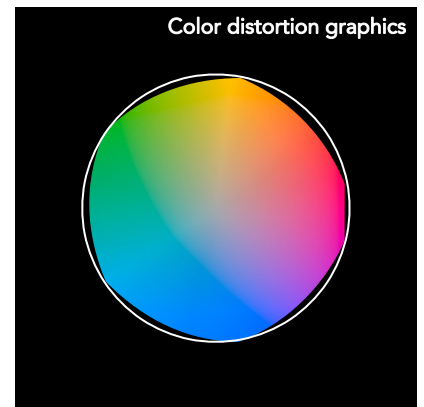
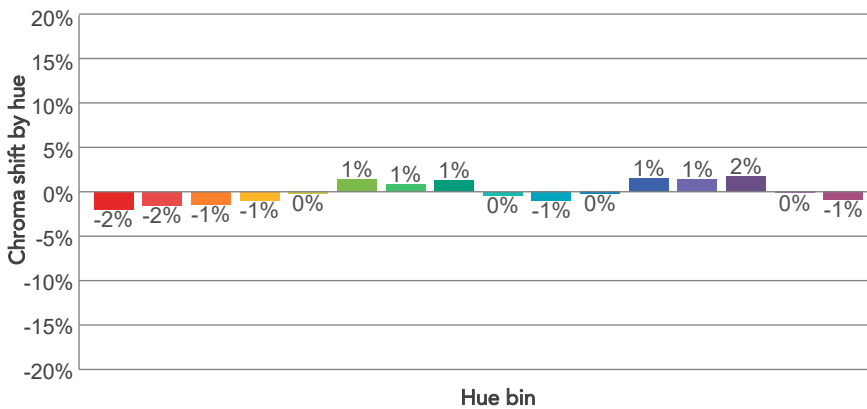
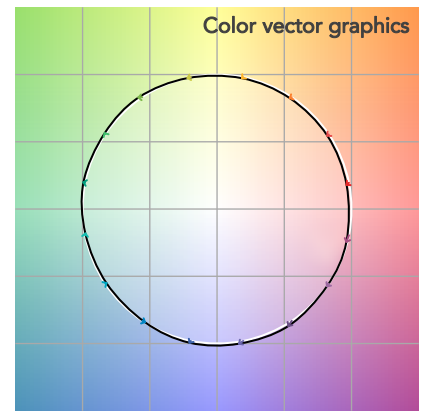
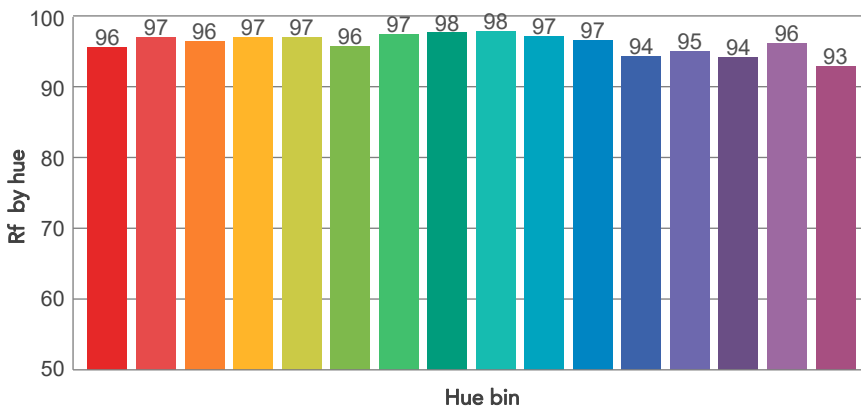
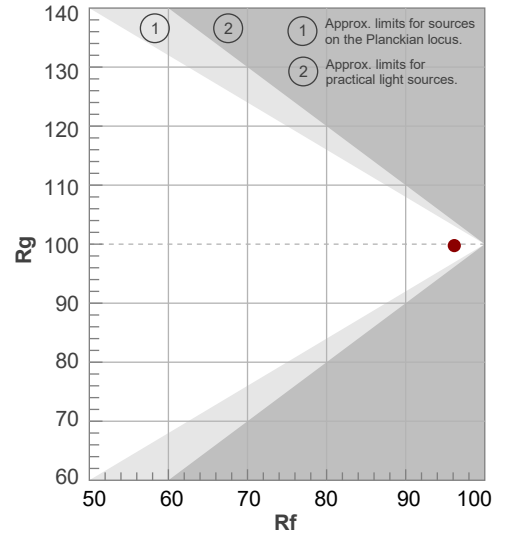
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2605 K	96,7	81,1	96,1	99,8	91,9	97	0,473	0,422	0,0029

TM30 DETAILS

Rf 96,1
Fidelity index Rf

Rg 99,8
Gammut index

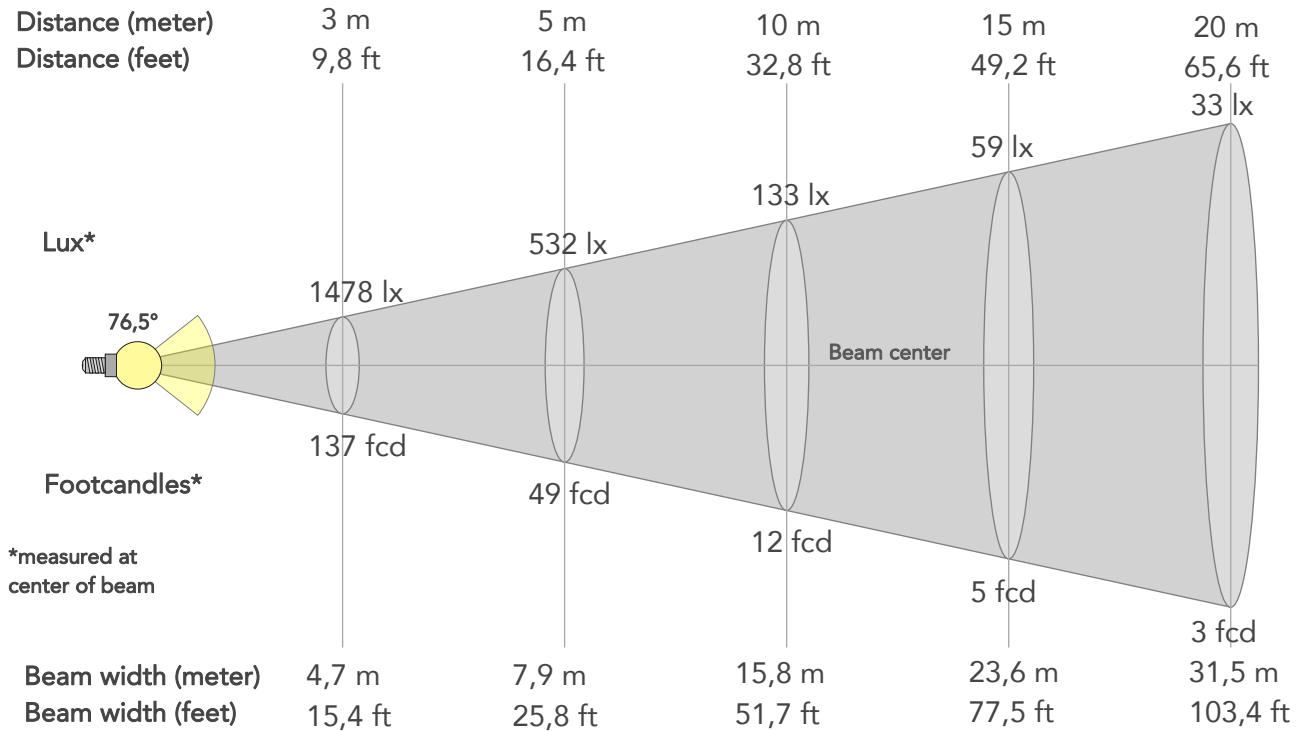
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-2%	-1%
2	97	-2%	0%
3	96	-1%	1%
4	97	-1%	1%
5	97	0%	3%
6	96	1%	3%
7	97	1%	0%
8	98	1%	0%
9	98	0%	-1%
10	97	-1%	0%
11	97	0%	2%
12	94	1%	-1%
13	95	1%	-3%
14	94	2%	-4%
15	96	0%	-2%
16	93	-1%	-5%



BEAM DETAILS



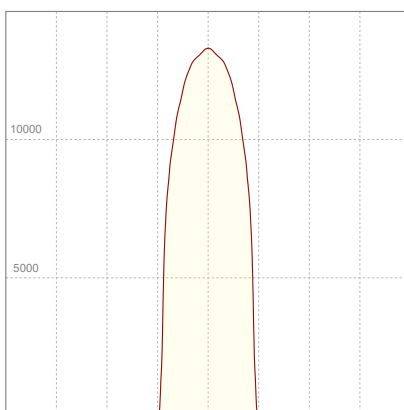
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,5°	84°	86°	99,8%	99,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	13299lx	3325lx	1478lx	831lx	532lx	236lx	133lx	59lx	33lx	21lx	15lx	8lx	5lx
Footcand.	1236fcd	309fcd	137fcd	77fcd	49fcd	22fcd	12fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,8m	15,8m	23,6m	31,5m	39,4m	47,3m	63m	78,8m
Beam wid.	5,2ft	10,4ft	15,4ft	20,6ft	25,8ft	38,8ft	51,7ft	77,5ft	103,4ft	129,2ft	155,1ft	206,8ft	258,5ft

LINEAR DISTRIBUTION DIAGRAM

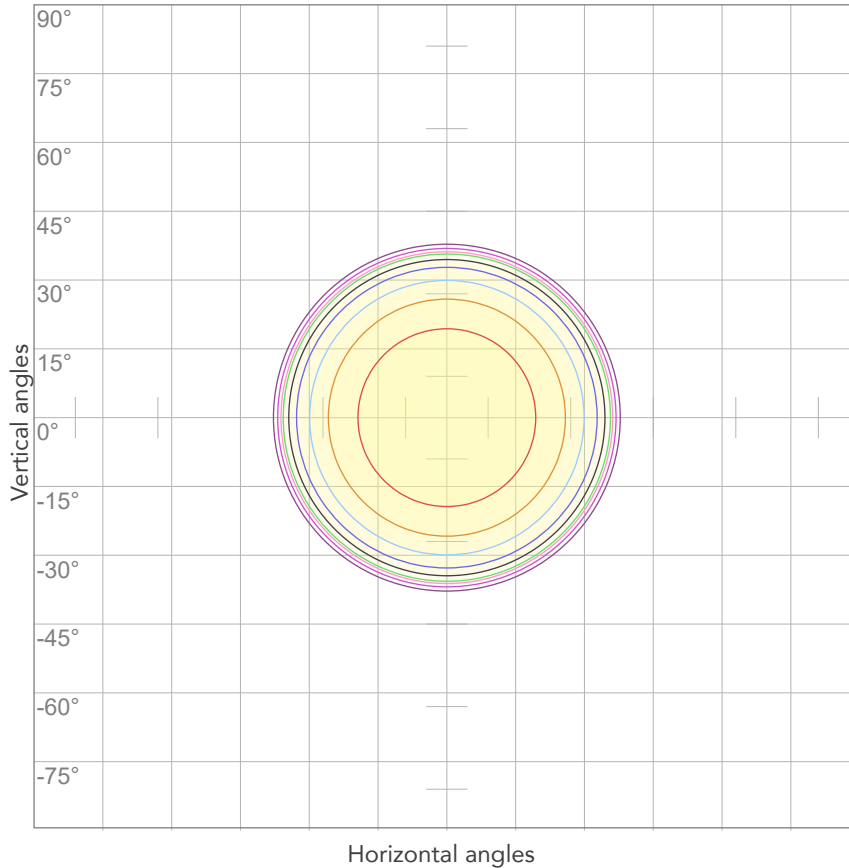


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
224V	1,77A	382,2W	0,96	41lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



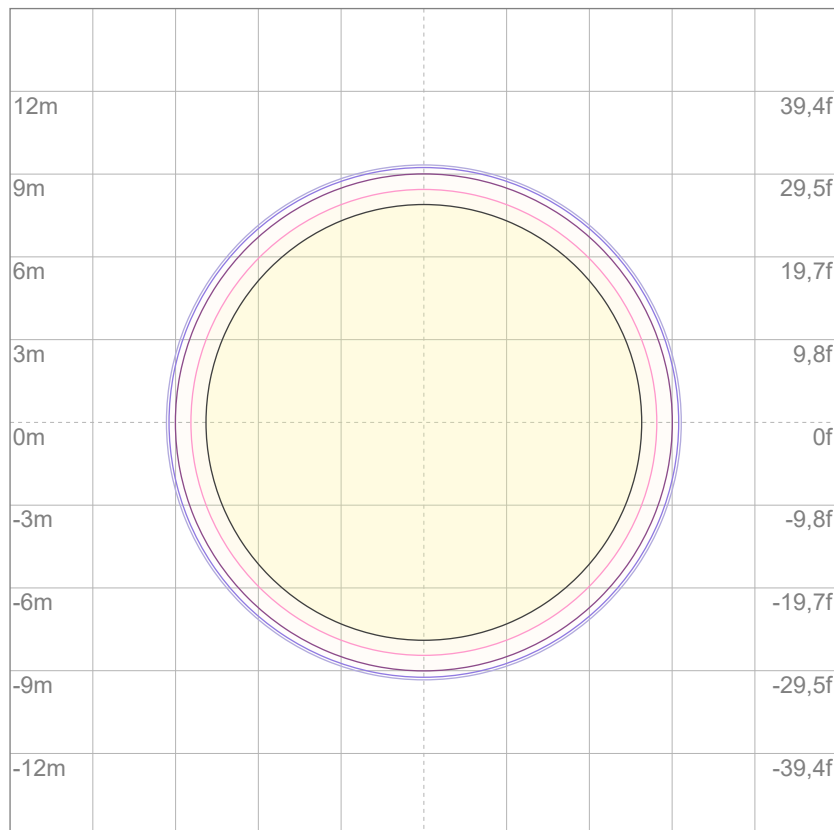
10%	1330 cd
20%	2660 cd
30%	3990 cd
40%	5320 cd
50%	6650 cd
60%	7979 cd
70%	9309 cd
80%	10639 cd

Conditions:

Number of c-planes: 2

Candela at center: 13299 cd

ISO LUX DIAGRAM



3%	3,99 lx
5%	6,65 lx
10%	13,3 lx
30%	39,9 lx
50%	66,5 lx

Conditions:

Number of c-planes: 2

Lux at center: 133 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:

19604 lm

Peak candela output:

16681 cd

Light quality:

CRI: 94,3

Color temperature:

6481 K

PRODUCT NAME:

ECLFWHPVW

MEASUREMENT CONDITIONS:

Beam angle:

PRL90

Target:

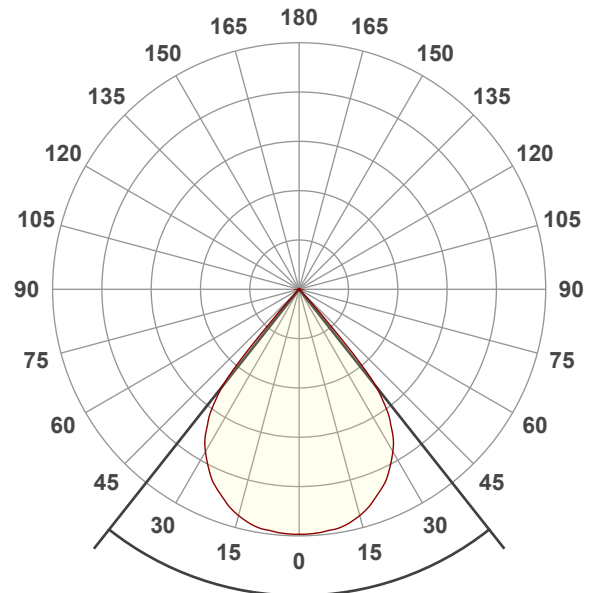
Cold White

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 16:47:04

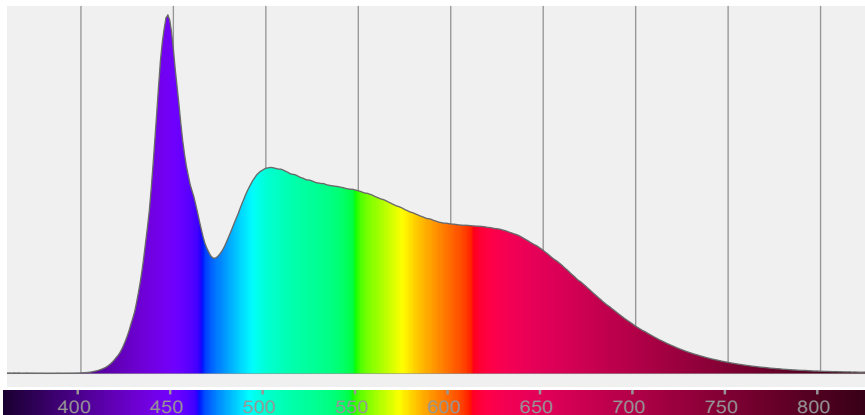


Beam angle 50%: 76,7°

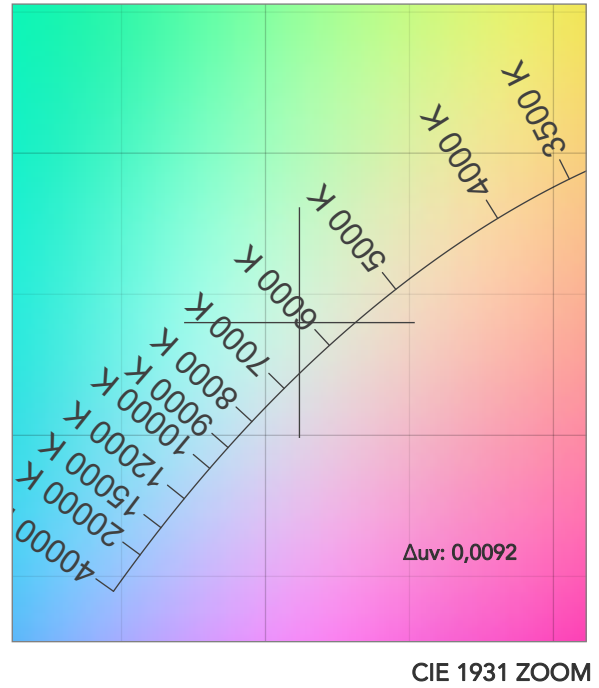
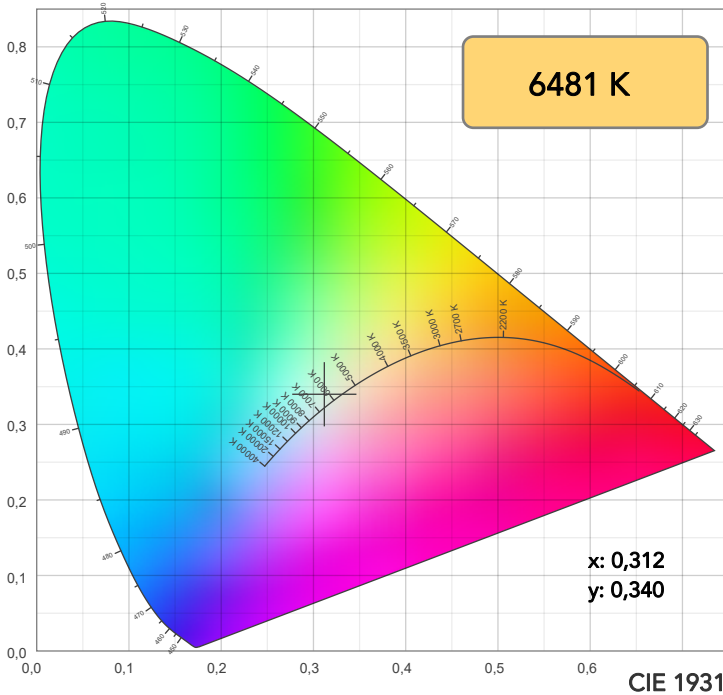
Field angle 10%: 84°

Cut off angle 2.5%: 86,3°

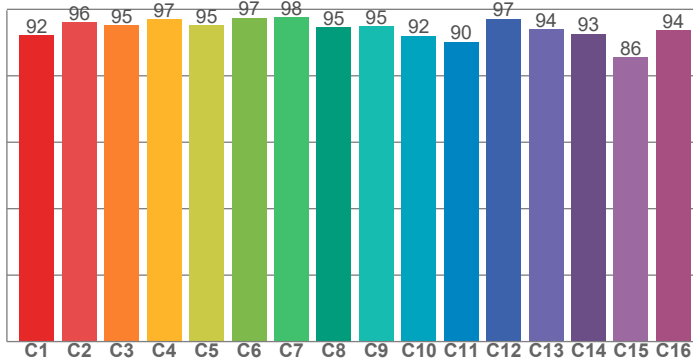
Spectra



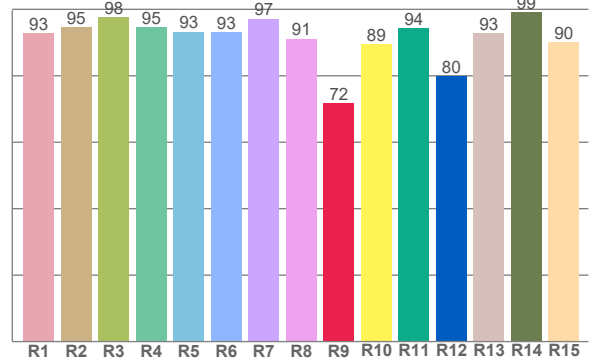
COLOR DETAILS



TM30: 94,1



CRI: 94,3 (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
92,8	94,5	97,6	94,7	93,3	93,2	97,2	91,2	71,8	89,5	94,3	79,8	92,9	99,2	90,1

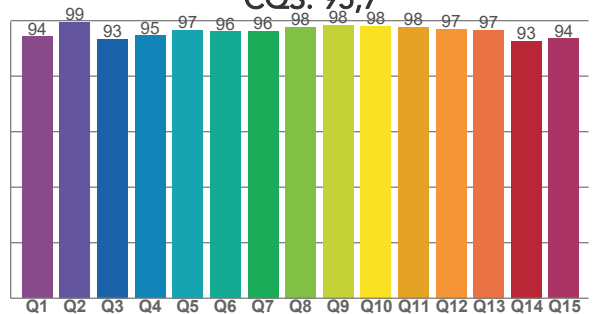
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,3	96,1	95,3	97,0	95,2	97,5	97,6	94,6	94,9	92,0	90,2	97,2	94,0	92,6	85,6	93,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,4	99,4	93,4	94,6	96,6	96,0	96,3	97,8	98,5	98,1	97,7	97,0	96,6	92,7	93,6

CQS: 95,7



COLOR PARAMETERS

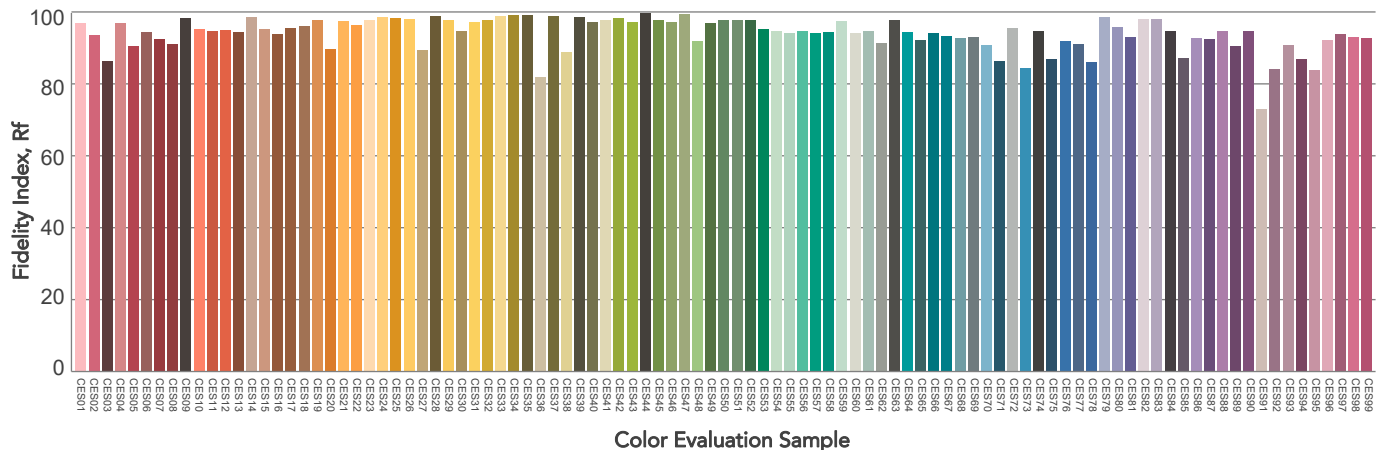
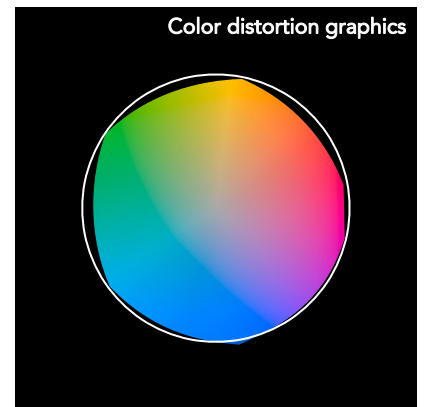
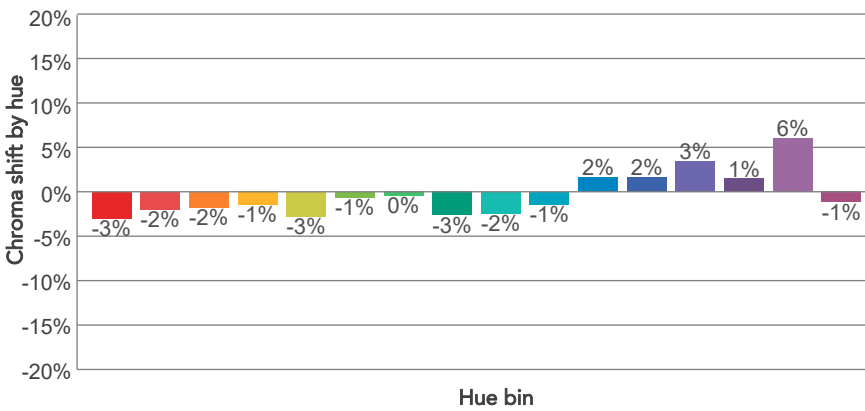
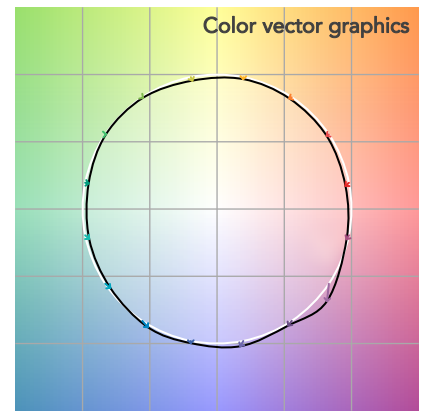
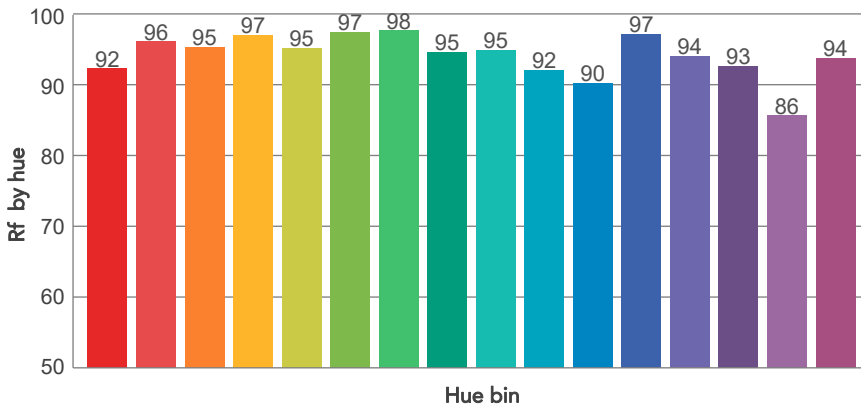
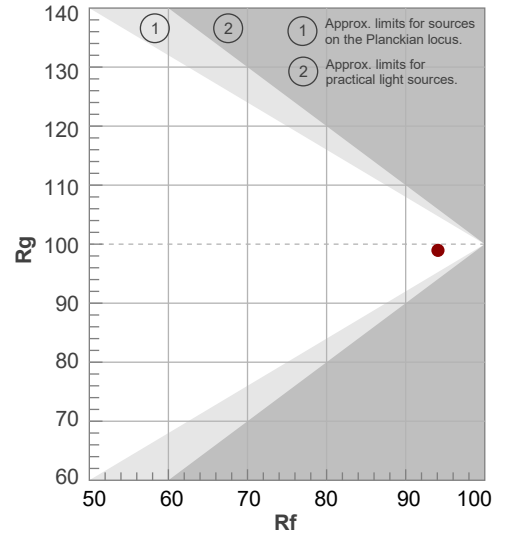
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6481 K	94,3	71,8	94,1	99,0	95,7	99	0,312	0,340	0,0092

TM30 DETAILS

Rf 94,1
Fidelity index Rf

Rg 99,0
Gammut index

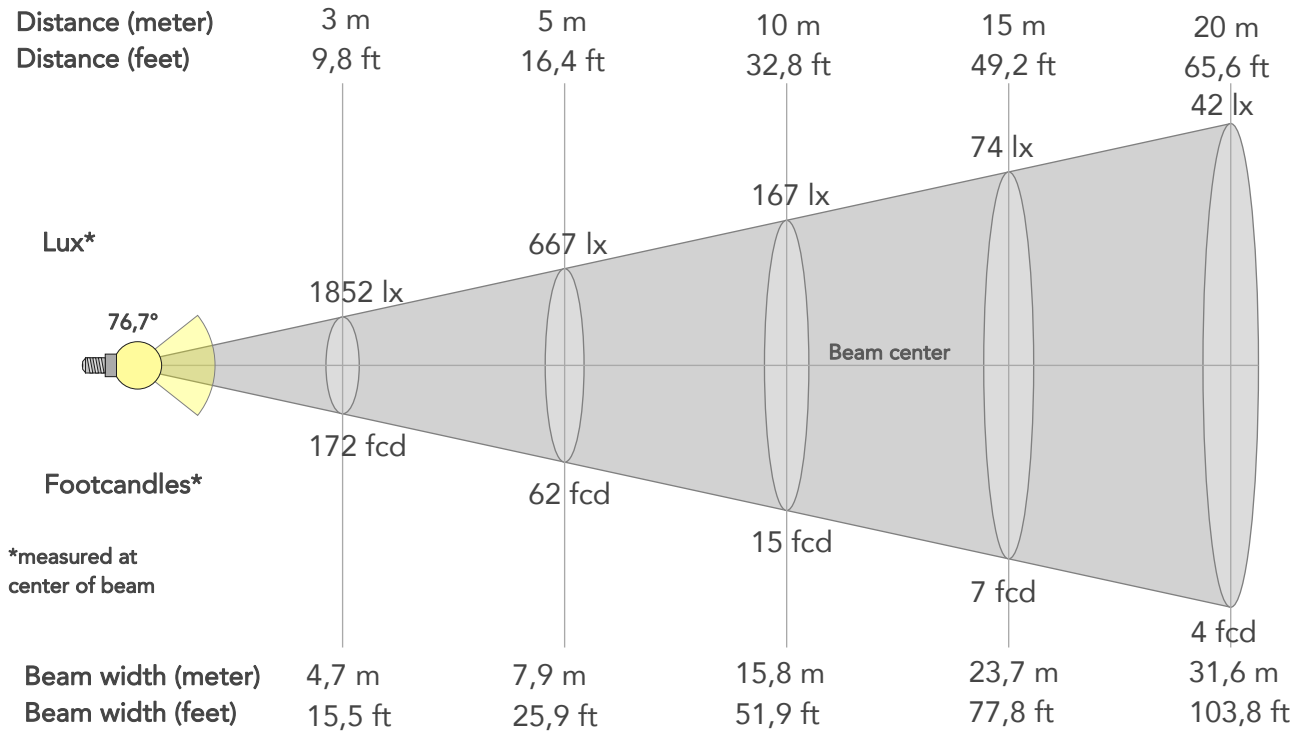
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-2%
2	96	-2%	0%
3	95	-2%	1%
4	97	-1%	0%
5	95	-3%	-1%
6	97	-1%	0%
7	98	0%	0%
8	95	-3%	0%
9	95	-2%	3%
10	92	-1%	5%
11	90	2%	6%
12	97	2%	0%
13	94	3%	-3%
14	93	1%	-4%
15	86	6%	-12%
16	94	-1%	-3%



BEAM DETAILS



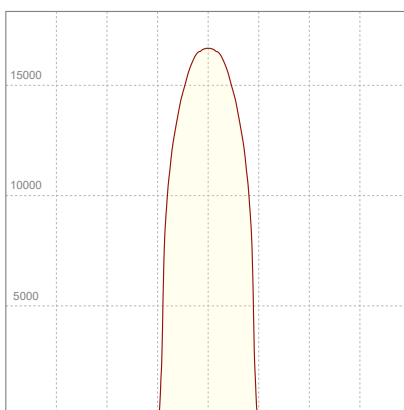
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,7°	84°	86,3°	99,7%	99,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	16672lx	4168lx	1852lx	1042lx	667lx	296lx	167lx	74lx	42lx	27lx	19lx	10lx	7lx
Footcand.	1549fcd	387fcd	172fcd	97fcd	62fcd	28fcd	15fcd	7fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,9m	15,8m	23,7m	31,6m	39,6m	47,5m	63,3m	79,1m
Beam wid.	5,2ft	10,4ft	15,5ft	20,7ft	25,9ft	38,9ft	51,9ft	77,8ft	103,8ft	129,7ft	155,7ft	207,6ft	259,5ft

LINEAR DISTRIBUTION DIAGRAM

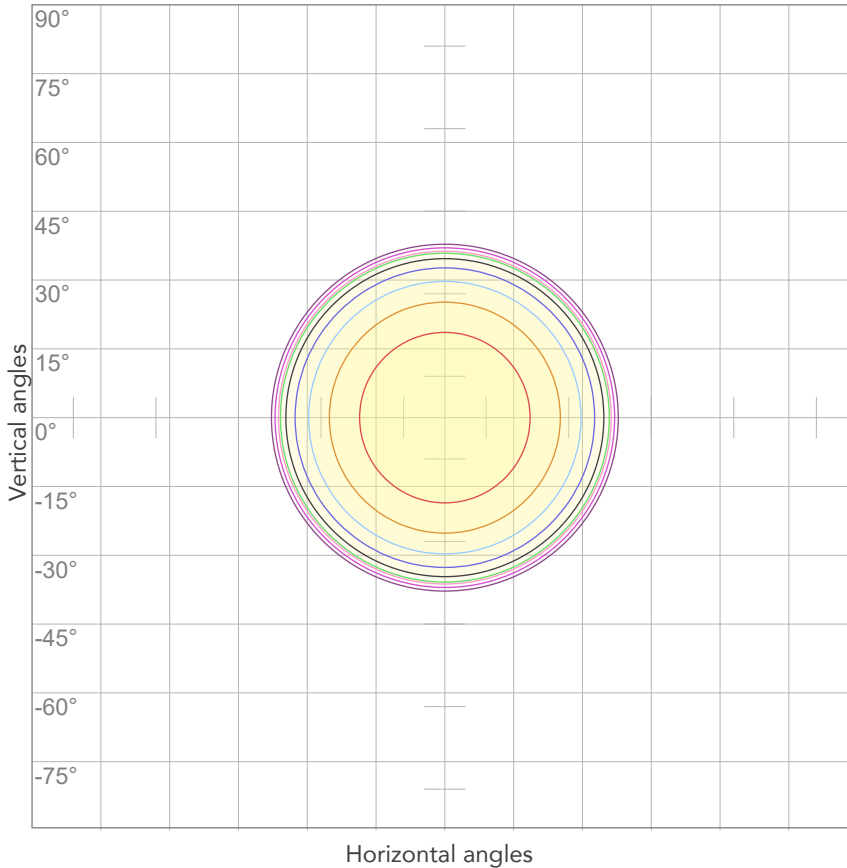


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	1,75A	379,6W	0,96	52lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



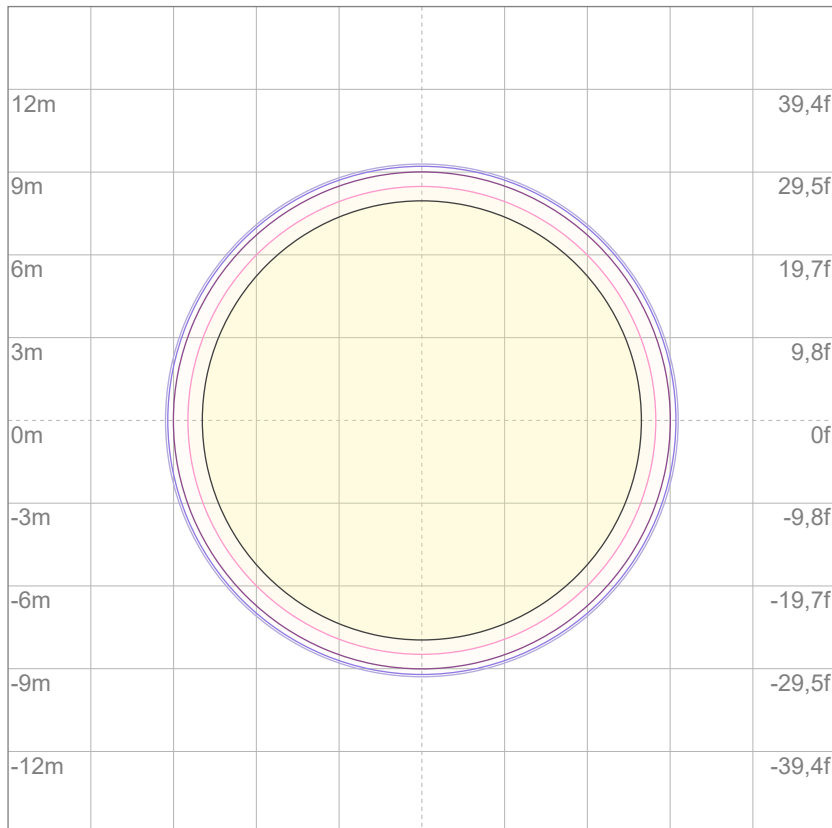
10%	1667 cd
20%	3334 cd
30%	5002 cd
40%	6669 cd
50%	8336 cd
60%	10003 cd
70%	11670 cd
80%	13338 cd

Conditions:

Number of c-planes: 2

Candela at center: 16672 cd

ISO LUX DIAGRAM



3%	5,00 lx
5%	8,34 lx
10%	16,7 lx
30%	50,0 lx
50%	83,4 lx

Conditions:

Number of c-planes: 2

Lux at center: 167 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:

17191 lm

Peak candela output:

14621 cd

Light quality:

CRI: 97,5

Color temperature:

2779 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL90

Target:

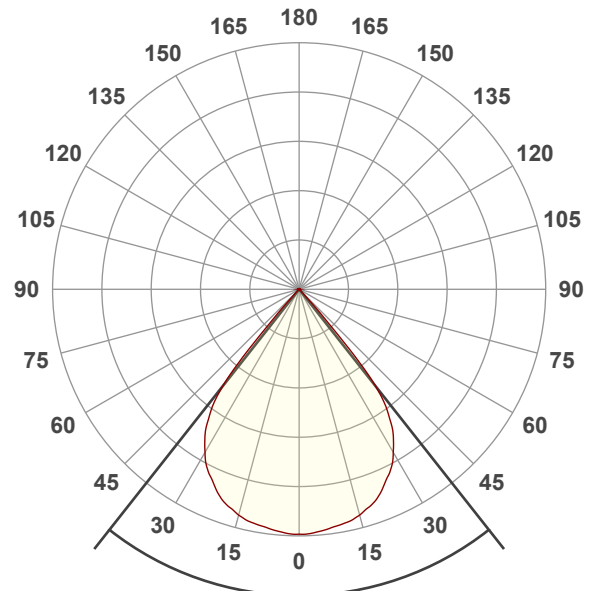
2800K

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 16:50:26

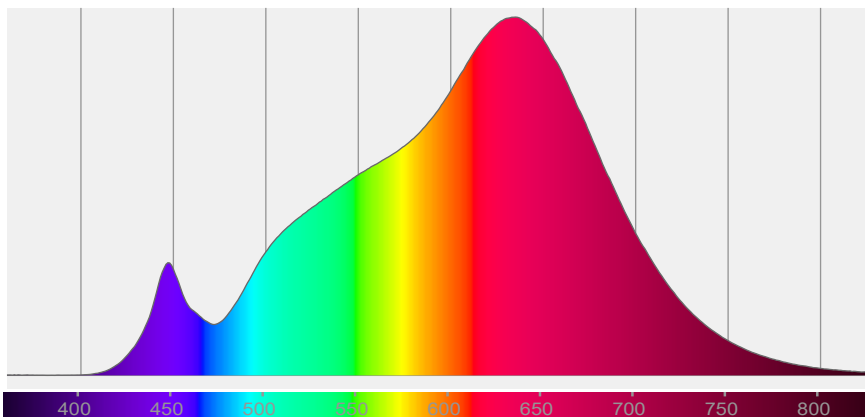


Beam angle 50%: 76,5°

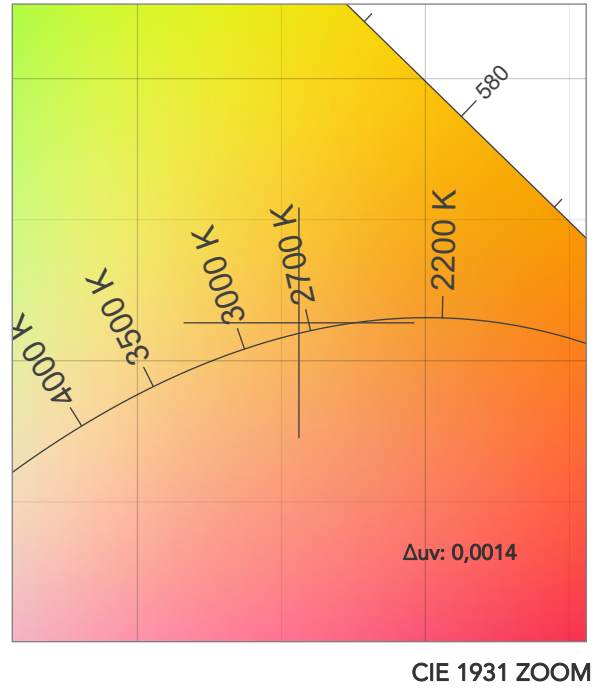
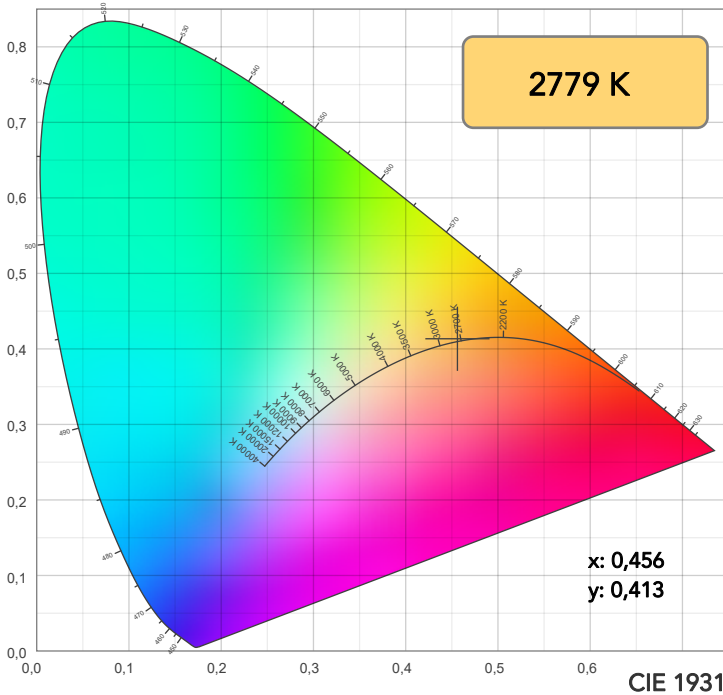
Field angle 10%: 84°

Cut off angle 2.5%: 86,1°

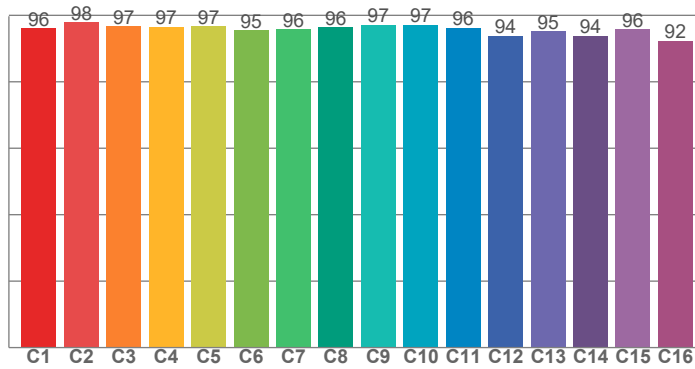
Spectra



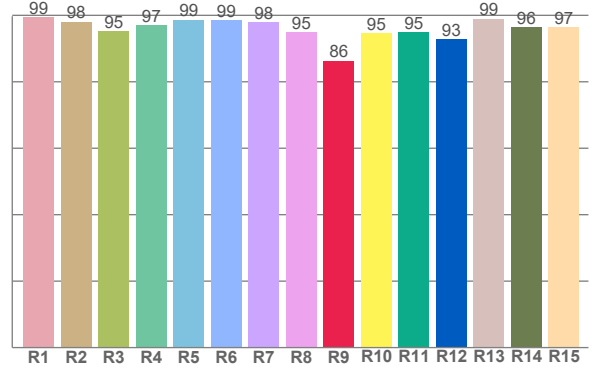
COLOR DETAILS



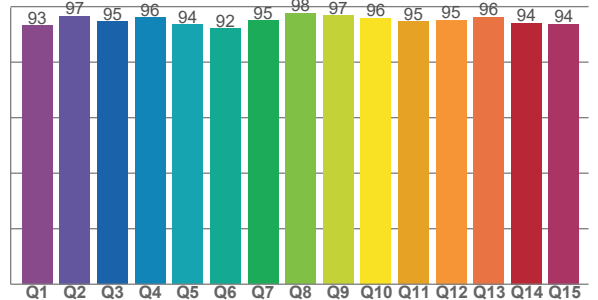
TM30: 96,0



CRI: 97,5 (R1-R8)



CQS: 94,7



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
99,3	98,1	95,2	97,1	98,7	98,5	97,8	95,0	86,3	94,6	94,9	92,9	99,0	96,4	96,5

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
96,1	97,9	96,7	96,6	96,7	95,4	95,8	96,4	97,2	97,1	96,3	93,8	95,2	93,9	95,8	92,4

CQS Q values

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

COLOR PARAMETERS

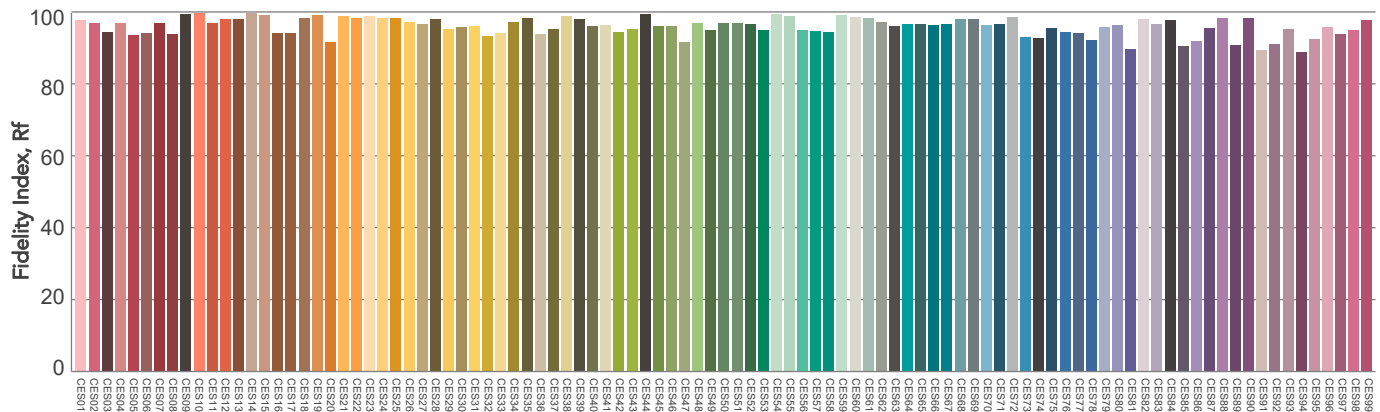
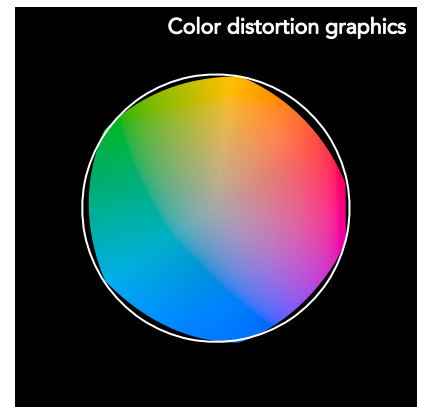
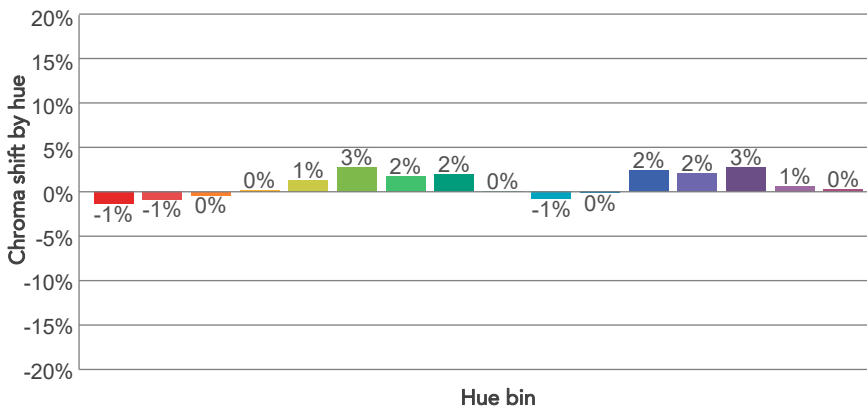
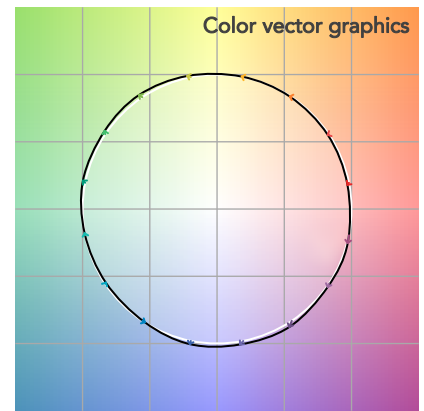
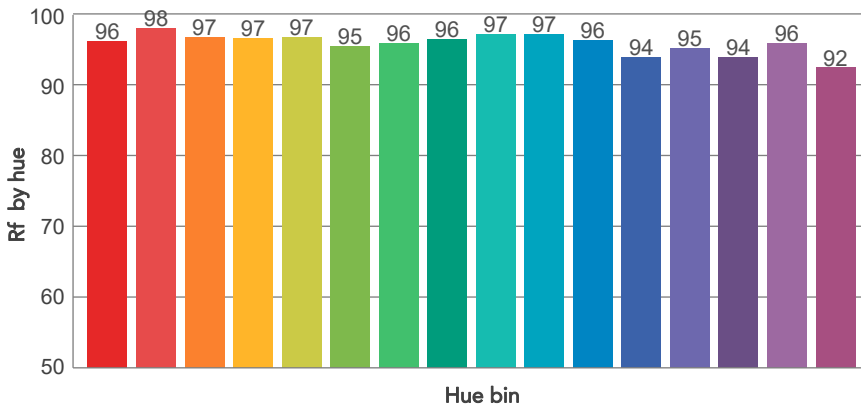
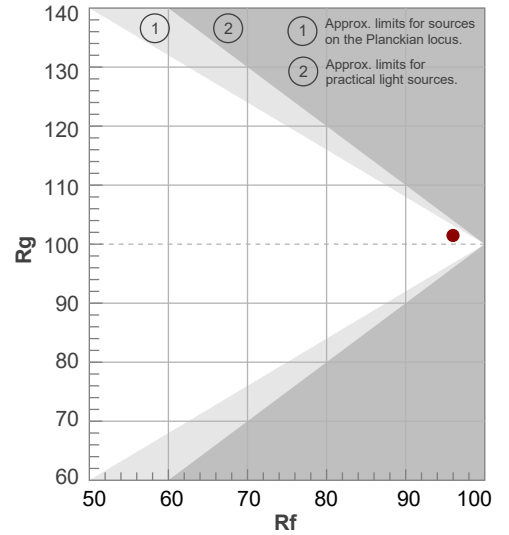
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2779 K	97,5	86,3	96,0	101,5	94,7	97	0,456	0,413	0,0014

TM30 DETAILS

Rf 96,0
Fidelity index Rf

Rg 101,5
Gammut index

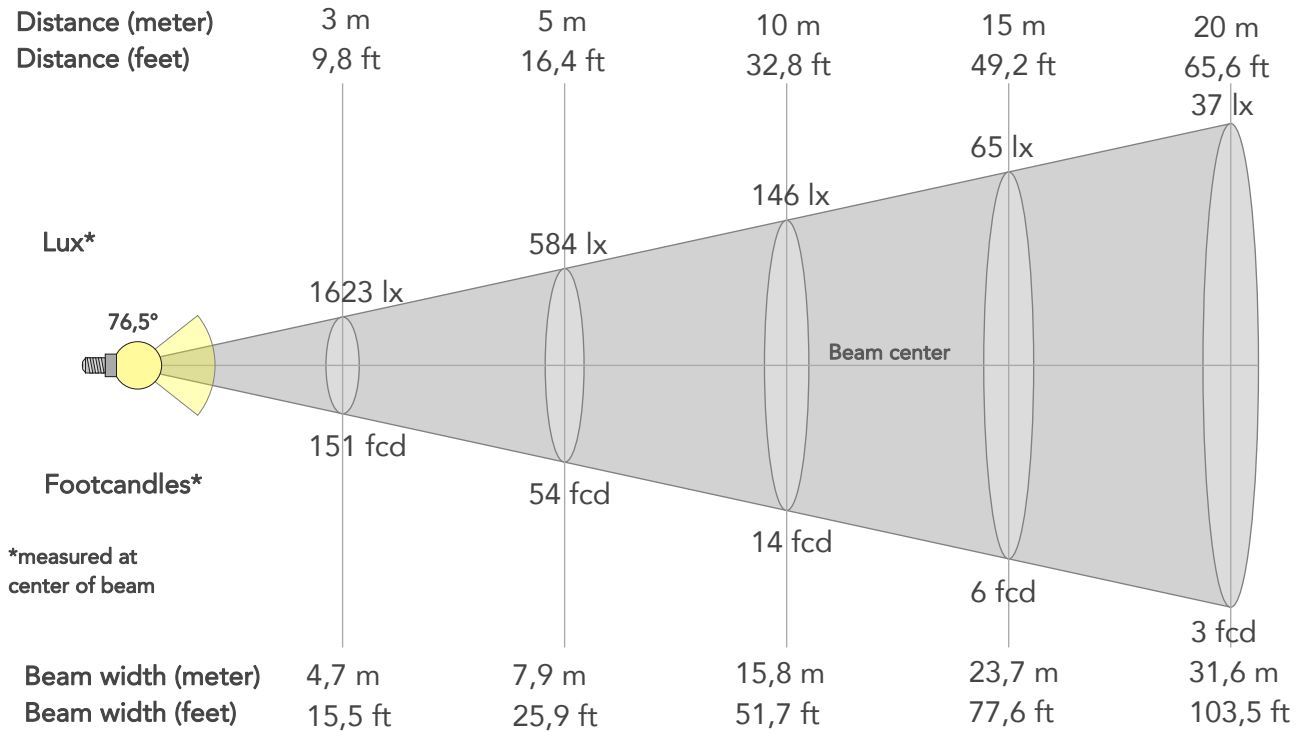
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	-1%
2	98	-1%	0%
3	97	0%	1%
4	97	0%	1%
5	97	1%	2%
6	95	3%	1%
7	96	2%	-2%
8	96	2%	-1%
9	97	0%	-1%
10	97	-1%	0%
11	96	0%	2%
12	94	2%	0%
13	95	2%	-3%
14	94	3%	-4%
15	96	1%	-2%
16	92	0%	-6%



BEAM DETAILS



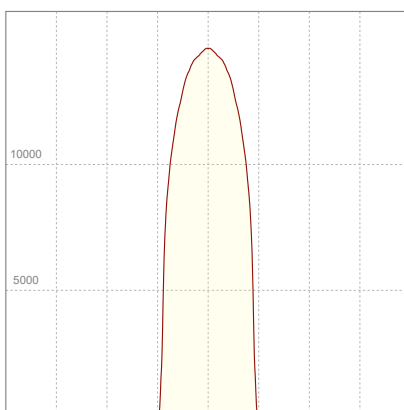
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,5°	84°	86,1°	99,8%	99,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	14609lx	3652lx	1623lx	913lx	584lx	260lx	146lx	65lx	37lx	23lx	16lx	9lx	6lx
Footcand.	1357fcd	339fcd	151fcd	85fcd	54fcd	24fcd	14fcd	6fcd	3fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,8m	15,8m	23,7m	31,6m	39,4m	47,3m	63,1m	78,9m
Beam wid.	5,2ft	10,4ft	15,5ft	20,7ft	25,9ft	38,8ft	51,7ft	77,6ft	103,5ft	129,4ft	155,2ft	207ft	258,7ft

LINEAR DISTRIBUTION DIAGRAM

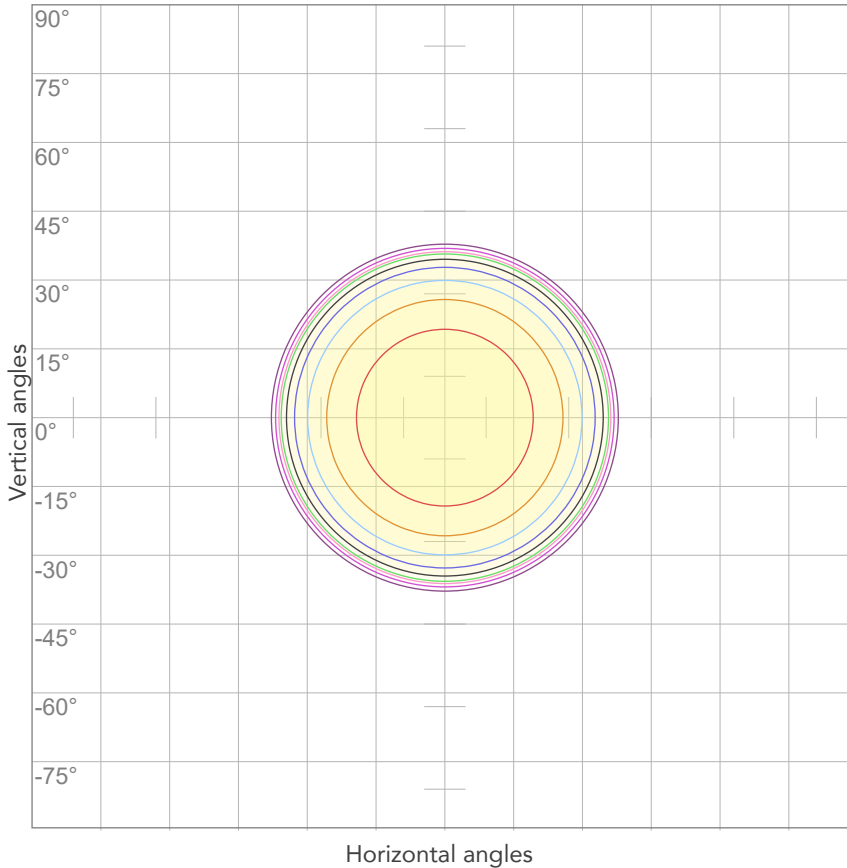


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	1,89A	411,6W	0,97	42lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



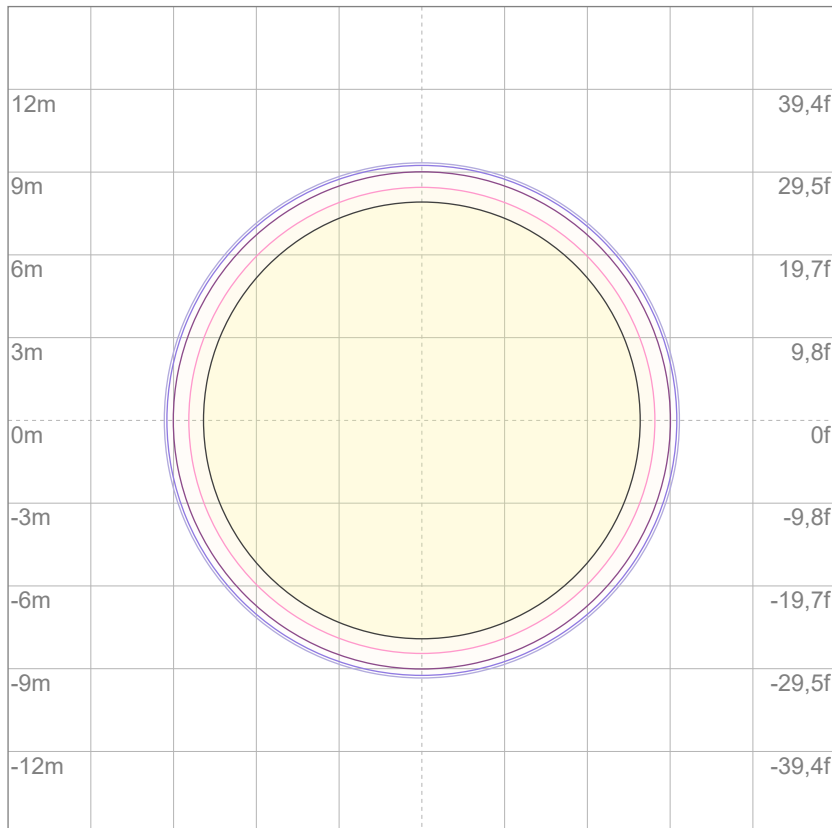
10%	1461 cd
20%	2922 cd
30%	4383 cd
40%	5844 cd
50%	7304 cd
60%	8765 cd
70%	10226 cd
80%	11687 cd

Conditions:

Number of c-planes: 2

Candela at center: 14609 cd

ISO LUX DIAGRAM



3%	4,38 lx
5%	7,30 lx
10%	14,6 lx
30%	43,8 lx
50%	73,0 lx

Conditions:

Number of c-planes: 2

Lux at center: 146 lx

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



Total lumen output:

18663 lm

Peak candela output:

15871 cd

Light quality:

CRI: 97,7

Color temperature:

3168 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL90

Target:

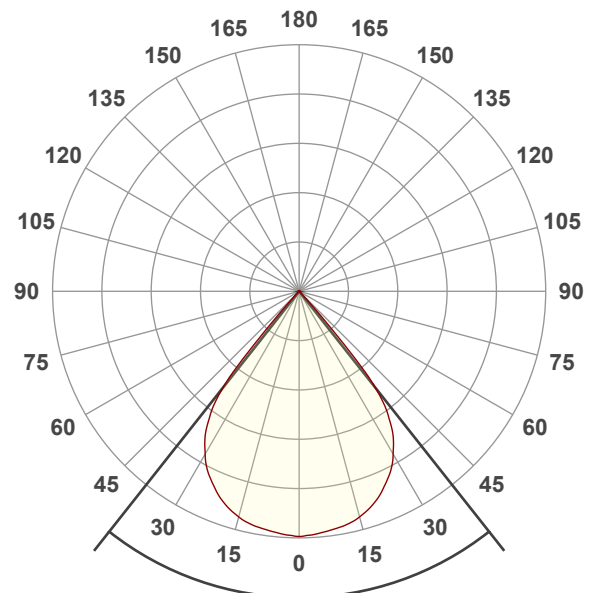
3200K

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 17:02:13

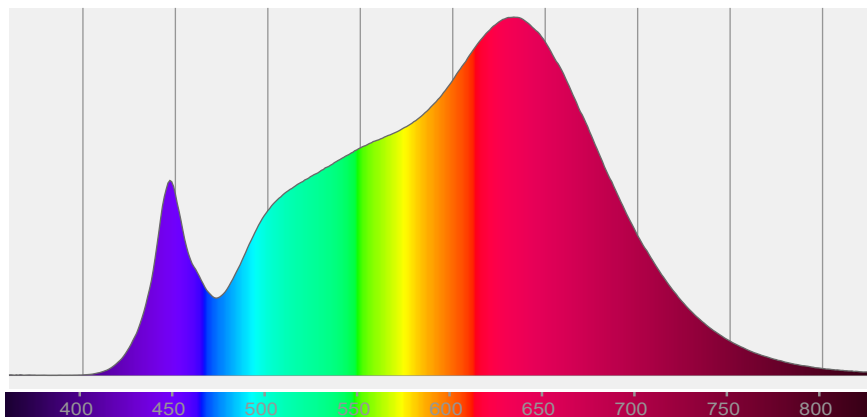


Beam angle 50%: 76,6°

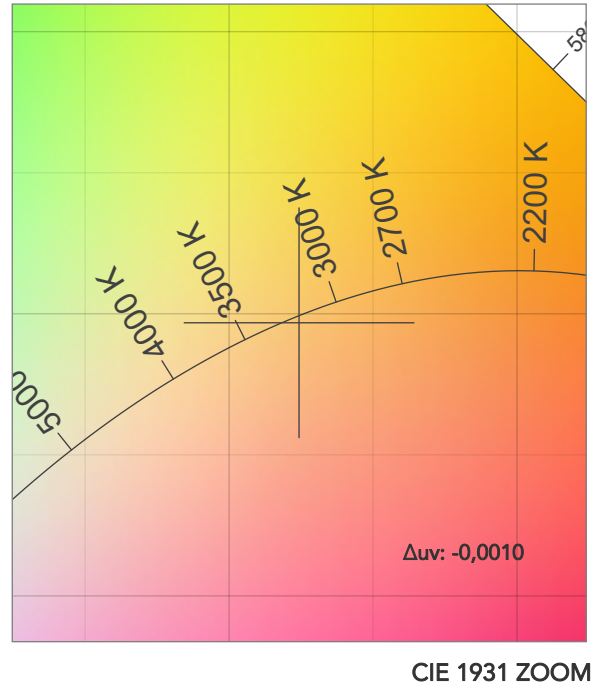
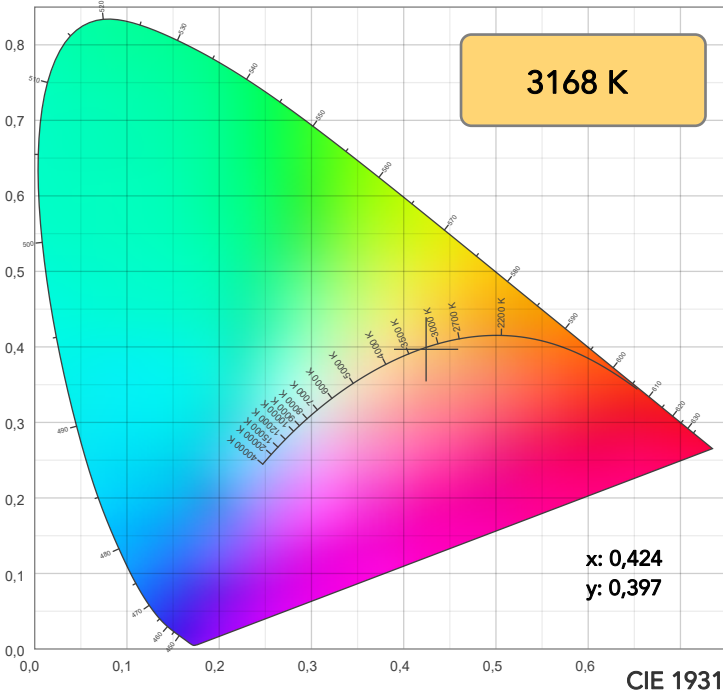
Field angle 10%: 83,9°

Cut off angle 2.5%: 86,4°

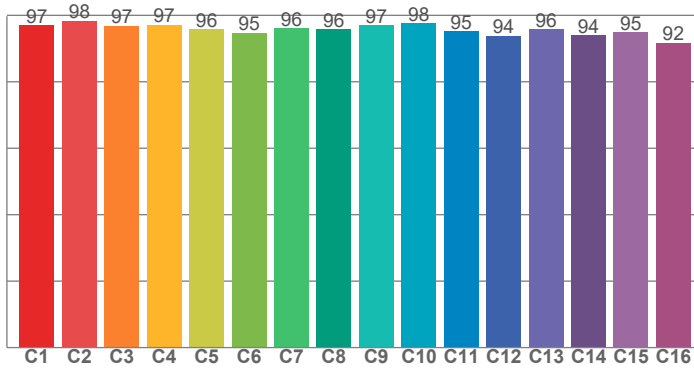
Spectra



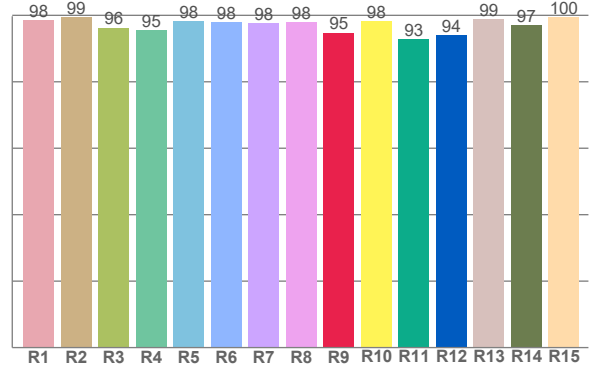
COLOR DETAILS



TM30: 96,0



CRI: 97,7 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,5	99,4	96,3	95,4	98,3	98,0	97,7	97,9	94,7	98,3	92,8	94,0	98,8	97,1	99,5

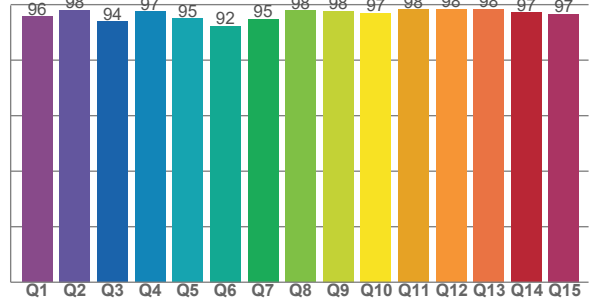
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
97,1	98,4	96,8	97,2	95,8	94,8	96,1	95,8	97,0	97,5	95,2	93,8	95,8	94,0	94,9	91,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95,7	98,1	94,0	97,5	95,0	92,3	94,8	97,9	97,7	97,0	98,3	98,3	98,4	97,1	96,7

CQS: 95,9



COLOR PARAMETERS

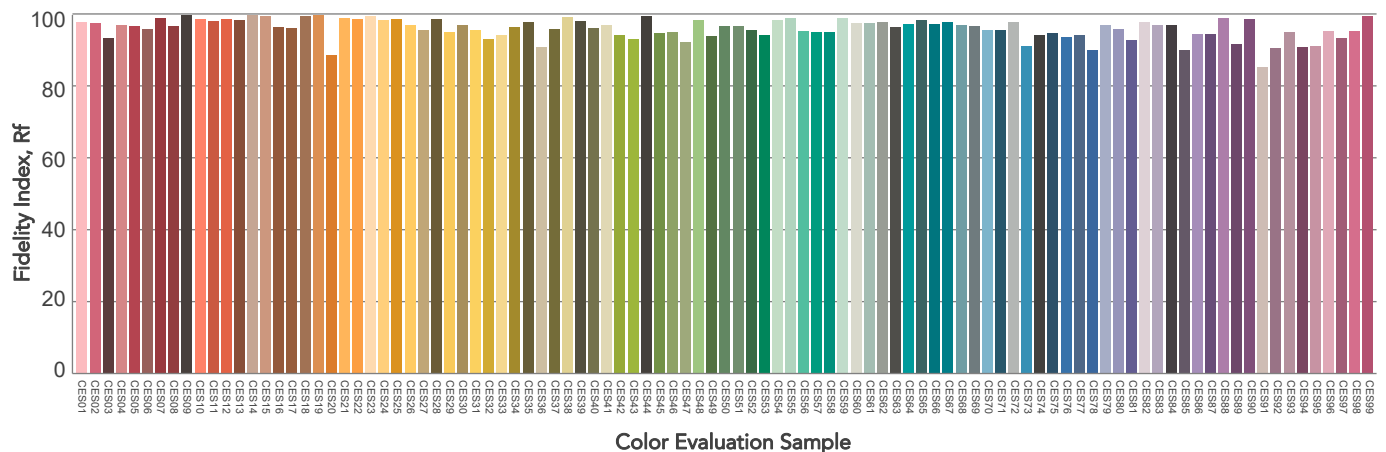
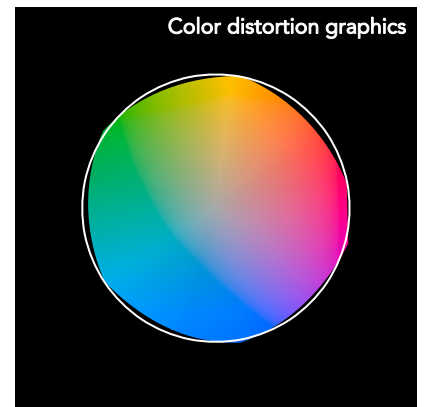
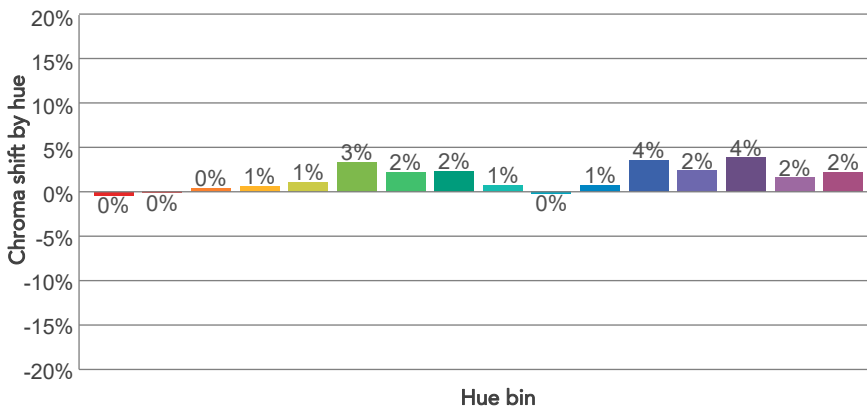
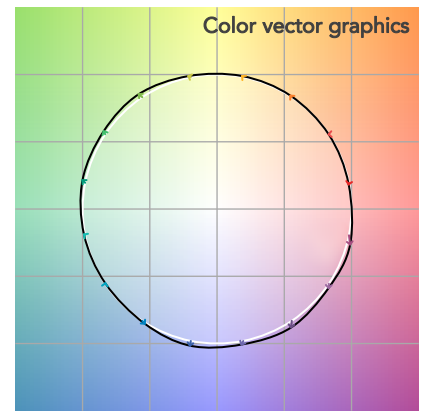
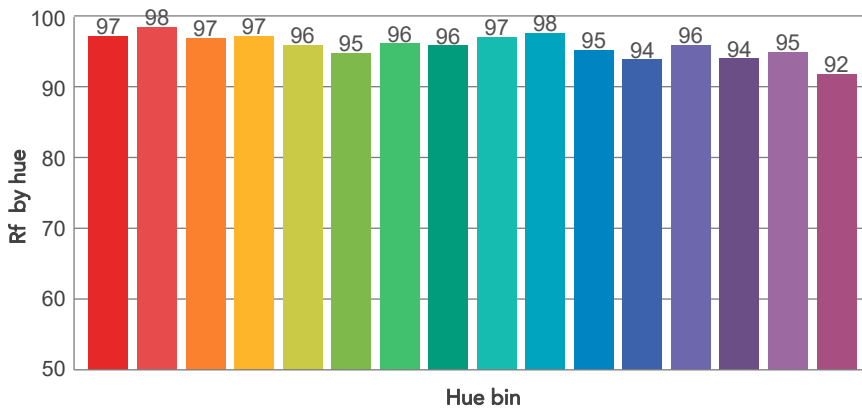
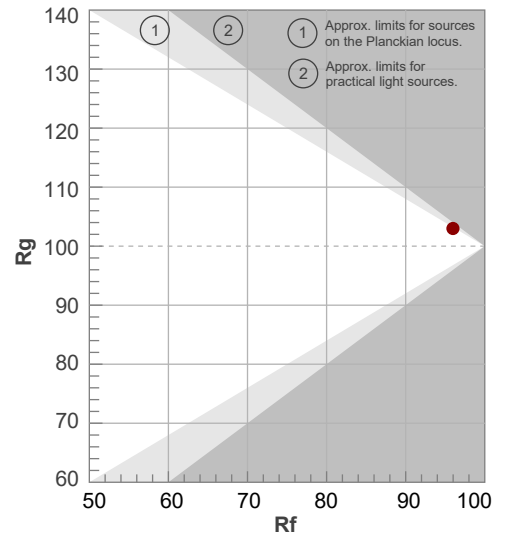
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3168 K	97,7	94,7	96,0	103,0	95,9	98	0,424	0,397	-0,0010

TM30 DETAILS

Rf 96,0
Fidelity index Rf

Rg 103,0
Gammut index

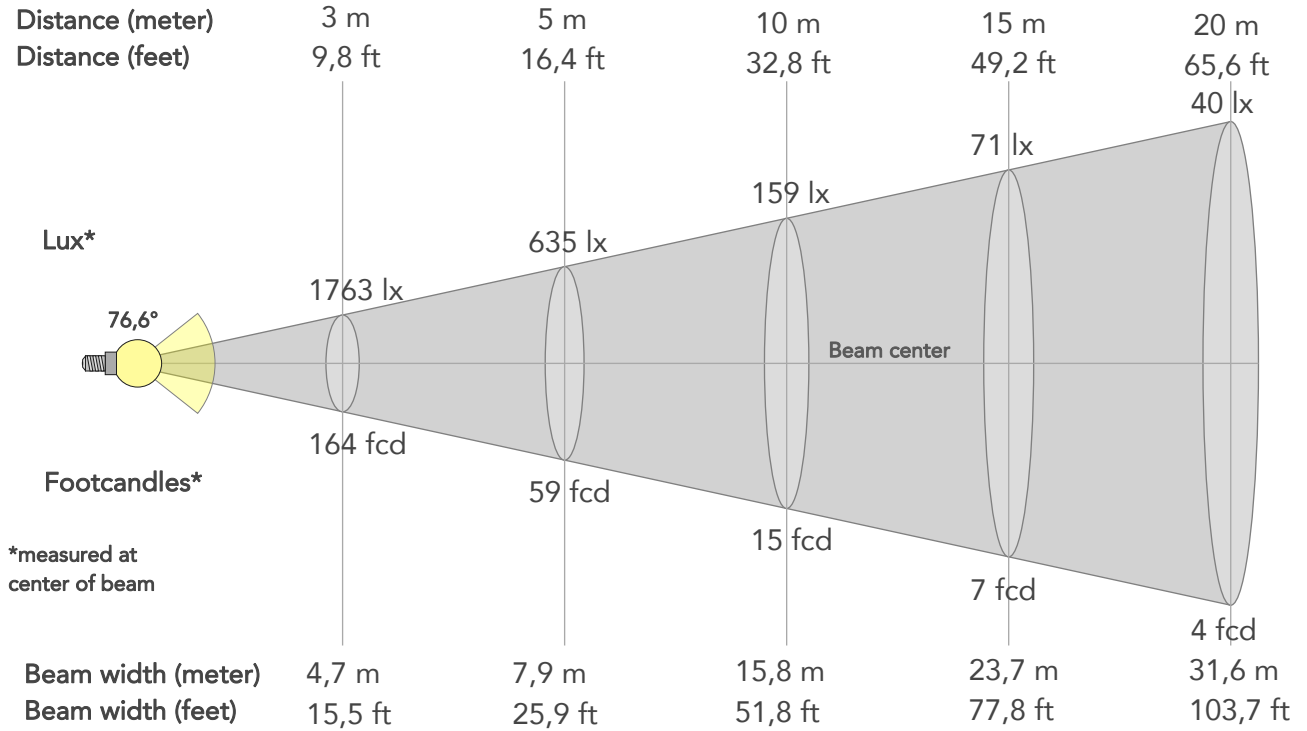
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	97	0%	-1%
2	98	0%	0%
3	97	0%	1%
4	97	1%	1%
5	96	1%	2%
6	95	3%	1%
7	96	2%	-1%
8	96	2%	-1%
9	97	1%	-1%
10	98	0%	0%
11	95	1%	3%
12	94	4%	0%
13	96	2%	-2%
14	94	4%	-3%
15	95	2%	-3%
16	92	2%	-7%



BEAM DETAILS



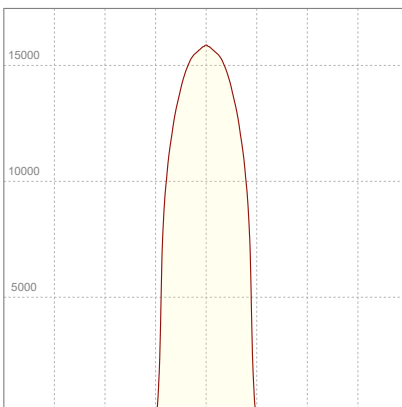
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,6°	83,9°	86,4°	99,8%	99,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	15871lx	3968lx	1763lx	992lx	635lx	282lx	159lx	71lx	40lx	25lx	18lx	10lx	6lx
Footcand.	1474fcd	369fcd	164fcd	92fcd	59fcd	26fcd	15fcd	7fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,9m	15,8m	23,7m	31,6m	39,5m	47,4m	63,2m	79m
Beam wid.	5,2ft	10,4ft	15,5ft	20,7ft	25,9ft	38,9ft	51,8ft	77,8ft	103,7ft	129,6ft	155,5ft	207,4ft	259,2ft

LINEAR DISTRIBUTION DIAGRAM

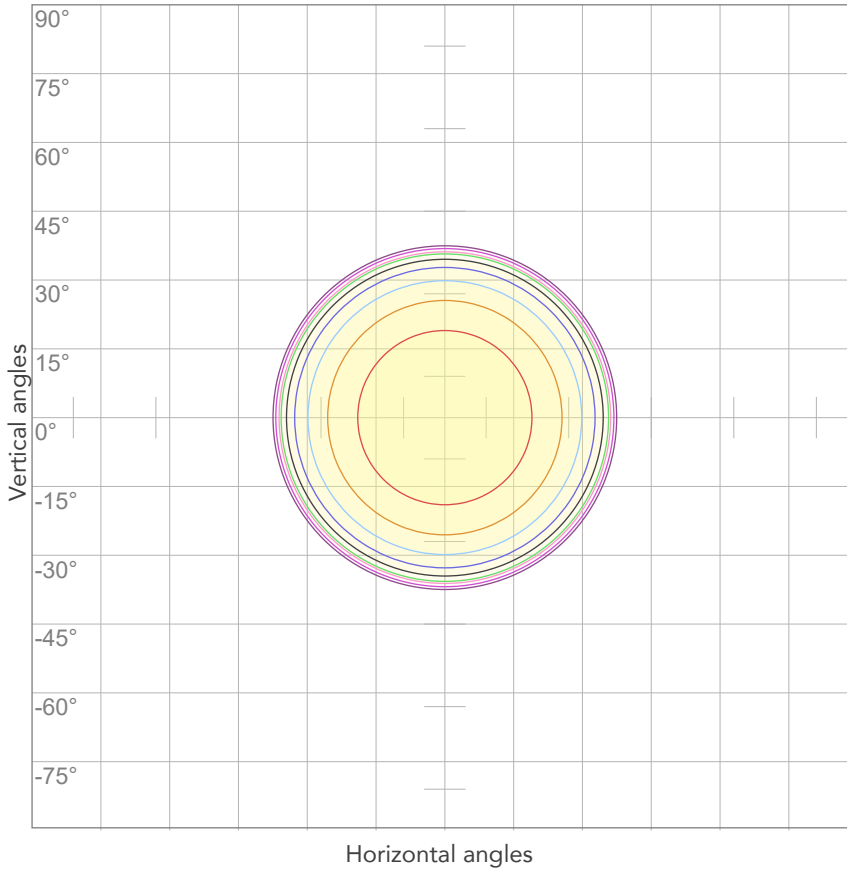


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	2,00A	438,8W	0,97	43lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



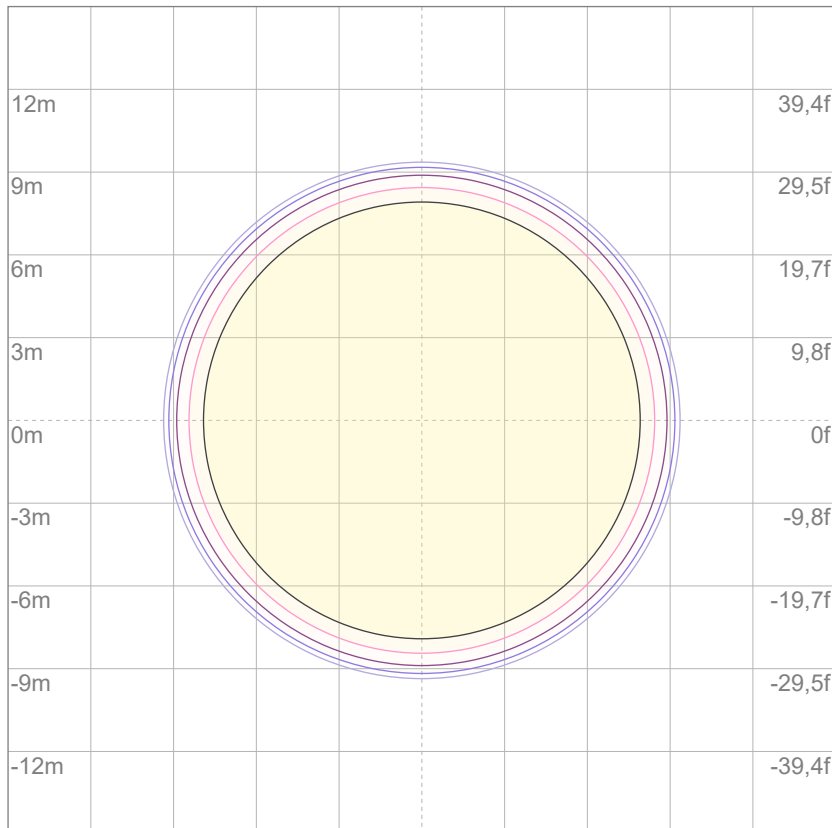
10%	1587 cd
20%	3174 cd
30%	4761 cd
40%	6348 cd
50%	7936 cd
60%	9523 cd
70%	11110 cd
80%	12697 cd

Conditions:

Number of c-planes: 2

Candela at center: 15871 cd

ISO LUX DIAGRAM



3%	4,76 lx
5%	7,94 lx
10%	15,9 lx
30%	47,6 lx
50%	79,4 lx

Conditions:

Number of c-planes: 2

Lux at center: 159 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:

20131 lm

Peak candela output:

17163 cd

Light quality:

CRI: 97,7

Color temperature:

3980 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL90

Target:

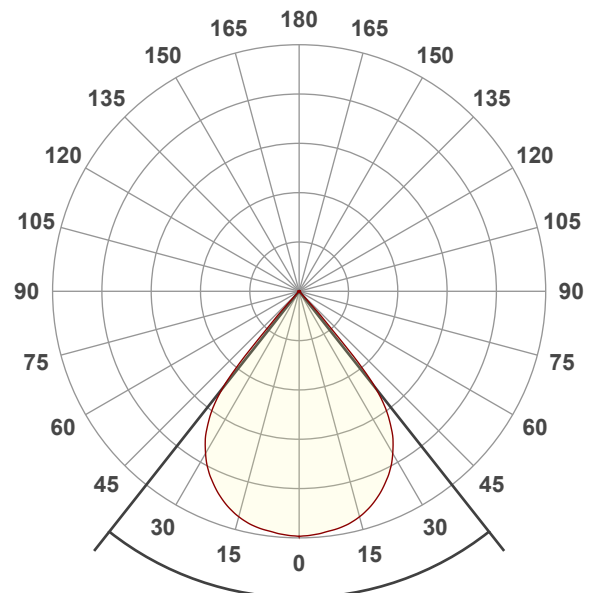
4000K

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 17:05:40

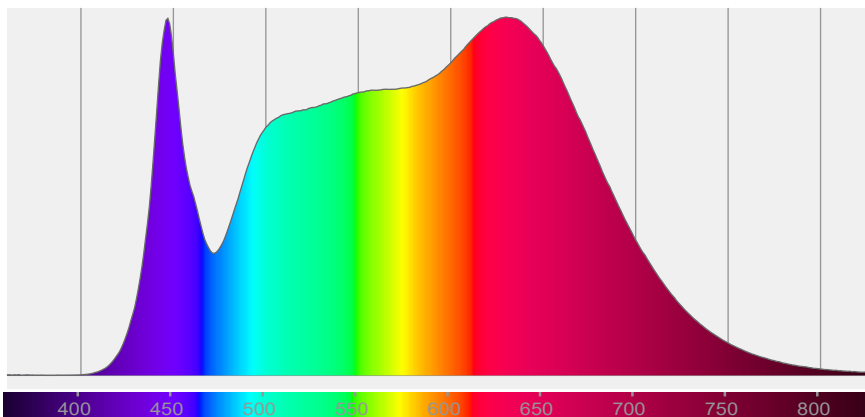


Beam angle 50%: 76,6°

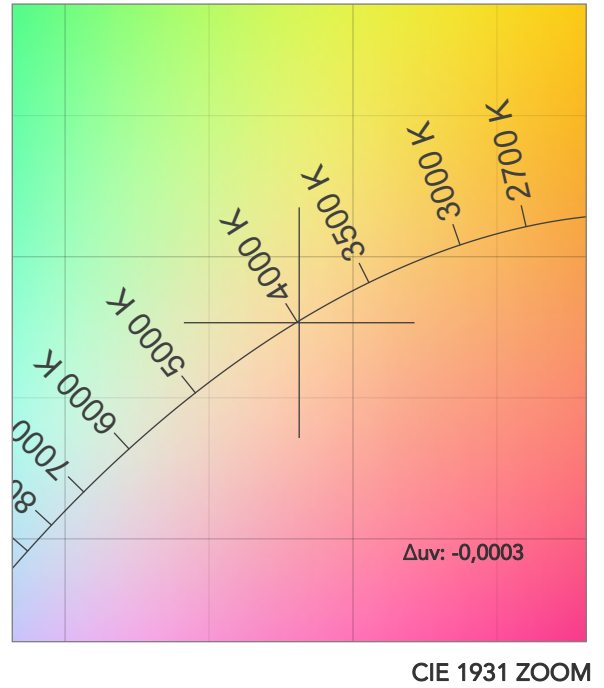
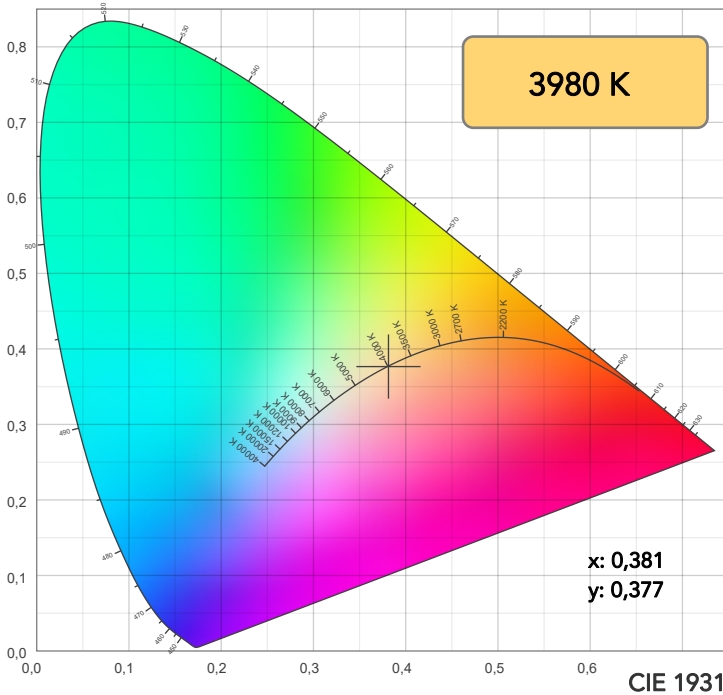
Field angle 10%: 84°

Cut off angle 2.5%: 86,2°

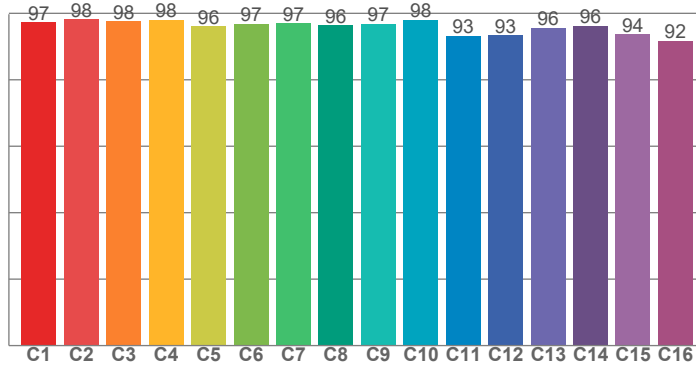
Spectra



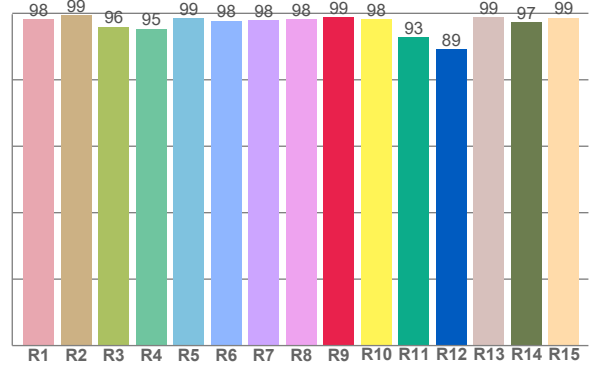
COLOR DETAILS



TM30: 96,1



CRI: 97,7 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,3	99,3	96,0	95,4	98,5	97,8	97,8	98,3	99,0	98,2	92,8	89,2	98,8	97,3	98,7

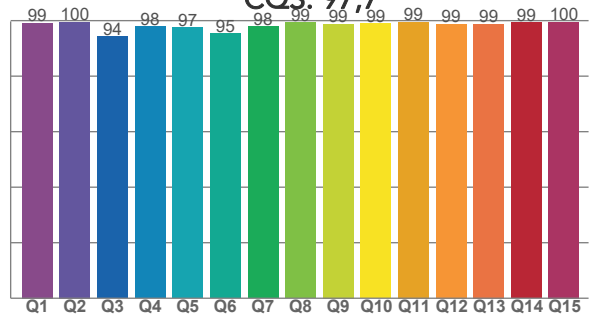
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
97,4	98,2	97,6	98,1	96,1	96,8	97,0	96,4	96,9	98,0	93,2	93,3	95,7	96,3	93,6	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,2	99,6	94,3	97,8	97,5	95,4	97,9	99,3	98,7	98,9	99,5	98,7	98,7	99,3	99,6

CQS: 97,7



COLOR PARAMETERS

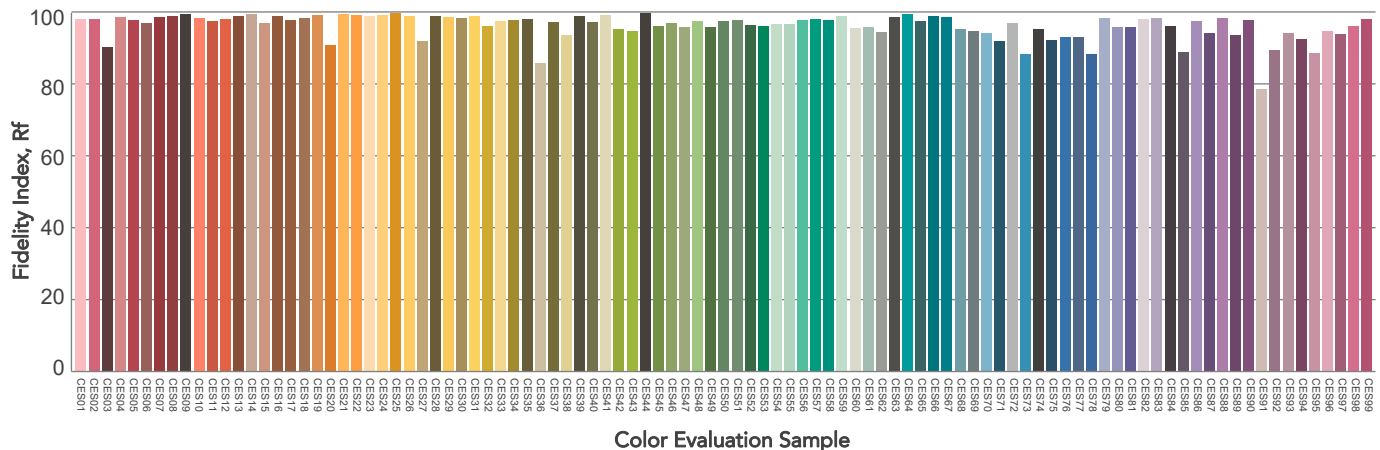
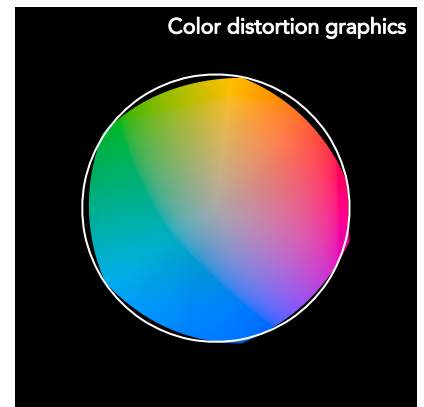
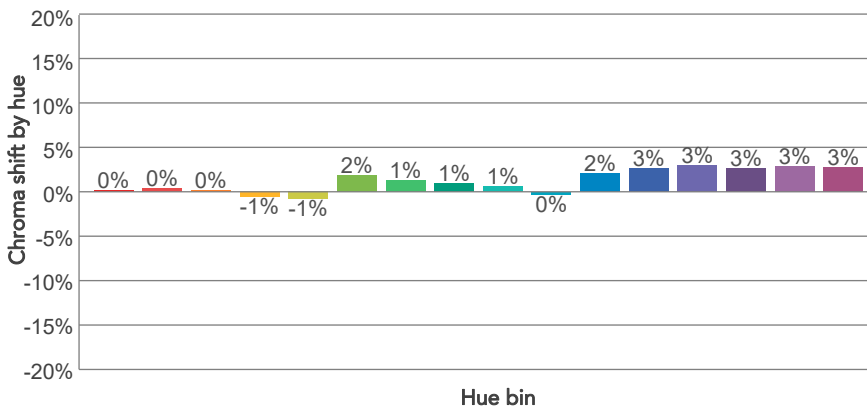
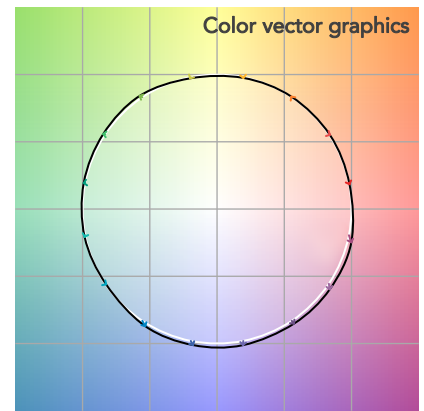
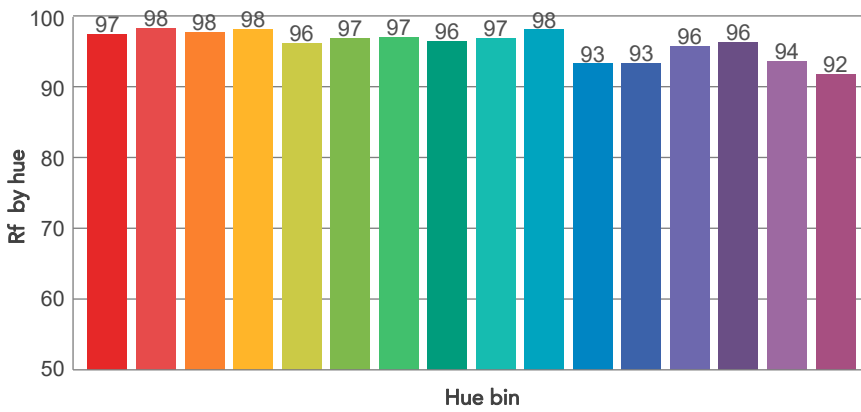
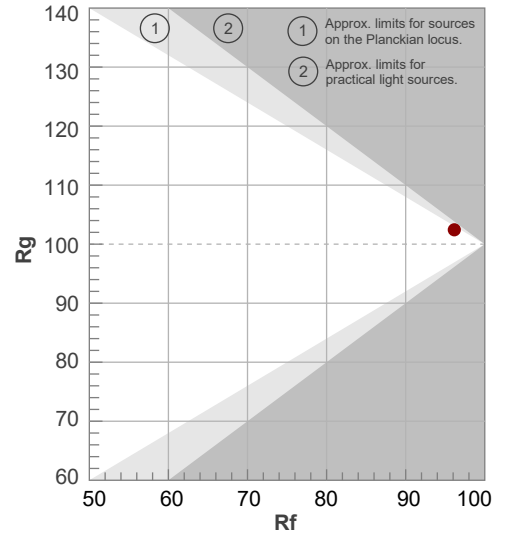
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3980 K	97,7	99,0	96,1	102,4	97,7	98	0,381	0,377	-0,0003

TM30 DETAILS

Rf 96,1
Fidelity index Rf

Rg 102,4
Gammut index

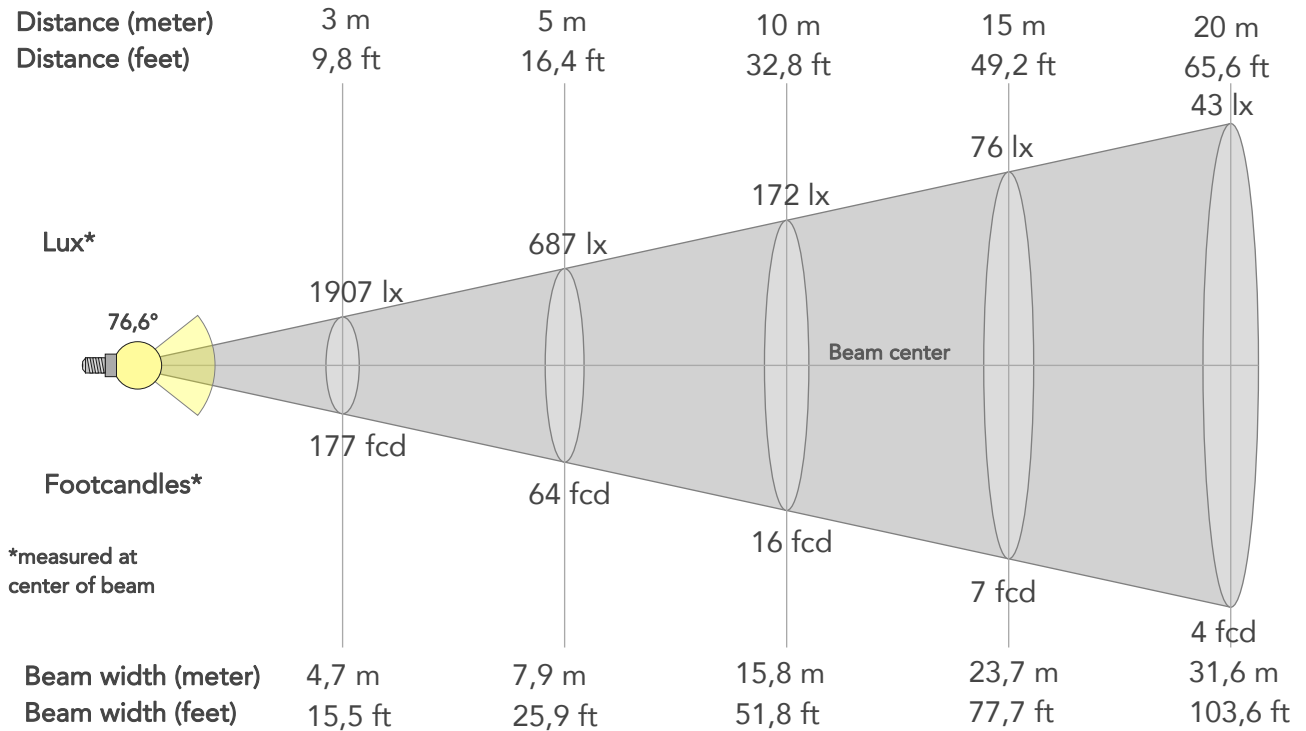
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	97	0%	-1%
2	98	0%	-1%
3	98	0%	0%
4	98	-1%	0%
5	96	-1%	1%
6	97	2%	1%
7	97	1%	1%
8	96	1%	0%
9	97	1%	1%
10	98	0%	1%
11	93	2%	4%
12	93	3%	2%
13	96	3%	-1%
14	96	3%	0%
15	94	3%	-3%
16	92	3%	-5%



BEAM DETAILS



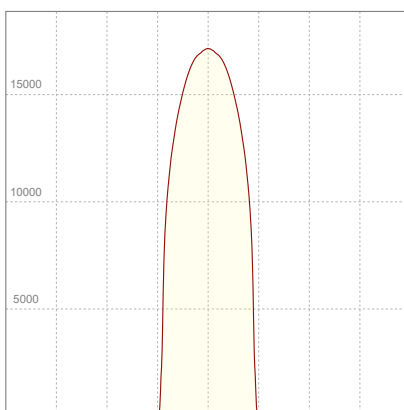
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,6°	84°	86,2°	99,7%	99,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	17163lx	4291lx	1907lx	1073lx	687lx	305lx	172lx	76lx	43lx	27lx	19lx	11lx	7lx
Footcand.	1595fcd	399fcd	177fcd	100fcd	64fcd	28fcd	16fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,8m	15,8m	23,7m	31,6m	39,5m	47,4m	63,2m	79m
Beam wid.	5,2ft	10,4ft	15,5ft	20,7ft	25,9ft	38,9ft	51,8ft	77,7ft	103,6ft	129,5ft	155,4ft	207,2ft	259ft

LINEAR DISTRIBUTION DIAGRAM

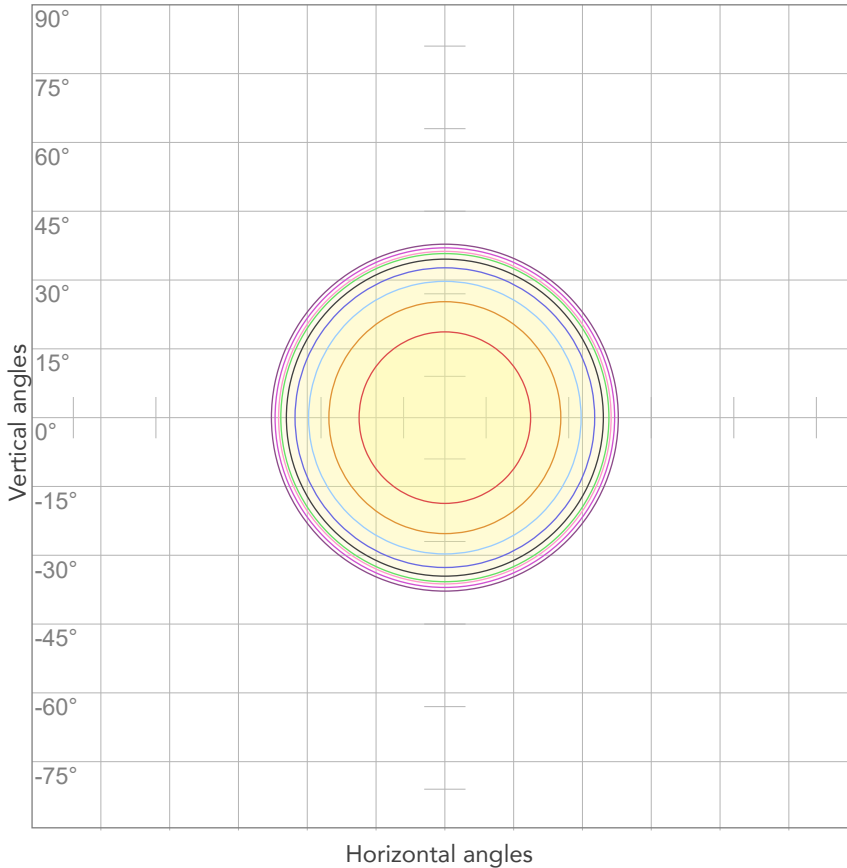


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	1,99A	436,3W	0,97	46lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



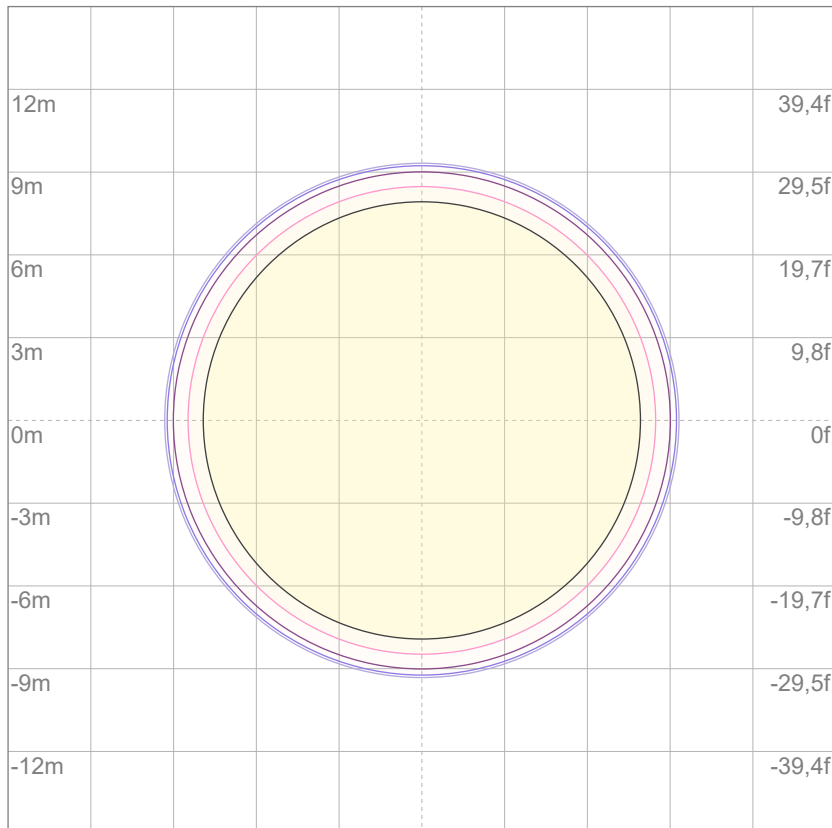
10%	1716 cd
20%	3433 cd
30%	5149 cd
40%	6865 cd
50%	8582 cd
60%	10298 cd
70%	12014 cd
80%	13731 cd

Conditions:

Number of c-planes: 2

Candela at center: 17163 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	5,15 lx
5%	8,58 lx
10%	17,2 lx
30%	51,5 lx
50%	85,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 172 lx

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



Total lumen output:

21588 lm

Peak candela output:

18385 cd

Light quality:

CRI: 96,8

Color temperature:

5559 K

PRODUCT NAME:

ECLFWHPVW

MEASURAMENT CONDITIONS:

Beam angle:

PRL90

Target:

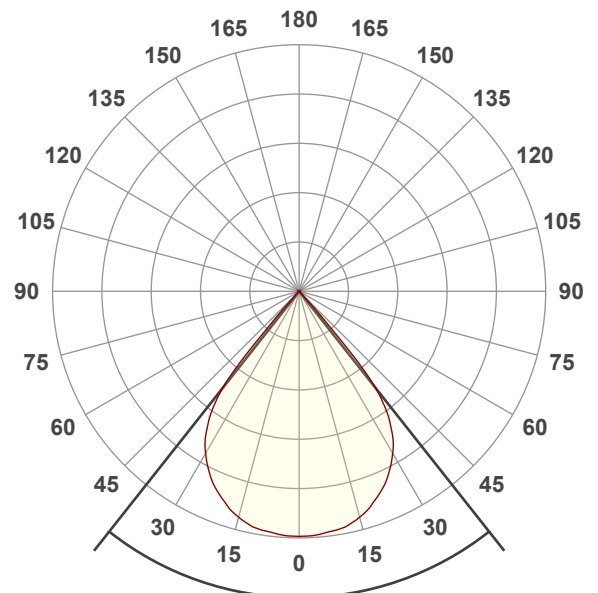
5600K

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 17:09:25

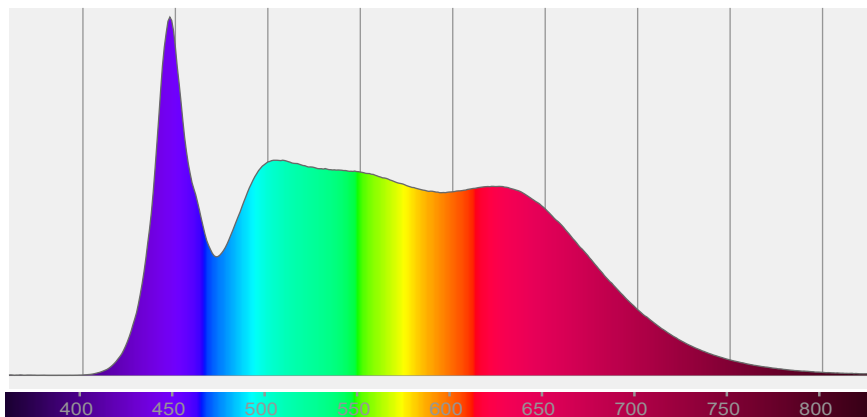


Beam angle 50%: 76,7°

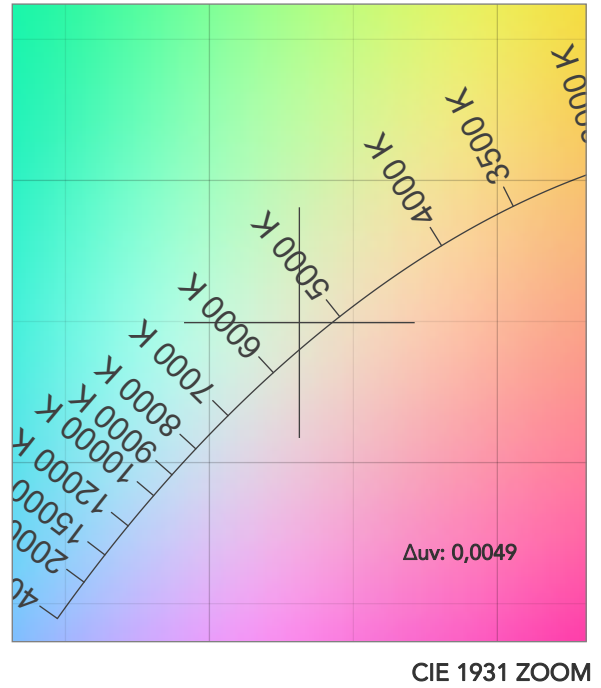
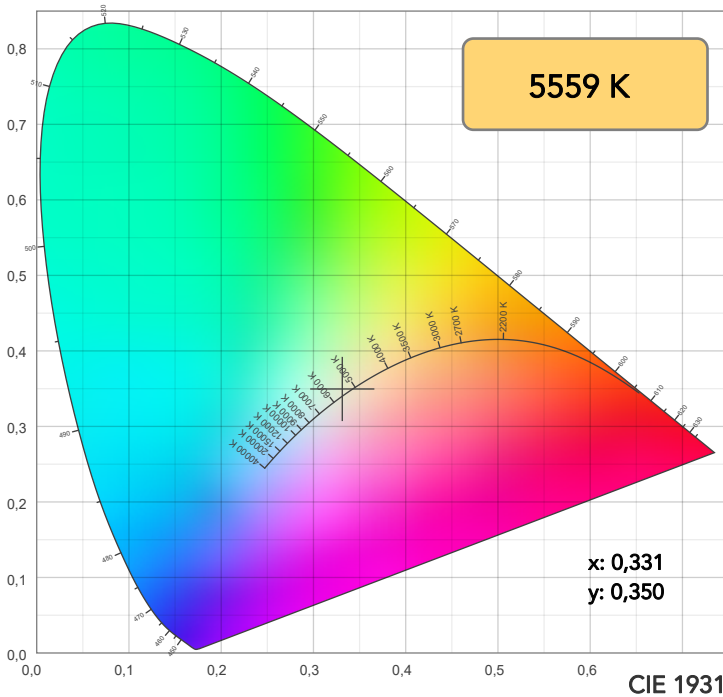
Field angle 10%: 84,1°

Cut off angle 2.5%: 86,1°

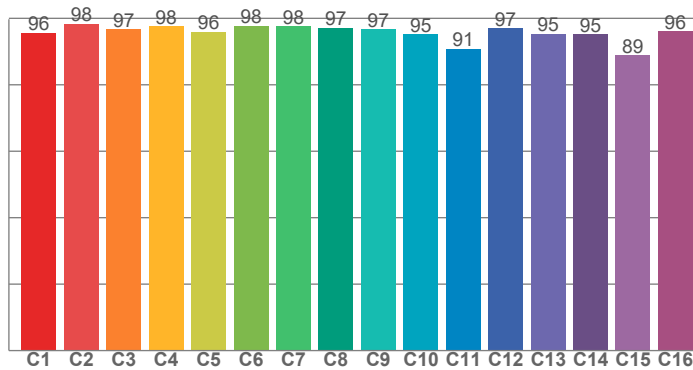
Spectra



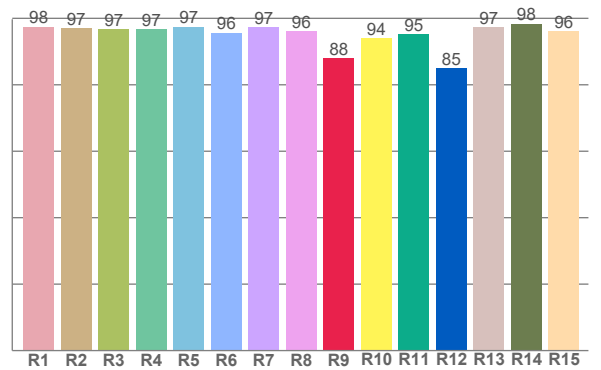
COLOR DETAILS



TM30: 95,6



CRI: 96,8 (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
97,5	97,1	96,7	96,7	97,5	95,7	97,4	96,1	88,1	94,1	95,2	85,0	97,3	98,4	96,1

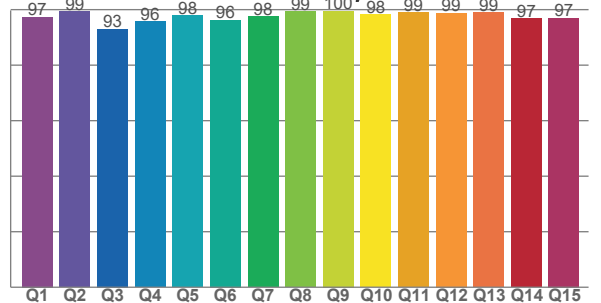
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,6	98,4	96,7	97,5	96,0	97,7	97,6	97,1	96,7	95,1	90,9	97,0	95,4	95,2	88,9	96,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
97,3	99,4	93,1	95,7	97,9	96,3	97,6	99,3	99,6	98,3	99,0	98,8	98,9	96,8	97,0

CQS: 97,1



COLOR PARAMETERS

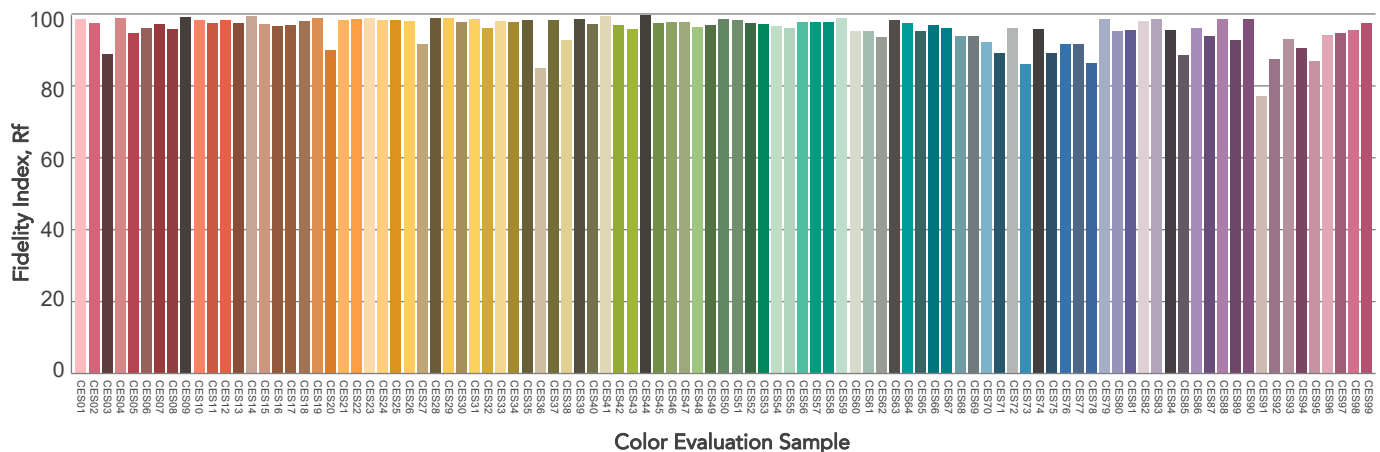
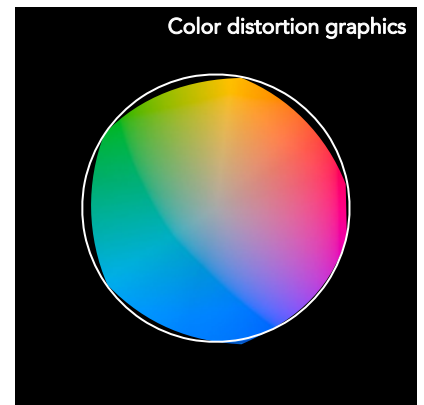
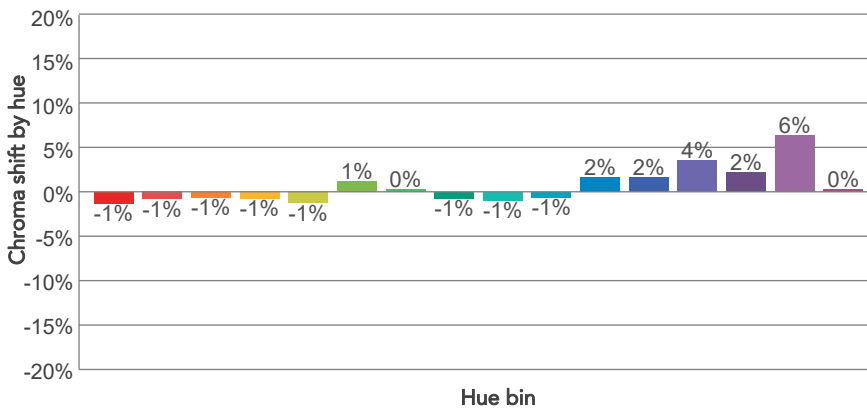
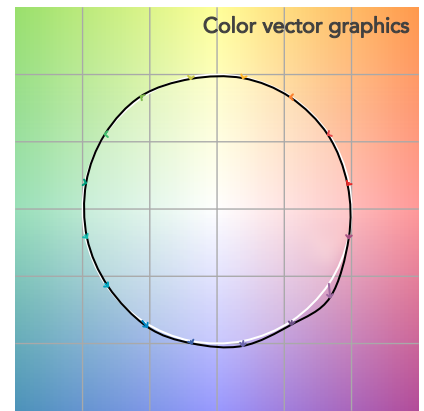
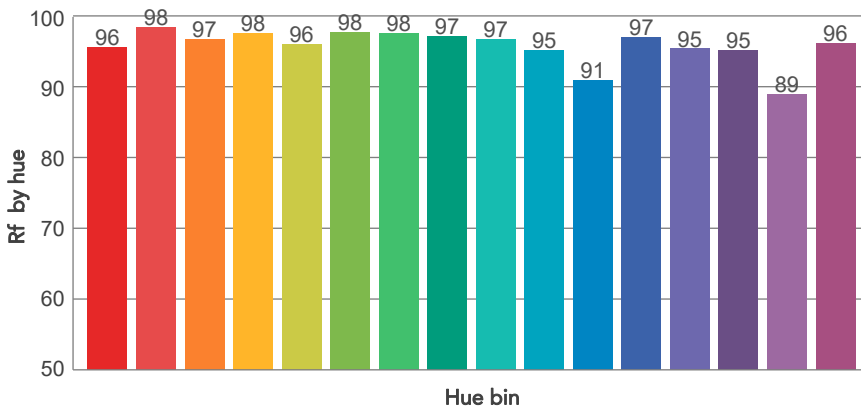
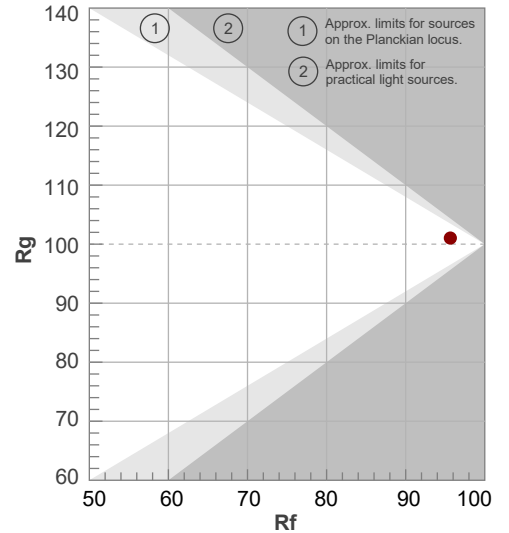
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5559 K	96,8	88,1	95,6	101,0	97,1	99	0,331	0,350	0,0049

TM30 DETAILS

Rf 95,6
Fidelity index Rf

Rg 101,0
Gammut index

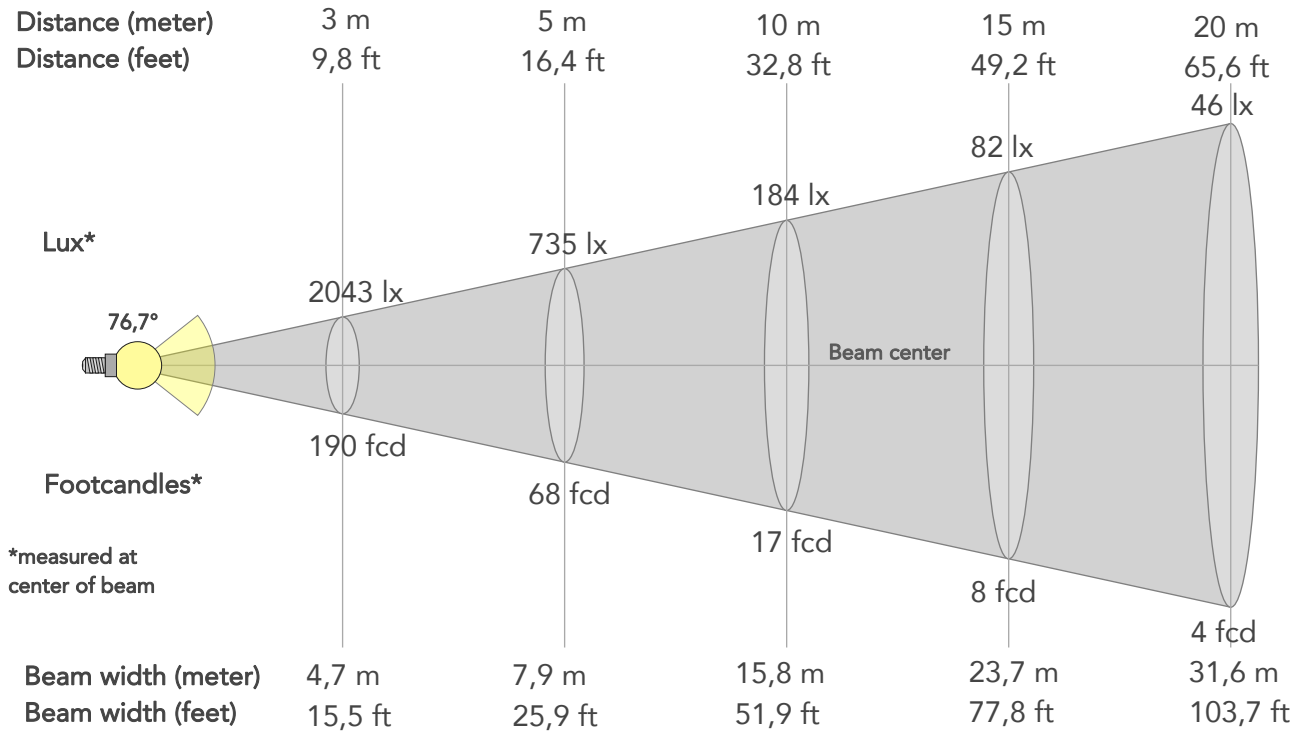
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	-1%
2	98	-1%	0%
3	97	-1%	1%
4	98	-1%	0%
5	96	-1%	0%
6	98	1%	1%
7	98	0%	0%
8	97	-1%	0%
9	97	-1%	2%
10	95	-1%	3%
11	91	2%	5%
12	97	2%	1%
13	95	4%	-1%
14	95	2%	-2%
15	89	6%	-8%
16	96	0%	-2%



BEAM DETAILS



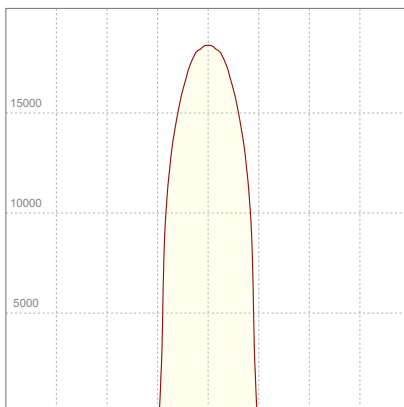
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,7°	84,1°	86,1°	99,7%	99,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	18385lx	4596lx	2043lx	1149lx	735lx	327lx	184lx	82lx	46lx	29lx	20lx	11lx	7lx
Footcand.	1708fcd	427fcd	190fcd	107fcd	68fcd	30fcd	17fcd	8fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,9m	15,8m	23,7m	31,6m	39,5m	47,4m	63,2m	79m
Beam wid.	5,2ft	10,4ft	15,5ft	20,7ft	25,9ft	38,9ft	51,9ft	77,8ft	103,7ft	129,6ft	155,6ft	207,4ft	259,3ft

LINEAR DISTRIBUTION DIAGRAM

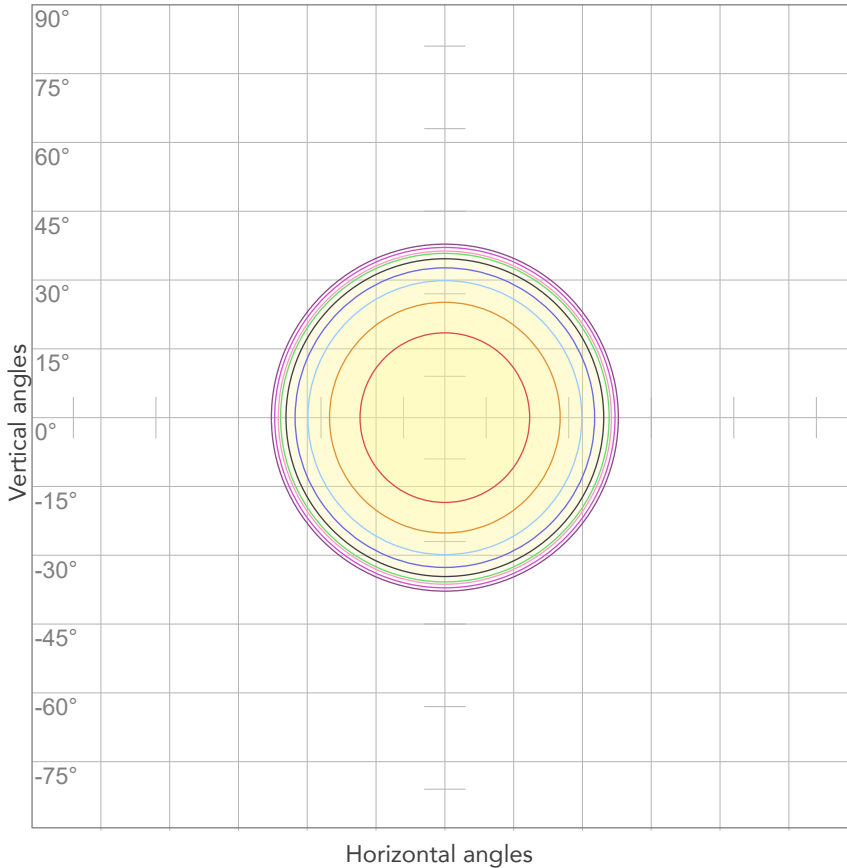


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	2,00A	435,6W	0,97	50lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



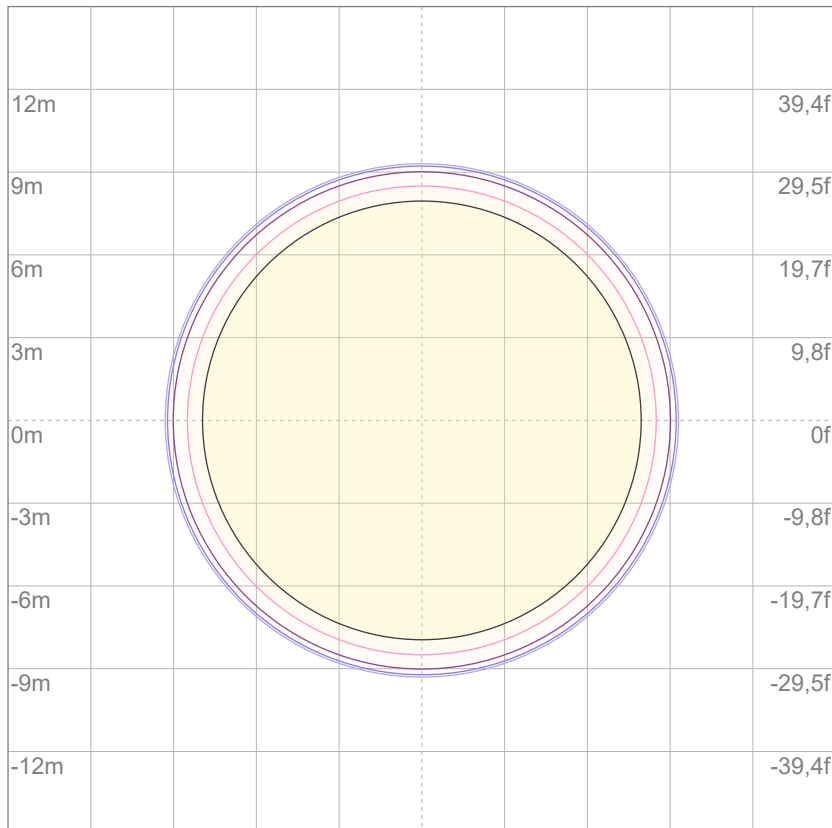
10%	1838 cd
20%	3677 cd
30%	5515 cd
40%	7354 cd
50%	9192 cd
60%	11031 cd
70%	12869 cd
80%	14708 cd

Conditions:

Number of c-planes: 2

Candela at center: 18385 cd

ISO LUX DIAGRAM



3%	5,52 lx
5%	9,19 lx
10%	18,4 lx
30%	55,2 lx
50%	91,9 lx

Conditions:

Number of c-planes: 2

Lux at center: 184 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:

21257 lm

Peak candela output:

18101 cd

Light quality:

CRI: 96,1

Color temperature:

5909 K

PRODUCT NAME:

ECLFWHPVW

MEASUREMENT CONDITIONS:

Beam angle:

PRL90

Target:

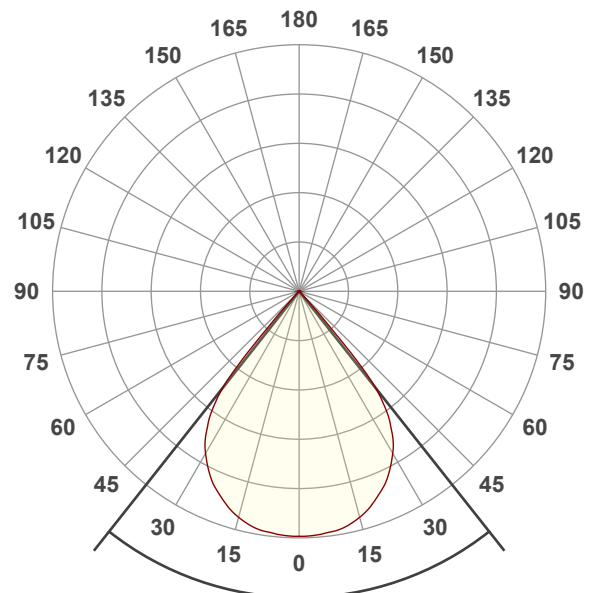
6000K

Operator:

Giuseppe della Peruta

Date and time:

08/01/2026 17:12:25

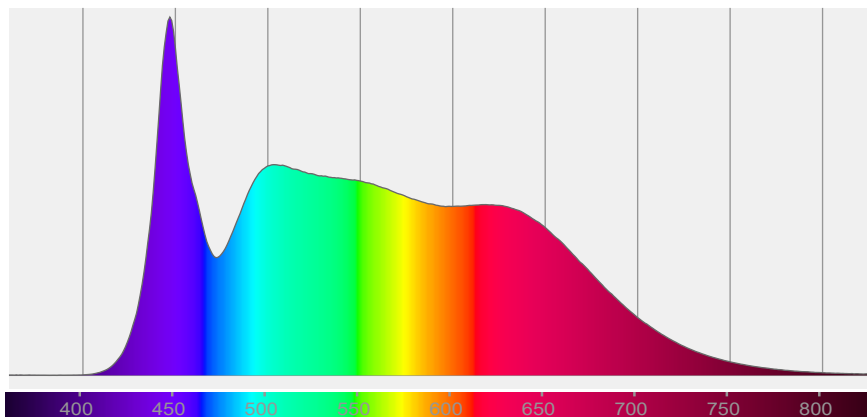


Beam angle 50%: 76,7°

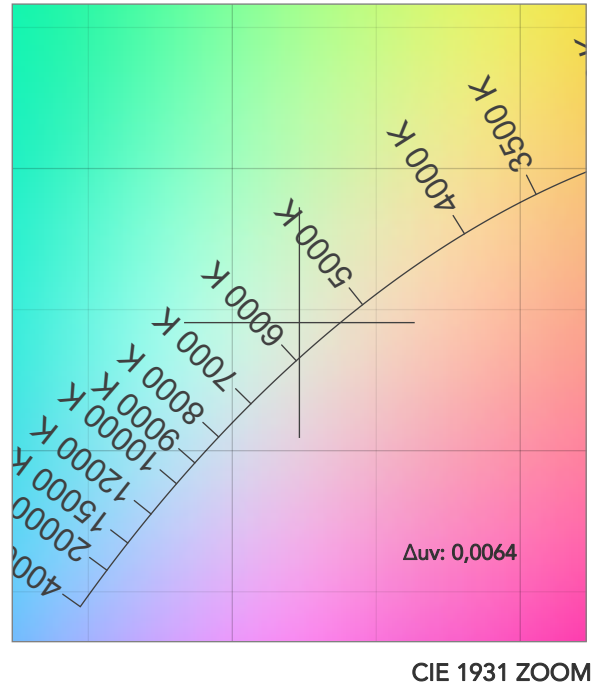
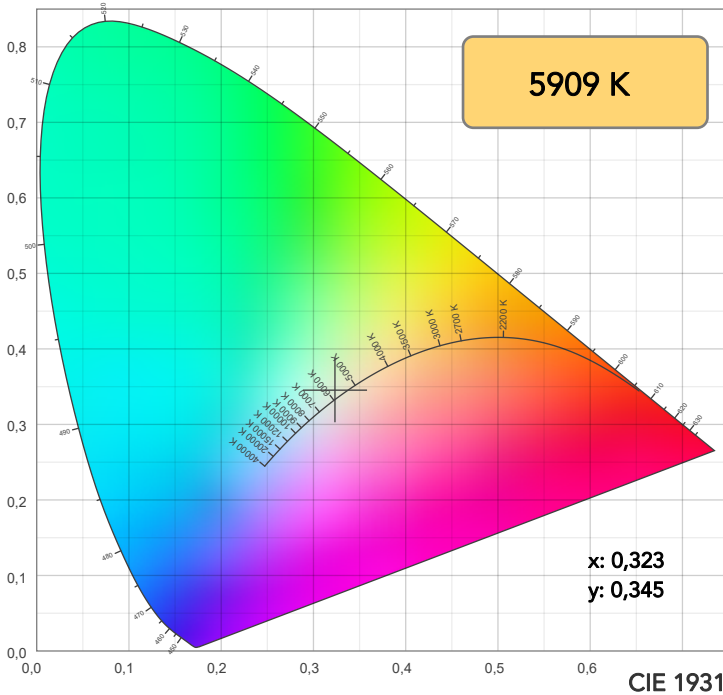
Field angle 10%: 84°

Cut off angle 2.5%: 86,3°

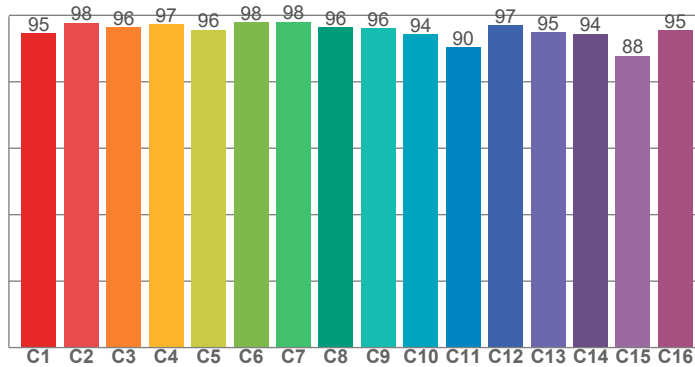
Spectra



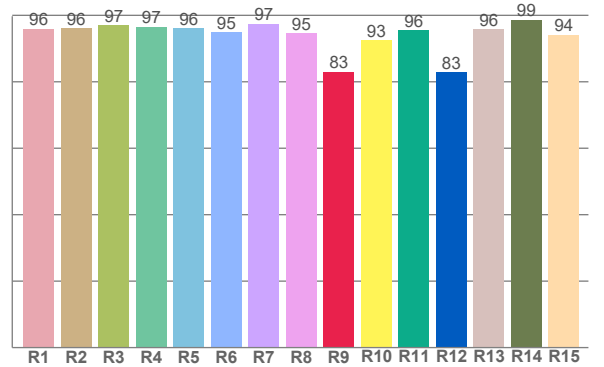
COLOR DETAILS



TM30: 95,2



CRI: 96,1 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
96,0	96,2	97,0	96,6	96,1	94,9	97,5	94,6	83,0	92,6	95,5	83,0	95,9	98,7	94,2

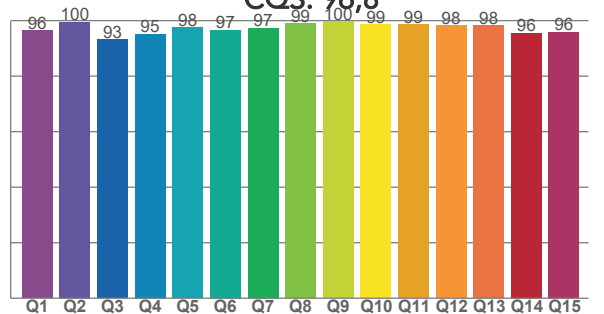
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,6	97,7	96,4	97,4	95,6	97,8	98,1	96,4	96,1	94,4	90,4	97,1	95,0	94,5	87,8	95,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,4	99,6	93,2	95,3	97,6	96,6	97,3	98,9	99,7	98,5	98,6	98,2	98,2	95,5	95,9

CQS: 96,8



COLOR PARAMETERS

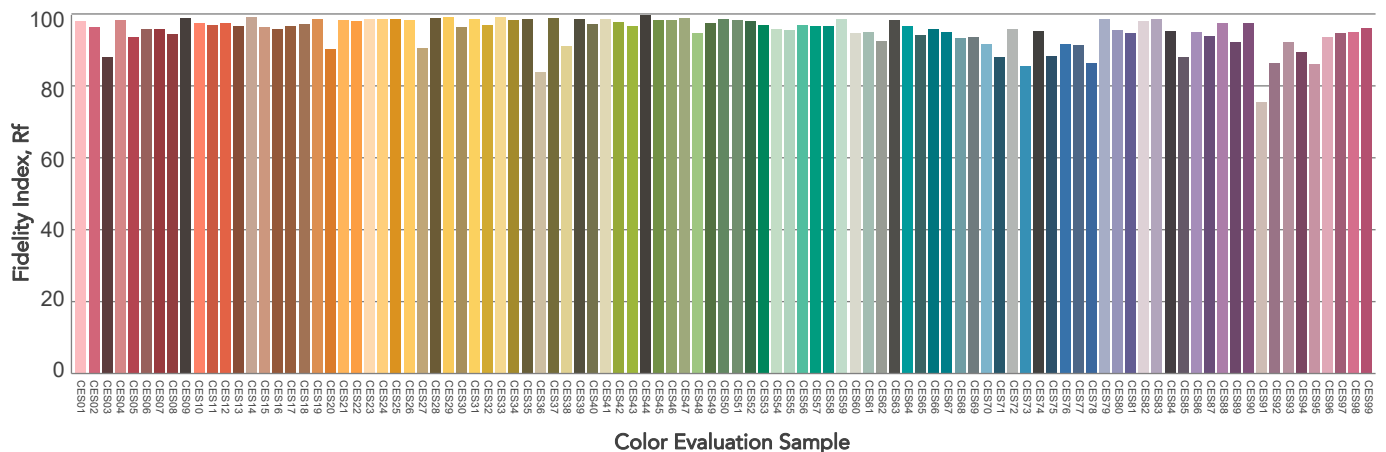
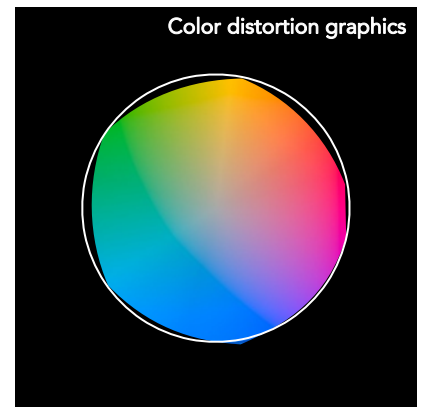
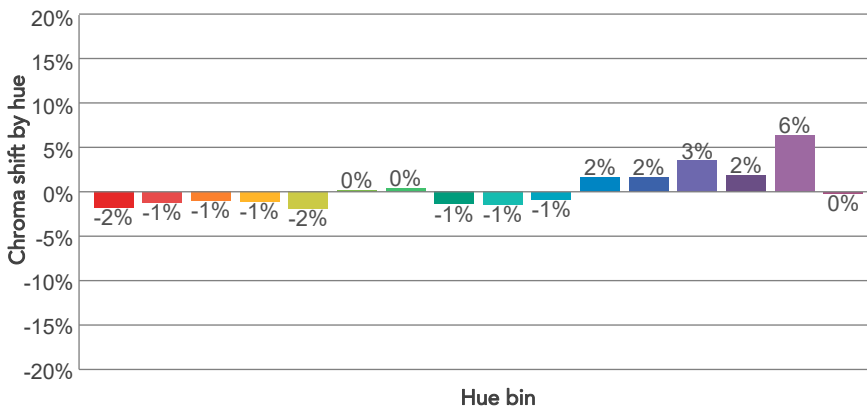
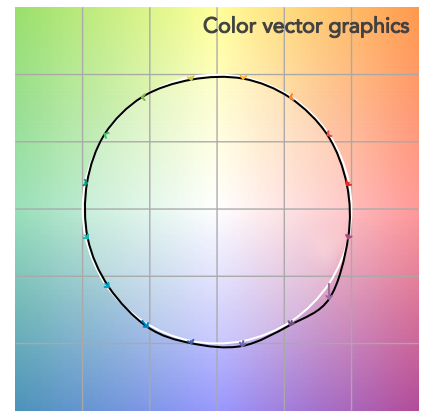
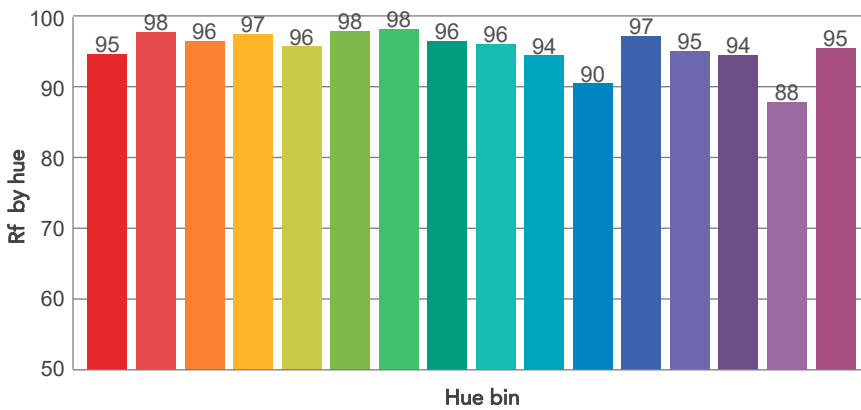
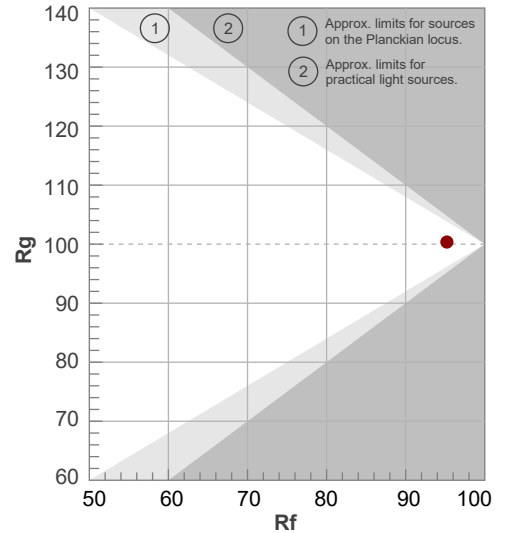
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5909 K	96,1	83,0	95,2	100,4	96,8	99	0,323	0,345	0,0064

TM30 DETAILS

Rf 95,2
Fidelity index Rf

Rg 100,4
Gammut index

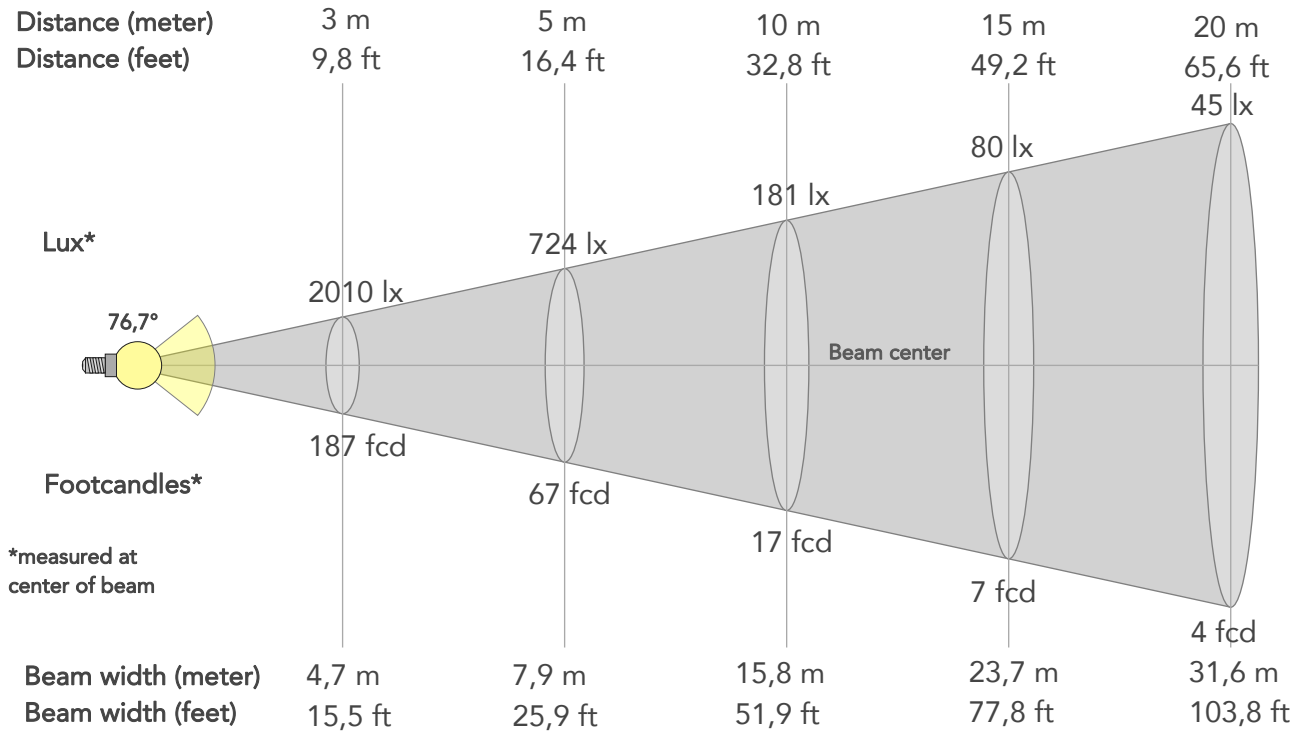
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	-1%
2	98	-1%	0%
3	96	-1%	1%
4	97	-1%	0%
5	96	-2%	0%
6	98	0%	0%
7	98	0%	0%
8	96	-1%	0%
9	96	-1%	3%
10	94	-1%	3%
11	90	2%	6%
12	97	2%	1%
13	95	3%	-2%
14	94	2%	-3%
15	88	6%	-9%
16	95	0%	-2%



BEAM DETAILS



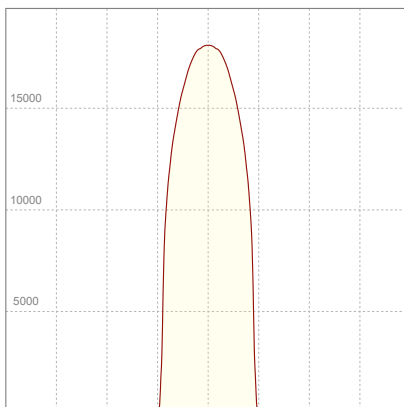
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
76,7°	84°	86,3°	99,7%	99,6%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	18093lx	4523lx	2010lx	1131lx	724lx	322lx	181lx	80lx	45lx	29lx	20lx	11lx	7lx
Footcand.	1681fcd	420fcd	187fcd	105fcd	67fcd	30fcd	17fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	1,6m	3,2m	4,7m	6,3m	7,9m	11,9m	15,8m	23,7m	31,6m	39,6m	47,5m	63,3m	79,1m
Beam wid.	5,2ft	10,4ft	15,5ft	20,7ft	25,9ft	38,9ft	51,9ft	77,8ft	103,8ft	129,7ft	155,7ft	207,6ft	259,5ft

LINEAR DISTRIBUTION DIAGRAM

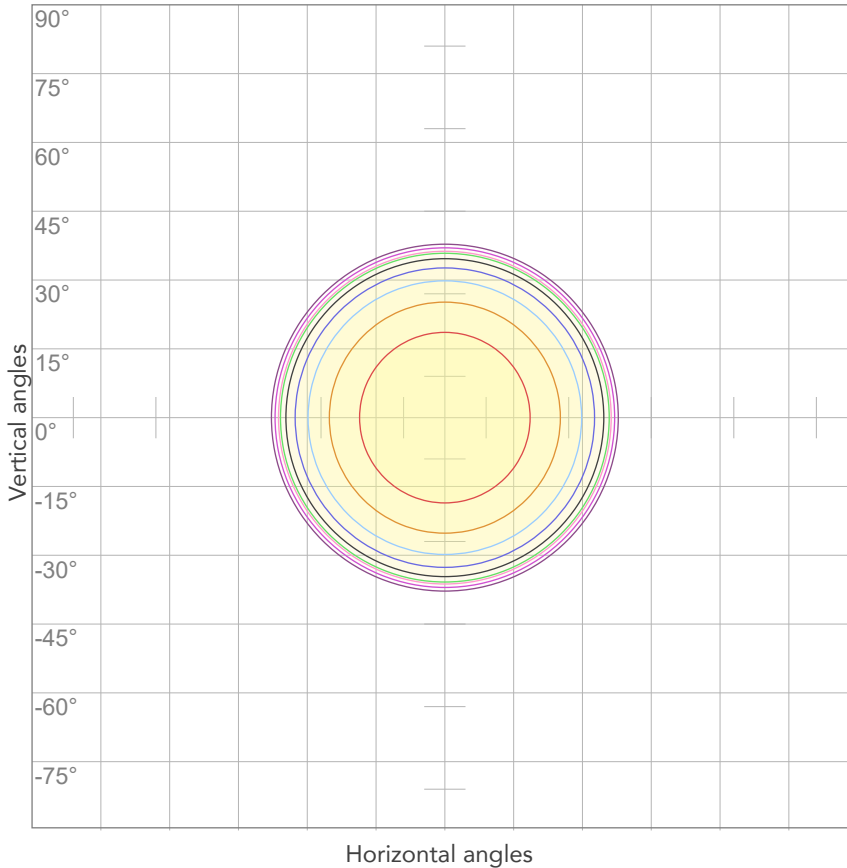


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	1,93A	422,4W	0,97	50lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



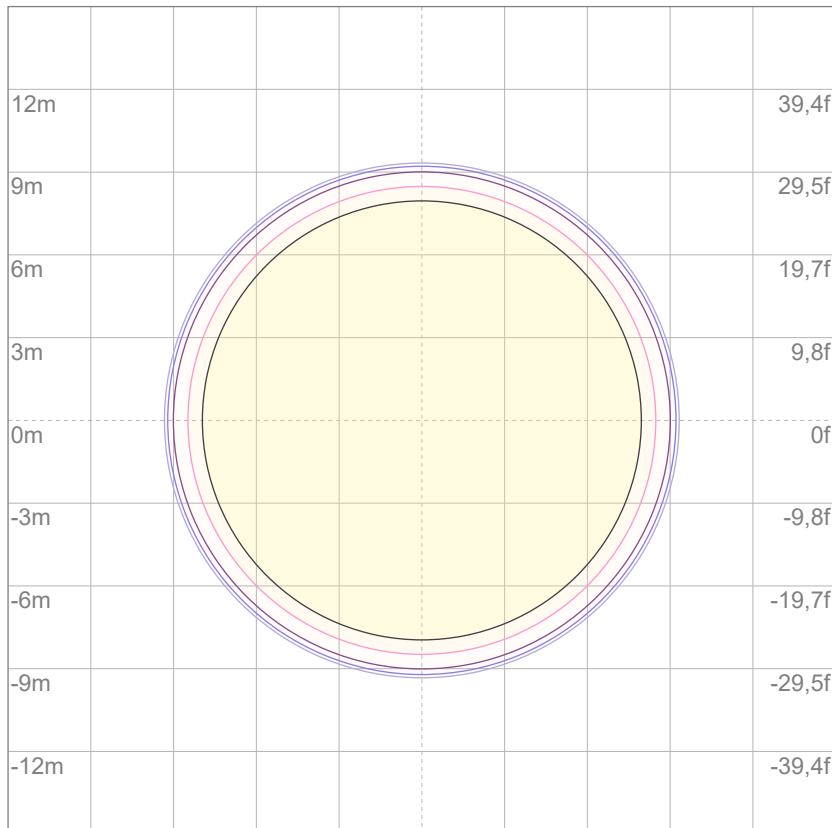
10%	1809 cd
20%	3619 cd
30%	5428 cd
40%	7237 cd
50%	9047 cd
60%	10856 cd
70%	12665 cd
80%	14475 cd

Conditions:

Number of c-planes: 2

Candela at center: 18093 cd

ISO LUX DIAGRAM



3%	5,43 lx
5%	9,05 lx
10%	18,1 lx
30%	54,3 lx
50%	90,5 lx

Conditions:

Number of c-planes: 2

Lux at center: 181 lx

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

Mounting height: 10 meters (33 feet)