

Photometric Test Report



ECLEXPFL150FC

150W Full Colour RGB+Warm White
asymmetric LED floodlight

CONTENTS

Table of contents	2
Testing process	3
Preset	
Full ON	4
Red	7
Green	10
Blue	13
White	16
2800K	19
3200K	24
4000K	29
5600K	34
6000k	39

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:

5342 lm

Peak candela output:

3500 cd

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

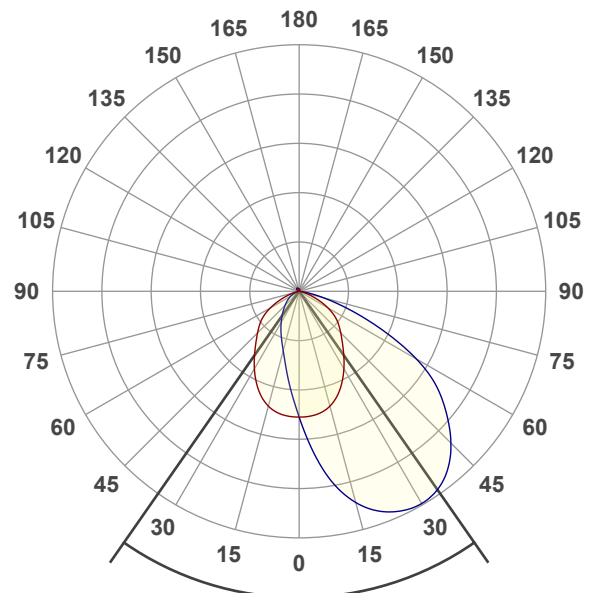
Full On

Operator:

Paolo Carvone

Date and time:

07/06/2023 10:44:46

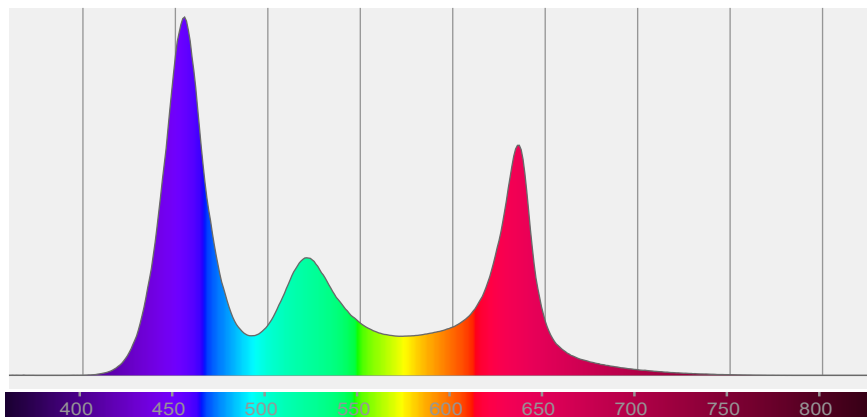


Beam angle 50%: 69,8°

Field angle 10%: 122,4°

Cut off angle 2.5%: 147,6°

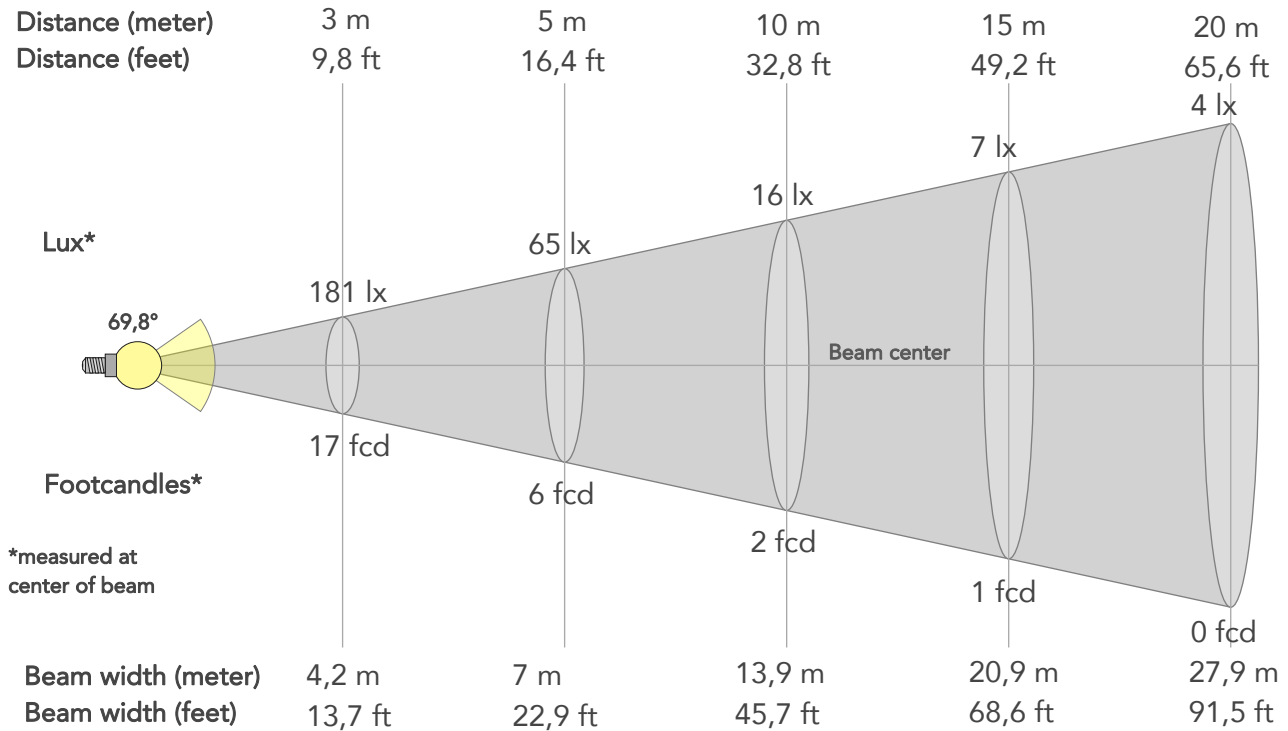
Spectra



BEAM DETAILS



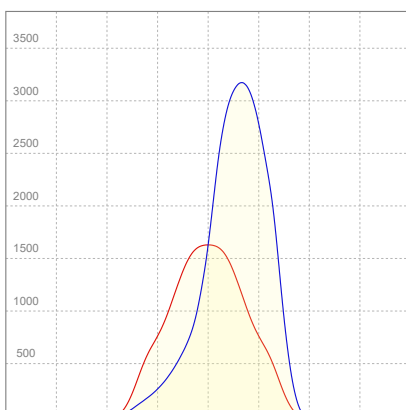
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
69,8°	122,4°	147,6°	83,2%	54,9%



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	1628lx	407lx	181lx	102lx	65lx	29lx	16lx	7lx	4lx	3lx	2lx	1lx	1lx
Footcand.	151fcd	38fcd	17fcd	9fcd	6fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,6m	7m	10,5m	13,9m	20,9m	27,9m	34,9m	41,8m	55,8m	69,7m
Beam wid.	4,6ft	9,2ft	13,7ft	18,3ft	22,9ft	34,3ft	45,7ft	68,6ft	91,5ft	114,3ft	137,2ft	182,9ft	228,7ft

LINEAR DISTRIBUTION DIAGRAM

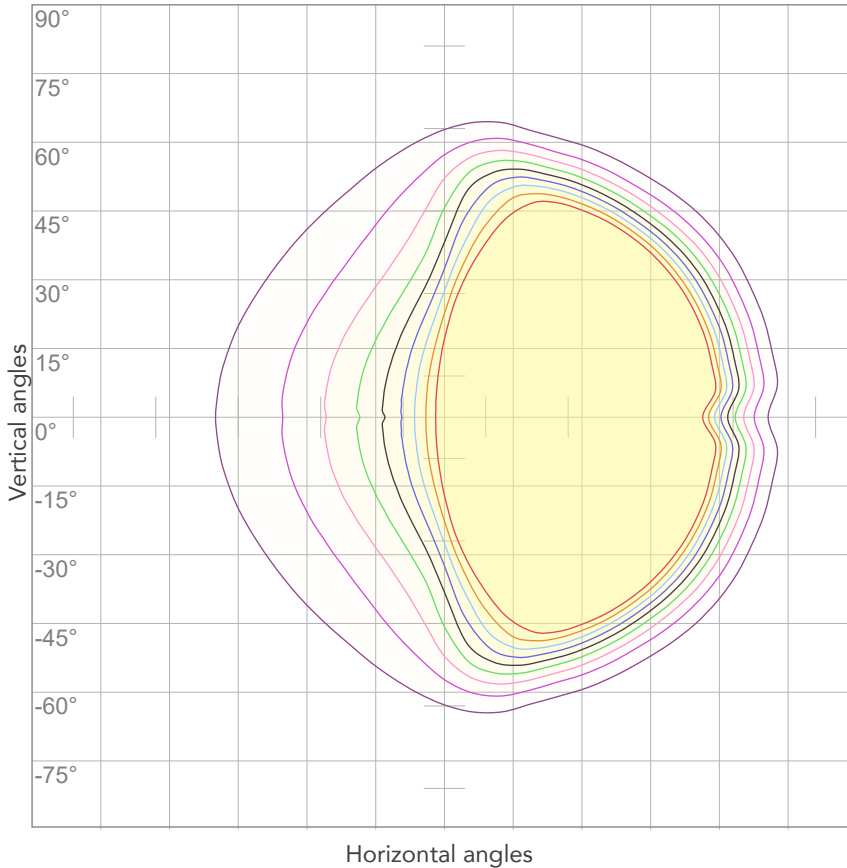


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,687A	154W	35lm/W

Power FC
0,99

ISO CANDELA DIAGRAM



10%	163 cd
20%	326 cd
30%	489 cd
40%	651 cd
50%	814 cd
60%	977 cd
70%	1140 cd
80%	1303 cd

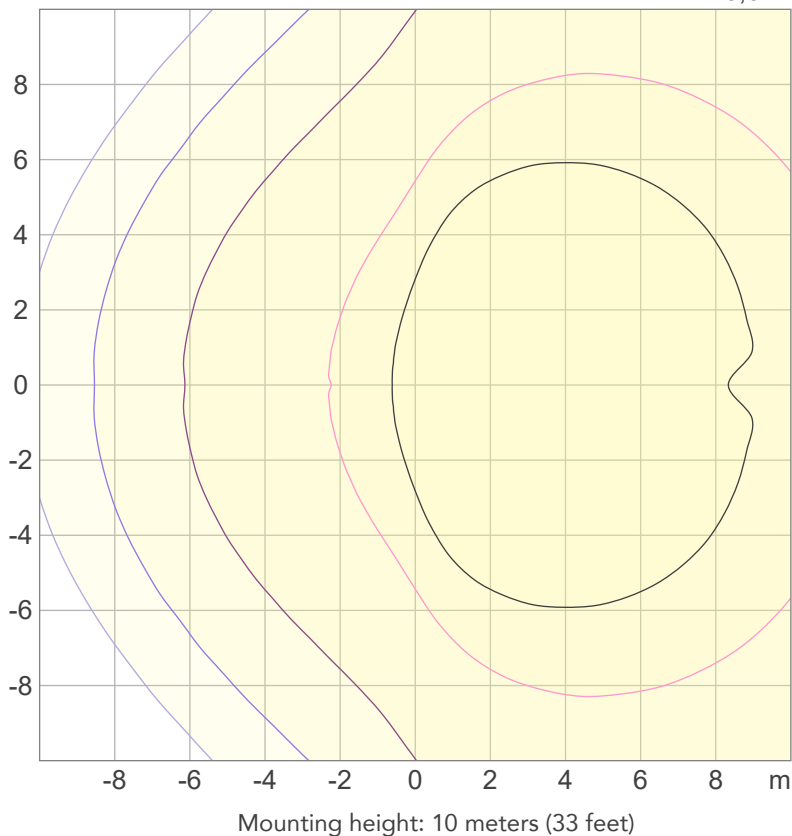
Conditions:

Number of c-planes: 64

Candela at center: 1628 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,489 lx
5%	0,814 lx
10%	1,63 lx
30%	4,89 lx
50%	8,14 lx

Conditions:

Number of c-planes: 64

Lux at center: 16,3 lx

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



Total lumen output:

1248 lm

Peak candela output:

821 cd

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

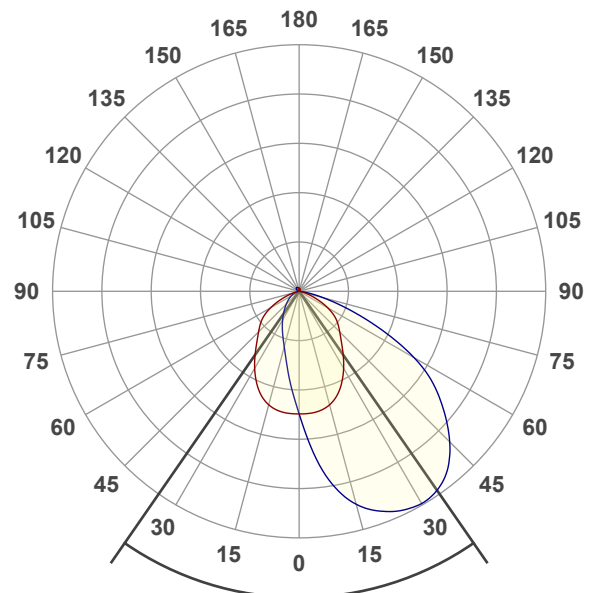
Red

Operator:

Paolo Carvone

Date and time:

13/06/2023 10:33:42

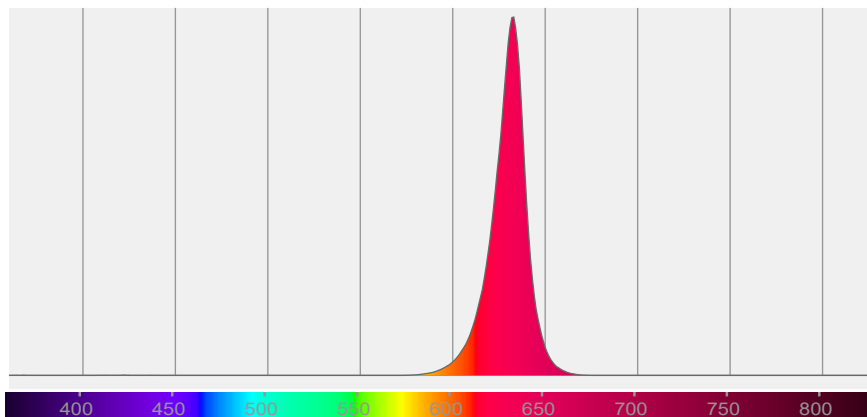


Beam angle 50%: 69,4°

Field angle 10%: 121,6°

Cut off angle 2.5%: 147,6°

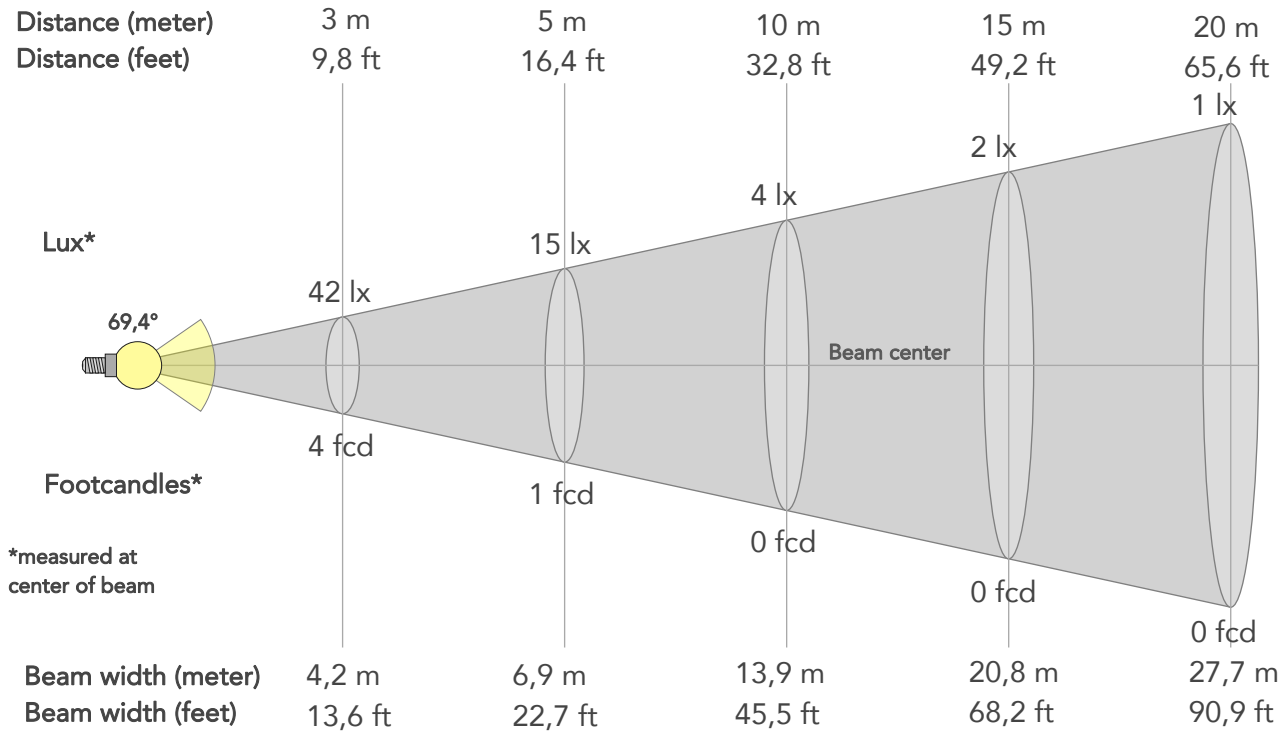
Spectra



BEAM DETAILS



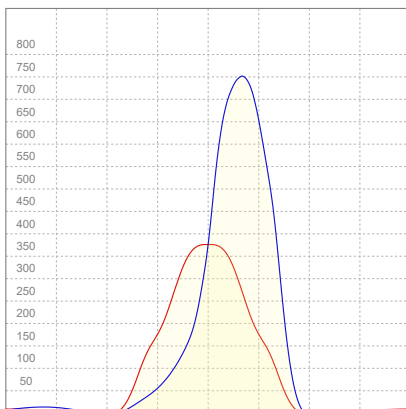
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
69,4°	121,6°	147,6°	83,3%	55,4%



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	376lx	94lx	42lx	24lx	15lx	7lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx
Footcand.	35fcd	9fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,5m	6,9m	10,4m	13,9m	20,8m	27,7m	34,6m	41,6m	55,4m	69,3m
Beam wid.	4,6ft	9,1ft	13,6ft	18,2ft	22,7ft	34,1ft	45,5ft	68,2ft	90,9ft	113,6ft	136,4ft	181,8ft	227,3ft

LINEAR DISTRIBUTION DIAGRAM

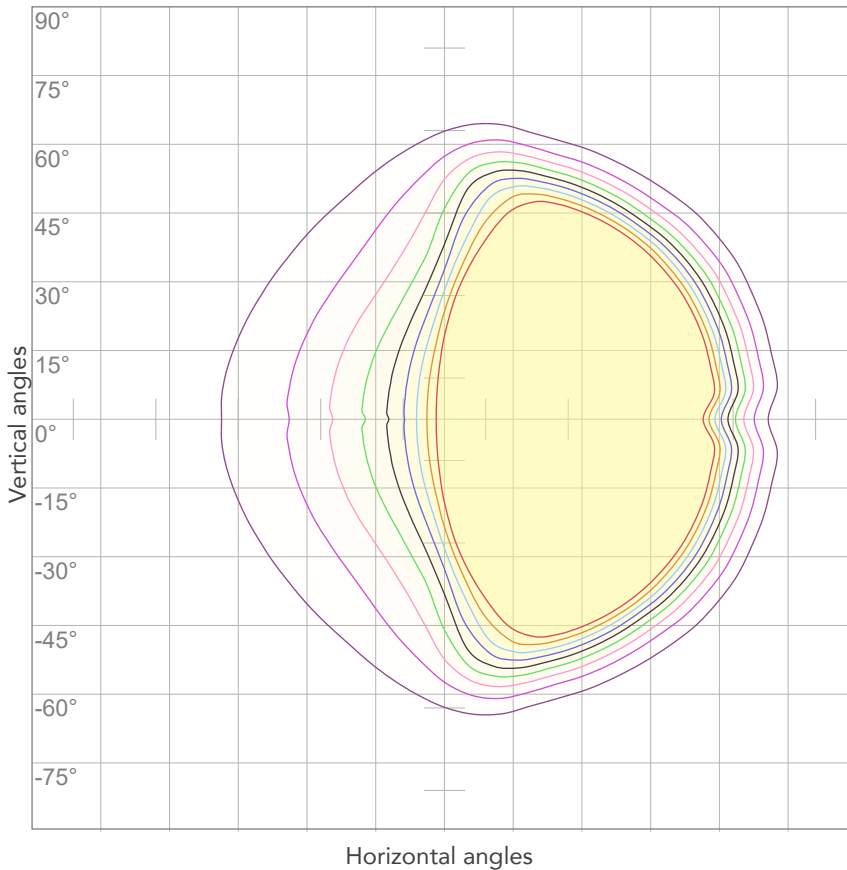


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,220A	46,0W	27lm/W

Power FC
0,92

ISO CANDELA DIAGRAM



10%	38 cd
20%	75 cd
30%	113 cd
40%	150 cd
50%	188 cd
60%	226 cd
70%	263 cd
80%	301 cd

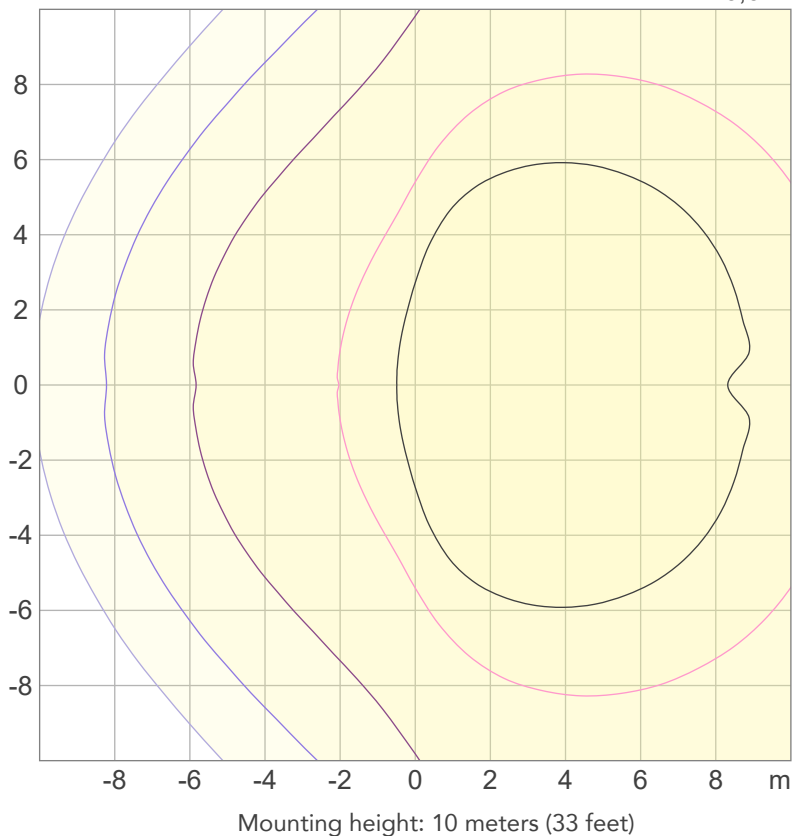
Conditions:

Number of c-planes: 64

Candela at center: 376 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,113 lx
5%	0,188 lx
10%	0,376 lx
30%	1,13 lx
50%	1,88 lx

Conditions:

Number of c-planes: 64

Lux at center: 3,76 lx

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



Total lumen output:

3159 lm

Peak candela output:

2009 cd

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

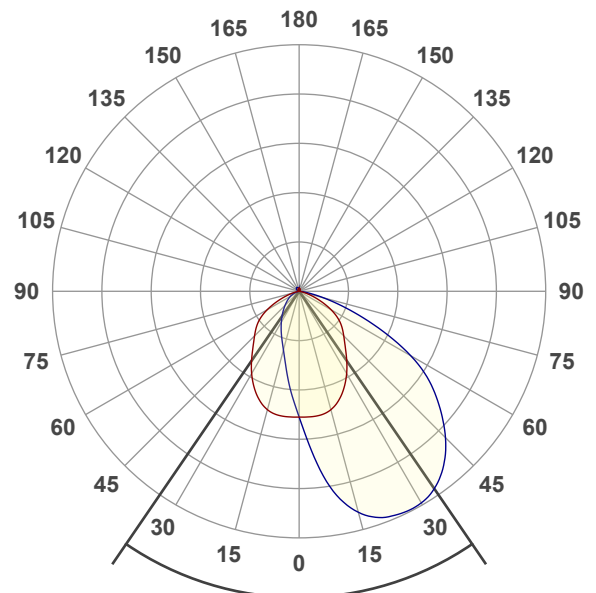
Green

Operator:

Paolo Carvone

Date and time:

13/06/2023 11:04:33

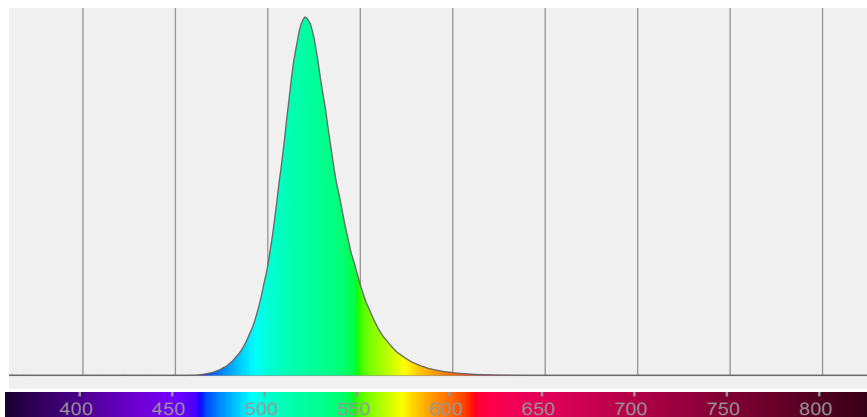


Beam angle 50%: 68,8°

Field angle 10%: 122,1°

Cut off angle 2.5%: 148,9°

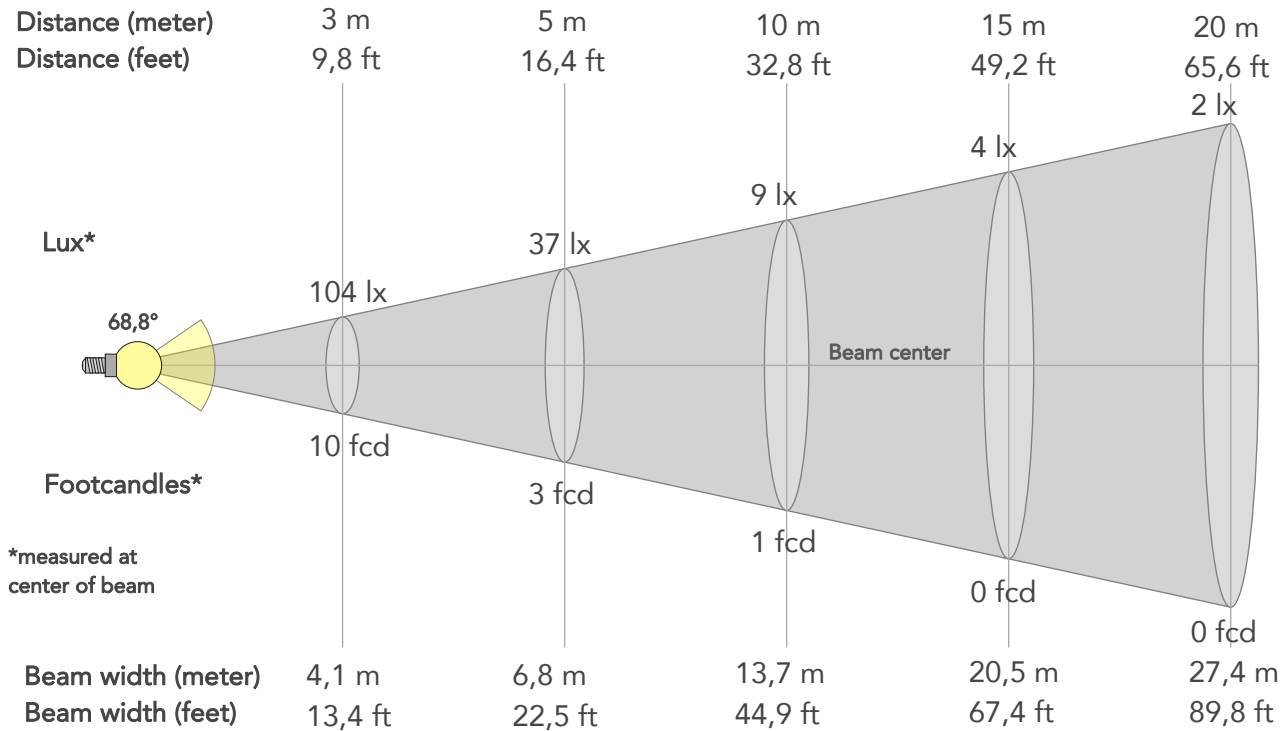
Spectra



BEAM DETAILS



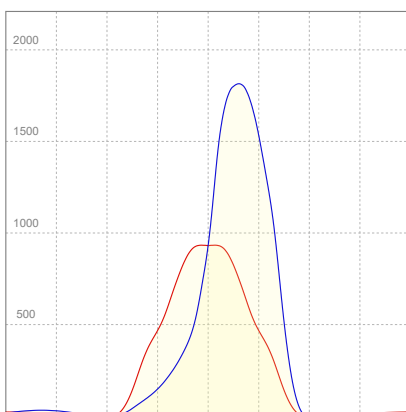
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
68,8°	122,1°	148,9°	83,2%	55,4%



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	932lx	233lx	104lx	58lx	37lx	17lx	9lx	4lx	2lx	1lx	1lx	1lx	0lx
Footcand.	87fcd	22fcd	10fcd	5fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,7m	4,1m	5,5m	6,8m	10,3m	13,7m	20,5m	27,4m	34,2m	41,1m	54,8m	68,5m
Beam wid.	4,5ft	9ft	13,4ft	17,9ft	22,5ft	33,7ft	44,9ft	67,4ft	89,8ft	112,3ft	134,7ft	179,6ft	224,6ft

LINEAR DISTRIBUTION DIAGRAM

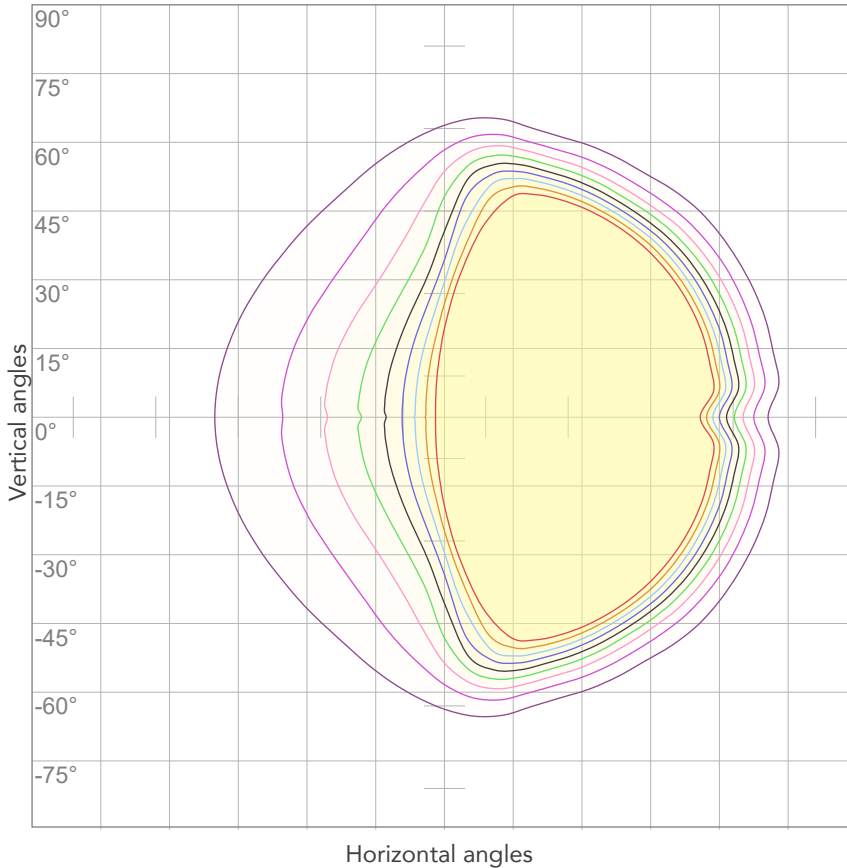


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,303A	65,9W	48lm/W

Power FC
0,96

ISO CANDELA DIAGRAM



10%	93 cd
20%	186 cd
30%	280 cd
40%	373 cd
50%	466 cd
60%	559 cd
70%	652 cd
80%	745 cd

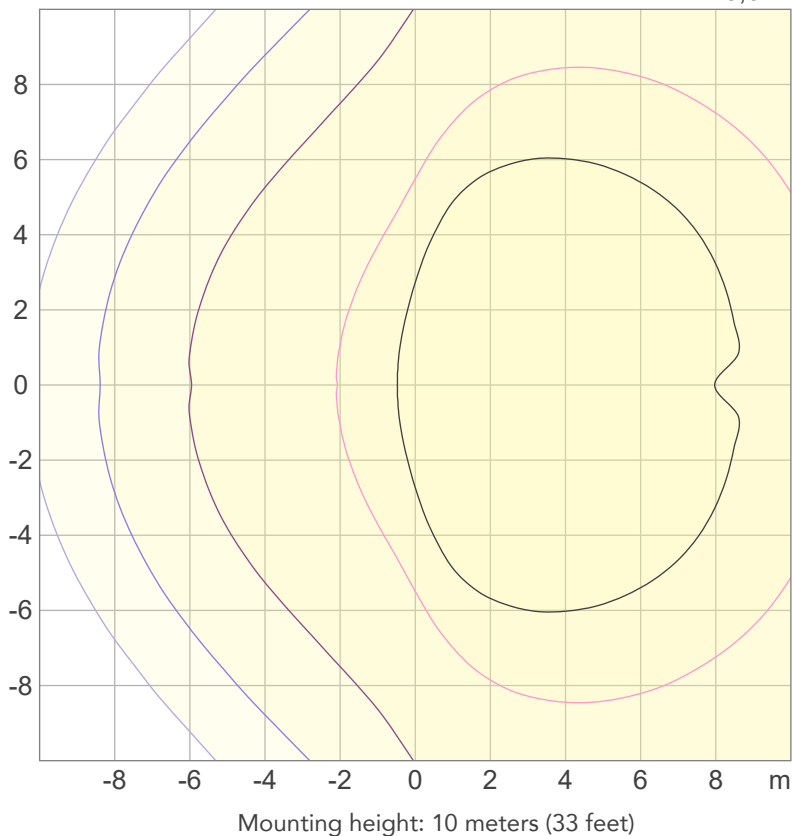
Conditions:

Number of c-planes: 64

Candela at center: 932 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,280 lx
5%	0,466 lx
10%	0,932 lx
30%	2,80 lx
50%	4,66 lx

Conditions:

Number of c-planes: 64

Lux at center: 9,32 lx

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



Total lumen output:

736 lm

Peak candela output:

469 cd

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

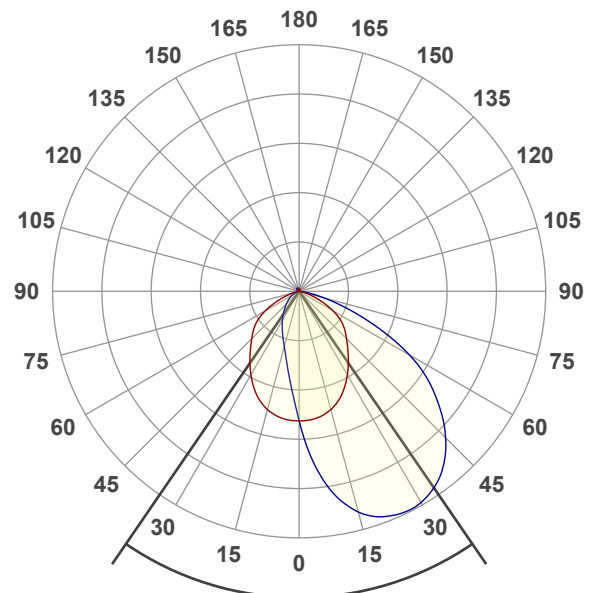
Blue

Operator:

Paolo Carvone

Date and time:

13/06/2023 11:32:36

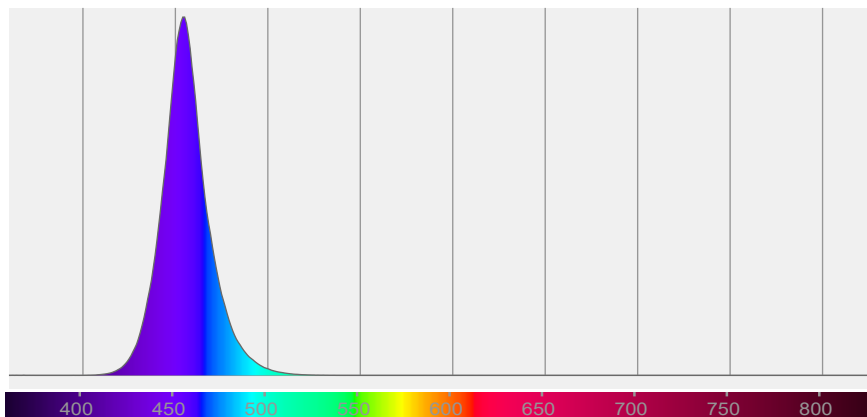


Beam angle 50%: 68,9°

Field angle 10%: 120,9°

Cut off angle 2.5%: 147,8°

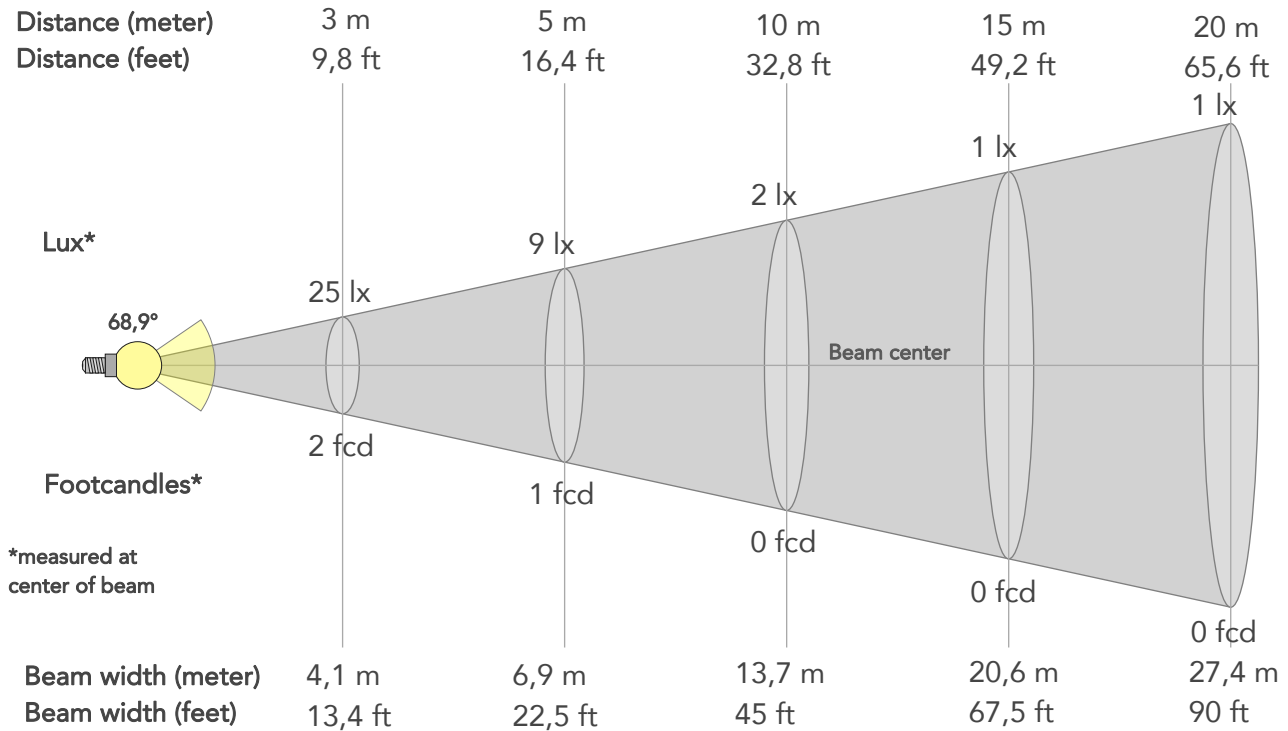
Spectra



BEAM DETAILS



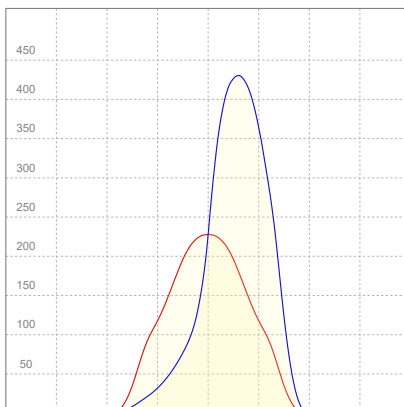
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
68,9°	120,9°	147,8°	83,9%	56,1%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	228lx	57lx	25lx	14lx	9lx	4lx	2lx	1lx	1lx	0lx	0lx	0lx	0lx
Footcand.	21fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,7m	4,1m	5,5m	6,9m	10,3m	13,7m	20,6m	27,4m	34,3m	41,1m	54,8m	68,6m
Beam wid.	4,5ft	9ft	13,4ft	18ft	22,5ft	33,7ft	45ft	67,5ft	90ft	112,4ft	134,9ft	179,9ft	224,9ft

LINEAR DISTRIBUTION DIAGRAM

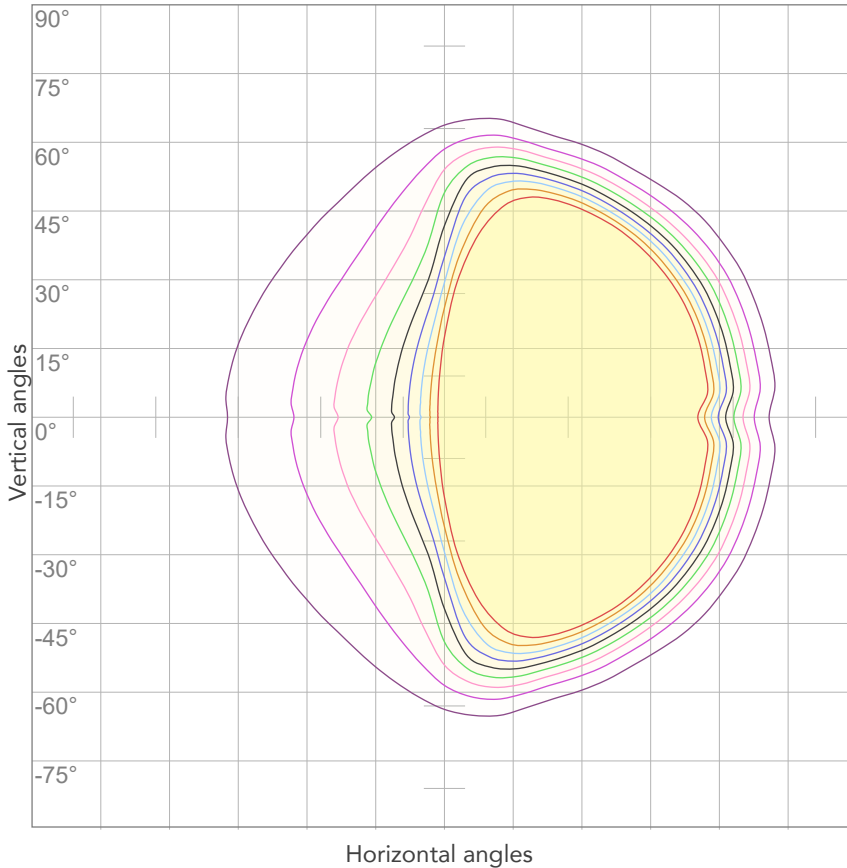


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,344A	75,4W	10lm/W

Power FC
0,97

ISO CANDELA DIAGRAM



10%	23 cd
20%	46 cd
30%	68 cd
40%	91 cd
50%	114 cd
60%	137 cd
70%	159 cd
80%	182 cd

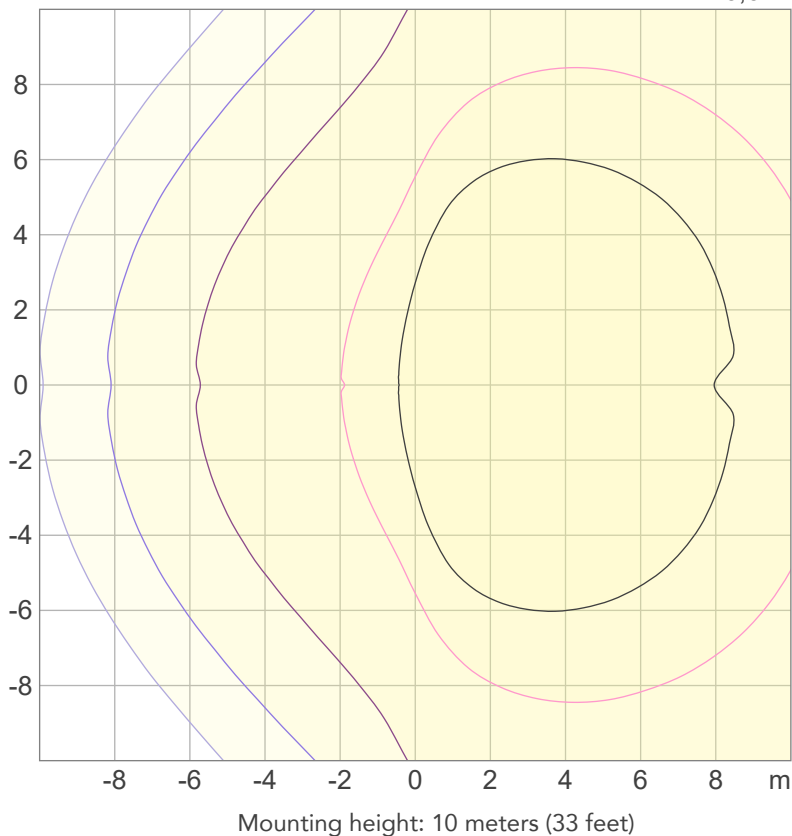
Conditions:

Number of c-planes: 68

Candela at center: 228 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	68,3m lx
5%	0,114 lx
10%	0,228 lx
30%	0,683 lx
50%	1,14 lx

Conditions:

Number of c-planes: 68

Lux at center: 2,28 lx

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



Total lumen output:

3622 lm

Peak candela output:

2413 cd

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

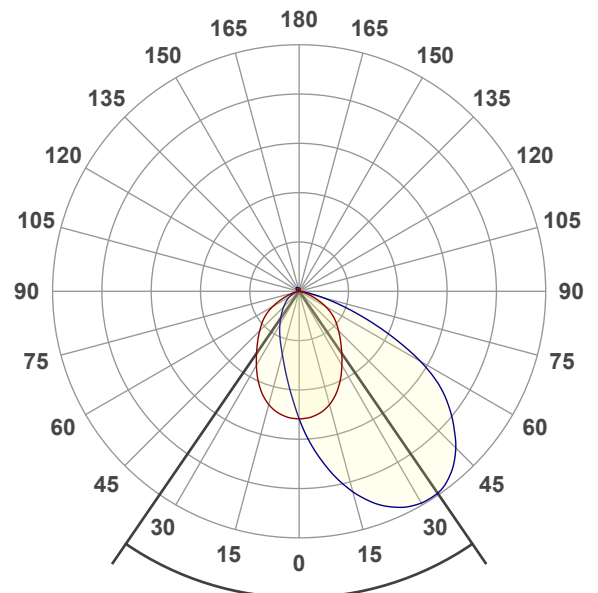
White

Operator:

Paolo Carvone

Date and time:

13/06/2023 12:01:33

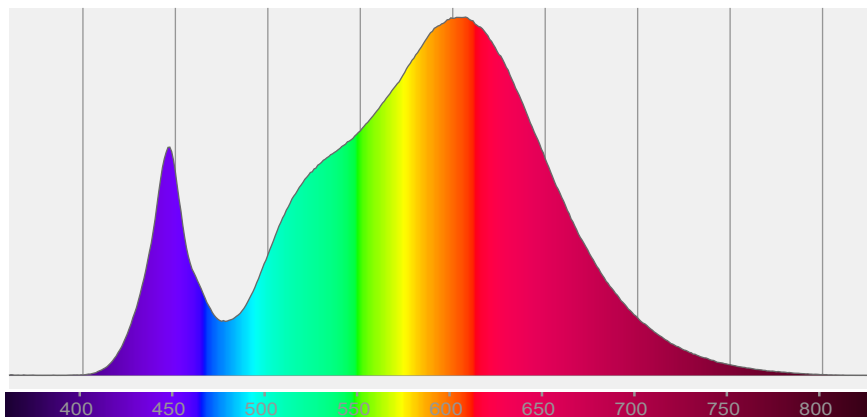


Beam angle 50%: 68,9°

Field angle 10%: 123,2°

Cut off angle 2.5%: 150,1°

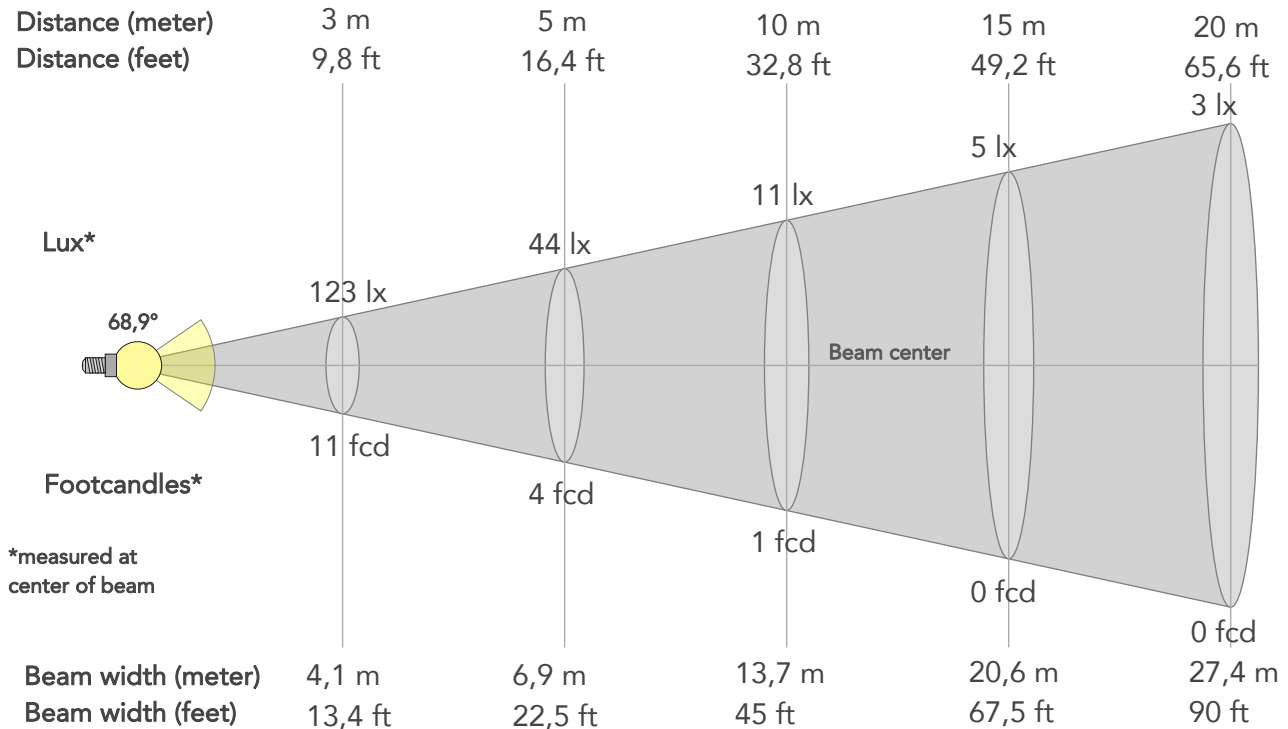
Spectra



BEAM DETAILS



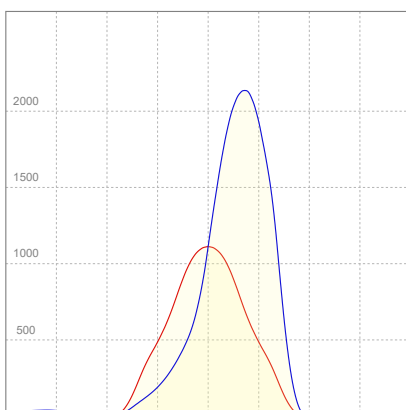
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
68,9°	123,2°	150,1°	82,2%	54,1%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1111lx	278lx	123lx	69lx	44lx	20lx	11lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	103fcd	26fcd	11fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,7m	4,1m	5,5m	6,9m	10,3m	13,7m	20,6m	27,4m	34,3m	41,2m	54,9m	68,6m
Beam wid.	4,5ft	9,1ft	13,4ft	18ft	22,5ft	33,8ft	45ft	67,5ft	90ft	112,5ft	135ft	180ft	225ft

LINEAR DISTRIBUTION DIAGRAM

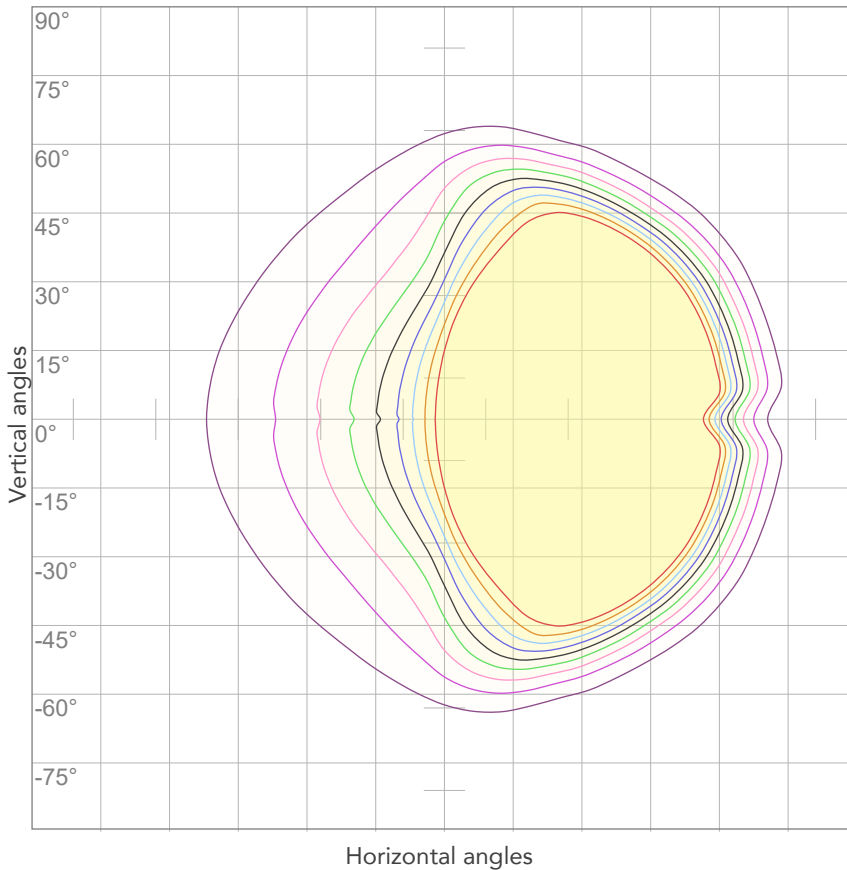


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,315A	68,8W	53lm/W

Power FC
0,96

ISO CANDELA DIAGRAM



10%	111 cd
20%	222 cd
30%	333 cd
40%	444 cd
50%	556 cd
60%	667 cd
70%	778 cd
80%	889 cd

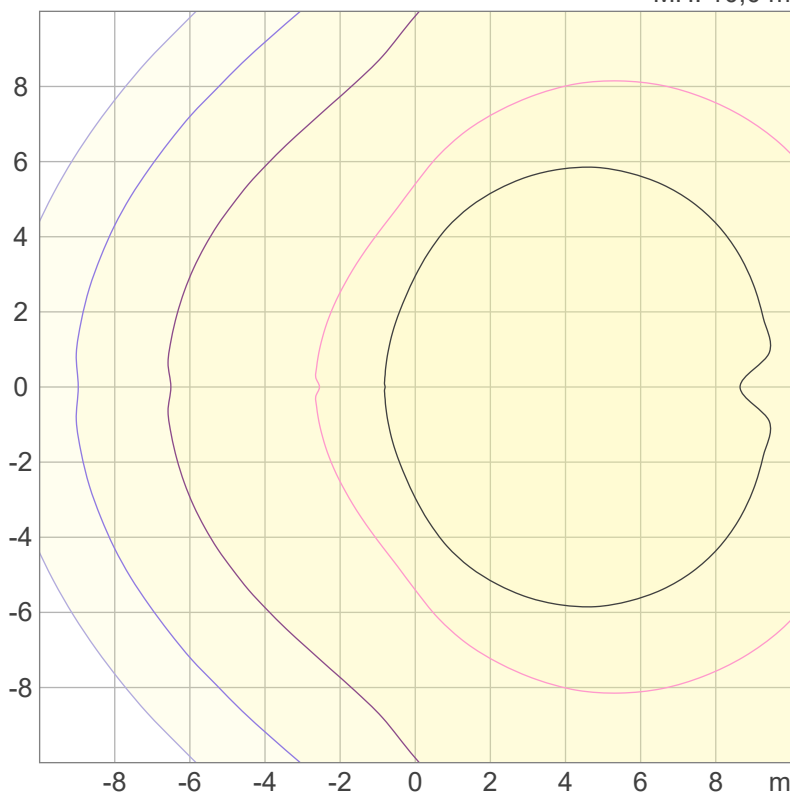
Conditions:

Number of c-planes: 64

Candela at center: 1111 cd

ISO LUX DIAGRAM

MH: 10,0 m



Mounting height: 10 meters (33 feet)

3%	0,333 lx
5%	0,556 lx
10%	1,11 lx
30%	3,33 lx
50%	5,56 lx

Conditions:

Number of c-planes: 64

Lux at center: 11,1 lx

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



Total lumen output:

4410 lm

Peak candela output:

2927 cd

Light quality:

CRI: 92,5

Color temperature:

2801 K

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

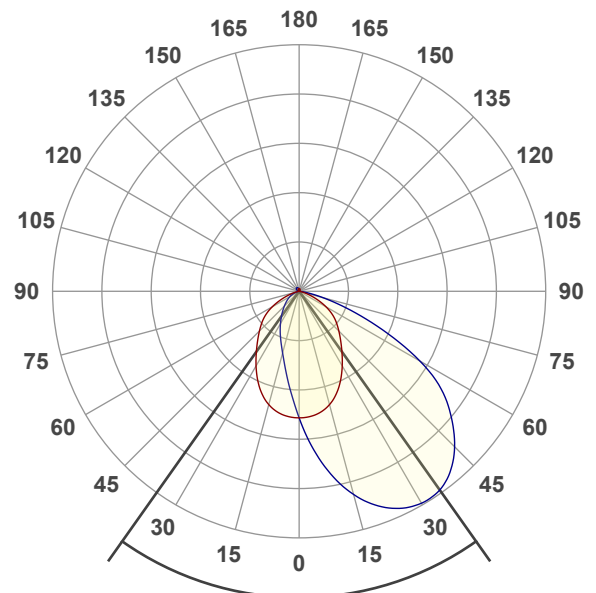
2800K

Operator:

Paolo Carvone

Date and time:

07/06/2023 11:14:02

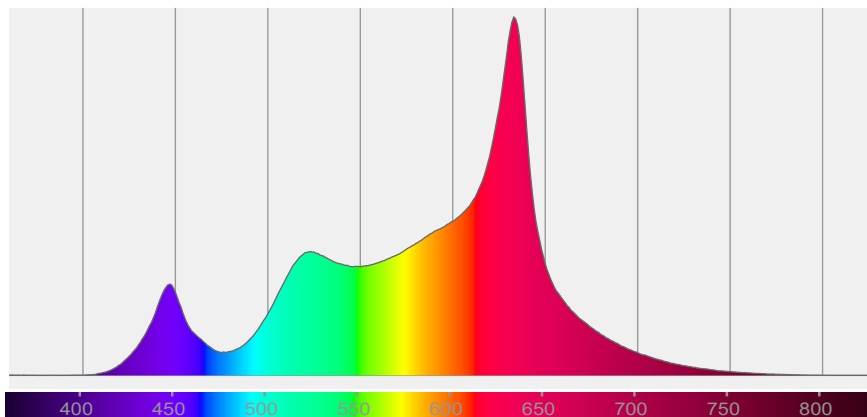


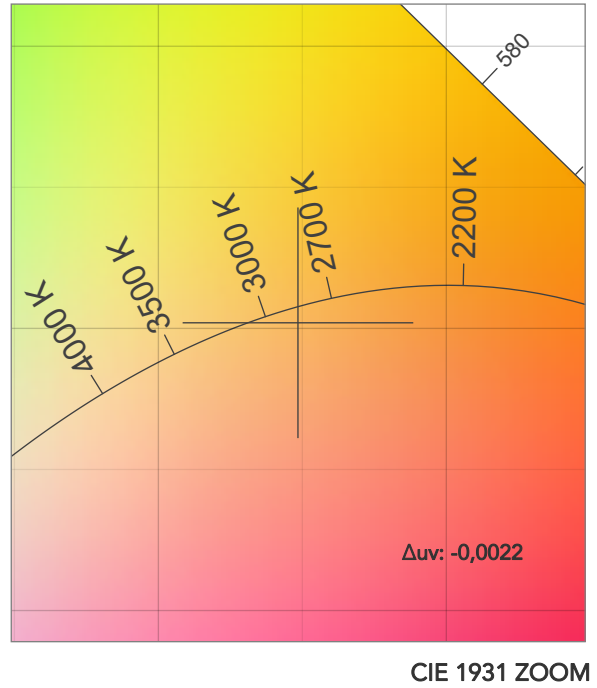
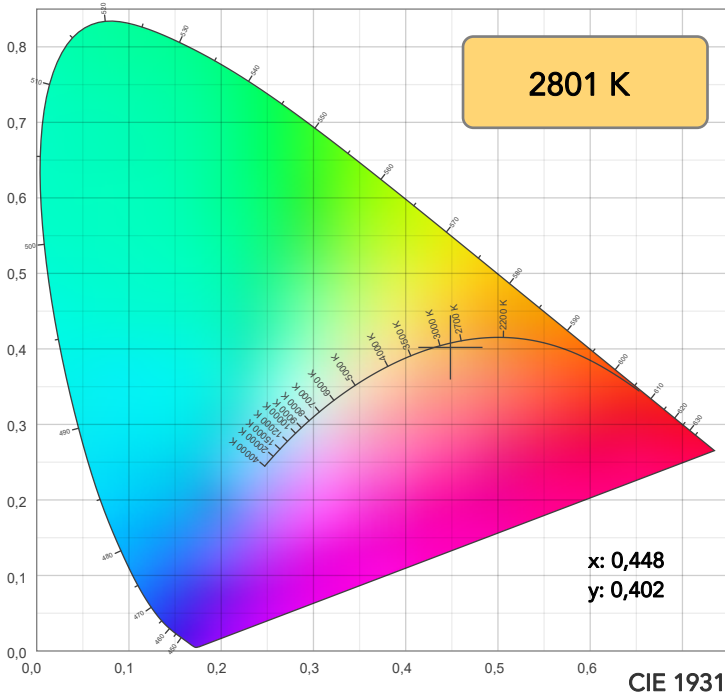
Beam angle 50%: 70,6°

Field angle 10%: 123,8°

Cut off angle 2.5%: 149°

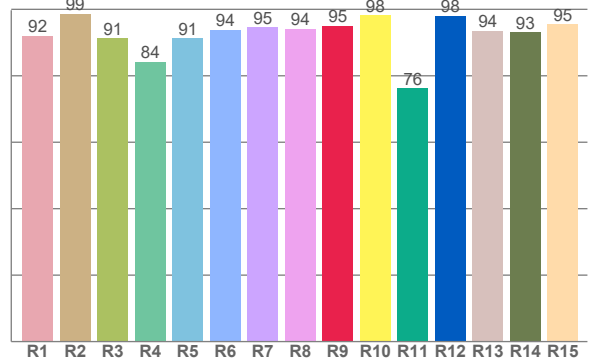
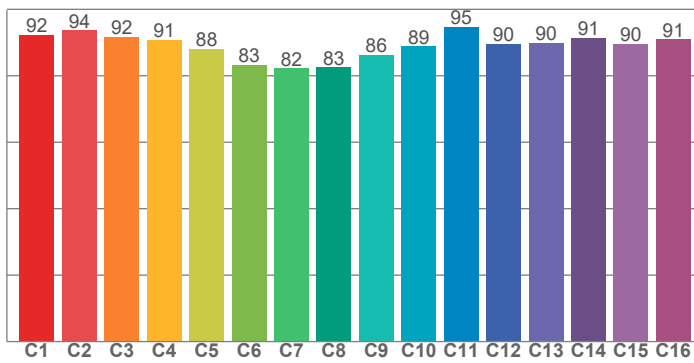
Spectra





TM30: 89,8

CRI: 92,5 (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
92,0	98,6	91,3	84,2	91,3	93,9	94,5	94,2	95,1	98,2	76,3	98,0	93,6	93,2	95,4

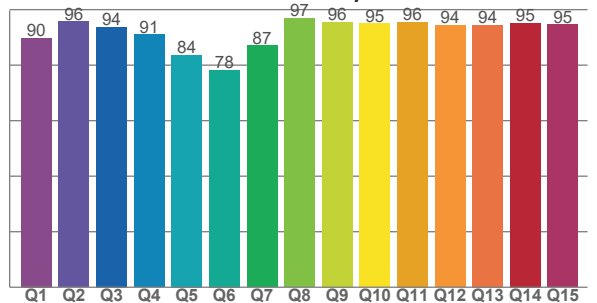
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,3	93,7	91,7	90,9	88,0	83,2	82,3	82,6	86,3	88,9	94,8	89,6	89,9	91,4	89,7	91,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,8	95,7	93,7	91,0	83,7	78,3	87,1	96,9	95,5	94,9	95,6	94,4	94,5	95,1	94,7

CQS: 90,2



COLOR PARAMETERS

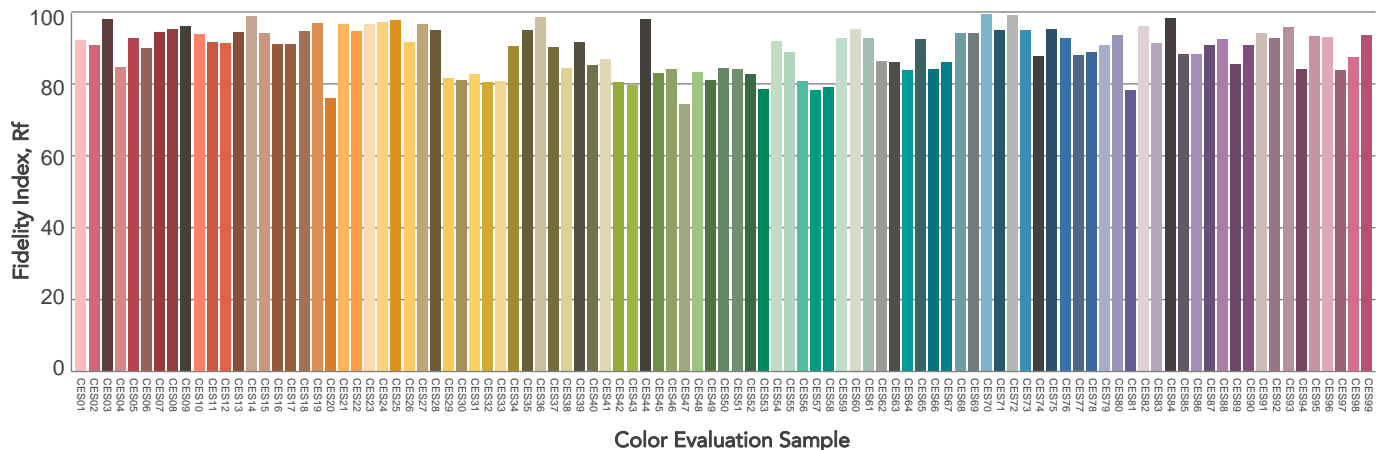
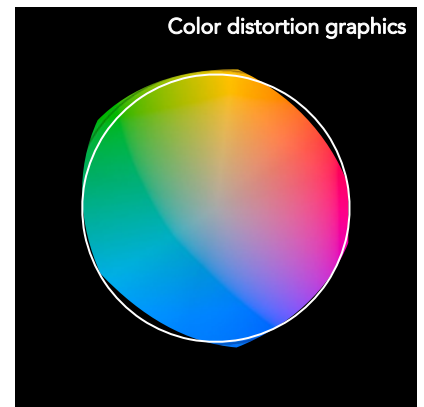
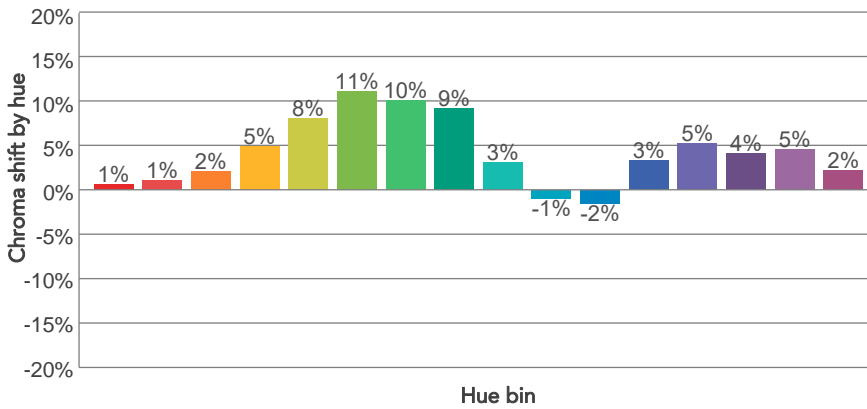
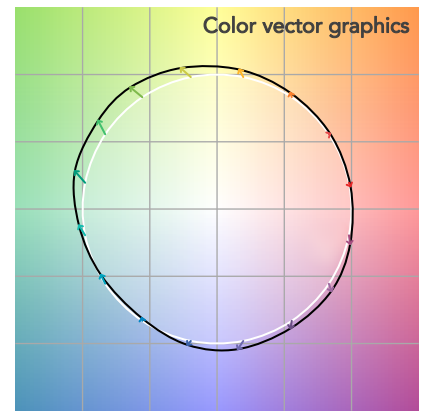
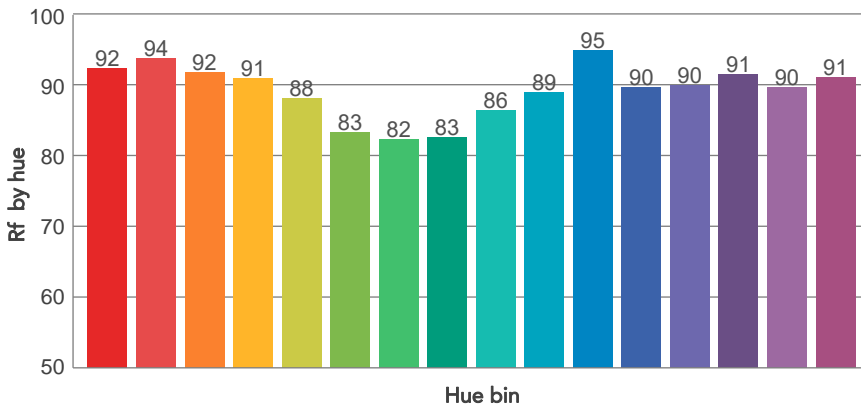
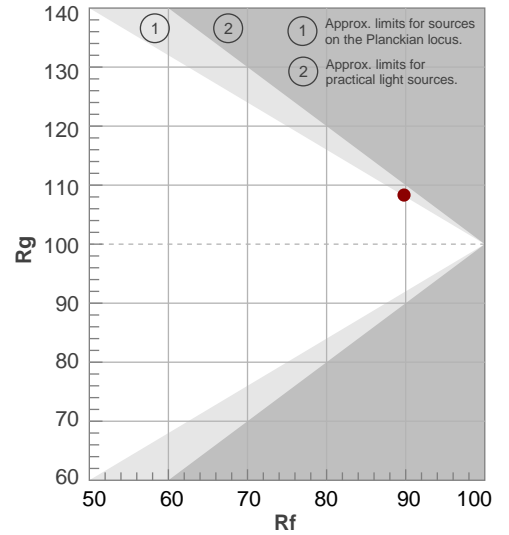
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2801 K	92,5	95,1	89,8	108,3	90,2	75	0,448	0,402	-0,0022

TM30 DETAILS

Rf 89,8
Fidelity index Rf

Rg 108,3
Gammut index

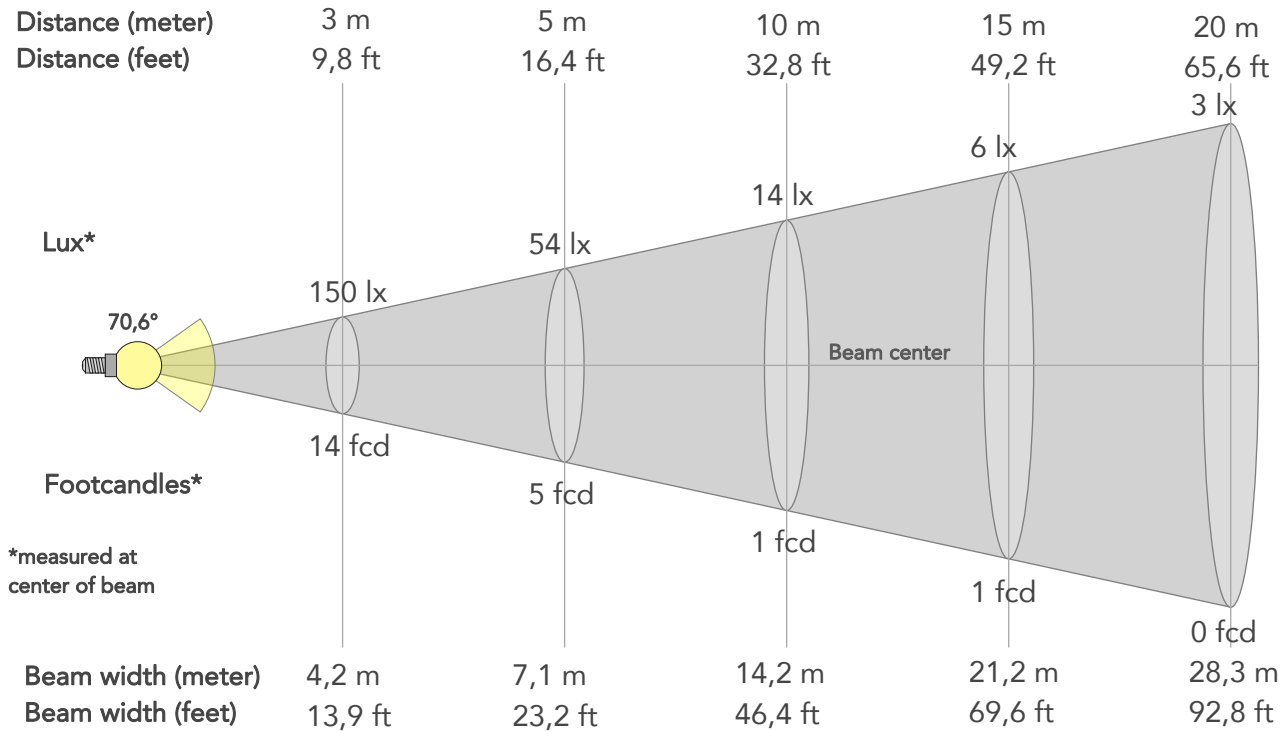
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	1%	-3%
2	94	1%	0%
3	92	2%	3%
4	91	5%	4%
5	88	8%	6%
6	83	11%	3%
7	82	10%	-5%
8	83	9%	-7%
9	86	3%	-8%
10	89	-1%	-7%
11	95	-2%	-2%
12	90	3%	-2%
13	90	5%	-5%
14	91	4%	-4%
15	90	5%	-3%
16	91	2%	-6%



BEAM DETAILS



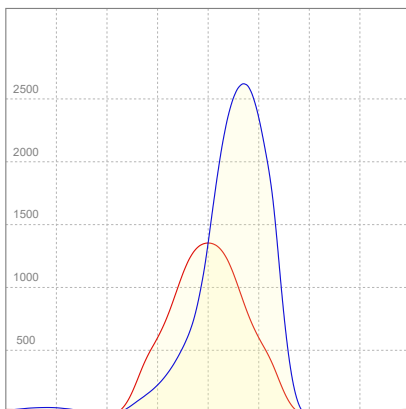
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
70,6°	123,8°	149°	82,9%	54,6%



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	1353lx	338lx	150lx	85lx	54lx	24lx	14lx	6lx	3lx	2lx	2lx	1lx	1lx
Footcand.	126fcd	31fcd	14fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,7m	7,1m	10,6m	14,2m	21,2m	28,3m	35,4m	42,5m	56,6m	70,8m
Beam wid.	4,7ft	9,3ft	13,9ft	18,5ft	23,2ft	34,8ft	46,4ft	69,6ft	92,8ft	116,1ft	139,3ft	185,7ft	232,1ft

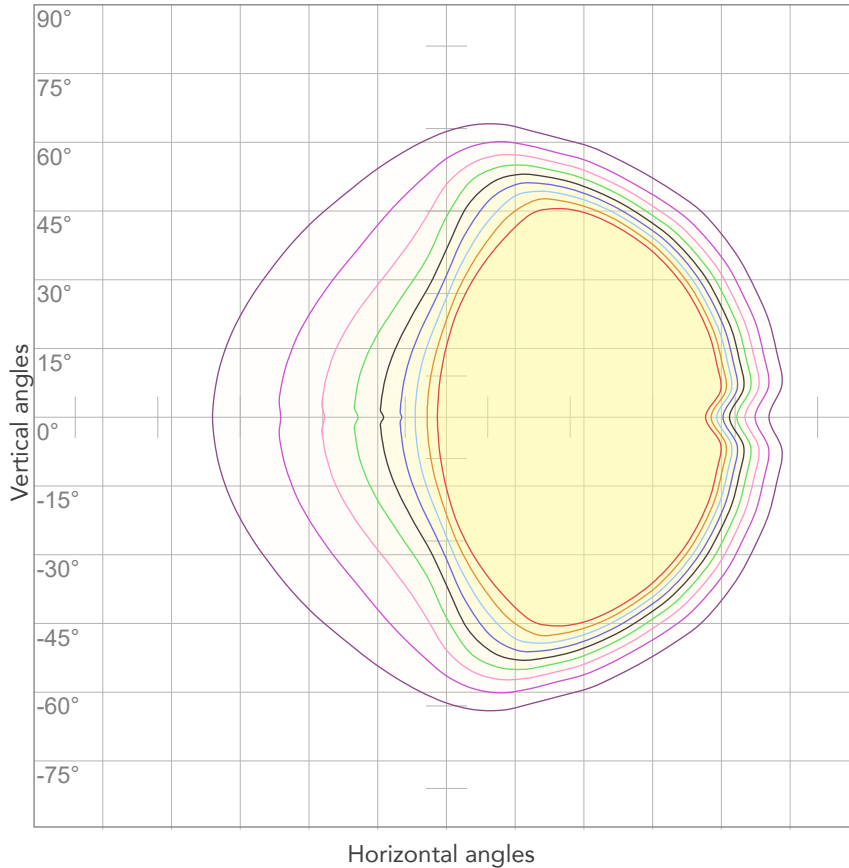
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,421A	92,7W	48lm/W

ISO CANDELA DIAGRAM



10%	135 cd
20%	271 cd
30%	406 cd
40%	541 cd
50%	677 cd
60%	812 cd
70%	947 cd
80%	1083 cd

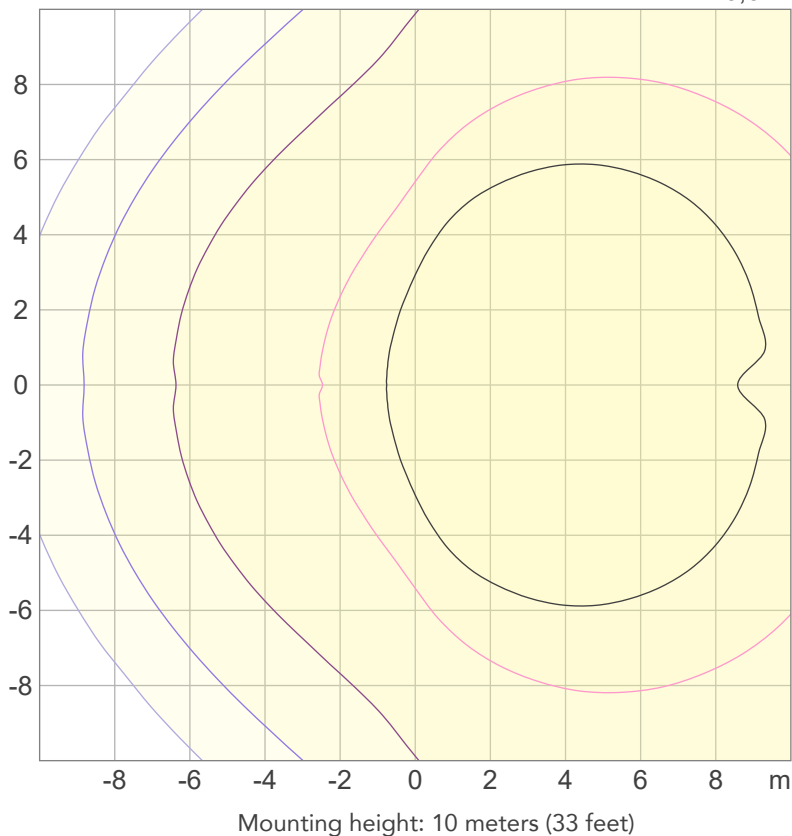
Conditions:

Number of c-planes: 64

Candela at center: 1353 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,406 lx
5%	0,677 lx
10%	1,35 lx
30%	4,06 lx
50%	6,77 lx

Conditions:

Number of c-planes: 64

Lux at center: 13,5 lx

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



Total lumen output:

4514 lm

Peak candela output:

2982 cd

Light quality:

CRI: 92,8

Color temperature:

3219 K

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

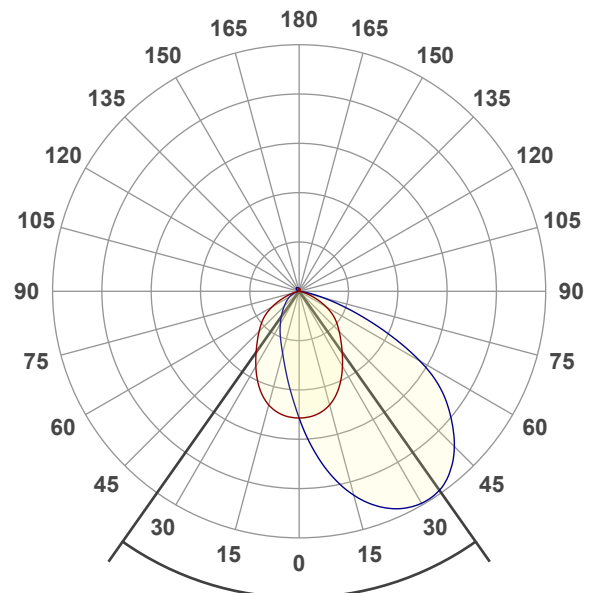
3200K

Operator:

Paolo Carvone

Date and time:

07/06/2023 11:42:40

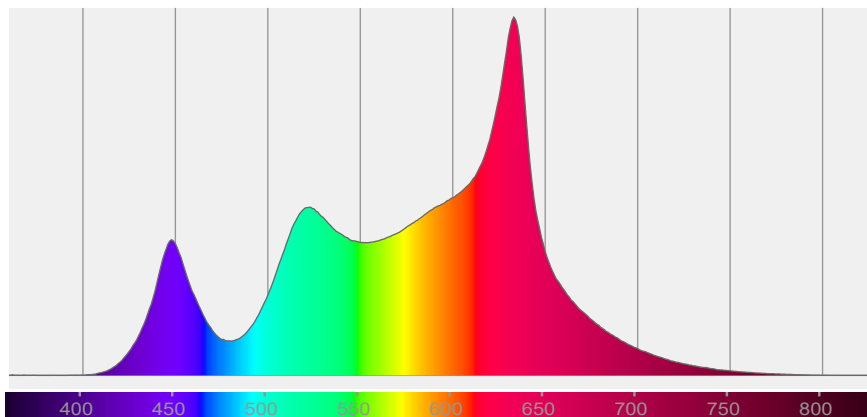


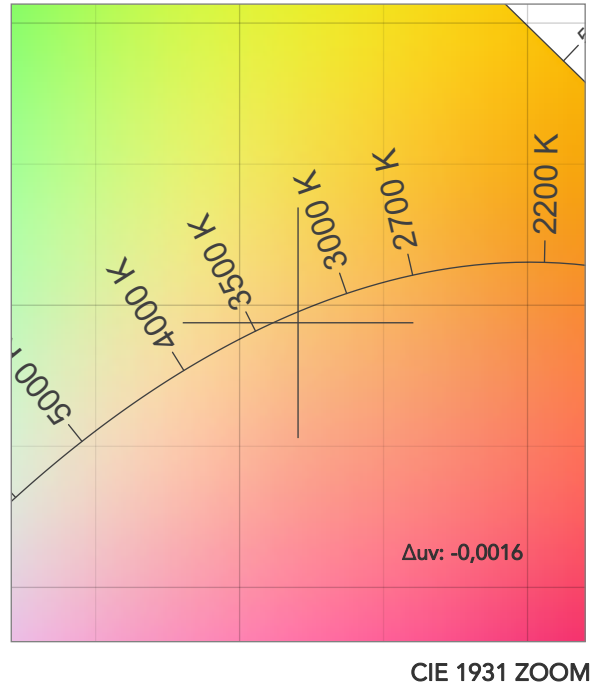
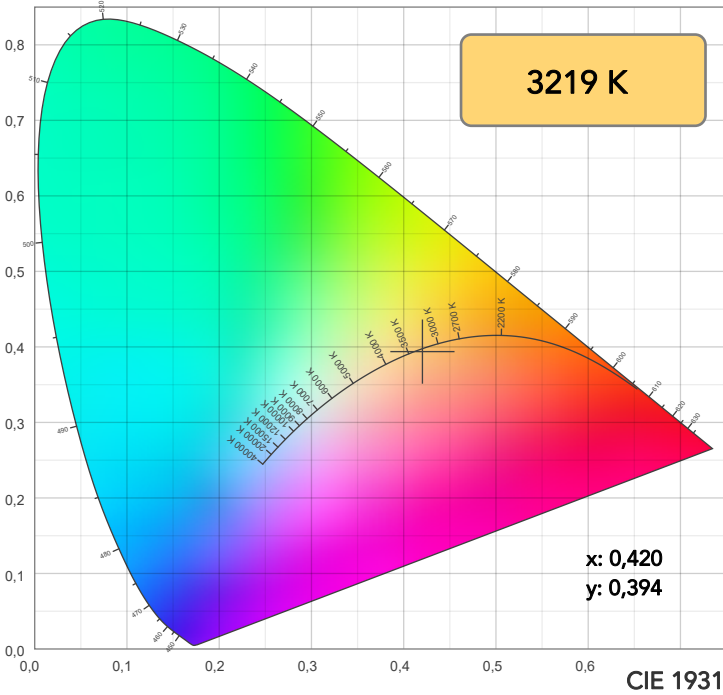
Beam angle 50%: 70,4°

Field angle 10%: 123,7°

Cut off angle 2.5%: 149,3°

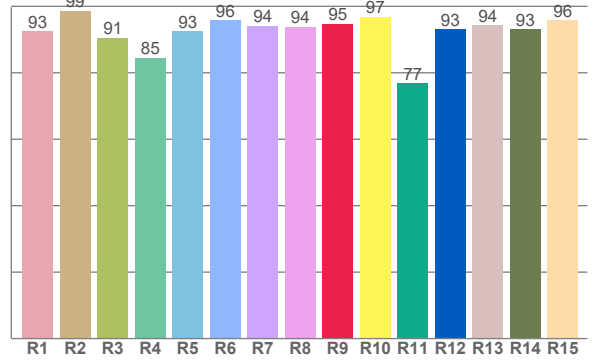
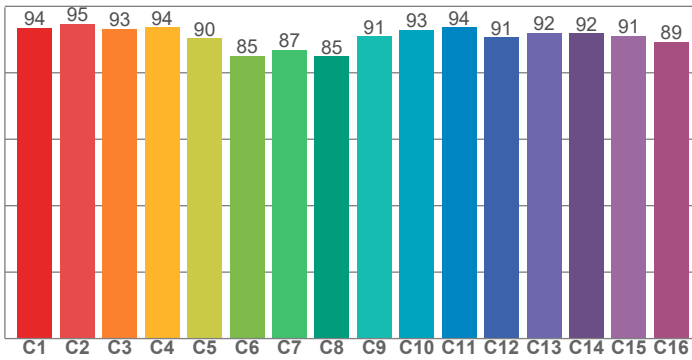
Spectra





TM30: 91,5

CRI: 92,8 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92,5	98,6	90,5	84,5	92,6	95,9	94,2	93,9	94,7	96,9	76,9	93,0	94,4	93,0	95,9

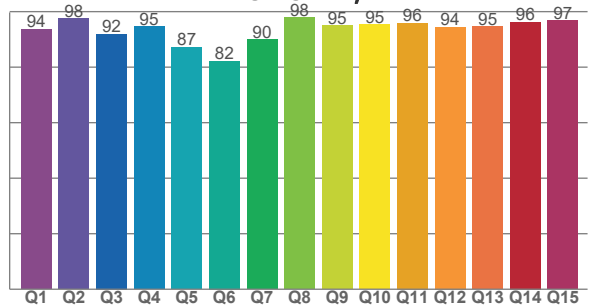
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93,5	94,7	93,2	93,6	90,4	85,1	86,9	84,9	90,9	92,9	93,7	90,6	91,9	91,9	91,2	89,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93,6	97,5	91,9	94,6	87,1	82,3	90,0	97,8	95,0	95,4	95,9	94,5	94,6	96,3	96,8

CQS: 92,2



COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3219 K	92,8	94,7	91,5	107,4	92,2	81	0,420	0,394	-0,0016

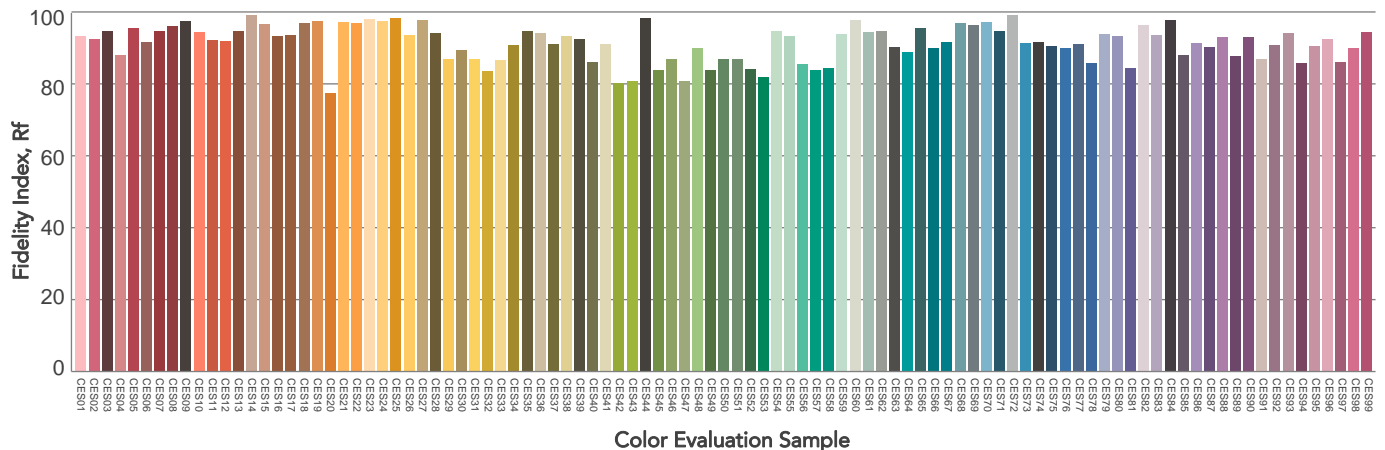
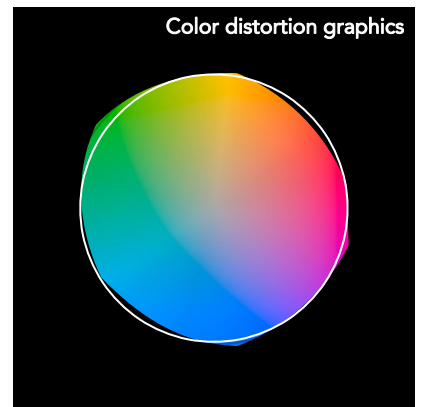
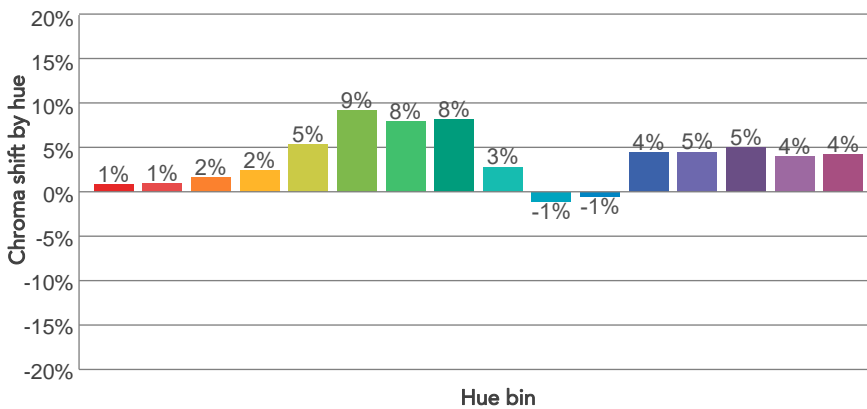
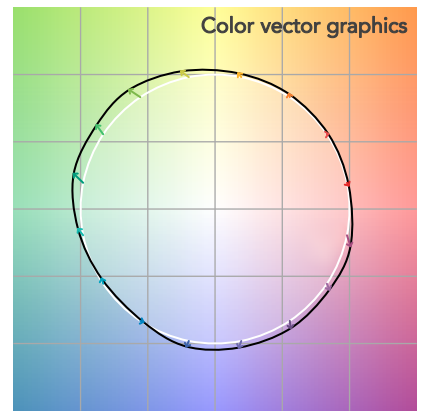
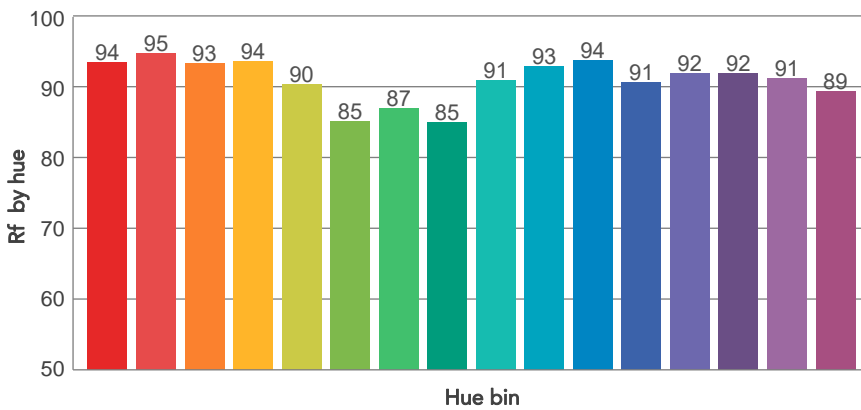
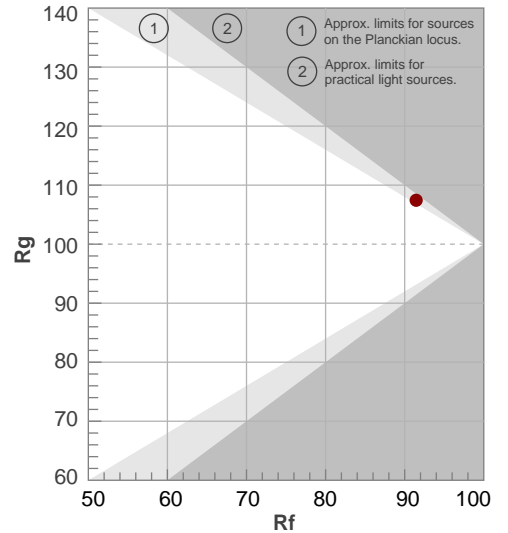
TM30 DETAILS



Rf 91,5
Fidelity index Rf

Rg 107,4
Gammut index

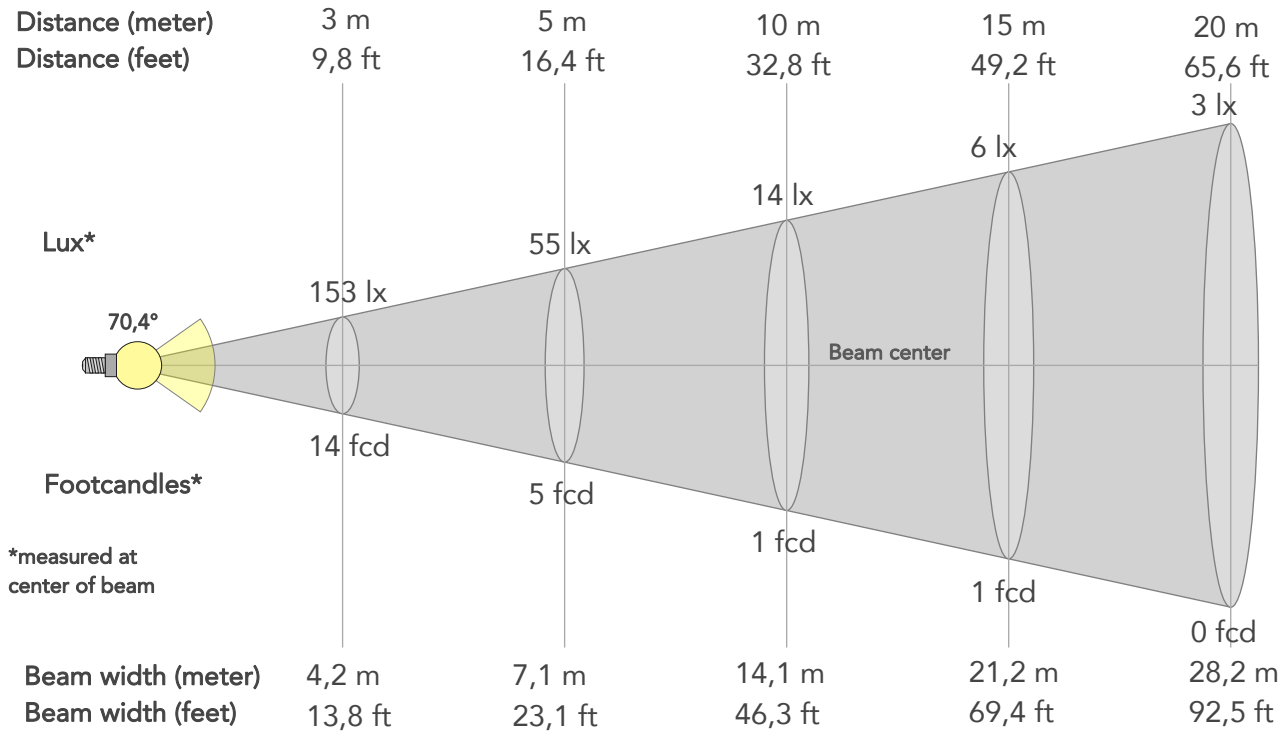
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	1%	-2%
2	95	1%	0%
3	93	2%	2%
4	94	2%	3%
5	90	5%	5%
6	85	9%	4%
7	87	8%	-3%
8	85	8%	-5%
9	91	3%	-5%
10	93	-1%	-4%
11	94	-1%	2%
12	91	4%	-1%
13	92	5%	-3%
14	92	5%	-2%
15	91	4%	-3%
16	89	4%	-7%



BEAM DETAILS



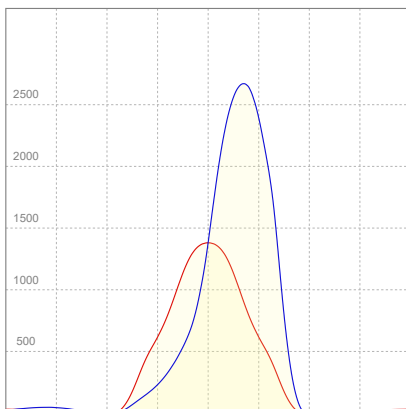
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
70,4°	123,7°	149,3°	82,9%	54,8%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1381lx	345lx	153lx	86lx	55lx	25lx	14lx	6lx	3lx	2lx	2lx	1lx	1lx
Footcand.	128fcd	32fcd	14fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,6m	7,1m	10,6m	14,1m	21,2m	28,2m	35,3m	42,3m	56,4m	70,5m
Beam wid.	4,7ft	9,3ft	13,8ft	18,5ft	23,1ft	34,7ft	46,3ft	69,4ft	92,5ft	115,6ft	138,8ft	185ft	231,3ft

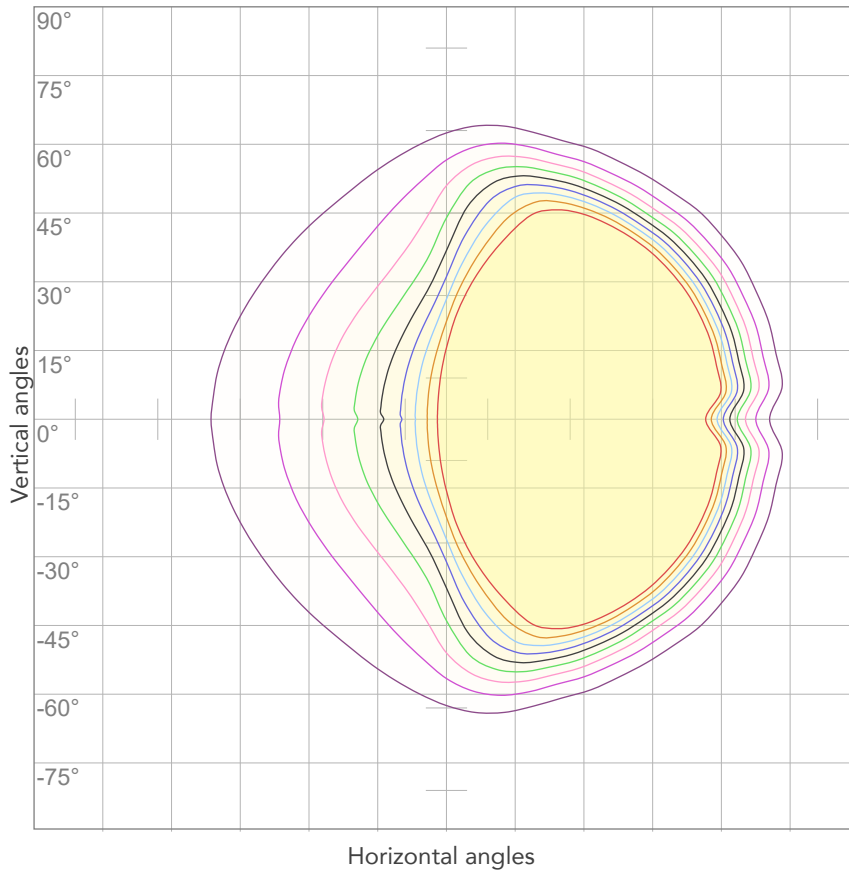
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,420A	92,7W	49lm/W

ISO CANDELA DIAGRAM



10%	138 cd
20%	276 cd
30%	414 cd
40%	552 cd
50%	691 cd
60%	829 cd
70%	967 cd
80%	1105 cd

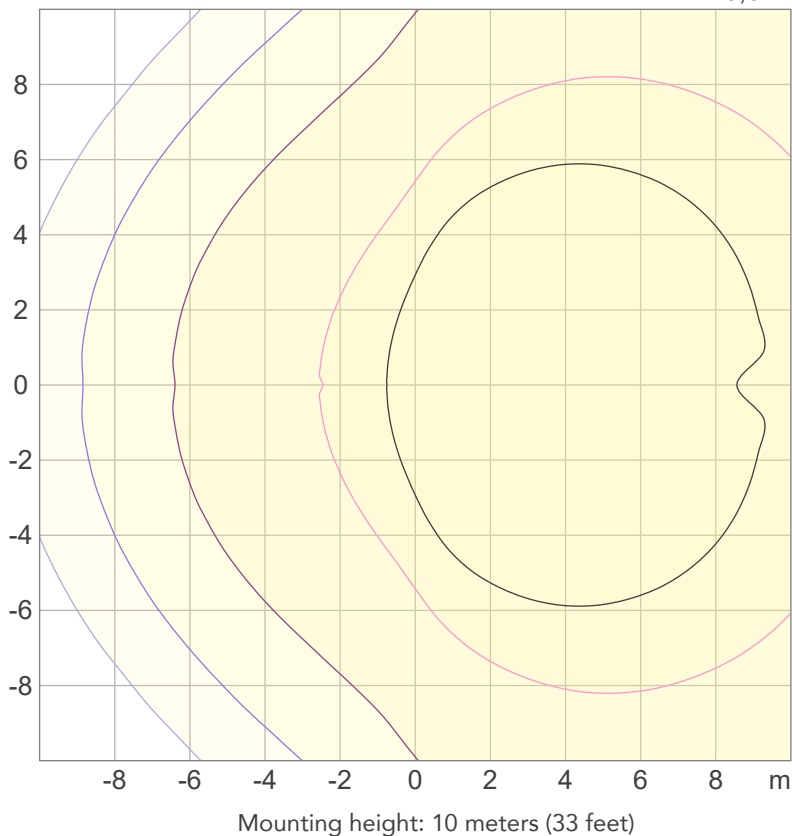
Conditions:

Number of c-planes: 64

Candela at center: 1381 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,414 lx
5%	0,691 lx
10%	1,38 lx
30%	4,14 lx
50%	6,91 lx

Conditions:

Number of c-planes: 64

Lux at center: 13,8 lx

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



Total lumen output:

4656 lm

Peak candela output:

3057 cd

Light quality:

CRI: 94,1

Color temperature:

4000 K

PRODUCT NAME:

ECLEXPFL150 FC

MEASURAMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

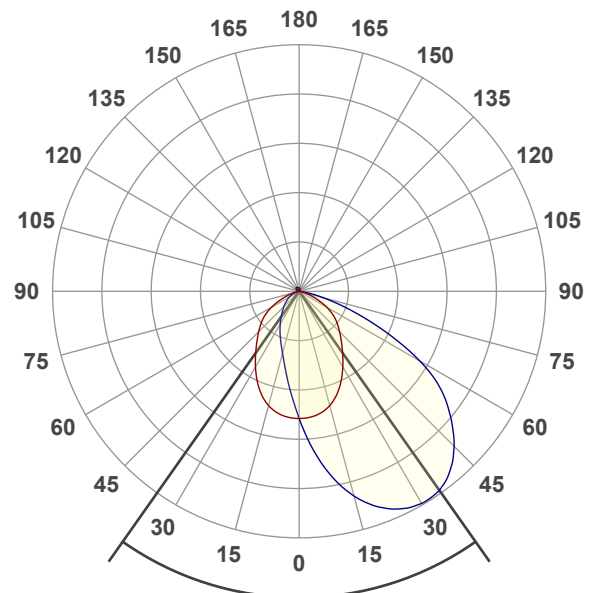
4000K

Operator:

Paolo Carvone

Date and time:

07/06/2023 12:12:19

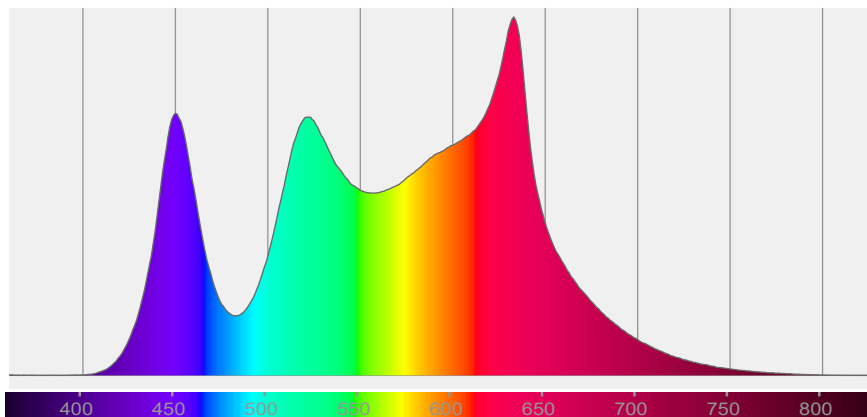


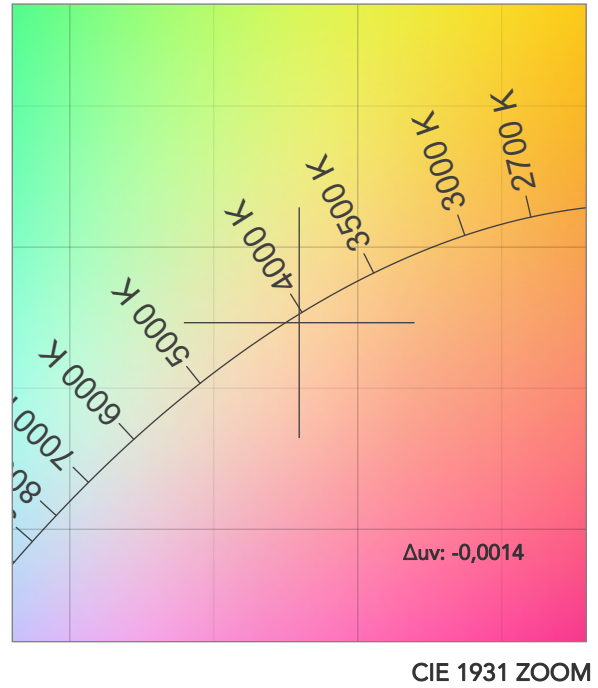
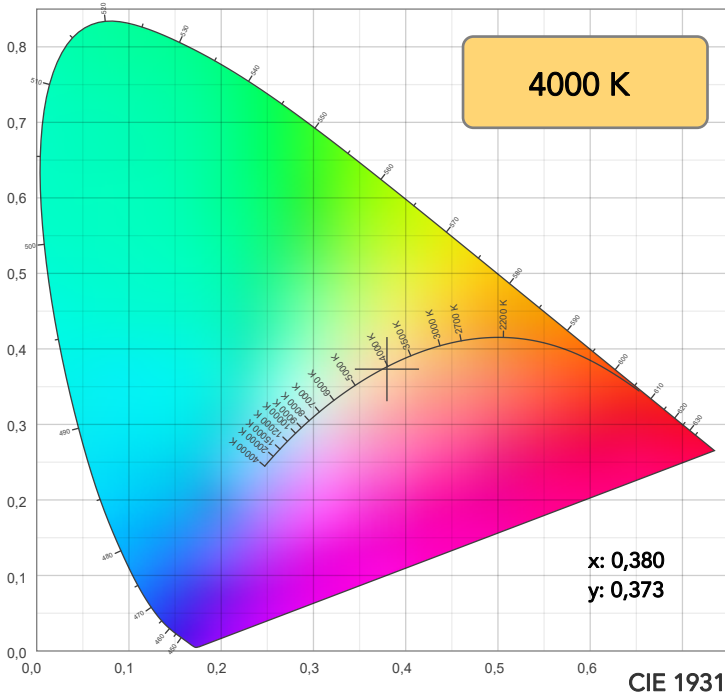
Beam angle 50%: 70,3°

Field angle 10%: 123,8°

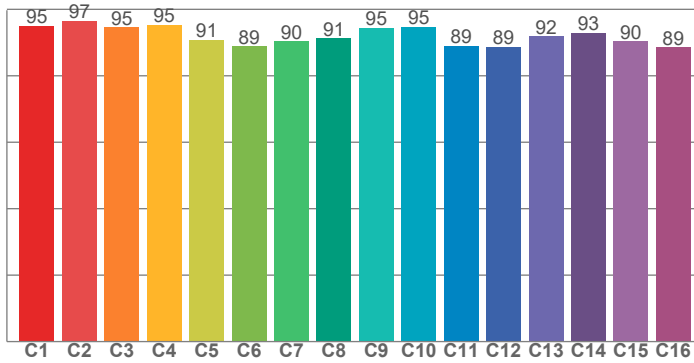
Cut off angle 2.5%: 149,7°

Spectra

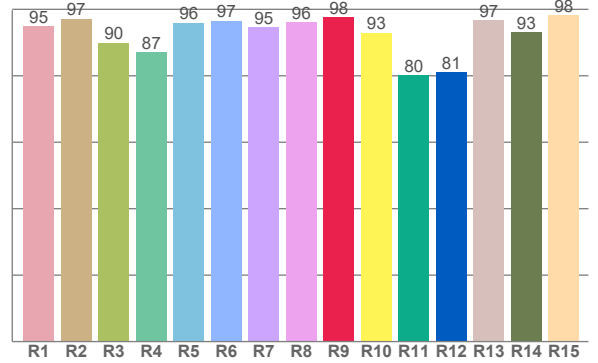




TM30: 92,3



CRI: 94,1 (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
95,0	97,2	89,9	87,1	96,0	96,5	94,6	96,2	97,6	92,9	80,2	81,0	96,7	93,1	98,1

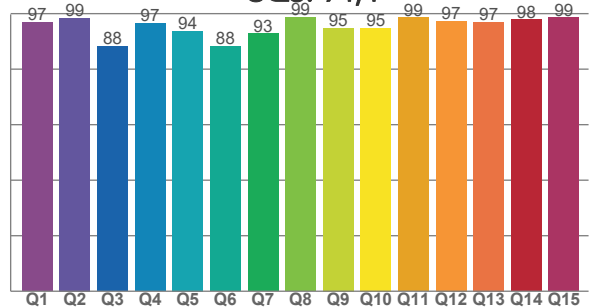
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,1	96,6	94,6	95,4	90,8	88,8	90,4	91,2	94,5	94,8	89,1	88,6	91,9	92,9	90,3	88,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96,9	98,5	88,2	96,5	93,7	88,2	92,8	98,7	94,9	94,8	98,6	97,3	97,0	97,9	98,6

CQS: 94,4



COLOR PARAMETERS

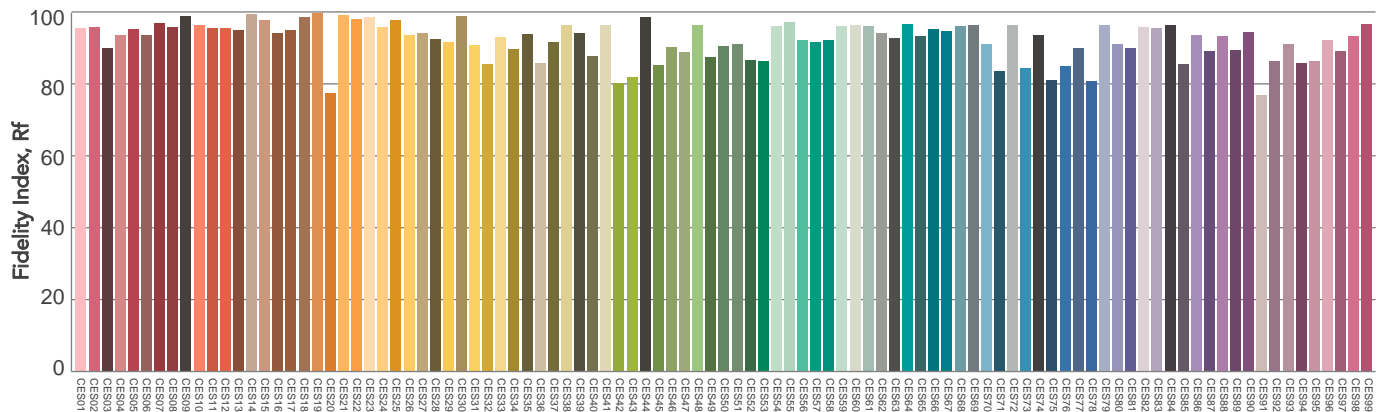
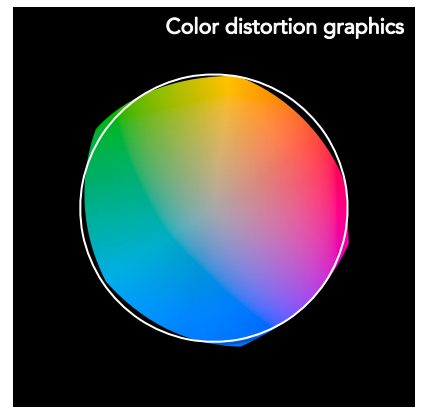
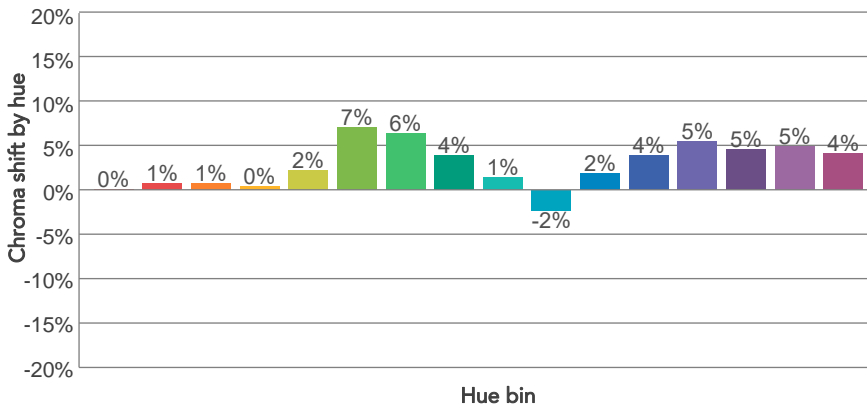
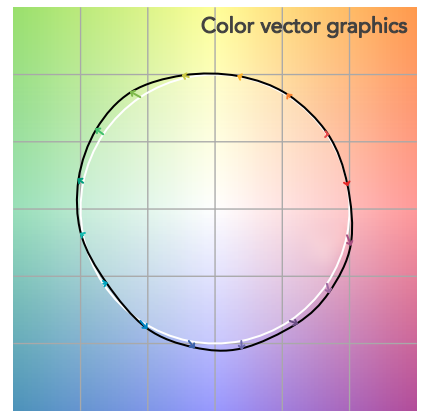
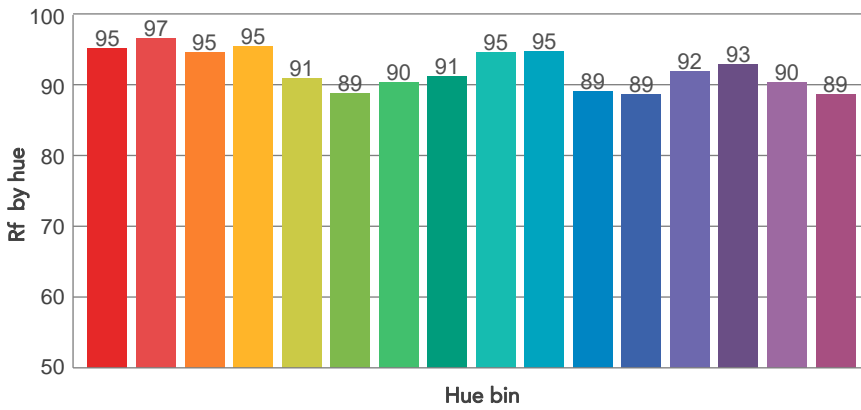
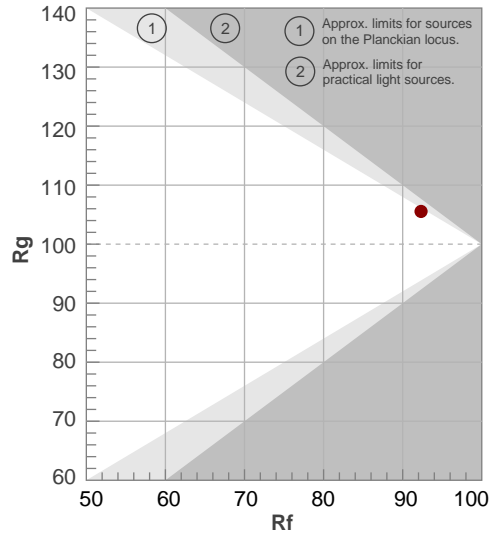
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
4000 K	94,1	97,6	92,3	105,5	94,4	86	0,380	0,373	-0,0014

TM30 DETAILS

Rf 92,3
Fidelity index Rf

Rg 105,5
Gammut index

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

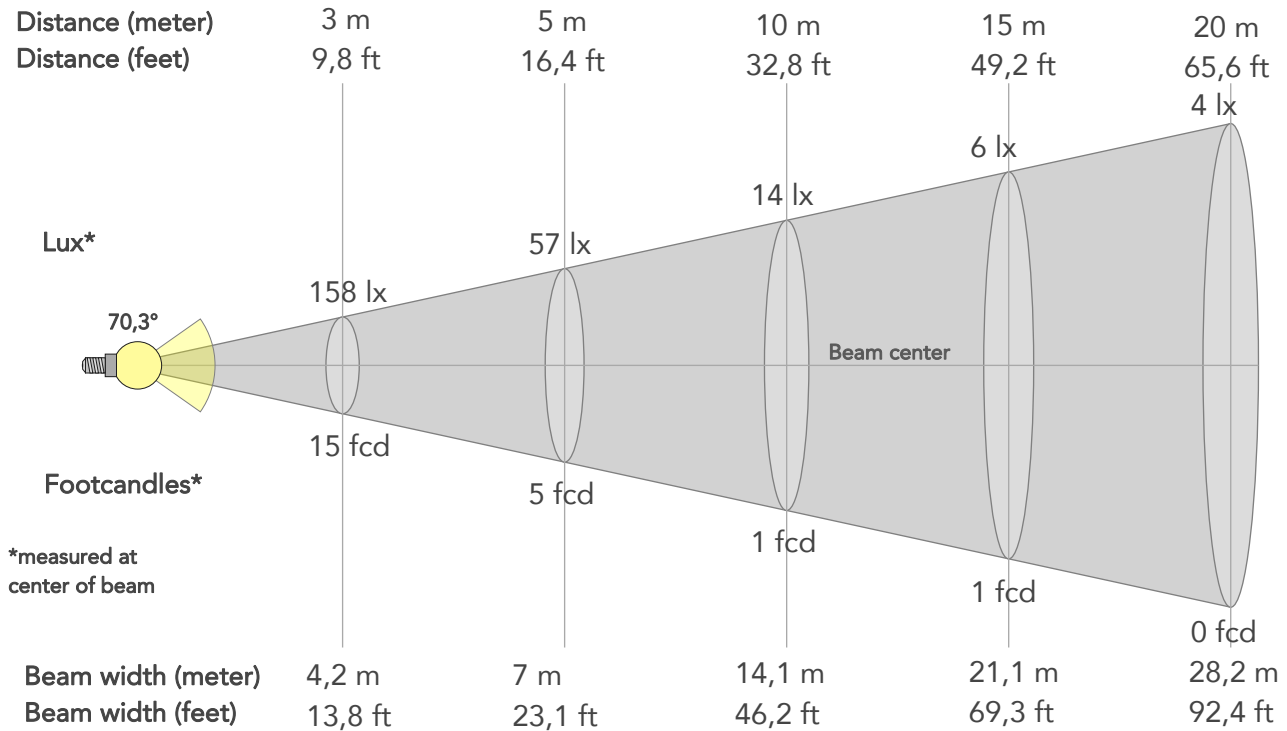


Color Evaluation Sample

BEAM DETAILS



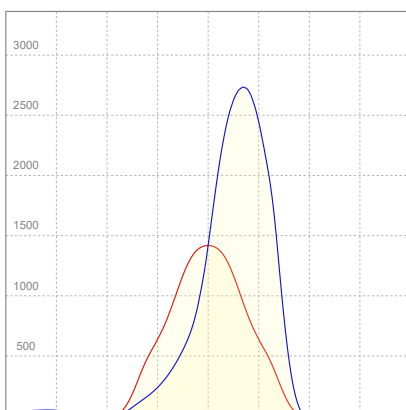
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
70,3°	123,8°	149,7°	82,5%	54,5%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	1419lx	355lx	158lx	89lx	57lx	25lx	14lx	6lx	4lx	2lx	2lx	1lx	1lx
Footcand.	132fcd	33fcd	15fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,6m	7m	10,6m	14,1m	21,1m	28,2m	35,2m	42,3m	56,4m	70,5m
Beam wid.	4,7ft	9,3ft	13,8ft	18,5ft	23,1ft	34,7ft	46,2ft	69,3ft	92,4ft	115,6ft	138,7ft	184,9ft	231,1ft

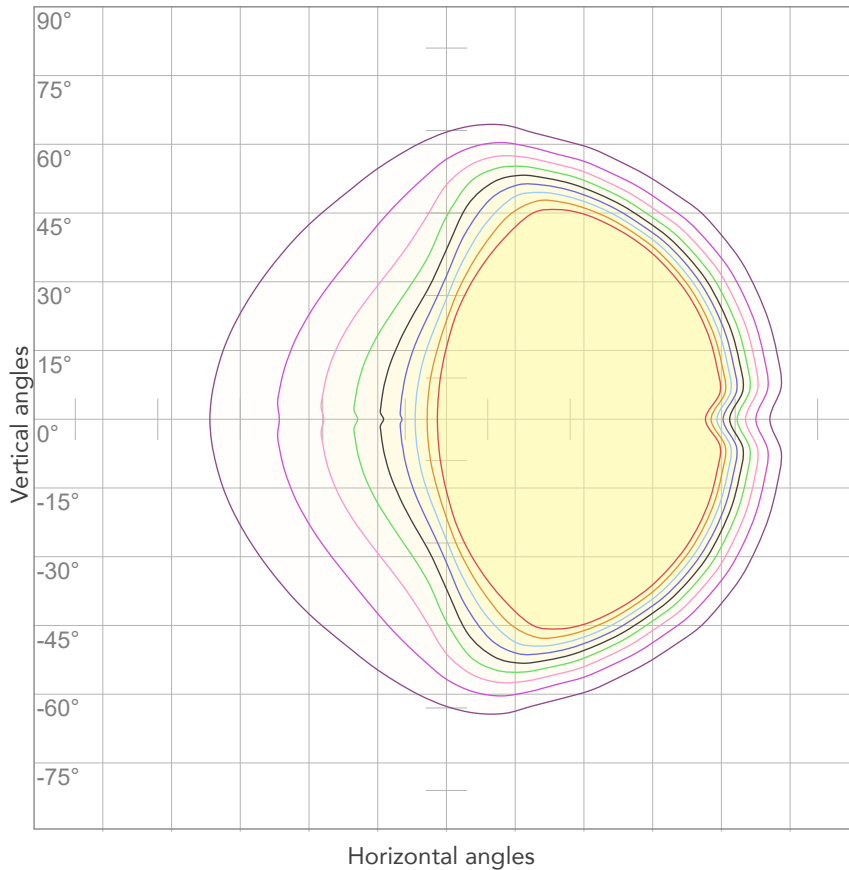
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,440A	96,9W	48lm/W

ISO CANDELA DIAGRAM



10%	142 cd
20%	284 cd
30%	426 cd
40%	567 cd
50%	709 cd
60%	851 cd
70%	993 cd
80%	1135 cd

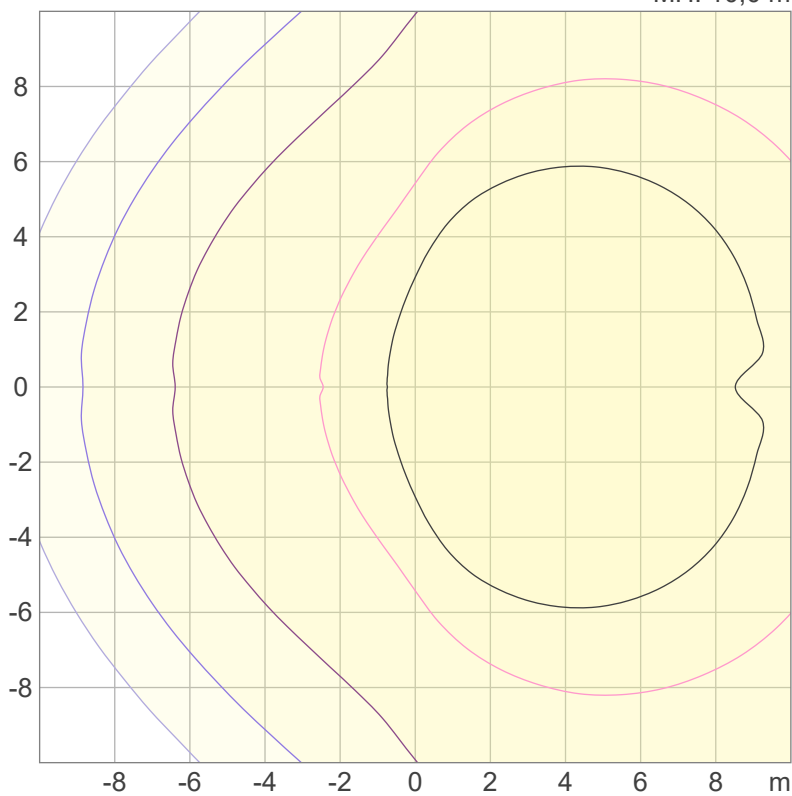
Conditions:

Number of c-planes: 64

Candela at center: 1419 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,426 lx
5%	0,709 lx
10%	1,42 lx
30%	4,26 lx
50%	7,09 lx

Conditions:

Number of c-planes: 64

Lux at center: 14,2 lx

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



Total lumen output:

5033 lm

Peak candela output:

3292 cd

Light quality:

CRI: 92,8

Color temperature:

5615 K

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

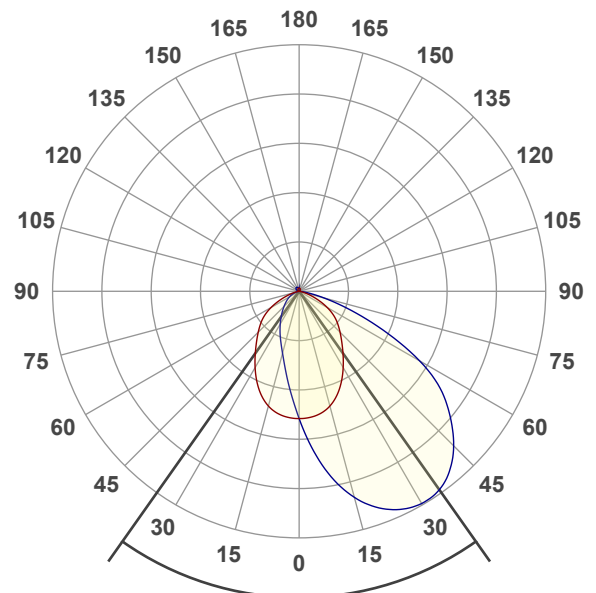
5600K

Operator:

Paolo Carvone

Date and time:

07/06/2023 12:39:46

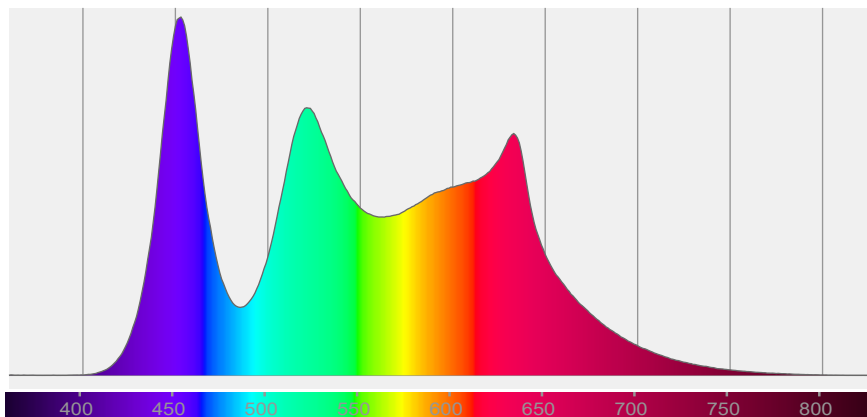


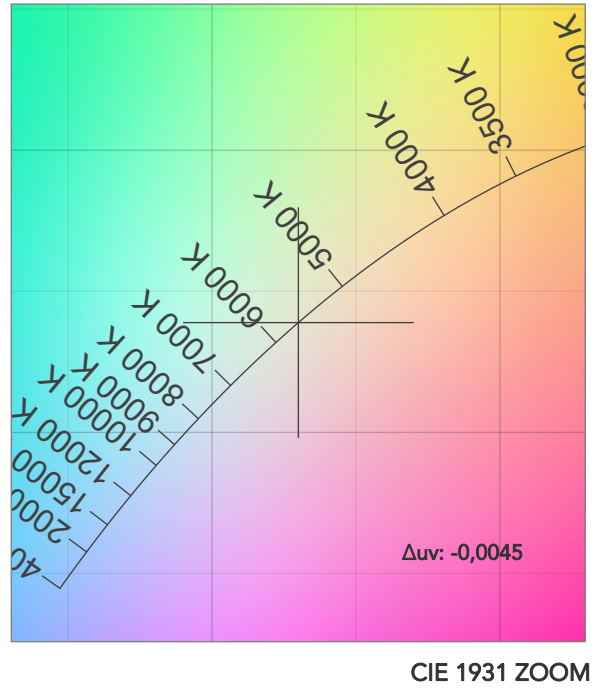
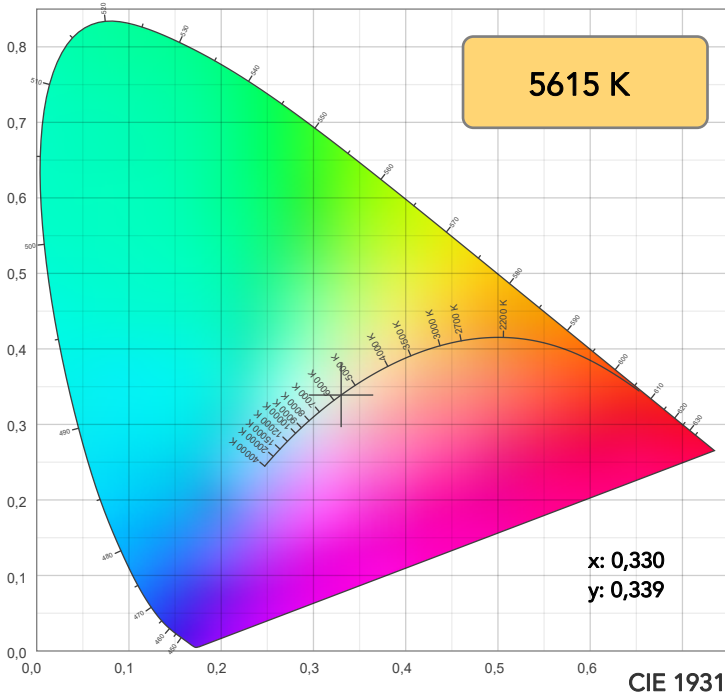
Beam angle 50%: 70,5°

Field angle 10%: 124°

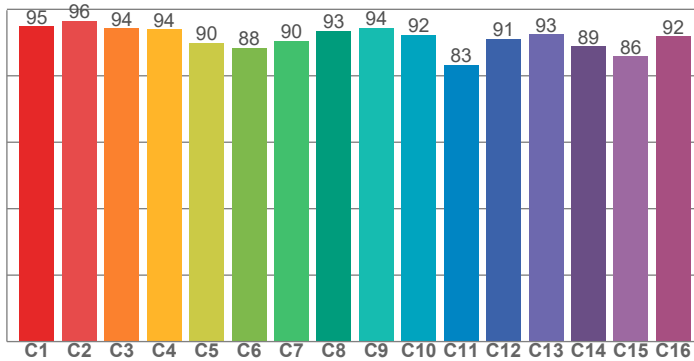
Cut off angle 2.5%: 162,9°

Spectra

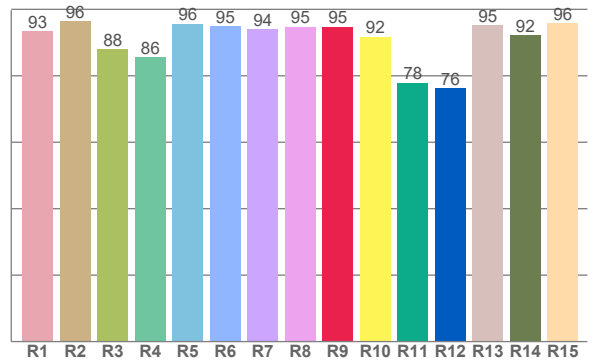




TM30: 91,3



CRI: 92,8 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93,4	96,5	88,1	85,6	95,7	94,8	93,9	94,7	94,7	91,7	77,9	76,2	95,2	92,2	95,7

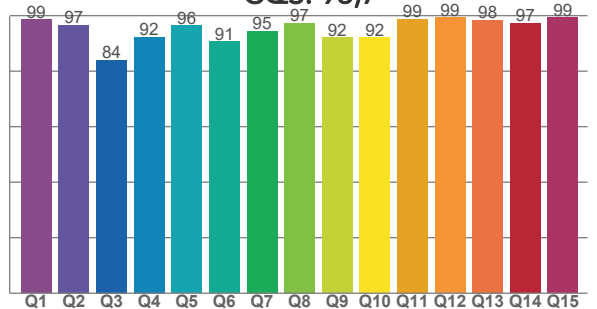
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,8	96,5	94,3	93,9	90,0	88,4	90,4	93,5	94,5	92,3	83,3	91,1	92,5	88,8	85,8	91,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
98,6	96,7	84,1	92,3	96,4	90,6	94,5	97,3	92,1	92,2	98,8	99,2	98,4	97,3	99,3

CQS: 93,7



COLOR PARAMETERS

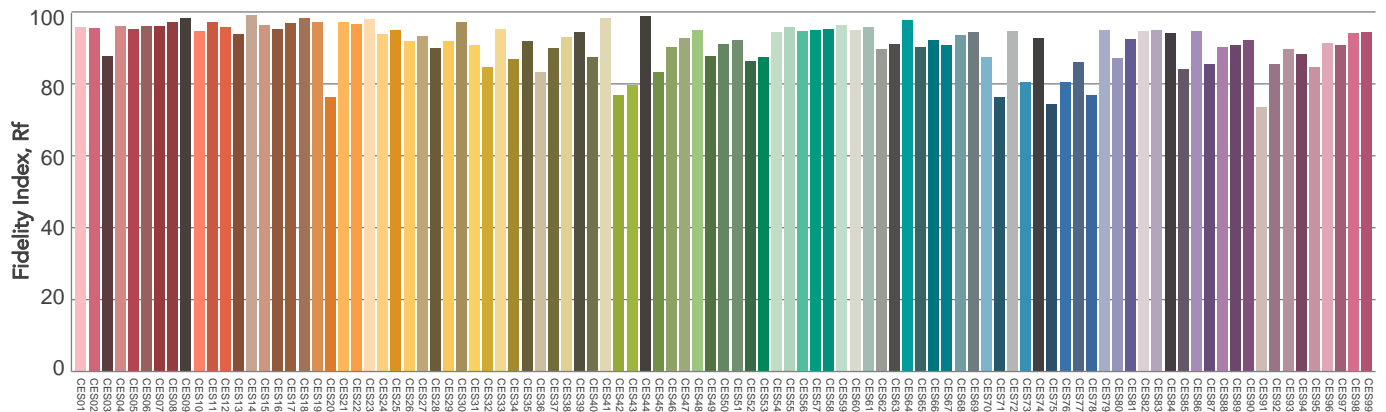
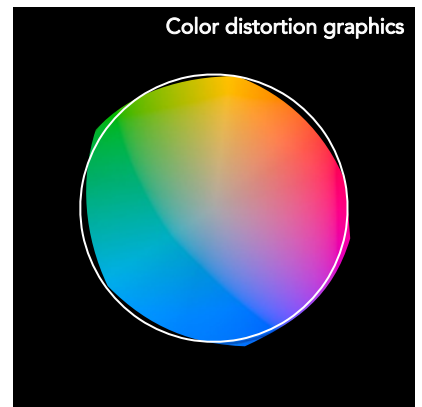
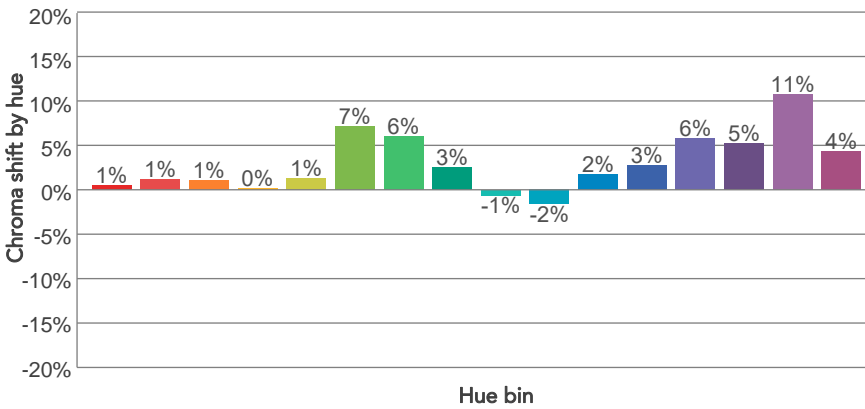
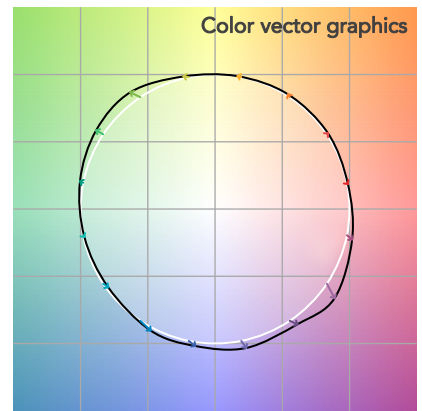
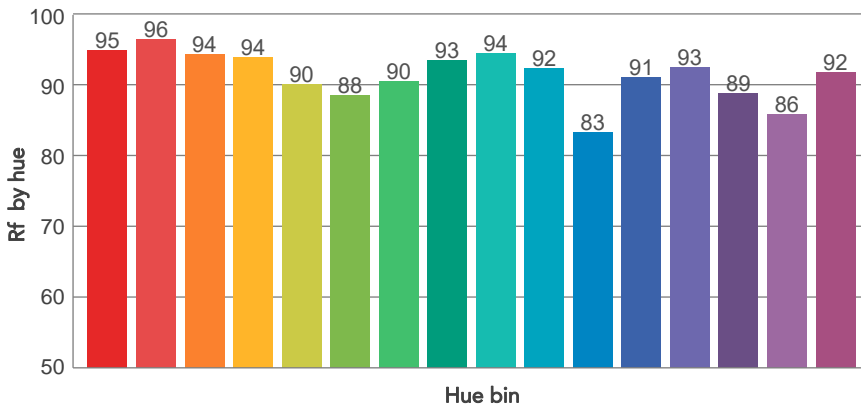
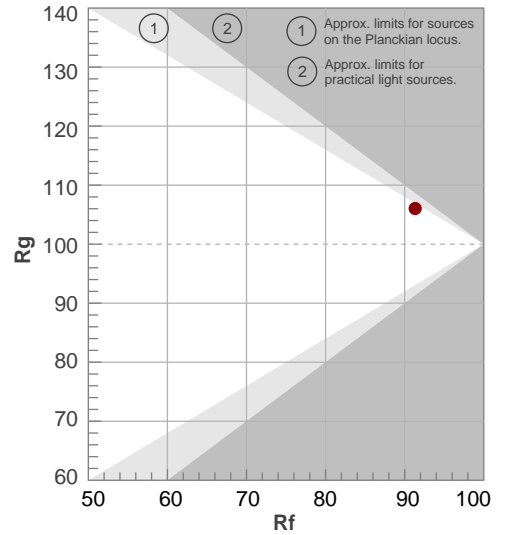
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
5615 K	92,8	94,7	91,3	106,0	93,7	92	0,330	0,339	-0,0045

TM30 DETAILS

Rf 91,3
Fidelity index Rf

Rg 106,0
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	-1%
2	96	1%	0%
3	94	1%	2%
4	94	0%	3%
5	90	1%	4%
6	88	7%	4%
7	90	6%	0%
8	93	3%	-1%
9	94	-1%	1%
10	92	-2%	4%
11	83	2%	10%
12	91	3%	5%
13	93	6%	3%
14	89	5%	3%
15	86	11%	-6%
16	92	4%	-2%

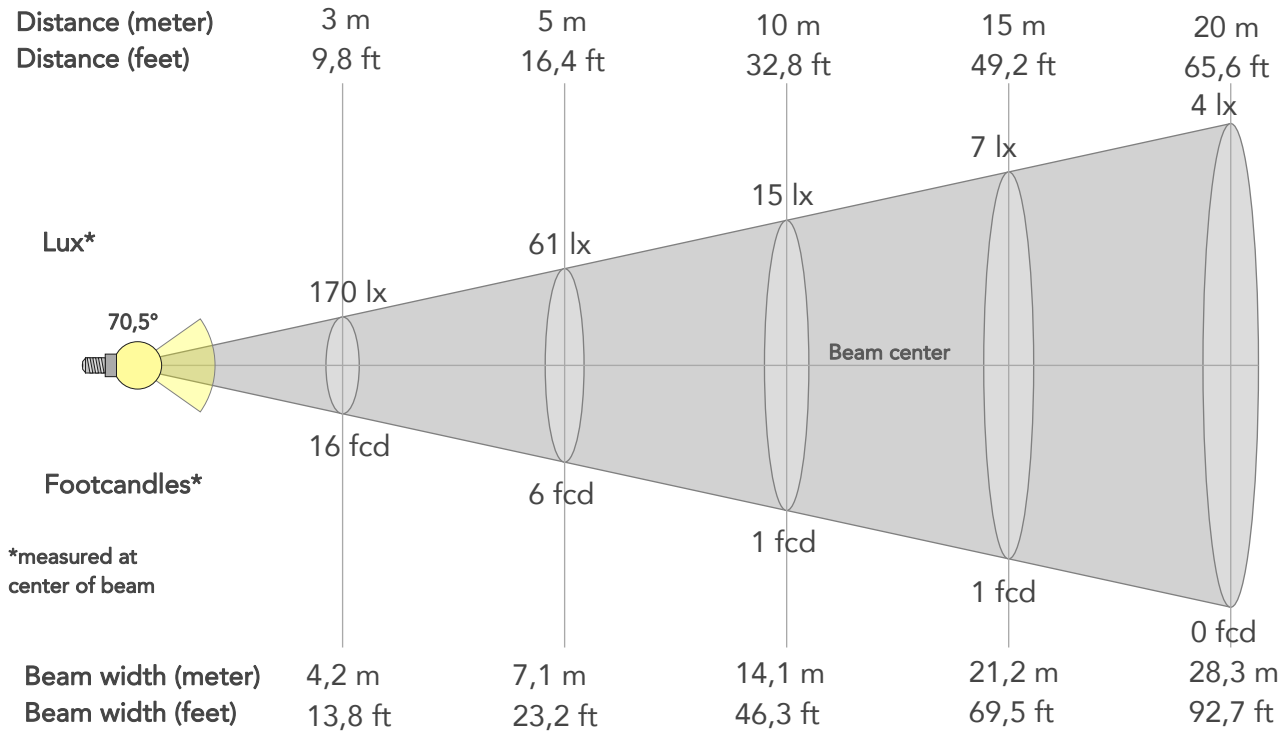


Color Evaluation Sample

BEAM DETAILS



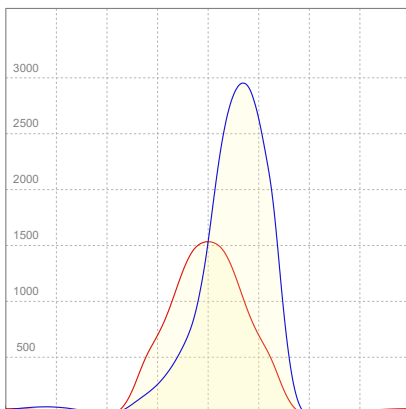
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
70,5°	124°	162,9°	82,5%	54,4%



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	1534lx	383lx	170lx	96lx	61lx	27lx	15lx	7lx	4lx	2lx	2lx	1lx	1lx
Footcand.	142fcd	36fcd	16fcd	9fcd	6fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,7m	7,1m	10,6m	14,1m	21,2m	28,3m	35,3m	42,4m	56,5m	70,6m
Beam wid.	4,7ft	9,3ft	13,8ft	18,5ft	23,2ft	34,8ft	46,3ft	69,5ft	92,7ft	115,8ft	139ft	185,4ft	231,7ft

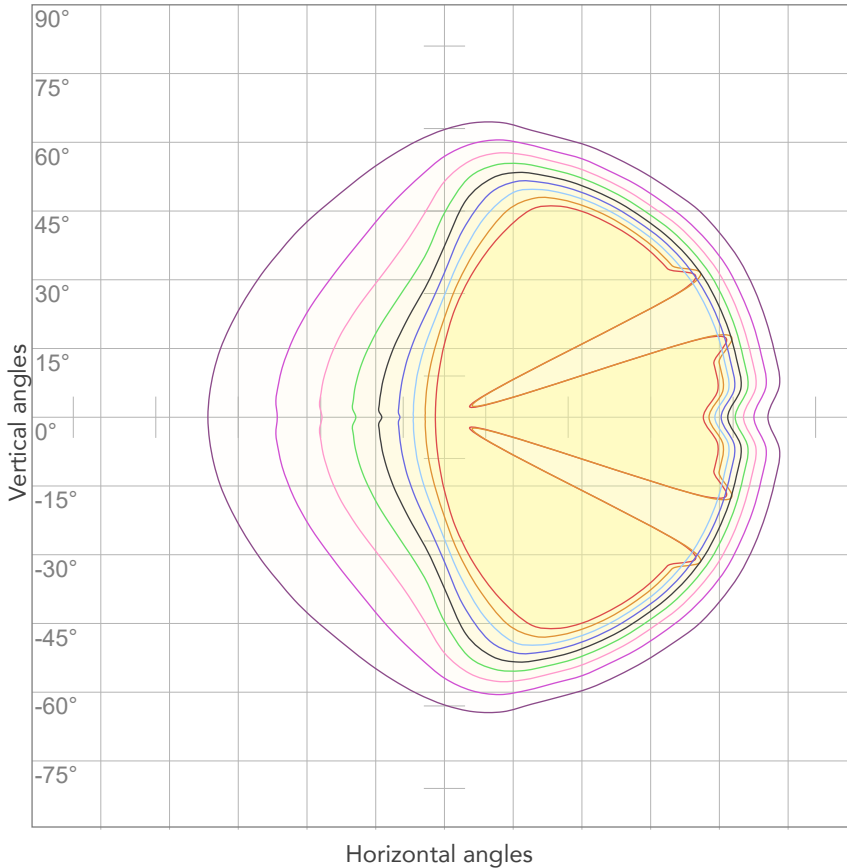
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,495A	109,8W	46lm/W

ISO CANDELA DIAGRAM



10%	153 cd
20%	307 cd
30%	460 cd
40%	614 cd
50%	767 cd
60%	920 cd
70%	1074 cd
80%	1227 cd

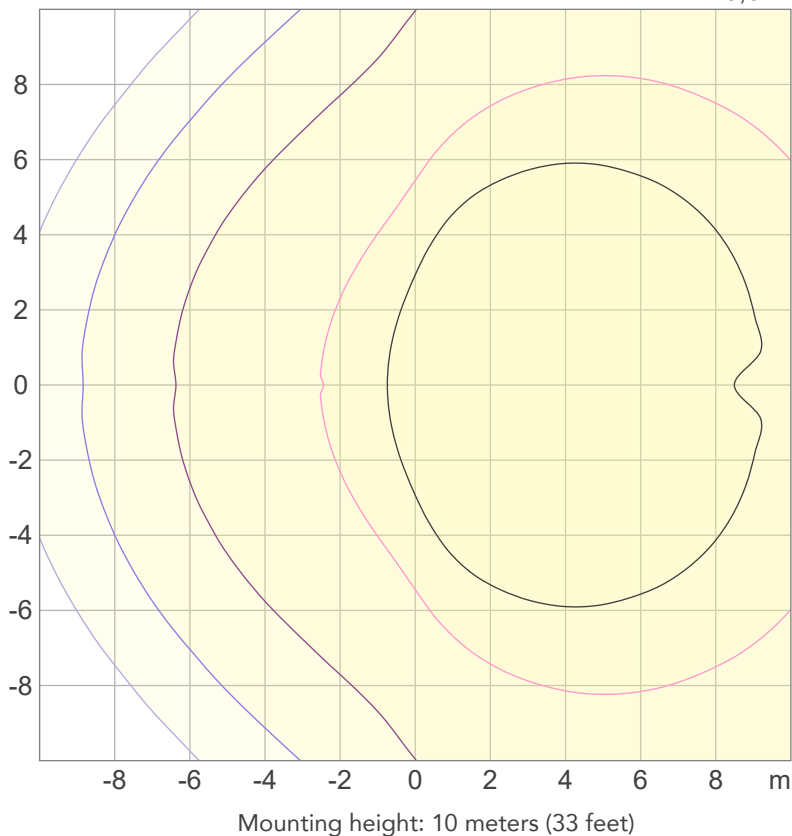
Conditions:

Number of c-planes: 64

Candela at center: 1534 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,460 lx
5%	0,767 lx
10%	1,53 lx
30%	4,60 lx
50%	7,67 lx

Conditions:

Number of c-planes: 64

Lux at center: 15,3 lx

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



Total lumen output:

5166 lm

Peak candela output:

3387 cd

Light quality:

CRI: 92,2

Color temperature:

6001 K

PRODUCT NAME:

ECLEXPFL150 FC

MEASUREMENT CONDITIONS:

Beam angle:

Asymmetric

Target:

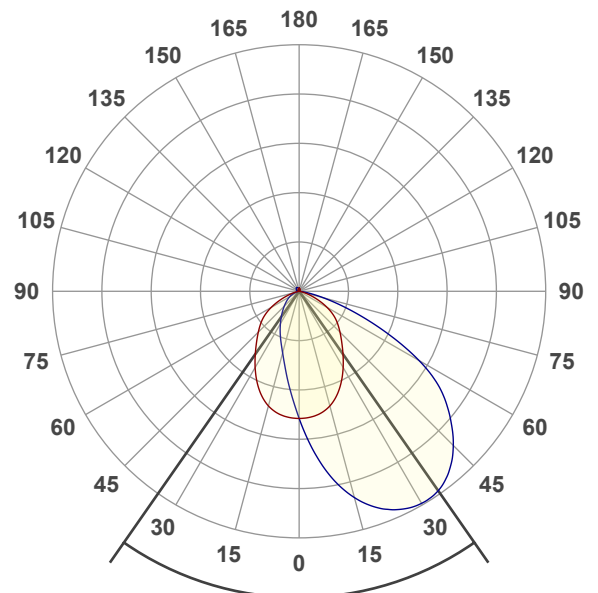
6000K

Operator:

Paolo Carvone

Date and time:

07/06/2023 13:16:35

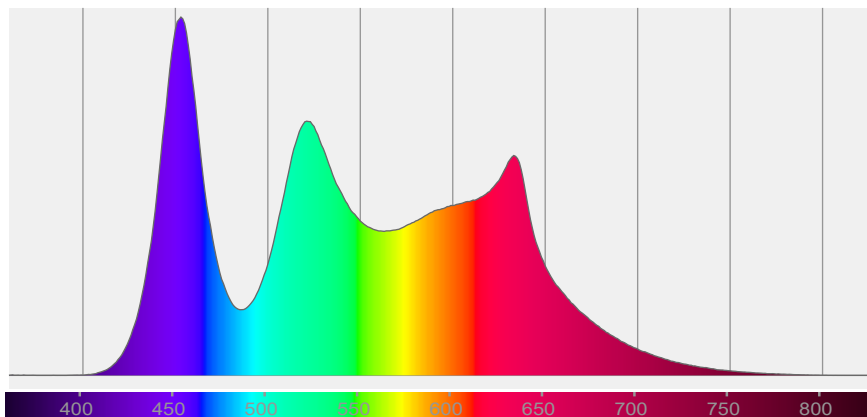


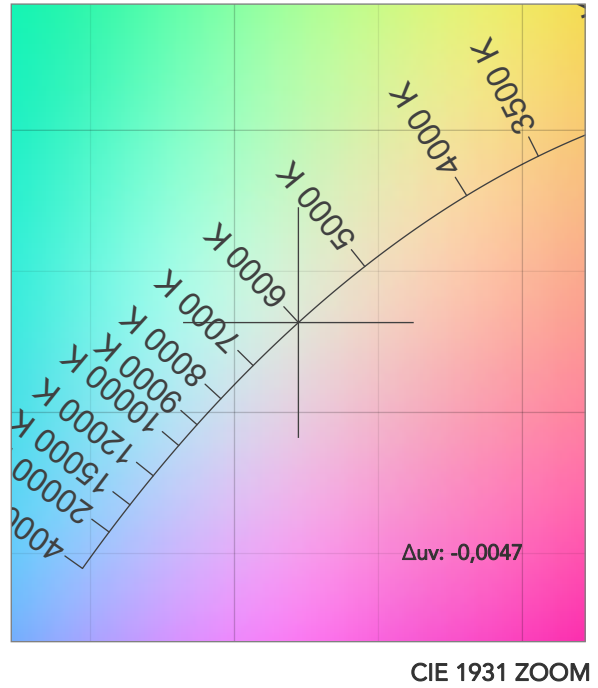
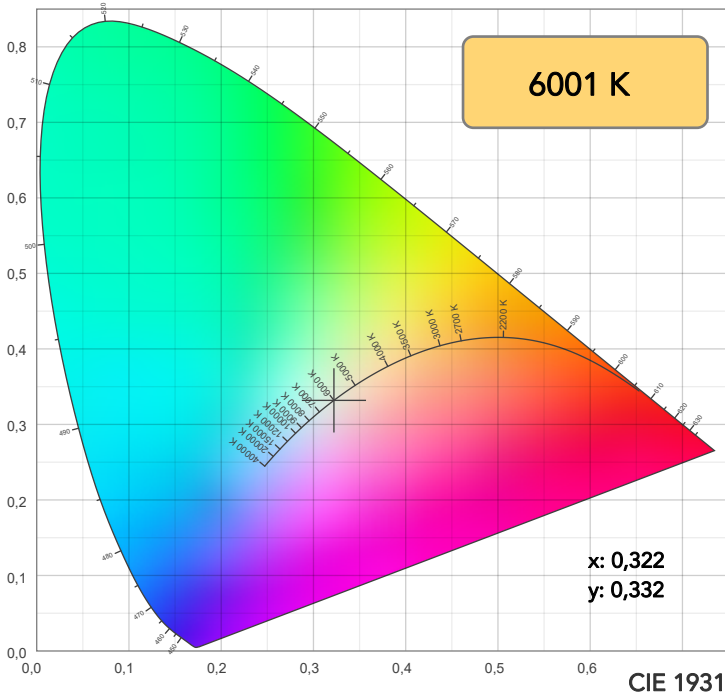
Beam angle 50%: 69,8°

Field angle 10%: 123,2°

Cut off angle 2.5%: 149,2°

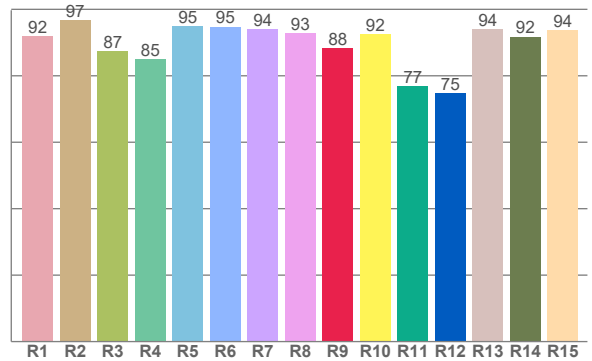
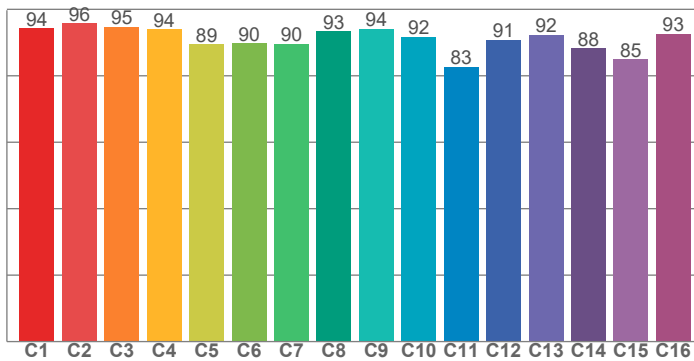
Spectra





TM30: 91,1

CRI: 92,2 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92,0	96,8	87,4	84,9	94,9	94,7	93,9	92,8	88,2	92,4	76,8	74,7	94,1	91,7	93,7

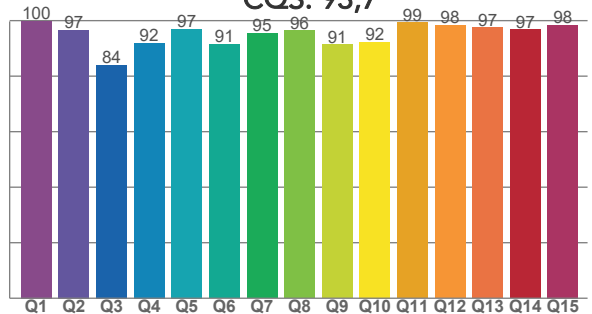
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94,3	95,8	94,7	94,0	89,4	89,8	89,5	93,4	94,1	91,7	82,6	90,9	92,3	88,3	84,9	92,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99,9	96,6	84,0	91,9	97,0	91,5	95,4	96,4	91,4	92,3	99,3	98,3	97,5	96,8	98,4

CQS: 93,7



COLOR PARAMETERS

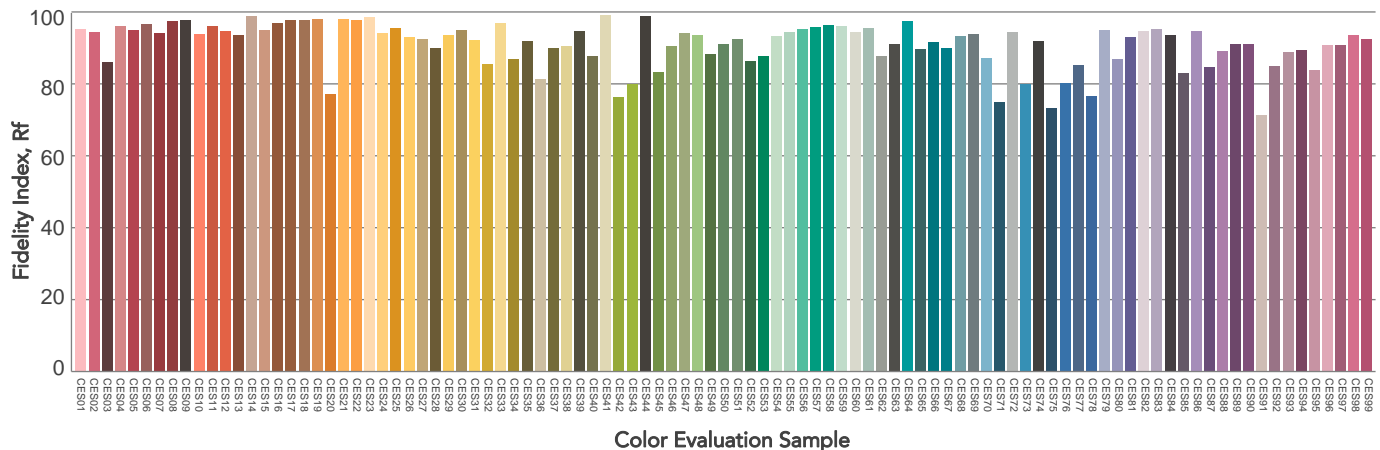
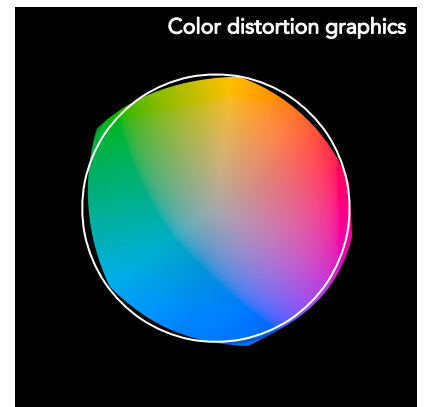
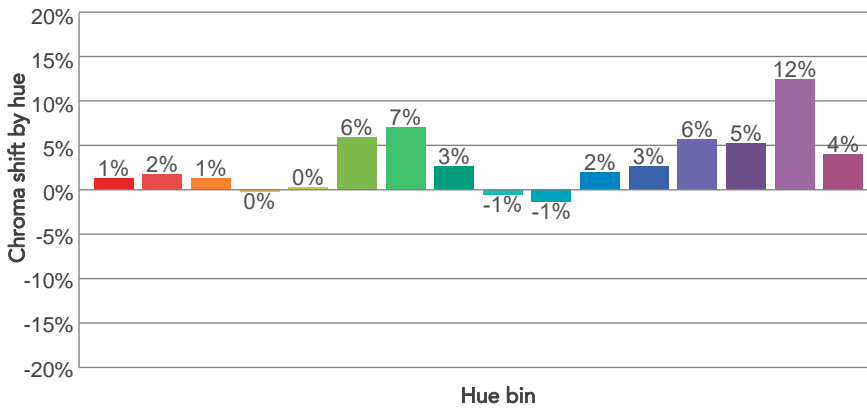
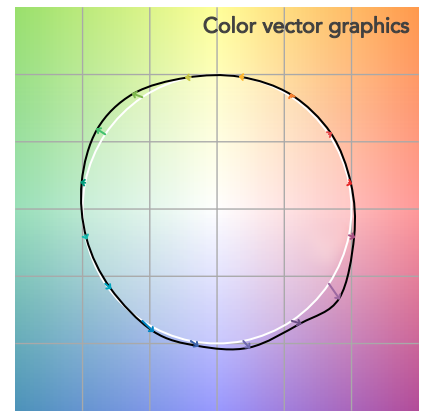
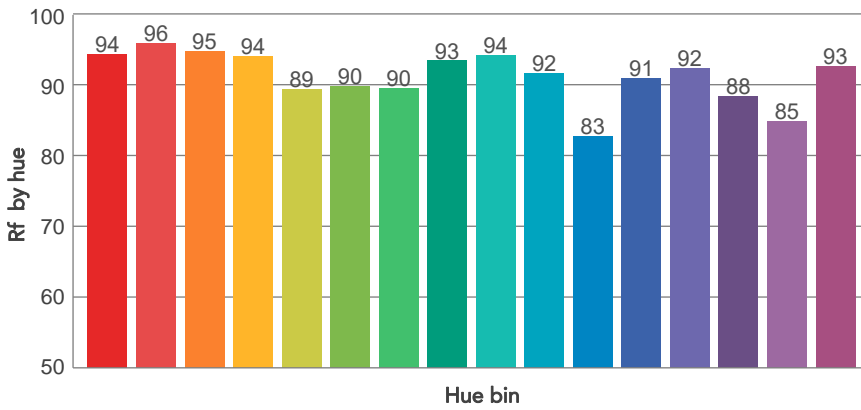
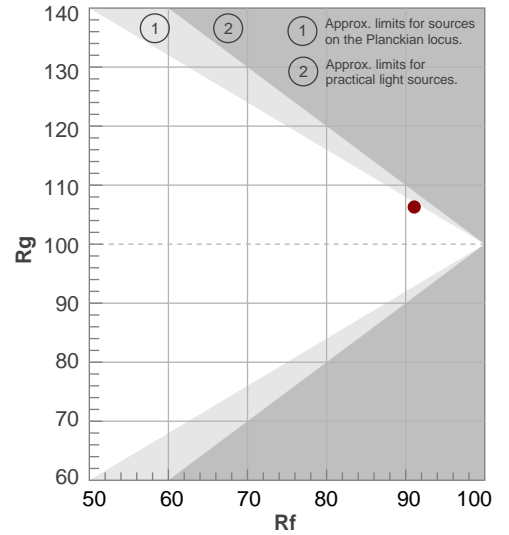
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
6001 K	92,2	88,2	91,1	106,3	93,7	92	0,322	0,332	-0,0047

TM30 DETAILS

Rf 91,1
Fidelity index Rf

Rg 106,3
Gammut index

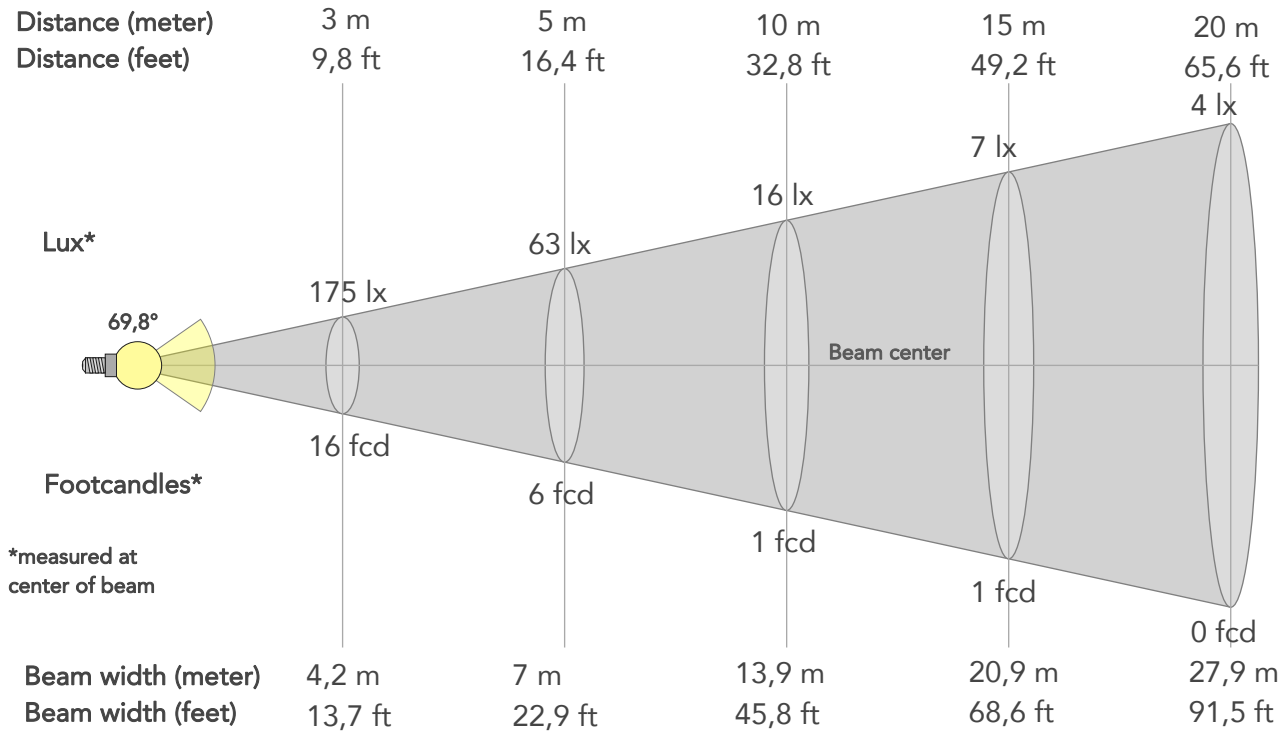
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	1%	-1%
2	96	2%	0%
3	95	1%	1%
4	94	0%	2%
5	89	0%	3%
6	90	6%	4%
7	90	7%	0%
8	93	3%	0%
9	94	-1%	2%
10	92	-1%	5%
11	83	2%	11%
12	91	3%	6%
13	92	6%	3%
14	88	5%	4%
15	85	12%	-5%
16	93	4%	-1%



BEAM DETAILS



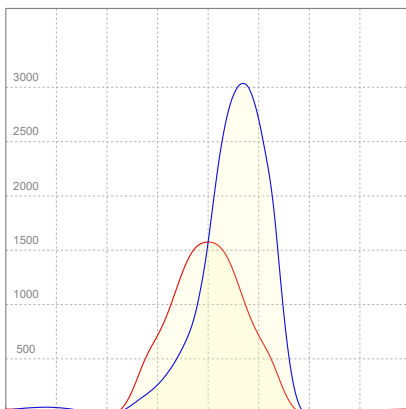
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
69,8°	123,2°	149,2°	82,7%	54,4%



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	1575lx	394lx	175lx	98lx	63lx	28lx	16lx	7lx	4lx	3lx	2lx	1lx	1lx
Footcand.	146fcd	37fcd	16fcd	9fcd	6fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	1,4m	2,8m	4,2m	5,6m	7m	10,5m	13,9m	20,9m	27,9m	34,9m	41,8m	55,8m	69,7m
Beam wid.	4,6ft	9,2ft	13,7ft	18,3ft	22,9ft	34,3ft	45,8ft	68,6ft	91,5ft	114,4ft	137,3ft	183ft	228,8ft

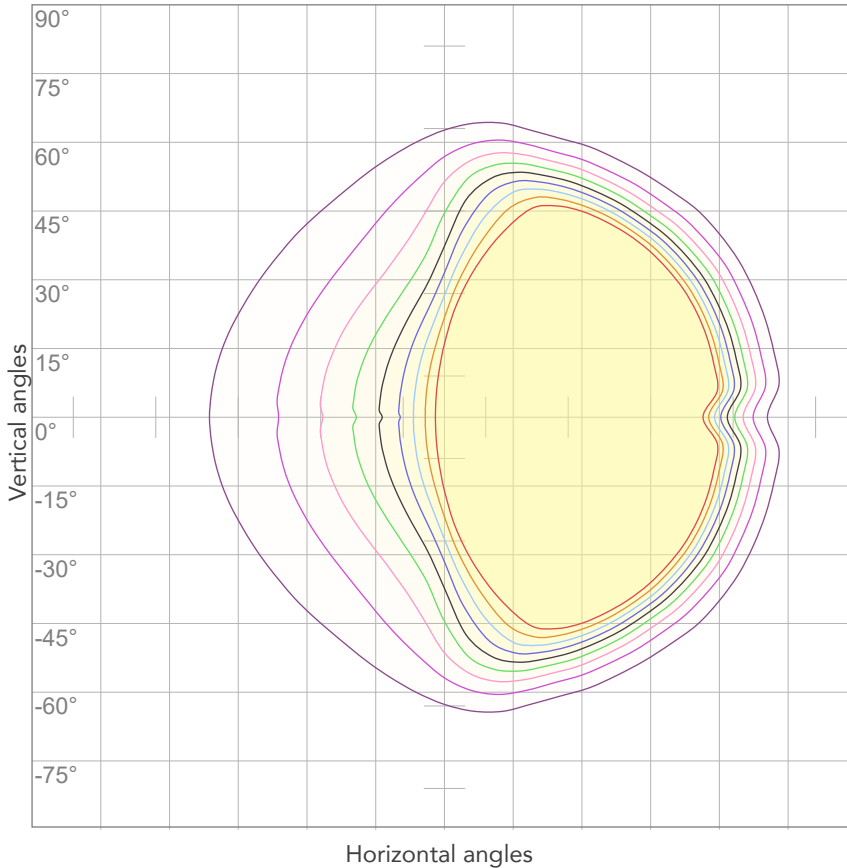
LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,515A	114,5W	45lm/W

ISO CANDELA DIAGRAM



10%	158 cd
20%	315 cd
30%	473 cd
40%	630 cd
50%	788 cd
60%	945 cd
70%	1103 cd
80%	1260 cd

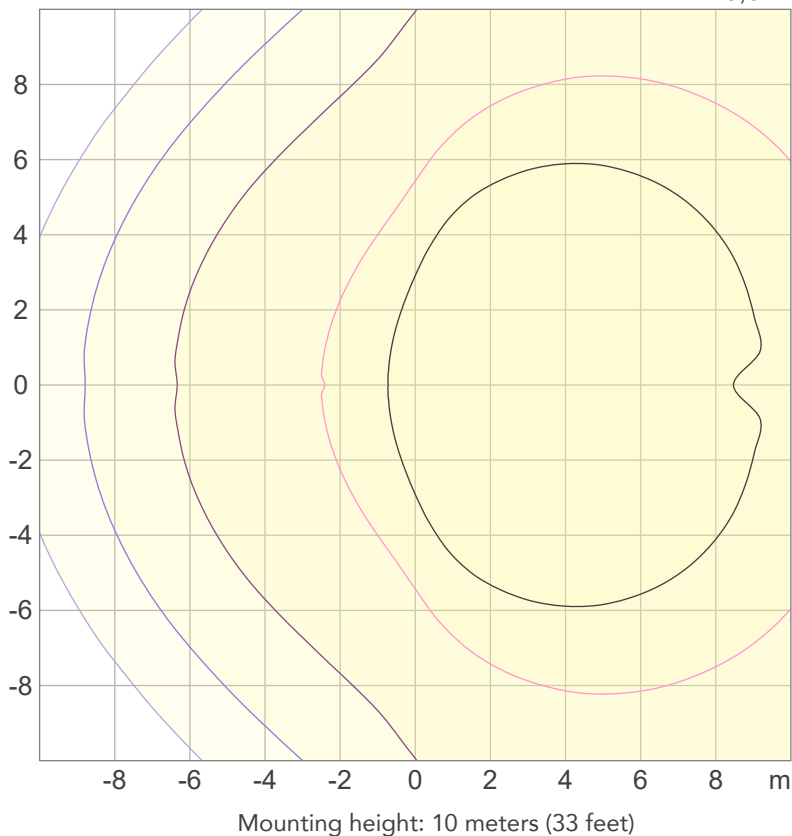
Conditions:

Number of c-planes: 64

Candela at center: 1575 cd

ISO LUX DIAGRAM

MH: 10,0 m



3%	0,473 lx
5%	0,788 lx
10%	1,58 lx
30%	4,73 lx
50%	7,88 lx

Conditions:

Number of c-planes: 64

Lux at center: 15,8 lx

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