



Photometric Test Report



ARCSPOTXLFC

IP66 Spot featuring 11'600 lumen
with 61 x 4W RGB+WarmWhite source,
10° native
(PRELIMINARY)

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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:

11684 lm

Peak candela output:

224761 cd

Light quality:

CRI: 45,1

Color temperature:

19408 K

PRODUCT NAME:

ARCSPOTXLFC

MEASURAMENT CONDITIONS:

Beam angle:

10°

Target:

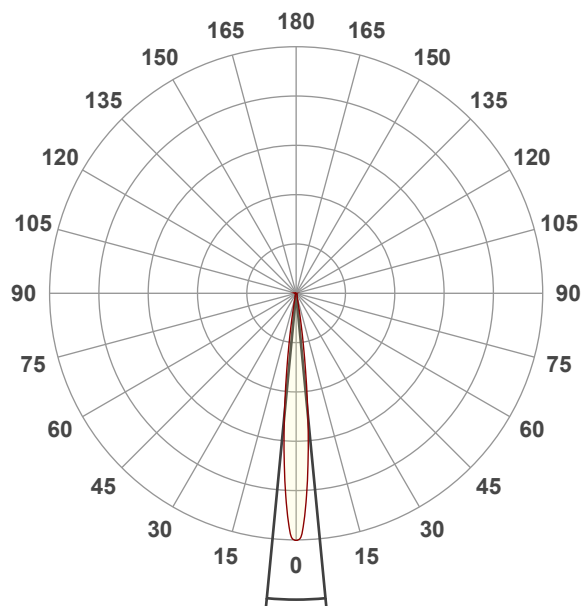
Full On

Operator:

Salvatore Giglio

Date and time:

04/01/2024 10:26:57

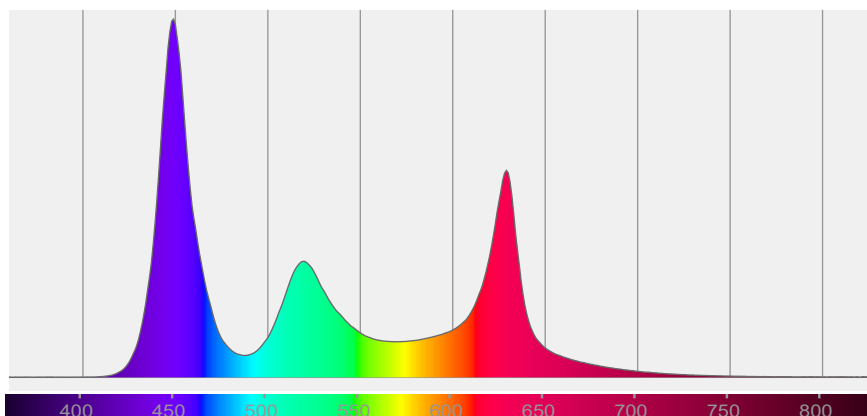


Beam angle 50%: 11°

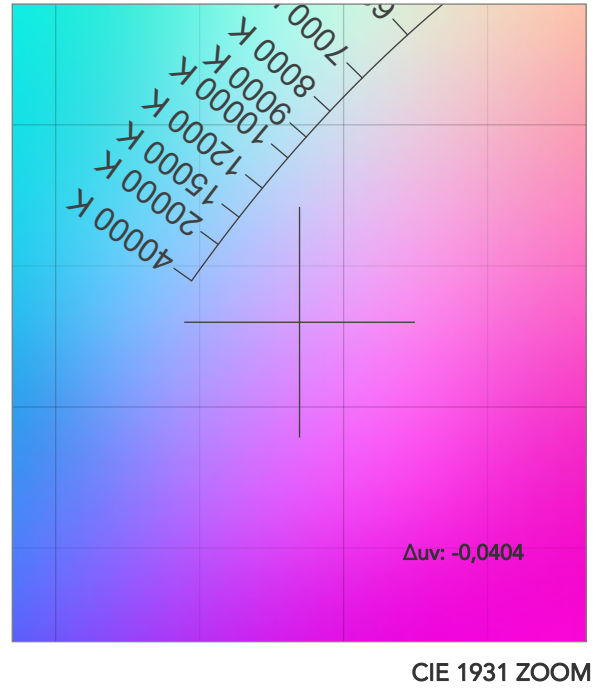
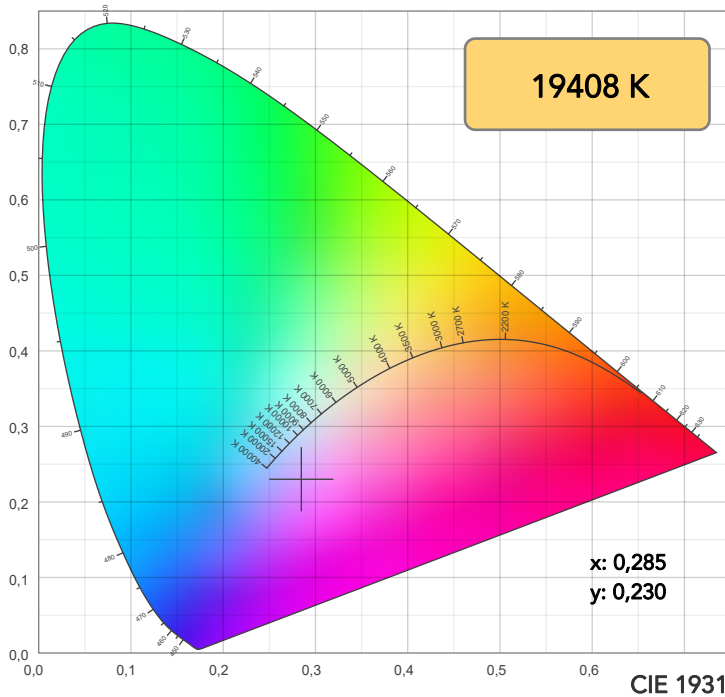
Field angle 10%: 19,3°

Cut off angle 2.5%: 26,3°

Spectra

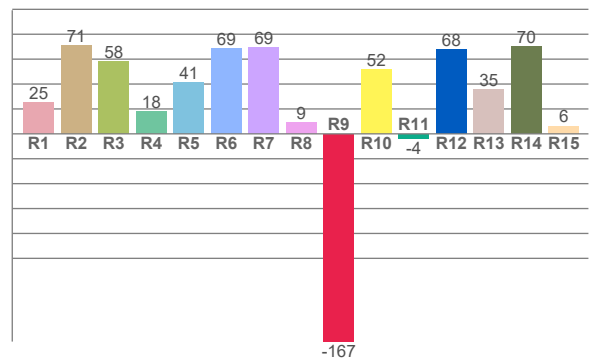
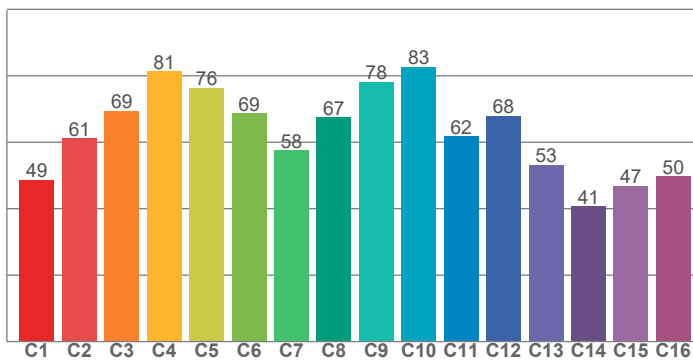


COLOR DETAILS



TM30: 66,0

CRI: 45,1 (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
25,1	71,4	58,2	18,1	41,5	68,6	69,3	8,9	-166,8	51,7	-3,9	67,8	35,5	70,5	6,4

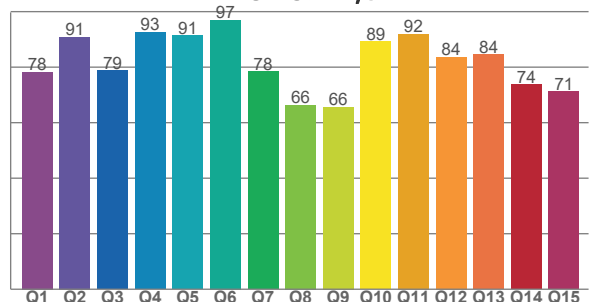
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
48,6	61,1	69,4	81,4	76,4	68,7	57,6	67,5	78,1	82,7	61,8	67,9	53,2	40,7	46,8	49,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
78,2	90,9	78,8	92,5	91,4	97,0	78,5	66,3	65,6	89,2	92,0	83,7	84,5	73,7	71,2

CQS: 79,8



COLOR PARAMETERS

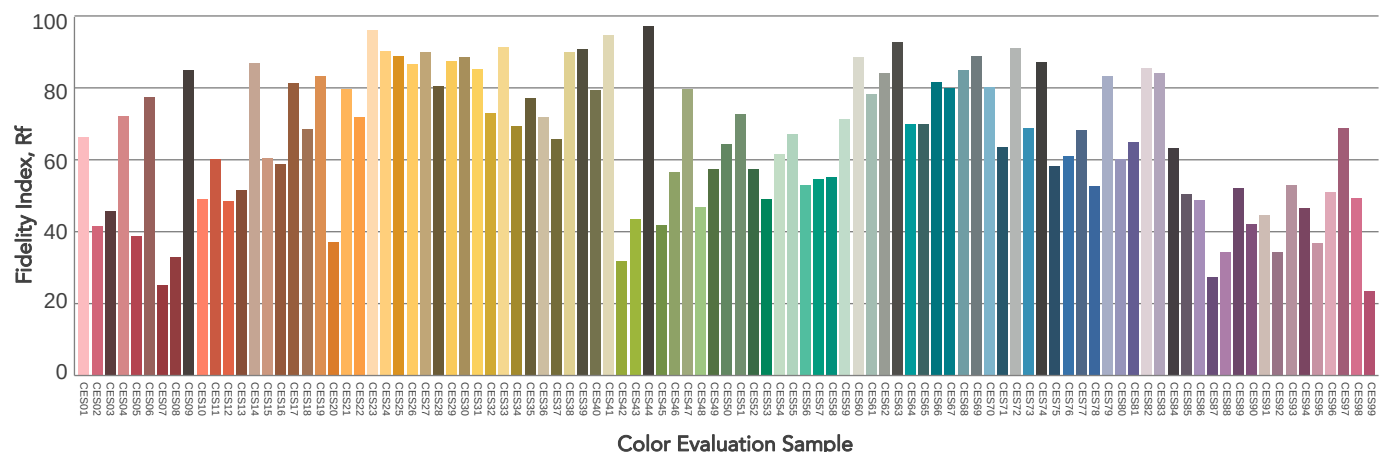
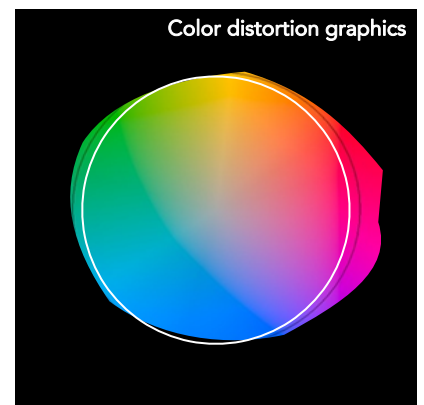
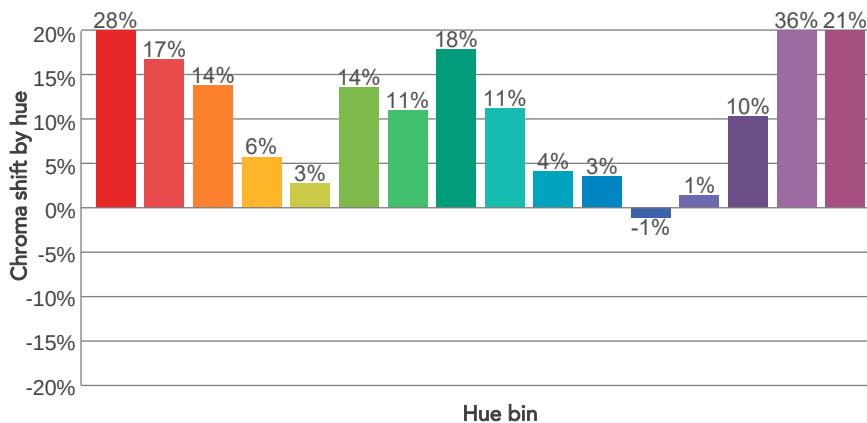
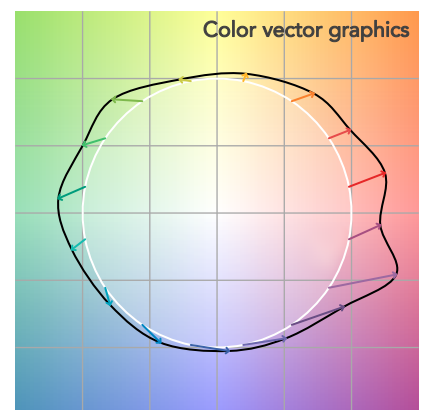
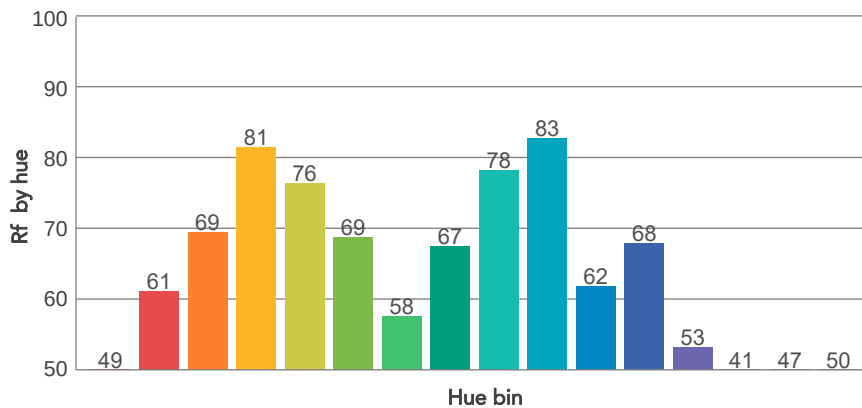
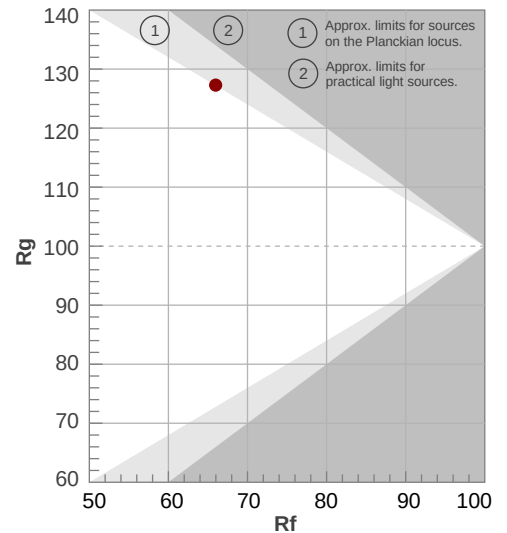
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
19408 K	45,1	-166,8	66,0	127,3	79,8	69	0,285	0,230	-0,0404

TM30 DETAILS

Rf 66,0
Fidelity index Rf

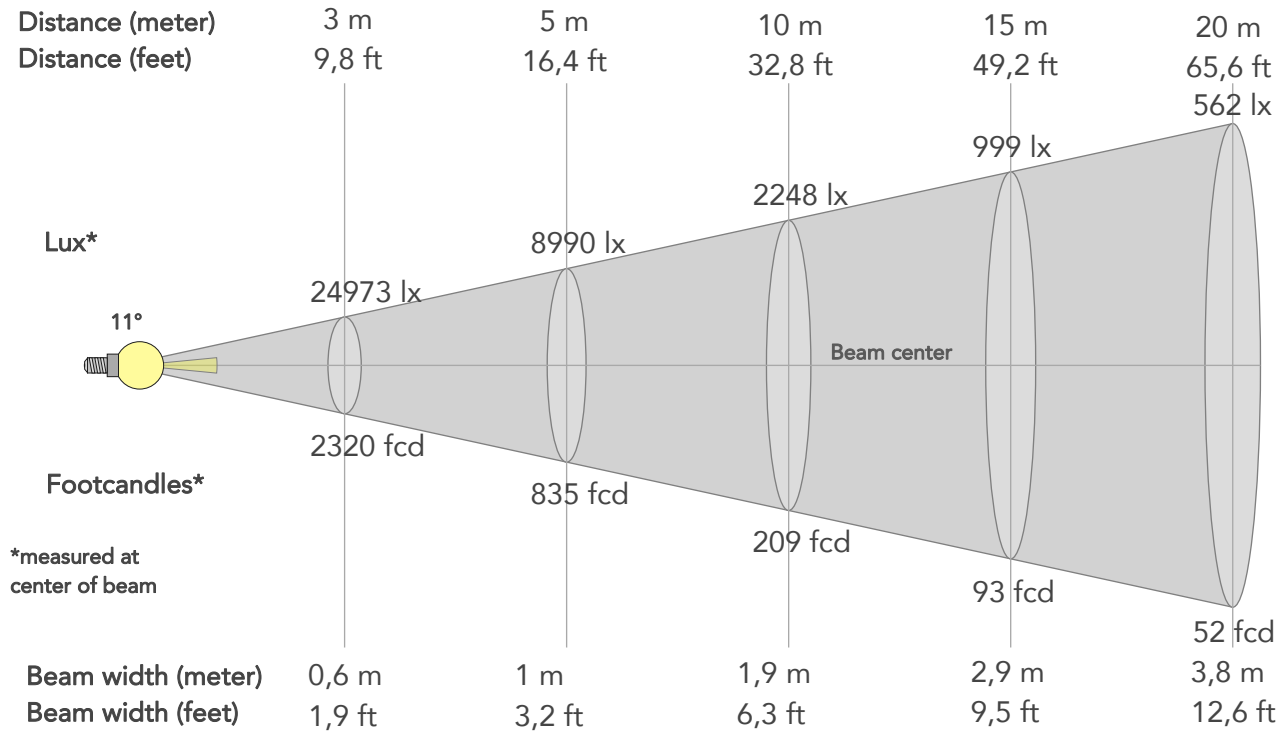
Rg 127,3
Gammut index

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	49	28%	5%
2	61	17%	-4%
3	69	14%	-10%
4	81	6%	-1%
5	76	3%	8%
6	69	14%	18%
7	58	11%	13%
8	67	18%	12%
9	78	11%	6%
10	83	4%	12%
11	62	3%	19%
12	68	-1%	29%
13	53	1%	32%
14	41	10%	40%
15	47	36%	36%
16	50	21%	15%



BEAM DETAILS

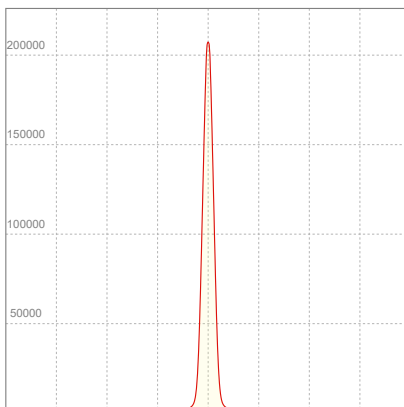
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11°	19,3°	26,3°	98,1%	95,2%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	224761lx	56190lx	24973lx	14048lx	8990lx	3996lx	2248lx	999lx	562lx	360lx	250lx	140lx	90lx
Footcand.	20881fcd	5220fcd	2320fcd	1305fcd	835fcd	371fcd	209fcd	93fcd	52fcd	33fcd	23fcd	13fcd	8fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,4m	1,9m	2,9m	3,8m	4,8m	5,8m	7,7m	9,6m
Beam wid.	0,6ft	1,3ft	1,9ft	2,5ft	3,2ft	4,7ft	6,3ft	9,5ft	12,6ft	15,8ft	18,9ft	25,3ft	31,6ft

LINEAR DISTRIBUTION DIAGRAM

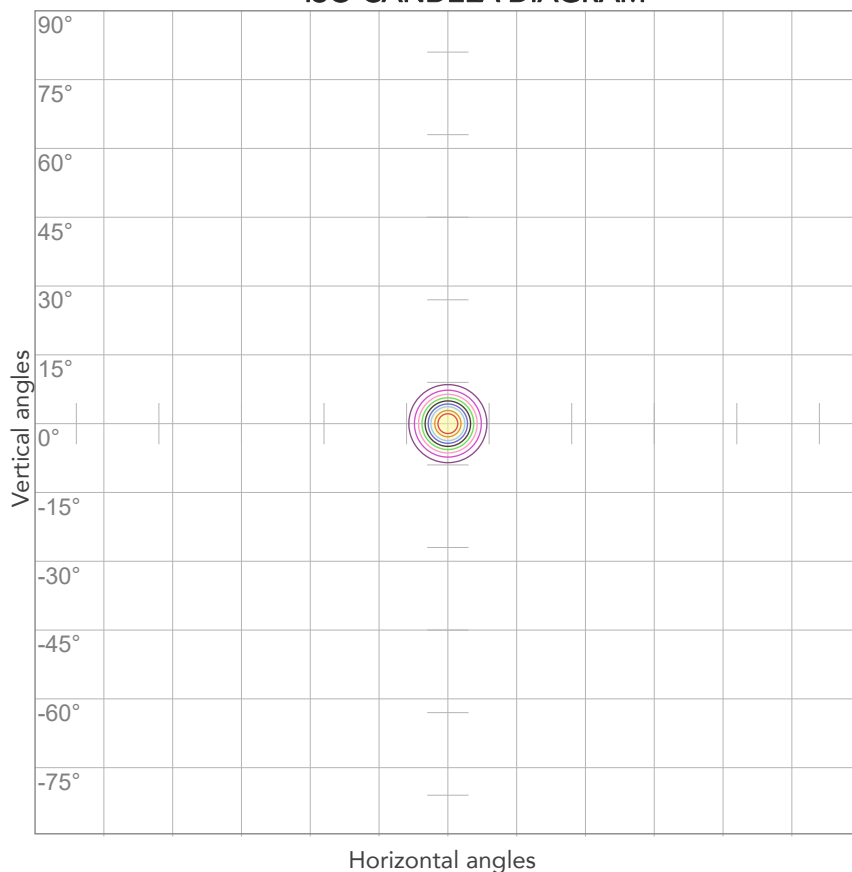


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
225V	1,07A	229,3W	0,95	51lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



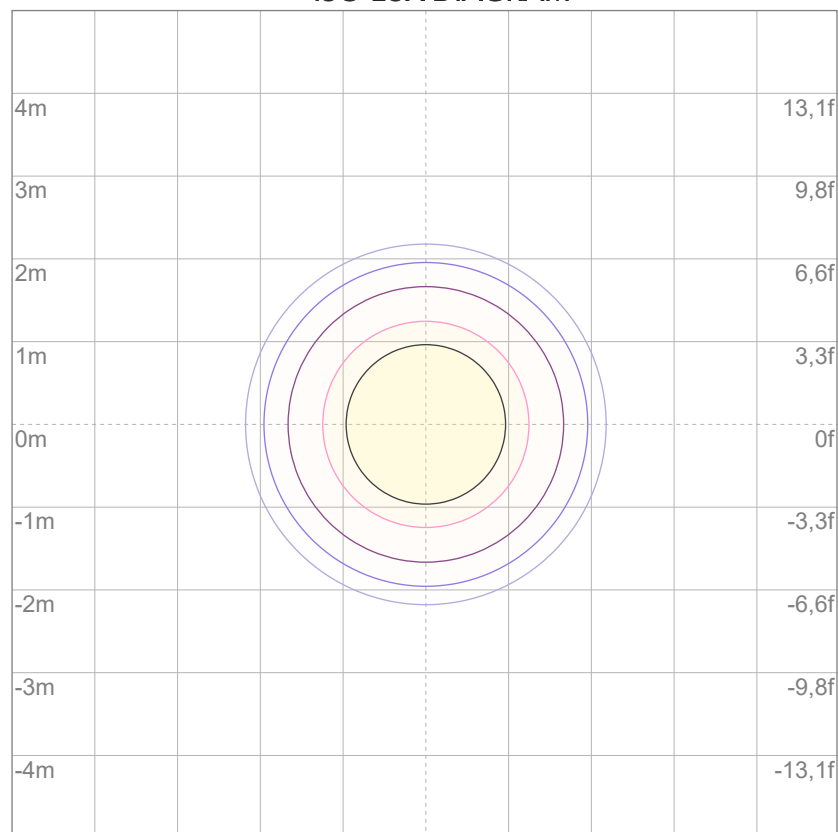
10%	22476 cd
20%	44952 cd
30%	67428 cd
40%	89905 cd
50%	112381 cd
60%	134857 cd
70%	157333 cd
80%	179809 cd

Conditions:

Number of c-planes: 2

Candela at center: 224761 cd

ISO LUX DIAGRAM



3%	67,4 lx
5%	112 lx
10%	225 lx
30%	674 lx
50%	1124 lx

Conditions:

Number of c-planes: 2

Lux at center: 2248 lx

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



Total lumen output:

3216 lm

Peak candela output:

63273 cd

PRODUCT NAME:

ARCSPOTXLFC

MEASURAMENT CONDITIONS:

Beam angle:

10°

Target:

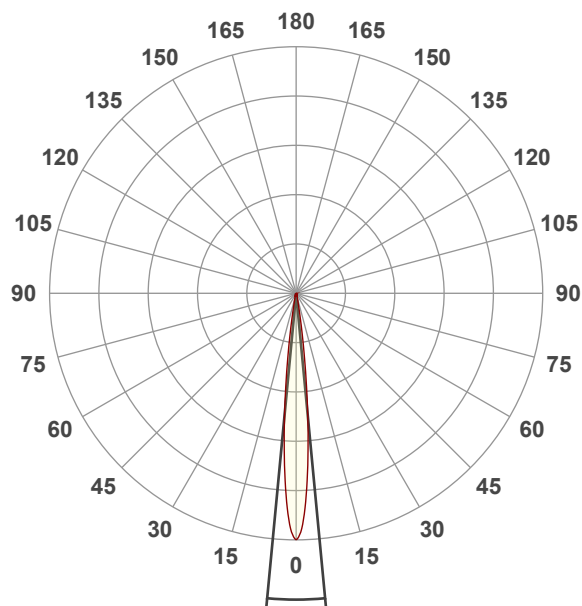
Red

Operator:

Salvatore Giglio

Date and time:

04/01/2024 10:28:22

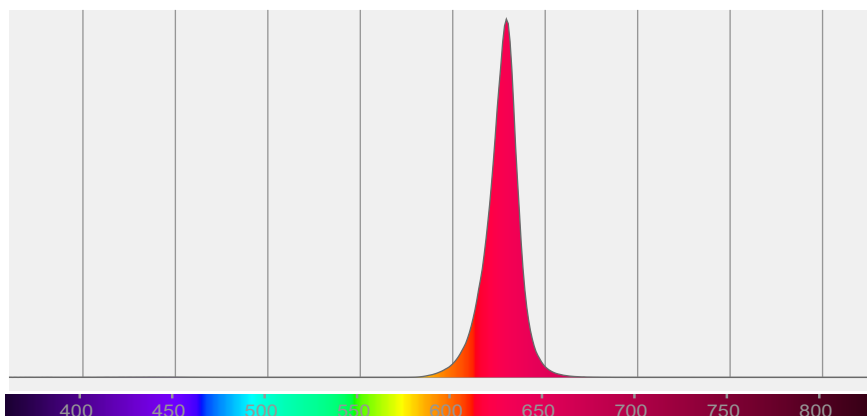


Beam angle 50%: 10,9°

Field angle 10%: 19,2°

Cut off angle 2.5%: 26,7°

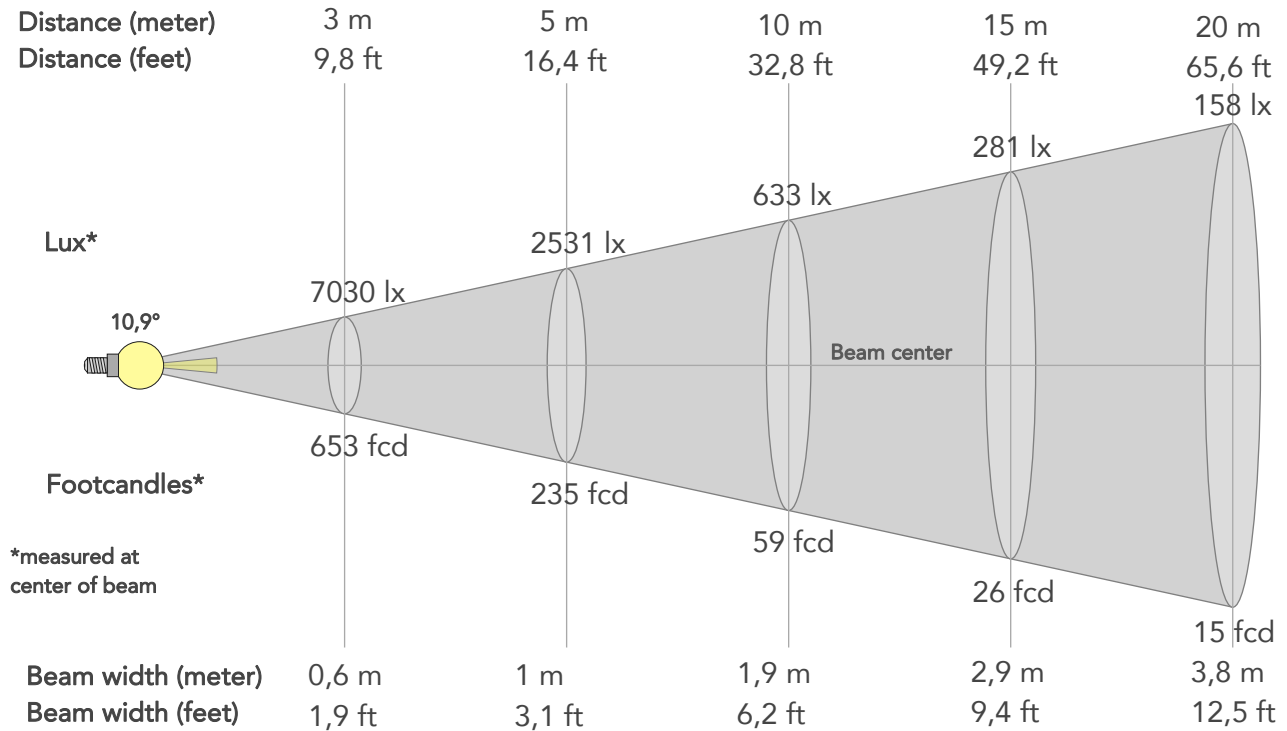
Spectra



BEAM DETAILS



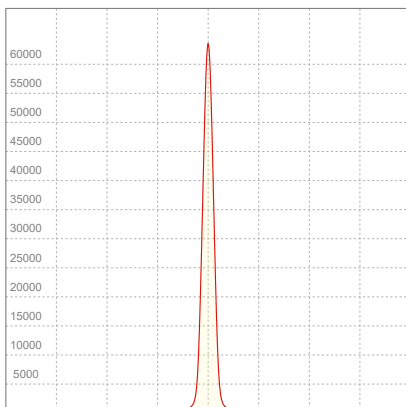
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,9°	19,2°	26,7°	98,6%	95,8%



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	63273lx	15818lx	7030lx	3955lx	2531lx	1125lx	633lx	281lx	158lx	101lx	70lx	40lx	25lx
Footcand.	5878fcd	1470fcd	653fcd	367fcd	235fcd	105fcd	59fcd	26fcd	15fcd	9fcd	7fcd	4fcd	2fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,4m	1,9m	2,9m	3,8m	4,8m	5,7m	7,6m	9,5m
Beam wid.	0,6ft	1,3ft	1,9ft	2,5ft	3,1ft	4,7ft	6,2ft	9,4ft	12,5ft	15,6ft	18,7ft	24,9ft	31,2ft

LINEAR DISTRIBUTION DIAGRAM

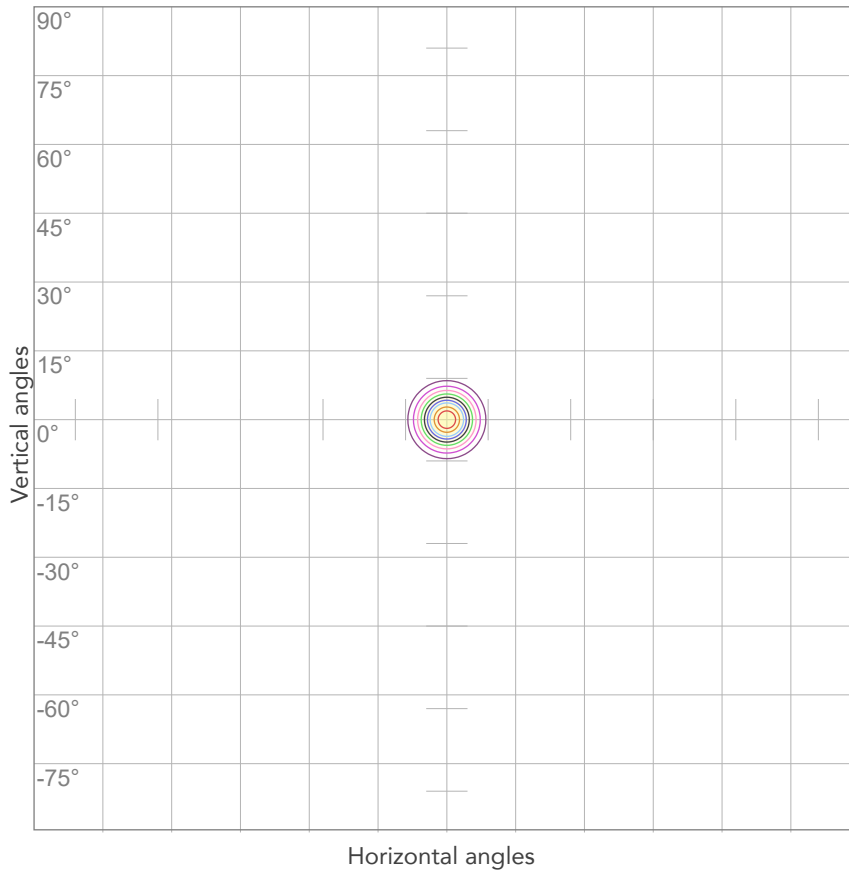


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Efficiency
226V	0,433A	84,3W	0,86	38lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



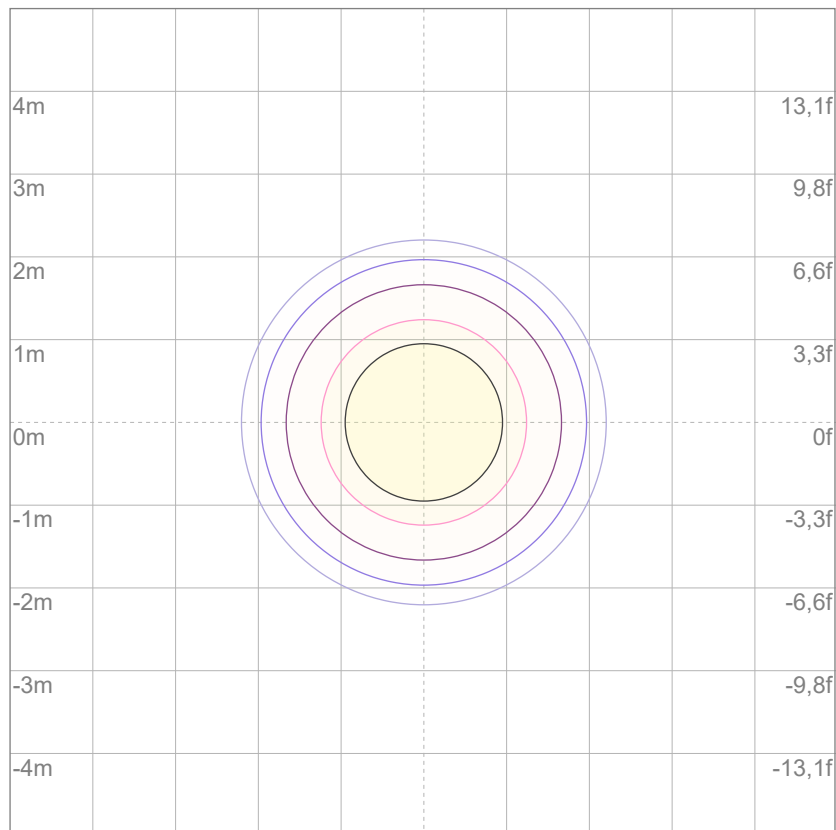
10%	6327 cd
20%	12655 cd
30%	18982 cd
40%	25309 cd
50%	31636 cd
60%	37964 cd
70%	44291 cd
80%	50618 cd

Conditions:

Number of c-planes: 2

Candela at center: 63273 cd

ISO LUX DIAGRAM



3%	19,0 lx
5%	31,6 lx
10%	63,3 lx
30%	190 lx
50%	316 lx

Conditions:

Number of c-planes: 2

Lux at center: 633 lx

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



Total lumen output:

7468 lm

Peak candela output:

139782 cd

PRODUCT NAME:

ARCSPOTXLFC

MEASURAMENT CONDITIONS:

Beam angle:

10°

Target:

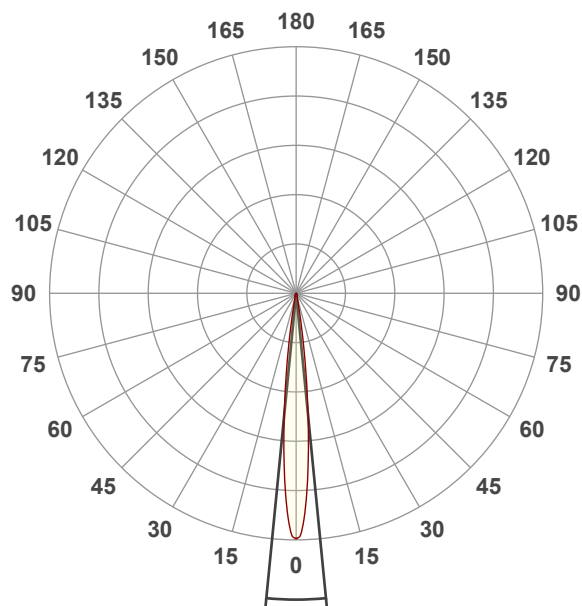
Green

Operator:

Salvatore Giglio

Date and time:

04/01/2024 10:29:46

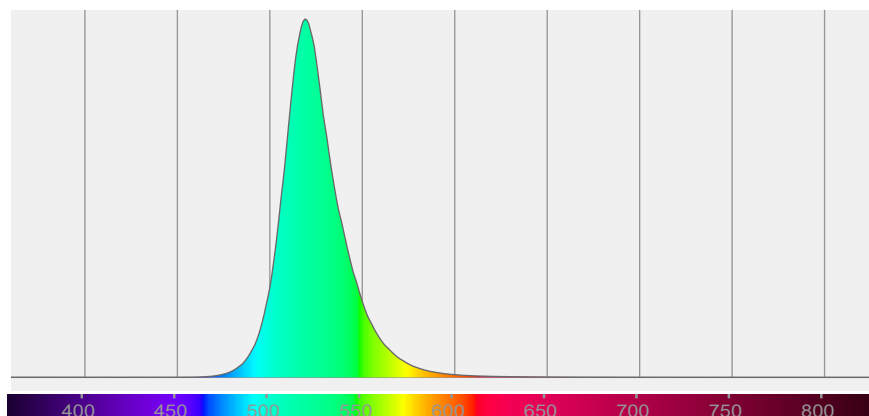


Beam angle 50%: 11,2°

Field angle 10%: 19,6°

Cut off angle 2.5%: 26,7°

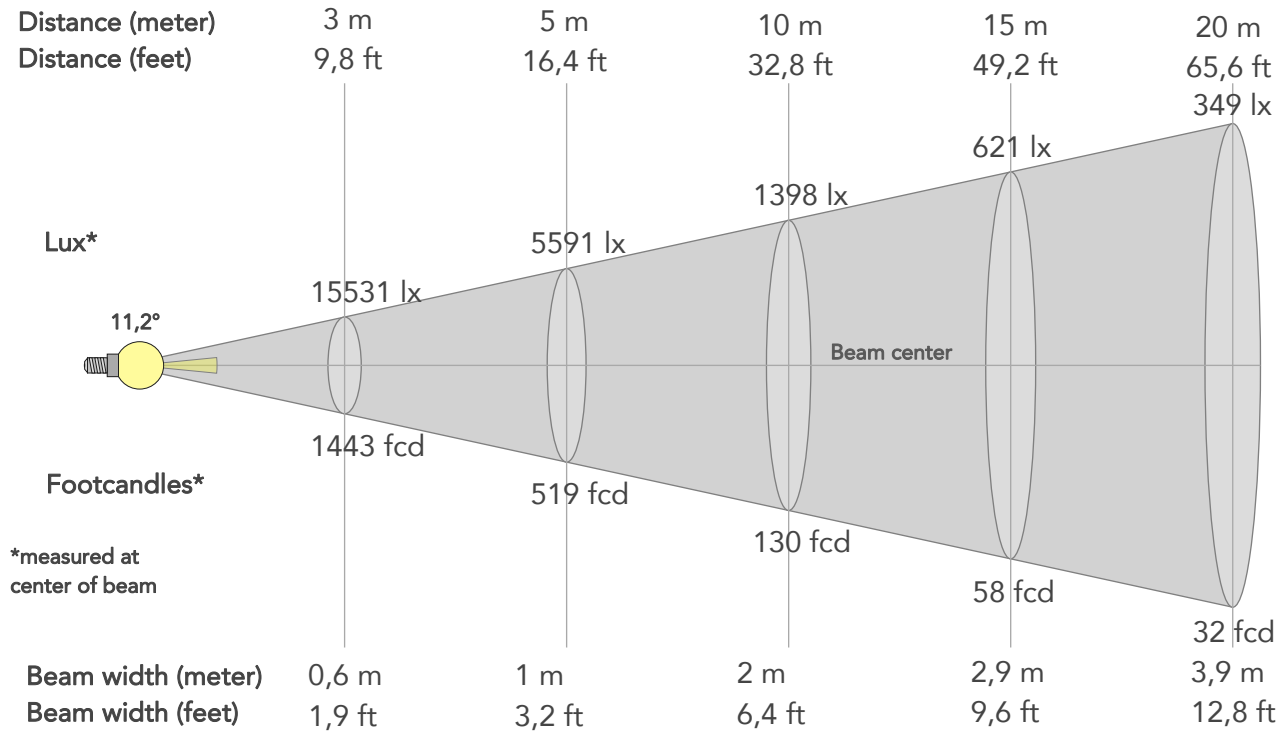
Spectra



BEAM DETAILS



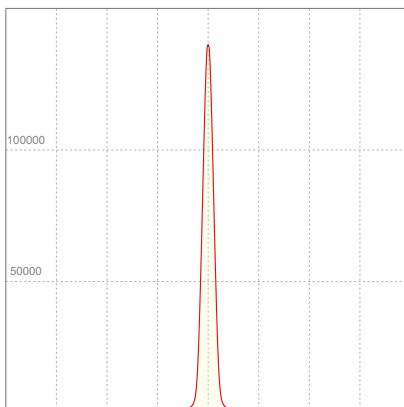
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11,2°	19,6°	26,7°	98,4%	95,4%



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	139782lx	34945lx	15531lx	8736lx	5591lx	2485lx	1398lx	621lx	349lx	224lx	155lx	87lx	56lx
Footcand.	12986fcd	3247fcd	1443fcd	812fcd	519fcd	231fcd	130fcd	58fcd	32fcd	21fcd	14fcd	8fcd	5fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,5m	2m	2,9m	3,9m	4,9m	5,9m	7,8m	9,8m
Beam wid.	0,6ft	1,3ft	1,9ft	2,6ft	3,2ft	4,8ft	6,4ft	9,6ft	12,8ft	16ft	19,2ft	25,7ft	32,1ft

LINEAR DISTRIBUTION DIAGRAM

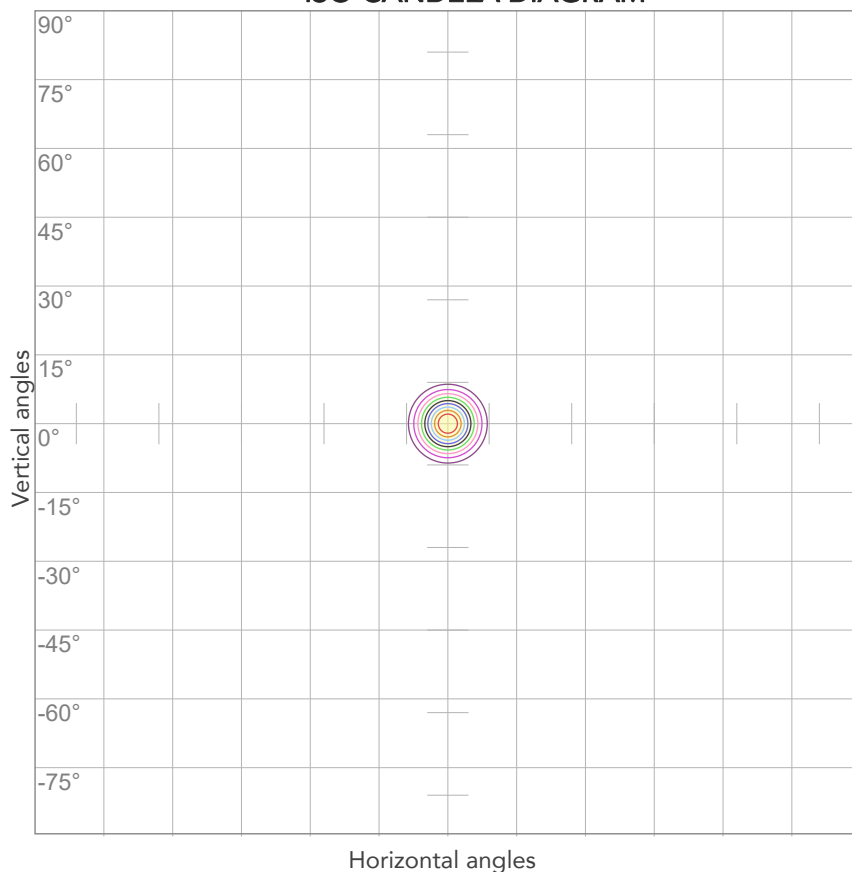


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
225V	0,535A	107,2W	0,89	70lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



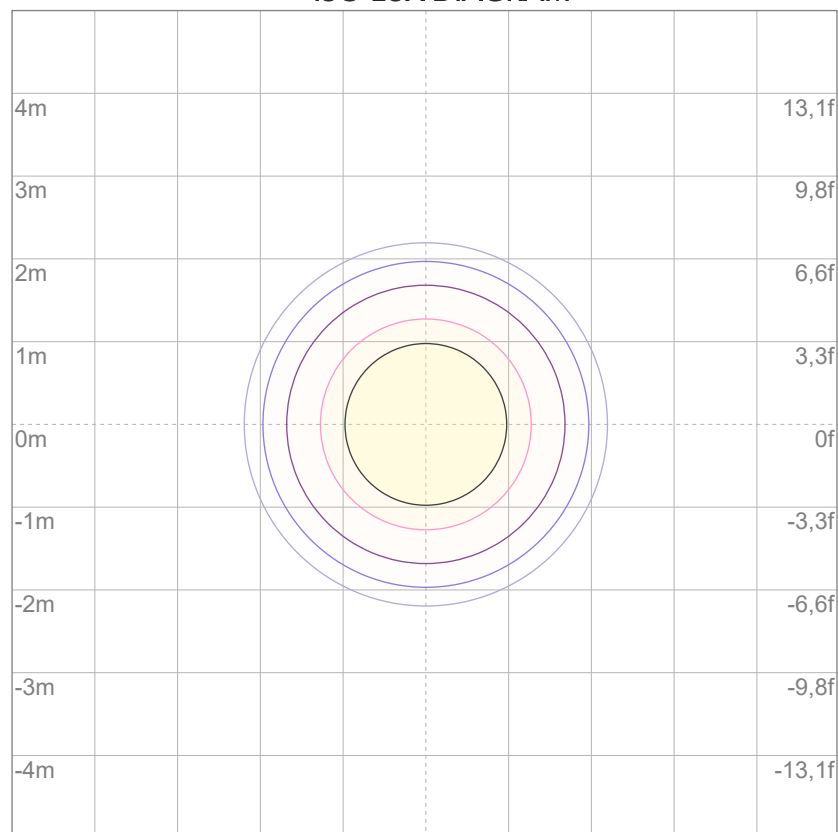
10%	13978 cd
20%	27956 cd
30%	41935 cd
40%	55913 cd
50%	69891 cd
60%	83869 cd
70%	97847 cd
80%	111825 cd

Conditions:

Number of c-planes: 2

Candela at center: 139782 cd

ISO LUX DIAGRAM



3%	41,9 lx
5%	69,9 lx
10%	140 lx
30%	419 lx
50%	699 lx

Conditions:

Number of c-planes: 2

Lux at center: 1398 lx

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



Total lumen output:

1334 lm

Peak candela output:

24010 cd

PRODUCT NAME:

ARCSPOTXLFC

MEASURAMENT CONDITIONS:

Beam angle:

10°

Target:

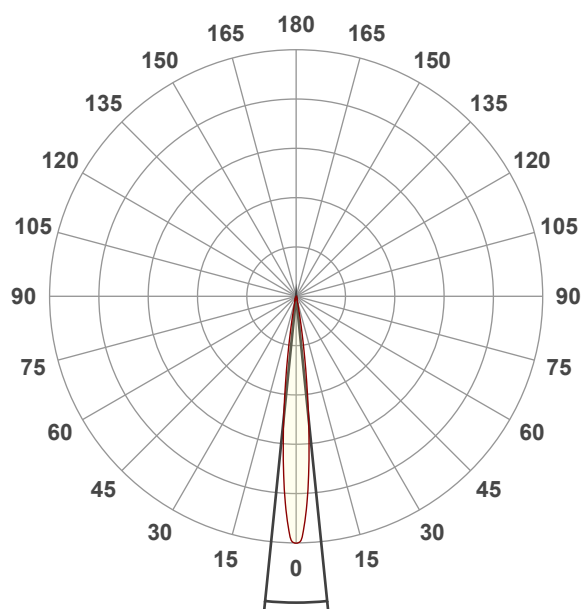
Blue

Operator:

Salvatore Giglio

Date and time:

04/01/2024 10:31:03

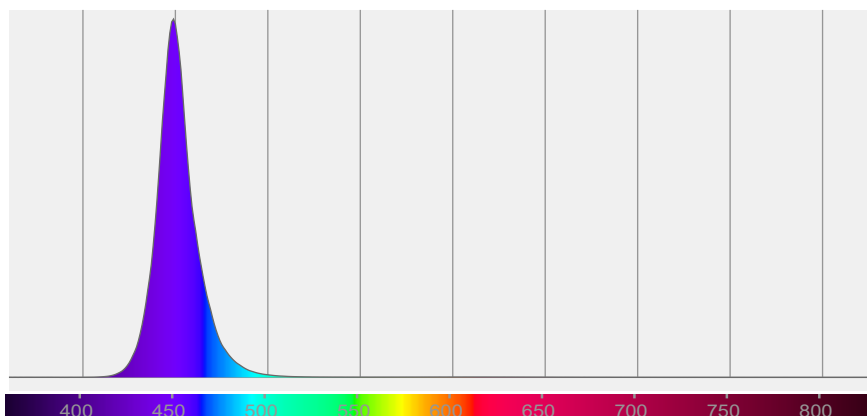


Beam angle 50%: 11,6°

Field angle 10%: 19,9°

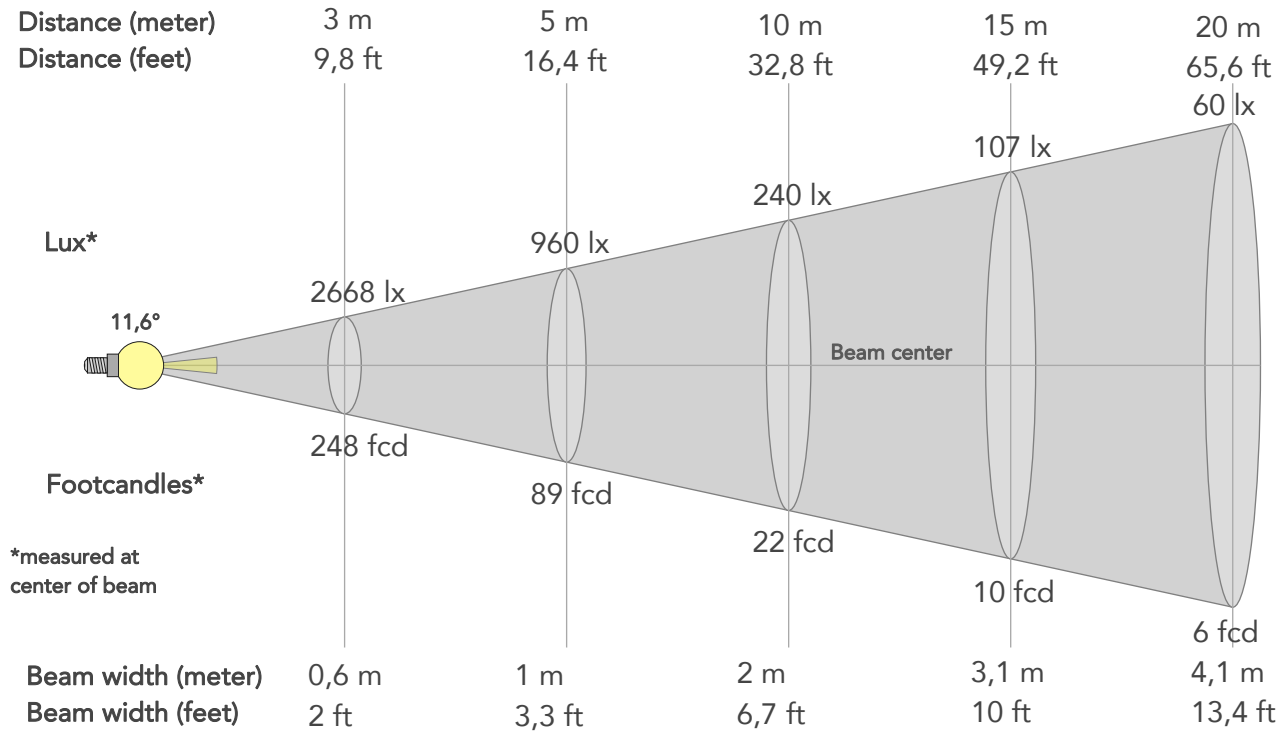
Cut off angle 2.5%: 26,8°

Spectra



BEAM DETAILS

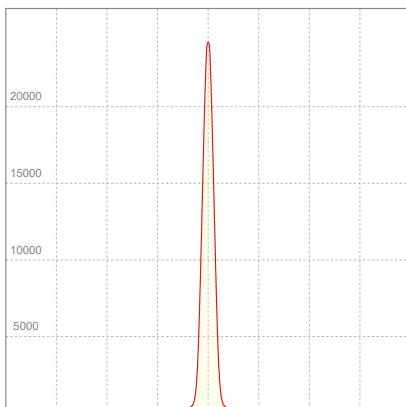
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11,6°	19,9°	26,8°	98,2%	95,4%



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	24010lx	6003lx	2668lx	1501lx	960lx	427lx	240lx	107lx	60lx	38lx	27lx	15lx	10lx
Footcand.	2231fcd	558fcd	248fcd	139fcd	89fcd	40fcd	22fcd	10fcd	6fcd	4fcd	2fcd	1fcd	1fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,5m	2m	3,1m	4,1m	5,1m	6,1m	8,1m	10,2m
Beam wid.	0,7ft	1,3ft	2ft	2,7ft	3,3ft	5ft	6,7ft	10ft	13,4ft	16,7ft	20ft	26,7ft	33,4ft

LINEAR DISTRIBUTION DIAGRAM

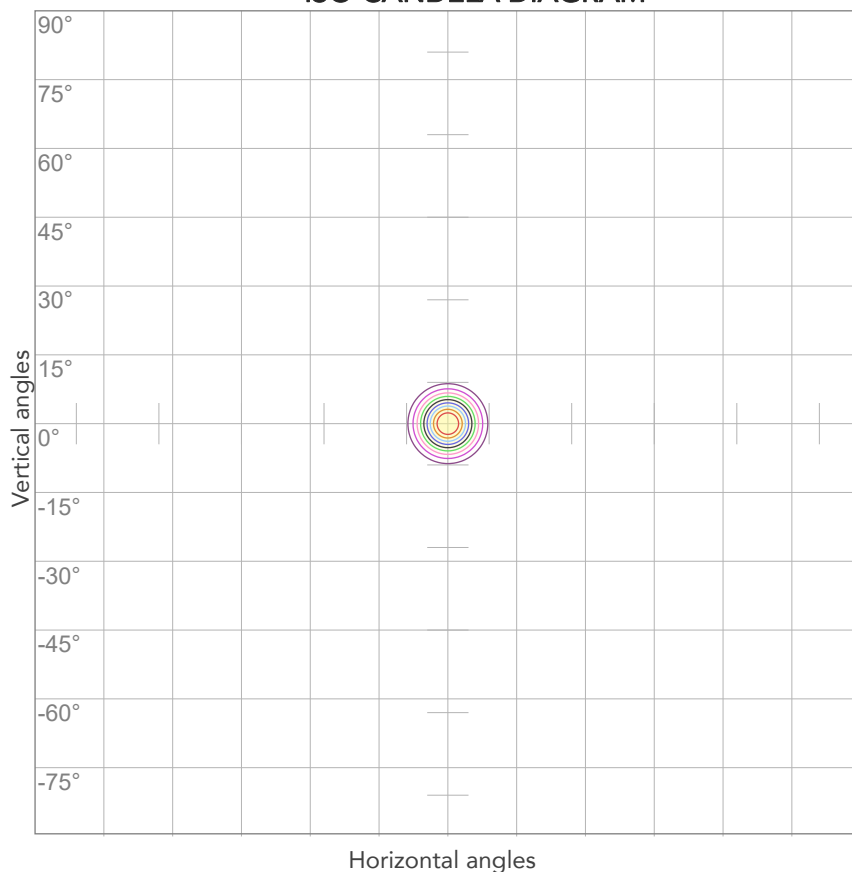


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
224V	0,555A	111,1W	0,89	12lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



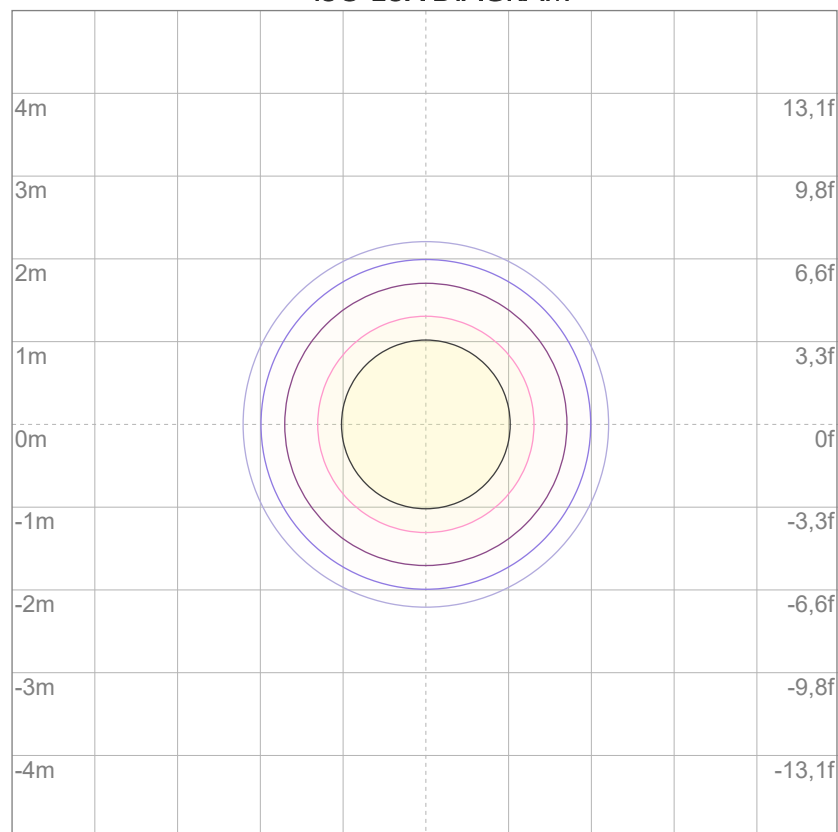
10%	2401 cd
20%	4802 cd
30%	7203 cd
40%	9604 cd
50%	12005 cd
60%	14406 cd
70%	16807 cd
80%	19208 cd

Conditions:

Number of c-planes: 2

Candela at center: 24010 cd

ISO LUX DIAGRAM



3%	7,20 lx
5%	12,0 lx
10%	24,0 lx
30%	72,0 lx
50%	120 lx

Conditions:

Number of c-planes: 2

Lux at center: 240 lx

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



Total lumen output:

8884 lm

Peak candela output:

183024 cd

Light quality:

CRI: 83,4

Color temperature:

2970 K

PRODUCT NAME:

ARCSPOTXLFC

MEASURAMENT CONDITIONS:

Beam angle:

10°

Target:

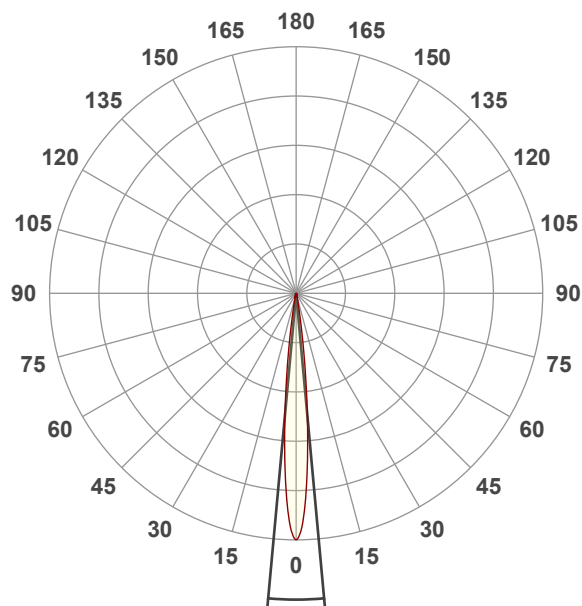
White

Operator:

Salvatore Giglio

Date and time:

04/01/2024 10:32:32

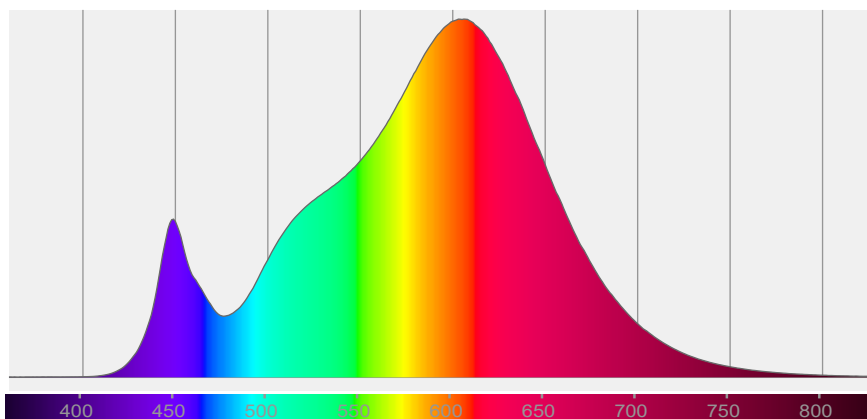


Beam angle 50%: 10,5°

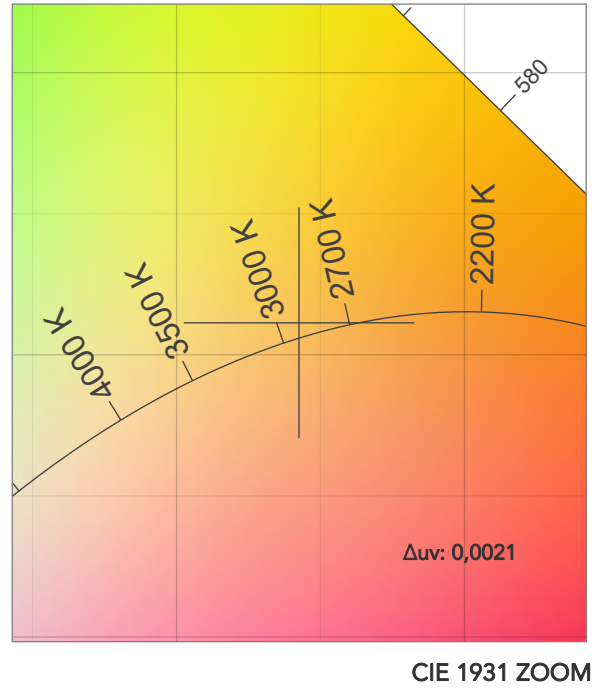
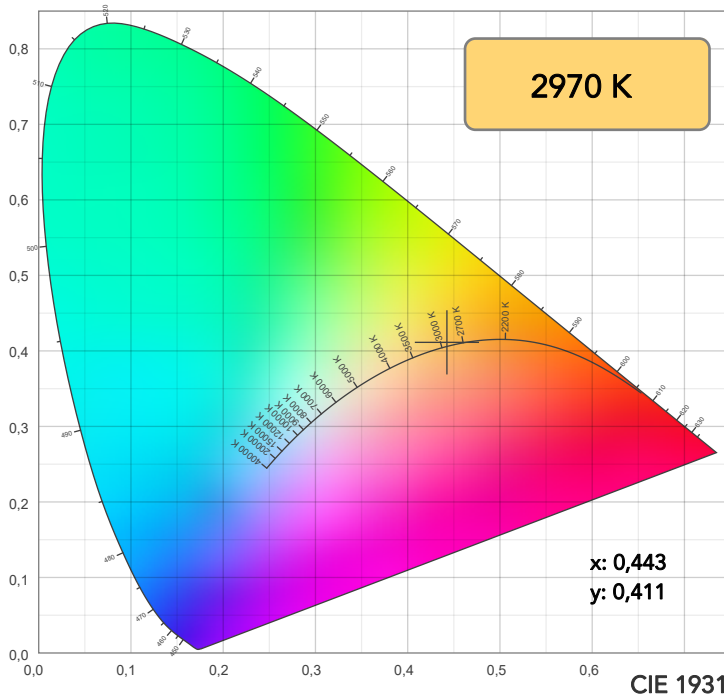
Field angle 10%: 18,7°

Cut off angle 2.5%: 25,6°

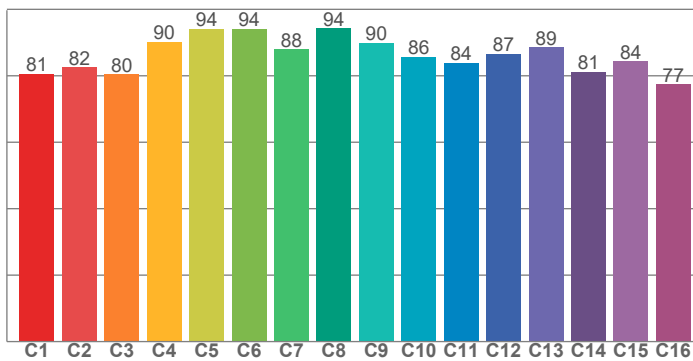
Spectra



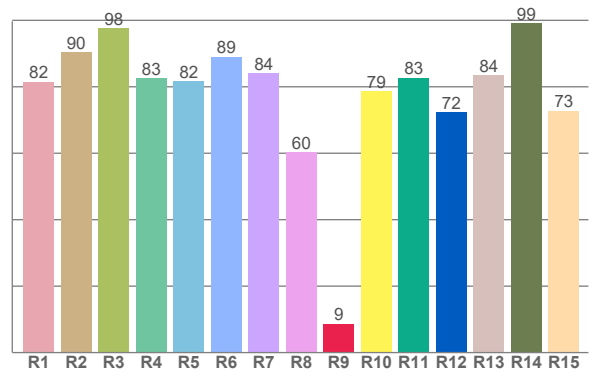
COLOR DETAILS



TM30: 86,2



CRI: 83,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81,5	90,5	97,6	82,6	81,6	89,1	84,2	60,3	8,7	78,7	82,7	72,3	83,6	99,1	72,8

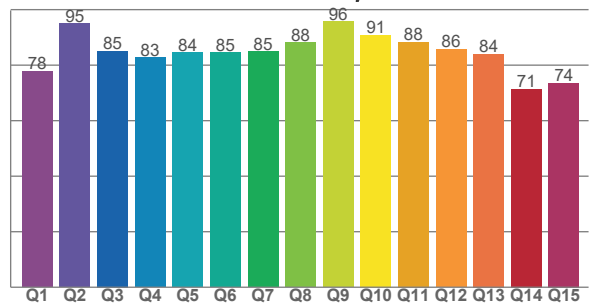
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
80,6	82,5	80,4	90,2	94,1	94,1	88,0	94,3	89,9	85,7	83,8	86,5	88,5	81,2	84,4	77,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77,8	94,9	85,1	82,7	84,5	84,5	84,9	88,1	95,6	90,8	88,3	85,7	83,9	71,3	73,6

CQS: 83,3



COLOR PARAMETERS

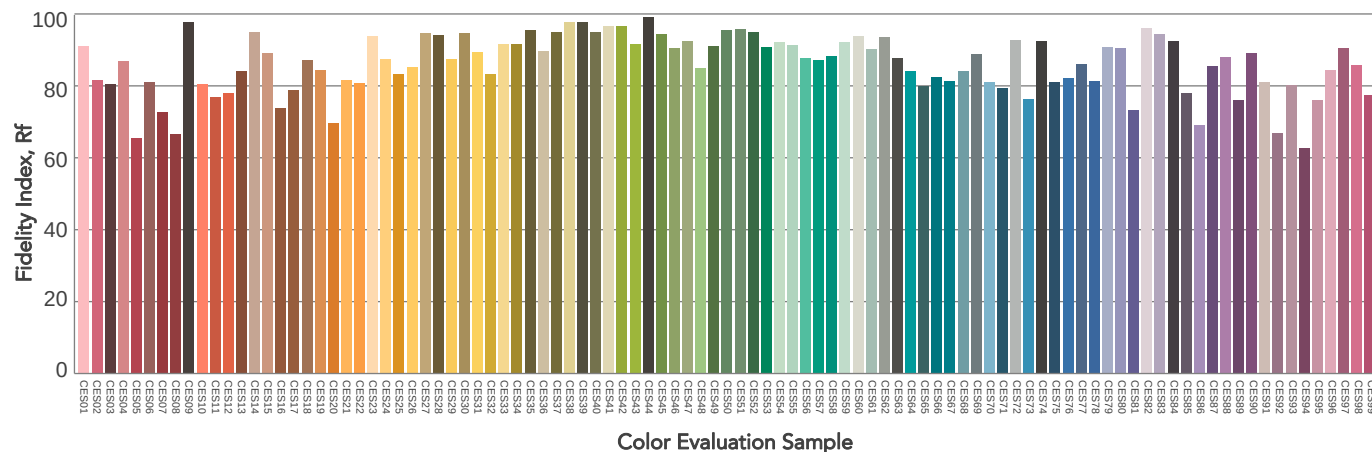
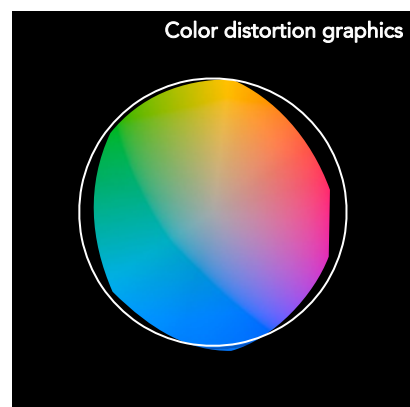
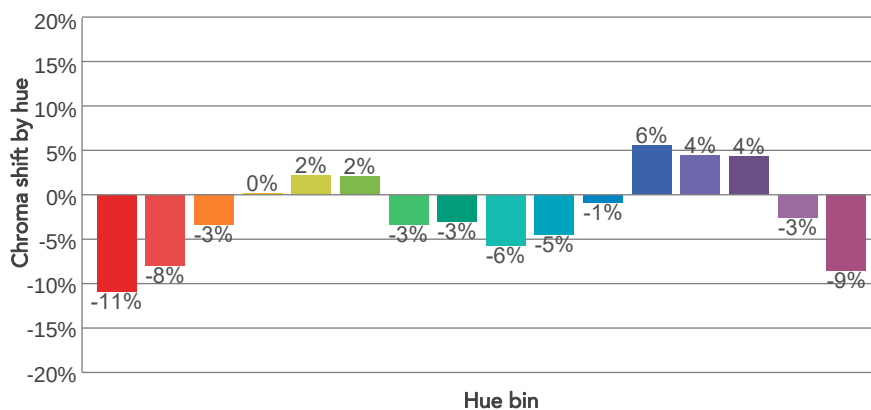
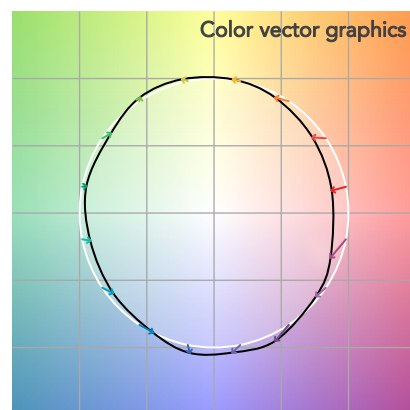
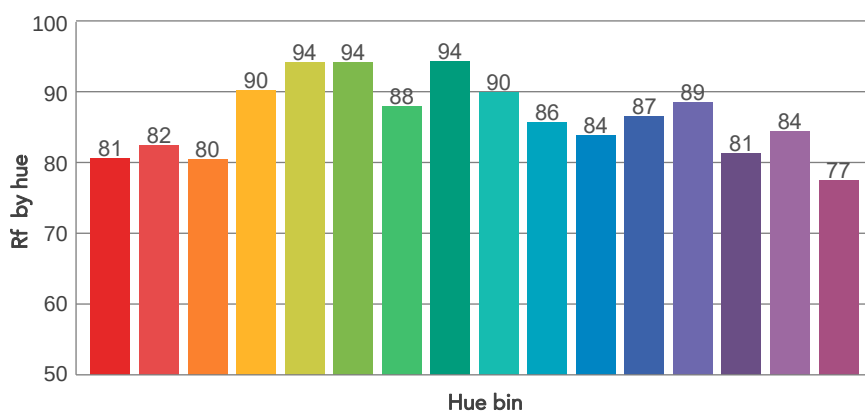
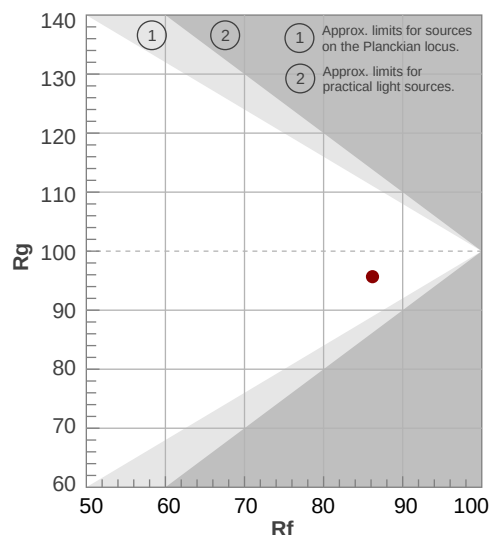
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
2970 K	83,4	8,7	86,2	95,7	83,3	70	0,443	0,411	0,0021

TM30 DETAILS

Rf 86,2
Fidelity index Rf

Rg 95,7
Gammut index

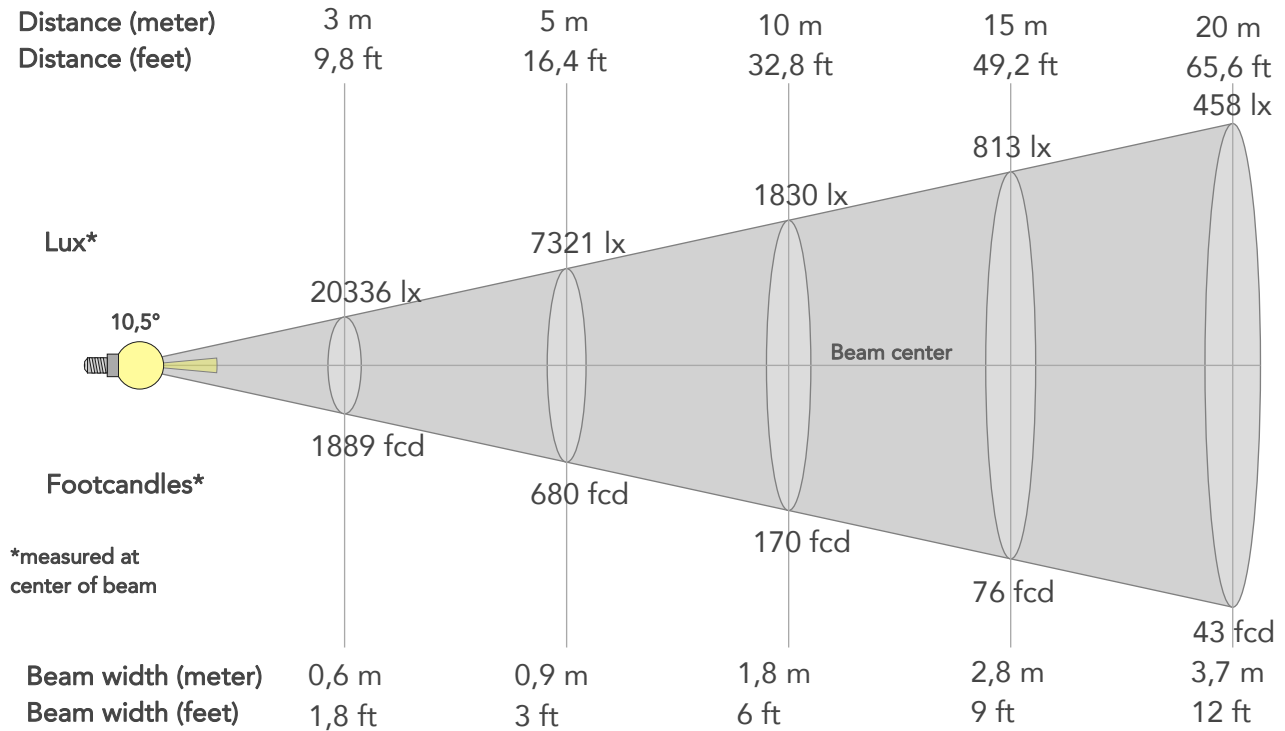
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	-11%	-1%
2	82	-8%	6%
3	80	-3%	10%
4	90	0%	6%
5	94	2%	4%
6	94	2%	-2%
7	88	-3%	-7%
8	94	-3%	-1%
9	90	-6%	2%
10	86	-5%	8%
11	84	-1%	12%
12	87	6%	3%
13	89	4%	-7%
14	81	4%	-15%
15	84	-3%	-9%
16	77	-9%	-16%



BEAM DETAILS



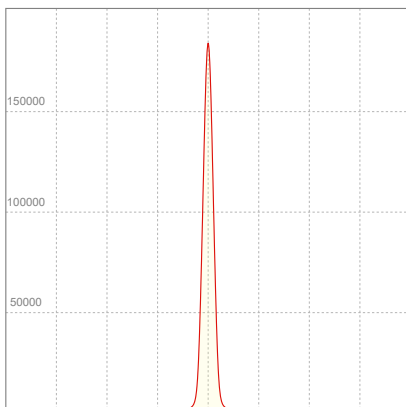
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10,5°	18,7°	25,6°	98,3%	95,2%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	183024lx	45756lx	20336lx	11439lx	7321lx	3254lx	1830lx	813lx	458lx	293lx	203lx	114lx	73lx
Footcand.	17003fcd	4251fcd	1889fcd	1063fcd	680fcd	302fcd	170fcd	76fcd	43fcd	27fcd	19fcd	11fcd	7fcd
Beam wid.	0,2m	0,4m	0,6m	0,7m	0,9m	1,4m	1,8m	2,8m	3,7m	4,6m	5,5m	7,3m	9,2m
Beam wid.	0,6ft	1,2ft	1,8ft	2,4ft	3ft	4,5ft	6ft	9ft	12ft	15ft	18ft	24,1ft	30,1ft

LINEAR DISTRIBUTION DIAGRAM

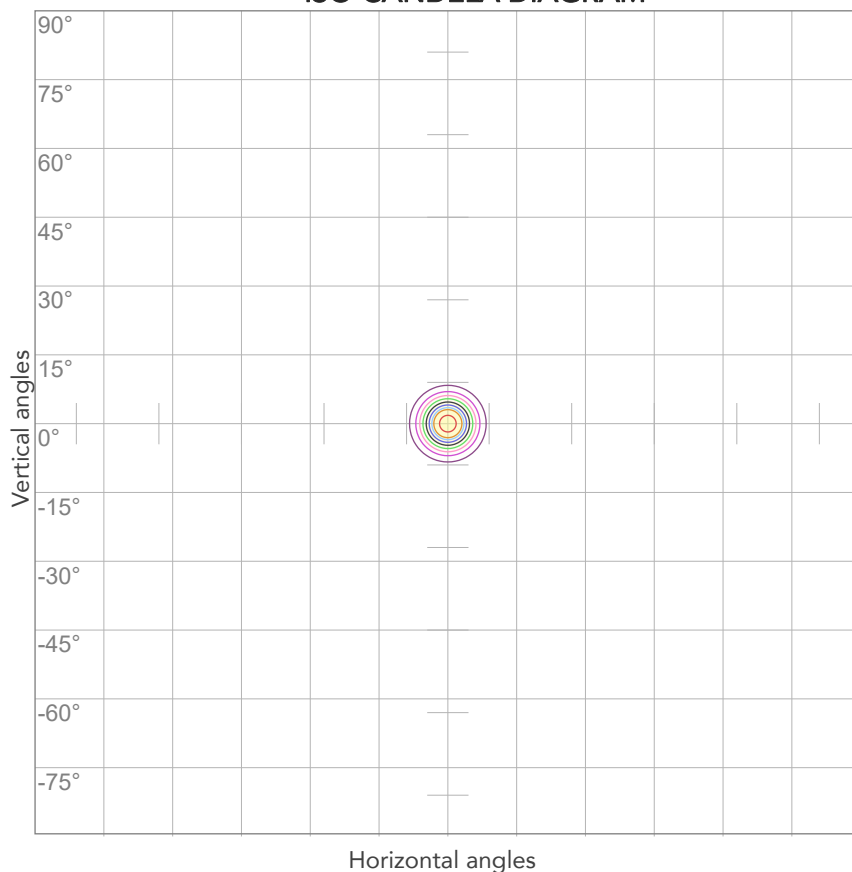


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,690A	143,4W	0,91	62lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



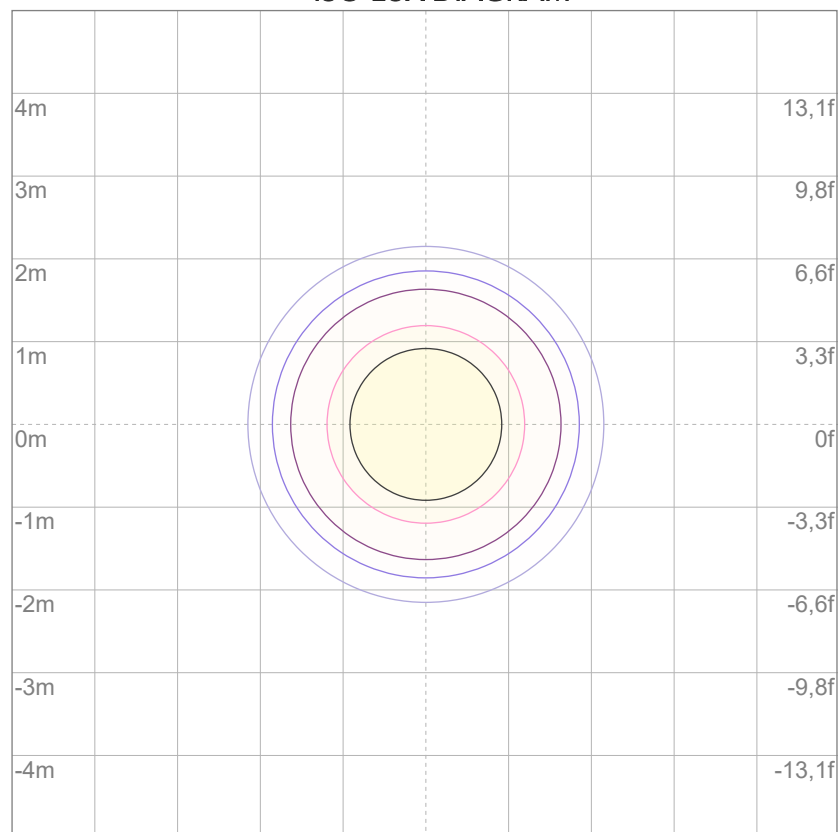
10%	18302 cd
20%	36605 cd
30%	54907 cd
40%	73210 cd
50%	91512 cd
60%	109814 cd
70%	128117 cd
80%	146419 cd

Conditions:

Number of c-planes: 2

Candela at center: 183024 cd

ISO LUX DIAGRAM



3%	54,9 lx
5%	91,5 lx
10%	183 lx
30%	549 lx
50%	915 lx

Conditions:

Number of c-planes: 2

Lux at center: 1830 lx

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