Photometric Test Report

ARCSPOTDOTFC

IP66 Spot featuring 590 lumen

with 1 x 20W RGB+WarmWhite source,

10° native

(PRELIMINARY)

CONTENTS

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:

592 lm

Peak candela output:

17467 cd

Light quality:

CRI: 0,0

Color temperature:

25183 K

PRODUCT NAME:

ARCSPOTDOTFC

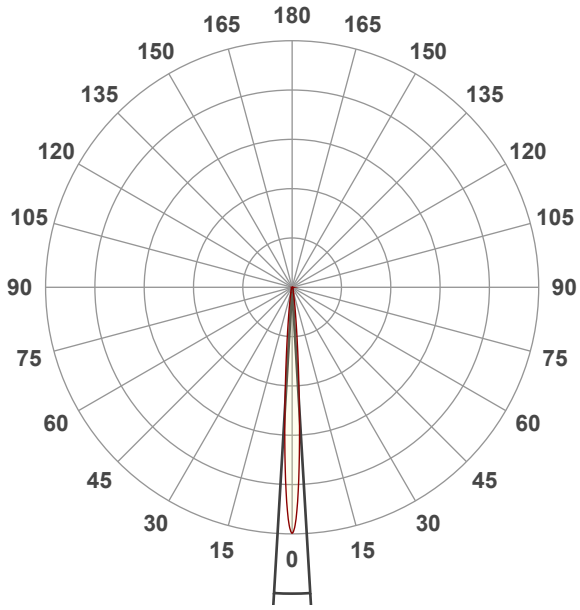
MEASURAMENT CONDITIONS:

Beam angle:
5°

Target:
Full On

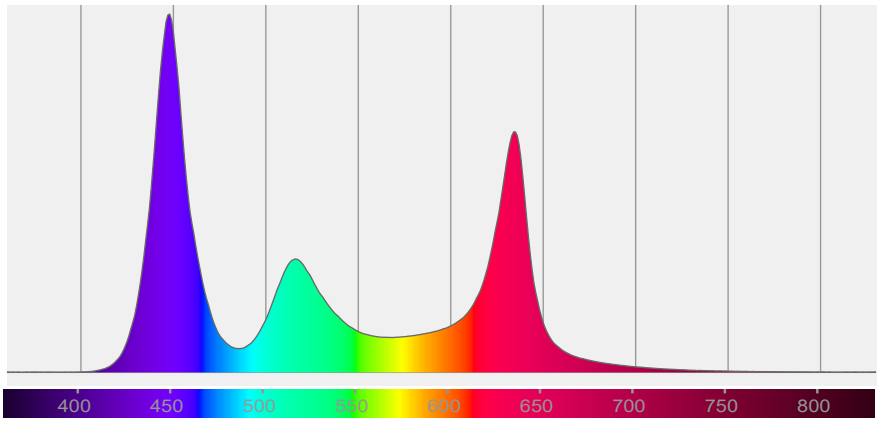
Operator:
Salvatore Giglio

Date and time:
04/01/2024 11:56:49

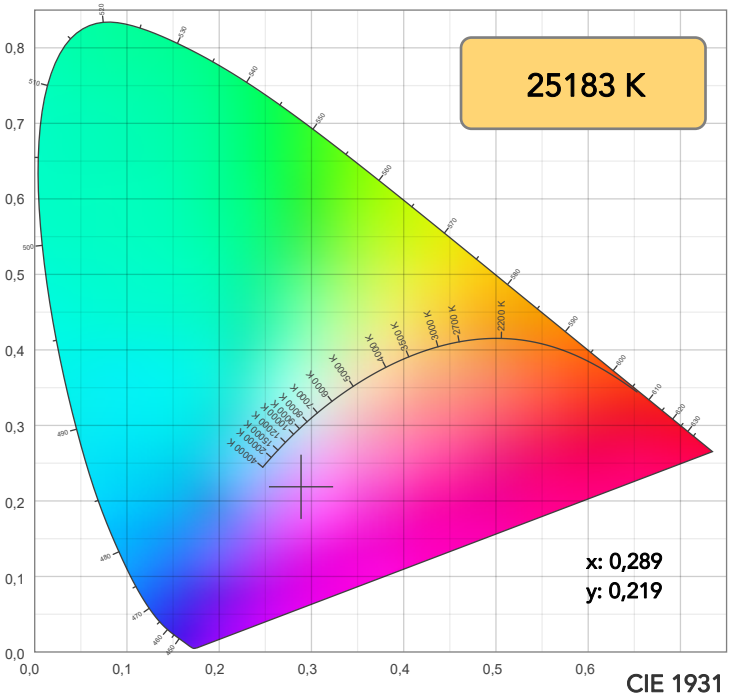


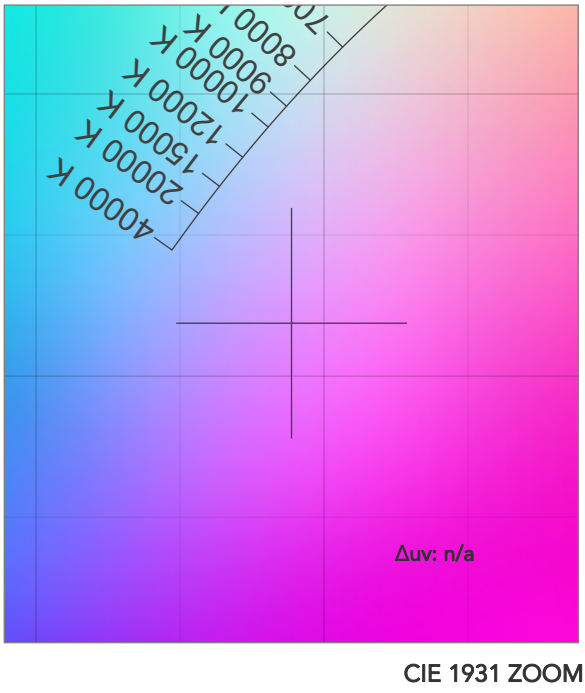
Beam angle 50%: 6,8°
Field angle 10%: 14,9°
Cut off angle 2.5%: 26,3°

Spectra

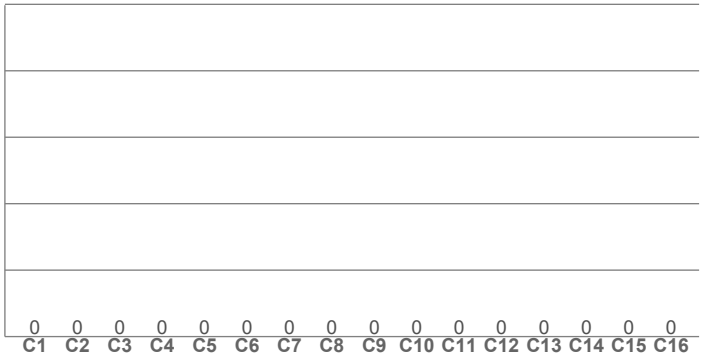


COLOR DETAILS

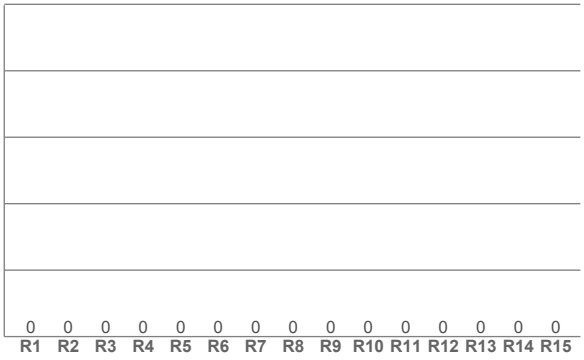




TM30: 0,0



CRI: 0,0 (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
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

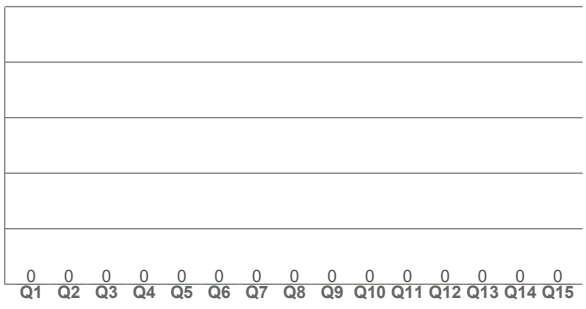
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS: 0,0



COLOR PARAMETERS

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
25183 K	0,0	0,0	0,0	0,0	0,0	55	0,289	0,219	n/a

TM30 DETAILS

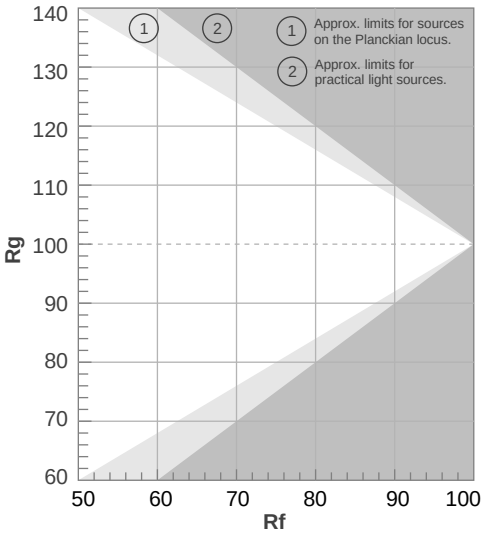
Rf 0,0

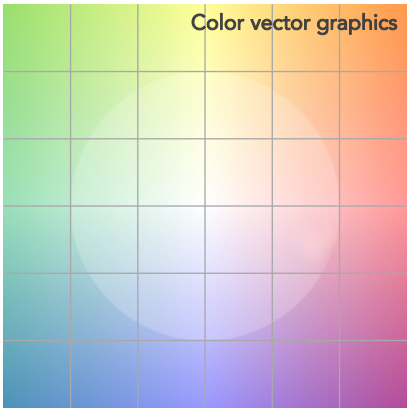
Fidelity index Rf

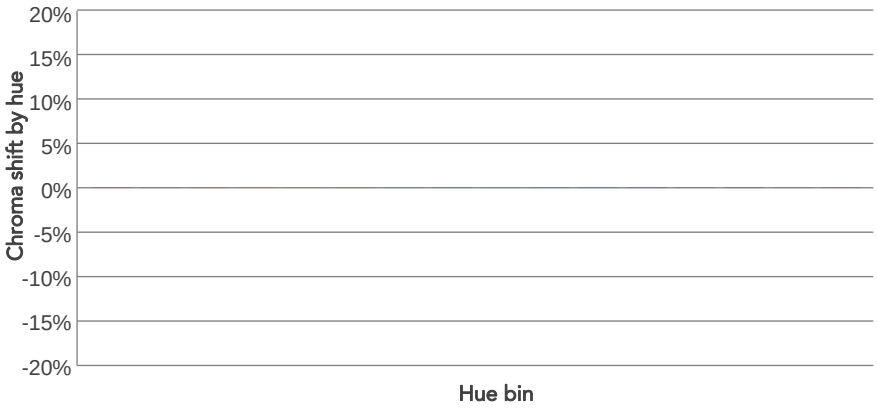
Rg 0,0

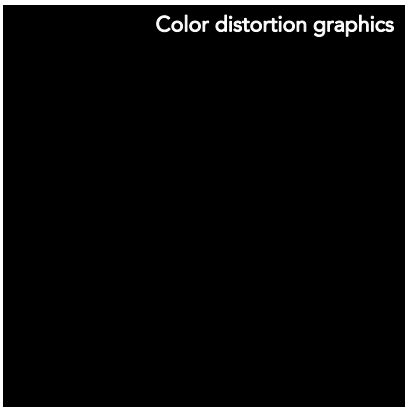
Gammut index

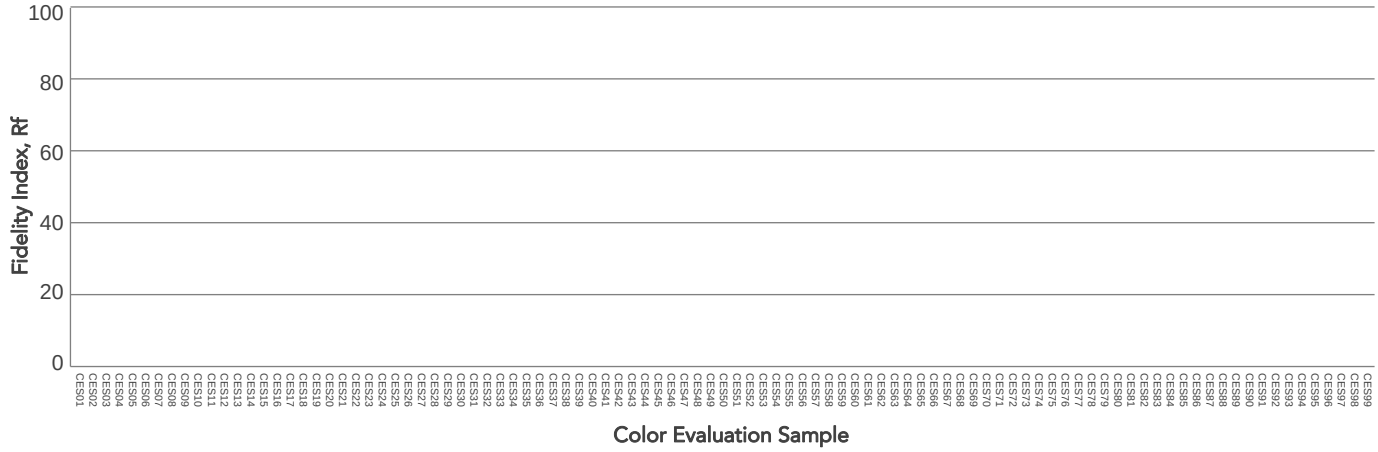
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%











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Tel: +39 0771 72190

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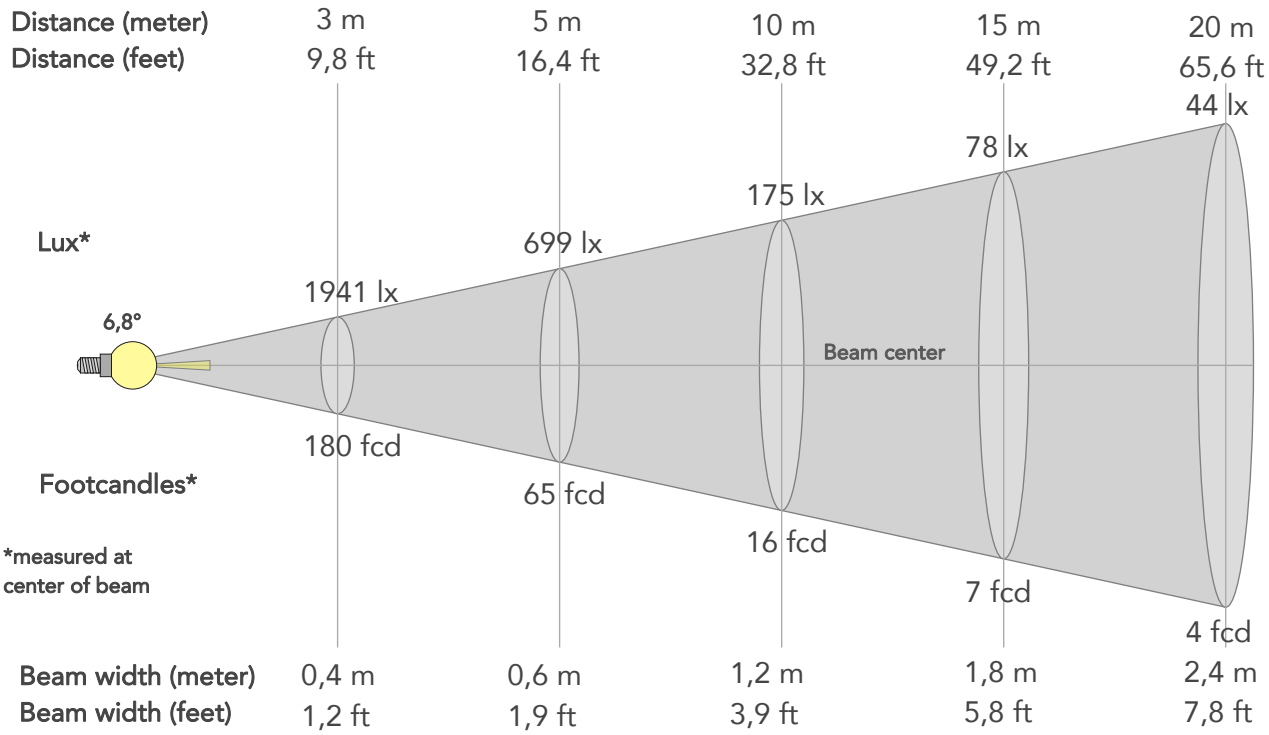
BEAM DETAILS

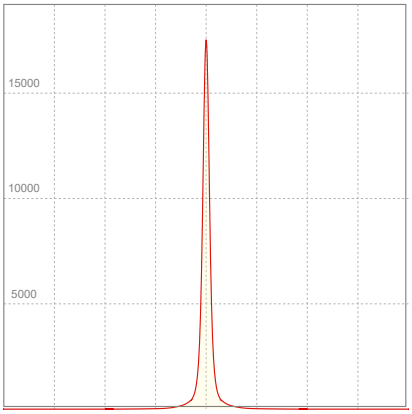
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
6,8°	14,9°	26,3°	96,9%	93,5%



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	17467lx	4367lx	1941lx	1092lx	699lx	311lx	175lx	78lx	44lx	28lx	19lx	11lx	7lx
Footcand.	1623fcd	406fcd	180fcd	101fcd	65fcd	29fcd	16fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,1m	0,2m	0,4m	0,5m	0,6m	0,9m	1,2m	1,8m	2,4m	3m	3,6m	4,7m	5,9m
Beam wid.	0,4ft	0,8ft	1,2ft	1,6ft	1,9ft	2,9ft	3,9ft	5,8ft	7,8ft	9,7ft	11,7ft	15,5ft	19,4ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,121A	24,4W	0,89	24lm/W

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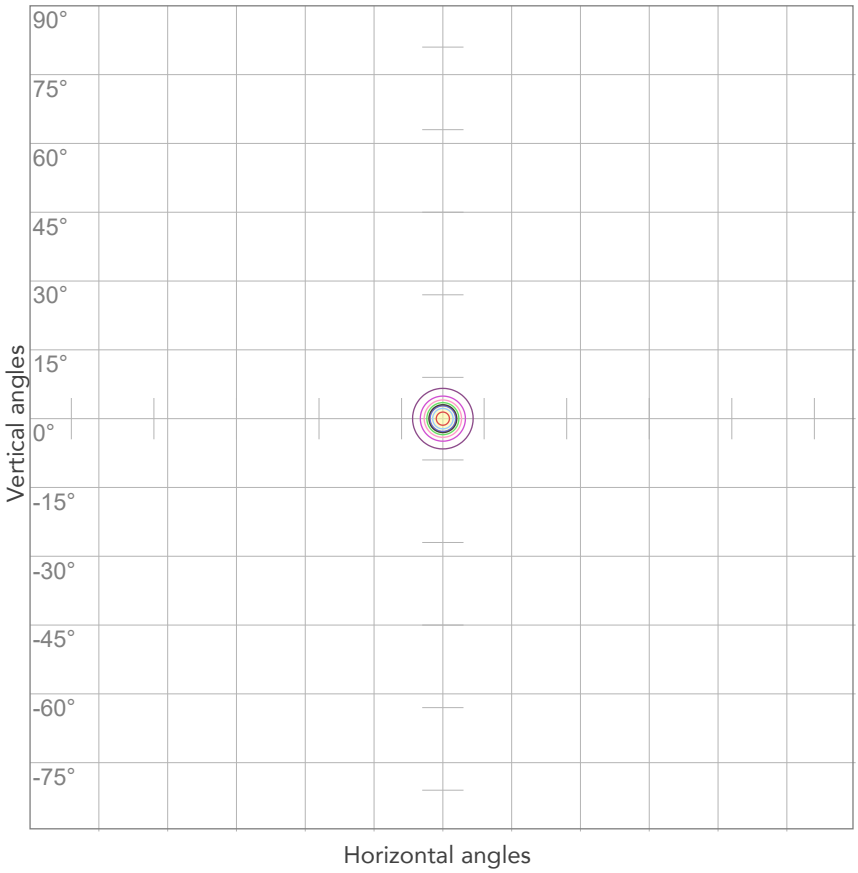
ISO DIAGRAMS

ISO CANDELA DIAGRAM



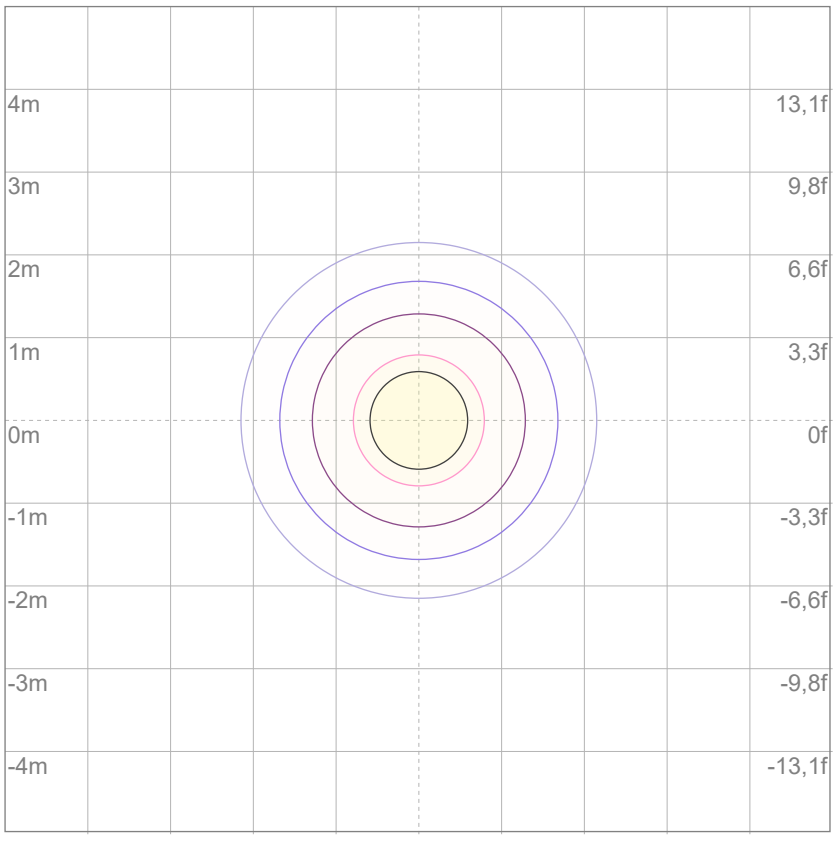
10%	1747 cd
20%	3493 cd
30%	5240 cd
40%	6987 cd
50%	8733 cd
60%	10480 cd
70%	12227 cd
80%	13973 cd

Conditions:

Number of c-planes: 2

Candela at center: 17467 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	5,24 lx
5%	8,73 lx
10%	17,5 lx
30%	52,4 lx
50%	87,3 lx

Conditions:

Number of c-planes: 2

Lux at center: 175 lx

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

Total lumen output:

210 lm

Peak candela output:

6355 cd

PRODUCT NAME:

ARCSPOTDOTFC

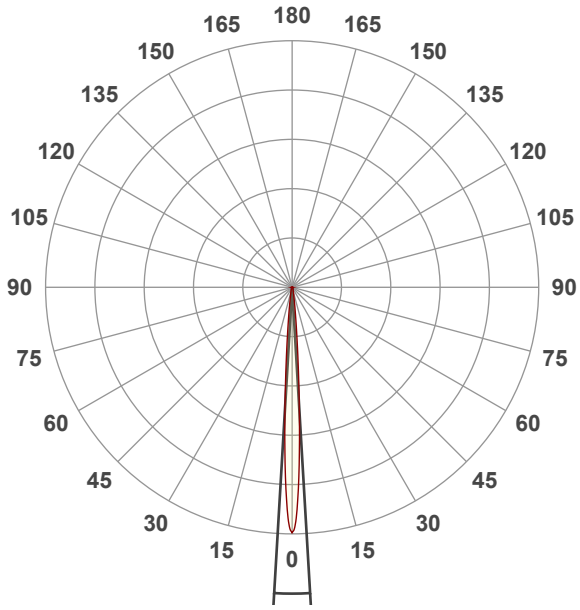
MEASURAMENT CONDITIONS:

Beam angle:
5°

Target:
Red

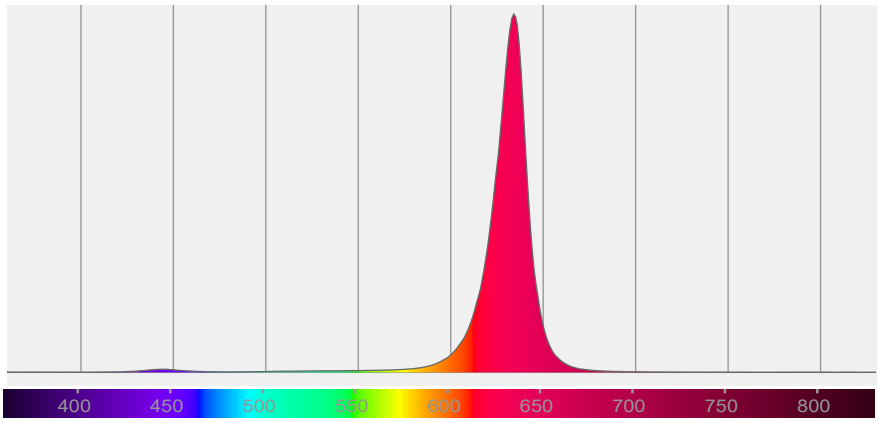
Operator:
Salvatore Giglio

Date and time:
04/01/2024 11:58:32



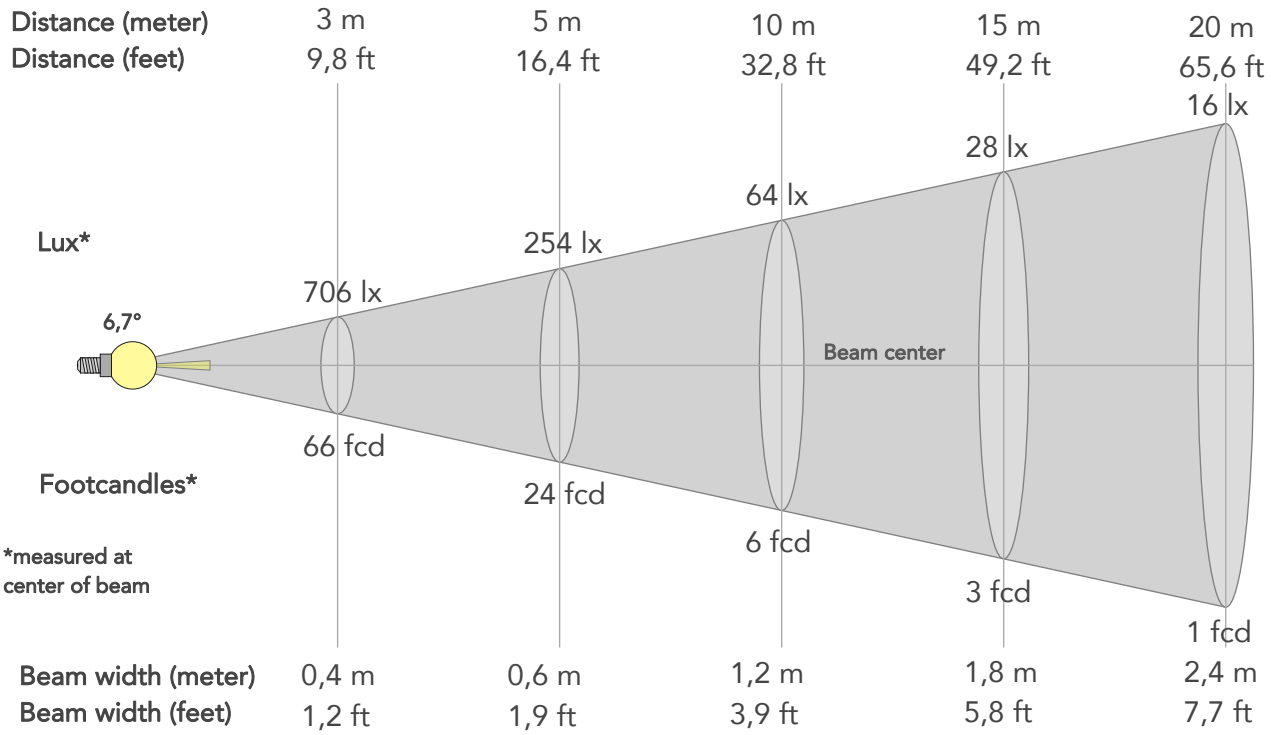
Beam angle 50%: 6,7°
Field angle 10%: 14,6°
Cut off angle 2.5%: 25,6°

Spectra



BEAM DETAILS

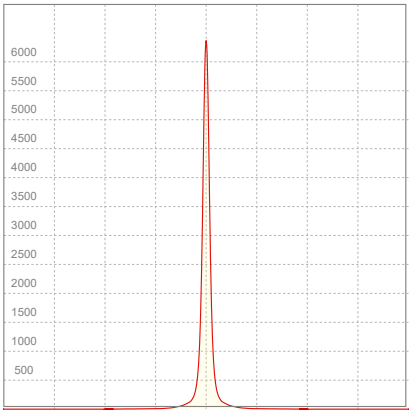
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
6,7°	14,6°	25,6°	96,2%	92,3%



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	6355lx	1589lx	706lx	397lx	254lx	113lx	64lx	28lx	16lx	10lx	7lx	4lx	3lx
Footcand.	590fcd	148fcd	66fcd	37fcd	24fcd	10fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,1m	0,2m	0,4m	0,5m	0,6m	0,9m	1,2m	1,8m	2,4m	2,9m	3,5m	4,7m	5,9m
Beam wid.	0,4ft	0,8ft	1,2ft	1,5ft	1,9ft	2,9ft	3,9ft	5,8ft	7,7ft	9,6ft	11,6ft	15,4ft	19,3ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,081A	12,9W	0,71	16lm/W

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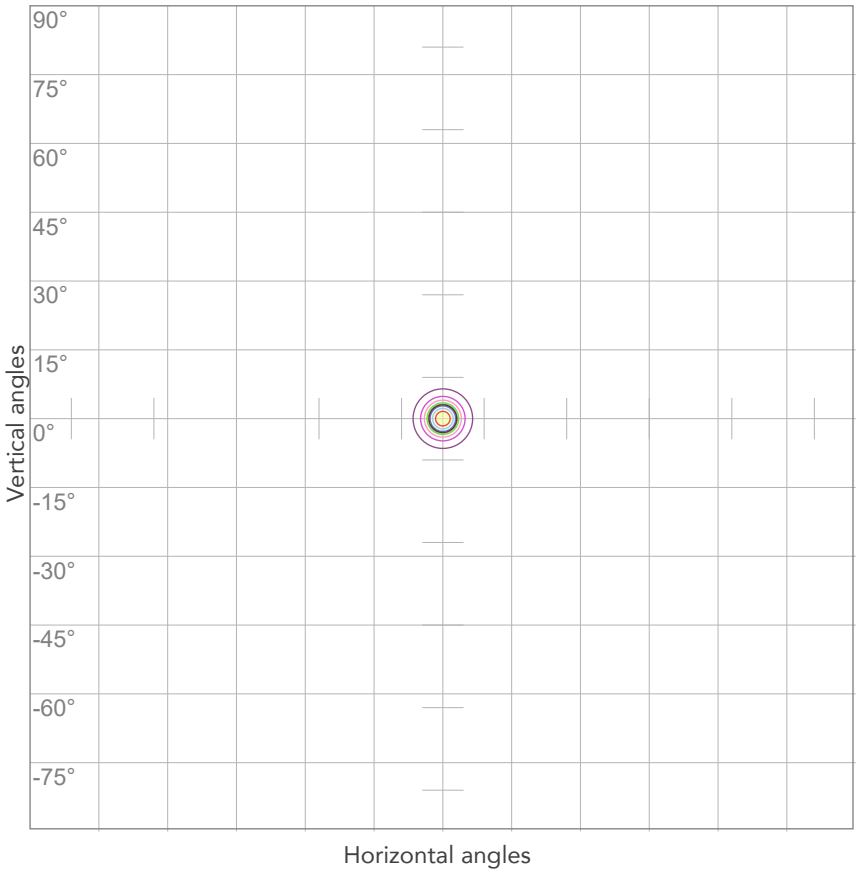
ISO DIAGRAMS

ISO CANDELA DIAGRAM



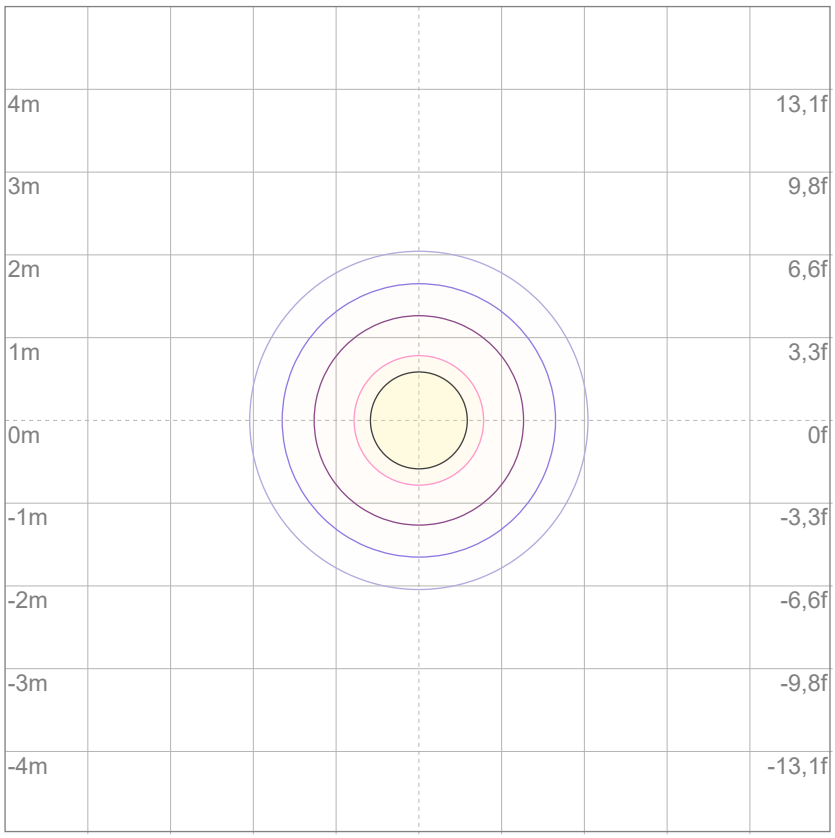
10%	636 cd
20%	1271 cd
30%	1907 cd
40%	2542 cd
50%	3178 cd
60%	3813 cd
70%	4449 cd
80%	5084 cd

Conditions:

Number of c-planes: 2

Candela at center: 6355 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	1,91 lx
5%	3,18 lx
10%	6,36 lx
30%	19,1 lx
50%	31,8 lx

Conditions:

Number of c-planes: 2

Lux at center: 63,6 lx

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

Total lumen output:

330 lm

Peak candela output:

9736 cd

PRODUCT NAME:

ARCSPOTDOTFC

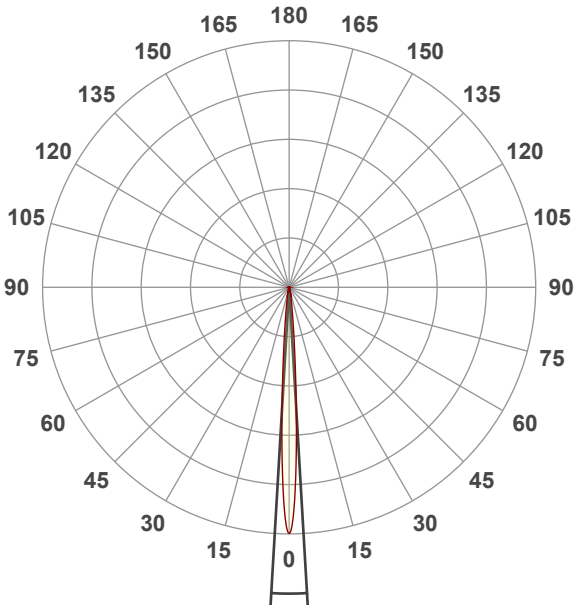
MEASURAMENT CONDITIONS:

Beam angle:
5°

Target:
Green

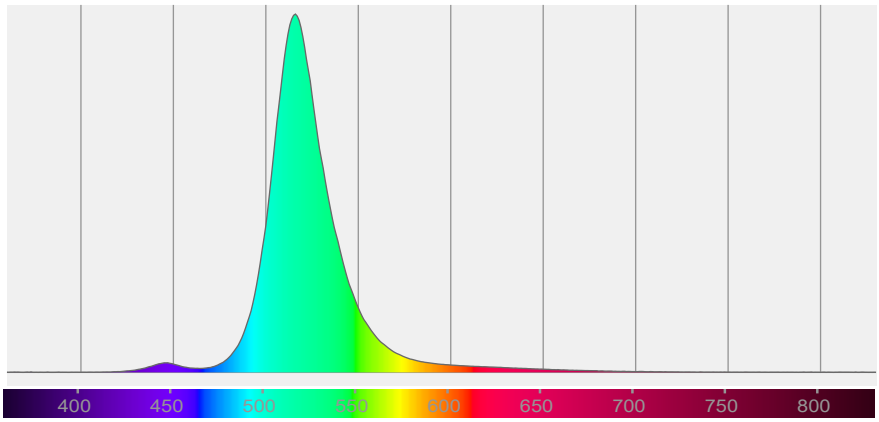
Operator:
Salvatore Giglio

Date and time:
04/01/2024 11:59:51



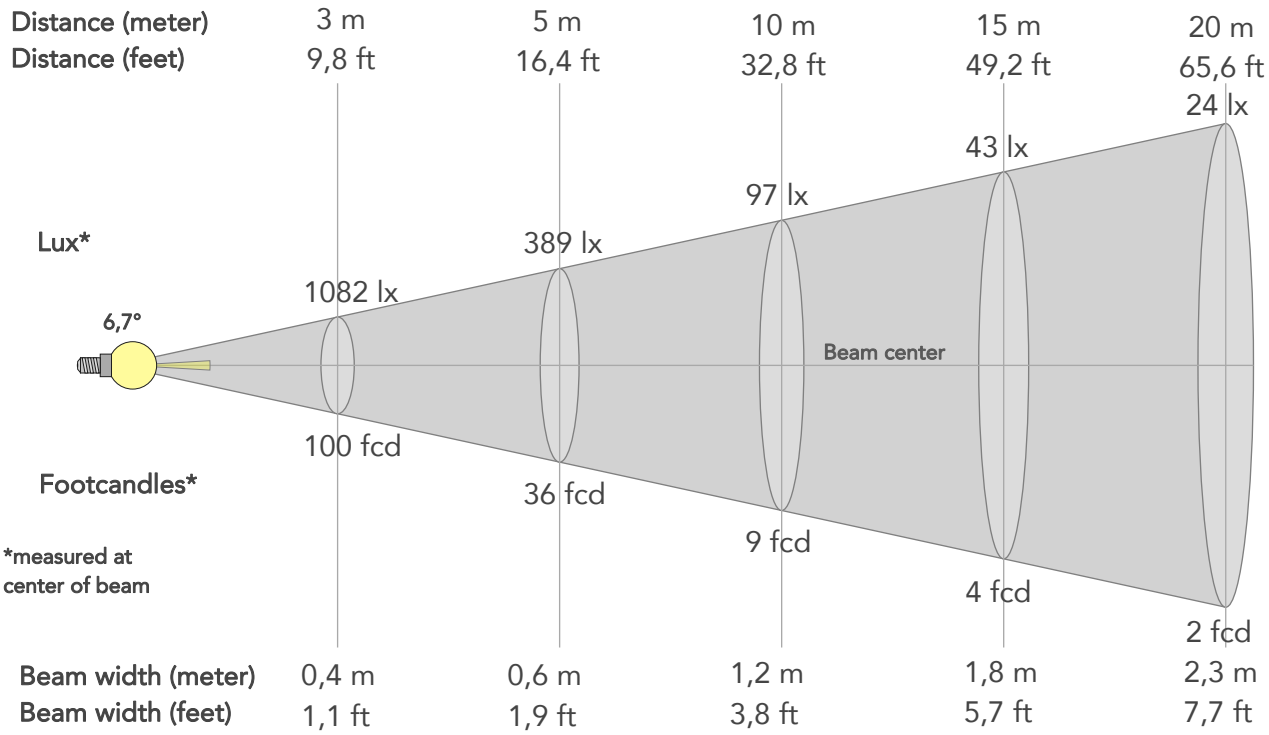
Beam angle 50%: 6,7°
Field angle 10%: 14,9°
Cut off angle 2.5%: 26,4°

Spectra



BEAM DETAILS

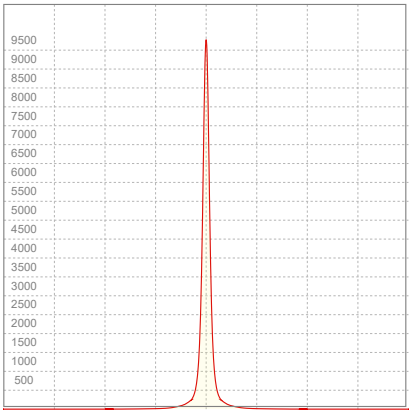
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
6,7°	14,9°	26,4°	96,8%	93,2%



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	9736lx	2434lx	1082lx	608lx	389lx	173lx	97lx	43lx	24lx	16lx	11lx	6lx	4lx
Footcand.	904fcd	226fcd	100fcd	57fcd	36fcd	16fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,1m	0,2m	0,4m	0,5m	0,6m	0,9m	1,2m	1,8m	2,3m	2,9m	3,5m	4,7m	5,8m
Beam wid.	0,4ft	0,8ft	1,1ft	1,5ft	1,9ft	2,9ft	3,8ft	5,7ft	7,7ft	9,6ft	11,5ft	15,3ft	19,2ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
227V	0,086A	14,8W	0,76	22lm/W

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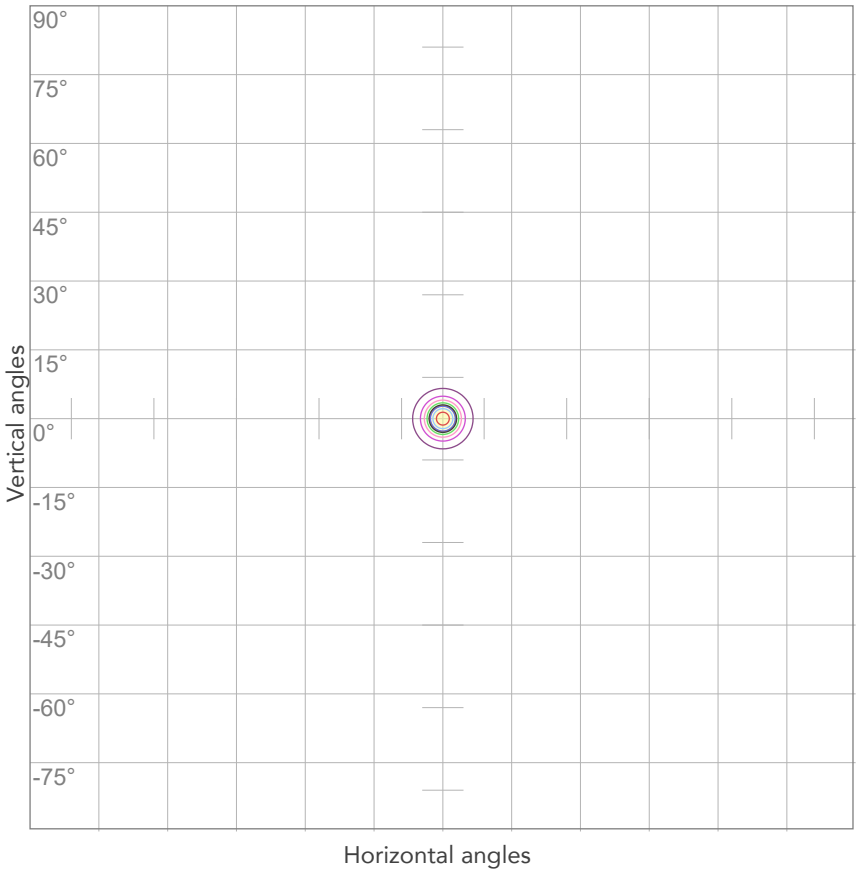
ISO DIAGRAMS

ISO CANDELA DIAGRAM



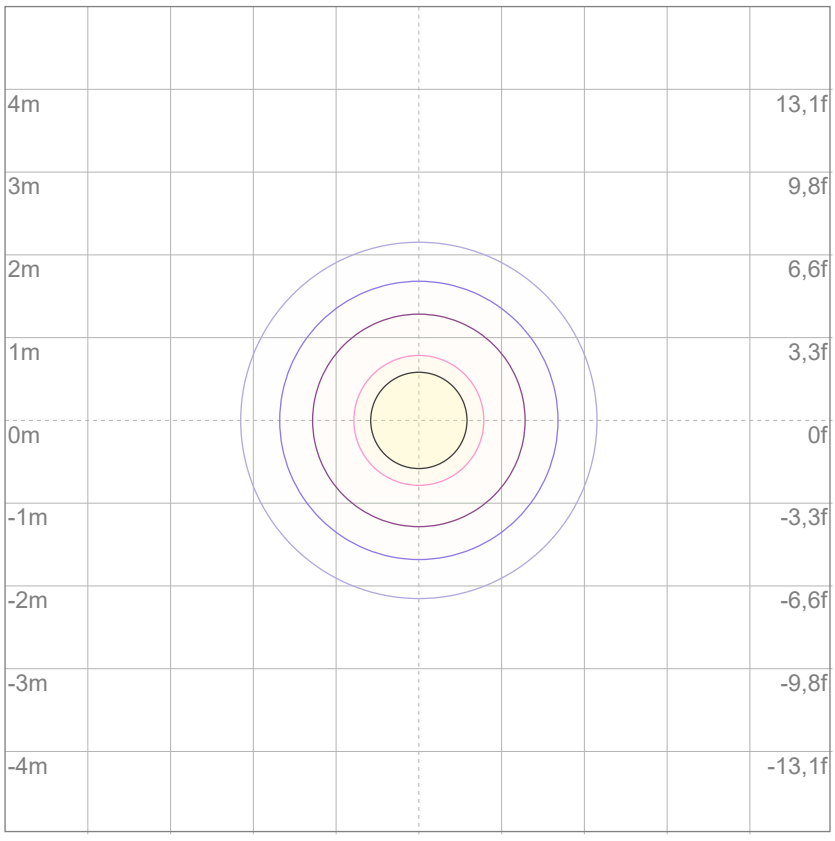
10%	974 cd
20%	1947 cd
30%	2921 cd
40%	3894 cd
50%	4868 cd
60%	5841 cd
70%	6815 cd
80%	7789 cd

Conditions:

Number of c-planes: 2

Candela at center: 9736 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	2,92 lx
5%	4,87 lx
10%	9,74 lx
30%	29,2 lx
50%	48,7 lx

Conditions:

Number of c-planes: 2

Lux at center: 97,4 lx

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

Total lumen output:

127 lm

Peak candela output:

3410 cd

PRODUCT NAME:

ARCSPOTDOTFC

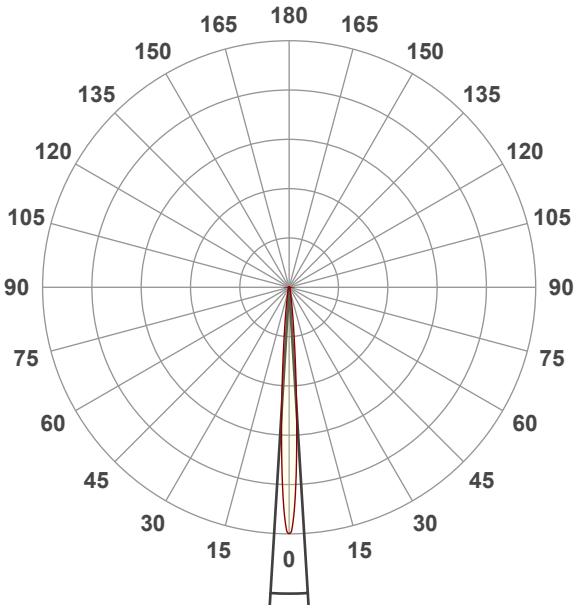
MEASURAMENT CONDITIONS:

Beam angle:
5°

Target:
Blue

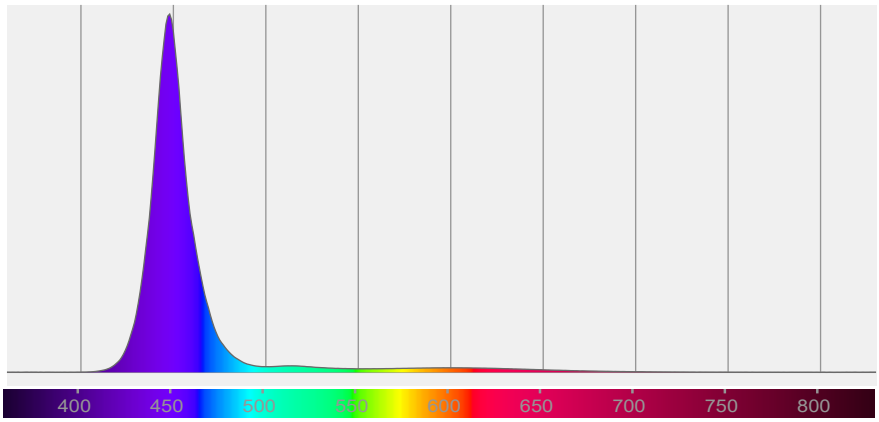
Operator:
Salvatore Giglio

Date and time:
04/01/2024 12:01:11



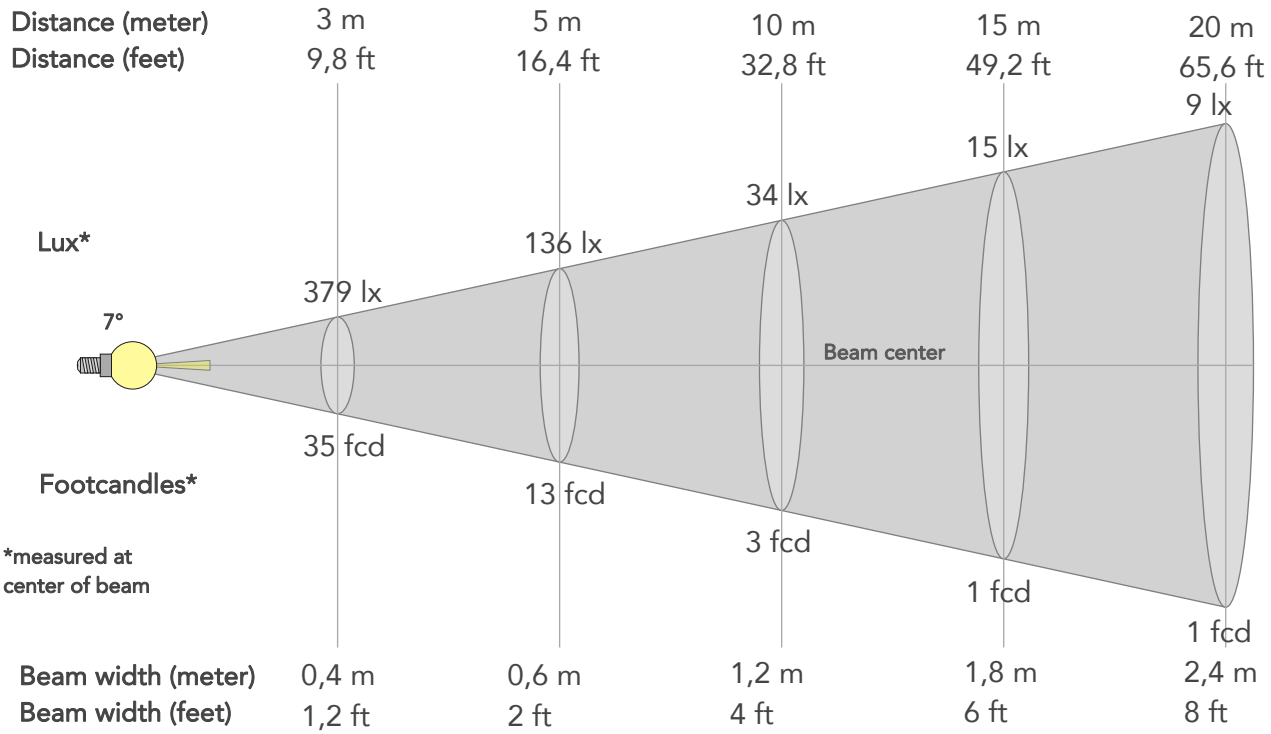
Beam angle 50%: 7°
Field angle 10%: 15,5°
Cut off angle 2.5%: 27,8°

Spectra



BEAM DETAILS

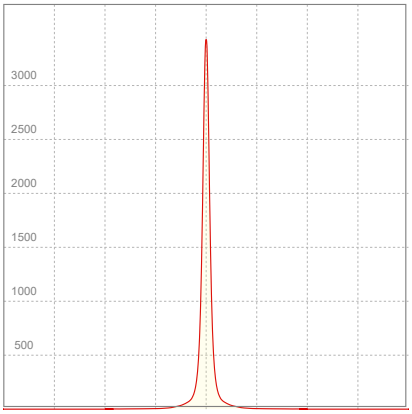
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
7°	15,5°	27,8°	95,1%	91,1%



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	3410lx	853lx	379lx	213lx	136lx	61lx	34lx	15lx	9lx	5lx	4lx	2lx	1lx
Footcand.	317fcd	79fcd	35fcd	20fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,1m	0,2m	0,4m	0,5m	0,6m	0,9m	1,2m	1,8m	2,4m	3m	3,7m	4,9m	6,1m
Beam wid.	0,4ft	0,8ft	1,2ft	1,6ft	2ft	3ft	4ft	6ft	8ft	10ft	12ft	16ft	20ft

LINEAR DISTRIBUTION DIAGRAM

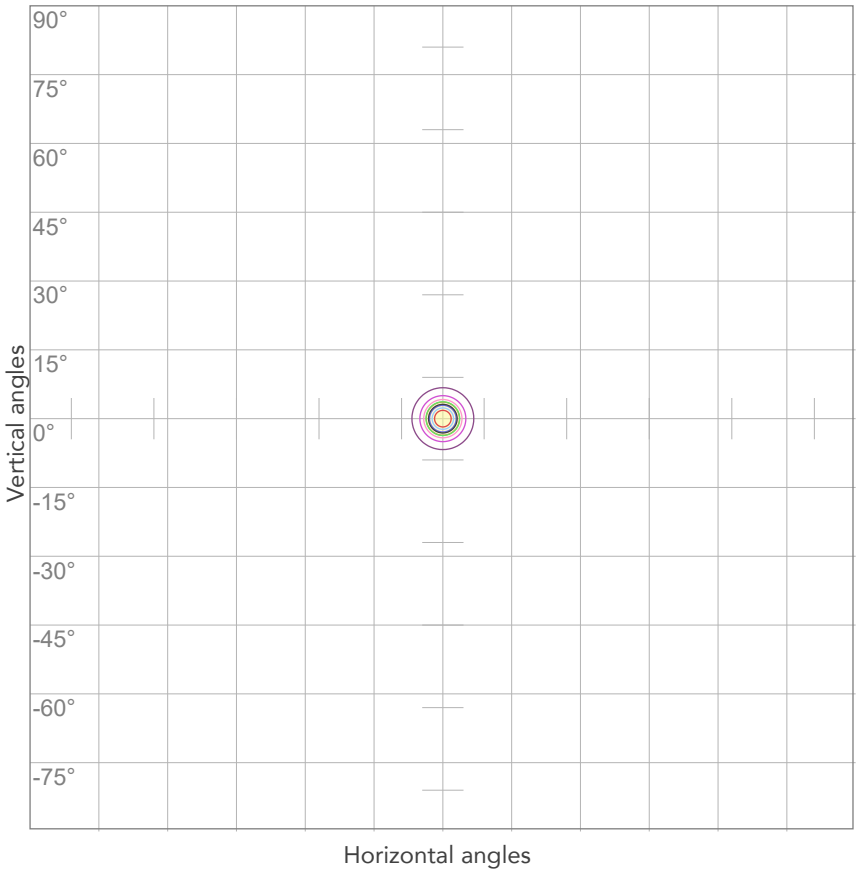


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
226V	0,088A	15,5W	0,77	8lm/W

ISO DIAGRAMS

ISO CANDELA DIAGRAM



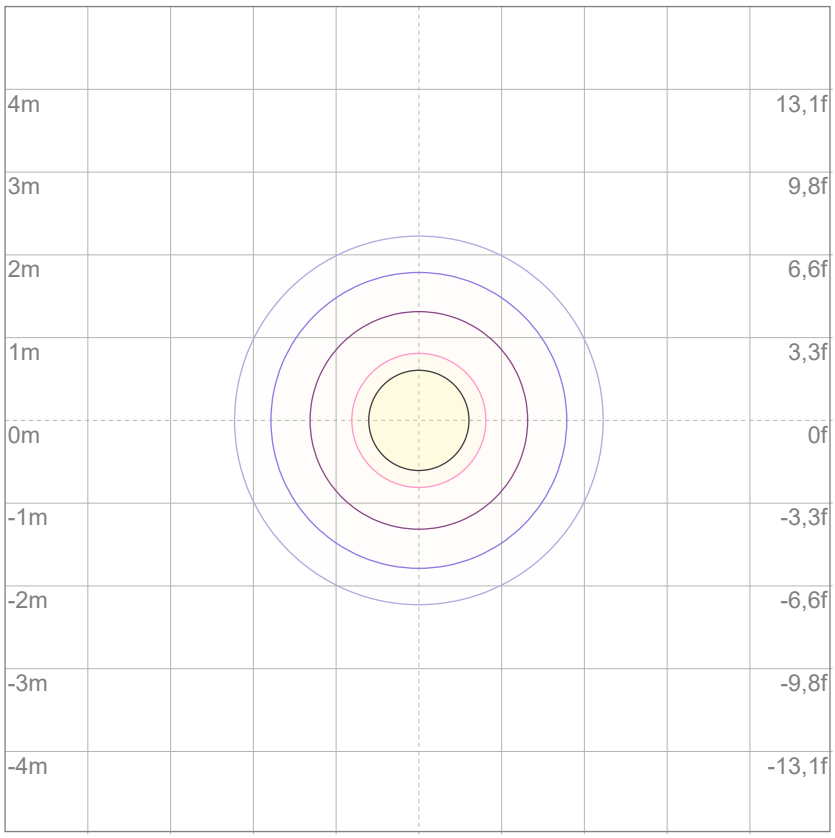
10%	341 cd
20%	682 cd
30%	1023 cd
40%	1364 cd
50%	1705 cd
60%	2046 cd
70%	2387 cd
80%	2728 cd

Conditions:

Number of c-planes: 2

Candela at center: 3410 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	1,02 lx
5%	1,71 lx
10%	3,41 lx
30%	10,2 lx
50%	17,1 lx

Conditions:

Number of c-planes: 2

Lux at center: 34,1 lx

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

Total lumen output:

682 lm

Peak candela output:

20271 cd

Light quality:

CRI: 57,8

Color temperature:

3259 K

PRODUCT NAME:

ARCSPOTDOTFC

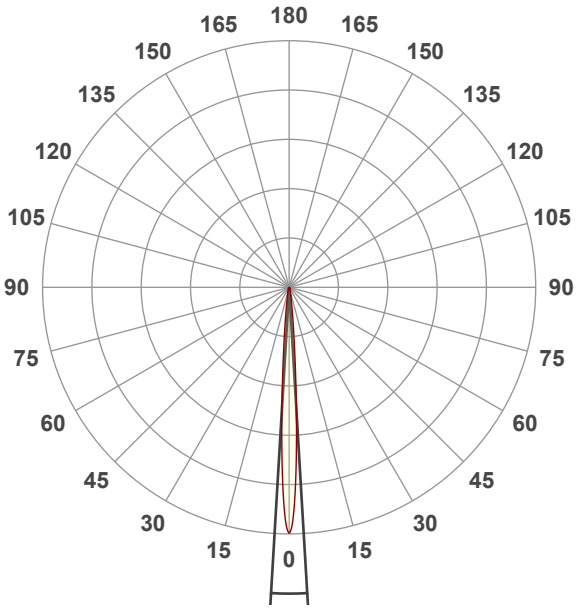
MEASURAMENT CONDITIONS:

Beam angle:
5°

Target:
White

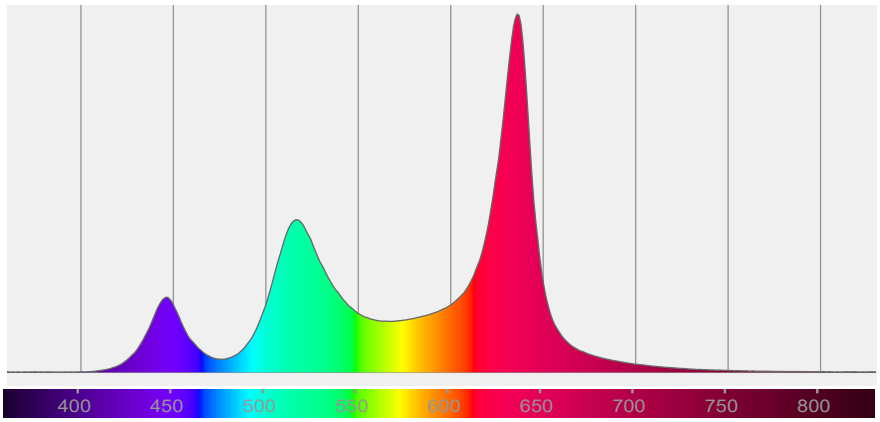
Operator:
Salvatore Giglio

Date and time:
04/01/2024 12:05:48

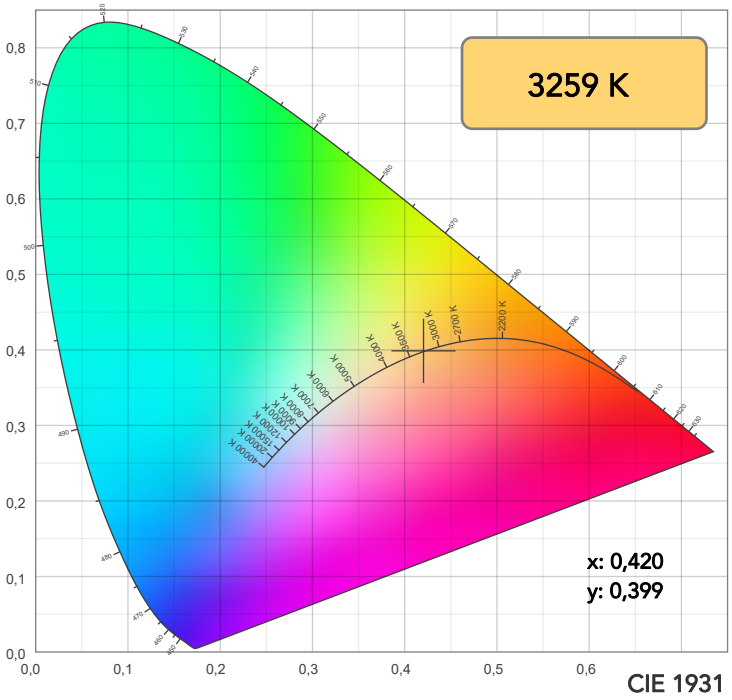


Beam angle 50%: 6,8°
Field angle 10%: 14,9°
Cut off angle 2.5%: 26,4°

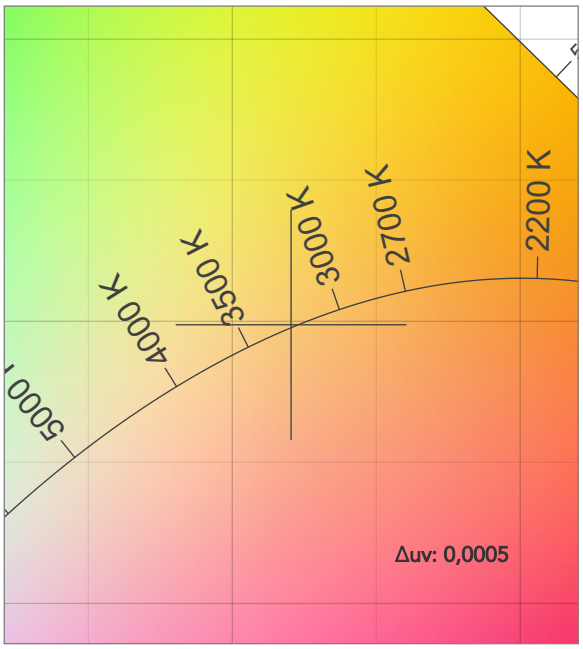
Spectra



COLOR DETAILS

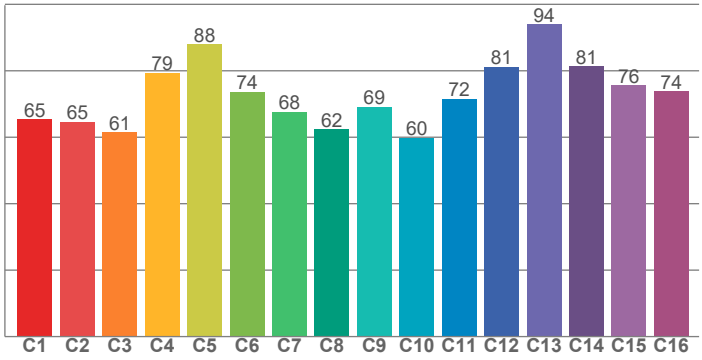


CIE 1931

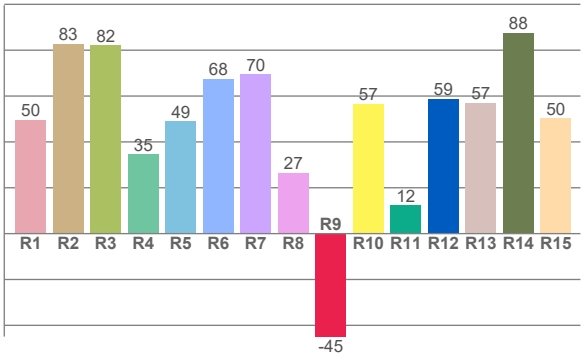


CIE 1931 ZOOM

TM30: 73,0



CRI: 57,8 (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
49,7	82,8	82,3	34,7	48,9	67,6	69,7	26,5	-44,9	56,7	12,2	58,8	57,1	87,6	50,4

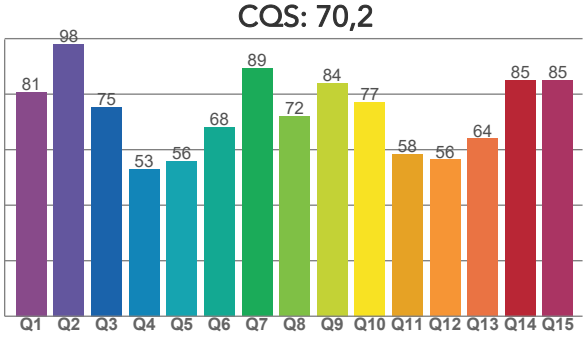
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
65,4	64,6	61,5	79,5	87,9	73,6	67,6	62,3	69,1	59,8	71,6	81,1	93,9	81,4	75,7	73,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,8	98,1	75,4	53,0	55,8	68,1	89,3	72,0	84,0	77,2	58,4	56,5	63,9	85,2	85,0

CQS: 70,2



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
3259 K	57,8	-44,9	73,0	115,8	70,2	29	0,420	0,399	0,0005

TM30 DETAILS

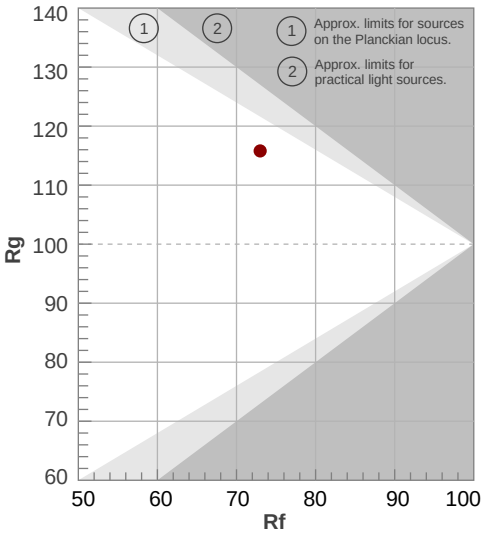
Rf 73,0

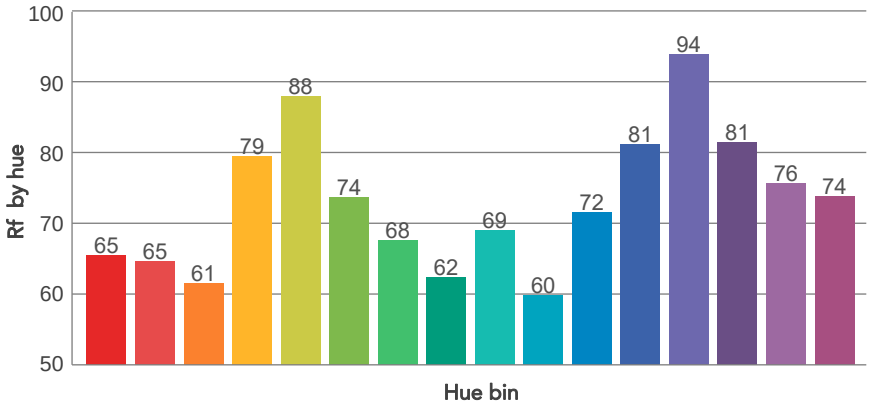
Fidelity index Rf

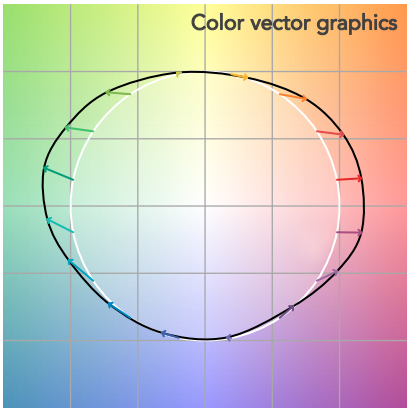
Rg 115,8

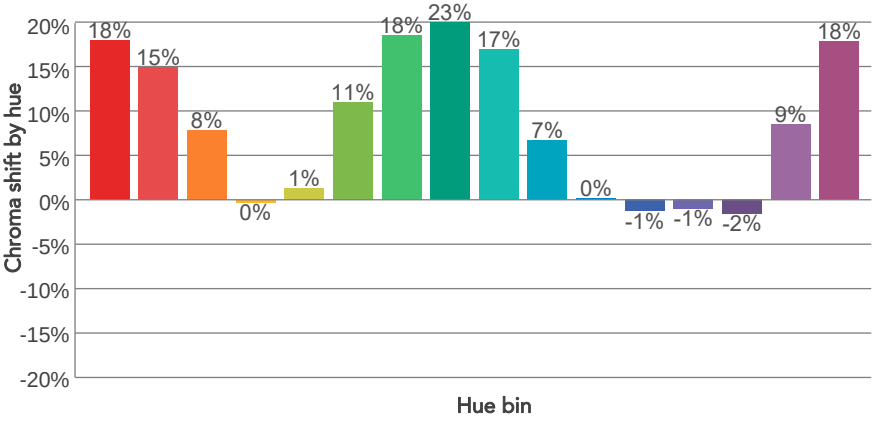
Gammut index

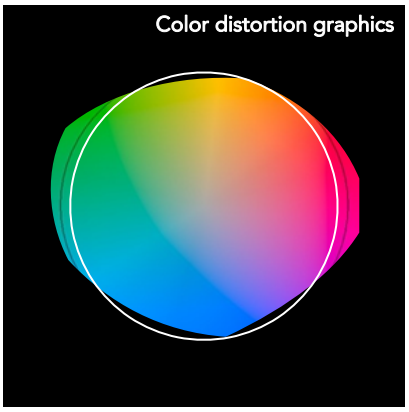
Hue Bin	R_f	Graphic shifts (%) Chroma	Hue
1	65	18%	-2%
2	65	15%	-13%
3	61	8%	-18%
4	79	0%	-12%
5	88	1%	1%
6	74	11%	14%
7	68	18%	9%
8	62	23%	-5%
9	69	17%	-13%
10	60	7%	-23%
11	72	0%	-19%
12	81	-1%	-13%
13	94	-1%	-3%
14	81	-2%	13%
15	76	9%	14%
16	74	18%	3%

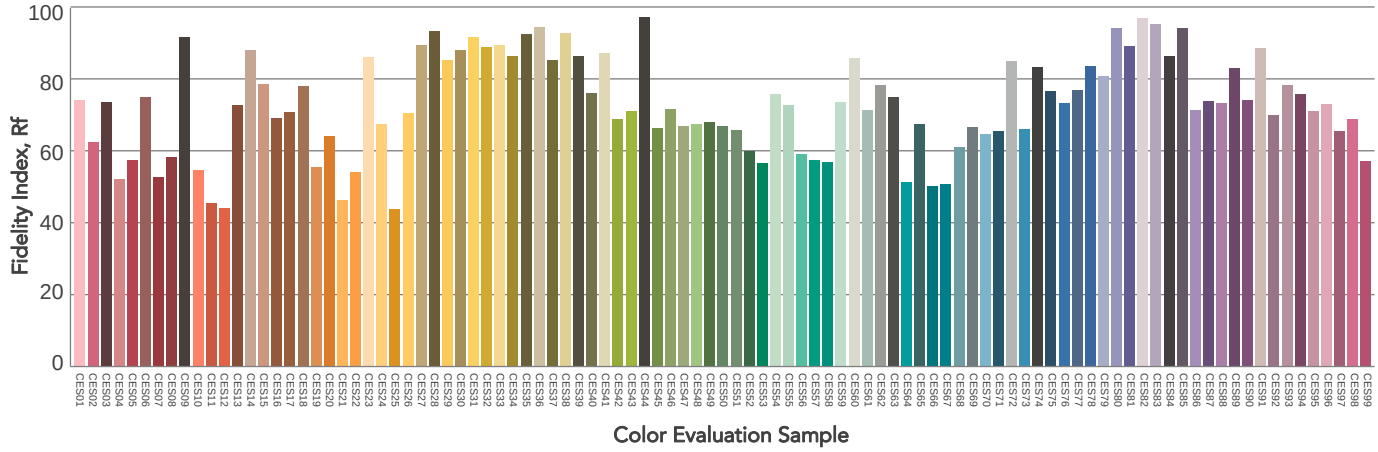












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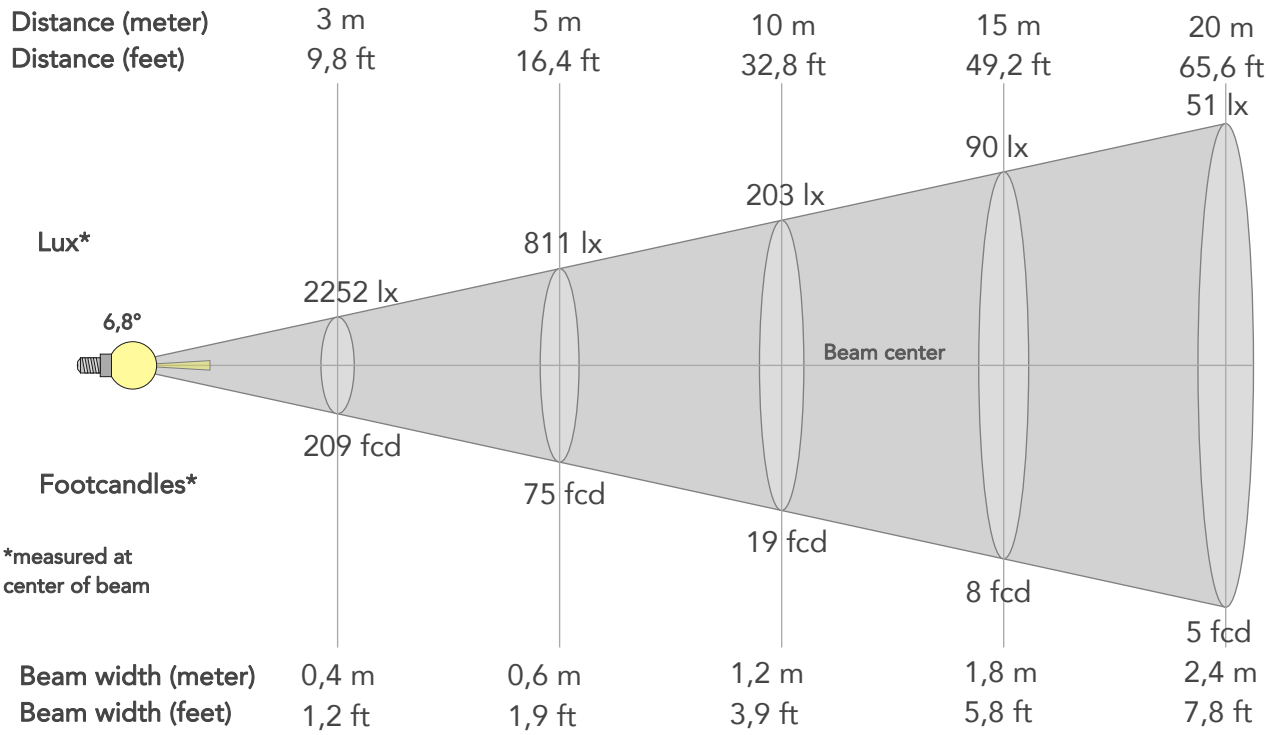
BEAM DETAILS

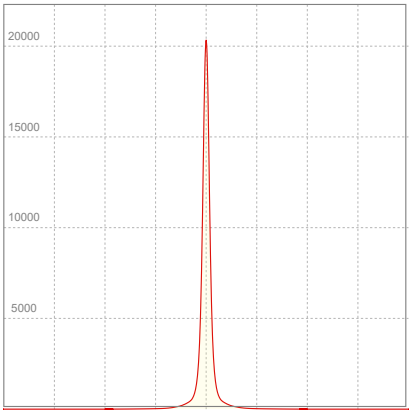
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
6,8°	14,9°	26,4°	97,5%	94,1%



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	20271lx	5068lx	2252lx	1267lx	811lx	360lx	203lx	90lx	51lx	32lx	23lx	13lx	8lx
Footcand.	1883fcd	471fcd	209fcd	118fcd	75fcd	33fcd	19fcd	8fcd	5fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,1m	0,2m	0,4m	0,5m	0,6m	0,9m	1,2m	1,8m	2,4m	3m	3,5m	4,7m	5,9m
Beam wid.	0,4ft	0,8ft	1,2ft	1,6ft	1,9ft	2,9ft	3,9ft	5,8ft	7,8ft	9,7ft	11,6ft	15,5ft	19,4ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Power FC	Effeciency
226V	0,122A	24,7W	0,89	28lm/W

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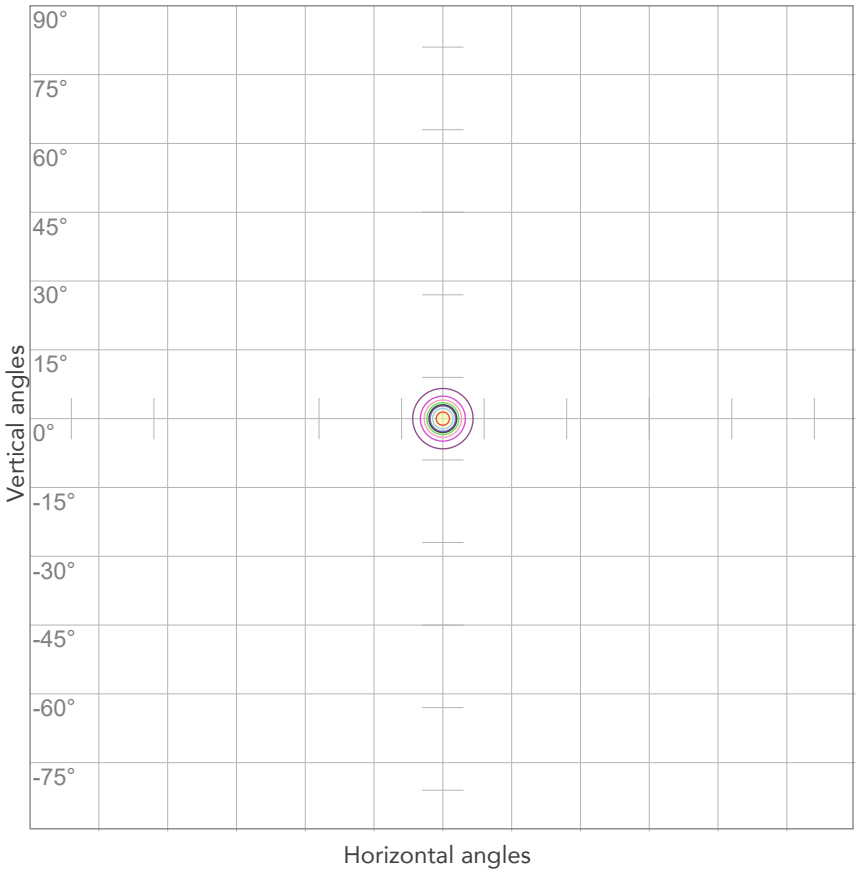
ISO DIAGRAMS

ISO CANDELA DIAGRAM



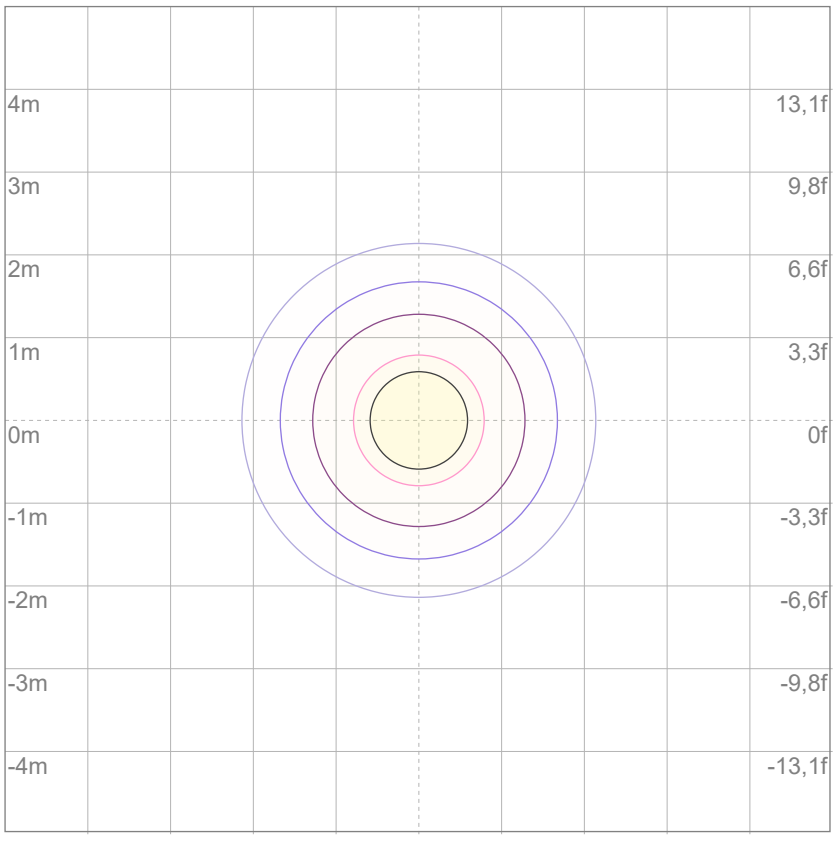
10%	2027 cd
20%	4054 cd
30%	6081 cd
40%	8108 cd
50%	10136 cd
60%	12163 cd
70%	14190 cd
80%	16217 cd

Conditions:

Number of c-planes: 2

Candela at center: 20271 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	6,08 lx
5%	10,1 lx
10%	20,3 lx
30%	60,8 lx
50%	101 lx

Conditions:

Number of c-planes: 2

Lux at center: 203 lx

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