

Photometric Test Report



STUDIOCOBPFC2

150W rated full colour COB LED Par
(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:

3281 lm

Peak candela output:

26663 cd

PRODUCT NAME:

STUDIOCOBPFC2

MEASUREMENT CONDITIONS:

Beam angle:

Narrow

Target:

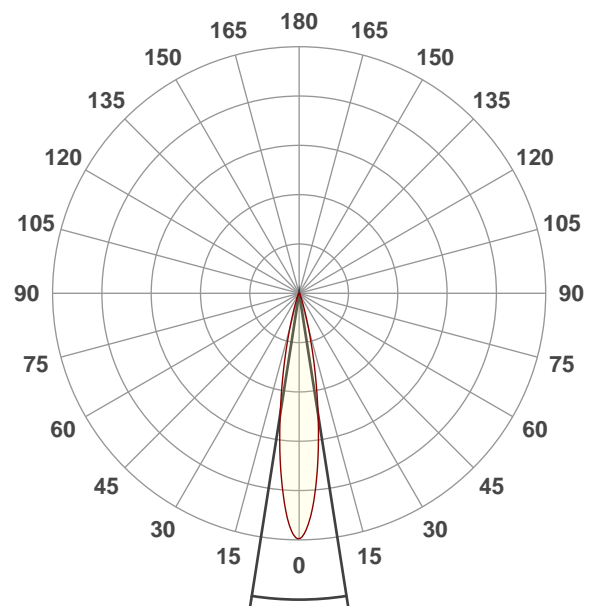
Full On

Operator:

Paolo Carvone

Date and time:

30/07/2021 12:32:26

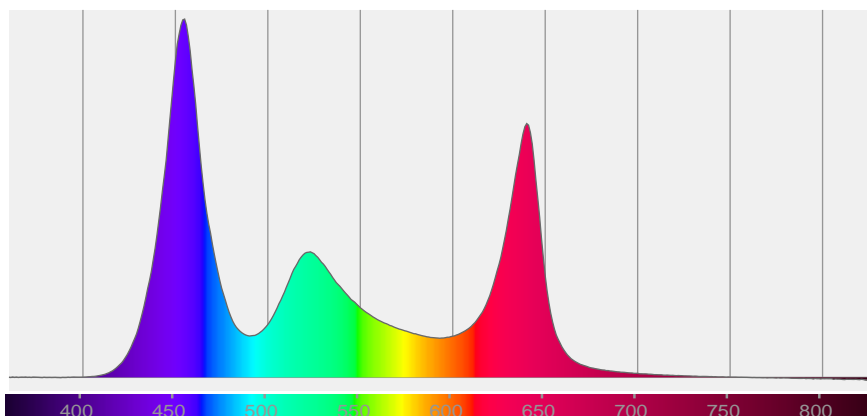


Beam angle 50%: 17,8°

Field angle 10%: 33°

Cut off angle 2.5%: 45,1°

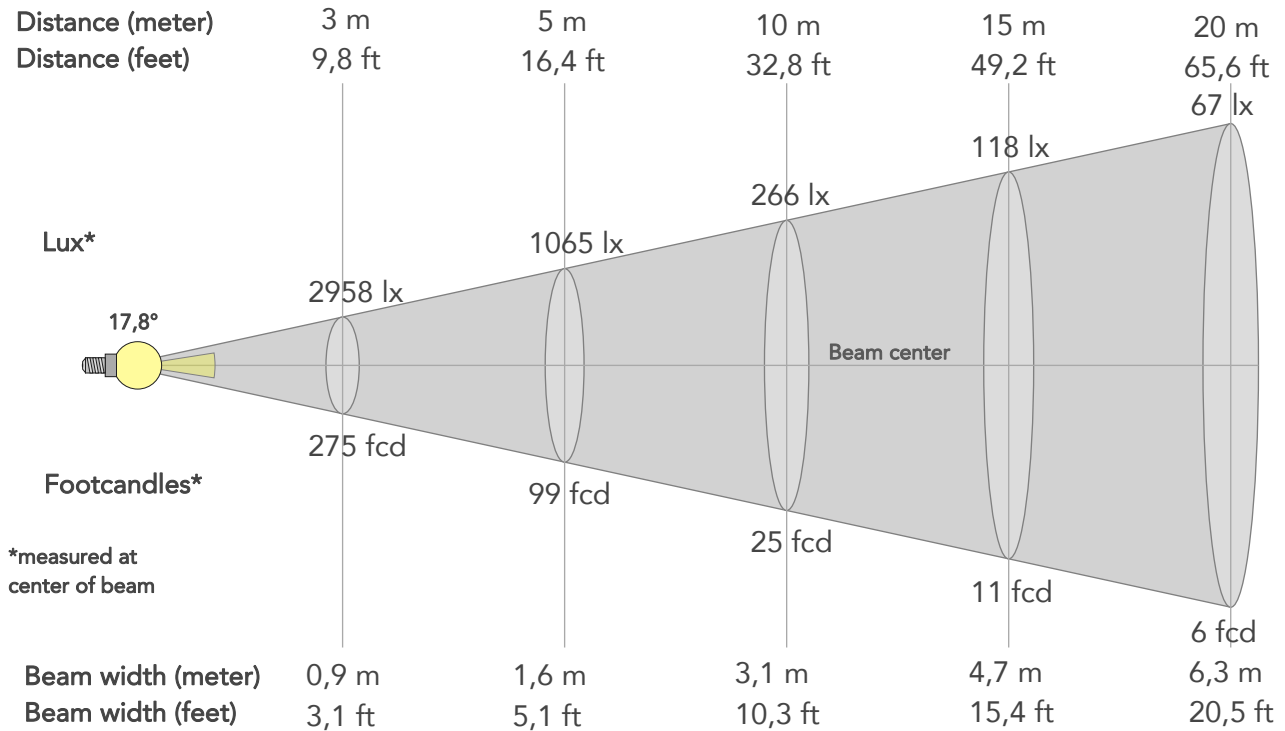
Spectra



BEAM DETAILS



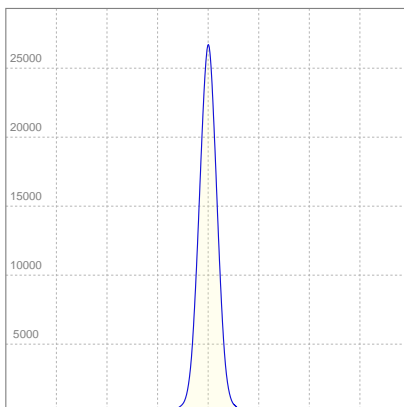
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
17,8°	33°	45,1°	99,9%	98,7%



BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	26624lx	6656lx	2958lx	1664lx	1065lx	473lx	266lx	118lx	67lx	43lx	30lx	17lx	11lx
Footcand.	2473fcd	618fcd	275fcd	155fcd	99fcd	44fcd	25fcd	11fcd	6fcd	4fcd	3fcd	2fcd	1fcd
Beam wid.	0,3m	0,6m	0,9m	1,3m	1,6m	2,3m	3,1m	4,7m	6,3m	7,8m	9,4m	12,5m	15,6m
Beam wid.	1ft	2,1ft	3,1ft	4,1ft	5,1ft	7,7ft	10,3ft	15,4ft	20,5ft	25,7ft	30,8ft	41,1ft	51,3ft

LINEAR DISTRIBUTION DIAGRAM

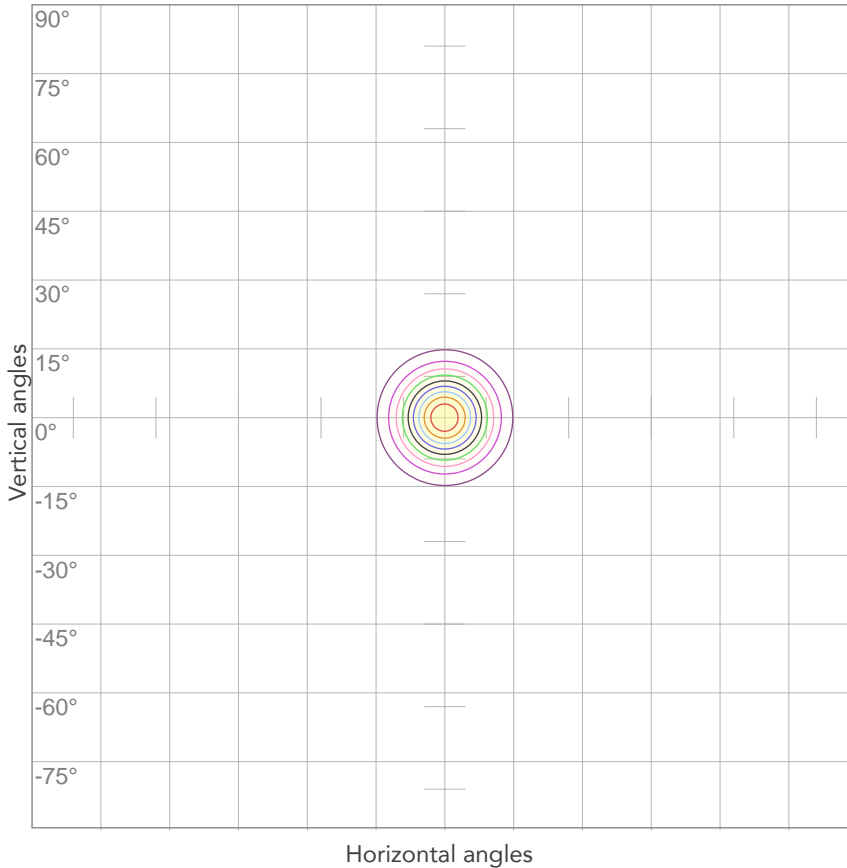


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,628A	130,7W	25lm/W

Power FC
0,93

ISO CANDELA DIAGRAM



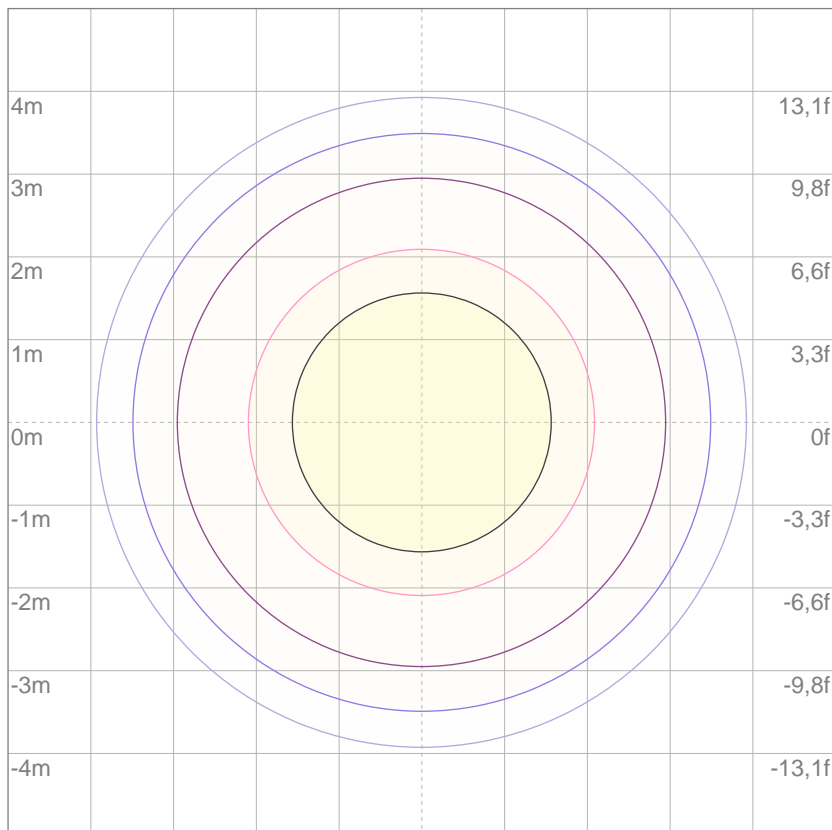
10%	2662 cd
20%	5325 cd
30%	7987 cd
40%	10650 cd
50%	13312 cd
60%	15974 cd
70%	18637 cd
80%	21299 cd

Conditions:

Number of c-planes: 2

Candela at center: 26624 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	7,99 lx
5%	13,3 lx
10%	26,6 lx
30%	79,9 lx
50%	133 lx

Conditions:

Number of c-planes: 2

Lux at center: 266 lx

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



Total lumen output:

685 lm

Peak candela output:

5269 cd

PRODUCT NAME:

STUDIOCOBPF2

MEASUREMENT CONDITIONS:

Beam angle:

Narrow

Target:

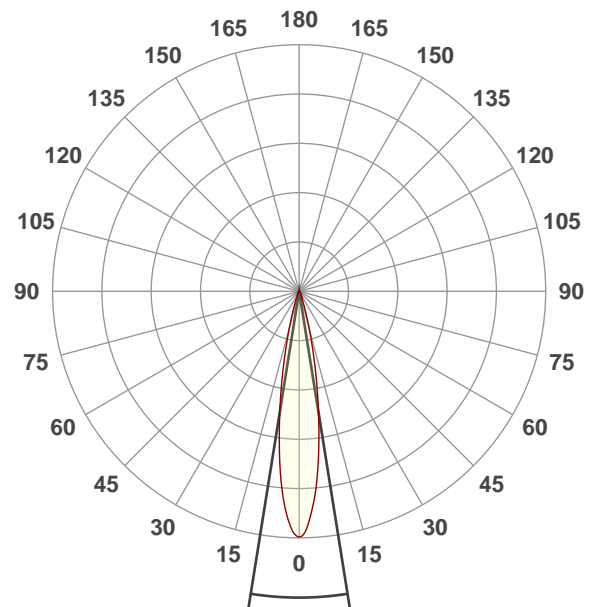
Red

Operator:

Paolo Carvone

Date and time:

30/07/2021 12:34:54

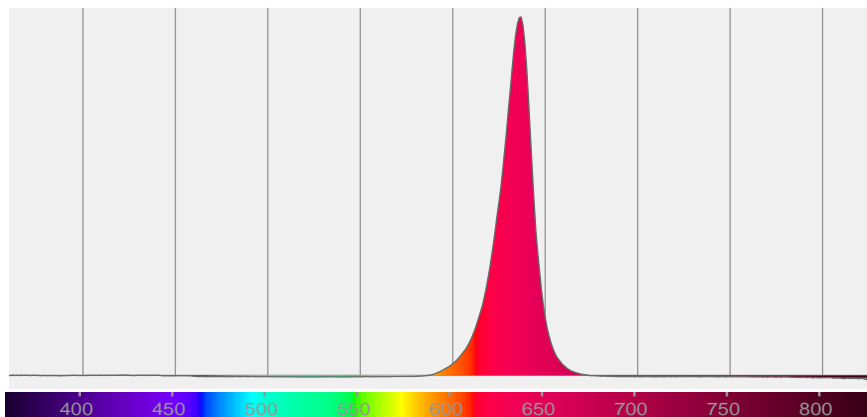


Beam angle 50%: 18,2°

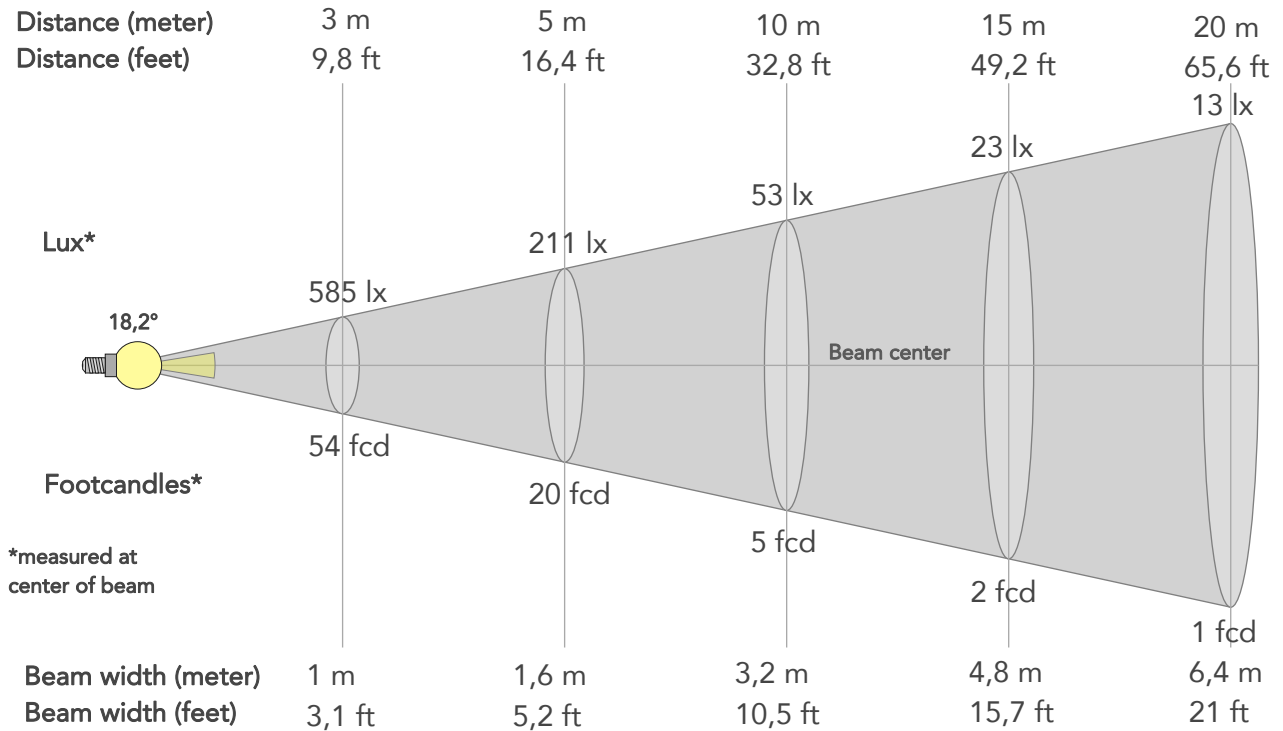
Field angle 10%: 33,7°

Cut off angle 2.5%: 45,6°

Spectra



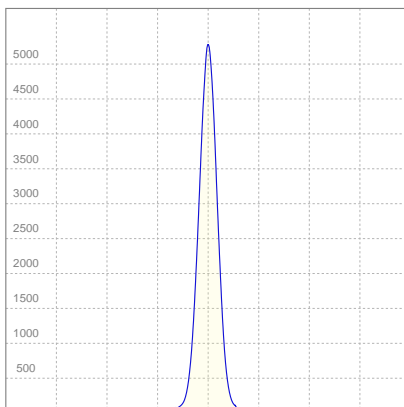
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,2°	33,7°	45,6°	99,6%	97,4%



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	5269lx	1317lx	585lx	329lx	211lx	94lx	53lx	23lx	13lx	8lx	6lx	3lx	2lx
Footcand.	489fcd	122fcd	54fcd	31fcd	20fcd	9fcd	5fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,3m	0,6m	1m	1,3m	1,6m	2,4m	3,2m	4,8m	6,4m	8m	9,6m	12,8m	16m
Beam wid.	1,1ft	2,1ft	3,1ft	4,2ft	5,2ft	7,9ft	10,5ft	15,7ft	21ft	26,2ft	31,5ft	42ft	52,5ft

LINEAR DISTRIBUTION DIAGRAM

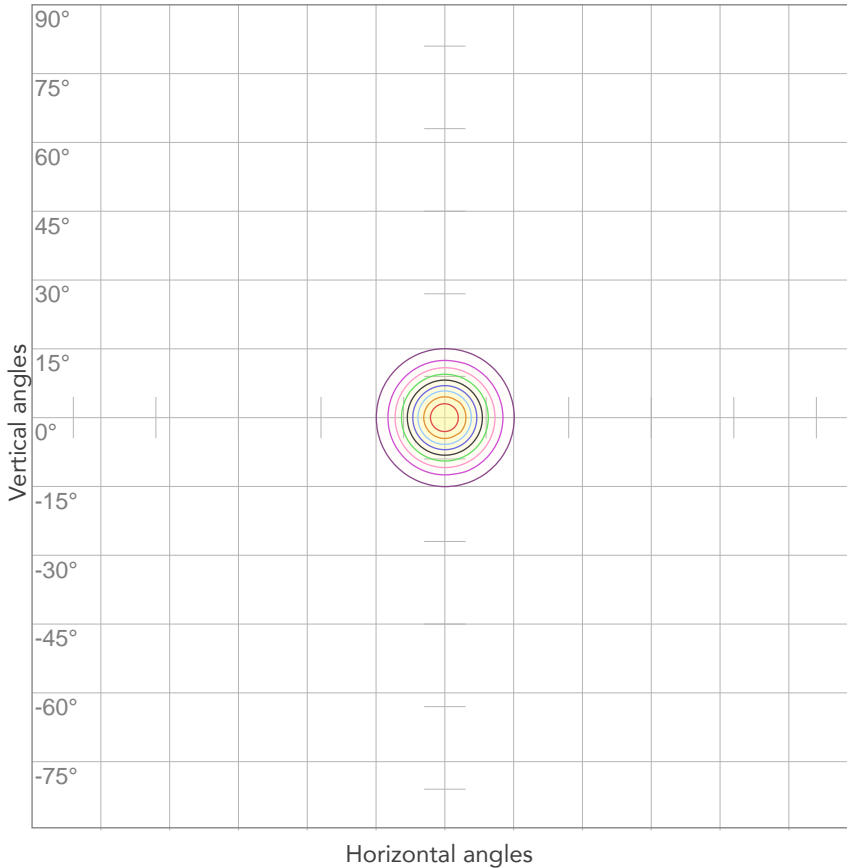


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,197A	34,5W	20lm/W

Power FC
0,78

ISO CANDELA DIAGRAM



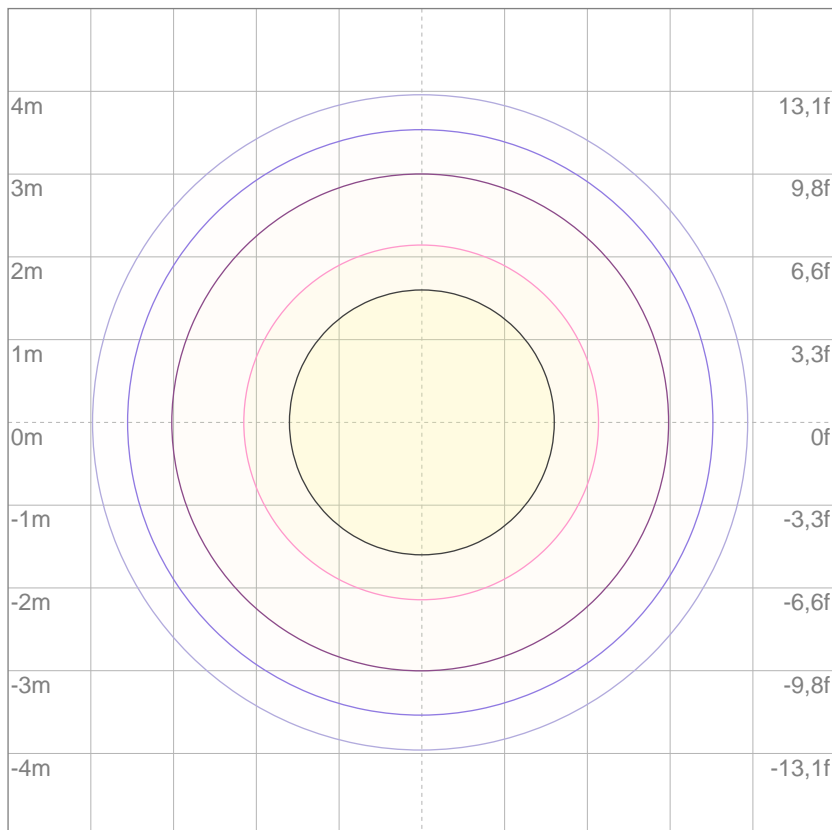
10%	527 cd
20%	1054 cd
30%	1581 cd
40%	2107 cd
50%	2634 cd
60%	3161 cd
70%	3688 cd
80%	4215 cd

Conditions:

Number of c-planes: 2

Candela at center: 5269 cd

ISO LUX DIAGRAM



3%	1,58 lx
5%	2,63 lx
10%	5,27 lx
30%	15,8 lx
50%	26,3 lx

Conditions:

Number of c-planes: 2

Lux at center: 52,7 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

1149 lm

Peak candela output:

8392 cd

PRODUCT NAME:

STUDIOCOBPF2

MEASUREMENT CONDITIONS:

Beam angle:

Narrow

Target:

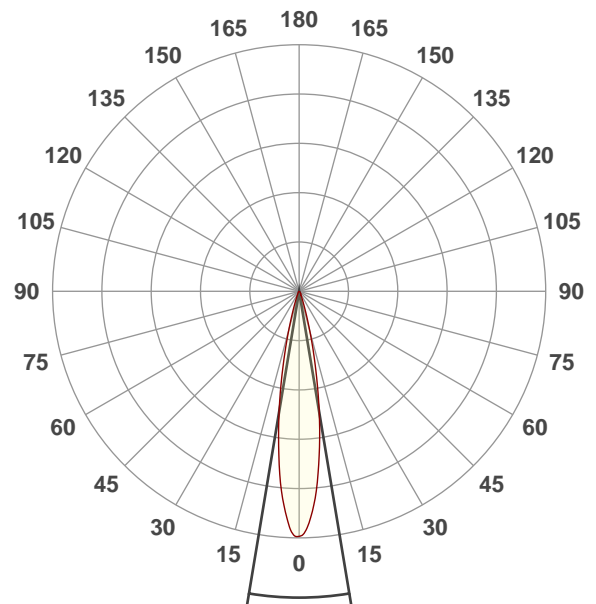
Green

Operator:

Paolo Carvone

Date and time:

30/07/2021 12:36:36

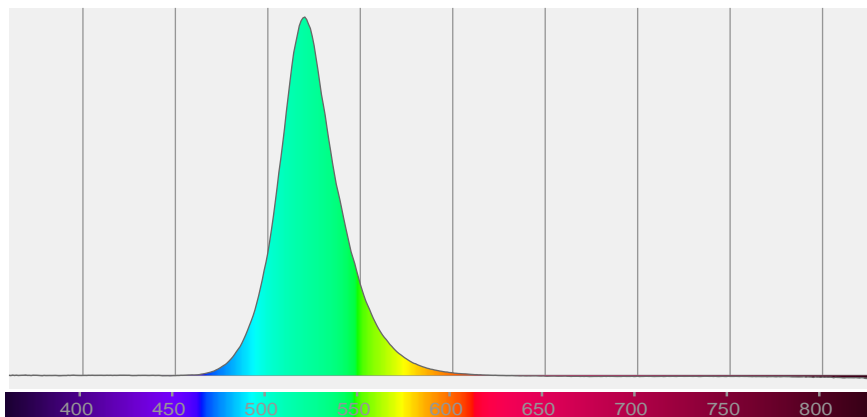


Beam angle 50%: 18,9°

Field angle 10%: 33,9°

Cut off angle 2.5%: 46,8°

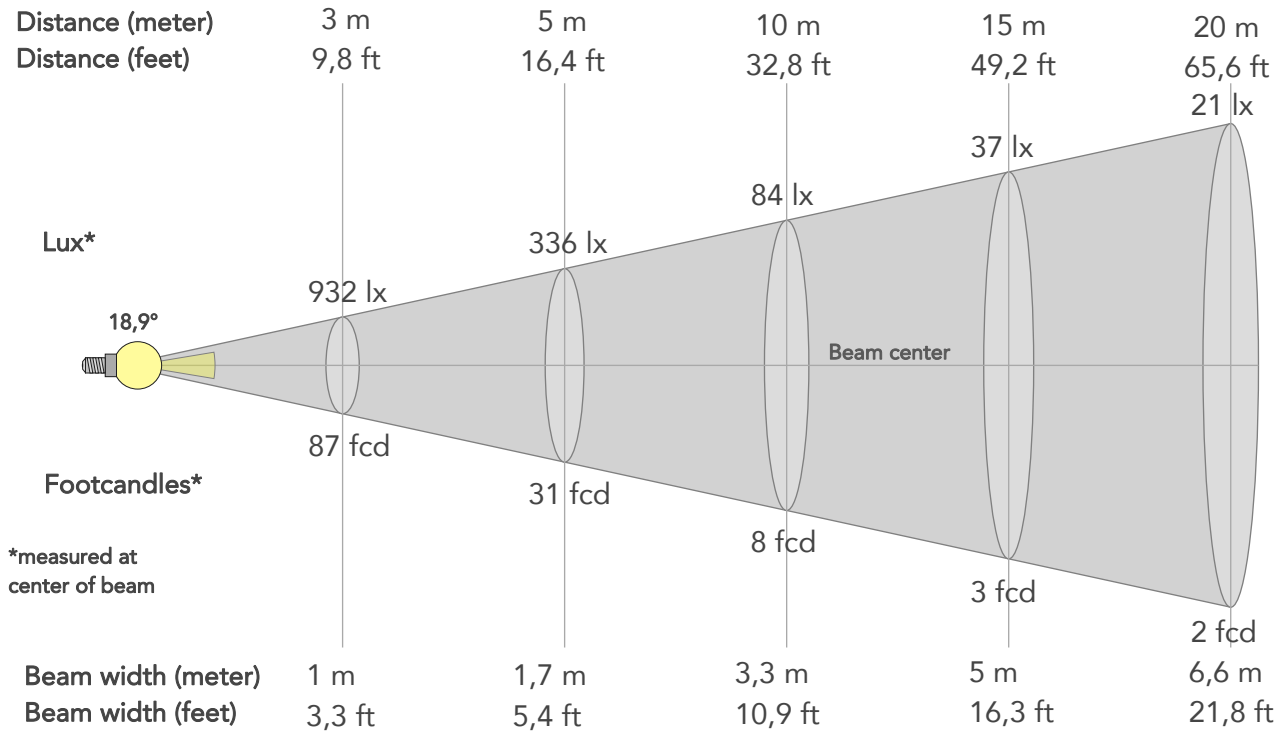
Spectra



BEAM DETAILS



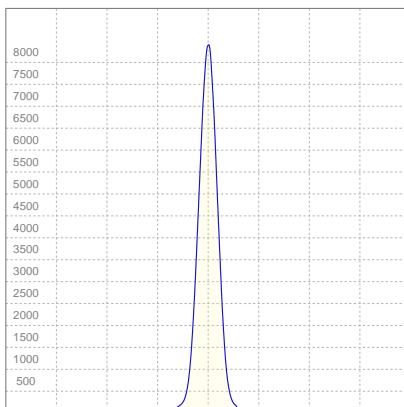
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18,9°	33,9°	46,8°	99,5%	96,9%



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	8388lx	2097lx	932lx	524lx	336lx	149lx	84lx	37lx	21lx	13lx	9lx	5lx	3lx
Footcand.	779fcd	195fcd	87fcd	49fcd	31fcd	14fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,3m	0,7m	1m	1,3m	1,7m	2,5m	3,3m	5m	6,6m	8,3m	10m	13,3m	16,6m
Beam wid.	1,1ft	2,2ft	3,3ft	4,4ft	5,4ft	8,2ft	10,9ft	16,3ft	21,8ft	27,2ft	32,7ft	43,6ft	54,5ft

LINEAR DISTRIBUTION DIAGRAM

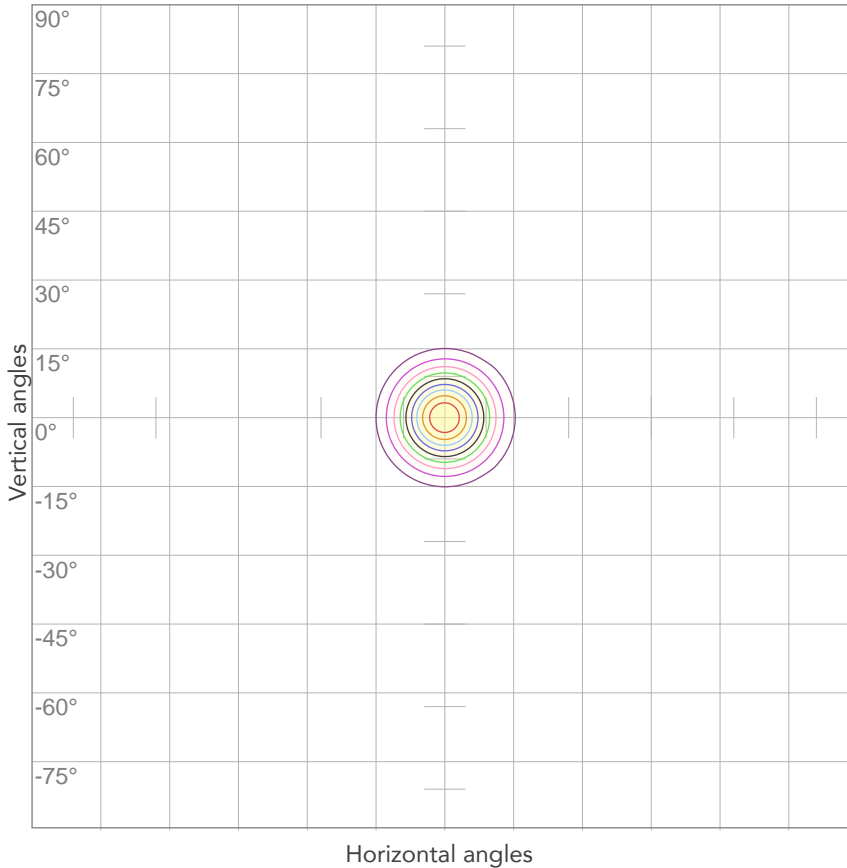


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,221A	40,5W	28lm/W

Power FC
0,81

ISO CANDELA DIAGRAM



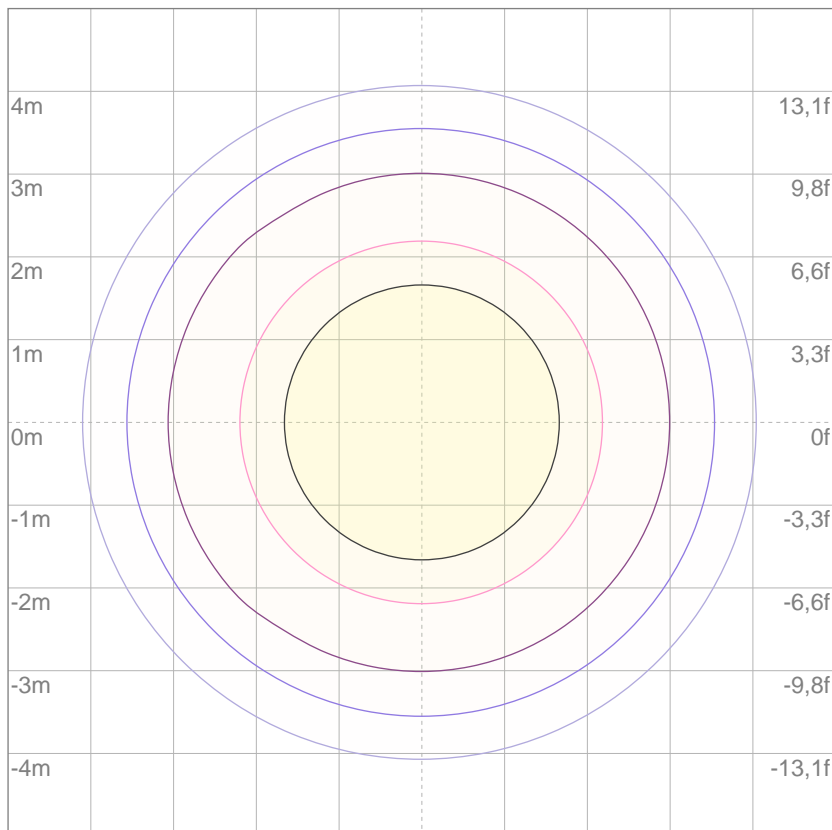
10%	839 cd
20%	1678 cd
30%	2517 cd
40%	3355 cd
50%	4194 cd
60%	5033 cd
70%	5872 cd
80%	6711 cd

Conditions:

Number of c-planes: 2

Candela at center: 8388 cd

ISO LUX DIAGRAM



3%	2,52 lx
5%	4,19 lx
10%	8,39 lx
30%	25,2 lx
50%	41,9 lx

Conditions:

Number of c-planes: 2

Lux at center: 83,9 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

197 lm

Peak candela output:

1270 cd

PRODUCT NAME:

STUDIOCOBPFC2

MEASUREMENT CONDITIONS:

Beam angle:

Narrow

Target:

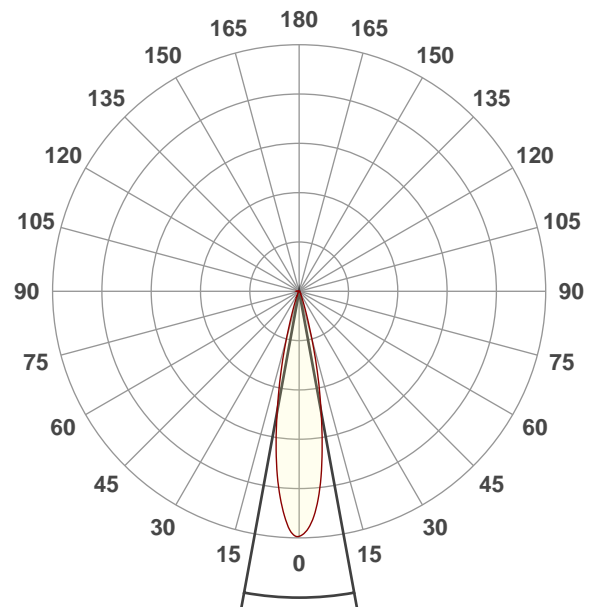
Blue

Operator:

Paolo Carvone

Date and time:

30/07/2021 12:38:07

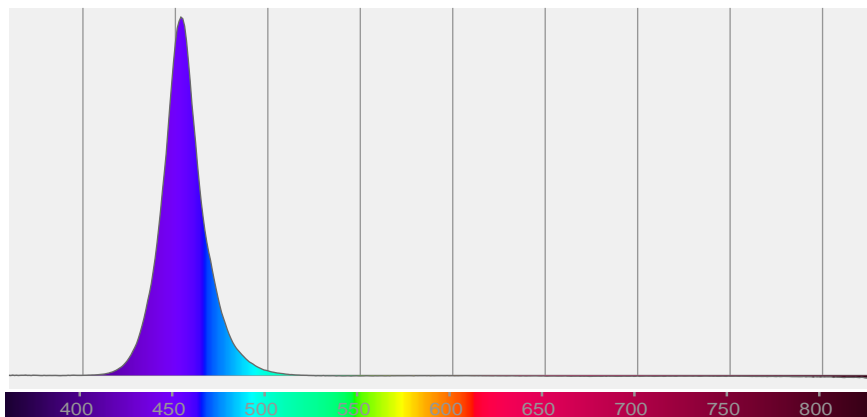


Beam angle 50%: 20,7°

Field angle 10%: 35,2°

Cut off angle 2.5%: 48,9°

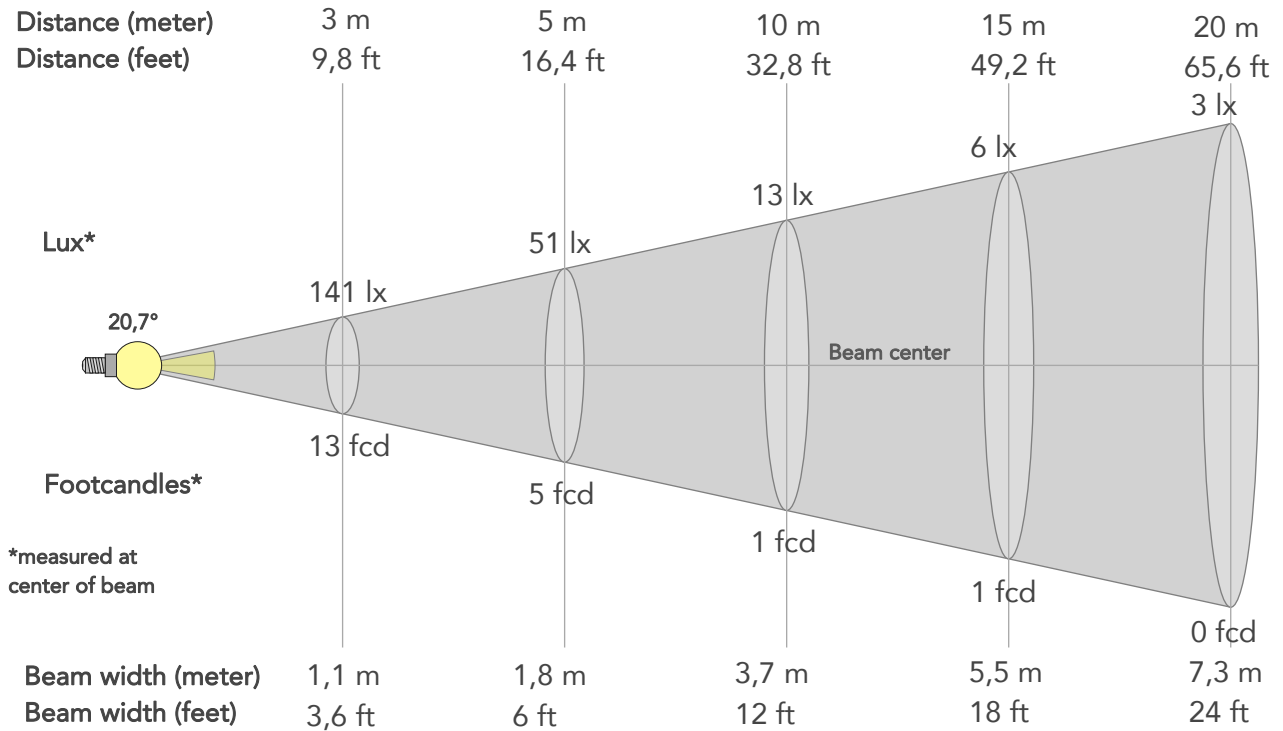
Spectra



BEAM DETAILS



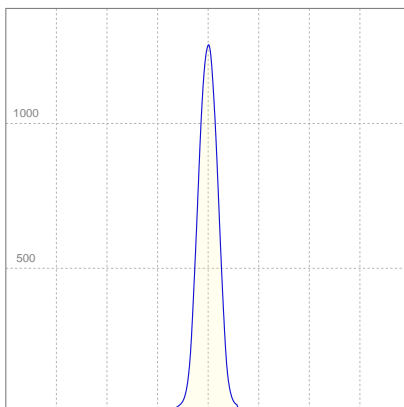
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
20,7°	35,2°	48,9°	99,1%	96,2%



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	1266lx	317lx	141lx	79lx	51lx	23lx	13lx	6lx	3lx	2lx	1lx	1lx	1lx
Footcand.	118fcd	29fcd	13fcd	7fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,4m	0,7m	1,1m	1,5m	1,8m	2,7m	3,7m	5,5m	7,3m	9,1m	11m	14,6m	18,3m
Beam wid.	1,2ft	2,4ft	3,6ft	4,8ft	6ft	9ft	12ft	18ft	24ft	30ft	35,9ft	47,9ft	59,9ft

LINEAR DISTRIBUTION DIAGRAM

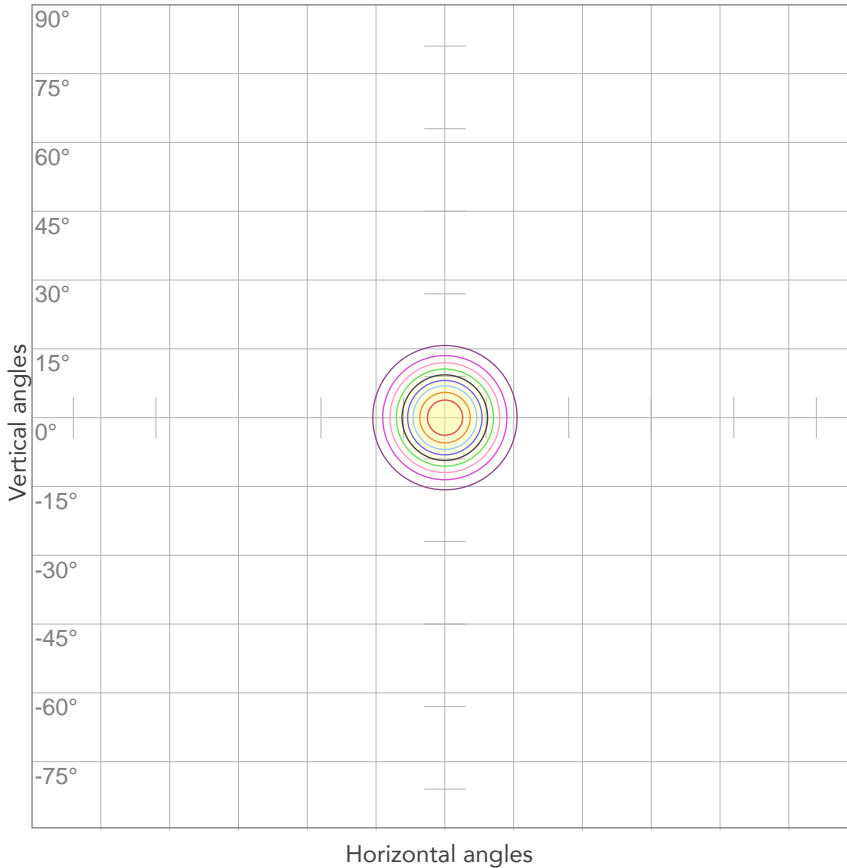


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	0,188A	32,3W	6lm/W

Power FC
0,77

ISO CANDELA DIAGRAM



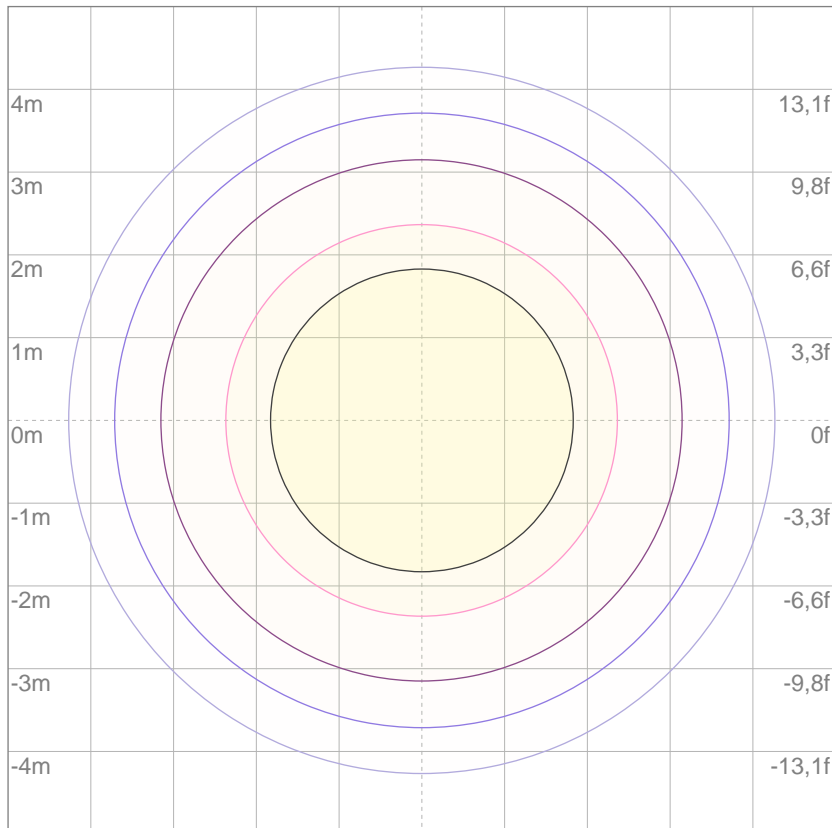
10%	127 cd
20%	253 cd
30%	380 cd
40%	506 cd
50%	633 cd
60%	760 cd
70%	886 cd
80%	1013 cd

Conditions:

Number of c-planes: 2

Candela at center: 1266 cd

ISO LUX DIAGRAM



3%	0,380 lx
5%	0,633 lx
10%	1,27 lx
30%	3,80 lx
50%	6,33 lx

Conditions:

Number of c-planes: 2

Lux at center: 12,7 lx

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

Mounting height: 10 meters (33 feet)



Total lumen output:

1707 lm

Peak candela output:

14620 cd

PRODUCT NAME:

STUDIOCOBPF2

MEASUREMENT CONDITIONS:

Beam angle:

Narrow

Target:

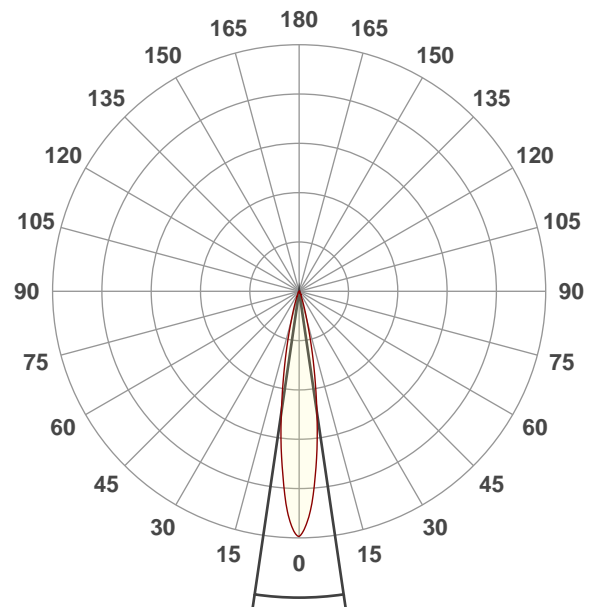
White

Operator:

Paolo Carvone

Date and time:

30/07/2021 12:40:01

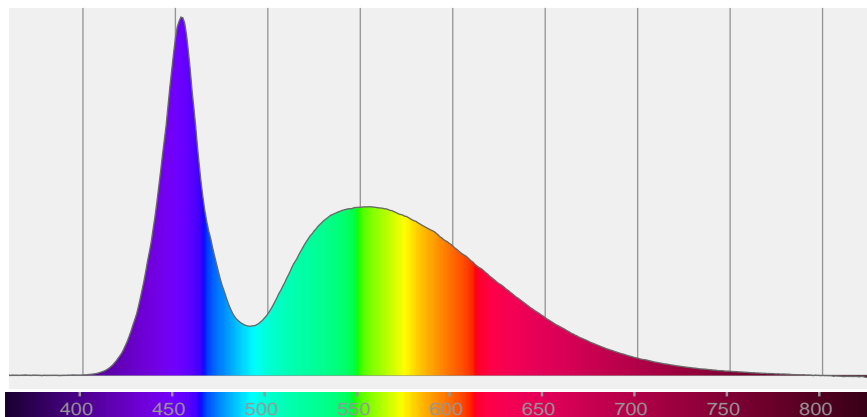


Beam angle 50%: 16,7°

Field angle 10%: 31,8°

Cut off angle 2.5%: 44,7°

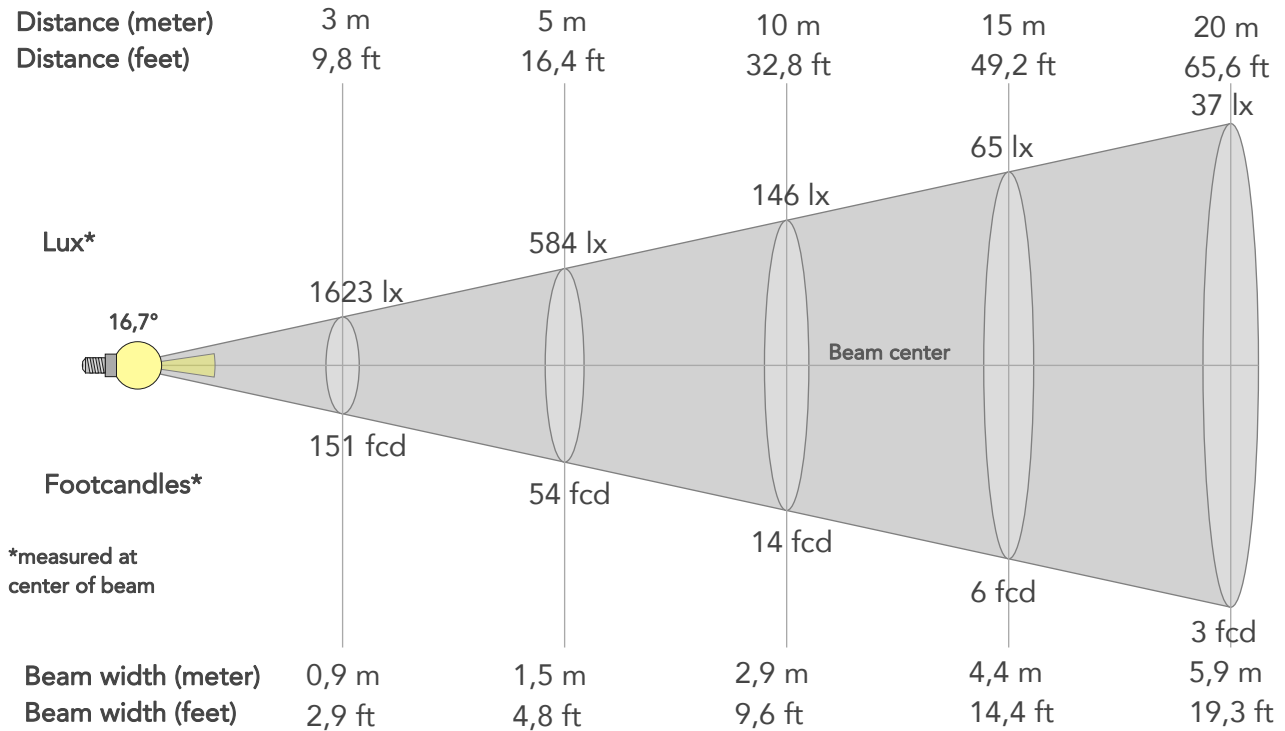
Spectra



BEAM DETAILS



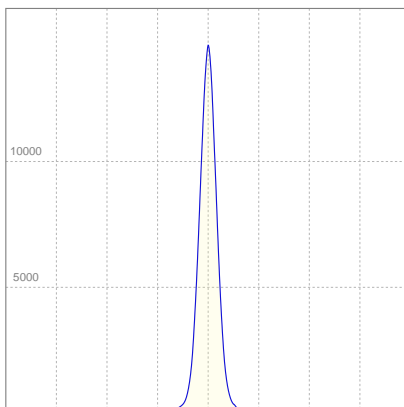
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16,7°	31,8°	44,7°	99,8%	97,5%



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	14605lx	3651lx	1623lx	913lx	584lx	260lx	146lx	65lx	37lx	23lx	16lx	9lx	6lx
Footcand.	1357fcd	339fcd	151fcd	85fcd	54fcd	24fcd	14fcd	6fcd	3fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,3m	0,6m	0,9m	1,2m	1,5m	2,2m	2,9m	4,4m	5,9m	7,3m	8,8m	11,7m	14,7m
Beam wid.	1ft	1,9ft	2,9ft	3,8ft	4,8ft	7,2ft	9,6ft	14,4ft	19,3ft	24,1ft	28,9ft	38,5ft	48,2ft

LINEAR DISTRIBUTION DIAGRAM

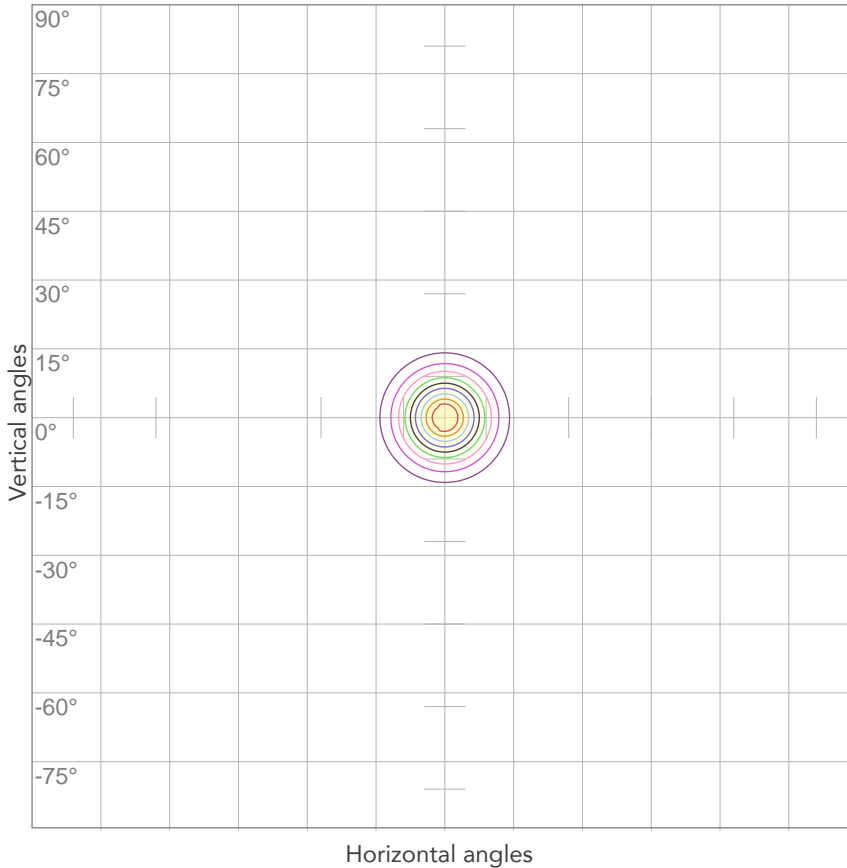


ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,225A	41,5W	41lm/W

Power FC
0,82

ISO CANDELA DIAGRAM



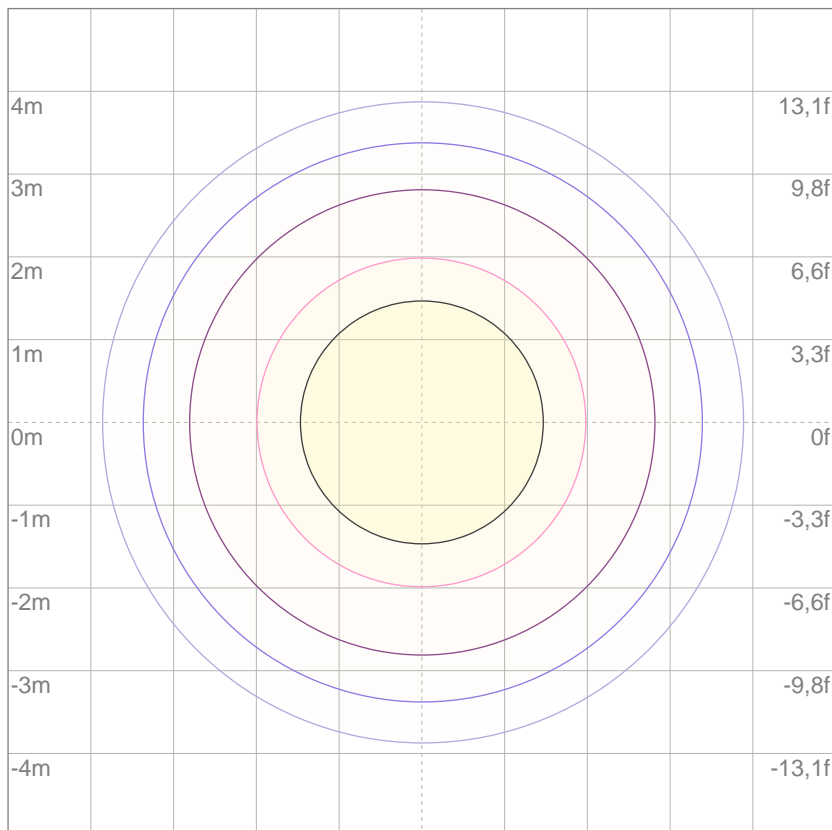
10%	1461 cd
20%	2921 cd
30%	4382 cd
40%	5842 cd
50%	7303 cd
60%	8763 cd
70%	10224 cd
80%	11684 cd

Conditions:

Number of c-planes: 2

Candela at center: 14605 cd

ISO LUX DIAGRAM



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

Conditions:

Number of c-planes: 2

Lux at center: 146 lx

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

Mounting height: 10 meters (33 feet)