

# Photometric Test Report



## **SOLAR48Q**

48 X 10 W high brightness  
indoor/outdoor compact wash light

## CONTENTS

Table of contents	2
Testing process	3
Color preset Full on	
Beam angle 10°	4
Beam angle 10°+ (F60°x10°)	7
Beam angle 15°	10
Beam angle 25°	13
Beam angle 45°	16
Color preset Red	
Beam angle 10°	19
Beam angle 10°+ (F60°x10°)	22
Beam angle 15°	25
Beam angle 25°	28
Beam angle 45°	31
Color preset Green	
Beam angle 10°	34
Beam angle 10°+ (F60°x10°)	37
Beam angle 15°	40
Beam angle 25°	43
Beam angle 45°	46
Color preset Blue	
Beam angle 10°	49
Beam angle 10°+ (F60°x10°)	52
Beam angle 15°	55
Beam angle 25°	58
Beam angle 45°	61
Color preset White	
Beam angle 10°	64
Beam angle 10°+ (F60°x10°)	67
Beam angle 15°	70
Beam angle 25°	73
Beam angle 45°	76

## 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:

18421 lm

Peak candela output:

337627 cd

PRODUCT NAME:

SOLAR48Q

MEASUREMENT CONDITIONS:

Beam angle:

10°

Target:

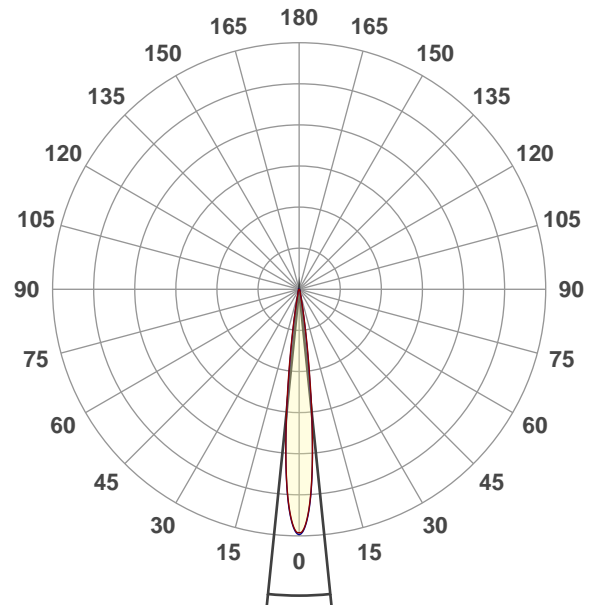
Full on

Operator:

Paolo Carvone

Date and time:

29/04/2020 15:35:34

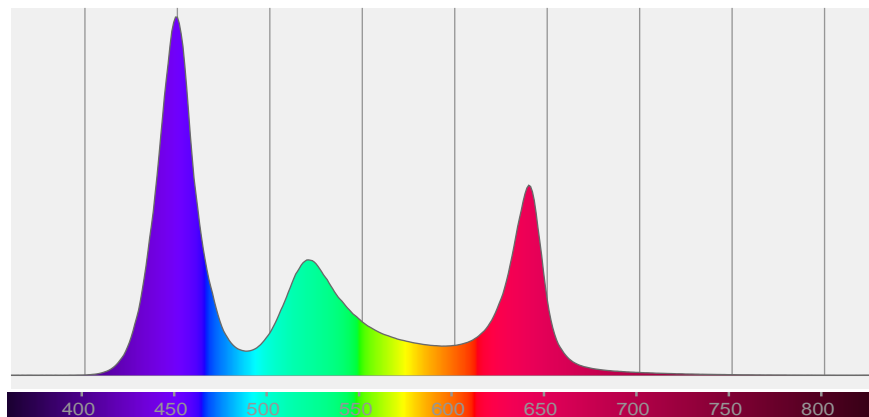


Beam angle 50%: 11,7°

Field angle 10%: 19,8°

Cut off angle 2.5%: 27,8°

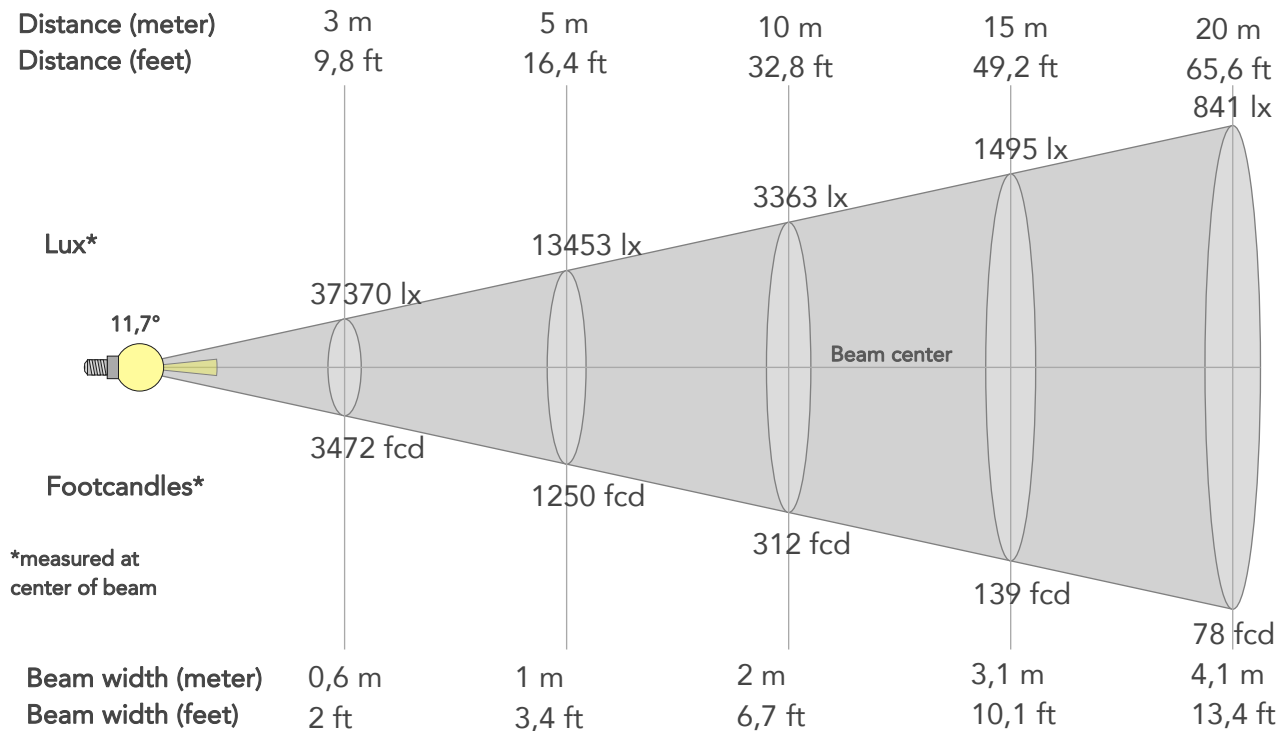
Spectra



# BEAM DETAILS



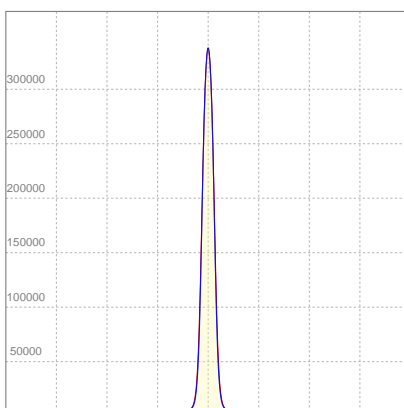
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11,7°	19,8°	27,8°	99,7%	98,0%



## 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	336333lx	84083lx	37370lx	21021lx	13453lx	5979lx	3363lx	1495lx	841lx	538lx	374lx	210lx	135lx
Footcand.	31246fcd	7812fcd	3472fcd	1953fcd	1250fcd	555fcd	312fcd	139fcd	78fcd	50fcd	35fcd	20fcd	12fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,5m	2m	3,1m	4,1m	5,1m	6,1m	8,2m	10,2m
Beam wid.	0,7ft	1,3ft	2ft	2,7ft	3,4ft	5ft	6,7ft	10,1ft	13,4ft	16,8ft	20,1ft	26,8ft	33,5ft

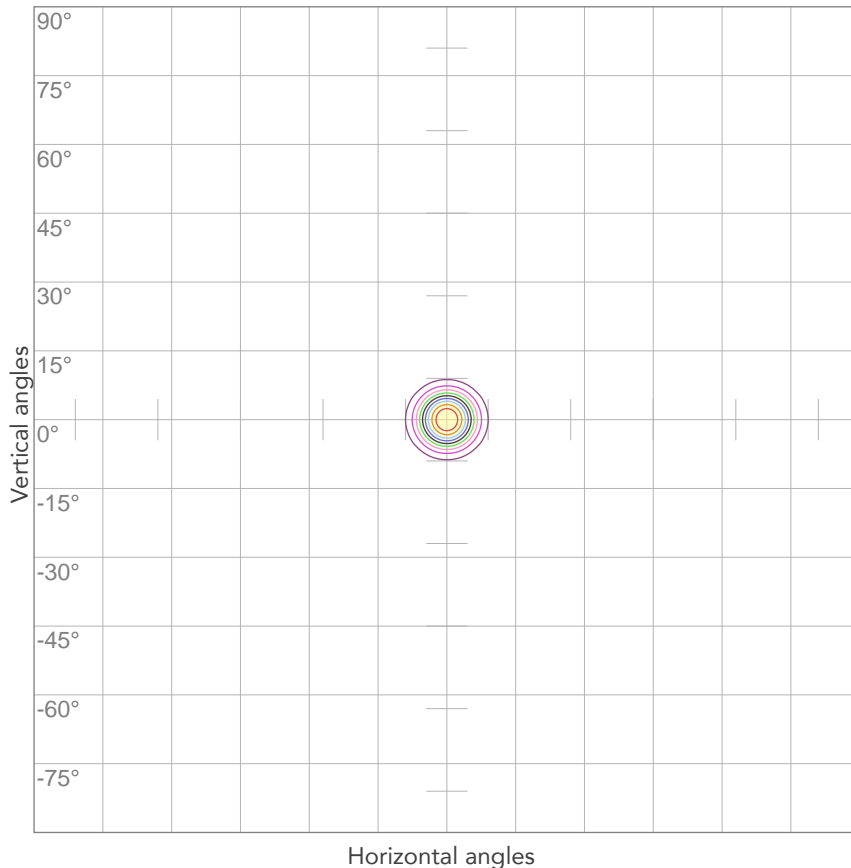
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	2,26A	486,7W	38lm/W
Power FC			
0,96			

## ISO CANDELA DIAGRAM



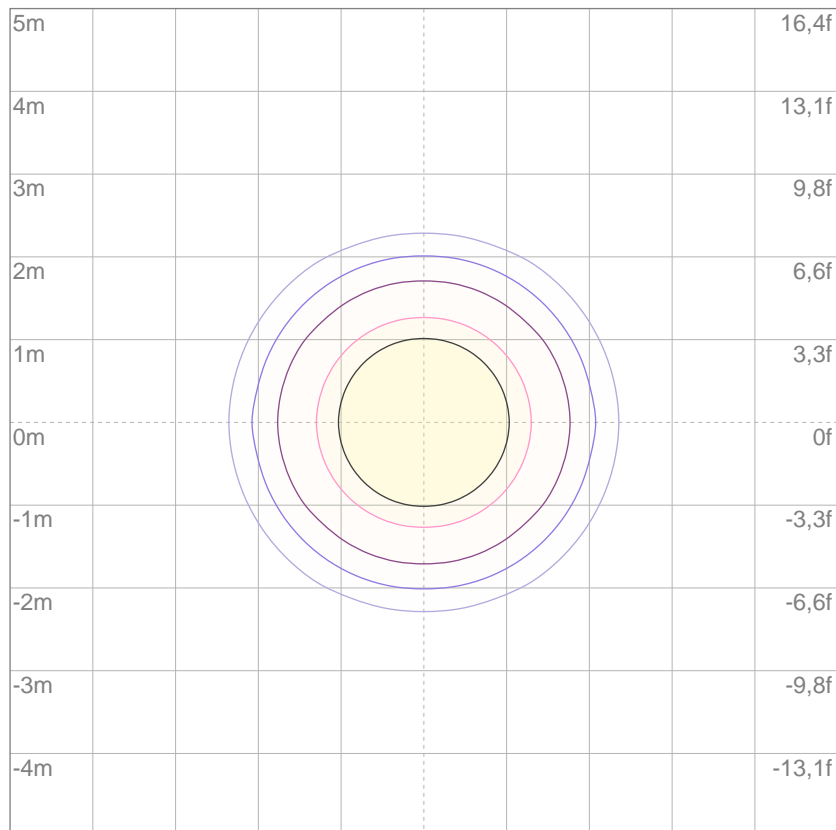
10%	33633 cd
20%	67267 cd
30%	100900 cd
40%	134533 cd
50%	168166 cd
60%	201800 cd
70%	235433 cd
80%	269066 cd

### Conditions:

Number of c-planes: 4

Candela at center: 336333 cd

## ISO LUX DIAGRAM



3%	101 lx
5%	168 lx
10%	336 lx
30%	1009 lx
50%	1682 lx

### Conditions:

Number of c-planes: 4

Lux at center: 3363 lx

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



Total lumen output:

28213 lm

Peak candela output:

66152 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°+f60°x1°

Target:

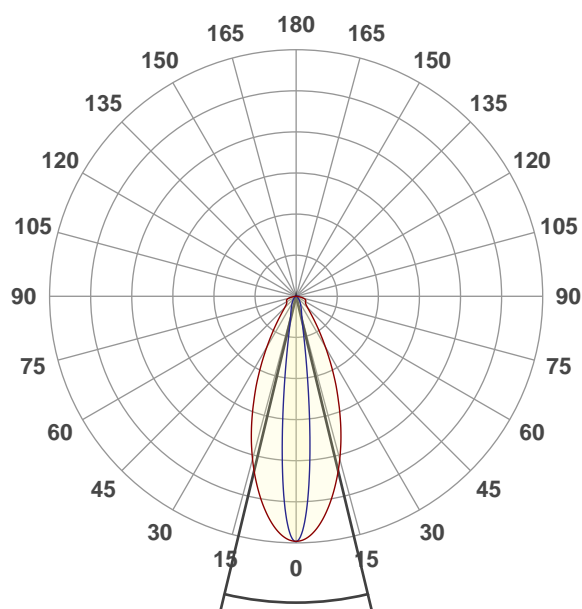
Full on

Operator:

Paolo Carvone

Date and time:

03/06/2020 15:40:10

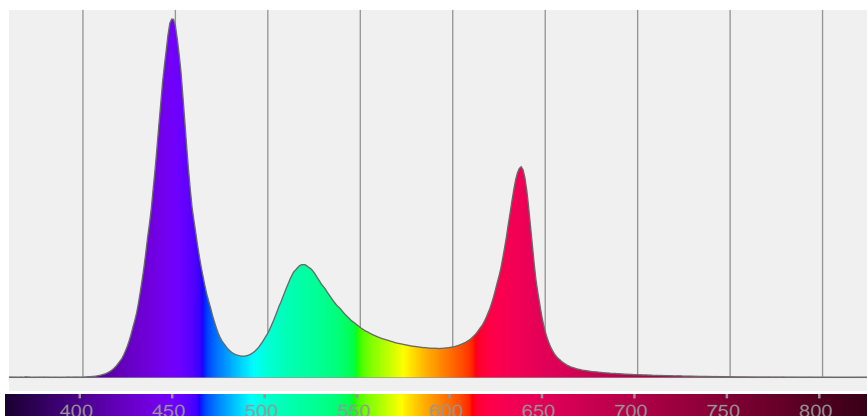


Beam angle 50%: 27,1°

Field angle 10%: 53,3°

Cut off angle 2.5%: 113,2°

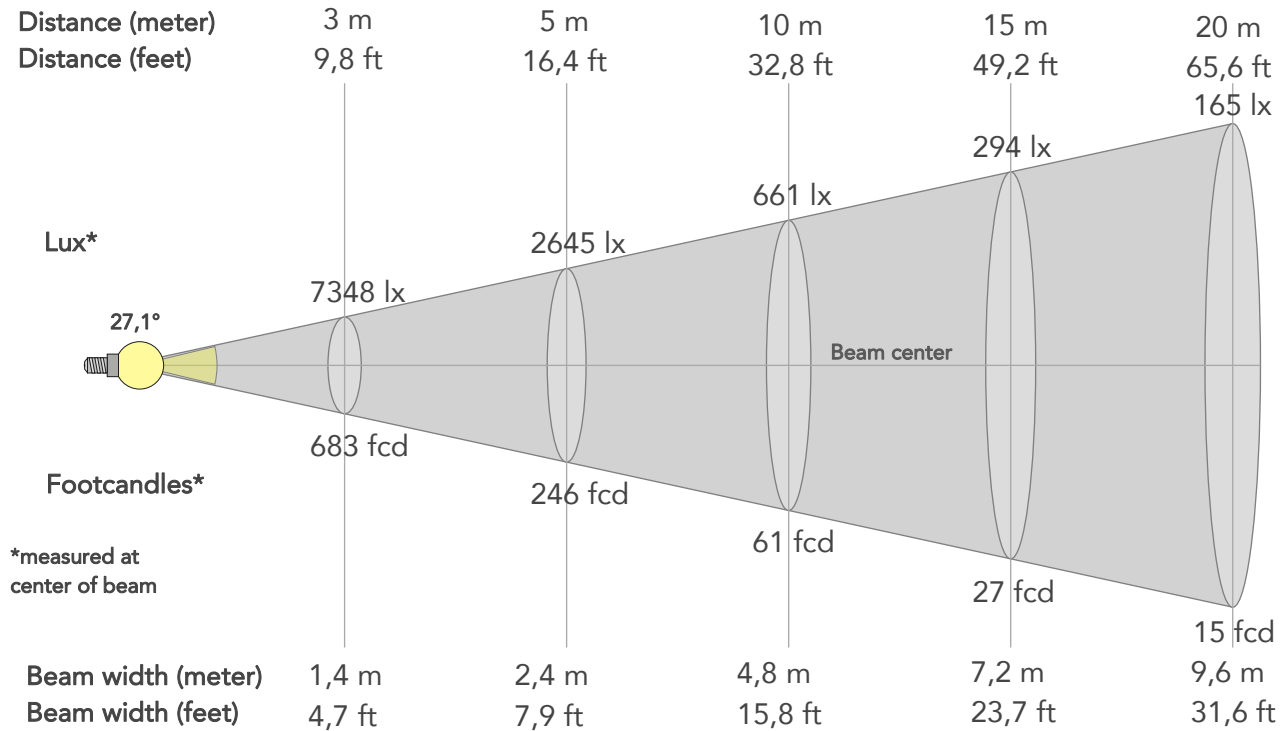
Spectra



# BEAM DETAILS



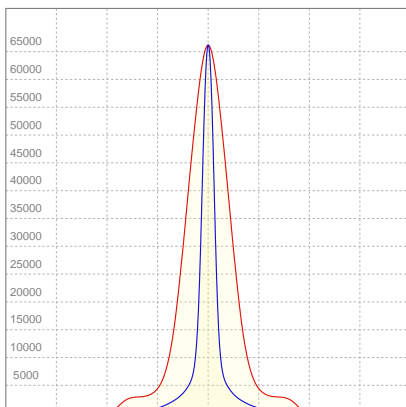
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27,1°	53,3°	113,2°	89,7%	80,6%



## 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	66129lx	16532lx	7348lx	4133lx	2645lx	1176lx	661lx	294lx	165lx	106lx	73lx	41lx	26lx
Footcand.	6144fcd	1536fcd	683fcd	384fcd	246fcd	109fcd	61fcd	27fcd	15fcd	10fcd	7fcd	4fcd	2fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	12m	14,4m	19,3m	24,1m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,9ft	11,8ft	15,8ft	23,7ft	31,6ft	39,5ft	47,4ft	63,2ft	78,9ft

## LINEAR DISTRIBUTION DIAGRAM



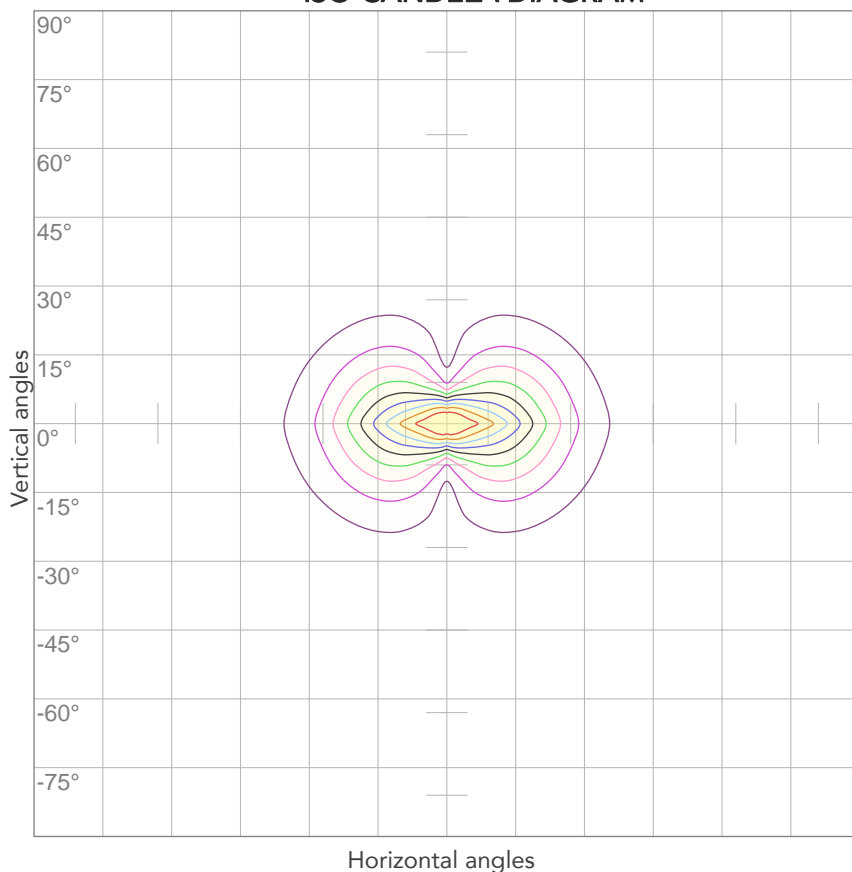
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
224V	2,30A	494,7W	57lm/W

Power FC
0,96



## ISO CANDELA DIAGRAM



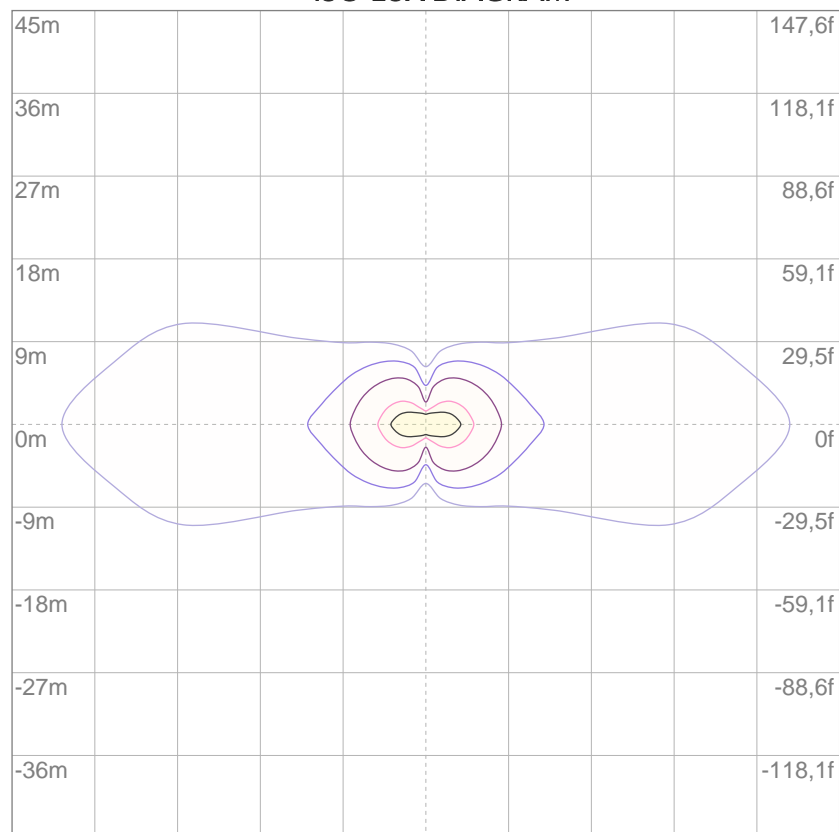
10%	6613 cd
20%	13226 cd
30%	19839 cd
40%	26452 cd
50%	33065 cd
60%	39678 cd
70%	46291 cd
80%	52904 cd

### Conditions:

Number of c-planes: 4

Candela at center: 66129 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	19,8 lx
5%	33,1 lx
10%	66,1 lx
30%	198 lx
50%	331 lx

### Conditions:

Number of c-planes: 4

Lux at center: 661 lx

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



Total lumen output:

22977 lm

Peak candela output:

278690 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

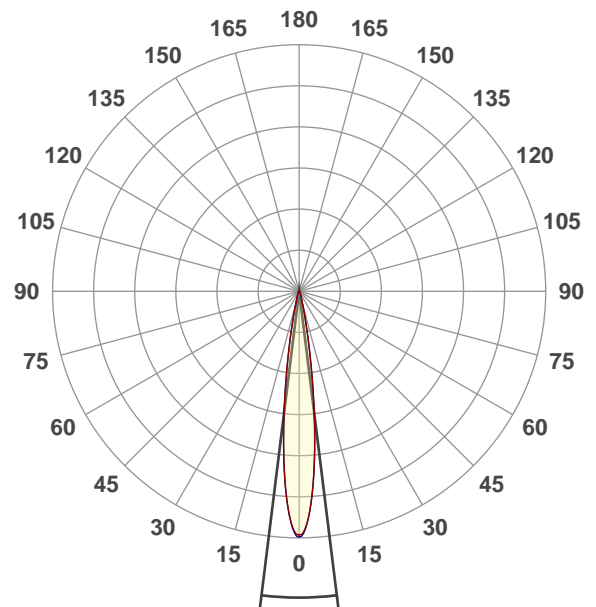
Full on

Operator:

Paolo Carvone

Date and time:

29/04/2020 16:37:59

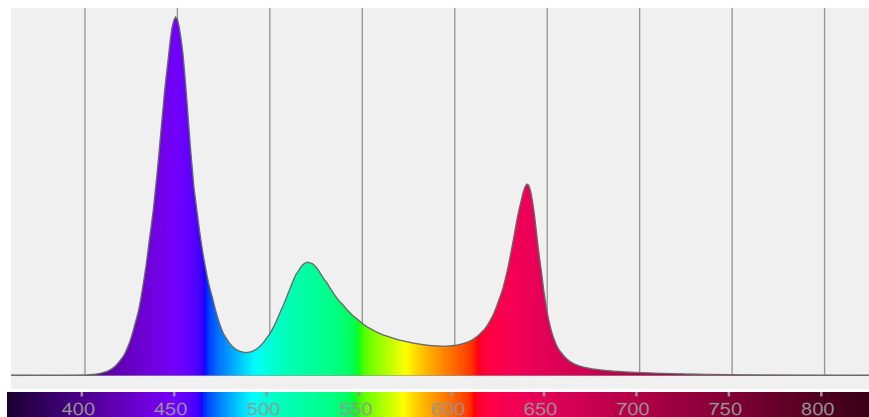


Beam angle 50%: 14,1°

Field angle 10%: 25,8°

Cut off angle 2.5%: 37,8°

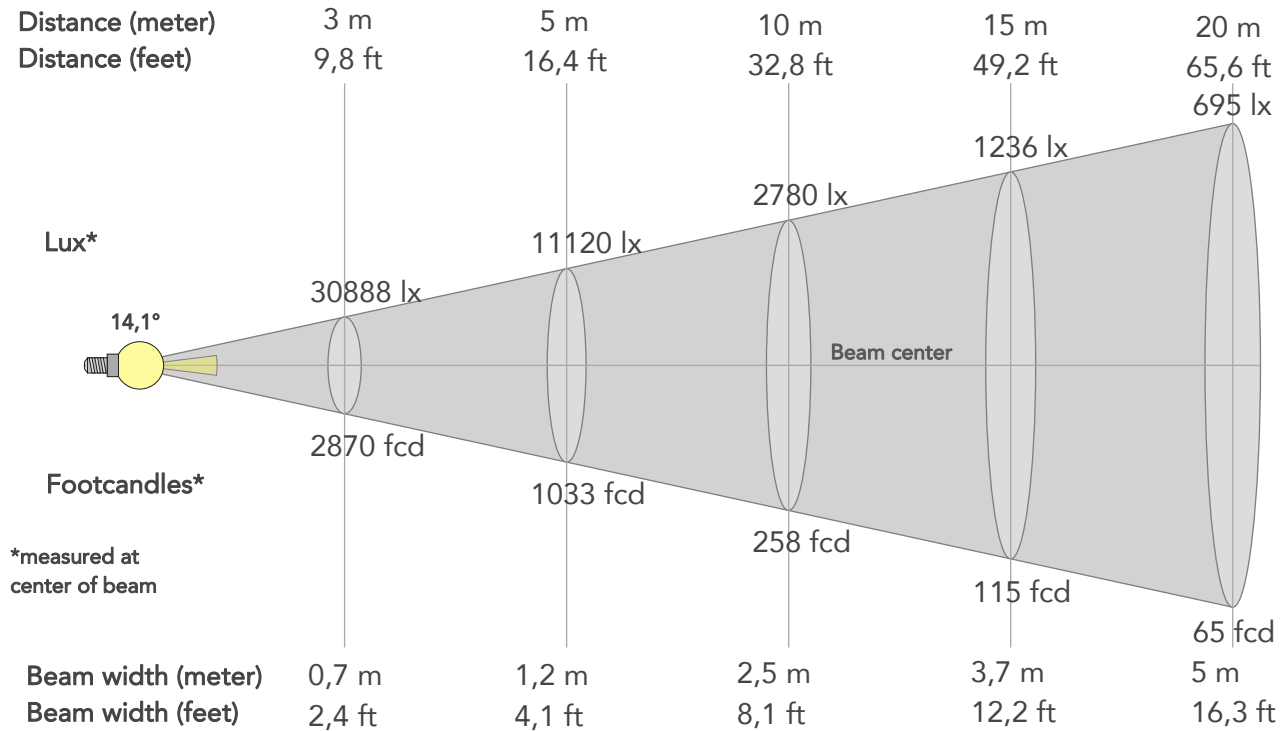
Spectra



# BEAM DETAILS



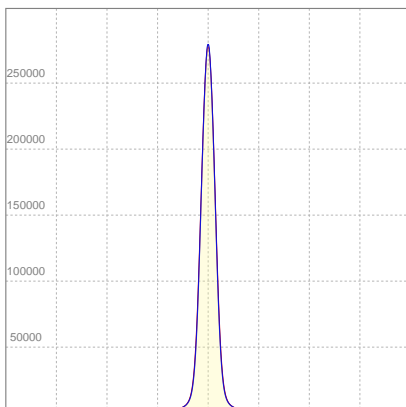
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14,1°	25,8°	37,8°	99,7%	98,3%



## 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	277992lx	69498lx	30888lx	17375lx	11120lx	4942lx	2780lx	1236lx	695lx	445lx	309lx	174lx	111lx
Footcand.	25826fcd	6457fcd	2870fcd	1614fcd	1033fcd	459fcd	258fcd	115fcd	65fcd	41fcd	29fcd	16fcd	10fcd
Beam wid.	0,2m	0,5m	0,7m	1m	1,2m	1,9m	2,5m	3,7m	5m	6,2m	7,4m	9,9m	12,4m
Beam wid.	0,8ft	1,6ft	2,4ft	3,2ft	4,1ft	6,1ft	8,1ft	12,2ft	16,3ft	20,3ft	24,4ft	32,5ft	40,6ft

## LINEAR DISTRIBUTION DIAGRAM

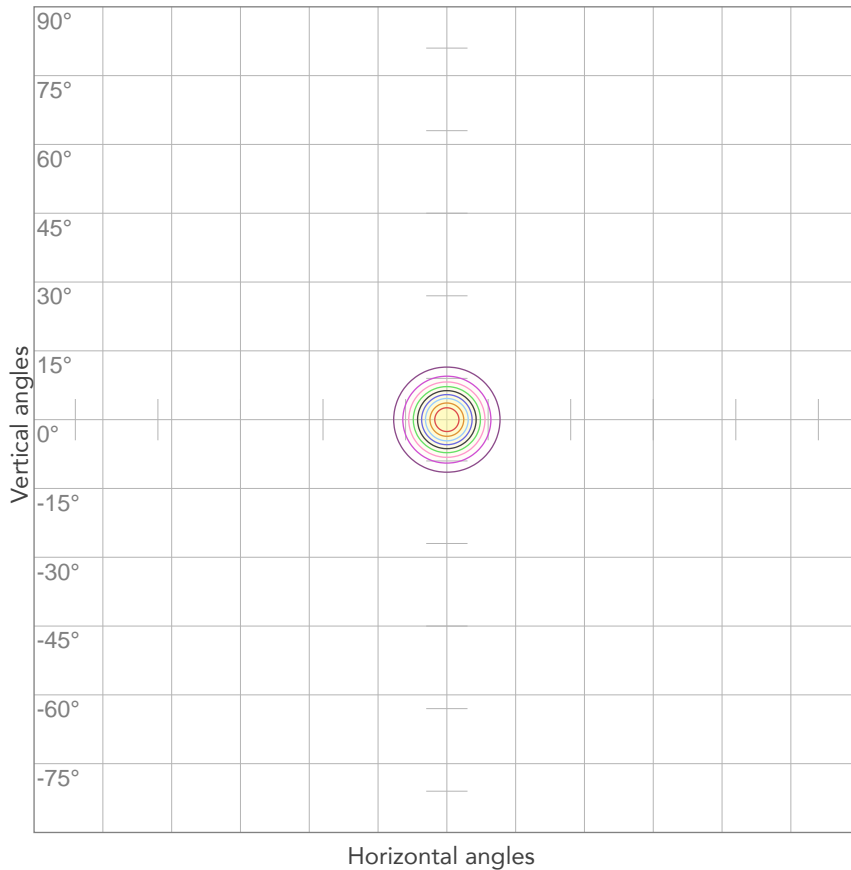


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	2,27A	488,4W	47lm/W

Power FC
0,96

## ISO CANDELA DIAGRAM



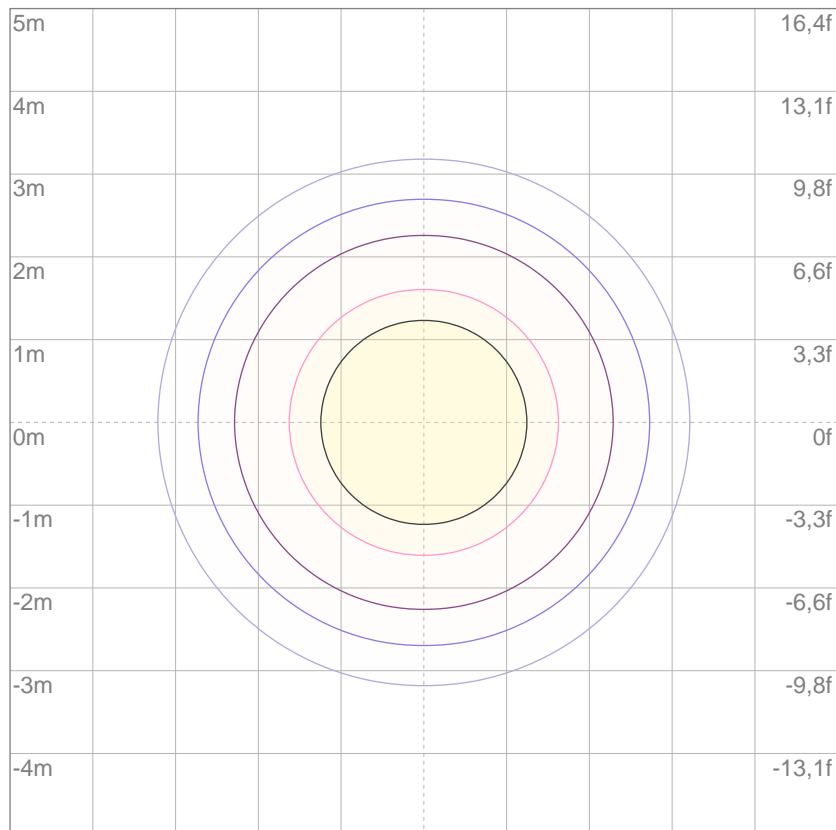
10%	27799 cd
20%	55598 cd
30%	83398 cd
40%	111197 cd
50%	138996 cd
60%	166795 cd
70%	194594 cd
80%	222394 cd

### Conditions:

Number of c-planes: 4

Candela at center: 277992 cd

## ISO LUX DIAGRAM



3%	83,4 lx
5%	139 lx
10%	278 lx
30%	834 lx
50%	1390 lx

### Conditions:

Number of c-planes: 4

Lux at center: 2780 lx

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



Total lumen output:

20741 lm

Peak candela output:

116170 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

25°

Target:

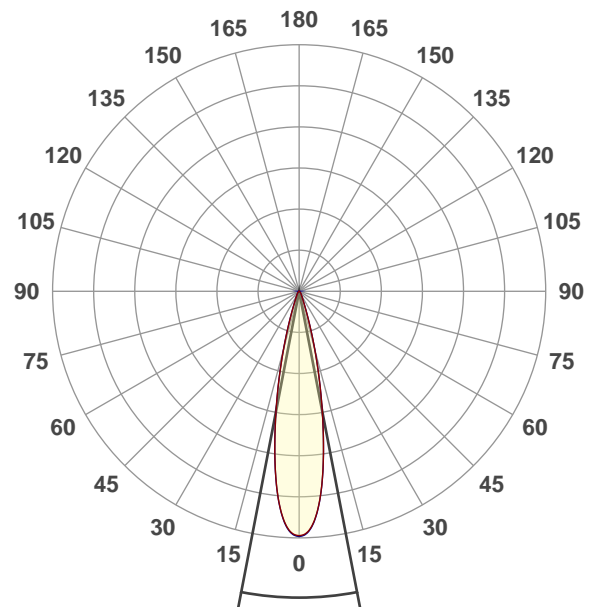
Full on

Operator:

Paolo Carvone

Date and time:

29/04/2020 14:49:40

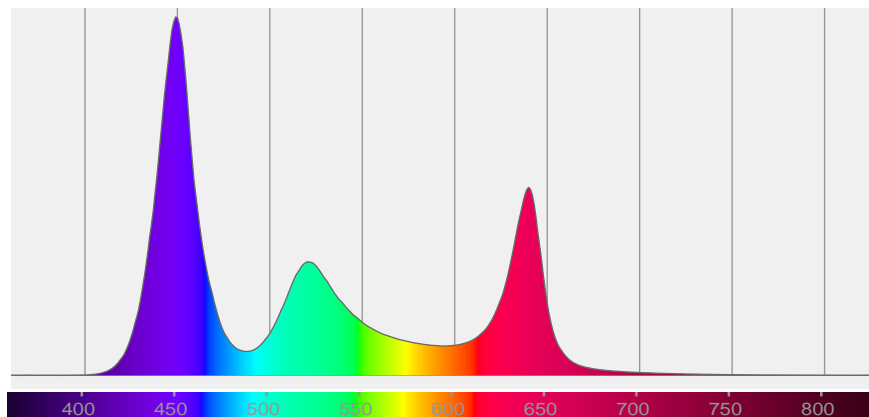


Beam angle 50%: 21,8°

Field angle 10%: 37,9°

Cut off angle 2.5%: 54,9°

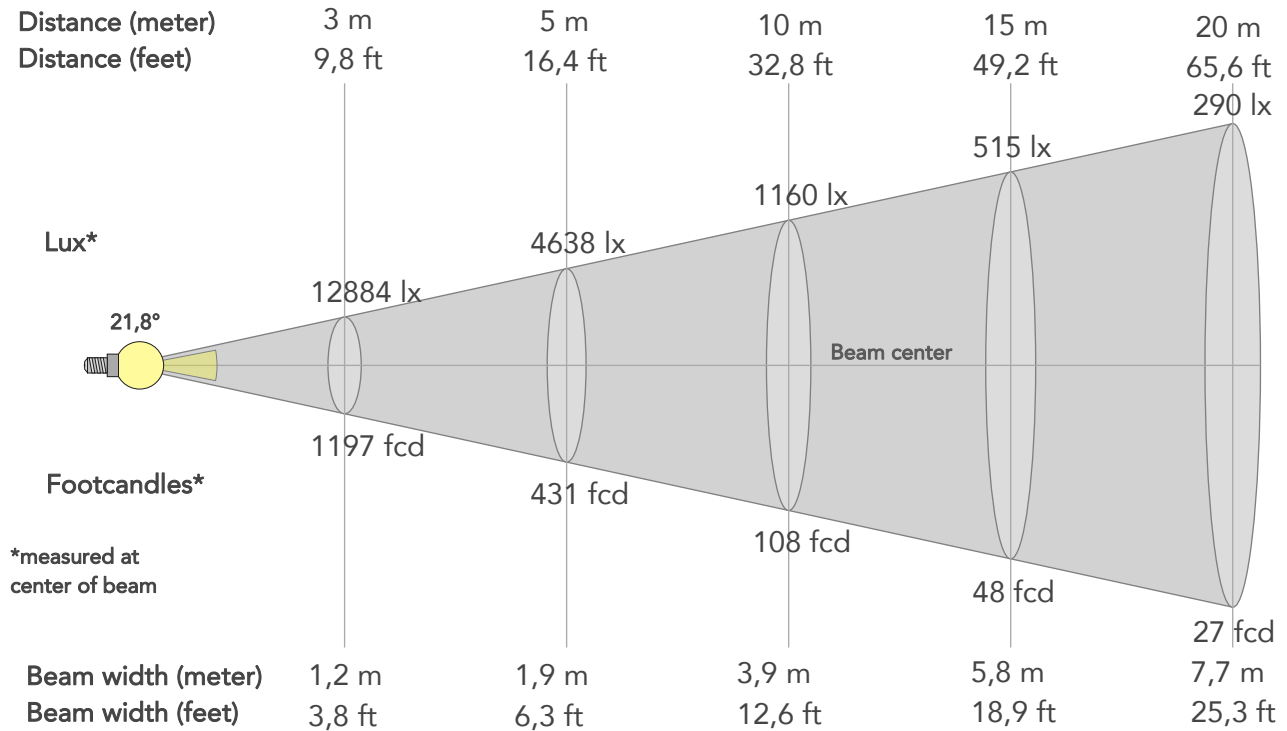
Spectra



# BEAM DETAILS



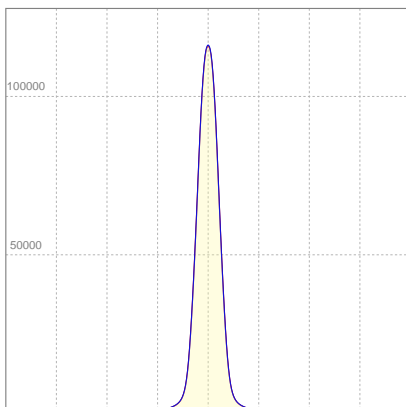
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
21,8°	37,9°	54,9°	99,0%	96,3%



## 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	115954lx	28988lx	12884lx	7247lx	4638lx	2061lx	1160lx	515lx	290lx	186lx	129lx	72lx	46lx
Footcand.	10772fcd	2693fcd	1197fcd	673fcd	431fcd	192fcd	108fcd	48fcd	27fcd	17fcd	12fcd	7fcd	4fcd
Beam wid.	0,4m	0,8m	1,2m	1,5m	1,9m	2,9m	3,9m	5,8m	7,7m	9,6m	11,6m	15,4m	19,3m
Beam wid.	1,3ft	2,5ft	3,8ft	5ft	6,3ft	9,5ft	12,6ft	18,9ft	25,3ft	31,6ft	37,9ft	50,5ft	63,2ft

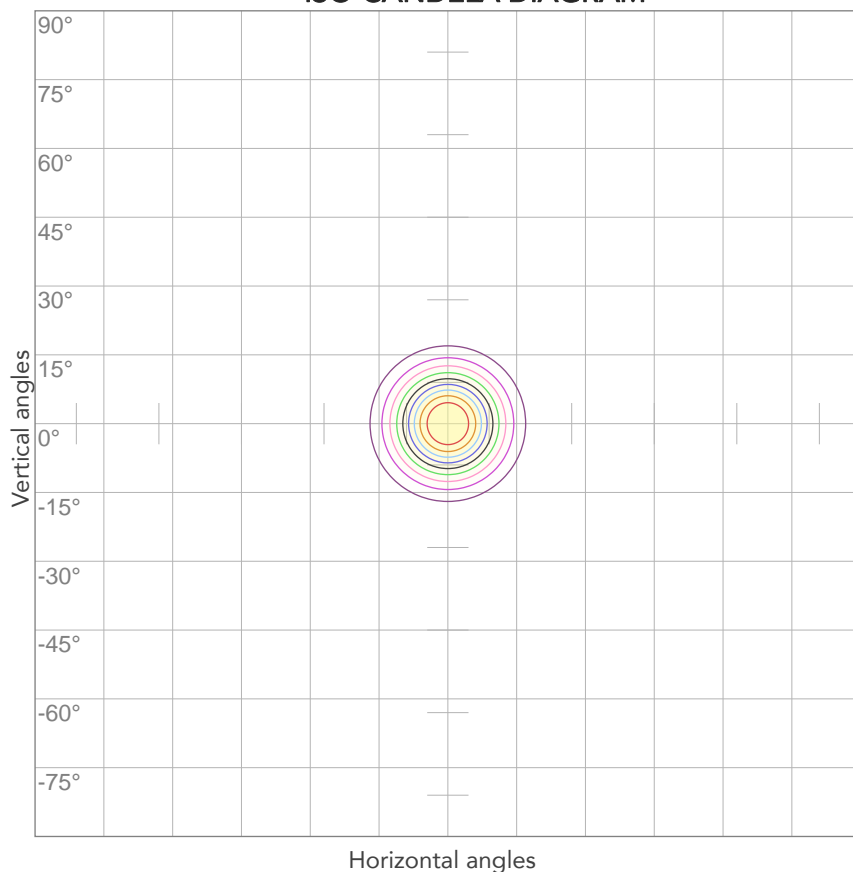
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
223V	2,27A	487,1W	43lm/W
Power FC			
0,96			

## ISO CANDELA DIAGRAM



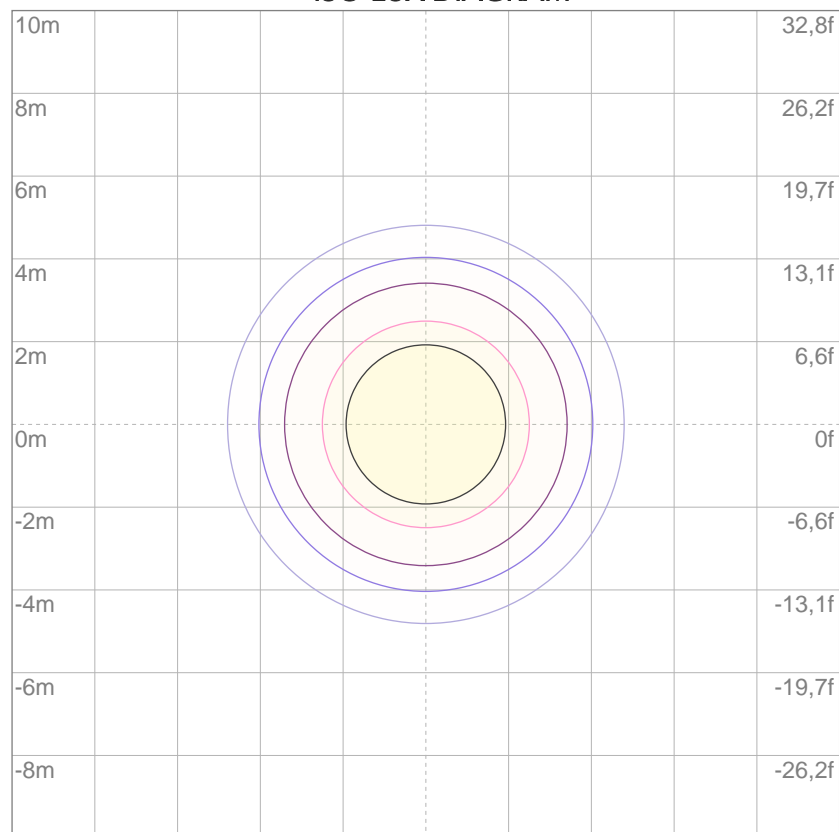
10%	11595 cd
20%	23191 cd
30%	34786 cd
40%	46381 cd
50%	57977 cd
60%	69572 cd
70%	81168 cd
80%	92763 cd

### Conditions:

Number of c-planes: 4

Candela at center: 115954 cd

## ISO LUX DIAGRAM



3%	34,8 lx
5%	58,0 lx
10%	116 lx
30%	348 lx
50%	580 lx

### Conditions:

Number of c-planes: 4

Lux at center: 1160 lx

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



Total lumen output:

16408 lm

Peak candela output:

25093 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

45°

Target:

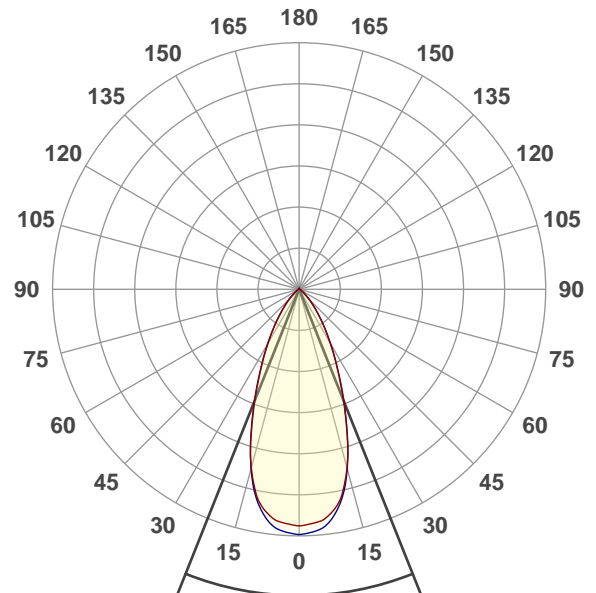
Full on

Operator:

Paolo Carvone

Date and time:

29/04/2020 13:14:42

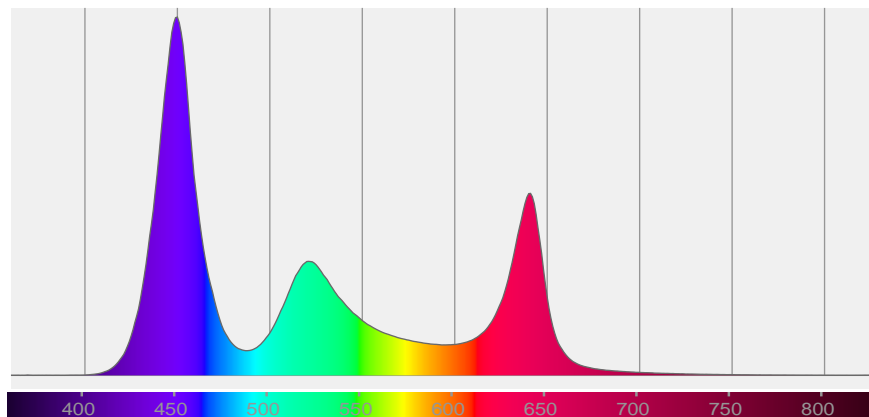


Beam angle 50%: 43,5°

Field angle 10%: 80°

Cut off angle 2.5%: 104°

Spectra

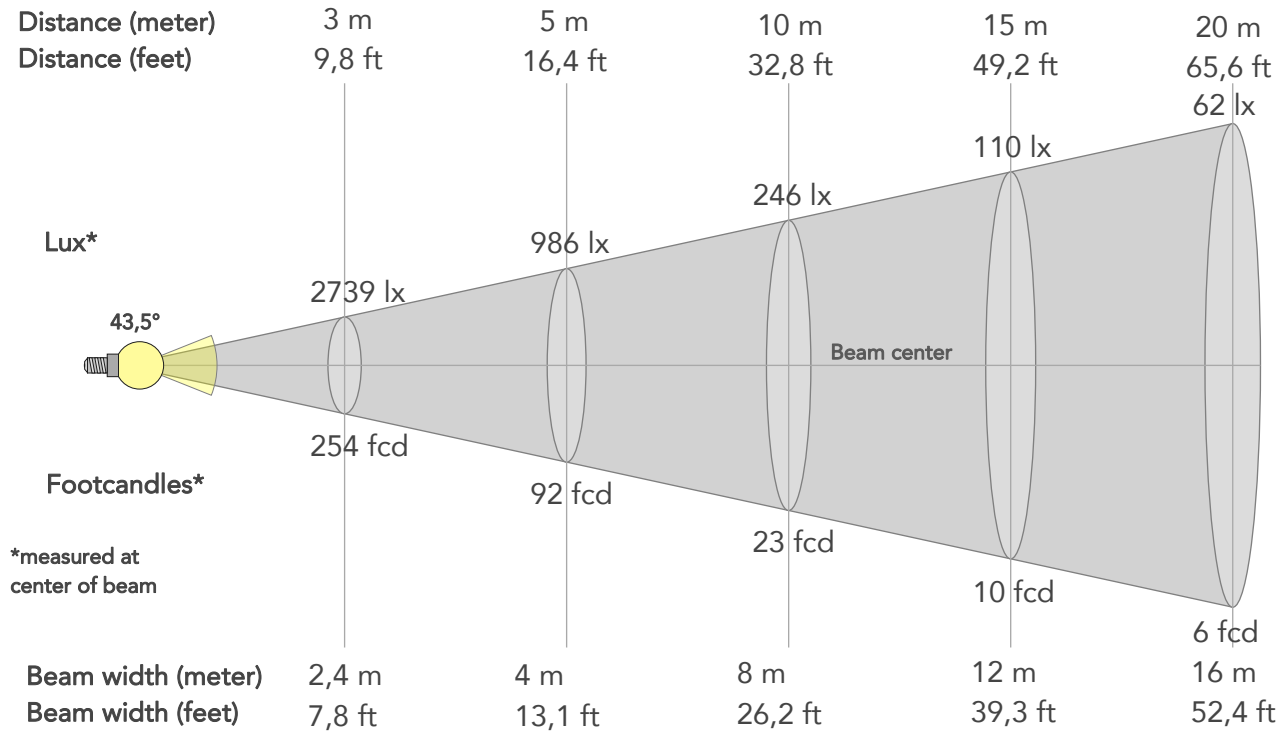




# BEAM DETAILS



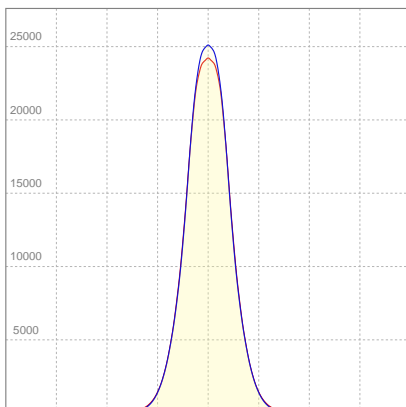
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
43,5°	80°	104°	97,5%	92,4%



## 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	24649lx	6162lx	2739lx	1541lx	986lx	438lx	246lx	110lx	62lx	39lx	27lx	15lx	10lx
Footcand.	2290fcd	572fcd	254fcd	143fcd	92fcd	41fcd	23fcd	10fcd	6fcd	4fcd	3fcd	1fcd	1fcd
Beam wid.	0,8m	1,6m	2,4m	3,2m	4m	6m	8m	12m	16m	20m	23,9m	31,9m	39,9m
Beam wid.	2,6ft	5,3ft	7,8ft	10,5ft	13,1ft	19,6ft	26,2ft	39,3ft	52,4ft	65,4ft	78,5ft	104,7ft	130,9ft

## LINEAR DISTRIBUTION DIAGRAM

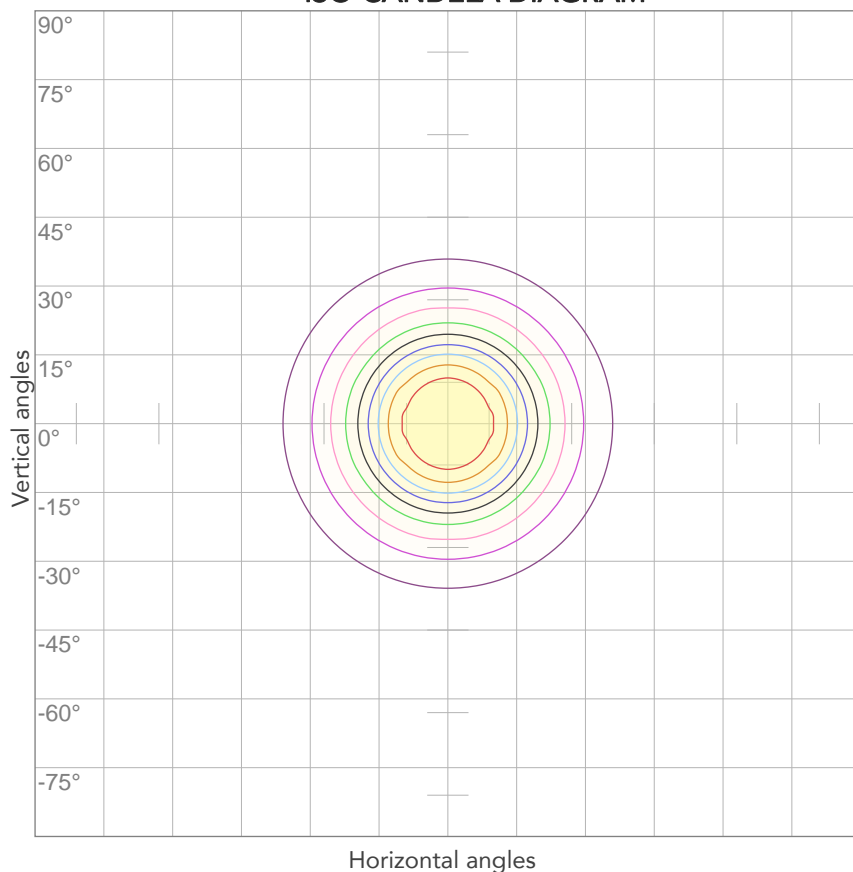


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	2,24A	484,9W	34lm/W

Power FC
0,96

## ISO CANDELA DIAGRAM



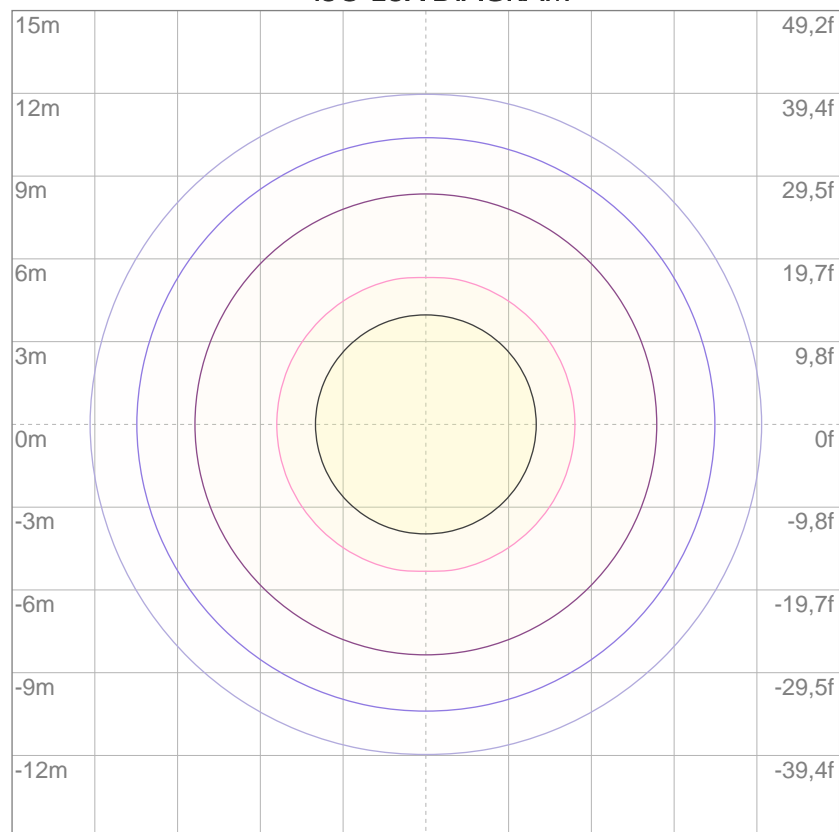
10%	2465 cd
20%	4930 cd
30%	7395 cd
40%	9860 cd
50%	12325 cd
60%	14789 cd
70%	17254 cd
80%	19719 cd

### Conditions:

Number of c-planes: 4

Candela at center: 24649 cd

## ISO LUX DIAGRAM



3%	7,39 lx
5%	12,3 lx
10%	24,6 lx
30%	73,9 lx
50%	123 lx

### Conditions:

Number of c-planes: 4

Lux at center: 246 lx

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



Total lumen output:

2689 lm

Peak candela output:

50853 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°

Target:

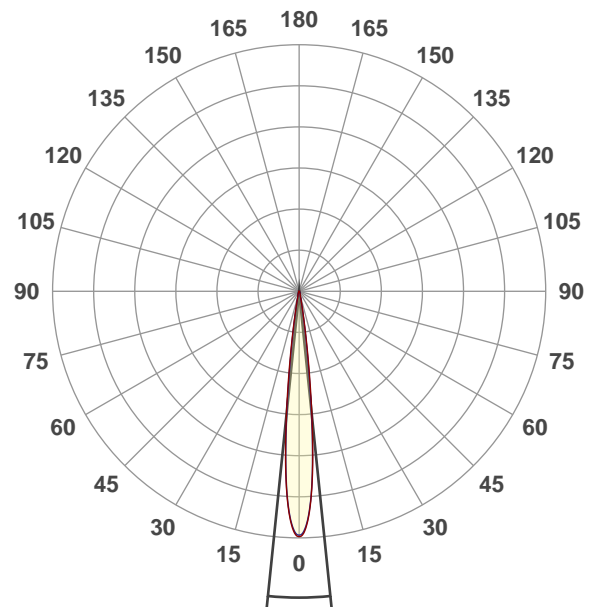
Red

Operator:

Paolo Carvone

Date and time:

29/04/2020 15:39:22

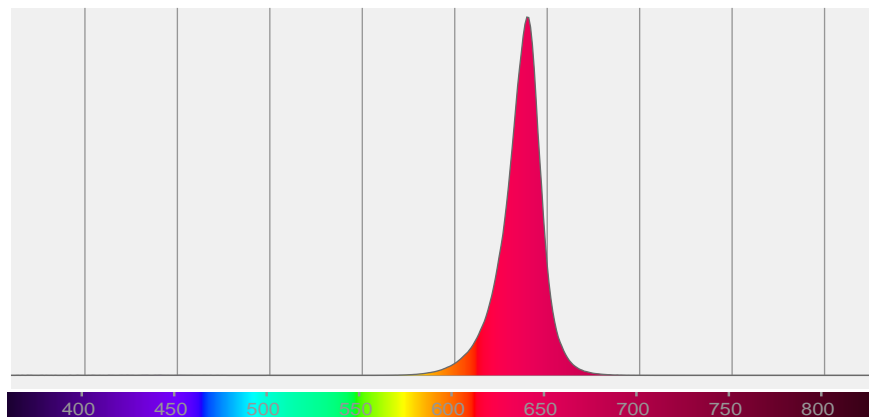


Beam angle 50%: 11,7°

Field angle 10%: 19,4°

Cut off angle 2.5%: 26,7°

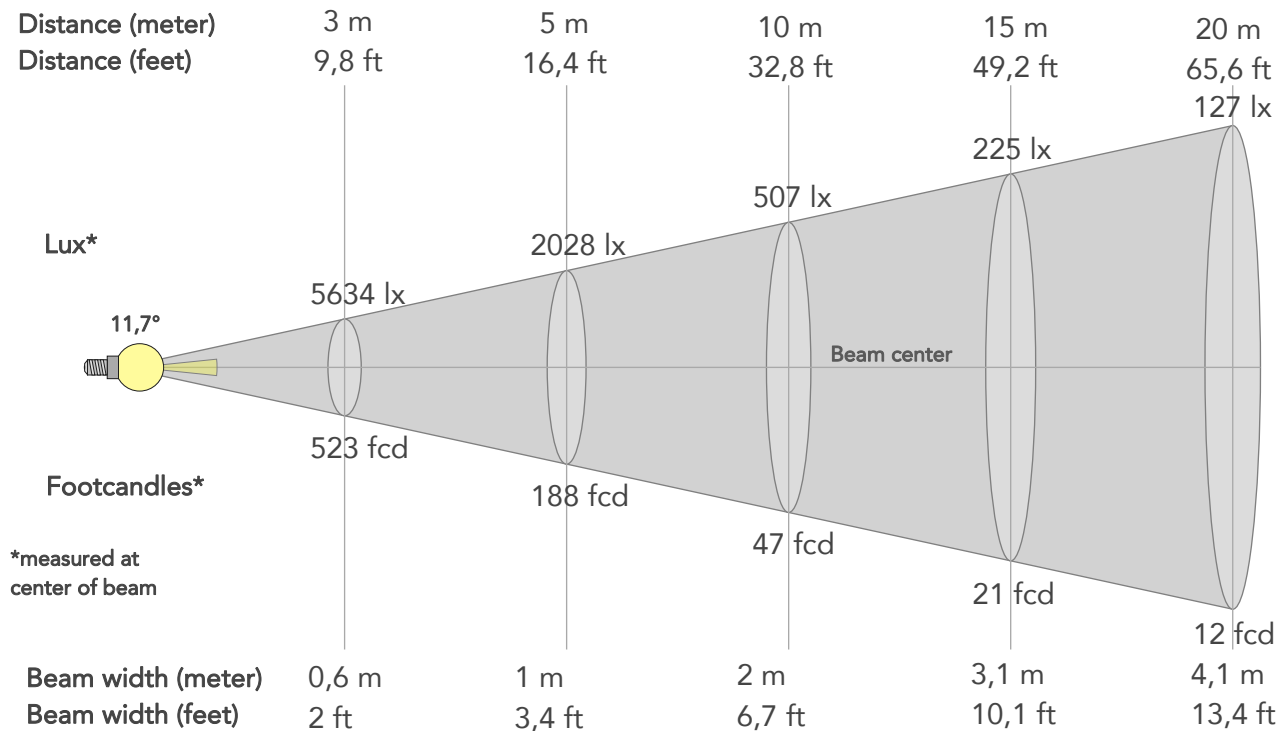
Spectra



# BEAM DETAILS



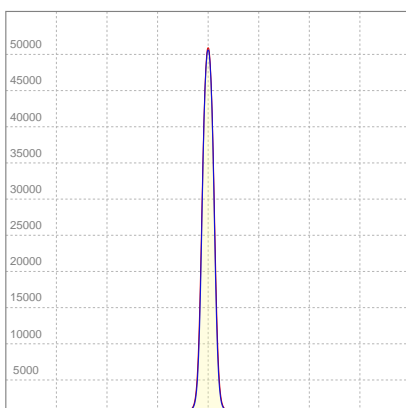
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11,7°	19,4°	26,7°	99,4%	97,7%



## 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	50702lx	12675lx	5634lx	3169lx	2028lx	901lx	507lx	225lx	127lx	81lx	56lx	32lx	20lx
Footcand.	4710fcd	1178fcd	523fcd	294fcd	188fcd	84fcd	47fcd	21fcd	12fcd	8fcd	5fcd	3fcd	2fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,5m	2m	3,1m	4,1m	5,1m	6,1m	8,2m	10,2m
Beam wid.	0,7ft	1,4ft	2ft	2,7ft	3,4ft	5ft	6,7ft	10,1ft	13,4ft	16,8ft	20,2ft	26,9ft	33,6ft

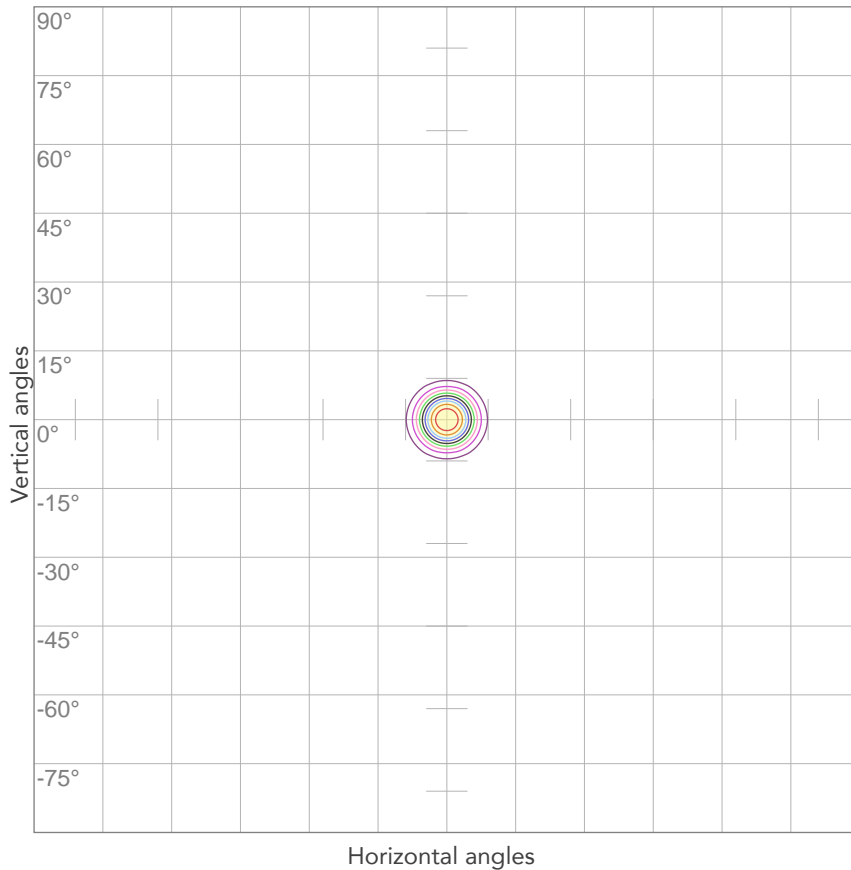
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,562A	92,7W	29lm/W
Power FC			
0,73			

## ISO CANDELA DIAGRAM



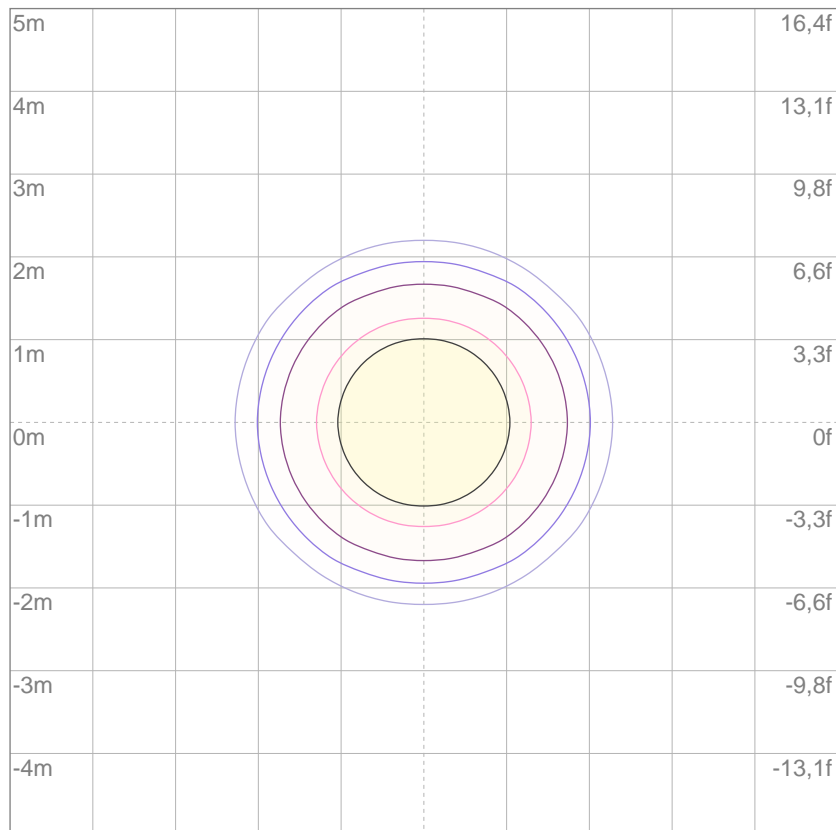
10%	5070 cd
20%	10140 cd
30%	15210 cd
40%	20281 cd
50%	25351 cd
60%	30421 cd
70%	35491 cd
80%	40561 cd

### Conditions:

Number of c-planes: 4

Candela at center: 50702 cd

## ISO LUX DIAGRAM



3%	15,2 lx
5%	25,4 lx
10%	50,7 lx
30%	152 lx
50%	254 lx

### Conditions:

Number of c-planes: 4

Lux at center: 507 lx

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



Total lumen output:

4808 lm

Peak candela output:

11529 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°+f60°x1°

Target:

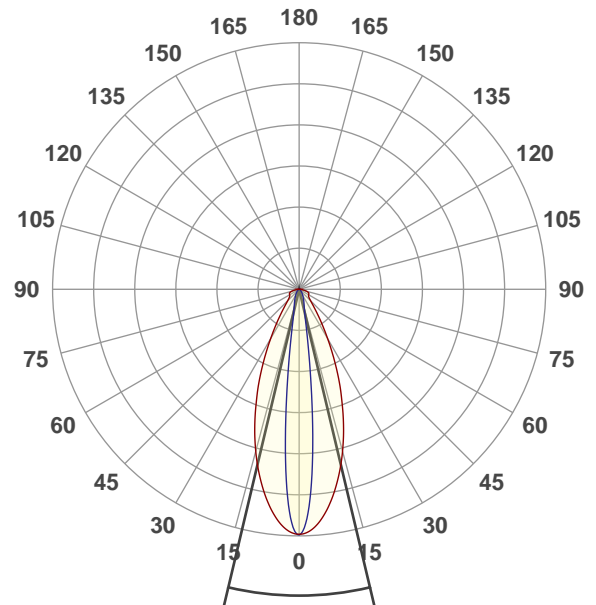
Red

Operator:

Paolo Carvone

Date and time:

03/06/2020 15:44:27

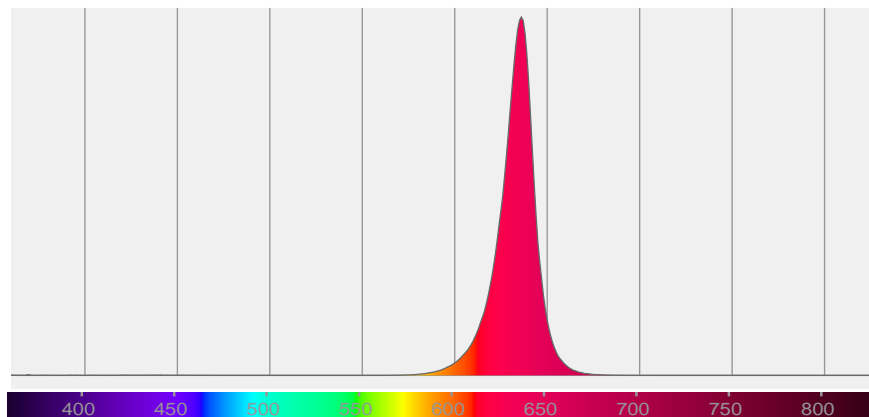


Beam angle 50%: 26,7°

Field angle 10%: 52,1°

Cut off angle 2.5%: 110,3°

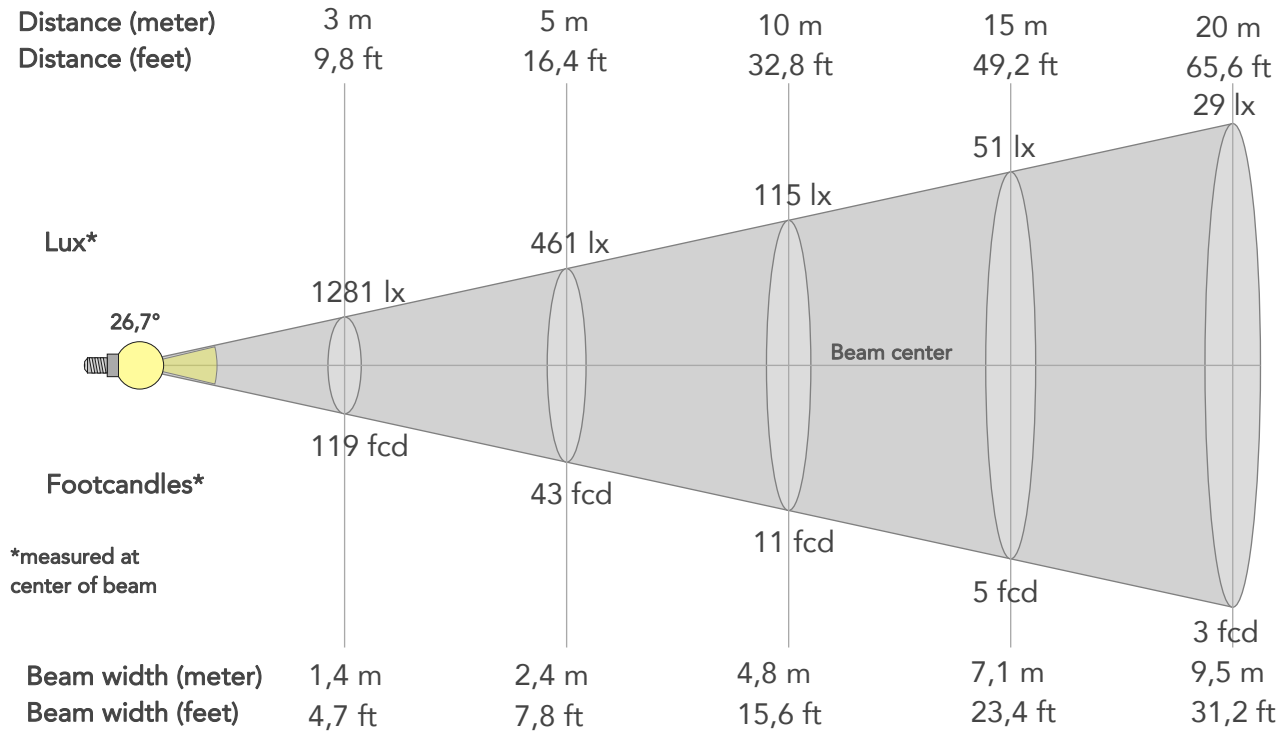
Spectra



# BEAM DETAILS



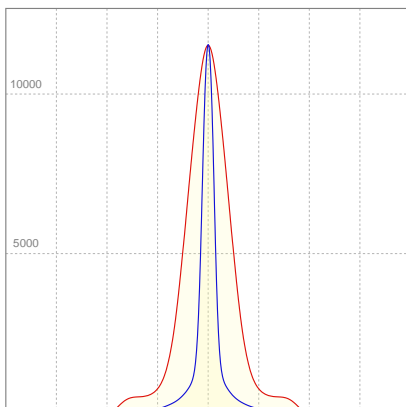
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,7°	52,1°	110,3°	89,5%	80,4%



## 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	11525lx	2881lx	1281lx	720lx	461lx	205lx	115lx	51lx	29lx	18lx	13lx	7lx	5lx
Footcand.	1071fcd	268fcd	119fcd	67fcd	43fcd	19fcd	11fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,1m	9,5m	11,9m	14,3m	19m	23,8m
Beam wid.	1,6ft	3,1ft	4,7ft	6,2ft	7,8ft	11,7ft	15,6ft	23,4ft	31,2ft	39ft	46,8ft	62,4ft	77,9ft

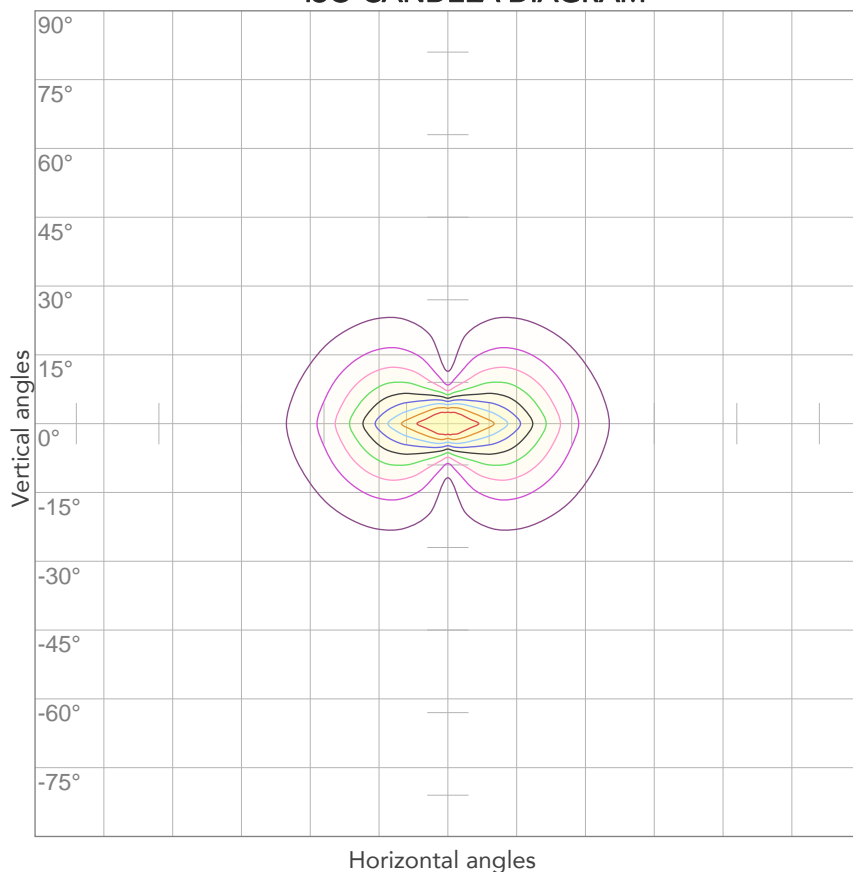
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,597A	99,0W	49lm/W
Power FC			
0,74			

## ISO CANDELA DIAGRAM



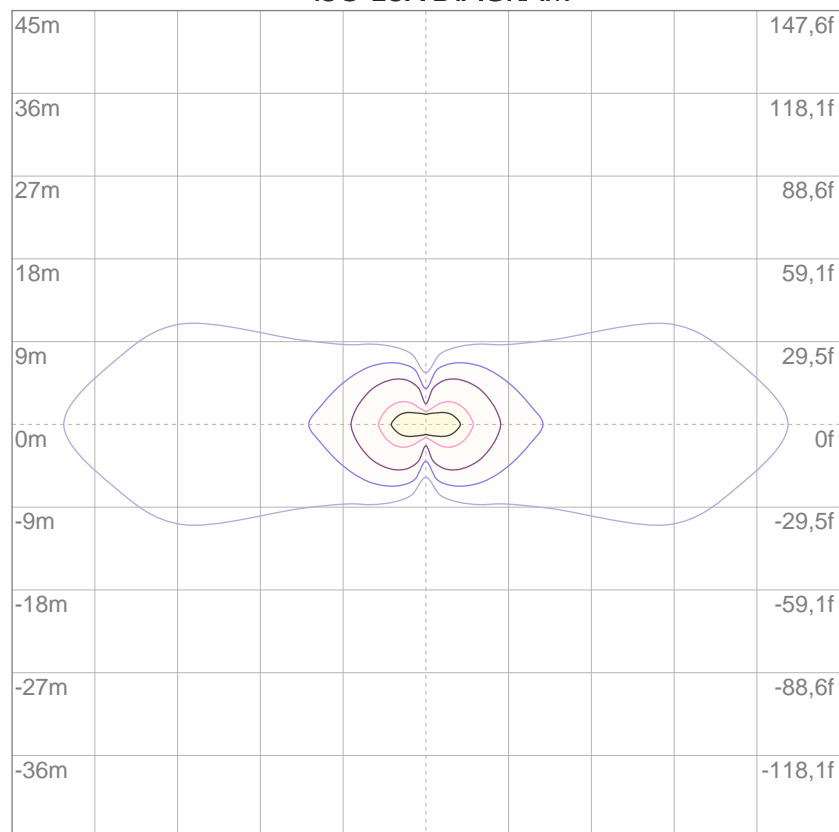
10%	1152 cd
20%	2305 cd
30%	3457 cd
40%	4610 cd
50%	5762 cd
60%	6915 cd
70%	8067 cd
80%	9220 cd

### Conditions:

Number of c-planes: 4

Candela at center: 11525 cd

## ISO LUX DIAGRAM



3%	3,46 lx
5%	5,76 lx
10%	11,5 lx
30%	34,6 lx
50%	57,6 lx

### Conditions:

Number of c-planes: 4

Lux at center: 115 lx

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





Total lumen output:

3561 lm

Peak candela output:

46109 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

15°

Target:

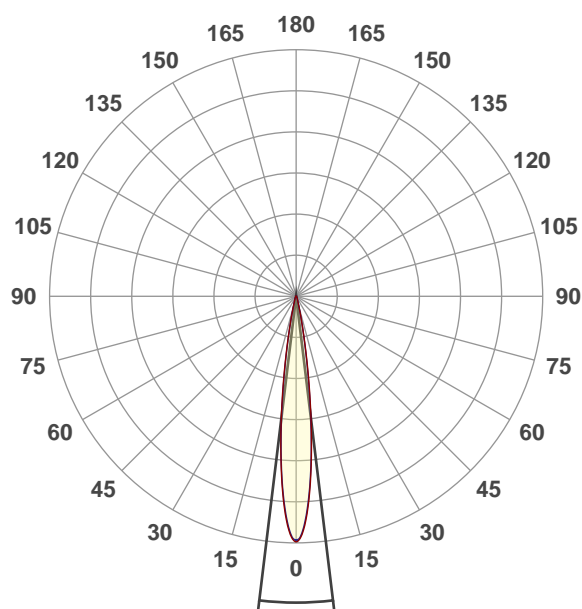
Red

Operator:

Paolo Carvone

Date and time:

29/04/2020 16:42:41

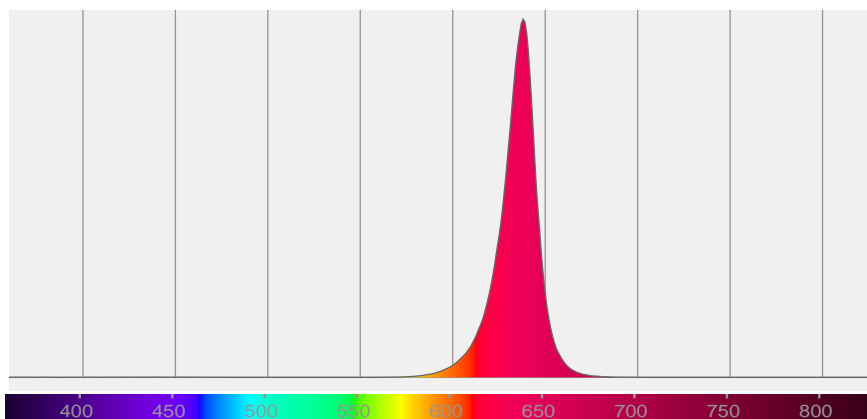


Beam angle 50%: 13,8°

Field angle 10%: 24,7°

Cut off angle 2.5%: 35,4°

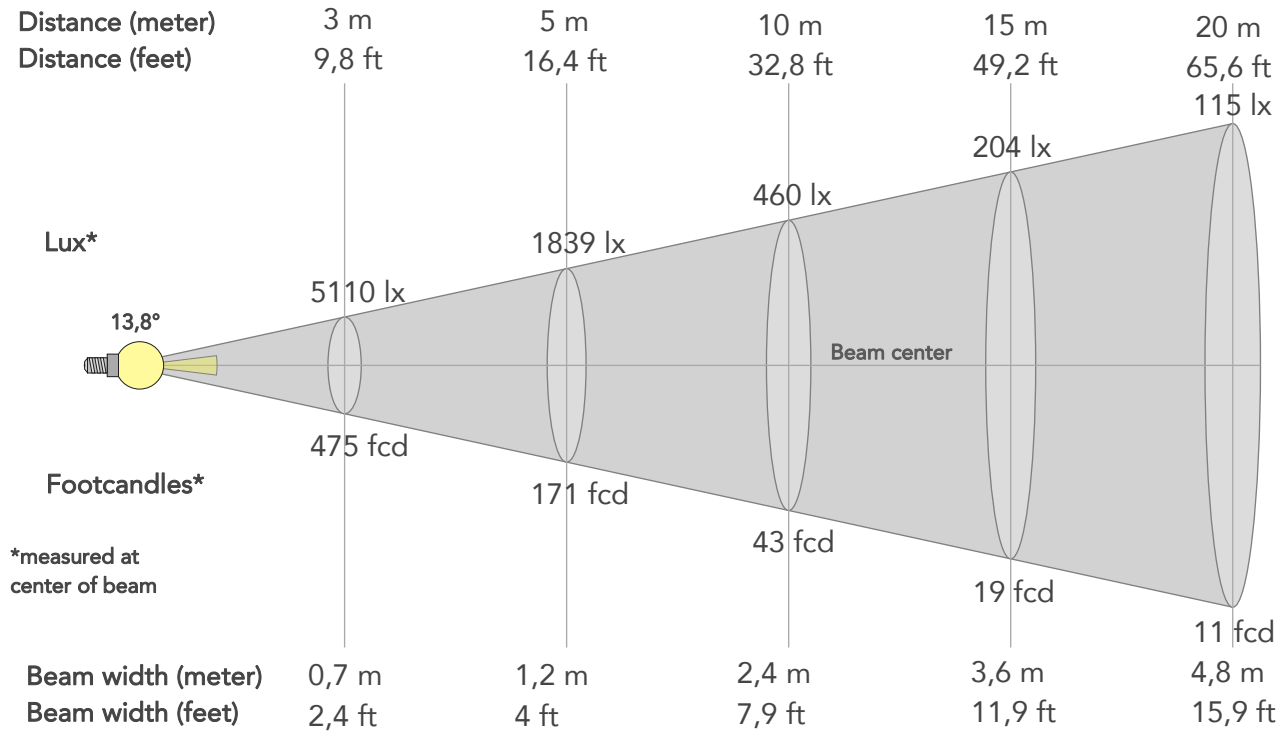
Spectra



# BEAM DETAILS



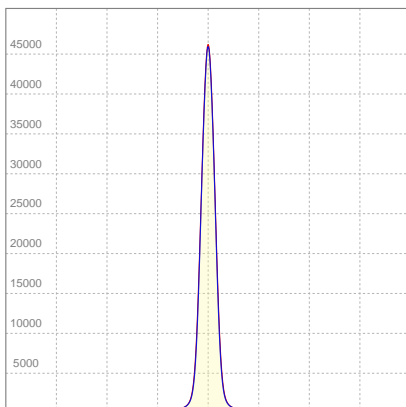
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
13,8°	24,7°	35,4°	99,3%	97,7%



## 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	45987lx	11497lx	5110lx	2874lx	1839lx	818lx	460lx	204lx	115lx	74lx	51lx	29lx	18lx
Footcand.	4272fcd	1068fcd	475fcd	267fcd	171fcd	76fcd	43fcd	19fcd	11fcd	7fcd	5fcd	3fcd	2fcd
Beam wid.	0,2m	0,5m	0,7m	1m	1,2m	1,8m	2,4m	3,6m	4,8m	6,1m	7,3m	9,7m	12,1m
Beam wid.	0,8ft	1,6ft	2,4ft	3,2ft	4ft	6ft	7,9ft	11,9ft	15,9ft	19,9ft	23,8ft	31,8ft	39,7ft

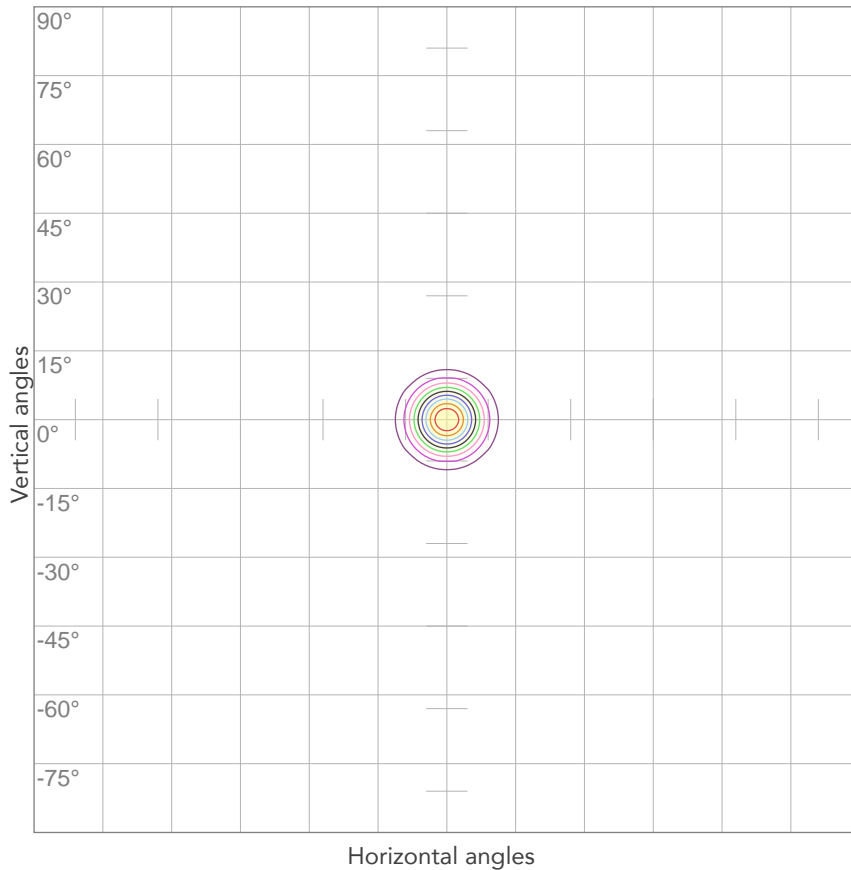
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,588A	98,3W	36lm/W
Power FC			
0,74			

## ISO CANDELA DIAGRAM



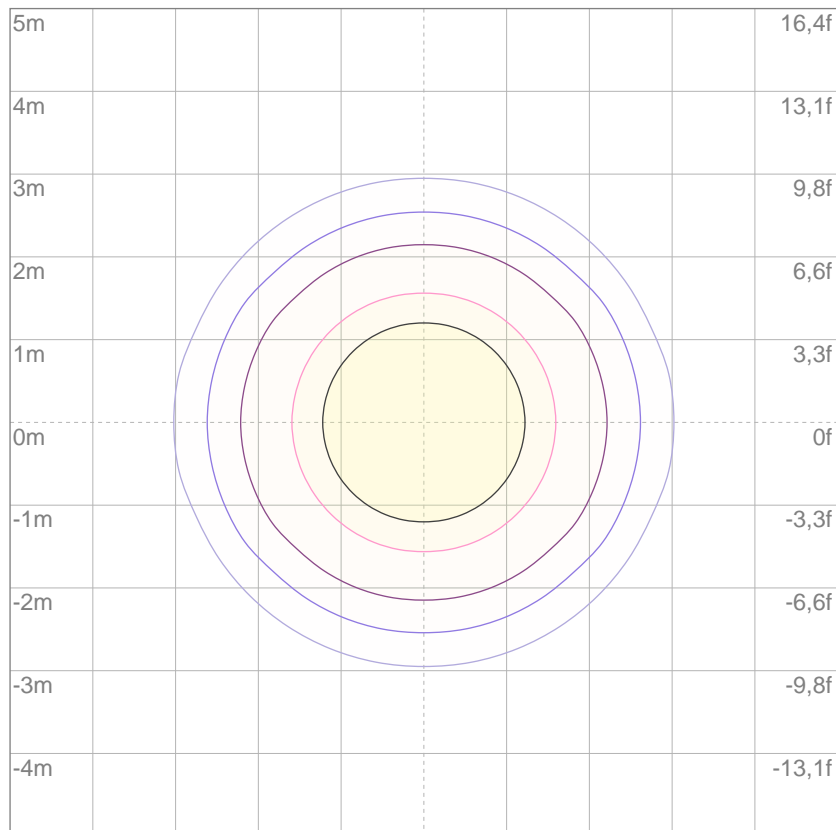
10%	4599 cd
20%	9197 cd
30%	13796 cd
40%	18395 cd
50%	22994 cd
60%	27592 cd
70%	32191 cd
80%	36790 cd

### Conditions:

Number of c-planes: 4

Candela at center: 45987 cd

## ISO LUX DIAGRAM



3%	13,8 lx
5%	23,0 lx
10%	46,0 lx
30%	138 lx
50%	230 lx

### Conditions:

Number of c-planes: 4

Lux at center: 460 lx

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



Total lumen output:

3016 lm

Peak candela output:

17655 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASURAMENT CONDITIONS:**

Beam angle:

25°

Target:

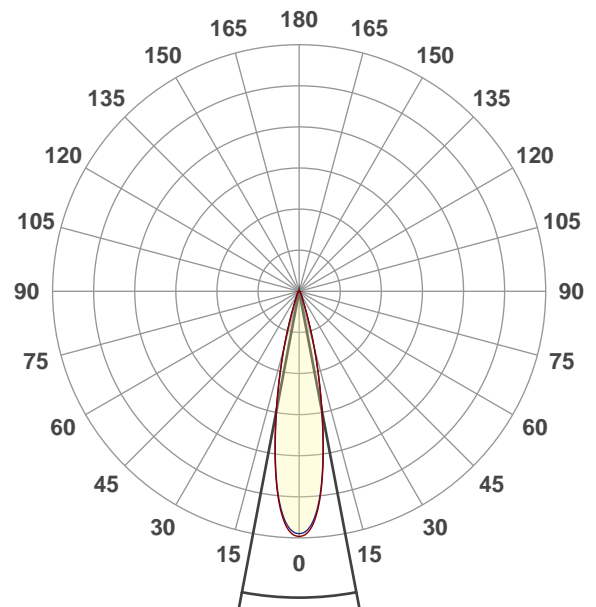
Red

Operator:

Paolo Carvone

Date and time:

29/04/2020 14:53:48

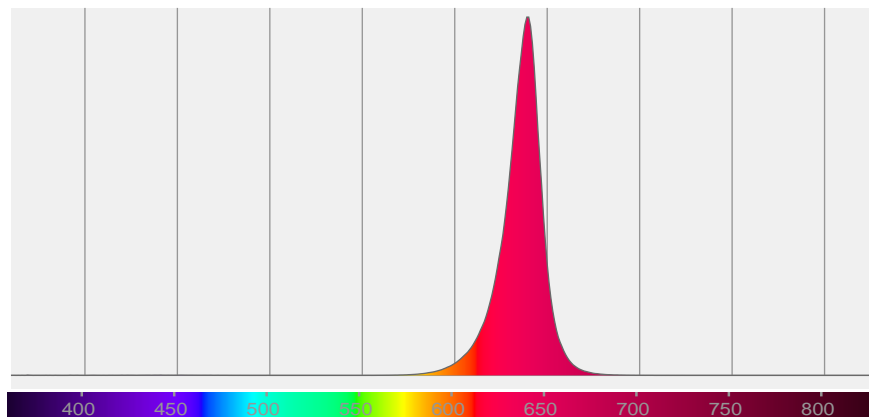


Beam angle 50%: 21,5°

Field angle 10%: 36,9°

Cut off angle 2.5%: 52,3°

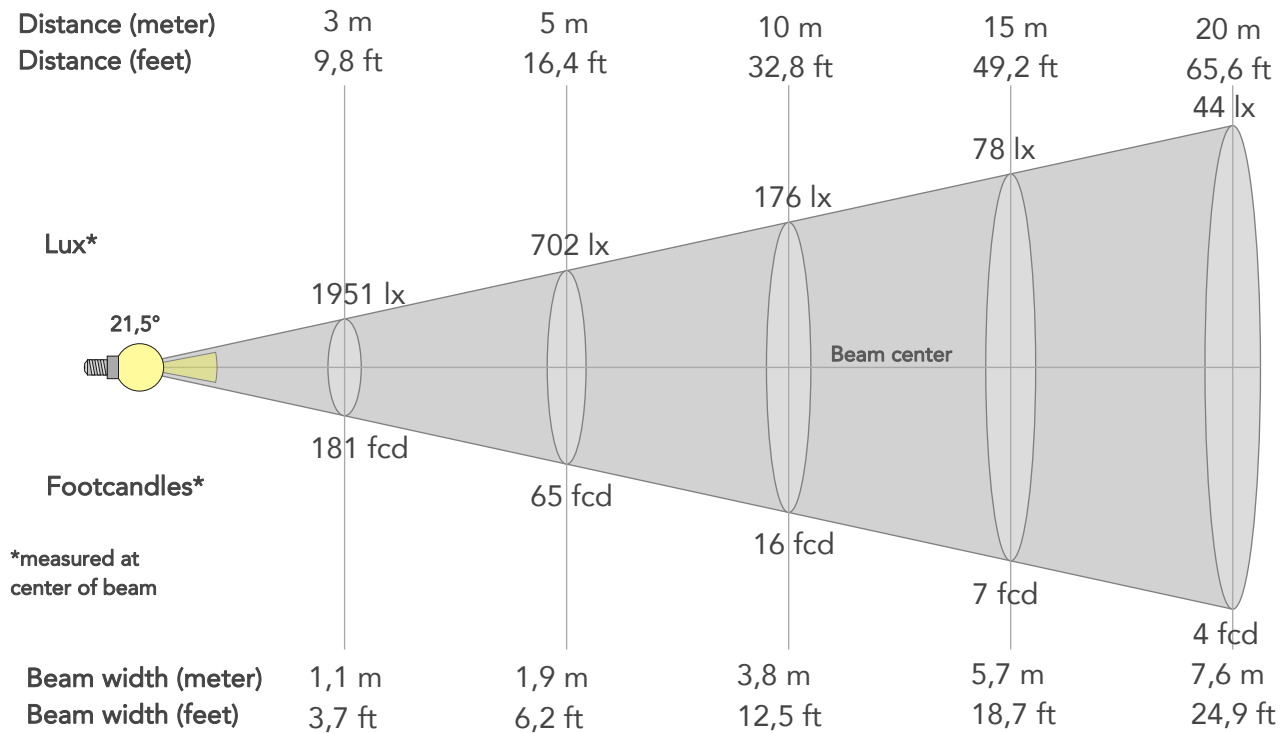
Spectra



# BEAM DETAILS



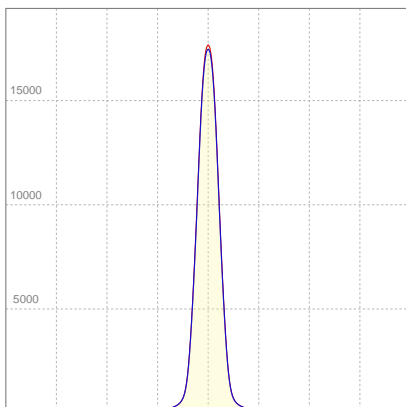
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
21,5°	36,9°	52,3°	98,7%	96,2%



## 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	17556lx	4389lx	1951lx	1097lx	702lx	312lx	176lx	78lx	44lx	28lx	20lx	11lx	7lx
Footcand.	1631fcd	408fcd	181fcd	102fcd	65fcd	29fcd	16fcd	7fcd	4fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,4m	0,8m	1,1m	1,5m	1,9m	2,9m	3,8m	5,7m	7,6m	9,5m	11,4m	15,2m	19m
Beam wid.	1,3ft	2,5ft	3,7ft	5ft	6,2ft	9,4ft	12,5ft	18,7ft	24,9ft	31,2ft	37,4ft	49,9ft	62,4ft

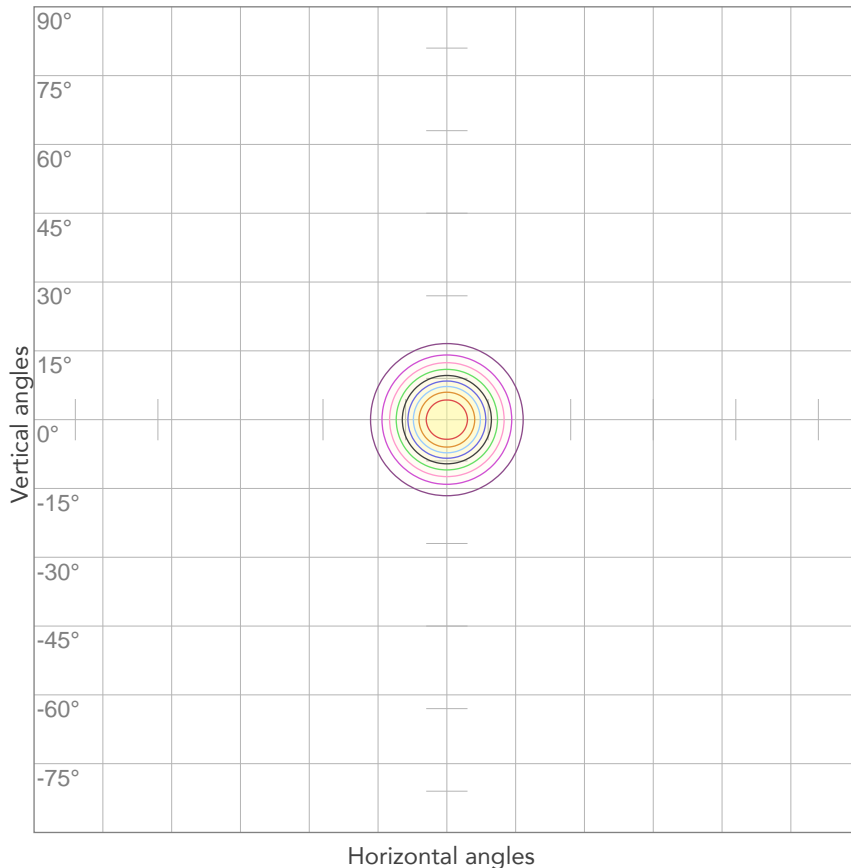
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,563A	92,6W	33lm/W
Power FC			
0,73			

## ISO CANDELA DIAGRAM



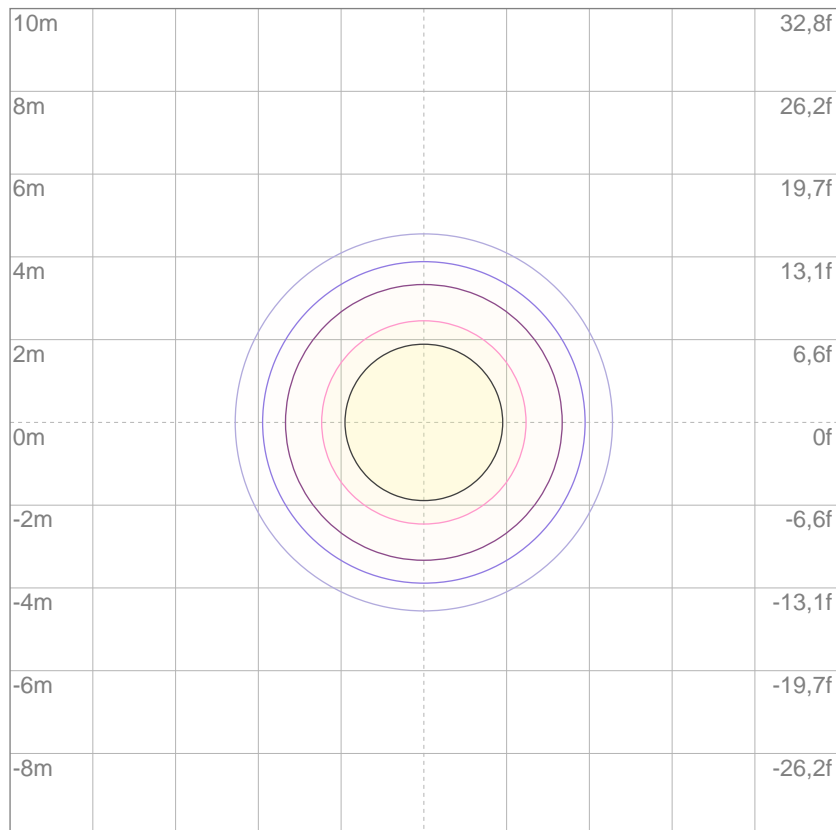
10%	1756 cd
20%	3511 cd
30%	5267 cd
40%	7022 cd
50%	8778 cd
60%	10533 cd
70%	12289 cd
80%	14045 cd

### Conditions:

Number of c-planes: 4

Candela at center: 17556 cd

## ISO LUX DIAGRAM



3%	5,27 lx
5%	8,78 lx
10%	17,6 lx
30%	52,7 lx
50%	87,8 lx

### Conditions:

Number of c-planes: 4

Lux at center: 176 lx

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



Total lumen output:

2547 lm

Peak candela output:

3638 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

45°

Target:

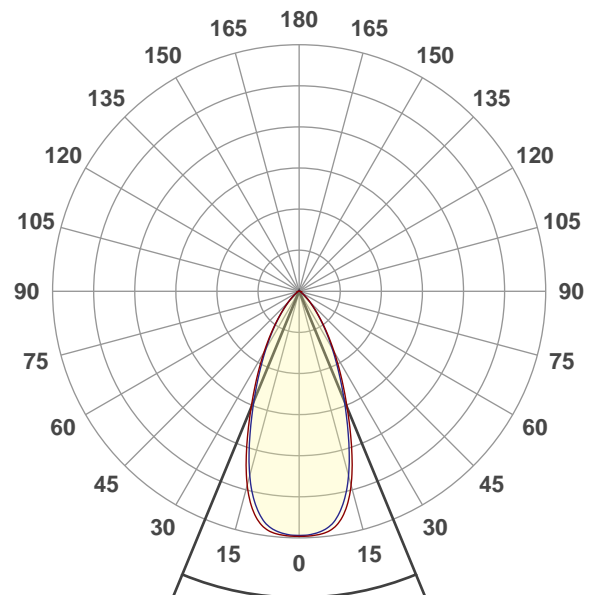
Red

Operator:

Paolo Carvone

Date and time:

29/04/2020 13:17:36

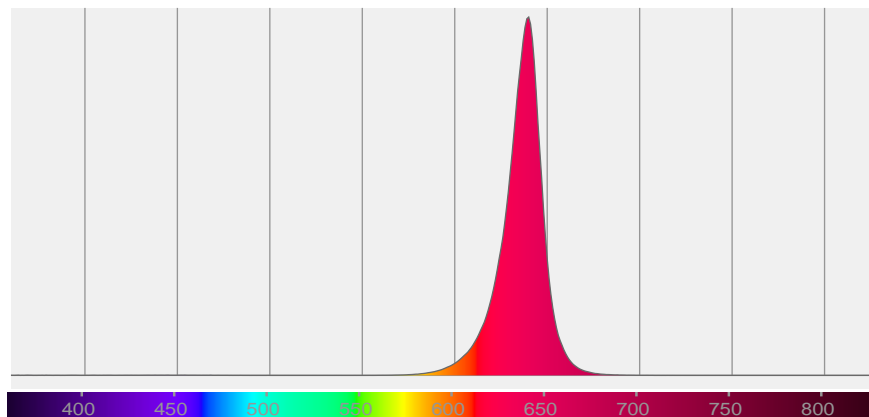


Beam angle 50%: 44,8°

Field angle 10%: 81,5°

Cut off angle 2.5%: 105,2°

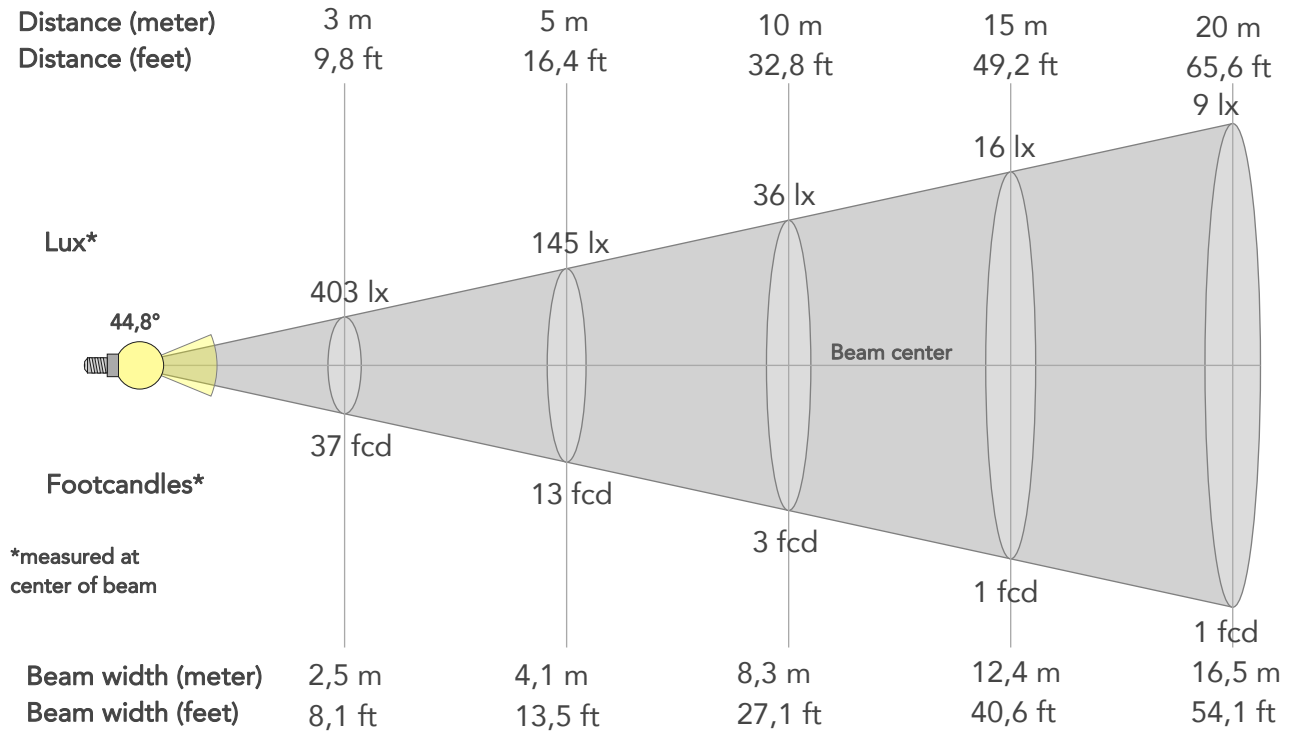
Spectra



# BEAM DETAILS



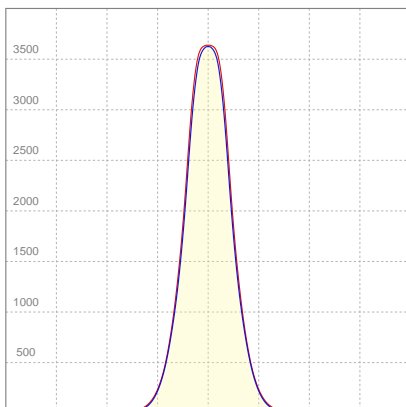
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
44,8°	81,5°	105,2°	97,3%	92,0%



## 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	3631lx	908lx	403lx	227lx	145lx	65lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	337fcd	84fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,8m	1,7m	2,5m	3,3m	4,1m	6,2m	8,3m	12,4m	16,5m	20,6m	24,8m	33m	41,3m
Beam wid.	2,7ft	5,4ft	8,1ft	10,8ft	13,5ft	20,3ft	27,1ft	40,6ft	54,1ft	67,7ft	81,2ft	108,3ft	135,3ft

## LINEAR DISTRIBUTION DIAGRAM



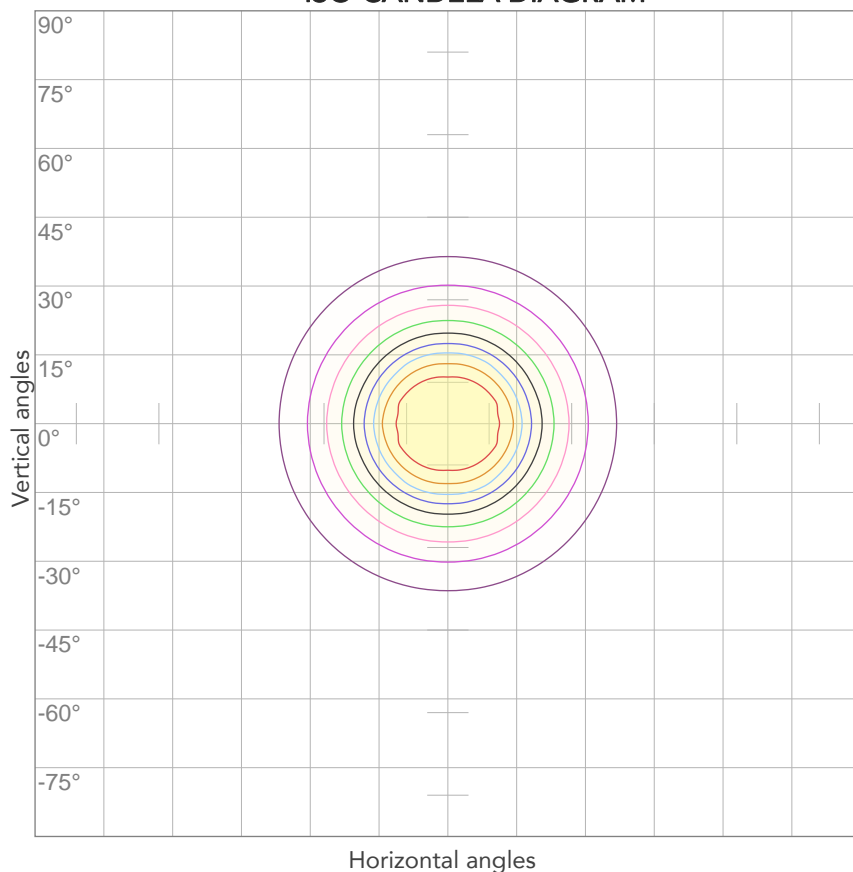
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
229V	0,561A	92,4W	28lm/W

Power FC
0,72



## ISO CANDELA DIAGRAM



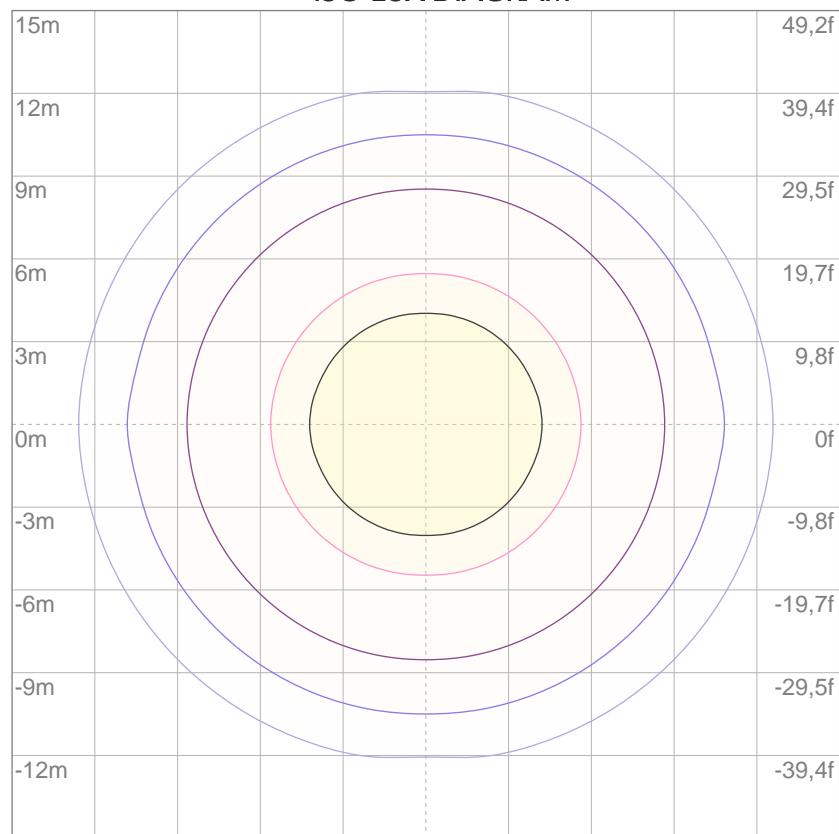
10%	363 cd
20%	726 cd
30%	1089 cd
40%	1452 cd
50%	1815 cd
60%	2178 cd
70%	2541 cd
80%	2904 cd

### Conditions:

Number of c-planes: 4

Candela at center: 3631 cd

## ISO LUX DIAGRAM



3%	1,09 lx
5%	1,82 lx
10%	3,63 lx
30%	10,9 lx
50%	18,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 36,3 lx

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



Total lumen output:

7012 lm

Peak candela output:

132970 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°

Target:

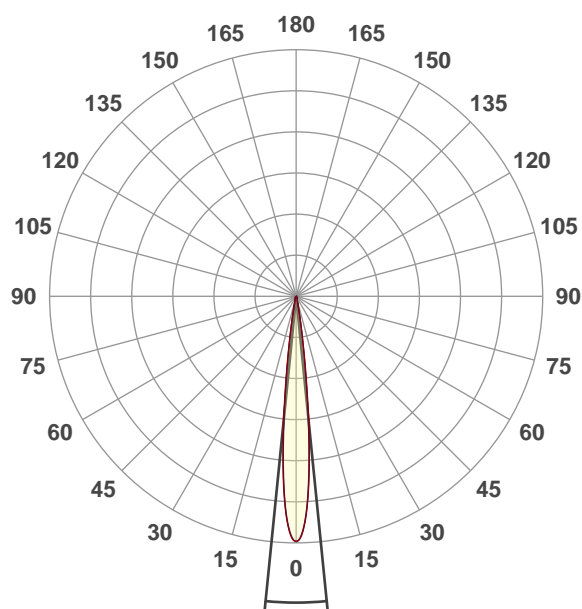
Green

Operator:

Paolo Carvone

Date and time:

29/04/2020 15:42:32

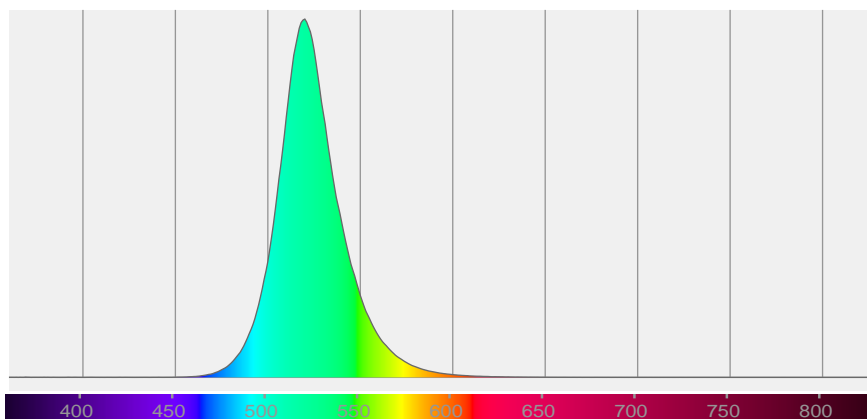


Beam angle 50%: 11,5°

Field angle 10%: 19,6°

Cut off angle 2.5%: 27°

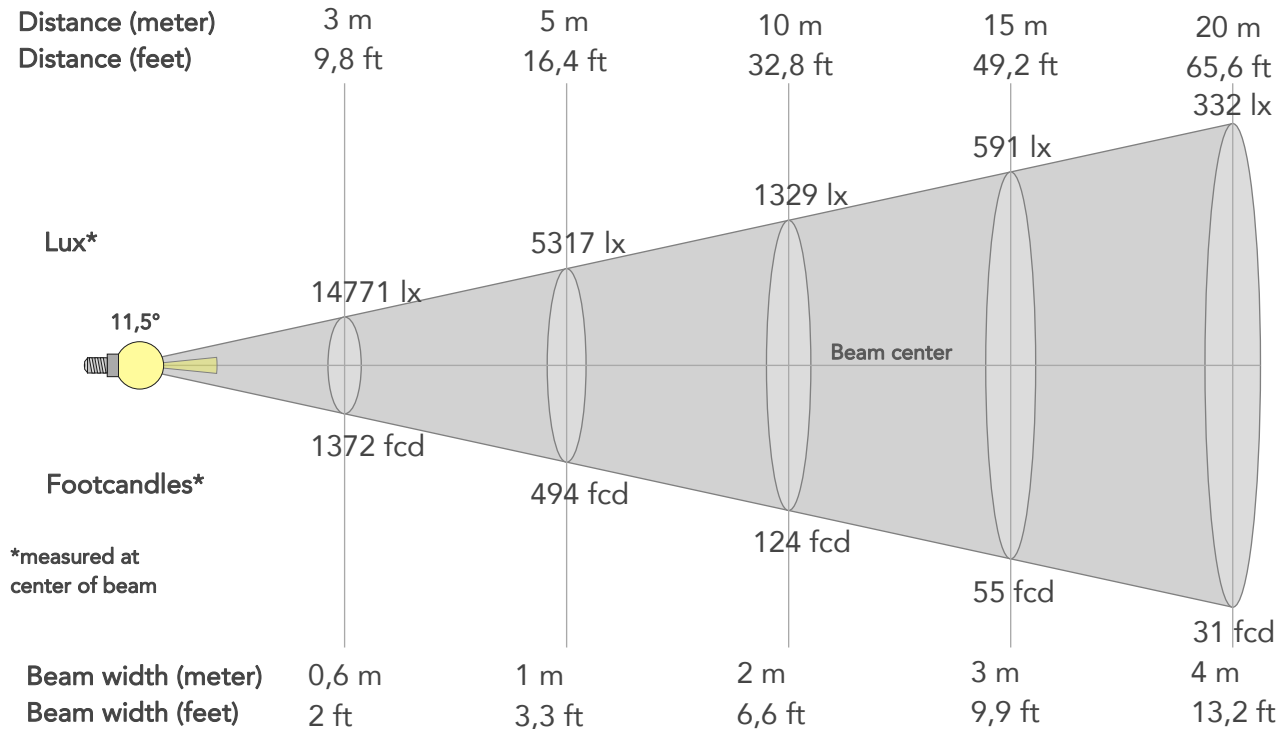
**Spectra**



# BEAM DETAILS



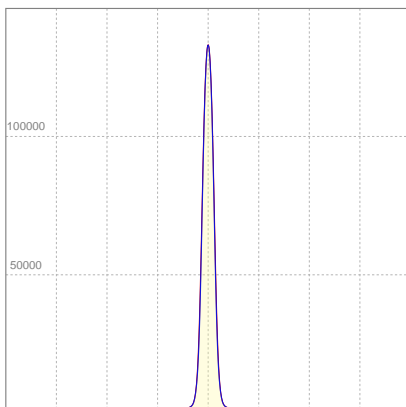
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11,5°	19,6°	27°	99,3%	97,4%



## 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	132937lx	33234lx	14771lx	8309lx	5317lx	2363lx	1329lx	591lx	332lx	213lx	148lx	83lx	53lx
Footcand.	12350fcd	3088fcd	1372fcd	772fcd	494fcd	220fcd	124fcd	55fcd	31fcd	20fcd	14fcd	8fcd	5fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,5m	2m	3m	4m	5m	6m	8m	10m
Beam wid.	0,7ft	1,3ft	2ft	2,6ft	3,3ft	4,9ft	6,6ft	9,9ft	13,2ft	16,4ft	19,7ft	26,3ft	32,9ft

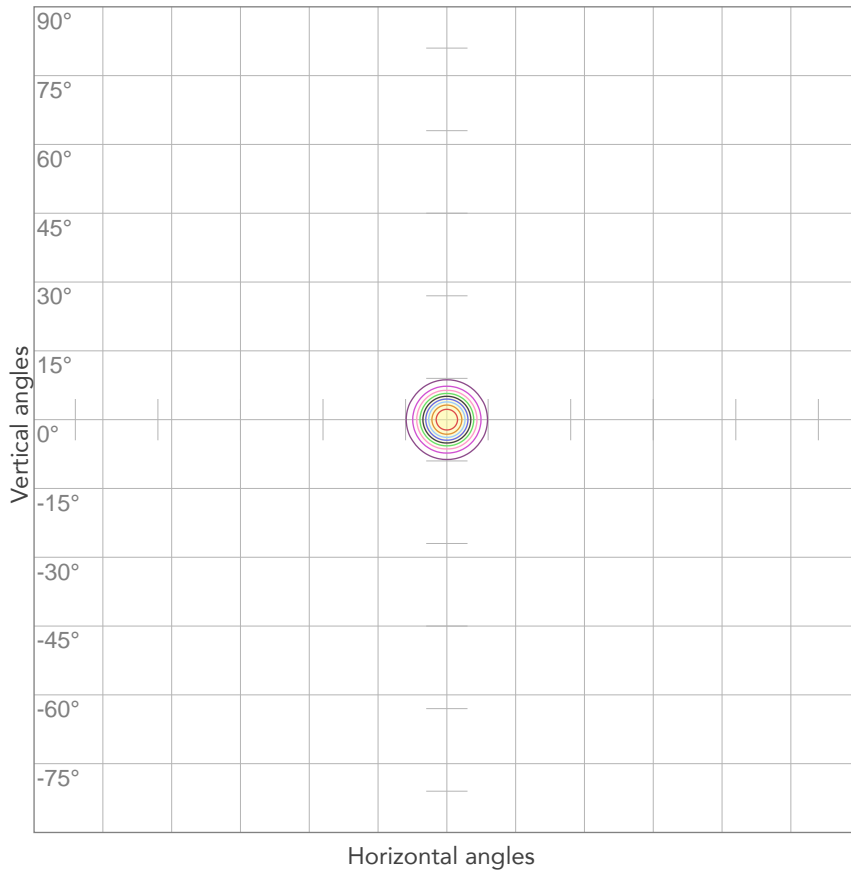
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,684A	121,2W	58lm/W
Power FC			
0,79			

## ISO CANDELA DIAGRAM



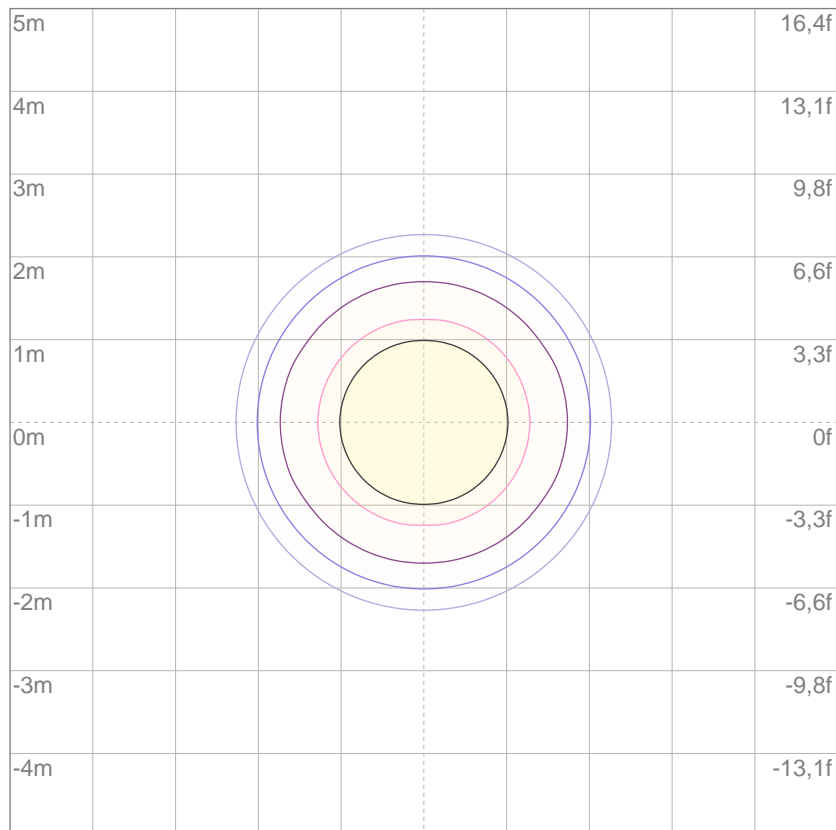
10%	13294 cd
20%	26587 cd
30%	39881 cd
40%	53175 cd
50%	66468 cd
60%	79762 cd
70%	93056 cd
80%	106349 cd

### Conditions:

Number of c-planes: 4

Candela at center: 132937 cd

## ISO LUX DIAGRAM



3%	39,9 lx
5%	66,5 lx
10%	133 lx
30%	399 lx
50%	665 lx

### Conditions:

Number of c-planes: 4

Lux at center: 1329 lx

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



Total lumen output:

10234 lm

Peak candela output:

24362 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°+f60°x1°

Target:

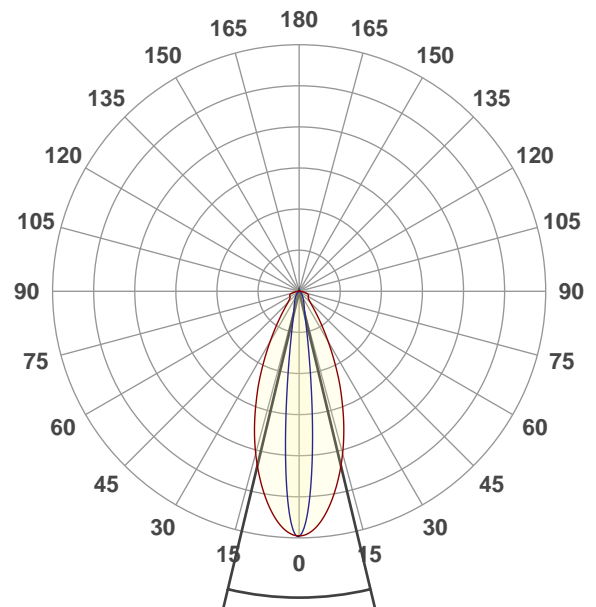
Green

Operator:

Paolo Carvone

Date and time:

03/06/2020 15:46:57

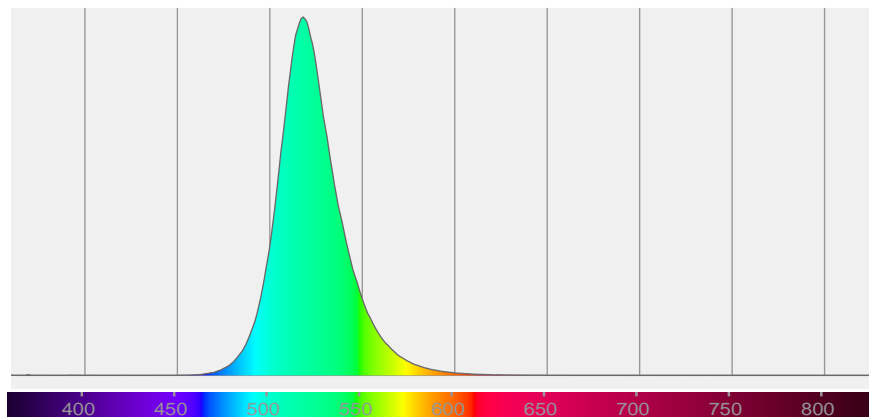


Beam angle 50%: 26,9°

Field angle 10%: 52,8°

Cut off angle 2.5%: 111,6°

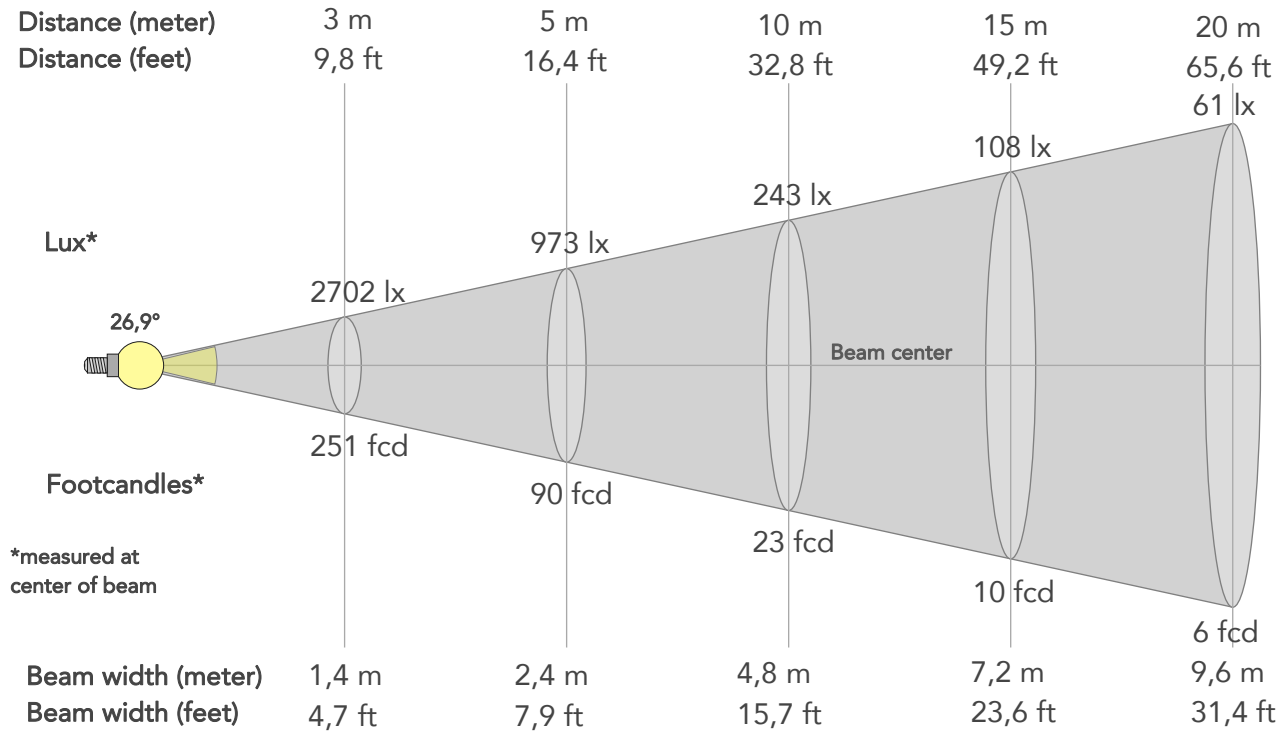
Spectra



# BEAM DETAILS



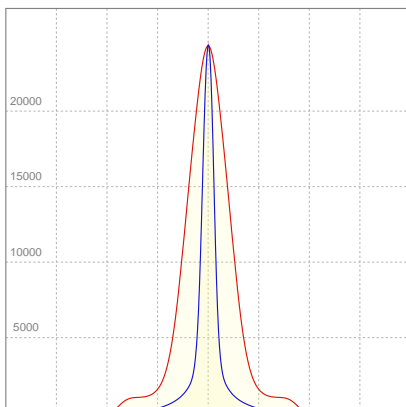
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,9°	52,8°	111,6°	89,7%	80,7%



## 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	24314lx	6079lx	2702lx	1520lx	973lx	432lx	243lx	108lx	61lx	39lx	27lx	15lx	10lx
Footcand.	2259fcd	565fcd	251fcd	141fcd	90fcd	40fcd	23fcd	10fcd	6fcd	4fcd	3fcd	1fcd	1fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	12m	14,4m	19,1m	23,9m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,9ft	11,8ft	15,7ft	23,6ft	31,4ft	39,3ft	47,1ft	62,8ft	78,5ft

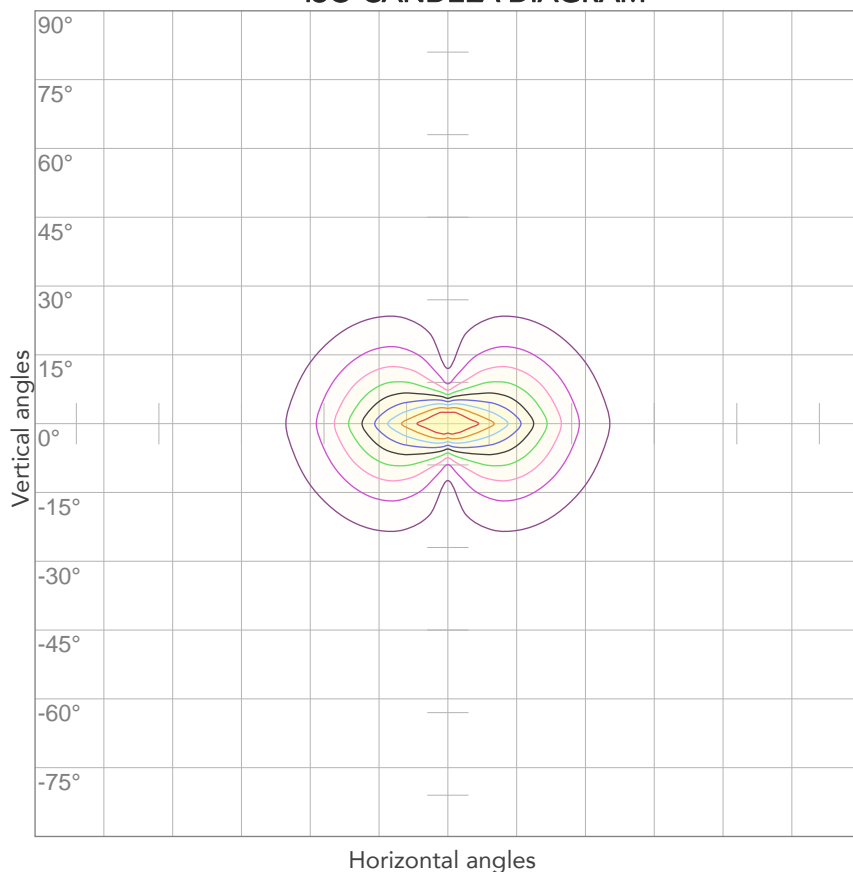
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,693A	122,9W	83lm/W
Power FC			
0,79			

## ISO CANDELA DIAGRAM



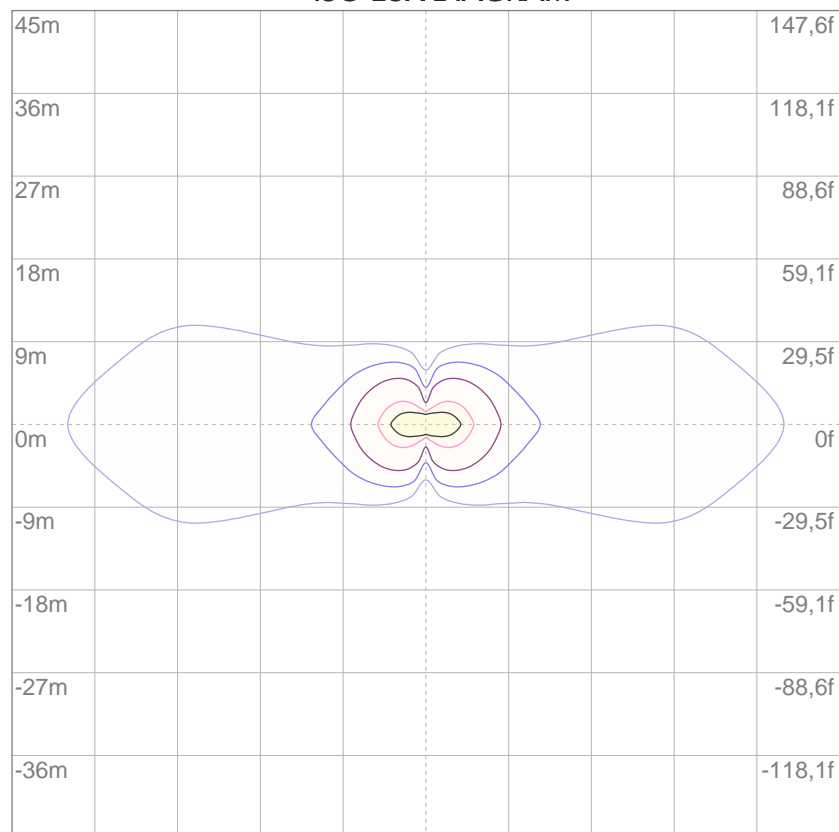
10%	2431 cd
20%	4863 cd
30%	7294 cd
40%	9726 cd
50%	12157 cd
60%	14589 cd
70%	17020 cd
80%	19451 cd

### Conditions:

Number of c-planes: 4

Candela at center: 24314 cd

## ISO LUX DIAGRAM



3%	7,29 lx
5%	12,2 lx
10%	24,3 lx
30%	72,9 lx
50%	122 lx

### Conditions:

Number of c-planes: 4

Lux at center: 243 lx

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



Total lumen output:

8601 lm

Peak candela output:

106841 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

15°

Target:

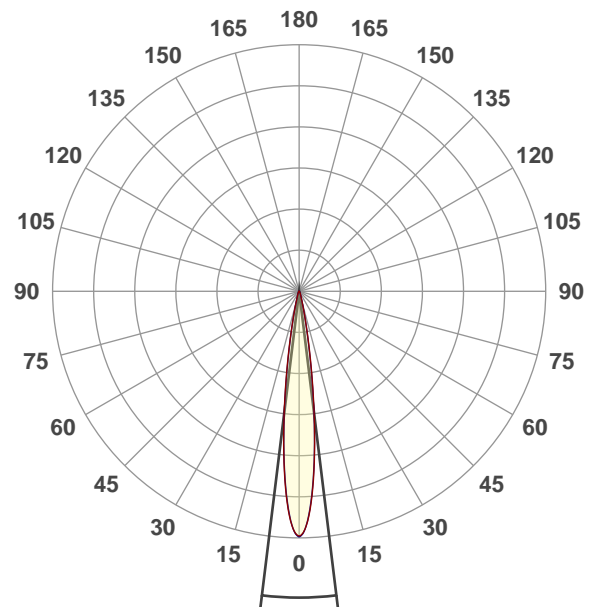
Green

Operator:

Paolo Carvone

Date and time:

29/04/2020 16:35:36

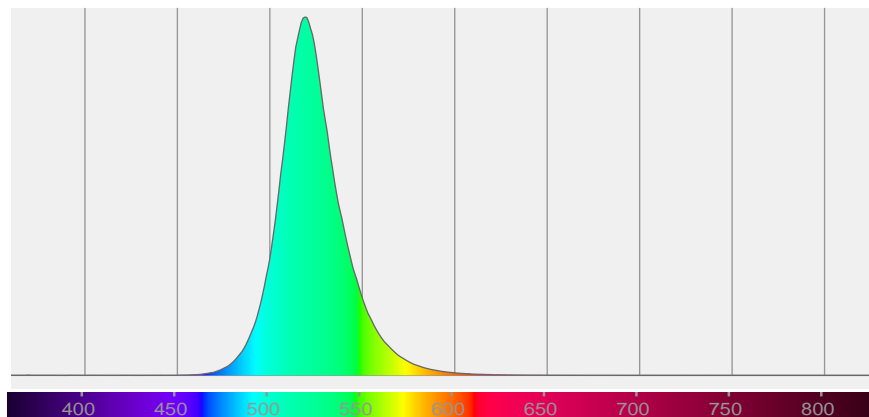


Beam angle 50%: 14°

Field angle 10%: 25,4°

Cut off angle 2.5%: 36,9°

Spectra

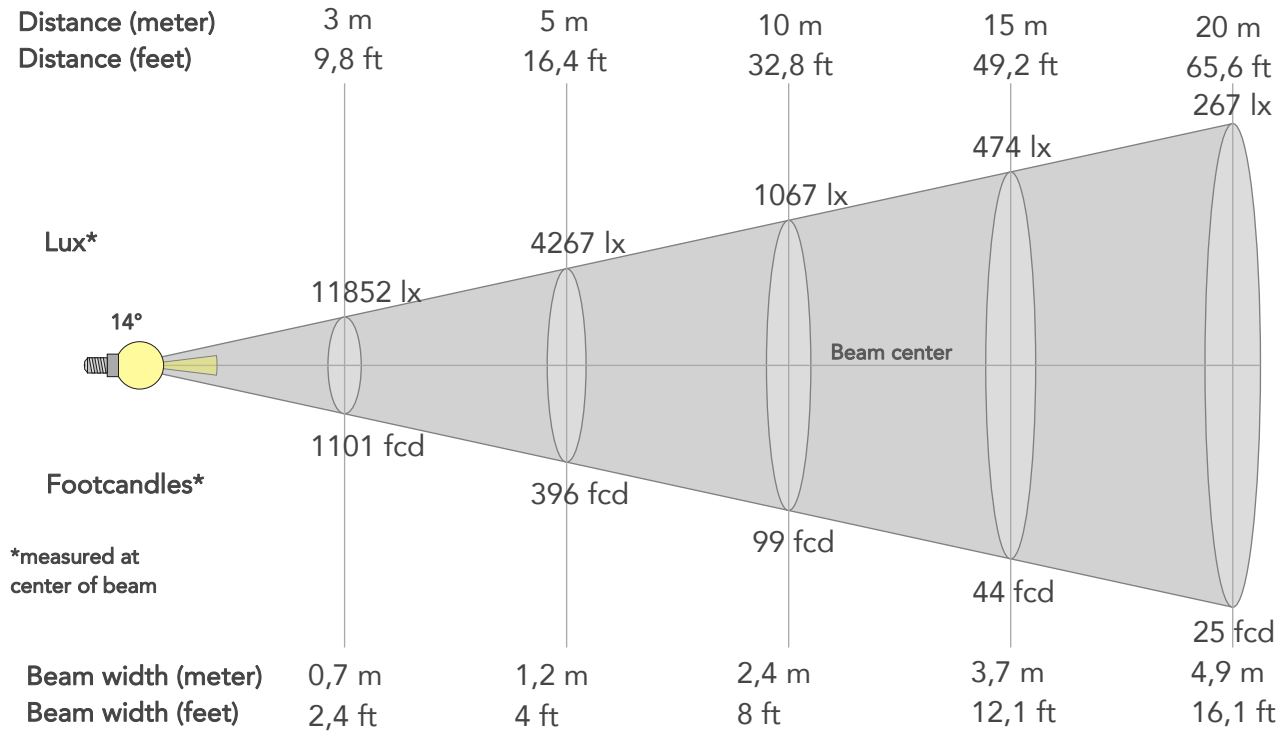




# BEAM DETAILS



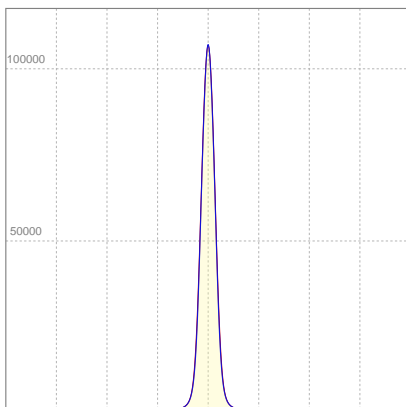
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14°	25,4°	36,9°	99,4%	97,8%



## 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	106664lx	26666lx	11852lx	6666lx	4267lx	1896lx	1067lx	474lx	267lx	171lx	119lx	67lx	43lx
Footcand.	9909fcd	2477fcd	1101fcd	619fcd	396fcd	176fcd	99fcd	44fcd	25fcd	16fcd	11fcd	6fcd	4fcd
Beam wid.	0,2m	0,5m	0,7m	1m	1,2m	1,8m	2,4m	3,7m	4,9m	6,1m	7,3m	9,8m	12,2m
Beam wid.	0,8ft	1,6ft	2,4ft	3,2ft	4ft	6ft	8ft	12,1ft	16,1ft	20,1ft	24,1ft	32,1ft	40,2ft

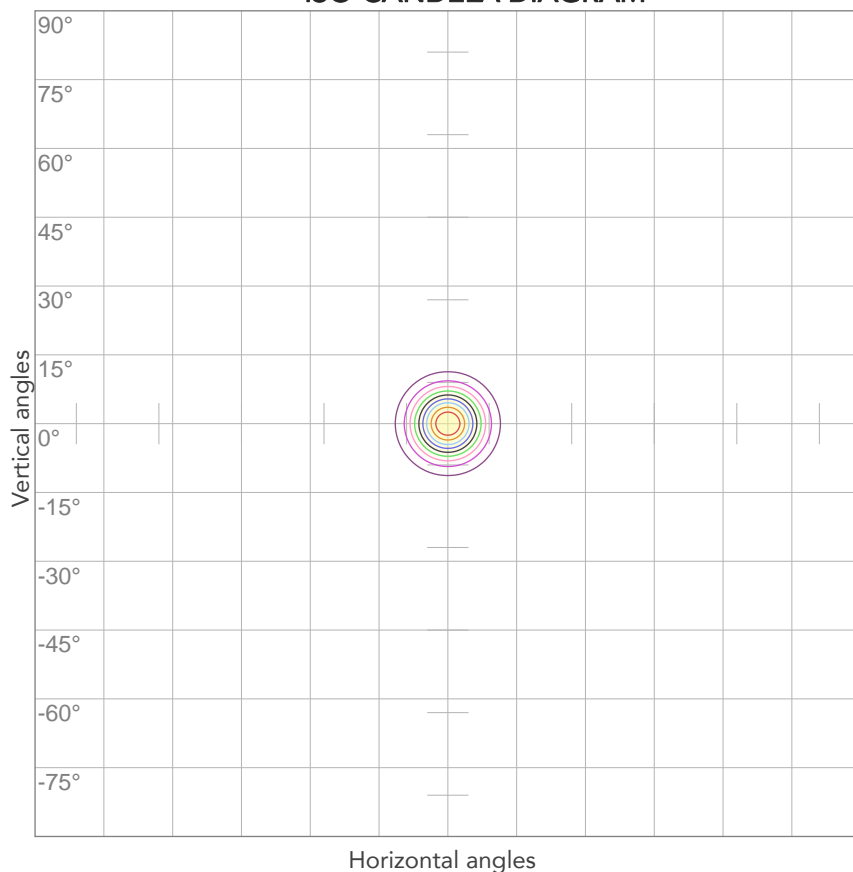
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,687A	122W	71lm/W
Power FC			
0,79			

## ISO CANDELA DIAGRAM



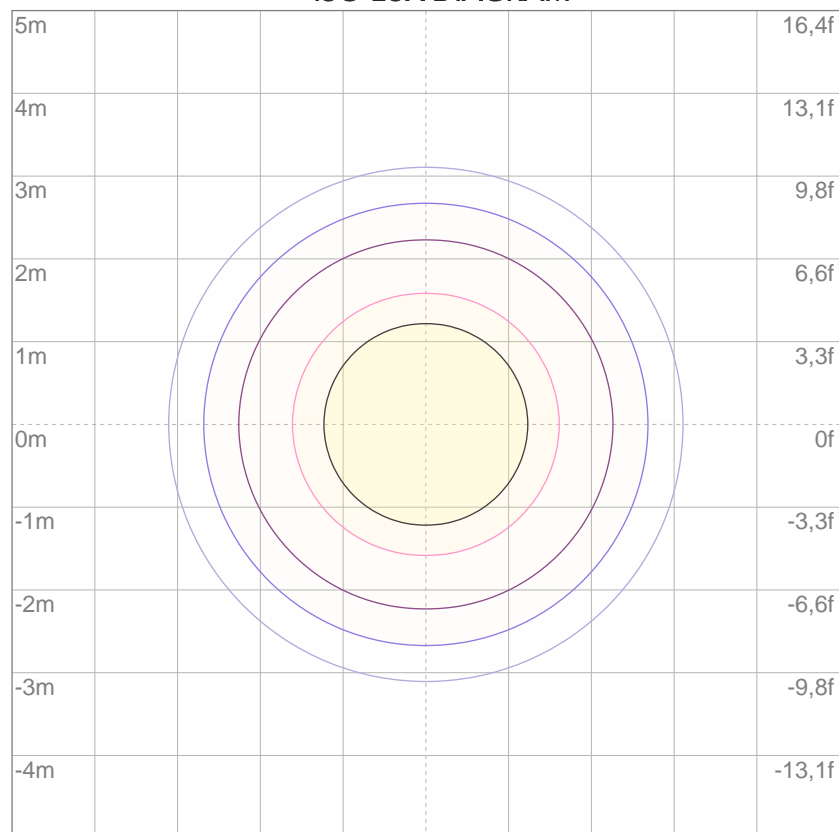
10%	10666 cd
20%	21333 cd
30%	31999 cd
40%	42665 cd
50%	53332 cd
60%	63998 cd
70%	74664 cd
80%	85331 cd

### Conditions:

Number of c-planes: 4

Candela at center: 106664 cd

## ISO LUX DIAGRAM



3%	32,0 lx
5%	53,3 lx
10%	107 lx
30%	320 lx
50%	533 lx

### Conditions:

Number of c-planes: 4

Lux at center: 1067 lx

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



Total lumen output:

7756 lm

Peak candela output:

43948 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

25°

Target:

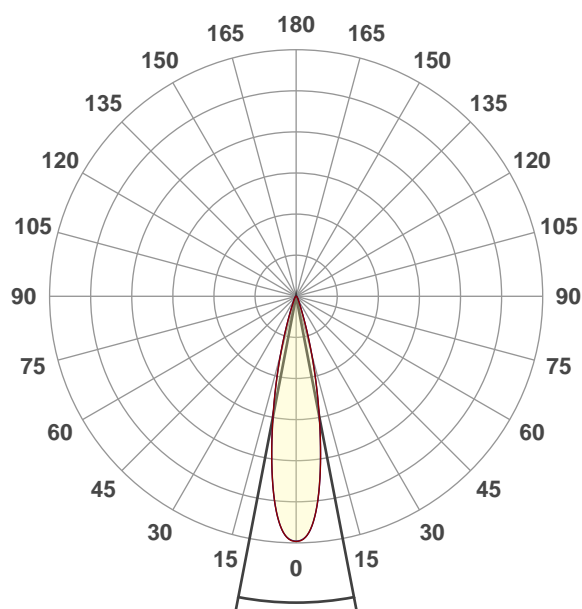
Green

Operator:

Paolo Carvone

Date and time:

29/04/2020 14:56:46

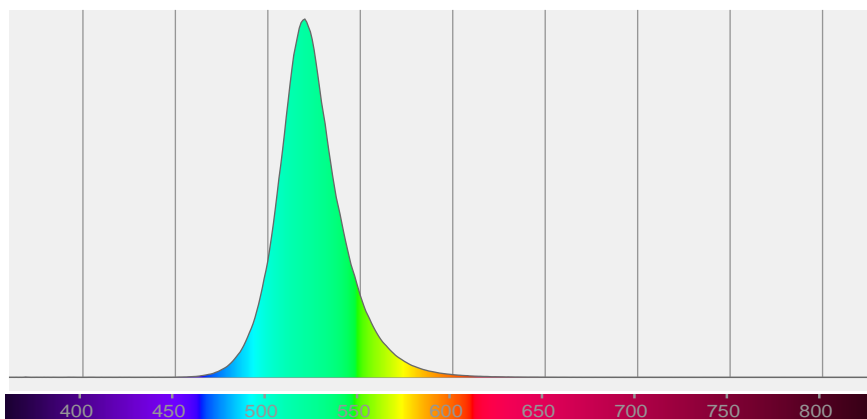


Beam angle 50%: 21,8°

Field angle 10%: 37,5°

Cut off angle 2.5%: 53,6°

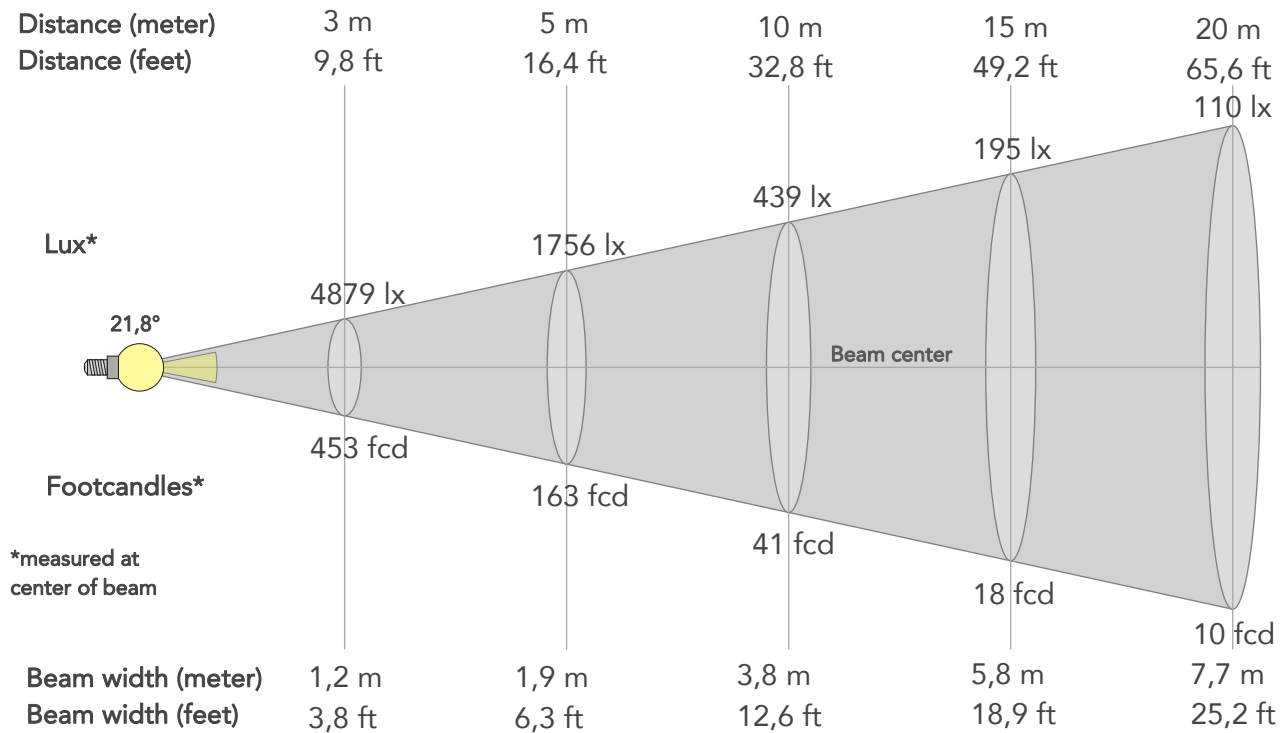
Spectra



# BEAM DETAILS



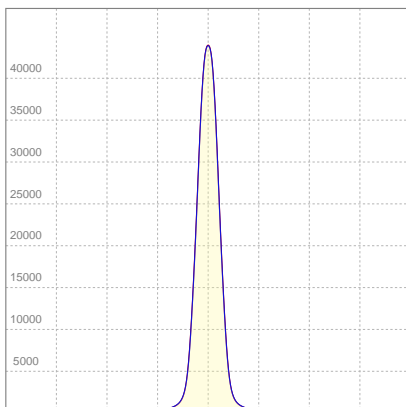
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
21,8°	37,5°	53,6°	98,8%	96,2%



## 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	43912lx	10978lx	4879lx	2744lx	1756lx	781lx	439lx	195lx	110lx	70lx	49lx	27lx	18lx
Footcand.	4080fcd	1020fcd	453fcd	255fcd	163fcd	73fcd	41fcd	18fcd	10fcd	7fcd	5fcd	3fcd	2fcd
Beam wid.	0,4m	0,8m	1,2m	1,5m	1,9m	2,9m	3,8m	5,8m	7,7m	9,6m	11,5m	15,4m	19,2m
Beam wid.	1,3ft	2,5ft	3,8ft	5ft	6,3ft	9,5ft	12,6ft	18,9ft	25,2ft	31,5ft	37,8ft	50,4ft	63,1ft

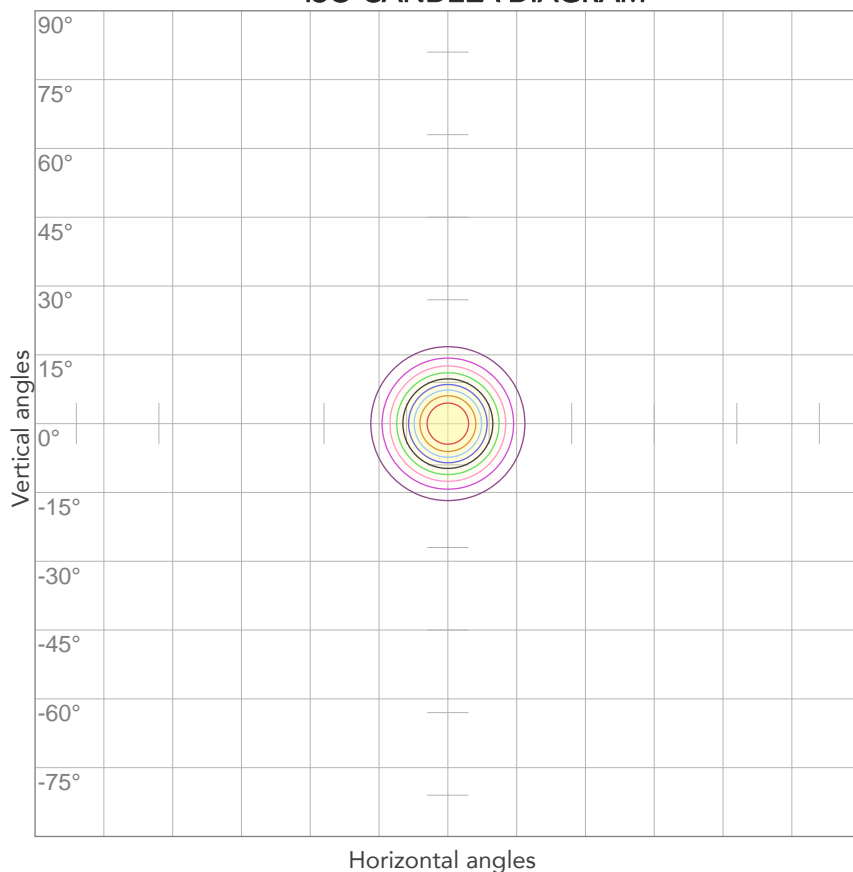
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,684A	121,2W	64lm/W
Power FC			
0,78			

## ISO CANDELA DIAGRAM



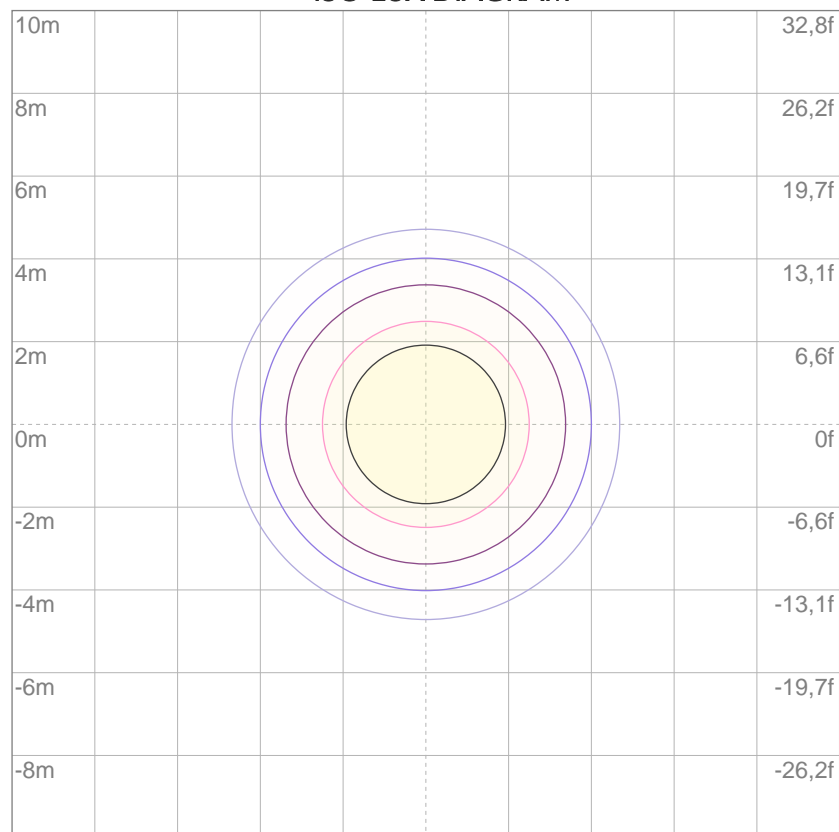
10%	4391 cd
20%	8782 cd
30%	13173 cd
40%	17565 cd
50%	21956 cd
60%	26347 cd
70%	30738 cd
80%	35129 cd

### Conditions:

Number of c-planes: 4

Candela at center: 43912 cd

## ISO LUX DIAGRAM



3%	13,2 lx
5%	22,0 lx
10%	43,9 lx
30%	132 lx
50%	220 lx

### Conditions:

Number of c-planes: 4

Lux at center: 439 lx

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



Total lumen output:

6653 lm

Peak candela output:

9331 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASURAMENT CONDITIONS:**

Beam angle:

45°

Target:

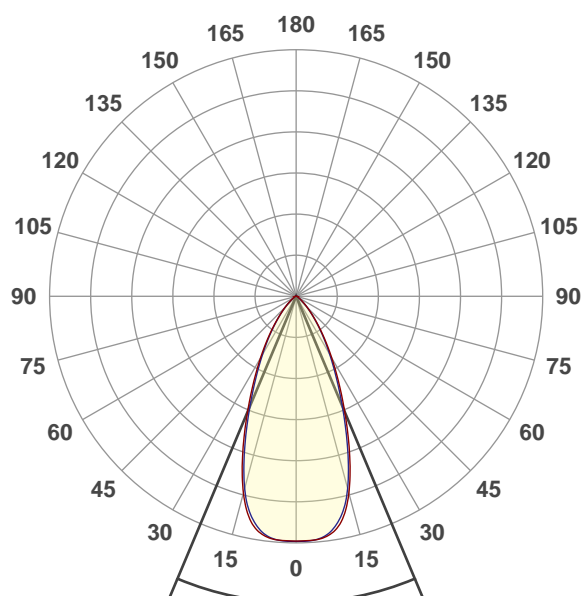
Green

Operator:

Paolo Carvone

Date and time:

29/04/2020 13:20:44

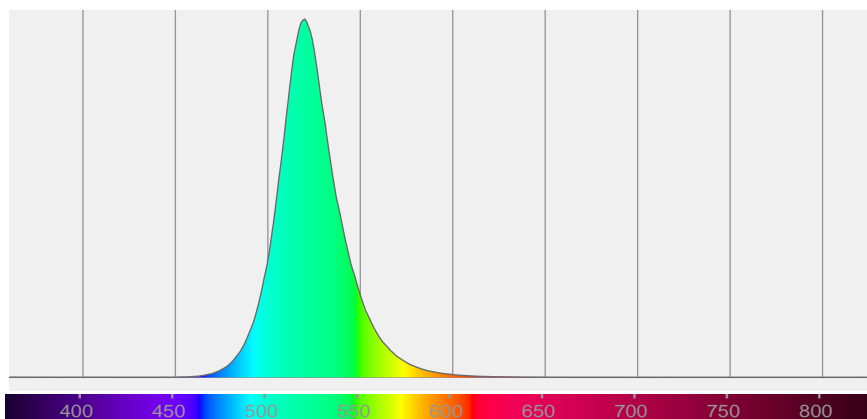


Beam angle 50%: 45,6°

Field angle 10%: 81,7°

Cut off angle 2.5%: 105,2°

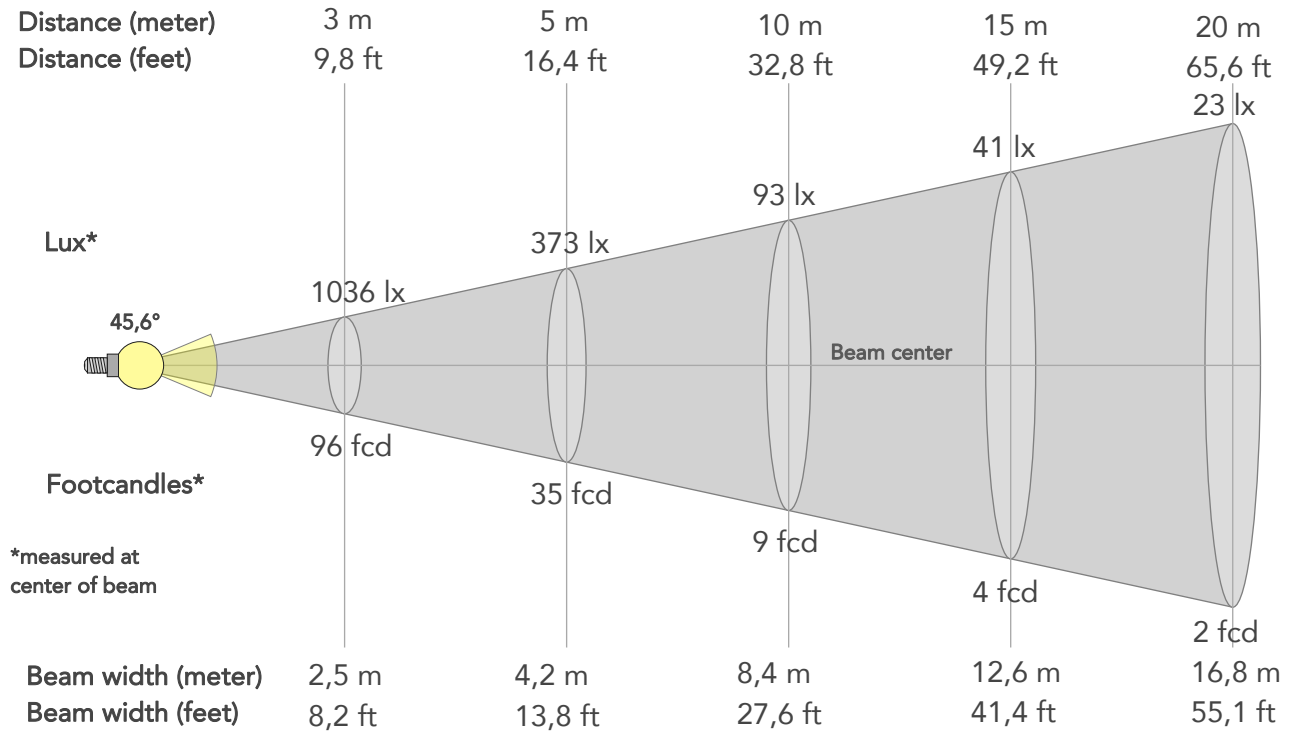
Spectra



# BEAM DETAILS



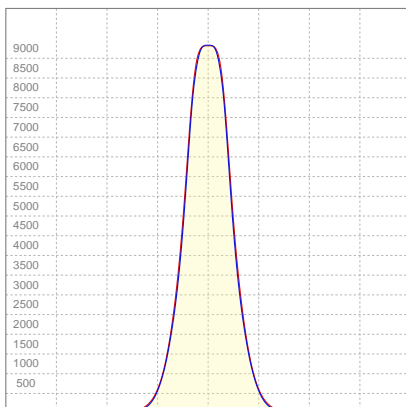
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
45,6°	81,7°	105,2°	97,4%	92,3%



## 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	9325lx	2331lx	1036lx	583lx	373lx	166lx	93lx	41lx	23lx	15lx	10lx	6lx	4lx
Footcand.	866fcd	217fcd	96fcd	54fcd	35fcd	15fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,8m	1,7m	2,5m	3,4m	4,2m	6,3m	8,4m	12,6m	16,8m	21m	25,2m	33,6m	42m
Beam wid.	2,8ft	5,5ft	8,2ft	11ft	13,8ft	20,7ft	27,6ft	41,4ft	55,1ft	68,9ft	82,7ft	110,3ft	137,8ft

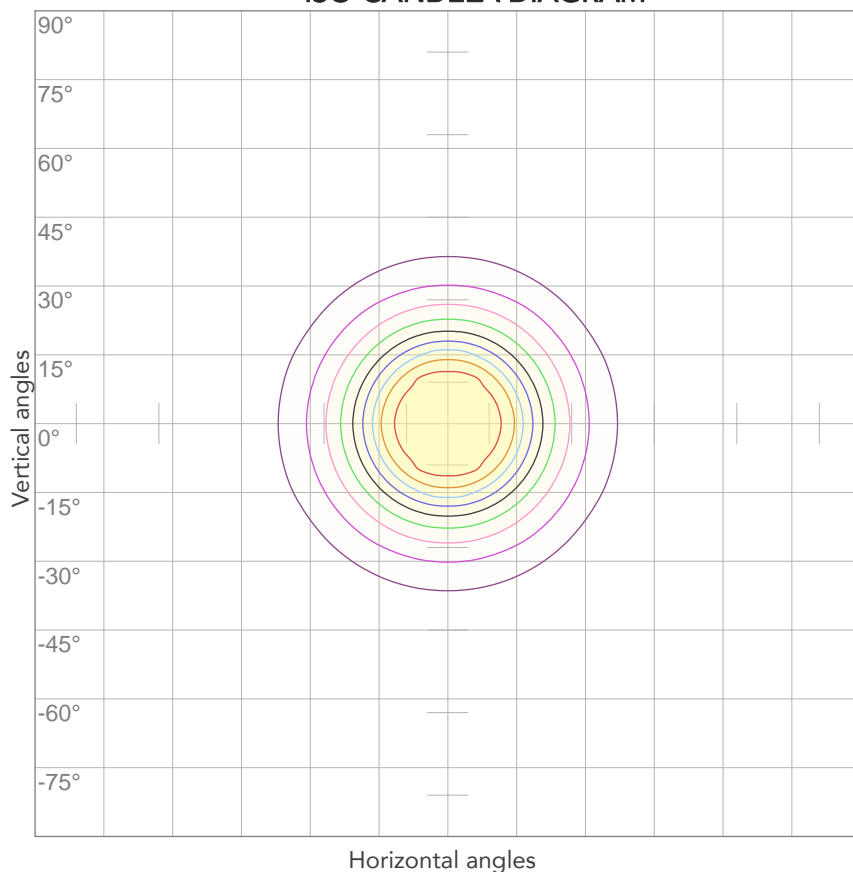
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,684A	121,1W	55lm/W
Power FC			
0,78			

## ISO CANDELA DIAGRAM



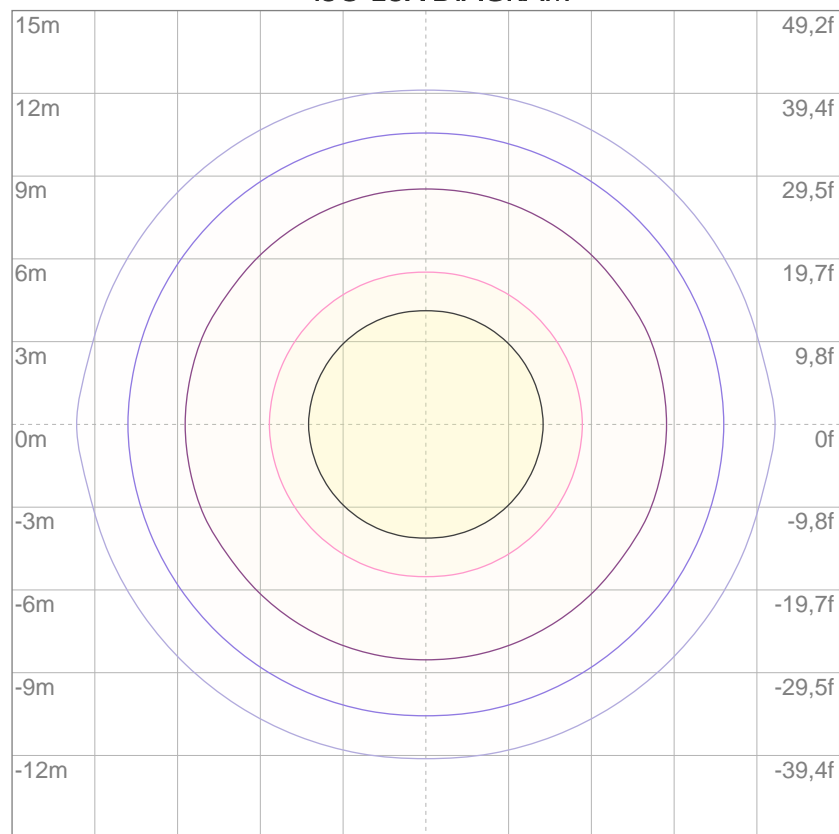
10%	932 cd
20%	1865 cd
30%	2797 cd
40%	3730 cd
50%	4662 cd
60%	5595 cd
70%	6527 cd
80%	7460 cd

### Conditions:

Number of c-planes: 4

Candela at center: 9325 cd

## ISO LUX DIAGRAM



3%	2,80 lx
5%	4,66 lx
10%	9,32 lx
30%	28,0 lx
50%	46,6 lx

### Conditions:

Number of c-planes: 4

Lux at center: 93,2 lx

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





Total lumen output:

1300 lm

Peak candela output:

24598 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°

Target:

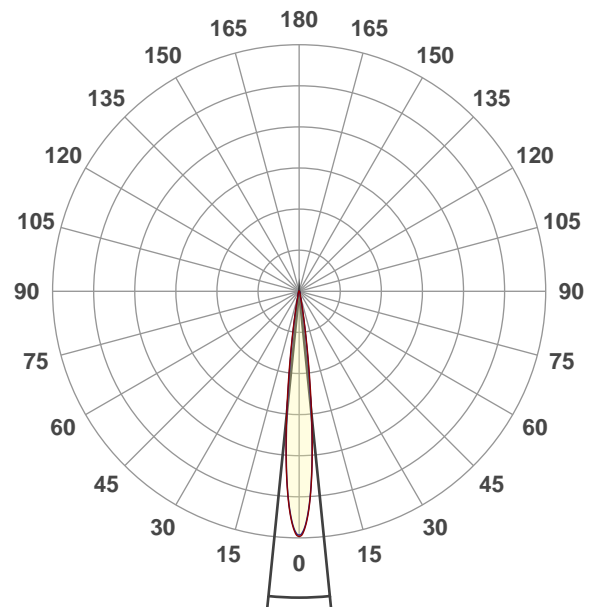
Blue

Operator:

Paolo Carvone

Date and time:

29/04/2020 15:46:59

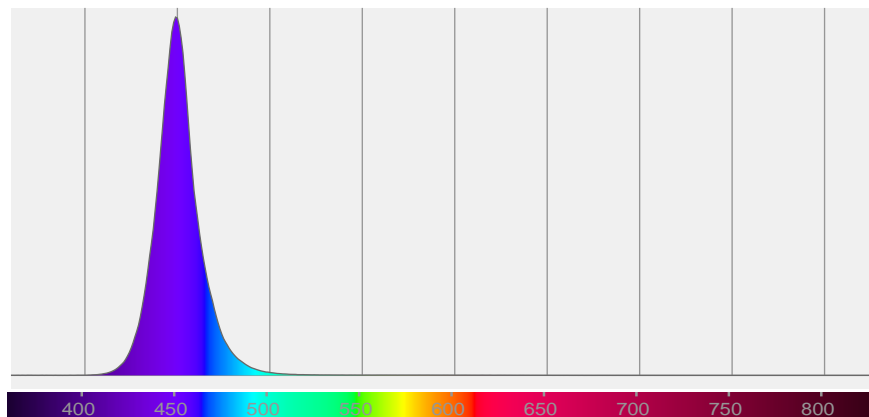


Beam angle 50%: 11,5°

Field angle 10%: 19,6°

Cut off angle 2.5%: 27,1°

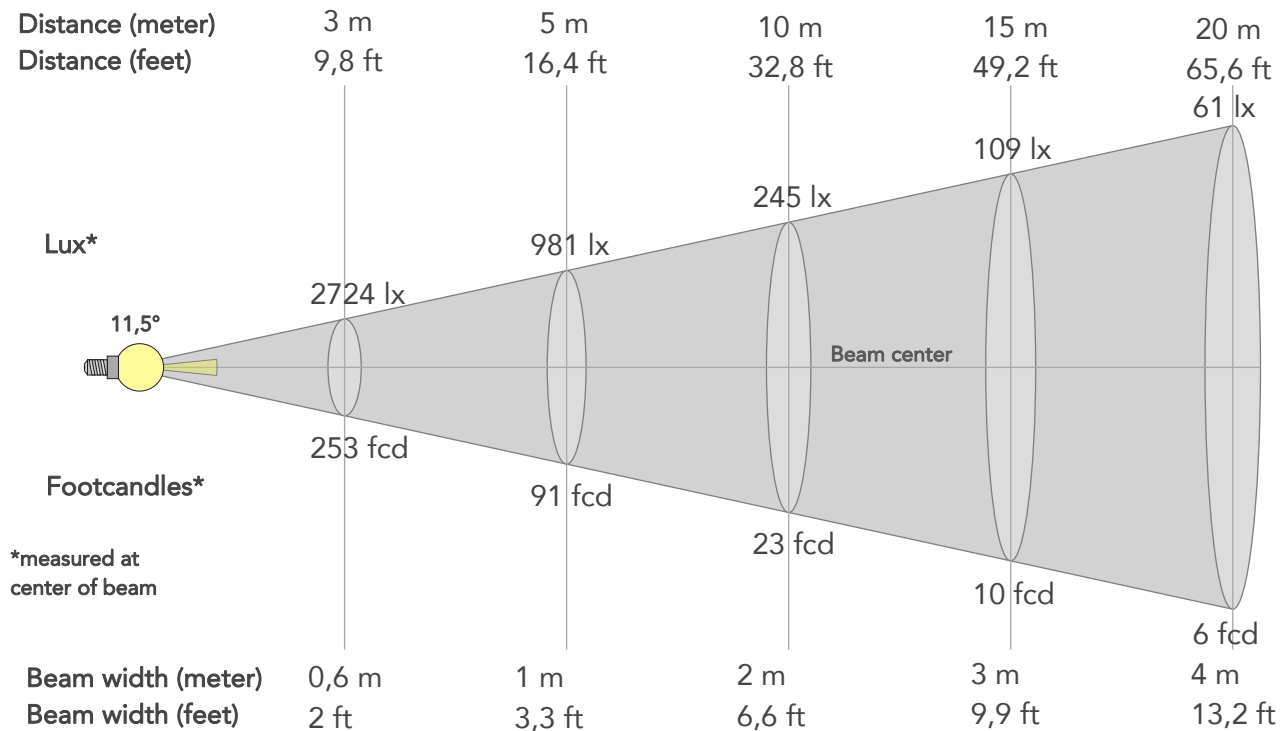
Spectra



# BEAM DETAILS



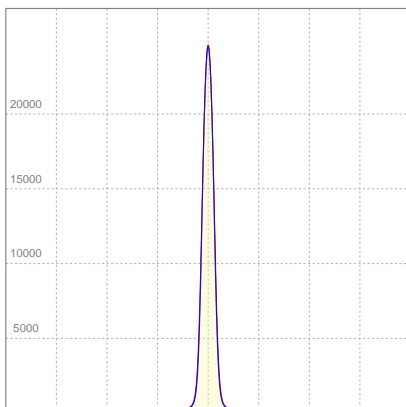
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
11,5°	19,6°	27,1°	99,2%	97,2%



## 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	24515lx	6129lx	2724lx	1532lx	981lx	436lx	245lx	109lx	61lx	39lx	27lx	15lx	10lx
Footcand.	2278fcd	569fcd	253fcd	142fcd	91fcd	40fcd	23fcd	10fcd	6fcd	4fcd	3fcd	1fcd	1fcd
Beam wid.	0,2m	0,4m	0,6m	0,8m	1m	1,5m	2m	3m	4m	5m	6m	8,1m	10,1m
Beam wid.	0,7ft	1,3ft	2ft	2,6ft	3,3ft	5ft	6,6ft	9,9ft	13,2ft	16,5ft	19,8ft	26,4ft	33ft

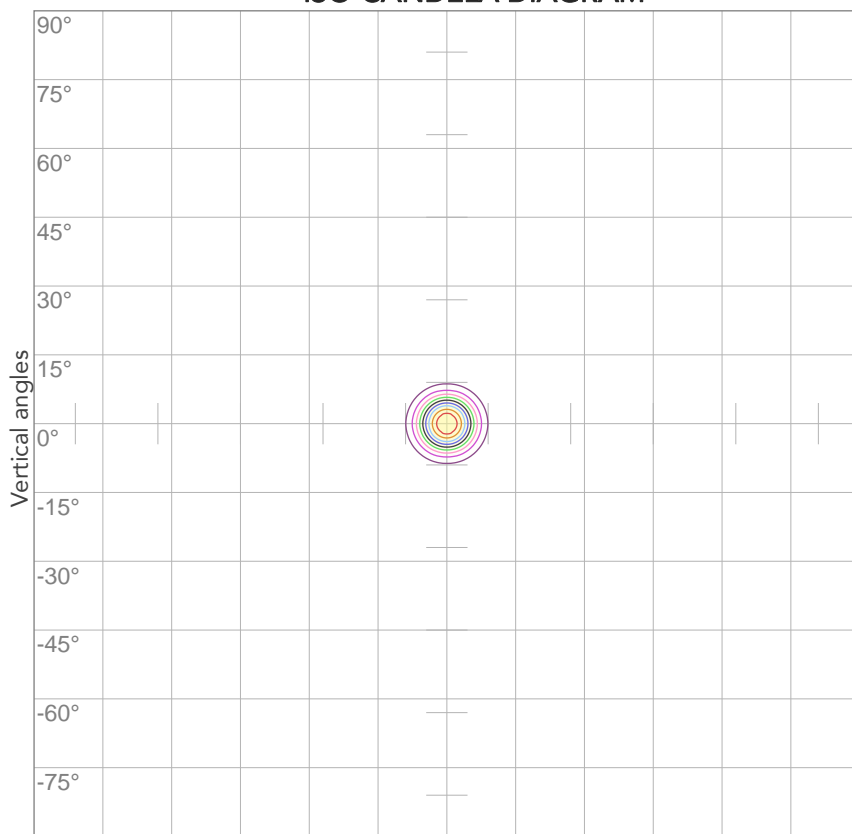
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,672A	118,5W	11lm/W
Power FC			
0,78			

## ISO CANDELA DIAGRAM



Horizontal angles

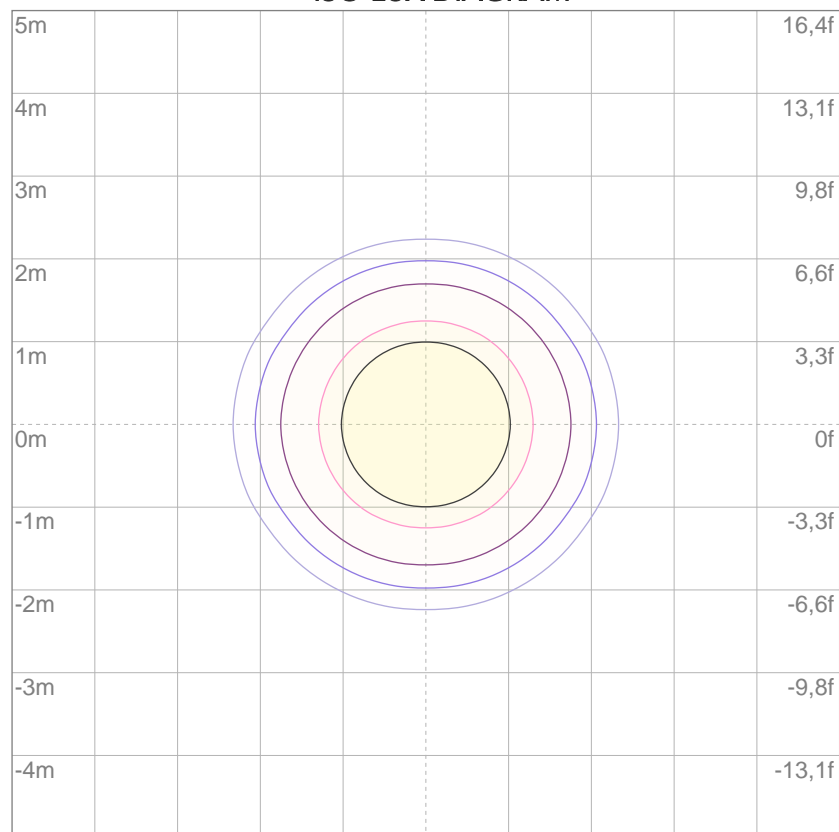
10%	2452 cd
20%	4903 cd
30%	7355 cd
40%	9806 cd
50%	12258 cd
60%	14709 cd
70%	17161 cd
80%	19612 cd

### Conditions:

Number of c-planes: 4

Candela at center: 24515 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	7,35 lx
5%	12,3 lx
10%	24,5 lx
30%	73,5 lx
50%	123 lx

### Conditions:

Number of c-planes: 4

Lux at center: 245 lx

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



Total lumen output:

1827 lm

Peak candela output:

4450 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°+f60°x1°

Target:

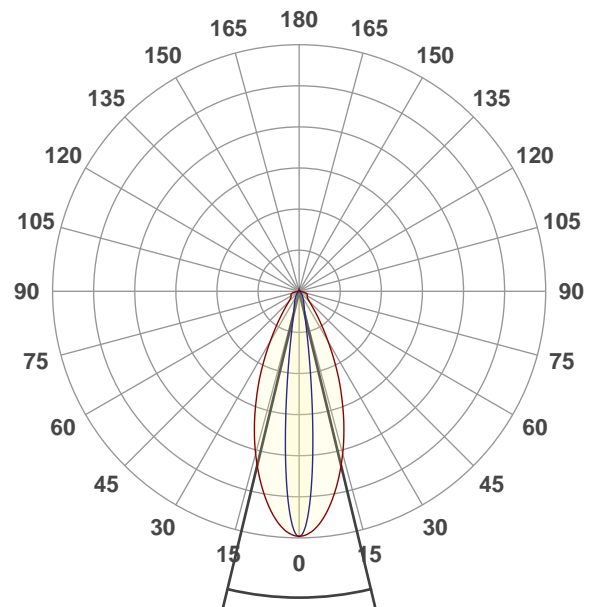
Blue

Operator:

Paolo Carvone

Date and time:

03/06/2020 15:49:27

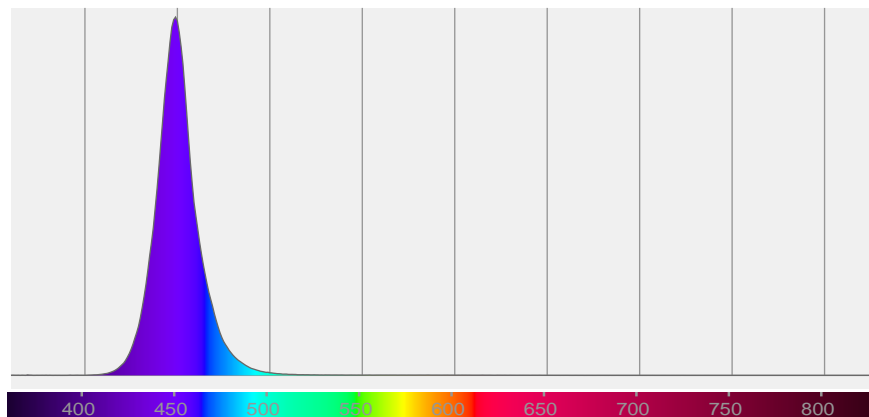


Beam angle 50%: 27,1°

Field angle 10%: 52,2°

Cut off angle 2.5%: 109,7°

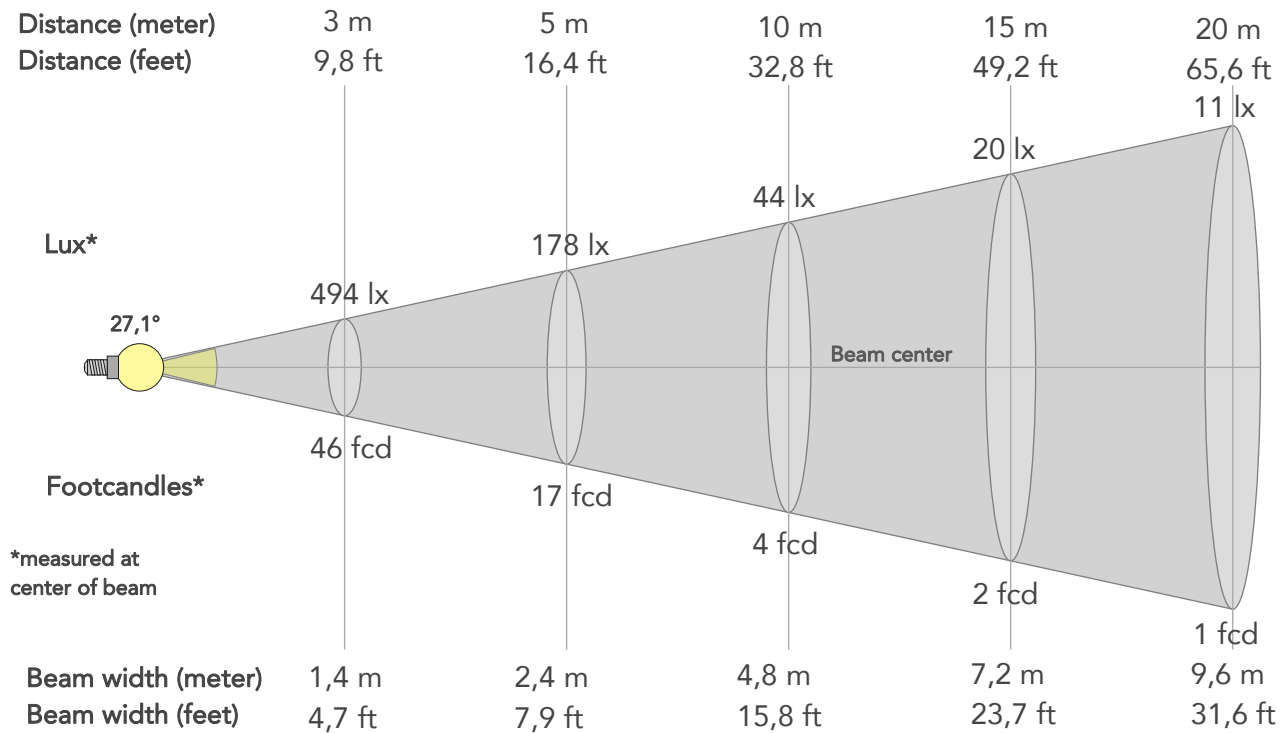
Spectra



# BEAM DETAILS



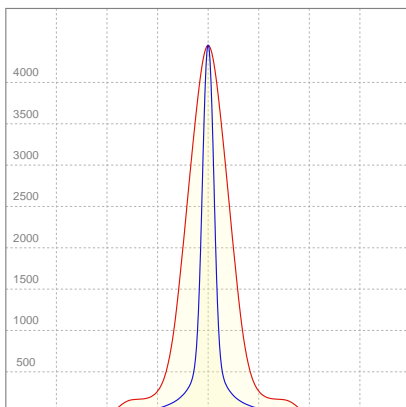
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27,1°	52,2°	109,7°	90,6%	82,3%



## 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	4446lx	1111lx	494lx	278lx	178lx	79lx	44lx	20lx	11lx	7lx	5lx	3lx	2lx
Footcand.	413fcd	103fcd	46fcd	26fcd	17fcd	7fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,4m	1,9m	2,4m	3,6m	4,8m	7,2m	9,6m	12m	14,4m	19,3m	24,1m
Beam wid.	1,6ft	3,2ft	4,7ft	6,3ft	7,9ft	11,8ft	15,8ft	23,7ft	31,6ft	39,5ft	47,4ft	63,2ft	79ft

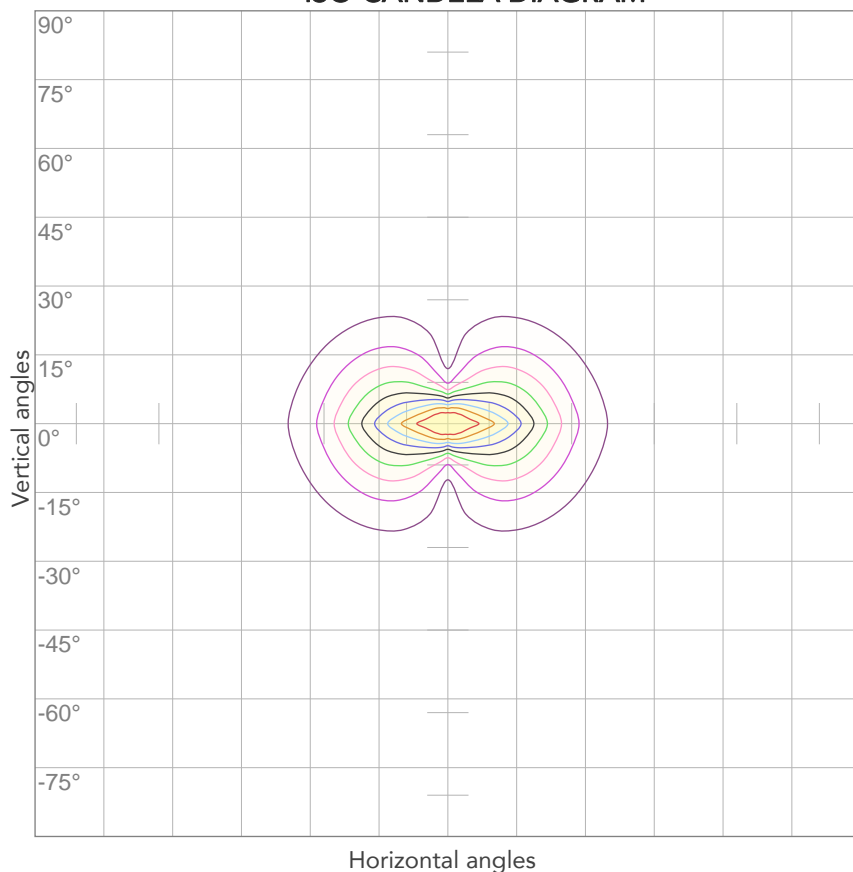
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,681A	120,2W	15lm/W
Power FC			
0,78			

## ISO CANDELA DIAGRAM



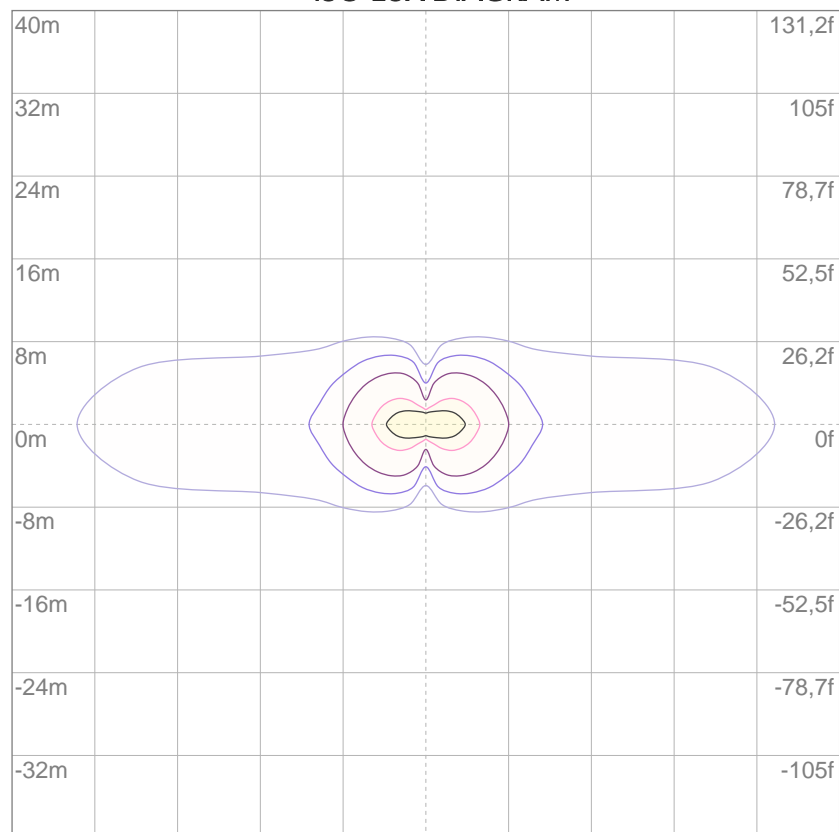
10%	445 cd
20%	889 cd
30%	1334 cd
40%	1778 cd
50%	2223 cd
60%	2667 cd
70%	3112 cd
80%	3557 cd

### Conditions:

Number of c-planes: 4

Candela at center: 4446 cd

## ISO LUX DIAGRAM



3%	1,33 lx
5%	2,22 lx
10%	4,45 lx
30%	13,3 lx
50%	22,2 lx

### Conditions:

Number of c-planes: 4

Lux at center: 44,5 lx

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



Total lumen output:

1601 lm

Peak candela output:

19527 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASURAMENT CONDITIONS:**

Beam angle:

15°

Target:

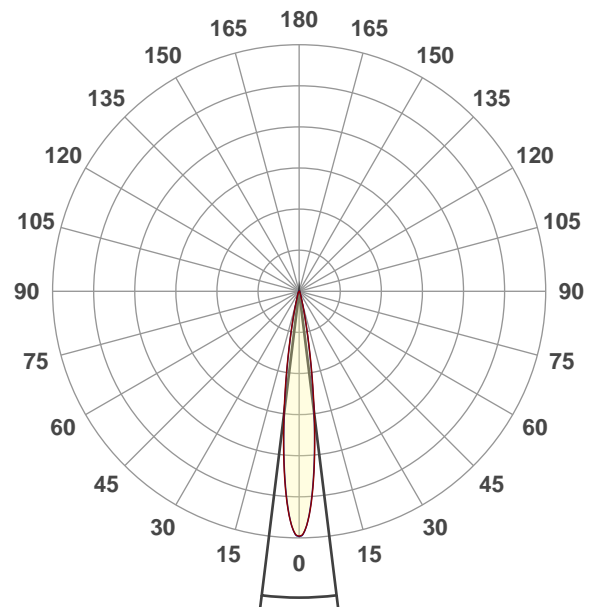
Blue

Operator:

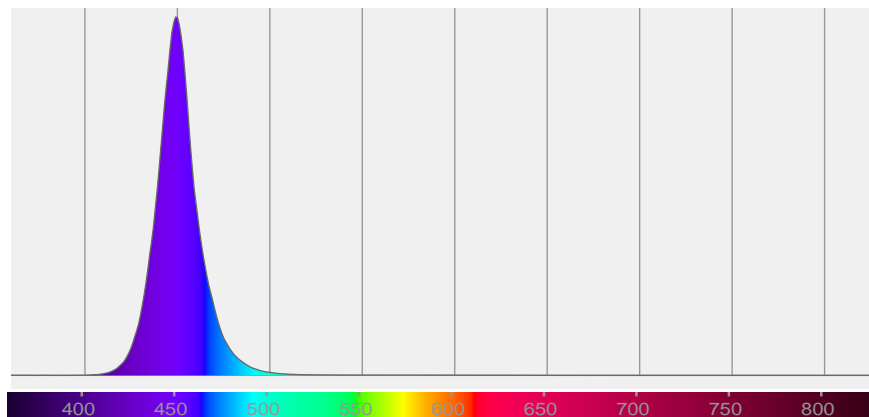
Paolo Carvone

Date and time:

29/04/2020 16:40:21



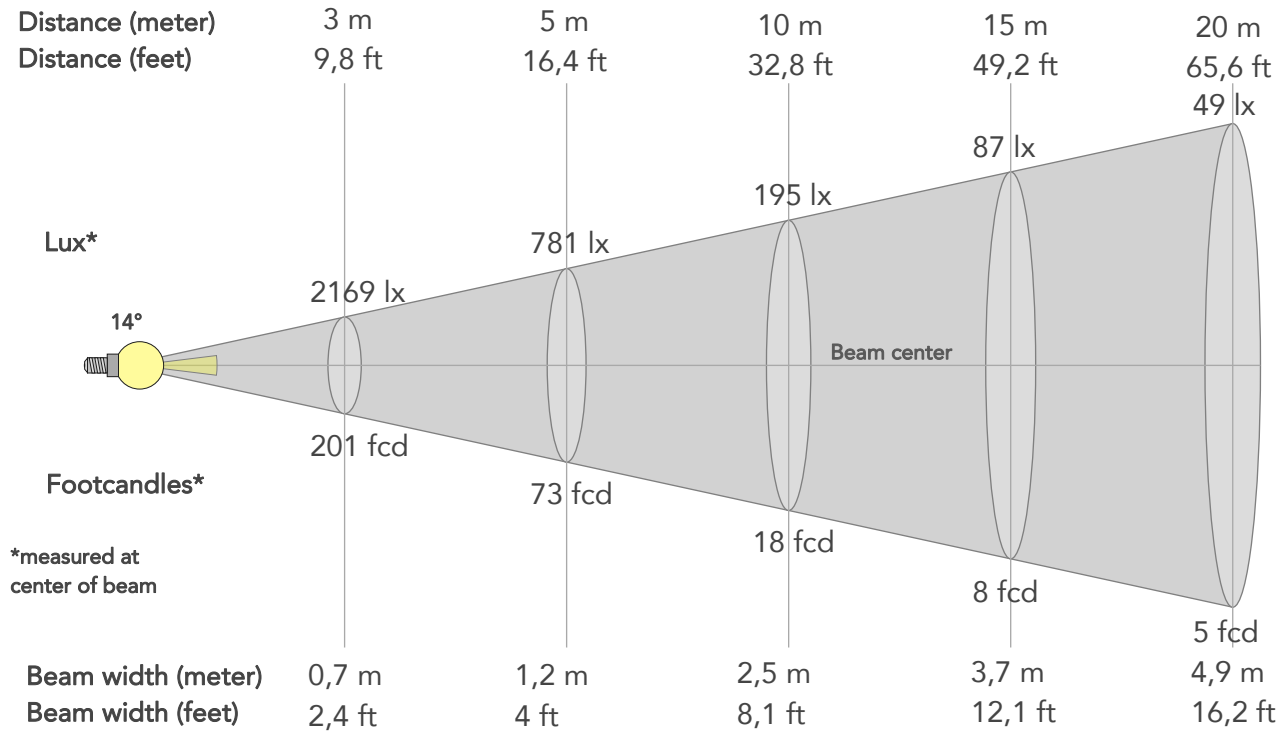
Spectra



# BEAM DETAILS



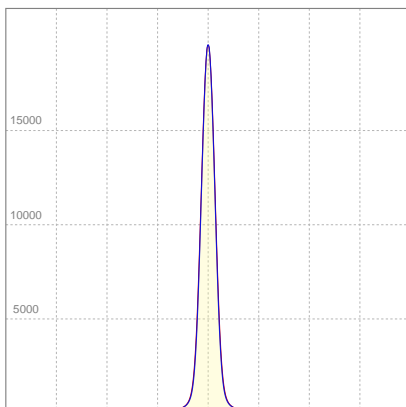
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14°	25,7°	37,3°	99,2%	97,6%



## 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	19517lx	4879lx	2169lx	1220lx	781lx	347lx	195lx	87lx	49lx	31lx	22lx	12lx	8lx
Footcand.	1813fcd	453fcd	201fcd	113fcd	73fcd	32fcd	18fcd	8fcd	5fcd	3fcd	2fcd	1fcd	1fcd
Beam wid.	0,2m	0,5m	0,7m	1m	1,2m	1,8m	2,5m	3,7m	4,9m	6,2m	7,4m	9,9m	12,3m
Beam wid.	0,8ft	1,6ft	2,4ft	3,2ft	4ft	6,1ft	8,1ft	12,1ft	16,2ft	20,2ft	24,2ft	32,3ft	40,4ft

## LINEAR DISTRIBUTION DIAGRAM



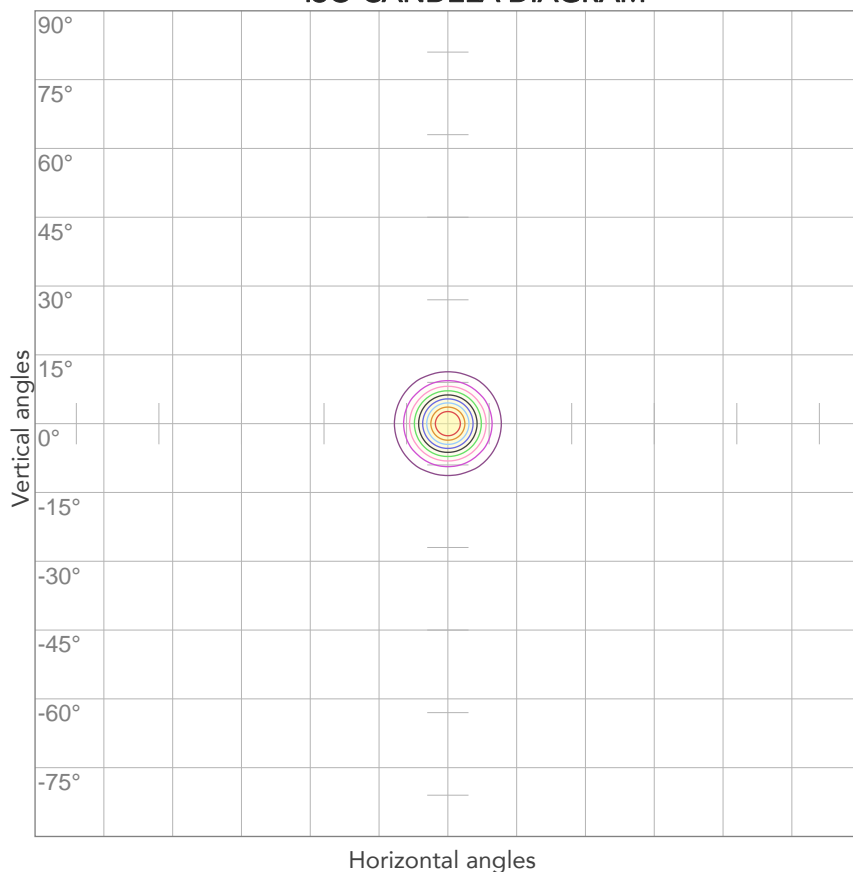
## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,673A	118,5W	14lm/W

Power FC
0,78



## ISO CANDELA DIAGRAM



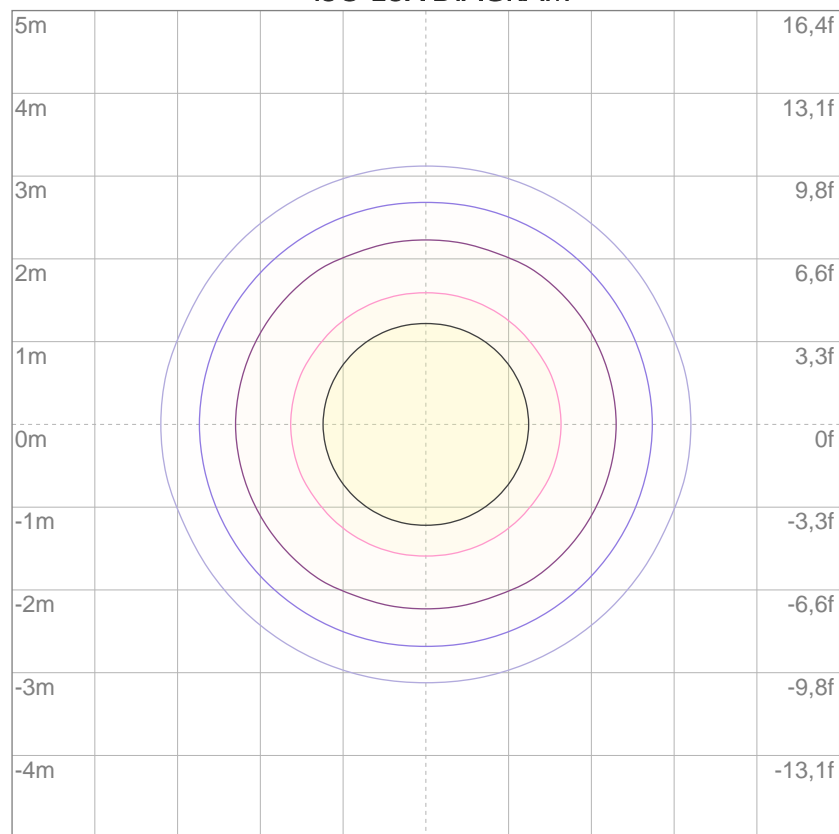
10%	1952 cd
20%	3903 cd
30%	5855 cd
40%	7807 cd
50%	9759 cd
60%	11710 cd
70%	13662 cd
80%	15614 cd

### Conditions:

Number of c-planes: 4

Candela at center: 19517 cd

## ISO LUX DIAGRAM



3%	5,86 lx
5%	9,76 lx
10%	19,5 lx
30%	58,6 lx
50%	97,6 lx

### Conditions:

Number of c-planes: 4

Lux at center: 195 lx

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



Total lumen output:

1461 lm

Peak candela output:

8225 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

25°

Target:

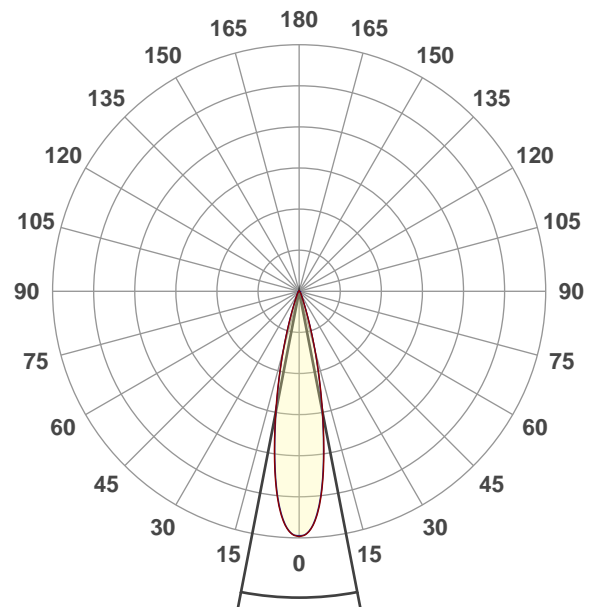
Blue

Operator:

Paolo Carvone

Date and time:

29/04/2020 14:58:59

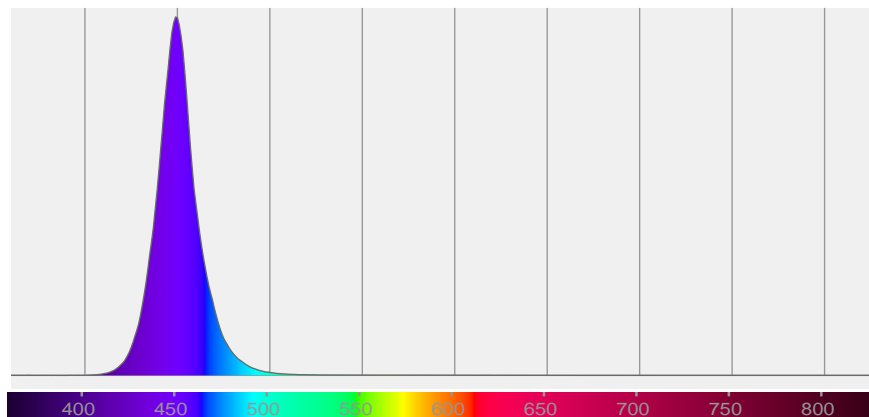


Beam angle 50%: 21,9°

Field angle 10%: 37,8°

Cut off angle 2.5%: 53,5°

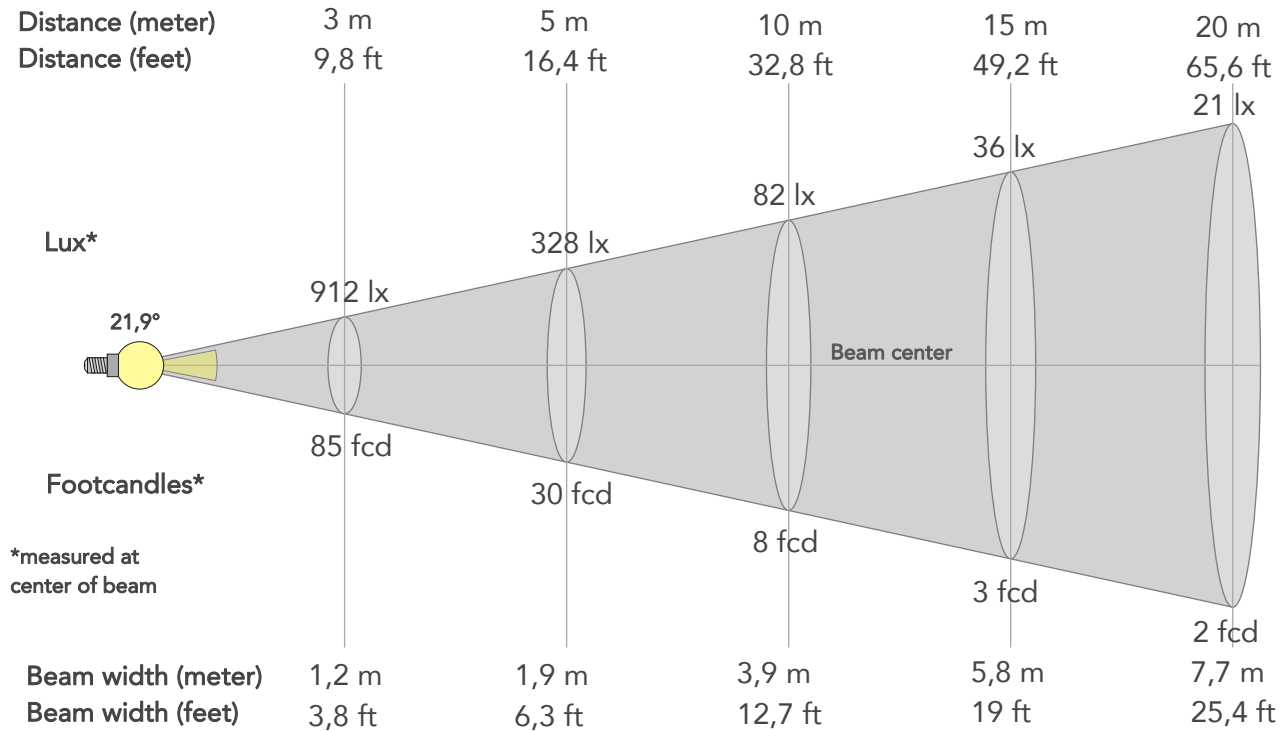
Spectra



# BEAM DETAILS



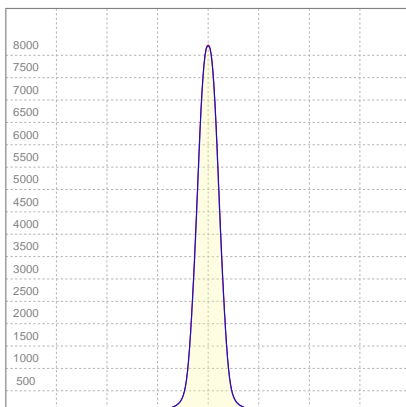
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
21,9°	37,8°	53,5°	98,8%	96,2%



## 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	8207lx	2052lx	912lx	513lx	328lx	146lx	82lx	36lx	21lx	13lx	9lx	5lx	3lx
Footcand.	762fcd	191fcd	85fcd	48fcd	30fcd	14fcd	8fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,4m	0,8m	1,2m	1,5m	1,9m	2,9m	3,9m	5,8m	7,7m	9,7m	11,6m	15,5m	19,3m
Beam wid.	1,3ft	2,6ft	3,8ft	5,1ft	6,3ft	9,5ft	12,7ft	19ft	25,4ft	31,7ft	38ft	50,7ft	63,4ft

## LINEAR DISTRIBUTION DIAGRAM

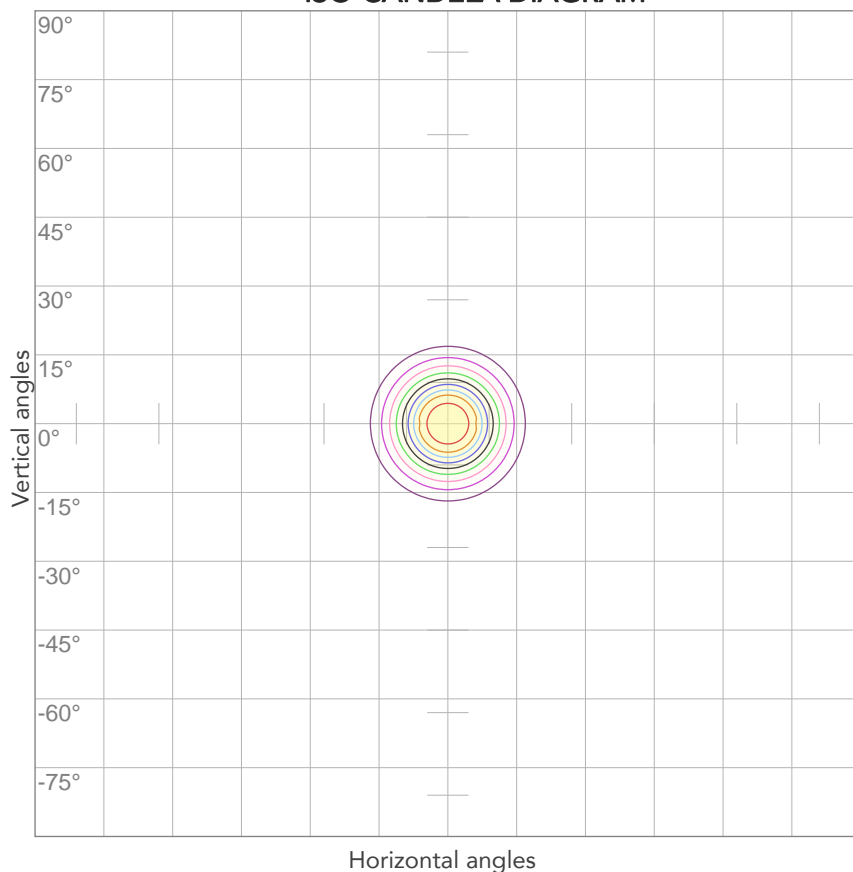


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,673A	118,4W	12lm/W

Power FC
0,78

## ISO CANDELA DIAGRAM



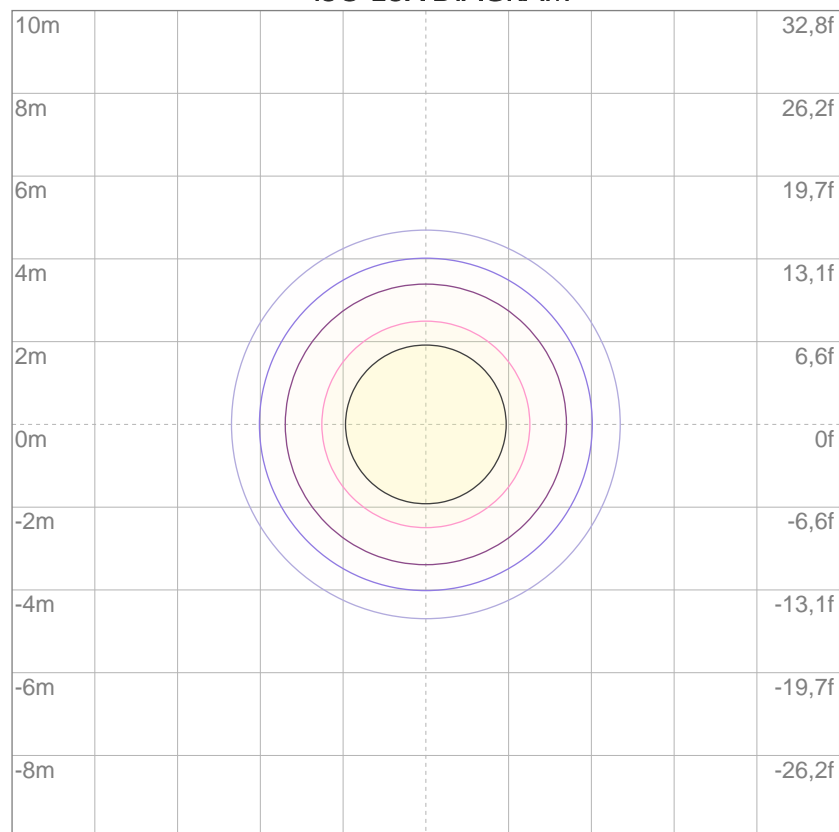
10%	821 cd
20%	1641 cd
30%	2462 cd
40%	3283 cd
50%	4104 cd
60%	4924 cd
70%	5745 cd
80%	6566 cd

### Conditions:

Number of c-planes: 4

Candela at center: 8207 cd

## ISO LUX DIAGRAM



3%	2,46 lx
5%	4,10 lx
10%	8,21 lx
30%	24,6 lx
50%	41,0 lx

### Conditions:

Number of c-planes: 4

Lux at center: 82,1 lx

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



Total lumen output:

1255 lm

Peak candela output:

1870 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

45°

Target:

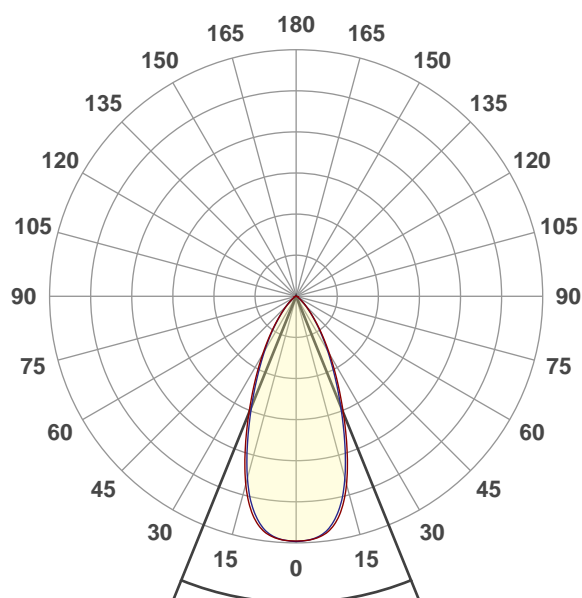
Blue

Operator:

Paolo Carvone

Date and time:

29/04/2020 13:23:51

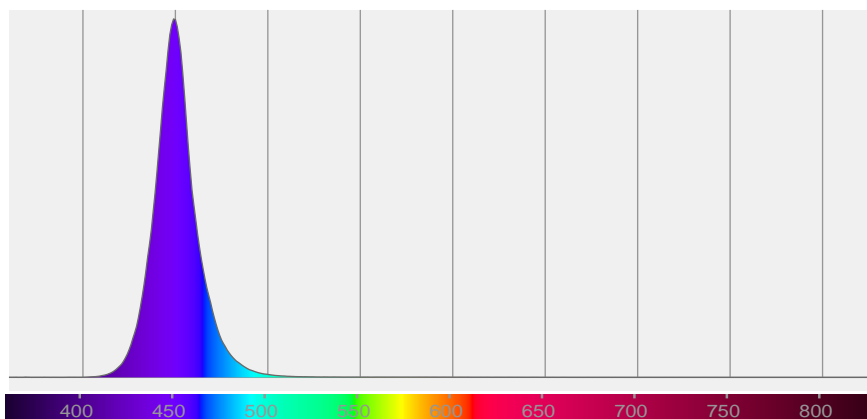


Beam angle 50%: 44,1°

Field angle 10%: 79,9°

Cut off angle 2.5%: 103,6°

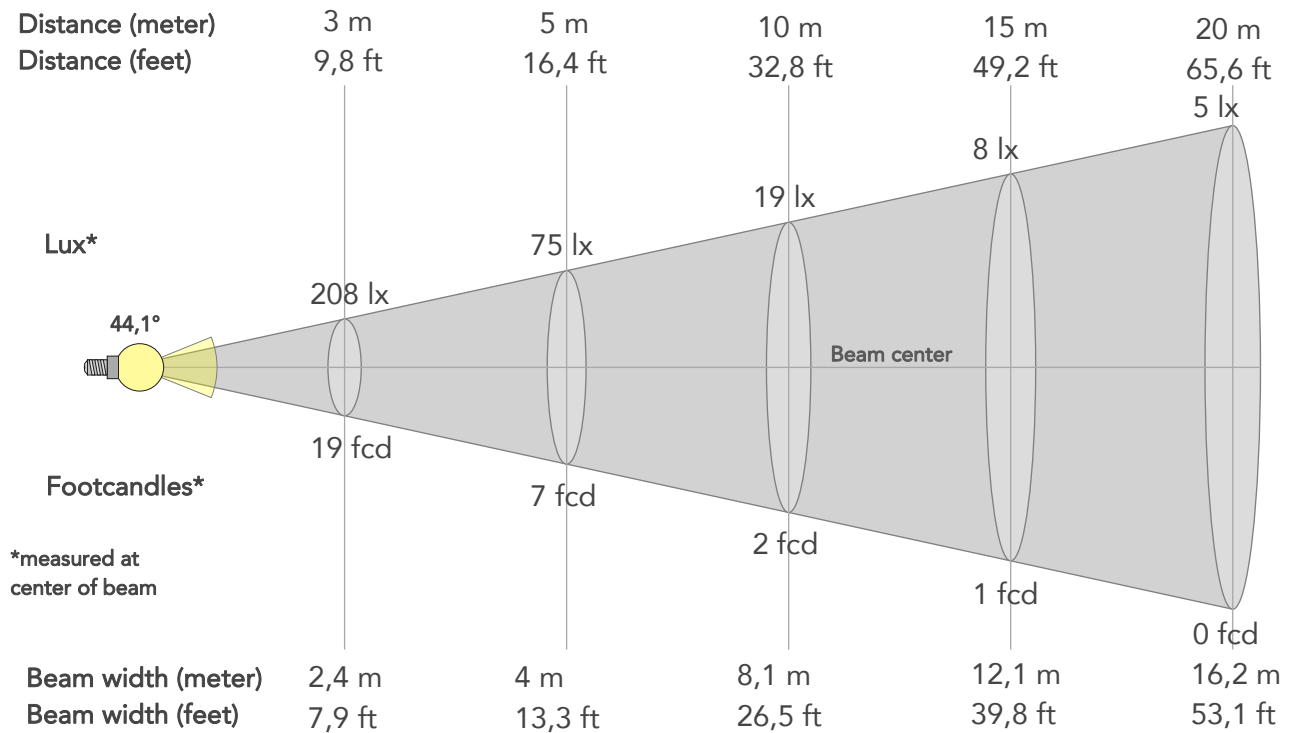
Spectra



# BEAM DETAILS



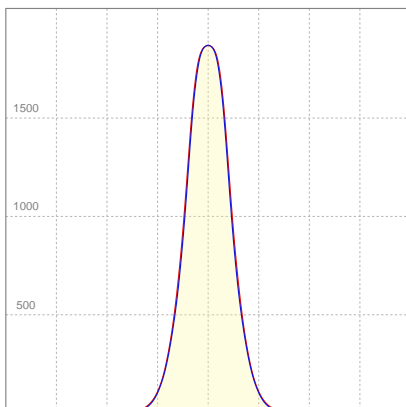
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
44,1°	79,9°	103,6°	97,8%	92,9%



## 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	1869lx	467lx	208lx	117lx	75lx	33lx	19lx	8lx	5lx	3lx	2lx	1lx	1lx
Footcand.	174fcd	43fcd	19fcd	11fcd	7fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,8m	1,6m	2,4m	3,2m	4m	6,1m	8,1m	12,1m	16,2m	20,2m	24,3m	32,4m	40,5m
Beam wid.	2,7ft	5,3ft	7,9ft	10,6ft	13,3ft	19,9ft	26,5ft	39,8ft	53,1ft	66,4ft	79,6ft	106,2ft	132,7ft

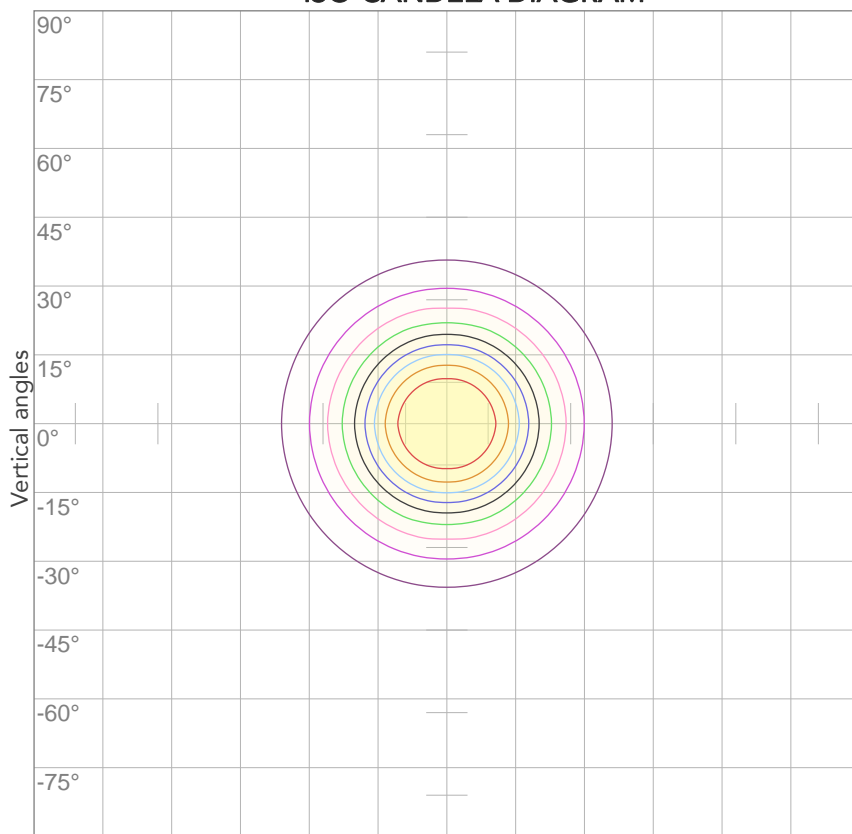
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,673A	118,4W	11lm/W
Power FC			
0,78			

## ISO CANDELA DIAGRAM



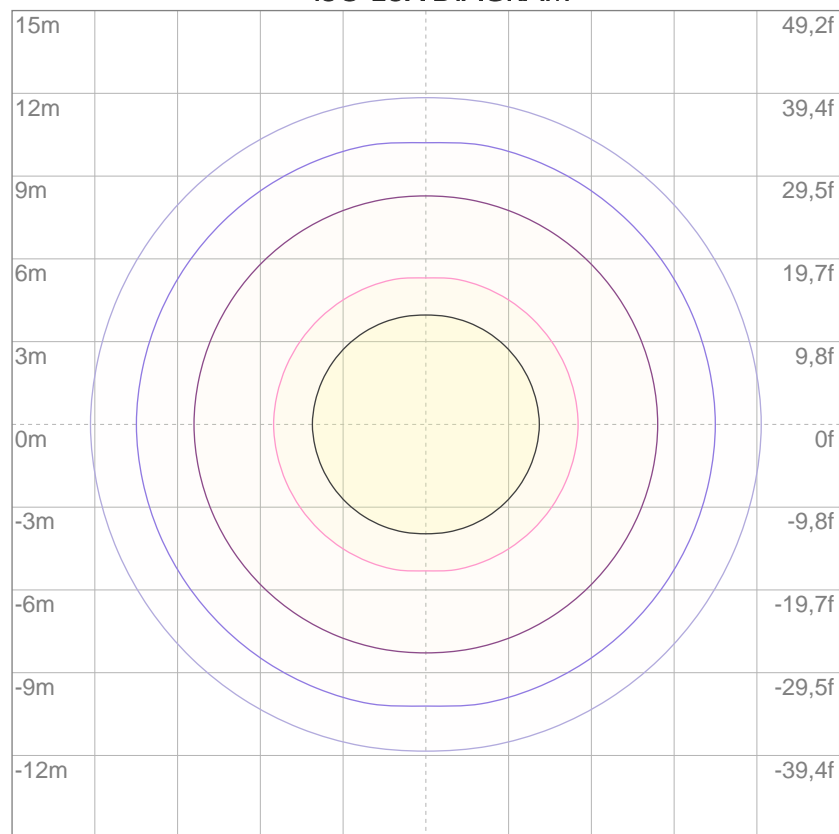
10%	187 cd
20%	374 cd
30%	561 cd
40%	747 cd
50%	934 cd
60%	1121 cd
70%	1308 cd
80%	1495 cd

### Conditions:

Number of c-planes: 4

Candela at center: 1869 cd

## ISO LUX DIAGRAM



3%	0,561 lx
5%	0,934 lx
10%	1,87 lx
30%	5,61 lx
50%	9,34 lx

### Conditions:

Number of c-planes: 4

Lux at center: 18,7 lx

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



Total lumen output:

8301 lm

Peak candela output:

135872 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°

Target:

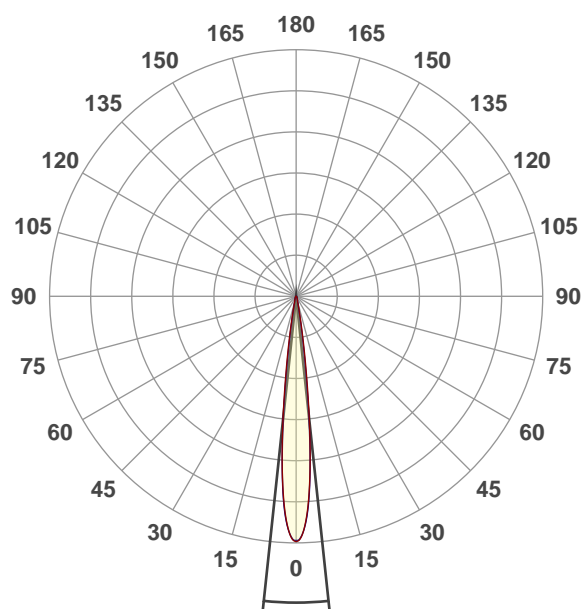
White

Operator:

Paolo Carvone

Date and time:

29/04/2020 15:50:06

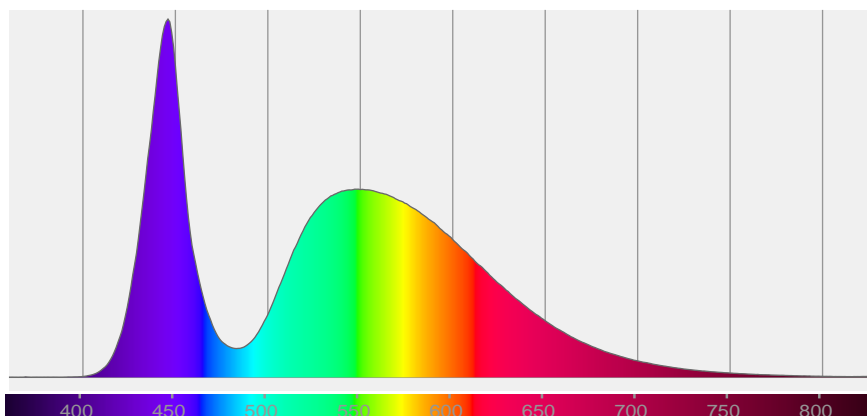


Beam angle 50%: 12,1°

Field angle 10%: 20,4°

Cut off angle 2.5%: 29,4°

**Spectra**

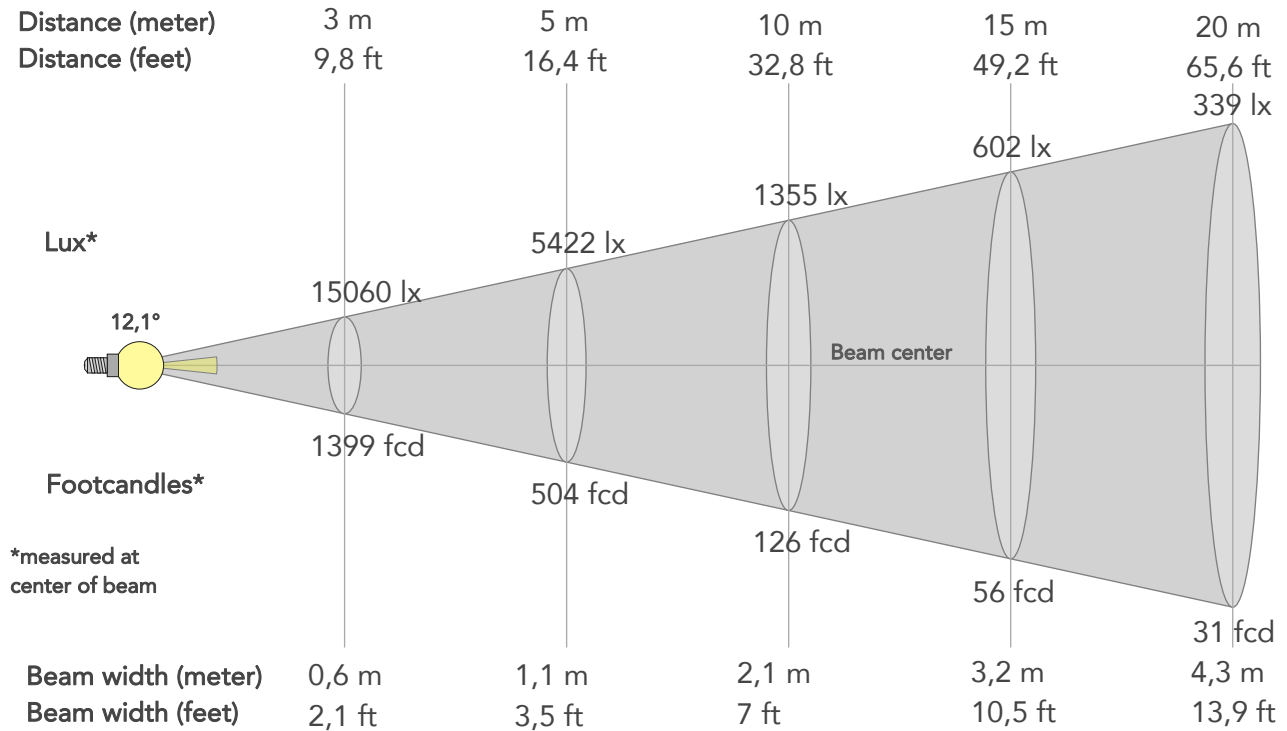




# BEAM DETAILS



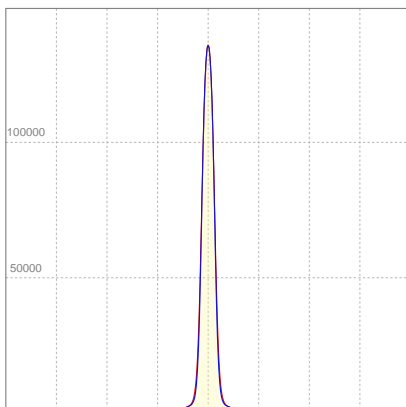
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
12,1°	20,4°	29,4°	99,0%	96,5%



## 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	135544lx	33886lx	15060lx	8472lx	5422lx	2410lx	1355lx	602lx	339lx	217lx	151lx	85lx	54lx
Footcand.	12592fcd	3148fcd	1399fcd	787fcd	504fcd	224fcd	126fcd	56fcd	31fcd	20fcd	14fcd	8fcd	5fcd
Beam wid.	0,2m	0,4m	0,6m	0,9m	1,1m	1,6m	2,1m	3,2m	4,3m	5,3m	6,4m	8,5m	10,6m
Beam wid.	0,7ft	1,4ft	2,1ft	2,8ft	3,5ft	5,2ft	7ft	10,5ft	13,9ft	17,4ft	20,9ft	27,9ft	34,9ft

## LINEAR DISTRIBUTION DIAGRAM

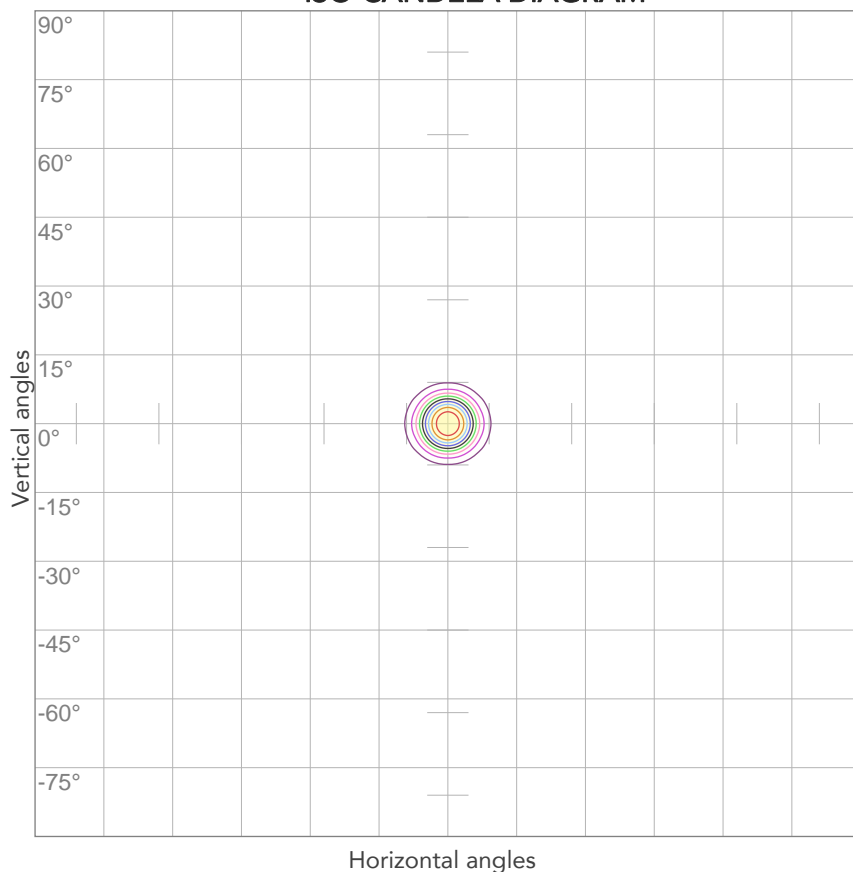


## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,838A	160,2W	52lm/W

Power FC
0,85

## ISO CANDELA DIAGRAM



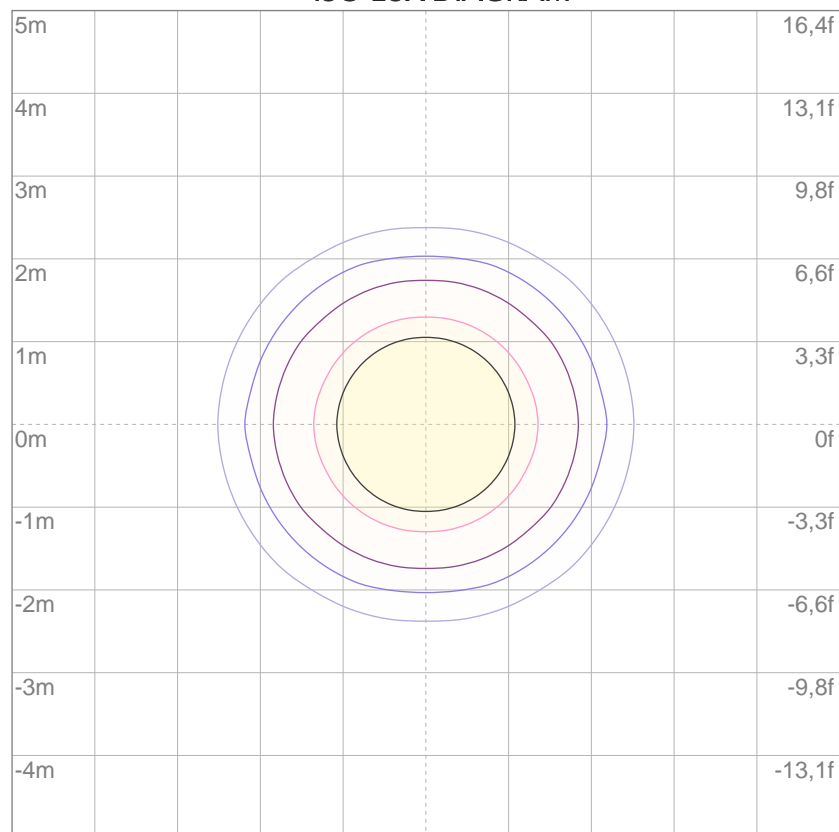
10%	13554 cd
20%	27109 cd
30%	40663 cd
40%	54218 cd
50%	67772 cd
60%	81326 cd
70%	94881 cd
80%	108435 cd

### Conditions:

Number of c-planes: 4

Candela at center: 135544 cd

## ISO LUX DIAGRAM



3%	40,7 lx
5%	67,8 lx
10%	136 lx
30%	407 lx
50%	678 lx

### Conditions:

Number of c-planes: 4

Lux at center: 1355 lx

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



Total lumen output:

11279 lm

Peak candela output:

25739 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

10°+f60°x1°

Target:

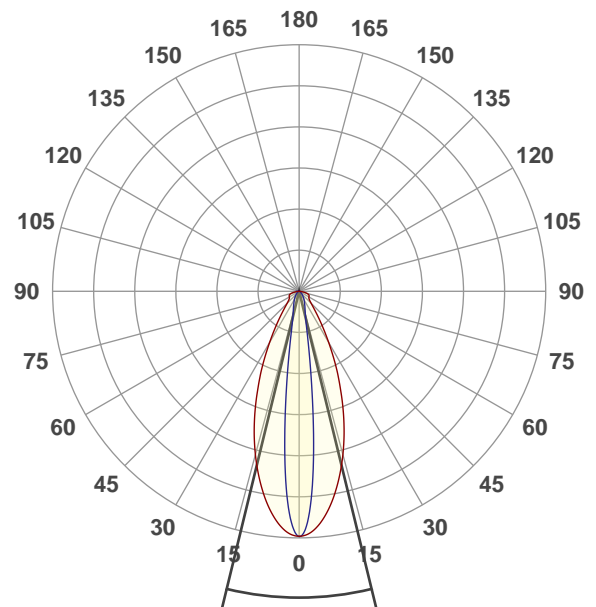
White

Operator:

Paolo Carvone

Date and time:

03/06/2020 15:52:04

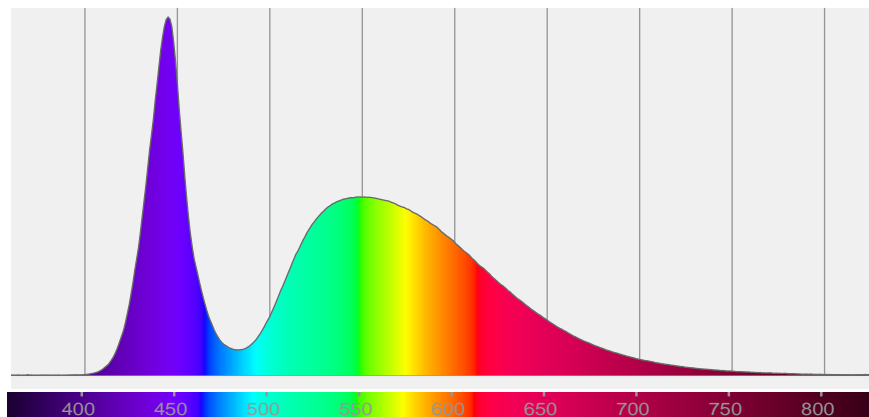


Beam angle 50%: 27,4°

Field angle 10%: 54,3°

Cut off angle 2.5%: 115,9°

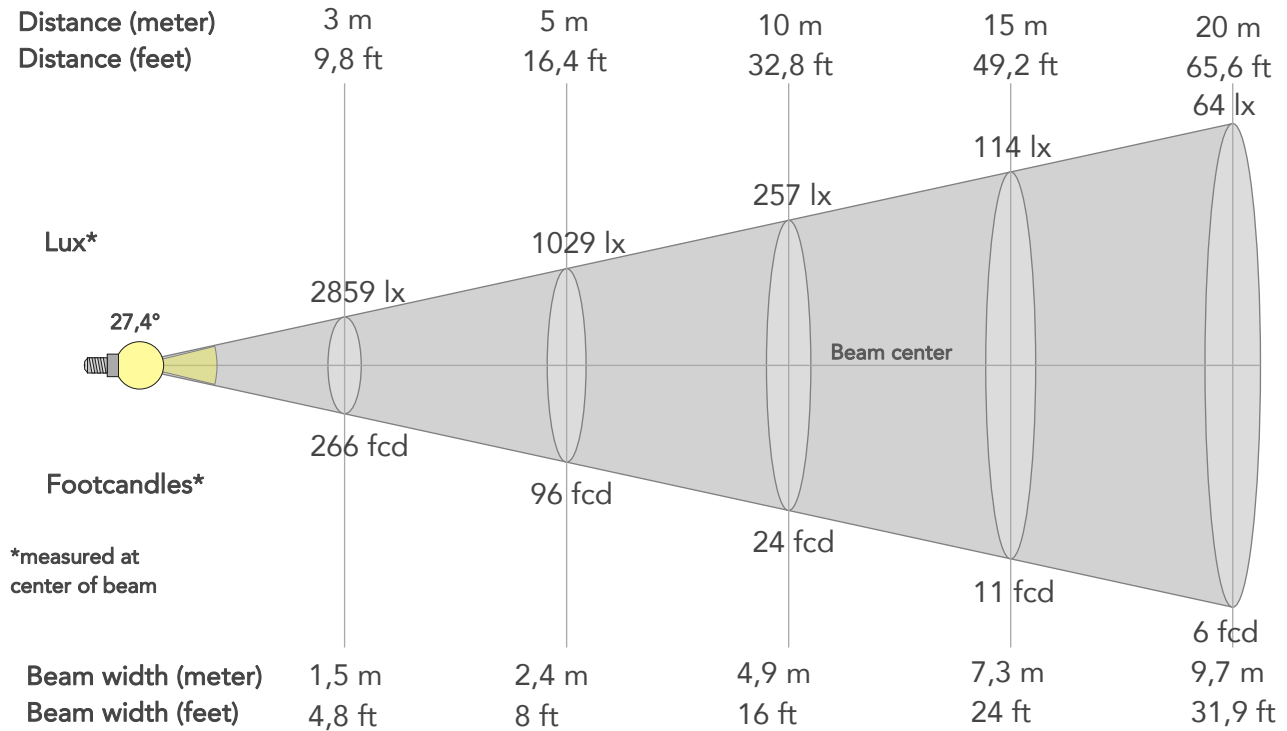
**Spectra**



# BEAM DETAILS



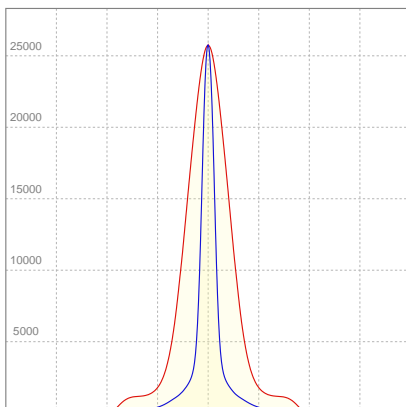
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27,4°	54,3°	115,9°	89,4%	80,0%



## 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	25728lx	6432lx	2859lx	1608lx	1029lx	457lx	257lx	114lx	64lx	41lx	29lx	16lx	10lx
Footcand.	2390fcd	598fcd	266fcd	149fcd	96fcd	42fcd	24fcd	11fcd	6fcd	4fcd	3fcd	1fcd	1fcd
Beam wid.	0,5m	1m	1,5m	1,9m	2,4m	3,7m	4,9m	7,3m	9,7m	12,2m	14,6m	19,5m	24,3m
Beam wid.	1,6ft	3,2ft	4,8ft	6,4ft	8ft	12ft	16ft	24ft	31,9ft	39,9ft	47,9ft	63,9ft	79,8ft

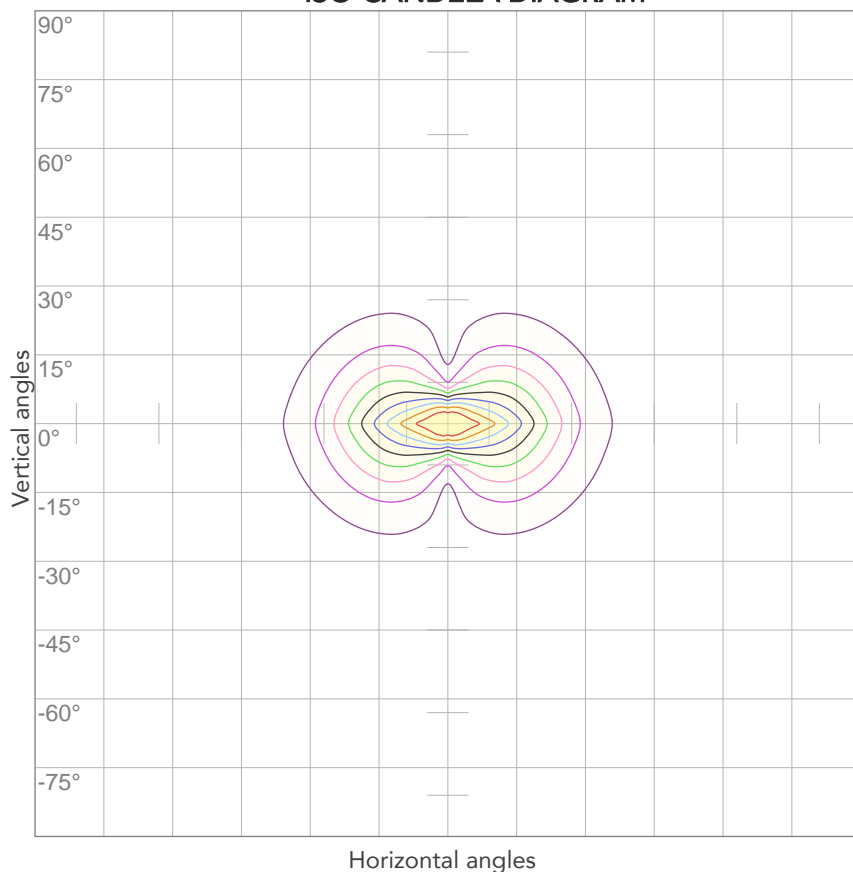
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,848A	162W	70lm/W
Power FC			
0,85			

## ISO CANDELA DIAGRAM



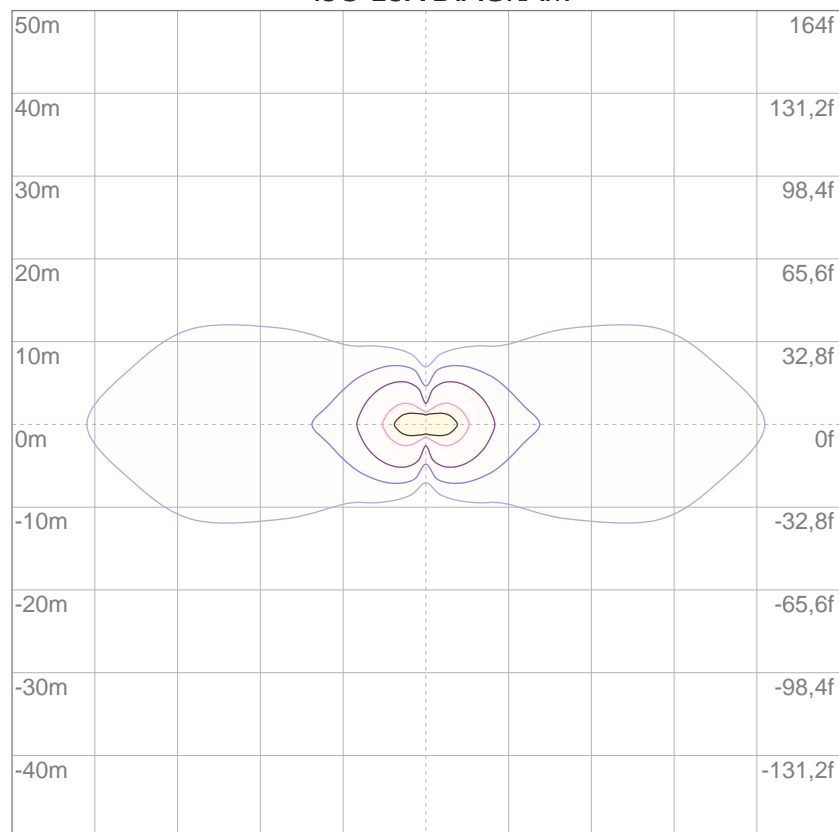
10%	2573 cd
20%	5146 cd
30%	7718 cd
40%	10291 cd
50%	12864 cd
60%	15437 cd
70%	18010 cd
80%	20582 cd

### Conditions:

Number of c-planes: 4

Candela at center: 25728 cd

## ISO LUX DIAGRAM



3%	7,72 lx
5%	12,9 lx
10%	25,7 lx
30%	77,2 lx
50%	129 lx

### Conditions:

Number of c-planes: 4

Lux at center: 257 lx

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



Total lumen output:

10065 lm

Peak candela output:

111948 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

15°

Target:

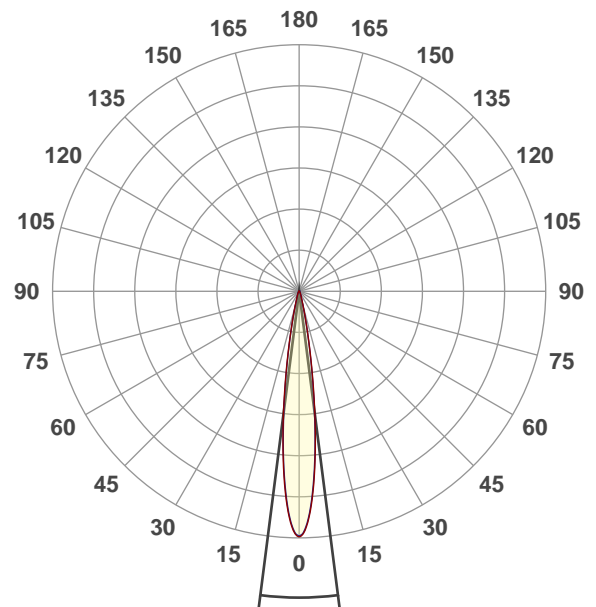
White

Operator:

Paolo Carvone

Date and time:

29/04/2020 16:44:58

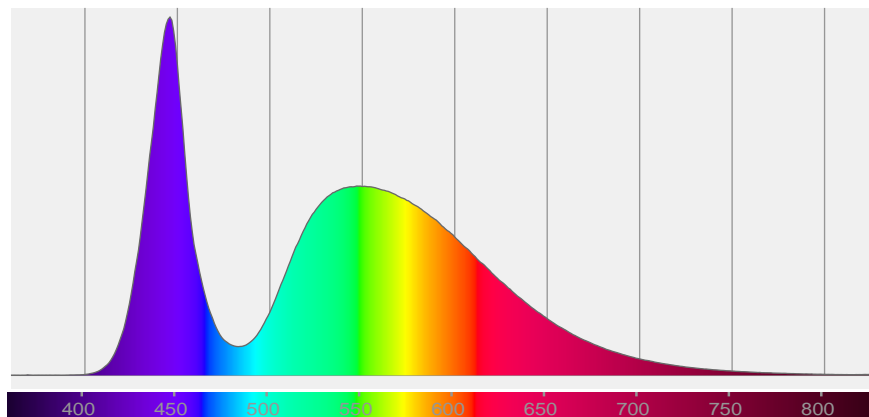


Beam angle 50%: 14,6°

Field angle 10%: 26,6°

Cut off angle 2.5%: 39,8°

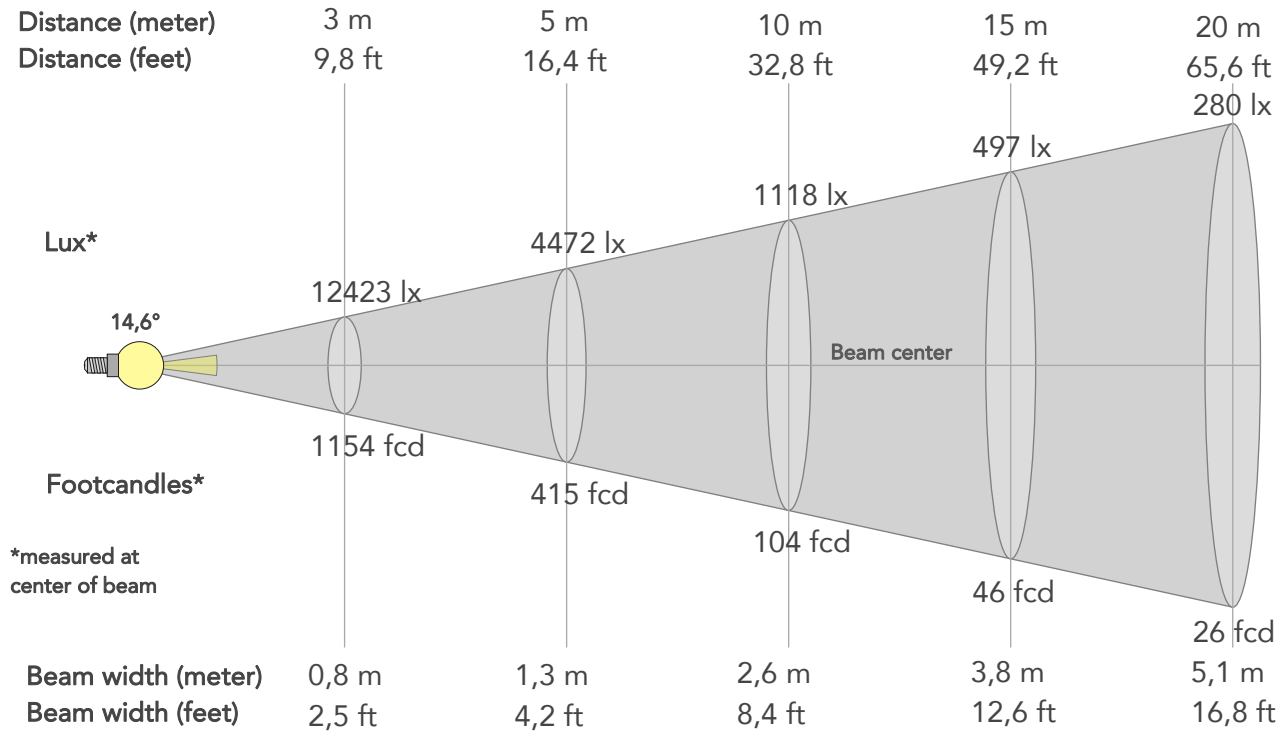
Spectra



# BEAM DETAILS



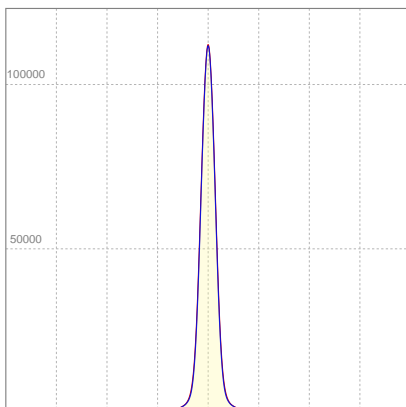
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14,6°	26,6°	39,8°	99,2%	97,2%



## 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	111807lx	27952lx	12423lx	6988lx	4472lx	1988lx	1118lx	497lx	280lx	179lx	124lx	70lx	45lx
Footcand.	10387fcd	2597fcd	1154fcd	649fcd	415fcd	185fcd	104fcd	46fcd	26fcd	17fcd	12fcd	6fcd	4fcd
Beam wid.	0,3m	0,5m	0,8m	1m	1,3m	1,9m	2,6m	3,8m	5,1m	6,4m	7,7m	10,2m	12,8m
Beam wid.	0,8ft	1,7ft	2,5ft	3,3ft	4,2ft	6,3ft	8,4ft	12,6ft	16,8ft	20,9ft	25,1ft	33,5ft	41,9ft

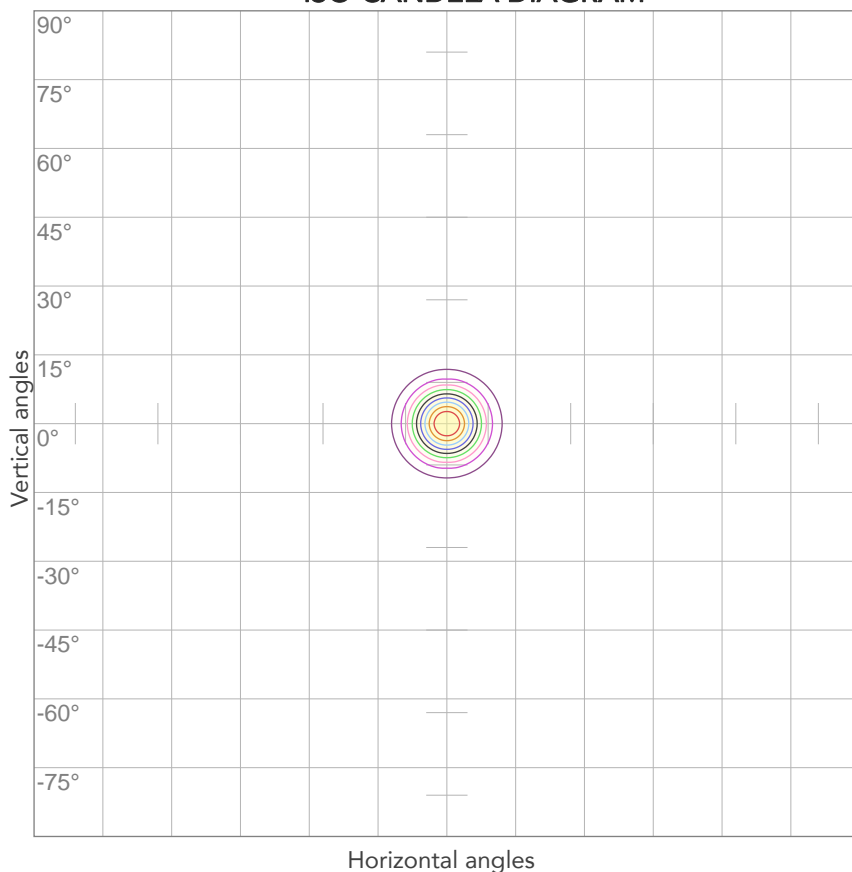
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,839A	160,3W	63lm/W
Power FC			
0,84			

## ISO CANDELA DIAGRAM



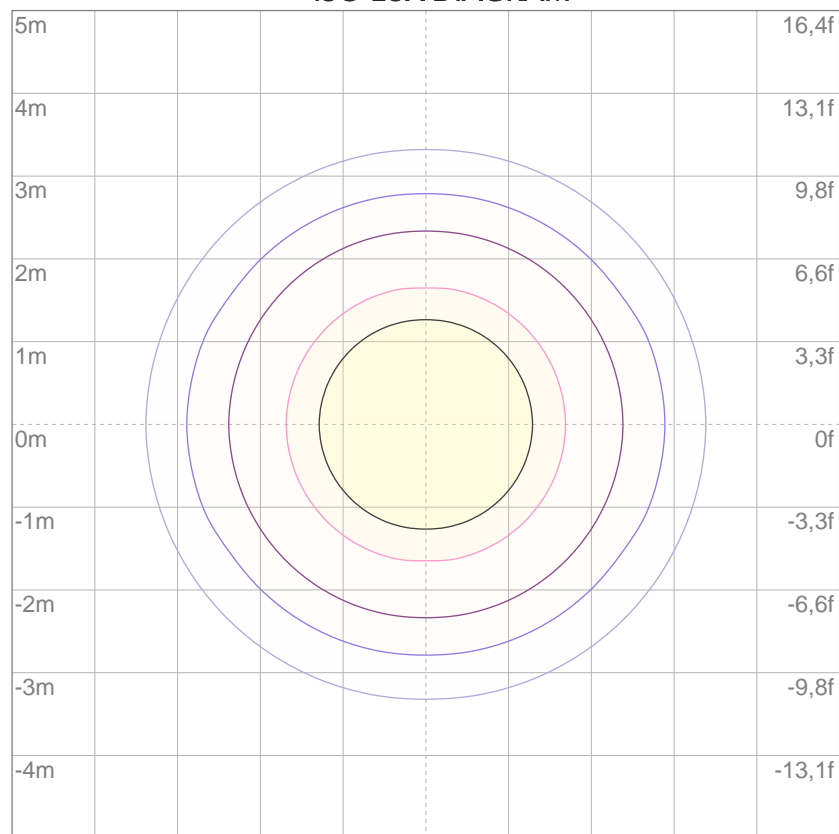
10%	11181 cd
20%	22361 cd
30%	33542 cd
40%	44723 cd
50%	55903 cd
60%	67084 cd
70%	78265 cd
80%	89445 cd

### Conditions:

Number of c-planes: 4

Candela at center: 111807 cd

## ISO LUX DIAGRAM



3%	33,5 lx
5%	55,9 lx
10%	112 lx
30%	335 lx
50%	559 lx

### Conditions:

Number of c-planes: 4

Lux at center: 1118 lx

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





Total lumen output:

9187 lm

Peak candela output:

50318 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

25°

Target:

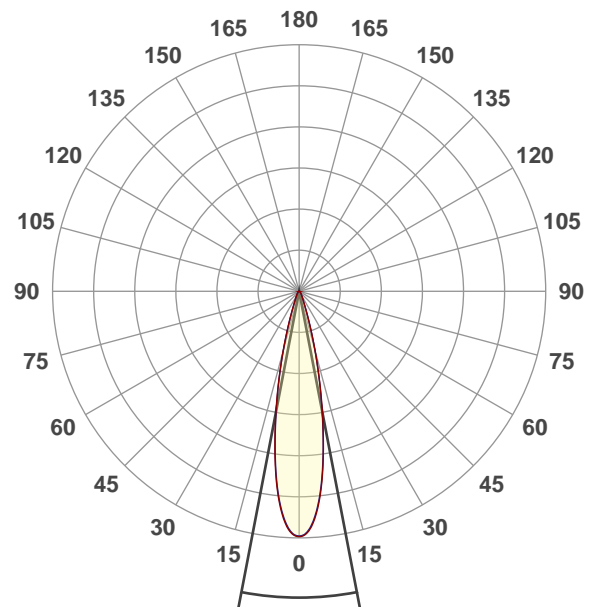
White

Operator:

Paolo Carvone

Date and time:

29/04/2020 15:02:01

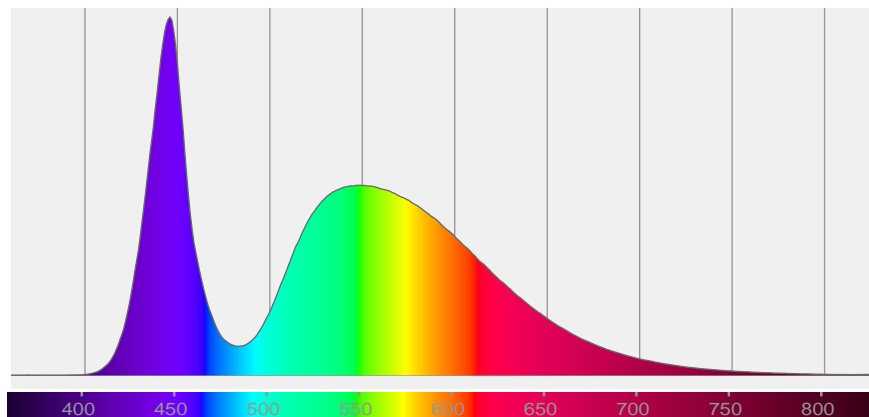


Beam angle 50%: 21,7°

Field angle 10%: 38,3°

Cut off angle 2.5%: 56,7°

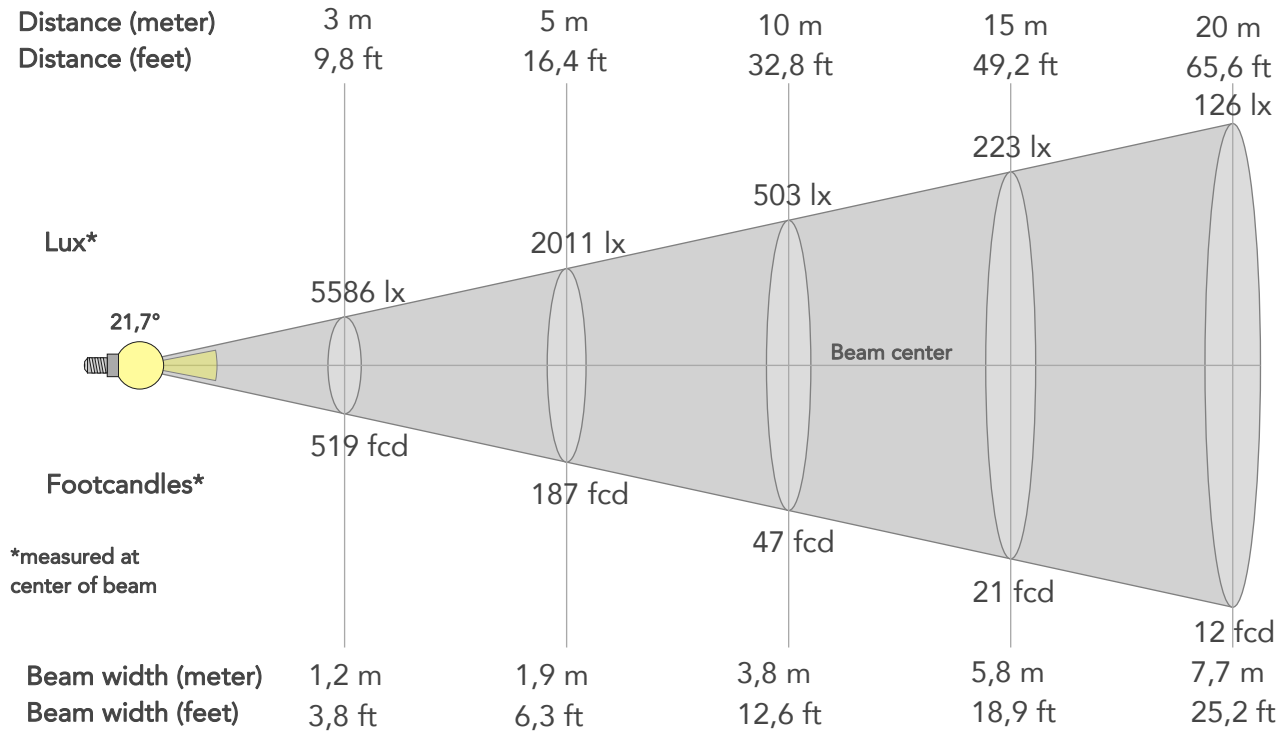
Spectra



# BEAM DETAILS



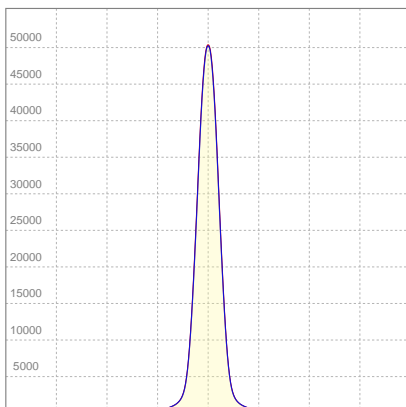
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
21,7°	38,3°	56,7°	98,4%	95,4%



## 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	50270lx	12568lx	5586lx	3142lx	2011lx	894lx	503lx	223lx	126lx	80lx	56lx	31lx	20lx
Footcand.	4670fcd	1168fcd	519fcd	292fcd	187fcd	83fcd	47fcd	21fcd	12fcd	7fcd	5fcd	3fcd	2fcd
Beam wid.	0,4m	0,8m	1,2m	1,5m	1,9m	2,9m	3,8m	5,8m	7,7m	9,6m	11,5m	15,4m	19,2m
Beam wid.	1,3ft	2,5ft	3,8ft	5ft	6,3ft	9,4ft	12,6ft	18,9ft	25,2ft	31,5ft	37,8ft	50,4ft	62,9ft

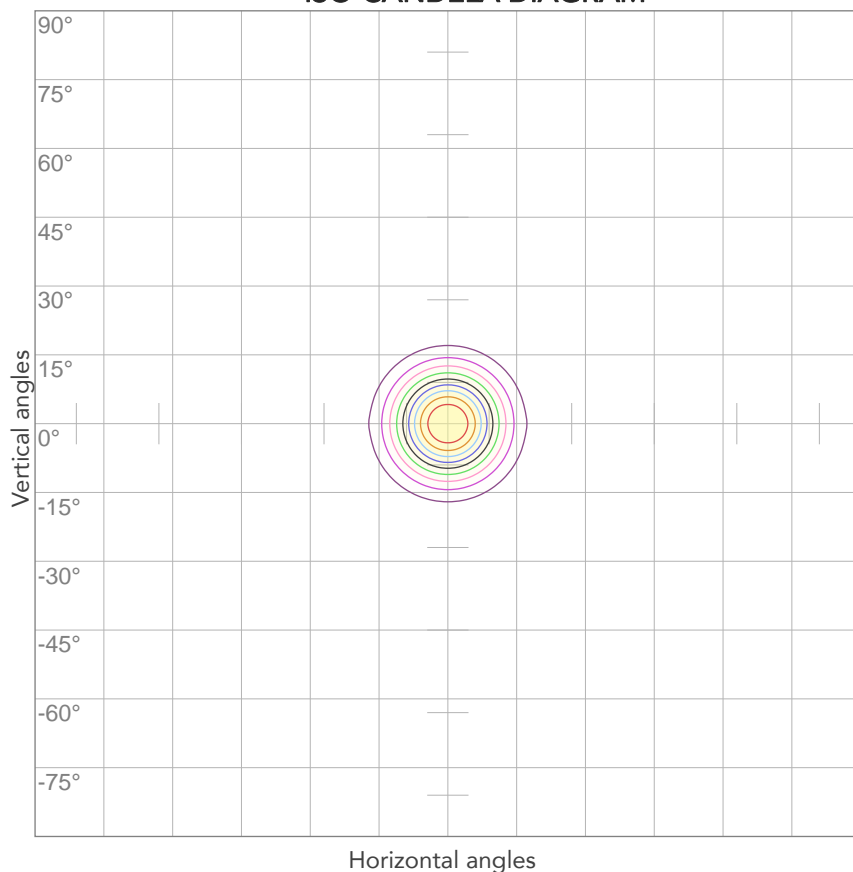
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
225V	0,842A	160,1W	57lm/W
Power FC			
0,85			

## ISO CANDELA DIAGRAM



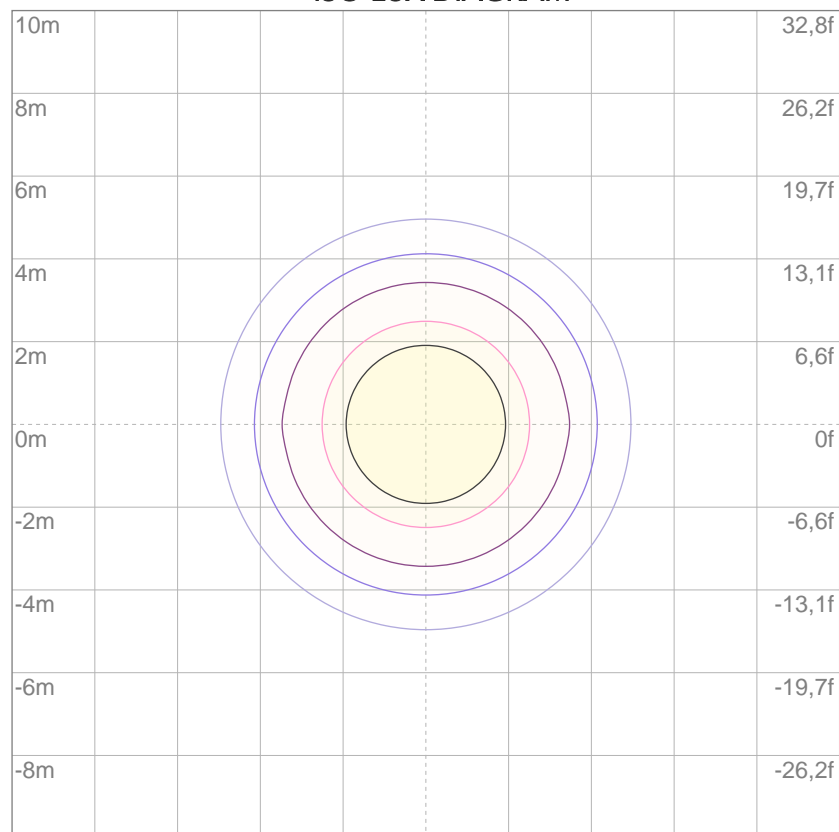
10%	5027 cd
20%	10054 cd
30%	15081 cd
40%	20108 cd
50%	25135 cd
60%	30162 cd
70%	35189 cd
80%	40216 cd

### Conditions:

Number of c-planes: 4

Candela at center: 50270 cd

## ISO LUX DIAGRAM



3%	15,1 lx
5%	25,1 lx
10%	50,3 lx
30%	151 lx
50%	251 lx

### Conditions:

Number of c-planes: 4

Lux at center: 503 lx

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



Total lumen output:

8193 lm

Peak candela output:

12993 cd

**PRODUCT NAME:**

**SOLAR48Q**

**MEASUREMENT CONDITIONS:**

Beam angle:

45°

Target:

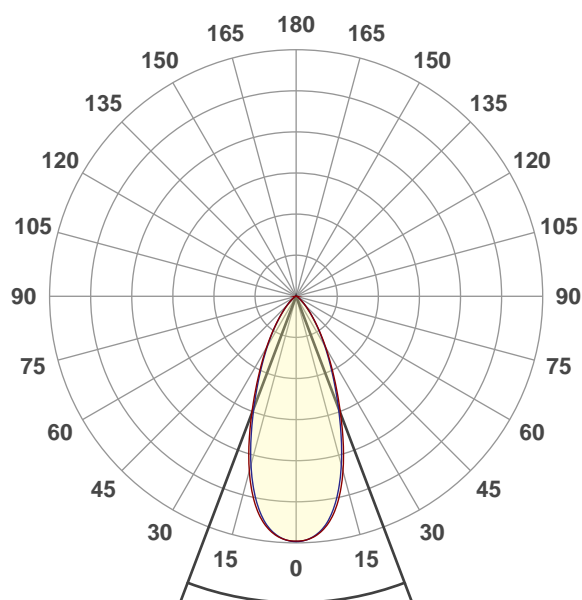
White

Operator:

Paolo Carvone

Date and time:

29/04/2020 13:27:27

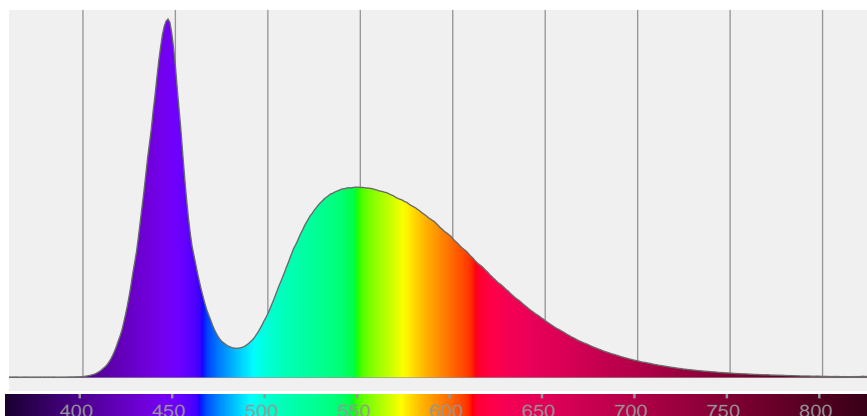


Beam angle 50%: 41,5°

Field angle 10%: 78,1°

Cut off angle 2.5%: 102,9°

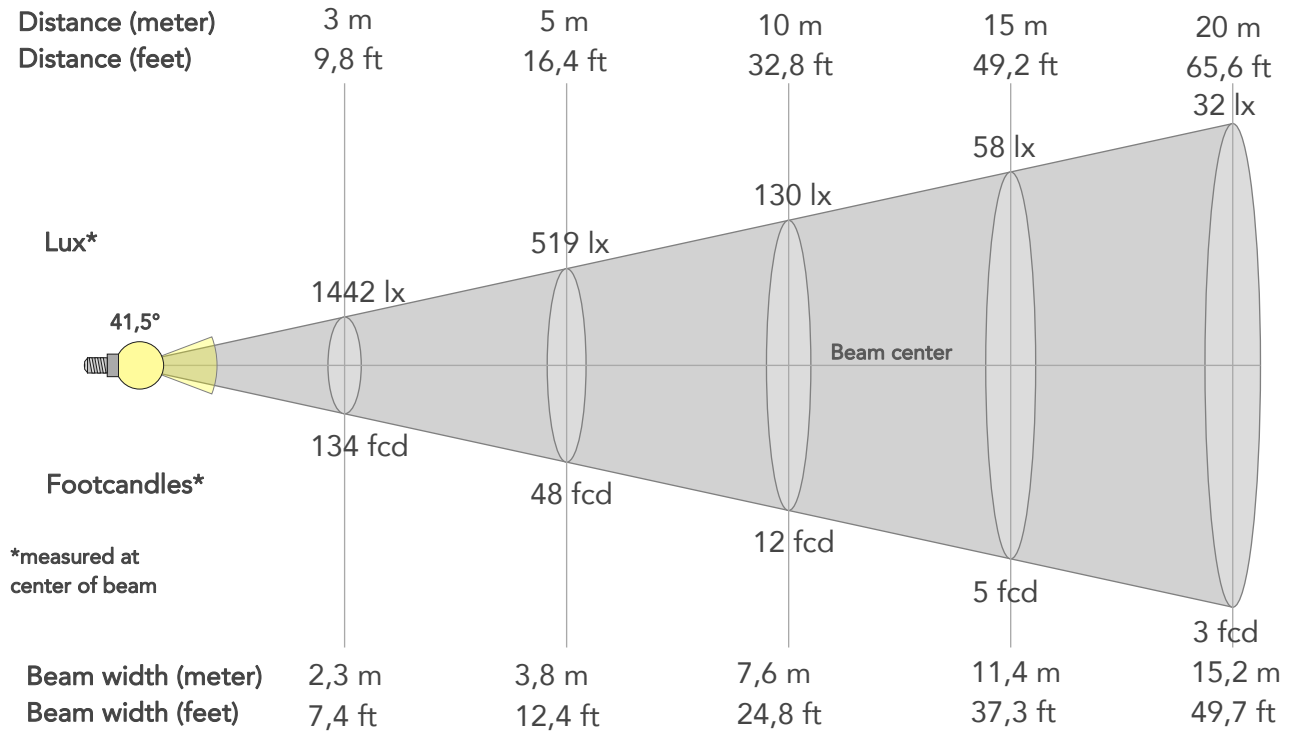
**Spectra**



# BEAM DETAILS



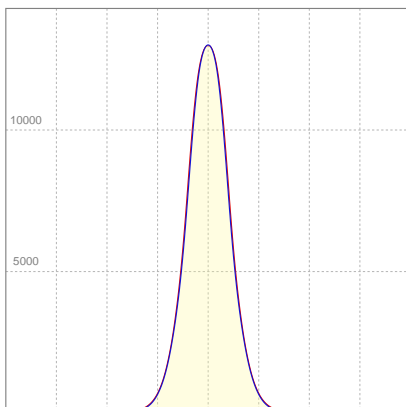
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
41,5°	78,1°	102,9°	96,3%	91,2%



## 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	12982lx	3246lx	1442lx	811lx	519lx	231lx	130lx	58lx	32lx	21lx	14lx	8lx	5lx
Footcand.	1206fcd	302fcd	134fcd	75fcd	48fcd	21fcd	12fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,8m	1,5m	2,3m	3m	3,8m	5,7m	7,6m	11,4m	15,2m	18,9m	22,7m	30,3m	37,9m
Beam wid.	2,5ft	5ft	7,4ft	9,9ft	12,4ft	18,6ft	24,8ft	37,3ft	49,7ft	62,1ft	74,5ft	99,4ft	124,2ft

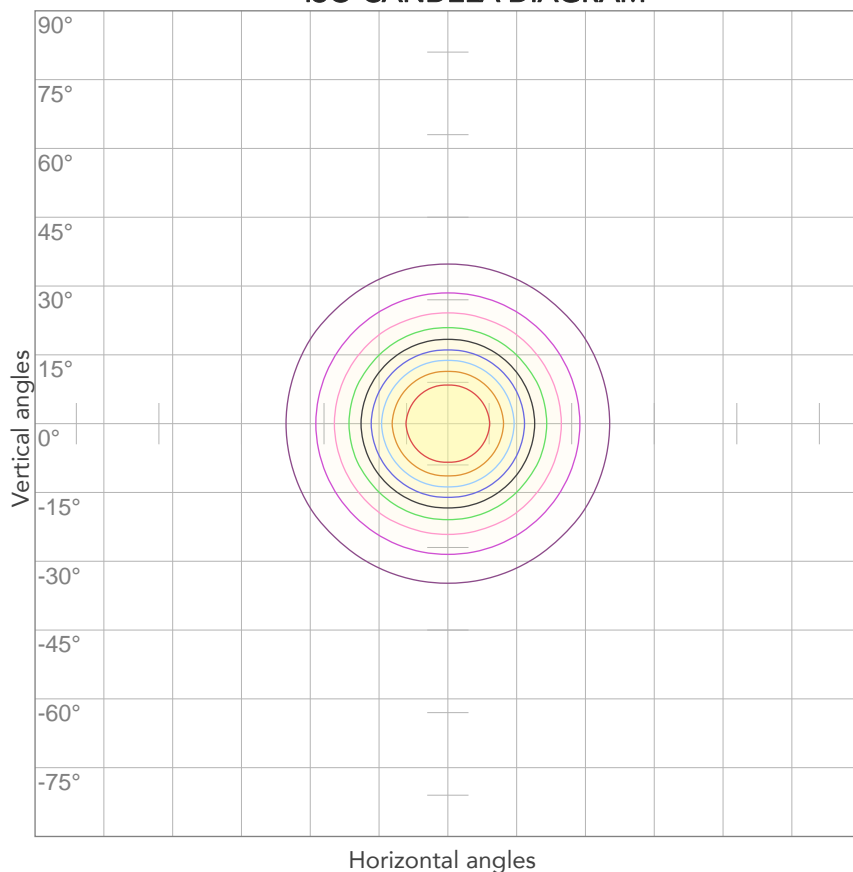
## LINEAR DISTRIBUTION DIAGRAM



## ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,840A	160W	51lm/W
Power FC			
0,84			

## ISO CANDELA DIAGRAM



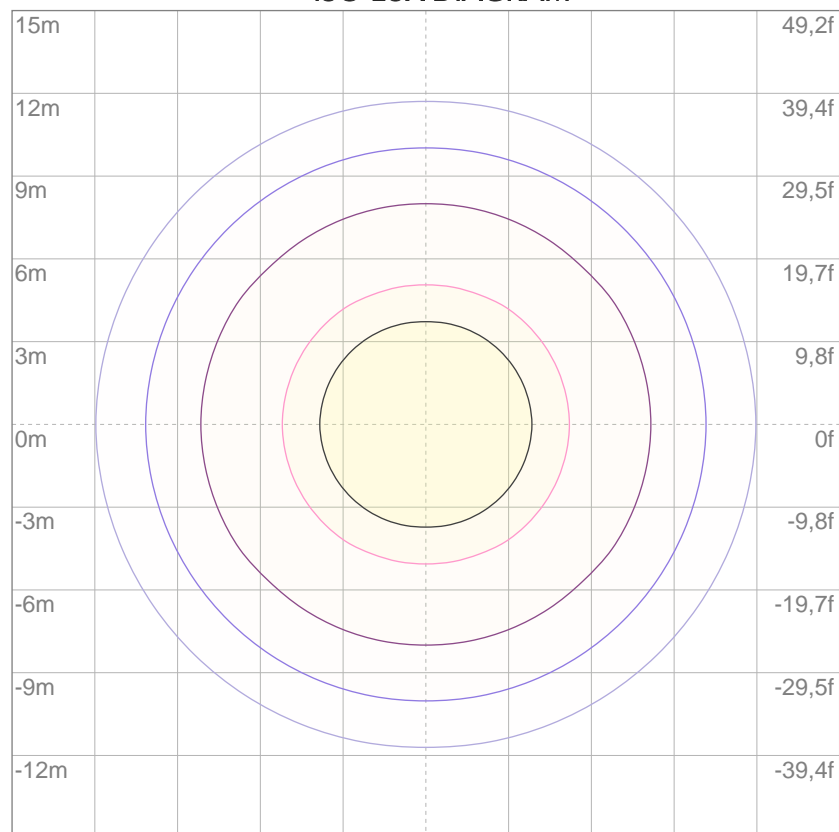
10%	1298 cd
20%	2596 cd
30%	3895 cd
40%	5193 cd
50%	6491 cd
60%	7789 cd
70%	9087 cd
80%	10386 cd

### Conditions:

Number of c-planes: 4

Candela at center: 12982 cd

## ISO LUX DIAGRAM



3%	3,89 lx
5%	6,49 lx
10%	13,0 lx
30%	38,9 lx
50%	64,9 lx

### Conditions:

Number of c-planes: 4

Lux at center: 130 lx

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