



# Photometric Test Report



## LUMIPAR12H PRO

12 X 12W tour proof high power LED PAR  
with RGBWAUV mixing

## CONTENTS

Table of contents	2
Testing process	3
Color preset Full on	
Beam angle 15°	4
Beam angle 25°	7
Beam angle 45°	10
Color preset Red	
Beam angle 15°	13
Beam angle 25°	16
Beam angle 45°	19
Color preset Green	
Beam angle 15°	22
Beam angle 25°	25
Beam angle 45°	28
Color preset Blue	
Beam angle 15°	31
Beam angle 25°	34
Beam angle 45°	37
Color preset Amber	
Beam angle 15°	40
Beam angle 25°	43
Beam angle 45°	46
Color preset White	
Beam angle 15°	49
Beam angle 25°	52
Beam angle 45°	55
Color preset Purple	
Beam angle 15°	58
Beam angle 25°	61
Beam angle 45°	64

## 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:

2893 lm

Peak candela output:

16784 cd

### PRODUCT NAME:

LUMIPAR12H PRO

### MEASUREMENT CONDITIONS:

Beam angle:

15°

Target:

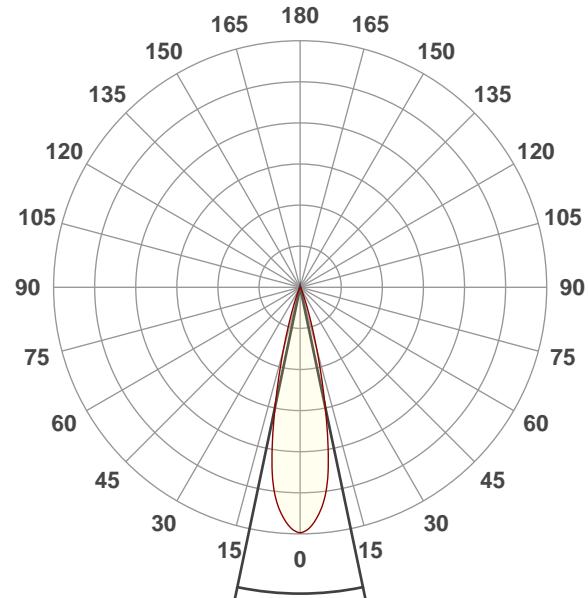
Full On

Operator:

Paolo Carvone

Date and time:

08/10/2020 16:52:20

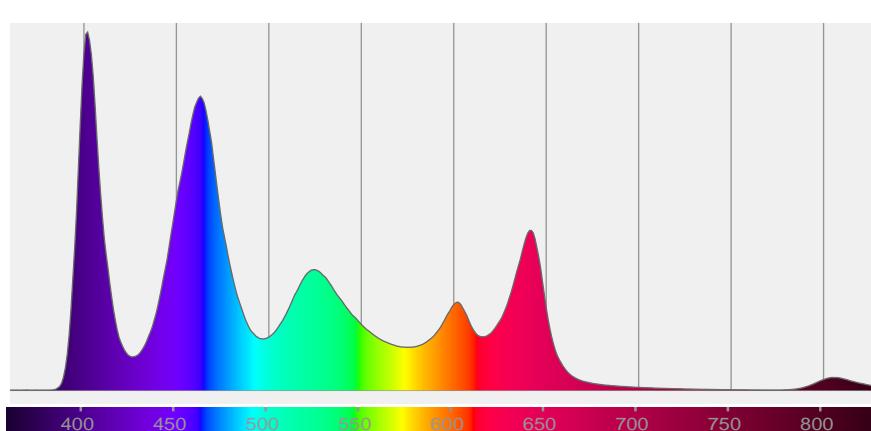


Beam angle 50%: 23,7°

Field angle 10%: 37,5°

Cut off angle 2.5%: 48,3°

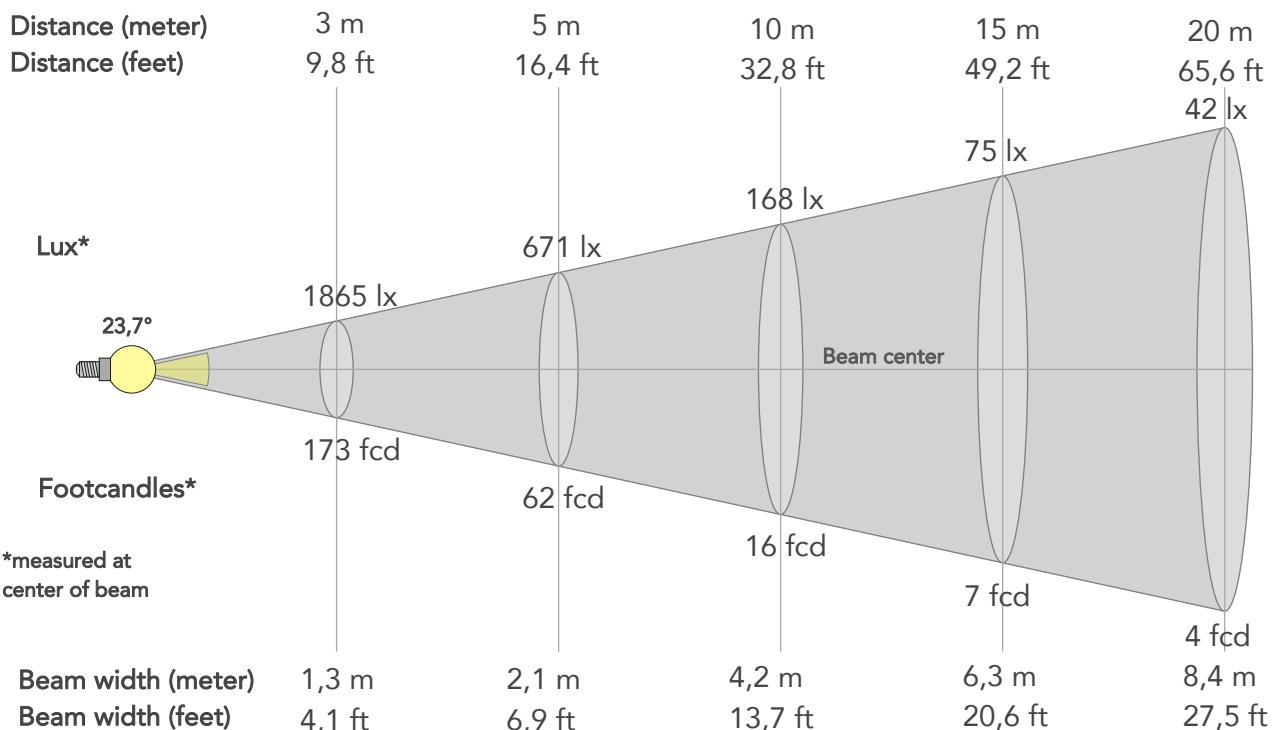
### Spectra



## BEAM DETAILS



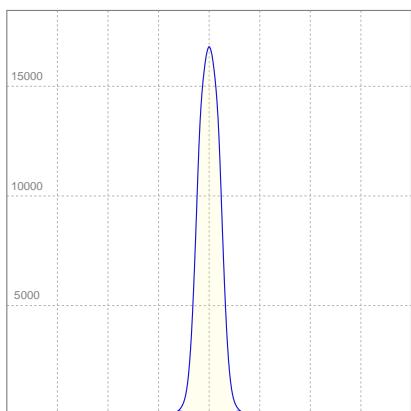
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23,7°	37,5°	48,3°	99,9%	99,0%



### 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	16784lx	4196lx	1865lx	1049lx	671lx	298lx	168lx	75lx	42lx	27lx	19lx	10lx	7lx
Footcand.	1559fcd	390fcd	173fcd	97fcd	62fcd	28fcd	16fcd	7fcd	4fcd	2fcd	2fcd	1fcd	1fcd
Beam wid.	0,4m	0,8m	1,3m	1,7m	2,1m	3,1m	4,2m	6,3m	8,4m	10,5m	12,6m	16,8m	20,9m
Beam wid.	1,4ft	2,8ft	4,1ft	5,5ft	6,9ft	10,3ft	13,7ft	20,6ft	27,5ft	34,4ft	41,2ft	55ft	68,7ft

### LINEAR DISTRIBUTION DIAGRAM



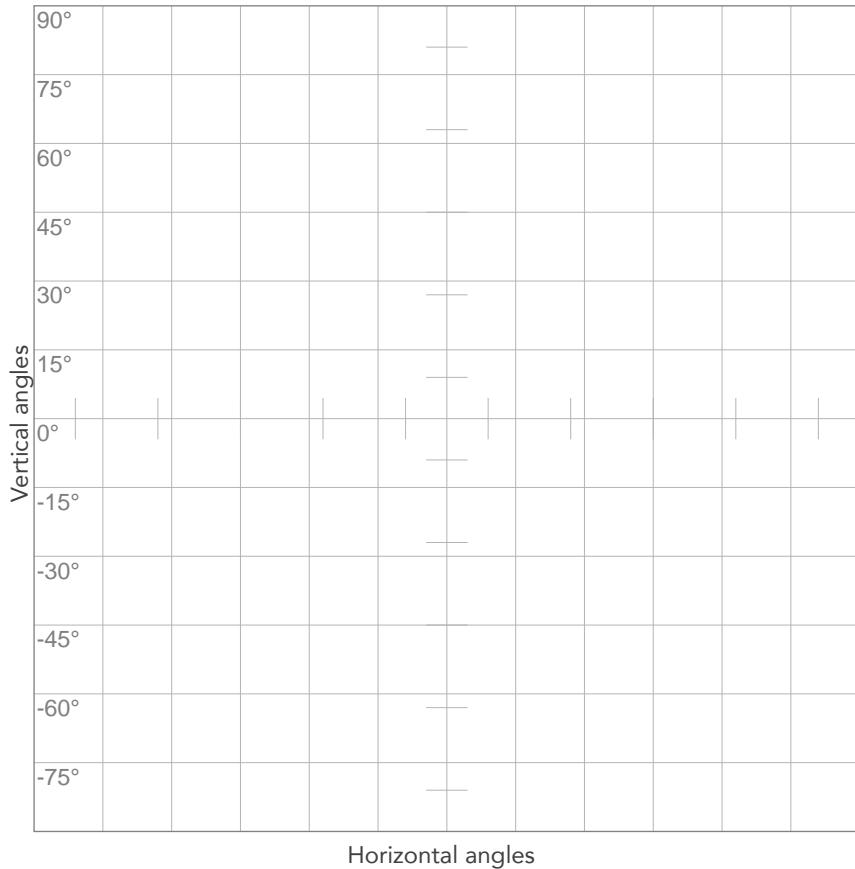
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
227V	0,450A	94,7W	31lm/W
Power FC			
0,93			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



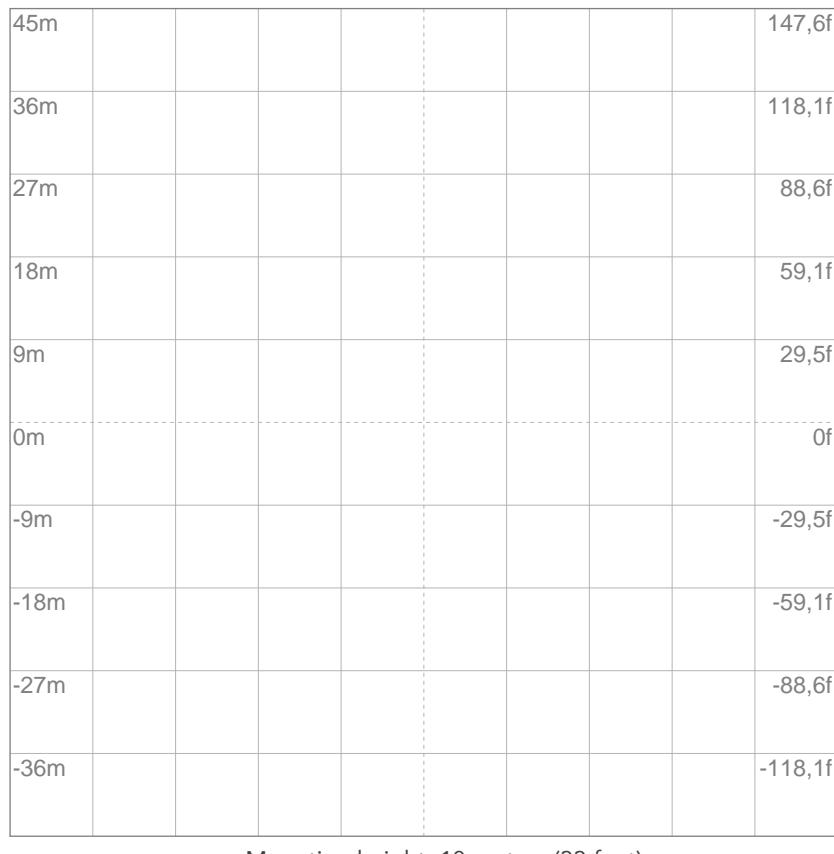
10%	1678 cd
20%	3357 cd
30%	5035 cd
40%	6714 cd
50%	8392 cd
60%	10070 cd
70%	11749 cd
80%	13427 cd

### Conditions:

Number of c-planes: 2

Candela at center: 16784 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	5,04 lx
5%	8,39 lx
10%	16,8 lx
30%	50,4 lx
50%	83,9 lx

### Conditions:

Number of c-planes: 2

Lux at center: 168 lx

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



**Total lumen output:**

**2644 lm**

**Peak candela output:**

**11829 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**25°**

**Target:**

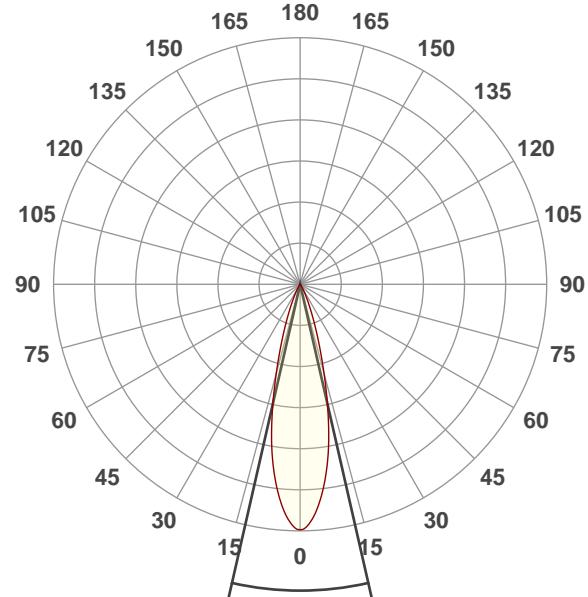
**Full On**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 13:05:15**

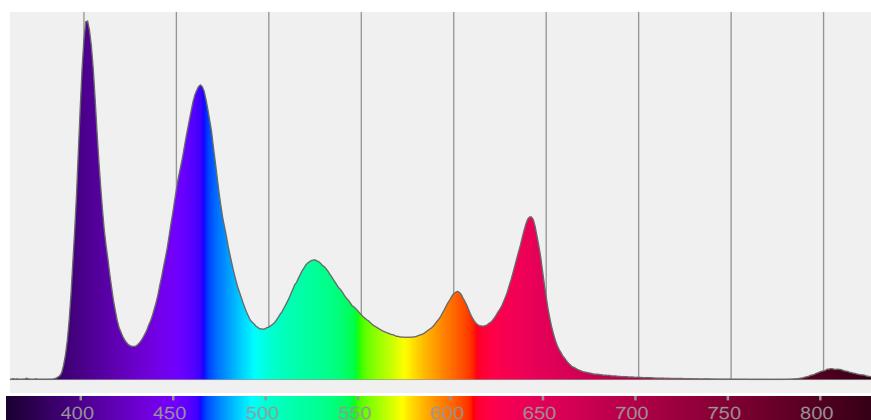


**Beam angle 50%: 25,7°**

**Field angle 10%: 45,8°**

**Cut off angle 2.5%: 60°**

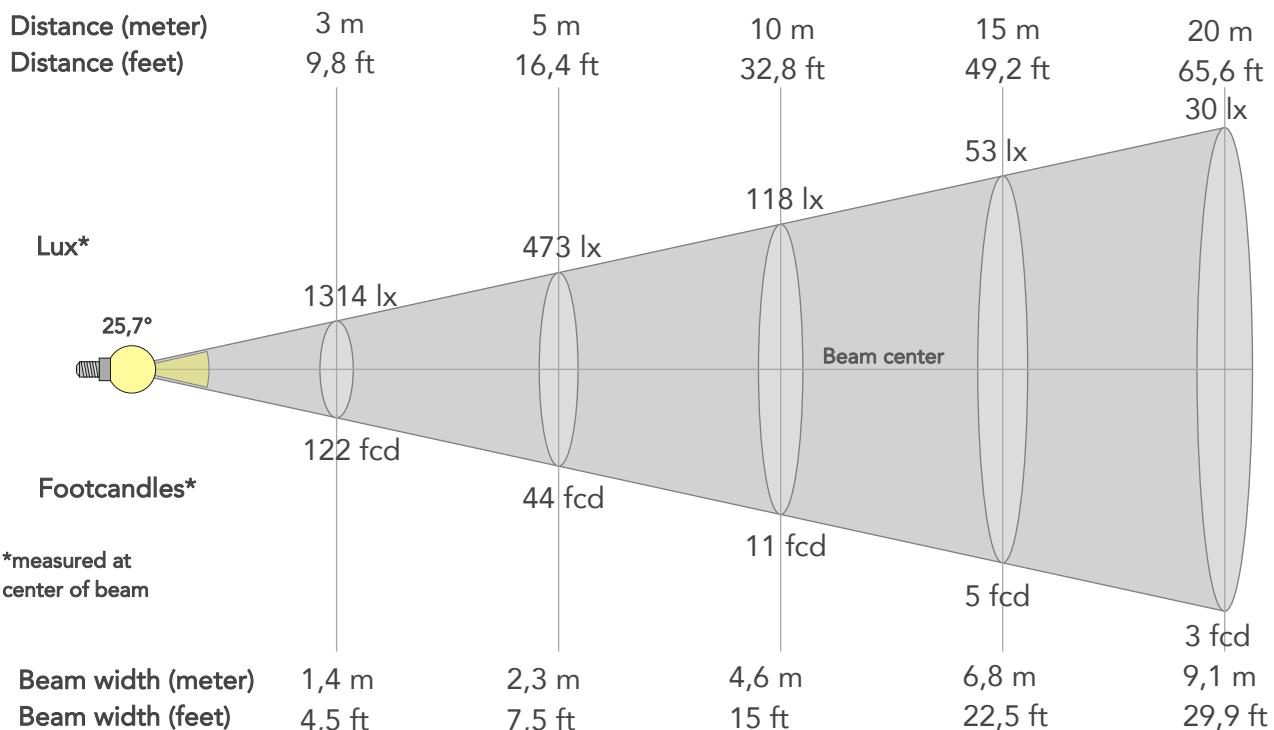
**Spectra**



## BEAM DETAILS



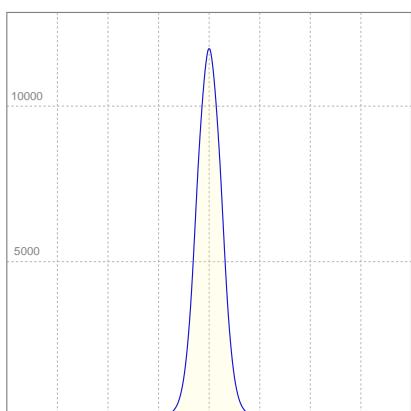
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
25,7°	45,8°	60°	99,9%	99,7%



### 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	11829lx	2957lx	1314lx	739lx	473lx	210lx	118lx	53lx	30lx	19lx	13lx	7lx	5lx
Footcand.	1099fcd	275fcd	122fcd	69fcd	44fcd	20fcd	11fcd	5fcd	3fcd	2fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,8m	2,3m	3,4m	4,6m	6,8m	9,1m	11,4m	13,7m	18,3m	22,8m
Beam wid.	1,5ft	3ft	4,5ft	6ft	7,5ft	11,2ft	15ft	22,5ft	29,9ft	37,4ft	44,9ft	59,9ft	74,9ft

### LINEAR DISTRIBUTION DIAGRAM



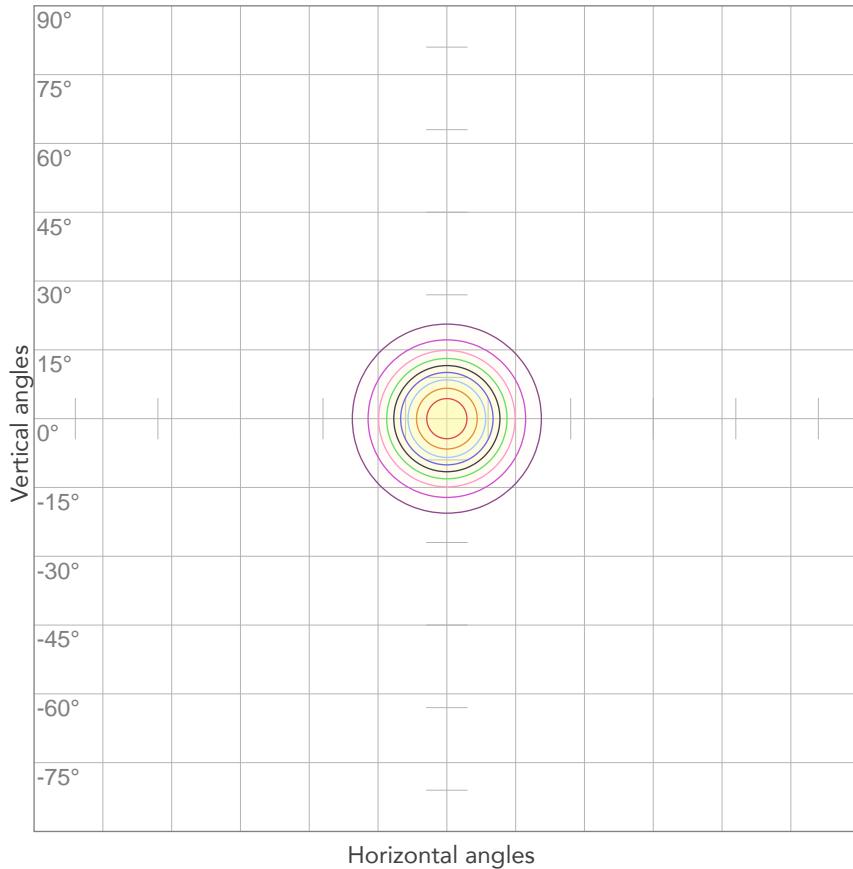
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
229V	0,447A	94,8W	28lm/W
Power FC			
0,93			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



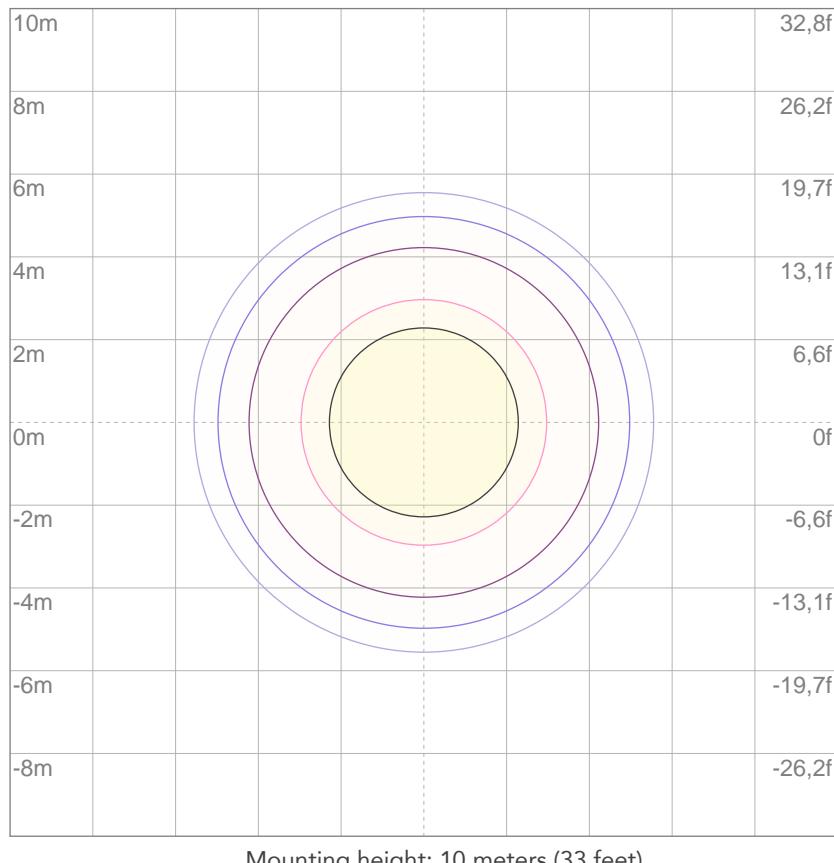
10%	1183 cd
20%	2366 cd
30%	3549 cd
40%	4732 cd
50%	5914 cd
60%	7097 cd
70%	8280 cd
80%	9463 cd

### Conditions:

Number of c-planes: 2

Candela at center: 11829 cd

## ISO LUX DIAGRAM



3%	3,55 lx
5%	5,91 lx
10%	11,8 lx
30%	35,5 lx
50%	59,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 118 lx

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



Total lumen output:

**2663 lm**

Peak candela output:

**3541 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

Beam angle:

**45°**

Target:

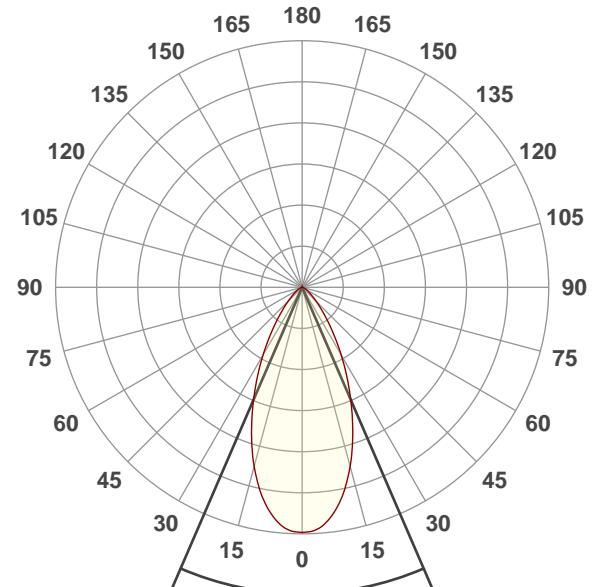
Full On

Operator:

**Paolo Carvone**

Date and time:

**08/10/2020 14:16:26**

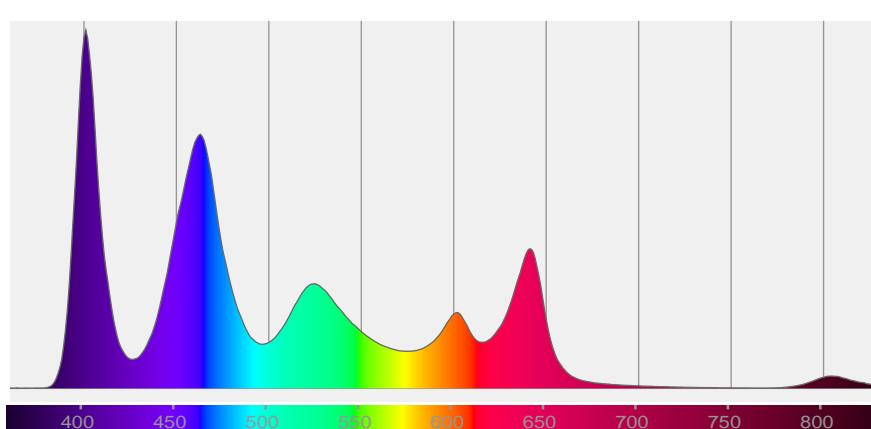


**Beam angle 50%: 46,7°**

**Field angle 10%: 85,7°**

**Cut off angle 2.5%: 115,3°**

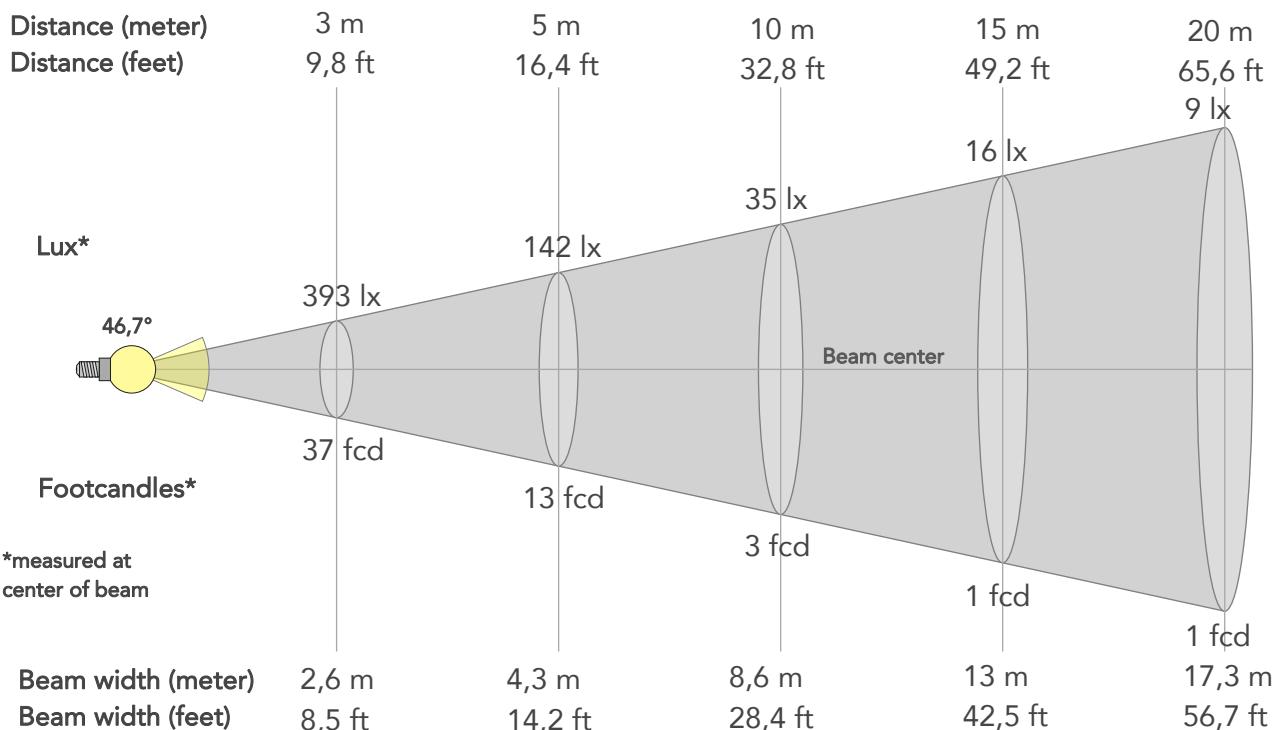
**Spectra**



## BEAM DETAILS



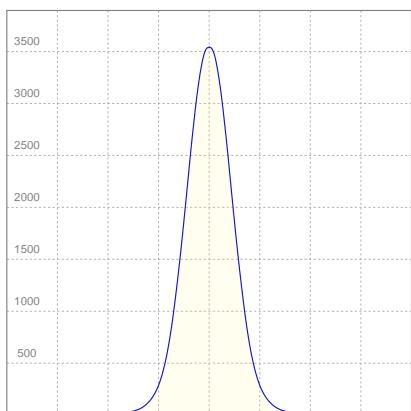
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,7°	85,7°	115,3°	97,4%	90,0%



### 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	3541lx	885lx	393lx	221lx	142lx	63lx	35lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	329fcd	82fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,5m	4,3m	6,5m	8,6m	13m	17,3m	21,6m	25,9m	34,6m	43,2m
Beam wid.	2,9ft	5,7ft	8,5ft	11,3ft	14,2ft	21,3ft	28,4ft	42,5ft	56,7ft	70,9ft	85,1ft	113,4ft	141,8ft

### LINEAR DISTRIBUTION DIAGRAM



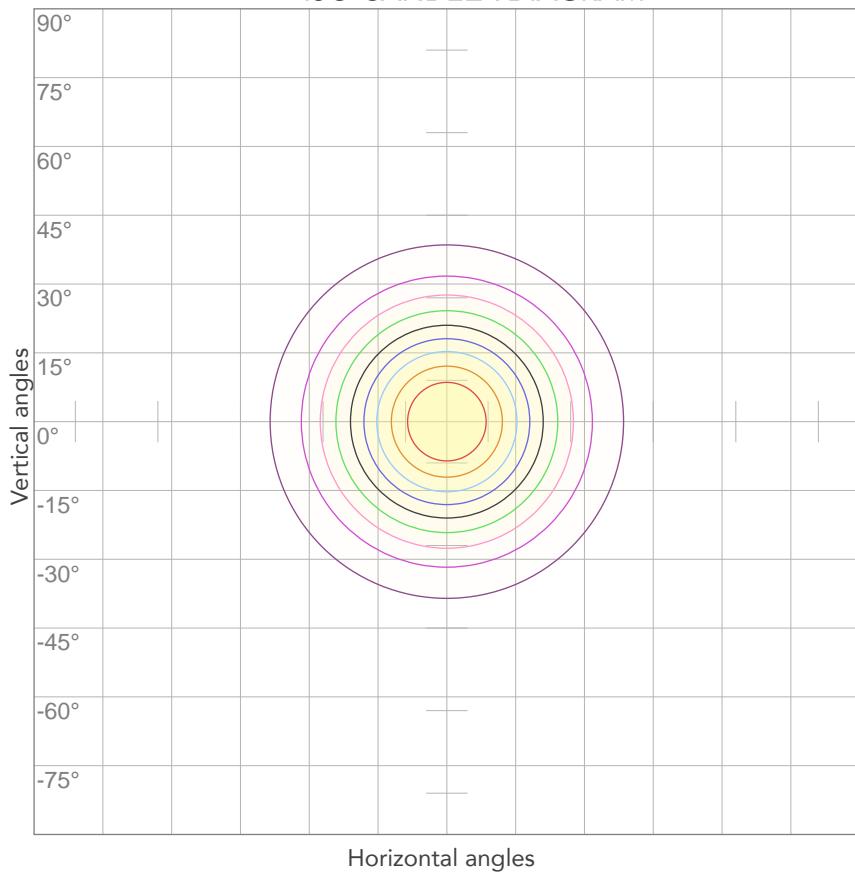
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
227V	0,451A	95,1W	28lm/W
Power FC			
0,93			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



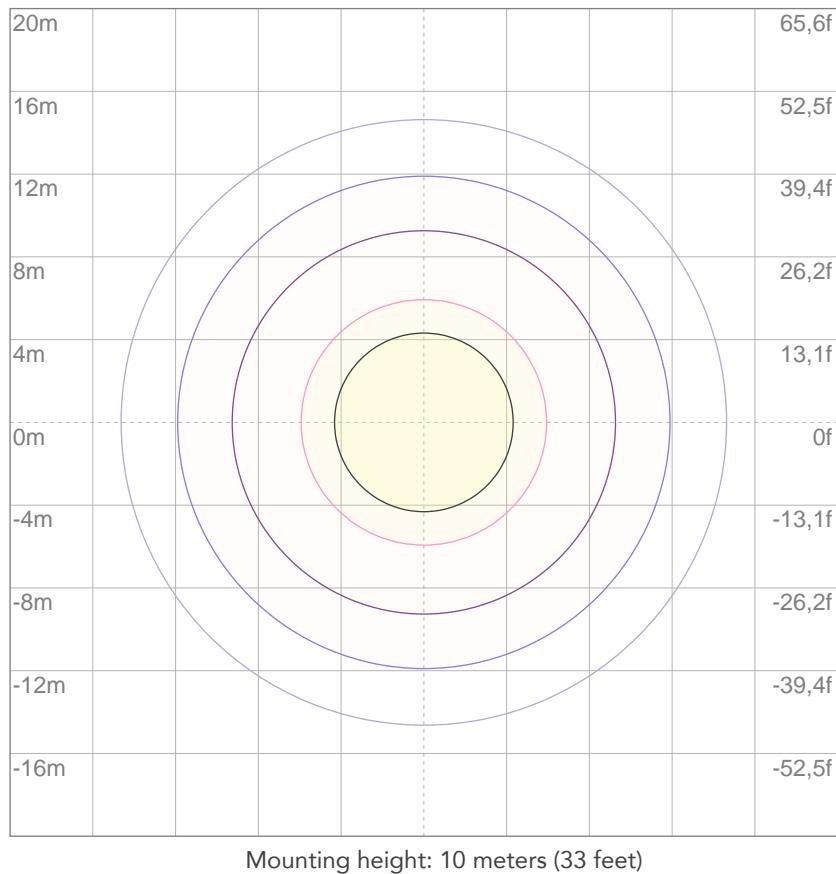
10%	354 cd
20%	708 cd
30%	1062 cd
40%	1417 cd
50%	1771 cd
60%	2125 cd
70%	2479 cd
80%	2833 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3541 cd

## ISO LUX DIAGRAM



3%	1,06 lx
5%	1,77 lx
10%	3,54 lx
30%	10,6 lx
50%	17,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 35,4 lx

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



Total lumen output:

426 lm

Peak candela output:

3144 cd

### PRODUCT NAME:

LUMIPAR12H PRO

### MEASUREMENT CONDITIONS:

Beam angle:

15°

Target:

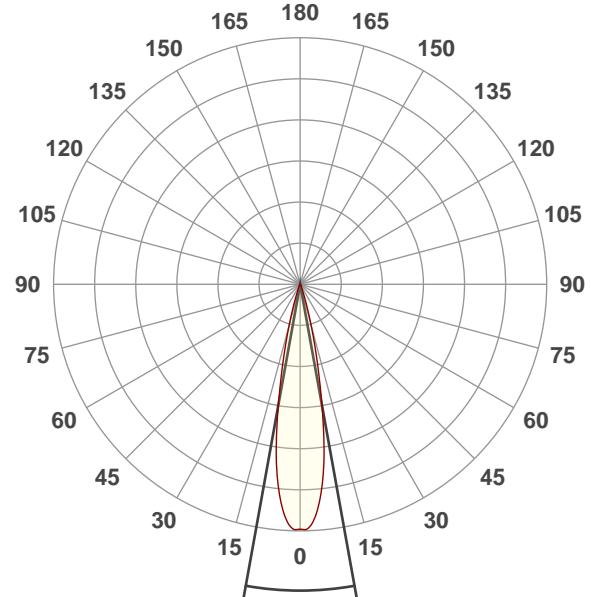
Red

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:42:51

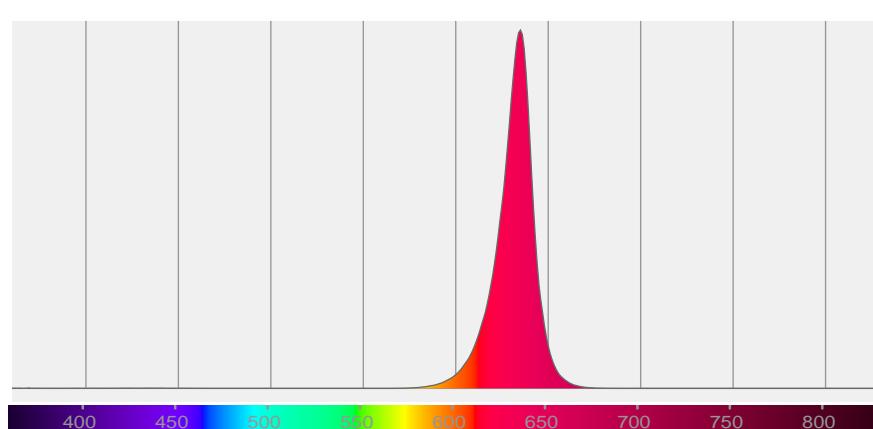


Beam angle 50%: 20,4°

Field angle 10%: 33,7°

Cut off angle 2.5%: 42,8°

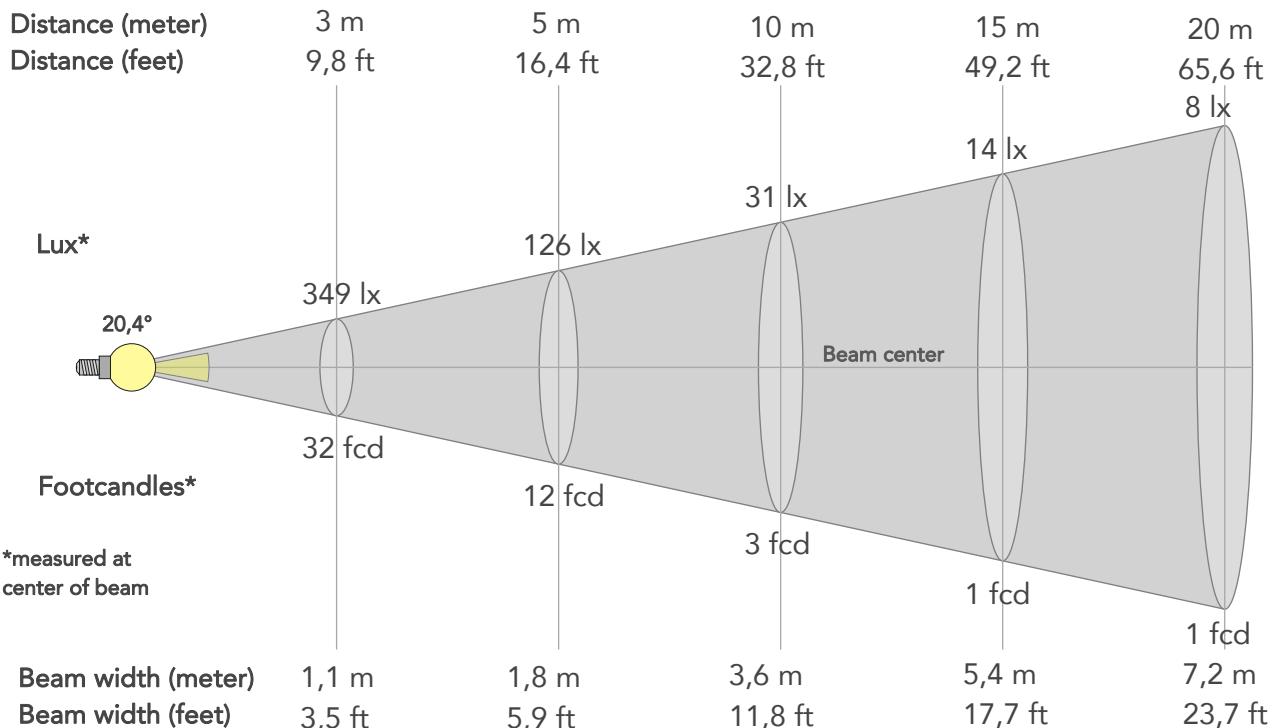
### Spectra



## BEAM DETAILS



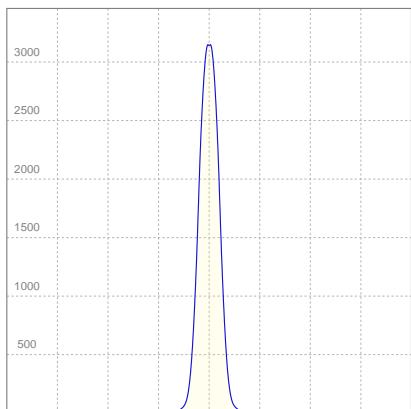
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
20,4°	33,7°	42,8°	99,7%	98,9%



### 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	3142lx	786lx	349lx	196lx	126lx	56lx	31lx	14lx	8lx	5lx	3lx	2lx	1lx
Footcand.	292fcd	73fcd	32fcd	18fcd	12fcd	5fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,4m	0,7m	1,1m	1,4m	1,8m	2,7m	3,6m	5,4m	7,2m	9m	10,8m	14,4m	18m
Beam wid.	1,2ft	2,4ft	3,5ft	4,7ft	5,9ft	8,9ft	11,8ft	17,7ft	23,7ft	29,6ft	35,5ft	47,3ft	59,2ft

### LINEAR DISTRIBUTION DIAGRAM



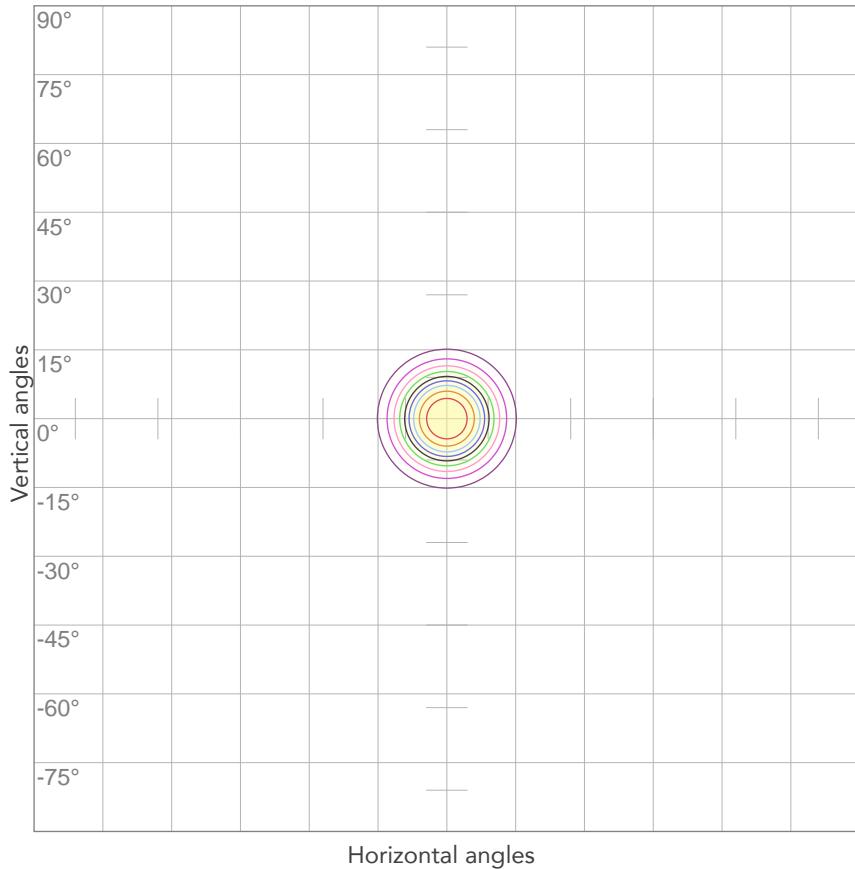
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
229V	0,130A	17,9W	24lm/W
Power FC			
0,6			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



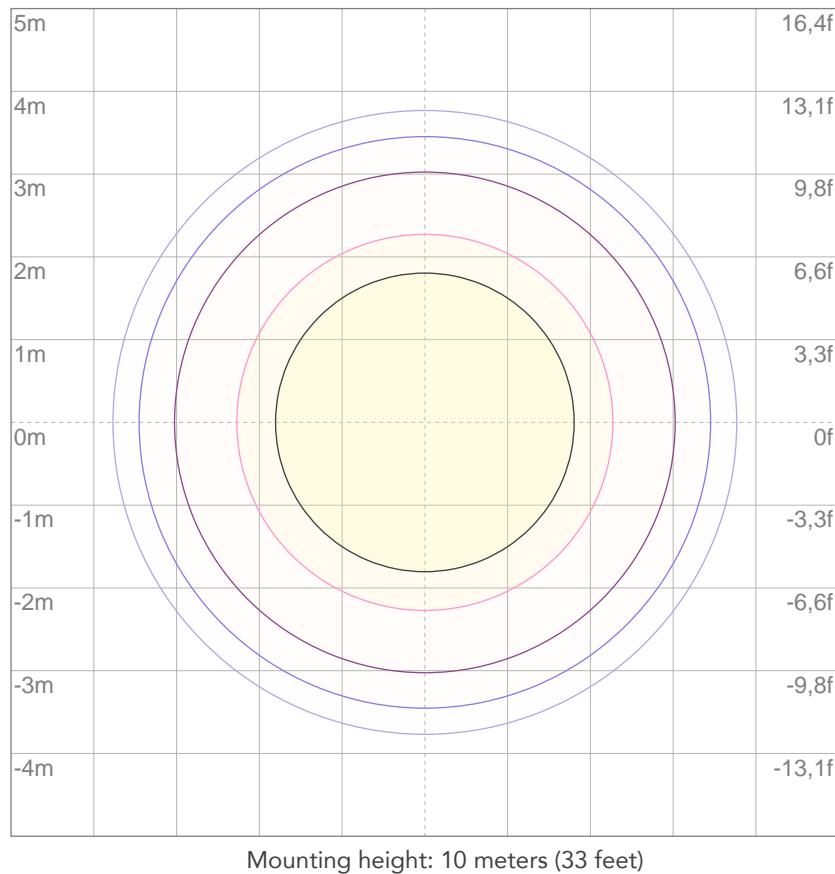
10%	314 cd
20%	628 cd
30%	943 cd
40%	1257 cd
50%	1571 cd
60%	1885 cd
70%	2200 cd
80%	2514 cd

### Conditions:

Number of c-planes: 2

Candela at center: 3142 cd

## ISO LUX DIAGRAM



3%	0,943 lx
5%	1,57 lx
10%	3,14 lx
30%	9,43 lx
50%	15,7 lx

### Conditions:

Number of c-planes: 2

Lux at center: 31,4 lx

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



**Total lumen output:**

**441 lm**

**Peak candela output:**

**2108 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**25°**

**Target:**

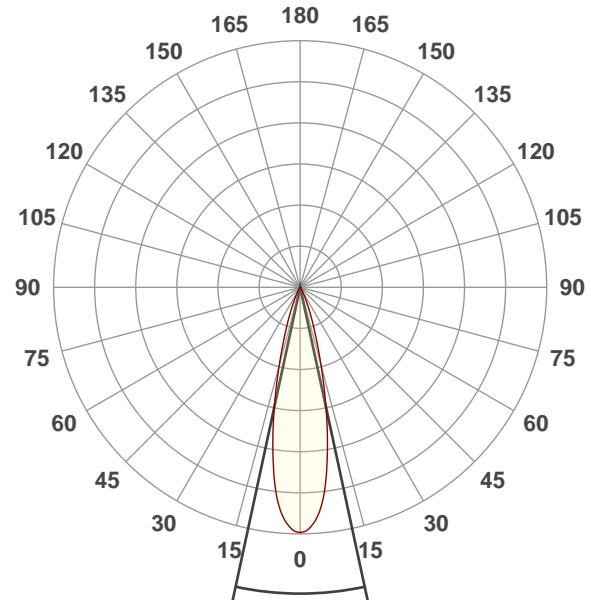
**Red**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 13:07:54**

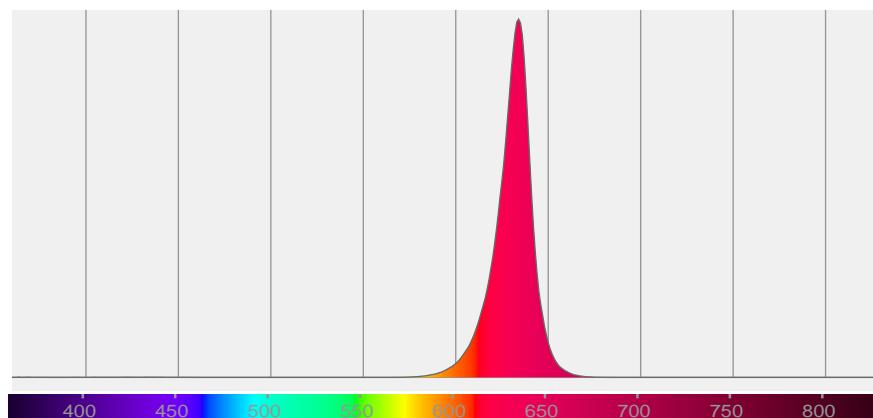


**Beam angle 50%: 24,3°**

**Field angle 10%: 43,5°**

**Cut off angle 2.5%: 56,8°**

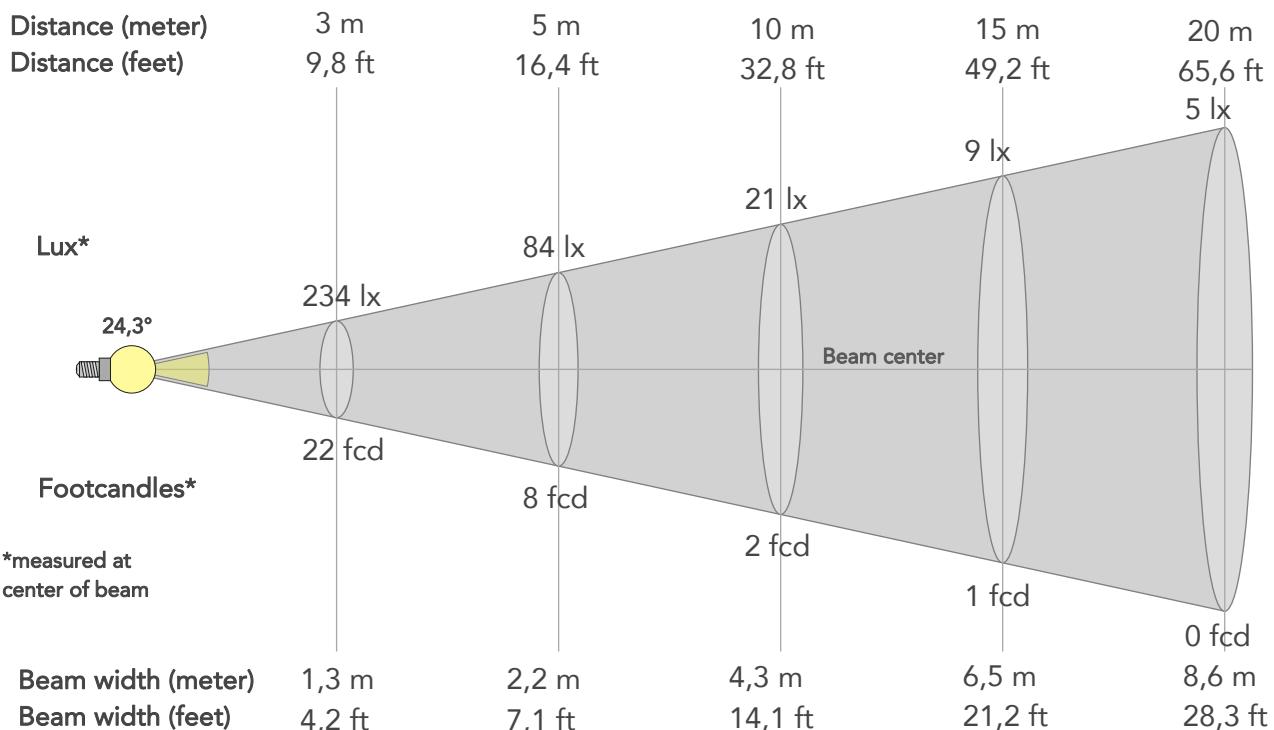
**Spectra**



## BEAM DETAILS



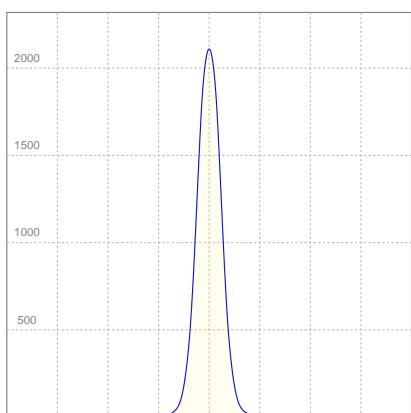
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24,3°	43,5°	56,8°	99,1%	97,6%



### 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	2108lx	527lx	234lx	132lx	84lx	37lx	21lx	9lx	5lx	3lx	2lx	1lx	1lx
Footcand.	196fcd	49fcd	22fcd	12fcd	8fcd	3fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,4m	0,9m	1,3m	1,7m	2,2m	3,2m	4,3m	6,5m	8,6m	10,8m	12,9m	17,2m	21,6m
Beam wid.	1,4ft	2,8ft	4,2ft	5,6ft	7,1ft	10,6ft	14,1ft	21,2ft	28,3ft	35,4ft	42,4ft	56,6ft	70,7ft

### LINEAR DISTRIBUTION DIAGRAM



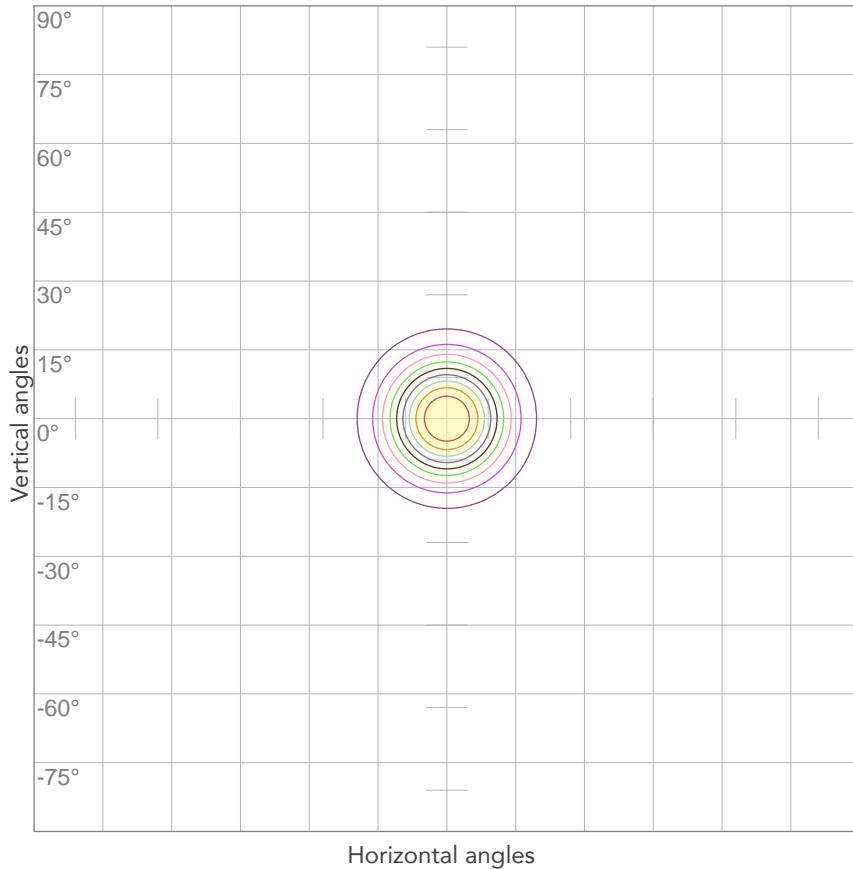
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
229V	0,129A	17,2W	26lm/W
Power FC			
0,58			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



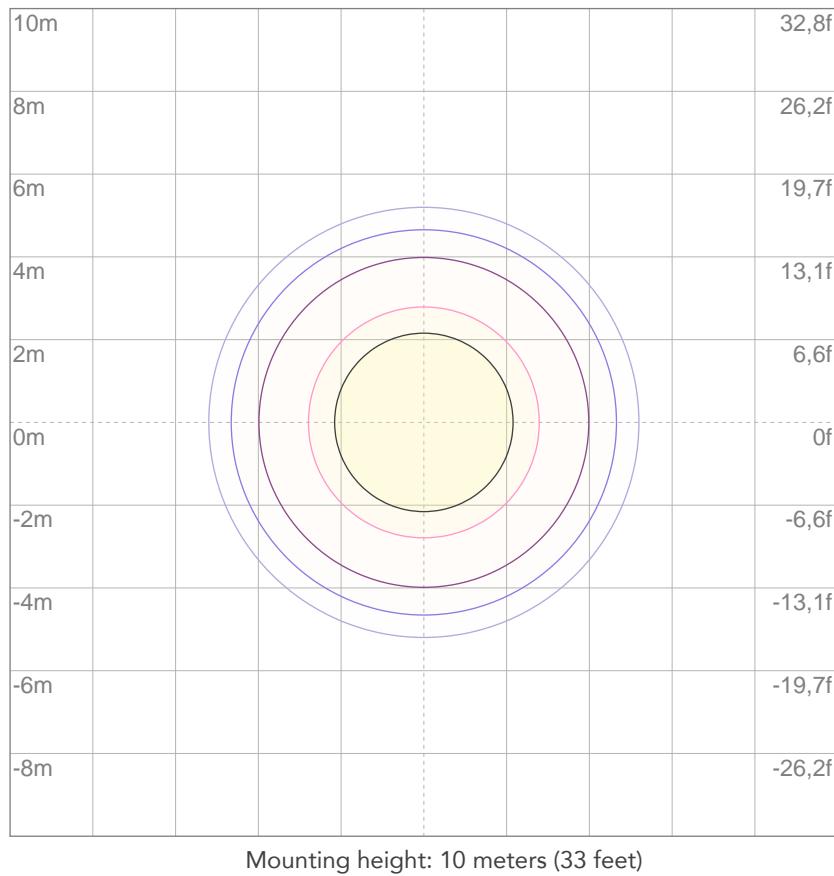
10%	211 cd
20%	422 cd
30%	632 cd
40%	843 cd
50%	1054 cd
60%	1265 cd
70%	1476 cd
80%	1687 cd

### Conditions:

Number of c-planes: 2

Candela at center: 2108 cd

## ISO LUX DIAGRAM



3%	0,632 lx
5%	1,05 lx
10%	2,11 lx
30%	6,32 lx
50%	10,5 lx

### Conditions:

Number of c-planes: 2

Lux at center: 21,1 lx

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



Total lumen output:

412 lm

Peak candela output:

569 cd

### PRODUCT NAME:

LUMIPAR12H PRO

### MEASUREMENT CONDITIONS:

Beam angle:

45°

Target:

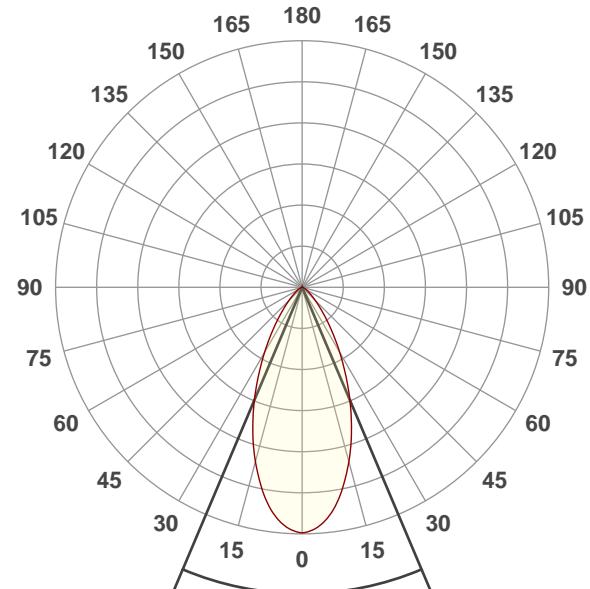
Red

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:18:05

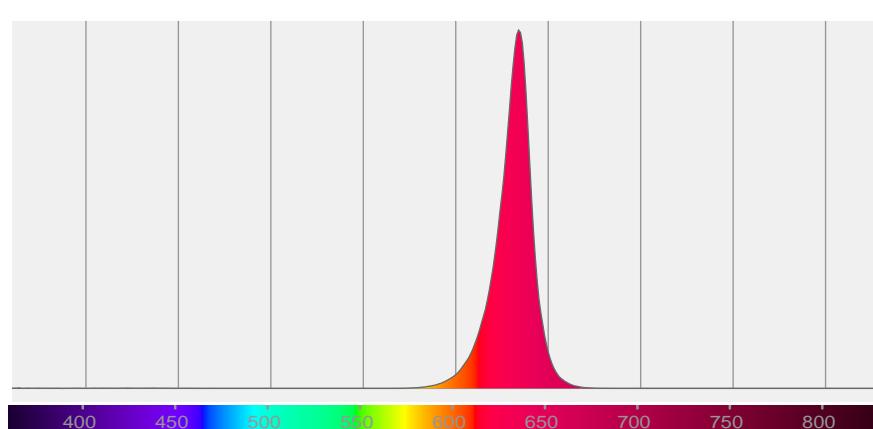


Beam angle 50%: 45,9°

Field angle 10%: 84,5°

Cut off angle 2.5%: 112,8°

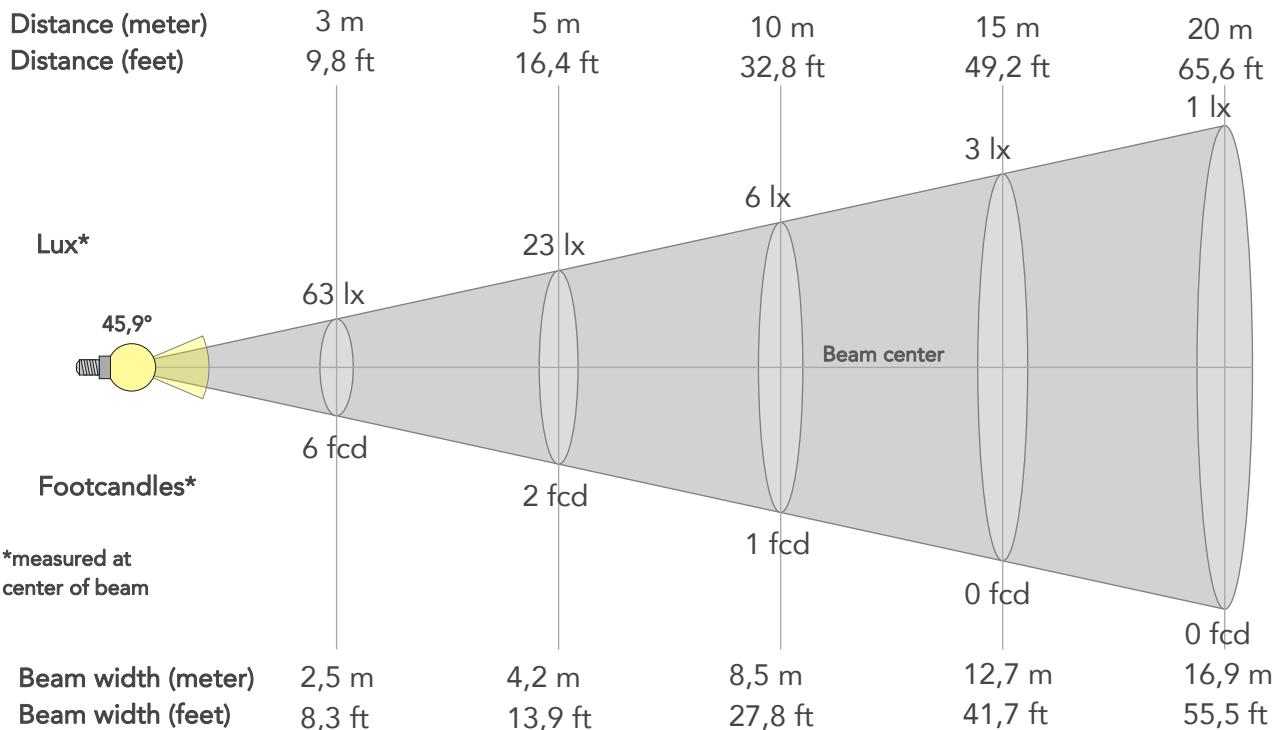
### Spectra



## BEAM DETAILS



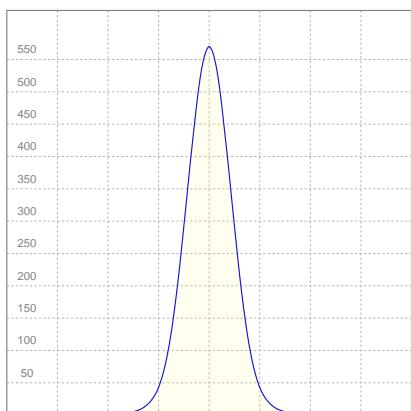
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
45,9°	84,5°	112,8°	97,6%	90,6%



### 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	569lx	142lx	63lx	36lx	23lx	10lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx
Footcand.	53fcd	13fcd	6fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,8m	1,7m	2,5m	3,4m	4,2m	6,3m	8,5m	12,7m	16,9m	21,2m	25,4m	33,9m	42,3m
Beam wid.	2,8ft	5,6ft	8,3ft	11,1ft	13,9ft	20,8ft	27,8ft	41,7ft	55,5ft	69,4ft	83,3ft	111,1ft	138,8ft

### LINEAR DISTRIBUTION DIAGRAM



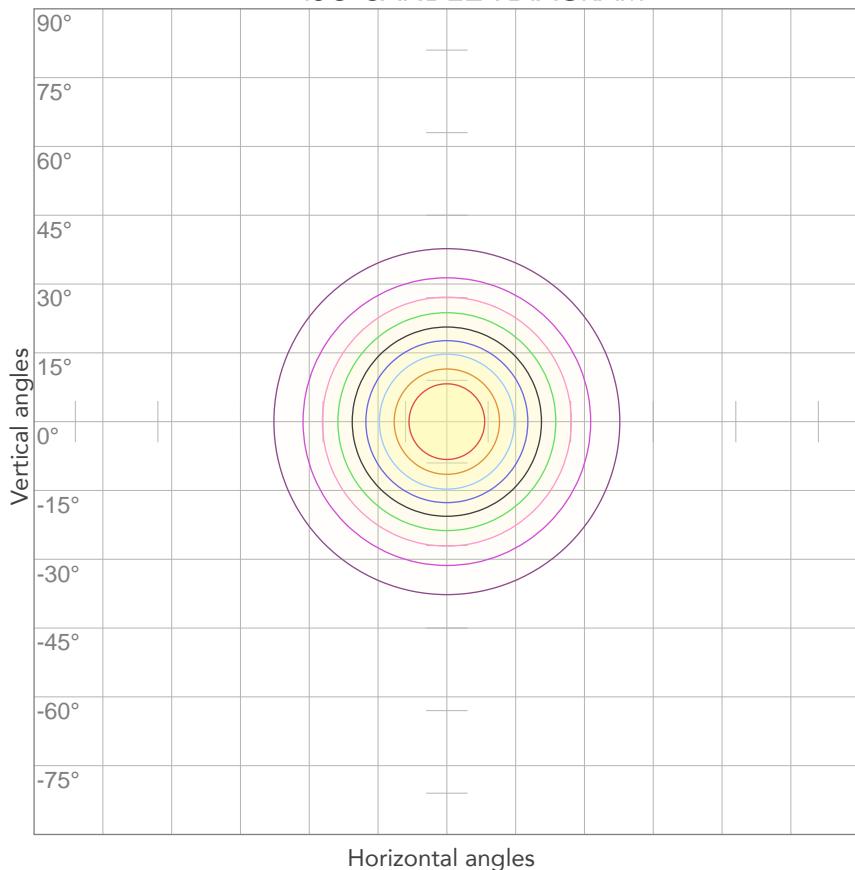
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
228V	0,126A	17,2W	24lm/W
Power FC			
0,6			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM

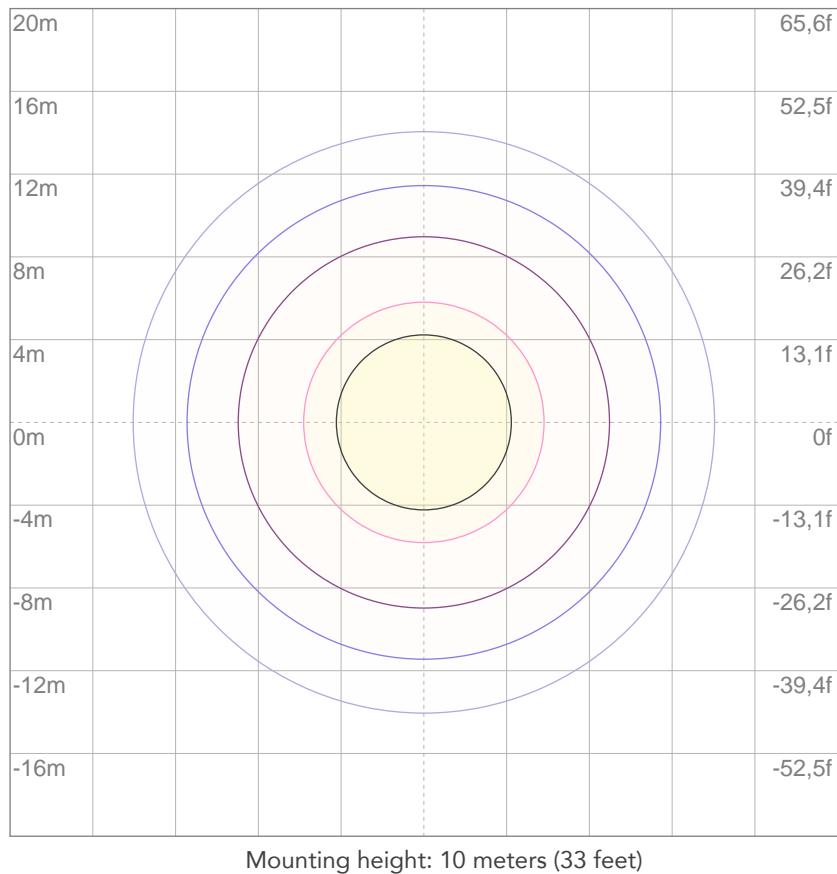


10%	57 cd
20%	114 cd
30%	171 cd
40%	228 cd
50%	284 cd
60%	341 cd
70%	398 cd
80%	455 cd

### Conditions:

Number of c-planes: 2  
Candela at center: 569 cd

## ISO LUX DIAGRAM



3%	0,171 lx
5%	0,284 lx
10%	0,569 lx
30%	1,71 lx
50%	2,84 lx

### Conditions:

Number of c-planes: 2  
Lux at center: 5,69 lx

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



Total lumen output:

**1092 lm**

Peak candela output:

**6040 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

Beam angle:

15°

Target:

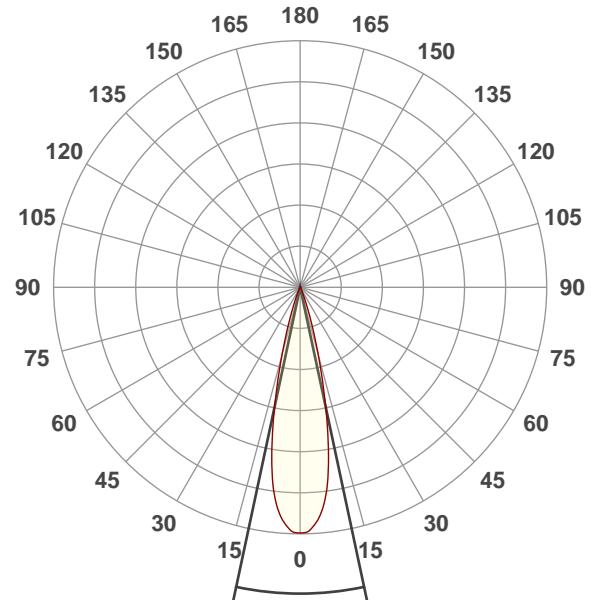
Green

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:45:44

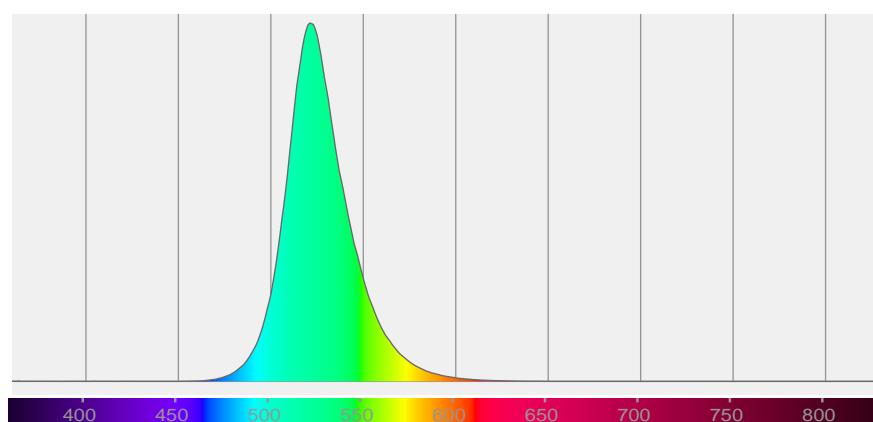


Beam angle 50%: 24,1°

Field angle 10%: 38,2°

Cut off angle 2.5%: 48,5°

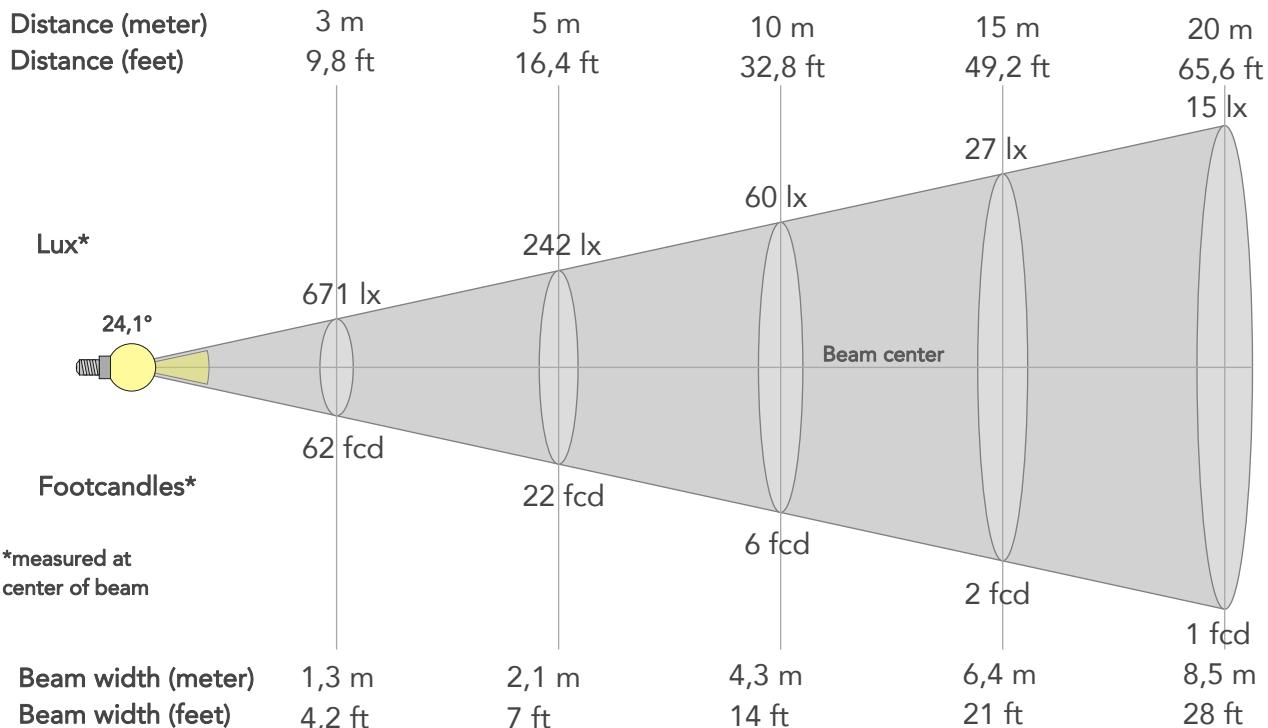
**Spectra**



## BEAM DETAILS



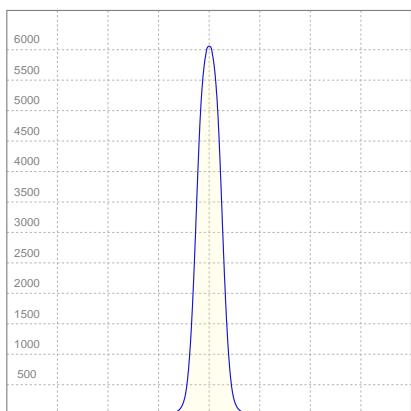
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24,1°	38,2°	48,5°	99,6%	98,2%



### 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	6040lx	1510lx	671lx	378lx	242lx	107lx	60lx	27lx	15lx	10lx	7lx	4lx	2lx
Footcand.	561fcd	140fcd	62fcd	35fcd	22fcd	10fcd	6fcd	2fcd	1fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,4m	0,9m	1,3m	1,7m	2,1m	3,2m	4,3m	6,4m	8,5m	10,7m	12,8m	17,1m	21,3m
Beam wid.	1,4ft	2,8ft	4,2ft	5,6ft	7ft	10,5ft	14ft	21ft	28ft	35ft	42ft	56ft	70ft

### LINEAR DISTRIBUTION DIAGRAM



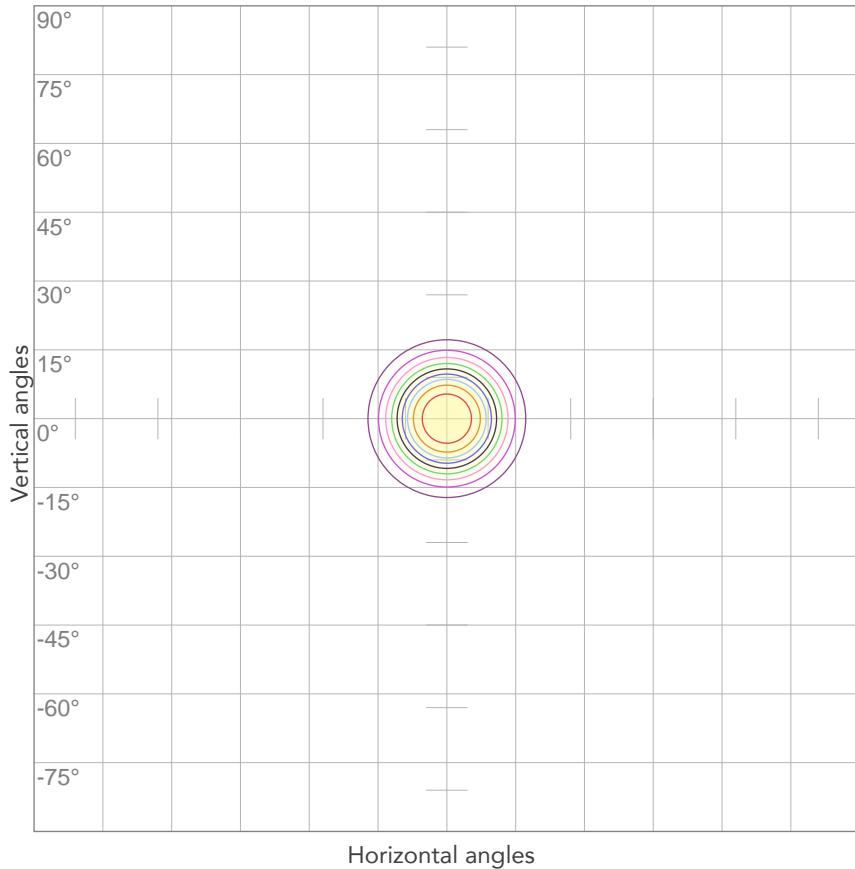
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
229V	0,144A	21,7W	50lm/W
Power FC			
0,66			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



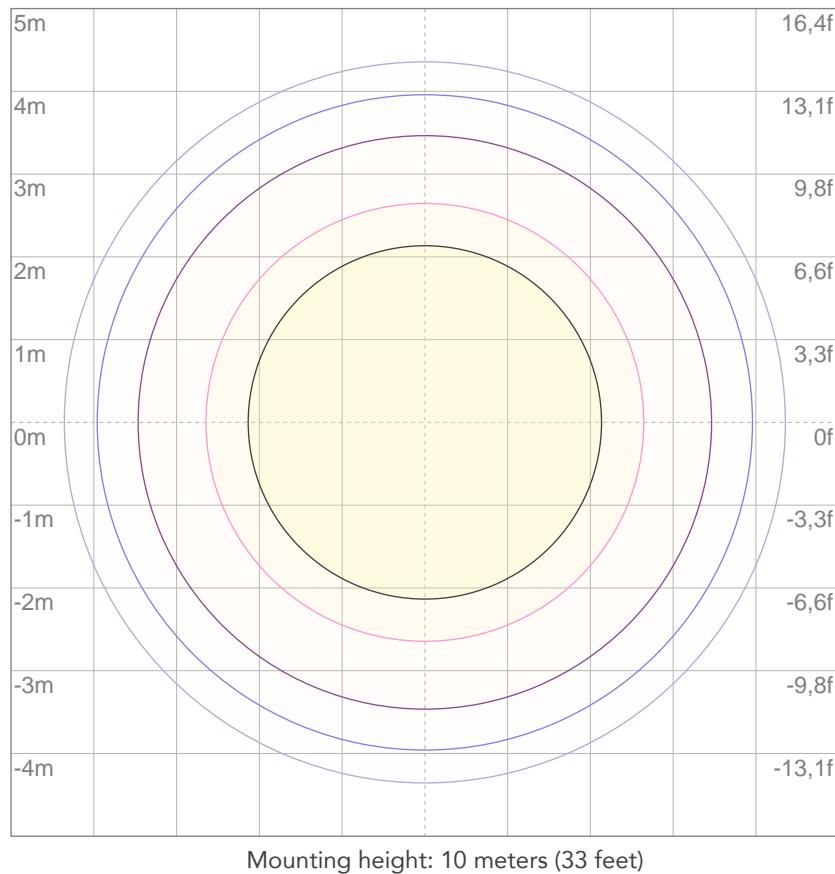
10%	604 cd
20%	1208 cd
30%	1812 cd
40%	2416 cd
50%	3020 cd
60%	3624 cd
70%	4228 cd
80%	4832 cd

### Conditions:

Number of c-planes: 2

Candela at center: 6040 cd

## ISO LUX DIAGRAM



3%	1,81 lx
5%	3,02 lx
10%	6,04 lx
30%	18,1 lx
50%	30,2 lx

### Conditions:

Number of c-planes: 2

Lux at center: 60,4 lx

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



**Total lumen output:**

**1066 lm**

**Peak candela output:**

**4576 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**25°**

**Target:**

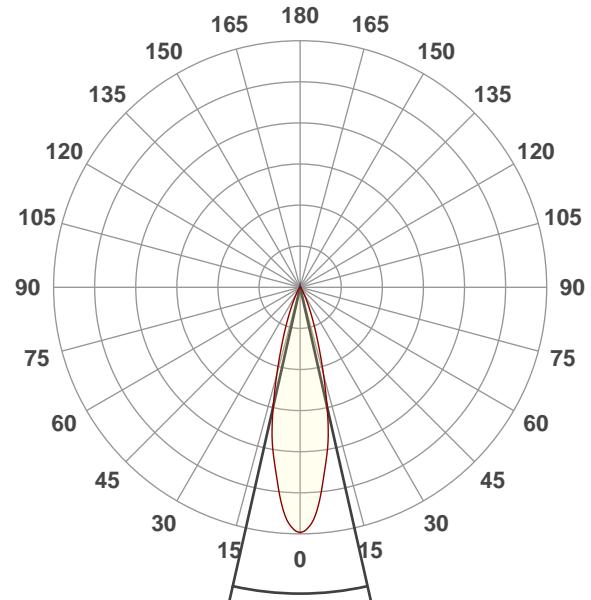
**Green**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 13:10:02**

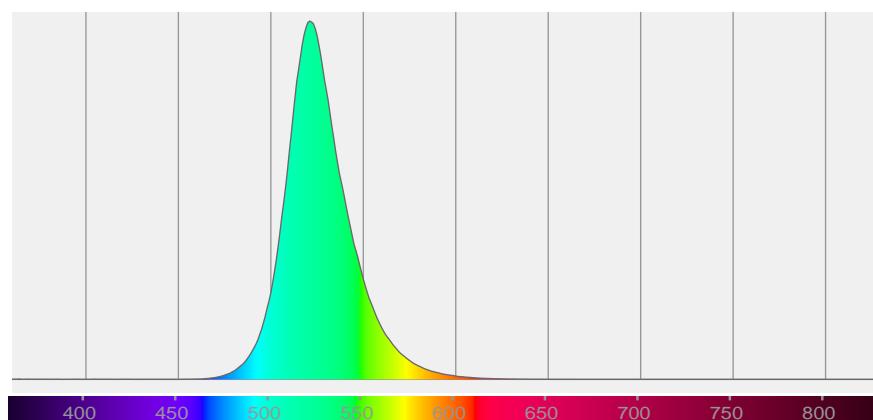


**Beam angle 50%: 25,4°**

**Field angle 10%: 46,4°**

**Cut off angle 2.5%: 62,3°**

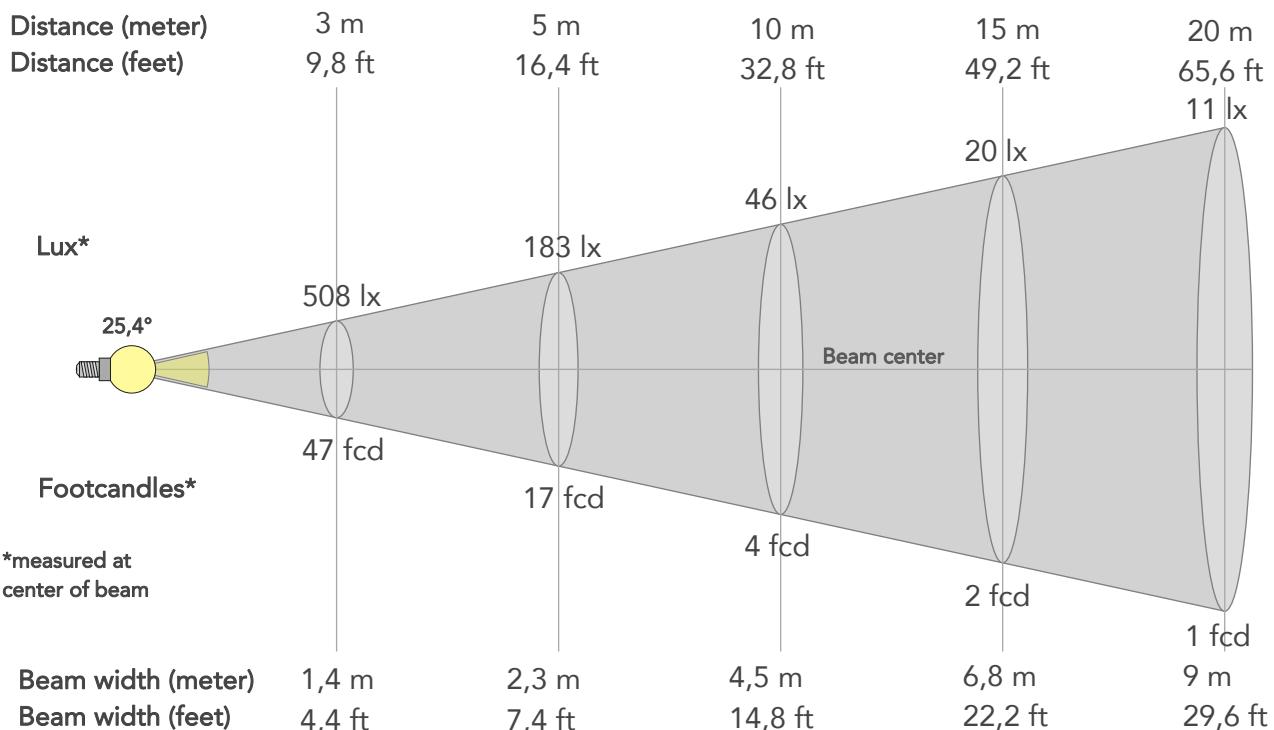
**Spectra**



## BEAM DETAILS



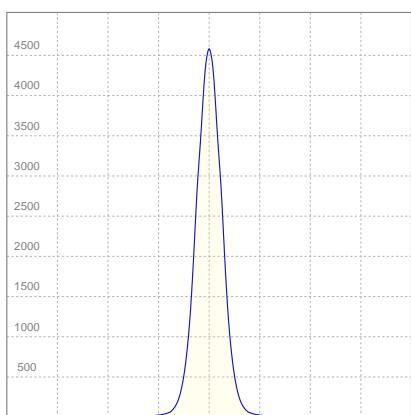
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
25,4°	46,4°	62,3°	98,9%	96,9%



### 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	4576lx	1144lx	508lx	286lx	183lx	81lx	46lx	20lx	11lx	7lx	5lx	3lx	2lx
Footcand.	425fcd	106fcd	47fcd	27fcd	17fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,8m	2,3m	3,4m	4,5m	6,8m	9m	11,3m	13,5m	18m	22,6m
Beam wid.	1,5ft	3ft	4,4ft	5,9ft	7,4ft	11,1ft	14,8ft	22,2ft	29,6ft	37ft	44,4ft	59,2ft	74ft

### LINEAR DISTRIBUTION DIAGRAM



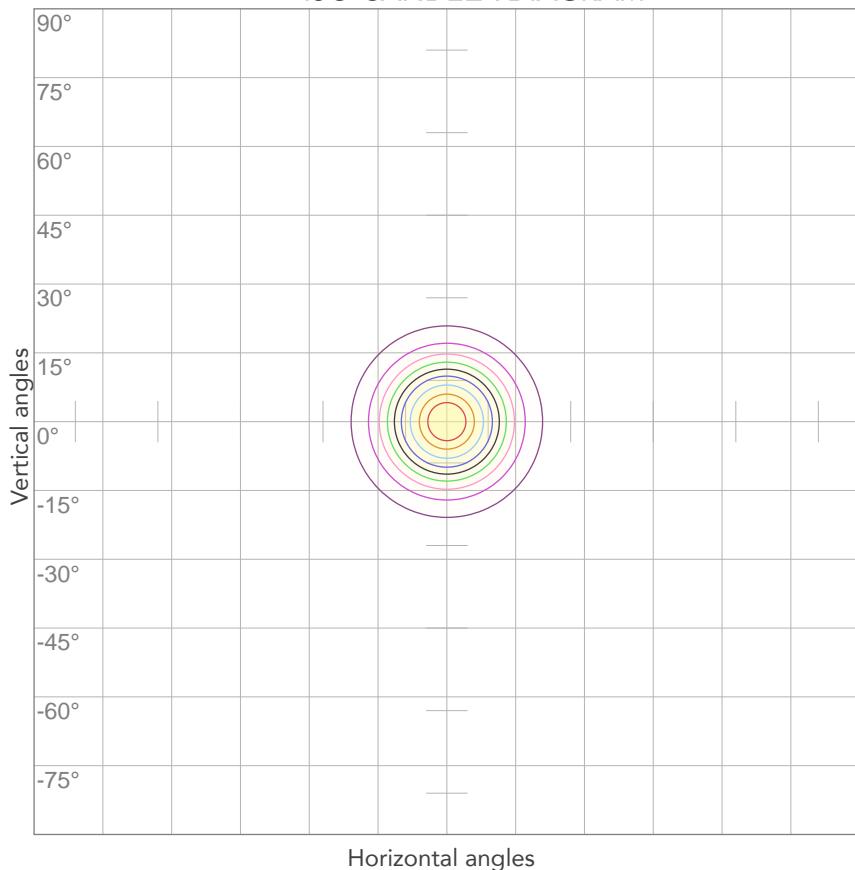
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
230V	0,144A	21,8W	49lm/W
Power FC			
0,66			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



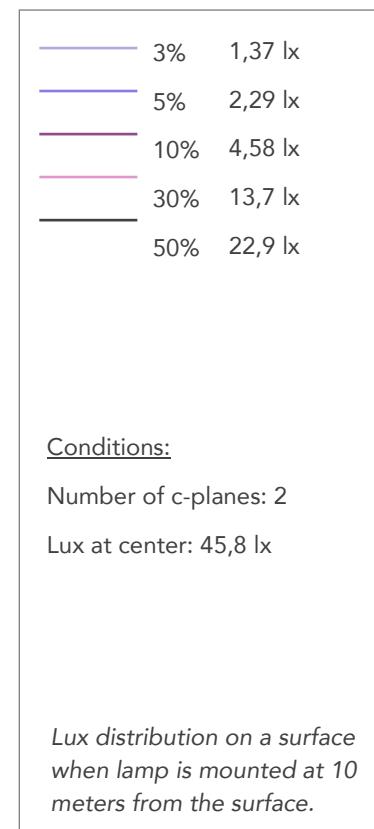
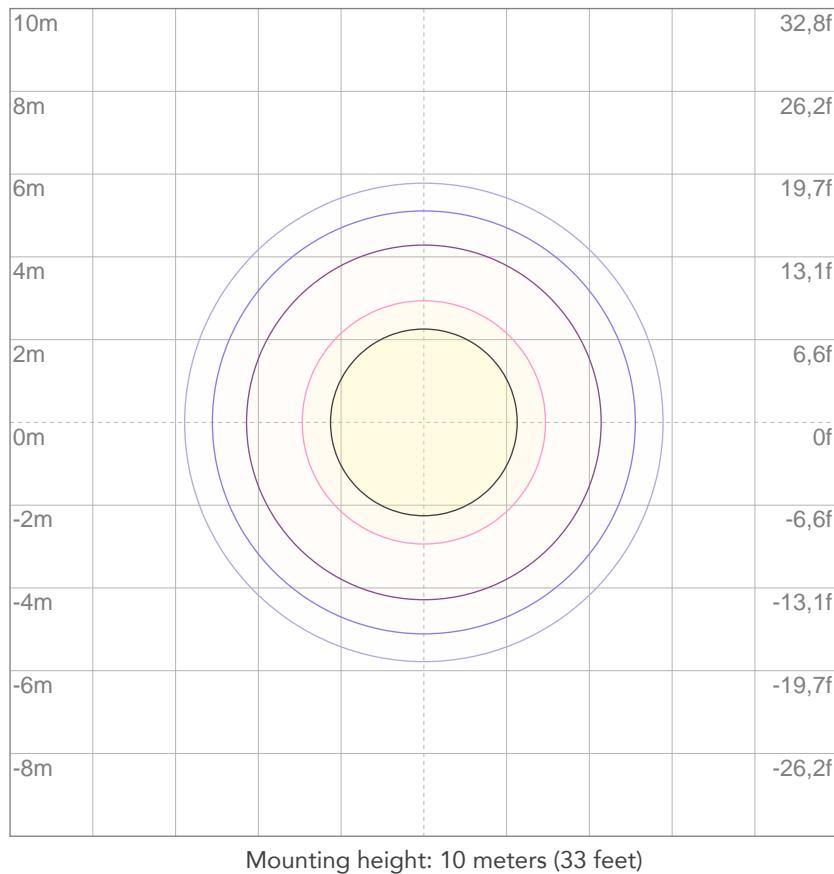
10%	458 cd
20%	915 cd
30%	1373 cd
40%	1831 cd
50%	2288 cd
60%	2746 cd
70%	3203 cd
80%	3661 cd

### Conditions:

Number of c-planes: 2

Candela at center: 4576 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)



**Total lumen output:**

**1003 lm**

**Peak candela output:**

**1306 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**45°**

**Target:**

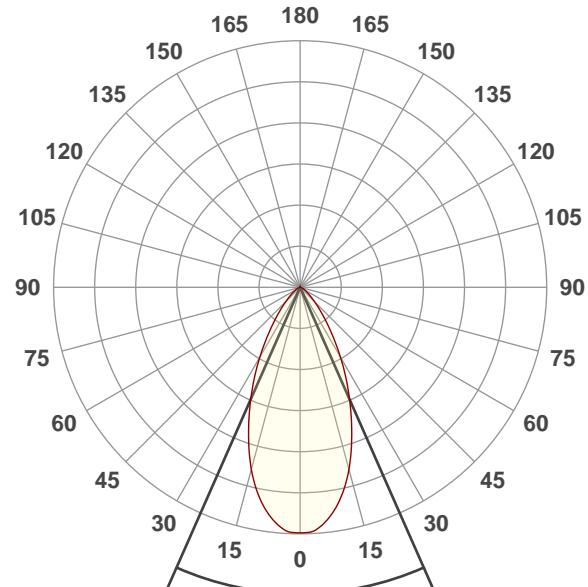
**Green**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 14:19:41**

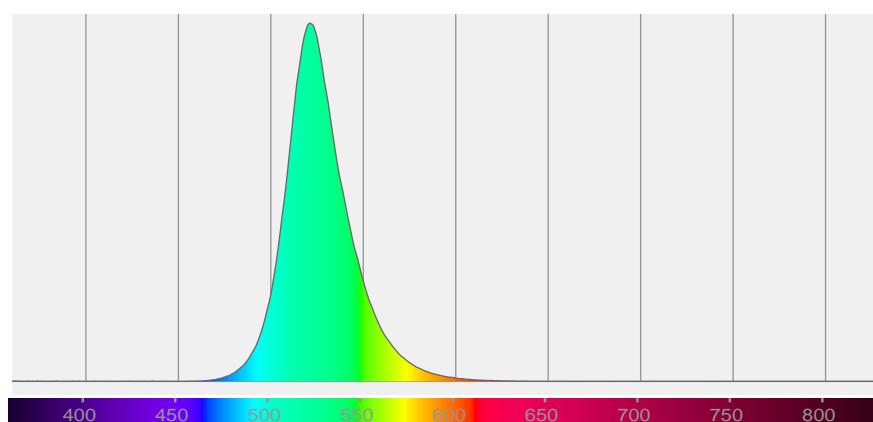


**Beam angle 50%: 47,6°**

**Field angle 10%: 86,4°**

**Cut off angle 2.5%: 115,7°**

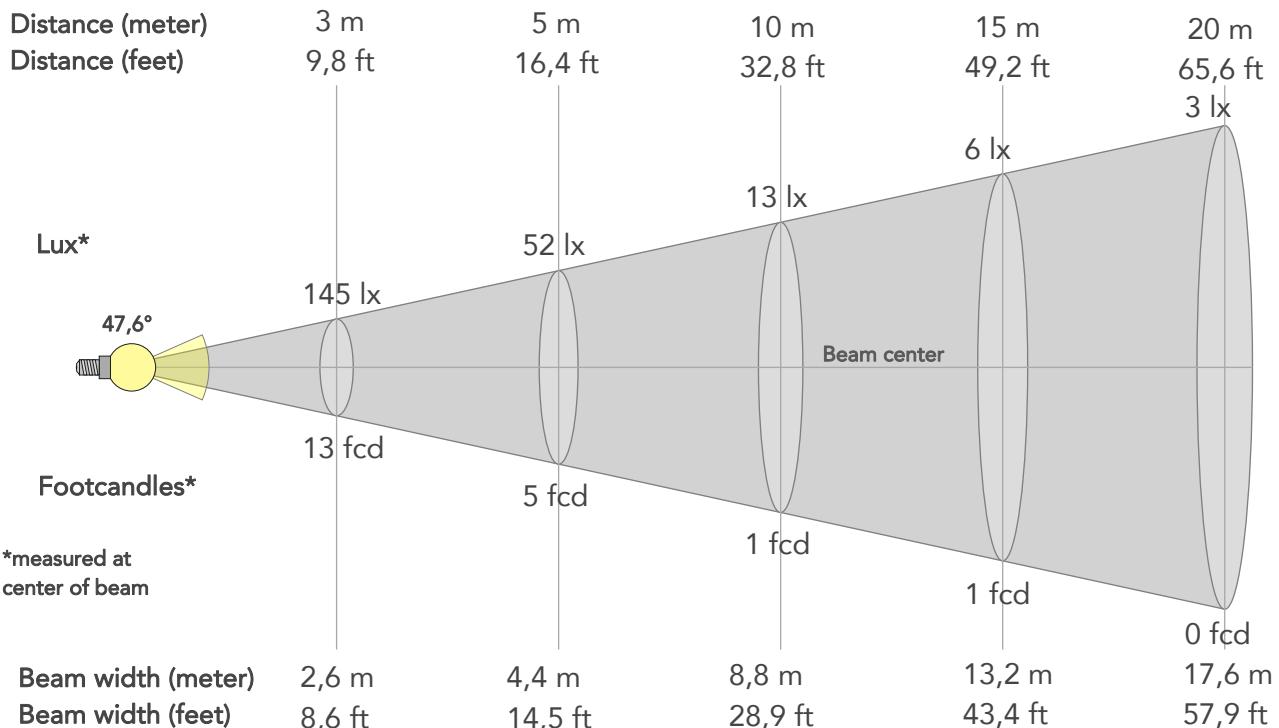
**Spectra**



## BEAM DETAILS



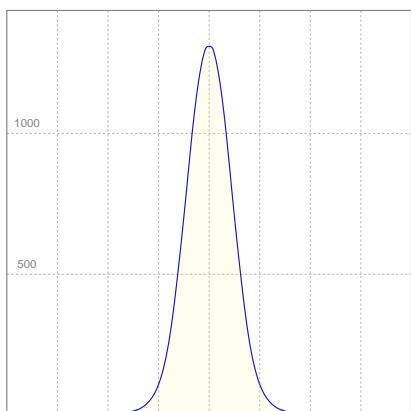
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,6°	86,4°	115,7°	97,3%	89,9%



### 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	1306lx	326lx	145lx	82lx	52lx	23lx	13lx	6lx	3lx	2lx	1lx	1lx	1lx
Footcand.	121fcd	30fcd	13fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,8m	2,6m	3,5m	4,4m	6,6m	8,8m	13,2m	17,6m	22,1m	26,5m	35,3m	44,1m
Beam wid.	2,9ft	5,8ft	8,6ft	11,6ft	14,5ft	21,7ft	28,9ft	43,4ft	57,9ft	72,3ft	86,8ft	115,7ft	144,7ft

### LINEAR DISTRIBUTION DIAGRAM



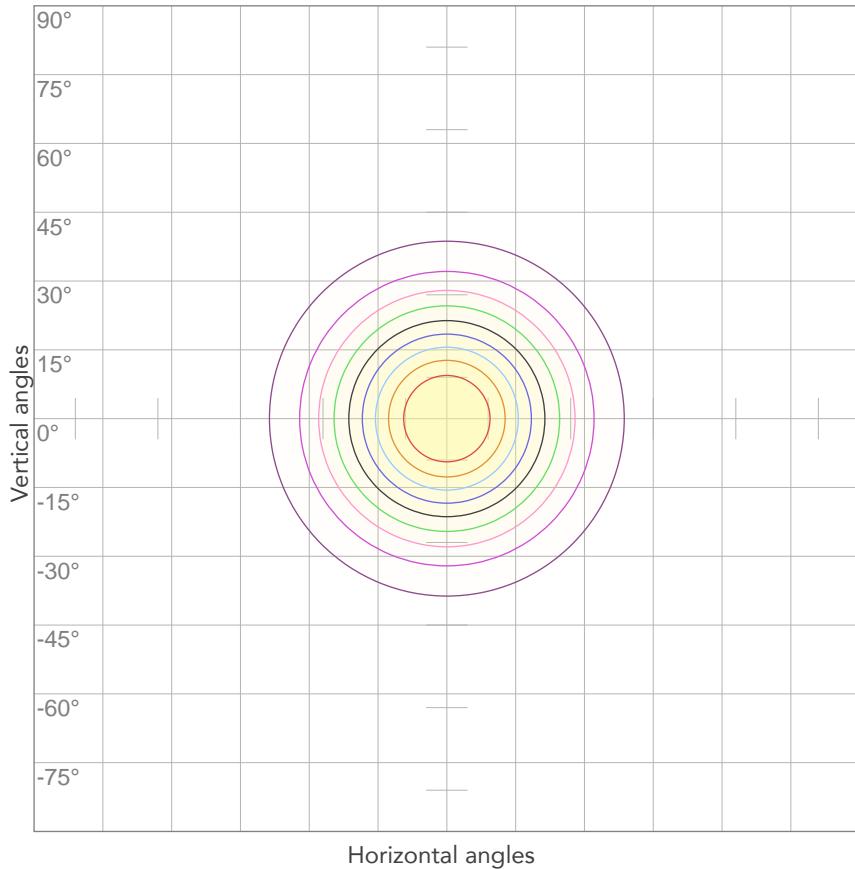
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
228V	0,144A	21,8W	46lm/W
Power FC			
0,66			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



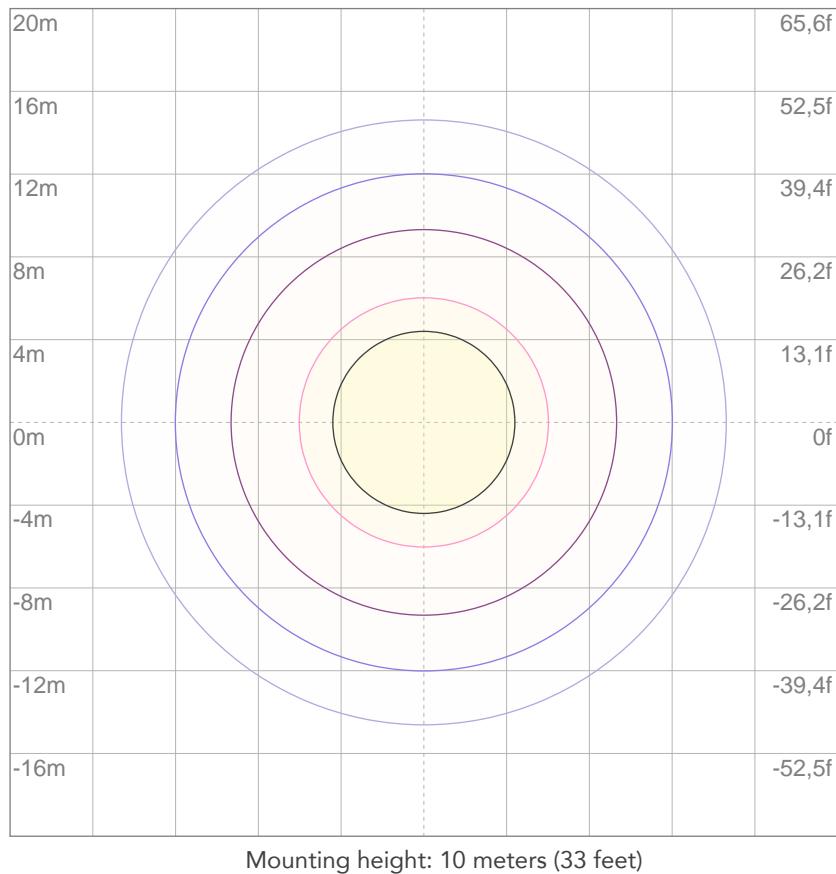
10%	131 cd
20%	261 cd
30%	392 cd
40%	522 cd
50%	653 cd
60%	783 cd
70%	914 cd
80%	1045 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1306 cd

## ISO LUX DIAGRAM



3%	0,392 lx
5%	0,653 lx
10%	1,31 lx
30%	3,92 lx
50%	6,53 lx

### Conditions:

Number of c-planes: 2

Lux at center: 13,1 lx

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



**Total lumen output:**

**281 lm**

**Peak candela output:**

**1292 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**15°**

**Target:**

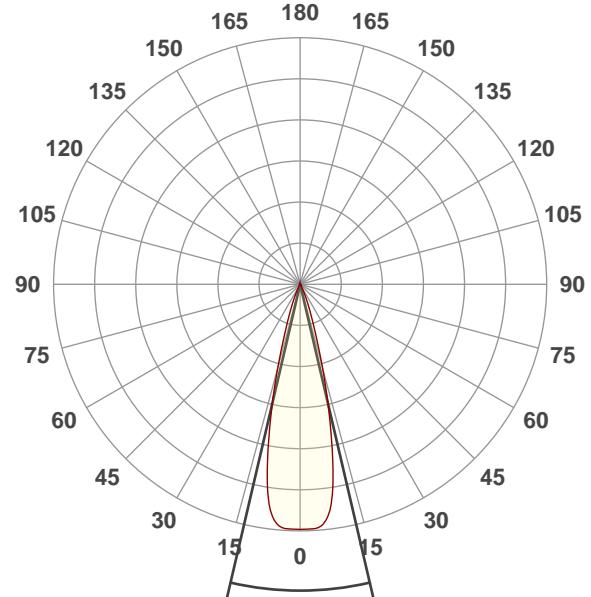
**Blue**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 14:48:42**

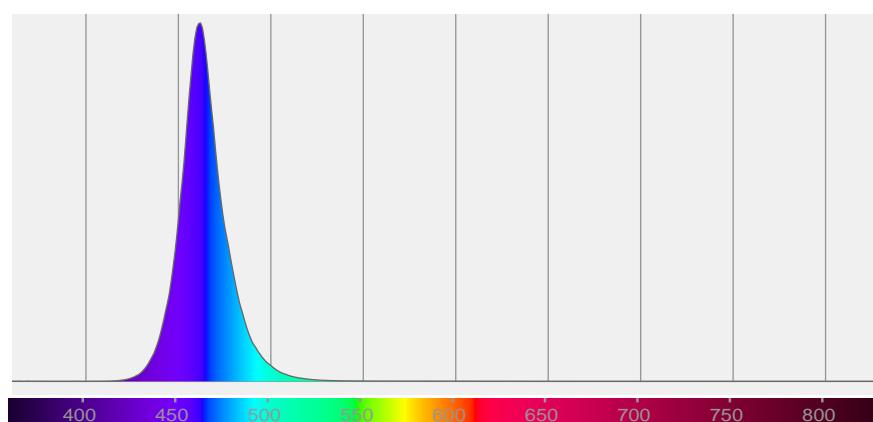


**Beam angle 50%: 26,3°**

**Field angle 10%: 41,8°**

**Cut off angle 2.5%: 53,3°**

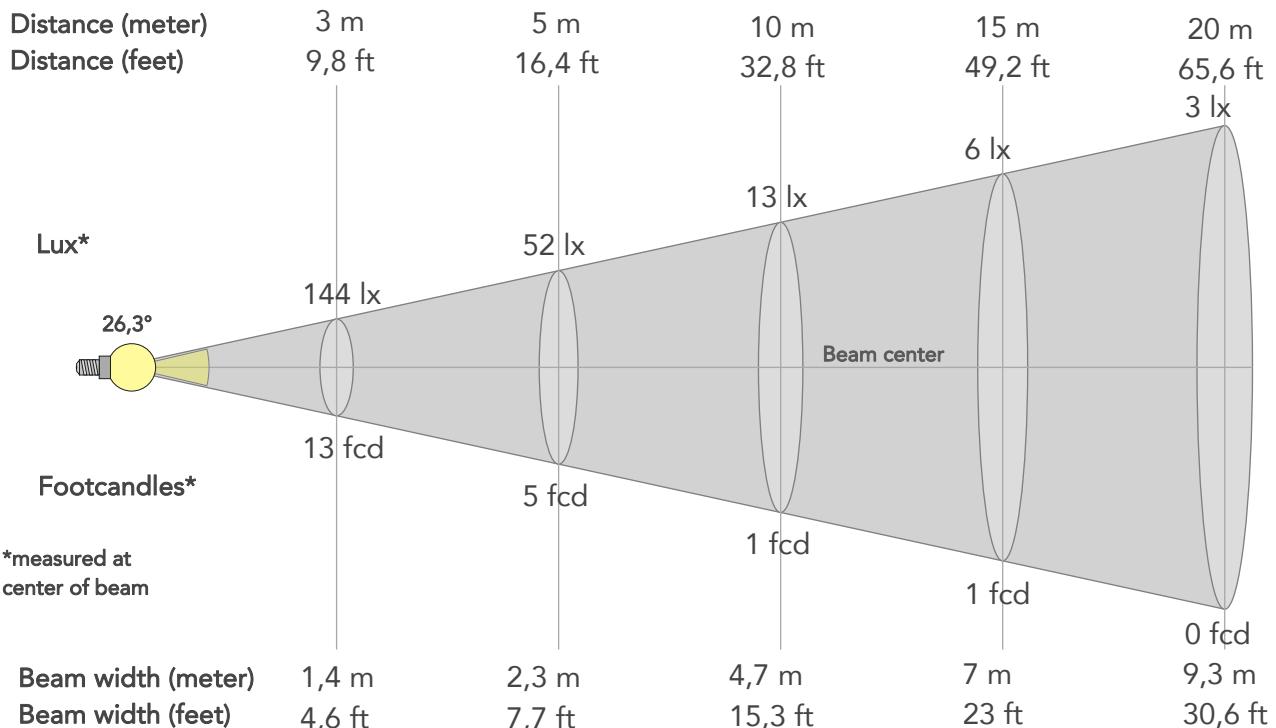
**Spectra**



## BEAM DETAILS



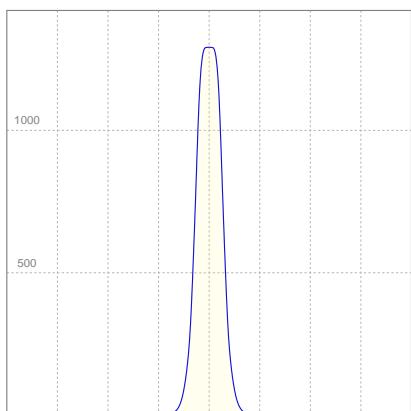
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,3°	41,8°	53,3°	99,5%	97,9%



### 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	1292lx	323lx	144lx	81lx	52lx	23lx	13lx	6lx	3lx	2lx	1lx	1lx	1lx
Footcand.	120fcd	30fcd	13fcd	8fcd	5fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,9m	2,3m	3,5m	4,7m	7m	9,3m	11,7m	14m	18,7m	23,3m
Beam wid.	1,5ft	3,1ft	4,6ft	6,1ft	7,7ft	11,5ft	15,3ft	23ft	30,6ft	38,3ft	45,9ft	61,2ft	76,5ft

### LINEAR DISTRIBUTION DIAGRAM



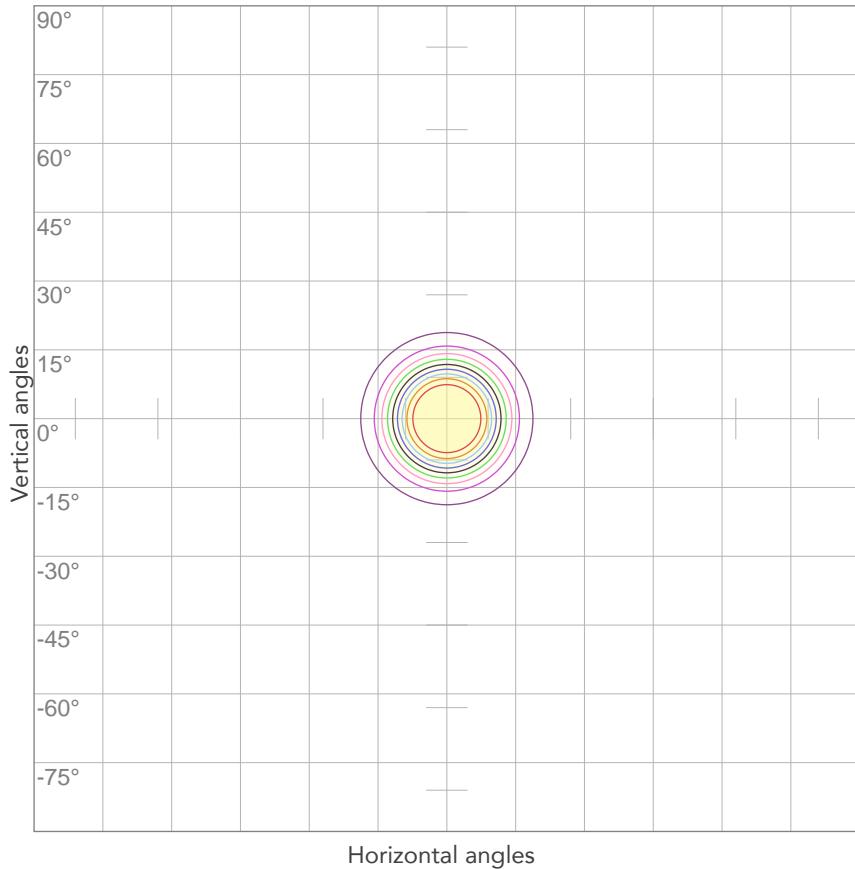
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
229V	0,146A	22,1W	13lm/W
Power FC			
0,66			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



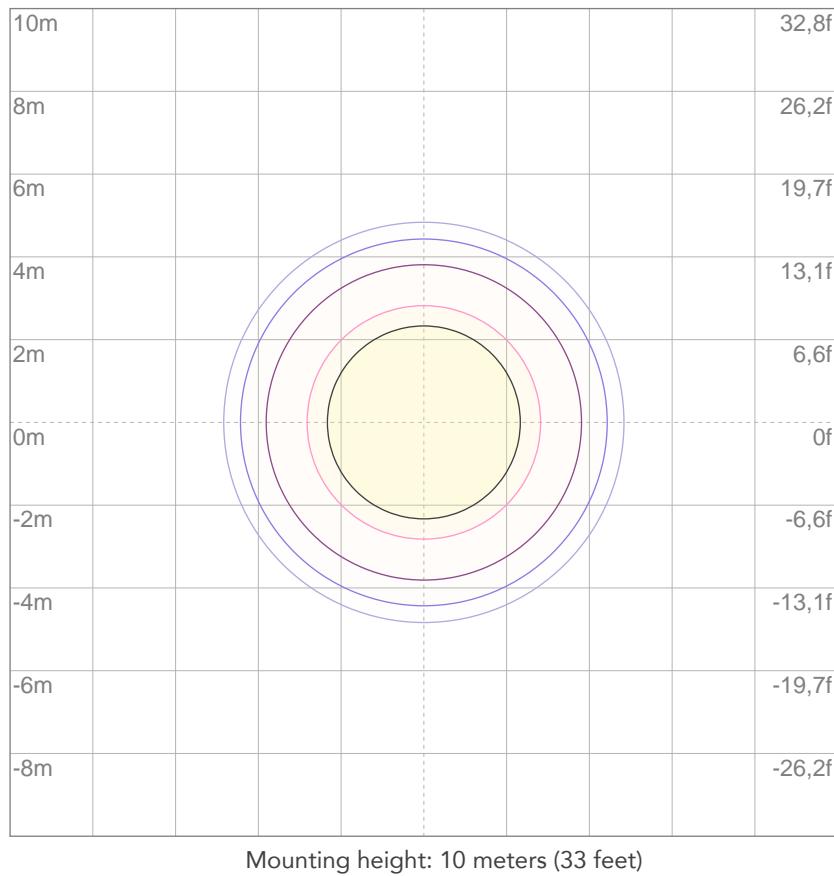
10%	129 cd
20%	258 cd
30%	388 cd
40%	517 cd
50%	646 cd
60%	775 cd
70%	904 cd
80%	1034 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1292 cd

## ISO LUX DIAGRAM



3%	0,388 lx
5%	0,646 lx
10%	1,29 lx
30%	3,88 lx
50%	6,46 lx

### Conditions:

Number of c-planes: 2

Lux at center: 12,9 lx

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



Total lumen output:

267 lm

Peak candela output:

1051 cd

### PRODUCT NAME:

LUMIPAR12H PRO

### MEASUREMENT CONDITIONS:

Beam angle:

25°

Target:

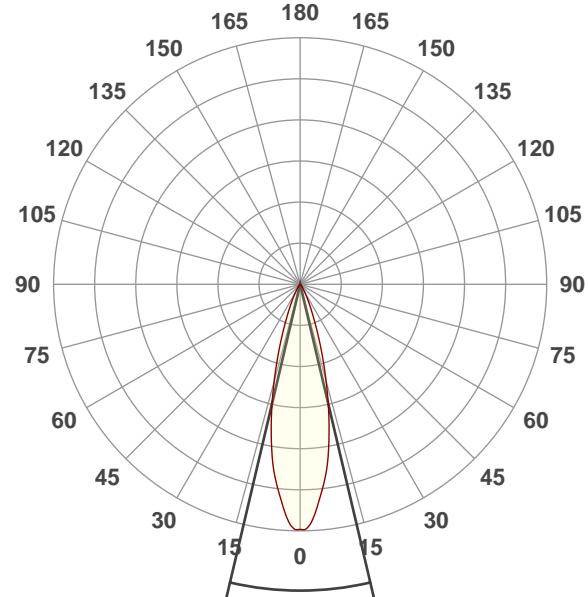
Blue

Operator:

Paolo Carvone

Date and time:

08/10/2020 13:13:45

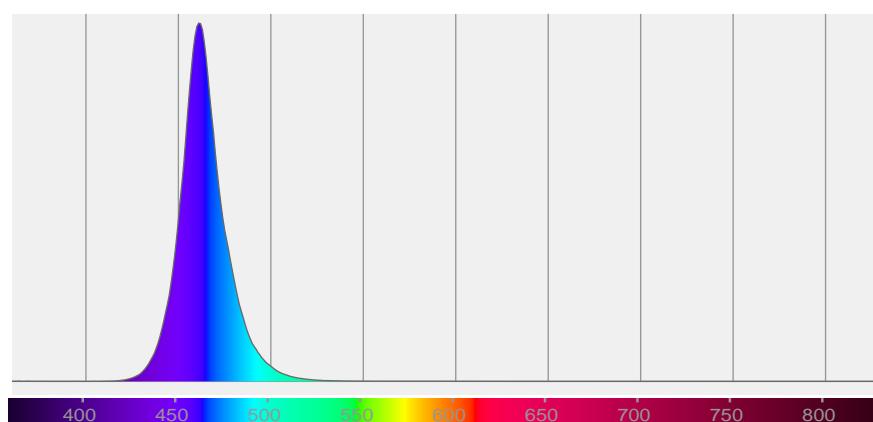


Beam angle 50%: 26,5°

Field angle 10%: 48,5°

Cut off angle 2.5%: 65°

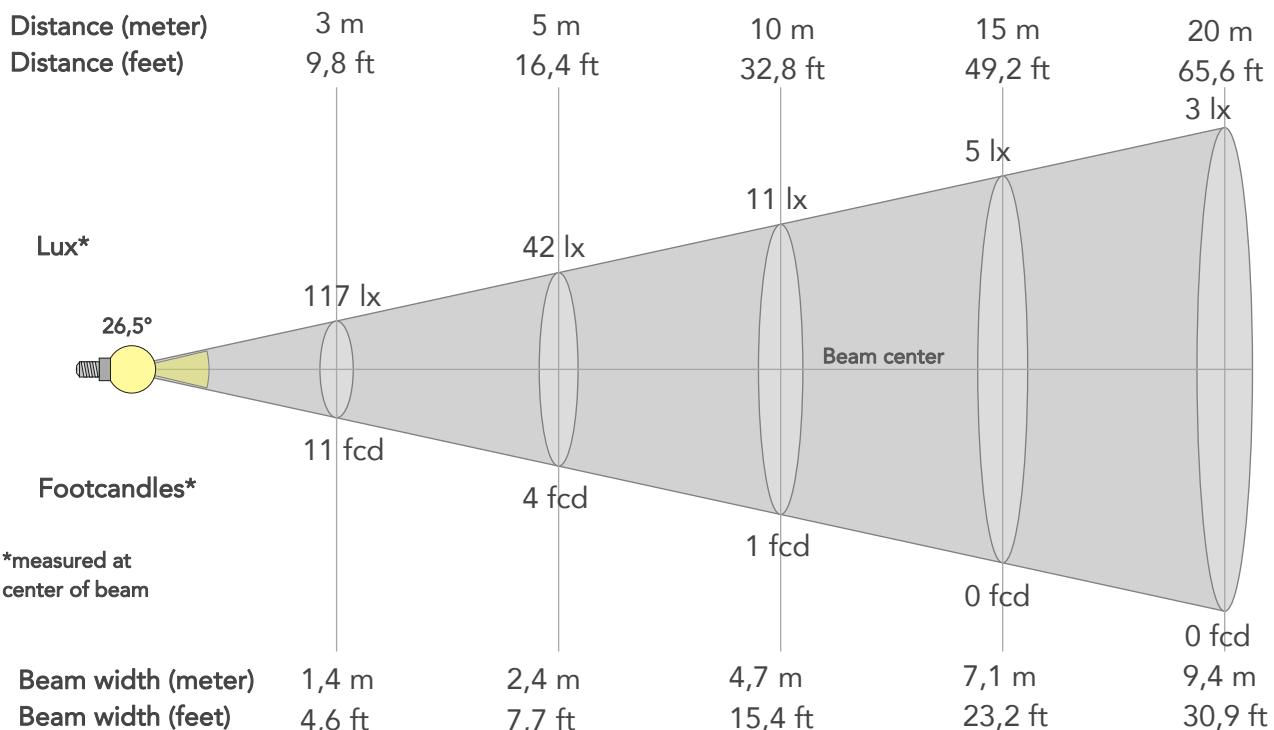
### Spectra



## BEAM DETAILS



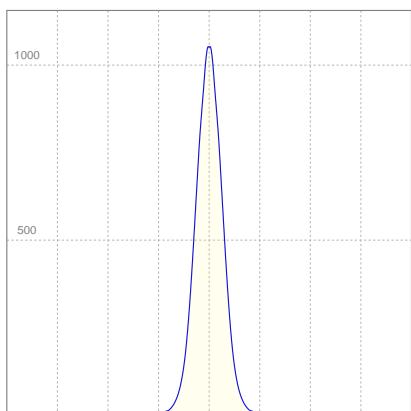
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,5°	48,5°	65°	99,0%	97,2%



### 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	1051lx	263lx	117lx	66lx	42lx	19lx	11lx	5lx	3lx	2lx	1lx	1lx	0lx
Footcand.	98fcd	24fcd	11fcd	6fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,9m	2,4m	3,5m	4,7m	7,1m	9,4m	11,8m	14,1m	18,8m	23,5m
Beam wid.	1,6ft	3,1ft	4,6ft	6,2ft	7,7ft	11,6ft	15,4ft	23,2ft	30,9ft	38,6ft	46,3ft	61,7ft	77,2ft

### LINEAR DISTRIBUTION DIAGRAM



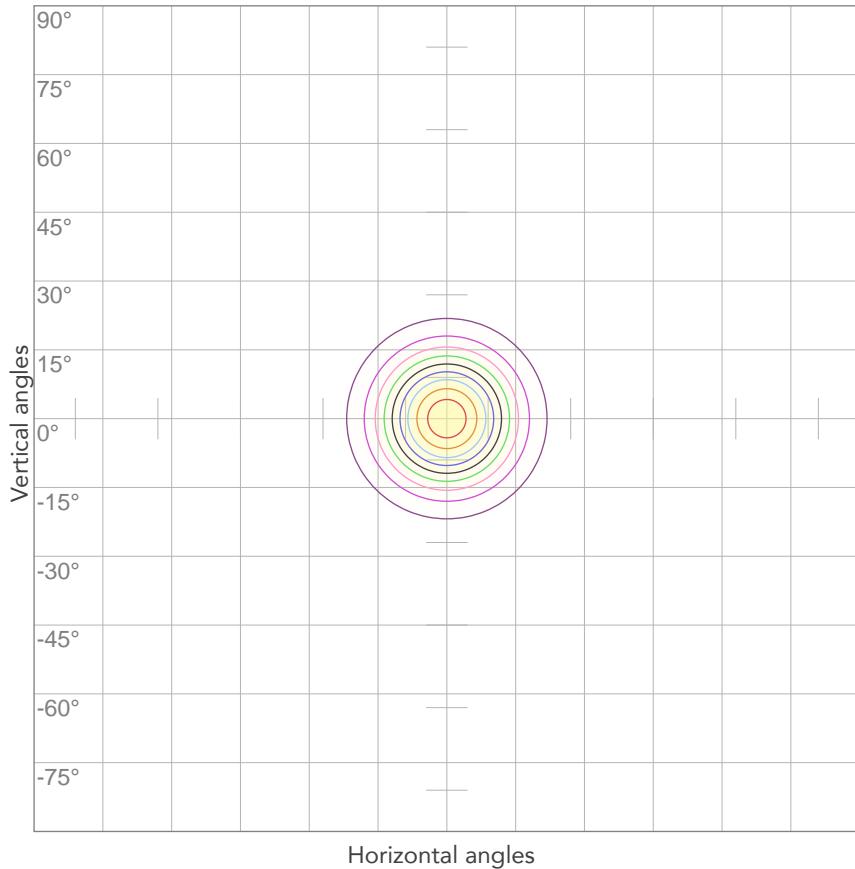
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
229V	0,146A	22,2W	12lm/W
Power FC			
0,66			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM

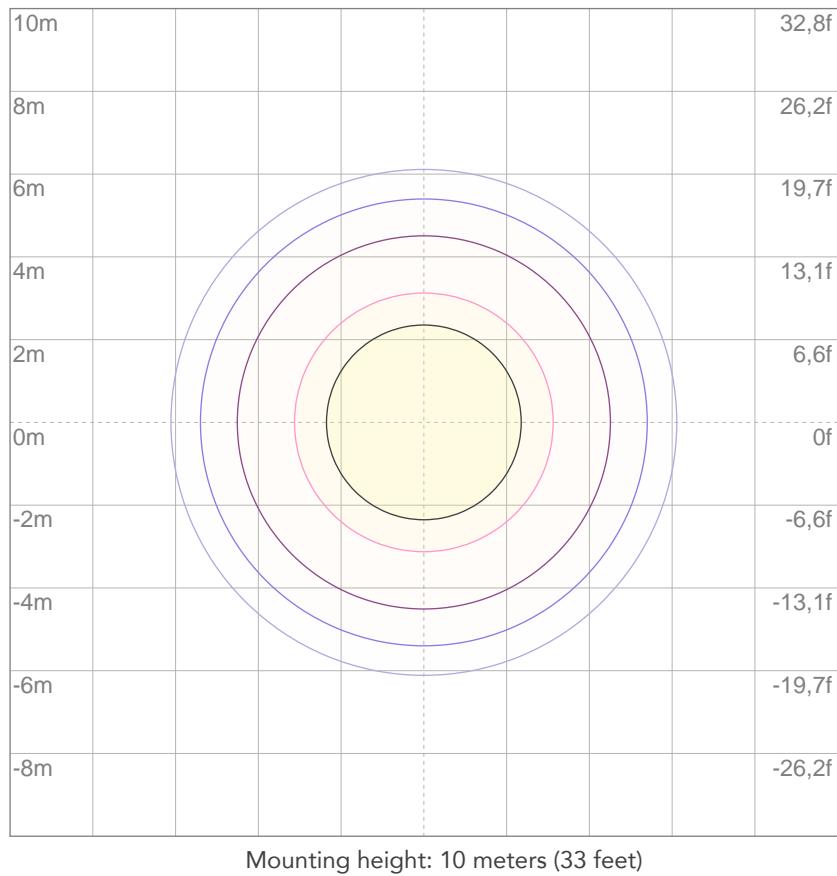


10%	105 cd
20%	210 cd
30%	315 cd
40%	420 cd
50%	526 cd
60%	631 cd
70%	736 cd
80%	841 cd

### Conditions:

Number of c-planes: 2  
Candela at center: 1051 cd

## ISO LUX DIAGRAM



3%	0,315 lx
5%	0,526 lx
10%	1,05 lx
30%	3,15 lx
50%	5,26 lx

### Conditions:

Number of c-planes: 2  
Lux at center: 10,5 lx

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



Total lumen output:

246 lm

Peak candela output:

311 cd

**PRODUCT NAME:**

LUMIPAR12H PRO

**MEASUREMENT CONDITIONS:**

Beam angle:

45°

Target:

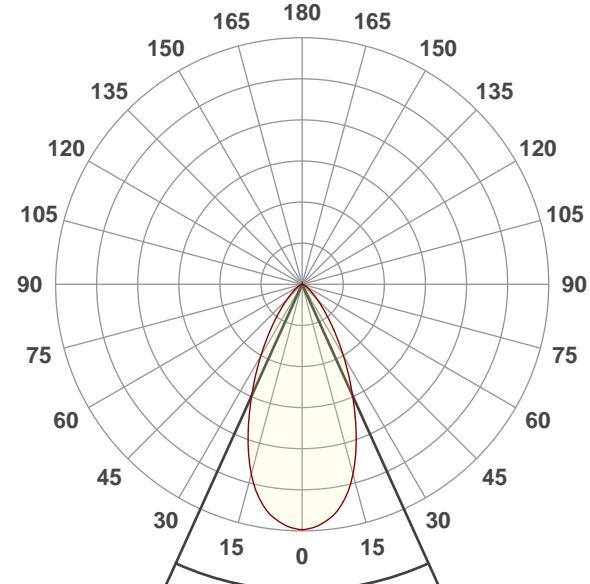
Blue

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:22:42

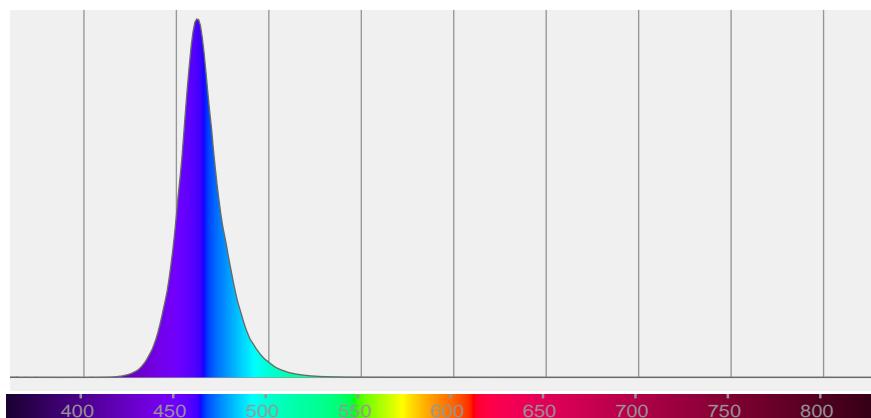


Beam angle 50%: 48,7°

Field angle 10%: 87,1°

Cut off angle 2.5%: 116,3°

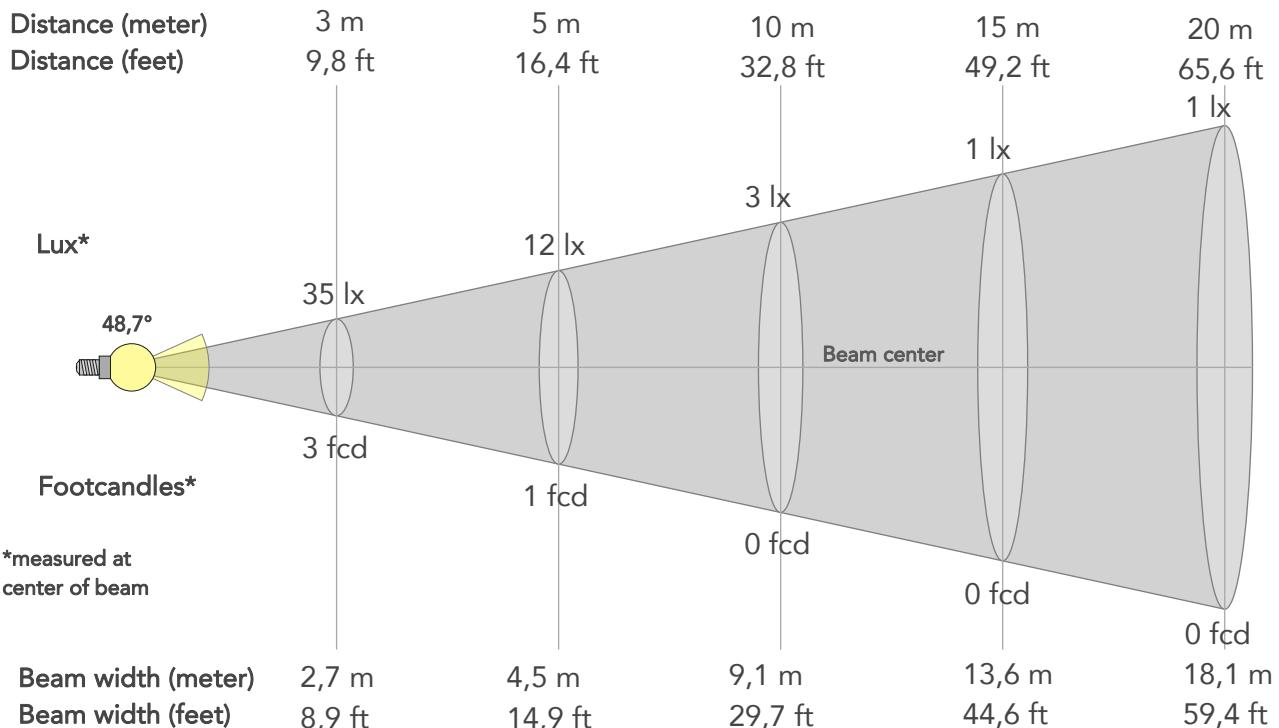
**Spectra**



## BEAM DETAILS



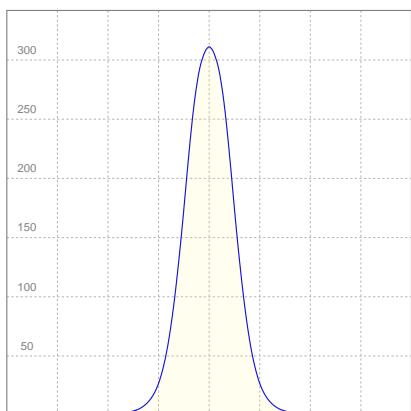
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
48,7°	87,1°	116,3°	97,3%	89,9%



### 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	311lx	78lx	35lx	19lx	12lx	6lx	3lx	1lx	1lx	0lx	0lx	0lx	0lx
Footcand.	29fcd	7fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,8m	2,7m	3,6m	4,5m	6,8m	9,1m	13,6m	18,1m	22,6m	27,2m	36,2m	45,3m
Beam wid.	3ft	6ft	8,9ft	11,9ft	14,9ft	22,3ft	29,7ft	44,6ft	59,4ft	74,3ft	89,1ft	118,8ft	148,5ft

### LINEAR DISTRIBUTION DIAGRAM



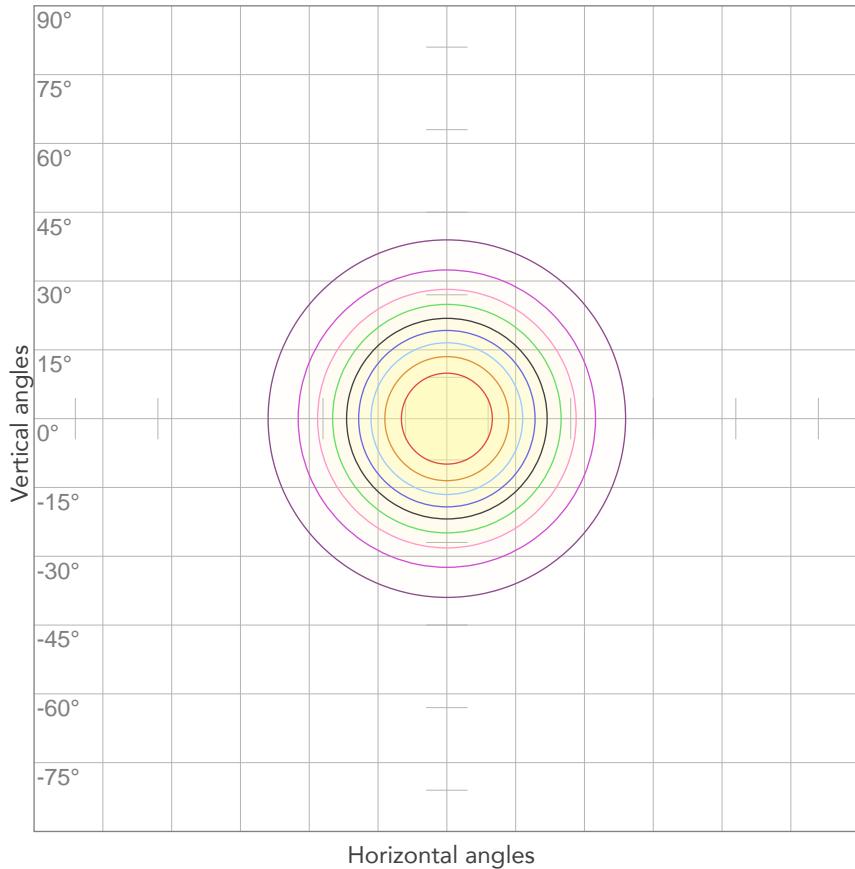
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,146A	22,2W	11lm/W
Power FC			
0,67			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM

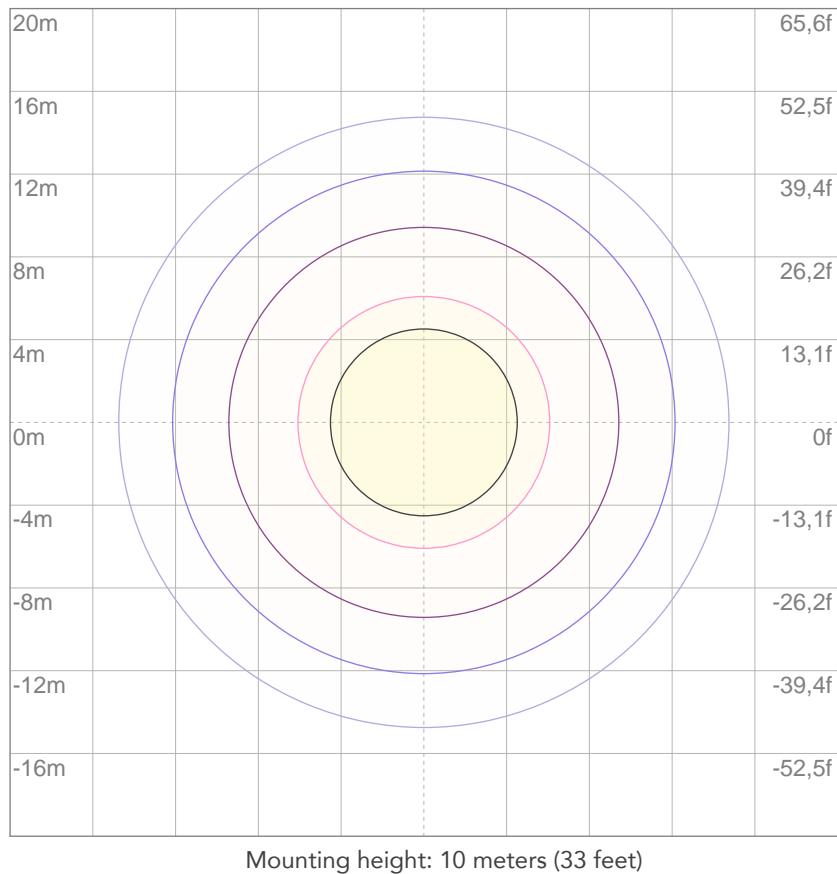


10%	31 cd
20%	62 cd
30%	93 cd
40%	124 cd
50%	155 cd
60%	186 cd
70%	218 cd
80%	249 cd

### Conditions:

Number of c-planes: 2  
Candela at center: 311 cd

## ISO LUX DIAGRAM



3%	93,2m lx
5%	0,155 lx
10%	0,311 lx
30%	0,932 lx
50%	1,55 lx

### Conditions:

Number of c-planes: 2  
Lux at center: 3,11 lx

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



Total lumen output:

587 lm

Peak candela output:

2622 cd

### PRODUCT NAME:

LUMIPAR12H PRO

### MEASUREMENT CONDITIONS:

Beam angle:

15°

Target:

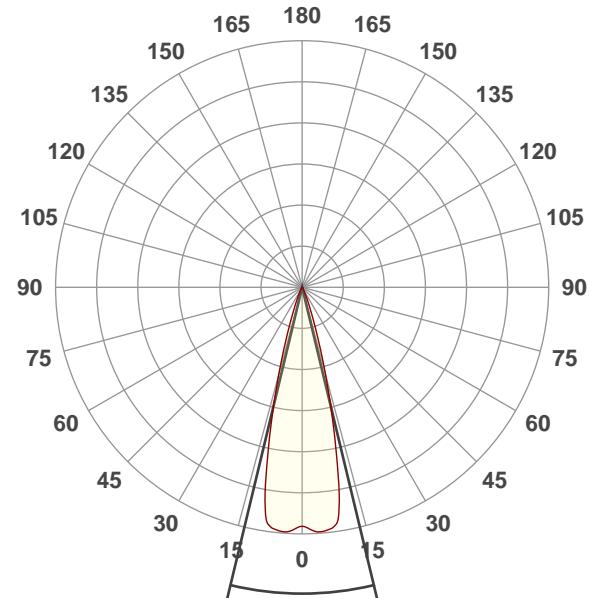
Amber

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:50:53

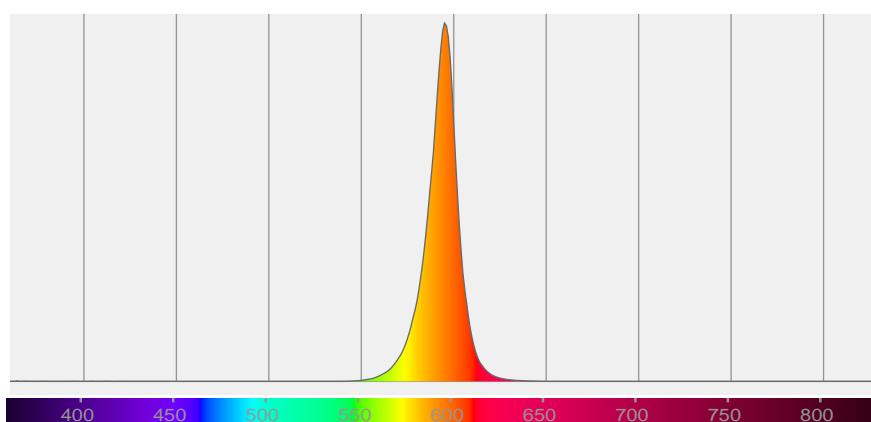


Beam angle 50%: 27,1°

Field angle 10%: 40,5°

Cut off angle 2.5%: 51,7°

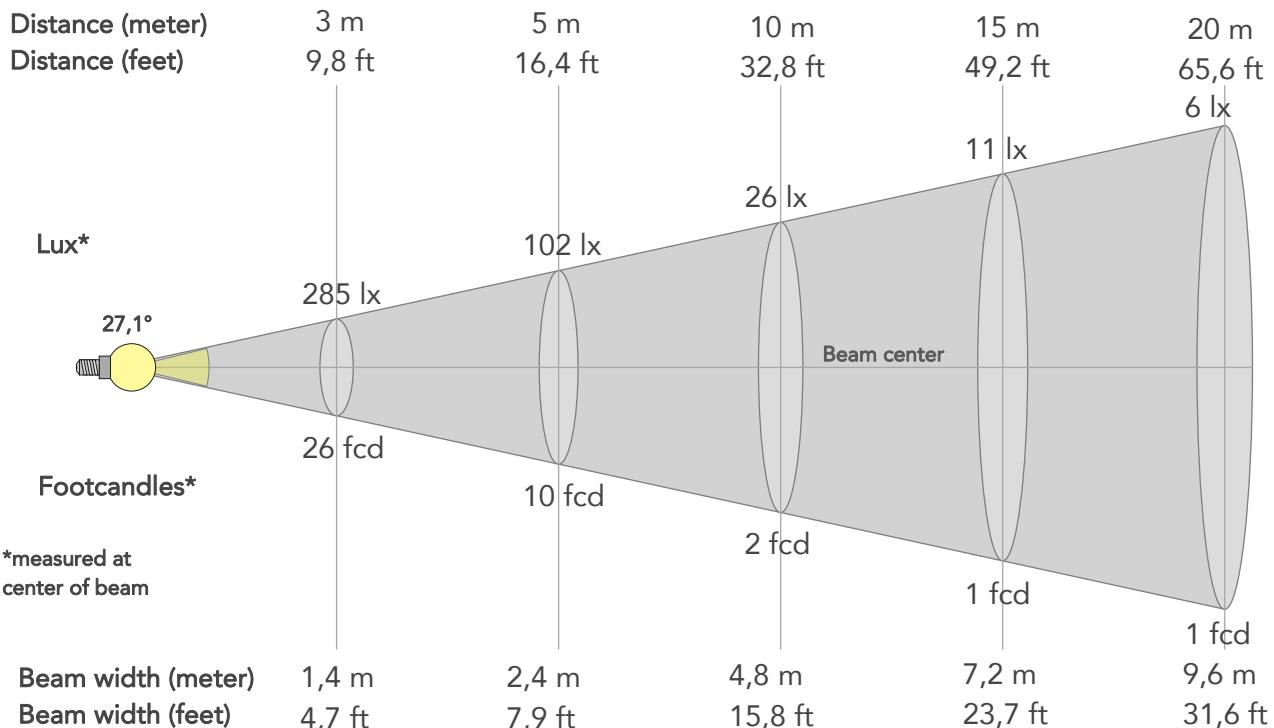
### Spectra



## BEAM DETAILS



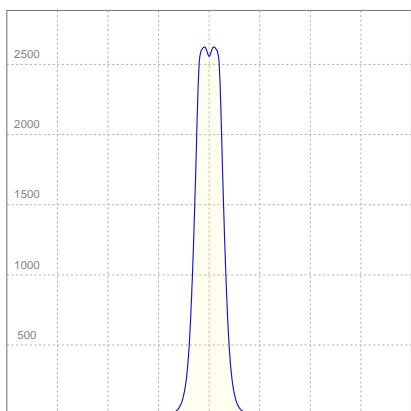
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27,1°	40,5°	51,7°	99,4%	98,1%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	2562lx	641lx	285lx	160lx	102lx	46lx	26lx	11lx	6lx	4lx	3lx	2lx	1lx
Footcand.	238fcd	60fcd	26fcd	15fcd	10fcd	4fcd	2fcd	1fcd	1fcd	0fcd	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	78,9ft

### LINEAR DISTRIBUTION DIAGRAM



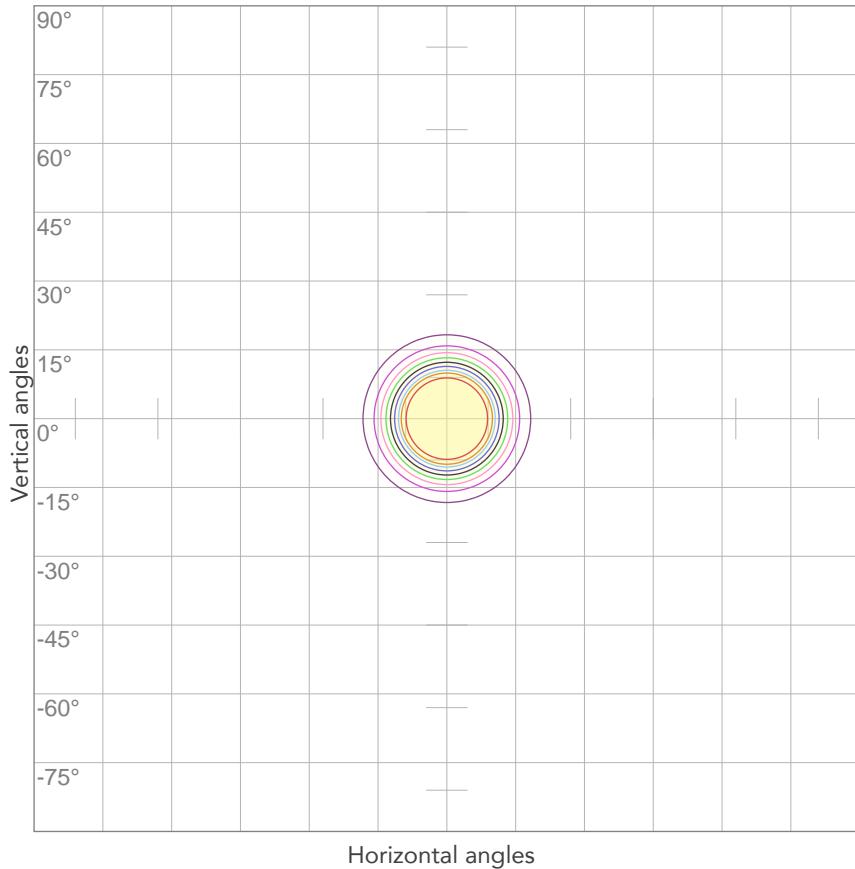
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
229V	0,129A	17,8W	33lm/W
Power FC			
0,6			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



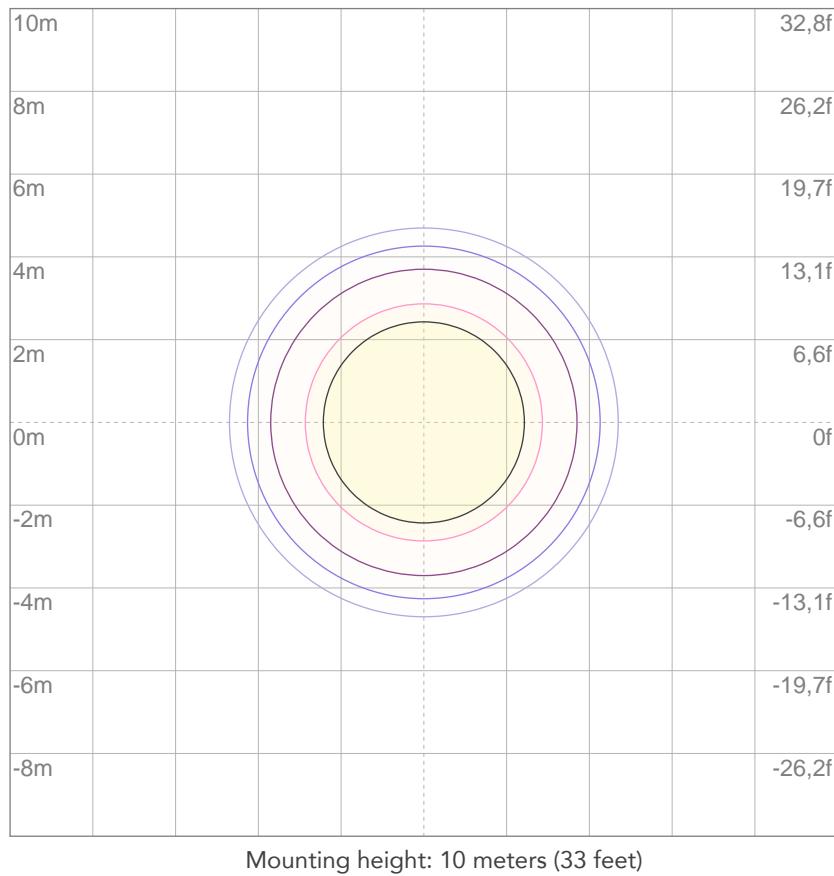
10%	256 cd
20%	512 cd
30%	769 cd
40%	1025 cd
50%	1281 cd
60%	1537 cd
70%	1793 cd
80%	2050 cd

### Conditions:

Number of c-planes: 2

Candela at center: 2562 cd

## ISO LUX DIAGRAM



3%	0,769 lx
5%	1,28 lx
10%	2,56 lx
30%	7,69 lx
50%	12,8 lx

### Conditions:

Number of c-planes: 2

Lux at center: 25,6 lx

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



Total lumen output:

609 lm

Peak candela output:

2229 cd

### PRODUCT NAME:

LUMIPAR12H PRO

### MEASUREMENT CONDITIONS:

Beam angle:

25°

Target:

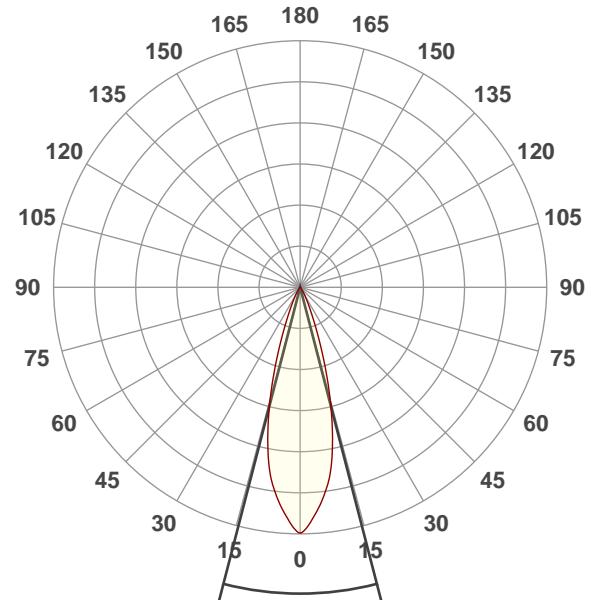
Amber

Operator:

Paolo Carvone

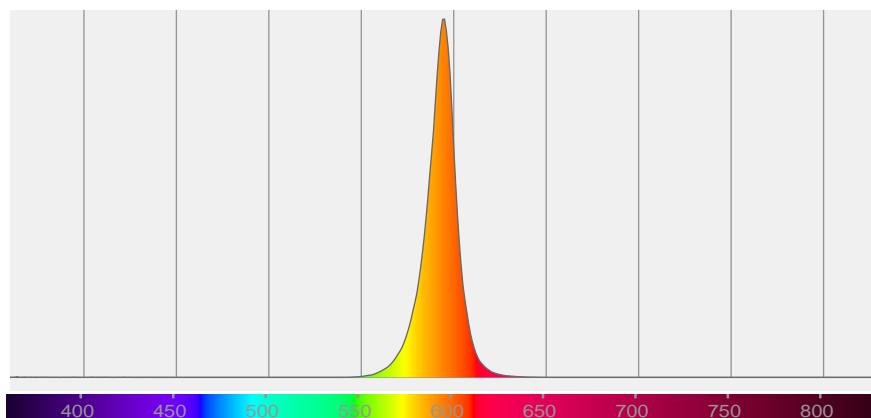
Date and time:

08/10/2020 13:23:07



Beam angle 50%: 29°  
 Field angle 10%: 48,6°  
 Cut off angle 2.5%: 64,9°

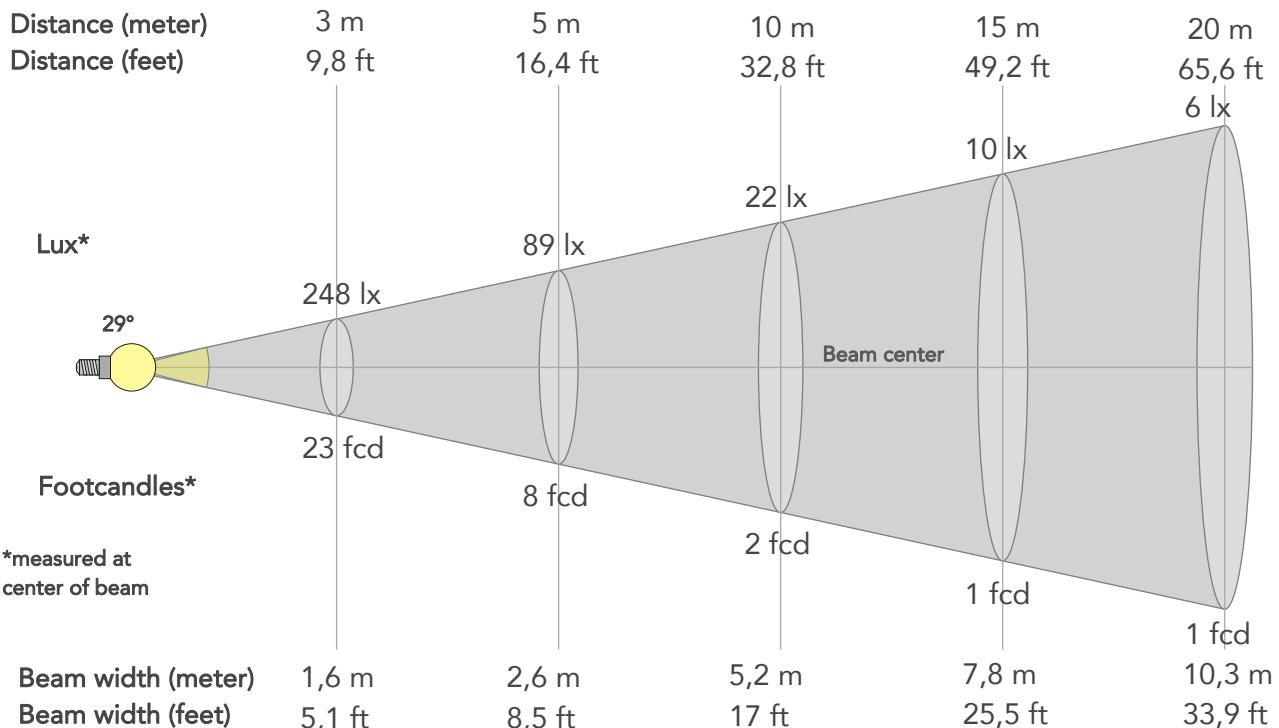
### Spectra



## BEAM DETAILS



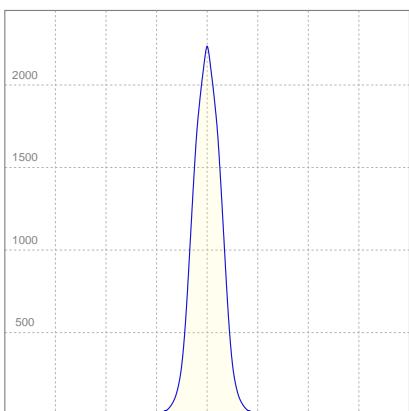
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29°	48,6°	64,9°	98,9%	97,1%



### BEAM INTENSITIES AND WIDTHS

Distance	1m	2m	3m	4m	5m	7,5m	10m	15m	20m	25m	30m	40m	50m
Distance	3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	24,6ft	32,8ft	49,2ft	65,6ft	82ft	98,4ft	131,2ft	164ft
Lux	2229lx	557lx	248lx	139lx	89lx	40lx	22lx	10lx	6lx	4lx	2lx	1lx	1lx
Footcand.	207fcd	52fcd	23fcd	13fcd	8fcd	4fcd	2fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	1m	1,6m	2,1m	2,6m	3,9m	5,2m	7,8m	10,3m	12,9m	15,5m	20,7m	25,9m
Beam wid.	1,7ft	3,4ft	5,1ft	6,8ft	8,5ft	12,7ft	17ft	25,5ft	33,9ft	42,4ft	50,9ft	67,9ft	84,9ft

### LINEAR DISTRIBUTION DIAGRAM



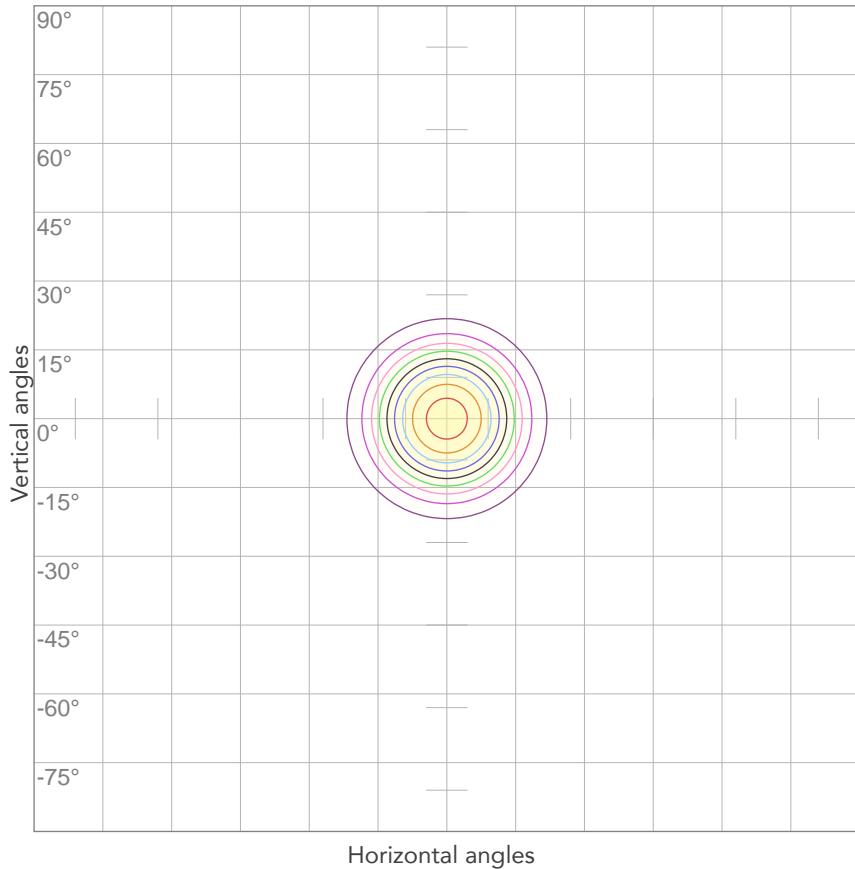
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
230V	0,128A	17,2W	35lm/W
Power FC			
0,58			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



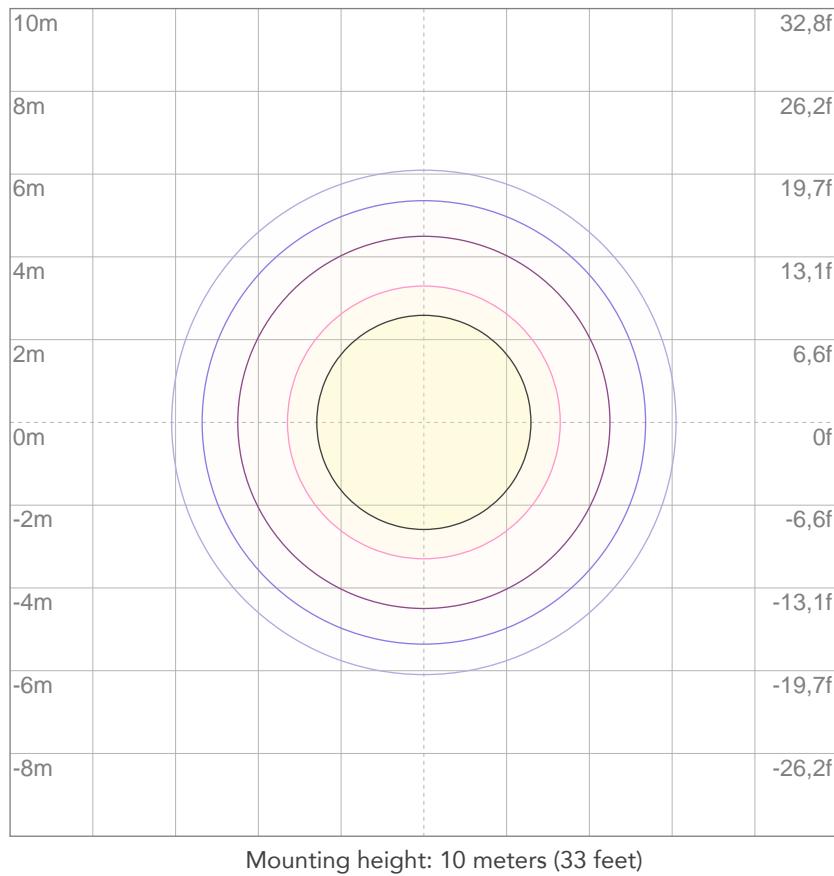
10%	223 cd
20%	446 cd
30%	669 cd
40%	891 cd
50%	1114 cd
60%	1337 cd
70%	1560 cd
80%	1783 cd

### Conditions:

Number of c-planes: 2

Candela at center: 2229 cd

## ISO LUX DIAGRAM



3%	0,669 lx
5%	1,11 lx
10%	2,23 lx
30%	6,69 lx
50%	11,1 lx

### Conditions:

Number of c-planes: 2

Lux at center: 22,3 lx

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



Total lumen output:

542 lm

Peak candela output:

715 cd

### PRODUCT NAME:

LUMIPAR12H PRO

### MEASUREMENT CONDITIONS:

Beam angle:

45°

Target:

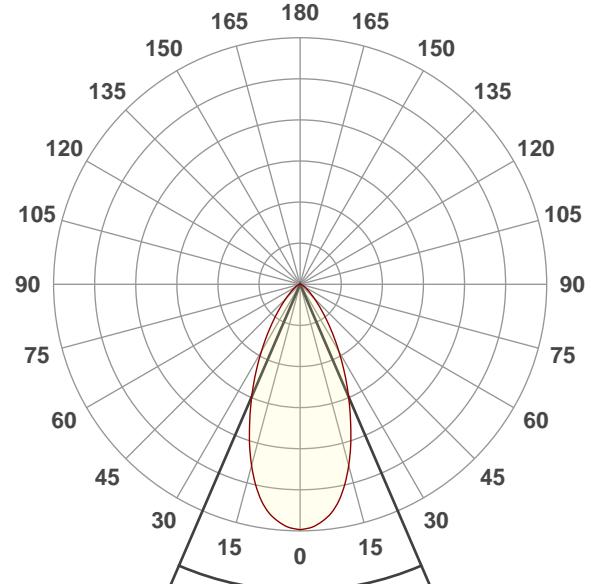
Amber

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:24:19

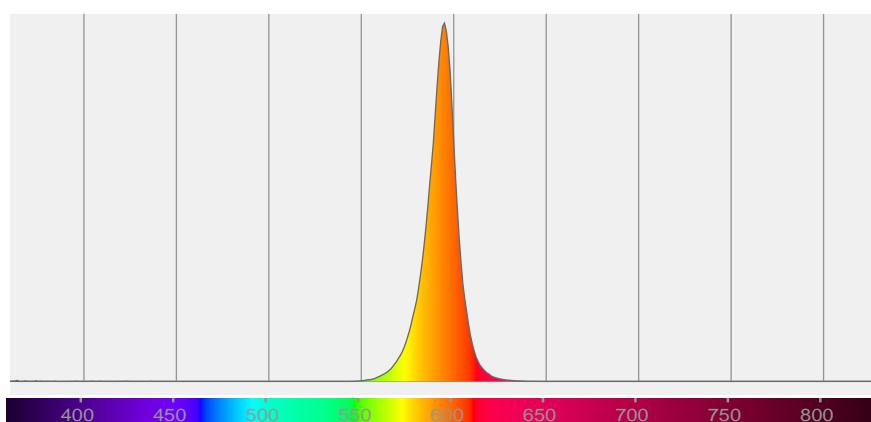


Beam angle 50%: 46,6°

Field angle 10%: 85,9°

Cut off angle 2.5%: 116,1°

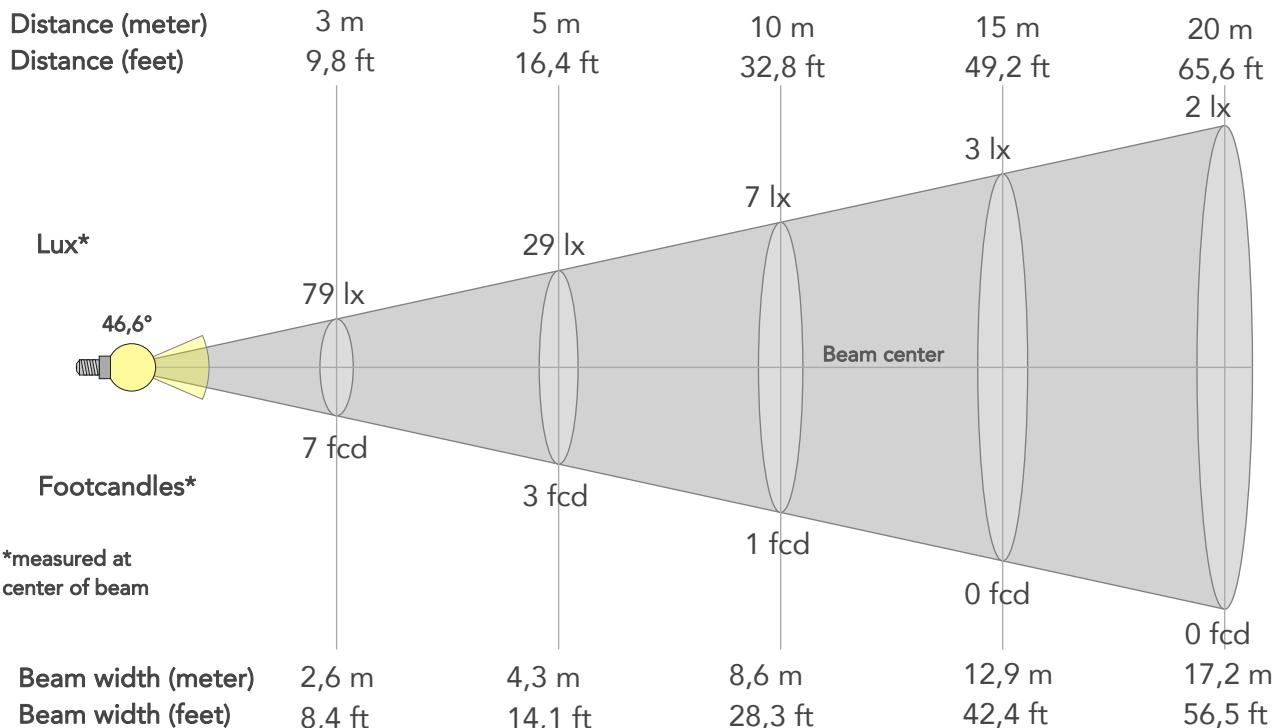
### Spectra



## BEAM DETAILS



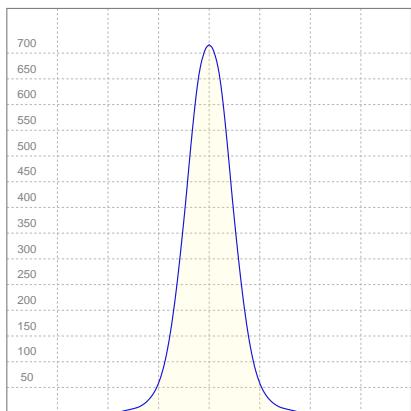
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,6°	85,9°	116,1°	97,0%	89,6%



### 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	715lx	179lx	79lx	45lx	29lx	13lx	7lx	3lx	2lx	1lx	1lx	0lx	0lx
Footcand.	66fcd	17fcd	7fcd	4fcd	3fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,9m	1,7m	2,6m	3,4m	4,3m	6,5m	8,6m	12,9m	17,2m	21,5m	25,9m	34,5m	43,1m
Beam wid.	2,8ft	5,7ft	8,4ft	11,3ft	14,1ft	21,2ft	28,3ft	42,4ft	56,5ft	70,7ft	84,8ft	113,1ft	141,3ft

### LINEAR DISTRIBUTION DIAGRAM



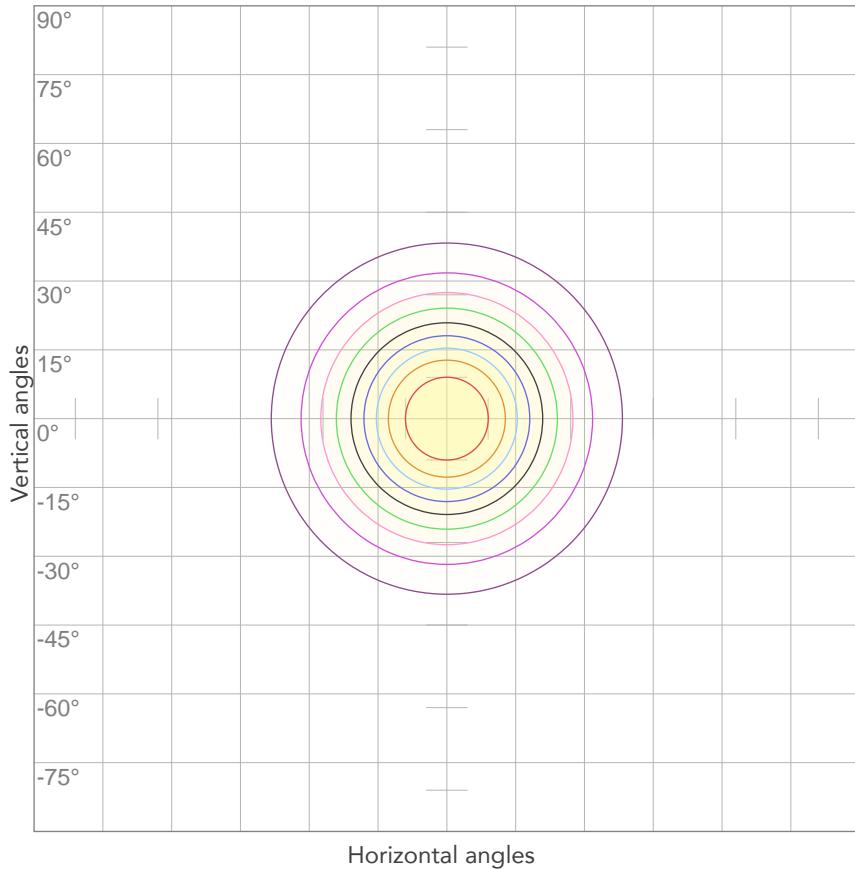
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
228V	0,129A	17,3W	31lm/W
Power FC			
0,59			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM

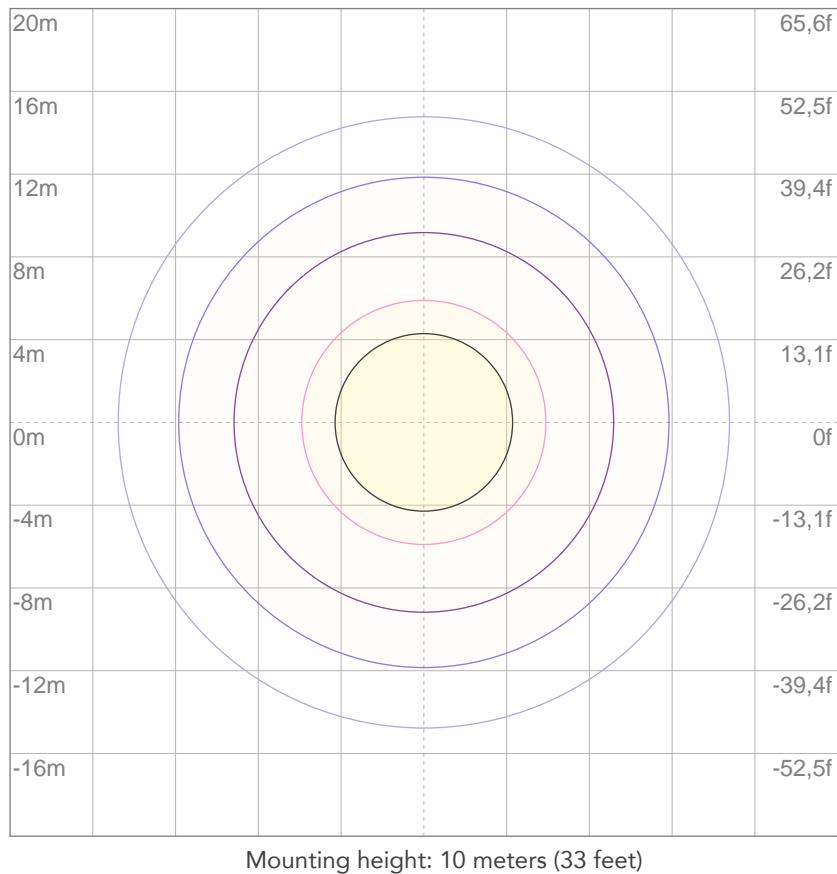


10%	72 cd
20%	143 cd
30%	215 cd
40%	286 cd
50%	358 cd
60%	429 cd
70%	501 cd
80%	572 cd

### Conditions:

Number of c-planes: 2  
Candela at center: 715 cd

## ISO LUX DIAGRAM



3%	0,215 lx
5%	0,358 lx
10%	0,715 lx
30%	2,15 lx
50%	3,58 lx

### Conditions:

Number of c-planes: 2  
Lux at center: 7,15 lx

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



Total lumen output:

1193 lm

Peak candela output:

7073 cd

### PRODUCT NAME:

LUMIPAR12HPRO

### MEASUREMENT CONDITIONS:

Beam angle:

15°

Target:

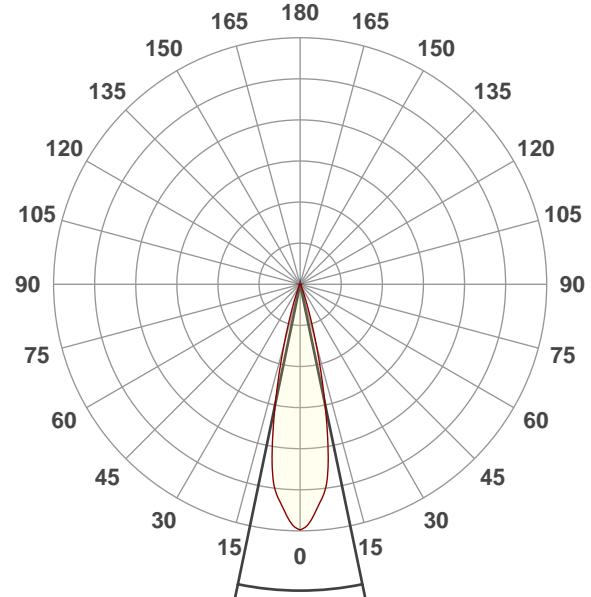
White

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:54:20

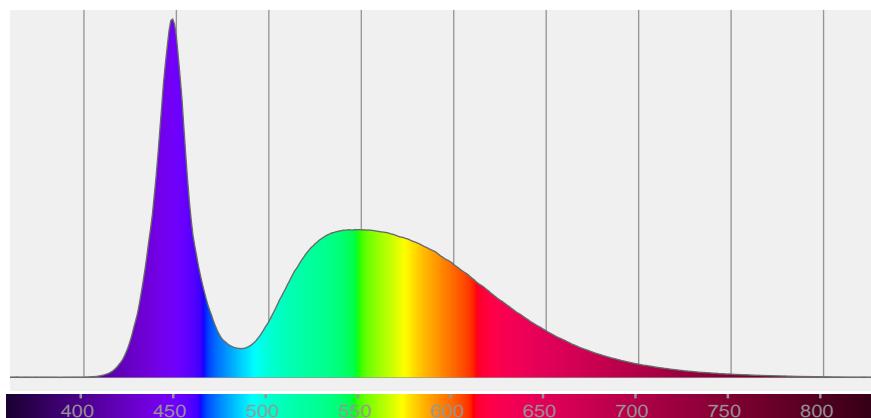


Beam angle 50%: 23,5°

Field angle 10%: 36,7°

Cut off angle 2.5%: 47,4°

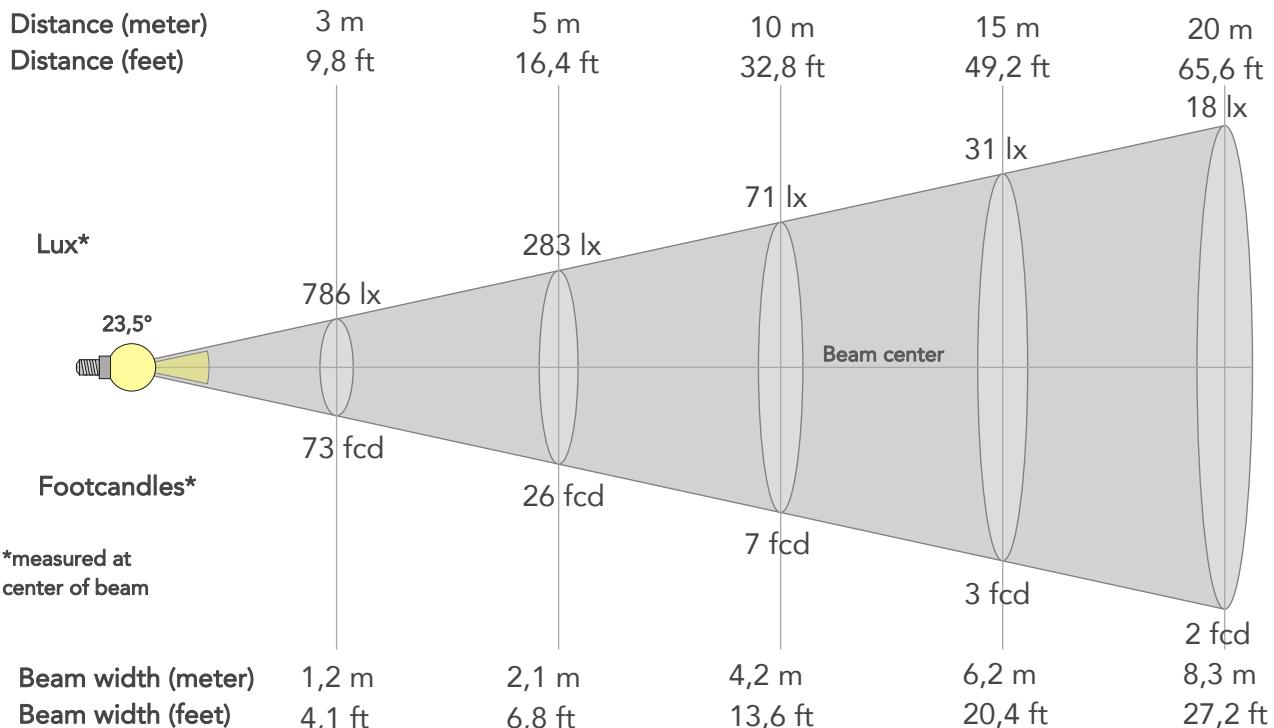
### Spectra



## BEAM DETAILS



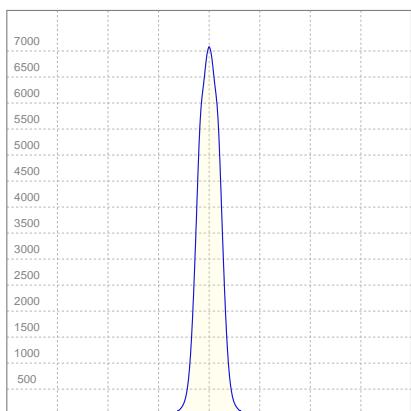
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23,5°	36,7°	47,4°	99,7%	98,5%



### 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	7073lx	1768lx	786lx	442lx	283lx	126lx	71lx	31lx	18lx	11lx	8lx	4lx	3lx
Footcand.	657fcd	164fcd	73fcd	41fcd	26fcd	12fcd	7fcd	3fcd	2fcd	1fcd	1fcd	0fcd	0fcd
Beam wid.	0,4m	0,8m	1,2m	1,7m	2,1m	3,1m	4,2m	6,2m	8,3m	10,4m	12,5m	16,6m	20,8m
Beam wid.	1,4ft	2,7ft	4,1ft	5,4ft	6,8ft	10,2ft	13,6ft	20,4ft	27,2ft	34ft	40,9ft	54,5ft	68,1ft

### LINEAR DISTRIBUTION DIAGRAM



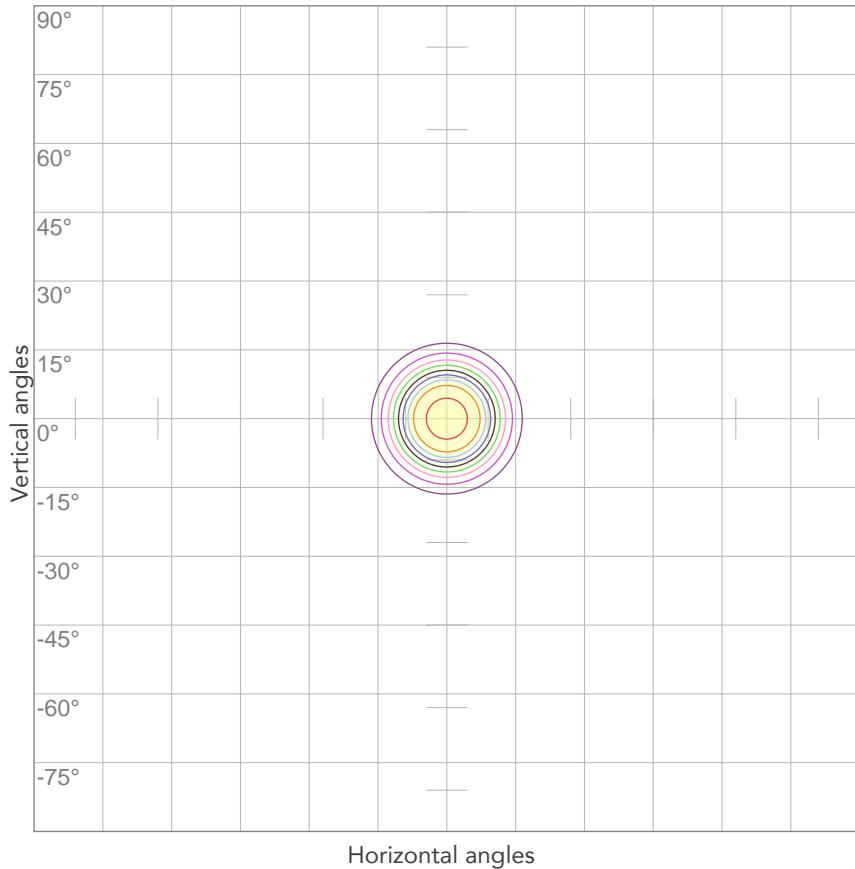
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,140A	20,7W	58lm/W
Power FC			
0,65			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



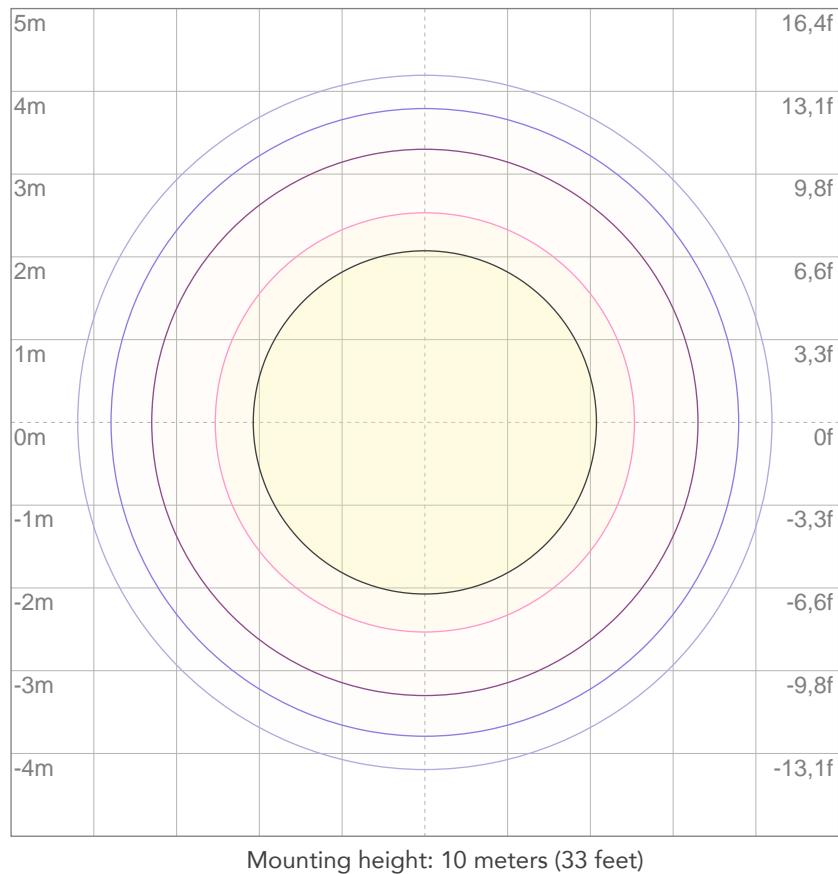
10%	707 cd
20%	1415 cd
30%	2122 cd
40%	2829 cd
50%	3536 cd
60%	4244 cd
70%	4951 cd
80%	5658 cd

### Conditions:

Number of c-planes: 2

Candela at center: 7073 cd

## ISO LUX DIAGRAM



3%	2,12 lx
5%	3,54 lx
10%	7,07 lx
30%	21,2 lx
50%	35,4 lx

### Conditions:

Number of c-planes: 2

Lux at center: 70,7 lx

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



**Total lumen output:**

**1162 lm**

**Peak candela output:**

**4727 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**25°**

**Target:**

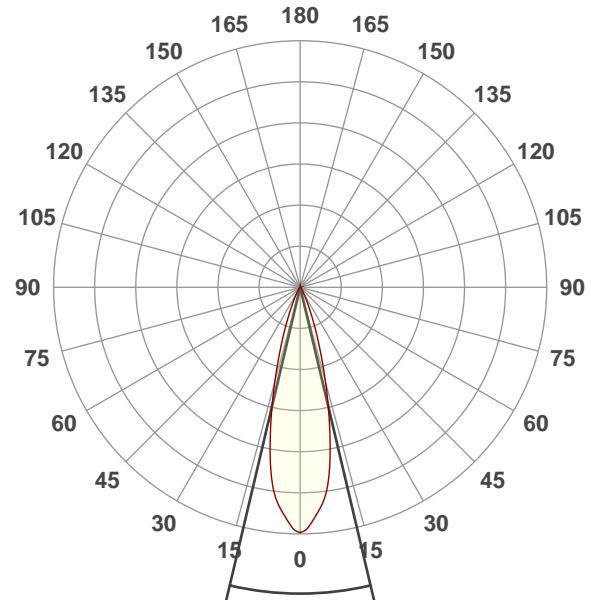
**White**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 13:24:44**

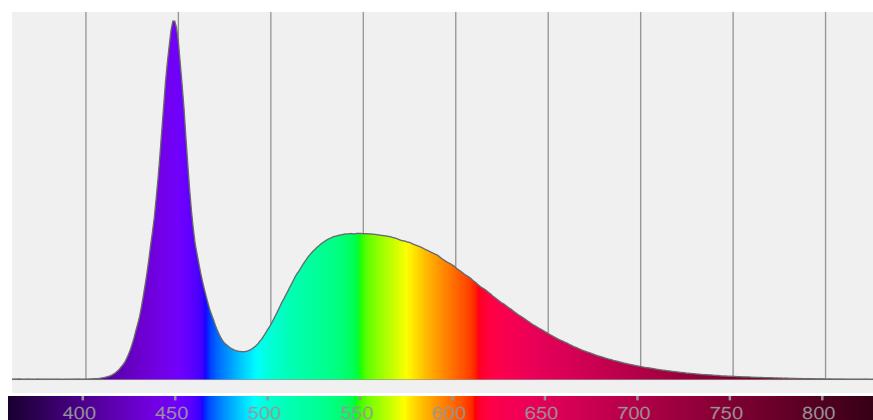


**Beam angle 50%: 26,6°**

**Field angle 10%: 46,5°**

**Cut off angle 2.5%: 62°**

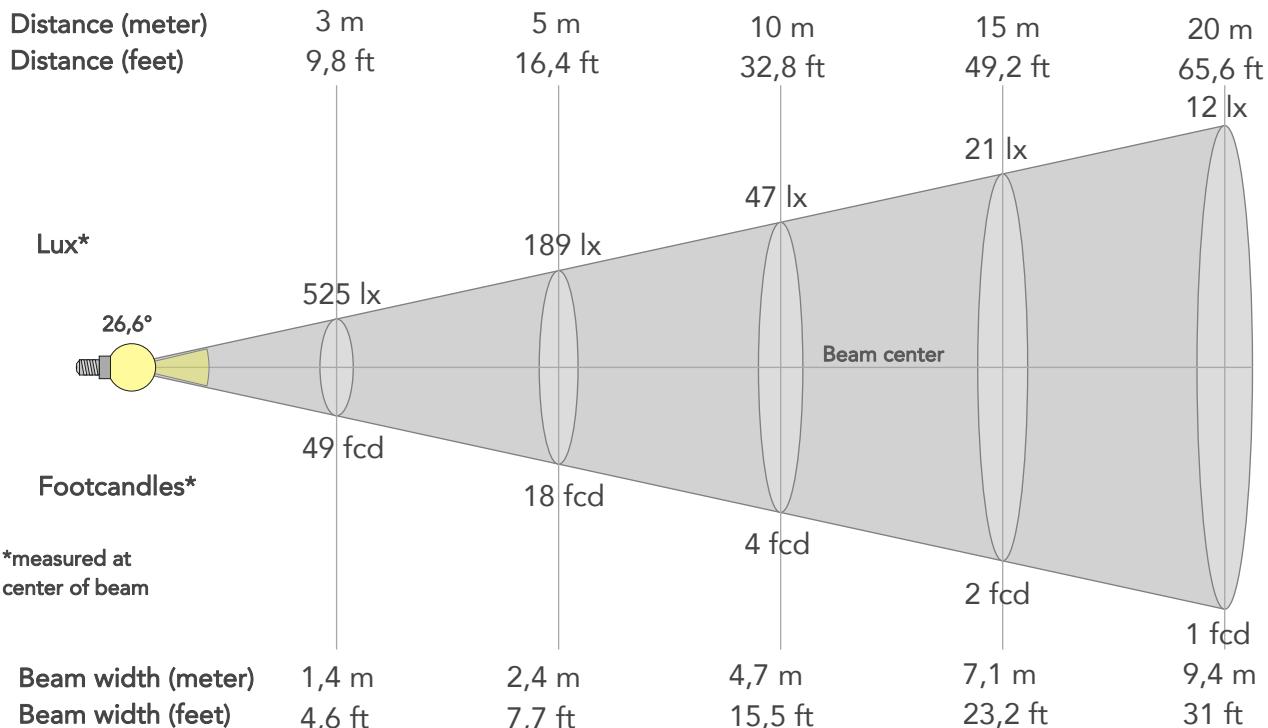
**Spectra**



## BEAM DETAILS



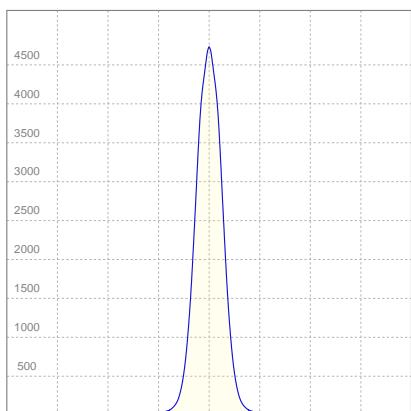
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26,6°	46,5°	62°	99,0%	97,0%



### 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	4727lx	1182lx	525lx	295lx	189lx	84lx	47lx	21lx	12lx	8lx	5lx	3lx	2lx
Footcand.	439fcd	110fcd	49fcd	27fcd	18fcd	8fcd	4fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	0,5m	0,9m	1,4m	1,9m	2,4m	3,5m	4,7m	7,1m	9,4m	11,8m	14,2m	18,9m	23,6m
Beam wid.	1,6ft	3,1ft	4,6ft	6,2ft	7,7ft	11,6ft	15,5ft	23,2ft	31ft	38,7ft	46,5ft	62ft	77,5ft

### LINEAR DISTRIBUTION DIAGRAM



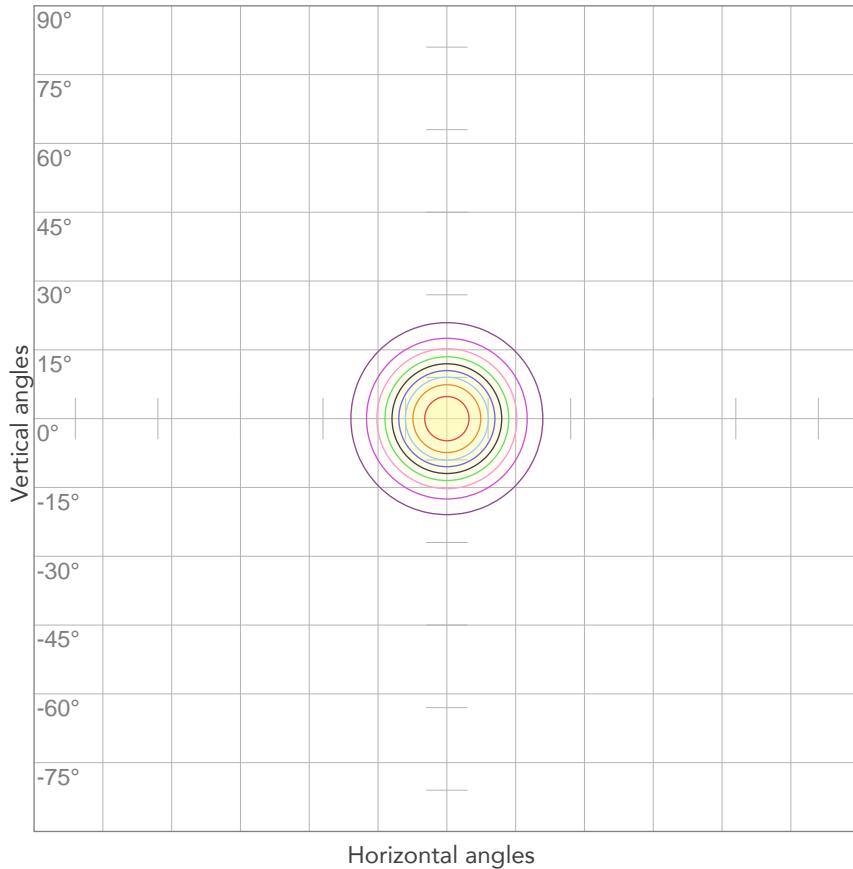
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
229V	0,141A	20,8W	56lm/W
Power FC			
0,64			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



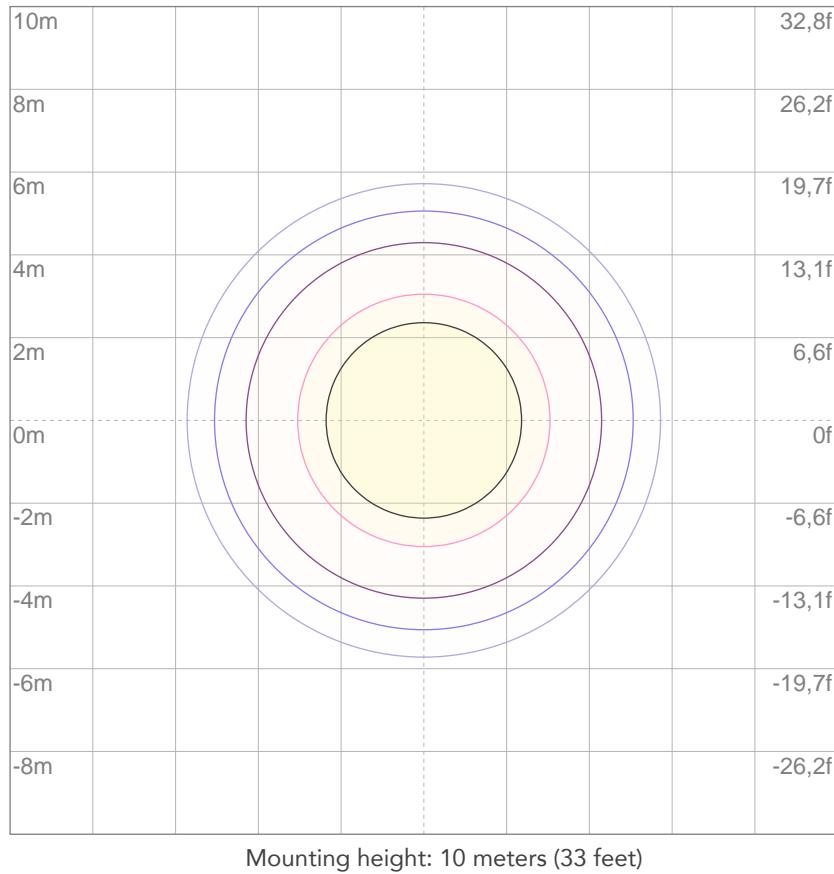
10%	473 cd
20%	945 cd
30%	1418 cd
40%	1891 cd
50%	2364 cd
60%	2836 cd
70%	3309 cd
80%	3782 cd

### Conditions:

Number of c-planes: 2

Candela at center: 4727 cd

## ISO LUX DIAGRAM



3%	1,42 lx
5%	2,36 lx
10%	4,73 lx
30%	14,2 lx
50%	23,6 lx

### Conditions:

Number of c-planes: 2

Lux at center: 47,3 lx

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



**Total lumen output:**

**1103 lm**

**Peak candela output:**

**1500 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**45°**

**Target:**

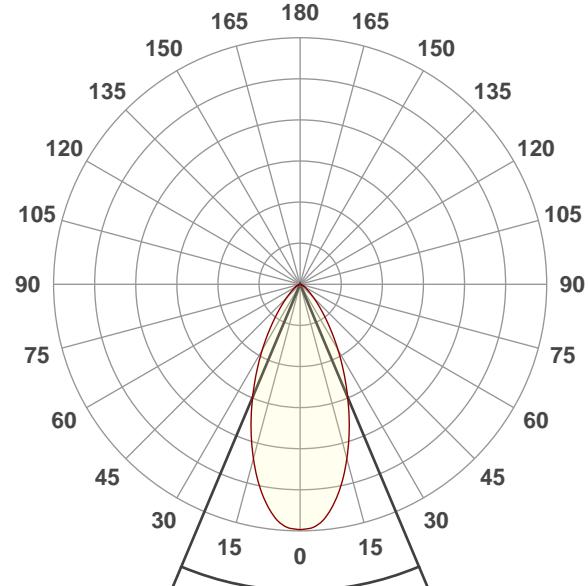
**White**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 14:28:51**

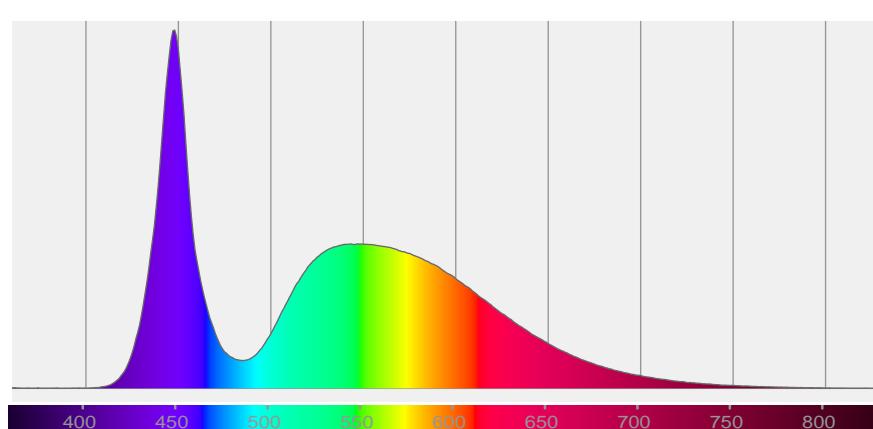


**Beam angle 50%: 45,7°**

**Field angle 10%: 85,3°**

**Cut off angle 2.5%: 115,2°**

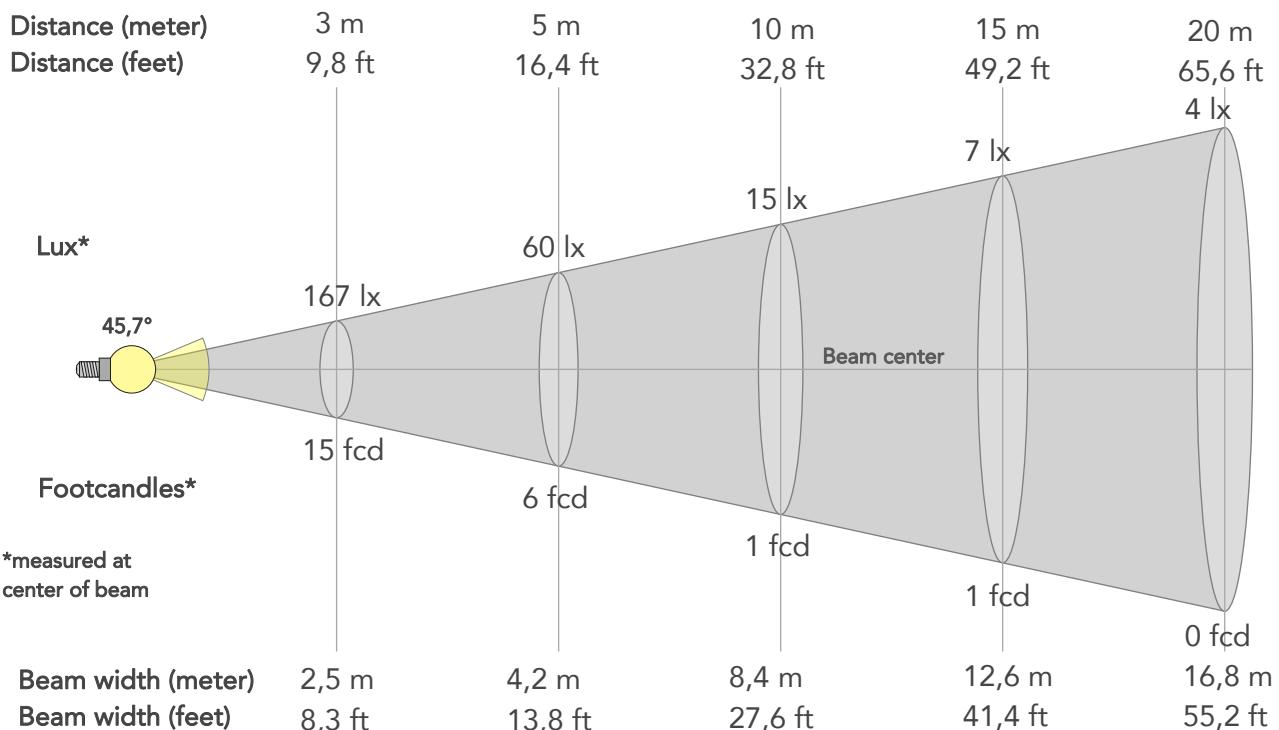
**Spectra**



## BEAM DETAILS



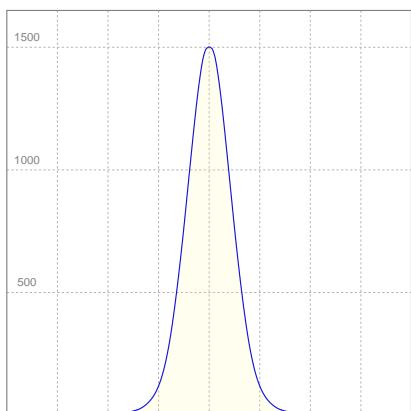
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
45,7°	85,3°	115,2°	97,2%	89,8%



### 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	1500lx	375lx	167lx	94lx	60lx	27lx	15lx	7lx	4lx	2lx	2lx	1lx	1lx
Footcand.	139fcd	35fcd	15fcd	9fcd	6fcd	2fcd	1fcd	1fcd	0fcd	0fcd	0fcd	0fcd	0fcd
Beam wid.	0,8m	1,7m	2,5m	3,4m	4,2m	6,3m	8,4m	12,6m	16,8m	21m	25,3m	33,7m	42,1m
Beam wid.	2,8ft	5,6ft	8,3ft	11ft	13,8ft	20,7ft	27,6ft	41,4ft	55,2ft	69ft	82,8ft	110,4ft	138,1ft

### LINEAR DISTRIBUTION DIAGRAM



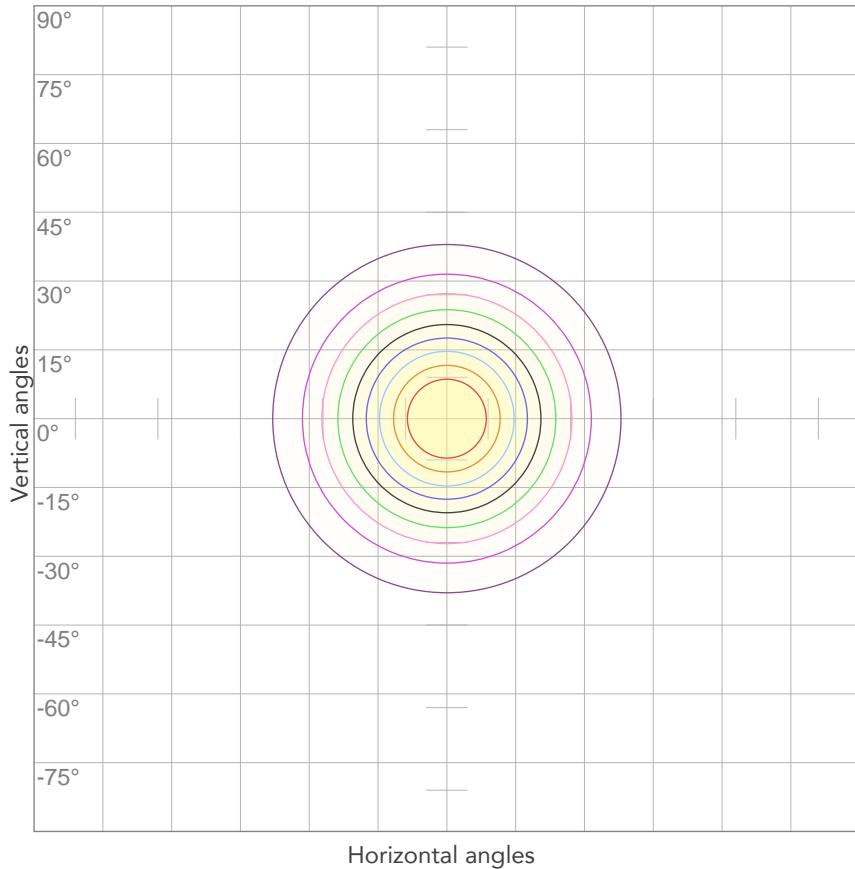
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
228V	0,141A	20,7W	53lm/W
Power FC			
0,65			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM



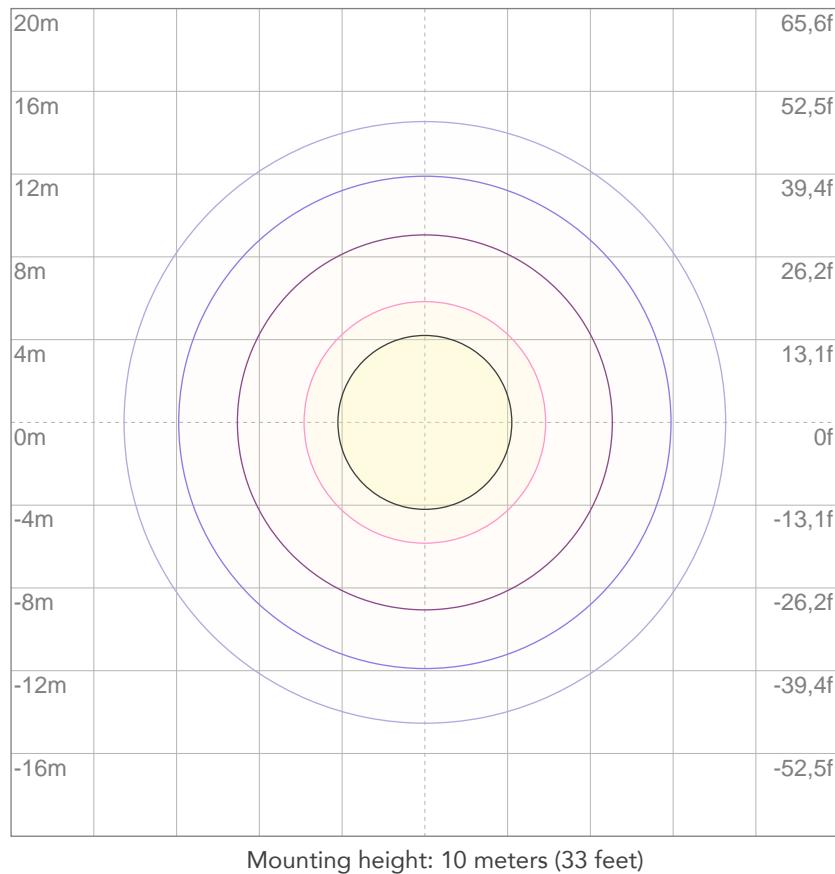
10%	150 cd
20%	300 cd
30%	450 cd
40%	600 cd
50%	750 cd
60%	900 cd
70%	1050 cd
80%	1200 cd

### Conditions:

Number of c-planes: 2

Candela at center: 1500 cd

## ISO LUX DIAGRAM



3%	0,450 lx
5%	0,750 lx
10%	1,50 lx
30%	4,50 lx
50%	7,50 lx

### Conditions:

Number of c-planes: 2

Lux at center: 15,0 lx

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



Total lumen output:

13,2 lm

Peak candela output:

81,1 cd

### PRODUCT NAME:

LUMIPAR12HPRO

### MEASUREMENT CONDITIONS:

Beam angle:

15°

Target:

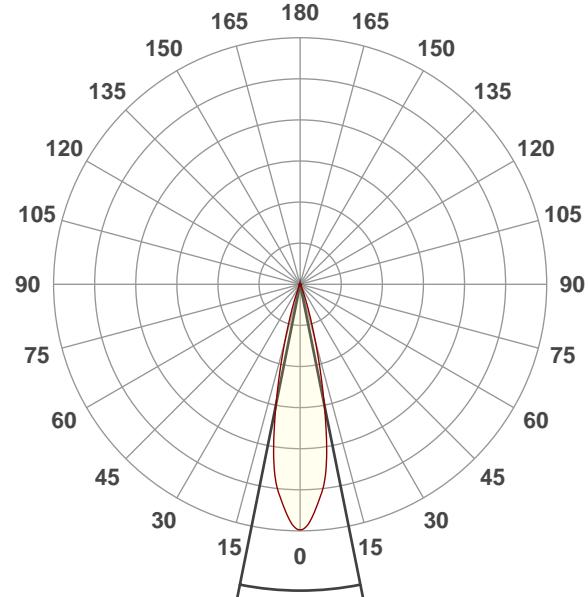
Purple

Operator:

Paolo Carvone

Date and time:

08/10/2020 14:56:12

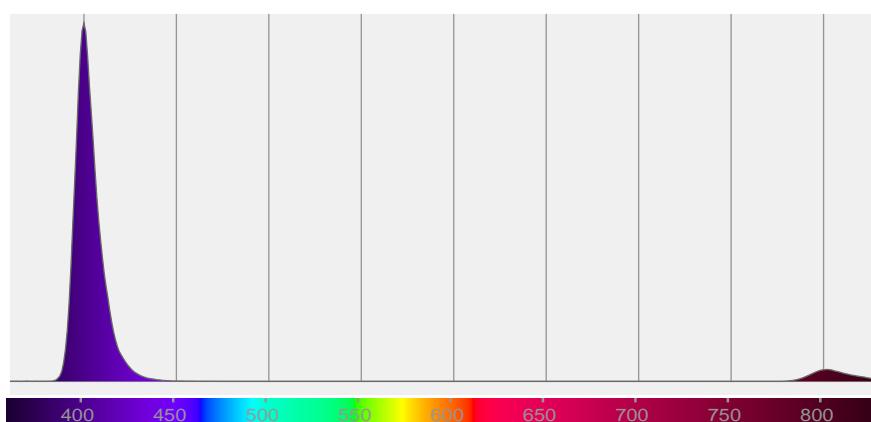


Beam angle 50%: 22,7°

Field angle 10%: 36,6°

Cut off angle 2.5%: 46,5°

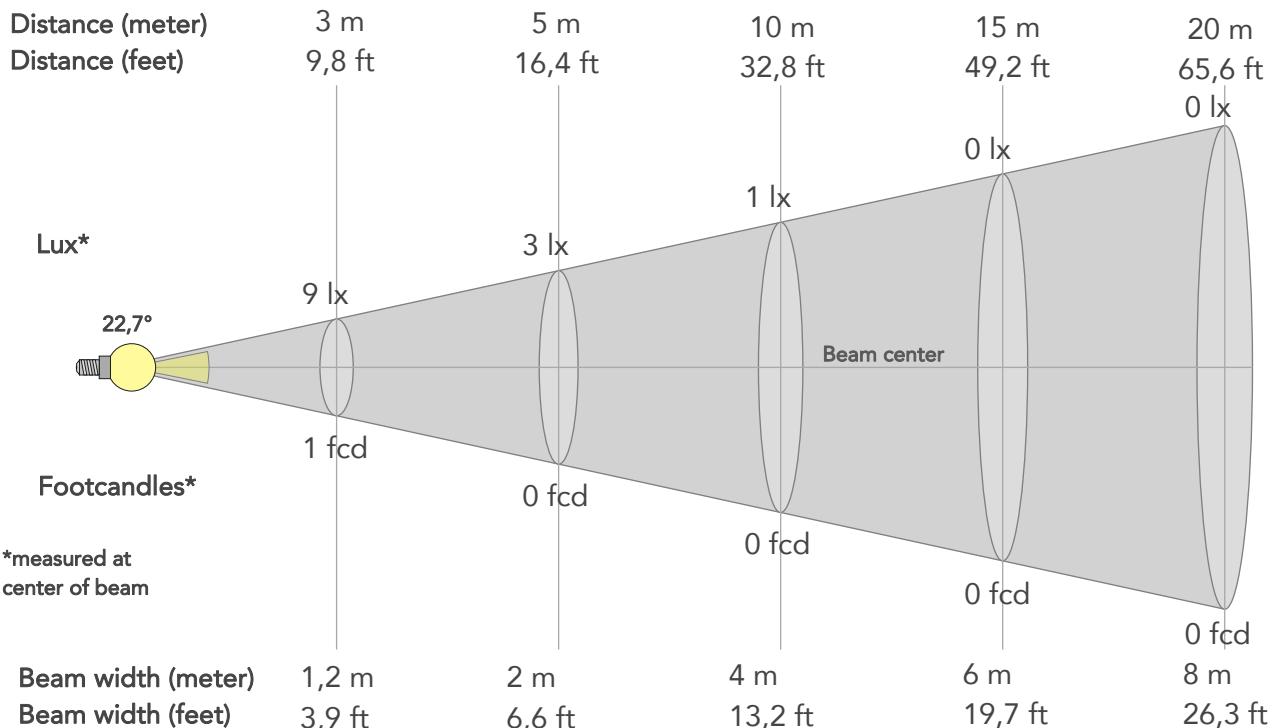
### Spectra



## BEAM DETAILS



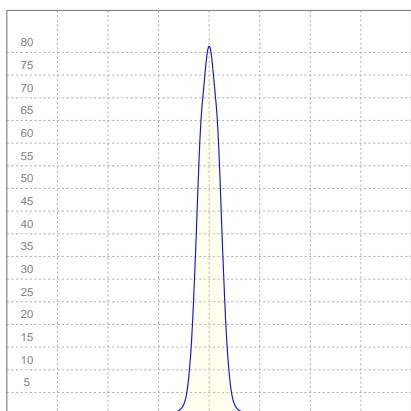
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
22,7°	36,6°	46,5°	99,1%	97,6%



### 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	81lx	20lx	9lx	5lx	3lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx
Footcand.	8fcd	2fcd	1fcd	0fcd	0fcd								
Beam wid.	0,4m	0,8m	1,2m	1,6m	2m	3m	4m	6m	8m	10m	12m	16m	20,1m
Beam wid.	1,3ft	2,6ft	3,9ft	5,3ft	6,6ft	9,9ft	13,2ft	19,7ft	26,3ft	32,9ft	39,5ft	52,6ft	65,8ft

### LINEAR DISTRIBUTION DIAGRAM



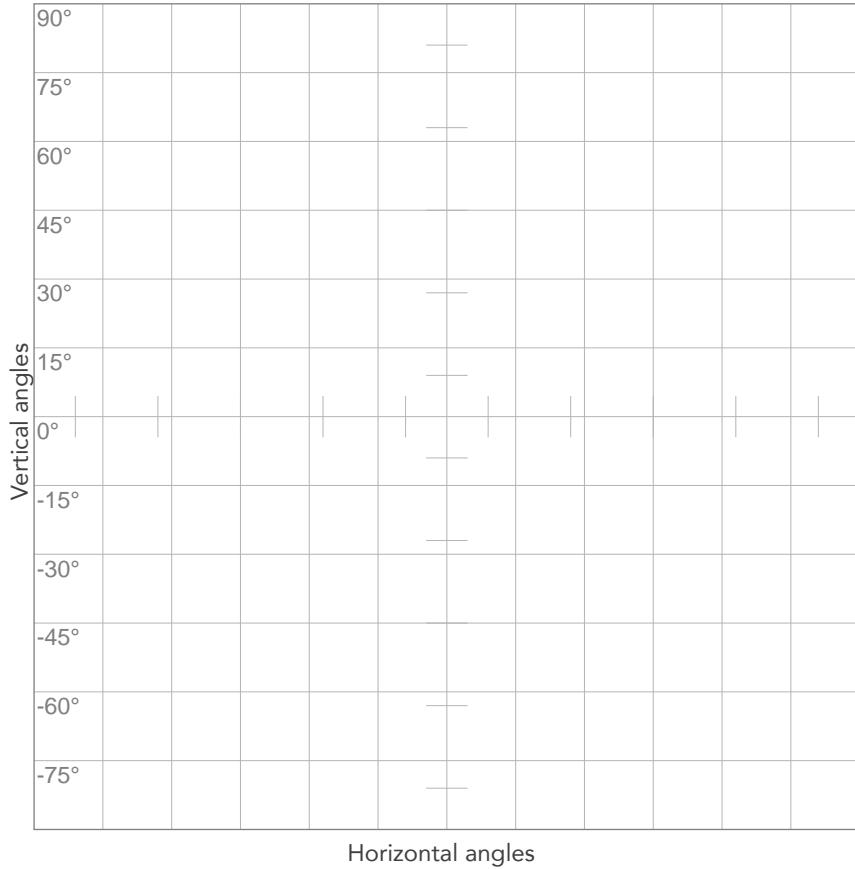
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
228V	0,145A	22,2W	1lm/W
Power FC			
0,67			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM

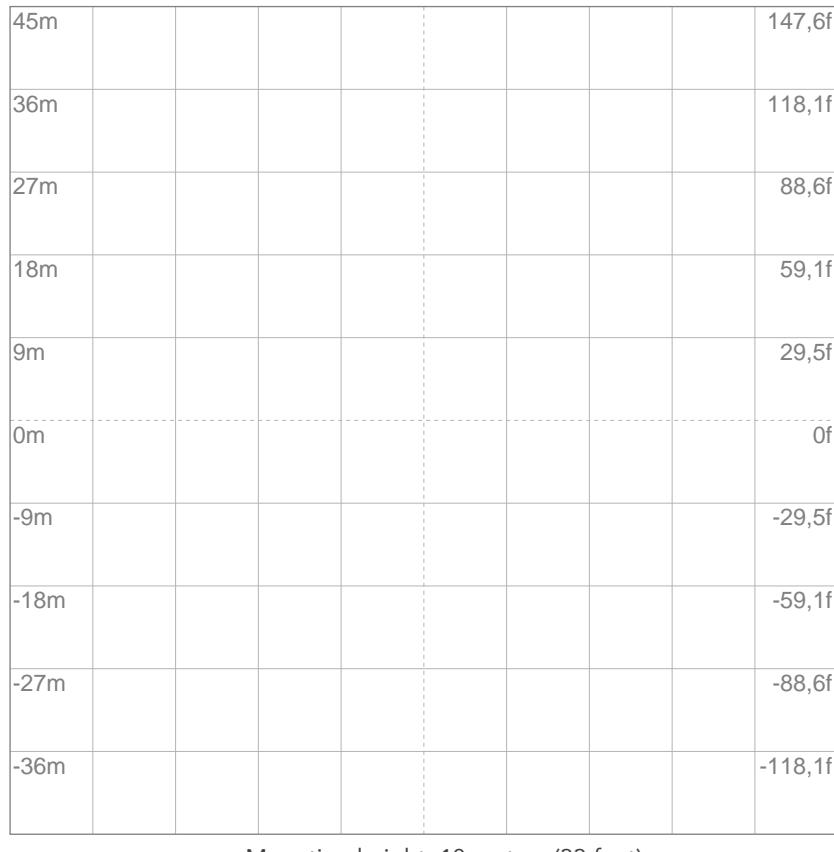


10%	8 cd
20%	16 cd
30%	24 cd
40%	32 cd
50%	41 cd
60%	49 cd
70%	57 cd
80%	65 cd

### Conditions:

Number of c-planes: 2  
Candela at center: 81 cd

## ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	24,3m lx
5%	40,6m lx
10%	81,1m lx
30%	0,243 lx
50%	0,406 lx

### Conditions:

Number of c-planes: 2  
Lux at center: 0,811 lx

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



Total lumen output:

**12,7 lm**

Peak candela output:

**52,9 cd**

### PRODUCT NAME:

LUMIPAR12HPRO

### MEASUREMENT CONDITIONS:

Beam angle:

25°

Target:

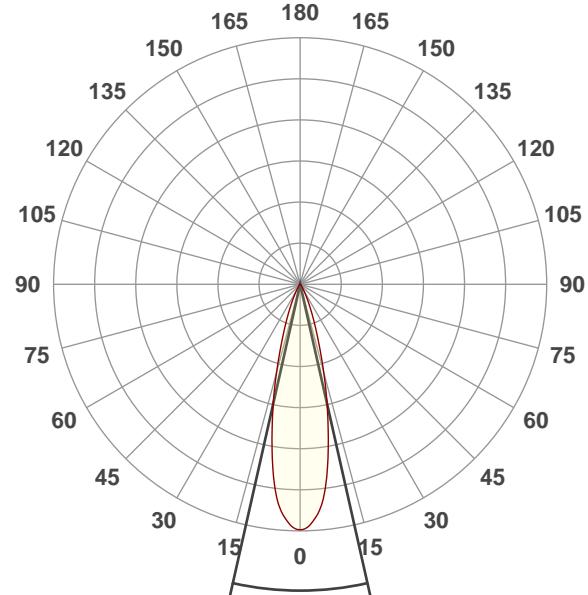
Purple

Operator:

Paolo Carvone

Date and time:

08/10/2020 13:27:37

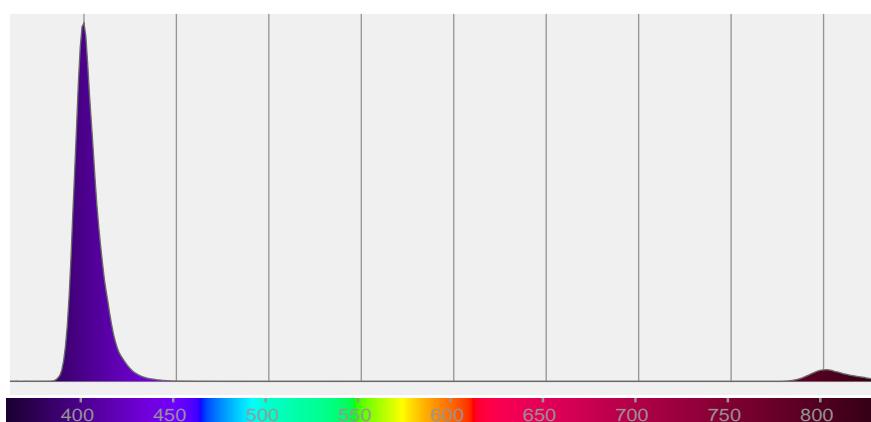


Beam angle 50%: 25,4°

Field angle 10%: 46,9°

Cut off angle 2.5%: 63°

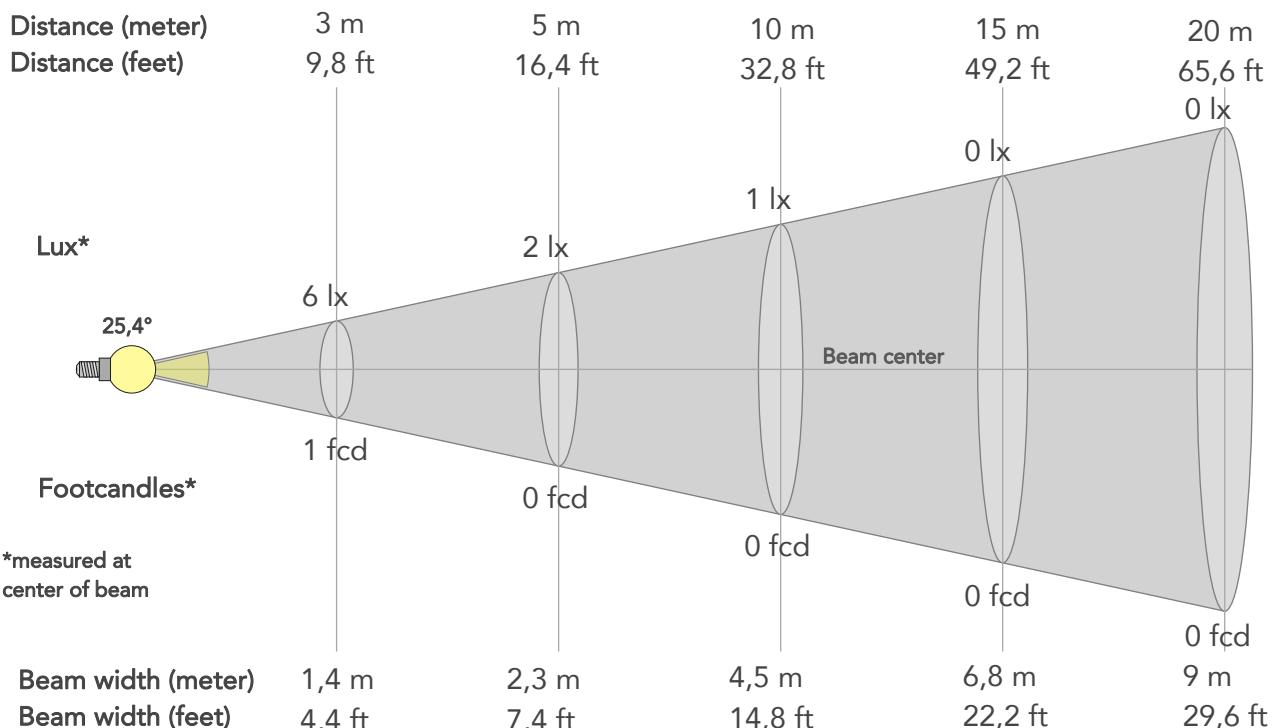
### Spectra



## BEAM DETAILS



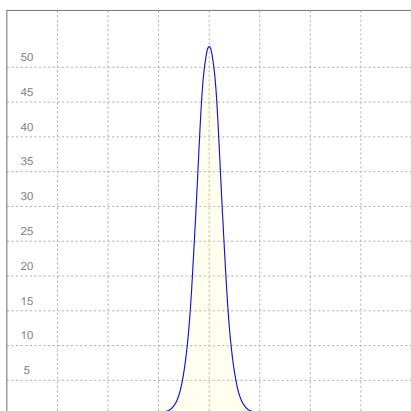
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
25,4°	46,9°	63°	98,4%	96,4%



### 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	53lx	13lx	6lx	3lx	2lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx
Footcand.	5fcd	1fcd	1fcd	0fcd	0fcd								
Beam wid.	0,5m	0,9m	1,4m	1,8m	2,3m	3,4m	4,5m	6,8m	9m	11,3m	13,5m	18m	22,5m
Beam wid.	1,5ft	3ft	4,4ft	5,9ft	7,4ft	11,1ft	14,8ft	22,2ft	29,6ft	36,9ft	44,3ft	59,1ft	73,9ft

### LINEAR DISTRIBUTION DIAGRAM



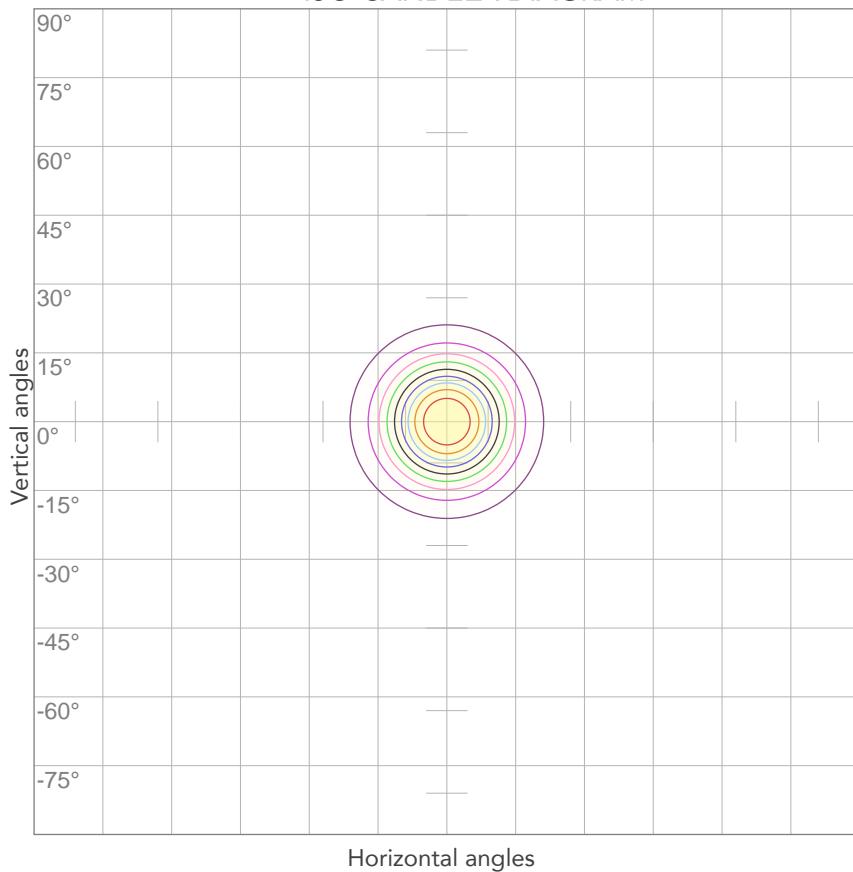
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
230V	0,146A	22,3W	1lm/W
Power FC			
0,66			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM

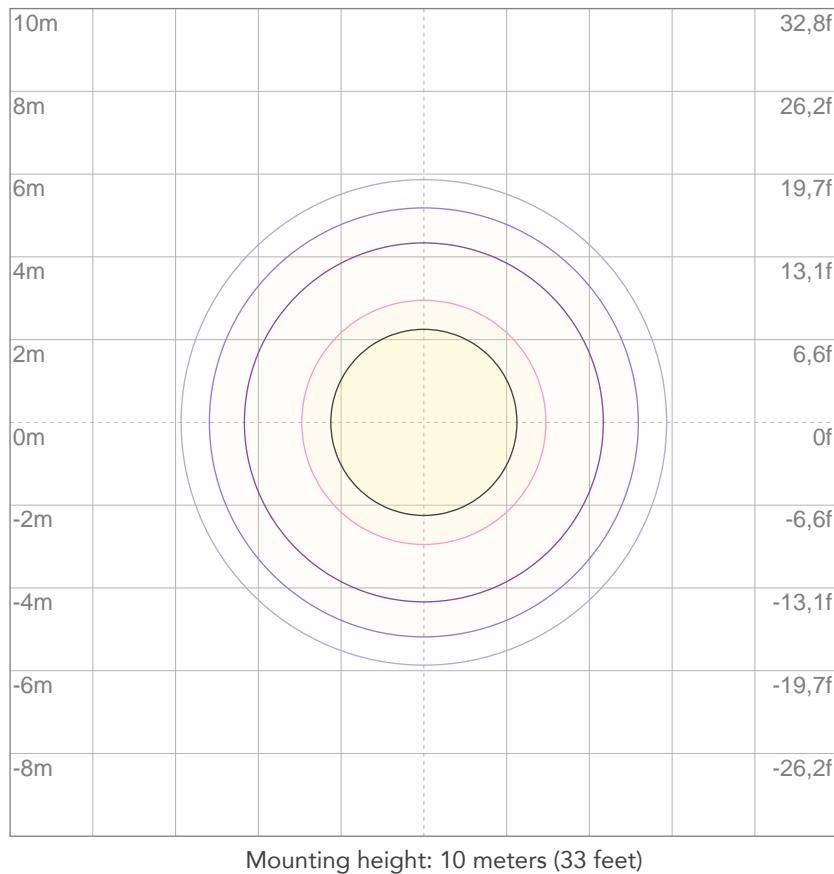


10%	5 cd
20%	11 cd
30%	16 cd
40%	21 cd
50%	26 cd
60%	32 cd
70%	37 cd
80%	42 cd

### Conditions:

Number of c-planes: 2  
Candela at center: 53 cd

## ISO LUX DIAGRAM



3%	15,9m lx
5%	26,4m lx
10%	52,9m lx
30%	0,159 lx
50%	0,264 lx

### Conditions:

Number of c-planes: 2  
Lux at center: 0,529 lx

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



**Total lumen output:**

**13,7 lm**

**Peak candela output:**

**18,8 cd**

**PRODUCT NAME:**

**LUMIPAR12H PRO**

**MEASUREMENT CONDITIONS:**

**Beam angle:**

**45°**

**Target:**

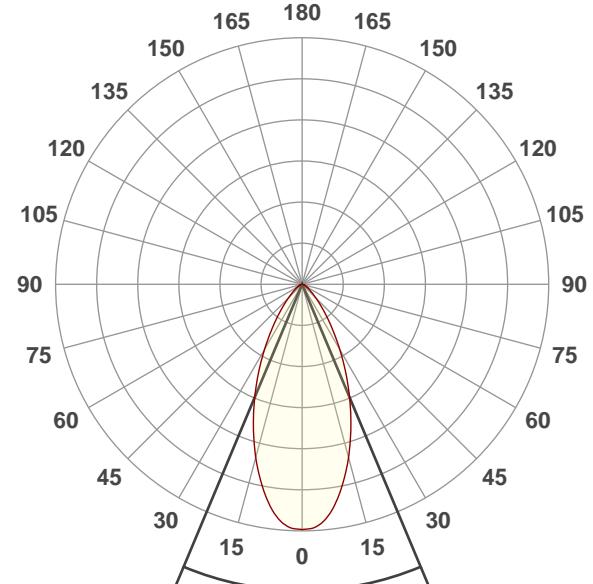
**Purple**

**Operator:**

**Paolo Carvone**

**Date and time:**

**08/10/2020 14:26:09**

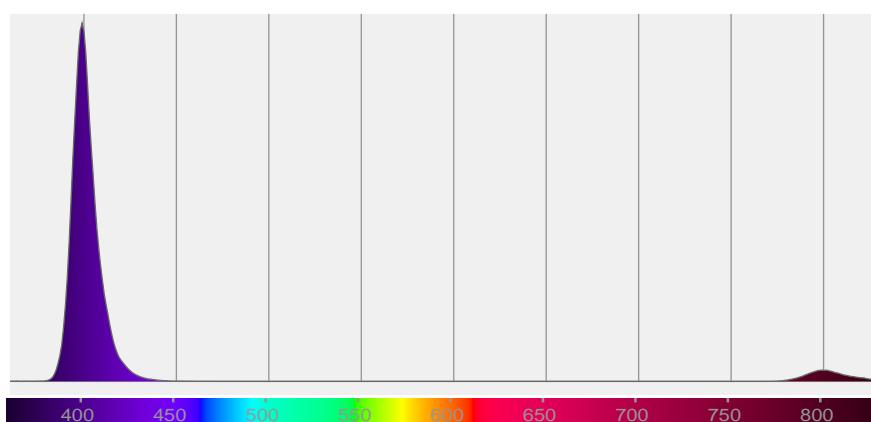


**Beam angle 50%: 45,5°**

**Field angle 10%: 85,4°**

**Cut off angle 2.5%: 114,6°**

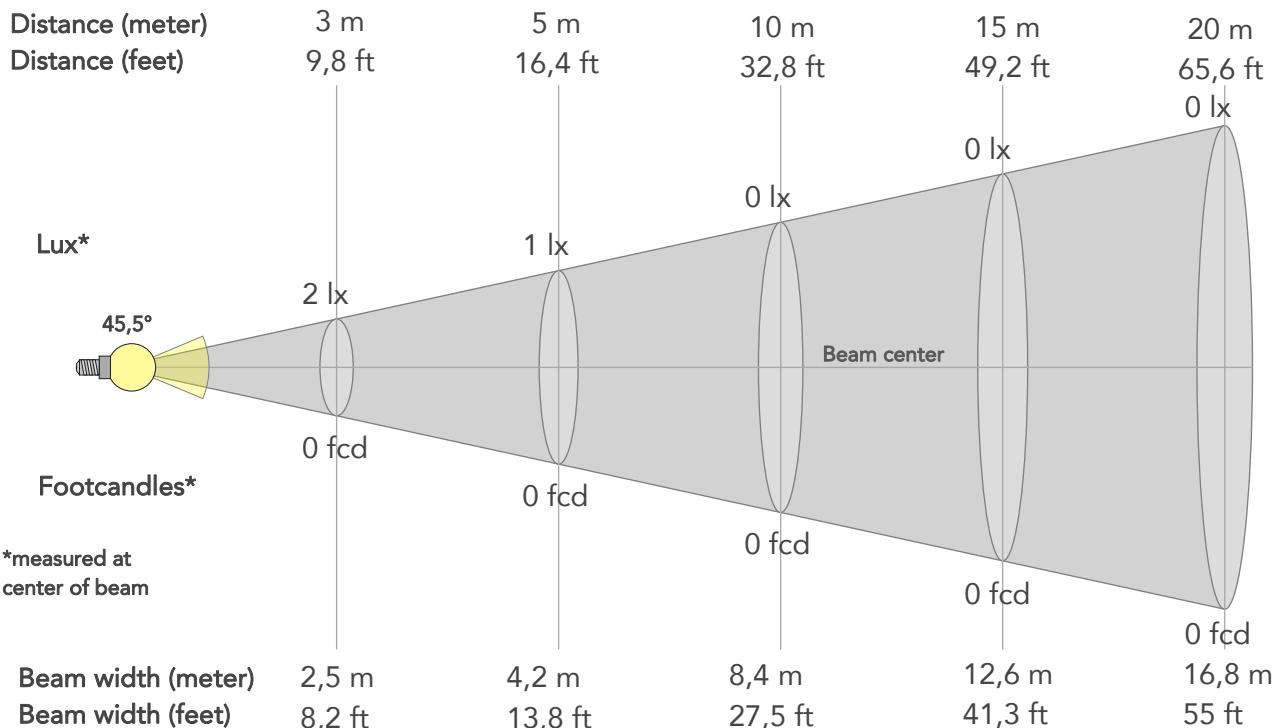
**Spectra**



## BEAM DETAILS



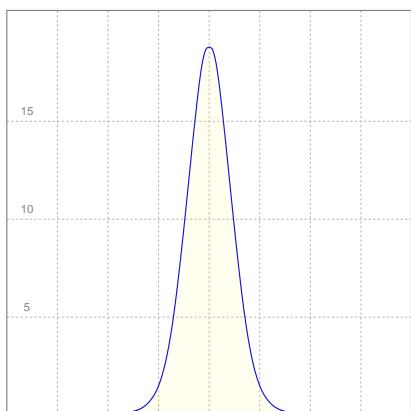
Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
45,5°	85,4°	114,6°	97,2%	89,9%



### 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	19lx	5lx	2lx	1lx	1lx	0lx	0lx						
Footcand.	2fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	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	20,6ft	27,5ft	41,3ft	55ft	68,8ft	82,6ft	110,1ft	137,6ft

### LINEAR DISTRIBUTION DIAGRAM



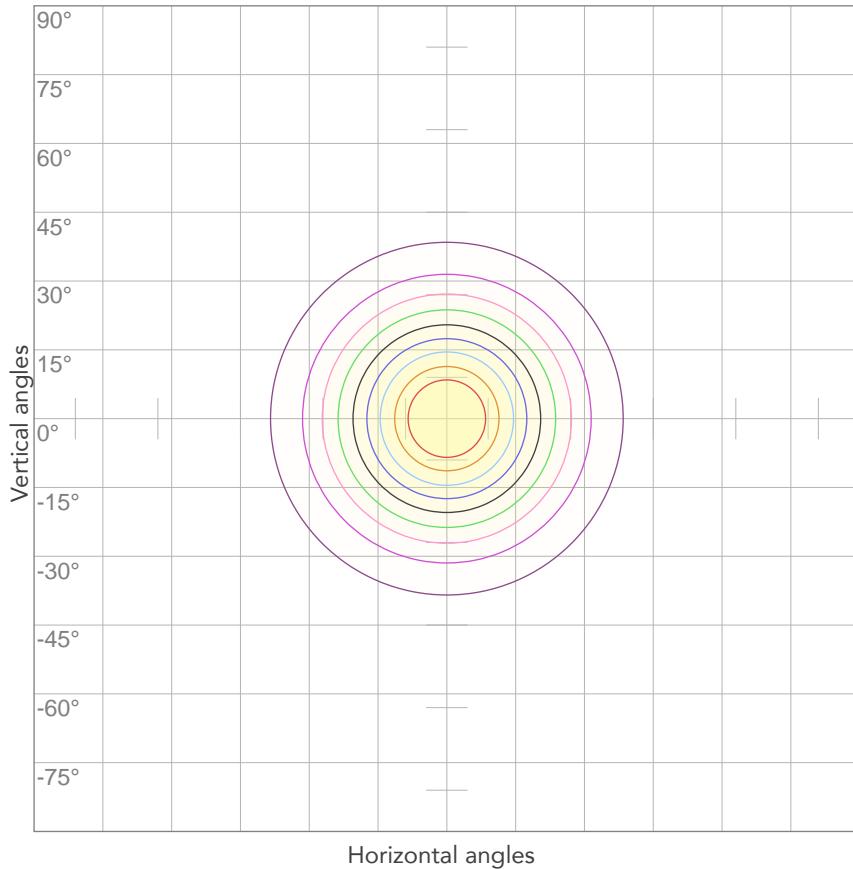
### ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Efficiency
229V	0,146A	22,3W	1lm/W
Power FC			
0,67			

# ISO DIAGRAMS



## ISO CANDELA DIAGRAM

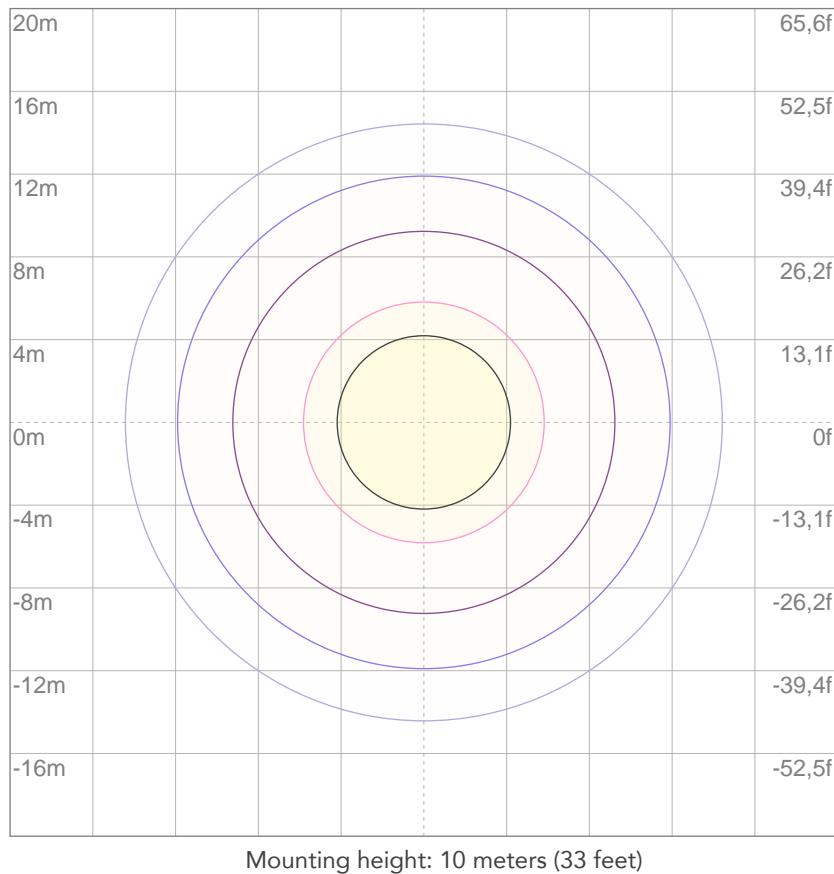


10%	2 cd
20%	4 cd
30%	6 cd
40%	8 cd
50%	9 cd
60%	11 cd
70%	13 cd
80%	15 cd

### Conditions:

Number of c-planes: 2  
Candela at center: 19 cd

## ISO LUX DIAGRAM



3%	5,63m lx
5%	9,39m lx
10%	18,8m lx
30%	56,3m lx
50%	93,9m lx

### Conditions:

Number of c-planes: 2  
Lux at center: 0,188 lx

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