EclFresnel JrTW

LED Fresnel FC and Tunable White with colour correction, to replace 650W lamp

EclFresnel JrTW is an advanced LED replacement of traditional 650W Fresnel lamps, featuring 6 colour mixing delivering high precision reproduction of the white spectrum from 2.800 K to 10.000 K with high CRI and an extensive colour reproduction.
The optical system harnesses the power of a 130 W custom LED with 6 colours to create an even projection, beautiful colours and precise white, with added ability to apply +/- green and magenta correction to match other sources of light. Featuring HD dimming and tuning from 2.800 K to 10.000 K version with external battery capabilities, the **EclFresnel** JrTW delivers the performance and quality of output demanded from this level of luminaire.

MAIN FEATURES

- Tunable white 2.800 K - 10.000 K with high CRI and extensive colour mixing
- +/- green and magenta white tuning
- Silent operation for studio and stage use
- Battery ready, compatible with industry standard external batteries (optional)

VERSIONS

Code	Housing
ECLFRESNELJTW	Black
ECLFRESNELJTWWH	White

TECHNICAL SPECIFICATION

LIGHT SOURCE
- Source: 130W 6 colour custom LEDs source (red, orange, cyan, royal blue, green, lime)
- CCT: 2.800 K - 10.000 K
- Luminous flux: (15,5°) 1’610 lm - (55°) 2’952 lm @full
- Lux: (15,5°) 709 lx - (55°) 145 lx @5 m full
- CRI: 91 @3.200 K; 92 @5.600 K
- R9: 95 @3.200 K; 93 @5.600 K
- TLCI: 86 @5.600 K
- TM30 Rf: 88 @3.200 K; 86 @5.600 K
- TM30 Rg: 106 @3.200 K; 104 @5.600 K
- Source life expectancy: > 50.000 h

OPTICS
- Zoom: 15,5° - 55° half peak angle
- Lens diameter: 6” - 150 mm
- Lens type: fresnel zoom lens

COLOUR SYSTEM
- Colour mixing: tunable white + colour
- CCT: CCT control, + / - green correction, tungsten emulation
- White presets: 2.800 K - 10.000 K
- Colour wheel: virtual colour wheel with macros
- Macros: several pre-build macros with adjustable speed

DYNAMIC EFFECTS
- Static colour mode: selection of static colour
- Manual colour mode: manual adjustment of intensity, CT, colour correction from knob
- Auto mode: built-in programs with execution speed adjustment
- Special features: linear crossfade channel from any white to any colour; virtual CTO on colours

BODY
- Hardware on-board: filter frame, 8 doors barndoor, spigot
- Body: sturdy die-cast aluminium body
- Body colour: black, white finishing available

CONTROL
- Protocols: DMX512, RDM, rotatory knob
- DMX channels: 1 / 2 / 5 - 1 / 5 - 2 / 7 / 9 / 12 / 13 / 16 / 19 / 21 channel
- RDM: RDM ready for remote monitoring and settings
- Display: Graphic User Interface
- Firmware upgrade: yes, via USB - DMX interface (UPBOX1) not included
- Other: 16bit control of dimmer and colour

ELECTRONICS
- Dimmer: linear 0 ~ 100% electronic dimmer
- Dimmer curves: 4 selectable dimming modes available
- Strobe / shutter: 1 - 30 Hz, electronic
- LED Control: flicker free frequency with adjustable PWM
- Selectable PWM: 600 ~ 25.000 Hz

ELECTRICAL
- Mains power supply: 100-240V - 50/60Hz
- Max power consumption: 100W
- Output (at 230V): 23 units on a single power line
- Power factor: >0,95

BATTERY
- Battery: 29,6V 4400 mAh external battery (optional ECLFRSJBP4)
- Re-charge connection: connection for external battery throught XLR 4p
- Other: Voltage range: 22,4V-33,6V

PHYSICAL
- Cooling: combination of heat pipe cooling system and low noise fan
- Suspension and fixing: bracket for hanging and positioning
- Signal connection: Amphenol XLR 5p IN/OUT connectors
- Power connection: Neutrik powerCON TRUE1 IN/OUT connectors
- IP rating: 20
- Dimensions (WxHxD): 235x360x260 mm
- Weight: 6 kg

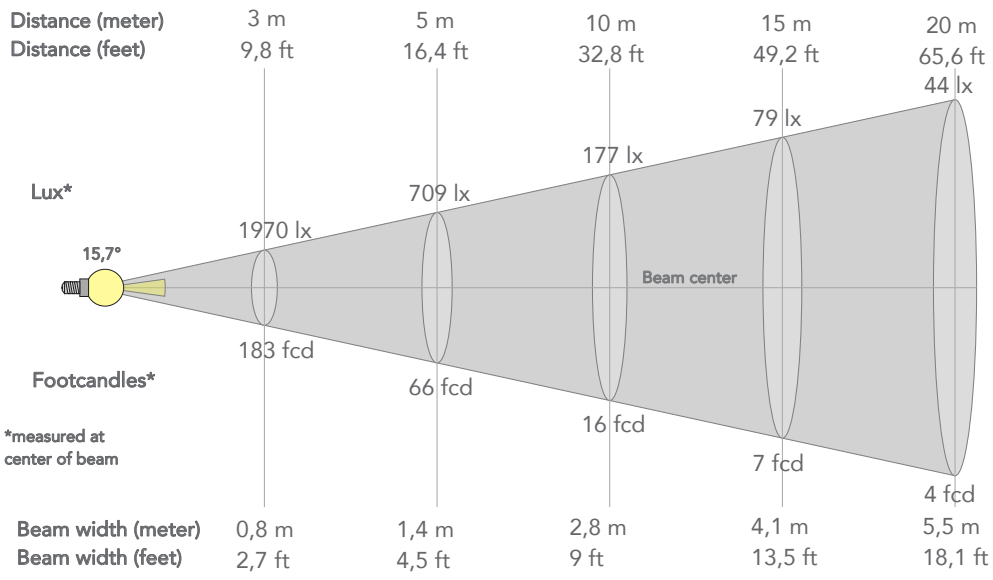
ACCESSORIES & RELATED PRODUCTS

ECLFRSJBP4	Battery pack kit for EclFresnelJ serie
ECLFRSPG	Spigot for PROLIGHTS Fresnel series (included)
ECLFRSJTPG	Filter frame for ECLFRESNELJ series
ECLFRSJBD	Black barn door 8 directional flaps to adjust the light beam (included)
C6040B	Heavy-load aluminum clamp, 500kg loa, 48-51mm tubes, M10 bolt inc., Black
UPBOX1U	Firmware uploader kit, USB IN, 3pin XLR DMX OUT, USB OUT

PRESET FULL ON

Beam angle 50%: 15,5°

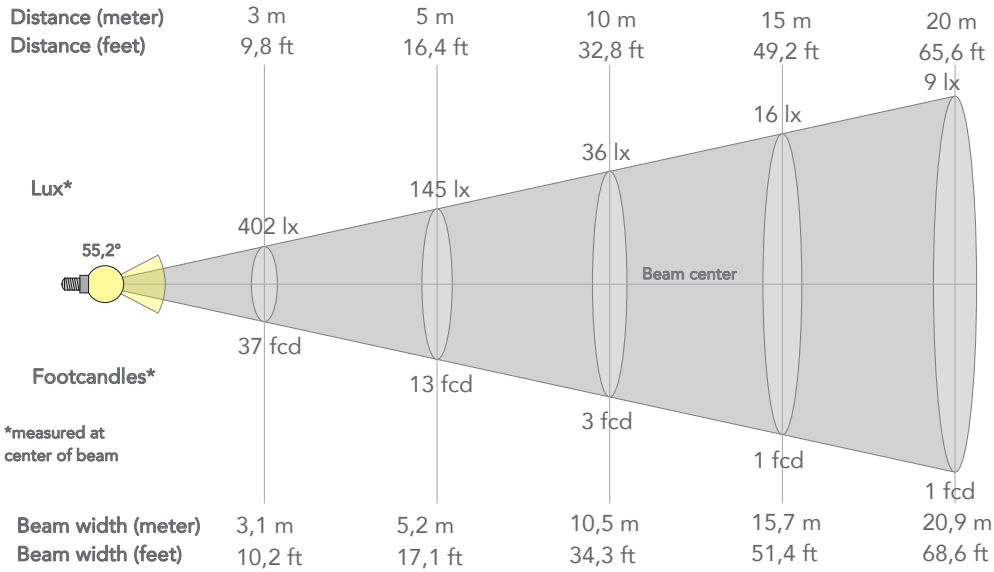
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15,7°	27,4°	33,4°	97,7%	95,0%



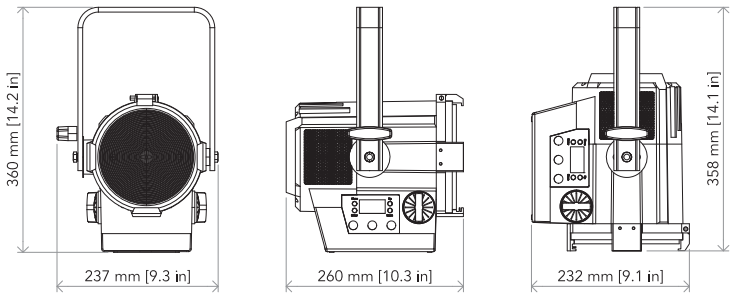
PRESET FULL ON

Beam angle 50%: 55°

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,2°	80,3°	96,9°	97,8%	94,9%



TECHICAL DRAWINGS



For more product info and downloads visit our website

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Photometric Test Report

ECLFRESNELJTW

Full colour and Tunable White with colour correction LED Fresnel to replace 650 W

*this report is valid also for ECLFRESNELJPTW version.

CONTENTS

TESTING PROCESS

Prolights has its own optical testing laboratory in order to provide accurate photometric reports for its lighting products. The testing laboratory contains certain variety of precise lighting measurement systems that ensure an optimal reading of all the characteristic parameters of the lighting devices. All measurements are made at a controlled room temperature of 20°C without any external light sources. This photometric report is obtained through the data measured by a high precision measurement system and analyzed by a dedicate software.

Prolights measurement instrument

Prolights measurement instrument is a complete measurement system for any light source. It's equipped with two-axis goniometer, that enables to measure the full 3D distribution field of the light source. This instrument measures the light intensity, the beam angle and the most significative colors parameters, like color temperature, spectral distribution, CRI, CQS, TM-30 with a very high accuracy rate.

Please Note: All measurements are made with light source at operating temperature. Before starting the measurement, the instrument analyzes the process of the light source during the heating phase. The measuring process of all the parameters begins only when the light emission is stable, that is with a variation of less than 0.5% in a 15 minutes time frame.

Prolights measurement software

The software provides user friendly interface for the operator who does the measurements, and it also analyzes and processes all the collected data by the instrument. With this software it is possible to see the measured data in real-time and it is possible to examine all the measured data and graphics afterwards as well. All information is collected in a specific Prolights template, and the software creates also IES and LDT files, which are widely used to transfer the photometric data, and to develop lighting system.

Additionally, the fixtures are rechecked using various hand-held instruments like Sekonic C-700 and Gossen Mavospec Base, this is done to ensure, that the data in the photometric report are as accurate as possible.

Total lumen output:

2952 lm

Total candela output:

3614 cd

PRODUCT NAME:

ECLFRESNELJTW

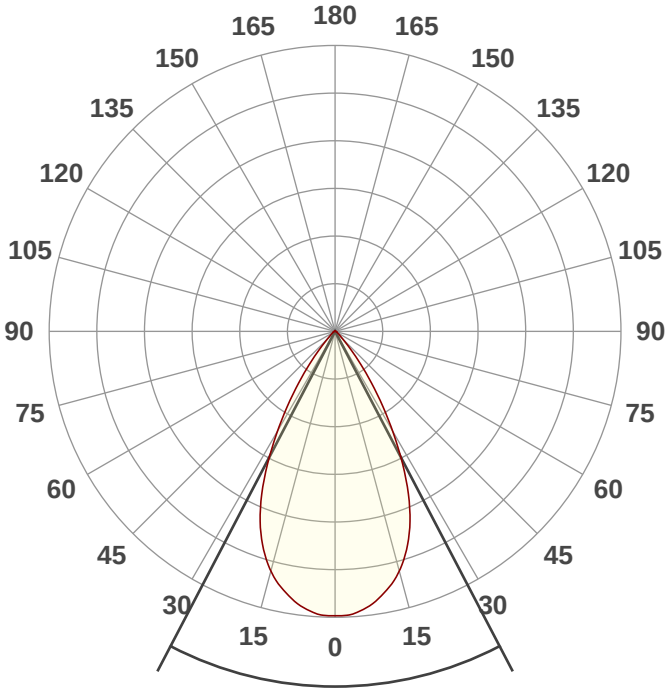
MEASURAMENT CONDITIONS:

Beam angle:
45°

Target:
Full on

Operator:
Paolo Carvone

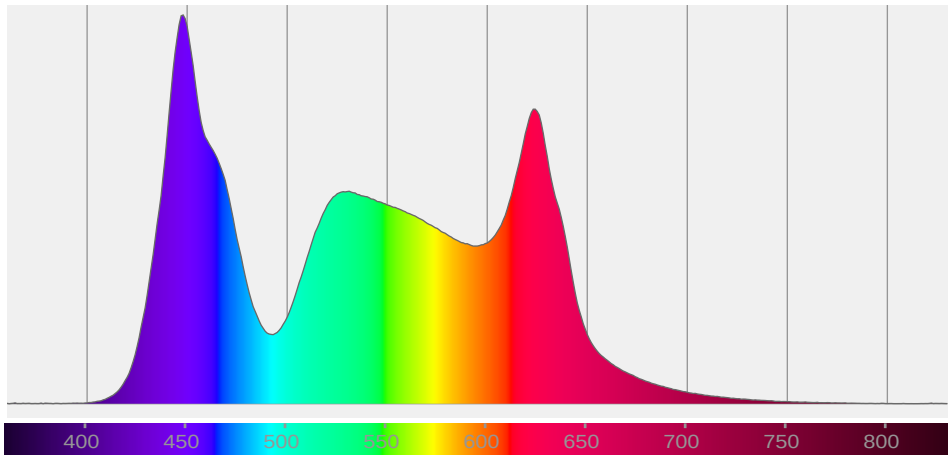
Date and time:
06/02/2020 16:32:44



Beam angle

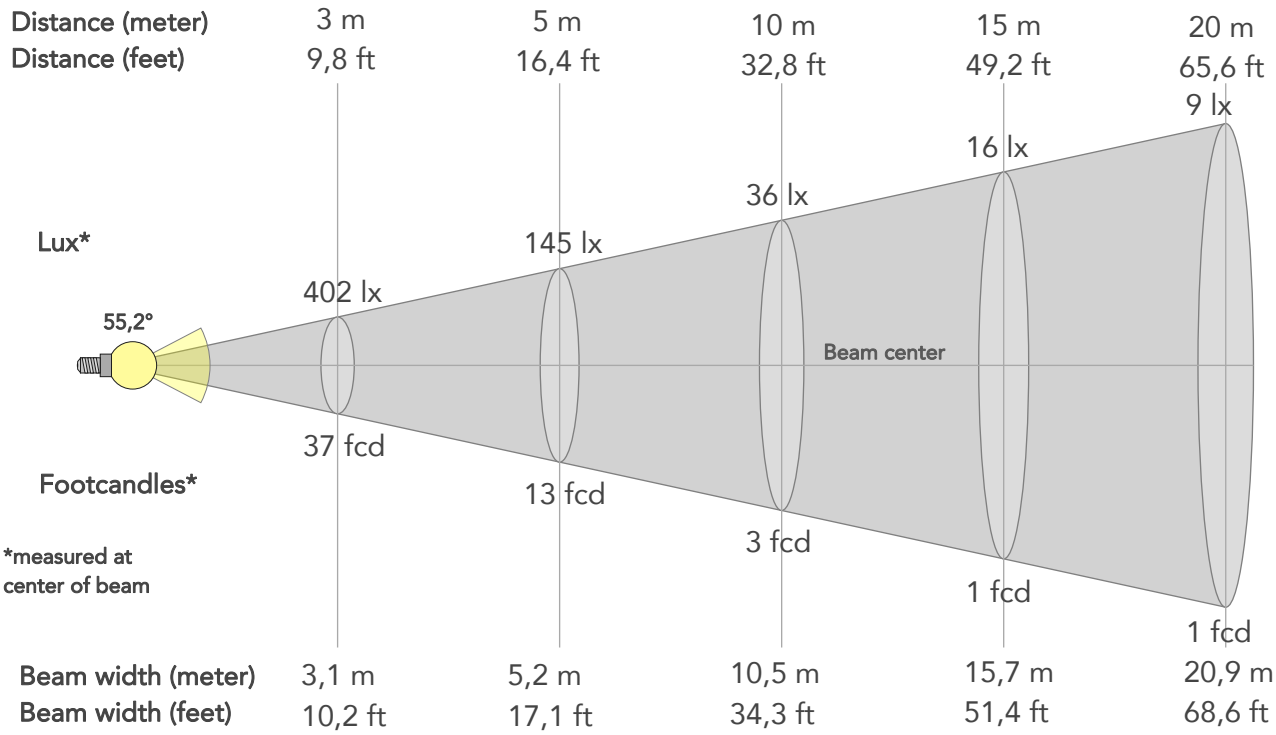
55,2°

Spectra



BEAM DETAILS

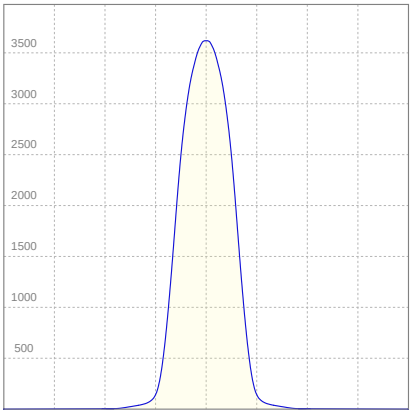
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,2°	80,3°	96,9°	97,8%	94,9%



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	3614lx	903lx	402lx	226lx	145lx	64lx	36lx	16lx	9lx	6lx	4lx	2lx	1lx
Footcand.	336fcd	84fcd	37fcd	21fcd	13fcd	6fcd	3fcd	1fcd	1fcd	1fcd	0fcd	0fcd	0fcd
Beam wid.	1m	2,1m	3,1m	4,2m	5,2m	7,8m	10,5m	15,7m	20,9m	26,1m	31,4m	41,8m	52,3m
Beam wid.	3,4ft	6,9ft	10,2ft	13,7ft	17,1ft	25,7ft	34,3ft	51,4ft	68,6ft	85,7ft	102,9ft	137,1ft	171,4ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,434A	91,8W	32lm/W

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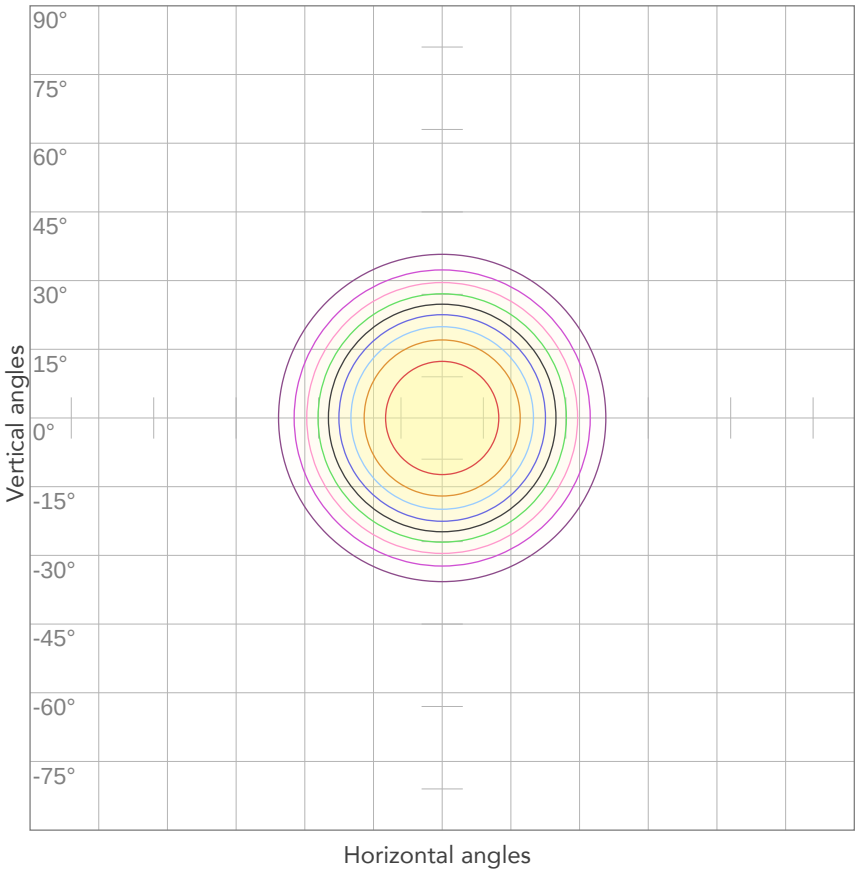
ISO DIAGRAMS

ISO CANDELA DIAGRAM



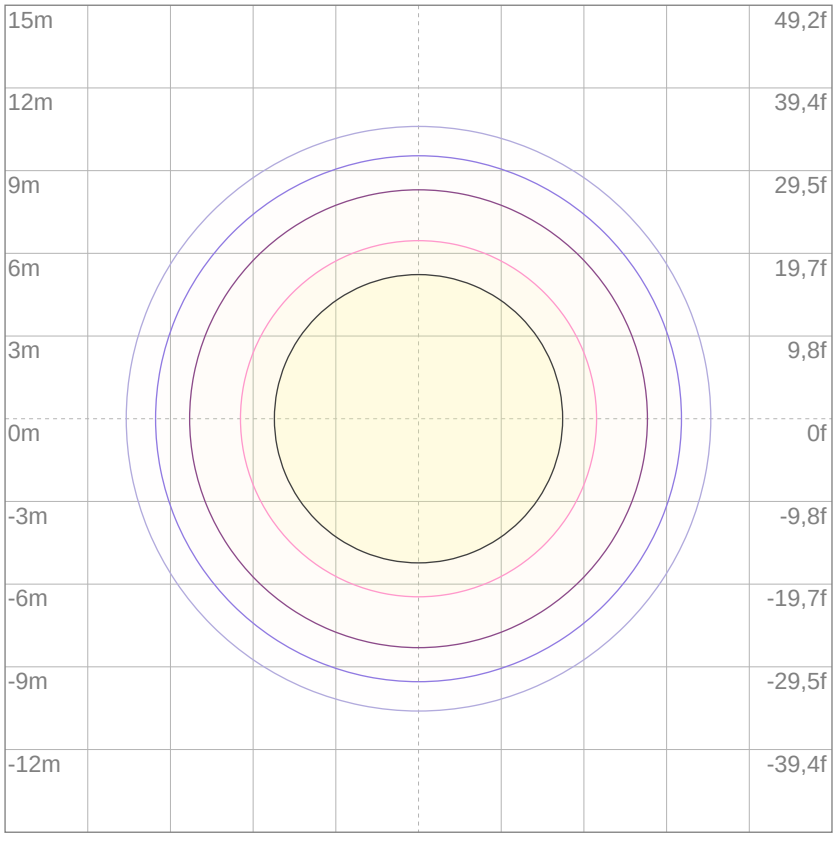
10%	361 cd
20%	723 cd
30%	1084 cd
40%	1446 cd
50%	1807 cd
60%	2168 cd
70%	{LUX_1M70} cd
80%	2891 cd

Conditions:

Number of c-planes: 2

Candela at center: 3614 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	1,08 lx
5%	1,81 lx
10%	3,61 lx
30%	10,8 lx
50%	18,1 lx

Conditions:

Number of c-planes: 2

Lux at center: 36,1 lx

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

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Total lumen output:

2750 lm

Total candela output:

10048 cd

PRODUCT NAME:

ECLFRESNELJTW

MEASURAMENT CONDITIONS:

Beam angle:
30°

Target:
Full on

Operator:
Paolo Carvone

Date and time:
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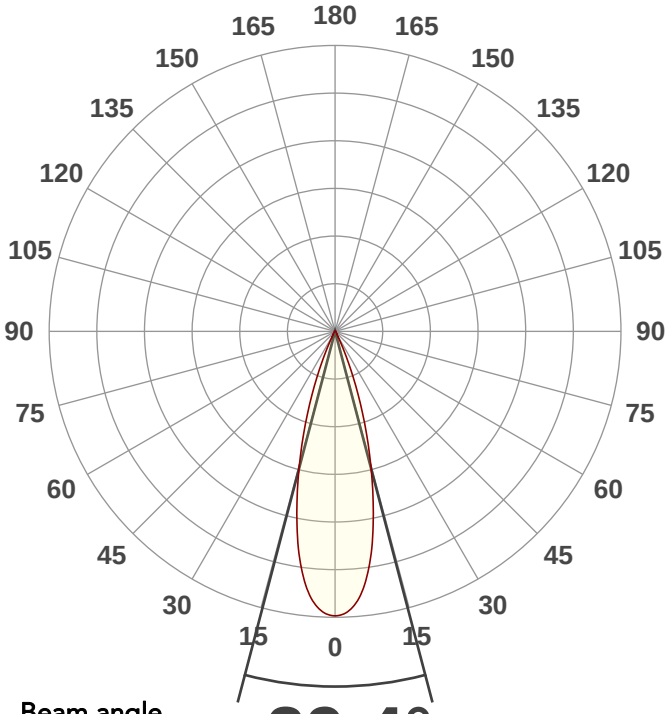
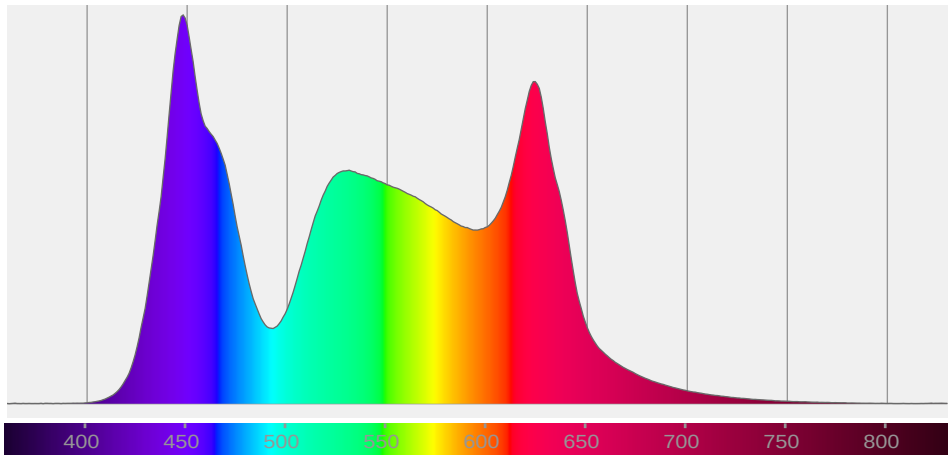


Beam angle

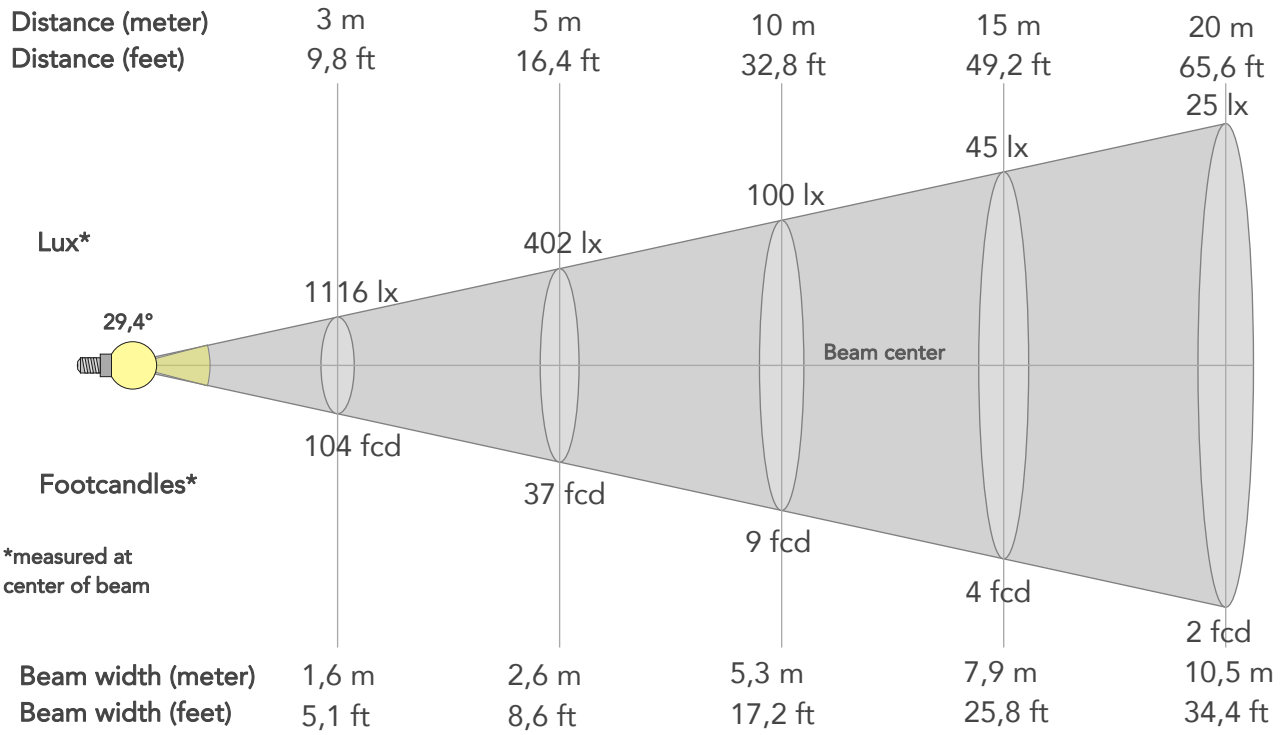
29,4°

Spectra



BEAM DETAILS

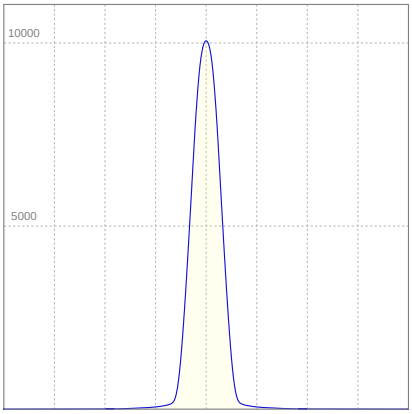
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29,4°	47,6°	56,7°	97,9%	95,9%



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	10048lx	2512lx	1116lx	628lx	402lx	179lx	100lx	45lx	25lx	16lx	11lx	6lx	4lx
Footcand.	934fcd	233fcd	104fcd	58fcd	37fcd	17fcd	9fcd	4fcd	2fcd	1fcd	1fcd	1fcd	0fcd
Beam wid.	0,5m	1,1m	1,6m	2,1m	2,6m	3,9m	5,3m	7,9m	10,5m	13,1m	15,8m	21m	26,3m
Beam wid.	1,7ft	3,5ft	5,1ft	6,9ft	8,6ft	12,9ft	17,2ft	25,8ft	34,4ft	43,1ft	51,7ft	68,9ft	86,1ft

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power	Effeciency
226V	0,432A	91,0W	30lm/W

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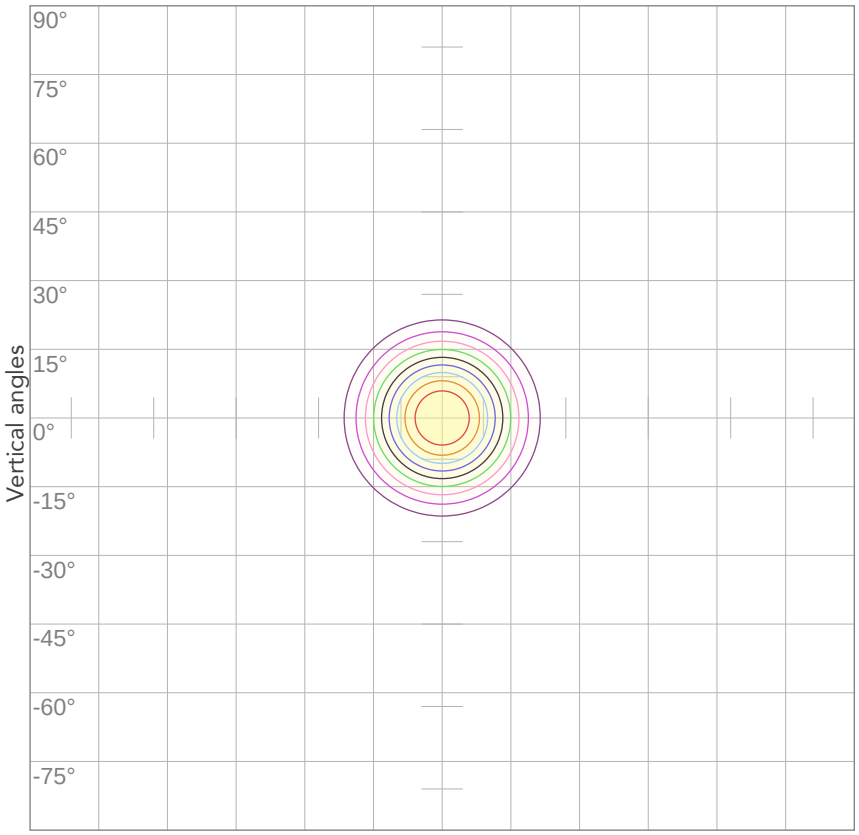
ISO CANDELA DIAGRAM



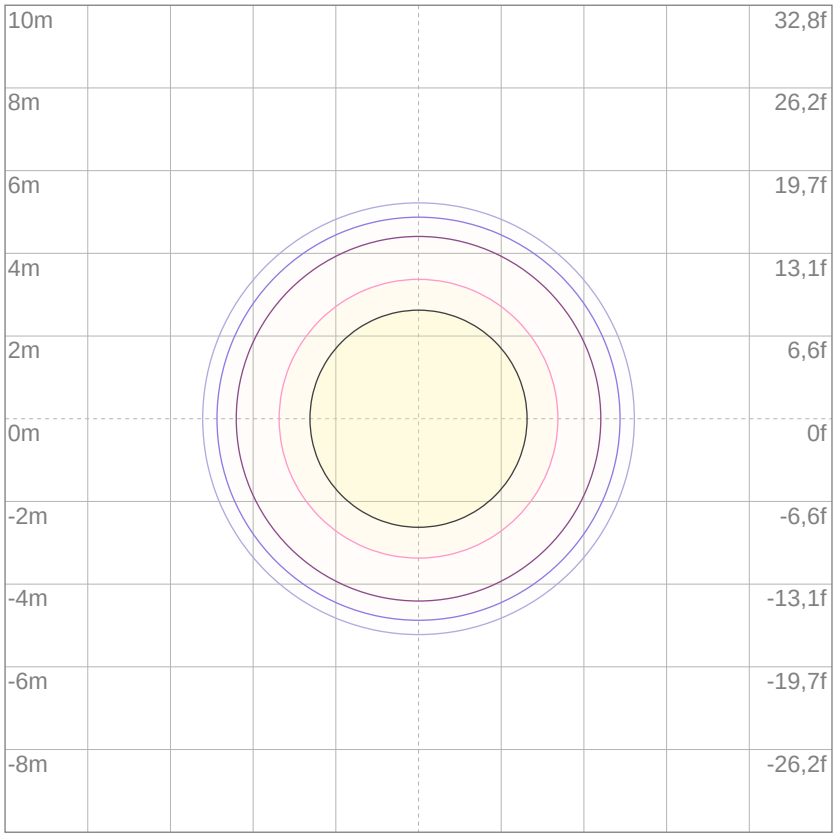
10%	1005 cd
20%	2010 cd
30%	3015 cd
40%	4019 cd
50%	5024 cd
60%	6029 cd
70%	{LUX_1M70} cd
80%	8039 cd

Conditions:

Number of c-planes: 2

Candela at center: 10048 cd

ISO LUX DIAGRAM



Mounting height: 10 meters (33 feet)

3%	3,01 lx
5%	5,02 lx
10%	10,0 lx
30%	30,1 lx
50%	50,2 lx

Conditions:

Number of c-planes: 2

Lux at center: 100 lx

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

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