ETC

ColorSource Spot jr

ColorSource Series

Type(s)

Project

Date

Notes

GENERAL INFORMATION

The ETC ColorSource Spot jr brings a four-color light engine at a fraction of the cost and a fraction of the size. Using a mix of red, green, blue, and lime LED emitters, the ColorSource Spot jr offers an amazing range of color. This fixture is available in both Original and Deep Blue arrays, and features the same color integrity technology as ETC's other fixtures. Increasing the versatility of this fixture is its built-in zoom capabilities and 5,708 lumen output.

APPLICATIONS

- Theatres and performance spaces
- Houses of worship
- Universities and schools
- Hospitality
- Retail
- Exhibition centers
- Meeting rooms
- Clubs
- Cafetoriums

PRODUCT FEATURES

- ETC's RGB-L array (red, green, blue and lime)
  - Also available in Deep Blue, which replaces the blue LEDs with indigo for rich, saturated blues and magentas
- Simple user interface with seven-segment display
- powerCON® in and thru
- DMX/RDM in and thru (5-pin XLR)
- LED droop compensation
- Optically calibrated
- Built-in zoom

ORDERING INFORMATION

ColorSource Spot jr Light Engine

MODEL	DESCRIPTION	ETL PART NUMBER	CE PART NUMBER	
CSSPOTJR2550	ColorSource Spot jr XLR, black	7416A1001	7416A1201	
CSSPOTJR2550-1	ColorSource Spot jr XLR, white	7416A1001-1	7416A1201-1	
CSSPOTJRDB2550	ColorSource Spot jr Deep Blue XLR, black	7416A1002	7416A1202	
CSSPOTJRDB2550-1	ColorSource Spot jr Deep Blue XLR, white	7416A1002-1	7416A1202-1	

Color options: -1 = white

Fixture ships with a 1.5 m (5 ft) powerCON power-input cable with a connector of choice. See page 9 for connector options.

ColorSource Spot jr *does not* ship with a c-clamp.

PRODUCT SPECIFICATIONS

Source

LED details	52 Lumileds LUXEON® C LED
Max lumens	Standard: 5,708 Deep Blue: 5,426
Max lumens per watt	44.8
L70 rating (hours to 70% output)*	>54,000 hours (both variants)

Color

Colors used	Standard: Red, green, blue, lime Deep Blue: Red, green, indigo, lime
Color temperature range	Color mixing
Calibrated array	Yes
Red shift	No

Optical

Beam angle range	Built in 25-50 degree zoom
Gate size	50 mm
Aperture size	6.25"-14"
Pattern projection	Yes
Pattern size	M (OD 66 mm, ID 48 mm), up to 2.03 mm (0.080 in) thick
Camera flicker control/Hz range	1,200 Hz (default) and 25,000 Hz (via RDM)

Control

Input method	DMX512 via 5-pin XLR
Protocols	DMX512/RDM
Modes (footprint)	4 modes, see page 10
RDM configuration	Yes
UI type	Seven-segment, three-button interface
Local control	Yes
Onboard presets	Yes (12)
Onboard sequences	Yes (5)
Onboard effects	No
Fixture-to-fixture control	Yes
Notes	15-bit virtual dimming engine

Electrical

Voltage range	100–240 VAC 50/60 Hz
Input method	powerCON power in and thru
Inrush	35 A at 120 V (First half-cycle) 45 A at 240 V (First half-cycle)
Fixtures per circuit	7 fixtures (15 A power thru connector) or 8 fixtures (R20 module or similar)
Wattage typical/standby	166 W / 2.6 W at 120 V 162 W / 2.0 W at 240 V
Current draw	1.40 A at 120 V 0.73 A at 240 V

Thermal

Ambient operating temp	0°–40° C (32°–104° F)
Fan (controllable)	Yes (no)
Droop compensation	Yes
dB range	Pending
BTUs/hour	549

Physical

Materials	ABS plastic
Color options	Black or white
Mounting options	Yoke
IP rating	IP20
Weight	5.4 kg (12 lb)
Included accessories	Hanging yoke, 1.5 m power cable
Notes	See page 9 for power cable options

Warranty

Fixture	5 years
LED array	10 years

Regulatory and Compliance

|	
Approved regulatory standards	cETLus Listed Conforms to UL 1598 Listed Certified to CSA C22.2 No. 250 Listed CE Compliant EAC Compliant

*Note about LED luminaire lifetime:
For information on lifetime testing, visit: etcconnect.com/About/News/ETC-Fixture-Ratings-and-Warranties-Extended.aspx.

All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. In individual situations, LEDs will be used for different durations and levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustments to presets, cues or programs.

PRODUCT FEATURES
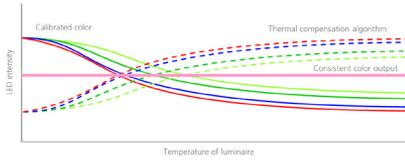
LED DROOP COMPENSATION
ETC's custom software adjusts for the changes that naturally occur as LEDs heat up and cool down so you never have to worry about color shift.
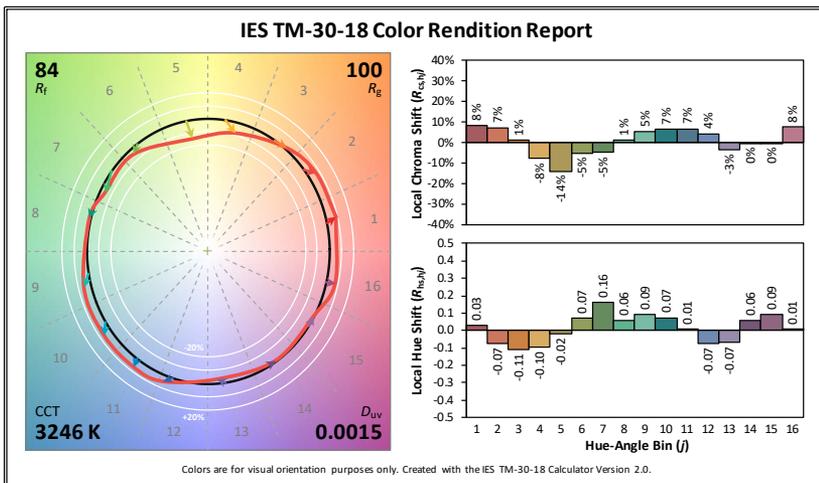

RGB-L ARRAY
The custom four-color blend of LEDs incorporates a hint of lime to increase spectral reach and color depth.
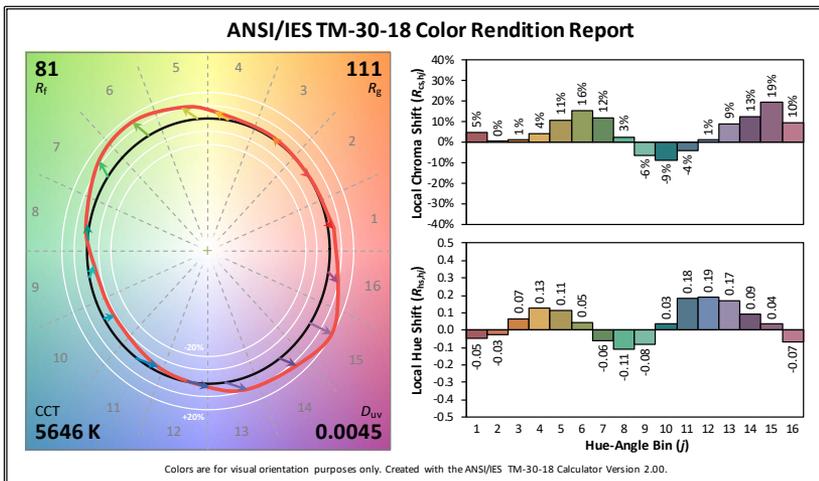

SIMPLE USER INTERFACE
The simple seven-segment display and navigation buttons enable quick setup and recall of built-in presets.

COLOR METRIC INFORMATION
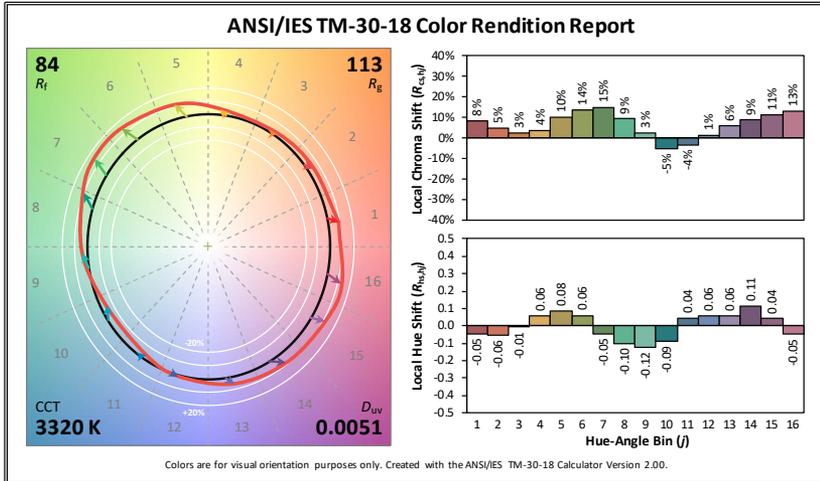
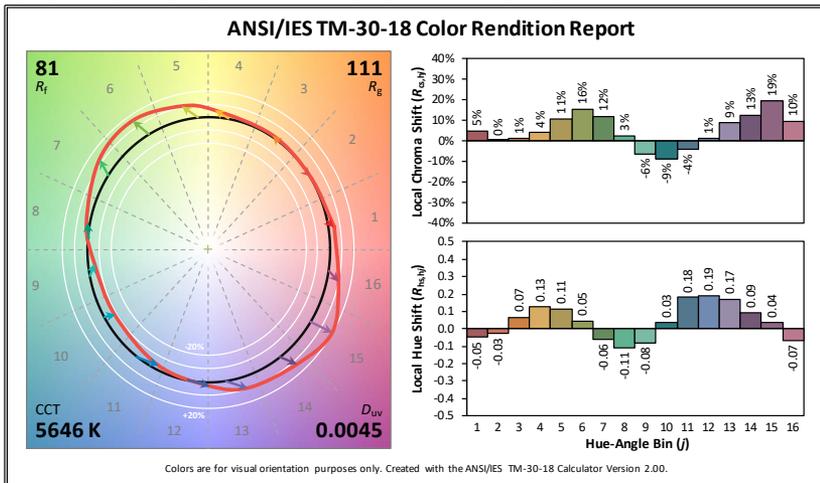**COLORSOURCE SPOT JR 3200 K TM-30-18**

COLORSOURCE SPOT JR 5600 K TM-30-18

COLOR METRIC INFORMATION

COLORSOURCE SPOT JR DEEP BLUE 3200 K TM-30-18

ANSI/IES TM-30-18 Color Rendition Report

84 R_f 113 R_g

CCT 3320 K D_{uv} 0.0051

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

COLORSOURCE SPOT JR DEEP BLUE 5600 K TM-30-18

ANSI/IES TM-30-18 Color Rendition Report

81 R_f 111 R_g

CCT 5646 K D_{uv} 0.0045

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

Additional Color Metrics

	STANDARD 3200 K	STANDARD 5600 K	DEEP BLUE 3200 K	DEEP BLUE 5600 K
CRI R_a (R_9)	82	64	79	80
TLCI	84	48	67	73

COLOR METRIC INFORMATION

ColorSource Array options – Original vs. Deep Blue
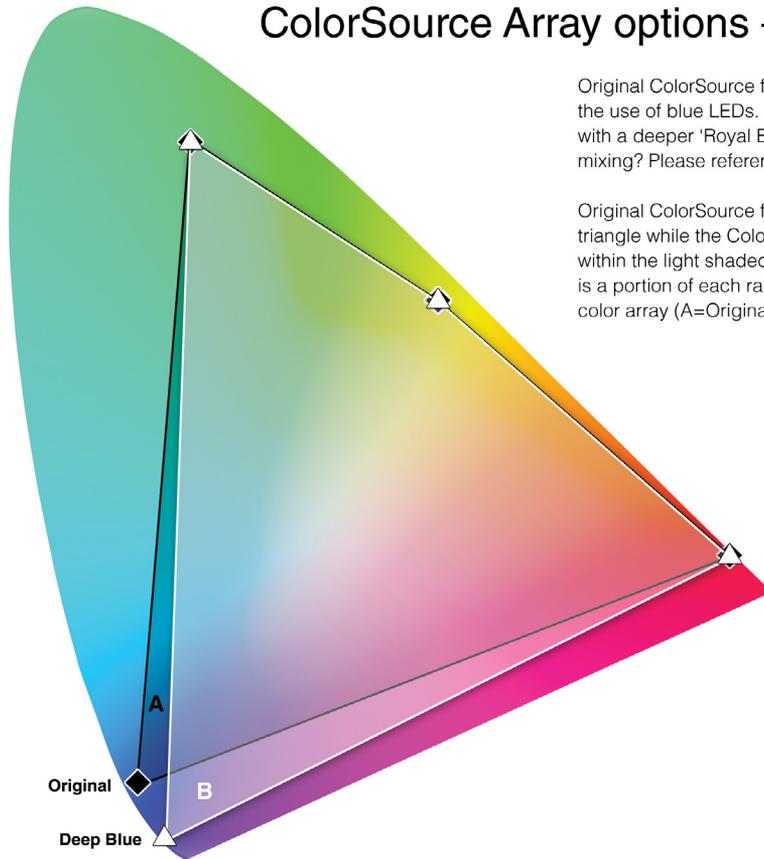
Original ColorSource fixtures use an RGB-L array where the 'B' represents the use of blue LEDs. ColorSource Deep Blue replaces those blue LEDs with a deeper 'Royal Blue' (indigo) LED. How does this impact your color mixing? Please reference the color chart.

Original ColorSource fixtures can reach any color within the dark shaded triangle while the ColorSource Deep Blue fixtures can reach any color within the light shaded triangle. While much of these areas overlap, there is a portion of each range that can only be reached by the respective color array (A=Original, B=Deep Blue).

Common gels found in original ColorSource
Roscolux 095, 075, 076
Lee 363, 119, 721, 722, 132, 141, 183, 172, 325

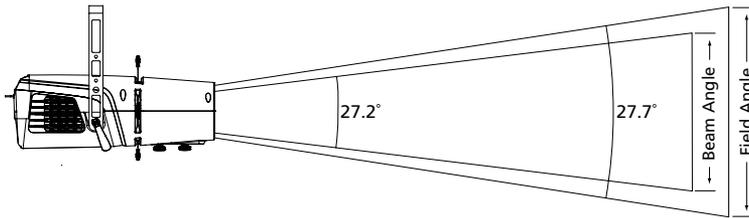**Common gels found in ColorSource Deep Blue**
Roscolux 384, 385, 382, 059, 358, 347, 049, 349, 046, 124, 027, 120
Lee 126, 049, 798, 707, 181, 071, 120, 716

PHOTOMETRY INFORMATION

ColorSource Spot jr Narrow

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
Full On Direct	27	34,894	5,708	5,640	161.3	35.4
3200 K	27	26,580	4,359	4,300	98.4	44.3
5600 K	27	26,414	4,380	4,297	138.0	31.7

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

27.2° 27.7°

Beam Angle / Field Angle

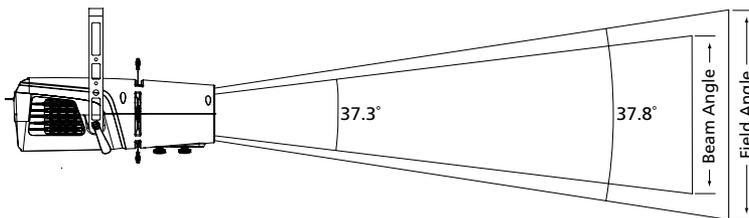| Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	186.8 ft 56.9 m
Field Diameter	4.9 ft 1.5 m	7.4 ft 2.3 m	9.9 ft 3.0 m	14.8 ft 4.5 m	–
Illuminance (fc)	349	155	87	39	1
Illuminance (lux)	3,756	1,669	939	417	10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.493.
For beam diameter at any distance, multiply by 0.484.

ColorSource Spot jr Mid

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
Full On Direct	37	18,630	5,467	5,391	161.3	33.9
3200 K	37	14,807	4,192	4,146	98.4	42.6
5600 K	37	15,745	4,114	3,930	138.0	29.8

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

37.3° 37.8°

Beam Angle / Field Angle

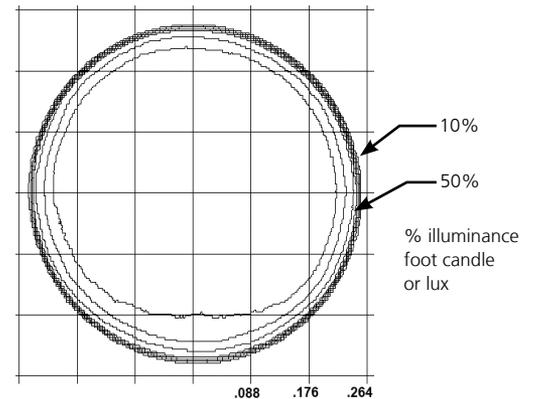| Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	136.5 ft 41.6 m
Field Diameter	6.8 ft 2.1 m	10.3 ft 3.1 m	13.7 ft 4.2 m	20.5 ft 6.3 m	–
Illuminance (fc)	186	83	47	21	1
Illuminance (lux)	2,005	891	501	223	10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.685.
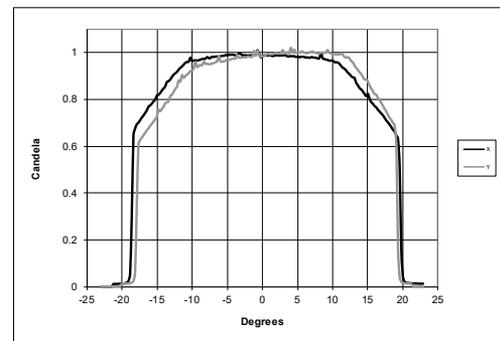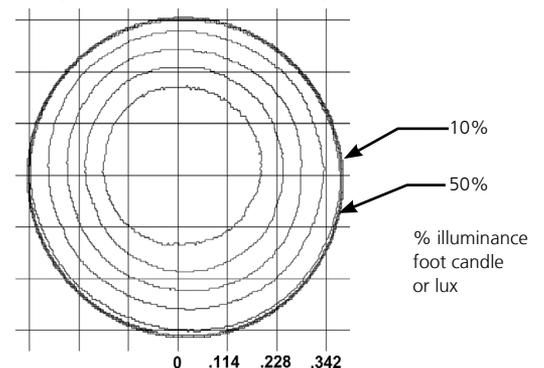For beam diameter at any distance, multiply by 0.675.

Candela Plot
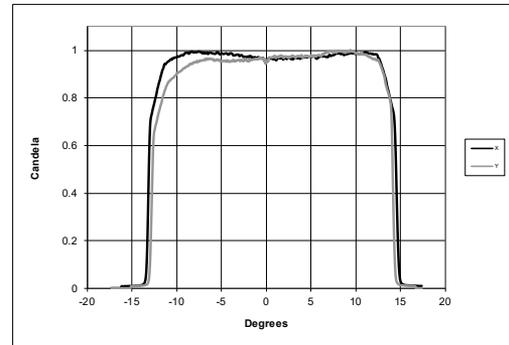
Iso-Illuminance Diagram
(Flat Surface Distribution)

10%
50%

% illuminance foot candle or lux

.088 .176 .264

Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

10%
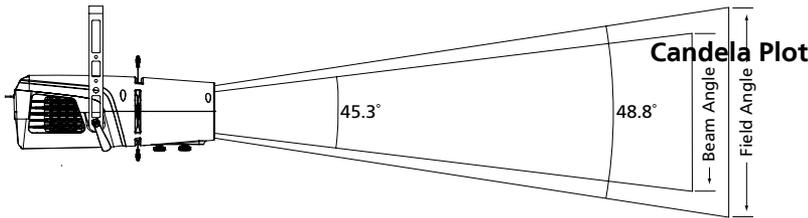50%

% illuminance foot candle or lux

0 .114 .228 .342

PHOTOMETRY INFORMATION

ColorSource Spot jr Wide

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
Full On Direct	45	13,404	5,286	4,004	161.3	32.8
3200 K	45	13,186	4,032	1,994	98.4	41.0
5600 K	45	13,772	4,262	2,132	138.0	30.9

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

Candela Plot

45.3° 48.8°

Candela Plot

Iso-Illuminance Diagram (Flat Surface Distribution)

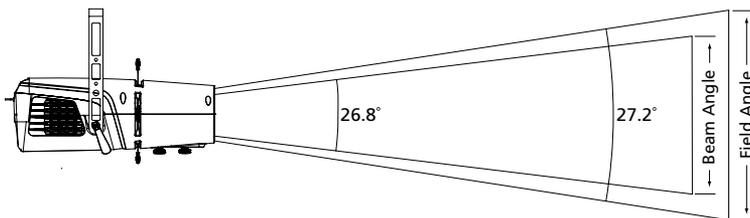| Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	115.8 ft 35.3 m
Field Diameter	9.1 ft 2.8 m	13.6 ft 4.1 m	18.1 ft 5.5 m	27.2 ft 8.3 m	–
Illuminance (fc)	134	60	34	15	1
Illuminance (lux)	1,443	641	361	160	10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.907.
For beam diameter at any distance, multiply by 0.835.

10% 50%
% illuminance foot candle or lux
0 .135 .27 .405

ColorSource Spot jr Deep Blue Narrow

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
Full On Direct	27	33,821	5,426	5,350	161.6	33.6
3200 K	27	33,442	4,651	4,570	103.8	44.8
5600 K	27	39,555	5,140	5,012	133.0	38.6

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

26.8° 27.2°

Candela Plot

| Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	183.9 ft 56.1 m
Field Diameter	4.8 ft 1.5 m	7.3 ft 2.2 m	9.7 ft 2.9 m	14.5 ft 4.4 m	–
Illuminance (fc)	338	150	85	38	1
Illuminance (lux)	3,640	1,618	910	404	10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.484.
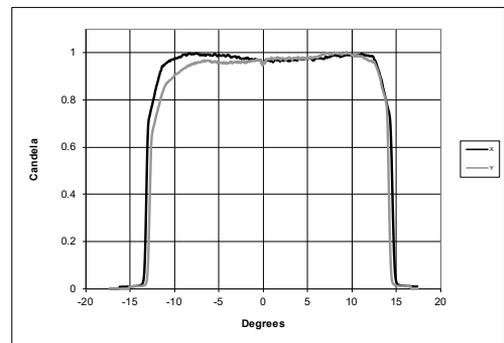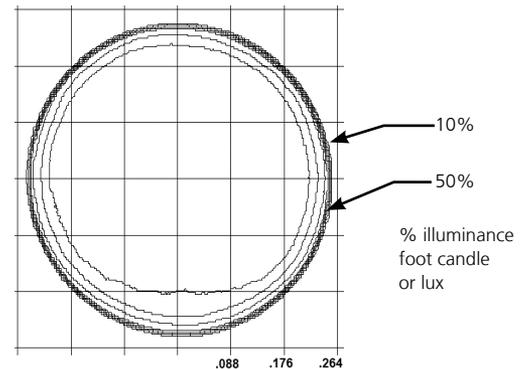For beam diameter at any distance, multiply by 0.476.
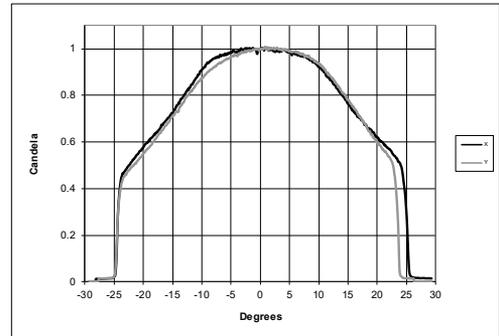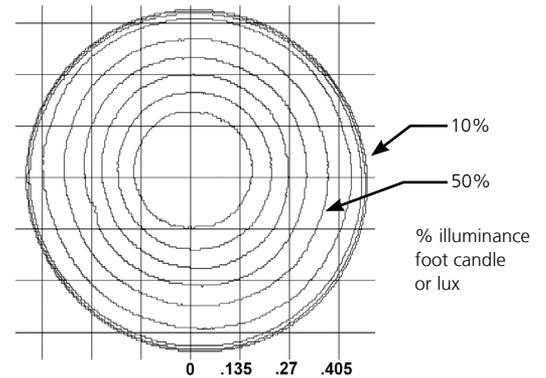
Iso-Illuminance Diagram (Flat Surface Distribution)

10% 50%
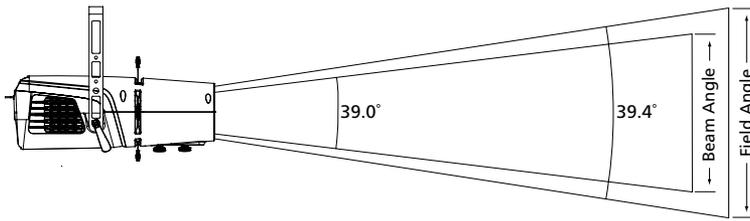% illuminance foot candle or lux
.088 .176 .264

PHOTOMETRY INFORMATION

ColorSource Spot jr Deep Blue Mid

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
Full On Direct	39	19,371	5,293	5,238	161.6	32.8
3200 K	39	15,169	4,525	4,409	103.8	43.6
5600 K	39	16,833	5,017	4,884	133.0	37.7

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

39.0° 39.4° Beam Angle Field Angle

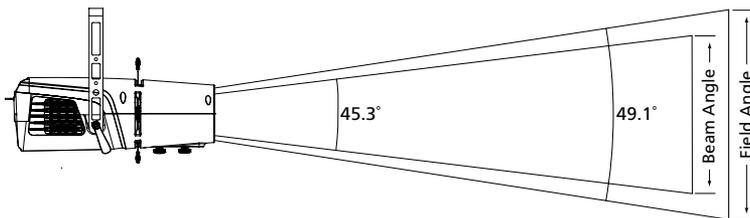| Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	139.2 ft 42.4 m
Field Diameter	7.2 ft 2.2 m	10.7 ft 3.3 m	14.3 ft 4.4 m	21.5 ft 6.5 m	–
Illuminance (fc)	194	86	48	22	1
Illuminance (lux)	2,085	927	521	232	10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.716.
For beam diameter at any distance, multiply by 0.708.

Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

10%
50%

% illuminance foot candle or lux

0   .114   .228   .342

ColorSource Spot jr Deep Blue Wide

Mode	Degree	Candela	Field Lumens	Beam Lumens	Power Consumption	Lumens Per Watt
Full On Direct	45	12,907	5,035	3,699	161.6	31.2
3200 K	45	11,008	4,275	3,144	103.8	41.2
5600 K	45	12,167	4,725	3,473	133.0	35.5

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

45.3° 49.1° Beam Angle Field Angle

| Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	113.6 ft 34.6 m
Field Diameter	9.1 ft 2.8 m	13.7 ft 4.2 m	18.3 ft 5.6 m	27.4 ft 8.4 m	–
Illuminance (fc)	129	57	32	14	1
Illuminance (lux)	1,389	617	347	154	10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.914.
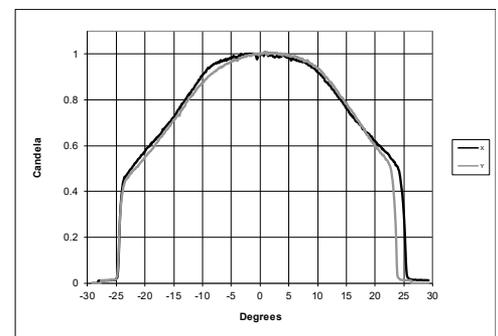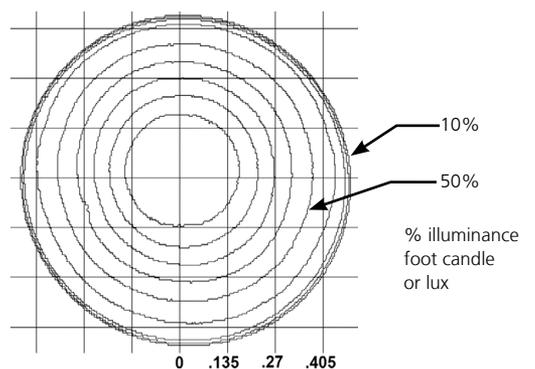For beam diameter at any distance, multiply by 0.835.

Candela Plot
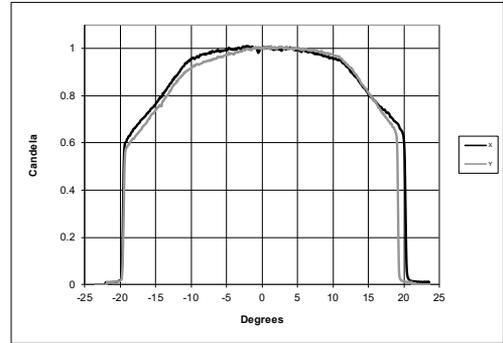
Iso-Illuminance Diagram
(Flat Surface Distribution)

10%
50%

% illuminance foot candle or lux

0   .135   .27   .405
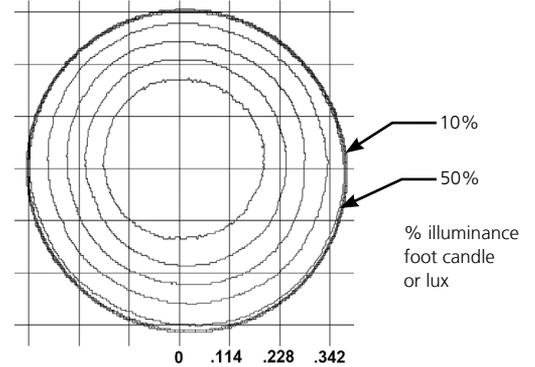
ADDITIONAL ORDERING INFORMATION

Fixture Accessories

MODEL	DESCRIPTION	PART NUMBER	
400CC	C-clamp (not included with fixture)	7060A2009 (not CE)	
400SC	Safety cable	7060A1022	
DPSJ-X	7.6 m (25 ft) powerCON-to-Edison input power cable with inline switch	7400B7030 (not CE)	
CSSPOTJRAH	ColorSource Spot jr accessory holder	PSF1181	
CSSPOTJRAH-1	ColorSource Spot jr accessory holder, white	PSF1181-1	
CSSPOTJRTH	ColorSource Spot jr top hat	PSF1182	
CSSPOTJRTH-1	ColorSource Spot jr top hat, white	PSF1182-1	
CSSPOTJRHH	ColorSource Spot jr half top hat	PSF1183	
CSSPOTJRHH-1	ColorSource Spot jr half top hat, white	PSF1183-1	
CSSPOTJRMH	ColorSource Spot jr media holder, 13.8 cm x 13.8 cm (5.45 in x 5.45 in)	PSF1184	
CSSPOTJRMH-1	ColorSource Spot jr media holder, white, 13.8 cm x 13.8 cm (5.45 in x 5.45 in)	PSF1184-1	
CSSPOTJRDN	ColorSource Spot jr donut	PSF1185	
CSSPOTJRDN-1	ColorSource Spot jr donut, white	PSF1185-1	
CSSPOTJRPH	ColorSource Spot jr gobo holder	7416A1301	
CSSPOTJRAK	ColorSource Spot jr Accessory Kit (gobo holder, smooth wash diffuser (in gate), accessory holder, media frame)	7416K1001	
CSSPOTJRAK-1	ColorSource Spot jr Accessory Kit (gobo holder, smooth wash diffuser (in gate), accessory holder, media frame), white	7416K1001-1	

Power Input Cables

Use information below to order 5 ft power input leads with factory-fitted connectors. CE fixtures ship with powerCON to bare end cables in the box.

MODEL	DESCRIPTION	PART NUMBER	
DPA-A	1.5 m (5 ft) powerCON to parallel blade U-ground (Edison) connector	7410B7037-A (not CE)	
DPA-B	1.5 m (5 ft) powerCON to 20 A two-pin and ground (stage pin) connector	7410B7037-B (not CE)	
DPA-C	1.5 m (5 ft) powerCON to grounded 20 A twistlock connector	7410B7037-C (not CE)	
DPA-X	1.5 m (5 ft) powerCON to bare-end power input lead	7410B7037-X (not CE)	

Power Thru Jumpers

Note: Power thru jumpers connect to a fixture's output (thru) connector to provide a link to successive fixtures.

MODEL	DESCRIPTION	PART NUMBER	
DPJ-5	1.5 m (5 ft) powerCON-to-powerCON fixture-to-fixture jumper	7410B7020	
DPJ-10	3.0 m (10 ft) powerCON-to-powerCON fixture-to-fixture jumper	7410B7010	

Diffusers

The Soft Focus Diffuser fits into a standard M-size pattern holder and delivers beautiful, homogenized light. You can also use the Soft Focus Diffuser with patterns for dappled and soft-edge projections.

MODEL	DESCRIPTION	PART NUMBER	
CSSPOTJRD	ColorSource Spot jr in gate smooth wash diffuser	7416A4025	

CONTROL

DMX Input Channel Profiles

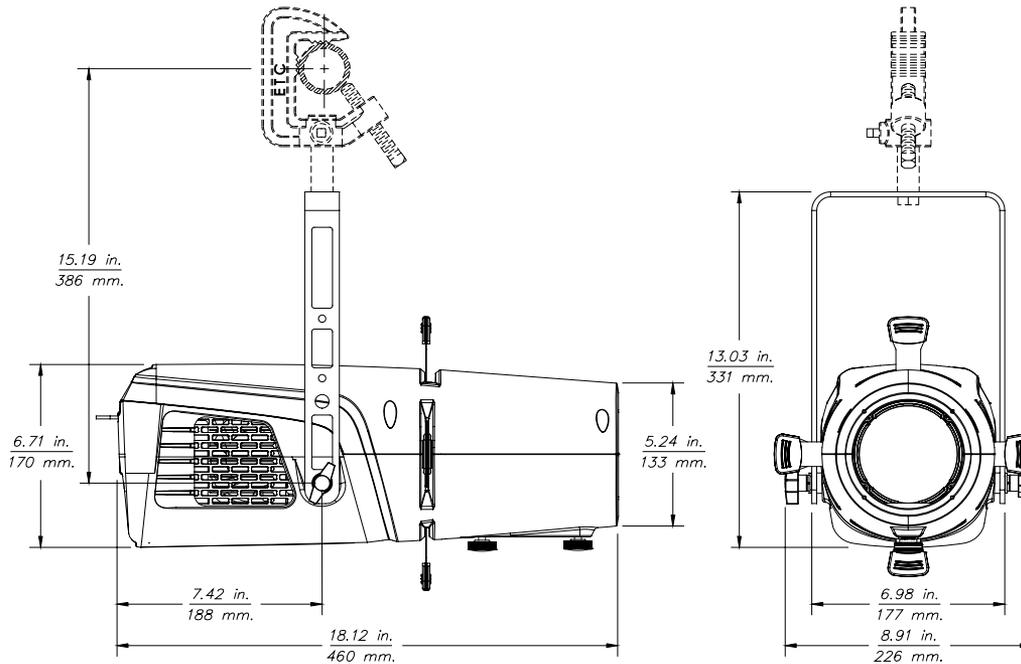| DMX Profile	DMX Channels	Channel Assignments	Notes
5ch (Default)	5	1-Intensity 2-Red 3-Green 4-Blue 5-Strobe	Lime is mixed automatically.
RGB	3	1-Red 2-Green 3-Blue	Lime is mixed automatically.
1ch	1	1-Intensity	This mode controls the intensity of Preset 1.
Dir	6	1-Intensity 2-Red 3-Green 4-Blue/Indigo* 5-Lime 6-Strobe	*Original ColorSource Spot Jr fixture uses blue in channel 4; Deep Blue ColorSource Spot jr fixture uses indigo in channel 4.

PHYSICAL

ColorSource Spot jr Weights

	WEIGHT*		SHIPPING WEIGHT	
	lb	kg	lb	kg
CS Spor jr	12.0	5.4	14.0	6.4

ColorSource Spot jr Dimensions

	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
CS Spot jr	13.03	331	10.17	258	18.12	460

*Does not include mounting hardware.

etcconnect.com