# **ColorSource Spot jr**

## ColorSource Series





Date
Project
Fixture
Comments

## 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 powerCON power-input cable with a connector of choice. See page 9 for connector options.



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## PRODUCT SPECIFICATIONS

## Source

| LED details                       | 52 Lumileds LUXEON® C LED           |
|-----------------------------------|-------------------------------------|
| Max lumens                        | Standard: 5,708<br>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<br>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<br>control/Hz range | 1,200 Hz (default) and 25,000 Hz (via<br>RDM)          |  |  |

## Control

| Input method               | DMX512 via 5-pin XLR                  |  |  |
|----------------------------|---------------------------------------|--|--|
| -                          | <u>'</u>                              |  |  |
| 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)<br>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<br>162 W / 2.0 W at 240 V                             |  |
| Current draw            | 1.59 A at 120 V<br>0.87 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**

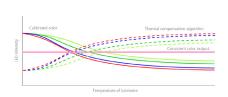
| Approved regulatory standards | cETLus Listed Conforms to UL 1598 Listed Contified to CSA C33 3 No. 350 Listed |  |  |
|-------------------------------|--|--|--|
|                               | Certified to CSA C22.2 No. 250 Listed  |  |  |
|                               | CE Compliant   |  |  |

## \*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.

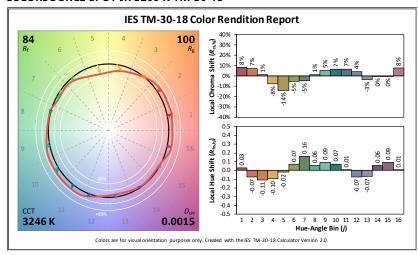


#### SIMPLE USER INTERFACE

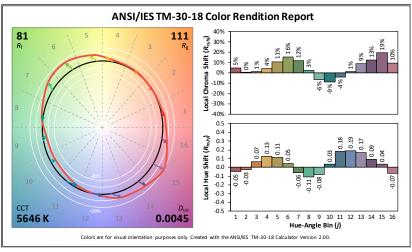
The simple seven-segment display and navigation buttons enable quick setup and recall of built-in presets.

## COLOR METRIC INFORMATION

## **COLORSOURCE SPOT JR 3200 K TM-30-18**

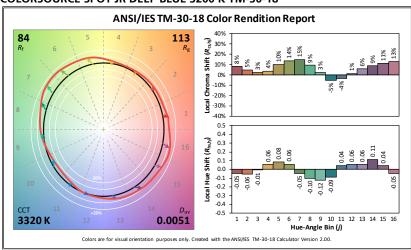


## **COLORSOURCE SPOT JR 5600 K TM-30-18**

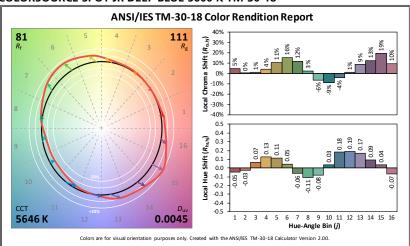


## COLOR METRIC INFORMATION

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



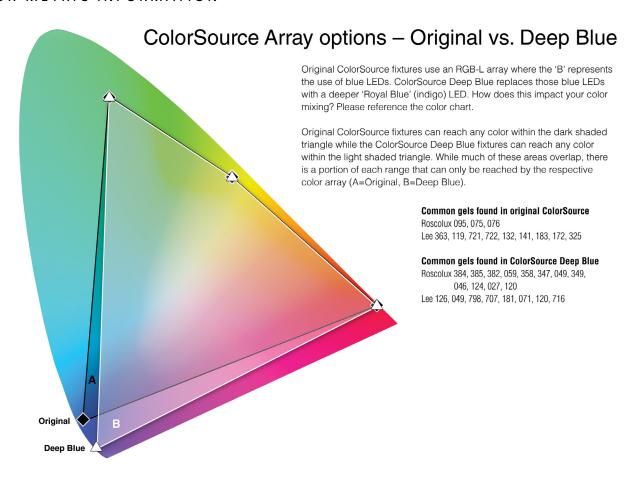
## **COLORSOURCE SPOT JR DEEP BLUE 5600 K TM-30-18**



## **Additional Color Metrics**

|                                      | STANDARD 3200 K | STANDARD 5600 K | DEEP BLUE 3200 K | DEEP BLUE 5600 K |
|--------------------------------------|-----------------|-----------------|------------------|------------------|
| CRI R <sub>a</sub> (R <sub>9</sub> ) | 82              | 64              | 79               | 80               |
| TLCI 84 48                           |                 | 67              | 73               |                  |

## COLOR METRIC INFORMATION

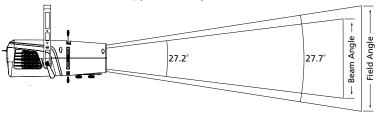


## PHOTOMETRY INFORMATION

## **ColorSource Spot jr Narrow**

| Mode           | Degree | Candela | Field  | Beam   | Power       | Lumens   |
|----------------|--------|---------|--------|--------|-------------|----------|
|                |        |         | Lumens | Lumens | Consumption | 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.



| Throw Distance (d) | 10 ft  | 15 ft  | 20 ft  | 30 ft   | 186.8 ft |
|--------------------|--------|--------|--------|---------|----------|
|                    | 3.0 m  | 4.6 m  | 6.1 m  | 9.1 m   | 56.9 m   |
| Field Diameter     | 4.9 ft | 7.4 ft | 9.9 ft | 14.8 ft |          |
|                    | 1.5 m  | 2.3 m  | 3.0 m  | 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.

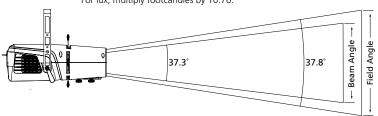
For field diameter at any distance, multiply distance by 0.493.

For beam diameter at any distance, multiply by 0.484.

## ColorSource Spot jr Mid

| Mode           | Degree | Candela | Field<br>Lumens | Beam<br>Lumens | Power<br>Consumption | Lumens<br>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.

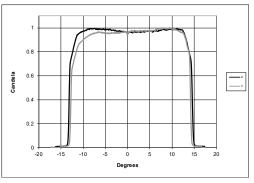


| Throw Distance (d) | 10 ft  | 15 ft   | 20 ft   | 30 ft   | 136.5 ft |
|--------------------|--------|---------|---------|---------|----------|
|                    | 3.0 m  | 4.6 m   | 6.1 m   | 9.1 m   | 41.6 m   |
| Field Diameter     | 6.8 ft | 10.3 ft | 13.7 ft | 20.5 ft |          |
|       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

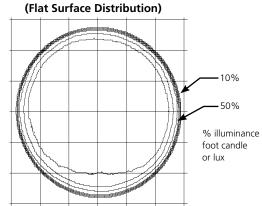
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

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

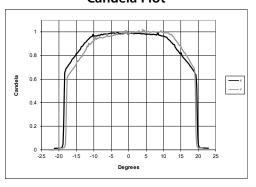
## Candela Plot



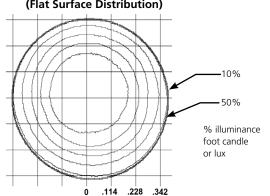
# Iso-Illuminance Diagram



## **Candela Plot**



# Iso-Illuminance Diagram (Flat Surface Distribution)

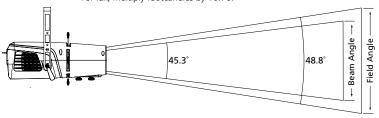


## PHOTOMETRY INFORMATION

## **ColorSource Spot jr Wide**

| Mode           | Degree | Candela | Field<br>Lumens | Beam<br>Lumens | Power<br>Consumption | Lumens<br>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.



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

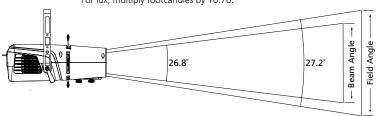
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

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

## **ColorSource Spot jr Deep Blue Narrow**

| Mode           | Degree | Candela | Field<br>Lumens | Beam<br>Lumens | Power<br>Consumption | Lumens<br>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.

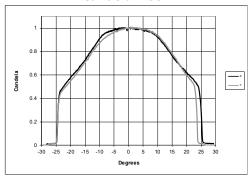


| Throw Distance (d) | 10 ft<br>3.0 m  | 15 ft<br>4.6 m  | 20 ft<br>6.1 m  | 30 ft<br>9.1 m   | 183.9 ft<br>56.1 m |
|--------------------|-----------------|-----------------|-----------------|------------------|--------------------|
| Field Diameter     | 4.8 ft<br>1.5 m | 7.3 ft<br>2.2 m | 9.7 ft<br>2.9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

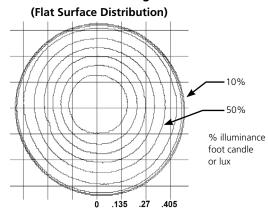
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.484. For beam diameter at any distance, multiply by 0.476.

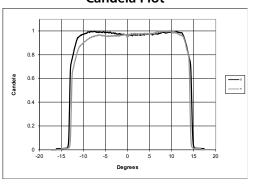
## **Candela Plot**



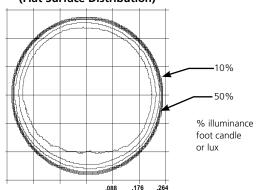
## Iso-Illuminance Diagram



## **Candela Plot**



# Iso-Illuminance Diagram (Flat Surface Distribution)

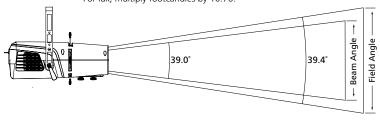


## PHOTOMETRY INFORMATION

## ColorSource Spot jr Deep Blue Mid

| Mode           | Degree | Candela | Field  | Beam   | Power       | Lumens   |
|----------------|--------|---------|--------|--------|-------------|----------|
|                |        |         | Lumens | Lumens | Consumption | 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.



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

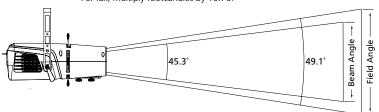
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

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

## **ColorSource Spot jr Deep Blue Wide**

| Mode           | Degree | Candela | Field<br>Lumens | Beam<br>Lumens | Power<br>Consumption | Lumens<br>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.

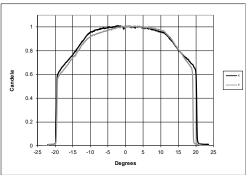


| Throw Distance (d) | 10 ft  | 15 ft   | 20 ft   | 30 ft   | 113.6 ft |
|--------------------|--------|---------|---------|---------|----------|
|                    | 3.0 m  | 4.6 m   | 6.1 m   | 9.1 m   | 34.6 m   |
| Field Diameter     | 9.1 ft | 13.7 ft | 18.3 ft | 27.4 ft |          |
|       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

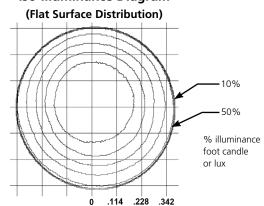
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

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

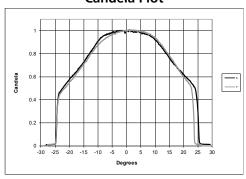
## Candela Plot



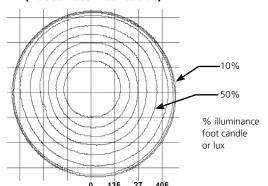
## Iso-Illuminance Diagram



## **Candela Plot**



# Iso-Illuminance Diagram (Flat Surface Distribution)



## ADDITIONAL ORDERING INFORMATION

#### **Fixture Accessories**

| MODEL        | DESCRIPTION   | PART NUMBER        |
|--------------|---|--------------------|
| 400CC        | C-clamp   | 7060A2009 (not CE) |
| 400SC        | Safety cable  | 7060A1022          |
| DPSJ-X       | 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  | PSF1184            |
| CSSPOTJRMH-1 | ColorSource Spot jr media holder, white   | 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 | 5 ft powerCON to parallel blade U-ground (Edison) connector    | 7410B7037-A (not CE) |  |
| DPA-B | 5 ft powerCON to 20 A two-pin and ground (stage pin) connector | 7410B7037-B (not CE) |  |
| DPA-C | 5 ft powerCON to grounded 20 A twistlock connector             | 7410B7037-C (not CE) |  |
| DPA-X | 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  | 5 ft powerCON-to-powerCON fixture-to-fixture jumper  | 7410B7020 (not CE) |  |
| DPJ-10 | 10 ft powerCON-to-powerCON fixture-to-fixture jumper | 7410B7010 (not CE) |  |

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

## PHYSICAL

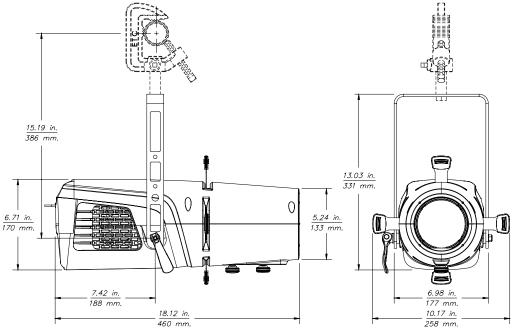
## **ColorSource Spot Jr Weights**

|             | WEIGHT* |     | SHIPPING WEIGHT |     |  |
|-------------|---------|-----|-----------------|-----|--|
|             | lb      | kg  | lb              | kg  |  |
| With Barrel | 12.0    | 5.4 | 14.0            | 6.4 |  |

## **ColorSource Spot Jr Dimensions**

|                     | HEIGHT |     | WIE   | TH  | DEP   | TH  |
|---------------------|--------|-----|-------|-----|-------|-----|
|                     | in     | mm  | in    | mm  | in    | mm  |
| ColorSource Spot jr | 13.03  | 331 | 10.17 | 258 | 18.12 | 460 |

<sup>\*</sup>Does not include mounting hardware.





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