ETC®

Source Four® CE 70W HID jr Zoom

HID Ellipsoidal Series

SPECIFICATIONS

PHYSICAL
- Rugged die cast aluminium construction
- 20 gauge stainless steel shutters in a bi-plane assembly
- High impact, thermally insulated knobs and shutter handles
- Two accessory slots, and top mounted, colour frame retainer
- Steel yoke with two mounting positions
- Positive locking, hand-operated yoke clutch
- Slot for glass or stainless steel gobos
- Slot with sliding cover for motorised pattern devices or optional iris
- CE compliant

ELECTRICAL
- 70W electronic ballast (yoke mounted)
- Less than 10% Harmonic distortion
- Greater than 95% Power Factor
- 90% Ballast Efficiency
- 230V±10%, 50-60Hz
- 0.35A operating current*

OPTICAL
- Optimised optical system for efficient photometric performance
- Two bi-convex lenses
- Faceted borosilicate reflector with dichroic cold mirror coating removes greater than 90% infrared radiation (heat) and reflects greater than 95% of visible light
- Reflector secured with anti-vibration shock mounts
- Tool free, positive locking X, Y and Z lamp centering adjustments, unaffected by relamping
- Beam edge continually adjustable hard-to-soft

*See page 3 for more information on operating current

SPECIFICATIONS

LAMP
- 70W Ceramic metal halide
- ETC Source Four HID is shipped with a 70W Philips MasterColor® CDM lamp
- 3000°K color temperature
  - 12,000 hrs. lamp life
  - Colour Rendering Index (CRI) 81
- Optional 70W Philips MasterColor CDM 4,200°K colour temperature (CRI 92) lamp available

ORDERING INFORMATION

Source Four CE 70W HID jr Zoom

PART NO.	DESCRIPTION
7062A1229-0X	Source Four CE jr Zoom 25°-50° 70W HID 230V, black
7062A1229-0X	Source Four CE jr Zoom 25°-50° 70W HID 230V, white
7062A1229-0X	Source Four CE jr Zoom 25°-50° 70W HID 230V, silver grey

ETC Source Four 70W HID jr Zooms are supplied with Philips CDM MasterColor 70W ceramic metal halide lamp, colour frame and 1.8 meter cable w/o connector
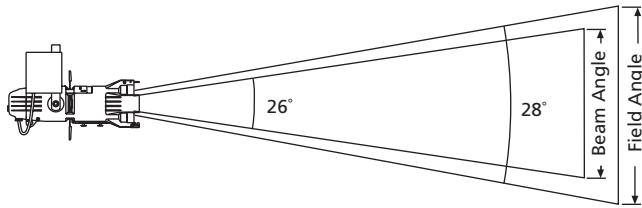
For colours other than black, white and silver grey , please contact ETC.

See back page for Source Four HID jr accessories

PHOTOMETRICS

Photometric data below is measured with a Philips CDM MasterColor 150W (3000K) ceramic metal halide lamp. To convert data when using other HID lamps, use the lumen or candela multiplying factors (Lm MF or Cd MF) for that specific lamp, listed in the Lamps table in this datasheet. For lumen data, multiply by the Lm MF. For candela or footcandle data, multiply by the Cd MF.
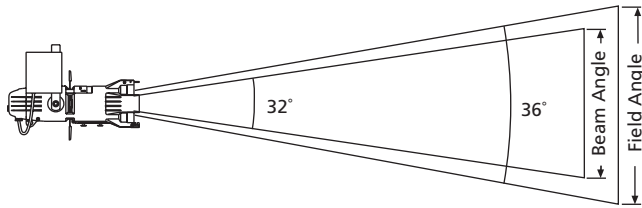
Source Four 70W HID jr 25°-50° Zoom set at 25°(cosine)

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
25°	20,460	2,795	2,380	42.3%	39.9

Metric Conversions: For Meters multiply feet by .3048
For Lux multiply footcandles by 10.76

For Field diameter at any distance, multiply distance by 0.49

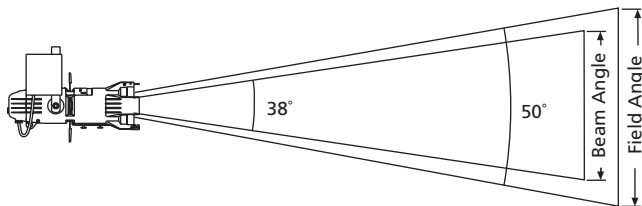For Beam diameter at any distance, multiply distance by 0.46

Throw Distance (d)	4.9m	5.2m	5.5m	6.1m
Field Diameter	2.4m	2.6m	2.7m	3.0m
Illuminance (lux)	860	762	680	551

Source Four 70W HID jr 25°-50° Zoom set at 36°(cosine)

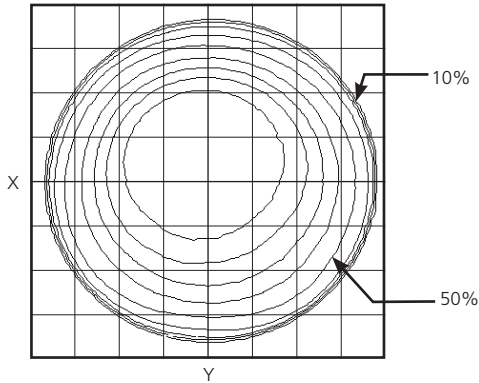| Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
36°	13,640	2,855	2,245	43.2%	40.8

Metric Conversions: For Meters multiply feet by .3048
For Lux multiply footcandles by 10.76

For Field diameter at any distance, multiply distance by 0.65
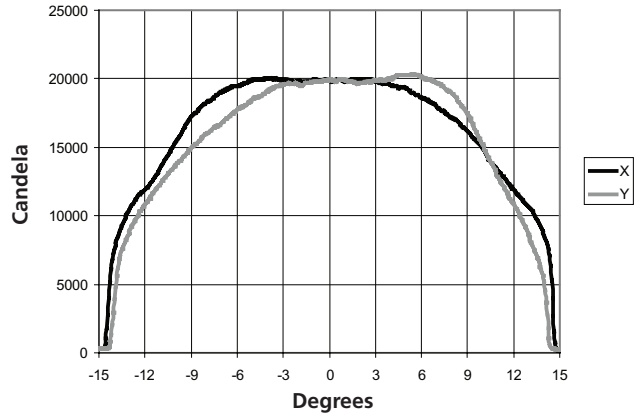
For Beam diameter at any distance, multiply distance by 0.57

Throw Distance (d)	3.7m	4.3m	4.9m	5.2m
Field Diameter	2.4m	2.8m	3.2m	3.4m
Illuminance (lux)	1,019	749	573	508

Source Four 70W HID jr 25°-50° Zoom set at 50°(cosine)

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
50°	8,210	2,730	1,775	41.4%	39.0

Metric Conversions: For Meters multiply feet by .3048
For Lux multiply footcandles by 10.76

For Field diameter at any distance, multiply distance by 0.93

For Beam diameter at any distance, multiply distance by 0.68

Throw Distance (d)	2.7m	3.0m	3.4m	4.0m
Field Diameter	2.6m	2.8m	3.1m	3.7m
Illuminance (lux)	1,091	884	730	523

PHOTOMETRICS

Source Four 70W HID jr 25°-50° Zoom set at 25°(cosine)
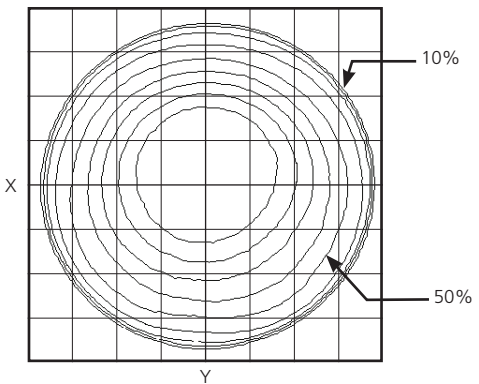
Iso-Illuminance Diagram
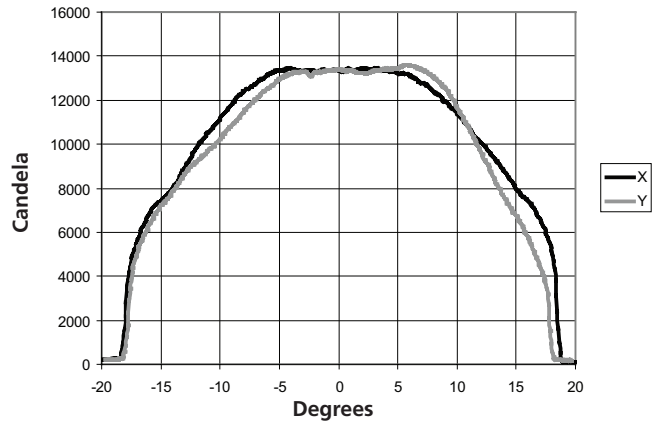

Cosine Candela Plot

Source Four 70W HID jr 25°-50° Zoom set at 36°(cosine)
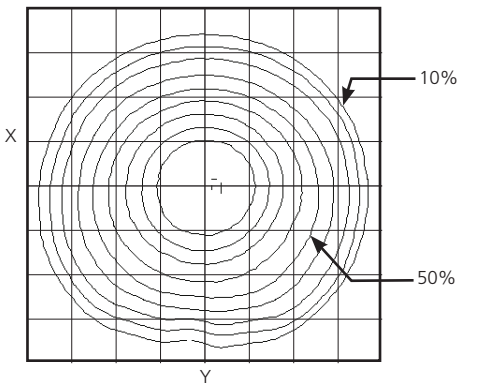
Iso-Illuminance Diagram
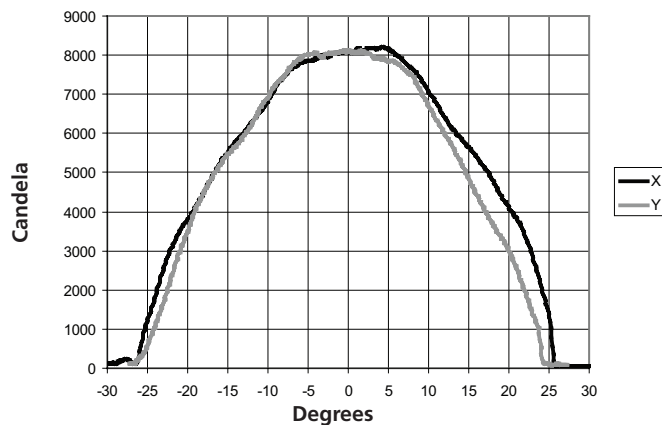

Cosine Candela Plot

Source Four 70W HID jr 25°-50° Zoom set at 50°(cosine)

Iso-Illuminance Diagram

Cosine Candela Plot

Complete IES photometry data files (LM-63-02 format) may be downloaded from the ETC Web site.

Go to http://www.etcconnect.com/downloads.asp

LAMPS

To determine Candela (Cd) or Lumens (Lm) for other HID lamps, multiply the Candela or Lumen value by the appropriate multiplying factor (CdMF or LmMF) shown for that lamp in the table below.

ETC Part #	Lamp Code	Watts	Volts	CRI	Initial Lumens	Colour Temp. K	Average Rated Life	25° Cd MF	25° Lm MF	36° Cd MF	36° Lm MF	50° Cd MF	50° Lm MF
RT212	CDM 70/T6/830**	70	88	81	6,600	3000	12,000	1.0	1.0	1.0	1.0	1.0	1.0
RT214	CDM 70/T6/942	70	88	92	6,600	4200	12,000	1.0	1.0	1.0	1.0	1.0	1.0

Source Four 70W HID jr Zoom is rated for 70W maximum.

**Photometric data was prepared using a production fixture and the Prometric CCD measurement system. Fixture adjusted for cosine distribution and tested with calibrated lamp at rated voltage. All data normalized to nominal lamp lumens in accordance with IES LM-73-04. Testing performed at ETC West, Hollywood, CA. All other multiplying factors extrapolated from primary test data.
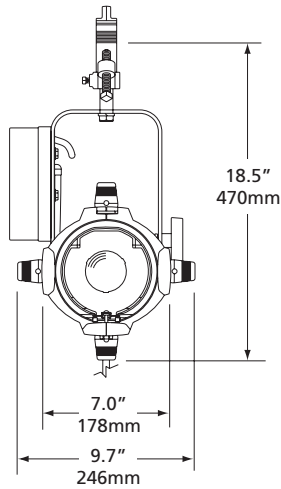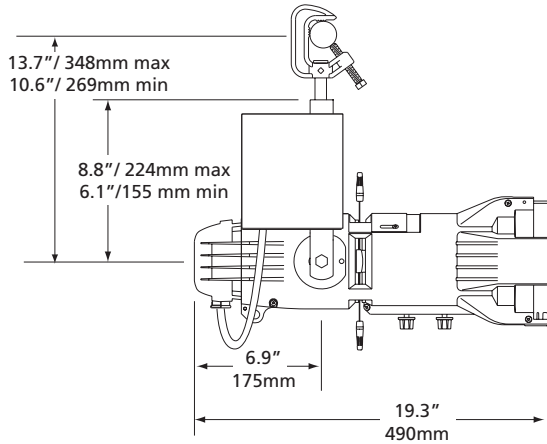
For links to photometry file downloads (IES LM-63-02 format) go to www.etcconnect.com
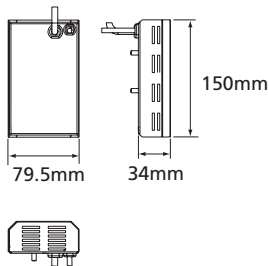
OPERATING CURRENT INFORMATION AND BREAKER GUIDELINES

BALLAST WATTAGE	RUN CURRENT	REC. 10A BREAKER LOAD	REC. 13A BREAKER LOAD	REC. 16A BREAKER LOAD
70W	0.35A @ 230V	Up to 14 units	Up to 25 units	Up to 36 units

PHYSICAL

13.7"/ 348mm max
10.6"/ 269mm min

8.8"/ 224mm max
6.1"/155 mm min

6.9"
175mm

19.3"
490mm

18.5"
470mm

7.0"
178mm

9.7"
246mm

Ballast Dimensions (Ballast may vary)

150mm

79.5mm   34mm

Source Four HID jr Zoom Weights (includes Ballast)*

MODEL	WEIGHT	SHIPPING WEIGHT
	Kg	Kg
42550HIDJ-70	6.2	8.0

ORDERING INFORMATION
Continued from page 1:

Source Four CE HID jr Zoom Accessories

PART NO.	DESCRIPTION
7062A1011	Drop-in Iris
7060A3043	Colour frame 159mm (spare), black
7060A3043-1	Colour frame 159mm (spare), white
7060A1015	Donut 159mm
PSF1021	Top Hat, black
PSF1021-1	Top Hat, white
7062A1010	Metal Gobo Holder (M size)
7062A1010-1	Glass Gobo Holder (M size) (glass without bezel)

Note: For colours other than black and white, please call ETC.

Source Four products are protected by one or more of the following patents:

U.S.	USRE36,3316, US5,345,371, US6,092,914 and US5,775,799
U.K.	GB0592589, GB0673488, 99930527.9*
Germany	DE0592589, GB0673488, 99930527.9*
Japan	JP2,501,772

*European patent application number

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