

SPECIFICATIONS

PHYSICAL

- Yoke mounted electronic ballast
- Rugged, die cast aluminum construction
- Rotating shutter assembly ± 25°
- 20 gauge stainless steel shutters in a tri-plane assembly
- Interchangeable lens tubes with smooth-running teflon guides provide nine user selectable field angle options
- Thermally insulated rear handle
- High impact, thermally insulated knobs and shutter handles
- Two accessory slots and a top mounted, gel frame retainer
- Steel yoke with two mounting positions
- Positive locking single-clutch fixture body
- Slot for glass or stainless steel patterns
- Wide accessory slot with sliding cover for motorized pattern devices or optional iris
- UL and cUL Listed for damp locations

ELECTRICAL

- 150W electronic ballast (yoke mounted)
- Less than 14 Amps inrush current, lasts less than one AC cycle (16.7mS)
 - Select breakers that meet or exceed the in-rush and ampacity requirement
- Less than 10% Harmonic distortion
- Greater than 95% Power Factor
- 90% Ballast Efficiency
- 120V Ballast:
 - 120V±10%, 60Hz
 - 1.5 Amps operating current
- 277V Ballast:
 - 277V±10%, 60Hz
 - 0.61 Amps operating current

OPTICAL

- Re-optimized optical system for improved photometric performance and field uniformity
- 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
- Micro-groove plastic fresnel lens
- Lens(es) secured with anti-vibration shock mounts
- Pre-focus lamp cap, unaffected by relamping
- Beam edge continually adjustable hard-to-soft
- Interchangeable lens barrels permit selection of 5°, 10°, 14°, 19°, 26°, 36°, 50°, 70°, and 90° field angles as well as 19°, 26°, 36°, and 50° EDLT lenses

SPECIFICATIONS

LAMP

- 150W Ceramic metal halide
- ETC Source Four HID is shipped with a 150W Philips MasterColor™ CDM lamp
- 3000°K color temperature
 - 12,000 hrs. lamp life
 - Color Rendering Index (CRI) - 85
- Optional 150W Philips MasterColor™ CDM 4,200°K color temperature (96 CRI) lamp available

ORDERING INFORMATION

Source Four HID

MODEL	DESCRIPTION
410HID	10° 120V HID ellipsoidal (black)
410HID-1	10° 120V HID ellipsoidal (white)
410HID277	10° 277V HID ellipsoidal (black)
410HID277-1	10° 277V HID ellipsoidal (white)

ETC Source Four HID are supplied with Philips CDM master color 150W ceramic metal halide lamp, color frame and 6' (1.8 meter) leads as standard. For colors other than black and white, please call ETC.

Connector Designation

Use Suffixes below to specify Factory-Fitted Connector type

MODEL	DESCRIPTION
-A	Parallel-blade U-ground connector, 120V
-B	Two-pin and ground, 20 amp connector, 120V
-C	Grounded, 20 amp, twistlock connector, 120V
-D	Twist lock NEMA L7-20P, 277V

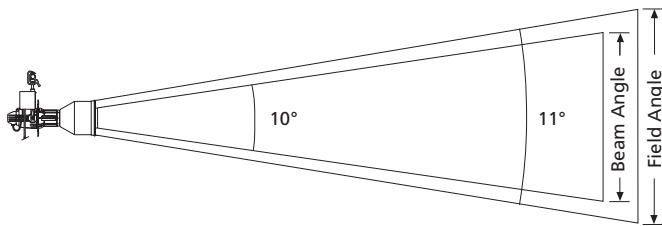
See back page for Source Four HID Accessories and optional Mounting Accessories



HID Ellipsoidal Series

PHOTOMETRICS

Photometric data below is measured with a Philips CDM master color 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.



Throw Distance (d)	40' 12.2m	55' 16.8m	70' 21.3m	85' 25.9m
Field Diameter	7.6' 2.3m	10.4' 3.2m	13.3' 4.0m	16.1' 4.9m
Illuminance (fc)	212	112	69	47
Illuminance (lux)	2,287	1,210	747	507

Source Four 10°(cosine)

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
10°	339,705	6,055	5,250	43.30%	40.4

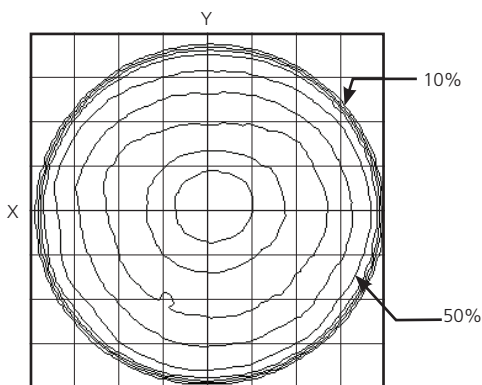
Metric Conversions: For Meters multiply feet by .3048
For Lux multiply footcandles by 10.76

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

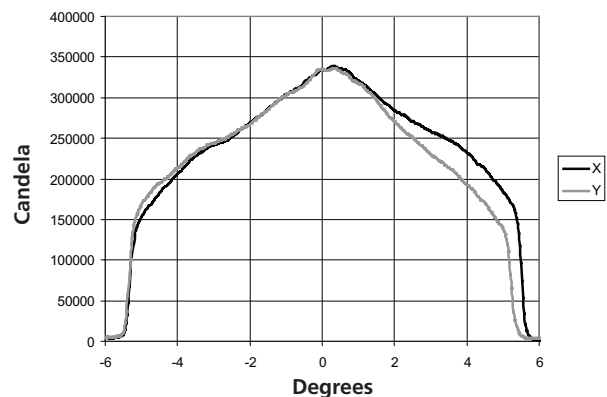
For Field diameter at any distance, multiply distance by .19

For Beam diameter at any distance, multiply distance by .17

Iso-Illuminance Diagram
(Flat Surface Distribution)



Cosine Candela Plot



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

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

HID Ellipsoidal Series

L A M P S

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	Color Temp. K	Average Rated Life	10° Cd MF	10° Lm MF
RT157	CDM150/T6/830**	150	96	85	14,000	3000	12,000	1.0	1.0
RT158	CDM150/T6/942	150	90	96	12,700	4200	12,000	.91	.91

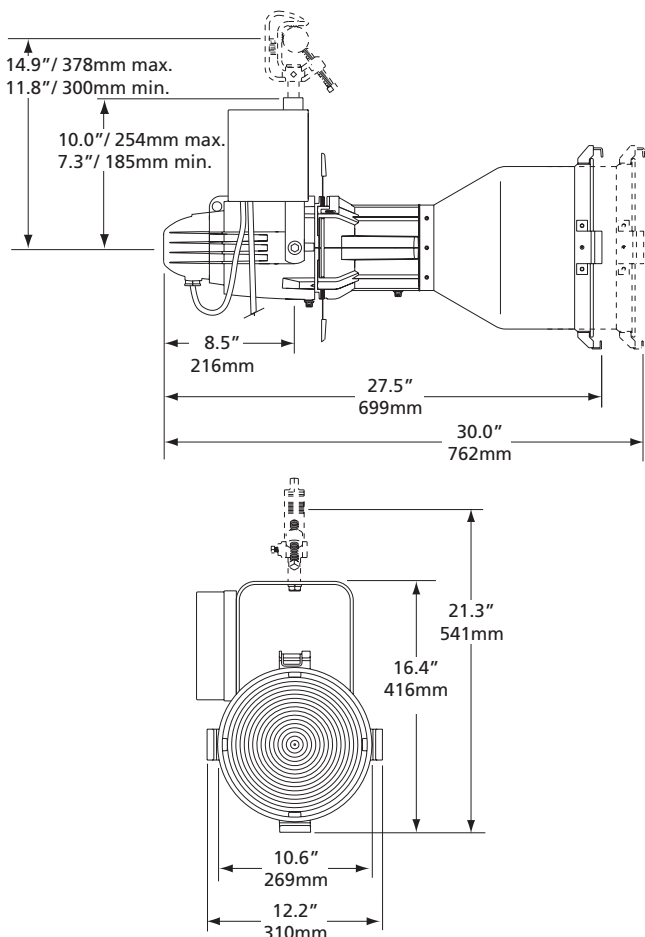
Source Four HID is rated for 150W maximum.

**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.

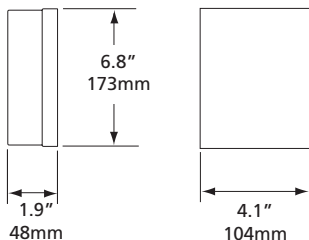
For links to photometry file downloads (IES LM-63-02 format) go to www.etcconnect.com

HID Ellipsoidal Series

PHYSICAL



Ballast Dimensions (Ballast may vary)



Source Four HID Weights (includes Ballast)*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
HID 10°	19.3	8.8	27.0	12.3

*Add 2.3 lbs for C-clamp

ORDERING INFORMATION

Continued from front page...

Source Four Accessories

MODEL	DESCRIPTION
410LT	10° lens tube with lens installed (black)
410LT-1	10° lens tube with lens installed (white)
400PH-A	Pattern holder (A size)
400PH-B	Pattern holder (B size)
400PH-G	Glass pattern holder
400SC	Safety cable
400RS	Drop-in iris
410CF	Colorframe for 10° (12") (included)
410DN	Donut for 10° (12")
410TH	Top hat
410FB	Source Four Fixture Body, Double Clutch

Optional Mounting Accessories

MODEL	DESCRIPTION
400CC	C-clamp
400CK	Canopy mounting kit

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

