



120V 277V

HID Ellipsoidal Series

SPECIFICATIONS

PHYSICAL

- Yoke mounted electronic ballast
- Rugged, die cast and extruded aluminum construction
- Patented one-handed focus mechanism with positive lock
- Rotating shutter assembly $\pm 25^\circ$
- 20 gauge stainless steel shutters in a tri-plane assembly
- Lens tube door provides easy access for lens cleaning
- Scale markings for field angle and focus settings
- 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 double-clutch yoke
- Slot for glass or stainless steel patterns
- Wide accessory slot with sliding cover for motorized pattern devices or optional iris
- UL and cUL Listed

ELECTRICAL

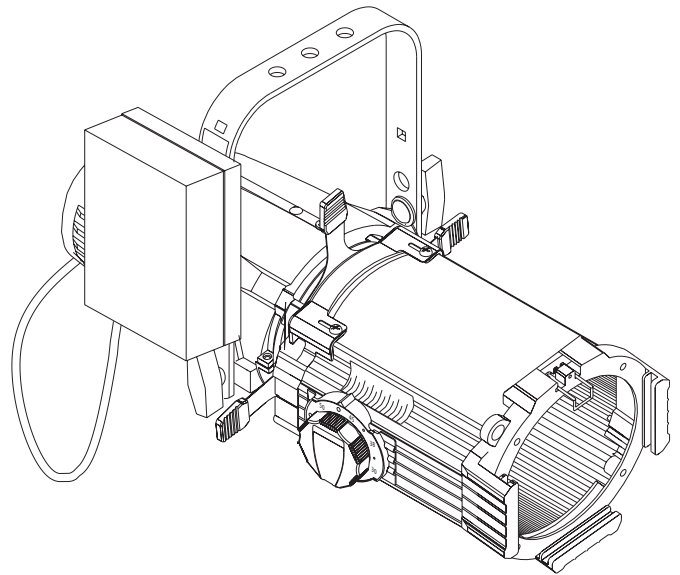
- 150W electronic ballast (yoke mounted)
- Less than 14 Amps inrush current, lasts less than one AC cycle (16.7mS)
 - Select breakers that meet or exceed the in-rush and ampacity requirement
- Less than 10% Harmonic distortion
- Greater than 95% Power Factor
- 90% Ballast Efficiency
- 120V Ballast:
 - 120V $\pm 10\%$, 60Hz
 - 1.5 Amps operating current
- 277V Ballast:
 - 277V $\pm 10\%$, 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 and lenses secured with anti-vibration shock mounts
- Two bi-convex lenses with anti-reflective coatings
- Low gate and beam temperature, shutters will not warp or distort
- Tool free, positive locking X, Y and Z lamp centering adjustments, unaffected by relamping
- 15°-30° version available

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 150W HID Zoom 25°-50°

MODEL	DESCRIPTION
42550HID-150	25°-50° 150W HID Zoom ellipsoidal, 120V (black)
42550HID-150-1	25°-50° 150W HID Zoom ellipsoidal, 120V (white)
42550HID-150-277	25°-50° 150W HID Zoom ellipsoidal, 277V (black)
42550HID-150-277-1	25°-50° 150W HID Zoom ellipsoidal, 277V (white)

ETC Source Four 150W HID Zooms 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.

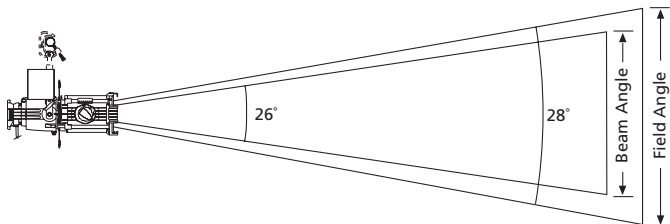
MODEL	DESCRIPTION
-A	Parallel-blade U-ground connector - 120V
-B	Two-pin and ground, 20A connector - 120V
-C	Grounded 20A Twist lock connector - 120V
-D	Grounded 20A Twist lock (NEMA L7-20P) - 277V

See page 5 for Source Four HID Zoom accessories and optional mounting accessories



PHOTOMETRICS

Photometric data below is measured with a Philips CDM master color 150W (3000K) ceramic metal halide lamp. To convert data when using any other HID lamp, use the lumen or candela multiplying factors (Lm MF or Cd MF) for that specific lamp. These multiplying factors are 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.



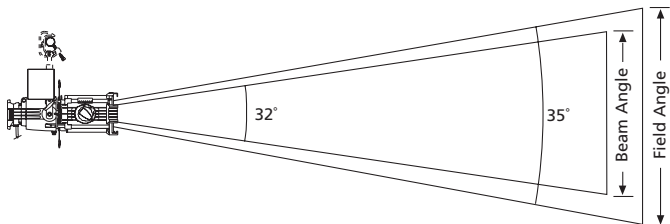
Source Four 150W HID 25°-50° Zoom set at 25°(cosine)

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
25°	59,969	7,743	6,764	55%	51.6

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

Throw Distance (d)	15'	20'	25'	35'
	4.6m	6.1m	7.6m	9.1m
Field Diameter	7.5'	10.0'	12.4'	17.5'
	2.3m	3.0m	3.8m	5.3m
Illuminance (fc)	267	150	96	49
Illuminance (lux)	2,869	1,614	1033	527

For Field diameter at any distance, multiply distance by 0.50
For Beam diameter at any distance, multiply distance by 0.46



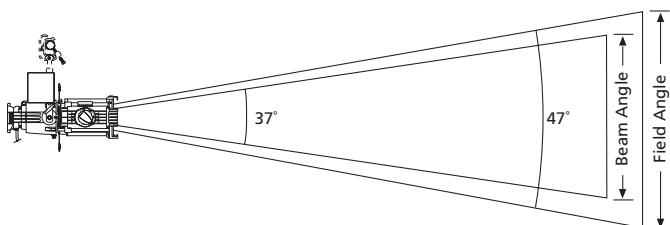
Source Four 150W HID 25°-50° Zoom set at 36°(cosine)

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
36°	39,748	7,753	6,134	55%	51.7

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

Throw Distance (d)	13'	18'	23'	28'
	4.0m	5.5m	7.0m	8.5m
Field Diameter	8.3'	11.5'	14.7'	17.8'
	2.5m	3.5m	4.5m	5.4m
Illuminance (fc)	235	123	75	51
Illuminance (lux)	2,532	1,321	809	546

For Field diameter at any distance, multiply distance by 0.64
For Beam diameter at any distance, multiply distance by 0.57



Source Four 150W HID 25°-50° Zoom set at 50°(cosine)

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
50°	24,755	7,675	4,581	55%	51.2

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

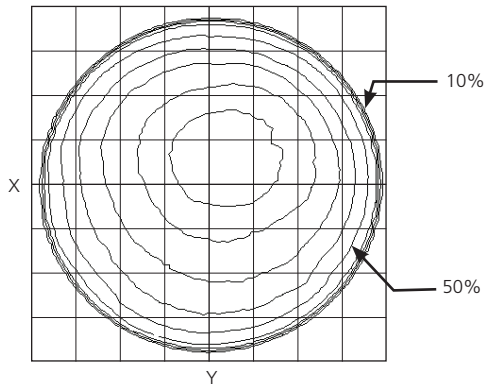
Throw Distance (d)	8'	13'	18'	23'
	2.4m	4.0m	5.5m	7.0m
Field Diameter	6.9'	11.3'	15.6'	19.9'
	2.1m	3.4m	4.8m	6.1m
Illuminance (fc)	387	146	76	47
Illuminance (lux)	4,163	1,577	822	504

For Field diameter at any distance, multiply distance by 0.87
For Beam diameter at any distance, multiply distance by 0.67

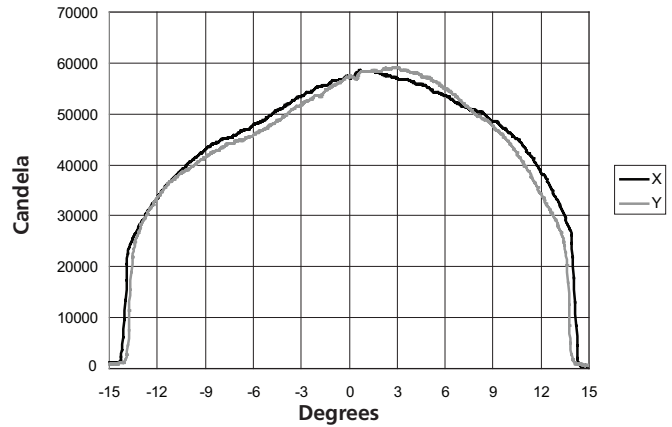
PHOTOMETRICS

Source Four 150W HID 25°-50° Zoom set at 25°(cosine)

Iso-Illuminance Diagram
(Flat Surface Distribution)

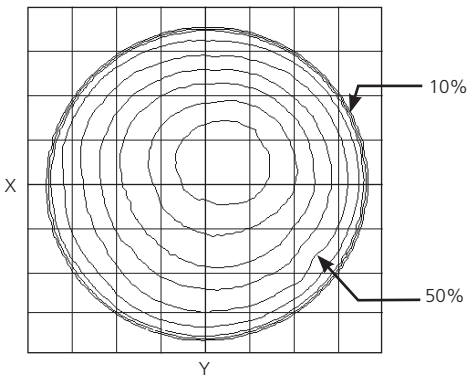


Cosine Candela Plot

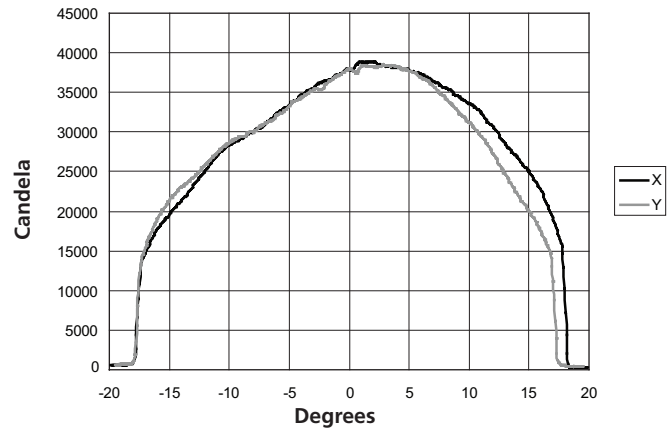


Source Four 150W HID 25°-50° Zoom set at 36°(cosine)

Iso-Illuminance Diagram
(Flat Surface Distribution)

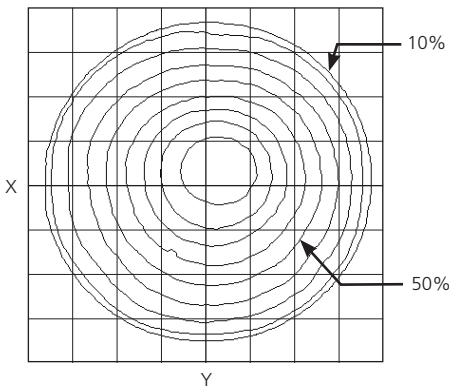


Cosine Candela Plot

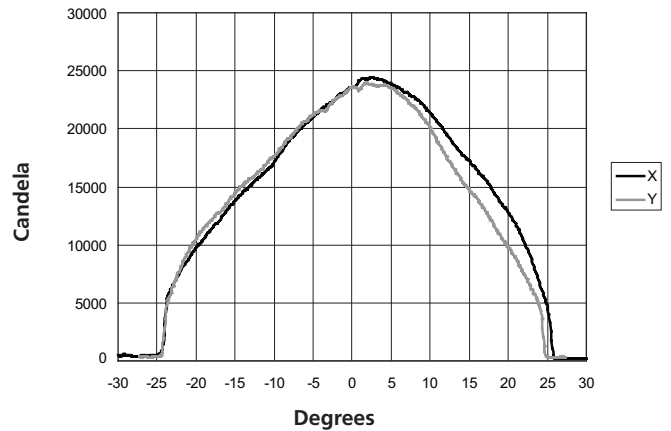


Source Four 150W HID 25°-50° Zoom set at 50°(cosine)

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.etconnect.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	25° Cd MF	25° Lm MF	36° Cd MF	36° Lm MF	50° Cd MF	50° Lm MF
RT157	CDM 150/T6/830**	150	96	85	14,000	3,000	12,000	1.0	1.0	1.0	1.0	1.0	1.0
RT158	CDM 150/T6/942	150	90	96	12,700	4,200	12,000	.91	.91	.91	.91	.91	.91

Source Four 150W HID Zoom is rated for 150W maximum.

**Photometric data was prepared using a production fixture and the Prometric CCD measurement system. Fixture 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.

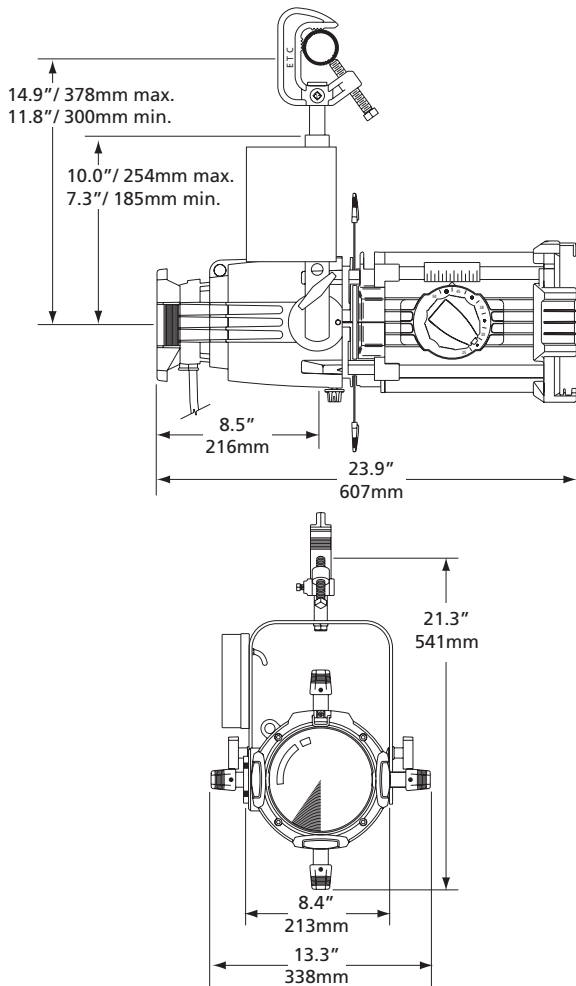
For links to photometry file downloads (IES LM-63-02 format) go to www.etconnect.com

OPERATING CURRENT INFORMATION AND BREAKER GUIDELINES

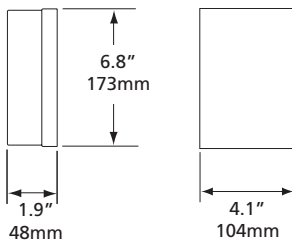
BALLAST WATTAGE	RUN CURRENT	RECOMMENDED 20A BREAKER LOAD	RECOMMENDED 15A BREAKER LOAD
150W	1.4A @ 120V	Up to 10 units	Up to 7 units
	.65A @ 277V	Up to 15 units	Up to 10 units
70W	.7A @ 120V	Up to 15 units	Up to 10 units
	.3A @ 277V	Up to 20 units	Up to 15 units

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PHYSICAL



Ballast Dimensions (Ballast may vary)



Source Four 150W HID Zoom 25°-50° Weights*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
42550HID-150	21	9.5	29	13.2

*Add 2.3 lbs for C-clamp

ORDERING INFORMATION

Continued from front page...

Source Four HID Zoom Accessories

MODEL	DESCRIPTION
407CF	Color Frame (included)
400SC	Safety Cable
400PH-A	Pattern holder (A size)
400PH-B	Pattern holder (B size)
400PH-G	Glass pattern holder
400BY	Balanced yoke assembly kit
400RS	Drop-in Iris
400PTH3	Top Hat (3" tube)
400PTH6	Top Hat (6" tube)
400PHH	Half Hat
400PGE3	Gel Extender (3" tube)
400PGE6	Gel Extender (6" tube)

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

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



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