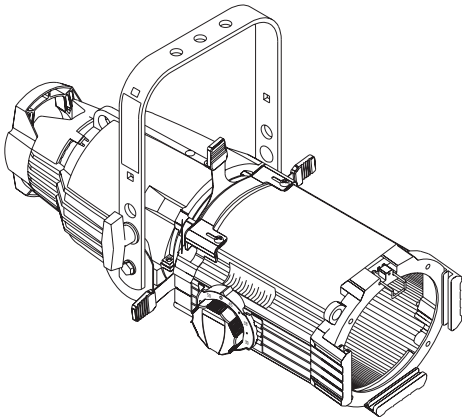




100V 115/120V 230/240V

Ellipsoidal Series



SPECIFICATIONS

PHYSICAL

- Rugged, die cast and extruded aluminium 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
- Integral die cast color frame holder with two accessory slots, and a top mounted, color 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

- 115-240V, 50/60Hz
- High temperature 3-conductor 36" leads in a glass fiber outer sleeve
- Supports ETC Dimmer Doubling™ technology

LAMP

- 750W Maximum
- HPL – compact tungsten filament contained in a krypton/ xenon filled quartz envelope (see table for suitable lamp types)
- Patented filament geometry makes for extremely efficient light collection and transmission
- Integral die cast aluminium heat sink lamp base

SPECIFICATIONS

OPTICAL

- Re-optimized optical system for improved photometric performance and field uniformity
- 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
- Lenses have anti-reflective coatings
- Lenses secured with anti-vibration shock mounts
- 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 is available

ORDERING INFORMATION

Source Four Zoom

| MODEL | DESCRIPTION                                  |
|-------|----------------------------------------------|
| 42550 | 25°-50° Source Four Zoom ellipsoidal (black) |

ETC Source Four Zooms are supplied with color frame, C-clamp and 36" (90cm) leads as standard

Connector Designation

Use Suffixes below to specify Factory-Fitted Connector type.

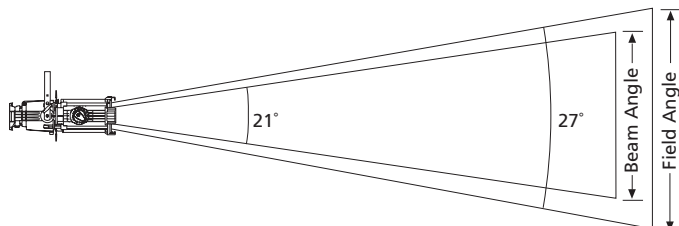
| MODEL | DESCRIPTION                            |
|-------|----------------------------------------|
| A     | Parallel-blade U-ground connector      |
| B     | Two-pin and ground, 20 amp connector   |
| C     | Grounded, 20 amp, twistlock connector  |
| M     | Dimmer Doubling connector (NEMA L515P) |

See page 5 for Source Four Accessories



## PHOTOMETRICS

Photometric data below is measured with an HPL 750W/115V 300 hr lamp. To convert data when using any other HPL 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.



|                           |       |       |       |       |
|---------------------------|-------|-------|-------|-------|
| <b>Throw Distance (d)</b> | 15'   | 30'   | 45'   | 55'   |
|                           | 4.6m  | 9.1m  | 13.7m | 16.8m |
| <b>Field Diameter</b>     | 7.3'  | 14.6' | 21.9' | 26.8' |
|                           | 2.2m  | 4.5m  | 6.7m  | 8.2m  |
| <b>Illuminance (fc)</b>   | 670   | 167   | 74    | 50    |
| <b>Illuminance (lux)</b>  | 7,212 | 1,803 | 801   | 536   |

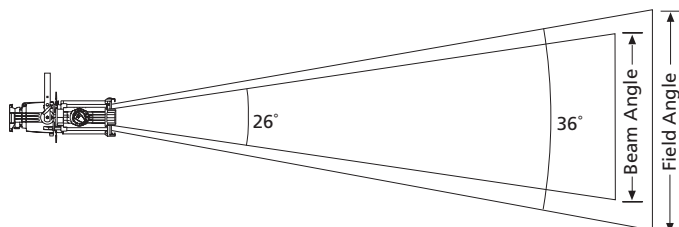
## Source Four 25°-50° Zoom set at 25° (cosine)

| Degree | Candela | Field Lumens | Beam Lumens | Efficiency | Lumens per watt |
|--------|---------|--------------|-------------|------------|-----------------|
| 25°    | 150,745 | 15,035       | 11,165      | 68.7%      | 20.0            |

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

For Field diameter at any distance, multiply distance by 0.49

For Beam diameter at any distance, multiply distance by 0.37



|                           |        |       |       |       |
|---------------------------|--------|-------|-------|-------|
| <b>Throw Distance (d)</b> | 10'    | 20'   | 30'   | 45'   |
|                           | 3.0m   | 6.1m  | 9.1m  | 13.7m |
| <b>Field Diameter</b>     | 6.5'   | 12.9' | 19.4' | 29.1' |
|                           | 2.0m   | 3.9m  | 5.9m  | 8.9m  |
| <b>Illuminance (fc)</b>   | 953    | 238   | 106   | 47    |
| <b>Illuminance (lux)</b>  | 10,258 | 2,565 | 1140  | 507   |

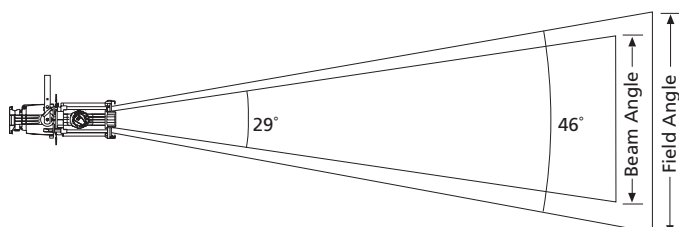
## Source Four 25°-50° Zoom set at 36° (cosine)

| Degree | Candela | Field Lumens | Beam Lumens | Efficiency | Lumens per watt |
|--------|---------|--------------|-------------|------------|-----------------|
| 36°    | 95,330  | 15,300       | 10,415      | 69.9%      | 20.4            |

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 0.45



|                           |       |       |       |       |
|---------------------------|-------|-------|-------|-------|
| <b>Throw Distance (d)</b> | 10'   | 20'   | 30'   | 35'   |
|                           | 3.0m  | 6.1m  | 9.1m  | 10.7m |
| <b>Field Diameter</b>     | 8.4'  | 16.9' | 25.3' | 29.6' |
|                           | 2.6m  | 5.2m  | 7.7m  | 9.0m  |
| <b>Illuminance (fc)</b>   | 635   | 159   | 71    | 52    |
| <b>Illuminance (lux)</b>  | 6,833 | 1,708 | 759   | 558   |

## Source Four 25°-50° Zoom set at 50° (cosine)

| Degree | Candela | Field Lumens | Beam Lumens | Efficiency | Lumens per watt |
|--------|---------|--------------|-------------|------------|-----------------|
| 50°    | 63,480  | 14,780       | 8,600       | 67.5%      | 19.7            |

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

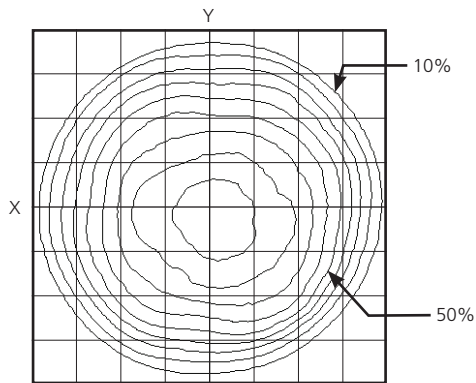
For Field diameter at any distance, multiply distance by 0.85

For Beam diameter at any distance, multiply distance by 0.52

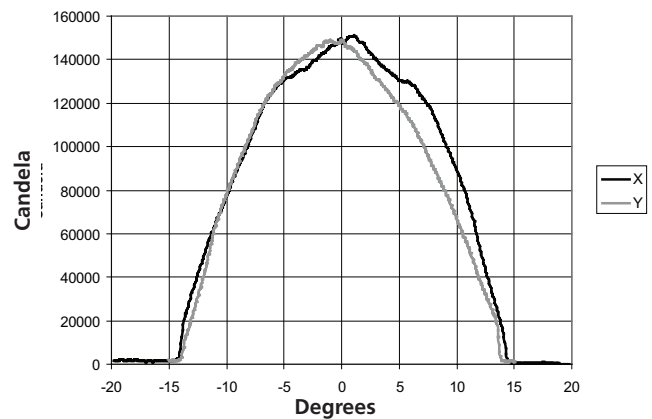
## PHOTOMETRICS

## Source Four 25°-50° Zoom set at 25°(cosine)

Iso-Illuminance Diagram

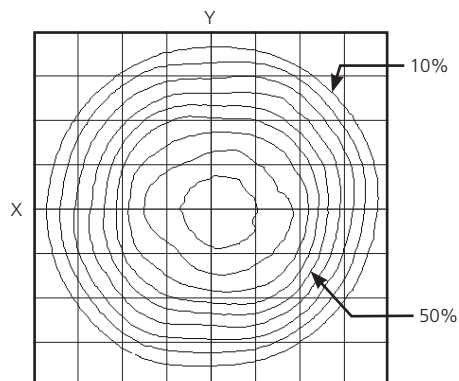


Cosine Candela Plot

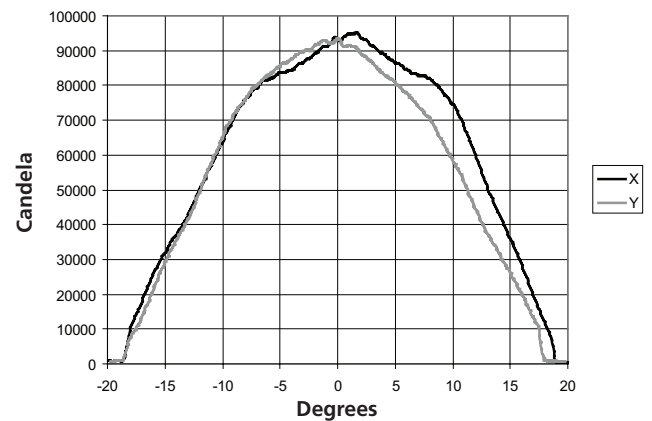


## Source Four 25°-50° Zoom set at 36°(cosine)

Iso-Illuminance Diagram

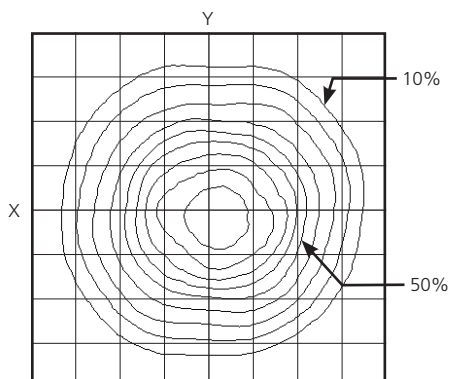


Cosine Candela Plot

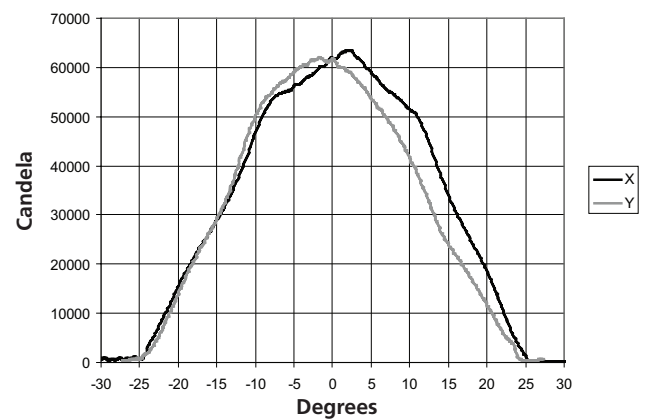


## Source Four 25°-50° Zoom set at 50°(cosine)

Iso-Illuminance Diagram



Cosine Candela Plot



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

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

## Ellipsoidal Series

## L A M P S

To determine Candela (Cd) or Lumens (Lm) for any other HPL lamp, 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 | 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 |
|------------|---------------|-------|-------|----------------|---------------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| RT116      | HPL 750/115** | 750   | 115   | 21,900         | 3,250         | 300                | 1.00      | 1.00      | 1.00      | 1.00      | 1.00      | 1.00      |
| RT196      | HPL 750/115X  | 750   | 115   | 16,400         | 3,050         | 1,500              | .64       | .74       | .64       | .74       | .64       | .74       |
| RT113      | HPL 575/115** | 575   | 115   | 16,520         | 3,250         | 300                | .76       | .74       | .74       | .76       | .81       | .81       |
| RT114      | HPL 575/115X  | 575   | 115   | 12,360         | 3,050         | 2,000              | .56       | .56       | .56       | .56       | .56       | .56       |
| RT142      | HPL 375/115   | 375   | 115   | 10,540         | 3,250         | 300                | .64       | .47       | .62       | .49       | .68       | .52       |
| RT143      | HPL 375/115X  | 375   | 115   | 8,500          | 3,050         | 1,000              | .44       | .36       | .43       | .37       | .47       | .39       |
| N/A        | HPL 750/120   | 750   | 120   | 21,900         | 3,250         | 300                | 1.00      | 1.00      | 1.00      | 1.00      | 1.00      | 1.00      |
| N/A        | HPL 750/120X  | 750   | 120   | 16,400         | 3,050         | 1,500              | .64       | .74       | .64       | .74       | .64       | .74       |
| RT115      | HPL 575/120   | 575   | 120   | 16,520         | 3,250         | 300                | .76       | .74       | .74       | .76       | .81       | .81       |
| RT171      | HPL 575/120X  | 575   | 120   | 12,360         | 3,050         | 2,000              | .56       | .56       | .56       | .56       | .56       | .56       |
|            |               |       |       |                |               |                    |           |           |           |           |           |           |
| RT112      | HPL 550/77*   | 550   | 77    | 16,170         | 3,250         | 300                | .78       | .73       | .76       | .75       | .83       | .80       |
| RT117      | HPL 550/77X*  | 550   | 77    | 12,160         | 3,050         | 2,000              | .59       | .56       | .59       | .56       | .59       | .56       |
|            |               |       |       |                |               |                    |           |           |           |           |           |           |
| RT160      | HPL 750/230** | 750   | 230   | 19,750         | 3,200         | 300                | .82       | .84       | .83       | .83       | .76       | .81       |
| N/A        | HPL 750/230X  | 750   | 230   | 15,600         | 3,050         | 1,500              | .51       | .66       | .52       | .66       | .47       | .64       |
| RT129      | HPL 575/230** | 575   | 230   | 14,900         | 3,200         | 400                | .66       | .63       | .67       | .62       | .67       | .67       |
| RT138      | HPL 575/230X  | 575   | 230   | 11,780         | 3,050         | 1,500              | .49       | .50       | .50       | .50       | .46       | .49       |
| RT154      | HPL 375/230X  | 375   | 230   | 7,800          | 3,050         | 1,000              | .36       | .33       | .37       | .32       | .37       | .35       |
| N/A        | HPL 750/240   | 750   | 240   | 19,750         | 3,200         | 300                | .82       | .84       | .83       | .83       | .76       | .81       |
| N/A        | HPL 750/240X  | 750   | 240   | 15,600         | 3,050         | 1,500              | .51       | .66       | .52       | .66       | .47       | .64       |
| RT130      | HPL 575/240   | 575   | 240   | 14,900         | 3,200         | 400                | .63       | .63       | .63       | .62       | .64       | .67       |
| RT139      | HPL 575/240X  | 575   | 240   | 11,780         | 3,050         | 1,500              | .46       | .50       | .47       | .50       | .43       | .49       |
| RT155      | HPL 375/240X  | 375   | 240   | 7,800          | 3,050         | 1,000              | .36       | .33       | .37       | .32       | .37       | .35       |

Source Four Zoom is rated for 750W maximum.

\*77 Volt HPL lamps are for use with ETC Dimmer Doubling technology only.

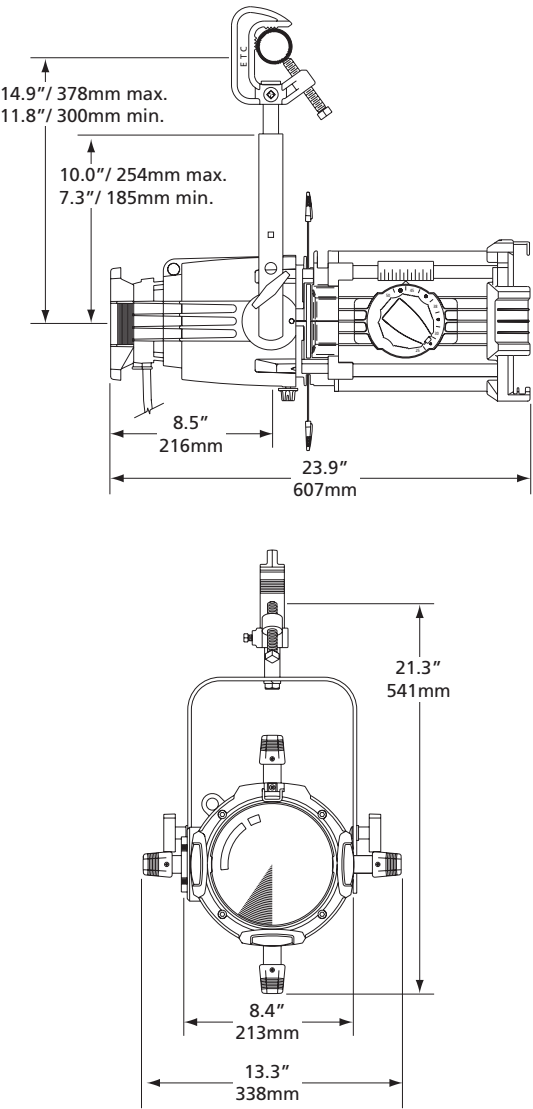
\*\*Photometric data was prepared using a production fixture and the Prometric CCD measurement system. Fixture adjusted for cosine distribution and tested with calibrated lamp at rated voltage. All data normalized to nominal lamp lumens in accordance with IES LM-73-04. Testing performed at ETC West, 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](http://www.etcconnect.com).

HPL Specified Tolerances: Watts +/- 5%, Lumens +/-7%, Average life +/-10%, Color Temperature +/- 50K

"N/A" lamps are not available for purchase from ETC. Contact your Dealer for purchase.

PHYSICAL



Source Four Zoom Weights\*

| MODEL | WEIGHT |     | SHIPPING WEIGHT |      |
|-------|--------|-----|-----------------|------|
|       | lbs    | kgs | lbs             | kgs  |
| 42550 | 17     | 7.6 | 25              | 12.7 |

\*Includes 2.3 lbs for C-clamp

ORDERING INFORMATION

Continued from front page...

Source Four Zoom Accessories

| MODEL   | DESCRIPTION                |
|---------|----------------------------|
| 407CF   | Color Frame (included)     |
| 400CC   | C-clamp (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: Available in black only

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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