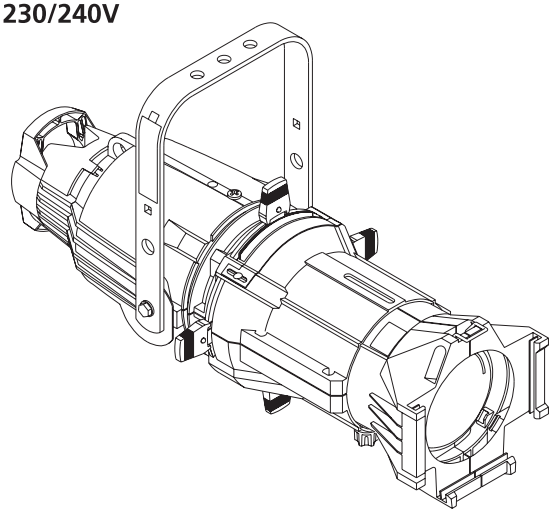
ETC®

Source Four® 19˚

Ellipsoidal Series

100V 115/120V 230/240V



SPECIFICATIONS

PHYSICAL

- 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-fit 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

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-filled quartz envelope (see table for suitable lamp types)
- Patented filament geometry makes for extremely efficient light collection and transmission
- Integral die cast aluminum heat sink lamp base

SPECIFICATIONS

OPTICAL

- Re-optimized optical system for improved photometric performance and field uniformity
- Projector-quality, high contrast aspheric lens
- Optional enhanced definition lens tube available for even higher image quality.
- 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
- Lens(es) 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
- 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

ORDERING INFORMATION

Source Four

MODEL	DESCRIPTION
419	19˚ ellipsoidal (black)
419-1	19˚ ellipsoidal (white)

ETC Source Four are supplied with C-clamp, color frame and 3' (96cm) leads as standard

Connector Designation

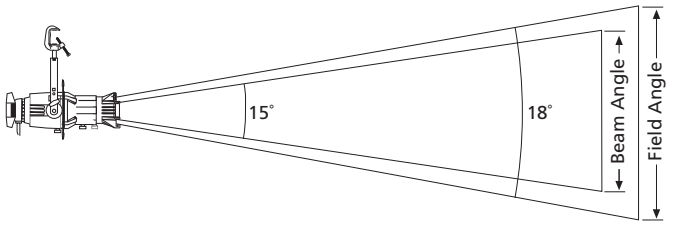
Use Suffixes below to specify Factory–Fitted Connector type

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 back page 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, 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)	25′ 7.6m	40′ 12.2m	55′ 16.7m	70′ 21.3m
Field Diameter	8′ 2.4m	13′ 3.9m	18′ 5.4m	22′ 6.8m
Illuminance (fc)	392	153	81	50
Illuminance (lux)	4,217	1,648	872	538

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

For Field diameter at any throw distance, multiply the throw distance by .32

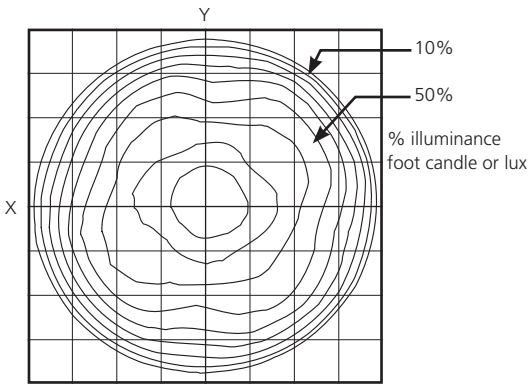
For Beam diameter at any throw distance, multiply the throw distance by .26

Source Four 19˚(cosine)

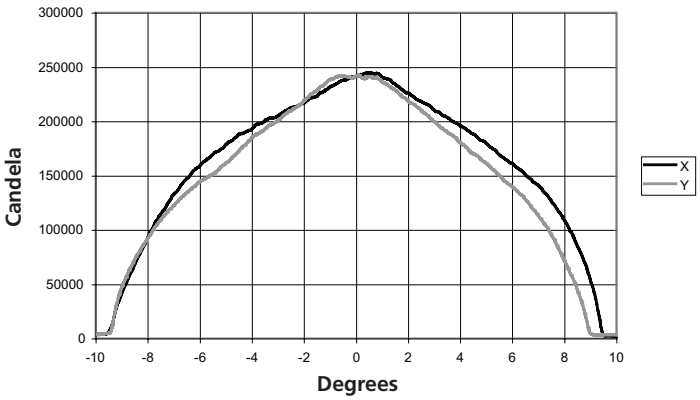
Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt
19˚	243,520	11,180	8,785	51.1%	14.9

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

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

LAMPS

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	19° Cd MF	19° Lm MF
RT116	HPL 750/115**	750	115	21,900	3,250	300	1.00	1.00
RT196	HPL 750/115X	750	115	16,400	3,050	1,500	.64	.74
RT113	HPL 575/115**	575	115	16,520	3,250	300	.85	.82
RT114	HPL 575/115X	575	115	12,360	3,050	2,000	.56	.56
RT142	HPL 375/115	375	115	10,540	3,250	300	.71	.53
RT143	HPL 375/115X	375	115	8,500	3,050	1,000	.49	.40
N/A	HPL 750/120	750	120	21,900	3,250	300	1.00	1.00
N/A	HPL 750/120X	750	120	16,400	3,050	1,500	.64	.74
RT115	HPL 575/120	575	120	16,520	3,250	300	.85	.82
RT171	HPL 575/120X	575	120	12,360	3,050	2,000	.56	.56
RT112	HPL 550/77*	550	77	16,170	3,250	300	.87	.81
RT117	HPL 550/77X*	550	77	12,160	3,050	2,000	.59	.56
RT160	HPL 750/230**	750	230	19,750	3,200	300	.64	.70
N/A	HPL 750/230X	750	230	15,600	3,050	1,500	.40	.55
RT129	HPL 575/230**	575	230	14,900	3,200	400	.55	.53
RT138	HPL 575/230X	575	230	11,780	3,050	1,500	.38	.42
RT154	HPL 375/230X	375	230	7,800	3,050	1,000	.30	.28
N/A	HPL 750/240	750	240	19,750	3,200	300	.64	.70
N/A	HPL 750/240X	750	240	15,600	3,050	1,500	.40	.55
RT130	HPL 575/240	575	240	14,900	3,200	400	.52	.53
RT139	HPL 575/240X	575	240	11,780	3,050	1,500	.36	.42
RT155	HPL 375/240X	375	240	7,800	3,050	1,000	.30	.28

Source Four is rated for 750W maximum

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

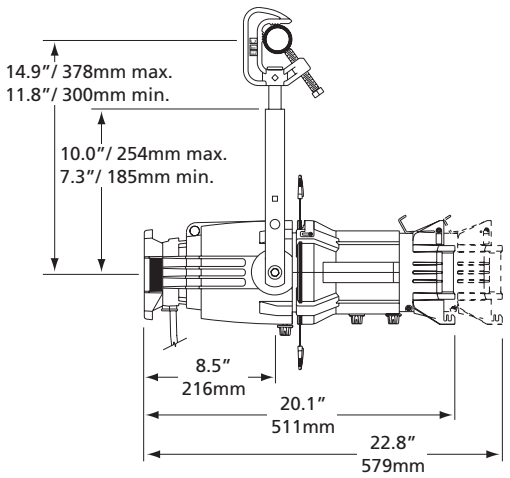
**Photometric data was prepared using a production fixture and the Prometric CCD measurement system. Fixture adjusted for cosine distribution and tested with calibrated lamp at rated voltage. All data normalized to nominal lamp lumens in accordance with IES LM-73-04. Testing performed at ETC West, Hollywood, CA. All other multiplying factors extrapolated from primary test data.

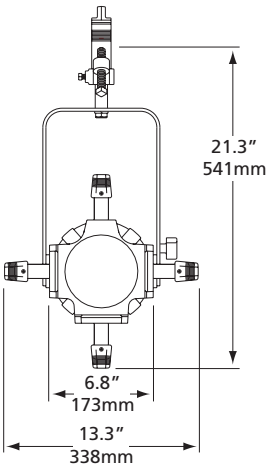
For links to photometry file downloads (IES LM-63-02 format) go to www.etcconnect.com

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 Weights*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
19˚	14	6.4	20	9.1

*Includes 2.3 lbs for C-clamp

ORDERING INFORMATION

Continued from front page...

Source Four Accessories

MODEL	DESCRIPTION
419LT	19˚ lens tube with lens installed (black)
419LT-1	19˚ lens tube with lens installed (white)
419EDLT	19˚ Enhanced Definition Lens Tube complete (black)
419EDLT-1	19˚ Enhanced Definition Lens Tube complete (white)
400CC	C–clamp (included)
400PH-A	Pattern holder (A size)
400PH-B	Pattern holder (B size)
400PH-G	Glass pattern holder
400SC	Safety cable
400RS	Drop–in iris
400CF	Colorframe (6.25") (included)
400DN	Donut (6.25")
400TH	Top hat
400HH	Half hat
400GE	Gel extender (Recommended for 19° and 26° only)
407GE	Conical gel extender (requires 407CF below)
407CF	7.5" Square color frame (Required for 14°, 70°, 90° and 407GE)
400FB	Source Four Fixture Body, Single Clutch

Note: For colors other than black or 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

Corporate Headquarters • 3031 Pleasant View Rd, PO Box 620979, Middleton WI 53562 0979 USA • Tel +1 608 831 4116 • Fax +1 608 836 1736
London, UK • Unit 26-28, Victoria Industrial Estate, Victoria Road, London W3 6UU, UK • Tel +44 (0)20 8896 1000 • Fax +44 (0)20 8896 2000
Rome, IT • Via Pieve Torina, 48, 00156 Rome, Italy • Tel +39 (06) 32 111 683 • Fax +44 (0)20 8752 8486
Holzkirchen, DE • Ohmstrasse 3, 83607 Holzkirchen, Germany • Tel +49 (80 24) 47 00-0 • Fax +49 (80 24) 47 00-3 00
Hong Kong • Room 1801, 18/F, Tower 1 Phase 1, Enterprise Square, 9 Sheung Yuet Road, Kowloon Bay, Kowloon, Hong Kong • Tel +852 2799 1220 • Fax +852 2799 9325
Web • www.etcconnect.com • Copyright©2010 ETC. All Rights Reserved. All product information and specifications subject to change. 7060L1007 Rev. G Printed in USA 12/10