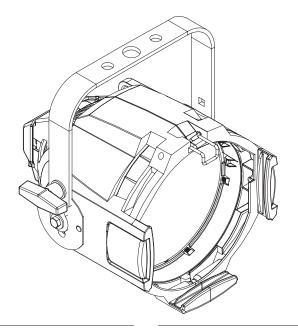




100V 115/120V 230/240V

## **PAR Series**



## SPECIFICATIONS

#### PHYSICAL

- Rugged die-cast aluminum construction
- Tool free access to the reflector and lens
- High-impact, thermally insulated knobs
- Sealed reflector housing
- Reflector temperature control through integral heat sink fins
- Gel frame holders with two accessory slots
- Top-mounted, gel-frame retainer
- Steel yoke with two mounting positions
- Positive locking yoke clutch
- UL and cUL Listed

#### **ELECTRICAL**

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

#### **LAMP**

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

#### **LENSES**

- Four heat resistant, molded borosilicate glass lenses supplied with each unit: Very Narrow Spot (VNSP), Narrow Spot (NSP), Medium Flood (MFL) and Wide Flood (WFL).
- Round beam for VNSP and NSP, oblong beam shape for MFL and WFL
- Optional Extra Wide Flood lens (XWFL) also available
- Tool free lens changing
- Thermally insulated lens ring

#### SPECIFICATIONS

#### **OPTICAL**

- Modified parabolic and multifaceted reflector
- Computer designed reflector facets molded directly into heat sink casting, finished with an enhanced aluminum deposition process, and polished for maximum reflectance
- Metal Cold Mirror (MCM) also available

## ORDERING INFORMATION

#### **Source Four PAR EA**

MODEL DESCRIPTION					
PAR-EA	Source Four PAR Enhanced Aluminum (Black)				
PAR-EA-1	Source Four PAR Enhanced Aluminum (White)				

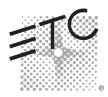
ETC Source Four PAR EA are supplied with 4 lens set: VNSP, NSP, MFL, WFL; color frame and 3' (96cm) lead as standard

## **Connector Designation**

Use Suffixes below to specify Factory–Fitted Connector type

MODEL DESCRIPTION						
	А	Parallel-blade U-ground connector				
B Two-pin and ground, 20 amp connector						
	С	Grounded, 20 amp, twistlock connector				
	М	Dimmer Doubling Connector (NEMA L515P)				

See back page for Source Four PAR Accessories



## **PAR Series**

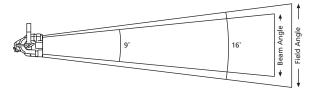
#### PHOTOMETRICS

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.

#### Source Four PAR EA with VNSP lens

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt	
VNSP	382,145	9,640	5,395	44%	12.9	

For Field diameter at any distance, multiply distance by 0.29 For Beam diameter at any distance, multiply distance by 0.16

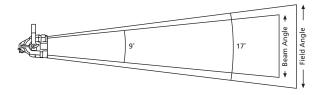


Throw Distance (d)	30′	50′	70′	85′
	9.1m	15.2m	21.3m	25.9m
Field Diameter	8.6′	14.4′	20.2′	24.5′
	2.6m	4.4m	6.1m	7.5m
Illuminance (fc)	425	153	78	53
Illuminance (lux)	4,570	1,645	839	569

## Source Four PAR EA with NSP lens

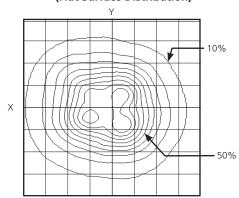
Degree	Degree Candela		Beam Lumens	Efficiency	Lumens per watt
NSP	336,740	9,504	5,280	43.4%	12.7

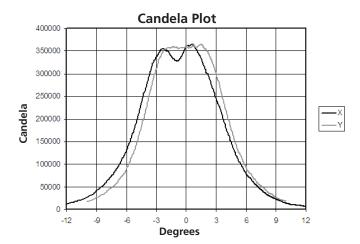
For Field diameter at any distance, multiply distance by 0.30 For Beam diameter at any distance, multiply distance by 0.16



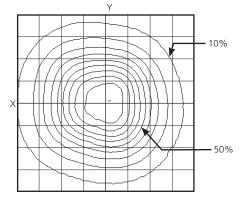
Throw Distance (d)	25′	45'	65′	80′
	7.6m	13.7m	19.8m	24.4m
Field Diameter	7.4′	13.3′	19.3'	23.7′
	2.3m	4.1m	5.9m	7.2m
Illuminance (fc)	539	166	80	53
Illuminance (lux)	5,799	1,790	858	566

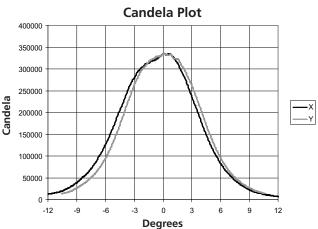
# Iso-Illuminance Diagram (Flat Surface Distribution)





# Iso-Illuminance Diagram (Flat Surface Distribution)





## **Source Four® PAR EA**

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

## **PAR Series**

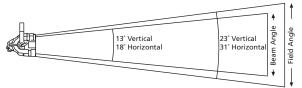
## PHOTOMETRICS

## Source Four PAR EA with MFL lens

Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt	
MFL	135,225	9,890	5,580	45.2%	13.2	

For Field diameter at any distance, multiply distance by 0.41V / .56H  $\,$ 

For Beam diameter at any distance, multiply distance by 0.22V  $\!\!\!/$  .32H

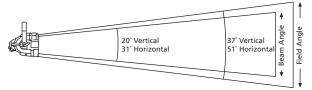


Throw Distance (d)	15'	25′	40′	50′
	4.6m	7.6m	12.2m	15.2m
Field Diameter	6.2'/8.4'	10.3'/14.0'	16.6'/22.5'	20.7'/28.1'
	1.9m/2.6m	3.2m/4.3m	5.0m/6.9m	6.3m/8.6m
Illuminance (fc)	601	216	85	54
Illuminance (lux)	6,467	2,329	910	582

## Source Four PAR EA with WFL lens

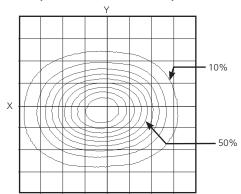
Degree	Candela	Field Lumens	Beam Lumens	Efficiency	Lumens per watt	
WFL	47,270	9,220	5,240	42.1%	12.3	

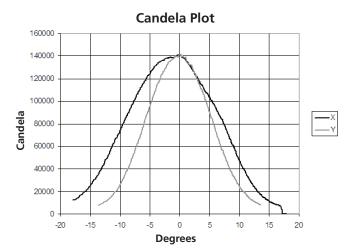
For Field diameter at any distance, multiply distance by 0.66V / 0.95HFor Beam diameter at any distance, multiply distance by 0.35V / 0.55H



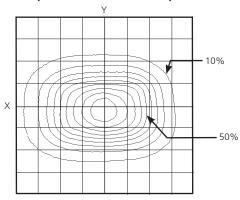
Throw Distance (d)	8.0′	16.0′	24.0′	30.0′
	2.4m	4.9m	7.3m	9.1m
Field Diameter	5.3'/7.6'	10.6'/15.3'	15.8'/22.9'	19.8'/28.6'
	1.6m/2.3m	3.2m/4.7m	4.8m/7.0m	6.0m/8.7m
Illuminance (fc)	739	185	82	53
Illuminance (lux)	7,950	1,987	883	565

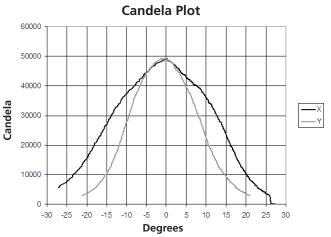
## Iso-Illuminance Diagram (Flat Surface Distribution)





# Iso-Illuminance Diagram (Flat Surface Distribution)





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

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

## **Source Four® PAR EA**

## **PAR Series**

## 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.

					Color	Avg.								
ETC				Initial	Temp.	Rated	VNSP	VNSP	NSP	NSP	MFL	MFL	WFL	WFL
Part #	Lamp Code	Watts	Volts	Lumens	K.	Life	Cd MF	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	1.00	1.00
RT196	HPL 750/115X	750	115	16,400	3,050	1,500	.64	.74	.64	.74	.64	.74	.64	.74
RT113	HPL 575/115**	575	115	16,520	3,250	300	.92	.75	.88	.75	.80	.77	.75	.77
RT114	HPL 575/115X	575	115	12,360	3,050	2,000	.56	.56	.56	.56	.56	.56	.56	.56
RT142	HPL 375/115	375	115	10,540	3,250	300	.78	.48	.74	.48	.67	.49	.63	.49
RT143	HPL 375/115X	375	115	8,500	3,050	1,000	.54	.36	.51	.36	.46	.37	.44	.37
N/A	HPL 750/120	750	120	21,900	3,250	300	1.00	1.00	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	.64	.74
RT115	HPL 575/120	575	120	16,520	3,250	300	.92	.75	.88	.75	.80	.77	.75	.77
RT171	HPL 575/120X	575	120	12,360	3,050	2,000	.56	.56	.56	.56	.56	.56	.56	.56
RT112	HPL 550/77*	550	77	16,170	3,250	300	.94	.74	.90	.74	.81	.75	.77	.75
RT117	HPL 550/77X*	550	77	12,160	3,050	2,000	.59	.56	.59	.56	.59	.56	.59	.56
RT160	HPL 750/230**	750	230	19,750	3,200	300	.61	.82	.64	.80	.74	.79	.76	.79
N/A	HPL 750/230X	750	230	15,600	3,050	1,500	.38	.64	.40	.63	.46	.63	.47	.62
RT129	HPL 575/230**	575	230	14,900	3,200	400	.53	.61	.54	.60	.59	.61	.58	.60
RT138	HPL 575/230X	575	230	11,780	3,050	1,500	.37	.49	.38	.48	.45	.48	.46	.47
RT154	HPL 375/230X	375	230	7,800	3,050	1,000	.29	.32	.30	.31	.33	.32	.32	.31
N/A	HPL 750/240	750	240	19,750	3,200	300	.61	.82	.64	.80	.74	.79	.76	.79
N/A	HPL 750/240X	750	240	15,600	3,050	1,500	.38	.64	.40	.63	.46	.63	.47	.62
RT130	HPL 575/240	575	240	14,900	3,200	400	.51	.61	.52	.60	.56	.61	.55	.60
RT139	HPL 575/240X	575	240	11,780	3,050	1,500	.34	.49	.36	.48	.42	.48	.43	.47
RT155	HPL 375/240X	375	240	7,800	3,050	1,000	.29	.32	.30	.31	.33	.32	.32	.31

Source Four PAR EA is rated for 750W maximum.

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

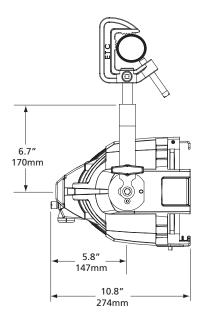
HPL Specified Tolerances: Watts +/- 5%, Lumens +/-7%, Average life +/-10%, Color Temperature +/- 50K

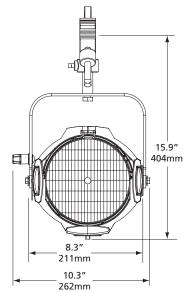
<sup>\*77</sup> Volt HPL lamps are for use with ETC Dimmer Doubling technology only.

<sup>\*\*</sup>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.

## **PAR Series**

## PHYSICAL





## Source Four PAR Weights\*

MODEL	WEI	GHT	SHIPPING	WEIGHT
	lbs	kgs	lbs	kgs
S4PAR-EA	7.5	3.4	12.8	5.8

<sup>\*</sup>Add 2.3 lbs for C-clamp

## ORDERING INFORMATION

Continued from front page...

## **Source Four PAR Accessories**

MODEL	DESCRIPTION
407CF	Color frame (7.5") (included)
400SC	Safety Cable
400CC	C-Clamp
400-VNSP	Very Narrow Spot lens
400-NSP	Narrow Spot lens
400-MFL	Medium Flood lens
400-WFL	Wide Flood lens
400–LS4	Set of four Source Four PAR lenses (VNSP, NSP, MFL, WFL)
400-XWFL	Extra Wide Flood lens (optional - not included with fixtures)
400PTH3	Top hat, 3"
400PTH6	Top hat, 6"
400PHH	Half hat
400XBTH	Cross baffle top hat
400PGE3	Gel extender, 3"
400PGE6	Gel extender, 6"
400BD	Barn door
400L	Egg crate louver
400WB	Weighted base

Note: For colors 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, US5,446,637, US5,544,029, US6,092,914 and US5,775,799
U.K.	GB0592589, GB0673488, 99930527.9*
Germany	DE0592589, GB0673488, 99930527.9*
Japan	JP2,501,772

<sup>\*</sup> European patent application number

## **PAR Series**

