

## FEATURES & SPECIFICATIONS

**INTENDED USE** — The ES8R is an ideal solution for relighting a parabolic installation when a one-for-one upgrade is desired. ES8R is designed for installation into host **2'x2' parabolic fixtures that are a minimum of 4-3/8"** deep. ES8R is not specifically designed for lensed troffer upgrades or lensed troffer with parabolic renovator kit installations. Ideal for retail, educational and other commercial lighting applications.

**ATTRIBUTES** — ES8R delivers more balanced light levels vertically and horizontally while eliminating the "cave effect" produced by traditional parabolic fixtures. ES8R provides substantial energy savings of up to 32% compared to a two-lamp T8 electronic ballast system and up to 43% savings compared to a two-lamp T12 ES magnetic system.

**CONSTRUCTION** — The ES8R assembly consists of six primary components plus hardware.

Universal end brackets containing the prewired ballast and sockets are constructed of 20-gauge painted steel and are secured to host fixture with TEK screws. A splice box is provided to enclose electrical connections and a ballast disconnect plug is installed standard.

The Reflector system is constructed from highly reflective white paint and easily attaches to the end brackets with quarter-turn fasteners.

Robust design, precision-tooling and automated assembly combine to create the industry's strongest louver.

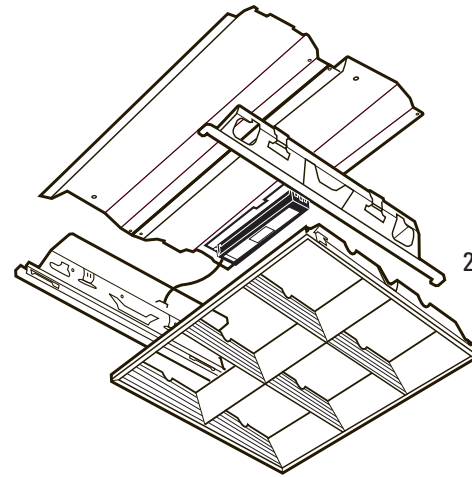
**FINISH** — Louver assembly painted after fabrication with low gloss, high reflectivity polyester powder coat. Reflectors finished in highly reflective computer controlled gloss white paint.

**OPTICAL** — Mechanical shielding is provided with angled length blades and linear faceted cross baffles. Contoured housing efficiently directs light downward. Lamp cut-outs maximize shielding while minimizing overall assembly depth to provide consistent performance in any host fixture application. Vertical light levels are improved providing a balanced amount of light across all surfaces.

**ELECTRICAL SYSTEM** — Standard ballast is high-efficiency, CEE (Consortium for Energy Efficiency) qualified, instant-start, <10% THD, universal voltage and sound rated A. Suggested lamps are high lumen, long-life Super T8 lamps which contribute to maximizing system performance. Optional program start and step-dimming ballasts are available as well as several ballast factor options.

**MAINTENANCE** — Louver assembly hinges from either side for access to lamps. For ballast access continue process by removing 1/4 turn fasteners and reflectors.

Catalog Number	
Notes	Type



2'x2' relight assembly  
2-lamp T8

### Specifications

*Intended to be installed in any existing parabolic recessed fixture:*  
Weight: 11 lbs.

**LISTING** — UL/C-UL Classified. Labeled for use in air-handling fixtures. Does not impact existing UL listing. NYC approved (#49192).

**WARRANTY** — Fixture guaranteed for one year against mechanical defects in manufacture. Lamp and ballast system warranty for 36 months for lamp, 60 months for ballast by lamp and ballast manufacturer.

Protected by US Patent Nos. 6,210,025; 6,231,213. Additional patents pending. Specifications subject to change without notice.

## ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: 2ES8R 217 BIHP

<b>2ES8R</b>	<b>217</b>			
Series	Number of lamps/wattage	Voltage	Ballast	Options
<b>2ES8R</b>	<b>217 2-lamp, 17W T8 (24")<sup>1</sup></b>	(blank) <b>MVOLT<sup>2</sup></b> 347 347 volts	BILP IS, high efficiency, .81 bf (low) <b>BINP IS, high efficiency, .90 bf (normal)</b> <b>BIHP IS, high efficiency, 1.24 bf (high)<sup>3</sup></b> BSNP PS, step-dimming, high efficiency, .90 bf (normal) <sup>4</sup>	<b>JP24 Job pack 24</b>

### NOTES:

- Lamps not included. Must be ordered separately.
- MVOLT standard for 120V-277V applications.
- Not available in high-efficiency 347V.
- Not available in 347V.

### Accessories

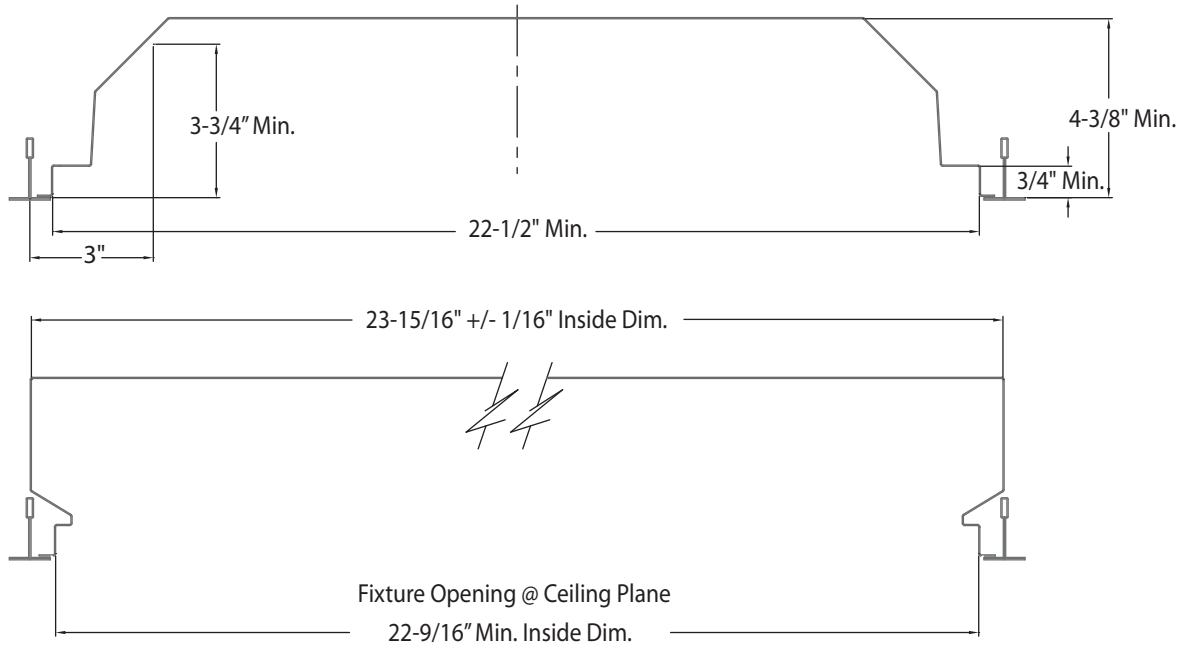
Order as separate catalog number.

**RRC2 Side reveal cover (pair), available in sets of five (pairs) or 25 (pairs)**

# ES8R Relight Assembly

## FIT COMPATIBILITY

The ES8™ relight assembly (ES8R) was engineered to upgrade parabolic fixtures from all major manufacturers conforming to the following dimensions:



Relight assemblies also will upgrade many existing "deep" lensed troffers conforming to these dimensions. Relight assemblies will not upgrade "contractor-grade" lensed troffers or lensed troffers previously upgraded with parabolic renovator kits. In addition to conforming to the dimensions above, Lithonia Lighting recommends a trial installation prior to purchasing project quantities.

## ENERGY AND LIGHT LEVEL COMPARISON

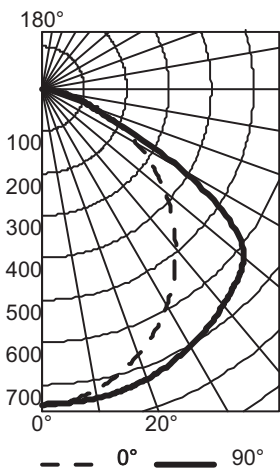
System	Light level	Input watts	Watts/SF	Watts saved	% Savings	\$ Savings per year	LER
Parabolic, (2) 2700 lumen U31W T8 lamps .88 ballast factor	47	60	0.92	Base	Base	Base	52
ES8P, (2) 1400 lumen T8 lamps, 1.24 ballast factor	42	41	0.66	19	32%	\$6.08	71

Light level in footcandles is calculated based on 8x8 mounting centers 9 foot ceilings, 60 x 60 room, 80/50/20 reflectances, .95 LLD, .90 LDD, horizontal light level on 2.5 foot workplane height.

Annual savings based on 4000 operating hours, \$.08/kwh. Luminaire Efficacy Rating (LER) is fixture lumen output divided by fixture input wattage.

## PHOTOMETRICS

2ES8R 217, 1400 lumens per lamp, Test No. LTL 16485



CP Summary		
	0°	90°
0°	748	748
5°	742	745
15°	700	738
25°	632	718
35°	543	687
45°	437	648
55°	319	541
65°	201	199
75°	94	81
85°	26	16
90°	0	0

RGR	Coefficients of Utilization											
	pf	20%					50%					
		pc	80%	50%	30%	20%	70%	30%	10%	50%	30%	10%
0	92	92	92	90	90	90	86	86	86	86	86	86
1	85	81	78	80	77	74	76	74	72	76	74	72
2	77	71	66	70	65	61	67	63	60	67	63	60
3	71	63	57	62	56	51	59	54	50	59	54	50
4	65	56	49	55	48	44	53	47	43	53	47	43
5	60	50	43	49	42	38	47	42	37	47	42	37
6	55	45	38	44	37	33	43	37	32	43	37	32
7	51	40	34	40	33	29	39	33	29	39	33	29
8	47	37	30	36	30	26	35	30	26	35	30	26
9	44	34	27	33	27	23	32	27	23	32	27	23
10	41	31	25	31	25	21	30	25	21	30	25	21

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0° - 30°	583	21.6	27.8
0° - 40°	963	35.7	46.0
0° - 60°	1745	64.6	83.3
0° - 90°	2094	77.6	100.0
90° - 180°	0	0.0	0.0
0° - 180°	2094	77.6	100.0

Efficiency: 77.6%