

## FEATURES & SPECIFICATIONS

**INTENDED USE** — ES8PHE provides a high-performance T8 (HPT8) energy-saving alternative to 3-lamp, 18-cell parabolic fixtures. Used in place of parabolics, ES8PHE can provide 44% energy savings while meeting IESNA recommended illuminance levels. Ideal for retail, educational, and commercial applications requiring lighting power density as low as 0.6 watts/square foot.

**CONSTRUCTION** — Designed and optimized for use with CEE (Consortium for Energy Efficiency) qualified, high-lumen T8 lamps and energy-efficient electronic ballasts.

Highly reflective surfaces combine with efficient design to produce up to 91% photometric efficiency and a Luminaire Efficacy Rating (LER) of up to 92 using listed lamps and ballast.

Robust design, precision-tooling and automated assembly combine to create the industry's strongest louver. Rotary sockets provide for simple lamp insertion and positive engagement into lamp contacts. Mechanical light seal requires no foam gasketing. Integral T-bar clips secure fixture to T-bar system. Housing formed of cold-rolled steel.

Finish: Five-stage iron-phosphate pre-treatment ensures superior paint adhesion and rust resistance. Housing painted after fabrication with environmentally friendly, high gloss, very high reflectivity polyester powder-coat.

Louver painted after fabrication with low gloss, high reflectivity polyester powder coat.

**OPTICS** — Mechanical shielding is provided with angled length blades, and linear faceted cross baffles. Contoured housing efficiently directs light downward. Lamp cut-out maximizes shielding even in shallow plenum applications and softens light distribution to deliver a balanced amount of light to both vertical and horizontal surfaces. MIRO® reflectors enhance fixture performance.

**ELECTRICAL** — Standard ballast is high-efficiency, CEE qualified, instant-start, ≤10% THD, universal voltage and sound rated A.

Optional program-start and step-dimming ballasts available.

Ballast disconnect standard on all configurations except EL options. See note in Ordering Information.

**LISTINGS** — Standard: UL; Optional: Canada – CSA or cUL. Mexico – NOM.

**WARRANTY** — 1-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

Ballast is warranted for five years, and lamp is warranted for three years under system warranty terms provided by lamp and ballast manufacturer. For options, see below.

**US PATENTS:** 6,210,025; 6,231,213, additional patents pending.

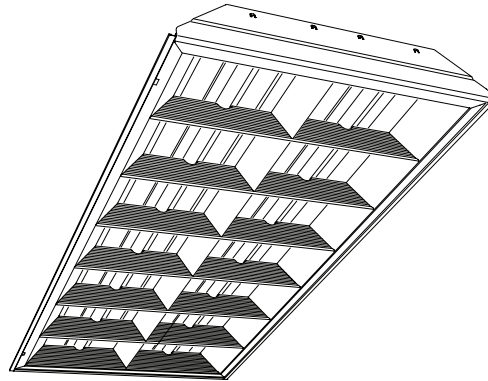
Note: Specifications subject to change without notice.

Catalog Number
Notes
Type

### Premium High-Performance T8 Lighting

# 2ES8PHE 2'X4'

2 Lamps  
T8



#### Specifications

Length: 48 (121.9)

Width: 24 (61.0)

Depth: 3-11/16 (9.4)

Weight: 26 lbs (11.7 kg)

All dimensions are inches (centimeters) unless otherwise indicated.

#### ORDERING INFORMATION

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

**Example:** 2ES8PHE 232 BINP L835HT8

Series	Trim type	Number of lamps/wattage	Voltage	Ballast	Lamp	Options <sup>4</sup>
<b>2ES8PHE</b>	<b>(blank)</b> Lay-in grid F Overlapping flanged	<b>232</b> 2-lamp, 32W T8 (48")	<b>(blank)</b> MVOLT <sup>1</sup> 120 277 347	<b>BILP</b> IS, high efficiency, .78 bf (low) <b>BINP</b> IS, high efficiency, .88 bf (normal) BIHP IS, high efficiency, 1.20 bf (high) <sup>2</sup> BSNP PS, step-dimming, high efficiency, .88 bf (normal) <sup>3</sup>	<b>L835HT8</b> 3100 lumen, long life, 3500K L830HT8 3100 lumen, long life, 3000K <b>L841HT8</b> 3100 lumen, long life, 4100K	<b>EL</b> Emergency battery pack (nominal 300 lumens) <sup>5</sup> <b>EL14</b> Emergency battery pack (nominal 1400 lumens) <sup>5</sup> PWS1836 6' prewire, 3/8" dia., 18-gauge, 1 circuit <b>JP16</b> Palletized, job wrapped, quantity 16 CSA Listed and labeled to comply with Canadian standards NOM NOM Certified

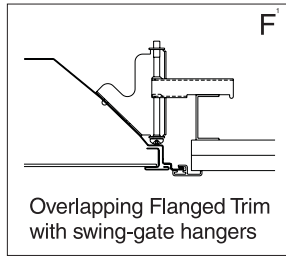
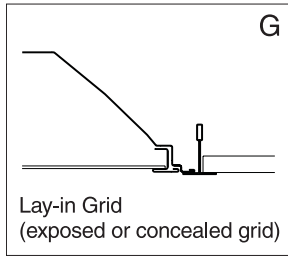
#### Notes

- MVOLT standard for 120V - 277V applications. 50 or 60 Hz operation. Some options require voltage specified.
- CEE qualified ballast is not available in 347V.
- Not available with 347V.
- Other options available may increase fixture depth to 4-1/2". Consult factory if plenum space is a concern.
- Ballast disconnect not standard with any EL option. Must specify BDP for inclusion with EL battery packs. UL Listed only. Consult factory for BDP CSA with EL option.

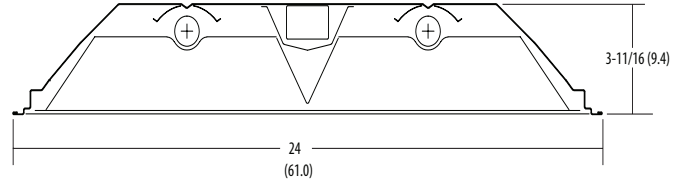
# 2ES8PHE 2'x4' Premium High-Performance T8 Lighting

## MOUNTING DATA

Continuous row mounting of flanged units requires CRE and CRM trim options (see Options).



## DIMENSIONS



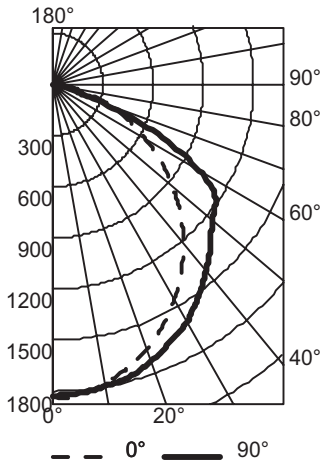
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### Notes

- 1 Recommended rough-in dimensions for F-trim fixtures 24"x48". (Tolerance is +1/4"-0".) Swing-gate range 1-3/16" to 3-15/16". Swing-gate span 23-3/8" to 26-11/16". Fixture swing-gate points require additional 9/16" over nominal fixture height.

## PHOTOMETRICS

2ES8PHE 232, 2725 lumens per lamp, test no. LTL19366



CP Summary	Coefficients of Utilization												Zonal Lumen Summary					
	0°		90°		pc	80%			70%			50%			Zone	Lumens	% Lamp	% Fixture
	70%	50%	30%	50%		30%	10%	50%	30%	10%	50%	30%	10%					
0°	1829	1829	0	108	108	108	106	106	106	101	101	101	0° - 30°	1405	25.8	28.3		
5°	1827	1817	1	100	95	92	93	90	87	89	87	84	0° - 40°	2293	42.1	46.2		
15°	1723	1775	2	91	84	78	82	76	72	79	74	70	0° - 60°	4061	74.5	81.9		
25°	1556	1667	3	83	73	66	72	65	60	69	64	59	0° - 90°	4959	91.0	100.0		
35°	1338	1518	4	76	65	57	64	57	51	62	55	50	90° - 180°	0	0.0	0.0		
45°	1080	1332	5	70	58	50	57	50	44	55	49	43	0° - 180°	4959	91.0	100.0		
55°	788	1190	6	64	52	44	52	44	38	50	43	38						
65°	504	692	7	60	47	40	47	39	34	45	39	34						
75°	231	151	8	56	43	36	43	35	30	41	35	30						
85°	61	35	9	52	40	32	39	32	27	38	32	27						
90°	2	0	10	49	37	30	36	29	25	35	29	25						

Efficiency: 91.0%

### ENERGY AND LIGHT LEVEL COMPARISON

System	Light level	Input watts	Watts/SF	Watts saved	% Savings	\$ Savings per year	LER
Parabolic, (3) 2800 lumen T8 lamps .88 ballast factor	69	85	1.06	Base	Base	Base	65
ES8P, (2) 3100 lumen T8 lamps, .78 ballast factor	52	48	0.60	37	44%	\$11.84	86

Light level in footcandles is calculated based on 8x10 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.