

FEATURES & SPECIFICATIONS

INTENDED USE

ES8P provides a T8 energy-saving alternative to 2-lamp parabolic fixtures. Used in place of parabolics, ES8P can provide 29% energy savings while meeting IESNA recommended illuminance levels. Ideal for retail, educational, and commercial applications requiring lighting power density as low as 0.64 watts/square foot.

ATTRIBUTES

Designed and optimized for use with high lumen T8 lamps and energy-efficient electronic ballasts.

Highly reflective surfaces combine with efficient design to produce up to 84% photometric efficiency and a Luminaire Efficacy Rating (LER) of up to 71 using listed lamps and ballast.

CONSTRUCTION

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. 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.

OPTICAL

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.

ELECTRICAL SYSTEM

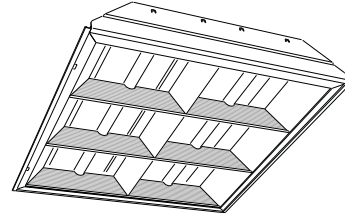
Standard ballast is high-efficiency, instant-start, ≤10% THD, universal voltage and sound rated A.

Optional program-start and step-dimming ballasts available.

| | |
|----------------|------|
| Catalog Number | |
| Notes | Type |

Premium Energy-Saving T8 Lighting

ES8P 2'X2'



2 Lamps
T8

Specifications

Length: 24 (609)

Width: 24 (609)

Depth: 3-11/16 (94)

Weight: 18 lbs (8.1 kg)

All dimensions are inches (millimeters) unless otherwise specified.

LISTING

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

WARRANTY

Light fixture is guaranteed for one year against mechanical defects in manufacture.

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.

Specifications subject to change without notice.

ORDERING INFORMATION

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

Example: 2ES8P 217 BIHP L835HT8

| 2ES8P | | 217 | | | | | | | | |
|--------------|----------------------------|---------------------------------|----------------------------------|--|--|--|--|--|--|--|
| Series | Trim type | Number of lamps/wattage | Voltage | Ballast | Lamp | Options ⁴ | | | | |
| 2ES8P | (blank) Lay-in grid | 217 2-lamp, 17W T8 (24") | (blank) MVOLT¹ | BILP IS, high efficiency, .81 bf (low) | L835HT8 1400 lumen, long life, 3500°K | EL Emergency battery pack (nominal 300 lumens)⁵ | | | | |
| | F Overlapping flanged | | 120 | BINP IS, high efficiency, .90 bf (normal) | L830HT8 1400 lumen, long life, 3000°K | PWS1836 6' prewire, 3/8" dia., 18-gauge, 3 wires | | | | |
| | | | 277 | BIHP IS, high efficiency, 1.24 bf (high)² | L841HT8 1400 lumen, long life, 4100°K | QFC__ Quick-flex, fixture cable, factory installed prewired cable (RELOC) ⁵ | | | | |
| | | | 347 | BSNP PS, step-dimming, high-efficiency, .90 bf (normal) ³ | | CP Chicago plenum approved | | | | |
| | | | | | | CSA Listed and labeled to comply with Canadian standards | | | | |
| | | | | | | NOM NOM Certified | | | | |

NOTES:

1 MVOLT standard for 120V - 277V applications. 50 or 60 hz operation. Some options require voltage specified.

2 347V not available with high-efficiency ballast.

3 Not available with 347V.

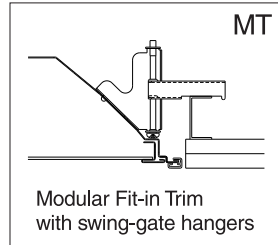
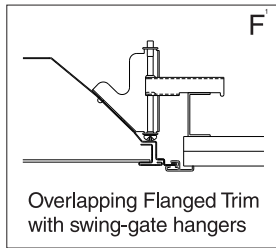
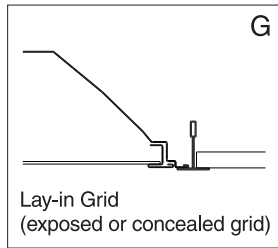
4 Other options available may increase fixture depth. Consult factory if plenum space is a concern.

6 Must specify voltage.

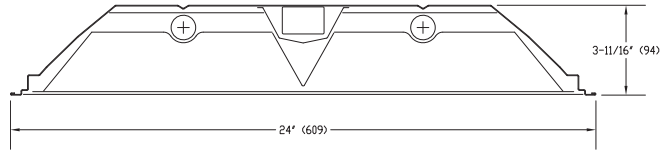
ES8P 2'x2' Premium Energy-Saving T8 Lighting

MOUNTING DATA

Continuous row mounting of flanged units requires CRE and CRM trim options.



DIMENSIONS

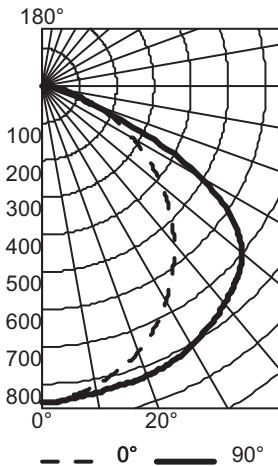


All dimensions are inches (millimeters) unless otherwise specified. Specifications subject to change without notice.

NOTE:

- 1 Recommended rough-in dimensions for F-trim fixtures 24"x24". (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.

2ES8P 217, 1400 lumens per lamp, test no. LTL 16075



CP Summary

| | 0° | 90° |
|-----|-----|-----|
| 0° | 848 | 848 |
| 5° | 839 | 843 |
| 15° | 791 | 830 |
| 25° | 716 | 819 |
| 35° | 611 | 784 |
| 45° | 487 | 736 |
| 55° | 351 | 622 |
| 65° | 216 | 291 |
| 75° | 100 | 85 |
| 85° | 25 | 16 |
| 90° | 0 | 0 |

Coefficients of Utilization

| ROR | pf | pc | 20% | | | | | | | | | | |
|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | | | 80% | | | 70% | | | 50% | | | | |
| | | | pw | 70% | 50% | 30% | 50% | 30% | 10% | 50% | 30% | 10% | |
| | 0 | | 101 | 101 | 101 | 98 | 98 | 98 | 94 | 94 | 94 | | |
| | 1 | | 92 | 89 | 85 | 87 | 84 | 81 | 83 | 81 | 78 | | |
| | 2 | | 84 | 78 | 72 | 76 | 71 | 67 | 73 | 69 | 65 | | |
| | 3 | | 77 | 68 | 62 | 67 | 61 | 56 | 65 | 59 | 55 | | |
| | 4 | | 70 | 61 | 53 | 59 | 53 | 47 | 57 | 51 | 47 | | |
| | 5 | | 65 | 54 | 47 | 53 | 46 | 41 | 51 | 45 | 40 | | |
| | 6 | | 60 | 49 | 41 | 48 | 41 | 36 | 46 | 40 | 35 | | |
| | 7 | | 55 | 44 | 37 | 43 | 36 | 31 | 42 | 36 | 31 | | |
| | 8 | | 51 | 40 | 33 | 40 | 33 | 28 | 38 | 32 | 28 | | |
| | 9 | | 48 | 37 | 30 | 36 | 30 | 25 | 35 | 29 | 25 | | |
| | 10 | | 45 | 34 | 27 | 33 | 27 | 23 | 33 | 27 | 23 | | |

Zonal Lumen Summary

| Zone | Lumens | % Lamp | % Fixture |
|------------|--------|--------|-----------|
| 0° - 30° | 657 | 23.4 | 27.8 |
| 0° - 40° | 1086 | 38.8 | 45.9 |
| 0° - 60° | 1964 | 70.2 | 83.1 |
| 0° - 90° | 2364 | 84.4 | 100.0 |
| 90° - 180° | 0 | 0.0 | 0.0 |
| 0° - 180° | 2364 | 84.4 | 100.0 |

Efficiency: 84.4%

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 | 59 | 0.92 | Base | Base | Base | 52 |
| ES8P, (2) 1400 lumen T8 lamps, 1.24 ballast factor | 45 | 41 | 0.66 | 18 | 29% | \$5.44 | 71 |

Light level is estimate based on 8x8 mounting centers, 9 foot ceilings, 60x60 room, 80/50/20 reflectances, .95 LLD, 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.