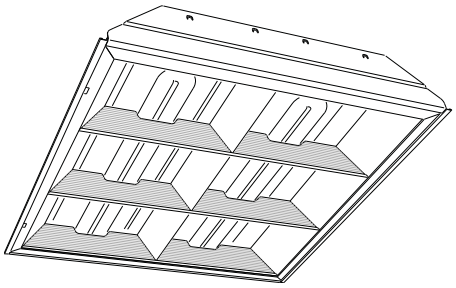
LITHONIA LIGHTING®

Catalog Number	
Notes	Type

FEATURES & SPECIFICATIONS

Premium Energy-Saving T8 Lighting

ES8P 2'x2'



2-U Lamps
T8

INTENDED USE

ES8P provides a T8 energy-saving alternative to 2-lamp compact fluorescent or 3-lamp parabolic fixtures. Used in place of parabolics, ES8P can provide 41% energy savings while meeting IESNA recommended illuminance levels. Ideal for retail, educational, and commercial applications requiring lighting power density as low as 0.73 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 82% photometric efficiency and a Luminaire Efficacy Rating (LER) of up to 76 using listed lamps and ballast.

CONSTRUCTION

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

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.

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

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 2U31 BILP L835HT8

Series	Trim type	Number of lamps/wattage	Voltage	Ballast	Lamp	Options[4]
2ES8P	(blank) **Lay-in grid**	**2U31 2-lamp, 31W T8 U (1-5/8" leg)**	(blank) **MVOLT**[1]	**BILP IS, high efficiency, .79 bf (low)**	**L835HT8 2775 lumen, long life, 3500°K**	**EL Emergency battery pack (nominal 300 lumens)** [5]
	F Overlapping flanged		120	BINP IS, high efficiency, .88 bf (normal)	L830HT8 2775 lumen, long life, 3000°K	**PWS1836 6' prewire, 3/8" dia., 18-gauge, 3 wires**
			277	BIHP IS, high efficiency, 1.20 bf (high)[2]	**L841HT8 2775 lumen, long life, 4100°K**	QFC__ Quick-flex, fixture cable, factory installed prewired cable (RELOC)[6]
			347	BSNP PS, step-dimming, high-efficiency, .88 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 in 347V.

4 Other options available may increase fixture depth up to 6". Consult factory if plenum space is a concern.

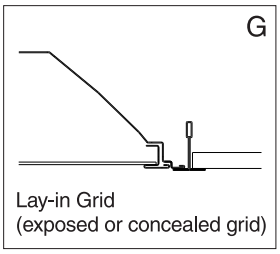
5 Ballast disconnect not standard with any EL option. Must specify BDP for inclusion with EL battery packs. UL Listed only. Consult factory for BDP CSA with EL option.

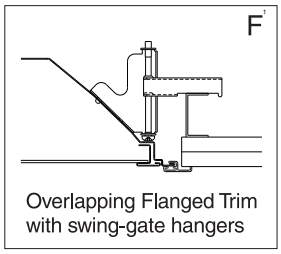
6 Must specify voltage.

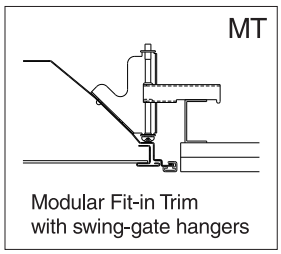
ES8P 2'x2' Premium Energy-Saving T8 Lighting

MOUNTING DATA

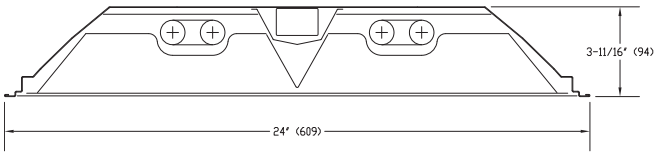
Continuous row mounting of flanged units requires CRE and CRM trim options.







DIMENSIONS

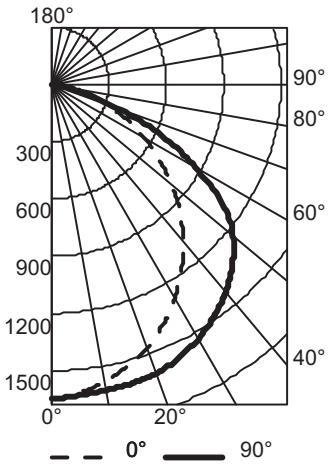


All dimensions are inches (millimeters) unless otherwise specified. Specifications subject to change without notice.

NOTE:

1 Recommended rough-in dimensions for F-trim fixtures 24"x 24". (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 2U31, 2775 lumens per lamp, test no. LTL 16076



CP Summary

	0°	90
0°	1643	1643
5°	1621	1635
15°	1531	1622
25°	1383	1578
35°	1185	1483
45°	952	1338
55°	690	1093
65°	430	637
75°	190	156
85°	49	26
90	0	0

Coefficients of Utilization

RCR	pf pc pw	80% 70%	80% 50%	80% 30%	20% 70%	20% 50%	20% 30%	20% 10%	50% 50%	50% 30%	50% 10%
	0	97	97	97	95	95	95	95	91	91	91
	1	90	86	83	84	81	78	76	81	78	76
	2	82	75	70	74	69	65	63	71	67	63
	3	75	66	60	65	59	54	52	62	57	53
	4	68	59	52	58	51	46	44	56	50	45
	5	63	52	45	51	45	40	38	50	44	39
	6	58	47	40	46	40	35	33	45	39	34
	7	54	43	36	42	35	31	29	41	35	30
	8	50	39	32	38	32	27	25	37	31	27
	9	47	36	29	35	29	24	23	34	28	24
	10	44	33	26	33	26	22	21	32	26	22

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	1275	23.0	28.1
0° - 40°	2099	37.8	46.2
0° - 60°	3746	67.5	82.5
0° - 90°	4543	81.8	100.0
90° - 180°	0	0.0	0.0
0° - 180°	4543	81.8	100.0

Efficiency: 81.8%

ENERGY AND LIGHT LEVEL COMPARISON

System	Light level	Input watts	Watts/SF	Watts saved	% Savings	$ Savings per year	LER
Parabolic, (3) 2775 lumen U31 T8 lamps .88 ballast factor	74	80	1.25	Base	Base	Base	58
ES8P, (2) 2775 lumen U31 T8 lamps, .79 ballast factor	56	47	0.73	33	41%	$10.56	76
ES8P, (2) 2775 lumen U31 T8 lamps, .88 ballast factor	62	53	0.83	27	34%	$8.64	75

Light level is estimate based on 8x8 mounting centers 9 foot ceilings, 60x60 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. Lumainare Efficacy Rating (LER) is fixture lumen output divided by fixture input wattage.

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An AcuityBrands Company

Sheet #: 2ES8P-2x2-U

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