



ENERGETIC
LIGHTING

Project:		Catalog #:		Type:	
Prepared by:		Notes:		Date:	

E5T8G

LED Double-Ended Bypass T8 Lamp
Shatter-resistant glass Lens
50,000hr lifetime | 5-yr Warranty



OVERVIEW

Energetic Lighting's E5T8G series of LED ballast bypass T8 tubes are designed to emulate the look and feel of traditional 4-foot fluorescent T8 tubes. Double-ended bypass installation means compatibility with any T8 lampholder (shunted or unshunted), and faster installation time without the need to change out lampholders. The lens is made of a durable glass, engineered for maximum light diffusion as well as reliability. Simply bypass the ballast in the existing fixture and wire Line to one end and Neutral to the other, is all it takes to convert existing fluorescent fixtures into long life, energy efficient LED units. Rated with an L70 lifetime of at least 50,000 hours, these rugged tube lamps are designed for many years of maintenance-free operation.

KEY FEATURES

- Available in either 4000K or 5000K CCT
- Suitable for dry or damp location installations
- Easy double-ended wiring: Line to one end and Neutral to the other
- Compatible with both shunted and unshunted lampholder styles, no need to replace existing fixture lampholder
- Shatter-resistant glass lens for smooth and even light distribution and tube rigidity
- Minimum 90% lumen maintenance @ 50,000 hours – L90/50,000 (per IES TM21)
- Minimum projected L70 @ 171,000 hours = maintenance free illumination (per IES TM21)



Load Information

Input Voltage	120-277Vac
Power Factor	0.9
THD	20%
Low Temp Start	-20°C (-4°F)
Max Temp	40°C (104°F)
Unit Weight	0.5 lbs

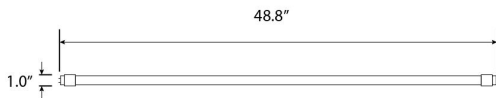
Shipping Information

Item	Weight	Box Qty.
All SKUs	17 lbs	25 per

Lumen Maintenance

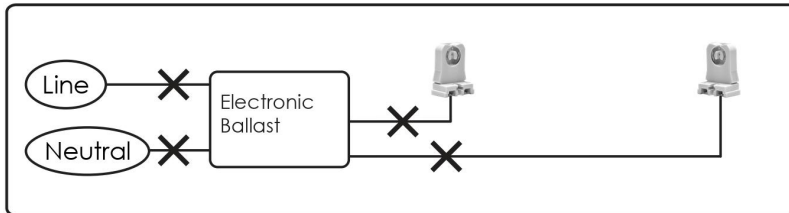
Ambient Temp	TM-21 Lumen Maint. (50,000 hours)	Theoretical L70 (hours)
25°C	>90%	171,000

Dimensions

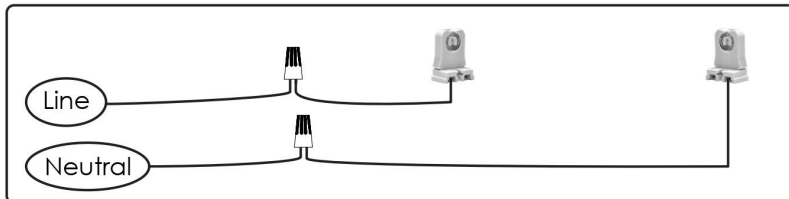


Wiring Instructions

Switch off power to fixture before starting.
Cut all wires leading into and out of the ballast and starter (if applicable).



Connect the input supply lines to the lampholder, Line to one side and Neutral to the other.
Cap off, or remove any extra wires from lampholders, if applicable.



STOCK ORDERING INFORMATION

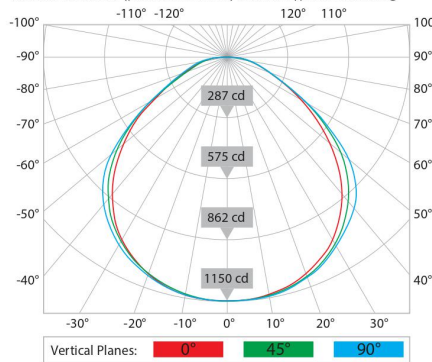
Catalog Logic	Order #	Lumens	Wattage	LPW	Color Temperature	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T8G-14D840	20089	1800 LM	13.5 W	133	4000K	0.8	120-277	No	DLC5.0-S	1000
E5T8G-14D850	20090	1800 LM	13.5 W	133	5000K	0.8	120-277	No	DLC5.0-S	1000

PHOTOMETRIC DATA

Cat Logic: E5T8G-14D840
 Applicable: E5T8G-14D850
 Models:
 Test Report: E5T8G-14D840.IES
 CCT: 4000K
 Lamp Type: LED
 Lumens: 3136.9 LM (Qty. 2 tubes in housing)
 Input Watts: 25.24 W (Qty. 2 tubes)
 Efficacy: 124 LM/W
 Spacing Criteria: [0° : 1.28] [90° : 1.34] *

Polar Candela Plot

Qty. 2 x E5T8G-14D840 installed in Lithonia 2GT8-2x4 (prismatic lensed) ballast-bypassed housing



* NOTE: Data produced from testing of qty. 2 x E5T8G test lamps installed within donor housing: Lithonia 2GT8 (prismatic lens) 2x4 profile housing (standard housing specified by DLC test criteria).

Coefficients of Utilization (using 2 x tubes installed in typical recessed troffer housing)

Effective Floor Cavity Reflectance 0.20

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	57	44	36	31	56	44	36	31	43	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

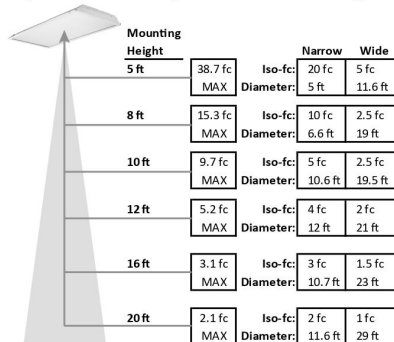
Zonal Lumen Summary

(using 2 x tubes installed in typical recessed troffer housing)

Zone	Lumens	%Luminaire
0-20	423.46	13.5
0-30	907.86	28.9
0-40	1499.81	47.8
0-60	2599.91	82.9
0-80	3071.19	97.9
0-90	3133.28	99.9
0-180	3136.94	100

Iso-footcandle Sampling

(using 2 x tubes installed in typical recessed troffer housing)





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