

FEATURES

- Housing depth of only 1½" – no taller than standard T-bar
- Does not intrude into usable plenum space
- Unique telescoping housing minimizes installation depth and simplifies installation
- Employs T5 or T5HO technology for high efficiency and high performance
- Choice of four shielding options and three reflector forms provide a variety of contemporary aesthetics
- Multiple shielding options include injection molded baffle, perforated diffuser, or linear prismatic lens with high-transmission surface relief diffuser film
- Soft, uniform light distribution provides excellent vertical illumination free from harsh contrast
- Surface mount depth only 1⅞". Using an enclosing shell that combines with standard ZPT recessed fixtures, the surface mount housing can be ordered with the fixture or separately

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing and end caps are die formed code gauge cold rolled steel. Rotating locking lampholders standard. Flush Curved Baffle (FCB) shielding option features injection molded, opal translucent, impact-resistant acrylic material. Acrylic lens option (LSR) features linear prisms sculpted into the surface for a distinct ribbed texture. Perforated metal basket (PRF) and solid basket (SB) options formed from steel and painted gloss white.

FINISH

White painted parts are treated with a five stage phosphate bonding process and finished after fabrication with a minimum 90% reflective gloss baked enamel.

CEILING COMPATIBILITY

Luminaire is available to fit most standard ceiling types. NEC-compliant T-bar clips supplied with all grid trim fixtures. See ceiling details on reverse. For hard ceilings order G trim and FK flange accessory. Assemble then support FK accessory at ceiling plane using tie wires (by others). Contact your Columbia representative for compatibility information for specific ceiling types. For Surface Mount order SM trim option or G trim with accessory surface mounting kit. Finished depth of surface mounted fixture is 1⅞". Wiring access for surface fixtures from back of fixture only. Not suitable for end-to-end mounting.

INSTALLATION

Unique telescoping housing is 1½" deep allowing installation in extremely shallow plenums. Housing is formed in two interlocking sections compressed narrower than the T-bar opening to simplify handling and reduce the depth required for installation to 3" required at one end of the fixture only. Once the fixture is in place in the T-bar opening the installer slides the two portions to full width. Tabbed design automatically locks the fixture to full width. An access plate is furnished with each luminaire for fast wiring access. No need to open fixture.

ELECTRICAL

Standard class "P", thermally protected, auto-resetting HPF ballast, sound rated A. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

PATENTS

This fixture is covered under one or more of the following patents: 7,234,832 B2, 7,390,111 B2, and 7,413,323 B2.

ORDERING INFORMATION

EXAMPLE ZPT24-228G-LSRR-EPU-EL

ZPT 24 - 2							
MODEL ZPT Zero Plenum® Troffer	NO. OF LAMPS 2 Two	CEILING TYPE G Grid SM Surface Mount	REFLECTOR O Open (N/A with PRF) S Smooth Curve R Ribbed Curve	VOLTAGE U 120V-277V 347 347V	OPTIONS		
SIZE 24 2' x 4'	LAMP TYPE 28 4', T5: 28 Watt 54 4', T5HO: 54 or 51 Watt	SHIELDING LSR Linear Prismatic Lens with Surface Relief Diffuser PRF Metal Perf with Overlay* FCB Flush Curved Baffle SB Solid Basket	BALLAST		F5830 30K 85CRI T5 or T5HO Lamps Installed F5835 35K 85CRI T5 or T5HO Lamps Installed F5841 41K 85CRI T5 or T5HO Lamps Installed GLR Fast Blow Fuse GMF Slow Blow Fuse EL5 Emergency Battery Pack (Low profile only) C38890 3-Wire Flex, 90° Connector C48890 4-Wire Flex, (Step Dimming), 90° Connector 4TB (4) Bulk T-bar Clips MS9 Master/Satellite Pair with 9' Harness NYC NYC Compliant NYCU NYC Compliant, Union Label		
ACCESSORIES (ORDER SEPARATELY)		*Installation requires 3½" between ceiling plane and plenum obstructions.		EP Electronic T5, 1.00 Ballast Factor (28W or 54W) EP95 Electronic T5, 0.95 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp) ESD95 Electronic T5, 0.95 Ballast Factor, Step Dimming, Programmed Start (N/A T5HO, 1-Lamp) EP115 Electronic T5, 1.15 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp) ESD115 Electronic T5, 1.15 Ballast Factor, Step Dimming, Programmed Start (N/A T5HO, 1-Lamp) ESD80 Electronic T5HO, 0.80 Ballast Factor, Step Dimming, Programmed Start (2-Lamp 54W only) ED Electronic T5, 1.00 Ballast Factor, Variable Dimming Ballast (28W or 54W) 11EP (2) 1-Lamp Electronic T5 or T5HO, 1.00 Ballast Factor (28W or 54W), No EL Available			

*ZPT may be ordered as a factory assembled surface mounted unit, or ordered as a grid "G" ceiling type and surface mounted in the field using the ZPTSMK surface mounting kit.

Note: Step dimming ballasts use two hot leads for 100% (both on) or 50% (one on) power.

For ED Electronic Dimming specify voltage and vendor's series.

For a specific ballast vendor show as option.



PHOTOMETRIC DATA

Test 14584 Test Date 7/14/05

LUMINAIRE DATA

Luminaire	ZPT24-228G-LSRR-EP ZPT Lensed Troffer 2' x 4' 2-Lamp with Linear Prismatic Lens, Opal Overlay, and Ribbed Reflector
Ballast	IOP-2S28-SC
Ballast Factor	0.95
Lamp	F28T5
Lumens per Lamp	2770
Watts	60
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.17 90° = 1.21
Luminous Opening in Feet	Length: 3.92 Width: 1.92 Height: 0.00

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1281	23.1	27.0
0-40	2065	37.3	43.6
0-60	3563	64.3	75.2
0-90	4740	85.6	100.0
0-180	4740	85.6	100.0

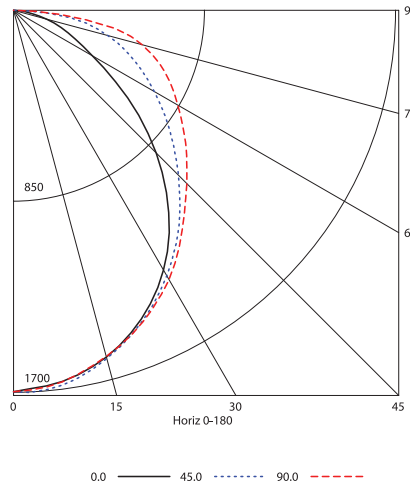
ENERGY DATA

Total Luminaire Efficiency	85.6%
Luminaire Efficacy Rating (LER)	75
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.20 based on 3000 hrs. and \$0.08 per KWH

COEFFICIENTS OF UTILIZATION (%)

RCR	RC	80			70			50			0	
		RW	70	50	30	10	70	50	30	10	50	30
1	92	88	84	80	90	86	82	79	82	79	76	70
2	84	76	70	65	81	74	69	64	71	67	62	58
3	76	67	59	54	74	65	59	53	63	57	52	48
4	70	59	51	45	68	58	51	45	56	49	44	41
5	64	53	45	39	62	52	44	39	50	43	38	36
6	59	48	40	34	57	47	39	34	45	39	34	31
7	55	43	35	30	53	42	35	30	41	35	30	28
8	51	39	32	27	50	39	32	27	38	31	27	25
9	48	36	29	24	47	36	29	24	35	28	24	22
10	45	33	27	22	44	33	26	22	32	26	22	20

INDOOR CANDELA PLOT



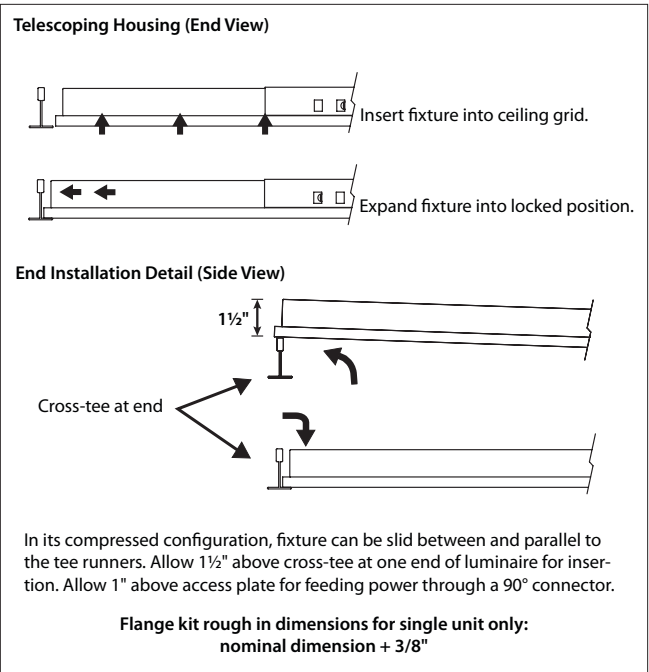
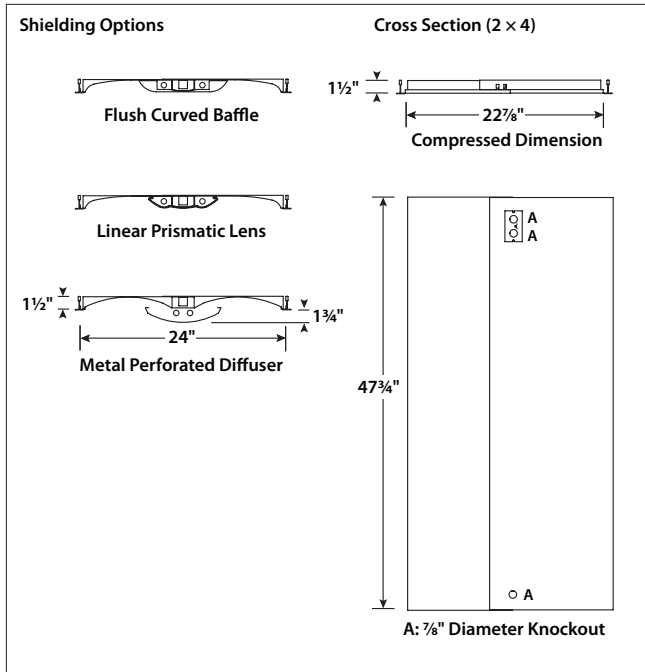
AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	2427	2427	2427	2427	2427
30	2203	2211	2251	2281	2284
40	1975	2054	2149	2190	2207
45	1814	1958	2097	2170	2205
50	1618	1869	2065	2183	2236
55	1381	1798	2055	2224	2299
60	1161	1736	2068	2305	2411
65	1025	1672	2122	2464	2609
70	941	1593	2229	2689	2885
75	845	1509	2398	3028	3271
80	692	1450	2693	3509	3747
85	476	1543	2642	3200	3397

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

DIMENSIONAL DATA



NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.