

FEATURES

- Clear acrylic diffuser features linear prisms plus optical diffusion overlay for high efficiency plus brightness control
- Balanced reflector and lens curves provide architectural interest with low brightness and low contrast
- Precision optical system produces an efficient luminaire without sacrificing high visual comfort
- Completely recessed, provides a clean ceiling and soft, uniform illumination in rooms with ceilings as low as 8 feet
- Available for use with twintube, T8, T5, or T5HO linear fluorescent lamps
- Optimized coating process and unique paint formulation provide exceptional reflectivity in a matte finish for high performance with a soft visual image
- Optional acrylic dust guards pivot to protect lamp compartment against contaminants especially for schools, medical facilities and public spaces
- Available with exclusive wiHUBB technology preinstalled
 - Peer to peer, self-healing wireless mesh network
 - Integrated control system for 0-10VDC or step dimming, or On/Off

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing and end caps are die formed code gauge cold rolled steel. The sturdy reflector is stiffened with linear forms, profiled to a precision curve. Linear prism basket with high transmission overlay for improved optical efficiency plus lamp obscuration. All reflective surfaces are finished after fabrication with unique formula high reflectivity matte white paint for soft, uniform indirect illumination.

Thermoplastic light seals snap into the housing at both ends of the lens to prevent light leaks. Lens hinges down for easy access to center wireway.

INSTALLATION

An access plate is furnished with each luminaire for fast wiring access from the plenum. No need to open fixture.

BALLASTS

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, unless otherwise specified. CEE NEMA Premium compliant.

ELECTRICAL

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

CEILING COMPATIBILITY

NEC-compliant T-Bar clips supplied with all grid trim fixtures. See ceiling details on reverse. For type SG ceilings order G trim. Fixture will be regressed 3/8" from the face of the ceiling tee. For hard ceilings order G trim and FK flange accessory. Assemble then support FK accessory at the ceiling plane using tie wires (by others). Contact your Columbia representative for compatibility information for specific ceiling types or for continuous row applications in hard ceilings.

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.

ORDERING INFORMATION

EXAMPLE TRA22-217G-CLO-EU

MODEL	NO. OF LAMPS	CEILING TYPE	SHIELDING	VOLTAGE	OPTIONS
TRA Transition® High Efficiency Architectural Lensed	1 One 2 Two 3 Three	G Grid Lay-in SM Surface Mount	CLO Clear Linear Prism Acrylic with Overlay	U 120V-277V 347 347V	GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack DG Dust Guard NYC NYC Compliant NYCU NYC Compliant, Union Label WIH wiHUBB Enabled ⁴
SIZE	LAMP TYPE	BALLAST			
22 2' x 2'	17 2', T8: 17 Watt 14 2', T5: 14 Watt 24 2', T5HO: 24 Watt 40TT Twin Tube Compact, 2G11 Base: 40 Watt	E Electronic T8, Instant Start ED Electronic Dimming T8 and T5* EP Electronic T5, T5HO, or T8, Programmed Start ESD Electronic Step Dimming for 2-Lamp T8 E104 Electronic T8, 1.04 Ballast Factor, Instant Start ¹ ESD104 Electronic T8, 1.04 Ballast Factor, Step Dimming, Programmed Start ^{2,3} ETT Electronic Twin Tube, Instant Start (specify voltage) EPTT Electronic Twin Tube, Programmed Start			

*Specify vendor and series.

**ACCESSORIES
(ORDER SEPARATELY)**

FK22 2' x 2' Single Flange Kit
(Shipped separately)

¹ 2-lamp T8 only

² 1-lamp or 2-lamp T8 only

³ Not compatible with T8 25, 28, or 30 Watt energy-saving lamps

⁴ Not available with Surface Mount Ceiling Types

PHOTOMETRIC DATA

Test 3505 Test Date 8/19/10

LUMINAIRE DATA

Luminaire	TRA22-224G-CLO-EPU Transition, Recessed/Architectural 2 x 2-lamp with clear linear prismed acrylic lens and opal overlay
Ballast	ICN-2524
Ballast Factor	1.00
Lamp	F24T5
Lumens per Lamp	2000
Watts	54
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.24 90° = 1.31
Luminous Opening in Feet	Length: 1.92 Width: 1.92 Height: 0.00

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	969	24.2	25.9
0-40	1595	39.9	42.7
0-60	2869	71.7	76.7
0-90	3739	93.5	100.0
0-180	3739	93.5	100.0

ENERGY DATA

Total Luminaire Efficiency	93.5%
Luminaire Efficacy Rating (LER)	69
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.48 based on 3000 hrs. and \$0.08 per KWH

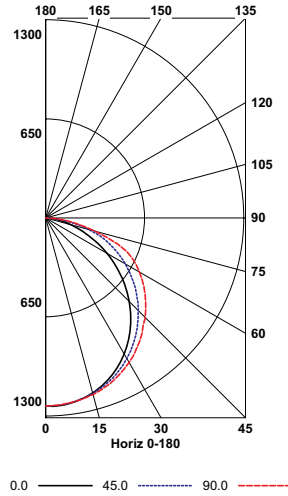
COEFFICIENTS OF UTILIZATION (%)

RCR	RW	80			70			50			0	
		70	50	30	10	70	50	30	10	50	30	10
1	101	97	92	89	99	94	91	87	90	87	84	77
2	92	84	77	72	89	82	76	71	79	73	69	64
3	83	73	65	59	81	72	64	59	69	63	57	53
4	76	65	56	50	74	63	56	49	61	54	49	45
5	70	58	49	43	68	57	48	42	55	47	42	39
6	65	52	43	37	63	51	43	37	49	42	37	34
7	60	47	39	33	58	46	38	33	45	38	32	30
8	56	43	35	29	54	42	34	29	41	34	29	27
9	52	39	31	26	51	39	31	26	38	31	26	24
10	49	36	29	24	47	36	28	24	35	28	23	22

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

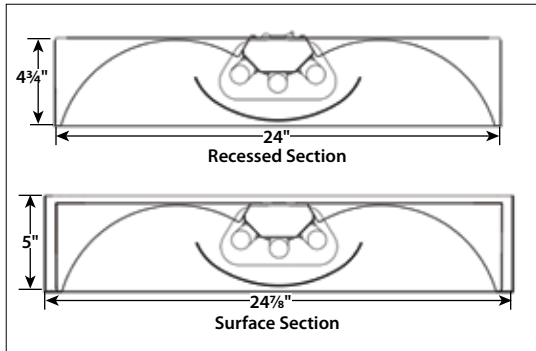
INDOOR CANDELA PLOT



AVG. LUMINANCE (Candela/Sq. M.)

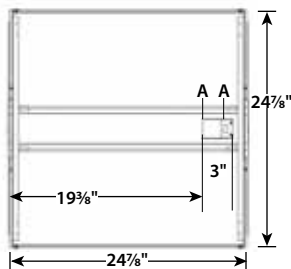
Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	3603	3603	3603	3603	3603
30	3469	3506	3587	3658	3689
40	3305	3396	3560	3701	3754
45	3196	3324	3547	3737	3811
50	3062	3239	3534	3788	3888
55	2902	3131	3523	3864	4001
60	2710	3013	3521	3977	4146
65	2473	2853	3517	4111	4325
70	2220	2681	3500	4200	4311
75	1952	2459	3317	3712	3802
80	1715	2186	2926	3195	3262
85	1407	1910	2513	2881	3015

DIMENSIONAL DATA

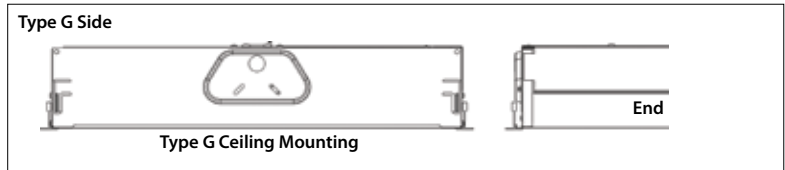


Top View

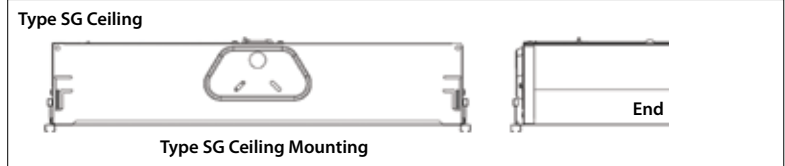
Surface K.O. Dimensions
A: 2" x 3" Access with (2) 7/8" Mount Supply Knockouts



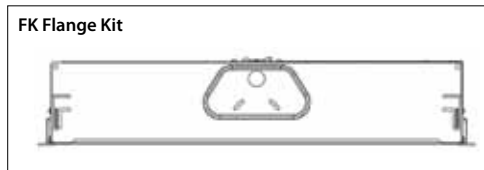
CEILING COMPATIBILITY



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum heights of 1 1/2" allowed.



For 5/8" slot grid type ceilings. Luminaire will be recessed 3/8" horizontal surface of the tee. Slot grid tees must be field installed all around the fixture.



For hard ceiling applications, fixtures must be ordered with a flange kit that wires directly into the concealed ceiling opening for a clean finished appearance. For row configurations contact your local Columbia Representative.

Flange kit cut out dimension for single FK22 only: 24 3/8" x 24 3/8"

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