



**FEATURES**

- Attractive fluorescent architectural recessed luminaire
- Precision optical design produces high efficiency in a high visual comfort architecturally styled direct/indirect distribution
- Available for use with T8, T5 or T5HO linear fluorescent lamps
- Custom perforated metal basket is backed by a high transmission lamp obscuring overlay
- Optimized coating process and unique paint formulation provide exceptional reflectivity in a matte finish for a soft visual image and balanced basket and reflector illumination
- Completely recessed, provides a clean ceiling with uniform illumination at mounting heights as low as 8 feet
- Optional acrylic dust guard pivots to seal lamp compartment against contaminants especially for schools, medical facilities and public spaces
- Recessed, surface or cable mount

**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. Perforated basket with high transmission overlay for improved optical efficiency plus lamp obscuration. Basket and all reflective surfaces are finished after fabrication with unique formula high reflectivity matte white paint for soft, uniform indirect illumination.

Thermoplastic light traps snap into the housing at both ends of the basket to prevent light leaks. Basket hinges down for easy access to center wireway.

**INSTALLATION**

An access plate is furnished with each recessed fixture for fast wiring connections without the necessity to open the fixture or wireway.

**BALLASTS**

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant. Fixtures with two ballasts or emergency-equipped fixtures may require using end wireway access.

**ELECTRICAL**

Standard class "P", thermally protected, autoresetting 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**

Designed for recessed installation in standard inverted tee grid ceilings (G), recessed installation in hard ceilings (G with FK accessory), surface mount at ceiling plane (SM) or cable mount suspension below ceiling plane (CM). For type SG ceilings order G trim. Fixture will be regressed 3/8" from the face of the ceiling tee. For compatibility with specific ceilings contact your Hubbell Lighting representative. Four integral T-bar clips are located in the end caps. 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 STE24-228-MPO-EPU**

<b>STE</b>	<b>24</b>	<b>2</b>		<b>MPO</b>			
<b>MODEL</b>		<b>NO. OF LAMPS</b>		<b>CEILING TYPE</b>	<b>SHIELDING</b>	<b>VOLTAGE</b>	<b>OPTIONS</b>
STE Stratus® E-Series Recessed Indirect		2 Two		G Grid <sup>1</sup> SM Surface Mount CM Cable Mount <sup>2</sup>	MPO Metal Perf w/Overlay	U 120V-277V 347 347V	C388 3-Wire Flex C488 4-Wire Flex C588 5-Wire Flex EL T8 Emergency Battery Pack, 350-450 Lumens DG Dust Guard Clear Acrylic GLR Fast Blow Fuse GMF Slow Blow Fuse CP Chicago Plenum
	<b>SIZE</b>		<b>LAMP TYPE</b>		<b>BALLAST</b>		
	24 2' x 4'		28 4', T5: 28 Watt 54 4', T5HO: 54 or 51 Watt		E Electronic T8, Instant Start ED Electronic Dimming T8 and T5 (specify series) ESD Step Dimming EP Electronic T5, T5HO, or T8, Programmed Start		
<b>ACCESSORIES (ORDER SEPARATELY)</b>							
FK24 2' x 4' Single Flange Kit (Shipped separately)							
FKCR Flange Kit Row Adapter							
CM48Y2Sc3F 48" Cable Mount Kit for 2' wide Cable Mount fixtures, 3 Wire							

<sup>1</sup> For drywall, order Flange Kit accessories separately.  
<sup>2</sup> Order hanger accessories separately

Test ITL67663 Test Date 3/3/11

## PHOTOMETRIC DATA

### LUMINAIRE DATA

Luminaire	STE24-228G-MPO-EPU STE Stratus® E-Series, Recessed Architectural 2 x 4 2-lamp with perforated metal basket and opal overlay
Ballast	B228PUNV-C
Ballast Factor	1.00
Lamp	F28T8
Lumens per Lamp	2600
Watts	65
Shielding Angle	0° = 0 90° = 0
Spacing Criterion	0° = 1.23 90° = 1.32
Luminous Opening in Feet	Length: 3.93 Width: 1.91 Height: 0.00

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1251	24.1	26.1
0-40	2061	39.6	43.1
0-60	3723	71.6	77.8
0-90	4783	92.0	100.0
0-180	4783	92.0	100.0

### ENERGY DATA

Total Luminaire Efficiency	92.0%
Luminaire Efficacy Rating (LER)	74
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.24 based on 3000 hrs. and \$0.08 per KWH

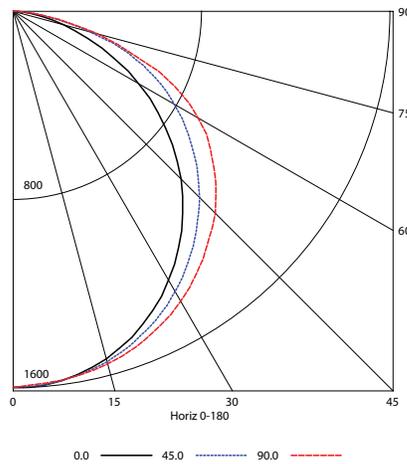
### COEFFICIENTS OF UTILIZATION (%)

RCR	RW	80				70				50				0
		70	50	30	10	70	50	30	10	50	30	10	0	
1	100	95	91	88	87	93	90	86	89	86	84	77		
2	91	83	76	71	88	81	75	70	78	73	69	63		
3	82	73	65	59	80	71	64	58	68	62	57	53		
4	75	64	56	50	73	63	55	49	60	54	48	45		
5	69	57	49	42	67	56	48	42	54	47	42	39		
6	64	51	43	37	62	50	42	37	49	42	36	34		
7	59	46	38	32	57	46	38	32	44	37	32	30		
8	55	42	34	29	53	42	34	29	40	34	29	26		
9	51	39	31	26	50	38	31	26	37	30	26	24		
10	48	36	28	23	47	35	28	23	34	28	23	21		

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

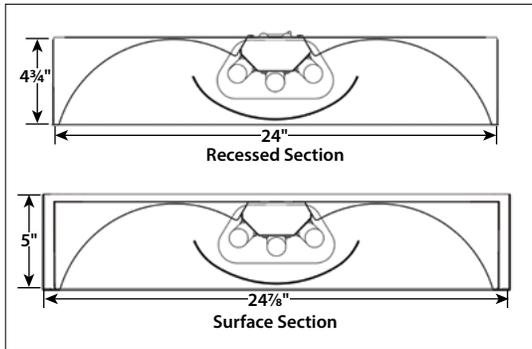
### INDOOR CANDELA PLOT



### AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	2292	2292	2292	2292	2292
30	2182	2207	2277	2333	2353
40	2095	2149	2265	2375	2405
45	2044	2107	2269	2405	2460
50	1970	2059	2269	2445	2503
55	1878	1998	2268	2485	2558
60	1761	1930	2266	2527	2601
65	1602	1870	2253	2528	2572
70	1413	1786	2180	2348	2289
75	1230	1668	1889	2033	2050
80	1032	1437	1553	1619	1619
85	773	921	1135	1185	1135

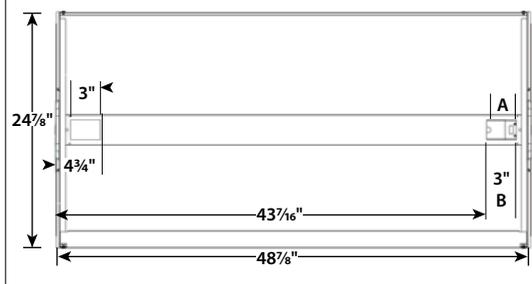
**DIMENSIONAL DATA**



**Top View**

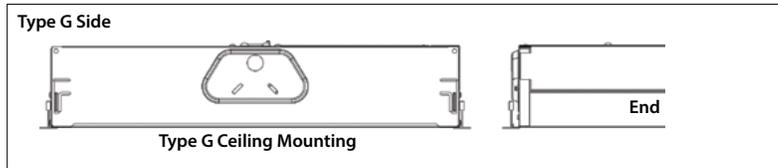
**Surface K.O. Dimensions**

- A: 7/8" K.O. Mount
- B: 2" x 3" Access (Cover Removed)
- C: 2" x 3" Rectangular Knockout

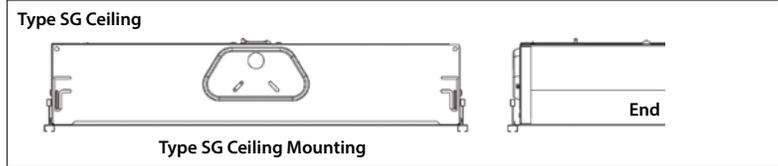


**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

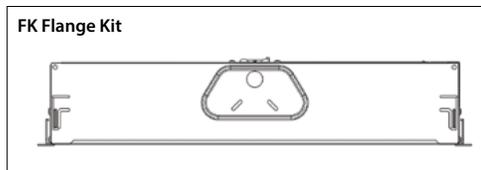
**CEILING COMPATIBILITY**



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



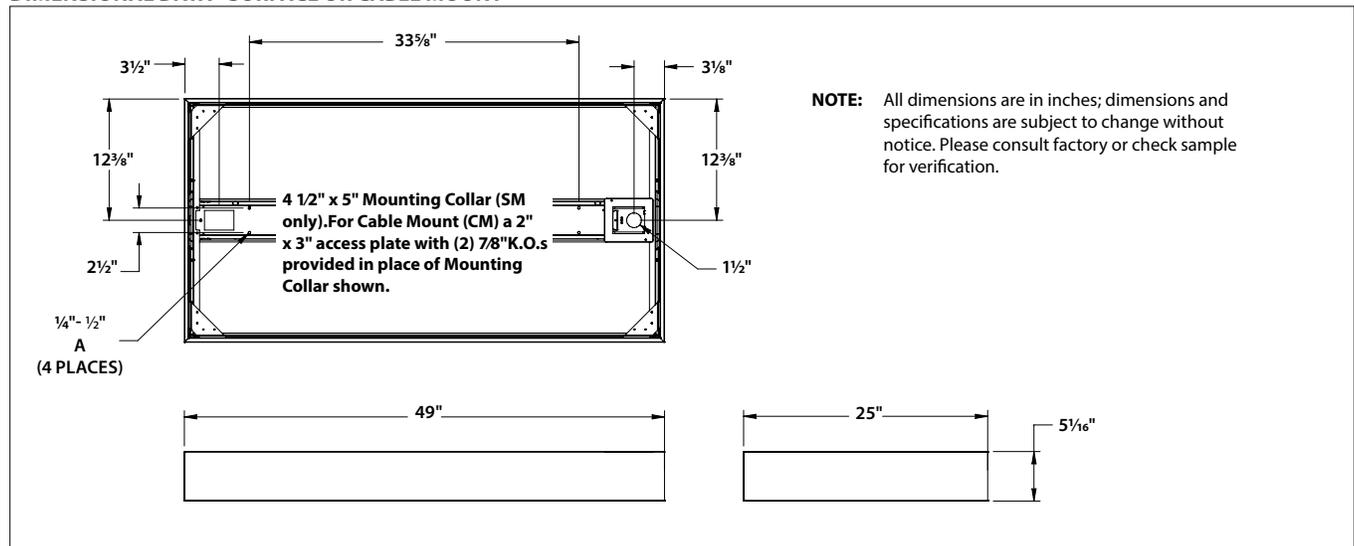
For 9/16" slot grid type ceilings. Luminaire will be regressed 3/8" horizontal surface of the tee.



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 FK24 only: 24 3/8" x 48 3/8"**

**DIMENSIONAL DATA - SURFACE OR CABLE MOUNT**



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

**SURFACE MOUNT**

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock outs, 1/4" to 1/2" provided as shown, marked "A".

**CABLE MOUNT**

Order CM ceiling type. Access plate supplied for cable mounting or suspension. Use CM48Y2C3F-KIT 48" cable mount kit. Includes 3 wire feed cord. For other wiring needs, contact Hubbell representative. Mounting knock-outs, 1/4" to 1/2", provided as shown, marked "A".