

## FEATURES

- 4 $\frac{3}{8}$ " deep troffer eliminates lens shadowing
- Contoured housing maximizes photometric performance with uniform lens brightness and no lamp striping on the lens
- Mitered corners on door present a clean uninterrupted appearance
- Full black reveal presents a floating door appearance
- Full air handling capabilities available
- Mechanical light trap prevents light leaks
- Heavy duty post-painted door frame enhances appearance
- Snug door fit eliminates light leaks

## PROJECT INFORMATION

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

## HOUSING

Fixture is constructed of die formed and embossed code gauge steel. End caps are hinged and riveted to the housing for added rigidity. Integral T-bar clips are located in the end cap of the housing. Luminaire is available to fit most standard ceiling types as shown on the back, however, some options may increase fixture depth. For information on compatibility with specific ceilings, or where plenum depth is a problem, contact your Columbia representative.

## 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.

## FINISH

All metal parts are processed with a multi-stage phosphate bonding treatment and finished with a high reflectance baked white enamel. Regressed air slots and control vanes are finished in flat black. For a post painted housing finish suffix catalog number with PAF.

## SHIELDING

Standard lens is a 100% clear prismatic acrylic pattern 12. For other available lenses consult lens option sheet or contact your Columbia representative. Steel or aluminum door frames are retained by steel hinges and spring steel latches. Door hinges and latches from either side of fixture and can be easily removed without tools. Door frames feature snug fitting mitered corner joints and are available in flush or regress design. All door frames are painted after fabrication. Doors are surrounded by a uniform black reveal. A mechanical light trap prevents light leaks.

## AIR COMPATIBILITY

All units may be used for heated or cooled air outlet or return air vent in ceiling. Also may be used for direct air return to plenum of non-combustible construction. Fixtures are compatible with air diffusers by all major air boot manufacturers. Air removal options must be specified.

## 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 5PA22-232U6G-FAA12-S-EU

MODEL	NO. OF LAMPS	CEILING TYPE	DOOR	AIR HANDLING	AIR CONTROL	VOLTAGE	OPTIONS
5PA 4 $\frac{3}{8}$ " Housing	2 Two 3 Three 4 Four (2' straight lamps)	G Grid F Overlap Flange M Modular Fit-in Trim SG Slot Grid	FA Flush Aluminum RA Regressed Aluminum	S Static A Air Supply/Return H Heat Extract C Combination Supply/Extract	Blank None V Air Supply/Return Vanes D Heat Extract Dampers VD Supply/Return Vanes & Heat Extract Dampers	U 120V-277V 347 347V	F0735 35K 75 CRI T8 Lamps Installed F0835 35K 80 CRI T8 Lamps Installed F5835 35K 80 CRI T5 Lamps Installed GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack MS9 Master/Satellite w/9' Harness PAF Paint After Fabrication NYC NYC Compliant NYCU NYC Compliant, Union Label
SIZE	LAMP TYPE	SHIELDING	BALLAST				
22 2' x 2'	14 2', T5: 14 Watt 17 2', T8: 17 Watt 24 2', T5HO: 24 Watt 31U1 U-Bent, 1 $\frac{5}{8}$ " Leg Spacing, T8: 31 Watt (Maximum of 3) 32U6 U-Bent, 6" Leg Spacing, T8: 32 Watt (Maximum of 2) 40TT Twin Tube Compact, 2G11 Base: 40 Watt	A12 Acrylic Prismatic Pattern 12 A19 Acrylic Prismatic Pattern 19 PC1 $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ " Specular Silver Polystyrene Louver PC2 $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x 1" Specular Silver Polystyrene Louver For thicker lens, specify - i.e. A12.125.	E Electronic T8, Instant Start 3E 3-Lamp Electronic T8, Instant Start 4E 4-Lamp Electronic T8, Instant Start EP Electronic T5 or T8, Programmed Start 3EP 3-Lamp Electronic T5HO or T8, Programmed Start 4EP 4-Lamp Electronic T5HO (N/A 347V) or T8, Programmed Start ETT Electronic Twin Tube, Instant Start, (Specify voltage) 3ETT 3-Lamp Electronic Twin Tube, Instant Start, (Specify voltage)	For a specific ballast vendor, show as option.			

### PHOTOMETRIC DATA

Test 14505 Test Date 1/30/07

#### LUMINAIRE DATA

Luminaire	5PA22-317G-FAA12-3E-PAF 5PA Lensed Troffer 2' x 2' 3-Lamp with Acrylic A-12 Prismatic Lens
Ballast	REL-3P32-SC
Ballast Factor	0.99
Lamp	F17T8
Lumens per Lamp	1300
Total Input Watts	44
Mounting	Recessed
Shielding Angle	0° = 90 90° = 1.32
Spacing Criterion	0° = 1.18 90° = 1.32
Luminous Opening in Feet	Length: 1.68 Width: 1.71 Height: 0.00

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	842	21.6	31.9
0-40	1364	35.0	51.8
0-60	2235	57.3	84.8
0-90	2635	67.6	100.0
0-180	2635	67.6	100.0

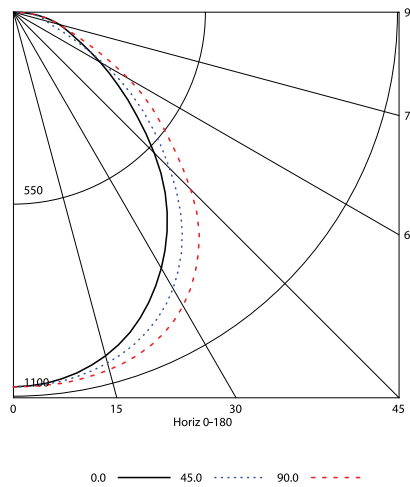
#### ENERGY DATA

Total Luminaire Efficiency	67.6%
Luminaire Efficacy Rating (LER)	59
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.07 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	10	0
1	74	71	68	66	72	70	67	65	67	65	63	58		
2	68	63	58	55	66	61	58	54	59	56	53	49		
3	62	56	50	46	61	55	50	46	53	49	45	42		
4	57	50	44	40	56	49	44	40	47	43	39	37		
5	53	45	39	35	52	44	39	35	43	38	34	32		
6	49	40	35	31	48	40	34	30	39	34	30	28		
7	46	37	31	27	44	36	31	27	35	30	27	25		
8	43	34	28	24	42	33	28	24	32	28	24	23		
9	40	31	26	22	39	31	26	22	30	25	22	20		
10	37	29	24	20	37	28	23	20	28	23	20	19		

#### INDOOR CANDELA PLOT



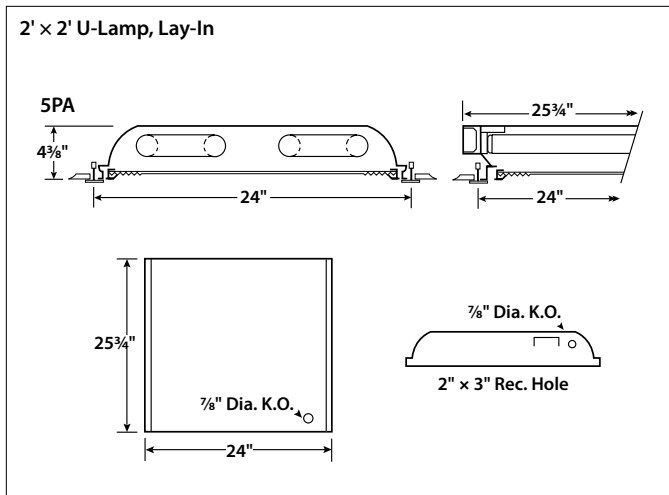
#### AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	4020	4020	4020	4020	4020
30	3665	3755	3954	4123	4201
40	3306	3399	3639	3898	4050
45	3020	3110	3349	3619	3805
50	2687	2827	3049	3346	3468
55	2397	2522	2717	3044	3194
60	2151	2158	2293	2645	2855
65	1942	1809	1809	2154	2385
70	1873	1632	1424	1775	2038
75	1969	1650	1390	1665	1954
80	2028	1834	1705	1748	2028
85	2107	2193	1978	2064	2021

RCR = Room Cavity Ratio

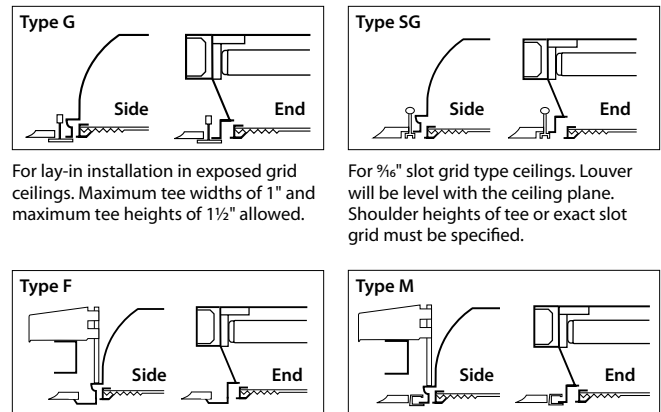
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

#### 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.

#### CEILING COMPATIBILITY



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

**Type SG**  
For 5/8" slot grid type ceilings. Louver will be level with the ceiling plane. Shoulder heights of tee or exact slot grid must be specified.

**Type F**  
For tile, plaster or plasterboard type ceilings. Overlapping extruded aluminum trim conceals edges of ceiling opening. Wing hanger suspension system included. For row mounting, row information is required.

**Type M**  
For metal pan ceilings "Fit-in" style extruded trim aligns with modular tile joints. Fixture is supported from concealed suspension and includes all adjustable wing hangers.

Flange kit rough in dimensions for single unit only: 24 1/8" x 24 1/8"