

Also available with 3, 4, or 6 lamps

FEATURES

- 4% deep troffer eliminates lens shadowing
- Contoured housing maximizes photometric performance with uniform lens brightness
- Mitered corners on door present a clean uninterrupted appearance
- Full black reveal presents a coating door appearance
- Full air handling capabilities available
- Mechanical light trap prevents light leaks
- Unique stepped ballast cover prevents any shadow being seen through the lens
- Heavy duty post-painted door frame enhances appearance
- Snug door fit eliminates light leaks
- Damp label standard
- Optional 6PA unit allows subsequent changeover of the lens to a 3" parabolic louver

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. Designed for installation in all ceilings as shown in Ceiling Compatibility on reverse side. Specify exact ceiling type. Integral T-bar clips are located in the end cap of the housing.

6PA

A 6PA housing may be specified so the lens can be replaced with a 3" parabolic louver at a later date. Housing features remain the same, only depth and ballast covers are unique.

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.

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 see 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 distributors 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 5PA24-232G-FAA12-S-EU-GLR

MODEL	NO. OF LAMPS	CEILING TYPE	DOOR	AIR HANDLING	AIR CONTROL	VOLTAGE	OPTIONS
6PA 53/4" Housing	2 Two	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				
24 2' x 4'	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	A12 Acrylic Prismatic Pattern 12 A19 Acrylic Prismatic Pattern 19 PC1 1/2" x 1/2" x 1/2" Specular Silver Polystyrene Louver PC2 1 1/2" x 1 1/2" x 1" Specular Silver Polystyrene Louver For thicker lens, specify - i.e. A12.125.	E Electronic T8, Instant Start 4E 4-Lamp Electronic T8, Instant Start (Master/Satellite only) EP Electronic T5 or T8, Programmed Start 4EP 4-Lamp Electronic T5HO (N/A 347V) or T8, Programmed Start (Master/Satellite only)	For a specific ballast vendor, show as option.			

PHOTOMETRIC DATA

Test 10598 Test Date 1/8/03

LUMINAIRE DATA

Luminaire	5PA24-232G-FAA12-E 5PA Lensed Troffer 2' x 4' 2-Lamp with A12 Pattern Acrylic Prisms Lens
Ballast	B232I120RH
Ballast Factor	0.95
Lamp	FO32/741
Lumens per Lamp	2850
Total Input Watts	60
Shielding Angle	N/A
Spacing Criterion	0° = 1.22 90° = 1.33
Luminous Opening in Feet	Length: 3.67 Width: 1.71 Height: 0.00

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1390	24.4	33.5
0-40	2277	39.9	54.9
0-60	3593	63.0	86.6
0-90	4150	72.8	100.0
0-180	4150	72.8	100.0

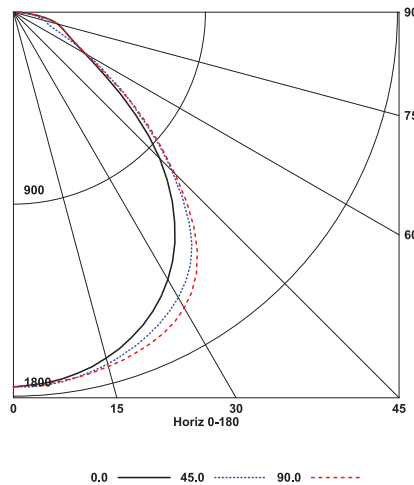
ENERGY DATA

Total Luminaire Efficiency	72.8%
Luminaire Efficacy Rating (LER)	66
IESNA RP-1-1993 Compliance	Noncompliant
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.64 based on 3000 hrs. and \$0.08 per KWH

COEFFICIENTS OF UTILIZATION (%)

RC	RW	80				70				50				0	
		70	50	30	10	70	50	30	10	50	30	10	0	0	
1	80	77	74	72	78	75	73	70	72	70	68	63			
2	74	68	64	60	72	67	63	59	64	61	58	54			
3	68	61	55	51	66	60	55	51	58	53	50	47			
4	62	54	49	44	61	54	48	44	52	47	43	41			
5	58	49	43	39	56	48	43	38	47	42	38	36			
6	54	45	38	34	52	44	38	34	43	38	34	32			
7	50	41	35	30	49	40	34	30	39	34	30	28			
8	47	37	31	27	45	37	31	27	36	31	27	26			
9	44	34	29	25	43	34	28	25	33	28	25	23			
10	41	32	26	23	40	31	26	23	31	26	22	21			

INDOOR CANDELA PLOT



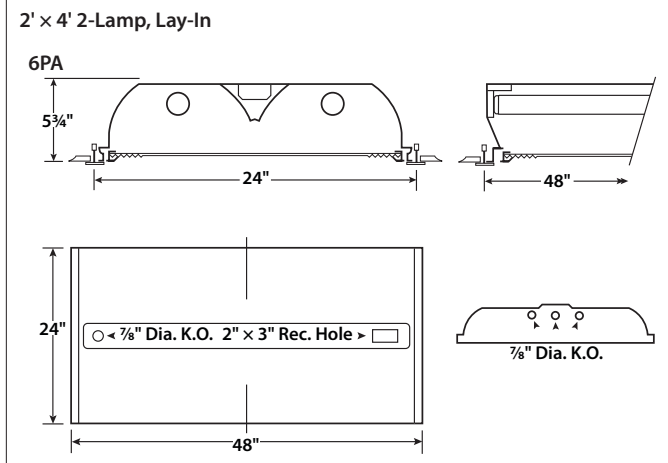
AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	3012	3012	3012	3012	3012
30	2866	2933	3060	3155	3171
40	2593	2716	2864	2935	2947
45	2350	2426	2549	2574	2595
50	1993	2065	2153	2161	2196
55	1594	1699	1767	1764	1722
60	1321	1393	1389	1417	1358
65	1222	1197	1059	1238	1238
70	1274	1138	893	1199	1279
75	1425	1153	1014	1219	1418
80	1491	1166	1136	1235	1472
85	1358	1319	1240	1319	1417

RCR = Room Cavity Ratio

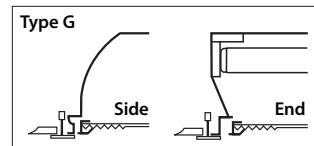
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

DIMENSIONAL DATA

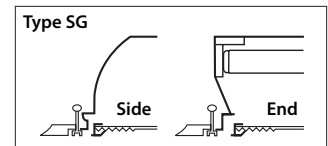


NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

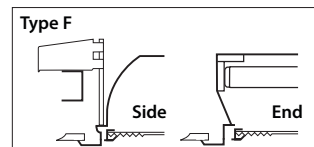
CEILING COMPATIBILITY



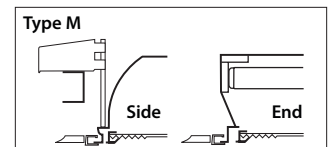
For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 1 1/2" allowed.



For 3/8" slot grid type ceilings. Louver will be level with the ceiling plane. Shoulder heights of tee or exact slot grid must be specified.



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.



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 48 1/8"