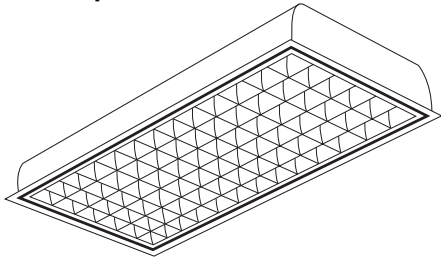


**1½" Deep Louver**



**FEATURES**

- 1½" deep small cell louver reduces glare
- Ideal for today's computer intensive electronic offices
- Proper lamp position ensures uniform illumination
- Black reveal with full air handling capabilities
- Anodized low iridescent aluminum louver
- Treated with a five stage phosphate bonding process and finished with a baked white enamel
- Mechanical light trap prevents light leaks
- Surface mount available

**PROJECT INFORMATION**

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

Type \_\_\_\_\_

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

Date \_\_\_\_\_

**CONSTRUCTION**

Luminaire housing and end caps are die formed code gauge steel. Parabolic louver is constructed of low iridescent aluminum in choice of finishes. Louver is secured in open or closed position by die formed steel hinges and can be hinged from either side. Mechanical light trap prevents light leaks. Positive feed spring steel latches are concealed in black reveal.

**FINISH**

Painted parts are treated with a five stage phosphate bonding process and finished with a high temperature baked white enamel. Louvers are low iridescent semi-specular (diffuse) natural anodized (LD) aluminum as standard.

**AIR HANDLING**

All supply/return and air extract functions are available as a specified option. Directional control vanes and/or extract damper features available. Air extract slots are located out of sight in end caps. See air removal data on reverse.

**INSTALLATION**

An access plate is furnished with each luminaire for fast wiring access from the plenum. No need to open fixture. Product ships standard with mylar dust cover to eliminate job site contamination.

**BALLASTS**

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

**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**

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. Contact your Columbia representative for compatibility information for specific ceiling types.

**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 P424-332G-LD613-S-3EU**

<b>P4</b>	<b>24</b>	-	-	-	-	-
<b>MODEL</b>	<b>NO. OF LAMPS</b>	<b>CEILING TYPE</b>	<b>NO. OF CELLS</b>	<b>BALLAST</b>	<b>OPTIONS</b>	
<b>P4</b> Recessed Air Handling Small Cell Parabolic	<b>2</b> Two <b>3</b> Three <b>4</b> Four	<b>G</b> Grid <b>F</b> Overlap Flange <b>M</b> Modular Fit-in Trim <b>SG</b> Slot Grid <b>SM</b> Surface Mount (Static only)	<b>613</b> 6 x 13 (78 nominal 3" x 3" cells) <b>715</b> 7 x 15 (105 nominal 2½" x 2½" cells)	<b>E</b> Electronic T8, Instant Start <b>3E</b> 3-Lamp Electronic T8, Instant Start <b>4E</b> 4-Lamp Electronic T8, Instant Start <b>EP</b> Electronic T5 or T8, Programmed Start <b>3EP</b> 3-Lamp Electronic T5HO or T8, Programmed Start <b>4EP</b> 4-Lamp Electronic T5HO (N/A 347V) or T8, Programmed Start	<b>GLR</b> Fast Blow Fuse <b>GMF</b> Slow Blow Fuse <b>EL</b> Emergency Battery Pack <b>F0735</b> 35K 75 CRI T8 Lamps Installed <b>F0835</b> 35K 80 CRI T8 Lamps Installed <b>F5835</b> 35K 80 CRI T5 Lamps Installed <b>C388</b> 3-Wire Flex <b>C488</b> 4-Wire Flex <b>MS9</b> Master/Satellite w/9' Harness <b>NYC</b> NYC Compliant <b>NYCU</b> NYC Compliant, Union Label	
	<b>SIZE</b>	<b>LAMP TYPE</b>	<b>LOUVER FINISH</b>			
	<b>24</b> 2' x 4'	<b>28</b> 4', T5: 28 Watt <b>32</b> 4', T8: 32, 30, 28 or 25 Watt <b>54</b> 4', T5HO: 54 or 51 Watt	<b>LD</b> Low Iridescent Semi-Specular (std.) <b>LS</b> Low Iridescent Specular <b>MA</b> Matte Anodized Low Iridescent Semi-Specular Aluminum			
				<b>AIR FUNCTIONS</b>	<b>VOLTAGE</b>	
				<b>S</b> Static <b>A</b> Air Handling <b>AV</b> Air Handling w/Supply Vanes <b>C</b> Combination Supply/Extract <b>CV</b> Combination Supply Vanes/Extract <b>CD</b> Combination Supply Extract Dampers <b>CVD</b> Combination Supply Vanes Extract Dampers <b>H</b> Heat Extract <b>HD</b> Heat Extract w/Dampers	<b>U</b> 120V-277V <b>347</b> 347V	
						<b>PARABOLICS / P424 SMALL CELL</b>

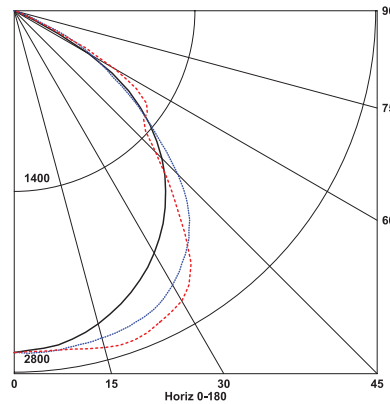
### PHOTOMETRIC DATA

Test 9284 Test Date 1/8/03

#### LUMINAIRE DATA

Luminaire	P424-340G-LD613-E
	P4 Parabolic
	2 x 4 3-L w/Ecolite Anodized
	6 x 13 Cell 1 1/2" Deep
	Frameless Louver
Ballast	R-2540, R-140
Ballast Factor	0.95
Lamp	F40WW
Lumens per Lamp	3200
Watts	130
Shielding Angle	N/A
Spacing Criterion	0° = 1.22 90° = 1.39

#### INDOOR CANDELA PLOT



#### ENERGY DATA

Total Luminaire Efficiency	64.6%
Luminaire Efficacy Rating (LER)	45
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$5.33 based on 3000 hrs. and \$0.08 per KWH

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

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	4270	4270	4270	4270	4270
30	4036	4260	4569	4761	4835
40	3841	4193	4449	4239	4091
45	3689	4040	4088	3636	3536
50	3441	3754	3473	3167	3282
55	3043	3279	2860	3200	3521
60	2155	2378	2294	2704	2894
65	630	905	1382	1294	1042
70	175	203	373	245	231
75	118	143	156	162	156
80	84	102	121	111	111
85	37	56	74	74	56

#### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	2153	22.4	34.7
0-40	3557	37.1	57.3
0-60	5840	60.8	94.1
0-90	6204	64.6	100.0
0-180	6204	64.6	100.0

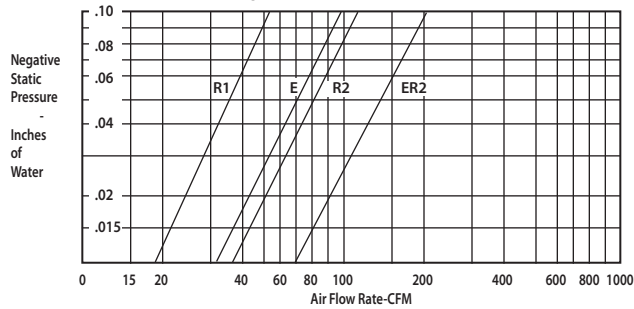
#### COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	72	70	67	65	70	68	66	64	65	64	62	57	
2	67	62	59	56	65	61	58	55	59	56	54	50	
3	61	56	51	48	60	55	51	47	53	49	46	44	
4	57	50	45	41	55	49	45	41	48	44	41	38	
5	52	45	40	36	51	44	40	36	43	39	36	34	
6	49	41	36	32	47	40	35	32	39	35	31	30	
7	45	37	32	28	44	37	32	28	36	31	28	27	
8	42	34	29	25	41	34	29	25	33	28	25	24	
9	39	31	26	23	39	31	26	23	30	26	23	21	
10	37	29	24	21	36	29	24	21	28	24	21	20	

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

#### EXTRACT AIR DATA Report AL-526-1.1



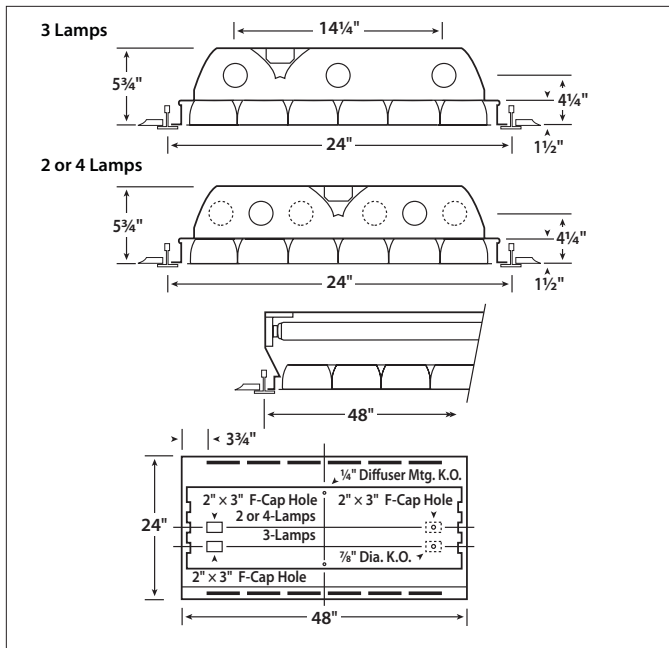
R1 - Air Return thru One Side Passage

R2 - Air Return thru Two Side Passages

E - Heat Extract thru Lamp Compartment

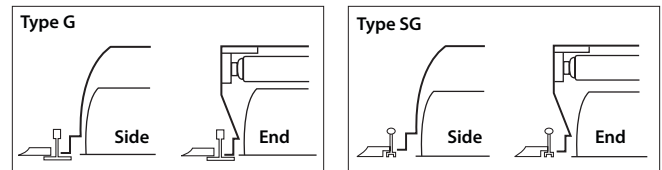
ER2 - Thru Both Sides and Lamp Compartment

#### DIMENSIONAL DATA



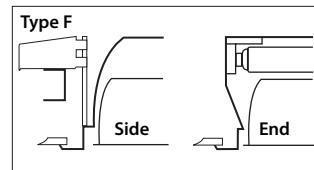
**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

#### CEILING COMPATIBILITY

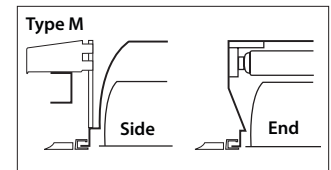


For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 1 1/2" allowed.

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 with concealed suspension and includes all adjustable wing hangers.

Flange kit rough in dimensions for single unit only: 24 1/8" x 48 1/8"