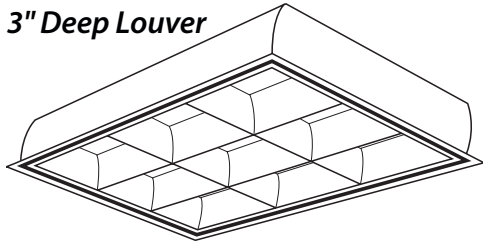


### 3" Deep Louver



Also available with 3 lamps and 16 cells

### FEATURES

- 3" deep cell parabolic louver for optimum control
- IES standard RP-1 glare control models available
- Wide light distribution provides 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 cold rolled steel. Louver is formed from low iridescent anodized aluminum and is secured by die-formed spring steel hinges. Louver hinges from either side. Mechanical light trap prevents light leaks. Latches are finger-tip actuated, positive feed type and completely concealed in the 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 shown on the specification sheet and are available as a specified option. Specify air handling requirement by including function number as part of complete catalog number. Directional control vanes and/or extract dampers must be specified. Air extract slots are located out of sight in end caps. See air removal data on specification sheet.

### INSTALLATION

For fast wiring connections without the necessity of opening fixture or wireway, a flex connector adapter plate is furnished with each luminaire. A plastic dust cover which eliminates construction dust and protects the lamps is provided as standard.

### 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 tee-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 P422-217G-LD33-S-EU

MODEL	NO. OF LAMPS	CEILING TYPE	NO. CELLS CROSSWISE	NO. CELLS LENGTHWISE	BALLAST	OPTIONS <sup>1</sup>
P4 Recessed Air Handling Parabolic	2 Two	G Grid F Overlap Flange M Modular Fit-in Trim SG Slot Grid SM Surface Mount (Static only)	3 Three 4 Four	3 Three 4 Four	E Electronic T8, Instant Start EP Electronic T5 or T8, Programmed Start EPTT Electronic Twin Tube, Programmed Start (40TT)  For a specific ballast vendor, show as option.	GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack C388 3-Wire Flex C488 4-Wire Flex MS9 Master/Satellite w/9' Harness NYC NYC Compliant NYCU NYC Compliant, Union Label
SIZE	LAMP TYPE	LOUVER FINISH	AIR FUNCTIONS	VOLTAGE		
22 2' x 2'	31U1 U-Bent, 15/8" Leg Spacing T8: 31 Watt 17 2', T8: 17 Watt 32U6 U-Bent, 6" Leg Spacing T8: 32 Watt 40TT Twin Tube Compact, 2G11 Base: 40 Watt	LD Low Iridescent Semi-Specular (Std.) LS Low Iridescent Specular MA Matte Anodized Low Iridescent Semi-Specular Aluminum GW Gloss White Enamel	S Static A Air Handling AV Air Handling w/Supply Vanes C Combination Supply/Extract CV Combination Supply Vanes/Extract CD Combination Supply Extract Dampers CVD Combination Supply Vanes Extract Dampers H Heat Extract HD Heat Extract w/Dampers	U 120V-277V 347 347V		

<sup>1</sup> EL or other options may increase fixture depth.

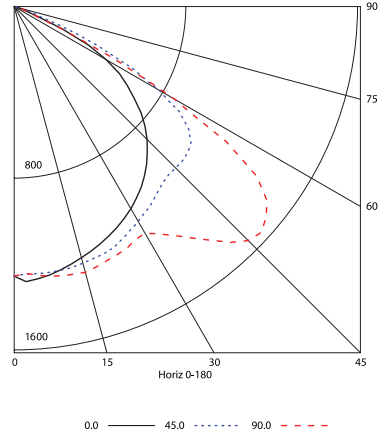
## PHOTOMETRIC DATA

Test L11171 Test Date 1/8/03

### LUMINAIRE DATA

Luminaire	P422-231U1G-LD33-E-PAF P4 Parabolic 2 x 2 2-Lamp T8U with White Interior and 3 x 3 Cell Semi-Specular Louver
Ballast	SSB2-120-2/32IS LH
Ballast Factor	0.88
Lamp	FBO31/31K
Lumens per Lamp	2800
Watts	55
Shielding Angle	N/A
Spacing Criterion	0° = 1.28 90° = 1.71

### INDOOR CANDELA PLOT



### ENERGY DATA

Total Luminaire Efficiency	68.7%
Luminaire Efficacy Rating (LER)	62
IESNA RP-1-1993 Compliance	Noncompliant
IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.87 based on 3000 hrs. and \$0.08 per KWH

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

	0.0	22.5	45.0	67.5	90.0
0	4315	4315	4315	4315	4315
30	4312	4479	4582	4685	4840
40	4301	4575	4817	5665	6373
45	4252	4529	5165	6516	7488
50	4126	4458	5650	7227	8183
55	3864	4277	5942	7236	8260
60	3395	3972	5367	5806	5923
65	2008	2780	3439	2634	1878
70	492	733	1045	563	512
75	252	305	305	332	319
80	119	158	178	198	198
85	0	39	79	118	79

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1020	18.2	26.5
0-40	1737	31.0	45.1
0-60	3466	61.9	90.1
0-90	3849	68.7	100.0
0-180	3849	68.7	100.0

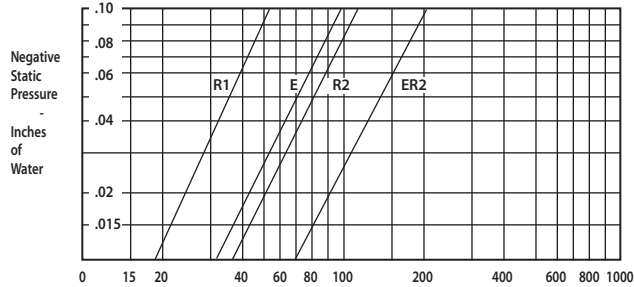
### COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	76	73	71	68	74	72	69	67	69	67	65	60	
2	70	64	60	57	68	63	59	56	61	58	55	51	
3	64	57	52	48	62	56	51	47	54	50	46	43	
4	58	50	45	40	57	49	44	40	48	43	39	37	
5	53	45	39	34	52	44	38	34	43	38	34	32	
6	49	40	34	30	48	39	34	30	38	33	29	28	
7	45	36	30	26	44	36	30	26	35	30	26	24	
8	42	33	27	23	41	32	27	23	31	26	23	21	
9	39	30	24	21	38	30	24	21	29	24	20	19	
10	37	28	22	19	36	27	22	18	27	22	18	17	

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

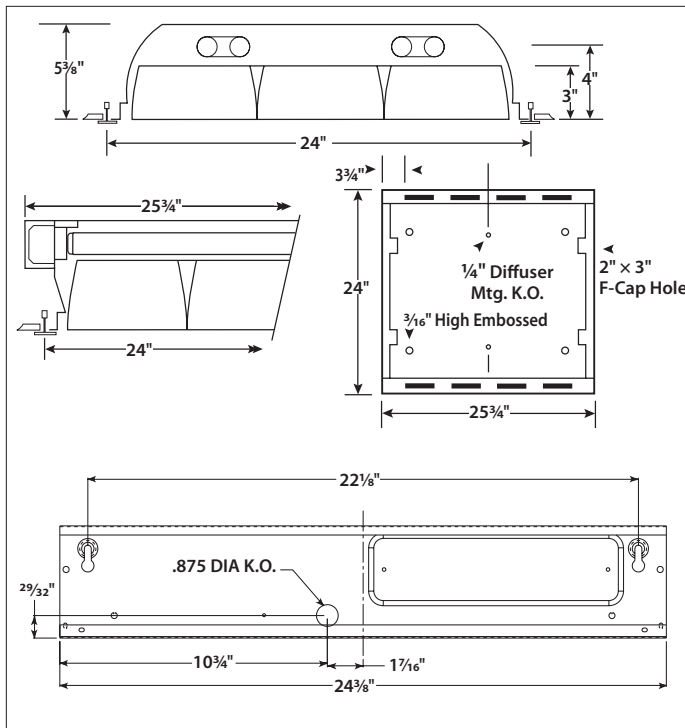
### EXTRACT AIR DATA Report AL-526-1.1



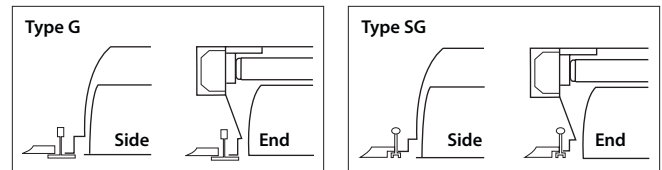
R1 - Air Return thru One Side Passage  
R2 - Air Return thru Two Side Passages

E - Heat Extract thru Lamp Compartment  
ER2 - Thru Both Sides and Lamp Compartment

### DIMENSIONAL DATA

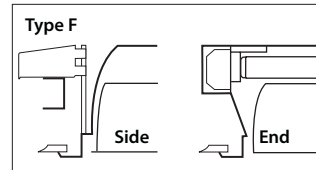


### CEILING COMPATIBILITY

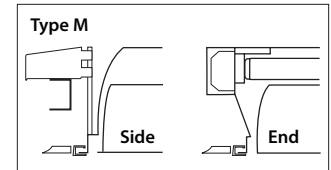


**Type G**  
For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 1 1/2" allowed.

**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 with concealed suspension and includes all adjustable wing hangers.

Flange kit rough in dimensions for single unit 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.