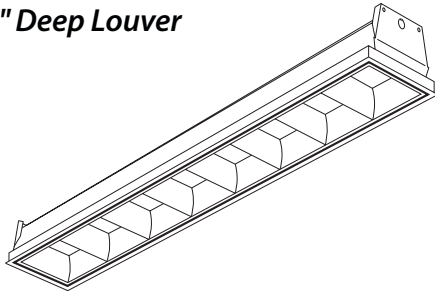


3" Deep Louver



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 constructed of die formed code gauge CR steel. Anodized aluminum louver is secured in open or closed position by die formed steel hinges. Louver hinges from either side. A mechanical light trap prevents light leaks. Latches are finger-tip actuated, positive feed type, fabricated of spring steel and completely concealed in the black reveal.

BALLASTS

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

FINISH

Painted parts are treated with a five stage phosphate bonding process and finished with a high temperature baked white enamel. For post painted housing, suffix catalog number with PAF. Regressed slots are flat black. Louver is standard semi-specular natural anodized aluminum (LD) for use with triphosphor lamps. Also available in non-iridescent semi-specular matte anodized (MA), and specular (LS).

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. For information on compatibility with specific ceilings, contact your Columbia representative.

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.

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.

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.

ORDERING INFORMATION

EXAMPLE P414-132G-LD16-S-EU

P4	14	-	-	-	-	-
MODEL P4 Recessed Air Handling Parabolic	NO. OF LAMPS 1 One 2 Two	CEILING TYPE G Grid F Overlap Flange M Modular Fit-in Trim SG Slot Grid SM Surface Mount	NO. CELLS CROSSWISE 1 One 2 Two	NO. CELLS LENGTHWISE 6 Six 8 Eight	BALLAST E Electronic T8, Instant Start EP Electronic T5 or T8, Programmed Start For a specific ballast vendor show as option.	OPTIONS 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 C388 3-Wire Flex C488 4-Wire Flex MS9 Master/Satellite w/9' Harness NYC NYC Compliant NYCU NYC Compliant, Union Label
SIZE 14 1' x 4'	LAMP TYPE 28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	LOUVER FINISH LD Low Iridescent Semi-Specular (Std.) LS Low Iridescent Specular MA Matte Anodized Low Iridescent Semi-Specular Aluminum GW Gloss White Enamel	AIR FUNCTIONS 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	VOLTAGE U 120V-277V 347 347V		

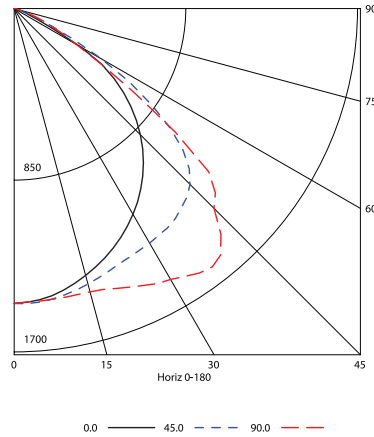
PHOTOMETRIC DATA

Test 11190 Test Date 6/11/03

LUMINAIRE DATA

Luminaire	P414-232G-LD18-E-PAF P4 Parabolic 1 x 4 2-Lamp with 1 x 8 Cell Semi-Specular Louver
Ballast	B232I120RH
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	60
Shielding Angle	N/A
Spacing Criterion	Along = 1.22 Across = 1.66

INDOOR CANDELA PLOT



ENERGY DATA

Total Luminaire Efficiency	65.9%
Luminaire Efficacy Rating (LER)	56
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.29 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	5410	5410	5410	5410	5410
30	5035	5202	5737	6345	6628
40	4816	5208	6234	7207	7701
45	4630	5239	6450	7084	7336
50	4344	5203	6294	6657	7245
55	3898	4920	5359	4971	4700
60	2818	3730	3686	2714	2655
65	1044	1439	1790	1685	1781
70	553	640	726	943	1008
75	358	387	387	387	358
80	256	278	278	256	256
85	213	213	255	213	255

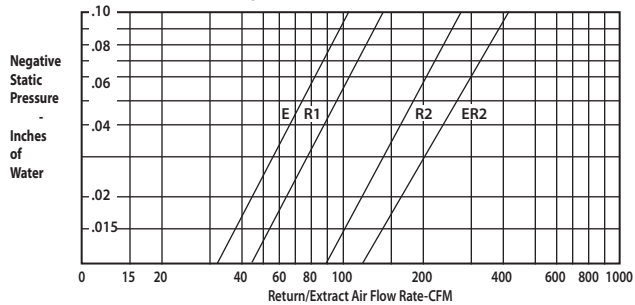
ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1170	20.2	30.6
0-40	2002	34.5	52.3
0-60	3579	61.7	93.6
0-90	3824	65.9	100.0
0-180	3824	65.9	100.0

COEFFICIENTS OF UTILIZATION (%)

RCR	RC 80			RC 70			RC 50			RC 0		
	70	50	30	70	50	30	50	30	10	0		
1	73	71	68	66	71	69	67	65	66	65	63	58
2	68	63	59	56	66	62	58	55	59	57	54	50
3	62	56	51	48	61	55	51	47	53	49	46	44
4	57	50	45	41	56	49	44	41	48	43	40	38
5	53	45	40	35	51	44	39	35	43	38	35	33
6	49	41	35	31	48	40	35	31	39	34	31	29
7	45	37	31	27	44	36	31	27	35	31	27	26
8	42	33	28	24	41	33	28	24	32	28	24	23
9	39	31	25	22	38	30	25	22	30	25	22	20
10	37	28	23	20	36	28	23	20	27	23	20	18

EXTRACT AIR DATA Report AL-571-1.1

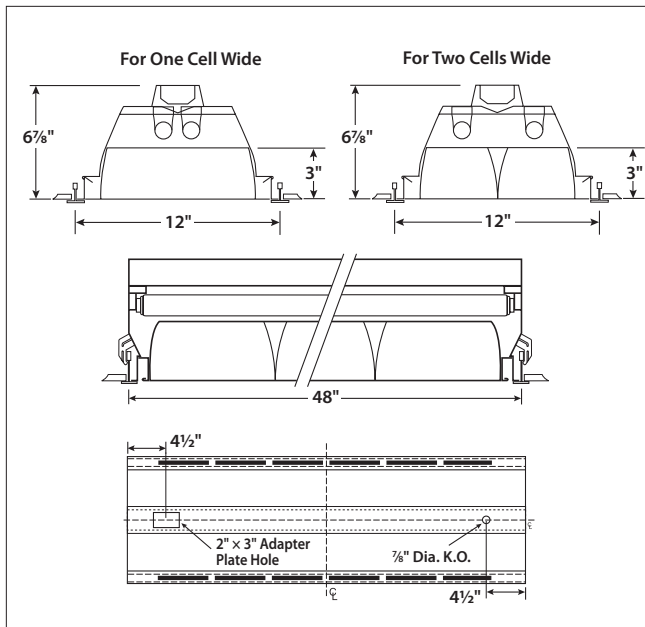


E - Heat Extract thru Lamp Compartment
R1 - Air Return thru One Side Passage
R2 - Air Return thru Two Side Passages
ER2 - Thru Both Sides and Lamp Compartment

RCR = Room Cavity Ratio

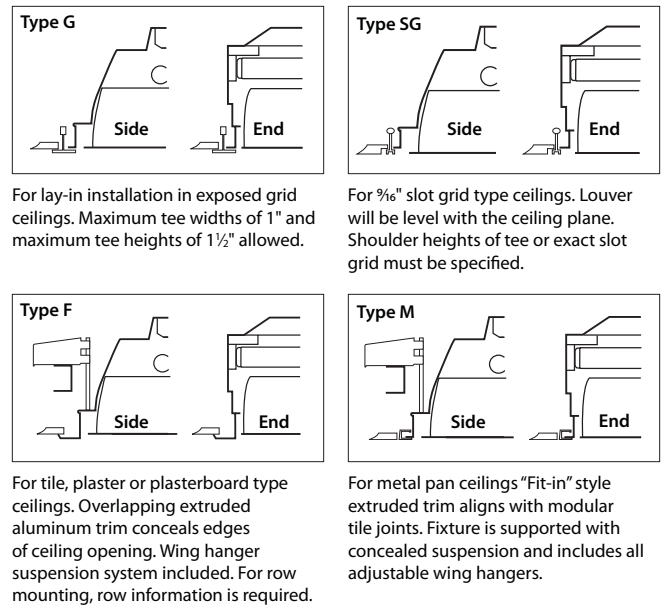
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

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



Flange kit rough in dimensions for single unit only: 12 1/8" x 48 3/4"