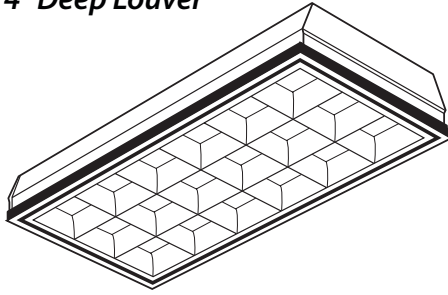


4" Deep Louver



FEATURES

- Meets IES standard RP-1 glare control recommendations on most models
- Ideal for computer intensive electronic offices
- Wide light distribution provides uniform illumination
- 4" deep low iridescent anodized aluminum louver
- UL listed 1598
- Surface mount available
- Mechanical light trap prevents light leaks
- Black reveal with full air handling capabilities
- Damp label standard
- NEC/CEC-compliant ballast disconnect standard

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing and end caps are die formed code gauge cold rolled 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.

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. Choice of low iridescent silver louver finishes.

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 as shown in specification sheet. For information on compatibility with specific ceilings, contact your Columbia representative. luminaires are furnished with necessary T-bar clips and/or wing hangers.

ORDERING INFORMATION

EXAMPLE 4524-332G-LD36-S-3EU

MODEL	NO. OF LAMPS	CEILING TYPE	NO. CELLS CROSSWISE	NO. CELLS LENGTHWISE	VOLTAGE	OPTIONS
45 Recessed 4" Deep Cell Parabolic	2 Two 3 Three 4 Four	G Grid F Overlap Flange M Modular Fit-in Trim SG Slot Grid SM Surface Mount (Static only)	2 Two 3 Three 4 Four	6 Six 8 Eight	U 120V-277V 347 347V	GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack F0735 35K 75 CRI T8 Lamps Installed F0835 35K 80 CRI T8 Lamps Installed F5835 35K 80 CRI T5 Lamps Installed
	SIZE 24' 2' 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.) MA Matte Anodized Low Iridescent Semi-Specular Aluminum LS Low Iridescent Specular	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	BALLAST E Electronic T8, Instant Start 3E 3-Lamp Electronic T8, Instant Start EP Electronic T5 or T8, Programmed Start 3EP 3-Lamp Electronic T5HO or T8, Programmed Start For a specific ballast vendor show as option.	C388 3-Wire Flex C488 4-Wire Flex MS9 Master/Satellite w/9' Harness PAF Paint After Fabrication 2BC Blank 2 nd Channel Cover (3-Lamp, 36 and 38 louvers only) NYC NYC Compliant NYCU NYC Compliant, Union Label

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	4524-232G-LD26-E-PAF 45 Parabolic 2' x 4' 2-Lamp Recessed with 2 x 6 Cell Semi-Specular Parabolic Louver
Ballast	B2321120-RH
Ballast Factor	0.95
Lamp	FO32/741
Lumens per Lamp	2850
Total Input Watts	60
Shielding Angle	N/A
Spacing Criterion	Along = 1.23 Across = 1.55

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	2581	2581	2581	2581	2581
30	2423	2494	2643	2899	3016
40	2343	2487	2872	3160	3377
45	2284	2477	2949	3496	3711
50	2182	2483	3119	3246	3285
55	1983	2434	2728	2489	2460
60	1575	2125	1865	1598	1575
65	821	971	1042	1097	1149
70	258	341	434	595	644
75	148	174	213	258	277
80	86	106	134	154	173
85	57	77	96	115	115

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1228	21.5	29.8
0-40	2079	36.5	50.5
0-60	3790	66.5	92.1
0-90	4116	72.2	100.0
0-180	4116	72.2	100.0

COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	0	30	10	0
1	80	77	75	72	78	76	73	71	73	71	69	64	64	64	64	64
2	74	69	64	61	72	67	63	60	65	62	59	55	55	55	55	55
3	68	61	56	52	66	60	55	51	58	54	50	47	47	47	47	47
4	62	54	49	44	61	53	48	44	52	47	43	41	41	41	41	41
5	57	49	43	38	56	48	42	38	46	41	38	35	35	35	35	35
6	53	44	38	33	52	43	37	33	42	37	33	31	31	31	31	31
7	49	40	34	29	48	39	33	29	38	33	29	27	27	27	27	27
8	46	36	30	26	44	36	30	26	35	30	26	24	24	24	24	24
9	43	33	27	23	42	33	27	23	32	27	23	22	22	22	22	22
10	40	30	25	21	39	30	25	21	29	24	21	20	20	20	20	20

RCR = Room Cavity Ratio

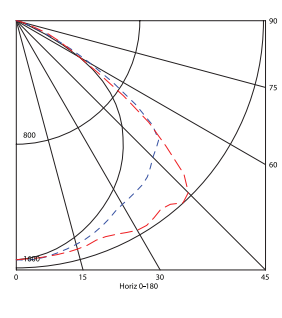
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

Total Luminaire Efficiency	72.2%
Luminaire Efficacy Rating (LER)	65
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.69 based on 3000 hrs. and \$0.08 per KWH

Test 10670 Test Date 6/10/03

INDOOR CANDELA PLOT



LUMINAIRE DATA

Luminaire	4524-332G-LD36-3E-PAF 45 Parabolic 2' x 4' 3-Lamp with 3 x 6 Cell Semi-Specular Louver
Ballast	B3321120RH
Ballast Factor	0.95
Lamp	FO32/741
Lumens per Lamp	2850
Total Input Watts	87
Shielding Angle	N/A
Spacing Criterion	Along = 1.24 Across = 1.45

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	4245	4245	4245	4245	4245
30	4006	4164	4355	4634	4925
40	3906	4118	4599	4538	4558
45	3822	4043	4310	3987	3982
50	3672	3952	3641	3220	3153
55	3400	3699	2873	2361	2286
60	2772	2602	1992	1661	1631
65	1425	1125	1022	951	951
70	419	424	410	419	419
75	219	232	238	251	264
80	125	144	154	173	192
85	57	77	96	115	134

ZONAL LUMEN SUMMARY

Zone	Lumens	Lamp	Fixt.
0-30	2033	23.8	34.1
0-40	3397	39.7	56.9
0-60	5615	65.7	94.1
0-90	5966	69.8	100.0
0-180	5966	69.8	100.0

COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	0	30	10	0
1	78	75	73	71	76	73	71	69	71	69	67	62	62	62	62	62
2	72	67	63	60	70	66	62	59	64	61	58	54	54	54	54	54
3	66	60	55	51	65	59	55	51	57	53	50	47	47	47	47	47
4	61	54	49	45	60	53	48	44	51	47	44	41	41	41	41	41
5	57	49	43	39	55	48	43	39	46	42	38	36	36	36	36	36
6	52	44	38	34	51	43	38	34	42	37	34	32	32	32	32	32
7	49	40	35	31	48	40	34	30	39	34	30	29	29	29	29	29
8	45	37	31	27	44	36	31	27	35	31	27	26	26	26	26	26
9	43	34	28	25	42	33	28	25	33	28	25	23	23	23	23	23
10	40	31	26	22	39	31	26	22	30	26	22	21	21	21	21	21

RCR = Room Cavity Ratio

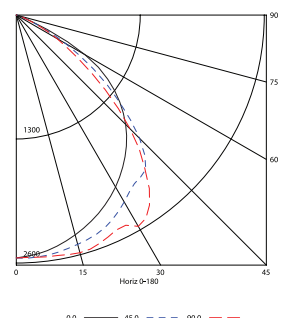
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

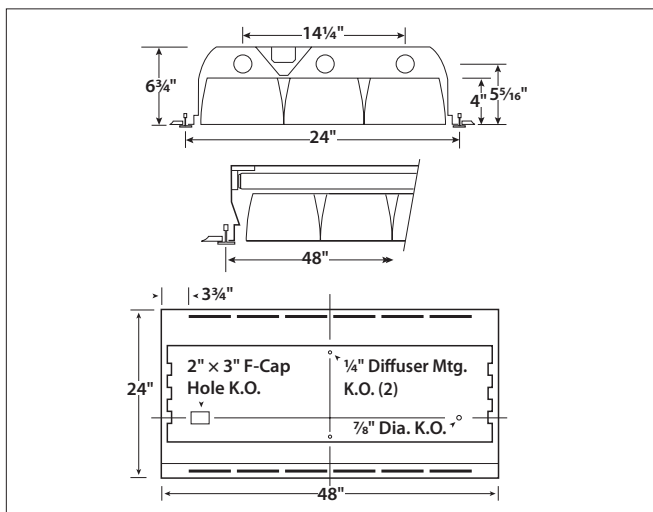
Total Luminaire Efficiency	69.8%
Luminaire Efficacy Rating (LER)	65
IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.69 based on 3000 hrs. and \$0.08 per KWH

Test 10686 Test Date 6/10/03

INDOOR CANDELA PLOT

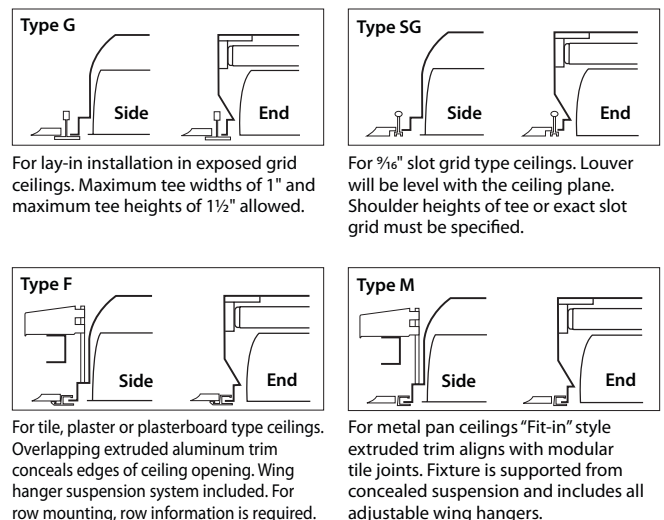


DIMENSIONAL DATA



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: 24 5/8" x 48 5/8"