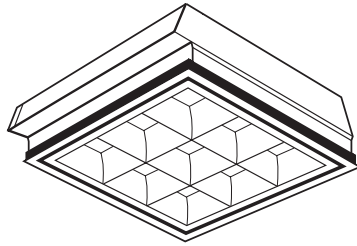


4" Deep Louver



Also available in 16 cells

FEATURES

- Meets IES standard RP-1 glare control recommendations on most models
- Non-directional architecturally modern 2' x 2' design
- Ideal for today's 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.

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.

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.

LABELS & ELECTRICAL

All luminaires bear appropriate UL or CUL labels. Completely wired with standard class "P", thermally protected, autoresetting, HPF ballast. Sound rated A. All ballast leads extend a minimum of 6" through the access opening. NEC/CEC-compliant ballast disconnect is standard. Damp label is applied 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.

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 for concealed suspension ceilings are furnished with necessary T-bar clips and/or wing hangers.

ORDERING INFORMATION

EXAMPLE 4522-340TTG-LD33-S-3ETTU

45	22 - 3						
MODEL	NO. OF LAMPS	CEILING TYPE	NO. CELLS CROSSWISE	NO. CELLS LENGTHWISE	BALLAST	OPTIONS¹	
45 Recessed 4" Deep Cell Parabolic	3 Three	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	ETT Electronic Twin Tube, Instant Start, (Specify voltage) 3ETT 3-Lamp Electronic Twin Tube, Instant Start, (Specify voltage)	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						
	22 2' x 2'						
		LAMP TYPE	LOUVER FINISH	AIR FUNCTIONS		VOLTAGE	
		31U1 U-Bent, 1 5/8" Leg Spacing T8: 31 Watt 40TT Twin Tube Compact, 2G11 Base: 40 Watt 17 2', T8: 17 Watt	LD Low Iridescent Semi-Specular (Std.) MA Matte Anodized Low Iridescent Semi-Specular Aluminum LS Low Iridescent Specular	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	

¹ EL or other options may increase fixture depth.



PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	4522-340-TTG-LD33-ETT-PAF 45 Parabolic 2' x 2' with 3 x 3 Cell Semi-Specular Louver
Ballast	(2) B2321I20RH
Ballast Factor	0.94
Lamp	F40BX
Lumens per Lamp	3150
Total Input Watts	108
Shielding Angle	N/A
Spacing Criterion	0° = 1.24 90° = 1.53

AVG. LUMINANCE (Candela/Sq. M.)

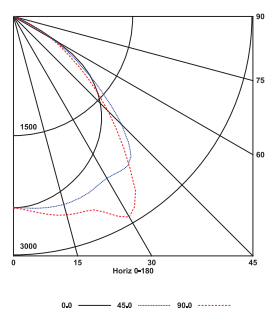
	0.0	22.5	45.0	67.5	90.0
0	8657	8657	8657	8657	8657
30	8306	8908	9755	11321	12097
40	8094	8944	10803	10315	10122
45	7853	8891	9776	8652	8540
50	7436	8639	7917	7016	6944
55	6647	7562	6107	5392	5317
60	4532	4668	4186	3841	3834
65	1830	1864	1770	1940	1821
70	705	736	694	705	694
75	417	417	375	389	417
80	249	249	249	249	249
85	124	124	124	124	124

COEFFICIENTS OF UTILIZATION (%)

RC	80					70					50					0				
	RW	70	50	30	10	70	50	30	10	50	30	10	0	70	50	30	10	0		
1	71	68	66	64	69	67	65	63	64	63	61	57								
2	66	61	58	55	64	60	57	54	58	55	53	49								
3	61	55	51	47	59	54	50	47	52	49	46	43								
4	56	49	45	41	55	49	44	41	47	43	40	38								
5	52	44	39	36	50	44	39	36	43	38	35	33								
6	48	40	35	31	47	40	35	31	39	34	31	29								
7	45	37	32	28	43	36	31	28	35	31	28	26								
8	41	34	29	25	41	33	28	25	32	28	25	23								
9	39	31	26	23	38	30	26	23	30	25	22	21								
10	36	28	24	21	36	28	24	20	27	23	20	19								

Test L11681 Test Date 7/28/08

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

Total Luminaire Efficiency	63.5%
Luminaire Efficacy Rating (LER)	52
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.62 based on 3000 hrs. and \$0.08 per KWH

LUMINAIRE DATA

Luminaire	4522-331U1G-LD33-E-PAF 45 Parabolic 2' x 2' Recessed with 3 x 3 Cell Semi-Specular Louver
Ballast	(2) B2321I20RH
Ballast Factor	1.00
Lamp	FBO31
Lumens per Lamp	2750
Total Input Watts	88
Shielding Angle	N/A
Spacing Criterion	0° = 1.22 90° = 1.36

AVG. LUMINANCE (Candela/Sq. M.)

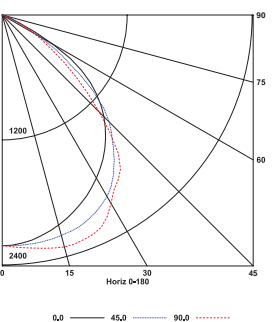
	0.0	22.5	45.0	67.5	90.0
0	7785	7785	7785	7785	7785
30	7338	7679	8162	8373	8474
40	7080	7525	7612	7846	7951
45	6864	7277	7217	6745	6536
50	6469	6791	6261	5178	5047
55	5705	5913	4577	3750	3634
60	3951	3733	2924	2538	2495
65	1530	1414	1214	1247	1156
70	586	545	504	473	452
75	340	326	285	272	272
80	202	202	202	202	202
85	121	121	121	121	121

COEFFICIENTS OF UTILIZATION (%)

RC	80					70					50					0				
	RW	70	50	30	10	70	50	30	10	50	30	10	0	70	50	30	10	0		
1	67	64	62	61	65	63	61	60	61	59	58	53								
2	62	58	55	52	60	57	54	51	55	52	50	47								
3	57	52	48	45	56	51	47	44	49	46	44	41								
4	53	47	42	39	52	46	42	39	45	41	38	36								
5	49	42	38	34	48	42	37	34	41	37	34	32								
6	45	38	34	30	44	38	33	30	37	33	30	28								
7	42	35	30	27	41	35	30	27	34	30	27	25								
8	40	32	28	24	39	32	27	24	31	27	24	23								
9	37	30	25	22	36	29	25	22	29	25	22	21								
10	35	27	23	20	34	27	23	20	26	23	20	19								

Test L11682 Test Date 1/8/03

INDOOR CANDELA PLOT



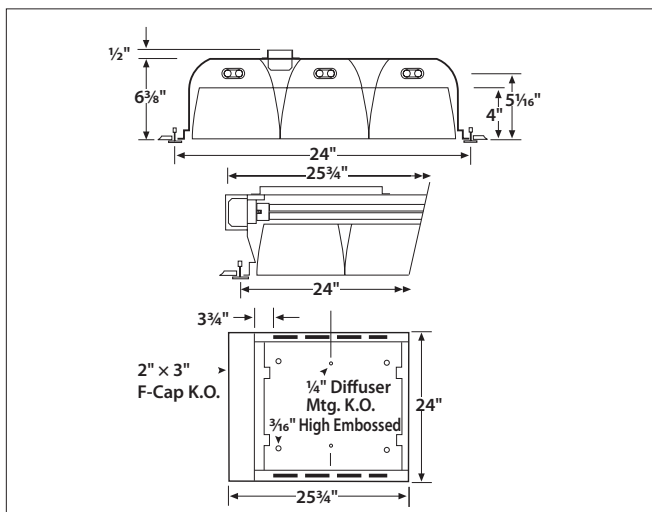
RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

Total Luminaire Efficiency	59.7%
Luminaire Efficacy Rating (LER)	56
ANSI/IESNA RP-1-2004 Compliance	YES-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.29 based on 3000 hrs. and \$0.08 per KWH

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.

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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 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.

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 from concealed suspension and includes all adjustable wing hangers.

Flange kit rough in dimensions for single unit only: 24 7/8" x 24 7/8"