

FEATURES

- One lamp T8 version recommended to meet IES standard RP-1 glare control
- Ideal for today's computer intensive electronic offices
- Wide light distribution provides uniform illumination
- Unique optical system eliminates glare
- Low iridescent anodized aluminum louver and reflector
- Treated with a five stage phosphate bonding process and finished with a baked white enamel
- Surface and pendant mount available
- Mechanical light trap prevents light leaks
- Black reveal with full air handling capabilities

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing and end caps are die formed code gauge CR steel. Upper specular reflector is constructed of highly reflective, specular anodized aluminum. The reflector is designed to increase efficiency while redirecting the light so fixture uniformity is maintained. Parabolic louver is constructed of low iridescent semi-specular (diffuse) anodized aluminum. 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. Latches are finger-tip actuated, positive-feed type, fabricated of spring steel and concealed in black reveal.

vanes and/or extract damper features available. Air extract slots are located out of sight in end caps. See air removal data on reverse.

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.

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.

CEILING COMPATIBILITY

Luminaire is available to fit most standard ceiling types. For information on compatibility with specific ceilings, contact your Columbia representative. luminaires for G and SG ceilings are supplied with UL recognized T-bar clips.

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.

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.

AIR HANDLING

All supply/return and air extract functions are available as a specified option. Directional control

ORDERING INFORMATION

EXAMPLE HC14-132G-LD112-EU

HC	14	-	-	1	12	-	-	-
MODEL	NO. OF LAMPS	CEILING TYPE	NO. CELLS CROSSWISE	NO. CELLS LENGTHWISE	BALLAST	OPTIONS		
HC Low Glare Parabolic	1 One 2 Two	G Grid F Overlap Flange M Modular Fit-in Trim SG Slot Grid SM Surface Mount* <small>*See limitations under Product Availability in the Product Selection Guide.</small>	1 One	12 Twelve	E Electronic T8, Instant Start EP Electronic T5 or T8, Programmed Start <small>For a specific ballast vendor show as option.</small>	F0735 35K 75 CRI T8 Lamps Installed	F0835 35K 80 CRI T8 Lamps Installed	F5835 35K 80 CRI T5 Lamps Installed
SIZE	LAMP TYPE	LOUVER FINISH	AIR FUNCTIONS		VOLTAGE	GLR Fast Blow Fuse	GMF Slow Blow Fuse	EL Emergency Battery Pack
14 1' x 4'	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	LD Low Iridescent Semi-Specular (Std.) 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	MS9 Master/Satellite w/9' Harness PAF Paint After Fabrication NYC NYC Compliant NYCU NYC Compliant, Union Label			

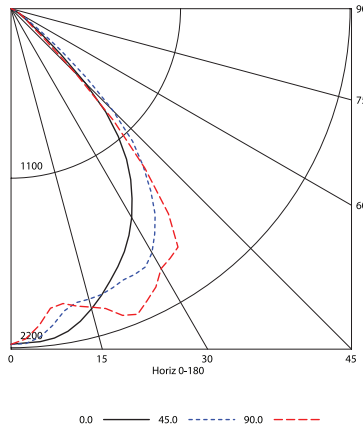
PHOTOMETRIC DATA

Test 11353 Test Date 4/30/03

LUMINAIRE DATA

Luminaire	HC14-232G-LD112-E HC Parabolic 1 x 4 2-Lamp with 1 x 12 Cell Semi-Specular Louver
Ballast	B232I120RH
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	61
Shielding Angle	N/A
Spacing Criterion	Along = 1.11 Across = 1.39

INDOOR CANDELA PLOT



ENERGY DATA

Total Luminaire Efficiency	58.7%
Luminaire Efficacy Rating (LER)	49
IESNA RP-1-1993 Compliance	Yes - Intensive
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.90 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	8200	8200	8200	8200	8200
30	6807	6846	7951	8551	8468
40	5320	6132	6564	6830	6643
45	3622	4693	4970	3851	3164
50	1541	2186	2491	1430	1043
55	657	801	926	873	716
60	362	392	422	640	535
65	223	223	205	312	303
70	165	154	143	165	165
75	116	102	102	102	102
80	87	108	87	87	87
85	86	43	86	43	43

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1628	28.1	47.8
0-40	2622	45.2	77.0
0-60	3362	58.0	98.8
0-90	3404	58.7	100.0
0-180	3404	58.7	100.0

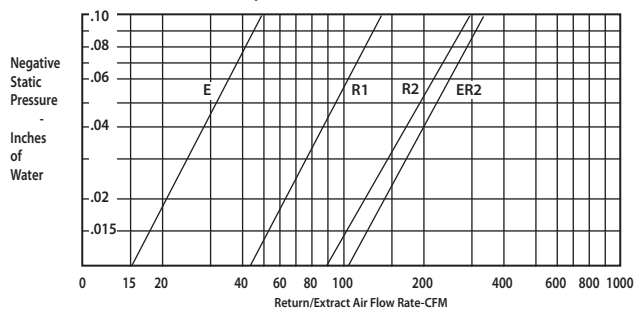
COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	66	64	62	61	65	63	61	60	60	59	58	54	54
2	62	59	56	54	61	58	55	53	56	54	52	49	49
3	58	54	50	48	57	53	50	47	51	49	46	44	44
4	54	49	45	42	53	48	45	42	47	44	42	40	40
5	51	45	41	38	50	45	41	38	43	40	38	36	36
6	48	42	37	34	47	41	37	34	40	37	34	33	33
7	45	38	34	31	44	38	34	31	37	34	31	30	30
8	42	36	31	29	41	35	31	28	34	31	28	27	27
9	40	33	29	26	39	33	29	26	32	29	26	25	25
10	37	31	27	24	37	30	27	24	30	26	24	23	23

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

EXTRACT AIR DATA Report AL-522-1.1



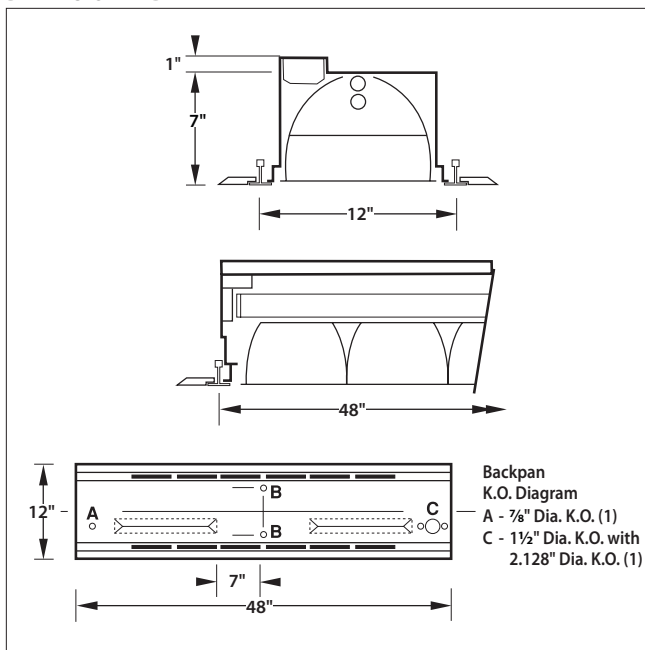
R1 - Air Return thru One Side Passage

R2 - Air Return thru Two Side Passages

E - Heat Extract thru Lamp Compartment

ER2 - Side Passages 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

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 with concealed suspension and includes all adjustable wing hangers.

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