

FEATURES

- Meets 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.

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.

ELECTRICAL

Standard class "P", thermally protected, auto-resetting HPF ballast, sound rated A. 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.

ORDERING INFORMATION

EXAMPLE HC22-240TTG-LD24-S-EPTT

HC	22	-	2	-	4	-	-	-
MODEL HC Low Glare Parabolic	NO. OF LAMPS 2 Two	CEILING TYPE G Grid F Overlap Flange M Modular Fit-in Trim SG Slot Grid SM Surface Mount	NO. CELLS CROSSWISE 2 Two 3 Three	NO. CELLS LENGTHWISE 4 Four	VOLTAGE U 120V-277V 347 347V	OPTIONS GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack PAF Paint After Fabrication NYC NYC Compliant NYCU NYC Compliant, Union Label		
SIZE 22 2' x 2'	LAMP TYPE 17 2', T8: 17 Watt 28 4', T5: 28 Watt 31U1 U-Bent, 1 3/8" Leg Spacing T8: 31 Watt 40TT Twin Tube Compact, 2G11 Base: 40 Watt	LOUVER FINISH LD Low Iridescent Semi-Specular (Std.) 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 ZETT 2-Lamp Electronic Twin Tube, Instant Start (Specify voltage) EP Electronic T5 or T8, Programmed Start EPTT Electronic Twin Tube, Programmed Start (40TT) For a specific ballast vendor show as option.			

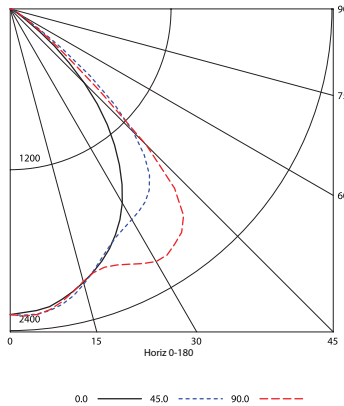
PHOTOMETRIC DATA

Test 12812 Test Date 4/30/03

LUMINAIRE DATA

Luminaire	HC22-240TTG-LD24-ETT-PAF HC Parabolic 2 x 2 2-Lamp with 2 x 4 Cell Semi-Specular Louver
Ballast	C240I120RH
Ballast Factor	0.88
Lamp	F40BX
Lumens per Lamp	3150
Watts	68
Shielding Angle	N/A
Spacing Criterion	Along = 1.13 Across = 1.45

INDOOR CANDELA PLOT



ENERGY DATA

Total Luminaire Efficiency	63.6%
Luminaire Efficacy Rating (LER)	52
IESNA RP-1-1993 Compliance	Intensive
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.62 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	7834	7834	7834	7834	7834
30	6633	6689	7197	8173	8633
40	5050	5660	7248	8333	9019
45	3795	4796	6302	6846	6963
50	2293	3244	4169	3373	2993
55	857	1504	1653	1510	1318
60	426	502	563	632	612
65	293	309	268	398	439
70	201	211	181	281	362
75	146	146	133	186	239
80	99	99	99	119	158
85	79	79	79	118	118

ZONAL LUMEN SUMMARY

Zone	Lumens	Lamp	Fixt.
0-30	1709	27.1	42.7
0-40	2804	44.5	70.0
0-60	3943	62.6	98.5
0-90	4004	63.6	100.0
0-180	4004	63.6	100.0

COEFFICIENTS OF UTILIZATION (%)

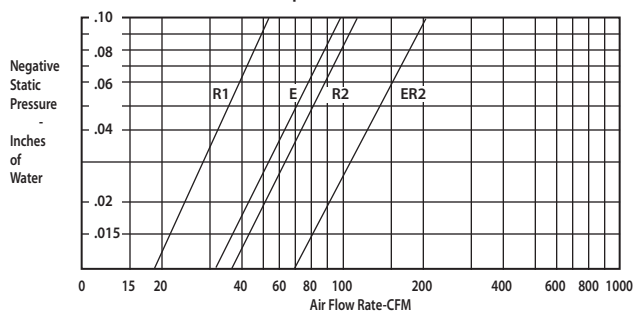
RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	71	69	67	66	70	68	66	65	64	63	64	63	58
2	67	63	60	57	65	62	59	57	60	57	55	52	46
3	62	57	53	50	61	56	53	50	55	52	49	46	42
4	58	52	48	45	57	51	47	44	50	46	44	42	42
5	54	48	43	40	53	47	43	40	46	42	39	37	37
6	51	44	39	36	50	43	39	36	42	38	35	34	34
7	47	40	35	32	46	40	35	32	39	35	32	30	30
8	44	37	32	29	43	37	32	29	36	32	29	28	28
9	42	34	30	27	41	34	30	27	33	29	26	25	25
10	39	32	27	24	38	31	27	24	31	27	24	23	23

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

EXTRACT AIR DATA

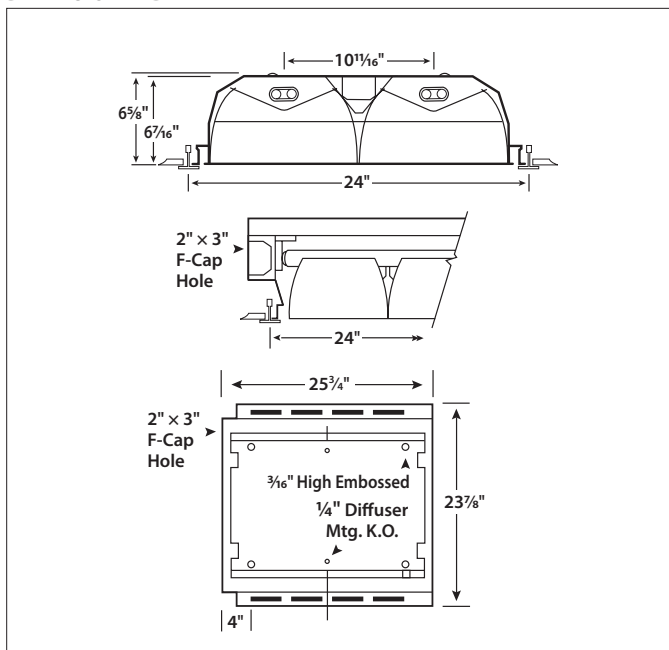
Report AL-526-1.1



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



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: 24 1/2" x 24 1/2"