

Also available in 16 cells and in lensed.

FEATURES

- Ideal for manufacturing areas, retail stores, and gymnasiums
- Shallow depth allows for installation in a myriad of shallow plenum applications
- Uses EISA compliant pulse start metal halide technology
- Removable power door allows for access to the ballast from below fixture

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Housing constructed of code gauge steel. Power door is constructed of 18 gauge steel and is secured with (3) ¼ turn fasteners. The power door contains all of the electrical components and can easily be removed from the fixture for maintenance. The ballast housing is constructed of aluminum for maximum heat dissipation. The housing is riveted together for maximum rigidity. A tempered glass overlay is standard on all pulse start metal halide lamped units. The tempered overlay is secured to the louver. Aluminum louver is retained by die formed latches and T-hinges and can be installed from either side.

FINISH

End and side rails are painted black to eliminate any light leaks. Housing and all other parts are painted after fabrication with a white polyester finish for maximum reflectance longevity.

AIR HANDLING

Supply or return air functions are provided on the side of the housing through the black reveal.

INSTALLATION

A ⅝" knockout is provided in the capacitor housing. All leads are pulled through the knockout for installation. A plastic dust cover which eliminates construction dust and protects the louver is supplied around the louver.

ELECTRICAL

Wired with core and coil ballasts and are SCWA. HV requires use of ED28 lamps.

CEILING COMPATIBILITY

Luminaire is available to fit most standard ceiling types as shown at left. For information on compatibility with specific ceilings, contact your Columbia representative. All luminaires are provided as standard with integral T-Bar clips.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard.

ORDERING INFORMATION

EXAMPLE HV22-P400G-LD33-S-QT277-QR

HV	22	-	P	-	LD	-	-	-
MODEL	LAMP TYPE	CEILING TYPE	LOUVER FINISH	CELLS WIDE BY CELLS LONG	VOLTAGE	OPTIONS		
HV Vertical Lamp Orientation	P Pulse Start Metal Halide	G Grid F Flange	LD Semi-Specular Low Iridescent	33 3 cells by 3 cells 44 4 cells by 4 cells	QT Quad-Tap, 120V, 208V, 240V, 277V 480 480V	QR Quartz Restrike GLR Fast Blow Fuse NYC NYC Compliant NYCU NYC Compliant, Union Label		
	SIZE	LAMP WATTS		AIR HANDLING FUNCTION	WIRED TO			
	22 2' x 2'	175 175 Watt 200 200 Watt 250 250 Watt 320 320 Watt 350 350 Watt 400 400 Watt		S Static A Air Handling AV Air Handling w/ supply vanes	120 120V 208 208V 240 240V 277 277V (Std.)			

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	HV22-M400G-LD33 HH/HV HID 2 x 2 with 3 x 3 cell semi-specular louver, tempered glass overlay, and baked white enamel reflector lamp
Ballast	N/A
Ballast Factor	1.00
Lamp	M400/C
Lumens per Lamp	36000
Watts	458
Spacing Criterion	0° = 1.34 90° = 1.31
Luminous Opening in Ft	Length: 1.77 Width: 1.77 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	25799	25799	25799	25799	25799
30	26220	25331	23566	25041	25724
40	28534	25148	24596	25399	29507
45	27370	24052	26442	24596	28828
50	22530	20504	28137	21049	23887
55	16221	15844	24476	16161	17168
60	11283	10898	15702	11036	11895
65	4479	5146	7504	5870	6569
70	1396	1557	2321	1718	1557
75	969	1009	1049	1009	969
80	791	851	791	712	712
85	631	631	631	512	512

ZONAL LUMEN SUMMARY

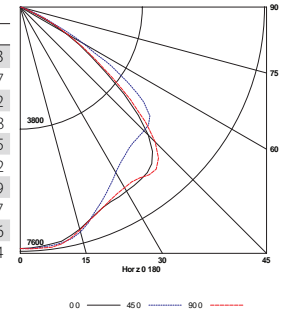
Zone	Lumens	Lamp	Fixt.
0-30	5765	16.0	33.4
0-40	9569	26.6	55.5
0-60	16328	45.4	94.7
0-90	17251	47.9	100.0
0-180	17251	47.9	100.0

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	53	52	50	49	52	50	49	48	48	47	46	43	
2	49	46	43	41	48	45	43	41	44	42	40	37	
3	46	41	38	35	44	41	37	35	39	37	34	32	
4	42	37	33	31	41	36	33	30	35	32	30	28	
5	39	33	29	27	38	33	29	27	32	29	26	25	
6	36	30	26	23	35	30	26	23	29	26	23	22	
7	33	27	24	21	33	27	23	21	26	23	21	19	
8	31	25	21	19	30	25	21	19	24	21	19	17	
9	29	23	19	17	28	23	19	17	22	19	17	16	
10	27	21	18	15	27	21	18	15	21	17	15	14	

RCR = Room Cavity Ratio
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

INDOOR CANDELA PLOT



LUMINAIRE DATA

Luminaire	HV22-M400-LD44 HH/HV HID 2 x 2 with 4 x 4 cell semi-specular louver, clear glass overlay and baked white enamel reflector
Ballast	N/A
Ballast Factor	1.00
Lamp	M400/C
Lumens per Lamp	36000
Watts	458
Spacing Criterion	0° = 1.28 90° = 1.26
Luminous Opening in Ft	Length: 1.77 Width: 1.77 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	26002	26002	26002	26002	26002
30	26236	27104	28362	26763	25648
40	24825	25587	24906	27198	25664
45	23284	24460	23420	27074	24435
50	19253	20910	21883	23037	20237
55	13765	14280	17713	15622	14574
60	4851	6913	10191	8754	8266
65	2041	2577	3536	3439	2919
70	1457	1808	1929	1949	1678
75	1142	1434	1500	1434	1181
80	970	1227	1227	1128	930
85	788	986	986	867	670

ZONAL LUMEN SUMMARY

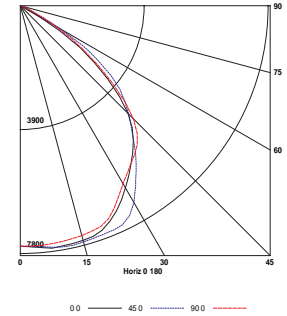
Zone	Lumens	Lamp	Fixt.
0-30	6250	17.4	36.9
0-40	10171	28.3	60.0
0-60	16332	45.4	96.3
0-90	16953	47.1	100.0
0-180	16953	47.1	100.0

COEFFICIENTS OF UTILIZATION (%)

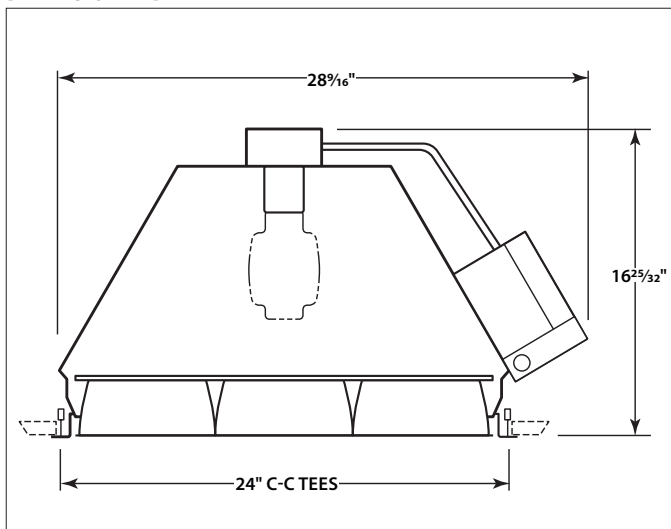
RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	53	51	49	48	51	50	48	47	48	47	46	42	
2	49	46	43	41	48	45	43	41	43	41	40	37	
3	45	41	38	35	44	40	38	35	39	37	35	33	
4	42	37	34	31	41	36	33	31	35	33	30	29	
5	39	34	30	27	38	33	30	27	32	29	27	25	
6	36	30	27	24	35	30	27	24	29	26	24	23	
7	34	28	24	22	33	27	24	21	27	24	21	20	
8	31	26	22	19	31	25	22	19	25	21	19	18	
9	29	23	20	18	29	23	20	17	23	20	17	16	
10	27	22	18	16	27	21	18	16	21	18	16	15	

RCR = Room Cavity Ratio
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

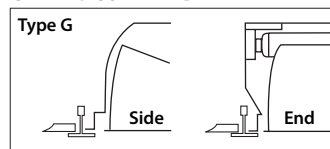
INDOOR CANDELA PLOT



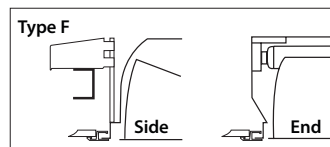
DIMENSIONAL DATA



CEILING COMPATIBILITY



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



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.