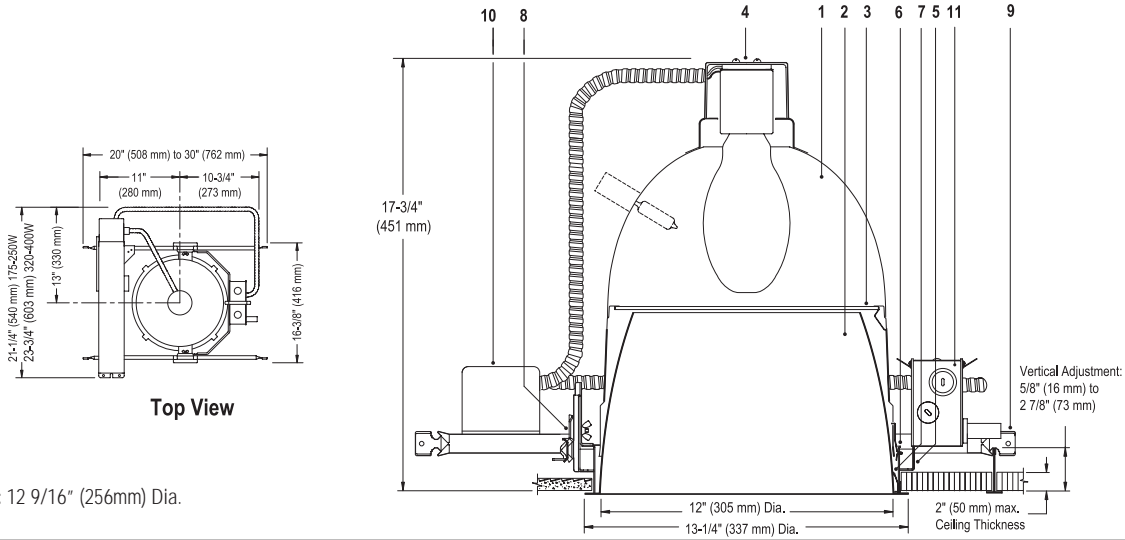




Calculite® HID Downlight C12E28VW

12" Aperture, ED28 (Enclosed) Metal Halide, Wide Beam



Ceiling Cutout: 12 9/16" (256mm) Dia.

Reflector Trim	Frame-In Kit	Lamp (Enclosed, Coated)
C12E28VW CLW Specular Clear, White Painted Flange.	C1217MHPU Magnetic, Pulse Start, 120V/277V	175W ED28, BT28 PS MH
CLP Specular Clear, Matching Flange.	C1225MHPU Magnetic, Pulse Start, 120V/277V	250W ED28, BT28 PS MH
CCDW Comfort Clear Diffuse, White Painted Flange.	C1232MHPU Magnetic, Pulse Start, 120V/277V	320W ED28, BT28 PS MH
CCDP Comfort Clear Diffuse, Matching Flange.	C1240MHPU Magnetic, Pulse Start, 120V/277V	400W ED28, BT28 PS MH
CCZW Champagne Bronze, White Painted Flange.	C1217MHU Magnetic, 120V/277V	175W ED28, BT28 MH
CCZP Champagne Bronze, Matching Flange.	C1225MHU Magnetic, 120V/277V	250W ED28, BT28 MH
	C1240MHU Magnetic, 120V/277V	400W ED28, BT28 MH

Features

- Upper Reflector:** Clear anodized aluminum, 0.040" (16-ga.). Provides wide beam optics ideal for general lighting. Also available in narrow beam, see C12E28VN specification sheet.
- Aperture Cone:** Low brightness with 40° cut-off to lamp. Specular Clear or Comfort Clear™ Diffuse, or champagne bronze self-flanged in painted white or aperture-matching polished flange. Consult factory for other finishes.
- Lamp Shield:** High-temperature glass as required by code, captive during re-lamping.
- Socket Cup:** Heat dissipating, die-cast aluminum, pre-wired with mogul base porcelain socket with nickel plated screw shell. Postive locking attachment without tools to reflector assures proper optical alignment of lamp.
- Mounting Frame:** 0.048" (18-ga.) galvanized steel, includes pre-installed mounting bars.
- Mounting Ring:** 0.048" (18-ga.) galvanized steel. Designed for vertical adjustment from above or below for ceilings from 0" to 2" thick. Center-line notches allow consistent alignment of multiple fixtures.
- Retention Springs:** Rust resistant springs secure cone for quick, tool-less installation.
- Frame Vertical Adjustment:** Vertical adjustment mechanism accommodates mounting to virtually any ceiling system using mounting bars (provided, or 1/2" EMT tubing (by others). Single locking feature secures all adjustments. Alignment holes and markings allow fixture to be preset prior to installation.
- Mounting Bars:** 0.048" (18-ga.) pre-installed, telescoping bars extend to 30" long and lock securely into position. Built-in locking tabs provide positive attachment to common T-bar systems. Self-centering feature simplifies installation in 24" O.C. grid systems. Attaches to steel or wood joists without accessories.
- Ballast:** Pulse Start
- Junction Box:** 0.059" (16-ga.) galvanized steel. UL listed for 8 No. 12 AWG, 90°C through branch circuit conductors. Allows inspection from below.
- Thermal Protector:** Meets NEC and UL requirements. Do not install insulation above nor within 3" (76mm) of any part of the luminaire.

Electrical

Magnetic Ballast: 120/277V dual voltage, 60 Hz., encased and potted, CWA or Super CWA (pulse start) circuit type, high power factor, sound rating "B" (175W and 250W PS)/sound rating "C" (others), -20°F minimum starting Temperature, Type 1 Outdoor rating.

Electrical (cont.)

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
175W PS MH	M137	120/277	2.20/0.90	205
250W PS MH	M138	120/277	2.80/1.20	290
320W PS MH	M132	120/277	3.40/1.50	370
400W PS MH	M135	120/277	4.10/1.80	465
175W MH	M57	120/277	2.00/0.90	205
250W MH	M58	120/277	2.60/1.10	290
400W MH	M59	120/277	3.90/1.70	460

Options and Accessories

- Auxiliary:** Add suffix **A** to Frame-In Kit and Reflector Trim. See Spec. Sheet "A".
- Emergency:** Add suffix **E** to Reflector Trim and Frame-In Kit. See Spec. Sheet "E".
- Slope Ceiling Adapters:** See Specification Sheet SCA.
- Fuse (magnetic ballast):** Add suffix **F1** or **F2** to Frame in Kit (F1=120V, F2=277V).
- Chicago Plenum:** Consult Factory.

Labels

UL (Suitable for Damp Locations), CSA, I.B.E.W.
 For 320W/400W, install fixtures with minimum spacing: 4 feet from center-to-center of adjacent luminaires; 3 inch from top of luminaire to overhead building member; 2 feet from luminaire center to side building member.

Job Information	Type:
Job Name:	
Cat. No.:	
Lamp(s):	
Notes:	

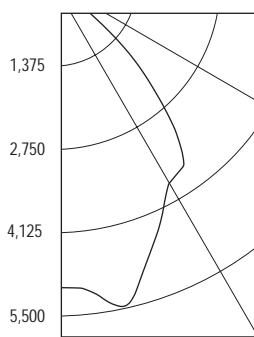
Lightolier a Genlyte Thomas Company www.lightolier.com
 631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710
 We reserve the right to change details of design, materials and finish.
 © 2004 Genlyte Thomas Group LLC (Lightolier Division) • A0504

LIGHTOLIER®



Calculite® HID Downlight C12E28VW

175W ED28 G.E. MH COATED LAMP, LUMEN RATING = 12900 LMS, ADVANCE MAGNETIC BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS	LUMINANCE SUMMARY - CD. / SQ. M.	
			ANGLE	MEAN CD/SQ M
0	5034		45	72490
5	5057	489	55	3628
10	5362		65	0
15	5266	1459	75	0
20	4701		85	0
25	4237	1967		
30	3820			
35	3715	2249		
40	3070			
45	2096	1574		
50	866			
55	85	233		
60	2			
65	0	1		
70	0			
75	0	0		
80	0	0		
85	5	0		
90	0			

Coefficients of Utilization

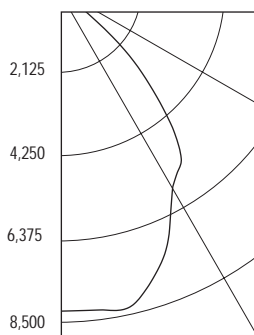
CEILING	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.74	.74	.74	.74	.72	.72	.69	.69	.66	.66	.62
1	.70	.68	.67	.65	.67	.64	.64	.62	.62	.60	.58
2	.67	.64	.61	.59	.63	.58	.60	.57	.59	.56	.54
3	.63	.59	.56	.53	.58	.53	.57	.52	.55	.51	.50
4	.60	.55	.52	.49	.54	.49	.53	.48	.52	.48	.46
5	.56	.51	.47	.45	.50	.44	.49	.44	.48	.44	.42
6	.53	.47	.44	.41	.47	.41	.46	.40	.45	.40	.39
7	.50	.44	.40	.37	.43	.37	.42	.37	.42	.36	.35
8	.47	.40	.36	.34	.40	.33	.39	.33	.39	.33	.32
9	.44	.37	.33	.30	.37	.30	.36	.30	.36	.30	.29
10	.41	.34	.30	.27	.34	.27	.33	.27	.33	.27	.26

LUMINAIRE INPUT WATTS = 205.0

*** EFFICIENCY = 61.8% ** SC = 1.1

CERTIFIED TEST REPORT NO. 2505FR, DATE: MAR 14, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

250W ED28 PHILIPS MH COATED LAMP, LUMEN RATING = 19475 LMS, UNIVERSAL MAGNETIC BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS	LUMINANCE SUMMARY - CD. / SQ. M.	
			ANGLE	MEAN CD/SQ M
0	8217		45	105132
5	8229	788	55	5546
10	8325		65	0
15	8132	2277	75	0
20	7546		85	0
25	6737	3109		
30	5850			
35	5457	3333		
40	4459			
45	3040	2289		
50	1286			
55	130	348		
60	4			
65	0	1		
70	0			
75	0	0		
80	0	0		
85	0	0		
90	0			

Coefficients of Utilization

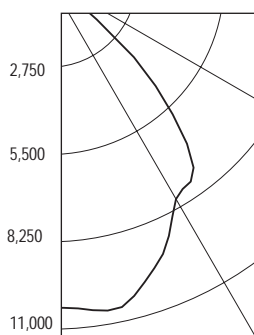
CEILING	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.74	.74	.74	.74	.73	.73	.69	.69	.66	.66	.62
1	.71	.69	.67	.66	.68	.65	.65	.63	.63	.61	.58
2	.67	.64	.62	.60	.63	.59	.61	.58	.59	.57	.54
3	.64	.60	.57	.54	.59	.54	.57	.53	.56	.52	.50
4	.61	.56	.52	.50	.55	.49	.54	.49	.53	.48	.47
5	.57	.52	.48	.45	.51	.45	.50	.45	.49	.44	.43
6	.54	.48	.44	.42	.48	.42	.47	.41	.46	.41	.40
7	.51	.45	.41	.38	.44	.38	.43	.38	.43	.37	.36
8	.48	.41	.37	.35	.41	.34	.40	.34	.40	.34	.33
9	.45	.38	.34	.31	.38	.31	.37	.31	.37	.31	.30
10	.42	.35	.31	.28	.35	.28	.34	.28	.34	.28	.27

LUMINAIRE INPUT WATTS = 290.0

*** EFFICIENCY = 62.4% ** SC = 1.1

CERTIFIED TEST REPORT NO. 2508FR, DATE: MAR 14, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

320W ED28 PHILIPS MH COATED LAMP, LUMEN RATING = 30100 LMS, ADVANCE BALLAST PULSE START MAGNETIC, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS	LUMINANCE SUMMARY - CD. / SQ. M.	
			ANGLE	MEAN CD/SQ M
0	10325		45	92020
5	10384	994	55	4756
10	10573		65	0
15	10304	2894	75	0
20	9659		85	0
25	8898	4099		
30	7970			
35	7756	4746		
40	6738			
45	4730	3513		
50	1945			
55	198	526		
60	4			
65	0	1		
70	0			
75	0	0		
80	0	0		
85	0	0		
90	0			

Coefficients of Utilization

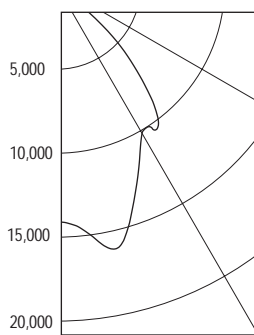
CEILING	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.66	.66	.66	.66	.65	.65	.62	.62	.59	.59	.56
1	.63	.62	.60	.59	.60	.58	.58	.56	.56	.54	.52
2	.60	.57	.55	.53	.56	.52	.54	.51	.53	.50	.48
3	.57	.53	.50	.48	.52	.48	.51	.47	.50	.46	.45
4	.54	.49	.46	.44	.49	.43	.48	.43	.46	.43	.41
5	.51	.46	.42	.40	.45	.40	.44	.39	.43	.39	.38
6	.48	.42	.39	.36	.42	.36	.41	.36	.40	.36	.35
7	.45	.39	.35	.33	.39	.33	.38	.33	.37	.32	.31
8	.42	.36	.32	.30	.35	.30	.35	.30	.34	.29	.28
9	.39	.33	.29	.27	.33	.27	.32	.27	.32	.26	.26
10	.36	.30	.27	.24	.30	.24	.29	.24	.29	.24	.23

LUMINAIRE INPUT WATTS = 370.0

*** EFFICIENCY = 55.7% ** SC = 1.2

CERTIFIED TEST REPORT NO. 2413FR, DATE: FEB 10, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

400W ED28 G.E. MH COATED LAMP, LUMEN RATING = 35000 LMS, ADVANCE MAGNETIC BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS	LUMINANCE SUMMARY - CD. / SQ. M.	
			ANGLE	MEAN CD/SQ M
0	14097		45	207807
5	14418	1399	5	5858
10	15675		65	0
15	15612	4282	75	0
20	13529		85	0
25	11653	5440		
30	10175			
35	10432	6250		
40	8760			
45	6008	4499		
50	2461			
55	137	614		
60	0	0		
65	0	0		
70	0	0		
75	0	0		
80	0	0		
85	0	0		
90	0			

Coefficients of Utilization

CEILING	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.76	.76	.76	.76	.75	.75	.71	.71	.68	.68	.64
1	.73	.71	.69	.68	.70	.67	.67	.65	.65	.63	.60
2	.69	.66	.64	.61	.65	.61	.63	.59	.61	.58	.56
3	.66	.61	.58	.56	.61	.55	.59	.54	.57	.54	.52
4	.62	.57	.54	.51	.57	.51	.55	.50	.54	.50	.48
5	.59	.53	.49	.46	.53	.46	.51	.46	.50	.45	.44
6	.55	.49	.45	.43	.49	.42	.48	.42	.47	.42	.41
7	.52	.46	.42	.39	.45	.38	.44	.38	.43	.38	.37
8	.49	.42	.38	.35	.42	.35	.41	.35	.40	.35	.34
9	.46	.39	.35	.32	.38	.32	.38	.32	.37	.31	.30
10	.43	.36	.32	.29	.35	.29	.35	.29	.34	.28	.27

LUMINAIRE INPUT WATTS = 460

*** EFFICIENCY = 64.2% ** SC = 1.1

CERTIFIED TEST REPORT NO. 2521FR, DATE: MAR 14, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

LIGHTOLIER®

Job Information Type: