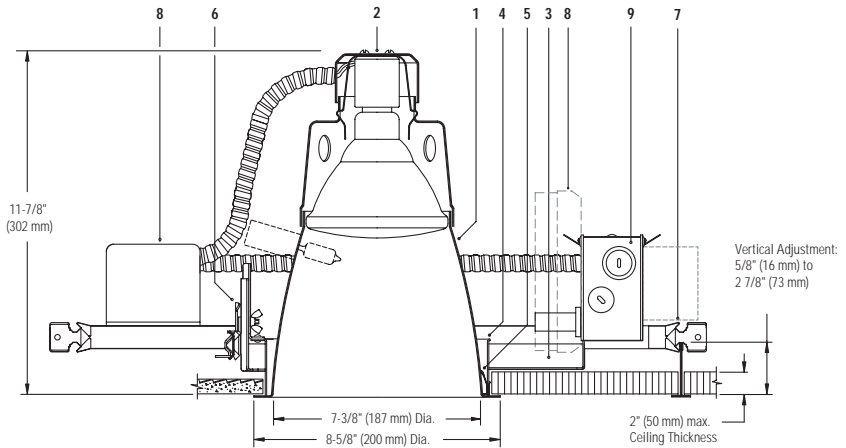
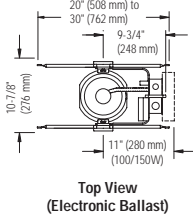
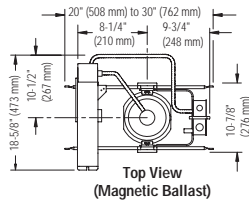




Calculite® HID Downlight C7P38MH

7" Aperture, PAR38 Ceramic Metal Halide



Ceiling Cutout: 8" (203 mm) dia.

Reflector Trim	Frame-In Kit	Lamp
C7P38MH CLW Specular Clear, White Painted Flange.	C770MHE1 Electronic 120V / C770MHE2 Electronic 277V	70W PAR38 Ceramic MH
CLP Specular Clear, Matching Flange.	C710MHE1 Electronic 120V / C710MHE2 Electronic 277V	100W PAR38 Ceramic MH
CCDW Comfort Clear Diffuse, White Painted Flange.	C715MHE1 Electronic 120V / C715MHE2 Electronic 277V	150W PAR38 Ceramic MH
CCDP Comfort Clear Diffuse, Matching Flange.	C770MHU Magnetic 120V/277V	70W PAR38 Ceramic MH
CCZW Champagne Bronze, White Painted Flange.	C710MHU Magnetic 120V/277V	100W PAR38 Ceramic MH
CCZP Champagne Bronze, Matching Flange.	C715MHU Magnetic 120V/277V	150W PAR38 Ceramic MH

Features

- Reflector Trim:** Clear anodized aluminum, 0.040" (16-ga.). Provides 50° visual cut-off to lamp and lamp image; self-flange in painted white or aperture-matching polished flange. Consult factory for other finishes.
- Socket Housing:** Galvanized steel, pre-wired with medium base pulse rated socket. Snaps onto upper reflector for secure attachment without tools; assures proper lamp alignment to optics for consistent performance.
- 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 reflector in place for quick, tool-less installation.
- Frame Vertical Adjustment Mechanism:** Vertical adjustment mechanism accommodates mounting to virtually any ceiling system using pre-installed mounting bars, or 1/2" EMT tubing (by others). Single locking feature secures all adjustments. Alignment holes and markings allow fixture to be pre-set 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:** Electronic 120V or 277V. Magnetic dual voltage (120V & 277V). Accessible from below for inspection and/or replacement without tools.
- Junction Box:** 0.048" (18-ga.) galvanized steel. UL listed for 8 No. 12 AWG, 90°C through branch circuit conductors; allows inspection from below.
- Thermal Protector:** (Not Shown) Meets NEC and UL requirements. Do not install insulation above nor within 3" (76mm) of any part of the luminaire.

Electrical

Electronic Ballast: 120V or 277V, 50/60 Hz., enclosed, high-power factor, T.H.D. <15%, thermally and transient protected, RMI / RFI complies with FCC Part 18 non-consumer equipment, shut-down circuit at end of lamp life, sound rating "A", -5°F (-20°F for 150W) minimum starting temperature, Type 1 outdoor rating.

Electrical (cont)

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
70W MH	M98/M143	120/277	0.67/0.28	78
100W MH	M90/M140	120/277	0.90/0.43	110
150W MH	M102	120/277	1.40/0.61	167

Magnetic Ballast: 120/277V dual voltage, 60 Hz., enclosed and potted, HX-HPF circuit type, high power factor, sound rating "B", -20°F minimum starting temperature, Type 1 Outdoor rating.

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
70W MH	M98/M143	120/277	1.90/0.80	94
100W MH	M90/M140	120/277	2.40/1.10	125
150W MH	M102	120/277	3.70/1.60	180

Options and Accessories

Auxiliary: Add suffix **A** to Frame-In Kit and Reflector Trim. See Spec. Sheet "A".

Emergency Lamp: 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 (magnetic ballast only), I.B.E.W.

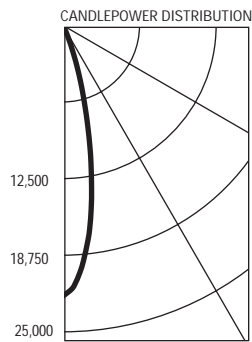
Job Information	Type:
Job Name:	
Cat. No.:	
Lamp(s):	
Notes:	

LIGHTOLIER®



Calculite® HID Downlight C7P38MH

70W PAR38 FLOOD, PHILIPS 3K MH LAMP, LUMEN RATING = 4800 LMS, ELECTRONIC AROMAT BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS
0	22077	
5	19279	1769
10	13483	
15	7146	2166
20	2784	
25	721	513
30	205	
35	85	64
40	29	
45	1	6
50	0	
55	0	0
60	0	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

LUMINANCE SUMMARY - CD. / SQ. M.			
ANGLE	MEAN CD/SQ M		
45	45	59	
55	55	0	
65	65	0	
75	75	0	
85	85	0	

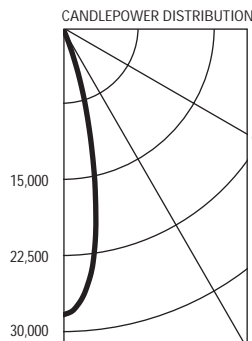
ZONAL LUMENS AND PERCENTAGES			
ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	4446	92.65	98.46
0-40	4510	93.97	99.86
0-60	4516	94.1	100
0-90	4516	94.1	100
40-90	6	0.13	0.14
60-90	0	0	0
90-180	0	0	0
0-180	4516	94.1	100

Coefficients of Utilization												
CEILING	80%				70%				50%			
	70	50	30	10	50	10	50	10	50	10	50	10
WALL	70	50	30	10	50	10	50	10	50	10	50	10
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%											
0	1.12	1.12	1.12	1.12	1.09	1.09	1.05	1.05	1.00	1.00	1.00	1.00
1	1.09	1.07	1.06	1.05	1.06	1.03	1.02	1.00	.98	.97	.94	.93
2	1.06	1.04	1.02	1.00	1.02	.99	.99	.96	.97	.94	.91	.89
3	1.04	1.01	.98	.96	1.00	.96	.98	.94	.96	.93	.90	.88
4	1.02	.98	.96	.94	.98	.93	.96	.92	.94	.91	.89	.87
5	1.00	.96	.93	.91	.95	.91	.94	.90	.92	.89	.88	.86
6	.99	.94	.91	.89	.94	.89	.93	.89	.92	.88	.87	.85
7	.97	.92	.89	.87	.92	.87	.91	.87	.90	.86	.85	.83
8	.95	.91	.88	.86	.90	.85	.89	.85	.89	.85	.84	.82
9	.94	.89	.86	.84	.89	.84	.88	.84	.87	.84	.83	.81
10	.92	.87	.85	.83	.87	.83	.87	.83	.86	.82	.81	.79

** EFFICIENCY = 94.1% **
 SC = .4
 CERTIFIED TEST REPORT NO. 2419FR, DATE: JAN 26, 2004
 COMPUTED BY LSI PROGRAM **TEST-LITE**

LUMINAIRE INPUT WATTS = 78.0

100W PAR38 FLOOD, PHILIPS 3K MH LAMP, LUMEN RATING = 6800 LMS, ELECTRONIC AROMAT BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS
0	28361	
5	26181	2386
10	19254	
15	10393	3130
20	4124	
25	1090	763
30	291	
35	120	91
40	47	
45	5	11
50	0	
55	0	0
60	0	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

LUMINANCE SUMMARY - CD. / SQ. M.			
ANGLE	MEAN CD/SQ M		
45	45	231	
55	55	0	
65	65	0	
75	75	0	
85	85	0	

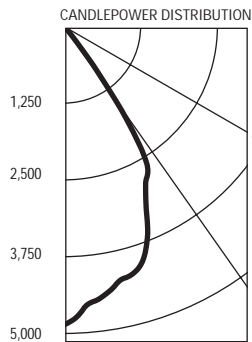
ZONAL LUMENS AND PERCENTAGES			
ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	6278	92.33	98.41
0-40	6369	93.67	99.83
0-60	6380	93.82	100
0-90	6380	93.82	100
40-90	10	0.16	0.17
60-90	0	0	0
90-180	0	0	0
0-180	6380	93.82	100

Coefficients of Utilization												
CEILING	80%				70%				50%			
	70	50	30	10	50	10	50	10	50	10	50	10
WALL	70	50	30	10	50	10	50	10	50	10	50	10
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%											
0	1.12	1.12	1.12	1.12	1.09	1.09	1.04	1.04	1.00	1.00	1.00	1.00
1	1.09	1.07	1.06	1.04	1.05	1.03	1.01	1.00	.98	.97	.94	.92
2	1.06	1.03	1.01	.99	1.02	.98	.99	.96	.96	.94	.91	.89
3	1.04	1.00	.98	.96	.99	.95	.97	.94	.95	.92	.90	.88
4	1.02	.98	.95	.93	.97	.92	.95	.91	.94	.91	.89	.87
5	1.00	.96	.92	.90	.95	.90	.93	.89	.92	.89	.87	.85
6	.98	.94	.91	.89	.93	.89	.92	.88	.91	.87	.86	.84
7	.96	.92	.89	.87	.91	.86	.90	.86	.89	.86	.85	.83
8	.95	.90	.87	.85	.89	.85	.89	.85	.88	.84	.83	.81
9	.93	.88	.86	.84	.88	.84	.87	.83	.87	.83	.82	.80
10	.92	.87	.84	.82	.87	.82	.86	.82	.86	.82	.81	.79

** EFFICIENCY = 93.8% **
 SC = .4
 CERTIFIED TEST REPORT NO. 2421FR, DATE: JAN 21, 2004
 COMPUTED BY LSI PROGRAM **TEST-LITE**

LUMINAIRE INPUT WATTS = 110.0

70W PAR38 WIDE FLOOD, PHILIPS 3K MH LAMP, LUMEN RATING = 4800 LMS, ELECTRONIC AROMAT BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS
0	4860	
5	4540	437
10	4365	
15	4197	1180
20	3890	
25	3162	1498
30	2735	
35	1466	929
40	250	
45	42	65
50	0	
55	0	0
60	0	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

LUMINANCE SUMMARY - CD. / SQ. M.			
ANGLE	MEAN CD/SQ M		
45	45	2104	
55	55	0	
65	65	0	
75	75	0	
85	85	0	

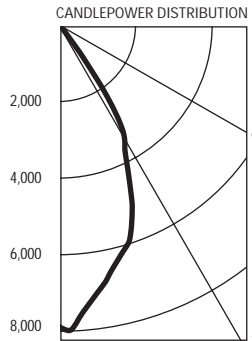
ZONAL LUMENS AND PERCENTAGES			
ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	3115	64.9	75.81
0-40	4044	84.26	98.42
0-60	4109	85.61	100
0-90	4109	85.61	100
40-90	64	1.35	1.58
60-90	0	0	0
90-180	0	0	0
0-180	4109	85.61	100

Coefficients of Utilization												
CEILING	80%				70%				50%			
	70	50	30	10	50	10	50	10	50	10	50	10
WALL	70	50	30	10	50	10	50	10	50	10	50	10
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%											
0	1.02	1.02	1.02	1.02	1.00	1.00	.95	.95	.91	.91	.86	.86
1	.98	.96	.94	.93	.95	.91	.91	.89	.88	.86	.82	.82
2	.94	.91	.89	.86	.90	.85	.87	.83	.85	.82	.79	.79
3	.91	.87	.83	.81	.85	.80	.84	.79	.82	.78	.75	.75
4	.88	.83	.79	.76	.82	.76	.80	.75	.78	.74	.72	.72
5	.84	.79	.74	.72	.78	.71	.76	.71	.75	.70	.68	.68
6	.81	.75	.71	.68	.74	.68	.73	.67	.72	.67	.66	.66
7	.78	.71	.67	.64	.71	.64	.70	.64	.69	.63	.62	.62
8	.75	.68	.64	.61	.67	.61	.67	.61	.66	.60	.59	.59
9	.71	.65	.60	.58	.64	.58	.63	.57	.63	.57	.56	.56
10	.69	.62	.57	.54	.61	.54	.61	.54	.60	.54	.53	.53

** EFFICIENCY = 85.6% **
 SC = .9
 CERTIFIED TEST REPORT NO. 2420FR, DATE: JAN 26, 2004
 COMPUTED BY LSI PROGRAM **TEST-LITE**

LUMINAIRE INPUT WATTS = 78.0

100W PAR38, WIDE FLOOD PHILIPS 3K MH LAMP, LUMEN RATING = 6800 LMS, ELECTRONIC AROMAT BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS
0	7868	
5	7495	709
10	6849	
15	6228	1761
20	5546	
25	4296	2032
30	3425	
35	1738	1130
40	296	
45	69	84
50	2	
55	0	0
60	0	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

LUMINANCE SUMMARY - CD. / SQ. M.			
ANGLE	MEAN CD/SQ M		
45	45	3439	
55	55	0	
65	65	0	
75	75	0	
85	85	0	

ZONAL LUMENS AND PERCENTAGES			
ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	4502	66.21	78.74
0-40	5632	82.83	98.51
0-60	5717	84.08	100
0-90	5717	84.08	100
40-90	84	1.25	1.49
60-90	0	0	0
90-180	0	0	0
0-180	5717	84.08	100

Coefficients of Utilization												
CEILING	80%				70%				50%			
	70	50	30	10	50	10	50	10	50	10	50	10
WALL	70	50	30	10	50	10	50	10	50	10	50	10
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%											
0	1.00	1.00	1.00	1.00	.98	.98	.93	.93	.89	.89	.84	.84
1	.97	.95	.93	.91	.93	.90	.89	.87	.86	.85	.81	.81
2	.93	.90	.87	.85	.88	.84	.86	.82	.83	.81	.78	.78
3	.90	.86	.82	.80	.84	.79	.83	.78	.81	.77	.75	.75
4	.87	.82	.78	.76	.81	.75	.79	.74	.78	.74	.72	.72
5	.83	.78	.74	.71	.77	.71	.76	.71	.75	.70	.68	.68
6	.81	.75	.71	.68	.74	.68	.73	.68	.72	.67	.66	.66
7	.77	.71	.68	.65	.71	.64	.70	.64	.69	.64	.63	.63
8	.75	.68	.64	.62	.68	.61	.67	.61	.66	.61	.60	.60
9	.71	.65	.61	.58	.65	.58	.64	.58	.63	.58	.57	.57
10	.69	.62	.58	.56	.62	.56	.61	.55	.61	.55	.54	.54

** EFFICIENCY = 84.1% **
 SC = .8
 CERTIFIED TEST REPORT NO. 2422FR, DATE: JAN 21, 2004
 COMPUTED BY LSI PROGRAM **TEST-LITE**

LUMINAIRE INPUT WATTS = 110.0

Job Information Type:

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.
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