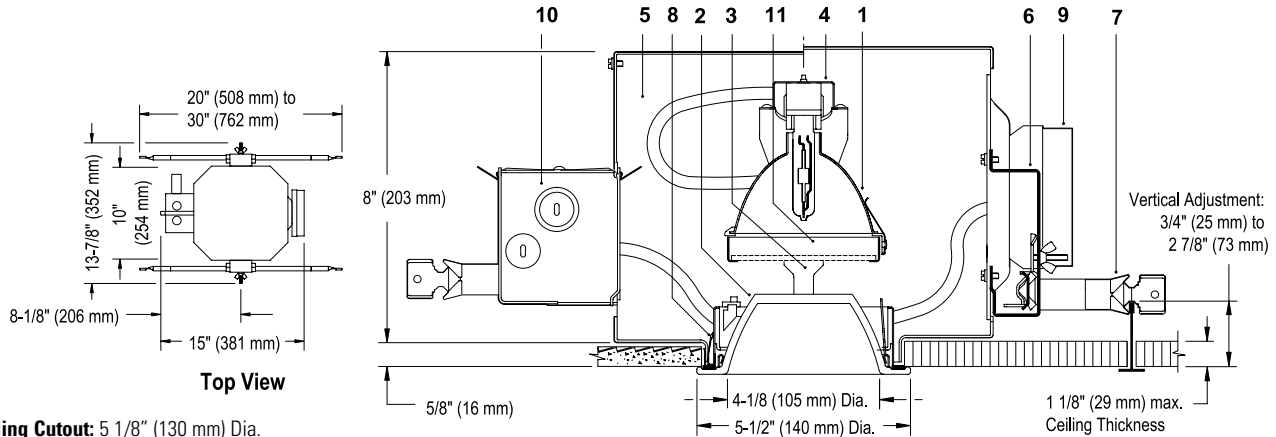


# Calculite® HID Lensed Downlight **C4T4GD-MHT4R**

Page 1 of 4

4 1/2" Aperture, T4 Ceramic Metal Halide, Glasslite



Ceiling Cutout: 5 1/8" (130 mm) Dia.

For complete fixture order: Trim Kit (Glasslite) + Upper Reflector + Frame-In Kit. Sold Separately

Glasslite Trim Kit + Upper Reflector	Frame-In Kit	Lamping (Ceramic Metal Halide)	
<b>C4T4GD + MHT4RS</b> (Spot Upper Reflector)	<b>C4A20BT5PGJ5E1</b>	Electronic 120V	22W Philips MiniMasterColor
<b>MHT4RNF</b> (Narrow Flood Upper Reflector)	<b>C4A20T4GU65EU</b>	Electronic 120V/277V	20W GE ConstantColor
<b>MHT4RF</b> (Flood Upper Reflector)	<b>C4A20T4EU</b>	Electronic 120V/277V	20W T4.5
	<b>C4A39T4GU65EU</b>	Electronic 120V/277V	39W Philips MiniMasterColor
	<b>C4A39T4E1</b>	Electronic 120V	39W T4.5
	<b>C4A39T4E2</b>	Electronic 277V	39W T4.5
	<b>C4A70T4E1</b>	Electronic 120V	70W T4.5
	<b>C4A70T4E2</b>	Electronic 277V	70W T4.5

## Features

- Upper Reflector:** Specular faceted aluminum; select 12° Spot (MHT4RS) 25° Narrow Flood (MHT4RNF) or 40° Flood (MHT4RF); interchangeable.
- Glasslite Trim Kit:** One piece borosilicate etched glass.
- Lamp Holder:** Unitized construction assures proper alignment of lamp to optics for consistent optical performance.
- Socket Housing:** Galvanized steel, pre-wired with G8.5 pulse rated socket. Snaps onto yoke for secure attachment without tools; unitized construction assures proper alignment of lamp to optics for consistent optical performance.
- Frame Housing:** Steel, 0.029" (22-Ga.), matte black finish. Removable cover for top re-lamping.
- Frame 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. Final adjustment can be made from below from inside fixture.
- Mounting Bars:** Galvanized steel, 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.
- Retention Springs:** Rust resistant springs secure trim for quick, tool-less installation.
- Ballast / Cover Assembly:** Accessible from below and removable without tools for inspection and ballast replacement.
- 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.
- Optional Accessory Holder:** Catalog # CAH4 Sold separately; die-formed steel, matte black finish, slide-in installation. Accepts up to two 3 3/4" dia. media.

## Features (continued)

- 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., encased, high power factor, T.H.D. <15%, thermally and transient protected, RMI/RFI complies with FCC Part 18 non-consumer limits, shut-down circuit at end of lamp life, sound rating "A", -5° F minimum starting temperature, Type 1 Outdoor rating.

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
20W MH	M156	120/277	0.21/0.10	23
39W MH	M130	120/277	0.39/0.17	44
70W MH	M139	120/277	0.67/0.29	78

## Options and Accessories

**Chicago Plenum:** Consult Factory.

## Labels

UL (Suitable for Wet Locations), CSA, I.B.E.W.

## Job Information

Type:

Job Name:

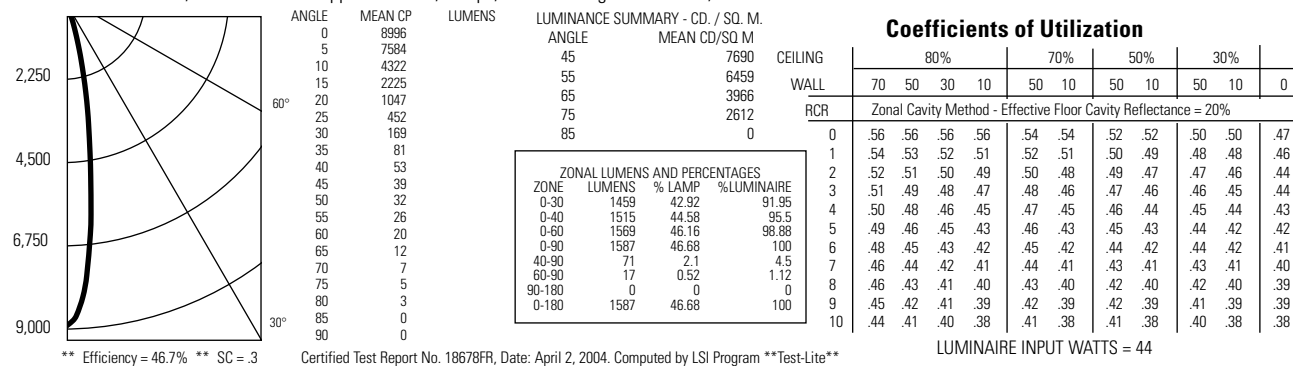
Cat. No.:

Lamp(s):

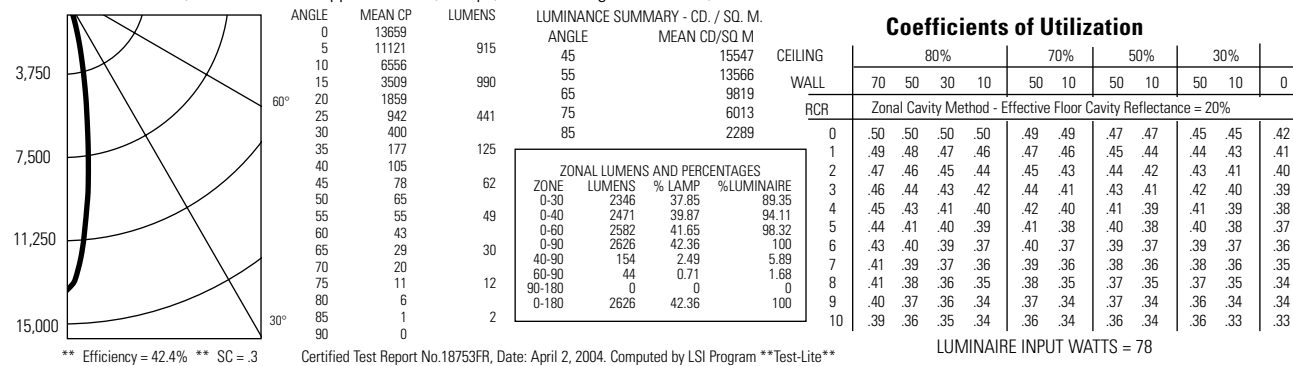
Notes:

# Calculite® HID Lensed Downlight **C4T4GD-MHT4R**

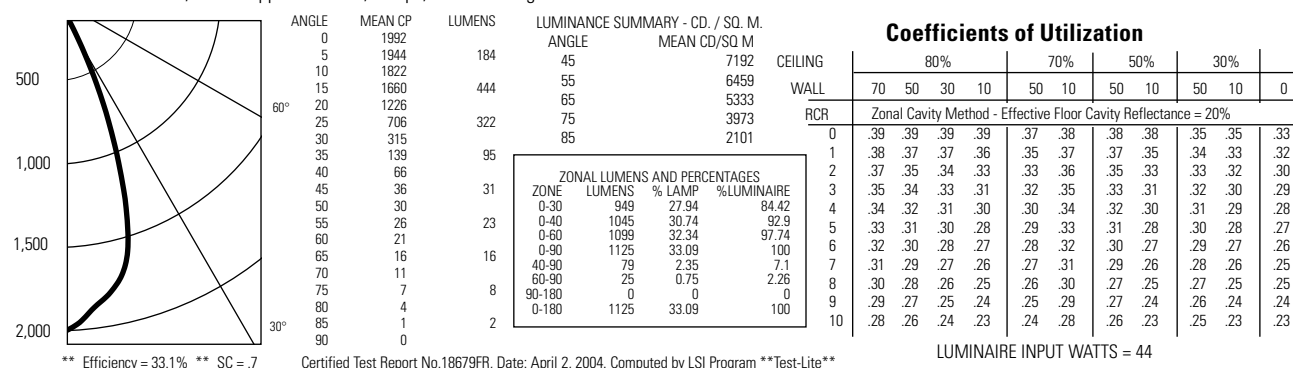
**39W T4.5 Ceramic MH, Narrow Flood** Upper Reflector, Philips, Lumen Rating = 3400 LMS., Aromat Electronic Ballast



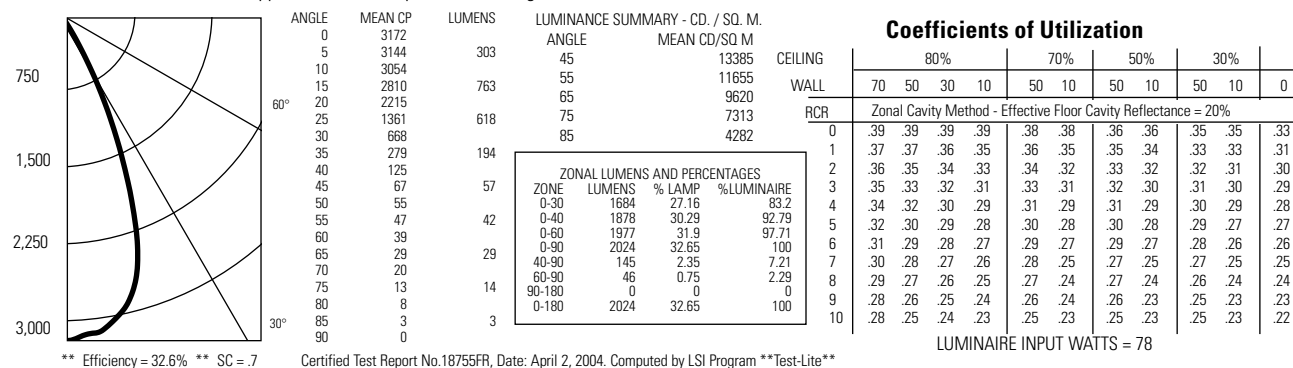
**70W T4.5 Ceramic MH, Narrow Flood** Upper Reflector, Philips, Lumen Rating = 6200 LMS., Aromat Electronic Ballast



**39W T4.5 Ceramic MH, Flood** Upper Reflector, Philips, Lumen Rating = 3400 LMS., Aromat Electronic Ballast

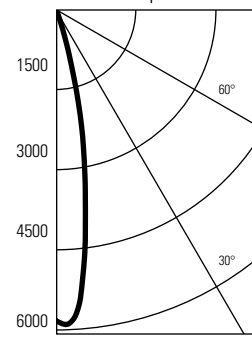


**70W T4.5 Ceramic MH, Flood** Upper Reflector, Philips, Lumen Rating = 6200 LMS., Aromat Electronic Ballast



**Job Information** **Type:**

**22W PGJ5** Philips MiniMastercolor CMH Lamp, **Narrow Flood** Upper Reflector, Lumen Rating = 1650 lms, Aromat Electronic Ballast



Angle	Mean CP	Lumens
0	5817	
5	5387	471
10	3158	
15	1324	435
20	339	
25	107	69
30	45	
35	29	19
40	18	
45	16	12
50	13	
55	11	10
60	8	
65	6	6
70	3	
75	2	2
80	1	
85	0	0
90	0	

Luminance Summary	
Angle	Mean CD/SQ M
45	2252
55	1858
65	1354
75	762
85	0

Zonal Lumens and Percentages			
Zone	Lumens	%Lamp	%Luminaire
0-30	975	59.15	95.24
0-40	994	60.3	97.09
0-60	1016	61.63	99.23
0-90	1024	62.11	100
40-90	29	1.81	2.91
60-90	7	0.48	0.77
90-180	0	0	0
0-180	1024	62.11	100

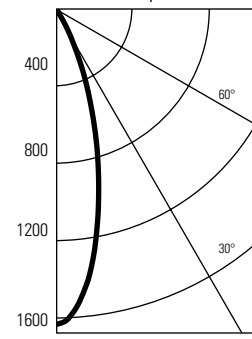
**Coefficients of Utilization**

Ceiling	80%		70%		50%		30%		0	
	70	50	30	10	50	10	50	10		
Wall										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%									
0	.74	.74	.74	.74	.72	.72	.69	.69	.66	.66
1	.72	.71	.70	.69	.70	.68	.67	.66	.65	.64
2	.70	.68	.67	.66	.67	.65	.65	.63	.64	.62
3	.68	.66	.65	.63	.65	.63	.64	.62	.63	.61
4	.67	.65	.63	.61	.64	.61	.63	.60	.62	.60
5	.66	.63	.61	.60	.62	.59	.61	.59	.61	.58
6	.65	.62	.60	.58	.61	.58	.61	.58	.60	.57
7	.63	.61	.59	.57	.60	.57	.59	.57	.59	.56
8	.63	.59	.57	.56	.59	.56	.59	.56	.58	.55
9	.61	.58	.57	.55	.58	.55	.58	.55	.57	.54
10	.61	.57	.56	.54	.57	.54	.57	.54	.57	.54

Luminaire Input Watts = 25

\*\* Efficiency = 62.1% \*\* SC = .4 Certified Test Report No. 3951FR, Date: Oct 16, 2008. Computed by LSI Program \*\*Test-Lite\*\*

**22W PGJ5** Philips MiniMastercolor CMH Lamp, **Flood** Upper Reflector, Lumen Rating = 1650 lms, Aromat Electronic Ballast



Angle	Mean CP	Lumens
0	1632	
5	1513	140
10	1222	
15	875	251
20	565	
25	325	159
30	162	
35	78	56
40	36	
45	24	21
50	22	
55	19	16
60	15	
65	11	11
70	7	
75	4	5
80	2	
85	0	1
90	0	

Luminance Summary	
Angle	Mean CD/SQ M
45	3360
55	3162
65	2446
75	1685
85	380

Zonal Lumens and Percentages			
Zone	Lumens	%Lamp	%Luminaire
0-30	550	33.36	83.46
0-40	606	36.73	91.9
0-60	643	38.98	97.52
0-90	659	39.97	100
40-90	53	3.24	8.1
60-90	16	0.99	2.48
90-180	0	0	0
0-180	659	39.97	100

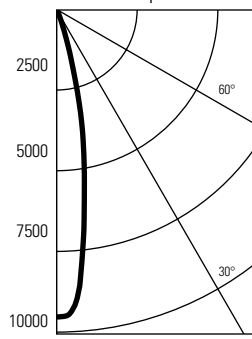
**Coefficients of Utilization**

Ceiling	80%		70%		50%		30%		0	
	70	50	30	10	50	10	50	10		
Wall										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%									
0	.48	.48	.48	.48	.46	.46	.44	.44	.43	.43
1	.46	.45	.44	.44	.44	.43	.43	.42	.41	.40
2	.44	.43	.42	.41	.42	.40	.41	.39	.40	.38
3	.43	.41	.39	.38	.40	.38	.39	.37	.39	.37
4	.41	.39	.38	.36	.39	.36	.38	.36	.37	.35
5	.40	.38	.36	.35	.37	.34	.37	.34	.36	.34
6	.39	.36	.35	.33	.36	.33	.35	.33	.35	.32
7	.38	.35	.33	.32	.35	.32	.34	.32	.34	.31
8	.37	.34	.32	.31	.33	.31	.33	.31	.33	.30
9	.35	.33	.31	.30	.32	.30	.32	.30	.32	.29
10	.34	.32	.30	.29	.31	.29	.31	.29	.31	.28

Luminaire Input Watts = 25

\*\* Efficiency = 40.0% \*\* SC = .5 Certified Test Report No. 3935FR, Date: Oct 16, 2008. Computed by LSI Program \*\*Test-Lite\*\*

**39W PGJ5** Philips MiniMastercolor CMH Lamp, **Narrow Flood** Upper Reflector, Lumen Rating = 3000 lms, Aromat Electronic Ballast



Angle	Mean CP	Lumens
0	9527	
5	8449	749
10	4953	
15	2214	710
20	632	
25	181	123
30	72	
35	41	29
40	28	
45	24	17
50	14	
55	14	11
60	6	
65	1	2
70	0	
75	0	0
80	0	
85	0	0
90	0	

Luminance Summary	
Angle	Mean CD/SQ M
45	3285
55	2340
65	325
75	0
85	0

Zonal Lumens and Percentages			
Zone	Lumens	%Lamp	%Luminaire
0-30	1581	52.72	96.4
0-40	1610	53.68	98.14
0-60	1638	54.61	99.85
0-90	1640	54.69	100
40-90	30	1.02	1.86
60-90	2	0.08	0.15
90-180	0	0	0
0-180	1640	54.69	100

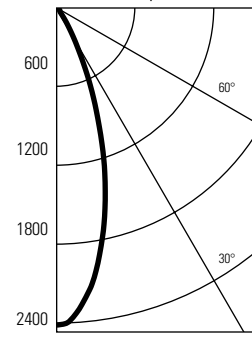
**Coefficients of Utilization**

Ceiling	80%		70%		50%		30%		0	
	70	50	30	10	50	10	50	10		
Wall										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%									
0	.65	.65	.65	.65	.64	.64	.61	.61	.58	.58
1	.63	.62	.62	.61	.61	.60	.59	.58	.57	.56
2	.62	.60	.59	.58	.59	.57	.58	.56	.56	.53
3	.60	.59	.57	.56	.58	.56	.57	.55	.56	.52
4	.59	.57	.56	.54	.57	.54	.56	.53	.55	.52
5	.58	.56	.54	.53	.55	.53	.54	.52	.54	.51
6	.57	.55	.53	.52	.54	.52	.54	.51	.53	.50
7	.56	.54	.52	.51	.53	.51	.53	.50	.52	.49
8	.55	.53	.51	.50	.52	.50	.52	.50	.51	.49
9	.54	.52	.50	.49	.52	.49	.51	.49	.51	.48
10	.54	.51	.49	.48	.51	.48	.50	.48	.50	.48

Luminaire Input Watts = 45

\*\* Efficiency = 54.7% \*\* SC = .4 Certified Test Report No. 3950FR, Date: Oct 16, 2008. Computed by LSI Program \*\*Test-Lite\*\*

**39W PGJ5** Philips MiniMastercolor CMH Lamp, **Flood** Upper Reflector, Lumen Rating = 3000 lms, Aromat Electronic Ballast



Angle	Mean CP	Lumens
0	2404	
5	2257	210
10	1901	
15	1439	406
20	955	
25	549	269
30	270	
35	125	90
40	55	
45	33	29
50	29	
55	24	21
60	17	
65	11	11
70	5	
75	1	2
80	0	
85	0	0
90	0	

Luminance Summary	
Angle	Mean CD/SQ M
45	4621
55	4069
65	2546
75	329
85	0

Zonal Lumens and Percentages			
Zone	Lumens	%Lamp	%Luminaire
0-30	885	29.52	85.24
0-40	976	32.53	93.94
0-60	1026	34.21	98.79
0-90	1038	34.63	100
40-90	62	2.1	6.06
60-90	12	0.42	1.21
90-180	0	0	0
0-180	1038	34.63	100

**Coefficients of Utilization**

Ceiling	80%		70%		50%		30%		0	
	70	50	30	10	50	10	50	10		
Wall										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%									
0	.41	.41	.41	.41	.40	.40	.38	.38	.37	.37
1	.40	.39	.38	.38	.38	.37	.37	.36	.36	.34
2	.38	.37	.36	.35	.37	.35	.36	.34	.35	.32
3	.37	.36	.34	.33	.35	.33	.34	.33	.34	.31
4	.36	.34	.33	.32	.34	.32	.33	.31	.33	.30
5	.35	.33	.31	.30	.33	.30	.32	.30	.31	.29
6	.34	.32	.30	.29	.32	.29	.31	.29	.31	.28
7	.33	.31	.29	.28	.30	.28	.30	.28	.30	.27
8	.32	.30	.28	.27	.29	.27	.29	.27	.29	.26
9	.31	.29	.27	.26	.28	.26	.28	.26	.28	.25
10	.30	.28	.26	.25	.28	.25	.27	.25	.27	.25

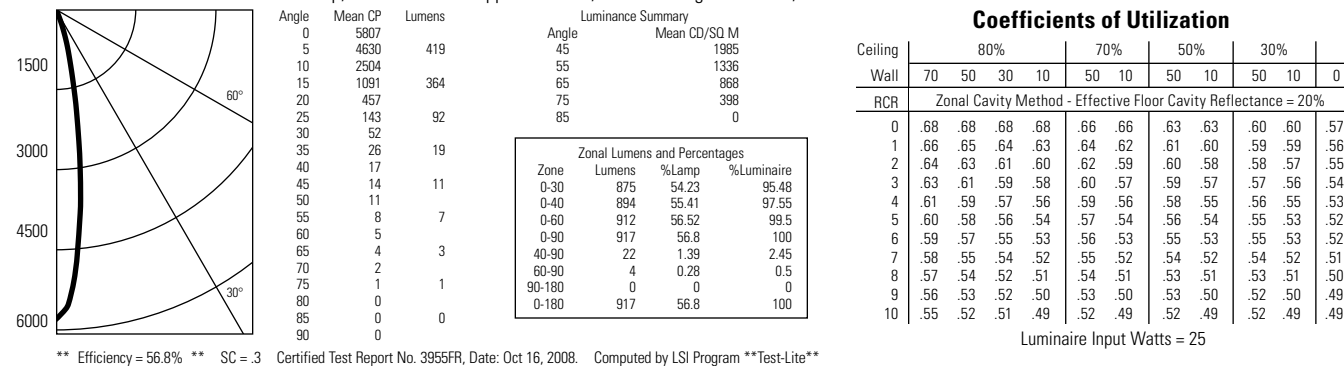
Luminaire Input Watts = 45

\*\* Efficiency = 34.6% \*\* SC = .6 Certified Test Report No. 3937FR, Date: Oct 16, 2008. Computed by LSI Program \*\*Test-Lite\*\*

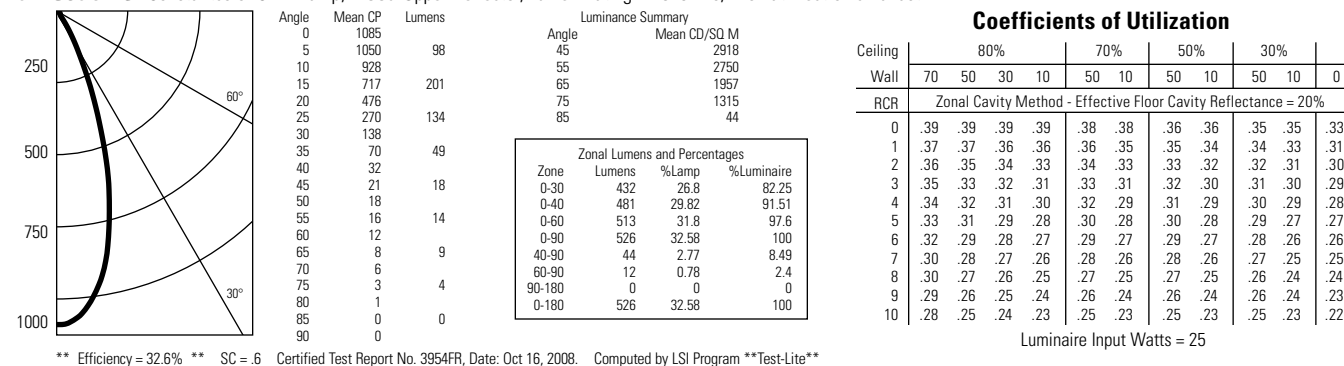
**Job Information** **Type:**

# Calculite® HID Lensed Downlight **C4T4GD-MHT4R**

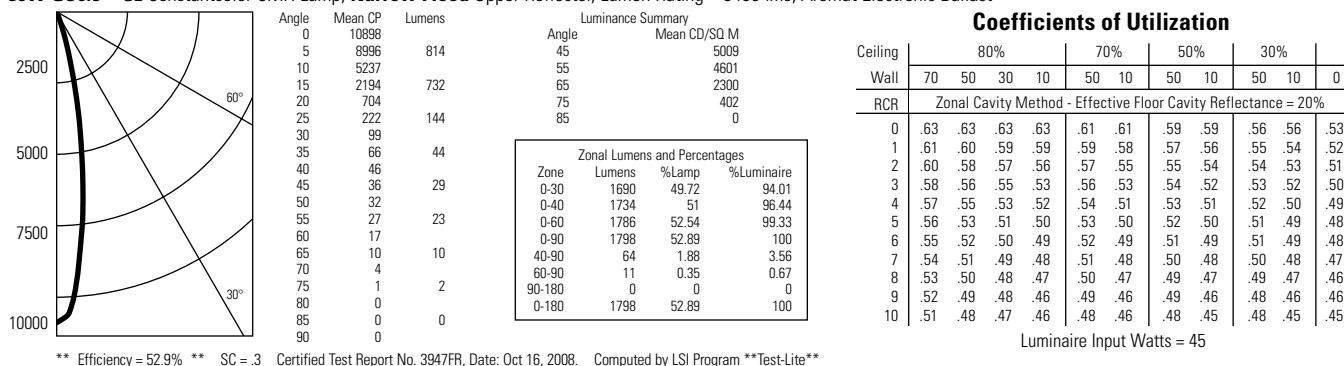
**20W GU6.5** GE Constantcolor CMH Lamp, **Narrow Flood** Upper Reflector, Lumen Rating = 1615 lms, Aromat Electronic Ballast



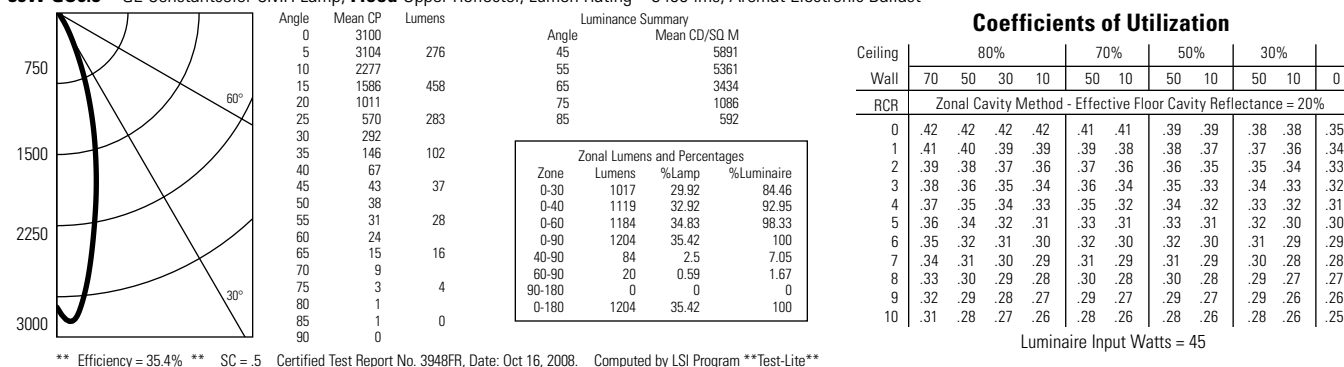
**20W GU6.5** GE Constantcolor CMH Lamp, **Flood** Upper Reflector, Lumen Rating = 1615 lms, Aromat Electronic Ballast



**39W GU6.5** GE Constantcolor CMH Lamp, **Narrow Flood** Upper Reflector, Lumen Rating = 3400 lms, Aromat Electronic Ballast



**39W GU6.5** GE Constantcolor CMH Lamp, **Flood** Upper Reflector, Lumen Rating = 3400 lms, Aromat Electronic Ballast



**Job Information** **Type:**