

Surface Cylinder (Complete Unit)		Housing	Lamping (Ceramic Metal Halide)
<b>C4CIN20T4EU</b>	Electronic 120V/277V	Painted Aluminum	20W T4.5
<b>C4CIN20T4EUA</b>	Electronic 120V/277V	Satin Aluminum	20W T4.5
<b>C4CIN20BT5PGJ5E1</b>	Electronic 120V	Painted Aluminum	22W Philips MiniMasterColor PGJ5
<b>C4CIN20BT5PGJ5E1A</b>	Electronic 120V	Satin Aluminum	22W Philips MiniMasterColor PGJ5
<b>C4CIN20T4GU65EU</b>	Electronic 120V/277V	Painted Aluminum	20W GE ConstantColor
<b>C4CIN20T4GU65EUA</b>	Electronic 120V/277V	Satin Aluminum	20W GE ConstantColor
<hr/>			
<b>C4CIN39T4EU</b>	Electronic 120V/277V	Painted Aluminum	39W T4.5
<b>C4CIN39T4EUA</b>	Electronic 120V/277V	Satin Aluminum	39W T4.5
<b>C4CIN39BT5PGJ5E1</b>	Electronic 120V	Painted Aluminum	39W Philips MiniMasterColor
<b>C4CIN39BT5PGJ5E1A</b>	Electronic 120V	Satin Aluminum	39W Philips MiniMasterColor
<b>C4CIN39T4GU65EU</b>	Electronic 120V/277V	Painted Aluminum	39W GE ConstantColor
<b>C4CIN39T4GU65EUA</b>	Electronic 120V/277V	Satin Aluminum	39W GE ConstantColor

## Features

- 1. Glass Shroud:** Clear glass cylinder provides visual interest and a contemporary decorative element.
- 2. Glass Diffuser:** Etched glass cylindrical diffuser provides cutoff to the light source delivering smooth even illumination.
- 3. Cylinder Base Cover:** Powder coated (to match base) die-cast cover is removable to access wiring and ballast.
- 4. Cylinder Base:** Powder coated matte silver die-cast aluminum base supports glass cylinder and conceals electrical components.
- 5. Reflector:** Highly polished specular aluminum. Precisely controls and directs light downward providing high-efficiency optics.
- 6. Lamp Shield:** High-temperature glass as required by code; captive during re-lamping. Light diffusion provides exceptionally smooth beam.
- 7. Socket:** G8.5 pulse rated socket.
- 8. Electronic Ballast:** 20W / 39W electronic universal (120/277V).

## Electrical

**Electronic Ballast:** 120V/277V dual voltage, 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

## Options and Accessories

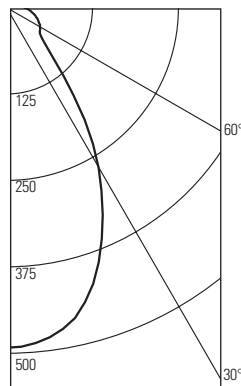
- CA4CWBS:** Wall Mount Kit – Silver Cast aluminum back plate, suitable for mounting over 4" octagon outlet box.
- CACPS:** 120" Cable Pendant Kit – Silver Cast aluminum back plate, suitable for mounting over 4" octagon outlet box. Provided with (3) 0.050" cables, power cable and 6 1/2" decorative plate. Installs over 4" octagon outlet box. Cable can be cut to length on site. Damp location only.
- CACSS:** Stem Kit – Silver (45° Swivel, 37" Long) Provided with 5/8" dia. Stem and 5 1/2" Canopy. Self-aligning swivel provides max. 45° vertical tilting. Installs over 4" octagonal outlet box. Stem can be cut to length on site. Damp location only.

## Labels

UL Listed (Suitable for wet locations), CSA, I.B.E.W.

Job Information	Type:
<b>Job Name:</b>	
<b>Cat. No.:</b>	
<b>Lamp(s):</b>	
<b>Notes:</b>	

**20W T4.5** G.E. Ceramic MH, Lumen Rating = 1700 LMS., Aromat 20W Electronic Ballast



ANGLE	MEAN CP	LUMENS	LUMINANCE SUMMARY - CD. / SQ. M.	
			ANGLE	MEAN CD/SQ M
0	492		45	6702
5	487	46	55	5702
10	472		65	6829
15	441	124	75	9096
20	392		85	20303
25	331	153		
30	268			
35	198	125		
40	129			
45	86	71		
50	66			
55	59	54		
60	56			
65	52	52		
70	48			
75	43	45		
80	37			
85	32	35		
90	26			

ZONAL LUMENS AND PERCENTAGES			
ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	322	19	45.83
0-40	447	26.33	63.51
0-60	572	33.68	81.25
0-90	704	41.45	100
40-90	257	15.12	36.49
60-90	132	7.77	18.75
90-180	0	0	0
0-180	704	41.45	100

**Coefficients of Utilization**

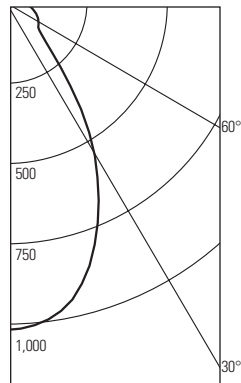
CEILING	80%				70%		50%		30%		
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.49	.49	.49	.49	.48	.48	.46	.46	.44	.44	.41
1	.46	.44	.42	.41	.43	.40	.41	.39	.40	.38	.36
2	.42	.40	.37	.35	.39	.35	.37	.34	.36	.33	.32
3	.40	.36	.33	.31	.35	.31	.34	.30	.33	.30	.29
4	.37	.33	.30	.28	.33	.28	.32	.28	.31	.27	.26
5	.35	.31	.28	.25	.30	.25	.29	.25	.29	.25	.24
6	.33	.29	.25	.23	.28	.23	.27	.23	.27	.23	.22
7	.31	.26	.23	.21	.26	.21	.26	.21	.25	.21	.20
8	.29	.25	.22	.20	.24	.20	.24	.20	.23	.19	.19
9	.28	.23	.20	.18	.23	.18	.22	.18	.22	.18	.17
10	.26	.22	.19	.17	.21	.17	.21	.17	.21	.17	.16

LUMINAIRE INPUT WATTS = 23

\*\* EFFICIENCY = 41.5% \*\*  
SC = .9

CERTIFIED TEST REPORT NO. 2615FR DATE: MAY 7, 2004  
COMPUTED BY LSI PROGRAM \*\*TEST-LITE\*\*

**39W T4.5** Philips Ceramic MH, Lumen Rating = 3300 LMS., Aromat 39W Electronic Ballast



ANGLE	MEAN CP	LUMENS	LUMINANCE SUMMARY - CD. / SQ. M.	
			ANGLE	MEAN CD/SQ M
0	1018		45	13544
5	1007	96	55	11586
10	974		65	13906
15	905	254	75	18535
20	801		85	41710
25	678	313		
30	549			
35	404	254		
40	262			
45	174	144		
50	133			
55	121	110		
60	114			
65	107	106		
70	98			
75	87	92		
80	77			
85	66	72		
90	54			

ZONAL LUMENS AND PERCENTAGES			
ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	662	20.09	46.03
0-40	916	27.79	63.67
0-60	1170	35.47	81.28
0-90	1440	43.64	100
40-90	523	15.85	36.33
60-90	269	8.17	18.72
90-180	0	0	0
0-180	1440	43.64	100

**Coefficients of Utilization**

CEILING	80%				70%		50%		30%		
	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	.52	.52	.52	.52	.51	.51	.48	.48	.46	.46	.44
1	.48	.46	.44	.43	.45	.42	.43	.41	.42	.40	.38
2	.45	.42	.39	.37	.41	.37	.39	.36	.38	.35	.33
3	.42	.38	.35	.33	.37	.32	.36	.32	.35	.31	.30
4	.39	.35	.32	.30	.35	.29	.33	.29	.33	.29	.27
5	.37	.32	.29	.27	.32	.27	.31	.26	.30	.26	.25
6	.35	.30	.27	.25	.30	.24	.29	.24	.28	.24	.23
7	.33	.28	.25	.23	.28	.22	.27	.22	.26	.22	.21
8	.31	.26	.23	.21	.26	.21	.25	.21	.25	.20	.20
9	.29	.24	.21	.19	.24	.19	.24	.19	.23	.19	.18
10	.28	.23	.20	.18	.22	.18	.22	.18	.22	.18	.17

LUMINAIRE INPUT WATTS = 44

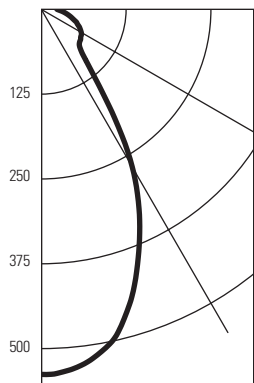
\*\* EFFICIENCY = 43.6% \*\*  
SC = .9

CERTIFIED TEST REPORT NO. 2614FR DATE: MAY 5, 2004  
COMPUTED BY LSI PROGRAM \*\*TEST-LITE\*\*

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



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



Angle	Mean CP	Lumens
0	538	
5	532	50
10	512	
15	472	132
20	411	
25	343	158
30	268	
35	175	114
40	109	
45	81	67
50	74	
55	71	64
60	68	
65	62	61
70	55	
75	46	49
80	38	
85	30	33
90	23	

Zonal Lumens and Percentages			
Zone	Lumens	% Lamp	%Luminaire
0-30	340	20.66	46.78
0-40	455	27.59	62.46
0-60	585	35.49	80.37
0-90	728	44.16	100
40-90	273	16.58	37.54
60-90	143	8.67	19.63
90-180	0	0	0
0-180	728	44.16	100

Luminaire Summary	
Angle	Mean CD/SQ M
45	4324
55	4079
65	3987
75	3479
85	2859

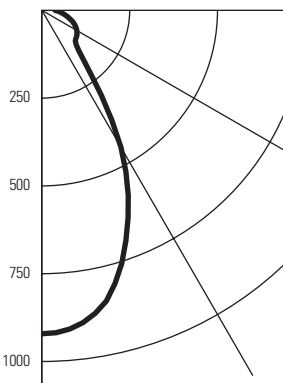
**Coefficients of Utilization**

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	.53	.53	.53	.53	.51	.51	.49	.49	.47	.47	.44
1	.49	.47	.45	.44	.46	.43	.44	.42	.42	.40	.38
2	.45	.42	.40	.37	.41	.37	.40	.36	.38	.35	.34
3	.42	.38	.35	.33	.38	.33	.36	.32	.35	.32	.30
4	.40	.35	.32	.30	.35	.30	.34	.29	.33	.29	.28
5	.37	.33	.29	.27	.32	.27	.31	.27	.30	.26	.25
6	.35	.30	.27	.25	.30	.25	.29	.24	.28	.24	.23
7	.33	.28	.25	.23	.28	.23	.27	.22	.27	.22	.21
8	.31	.26	.23	.21	.26	.21	.25	.21	.25	.21	.20
9	.30	.25	.22	.19	.24	.19	.24	.19	.24	.19	.18
10	.28	.23	.20	.18	.23	.18	.23	.18	.22	.18	.17

Certified Test Report No. 3962FR

\*\* Efficiency 44.20% \*\*  
SC = 0.9

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



Angle	Mean CP	Lumens
0	921	
5	911	86
10	876	
15	805	226
20	699	
25	582	268
30	450	
35	295	192
40	185	
45	138	114
50	126	
55	122	108
60	115	
65	105	103
70	93	
75	78	83
80	64	
85	51	55
90	37	

Zonal Lumens and Percentages			
Zone	Lumens	% Lamp	%Luminaire
0-30	579	19.33	46.93
0-40	772	25.74	62.49
0-60	994	33.14	80.46
0-90	1235	41.18	100
40-90	463	15.45	37.51
60-90	241	8.05	19.54
90-180	0	0	0
0-180	1235	41.18	100

Luminaire Summary	
Angle	Mean CD/SQ M
45	7367
55	7009
65	6752
75	5899
85	4861

**Coefficients of Utilization**

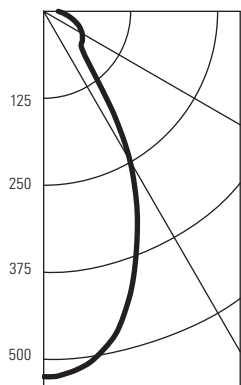
Ceiling	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.49	.49	.49	.49	.48	.48	.46	.46	.44	.44	.41
1	.45	.44	.42	.41	.43	.40	.41	.39	.39	.37	.36
2	.42	.39	.37	.35	.39	.35	.37	.34	.36	.33	.31
3	.39	.36	.33	.31	.35	.31	.34	.30	.33	.30	.28
4	.37	.33	.30	.28	.32	.28	.32	.27	.31	.27	.26
5	.35	.30	.27	.25	.30	.25	.29	.25	.28	.25	.24
6	.33	.28	.25	.23	.28	.23	.27	.23	.27	.23	.22
7	.31	.26	.23	.21	.26	.21	.25	.21	.25	.21	.20
8	.29	.25	.22	.20	.24	.20	.24	.19	.23	.19	.19
9	.28	.23	.20	.18	.23	.18	.22	.18	.22	.18	.17
10	.26	.22	.19	.17	.21	.17	.21	.17	.21	.17	.16

Certified Test Report No. 3961FR

\*\* Efficiency 41.20% \*\*  
SC = 0.9

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

**20W GU6.5** GE ConstantColor CMH Lamp, Lumen Rating = 1615 lms, Aromat Electronic Ballast



Angle	Mean CP	Lumens
0	525	
5	518	49
10	494	
15	449	126
20	385	
25	318	147
30	248	
35	168	108
40	106	
45	79	65
50	71	
55	68	61
60	64	
65	58	58
70	51	
75	43	46
80	35	
85	28	30
90	21	

Zonal Lumens and Percentages			
Zone	Lumens	% Lamp	%Luminaire
0-30	321	19.92	46.65
0-40	430	26.63	62.35
0-60	555	34.43	80.6
0-90	689	42.71	100
40-90	259	16.08	37.65
60-90	133	8.29	19.4
90-180	0	0	0
0-180	689	42.71	100

Luminaire Summary	
Angle	Mean CD/SQ M
45	4217
55	3907
65	3730
75	3252
85	2669

**Coefficients of Utilization**

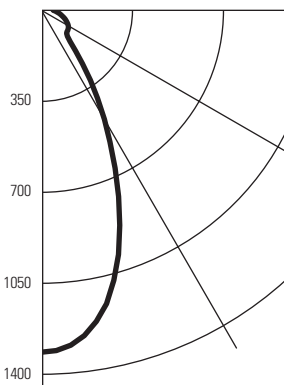
Ceiling	80%				70%		50%		30%		0
	70	50	30	10	50	10	50	10	50	10	
WALL	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	.51	.51	.51	.51	.50	.50	.47	.47	.45	.45	.43
1	.47	.45	.44	.42	.44	.41	.42	.40	.41	.39	.37
2	.44	.41	.38	.36	.40	.36	.39	.35	.37	.34	.33
3	.41	.37	.34	.32	.36	.32	.35	.31	.34	.31	.29
4	.38	.34	.31	.29	.34	.29	.33	.28	.32	.28	.27
5	.36	.32	.28	.26	.31	.26	.30	.26	.29	.25	.24
6	.34	.29	.26	.24	.29	.24	.28	.24	.28	.23	.23
7	.32	.27	.24	.22	.27	.22	.26	.22	.26	.22	.21
8	.30	.25	.22	.20	.25	.20	.25	.20	.24	.20	.19
9	.29	.24	.21	.19	.24	.19	.23	.19	.23	.19	.18
10	.27	.22	.20	.18	.22	.18	.22	.18	.21	.17	.17

Certified Test Report No. 3905FR

\*\* Efficiency 42.7% \*\*

SC = 0.9

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



Angle	Mean CP	Lumens
0	1177	
5	1161	110
10	1104	
15	995	279
20	849	
25	698	323
30	543	
35	368	238
40	236	
45	176	144
50	159	
55	152	136
60	143	
65	131	130
70	117	
75	100	105
80	82	
85	66	72
90	50	

Zonal Lumens and Percentages			
Zone	Lumens	% Lamp	%Luminaire
0-30	711	20.94	46.31
0-40	949	27.94	61.79
0-60	1230	36.19	80.04
0-90	1537	45.21	100
40-90	587	17.28	38.21
60-90	306	9.03	19.96
90-180	0	0	0
0-180	1537	45.21	100

Luminaire Summary	
Angle	Mean CD/SQ M
45	9396
55	8733
65	8424
75	7563
85	6290

**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	.54	.54	.54	.54	.53	.53	.50	.50	.48	.48	.45
1	.50	.48	.46	.44	.47	.44	.45	.42	.43	.41	.39
2	.46	.43	.40	.38	.42	.38	.41	.37	.39	.36	.34
3	.43	.39	.36	.34	.38	.33	.37	.33	.36	.32	.31
4	.41	.36	.33	.30	.36	.30	.34	.30	.33	.29	.28
5	.38	.33	.30	.27	.33	.27	.32	.27	.31	.27	.26
6	.36	.31	.28	.25	.30	.25	.30	.25	.29	.25	.24
7	.34	.29	.25	.23	.28	.23	.28	.23	.27	.23	.22
8	.32	.27	.24	.21	.26	.21	.26	.21	.25	.21	.20
9	.30	.25	.22	.20	.25	.20	.24	.20	.24	.20	.19
10	.29	.24	.20	.18	.23	.18	.23	.18	.23	.18	.18

Certified Test Report No. 3958FR

\*\* Efficiency 45.20% \*\*

SC = 0.9

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