

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P640856

Luminaire Tested: ML5612LSFL4097FS1E - 694WB - 1200LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640856  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-44)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 694WB - 1200LM - 2700K  
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

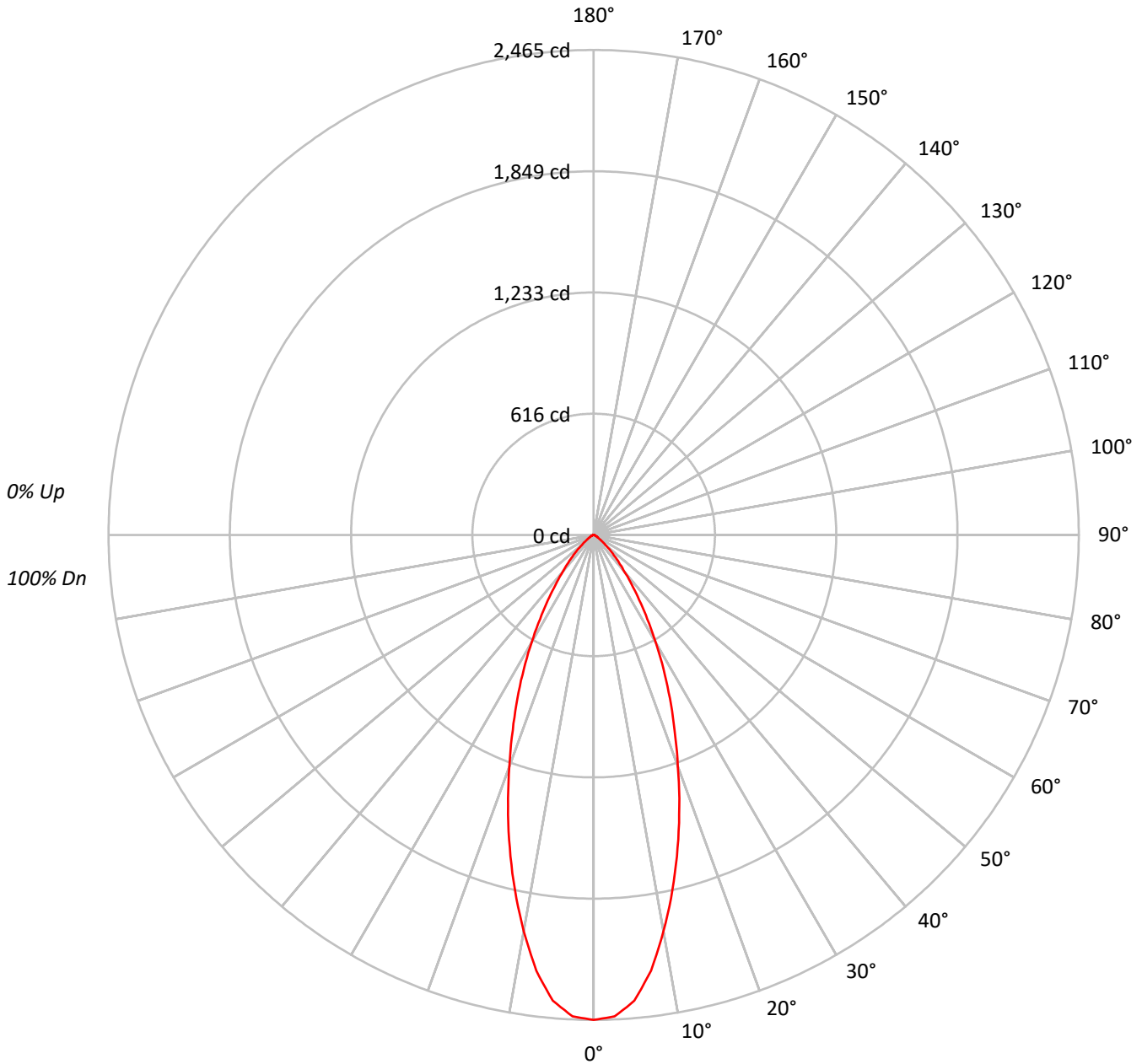
Lumens per Lamp: N/A  
Luminaire Lumens: 1520.2 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	101	98	95	98	95	92	95	93	91	92	90	89	87																			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81																			
4	97	90	85	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76																			
5	93	84	79	74	91	84	78	74	82	77	73	80	76	73	79	75	72	71																			
6	88	79	74	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66																			
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62																			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59																			
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56																			
10	73	64	58	55	72	63	58	54	63	58	54	62	57	54	61	57	54	53																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	135132
5°	130778
10°	113831
15°	93491
20°	72981
25°	55376
30°	39804
35°	27050
40°	17397
45°	11265
50°	6533
55°	3661
60°	2467
65°	1712
70°	1266
75°	1123
80°	410
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11265 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.0	14.2
10°-20°	455.6	30.0
20°-30°	419.4	27.6
30°-40°	256.7	16.9
40°-50°	114.9	7.6
50°-60°	37.9	2.5
60°-70°	14.2	0.9
70°-80°	5.0	0.3
80°-90°	0.5	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1090.9	71.8
0°-40°	1347.6	88.7
0°-60°	1500.4	98.7
0°-90°	1520.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1520.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2465	
5°	2376	216
15°	1647	456
25°	916	419
35°	404	257
45°	145	115
55°	38	38
65°	13	14
75°	5	5
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2465.0
2.5°	2449.2
5°	2376.5
7.5°	2233.8
10°	2044.9
12.5°	1849.4
15°	1647.3
17.5°	1446.5
20°	1251.0
22.5°	1074.0
25°	915.5
27.5°	767.5
30°	628.8
32.5°	507.3
35°	404.2
37.5°	317.0
40°	243.1
42.5°	190.2
45°	145.3
47.5°	107.0
50°	76.6
52.5°	54.2
55°	38.3
57.5°	29.1
60°	22.5
62.5°	18.5
65°	13.2
67.5°	10.6
70°	7.9
72.5°	6.6
75°	5.3
77.5°	2.6
80°	1.3
82.5°	1.3
85°	0.0
87.5°	0.0
90°	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)