

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: P640772

Luminaire Tested: ML5612LSFL4097FS1E - 692W - 600LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640772  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-39)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSFL4097FS1E - 692W - 600LM - 3000K  
Description: ML56 RR, 40D TIR OPTIC, 6" WHITE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

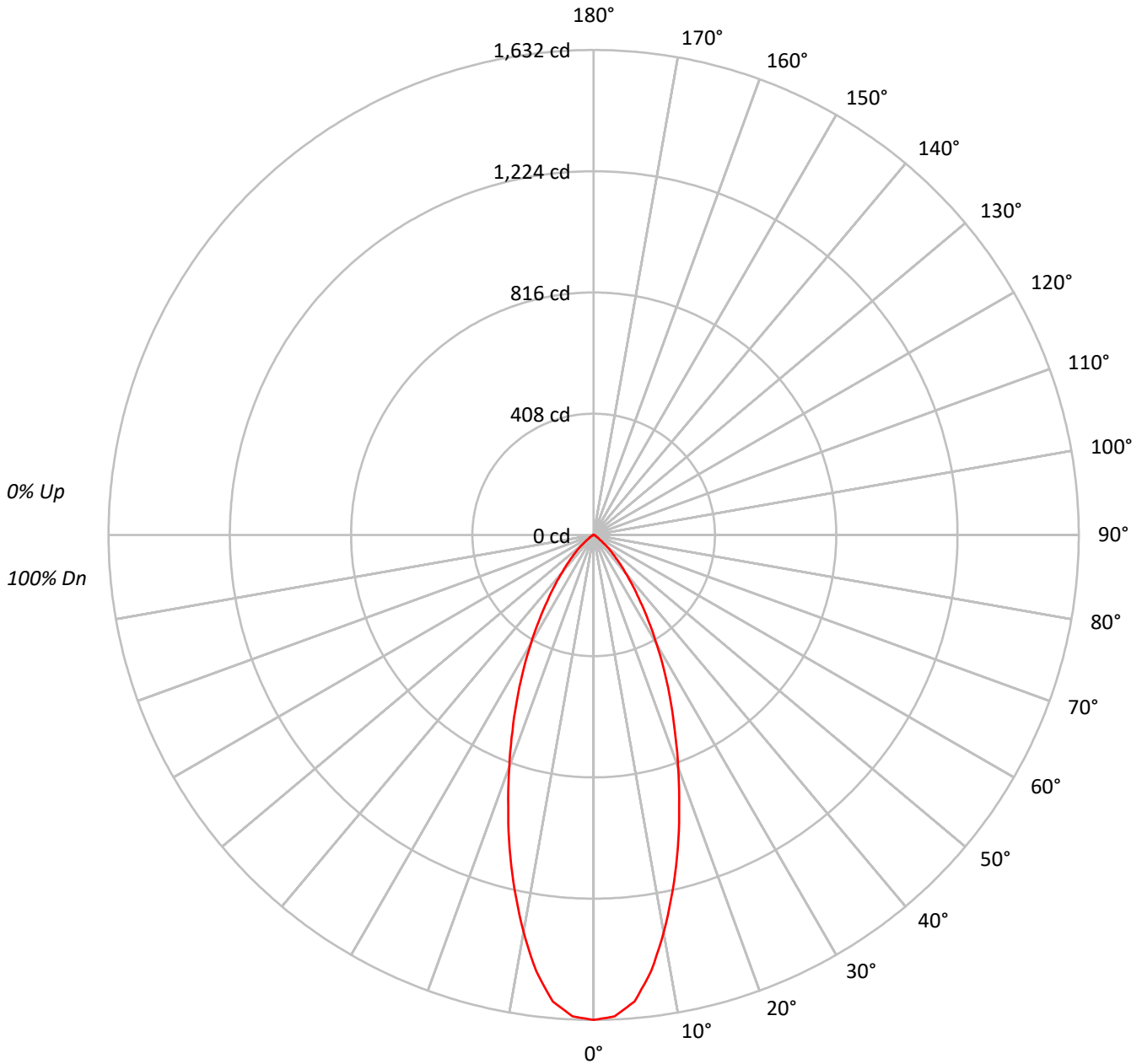
Lumens per Lamp: N/A  
Luminaire Lumens: 1001.5 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.3  
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				20				
RC	80				70				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	100	98	98	96	95	94			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87			
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76			
5	93	85	79	75	91	84	79	75	82	78	74	81	76	73	79	75	73	71			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67			
7	84	75	70	65	83	75	69	65	73	69	65	72	68	65	71	67	64	63			
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59			
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56			
10	74	64	59	55	73	64	58	55	63	58	55	62	58	55	62	57	54	53			

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

	0°
0°	89467
5°	86732
10°	75566
15°	62061
20°	48444
25°	36855
30°	26726
35°	18310
40°	11887
45°	7388
50°	3880
55°	1759
60°	1151
65°	675
70°	417
75°	360
80°	537
85°	566

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7388 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.2	14.3
10°-20°	302.0	30.2
20°-30°	279.3	27.9
30°-40°	173.6	17.3
40°-50°	76.3	7.6
50°-60°	18.8	1.9
60°-70°	5.5	0.5
70°-80°	2.2	0.2
80°-90°	0.7	0.1
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°	724.5	72.3
0°-40°	898.1	89.7
0°-60°	993.2	99.2
0°-90°	1001.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1632	
5°	1576	143
15°	1094	302
25°	609	279
35°	274	174
45°	95	76
55°	18	19
65°	5	5
75°	2	2
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1632.0
2.5°	1621.5
5°	1576.1
7.5°	1480.8
10°	1357.5
12.5°	1226.4
15°	1093.5
17.5°	956.3
20°	830.4
22.5°	713.3
25°	609.3
27.5°	512.2
30°	422.2
32.5°	342.7
35°	273.6
37.5°	215.0
40°	166.1
42.5°	128.5
45°	95.3
47.5°	70.8
50°	45.5
52.5°	24.5
55°	18.4
57.5°	14.0
60°	10.5
62.5°	7.9
65°	5.2
67.5°	2.6
70°	2.6
72.5°	2.6
75°	1.7
77.5°	1.7
80°	1.7
82.5°	0.9
85°	0.9
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)