

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: P641994

Luminaire Tested: ML5612LSWFL5597FS1E - 593BB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641994  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-52)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 593BB - 900LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" BLACK BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1348.2 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

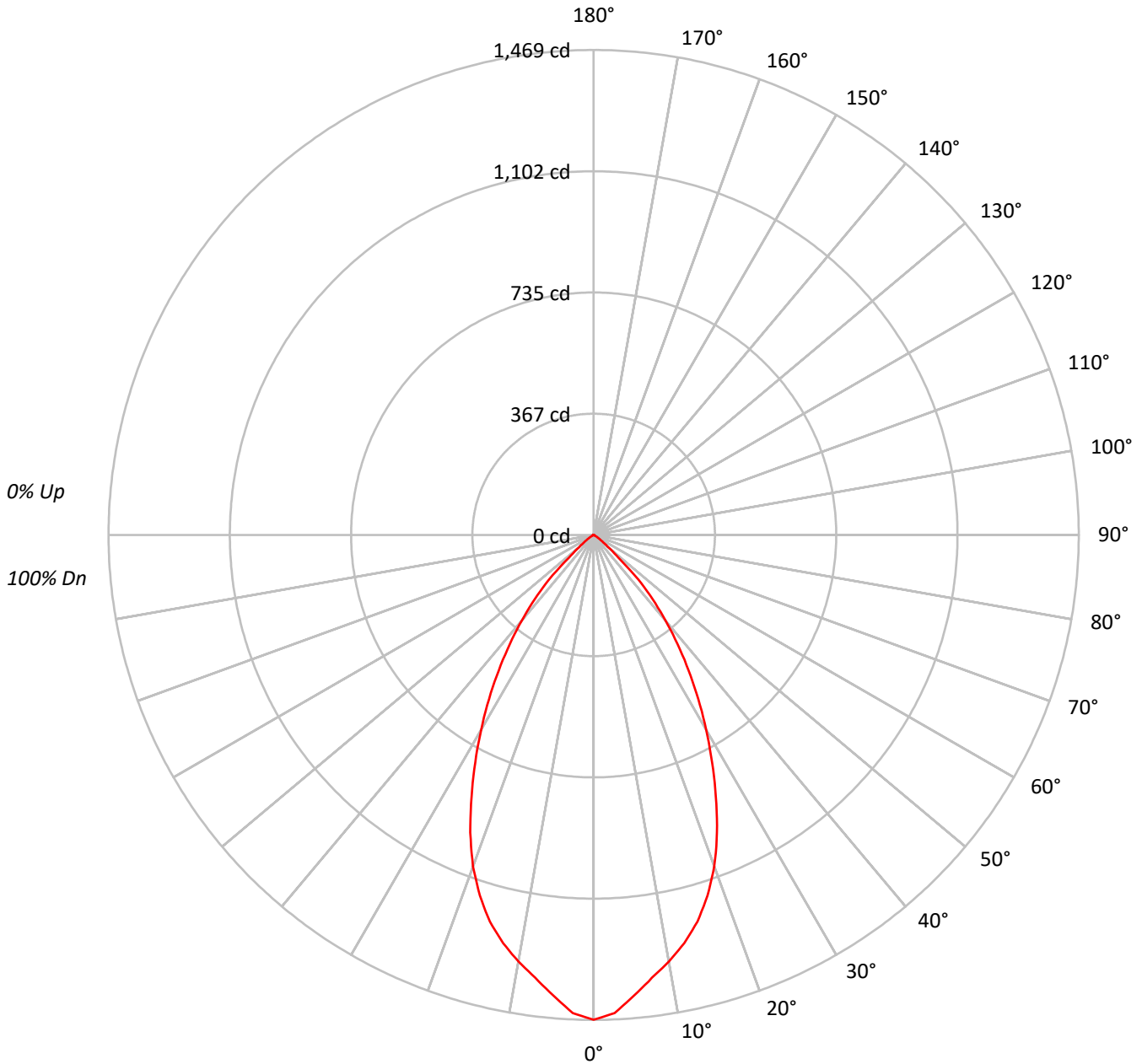
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	83	81	79			
4	96	88	83	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73			
5	91	82	76	72	89	81	76	71	80	75	71	78	74	70	76	73	70	68			
6	86	77	71	66	85	76	70	66	75	69	65	73	69	65	72	68	65	63			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	68	63	60	59			
8	77	68	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55			
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51			
10	70	60	54	50	69	59	54	50	59	53	50	58	53	49	57	53	49	48			

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

	0°
0°	115933
5°	110971
10°	105192
15°	99141
20°	89720
25°	76275
30°	62075
35°	48291
40°	34769
45°	21323
50°	7012
55°	3069
60°	789
65°	224
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21323 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.9	9.7
10°-20°	337.8	25.1
20°-30°	400.0	29.7
30°-40°	312.4	23.2
40°-50°	142.9	10.6
50°-60°	22.7	1.7
60°-70°	1.5	0.1
70°-80°	0.0	0.0
80°-90°	0.0	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°	868.8	64.4
0°-40°	1181.2	87.6
0°-60°	1346.7	99.9
0°-90°	1348.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1348.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1469	
5°	1400	131
15°	1213	338
25°	876	400
35°	501	312
45°	191	143
55°	22	23
65°	1	2
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1468.6
2.5°	1450.0
5°	1400.4
7.5°	1353.2
10°	1312.3
12.5°	1266.4
15°	1213.1
17.5°	1146.1
20°	1068.0
22.5°	976.2
25°	875.7
27.5°	776.5
30°	681.0
32.5°	589.2
35°	501.1
37.5°	416.8
40°	337.4
42.5°	264.2
45°	191.0
47.5°	101.7
50°	57.1
52.5°	36.0
55°	22.3
57.5°	13.6
60°	5.0
62.5°	2.5
65°	1.2
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
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)