

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: P641169

Luminaire Tested: ML5612LSNFL2597FS1E - 693TBZB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641169  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-20)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 693TBZB - 900LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1253.9 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

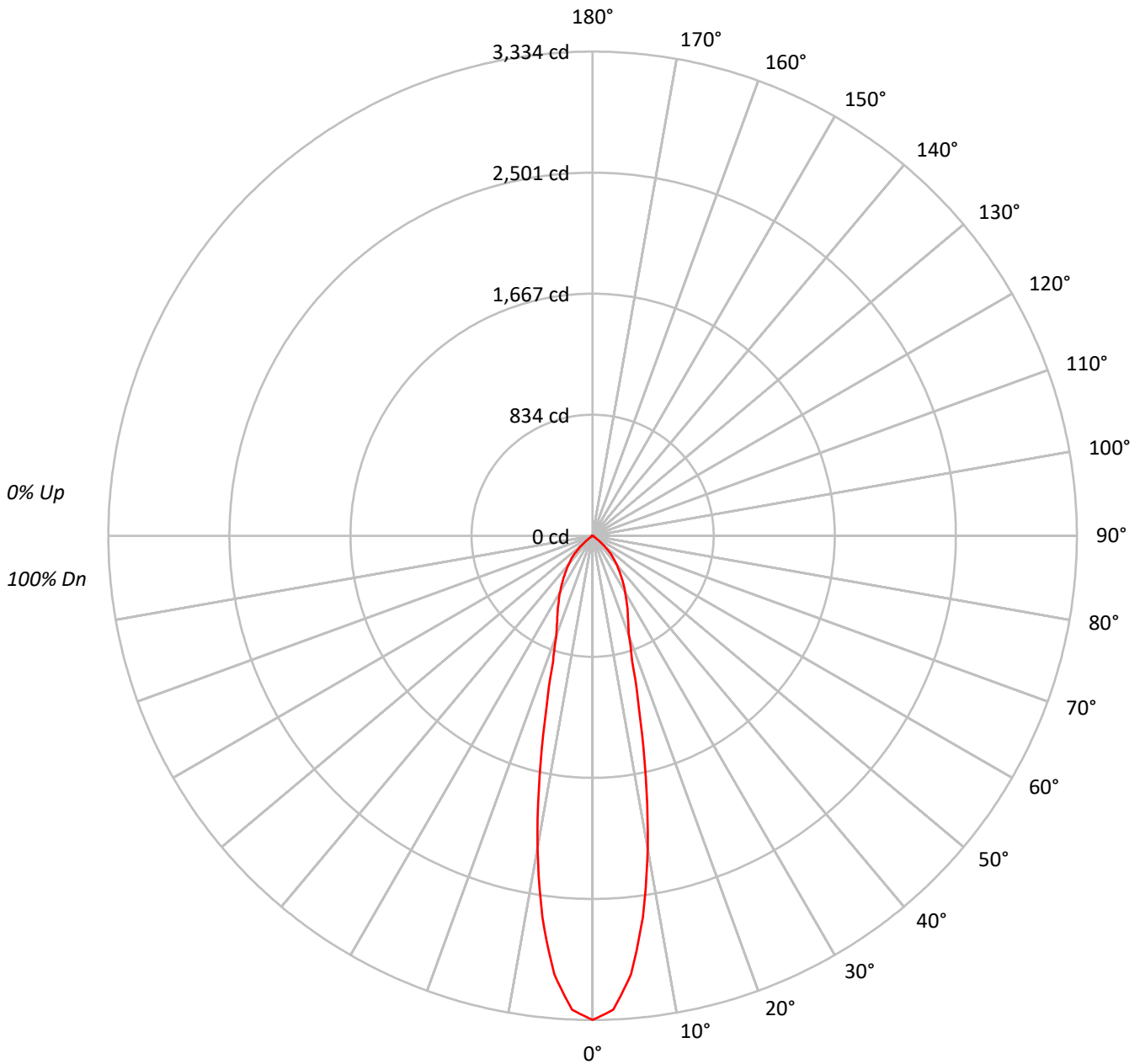
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	108	104	100	97	106	102	99	96	99	96	93	96	94	91	93	91	90	88																			
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	89	86	84	82																			
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77																			
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	72																			
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68																			
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65																			
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	63	61																			
9	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58																			
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56																			

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

	0°
0°	182749
5°	166723
10°	121686
15°	69637
20°	42488
25°	34448
30°	28352
35°	23001
40°	18198
45°	13947
50°	7087
55°	1778
60°	1085
65°	480
70°	192
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13947 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.8	20.9
10°-20°	351.9	28.1
20°-30°	262.3	20.9
30°-40°	215.5	17.2
40°-50°	132.7	10.6
50°-60°	25.2	2.0
60°-70°	4.1	0.3
70°-80°	0.5	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°	876.0	69.9
0°-40°	1091.5	87.0
0°-60°	1249.4	99.6
0°-90°	1253.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1253.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3334	
5°	3030	262
15°	1227	352
25°	570	262
35°	344	215
45°	180	133
55°	19	25
65°	4	4
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3333.6
2.5°	3266.6
5°	3029.7
7.5°	2650.0
10°	2186.0
12.5°	1681.1
15°	1227.0
17.5°	905.7
20°	728.3
22.5°	636.5
25°	569.5
27.5°	504.9
30°	447.9
32.5°	394.5
35°	343.7
37.5°	297.8
40°	254.3
42.5°	217.1
45°	179.9
47.5°	129.0
50°	83.1
52.5°	37.2
55°	18.6
57.5°	12.4
60°	9.9
62.5°	6.2
65°	3.7
67.5°	1.2
70°	1.2
72.5°	1.2
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)