

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: P640958

Luminaire Tested: ML5612LSNFL2597FS1E - 593BB - 900LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640958  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 593BB - 900LM - 3500K  
Description: ML56 RR, 25D TIR OPTIC, 5" BLACK BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

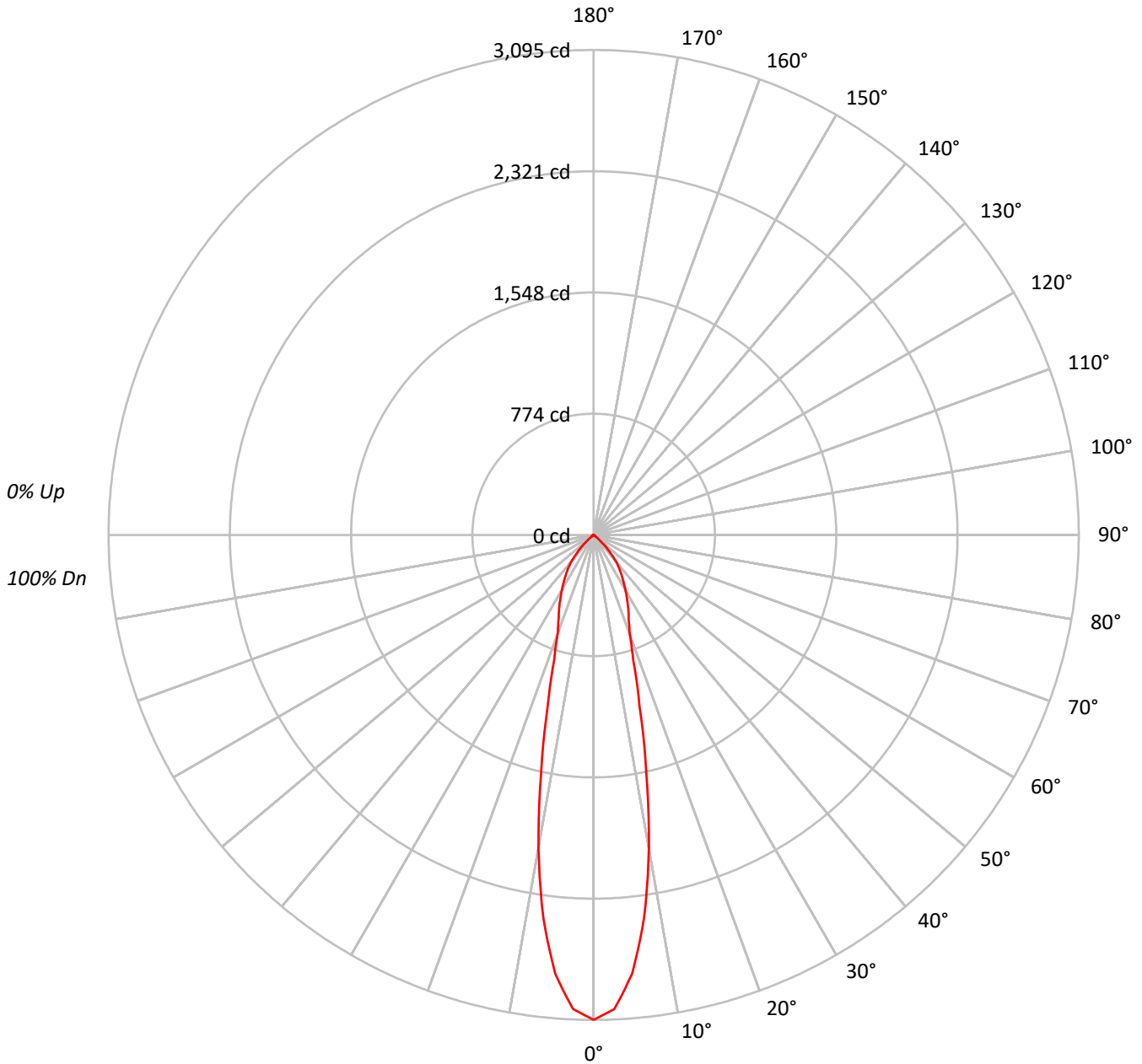
Lumens per Lamp: N/A  
Luminaire Lumens: 1103.6 lumens  
Efficiency: N/A  
Efficacy: 83.0 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.43  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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									
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	112	109	107	105	105	104	102	102	100	99	98	97	96	94																			
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89																			
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	83																			
4	99	92	87	83	98	91	86	83	89	85	82	87	84	81	85	82	80	79																			
5	95	87	82	78	93	86	81	78	85	80	77	83	79	76	81	78	76	74																			
6	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	72	70																			
7	87	78	73	69	86	78	73	69	77	72	69	75	71	68	74	71	68	67																			
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	65	63																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60																			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58																			

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

	0°
0°	244298
5°	222743
10°	162634
15°	92383
20°	56302
25°	45511
30°	36908
35°	29682
40°	22826
45°	13140
50°	3119
55°	1431
60°	1089
65°	430
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13140 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.1	22.0
10°-20°	324.9	29.4
20°-30°	240.2	21.8
30°-40°	192.8	17.5
40°-50°	89.0	8.1
50°-60°	11.0	1.0
60°-70°	2.6	0.2
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°	808.2	73.2
0°-40°	1001.0	90.7
0°-60°	1101.0	99.8
0°-90°	1103.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1103.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3095	
5°	2811	243
15°	1130	325
25°	522	240
35°	308	193
45°	118	89
55°	10	11
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3094.7
2.5°	3028.9
5°	2810.9
7.5°	2464.9
10°	2028.9
12.5°	1549.1
15°	1130.4
17.5°	837.4
20°	670.2
22.5°	584.8
25°	522.5
27.5°	461.4
30°	404.9
32.5°	354.1
35°	308.0
37.5°	266.4
40°	221.5
42.5°	164.9
45°	117.7
47.5°	64.6
50°	25.4
52.5°	15.0
55°	10.4
57.5°	8.1
60°	6.9
62.5°	3.5
65°	2.3
67.5°	1.2
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)