

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: P643838

Luminaire Tested: ML5615LSWFL559FS1E - 593TBZB - 900LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643838  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-54)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 593TBZB - 900LM - 3500K  
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1151.7 lumens  
Efficiency: N/A  
Efficacy: 109.7 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

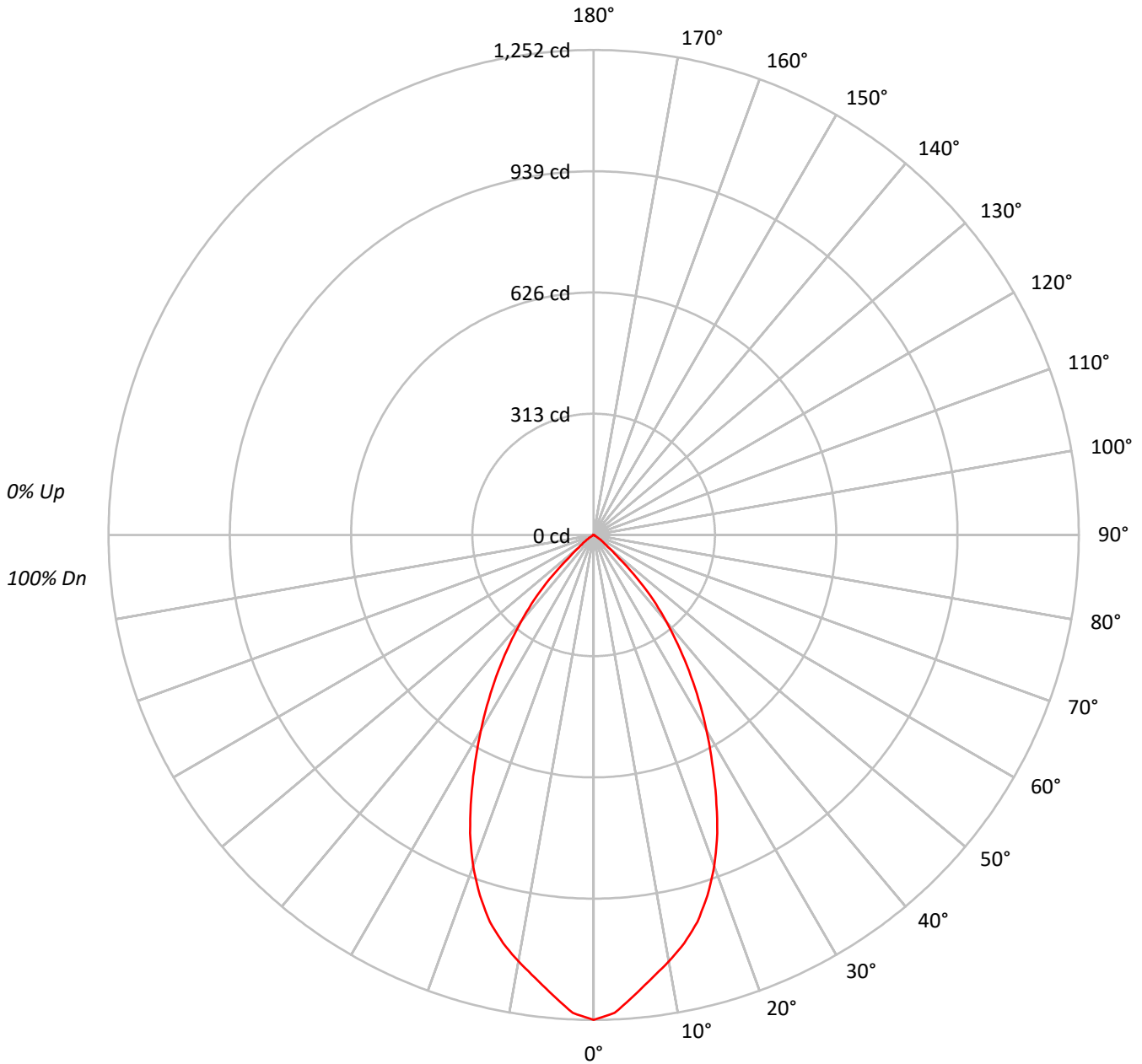
Input Watts (W): 10.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	73	70	76	72	69	68			
6	86	77	71	66	85	76	70	66	75	69	65	73	68	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	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55			
9	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51			
10	70	60	54	50	69	59	54	50	58	53	49	58	53	49	57	52	49	48			

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

	0°
0°	98834
5°	94608
10°	89601
15°	84529
20°	76421
25°	65056
30°	53060
35°	41333
40°	29833
45°	17929
50°	6104
55°	2766
60°	837
65°	205
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17929 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.6	9.7
10°-20°	287.8	25.0
20°-30°	341.3	29.6
30°-40°	267.3	23.2
40°-50°	122.2	10.6
50°-60°	20.0	1.7
60°-70°	1.4	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°	740.8	64.3
0°-40°	1008.0	87.5
0°-60°	1150.2	99.9
0°-90°	1151.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1151.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1252	
5°	1194	112
15°	1034	288
25°	747	341
35°	429	267
45°	161	122
55°	20	20
65°	1	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1252.0
2.5°	1235.1
5°	1193.9
7.5°	1153.7
10°	1117.8
12.5°	1079.7
15°	1034.3
17.5°	976.2
20°	909.7
22.5°	833.6
25°	746.9
27.5°	662.4
30°	582.1
32.5°	504.0
35°	428.9
37.5°	356.0
40°	289.5
42.5°	227.1
45°	160.6
47.5°	87.7
50°	49.7
52.5°	31.7
55°	20.1
57.5°	11.6
60°	5.3
62.5°	2.1
65°	1.1
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)