

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: P643837

Luminaire Tested: ML5615LSWFL559FS1E - 593TBZB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643837  
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 - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1121.1 lumens  
Efficiency: N/A  
Efficacy: 106.8 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

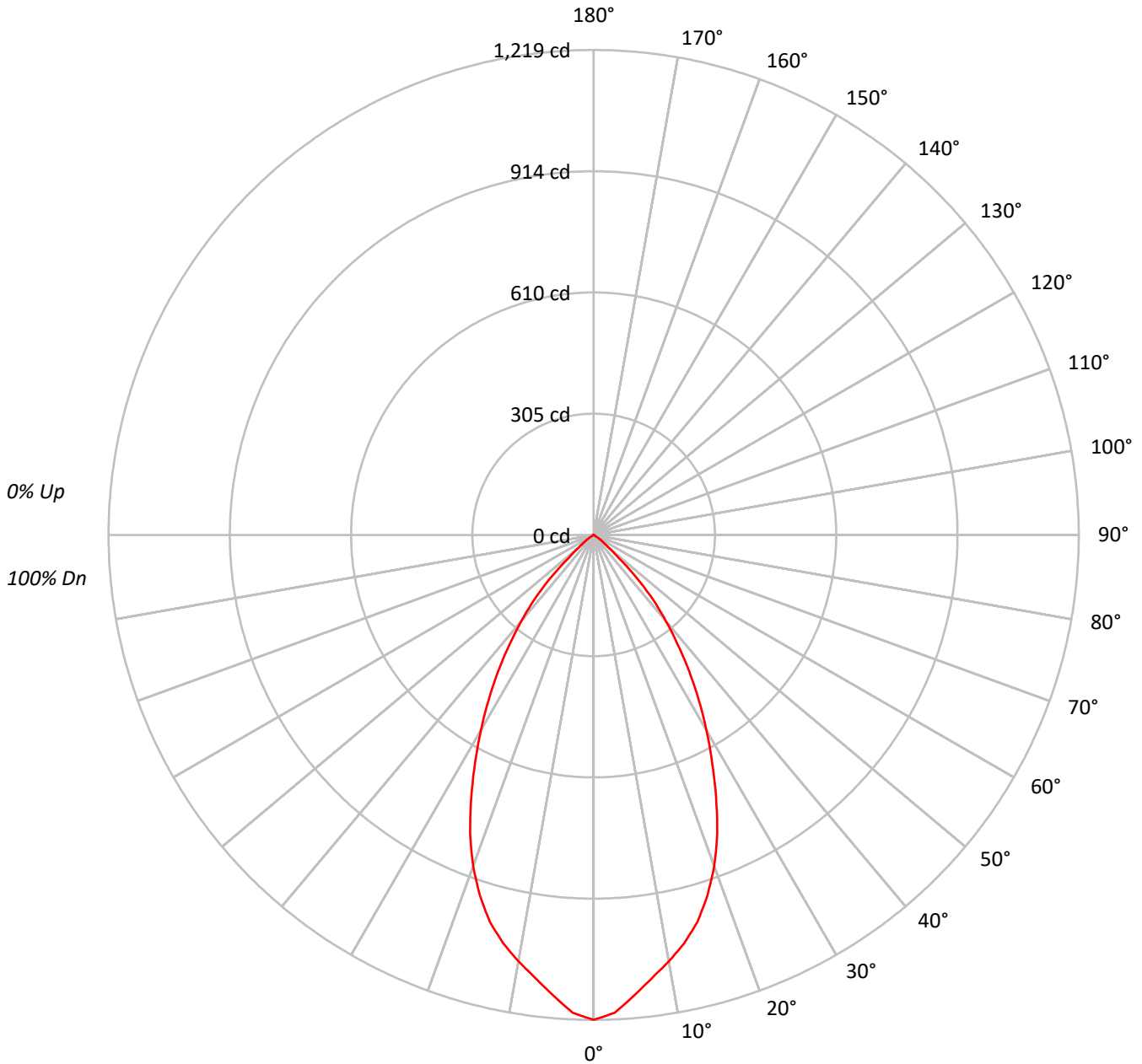
Input Watts (W): 10.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	96213
5°	92096
10°	87229
15°	82290
20°	74388
25°	63340
30°	51656
35°	40244
40°	29040
45°	17449
50°	5932
55°	2684
60°	805
65°	187
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17449 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.6	9.7
10°-20°	280.2	25.0
20°-30°	332.3	29.6
30°-40°	260.2	23.2
40°-50°	118.9	10.6
50°-60°	19.5	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°	721.2	64.3
0°-40°	981.3	87.5
0°-60°	1119.7	99.9
0°-90°	1121.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1121.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1219	
5°	1162	109
15°	1007	280
25°	727	332
35°	418	260
45°	156	119
55°	20	19
65°	1	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1218.8
2.5°	1202.3
5°	1162.2
7.5°	1123.1
10°	1088.2
12.5°	1051.1
15°	1006.9
17.5°	950.3
20°	885.5
22.5°	811.5
25°	727.2
27.5°	644.9
30°	566.7
32.5°	490.6
35°	417.6
37.5°	346.6
40°	281.8
42.5°	221.1
45°	156.3
47.5°	85.4
50°	48.3
52.5°	30.9
55°	19.5
57.5°	11.3
60°	5.1
62.5°	2.1
65°	1.0
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)