

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: P643824

Luminaire Tested: ML5615LSWFL559FS1E - 593SNB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643824  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-53)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 593SNB - 900LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" SATIN NICKLE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

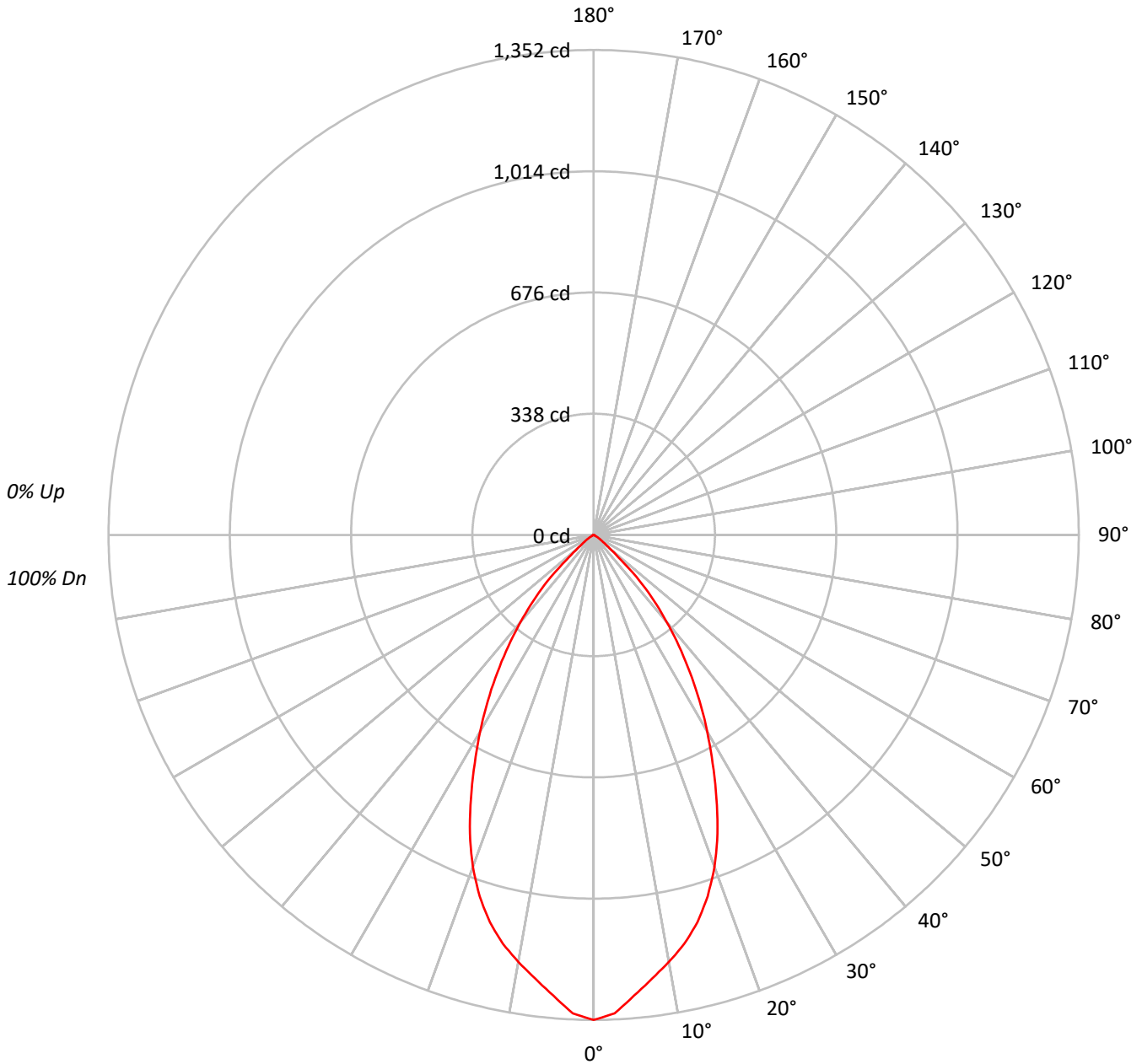
Lumens per Lamp: N/A  
Luminaire Lumens: 1257.3 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	108	106	111	108	106	104	104	102	101	100	99	98	97	96	95	93					93			
2	107	102	98	94	105	101	97	93	97	94	91	94	92	89	91	89	88	86					86			
3	102	95	90	85	100	93	89	85	91	87	83	88	85	82	86	83	81	79					79			
4	96	88	82	78	94	87	82	77	85	80	76	83	79	76	81	77	75	73					73			
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68					68			
6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	71	67	64	63					63			
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58					58			
8	77	67	61	57	76	67	61	56	65	60	56	64	60	56	63	59	56	54					54			
9	73	63	57	53	72	63	57	53	62	56	53	61	56	52	60	55	52	51					51			
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48					48			

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

	0°
0°	106728
5°	102175
10°	96888
15°	91345
20°	82722
25°	70518
30°	57627
35°	45033
40°	32687
45°	20307
50°	6988
55°	3289
60°	1263
65°	430
70°	254
75°	336
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 20307 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.6	9.6
10°-20°	311.3	24.8
20°-30°	369.7	29.4
30°-40°	291.6	23.2
40°-50°	136.6	10.9
50°-60°	23.7	1.9
60°-70°	3.0	0.2
70°-80°	0.7	0.1
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°	801.7	63.8
0°-40°	1093.3	87.0
0°-60°	1253.5	99.7
0°-90°	1257.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1352	
5°	1289	121
15°	1118	311
25°	810	370
35°	467	292
45°	182	137
55°	24	24
65°	2	3
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1352.0
2.5°	1334.9
5°	1289.4
7.5°	1247.3
10°	1208.7
12.5°	1167.8
15°	1117.7
17.5°	1056.3
20°	984.7
22.5°	901.7
25°	809.6
27.5°	717.5
30°	632.2
32.5°	549.2
35°	467.3
37.5°	390.0
40°	317.2
42.5°	249.0
45°	181.9
47.5°	102.3
50°	56.9
52.5°	36.4
55°	23.9
57.5°	14.8
60°	8.0
62.5°	4.5
65°	2.3
67.5°	1.1
70°	1.1
72.5°	1.1
75°	1.1
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)