

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: P644004

Luminaire Tested: ML5615LSWFL559FS1E - 693SNB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644004  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-65)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 693SNB - 900LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

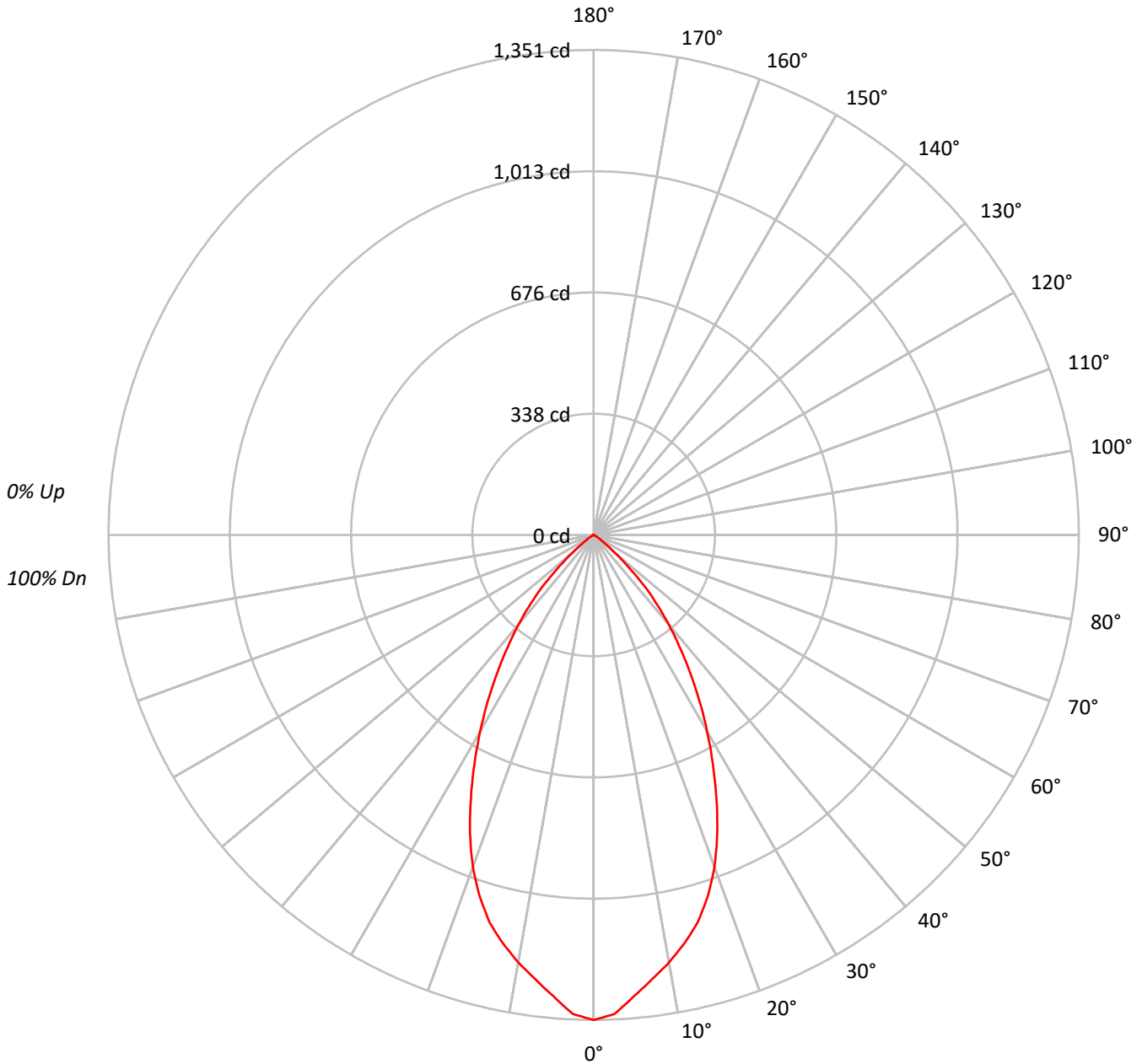
Lumens per Lamp: N/A  
Luminaire Lumens: 1273.2 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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									
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	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86																			
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81	79																			
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73																			
5	91	82	76	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67																			
6	86	76	70	65	84	75	70	65	74	69	65	72	68	64	71	67	64	62																			
7	81	71	65	60	80	71	65	60	69	64	60	68	63	60	67	63	59	58																			
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	55	54																			
9	73	63	57	52	72	62	56	52	61	56	52	60	55	52	60	55	52	50																			
10	69	59	53	49	68	59	53	49	58	52	49	57	52	49	56	52	48	47																			

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

	0°
0°	74084
5°	70988
10°	67311
15°	63462
20°	57405
25°	48922
30°	39968
35°	31287
40°	23201
45°	15079
50°	6499
55°	2389
60°	1118
65°	298
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15079 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.7	9.5
10°-20°	311.2	24.4
20°-30°	369.5	29.0
30°-40°	292.4	23.0
40°-50°	148.4	11.7
50°-60°	27.8	2.2
60°-70°	3.2	0.3
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°	801.4	62.9
0°-40°	1093.8	85.9
0°-60°	1270.0	99.7
0°-90°	1273.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1273.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1351	
5°	1290	121
15°	1118	311
25°	809	370
35°	468	292
45°	194	148
55°	25	28
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1351.4
2.5°	1335.5
5°	1290.0
7.5°	1247.9
10°	1209.2
12.5°	1166.0
15°	1118.2
17.5°	1055.7
20°	984.0
22.5°	899.8
25°	808.8
27.5°	718.9
30°	631.4
32.5°	548.3
35°	467.5
37.5°	392.5
40°	324.2
42.5°	258.2
45°	194.5
47.5°	127.4
50°	76.2
52.5°	41.0
55°	25.0
57.5°	17.1
60°	10.2
62.5°	4.6
65°	2.3
67.5°	1.1
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)