

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: P644000

Luminaire Tested: ML5615LSWFL559FS1E - 693SNB - 1500LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644000  
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 - 1500LM - 5000K  
Description: ML56 RR, 55D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

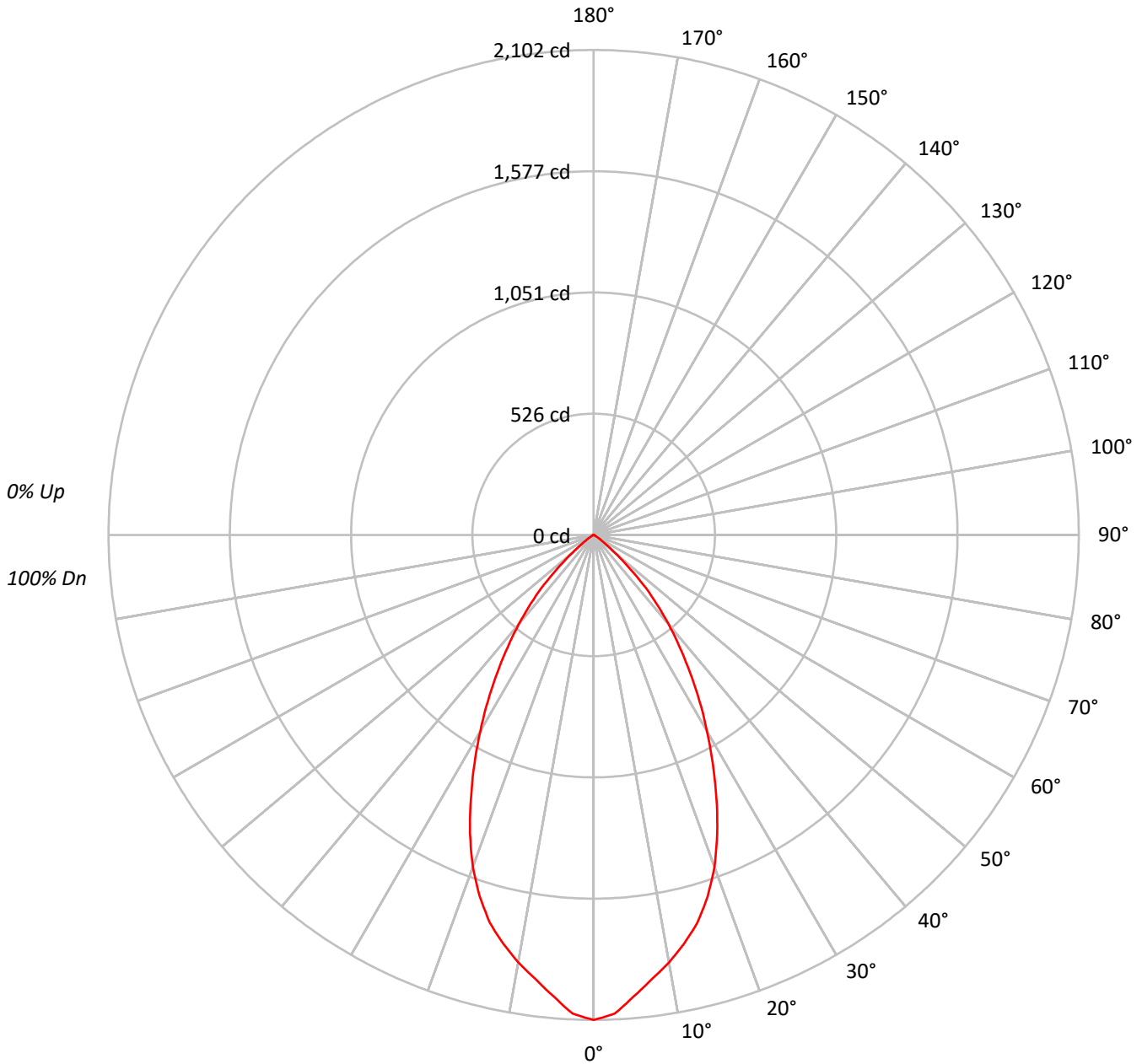
Lumens per Lamp: N/A  
Luminaire Lumens: 1980.5 lumens  
Efficiency: N/A  
Efficacy: 115.8 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.1  
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				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			100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86			86
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81	79			79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73			73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67			67
6	86	76	70	65	84	75	70	65	74	69	65	72	68	64	71	67	64	62			62
7	81	71	65	60	80	71	65	60	69	64	60	68	63	60	67	63	59	58			58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	55	54			54
9	73	63	57	52	72	62	56	52	61	56	52	60	55	52	60	55	52	50			50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	49	56	52	48	47			47

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

	0°
0°	115243
5°	110422
10°	104707
15°	98718
20°	89293
25°	76099
30°	62168
35°	48673
40°	36089
45°	23460
50°	10115
55°	3718
60°	1743
65°	454
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 23460 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.7	9.5
10°-20°	484.0	24.4
20°-30°	574.8	29.0
30°-40°	454.9	23.0
40°-50°	230.9	11.7
50°-60°	43.3	2.2
60°-70°	5.0	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°	1246.6	62.9
0°-40°	1701.5	85.9
0°-60°	1975.6	99.7
0°-90°	1980.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1980.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2102	
5°	2007	188
15°	1739	484
25°	1258	575
35°	727	455
45°	303	231
55°	39	43
65°	4	5
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2102.2
2.5°	2077.4
5°	2006.6
7.5°	1941.1
10°	1881.0
12.5°	1813.7
15°	1739.4
17.5°	1642.1
20°	1530.6
22.5°	1399.7
25°	1258.1
27.5°	1118.3
30°	982.1
32.5°	852.9
35°	727.3
37.5°	610.5
40°	504.3
42.5°	401.7
45°	302.6
47.5°	198.2
50°	118.6
52.5°	63.7
55°	38.9
57.5°	26.5
60°	15.9
62.5°	7.1
65°	3.5
67.5°	1.8
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)