

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: P643850

Luminaire Tested: ML5615LSWFL559FS1E - 593WB - 1500LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643850  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-51)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 593WB - 1500LM - 5000K  
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

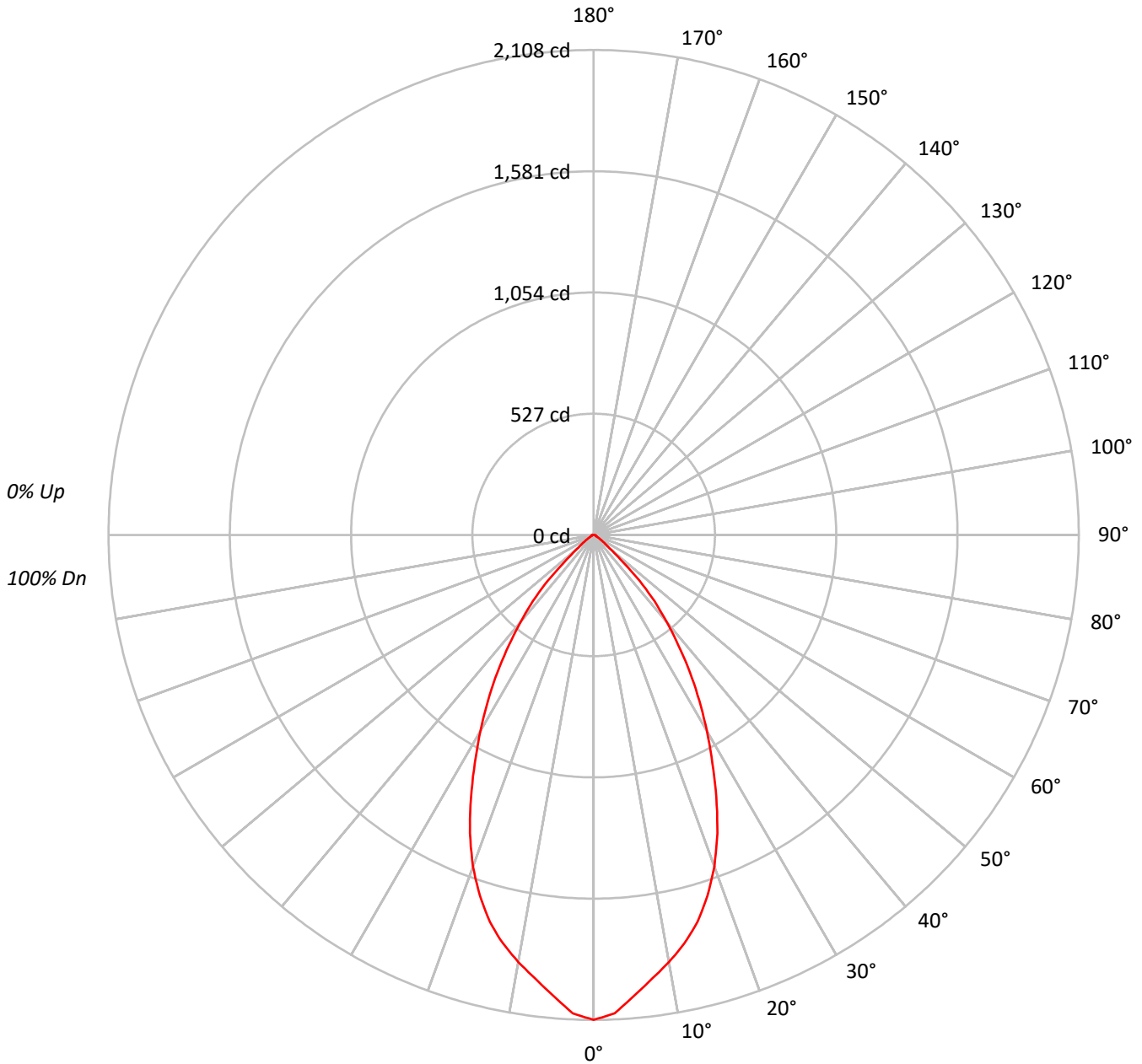
Lumens per Lamp: N/A  
Luminaire Lumens: 1982.3 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.1  
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			100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79			79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72			72
5	90	81	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67			67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62			62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58			58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54			54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50			50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47			47

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

	0°
0°	166400
5°	159325
10°	151099
15°	142350
20°	128800
25°	109818
30°	89622
35°	70215
40°	50845
45°	31583
50°	11299
55°	6083
60°	3079
65°	2316
70°	2447
75°	2166
80°	2409
85°	3170

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 31583 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.1	9.5
10°-20°	485.0	24.5
20°-30°	575.7	29.0
30°-40°	453.5	22.9
40°-50°	213.1	10.7
50°-60°	42.9	2.2
60°-70°	12.9	0.7
70°-80°	8.2	0.4
80°-90°	3.1	0.2
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°	1248.8	63.0
0°-40°	1702.3	85.9
0°-60°	1958.2	98.8
0°-90°	1982.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1982.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2108	
5°	2011	188
15°	1742	485
25°	1261	576
35°	729	453
45°	283	213
55°	44	43
65°	12	13
75°	7	8
85°	4	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2107.9
2.5°	2081.3
5°	2010.6
7.5°	1945.2
10°	1885.0
12.5°	1819.6
15°	1741.8
17.5°	1644.6
20°	1533.2
22.5°	1404.1
25°	1260.8
27.5°	1117.6
30°	983.2
32.5°	854.1
35°	728.6
37.5°	604.8
40°	493.4
42.5°	390.8
45°	282.9
47.5°	157.4
50°	92.0
52.5°	63.7
55°	44.2
57.5°	30.1
60°	19.5
62.5°	14.1
65°	12.4
67.5°	10.6
70°	10.6
72.5°	8.8
75°	7.1
77.5°	7.1
80°	5.3
82.5°	3.5
85°	3.5
87.5°	1.8
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)