

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: P644029

Luminaire Tested: ML5615LSWFL559FS1E - 693WB - 1500LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644029  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-63)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 693WB - 1500LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 6" WHITE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1995.7 lumens  
Efficiency: N/A  
Efficacy: 116.7 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

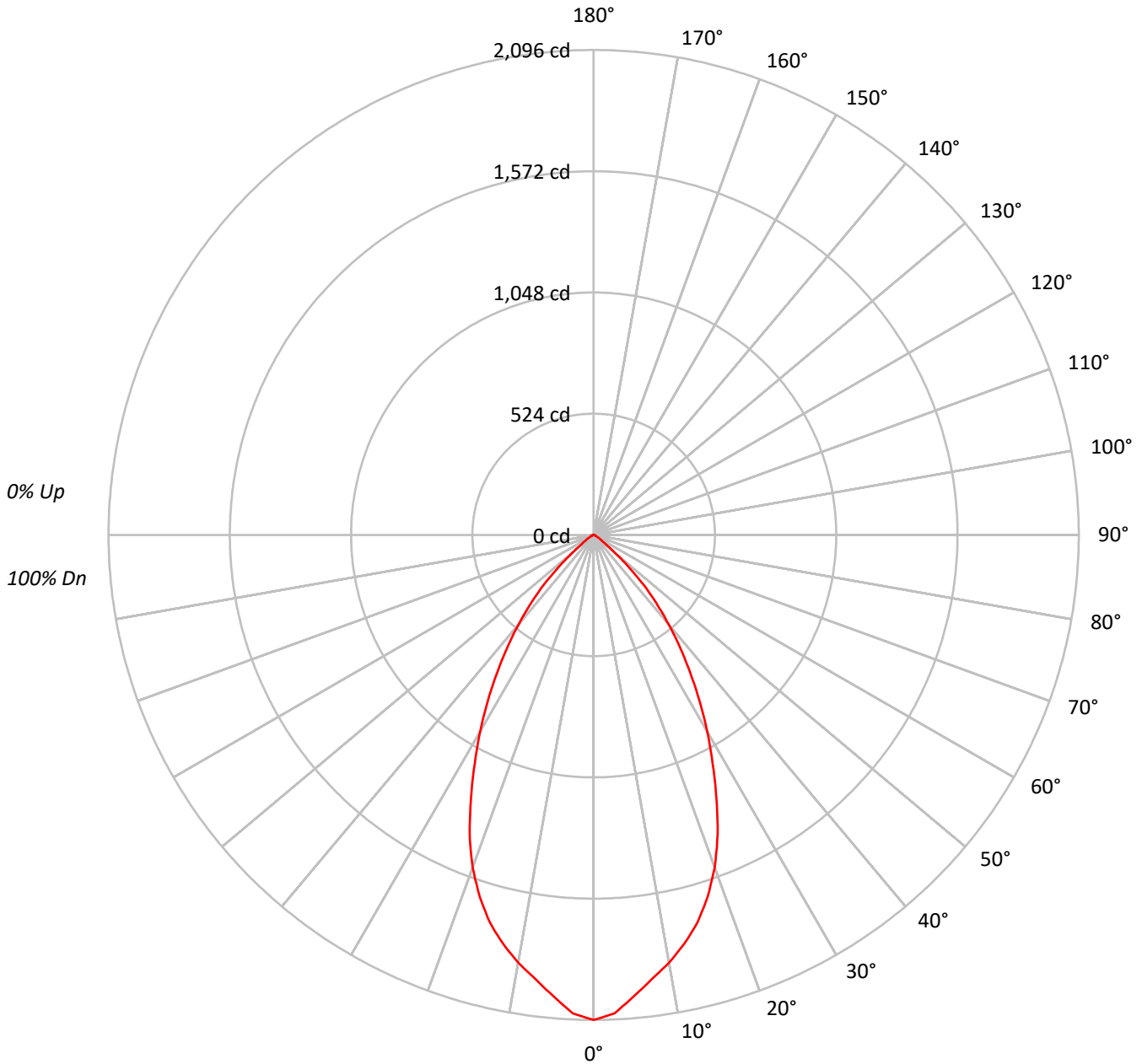
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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			100																
1	113	110	108	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	85	83	80	78			78																
4	96	87	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72			72																
5	90	81	75	71	89	80	75	70	79	73	70	77	72	69	75	71	68	67			67																
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	67	63	62			62																
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57			57																
8	77	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53			53																
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50			50																
10	69	59	53	49	68	58	52	48	57	52	48	57	52	48	56	51	48	47			47																

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

	0°
0°	114903
5°	110087
10°	104474
15°	98394
20°	89182
25°	75900
30°	62086
35°	48606
40°	36046
45°	23700
50°	10251
55°	4224
60°	2324
65°	1141
70°	1138
75°	1123
80°	1105
85°	1132

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 23700 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.2	9.4
10°-20°	482.9	24.2
20°-30°	573.6	28.7
30°-40°	454.6	22.8
40°-50°	231.8	11.6
50°-60°	47.2	2.4
60°-70°	10.5	0.5
70°-80°	5.6	0.3
80°-90°	2.4	0.1
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°	1243.7	62.3
0°-40°	1698.3	85.1
0°-60°	1977.3	99.1
0°-90°	1995.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1995.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2096	
5°	2000	187
15°	1734	483
25°	1255	574
35°	726	455
45°	306	232
55°	44	47
65°	9	10
75°	5	6
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2096.0
2.5°	2069.5
5°	2000.5
7.5°	1935.1
10°	1876.8
12.5°	1809.7
15°	1733.7
17.5°	1638.2
20°	1528.7
22.5°	1399.7
25°	1254.8
27.5°	1113.4
30°	980.8
32.5°	851.8
35°	726.3
37.5°	611.5
40°	503.7
42.5°	401.2
45°	305.7
47.5°	199.7
50°	120.2
52.5°	67.2
55°	44.2
57.5°	31.8
60°	21.2
62.5°	12.4
65°	8.8
67.5°	7.1
70°	7.1
72.5°	5.3
75°	5.3
77.5°	5.3
80°	3.5
82.5°	3.5
85°	1.8
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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Scaled Data Report



(END OF REPORT)