

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: P644015

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

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644015  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-66)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 693TBZB - 1500LM - 5000K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1961.1 lumens  
Efficiency: N/A  
Efficacy: 114.7 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

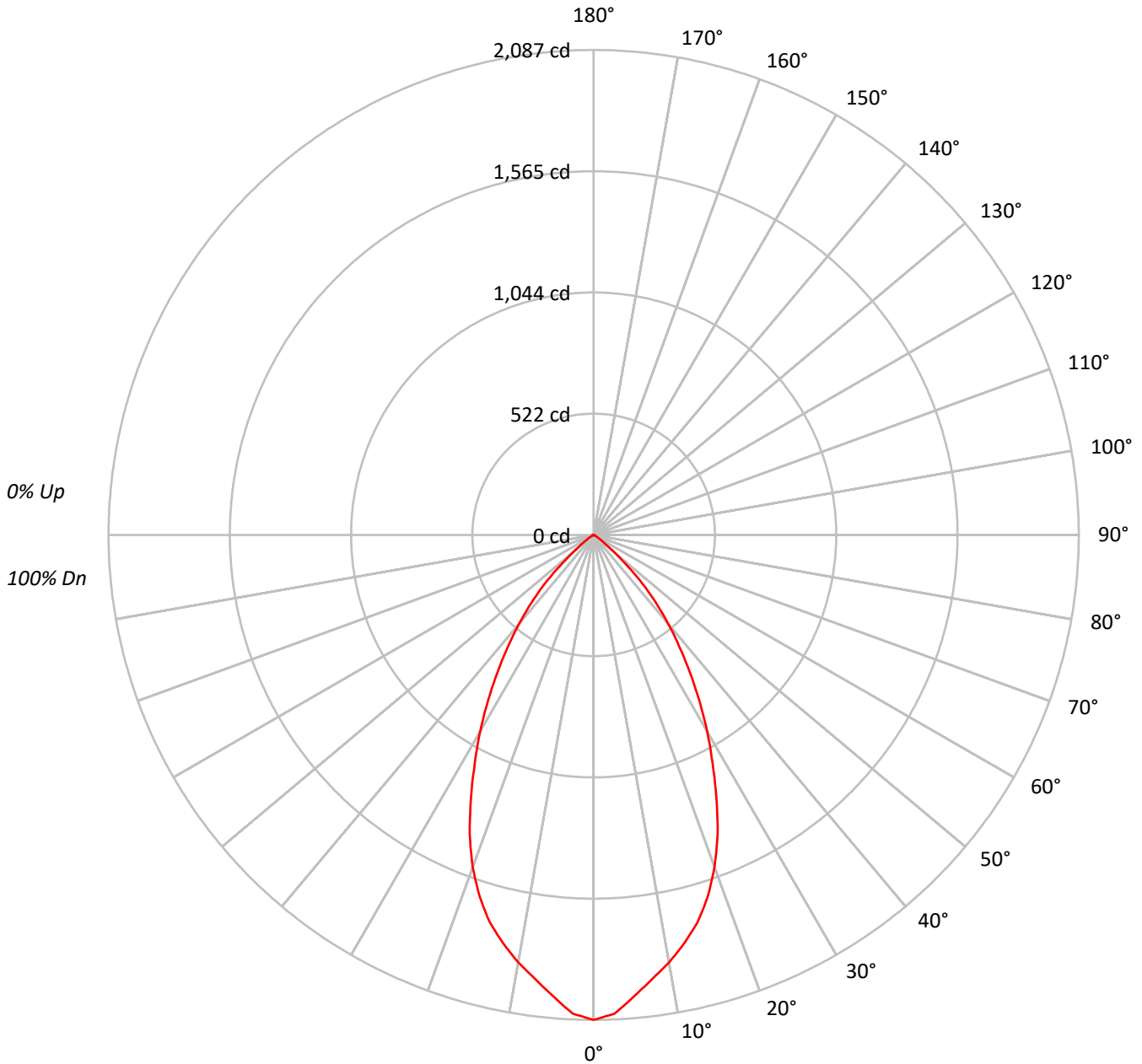
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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	70	76	72	69	67				67															
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62				62															
7	81	71	65	61	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	56	52	60	55	52	50				50															
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47				47															

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

	0°
0°	114393
5°	109674
10°	103950
15°	97952
20°	88721
25°	75518
30°	61788
35°	48165
40°	35688
45°	23173
50°	9654
55°	3546
60°	1546
65°	454
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 23173 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.4	9.5
10°-20°	480.7	24.5
20°-30°	570.8	29.1
30°-40°	450.7	23.0
40°-50°	227.0	11.6
50°-60°	40.9	2.1
60°-70°	4.7	0.2
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°	1237.8	63.1
0°-40°	1688.5	86.1
0°-60°	1956.4	99.8
0°-90°	1961.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2087	
5°	1993	186
15°	1726	481
25°	1248	571
35°	720	451
45°	299	227
55°	37	41
65°	4	5
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2086.7
2.5°	2061.9
5°	1993.0
7.5°	1927.5
10°	1867.4
12.5°	1800.2
15°	1725.9
17.5°	1632.2
20°	1520.8
22.5°	1393.5
25°	1248.5
27.5°	1107.0
30°	976.1
32.5°	845.3
35°	719.7
37.5°	604.8
40°	498.7
42.5°	396.1
45°	298.9
47.5°	192.8
50°	113.2
52.5°	60.1
55°	37.1
57.5°	24.8
60°	14.1
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)