

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: P643880

Luminaire Tested: ML5615LSWFL559FS1E - 594TBZB - 1500LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643880  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-57)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 594TBZB - 1500LM - 5000K  
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2010.6 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

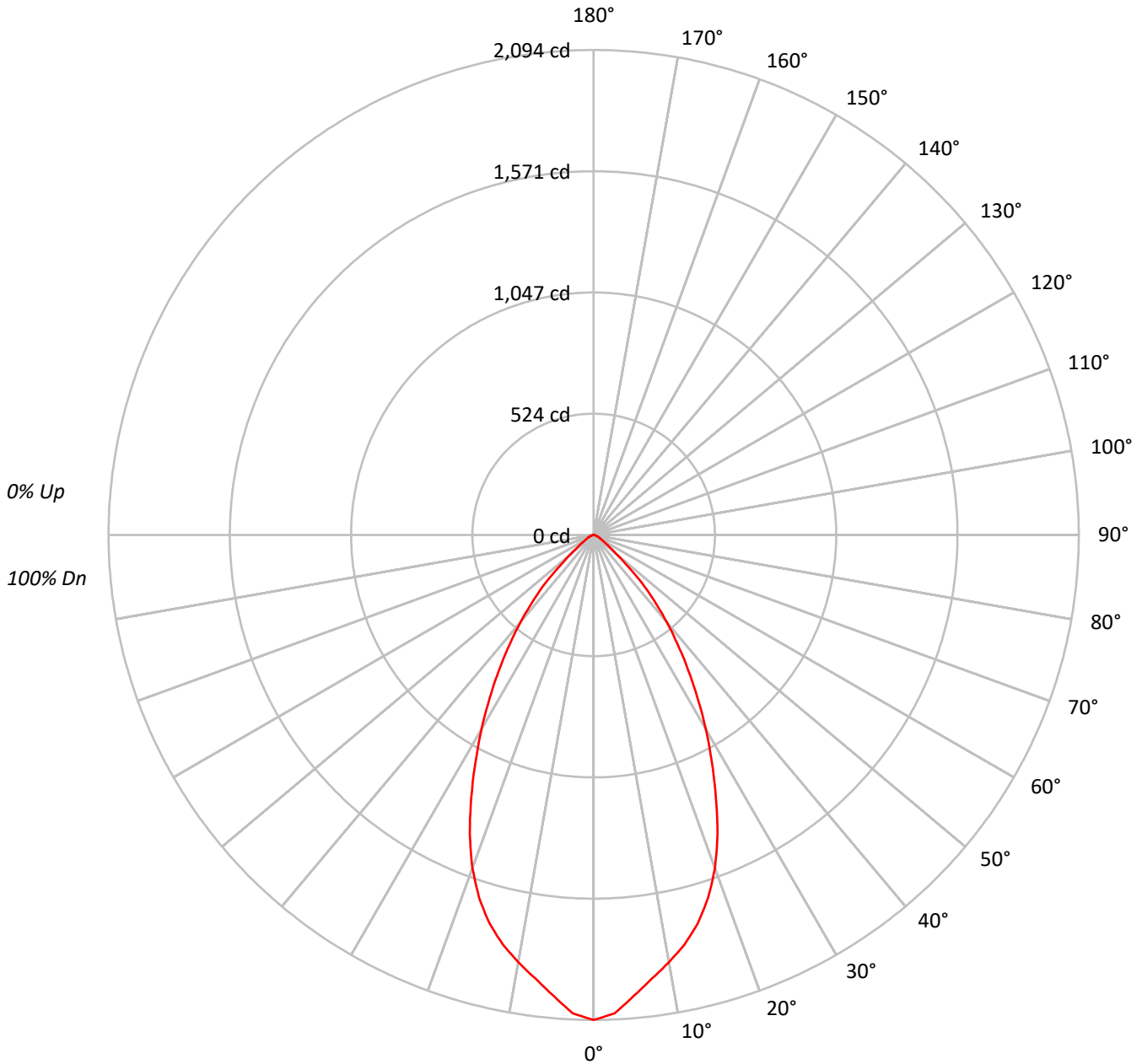
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	110	108	105	103	104	102	100	100	98	97	97	95	94				92
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87				85
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80				78
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73				72
5	90	81	74	70	88	80	74	70	78	73	69	76	72	68	75	71	68				66
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63				61
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58				57
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54				53
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51				49
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47				46

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

	0°
0°	165310
5°	158239
10°	150145
15°	141949
20°	128523
25°	108764
30°	88191
35°	68518
40°	50484
45°	33168
50°	16076
55°	8519
60°	5589
65°	4632
70°	3670
75°	2684
80°	1591
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 33168 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.8	9.3
10°-20°	483.6	24.1
20°-30°	570.6	28.4
30°-40°	444.7	22.1
40°-50°	227.4	11.3
50°-60°	61.9	3.1
60°-70°	25.1	1.2
70°-80°	9.5	0.5
80°-90°	1.0	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°	1241.0	61.7
0°-40°	1685.7	83.8
0°-60°	1975.0	98.2
0°-90°	2010.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2094	
5°	1997	187
15°	1737	484
25°	1249	571
35°	711	445
45°	297	227
55°	62	62
65°	25	25
75°	9	10
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2094.1
2.5°	2067.6
5°	1996.9
7.5°	1931.4
10°	1873.1
12.5°	1811.2
15°	1736.9
17.5°	1643.1
20°	1529.9
22.5°	1397.3
25°	1248.7
27.5°	1103.7
30°	967.5
32.5°	834.8
35°	711.0
37.5°	594.3
40°	489.9
42.5°	390.9
45°	297.1
47.5°	196.3
50°	130.9
52.5°	88.4
55°	61.9
57.5°	46.0
60°	35.4
62.5°	30.1
65°	24.8
67.5°	21.2
70°	15.9
72.5°	12.4
75°	8.8
77.5°	5.3
80°	3.5
82.5°	1.8
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)