

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: P644038

Luminaire Tested: ML5615LSWFL559FS1E - 694TBZB - 1200LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644038  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-68)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 694TBZB - 1200LM - 3500K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1520.7 lumens  
Efficiency: N/A  
Efficacy: 113.5 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

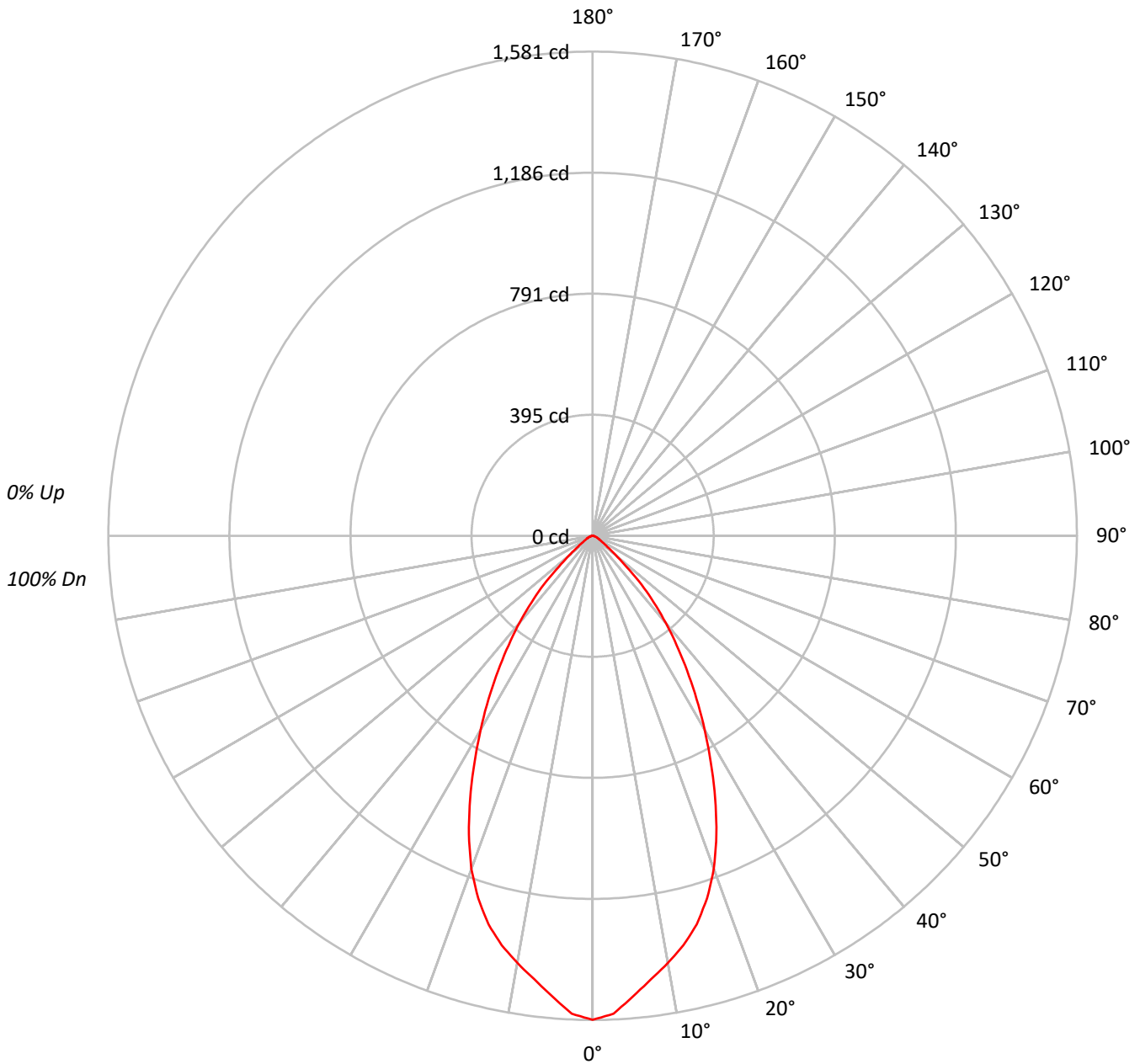
Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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

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

	0°
0°	86649
5°	83084
10°	78840
15°	74541
20°	67503
25°	57221
30°	46267
35°	35944
40°	26578
45°	17506
50°	8435
55°	4473
60°	2927
65°	2426
70°	1923
75°	1419
80°	852
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17506 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.2	9.3
10°-20°	365.6	24.0
20°-30°	431.6	28.4
30°-40°	336.5	22.1
40°-50°	172.2	11.3
50°-60°	46.8	3.1
60°-70°	19.0	1.2
70°-80°	7.2	0.5
80°-90°	0.7	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°	938.4	61.7
0°-40°	1274.9	83.8
0°-60°	1493.8	98.2
0°-90°	1520.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1520.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1581	
5°	1510	141
15°	1313	366
25°	946	432
35°	537	336
45°	226	172
55°	47	47
65°	19	19
75°	7	7
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1580.6
2.5°	1561.9
5°	1509.8
7.5°	1460.4
10°	1416.3
12.5°	1369.5
15°	1313.4
17.5°	1241.3
20°	1157.1
22.5°	1055.5
25°	946.0
27.5°	835.1
30°	730.9
32.5°	632.0
35°	537.1
37.5°	450.3
40°	371.4
42.5°	295.3
45°	225.8
47.5°	148.3
50°	98.9
52.5°	66.8
55°	46.8
57.5°	34.7
60°	26.7
62.5°	22.7
65°	18.7
67.5°	16.0
70°	12.0
72.5°	9.4
75°	6.7
77.5°	4.0
80°	2.7
82.5°	1.3
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)