

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: P644049

Luminaire Tested: ML5615LSWFL559FS1E - 694TBZB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644049  
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 - 900LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1293.7 lumens  
Efficiency: N/A  
Efficacy: 123.2 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

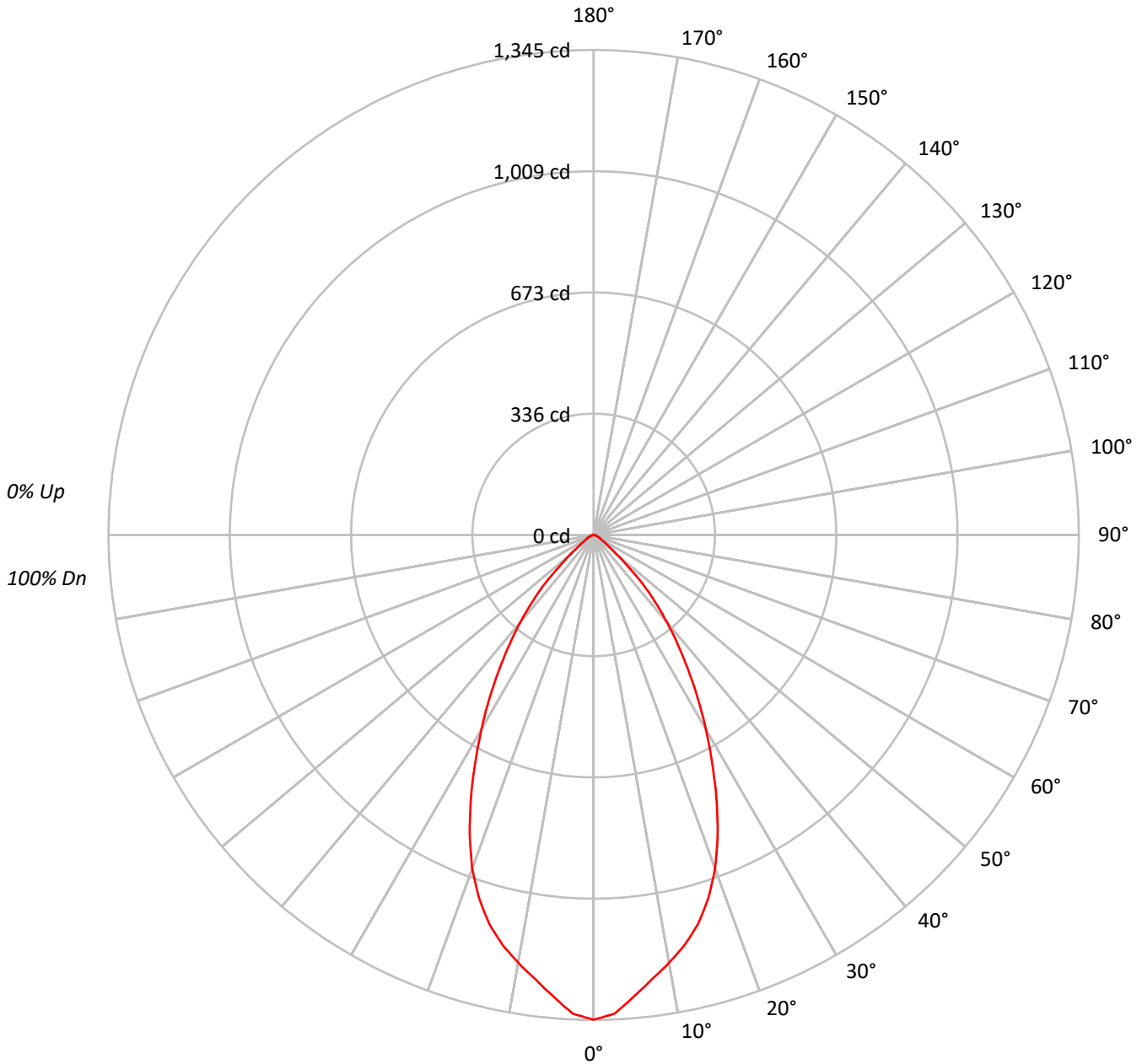
Input Watts (W): 10.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	73717
5°	70685
10°	67072
15°	63417
20°	57428
25°	48680
30°	39360
35°	30577
40°	22614
45°	14893
50°	7172
55°	3804
60°	2489
65°	2062
70°	1635
75°	1207
80°	726
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14893 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.2	9.3
10°-20°	311.0	24.0
20°-30°	367.2	28.4
30°-40°	286.2	22.1
40°-50°	146.5	11.3
50°-60°	39.8	3.1
60°-70°	16.1	1.2
70°-80°	6.1	0.5
80°-90°	0.6	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°	798.4	61.7
0°-40°	1084.6	83.8
0°-60°	1270.8	98.2
0°-90°	1293.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1293.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1345	
5°	1284	120
15°	1117	311
25°	805	367
35°	457	286
45°	192	146
55°	40	40
65°	16	16
75°	6	6
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1344.7
2.5°	1328.8
5°	1284.5
7.5°	1242.4
10°	1204.9
12.5°	1165.1
15°	1117.4
17.5°	1056.0
20°	984.4
22.5°	898.0
25°	804.8
27.5°	710.4
30°	621.8
32.5°	537.7
35°	456.9
37.5°	383.1
40°	316.0
42.5°	251.2
45°	192.1
47.5°	126.2
50°	84.1
52.5°	56.8
55°	39.8
57.5°	29.6
60°	22.7
62.5°	19.3
65°	15.9
67.5°	13.6
70°	10.2
72.5°	8.0
75°	5.7
77.5°	3.4
80°	2.3
82.5°	1.1
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)