

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: P640523

Luminaire Tested: ML5609LSWFL55D2W1E - 694TBZB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640523  
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: ML5609LSWFL55D2W1E - 694TBZB - 900LM - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1142.7 lumens  
Efficiency: N/A  
Efficacy: 96.8 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

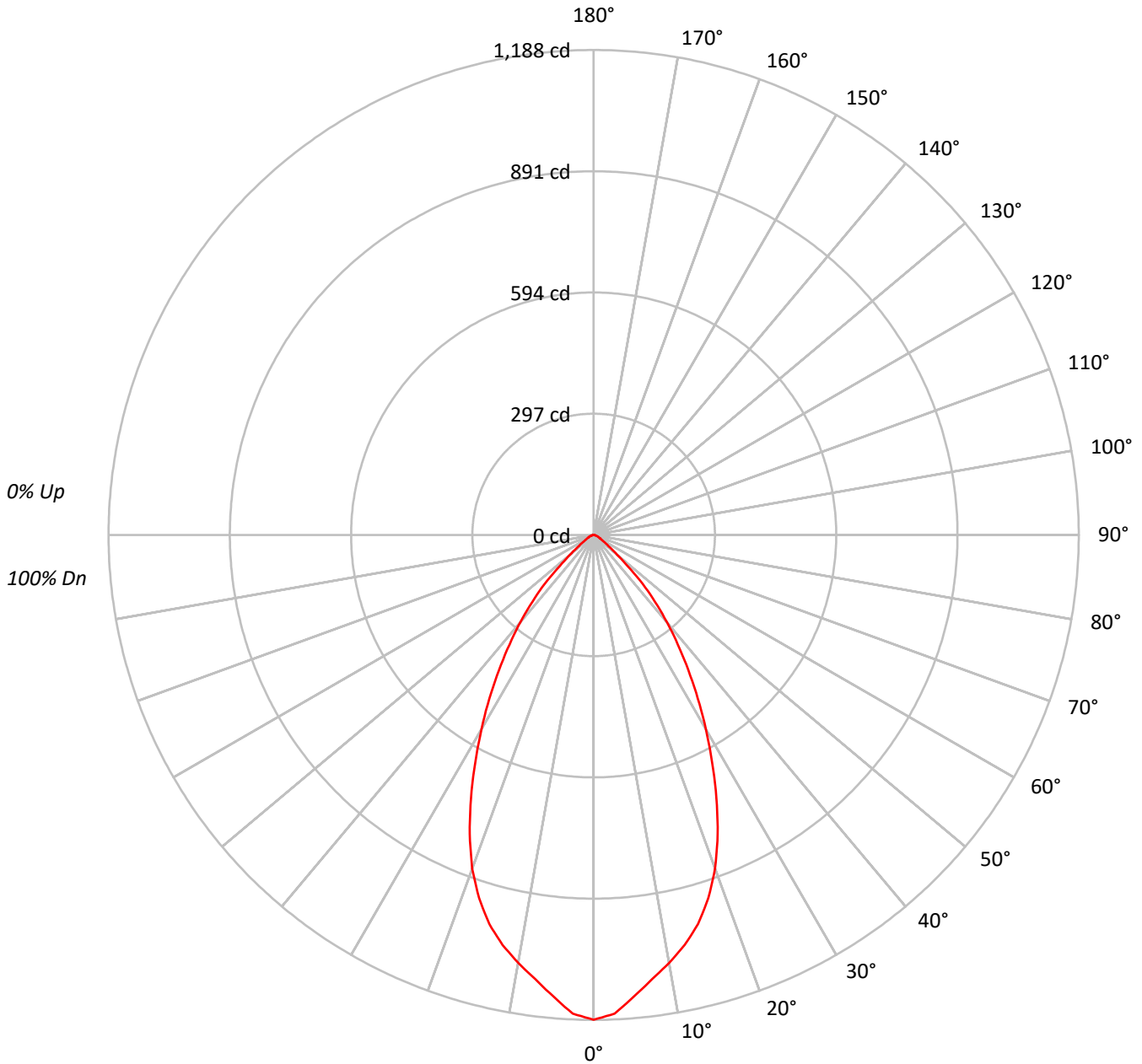
Input Watts (W): 11.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	65115
5°	62437
10°	59245
15°	56016
20°	50725
25°	43000
30°	34765
35°	27010
40°	19973
45°	13156
50°	6337
55°	3355
60°	2204
65°	1829
70°	1443
75°	1059
80°	631
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13156 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.1	9.3
10°-20°	274.7	24.0
20°-30°	324.3	28.4
30°-40°	252.8	22.1
40°-50°	129.4	11.3
50°-60°	35.1	3.1
60°-70°	14.3	1.2
70°-80°	5.4	0.5
80°-90°	0.5	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°	705.2	61.7
0°-40°	958.0	83.8
0°-60°	1122.5	98.2
0°-90°	1142.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1142.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1188	
5°	1135	106
15°	987	275
25°	711	324
35°	404	253
45°	170	129
55°	35	35
65°	14	14
75°	5	5
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1187.8
2.5°	1173.7
5°	1134.6
7.5°	1097.4
10°	1064.3
12.5°	1029.1
15°	987.0
17.5°	932.8
20°	869.5
22.5°	793.2
25°	710.9
27.5°	627.5
30°	549.2
32.5°	474.9
35°	403.6
37.5°	338.4
40°	279.1
42.5°	221.9
45°	169.7
47.5°	111.4
50°	74.3
52.5°	50.2
55°	35.1
57.5°	26.1
60°	20.1
62.5°	17.1
65°	14.1
67.5°	12.0
70°	9.0
72.5°	7.0
75°	5.0
77.5°	3.0
80°	2.0
82.5°	1.0
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)