

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: P640519

Luminaire Tested: ML5609LSWFL55D2W1E - 693TBZB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640519  
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: ML5609LSWFL55D2W1E - 693TBZB - 900LM - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

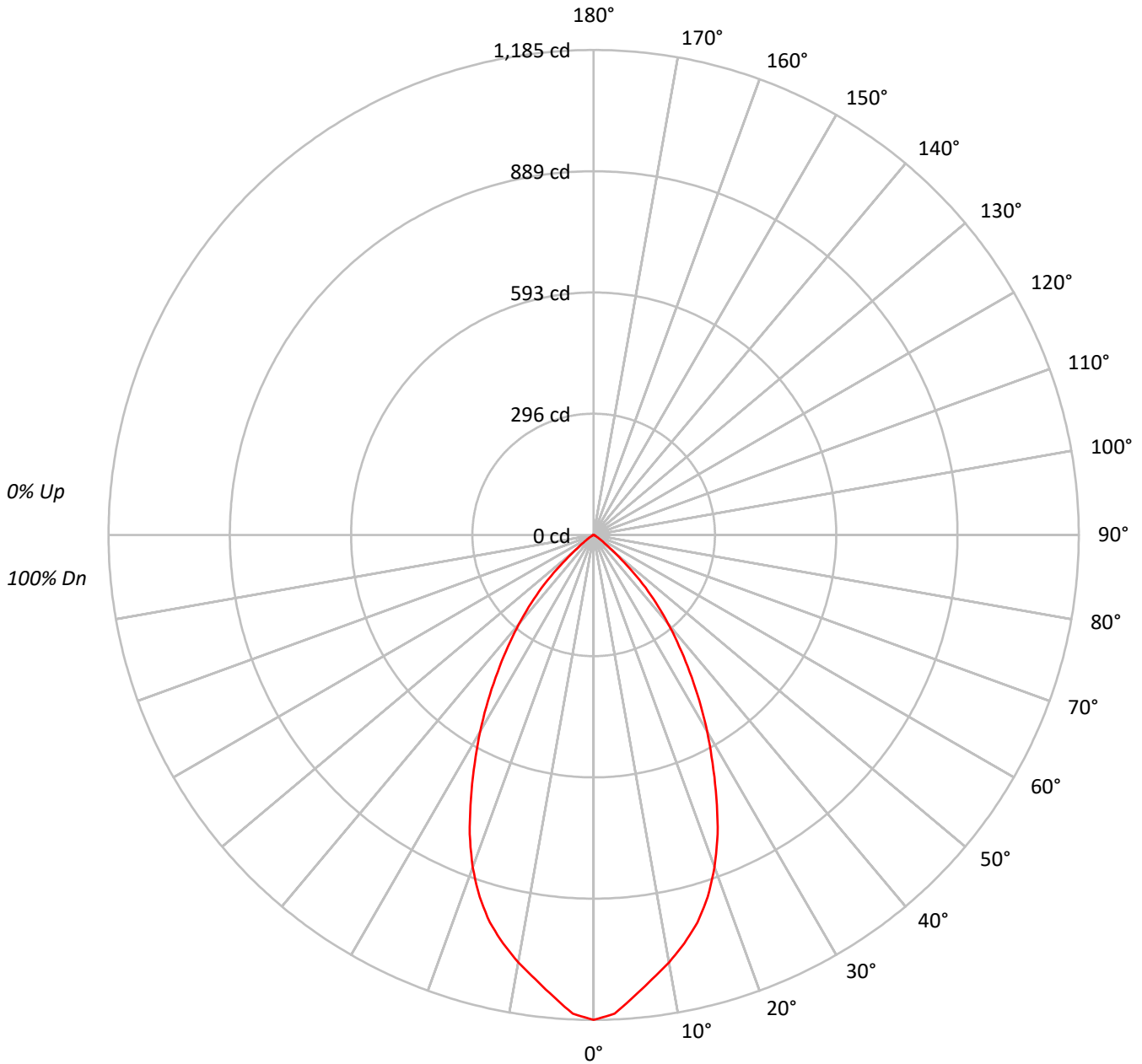
Lumens per Lamp: N/A  
Luminaire Lumens: 1113.6 lumens  
Efficiency: N/A  
Efficacy: 94.4 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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																			
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86																			
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81	79																			
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73																			
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67																			
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62																			
7	81	71	65	61	80	71	65	60	69	64	60	68	63	60	67	63	59	58																			
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	55	54																			
9	73	63	57	52	72	62	56	52	61	56	52	60	56	52	60	55	52	50																			
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47																			

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

	0°
0°	64956
5°	62277
10°	59028
15°	55625
20°	50381
25°	42886
30°	35088
35°	27351
40°	20267
45°	13156
50°	5484
55°	2017
60°	877
65°	259
70°	0
75°	0
80°	0
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°	105.8	9.5
10°-20°	273.0	24.5
20°-30°	324.1	29.1
30°-40°	255.9	23.0
40°-50°	128.9	11.6
50°-60°	23.2	2.1
60°-70°	2.7	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°	702.9	63.1
0°-40°	958.8	86.1
0°-60°	1110.9	99.8
0°-90°	1113.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1113.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1185	
5°	1132	106
15°	980	273
25°	709	324
35°	409	256
45°	170	129
55°	21	23
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1184.9
2.5°	1170.9
5°	1131.7
7.5°	1094.6
10°	1060.4
12.5°	1022.3
15°	980.1
17.5°	926.9
20°	863.6
22.5°	791.3
25°	709.0
27.5°	628.6
30°	554.3
32.5°	480.0
35°	408.7
37.5°	343.4
40°	283.2
42.5°	224.9
45°	169.7
47.5°	109.5
50°	64.3
52.5°	34.1
55°	21.1
57.5°	14.1
60°	8.0
62.5°	4.0
65°	2.0
67.5°	1.0
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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Scaled Data Report



(END OF REPORT)