

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: P640518

Luminaire Tested: ML5609LSWFL55D2W1E - 693SNB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640518  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-65)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 693SNB - 900LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

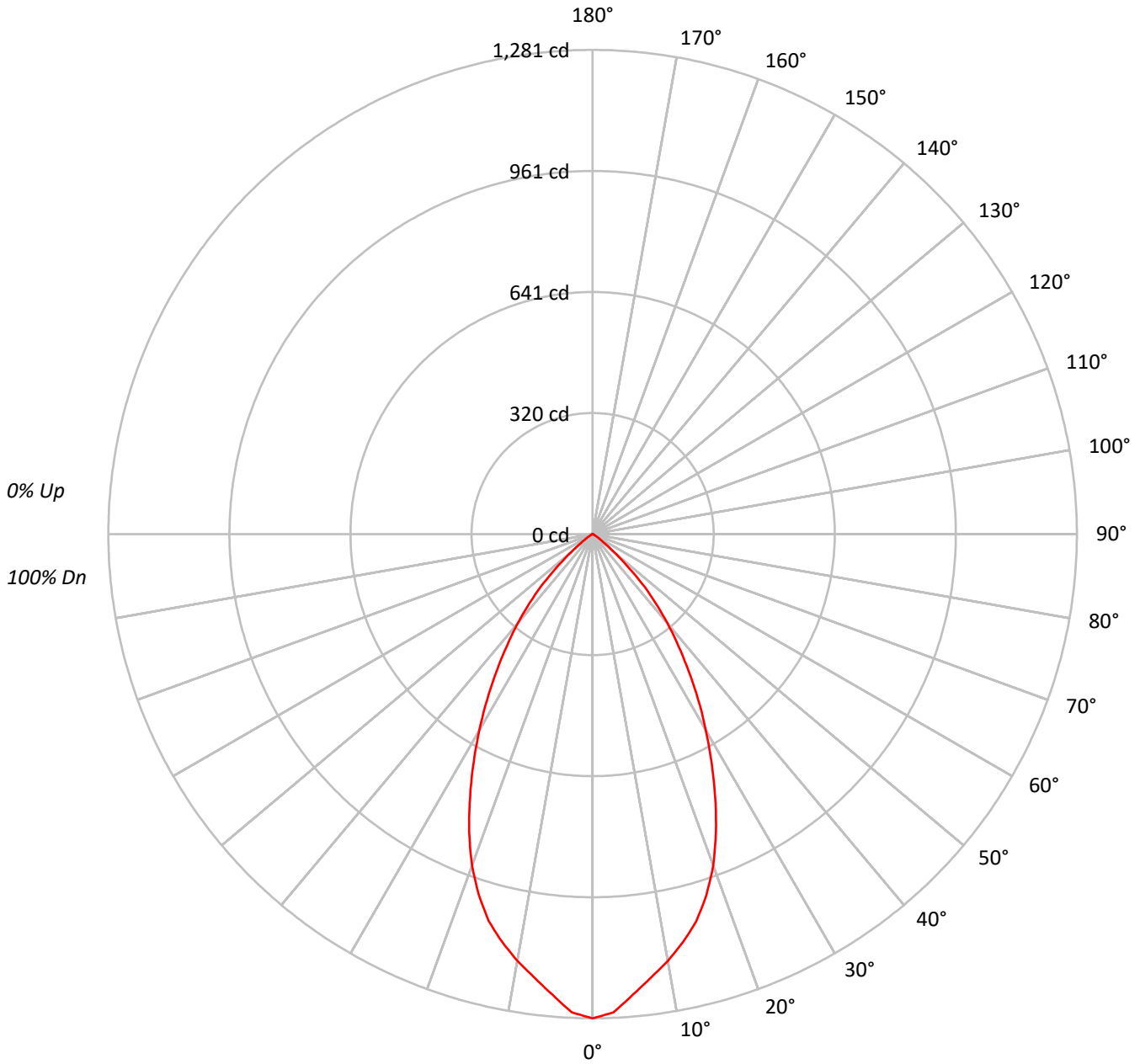
Lumens per Lamp: N/A  
Luminaire Lumens: 1207.2 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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				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			
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	69	76	72	69	67			
6	86	76	70	65	84	75	70	65	74	69	65	72	68	64	71	67	64	62			
7	81	71	65	60	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	55	52	60	55	52	50			
10	69	59	53	49	68	59	53	49	58	52	49	57	52	49	56	52	48	47			

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

	0°
0°	70241
5°	67301
10°	63821
15°	60171
20°	54424
25°	46382
30°	37892
35°	29667
40°	21998
45°	14296
50°	6166
55°	2265
60°	1064
65°	285
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14296 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.4	9.5
10°-20°	295.0	24.4
20°-30°	350.4	29.0
30°-40°	277.3	23.0
40°-50°	140.7	11.7
50°-60°	26.4	2.2
60°-70°	3.0	0.3
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°	759.8	62.9
0°-40°	1037.0	85.9
0°-60°	1204.1	99.7
0°-90°	1207.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1207.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1281	
5°	1223	114
15°	1060	295
25°	767	350
35°	443	277
45°	184	141
55°	24	26
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1281.3
2.5°	1266.2
5°	1223.0
7.5°	1183.1
10°	1146.5
12.5°	1105.5
15°	1060.2
17.5°	1000.9
20°	932.9
22.5°	853.1
25°	766.8
27.5°	681.6
30°	598.6
32.5°	519.8
35°	443.3
37.5°	372.1
40°	307.4
42.5°	244.8
45°	184.4
47.5°	120.8
50°	72.3
52.5°	38.8
55°	23.7
57.5°	16.2
60°	9.7
62.5°	4.3
65°	2.2
67.5°	1.1
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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(END OF REPORT)