

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: P640486

Luminaire Tested: ML5609LSWFL55D2W1E - 592H - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640486  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-49)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 592H - 900LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 5" HAZE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

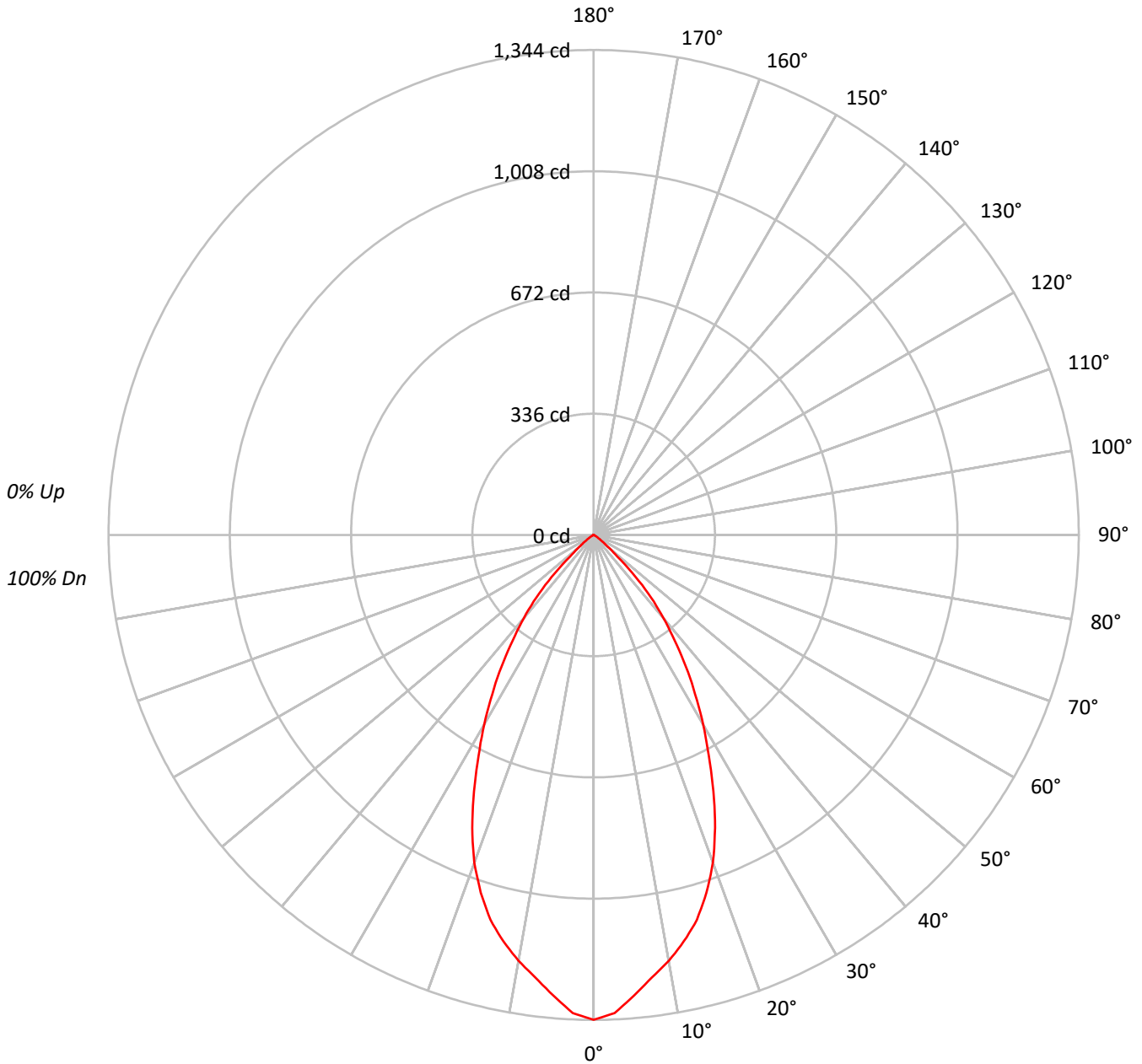
Lumens per Lamp: N/A  
Luminaire Lumens: 1210.4 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.88  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.8  
Input Voltage (V): NR  
Input Current (Ain): 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	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	84	81	80			
4	96	88	83	78	94	87	82	78	85	81	77	83	79	76	81	78	75	74			
5	91	82	76	72	89	82	76	72	80	75	71	78	74	70	76	73	70	68			
6	86	77	71	66	85	76	70	66	75	70	66	73	69	65	72	68	65	63			
7	82	72	66	62	80	71	66	61	70	65	61	69	64	61	68	64	60	59			
8	78	68	61	57	76	67	61	57	66	61	57	65	60	57	64	60	56	55			
9	74	64	58	53	73	63	57	53	62	57	53	61	56	53	60	56	53	51			
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	50	48			

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

	0°
0°	106081
5°	101533
10°	96046
15°	90258
20°	81176
25°	68296
30°	55248
35°	42923
40°	31008
45°	18420
50°	6226
55°	2821
60°	853
65°	205
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18420 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.7	9.9
10°-20°	307.1	25.4
20°-30°	358.3	29.6
30°-40°	277.3	22.9
40°-50°	125.8	10.4
50°-60°	20.5	1.7
60°-70°	1.7	0.1
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°	785.1	64.9
0°-40°	1062.5	87.8
0°-60°	1208.7	99.9
0°-90°	1210.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1210.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1344	
5°	1281	120
15°	1104	307
25°	784	358
35°	445	277
45°	165	126
55°	20	20
65°	1	2
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1343.8
2.5°	1326.6
5°	1281.3
7.5°	1237.0
10°	1198.2
12.5°	1154.0
15°	1104.4
17.5°	1039.7
20°	966.3
22.5°	879.0
25°	784.1
27.5°	690.2
30°	606.1
32.5°	523.1
35°	445.4
37.5°	367.8
40°	300.9
42.5°	235.1
45°	165.0
47.5°	88.4
50°	50.7
52.5°	32.4
55°	20.5
57.5°	11.9
60°	5.4
62.5°	2.2
65°	1.1
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)