

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: P640489

Luminaire Tested: ML5609LSWFL55D2W1E - 592W - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640489  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-50)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 592W - 900LM - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

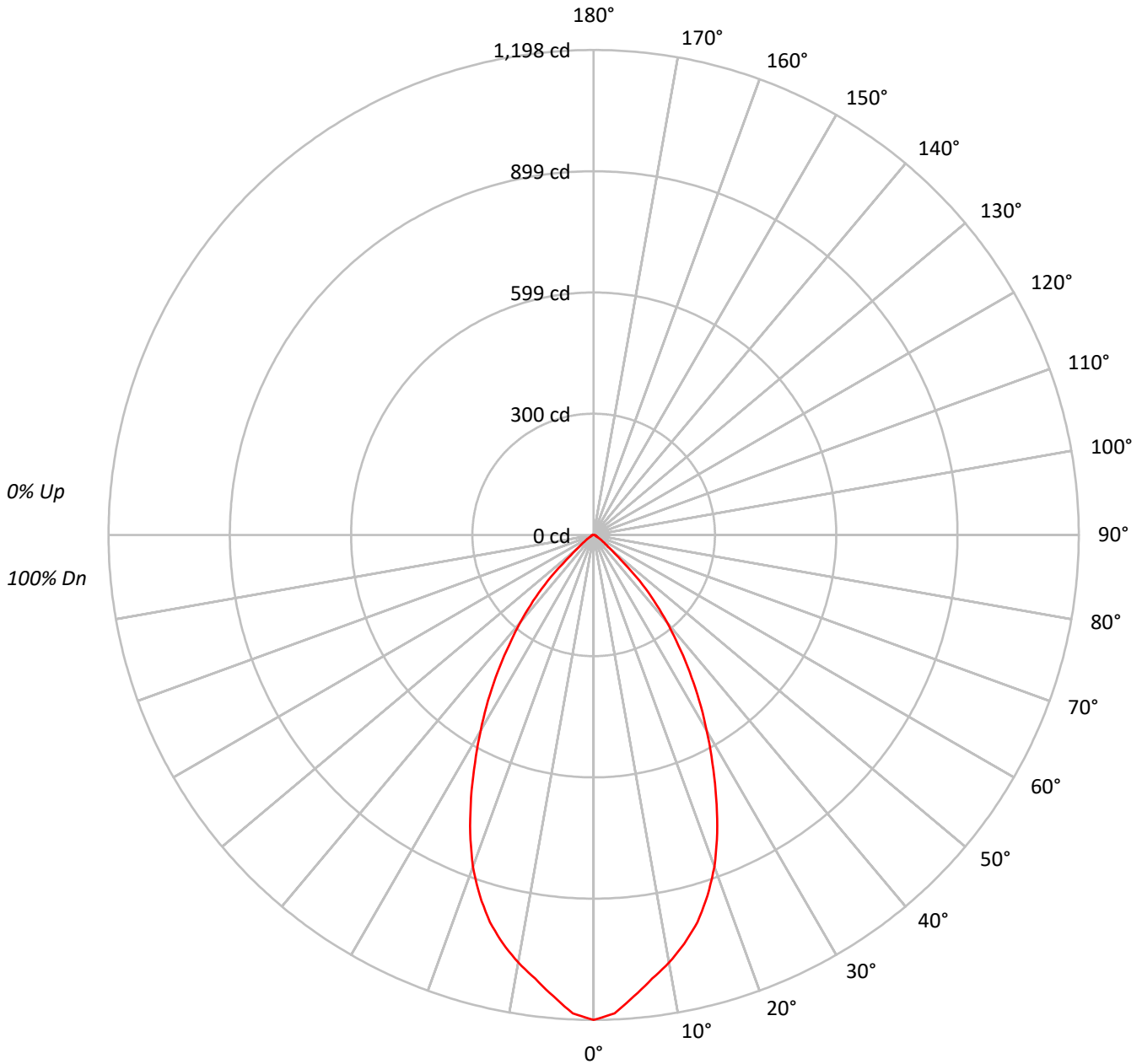
Lumens per Lamp: N/A  
Luminaire Lumens: 1126.6 lumens  
Efficiency: N/A  
Efficacy: 95.5 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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									
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	103	104	102	100	100	99	97	97	96	94	93																			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85																			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79																			
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72																			
5	90	81	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67																			
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62																			
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58																			
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54																			
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50																			
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47																			

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

	0°
0°	94571
5°	90638
10°	85970
15°	80925
20°	73229
25°	62365
30°	50891
35°	39772
40°	28978
45°	17940
50°	6534
55°	3454
60°	1737
65°	1308
70°	1385
75°	1220
80°	1364
85°	906

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17940 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.0	9.5
10°-20°	275.7	24.5
20°-30°	327.0	29.0
30°-40°	257.4	22.8
40°-50°	121.2	10.8
50°-60°	24.7	2.2
60°-70°	7.5	0.7
70°-80°	4.6	0.4
80°-90°	1.5	0.1
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°	709.7	63.0
0°-40°	967.1	85.8
0°-60°	1113.0	98.8
0°-90°	1126.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1126.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1198	
5°	1144	107
15°	990	276
25°	716	327
35°	413	257
45°	161	121
55°	25	25
65°	7	8
75°	4	5
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1198.0
2.5°	1183.0
5°	1143.8
7.5°	1105.6
10°	1072.5
12.5°	1034.3
15°	990.2
17.5°	934.9
20°	871.7
22.5°	797.3
25°	716.0
27.5°	634.7
30°	558.3
32.5°	485.0
35°	412.7
37.5°	343.4
40°	281.2
42.5°	220.9
45°	160.7
47.5°	90.4
50°	53.2
52.5°	36.2
55°	25.1
57.5°	18.1
60°	11.0
62.5°	9.0
65°	7.0
67.5°	6.0
70°	6.0
72.5°	5.0
75°	4.0
77.5°	4.0
80°	3.0
82.5°	2.0
85°	1.0
87.5°	1.0
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)