

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: P640513

Luminaire Tested: ML5609LSWFL55D2W1E - 692W - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640513  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-62)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 692W - 900LM - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 6" WHITE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

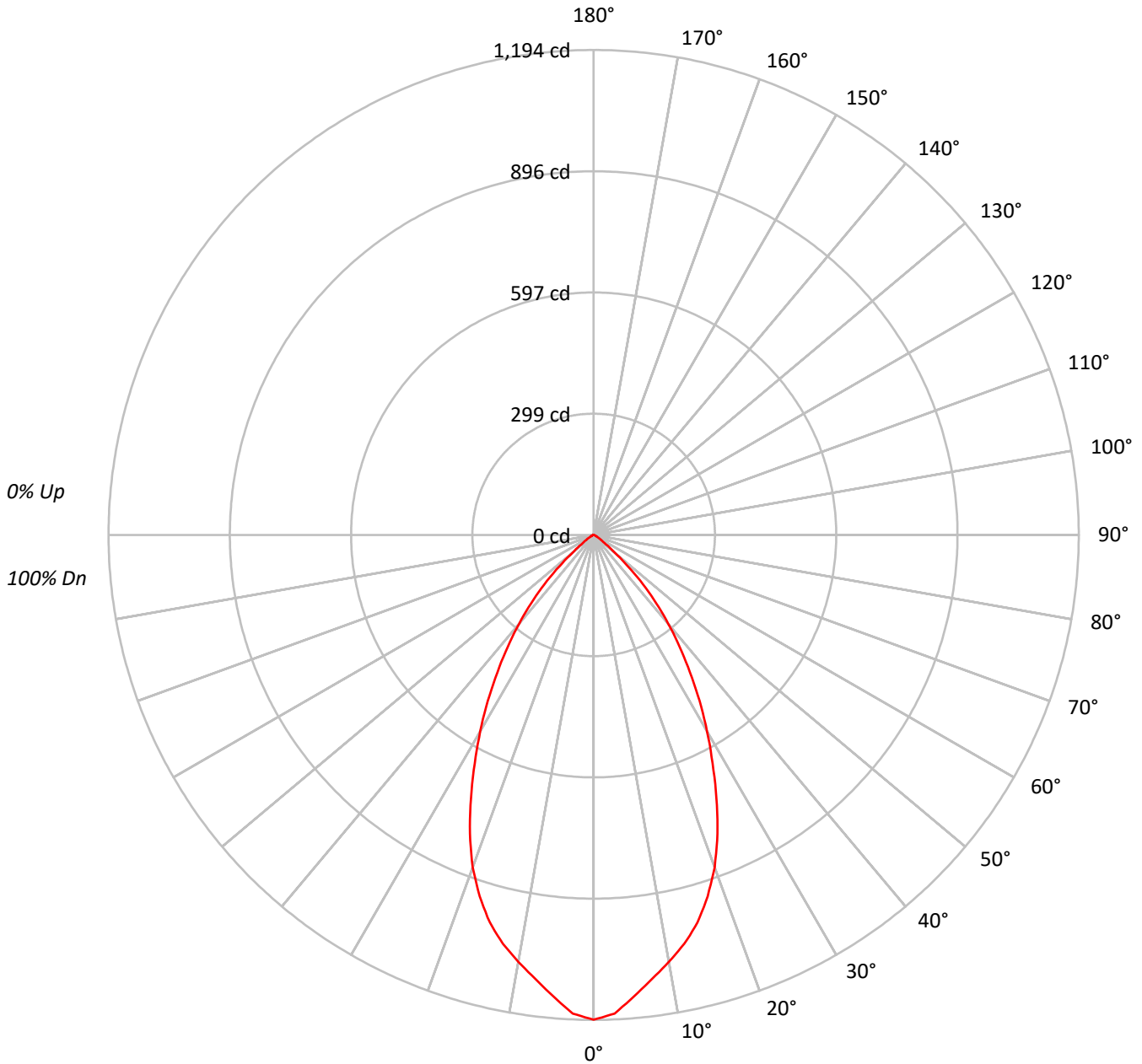
Lumens per Lamp: N/A  
Luminaire Lumens: 1134.7 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93			93																
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85																
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	79			79																
4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72			72																
5	90	81	75	71	89	80	75	70	79	74	70	77	72	69	75	71	68	67			67																
6	85	76	70	65	84	75	69	65	74	68	64	72	67	64	71	67	63	62			62																
7	81	71	65	60	79	70	64	60	69	63	60	68	63	59	67	62	59	57			57																
8	77	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53			53																
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50			50																
10	69	59	53	49	68	58	52	48	57	52	48	57	52	48	56	51	48	47			47																

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

	0°
0°	65433
5°	62756
10°	59401
15°	56062
20°	50778
25°	43236
30°	35328
35°	27612
40°	20474
45°	13389
50°	5740
55°	2399
60°	1316
65°	778
70°	641
75°	635
80°	631
85°	629

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13389 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.6	9.4
10°-20°	275.0	24.2
20°-30°	326.5	28.8
30°-40°	258.4	22.8
40°-50°	131.4	11.6
50°-60°	26.7	2.4
60°-70°	6.4	0.6
70°-80°	2.9	0.3
80°-90°	0.8	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°	708.0	62.4
0°-40°	966.5	85.2
0°-60°	1124.6	99.1
0°-90°	1134.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1134.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1194	
5°	1140	107
15°	988	275
25°	715	326
35°	413	258
45°	173	131
55°	25	27
65°	6	6
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1193.6
2.5°	1179.5
5°	1140.4
7.5°	1102.2
10°	1067.1
12.5°	1031.0
15°	987.8
17.5°	932.6
20°	870.4
22.5°	796.1
25°	714.8
27.5°	633.4
30°	558.1
32.5°	484.9
35°	412.6
37.5°	347.3
40°	286.1
42.5°	227.9
45°	172.7
47.5°	113.4
50°	67.3
52.5°	38.1
55°	25.1
57.5°	18.1
60°	12.0
62.5°	8.0
65°	6.0
67.5°	4.0
70°	4.0
72.5°	3.0
75°	3.0
77.5°	2.0
80°	2.0
82.5°	1.0
85°	1.0
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)