

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: P640522

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

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640522  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-63)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 693WB - 900LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 6" WHITE BAFFLE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

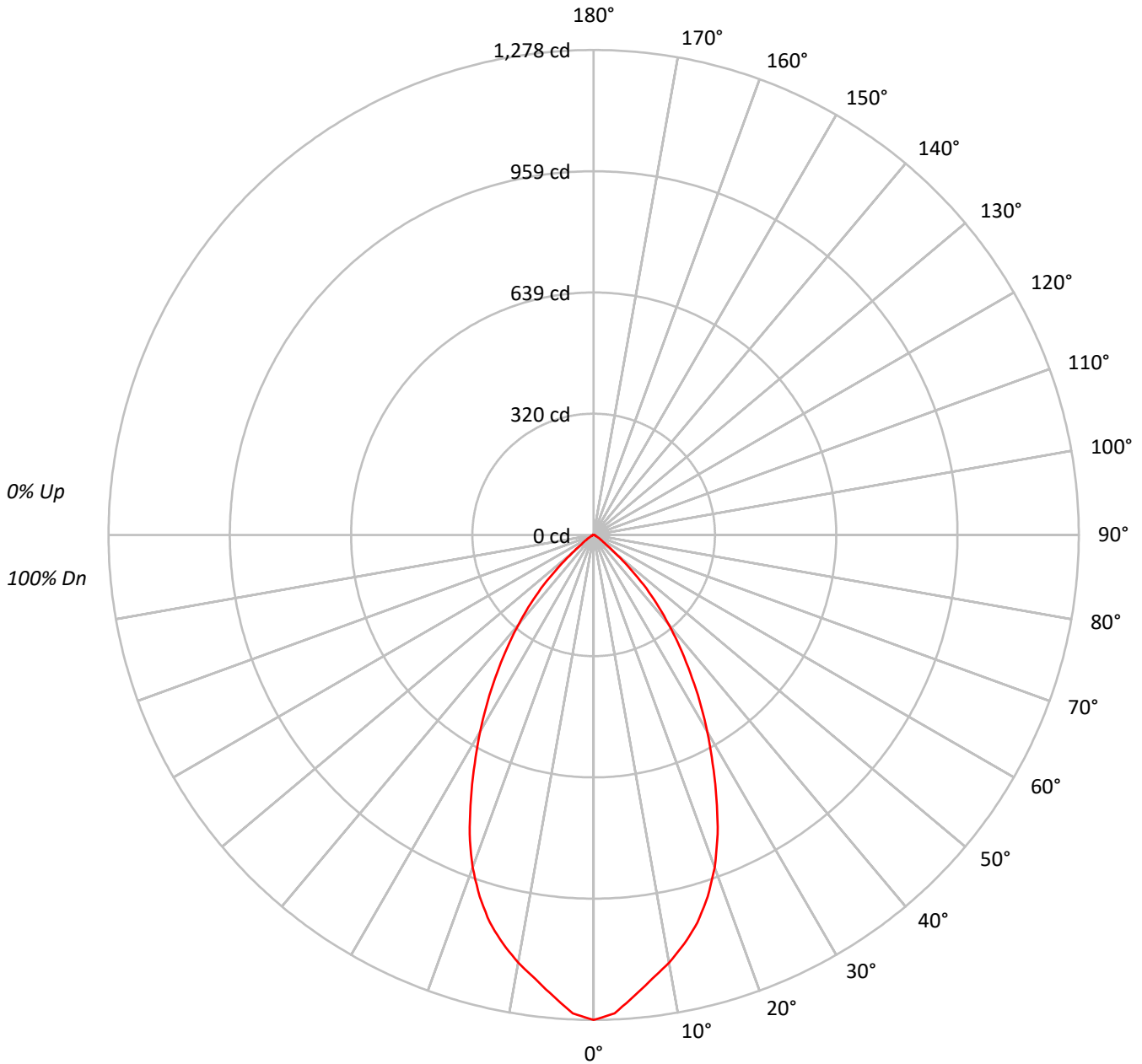
Lumens per Lamp: N/A  
Luminaire Lumens: 1216.8 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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			100
1	113	110	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94	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	78			78
4	96	87	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	73	70	77	72	69	75	71	68	67			67
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	67	63	62			62
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	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°	70060
5°	67125
10°	63704
15°	59995
20°	54377
25°	46279
30°	37854
35°	29640
40°	21977
45°	14451
50°	6251
55°	2571
60°	1414
65°	700
70°	689
75°	678
80°	695
85°	692

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14451 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.1	9.4
10°-20°	294.4	24.2
20°-30°	349.8	28.7
30°-40°	277.2	22.8
40°-50°	141.3	11.6
50°-60°	28.8	2.4
60°-70°	6.4	0.5
70°-80°	3.4	0.3
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°	758.3	62.3
0°-40°	1035.5	85.1
0°-60°	1205.6	99.1
0°-90°	1216.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1216.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1278	
5°	1220	114
15°	1057	294
25°	765	350
35°	443	277
45°	186	141
55°	27	29
65°	5	6
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1278.0
2.5°	1261.8
5°	1219.8
7.5°	1179.9
10°	1144.4
12.5°	1103.4
15°	1057.1
17.5°	998.9
20°	932.1
22.5°	853.4
25°	765.1
27.5°	678.9
30°	598.0
32.5°	519.4
35°	442.9
37.5°	372.8
40°	307.1
42.5°	244.6
45°	186.4
47.5°	121.8
50°	73.3
52.5°	40.9
55°	26.9
57.5°	19.4
60°	12.9
62.5°	7.5
65°	5.4
67.5°	4.3
70°	4.3
72.5°	3.2
75°	3.2
77.5°	3.2
80°	2.2
82.5°	2.2
85°	1.1
87.5°	1.1
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)