

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: P640528

Luminaire Tested: ML5609LSWFL55D2W1E - 696WB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640528  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-69)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 696WB - 900LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 6" SHALLOW WHITE BAFFLE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

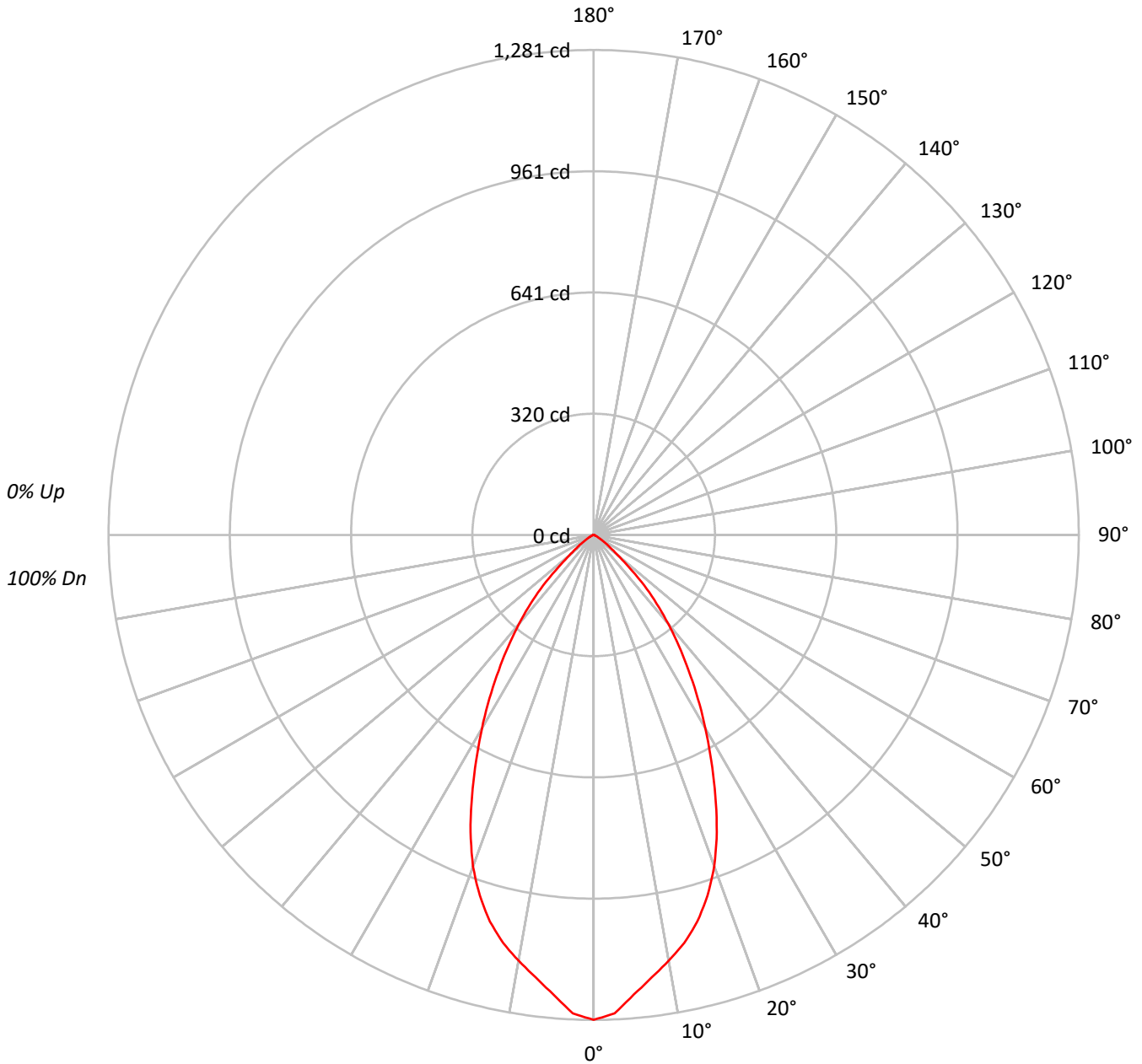
Lumens per Lamp: N/A  
Luminaire Lumens: 1223.4 lumens  
Efficiency: N/A  
Efficacy: 103.7 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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				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	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			85
3	101	94	89	84	99	93	88	84	90	86	82	88	84	81	85	82	80	78			78
4	95	87	81	77	93	86	81	76	84	79	75	82	78	74	80	76	74	72			72
5	90	81	75	70	88	80	74	70	78	73	69	77	72	69	75	71	68	66			66
6	85	76	69	65	84	75	69	64	73	68	64	72	67	63	70	66	63	61			61
7	80	71	64	60	79	70	64	59	69	63	59	67	62	59	66	62	58	57			57
8	76	66	60	55	75	65	59	55	64	59	55	63	58	55	62	58	54	53			53
9	72	62	56	52	71	62	56	51	61	55	51	60	55	51	59	54	51	49			49
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	56	51	48	46			46

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

	0°
0°	70219
5°	67048
10°	63559
15°	60029
20°	54348
25°	45976
30°	37335
35°	29225
40°	21912
45°	14629
50°	7079
55°	3708
60°	1897
65°	1258
70°	513
75°	466
80°	347
85°	692

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14629 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.0	9.3
10°-20°	294.5	24.1
20°-30°	347.3	28.4
30°-40°	274.0	22.4
40°-50°	143.6	11.7
50°-60°	37.5	3.1
60°-70°	9.4	0.8
70°-80°	2.3	0.2
80°-90°	0.7	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°	755.8	61.8
0°-40°	1029.8	84.2
0°-60°	1210.9	99.0
0°-90°	1223.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1223.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1281	
5°	1218	114
15°	1058	294
25°	760	347
35°	437	274
45°	189	144
55°	39	38
65°	10	9
75°	2	2
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1280.9
2.5°	1264.7
5°	1218.4
7.5°	1178.5
10°	1141.8
12.5°	1104.1
15°	1057.7
17.5°	999.5
20°	931.6
22.5°	849.6
25°	760.1
27.5°	671.7
30°	589.8
32.5°	512.1
35°	436.7
37.5°	369.8
40°	306.2
42.5°	245.8
45°	188.7
47.5°	125.1
50°	83.0
52.5°	56.1
55°	38.8
57.5°	24.8
60°	17.3
62.5°	12.9
65°	9.7
67.5°	5.4
70°	3.2
72.5°	2.2
75°	2.2
77.5°	2.2
80°	1.1
82.5°	1.1
85°	1.1
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)