

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: P640498

Luminaire Tested: ML5609LSWFL55D2W1E - 593WB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640498  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-51)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSWFL55D2W1E - 593WB - 900LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE BAFFLE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

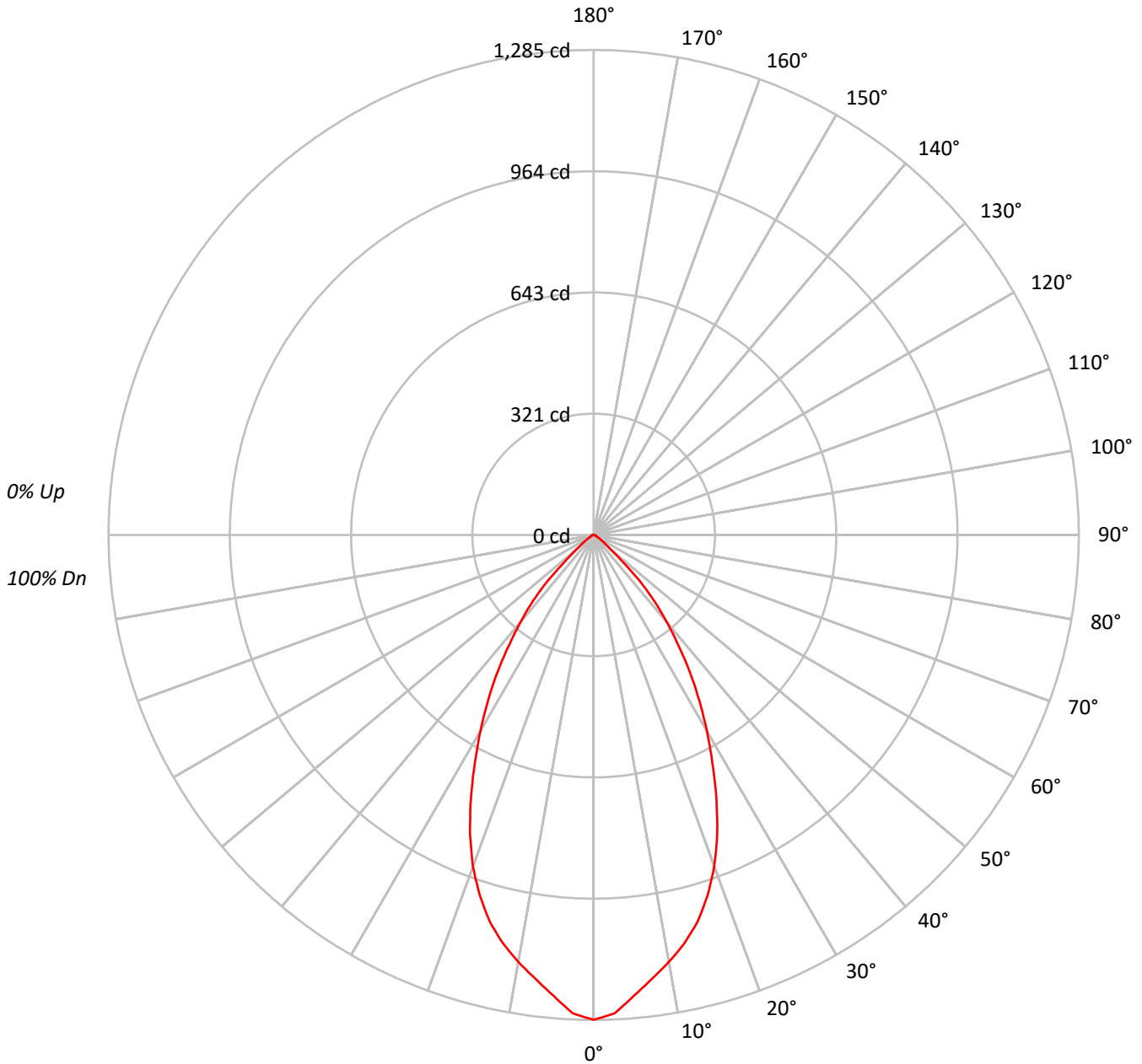
Lumens per Lamp: N/A  
Luminaire Lumens: 1208.3 lumens  
Efficiency: N/A  
Efficacy: 102.4 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.8  
Input Voltage (V): NR  
Input Current (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	100	100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79	79	79	79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72	72	72	72
5	90	81	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67	67	67	67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62	62	62	62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58	58	58	58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54	54	54	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50	50	50	50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47	47	47	47

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

	0°
0°	101423
5°	97112
10°	92102
15°	86760
20°	78505
25°	66938
30°	54628
35°	42798
40°	30987
45°	19258
50°	6877
55°	3702
60°	1879
65°	1401
70°	1500
75°	1312
80°	1455
85°	1993

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19258 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.7	9.5
10°-20°	295.6	24.5
20°-30°	350.9	29.0
30°-40°	276.4	22.9
40°-50°	129.9	10.7
50°-60°	26.1	2.2
60°-70°	7.9	0.7
70°-80°	5.0	0.4
80°-90°	1.9	0.2
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°	761.2	63.0
0°-40°	1037.6	85.9
0°-60°	1193.5	98.8
0°-90°	1208.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1208.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1285	
5°	1226	115
15°	1062	296
25°	768	351
35°	444	276
45°	172	130
55°	27	26
65°	8	8
75°	4	5
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1284.8
2.5°	1268.6
5°	1225.5
7.5°	1185.6
10°	1149.0
12.5°	1109.1
15°	1061.6
17.5°	1002.4
20°	934.5
22.5°	855.8
25°	768.5
27.5°	681.2
30°	599.3
32.5°	520.6
35°	444.1
37.5°	368.6
40°	300.7
42.5°	238.2
45°	172.5
47.5°	95.9
50°	56.0
52.5°	38.8
55°	26.9
57.5°	18.3
60°	11.9
62.5°	8.6
65°	7.5
67.5°	6.5
70°	6.5
72.5°	5.4
75°	4.3
77.5°	4.3
80°	3.2
82.5°	2.2
85°	2.2
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)