

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: P640438

Luminaire Tested: ML5609LSVWFLD2W1E - 591WB - 900LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-93)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSVWFLD2W1E - 591WB - 900LM - 3000K  
Description: ML56 RR, MILKY OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

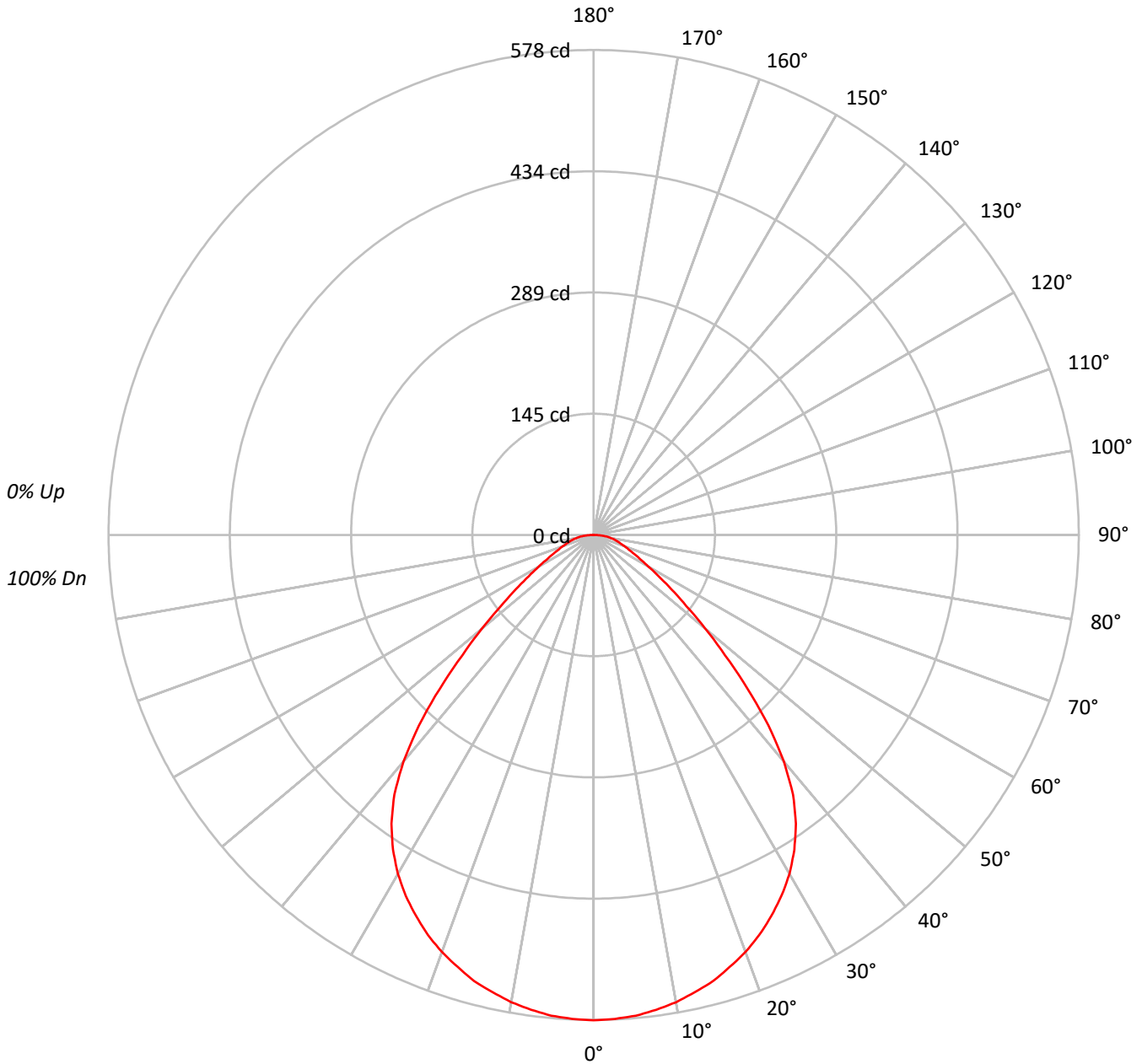
Lumens per Lamp: N/A  
Luminaire Lumens: 1100.5 lumens  
Efficiency: N/A  
Efficacy: 93.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.23  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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									
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77																			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	81	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	46	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	46	41	40																			
9	63	51	44	39	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33																			

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

	0°
0°	45667
5°	45580
10°	45330
15°	44990
20°	44431
25°	43629
30°	42514
35°	40485
40°	36305
45°	28982
50°	21295
55°	15566
60°	11904
65°	9863
70°	8955
75°	8876
80°	9319
85°	9782

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 28982 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.6	5.0
10°-20°	155.1	14.1
20°-30°	230.5	20.9
30°-40°	260.0	23.6
40°-50°	199.9	18.2
50°-60°	104.2	9.5
60°-70°	53.8	4.9
70°-80°	30.9	2.8
80°-90°	11.6	1.1
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°	440.2	40.0
0°-40°	700.2	63.6
0°-60°	1004.3	91.3
0°-90°	1100.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1100.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	578	
5°	575	55
15°	550	155
25°	501	231
35°	420	260
45°	260	200
55°	113	104
65°	53	54
75°	29	31
85°	11	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	578.5
2.5°	577.4
5°	575.2
7.5°	570.9
10°	565.5
12.5°	558.0
15°	550.5
17.5°	539.7
20°	528.9
22.5°	516.0
25°	500.9
27.5°	484.8
30°	466.4
32.5°	444.9
35°	420.1
37.5°	390.0
40°	352.3
42.5°	308.1
45°	259.6
47.5°	212.2
50°	173.4
52.5°	139.0
55°	113.1
57.5°	91.6
60°	75.4
62.5°	62.5
65°	52.8
67.5°	45.2
70°	38.8
72.5°	33.4
75°	29.1
77.5°	24.8
80°	20.5
82.5°	16.2
85°	10.8
87.5°	5.4
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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Scaled Data Report



(END OF REPORT)