

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: P640437

Luminaire Tested: ML5609LSVWFLD2W1E - 591WB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640437  
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 - 2700K  
Description: ML56 RR, MILKY OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

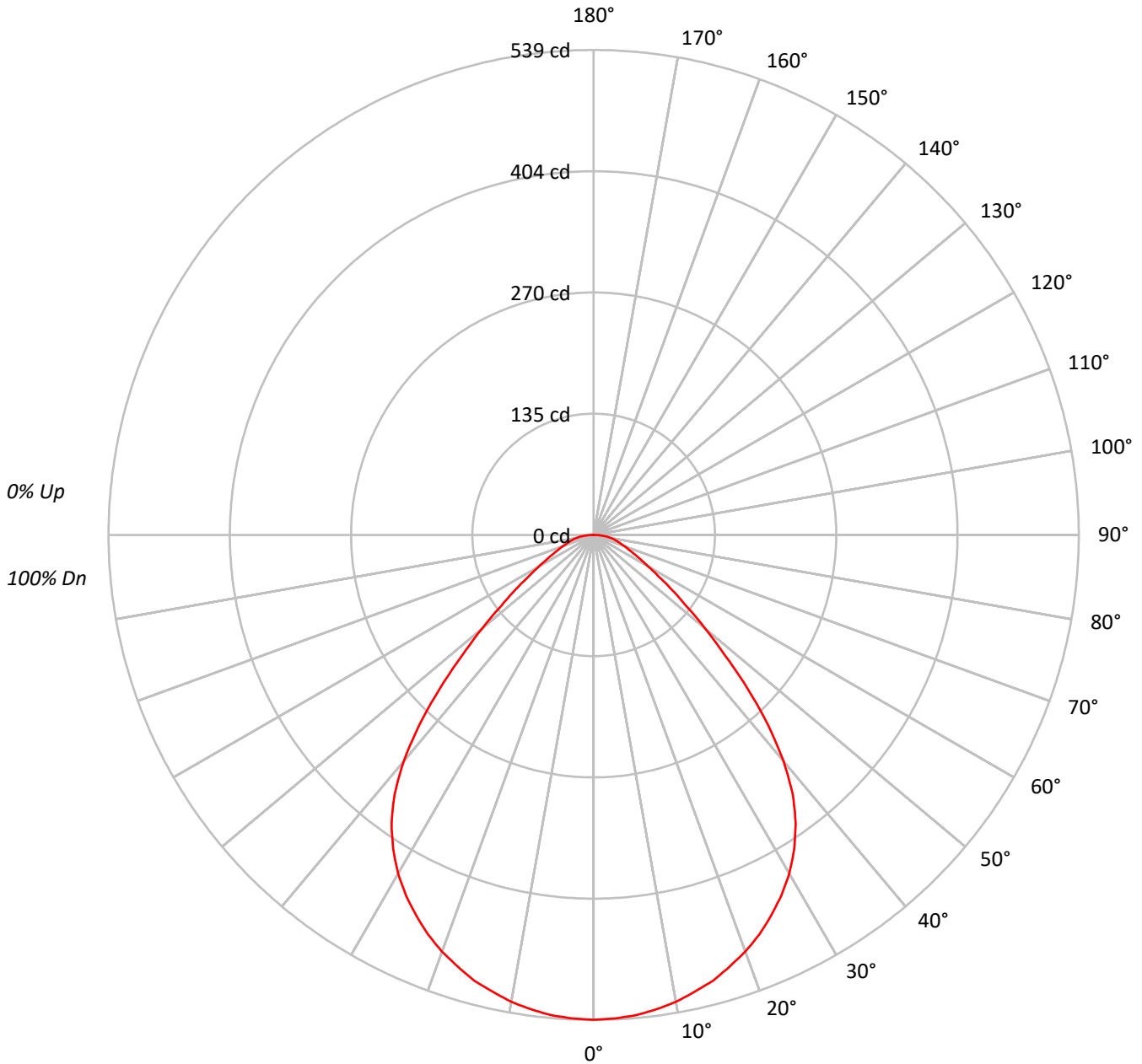
Lumens per Lamp: N/A  
Luminaire Lumens: 1025.3 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.23  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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°	42541
5°	42466
10°	42236
15°	41917
20°	41399
25°	40650
30°	39615
35°	37719
40°	33821
45°	27006
50°	19846
55°	14506
60°	11099
65°	9190
70°	8332
75°	8266
80°	8683
85°	9057

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 27006 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.9	5.0
10°-20°	144.5	14.1
20°-30°	214.8	20.9
30°-40°	242.2	23.6
40°-50°	186.3	18.2
50°-60°	97.0	9.5
60°-70°	50.1	4.9
70°-80°	28.7	2.8
80°-90°	10.8	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°	410.1	40.0
0°-40°	652.3	63.6
0°-60°	935.6	91.3
0°-90°	1025.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1025.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	539	
5°	536	51
15°	513	144
25°	467	215
35°	391	242
45°	242	186
55°	105	97
65°	49	50
75°	27	29
85°	10	11
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	538.9
2.5°	537.9
5°	535.9
7.5°	531.9
10°	526.9
12.5°	519.9
15°	512.9
17.5°	502.8
20°	492.8
22.5°	480.7
25°	466.7
27.5°	451.6
30°	434.6
32.5°	414.5
35°	391.4
37.5°	363.3
40°	328.2
42.5°	287.0
45°	241.9
47.5°	197.7
50°	161.6
52.5°	129.5
55°	105.4
57.5°	85.3
60°	70.3
62.5°	58.2
65°	49.2
67.5°	42.2
70°	36.1
72.5°	31.1
75°	27.1
77.5°	23.1
80°	19.1
82.5°	15.1
85°	10.0
87.5°	5.0
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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Scaled Data Report



(END OF REPORT)