

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: P640355

Luminaire Tested: ML5609LSNFL25D2W1E - 593SNB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640355  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSNFL25D2W1E - 593SNB - 900LM - 2700K  
Description: ML56 RR, 25D TIR OPTIC, 5" SATIN NICKLE BAFFLE TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1011.2 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

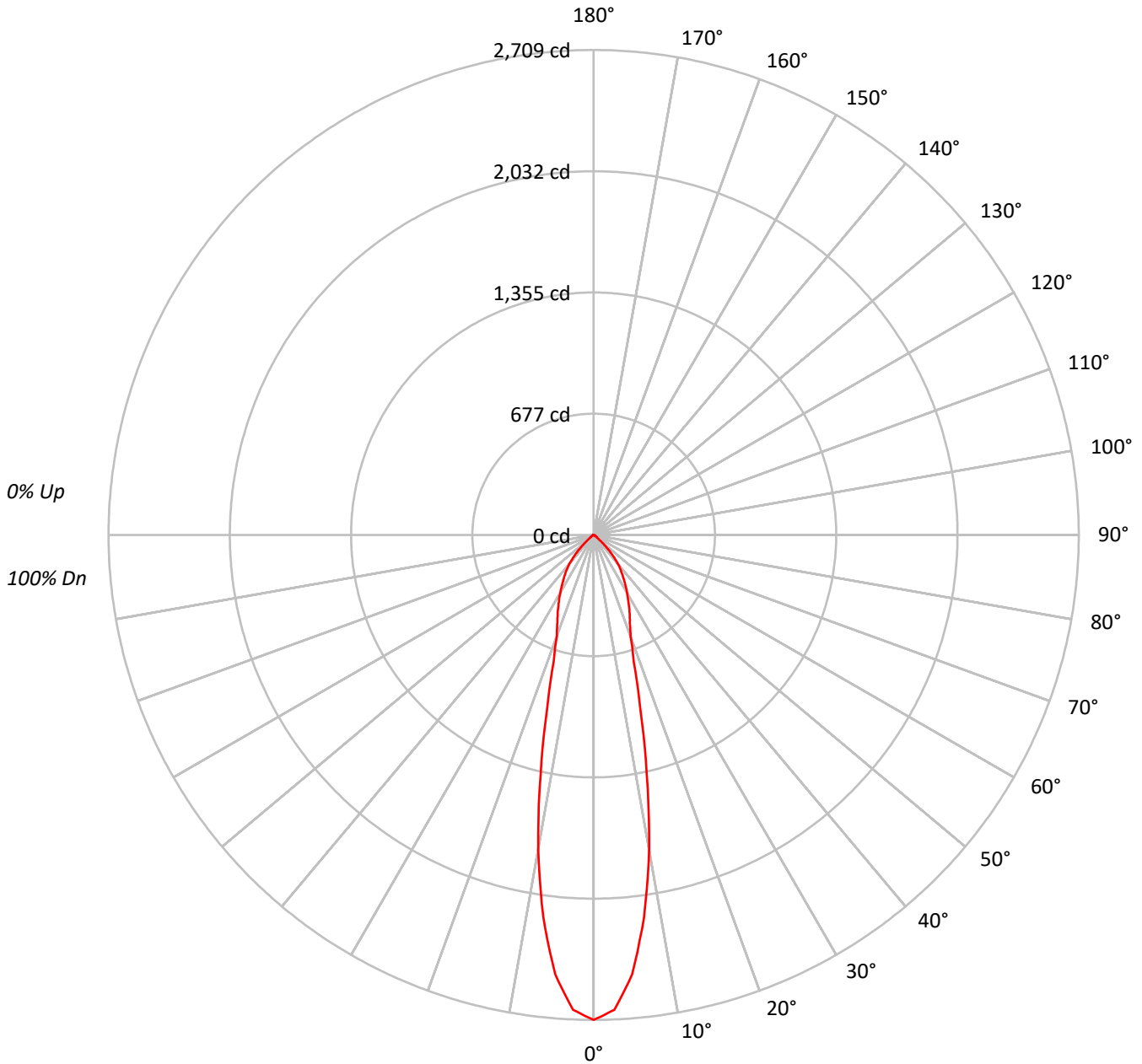
Input Watts (W): 11.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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			
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88			
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	83			
4	99	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	78			
5	94	86	81	77	93	85	80	76	84	79	76	82	78	75	80	77	74	73			
6	90	82	76	72	88	81	75	72	79	75	71	78	74	71	77	73	70	69			
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	66	65			
8	82	73	68	64	81	73	68	64	72	67	64	71	67	63	70	66	63	62			
9	79	70	65	61	78	70	64	61	69	64	61	68	63	60	67	63	60	59			
10	76	67	61	58	75	66	61	58	66	61	58	65	61	58	64	60	57	56			

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

	0°
0°	213867
5°	195269
10°	142795
15°	81979
20°	50530
25°	41286
30°	33955
35°	27581
40°	21733
45°	13229
50°	4188
55°	2216
60°	1579
65°	934
70°	462
75°	305
80°	455
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13229 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.9	21.1
10°-20°	288.0	28.5
20°-30°	218.0	21.6
30°-40°	179.2	17.7
40°-50°	90.1	8.9
50°-60°	16.0	1.6
60°-70°	5.2	0.5
70°-80°	1.4	0.1
80°-90°	0.4	0.0
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°	718.9	71.1
0°-40°	898.0	88.8
0°-60°	1004.2	99.3
0°-90°	1011.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1011.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2709	
5°	2464	213
15°	1003	288
25°	474	218
35°	286	179
45°	118	90
55°	16	16
65°	5	5
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2709.2
2.5°	2655.0
5°	2464.2
7.5°	2153.9
10°	1781.4
12.5°	1370.7
15°	1003.1
17.5°	745.1
20°	601.5
22.5°	528.2
25°	474.0
27.5°	420.7
30°	372.5
32.5°	327.4
35°	286.2
37.5°	248.0
40°	210.9
42.5°	161.7
45°	118.5
47.5°	72.3
50°	34.1
52.5°	21.1
55°	16.1
57.5°	13.1
60°	10.0
62.5°	7.0
65°	5.0
67.5°	3.0
70°	2.0
72.5°	2.0
75°	1.0
77.5°	1.0
80°	1.0
82.5°	1.0
85°	0.0
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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Scaled Data Report



(END OF REPORT)