

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: P640373

Luminaire Tested: ML5609LSNFL25D2W1E - 692SC - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640373  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-14)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5609LSNFL25D2W1E - 692SC - 900LM - 2700K  
Description: ML56 RR, 25D TIR OPTIC, 6" SPECULAR CLEAR TRIM  
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

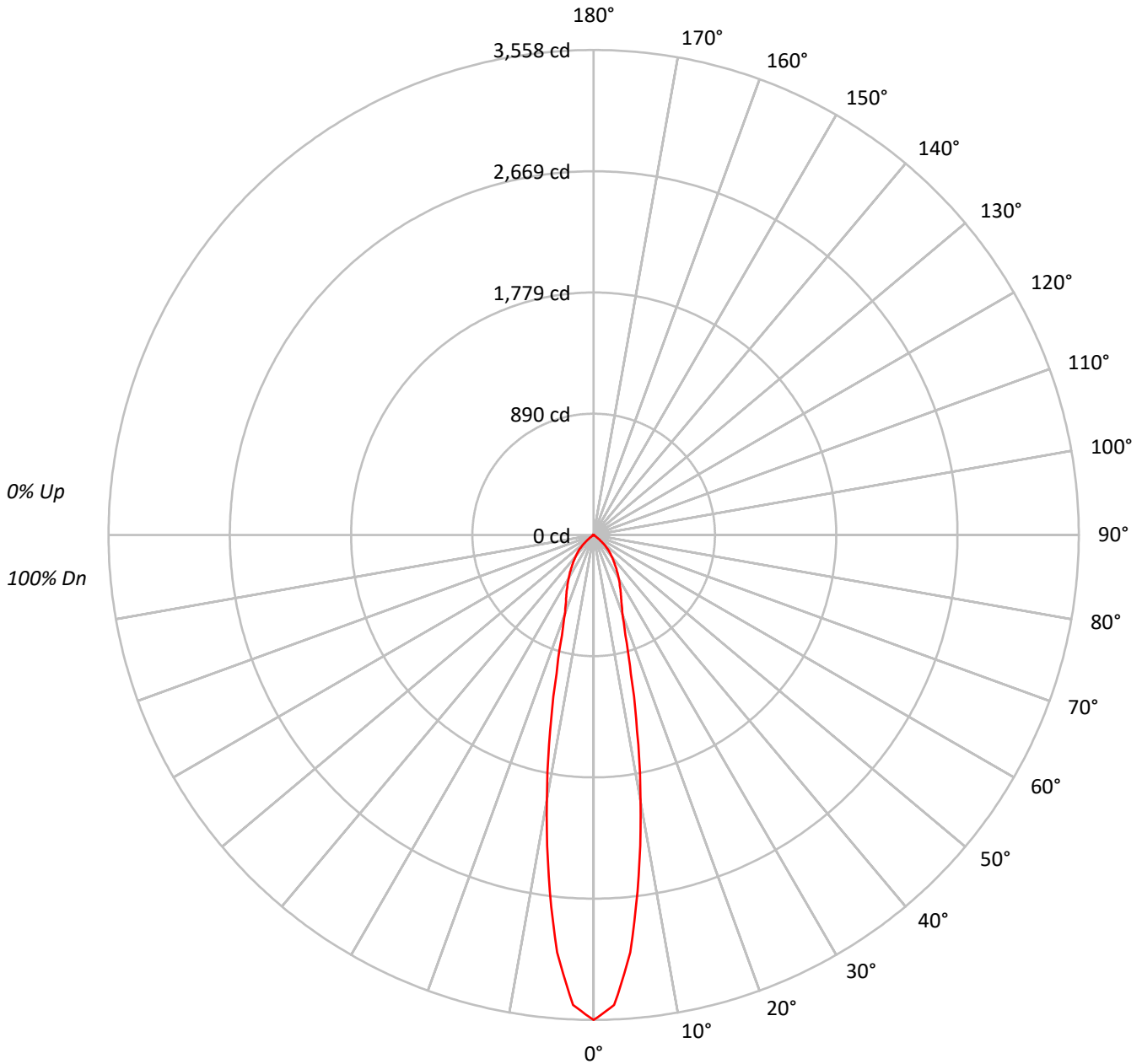
Lumens per Lamp: N/A  
Luminaire Lumens: 1083.5 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Spacing Criteria (0/90/45): 0.37 / 0.37 / 0.39  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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
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	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	89		
3	104	98	93	89	102	96	92	89	94	90	87	91	89	86	89	87	85	83		
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78		
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74		
6	91	82	77	73	89	82	76	73	80	76	72	79	75	72	78	74	71	70		
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66		
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63		
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	61	60		
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58		

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

	0°
0°	195072
5°	169227
10°	110113
15°	59756
20°	35866
25°	28441
30°	23149
35°	18558
40°	14592
45°	11141
50°	5740
55°	1348
60°	767
65°	389
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11141 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.9	23.7
10°-20°	305.7	28.2
20°-30°	217.5	20.1
30°-40°	174.2	16.1
40°-50°	106.3	9.8
50°-60°	19.8	1.8
60°-70°	3.1	0.3
70°-80°	0.0	0.0
80°-90°	0.0	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°	780.1	72.0
0°-40°	954.3	88.1
0°-60°	1080.4	99.7
0°-90°	1083.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1083.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3558	
5°	3075	257
15°	1053	306
25°	470	217
35°	277	174
45°	144	106
55°	14	20
65°	3	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3558.4
2.5°	3451.9
5°	3075.2
7.5°	2524.6
10°	1978.1
12.5°	1471.8
15°	1052.9
17.5°	773.6
20°	614.8
22.5°	531.4
25°	470.2
27.5°	415.9
30°	365.7
32.5°	320.5
35°	277.3
37.5°	239.1
40°	203.9
42.5°	173.8
45°	143.7
47.5°	103.5
50°	67.3
52.5°	30.1
55°	14.1
57.5°	9.0
60°	7.0
62.5°	5.0
65°	3.0
67.5°	1.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
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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(END OF REPORT)