

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: P640382

Luminaire Tested: ML5609LSNFL25D2W1E - 693TBZB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640382
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-20)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSNFL25D2W1E - 693TBZB - 900LM - 3000K
Description: ML56 RR, 25D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1089.7 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

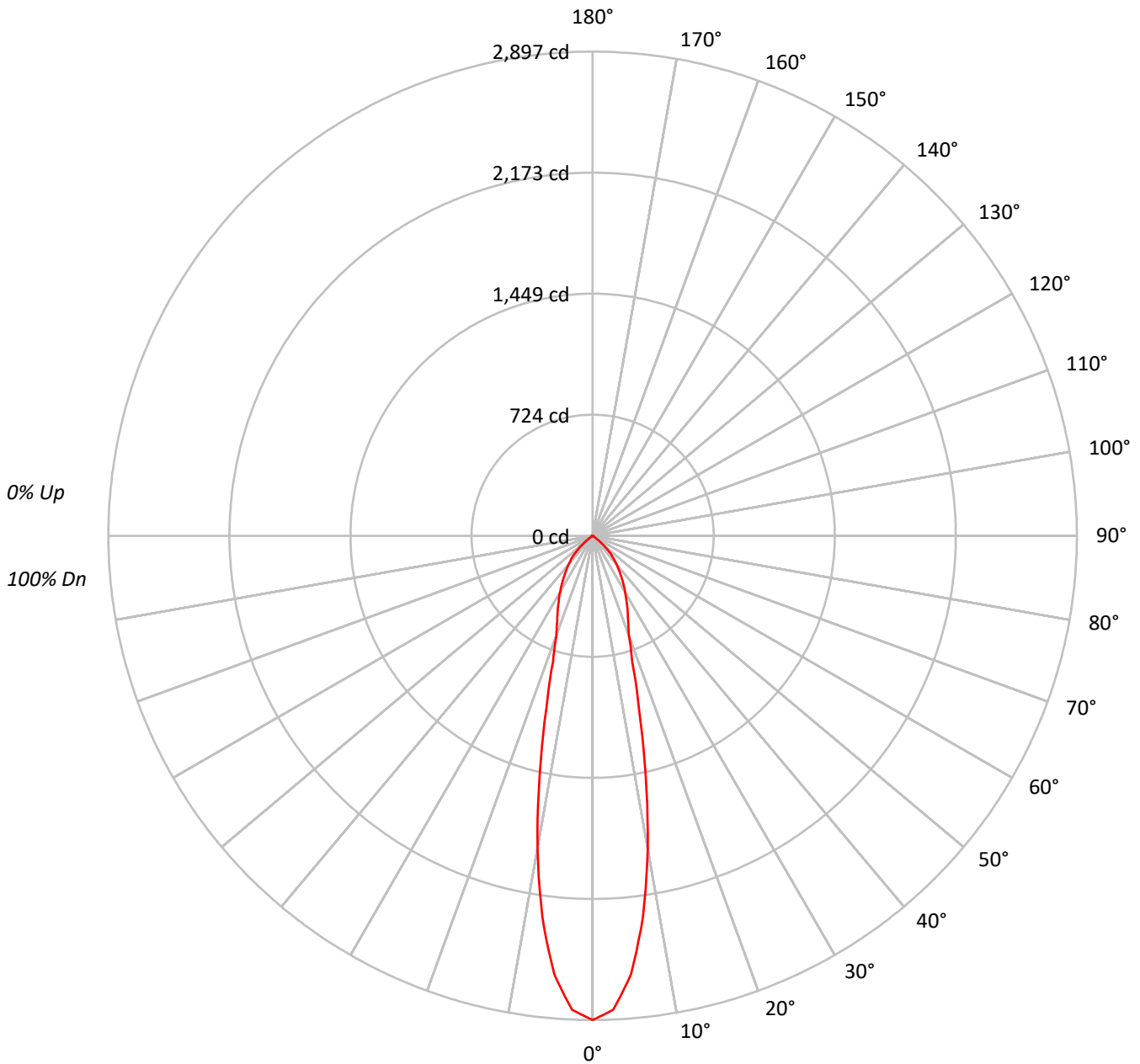
Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	93	96	94	91	93	91	90	88			
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	88	86	84	82			
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77			
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	72			
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68			
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65			
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	63	61			
9	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58			
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	158809
5°	144882
10°	105743
15°	60517
20°	36922
25°	29935
30°	24637
35°	19983
40°	15815
45°	12118
50°	6158
55°	1548
60°	943
65°	415
70°	176
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12118 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.5	20.9
10°-20°	305.8	28.1
20°-30°	228.0	20.9
30°-40°	187.2	17.2
40°-50°	115.3	10.6
50°-60°	21.9	2.0
60°-70°	3.6	0.3
70°-80°	0.4	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°	761.3	69.9
0°-40°	948.5	87.0
0°-60°	1085.7	99.6
0°-90°	1089.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1089.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2897	
5°	2633	227
15°	1066	306
25°	495	228
35°	299	187
45°	156	115
55°	16	22
65°	3	4
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2896.9
2.5°	2838.7
5°	2632.8
7.5°	2302.9
10°	1899.6
12.5°	1460.8
15°	1066.3
17.5°	787.0
20°	632.9
22.5°	553.1
25°	494.9
27.5°	438.8
30°	389.2
32.5°	342.8
35°	298.6
37.5°	258.7
40°	221.0
42.5°	188.7
45°	156.3
47.5°	112.1
50°	72.2
52.5°	32.3
55°	16.2
57.5°	10.8
60°	8.6
62.5°	5.4
65°	3.2
67.5°	1.1
70°	1.1
72.5°	1.1
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)