

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: P640357

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

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640357
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSNFL25D2W1E - 593TBZB - 900LM - 2700K
Description: ML56 RR, 25D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

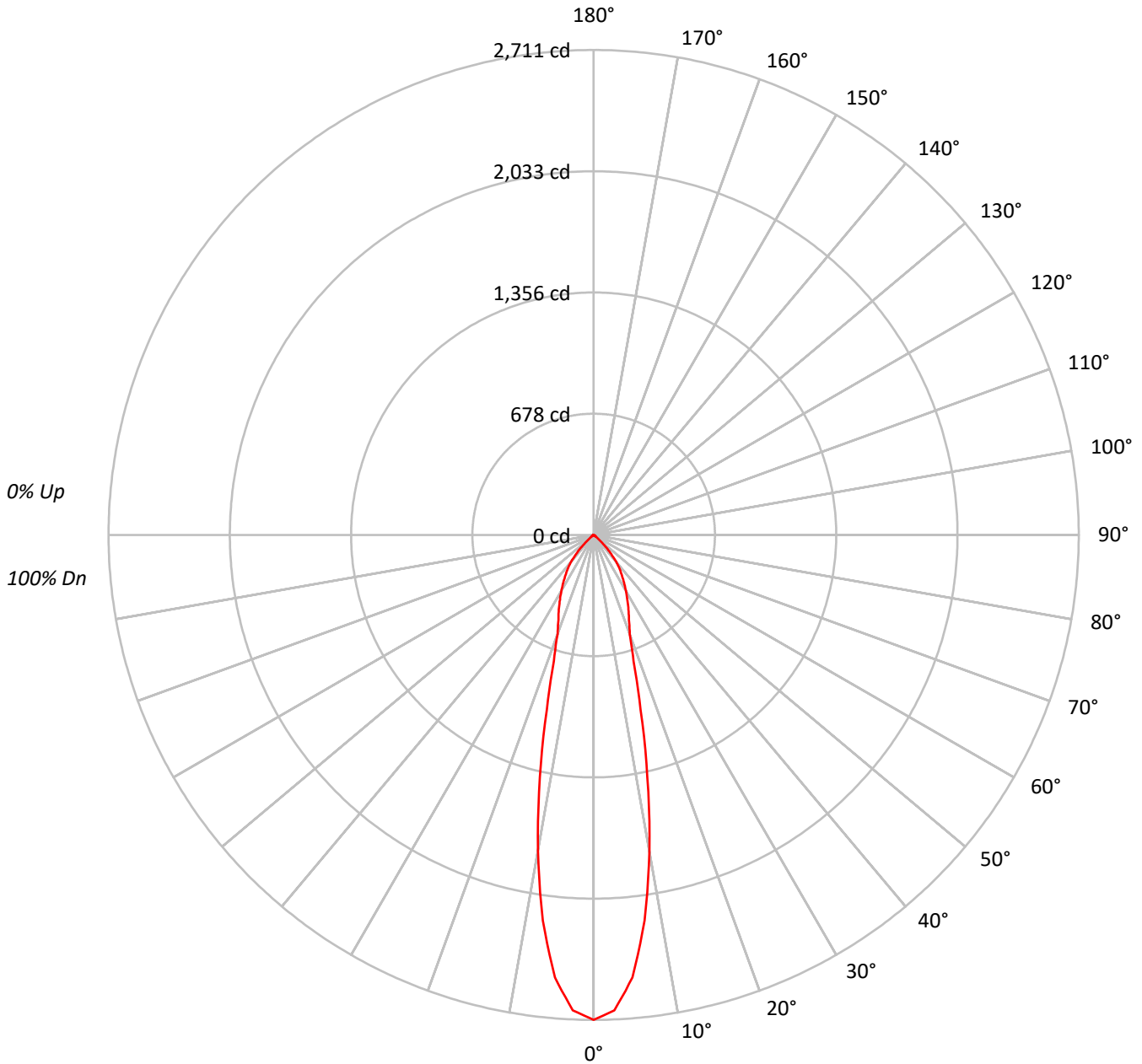
Lumens per Lamp: N/A
Luminaire Lumens: 978.7 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (A_{in}): 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	112	109	107	105	105	104	102	101	100	99	98	97	96	94			
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89			
3	104	98	93	90	102	97	92	89	94	90	88	92	89	86	89	87	85	83			
4	99	92	87	83	97	91	86	83	89	85	82	87	84	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	77	73	80	76	72	79	75	72	78	74	71	70			
7	87	78	73	69	86	78	72	69	76	72	68	75	71	68	74	71	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	65	62	59	58			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	214025
5°	196775
10°	143813
15°	82592
20°	49455
25°	40075
30°	32779
35°	26424
40°	20188
45°	11331
50°	2960
55°	1514
60°	947
65°	374
70°	231
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11331 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.4	21.9
10°-20°	288.8	29.5
20°-30°	211.8	21.6
30°-40°	171.5	17.5
40°-50°	78.2	8.0
50°-60°	11.1	1.1
60°-70°	2.6	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°	715.0	73.1
0°-40°	886.5	90.6
0°-60°	975.8	99.7
0°-90°	978.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	978.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2711	
5°	2483	214
15°	1011	289
25°	460	212
35°	274	171
45°	102	78
55°	11	11
65°	2	3
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2711.2
2.5°	2660.0
5°	2483.2
7.5°	2174.8
10°	1794.1
12.5°	1386.2
15°	1010.6
17.5°	739.3
20°	588.7
22.5°	514.3
25°	460.1
27.5°	407.8
30°	359.6
32.5°	315.4
35°	274.2
37.5°	237.1
40°	195.9
42.5°	145.7
45°	101.5
47.5°	56.3
50°	24.1
52.5°	15.1
55°	11.0
57.5°	9.0
60°	6.0
62.5°	4.0
65°	2.0
67.5°	1.0
70°	1.0
72.5°	1.0
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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