

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: P640385

Luminaire Tested: ML5609LSNFL25D2W1E - 694TBZB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSNFL25D2W1E - 694TBZB - 900LM - 2700K
Description: ML56 RR, 25D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1097.5 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.43
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

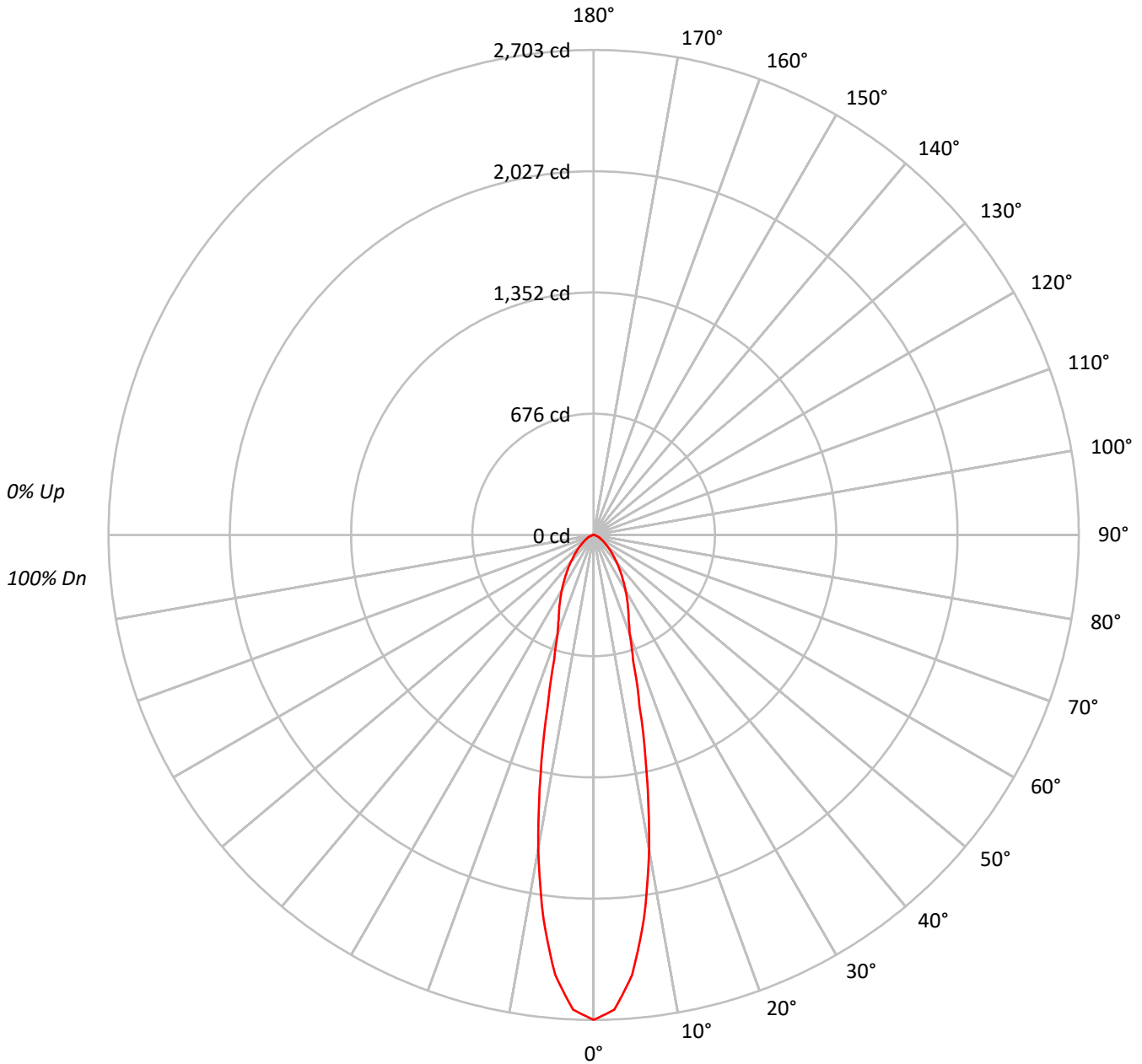
Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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			100
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	95	94	93			93
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79			79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73			73
5	91	82	76	72	89	81	76	71	80	75	71	78	74	70	76	73	70	68			68
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64			64
7	83	73	67	63	81	72	67	63	71	66	62	70	65	62	69	65	61	60			60
8	79	69	63	59	78	69	63	59	68	62	59	67	62	58	66	61	58	57			57
9	75	66	60	56	74	65	60	56	64	59	56	63	59	55	63	58	55	54			54
10	72	63	57	53	71	62	57	53	62	56	53	61	56	53	60	56	53	51			51

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	148173
5°	135417
10°	98907
15°	56090
20°	34221
25°	27461
30°	22383
35°	17949
40°	14234
45°	11133
50°	8648
55°	6815
60°	5394
65°	4436
70°	3222
75°	1906
80°	947
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11133 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.6	19.4
10°-20°	284.7	25.9
20°-30°	209.5	19.1
30°-40°	168.6	15.4
40°-50°	112.0	10.2
50°-60°	64.9	5.9
60°-70°	34.1	3.1
70°-80°	10.2	0.9
80°-90°	0.9	0.1
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°	706.8	64.4
0°-40°	875.4	79.8
0°-60°	1052.3	95.9
0°-90°	1097.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1097.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2703	
5°	2461	213
15°	988	285
25°	454	210
35°	268	169
45°	144	112
55°	71	65
65°	34	34
75°	9	10
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2702.9
2.5°	2648.6
5°	2460.8
7.5°	2152.5
10°	1776.8
12.5°	1366.0
15°	988.3
17.5°	730.2
20°	586.6
22.5°	510.2
25°	454.0
27.5°	402.8
30°	353.6
32.5°	309.4
35°	268.2
37.5°	232.0
40°	198.9
42.5°	168.7
45°	143.6
47.5°	121.5
50°	101.4
52.5°	85.4
55°	71.3
57.5°	59.3
60°	49.2
62.5°	41.2
65°	34.2
67.5°	28.1
70°	20.1
72.5°	13.1
75°	9.0
77.5°	5.0
80°	3.0
82.5°	2.0
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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