

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: P640369

Luminaire Tested: ML5609LSNFL25D2W1E - 691WB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSNFL25D2W1E - 691WB - 900LM - 2700K
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

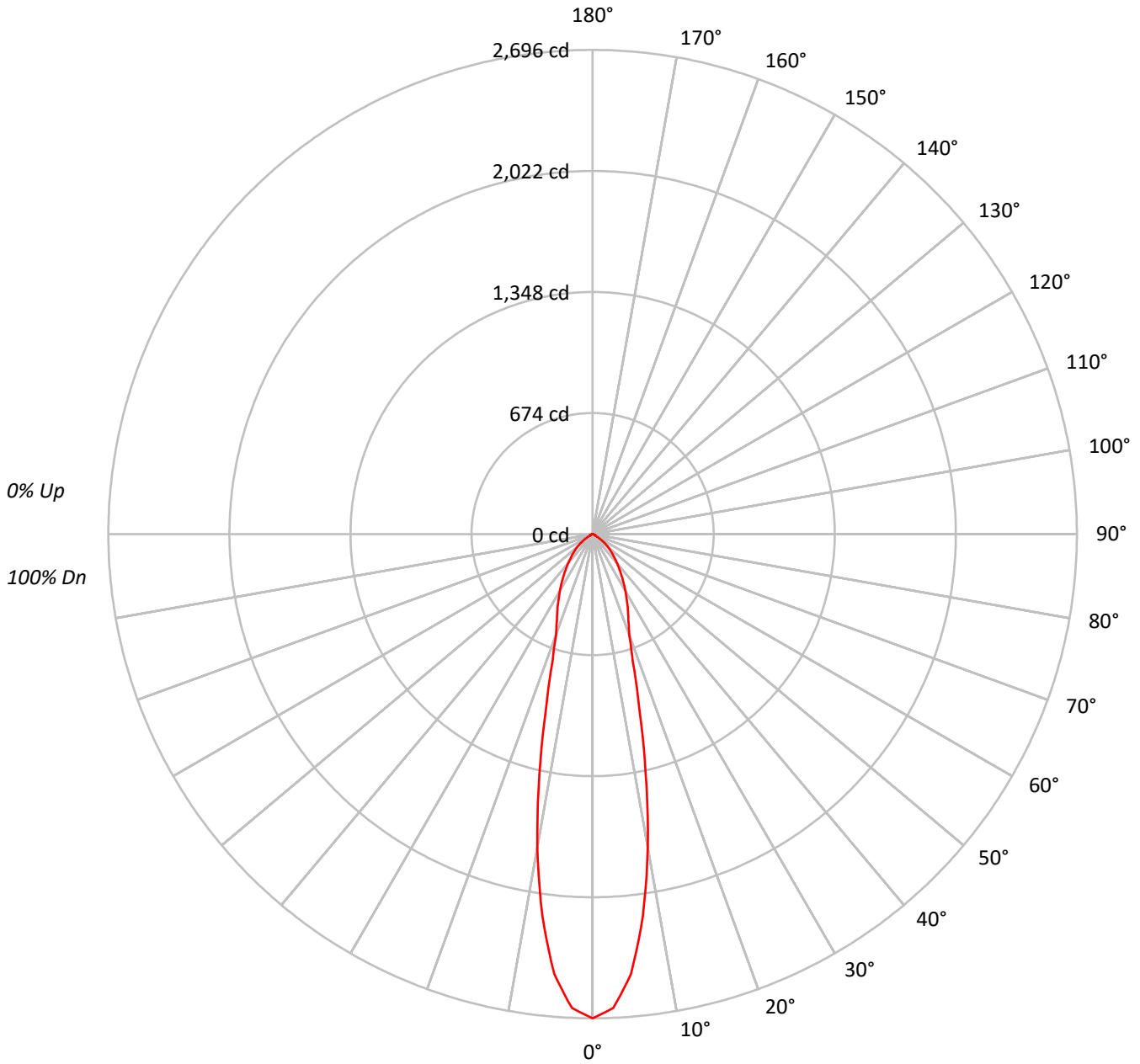
Lumens per Lamp: N/A
Luminaire Lumens: 1089.5 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (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									
RC	80									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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	95	105	101	97	94	97	94	91	94	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80																			
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65																			
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61																			
8	80	70	64	60	78	70	64	60	68	63	60	67	63	59	66	62	59	58																			
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55																			
10	73	63	58	54	72	63	58	54	62	57	54	61	57	54	61	57	53	52																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	147795
5°	135263
10°	98540
15°	56646
20°	34676
25°	28060
30°	23010
35°	18745
40°	15093
45°	12063
50°	9509
55°	6146
60°	2423
65°	1829
70°	1443
75°	1271
80°	1263
85°	1258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12063 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.0	19.5
10°-20°	286.2	26.3
20°-30°	213.8	19.6
30°-40°	175.7	16.1
40°-50°	121.1	11.1
50°-60°	58.1	5.3
60°-70°	14.0	1.3
70°-80°	6.5	0.6
80°-90°	2.2	0.2
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°	711.9	65.3
0°-40°	887.6	81.5
0°-60°	1066.8	97.9
0°-90°	1089.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1089.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2696	
5°	2458	212
15°	998	286
25°	464	214
35°	280	176
45°	156	121
55°	64	58
65°	14	14
75°	6	6
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2696.0
2.5°	2641.8
5°	2458.0
7.5°	2143.8
10°	1770.2
12.5°	1364.6
15°	998.1
17.5°	739.0
20°	594.4
22.5°	519.1
25°	463.9
27.5°	411.7
30°	363.5
32.5°	319.3
35°	280.1
37.5°	244.0
40°	210.9
42.5°	181.7
45°	155.6
47.5°	132.5
50°	111.5
52.5°	90.4
55°	64.3
57.5°	41.2
60°	22.1
62.5°	16.1
65°	14.1
67.5°	11.0
70°	9.0
72.5°	7.0
75°	6.0
77.5°	5.0
80°	4.0
82.5°	3.0
85°	2.0
87.5°	1.0
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)