

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: P640367

Luminaire Tested: ML5609LSNFL25D2W1E - 596WB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640367
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSNFL25D2W1E - 596WB - 900LM - 2700K
Description: ML56 RR, 25D TIR OPTIC, 5" SHALLOW WHITE BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

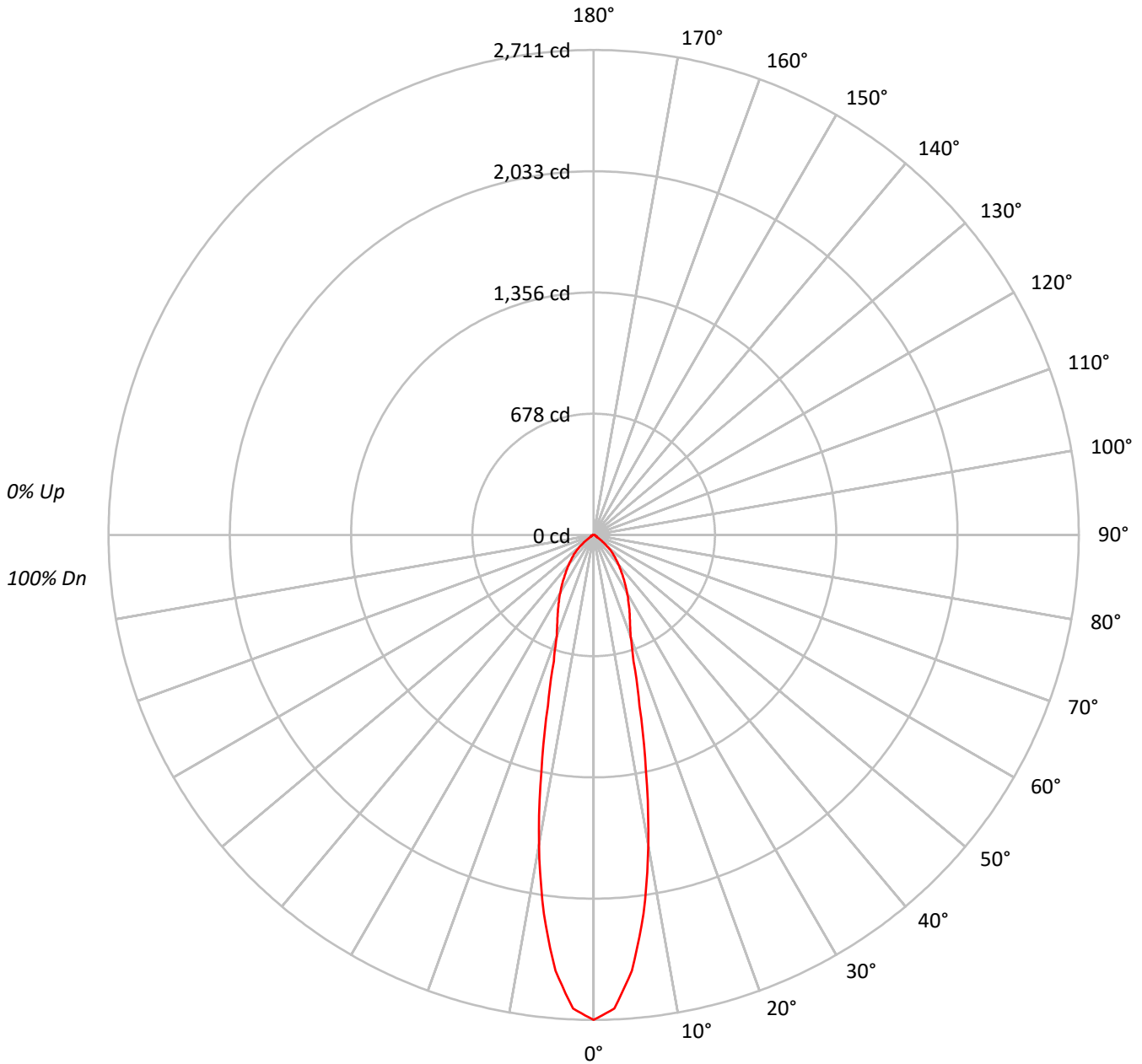
Lumens per Lamp: N/A
Luminaire Lumens: 1081.5 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.44
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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									
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			100																
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93																
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86			86																
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80			80																
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75			75																
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70			70																
6	88	79	73	69	86	78	72	68	76	72	68	75	71	67	74	70	67	65			65																
7	84	74	68	64	82	74	68	64	72	67	64	71	67	63	70	66	63	62			62																
8	80	71	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58			58																
9	76	67	61	57	75	67	61	57	66	61	57	65	60	57	64	60	57	55			55																
10	73	64	58	54	72	63	58	54	63	58	54	62	57	54	61	57	54	53			53																

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	214009
5°	193811
10°	141143
15°	80859
20°	50547
25°	41295
30°	34055
35°	27590
40°	22145
45°	17606
50°	11839
55°	5395
60°	3016
65°	2821
70°	2308
75°	2135
80°	2273
85°	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17606 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.3	19.5
10°-20°	284.9	26.3
20°-30°	218.2	20.2
30°-40°	179.8	16.6
40°-50°	120.3	11.1
50°-60°	41.8	3.9
60°-70°	14.5	1.3
70°-80°	7.8	0.7
80°-90°	2.9	0.3
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°	714.4	66.1
0°-40°	894.2	82.7
0°-60°	1056.3	97.7
0°-90°	1081.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1081.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2711	
5°	2446	211
15°	989	285
25°	474	218
35°	286	180
45°	158	120
55°	39	42
65°	15	15
75°	7	8
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2711.0
2.5°	2649.7
5°	2445.8
7.5°	2136.4
10°	1760.8
12.5°	1350.0
15°	989.4
17.5°	740.3
20°	601.7
22.5°	529.3
25°	474.1
27.5°	420.9
30°	373.6
32.5°	328.4
35°	286.3
37.5°	248.1
40°	214.9
42.5°	184.8
45°	157.7
47.5°	129.6
50°	96.4
52.5°	68.3
55°	39.2
57.5°	24.1
60°	19.1
62.5°	17.1
65°	15.1
67.5°	12.1
70°	10.0
72.5°	8.0
75°	7.0
77.5°	7.0
80°	5.0
82.5°	4.0
85°	3.0
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)