

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: P640310

Luminaire Tested: ML5609LSFL40D2W1E - 593SNB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640310
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-30)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 593SNB - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" SATIN NICKLE BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

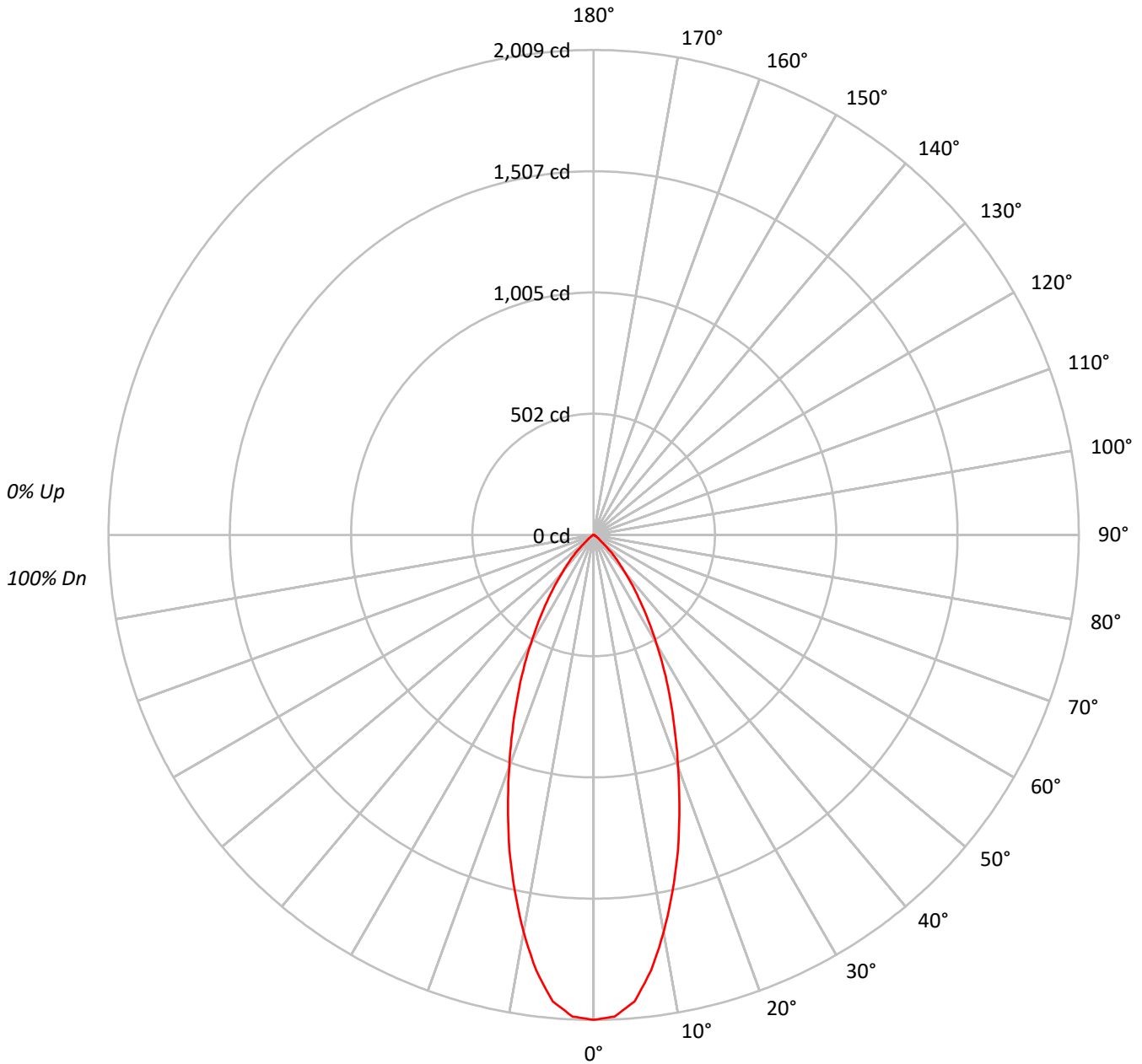
Lumens per Lamp: N/A
Luminaire Lumens: 1211.5 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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					70					50					30				
RW	70	50	30	10	70	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	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94		
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88		
3	103	97	92	88	101	96	91	88	93	89	86	91	87	85	88	86	84	82		
4	98	91	86	82	96	90	85	81	88	83	80	86	82	79	84	81	78	77		
5	93	85	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72		
6	89	81	75	71	88	80	74	70	78	74	70	77	73	69	76	72	69	68		
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64		
8	81	72	66	62	80	71	66	62	70	65	62	69	65	62	68	64	61	60		
9	78	68	63	59	76	68	62	59	67	62	59	66	62	58	65	61	58	57		
10	74	65	59	56	73	65	59	56	64	59	56	63	59	55	62	58	55	54		

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	158569
5°	153707
10°	133889
15°	110174
20°	85822
25°	65326
30°	47445
35°	32399
40°	20321
45°	12035
50°	4495
55°	2670
60°	1531
65°	598
70°	254
75°	336
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12035 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.1	14.5
10°-20°	372.0	30.7
20°-30°	344.0	28.4
30°-40°	212.8	17.6
40°-50°	83.1	6.9
50°-60°	18.5	1.5
60°-70°	4.2	0.3
70°-80°	0.7	0.1
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°	892.1	73.6
0°-40°	1105.0	91.2
0°-60°	1206.5	99.6
0°-90°	1211.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1211.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2009	
5°	1940	176
15°	1348	372
25°	750	344
35°	336	213
45°	108	83
55°	19	18
65°	3	4
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2008.7
2.5°	1996.8
5°	1939.7
7.5°	1820.1
10°	1670.3
12.5°	1509.7
15°	1348.1
17.5°	1178.9
20°	1021.6
22.5°	878.3
25°	750.0
27.5°	631.5
30°	520.5
32.5°	422.4
35°	336.2
37.5°	262.9
40°	197.2
42.5°	149.8
45°	107.8
47.5°	63.6
50°	36.6
52.5°	26.9
55°	19.4
57.5°	14.0
60°	9.7
62.5°	7.5
65°	3.2
67.5°	1.1
70°	1.1
72.5°	1.1
75°	1.1
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)