

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: P640334

Luminaire Tested: ML5609LSFL40D2W1E - 693SNB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640334
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-42)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 693SNB - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 6" SATIN NICKLE BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

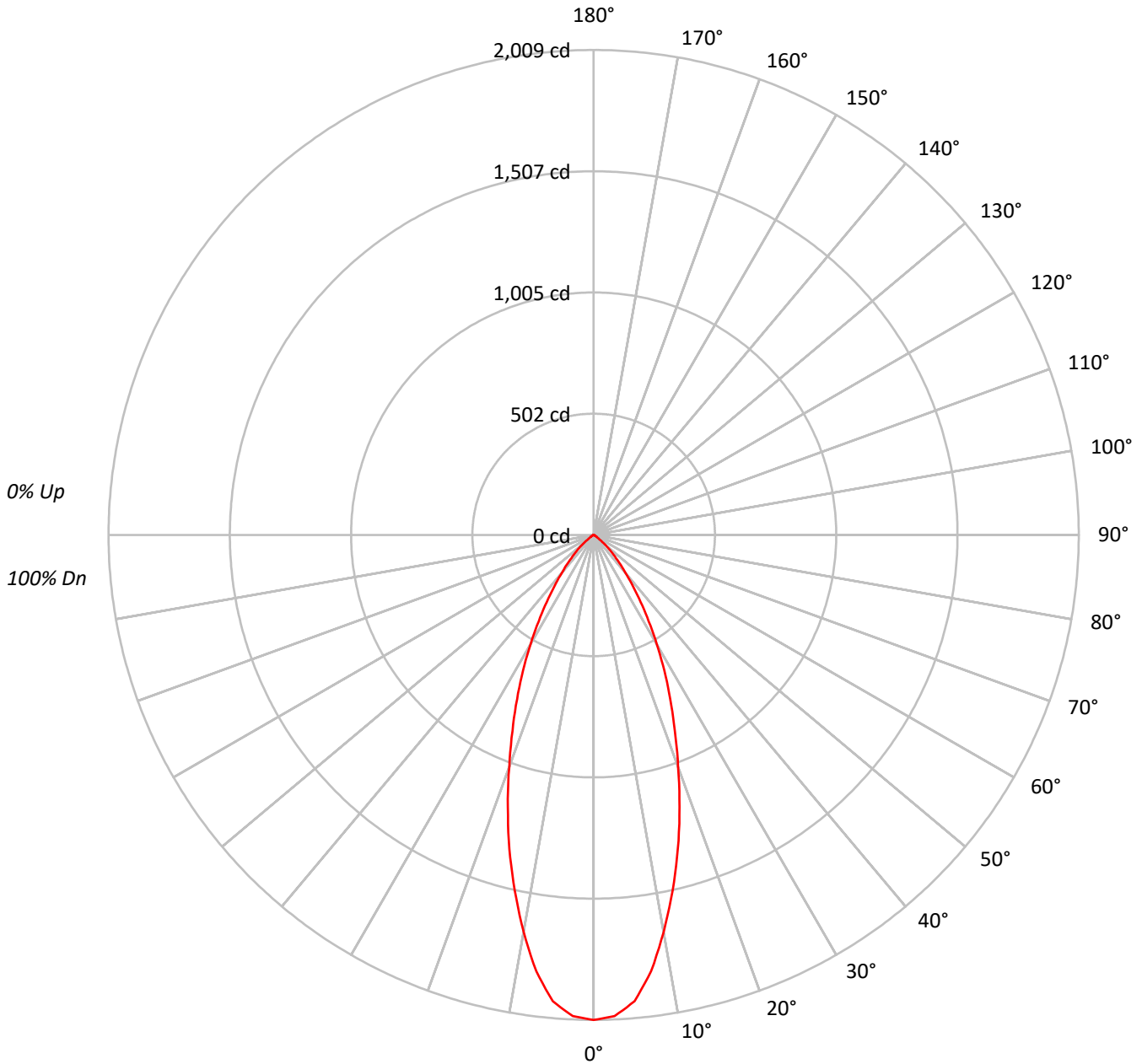
Lumens per Lamp: N/A
Luminaire Lumens: 1226.6 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.7
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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				100															
1	114	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94				94															
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88				88															
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82				82															
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	80	78	76				76															
5	93	85	80	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72				72															
6	89	80	74	70	87	79	74	70	78	73	70	77	72	69	75	72	69	67				67															
7	85	76	70	66	83	75	70	66	74	69	65	73	68	65	72	68	65	63				63															
8	81	72	66	62	80	71	66	62	70	65	62	69	65	61	68	64	61	60				60															
9	77	68	62	58	76	67	62	58	67	62	58	66	61	58	65	61	58	56				56															
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	53				53															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	110156
5°	106719
10°	92945
15°	76459
20°	59651
25°	45408
30°	33043
35°	22667
40°	14663
45°	9032
50°	4878
55°	1854
60°	1184
65°	415
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9032 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.2	14.4
10°-20°	372.2	30.3
20°-30°	344.2	28.1
30°-40°	214.6	17.5
40°-50°	93.8	7.6
50°-60°	21.6	1.8
60°-70°	4.0	0.3
70°-80°	0.0	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°	892.6	72.8
0°-40°	1107.3	90.3
0°-60°	1222.6	99.7
0°-90°	1226.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1226.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2009	
5°	1939	176
15°	1347	372
25°	751	344
35°	339	215
45°	116	94
55°	19	22
65°	3	4
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2009.4
2.5°	1995.4
5°	1939.3
7.5°	1822.8
10°	1669.7
12.5°	1509.0
15°	1347.2
17.5°	1182.1
20°	1022.5
22.5°	878.0
25°	750.7
27.5°	632.1
30°	522.0
32.5°	423.9
35°	338.7
37.5°	265.3
40°	204.9
42.5°	158.6
45°	116.5
47.5°	86.3
50°	57.2
52.5°	29.1
55°	19.4
57.5°	15.1
60°	10.8
62.5°	6.5
65°	3.2
67.5°	1.1
70°	0.0
72.5°	0.0
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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(END OF REPORT)