

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: P640300

Luminaire Tested: ML5609LSFL40D2W1E - 591WB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-24)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 591WB - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" DEADFRONT TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1228.8 lumens
Efficiency: N/A
Efficacy: 104.1 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

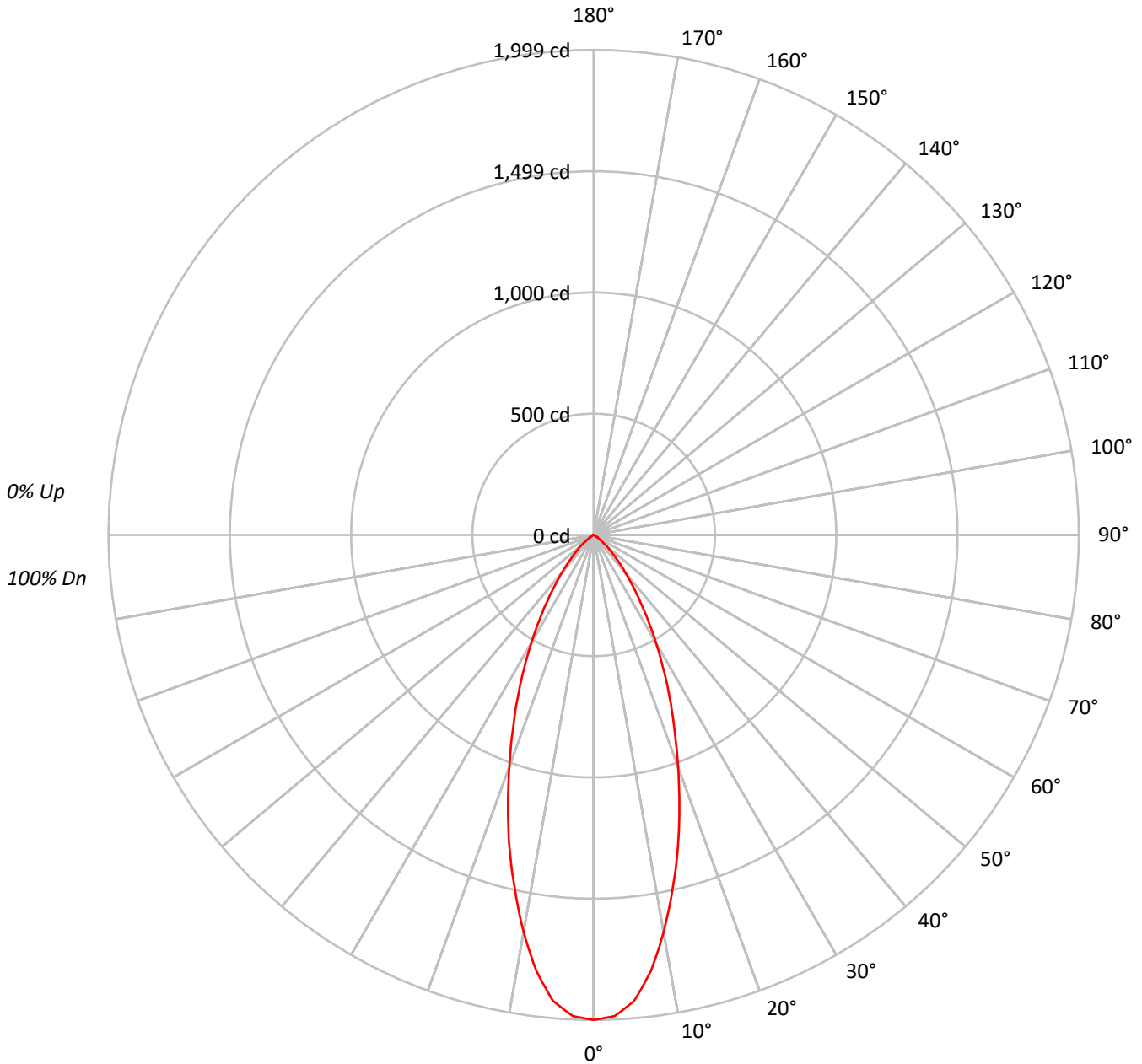
Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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			
1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87			
3	103	96	91	88	101	95	90	87	92	89	85	90	87	84	88	85	83	81			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71			
6	88	80	74	70	87	79	73	69	77	73	69	76	72	69	75	71	68	67			
7	84	75	69	65	83	75	69	65	73	68	65	72	68	64	71	67	64	63			
8	80	71	65	61	79	71	65	61	70	65	61	69	64	61	68	63	60	59			
9	77	67	62	58	76	67	62	58	66	61	58	65	61	57	64	60	57	56			
10	74	64	59	55	73	64	58	55	63	58	55	62	58	54	61	57	54	53			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	157827
5°	152708
10°	133224
15°	109488
20°	85292
25°	64586
30°	46762
35°	32091
40°	20991
45°	13240
50°	7676
55°	3262
60°	2210
65°	1401
70°	739
75°	671
80°	1000
85°	996

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13240 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.2	14.3
10°-20°	369.9	30.1
20°-30°	340.0	27.7
30°-40°	211.1	17.2
40°-50°	94.6	7.7
50°-60°	26.3	2.1
60°-70°	7.9	0.6
70°-80°	2.5	0.2
80°-90°	1.2	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°	885.1	72.0
0°-40°	1096.2	89.2
0°-60°	1217.2	99.1
0°-90°	1228.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1228.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1999	
5°	1927	175
15°	1340	370
25°	742	340
35°	333	211
45°	119	95
55°	24	26
65°	8	8
75°	2	2
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1999.3
2.5°	1985.3
5°	1927.1
7.5°	1811.8
10°	1662.0
12.5°	1499.2
15°	1339.7
17.5°	1173.7
20°	1015.3
22.5°	870.9
25°	741.5
27.5°	620.8
30°	513.0
32.5°	415.0
35°	333.0
37.5°	261.9
40°	203.7
42.5°	157.4
45°	118.6
47.5°	87.3
50°	62.5
52.5°	38.8
55°	23.7
57.5°	18.3
60°	14.0
62.5°	10.8
65°	7.5
67.5°	5.4
70°	3.2
72.5°	2.2
75°	2.2
77.5°	2.2
80°	2.2
82.5°	1.1
85°	1.1
87.5°	1.1
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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