

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: P640307

Luminaire Tested: ML5609LSFL40D2W1E - 593BB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640307
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-29)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 593BB - 900LM - 2700K
Description: ML56 RR, 40D TIR OPTIC, 5" BLACK BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

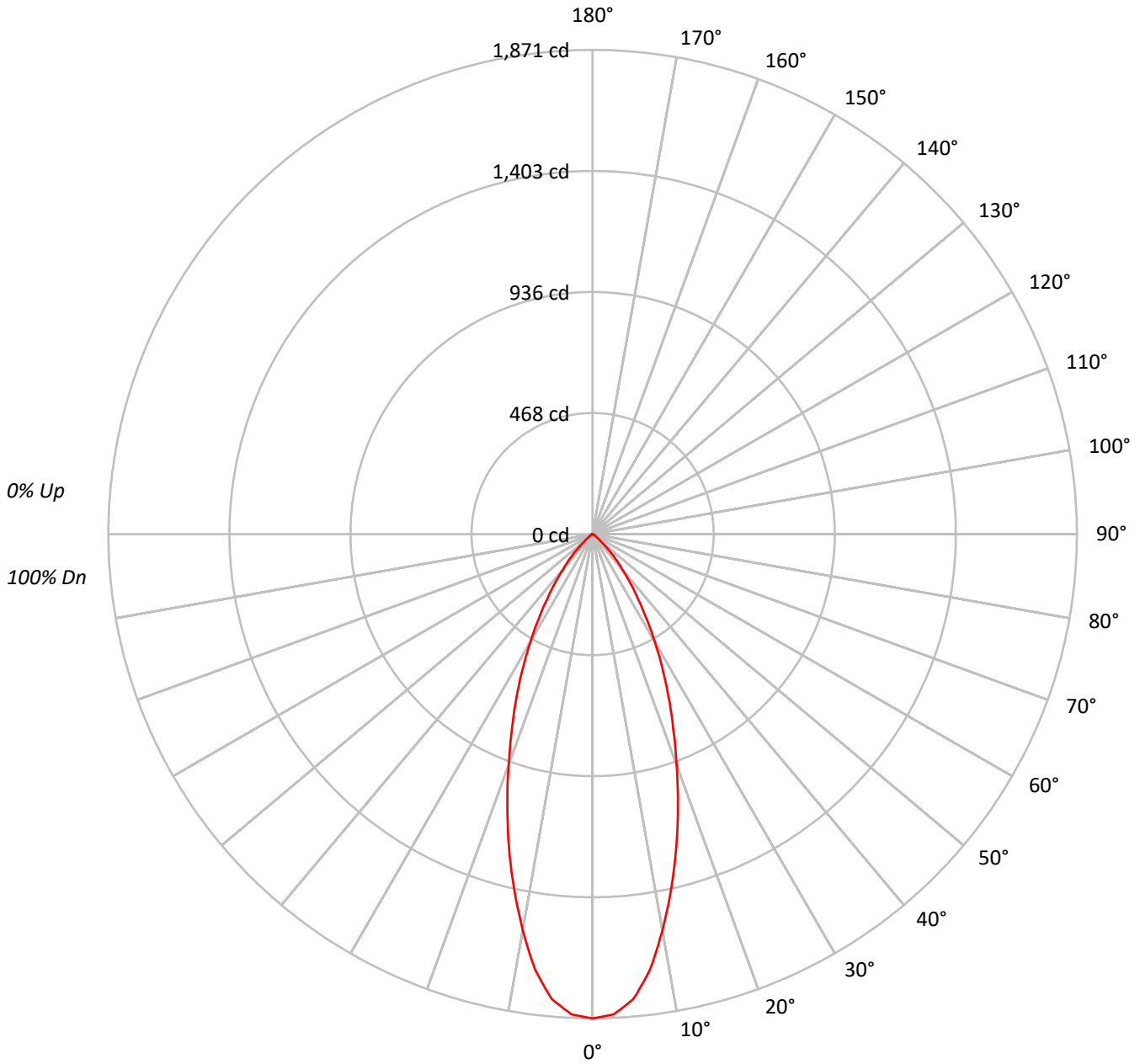
Lumens per Lamp: N/A
Luminaire Lumens: 1112.6 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (Ain): 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			100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			94
2	108	104	100	97	106	102	99	96	99	96	93	96	94	92	93	91	90	88			88
3	103	97	92	89	101	96	91	88	93	90	87	91	88	85	89	86	84	82			82
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77			77
5	94	86	80	76	92	85	80	76	83	79	75	81	78	74	80	77	74	72			72
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68			68
7	85	76	71	67	84	76	70	67	75	70	66	73	69	66	72	68	65	64			64
8	81	72	67	63	80	72	66	63	71	66	62	70	65	62	69	65	62	61			61
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	66	62	59	57			57
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54			54

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	147730
5°	142953
10°	124551
15°	102182
20°	79614
25°	60492
30°	43790
35°	29537
40°	18333
45°	10550
50°	3709
55°	2078
60°	1105
65°	374
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10550 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.1	14.7
10°-20°	345.5	31.1
20°-30°	318.2	28.6
30°-40°	194.7	17.5
40°-50°	72.8	6.5
50°-60°	14.8	1.3
60°-70°	2.6	0.2
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°	827.8	74.4
0°-40°	1022.5	91.9
0°-60°	1110.1	99.8
0°-90°	1112.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1112.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1871	
5°	1804	164
15°	1250	346
25°	694	318
35°	306	195
45°	94	73
55°	15	15
65°	2	3
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1871.4
2.5°	1858.3
5°	1804.0
7.5°	1698.5
10°	1553.8
12.5°	1403.0
15°	1250.3
17.5°	1095.5
20°	947.7
22.5°	813.1
25°	694.5
27.5°	582.9
30°	480.4
32.5°	386.9
35°	306.5
37.5°	240.2
40°	177.9
42.5°	134.7
45°	94.5
47.5°	51.3
50°	30.2
52.5°	22.1
55°	15.1
57.5°	11.1
60°	7.0
62.5°	5.0
65°	2.0
67.5°	0.0
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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