

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: P640304

Luminaire Tested: ML5609LSFL40D2W1E - 592SC - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640304
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-25)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSFL40D2W1E - 592SC - 900LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" SPECULAR CLEAR TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

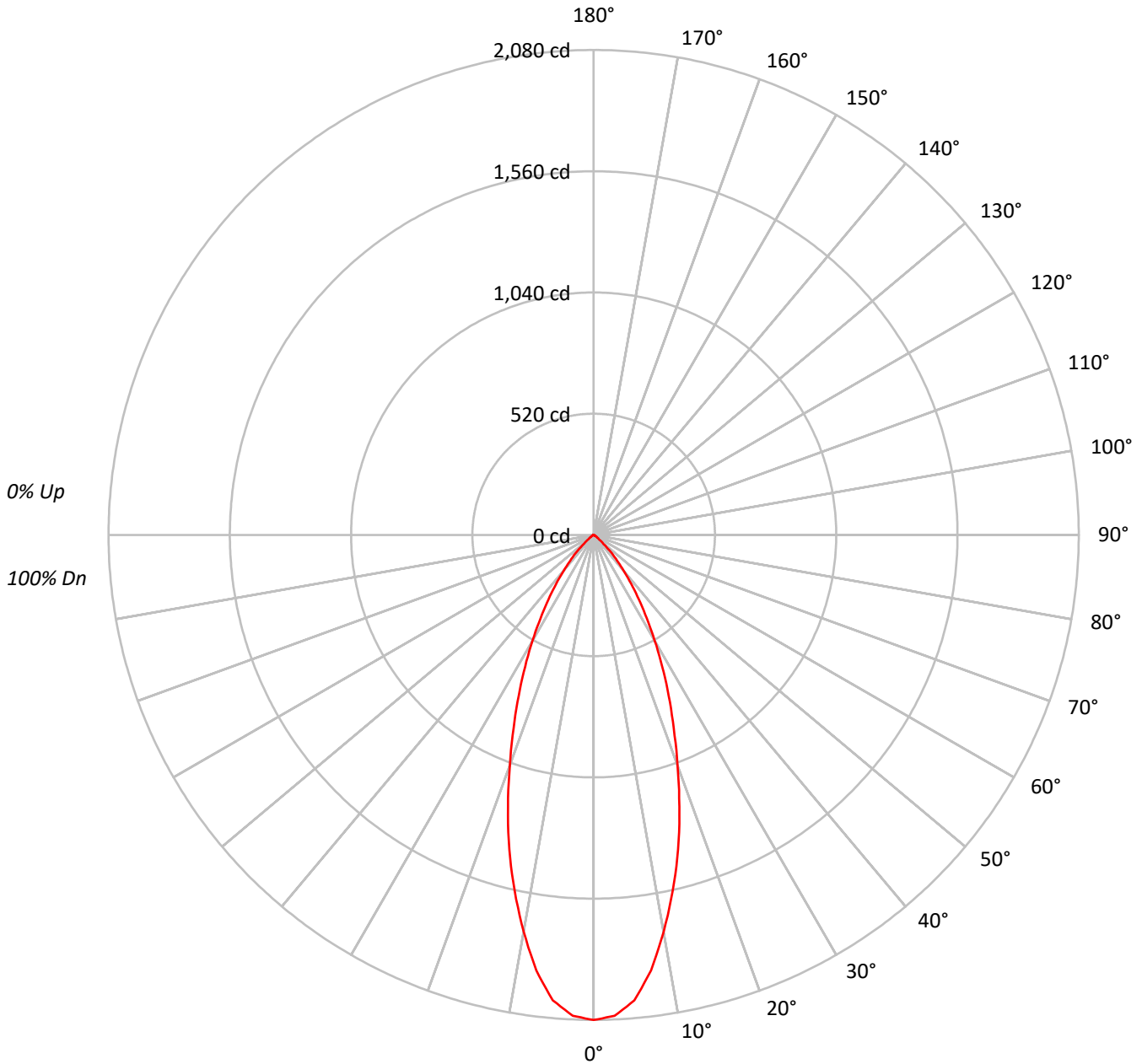
Lumens per Lamp: N/A
Luminaire Lumens: 1229.8 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	164221
5°	158778
10°	138482
15°	114220
20°	88241
25°	66223
30°	47673
35°	32525
40°	20332
45°	11555
50°	4102
55°	2381
60°	1358
65°	411
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11555 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.2	14.8
10°-20°	385.1	31.3
20°-30°	349.2	28.4
30°-40°	213.3	17.3
40°-50°	80.6	6.6
50°-60°	16.4	1.3
60°-70°	2.9	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°	916.6	74.5
0°-40°	1129.9	91.9
0°-60°	1226.9	99.8
0°-90°	1229.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1229.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2080	
5°	2004	182
15°	1398	385
25°	760	349
35°	338	213
45°	104	81
55°	17	16
65°	2	3
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2080.3
2.5°	2064.1
5°	2003.7
7.5°	1884.0
10°	1727.6
12.5°	1564.8
15°	1397.6
17.5°	1221.8
20°	1050.4
22.5°	896.2
25°	760.3
27.5°	636.3
30°	523.0
32.5°	422.7
35°	337.5
37.5°	263.1
40°	197.3
42.5°	148.8
45°	103.5
47.5°	58.2
50°	33.4
52.5°	23.7
55°	17.3
57.5°	11.9
60°	8.6
62.5°	5.4
65°	2.2
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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(END OF REPORT)