

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: P640549

Luminaire Tested: ML5612LSFL4097FS1E - 591WB - 600LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640549
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: ML5612LSFL4097FS1E - 591WB - 600LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 5" DEADFRONT TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

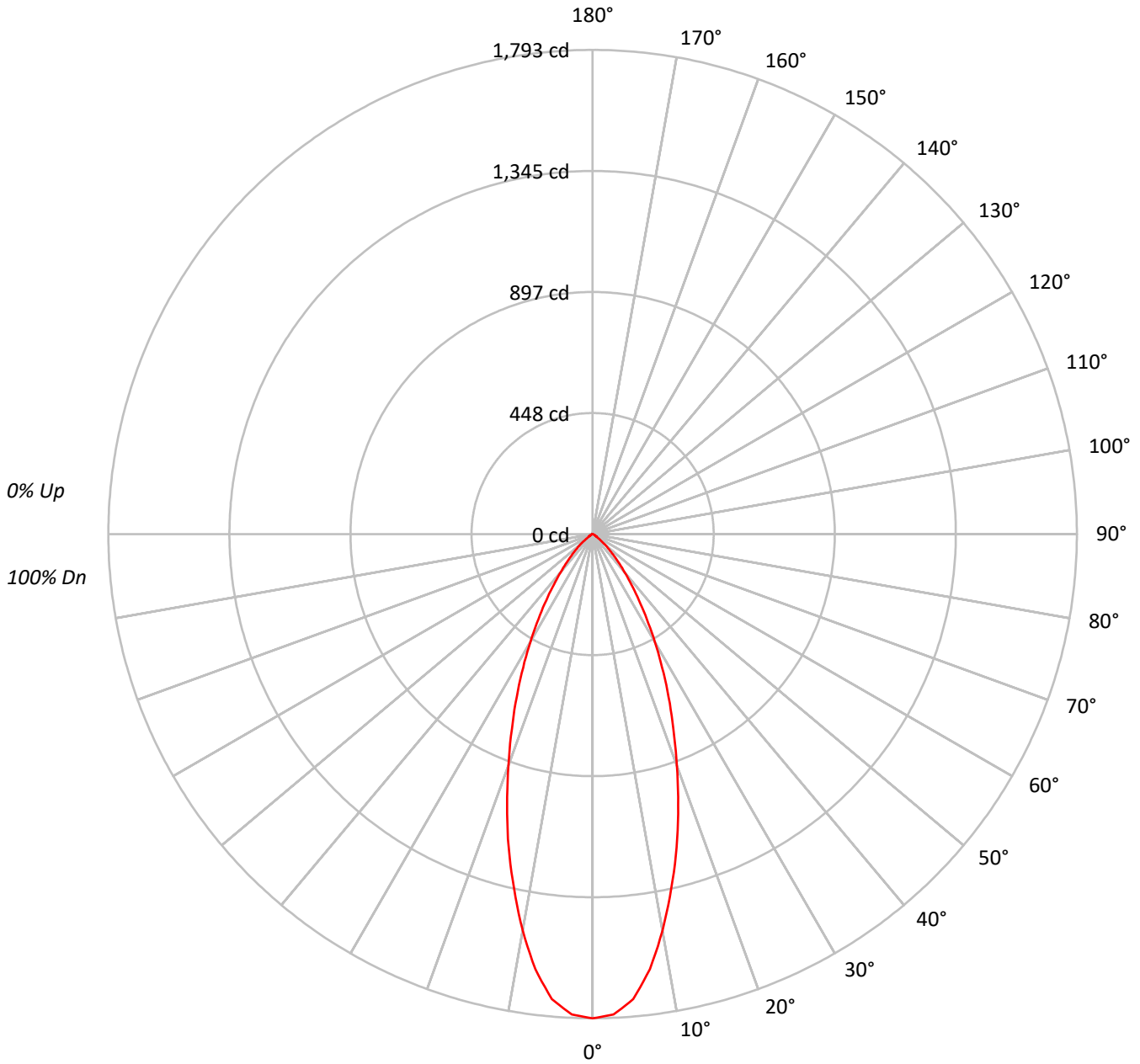
Lumens per Lamp: N/A
Luminaire Lumens: 1102.1 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
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																			
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°	141565
5°	136971
10°	119493
15°	98202
20°	76505
25°	57931
30°	41949
35°	28785
40°	18827
45°	11867
50°	6890
55°	2932
60°	1989
65°	1270
70°	669
75°	580
80°	864
85°	906

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11867 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	14.3
10°-20°	331.8	30.1
20°-30°	305.0	27.7
30°-40°	189.4	17.2
40°-50°	84.8	7.7
50°-60°	23.6	2.1
60°-70°	7.1	0.6
70°-80°	2.1	0.2
80°-90°	1.1	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°	793.9	72.0
0°-40°	983.3	89.2
0°-60°	1091.7	99.1
0°-90°	1102.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1102.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1793	
5°	1728	157
15°	1202	332
25°	665	305
35°	299	189
45°	106	85
55°	21	24
65°	7	7
75°	2	2
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1793.3
2.5°	1780.7
5°	1728.5
7.5°	1625.1
10°	1490.7
12.5°	1344.7
15°	1201.6
17.5°	1052.8
20°	910.7
22.5°	781.1
25°	665.1
27.5°	556.8
30°	460.2
32.5°	372.2
35°	298.7
37.5°	234.9
40°	182.7
42.5°	141.1
45°	106.3
47.5°	78.3
50°	56.1
52.5°	34.8
55°	21.3
57.5°	16.4
60°	12.6
62.5°	9.7
65°	6.8
67.5°	4.8
70°	2.9
72.5°	1.9
75°	1.9
77.5°	1.9
80°	1.9
82.5°	1.0
85°	1.0
87.5°	1.0
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)