

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: P640724

Luminaire Tested: ML5612LSFL4097FS1E - 691WB - 1200LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640724
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 691WB - 1200LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 6" DEADFRONT TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1719.2 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

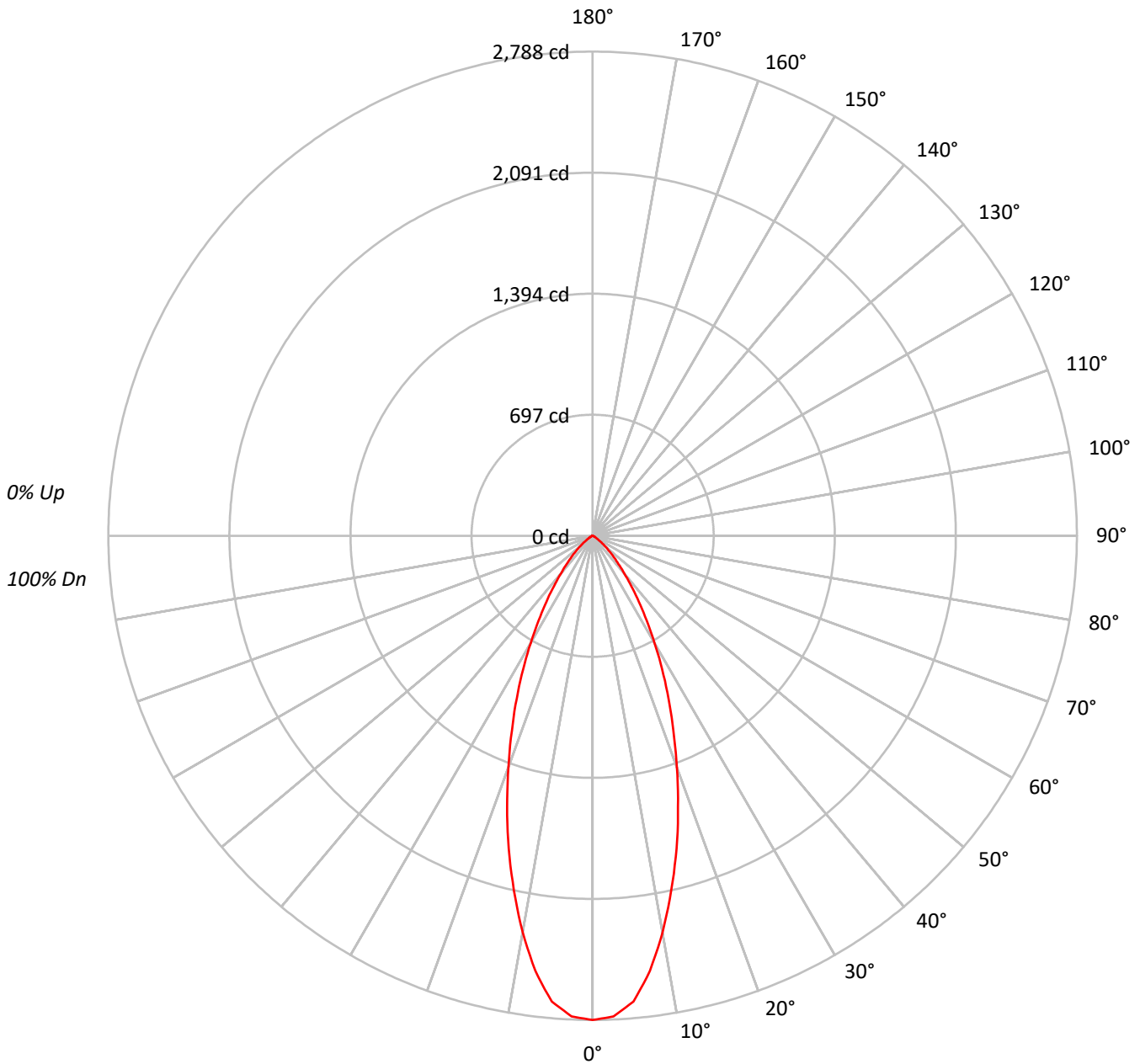
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	87	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	72	69	76	72	68	75	71	68	67			
7	84	75	69	65	83	74	69	65	73	68	65	72	68	64	71	67	64	63			
8	80	71	65	61	79	70	65	61	69	64	61	68	64	61	67	63	60	59			
9	77	67	62	58	76	67	61	58	66	61	57	65	61	57	64	60	57	56			
10	73	64	58	55	72	64	58	55	63	58	54	62	57	54	61	57	54	53			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	152850
5°	148151
10°	129061
15°	105863
20°	82642
25°	62544
30°	45121
35°	31032
40°	20295
45°	13265
50°	7804
55°	4158
60°	2302
65°	1362
70°	721
75°	318
80°	474
85°	943

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13265 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.5	14.2
10°-20°	515.6	30.0
20°-30°	473.8	27.6
30°-40°	294.1	17.1
40°-50°	134.5	7.8
50°-60°	42.3	2.5
60°-70°	10.9	0.6
70°-80°	2.4	0.1
80°-90°	1.0	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°	1234.0	71.8
0°-40°	1528.1	88.9
0°-60°	1704.9	99.2
0°-90°	1719.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1719.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2788	
5°	2692	245
15°	1865	516
25°	1034	474
35°	464	294
45°	171	135
55°	44	42
65°	10	11
75°	2	2
85°	2	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2788.2
2.5°	2770.2
5°	2692.2
7.5°	2527.1
10°	2318.5
12.5°	2091.9
15°	1865.3
17.5°	1635.7
20°	1416.6
22.5°	1214.0
25°	1034.0
27.5°	864.4
30°	712.8
32.5°	577.8
35°	463.7
37.5°	366.2
40°	283.6
42.5°	220.6
45°	171.1
47.5°	126.1
50°	91.5
52.5°	63.0
55°	43.5
57.5°	28.5
60°	21.0
62.5°	15.0
65°	10.5
67.5°	6.0
70°	4.5
72.5°	3.0
75°	1.5
77.5°	1.5
80°	1.5
82.5°	1.5
85°	1.5
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)