

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: P640727

Luminaire Tested: ML5612LSFL4097FS1E - 691WB - 600LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640727
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 - 600LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 6" DEADFRONT TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1001.5 lumens
Efficiency: N/A
Efficacy: 97.2 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

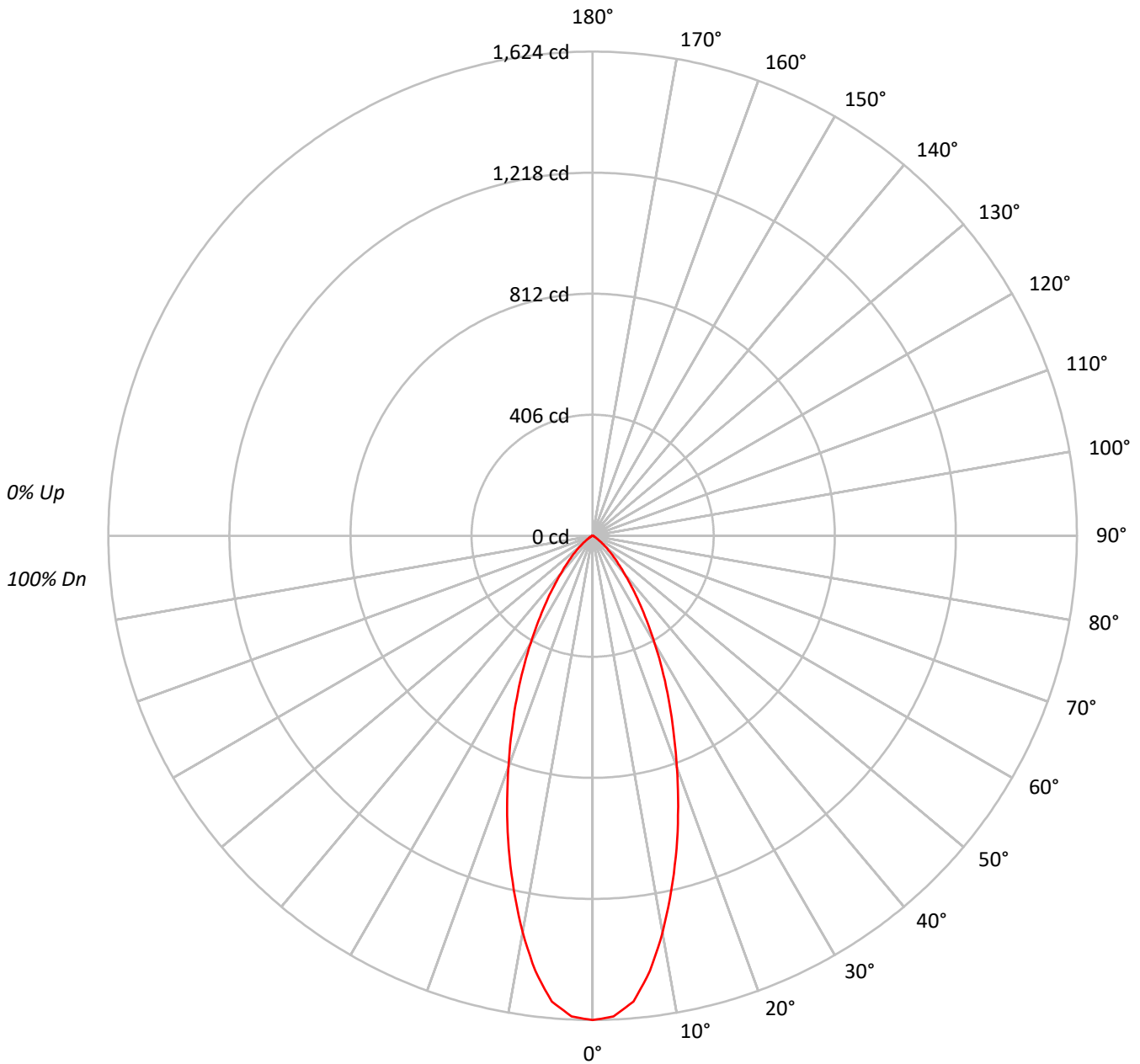
Input Watts (W): 10.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	89044
5°	86308
10°	75188
15°	61675
20°	48147
25°	36432
30°	26289
35°	18076
40°	11822
45°	7729
50°	4546
55°	2428
60°	1338
65°	791
70°	417
75°	191
80°	284
85°	566

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7729 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.4	14.2
10°-20°	300.4	30.0
20°-30°	276.0	27.6
30°-40°	171.3	17.1
40°-50°	78.4	7.8
50°-60°	24.6	2.5
60°-70°	6.3	0.6
70°-80°	1.4	0.1
80°-90°	0.6	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°	718.9	71.8
0°-40°	890.2	88.9
0°-60°	993.2	99.2
0°-90°	1001.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1624	
5°	1568	142
15°	1087	300
25°	602	276
35°	270	171
45°	100	78
55°	25	25
65°	6	6
75°	1	1
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1624.3
2.5°	1613.8
5°	1568.4
7.5°	1472.2
10°	1350.7
12.5°	1218.7
15°	1086.7
17.5°	952.9
20°	825.3
22.5°	707.2
25°	602.3
27.5°	503.6
30°	415.3
32.5°	336.6
35°	270.1
37.5°	213.3
40°	165.2
42.5°	128.5
45°	99.7
47.5°	73.4
50°	53.3
52.5°	36.7
55°	25.4
57.5°	16.6
60°	12.2
62.5°	8.7
65°	6.1
67.5°	3.5
70°	2.6
72.5°	1.7
75°	0.9
77.5°	0.9
80°	0.9
82.5°	0.9
85°	0.9
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)