

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: P642540

Luminaire Tested: ML5615LSFL409FS1E - 691WB - 1200LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642540
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: ML5615LSFL409FS1E - 691WB - 1200LM - 5000K
Description: ML56 RR, 40D TIR OPTIC, 6" DEADFRONT TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1646.9 lumens
Efficiency: N/A
Efficacy: 122.9 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

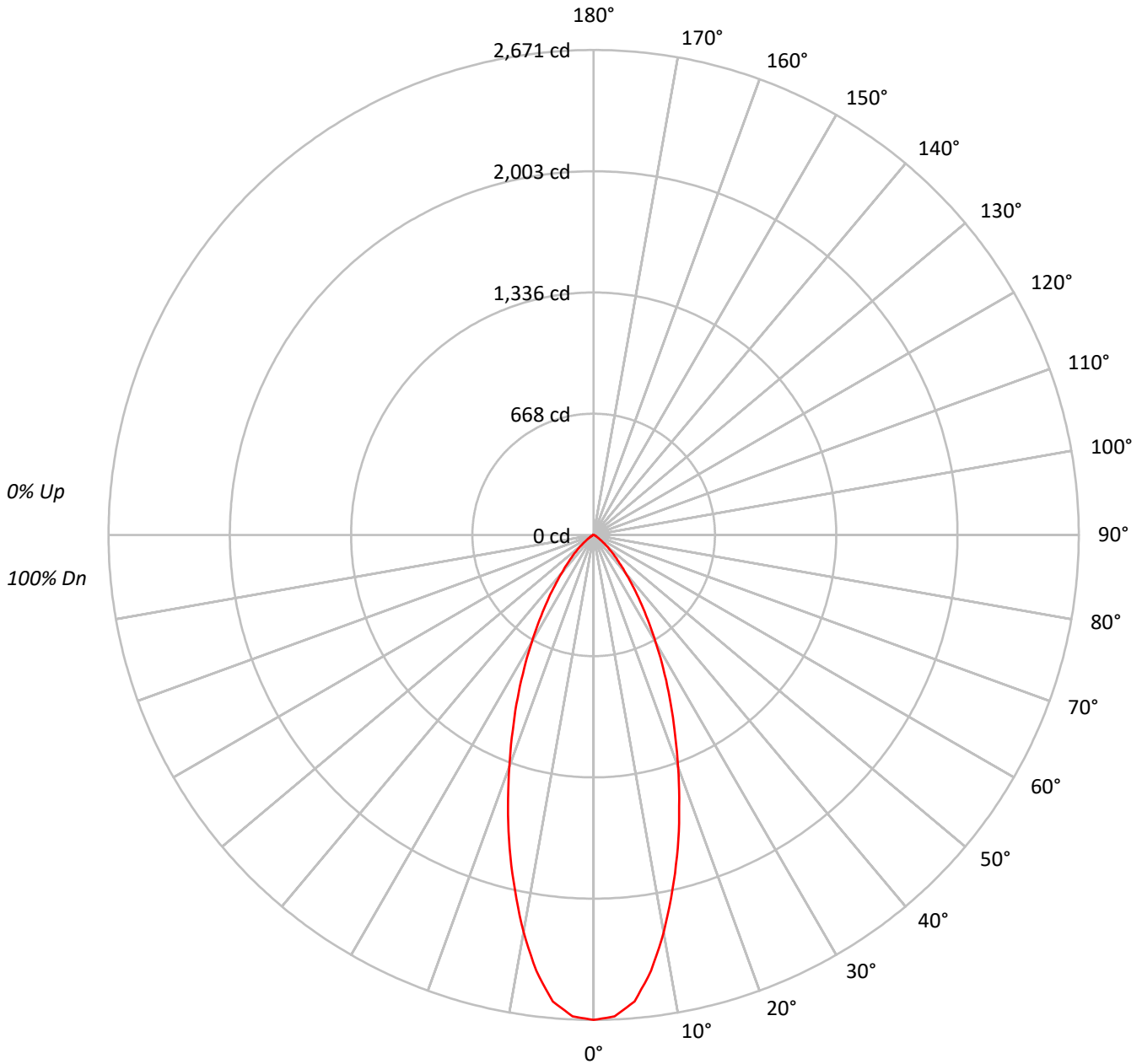
Input Watts (W): 13.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	146425
5°	141921
10°	123639
15°	101414
20°	79171
25°	59913
30°	43222
35°	29727
40°	19444
45°	12707
50°	7479
55°	3986
60°	2204
65°	1310
70°	689
75°	297
80°	442
85°	881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12707 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.2	14.2
10°-20°	494.0	30.0
20°-30°	453.9	27.6
30°-40°	281.7	17.1
40°-50°	128.9	7.8
50°-60°	40.5	2.5
60°-70°	10.4	0.6
70°-80°	2.2	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°	1182.1	71.8
0°-40°	1463.8	88.9
0°-60°	1633.3	99.2
0°-90°	1646.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1646.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2671	
5°	2579	234
15°	1787	494
25°	990	454
35°	444	282
45°	164	129
55°	42	41
65°	10	10
75°	1	2
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2671.0
2.5°	2653.8
5°	2579.0
7.5°	2420.9
10°	2221.1
12.5°	2004.0
15°	1786.9
17.5°	1567.0
20°	1357.1
22.5°	1163.0
25°	990.5
27.5°	828.0
30°	682.8
32.5°	553.5
35°	444.2
37.5°	350.8
40°	271.7
42.5°	211.3
45°	163.9
47.5°	120.8
50°	87.7
52.5°	60.4
55°	41.7
57.5°	27.3
60°	20.1
62.5°	14.4
65°	10.1
67.5°	5.8
70°	4.3
72.5°	2.9
75°	1.4
77.5°	1.4
80°	1.4
82.5°	1.4
85°	1.4
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)