

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: P642462

Luminaire Tested: ML5615LSFL409FS1E - 593WB - 1200LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642462
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-28)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSFL409FS1E - 593WB - 1200LM - 3000K
Description: ML56 RR, 40D TIR OPTIC, 5" WHITE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1477.8 lumens
Efficiency: N/A
Efficacy: 110.3 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

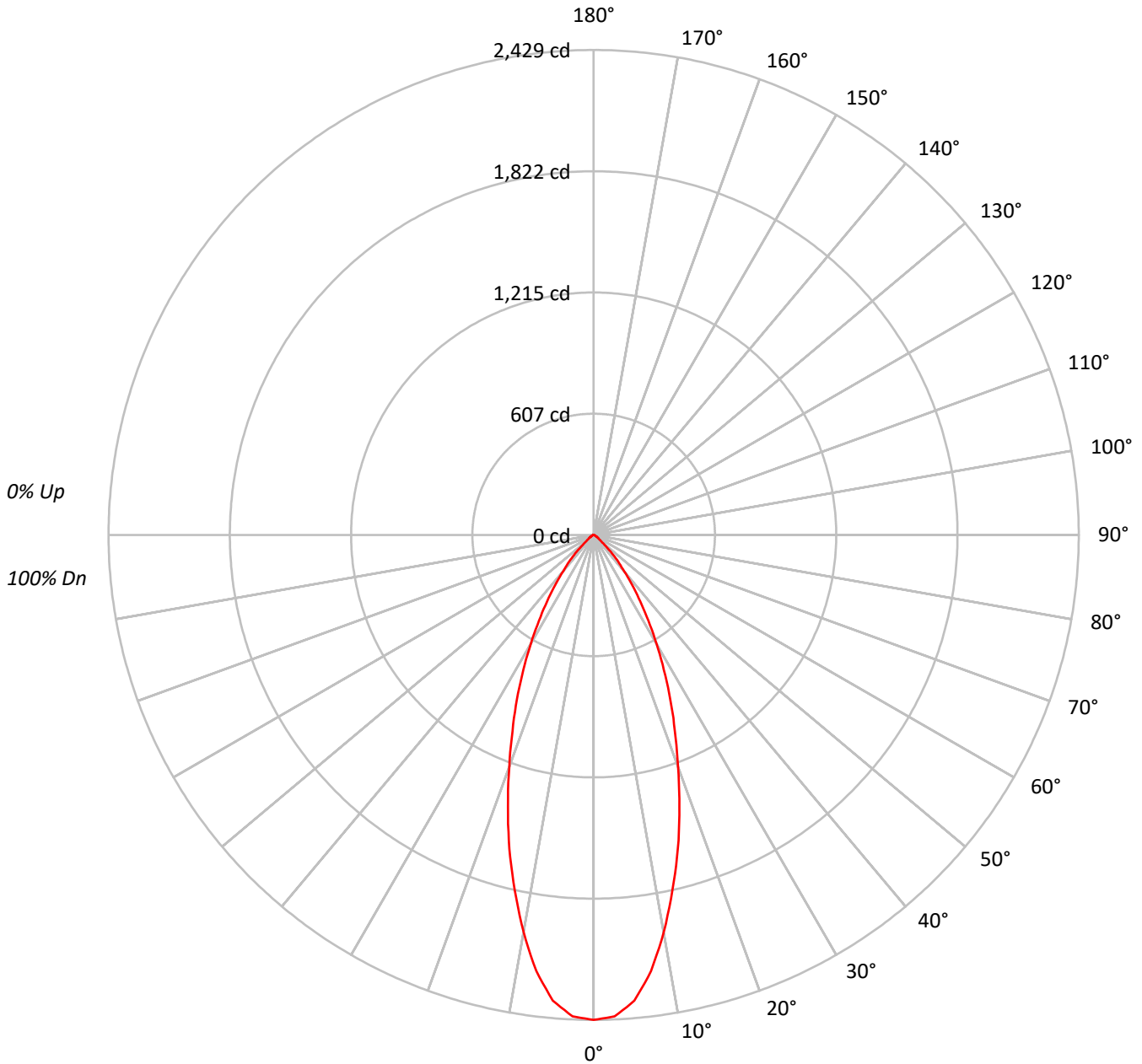
Input Watts (W): 13.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P642462

CATALOG NUMBER: ML5615LSFL409FS1E - 593WB - 1200LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P642462

CATALOG NUMBER: ML5615LSFL409FS1E - 593WB - 1200LM - 3000K

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	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	82	79	83	80	78	76																			
5	93	85	79	75	92	84	79	75	82	78	74	81	77	73	79	76	73	71																			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																			
7	85	76	70	66	83	75	69	66	74	69	65	73	68	65	71	67	64	63																			
8	81	72	66	62	80	71	66	62	70	65	61	69	64	61	68	64	61	60																			
9	77	68	62	58	76	67	62	58	66	62	58	66	61	58	65	61	58	56																			
10	74	65	59	55	73	64	59	55	63	58	55	63	58	55	62	58	55	53																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	191747
5°	185570
10°	161961
15°	133123
20°	103724
25°	79097
30°	57281
35°	39116
40°	24402
45°	14524
50°	5748
55°	3757
60°	2668
65°	1700
70°	1500
75°	1586
80°	1773
85°	2355

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14524 cd/sqm



TEST NUMBER: P642462

CATALOG NUMBER: ML5615LSFL409FS1E - 593WB - 1200LM - 3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.0	14.4
10°-20°	449.7	30.4
20°-30°	415.6	28.1
30°-40°	256.9	17.4
40°-50°	99.6	6.7
50°-60°	25.6	1.7
60°-70°	9.9	0.7
70°-80°	5.1	0.3
80°-90°	2.3	0.2
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°	1078.3	73.0
0°-40°	1335.2	90.4
0°-60°	1460.4	98.8
0°-90°	1477.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1477.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2429	
5°	2342	213
15°	1629	450
25°	908	416
35°	406	257
45°	130	100
55°	27	26
65°	9	10
75°	5	5
85°	3	2
90°	0	



TEST NUMBER: P642462

CATALOG NUMBER: ML5615LSFL409FS1E - 593WB - 1200LM - 3000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	2429.0
2.5°	2413.4
5°	2341.8
7.5°	2202.6
10°	2020.5
12.5°	1822.7
15°	1628.9
17.5°	1427.2
20°	1234.7
22.5°	1061.6
25°	908.1
27.5°	761.1
30°	628.4
32.5°	508.7
35°	405.9
37.5°	318.7
40°	236.8
42.5°	180.8
45°	130.1
47.5°	72.9
50°	46.8
52.5°	35.1
55°	27.3
57.5°	20.8
60°	16.9
62.5°	13.0
65°	9.1
67.5°	6.5
70°	6.5
72.5°	5.2
75°	5.2
77.5°	3.9
80°	3.9
82.5°	2.6
85°	2.6
87.5°	1.3
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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)