

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: P643886

Luminaire Tested: ML5615LSWFL559FS1E - 594WB - 1200LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643886  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-55)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 594WB - 1200LM - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1438.0 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

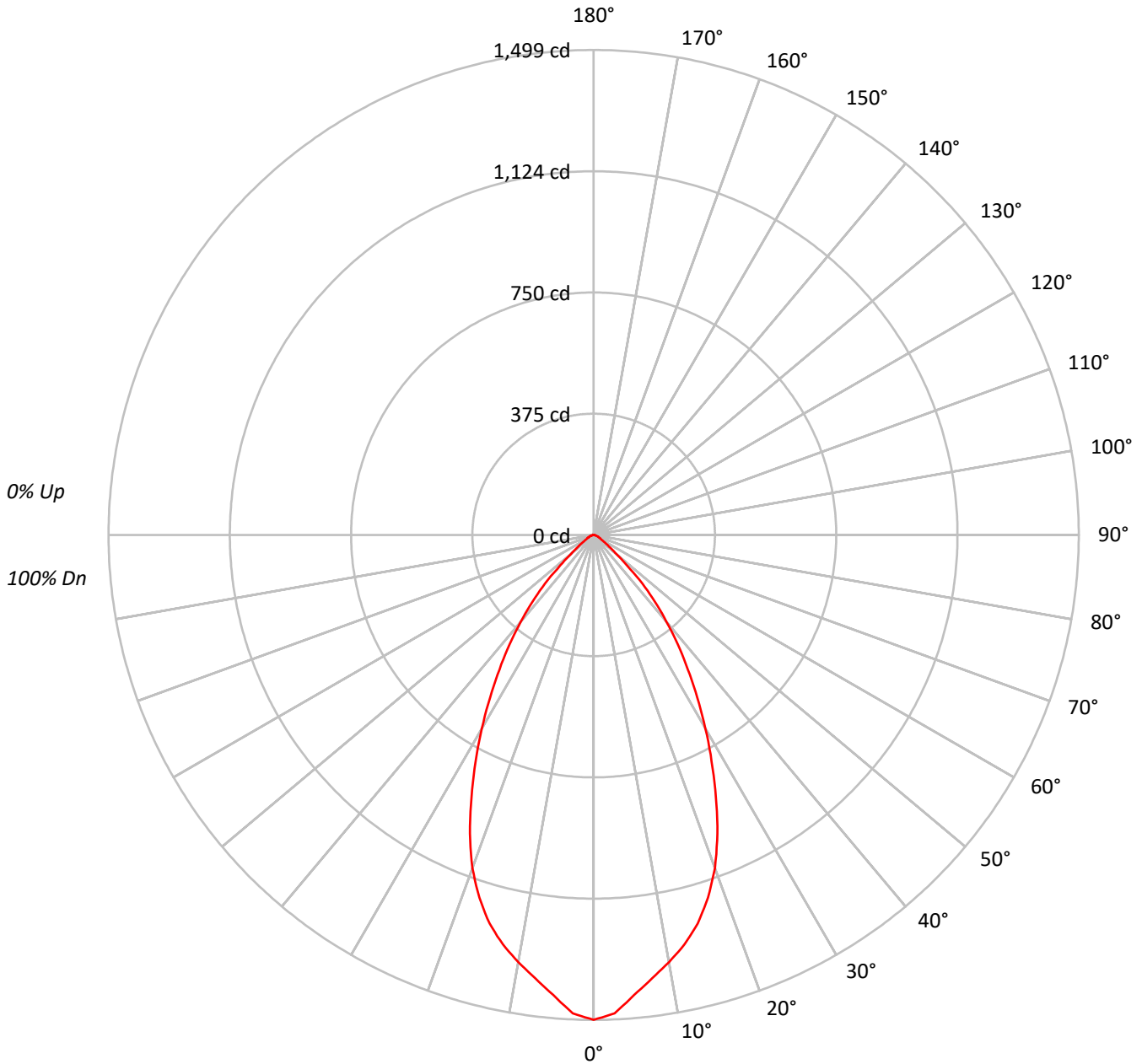
Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P643886

CATALOG NUMBER: ML5615LSWFL559FS1E - 594WB - 1200LM - 2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P643886

CATALOG NUMBER: ML5615LSWFL559FS1E - 594WB - 1200LM - 2700K

**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				100															
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92				92															
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85				85															
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78				78															
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72				72															
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	68	66				66															
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61				61															
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57				57															
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53				53															
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49				49															
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46				46															

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	118325
5°	113158
10°	107477
15°	101618
20°	92021
25°	77782
30°	62950
35°	48878
40°	36109
45°	23723
50°	11335
55°	6097
60°	4200
65°	3306
70°	2908
75°	1922
80°	1137
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 23723 cd/sqm



TEST NUMBER: P643886

CATALOG NUMBER: ML5615LSWFL559FS1E - 594WB - 1200LM - 2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.7	9.3
10°-20°	346.1	24.1
20°-30°	408.1	28.4
30°-40°	317.8	22.1
40°-50°	162.2	11.3
50°-60°	44.3	3.1
60°-70°	18.3	1.3
70°-80°	7.0	0.5
80°-90°	0.7	0.0
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°	887.8	61.7
0°-40°	1205.6	83.8
0°-60°	1412.1	98.2
0°-90°	1438.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1438.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1499	
5°	1428	134
15°	1243	346
25°	893	408
35°	507	318
45°	212	162
55°	44	44
65°	18	18
75°	6	7
85°	0	1
90°	0	



TEST NUMBER: P643886

CATALOG NUMBER: ML5615LSWFL559FS1E - 594WB - 1200LM - 2700K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1498.9
2.5°	1479.9
5°	1428.0
7.5°	1382.5
10°	1340.8
12.5°	1296.5
15°	1243.4
17.5°	1175.1
20°	1095.4
22.5°	999.2
25°	893.0
27.5°	789.3
30°	690.6
32.5°	595.8
35°	507.2
37.5°	426.3
40°	350.4
42.5°	279.5
45°	212.5
47.5°	139.1
50°	92.3
52.5°	63.2
55°	44.3
57.5°	32.9
60°	26.6
62.5°	21.5
65°	17.7
67.5°	15.2
70°	12.6
72.5°	8.9
75°	6.3
77.5°	3.8
80°	2.5
82.5°	1.3
85°	0.0
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

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)