

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: P643799

Luminaire Tested: ML5615LSWFL559FS1E - 593BB - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643799  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-52)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 593BB - 1200LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" BLACK BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1562.9 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

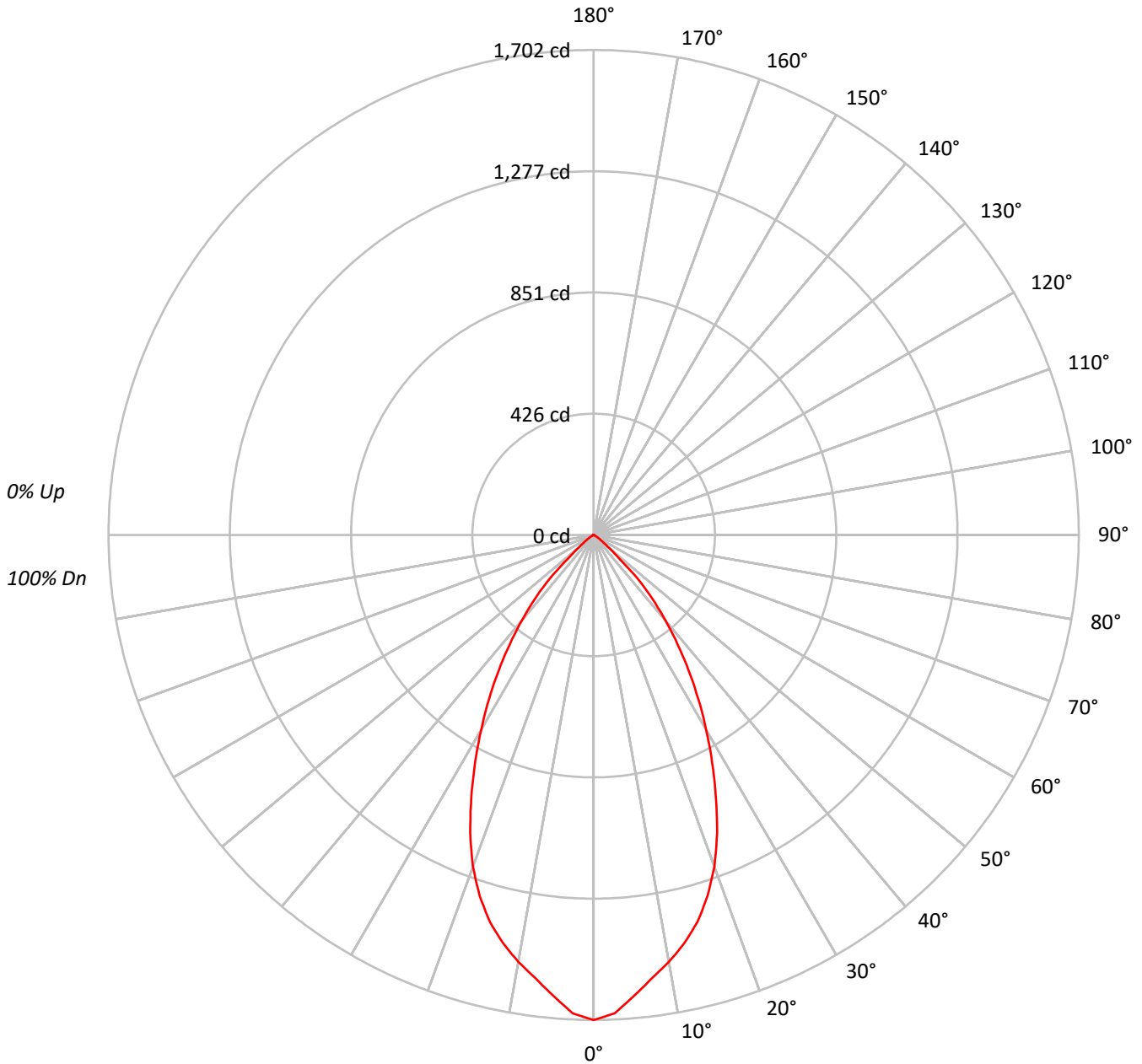
Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P643799

CATALOG NUMBER: ML5615LSWFL559FS1E - 593BB - 1200LM - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P643799

CATALOG NUMBER: ML5615LSWFL559FS1E - 593BB - 1200LM - 4000K

**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	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93																			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	83	81	79																			
4	96	88	83	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73																			
5	91	82	76	72	89	81	76	71	80	75	71	78	74	70	76	73	70	68																			
6	86	77	71	66	85	76	70	66	75	69	65	73	69	65	72	68	65	63																			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	68	63	60	59																			
8	77	68	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55																			
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51																			
10	70	60	54	50	69	59	54	50	59	53	50	58	53	49	57	53	49	48																			

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

	0°
0°	134389
5°	128642
10°	121945
15°	114923
20°	104001
25°	88417
30°	71956
35°	55981
40°	40303
45°	24717
50°	8118
55°	3565
60°	916
65°	262
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 24717 cd/sqm



TEST NUMBER: P643799

CATALOG NUMBER: ML5615LSWFL559FS1E - 593BB - 1200LM - 4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.8	9.7
10°-20°	391.6	25.1
20°-30°	463.7	29.7
30°-40°	362.2	23.2
40°-50°	165.6	10.6
50°-60°	26.3	1.7
60°-70°	1.7	0.1
70°-80°	0.0	0.0
80°-90°	0.0	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°	1007.1	64.4
0°-40°	1369.2	87.6
0°-60°	1561.1	99.9
0°-90°	1562.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1702	
5°	1623	152
15°	1406	392
25°	1015	464
35°	581	362
45°	221	166
55°	26	26
65°	1	2
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P643799

CATALOG NUMBER: ML5615LSWFL559FS1E - 593BB - 1200LM - 4000K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1702.4
2.5°	1680.9
5°	1623.4
7.5°	1568.7
10°	1521.3
12.5°	1468.1
15°	1406.2
17.5°	1328.6
20°	1238.0
22.5°	1131.6
25°	1015.1
27.5°	900.1
30°	789.4
32.5°	683.0
35°	580.9
37.5°	483.1
40°	391.1
42.5°	306.3
45°	221.4
47.5°	117.9
50°	66.1
52.5°	41.7
55°	25.9
57.5°	15.8
60°	5.8
62.5°	2.9
65°	1.4
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
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)