

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: P643819

Luminaire Tested: ML5615LSWFL559FS1E - 593SNB - 1500LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643819  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-53)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 593SNB - 1500LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" SATIN NICKLE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

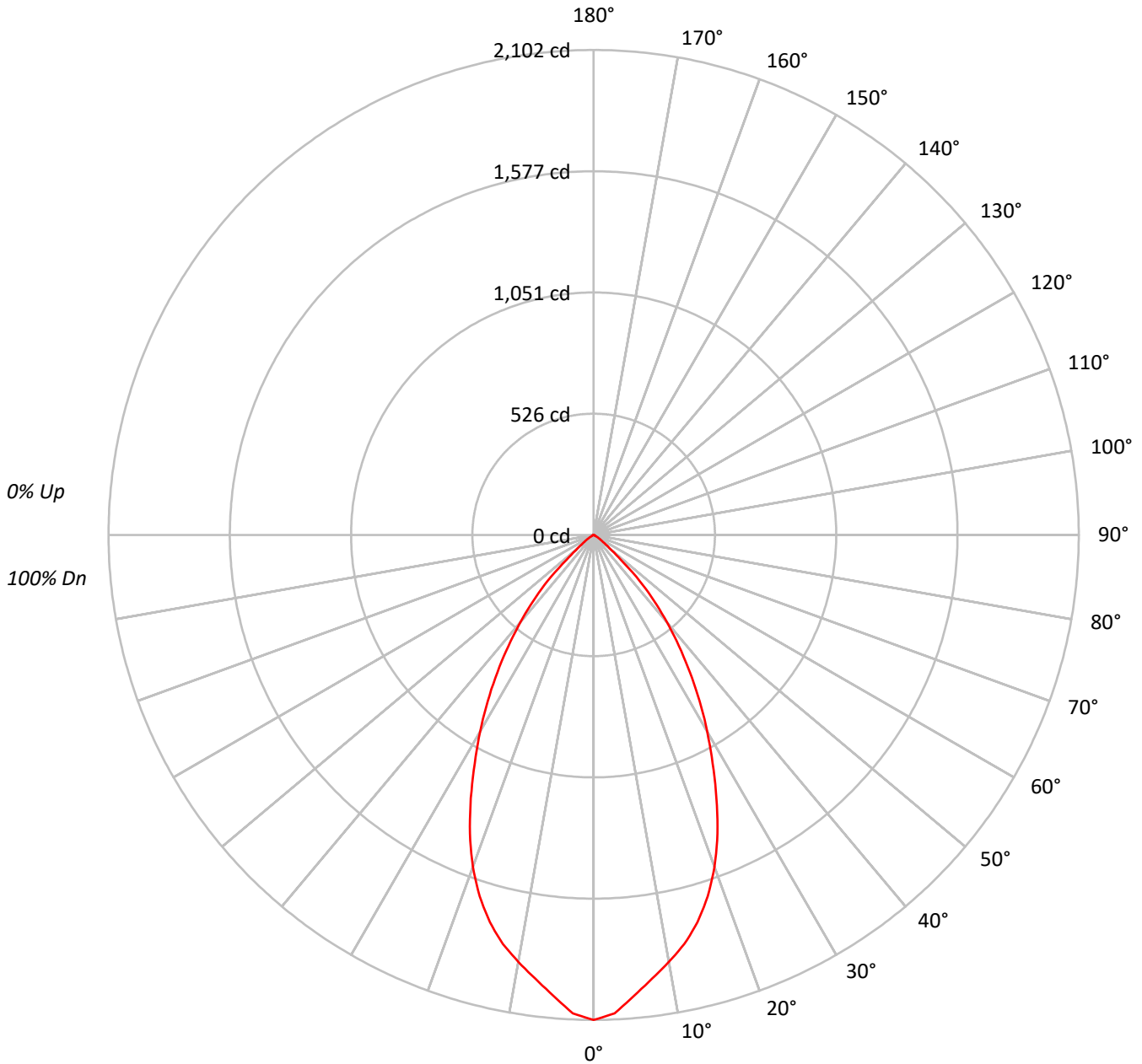
Lumens per Lamp: N/A  
Luminaire Lumens: 1955.1 lumens  
Efficiency: N/A  
Efficacy: 114.3 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (Ain): 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: P643819  
CATALOG NUMBER: ML5615LSWFL559FS1E - 593SNB - 1500LM - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P643819

CATALOG NUMBER: ML5615LSWFL559FS1E - 593SNB - 1500LM - 4000K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				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	100	100
1	113	110	108	106	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93	93
2	107	102	98	94	105	101	97	93	97	94	91	94	92	89	91	89	88	86	86	86	86
3	102	95	90	85	100	93	89	85	91	87	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	82	77	85	80	76	83	79	76	81	77	75	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68	68	68	68
6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	71	67	64	63	63	63	63
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58
8	77	67	61	57	76	67	61	56	65	60	56	64	60	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	53	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48

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

	0°
0°	165950
5°	158873
10°	150650
15°	142039
20°	128623
25°	109644
30°	89604
35°	70031
40°	50835
45°	31583
50°	10856
55°	5106
60°	1958
65°	654
70°	415
75°	549
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 31583 cd/sqm



TEST NUMBER: P643819

CATALOG NUMBER: ML5615LSWFL559FS1E - 593SNB - 1500LM - 4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.6	9.6
10°-20°	484.1	24.8
20°-30°	574.9	29.4
30°-40°	453.4	23.2
40°-50°	212.4	10.9
50°-60°	36.9	1.9
60°-70°	4.8	0.2
70°-80°	1.2	0.1
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°	1246.5	63.8
0°-40°	1699.9	86.9
0°-60°	1949.1	99.7
0°-90°	1955.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1955.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2102	
5°	2005	188
15°	1738	484
25°	1259	575
35°	727	453
45°	283	212
55°	37	37
65°	4	5
75°	2	1
85°	0	0
90°	0	



TEST NUMBER: P643819

CATALOG NUMBER: ML5615LSWFL559FS1E - 593SNB - 1500LM - 4000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2102.2
2.5°	2075.7
5°	2004.9
7.5°	1939.5
10°	1879.4
12.5°	1815.8
15°	1738.0
17.5°	1642.5
20°	1531.1
22.5°	1402.0
25°	1258.8
27.5°	1115.6
30°	983.0
32.5°	854.0
35°	726.7
37.5°	606.4
40°	493.3
42.5°	387.2
45°	282.9
47.5°	159.1
50°	88.4
52.5°	56.6
55°	37.1
57.5°	23.0
60°	12.4
62.5°	7.1
65°	3.5
67.5°	1.8
70°	1.8
72.5°	1.8
75°	1.8
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)