

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: P643189

Luminaire Tested: ML5615LSVWFL759FS1E - 594TBZB - 1500LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643189  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-80)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL759FS1E - 594TBZB - 1500LM - 4000K  
Description: ML56 RR, 75D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1935.6 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.09  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

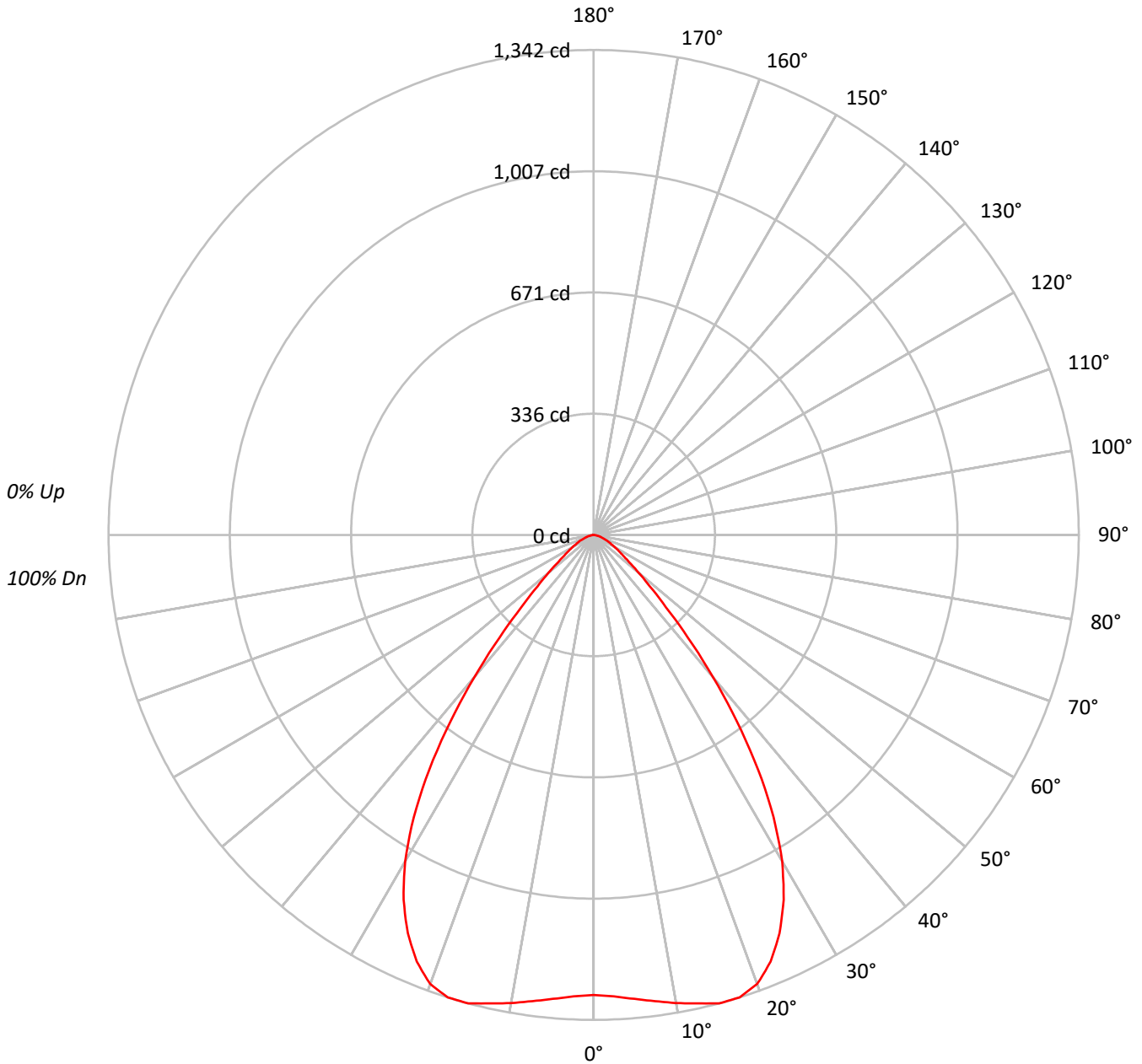
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P643189

CATALOG NUMBER: ML5615LSVWFL759FS1E - 594TBZB - 1500LM - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P643189

CATALOG NUMBER: ML5615LSVWFL759FS1E - 594TBZB - 1500LM - 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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91																			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83																			
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75																			
4	93	84	78	73	91	83	77	72	81	76	72	79	74	71	77	73	70	68																			
5	87	78	71	66	86	77	70	66	75	69	65	73	68	64	71	67	64	62																			
6	82	72	65	60	81	71	64	60	69	64	59	68	63	59	67	62	58	57																			
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																			
8	73	62	55	50	72	61	55	50	60	54	50	59	54	50	58	53	50	48																			
9	69	58	51	47	68	57	51	47	56	50	46	55	50	46	54	50	46	44																			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41																			

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

	0°
0°	100492
5°	102136
10°	105441
15°	109668
20°	111099
25°	105950
30°	95082
35°	76498
40°	52834
45°	31583
50°	19981
55°	13625
60°	10610
65°	8592
70°	6947
75°	5399
80°	3228
85°	1630

**MAXIMUM LUMINANCE 45°-90°:**

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



TEST NUMBER: P643189

CATALOG NUMBER: ML5615LSVWFL759FS1E - 594TBZB - 1500LM - 4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.9	6.4
10°-20°	378.0	19.5
20°-30°	553.5	28.6
30°-40°	487.9	25.2
40°-50°	231.8	12.0
50°-60°	93.2	4.8
60°-70°	46.1	2.4
70°-80°	18.9	1.0
80°-90°	2.4	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°	1055.4	54.5
0°-40°	1543.3	79.7
0°-60°	1868.3	96.5
0°-90°	1935.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1935.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1273	
5°	1289	124
15°	1342	378
25°	1216	554
35°	794	488
45°	283	232
55°	99	93
65°	46	46
75°	18	19
85°	2	2
90°	0	



TEST NUMBER: P643189

CATALOG NUMBER: ML5615LSVWFL759FS1E - 594TBZB - 1500LM - 4000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1273.0
2.5°	1278.3
5°	1288.9
7.5°	1301.3
10°	1315.4
12.5°	1327.8
15°	1341.9
17.5°	1341.9
20°	1322.5
22.5°	1278.3
25°	1216.4
27.5°	1138.6
30°	1043.1
32.5°	926.4
35°	793.8
37.5°	650.6
40°	512.7
42.5°	385.4
45°	282.9
47.5°	210.4
50°	162.7
52.5°	123.8
55°	99.0
57.5°	81.3
60°	67.2
62.5°	54.8
65°	46.0
67.5°	37.1
70°	30.1
72.5°	23.0
75°	17.7
77.5°	12.4
80°	7.1
82.5°	3.5
85°	1.8
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)