

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: P644008

Luminaire Tested: ML5615LSWFL559FS1E - 693TBZB - 1200LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P644008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-66)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 693TBZB - 1200LM - 3500K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

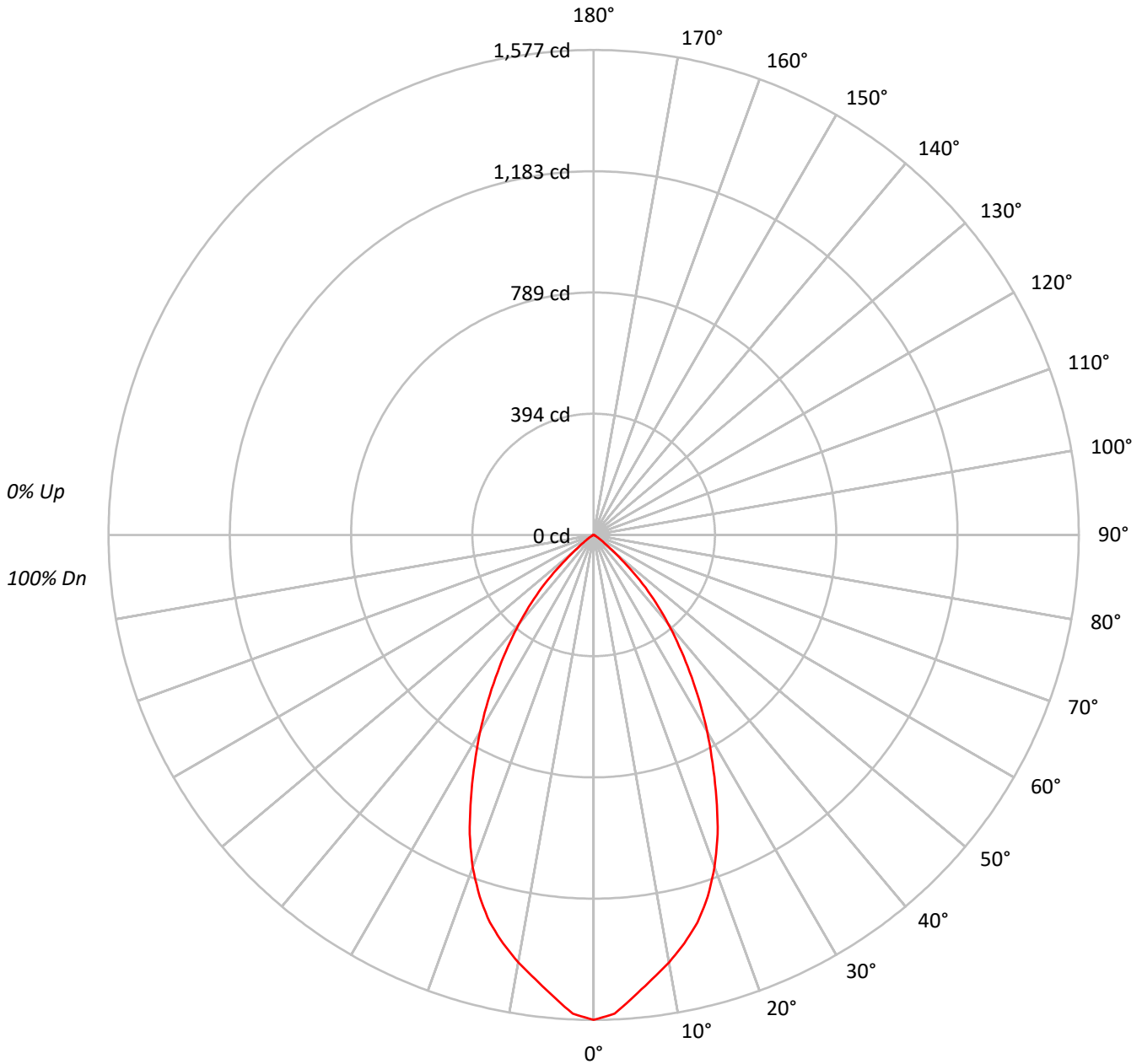
Lumens per Lamp: N/A  
Luminaire Lumens: 1481.9 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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: P644008  
CATALOG NUMBER: ML5615LSWFL559FS1E - 693TBZB - 1200LM - 3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P644008

CATALOG NUMBER: ML5615LSWFL559FS1E - 693TBZB - 1200LM - 3500K

**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
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86			86
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81	79			79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73			73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67			67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62			62
7	81	71	65	61	80	71	65	60	69	64	60	68	63	60	67	63	59	58			58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	55	54			54
9	73	63	57	52	72	62	56	52	61	56	52	60	56	52	60	55	52	50			50
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47			47

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

	0°
0°	86446
5°	82875
10°	78556
15°	74019
20°	67042
25°	57064
30°	46691
35°	36399
40°	26965
45°	17506
50°	7292
55°	2686
60°	1173
65°	350
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17506 cd/sqm



TEST NUMBER: P644008

CATALOG NUMBER: ML5615LSWFL559FS1E - 693TBZB - 1200LM - 3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.8	9.5
10°-20°	363.2	24.5
20°-30°	431.3	29.1
30°-40°	340.6	23.0
40°-50°	171.5	11.6
50°-60°	30.9	2.1
60°-70°	3.6	0.2
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°	935.4	63.1
0°-40°	1276.0	86.1
0°-60°	1478.3	99.8
0°-90°	1481.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1481.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1577	
5°	1506	141
15°	1304	363
25°	943	431
35°	544	341
45°	226	171
55°	28	31
65°	3	4
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P644008

CATALOG NUMBER: ML5615LSWFL559FS1E - 693TBZB - 1200LM - 3500K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1576.9
2.5°	1558.1
5°	1506.0
7.5°	1456.6
10°	1411.2
12.5°	1360.4
15°	1304.2
17.5°	1233.4
20°	1149.2
22.5°	1053.0
25°	943.4
27.5°	836.5
30°	737.6
32.5°	638.8
35°	543.9
37.5°	457.0
40°	376.8
42.5°	299.3
45°	225.8
47.5°	145.7
50°	85.5
52.5°	45.4
55°	28.1
57.5°	18.7
60°	10.7
62.5°	5.3
65°	2.7
67.5°	1.3
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)