

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: P642207

Luminaire Tested: ML5612LSWFL5597FS1E - 693WB - 1200LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642207  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-63)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 693WB - 1200LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 6" WHITE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1533.8 lumens  
Efficiency: N/A  
Efficacy: 93.0 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

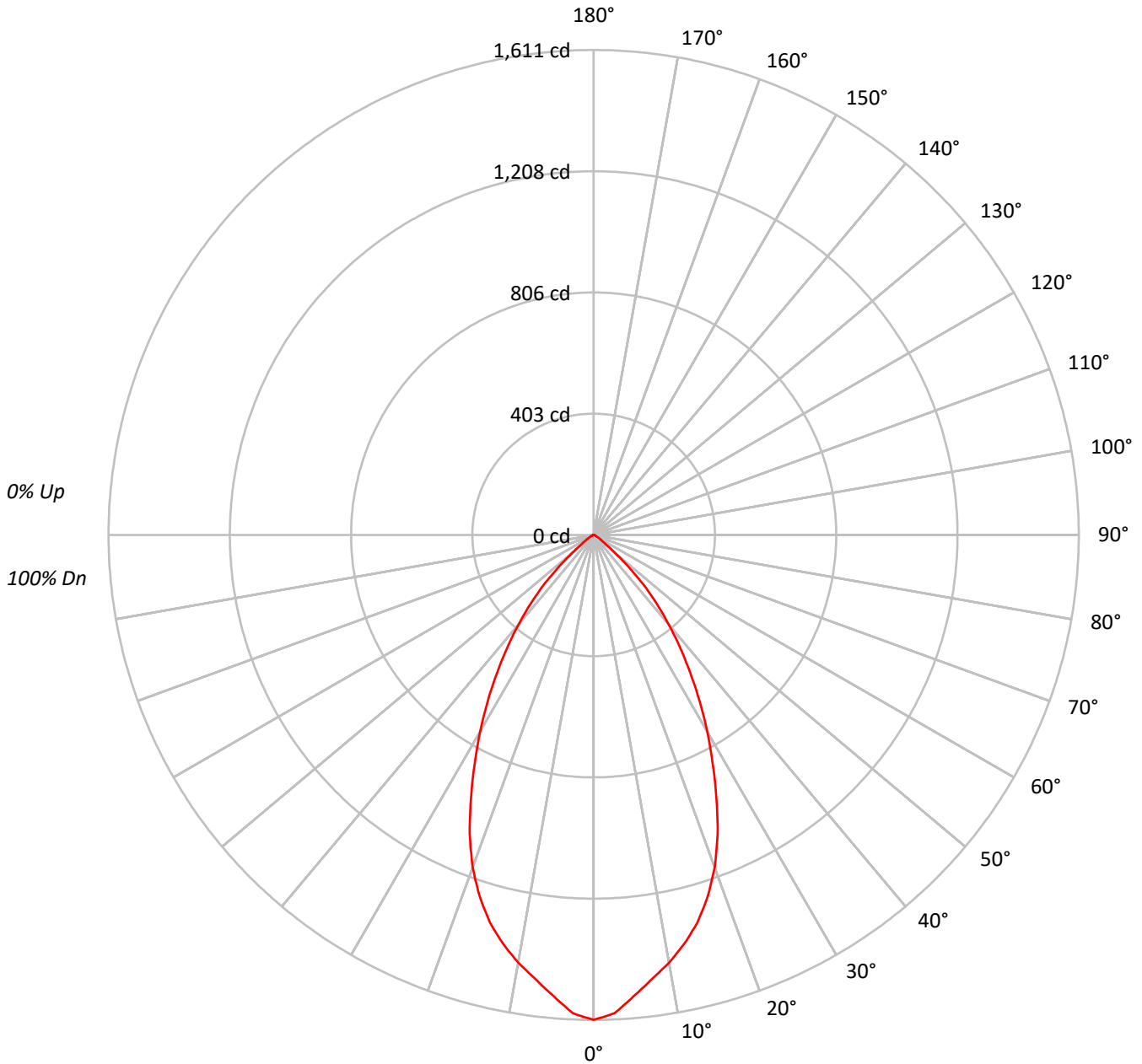
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P642207

CATALOG NUMBER: ML5612LSWFL5597FS1E - 693WB - 1200LM - 3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P642207

CATALOG NUMBER: ML5612LSWFL5597FS1E - 693WB - 1200LM - 3000K

**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	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93																
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85																
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78			78																
4	96	87	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72			72																
5	90	81	75	71	89	80	75	70	79	73	70	77	72	69	75	71	68	67			67																
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	67	63	62			62																
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57			57																
8	77	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53			53																
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50			50																
10	69	59	53	49	68	58	52	48	57	52	48	57	52	48	56	51	48	47			47																

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

	0°
0°	88304
5°	84602
10°	80292
15°	75619
20°	68536
25°	58328
30°	47716
35°	37356
40°	27702
45°	18219
50°	7880
55°	3250
60°	1787
65°	882
70°	866
75°	868
80°	852
85°	881

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18219 cd/sqm



TEST NUMBER: P642207

CATALOG NUMBER: ML5612LSWFL5597FS1E - 693WB - 1200LM - 3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.8	9.4
10°-20°	371.1	24.2
20°-30°	440.8	28.7
30°-40°	349.4	22.8
40°-50°	178.1	11.6
50°-60°	36.3	2.4
60°-70°	8.0	0.5
70°-80°	4.3	0.3
80°-90°	1.9	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°	955.8	62.3
0°-40°	1305.1	85.1
0°-60°	1519.6	99.1
0°-90°	1533.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1533.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1611	
5°	1537	144
15°	1332	371
25°	964	441
35°	558	349
45°	235	178
55°	34	36
65°	7	8
75°	4	4
85°	1	2
90°	0	



TEST NUMBER: P642207

CATALOG NUMBER: ML5612LSWFL5597FS1E - 693WB - 1200LM - 3000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1610.8
2.5°	1590.4
5°	1537.4
7.5°	1487.2
10°	1442.4
12.5°	1390.8
15°	1332.4
17.5°	1259.0
20°	1174.8
22.5°	1075.7
25°	964.3
27.5°	855.6
30°	753.8
32.5°	654.6
35°	558.2
37.5°	469.9
40°	387.1
42.5°	308.3
45°	235.0
47.5°	153.5
50°	92.4
52.5°	51.6
55°	34.0
57.5°	24.4
60°	16.3
62.5°	9.5
65°	6.8
67.5°	5.4
70°	5.4
72.5°	4.1
75°	4.1
77.5°	4.1
80°	2.7
82.5°	2.7
85°	1.4
87.5°	1.4
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)