

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: P642224

Luminaire Tested: ML5612LSWFL5597FS1E - 694TBZB - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642224  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-68)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 694TBZB - 1200LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1708.6 lumens  
Efficiency: N/A  
Efficacy: 103.6 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

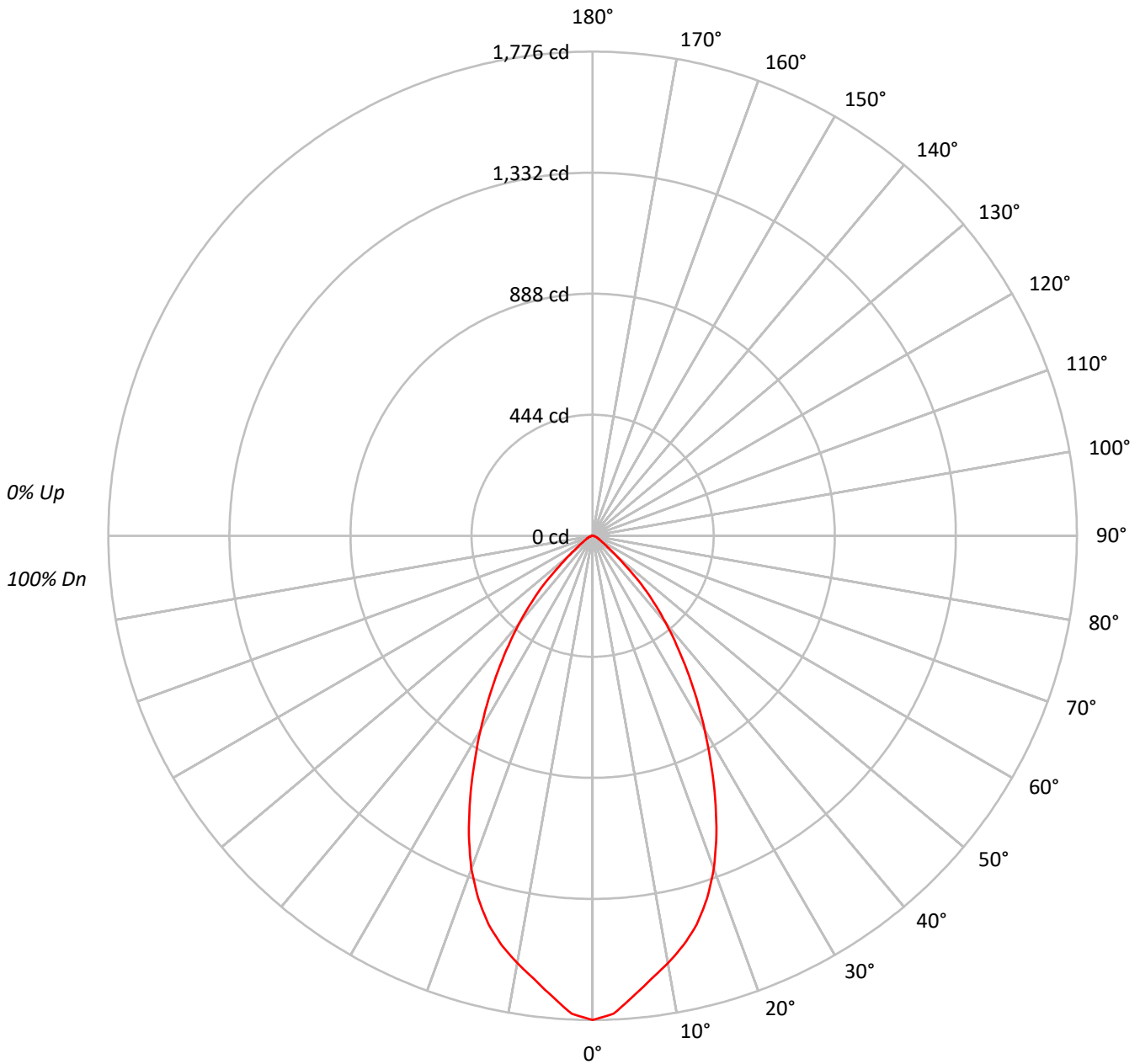
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P642224

CATALOG NUMBER: ML5612LSWFL5597FS1E - 694TBZB - 1200LM - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P642224

CATALOG NUMBER: ML5612LSWFL5597FS1E - 694TBZB - 1200LM - 4000K

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

RF	20									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	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	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92											92																	
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85											85																	
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78											78																	
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72											72																	
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	68	66											66																	
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61											61																	
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57											57																	
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53											53																	
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49											49																	
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46											46																	

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

	0°
0°	97361
5°	93352
10°	88587
15°	83758
20°	75846
25°	64292
30°	51983
35°	40388
40°	29870
45°	19669
50°	9475
55°	5018
60°	3289
65°	2724
70°	2164
75°	1589
80°	947
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19669 cd/sqm



TEST NUMBER: P642224

CATALOG NUMBER: ML5612LSWFL5597FS1E - 694TBZB - 1200LM - 4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.7	9.3
10°-20°	410.7	24.0
20°-30°	485.0	28.4
30°-40°	378.0	22.1
40°-50°	193.4	11.3
50°-60°	52.5	3.1
60°-70°	21.3	1.2
70°-80°	8.1	0.5
80°-90°	0.8	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°	1054.4	61.7
0°-40°	1432.5	83.8
0°-60°	1678.4	98.2
0°-90°	1708.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1708.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1776	
5°	1696	159
15°	1476	411
25°	1063	485
35°	604	378
45°	254	193
55°	52	53
65°	21	21
75°	8	8
85°	0	1
90°	0	



TEST NUMBER: P642224

CATALOG NUMBER: ML5612LSWFL5597FS1E - 694TBZB - 1200LM - 4000K

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1776.0
2.5°	1755.0
5°	1696.4
7.5°	1640.9
10°	1591.4
12.5°	1538.8
15°	1475.8
17.5°	1394.7
20°	1300.1
22.5°	1186.0
25°	1062.9
27.5°	938.3
30°	821.2
32.5°	710.1
35°	603.5
37.5°	505.9
40°	417.4
42.5°	331.8
45°	253.7
47.5°	166.6
50°	111.1
52.5°	75.1
55°	52.5
57.5°	39.0
60°	30.0
62.5°	25.5
65°	21.0
67.5°	18.0
70°	13.5
72.5°	10.5
75°	7.5
77.5°	4.5
80°	3.0
82.5°	1.5
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)