

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: P642060

Luminaire Tested: ML5612LSWFL5597FS1E - 594TBZB - 1200LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642060  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-57)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 594TBZB - 1200LM - 5000K  
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

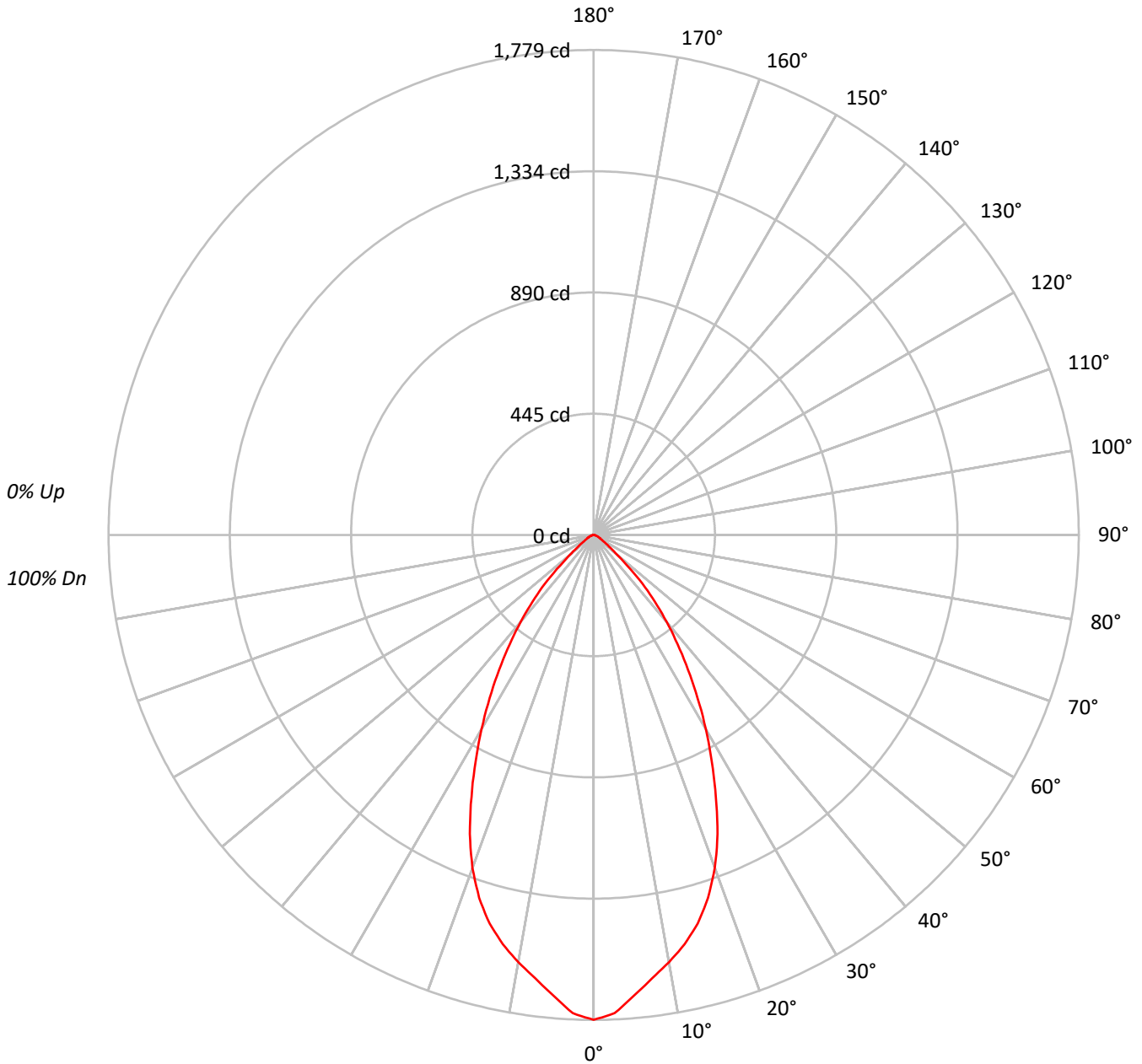
Lumens per Lamp: N/A  
Luminaire Lumens: 1707.8 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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: P642060  
CATALOG NUMBER: ML5612LSWFL5597FS1E - 594TBZB - 1200LM - 5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P642060

CATALOG NUMBER: ML5612LSWFL5597FS1E - 594TBZB - 1200LM - 5000K

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

RF	20									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	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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92																											
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85																											
3	101	94	88	84	99	92	87	83	90	86	82	87	84	81	85	82	80	78																											
4	95	87	81	76	93	86	80	76	84	79	75	82	77	74	80	76	73	72																											
5	90	81	74	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66																											
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61																											
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57																											
8	76	66	59	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53																											
9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49																											
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	47	46																											

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

	0°
0°	140420
5°	134403
10°	127533
15°	120570
20°	109167
25°	92380
30°	74910
35°	58197
40°	42879
45°	28178
50°	13657
55°	7239
60°	4736
65°	3923
70°	3116
75°	2288
80°	1364
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 28178 cd/sqm



TEST NUMBER: P642060

CATALOG NUMBER: ML5612LSWFL5597FS1E - 594TBZB - 1200LM - 5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.7	9.3
10°-20°	410.7	24.1
20°-30°	484.7	28.4
30°-40°	377.7	22.1
40°-50°	193.2	11.3
50°-60°	52.6	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°	1054.1	61.7
0°-40°	1431.8	83.8
0°-60°	1677.6	98.2
0°-90°	1707.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1707.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1779	
5°	1696	159
15°	1475	411
25°	1061	485
35°	604	378
45°	252	193
55°	53	53
65°	21	21
75°	8	8
85°	0	1
90°	0	



TEST NUMBER: P642060

CATALOG NUMBER: ML5612LSWFL5597FS1E - 594TBZB - 1200LM - 5000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1778.8
2.5°	1756.2
5°	1696.1
7.5°	1640.6
10°	1591.0
12.5°	1538.4
15°	1475.3
17.5°	1395.7
20°	1299.5
22.5°	1186.8
25°	1060.6
27.5°	937.5
30°	821.8
32.5°	709.1
35°	603.9
37.5°	504.8
40°	416.1
42.5°	332.0
45°	252.4
47.5°	166.8
50°	111.2
52.5°	75.1
55°	52.6
57.5°	39.1
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)