

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: P642016

Luminaire Tested: ML5612LSWFL5597FS1E - 593TBZB - 600LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642016  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-54)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 593TBZB - 600LM - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 5" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 927.0 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

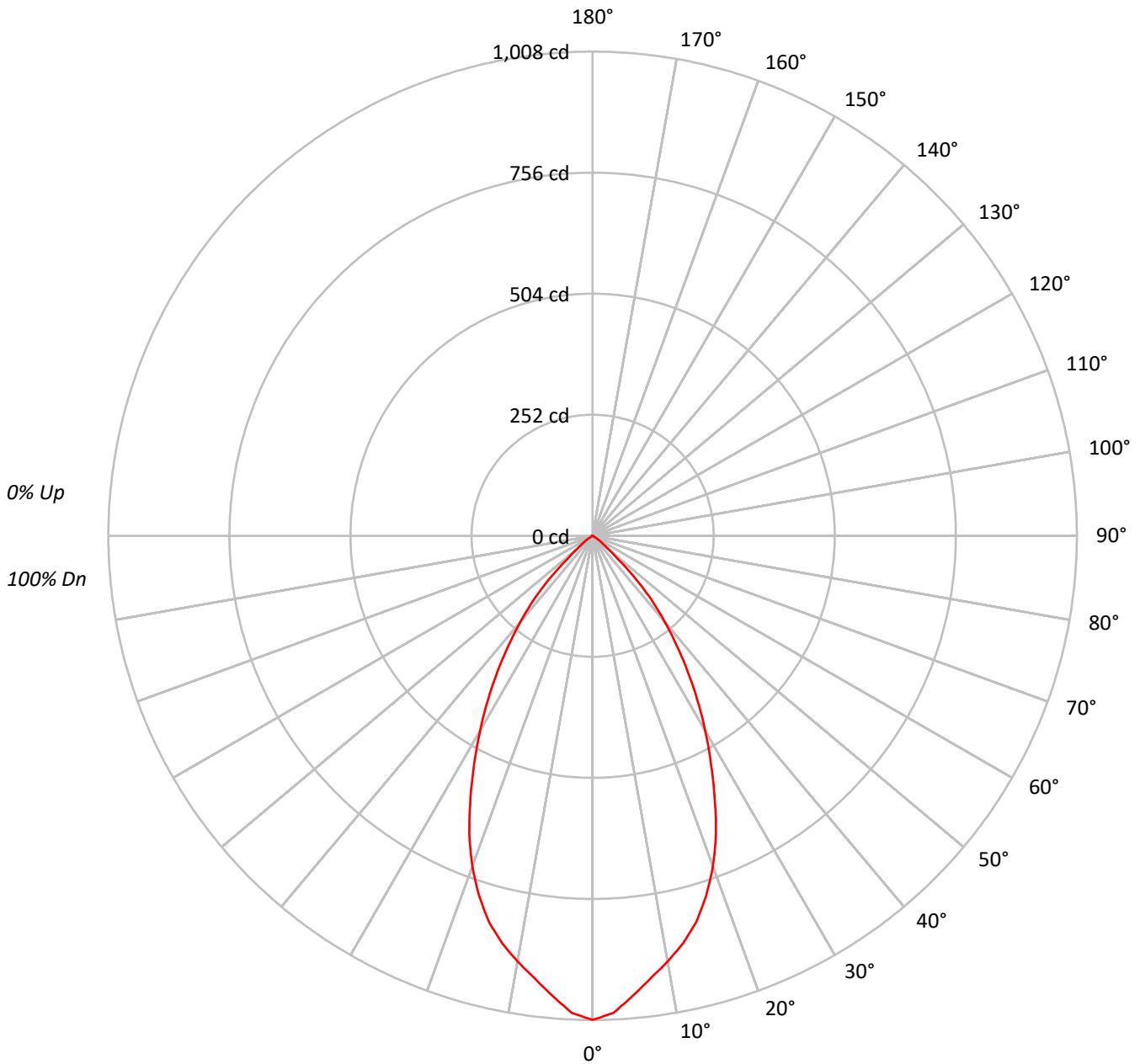
Input Watts (W): 10.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P642016

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593TBZB - 600LM - 2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P642016

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593TBZB - 600LM - 2700K

**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			
1	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	83	81	79			
4	96	88	83	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73			
5	91	82	76	72	89	81	76	71	80	75	71	78	73	70	76	72	69	68			
6	86	77	71	66	85	76	70	66	75	69	65	73	68	65	72	68	65	63			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	68	63	60	59			
8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55			
9	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51			
10	70	60	54	50	69	59	54	50	58	53	49	58	53	49	57	52	49	48			

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

	0°
0°	79549
5°	76144
10°	72119
15°	68037
20°	61502
25°	52366
30°	42705
35°	33267
40°	24011
45°	14435
50°	4912
55°	2230
60°	679
65°	168
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14435 cd/sqm



TEST NUMBER: P642016

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593TBZB - 600LM - 2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.8	9.7
10°-20°	231.7	25.0
20°-30°	274.7	29.6
30°-40°	215.1	23.2
40°-50°	98.3	10.6
50°-60°	16.1	1.7
60°-70°	1.2	0.1
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°	596.2	64.3
0°-40°	811.3	87.5
0°-60°	925.8	99.9
0°-90°	927.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	927.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1008	
5°	961	90
15°	832	232
25°	601	275
35°	345	215
45°	129	98
55°	16	16
65°	1	1
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P642016

CATALOG NUMBER: ML5612LSWFL5597FS1E - 593TBZB - 600LM - 2700K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1007.7
2.5°	994.1
5°	960.9
7.5°	928.6
10°	899.7
12.5°	869.1
15°	832.5
17.5°	785.7
20°	732.1
22.5°	670.9
25°	601.2
27.5°	533.2
30°	468.5
32.5°	405.6
35°	345.2
37.5°	286.6
40°	233.0
42.5°	182.8
45°	129.3
47.5°	70.6
50°	40.0
52.5°	25.5
55°	16.2
57.5°	9.4
60°	4.3
62.5°	1.7
65°	0.9
67.5°	0.0
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)