

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: P642221

Luminaire Tested: ML5612LSWFL5597FS1E - 694TBZB - 1200LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642221  
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 - 2700K  
Description: ML56 RR, 55D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1502.9 lumens  
Efficiency: N/A  
Efficacy: 91.1 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

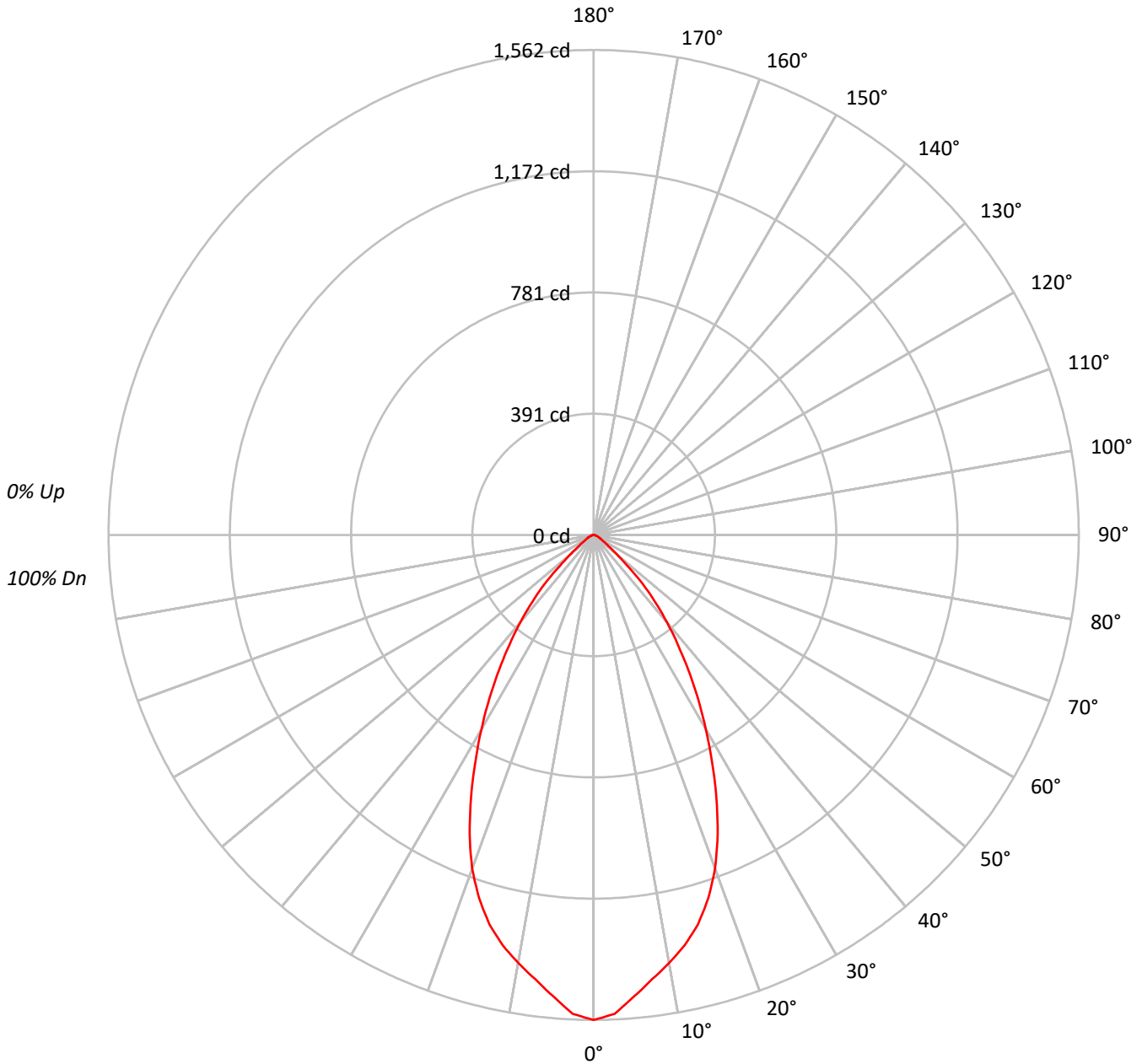
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**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	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°	85646
5°	82121
10°	77921
15°	73672
20°	66716
25°	56556
30°	45729
35°	35529
40°	26271
45°	17304
50°	8332
55°	4416
60°	2895
65°	2400
70°	1907
75°	1398
80°	821
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17304 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.6	9.3
10°-20°	361.3	24.0
20°-30°	426.6	28.4
30°-40°	332.5	22.1
40°-50°	170.2	11.3
50°-60°	46.2	3.1
60°-70°	18.7	1.2
70°-80°	7.1	0.5
80°-90°	0.7	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°	927.5	61.7
0°-40°	1260.0	83.8
0°-60°	1476.4	98.2
0°-90°	1502.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1502.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1562	
5°	1492	140
15°	1298	361
25°	935	427
35°	531	333
45°	223	170
55°	46	46
65°	18	19
75°	7	7
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1562.3
2.5°	1543.8
5°	1492.3
7.5°	1443.4
10°	1399.8
12.5°	1353.6
15°	1298.1
17.5°	1226.8
20°	1143.6
22.5°	1043.3
25°	935.0
27.5°	825.4
30°	722.4
32.5°	624.6
35°	530.9
37.5°	445.0
40°	367.1
42.5°	291.8
45°	223.2
47.5°	146.6
50°	97.7
52.5°	66.0
55°	46.2
57.5°	34.3
60°	26.4
62.5°	22.4
65°	18.5
67.5°	15.8
70°	11.9
72.5°	9.2
75°	6.6
77.5°	4.0
80°	2.6
82.5°	1.3
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

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— 0°-180°

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(END OF REPORT)