

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: P642103

Luminaire Tested: ML5612LSWFL5597FS1E - 691WB - 1200LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642103  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-59)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 691WB - 1200LM - 3500K  
Description: ML56 RR, 55D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

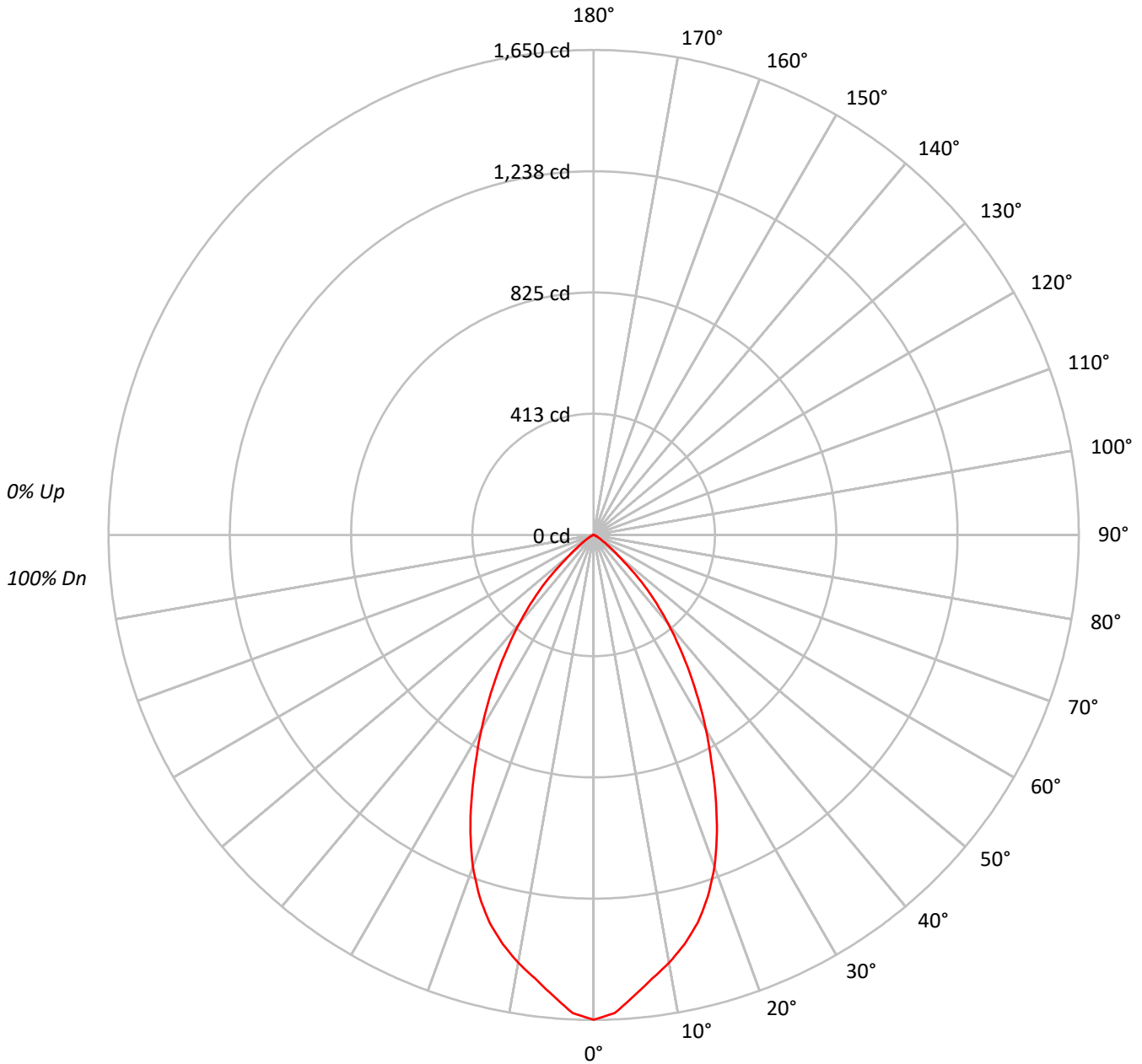
Lumens per Lamp: N/A  
Luminaire Lumens: 1578.3 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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



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### Luminous Intensity Polar Plot





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**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	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93				93															
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85				85															
3	101	94	89	84	99	93	88	84	90	86	82	88	84	81	85	82	80	78				78															
4	95	87	81	77	93	86	81	76	84	79	75	82	78	74	80	76	74	72				72															
5	90	81	75	70	88	80	74	70	78	73	69	77	72	69	75	71	68	66				66															
6	85	76	69	65	84	75	69	64	73	68	64	72	67	63	70	66	63	61				61															
7	81	71	64	60	79	70	64	59	69	63	59	67	62	59	66	62	58	57				57															
8	76	66	60	55	75	66	59	55	64	59	55	63	58	55	62	58	54	53				53															
9	72	62	56	52	71	62	56	51	61	55	51	60	55	51	59	54	51	49				49															
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	56	51	48	46				46															

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

	0°
0°	90426
5°	86628
10°	82269
15°	77537
20°	70099
25°	59344
30°	48324
35°	37825
40°	28160
45°	18932
50°	9168
55°	4530
60°	2291
65°	1453
70°	673
75°	593
80°	442
85°	881

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 18932 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.3	9.3
10°-20°	380.4	24.1
20°-30°	448.2	28.4
30°-40°	353.7	22.4
40°-50°	185.6	11.8
50°-60°	47.5	3.0
60°-70°	11.3	0.7
70°-80°	3.0	0.2
80°-90°	1.3	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°	975.9	61.8
0°-40°	1329.6	84.2
0°-60°	1562.7	99.0
0°-90°	1578.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1578.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1650	
5°	1574	147
15°	1366	380
25°	981	448
35°	565	354
45°	244	186
55°	47	47
65°	11	11
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1649.5
2.5°	1628.6
5°	1574.2
7.5°	1522.6
10°	1477.9
12.5°	1426.3
15°	1366.2
17.5°	1290.9
20°	1201.6
22.5°	1095.5
25°	981.1
27.5°	866.6
30°	763.4
32.5°	661.5
35°	565.2
37.5°	475.9
40°	393.5
42.5°	316.8
45°	244.2
47.5°	163.3
50°	107.5
52.5°	72.6
55°	47.4
57.5°	30.7
60°	20.9
62.5°	15.4
65°	11.2
67.5°	7.0
70°	4.2
72.5°	2.8
75°	2.8
77.5°	2.8
80°	1.4
82.5°	1.4
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

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— 0°-180°

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(END OF REPORT)