

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: P641067

Luminaire Tested: ML5612LSNFL2597FS1E - 691WB - 1200LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-13)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 691WB - 1200LM - 3000K  
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1474.0 lumens  
Efficiency: N/A  
Efficacy: 89.3 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

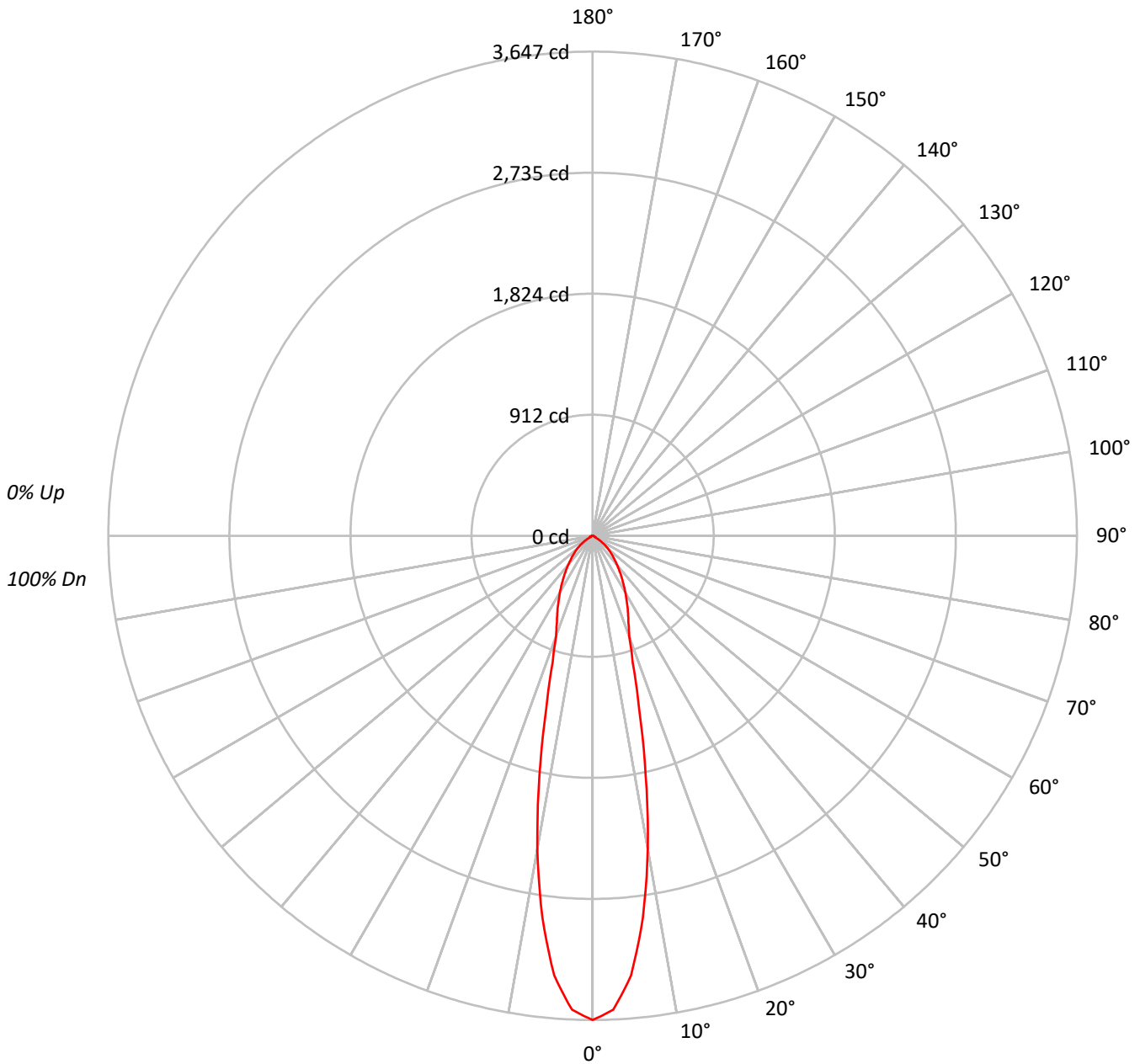
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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																			
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	95	105	101	97	94	97	94	91	94	92	90	92	89	88	86																			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80																			
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65																			
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61																			
8	80	70	64	60	78	70	64	60	68	63	60	67	63	59	66	62	59	58																			
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55																			
10	73	63	58	54	72	63	58	54	62	57	54	61	57	54	61	57	53	52																			

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

	0°
0°	199946
5°	182995
10°	133314
15°	76629
20°	46916
25°	37962
30°	31125
35°	25364
40°	20417
45°	16327
50°	12861
55°	8306
60°	3278
65°	2465
70°	1955
75°	1737
80°	1705
85°	1698

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16327 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.8	19.5
10°-20°	387.2	26.3
20°-30°	289.2	19.6
30°-40°	237.7	16.1
40°-50°	163.9	11.1
50°-60°	78.6	5.3
60°-70°	18.9	1.3
70°-80°	8.8	0.6
80°-90°	3.0	0.2
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°	963.1	65.3
0°-40°	1200.8	81.5
0°-60°	1443.3	97.9
0°-90°	1474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1474.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3647	
5°	3325	287
15°	1350	387
25°	628	289
35°	379	238
45°	211	164
55°	87	79
65°	19	19
75°	8	9
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3647.3
2.5°	3574.0
5°	3325.4
7.5°	2900.2
10°	2394.9
12.5°	1846.1
15°	1350.2
17.5°	999.8
20°	804.2
22.5°	702.3
25°	627.6
27.5°	556.9
30°	491.7
32.5°	432.0
35°	379.0
37.5°	330.1
40°	285.3
42.5°	245.9
45°	210.6
47.5°	179.3
50°	150.8
52.5°	122.3
55°	86.9
57.5°	55.7
60°	29.9
62.5°	21.7
65°	19.0
67.5°	14.9
70°	12.2
72.5°	9.5
75°	8.2
77.5°	6.8
80°	5.4
82.5°	4.1
85°	2.7
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)