

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: P640976

Luminaire Tested: ML5612LSNFL2597FS1E - 593TBZB - 1200LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640976  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 593TBZB - 1200LM - 2700K  
Description: ML56 RR, 25D 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: 1287.3 lumens  
Efficiency: N/A  
Efficacy: 78.0 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

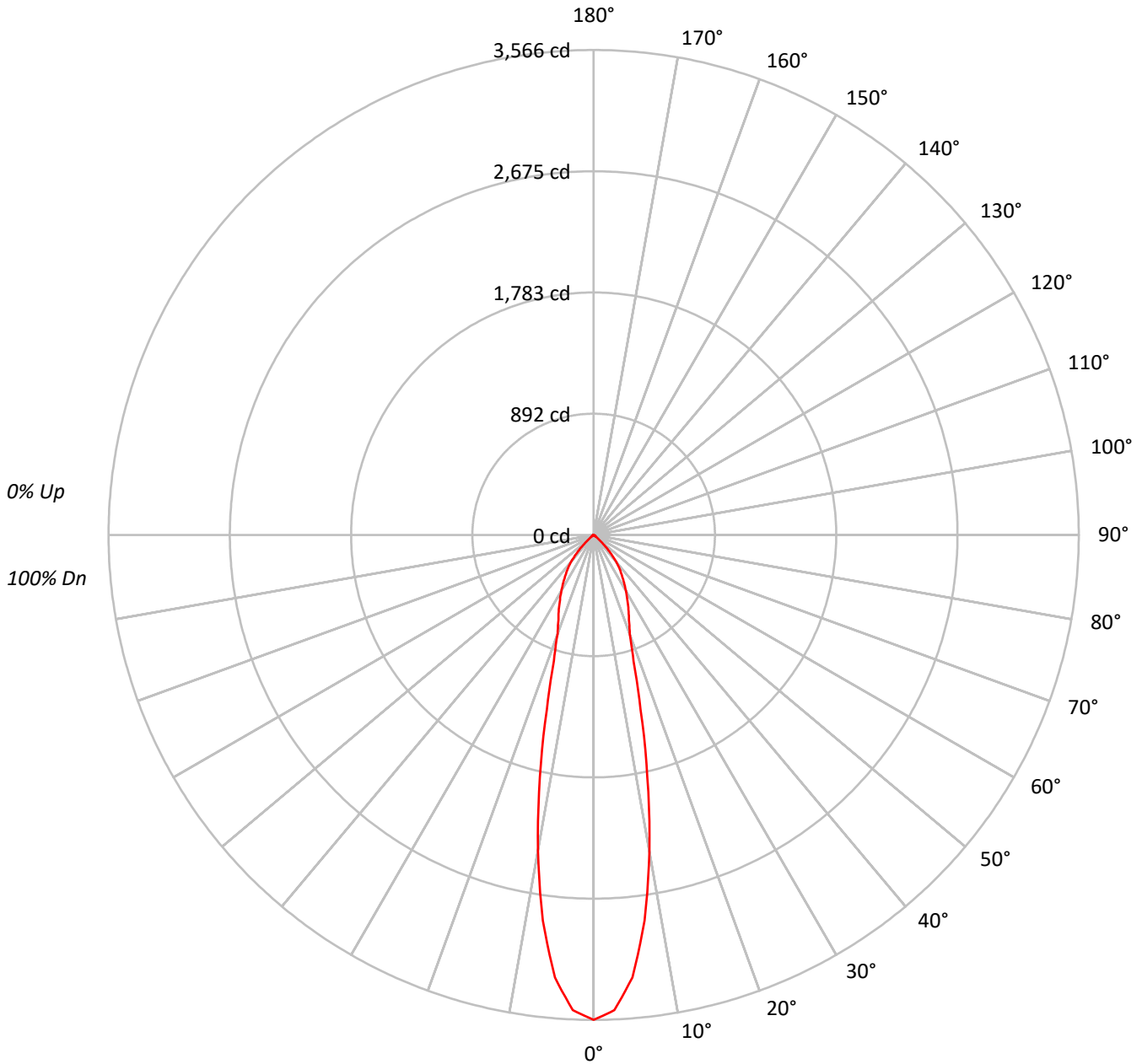
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	114	111	109	107	112	109	107	105	105	104	102	101	100	99	98	97	96	94																			
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89																			
3	104	98	93	90	102	97	92	89	94	90	88	92	89	86	89	87	85	83																			
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	79																			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74																			
6	91	82	77	73	89	82	77	73	80	76	72	79	75	72	78	74	71	70																			
7	87	78	73	69	86	78	72	69	76	72	68	75	71	68	74	71	68	66																			
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	61	60																			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	65	62	59	58																			

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

	0°
0°	281503
5°	258814
10°	189151
15°	108630
20°	65038
25°	52705
30°	43115
35°	34760
40°	26546
45°	14893
50°	3893
55°	1996
60°	1247
65°	486
70°	300
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14893 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.0	21.9
10°-20°	379.8	29.5
20°-30°	278.6	21.6
30°-40°	225.6	17.5
40°-50°	102.8	8.0
50°-60°	14.6	1.1
60°-70°	3.4	0.3
70°-80°	0.5	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°	940.4	73.1
0°-40°	1165.9	90.6
0°-60°	1283.4	99.7
0°-90°	1287.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1287.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3566	
5°	3266	282
15°	1329	380
25°	605	279
35°	361	226
45°	133	103
55°	14	15
65°	3	3
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3566.0
2.5°	3498.6
5°	3266.1
7.5°	2860.4
10°	2359.7
12.5°	1823.3
15°	1329.2
17.5°	972.4
20°	774.2
22.5°	676.5
25°	605.1
27.5°	536.4
30°	473.0
32.5°	414.9
35°	360.7
37.5°	311.8
40°	257.6
42.5°	191.6
45°	133.4
47.5°	74.0
50°	31.7
52.5°	19.8
55°	14.5
57.5°	11.9
60°	7.9
62.5°	5.3
65°	2.6
67.5°	1.3
70°	1.3
72.5°	1.3
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

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— 0°-180°

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(END OF REPORT)