

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: P641031

Luminaire Tested: ML5612LSNFL2597FS1E - 594TBZB - 900LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641031  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 594TBZB - 900LM - 2700K  
Description: ML56 RR, 25D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1193.6 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.43  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

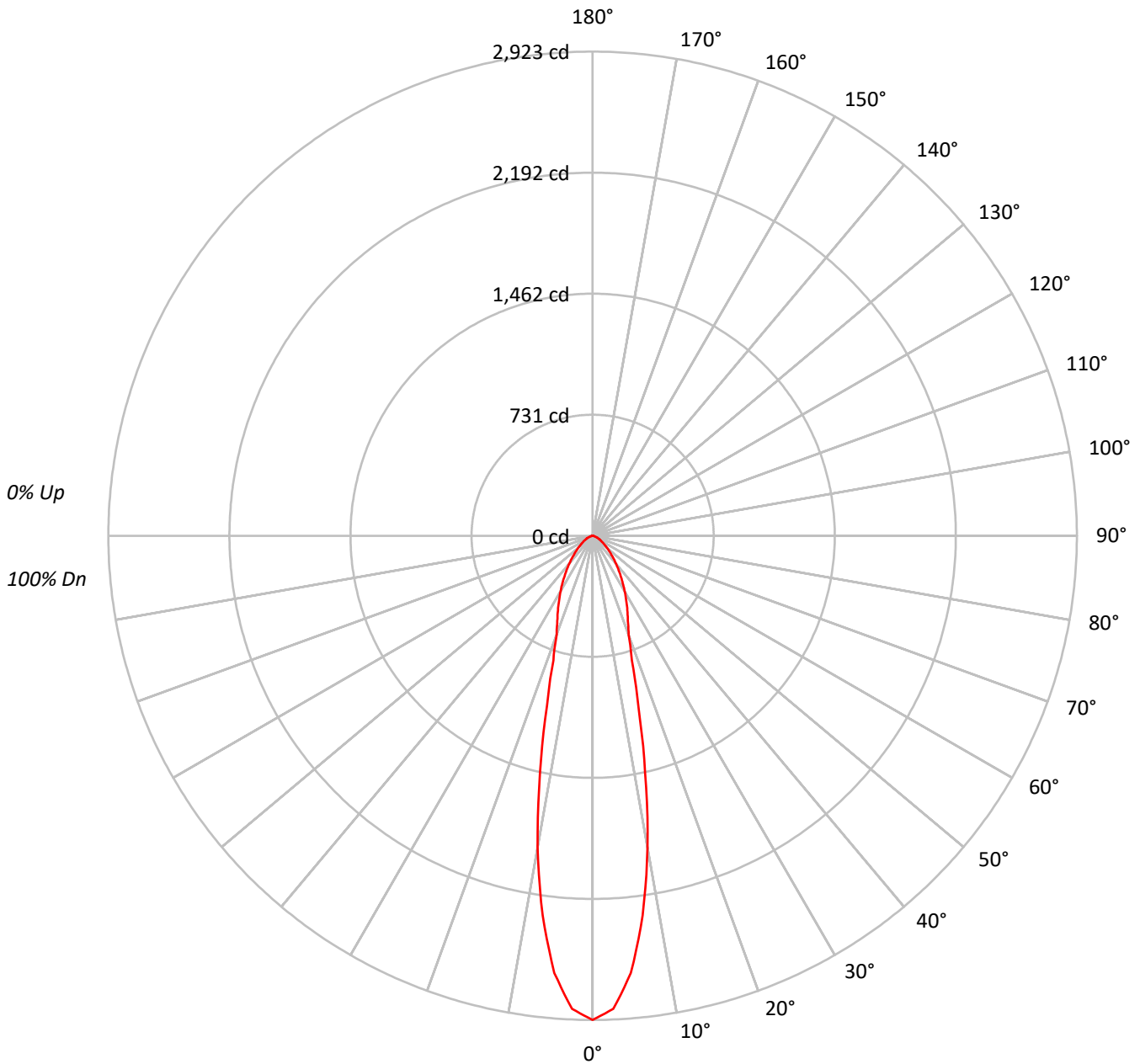
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92	92	92	92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85	85	85	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78	78	78	78
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	81	77	74	73	73	73	73
5	91	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68	68	68	68
6	86	77	71	67	85	76	71	66	75	70	66	73	69	65	72	68	65	64	64	64	64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60	60	60	60
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	57	57	57	57
9	75	66	60	56	74	65	59	56	64	59	55	63	59	55	62	58	55	54	54	54	54
10	72	62	57	53	71	62	57	53	61	56	53	60	56	52	60	55	52	51	51	51	51

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

	0°
0°	230752
5°	209937
10°	153175
15°	86907
20°	53420
25°	43133
30°	35194
35°	28381
40°	22475
45°	17661
50°	13792
55°	10804
60°	8605
65°	7135
70°	5032
75°	2654
80°	2000
85°	996

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17661 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.8	19.2
10°-20°	306.4	25.7
20°-30°	228.4	19.1
30°-40°	184.8	15.5
40°-50°	123.6	10.4
50°-60°	71.5	6.0
60°-70°	37.7	3.2
70°-80°	10.9	0.9
80°-90°	1.5	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°	763.6	64.0
0°-40°	948.4	79.5
0°-60°	1143.5	95.8
0°-90°	1193.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1193.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2923	
5°	2649	229
15°	1063	306
25°	495	228
35°	294	185
45°	158	124
55°	78	72
65°	38	38
75°	9	11
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2923.1
2.5°	2858.8
5°	2649.3
7.5°	2312.3
10°	1910.9
12.5°	1464.8
15°	1063.4
17.5°	788.6
20°	635.9
22.5°	556.3
25°	495.2
27.5°	439.6
30°	386.1
32.5°	339.2
35°	294.5
37.5°	254.1
40°	218.1
42.5°	186.5
45°	158.2
47.5°	134.2
50°	112.3
52.5°	93.8
55°	78.5
57.5°	65.4
60°	54.5
62.5°	45.8
65°	38.2
67.5°	30.5
70°	21.8
72.5°	14.2
75°	8.7
77.5°	5.5
80°	4.4
82.5°	2.2
85°	1.1
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)