

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: P641021

Luminaire Tested: ML5612LSNFL2597FS1E - 594TBZB - 1200LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641021  
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 - 1200LM - 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: 1444.9 lumens  
Efficiency: N/A  
Efficacy: 87.6 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

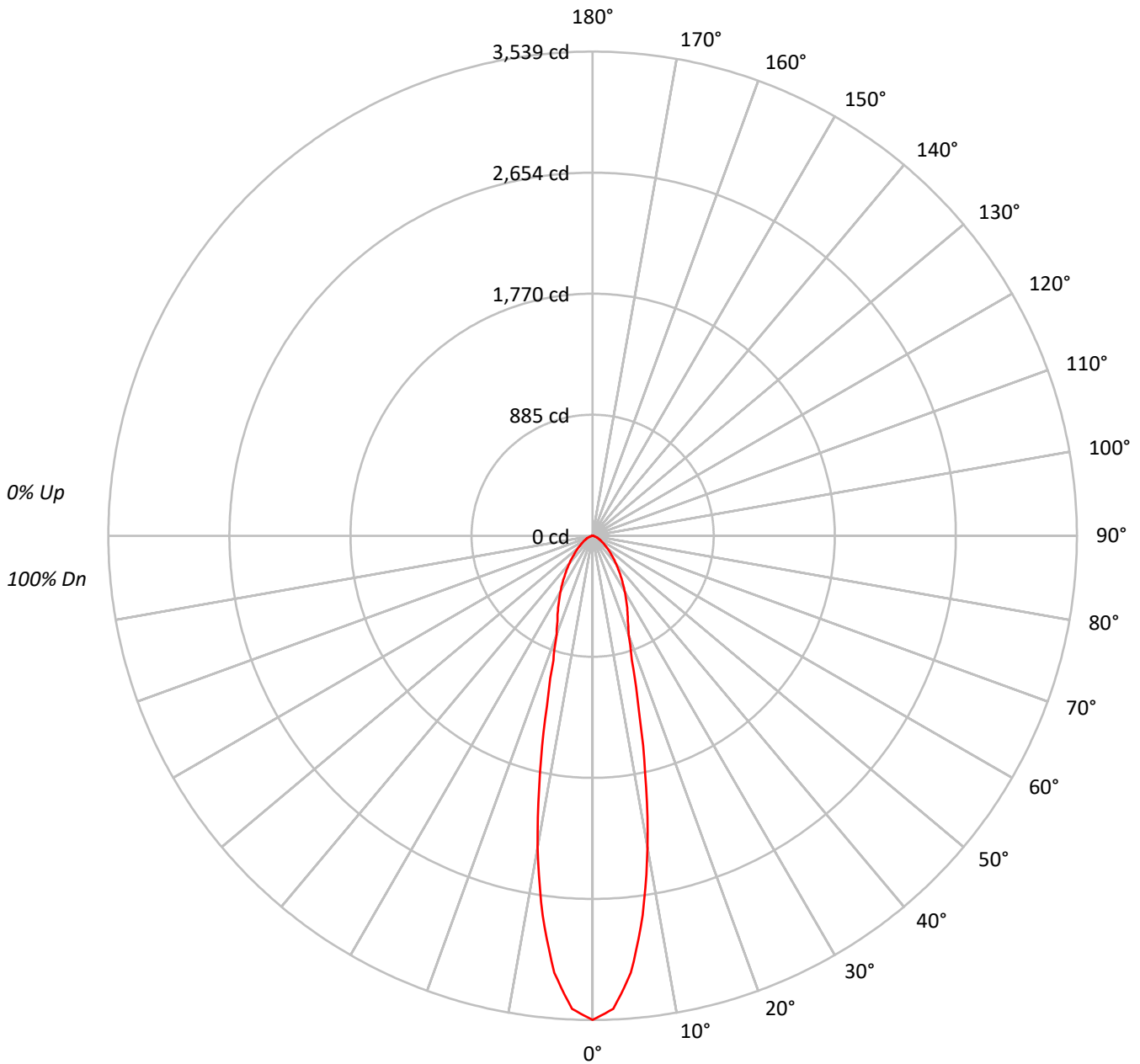
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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
1	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92			92
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78			78
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	81	77	74	73			73
5	91	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68			68
6	86	77	71	67	85	76	71	66	75	70	66	73	69	65	72	68	65	64			64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60			60
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	57			57
9	75	66	60	56	74	65	59	56	64	59	55	63	59	55	62	58	55	54			54
10	72	62	57	53	71	62	57	53	61	56	53	60	56	52	60	55	52	51			51

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

	0°
0°	279340
5°	254146
10°	185431
15°	105214
20°	64669
25°	52209
30°	42605
35°	34356
40°	27216
45°	21379
50°	16702
55°	13089
60°	10420
65°	8630
70°	6093
75°	3233
80°	2409
85°	1177

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21379 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.9	19.2
10°-20°	371.0	25.7
20°-30°	276.4	19.1
30°-40°	223.7	15.5
40°-50°	149.6	10.4
50°-60°	86.6	6.0
60°-70°	45.6	3.2
70°-80°	13.2	0.9
80°-90°	1.8	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°	924.3	64.0
0°-40°	1148.1	79.5
0°-60°	1384.3	95.8
0°-90°	1444.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1444.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3539	
5°	3207	277
15°	1287	371
25°	599	276
35°	356	224
45°	192	150
55°	95	87
65°	46	46
75°	11	13
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3538.6
2.5°	3460.7
5°	3207.2
7.5°	2799.2
10°	2313.3
12.5°	1773.2
15°	1287.4
17.5°	954.6
20°	769.8
22.5°	673.4
25°	599.4
27.5°	532.1
30°	467.4
32.5°	410.6
35°	356.5
37.5°	307.6
40°	264.1
42.5°	225.8
45°	191.5
47.5°	162.4
50°	136.0
52.5°	113.6
55°	95.1
57.5°	79.2
60°	66.0
62.5°	55.5
65°	46.2
67.5°	37.0
70°	26.4
72.5°	17.2
75°	10.6
77.5°	6.6
80°	5.3
82.5°	2.6
85°	1.3
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)