

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: P641189

Luminaire Tested: ML5612LSNFL2597FS1E - 694TBZB - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641189  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-22)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 694TBZB - 1200LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1641.1 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.43  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

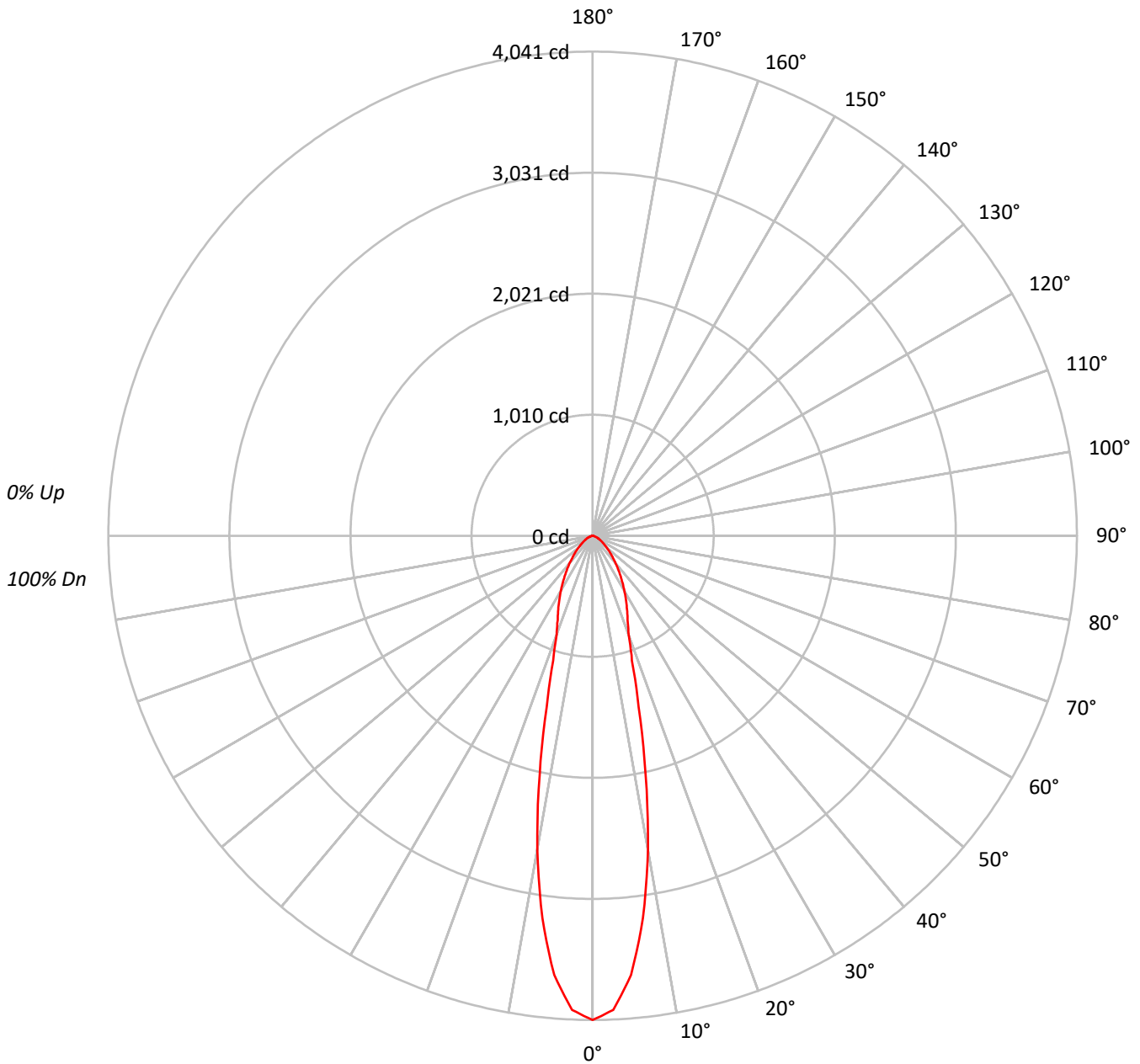
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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			
1	113	110	107	105	111	108	106	103	104	102	100	100	99	97	97	95	94	93			
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79			
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73			
5	91	82	76	72	89	81	76	71	80	75	71	78	74	70	76	73	70	68			
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64			
7	83	73	67	63	81	72	67	63	71	66	62	70	65	62	69	65	61	60			
8	79	69	63	59	78	69	63	59	68	62	59	67	62	58	66	61	58	57			
9	75	66	60	56	74	65	60	56	64	59	56	63	59	55	63	58	55	54			
10	72	63	57	53	71	62	57	53	62	56	53	61	56	53	60	56	53	51			

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

	0°
0°	221550
5°	202481
10°	147887
15°	83871
20°	51169
25°	41059
30°	33461
35°	26836
40°	21283
45°	16653
50°	12938
55°	10188
60°	8070
65°	6628
70°	4809
75°	2859
80°	1421
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16653 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	317.8	19.4
10°-20°	425.7	25.9
20°-30°	313.3	19.1
30°-40°	252.1	15.4
40°-50°	167.6	10.2
50°-60°	97.0	5.9
60°-70°	51.0	3.1
70°-80°	15.2	0.9
80°-90°	1.4	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°	1056.8	64.4
0°-40°	1308.9	79.8
0°-60°	1573.5	95.9
0°-90°	1641.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1641.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4041	
5°	3680	318
15°	1478	426
25°	679	313
35°	401	252
45°	215	168
55°	107	97
65°	51	51
75°	14	15
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4041.4
2.5°	3960.3
5°	3679.5
7.5°	3218.4
10°	2656.7
12.5°	2042.5
15°	1477.8
17.5°	1091.8
20°	877.1
22.5°	762.9
25°	678.8
27.5°	602.2
30°	528.6
32.5°	462.6
35°	401.0
37.5°	346.9
40°	297.4
42.5°	252.3
45°	214.8
47.5°	181.7
50°	151.7
52.5°	127.7
55°	106.6
57.5°	88.6
60°	73.6
62.5°	61.6
65°	51.1
67.5°	42.1
70°	30.0
72.5°	19.5
75°	13.5
77.5°	7.5
80°	4.5
82.5°	3.0
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)