

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: P642839

Luminaire Tested: ML5615LSNFL259FS1E - 594TBZB - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642839  
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: ML5615LSNFL259FS1E - 594TBZB - 1200LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

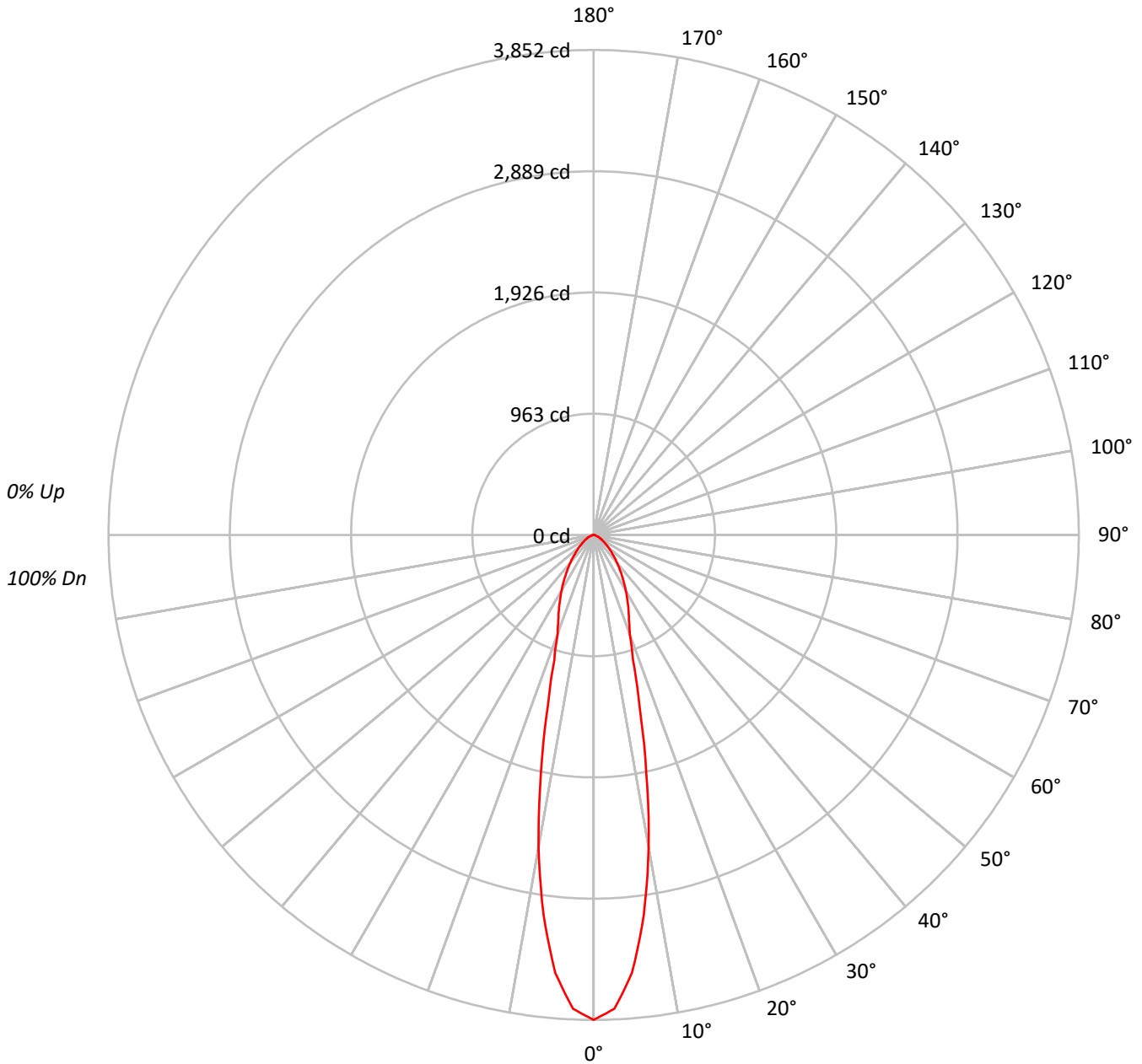
Lumens per Lamp: N/A  
Luminaire Lumens: 1572.9 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.43  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.4  
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°	304096
5°	276667
10°	201864
15°	114539
20°	70398
25°	56843
30°	46379
35°	37401
40°	29627
45°	23266
50°	18188
55°	14245
60°	11352
65°	9396
70°	6624
75°	3508
80°	2591
85°	1268

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 23266 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	301.5	19.2
10°-20°	403.8	25.7
20°-30°	301.0	19.1
30°-40°	243.6	15.5
40°-50°	162.9	10.4
50°-60°	94.3	6.0
60°-70°	49.7	3.2
70°-80°	14.4	0.9
80°-90°	1.9	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°	1006.3	64.0
0°-40°	1249.8	79.5
0°-60°	1507.0	95.8
0°-90°	1572.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1572.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3852	
5°	3491	301
15°	1402	404
25°	653	301
35°	388	244
45°	208	163
55°	104	94
65°	50	50
75°	12	14
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3852.2
2.5°	3767.4
5°	3491.4
7.5°	3047.3
10°	2518.3
12.5°	1930.4
15°	1401.5
17.5°	1039.2
20°	838.0
22.5°	733.1
25°	652.6
27.5°	579.3
30°	508.8
32.5°	447.0
35°	388.1
37.5°	334.9
40°	287.5
42.5°	245.8
45°	208.4
47.5°	176.8
50°	148.1
52.5°	123.6
55°	103.5
57.5°	86.2
60°	71.9
62.5°	60.4
65°	50.3
67.5°	40.2
70°	28.7
72.5°	18.7
75°	11.5
77.5°	7.2
80°	5.7
82.5°	2.9
85°	1.4
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)