

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: P642979

Luminaire Tested: ML5615LSNFL259FS1E - 693TBZB - 1500LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642979  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-20)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 693TBZB - 1500LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 6" TUSCON BRONZE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1787.1 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

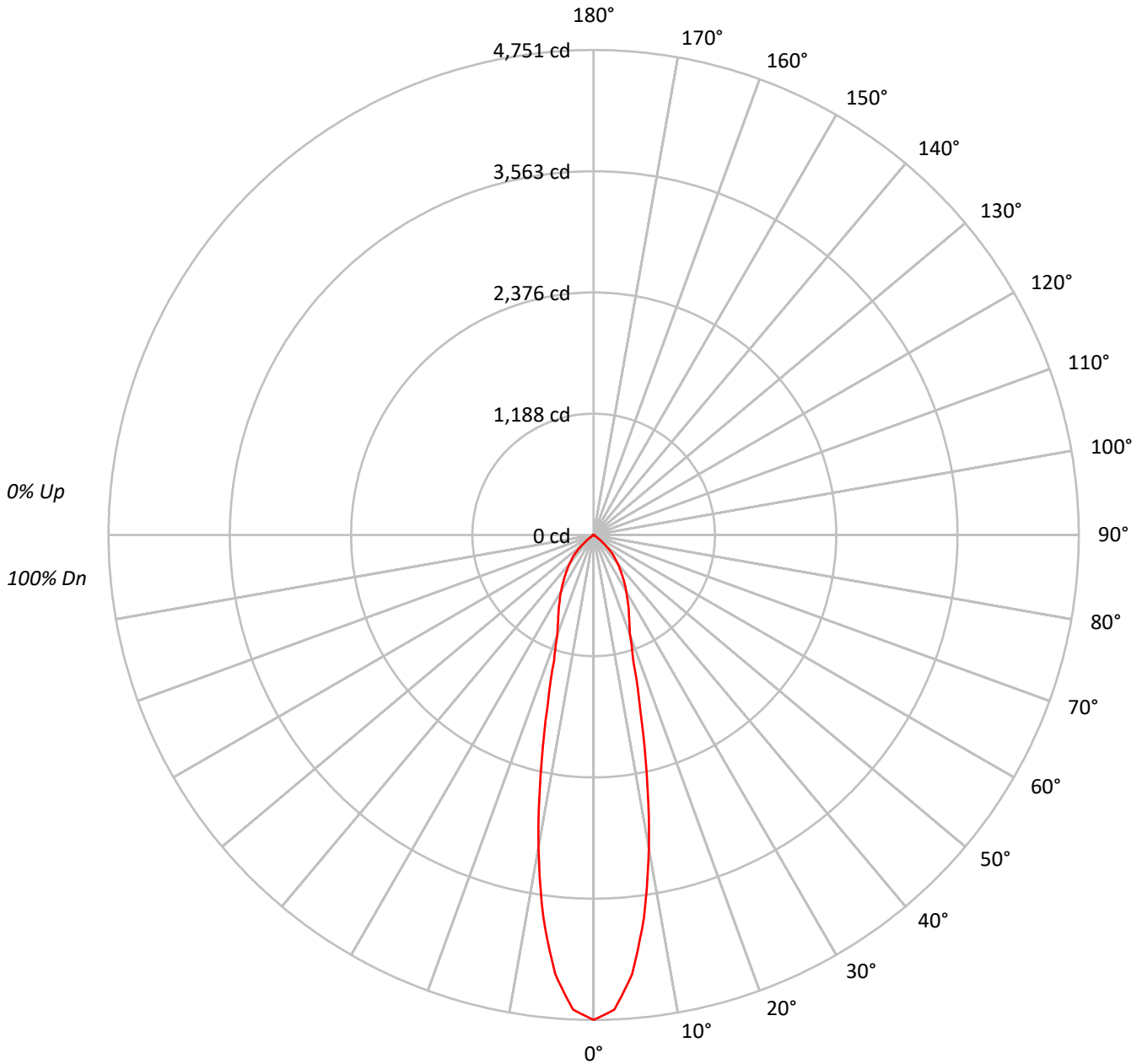
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	97	106	102	99	96	99	96	93	96	94	91	93	91	90	88			
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	88	86	84	82			
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	79	77			
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	72			
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68			
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65			
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	63	61			
9	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58			
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56			

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

	0°
0°	260456
5°	237612
10°	173427
15°	99246
20°	60549
25°	49092
30°	40405
35°	32779
40°	25941
45°	19878
50°	10106
55°	2533
60°	1546
65°	687
70°	289
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19878 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	373.1	20.9
10°-20°	501.6	28.1
20°-30°	373.9	20.9
30°-40°	307.1	17.2
40°-50°	189.1	10.6
50°-60°	35.9	2.0
60°-70°	5.8	0.3
70°-80°	0.7	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°	1248.5	69.9
0°-40°	1555.6	87.0
0°-60°	1780.6	99.6
0°-90°	1787.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1787.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4751	
5°	4318	373
15°	1749	502
25°	812	374
35°	490	307
45°	256	189
55°	26	36
65°	5	6
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4751.1
2.5°	4655.6
5°	4317.9
7.5°	3776.8
10°	3115.5
12.5°	2395.9
15°	1748.7
17.5°	1290.8
20°	1037.9
22.5°	907.1
25°	811.6
27.5°	719.6
30°	638.3
32.5°	562.3
35°	489.8
37.5°	424.4
40°	362.5
42.5°	309.4
45°	256.4
47.5°	183.9
50°	118.5
52.5°	53.0
55°	26.5
57.5°	17.7
60°	14.1
62.5°	8.8
65°	5.3
67.5°	1.8
70°	1.8
72.5°	1.8
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)