

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: P642948

Luminaire Tested: ML5615LSNFL259FS1E - 693BB - 1500LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642948  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-18)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 693BB - 1500LM - 3500K  
Description: ML56 RR, 25D TIR OPTIC, 6" BLACK BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

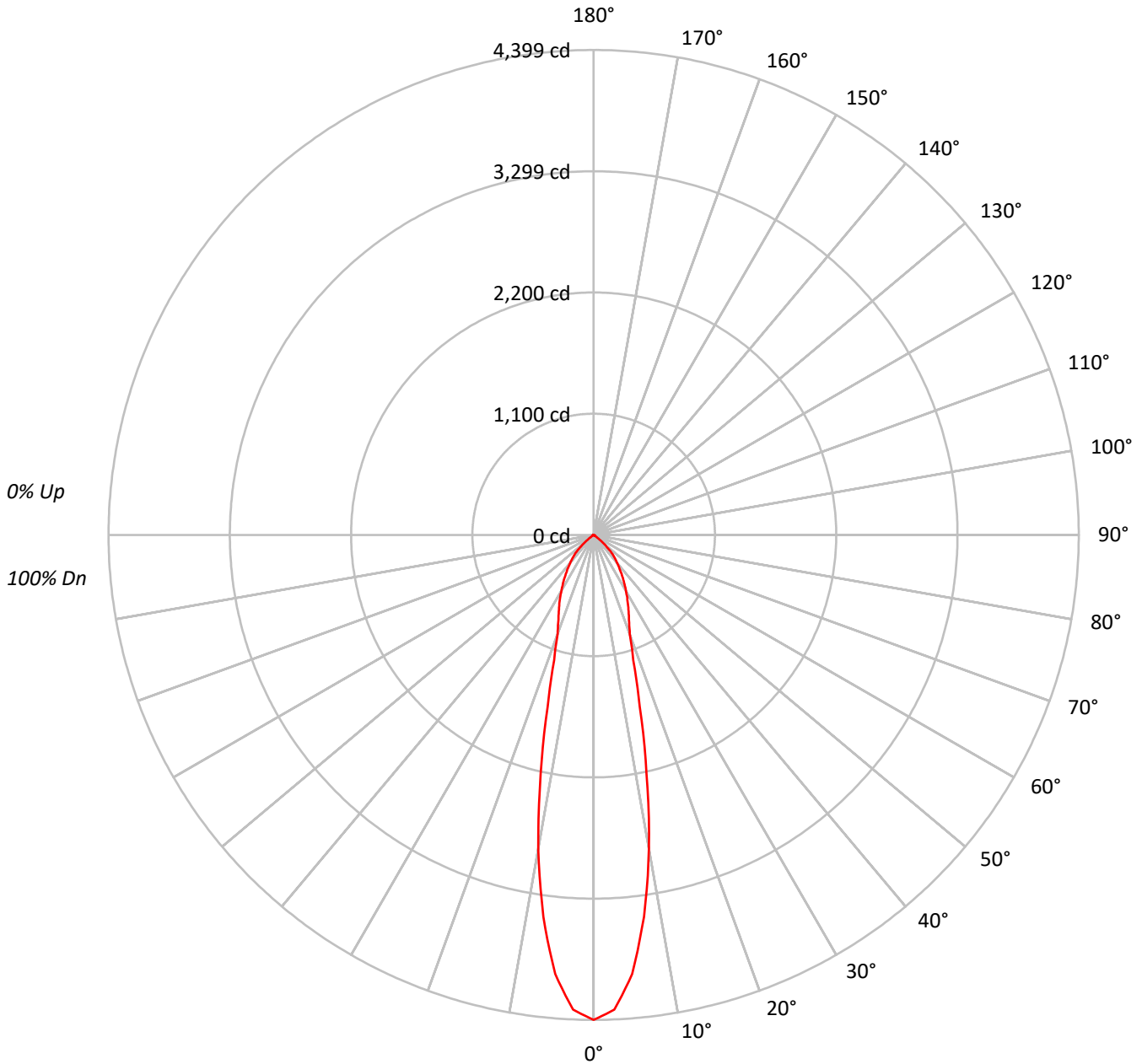
Lumens per Lamp: N/A  
Luminaire Lumens: 1640.4 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.43  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (Ain): 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									
RC	80									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	94	96	94	92	93	91	90	88																			
3	103	97	92	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82																			
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77																			
5	94	86	81	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73																			
6	90	81	76	72	88	80	75	71	79	74	71	78	74	70	76	73	70	69																			
7	86	77	71	67	84	76	71	67	75	70	67	74	70	67	73	69	66	65																			
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	62																			
9	79	70	64	60	78	69	64	60	68	64	60	67	63	60	67	63	60	59																			
10	76	67	61	58	75	66	61	57	65	61	57	65	60	57	64	60	57	56																			

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

	0°
0°	241159
5°	220008
10°	160874
15°	91527
20°	55719
25°	45142
30°	37044
35°	29921
40°	23644
45°	17971
50°	9117
55°	2045
60°	1261
65°	636
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17971 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	345.4	21.1
10°-20°	463.4	28.2
20°-30°	343.7	21.0
30°-40°	280.5	17.1
40°-50°	171.4	10.4
50°-60°	31.0	1.9
60°-70°	5.0	0.3
70°-80°	0.0	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°	1152.5	70.3
0°-40°	1433.0	87.4
0°-60°	1635.4	99.7
0°-90°	1640.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1640.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4399	
5°	3998	345
15°	1613	463
25°	746	344
35°	447	280
45°	232	171
55°	21	31
65°	5	5
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4399.1
2.5°	4310.3
5°	3998.0
7.5°	3493.3
10°	2890.0
12.5°	2217.6
15°	1612.7
17.5°	1190.2
20°	955.1
22.5°	833.5
25°	746.3
27.5°	662.5
30°	585.2
32.5°	514.5
35°	447.1
37.5°	386.3
40°	330.4
42.5°	281.1
45°	231.8
47.5°	166.0
50°	106.9
52.5°	46.0
55°	21.4
57.5°	14.8
60°	11.5
62.5°	8.2
65°	4.9
67.5°	1.6
70°	0.0
72.5°	0.0
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)