

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: P642715

Luminaire Tested: ML5615LSNFL259FS1E - 591WB - 900LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642715  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 591WB - 900LM - 5000K  
Description: ML56 RR, 25D TIR OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

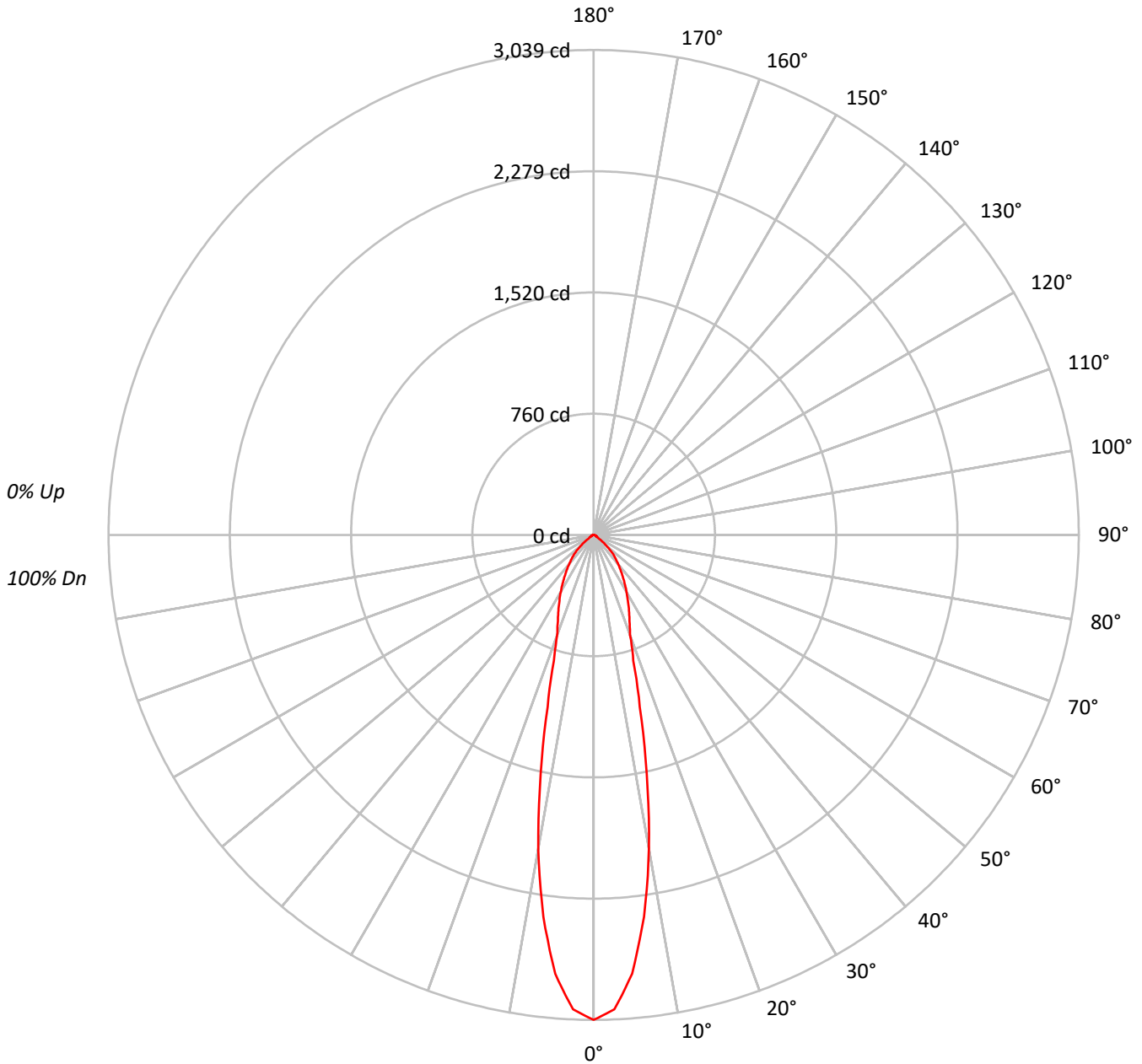
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1207.8 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 10.5  
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									
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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86																			
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	84	78	74	90	83	77	73	81	76	73	79	75	72	78	74	71	70																			
6	88	79	73	69	86	78	72	68	77	72	68	75	71	67	74	70	67	66																			
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62																			
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58																			
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56																			
10	73	64	58	55	72	64	58	55	63	58	54	62	58	54	61	57	54	53																			

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

	0°
0°	239886
5°	218709
10°	160045
15°	91116
20°	56100
25°	45580
30°	37537
35°	30482
40°	24619
45°	19682
50°	12858
55°	5643
60°	3600
65°	3194
70°	2885
75°	2776
80°	3091
85°	3080

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19682 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.5	19.8
10°-20°	321.0	26.6
20°-30°	241.0	20.0
30°-40°	198.7	16.5
40°-50°	132.5	11.0
50°-60°	45.0	3.7
60°-70°	17.3	1.4
70°-80°	9.8	0.8
80°-90°	4.0	0.3
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°	800.5	66.3
0°-40°	999.2	82.7
0°-60°	1176.7	97.4
0°-90°	1207.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1207.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3039	
5°	2760	239
15°	1115	321
25°	523	241
35°	316	199
45°	176	132
55°	41	45
65°	17	17
75°	9	10
85°	3	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3038.8
2.5°	2976.2
5°	2760.0
7.5°	2413.0
10°	1996.6
12.5°	1532.5
15°	1114.9
17.5°	827.1
20°	667.8
22.5°	584.8
25°	523.3
27.5°	464.2
30°	411.8
32.5°	361.8
35°	316.3
37.5°	275.3
40°	238.9
42.5°	205.9
45°	176.3
47.5°	137.7
50°	104.7
52.5°	71.7
55°	41.0
57.5°	27.3
60°	22.8
62.5°	20.5
65°	17.1
67.5°	14.8
70°	12.5
72.5°	10.2
75°	9.1
77.5°	8.0
80°	6.8
82.5°	5.7
85°	3.4
87.5°	2.3
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)