

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: P642884

Luminaire Tested: ML5615LSNFL259FS1E - 691WB - 1200LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642884  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-13)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 691WB - 1200LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1560.0 lumens  
Efficiency: N/A  
Efficacy: 116.4 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

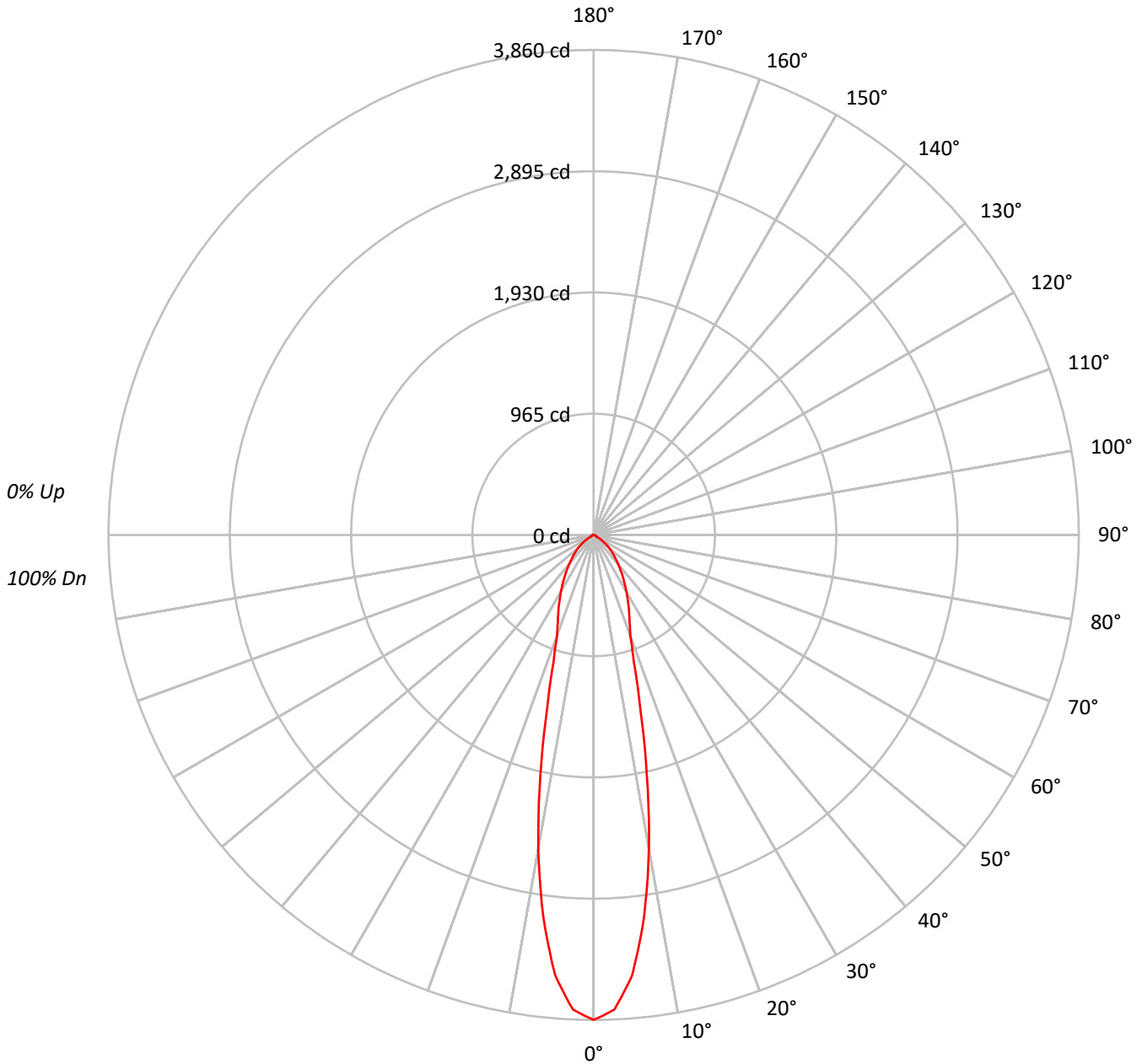
Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93			93
2	107	102	98	95	105	101	97	94	97	94	91	94	92	90	92	90	88	86			86
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80			80
4	97	89	83	79	95	88	82	78	86	81	77	84	80	77	82	78	76	74			74
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69			69
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65			65
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61			61
8	80	70	64	60	78	70	64	60	68	63	60	67	63	59	66	62	59	58			58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55			55
10	73	63	58	54	72	63	58	54	62	57	54	61	57	54	61	57	53	52			52

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

	0°
0°	211622
5°	193677
10°	141096
15°	81107
20°	49652
25°	40176
30°	32948
35°	26843
40°	21605
45°	17273
50°	13611
55°	8793
60°	3465
65°	2607
70°	2068
75°	1822
80°	1831
85°	1824

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17273 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	303.5	19.5
10°-20°	409.8	26.3
20°-30°	306.1	19.6
30°-40°	251.6	16.1
40°-50°	173.4	11.1
50°-60°	83.2	5.3
60°-70°	20.0	1.3
70°-80°	9.3	0.6
80°-90°	3.1	0.2
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°	1019.3	65.3
0°-40°	1270.9	81.5
0°-60°	1527.5	97.9
0°-90°	1560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1560.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3860	
5°	3520	303
15°	1429	410
25°	664	306
35°	401	252
45°	223	173
55°	92	83
65°	20	20
75°	9	9
85°	3	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3860.3
2.5°	3782.6
5°	3519.5
7.5°	3069.5
10°	2534.7
12.5°	1953.9
15°	1429.1
17.5°	1058.2
20°	851.1
22.5°	743.3
25°	664.2
27.5°	589.5
30°	520.5
32.5°	457.2
35°	401.1
37.5°	349.4
40°	301.9
42.5°	260.2
45°	222.8
47.5°	189.8
50°	159.6
52.5°	129.4
55°	92.0
57.5°	58.9
60°	31.6
62.5°	23.0
65°	20.1
67.5°	15.8
70°	12.9
72.5°	10.1
75°	8.6
77.5°	7.2
80°	5.8
82.5°	4.3
85°	2.9
87.5°	1.4
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)