

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: P642890

Luminaire Tested: ML5615LSNFL259FS1E - 691WB - 1500LM - 5000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642890  
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 - 1500LM - 5000K  
Description: ML56 RR, 25D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

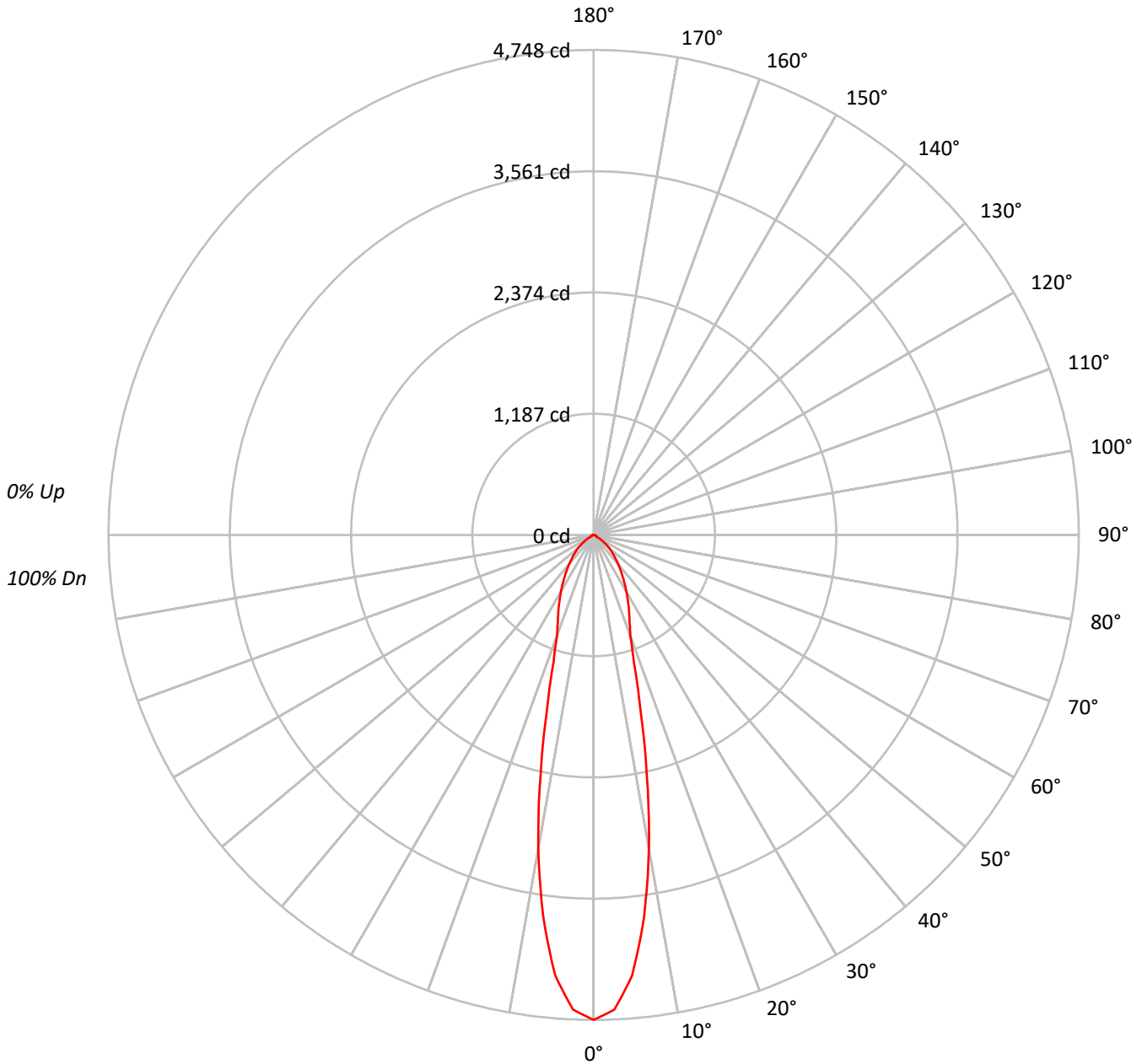
Lumens per Lamp: N/A  
Luminaire Lumens: 1918.7 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

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									
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			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	89	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°	260270
5°	238201
10°	173533
15°	99751
20°	61069
25°	49412
30°	40519
35°	33013
40°	26571
45°	21250
50°	16741
55°	10819
60°	4265
65°	3217
70°	2549
75°	2245
80°	2241
85°	2201

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21250 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	373.3	19.5
10°-20°	504.0	26.3
20°-30°	376.5	19.6
30°-40°	309.4	16.1
40°-50°	213.3	11.1
50°-60°	102.3	5.3
60°-70°	24.7	1.3
70°-80°	11.4	0.6
80°-90°	3.9	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°	1253.7	65.3
0°-40°	1563.1	81.5
0°-60°	1878.7	97.9
0°-90°	1918.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1918.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4748	
5°	4329	373
15°	1758	504
25°	817	376
35°	493	309
45°	274	213
55°	113	102
65°	25	25
75°	11	11
85°	4	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4747.7
2.5°	4652.2
5°	4328.6
7.5°	3775.2
10°	3117.4
12.5°	2403.0
15°	1757.6
17.5°	1301.4
20°	1046.8
22.5°	914.2
25°	816.9
27.5°	725.0
30°	640.1
32.5°	562.3
35°	493.3
37.5°	429.7
40°	371.3
42.5°	320.1
45°	274.1
47.5°	233.4
50°	196.3
52.5°	159.1
55°	113.2
57.5°	72.5
60°	38.9
62.5°	28.3
65°	24.8
67.5°	19.5
70°	15.9
72.5°	12.4
75°	10.6
77.5°	8.8
80°	7.1
82.5°	5.3
85°	3.5
87.5°	1.8
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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Scaled Data Report



(END OF REPORT)