

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: P643737

Luminaire Tested: ML5615LSWFL559FS1E - 591WB - 1200LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643737  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-47)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 591WB - 1200LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1467.4 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

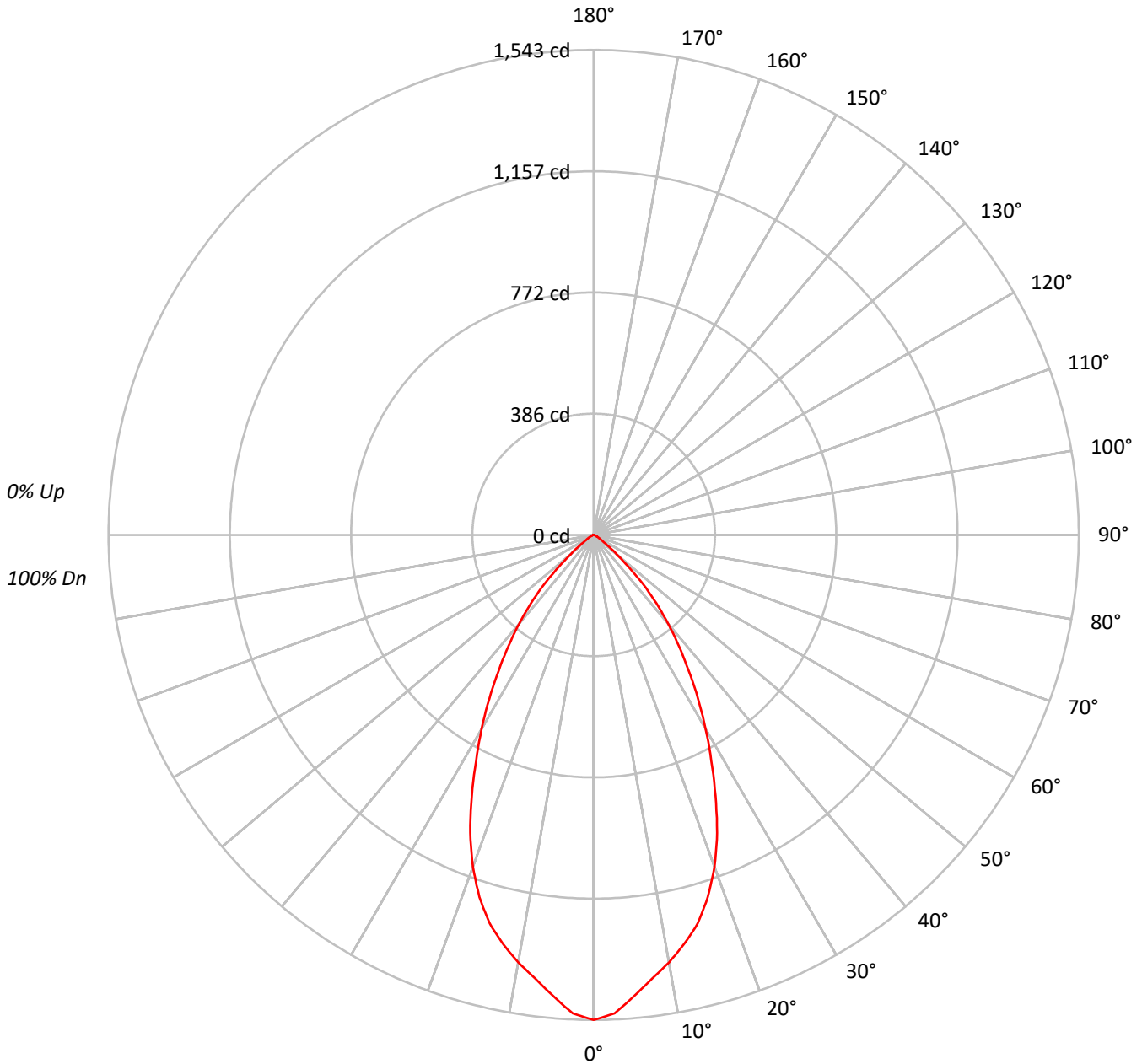
Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93																
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85			85																
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	82	80	78			78																
4	95	87	81	77	94	86	81	76	84	79	76	82	78	75	80	77	74	72			72																
5	90	81	75	70	88	80	74	70	78	73	69	77	72	69	75	71	68	67			67																
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	66	63	62			62																
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57			57																
8	76	66	60	56	75	66	60	55	65	59	55	64	59	55	63	58	55	53			53																
9	73	62	56	52	71	62	56	52	61	55	51	60	55	51	59	54	51	50			50																
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47			47																

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

	0°
0°	121822
5°	116724
10°	110675
15°	104552
20°	94365
25°	79837
30°	64947
35°	50738
40°	37912
45°	24963
50°	11655
55°	4831
60°	2873
65°	1700
70°	1200
75°	1190
80°	1182
85°	1177

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 24963 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.7	9.4
10°-20°	355.7	24.2
20°-30°	419.0	28.6
30°-40°	330.1	22.5
40°-50°	170.9	11.6
50°-60°	38.0	2.6
60°-70°	9.9	0.7
70°-80°	4.1	0.3
80°-90°	1.8	0.1
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°	912.5	62.2
0°-40°	1242.6	84.7
0°-60°	1451.6	98.9
0°-90°	1467.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1543	
5°	1473	138
15°	1279	356
25°	917	419
35°	526	330
45°	224	171
55°	35	38
65°	9	10
75°	4	4
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1543.2
2.5°	1523.7
5°	1473.0
7.5°	1423.6
10°	1380.7
12.5°	1332.6
15°	1279.3
17.5°	1207.8
20°	1123.3
22.5°	1025.8
25°	916.6
27.5°	810.0
30°	712.5
32.5°	617.6
35°	526.5
37.5°	444.6
40°	367.9
42.5°	295.1
45°	223.6
47.5°	148.2
50°	94.9
52.5°	57.2
55°	35.1
57.5°	23.4
60°	18.2
62.5°	13.0
65°	9.1
67.5°	6.5
70°	5.2
72.5°	3.9
75°	3.9
77.5°	3.9
80°	2.6
82.5°	2.6
85°	1.3
87.5°	1.3
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)