

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: P643917

Luminaire Tested: ML5615LSWFL559FS1E - 691WB - 1200LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643917  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-59)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSWFL559FS1E - 691WB - 1200LM - 3000K  
Description: ML56 RR, 55D TIR OPTIC, 6" DEADFRONT TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

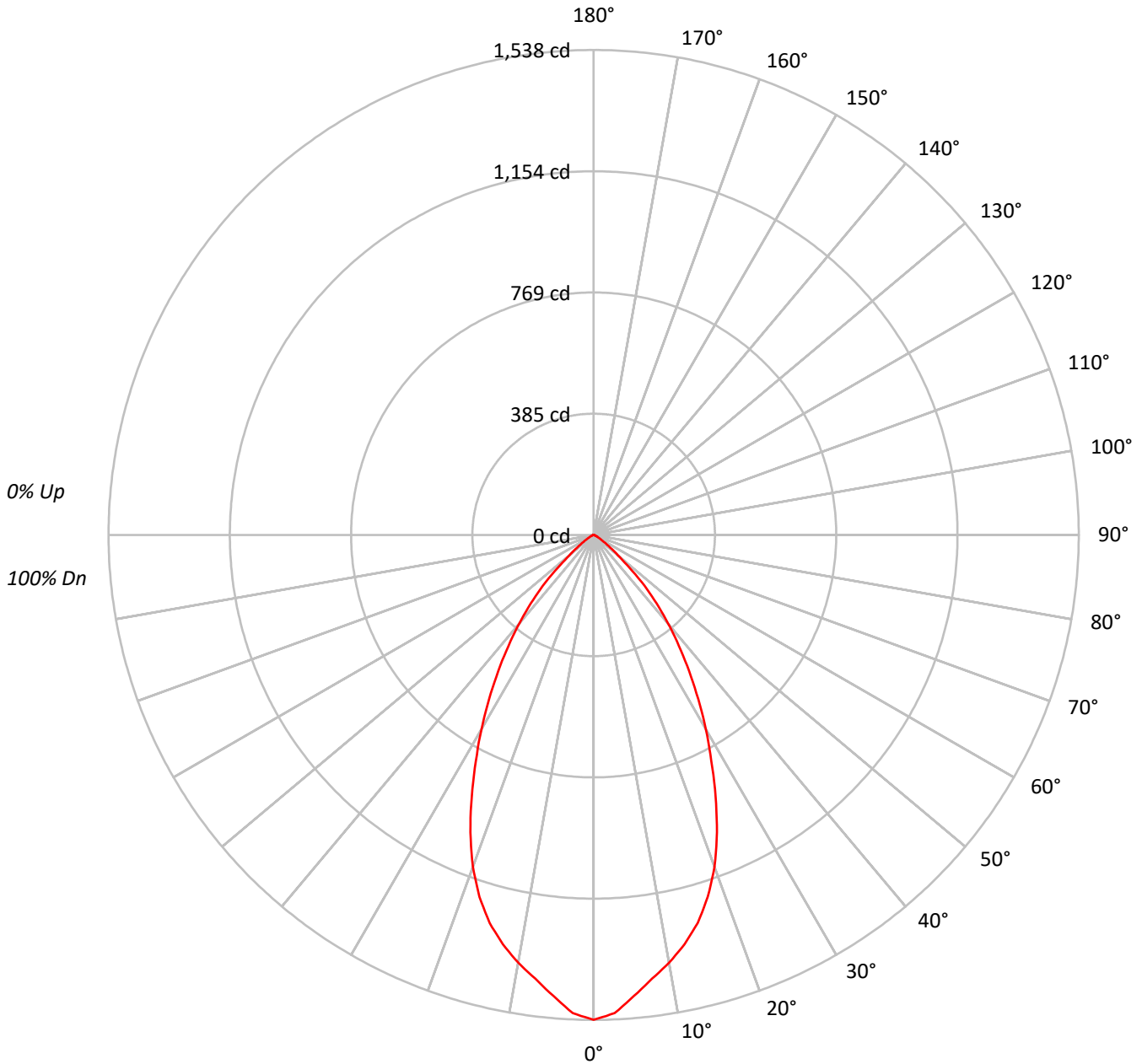
Lumens per Lamp: N/A  
Luminaire Lumens: 1471.3 lumens  
Efficiency: N/A  
Efficacy: 109.8 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.4  
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			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	84	99	93	88	84	90	86	82	88	84	81	85	82	80	78			78																
4	95	87	81	77	93	86	81	76	84	79	75	82	78	74	80	76	74	72			72																
5	90	81	75	70	88	80	74	70	78	73	69	77	72	69	75	71	68	66			66																
6	85	76	69	65	84	75	69	64	73	68	64	72	67	63	70	66	63	61			61																
7	81	71	64	60	79	70	64	59	69	63	59	67	62	59	66	62	58	57			57																
8	76	66	60	55	75	66	59	55	64	59	55	63	58	55	62	58	54	53			53																
9	72	62	56	52	71	62	56	51	61	55	51	60	55	51	59	54	51	49			49																
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	56	51	48	46			46																

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

	0°
0°	84302
5°	80756
10°	76691
15°	72288
20°	65345
25°	55322
30°	45045
35°	35262
40°	26256
45°	17653
50°	8546
55°	4224
60°	2138
65°	1349
70°	625
75°	551
80°	410
85°	818

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 17653 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	9.3
10°-20°	354.6	24.1
20°-30°	417.8	28.4
30°-40°	329.7	22.4
40°-50°	173.0	11.8
50°-60°	44.3	3.0
60°-70°	10.5	0.7
70°-80°	2.7	0.2
80°-90°	1.2	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°	909.7	61.8
0°-40°	1239.5	84.2
0°-60°	1456.8	99.0
0°-90°	1471.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1471.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1538	
5°	1468	137
15°	1274	355
25°	915	418
35°	527	330
45°	228	173
55°	44	44
65°	10	11
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1537.8
2.5°	1518.2
5°	1467.5
7.5°	1419.4
10°	1377.7
12.5°	1329.6
15°	1273.7
17.5°	1203.4
20°	1120.1
22.5°	1021.3
25°	914.6
27.5°	807.9
30°	711.6
32.5°	616.7
35°	526.9
37.5°	443.6
40°	366.9
42.5°	295.3
45°	227.7
47.5°	152.2
50°	100.2
52.5°	67.7
55°	44.2
57.5°	28.6
60°	19.5
62.5°	14.3
65°	10.4
67.5°	6.5
70°	3.9
72.5°	2.6
75°	2.6
77.5°	2.6
80°	1.3
82.5°	1.3
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)