

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: P642039

Luminaire Tested: ML5612LSWFL5597FS1E - 593WB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642039  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-51)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSWFL5597FS1E - 593WB - 900LM - 4000K  
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE BAFFLE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1390.4 lumens  
Efficiency: N/A  
Efficacy: 104.5 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

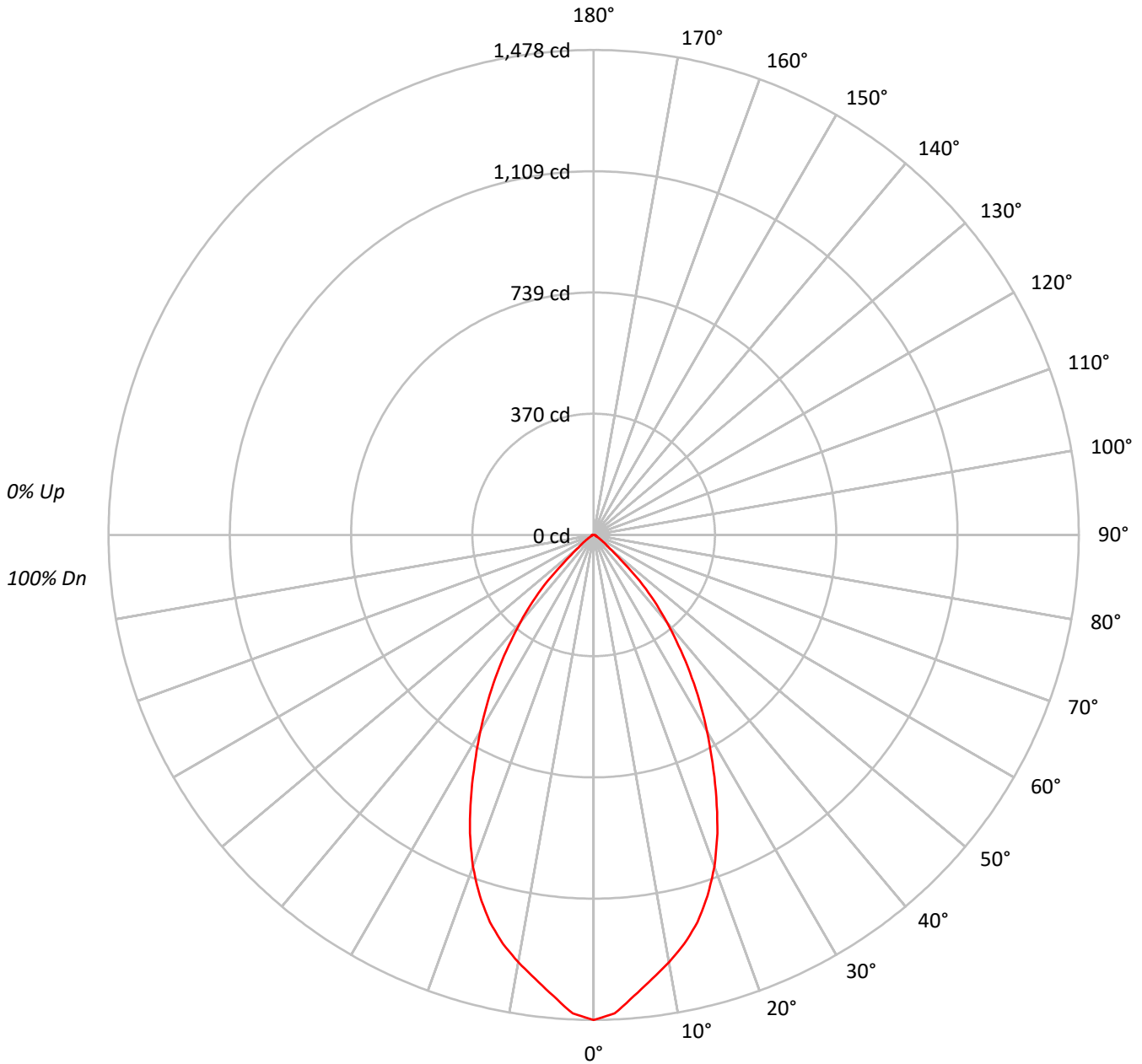
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	107	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93			93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	86	83	80	79			79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72			72
5	90	81	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67			67
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62			62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58			58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54			54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50			50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47			47

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

	0°
0°	116706
5°	111748
10°	105986
15°	99844
20°	90333
25°	77024
30°	62859
35°	49245
40°	35655
45°	22149
50°	7921
55°	4267
60°	2147
65°	1625
70°	1708
75°	1525
80°	1682
85°	2264

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 22149 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.9	9.5
10°-20°	340.2	24.5
20°-30°	403.8	29.0
30°-40°	318.0	22.9
40°-50°	149.4	10.7
50°-60°	30.0	2.2
60°-70°	9.0	0.6
70°-80°	5.7	0.4
80°-90°	2.2	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°	875.9	63.0
0°-40°	1193.9	85.9
0°-60°	1373.4	98.8
0°-90°	1390.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1390.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1478	
5°	1410	132
15°	1222	340
25°	884	404
35°	511	318
45°	198	149
55°	31	30
65°	9	9
75°	5	6
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1478.4
2.5°	1459.8
5°	1410.2
7.5°	1364.3
10°	1322.2
12.5°	1276.3
15°	1221.7
17.5°	1153.5
20°	1075.3
22.5°	984.8
25°	884.3
27.5°	783.9
30°	689.6
32.5°	599.1
35°	511.0
37.5°	424.2
40°	346.0
42.5°	274.1
45°	198.4
47.5°	110.4
50°	64.5
52.5°	44.7
55°	31.0
57.5°	21.1
60°	13.6
62.5°	9.9
65°	8.7
67.5°	7.4
70°	7.4
72.5°	6.2
75°	5.0
77.5°	5.0
80°	3.7
82.5°	2.5
85°	2.5
87.5°	1.2
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)