

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: P885785

Luminaire Tested: ML104LSFL95FS1E-TIR1D55WFL-TL1SDMWB-340LM-3500K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885785  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-151)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL95FS1E-TIR1D55WFL-TL1SDMWB-340LM-3500K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

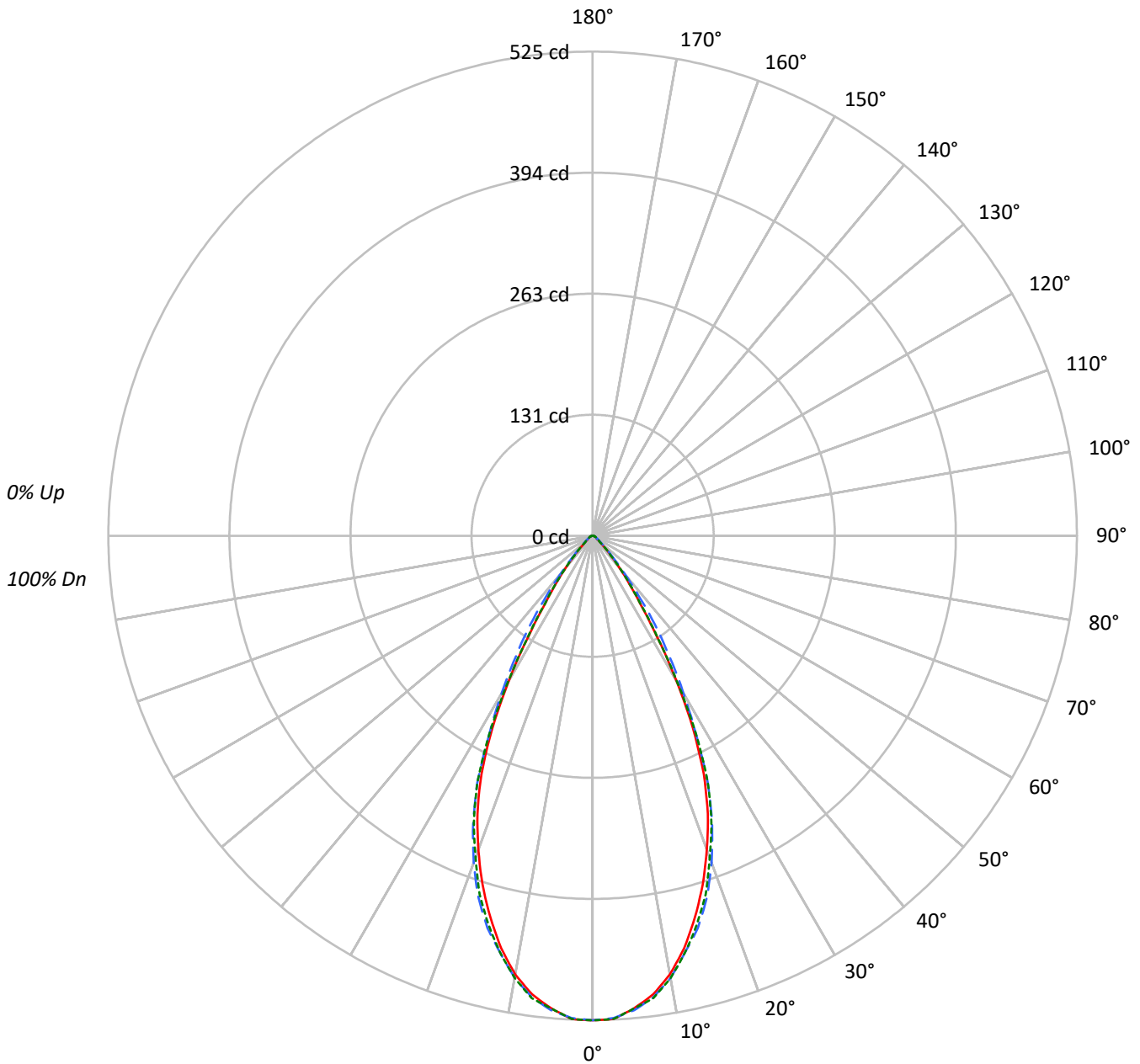
Lumens per Lamp: N/A  
Luminaire Lumens: 398.4 lumens  
Efficiency: N/A  
Efficacy: 65.3 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.83 / 0.81  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.1  
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			
1	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76			
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71			
6	88	80	74	70	87	79	73	69	77	73	69	76	72	69	75	71	68	67			
7	84	75	69	65	83	75	69	65	73	68	65	72	68	64	71	67	64	63			
8	80	71	65	61	79	71	65	61	70	65	61	68	64	61	68	63	60	59			
9	77	67	62	58	76	67	61	58	66	61	58	65	61	57	64	60	57	56			
10	73	64	58	55	72	64	58	55	63	58	54	62	57	54	61	57	54	53			

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

	0°	45°	90°
0°	814378	814378	814378
5°	800530	803641	800530
10°	759892	766188	766188
15°	687451	706547	700128
20°	597281	621859	611962
25°	487251	505893	505893
30°	325744	352413	329324
35°	170300	222714	172192
40°	90041	110073	92065
45°	45595	51952	45595
50°	21461	28696	23873
55°	15944	18646	15944
60°	15190	15190	15190
65°	14671	14671	14671
70°	13596	13596	13596
75°	11978	11978	11978
80°	8926	8926	8926
85°	17784	17784	17784

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 51952 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.3	12.1
10°-20°	121.2	30.4
20°-30°	130.8	32.8
30°-40°	66.5	16.7
40°-50°	18.7	4.7
50°-60°	6.1	1.5
60°-70°	3.8	1.0
70°-80°	2.4	0.6
80°-90°	0.7	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°	300.3	75.4
0°-40°	366.7	92.0
0°-60°	391.5	98.3
0°-90°	398.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	398.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	514	516	516	516	514	48
15°	428	433	440	439	436	119
25°	285	289	296	296	296	127
35°	90	99	118	101	91	61
45°	21	22	24	22	21	17
55°	6	6	7	7	6	5
65°	4	4	4	4	4	4
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	525.4	525.4	525.4	525.4	525.4
2.5°	524.4	523.4	523.4	524.4	524.4
5°	514.5	516.5	516.5	516.5	514.5
7.5°	501.6	502.6	504.6	504.6	505.6
10°	482.8	484.8	486.8	486.8	486.8
12.5°	458.1	460.1	463.0	464.0	463.0
15°	428.4	433.3	440.3	439.3	436.3
17.5°	396.7	402.7	411.6	408.6	407.6
20°	362.1	369.0	377.0	374.0	371.0
22.5°	326.5	332.4	338.4	338.4	336.4
25°	284.9	288.9	295.8	295.8	295.8
27.5°	235.5	240.4	242.4	246.4	243.4
30°	182.0	189.0	196.9	194.9	184.0
32.5°	129.6	140.5	154.3	144.4	131.6
35°	90.0	98.9	117.7	100.9	91.0
37.5°	64.3	67.3	82.1	67.3	65.3
40°	44.5	46.5	54.4	46.5	45.5
42.5°	30.7	32.6	35.6	32.6	29.7
45°	20.8	21.8	23.7	21.8	20.8
47.5°	12.9	13.9	15.8	14.8	13.9
50°	8.9	9.9	11.9	10.9	9.9
52.5°	6.9	7.9	8.9	7.9	7.9
55°	5.9	5.9	6.9	6.9	5.9
57.5°	4.9	4.9	5.9	4.9	4.9
60°	4.9	4.9	4.9	4.9	4.9
62.5°	4.0	4.0	4.0	4.0	4.0
65°	4.0	4.0	4.0	4.0	4.0
67.5°	3.0	4.0	3.0	4.0	3.0
70°	3.0	3.0	3.0	3.0	3.0
72.5°	3.0	3.0	3.0	3.0	3.0
75°	2.0	2.0	2.0	2.0	2.0
77.5°	2.0	2.0	2.0	2.0	2.0
80°	1.0	1.0	1.0	2.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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