

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



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: P885709

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-3000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885709  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-144)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-3000K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 362.3 lumens  
Efficiency: N/A  
Efficacy: 59.4 lumens/watt  
Spacing Criteria (0/90/45): 0.67 / 0.68 / 0.68  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')  
CIE Type: Direct

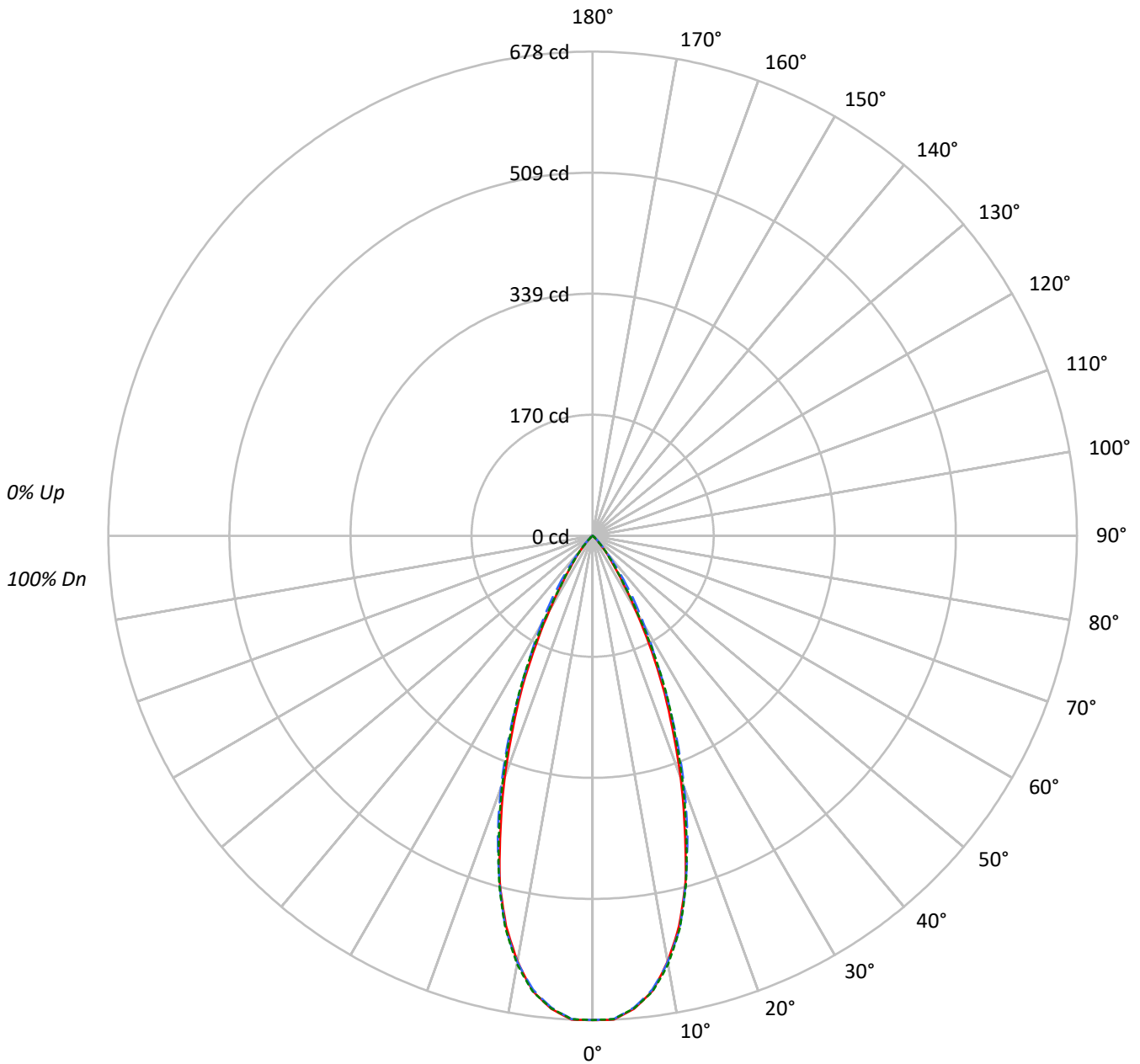
Input Watts (W): 6.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	98	98	97	95																			
2	109	105	102	99	107	103	100	97	100	98	95	97	95	93	95	93	91	90																			
3	105	99	95	91	103	98	94	91	95	92	89	93	90	88	91	89	87	85																			
4	100	94	89	85	99	93	88	85	91	87	84	89	86	83	87	84	82	81																			
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	77																			
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73																			
7	89	81	75	72	87	80	75	71	79	74	71	78	74	71	77	73	70	69																			
8	85	77	72	68	84	76	71	68	75	71	68	74	70	67	73	70	67	66																			
9	82	73	68	65	81	73	68	65	72	68	64	71	67	64	70	67	64	63																			
10	79	70	65	62	78	70	65	62	69	65	62	68	64	61	68	64	61	60																			

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

	0°	45°	90°
0°	1051221	1051221	1051221
5°	1034854	1031897	1033453
10°	952541	954115	958522
15°	806038	807643	810692
20°	594147	618725	608003
25°	395240	414394	419183
30°	216029	257911	229453
35°	102748	143430	108046
40°	49169	60500	53013
45°	16440	26743	14248
50°	4582	8922	4582
55°	2432	2432	2432
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 26743 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.6	17.0
10°-20°	137.5	38.0
20°-30°	110.1	30.4
30°-40°	43.3	11.9
40°-50°	8.9	2.5
50°-60°	0.9	0.3
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	309.2	85.3
0°-40°	352.4	97.3
0°-60°	362.3	100.0
0°-90°	362.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	362.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	665	663	663	664	664	62
15°	502	500	503	504	505	136
25°	231	233	242	246	245	105
35°	54	62	76	64	57	37
45°	8	9	12	9	6	7
55°	1	1	1	1	1	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	678.2	678.2	678.2	678.2	678.2
2.5°	678.2	676.3	677.3	678.2	677.3
5°	665.1	663.2	663.2	664.2	664.2
7.5°	642.7	641.7	640.8	641.7	643.6
10°	605.2	607.1	606.2	609.0	609.0
12.5°	559.4	558.5	563.2	563.2	563.2
15°	502.3	500.5	503.3	504.2	505.2
17.5°	428.4	435.0	441.5	438.7	435.9
20°	360.2	365.8	375.1	371.4	368.6
22.5°	290.9	298.4	306.8	305.0	301.2
25°	231.1	232.9	242.3	246.0	245.1
27.5°	171.2	182.4	186.2	191.8	184.3
30°	120.7	133.8	144.1	141.3	128.2
32.5°	81.4	91.7	108.5	97.3	83.3
35°	54.3	61.7	75.8	63.6	57.1
37.5°	37.4	41.2	48.6	43.0	38.4
40°	24.3	28.1	29.9	29.0	26.2
42.5°	14.0	17.8	19.6	17.8	15.0
45°	7.5	9.4	12.2	9.4	6.5
47.5°	3.7	4.7	7.5	4.7	3.7
50°	1.9	2.8	3.7	2.8	1.9
52.5°	0.9	1.9	1.9	1.9	0.9
55°	0.9	0.9	0.9	0.9	0.9
57.5°	0.0	0.0	0.9	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report







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

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(END OF REPORT)