

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: P885716

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMBB-340LM-4000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885716
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-147)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDMBB-340LM-4000K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK BAFFLED TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 415.9 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')
CIE Type: Direct

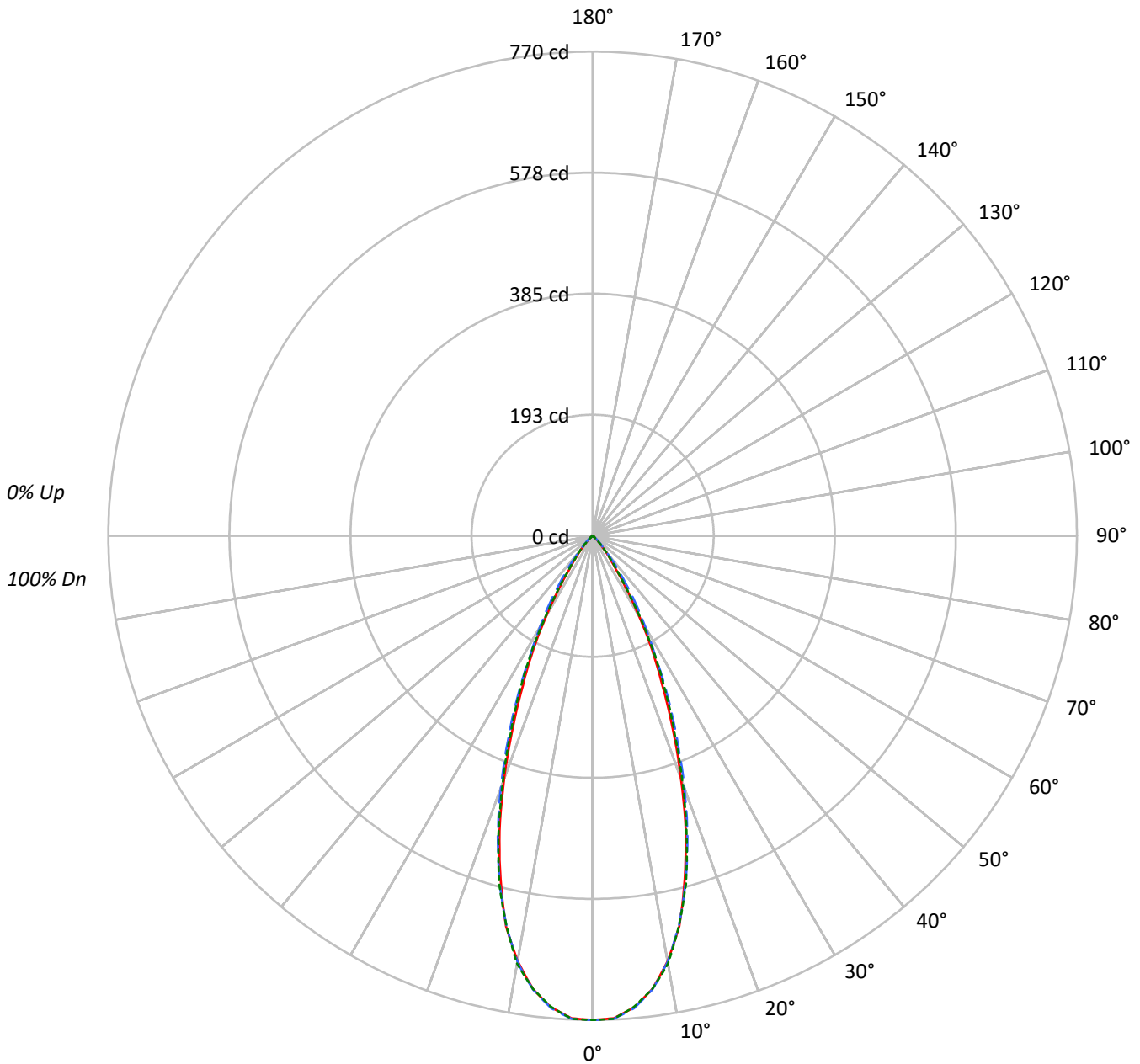
Input Watts (W): 6.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P885716

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMBB-340LM-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P885716

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMBB-340LM-4000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1193512	1193512	1193512
5°	1171932	1173488	1170220
10°	1080974	1082547	1087584
15°	907776	916120	919490
20°	677612	703674	689818
25°	448600	482805	470149
30°	263996	297823	273303
35°	119588	169354	129617
40°	59690	72438	63940
45°	20825	34634	20825
50°	7716	12780	7716
55°	2973	2973	2973
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: 34634 cd/sqm



TEST NUMBER: P885716

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMBB-340LM-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	16.8
10°-20°	156.1	37.5
20°-30°	126.3	30.4
30°-40°	51.4	12.3
40°-50°	11.1	2.7
50°-60°	1.2	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°	352.3	84.7
0°-40°	403.7	97.0
0°-60°	415.9	100.0
0°-90°	415.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	415.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	753	753	754	752	752	70
15°	566	570	571	569	573	155
25°	262	271	282	275	275	121
35°	63	74	90	77	68	45
45°	10	12	16	13	10	9
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	0



TEST NUMBER: P885716

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMBB-340LM-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	770.0	770.0	770.0	770.0	770.0
2.5°	767.9	767.9	769.0	767.9	769.0
5°	753.2	753.2	754.2	752.1	752.1
7.5°	726.8	726.8	727.9	727.9	726.8
10°	686.8	688.9	687.8	690.0	691.0
12.5°	636.2	635.2	634.1	636.2	634.1
15°	565.7	569.9	570.9	568.8	573.0
17.5°	491.9	495.1	501.4	501.4	497.2
20°	410.8	421.3	426.6	422.4	418.2
22.5°	332.9	341.3	350.8	347.6	341.3
25°	262.3	270.7	282.3	274.9	274.9
27.5°	204.4	211.7	215.9	218.0	213.8
30°	147.5	158.0	166.4	163.3	152.7
32.5°	98.0	109.5	125.4	115.9	103.2
35°	63.2	73.7	89.5	76.9	68.5
37.5°	43.2	48.5	60.0	50.6	46.3
40°	29.5	33.7	35.8	33.7	31.6
42.5°	17.9	21.1	23.2	22.1	19.0
45°	9.5	11.6	15.8	12.6	9.5
47.5°	4.2	6.3	9.5	6.3	4.2
50°	3.2	3.2	5.3	3.2	3.2
52.5°	2.1	2.1	2.1	2.1	2.1
55°	1.1	1.1	1.1	1.1	1.1
57.5°	0.0	0.0	1.1	1.1	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

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

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

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report



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

Scaled Data Report



(END OF REPORT)