

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: P885720

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3500K

Issue Date: 6/19/2024

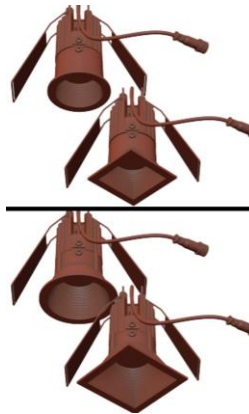
Test Information

Test Method: LM-79-2019
Report Number: P885720
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-142)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3500K
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 412.0 lumens
Efficiency: N/A
Efficacy: 67.5 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

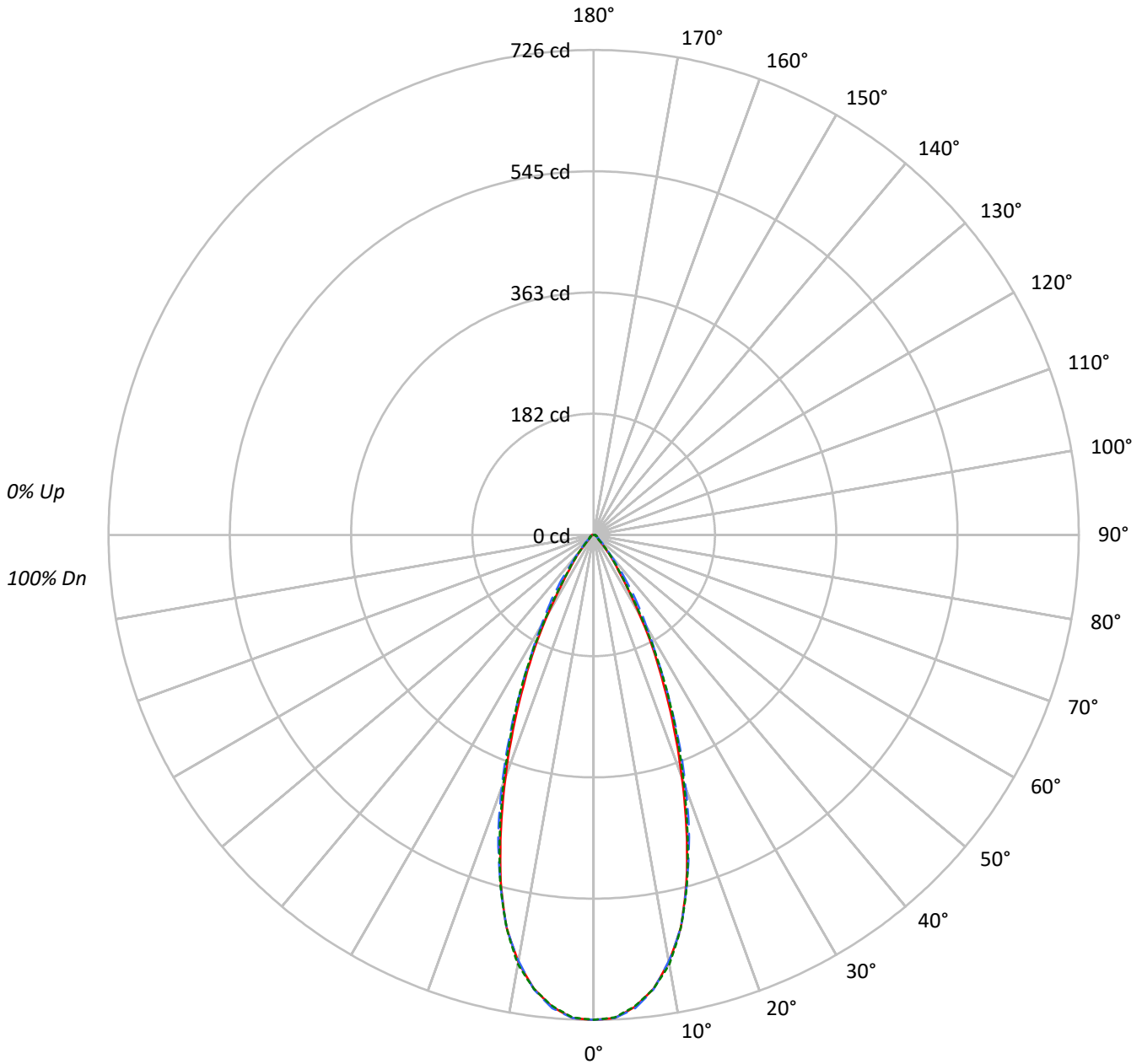
Input Watts (W): 6.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P885720

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P885720

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	100	100	100	100		
	1	114	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94	94	94	94	94	94		
	2	108	104	100	97	106	102	99	96	99	96	93	96	94	91	93	91	90	88	88	88	88	88	88		
	3	103	97	93	89	102	96	92	88	93	90	87	91	88	86	89	86	84	83	83	83	83	83	83		
	4	99	92	87	83	97	91	86	82	89	84	81	87	83	80	85	82	79	78	78	78	78	78	78		
	5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74	74	74	74	74	74		
	6	90	82	77	73	89	81	76	72	80	75	72	79	75	71	77	74	71	70	70	70	70	70	70		
	7	87	78	73	69	85	77	72	68	76	72	68	75	71	68	74	70	67	66	66	66	66	66	66		
	8	83	74	69	65	82	74	69	65	73	68	65	72	67	64	71	67	64	63	63	63	63	63	63		
	9	80	71	65	62	79	70	65	62	69	65	61	69	64	61	68	64	61	60	60	60	60	60	60		
	10	77	68	62	59	76	67	62	59	66	62	59	66	61	58	65	61	58	57	57	57	57	57	57		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1125157	1125157	1125157
5°	1103315	1106427	1101759
10°	1021164	1019590	1027303
15°	861721	864931	866535
20°	636209	663921	649240
25°	424485	444837	446547
30°	244308	281357	258448
35°	119778	166515	125454
40°	65963	78103	70010
45°	28277	43403	28277
50°	21461	23873	21461
55°	18646	18646	18646
60°	18290	18290	18290
65°	17971	17971	17971
70°	18128	18128	18128
75°	17966	17966	17966
80°	17852	17852	17852
85°	17784	17784	17784

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 43403 cd/sqm



TEST NUMBER: P885720

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	16.0
10°-20°	147.3	35.8
20°-30°	118.9	28.9
30°-40°	49.9	12.1
40°-50°	14.4	3.5
50°-60°	6.3	1.5
60°-70°	4.8	1.2
70°-80°	3.4	0.8
80°-90°	1.0	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°	332.1	80.6
0°-40°	382.0	92.7
0°-60°	402.7	97.7
0°-90°	412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	412.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	709	709	711	710	708	66
15°	537	535	539	537	540	146
25°	248	256	260	261	261	114
35°	63	70	88	72	66	44
45°	13	16	20	17	13	12
55°	7	7	7	7	7	6
65°	5	5	5	5	5	5
75°	3	3	3	3	3	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P885720

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMW-340LM-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	725.9	725.9	725.9	725.9	725.9
2.5°	723.9	723.9	723.9	724.9	722.9
5°	709.1	709.1	711.1	710.1	708.1
7.5°	685.3	685.3	686.3	686.3	685.3
10°	648.8	649.7	647.8	650.7	652.7
12.5°	602.3	601.3	602.3	603.3	602.3
15°	537.0	535.0	539.0	537.0	540.0
17.5°	461.8	468.8	474.7	470.7	466.8
20°	385.7	391.6	402.5	397.6	393.6
22.5°	314.5	322.4	331.3	329.3	324.4
25°	248.2	256.1	260.1	261.1	261.1
27.5°	191.9	198.8	201.7	205.7	199.8
30°	136.5	146.4	157.2	156.3	144.4
32.5°	93.0	102.9	121.6	109.8	96.9
35°	63.3	70.2	88.0	72.2	66.3
37.5°	46.5	50.4	58.3	51.4	48.5
40°	32.6	35.6	38.6	37.6	34.6
42.5°	21.8	24.7	27.7	25.7	21.8
45°	12.9	15.8	19.8	16.8	12.9
47.5°	9.9	10.9	14.8	10.9	9.9
50°	8.9	8.9	9.9	8.9	8.9
52.5°	7.9	7.9	7.9	7.9	7.9
55°	6.9	6.9	6.9	6.9	6.9
57.5°	5.9	5.9	5.9	5.9	5.9
60°	5.9	5.9	5.9	5.9	5.9
62.5°	4.9	4.9	4.9	4.9	4.9
65°	4.9	4.9	4.9	4.9	4.9
67.5°	4.0	4.9	4.9	4.9	4.9
70°	4.0	4.0	4.0	4.0	4.0
72.5°	4.0	4.0	4.0	4.0	4.0
75°	3.0	3.0	3.0	3.0	3.0
77.5°	3.0	3.0	3.0	3.0	3.0
80°	2.0	2.0	2.0	2.0	2.0
82.5°	2.0	2.0	1.0	2.0	2.0
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



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)