

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: P885712

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-5000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885712  
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-5000K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 453.4 lumens  
Efficiency: N/A  
Efficacy: 74.3 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

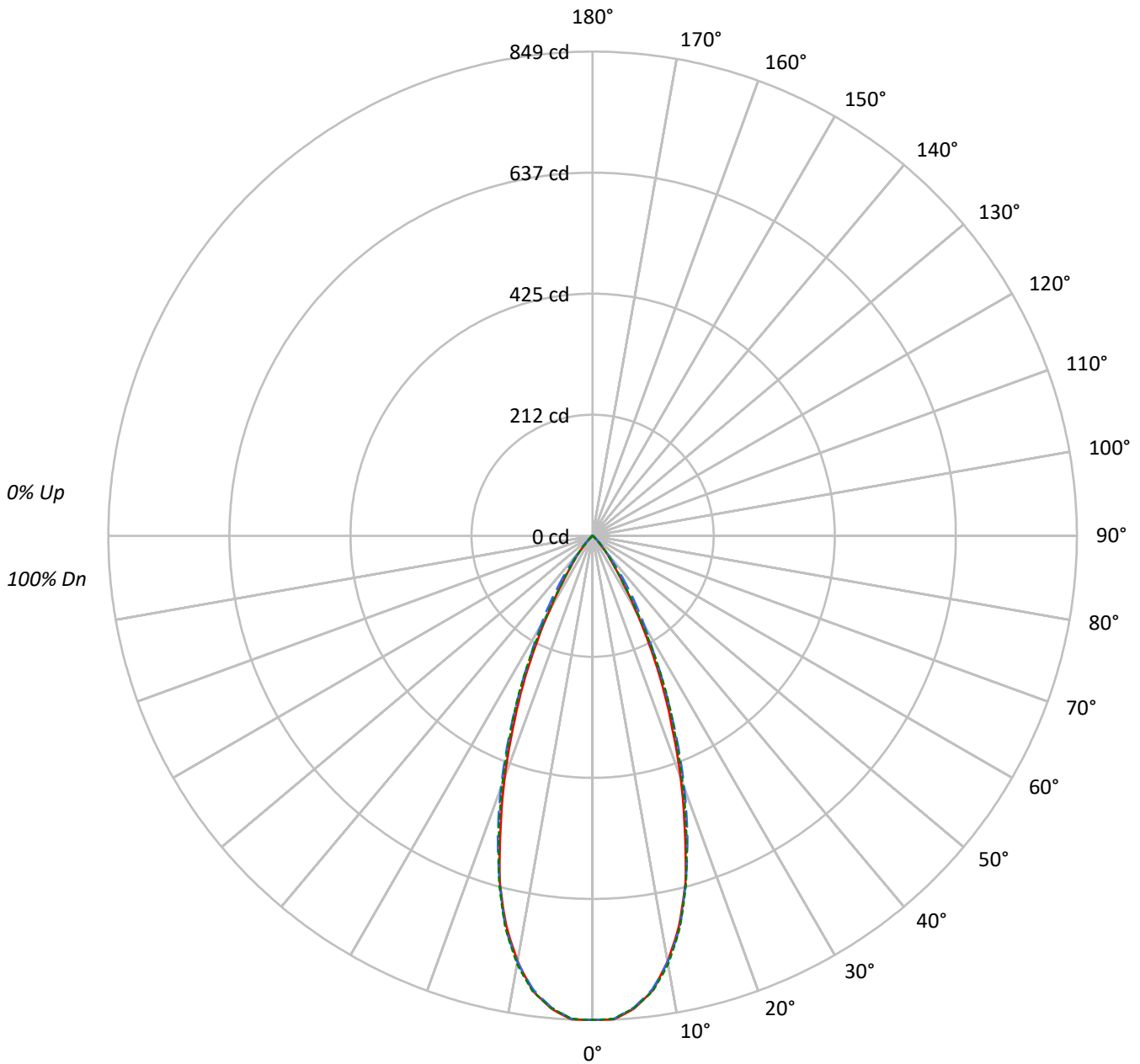
Input Watts (W): 6.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P885712

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P885712

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-5000K

**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	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°	1315809	1315809	1315809
5°	1295318	1291739	1293450
10°	1192408	1194139	1199805
15°	1009032	1010797	1014649
20°	743591	774437	760911
25°	494605	518720	524706
30°	270260	322702	287085
35°	128482	179382	135105
40°	61511	75878	66368
45°	20605	33319	17975
50°	5546	11334	5546
55°	3243	3243	3243
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: 33319 cd/sqm



TEST NUMBER: P885712

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	17.0
10°-20°	172.1	38.0
20°-30°	137.8	30.4
30°-40°	54.1	11.9
40°-50°	11.2	2.5
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°	387.0	85.3
0°-40°	441.1	97.3
0°-60°	453.4	100.0
0°-90°	453.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	453.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	849	849	849	849	849	
5°	832	830	830	831	831	77
15°	629	626	630	631	632	170
25°	289	292	303	308	307	131
35°	68	77	95	80	71	47
45°	9	12	15	12	8	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	



TEST NUMBER: P885712

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	848.9	848.9	848.9	848.9	848.9
2.5°	848.9	846.6	847.7	848.9	847.7
5°	832.5	830.2	830.2	831.3	831.3
7.5°	804.4	803.2	802.1	803.2	805.6
10°	757.6	759.9	758.7	762.3	762.3
12.5°	700.2	699.0	704.9	704.9	704.9
15°	628.8	626.4	629.9	631.1	632.3
17.5°	536.3	544.5	552.7	549.2	545.6
20°	450.8	457.8	469.5	464.8	461.3
22.5°	364.2	373.5	384.1	381.7	377.0
25°	289.2	291.6	303.3	307.9	306.8
27.5°	214.3	228.3	233.0	240.0	230.7
30°	151.0	167.4	180.3	176.8	160.4
32.5°	101.9	114.7	135.8	121.8	104.2
35°	67.9	77.3	94.8	79.6	71.4
37.5°	46.8	51.5	60.9	53.9	48.0
40°	30.4	35.1	37.5	36.3	32.8
42.5°	17.6	22.2	24.6	22.2	18.7
45°	9.4	11.7	15.2	11.7	8.2
47.5°	4.7	5.9	9.4	5.9	4.7
50°	2.3	3.5	4.7	3.5	2.3
52.5°	1.2	2.3	2.3	2.3	1.2
55°	1.2	1.2	1.2	1.2	1.2
57.5°	0.0	0.0	1.2	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

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)