

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: P885708

Luminaire Tested: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-2700K

Issue Date: 6/19/2024

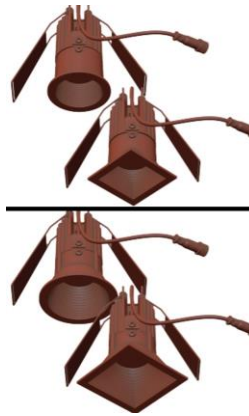
**Test Information**

Test Method: LM-79-2019  
Report Number: P885708  
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-2700K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 348.9 lumens  
Efficiency: N/A  
Efficacy: 57.2 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

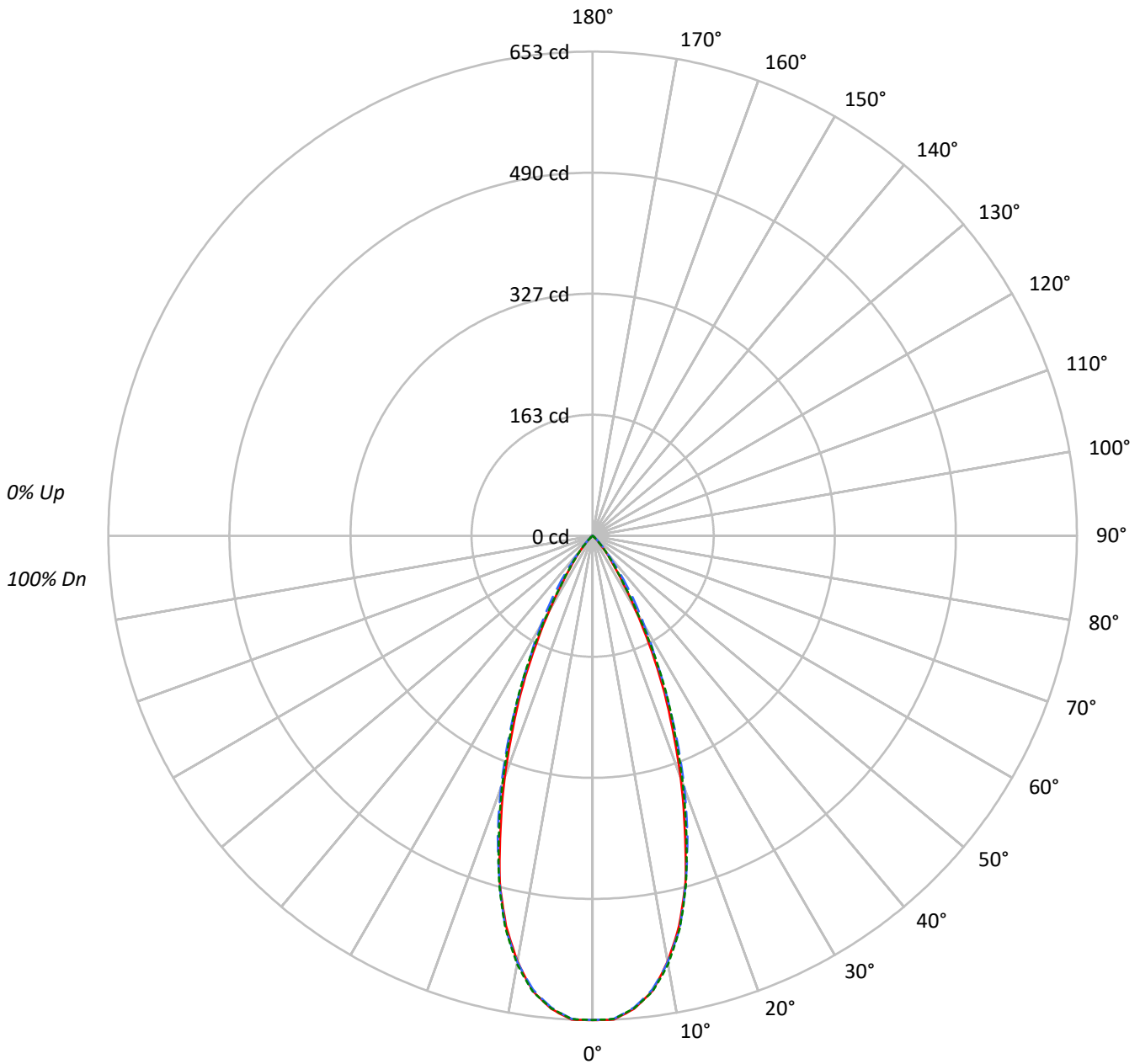
Input Watts (W): 6.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P885708

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P885708

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-2700K

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

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	1012471	1012471	1012471
5°	996733	993933	995333
10°	917442	918859	923109
15°	776351	777796	780684
20°	572209	595962	585570
25°	380531	399173	403791
30°	207975	248425	220862
35°	98963	138132	104072
40°	47348	58274	50990
45°	15783	25647	13810
50°	4341	8681	4341
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: 25647 cd/sqm



TEST NUMBER: P885708

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.3	17.0
10°-20°	132.4	38.0
20°-30°	106.0	30.4
30°-40°	41.7	11.9
40°-50°	8.6	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°	297.8	85.3
0°-40°	339.4	97.3
0°-60°	348.9	100.0
0°-90°	348.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	348.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	653	653	653	653	653	
5°	641	639	639	640	640	59
15°	484	482	485	486	486	131
25°	222	224	233	237	236	101
35°	52	60	73	61	55	36
45°	7	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	



TEST NUMBER: P885708

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D40FL-TL1SDMB-340LM-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	653.2	653.2	653.2	653.2	653.2
2.5°	653.2	651.4	652.3	653.2	652.3
5°	640.6	638.8	638.8	639.7	639.7
7.5°	619.0	618.1	617.2	618.1	619.9
10°	582.9	584.7	583.8	586.5	586.5
12.5°	538.8	537.9	542.4	542.4	542.4
15°	483.8	482.0	484.7	485.6	486.5
17.5°	412.7	419.0	425.3	422.6	419.9
20°	346.9	352.3	361.3	357.7	355.0
22.5°	280.2	287.4	295.5	293.7	290.1
25°	222.5	224.3	233.4	237.0	236.1
27.5°	164.9	175.7	179.3	184.7	177.5
30°	116.2	128.8	138.8	136.1	123.4
32.5°	78.4	88.3	104.5	93.7	80.2
35°	52.3	59.5	73.0	61.3	55.0
37.5°	36.0	39.6	46.9	41.4	36.9
40°	23.4	27.0	28.8	27.9	25.2
42.5°	13.5	17.1	18.9	17.1	14.4
45°	7.2	9.0	11.7	9.0	6.3
47.5°	3.6	4.5	7.2	4.5	3.6
50°	1.8	2.7	3.6	2.7	1.8
52.5°	0.9	1.8	1.8	1.8	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

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)