

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: P885651

Luminaire Tested: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMB-340LM-4000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885651  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-138)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMB-340LM-4000K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 95CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

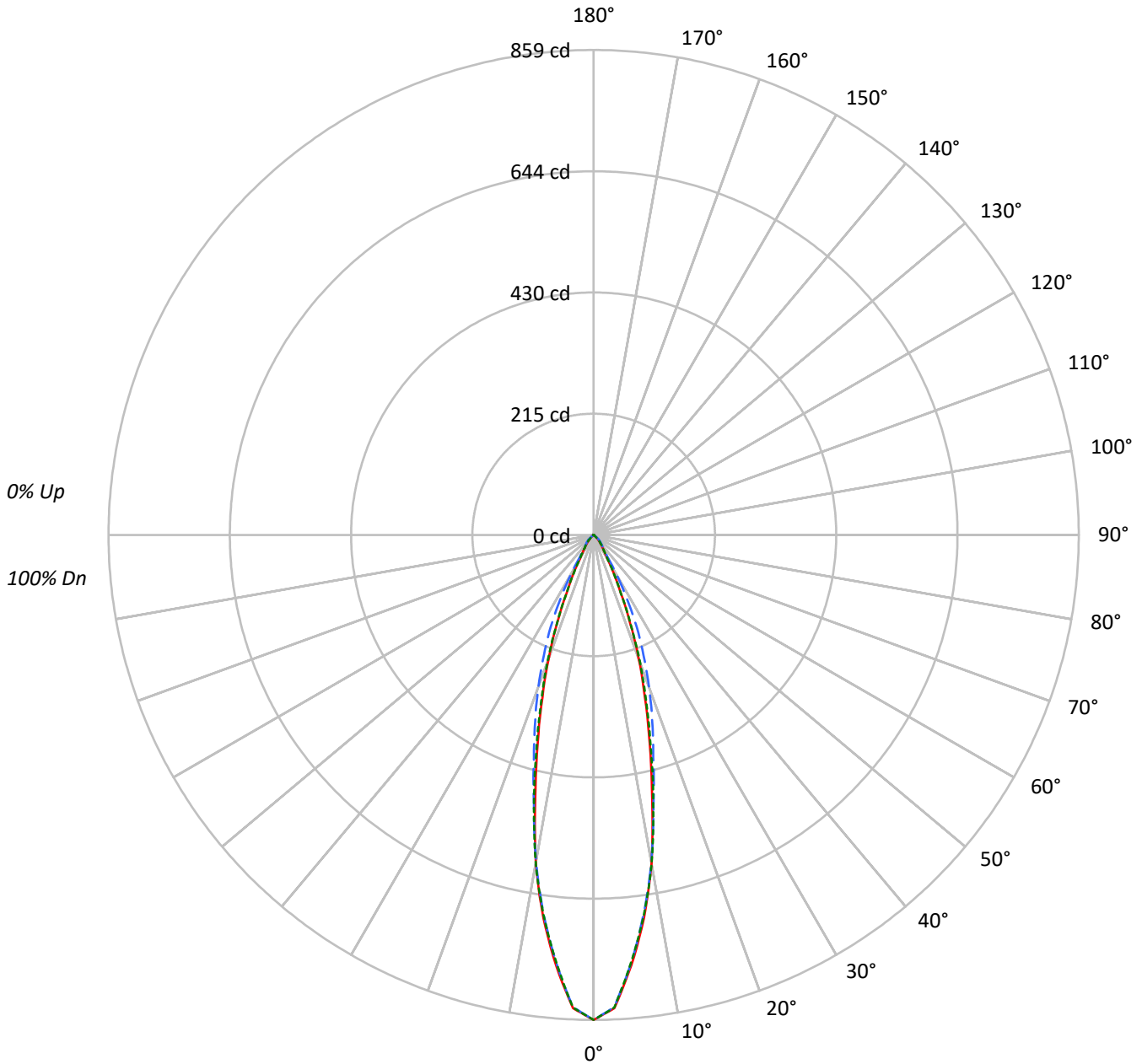
Lumens per Lamp: N/A  
Luminaire Lumens: 275.1 lumens  
Efficiency: N/A  
Efficacy: 45.1 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.47 / 0.54  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')

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: P885651  
CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMB-340LM-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P885651

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMB-340LM-4000K

**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	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96								
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91								
3	106	101	97	93	104	99	96	93	97	94	91	94	92	90	92	90	88	87								
4	102	96	91	88	100	95	91	87	93	89	86	91	88	85	89	87	84	83								
5	98	91	87	83	97	91	86	83	89	85	82	87	84	81	86	83	81	80								
6	95	87	83	79	93	87	82	79	85	81	78	84	81	78	83	80	77	76								
7	91	84	79	76	90	83	79	75	82	78	75	81	77	75	80	77	74	73								
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70								
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	75	71	69	68								
10	82	75	70	67	81	74	70	67	73	69	67	73	69	66	72	69	66	65								

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

	0°	45°	90°
0°	1331464	1331464	1331464
5°	1190603	1184068	1182357
10°	928932	925627	930663
15°	613956	654555	625831
20°	384167	471095	394724
25°	194627	308188	194627
30°	86806	141395	88595
35°	51847	57902	51847
40°	34196	42694	36219
45°	16221	32442	18413
50°	5064	20256	5064
55°	2973	2973	2973
60°	3410	0	3410
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: 32442 cd/sqm



TEST NUMBER: P885651

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMB-340LM-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.4	24.5
10°-20°	110.8	40.3
20°-30°	66.2	24.1
30°-40°	21.4	7.8
40°-50°	8.2	3.0
50°-60°	1.1	0.4
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°	244.4	88.8
0°-40°	265.7	96.6
0°-60°	275.1	100.0
0°-90°	275.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	275.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	765	767	761	762	760	68
15°	383	394	408	400	390	106
25°	114	133	180	138	114	55
35°	27	33	31	33	27	18
45°	7	10	15	10	8	6
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: P885651

CATALOG NUMBER: ML104LSFL95FS1E-TIR1D25NFL-TL1SDMB-340LM-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	859.0	859.0	859.0	859.0	859.0
2.5°	839.0	837.9	836.9	837.9	837.9
5°	765.2	767.3	761.0	762.0	759.9
7.5°	684.0	681.9	677.7	680.9	679.8
10°	590.2	583.9	588.1	588.1	591.3
12.5°	477.5	486.9	489.0	488.0	488.0
15°	382.6	394.2	407.9	399.5	390.0
17.5°	301.4	320.4	344.7	325.7	308.8
20°	232.9	251.9	285.6	255.1	239.3
22.5°	168.6	191.8	230.8	193.9	170.7
25°	113.8	132.8	180.2	138.1	113.8
27.5°	76.9	90.6	126.5	91.7	75.9
30°	48.5	65.3	79.0	64.3	49.5
32.5°	34.8	46.4	44.3	46.4	35.8
35°	27.4	32.7	30.6	32.7	27.4
37.5°	21.1	24.2	25.3	24.2	22.1
40°	16.9	17.9	21.1	19.0	17.9
42.5°	12.6	14.8	17.9	14.8	13.7
45°	7.4	10.5	14.8	10.5	8.4
47.5°	2.1	5.3	12.6	5.3	2.1
50°	2.1	1.1	8.4	1.1	2.1
52.5°	1.1	1.1	3.2	1.1	1.1
55°	1.1	1.1	1.1	1.1	1.1
57.5°	1.1	0.0	0.0	1.1	1.1
60°	1.1	0.0	0.0	0.0	1.1
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)