

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: P886000

Luminaire Tested: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-2700K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886000  
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: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-2700K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM  
Light Source: (1) D2W LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 144.9 lumens  
Efficiency: N/A  
Efficacy: 45.3 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')

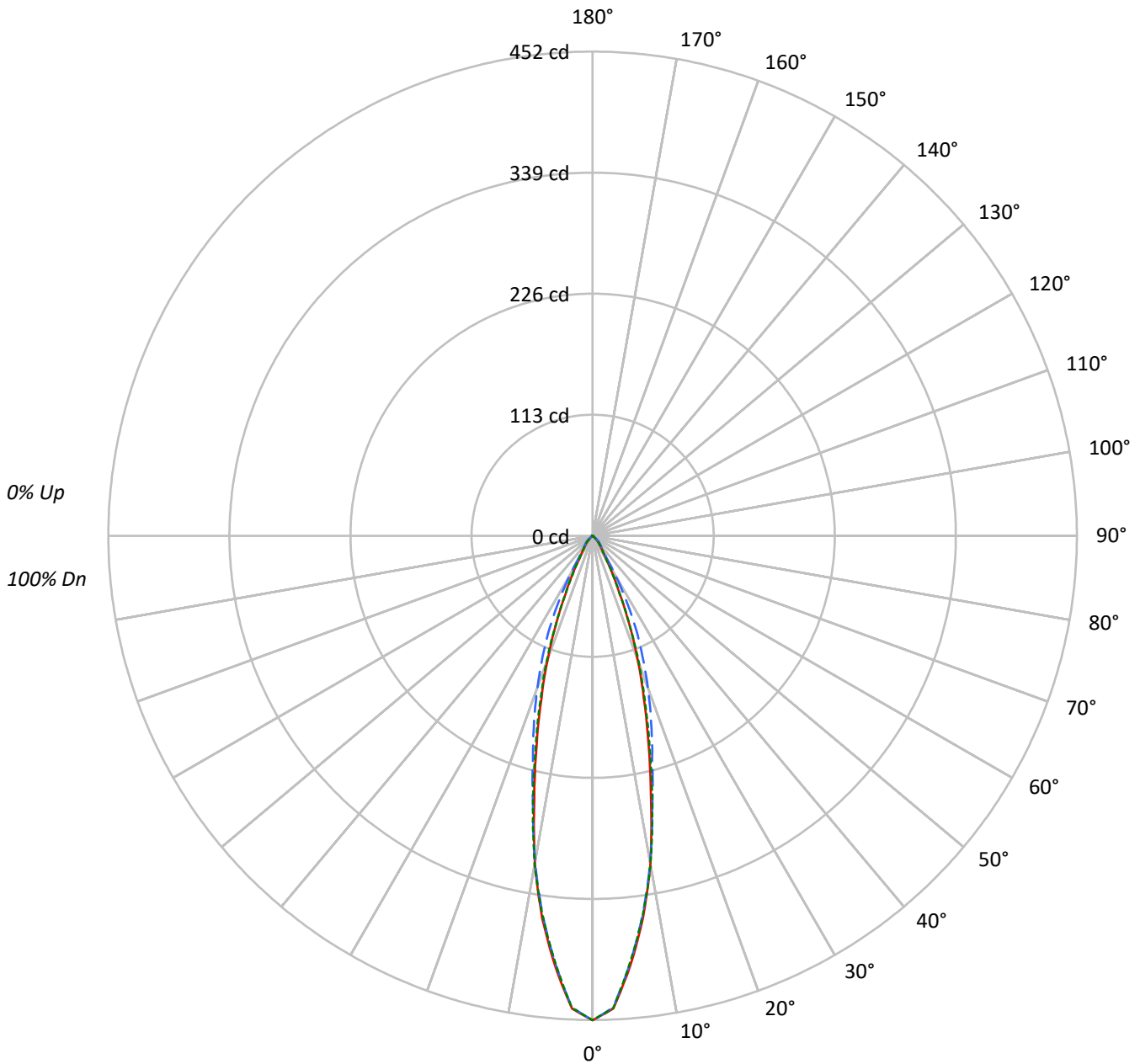
CIE Type: Direct  
  
Input Watts (W): 3.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P886000

CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P886000

CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-2700K

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

RF	20									20									20									20									
RC	80									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			100																
1	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96			96																
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91			91																
3	106	101	97	93	104	99	96	93	97	94	91	94	92	90	92	90	88	87			87																
4	102	96	91	88	100	95	91	87	93	89	86	91	88	85	89	87	84	83			83																
5	98	91	87	83	97	91	86	83	89	85	82	87	84	81	86	83	81	80			80																
6	95	87	83	79	93	87	82	79	85	81	78	84	81	78	83	80	77	76			76																
7	91	84	79	76	90	83	79	75	82	78	75	81	77	75	80	77	74	73			73																
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70			70																
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	75	71	69	68			68																
10	82	75	70	67	81	74	70	67	73	69	67	73	69	66	72	69	66	65			65																

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

	0°	45°	90°
0°	701072	701072	701072
5°	626887	623464	622686
10°	489177	487445	490121
15°	323346	344688	329604
20°	202393	248084	207836
25°	102444	162303	102444
30°	45640	74456	46714
35°	27248	30465	27248
40°	18008	22460	19020
45°	8549	17098	9645
50°	2653	10610	2653
55°	1621	1621	1621
60°	1860	0	1860
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: 17098 cd/sqm



TEST NUMBER: P886000

CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.5	24.5
10°-20°	58.3	40.3
20°-30°	34.8	24.1
30°-40°	11.3	7.8
40°-50°	4.3	3.0
50°-60°	0.6	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°	128.7	88.8
0°-40°	139.9	96.6
0°-60°	144.9	100.0
0°-90°	144.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	144.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	452	452	452	452	452	
5°	403	404	401	401	400	36
15°	202	208	215	210	205	56
25°	60	70	95	73	60	29
35°	14	17	16	17	14	9
45°	4	6	8	6	4	3
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: P886000

CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	452.3	452.3	452.3	452.3	452.3
2.5°	441.8	441.2	440.7	441.2	441.2
5°	402.9	404.0	400.7	401.3	400.2
7.5°	360.2	359.1	356.9	358.5	358.0
10°	310.8	307.5	309.7	309.7	311.4
12.5°	251.4	256.4	257.5	257.0	257.0
15°	201.5	207.6	214.8	210.3	205.4
17.5°	158.7	168.7	181.5	171.5	162.6
20°	122.7	132.6	150.4	134.3	126.0
22.5°	88.8	101.0	121.5	102.1	89.9
25°	59.9	69.9	94.9	72.7	59.9
27.5°	40.5	47.7	66.6	48.3	40.0
30°	25.5	34.4	41.6	33.9	26.1
32.5°	18.3	24.4	23.3	24.4	18.9
35°	14.4	17.2	16.1	17.2	14.4
37.5°	11.1	12.8	13.3	12.8	11.7
40°	8.9	9.4	11.1	10.0	9.4
42.5°	6.7	7.8	9.4	7.8	7.2
45°	3.9	5.6	7.8	5.6	4.4
47.5°	1.1	2.8	6.7	2.8	1.1
50°	1.1	0.6	4.4	0.6	1.1
52.5°	0.6	0.6	1.7	0.6	0.6
55°	0.6	0.6	0.6	0.6	0.6
57.5°	0.6	0.0	0.0	0.6	0.6
60°	0.6	0.0	0.0	0.0	0.6
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)