

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: P886001

Luminaire Tested: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-3000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886001  
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-3000K  
Description: 1IN SQUARE ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM  
Light Source: (1) D2W LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

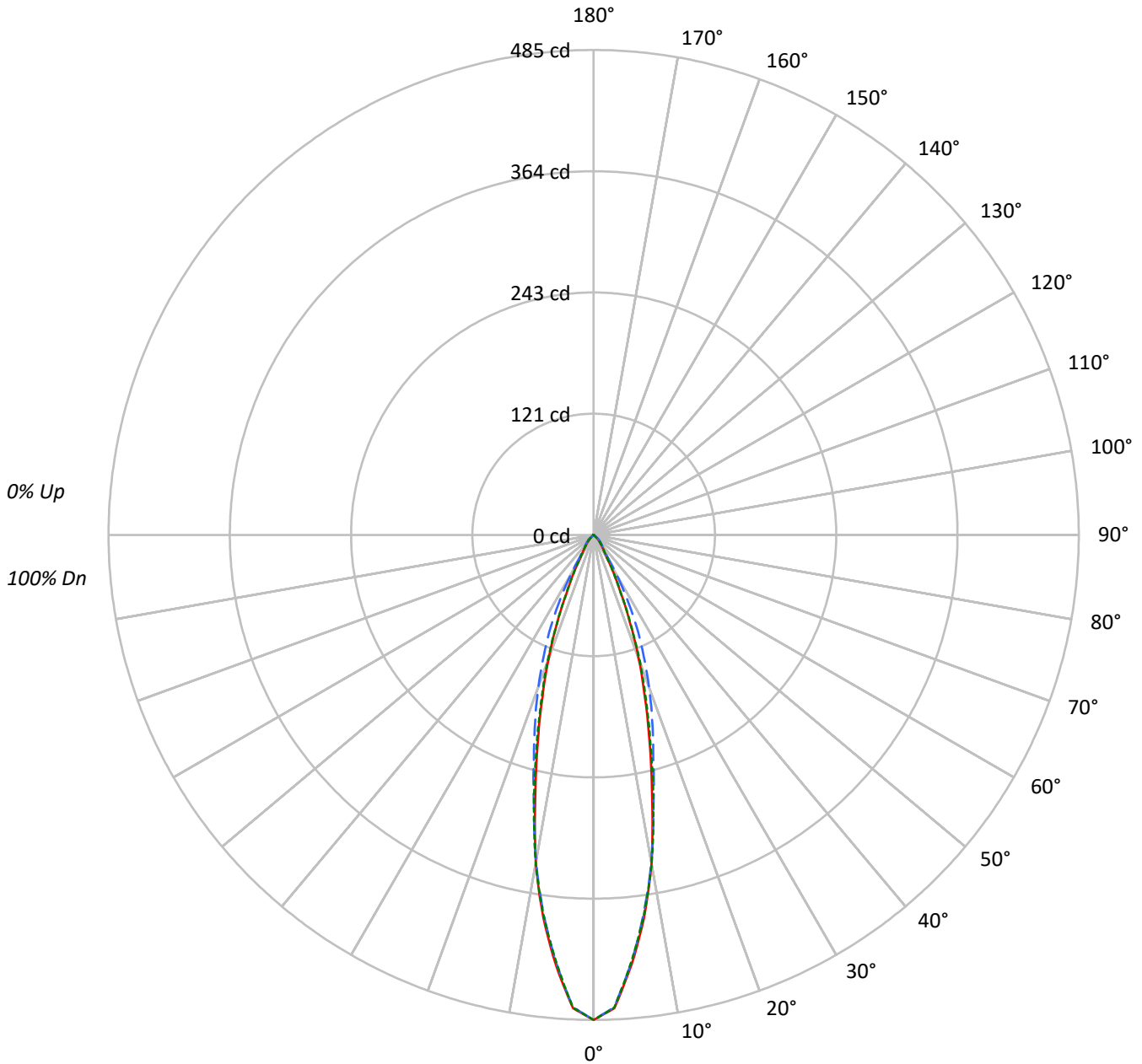
Lumens per Lamp: N/A  
Luminaire Lumens: 155.3 lumens  
Efficiency: N/A  
Efficacy: 48.5 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.47 / 0.54  
Luminous Opening: Rectangular (W 0.08' x L: 0.08' x H: 0')  
CIE Type: Direct

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: P886001  
CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P886001

CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-3000K

**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°	751758	751758	751758
5°	672165	668431	667497
10°	524433	522544	525377
15°	346614	369561	353354
20°	216908	266063	222846
25°	109969	174104	109969
30°	49041	79825	50115
35°	29329	32735	29329
40°	19222	24078	20436
45°	9207	18194	10522
50°	2894	11575	2894
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: 18194 cd/sqm



TEST NUMBER: P886001

CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.1	24.5
10°-20°	62.5	40.3
20°-30°	37.4	24.1
30°-40°	12.1	7.8
40°-50°	4.6	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°	138.0	88.8
0°-40°	150.0	96.6
0°-60°	155.3	100.0
0°-90°	155.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	155.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	432	433	430	430	429	38
15°	216	223	230	226	220	60
25°	64	75	102	78	64	31
35°	16	18	17	18	16	10
45°	4	6	8	6	5	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: P886001

CATALOG NUMBER: ML104LSFLD2W1E-TIR1D25NFL-TL1SDMB-200LM-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	485.0	485.0	485.0	485.0	485.0
2.5°	473.7	473.1	472.5	473.1	473.1
5°	432.0	433.2	429.6	430.2	429.0
7.5°	386.2	385.0	382.6	384.4	383.8
10°	333.2	329.7	332.0	332.0	333.8
12.5°	269.6	274.9	276.1	275.5	275.5
15°	216.0	222.6	230.3	225.5	220.2
17.5°	170.2	180.9	194.6	183.9	174.4
20°	131.5	142.2	161.3	144.0	135.1
22.5°	95.2	108.3	130.3	109.5	96.4
25°	64.3	75.0	101.8	78.0	64.3
27.5°	43.4	51.2	71.4	51.8	42.8
30°	27.4	36.9	44.6	36.3	28.0
32.5°	19.6	26.2	25.0	26.2	20.2
35°	15.5	18.4	17.3	18.4	15.5
37.5°	11.9	13.7	14.3	13.7	12.5
40°	9.5	10.1	11.9	10.7	10.1
42.5°	7.1	8.3	10.1	8.3	7.7
45°	4.2	6.0	8.3	6.0	4.8
47.5°	1.2	3.0	7.1	3.0	1.2
50°	1.2	0.6	4.8	0.6	1.2
52.5°	0.6	0.6	1.8	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)