

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: P886013

Luminaire Tested: ML104LSFLD2W1E-TIR1D40FL-TL1RDMB-200LM-4000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P886013  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-126)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFLD2W1E-TIR1D40FL-TL1RDMB-200LM-4000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK TRIM  
Light Source: (1) D2W LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 223.8 lumens  
Efficiency: N/A  
Efficacy: 69.9 lumens/watt  
Spacing Criteria (0/90/45): 0.65 / 0.65 / 0.65  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

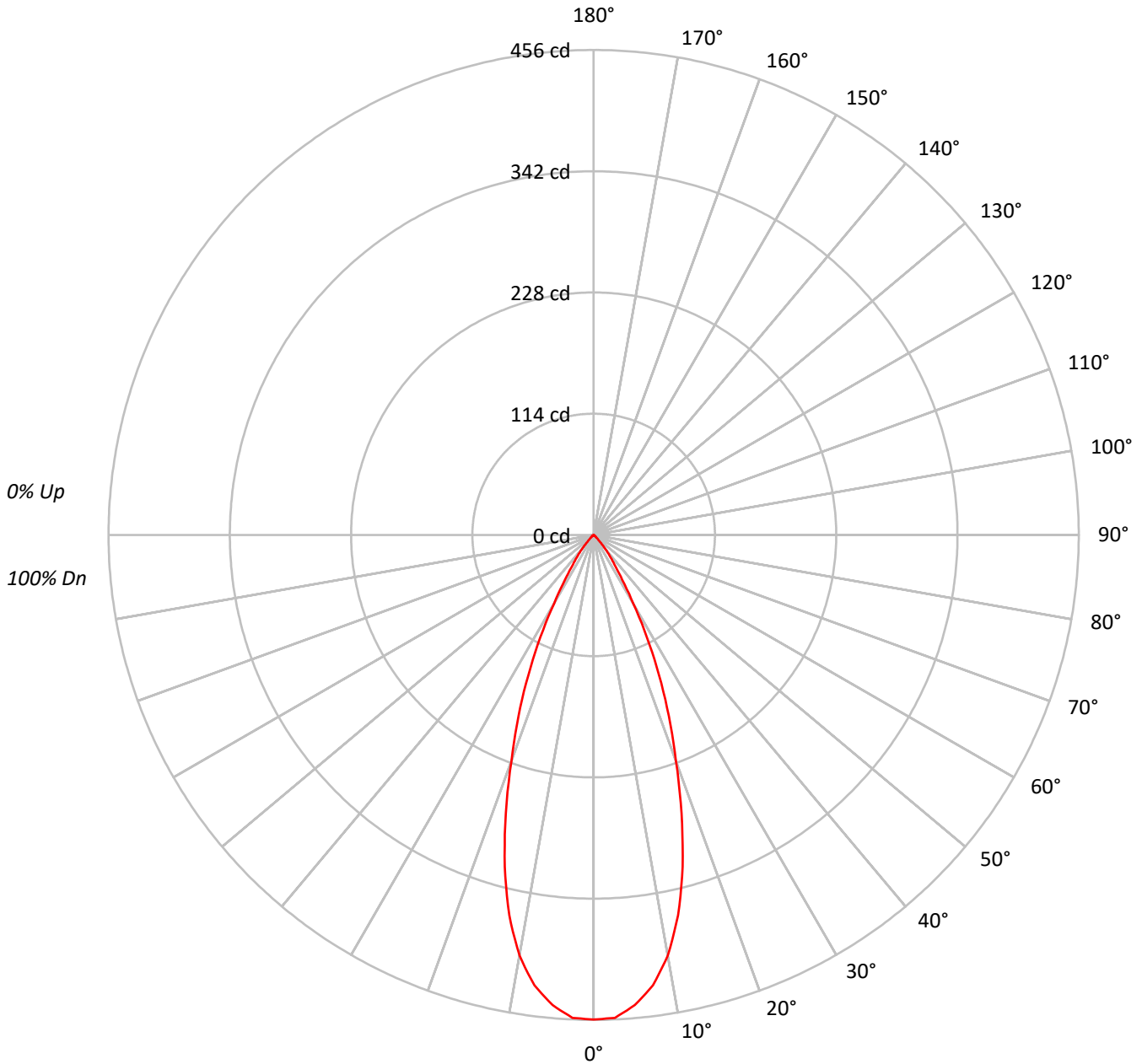
Input Watts (W): 3.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95				95															
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90				90															
3	105	100	95	92	103	98	94	91	96	93	90	93	91	88	91	89	87	86				86															
4	101	94	90	86	99	93	89	86	91	88	85	89	86	84	88	85	83	81				81															
5	97	90	85	81	95	89	84	81	87	83	80	86	82	79	84	81	79	77				77															
6	93	85	80	77	92	85	80	76	83	79	76	82	78	75	81	77	75	74				74															
7	89	81	76	73	88	81	76	73	80	75	72	79	75	72	77	74	72	70				70															
8	86	78	73	69	85	77	72	69	76	72	69	75	71	69	74	71	68	67				67															
9	83	74	69	66	82	74	69	66	73	69	66	72	68	66	72	68	65	64				64															
10	80	71	66	63	79	71	66	63	70	66	63	70	66	63	69	65	63	61				61															

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

	0°
0°	899343
5°	879204
10°	804801
15°	660145
20°	474855
25°	316182
30°	169546
35°	81674
40°	41478
45°	11722
50°	5527
55°	2064
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11722 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.1	18.3
10°-20°	88.0	39.3
20°-30°	66.0	29.5
30°-40°	23.4	10.5
40°-50°	4.7	2.1
50°-60°	0.6	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°	195.0	87.2
0°-40°	218.5	97.6
0°-60°	223.8	100.0
0°-90°	223.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	223.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	456	
5°	444	41
15°	323	88
25°	145	66
35°	34	23
45°	4	5
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	455.7
2.5°	454.5
5°	443.8
7.5°	427.2
10°	401.6
12.5°	366.5
15°	323.1
17.5°	274.3
20°	226.1
22.5°	184.4
25°	145.2
27.5°	108.3
30°	74.4
32.5°	50.0
35°	33.9
37.5°	24.4
40°	16.1
42.5°	8.9
45°	4.2
47.5°	3.0
50°	1.8
52.5°	1.2
55°	0.6
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	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

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— 0°-180°

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Scaled Data Report



(END OF REPORT)