

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: P886017

Luminaire Tested: ML104LSFLD2W1E-TIR1D40FL-TL1RDMW-200LM-4000K

Issue Date: 6/19/2024

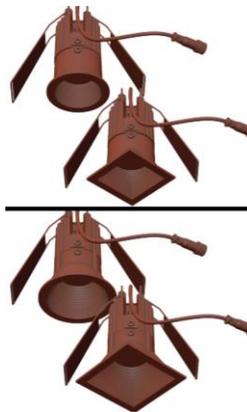
**Test Information**

Test Method: LM-79-2019  
Report Number: P886017  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-124)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFLD2W1E-TIR1D40FL-TL1RDMW-200LM-4000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM  
Light Source: (1) D2W LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 254.4 lumens  
Efficiency: N/A  
Efficacy: 79.5 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

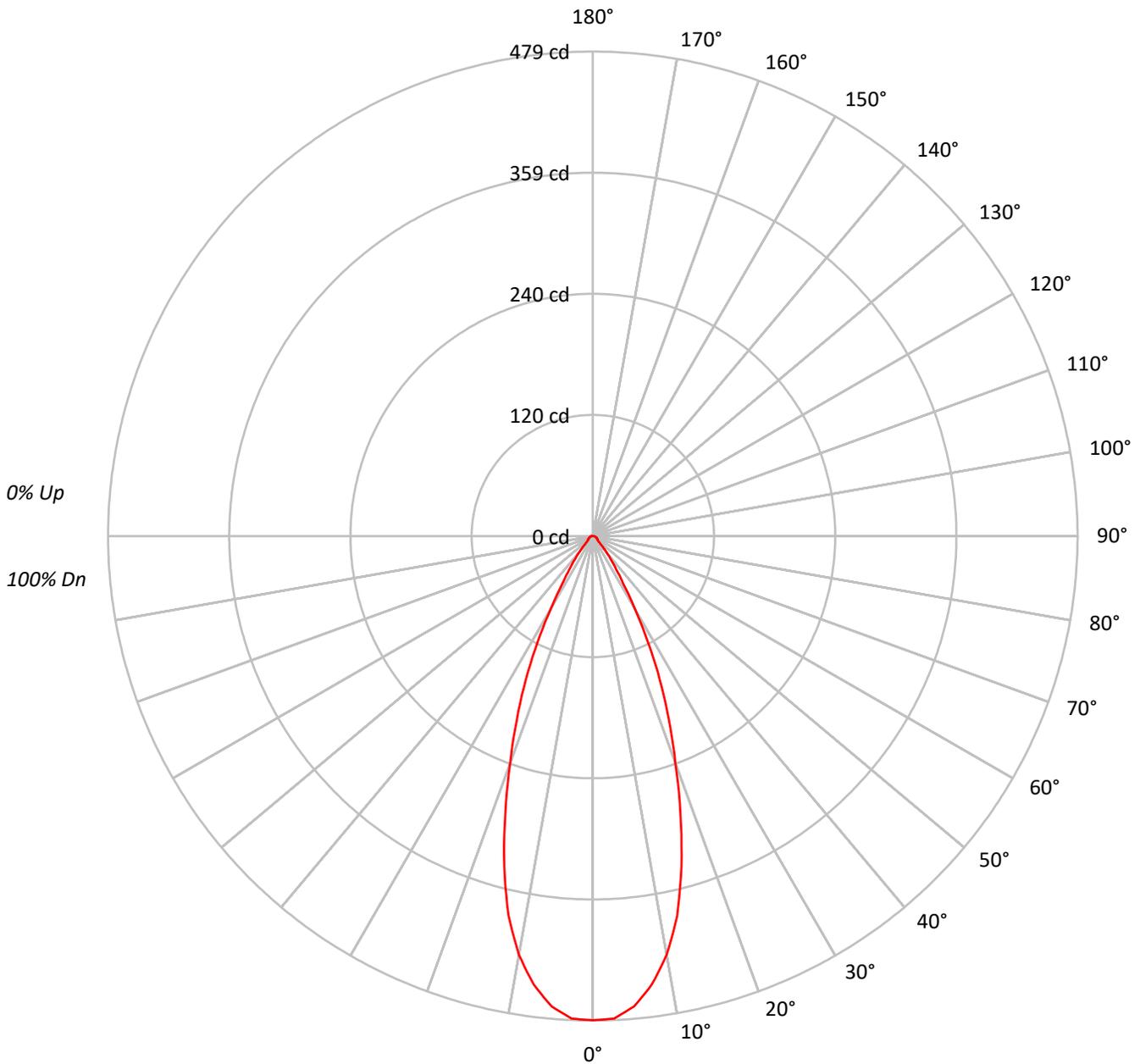
Input Watts (W): 3.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	114	111	108	106	111	109	106	105	105	103	101	101	100	98	98	96	95	94			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88			
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	83			
4	99	92	87	83	97	91	86	82	88	84	81	87	83	80	85	82	79	78			
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74			
6	90	82	77	73	89	81	76	73	80	75	72	79	75	72	77	74	71	70			
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66			
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	61	60			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	65	62	59	58			

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

	0°
0°	944734
5°	924768
10°	842476
15°	691406
20°	500898
25°	340571
30°	188461
35°	97334
40°	55132
45°	24840
50°	19957
55°	18580
60°	18946
65°	19613
70°	17311
75°	18300
80°	20457
85°	13586

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 87.5°  
 Luminance: 27147 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.1	16.9
10°-20°	92.3	36.3
20°-30°	70.9	27.9
30°-40°	27.3	10.7
40°-50°	8.4	3.3
50°-60°	4.9	1.9
60°-70°	3.9	1.5
70°-80°	2.7	1.1
80°-90°	0.9	0.4
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°	206.2	81.1
0°-40°	233.6	91.8
0°-60°	246.9	97.0
0°-90°	254.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	254.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	479	
5°	467	43
15°	338	92
25°	156	71
35°	40	27
45°	9	8
55°	5	5
65°	4	4
75°	2	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	478.7
2.5°	477.5
5°	466.8
7.5°	447.2
10°	420.4
12.5°	384.7
15°	338.4
17.5°	287.8
20°	238.5
22.5°	196.2
25°	156.4
27.5°	117.7
30°	82.7
32.5°	56.5
35°	40.4
37.5°	29.7
40°	21.4
42.5°	14.3
45°	8.9
47.5°	7.1
50°	6.5
52.5°	5.9
55°	5.4
57.5°	4.8
60°	4.8
62.5°	4.2
65°	4.2
67.5°	3.6
70°	3.0
72.5°	3.0
75°	2.4
77.5°	2.4
80°	1.8
82.5°	1.2
85°	0.6
87.5°	0.6
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)