

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: P885881

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMW-400LM-4000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885881  
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: ML104LSFL9FS1E-TIR1D40FL-TL1RDMW-400LM-4000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 500.3 lumens  
Efficiency: N/A  
Efficacy: 83.4 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

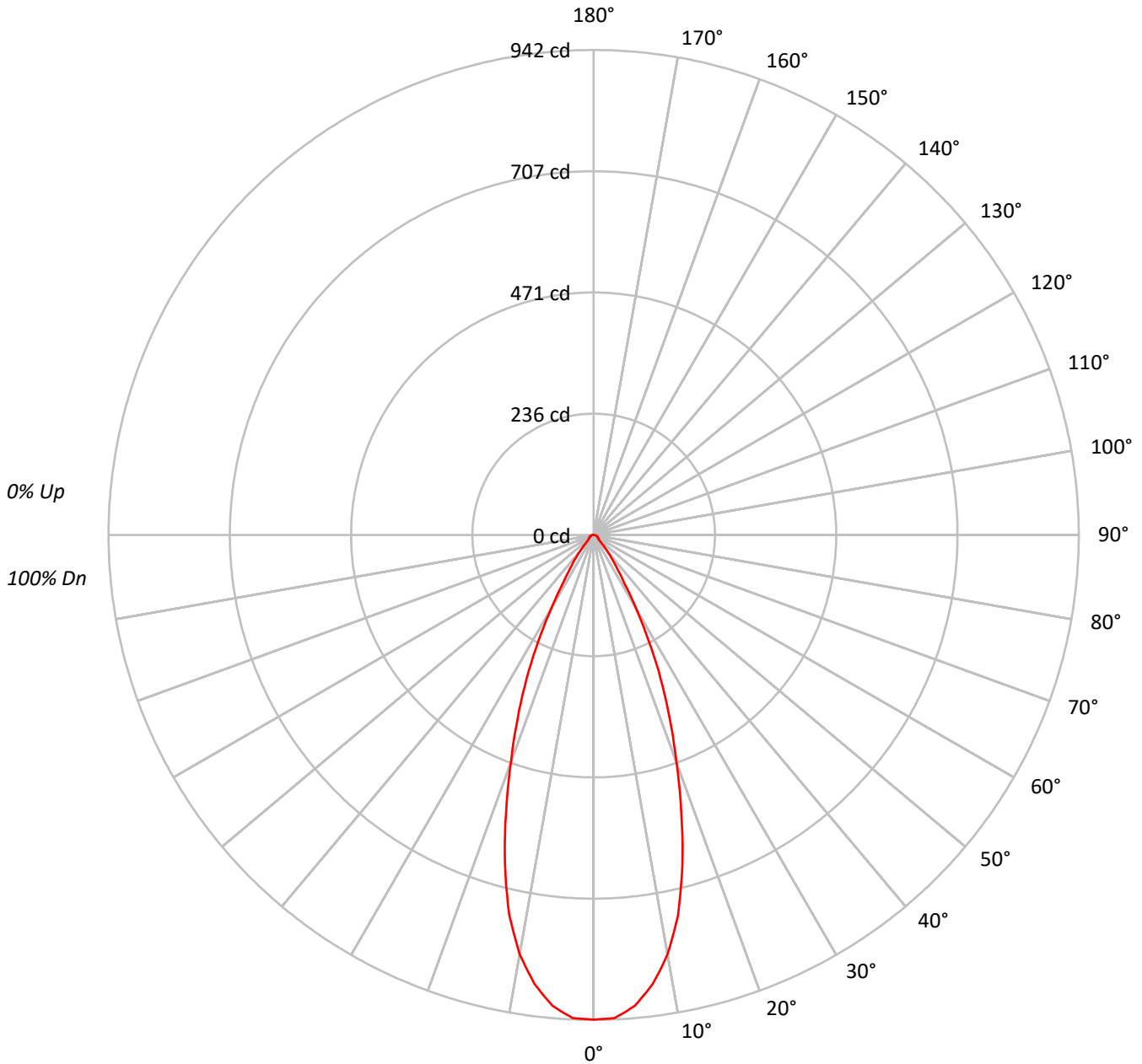
Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	107	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°	1858287
5°	1819028
10°	1657297
15°	1359928
20°	985204
25°	669818
30°	370541
35°	191535
40°	108461
45°	48843
50°	39607
55°	36128
60°	37103
65°	38292
70°	33467
75°	35838
80°	39778
85°	27173

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 87.5°  
 Luminance: 54294 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.7	16.9
10°-20°	181.6	36.3
20°-30°	139.4	27.9
30°-40°	53.8	10.8
40°-50°	16.6	3.3
50°-60°	9.6	1.9
60°-70°	7.7	1.5
70°-80°	5.2	1.0
80°-90°	1.8	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°	405.7	81.1
0°-40°	459.5	91.8
0°-60°	485.6	97.1
0°-90°	500.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	500.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	942	
5°	918	85
15°	666	182
25°	308	139
35°	80	54
45°	18	17
55°	10	10
65°	8	8
75°	5	5
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	941.6
2.5°	939.3
5°	918.2
7.5°	879.6
10°	827.0
12.5°	756.8
15°	665.6
17.5°	566.2
20°	469.1
22.5°	386.0
25°	307.6
27.5°	231.6
30°	162.6
32.5°	111.1
35°	79.5
37.5°	58.5
40°	42.1
42.5°	28.1
45°	17.5
47.5°	14.0
50°	12.9
52.5°	11.7
55°	10.5
57.5°	9.4
60°	9.4
62.5°	8.2
65°	8.2
67.5°	7.0
70°	5.8
72.5°	5.8
75°	4.7
77.5°	4.7
80°	3.5
82.5°	2.3
85°	1.2
87.5°	1.2
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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(END OF REPORT)