

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: P885887

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMWB-400LM-5000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885887  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-127)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDMWB-400LM-5000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

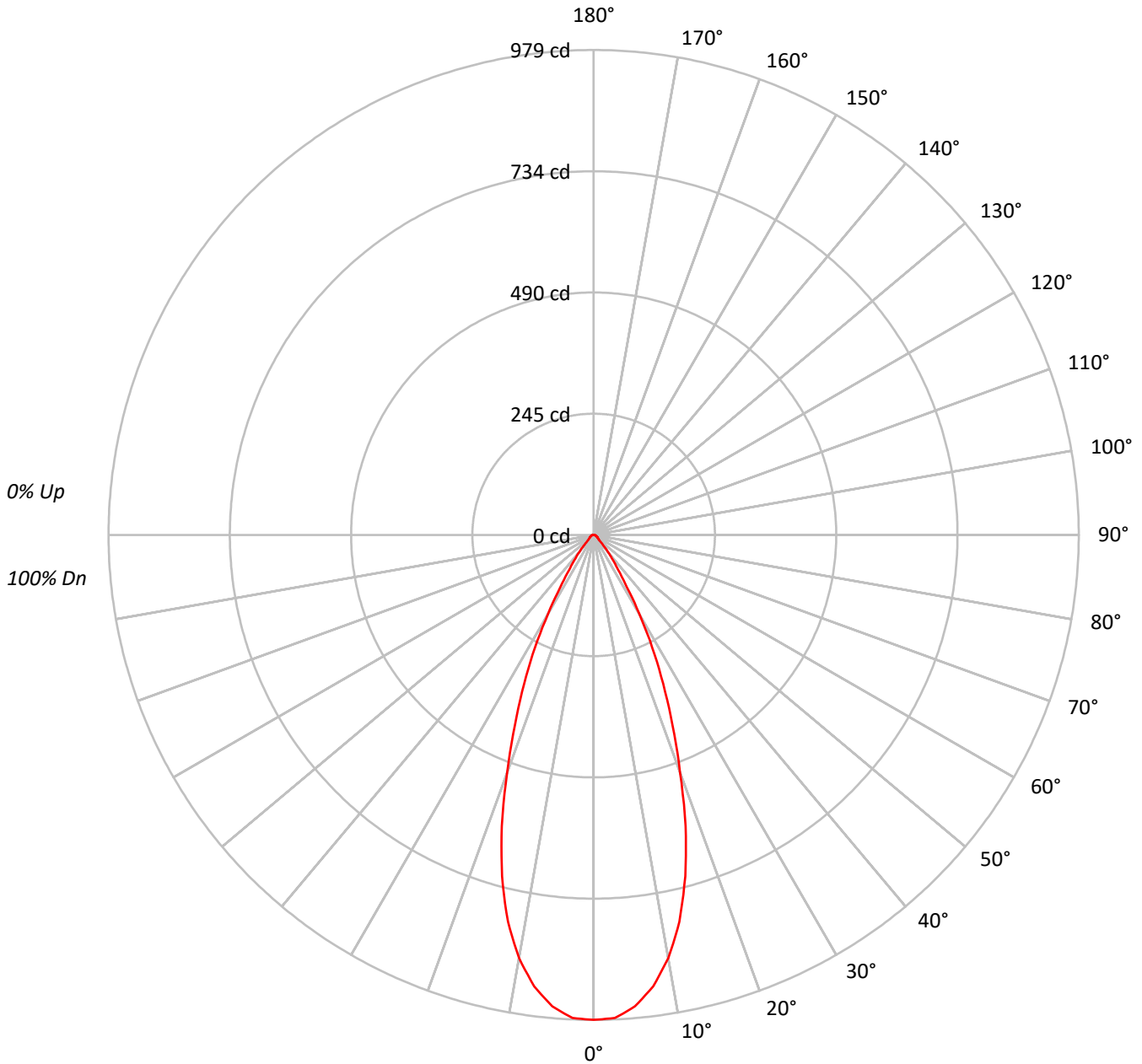
Lumens per Lamp: N/A  
Luminaire Lumens: 532.9 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.66  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88			
3	104	98	93	89	102	96	92	88	94	90	87	91	88	86	89	87	84	83			
4	99	92	87	83	97	91	86	82	89	85	82	87	83	81	85	82	80	78			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74			
6	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	71	70			
7	87	78	73	69	86	78	73	69	77	72	69	75	71	68	74	71	68	67			
8	83	75	69	66	82	74	69	65	73	68	65	72	68	65	71	67	65	63			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58			

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

	0°
0°	1931900
5°	1892922
10°	1737657
15°	1458204
20°	1070262
25°	721862
30°	417713
35°	206714
40°	117221
45°	54425
50°	39914
55°	35784
60°	30787
65°	30354
70°	30005
75°	29738
80°	29549
85°	29437

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 54425 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.4	16.6
10°-20°	194.5	36.5
20°-30°	151.7	28.5
30°-40°	59.4	11.2
40°-50°	17.7	3.3
50°-60°	9.0	1.7
60°-70°	6.8	1.3
70°-80°	4.5	0.8
80°-90°	1.1	0.2
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°	434.6	81.5
0°-40°	494.0	92.7
0°-60°	520.6	97.7
0°-90°	532.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	532.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	979	
5°	956	88
15°	714	194
25°	332	152
35°	86	59
45°	20	18
55°	10	9
65°	6	7
75°	4	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	978.9
2.5°	976.3
5°	955.5
7.5°	919.1
10°	867.1
12.5°	799.5
15°	713.7
17.5°	616.2
20°	509.6
22.5°	414.7
25°	331.5
27.5°	256.1
30°	183.3
32.5°	124.8
35°	85.8
37.5°	63.7
40°	45.5
42.5°	29.9
45°	19.5
47.5°	14.3
50°	13.0
52.5°	10.4
55°	10.4
57.5°	9.1
60°	7.8
62.5°	7.8
65°	6.5
67.5°	6.5
70°	5.2
72.5°	5.2
75°	3.9
77.5°	3.9
80°	2.6
82.5°	1.3
85°	1.3
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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(END OF REPORT)