

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: P885886

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMWB-400LM-4000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885886  
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-4000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

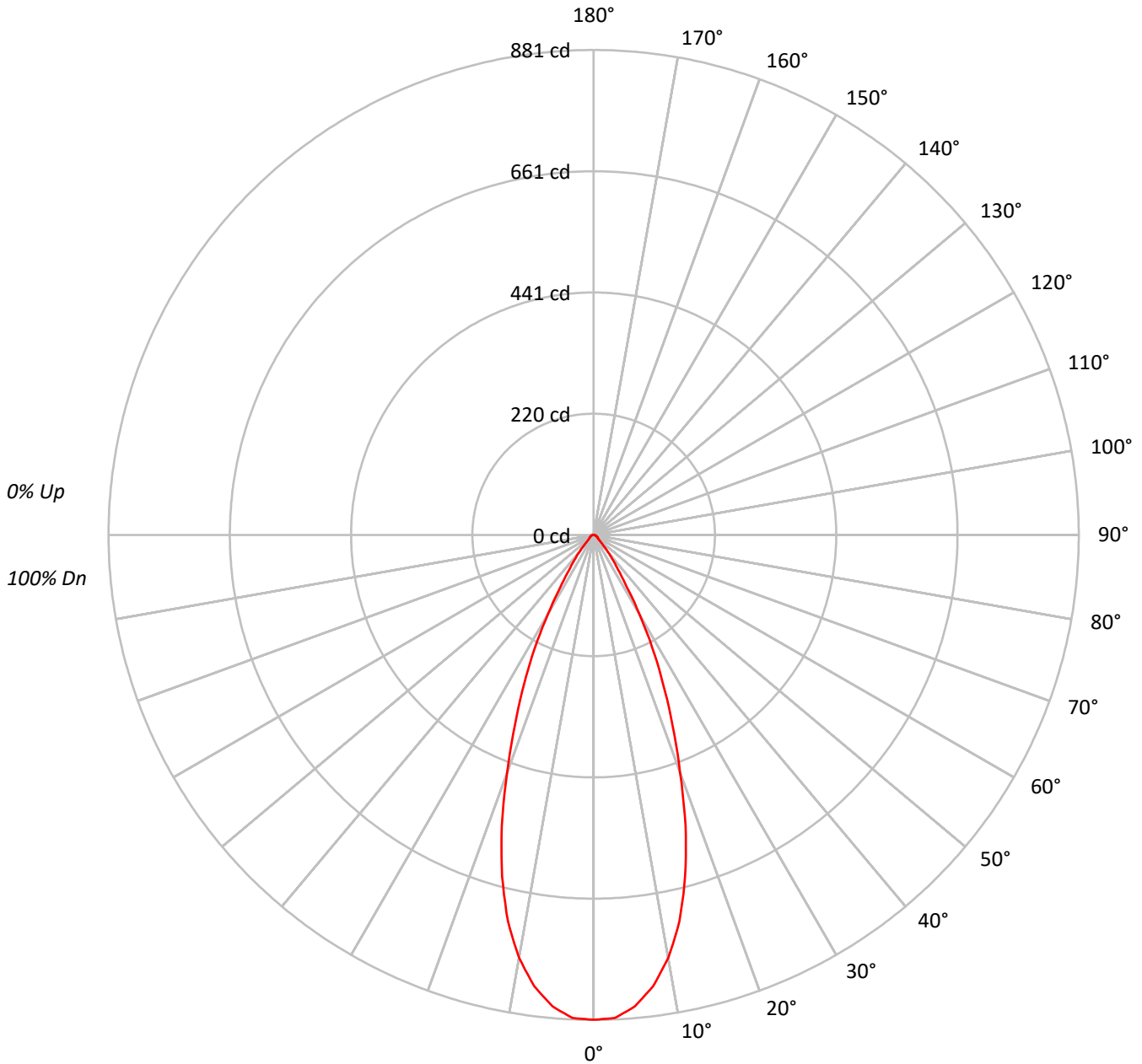
Lumens per Lamp: N/A  
Luminaire Lumens: 479.5 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.66  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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	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°	1738098
5°	1702937
10°	1563310
15°	1311914
20°	962941
25°	649349
30°	375782
35°	185994
40°	105370
45°	48843
50°	35922
55°	32343
60°	27630
65°	27085
70°	27120
75°	26688
80°	26140
85°	27173

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 48843 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.5	16.6
10°-20°	175.0	36.5
20°-30°	136.5	28.5
30°-40°	53.5	11.2
40°-50°	15.9	3.3
50°-60°	8.1	1.7
60°-70°	6.1	1.3
70°-80°	4.0	0.8
80°-90°	1.0	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°	391.0	81.5
0°-40°	444.4	92.7
0°-60°	468.4	97.7
0°-90°	479.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	479.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	881	
5°	860	80
15°	642	175
25°	298	136
35°	77	53
45°	18	16
55°	9	8
65°	6	6
75°	4	4
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	880.7
2.5°	878.4
5°	859.6
7.5°	826.9
10°	780.1
12.5°	719.3
15°	642.1
17.5°	554.4
20°	458.5
22.5°	373.1
25°	298.2
27.5°	230.4
30°	164.9
32.5°	112.3
35°	77.2
37.5°	57.3
40°	40.9
42.5°	26.9
45°	17.5
47.5°	12.9
50°	11.7
52.5°	9.4
55°	9.4
57.5°	8.2
60°	7.0
62.5°	7.0
65°	5.8
67.5°	5.8
70°	4.7
72.5°	4.7
75°	3.5
77.5°	3.5
80°	2.3
82.5°	1.2
85°	1.2
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)