

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: P885814

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMBB-400LM-3000K

Issue Date: 7/18/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885814  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-123)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/18/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMBB-400LM-3000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

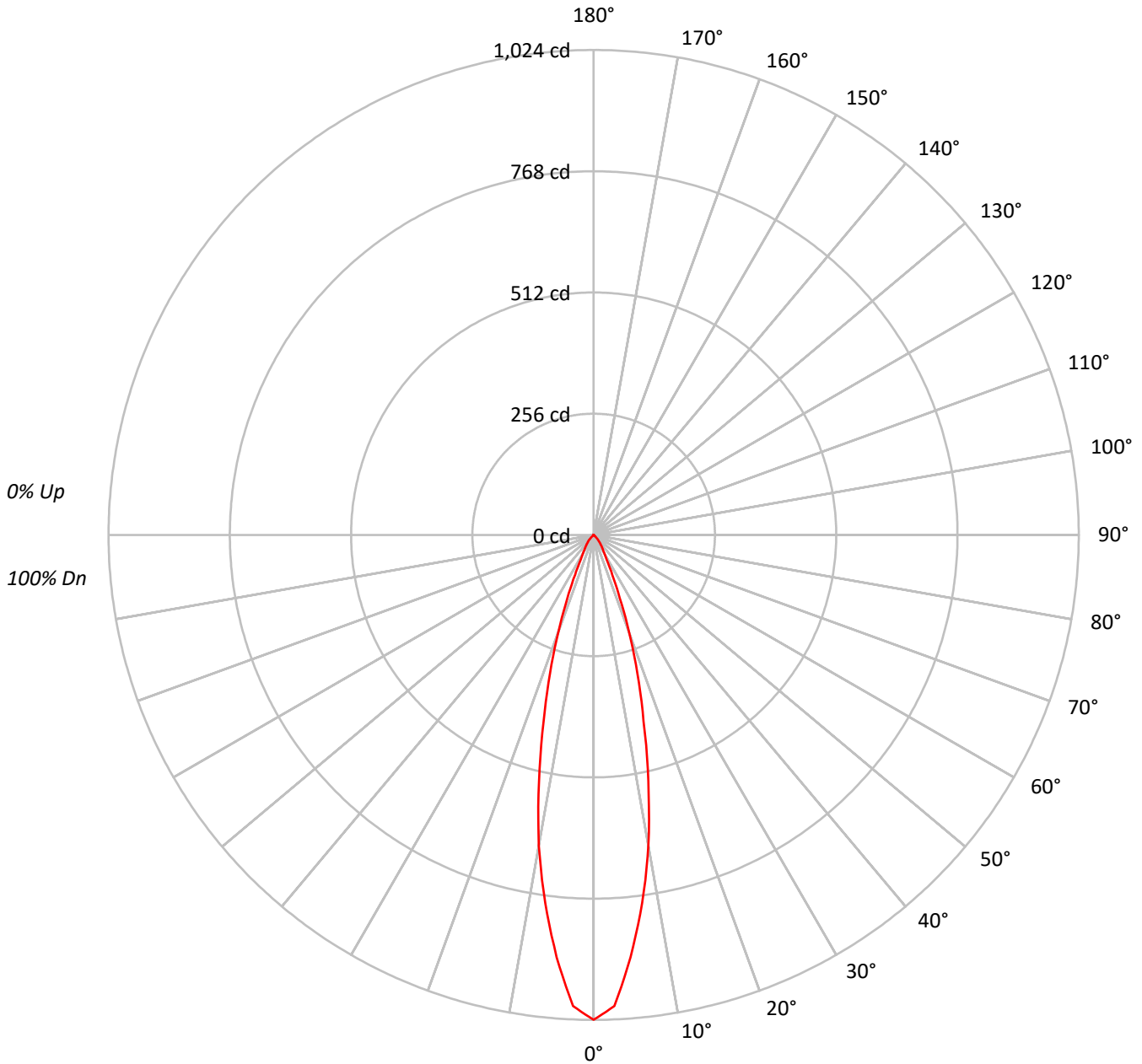
Lumens per Lamp: N/A  
Luminaire Lumens: 263.5 lumens  
Efficiency: N/A  
Efficacy: 43.9 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.45  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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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CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMMB-400LM-3000K

**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	115	113	111	109	112	110	109	107	106	105	104		103	102	101		99	99	98	96
2	111	107	104	101	109	105	102	100	102	100	98		99	97	96		96	95	94	92
3	107	102	98	95	105	100	97	94	98	95	93		96	93	91		94	92	90	89
4	103	97	93	90	101	96	92	89	94	91	88		92	90	87		91	88	86	85
5	100	93	89	86	98	92	88	85	91	87	84		89	86	84		88	85	83	82
6	96	90	85	82	95	89	85	82	88	84	81		86	83	81		85	82	80	79
7	93	86	82	79	92	86	81	78	85	81	78		83	80	78		82	80	77	76
8	90	83	79	76	89	83	78	76	82	78	75		81	77	75		80	77	75	74
9	88	80	76	73	87	80	76	73	79	75	73		78	75	72		78	75	72	71
10	85	78	73	71	84	77	73	71	77	73	70		76	73	70		75	72	70	69

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

	0°
0°	2020512
5°	1772869
10°	1335056
15°	832384
20°	456163
25°	201425
30°	101865
35°	67700
40°	45600
45°	14513
50°	6448
55°	3441
60°	3947
65°	0
70°	0
75°	0
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14513 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.3	29.7
10°-20°	113.0	42.9
20°-30°	47.4	18.0
30°-40°	18.1	6.9
40°-50°	5.6	2.1
50°-60°	1.0	0.4
60°-70°	0.1	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°	238.7	90.6
0°-40°	256.8	97.5
0°-60°	263.4	100.0
0°-90°	263.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	263.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1024	
5°	895	78
15°	407	113
25°	92	47
35°	28	18
45°	5	6
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1023.8
2.5°	995.7
5°	894.9
7.5°	783.7
10°	666.2
12.5°	532.2
15°	407.4
17.5°	305.6
20°	217.2
22.5°	144.5
25°	92.5
27.5°	61.3
30°	44.7
32.5°	35.3
35°	28.1
37.5°	22.9
40°	17.7
42.5°	12.5
45°	5.2
47.5°	2.1
50°	2.1
52.5°	1.0
55°	1.0
57.5°	1.0
60°	1.0
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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(END OF REPORT)