

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: P885825

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMWB-400LM-3500K

Issue Date: 7/18/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885825  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-121)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 7/18/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMWB-400LM-3500K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

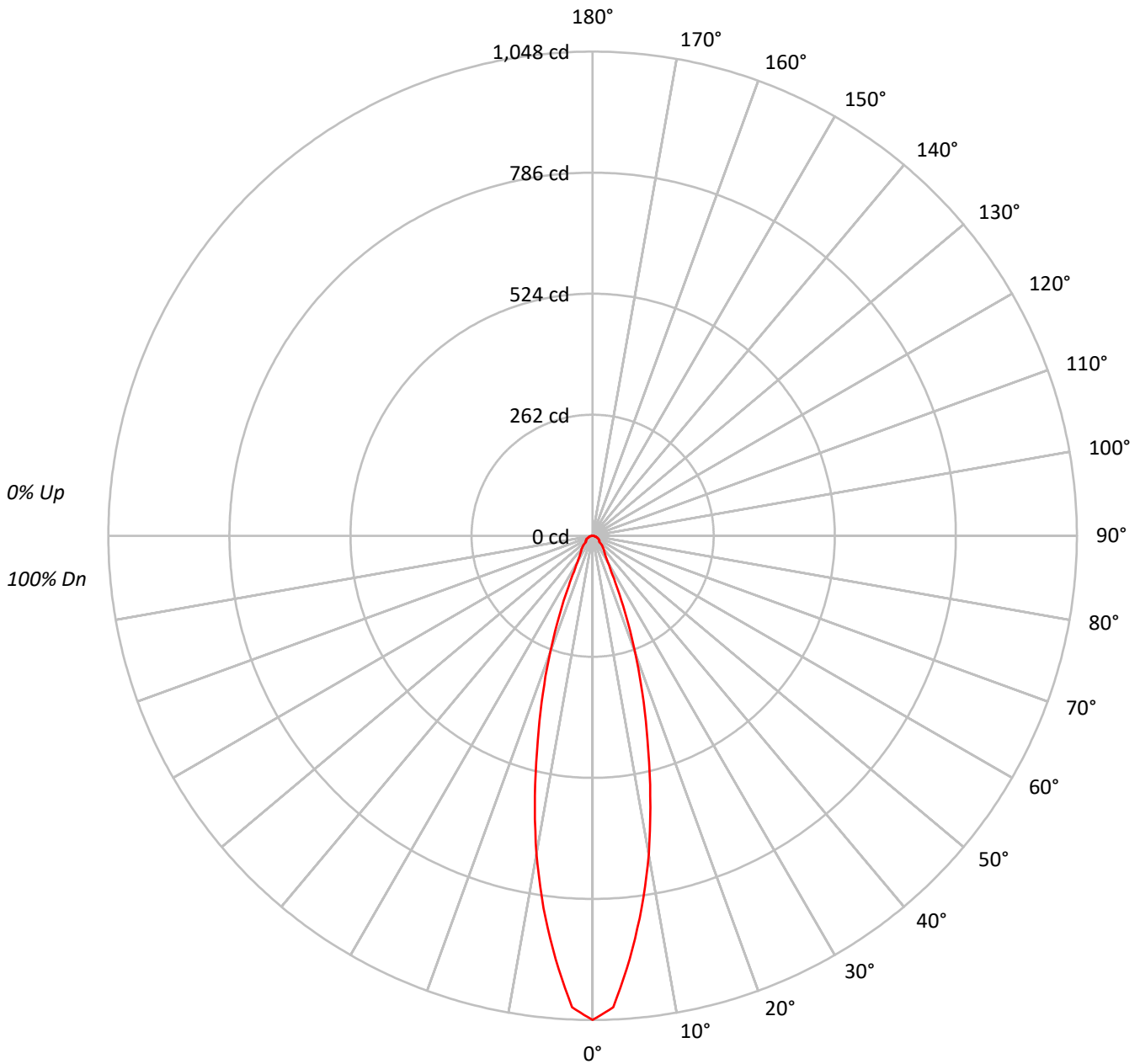
Lumens per Lamp: N/A  
Luminaire Lumens: 356.9 lumens  
Efficiency: N/A  
Efficacy: 59.5 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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	100	100	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93	93
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86	86	86	86
3	103	96	91	87	101	95	90	87	92	88	85	90	86	84	87	85	83	81	81	81	81
4	98	91	85	81	96	89	84	81	87	83	80	85	82	79	83	80	78	76	76	76	76
5	94	86	80	76	92	85	79	76	83	78	75	81	77	74	80	76	74	72	72	72	72
6	90	81	76	72	88	81	75	71	79	74	71	78	74	70	76	73	70	69	69	69	69
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	73	70	67	66	66	66	66
8	83	74	69	65	82	74	68	65	73	68	65	72	67	64	71	67	64	63	63	63	63
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	61	60	60	60	60
10	77	68	63	60	76	68	63	60	67	63	59	66	62	59	66	62	59	58	58	58	58

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

	0°
0°	2068075
5°	1821405
10°	1402190
15°	935768
20°	562853
25°	279817
30°	147669
35°	108416
40°	93261
45°	76753
50°	57414
55°	60557
60°	60785
65°	56505
70°	50778
75°	50326
80°	37505
85°	24908

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 76753 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.0	22.7
10°-20°	126.6	35.5
20°-30°	63.5	17.8
30°-40°	29.3	8.2
40°-50°	20.4	5.7
50°-60°	15.6	4.4
60°-70°	12.2	3.4
70°-80°	6.5	1.8
80°-90°	1.6	0.5
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°	271.1	76.0
0°-40°	300.4	84.2
0°-60°	336.5	94.3
0°-90°	356.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	356.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1048	
5°	919	81
15°	458	127
25°	128	63
35°	45	29
45°	28	20
55°	18	16
65°	12	12
75°	7	7
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1047.9
2.5°	1021.5
5°	919.4
7.5°	812.8
10°	699.7
12.5°	576.7
15°	458.0
17.5°	357.0
20°	268.0
22.5°	191.1
25°	128.5
27.5°	86.8
30°	64.8
32.5°	52.7
35°	45.0
37.5°	40.6
40°	36.2
42.5°	31.9
45°	27.5
47.5°	19.8
50°	18.7
52.5°	18.7
55°	17.6
57.5°	16.5
60°	15.4
62.5°	14.3
65°	12.1
67.5°	11.0
70°	8.8
72.5°	7.7
75°	6.6
77.5°	4.4
80°	3.3
82.5°	2.2
85°	1.1
87.5°	1.1
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)