

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: P885826

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMWB-400LM-4000K

Issue Date: 7/18/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885826  
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-4000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

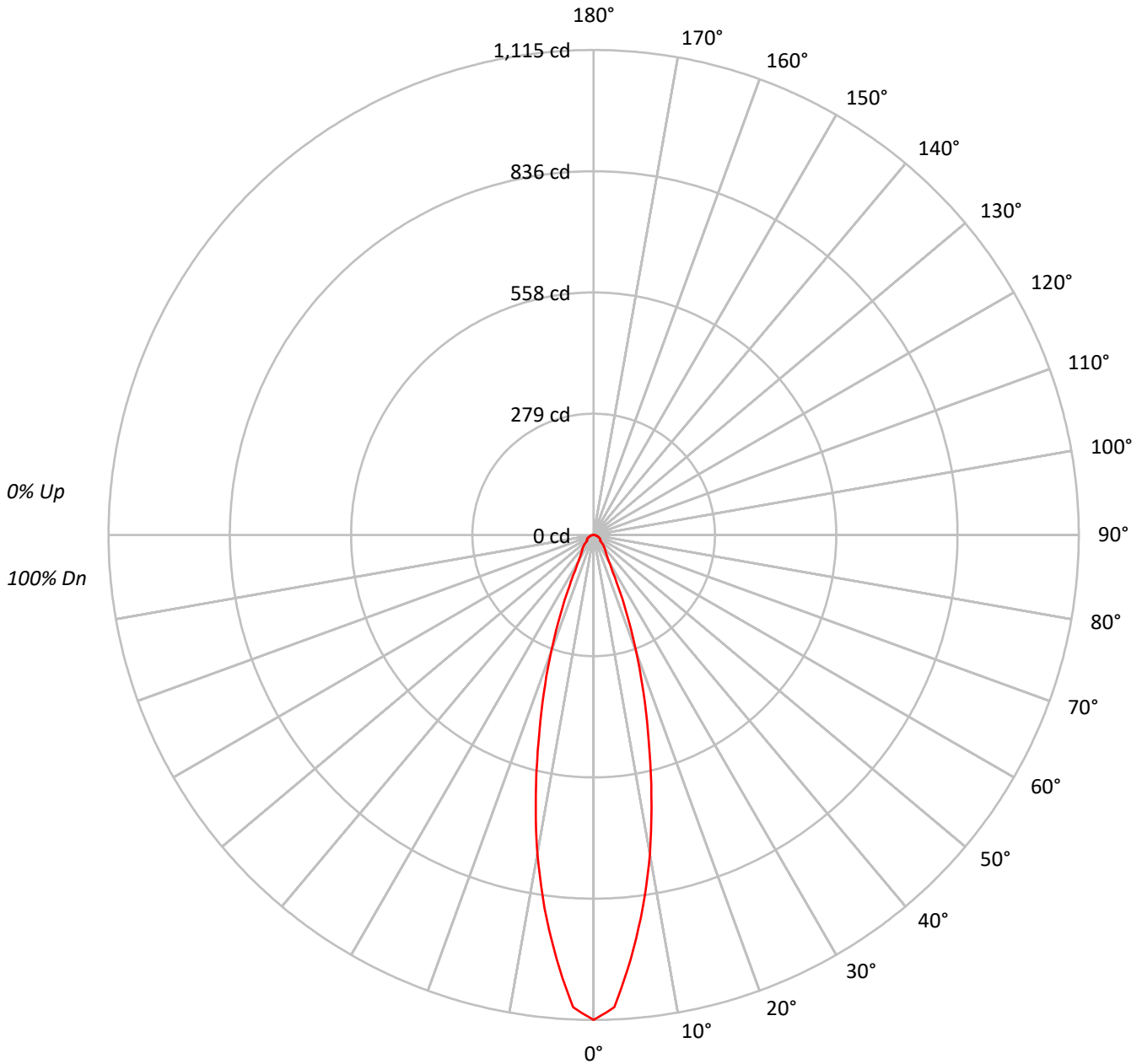
Lumens per Lamp: N/A  
Luminaire Lumens: 379.8 lumens  
Efficiency: N/A  
Efficacy: 63.3 lumens/watt  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93		
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86		
3	103	96	91	87	101	95	90	87	92	88	85	90	86	84	87	85	83	81		
4	98	91	85	81	96	89	84	81	87	83	80	85	82	79	83	80	78	76		
5	94	86	80	76	92	85	79	76	83	78	75	81	77	74	80	76	74	72		
6	90	81	76	72	88	81	75	71	79	74	71	78	74	70	76	73	70	69		
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	73	70	67	66		
8	83	74	69	65	82	74	68	65	73	68	65	72	67	64	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	60	76	68	63	60	67	63	59	66	62	59	66	62	59	58		

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

	0°
0°	2200697
5°	1938091
10°	1491968
15°	995837
20°	598977
25°	297891
30°	157241
35°	115403
40°	99444
45°	81497
50°	61099
55°	64342
60°	64732
65°	60240
70°	54240
75°	53376
80°	39778
85°	27173

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 81497 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.2	22.7
10°-20°	134.8	35.5
20°-30°	67.6	17.8
30°-40°	31.2	8.2
40°-50°	21.7	5.7
50°-60°	16.6	4.4
60°-70°	13.0	3.4
70°-80°	6.9	1.8
80°-90°	1.8	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°	288.5	76.0
0°-40°	319.7	84.2
0°-60°	358.0	94.3
0°-90°	379.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	379.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1115	
5°	978	86
15°	487	135
25°	137	68
35°	48	31
45°	29	22
55°	19	17
65°	13	13
75°	7	7
85°	1	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1115.1
2.5°	1087.0
5°	978.3
7.5°	864.9
10°	744.5
12.5°	613.6
15°	487.4
17.5°	379.9
20°	285.2
22.5°	203.4
25°	136.8
27.5°	92.3
30°	69.0
32.5°	56.1
35°	47.9
37.5°	43.2
40°	38.6
42.5°	33.9
45°	29.2
47.5°	21.0
50°	19.9
52.5°	19.9
55°	18.7
57.5°	17.5
60°	16.4
62.5°	15.2
65°	12.9
67.5°	11.7
70°	9.4
72.5°	8.2
75°	7.0
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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Scaled Data Report



(END OF REPORT)