

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: P885883

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMWB-400LM-2700K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885883  
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-2700K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

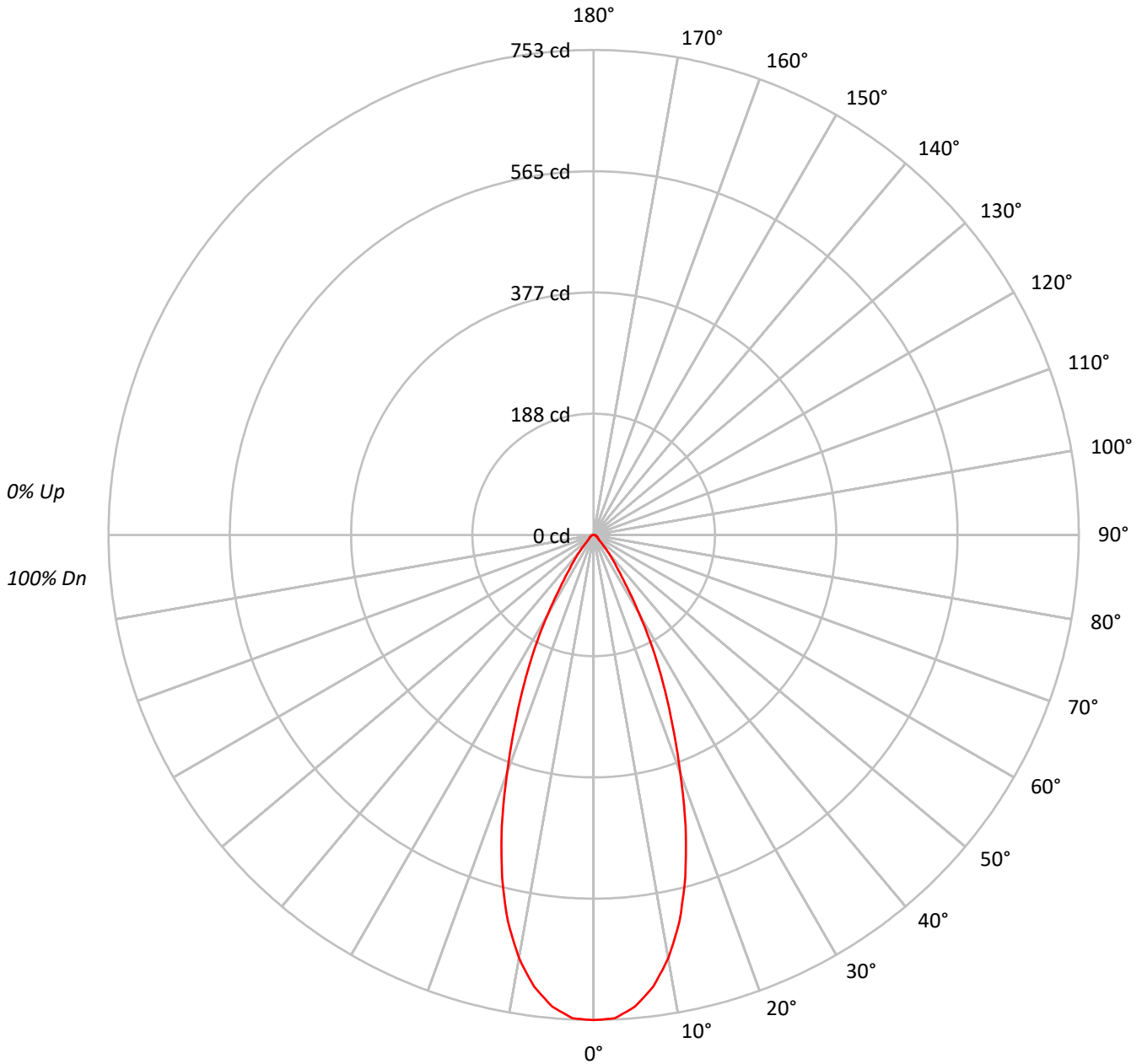
Lumens per Lamp: N/A  
Luminaire Lumens: 410.1 lumens  
Efficiency: N/A  
Efficacy: 68.3 lumens/watt  
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.66  
Luminous Opening: Circular (Dia: 0.08' x H: 0')  
CIE Type: Direct

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									
RC	80									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°	1486669
5°	1456688
10°	1337260
15°	1122104
20°	823698
25°	555496
30°	321546
35°	159010
40°	90170
45°	41865
50°	30703
55°	27526
60°	23683
65°	23349
70°	23081
75°	22876
80°	22730
85°	22644

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 41865 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	16.6
10°-20°	149.7	36.5
20°-30°	116.7	28.5
30°-40°	45.7	11.1
40°-50°	13.6	3.3
50°-60°	6.9	1.7
60°-70°	5.2	1.3
70°-80°	3.4	0.8
80°-90°	0.8	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°	334.4	81.5
0°-40°	380.1	92.7
0°-60°	400.6	97.7
0°-90°	410.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	410.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	753	
5°	735	68
15°	549	150
25°	255	117
35°	66	46
45°	15	14
55°	8	7
65°	5	5
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	753.3
2.5°	751.3
5°	735.3
7.5°	707.3
10°	667.3
12.5°	615.2
15°	549.2
17.5°	474.2
20°	392.2
22.5°	319.1
25°	255.1
27.5°	197.1
30°	141.1
32.5°	96.0
35°	66.0
37.5°	49.0
40°	35.0
42.5°	23.0
45°	15.0
47.5°	11.0
50°	10.0
52.5°	8.0
55°	8.0
57.5°	7.0
60°	6.0
62.5°	6.0
65°	5.0
67.5°	5.0
70°	4.0
72.5°	4.0
75°	3.0
77.5°	3.0
80°	2.0
82.5°	1.0
85°	1.0
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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Scaled Data Report



(END OF REPORT)