

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: P885894

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDSLb-400LM-3000K

Issue Date: 6/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P885894  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-128)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 6/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDSL B-400LM-3000K  
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER BAFFLED TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 424.4 lumens  
Efficiency: N/A  
Efficacy: 70.7 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

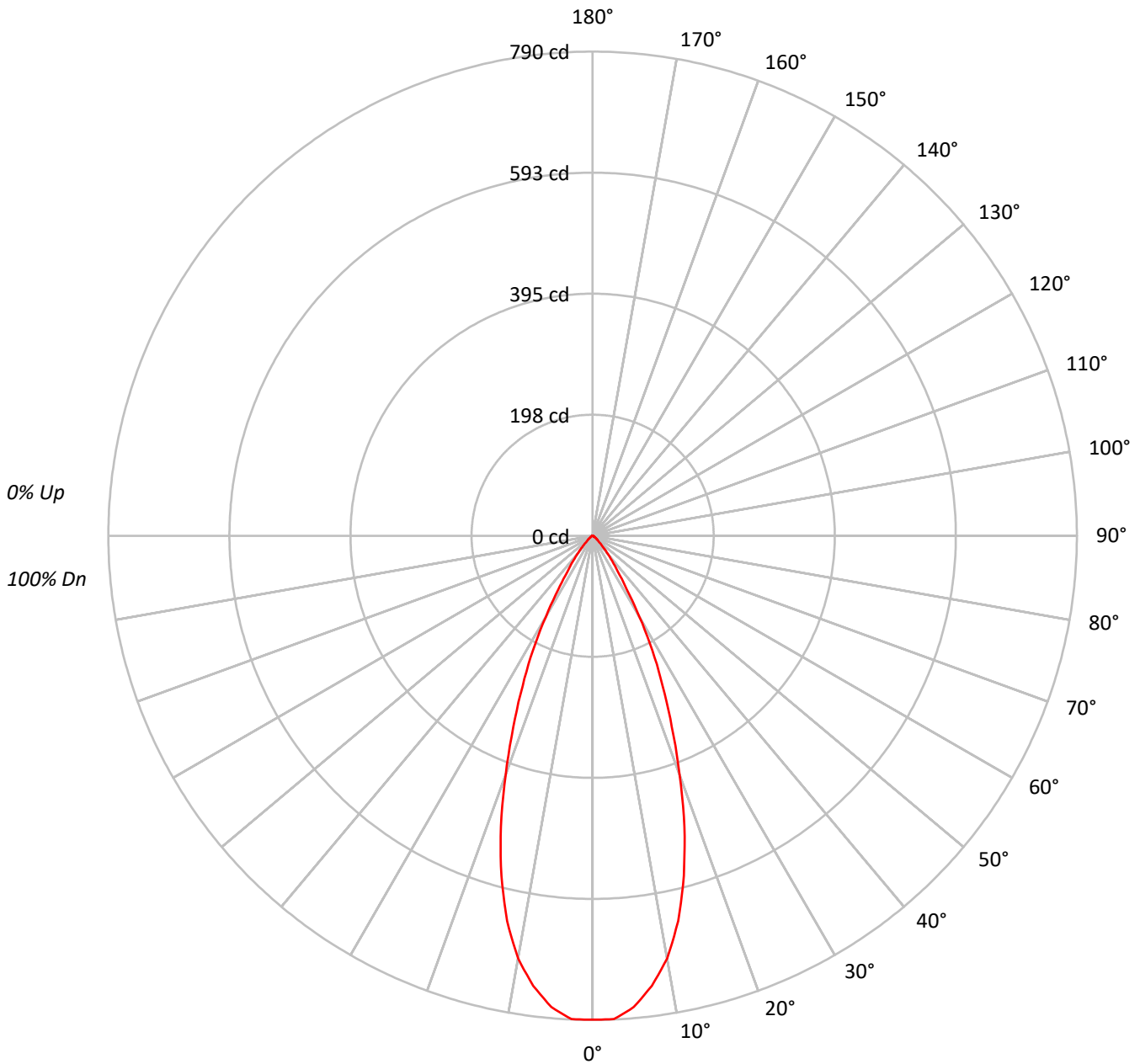
Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			
3	104	99	94	90	102	97	93	90	95	91	88	92	89	87	90	88	86	84			
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80			
5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75			
6	91	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71			
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	68			
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	66	63	62			
10	78	69	64	61	77	69	64	60	68	63	60	67	63	60	67	63	60	59			

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

	0°
0°	1558111
5°	1529196
10°	1403192
15°	1173796
20°	870533
25°	588160
30°	347980
35°	175152
40°	98929
45°	46331
50°	28554
55°	17892
60°	12236
65°	9807
70°	5770
75°	7625
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 46331 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	16.8
10°-20°	157.0	37.0
20°-30°	124.0	29.2
30°-40°	49.7	11.7
40°-50°	14.6	3.4
50°-60°	5.1	1.2
60°-70°	2.0	0.5
70°-80°	0.7	0.2
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°	352.3	83.0
0°-40°	402.1	94.7
0°-60°	421.7	99.4
0°-90°	424.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	424.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	790	
5°	772	71
15°	574	157
25°	270	124
35°	73	50
45°	17	15
55°	5	5
65°	2	2
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	789.5
2.5°	789.5
5°	771.9
7.5°	740.7
10°	700.2
12.5°	644.1
15°	574.5
17.5°	497.6
20°	414.5
22.5°	337.6
25°	270.1
27.5°	210.9
30°	152.7
32.5°	103.9
35°	72.7
37.5°	53.0
40°	38.4
42.5°	24.9
45°	16.6
47.5°	11.4
50°	9.3
52.5°	7.3
55°	5.2
57.5°	4.2
60°	3.1
62.5°	3.1
65°	2.1
67.5°	1.0
70°	1.0
72.5°	1.0
75°	1.0
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)