

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: P885829

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-3000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885829
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-119)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-3000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

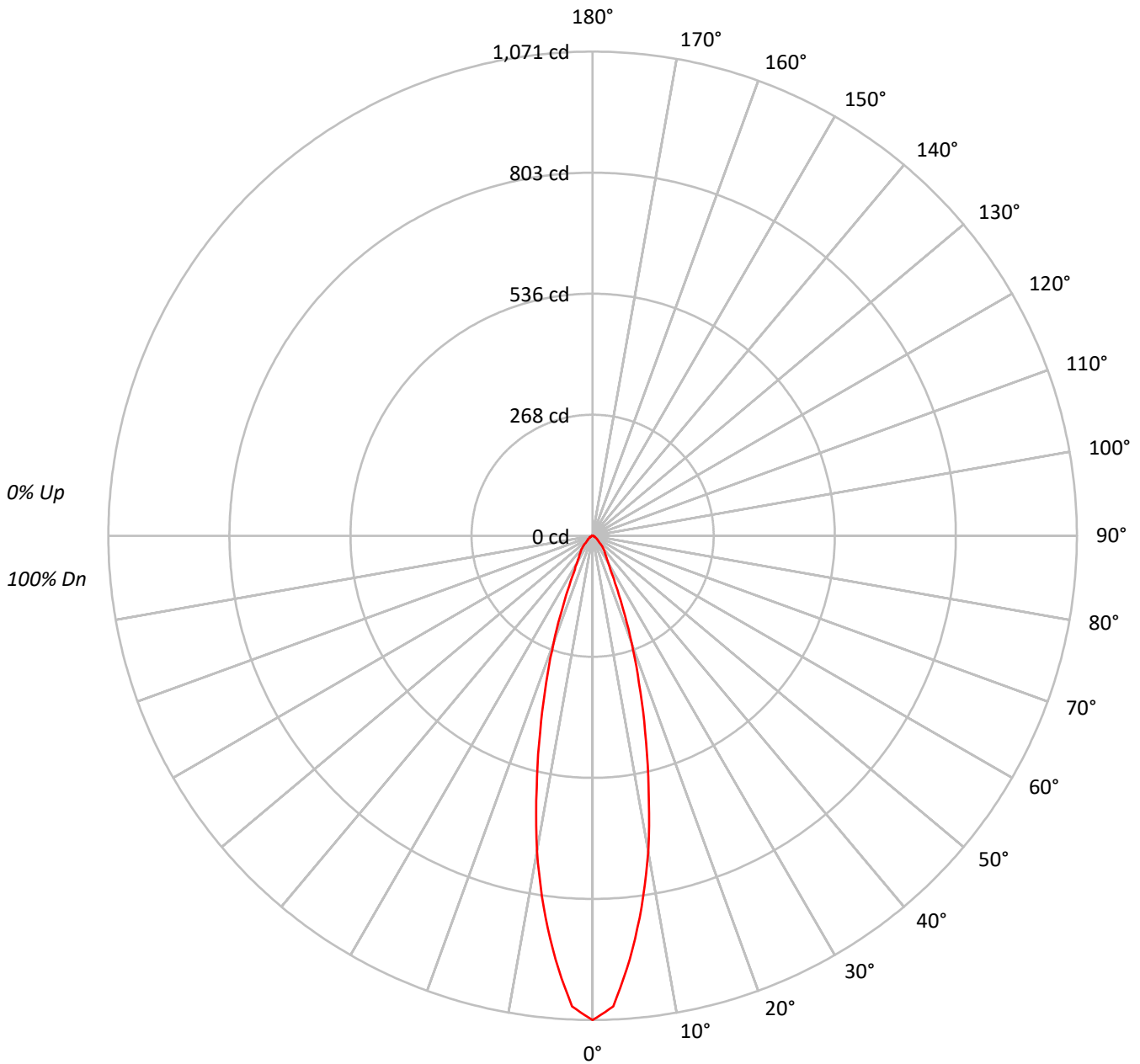
Lumens per Lamp: N/A
Luminaire Lumens: 331.4 lumens
Efficiency: N/A
Efficacy: 55.2 lumens/watt
Spacing Criteria (0/90/45): 0.44 / 0.44 / 0.47
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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	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	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84																			
4	100	93	89	85	98	92	88	84	90	86	83	88	85	82	87	84	82	80																			
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76																			
6	92	85	79	76	91	84	79	76	82	78	75	81	77	75	80	77	74	73																			
7	89	81	76	72	88	80	75	72	79	75	72	78	74	71	77	74	71	70																			
8	86	78	72	69	85	77	72	69	76	72	69	75	71	68	74	71	68	67																			
9	83	75	69	66	82	74	69	66	73	69	66	72	68	66	72	68	65	64																			
10	80	72	67	64	79	71	67	63	71	66	63	70	66	63	69	66	63	62																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2114058
5°	1864791
10°	1420025
15°	914927
20°	527990
25°	264792
30°	156329
35°	117571
40°	93776
45°	60844
50°	44519
55°	35784
60°	28814
65°	19613
70°	12118
75°	7625
80°	11365
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 60844 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.6	24.9
10°-20°	123.8	37.4
20°-30°	60.7	18.3
30°-40°	31.2	9.4
40°-50°	17.9	5.4
50°-60°	9.4	2.8
60°-70°	4.2	1.3
70°-80°	1.5	0.4
80°-90°	0.1	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°	267.0	80.6
0°-40°	298.2	90.0
0°-60°	325.5	98.2
0°-90°	331.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	331.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1071	
5°	941	83
15°	448	124
25°	122	61
35°	49	31
45°	22	18
55°	10	9
65°	4	4
75°	1	1
85°	0	0
90°	0	



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CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RD5L-400LM-3000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	1071.2
2.5°	1042.1
5°	941.3
7.5°	829.1
10°	708.6
12.5°	571.5
15°	447.8
17.5°	340.8
20°	251.4
22.5°	176.6
25°	121.6
27.5°	87.3
30°	68.6
32.5°	57.1
35°	48.8
37.5°	42.6
40°	36.4
42.5°	30.1
45°	21.8
47.5°	16.6
50°	14.5
52.5°	12.5
55°	10.4
57.5°	8.3
60°	7.3
62.5°	5.2
65°	4.2
67.5°	3.1
70°	2.1
72.5°	2.1
75°	1.0
77.5°	1.0
80°	1.0
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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