

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: P885828

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-2700K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885828
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-2700K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 319.2 lumens
Efficiency: N/A
Efficacy: 53.2 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

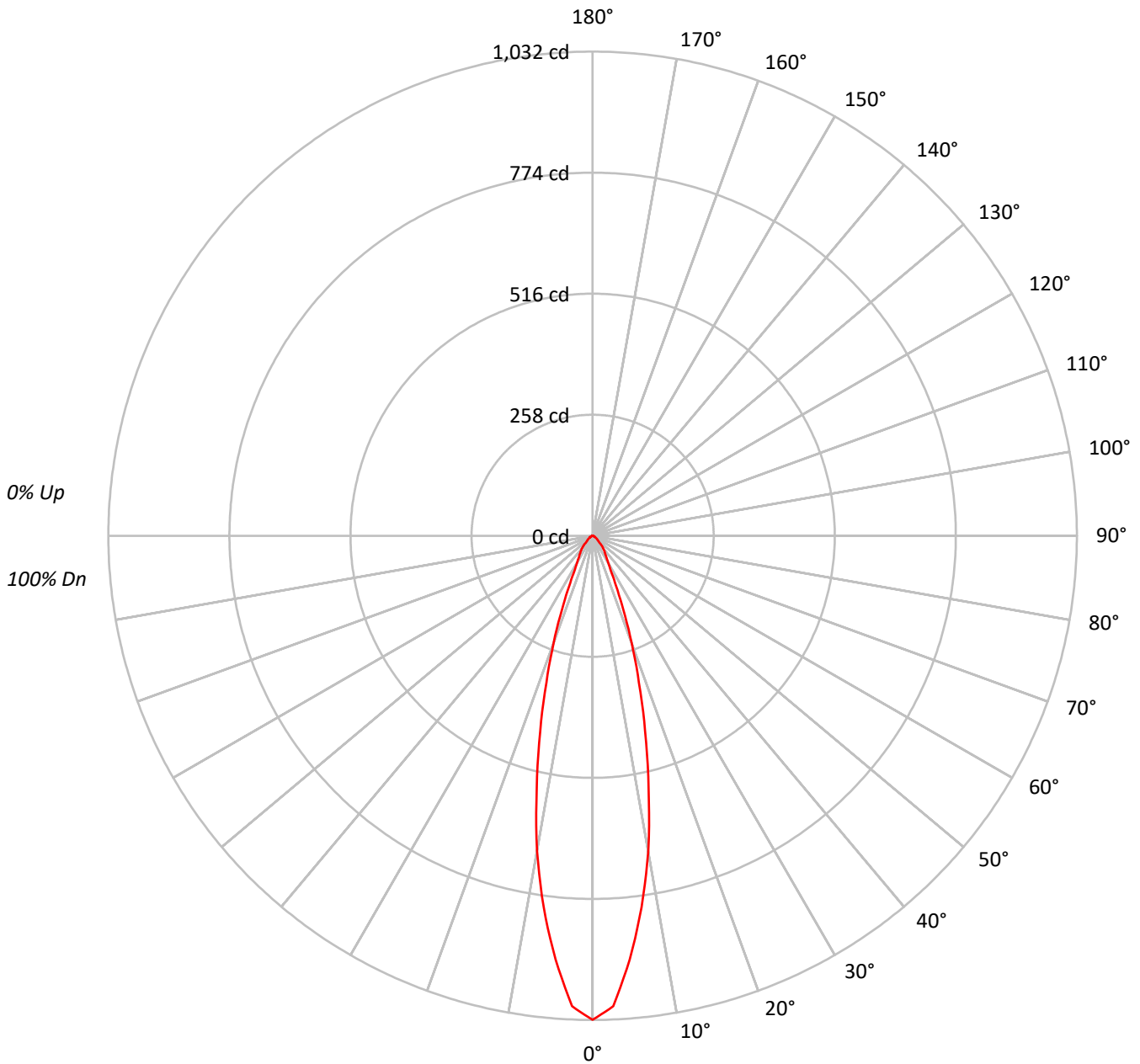
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	70	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°	2036103
5°	1796246
10°	1367721
15°	881215
20°	508668
25°	254993
30°	150404
35°	113235
40°	90170
45°	58611
50°	42984
55°	34408
60°	27630
65°	18679
70°	11541
75°	7625
80°	11365
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 58611 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	24.9
10°-20°	119.2	37.4
20°-30°	58.4	18.3
30°-40°	30.0	9.4
40°-50°	17.3	5.4
50°-60°	9.0	2.8
60°-70°	4.1	1.3
70°-80°	1.4	0.5
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°	257.2	80.6
0°-40°	287.2	90.0
0°-60°	313.5	98.2
0°-90°	319.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	319.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1032	
5°	907	80
15°	431	119
25°	117	58
35°	47	30
45°	21	17
55°	10	9
65°	4	4
75°	1	1
85°	0	0
90°	0	



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CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RD5L-400LM-2700K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1031.7
2.5°	1003.7
5°	906.7
7.5°	798.6
10°	682.5
12.5°	550.4
15°	431.3
17.5°	328.2
20°	242.2
22.5°	170.1
25°	117.1
27.5°	84.1
30°	66.0
32.5°	55.0
35°	47.0
37.5°	41.0
40°	35.0
42.5°	29.0
45°	21.0
47.5°	16.0
50°	14.0
52.5°	12.0
55°	10.0
57.5°	8.0
60°	7.0
62.5°	5.0
65°	4.0
67.5°	3.0
70°	2.0
72.5°	2.0
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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(END OF REPORT)