

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: P885823

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMWB-400LM-2700K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885823
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-2700K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

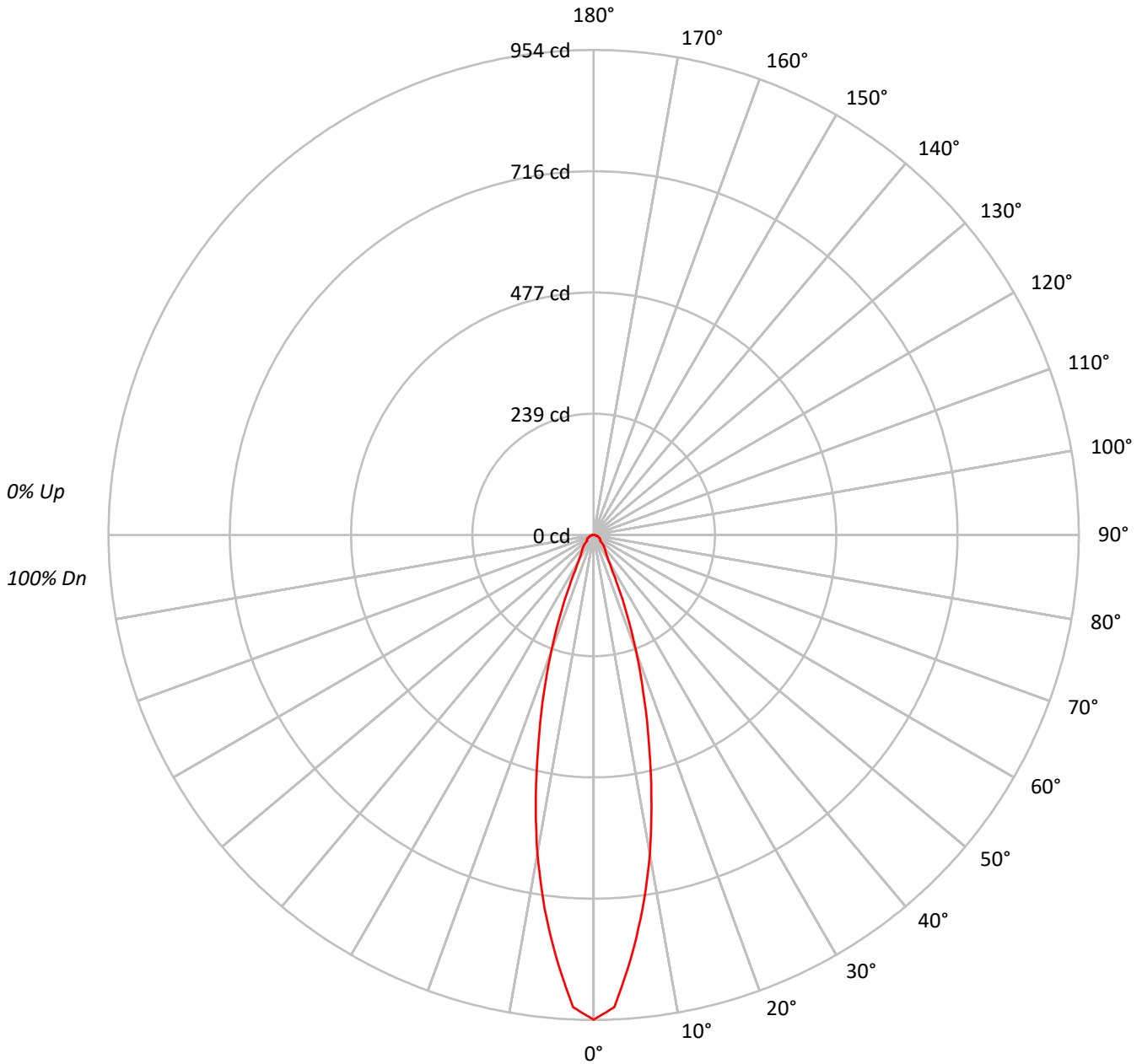
Lumens per Lamp: N/A
Luminaire Lumens: 324.8 lumens
Efficiency: N/A
Efficacy: 54.1 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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																	
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	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	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	87	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	71	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°	1882167
5°	1657768
10°	1276139
15°	851794
20°	512239
25°	254775
30°	134452
35°	98779
40°	85017
45°	69775
50°	52195
55°	55052
60°	55259
65°	51368
70°	46162
75°	45751
80°	34096
85°	22644

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 69775 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	22.7
10°-20°	115.3	35.5
20°-30°	57.8	17.8
30°-40°	26.7	8.2
40°-50°	18.6	5.7
50°-60°	14.2	4.4
60°-70°	11.1	3.4
70°-80°	5.9	1.8
80°-90°	1.5	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°	246.8	76.0
0°-40°	273.5	84.2
0°-60°	306.3	94.3
0°-90°	324.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	324.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	954	
5°	837	74
15°	417	115
25°	117	58
35°	41	27
45°	25	19
55°	16	14
65°	11	11
75°	6	6
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	953.7
2.5°	929.8
5°	836.8
7.5°	739.8
10°	636.8
12.5°	524.9
15°	416.9
17.5°	324.9
20°	243.9
22.5°	174.0
25°	117.0
27.5°	79.0
30°	59.0
32.5°	48.0
35°	41.0
37.5°	37.0
40°	33.0
42.5°	29.0
45°	25.0
47.5°	18.0
50°	17.0
52.5°	17.0
55°	16.0
57.5°	15.0
60°	14.0
62.5°	13.0
65°	11.0
67.5°	10.0
70°	8.0
72.5°	7.0
75°	6.0
77.5°	4.0
80°	3.0
82.5°	2.0
85°	1.0
87.5°	1.0
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)