

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: P885817

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMBB-400LM-5000K

Issue Date: 7/18/2024

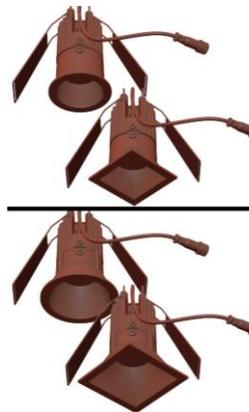
Test Information

Test Method: LM-79-2019
Report Number: P885817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-123)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMMBB-400LM-5000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

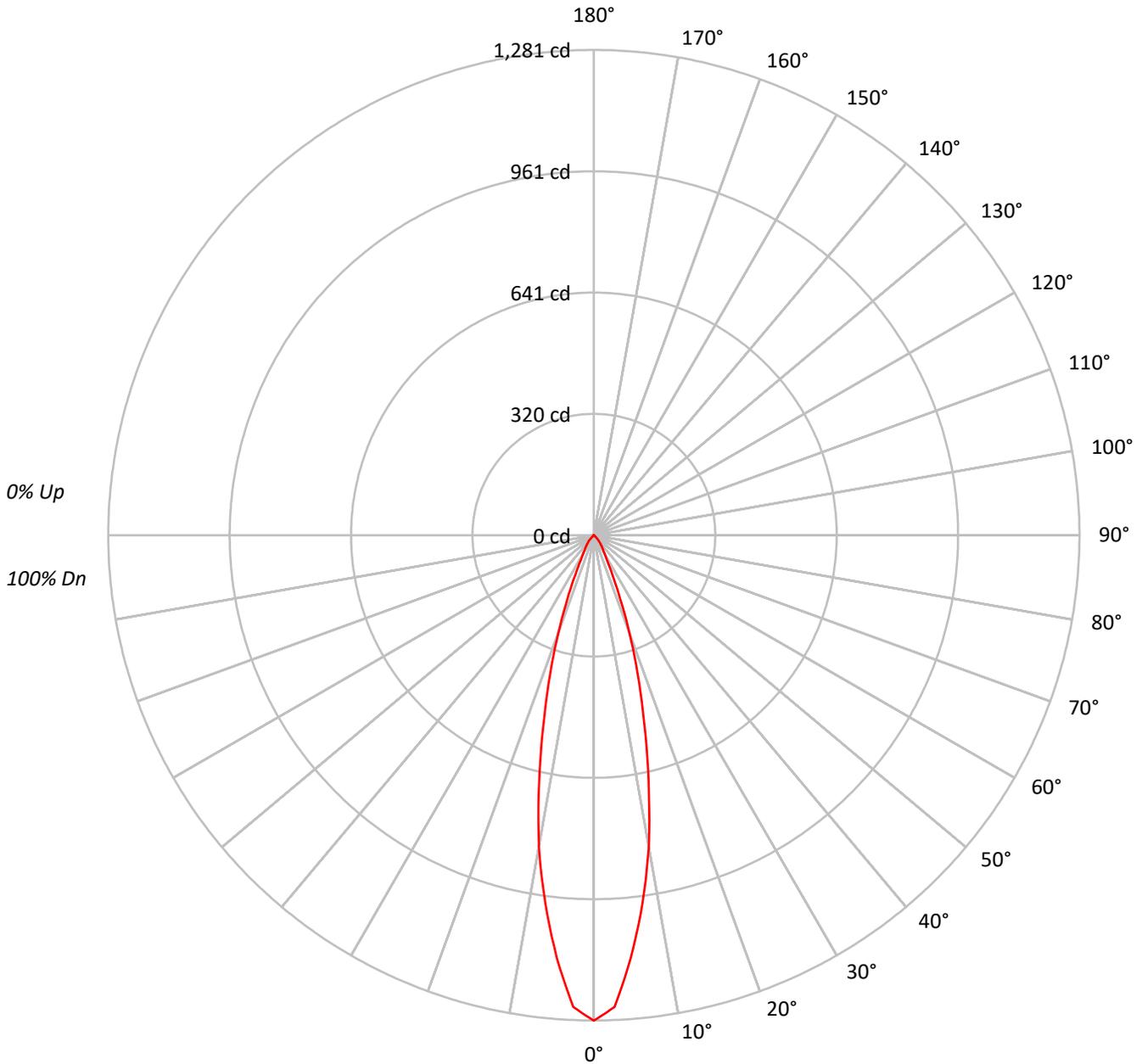
Lumens per Lamp: N/A
Luminaire Lumens: 329.8 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.45
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																			
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	96	95	94	92																			
3	107	102	98	95	105	100	97	94	98	95	93	96	93	91	94	92	90	89																			
4	103	97	93	90	101	96	92	89	94	91	88	92	90	87	91	88	86	85																			
5	100	93	89	86	98	92	88	85	91	87	84	89	86	84	88	85	83	82																			
6	96	90	85	82	95	89	85	82	88	84	81	86	83	81	85	82	80	79																			
7	93	86	82	79	92	86	81	78	85	81	78	83	80	78	82	80	77	76																			
8	90	83	79	76	89	83	78	76	82	78	75	81	77	75	80	77	75	74																			
9	88	80	76	73	87	80	76	73	79	75	73	78	75	72	78	75	72	71																			
10	85	78	73	71	84	77	73	71	77	73	70	76	73	70	75	72	70	69																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2528897
5°	2219008
10°	1671125
15°	1042012
20°	571044
25°	252162
30°	127388
35°	84565
40°	56936
45°	18142
50°	7983
55°	4473
60°	5131
65°	0
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18142 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.0	29.7
10°-20°	141.5	42.9
20°-30°	59.3	18.0
30°-40°	22.7	6.9
40°-50°	6.9	2.1
50°-60°	1.3	0.4
60°-70°	0.2	0.0
70°-80°	0.0	0.0
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°	298.7	90.6
0°-40°	321.4	97.5
0°-60°	329.7	100.0
0°-90°	329.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	329.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1281	
5°	1120	98
15°	510	141
25°	116	59
35°	35	23
45°	6	7
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1281.4
2.5°	1246.3
5°	1120.1
7.5°	980.9
10°	833.9
12.5°	666.1
15°	510.0
17.5°	382.5
20°	271.9
22.5°	180.8
25°	115.8
27.5°	76.8
30°	55.9
32.5°	44.2
35°	35.1
37.5°	28.6
40°	22.1
42.5°	15.6
45°	6.5
47.5°	2.6
50°	2.6
52.5°	1.3
55°	1.3
57.5°	1.3
60°	1.3
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
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)