

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: P885806

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMB-200LM-4000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885806
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-120)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMB-200LM-4000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

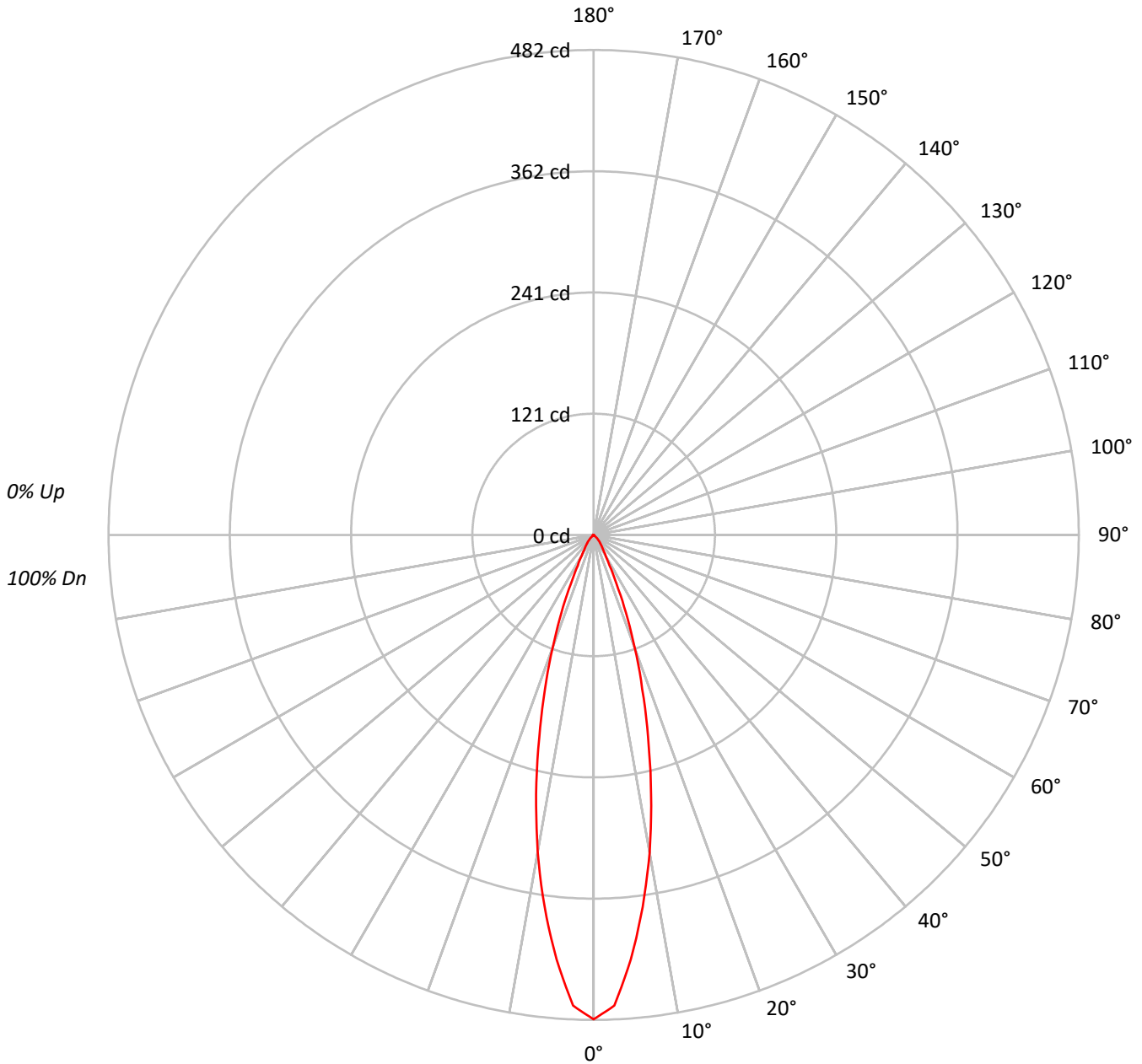
Lumens per Lamp: N/A
Luminaire Lumens: 134.8 lumens
Efficiency: N/A
Efficacy: 40.8 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 3.3
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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	115	112	110	108	112	110	108	107	106	105	104		103	101	100		99	98	98	96
2	110	107	103	101	108	105	102	99	102	99	97		99	97	95		96	95	93	92
3	106	101	97	94	105	100	96	94	97	95	92		95	93	91		93	91	89	88
4	103	97	92	89	101	96	92	89	94	90	88		92	89	87		90	88	86	84
5	99	93	88	85	98	92	87	84	90	86	84		88	85	83		87	84	82	81
6	96	89	84	81	94	88	84	81	87	83	80		85	82	80		84	81	79	78
7	92	85	81	77	91	85	80	77	84	80	77		83	79	77		82	78	76	75
8	90	82	78	74	88	82	77	74	81	77	74		80	76	74		79	76	73	72
9	87	79	75	72	86	79	75	72	78	74	71		77	74	71		77	73	71	70
10	84	77	72	69	83	76	72	69	76	72	69		75	71	69		74	71	69	68

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	950260
5°	838789
10°	641276
15°	425795
20°	249294
25°	116500
30°	53325
35°	34452
40°	23702
45°	12839
50°	3070
55°	1720
60°	1974
65°	0
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12839 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.2	27.6
10°-20°	57.5	42.6
20°-30°	26.7	19.8
30°-40°	9.2	6.8
40°-50°	3.4	2.6
50°-60°	0.6	0.5
60°-70°	0.2	0.1
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°	121.3	90.0
0°-40°	130.5	96.9
0°-60°	134.6	99.9
0°-90°	134.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	134.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	482	
5°	423	37
15°	208	57
25°	54	27
35°	14	9
45°	5	3
55°	0	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	481.5
2.5°	468.3
5°	423.4
7.5°	373.0
10°	320.0
12.5°	263.9
15°	208.4
17.5°	160.5
20°	118.7
22.5°	83.6
25°	53.5
27.5°	34.1
30°	23.4
32.5°	17.8
35°	14.3
37.5°	11.2
40°	9.2
42.5°	7.1
45°	4.6
47.5°	1.5
50°	1.0
52.5°	1.0
55°	0.5
57.5°	0.5
60°	0.5
62.5°	0.5
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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