

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: P885799

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMB-100LM-3000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885799
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-100LM-3000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

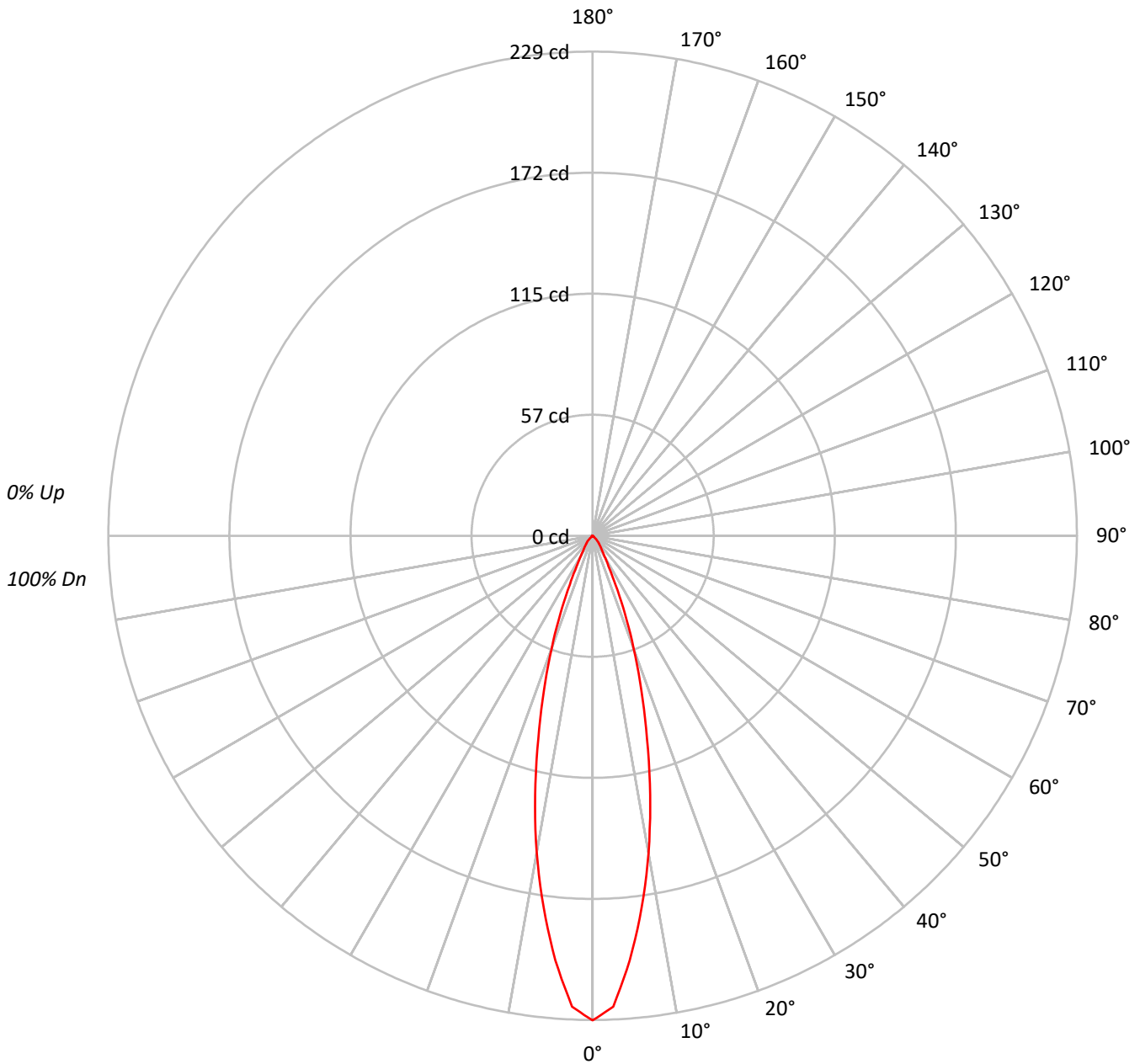
Lumens per Lamp: N/A
Luminaire Lumens: 64.1 lumens
Efficiency: N/A
Efficacy: 29.2 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 2.2
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	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	115	112	110	108	112	110	108	107	106	105	104	103	101	100	99	98	98	96	96	96	96
2	110	107	103	101	108	105	102	99	102	99	97	99	97	95	96	95	93	92	92	92	92
3	106	101	97	94	105	100	96	94	98	95	92	95	93	91	93	91	89	88	88	88	88
4	103	97	92	89	101	96	92	89	94	90	88	92	89	87	90	88	86	84	84	84	84
5	99	93	88	85	98	92	87	84	90	86	84	89	85	83	87	84	82	81	81	81	81
6	96	89	84	81	94	88	84	81	87	83	80	85	82	80	84	81	79	78	78	78	78
7	92	85	81	77	91	85	80	77	84	80	77	83	79	77	82	78	76	75	75	75	75
8	90	82	78	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72	72	72	72
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70	70	70	70
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68	68	68	68

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	452336
5°	399386
10°	305207
15°	202682
20°	118661
25°	55528
30°	25523
35°	16383
40°	11336
45°	6140
50°	1535
55°	688
60°	789
65°	0
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6140 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.7	27.6
10°-20°	27.3	42.6
20°-30°	12.7	19.9
30°-40°	4.4	6.8
40°-50°	1.6	2.6
50°-60°	0.3	0.4
60°-70°	0.1	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°	57.8	90.1
0°-40°	62.2	96.9
0°-60°	64.1	99.9
0°-90°	64.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	64.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	229	
5°	202	18
15°	99	27
25°	26	13
35°	7	4
45°	2	2
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	229.2
2.5°	222.9
5°	201.6
7.5°	177.5
10°	152.3
12.5°	125.6
15°	99.2
17.5°	76.4
20°	56.5
22.5°	39.8
25°	25.5
27.5°	16.3
30°	11.2
32.5°	8.5
35°	6.8
37.5°	5.3
40°	4.4
42.5°	3.4
45°	2.2
47.5°	0.7
50°	0.5
52.5°	0.5
55°	0.2
57.5°	0.2
60°	0.2
62.5°	0.2
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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