

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: P885810

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMB-400LM-3500K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885810
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-400LM-3500K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

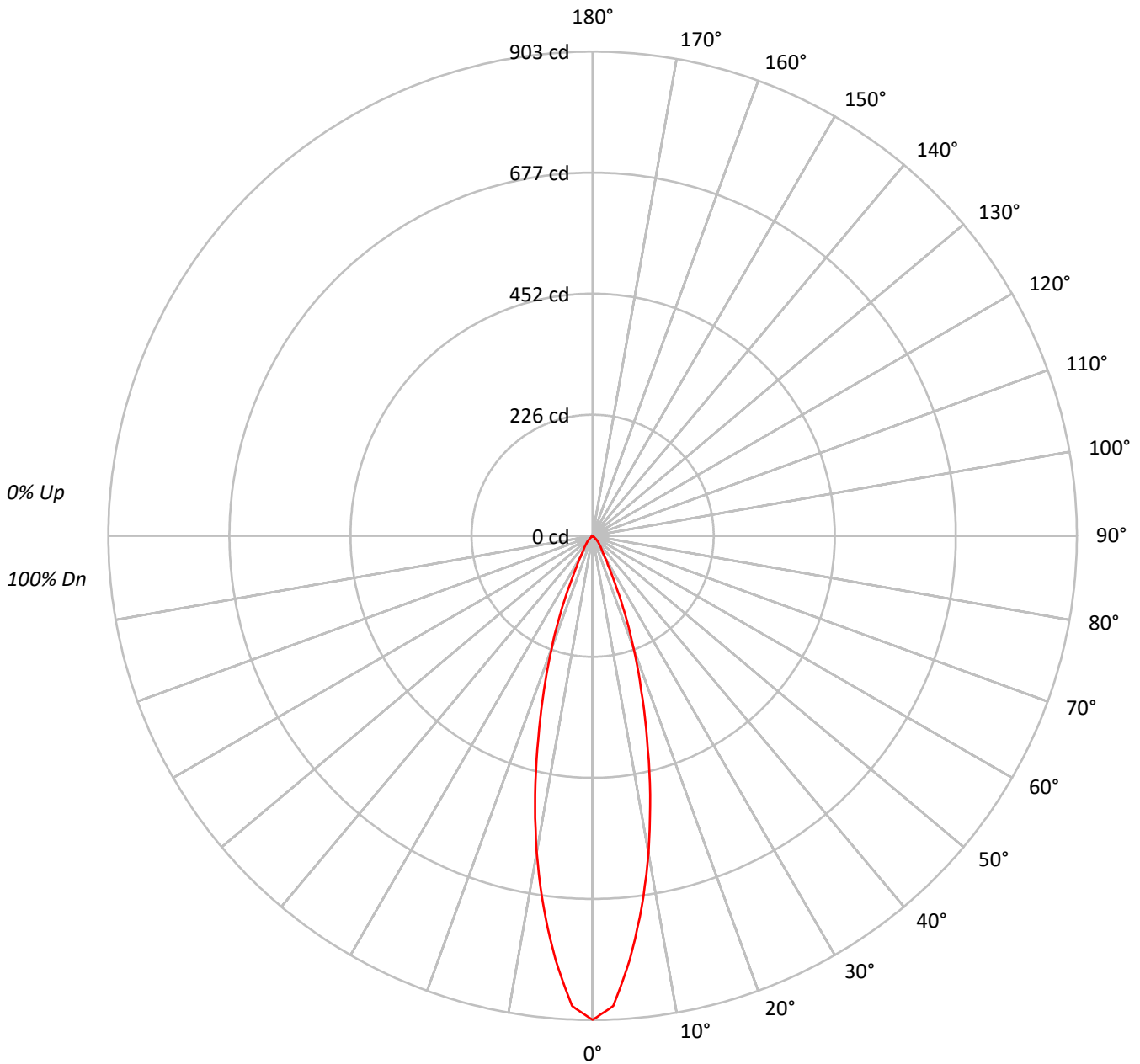
Lumens per Lamp: N/A
Luminaire Lumens: 252.7 lumens
Efficiency: N/A
Efficacy: 42.1 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P885810
CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMB-400LM-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P885810

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDDB-400LM-3500K

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	106	103	101	108	105	102	99	102	99	97	99	97	95	96	95	93	92
3	106	101	97	94	105	100	96	93	97	94	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	89	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°	1781516
5°	1572582
10°	1202192
15°	798263
20°	467504
25°	218410
30°	100042
35°	64327
40°	44312
45°	24003
50°	5834
55°	3441
60°	3947
65°	0
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24003 cd/sqm



TEST NUMBER: P885810

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMB-400LM-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	27.6
10°-20°	107.7	42.6
20°-30°	50.1	19.8
30°-40°	17.2	6.8
40°-50°	6.5	2.6
50°-60°	1.2	0.5
60°-70°	0.4	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°	227.5	90.0
0°-40°	244.7	96.8
0°-60°	252.4	99.9
0°-90°	252.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	252.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	903	
5°	794	70
15°	391	108
25°	100	50
35°	27	17
45°	9	6
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P885810

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMB-400LM-3500K

CANDELA DISTRIBUTION (FULL):

	0°
0°	902.7
2.5°	877.8
5°	793.8
7.5°	699.2
10°	599.9
12.5°	494.8
15°	390.7
17.5°	300.9
20°	222.6
22.5°	156.7
25°	100.3
27.5°	64.0
30°	43.9
32.5°	33.4
35°	26.7
37.5°	21.0
40°	17.2
42.5°	13.4
45°	8.6
47.5°	2.9
50°	1.9
52.5°	1.9
55°	1.0
57.5°	1.0
60°	1.0
62.5°	1.0
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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)