

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: P885831

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-4000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-119)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-4000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

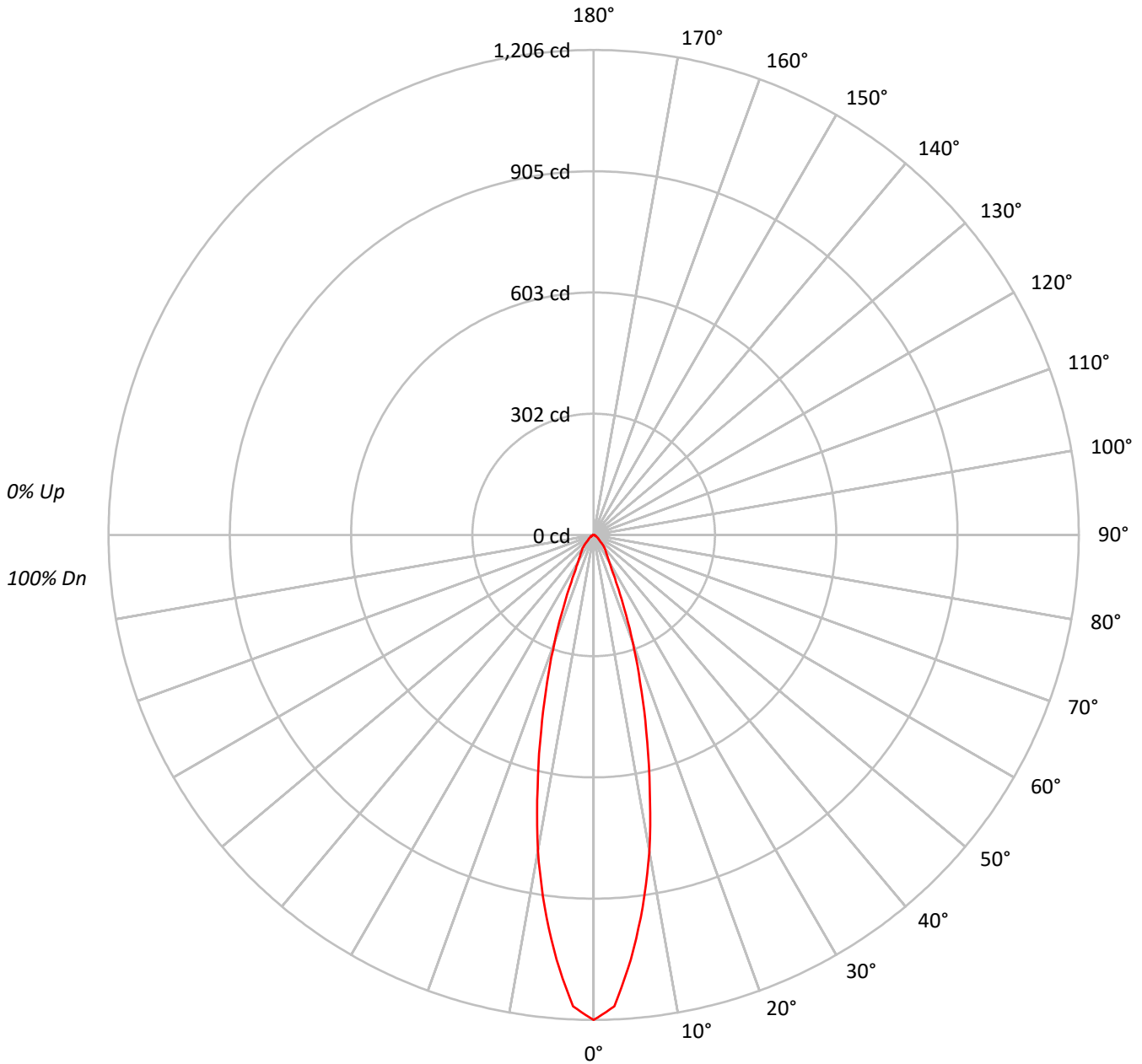
Lumens per Lamp: N/A
Luminaire Lumens: 373.2 lumens
Efficiency: N/A
Efficacy: 62.2 lumens/watt
Spacing Criteria (0/90/45): 0.44 / 0.44 / 0.47
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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: P885831
CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P885831

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RD5L-400LM-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95																												
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89																												
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84																												
4	100	93	89	85	98	92	88	84	90	86	83	88	85	82	87	84	82	80																												
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76																												
6	92	85	79	76	91	84	79	76	82	78	75	81	77	75	80	77	74	73																												
7	89	81	76	72	88	80	75	72	79	75	72	78	74	71	77	74	71	70																												
8	86	78	72	69	85	77	72	69	76	72	69	75	71	68	74	71	68	67																												
9	83	75	69	66	82	74	69	66	73	69	66	72	68	66	72	68	65	64																												
10	80	72	67	64	79	71	67	63	71	66	63	70	66	63	69	66	63	62																												

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2380486
5°	2099945
10°	1598981
15°	1030366
20°	594566
25°	298108
30°	175927
35°	132509
40°	105370
45°	68659
50°	50353
55°	40257
60°	32366
65°	21948
70°	13272
75°	9150
80°	13638
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 68659 cd/sqm



TEST NUMBER: P885831

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RD2SL-400LM-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	24.9
10°-20°	139.4	37.4
20°-30°	68.3	18.3
30°-40°	35.1	9.4
40°-50°	20.2	5.4
50°-60°	10.6	2.8
60°-70°	4.7	1.3
70°-80°	1.7	0.5
80°-90°	0.2	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°	300.7	80.6
0°-40°	335.8	90.0
0°-60°	366.6	98.2
0°-90°	373.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	373.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1206	
5°	1060	93
15°	504	139
25°	137	68
35°	55	35
45°	25	20
55°	12	11
65°	5	5
75°	1	2
85°	0	0
90°	0	



TEST NUMBER: P885831

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL-400LM-4000K

CANDELA DISTRIBUTION (FULL):

	0°
0°	1206.2
2.5°	1173.5
5°	1060.0
7.5°	933.6
10°	797.9
12.5°	643.5
15°	504.3
17.5°	383.8
20°	283.1
22.5°	198.9
25°	136.9
27.5°	98.3
30°	77.2
32.5°	64.3
35°	55.0
37.5°	48.0
40°	40.9
42.5°	33.9
45°	24.6
47.5°	18.7
50°	16.4
52.5°	14.0
55°	11.7
57.5°	9.4
60°	8.2
62.5°	5.8
65°	4.7
67.5°	3.5
70°	2.3
72.5°	2.3
75°	1.2
77.5°	1.2
80°	1.2
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)