

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: P885834

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL B-400LM-3000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885834
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-122)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL B-400LM-3000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, METALLIC SILVER BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

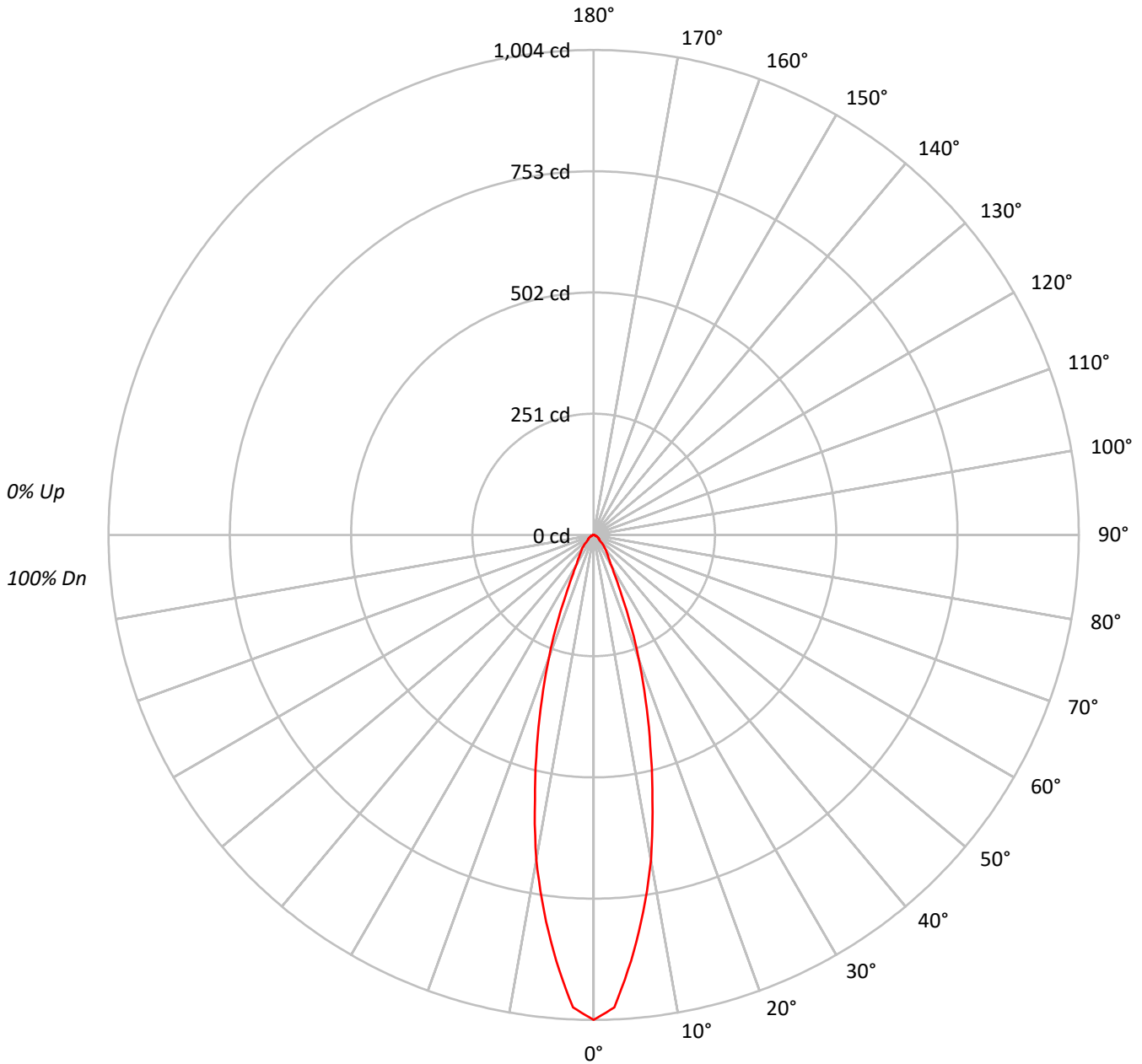
Lumens per Lamp: N/A
Luminaire Lumens: 339.2 lumens
Efficiency: N/A
Efficacy: 56.5 lumens/watt
Spacing Criteria (0/90/45): 0.46 / 0.46 / 0.49
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

Input Watts (W): 6
Input Voltage (V): NR
Input Current (A_{in}): 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: P885834
CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL B-400LM-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P885834

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSLb-400LM-3000K

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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89																			
3	104	98	94	90	102	97	93	89	94	91	88	92	89	86	90	87	85	84																			
4	100	93	88	84	98	92	87	83	89	86	82	88	84	81	86	83	80	79																			
5	95	88	83	79	94	87	82	78	85	81	78	84	80	77	82	79	76	75																			
6	92	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71																			
7	88	80	74	71	87	79	74	71	78	73	70	77	73	70	76	72	70	68																			
8	85	76	71	67	84	76	71	67	75	70	67	74	70	67	73	69	67	65																			
9	82	73	68	65	81	73	68	64	72	67	64	71	67	64	70	67	64	63																			
10	79	70	65	62	78	70	65	62	69	65	62	69	64	62	68	64	61	60																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1981436
5°	1754247
10°	1368322
15°	925756
20°	567474
25°	292011
30°	163394
35°	120222
40°	96353
45°	69496
50°	47896
55°	43010
60°	37103
65°	28953
70°	17888
75°	7625
80°	11365
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 69496 cd/sqm



TEST NUMBER: P885834

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSLb-400LM-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	23.1
10°-20°	124.9	36.8
20°-30°	66.3	19.5
30°-40°	32.0	9.4
40°-50°	18.9	5.6
50°-60°	11.1	3.3
60°-70°	5.9	1.7
70°-80°	1.6	0.5
80°-90°	0.1	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°	269.4	79.4
0°-40°	301.4	88.9
0°-60°	331.5	97.7
0°-90°	339.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	339.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1004	
5°	886	78
15°	453	125
25°	134	66
35°	50	32
45°	25	19
55°	12	11
65°	6	6
75°	1	2
85°	0	0
90°	0	



TEST NUMBER: P885834

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D25NFL-TL1RDSL B-400LM-3000K

CANDELA DISTRIBUTION (FULL):

0°	
0°	1004.0
2.5°	979.0
5°	885.5
7.5°	786.8
10°	682.8
12.5°	562.3
15°	453.1
17.5°	355.4
20°	270.2
22.5°	196.4
25°	134.1
27.5°	94.6
30°	71.7
32.5°	59.2
35°	49.9
37.5°	42.6
40°	37.4
42.5°	31.2
45°	24.9
47.5°	16.6
50°	15.6
52.5°	13.5
55°	12.5
57.5°	11.4
60°	9.4
62.5°	7.3
65°	6.2
67.5°	4.2
70°	3.1
72.5°	2.1
75°	1.0
77.5°	1.0
80°	1.0
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)