

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: P885875

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMBB-400LM-3500K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885875
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-129)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDMBB-400LM-3500K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

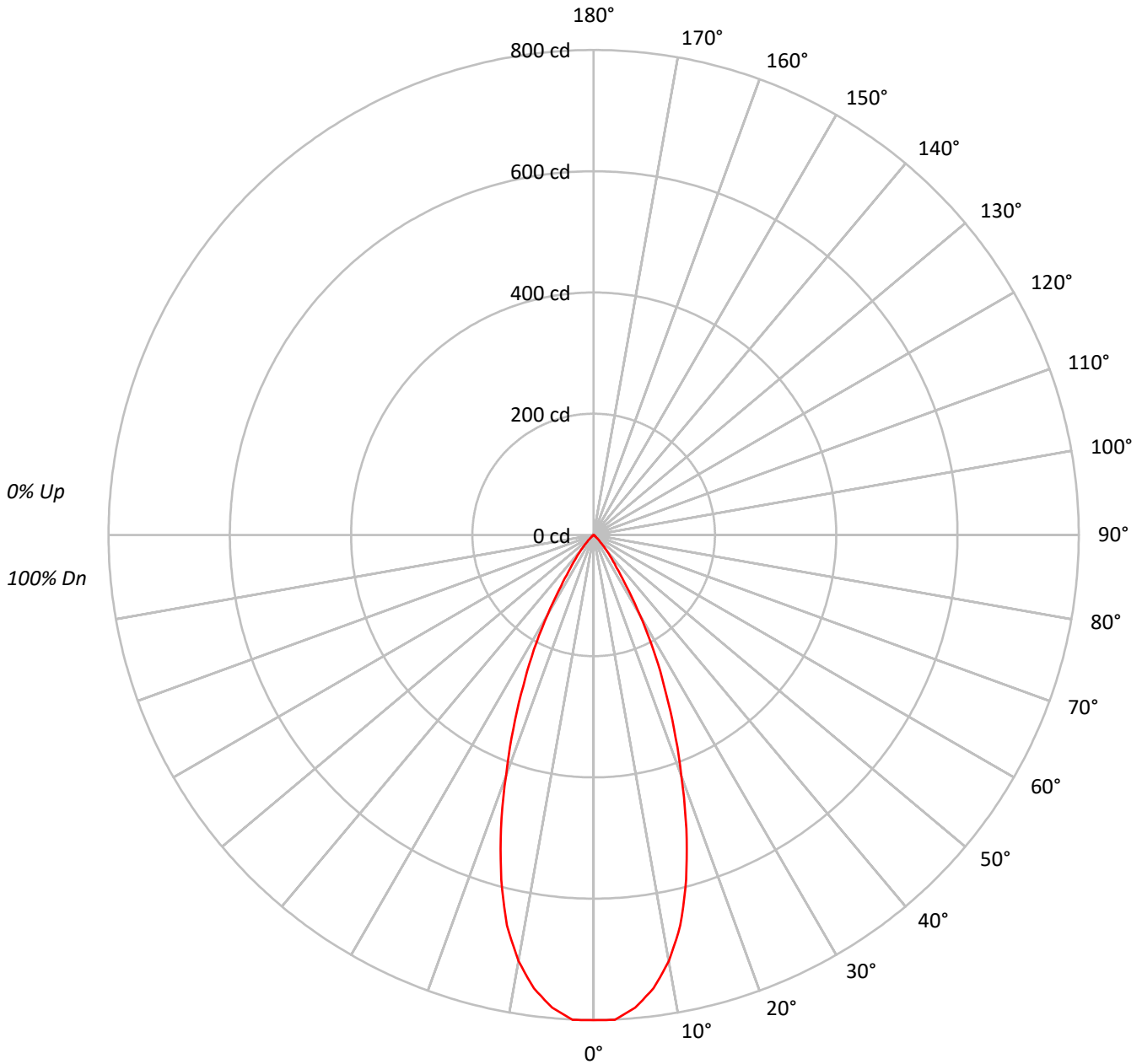
Lumens per Lamp: N/A
Luminaire Lumens: 416.3 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.66
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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: P885875
CATALOG NUMBER: ML104LSFL9FS1E-TIR1D40FL-TL1RDMBB-400LM-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P885875

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D40FL-TL1RDMBB-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	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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	95
2	110	105	102	99	107	104	100	98	100	98	96	97	95	94	95	93	92	90	90	90	90
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	91	89	87	85	85	85	85
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81	81	81	81
5	96	89	84	81	95	88	84	80	87	83	80	85	82	79	84	81	78	77	77	77	77
6	93	85	80	76	91	84	79	76	83	78	75	81	78	75	80	77	74	73	73	73	73
7	89	81	76	72	88	80	75	72	79	75	72	78	74	71	77	73	71	70	70	70	70
8	85	77	72	69	84	77	72	68	76	71	68	75	71	68	74	70	68	66	66	66	66
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	65	63	63	63	63
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61	61	61	61

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1579820
5°	1550988
10°	1430245
15°	1202605
20°	887964
25°	597741
30°	345246
35°	158770
40°	81926
45°	27631
50°	10132
55°	3785
60°	0
65°	0
70°	0
75°	0
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27631 cd/sqm



TEST NUMBER: P885875

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D40FL-TL1RDMBB-400LM-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.5	17.4
10°-20°	160.5	38.6
20°-30°	126.0	30.3
30°-40°	46.4	11.2
40°-50°	9.7	2.3
50°-60°	1.1	0.3
60°-70°	0.0	0.0
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°	359.1	86.3
0°-40°	405.5	97.4
0°-60°	416.3	100.0
0°-90°	416.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	416.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	800	
5°	783	73
15°	589	161
25°	274	126
35°	66	46
45°	10	10
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P885875

CATALOG NUMBER: ML104LSFL9FS1E-TIR1D40FL-TL1RDMBB-400LM-3500K

CANDELA DISTRIBUTION (FULL):

	0°
0°	800.5
2.5°	800.5
5°	782.9
7.5°	754.4
10°	713.7
12.5°	659.9
15°	588.6
17.5°	508.4
20°	422.8
22.5°	345.9
25°	274.5
27.5°	213.0
30°	151.5
32.5°	99.9
35°	65.9
37.5°	47.2
40°	31.8
42.5°	18.7
45°	9.9
47.5°	5.5
50°	3.3
52.5°	2.2
55°	1.1
57.5°	0.0
60°	0.0
62.5°	0.0
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)