

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: P885896

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDSLb-400LM-4000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-128)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDSL B-400LM-4000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 478.0 lumens
Efficiency: N/A
Efficacy: 79.7 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

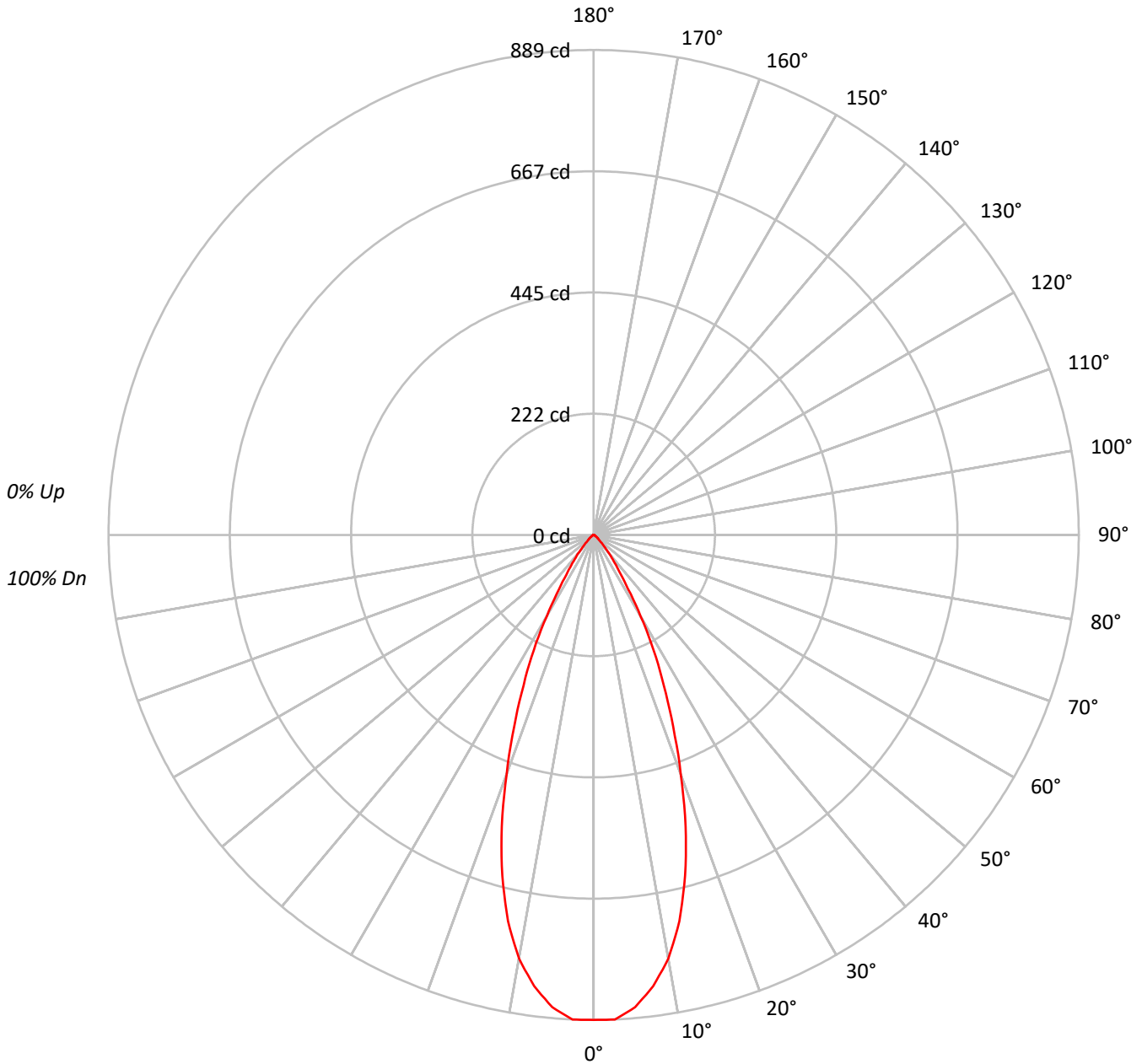
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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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	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	90	102	97	93	90	95	91	88	92	89	87	90	88	86	84																			
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80																			
5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75																			
6	91	84	78	74	90	83	78	74	81	77	74	80	76	73	79	75	73	71																			
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	68																			
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65																			
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	66	63	62																			
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1754676
5°	1721955
10°	1579943
15°	1321721
20°	980373
25°	662197
30°	391962
35°	197318
40°	111553
45°	52192
50°	32238
55°	19956
60°	13815
65°	10741
70°	6924
75°	9150
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 52192 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.3	16.8
10°-20°	176.7	37.0
20°-30°	139.7	29.2
30°-40°	56.0	11.7
40°-50°	16.4	3.4
50°-60°	5.7	1.2
60°-70°	2.3	0.5
70°-80°	0.8	0.2
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°	396.7	83.0
0°-40°	452.8	94.7
0°-60°	474.9	99.4
0°-90°	478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	478.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	889	
5°	869	80
15°	647	177
25°	304	140
35°	82	56
45°	19	16
55°	6	6
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	889.1
2.5°	889.1
5°	869.2
7.5°	834.1
10°	788.4
12.5°	725.3
15°	646.9
17.5°	560.3
20°	466.8
22.5°	380.2
25°	304.1
27.5°	237.5
30°	172.0
32.5°	117.0
35°	81.9
37.5°	59.7
40°	43.3
42.5°	28.1
45°	18.7
47.5°	12.9
50°	10.5
52.5°	8.2
55°	5.8
57.5°	4.7
60°	3.5
62.5°	3.5
65°	2.3
67.5°	1.2
70°	1.2
72.5°	1.2
75°	1.2
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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(END OF REPORT)