

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: P885891

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDSL-400LM-4000K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P885891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-125)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDSL-400LM-4000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, METALLIC SILVER TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

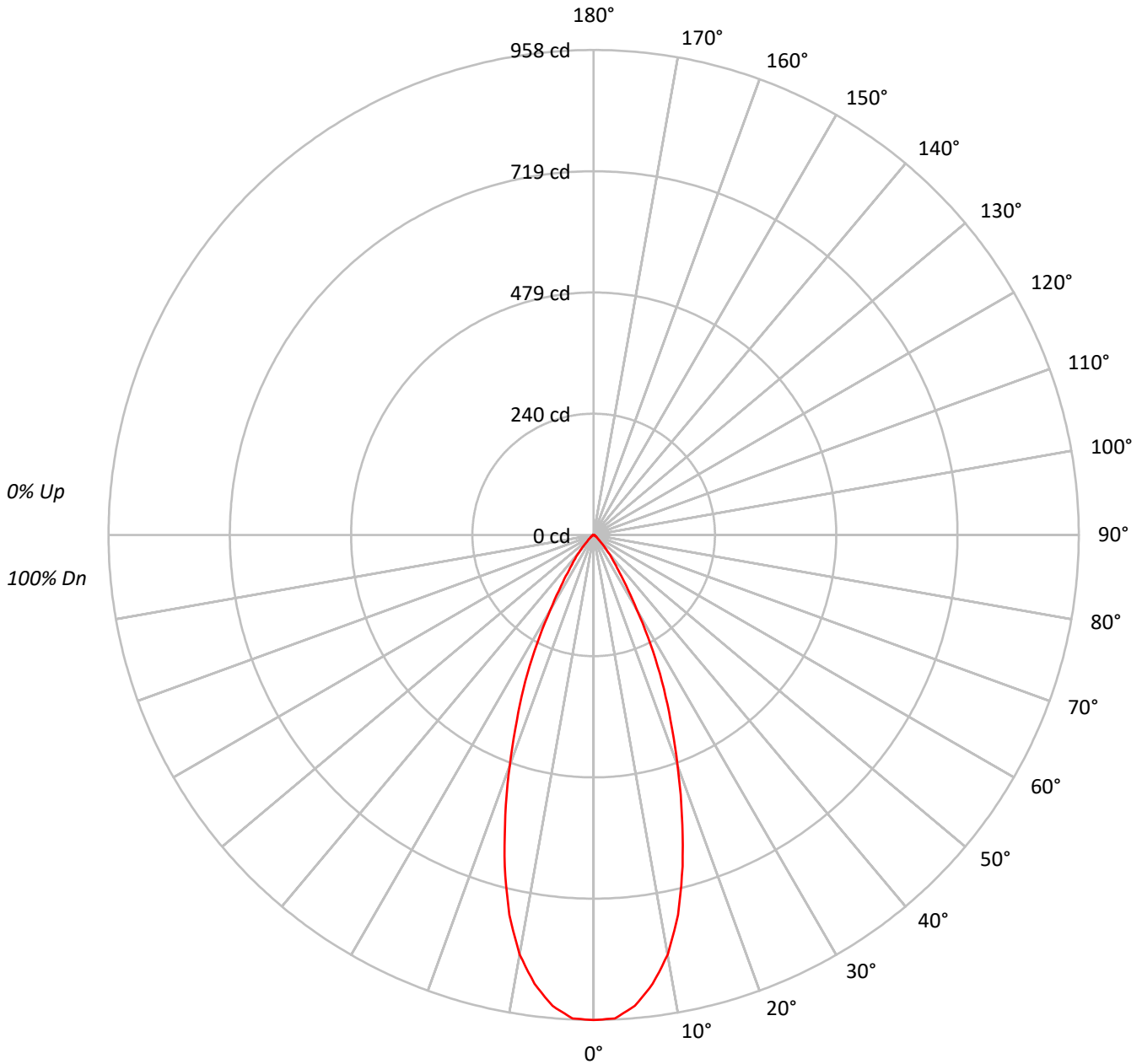
Lumens per Lamp: N/A
Luminaire Lumens: 498.3 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 0.65 / 0.66
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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				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			
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	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	86	81	78	84	80	78	83	79	77	76			
6	92	84	78	75	90	83	78	74	82	77	74	80	76	73	79	76	73	72			
7	88	80	74	71	87	79	74	70	78	73	70	77	73	70	76	72	69	68			
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	73	69	66	65			
9	81	73	67	64	80	72	67	64	71	67	64	70	66	63	70	66	63	62			
10	78	69	64	61	77	69	64	61	68	64	61	68	63	61	67	63	60	59			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1891245
5°	1849933
10°	1686355
15°	1384854
20°	1016076
25°	694860
30°	388772
35°	202618
40°	114387
45°	48843
50°	28554
55°	19956
60°	13815
65°	10741
70°	6924
75°	9150
80°	13638
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 48843 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	17.3
10°-20°	185.3	37.2
20°-30°	144.4	29.0
30°-40°	57.2	11.5
40°-50°	16.2	3.2
50°-60°	5.3	1.1
60°-70°	2.3	0.5
70°-80°	1.3	0.3
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°	415.8	83.5
0°-40°	473.1	94.9
0°-60°	494.5	99.3
0°-90°	498.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	498.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	958	
5°	934	86
15°	678	185
25°	319	144
35°	84	57
45°	18	16
55°	6	5
65°	2	2
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	958.3
2.5°	956.0
5°	933.8
7.5°	894.1
10°	841.5
12.5°	769.0
15°	677.8
17.5°	579.7
20°	483.8
22.5°	396.2
25°	319.1
27.5°	241.9
30°	170.6
32.5°	119.2
35°	84.1
37.5°	63.1
40°	44.4
42.5°	28.0
45°	17.5
47.5°	12.9
50°	9.3
52.5°	7.0
55°	5.8
57.5°	4.7
60°	3.5
62.5°	2.3
65°	2.3
67.5°	2.3
70°	1.2
72.5°	1.2
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

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— 0°-180°

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