

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: P885884

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMWB-400LM-3000K

Issue Date: 6/19/2024

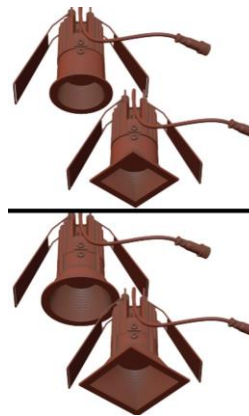
Test Information

Test Method: LM-79-2019
Report Number: P885884
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-127)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDMWB-400LM-3000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

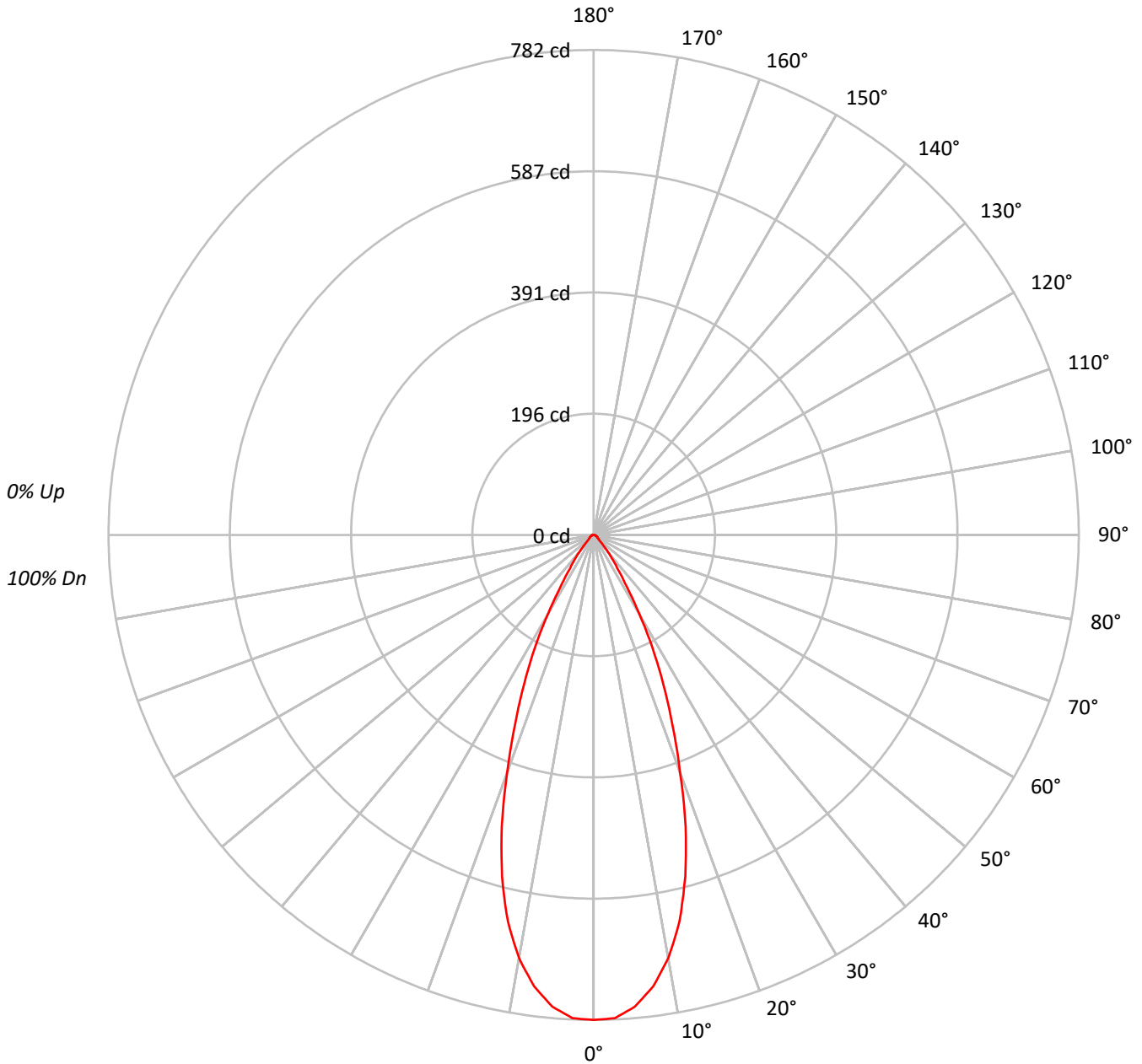
Lumens per Lamp: N/A
Luminaire Lumens: 425.8 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 0.67 / 0.67 / 0.66
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88																			
3	104	98	93	89	102	96	92	88	94	90	87	91	88	86	89	87	84	83																			
4	99	92	87	83	97	91	86	82	89	85	82	87	83	81	85	82	80	78																			
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74																			
6	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	71	70																			
7	87	78	73	69	86	78	73	69	77	72	69	75	71	68	74	71	68	67																			
8	83	75	69	66	82	74	69	65	73	68	65	72	68	65	71	67	65	63																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60																			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1543507
5°	1512357
10°	1388362
15°	1165010
20°	855201
25°	576836
30°	333852
35°	165275
40°	93776
45°	43540
50°	31931
55°	28558
60°	24472
65°	24283
70°	24235
75°	23638
80°	23867
85°	22644

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 43540 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	16.6
10°-20°	155.4	36.5
20°-30°	121.2	28.5
30°-40°	47.5	11.2
40°-50°	14.1	3.3
50°-60°	7.2	1.7
60°-70°	5.4	1.3
70°-80°	3.6	0.8
80°-90°	0.8	0.2
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°	347.2	81.5
0°-40°	394.7	92.7
0°-60°	416.0	97.7
0°-90°	425.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	425.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	782	
5°	763	71
15°	570	155
25°	265	121
35°	69	47
45°	16	14
55°	8	7
65°	5	5
75°	3	4
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	782.1
2.5°	780.0
5°	763.4
7.5°	734.3
10°	692.8
12.5°	638.8
15°	570.2
17.5°	492.3
20°	407.2
22.5°	331.3
25°	264.9
27.5°	204.6
30°	146.5
32.5°	99.7
35°	68.6
37.5°	50.9
40°	36.4
42.5°	23.9
45°	15.6
47.5°	11.4
50°	10.4
52.5°	8.3
55°	8.3
57.5°	7.3
60°	6.2
62.5°	6.2
65°	5.2
67.5°	5.2
70°	4.2
72.5°	4.2
75°	3.1
77.5°	3.1
80°	2.1
82.5°	1.0
85°	1.0
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)