

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: P885882

Luminaire Tested: ML104LSFL9FS1E-TIR1D40FL-TL1RDMW-400LM-5000K

Issue Date: 6/19/2024

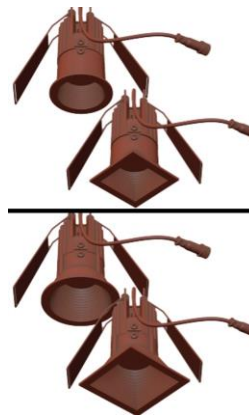
Test Information

Test Method: LM-79-2019
Report Number: P885882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-124)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D40FL-TL1RDMW-400LM-5000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 556.1 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 0.65 / 0.65
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

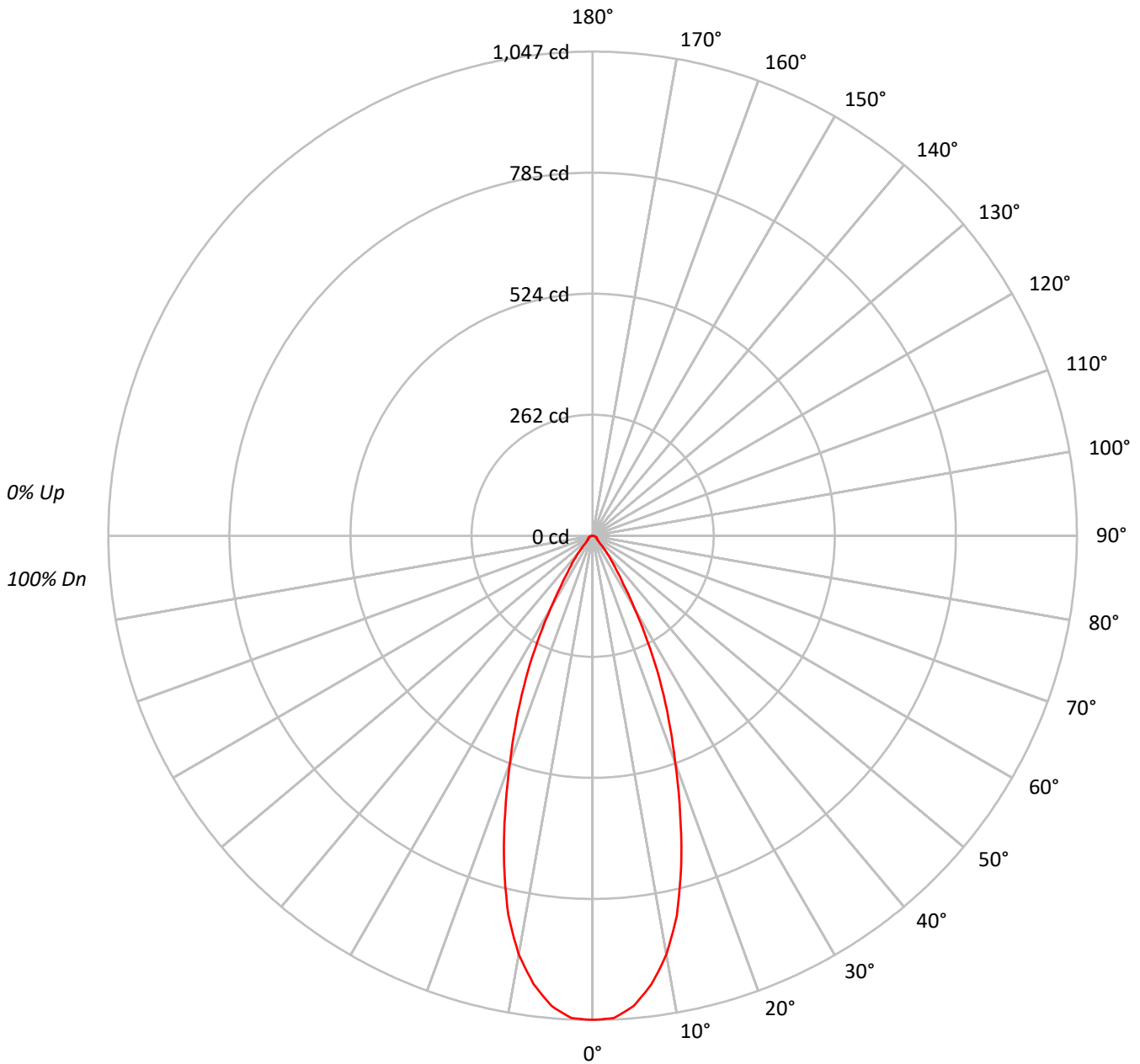
Input Watts (W): 6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94																			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88																			
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	83																			
4	99	92	87	83	97	91	86	82	88	84	81	87	83	80	85	82	79	78																			
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74																			
6	90	82	77	73	89	81	76	73	80	75	72	79	75	72	77	74	71	70																			
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66																			
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	64	63																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	61	60																			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	65	62	59	58																			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2065706
5°	2022089
10°	1842265
15°	1511530
20°	1095044
25°	744726
30°	411788
35°	212978
40°	120570
45°	54425
50°	43905
55°	40257
60°	41050
65°	42495
70°	37507
75°	39651
80°	44324
85°	29437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 58818 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.1	16.9
10°-20°	201.8	36.3
20°-30°	155.0	27.9
30°-40°	59.8	10.8
40°-50°	18.4	3.3
50°-60°	10.6	1.9
60°-70°	8.5	1.5
70°-80°	5.8	1.0
80°-90°	1.9	0.3
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°	450.9	81.1
0°-40°	510.7	91.8
0°-60°	539.8	97.1
0°-90°	556.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	556.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1047	
5°	1021	94
15°	740	202
25°	342	155
35°	88	60
45°	20	18
55°	12	11
65°	9	9
75°	5	6
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1046.7
2.5°	1044.1
5°	1020.7
7.5°	977.8
10°	919.3
12.5°	841.3
15°	739.8
17.5°	629.3
20°	521.4
22.5°	429.1
25°	342.0
27.5°	257.4
30°	180.7
32.5°	123.5
35°	88.4
37.5°	65.0
40°	46.8
42.5°	31.2
45°	19.5
47.5°	15.6
50°	14.3
52.5°	13.0
55°	11.7
57.5°	10.4
60°	10.4
62.5°	9.1
65°	9.1
67.5°	7.8
70°	6.5
72.5°	6.5
75°	5.2
77.5°	5.2
80°	3.9
82.5°	2.6
85°	1.3
87.5°	1.3
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)