

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: P885822

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMW-400LM-5000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-118)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMW-400LM-5000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

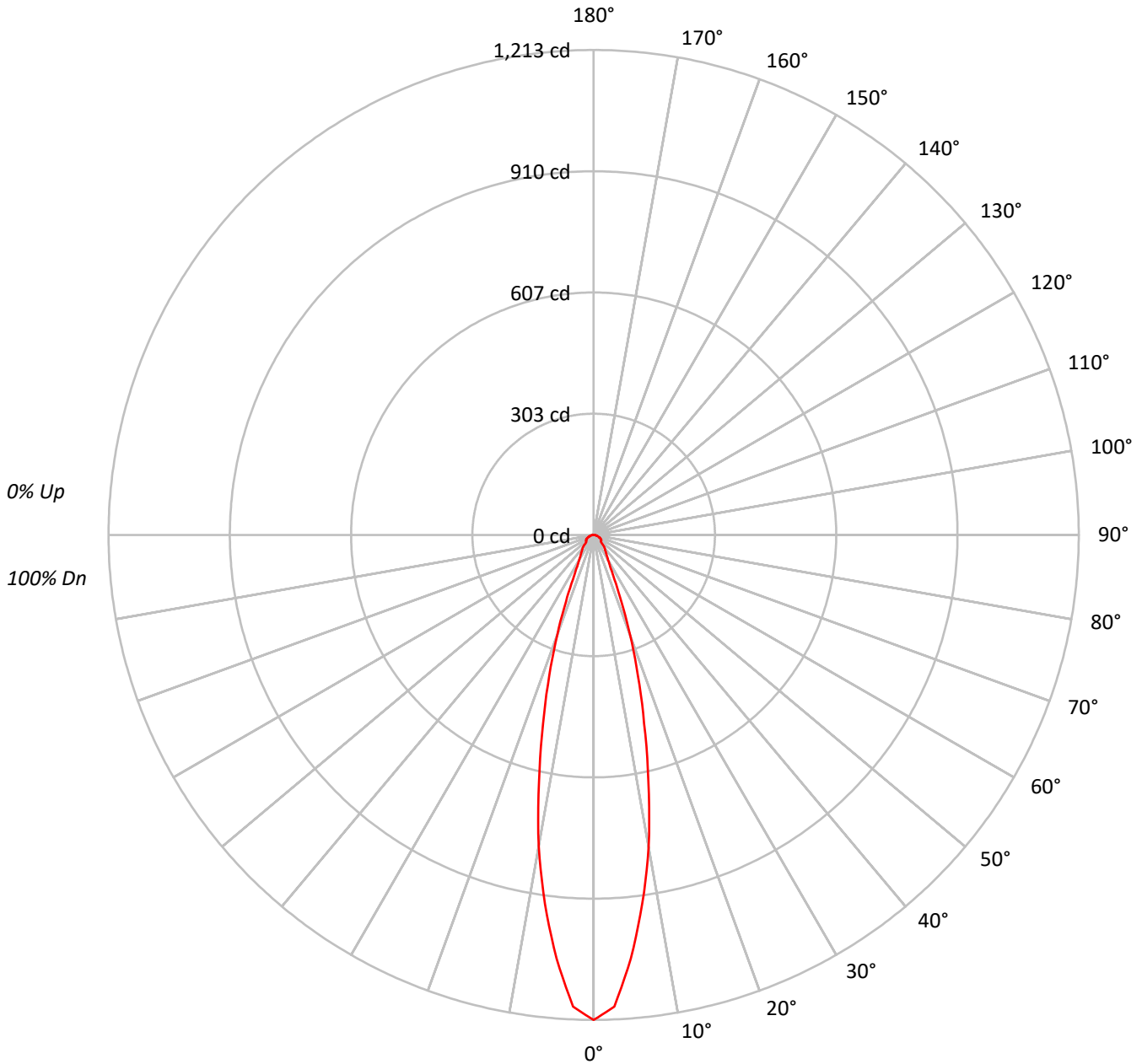
Lumens per Lamp: N/A
Luminaire Lumens: 397.1 lumens
Efficiency: N/A
Efficacy: 66.2 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.46
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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			100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92			92
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80			80
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75			75
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71			71
6	89	80	74	70	87	79	74	70	78	73	70	77	72	69	75	72	69	67			67
7	85	76	71	67	84	76	70	67	75	70	66	73	69	66	72	68	66	64			64
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	61			61
9	79	70	65	61	78	70	64	61	69	64	61	68	64	60	67	63	60	59			59
10	76	67	62	59	75	67	62	59	66	62	58	66	61	58	65	61	58	57			57

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2394301
5°	2107275
10°	1586957
15°	996245
20°	557183
25°	266098
30°	162938
35°	128413
40°	110522
45°	76195
50°	75836
55°	80514
60°	82099
65°	78920
70°	75013
75°	69389
80°	59099
85°	58874

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 60°
 Luminance: 82099 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	23.4
10°-20°	135.2	34.0
20°-30°	62.2	15.7
30°-40°	33.9	8.5
40°-50°	23.4	5.9
50°-60°	20.5	5.2
60°-70°	16.4	4.1
70°-80°	9.6	2.4
80°-90°	2.8	0.7
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°	290.4	73.1
0°-40°	324.3	81.7
0°-60°	368.3	92.7
0°-90°	397.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	397.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1213	
5°	1064	93
15°	488	135
25°	122	62
35°	53	34
45°	27	23
55°	23	21
65°	17	16
75°	9	10
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1213.2
2.5°	1180.7
5°	1063.7
7.5°	931.1
10°	791.9
12.5°	630.7
15°	487.6
17.5°	368.0
20°	265.3
22.5°	180.8
25°	122.2
27.5°	88.4
30°	71.5
32.5°	61.1
35°	53.3
37.5°	46.8
40°	42.9
42.5°	36.4
45°	27.3
47.5°	24.7
50°	24.7
52.5°	23.4
55°	23.4
57.5°	22.1
60°	20.8
62.5°	18.2
65°	16.9
67.5°	14.3
70°	13.0
72.5°	10.4
75°	9.1
77.5°	7.8
80°	5.2
82.5°	3.9
85°	2.6
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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