

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: P885820

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMW-400LM-3500K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885820
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-3500K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

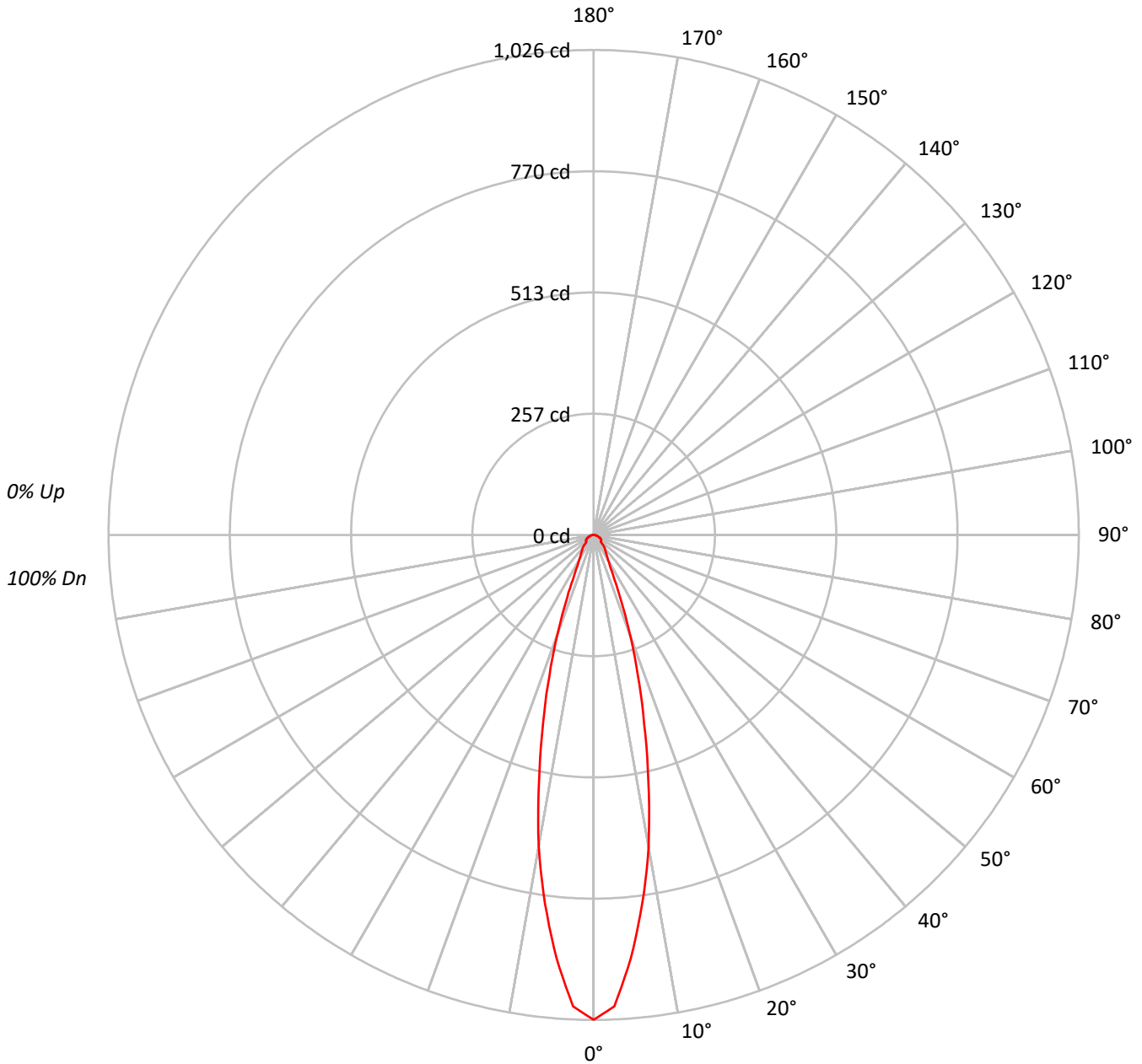
Lumens per Lamp: N/A
Luminaire Lumens: 335.8 lumens
Efficiency: N/A
Efficacy: 56.0 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.46
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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°	2024262
5°	1781586
10°	1341669
15°	842395
20°	471075
25°	224942
30°	137870
35°	108657
40°	93519
45°	64472
50°	64169
55°	68127
60°	69469
65°	66778
70°	63473
75°	58714
80°	50007
85°	49816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 60°
 Luminance: 69469 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	23.4
10°-20°	114.3	34.0
20°-30°	52.6	15.7
30°-40°	28.7	8.6
40°-50°	19.8	5.9
50°-60°	17.4	5.2
60°-70°	13.9	4.1
70°-80°	8.1	2.4
80°-90°	2.4	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°	245.5	73.1
0°-40°	274.2	81.7
0°-60°	311.4	92.7
0°-90°	335.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	335.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1026	
5°	899	79
15°	412	114
25°	103	53
35°	45	29
45°	23	20
55°	20	17
65°	14	14
75°	8	8
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1025.7
2.5°	998.2
5°	899.3
7.5°	787.1
10°	669.5
12.5°	533.2
15°	412.3
17.5°	311.1
20°	224.3
22.5°	152.8
25°	103.3
27.5°	74.8
30°	60.5
32.5°	51.7
35°	45.1
37.5°	39.6
40°	36.3
42.5°	30.8
45°	23.1
47.5°	20.9
50°	20.9
52.5°	19.8
55°	19.8
57.5°	18.7
60°	17.6
62.5°	15.4
65°	14.3
67.5°	12.1
70°	11.0
72.5°	8.8
75°	7.7
77.5°	6.6
80°	4.4
82.5°	3.3
85°	2.2
87.5°	1.1
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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