

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: P885824

Luminaire Tested: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMWB-400LM-3000K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P885824
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-121)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFL9FS1E-TIR1D25NFL-TL1RDMWB-400LM-3000K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

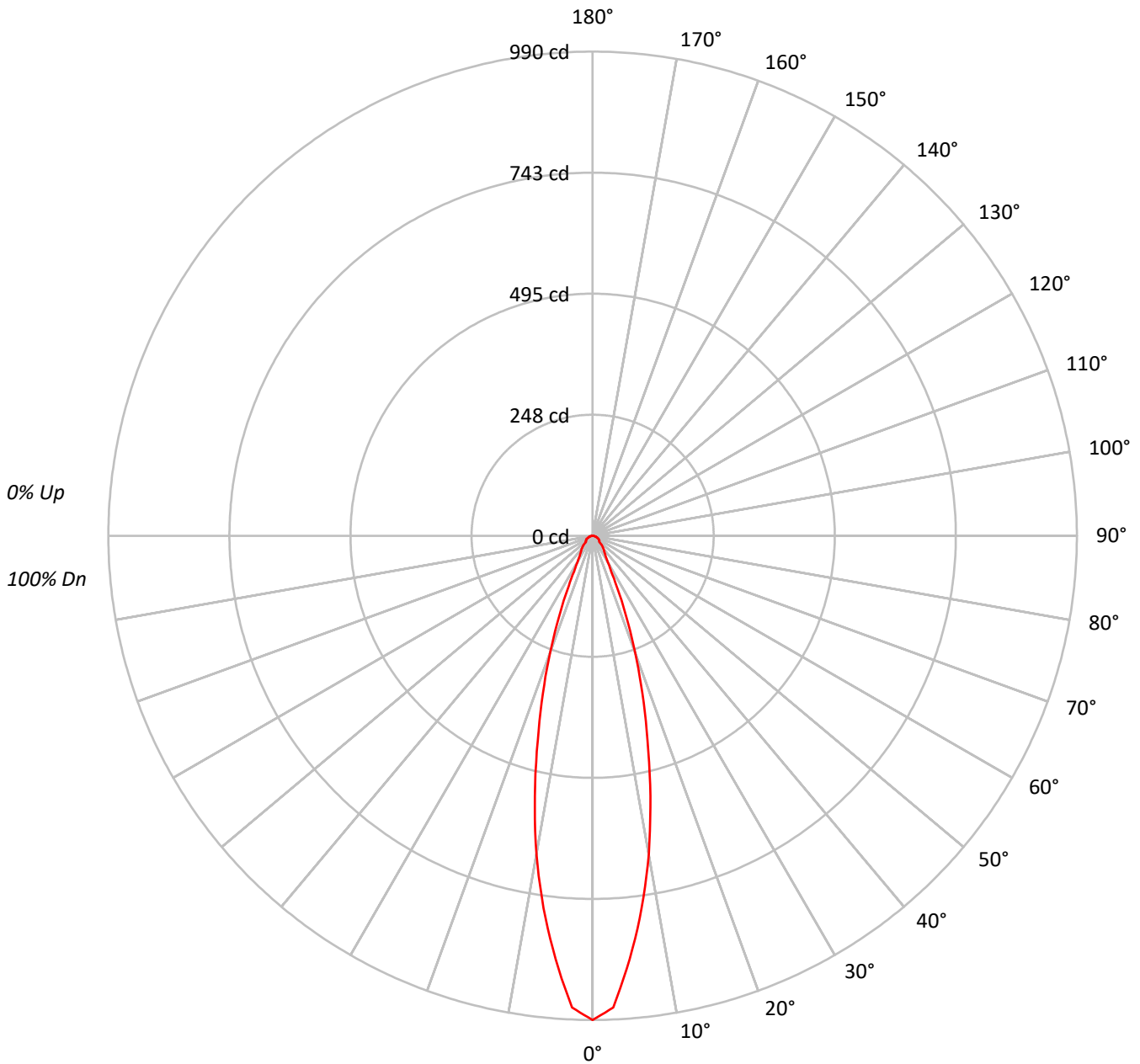
Lumens per Lamp: N/A
Luminaire Lumens: 337.2 lumens
Efficiency: N/A
Efficacy: 56.2 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

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	100	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93	93
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86	86	86	86
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81	81	81	81
4	98	91	85	81	96	89	84	81	87	83	80	85	82	79	83	80	78	76	76	76	76
5	94	86	80	76	92	85	80	76	83	78	75	81	77	74	80	76	74	72	72	72	72
6	90	81	76	72	88	81	75	71	79	74	71	78	74	71	76	73	70	69	69	69	69
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	73	70	67	66	66	66	66
8	83	74	69	65	82	74	68	65	73	68	65	72	67	64	71	67	64	63	63	63	63
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	61	60	60	60	60
10	77	68	63	60	76	68	63	60	67	63	59	66	62	59	66	62	59	58	58	58	58

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1954201
5°	1721163
10°	1325036
15°	884280
20°	531981
25°	264356
30°	139466
35°	102634
40°	88366
45°	72287
50°	54037
55°	57117
60°	57233
65°	53236
70°	47893
75°	47276
80°	35232
85°	22644

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 72287 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.5	22.7
10°-20°	119.7	35.5
20°-30°	60.0	17.8
30°-40°	27.7	8.2
40°-50°	19.3	5.7
50°-60°	14.7	4.4
60°-70°	11.5	3.4
70°-80°	6.2	1.8
80°-90°	1.5	0.5
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°	256.2	76.0
0°-40°	283.9	84.2
0°-60°	317.9	94.3
0°-90°	337.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	337.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	990	
5°	869	77
15°	433	120
25°	121	60
35°	43	28
45°	26	19
55°	17	15
65°	11	12
75°	6	6
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	990.2
2.5°	965.3
5°	868.8
7.5°	768.1
10°	661.2
12.5°	544.9
15°	432.8
17.5°	337.3
20°	253.3
22.5°	180.6
25°	121.4
27.5°	82.0
30°	61.2
32.5°	49.8
35°	42.6
37.5°	38.4
40°	34.3
42.5°	30.1
45°	25.9
47.5°	18.7
50°	17.6
52.5°	17.6
55°	16.6
57.5°	15.6
60°	14.5
62.5°	13.5
65°	11.4
67.5°	10.4
70°	8.3
72.5°	7.3
75°	6.2
77.5°	4.2
80°	3.1
82.5°	2.1
85°	1.0
87.5°	1.0
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)