

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: METALUX

Report Number: P893642

Luminaire Tested: 4MB-5SL-LVRA-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-LVRA-UNV-L835
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

Summary

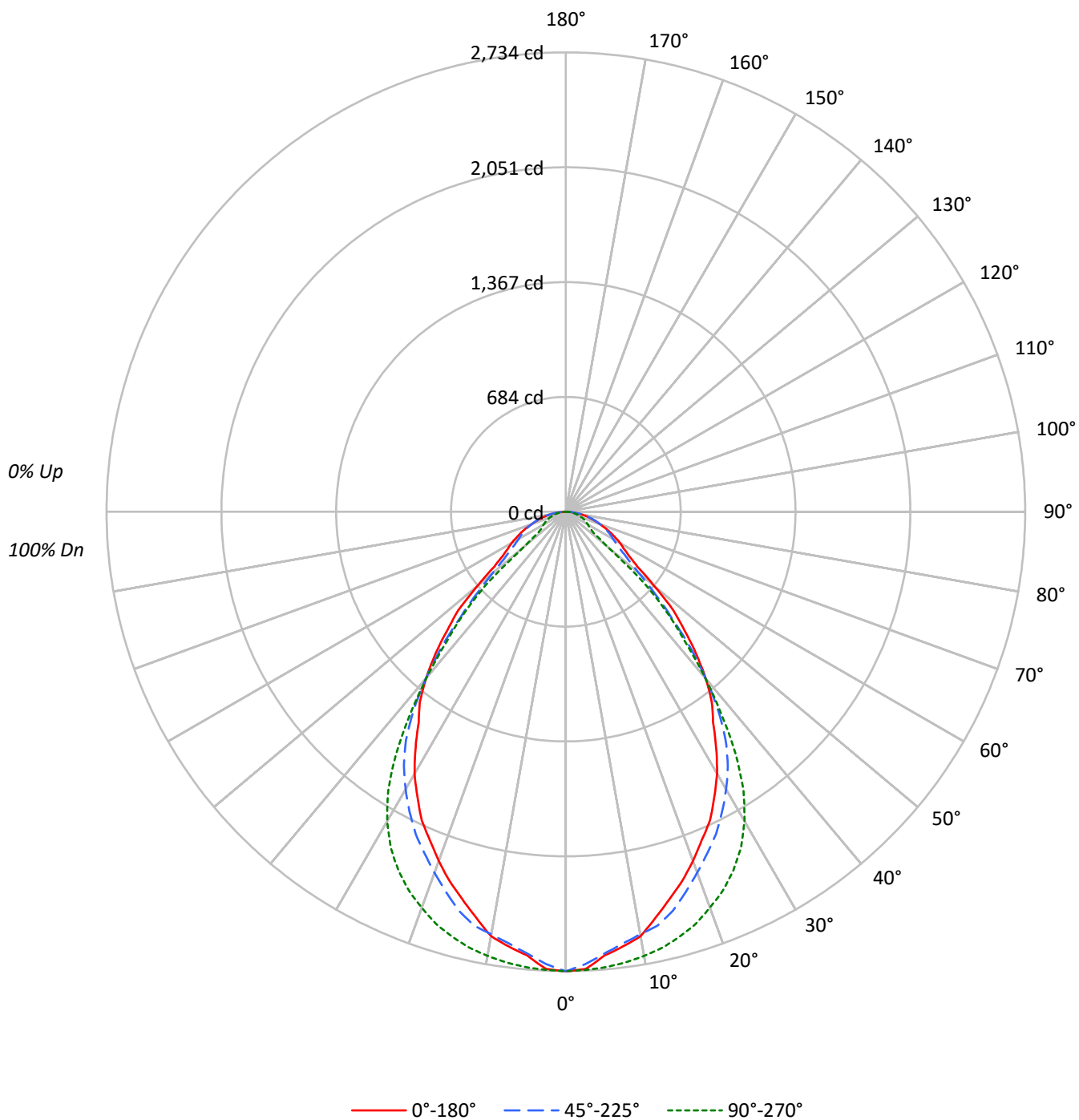
Lumens per Lamp: N/A
Luminaire Lumens: 4438.0 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 9.55
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93
2	103	96	91	86	101	95	90	85	91	87	83		88	85	82		85
3	96	87	80	75	94	86	80	75	83	78	73		80	76	72		78
4	89	79	72	66	87	78	71	66	76	70	65		73	68	64		71
5	83	72	65	59	81	71	64	59	69	63	58		67	62	58		66
6	78	66	59	53	76	65	58	53	64	57	53		62	57	52		61
7	73	61	54	48	71	60	53	48	59	52	48		58	52	47		56
8	68	57	49	44	67	56	49	44	55	48	44		53	48	43		52
9	64	52	45	40	63	52	45	40	51	44	40		50	44	40		49
10	61	49	42	37	60	48	42	37	47	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19456	19456	19456
5°	18931	18846	19435
10°	18529	18448	19390
15°	17572	18112	19280
20°	16740	17306	18987
25°	15923	16604	18502
30°	14794	15674	17469
35°	13265	14404	15322
40°	12019	12045	11979
45°	10049	8900	8680
50°	7590	6264	3550
55°	5709	5009	2238
60°	5305	4613	2156
65°	4936	4605	2160
70°	4516	4516	2126
75°	4283	4398	2054
80°	3958	4159	2106
85°	3453	3625	2302

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 10282 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.6	5.7
10°-20°	696.0	15.7
20°-30°	986.9	22.2
30°-40°	1016.8	22.9
40°-50°	710.2	16.0
50°-60°	340.8	7.7
60°-70°	239.1	5.4
70°-80°	149.5	3.4
80°-90°	46.2	1.0
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°	1935.5	43.6
0°-40°	2952.3	66.5
0°-60°	4003.2	90.2
0°-90°	4438.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4438.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2734	2734	2734	2734	2734	
5°	2651	2647	2639	2708	2721	251
15°	2386	2403	2459	2529	2618	672
25°	2028	2049	2115	2258	2357	927
35°	1527	1569	1658	1693	1764	962
45°	999	1022	884	839	863	769
55°	460	438	404	259	180	431
65°	293	274	274	208	128	290
75°	156	154	160	138	75	164
85°	42	42	44	44	28	47
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2734.5	2734.5	2734.5	2734.5	2734.5
2.5°	2723.9	2715.5	2695.0	2732.4	2729.6
5°	2650.6	2647.1	2638.7	2707.7	2721.1
7.5°	2609.1	2602.0	2592.1	2668.3	2705.6
10°	2564.7	2573.1	2553.4	2623.2	2683.8
12.5°	2473.0	2495.6	2522.4	2576.6	2657.0
15°	2385.6	2403.3	2458.9	2529.4	2617.5
17.5°	2303.9	2324.3	2372.3	2478.0	2571.7
20°	2210.9	2239.1	2285.6	2420.9	2507.6
22.5°	2115.0	2141.1	2199.6	2344.8	2441.3
25°	2028.3	2048.8	2115.0	2258.1	2356.8
27.5°	1913.5	1951.5	2014.2	2152.4	2256.0
30°	1800.7	1833.1	1907.8	2024.1	2126.3
32.5°	1664.7	1711.9	1794.3	1883.1	1968.4
35°	1527.2	1568.8	1658.3	1692.9	1764.0
37.5°	1427.2	1438.4	1489.2	1485.0	1525.1
40°	1294.0	1316.5	1296.8	1243.9	1289.7
42.5°	1150.2	1177.0	1097.3	1036.0	1052.2
45°	998.7	1021.9	884.5	839.4	862.6
47.5°	867.6	865.5	713.2	682.9	650.5
50°	685.7	708.3	565.9	509.5	320.7
52.5°	535.6	544.1	466.6	325.6	210.7
55°	460.2	437.7	403.8	258.7	180.4
57.5°	408.8	380.6	358.0	240.3	164.9
60°	372.8	341.1	324.2	228.3	151.5
62.5°	331.9	307.3	300.9	217.8	139.5
65°	293.2	274.2	273.5	207.9	128.3
67.5°	254.4	243.9	246.7	195.9	115.6
70°	217.1	215.0	217.1	180.4	102.2
72.5°	185.4	183.2	188.9	160.7	87.4
75°	155.8	153.6	160.0	138.1	74.7
77.5°	124.0	125.4	129.7	114.9	62.7
80°	96.6	96.6	101.5	90.2	51.4
82.5°	69.1	69.8	72.6	66.2	40.2
85°	42.3	42.3	44.4	43.7	28.2
87.5°	14.1	16.2	19.0	20.4	14.1
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.96	17.31	16.32	17.63	17.94	12.29	13.64	12.66	13.96	14.27
	3H	17.70	18.91	18.08	19.23	19.60	14.27	15.47	14.65	15.80	16.17
	4H	18.37	19.50	18.77	19.85	20.23	14.97	16.10	15.37	16.45	16.83
	6H	18.88	19.91	19.29	20.28	20.68	15.49	16.53	15.91	16.90	17.30
	8H	19.05	20.03	19.48	20.42	20.83	15.68	16.66	16.11	17.06	17.46
	12H	19.16	20.10	19.59	20.48	20.91	15.82	16.76	16.25	17.14	17.57
4H	2H	16.49	17.62	16.89	17.97	18.35	13.91	15.04	14.32	15.39	15.77
	3H	18.47	19.40	18.88	19.80	20.20	16.09	17.02	16.50	17.42	17.83
	4H	19.27	20.10	19.70	20.52	20.97	16.97	17.81	17.41	18.23	18.67
	6H	19.91	20.64	20.37	21.08	21.55	17.61	18.34	18.08	18.78	19.25
	8H	20.13	20.81	20.60	21.26	21.73	17.82	18.50	18.29	18.95	19.42
	12H	20.29	20.89	20.77	21.37	21.84	17.98	18.58	18.47	19.06	19.54
8H	4H	19.55	20.23	20.02	20.68	21.15	17.62	18.30	18.09	18.74	19.21
	6H	20.34	20.89	20.84	21.39	21.87	18.48	19.04	18.98	19.53	20.01
	8H	20.64	21.14	21.16	21.65	22.14	18.81	19.31	19.33	19.82	20.31
	12H	20.87	21.31	21.39	21.81	22.38	19.07	19.51	19.59	20.01	20.58
12H	4H	19.57	20.17	20.06	20.65	21.13	17.69	18.29	18.18	18.77	19.25
	6H	20.39	20.89	20.91	21.40	21.89	18.62	19.12	19.14	19.63	20.12
	8H	20.75	21.19	21.27	21.69	22.26	19.03	19.47	19.55	19.97	20.54