

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: P892583

Luminaire Tested: 2MB-3SL-A-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892583
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-3SL-A-UNV-L840
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

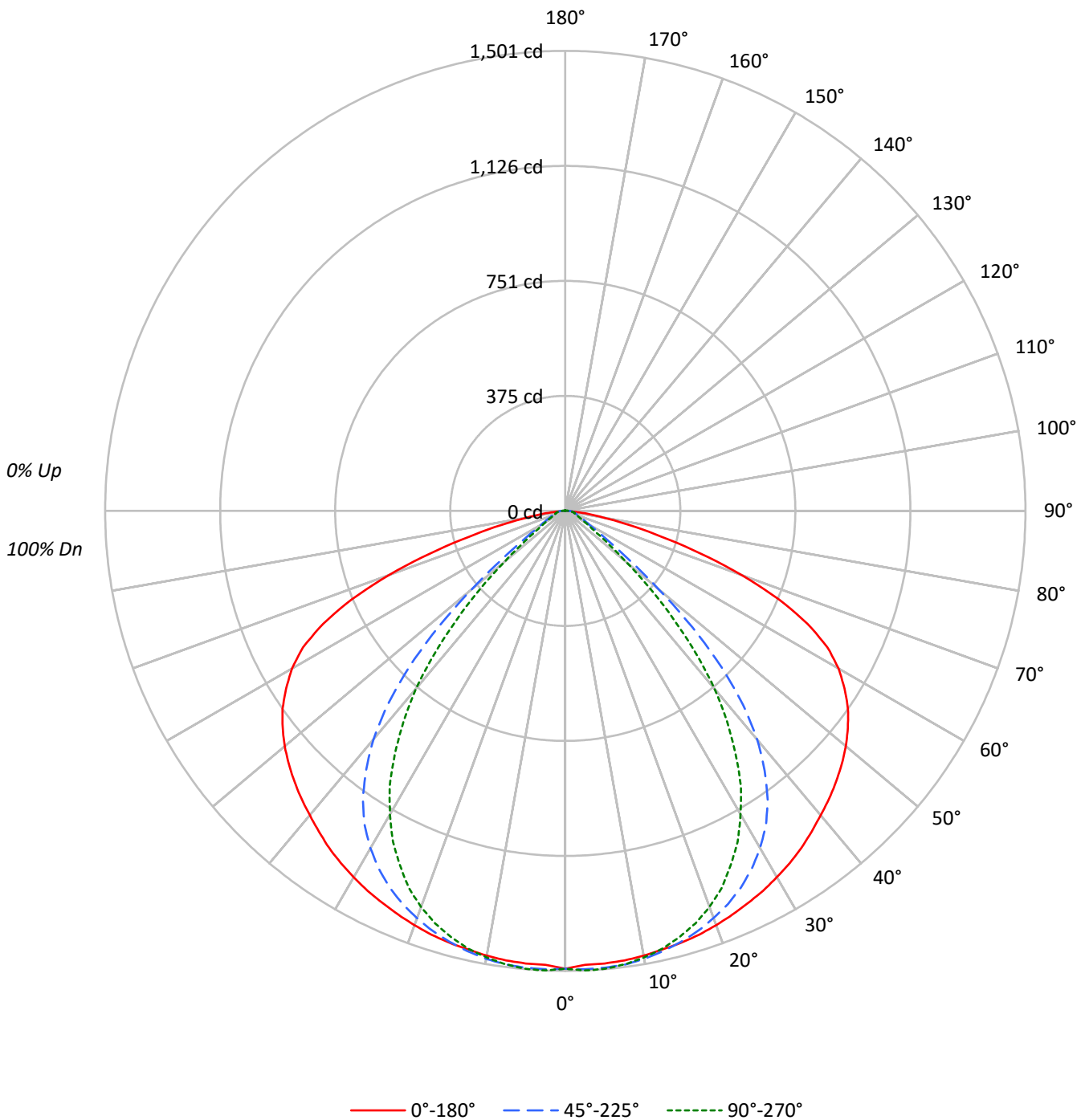
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3133.0 lumens
Efficiency: N/A
Efficacy: 149.2 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.15 / 1.25
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 8
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	102	102	102	100
1	111	107	103	100	108	105	101	99	100	98	95	97	94	93	93	91	90	93	91	90	88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	84	81	79	77
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	76	72	69	76	72	69	67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	70	65	61	59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	63	59	55	63	59	55	53
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	58	53	49	47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	40	36	46	40	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	33	43	37	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30590	30590	30590
5°	30466	30746	30826
10°	30635	30858	30758
15°	30925	30863	30511
20°	31344	30812	29964
25°	31881	30627	28822
30°	32627	30049	27032
35°	33569	28774	24222
40°	34648	26030	20251
45°	36180	20867	14439
50°	38064	12688	8282
55°	40191	6119	4452
60°	42153	3747	3031
65°	42230	3019	2500
70°	36556	2742	2335
75°	25736	2777	2540
80°	15153	3325	3219
85°	7095	5028	4816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 42754 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.3	4.5
10°-20°	410.8	13.1
20°-30°	621.7	19.8
30°-40°	717.9	22.9
40°-50°	613.9	19.6
50°-60°	335.3	10.7
60°-70°	169.4	5.4
70°-80°	82.2	2.6
80°-90°	28.3	0.9
90°-100°	6.8	0.2
100°-110°	1.1	0.0
110°-120°	0.4	0.0
120°-130°	0.4	0.0
130°-140°	0.7	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	1174.7	37.5
0°-40°	1892.7	60.4
0°-60°	2842.0	90.7
0°-90°	3121.9	99.6
90°-120°	8.4	0.3
90°-150°	10.1	0.3
90°-180°	11.0	0.4
0°-180°	3133.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1494	1494	1494	1494	1494	
5°	1482	1494	1496	1502	1500	141
15°	1459	1468	1456	1449	1439	413
25°	1411	1403	1356	1303	1276	652
35°	1343	1297	1151	1017	969	841
45°	1249	1091	721	536	499	965
55°	1126	517	171	133	125	1003
65°	872	96	62	56	52	844
75°	325	54	35	34	32	360
85°	30	30	21	21	20	46
90°	0	18	14	14	13	1
95°	0	2	6	9	8	0
105°	0	0	1	2	1	0
115°	0	0	0	1	1	0
125°	0	0	1	1	0	0
135°	1	1	1	1	1	1
145°	1	1	1	1	1	1
155°	1	1	1	2	1	0
165°	1	1	2	2	2	0
175°	1	1	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1493.9	1493.9	1493.9	1493.9	1493.9
2.5°	1482.2	1492.9	1496.8	1503.6	1500.7
5°	1482.2	1493.9	1495.8	1501.7	1499.7
7.5°	1479.3	1490.0	1492.9	1495.8	1491.9
10°	1473.4	1484.1	1484.1	1484.1	1479.3
12.5°	1465.6	1477.3	1471.5	1467.6	1462.7
15°	1458.8	1467.6	1455.9	1449.1	1439.3
17.5°	1450.0	1456.9	1437.4	1423.7	1411.1
20°	1438.4	1441.3	1414.0	1388.7	1375.1
22.5°	1425.7	1422.8	1387.7	1350.7	1332.2
25°	1411.1	1403.3	1355.6	1303.0	1275.7
27.5°	1397.5	1380.9	1316.6	1245.5	1217.3
30°	1379.9	1357.5	1270.9	1181.3	1143.3
32.5°	1362.4	1329.3	1217.3	1108.2	1066.3
35°	1342.9	1297.1	1151.1	1016.7	969.0
37.5°	1319.5	1257.2	1068.3	917.4	866.7
40°	1296.2	1210.5	973.8	802.4	757.6
42.5°	1273.8	1157.9	857.9	673.9	630.1
45°	1249.4	1090.7	720.6	535.6	498.6
47.5°	1223.1	998.2	561.9	406.1	374.9
50°	1194.9	878.4	398.3	284.4	260.0
52.5°	1161.8	712.8	262.9	191.8	176.3
55°	1125.8	517.1	171.4	133.4	124.7
57.5°	1080.0	336.9	120.8	99.3	92.5
60°	1029.3	201.6	91.5	78.9	74.0
62.5°	964.1	130.5	74.0	66.2	60.4
65°	871.6	96.4	62.3	55.5	51.6
67.5°	754.7	79.9	52.6	47.7	43.8
70°	610.6	70.1	45.8	41.9	39.0
72.5°	461.6	61.4	39.9	37.0	35.1
75°	325.3	53.6	35.1	34.1	32.1
77.5°	213.3	46.7	32.1	31.2	30.2
80°	128.5	39.9	28.2	28.2	27.3
82.5°	72.1	35.1	25.3	25.3	23.4
85°	30.2	30.2	21.4	21.4	20.5
87.5°	8.8	23.4	17.5	17.5	15.6
90°	0.0	17.5	13.6	13.6	12.7
92.5°	0.0	9.7	9.7	10.7	9.7
95°	0.0	1.9	5.8	8.8	7.8
97.5°	0.0	1.0	3.9	6.8	5.8
100°	0.0	0.0	1.9	4.9	3.9
102.5°	0.0	0.0	1.0	2.9	2.9
105°	0.0	0.0	1.0	1.9	1.0
107.5°	0.0	0.0	1.0	1.0	1.0
110°	0.0	0.0	1.0	1.0	1.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	1.0	1.0	1.0
115°	0.0	0.0	0.0	1.0	1.0
117.5°	0.0	0.0	0.0	1.0	0.0
120°	0.0	0.0	0.0	1.0	0.0
122.5°	0.0	0.0	0.0	1.0	0.0
125°	0.0	0.0	1.0	1.0	0.0
127.5°	0.0	0.0	1.0	1.0	1.0
130°	0.0	0.0	1.0	1.0	1.0
132.5°	1.0	0.0	1.0	1.0	1.0
135°	1.0	1.0	1.0	1.0	1.0
137.5°	1.0	1.0	1.0	1.0	1.0
140°	1.0	1.0	1.0	1.0	1.0
142.5°	1.0	1.0	1.0	1.0	1.0
145°	1.0	1.0	1.0	1.0	1.0
147.5°	1.0	1.0	1.0	1.0	1.0
150°	1.0	1.0	1.0	1.0	1.0
152.5°	1.0	1.0	1.0	1.0	1.0
155°	1.0	1.0	1.0	1.9	1.0
157.5°	1.0	1.0	1.0	1.9	1.0
160°	1.0	1.0	1.0	1.9	1.0
162.5°	1.0	1.0	1.9	1.9	1.9
165°	1.0	1.0	1.9	1.9	1.9
167.5°	1.0	1.0	1.9	1.9	1.9
170°	1.0	1.0	1.9	1.9	1.9
172.5°	1.0	1.0	1.9	1.9	1.9
175°	1.0	1.0	1.9	1.9	1.9
177.5°	1.0	1.0	1.9	1.9	1.9
180°	1.9	1.9	1.9	1.9	1.9



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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	22.05	23.47	22.42	23.79	24.11	11.17	12.58	11.54	12.91	13.23
	3H	24.83	26.09	25.22	26.43	26.80	12.18	13.43	12.56	13.77	14.14
	4H	25.67	26.84	26.07	27.20	27.59	12.73	13.91	13.14	14.26	14.65
	6H	26.06	27.14	26.48	27.52	27.92	13.43	14.51	13.85	14.89	15.29
	8H	26.13	27.16	26.57	27.56	27.97	13.81	14.83	14.24	15.23	15.64
	12H	26.15	27.13	26.59	27.52	27.96	14.23	15.21	14.67	15.60	16.04
4H	2H	21.87	23.05	22.28	23.40	23.79	11.60	12.78	12.01	13.14	13.53
	3H	24.67	25.63	25.08	26.04	26.45	12.88	13.84	13.30	14.25	14.66
	4H	25.50	26.36	25.94	26.79	27.24	13.62	14.48	14.06	14.90	15.35
	6H	25.97	26.72	26.44	27.17	27.64	14.53	15.28	15.00	15.73	16.20
	8H	26.08	26.78	26.56	27.23	27.71	15.02	15.71	15.49	16.17	16.64
	12H	26.14	26.76	26.63	27.24	27.73	15.56	16.18	16.05	16.67	17.15
8H	4H	25.39	26.09	25.87	26.54	27.02	14.06	14.75	14.53	15.21	15.68
	6H	25.87	26.44	26.37	26.94	27.43	15.17	15.75	15.68	16.25	16.74
	8H	26.00	26.52	26.52	27.04	27.54	15.82	16.33	16.34	16.85	17.35
	12H	26.10	26.56	26.61	27.06	27.63	16.56	17.02	17.08	17.52	18.09
12H	4H	25.36	25.98	25.85	26.46	26.95	14.22	14.84	14.71	15.33	15.81
	6H	25.82	26.34	26.34	26.86	27.35	15.39	15.90	15.91	16.42	16.92
	8H	25.98	26.44	26.50	26.94	27.51	16.12	16.58	16.64	17.08	17.66