

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: P895767

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

Issue Date: 11/19/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P895767  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/19/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-3SL-ACL-UNV-L840  
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 4000K (C)  
Light Source: -  
Ballast/Driver: -

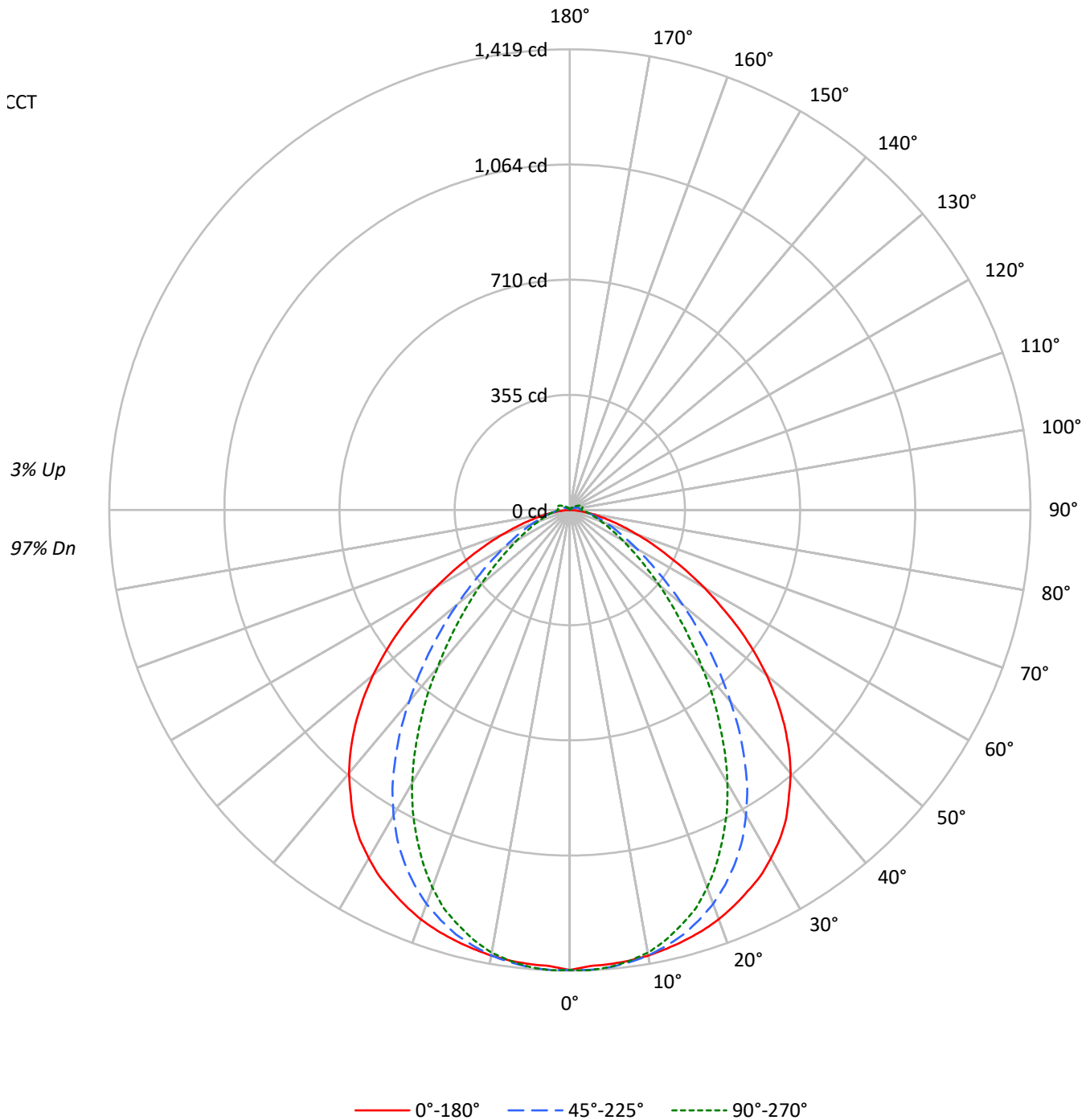
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2952.0 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.07 / 1.17  
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')  
CIE Type: Direct

Input Watts (W): 21  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	97
1	110	105	102	98	107	103	100	97	98	96	93	94	92	90	90	88	87	87	87	87	84
2	101	94	88	83	98	92	86	82	88	83	80	84	81	77	81	78	75	75	75	75	73
3	93	84	77	71	91	82	76	70	79	73	69	76	71	67	73	69	66	66	66	66	64
4	86	76	68	62	84	74	67	61	71	65	60	69	63	59	66	62	58	58	58	58	56
5	80	68	60	54	78	67	60	54	65	58	53	63	57	52	61	56	52	52	52	52	50
6	74	62	54	48	72	61	54	48	59	52	47	57	51	47	56	50	46	46	46	46	44
7	69	57	49	43	68	56	49	43	54	48	43	53	47	42	51	46	42	42	42	42	40
8	65	52	45	39	63	52	44	39	50	43	39	49	43	38	47	42	38	38	38	38	36
9	61	48	41	36	59	48	40	35	46	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	38	33	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	32	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	29009	29009	29009
5°	28755	28435	28264
10°	28759	27742	27281
15°	28758	26879	25896
20°	28795	25774	24205
25°	28717	24317	21976
30°	28589	22416	19453
35°	28205	19930	16485
40°	27326	17000	13433
45°	25949	13992	10648
50°	24012	11120	8309
55°	21377	8644	6433
60°	18211	6749	5040
65°	14883	5363	4006
70°	11811	4344	3287
75°	9121	3538	2876
80°	6492	2979	2602
85°	3712	2595	2347

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25949 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.2	4.5
10°-20°	380.8	12.9
20°-30°	553.3	18.7
30°-40°	598.1	20.3
40°-50°	504.7	17.1
50°-60°	345.8	11.7
60°-70°	201.6	6.8
70°-80°	102.9	3.5
80°-90°	44.4	1.5
90°-100°	26.9	0.9
100°-110°	24.1	0.8
110°-120°	16.4	0.6
120°-130°	9.2	0.3
130°-140°	5.0	0.2
140°-150°	2.6	0.1
150°-160°	1.4	0.0
160°-170°	0.5	0.0
170°-180°	0.1	0.0
0°-30°	1068.3	36.2
0°-40°	1666.4	56.5
0°-60°	2516.8	85.3
0°-90°	2865.7	97.1
90°-120°	67.4	2.3
90°-150°	84.2	2.9
90°-180°	86.0	2.9
0°-180°	2952.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1404	1413	1414	1417	1413	134
15°	1372	1371	1353	1337	1324	388
25°	1296	1271	1202	1143	1115	598
35°	1162	1087	938	837	804	724
45°	934	790	605	511	483	718
55°	635	481	329	276	261	566
65°	335	246	170	145	138	336
75°	133	109	87	81	79	144
85°	23	32	43	46	46	29
90°	1	15	31	35	35	2
95°	0	14	30	36	37	0
105°	0	8	26	38	40	0
115°	0	5	17	28	32	0
125°	0	3	10	17	20	1
135°	1	3	7	10	12	1
145°	1	2	5	6	7	1
155°	1	2	3	4	5	0
165°	1	1	2	3	3	0
175°	1	1	2	2	1	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1416.7	1416.7	1416.7	1416.7	1416.7
2.5°	1406.0	1414.8	1417.7	1421.6	1418.7
5°	1404.1	1412.8	1413.8	1416.7	1412.8
7.5°	1400.2	1407.0	1405.0	1405.0	1401.1
10°	1393.4	1397.2	1393.4	1388.5	1384.6
12.5°	1383.6	1386.5	1374.9	1368.0	1358.3
15°	1371.9	1371.0	1353.4	1336.9	1324.2
17.5°	1358.3	1351.5	1324.2	1298.9	1288.2
20°	1341.7	1329.1	1291.1	1254.1	1237.6
22.5°	1320.3	1302.8	1250.2	1202.5	1180.1
25°	1296.0	1270.7	1202.5	1143.1	1114.9
27.5°	1271.6	1233.7	1149.0	1075.0	1047.7
30°	1238.5	1190.8	1085.7	1001.9	971.7
32.5°	1203.5	1143.1	1017.5	920.1	890.0
35°	1161.6	1086.6	937.7	837.4	804.3
37.5°	1109.0	1020.4	856.8	751.7	723.5
40°	1058.4	948.4	770.2	666.0	634.8
42.5°	999.0	870.5	686.5	585.2	557.0
45°	933.8	789.7	604.7	511.2	483.0
47.5°	864.6	712.7	526.8	440.1	417.7
50°	791.6	633.9	453.7	378.8	358.3
52.5°	713.7	555.0	386.6	324.2	305.7
55°	634.8	481.0	329.1	275.6	260.9
57.5°	552.1	409.9	280.4	234.7	221.0
60°	477.1	350.5	236.6	200.6	189.9
62.5°	403.1	296.0	201.6	170.4	161.6
65°	334.9	246.3	170.4	145.1	138.3
67.5°	275.6	206.4	146.1	124.6	119.8
70°	220.1	168.4	122.7	107.1	102.2
72.5°	173.3	136.3	103.2	92.5	89.6
75°	133.4	109.1	86.7	80.8	78.9
77.5°	97.4	83.7	73.0	70.1	69.1
80°	68.2	63.3	61.3	61.3	61.3
82.5°	42.8	46.7	51.6	53.6	53.6
85°	23.4	32.1	42.8	45.8	45.8
87.5°	9.7	22.4	36.0	38.9	38.0
90°	1.0	14.6	31.2	35.1	35.1
92.5°	0.0	14.6	31.2	35.1	35.1
95°	0.0	13.6	30.2	36.0	37.0
97.5°	0.0	12.7	30.2	37.0	38.0
100°	1.0	11.7	30.2	38.0	38.9
102.5°	0.0	9.7	28.2	38.0	39.9
105°	0.0	7.8	26.3	38.0	39.9
107.5°	0.0	5.8	24.3	36.0	38.9
110°	0.0	5.8	22.4	34.1	37.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	4.9	19.5	31.2	35.1
115°	0.0	4.9	16.6	28.2	32.1
117.5°	0.0	3.9	14.6	25.3	28.2
120°	0.0	3.9	12.7	22.4	25.3
122.5°	0.0	3.9	11.7	19.5	22.4
125°	0.0	2.9	9.7	16.6	19.5
127.5°	1.0	2.9	8.8	14.6	17.5
130°	1.0	2.9	7.8	12.7	15.6
132.5°	1.0	2.9	6.8	11.7	13.6
135°	1.0	2.9	6.8	9.7	11.7
137.5°	1.0	2.9	5.8	8.8	9.7
140°	1.0	2.9	4.9	7.8	8.8
142.5°	1.0	1.9	4.9	6.8	7.8
145°	1.0	1.9	4.9	5.8	6.8
147.5°	1.0	1.9	3.9	5.8	5.8
150°	1.0	1.9	3.9	4.9	5.8
152.5°	1.0	1.9	2.9	4.9	4.9
155°	1.0	1.9	2.9	3.9	4.9
157.5°	1.0	1.9	2.9	3.9	3.9
160°	1.0	1.9	1.9	2.9	3.9
162.5°	1.0	1.0	1.9	2.9	2.9
165°	1.0	1.0	1.9	2.9	2.9
167.5°	1.0	1.0	1.9	1.9	2.9
170°	1.0	1.0	1.9	1.9	1.9
172.5°	1.0	1.0	1.9	1.9	1.0
175°	1.0	1.0	1.9	1.9	1.0
177.5°	1.0	1.0	1.9	1.0	1.0
180°	1.0	1.0	1.0	1.0	1.0



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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	20.23	21.63	20.65	22.01	22.40	16.56	17.96	16.97	18.34	18.72
	3H	21.30	22.55	21.73	22.94	23.38	17.74	18.99	18.17	19.38	19.82
	4H	21.59	22.76	22.04	23.17	23.63	18.26	19.44	18.71	19.85	20.30
	6H	21.73	22.81	22.19	23.24	23.70	18.80	19.88	19.26	20.31	20.77
	8H	21.74	22.77	22.21	23.22	23.69	19.08	20.11	19.55	20.56	21.03
	12H	21.73	22.71	22.21	23.15	23.65	19.37	20.36	19.85	20.80	21.30
4H	2H	20.26	21.44	20.71	21.85	22.30	17.01	18.19	17.46	18.60	19.05
	3H	21.49	22.46	21.95	22.92	23.39	18.38	19.35	18.84	19.81	20.28
	4H	21.87	22.74	22.35	23.21	23.72	19.01	19.88	19.49	20.35	20.86
	6H	22.09	22.84	22.59	23.34	23.87	19.68	20.44	20.19	20.94	21.47
	8H	22.12	22.83	22.63	23.33	23.86	20.02	20.73	20.54	21.23	21.77
	12H	22.12	22.76	22.66	23.29	23.83	20.40	21.04	20.93	21.57	22.11
8H	4H	21.89	22.60	22.40	23.09	23.63	19.23	19.94	19.74	20.43	20.97
	6H	22.16	22.75	22.71	23.29	23.84	20.01	20.60	20.56	21.14	21.69
	8H	22.23	22.76	22.79	23.32	23.87	20.45	20.98	21.01	21.54	22.09
	12H	22.26	22.73	22.82	23.28	23.91	20.95	21.42	21.51	21.96	22.60
12H	4H	21.87	22.51	22.40	23.04	23.58	19.23	19.87	19.77	20.40	20.94
	6H	22.15	22.68	22.72	23.24	23.80	20.04	20.57	20.60	21.13	21.69
	8H	22.26	22.73	22.82	23.27	23.90	20.54	21.01	21.10	21.55	22.18