

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: P892581

Luminaire Tested: 2MB-3SL-A-UNV-L830

Issue Date: 11/11/2024

**Test Information**

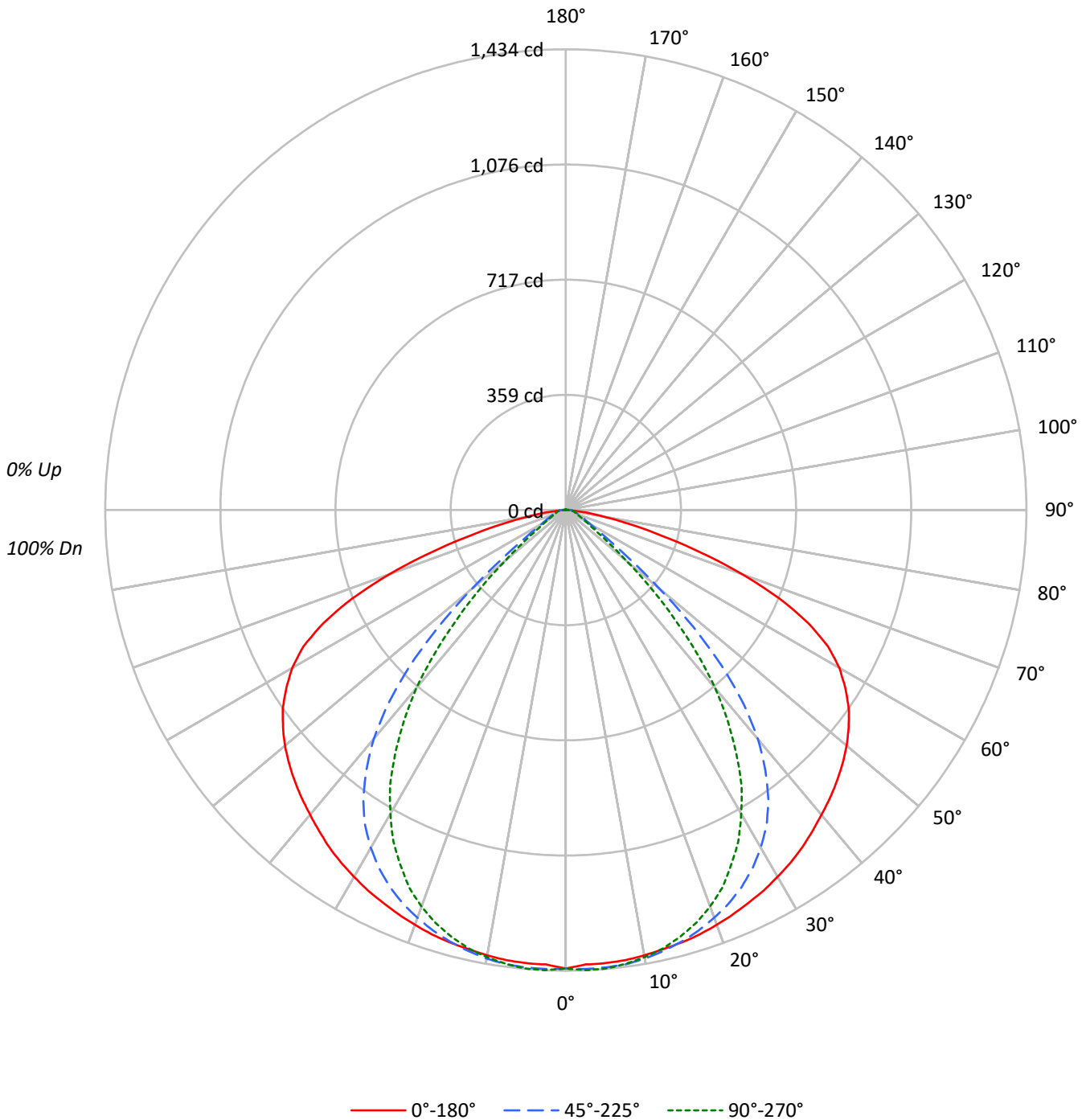
Test Method: LM-79-2019  
Report Number: P892581  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-3SL-A-UNV-L830  
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2992.9 lumens  
Efficiency: N/A  
Efficacy: 142.5 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<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	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	73	69	76	73	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°	29222	29222	29222
5°	29103	29373	29449
10°	29267	29479	29384
15°	29543	29483	29148
20°	29942	29435	28624
25°	30456	29258	27534
30°	31170	28706	25824
35°	32069	27487	23140
40°	33100	24867	19347
45°	34564	19935	13793
50°	36363	12121	7913
55°	38391	5844	4252
60°	40269	3579	2895
65°	40341	2883	2389
70°	34922	2616	2227
75°	24581	2650	2429
80°	14481	3184	3066
85°	6766	4816	4581

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 62.5°  
 Luminance: 40842 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.0	4.5
10°-20°	392.4	13.1
20°-30°	593.9	19.8
30°-40°	685.9	22.9
40°-50°	586.5	19.6
50°-60°	320.4	10.7
60°-70°	161.8	5.4
70°-80°	78.6	2.6
80°-90°	27.0	0.9
90°-100°	6.5	0.2
100°-110°	1.1	0.0
110°-120°	0.4	0.0
120°-130°	0.4	0.0
130°-140°	0.6	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	1122.2	37.5
0°-40°	1808.1	60.4
0°-60°	2715.0	90.7
0°-90°	2982.4	99.6
90°-120°	8.0	0.3
90°-150°	9.5	0.3
90°-180°	11.0	0.4
0°-180°	2992.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1416	1427	1429	1434	1433	135
15°	1394	1402	1391	1384	1375	394
25°	1348	1341	1295	1245	1219	623
35°	1283	1239	1100	971	926	804
45°	1194	1042	688	512	476	922
55°	1075	494	164	128	119	958
65°	833	92	60	53	49	806
75°	311	51	34	33	31	344
85°	29	29	20	20	20	44
90°	0	17	13	13	12	1
95°	0	2	6	8	7	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°	1427.1	1427.1	1427.1	1427.1	1427.1
2.5°	1415.9	1426.2	1429.9	1436.4	1433.6
5°	1415.9	1427.1	1429.0	1434.5	1432.7
7.5°	1413.2	1423.4	1426.2	1429.0	1425.2
10°	1407.6	1417.8	1417.8	1417.8	1413.2
12.5°	1400.1	1411.3	1405.7	1402.0	1397.3
15°	1393.6	1402.0	1390.8	1384.3	1375.0
17.5°	1385.2	1391.8	1373.1	1360.1	1348.0
20°	1374.1	1376.9	1350.8	1326.6	1313.6
22.5°	1362.0	1359.2	1325.7	1290.3	1272.7
25°	1348.0	1340.6	1295.0	1244.8	1218.7
27.5°	1335.0	1319.2	1257.8	1189.9	1162.9
30°	1318.3	1296.9	1214.1	1128.5	1092.2
32.5°	1301.5	1269.9	1162.9	1058.7	1018.7
35°	1282.9	1239.2	1099.6	971.3	925.7
37.5°	1260.6	1201.0	1020.6	876.4	828.0
40°	1238.3	1156.4	930.3	766.6	723.8
42.5°	1216.9	1106.1	819.6	643.8	601.9
45°	1193.6	1042.0	688.4	511.7	476.3
47.5°	1168.5	953.6	536.8	387.9	358.2
50°	1141.5	839.1	380.5	271.7	248.4
52.5°	1109.9	681.0	251.2	183.3	168.4
55°	1075.4	494.0	163.7	127.5	119.1
57.5°	1031.7	321.9	115.4	94.9	88.4
60°	983.3	192.6	87.4	75.4	70.7
62.5°	921.0	124.7	70.7	63.3	57.7
65°	832.6	92.1	59.5	53.0	49.3
67.5°	721.0	76.3	50.2	45.6	41.9
70°	583.3	67.0	43.7	40.0	37.2
72.5°	441.0	58.6	38.1	35.4	33.5
75°	310.7	51.2	33.5	32.6	30.7
77.5°	203.7	44.7	30.7	29.8	28.8
80°	122.8	38.1	27.0	27.0	26.0
82.5°	68.8	33.5	24.2	24.2	22.3
85°	28.8	28.8	20.5	20.5	19.5
87.5°	8.4	22.3	16.7	16.7	14.9
90°	0.0	16.7	13.0	13.0	12.1
92.5°	0.0	9.3	9.3	10.2	9.3
95°	0.0	1.9	5.6	8.4	7.4
97.5°	0.0	0.9	3.7	6.5	5.6
100°	0.0	0.0	1.9	4.7	3.7
102.5°	0.0	0.0	0.9	2.8	2.8
105°	0.0	0.0	0.9	1.9	0.9
107.5°	0.0	0.0	0.9	0.9	0.9
110°	0.0	0.0	0.9	0.9	0.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.9	0.9	0.9
115°	0.0	0.0	0.0	0.9	0.9
117.5°	0.0	0.0	0.0	0.9	0.0
120°	0.0	0.0	0.0	0.9	0.0
122.5°	0.0	0.0	0.0	0.9	0.0
125°	0.0	0.0	0.9	0.9	0.0
127.5°	0.0	0.0	0.9	0.9	0.9
130°	0.0	0.0	0.9	0.9	0.9
132.5°	0.9	0.0	0.9	0.9	0.9
135°	0.9	0.9	0.9	0.9	0.9
137.5°	0.9	0.9	0.9	0.9	0.9
140°	0.9	0.9	0.9	0.9	0.9
142.5°	0.9	0.9	0.9	0.9	0.9
145°	0.9	0.9	0.9	0.9	0.9
147.5°	0.9	0.9	0.9	0.9	0.9
150°	0.9	0.9	0.9	0.9	0.9
152.5°	0.9	0.9	0.9	0.9	0.9
155°	0.9	0.9	0.9	1.9	0.9
157.5°	0.9	0.9	0.9	1.9	0.9
160°	0.9	0.9	0.9	1.9	0.9
162.5°	0.9	0.9	1.9	1.9	1.9
165°	0.9	0.9	1.9	1.9	1.9
167.5°	0.9	0.9	1.9	1.9	1.9
170°	0.9	0.9	1.9	1.9	1.9
172.5°	0.9	0.9	1.9	1.9	1.9
175°	0.9	0.9	1.9	1.9	1.9
177.5°	0.9	0.9	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	21.90	23.31	22.27	23.63	23.95	11.02	12.43	11.39	12.75	13.07
	3H	24.68	25.93	25.06	26.27	26.64	12.02	13.28	12.41	13.61	13.99
	4H	25.51	26.68	25.91	27.04	27.43	12.58	13.75	12.98	14.11	14.50
	6H	25.90	26.98	26.32	27.36	27.76	13.28	14.36	13.70	14.73	15.13
	8H	25.98	27.00	26.41	27.40	27.81	13.65	14.67	14.08	15.07	15.48
	12H	25.99	26.97	26.43	27.36	27.80	14.07	15.05	14.50	15.44	15.88
4H	2H	21.72	22.89	22.12	23.25	23.64	11.45	12.62	11.86	12.98	13.37
	3H	24.51	25.47	24.93	25.88	26.29	12.72	13.69	13.14	14.10	14.51
	4H	25.34	26.20	25.78	26.63	27.08	13.46	14.32	13.90	14.75	15.20
	6H	25.81	26.56	26.28	27.01	27.48	14.37	15.12	14.84	15.57	16.04
	8H	25.93	26.62	26.40	27.08	27.55	14.86	15.55	15.33	16.01	16.48
	12H	25.98	26.60	26.47	27.09	27.57	15.40	16.02	15.89	16.51	16.99
8H	4H	25.24	25.93	25.71	26.39	26.86	13.90	14.60	14.37	15.05	15.53
	6H	25.71	26.28	26.21	26.78	27.27	15.02	15.59	15.52	16.09	16.58
	8H	25.84	26.36	26.36	26.88	27.38	15.66	16.18	16.18	16.70	17.20
	12H	25.94	26.40	26.45	26.90	27.47	16.40	16.86	16.92	17.36	17.94
12H	4H	25.20	25.82	25.69	26.31	26.79	14.06	14.69	14.56	15.17	15.65
	6H	25.66	26.18	26.18	26.70	27.20	15.23	15.75	15.75	16.27	16.77
	8H	25.82	26.28	26.34	26.78	27.35	15.97	16.43	16.48	16.93	17.50