

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: P892487

Luminaire Tested: 2MB-2SL-AOL-UNV-L840

Issue Date: 11/11/2024

**Test Information**

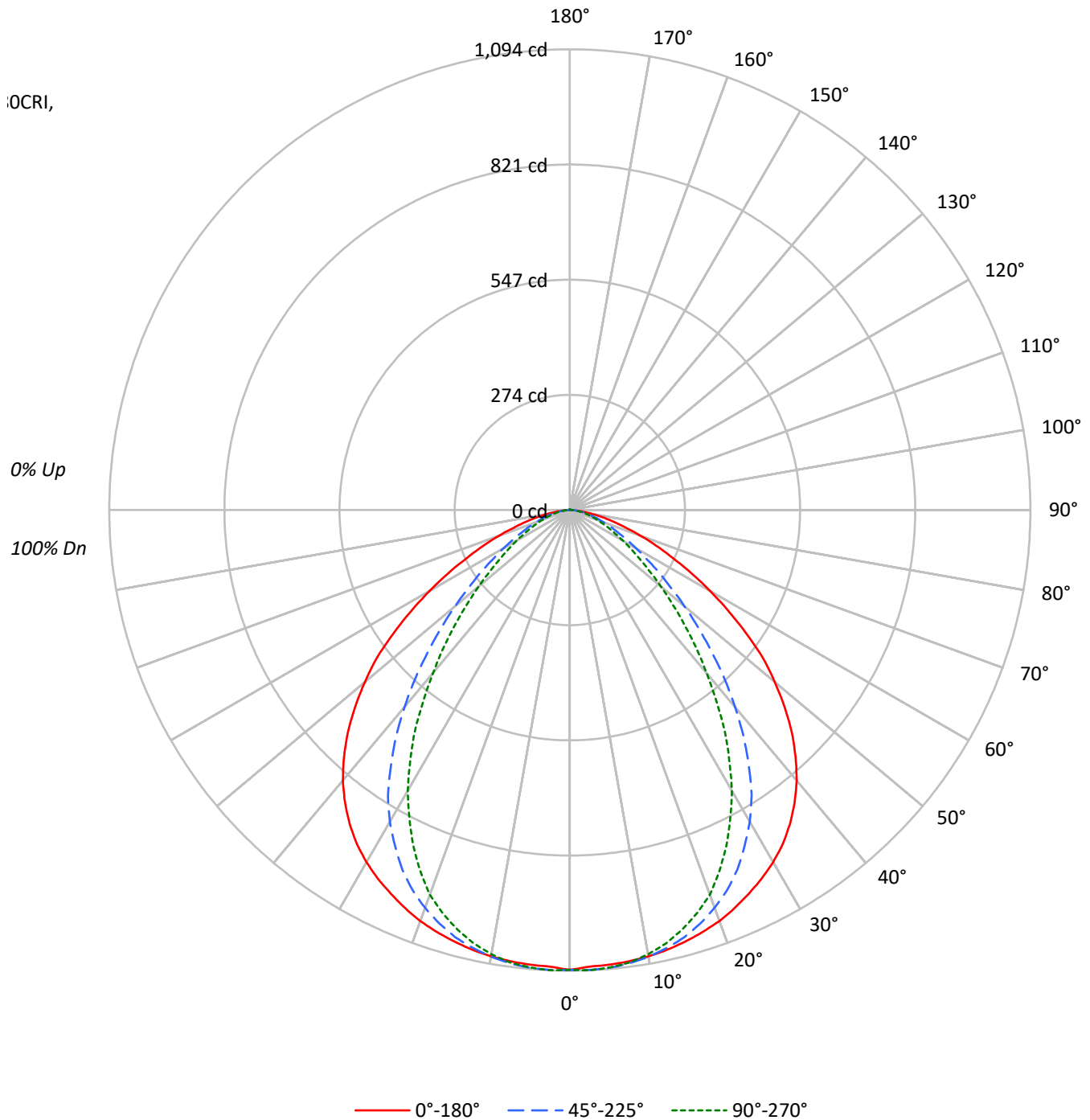
Test Method: LM-79-2019  
Report Number: P892487  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-2SL-AOL-UNV-L840  
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 8  
4000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2225.9 lumens  
Efficiency: N/A  
Efficacy: 149.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.08 / 1.18  
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 14.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.92  
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	104	101	98	100	97	95	96	94	92	93	91	89	89	89	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	78	78	78	76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	68	68	68	66
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	60	60	60	58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	53	53	53	52
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	48	48	48	46
7	70	58	50	44	69	57	49	44	56	49	44	54	48	43	53	47	43	43	43	43	41
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	39	39	39	37
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	33	33	33	31

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

	0°	45°	90°
0°	22356	22356	22356
5°	22275	22427	22411
10°	22379	22395	22271
15°	22488	22269	21862
20°	22634	21908	21185
25°	22715	21283	19880
30°	22831	20213	18206
35°	22772	18528	16053
40°	22416	16319	13496
45°	21591	13787	11137
50°	20248	11334	8983
55°	18289	9196	7222
60°	15751	7408	5987
65°	13092	6115	4971
70°	10741	5125	4245
75°	8529	4383	3679
80°	6438	3738	3314
85°	4346	3477	3125

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21591 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	4.7
10°-20°	295.5	13.3
20°-30°	432.8	19.4
30°-40°	472.3	21.2
40°-50°	400.4	18.0
50°-60°	272.2	12.2
60°-70°	153.7	6.9
70°-80°	70.2	3.2
80°-90°	18.3	0.8
90°-100°	2.4	0.1
100°-110°	1.4	0.1
110°-120°	0.8	0.0
120°-130°	0.7	0.0
130°-140°	0.5	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	831.9	37.4
0°-40°	1304.2	58.6
0°-60°	1976.8	88.8
0°-90°	2219.0	99.7
90°-120°	4.5	0.2
90°-150°	6.2	0.3
90°-180°	7.0	0.3
0°-180°	2225.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1084	1090	1091	1093	1090	103
15°	1061	1060	1050	1039	1031	300
25°	1005	988	942	899	880	464
35°	911	853	741	664	642	569
45°	746	630	476	404	385	572
55°	512	379	258	214	202	457
65°	270	192	126	108	103	272
75°	108	79	55	49	46	117
85°	18	17	15	14	13	23
90°	0	2	3	4	4	1
95°	0	1	2	4	4	0
105°	0	1	2	2	2	0
115°	0	0	1	2	2	0
125°	0	0	1	2	2	0
135°	1	1	1	1	1	0
145°	1	1	1	1	1	0
155°	1	1	1	1	1	0
165°	1	1	1	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°	1091.8	1091.8	1091.8	1091.8	1091.8
2.5°	1085.2	1091.1	1093.3	1096.2	1094.0
5°	1083.7	1089.6	1091.1	1093.3	1090.3
7.5°	1080.7	1085.9	1085.9	1085.9	1083.7
10°	1076.3	1080.0	1077.1	1074.1	1071.1
12.5°	1069.7	1071.1	1065.2	1060.1	1054.2
15°	1060.8	1060.1	1050.5	1038.7	1031.3
17.5°	1050.5	1047.5	1029.8	1014.3	1004.0
20°	1038.7	1031.3	1005.4	981.1	972.2
22.5°	1023.2	1012.8	976.7	942.7	927.9
25°	1005.4	988.5	942.0	899.1	879.9
27.5°	987.0	961.9	899.1	846.0	825.3
30°	965.6	930.9	854.9	793.6	770.0
32.5°	941.2	896.9	803.9	730.1	705.0
35°	911.0	852.6	741.2	663.7	642.2
37.5°	877.0	805.4	677.7	597.2	571.4
40°	838.6	751.5	610.5	530.0	504.9
42.5°	793.6	693.9	544.1	465.8	444.4
45°	745.6	629.7	476.1	404.5	384.6
47.5°	691.7	566.2	414.1	346.2	330.7
50°	635.6	502.7	355.8	297.5	282.0
52.5°	578.8	439.2	301.9	252.5	239.2
55°	512.3	378.7	257.6	214.1	202.3
57.5°	447.4	324.8	215.6	179.4	172.0
60°	384.6	273.1	180.9	151.3	146.2
62.5°	326.3	228.8	152.1	127.7	121.1
65°	270.2	191.9	126.2	107.8	102.6
67.5°	222.2	156.5	105.6	89.3	84.9
70°	179.4	126.2	85.6	73.1	70.9
72.5°	139.5	101.1	70.1	60.5	58.3
75°	107.8	79.0	55.4	48.7	46.5
77.5°	79.0	59.1	42.8	37.6	36.2
80°	54.6	42.1	31.7	28.8	28.1
82.5°	34.7	27.3	22.9	20.7	20.7
85°	18.5	17.0	14.8	14.0	13.3
87.5°	7.4	8.1	8.1	8.1	7.4
90°	0.0	2.2	3.0	3.7	3.7
92.5°	0.0	1.5	3.0	3.7	3.7
95°	0.0	0.7	2.2	3.7	3.7
97.5°	0.0	0.7	2.2	3.0	3.0
100°	0.0	0.7	1.5	3.0	3.0
102.5°	0.0	0.7	1.5	2.2	3.0
105°	0.0	0.7	1.5	2.2	2.2
107.5°	0.0	0.0	1.5	2.2	2.2
110°	0.0	0.0	0.7	1.5	2.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.7	1.5	2.2
115°	0.0	0.0	0.7	1.5	1.5
117.5°	0.0	0.0	0.7	1.5	1.5
120°	0.0	0.0	0.7	1.5	1.5
122.5°	0.0	0.0	0.7	1.5	1.5
125°	0.0	0.0	0.7	1.5	1.5
127.5°	0.0	0.7	0.7	0.7	1.5
130°	0.0	0.7	0.7	0.7	1.5
132.5°	0.7	0.7	0.7	0.7	0.7
135°	0.7	0.7	0.7	0.7	0.7
137.5°	0.7	0.7	0.7	0.7	0.7
140°	0.7	0.7	0.7	0.7	0.7
142.5°	0.7	0.7	0.7	0.7	0.7
145°	0.7	0.7	0.7	0.7	0.7
147.5°	0.7	0.7	0.7	0.7	0.7
150°	0.7	0.7	0.7	0.7	0.7
152.5°	0.7	0.7	0.7	0.7	0.7
155°	0.7	0.7	0.7	0.7	0.7
157.5°	0.7	0.7	0.7	0.7	0.7
160°	0.7	0.7	0.7	0.7	1.5
162.5°	0.7	0.7	0.7	1.5	1.5
165°	0.7	0.7	0.7	1.5	1.5
167.5°	0.7	0.7	0.7	1.5	1.5
170°	0.7	0.7	0.7	1.5	1.5
172.5°	0.7	0.7	0.7	1.5	1.5
175°	0.7	0.7	1.5	1.5	1.5
177.5°	0.7	0.7	1.5	1.5	1.5
180°	1.5	1.5	1.5	1.5	1.5



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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	21.13	22.57	21.50	22.89	23.22	16.49	17.94	16.86	18.26	18.58
	3H	22.38	23.67	22.77	24.01	24.38	17.53	18.82	17.92	19.16	19.53
	4H	22.78	23.99	23.19	24.34	24.73	17.90	19.11	18.31	19.46	19.85
	6H	23.02	24.13	23.44	24.51	24.91	18.16	19.27	18.58	19.65	20.05
	8H	23.08	24.13	23.51	24.53	24.94	18.26	19.31	18.69	19.71	20.12
	12H	23.10	24.10	23.53	24.49	24.93	18.32	19.33	18.76	19.72	20.15
4H	2H	21.15	22.35	21.55	22.71	23.09	17.07	18.27	17.47	18.63	19.02
	3H	22.55	23.54	22.97	23.95	24.36	18.29	19.29	18.71	19.69	20.10
	4H	23.05	23.93	23.48	24.36	24.81	18.75	19.64	19.19	20.07	20.51
	6H	23.39	24.16	23.85	24.61	25.08	19.11	19.88	19.58	20.33	20.80
	8H	23.47	24.19	23.94	24.64	25.12	19.23	19.95	19.71	20.41	20.88
	12H	23.52	24.16	24.01	24.65	25.13	19.34	19.98	19.82	20.46	20.94
8H	4H	23.04	23.76	23.51	24.21	24.68	19.04	19.76	19.51	20.21	20.69
	6H	23.43	24.02	23.93	24.52	25.01	19.49	20.08	19.99	20.58	21.07
	8H	23.55	24.08	24.07	24.60	25.10	19.67	20.20	20.19	20.72	21.22
	12H	23.64	24.11	24.16	24.61	25.19	19.83	20.31	20.35	20.80	21.38
12H	4H	23.01	23.65	23.50	24.14	24.62	19.07	19.71	19.56	20.20	20.68
	6H	23.40	23.93	23.92	24.45	24.95	19.54	20.07	20.06	20.59	21.09
	8H	23.56	24.03	24.07	24.53	25.10	19.77	20.24	20.29	20.74	21.31