

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: P892471

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

Issue Date: 11/11/2024

**Test Information**

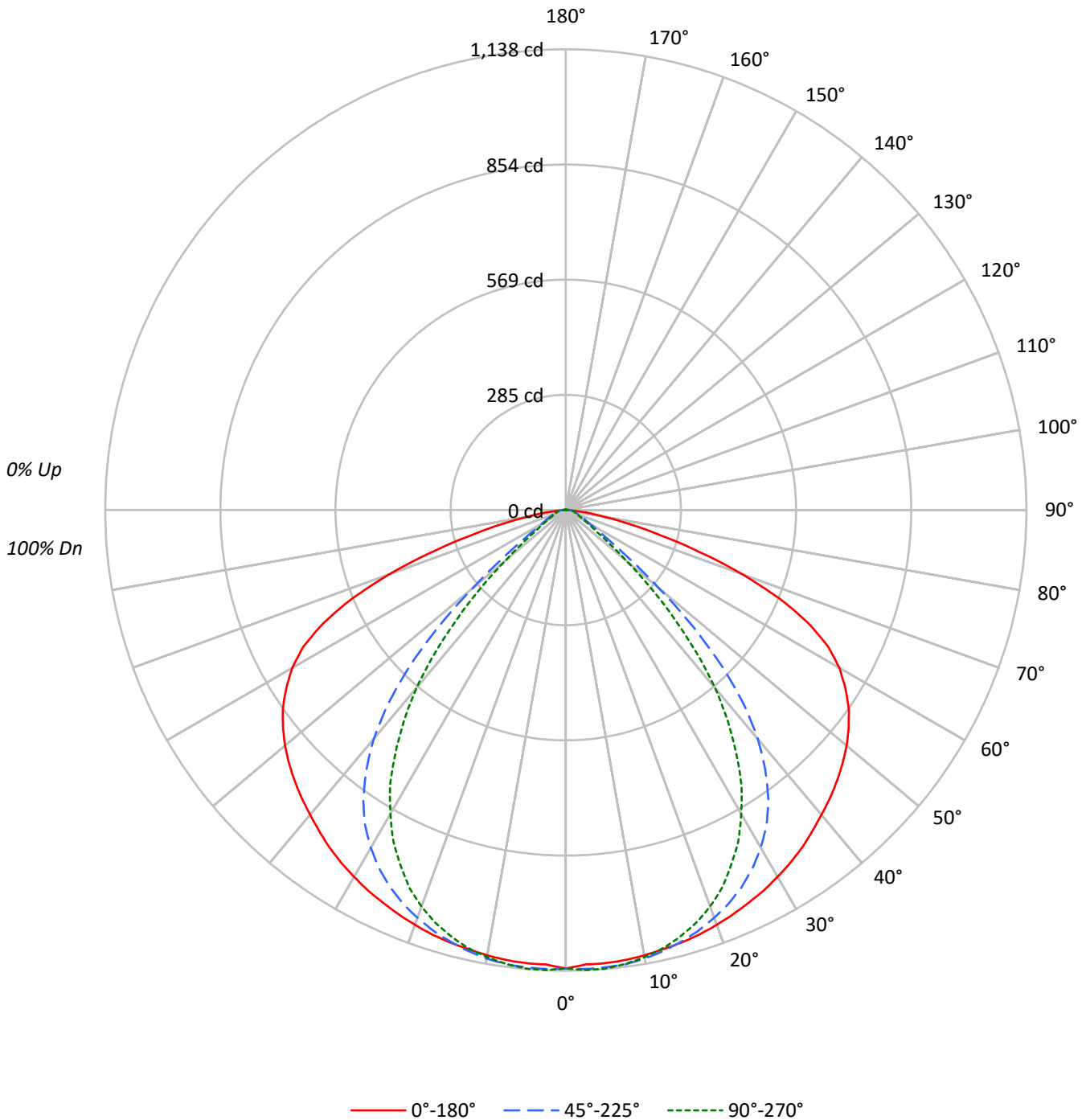
Test Method: LM-79-2019  
Report Number: P892471  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-2SL-A-UNV-L840  
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 4000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2374.9 lumens  
Efficiency: N/A  
Efficacy: 159.4 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): 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

TEST NUMBER: P892471  
CATALOG NUMBER: 2MB-2SL-A-UNV-L840

### Luminous Intensity Polar Plot





TEST NUMBER: P892471

CATALOG NUMBER: 2MB-2SL-A-UNV-L840

**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°	23188	23188	23188
5°	23095	23307	23369
10°	23223	23393	23317
15°	23444	23395	23130
20°	23760	23357	22715
25°	24168	23217	21850
30°	24734	22779	20492
35°	25447	21813	18360
40°	26265	19732	15351
45°	27426	15820	10946
50°	28855	9617	6279
55°	30466	4637	3374
60°	31956	2842	2297
65°	32012	2287	1894
70°	27713	2077	1766
75°	19510	2104	1930
80°	11485	2523	2441
85°	5380	3806	3642

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 62.5°  
 Luminance: 32408 cd/sqm



TEST NUMBER: P892471  
 CATALOG NUMBER: 2MB-2SL-A-UNV-L840

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.9	4.5
10°-20°	311.4	13.1
20°-30°	471.3	19.8
30°-40°	544.2	22.9
40°-50°	465.4	19.6
50°-60°	254.2	10.7
60°-70°	128.4	5.4
70°-80°	62.3	2.6
80°-90°	21.4	0.9
90°-100°	5.2	0.2
100°-110°	0.8	0.0
110°-120°	0.3	0.0
120°-130°	0.3	0.0
130°-140°	0.5	0.0
140°-150°	0.4	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	890.5	37.5
0°-40°	1434.8	60.4
0°-60°	2154.4	90.7
0°-90°	2366.6	99.6
90°-120°	6.3	0.3
90°-150°	7.5	0.3
90°-180°	8.0	0.3
0°-180°	2374.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1132	1132	1132	1132	1132	
5°	1124	1132	1134	1138	1137	107
15°	1106	1112	1104	1098	1091	313
25°	1070	1064	1028	988	967	494
35°	1018	983	873	771	734	638
45°	947	827	546	406	378	732
55°	853	392	130	101	94	761
65°	661	73	47	42	39	640
75°	247	41	27	26	24	273
85°	23	23	16	16	16	35
90°	0	13	10	10	10	1
95°	0	2	4	7	6	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	0
145°	1	1	1	1	1	0
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	



TEST NUMBER: P892471

CATALOG NUMBER: 2MB-2SL-A-UNV-L840

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1132.4	1132.4	1132.4	1132.4	1132.4
2.5°	1123.6	1131.7	1134.6	1139.8	1137.6
5°	1123.6	1132.4	1133.9	1138.3	1136.9
7.5°	1121.4	1129.5	1131.7	1133.9	1131.0
10°	1116.9	1125.1	1125.1	1125.1	1121.4
12.5°	1111.0	1119.9	1115.5	1112.5	1108.8
15°	1105.9	1112.5	1103.6	1098.5	1091.1
17.5°	1099.2	1104.4	1089.6	1079.3	1069.7
20°	1090.4	1092.6	1071.9	1052.7	1042.4
22.5°	1080.8	1078.5	1052.0	1023.9	1009.9
25°	1069.7	1063.8	1027.6	987.7	967.1
27.5°	1059.4	1046.8	998.1	944.2	922.8
30°	1046.1	1029.1	963.4	895.5	866.7
32.5°	1032.8	1007.7	922.8	840.1	808.4
35°	1018.0	983.3	872.6	770.7	734.5
37.5°	1000.3	953.0	809.8	695.4	657.0
40°	982.6	917.6	738.2	608.3	574.3
42.5°	965.6	877.7	650.4	510.9	477.6
45°	947.1	826.8	546.3	406.0	378.0
47.5°	927.2	756.7	426.0	307.8	284.2
50°	905.8	665.9	301.9	215.6	197.1
52.5°	880.7	540.4	199.3	145.4	133.6
55°	853.4	392.0	129.9	101.1	94.5
57.5°	818.7	255.4	91.5	75.3	70.1
60°	780.3	152.8	69.4	59.8	56.1
62.5°	730.8	98.9	56.1	50.2	45.8
65°	660.7	73.1	47.2	42.1	39.1
67.5°	572.1	60.5	39.9	36.2	33.2
70°	462.9	53.2	34.7	31.7	29.5
72.5°	349.9	46.5	30.3	28.1	26.6
75°	246.6	40.6	26.6	25.8	24.4
77.5°	161.7	35.4	24.4	23.6	22.9
80°	97.4	30.3	21.4	21.4	20.7
82.5°	54.6	26.6	19.2	19.2	17.7
85°	22.9	22.9	16.2	16.2	15.5
87.5°	6.6	17.7	13.3	13.3	11.8
90°	0.0	13.3	10.3	10.3	9.6
92.5°	0.0	7.4	7.4	8.1	7.4
95°	0.0	1.5	4.4	6.6	5.9
97.5°	0.0	0.7	3.0	5.2	4.4
100°	0.0	0.0	1.5	3.7	3.0
102.5°	0.0	0.0	0.7	2.2	2.2
105°	0.0	0.0	0.7	1.5	0.7
107.5°	0.0	0.0	0.7	0.7	0.7
110°	0.0	0.0	0.7	0.7	0.7



TEST NUMBER: P892471

CATALOG NUMBER: 2MB-2SL-A-UNV-L840

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.7	0.7	0.7
115°	0.0	0.0	0.0	0.7	0.7
117.5°	0.0	0.0	0.0	0.7	0.0
120°	0.0	0.0	0.0	0.7	0.0
122.5°	0.0	0.0	0.0	0.7	0.0
125°	0.0	0.0	0.7	0.7	0.0
127.5°	0.0	0.0	0.7	0.7	0.7
130°	0.0	0.0	0.7	0.7	0.7
132.5°	0.7	0.0	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	1.5	0.7
157.5°	0.7	0.7	0.7	1.5	0.7
160°	0.7	0.7	0.7	1.5	0.7
162.5°	0.7	0.7	1.5	1.5	1.5
165°	0.7	0.7	1.5	1.5	1.5
167.5°	0.7	0.7	1.5	1.5	1.5
170°	0.7	0.7	1.5	1.5	1.5
172.5°	0.7	0.7	1.5	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



TEST NUMBER: P892471  
 CATALOG NUMBER: 2MB-2SL-A-UNV-L840

**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	21.09	22.50	21.46	22.83	23.15	10.21	11.62	10.58	11.95	12.27
	3H	23.87	25.13	24.26	25.47	25.84	11.22	12.47	11.60	12.81	13.18
	4H	24.70	25.88	25.11	26.23	26.62	11.77	12.95	12.18	13.30	13.69
	6H	25.10	26.18	25.52	26.55	26.96	12.47	13.55	12.89	13.93	14.33
	8H	25.17	26.20	25.61	26.60	27.01	12.85	13.87	13.28	14.27	14.68
	12H	25.19	26.17	25.63	26.56	27.00	13.26	14.25	13.70	14.63	15.07
4H	2H	20.91	22.09	21.32	22.44	22.83	10.64	11.82	11.05	12.17	12.56
	3H	23.70	24.67	24.12	25.08	25.49	11.92	12.88	12.34	13.29	13.70
	4H	24.54	25.40	24.98	25.83	26.28	12.65	13.52	13.09	13.94	14.39
	6H	25.01	25.76	25.48	26.21	26.68	13.57	14.31	14.03	14.77	15.24
	8H	25.12	25.82	25.59	26.27	26.75	14.05	14.75	14.52	15.20	15.68
	12H	25.17	25.79	25.66	26.28	26.76	14.60	15.22	15.09	15.71	16.19
8H	4H	24.43	25.13	24.90	25.58	26.06	13.09	13.79	13.57	14.24	14.72
	6H	24.90	25.48	25.41	25.98	26.47	14.21	14.79	14.72	15.29	15.78
	8H	25.04	25.56	25.56	26.07	26.57	14.85	15.37	15.38	15.89	16.39
	12H	25.13	25.59	25.65	26.09	26.67	15.59	16.05	16.11	16.55	17.13
12H	4H	24.39	25.02	24.88	25.50	25.98	13.26	13.88	13.75	14.37	14.85
	6H	24.86	25.37	25.38	25.89	26.39	14.42	14.94	14.95	15.46	15.96
	8H	25.02	25.48	25.53	25.98	26.55	15.16	15.62	15.68	16.12	16.70