

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: P892500

Luminaire Tested: 2MB-2SL-ASMF-UNV-L950

Issue Date: 11/11/2024

**Test Information**

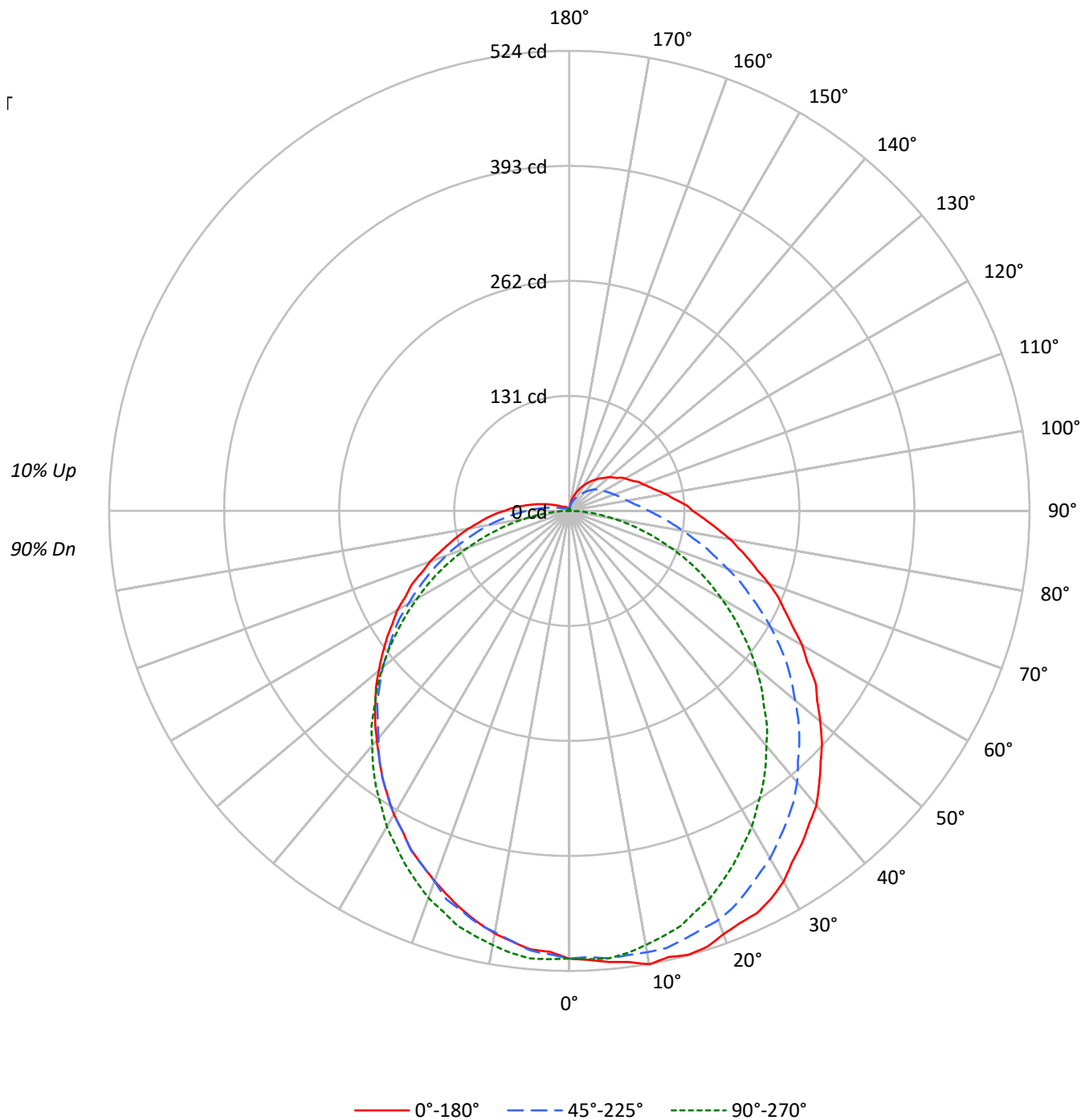
Test Method: LM-79-2019  
Report Number: P892500  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-185-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-2SL-ASMF-UNV-L950  
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 90CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1753.0 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.21 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.12')  
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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	93	93	93	90
1	105	99	95	90	101	96	92	88	90	87	83	85	82	79	79	77	75	75	75	75	72
2	95	86	79	72	91	83	76	71	78	72	68	73	69	65	69	65	62	62	62	62	59
3	86	75	66	60	83	73	65	58	68	62	56	64	59	54	60	56	52	52	52	52	49
4	79	66	57	50	76	64	56	49	61	53	48	57	51	46	54	49	44	44	44	44	42
5	72	59	50	43	69	57	49	42	54	47	41	51	45	40	48	43	38	38	38	38	36
6	67	53	44	37	64	52	43	37	49	41	36	46	40	35	44	38	34	34	34	34	31
7	62	48	39	33	59	47	38	32	44	37	32	42	36	31	40	34	30	30	30	30	28
8	57	44	35	29	55	43	35	29	41	33	28	39	32	27	37	31	27	27	27	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	28	24	24	24	24	22
10	50	37	29	24	49	36	29	23	34	28	23	33	27	22	31	26	22	22	22	22	20

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

	0°	45°	90°	135°	180°
0°	10441	10441	10441	10441	10441
5°	10542	10182	10102	10003	10252
10°	10783	9950	9642	9502	10049
15°	10911	9722	9215	9089	9810
20°	10932	9505	8727	8600	9551
25°	11094	9183	8213	8194	9349
30°	11126	8874	7725	7756	9107
35°	11057	8540	7214	7333	8879
40°	11111	8193	6688	6862	8654
45°	11026	7787	6169	6500	8506
50°	11050	7372	5672	6089	8390
55°	11219	7008	5101	5676	8308
60°	11311	6560	4515	5240	8346
65°	11577	6076	3921	4807	8440
70°	12331	5611	3214	4391	8596
75°	13528	5269	2460	3912	8976
80°	16131	4930	1646	3485	10114
85°	21953	4824	825	3042	12907

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 45548 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.4	2.8
10°-20°	138.7	7.9
20°-30°	209.1	11.9
30°-40°	250.9	14.3
40°-50°	261.3	14.9
50°-60°	242.2	13.8
60°-70°	199.5	11.4
70°-80°	143.9	8.2
80°-90°	91.4	5.2
90°-100°	56.3	3.2
100°-110°	37.6	2.1
110°-120°	26.7	1.5
120°-130°	19.6	1.1
130°-140°	13.5	0.8
140°-150°	8.2	0.5
150°-160°	4.1	0.2
160°-170°	1.5	0.1
170°-180°	0.2	0.0
0°-30°	396.1	22.6
0°-40°	647.1	36.9
0°-60°	1150.6	65.6
0°-90°	1585.3	90.4
90°-120°	120.6	6.9
90°-150°	161.9	9.2
90°-180°	168.0	9.6
0°-180°	1753.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	510	510	510	510	510	
5°	516	512	512	503	502	49
15°	523	505	490	472	471	148
25°	506	478	443	426	426	232
35°	462	432	384	371	371	289
45°	405	370	313	309	312	313
55°	343	302	239	245	254	304
65°	271	227	163	180	198	270
75°	211	160	86	119	140	224
85°	161	109	22	69	95	137
90°	140	91	2	49	74	78
95°	125	77	1	33	57	100
105°	98	60	1	14	30	105
115°	81	50	2	6	14	81
125°	66	42	2	5	8	60
135°	52	33	2	4	6	41
145°	40	24	2	3	4	26
155°	28	16	2	2	3	13
165°	16	9	2	1	2	5
175°	2	4	2	1	0	0
180°	2	2	2	2	2	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9
2.5°	511.9	513.4	508.6	511.7	511.1	511.7	505.5	510.6	502.7
5°	515.7	516.5	511.7	513.4	511.7	507.3	502.7	501.0	501.5
7.5°	518.3	522.4	510.4	510.9	507.8	503.2	494.6	496.1	495.1
10°	524.4	519.8	510.4	508.1	502.2	497.4	487.4	488.2	488.7
12.5°	520.6	519.6	510.1	501.7	495.9	491.8	481.6	479.0	480.3
15°	523.4	519.1	505.0	498.4	489.5	482.3	472.1	470.4	470.6
17.5°	520.8	517.3	499.9	490.8	478.3	473.9	464.2	461.2	459.7
20°	513.2	511.4	496.1	480.3	469.1	460.7	448.9	447.2	448.4
22.5°	508.1	503.8	488.5	472.7	456.3	448.9	437.2	437.0	437.2
25°	505.5	499.9	478.0	461.4	443.3	436.7	426.5	422.7	426.0
27.5°	497.9	492.8	467.0	448.9	428.8	419.9	411.5	410.7	411.2
30°	487.7	477.8	457.1	434.9	415.5	406.4	399.5	394.4	399.2
32.5°	473.2	467.6	444.1	419.9	398.5	392.1	385.2	384.7	384.7
35°	461.9	457.9	431.9	406.6	383.7	375.0	370.9	369.1	370.9
37.5°	448.9	442.8	418.9	390.6	367.1	359.7	355.6	354.1	355.4
40°	437.7	426.5	403.6	374.0	349.0	342.4	338.0	339.6	340.9
42.5°	421.2	414.8	385.5	357.2	333.5	326.3	322.7	324.0	327.1
45°	404.8	399.0	370.4	339.6	313.3	309.5	309.2	308.5	312.3
47.5°	390.1	381.6	353.9	322.2	296.5	292.2	292.7	295.2	298.5
50°	373.0	363.0	335.5	303.6	277.9	275.1	277.1	278.9	283.2
52.5°	355.9	348.0	318.7	286.0	259.0	257.0	259.8	265.6	268.2
55°	342.6	328.4	302.1	265.4	238.9	239.1	244.7	248.1	253.7
57.5°	321.5	310.8	283.2	247.0	220.0	221.8	229.4	235.1	238.6
60°	306.4	292.9	264.9	227.4	200.1	202.9	211.6	220.0	226.1
62.5°	287.1	275.3	245.8	208.0	181.8	185.8	195.5	205.5	209.8
65°	271.3	258.0	226.9	188.7	162.6	167.5	179.5	190.7	197.8
67.5°	257.7	244.0	210.1	170.8	143.3	150.4	164.4	175.4	181.0
70°	241.7	225.6	190.9	150.9	123.1	131.5	149.4	162.1	168.5
72.5°	224.6	211.6	174.4	132.6	104.5	114.7	134.4	147.6	153.7
75°	211.3	196.8	160.4	114.2	85.7	97.9	119.1	134.1	140.2
77.5°	197.8	184.6	144.5	97.4	68.8	82.6	105.5	122.1	128.5
80°	185.8	170.6	131.3	83.6	51.2	67.6	92.8	109.1	116.5
82.5°	172.6	159.3	119.8	69.1	36.5	53.8	80.3	98.2	104.3
85°	160.9	147.1	109.1	57.6	22.4	41.6	68.8	87.2	94.6
87.5°	150.2	138.7	99.2	48.9	11.2	31.6	57.9	76.5	84.9
90°	140.5	127.5	90.8	41.0	2.0	22.9	48.9	67.3	73.7
92.5°	134.4	118.8	83.9	35.9	1.3	16.3	40.8	58.9	66.3
95°	125.2	111.4	76.7	32.1	1.3	11.0	32.9	50.5	56.9
97.5°	117.3	104.5	71.6	29.8	1.0	7.4	27.0	42.3	48.9
100°	111.2	99.2	67.0	27.8	1.3	5.4	21.4	35.9	41.8
102.5°	104.3	93.3	63.5	26.5	1.3	3.8	16.8	30.3	35.7
105°	98.2	88.5	60.2	25.2	1.3	3.3	13.5	25.0	29.8
107.5°	93.6	83.4	57.4	24.5	1.3	3.3	10.7	20.4	24.5
110°	89.0	79.3	54.6	23.7	1.3	3.1	8.4	16.8	20.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	85.9	75.5	52.0	22.9	1.5	3.1	6.9	14.0	16.8
115°	80.6	72.1	49.7	22.7	1.5	2.8	6.4	11.5	14.3
117.5°	76.7	69.1	47.4	21.9	1.5	2.8	6.1	9.4	11.5
120°	73.9	65.5	45.4	21.2	1.5	2.5	5.6	8.4	9.7
122.5°	70.4	62.2	43.6	20.6	1.5	2.5	5.4	7.9	8.7
125°	65.5	59.1	41.6	19.6	1.8	2.5	5.1	7.4	8.2
127.5°	62.5	56.3	40.0	18.4	1.8	2.3	4.8	6.9	7.6
130°	59.9	53.3	38.2	17.1	1.8	2.3	4.6	6.4	7.1
132.5°	56.1	50.2	35.7	16.1	1.8	2.0	4.1	5.9	6.6
135°	52.5	47.7	33.1	15.0	1.8	2.0	3.8	5.6	6.1
137.5°	50.2	45.1	30.8	14.0	1.8	1.8	3.6	5.1	5.6
140°	46.4	42.3	28.3	13.0	1.8	1.8	3.3	4.8	5.1
142.5°	43.6	39.5	26.0	12.0	1.8	1.8	3.1	4.3	4.8
145°	40.3	36.7	23.5	11.0	1.8	1.5	2.8	4.1	4.3
147.5°	37.2	33.4	21.4	10.2	1.8	1.5	2.5	3.6	3.8
150°	34.2	30.1	19.4	9.4	1.8	1.5	2.3	3.1	3.6
152.5°	30.8	26.0	17.3	8.7	1.8	1.5	2.0	2.8	3.1
155°	27.5	22.7	15.6	7.9	2.0	1.5	1.8	2.3	2.8
157.5°	24.7	19.6	13.8	7.1	2.0	1.3	1.8	2.0	2.3
160°	21.4	16.8	12.2	6.4	2.0	1.3	1.5	1.8	2.0
162.5°	18.9	14.0	10.7	5.9	2.0	1.3	1.5	1.5	1.8
165°	16.1	11.7	8.9	5.4	2.0	1.3	1.3	1.3	1.5
167.5°	13.0	9.2	7.4	4.8	2.0	1.3	1.3	1.0	1.3
170°	9.7	6.9	6.1	4.3	2.0	1.3	1.0	0.8	1.0
172.5°	4.3	5.4	4.8	3.8	2.3	1.3	1.0	0.8	0.5
175°	2.3	3.8	3.8	3.3	2.3	1.3	1.0	0.8	0.3
177.5°	1.8	2.3	2.8	2.8	2.3	1.5	1.0	0.5	0.3
180°	1.5	1.5	1.5	1.5	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	18.48	19.96	18.99	20.46	21.01	17.36	18.83	17.86	19.34	19.88
	3H	20.57	21.92	21.09	22.43	23.01	19.19	20.54	19.71	21.05	21.64
	4H	21.52	22.79	22.06	23.32	23.92	19.92	21.19	20.46	21.72	22.32
	6H	22.44	23.63	22.99	24.17	24.78	20.52	21.71	21.07	22.25	22.86
	8H	22.87	24.01	23.43	24.57	25.19	20.75	21.89	21.32	22.45	23.07
	12H	23.29	24.38	23.86	24.94	25.59	20.96	22.05	21.53	22.60	23.25
4H	2H	18.96	20.24	19.50	20.77	21.36	17.93	19.20	18.47	19.73	20.33
	3H	21.28	22.37	21.83	22.94	23.55	19.96	21.04	20.51	21.61	22.23
	4H	22.39	23.39	22.97	23.97	24.62	20.79	21.78	21.36	22.36	23.01
	6H	23.50	24.38	24.09	24.98	25.65	21.51	22.39	22.10	22.99	23.65
	8H	24.03	24.86	24.63	25.46	26.14	21.80	22.63	22.40	23.23	23.91
	12H	24.56	25.31	25.18	25.94	26.62	22.07	22.82	22.68	23.45	24.13
8H	4H	22.64	23.47	23.24	24.07	24.75	21.13	21.96	21.73	22.56	23.23
	6H	23.93	24.63	24.55	25.27	25.95	21.98	22.68	22.61	23.33	24.01
	8H	24.60	25.23	25.24	25.88	26.57	22.36	22.99	23.00	23.65	24.34
	12H	25.30	25.87	25.94	26.51	27.27	22.72	23.28	23.36	23.92	24.68
12H	4H	22.66	23.41	23.28	24.04	24.72	21.20	21.95	21.82	22.58	23.26
	6H	23.98	24.61	24.62	25.26	25.96	22.09	22.73	22.74	23.38	24.07
	8H	24.72	25.28	25.36	25.93	26.68	22.54	23.10	23.18	23.74	24.50