

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: P893372

Luminaire Tested: 4MB-3SL-ASMF-UNV-L850

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P893372  
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: 4MB-3SL-ASMF-UNV-L850  
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 80CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

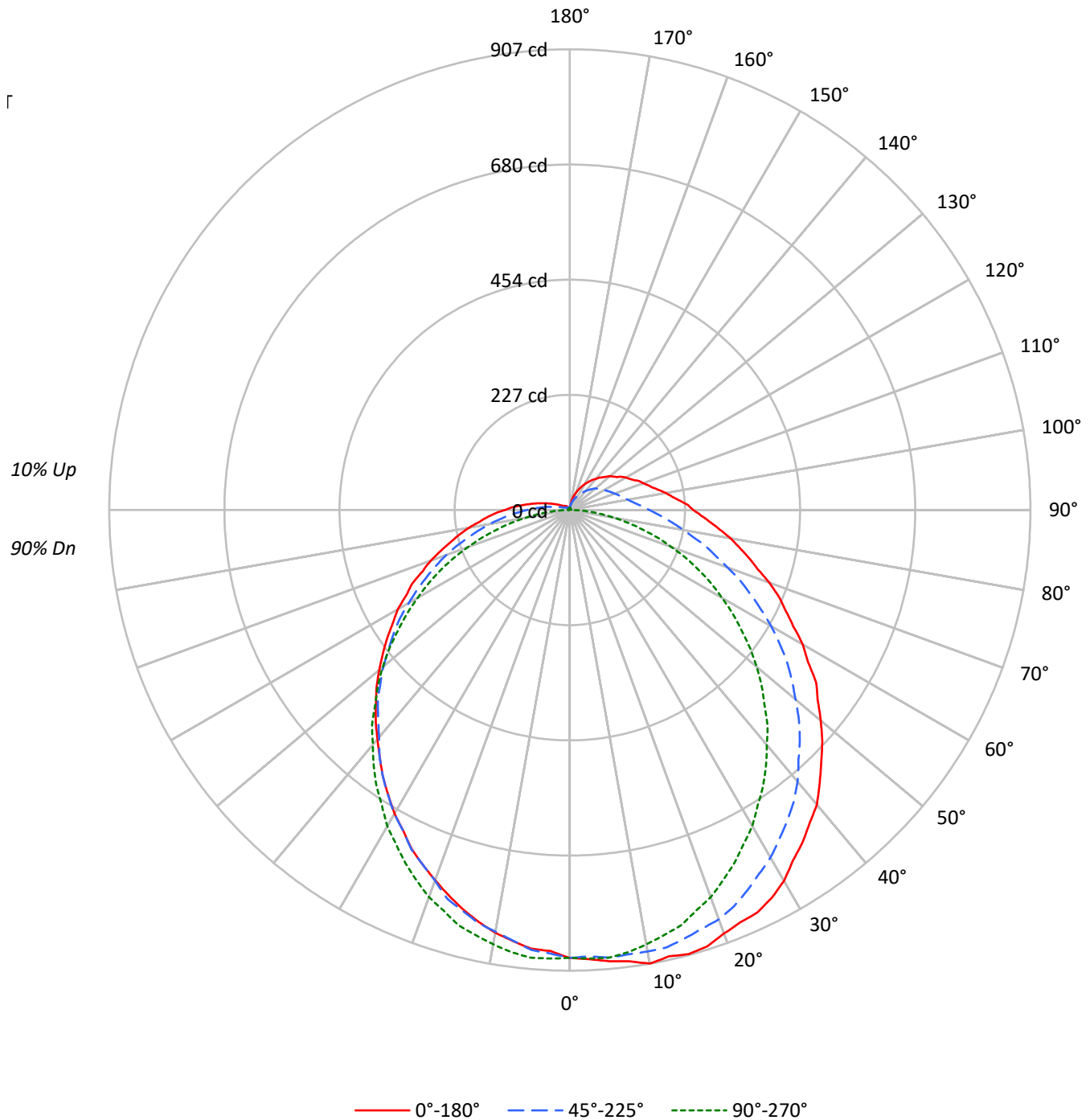
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3031.0 lumens  
Efficiency: N/A  
Efficacy: 143.6 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.21 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 21.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 5.2  
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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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.7	2.8
10°-20°	239.7	7.9
20°-30°	361.5	11.9
30°-40°	433.9	14.3
40°-50°	451.8	14.9
50°-60°	418.8	13.8
60°-70°	344.9	11.4
70°-80°	248.8	8.2
80°-90°	157.9	5.2
90°-100°	97.4	3.2
100°-110°	64.9	2.1
110°-120°	46.2	1.5
120°-130°	33.9	1.1
130°-140°	23.3	0.8
140°-150°	14.2	0.5
150°-160°	7.0	0.2
160°-170°	2.6	0.1
170°-180°	0.4	0.0
0°-30°	684.9	22.6
0°-40°	1118.8	36.9
0°-60°	1989.4	65.6
0°-90°	2741.1	90.4
90°-120°	208.5	6.9
90°-150°	279.9	9.2
90°-180°	290.0	9.6
0°-180°	3031.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	882	882	882	882	882	
5°	892	885	885	869	867	85
15°	905	873	846	816	814	255
25°	874	826	766	737	737	402
35°	799	747	663	641	641	500
45°	700	640	542	535	540	542
55°	592	522	413	423	439	526
65°	469	392	281	310	342	467
75°	365	277	148	206	242	387
85°	278	189	39	119	164	236
90°	243	157	4	85	127	134
95°	216	133	2	57	98	172
105°	170	104	2	23	52	181
115°	139	86	3	11	25	139
125°	113	72	3	9	14	103
135°	91	57	3	7	11	71
145°	70	41	3	5	8	44
155°	48	27	4	3	5	22
165°	28	15	4	2	3	8
175°	4	7	4	2	0	1
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	881.6	881.6	881.6	881.6	881.6	881.6	881.6	881.6	881.6
2.5°	885.1	887.8	879.4	884.7	883.8	884.7	874.1	882.9	869.2
5°	891.7	893.0	884.7	887.8	884.7	877.2	869.2	866.2	867.0
7.5°	896.1	903.2	882.5	883.4	878.1	870.1	855.1	857.8	856.0
10°	906.7	898.8	882.5	878.5	868.4	860.0	842.8	844.1	845.0
12.5°	900.1	898.3	882.0	867.5	857.3	850.3	832.7	828.3	830.5
15°	905.0	897.5	873.2	861.8	846.3	834.0	816.4	813.3	813.7
17.5°	900.5	894.4	864.4	848.5	826.9	819.4	802.7	797.4	794.8
20°	887.3	884.2	857.8	830.5	811.1	796.5	776.2	773.2	775.4
22.5°	878.5	871.0	844.6	817.2	789.0	776.2	756.0	755.5	756.0
25°	874.1	864.4	826.5	797.8	766.5	755.1	737.4	730.8	736.6
27.5°	860.9	852.1	807.5	776.2	741.4	726.0	711.4	710.1	711.0
30°	843.2	826.0	790.3	752.0	718.5	702.6	690.7	681.9	690.3
32.5°	818.1	808.4	767.9	726.0	689.0	677.9	666.0	665.2	665.2
35°	798.7	791.7	746.7	703.1	663.4	648.4	641.4	638.3	641.4
37.5°	776.2	765.7	724.2	675.3	634.7	622.0	614.9	612.3	614.5
40°	756.8	737.4	697.8	646.6	603.4	592.0	584.5	587.1	589.3
42.5°	728.2	717.2	666.5	617.6	576.6	564.2	558.0	560.2	565.5
45°	700.0	689.8	640.5	587.1	541.7	535.1	534.7	533.4	540.0
47.5°	674.4	659.9	611.8	557.2	512.6	505.2	506.0	510.4	516.2
50°	644.9	627.7	580.1	525.0	480.5	475.6	479.1	482.2	489.7
52.5°	615.3	601.7	551.0	494.6	447.8	444.3	449.2	459.3	463.7
55°	592.4	567.7	522.3	458.9	413.0	413.5	423.2	428.9	438.6
57.5°	555.8	537.3	489.7	427.1	380.4	383.5	396.7	406.4	412.6
60°	529.8	506.5	458.0	393.2	346.0	350.9	365.9	380.4	391.0
62.5°	496.3	476.1	424.9	359.7	314.3	321.3	338.1	355.3	362.8
65°	469.0	446.1	392.3	326.2	281.2	289.6	310.3	329.7	342.1
67.5°	445.6	421.8	363.2	295.3	247.7	260.1	284.3	303.3	313.0
70°	417.9	390.1	330.2	261.0	212.9	227.4	258.3	280.3	291.4
72.5°	388.3	365.9	301.5	229.2	180.7	198.4	232.3	255.2	265.8
75°	365.4	340.3	277.3	197.5	148.1	169.3	205.9	231.9	242.4
77.5°	342.1	319.1	249.9	168.4	119.0	142.8	182.5	211.1	222.2
80°	321.3	294.9	227.0	144.6	88.6	116.8	160.4	188.7	201.4
82.5°	298.4	275.5	207.2	119.5	63.0	93.0	138.9	169.7	180.3
85°	278.1	254.3	188.7	99.6	38.8	71.8	119.0	150.8	163.5
87.5°	259.6	239.8	171.5	84.6	19.4	54.7	100.1	132.2	146.8
90°	242.9	220.4	156.9	71.0	3.5	39.7	84.6	116.4	127.4
92.5°	232.3	205.4	145.0	62.2	2.2	28.2	70.5	101.8	114.6
95°	216.4	192.6	132.7	55.5	2.2	19.0	56.9	87.3	98.3
97.5°	202.8	180.7	123.9	51.6	1.8	12.8	46.7	73.2	84.6
100°	192.2	171.5	115.9	48.0	2.2	9.3	37.0	62.2	72.3
102.5°	180.3	161.3	109.8	45.8	2.2	6.6	29.1	52.5	61.7
105°	169.7	153.0	104.0	43.6	2.2	5.7	23.4	43.2	51.6
107.5°	161.8	144.1	99.2	42.3	2.2	5.7	18.5	35.3	42.3
110°	153.8	137.1	94.3	41.0	2.2	5.3	14.5	29.1	35.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	148.5	130.5	89.9	39.7	2.6	5.3	11.9	24.2	29.1
115°	139.3	124.7	86.0	39.2	2.6	4.8	11.0	19.8	24.7
117.5°	132.7	119.5	82.0	37.9	2.6	4.8	10.6	16.3	19.8
120°	127.8	113.3	78.5	36.6	2.6	4.4	9.7	14.5	16.8
122.5°	121.7	107.6	75.4	35.7	2.6	4.4	9.3	13.7	15.0
125°	113.3	102.3	71.8	33.9	3.1	4.4	8.8	12.8	14.1
127.5°	108.0	97.4	69.2	31.7	3.1	4.0	8.4	11.9	13.2
130°	103.6	92.1	66.1	29.5	3.1	4.0	7.9	11.0	12.3
132.5°	97.0	86.8	61.7	27.8	3.1	3.5	7.1	10.1	11.5
135°	90.8	82.4	57.3	26.0	3.1	3.5	6.6	9.7	10.6
137.5°	86.8	78.0	53.3	24.2	3.1	3.1	6.2	8.8	9.7
140°	80.2	73.2	48.9	22.5	3.1	3.1	5.7	8.4	8.8
142.5°	75.4	68.3	45.0	20.7	3.1	3.1	5.3	7.5	8.4
145°	69.6	63.5	40.6	19.0	3.1	2.6	4.8	7.1	7.5
147.5°	64.4	57.7	37.0	17.6	3.1	2.6	4.4	6.2	6.6
150°	59.1	52.0	33.5	16.3	3.1	2.6	4.0	5.3	6.2
152.5°	53.3	45.0	30.0	15.0	3.1	2.6	3.5	4.8	5.3
155°	47.6	39.2	26.9	13.7	3.5	2.6	3.1	4.0	4.8
157.5°	42.8	33.9	23.8	12.3	3.5	2.2	3.1	3.5	4.0
160°	37.0	29.1	21.2	11.0	3.5	2.2	2.6	3.1	3.5
162.5°	32.6	24.2	18.5	10.1	3.5	2.2	2.6	2.6	3.1
165°	27.8	20.3	15.4	9.3	3.5	2.2	2.2	2.2	2.6
167.5°	22.5	15.9	12.8	8.4	3.5	2.2	2.2	1.8	2.2
170°	16.8	11.9	10.6	7.5	3.5	2.2	1.8	1.3	1.8
172.5°	7.5	9.3	8.4	6.6	4.0	2.2	1.8	1.3	0.9
175°	4.0	6.6	6.6	5.7	4.0	2.2	1.8	1.3	0.4
177.5°	3.1	4.0	4.8	4.8	4.0	2.6	1.8	0.9	0.4
180°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6



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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	17.99	19.47	18.50	19.97	20.51	16.96	18.44	17.47	18.94	19.48
	3H	20.08	21.42	20.59	21.93	22.52	18.83	20.18	19.35	20.69	21.27
	4H	21.02	22.30	21.56	22.82	23.42	19.58	20.85	20.12	21.38	21.98
	6H	21.94	23.13	22.49	23.67	24.28	20.21	21.40	20.76	21.94	22.55
	8H	22.37	23.51	22.93	24.07	24.69	20.47	21.60	21.03	22.17	22.79
	12H	22.79	23.88	23.36	24.44	25.08	20.70	21.79	21.27	22.35	22.99
4H	2H	18.48	19.76	19.02	20.29	20.88	17.52	18.80	18.06	19.33	19.92
	3H	20.80	21.88	21.35	22.45	23.07	19.58	20.67	20.14	21.24	21.86
	4H	21.91	22.91	22.48	23.48	24.13	20.44	21.43	21.01	22.01	22.66
	6H	23.01	23.89	23.61	24.50	25.16	21.19	22.07	21.78	22.67	23.34
	8H	23.54	24.37	24.14	24.97	25.65	21.51	22.33	22.10	22.94	23.61
	12H	24.07	24.82	24.69	25.45	26.13	21.80	22.55	22.42	23.18	23.86
8H	4H	22.17	22.99	22.76	23.60	24.27	20.77	21.60	21.37	22.20	22.88
	6H	23.45	24.15	24.08	24.79	25.47	21.66	22.36	22.29	23.00	23.68
	8H	24.12	24.75	24.76	25.40	26.10	22.06	22.69	22.70	23.34	24.04
	12H	24.82	25.38	25.46	26.03	26.78	22.45	23.01	23.09	23.65	24.41
12H	4H	22.18	22.93	22.80	23.56	24.25	20.84	21.59	21.46	22.22	22.90
	6H	23.50	24.14	24.14	24.79	25.48	21.77	22.40	22.41	23.05	23.75
	8H	24.25	24.81	24.89	25.45	26.21	22.23	22.80	22.87	23.44	24.20