

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: P893486

Luminaire Tested: 4MB-4SL-ASMF-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893486
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-4SL-ASMF-UNV-L935
Description: 4000 Lumen 4FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

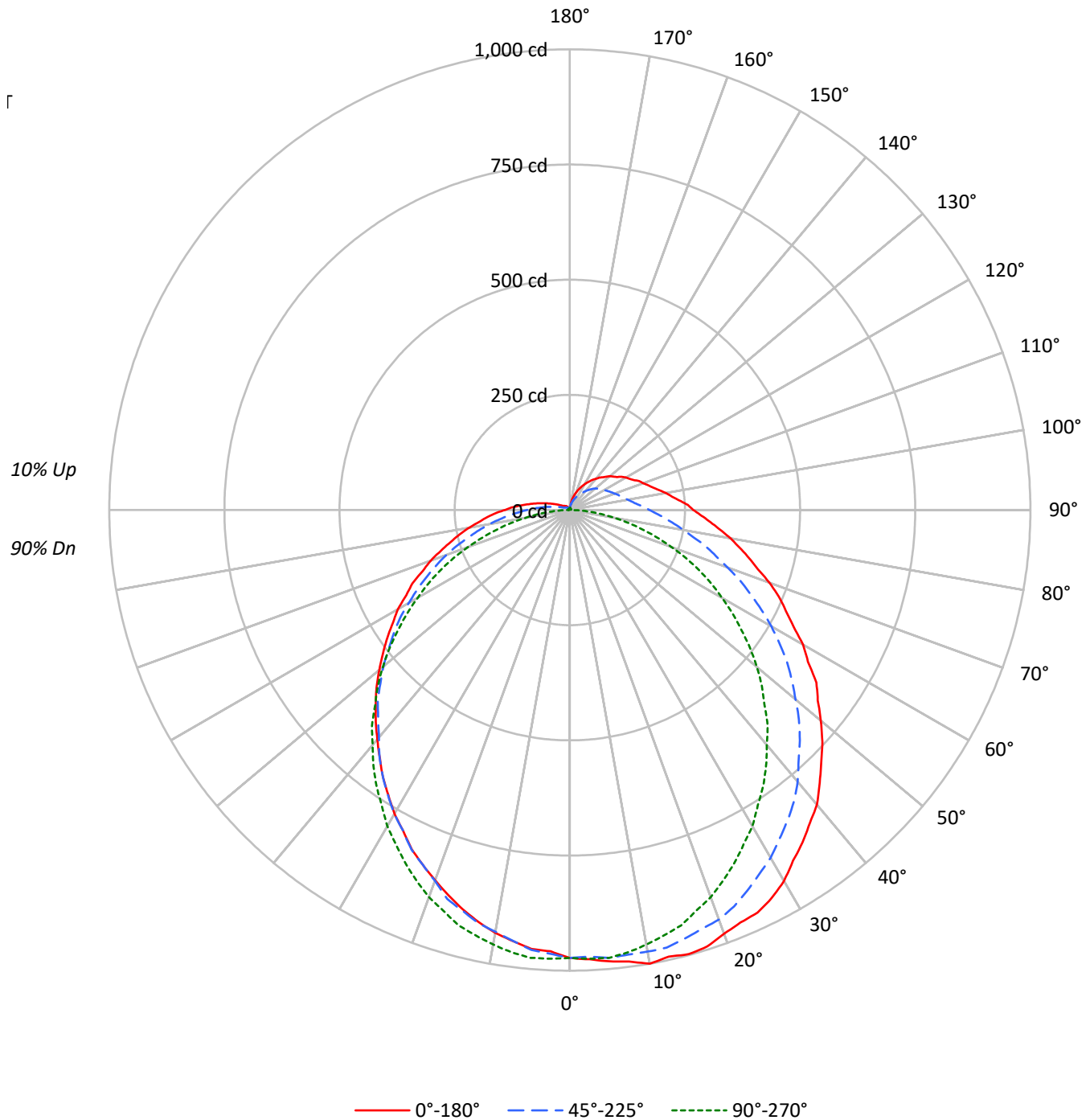
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3343.0 lumens
Efficiency: N/A
Efficacy: 112.2 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): 29.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.5
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°	92.3	2.8
10°-20°	264.4	7.9
20°-30°	398.7	11.9
30°-40°	478.6	14.3
40°-50°	498.3	14.9
50°-60°	461.9	13.8
60°-70°	380.4	11.4
70°-80°	274.4	8.2
80°-90°	174.2	5.2
90°-100°	107.4	3.2
100°-110°	71.6	2.1
110°-120°	51.0	1.5
120°-130°	37.4	1.1
130°-140°	25.7	0.8
140°-150°	15.6	0.5
150°-160°	7.8	0.2
160°-170°	2.8	0.1
170°-180°	0.5	0.0
0°-30°	755.4	22.6
0°-40°	1234.0	36.9
0°-60°	2194.2	65.6
0°-90°	3023.2	90.4
90°-120°	230.0	6.9
90°-150°	308.7	9.2
90°-180°	320.0	9.6
0°-180°	3343.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	972	972	972	972	972	
5°	984	976	976	959	956	94
15°	998	963	933	900	898	281
25°	964	912	845	813	812	443
35°	881	824	732	707	707	552
45°	772	706	598	590	596	597
55°	653	576	456	467	484	580
65°	517	433	310	342	377	515
75°	403	306	163	227	267	427
85°	307	208	43	131	180	260
90°	268	173	4	93	140	148
95°	239	146	2	63	108	190
105°	187	115	2	26	57	200
115°	154	95	3	12	27	154
125°	125	79	3	10	16	114
135°	100	63	3	7	12	79
145°	77	45	3	5	8	49
155°	52	30	4	3	5	25
165°	31	17	4	2	3	9
175°	4	7	4	2	0	1
180°	3	3	3	3	3	



TEST NUMBER: P893486

CATALOG NUMBER: 4MB-4SL-ASMF-UNV-L935

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	972.3	972.3	972.3	972.3	972.3	972.3	972.3	972.3	972.3
2.5°	976.2	979.1	969.9	975.7	974.8	975.7	964.1	973.8	958.7
5°	983.5	985.0	975.7	979.1	975.7	967.5	958.7	955.3	956.3
7.5°	988.4	996.2	973.3	974.3	968.4	959.7	943.2	946.1	944.1
10°	1000.0	991.3	973.3	968.9	957.8	948.5	929.6	931.0	932.0
12.5°	992.8	990.8	972.8	956.8	945.6	937.8	918.4	913.5	915.9
15°	998.1	989.8	963.1	950.5	933.4	919.8	900.4	897.0	897.5
17.5°	993.2	986.4	953.4	935.9	912.1	903.8	885.3	879.5	876.6
20°	978.7	975.3	946.1	915.9	894.5	878.5	856.1	852.7	855.2
22.5°	968.9	960.7	931.5	901.4	870.2	856.1	833.8	833.3	833.8
25°	964.1	953.4	911.6	880.0	845.4	832.8	813.4	806.1	812.4
27.5°	949.5	939.8	890.7	856.1	817.7	800.7	784.7	783.2	784.2
30°	930.0	911.1	871.7	829.4	792.5	775.0	761.8	752.1	761.3
32.5°	902.3	891.6	846.9	800.7	759.9	747.7	734.6	733.6	733.6
35°	880.9	873.2	823.6	775.4	731.7	715.2	707.4	704.0	707.4
37.5°	856.1	844.5	798.8	744.8	700.1	686.0	678.2	675.3	677.7
40°	834.8	813.4	769.6	713.2	665.6	652.9	644.7	647.6	650.0
42.5°	803.1	791.0	735.1	681.1	635.9	622.3	615.5	617.9	623.8
45°	772.0	760.9	706.4	647.6	597.5	590.2	589.7	588.3	595.6
47.5°	743.8	727.8	674.8	614.5	565.4	557.1	558.1	563.0	569.3
50°	711.3	692.3	639.8	579.0	529.9	524.6	528.5	531.9	540.1
52.5°	678.7	663.6	607.7	545.5	493.9	490.1	495.4	506.6	511.4
55°	653.4	626.2	576.1	506.1	455.5	456.0	466.7	473.0	483.7
57.5°	613.1	592.6	540.1	471.1	419.6	423.0	437.6	448.2	455.1
60°	584.4	558.6	505.1	433.7	381.6	387.0	403.5	419.6	431.2
62.5°	547.4	525.1	468.7	396.7	346.6	354.4	372.9	391.9	400.1
65°	517.3	492.0	432.7	359.8	310.2	319.4	342.3	363.7	377.3
67.5°	491.5	465.3	400.6	325.7	273.2	286.8	313.6	334.5	345.2
70°	460.9	430.3	364.1	287.8	234.8	250.9	284.9	309.2	321.4
72.5°	428.3	403.5	332.5	252.8	199.3	218.8	256.2	281.5	293.2
75°	403.0	375.3	305.8	217.8	163.4	186.7	227.0	255.7	267.4
77.5°	377.3	352.0	275.7	185.7	131.3	157.5	201.3	232.9	245.0
80°	354.4	325.2	250.4	159.5	97.7	128.8	177.0	208.1	222.2
82.5°	329.1	303.9	228.5	131.8	69.5	102.6	153.1	187.2	198.8
85°	306.8	280.5	208.1	109.9	42.8	79.2	131.3	166.3	180.4
87.5°	286.4	264.5	189.1	93.3	21.4	60.3	110.4	145.9	161.9
90°	267.9	243.1	173.1	78.3	3.9	43.8	93.3	128.3	140.5
92.5°	256.2	226.6	159.9	68.5	2.4	31.1	77.8	112.3	126.4
95°	238.7	212.5	146.3	61.3	2.4	20.9	62.7	96.3	108.4
97.5°	223.6	199.3	136.6	56.9	1.9	14.1	51.5	80.7	93.3
100°	212.0	189.1	127.9	53.0	2.4	10.2	40.8	68.5	79.7
102.5°	198.8	177.9	121.1	50.6	2.4	7.3	32.1	57.9	68.1
105°	187.2	168.7	114.7	48.1	2.4	6.3	25.8	47.6	56.9
107.5°	178.4	159.0	109.4	46.7	2.4	6.3	20.4	38.9	46.7
110°	169.7	151.2	104.0	45.2	2.4	5.8	16.0	32.1	38.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	163.8	143.9	99.2	43.8	2.9	5.8	13.1	26.7	32.1
115°	153.6	137.6	94.8	43.3	2.9	5.3	12.2	21.9	27.2
117.5°	146.3	131.8	90.4	41.8	2.9	5.3	11.7	18.0	21.9
120°	141.0	124.9	86.5	40.4	2.9	4.9	10.7	16.0	18.5
122.5°	134.2	118.6	83.1	39.4	2.9	4.9	10.2	15.1	16.5
125°	124.9	112.8	79.2	37.4	3.4	4.9	9.7	14.1	15.6
127.5°	119.1	107.4	76.3	35.0	3.4	4.4	9.2	13.1	14.6
130°	114.2	101.6	72.9	32.6	3.4	4.4	8.8	12.2	13.6
132.5°	107.0	95.8	68.1	30.6	3.4	3.9	7.8	11.2	12.6
135°	100.2	90.9	63.2	28.7	3.4	3.9	7.3	10.7	11.7
137.5°	95.8	86.1	58.8	26.7	3.4	3.4	6.8	9.7	10.7
140°	88.5	80.7	54.0	24.8	3.4	3.4	6.3	9.2	9.7
142.5°	83.1	75.4	49.6	22.8	3.4	3.4	5.8	8.3	9.2
145°	76.8	70.0	44.7	20.9	3.4	2.9	5.3	7.8	8.3
147.5°	71.0	63.7	40.8	19.4	3.4	2.9	4.9	6.8	7.3
150°	65.1	57.4	36.9	18.0	3.4	2.9	4.4	5.8	6.8
152.5°	58.8	49.6	33.1	16.5	3.4	2.9	3.9	5.3	5.8
155°	52.5	43.3	29.7	15.1	3.9	2.9	3.4	4.4	5.3
157.5°	47.2	37.4	26.3	13.6	3.9	2.4	3.4	3.9	4.4
160°	40.8	32.1	23.3	12.2	3.9	2.4	2.9	3.4	3.9
162.5°	36.0	26.7	20.4	11.2	3.9	2.4	2.9	2.9	3.4
165°	30.6	22.4	17.0	10.2	3.9	2.4	2.4	2.4	2.9
167.5°	24.8	17.5	14.1	9.2	3.9	2.4	2.4	1.9	2.4
170°	18.5	13.1	11.7	8.3	3.9	2.4	1.9	1.5	1.9
172.5°	8.3	10.2	9.2	7.3	4.4	2.4	1.9	1.5	1.0
175°	4.4	7.3	7.3	6.3	4.4	2.4	1.9	1.5	0.5
177.5°	3.4	4.4	5.3	5.3	4.4	2.9	1.9	1.0	0.5
180°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9



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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	18.33	19.81	18.84	20.31	20.85	17.30	18.78	17.81	19.28	19.82
	3H	20.42	21.76	20.94	22.28	22.86	19.17	20.52	19.69	21.03	21.61
	4H	21.36	22.64	21.90	23.16	23.76	19.92	21.20	20.46	21.72	22.32
	6H	22.28	23.47	22.83	24.01	24.62	20.55	21.74	21.10	22.28	22.89
	8H	22.71	23.85	23.27	24.41	25.03	20.81	21.95	21.37	22.51	23.13
	12H	23.13	24.22	23.70	24.78	25.42	21.04	22.13	21.61	22.69	23.33
4H	2H	18.82	20.10	19.36	20.63	21.22	17.87	19.14	18.41	19.67	20.27
	3H	21.14	22.22	21.69	22.79	23.41	19.92	21.01	20.48	21.58	22.20
	4H	22.25	23.25	22.82	23.82	24.47	20.78	21.77	21.35	22.35	23.00
	6H	23.35	24.23	23.95	24.84	25.50	21.53	22.41	22.12	23.02	23.68
	8H	23.88	24.71	24.48	25.31	25.99	21.85	22.67	22.44	23.28	23.95
	12H	24.41	25.16	25.03	25.79	26.47	22.14	22.89	22.76	23.52	24.20
8H	4H	22.51	23.33	23.10	23.94	24.61	21.12	21.94	21.71	22.54	23.22
	6H	23.79	24.49	24.42	25.13	25.81	22.00	22.70	22.63	23.35	24.03
	8H	24.46	25.09	25.10	25.74	26.44	22.40	23.03	23.04	23.68	24.38
	12H	25.16	25.73	25.80	26.37	27.13	22.79	23.35	23.43	23.99	24.75
12H	4H	22.52	23.27	23.14	23.91	24.59	21.18	21.93	21.80	22.56	23.24
	6H	23.84	24.48	24.49	25.13	25.82	22.11	22.74	22.75	23.39	24.09
	8H	24.59	25.15	25.23	25.79	26.55	22.57	23.14	23.21	23.78	24.54