

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: P892718

Luminaire Tested: 2MB-4HL-ASMF-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892718
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-4HL-ASMF-UNV-L835
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

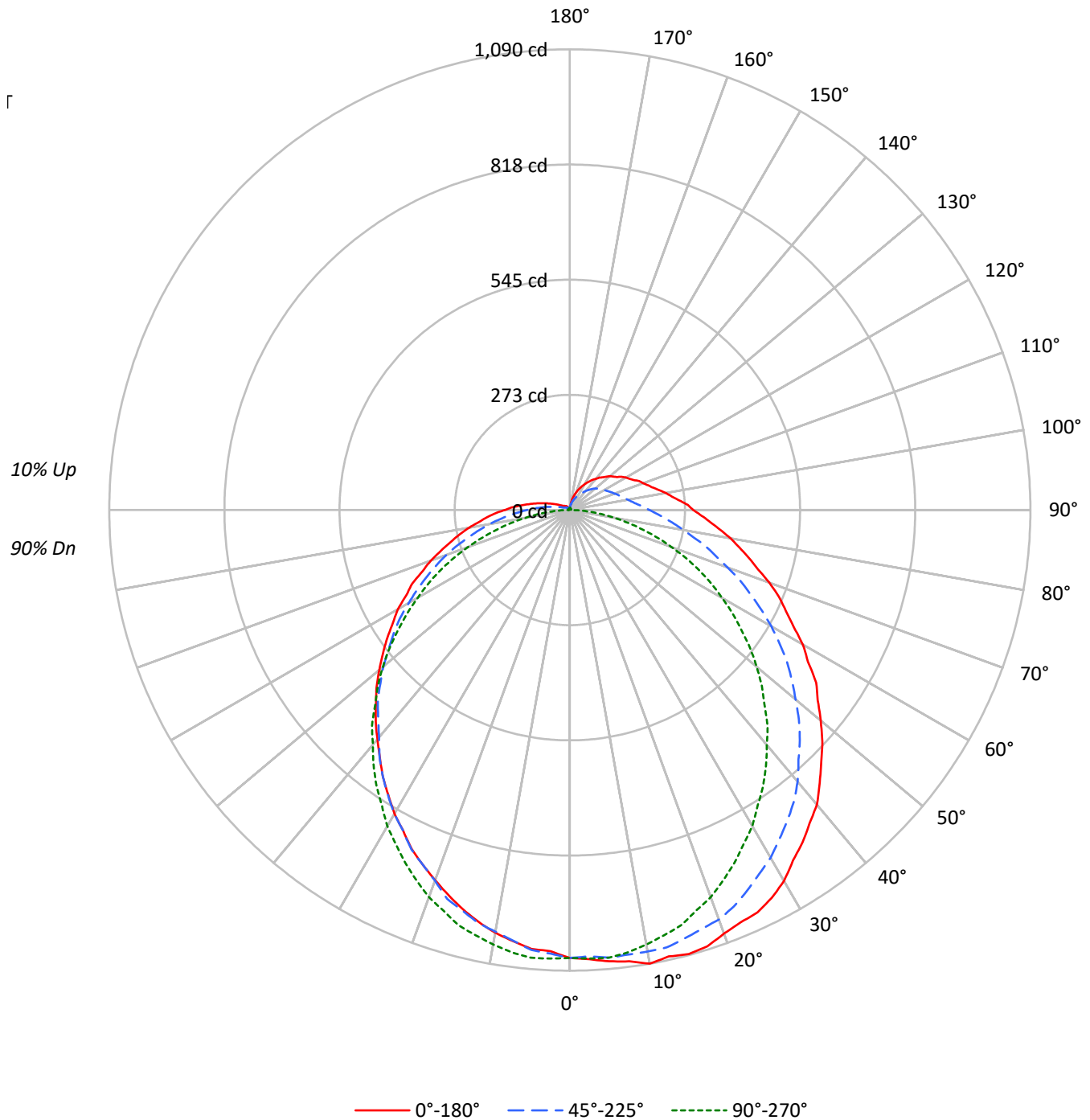
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3643.0 lumens
Efficiency: N/A
Efficacy: 132.0 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): 27.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 6.5
Total Harmonic Distortion (THDi): 0.99
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°	100.5	2.8
10°-20°	288.1	7.9
20°-30°	434.5	11.9
30°-40°	521.5	14.3
40°-50°	543.0	14.9
50°-60°	503.4	13.8
60°-70°	414.6	11.4
70°-80°	299.0	8.2
80°-90°	189.8	5.2
90°-100°	117.0	3.2
100°-110°	78.0	2.1
110°-120°	55.6	1.5
120°-130°	40.7	1.1
130°-140°	28.0	0.8
140°-150°	17.0	0.5
150°-160°	8.4	0.2
160°-170°	3.1	0.1
170°-180°	0.5	0.0
0°-30°	823.2	22.6
0°-40°	1344.7	36.9
0°-60°	2391.1	65.6
0°-90°	3294.5	90.4
90°-120°	250.6	6.9
90°-150°	336.4	9.2
90°-180°	348.0	9.6
0°-180°	3643.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1060	1060	1060	1060	1060	
5°	1072	1063	1063	1045	1042	103
15°	1088	1050	1017	981	978	307
25°	1051	993	921	886	885	483
35°	960	898	797	771	771	601
45°	841	770	651	643	649	651
55°	712	628	496	509	527	633
65°	564	472	338	373	411	561
75°	439	333	178	247	291	465
85°	334	227	47	143	197	284
90°	292	189	4	102	153	161
95°	260	160	3	68	118	207
105°	204	125	3	28	62	218
115°	167	103	3	13	30	168
125°	136	86	4	11	17	124
135°	109	69	4	8	13	86
145°	84	49	4	6	9	53
155°	57	32	4	4	6	27
165°	33	18	4	3	3	10
175°	5	8	5	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°	1059.6	1059.6	1059.6	1059.6	1059.6	1059.6	1059.6	1059.6	1059.6
2.5°	1063.8	1067.0	1056.9	1063.3	1062.2	1063.3	1050.6	1061.2	1044.8
5°	1071.8	1073.4	1063.3	1067.0	1063.3	1054.3	1044.8	1041.1	1042.1
7.5°	1077.1	1085.6	1060.7	1061.7	1055.4	1045.8	1027.8	1031.0	1028.9
10°	1089.8	1080.3	1060.7	1055.9	1043.7	1033.6	1013.0	1014.6	1015.6
12.5°	1081.8	1079.7	1060.1	1042.6	1030.5	1022.0	1000.8	995.5	998.1
15°	1087.7	1078.7	1049.5	1035.8	1017.2	1002.4	981.2	977.5	978.0
17.5°	1082.4	1075.0	1038.9	1019.9	993.9	984.9	964.8	958.4	955.2
20°	1066.5	1062.8	1031.0	998.1	974.8	957.3	933.0	929.3	931.9
22.5°	1055.9	1046.9	1015.1	982.2	948.3	933.0	908.6	908.1	908.6
25°	1050.6	1038.9	993.4	958.9	921.3	907.5	886.4	878.4	885.3
27.5°	1034.7	1024.1	970.6	933.0	891.1	872.6	855.1	853.5	854.6
30°	1013.5	992.8	949.9	903.8	863.6	844.5	830.2	819.6	829.7
32.5°	983.3	971.6	922.9	872.6	828.1	814.8	800.5	799.5	799.5
35°	960.0	951.5	897.5	845.0	797.3	779.3	770.9	767.1	770.9
37.5°	933.0	920.3	870.5	811.6	762.9	747.5	739.1	735.9	738.5
40°	909.7	886.4	838.7	777.2	725.3	711.5	702.5	705.7	708.3
42.5°	875.2	862.0	801.1	742.2	693.0	678.1	670.7	673.4	679.7
45°	841.3	829.1	769.8	705.7	651.1	643.2	642.6	641.1	649.0
47.5°	810.6	793.1	735.4	669.7	616.2	607.1	608.2	613.5	620.4
50°	775.1	754.4	697.2	631.0	577.5	571.7	575.9	579.6	588.6
52.5°	739.6	723.2	662.2	594.4	538.3	534.0	539.9	552.0	557.3
55°	712.0	682.4	627.8	551.5	496.4	496.9	508.6	515.5	527.1
57.5°	668.1	645.8	588.6	513.4	457.2	460.9	476.8	488.5	495.9
60°	636.8	608.7	550.5	472.6	415.9	421.7	439.7	457.2	469.9
62.5°	596.6	572.2	510.7	432.3	377.7	386.2	406.4	427.0	436.0
65°	563.7	536.2	471.5	392.0	338.0	348.1	373.0	396.3	411.1
67.5°	535.6	507.0	436.6	355.0	297.7	312.6	341.7	364.5	376.2
70°	502.2	468.9	396.8	313.6	255.9	273.4	310.5	337.0	350.2
72.5°	466.8	439.7	362.4	275.5	217.2	238.4	279.2	306.8	319.5
75°	439.2	409.0	333.2	237.3	178.0	203.4	247.4	278.7	291.4
77.5°	411.1	383.6	300.4	202.4	143.0	171.7	219.3	253.8	267.0
80°	386.2	354.4	272.8	173.8	106.5	140.4	192.8	226.8	242.1
82.5°	358.7	331.1	249.0	143.6	75.8	111.8	166.9	204.0	216.7
85°	334.3	305.7	226.8	119.7	46.6	86.4	143.0	181.2	196.6
87.5°	312.1	288.2	206.1	101.7	23.3	65.7	120.3	158.9	176.4
90°	291.9	264.9	188.6	85.3	4.2	47.7	101.7	139.9	153.1
92.5°	279.2	246.9	174.3	74.7	2.6	33.9	84.8	122.4	137.7
95°	260.1	231.5	159.5	66.8	2.6	22.8	68.3	104.9	118.1
97.5°	243.7	217.2	148.9	62.0	2.1	15.4	56.2	87.9	101.7
100°	231.0	206.1	139.3	57.7	2.6	11.1	44.5	74.7	86.9
102.5°	216.7	193.9	131.9	55.1	2.6	7.9	35.0	63.0	74.2
105°	204.0	183.8	125.0	52.4	2.6	6.9	28.1	51.9	62.0
107.5°	194.4	173.2	119.2	50.9	2.6	6.9	22.3	42.4	50.9
110°	184.9	164.8	113.4	49.3	2.6	6.4	17.5	35.0	42.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	178.5	156.8	108.1	47.7	3.2	6.4	14.3	29.1	35.0
115°	167.4	149.9	103.3	47.2	3.2	5.8	13.2	23.8	29.7
117.5°	159.5	143.6	98.5	45.6	3.2	5.8	12.7	19.6	23.8
120°	153.6	136.2	94.3	44.0	3.2	5.3	11.7	17.5	20.1
122.5°	146.2	129.3	90.6	42.9	3.2	5.3	11.1	16.4	18.0
125°	136.2	122.9	86.4	40.8	3.7	5.3	10.6	15.4	17.0
127.5°	129.8	117.1	83.2	38.1	3.7	4.8	10.1	14.3	15.9
130°	124.5	110.7	79.5	35.5	3.7	4.8	9.5	13.2	14.8
132.5°	116.6	104.4	74.2	33.4	3.7	4.2	8.5	12.2	13.8
135°	109.1	99.1	68.9	31.3	3.7	4.2	7.9	11.7	12.7
137.5°	104.4	93.8	64.1	29.1	3.7	3.7	7.4	10.6	11.7
140°	96.4	87.9	58.8	27.0	3.7	3.7	6.9	10.1	10.6
142.5°	90.6	82.1	54.0	24.9	3.7	3.7	6.4	9.0	10.1
145°	83.7	76.3	48.7	22.8	3.7	3.2	5.8	8.5	9.0
147.5°	77.4	69.4	44.5	21.2	3.7	3.2	5.3	7.4	7.9
150°	71.0	62.5	40.3	19.6	3.7	3.2	4.8	6.4	7.4
152.5°	64.1	54.0	36.0	18.0	3.7	3.2	4.2	5.8	6.4
155°	57.2	47.2	32.3	16.4	4.2	3.2	3.7	4.8	5.8
157.5°	51.4	40.8	28.6	14.8	4.2	2.6	3.7	4.2	4.8
160°	44.5	35.0	25.4	13.2	4.2	2.6	3.2	3.7	4.2
162.5°	39.2	29.1	22.3	12.2	4.2	2.6	3.2	3.2	3.7
165°	33.4	24.4	18.5	11.1	4.2	2.6	2.6	2.6	3.2
167.5°	27.0	19.1	15.4	10.1	4.2	2.6	2.6	2.1	2.6
170°	20.1	14.3	12.7	9.0	4.2	2.6	2.1	1.6	2.1
172.5°	9.0	11.1	10.1	7.9	4.8	2.6	2.1	1.6	1.1
175°	4.8	7.9	7.9	6.9	4.8	2.6	2.1	1.6	0.5
177.5°	3.7	4.8	5.8	5.8	4.8	3.2	2.1	1.1	0.5
180°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2



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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	21.02	22.50	21.53	23.00	23.55	19.90	21.38	20.40	21.88	22.42
	3H	23.11	24.46	23.63	24.97	25.55	21.74	23.08	22.26	23.60	24.18
	4H	24.06	25.33	24.60	25.86	26.46	22.46	23.74	23.00	24.26	24.86
	6H	24.98	26.17	25.53	26.71	27.32	23.06	24.25	23.61	24.79	25.40
	8H	25.41	26.55	25.97	27.11	27.73	23.29	24.43	23.86	25.00	25.61
	12H	25.83	26.92	26.40	27.48	28.13	23.50	24.59	24.07	25.15	25.79
4H	2H	21.50	22.78	22.04	23.31	23.91	20.47	21.75	21.01	22.27	22.87
	3H	23.82	24.91	24.37	25.48	26.10	22.50	23.58	23.05	24.15	24.77
	4H	24.94	25.93	25.51	26.51	27.16	23.33	24.32	23.90	24.90	25.55
	6H	26.04	26.92	26.63	27.53	28.19	24.05	24.93	24.64	25.53	26.19
	8H	26.57	27.40	27.17	28.00	28.68	24.34	25.17	24.94	25.77	26.45
	12H	27.10	27.85	27.72	28.48	29.16	24.61	25.36	25.23	25.99	26.67
8H	4H	25.18	26.01	25.78	26.61	27.29	23.67	24.50	24.27	25.10	25.78
	6H	26.47	27.17	27.10	27.81	28.49	24.52	25.23	25.15	25.87	26.55
	8H	27.14	27.77	27.78	28.42	29.12	24.90	25.53	25.54	26.19	26.88
	12H	27.84	28.41	28.49	29.05	29.81	25.26	25.82	25.90	26.47	27.22
12H	4H	25.20	25.95	25.82	26.58	27.26	23.74	24.49	24.36	25.12	25.80
	6H	26.52	27.15	27.16	27.81	28.50	24.64	25.27	25.28	25.92	26.62
	8H	27.26	27.83	27.90	28.47	29.23	25.08	25.64	25.72	26.28	27.04