

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: P892802

Luminaire Tested: 2MB-5HL-ACL-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-ACL-UNV-L935
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 90CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

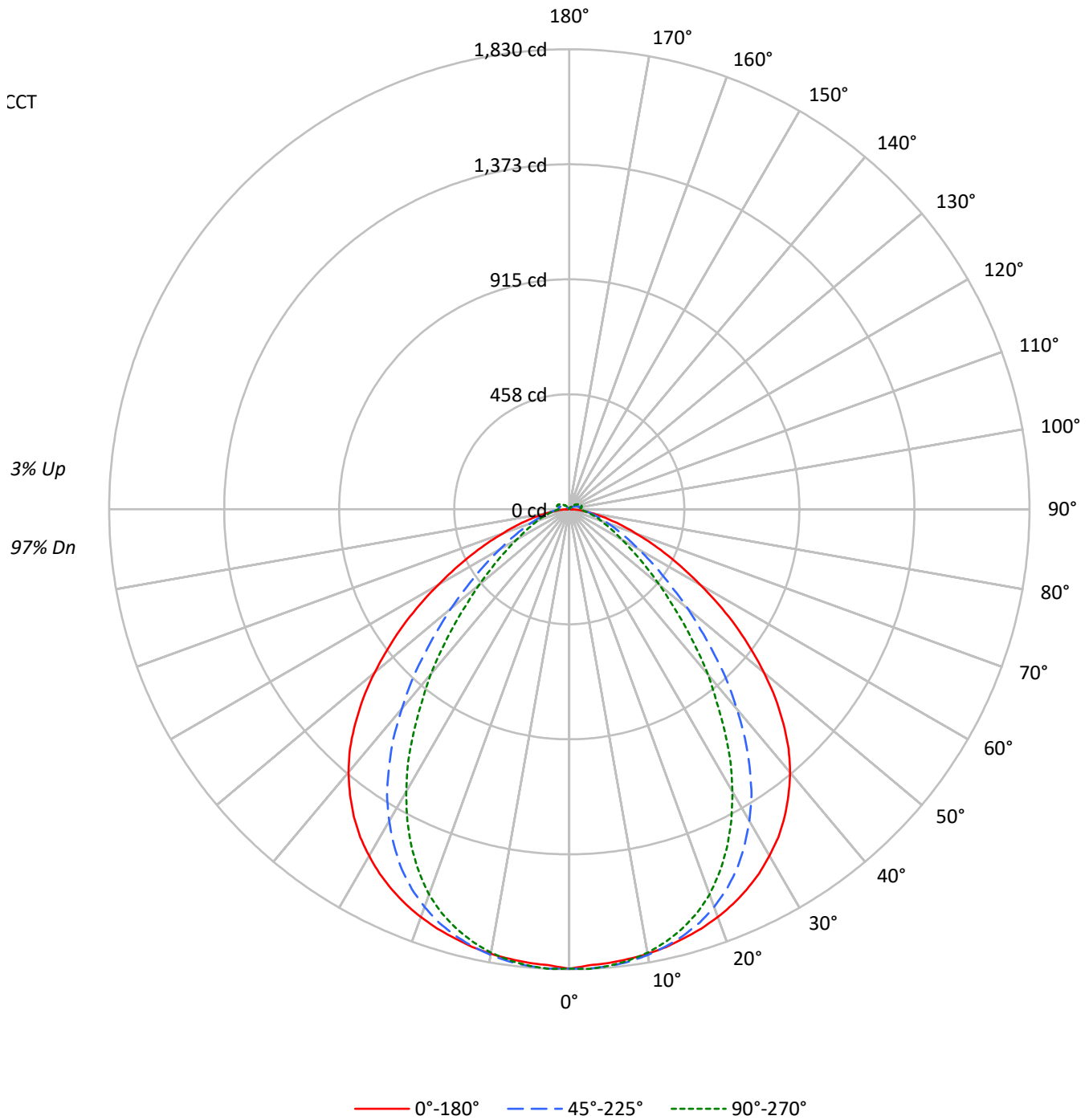
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3905.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.09 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
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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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	97
1	109	105	102	98	106	103	99	96	98	95	93	94	91	89	89	88	86	89	88	86	84
2	101	94	88	83	98	92	86	82	88	83	79	84	80	77	81	77	75	81	77	75	73
3	93	84	77	71	90	82	75	70	79	73	68	76	71	67	73	69	65	73	69	65	63
4	86	75	68	62	84	74	67	61	71	65	60	68	63	59	66	61	58	66	61	58	56
5	80	68	60	54	78	67	59	54	65	58	53	62	57	52	60	55	51	60	55	51	49
6	74	62	54	48	72	61	53	48	59	52	47	57	51	46	55	50	46	55	50	46	44
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41	51	45	41	39
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	42	37	47	42	37	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	38	34	44	38	34	32
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	37413	37413	37413
5°	37104	36685	36475
10°	37062	35843	35292
15°	37020	34861	33804
20°	37050	33608	31896
25°	36982	31914	29241
30°	36746	29572	25969
35°	36262	26563	22064
40°	35265	22851	18144
45°	33438	18851	14155
50°	30665	15046	10836
55°	27203	11730	8339
60°	22994	9103	6422
65°	19003	7208	5197
70°	15160	5813	4345
75°	12007	4799	3729
80°	9082	4082	3208
85°	6789	3517	2819

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 33438 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.2	4.4
10°-20°	493.9	12.6
20°-30°	724.4	18.5
30°-40°	789.9	20.2
40°-50°	670.2	17.2
50°-60°	456.3	11.7
60°-70°	266.3	6.8
70°-80°	138.6	3.6
80°-90°	60.4	1.5
90°-100°	38.4	1.0
100°-110°	35.4	0.9
110°-120°	26.3	0.7
120°-130°	15.9	0.4
130°-140°	8.5	0.2
140°-150°	4.3	0.1
150°-160°	2.1	0.1
160°-170°	0.8	0.0
170°-180°	0.2	0.0
0°-30°	1391.4	35.6
0°-40°	2181.3	55.9
0°-60°	3307.8	84.7
0°-90°	3773.2	96.6
90°-120°	100.1	2.6
90°-150°	128.7	3.3
90°-180°	132.0	3.4
0°-180°	3905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1827	1827	1827	1827	1827	
5°	1812	1820	1824	1826	1823	172
15°	1766	1771	1755	1739	1729	499
25°	1669	1645	1578	1516	1484	769
35°	1493	1417	1250	1125	1076	932
45°	1203	1054	815	686	642	924
55°	808	643	447	359	338	720
65°	428	338	229	189	179	428
75°	176	151	118	107	102	191
85°	43	51	58	56	55	46
90°	7	23	40	44	43	7
95°	13	25	42	46	45	9
105°	4	19	39	50	50	4
115°	3	12	30	42	45	3
125°	2	6	18	28	33	1
135°	2	5	11	17	20	1
145°	2	3	7	10	12	1
155°	2	2	5	7	7	1
165°	2	2	3	4	5	0
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1827.1	1827.1	1827.1	1827.1	1827.1
2.5°	1815.6	1824.0	1828.6	1831.6	1830.1
5°	1811.8	1820.2	1824.0	1825.5	1823.2
7.5°	1804.1	1813.3	1815.6	1814.1	1810.3
10°	1795.7	1803.4	1800.3	1796.5	1791.2
12.5°	1783.5	1788.9	1780.5	1772.1	1763.7
15°	1766.0	1770.6	1755.3	1739.2	1728.6
17.5°	1748.4	1746.9	1724.0	1698.0	1685.0
20°	1726.3	1717.9	1683.5	1646.1	1630.8
22.5°	1700.3	1685.8	1635.4	1585.0	1562.1
25°	1669.0	1645.3	1578.2	1516.3	1483.5
27.5°	1633.9	1600.3	1508.7	1431.6	1394.9
30°	1591.9	1546.1	1432.3	1337.6	1297.2
32.5°	1546.8	1488.1	1349.1	1230.8	1193.3
35°	1493.4	1417.1	1249.8	1124.6	1076.5
37.5°	1432.3	1335.4	1148.3	1010.9	960.5
40°	1365.9	1249.1	1035.3	897.9	857.4
42.5°	1291.1	1157.5	929.9	785.6	745.2
45°	1203.3	1053.6	814.7	686.4	642.1
47.5°	1110.9	951.3	708.5	583.3	546.7
50°	1010.9	843.7	613.9	499.3	467.3
52.5°	907.8	743.6	523.0	423.0	396.3
55°	807.8	642.9	446.6	358.8	338.2
57.5°	703.2	558.1	379.5	305.4	284.8
60°	602.4	472.6	319.1	258.1	242.0
62.5°	511.5	398.5	271.8	219.9	208.4
65°	427.6	337.5	229.0	189.3	179.4
67.5°	352.7	279.4	196.2	164.2	155.0
70°	282.5	228.3	164.2	141.2	135.1
72.5°	229.0	190.1	139.0	123.7	119.1
75°	175.6	151.2	117.6	106.9	102.3
77.5°	132.1	118.3	100.0	91.6	87.8
80°	95.4	91.6	84.0	79.4	75.6
82.5°	65.7	69.5	70.2	66.4	64.9
85°	42.8	51.2	58.0	56.5	55.0
87.5°	23.7	34.4	47.3	48.1	46.6
90°	6.9	22.9	40.5	43.5	42.8
92.5°	13.0	24.4	41.2	44.3	43.5
95°	13.0	25.2	42.0	45.8	45.0
97.5°	12.2	25.2	42.8	47.3	47.3
100°	6.1	24.4	42.8	48.9	48.9
102.5°	3.8	22.1	41.2	49.6	50.4
105°	3.8	19.1	38.9	49.6	50.4
107.5°	3.8	16.0	37.4	48.1	50.4
110°	3.1	13.7	35.1	45.8	48.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.1	12.2	32.8	44.3	47.3
115°	3.1	11.5	29.8	42.0	45.0
117.5°	2.3	9.9	26.0	38.9	42.8
120°	2.3	8.4	22.9	35.9	39.7
122.5°	1.5	7.6	19.9	32.1	36.6
125°	1.5	6.1	17.6	28.2	32.8
127.5°	1.5	6.1	16.0	25.2	29.0
130°	1.5	5.3	13.7	22.1	25.2
132.5°	1.5	5.3	12.2	19.1	22.1
135°	1.5	4.6	10.7	16.8	19.9
137.5°	1.5	4.6	9.9	14.5	17.6
140°	1.5	3.8	8.4	13.0	15.3
142.5°	1.5	3.8	7.6	11.5	13.0
145°	1.5	3.1	6.9	9.9	11.5
147.5°	1.5	3.1	6.1	8.4	9.9
150°	1.5	3.1	6.1	7.6	8.4
152.5°	1.5	2.3	5.3	6.9	7.6
155°	1.5	2.3	4.6	6.9	6.9
157.5°	1.5	2.3	3.8	6.1	6.9
160°	1.5	2.3	3.8	5.3	6.1
162.5°	1.5	2.3	3.1	3.8	5.3
165°	1.5	1.5	3.1	3.8	4.6
167.5°	1.5	1.5	2.3	3.1	3.8
170°	1.5	1.5	2.3	2.3	2.3
172.5°	1.5	1.5	2.3	2.3	1.5
175°	1.5	1.5	2.3	2.3	1.5
177.5°	1.5	1.5	2.3	2.3	1.5
180°	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	21.27	22.67	21.70	23.06	23.46	17.38	18.77	17.80	19.16	19.56
	3H	22.30	23.55	22.74	23.95	24.39	18.58	19.83	19.01	20.23	20.67
	4H	22.60	23.76	23.05	24.18	24.65	19.12	20.28	19.57	20.70	21.17
	6H	22.75	23.82	23.22	24.26	24.74	19.62	20.70	20.09	21.14	21.61
	8H	22.77	23.79	23.25	24.25	24.74	19.86	20.89	20.35	21.35	21.83
	12H	22.77	23.75	23.26	24.20	24.71	20.12	21.10	20.61	21.55	22.06
4H	2H	21.31	22.48	21.77	22.90	23.36	17.88	19.05	18.33	19.46	19.93
	3H	22.50	23.47	22.97	23.94	24.42	19.26	20.23	19.73	20.70	21.18
	4H	22.89	23.76	23.38	24.24	24.76	19.90	20.77	20.39	21.25	21.77
	6H	23.14	23.89	23.65	24.40	24.94	20.53	21.29	21.05	21.80	22.34
	8H	23.19	23.89	23.71	24.40	24.95	20.84	21.54	21.36	22.05	22.60
	12H	23.21	23.84	23.75	24.38	24.93	21.16	21.80	21.70	22.34	22.89
8H	4H	22.91	23.62	23.44	24.13	24.68	20.14	20.85	20.66	21.36	21.90
	6H	23.22	23.81	23.78	24.36	24.92	20.89	21.47	21.44	22.03	22.58
	8H	23.32	23.84	23.89	24.41	24.98	21.28	21.80	21.85	22.37	22.94
	12H	23.39	23.85	23.95	24.40	25.05	21.72	22.19	22.28	22.74	23.38
12H	4H	22.90	23.53	23.44	24.07	24.62	20.15	20.79	20.69	21.33	21.88
	6H	23.22	23.75	23.79	24.31	24.88	20.93	21.46	21.50	22.03	22.59
	8H	23.35	23.82	23.92	24.37	25.01	21.38	21.84	21.94	22.40	23.04