

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: P892803

Luminaire Tested: 2MB-5HL-ACL-UNV-L940

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P892803  
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-L940  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 90CRI, 4000K (C)  
Light Source: -  
Ballast/Driver: -

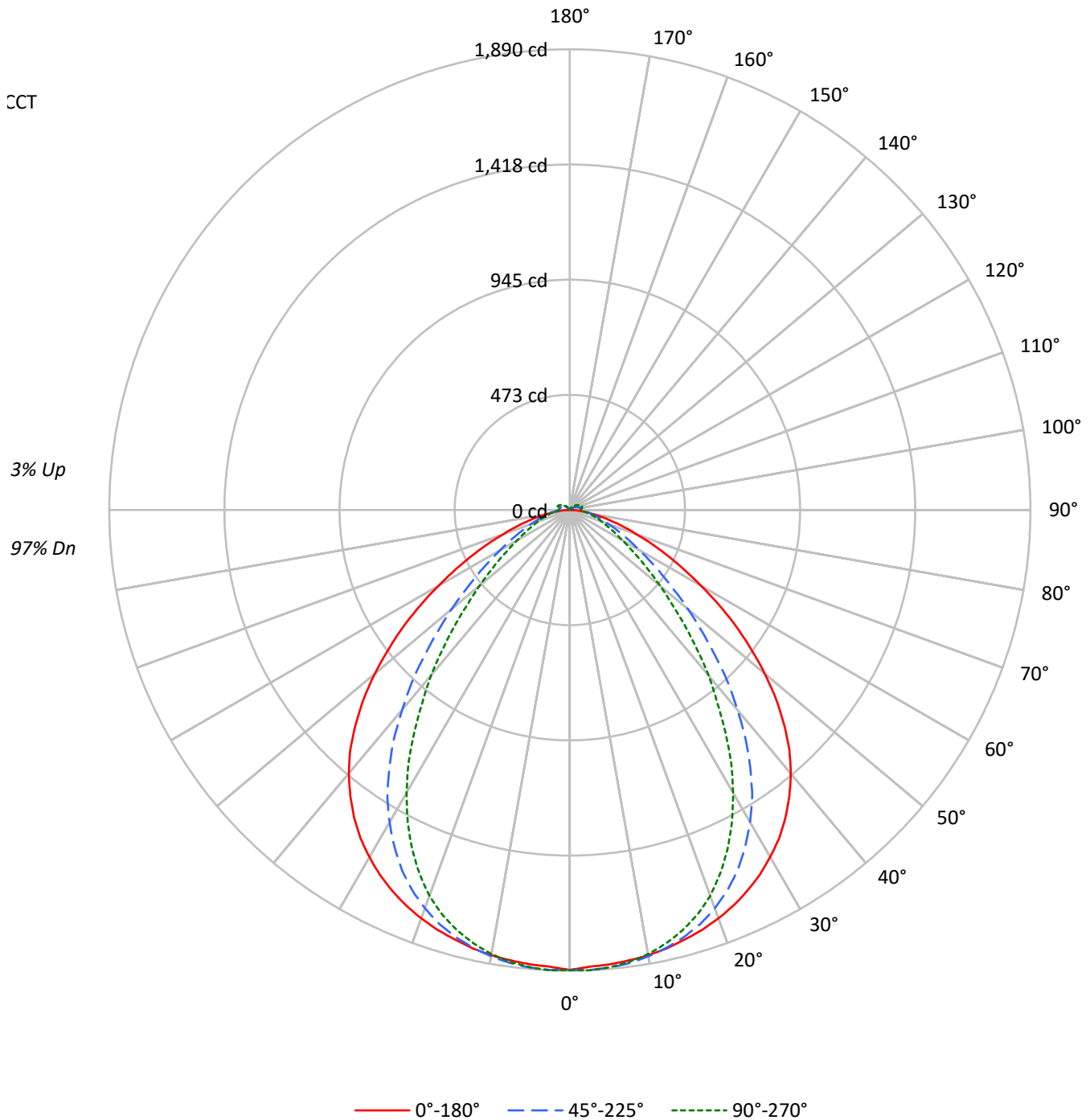
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4033.0 lumens  
Efficiency: N/A  
Efficacy: 119.7 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<sub>in</sub>): 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				
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°	38637	38637	38637
5°	38321	37887	37671
10°	38277	37018	36448
15°	38233	36003	34911
20°	38264	34710	32942
25°	38194	32959	30199
30°	37951	30542	26820
35°	37452	27435	22788
40°	36422	23599	18739
45°	34533	19469	14618
50°	31669	15539	11191
55°	28095	12116	8613
60°	23746	9402	6635
65°	19625	7447	5368
70°	15659	6001	4490
75°	12403	4954	3853
80°	9386	4213	3315
85°	7011	3632	2911

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 34533 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.8	4.4
10°-20°	510.1	12.6
20°-30°	748.1	18.5
30°-40°	815.8	20.2
40°-50°	692.2	17.2
50°-60°	471.2	11.7
60°-70°	275.0	6.8
70°-80°	143.2	3.6
80°-90°	62.4	1.5
90°-100°	39.6	1.0
100°-110°	36.6	0.9
110°-120°	27.2	0.7
120°-130°	16.4	0.4
130°-140°	8.7	0.2
140°-150°	4.4	0.1
150°-160°	2.2	0.1
160°-170°	0.9	0.0
170°-180°	0.2	0.0
0°-30°	1437.0	35.6
0°-40°	2252.8	55.9
0°-60°	3416.2	84.7
0°-90°	3896.8	96.6
90°-120°	103.4	2.6
90°-150°	133.0	3.3
90°-180°	136.0	3.4
0°-180°	4033.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1887	1887	1887	1887	1887	
5°	1871	1880	1884	1885	1883	178
15°	1824	1829	1813	1796	1785	516
25°	1724	1699	1630	1566	1532	794
35°	1542	1464	1291	1162	1112	962
45°	1243	1088	841	709	663	955
55°	834	664	461	371	349	744
65°	442	348	237	196	185	442
75°	181	156	121	110	106	197
85°	44	53	60	58	57	47
90°	7	24	42	45	44	7
95°	13	26	43	47	46	10
105°	4	20	40	51	52	4
115°	3	12	31	43	46	3
125°	2	6	18	29	34	2
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°	1886.9	1886.9	1886.9	1886.9	1886.9
2.5°	1875.1	1883.8	1888.5	1891.7	1890.1
5°	1871.2	1879.8	1883.8	1885.4	1883.0
7.5°	1863.3	1872.7	1875.1	1873.5	1869.6
10°	1854.6	1862.5	1859.3	1855.4	1849.9
12.5°	1842.0	1847.5	1838.8	1830.2	1821.5
15°	1823.9	1828.6	1812.8	1796.3	1785.2
17.5°	1805.7	1804.1	1780.5	1753.7	1740.3
20°	1782.9	1774.2	1738.7	1700.1	1684.3
22.5°	1756.0	1741.1	1689.0	1637.0	1613.3
25°	1723.7	1699.3	1629.9	1566.0	1532.1
27.5°	1687.4	1652.7	1558.1	1478.5	1440.6
30°	1644.1	1596.8	1479.3	1381.5	1339.7
32.5°	1597.6	1536.8	1393.3	1271.1	1232.5
35°	1542.4	1463.5	1290.8	1161.5	1111.8
37.5°	1479.3	1379.1	1185.9	1044.0	992.0
40°	1410.7	1290.0	1069.2	927.3	885.5
42.5°	1333.4	1195.4	960.4	811.4	769.6
45°	1242.7	1088.2	841.4	708.9	663.1
47.5°	1147.3	982.5	731.8	602.4	564.6
50°	1044.0	871.3	634.0	515.7	482.6
52.5°	937.6	768.0	540.1	436.8	409.2
55°	834.3	663.9	461.3	370.6	349.3
57.5°	726.2	576.4	391.9	315.4	294.1
60°	622.1	488.1	329.6	266.5	250.0
62.5°	528.3	411.6	280.7	227.1	215.3
65°	441.6	348.5	236.6	195.6	185.3
67.5°	364.3	288.6	202.7	169.5	160.1
70°	291.8	235.8	169.5	145.9	139.6
72.5°	236.6	196.3	143.5	127.7	123.0
75°	181.4	156.1	121.4	110.4	105.7
77.5°	136.4	122.2	103.3	94.6	90.7
80°	98.6	94.6	86.7	82.0	78.1
82.5°	67.8	71.8	72.5	68.6	67.0
85°	44.2	52.8	59.9	58.4	56.8
87.5°	24.4	35.5	48.9	49.7	48.1
90°	7.1	23.7	41.8	44.9	44.2
92.5°	13.4	25.2	42.6	45.7	44.9
95°	13.4	26.0	43.4	47.3	46.5
97.5°	12.6	26.0	44.2	48.9	48.9
100°	6.3	25.2	44.2	50.5	50.5
102.5°	3.9	22.9	42.6	51.3	52.0
105°	3.9	19.7	40.2	51.3	52.0
107.5°	3.9	16.6	38.6	49.7	52.0
110°	3.2	14.2	36.3	47.3	50.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	3.2	12.6	33.9	45.7	48.9
115°	3.2	11.8	30.8	43.4	46.5
117.5°	2.4	10.3	26.8	40.2	44.2
120°	2.4	8.7	23.7	37.1	41.0
122.5°	1.6	7.9	20.5	33.1	37.8
125°	1.6	6.3	18.1	29.2	33.9
127.5°	1.6	6.3	16.6	26.0	30.0
130°	1.6	5.5	14.2	22.9	26.0
132.5°	1.6	5.5	12.6	19.7	22.9
135°	1.6	4.7	11.0	17.3	20.5
137.5°	1.6	4.7	10.3	15.0	18.1
140°	1.6	3.9	8.7	13.4	15.8
142.5°	1.6	3.9	7.9	11.8	13.4
145°	1.6	3.2	7.1	10.3	11.8
147.5°	1.6	3.2	6.3	8.7	10.3
150°	1.6	3.2	6.3	7.9	8.7
152.5°	1.6	2.4	5.5	7.1	7.9
155°	1.6	2.4	4.7	7.1	7.1
157.5°	1.6	2.4	3.9	6.3	7.1
160°	1.6	2.4	3.9	5.5	6.3
162.5°	1.6	2.4	3.2	3.9	5.5
165°	1.6	1.6	3.2	3.9	4.7
167.5°	1.6	1.6	2.4	3.2	3.9
170°	1.6	1.6	2.4	2.4	2.4
172.5°	1.6	1.6	2.4	2.4	1.6
175°	1.6	1.6	2.4	2.4	1.6
177.5°	1.6	1.6	2.4	2.4	1.6
180°	1.6	1.6	1.6	1.6	1.6



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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	21.39	22.78	21.81	23.17	23.57	17.49	18.88	17.91	19.27	19.67
	3H	22.41	23.66	22.85	24.06	24.51	18.69	19.94	19.13	20.34	20.79
	4H	22.71	23.88	23.16	24.30	24.76	19.23	20.40	19.68	20.82	21.28
	6H	22.86	23.94	23.33	24.37	24.85	19.73	20.81	20.20	21.25	21.72
	8H	22.88	23.91	23.36	24.36	24.85	19.98	21.00	20.46	21.46	21.94
	12H	22.88	23.86	23.37	24.31	24.83	20.23	21.21	20.72	21.66	22.17
4H	2H	21.42	22.59	21.88	23.01	23.47	17.99	19.16	18.45	19.58	20.04
	3H	22.61	23.58	23.08	24.05	24.53	19.37	20.34	19.84	20.81	21.29
	4H	23.00	23.87	23.49	24.36	24.88	20.01	20.88	20.50	21.36	21.88
	6H	23.25	24.00	23.76	24.51	25.05	20.64	21.40	21.16	21.91	22.45
	8H	23.30	24.01	23.82	24.51	25.06	20.95	21.66	21.47	22.16	22.71
	12H	23.32	23.96	23.86	24.50	25.05	21.28	21.91	21.82	22.45	23.00
8H	4H	23.03	23.74	23.55	24.24	24.79	20.25	20.96	20.77	21.47	22.01
	6H	23.34	23.92	23.89	24.48	25.03	21.00	21.59	21.55	22.14	22.70
	8H	23.43	23.96	24.00	24.52	25.09	21.39	21.92	21.96	22.48	23.05
	12H	23.50	23.97	24.06	24.52	25.16	21.83	22.30	22.40	22.85	23.49
12H	4H	23.01	23.64	23.55	24.18	24.74	20.27	20.90	20.81	21.44	21.99
	6H	23.33	23.86	23.90	24.43	24.99	21.04	21.57	21.61	22.14	22.71
	8H	23.46	23.93	24.03	24.48	25.12	21.49	21.96	22.05	22.51	23.15