

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: P892810

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

Issue Date: 11/11/2024

**Test Information**

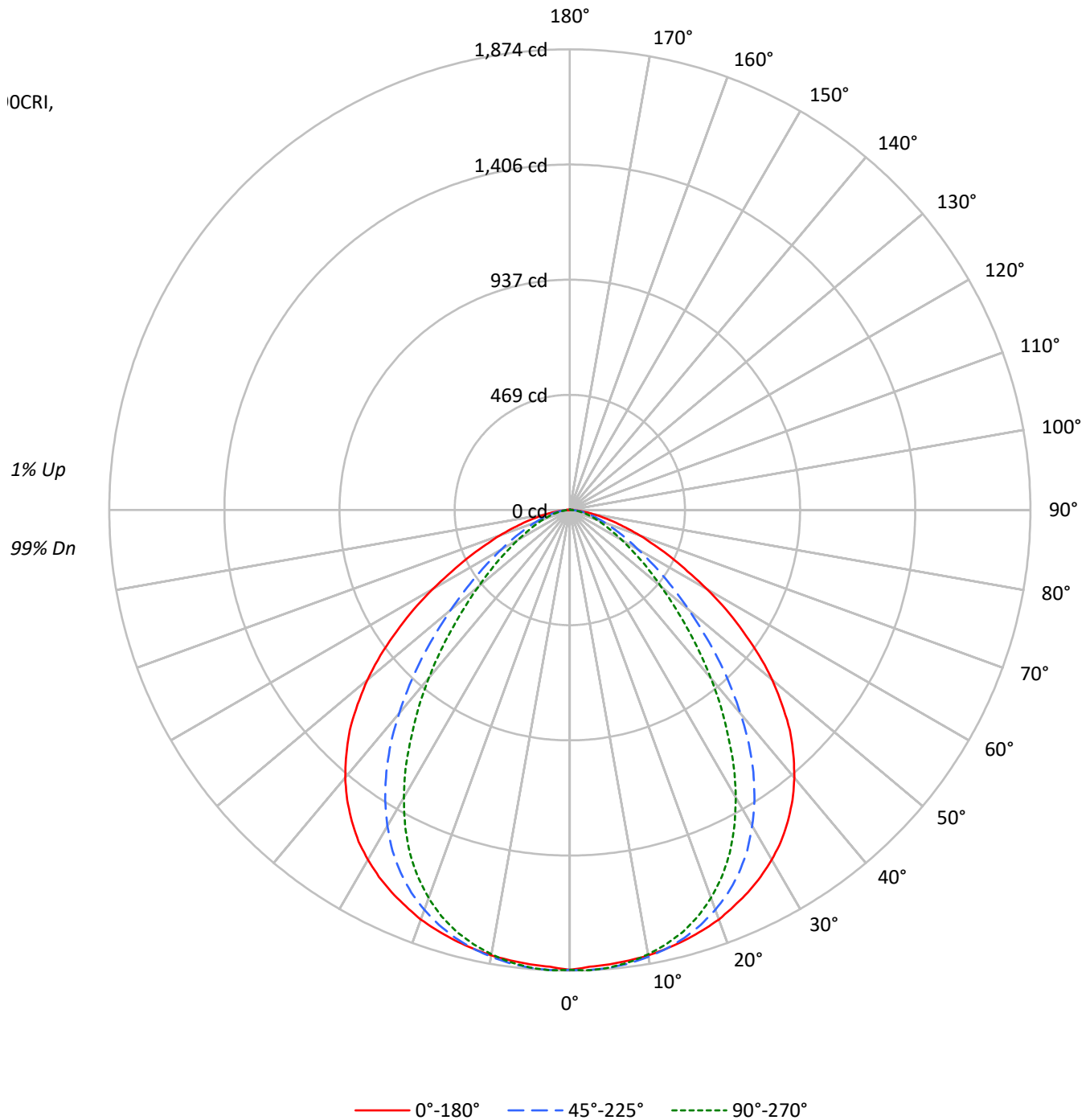
Test Method: LM-79-2019  
Report Number: P892810  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-AOL-UNV-L935  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 9  
3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3877.0 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.1 / 1.2  
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.7  
Input Voltage (V): 120  
Input Current (Ain): 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99				99
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	92	91	89	87				87
2	102	95	89	84	99	93	88	83	89	85	81	86	83	79	83	80	77	75				75
3	94	85	78	72	92	83	77	72	80	75	70	78	73	69	75	71	68	66				66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46				46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41				41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34				34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31				31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	38299	38299	38299
5°	38131	38413	38398
10°	38254	38366	38158
15°	38404	38194	37660
20°	38626	37713	36597
25°	38757	36791	34789
30°	38845	35090	31932
35°	38643	32536	28089
40°	37997	28874	23854
45°	36675	24606	19411
50°	34242	20162	15444
55°	30687	16325	12456
60°	26386	13162	10005
65°	21973	10873	8324
70°	18236	9280	7083
75°	14676	7975	6163
80°	11615	7111	5401
85°	10220	7001	5380

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 36675 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.4	4.6
10°-20°	507.0	13.1
20°-30°	747.7	19.3
30°-40°	821.0	21.2
40°-50°	698.8	18.0
50°-60°	474.2	12.2
60°-70°	267.2	6.9
70°-80°	124.5	3.2
80°-90°	36.4	0.9
90°-100°	8.7	0.2
100°-110°	5.6	0.1
110°-120°	3.4	0.1
120°-130°	1.9	0.0
130°-140°	1.1	0.0
140°-150°	0.9	0.0
150°-160°	0.7	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	1432.0	36.9
0°-40°	2253.0	58.1
0°-60°	3426.0	88.4
0°-90°	3854.1	99.4
90°-120°	17.7	0.5
90°-150°	21.6	0.6
90°-180°	23.0	0.6
0°-180°	3877.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1870	1870	1870	1870	1870	
5°	1855	1864	1869	1870	1868	177
15°	1812	1814	1802	1786	1776	512
25°	1715	1694	1628	1567	1540	791
35°	1546	1467	1302	1175	1124	966
45°	1266	1104	850	709	670	971
55°	860	674	457	370	349	769
65°	454	342	224	182	172	454
75°	186	145	101	82	78	201
85°	44	38	30	24	23	47
90°	8	9	8	7	7	7
95°	13	10	8	6	6	9
105°	4	8	5	4	4	4
115°	2	5	3	3	3	2
125°	2	2	2	2	2	1
135°	1	2	2	2	2	1
145°	1	2	2	2	2	1
155°	1	2	2	2	2	0
165°	2	2	2	2	2	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°	1870.4	1870.4	1870.4	1870.4	1870.4
2.5°	1859.7	1867.3	1872.7	1875.7	1874.2
5°	1855.1	1864.3	1868.8	1870.4	1868.1
7.5°	1848.2	1857.4	1859.7	1858.9	1855.1
10°	1839.8	1846.7	1845.2	1841.4	1835.2
12.5°	1826.8	1832.2	1826.8	1816.9	1809.3
15°	1811.6	1813.9	1801.7	1786.4	1776.5
17.5°	1793.3	1791.7	1769.6	1747.5	1733.7
20°	1772.6	1764.2	1730.7	1697.1	1679.5
22.5°	1744.4	1731.4	1684.9	1636.8	1615.4
25°	1715.4	1694.0	1628.4	1567.3	1539.8
27.5°	1681.8	1647.4	1562.7	1484.8	1450.5
30°	1642.9	1597.1	1484.1	1391.7	1350.5
32.5°	1599.4	1536.8	1398.6	1287.1	1242.8
35°	1545.9	1467.3	1301.6	1174.9	1123.7
37.5°	1487.9	1387.9	1196.3	1052.7	1010.0
40°	1421.5	1299.3	1080.2	934.4	892.4
42.5°	1345.9	1203.9	965.0	816.9	779.4
45°	1266.5	1103.9	849.7	709.2	670.3
47.5°	1171.1	993.2	735.2	606.9	572.6
50°	1074.9	882.5	632.9	516.1	484.8
52.5°	971.1	777.2	538.2	438.2	412.2
55°	859.6	674.1	457.3	369.5	348.9
57.5°	754.3	577.1	384.8	309.2	290.1
60°	644.3	487.1	321.4	260.3	244.3
62.5°	540.5	408.4	271.8	216.8	203.8
65°	453.5	342.0	224.4	182.5	171.8
67.5°	369.5	284.0	187.0	151.9	142.8
70°	304.6	229.8	155.0	125.2	118.3
72.5°	237.4	186.3	125.2	102.3	96.2
75°	185.5	145.0	100.8	82.4	77.9
77.5°	137.4	112.2	79.4	64.9	61.8
80°	98.5	83.2	60.3	49.6	45.8
82.5°	68.7	58.0	43.5	35.9	33.6
85°	43.5	38.2	29.8	24.4	22.9
87.5°	22.9	21.4	17.6	14.5	13.7
90°	7.6	9.2	8.4	6.9	6.9
92.5°	13.0	9.9	7.6	6.9	6.1
95°	13.0	9.9	7.6	6.1	6.1
97.5°	12.2	9.2	6.9	6.1	5.3
100°	6.1	9.2	6.1	5.3	4.6
102.5°	3.8	8.4	6.1	4.6	4.6
105°	3.8	7.6	5.3	3.8	3.8
107.5°	3.1	6.9	4.6	3.8	3.8
110°	3.1	6.1	4.6	3.8	3.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	3.1	5.3	3.8	3.1	3.1
115°	2.3	4.6	3.1	3.1	3.1
117.5°	2.3	3.8	3.1	3.1	3.1
120°	1.5	3.1	2.3	2.3	2.3
122.5°	1.5	2.3	2.3	2.3	2.3
125°	1.5	2.3	2.3	2.3	2.3
127.5°	1.5	1.5	2.3	2.3	2.3
130°	0.8	1.5	1.5	2.3	2.3
132.5°	0.8	1.5	1.5	1.5	1.5
135°	0.8	1.5	1.5	1.5	1.5
137.5°	0.8	1.5	1.5	1.5	1.5
140°	0.8	1.5	1.5	1.5	1.5
142.5°	0.8	1.5	1.5	1.5	1.5
145°	0.8	1.5	1.5	1.5	1.5
147.5°	0.8	1.5	1.5	1.5	1.5
150°	0.8	1.5	1.5	1.5	1.5
152.5°	0.8	1.5	1.5	1.5	1.5
155°	0.8	1.5	1.5	1.5	1.5
157.5°	1.5	1.5	1.5	1.5	2.3
160°	1.5	1.5	1.5	1.5	2.3
162.5°	1.5	1.5	1.5	2.3	2.3
165°	1.5	1.5	1.5	2.3	2.3
167.5°	1.5	1.5	1.5	2.3	2.3
170°	1.5	1.5	1.5	2.3	2.3
172.5°	1.5	1.5	1.5	2.3	2.3
175°	1.5	1.5	2.3	2.3	2.3
177.5°	1.5	1.5	2.3	2.3	2.3
180°	2.3	2.3	2.3	2.3	2.3



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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	23.10	24.54	23.47	24.87	25.20	18.30	19.75	18.68	20.07	20.40
	3H	24.32	25.61	24.71	25.95	26.33	19.32	20.60	19.70	20.94	21.32
	4H	24.72	25.93	25.13	26.29	26.68	19.67	20.87	20.08	21.23	21.63
	6H	24.98	26.09	25.40	26.47	26.87	19.92	21.03	20.35	21.41	21.82
	8H	25.05	26.11	25.49	26.51	26.92	20.01	21.06	20.44	21.46	21.88
	12H	25.10	26.11	25.54	26.50	26.95	20.07	21.08	20.51	21.47	21.92
4H	2H	23.12	24.32	23.53	24.68	25.08	18.93	20.13	19.34	20.49	20.89
	3H	24.52	25.51	24.94	25.92	26.34	20.13	21.12	20.55	21.53	21.95
	4H	25.02	25.91	25.46	26.34	26.79	20.57	21.46	21.01	21.88	22.34
	6H	25.39	26.17	25.86	26.62	27.10	20.91	21.69	21.38	22.14	22.62
	8H	25.51	26.23	25.99	26.69	27.17	21.03	21.75	21.50	22.21	22.69
	12H	25.60	26.24	26.10	26.73	27.22	21.13	21.77	21.62	22.26	22.75
8H	4H	25.02	25.74	25.50	26.20	26.68	20.91	21.63	21.38	22.08	22.57
	6H	25.46	26.05	25.97	26.56	27.05	21.35	21.94	21.86	22.45	22.94
	8H	25.63	26.16	26.15	26.68	27.19	21.52	22.05	22.05	22.57	23.08
	12H	25.78	26.26	26.30	26.76	27.34	21.68	22.15	22.20	22.66	23.24
12H	4H	24.99	25.64	25.49	26.13	26.61	20.95	21.59	21.45	22.09	22.57
	6H	25.43	25.97	25.96	26.49	26.99	21.42	21.96	21.95	22.48	22.98
	8H	25.64	26.11	26.16	26.62	27.20	21.65	22.12	22.17	22.63	23.21