

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: P892849

Luminaire Tested: 2MB-5HL-LVRA-UNV-L930

Issue Date: 11/11/2024

**Test Information**

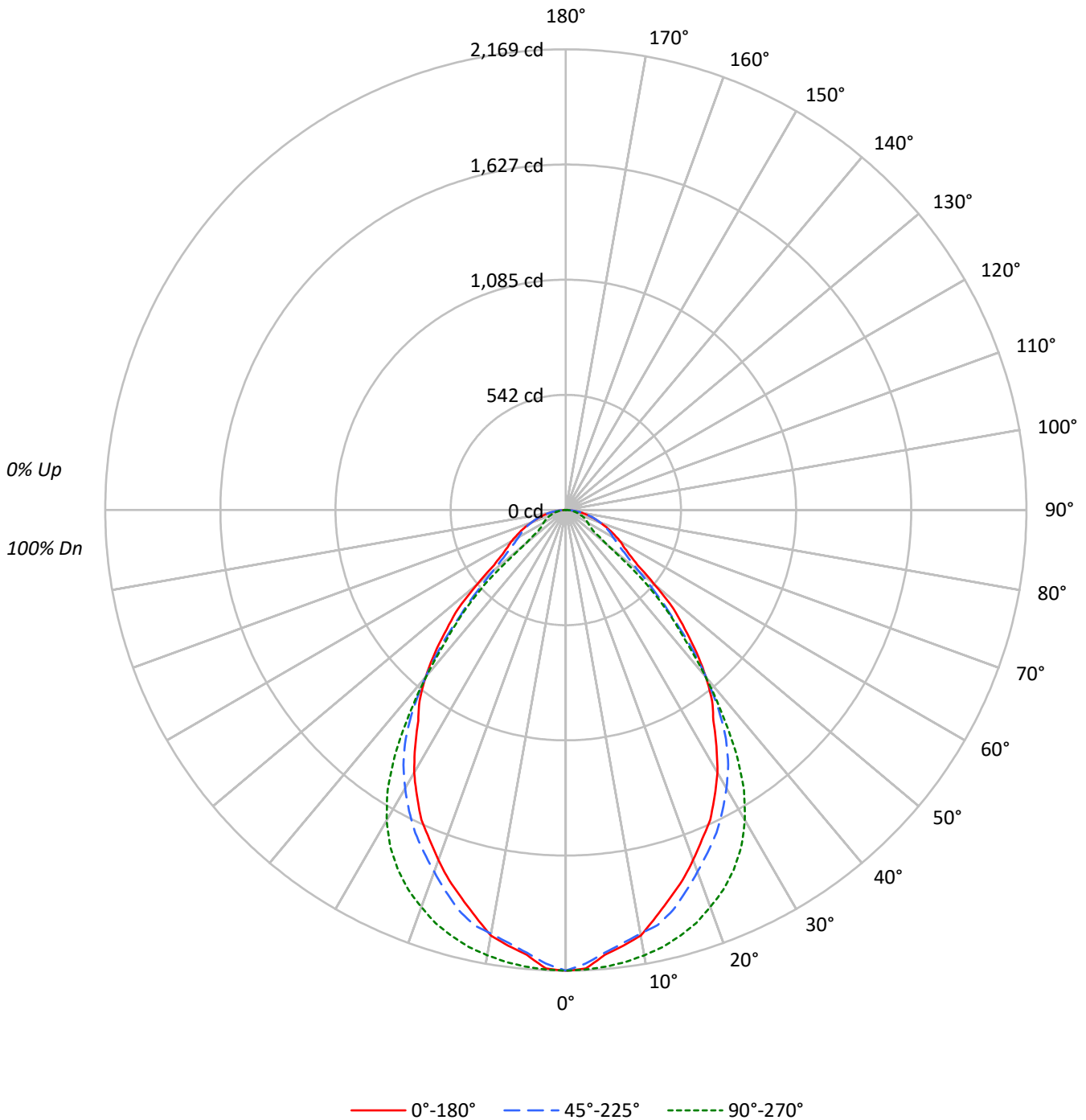
Test Method: LM-79-2019  
Report Number: P892849  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-LVRA-UNV-L930  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3520.0 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12  
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')  
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78	78	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55	55	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50	50	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45	45	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41	41	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38	38	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35	35	35

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

	0°	45°	90°
0°	31027	31027	31027
5°	30191	30054	30993
10°	29549	29418	30920
15°	28024	28884	30747
20°	26695	27597	30278
25°	25394	26478	29506
30°	23592	24996	27859
35°	21154	22970	24434
40°	19166	19207	19102
45°	16025	14192	13842
50°	12105	9990	5660
55°	9103	7989	3569
60°	8460	7356	3439
65°	7870	7342	3443
70°	7203	7203	3392
75°	6826	7014	3278
80°	6310	6632	3361
85°	5499	5778	3677

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 16397 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.3	5.7
10°-20°	552.0	15.7
20°-30°	782.8	22.2
30°-40°	806.4	22.9
40°-50°	563.3	16.0
50°-60°	270.3	7.7
60°-70°	189.6	5.4
70°-80°	118.6	3.4
80°-90°	36.7	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1535.2	43.6
0°-40°	2341.6	66.5
0°-60°	3175.1	90.2
0°-90°	3520.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3520.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2169	2169	2169	2169	2169	
5°	2102	2100	2093	2148	2158	199
15°	1892	1906	1950	2006	2076	533
25°	1609	1625	1678	1791	1869	736
35°	1211	1244	1315	1343	1399	763
45°	792	810	702	666	684	610
55°	365	347	320	205	143	342
65°	232	217	217	165	102	230
75°	124	122	127	110	59	130
85°	34	34	35	35	22	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2168.9	2168.9	2168.9	2168.9	2168.9
2.5°	2160.5	2153.8	2137.6	2167.2	2165.0
5°	2102.4	2099.6	2092.9	2147.6	2158.3
7.5°	2069.4	2063.8	2056.0	2116.3	2146.0
10°	2034.2	2040.9	2025.2	2080.6	2128.6
12.5°	1961.5	1979.4	2000.6	2043.7	2107.4
15°	1892.2	1906.1	1950.3	2006.2	2076.1
17.5°	1827.3	1843.5	1881.6	1965.4	2039.7
20°	1753.5	1775.9	1812.8	1920.1	1988.9
22.5°	1677.5	1698.2	1744.6	1859.8	1936.3
25°	1608.8	1625.0	1677.5	1791.0	1869.3
27.5°	1517.7	1547.8	1597.6	1707.2	1789.3
30°	1428.2	1453.9	1513.2	1605.4	1686.5
32.5°	1320.3	1357.8	1423.2	1493.6	1561.3
35°	1211.3	1244.3	1315.3	1342.7	1399.1
37.5°	1132.0	1140.9	1181.1	1177.8	1209.7
40°	1026.3	1044.2	1028.5	986.6	1022.9
42.5°	912.3	933.5	870.3	821.7	834.6
45°	792.1	810.5	701.5	665.8	684.2
47.5°	688.1	686.4	565.7	541.7	515.9
50°	543.9	561.8	448.9	404.1	254.3
52.5°	424.8	431.5	370.1	258.3	167.1
55°	365.0	347.1	320.3	205.1	143.1
57.5°	324.2	301.9	284.0	190.6	130.8
60°	295.7	270.6	257.1	181.1	120.2
62.5°	263.3	243.7	238.7	172.7	110.7
65°	232.5	217.4	216.9	164.9	101.7
67.5°	201.8	193.4	195.6	155.4	91.7
70°	172.2	170.5	172.2	143.1	81.1
72.5°	147.0	145.3	149.8	127.4	69.3
75°	123.5	121.9	126.9	109.6	59.3
77.5°	98.4	99.5	102.9	91.1	49.7
80°	76.6	76.6	80.5	71.6	40.8
82.5°	54.8	55.3	57.6	52.5	31.9
85°	33.5	33.5	35.2	34.7	22.4
87.5°	11.2	12.9	15.1	16.2	11.2
90°	0.0	0.0	0.0	0.0	0.0



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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	17.58	18.94	17.95	19.25	19.56	13.91	15.27	14.28	15.58	15.89
	3H	19.32	20.53	19.70	20.86	21.22	15.89	17.10	16.27	17.43	17.79
	4H	19.99	21.12	20.39	21.47	21.85	16.59	17.72	17.00	18.07	18.45
	6H	20.50	21.54	20.91	21.91	22.30	17.12	18.15	17.53	18.52	18.92
	8H	20.67	21.65	21.10	22.05	22.45	17.30	18.29	17.73	18.68	19.08
	12H	20.78	21.72	21.21	22.10	22.53	17.44	18.38	17.87	18.77	19.20
4H	2H	18.11	19.24	18.51	19.59	19.97	15.53	16.66	15.94	17.01	17.39
	3H	20.09	21.02	20.50	21.42	21.82	17.71	18.64	18.13	19.05	19.45
	4H	20.89	21.73	21.33	22.14	22.59	18.59	19.43	19.03	19.85	20.29
	6H	21.53	22.26	22.00	22.70	23.17	19.24	19.96	19.70	20.41	20.87
	8H	21.75	22.43	22.22	22.88	23.35	19.44	20.12	19.91	20.57	21.04
	12H	21.91	22.51	22.39	22.99	23.46	19.60	20.20	20.09	20.69	21.16
8H	4H	21.18	21.85	21.64	22.30	22.77	19.24	19.92	19.71	20.37	20.84
	6H	21.96	22.51	22.46	23.01	23.49	20.10	20.66	20.60	21.15	21.63
	8H	22.26	22.76	22.78	23.27	23.76	20.43	20.93	20.95	21.44	21.94
	12H	22.49	22.94	23.01	23.43	24.00	20.70	21.14	21.21	21.63	22.20
12H	4H	21.19	21.79	21.68	22.27	22.75	19.31	19.91	19.80	20.40	20.87
	6H	22.01	22.51	22.53	23.02	23.52	20.24	20.74	20.76	21.25	21.75
	8H	22.38	22.82	22.89	23.31	23.88	20.65	21.09	21.17	21.59	22.16