

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: P892812

Luminaire Tested: 2MB-5HL-AOL-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892812
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-L950
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 9
5000K CCT
Light Source: -
Ballast/Driver: -

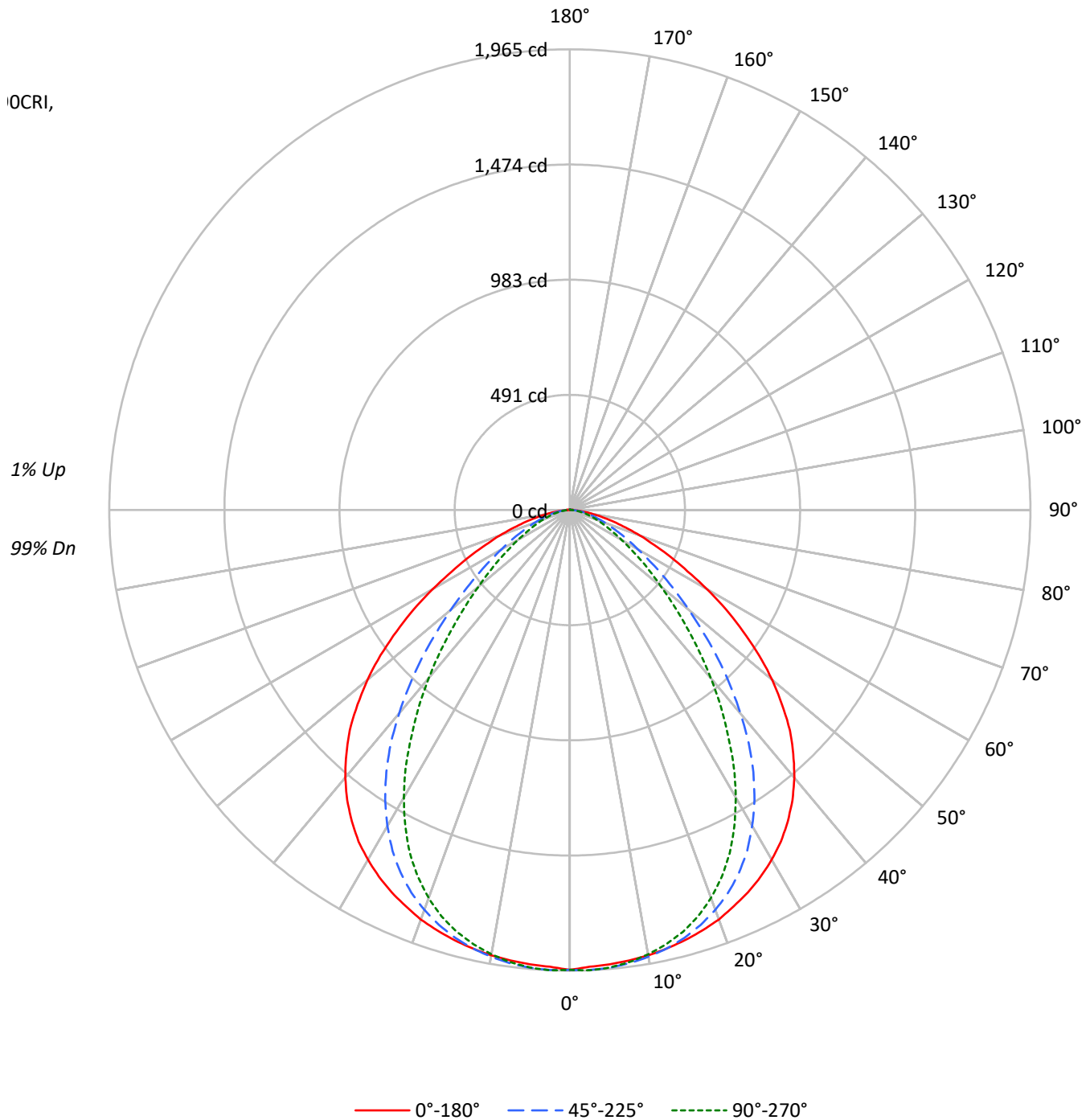
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4065.0 lumens
Efficiency: N/A
Efficacy: 120.6 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
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	92	91	89				87
2	102	95	89	84	99	93	88	83	89	85	81	86	83	79	83	80	77				75
3	94	85	78	72	92	83	77	72	80	75	70	78	73	69	75	71	68				66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60				58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53				51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48				46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43				41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35				34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40156	40156	40156
5°	39981	40277	40261
10°	40108	40225	40009
15°	40265	40045	39485
20°	40500	39541	38373
25°	40636	38574	36477
30°	40727	36790	33480
35°	40518	34114	29452
40°	39839	30275	25011
45°	38454	25799	20352
50°	35901	21139	16192
55°	32176	17118	13059
60°	27668	13801	10488
65°	23039	11401	8726
70°	19122	9729	7430
75°	15388	8362	6456
80°	12181	7453	5660
85°	10713	7330	5639

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 38454 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.0	4.6
10°-20°	531.5	13.1
20°-30°	783.9	19.3
30°-40°	860.8	21.2
40°-50°	732.7	18.0
50°-60°	497.1	12.2
60°-70°	280.2	6.9
70°-80°	130.6	3.2
80°-90°	38.1	0.9
90°-100°	9.1	0.2
100°-110°	5.9	0.1
110°-120°	3.6	0.1
120°-130°	2.0	0.0
130°-140°	1.2	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°	1501.4	36.9
0°-40°	2362.3	58.1
0°-60°	3592.1	88.4
0°-90°	4040.9	99.4
90°-120°	18.5	0.5
90°-150°	22.6	0.6
90°-180°	24.0	0.6
0°-180°	4065.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1945	1955	1960	1961	1959	185
15°	1899	1902	1889	1873	1863	537
25°	1799	1776	1707	1643	1614	829
35°	1621	1538	1365	1232	1178	1012
45°	1328	1157	891	744	703	1018
55°	901	707	480	387	366	806
65°	476	359	235	191	180	476
75°	194	152	106	86	82	210
85°	46	40	31	26	24	49
90°	8	10	9	7	7	7
95°	14	10	8	6	6	10
105°	4	8	6	4	4	4
115°	2	5	3	3	3	3
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°	1961.1	1961.1	1961.1	1961.1	1961.1
2.5°	1949.9	1957.9	1963.5	1966.7	1965.1
5°	1945.1	1954.7	1959.5	1961.1	1958.7
7.5°	1937.8	1947.5	1949.9	1949.1	1945.1
10°	1929.0	1936.2	1934.6	1930.6	1924.2
12.5°	1915.4	1921.0	1915.4	1905.0	1897.0
15°	1899.4	1901.8	1889.0	1873.0	1862.6
17.5°	1880.2	1878.6	1855.4	1832.2	1817.8
20°	1858.6	1849.8	1814.6	1779.4	1761.0
22.5°	1829.0	1815.4	1766.6	1716.1	1693.7
25°	1798.6	1776.2	1707.3	1643.3	1614.5
27.5°	1763.4	1727.3	1638.5	1556.8	1520.8
30°	1722.5	1674.5	1556.0	1459.2	1416.0
32.5°	1676.9	1611.3	1466.4	1349.5	1303.1
35°	1620.9	1538.4	1364.7	1231.9	1178.2
37.5°	1560.0	1455.2	1254.3	1103.8	1059.0
40°	1490.4	1362.3	1132.6	979.7	935.7
42.5°	1411.2	1262.3	1011.7	856.5	817.2
45°	1327.9	1157.4	890.9	743.6	702.8
47.5°	1227.9	1041.4	770.8	636.3	600.3
50°	1127.0	925.3	663.6	541.1	508.3
52.5°	1018.1	814.8	564.3	459.4	432.2
55°	901.3	706.8	479.5	387.4	365.8
57.5°	790.8	605.1	403.4	324.2	304.2
60°	675.6	510.7	337.0	272.9	256.1
62.5°	566.7	428.2	285.0	227.3	213.7
65°	475.5	358.6	235.3	191.3	180.1
67.5°	387.4	297.8	196.1	159.3	149.7
70°	319.4	240.9	162.5	131.3	124.1
72.5°	248.9	195.3	131.3	107.3	100.9
75°	194.5	152.1	105.7	86.4	81.6
77.5°	144.1	117.7	83.2	68.0	64.8
80°	103.3	87.2	63.2	52.0	48.0
82.5°	72.0	60.8	45.6	37.6	35.2
85°	45.6	40.0	31.2	25.6	24.0
87.5°	24.0	22.4	18.4	15.2	14.4
90°	8.0	9.6	8.8	7.2	7.2
92.5°	13.6	10.4	8.0	7.2	6.4
95°	13.6	10.4	8.0	6.4	6.4
97.5°	12.8	9.6	7.2	6.4	5.6
100°	6.4	9.6	6.4	5.6	4.8
102.5°	4.0	8.8	6.4	4.8	4.8
105°	4.0	8.0	5.6	4.0	4.0
107.5°	3.2	7.2	4.8	4.0	4.0
110°	3.2	6.4	4.8	4.0	3.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.2	5.6	4.0	3.2	3.2
115°	2.4	4.8	3.2	3.2	3.2
117.5°	2.4	4.0	3.2	3.2	3.2
120°	1.6	3.2	2.4	2.4	2.4
122.5°	1.6	2.4	2.4	2.4	2.4
125°	1.6	2.4	2.4	2.4	2.4
127.5°	1.6	1.6	2.4	2.4	2.4
130°	0.8	1.6	1.6	2.4	2.4
132.5°	0.8	1.6	1.6	1.6	1.6
135°	0.8	1.6	1.6	1.6	1.6
137.5°	0.8	1.6	1.6	1.6	1.6
140°	0.8	1.6	1.6	1.6	1.6
142.5°	0.8	1.6	1.6	1.6	1.6
145°	0.8	1.6	1.6	1.6	1.6
147.5°	0.8	1.6	1.6	1.6	1.6
150°	0.8	1.6	1.6	1.6	1.6
152.5°	0.8	1.6	1.6	1.6	1.6
155°	0.8	1.6	1.6	1.6	1.6
157.5°	1.6	1.6	1.6	1.6	2.4
160°	1.6	1.6	1.6	1.6	2.4
162.5°	1.6	1.6	1.6	2.4	2.4
165°	1.6	1.6	1.6	2.4	2.4
167.5°	1.6	1.6	1.6	2.4	2.4
170°	1.6	1.6	1.6	2.4	2.4
172.5°	1.6	1.6	1.6	2.4	2.4
175°	1.6	1.6	2.4	2.4	2.4
177.5°	1.6	1.6	2.4	2.4	2.4
180°	2.4	2.4	2.4	2.4	2.4



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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	23.26	24.70	23.64	25.03	25.36	18.47	19.91	18.84	20.24	20.57
	3H	24.49	25.77	24.88	26.11	26.49	19.48	20.77	19.87	21.11	21.49
	4H	24.89	26.09	25.30	26.45	26.85	19.83	21.04	20.24	21.40	21.79
	6H	25.14	26.25	25.57	26.63	27.04	20.09	21.20	20.51	21.58	21.99
	8H	25.22	26.27	25.65	26.67	27.09	20.17	21.22	20.61	21.63	22.04
	12H	25.26	26.27	25.71	26.67	27.11	20.23	21.24	20.67	21.64	22.08
4H	2H	23.28	24.49	23.69	24.85	25.24	19.09	20.30	19.50	20.66	21.05
	3H	24.68	25.67	25.10	26.08	26.50	20.29	21.29	20.72	21.70	22.12
	4H	25.18	26.07	25.63	26.50	26.96	20.73	21.62	21.17	22.05	22.50
	6H	25.56	26.33	26.03	26.79	27.26	21.08	21.85	21.55	22.31	22.78
	8H	25.67	26.40	26.15	26.85	27.33	21.19	21.91	21.67	22.37	22.85
	12H	25.77	26.41	26.26	26.90	27.38	21.29	21.93	21.78	22.42	22.91
8H	4H	25.18	25.90	25.66	26.36	26.84	21.07	21.79	21.55	22.25	22.73
	6H	25.62	26.22	26.13	26.72	27.22	21.51	22.11	22.02	22.61	23.10
	8H	25.79	26.33	26.32	26.85	27.35	21.68	22.22	22.21	22.74	23.24
	12H	25.95	26.42	26.47	26.92	27.50	21.84	22.32	22.37	22.82	23.40
12H	4H	25.16	25.80	25.65	26.29	26.78	21.12	21.76	21.61	22.25	22.74
	6H	25.60	26.13	26.13	26.66	27.16	21.59	22.12	22.11	22.64	23.15
	8H	25.80	26.28	26.33	26.78	27.36	21.81	22.29	22.33	22.79	23.37