

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: P892796

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-8)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-A-UNV-L950
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

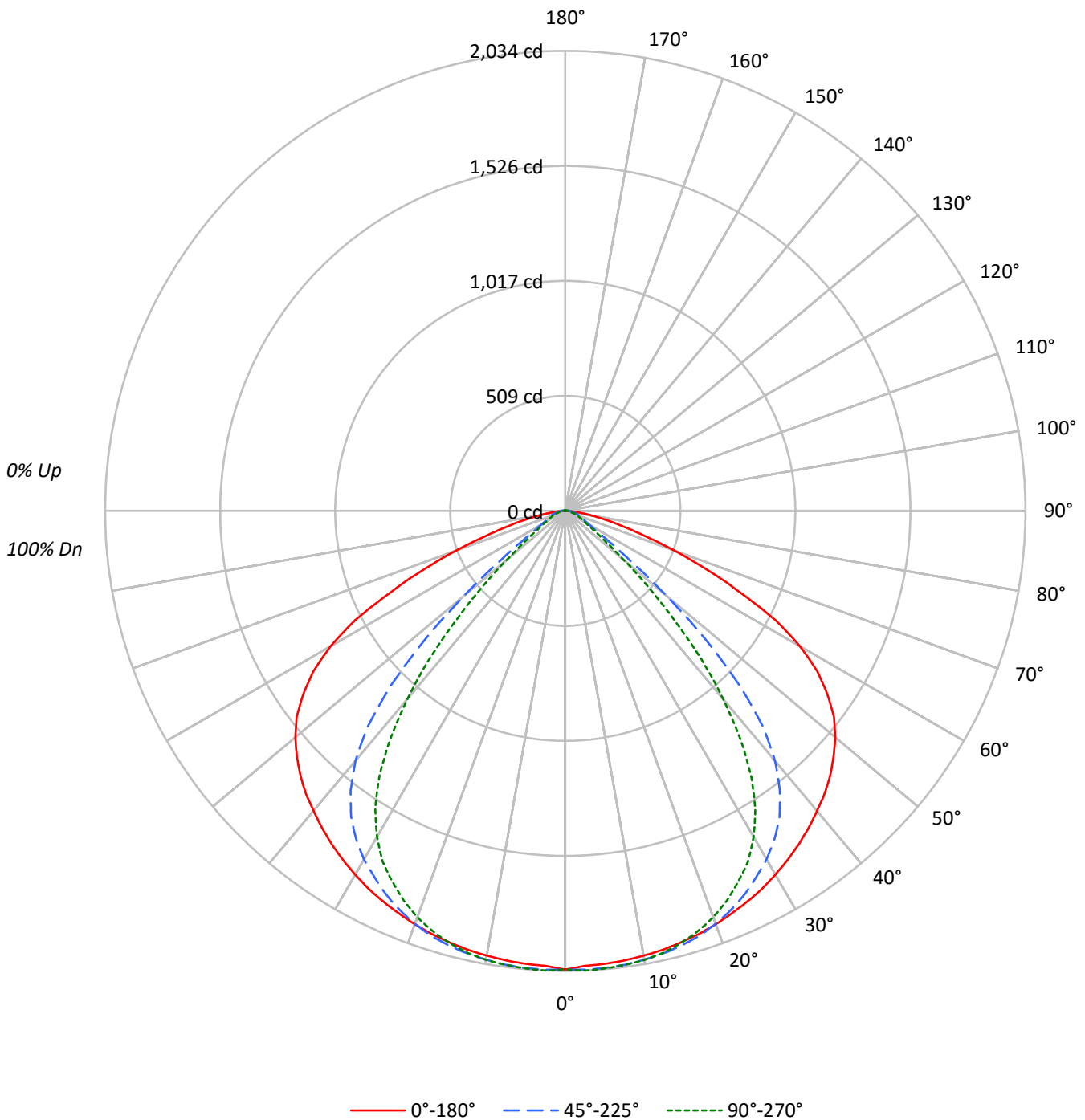
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4312.9 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.21 / 1.29
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 (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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	79	79	79	77
3	95	86	80	74	93	85	78	73	82	77	72	79	75	71	77	73	70	70	70	70	68
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	62	62	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	55	64	59	55	55	55	55	53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	58	53	49	49	49	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	44	44	44	43
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	40	40	40	38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	37	37	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	37	33	33	33	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41526	41526	41526
5°	41323	41701	41751
10°	41516	41901	41917
15°	41870	42175	41938
20°	42376	42341	41661
25°	43052	42310	40865
30°	43900	42065	39358
35°	44972	41250	35828
40°	46270	38548	29029
45°	47926	31449	19654
50°	49612	18534	10681
55°	50483	8257	5801
60°	49094	5045	4128
65°	41334	4225	3527
70°	30809	4071	3209
75°	20831	4241	2722
80°	14150	3868	3113
85°	8646	5639	5451

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 50483 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.0	4.5
10°-20°	560.4	13.0
20°-30°	859.9	19.9
30°-40°	1013.0	23.5
40°-50°	863.9	20.0
50°-60°	472.0	10.9
60°-70°	209.2	4.8
70°-80°	91.8	2.1
80°-90°	32.8	0.8
90°-100°	10.1	0.2
100°-110°	2.6	0.1
110°-120°	0.7	0.0
120°-130°	0.7	0.0
130°-140°	0.6	0.0
140°-150°	0.7	0.0
150°-160°	0.7	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	1613.3	37.4
0°-40°	2626.3	60.9
0°-60°	3962.2	91.9
0°-90°	4296.0	99.6
90°-120°	13.4	0.3
90°-150°	15.5	0.4
90°-180°	17.0	0.4
0°-180°	4312.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2028	2028	2028	2028	2028	
5°	2010	2022	2029	2034	2031	192
15°	1975	1986	1990	1984	1978	559
25°	1906	1906	1873	1834	1809	880
35°	1799	1766	1650	1500	1433	1127
45°	1655	1519	1086	756	679	1277
55°	1414	867	231	170	162	1255
65°	853	184	87	78	73	848
75°	263	93	54	41	34	297
85°	37	34	24	23	23	48
90°	3	14	18	18	15	3
95°	3	6	13	10	10	2
105°	1	1	2	4	5	1
115°	1	1	1	1	1	0
125°	1	1	1	1	1	1
135°	1	1	1	1	1	1
145°	1	1	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°	2028.0	2028.0	2028.0	2028.0	2028.0
2.5°	2013.6	2024.0	2030.4	2035.2	2034.4
5°	2010.4	2021.6	2028.8	2033.6	2031.2
7.5°	2004.7	2016.8	2024.0	2028.8	2024.8
10°	1996.7	2008.8	2015.2	2018.4	2016.0
12.5°	1987.9	1999.1	2003.9	2005.5	2000.7
15°	1975.1	1986.3	1989.5	1983.9	1978.3
17.5°	1961.5	1971.1	1969.5	1959.1	1948.7
20°	1944.7	1952.7	1943.1	1923.1	1911.9
22.5°	1925.5	1931.1	1911.1	1881.5	1865.5
25°	1905.5	1905.5	1872.7	1834.3	1808.7
27.5°	1883.1	1877.5	1826.3	1775.1	1748.7
30°	1856.7	1843.9	1779.1	1706.2	1664.6
32.5°	1829.5	1808.7	1720.6	1616.6	1563.0
35°	1799.1	1765.5	1650.2	1499.8	1433.3
37.5°	1766.3	1719.0	1558.2	1351.7	1270.1
40°	1731.0	1662.2	1442.1	1176.4	1086.0
42.5°	1696.6	1597.4	1291.7	974.8	891.5
45°	1655.0	1519.0	1086.0	756.3	678.7
47.5°	1608.6	1422.1	838.7	545.0	497.8
50°	1557.4	1290.1	581.8	375.3	335.3
52.5°	1496.6	1110.8	366.5	249.7	230.5
55°	1414.1	866.7	231.3	169.7	162.5
57.5°	1320.5	605.8	157.7	128.8	124.0
60°	1198.8	388.1	123.2	105.6	100.8
62.5°	1048.4	257.7	102.4	89.6	84.8
65°	853.1	184.1	87.2	77.6	72.8
67.5°	676.3	147.3	76.8	68.0	61.6
70°	514.6	123.2	68.0	60.0	53.6
72.5°	366.5	107.2	60.8	51.2	44.8
75°	263.3	92.8	53.6	40.8	34.4
77.5°	181.7	80.8	44.8	31.2	29.6
80°	120.0	70.4	32.8	28.0	26.4
82.5°	72.8	56.8	28.0	24.0	25.6
85°	36.8	33.6	24.0	23.2	23.2
87.5°	14.4	20.0	20.0	22.4	22.4
90°	3.2	13.6	18.4	18.4	15.2
92.5°	3.2	10.4	16.8	12.8	11.2
95°	3.2	5.6	12.8	10.4	10.4
97.5°	2.4	2.4	8.8	8.8	8.8
100°	0.8	1.6	5.6	8.0	8.0
102.5°	0.8	0.8	3.2	5.6	6.4
105°	0.8	0.8	1.6	4.0	4.8
107.5°	0.0	0.0	0.8	2.4	3.2
110°	0.0	0.0	0.8	1.6	1.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.8	0.8	0.8
115°	0.8	0.8	0.8	0.8	0.8
117.5°	0.8	0.8	0.8	0.8	0.8
120°	0.8	0.8	0.8	0.8	0.8
122.5°	0.8	0.8	0.8	0.8	0.8
125°	0.8	0.8	0.8	0.8	0.8
127.5°	0.8	0.8	0.8	0.8	0.8
130°	0.8	0.8	0.8	0.8	0.8
132.5°	0.8	0.8	0.8	0.8	0.8
135°	0.8	0.8	0.8	0.8	0.8
137.5°	0.8	0.8	0.8	0.8	0.8
140°	0.8	0.8	0.8	0.8	0.8
142.5°	0.8	0.8	0.8	1.6	0.8
145°	0.8	0.8	1.6	1.6	1.6
147.5°	0.8	0.8	1.6	1.6	1.6
150°	0.8	0.8	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°	0.8	1.6	1.6	2.4	1.6
160°	1.6	1.6	1.6	2.4	1.6
162.5°	1.6	1.6	2.4	2.4	2.4
165°	1.6	1.6	2.4	2.4	2.4
167.5°	1.6	1.6	2.4	2.4	2.4
170°	1.6	1.6	2.4	2.4	2.4
172.5°	1.6	1.6	2.4	2.4	2.4
175°	1.6	1.6	2.4	2.4	2.4
177.5°	1.6	1.6	2.4	3.2	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	24.03	25.43	24.40	25.76	26.08	11.93	13.33	12.30	13.66	13.98
	3H	25.33	26.57	25.71	26.91	27.28	13.10	14.34	13.48	14.68	15.05
	4H	25.72	26.88	26.13	27.24	27.63	13.53	14.69	13.94	15.05	15.44
	6H	25.96	27.02	26.38	27.40	27.80	13.91	14.97	14.33	15.35	15.75
	8H	26.01	27.02	26.44	27.42	27.83	14.16	15.17	14.59	15.57	15.98
	12H	26.02	26.99	26.46	27.38	27.82	14.49	15.46	14.93	15.85	16.29
4H	2H	23.85	25.01	24.26	25.37	25.76	12.45	13.61	12.86	13.97	14.36
	3H	25.19	26.13	25.60	26.54	26.96	13.91	14.86	14.33	15.27	15.68
	4H	25.61	26.46	26.05	26.89	27.34	14.47	15.31	14.91	15.74	16.19
	6H	25.94	26.67	26.41	27.13	27.60	14.97	15.71	15.44	16.16	16.63
	8H	26.03	26.72	26.50	27.17	27.65	15.29	15.97	15.76	16.43	16.91
	12H	26.08	26.69	26.57	27.18	27.66	15.73	16.34	16.22	16.83	17.31
8H	4H	25.51	26.20	25.99	26.65	27.13	15.04	15.73	15.52	16.18	16.66
	6H	25.86	26.43	26.37	26.93	27.42	15.67	16.24	16.18	16.74	17.23
	8H	25.99	26.50	26.52	27.02	27.52	16.08	16.59	16.60	17.11	17.61
	12H	26.09	26.54	26.61	27.04	27.62	16.67	17.12	17.19	17.62	18.20
12H	4H	25.47	26.08	25.97	26.57	27.05	15.25	15.85	15.74	16.34	16.83
	6H	25.81	26.32	26.34	26.84	27.34	15.91	16.42	16.44	16.94	17.44
	8H	25.97	26.42	26.49	26.92	27.50	16.39	16.85	16.91	17.35	17.92