

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: P892794

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892794
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-L935
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

Summary

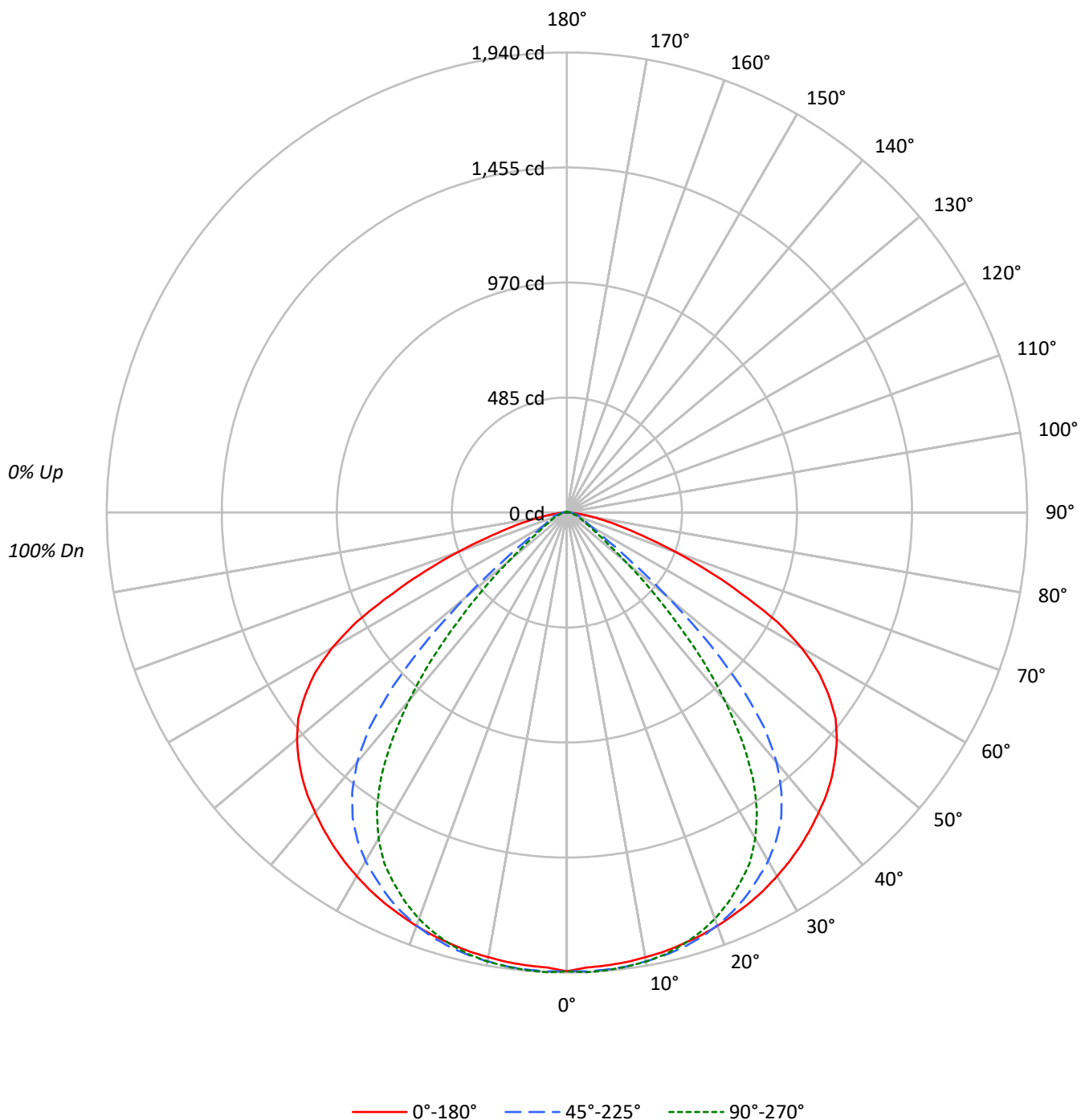
Lumens per Lamp: N/A
Luminaire Lumens: 4114.1 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.21 / 1.29
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85
3	95	86	80	74	93	85	78	73	82	77	72		79	75	71		77
4	88	78	70	65	86	77	70	64	74	68	63		72	67	62		70
5	82	71	63	57	80	70	62	57	68	61	56		66	60	55		64
6	76	64	56	51	74	63	56	50	62	55	50		60	54	50		58
7	71	59	51	45	69	58	51	45	57	50	45		55	49	45		54
8	66	54	46	41	65	53	46	41	52	45	41		51	45	40		50
9	62	50	42	37	61	49	42	37	48	42	37		47	41	37		46
10	58	46	39	34	57	46	39	34	45	38	34		44	38	34		43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39610	39610	39610
5°	39416	39777	39823
10°	39601	39967	39982
15°	39939	40229	40004
20°	40422	40389	39740
25°	41066	40358	38978
30°	41874	40124	37542
35°	42898	39348	34176
40°	44137	36770	27690
45°	45716	29998	18745
50°	47322	17680	10191
55°	48155	7875	5533
60°	46830	4816	3940
65°	39430	4031	3367
70°	29384	3886	3059
75°	19866	4043	2595
80°	13502	3691	2972
85°	8246	5380	5192

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 55°

Luminance: 48155 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.1	4.5
10°-20°	534.5	13.0
20°-30°	820.3	19.9
30°-40°	966.3	23.5
40°-50°	824.0	20.0
50°-60°	450.2	10.9
60°-70°	199.5	4.9
70°-80°	87.6	2.1
80°-90°	31.3	0.8
90°-100°	9.6	0.2
100°-110°	2.5	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°	1538.9	37.4
0°-40°	2505.2	60.9
0°-60°	3779.4	91.9
0°-90°	4097.8	99.6
90°-120°	12.8	0.3
90°-150°	14.8	0.4
90°-180°	16.0	0.4
0°-180°	4114.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1934	1934	1934	1934	1934	
5°	1918	1928	1935	1940	1937	183
15°	1884	1895	1898	1892	1887	533
25°	1818	1818	1786	1750	1725	839
35°	1716	1684	1574	1431	1367	1075
45°	1579	1449	1036	721	647	1218
55°	1349	827	221	162	155	1197
65°	814	176	83	74	70	809
75°	251	89	51	39	33	283
85°	35	32	23	22	22	46
90°	3	13	18	18	14	3
95°	3	5	12	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°	1934.4	1934.4	1934.4	1934.4	1934.4
2.5°	1920.6	1930.6	1936.7	1941.3	1940.5
5°	1917.6	1928.3	1935.2	1939.7	1937.4
7.5°	1912.3	1923.7	1930.6	1935.2	1931.3
10°	1904.6	1916.1	1922.2	1925.2	1922.9
12.5°	1896.2	1906.9	1911.5	1913.0	1908.4
15°	1884.0	1894.7	1897.7	1892.4	1887.1
17.5°	1871.0	1880.2	1878.7	1868.7	1858.8
20°	1855.0	1862.6	1853.5	1834.4	1823.7
22.5°	1836.7	1842.0	1822.9	1794.7	1779.4
25°	1817.6	1817.6	1786.3	1749.7	1725.2
27.5°	1796.2	1790.9	1742.0	1693.2	1668.0
30°	1771.0	1758.8	1697.0	1627.5	1587.8
32.5°	1745.1	1725.2	1641.3	1542.0	1490.9
35°	1716.1	1684.0	1574.1	1430.6	1367.2
37.5°	1684.8	1639.7	1486.3	1289.3	1211.5
40°	1651.2	1585.5	1375.6	1122.2	1035.9
42.5°	1618.4	1523.7	1232.1	929.8	850.4
45°	1578.7	1448.9	1035.9	721.4	647.3
47.5°	1534.4	1356.5	800.0	519.9	474.8
50°	1485.5	1230.6	555.0	358.0	319.9
52.5°	1427.5	1059.6	349.6	238.2	219.9
55°	1348.9	826.7	220.6	161.8	155.0
57.5°	1259.6	577.9	150.4	122.9	118.3
60°	1143.5	370.2	117.6	100.8	96.2
62.5°	1000.0	245.8	97.7	85.5	80.9
65°	813.8	175.6	83.2	74.0	69.5
67.5°	645.1	140.5	73.3	64.9	58.8
70°	490.8	117.6	64.9	57.3	51.1
72.5°	349.6	102.3	58.0	48.9	42.7
75°	251.1	88.6	51.1	38.9	32.8
77.5°	173.3	77.1	42.7	29.8	28.2
80°	114.5	67.2	31.3	26.7	25.2
82.5°	69.5	54.2	26.7	22.9	24.4
85°	35.1	32.1	22.9	22.1	22.1
87.5°	13.7	19.1	19.1	21.4	21.4
90°	3.1	13.0	17.6	17.6	14.5
92.5°	3.1	9.9	16.0	12.2	10.7
95°	3.1	5.3	12.2	9.9	9.9
97.5°	2.3	2.3	8.4	8.4	8.4
100°	0.8	1.5	5.3	7.6	7.6
102.5°	0.8	0.8	3.1	5.3	6.1
105°	0.8	0.8	1.5	3.8	4.6
107.5°	0.0	0.0	0.8	2.3	3.1
110°	0.0	0.0	0.8	1.5	1.5



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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	1.5	0.8
145°	0.8	0.8	1.5	1.5	1.5
147.5°	0.8	0.8	1.5	1.5	1.5
150°	0.8	0.8	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°	0.8	1.5	1.5	2.3	1.5
160°	1.5	1.5	1.5	2.3	1.5
162.5°	1.5	1.5	2.3	2.3	2.3
165°	1.5	1.5	2.3	2.3	2.3
167.5°	1.5	1.5	2.3	2.3	2.3
170°	1.5	1.5	2.3	2.3	2.3
172.5°	1.5	1.5	2.3	2.3	2.3
175°	1.5	1.5	2.3	2.3	2.3
177.5°	1.5	1.5	2.3	3.1	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	23.87	25.27	24.24	25.59	25.92	11.77	13.17	12.14	13.49	13.82
	3H	25.16	26.41	25.55	26.74	27.12	12.94	14.18	13.32	14.52	14.89
	4H	25.56	26.72	25.97	27.08	27.47	13.37	14.53	13.77	14.89	15.28
	6H	25.79	26.86	26.21	27.24	27.64	13.74	14.81	14.17	15.19	15.59
	8H	25.84	26.86	26.28	27.26	27.67	13.99	15.01	14.43	15.40	15.82
	12H	25.86	26.83	26.30	27.22	27.66	14.33	15.30	14.77	15.69	16.13
4H	2H	23.69	24.85	24.09	25.20	25.60	12.29	13.45	12.70	13.81	14.20
	3H	25.02	25.97	25.44	26.38	26.79	13.75	14.70	14.17	15.11	15.52
	4H	25.45	26.30	25.89	26.72	27.17	14.30	15.15	14.74	15.58	16.03
	6H	25.77	26.51	26.24	26.96	27.43	14.81	15.54	15.28	16.00	16.47
	8H	25.87	26.55	26.34	27.01	27.49	15.13	15.81	15.60	16.27	16.74
	12H	25.91	26.52	26.41	27.01	27.50	15.57	16.18	16.06	16.66	17.15
8H	4H	25.35	26.04	25.82	26.49	26.97	14.88	15.57	15.35	16.02	16.50
	6H	25.70	26.26	26.21	26.77	27.25	15.51	16.07	16.02	16.58	17.07
	8H	25.83	26.34	26.35	26.86	27.36	15.91	16.42	16.44	16.94	17.44
	12H	25.92	26.38	26.44	26.88	27.46	16.50	16.96	17.02	17.46	18.04
12H	4H	25.31	25.92	25.80	26.41	26.89	15.08	15.69	15.57	16.18	16.66
	6H	25.65	26.16	26.17	26.68	27.18	15.75	16.26	16.28	16.78	17.28
	8H	25.81	26.26	26.33	26.76	27.34	16.23	16.68	16.75	17.18	17.76