

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: P894069

Luminaire Tested: 4MB-9HL-RND-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894069
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-9HL-RND-UNV-L930
Description: 9000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

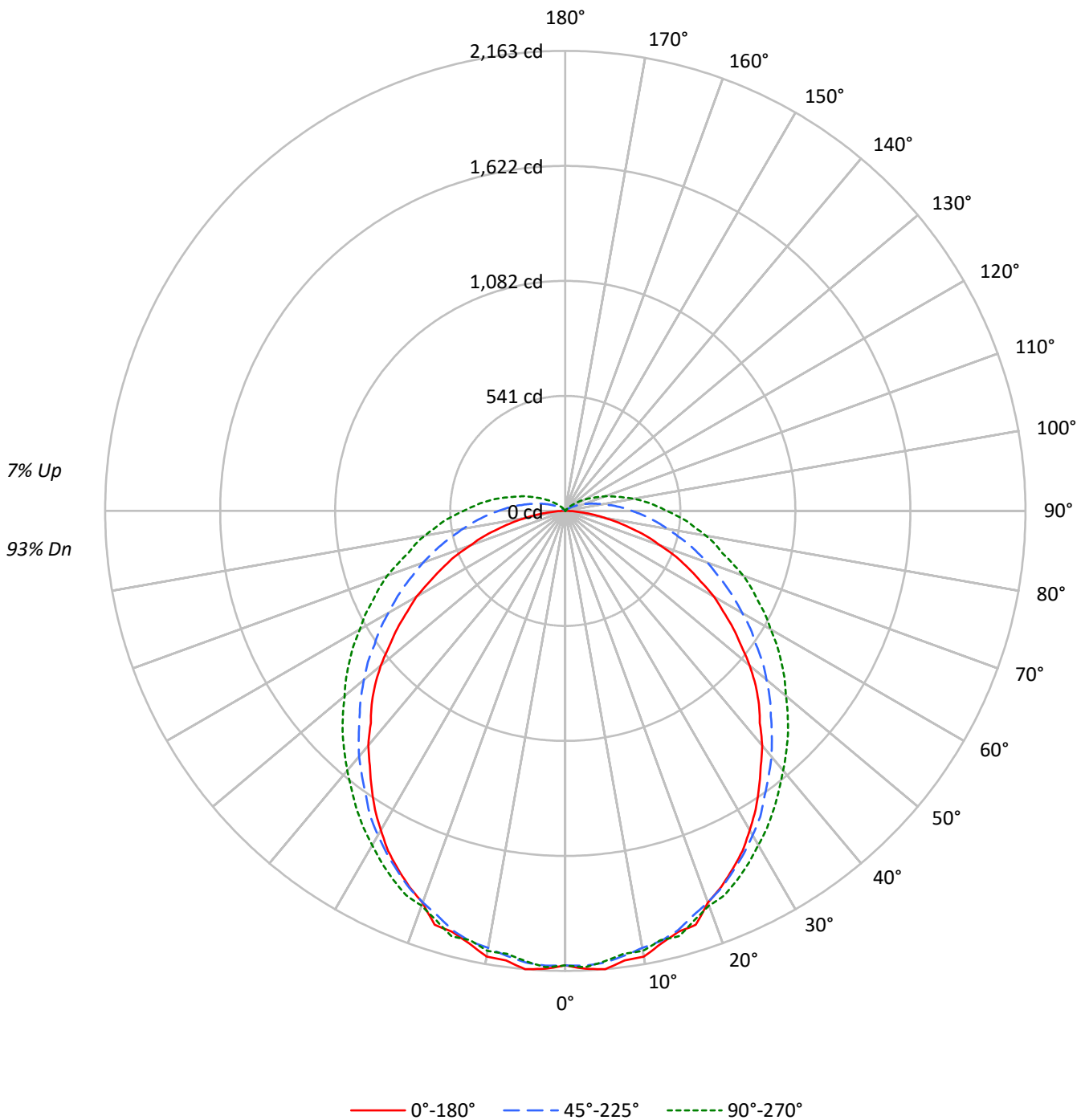
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7040.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.35
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 64.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 8.94
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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.6	2.9
10°-20°	576.9	8.2
20°-30°	864.4	12.3
30°-40°	1027.3	14.6
40°-50°	1063.5	15.1
50°-60°	985.5	14.0
60°-70°	820.5	11.7
70°-80°	609.0	8.7
80°-90°	402.8	5.7
90°-100°	245.1	3.5
100°-110°	137.4	2.0
110°-120°	67.7	1.0
120°-130°	27.5	0.4
130°-140°	8.0	0.1
140°-150°	1.2	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	1643.9	23.4
0°-40°	2671.2	37.9
0°-60°	4720.3	67.0
0°-90°	6552.5	93.1
90°-120°	450.2	6.4
90°-150°	486.9	6.9
90°-180°	487.0	6.9
0°-180°	7040.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2137	2137	2137	2137	2137	
5°	2163	2139	2131	2142	2126	204
15°	2049	2042	2042	2045	2070	580
25°	1860	1858	1867	1904	1913	856
35°	1588	1600	1634	1686	1710	993
45°	1288	1306	1367	1452	1480	992
55°	964	1005	1094	1204	1240	862
65°	638	697	833	955	999	633
75°	326	424	596	724	764	348
85°	76	214	397	538	577	86
90°	4	139	314	439	478	6
95°	1	86	244	363	403	1
105°	1	28	132	224	255	1
115°	1	7	62	123	148	1
125°	1	2	22	57	72	1
135°	2	1	6	19	25	1
145°	2	1	0	2	3	1
155°	2	2	0	0	0	1
165°	3	2	0	0	0	1
175°	3	2	0	0	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2137.3	2137.3	2137.3	2137.3	2137.3
2.5°	2154.9	2144.1	2140.2	2135.3	2147.1
5°	2162.7	2139.2	2131.4	2142.2	2125.6
7.5°	2132.4	2126.5	2109.9	2115.8	2100.1
10°	2127.5	2095.2	2086.4	2106.0	2101.1
12.5°	2083.5	2056.1	2071.8	2085.5	2066.9
15°	2049.3	2041.5	2042.4	2045.4	2069.8
17.5°	2040.5	2005.3	1995.5	2020.0	2018.0
20°	1960.3	1953.5	1958.4	1990.6	1975.0
22.5°	1913.4	1891.9	1918.3	1949.6	1956.4
25°	1859.6	1857.7	1867.4	1903.6	1913.4
27.5°	1802.9	1790.2	1816.6	1858.6	1866.5
30°	1733.5	1728.6	1760.9	1797.0	1814.6
32.5°	1665.0	1668.0	1705.1	1735.4	1765.8
35°	1587.8	1599.5	1633.8	1685.6	1710.0
37.5°	1509.6	1524.3	1570.2	1629.9	1650.4
40°	1440.2	1443.1	1507.6	1568.3	1593.7
42.5°	1353.2	1382.5	1437.2	1517.4	1537.0
45°	1287.7	1306.2	1366.8	1451.9	1480.3
47.5°	1213.3	1234.9	1304.3	1387.4	1417.7
50°	1132.2	1151.7	1234.9	1329.7	1354.1
52.5°	1042.2	1082.3	1169.3	1267.1	1299.4
55°	964.0	1005.1	1094.1	1203.6	1239.7
57.5°	879.9	921.0	1032.5	1134.1	1181.1
60°	807.6	846.7	960.1	1086.2	1114.6
62.5°	717.6	773.4	896.6	1020.7	1060.8
65°	637.5	697.1	833.0	955.2	999.2
67.5°	564.1	625.7	767.5	898.5	946.4
70°	474.2	555.3	711.8	840.8	890.7
72.5°	407.7	488.9	652.1	780.2	825.2
75°	325.6	424.3	596.4	724.5	763.6
77.5°	257.1	363.7	538.7	682.4	721.6
80°	187.7	309.0	488.9	626.7	671.7
82.5°	128.1	258.1	442.9	574.9	617.9
85°	76.3	214.1	397.0	537.7	576.9
87.5°	33.2	175.0	354.9	484.0	524.1
90°	3.9	138.8	313.8	439.0	478.1
92.5°	1.0	111.5	277.7	398.9	437.0
95°	1.0	86.0	243.5	362.7	402.8
97.5°	1.0	66.5	209.2	325.6	363.7
100°	1.0	50.8	180.9	286.5	327.5
102.5°	1.0	38.1	153.5	254.2	289.4
105°	1.0	28.4	132.0	223.9	255.2
107.5°	1.0	20.5	110.5	195.5	226.8
110°	1.0	14.7	92.9	169.1	200.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	10.8	75.3	145.7	172.1
115°	1.0	6.8	61.6	123.2	147.6
117.5°	1.0	4.9	48.9	103.6	127.1
120°	1.0	3.9	39.1	86.0	106.6
122.5°	1.0	2.9	30.3	70.4	89.9
125°	1.0	2.0	22.5	56.7	72.4
127.5°	1.0	2.0	16.6	45.0	58.7
130°	1.0	1.0	11.7	34.2	46.0
132.5°	1.0	1.0	7.8	25.4	34.2
135°	2.0	1.0	5.9	18.6	25.4
137.5°	2.0	1.0	3.9	12.7	17.6
140°	2.0	1.0	2.0	7.8	10.8
142.5°	2.0	1.0	1.0	3.9	5.9
145°	2.0	1.0	0.0	2.0	2.9
147.5°	2.0	1.0	0.0	1.0	1.0
150°	2.0	1.0	0.0	0.0	0.0
152.5°	2.0	1.0	0.0	0.0	0.0
155°	2.0	2.0	0.0	0.0	0.0
157.5°	2.0	2.0	0.0	0.0	0.0
160°	2.0	2.0	0.0	0.0	0.0
162.5°	2.0	2.0	0.0	0.0	0.0
165°	2.9	2.0	0.0	0.0	0.0
167.5°	2.9	2.0	0.0	0.0	0.0
170°	2.9	2.0	0.0	0.0	0.0
172.5°	2.9	2.0	0.0	0.0	0.0
175°	2.9	2.0	0.0	0.0	0.0
177.5°	2.9	2.0	0.0	0.0	0.0
180°	1.0	1.0	1.0	1.0	1.0



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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	19.68	21.22	20.15	21.68	22.16	21.26	22.80	21.73	23.25	23.73
	3H	21.45	22.85	21.93	23.32	23.84	23.84	25.25	24.33	25.71	26.24
	4H	22.11	23.44	22.61	23.92	24.46	25.10	26.43	25.60	26.92	27.45
	6H	22.58	23.82	23.10	24.32	24.87	26.48	27.73	27.00	28.22	28.77
	8H	22.73	23.92	23.26	24.44	25.00	27.21	28.40	27.74	28.92	29.48
	12H	22.83	23.97	23.36	24.48	25.07	28.06	29.20	28.59	29.71	30.30
4H	2H	20.64	21.97	21.14	22.45	22.99	21.83	23.16	22.33	23.64	24.18
	3H	22.68	23.82	23.20	24.34	24.90	24.70	25.83	25.21	26.36	26.92
	4H	23.49	24.54	24.03	25.07	25.66	26.18	27.22	26.71	27.75	28.35
	6H	24.14	25.06	24.70	25.63	26.23	27.80	28.72	28.35	29.28	29.88
	8H	24.37	25.24	24.93	25.80	26.42	28.65	29.52	29.21	30.08	30.70
	12H	24.54	25.33	25.12	25.92	26.54	29.64	30.43	30.23	31.02	31.65
8H	4H	24.34	25.21	24.90	25.77	26.39	26.55	27.41	27.11	27.98	28.59
	6H	25.27	26.00	25.86	26.61	27.23	28.43	29.16	29.02	29.77	30.39
	8H	25.65	26.31	26.25	26.93	27.56	29.49	30.15	30.09	30.77	31.40
	12H	25.97	26.56	26.58	27.17	27.87	30.74	31.34	31.35	31.94	32.64
12H	4H	24.60	25.39	25.19	25.98	26.61	26.59	27.38	27.17	27.97	28.59
	6H	25.69	26.36	26.29	26.97	27.61	28.54	29.20	29.14	29.82	30.45
	8H	26.23	26.82	26.84	27.43	28.13	29.71	30.31	30.32	30.91	31.61