

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: P894070

Luminaire Tested: 4MB-9HL-RND-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894070
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-L935
Description: 9000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

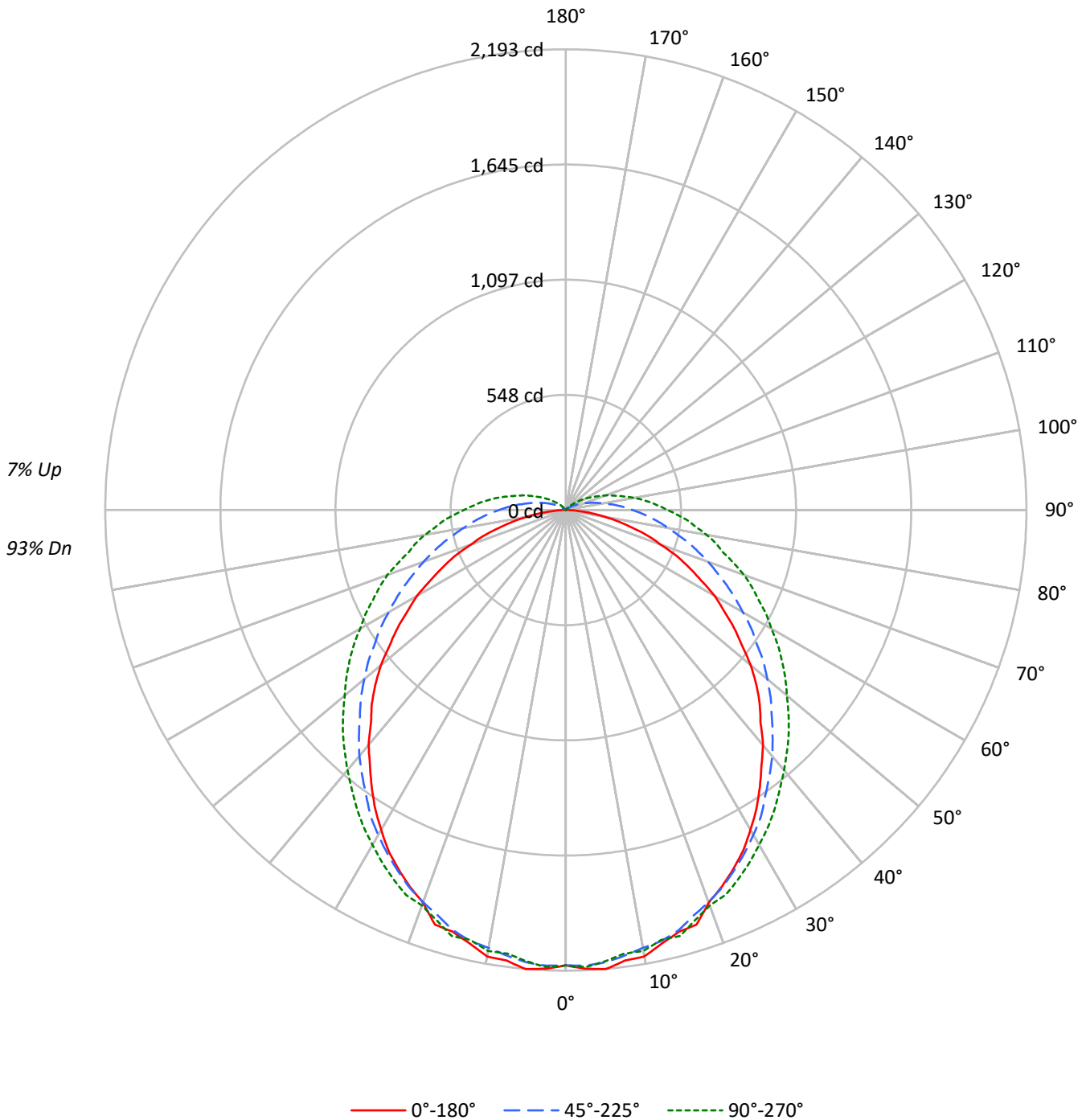
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7140.0 lumens
Efficiency: N/A
Efficacy: 110.9 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°	205.5	2.9
10°-20°	585.0	8.2
20°-30°	876.7	12.3
30°-40°	1041.9	14.6
40°-50°	1078.6	15.1
50°-60°	999.6	14.0
60°-70°	832.2	11.7
70°-80°	617.6	8.7
80°-90°	408.5	5.7
90°-100°	248.6	3.5
100°-110°	139.4	2.0
110°-120°	68.6	1.0
120°-130°	27.9	0.4
130°-140°	8.1	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°	1667.3	23.4
0°-40°	2709.1	37.9
0°-60°	4787.3	67.0
0°-90°	6645.6	93.1
90°-120°	456.6	6.4
90°-150°	493.8	6.9
90°-180°	494.0	6.9
0°-180°	7140.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2168	2168	2168	2168	2168	
5°	2193	2170	2162	2173	2156	207
15°	2078	2070	2072	2074	2099	589
25°	1886	1884	1894	1931	1941	868
35°	1610	1622	1657	1710	1734	1008
45°	1306	1325	1386	1472	1501	1006
55°	978	1019	1110	1221	1257	874
65°	646	707	845	969	1013	642
75°	330	430	605	735	774	353
85°	77	217	403	545	585	87
90°	4	141	318	445	485	6
95°	1	87	247	368	408	1
105°	1	29	134	227	259	1
115°	1	7	62	125	150	1
125°	1	2	23	58	73	1
135°	2	1	6	19	26	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°	2167.6	2167.6	2167.6	2167.6	2167.6
2.5°	2185.5	2174.6	2170.6	2165.7	2177.6
5°	2193.4	2169.6	2161.7	2172.6	2155.7
7.5°	2162.7	2156.7	2139.9	2145.8	2130.0
10°	2157.7	2125.0	2116.1	2135.9	2131.0
12.5°	2113.1	2085.3	2101.2	2115.1	2096.2
15°	2078.4	2070.5	2071.5	2074.4	2099.2
17.5°	2069.5	2033.8	2023.9	2048.7	2046.7
20°	1988.2	1981.2	1986.2	2018.9	2003.0
22.5°	1940.6	1918.8	1945.5	1977.3	1984.2
25°	1886.0	1884.0	1894.0	1930.7	1940.6
27.5°	1828.5	1815.6	1842.4	1885.0	1893.0
30°	1758.1	1753.2	1785.9	1822.6	1840.4
32.5°	1688.7	1691.7	1729.4	1760.1	1790.8
35°	1610.4	1622.3	1657.0	1709.5	1734.3
37.5°	1531.0	1545.9	1592.5	1653.0	1673.8
40°	1460.6	1463.6	1529.1	1590.5	1616.3
42.5°	1372.4	1402.1	1457.7	1539.0	1558.8
45°	1305.9	1324.8	1386.3	1472.5	1501.3
47.5°	1230.6	1252.4	1322.8	1407.1	1437.8
50°	1148.3	1168.1	1252.4	1348.6	1373.4
52.5°	1057.0	1097.7	1186.0	1285.1	1317.8
55°	977.7	1019.4	1109.6	1220.7	1257.4
57.5°	892.4	934.1	1047.1	1150.3	1197.9
60°	819.1	858.7	973.8	1101.7	1130.4
62.5°	727.8	784.4	909.3	1035.2	1075.9
65°	646.5	707.0	844.8	968.8	1013.4
67.5°	572.2	634.6	778.4	911.3	959.9
70°	480.9	563.2	721.9	852.8	903.4
72.5°	413.5	495.8	661.4	791.3	836.9
75°	330.2	430.4	604.9	734.8	774.4
77.5°	260.8	368.9	546.4	692.1	731.8
80°	190.4	313.3	495.8	635.6	681.2
82.5°	129.9	261.8	449.2	583.1	626.7
85°	77.3	217.2	402.6	545.4	585.0
87.5°	33.7	177.5	360.0	490.8	531.5
90°	4.0	140.8	318.3	445.2	484.9
92.5°	1.0	113.0	281.6	404.6	443.2
95°	1.0	87.3	246.9	367.9	408.5
97.5°	1.0	67.4	212.2	330.2	368.9
100°	1.0	51.6	183.4	290.5	332.2
102.5°	1.0	38.7	155.7	257.8	293.5
105°	1.0	28.8	133.9	227.1	258.8
107.5°	1.0	20.8	112.1	198.3	230.1
110°	1.0	14.9	94.2	171.5	203.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	10.9	76.4	147.7	174.5
115°	1.0	6.9	62.5	124.9	149.7
117.5°	1.0	5.0	49.6	105.1	128.9
120°	1.0	4.0	39.7	87.3	108.1
122.5°	1.0	3.0	30.7	71.4	91.2
125°	1.0	2.0	22.8	57.5	73.4
127.5°	1.0	2.0	16.9	45.6	59.5
130°	1.0	1.0	11.9	34.7	46.6
132.5°	1.0	1.0	7.9	25.8	34.7
135°	2.0	1.0	5.9	18.8	25.8
137.5°	2.0	1.0	4.0	12.9	17.8
140°	2.0	1.0	2.0	7.9	10.9
142.5°	2.0	1.0	1.0	4.0	5.9
145°	2.0	1.0	0.0	2.0	3.0
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°	3.0	2.0	0.0	0.0	0.0
167.5°	3.0	2.0	0.0	0.0	0.0
170°	3.0	2.0	0.0	0.0	0.0
172.5°	3.0	2.0	0.0	0.0	0.0
175°	3.0	2.0	0.0	0.0	0.0
177.5°	3.0	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	19.73	21.27	20.20	21.73	22.21	21.31	22.85	21.78	23.30	23.78
	3H	21.50	22.90	21.98	23.37	23.89	23.89	25.30	24.38	25.76	26.29
	4H	22.15	23.49	22.66	23.97	24.50	25.15	26.48	25.65	26.96	27.50
	6H	22.63	23.87	23.15	24.37	24.92	26.53	27.77	27.05	28.27	28.82
	8H	22.78	23.97	23.31	24.49	25.05	27.26	28.45	27.79	28.97	29.53
	12H	22.88	24.02	23.41	24.53	25.12	28.11	29.25	28.64	29.76	30.35
4H	2H	20.69	22.02	21.19	22.50	23.04	21.88	23.21	22.38	23.69	24.23
	3H	22.73	23.87	23.25	24.39	24.95	24.75	25.88	25.26	26.41	26.97
	4H	23.54	24.58	24.08	25.12	25.71	26.23	27.27	26.76	27.80	28.39
	6H	24.19	25.11	24.75	25.68	26.28	27.85	28.77	28.40	29.33	29.93
	8H	24.42	25.29	24.98	25.85	26.47	28.70	29.57	29.26	30.13	30.75
	12H	24.59	25.38	25.17	25.97	26.59	29.69	30.48	30.27	31.07	31.69
8H	4H	24.39	25.26	24.95	25.82	26.44	26.60	27.46	27.16	28.03	28.64
	6H	25.32	26.05	25.91	26.66	27.28	28.47	29.21	29.07	29.81	30.44
	8H	25.70	26.36	26.30	26.98	27.61	29.54	30.20	30.14	30.81	31.45
	12H	26.02	26.61	26.62	27.22	27.92	30.79	31.39	31.40	31.99	32.69
12H	4H	24.65	25.44	25.24	26.03	26.66	26.64	27.43	27.22	28.02	28.64
	6H	25.74	26.41	26.34	27.02	27.66	28.59	29.25	29.19	29.87	30.50
	8H	26.28	26.87	26.88	27.48	28.18	29.76	30.35	30.37	30.96	31.66