

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: P893972

Luminaire Tested: 4MB-8HL-RND-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893972
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-8HL-RND-UNV-L850
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

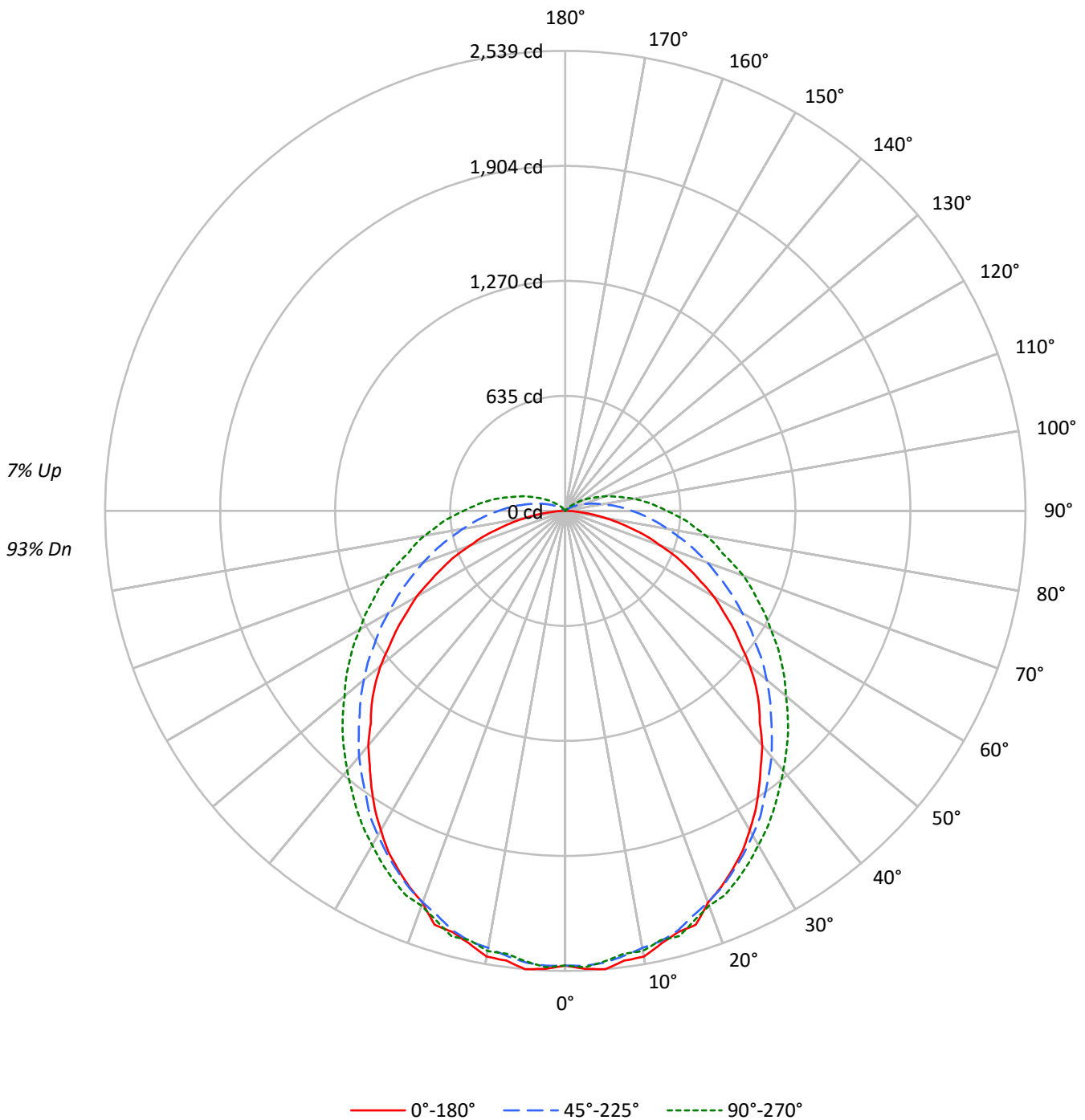
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8264.9 lumens
Efficiency: N/A
Efficacy: 142.7 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): 57.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 4.23
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°	237.9	2.9
10°-20°	677.2	8.2
20°-30°	1014.9	12.3
30°-40°	1206.0	14.6
40°-50°	1248.6	15.1
50°-60°	1157.0	14.0
60°-70°	963.3	11.7
70°-80°	715.0	8.7
80°-90°	472.9	5.7
90°-100°	287.8	3.5
100°-110°	161.3	2.0
110°-120°	79.4	1.0
120°-130°	32.3	0.4
130°-140°	9.4	0.1
140°-150°	1.3	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1930.0	23.4
0°-40°	3136.0	37.9
0°-60°	5541.6	67.0
0°-90°	7692.7	93.1
90°-120°	528.5	6.4
90°-150°	571.5	6.9
90°-180°	572.0	6.9
0°-180°	8264.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2509	2509	2509	2509	2509	
5°	2539	2512	2502	2515	2495	240
15°	2406	2397	2398	2401	2430	681
25°	2183	2181	2192	2235	2246	1005
35°	1864	1878	1918	1979	2008	1166
45°	1512	1534	1605	1704	1738	1165
55°	1132	1180	1284	1413	1456	1012
65°	748	818	978	1121	1173	743
75°	382	498	700	851	896	409
85°	90	251	466	631	677	100
90°	5	163	368	515	561	7
95°	1	101	286	426	473	1
105°	1	33	155	263	300	1
115°	1	8	72	145	173	1
125°	1	2	26	67	85	1
135°	2	1	7	22	30	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°	2509.2	2509.2	2509.2	2509.2	2509.2
2.5°	2529.8	2517.2	2512.6	2506.9	2520.7
5°	2539.0	2511.5	2502.3	2514.9	2495.4
7.5°	2503.4	2496.6	2477.0	2483.9	2465.6
10°	2497.7	2459.8	2449.5	2472.5	2466.7
12.5°	2446.1	2413.9	2432.3	2448.3	2426.5
15°	2405.9	2396.7	2397.8	2401.3	2430.0
17.5°	2395.5	2354.2	2342.7	2371.4	2369.1
20°	2301.4	2293.4	2299.1	2337.0	2318.6
22.5°	2246.3	2221.1	2252.1	2288.8	2296.8
25°	2183.2	2180.9	2192.4	2234.9	2246.3
27.5°	2116.6	2101.7	2132.7	2182.0	2191.2
30°	2035.1	2029.4	2067.3	2109.7	2130.4
32.5°	1954.8	1958.2	2001.8	2037.4	2073.0
35°	1864.1	1877.9	1918.0	1978.9	2007.6
37.5°	1772.3	1789.5	1843.4	1913.5	1937.6
40°	1690.8	1694.2	1770.0	1841.1	1871.0
42.5°	1588.6	1623.0	1687.3	1781.5	1804.4
45°	1511.7	1533.5	1604.7	1704.5	1737.8
47.5°	1424.5	1449.7	1531.2	1628.8	1664.4
50°	1329.2	1352.2	1449.7	1561.1	1589.8
52.5°	1223.6	1270.7	1372.8	1487.6	1525.5
55°	1131.8	1180.0	1284.4	1413.0	1455.5
57.5°	1033.1	1081.3	1212.1	1331.5	1386.6
60°	948.1	994.0	1127.2	1275.3	1308.5
62.5°	842.5	907.9	1052.6	1198.3	1245.4
65°	748.4	818.4	978.0	1121.4	1173.1
67.5°	662.3	734.6	901.1	1054.9	1111.1
70°	556.7	652.0	835.6	987.1	1045.7
72.5°	478.7	573.9	765.6	916.0	968.8
75°	382.2	498.2	700.2	850.6	896.5
77.5°	301.9	427.0	632.5	801.2	847.1
80°	220.4	362.7	573.9	735.8	788.6
82.5°	150.4	303.0	520.0	674.9	725.4
85°	89.5	251.4	466.0	631.3	677.2
87.5°	39.0	205.5	416.7	568.2	615.2
90°	4.6	163.0	368.5	515.4	561.3
92.5°	1.1	130.9	326.0	468.3	513.1
95°	1.1	101.0	285.8	425.8	472.9
97.5°	1.1	78.1	245.6	382.2	427.0
100°	1.1	59.7	212.4	336.3	384.5
102.5°	1.1	44.8	180.2	298.4	339.8
105°	1.1	33.3	155.0	262.9	299.6
107.5°	1.1	24.1	129.7	229.6	266.3
110°	1.1	17.2	109.0	198.6	235.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	12.6	88.4	171.0	202.0
115°	1.1	8.0	72.3	144.6	173.3
117.5°	1.1	5.7	57.4	121.7	149.2
120°	1.1	4.6	45.9	101.0	125.1
122.5°	1.1	3.4	35.6	82.6	105.6
125°	1.1	2.3	26.4	66.6	84.9
127.5°	1.1	2.3	19.5	52.8	68.9
130°	1.1	1.1	13.8	40.2	53.9
132.5°	1.1	1.1	9.2	29.8	40.2
135°	2.3	1.1	6.9	21.8	29.8
137.5°	2.3	1.1	4.6	14.9	20.7
140°	2.3	1.1	2.3	9.2	12.6
142.5°	2.3	1.1	1.1	4.6	6.9
145°	2.3	1.1	0.0	2.3	3.4
147.5°	2.3	1.1	0.0	1.1	1.1
150°	2.3	1.1	0.0	0.0	0.0
152.5°	2.3	1.1	0.0	0.0	0.0
155°	2.3	2.3	0.0	0.0	0.0
157.5°	2.3	2.3	0.0	0.0	0.0
160°	2.3	2.3	0.0	0.0	0.0
162.5°	2.3	2.3	0.0	0.0	0.0
165°	3.4	2.3	0.0	0.0	0.0
167.5°	3.4	2.3	0.0	0.0	0.0
170°	3.4	2.3	0.0	0.0	0.0
172.5°	3.4	2.3	0.0	0.0	0.0
175°	3.4	2.3	0.0	0.0	0.0
177.5°	3.4	2.3	0.0	0.0	0.0
180°	1.1	1.1	1.1	1.1	1.1



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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	20.24	21.78	20.71	22.24	22.72	21.82	23.35	22.28	23.81	24.29
	3H	22.01	23.41	22.49	23.87	24.40	24.40	25.81	24.88	26.27	26.79
	4H	22.66	23.99	23.16	24.48	25.01	25.66	26.99	26.16	27.47	28.01
	6H	23.14	24.38	23.66	24.88	25.43	27.04	28.28	27.56	28.78	29.33
	8H	23.29	24.48	23.82	25.00	25.56	27.77	28.96	28.30	29.48	30.04
	12H	23.39	24.53	23.92	25.04	25.63	28.61	29.76	29.15	30.27	30.86
4H	2H	21.20	22.53	21.70	23.01	23.55	22.39	23.72	22.89	24.20	24.74
	3H	23.24	24.38	23.75	24.90	25.46	25.26	26.39	25.77	26.92	27.48
	4H	24.05	25.09	24.59	25.63	26.22	26.73	27.78	27.27	28.31	28.90
	6H	24.70	25.62	25.26	26.18	26.79	28.35	29.27	28.91	29.84	30.44
	8H	24.93	25.80	25.49	26.36	26.98	29.21	30.08	29.77	30.64	31.26
	12H	25.10	25.89	25.68	26.48	27.10	30.20	30.99	30.78	31.58	32.20
8H	4H	24.90	25.77	25.46	26.33	26.95	27.11	27.97	27.67	28.53	29.15
	6H	25.82	26.56	26.42	27.16	27.79	28.98	29.72	29.58	30.32	30.95
	8H	26.21	26.87	26.81	27.49	28.12	30.04	30.71	30.65	31.32	31.96
	12H	26.53	27.12	27.13	27.72	28.43	31.30	31.89	31.91	32.50	33.20
12H	4H	25.16	25.95	25.74	26.54	27.16	27.15	27.94	27.73	28.53	29.15
	6H	26.25	26.91	26.85	27.53	28.16	29.09	29.76	29.70	30.37	31.01
	8H	26.79	27.38	27.39	27.98	28.69	30.27	30.86	30.87	31.47	32.17