

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: P893467

Luminaire Tested: 4MB-4SL-ACL-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-15)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-4SL-ACL-UNV-L840
Description: 4000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 4000K (C)
Light Source: -
Ballast/Driver: -

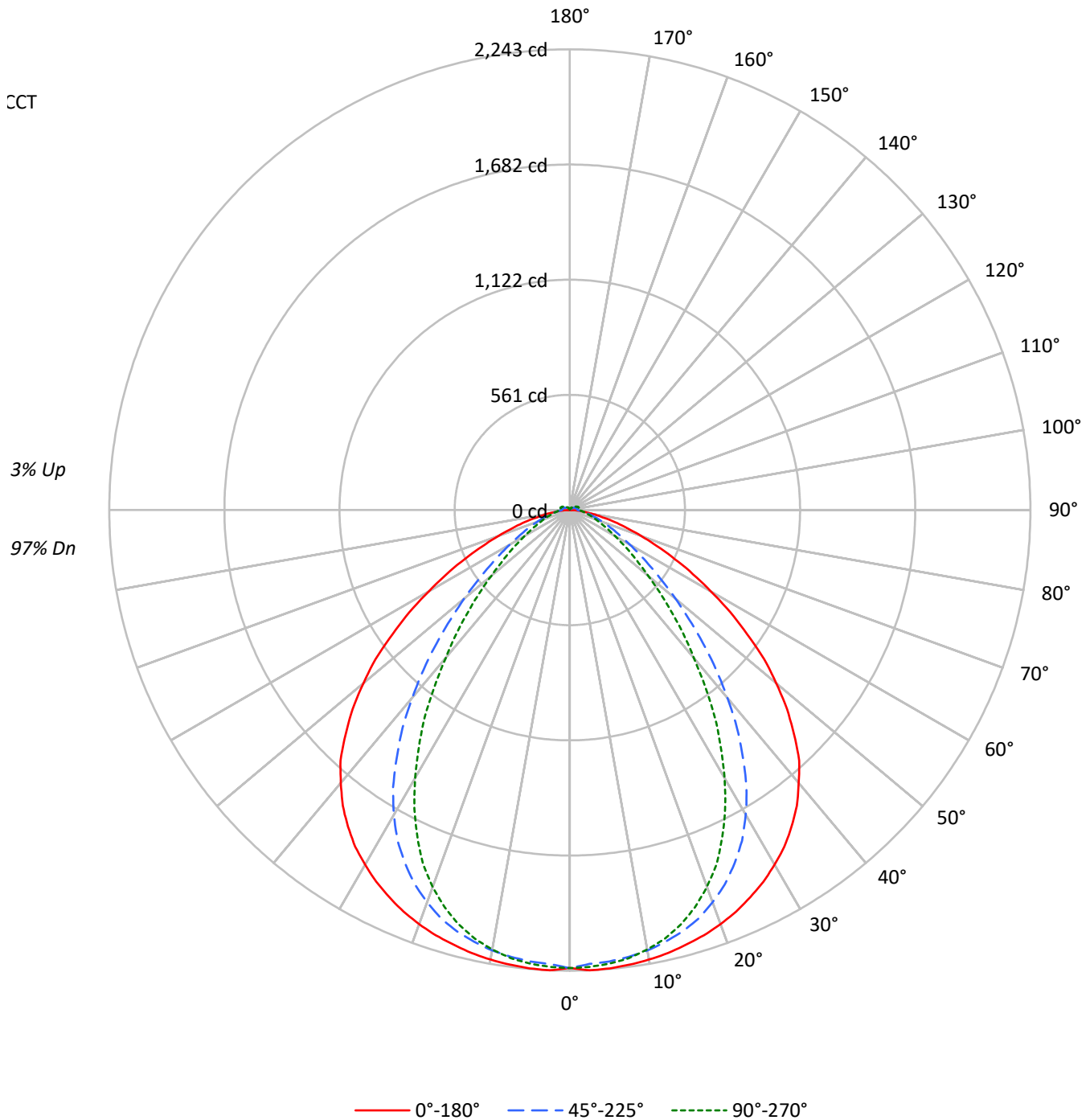
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4575.0 lumens
Efficiency: N/A
Efficacy: 153.5 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.08')
CIE Type: Direct

Input Watts (W): 29.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.5
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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.2	4.6
10°-20°	601.8	13.2
20°-30°	877.3	19.2
30°-40°	942.6	20.6
40°-50°	784.5	17.1
50°-60°	524.7	11.5
60°-70°	300.4	6.6
70°-80°	149.3	3.3
80°-90°	61.1	1.3
90°-100°	35.5	0.8
100°-110°	31.3	0.7
110°-120°	23.0	0.5
120°-130°	14.8	0.3
130°-140°	8.8	0.2
140°-150°	5.0	0.1
150°-160°	2.5	0.1
160°-170°	1.1	0.0
170°-180°	0.2	0.0
0°-30°	1690.4	36.9
0°-40°	2633.0	57.6
0°-60°	3942.2	86.2
0°-90°	4453.0	97.3
90°-120°	89.7	2.0
90°-150°	118.2	2.6
90°-180°	122.0	2.7
0°-180°	4575.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2230	2230	2230	2230	2230	
5°	2240	2233	2206	2224	2217	213
15°	2190	2176	2124	2108	2089	619
25°	2080	2030	1898	1802	1757	959
35°	1883	1746	1469	1288	1232	1176
45°	1544	1284	917	742	699	1187
55°	1053	760	478	378	358	943
65°	564	382	241	195	185	564
75°	227	165	119	105	102	244
85°	44	49	55	58	59	52
90°	6	21	38	45	46	6
95°	10	21	37	45	46	8
105°	6	17	33	44	46	7
115°	3	10	26	36	39	3
125°	2	6	18	26	29	2
135°	1	5	12	18	20	1
145°	1	4	8	12	14	1
155°	1	3	5	7	9	1
165°	2	3	4	5	6	1
175°	2	2	3	3	3	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2230.2	2230.2	2230.2	2230.2	2230.2
2.5°	2243.2	2237.4	2212.0	2232.1	2226.3
5°	2240.0	2232.8	2206.1	2224.3	2217.2
7.5°	2232.8	2225.0	2194.4	2208.7	2200.9
10°	2222.4	2212.6	2177.5	2184.7	2172.3
12.5°	2209.4	2197.0	2153.4	2151.5	2137.8
15°	2190.5	2175.5	2123.5	2107.9	2089.0
17.5°	2171.0	2148.9	2085.1	2053.2	2027.2
20°	2145.6	2116.3	2032.4	1984.9	1952.4
22.5°	2116.3	2076.7	1973.2	1900.4	1866.5
25°	2079.9	2030.5	1897.7	1802.1	1757.2
27.5°	2040.9	1975.2	1815.8	1690.2	1638.8
30°	1994.0	1912.7	1713.6	1562.7	1507.4
32.5°	1944.6	1833.3	1601.7	1428.7	1368.2
35°	1882.8	1746.2	1469.0	1288.2	1231.6
37.5°	1815.8	1642.1	1337.6	1144.4	1080.6
40°	1734.5	1532.1	1193.2	1001.9	938.8
42.5°	1653.8	1412.4	1054.6	873.1	818.4
45°	1544.5	1283.6	917.3	742.3	698.7
47.5°	1434.5	1145.7	785.9	636.3	593.3
50°	1312.2	1010.4	670.8	534.1	498.3
52.5°	1193.2	884.1	566.0	451.5	420.9
55°	1053.3	759.9	478.2	378.0	358.5
57.5°	927.1	644.7	403.4	320.1	301.9
60°	793.7	546.5	337.7	270.6	253.7
62.5°	676.6	459.3	284.3	229.7	217.9
65°	564.1	382.5	240.7	195.2	184.8
67.5°	460.6	319.4	203.0	166.5	158.1
70°	369.5	258.9	171.1	141.8	136.0
72.5°	290.8	208.2	142.5	122.3	117.1
75°	227.1	165.2	119.1	105.4	102.1
77.5°	163.9	128.8	99.5	90.4	88.5
80°	115.8	97.6	82.0	78.1	76.8
82.5°	76.8	70.9	67.7	67.7	67.0
85°	44.2	49.4	55.3	57.9	58.6
87.5°	22.8	33.2	44.2	49.4	50.1
90°	6.5	20.8	37.7	44.9	46.2
92.5°	9.8	20.8	37.1	44.9	46.2
95°	9.8	20.8	37.1	44.9	46.2
97.5°	9.1	20.2	37.1	44.9	46.2
100°	8.5	18.9	36.4	44.9	46.2
102.5°	7.2	18.2	35.1	44.2	46.2
105°	6.5	16.9	33.2	43.6	45.5
107.5°	5.9	14.3	31.2	41.6	44.2
110°	4.6	12.4	29.9	39.7	42.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.9	11.1	28.0	37.7	41.0
115°	3.3	9.8	26.0	35.8	39.0
117.5°	2.6	9.1	23.4	33.2	36.4
120°	2.0	8.5	21.5	31.2	33.8
122.5°	2.0	7.8	18.9	28.6	31.2
125°	2.0	6.5	17.6	26.0	28.6
127.5°	1.3	5.9	15.6	23.4	26.0
130°	1.3	5.9	14.3	21.5	23.4
132.5°	1.3	5.2	13.0	19.5	21.5
135°	1.3	5.2	11.7	17.6	19.5
137.5°	1.3	4.6	10.4	16.3	18.2
140°	1.3	4.6	9.8	14.3	16.3
142.5°	1.3	3.9	8.5	13.7	15.0
145°	1.3	3.9	7.8	11.7	13.7
147.5°	1.3	3.9	7.2	11.1	12.4
150°	1.3	3.3	6.5	9.1	11.1
152.5°	1.3	3.3	5.9	8.5	10.4
155°	1.3	3.3	5.2	7.2	9.1
157.5°	1.3	3.3	5.2	6.5	7.8
160°	2.0	2.6	4.6	5.9	7.2
162.5°	2.0	2.6	3.9	5.2	6.5
165°	2.0	2.6	3.9	4.6	5.9
167.5°	2.0	2.6	3.3	3.9	4.6
170°	2.0	2.0	3.3	3.3	3.3
172.5°	2.0	2.0	2.6	3.3	2.6
175°	2.0	2.0	2.6	2.6	2.6
177.5°	2.0	2.0	2.6	2.6	2.6
180°	2.0	2.0	2.0	2.0	2.0



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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	19.58	20.98	19.99	21.35	21.73	14.88	16.27	15.29	16.64	17.03
	3H	20.68	21.92	21.10	22.31	22.74	16.02	17.26	16.44	17.65	18.08
	4H	20.98	22.15	21.43	22.55	23.00	16.52	17.68	16.97	18.09	18.54
	6H	21.13	22.20	21.59	22.63	23.08	17.02	18.09	17.48	18.52	18.98
	8H	21.15	22.17	21.62	22.61	23.08	17.28	18.30	17.75	18.75	19.21
	12H	21.14	22.12	21.62	22.55	23.05	17.58	18.55	18.05	18.99	19.48
4H	2H	19.57	20.73	20.01	21.14	21.58	15.38	16.54	15.82	16.95	17.39
	3H	20.80	21.76	21.26	22.22	22.69	16.69	17.65	17.15	18.11	18.57
	4H	21.19	22.05	21.67	22.52	23.02	17.28	18.15	17.76	18.62	19.12
	6H	21.42	22.17	21.92	22.66	23.19	17.91	18.66	18.41	19.15	19.67
	8H	21.46	22.16	21.97	22.66	23.19	18.23	18.93	18.74	19.42	19.95
	12H	21.47	22.10	22.00	22.63	23.16	18.60	19.23	19.13	19.75	20.29
8H	4H	21.17	21.88	21.68	22.37	22.90	17.52	18.23	18.03	18.72	19.25
	6H	21.45	22.03	21.99	22.57	23.11	18.25	18.83	18.79	19.37	19.91
	8H	21.52	22.05	22.08	22.60	23.15	18.65	19.17	19.21	19.73	20.28
	12H	21.57	22.03	22.13	22.57	23.20	19.15	19.61	19.70	20.15	20.77
12H	4H	21.15	21.78	21.68	22.31	22.84	17.54	18.16	18.07	18.69	19.23
	6H	21.43	21.95	21.99	22.51	23.06	18.28	18.81	18.84	19.36	19.92
	8H	21.54	22.00	22.09	22.54	23.17	18.75	19.21	19.30	19.75	20.37