

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: P893724

Luminaire Tested: 4MB-6SL-ASYMR-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893724
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-6SL-ASYMR-UNV-L850
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

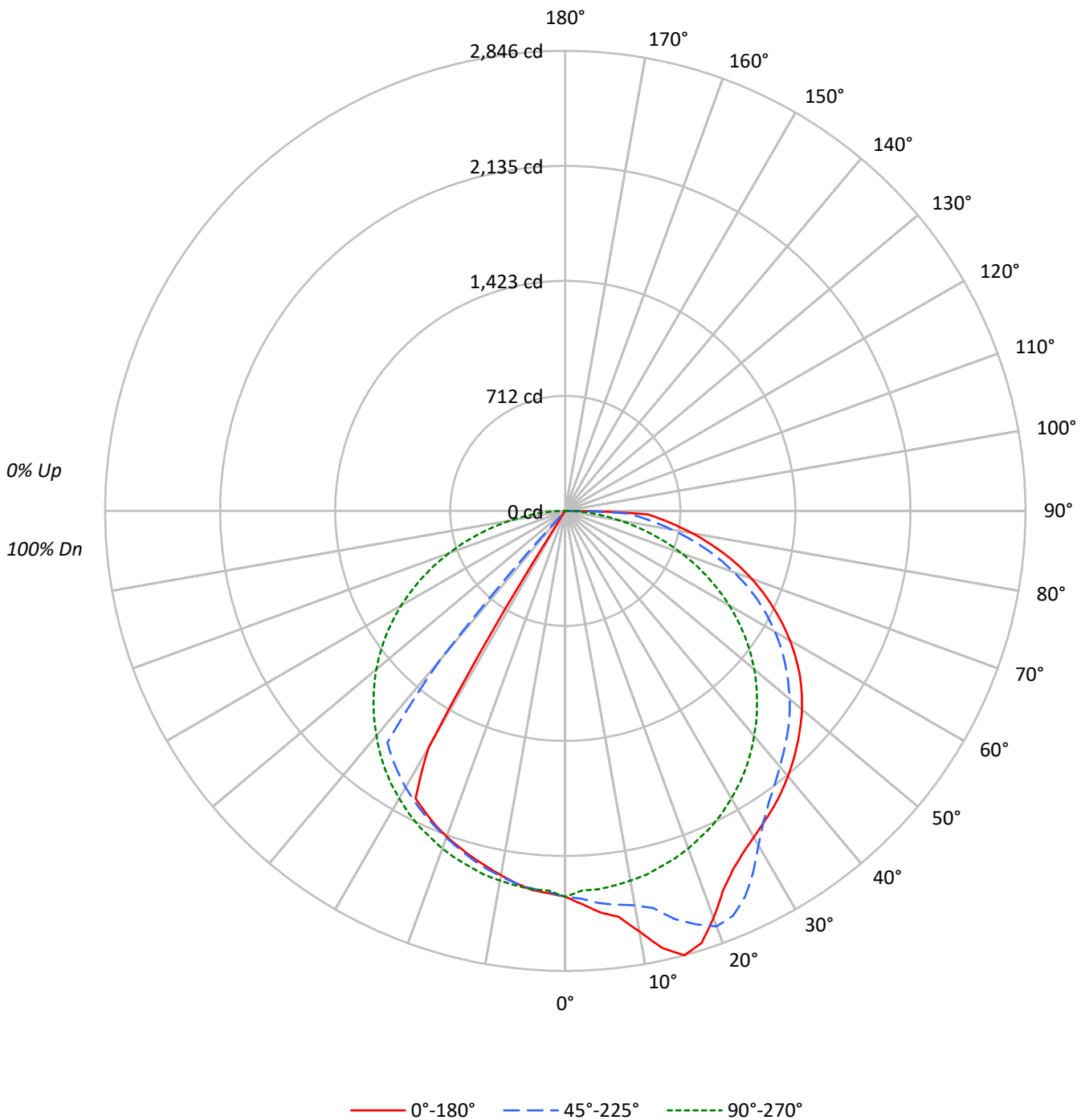
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6458.0 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 44.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	85	85	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	71	71	71	69
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	50
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	30	30	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	27	27	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	30994	30994	30994	30994	30994
5°	32502	31754	30631	30578	30685
10°	34825	32662	30624	30264	30175
15°	38262	35138	30636	29974	29826
20°	37044	37800	30716	29734	29639
25°	35099	37724	30790	29635	29419
30°	34948	35810	30787	29598	25335
35°	35540	34825	30837	29602	347
40°	36312	34992	30796	20416	232
45°	37306	35699	30803	376	151
50°	38609	36592	30819	277	55
55°	40077	37632	30732	186	32
60°	41679	38911	30460	70	36
65°	43642	40450	29905	83	83
70°	46557	42146	28960	103	103
75°	50958	44857	27709	276	135
80°	59800	50191	25656	411	202
85°	89005	70471	24032	611	402

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 152596 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.7	3.5
10°-20°	682.9	10.6
20°-30°	1049.8	16.3
30°-40°	1125.0	17.4
40°-50°	1021.8	15.8
50°-60°	932.0	14.4
60°-70°	693.3	10.7
70°-80°	488.0	7.6
80°-90°	236.4	3.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1961.4	30.4
0°-40°	3086.5	47.8
0°-60°	5040.2	78.0
0°-90°	6458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6458.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2387	2387	2387	2387	2387	
5°	2494	2436	2350	2346	2354	242
15°	2846	2614	2279	2230	2219	786
25°	2450	2633	2149	2068	2053	1139
35°	2242	2197	1945	1867	22	1404
45°	2032	1944	1677	20	8	1570
55°	1770	1662	1358	8	1	1581
65°	1420	1316	973	3	3	1406
75°	1016	894	552	6	3	1071
85°	597	473	161	4	3	600
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2386.9	2386.9	2386.9	2386.9	2386.9	2386.9	2386.9	2386.9	2386.9
2.5°	2436.1	2408.8	2401.9	2421.1	2351.3	2397.8	2359.6	2367.8	2367.8
5°	2493.5	2455.2	2436.1	2430.6	2350.0	2381.4	2345.9	2345.9	2354.1
7.5°	2533.2	2490.8	2456.6	2442.9	2337.7	2365.0	2324.0	2324.0	2324.0
10°	2641.2	2561.9	2477.1	2452.5	2322.6	2343.1	2295.3	2298.0	2288.5
12.5°	2768.3	2697.2	2516.8	2448.4	2306.2	2315.8	2265.2	2263.9	2252.9
15°	2846.2	2792.9	2613.8	2442.9	2278.9	2287.1	2229.7	2225.6	2218.7
17.5°	2802.5	2794.3	2680.8	2438.8	2254.3	2247.5	2190.0	2185.9	2180.5
20°	2680.8	2701.3	2735.5	2430.6	2222.8	2209.2	2151.8	2149.0	2144.9
22.5°	2545.5	2566.0	2710.9	2444.3	2184.6	2168.2	2110.7	2108.0	2102.5
25°	2449.8	2449.8	2633.0	2477.1	2149.0	2118.9	2068.4	2064.3	2053.3
27.5°	2382.8	2370.5	2516.8	2514.0	2103.9	2069.7	2023.3	2019.2	2005.5
30°	2330.8	2310.3	2388.3	2531.8	2053.3	2016.4	1974.0	1969.9	1689.7
32.5°	2284.4	2262.5	2280.3	2546.8	2002.7	1959.0	1922.1	1371.2	60.2
35°	2242.0	2217.4	2196.9	2535.9	1945.3	1901.6	1867.4	39.6	21.9
37.5°	2194.1	2175.0	2128.5	2478.5	1883.8	1840.1	1807.3	21.9	19.1
40°	2142.2	2124.4	2064.3	2393.7	1816.8	1779.9	1204.4	19.1	13.7
42.5°	2088.9	2075.2	2004.1	2270.7	1749.8	1712.9	38.3	15.0	10.9
45°	2031.5	2019.2	1944.0	2121.7	1677.4	1643.2	20.5	10.9	8.2
47.5°	1972.7	1954.9	1881.1	1961.7	1603.6	1569.4	17.8	8.2	5.5
50°	1911.2	1892.0	1811.4	1820.9	1525.6	1491.5	13.7	5.5	2.7
52.5°	1842.8	1819.6	1737.5	1693.8	1443.6	1412.2	10.9	2.7	1.4
55°	1770.3	1744.4	1662.3	1583.1	1357.5	1321.9	8.2	2.7	1.4
57.5°	1689.7	1661.0	1583.1	1477.8	1265.9	894.1	5.5	2.7	1.4
60°	1604.9	1576.2	1498.3	1379.4	1172.9	61.5	2.7	2.7	1.4
62.5°	1514.7	1484.6	1409.4	1279.6	1073.1	50.6	2.7	2.7	2.7
65°	1420.4	1384.8	1316.5	1177.0	973.3	42.4	2.7	2.7	2.7
67.5°	1326.1	1280.9	1216.7	1071.8	870.8	35.5	2.7	2.7	2.7
70°	1226.3	1177.0	1110.1	965.1	762.8	28.7	2.7	2.7	2.7
72.5°	1123.7	1075.9	1003.4	857.1	661.7	21.9	2.7	2.7	2.7
75°	1015.7	972.0	894.1	749.2	552.3	16.4	5.5	2.7	2.7
77.5°	903.6	869.5	782.0	638.4	445.7	10.9	5.5	2.7	2.7
80°	799.7	761.5	671.2	526.3	343.1	8.2	5.5	4.1	2.7
82.5°	693.1	658.9	568.7	423.8	246.1	6.8	5.5	4.1	2.7
85°	597.4	564.6	473.0	330.8	161.3	5.5	4.1	4.1	2.7
87.5°	512.6	482.6	392.3	242.0	91.6	4.1	4.1	4.1	2.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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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	26.46	28.08	26.83	28.39	28.70	21.90	23.51	22.26	23.82	24.14
	3H	28.91	30.37	29.29	30.70	31.06	22.54	24.00	22.91	24.33	24.69
	4H	30.03	31.42	30.43	31.76	32.14	22.68	24.06	23.08	24.41	24.79
	6H	31.13	32.41	31.54	32.77	33.17	22.72	24.01	23.13	24.37	24.76
	8H	31.66	32.88	32.08	33.27	33.67	22.71	23.94	23.13	24.33	24.73
	12H	32.22	33.40	32.65	33.78	34.21	22.69	23.87	23.12	24.25	24.68
4H	2H	27.12	28.50	27.52	28.85	29.23	23.02	24.40	23.42	24.75	25.13
	3H	29.81	30.98	30.22	31.37	31.77	24.36	25.53	24.77	25.93	26.33
	4H	31.10	32.17	31.53	32.58	33.01	24.90	25.96	25.33	26.37	26.81
	6H	32.38	33.32	32.84	33.76	34.21	25.17	26.11	25.63	26.55	27.00
	8H	33.01	33.89	33.47	34.33	34.80	25.21	26.09	25.67	26.53	27.00
	12H	33.70	34.49	34.18	34.96	35.43	25.22	26.01	25.70	26.49	26.96
8H	4H	31.47	32.34	31.93	32.79	33.25	25.85	26.72	26.31	27.16	27.63
	6H	32.95	33.69	33.44	34.17	34.65	26.44	27.17	26.93	27.66	28.13
	8H	33.73	34.40	34.24	34.90	35.39	26.61	27.28	27.12	27.78	28.27
	12H	34.62	35.22	35.13	35.70	36.26	26.72	27.31	27.22	27.80	28.36
12H	4H	31.51	32.30	31.99	32.77	33.24	26.06	26.86	26.54	27.33	27.80
	6H	33.04	33.70	33.54	34.21	34.69	26.79	27.45	27.29	27.96	28.44
	8H	33.92	34.51	34.42	35.00	35.56	27.10	27.69	27.60	28.18	28.74