

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: P893728

Luminaire Tested: 4MB-6SL-ASYMR-UNV-L950

Issue Date: 11/11/2024

**Test Information**

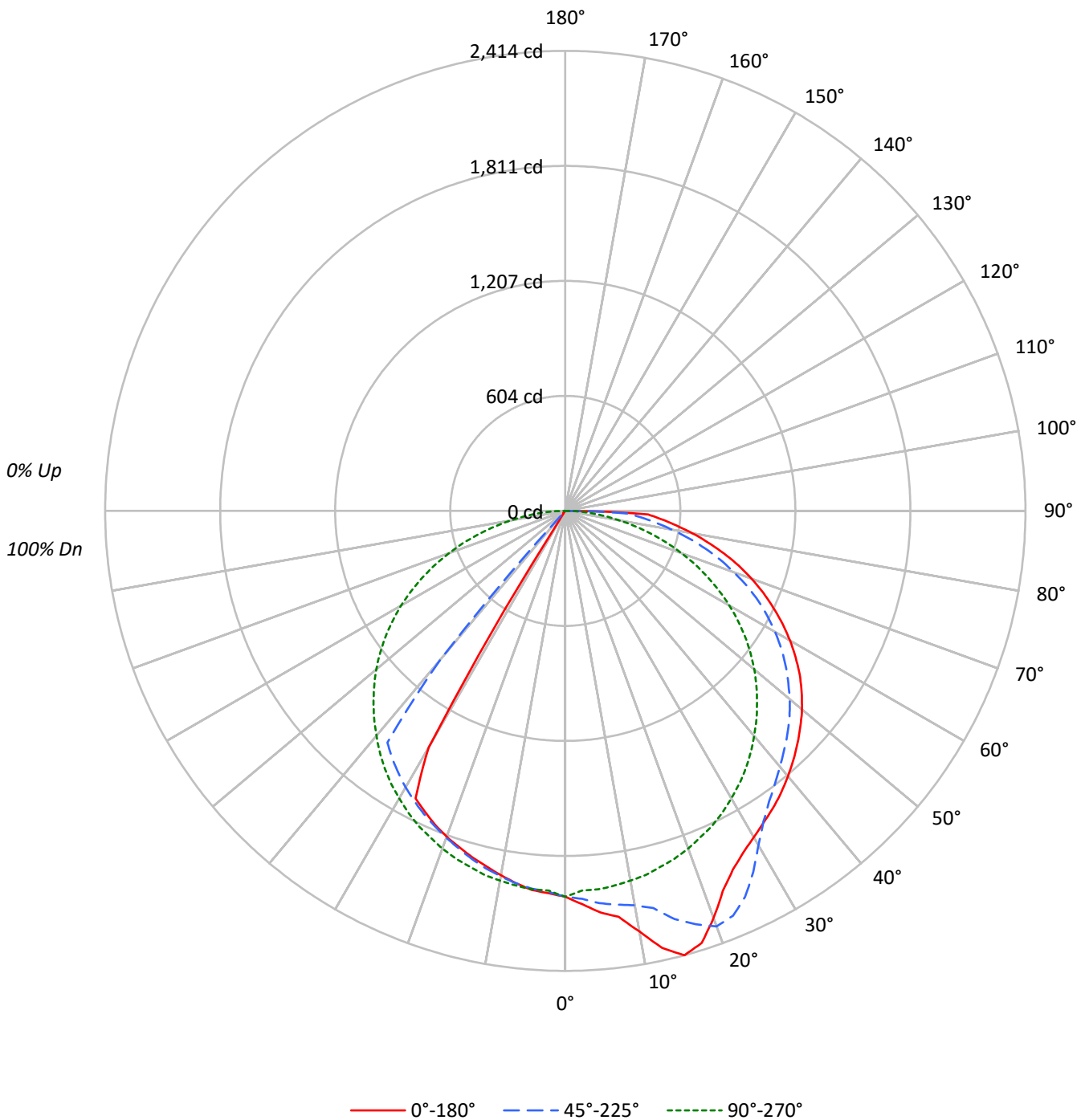
Test Method: LM-79-2019  
Report Number: P893728  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-6SL-ASYMR-UNV-L950  
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 90CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5478.0 lumens  
Efficiency: N/A  
Efficacy: 123.4 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 (A<sub>in</sub>): 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	
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°	26291	26291	26291	26291	26291
5°	27570	26935	25983	25938	26029
10°	29541	27705	25978	25672	25595
15°	32456	29806	25987	25425	25300
20°	31423	32064	26055	25221	25141
25°	29772	31999	26118	25138	24954
30°	29644	30375	26115	25107	21491
35°	30147	29540	26157	25109	295
40°	30801	29681	26123	17317	197
45°	31644	30282	26128	320	129
50°	32748	31039	26142	234	46
55°	33997	31923	26069	158	27
60°	35356	33005	25838	60	31
65°	37018	34311	25367	71	71
70°	39492	35749	24568	87	87
75°	43227	38049	23505	231	115
80°	50729	42579	21768	344	172
85°	75507	59774	20381	521	343

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 87.5°  
 Luminance: 129466 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.0	3.5
10°-20°	579.3	10.6
20°-30°	890.5	16.3
30°-40°	954.3	17.4
40°-50°	866.7	15.8
50°-60°	790.6	14.4
60°-70°	588.1	10.7
70°-80°	414.0	7.6
80°-90°	200.5	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°	1663.8	30.4
0°-40°	2618.1	47.8
0°-60°	4275.3	78.0
0°-90°	5478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5478.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2025	2025	2025	2025	2025	
5°	2115	2066	1993	1990	1997	205
15°	2414	2217	1933	1891	1882	667
25°	2078	2233	1823	1754	1742	966
35°	1902	1864	1650	1584	19	1191
45°	1723	1649	1423	17	7	1331
55°	1502	1410	1152	7	1	1341
65°	1205	1117	826	2	2	1193
75°	862	758	468	5	2	909
85°	507	401	137	4	2	509
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°	2024.7	2024.7	2024.7	2024.7	2024.7	2024.7	2024.7	2024.7	2024.7
2.5°	2066.4	2043.2	2037.4	2053.7	1994.5	2034.0	2001.5	2008.4	2008.4
5°	2115.1	2082.7	2066.4	2061.8	1993.4	2020.0	1989.9	1989.9	1996.9
7.5°	2148.8	2112.8	2083.8	2072.2	1982.9	2006.1	1971.3	1971.3	1971.3
10°	2240.4	2173.1	2101.2	2080.3	1970.2	1987.6	1947.0	1949.3	1941.2
12.5°	2348.2	2287.9	2134.8	2076.9	1956.3	1964.4	1921.5	1920.3	1911.0
15°	2414.3	2369.1	2217.2	2072.2	1933.1	1940.0	1891.3	1887.8	1882.0
17.5°	2377.2	2370.2	2274.0	2068.7	1912.2	1906.4	1857.7	1854.2	1849.6
20°	2274.0	2291.4	2320.4	2061.8	1885.5	1873.9	1825.2	1822.9	1819.4
22.5°	2159.2	2176.6	2299.5	2073.4	1853.1	1839.1	1790.4	1788.1	1783.5
25°	2078.0	2078.0	2233.4	2101.2	1822.9	1797.4	1754.5	1751.0	1741.7
27.5°	2021.2	2010.8	2134.8	2132.5	1784.6	1755.7	1716.2	1712.7	1701.1
30°	1977.1	1959.7	2025.8	2147.6	1741.7	1710.4	1674.5	1671.0	1433.3
32.5°	1937.7	1919.2	1934.2	2160.4	1698.8	1661.7	1630.4	1163.1	51.0
35°	1901.8	1880.9	1863.5	2151.1	1650.1	1613.0	1584.0	33.6	18.6
37.5°	1861.2	1844.9	1805.5	2102.4	1597.9	1560.8	1533.0	18.6	16.2
40°	1817.1	1802.0	1751.0	2030.5	1541.1	1509.8	1021.6	16.2	11.6
42.5°	1771.9	1760.3	1700.0	1926.1	1484.3	1453.0	32.5	12.8	9.3
45°	1723.2	1712.7	1649.0	1799.7	1422.8	1393.9	17.4	9.3	7.0
47.5°	1673.3	1658.2	1595.6	1664.0	1360.2	1331.2	15.1	7.0	4.6
50°	1621.1	1604.9	1536.5	1544.6	1294.1	1265.1	11.6	4.6	2.3
52.5°	1563.2	1543.4	1473.9	1436.8	1224.5	1197.9	9.3	2.3	1.2
55°	1501.7	1479.7	1410.1	1342.8	1151.5	1121.3	7.0	2.3	1.2
57.5°	1433.3	1408.9	1342.8	1253.5	1073.8	758.4	4.6	2.3	1.2
60°	1361.4	1337.0	1270.9	1170.0	994.9	52.2	2.3	2.3	1.2
62.5°	1284.8	1259.3	1195.6	1085.4	910.3	42.9	2.3	2.3	2.3
65°	1204.8	1174.7	1116.7	998.4	825.6	35.9	2.3	2.3	2.3
67.5°	1124.8	1086.6	1032.1	909.1	738.7	30.1	2.3	2.3	2.3
70°	1040.2	998.4	941.6	818.7	647.1	24.4	2.3	2.3	2.3
72.5°	953.2	912.6	851.2	727.1	561.3	18.6	2.3	2.3	2.3
75°	861.6	824.5	758.4	635.5	468.5	13.9	4.6	2.3	2.3
77.5°	766.5	737.5	663.3	541.5	378.0	9.3	4.6	2.3	2.3
80°	678.4	645.9	569.4	446.5	291.1	7.0	4.6	3.5	2.3
82.5°	587.9	558.9	482.4	359.5	208.7	5.8	4.6	3.5	2.3
85°	506.8	478.9	401.2	280.6	136.8	4.6	3.5	3.5	2.3
87.5°	434.9	409.3	332.8	205.3	77.7	3.5	3.5	3.5	2.3
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	25.89	27.50	26.25	27.82	28.13	21.32	22.94	21.69	23.25	23.57
	3H	28.34	29.80	28.71	30.13	30.49	21.97	23.43	22.34	23.76	24.12
	4H	29.46	30.84	29.86	31.19	31.57	22.11	23.49	22.51	23.84	24.22
	6H	30.55	31.84	30.96	32.20	32.59	22.15	23.44	22.56	23.80	24.19
	8H	31.08	32.31	31.51	32.70	33.10	22.14	23.37	22.56	23.76	24.15
	12H	31.65	32.83	32.08	33.21	33.64	22.12	23.30	22.55	23.68	24.11
4H	2H	26.55	27.93	26.95	28.28	28.65	22.45	23.83	22.85	24.18	24.56
	3H	29.24	30.40	29.65	30.80	31.20	23.79	24.96	24.20	25.36	25.76
	4H	30.53	31.59	30.96	32.01	32.44	24.33	25.39	24.76	25.80	26.24
	6H	31.81	32.75	32.27	33.19	33.64	24.60	25.54	25.06	25.98	26.43
	8H	32.44	33.32	32.90	33.76	34.22	24.64	25.52	25.10	25.96	26.42
	12H	33.13	33.92	33.61	34.39	34.86	24.65	25.44	25.13	25.92	26.39
8H	4H	30.89	31.77	31.35	32.21	32.68	25.27	26.15	25.73	26.59	27.06
	6H	32.38	33.11	32.87	33.60	34.08	25.86	26.60	26.36	27.09	27.56
	8H	33.16	33.83	33.67	34.33	34.82	26.04	26.71	26.55	27.21	27.70
	12H	34.05	34.64	34.56	35.13	35.69	26.14	26.74	26.65	27.23	27.78
12H	4H	30.94	31.73	31.41	32.20	32.67	25.49	26.28	25.97	26.76	27.23
	6H	32.47	33.13	32.97	33.64	34.12	26.21	26.88	26.72	27.39	27.87
	8H	33.35	33.94	33.85	34.43	34.99	26.53	27.12	27.03	27.61	28.17