

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: P893725

Luminaire Tested: 4MB-6SL-ASYMR-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893725
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-L930
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

Summary

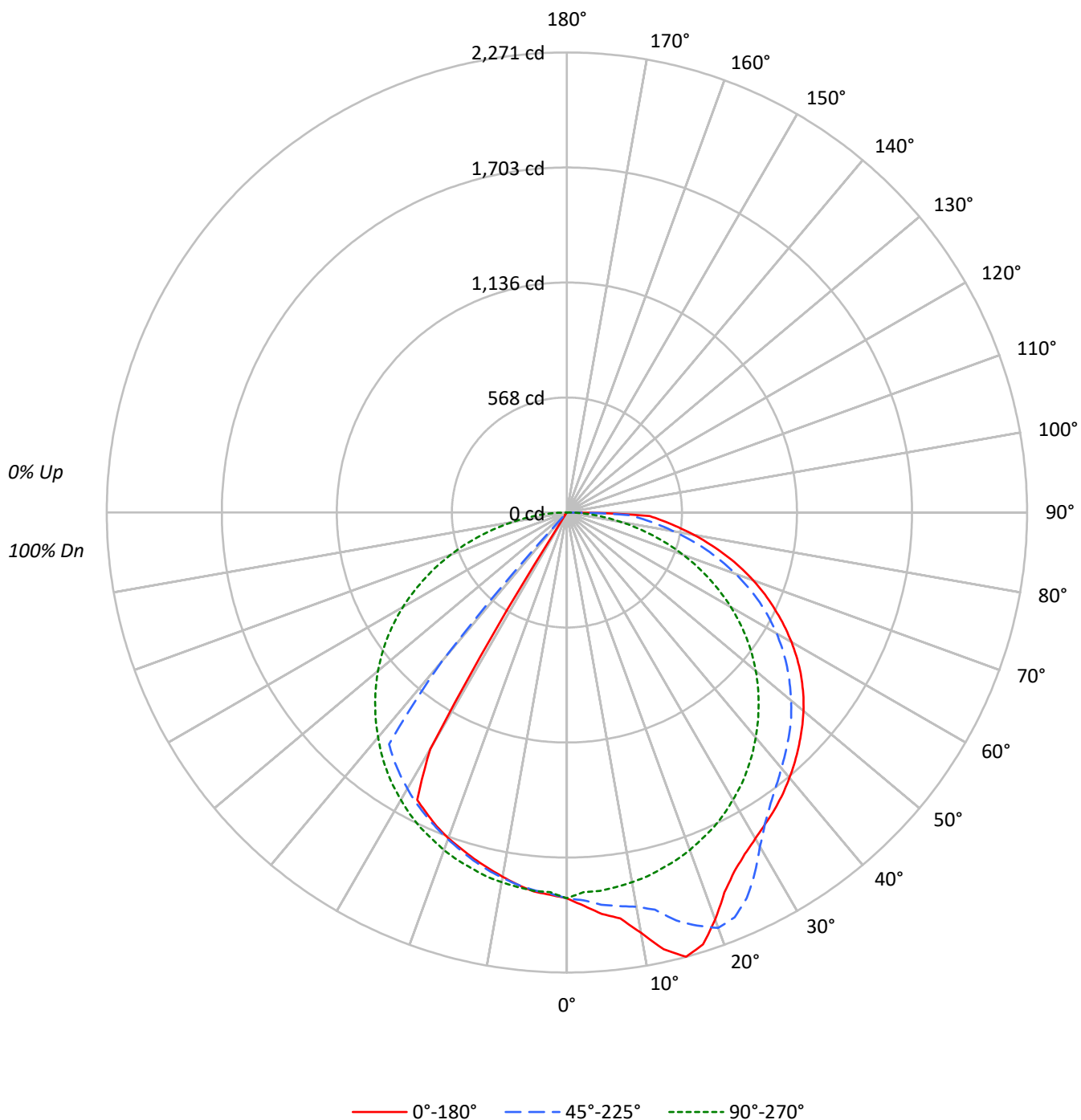
Lumens per Lamp: N/A
Luminaire Lumens: 5152.0 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')
CIE Type: Direct

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			
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83		
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59		
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50		
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39		
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	35		
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31		
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28		
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	24726	24726	24726	24726	24726
5°	25930	25333	24436	24394	24479
10°	27782	26057	24431	24144	24073
15°	30524	28032	24440	23913	23794
20°	29553	30156	24504	23721	23646
25°	28002	30095	24563	23642	23470
30°	27881	28568	24561	23612	20212
35°	28353	27782	24600	23616	276
40°	28969	27915	24569	16286	185
45°	29760	28478	24574	301	119
50°	30801	29191	24587	220	44
55°	31973	30024	24518	147	25
60°	33252	31042	24300	57	29
65°	34815	32268	23858	68	68
70°	37142	33623	23106	84	84
75°	40653	35787	22105	221	110
80°	47708	40044	20467	329	165
85°	71007	56213	19175	492	328

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 87.5°

Luminance: 121755 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.5	3.5
10°-20°	544.8	10.6
20°-30°	837.5	16.3
30°-40°	897.5	17.4
40°-50°	815.1	15.8
50°-60°	743.5	14.4
60°-70°	553.1	10.7
70°-80°	389.3	7.6
80°-90°	188.6	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°	1564.8	30.4
0°-40°	2462.3	47.8
0°-60°	4020.9	78.0
0°-90°	5152.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5152.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1904	1904	1904	1904	1904	
5°	1989	1944	1875	1872	1878	193
15°	2271	2085	1818	1779	1770	627
25°	1954	2100	1714	1650	1638	909
35°	1789	1753	1552	1490	17	1120
45°	1621	1551	1338	16	6	1252
55°	1412	1326	1083	6	1	1261
65°	1133	1050	776	2	2	1122
75°	810	713	441	4	2	854
85°	477	377	129	3	2	479
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°	1904.2	1904.2	1904.2	1904.2	1904.2	1904.2	1904.2	1904.2	1904.2
2.5°	1943.5	1921.6	1916.2	1931.5	1875.8	1912.9	1882.4	1888.9	1888.9
5°	1989.3	1958.7	1943.5	1939.1	1874.7	1899.8	1871.5	1871.5	1878.0
7.5°	2020.9	1987.1	1959.8	1948.9	1864.9	1886.7	1854.0	1854.0	1854.0
10°	2107.0	2043.8	1976.2	1956.5	1852.9	1869.3	1831.1	1833.3	1825.7
12.5°	2208.5	2151.8	2007.8	1953.3	1839.8	1847.5	1807.1	1806.0	1797.3
15°	2270.6	2228.1	2085.2	1948.9	1818.0	1824.6	1778.8	1775.5	1770.0
17.5°	2235.7	2229.2	2138.7	1945.6	1798.4	1792.9	1747.1	1743.9	1739.5
20°	2138.7	2155.0	2182.3	1939.1	1773.3	1762.4	1716.6	1714.4	1711.2
22.5°	2030.7	2047.1	2162.7	1950.0	1742.8	1729.7	1683.9	1681.7	1677.3
25°	1954.4	1954.4	2100.5	1976.2	1714.4	1690.4	1650.1	1646.8	1638.1
27.5°	1900.9	1891.1	2007.8	2005.6	1678.4	1651.2	1614.1	1610.8	1599.9
30°	1859.5	1843.1	1905.3	2019.8	1638.1	1608.6	1574.8	1571.6	1348.0
32.5°	1822.4	1804.9	1819.1	2031.8	1597.7	1562.8	1533.4	1093.9	48.0
35°	1788.6	1769.0	1752.6	2023.1	1551.9	1517.0	1489.8	31.6	17.4
37.5°	1750.4	1735.1	1698.1	1977.3	1502.8	1468.0	1441.8	17.4	15.3
40°	1709.0	1694.8	1646.8	1909.6	1449.4	1420.0	960.8	15.3	10.9
42.5°	1666.4	1655.5	1598.8	1811.5	1396.0	1366.5	30.5	12.0	8.7
45°	1620.6	1610.8	1550.8	1692.6	1338.2	1310.9	16.4	8.7	6.5
47.5°	1573.7	1559.6	1500.7	1565.0	1279.3	1252.0	14.2	6.5	4.4
50°	1524.7	1509.4	1445.0	1452.7	1217.1	1189.8	10.9	4.4	2.2
52.5°	1470.1	1451.6	1386.2	1351.3	1151.7	1126.6	8.7	2.2	1.1
55°	1412.3	1391.6	1326.2	1262.9	1083.0	1054.6	6.5	2.2	1.1
57.5°	1348.0	1325.1	1262.9	1178.9	1009.9	713.3	4.4	2.2	1.1
60°	1280.4	1257.5	1195.3	1100.4	935.7	49.1	2.2	2.2	1.1
62.5°	1208.4	1184.4	1124.4	1020.8	856.1	40.4	2.2	2.2	2.2
65°	1133.1	1104.8	1050.2	939.0	776.5	33.8	2.2	2.2	2.2
67.5°	1057.9	1021.9	970.6	855.0	694.7	28.4	2.2	2.2	2.2
70°	978.3	939.0	885.6	770.0	608.6	22.9	2.2	2.2	2.2
72.5°	896.5	858.3	800.5	683.8	527.9	17.4	2.2	2.2	2.2
75°	810.3	775.4	713.3	597.6	440.6	13.1	4.4	2.2	2.2
77.5°	720.9	693.6	623.8	509.3	355.5	8.7	4.4	2.2	2.2
80°	638.0	607.5	535.5	419.9	273.7	6.5	4.4	3.3	2.2
82.5°	552.9	525.7	453.7	338.1	196.3	5.5	4.4	3.3	2.2
85°	476.6	450.4	377.3	263.9	128.7	4.4	3.3	3.3	2.2
87.5°	409.0	385.0	313.0	193.0	73.1	3.3	3.3	3.3	2.2
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	25.68	27.29	26.04	27.61	27.92	21.11	22.72	21.47	23.04	23.35
	3H	28.12	29.59	28.50	29.91	30.27	21.75	23.22	22.13	23.54	23.90
	4H	29.25	30.63	29.65	30.98	31.35	21.90	23.28	22.29	23.63	24.00
	6H	30.34	31.63	30.75	31.99	32.38	21.94	23.22	22.35	23.59	23.98
	8H	30.87	32.10	31.29	32.49	32.89	21.93	23.15	22.35	23.54	23.94
	12H	31.44	32.62	31.87	33.00	33.43	21.91	23.09	22.34	23.47	23.90
4H	2H	26.33	27.72	26.73	28.06	28.44	22.24	23.62	22.63	23.97	24.34
	3H	29.02	30.19	29.43	30.59	30.99	23.58	24.75	23.99	25.14	25.54
	4H	30.32	31.38	30.75	31.79	32.23	24.11	25.18	24.55	25.59	26.03
	6H	31.60	32.53	32.05	32.97	33.43	24.39	25.32	24.84	25.76	26.22
	8H	32.23	33.10	32.69	33.55	34.01	24.43	25.30	24.89	25.75	26.21
	12H	32.91	33.70	33.39	34.18	34.65	24.44	25.23	24.92	25.70	26.17
8H	4H	30.68	31.56	31.14	32.00	32.47	25.06	25.94	25.52	26.38	26.84
	6H	32.16	32.90	32.66	33.39	33.86	25.65	26.39	26.14	26.88	27.35
	8H	32.95	33.61	33.46	34.12	34.60	25.83	26.49	26.34	27.00	27.48
	12H	33.84	34.43	34.34	34.92	35.48	25.93	26.52	26.44	27.01	27.57
12H	4H	30.72	31.51	31.20	31.99	32.46	25.28	26.07	25.76	26.54	27.01
	6H	32.25	32.92	32.76	33.42	33.91	26.00	26.67	26.51	27.17	27.66
	8H	33.13	33.72	33.64	34.21	34.77	26.31	26.91	26.82	27.39	27.95