

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: P893721

Luminaire Tested: 4MB-6SL-ASYMR-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893721
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-L830
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

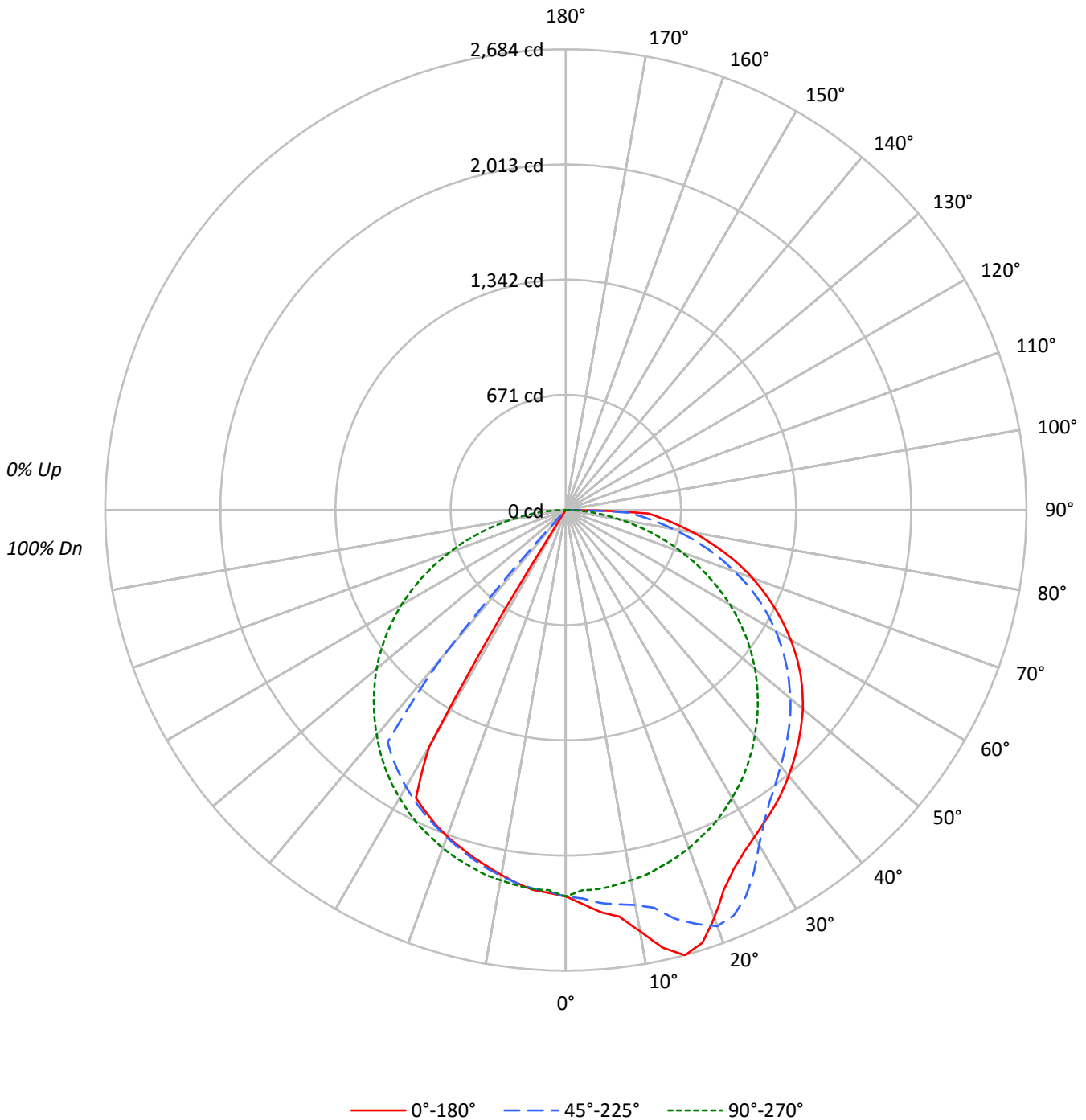
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6091.0 lumens
Efficiency: N/A
Efficacy: 137.2 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_{in}): 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°	29232	29232	29232	29232	29232
5°	30655	29950	28890	28841	28941
10°	32846	30805	28884	28545	28459
15°	36088	33141	28895	28271	28132
20°	34940	35652	28970	28045	27955
25°	33105	35579	29040	27950	27747
30°	32963	33774	29037	27917	23896
35°	33520	32845	29085	27920	327
40°	34247	33003	29047	19254	219
45°	35185	33670	29053	354	141
50°	36413	34512	29067	261	53
55°	37800	35495	28984	174	29
60°	39311	36701	28731	68	34
65°	41163	38152	28206	80	80
70°	43911	39750	27316	99	99
75°	48063	42309	26134	261	130
80°	56405	47342	24198	389	194
85°	83954	66463	22661	581	387

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 143933 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.7	3.5
10°-20°	644.1	10.6
20°-30°	990.1	16.3
30°-40°	1061.1	17.4
40°-50°	963.7	15.8
50°-60°	879.0	14.4
60°-70°	654.0	10.7
70°-80°	460.3	7.6
80°-90°	223.0	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°	1850.0	30.4
0°-40°	2911.1	47.8
0°-60°	4753.8	78.0
0°-90°	6091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6091.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2251	2251	2251	2251	2251	
5°	2352	2298	2216	2213	2220	228
15°	2684	2465	2149	2103	2093	741
25°	2311	2483	2027	1951	1937	1074
35°	2115	2072	1835	1761	21	1325
45°	1916	1834	1582	19	8	1480
55°	1670	1568	1280	8	1	1491
65°	1340	1242	918	3	3	1326
75°	958	843	521	5	3	1010
85°	564	446	152	4	3	566
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°	2251.2	2251.2	2251.2	2251.2	2251.2	2251.2	2251.2	2251.2	2251.2
2.5°	2297.7	2271.9	2265.4	2283.5	2217.7	2261.6	2225.5	2233.2	2233.2
5°	2351.8	2315.7	2297.7	2292.5	2216.4	2246.1	2212.6	2212.6	2220.3
7.5°	2389.2	2349.2	2317.0	2304.1	2204.8	2230.6	2191.9	2191.9	2191.9
10°	2491.1	2416.3	2336.3	2313.1	2190.6	2210.0	2164.9	2167.4	2158.4
12.5°	2611.0	2543.9	2373.7	2309.3	2175.2	2184.2	2136.5	2135.2	2124.9
15°	2684.5	2634.2	2465.3	2304.1	2149.4	2157.1	2103.0	2099.1	2092.7
17.5°	2643.2	2635.5	2528.5	2300.2	2126.2	2119.7	2065.6	2061.7	2056.6
20°	2528.5	2547.8	2580.0	2292.5	2096.5	2083.6	2029.5	2026.9	2023.0
22.5°	2400.8	2420.2	2556.8	2305.4	2060.4	2044.9	1990.8	1988.2	1983.1
25°	2310.6	2310.6	2483.3	2336.3	2026.9	1998.5	1950.8	1947.0	1936.6
27.5°	2247.4	2235.8	2373.7	2371.2	1984.3	1952.1	1908.3	1904.4	1891.5
30°	2198.4	2179.0	2252.5	2387.9	1936.6	1901.8	1861.9	1858.0	1593.7
32.5°	2154.5	2133.9	2150.7	2402.1	1888.9	1847.7	1812.9	1293.2	56.7
35°	2114.6	2091.4	2072.0	2391.8	1834.8	1793.5	1761.3	37.4	20.6
37.5°	2069.4	2051.4	2007.6	2337.6	1776.8	1735.5	1704.6	20.6	18.1
40°	2020.4	2003.7	1947.0	2257.7	1713.6	1678.8	1135.9	18.1	12.9
42.5°	1970.2	1957.3	1890.2	2141.7	1650.4	1615.6	36.1	14.2	10.3
45°	1916.0	1904.4	1833.5	2001.1	1582.1	1549.8	19.3	10.3	7.7
47.5°	1860.6	1843.8	1774.2	1850.3	1512.4	1480.2	16.8	7.7	5.2
50°	1802.5	1784.5	1708.4	1717.4	1438.9	1406.7	12.9	5.2	2.6
52.5°	1738.1	1716.2	1638.8	1597.5	1361.6	1331.9	10.3	2.6	1.3
55°	1669.7	1645.2	1567.9	1493.1	1280.3	1246.8	7.7	2.6	1.3
57.5°	1593.7	1566.6	1493.1	1393.8	1194.0	843.3	5.2	2.6	1.3
60°	1513.7	1486.6	1413.2	1301.0	1106.3	58.0	2.6	2.6	1.3
62.5°	1428.6	1400.3	1329.3	1206.9	1012.2	47.7	2.6	2.6	2.6
65°	1339.7	1306.1	1241.7	1110.2	918.0	40.0	2.6	2.6	2.6
67.5°	1250.7	1208.1	1147.5	1010.9	821.3	33.5	2.6	2.6	2.6
70°	1156.6	1110.2	1047.0	910.3	719.5	27.1	2.6	2.6	2.6
72.5°	1059.9	1014.7	946.4	808.4	624.1	20.6	2.6	2.6	2.6
75°	958.0	916.7	843.3	706.6	520.9	15.5	5.2	2.6	2.6
77.5°	852.3	820.0	737.5	602.1	420.3	10.3	5.2	2.6	2.6
80°	754.3	718.2	633.1	496.4	323.6	7.7	5.2	3.9	2.6
82.5°	653.7	621.5	536.4	399.7	232.1	6.4	5.2	3.9	2.6
85°	563.5	532.5	446.1	312.0	152.1	5.2	3.9	3.9	2.6
87.5°	483.5	455.1	370.1	228.2	86.4	3.9	3.9	3.9	2.6
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	26.26	27.87	26.62	28.19	28.50	21.69	23.31	22.06	23.62	23.93
	3H	28.71	30.17	29.08	30.50	30.86	22.33	23.80	22.71	24.12	24.49
	4H	29.83	31.21	30.23	31.56	31.94	22.48	23.86	22.88	24.21	24.58
	6H	30.92	32.21	31.33	32.57	32.96	22.52	23.80	22.93	24.17	24.56
	8H	31.45	32.68	31.88	33.07	33.47	22.51	23.74	22.93	24.12	24.52
	12H	32.02	33.20	32.45	33.58	34.01	22.49	23.67	22.92	24.05	24.48
4H	2H	26.92	28.30	27.31	28.65	29.02	22.82	24.20	23.22	24.55	24.92
	3H	29.60	30.77	30.01	31.17	31.57	24.16	25.33	24.57	25.73	26.13
	4H	30.90	31.96	31.33	32.38	32.81	24.70	25.76	25.13	26.17	26.61
	6H	32.18	33.12	32.63	33.56	34.01	24.97	25.91	25.42	26.35	26.80
	8H	32.81	33.69	33.27	34.13	34.59	25.01	25.89	25.47	26.33	26.79
	12H	33.50	34.29	33.97	34.76	35.23	25.02	25.81	25.50	26.29	26.75
8H	4H	31.26	32.14	31.72	32.58	33.05	25.64	26.52	26.10	26.96	27.43
	6H	32.75	33.48	33.24	33.97	34.44	26.23	26.97	26.73	27.46	27.93
	8H	33.53	34.19	34.04	34.70	35.18	26.41	27.08	26.92	27.58	28.07
	12H	34.42	35.01	34.93	35.50	36.06	26.51	27.10	27.02	27.59	28.15
12H	4H	31.30	32.10	31.78	32.57	33.04	25.86	26.65	26.34	27.13	27.60
	6H	32.83	33.50	33.34	34.01	34.49	26.58	27.25	27.09	27.75	28.24
	8H	33.71	34.31	34.22	34.80	35.35	26.90	27.49	27.40	27.98	28.54