

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: P893723

Luminaire Tested: 4MB-6SL-ASYMR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893723
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-L840
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

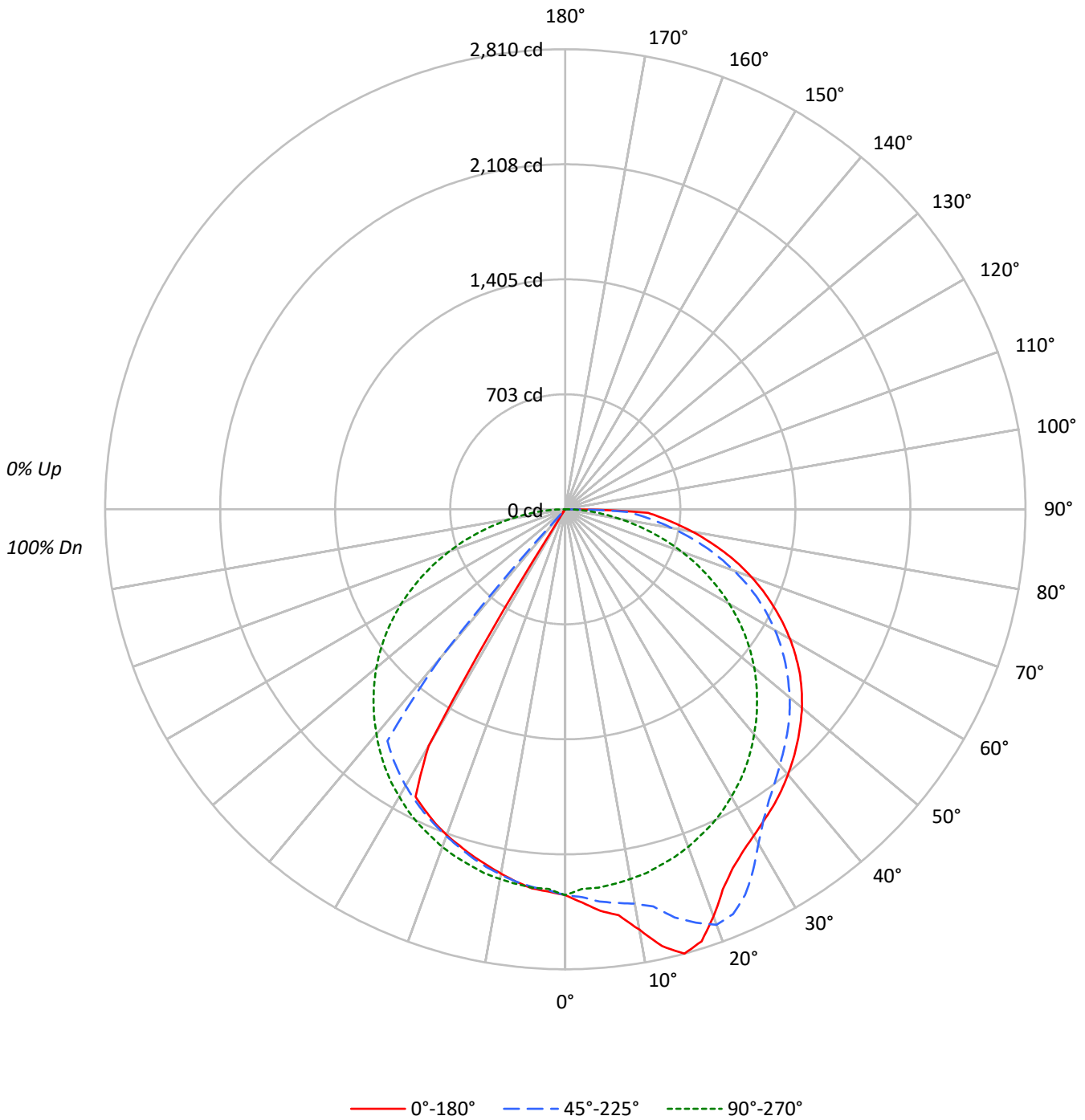
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6376.0 lumens
Efficiency: N/A
Efficacy: 143.6 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	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°	30601	30601	30601	30601	30601
5°	32090	31351	30242	30190	30295
10°	34382	32248	30235	29881	29791
15°	37777	34691	30247	29594	29449
20°	36575	37321	30326	29356	29263
25°	34654	37244	30399	29258	29046
30°	34504	35354	30397	29223	25013
35°	35088	34383	30445	29226	342
40°	35851	34547	30406	20156	229
45°	36832	35245	30412	371	149
50°	38118	36128	30429	273	55
55°	39570	37155	30343	183	29
60°	41152	38418	30073	70	34
65°	43086	39937	29527	83	83
70°	45965	41611	28592	103	103
75°	50311	44285	27358	271	135
80°	59045	49555	25335	404	202
85°	87873	69577	23734	596	402

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 150661 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.8	3.5
10°-20°	674.3	10.6
20°-30°	1036.4	16.3
30°-40°	1110.7	17.4
40°-50°	1008.8	15.8
50°-60°	920.2	14.4
60°-70°	684.5	10.7
70°-80°	481.8	7.6
80°-90°	233.4	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°	1936.5	30.4
0°-40°	3047.3	47.8
0°-60°	4976.2	78.0
0°-90°	6376.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6376.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2357	2357	2357	2357	2357	
5°	2462	2405	2320	2316	2324	238
15°	2810	2581	2250	2201	2191	776
25°	2419	2600	2122	2042	2027	1125
35°	2214	2169	1921	1844	22	1387
45°	2006	1919	1656	20	8	1550
55°	1748	1641	1340	8	1	1561
65°	1402	1300	961	3	3	1388
75°	1003	883	545	5	3	1057
85°	590	467	159	4	3	593
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°	2356.6	2356.6	2356.6	2356.6	2356.6	2356.6	2356.6	2356.6	2356.6
2.5°	2405.2	2378.2	2371.4	2390.3	2321.5	2367.4	2329.6	2337.7	2337.7
5°	2461.9	2424.1	2405.2	2399.8	2320.1	2351.2	2316.1	2316.1	2324.2
7.5°	2501.0	2459.2	2425.4	2411.9	2308.0	2335.0	2294.5	2294.5	2294.5
10°	2607.6	2529.3	2445.7	2421.4	2293.1	2313.4	2266.2	2268.9	2259.4
12.5°	2733.2	2663.0	2484.8	2417.3	2277.0	2286.4	2236.5	2235.1	2224.3
15°	2810.1	2757.4	2580.6	2411.9	2250.0	2258.1	2201.4	2197.3	2190.6
17.5°	2766.9	2758.8	2646.8	2407.9	2225.7	2218.9	2162.2	2158.2	2152.8
20°	2646.8	2667.0	2700.8	2399.8	2194.6	2181.1	2124.4	2121.7	2117.7
22.5°	2513.2	2533.4	2676.5	2413.3	2156.8	2140.6	2083.9	2081.2	2075.8
25°	2418.7	2418.7	2599.5	2445.7	2121.7	2092.0	2042.1	2038.1	2027.3
27.5°	2352.5	2340.4	2484.8	2482.1	2077.2	2043.5	1997.6	1993.5	1980.0
30°	2301.2	2281.0	2357.9	2499.7	2027.3	1990.8	1949.0	1944.9	1668.2
32.5°	2255.4	2233.8	2251.3	2514.5	1977.3	1934.1	1897.7	1353.8	59.4
35°	2213.5	2189.2	2169.0	2503.7	1920.6	1877.4	1843.7	39.1	21.6
37.5°	2166.3	2147.4	2101.5	2447.0	1859.9	1816.7	1784.3	21.6	18.9
40°	2115.0	2097.4	2038.1	2363.3	1793.8	1757.3	1189.1	18.9	13.5
42.5°	2062.3	2048.9	1978.7	2241.9	1727.6	1691.2	37.8	14.8	10.8
45°	2005.7	1993.5	1919.3	2094.7	1656.1	1622.3	20.2	10.8	8.1
47.5°	1947.6	1930.1	1857.2	1936.8	1583.2	1549.5	17.5	8.1	5.4
50°	1886.9	1868.0	1788.4	1797.8	1506.3	1472.5	13.5	5.4	2.7
52.5°	1819.4	1796.5	1715.5	1672.3	1425.3	1394.2	10.8	2.7	1.3
55°	1747.9	1722.2	1641.2	1563.0	1340.3	1305.2	8.1	2.7	1.3
57.5°	1668.2	1639.9	1563.0	1459.0	1249.8	882.7	5.4	2.7	1.3
60°	1584.6	1556.2	1479.3	1361.9	1158.0	60.7	2.7	2.7	1.3
62.5°	1495.5	1465.8	1391.5	1263.3	1059.5	49.9	2.7	2.7	2.7
65°	1402.3	1367.3	1299.8	1162.1	961.0	41.8	2.7	2.7	2.7
67.5°	1309.2	1264.7	1201.2	1058.2	859.8	35.1	2.7	2.7	2.7
70°	1210.7	1162.1	1096.0	952.9	753.1	28.3	2.7	2.7	2.7
72.5°	1109.5	1062.2	990.7	846.3	653.3	21.6	2.7	2.7	2.7
75°	1002.8	959.6	882.7	739.6	545.3	16.2	5.4	2.7	2.7
77.5°	892.2	858.4	772.0	630.3	440.0	10.8	5.4	2.7	2.7
80°	789.6	751.8	662.7	519.6	338.8	8.1	5.4	4.0	2.7
82.5°	684.3	650.6	561.5	418.4	242.9	6.7	5.4	4.0	2.7
85°	589.8	557.4	467.0	326.6	159.3	5.4	4.0	4.0	2.7
87.5°	506.1	476.4	387.4	238.9	90.4	4.0	4.0	4.0	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	26.42	28.03	26.78	28.35	28.66	21.85	23.46	22.22	23.78	24.09
	3H	28.86	30.33	29.24	30.65	31.02	22.49	23.96	22.87	24.28	24.64
	4H	29.99	31.37	30.39	31.72	32.09	22.64	24.02	23.04	24.37	24.74
	6H	31.08	32.37	31.49	32.73	33.12	22.68	23.96	23.09	24.33	24.72
	8H	31.61	32.84	32.04	33.23	33.63	22.67	23.89	23.09	24.28	24.68
	12H	32.18	33.36	32.61	33.74	34.17	22.65	23.83	23.08	24.21	24.64
4H	2H	27.07	28.46	27.47	28.80	29.18	22.98	24.36	23.38	24.71	25.08
	3H	29.76	30.93	30.17	31.33	31.73	24.32	25.49	24.73	25.88	26.28
	4H	31.06	32.12	31.49	32.53	32.97	24.86	25.92	25.29	26.33	26.77
	6H	32.34	33.27	32.79	33.71	34.17	25.13	26.06	25.58	26.50	26.96
	8H	32.97	33.84	33.43	34.29	34.75	25.17	26.04	25.63	26.49	26.95
	12H	33.65	34.45	34.13	34.92	35.39	25.18	25.97	25.66	26.44	26.91
8H	4H	31.42	32.30	31.88	32.74	33.21	25.80	26.68	26.26	27.12	27.58
	6H	32.91	33.64	33.40	34.13	34.60	26.39	27.13	26.88	27.62	28.09
	8H	33.69	34.35	34.20	34.86	35.34	26.57	27.23	27.08	27.74	28.22
	12H	34.58	35.17	35.08	35.66	36.22	26.67	27.26	27.18	27.75	28.31
12H	4H	31.46	32.25	31.94	32.73	33.20	26.02	26.81	26.50	27.29	27.75
	6H	32.99	33.66	33.50	34.16	34.65	26.74	27.41	27.25	27.91	28.40
	8H	33.87	34.46	34.38	34.95	35.51	27.05	27.65	27.56	28.14	28.69