

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: P893722

Luminaire Tested: 4MB-6SL-ASYMR-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893722
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-L835
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

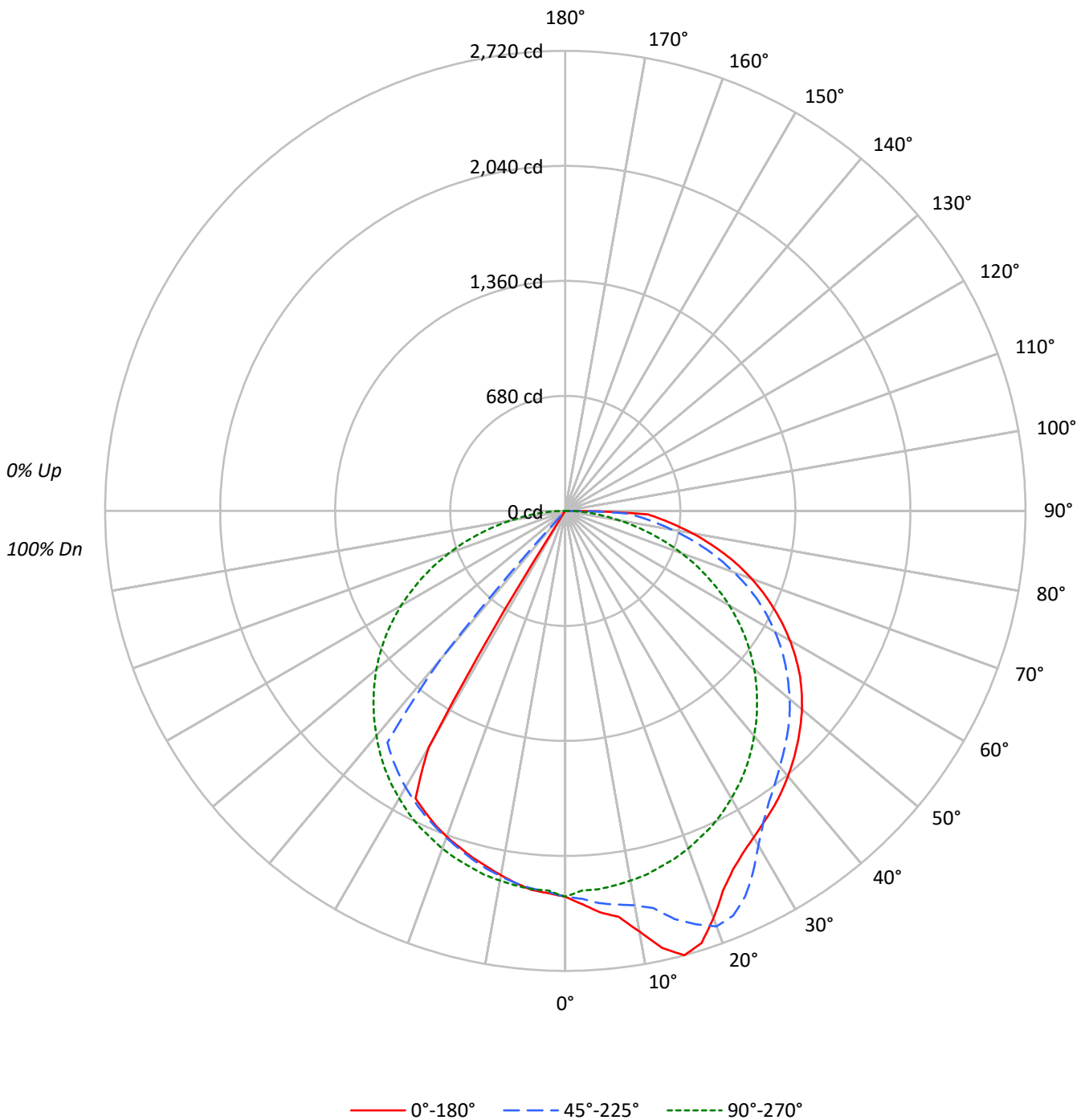
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6172.0 lumens
Efficiency: N/A
Efficacy: 139.0 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 (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°	29622	29622	29622	29622	29622
5°	31063	30347	29275	29224	29325
10°	33283	31215	29269	28923	28838
15°	36568	33582	29279	28646	28506
20°	35404	36126	29356	28418	28326
25°	33545	36054	29427	28322	28116
30°	33400	34224	29424	28287	24214
35°	33966	33283	29472	28291	331
40°	34703	33441	29433	19510	222
45°	35653	34118	29439	360	143
50°	36897	34970	29455	265	53
55°	38303	35966	29372	177	29
60°	39836	37187	29113	68	34
65°	41710	38659	28581	80	80
70°	44492	40278	27677	99	99
75°	48700	42871	26480	261	130
80°	57153	47970	24520	389	194
85°	85057	67357	22974	581	387

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 145839 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.6	3.5
10°-20°	652.7	10.6
20°-30°	1003.3	16.3
30°-40°	1075.2	17.4
40°-50°	976.5	15.8
50°-60°	890.7	14.4
60°-70°	662.6	10.7
70°-80°	466.4	7.6
80°-90°	225.9	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°	1874.6	30.4
0°-40°	2949.8	47.8
0°-60°	4817.0	78.0
0°-90°	6172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6172.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2281	2281	2281	2281	2281	
5°	2383	2328	2246	2242	2250	231
15°	2720	2498	2178	2131	2120	751
25°	2341	2516	2054	1977	1962	1089
35°	2143	2100	1859	1785	21	1342
45°	1942	1858	1603	20	8	1500
55°	1692	1589	1297	8	1	1511
65°	1358	1258	930	3	3	1344
75°	971	854	528	5	3	1024
85°	571	452	154	4	3	574
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°	2281.2	2281.2	2281.2	2281.2	2281.2	2281.2	2281.2	2281.2	2281.2
2.5°	2328.2	2302.1	2295.6	2313.8	2247.2	2291.6	2255.1	2262.9	2262.9
5°	2383.1	2346.5	2328.2	2323.0	2245.9	2276.0	2242.0	2242.0	2249.8
7.5°	2421.0	2380.5	2347.8	2334.8	2234.2	2260.3	2221.1	2221.1	2221.1
10°	2524.2	2448.4	2367.4	2343.9	2219.8	2239.4	2193.6	2196.3	2187.1
12.5°	2645.7	2577.8	2405.3	2340.0	2204.1	2213.2	2164.9	2163.6	2153.1
15°	2720.2	2669.2	2498.1	2334.8	2178.0	2185.8	2130.9	2127.0	2120.5
17.5°	2678.4	2670.5	2562.1	2330.8	2154.5	2147.9	2093.0	2089.1	2083.9
20°	2562.1	2581.7	2614.3	2323.0	2124.4	2111.3	2056.5	2053.9	2049.9
22.5°	2432.7	2452.3	2590.8	2336.1	2087.8	2072.1	2017.3	2014.7	2009.4
25°	2341.3	2341.3	2516.4	2367.4	2053.9	2025.1	1976.8	1972.8	1962.4
27.5°	2277.3	2265.5	2405.3	2402.7	2010.7	1978.1	1933.7	1929.7	1916.7
30°	2227.6	2208.0	2282.5	2419.7	1962.4	1927.1	1886.6	1882.7	1614.9
32.5°	2183.2	2162.3	2179.3	2434.0	1914.1	1872.2	1837.0	1310.4	57.5
35°	2142.7	2119.2	2099.6	2423.6	1859.2	1817.4	1784.7	37.9	20.9
37.5°	2097.0	2078.7	2034.3	2368.7	1800.4	1758.6	1727.2	20.9	18.3
40°	2047.3	2030.3	1972.8	2287.7	1736.4	1701.1	1151.0	18.3	13.1
42.5°	1996.4	1983.3	1915.4	2170.1	1672.3	1637.1	36.6	14.4	10.5
45°	1941.5	1929.7	1857.9	2027.7	1603.1	1570.4	19.6	10.5	7.8
47.5°	1885.3	1868.3	1797.8	1874.9	1532.5	1499.9	17.0	7.8	5.2
50°	1826.5	1808.2	1731.1	1740.3	1458.1	1425.4	13.1	5.2	2.6
52.5°	1761.2	1739.0	1660.6	1618.8	1379.7	1349.6	10.5	2.6	1.3
55°	1691.9	1667.1	1588.7	1513.0	1297.4	1263.4	7.8	2.6	1.3
57.5°	1614.9	1587.4	1513.0	1412.3	1209.8	854.5	5.2	2.6	1.3
60°	1533.9	1506.4	1431.9	1318.3	1121.0	58.8	2.6	2.6	1.3
62.5°	1447.6	1418.9	1347.0	1222.9	1025.6	48.3	2.6	2.6	2.6
65°	1357.5	1323.5	1258.2	1124.9	930.2	40.5	2.6	2.6	2.6
67.5°	1267.3	1224.2	1162.8	1024.3	832.3	34.0	2.6	2.6	2.6
70°	1171.9	1124.9	1060.9	922.4	729.0	27.4	2.6	2.6	2.6
72.5°	1074.0	1028.2	959.0	819.2	632.4	20.9	2.6	2.6	2.6
75°	970.7	928.9	854.5	716.0	527.8	15.7	5.2	2.6	2.6
77.5°	863.6	830.9	747.3	610.1	425.9	10.5	5.2	2.6	2.6
80°	764.3	727.7	641.5	503.0	327.9	7.8	5.2	3.9	2.6
82.5°	662.4	629.7	543.5	405.0	235.2	6.5	5.2	3.9	2.6
85°	570.9	539.6	452.1	316.2	154.2	5.2	3.9	3.9	2.6
87.5°	489.9	461.2	375.0	231.3	87.5	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	26.30	27.92	26.67	28.23	28.55	21.74	23.35	22.10	23.67	23.98
	3H	28.75	30.22	29.13	30.54	30.90	22.38	23.84	22.76	24.17	24.53
	4H	29.88	31.26	30.27	31.61	31.98	22.52	23.91	22.92	24.25	24.63
	6H	30.97	32.25	31.38	32.62	33.01	22.56	23.85	22.98	24.21	24.60
	8H	31.50	32.73	31.92	33.11	33.51	22.55	23.78	22.98	24.17	24.57
	12H	32.07	33.24	32.50	33.63	34.05	22.53	23.71	22.96	24.09	24.52
4H	2H	26.96	28.34	27.36	28.69	29.07	22.86	24.25	23.26	24.59	24.97
	3H	29.65	30.82	30.06	31.22	31.62	24.21	25.37	24.62	25.77	26.17
	4H	30.95	32.01	31.38	32.42	32.86	24.74	25.80	25.17	26.22	26.65
	6H	32.23	33.16	32.68	33.60	34.06	25.02	25.95	25.47	26.39	26.85
	8H	32.85	33.73	33.31	34.17	34.64	25.05	25.93	25.51	26.37	26.84
	12H	33.54	34.33	34.02	34.81	35.28	25.07	25.86	25.54	26.33	26.80
8H	4H	31.31	32.19	31.77	32.63	33.09	25.69	26.57	26.15	27.01	27.47
	6H	32.79	33.53	33.28	34.02	34.49	26.28	27.02	26.77	27.50	27.98
	8H	33.58	34.24	34.08	34.74	35.23	26.46	27.12	26.96	27.63	28.11
	12H	34.47	35.06	34.97	35.55	36.11	26.56	27.15	27.06	27.64	28.20
12H	4H	31.35	32.14	31.83	32.62	33.08	25.91	26.70	26.39	27.17	27.64
	6H	32.88	33.55	33.39	34.05	34.54	26.63	27.29	27.14	27.80	28.28
	8H	33.76	34.35	34.27	34.84	35.40	26.94	27.53	27.45	28.02	28.58