

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: P893681

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

Issue Date: 11/11/2024

**Test Information**

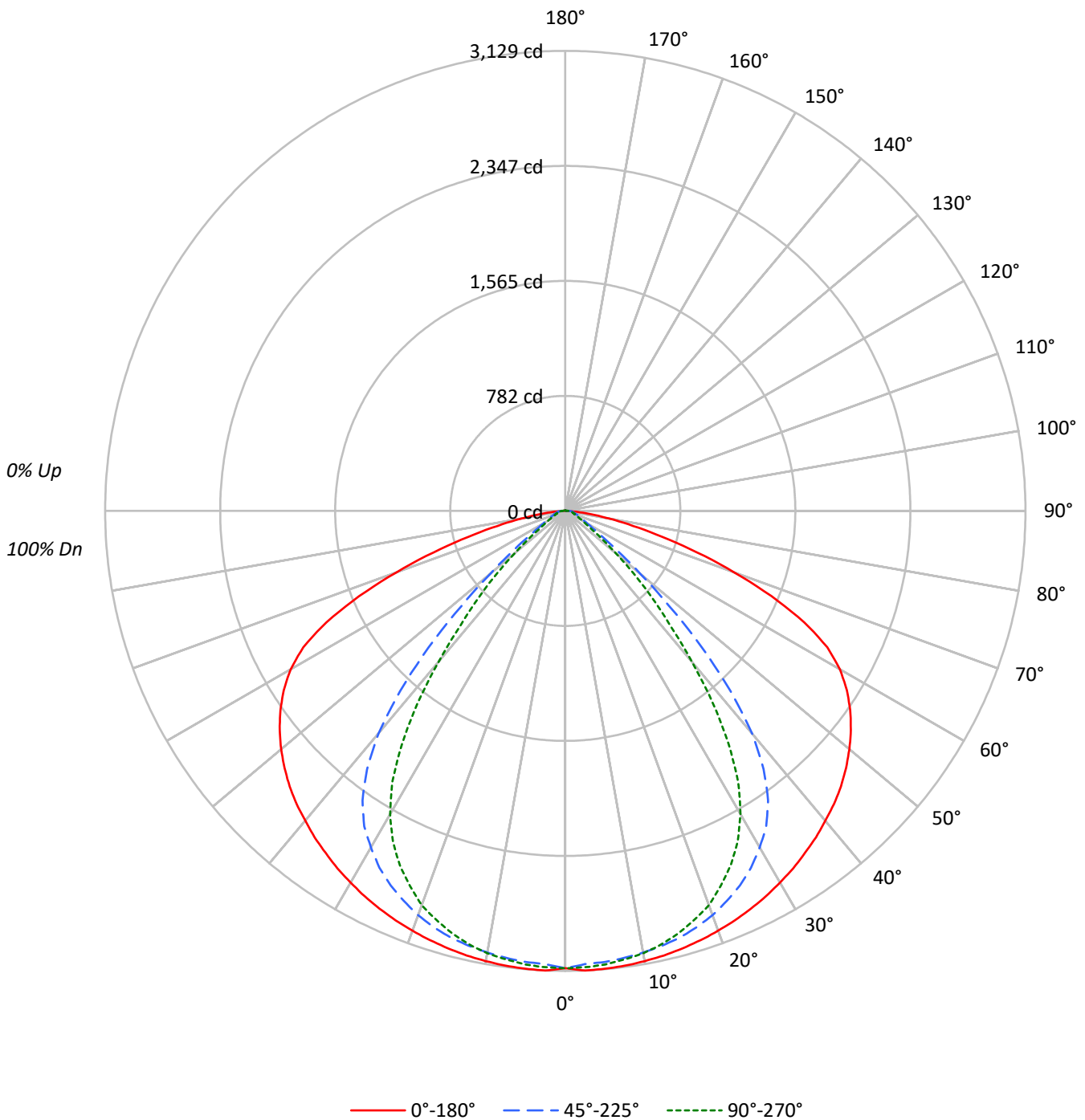
Test Method: LM-79-2019  
Report Number: P893681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-6SL-A-UNV-L830  
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3000K 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): 1.41 / 1.15 / 1.23  
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 44.4  
Input Voltage (V): 120  
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	111	107	103	100	108	105	102	99	100	98	96	97	95	93	93	91	90	90	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	79	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	69	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	62	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	55	64	59	55	55	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	49	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	45	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	40	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	37	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	34	34	32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	31676	31676	31676
5°	31955	31480	31665
10°	32156	31550	31596
15°	32476	31686	31360
20°	32935	31714	30939
25°	33548	31576	29893
30°	34330	31081	28014
35°	35310	29886	24086
40°	36568	26247	17803
45°	38179	18939	11974
50°	39953	10582	7146
55°	41992	5471	3912
60°	43929	3558	2770
65°	43179	2923	2198
70°	36417	2692	2052
75°	26789	2743	2200
80°	17870	3232	2774
85°	9757	5235	4218

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 62.5°  
 Luminance: 44303 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	295.3	4.6
10°-20°	853.5	13.4
20°-30°	1298.3	20.4
30°-40°	1482.7	23.3
40°-50°	1196.1	18.8
50°-60°	654.8	10.3
60°-70°	345.2	5.4
70°-80°	169.3	2.7
80°-90°	59.6	0.9
90°-100°	12.8	0.2
100°-110°	1.8	0.0
110°-120°	1.1	0.0
120°-130°	1.0	0.0
130°-140°	1.0	0.0
140°-150°	1.2	0.0
150°-160°	1.1	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	2447.0	38.4
0°-40°	3929.7	61.6
0°-60°	5780.6	90.7
0°-90°	6354.8	99.7
90°-120°	15.7	0.2
90°-150°	19.0	0.3
90°-180°	21.0	0.3
0°-180°	6376.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3110	3110	3110	3110	3110	
5°	3126	3116	3079	3107	3097	298
15°	3080	3061	3005	3000	2974	872
25°	2986	2942	2810	2714	2660	1379
35°	2840	2720	2404	2077	1937	1782
45°	2651	2277	1315	898	831	2046
55°	2365	973	308	238	220	2110
65°	1792	225	121	98	91	1733
75°	681	126	70	58	56	752
85°	84	66	45	40	36	115
90°	3	34	28	24	22	5
95°	3	4	10	15	14	2
105°	1	0	1	2	2	1
115°	1	1	1	2	1	1
125°	1	1	1	2	1	1
135°	1	1	2	2	1	1
145°	2	2	2	3	2	1
155°	2	2	3	3	3	1
165°	2	3	3	3	3	1
175°	3	3	3	4	3	0
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3110.3	3110.3	3110.3	3110.3	3110.3
2.5°	3129.3	3120.7	3085.4	3115.5	3106.9
5°	3125.8	3116.4	3079.3	3106.9	3097.4
7.5°	3119.8	3107.7	3067.3	3092.3	3077.6
10°	3109.5	3097.4	3050.9	3070.7	3055.3
12.5°	3097.4	3081.1	3029.4	3039.8	3020.0
15°	3080.2	3061.3	3005.3	3000.2	2974.4
17.5°	3061.3	3038.0	2970.0	2947.7	2916.7
20°	3038.9	3010.5	2926.2	2882.3	2854.7
22.5°	3013.9	2976.9	2871.1	2803.9	2760.9
25°	2985.5	2942.5	2810.0	2714.4	2660.2
27.5°	2955.4	2896.9	2736.0	2610.3	2537.1
30°	2919.3	2848.7	2643.0	2473.5	2382.2
32.5°	2883.1	2788.5	2543.2	2297.0	2188.6
35°	2840.1	2720.5	2403.8	2076.7	1937.3
37.5°	2799.6	2638.7	2215.3	1800.4	1650.7
40°	2750.6	2542.3	1974.3	1482.9	1339.1
42.5°	2704.1	2430.4	1661.9	1176.5	1051.7
45°	2650.8	2277.2	1315.0	898.5	831.4
47.5°	2588.8	2068.1	956.2	668.7	626.5
50°	2521.7	1780.7	667.9	485.4	451.0
52.5°	2447.6	1392.5	450.1	337.4	318.4
55°	2365.0	973.4	308.1	238.4	220.3
57.5°	2269.5	633.4	223.8	179.9	167.8
60°	2156.7	404.5	174.7	142.9	136.0
62.5°	2008.7	284.0	143.7	117.9	111.9
65°	1791.8	224.6	121.3	98.1	91.2
67.5°	1517.3	190.2	104.1	82.6	78.3
70°	1223.0	165.2	90.4	71.4	68.9
72.5°	939.8	144.6	78.3	63.7	62.0
75°	680.8	126.5	69.7	58.5	55.9
77.5°	471.6	109.3	62.0	52.5	50.8
80°	304.7	94.7	55.1	48.2	47.3
82.5°	174.7	79.2	49.9	46.5	45.6
85°	83.5	66.3	44.8	40.4	36.1
87.5°	26.7	49.1	35.3	31.0	27.5
90°	3.4	34.4	27.5	24.1	22.4
92.5°	3.4	18.9	19.8	19.8	18.9
95°	2.6	4.3	9.5	14.6	13.8
97.5°	2.6	1.7	6.0	10.3	10.3
100°	1.7	0.9	2.6	6.9	6.9
102.5°	1.7	0.9	0.9	4.3	4.3
105°	0.9	0.0	0.9	1.7	1.7
107.5°	0.9	0.9	0.9	1.7	0.9
110°	0.9	0.9	0.9	1.7	0.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.9	1.7	0.9
115°	0.9	0.9	0.9	1.7	0.9
117.5°	0.9	0.9	0.9	1.7	0.9
120°	0.9	0.9	0.9	1.7	0.9
122.5°	0.9	0.9	0.9	1.7	0.9
125°	0.9	0.9	0.9	1.7	0.9
127.5°	0.9	0.9	0.9	1.7	0.9
130°	0.9	0.9	1.7	1.7	0.9
132.5°	0.9	0.9	1.7	1.7	0.9
135°	0.9	0.9	1.7	1.7	0.9
137.5°	0.9	0.9	1.7	1.7	1.7
140°	1.7	0.9	1.7	1.7	1.7
142.5°	1.7	1.7	1.7	2.6	1.7
145°	1.7	1.7	1.7	2.6	1.7
147.5°	1.7	1.7	2.6	2.6	1.7
150°	1.7	1.7	2.6	2.6	1.7
152.5°	1.7	1.7	2.6	2.6	2.6
155°	1.7	1.7	2.6	3.4	2.6
157.5°	1.7	1.7	2.6	3.4	2.6
160°	1.7	2.6	3.4	3.4	2.6
162.5°	1.7	2.6	3.4	3.4	3.4
165°	1.7	2.6	3.4	3.4	3.4
167.5°	2.6	2.6	3.4	4.3	3.4
170°	2.6	2.6	3.4	4.3	3.4
172.5°	2.6	2.6	3.4	4.3	3.4
175°	2.6	2.6	3.4	4.3	3.4
177.5°	2.6	2.6	3.4	4.3	4.3
180°	3.4	3.4	3.4	3.4	3.4



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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	21.91	23.31	22.28	23.63	23.95	10.43	11.83	10.80	12.15	12.47
	3H	24.82	26.07	25.21	26.40	26.78	11.36	12.61	11.75	12.94	13.32
	4H	25.72	26.88	26.12	27.24	27.62	11.88	13.04	12.29	13.40	13.79
	6H	26.21	27.28	26.63	27.66	28.06	12.51	13.58	12.93	13.96	14.36
	8H	26.32	27.34	26.76	27.74	28.15	12.93	13.95	13.37	14.35	14.76
	12H	26.37	27.34	26.81	27.73	28.17	13.38	14.35	13.82	14.74	15.18
4H	2H	21.73	22.89	22.13	23.25	23.64	10.94	12.11	11.35	12.46	12.85
	3H	24.66	25.61	25.07	26.02	26.43	12.14	13.09	12.56	13.50	13.91
	4H	25.56	26.41	26.00	26.84	27.29	12.80	13.66	13.24	14.08	14.53
	6H	26.15	26.89	26.62	27.34	27.82	13.63	14.37	14.09	14.82	15.29
	8H	26.31	27.01	26.79	27.46	27.94	14.16	14.85	14.63	15.30	15.78
	12H	26.40	27.02	26.90	27.51	27.99	14.74	15.35	15.23	15.84	16.32
8H	4H	25.45	26.14	25.92	26.59	27.07	13.40	14.09	13.87	14.54	15.02
	6H	26.05	26.62	26.55	27.12	27.61	14.40	14.97	14.91	15.47	15.96
	8H	26.24	26.75	26.76	27.27	27.77	15.08	15.59	15.60	16.11	16.61
	12H	26.38	26.84	26.90	27.34	27.91	15.84	16.30	16.36	16.79	17.37
12H	4H	25.41	26.03	25.90	26.51	26.99	13.66	14.27	14.15	14.76	15.24
	6H	26.00	26.51	26.52	27.03	27.53	14.71	15.22	15.23	15.74	16.24
	8H	26.21	26.67	26.73	27.17	27.74	15.47	15.93	15.99	16.43	17.00