

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: P893753

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

Issue Date: 11/11/2024

**Test Information**

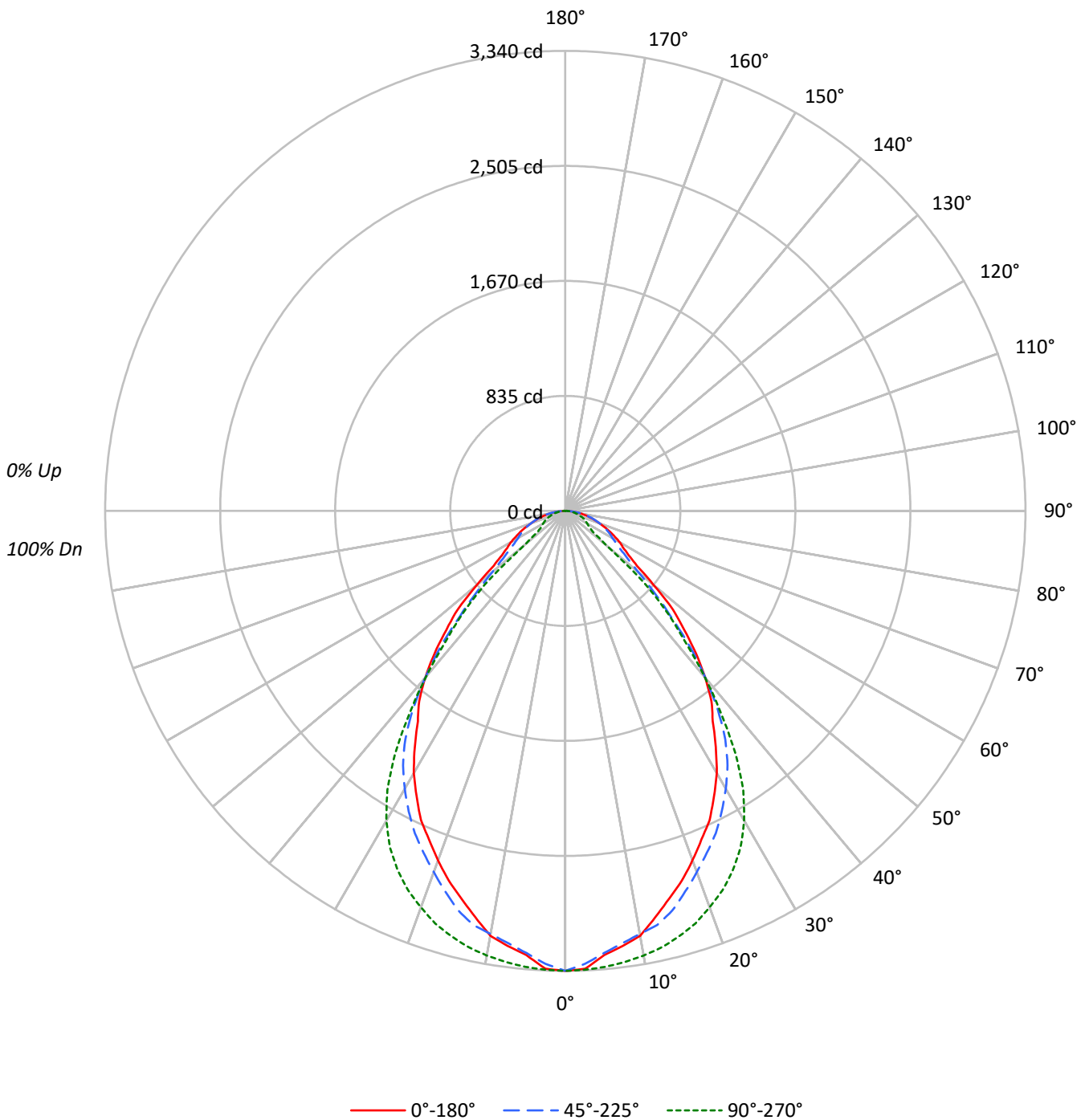
Test Method: LM-79-2019  
Report Number: P893753  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-6SL-LVRA-UNV-L830  
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5420.0 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12  
Luminous Opening: Rectangular (W 0.38' 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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	93	92	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	85	82	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	71	67	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	66	61	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	61	56	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	52	47	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	49	44	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	46	40	37	35

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

	0°	45°	90°
0°	23761	23761	23761
5°	23120	23016	23735
10°	22629	22530	23680
15°	21461	22120	23547
20°	20444	21135	23187
25°	19447	20278	22595
30°	18067	19143	21335
35°	16201	17591	18713
40°	14678	14709	14629
45°	12272	10869	10600
50°	9270	7651	4335
55°	6971	6118	2733
60°	6479	5634	2634
65°	6029	5623	2638
70°	5515	5515	2596
75°	5229	5372	2507
80°	4831	5077	2573
85°	4212	4425	2808

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 12558 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	308.5	5.7
10°-20°	850.0	15.7
20°-30°	1205.3	22.2
30°-40°	1241.7	22.9
40°-50°	867.3	16.0
50°-60°	416.2	7.7
60°-70°	292.0	5.4
70°-80°	182.5	3.4
80°-90°	56.5	1.0
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°	2363.8	43.6
0°-40°	3605.5	66.5
0°-60°	4889.0	90.2
0°-90°	5420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5420.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3340	3340	3340	3340	3340	
5°	3237	3233	3222	3307	3323	306
15°	2914	2935	3003	3089	3197	820
25°	2477	2502	2583	2758	2878	1133
35°	1865	1916	2025	2067	2154	1175
45°	1220	1248	1080	1025	1054	940
55°	562	534	493	316	220	527
65°	358	335	334	254	157	355
75°	190	188	195	169	91	200
85°	52	52	54	53	34	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3339.6	3339.6	3339.6	3339.6	3339.6
2.5°	3326.7	3316.3	3291.4	3337.0	3333.5
5°	3237.1	3232.8	3222.5	3306.9	3323.2
7.5°	3186.4	3177.8	3165.7	3258.7	3304.3
10°	3132.1	3142.5	3118.4	3203.6	3277.6
12.5°	3020.2	3047.8	3080.5	3146.8	3244.9
15°	2913.5	2935.0	3003.0	3089.1	3196.7
17.5°	2813.7	2838.6	2897.2	3026.3	3140.7
20°	2700.1	2734.5	2791.3	2956.6	3062.4
22.5°	2583.0	2614.9	2686.3	2863.6	2981.5
25°	2477.1	2502.1	2583.0	2757.7	2878.2
27.5°	2336.8	2383.3	2459.9	2628.6	2755.1
30°	2199.1	2238.7	2330.0	2472.0	2596.8
32.5°	2033.0	2090.7	2191.4	2299.8	2404.0
35°	1865.2	1916.0	2025.3	2067.4	2154.4
37.5°	1742.9	1756.7	1818.7	1813.5	1862.6
40°	1580.3	1607.8	1583.7	1519.2	1575.1
42.5°	1404.7	1437.4	1340.1	1265.3	1285.0
45°	1219.6	1248.0	1080.2	1025.1	1053.5
47.5°	1059.5	1057.0	871.0	834.0	794.4
50°	837.5	865.0	691.2	622.3	391.6
52.5°	654.1	664.5	569.8	397.7	257.4
55°	562.0	534.5	493.2	315.9	220.3
57.5°	499.2	464.8	437.2	293.5	201.4
60°	455.3	416.6	395.9	278.9	185.1
62.5°	405.4	375.3	367.5	266.0	170.4
65°	358.1	334.8	334.0	253.9	156.7
67.5°	310.7	297.8	301.3	239.3	141.2
70°	265.1	262.5	265.1	220.3	124.8
72.5°	226.4	223.8	230.7	196.2	106.7
75°	190.2	187.6	195.4	168.7	91.2
77.5°	151.5	153.2	158.4	140.3	76.6
80°	117.9	117.9	123.9	110.2	62.8
82.5°	84.4	85.2	88.7	80.9	49.1
85°	51.6	51.6	54.2	53.4	34.4
87.5°	17.2	19.8	23.2	25.0	17.2
90°	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	16.65	18.01	17.02	18.32	18.64	12.99	14.34	13.35	14.65	14.97
	3H	18.39	19.60	18.77	19.93	20.29	14.96	16.17	15.34	16.50	16.86
	4H	19.06	20.19	19.47	20.54	20.92	15.67	16.79	16.07	17.14	17.53
	6H	19.57	20.61	19.98	20.98	21.37	16.19	17.23	16.60	17.60	17.99
	8H	19.74	20.73	20.17	21.12	21.52	16.37	17.36	16.80	17.75	18.15
	12H	19.85	20.79	20.28	21.18	21.61	16.51	17.46	16.95	17.84	18.27
4H	2H	17.18	18.31	17.59	18.66	19.04	14.61	15.74	15.01	16.09	16.47
	3H	19.16	20.09	19.57	20.49	20.90	16.79	17.72	17.20	18.12	18.52
	4H	19.96	20.80	20.40	21.22	21.66	17.67	18.50	18.10	18.92	19.36
	6H	20.61	21.33	21.07	21.78	22.24	18.31	19.03	18.77	19.48	19.94
	8H	20.83	21.50	21.29	21.95	22.42	18.52	19.19	18.99	19.64	20.11
	12H	20.98	21.58	21.47	22.06	22.54	18.68	19.28	19.16	19.76	20.23
8H	4H	20.25	20.92	20.72	21.37	21.84	18.31	18.99	18.78	19.44	19.91
	6H	21.03	21.59	21.53	22.08	22.56	19.18	19.73	19.68	20.23	20.71
	8H	21.33	21.83	21.85	22.35	22.84	19.50	20.00	20.02	20.52	21.01
	12H	21.57	22.01	22.08	22.50	23.07	19.77	20.21	20.28	20.70	21.27
12H	4H	20.26	20.86	20.75	21.35	21.82	18.39	18.99	18.87	19.47	19.94
	6H	21.08	21.58	21.60	22.10	22.59	19.31	19.81	19.83	20.33	20.82
	8H	21.45	21.89	21.96	22.38	22.95	19.73	20.17	20.24	20.66	21.23