

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: P893685

Luminaire Tested: 4MB-6SL-A-UNV-L930

Issue Date: 11/11/2024

**Test Information**

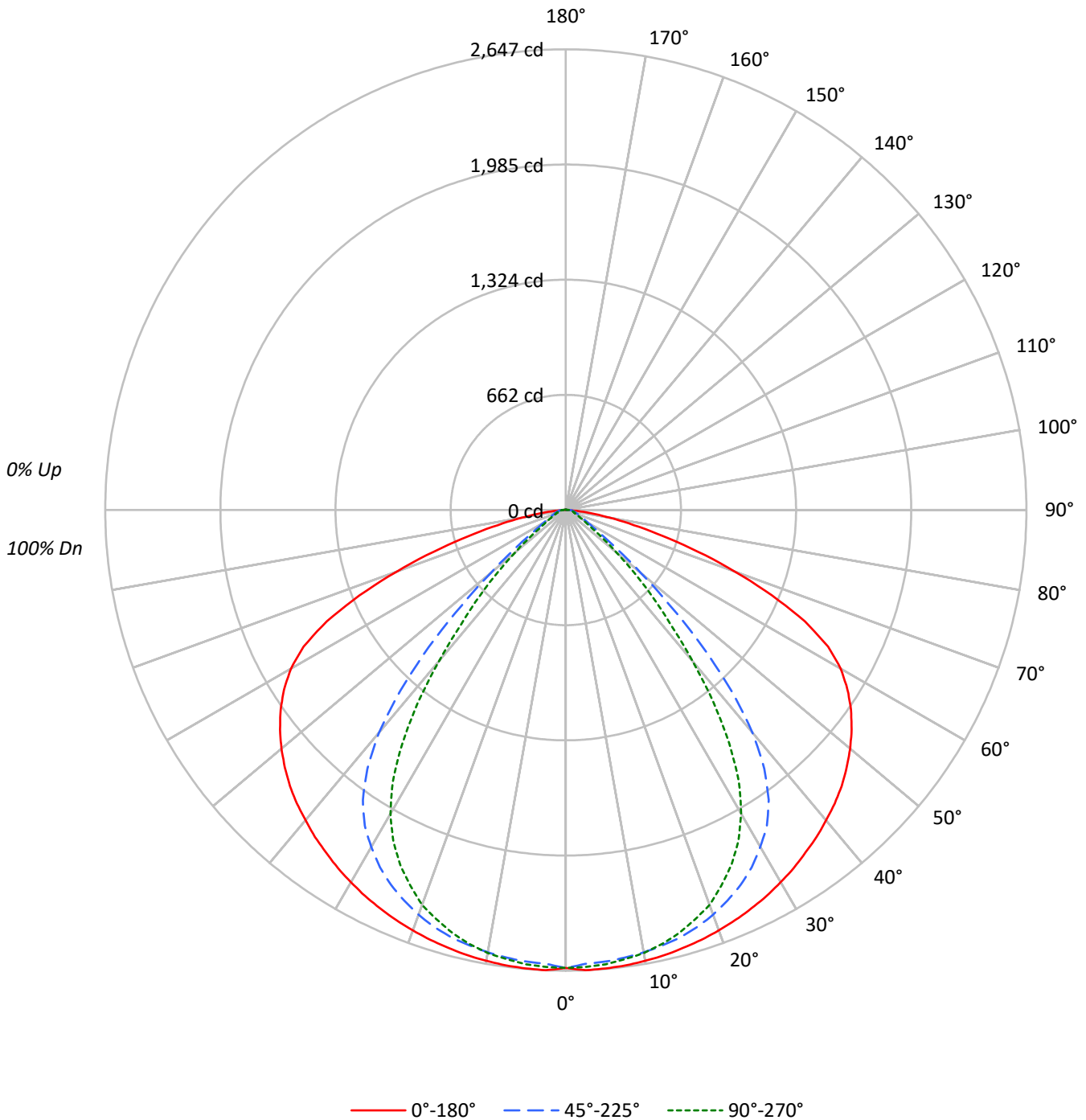
Test Method: LM-79-2019  
Report Number: P893685  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-6SL-A-UNV-L930  
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 3000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5393.0 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 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

TEST NUMBER: P893685  
CATALOG NUMBER: 4MB-6SL-A-UNV-L930

### Luminous Intensity Polar Plot





TEST NUMBER: P893685

CATALOG NUMBER: 4MB-6SL-A-UNV-L930

**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	103	100	108	105	102	99	100	98	96	97	95	93	93	91	90	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	84	81	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	77	73	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	55	64	59	55	64	59	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	59	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	54	49	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	50	44	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	43	38	34	32

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

	0°	45°	90°
0°	26793	26793	26793
5°	27029	26627	26784
10°	27199	26687	26724
15°	27469	26802	26525
20°	27858	26824	26169
25°	28377	26708	25284
30°	29037	26289	23696
35°	29866	25278	20372
40°	30930	22201	15059
45°	32292	16020	10128
50°	33793	8950	6043
55°	35518	4627	3310
60°	37156	3010	2342
65°	36523	2472	1860
70°	30801	2275	1733
75°	22657	2322	1861
80°	15114	2733	2346
85°	8250	4429	3576

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 62.5°  
 Luminance: 37473 cd/sqm



TEST NUMBER: P893685  
 CATALOG NUMBER: 4MB-6SL-A-UNV-L930

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.8	4.6
10°-20°	721.9	13.4
20°-30°	1098.1	20.4
30°-40°	1254.1	23.3
40°-50°	1011.7	18.8
50°-60°	553.8	10.3
60°-70°	292.0	5.4
70°-80°	143.2	2.7
80°-90°	50.4	0.9
90°-100°	10.8	0.2
100°-110°	1.5	0.0
110°-120°	0.9	0.0
120°-130°	0.8	0.0
130°-140°	0.9	0.0
140°-150°	1.1	0.0
150°-160°	1.0	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	2069.8	38.4
0°-40°	3323.9	61.6
0°-60°	4889.4	90.7
0°-90°	5375.0	99.7
90°-120°	13.2	0.2
90°-150°	16.0	0.3
90°-180°	18.0	0.3
0°-180°	5393.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2631	2631	2631	2631	2631	
5°	2644	2636	2605	2628	2620	252
15°	2605	2589	2542	2538	2516	737
25°	2525	2489	2377	2296	2250	1167
35°	2402	2301	2033	1756	1639	1507
45°	2242	1926	1112	760	703	1731
55°	2000	823	261	202	186	1785
65°	1516	190	103	83	77	1466
75°	576	107	59	50	47	636
85°	71	56	38	34	31	97
90°	3	29	23	20	19	4
95°	2	4	8	12	12	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	2	2	1
155°	2	2	2	3	2	1
165°	2	2	3	3	3	0
175°	2	2	3	4	3	0
180°	3	3	3	3	3	



TEST NUMBER: P893685

CATALOG NUMBER: 4MB-6SL-A-UNV-L930

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2630.8	2630.8	2630.8	2630.8	2630.8
2.5°	2646.8	2639.5	2609.7	2635.2	2627.9
5°	2643.9	2635.9	2604.6	2627.9	2619.9
7.5°	2638.8	2628.6	2594.4	2615.5	2603.1
10°	2630.1	2619.9	2580.6	2597.3	2584.2
12.5°	2619.9	2606.1	2562.4	2571.1	2554.4
15°	2605.3	2589.3	2542.0	2537.6	2515.8
17.5°	2589.3	2569.7	2512.2	2493.2	2467.0
20°	2570.4	2546.4	2475.0	2437.9	2414.6
22.5°	2549.3	2518.0	2428.4	2371.7	2335.3
25°	2525.3	2488.9	2376.8	2295.9	2250.1
27.5°	2499.8	2450.3	2314.1	2207.9	2146.0
30°	2469.2	2409.5	2235.5	2092.1	2015.0
32.5°	2438.6	2358.6	2151.1	1942.9	1851.2
35°	2402.2	2301.0	2033.2	1756.5	1638.6
37.5°	2368.0	2231.9	1873.7	1522.9	1396.2
40°	2326.5	2150.4	1669.9	1254.3	1132.7
42.5°	2287.2	2055.7	1405.7	995.1	889.6
45°	2242.1	1926.2	1112.3	760.0	703.2
47.5°	2189.7	1749.3	808.8	565.6	529.9
50°	2132.9	1506.1	564.9	410.6	381.4
52.5°	2070.3	1177.8	380.7	285.4	269.3
55°	2000.4	823.3	260.6	201.6	186.4
57.5°	1919.6	535.8	189.3	152.1	141.9
60°	1824.2	342.1	147.8	120.8	115.0
62.5°	1699.0	240.2	121.6	99.7	94.6
65°	1515.6	190.0	102.6	83.0	77.2
67.5°	1283.4	160.9	88.1	69.9	66.2
70°	1034.4	139.8	76.4	60.4	58.2
72.5°	794.9	122.3	66.2	53.9	52.4
75°	575.8	107.0	59.0	49.5	47.3
77.5°	398.9	92.4	52.4	44.4	42.9
80°	257.7	80.1	46.6	40.8	40.0
82.5°	147.8	67.0	42.2	39.3	38.6
85°	70.6	56.1	37.9	34.2	30.6
87.5°	22.6	41.5	29.8	26.2	23.3
90°	2.9	29.1	23.3	20.4	18.9
92.5°	2.9	16.0	16.7	16.7	16.0
95°	2.2	3.6	8.0	12.4	11.6
97.5°	2.2	1.5	5.1	8.7	8.7
100°	1.5	0.7	2.2	5.8	5.8
102.5°	1.5	0.7	0.7	3.6	3.6
105°	0.7	0.0	0.7	1.5	1.5
107.5°	0.7	0.7	0.7	1.5	0.7
110°	0.7	0.7	0.7	1.5	0.7



TEST NUMBER: P893685  
 CATALOG NUMBER: 4MB-6SL-A-UNV-L930

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	0.7	1.5	0.7
115°	0.7	0.7	0.7	1.5	0.7
117.5°	0.7	0.7	0.7	1.5	0.7
120°	0.7	0.7	0.7	1.5	0.7
122.5°	0.7	0.7	0.7	1.5	0.7
125°	0.7	0.7	0.7	1.5	0.7
127.5°	0.7	0.7	0.7	1.5	0.7
130°	0.7	0.7	1.5	1.5	0.7
132.5°	0.7	0.7	1.5	1.5	0.7
135°	0.7	0.7	1.5	1.5	0.7
137.5°	0.7	0.7	1.5	1.5	1.5
140°	1.5	0.7	1.5	1.5	1.5
142.5°	1.5	1.5	1.5	2.2	1.5
145°	1.5	1.5	1.5	2.2	1.5
147.5°	1.5	1.5	2.2	2.2	1.5
150°	1.5	1.5	2.2	2.2	1.5
152.5°	1.5	1.5	2.2	2.2	2.2
155°	1.5	1.5	2.2	2.9	2.2
157.5°	1.5	1.5	2.2	2.9	2.2
160°	1.5	2.2	2.9	2.9	2.2
162.5°	1.5	2.2	2.9	2.9	2.9
165°	1.5	2.2	2.9	2.9	2.9
167.5°	2.2	2.2	2.9	3.6	2.9
170°	2.2	2.2	2.9	3.6	2.9
172.5°	2.2	2.2	2.9	3.6	2.9
175°	2.2	2.2	2.9	3.6	2.9
177.5°	2.2	2.2	2.9	3.6	3.6
180°	2.9	2.9	2.9	2.9	2.9



TEST NUMBER: P893685  
 CATALOG NUMBER: 4MB-6SL-A-UNV-L930

**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	21.33	22.73	21.70	23.05	23.37	9.84	11.24	10.21	11.56	11.89
	3H	24.24	25.49	24.63	25.82	26.19	10.78	12.02	11.16	12.36	12.73
	4H	25.13	26.30	25.54	26.65	27.04	11.30	12.46	11.70	12.82	13.21
	6H	25.63	26.70	26.05	27.08	27.48	11.93	13.00	12.35	13.38	13.78
	8H	25.74	26.76	26.18	27.16	27.57	12.35	13.36	12.78	13.76	14.17
	12H	25.79	26.76	26.22	27.15	27.59	12.80	13.77	13.23	14.16	14.60
4H	2H	21.14	22.31	21.55	22.66	23.05	10.36	11.52	10.77	11.88	12.27
	3H	24.07	25.03	24.49	25.44	25.85	11.55	12.51	11.97	12.92	13.33
	4H	24.98	25.83	25.42	26.26	26.71	12.22	13.08	12.66	13.50	13.95
	6H	25.57	26.31	26.04	26.76	27.23	13.04	13.78	13.51	14.24	14.71
	8H	25.73	26.42	26.20	26.88	27.35	13.58	14.27	14.05	14.72	15.20
	12H	25.82	26.44	26.31	26.93	27.41	14.16	14.77	14.65	15.26	15.74
8H	4H	24.87	25.56	25.34	26.01	26.49	12.81	13.50	13.29	13.96	14.43
	6H	25.47	26.04	25.97	26.54	27.02	13.82	14.39	14.32	14.89	15.38
	8H	25.65	26.17	26.18	26.69	27.19	14.49	15.01	15.02	15.52	16.02
	12H	25.80	26.26	26.32	26.76	27.33	15.26	15.71	15.78	16.21	16.79
12H	4H	24.83	25.44	25.32	25.93	26.41	13.07	13.69	13.56	14.18	14.66
	6H	25.42	25.93	25.94	26.45	26.95	14.13	14.64	14.65	15.16	15.66
	8H	25.63	26.09	26.15	26.59	27.16	14.89	15.35	15.41	15.85	16.42