

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: P893682

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

Issue Date: 11/11/2024

**Test Information**

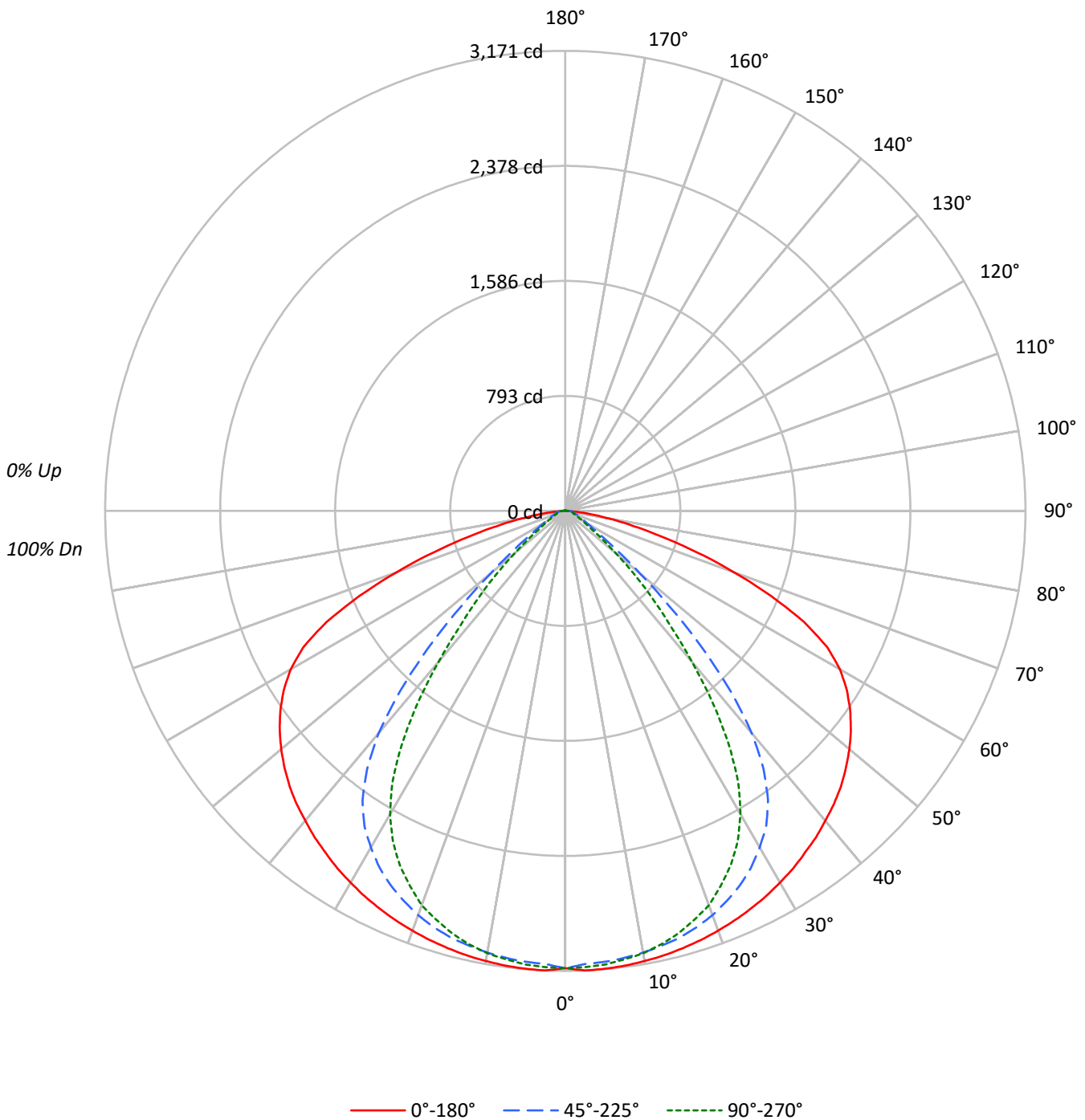
Test Method: LM-79-2019  
Report Number: P893682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-6SL-A-UNV-L835  
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6461.0 lumens  
Efficiency: N/A  
Efficacy: 145.5 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 (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

TEST NUMBER: P893682  
CATALOG NUMBER: 4MB-6SL-A-UNV-L835

### Luminous Intensity Polar Plot





TEST NUMBER: P893682

CATALOG NUMBER: 4MB-6SL-A-UNV-L835

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

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

	0°	45°	90°
0°	32099	32099	32099
5°	32382	31900	32087
10°	32584	31971	32017
15°	32909	32109	31778
20°	33374	32136	31352
25°	33995	31996	30292
30°	34788	31495	28388
35°	35781	30283	24406
40°	37056	26597	18041
45°	38687	19193	12134
50°	40486	10723	7241
55°	42553	5543	3965
60°	44515	3605	2807
65°	43755	2964	2227
70°	36902	2728	2078
75°	27143	2778	2231
80°	18105	3273	2815
85°	9886	5293	4277

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 62.5°  
 Luminance: 44894 cd/sqm



TEST NUMBER: P893682  
 CATALOG NUMBER: 4MB-6SL-A-UNV-L835

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.3	4.6
10°-20°	864.8	13.4
20°-30°	1315.6	20.4
30°-40°	1502.5	23.3
40°-50°	1212.1	18.8
50°-60°	663.5	10.3
60°-70°	349.8	5.4
70°-80°	171.5	2.7
80°-90°	60.4	0.9
90°-100°	13.0	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°	2479.7	38.4
0°-40°	3982.1	61.6
0°-60°	5857.7	90.7
0°-90°	6439.5	99.7
90°-120°	15.9	0.2
90°-150°	19.2	0.3
90°-180°	22.0	0.3
0°-180°	6461.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3152	3152	3152	3152	3152	
5°	3168	3158	3120	3148	3139	302
15°	3121	3102	3045	3040	3014	883
25°	3025	2982	2847	2751	2696	1398
35°	2878	2757	2436	2104	1963	1805
45°	2686	2308	1333	910	842	2073
55°	2397	986	312	242	223	2138
65°	1816	228	123	99	92	1756
75°	690	128	71	59	57	762
85°	85	67	45	41	37	117
90°	4	35	28	24	23	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	4	3	1
165°	2	3	4	4	4	1
175°	3	3	4	4	4	0
180°	4	4	4	4	4	



TEST NUMBER: P893682

CATALOG NUMBER: 4MB-6SL-A-UNV-L835

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3151.8	3151.8	3151.8	3151.8	3151.8
2.5°	3171.0	3162.3	3126.5	3157.0	3148.3
5°	3167.5	3157.9	3120.4	3148.3	3138.7
7.5°	3161.4	3149.2	3108.2	3133.5	3118.7
10°	3150.9	3138.7	3091.6	3111.7	3096.0
12.5°	3138.7	3122.1	3069.8	3080.3	3060.2
15°	3121.3	3102.1	3045.4	3040.2	3014.0
17.5°	3102.1	3078.5	3009.6	2987.0	2955.6
20°	3079.4	3050.6	2965.2	2920.7	2892.8
22.5°	3054.1	3016.6	2909.4	2841.3	2797.7
25°	3025.3	2981.7	2847.4	2750.6	2695.7
27.5°	2994.8	2935.5	2772.4	2645.1	2571.0
30°	2958.2	2886.7	2678.2	2506.4	2414.0
32.5°	2921.6	2825.6	2577.1	2327.7	2217.8
35°	2878.0	2756.7	2435.8	2104.4	1963.1
37.5°	2837.0	2673.9	2244.8	1824.4	1672.7
40°	2787.3	2576.2	2000.6	1502.6	1357.0
42.5°	2740.2	2462.8	1684.0	1192.2	1065.7
45°	2686.1	2307.6	1332.6	910.5	842.5
47.5°	2623.3	2095.7	968.9	677.6	634.9
50°	2555.3	1804.4	676.8	491.9	457.0
52.5°	2480.3	1411.1	456.1	341.9	322.7
55°	2396.6	986.4	312.2	241.6	223.3
57.5°	2299.7	641.9	226.7	182.3	170.1
60°	2185.5	409.9	177.0	144.8	137.8
62.5°	2035.5	287.8	145.6	119.5	113.4
65°	1815.7	227.6	123.0	99.4	92.4
67.5°	1537.5	192.7	105.5	83.7	79.4
70°	1239.3	167.4	91.6	72.4	69.8
72.5°	952.3	146.5	79.4	64.5	62.8
75°	689.8	128.2	70.6	59.3	56.7
77.5°	477.9	110.8	62.8	53.2	51.5
80°	308.7	95.9	55.8	48.8	48.0
82.5°	177.0	80.2	50.6	47.1	46.2
85°	84.6	67.2	45.3	41.0	36.6
87.5°	27.0	49.7	35.8	31.4	27.9
90°	3.5	34.9	27.9	24.4	22.7
92.5°	3.5	19.2	20.1	20.1	19.2
95°	2.6	4.4	9.6	14.8	14.0
97.5°	2.6	1.7	6.1	10.5	10.5
100°	1.7	0.9	2.6	7.0	7.0
102.5°	1.7	0.9	0.9	4.4	4.4
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



TEST NUMBER: P893682

CATALOG NUMBER: 4MB-6SL-A-UNV-L835

**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	3.5	2.6
157.5°	1.7	1.7	2.6	3.5	2.6
160°	1.7	2.6	3.5	3.5	2.6
162.5°	1.7	2.6	3.5	3.5	3.5
165°	1.7	2.6	3.5	3.5	3.5
167.5°	2.6	2.6	3.5	4.4	3.5
170°	2.6	2.6	3.5	4.4	3.5
172.5°	2.6	2.6	3.5	4.4	3.5
175°	2.6	2.6	3.5	4.4	3.5
177.5°	2.6	2.6	3.5	4.4	4.4
180°	3.5	3.5	3.5	3.5	3.5



TEST NUMBER: P893682  
 CATALOG NUMBER: 4MB-6SL-A-UNV-L835

**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	21.96	23.36	22.33	23.68	24.00	10.47	11.87	10.84	12.19	12.52
	3H	24.87	26.11	25.25	26.45	26.82	11.41	12.65	11.79	12.99	13.36
	4H	25.76	26.92	26.17	27.28	27.67	11.93	13.09	12.33	13.45	13.84
	6H	26.26	27.33	26.68	27.70	28.11	12.56	13.63	12.98	14.01	14.41
	8H	26.37	27.39	26.80	27.78	28.20	12.98	14.00	13.41	14.39	14.80
	12H	26.41	27.39	26.85	27.78	28.21	13.43	14.40	13.86	14.79	15.23
4H	2H	21.77	22.94	22.18	23.29	23.68	10.99	12.15	11.40	12.51	12.90
	3H	24.70	25.66	25.12	26.07	26.48	12.18	13.14	12.60	13.55	13.96
	4H	25.60	26.46	26.04	26.88	27.33	12.85	13.71	13.29	14.13	14.58
	6H	26.20	26.94	26.66	27.39	27.86	13.67	14.42	14.14	14.87	15.34
	8H	26.36	27.05	26.83	27.50	27.98	14.21	14.90	14.68	15.35	15.83
	12H	26.45	27.07	26.94	27.55	28.03	14.78	15.40	15.27	15.89	16.37
8H	4H	25.49	26.19	25.97	26.64	27.12	13.44	14.13	13.92	14.59	15.06
	6H	26.09	26.66	26.60	27.16	27.65	14.45	15.02	14.95	15.52	16.01
	8H	26.28	26.80	26.81	27.31	27.81	15.12	15.64	15.65	16.15	16.65
	12H	26.43	26.88	26.95	27.38	27.96	15.89	16.34	16.40	16.84	17.42
12H	4H	25.46	26.07	25.95	26.56	27.04	13.70	14.32	14.19	14.81	15.29
	6H	26.04	26.56	26.57	27.08	27.57	14.76	15.27	15.28	15.79	16.29
	8H	26.26	26.71	26.78	27.21	27.79	15.52	15.98	16.04	16.48	17.05