

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: P893684

Luminaire Tested: 4MB-6SL-A-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893684
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-L850
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

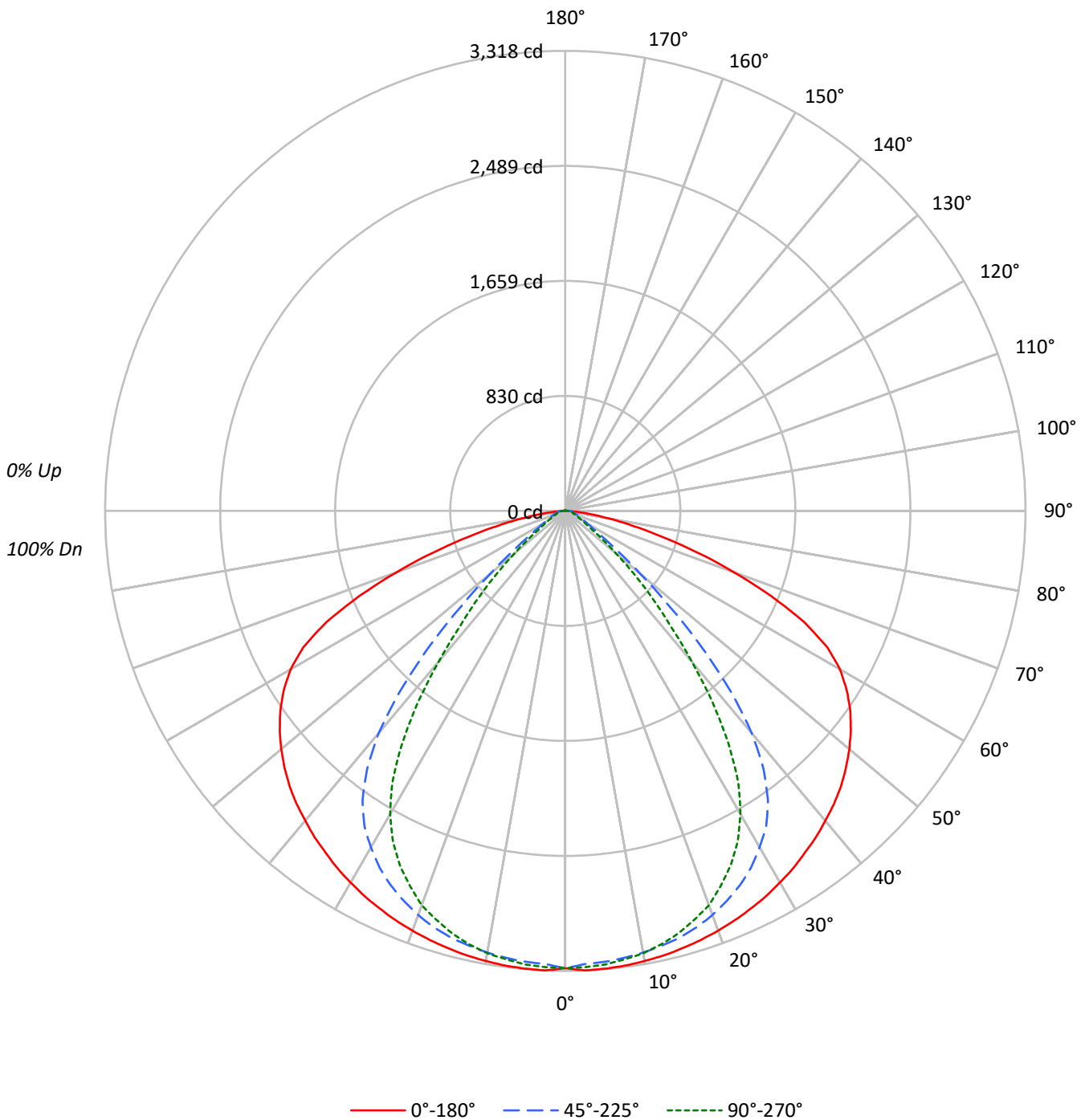
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6759.9 lumens
Efficiency: N/A
Efficacy: 152.2 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_{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

TEST NUMBER: P893684
CATALOG NUMBER: 4MB-6SL-A-UNV-L850

Luminous Intensity Polar Plot





TEST NUMBER: P893684

CATALOG NUMBER: 4MB-6SL-A-UNV-L850

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	56	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°	33584	33584	33584
5°	33880	33376	33573
10°	34092	33451	33499
15°	34432	33595	33249
20°	34918	33623	32803
25°	35569	33477	31693
30°	36397	32953	29702
35°	37436	31685	25537
40°	38770	27828	18876
45°	40477	20080	12694
50°	42358	11219	7575
55°	44522	5801	4148
60°	46574	3772	2937
65°	45781	3101	2330
70°	38608	2853	2174
75°	28402	2908	2333
80°	18943	3425	2944
85°	10341	5539	4475

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 46972 cd/sqm



TEST NUMBER: P893684
 CATALOG NUMBER: 4MB-6SL-A-UNV-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.1	4.6
10°-20°	904.9	13.4
20°-30°	1376.4	20.4
30°-40°	1572.0	23.3
40°-50°	1268.2	18.8
50°-60°	694.2	10.3
60°-70°	366.0	5.4
70°-80°	179.5	2.7
80°-90°	63.2	0.9
90°-100°	13.6	0.2
100°-110°	1.9	0.0
110°-120°	1.1	0.0
120°-130°	1.0	0.0
130°-140°	1.1	0.0
140°-150°	1.3	0.0
150°-160°	1.2	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	2594.4	38.4
0°-40°	4166.4	61.6
0°-60°	6128.8	90.7
0°-90°	6737.5	99.7
90°-120°	16.6	0.2
90°-150°	20.0	0.3
90°-180°	22.0	0.3
0°-180°	6759.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3298	3298	3298	3298	3298	
5°	3314	3304	3265	3294	3284	316
15°	3266	3246	3186	3181	3154	924
25°	3165	3120	2979	2878	2820	1462
35°	3011	2884	2548	2202	2054	1889
45°	2810	2414	1394	953	881	2169
55°	2508	1032	327	253	234	2237
65°	1900	238	129	104	97	1837
75°	722	134	74	62	59	797
85°	88	70	47	43	38	122
90°	4	36	29	26	24	5
95°	3	5	10	16	15	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	5	4	0
180°	4	4	4	4	4	



TEST NUMBER: P893684

CATALOG NUMBER: 4MB-6SL-A-UNV-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3297.7	3297.7	3297.7	3297.7	3297.7
2.5°	3317.7	3308.6	3271.2	3303.1	3294.0
5°	3314.1	3304.0	3264.8	3294.0	3284.0
7.5°	3307.7	3294.9	3252.0	3278.5	3263.0
10°	3296.7	3284.0	3234.7	3255.7	3239.3
12.5°	3284.0	3266.6	3211.9	3222.8	3201.8
15°	3265.7	3245.6	3186.3	3180.9	3153.5
17.5°	3245.6	3221.0	3148.9	3125.2	3092.3
20°	3221.9	3191.8	3102.4	3055.9	3026.7
22.5°	3195.5	3156.2	3044.0	2972.8	2927.2
25°	3165.3	3119.7	2979.2	2877.9	2820.4
27.5°	3133.4	3071.4	2900.7	2767.5	2690.0
30°	3095.1	3020.3	2802.2	2622.4	2525.7
32.5°	3056.8	2956.4	2696.3	2435.4	2320.4
35°	3011.1	2884.3	2548.5	2201.8	2054.0
37.5°	2968.3	2797.6	2348.7	1908.9	1750.1
40°	2916.2	2695.4	2093.2	1572.2	1419.8
42.5°	2867.0	2576.8	1762.0	1247.3	1115.0
45°	2810.4	2414.4	1394.2	952.6	881.4
47.5°	2744.7	2192.7	1013.8	709.0	664.3
50°	2673.5	1887.9	708.1	514.6	478.1
52.5°	2595.1	1476.4	477.2	357.7	337.6
55°	2507.5	1032.0	326.7	252.8	233.6
57.5°	2406.2	671.6	237.2	190.7	177.9
60°	2286.6	428.9	185.2	151.5	144.2
62.5°	2129.7	301.1	152.4	125.0	118.6
65°	1899.8	238.2	128.7	104.0	96.7
67.5°	1608.7	201.7	110.4	87.6	83.0
70°	1296.6	175.2	95.8	75.7	73.0
72.5°	996.4	153.3	83.0	67.5	65.7
75°	721.8	134.1	73.9	62.0	59.3
77.5°	500.0	115.9	65.7	55.7	53.8
80°	323.0	100.4	58.4	51.1	50.2
82.5°	185.2	83.9	52.9	49.3	48.4
85°	88.5	70.3	47.4	42.9	38.3
87.5°	28.3	52.0	37.4	32.8	29.2
90°	3.6	36.5	29.2	25.5	23.7
92.5°	3.6	20.1	21.0	21.0	20.1
95°	2.7	4.6	10.0	15.5	14.6
97.5°	2.7	1.8	6.4	10.9	10.9
100°	1.8	0.9	2.7	7.3	7.3
102.5°	1.8	0.9	0.9	4.6	4.6
105°	0.9	0.0	0.9	1.8	1.8
107.5°	0.9	0.9	0.9	1.8	0.9
110°	0.9	0.9	0.9	1.8	0.9



TEST NUMBER: P893684

CATALOG NUMBER: 4MB-6SL-A-UNV-L850

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.9	1.8	0.9
115°	0.9	0.9	0.9	1.8	0.9
117.5°	0.9	0.9	0.9	1.8	0.9
120°	0.9	0.9	0.9	1.8	0.9
122.5°	0.9	0.9	0.9	1.8	0.9
125°	0.9	0.9	0.9	1.8	0.9
127.5°	0.9	0.9	0.9	1.8	0.9
130°	0.9	0.9	1.8	1.8	0.9
132.5°	0.9	0.9	1.8	1.8	0.9
135°	0.9	0.9	1.8	1.8	0.9
137.5°	0.9	0.9	1.8	1.8	1.8
140°	1.8	0.9	1.8	1.8	1.8
142.5°	1.8	1.8	1.8	2.7	1.8
145°	1.8	1.8	1.8	2.7	1.8
147.5°	1.8	1.8	2.7	2.7	1.8
150°	1.8	1.8	2.7	2.7	1.8
152.5°	1.8	1.8	2.7	2.7	2.7
155°	1.8	1.8	2.7	3.6	2.7
157.5°	1.8	1.8	2.7	3.6	2.7
160°	1.8	2.7	3.6	3.6	2.7
162.5°	1.8	2.7	3.6	3.6	3.6
165°	1.8	2.7	3.6	3.6	3.6
167.5°	2.7	2.7	3.6	4.6	3.6
170°	2.7	2.7	3.6	4.6	3.6
172.5°	2.7	2.7	3.6	4.6	3.6
175°	2.7	2.7	3.6	4.6	3.6
177.5°	2.7	2.7	3.6	4.6	4.6
180°	3.6	3.6	3.6	3.6	3.6



TEST NUMBER: P893684
 CATALOG NUMBER: 4MB-6SL-A-UNV-L850

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	22.11	23.51	22.49	23.83	24.16	10.63	12.03	11.00	12.35	12.67
	3H	25.03	26.27	25.41	26.61	26.98	11.56	12.81	11.95	13.15	13.52
	4H	25.92	27.08	26.33	27.44	27.83	12.08	13.25	12.49	13.60	13.99
	6H	26.42	27.49	26.84	27.86	28.26	12.72	13.79	13.14	14.16	14.56
	8H	26.53	27.54	26.96	27.94	28.35	13.14	14.15	13.57	14.55	14.96
	12H	26.57	27.54	27.01	27.93	28.37	13.58	14.55	14.02	14.94	15.38
4H	2H	21.93	23.09	22.34	23.45	23.84	11.15	12.31	11.56	12.67	13.06
	3H	24.86	25.81	25.28	26.22	26.63	12.34	13.29	12.76	13.70	14.11
	4H	25.76	26.62	26.20	27.04	27.49	13.01	13.86	13.45	14.29	14.74
	6H	26.36	27.10	26.82	27.55	28.02	13.83	14.57	14.30	15.02	15.49
	8H	26.52	27.21	26.99	27.66	28.14	14.36	15.06	14.84	15.51	15.98
	12H	26.61	27.22	27.10	27.71	28.19	14.94	15.56	15.43	16.04	16.53
8H	4H	25.65	26.34	26.12	26.80	27.27	13.60	14.29	14.07	14.74	15.22
	6H	26.25	26.82	26.76	27.32	27.81	14.60	15.17	15.11	15.67	16.16
	8H	26.44	26.95	26.96	27.47	27.97	15.28	15.79	15.80	16.31	16.81
	12H	26.59	27.04	27.10	27.54	28.12	16.04	16.50	16.56	17.00	17.58
12H	4H	25.61	26.23	26.10	26.72	27.20	13.86	14.47	14.35	14.96	15.44
	6H	26.20	26.71	26.72	27.23	27.73	14.91	15.43	15.44	15.95	16.44
	8H	26.42	26.87	26.93	27.37	27.95	15.68	16.13	16.20	16.63	17.21