

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: P893698

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-14)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-6SL-AOL-UNV-L835
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 8
3500K CCT
Light Source: -
Ballast/Driver: -

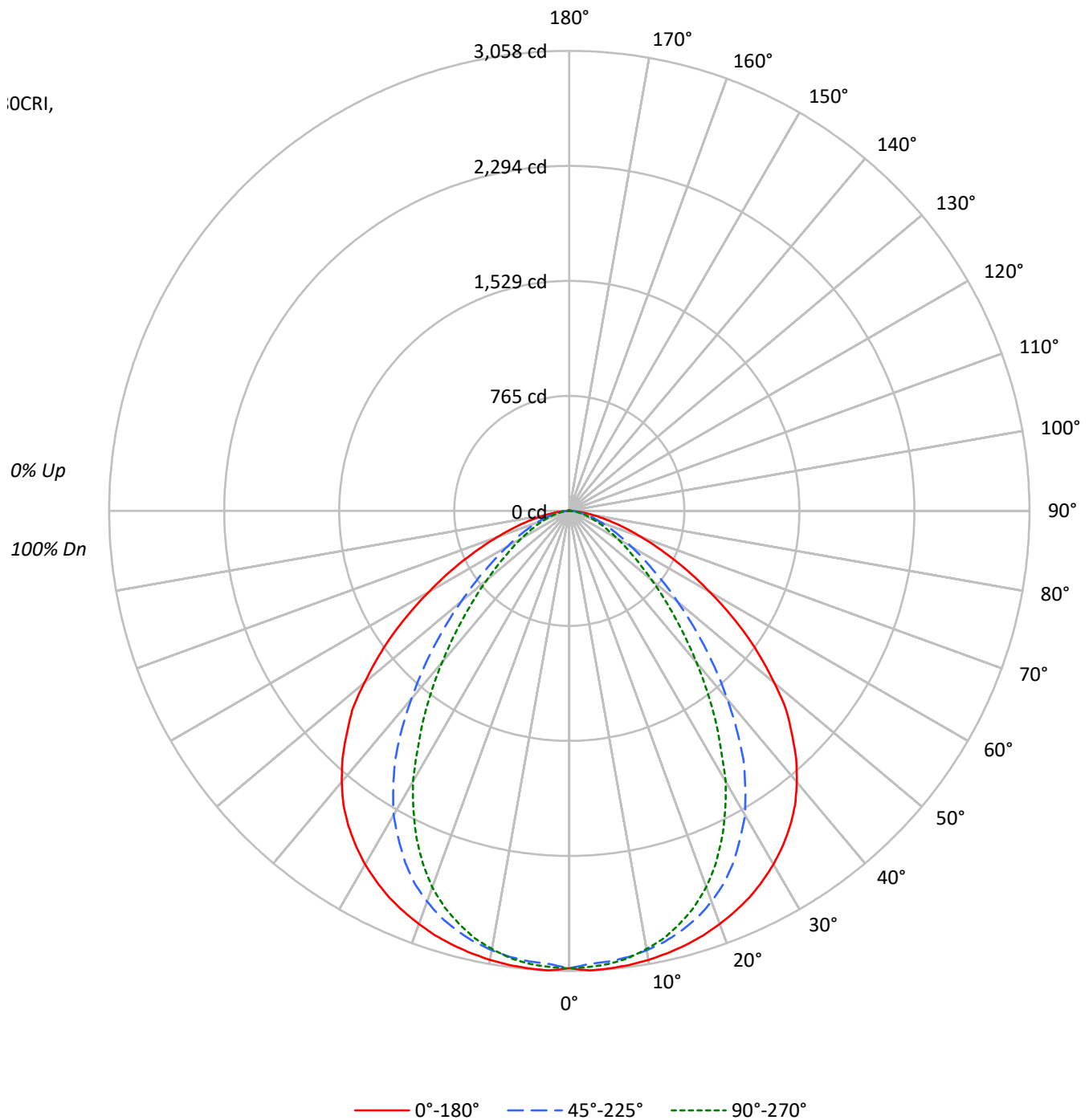
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6072.9 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	104	101	98	100	98	95	96	94	92	93	91	89	89	89	89	87
2	102	95	89	85	100	93	88	84	90	85	82	87	83	80	84	81	78	78	78	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	70	76	72	68	68	68	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	60	60	60	58
5	81	70	62	56	79	69	61	55	67	60	55	65	59	54	63	58	54	54	54	54	52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	48	48	48	46
7	70	58	50	45	69	57	50	44	56	49	44	54	48	44	53	48	43	43	43	43	42
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	39	39	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	36	36	36	34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	33	33	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30961	30961	30961
5°	31213	30741	30901
10°	31340	30663	30582
15°	31502	30444	29939
20°	31672	29952	28847
25°	31849	28978	26979
30°	31905	27454	24428
35°	31801	25079	21012
40°	31270	21705	17461
45°	30107	18238	14130
50°	28173	14854	11317
55°	25456	11939	9075
60°	21955	9716	7514
65°	18577	8092	6179
70°	15165	6881	5247
75°	12147	5800	4462
80°	9460	4962	3836
85°	7338	4382	3470

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30107 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.9	4.7
10°-20°	819.2	13.5
20°-30°	1194.1	19.7
30°-40°	1287.1	21.2
40°-50°	1079.0	17.8
50°-60°	730.5	12.0
60°-70°	416.6	6.9
70°-80°	190.5	3.1
80°-90°	49.9	0.8
90°-100°	6.1	0.1
100°-110°	4.2	0.1
110°-120°	2.3	0.0
120°-130°	1.3	0.0
130°-140°	1.2	0.0
140°-150°	1.1	0.0
150°-160°	0.9	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	2301.2	37.9
0°-40°	3588.3	59.1
0°-60°	5397.9	88.9
0°-90°	6054.8	99.7
90°-120°	12.6	0.2
90°-150°	16.2	0.3
90°-180°	18.0	0.3
0°-180°	6072.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3040	3040	3040	3040	3040	
5°	3053	3044	3007	3031	3023	291
15°	2988	2962	2888	2868	2840	844
25°	2834	2759	2579	2460	2401	1306
35°	2558	2365	2017	1770	1690	1597
45°	2090	1744	1266	1044	981	1609
55°	1434	1049	672	545	511	1277
65°	771	536	336	272	256	769
75°	309	227	147	120	113	337
85°	63	53	38	31	30	73
90°	9	9	5	4	4	9
95°	13	8	4	3	3	10
105°	9	6	3	2	1	9
115°	4	4	2	1	1	4
125°	2	2	2	1	1	2
135°	1	2	2	2	1	1
145°	2	2	2	2	2	1
155°	2	2	2	3	3	1
165°	2	3	3	3	3	0
175°	3	3	3	4	4	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3040.1	3040.1	3040.1	3040.1	3040.1
2.5°	3057.6	3049.7	3014.9	3043.6	3034.9
5°	3053.2	3043.6	3007.0	3031.4	3022.7
7.5°	3044.5	3032.3	2991.3	3009.6	2998.3
10°	3030.6	3015.7	2965.1	2975.6	2957.3
12.5°	3011.4	2993.1	2932.9	2930.3	2908.5
15°	2987.8	2961.7	2887.5	2868.3	2839.6
17.5°	2959.0	2925.9	2833.5	2795.1	2760.2
20°	2922.4	2879.7	2763.7	2702.6	2661.7
22.5°	2880.6	2823.0	2682.6	2584.9	2540.4
25°	2834.3	2759.3	2578.8	2460.2	2400.9
27.5°	2776.8	2682.6	2458.5	2305.0	2243.9
30°	2713.1	2593.6	2334.6	2138.4	2077.3
32.5°	2640.7	2491.6	2176.8	1958.7	1873.3
35°	2557.9	2365.1	2017.2	1770.4	1690.1
37.5°	2464.6	2233.5	1826.2	1580.2	1499.1
40°	2352.1	2077.3	1632.6	1389.3	1313.4
42.5°	2230.8	1918.6	1446.8	1207.9	1142.5
45°	2090.4	1744.2	1266.3	1043.9	981.1
47.5°	1955.3	1568.0	1097.1	893.9	842.5
50°	1778.2	1380.5	937.5	757.0	714.3
52.5°	1605.5	1207.0	801.5	647.1	607.0
55°	1433.7	1049.1	672.4	545.1	511.1
57.5°	1252.3	894.8	566.0	461.3	438.7
60°	1077.9	761.3	477.0	387.2	368.9
62.5°	918.3	638.4	403.8	327.0	309.6
65°	770.9	536.3	335.8	272.1	256.4
67.5°	631.4	441.3	279.9	226.7	215.4
70°	509.3	357.6	231.1	186.6	176.2
72.5°	403.8	286.0	184.9	152.6	141.3
75°	308.7	226.7	147.4	120.4	113.4
77.5°	230.2	170.9	113.4	92.4	87.2
80°	161.3	123.8	84.6	69.8	65.4
82.5°	109.9	85.5	59.3	48.8	46.2
85°	62.8	53.2	37.5	31.4	29.7
87.5°	32.3	27.9	20.1	14.8	13.1
90°	8.7	8.7	5.2	4.4	3.5
92.5°	14.0	7.8	5.2	3.5	2.6
95°	13.1	7.8	4.4	2.6	2.6
97.5°	12.2	7.8	3.5	2.6	1.7
100°	11.3	7.0	3.5	1.7	1.7
102.5°	10.5	7.0	3.5	1.7	1.7
105°	8.7	6.1	2.6	1.7	0.9
107.5°	7.8	5.2	2.6	1.7	0.9
110°	6.1	4.4	2.6	1.7	0.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.2	4.4	1.7	1.7	0.9
115°	4.4	3.5	1.7	0.9	0.9
117.5°	3.5	2.6	1.7	0.9	0.9
120°	2.6	2.6	1.7	0.9	0.9
122.5°	2.6	1.7	1.7	0.9	0.9
125°	1.7	1.7	1.7	0.9	0.9
127.5°	1.7	1.7	1.7	0.9	0.9
130°	1.7	1.7	1.7	0.9	0.9
132.5°	1.7	1.7	1.7	1.7	0.9
135°	0.9	1.7	1.7	1.7	0.9
137.5°	1.7	1.7	1.7	1.7	1.7
140°	1.7	1.7	1.7	1.7	1.7
142.5°	1.7	1.7	1.7	1.7	1.7
145°	1.7	1.7	1.7	1.7	1.7
147.5°	1.7	1.7	1.7	1.7	1.7
150°	1.7	1.7	1.7	1.7	1.7
152.5°	1.7	1.7	1.7	1.7	1.7
155°	1.7	1.7	1.7	2.6	2.6
157.5°	1.7	1.7	2.6	2.6	2.6
160°	1.7	1.7	2.6	2.6	2.6
162.5°	1.7	1.7	2.6	2.6	2.6
165°	1.7	2.6	2.6	2.6	2.6
167.5°	1.7	2.6	2.6	2.6	3.5
170°	1.7	2.6	2.6	3.5	3.5
172.5°	1.7	2.6	2.6	3.5	3.5
175°	2.6	2.6	2.6	3.5	3.5
177.5°	2.6	2.6	2.6	3.5	3.5
180°	2.6	2.6	2.6	2.6	2.6



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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	22.30	23.73	22.67	24.05	24.38	17.14	18.58	17.51	18.90	19.22
	3H	23.60	24.89	23.99	25.22	25.59	18.15	19.43	18.53	19.77	20.14
	4H	24.03	25.23	24.43	25.58	25.97	18.49	19.68	18.89	20.04	20.43
	6H	24.29	25.40	24.71	25.77	26.17	18.71	19.82	19.13	20.19	20.59
	8H	24.37	25.42	24.80	25.81	26.22	18.78	19.83	19.21	20.22	20.63
	12H	24.40	25.41	24.84	25.80	26.23	18.82	19.83	19.26	20.21	20.65
4H	2H	22.29	23.49	22.70	23.85	24.24	17.76	18.96	18.17	19.32	19.70
	3H	23.76	24.75	24.18	25.15	25.56	18.96	19.95	19.38	20.35	20.76
	4H	24.28	25.17	24.72	25.59	26.04	19.37	20.26	19.81	20.68	21.13
	6H	24.66	25.43	25.13	25.88	26.35	19.68	20.45	20.15	20.90	21.37
	8H	24.77	25.49	25.24	25.94	26.42	19.78	20.50	20.25	20.95	21.42
	12H	24.85	25.49	25.34	25.97	26.45	19.85	20.49	20.34	20.97	21.45
8H	4H	24.27	24.98	24.74	25.43	25.91	19.71	20.43	20.18	20.88	21.35
	6H	24.70	25.29	25.20	25.79	26.27	20.10	20.69	20.61	21.19	21.68
	8H	24.85	25.38	25.38	25.90	26.40	20.24	20.77	20.76	21.29	21.79
	12H	24.98	25.45	25.50	25.95	26.53	20.37	20.83	20.88	21.33	21.91
12H	4H	24.24	24.88	24.73	25.36	25.84	19.76	20.39	20.24	20.88	21.36
	6H	24.66	25.19	25.19	25.71	26.21	20.17	20.70	20.69	21.22	21.71
	8H	24.85	25.32	25.37	25.82	26.40	20.36	20.83	20.88	21.33	21.90