

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: P893692

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893692
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-15)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-6SL-ACL-UNV-L850
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 5000K (C)
Light Source: -
Ballast/Driver: -

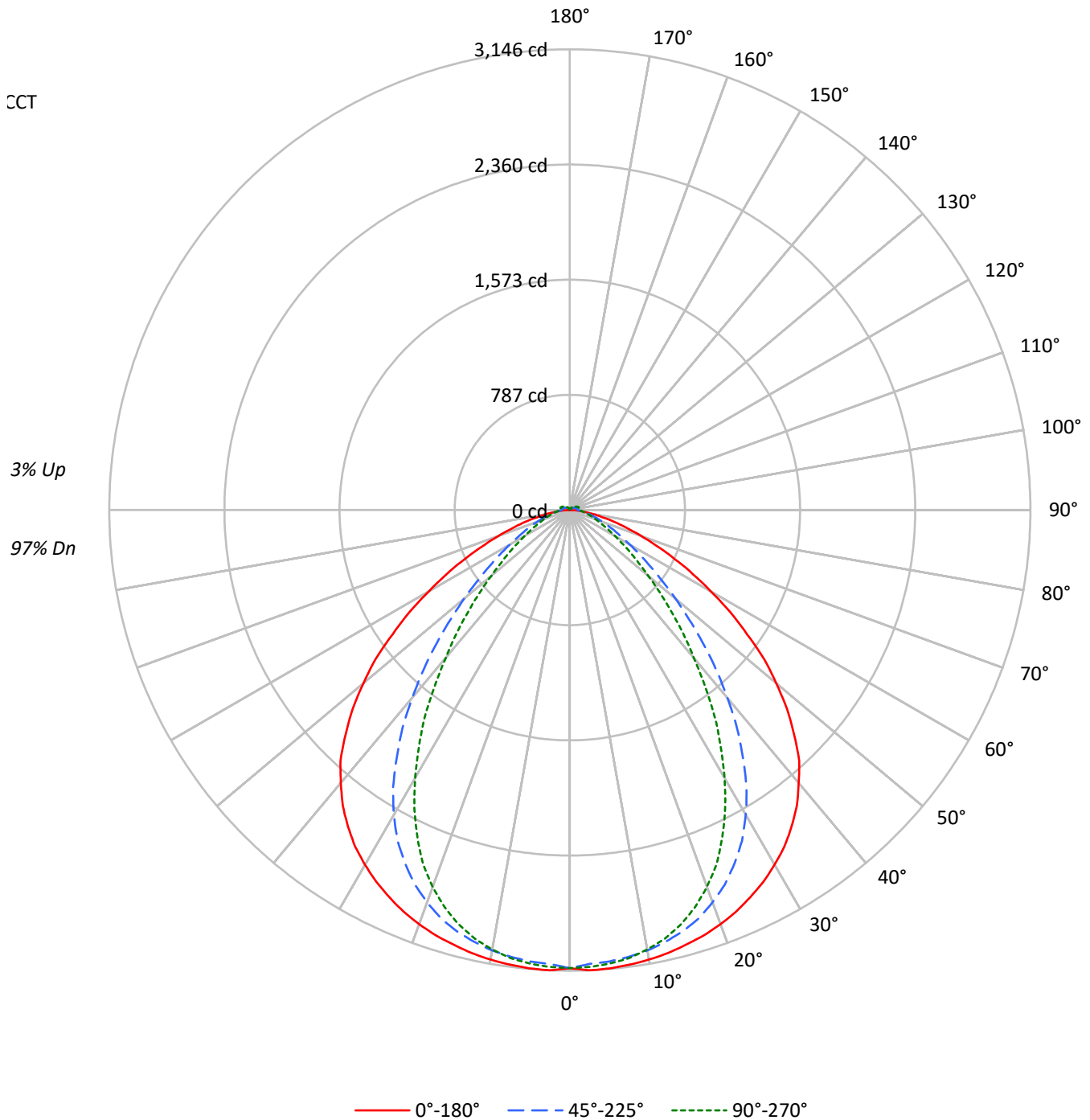
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6417.1 lumens
Efficiency: N/A
Efficacy: 144.5 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.08')
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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97				97
1	110	106	102	99	107	103	100	97	99	96	93	94	92	90	90	89	87	85				85
2	101	94	88	84	99	92	87	82	88	84	80	85	81	78	82	79	76	74				74
3	94	85	77	72	91	83	76	71	80	74	69	77	72	68	74	70	66	64				64
4	87	76	68	62	84	75	67	62	72	66	61	69	64	60	67	62	59	57				57
5	80	69	61	55	78	68	60	55	65	59	54	63	58	53	61	56	52	50				50
6	75	63	55	49	73	62	54	49	60	53	48	58	52	47	56	51	47	45				45
7	70	57	50	44	68	57	49	44	55	48	43	53	47	43	52	46	42	40				40
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	37				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31857	31857	31857
5°	32060	30993	30944
10°	32117	30320	29858
15°	32214	29532	28499
20°	32370	28446	26639
25°	32465	26939	24163
30°	32498	24869	21052
35°	32358	21977	17609
40°	31785	18565	13859
45°	30561	14987	10745
50°	28452	11628	8062
55°	25471	8901	6166
60°	21883	6843	4698
65°	18247	5397	3735
70°	14594	4331	3050
75°	11624	3490	2598
80°	8514	2880	2273
85°	5855	2448	2093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30561 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.3	4.6
10°-20°	844.1	13.2
20°-30°	1230.6	19.2
30°-40°	1322.1	20.6
40°-50°	1100.4	17.1
50°-60°	736.0	11.5
60°-70°	421.3	6.6
70°-80°	209.5	3.3
80°-90°	85.7	1.3
90°-100°	49.7	0.8
100°-110°	43.9	0.7
110°-120°	32.2	0.5
120°-130°	20.7	0.3
130°-140°	12.3	0.2
140°-150°	7.0	0.1
150°-160°	3.5	0.1
160°-170°	1.5	0.0
170°-180°	0.3	0.0
0°-30°	2371.0	36.9
0°-40°	3693.1	57.6
0°-60°	5529.4	86.2
0°-90°	6245.9	97.3
90°-120°	125.9	2.0
90°-150°	165.9	2.6
90°-180°	171.0	2.7
0°-180°	6417.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3128	3128	3128	3128	3128	
5°	3142	3132	3094	3120	3110	299
15°	3072	3052	2978	2957	2930	869
25°	2917	2848	2662	2528	2465	1345
35°	2641	2449	2060	1807	1727	1649
45°	2166	1800	1287	1041	980	1665
55°	1477	1066	671	530	503	1323
65°	791	537	338	274	259	791
75°	318	232	167	148	143	342
85°	62	69	78	81	82	73
90°	9	29	53	63	65	9
95°	14	29	52	63	65	11
105°	9	24	46	61	64	10
115°	5	14	36	50	55	5
125°	3	9	25	36	40	2
135°	2	7	16	25	27	1
145°	2	6	11	16	19	1
155°	2	5	7	10	13	1
165°	3	4	6	6	8	1
175°	3	3	4	4	4	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3128.1	3128.1	3128.1	3128.1	3128.1
2.5°	3146.4	3138.2	3102.6	3130.9	3122.6
5°	3141.8	3131.8	3094.4	3119.9	3109.9
7.5°	3131.8	3120.8	3077.9	3098.0	3087.1
10°	3117.2	3103.5	3054.2	3064.2	3046.9
12.5°	3098.9	3081.6	3020.4	3017.7	2998.5
15°	3072.5	3051.5	2978.5	2956.6	2930.1
17.5°	3045.1	3014.1	2924.6	2879.9	2843.4
20°	3009.5	2968.4	2850.7	2784.1	2738.5
22.5°	2968.4	2912.8	2767.7	2665.5	2618.0
25°	2917.3	2848.0	2661.8	2527.7	2464.7
27.5°	2862.6	2770.4	2546.8	2370.7	2298.6
30°	2796.9	2682.8	2403.6	2191.9	2114.3
32.5°	2727.5	2571.5	2246.6	2003.9	1919.0
35°	2640.8	2449.2	2060.5	1806.8	1727.4
37.5°	2546.8	2303.2	1876.1	1605.1	1515.7
40°	2432.8	2149.0	1673.6	1405.3	1316.8
42.5°	2319.6	1981.1	1479.2	1224.6	1148.0
45°	2166.3	1800.4	1286.7	1041.2	980.0
47.5°	2012.1	1607.0	1102.3	892.4	832.2
50°	1840.6	1417.1	940.8	749.2	699.0
52.5°	1673.6	1240.1	793.9	633.3	590.4
55°	1477.4	1065.8	670.7	530.2	502.8
57.5°	1300.3	904.3	565.8	449.0	423.4
60°	1113.3	766.5	473.6	379.6	355.9
62.5°	949.0	644.2	398.8	322.1	305.7
65°	791.2	536.6	337.6	273.8	259.2
67.5°	646.1	448.0	284.7	233.6	221.7
70°	518.3	363.2	240.0	198.9	190.7
72.5°	407.9	292.0	199.8	171.6	164.3
75°	318.5	231.8	167.0	147.8	143.3
77.5°	230.0	180.7	139.6	126.8	124.1
80°	162.4	136.9	115.0	109.5	107.7
82.5°	107.7	99.5	94.9	94.9	94.0
85°	62.1	69.4	77.6	81.2	82.1
87.5°	31.9	46.5	62.1	69.4	70.3
90°	9.1	29.2	52.9	63.0	64.8
92.5°	13.7	29.2	52.0	63.0	64.8
95°	13.7	29.2	52.0	63.0	64.8
97.5°	12.8	28.3	52.0	63.0	64.8
100°	11.9	26.5	51.1	63.0	64.8
102.5°	10.0	25.6	49.3	62.1	64.8
105°	9.1	23.7	46.5	61.1	63.9
107.5°	8.2	20.1	43.8	58.4	62.1
110°	6.4	17.3	42.0	55.7	60.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.5	15.5	39.2	52.9	57.5
115°	4.6	13.7	36.5	50.2	54.8
117.5°	3.7	12.8	32.9	46.5	51.1
120°	2.7	11.9	30.1	43.8	47.5
122.5°	2.7	11.0	26.5	40.2	43.8
125°	2.7	9.1	24.6	36.5	40.2
127.5°	1.8	8.2	21.9	32.9	36.5
130°	1.8	8.2	20.1	30.1	32.9
132.5°	1.8	7.3	18.3	27.4	30.1
135°	1.8	7.3	16.4	24.6	27.4
137.5°	1.8	6.4	14.6	22.8	25.6
140°	1.8	6.4	13.7	20.1	22.8
142.5°	1.8	5.5	11.9	19.2	21.0
145°	1.8	5.5	11.0	16.4	19.2
147.5°	1.8	5.5	10.0	15.5	17.3
150°	1.8	4.6	9.1	12.8	15.5
152.5°	1.8	4.6	8.2	11.9	14.6
155°	1.8	4.6	7.3	10.0	12.8
157.5°	1.8	4.6	7.3	9.1	11.0
160°	2.7	3.7	6.4	8.2	10.0
162.5°	2.7	3.7	5.5	7.3	9.1
165°	2.7	3.7	5.5	6.4	8.2
167.5°	2.7	3.7	4.6	5.5	6.4
170°	2.7	2.7	4.6	4.6	4.6
172.5°	2.7	2.7	3.7	4.6	3.7
175°	2.7	2.7	3.7	3.7	3.7
177.5°	2.7	2.7	3.7	3.7	3.7
180°	2.7	2.7	2.7	2.7	2.7



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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	20.76	22.15	21.17	22.52	22.91	16.06	17.45	16.47	17.82	18.20
	3H	21.85	23.10	22.28	23.48	23.91	17.20	18.44	17.62	18.82	19.25
	4H	22.16	23.32	22.61	23.73	24.18	17.70	18.86	18.14	19.27	19.71
	6H	22.31	23.38	22.76	23.80	24.26	18.20	19.27	18.66	19.69	20.15
	8H	22.32	23.34	22.80	23.79	24.26	18.46	19.48	18.93	19.92	20.39
	12H	22.32	23.29	22.79	23.73	24.22	18.75	19.73	19.23	20.16	20.66
4H	2H	20.74	21.91	21.19	22.31	22.76	16.55	17.72	17.00	18.12	18.57
	3H	21.98	22.94	22.44	23.39	23.86	17.87	18.83	18.32	19.28	19.75
	4H	22.36	23.23	22.84	23.70	24.20	18.46	19.32	18.94	19.79	20.30
	6H	22.60	23.35	23.10	23.84	24.36	19.08	19.83	19.58	20.33	20.85
	8H	22.64	23.34	23.15	23.83	24.36	19.40	20.10	19.91	20.60	21.13
	12H	22.65	23.27	23.18	23.80	24.34	19.78	20.40	20.30	20.93	21.46
8H	4H	22.35	23.05	22.86	23.55	24.08	18.70	19.40	19.21	19.90	20.43
	6H	22.63	23.21	23.17	23.75	24.29	19.42	20.00	19.97	20.55	21.09
	8H	22.70	23.22	23.26	23.78	24.33	19.83	20.35	20.39	20.91	21.46
	12H	22.75	23.21	23.30	23.75	24.37	20.32	20.78	20.88	21.32	21.95
12H	4H	22.33	22.95	22.86	23.48	24.02	18.71	19.34	19.24	19.87	20.40
	6H	22.61	23.13	23.17	23.69	24.24	19.46	19.98	20.02	20.54	21.09
	8H	22.71	23.18	23.27	23.72	24.34	19.92	20.38	20.48	20.92	21.55