

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: P893693

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893693
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-L930
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 90CRI, 3000K (C)
Light Source: -
Ballast/Driver: -

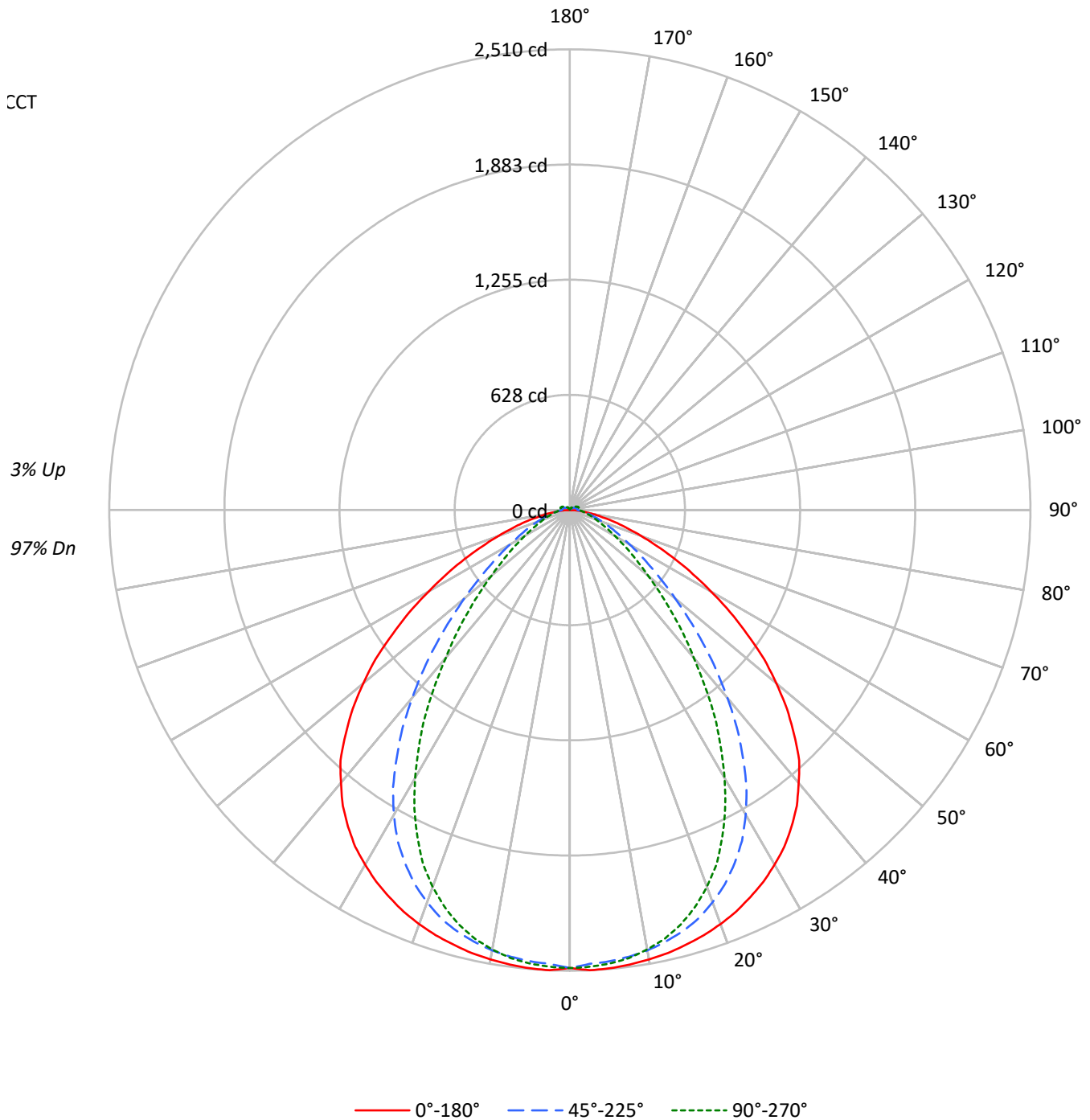
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5119.0 lumens
Efficiency: N/A
Efficacy: 115.3 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				
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°	25414	25414	25414
5°	25575	24723	24684
10°	25620	24187	23819
15°	25698	23558	22734
20°	25823	22692	21251
25°	25898	21490	19276
30°	25924	19839	16793
35°	25813	17532	14048
40°	25355	14809	11055
45°	24379	11955	8572
50°	22697	9276	6431
55°	20318	7100	4919
60°	17456	5459	3747
65°	14555	4305	2978
70°	11643	3454	2433
75°	9274	2784	2072
80°	6794	2297	1813
85°	4667	1953	1669

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24379 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.4	4.6
10°-20°	673.3	13.2
20°-30°	981.7	19.2
30°-40°	1054.7	20.6
40°-50°	877.8	17.1
50°-60°	587.1	11.5
60°-70°	336.1	6.6
70°-80°	167.1	3.3
80°-90°	68.4	1.3
90°-100°	39.7	0.8
100°-110°	35.0	0.7
110°-120°	25.7	0.5
120°-130°	16.5	0.3
130°-140°	9.8	0.2
140°-150°	5.5	0.1
150°-160°	2.8	0.1
160°-170°	1.2	0.0
170°-180°	0.3	0.0
0°-30°	1891.4	36.9
0°-40°	2946.1	57.6
0°-60°	4410.9	86.2
0°-90°	4982.5	97.3
90°-120°	100.4	2.0
90°-150°	132.3	2.6
90°-180°	137.0	2.7
0°-180°	5119.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2495	2495	2495	2495	2495	
5°	2506	2498	2468	2489	2481	239
15°	2451	2434	2376	2358	2337	693
25°	2327	2272	2123	2016	1966	1073
35°	2107	1954	1644	1441	1378	1316
45°	1728	1436	1026	831	782	1329
55°	1178	850	535	423	401	1056
65°	631	428	269	218	207	631
75°	254	185	133	118	114	272
85°	50	55	62	65	66	58
90°	7	23	42	50	52	7
95°	11	23	42	50	52	9
105°	7	19	37	49	51	8
115°	4	11	29	40	44	4
125°	2	7	20	29	32	2
135°	2	6	13	20	22	1
145°	2	4	9	13	15	1
155°	2	4	6	8	10	1
165°	2	3	4	5	7	1
175°	2	2	3	3	3	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2495.4	2495.4	2495.4	2495.4	2495.4
2.5°	2509.9	2503.4	2475.0	2497.6	2491.0
5°	2506.3	2498.3	2468.4	2488.8	2480.8
7.5°	2498.3	2489.6	2455.3	2471.4	2462.6
10°	2486.6	2475.7	2436.4	2444.4	2430.6
12.5°	2472.1	2458.3	2409.5	2407.3	2392.0
15°	2451.0	2434.2	2376.0	2358.5	2337.4
17.5°	2429.1	2404.4	2333.1	2297.4	2268.3
20°	2400.8	2368.0	2274.1	2220.9	2184.6
22.5°	2368.0	2323.6	2207.8	2126.3	2088.5
25°	2327.2	2271.9	2123.4	2016.4	1966.2
27.5°	2283.6	2210.0	2031.7	1891.2	1833.7
30°	2231.1	2140.1	1917.4	1748.5	1686.6
32.5°	2175.8	2051.3	1792.2	1598.6	1530.9
35°	2106.7	1953.8	1643.7	1441.3	1378.0
37.5°	2031.7	1837.3	1496.6	1280.4	1209.1
40°	1940.7	1714.3	1335.0	1121.0	1050.4
42.5°	1850.4	1580.4	1180.0	976.9	915.8
45°	1728.1	1436.2	1026.4	830.6	781.8
47.5°	1605.1	1281.9	879.4	711.9	663.9
50°	1468.3	1130.5	750.5	597.6	557.6
52.5°	1335.0	989.3	633.3	505.2	471.0
55°	1178.5	850.2	535.0	422.9	401.1
57.5°	1037.3	721.4	451.3	358.1	337.8
60°	888.1	611.5	377.8	302.8	283.9
62.5°	757.1	513.9	318.1	257.0	243.9
65°	631.1	428.0	269.3	218.4	206.7
67.5°	515.4	357.4	227.1	186.4	176.9
70°	413.5	289.7	191.4	158.7	152.1
72.5°	325.4	232.9	159.4	136.9	131.0
75°	254.1	184.9	133.2	117.9	114.3
77.5°	183.4	144.1	111.4	101.2	99.0
80°	129.6	109.2	91.7	87.4	85.9
82.5°	85.9	79.3	75.7	75.7	75.0
85°	49.5	55.3	61.9	64.8	65.5
87.5°	25.5	37.1	49.5	55.3	56.1
90°	7.3	23.3	42.2	50.2	51.7
92.5°	10.9	23.3	41.5	50.2	51.7
95°	10.9	23.3	41.5	50.2	51.7
97.5°	10.2	22.6	41.5	50.2	51.7
100°	9.5	21.1	40.8	50.2	51.7
102.5°	8.0	20.4	39.3	49.5	51.7
105°	7.3	18.9	37.1	48.8	51.0
107.5°	6.6	16.0	34.9	46.6	49.5
110°	5.1	13.8	33.5	44.4	48.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.4	12.4	31.3	42.2	45.9
115°	3.6	10.9	29.1	40.0	43.7
117.5°	2.9	10.2	26.2	37.1	40.8
120°	2.2	9.5	24.0	34.9	37.9
122.5°	2.2	8.7	21.1	32.0	34.9
125°	2.2	7.3	19.7	29.1	32.0
127.5°	1.5	6.6	17.5	26.2	29.1
130°	1.5	6.6	16.0	24.0	26.2
132.5°	1.5	5.8	14.6	21.8	24.0
135°	1.5	5.8	13.1	19.7	21.8
137.5°	1.5	5.1	11.6	18.2	20.4
140°	1.5	5.1	10.9	16.0	18.2
142.5°	1.5	4.4	9.5	15.3	16.7
145°	1.5	4.4	8.7	13.1	15.3
147.5°	1.5	4.4	8.0	12.4	13.8
150°	1.5	3.6	7.3	10.2	12.4
152.5°	1.5	3.6	6.6	9.5	11.6
155°	1.5	3.6	5.8	8.0	10.2
157.5°	1.5	3.6	5.8	7.3	8.7
160°	2.2	2.9	5.1	6.6	8.0
162.5°	2.2	2.9	4.4	5.8	7.3
165°	2.2	2.9	4.4	5.1	6.6
167.5°	2.2	2.9	3.6	4.4	5.1
170°	2.2	2.2	3.6	3.6	3.6
172.5°	2.2	2.2	2.9	3.6	2.9
175°	2.2	2.2	2.9	2.9	2.9
177.5°	2.2	2.2	2.9	2.9	2.9
180°	2.2	2.2	2.2	2.2	2.2



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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	19.98	21.37	20.39	21.74	22.12	15.27	16.66	15.68	17.03	17.42
	3H	21.07	22.31	21.49	22.70	23.13	16.41	17.65	16.83	18.04	18.47
	4H	21.38	22.54	21.82	22.94	23.39	16.91	18.07	17.36	18.48	18.93
	6H	21.52	22.59	21.98	23.02	23.48	17.41	18.48	17.87	18.91	19.37
	8H	21.54	22.56	22.01	23.00	23.47	17.67	18.69	18.14	19.14	19.60
	12H	21.53	22.51	22.01	22.94	23.44	17.97	18.94	18.44	19.38	19.87
4H	2H	19.96	21.12	20.40	21.53	21.97	15.77	16.93	16.21	17.34	17.78
	3H	21.19	22.15	21.65	22.61	23.08	17.08	18.04	17.54	18.50	18.96
	4H	21.58	22.44	22.06	22.91	23.42	17.67	18.54	18.15	19.01	19.51
	6H	21.81	22.56	22.31	23.05	23.58	18.30	19.05	18.80	19.54	20.06
	8H	21.85	22.55	22.36	23.05	23.58	18.62	19.32	19.13	19.81	20.34
	12H	21.86	22.49	22.39	23.02	23.55	18.99	19.62	19.52	20.14	20.68
8H	4H	21.56	22.27	22.07	22.76	23.29	17.91	18.62	18.42	19.11	19.64
	6H	21.84	22.42	22.38	22.96	23.50	18.64	19.22	19.18	19.76	20.30
	8H	21.91	22.44	22.47	22.99	23.55	19.04	19.56	19.60	20.12	20.67
	12H	21.96	22.42	22.52	22.96	23.59	19.54	20.00	20.09	20.54	21.16
12H	4H	21.54	22.17	22.07	22.70	23.23	17.93	18.55	18.46	19.08	19.62
	6H	21.82	22.34	22.38	22.90	23.45	18.67	19.20	19.23	19.75	20.31
	8H	21.93	22.39	22.48	22.93	23.56	19.14	19.60	19.69	20.14	20.76