

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: P893687

Luminaire Tested: 4MB-6SL-A-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893687
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-L940
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

Summary

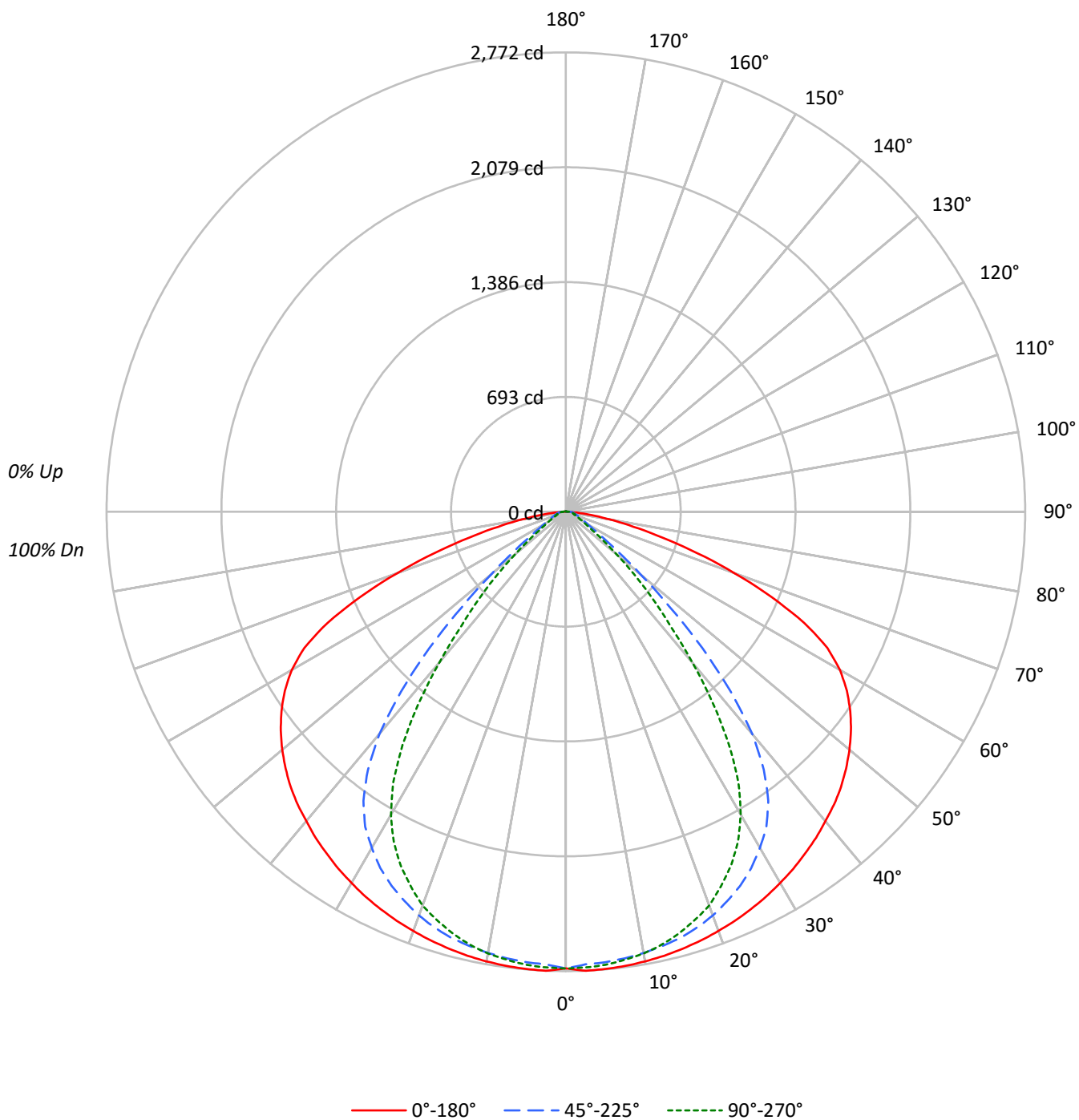
Lumens per Lamp: N/A
Luminaire Lumens: 5649.1 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.41 / 1.15 / 1.23
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')
CIE Type: Direct

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

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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	105	102	99	100	98	96		97	95	93		93
2	103	96	90	85	100	94	89	84	91	86	82		87	84	81		84
3	95	86	79	74	93	85	78	73	82	76	72		79	74	71		77
4	88	78	70	65	86	77	70	64	74	68	63		72	67	62		70
5	82	71	63	57	80	70	62	57	68	61	56		66	60	55		64
6	76	64	56	51	74	63	56	51	62	55	50		60	54	50		59
7	71	59	51	46	69	58	51	45	57	50	45		55	49	45		54
8	66	54	47	41	65	54	46	41	52	46	41		51	45	41		50
9	62	50	43	38	61	50	42	37	48	42	37		47	41	37		46
10	59	46	39	34	57	46	39	34	45	39	34		44	38	34		43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28065	28065	28065
5°	28312	27891	28055
10°	28489	27954	27993
15°	28773	28074	27784
20°	29180	28097	27411
25°	29723	27976	26485
30°	30415	27537	24820
35°	31284	26478	21339
40°	32399	23255	15774
45°	33825	16781	10609
50°	35397	9375	6331
55°	37205	4847	3466
60°	38920	3153	2454
65°	38255	2591	1947
70°	32263	2385	1816
75°	23731	2432	1952
80°	15829	2862	2457
85°	8647	4639	3739

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 62.5°

Luminance: 39253 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.7	4.6
10°-20°	756.2	13.4
20°-30°	1150.2	20.4
30°-40°	1313.6	23.3
40°-50°	1059.8	18.8
50°-60°	580.1	10.3
60°-70°	305.9	5.4
70°-80°	150.0	2.7
80°-90°	52.8	0.9
90°-100°	11.4	0.2
100°-110°	1.6	0.0
110°-120°	1.0	0.0
120°-130°	0.9	0.0
130°-140°	0.9	0.0
140°-150°	1.1	0.0
150°-160°	1.0	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	2168.0	38.4
0°-40°	3481.7	61.6
0°-60°	5121.5	90.7
0°-90°	5630.2	99.7
90°-120°	13.9	0.2
90°-150°	16.8	0.3
90°-180°	19.0	0.3
0°-180°	5649.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2756	2756	2756	2756	2756	
5°	2769	2761	2728	2753	2744	264
15°	2729	2712	2663	2658	2635	772
25°	2645	2607	2490	2405	2357	1222
35°	2516	2410	2130	1840	1716	1579
45°	2348	2018	1165	796	737	1813
55°	2095	862	273	211	195	1869
65°	1588	199	108	87	81	1535
75°	603	112	62	52	50	666
85°	74	59	40	36	32	102
90°	3	30	24	21	20	5
95°	2	4	8	13	12	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	2	2	1
155°	2	2	2	3	2	1
165°	2	2	3	3	3	0
175°	2	2	3	4	3	0
180°	3	3	3	3	3	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2755.7	2755.7	2755.7	2755.7	2755.7
2.5°	2772.5	2764.8	2733.6	2760.3	2752.6
5°	2769.4	2761.0	2728.2	2752.6	2744.3
7.5°	2764.1	2753.4	2717.6	2739.7	2726.7
10°	2754.9	2744.3	2703.1	2720.6	2706.9
12.5°	2744.3	2729.8	2684.0	2693.2	2675.6
15°	2729.0	2712.2	2662.7	2658.1	2635.2
17.5°	2712.2	2691.6	2631.4	2611.6	2584.1
20°	2692.4	2667.2	2592.5	2553.6	2529.2
22.5°	2670.3	2637.5	2543.7	2484.2	2446.1
25°	2645.1	2607.0	2489.6	2404.9	2356.9
27.5°	2618.4	2566.6	2424.0	2312.7	2247.9
30°	2586.4	2523.9	2341.6	2191.4	2110.6
32.5°	2554.4	2470.5	2253.2	2035.1	1939.0
35°	2516.3	2410.3	2129.7	1839.9	1716.4
37.5°	2480.4	2337.8	1962.7	1595.2	1462.5
40°	2437.0	2252.4	1749.2	1313.8	1186.5
42.5°	2395.8	2153.3	1472.4	1042.3	931.8
45°	2348.5	2017.6	1165.1	796.1	736.6
47.5°	2293.6	1832.3	847.1	592.5	555.1
50°	2234.1	1577.6	591.7	430.1	399.6
52.5°	2168.6	1233.7	398.8	298.9	282.1
55°	2095.4	862.4	273.0	211.2	195.2
57.5°	2010.7	561.2	198.3	159.4	148.7
60°	1910.8	358.4	154.8	126.6	120.5
62.5°	1779.7	251.6	127.3	104.5	99.1
65°	1587.5	199.0	107.5	86.9	80.8
67.5°	1344.3	168.5	92.3	73.2	69.4
70°	1083.5	146.4	80.1	63.3	61.0
72.5°	832.7	128.1	69.4	56.4	54.9
75°	603.1	112.1	61.8	51.9	49.6
77.5°	417.9	96.8	54.9	46.5	45.0
80°	269.9	83.9	48.8	42.7	41.9
82.5°	154.8	70.2	44.2	41.2	40.4
85°	74.0	58.7	39.7	35.8	32.0
87.5°	23.6	43.5	31.3	27.5	24.4
90°	3.1	30.5	24.4	21.4	19.8
92.5°	3.1	16.8	17.5	17.5	16.8
95°	2.3	3.8	8.4	13.0	12.2
97.5°	2.3	1.5	5.3	9.2	9.2
100°	1.5	0.8	2.3	6.1	6.1
102.5°	1.5	0.8	0.8	3.8	3.8
105°	0.8	0.0	0.8	1.5	1.5
107.5°	0.8	0.8	0.8	1.5	0.8
110°	0.8	0.8	0.8	1.5	0.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	0.8	1.5	0.8
115°	0.8	0.8	0.8	1.5	0.8
117.5°	0.8	0.8	0.8	1.5	0.8
120°	0.8	0.8	0.8	1.5	0.8
122.5°	0.8	0.8	0.8	1.5	0.8
125°	0.8	0.8	0.8	1.5	0.8
127.5°	0.8	0.8	0.8	1.5	0.8
130°	0.8	0.8	1.5	1.5	0.8
132.5°	0.8	0.8	1.5	1.5	0.8
135°	0.8	0.8	1.5	1.5	0.8
137.5°	0.8	0.8	1.5	1.5	1.5
140°	1.5	0.8	1.5	1.5	1.5
142.5°	1.5	1.5	1.5	2.3	1.5
145°	1.5	1.5	1.5	2.3	1.5
147.5°	1.5	1.5	2.3	2.3	1.5
150°	1.5	1.5	2.3	2.3	1.5
152.5°	1.5	1.5	2.3	2.3	2.3
155°	1.5	1.5	2.3	3.1	2.3
157.5°	1.5	1.5	2.3	3.1	2.3
160°	1.5	2.3	3.1	3.1	2.3
162.5°	1.5	2.3	3.1	3.1	3.1
165°	1.5	2.3	3.1	3.1	3.1
167.5°	2.3	2.3	3.1	3.8	3.1
170°	2.3	2.3	3.1	3.8	3.1
172.5°	2.3	2.3	3.1	3.8	3.1
175°	2.3	2.3	3.1	3.8	3.1
177.5°	2.3	2.3	3.1	3.8	3.8
180°	3.1	3.1	3.1	3.1	3.1

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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	21.49	22.89	21.86	23.21	23.53	10.01	11.41	10.38	11.73	12.05
	3H	24.40	25.65	24.79	25.98	26.36	10.94	12.19	11.33	12.52	12.90
	4H	25.29	26.46	25.70	26.81	27.20	11.46	12.62	11.87	12.98	13.37
	6H	25.79	26.86	26.21	27.24	27.64	12.09	13.16	12.51	13.54	13.94
	8H	25.90	26.92	26.34	27.32	27.73	12.51	13.53	12.95	13.93	14.34
	12H	25.95	26.92	26.39	27.31	27.75	12.96	13.93	13.40	14.32	14.76
4H	2H	21.31	22.47	21.71	22.83	23.21	10.52	11.69	10.93	12.04	12.43
	3H	24.24	25.19	24.65	25.60	26.01	11.72	12.67	12.14	13.08	13.49
	4H	25.14	25.99	25.58	26.42	26.87	12.39	13.24	12.83	13.67	14.11
	6H	25.73	26.47	26.20	26.92	27.39	13.21	13.95	13.67	14.40	14.87
	8H	25.89	26.58	26.37	27.04	27.51	13.74	14.43	14.21	14.88	15.36
	12H	25.98	26.60	26.47	27.09	27.57	14.32	14.93	14.81	15.42	15.90
8H	4H	25.03	25.72	25.50	26.17	26.65	12.98	13.67	13.45	14.12	14.60
	6H	25.63	26.20	26.13	26.70	27.19	13.98	14.55	14.49	15.05	15.54
	8H	25.82	26.33	26.34	26.85	27.35	14.66	15.17	15.18	15.69	16.19
	12H	25.96	26.42	26.48	26.92	27.49	15.42	15.88	15.94	16.38	16.95
12H	4H	24.99	25.60	25.48	26.09	26.57	13.24	13.85	13.73	14.34	14.82
	6H	25.58	26.09	26.10	26.61	27.11	14.29	14.80	14.81	15.32	15.82
	8H	25.79	26.25	26.31	26.75	27.32	15.05	15.51	15.57	16.01	16.58

END OF REPORT