

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: P893346

Luminaire Tested: 4MB-3SL-A-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893346
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-3SL-A-UNV-L835
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

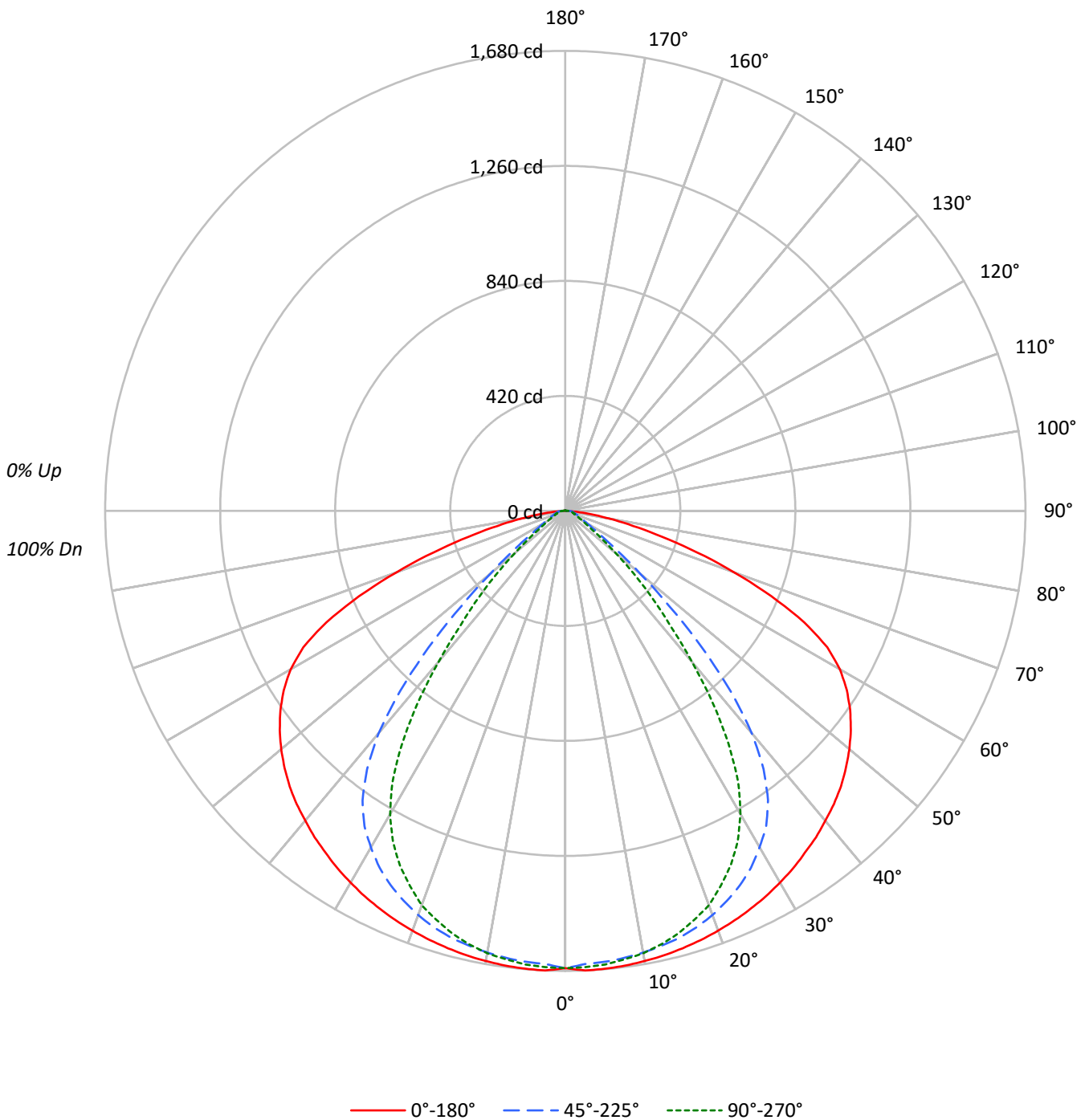
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3423.1 lumens
Efficiency: N/A
Efficacy: 162.2 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): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.2
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	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	55	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°	17006	17006	17006
5°	17155	16901	17000
10°	17263	16938	16962
15°	17435	17011	16836
20°	17682	17025	16610
25°	18011	16952	16049
30°	18430	16686	15039
35°	18956	16044	12930
40°	19632	14091	9557
45°	20496	10168	6428
50°	21449	5680	3836
55°	22544	2937	2100
60°	23585	1911	1487
65°	23182	1569	1181
70°	19551	1444	1102
75°	14382	1472	1180
80°	9595	1736	1490
85°	5235	2804	2267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 23785 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.5	4.6
10°-20°	458.2	13.4
20°-30°	697.0	20.4
30°-40°	796.0	23.3
40°-50°	642.2	18.8
50°-60°	351.5	10.3
60°-70°	185.3	5.4
70°-80°	90.9	2.7
80°-90°	32.0	0.9
90°-100°	6.9	0.2
100°-110°	1.0	0.0
110°-120°	0.6	0.0
120°-130°	0.5	0.0
130°-140°	0.6	0.0
140°-150°	0.7	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	1313.7	38.4
0°-40°	2109.7	61.6
0°-60°	3103.4	90.7
0°-90°	3411.6	99.7
90°-120°	8.4	0.2
90°-150°	10.2	0.3
90°-180°	11.0	0.3
0°-180°	3423.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1670	1670	1670	1670	1670	
5°	1678	1673	1653	1668	1663	160
15°	1654	1644	1613	1611	1597	468
25°	1603	1580	1509	1457	1428	741
35°	1525	1460	1290	1115	1040	956
45°	1423	1223	706	482	446	1098
55°	1270	523	165	128	118	1133
65°	962	121	65	53	49	930
75°	366	68	37	31	30	404
85°	45	36	24	22	19	62
90°	2	18	15	13	12	3
95°	1	2	5	8	7	1
105°	0	0	0	1	1	1
115°	0	0	0	1	0	0
125°	0	0	0	1	0	0
135°	0	0	1	1	0	0
145°	1	1	1	1	1	1
155°	1	1	1	2	1	0
165°	1	1	2	2	2	0
175°	1	1	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1669.8	1669.8	1669.8	1669.8	1669.8
2.5°	1680.0	1675.3	1656.4	1672.6	1668.0
5°	1678.1	1673.0	1653.2	1668.0	1662.9
7.5°	1674.9	1668.4	1646.7	1660.1	1652.2
10°	1669.3	1662.9	1637.9	1648.5	1640.2
12.5°	1662.9	1654.1	1626.4	1631.9	1621.3
15°	1653.6	1643.5	1613.4	1610.7	1596.8
17.5°	1643.5	1631.0	1594.5	1582.5	1565.8
20°	1631.5	1616.2	1570.9	1547.4	1532.6
22.5°	1618.1	1598.2	1541.4	1505.3	1482.2
25°	1602.8	1579.7	1508.6	1457.3	1428.2
27.5°	1586.6	1555.2	1468.8	1401.4	1362.1
30°	1567.2	1529.3	1418.9	1327.9	1278.9
32.5°	1547.8	1497.0	1365.3	1233.2	1175.0
35°	1524.7	1460.5	1290.5	1114.9	1040.0
37.5°	1503.0	1416.6	1189.3	966.6	886.2
40°	1476.7	1364.9	1059.9	796.1	718.9
42.5°	1451.7	1304.8	892.2	631.6	564.6
45°	1423.1	1222.6	706.0	482.4	446.3
47.5°	1389.8	1110.3	513.3	359.0	336.4
50°	1353.8	956.0	358.5	260.6	242.1
52.5°	1314.0	747.6	241.6	181.1	171.0
55°	1269.7	522.6	165.4	128.0	118.3
57.5°	1218.4	340.1	120.1	96.6	90.1
60°	1157.9	217.2	93.8	76.7	73.0
62.5°	1078.4	152.5	77.2	63.3	60.1
65°	962.0	120.6	65.1	52.7	49.0
67.5°	814.6	102.1	55.9	44.4	42.0
70°	656.6	88.7	48.5	38.3	37.0
72.5°	504.5	77.6	42.0	34.2	33.3
75°	365.5	67.9	37.4	31.4	30.0
77.5°	253.2	58.7	33.3	28.2	27.3
80°	163.6	50.8	29.6	25.9	25.4
82.5°	93.8	42.5	26.8	25.0	24.5
85°	44.8	35.6	24.0	21.7	19.4
87.5°	14.3	26.3	18.9	16.6	14.8
90°	1.8	18.5	14.8	12.9	12.0
92.5°	1.8	10.2	10.6	10.6	10.2
95°	1.4	2.3	5.1	7.9	7.4
97.5°	1.4	0.9	3.2	5.5	5.5
100°	0.9	0.5	1.4	3.7	3.7
102.5°	0.9	0.5	0.5	2.3	2.3
105°	0.5	0.0	0.5	0.9	0.9
107.5°	0.5	0.5	0.5	0.9	0.5
110°	0.5	0.5	0.5	0.9	0.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.5	0.9	0.5
115°	0.5	0.5	0.5	0.9	0.5
117.5°	0.5	0.5	0.5	0.9	0.5
120°	0.5	0.5	0.5	0.9	0.5
122.5°	0.5	0.5	0.5	0.9	0.5
125°	0.5	0.5	0.5	0.9	0.5
127.5°	0.5	0.5	0.5	0.9	0.5
130°	0.5	0.5	0.9	0.9	0.5
132.5°	0.5	0.5	0.9	0.9	0.5
135°	0.5	0.5	0.9	0.9	0.5
137.5°	0.5	0.5	0.9	0.9	0.9
140°	0.9	0.5	0.9	0.9	0.9
142.5°	0.9	0.9	0.9	1.4	0.9
145°	0.9	0.9	0.9	1.4	0.9
147.5°	0.9	0.9	1.4	1.4	0.9
150°	0.9	0.9	1.4	1.4	0.9
152.5°	0.9	0.9	1.4	1.4	1.4
155°	0.9	0.9	1.4	1.8	1.4
157.5°	0.9	0.9	1.4	1.8	1.4
160°	0.9	1.4	1.8	1.8	1.4
162.5°	0.9	1.4	1.8	1.8	1.8
165°	0.9	1.4	1.8	1.8	1.8
167.5°	1.4	1.4	1.8	2.3	1.8
170°	1.4	1.4	1.8	2.3	1.8
172.5°	1.4	1.4	1.8	2.3	1.8
175°	1.4	1.4	1.8	2.3	1.8
177.5°	1.4	1.4	1.8	2.3	2.3
180°	1.8	1.8	1.8	1.8	1.8



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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	19.75	21.15	20.12	21.47	21.79	8.27	9.67	8.64	9.99	10.31
	3H	22.66	23.91	23.05	24.24	24.62	9.20	10.45	9.59	10.78	11.15
	4H	23.55	24.72	23.96	25.07	25.46	9.72	10.88	10.13	11.24	11.63
	6H	24.05	25.12	24.47	25.50	25.90	10.35	11.42	10.77	11.80	12.20
	8H	24.16	25.18	24.60	25.58	25.99	10.77	11.79	11.21	12.19	12.60
	12H	24.21	25.18	24.64	25.57	26.01	11.22	12.19	11.66	12.58	13.02
4H	2H	19.57	20.73	19.97	21.09	21.47	8.78	9.95	9.19	10.30	10.69
	3H	22.50	23.45	22.91	23.86	24.27	9.98	10.93	10.39	11.34	11.75
	4H	23.40	24.25	23.84	24.68	25.13	10.64	11.50	11.08	11.92	12.37
	6H	23.99	24.73	24.46	25.18	25.65	11.47	12.21	11.93	12.66	13.13
	8H	24.15	24.84	24.62	25.30	25.77	12.00	12.69	12.47	13.14	13.62
	12H	24.24	24.86	24.73	25.35	25.83	12.58	13.19	13.07	13.68	14.16
8H	4H	23.29	23.98	23.76	24.43	24.91	11.23	11.93	11.71	12.38	12.86
	6H	23.89	24.46	24.39	24.96	25.45	12.24	12.81	12.75	13.31	13.80
	8H	24.08	24.59	24.60	25.11	25.61	12.92	13.43	13.44	13.95	14.45
	12H	24.22	24.68	24.74	25.18	25.75	13.68	14.14	14.20	14.64	15.21
12H	4H	23.25	23.86	23.74	24.35	24.83	11.49	12.11	11.98	12.60	13.08
	6H	23.84	24.35	24.36	24.87	25.37	12.55	13.06	13.07	13.58	14.08
	8H	24.05	24.51	24.57	25.01	25.58	13.31	13.77	13.83	14.27	14.85