

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: P893352

Luminaire Tested: 4MB-3SL-A-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893352
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-L950
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

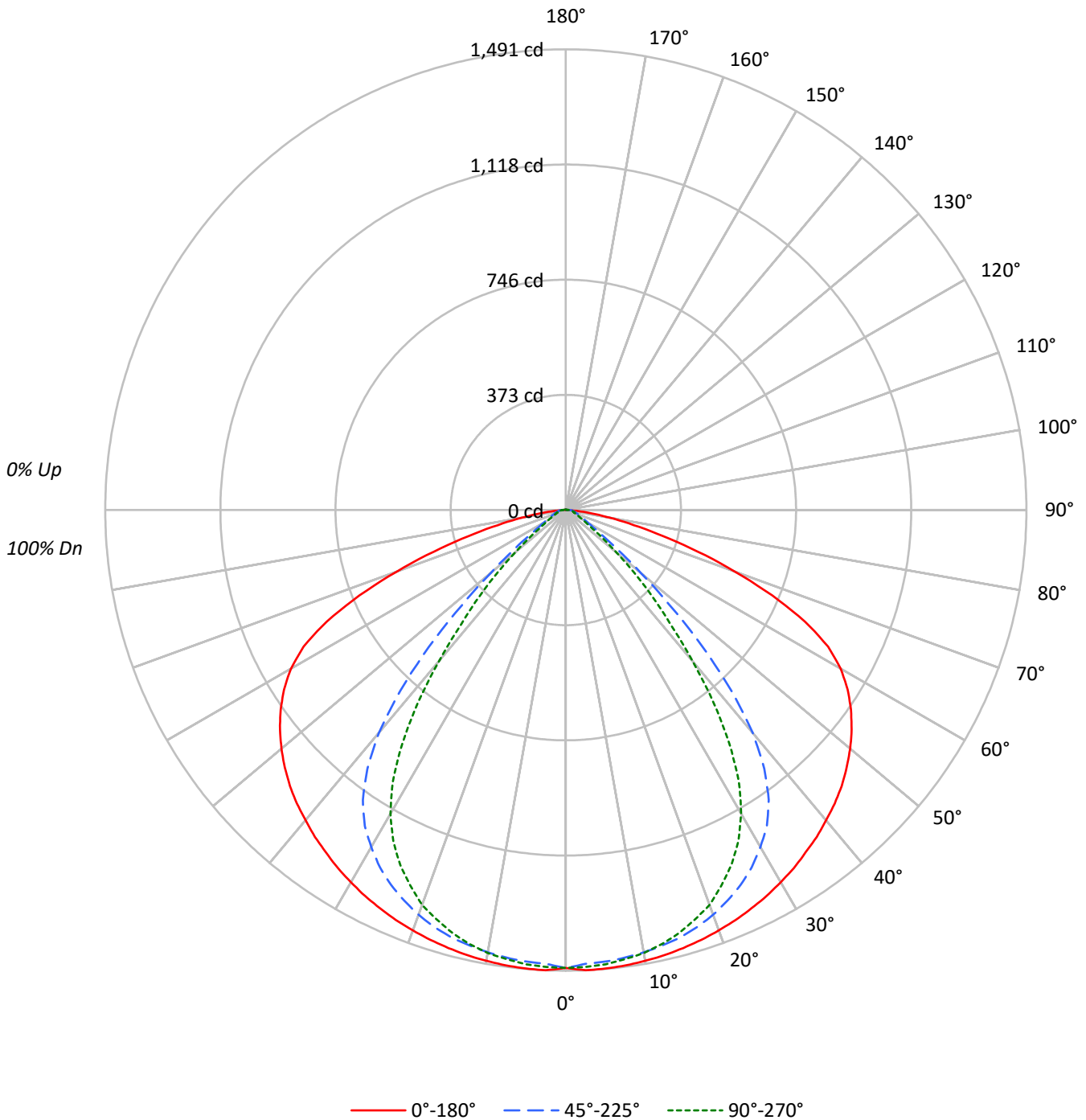
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3037.9 lumens
Efficiency: N/A
Efficacy: 144.0 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 (A_{in}): 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	90	90	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	79	79	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	69	69	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	62	62	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	55	55	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	49	49	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	45	45	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	40	40	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	37	37	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	34	34	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15093	15093	15093
5°	15226	14999	15087
10°	15322	15033	15054
15°	15474	15098	14942
20°	15693	15110	14742
25°	15985	15045	14243
30°	16358	14809	13348
35°	16824	14239	11477
40°	17424	12506	8483
45°	18191	9025	5705
50°	19036	5042	3405
55°	20009	2607	1864
60°	20931	1695	1320
65°	20575	1393	1048
70°	17351	1283	977
75°	12765	1306	1051
80°	8516	1537	1325
85°	4651	2489	2010

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 21110 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.7	4.6
10°-20°	406.7	13.4
20°-30°	618.6	20.4
30°-40°	706.5	23.3
40°-50°	569.9	18.8
50°-60°	312.0	10.3
60°-70°	164.5	5.4
70°-80°	80.7	2.7
80°-90°	28.4	0.9
90°-100°	6.1	0.2
100°-110°	0.8	0.0
110°-120°	0.5	0.0
120°-130°	0.5	0.0
130°-140°	0.5	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	1166.0	38.4
0°-40°	1872.4	61.6
0°-60°	2754.3	90.7
0°-90°	3027.9	99.7
90°-120°	7.4	0.2
90°-150°	9.0	0.3
90°-180°	10.0	0.3
0°-180°	3037.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1482	1482	1482	1482	1482	
5°	1489	1485	1467	1480	1476	142
15°	1468	1459	1432	1430	1417	415
25°	1422	1402	1339	1293	1268	657
35°	1353	1296	1145	990	923	849
45°	1263	1085	627	428	396	975
55°	1127	464	147	114	105	1005
65°	854	107	58	47	44	826
75°	324	60	33	28	27	358
85°	40	32	21	19	17	55
90°	2	16	13	12	11	2
95°	1	2	4	7	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°	1482.0	1482.0	1482.0	1482.0	1482.0
2.5°	1491.0	1486.9	1470.1	1484.5	1480.4
5°	1489.4	1484.9	1467.2	1480.4	1475.8
7.5°	1486.5	1480.8	1461.5	1473.4	1466.4
10°	1481.6	1475.8	1453.7	1463.1	1455.7
12.5°	1475.8	1468.1	1443.4	1448.4	1438.9
15°	1467.6	1458.6	1432.0	1429.5	1417.2
17.5°	1458.6	1447.5	1415.2	1404.5	1389.7
20°	1448.0	1434.4	1394.2	1373.3	1360.2
22.5°	1436.1	1418.4	1368.0	1336.0	1315.5
25°	1422.5	1402.0	1338.9	1293.4	1267.5
27.5°	1408.2	1380.3	1303.6	1243.7	1208.9
30°	1391.0	1357.3	1259.3	1178.5	1135.1
32.5°	1373.7	1328.6	1211.8	1094.5	1042.8
35°	1353.2	1296.2	1145.3	989.5	923.1
37.5°	1334.0	1257.3	1055.5	857.9	786.5
40°	1310.6	1211.3	940.7	706.6	638.1
42.5°	1288.4	1158.0	791.8	560.6	501.1
45°	1263.0	1085.0	626.6	428.1	396.1
47.5°	1233.5	985.4	455.6	318.6	298.5
50°	1201.5	848.4	318.2	231.3	214.9
52.5°	1166.2	663.5	214.5	160.7	151.7
55°	1126.9	463.8	146.8	113.6	105.0
57.5°	1081.4	301.8	106.6	85.7	80.0
60°	1027.6	192.7	83.2	68.1	64.8
62.5°	957.1	135.3	68.5	56.2	53.3
65°	853.8	107.0	57.8	46.7	43.5
67.5°	723.0	90.6	49.6	39.4	37.3
70°	582.7	78.7	43.1	34.0	32.8
72.5°	447.8	68.9	37.3	30.3	29.5
75°	324.4	60.3	33.2	27.9	26.7
77.5°	224.7	52.1	29.5	25.0	24.2
80°	145.2	45.1	26.2	23.0	22.6
82.5°	83.2	37.7	23.8	22.1	21.7
85°	39.8	31.6	21.3	19.3	17.2
87.5°	12.7	23.4	16.8	14.8	13.1
90°	1.6	16.4	13.1	11.5	10.7
92.5°	1.6	9.0	9.4	9.4	9.0
95°	1.2	2.1	4.5	7.0	6.6
97.5°	1.2	0.8	2.9	4.9	4.9
100°	0.8	0.4	1.2	3.3	3.3
102.5°	0.8	0.4	0.4	2.1	2.1
105°	0.4	0.0	0.4	0.8	0.8
107.5°	0.4	0.4	0.4	0.8	0.4
110°	0.4	0.4	0.4	0.8	0.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.4	0.4	0.4	0.8	0.4
115°	0.4	0.4	0.4	0.8	0.4
117.5°	0.4	0.4	0.4	0.8	0.4
120°	0.4	0.4	0.4	0.8	0.4
122.5°	0.4	0.4	0.4	0.8	0.4
125°	0.4	0.4	0.4	0.8	0.4
127.5°	0.4	0.4	0.4	0.8	0.4
130°	0.4	0.4	0.8	0.8	0.4
132.5°	0.4	0.4	0.8	0.8	0.4
135°	0.4	0.4	0.8	0.8	0.4
137.5°	0.4	0.4	0.8	0.8	0.8
140°	0.8	0.4	0.8	0.8	0.8
142.5°	0.8	0.8	0.8	1.2	0.8
145°	0.8	0.8	0.8	1.2	0.8
147.5°	0.8	0.8	1.2	1.2	0.8
150°	0.8	0.8	1.2	1.2	0.8
152.5°	0.8	0.8	1.2	1.2	1.2
155°	0.8	0.8	1.2	1.6	1.2
157.5°	0.8	0.8	1.2	1.6	1.2
160°	0.8	1.2	1.6	1.6	1.2
162.5°	0.8	1.2	1.6	1.6	1.6
165°	0.8	1.2	1.6	1.6	1.6
167.5°	1.2	1.2	1.6	2.1	1.6
170°	1.2	1.2	1.6	2.1	1.6
172.5°	1.2	1.2	1.6	2.1	1.6
175°	1.2	1.2	1.6	2.1	1.6
177.5°	1.2	1.2	1.6	2.1	2.1
180°	1.6	1.6	1.6	1.6	1.6



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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	19.34	20.74	19.71	21.06	21.38	7.85	9.25	8.22	9.57	9.89
	3H	22.25	23.49	22.63	23.83	24.20	8.79	10.03	9.17	10.37	10.74
	4H	23.14	24.30	23.55	24.66	25.05	9.31	10.47	9.71	10.82	11.21
	6H	23.64	24.71	24.06	25.08	25.48	9.94	11.01	10.36	11.39	11.79
	8H	23.75	24.76	24.18	25.16	25.57	10.36	11.37	10.79	11.77	12.18
	12H	23.79	24.76	24.23	25.15	25.59	10.80	11.78	11.24	12.17	12.60
4H	2H	19.15	20.31	19.56	20.67	21.06	8.37	9.53	8.78	9.89	10.28
	3H	22.08	23.04	22.50	23.44	23.86	9.56	10.52	9.98	10.92	11.34
	4H	22.98	23.84	23.42	24.26	24.71	10.23	11.08	10.67	11.51	11.96
	6H	23.58	24.32	24.04	24.77	25.24	11.05	11.79	11.52	12.25	12.72
	8H	23.74	24.43	24.21	24.88	25.36	11.58	12.28	12.06	12.73	13.21
	12H	23.83	24.44	24.32	24.93	25.41	12.16	12.78	12.65	13.26	13.75
8H	4H	22.87	23.57	23.35	24.02	24.50	10.82	11.51	11.29	11.96	12.44
	6H	23.47	24.04	23.98	24.54	25.03	11.83	12.40	12.33	12.90	13.38
	8H	23.66	24.17	24.18	24.69	25.19	12.50	13.01	13.02	13.53	14.03
	12H	23.81	24.26	24.32	24.76	25.34	13.26	13.72	13.78	14.22	14.80
12H	4H	22.83	23.45	23.33	23.94	24.42	11.08	11.70	11.57	12.18	12.66
	6H	23.42	23.94	23.95	24.45	24.95	12.13	12.65	12.66	13.17	13.67
	8H	23.64	24.09	24.16	24.59	25.17	12.90	13.35	13.42	13.85	14.43