

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: P893525

Luminaire Tested: 4MB-4SL-LVR-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893525
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-4SL-LVR-UNV-L930
Description: 4000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

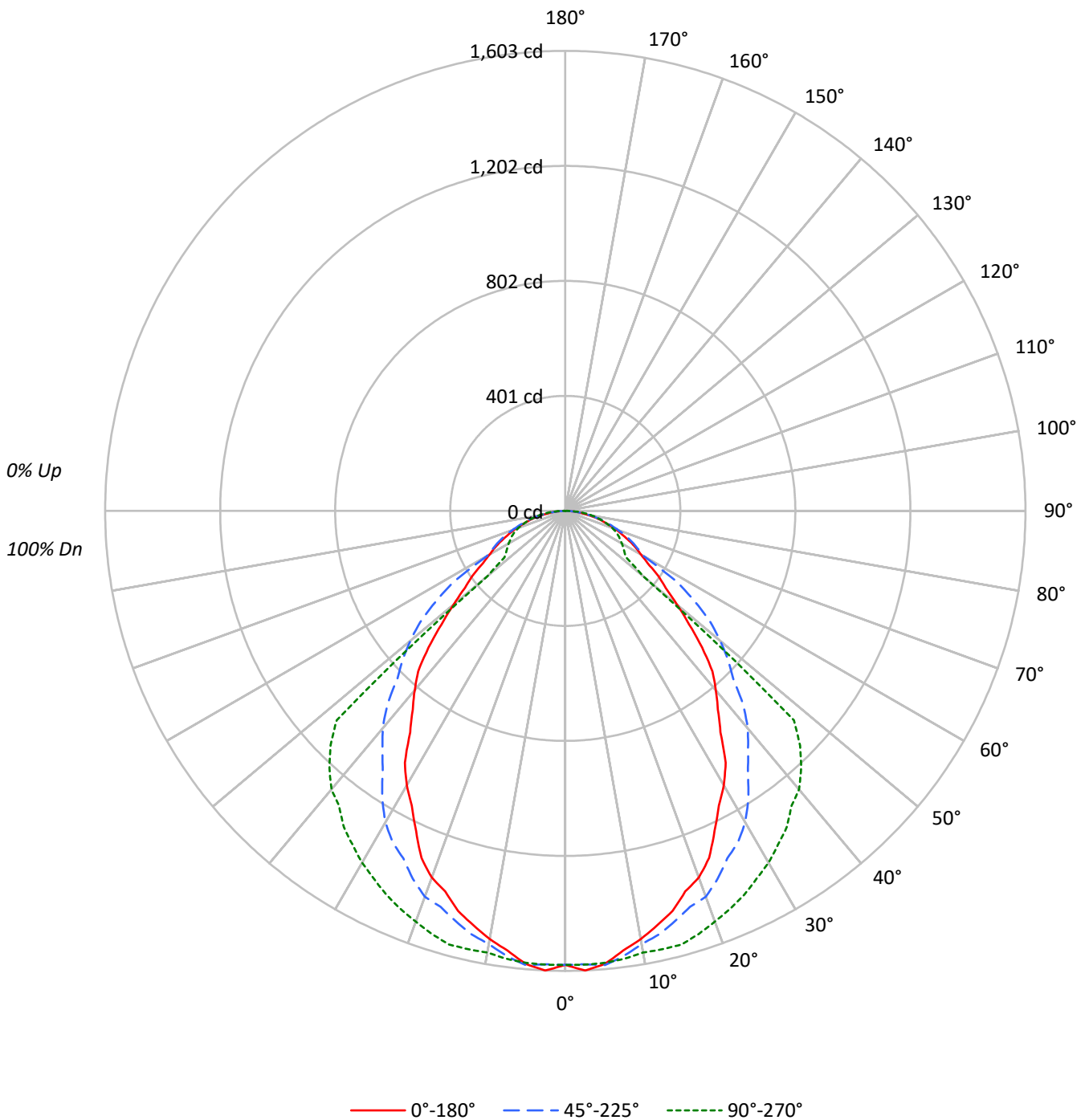
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3376.0 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 29.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.5
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11256	11256	11256
5°	11316	11345	11287
10°	10945	11073	11289
15°	10629	10897	11522
20°	10296	10834	11532
25°	9660	10485	11582
30°	9074	10296	11630
35°	8183	9628	11685
40°	7579	9186	11767
45°	6780	8325	11634
50°	5625	7798	3908
55°	4901	6845	3127
60°	4334	4461	3242
65°	4121	4339	3441
70°	3865	4100	3630
75°	3598	3865	3730
80°	3278	3643	3905
85°	2906	3102	4221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11634 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	4.4
10°-20°	422.1	12.5
20°-30°	621.0	18.4
30°-40°	710.1	21.0
40°-50°	672.4	19.9
50°-60°	370.5	11.0
60°-70°	237.9	7.0
70°-80°	146.8	4.3
80°-90°	45.2	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1193.1	35.3
0°-40°	1903.3	56.4
0°-60°	2946.2	87.3
0°-90°	3376.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3376.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1584	1597	1588	1588	1580	149
15°	1443	1461	1479	1557	1564	405
25°	1230	1286	1336	1423	1475	567
35°	942	1023	1108	1269	1345	595
45°	674	738	827	1062	1156	515
55°	395	414	552	284	252	353
65°	245	253	258	230	204	242
75°	131	133	141	148	136	139
85°	36	36	38	44	52	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.0	1582.0	1582.0	1582.0	1582.0
2.5°	1603.0	1607.0	1581.2	1580.4	1582.8
5°	1584.4	1597.4	1588.5	1588.5	1580.4
7.5°	1544.8	1566.6	1564.2	1582.8	1573.9
10°	1514.9	1532.7	1532.7	1581.2	1562.6
12.5°	1479.4	1499.6	1510.9	1561.8	1564.2
15°	1443.0	1460.8	1479.4	1557.0	1564.2
17.5°	1390.5	1422.8	1446.3	1522.2	1545.6
20°	1359.8	1379.2	1430.9	1492.3	1523.0
22.5°	1308.9	1337.2	1387.3	1456.0	1501.2
25°	1230.5	1285.5	1335.6	1422.8	1475.3
27.5°	1157.8	1199.0	1302.4	1394.6	1444.6
30°	1104.5	1136.8	1253.2	1353.3	1415.6
32.5°	1039.9	1092.4	1186.9	1312.9	1379.2
35°	942.1	1022.9	1108.5	1269.3	1345.3
37.5°	873.4	929.2	1045.5	1224.1	1294.4
40°	816.0	866.9	989.0	1167.5	1266.9
42.5°	758.7	799.9	917.9	1125.5	1216.0
45°	673.8	737.7	827.4	1061.7	1156.2
47.5°	585.0	652.8	768.4	1007.5	1080.3
50°	508.2	562.3	704.5	900.1	353.1
52.5°	441.1	491.2	636.7	325.6	266.6
55°	395.1	414.5	551.8	284.4	252.1
57.5°	340.2	371.7	463.0	270.7	239.2
60°	304.6	318.3	313.5	256.9	227.8
62.5°	276.3	286.0	284.4	243.2	214.9
65°	244.8	252.9	257.7	229.5	204.4
67.5°	213.3	220.6	227.8	212.5	189.9
70°	185.8	190.7	197.1	192.3	174.5
72.5°	157.6	163.2	167.2	171.3	154.3
75°	130.9	133.3	140.6	147.9	135.7
77.5°	106.7	109.1	113.9	122.0	115.5
80°	80.0	82.4	88.9	95.3	95.3
82.5°	56.6	58.2	62.2	71.1	75.1
85°	35.6	35.6	38.0	43.6	51.7
87.5°	13.7	13.7	16.2	19.4	25.9
90°	0.0	0.0	0.0	0.0	0.0



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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	16.36	17.84	16.73	18.16	18.47	14.16	15.65	14.53	15.96	16.27
	3H	17.89	19.21	18.27	19.54	19.90	16.49	17.82	16.87	18.15	18.51
	4H	18.48	19.72	18.88	20.07	20.45	17.44	18.69	17.84	19.04	19.42
	6H	18.94	20.08	19.35	20.45	20.84	18.23	19.38	18.64	19.74	20.13
	8H	19.08	20.17	19.51	20.56	20.97	18.54	19.63	18.97	20.02	20.42
	12H	19.18	20.22	19.61	20.61	21.03	18.79	19.83	19.22	20.21	20.64
4H	2H	16.91	18.15	17.31	18.50	18.88	15.27	16.51	15.67	16.86	17.24
	3H	18.68	19.71	19.09	20.11	20.51	17.71	18.74	18.12	19.14	19.54
	4H	19.40	20.33	19.84	20.75	21.19	18.78	19.71	19.21	20.12	20.56
	6H	19.99	20.79	20.45	21.24	21.70	19.67	20.47	20.13	20.92	21.38
	8H	20.18	20.93	20.64	21.38	21.84	20.02	20.77	20.48	21.22	21.68
	12H	20.32	20.99	20.80	21.47	21.94	20.31	20.98	20.79	21.46	21.93
8H	4H	19.71	20.46	20.18	20.91	21.38	19.17	19.92	19.63	20.36	20.83
	6H	20.42	21.05	20.92	21.54	22.02	20.20	20.83	20.70	21.32	21.80
	8H	20.68	21.25	21.20	21.76	22.25	20.65	21.21	21.16	21.72	22.21
	12H	20.89	21.39	21.40	21.88	22.45	21.03	21.53	21.54	22.02	22.59
12H	4H	19.75	20.42	20.23	20.90	21.37	19.20	19.87	19.68	20.35	20.82
	6H	20.49	21.05	21.00	21.56	22.05	20.27	20.83	20.78	21.34	21.83
	8H	20.81	21.31	21.32	21.80	22.36	20.77	21.27	21.28	21.76	22.33