

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: P893527

Luminaire Tested: 4MB-4SL-LVR-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893527
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-L940
Description: 4000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

Summary

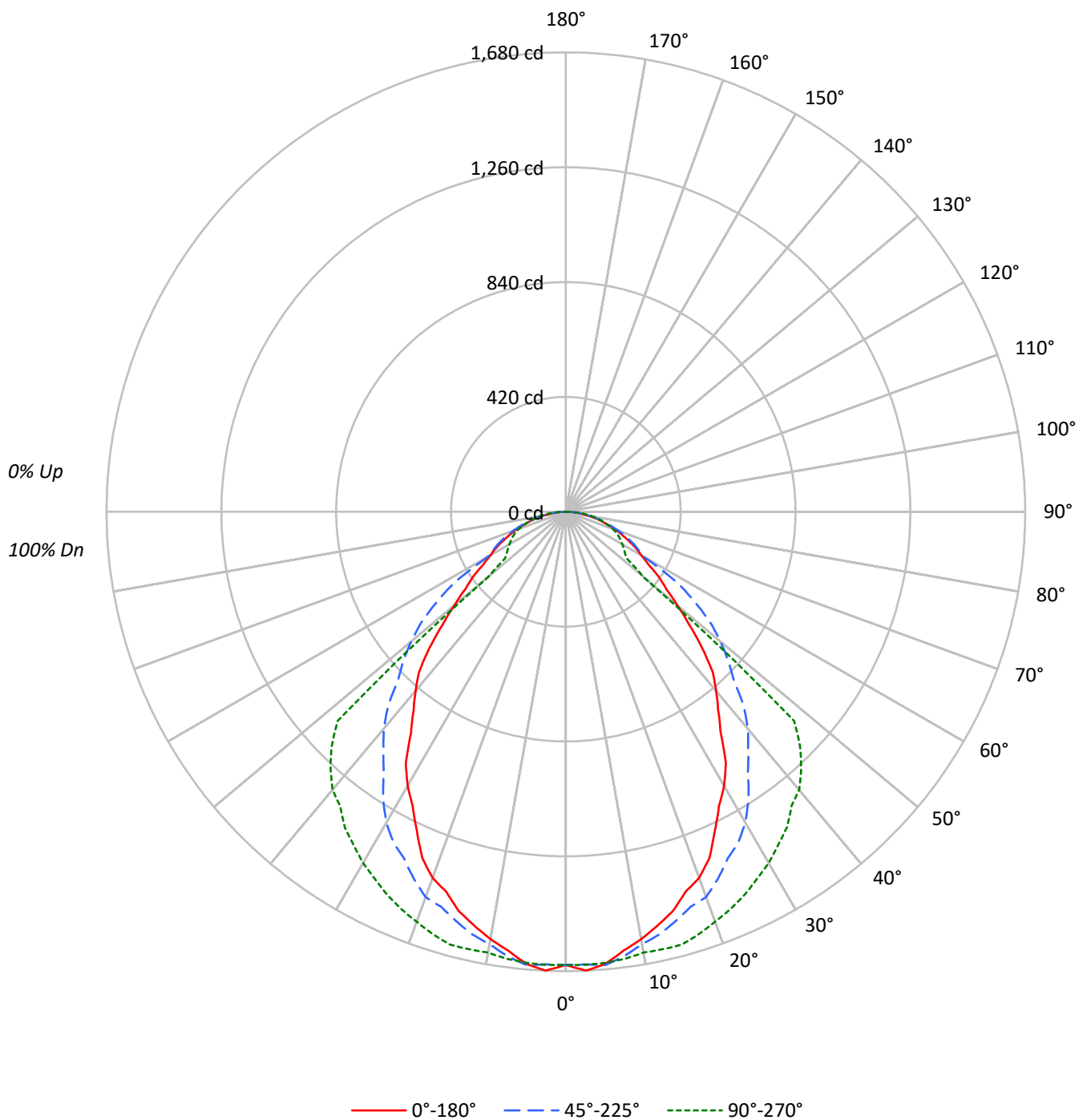
Lumens per Lamp: N/A
Luminaire Lumens: 3537.0 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.33 / 1.27
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11792	11792	11792
5°	11856	11886	11826
10°	11467	11602	11828
15°	11136	11417	12071
20°	10787	11351	12081
25°	10121	10985	12135
30°	9507	10786	12185
35°	8573	10088	12242
40°	7941	9623	12328
45°	7104	8722	12188
50°	5893	8170	4094
55°	5134	7172	3276
60°	4541	4673	3397
65°	4318	4546	3606
70°	4050	4296	3803
75°	3769	4049	3909
80°	3434	3815	4093
85°	3037	3249	4425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12188 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	4.4
10°-20°	442.3	12.5
20°-30°	650.6	18.4
30°-40°	744.0	21.0
40°-50°	704.5	19.9
50°-60°	388.1	11.0
60°-70°	249.2	7.0
70°-80°	153.8	4.3
80°-90°	47.3	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°	1250.0	35.3
0°-40°	1994.0	56.4
0°-60°	3086.7	87.3
0°-90°	3537.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1657	1657	1657	1657	1657	
5°	1660	1674	1664	1664	1656	156
15°	1512	1530	1550	1631	1639	424
25°	1289	1347	1399	1491	1546	594
35°	987	1072	1161	1330	1409	624
45°	706	773	867	1112	1211	540
55°	414	434	578	298	264	370
65°	256	265	270	240	214	254
75°	137	140	147	155	142	146
85°	37	37	40	46	54	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.4	1657.4	1657.4	1657.4	1657.4
2.5°	1679.5	1683.7	1656.6	1655.8	1658.3
5°	1660.0	1673.5	1664.2	1664.2	1655.8
7.5°	1618.5	1641.4	1638.8	1658.3	1649.0
10°	1587.2	1605.8	1605.8	1656.6	1637.1
12.5°	1549.9	1571.1	1583.0	1636.3	1638.8
15°	1511.8	1530.5	1549.9	1631.2	1638.8
17.5°	1456.8	1490.7	1515.2	1594.8	1619.4
20°	1424.7	1445.0	1499.1	1563.5	1595.6
22.5°	1371.3	1401.0	1453.4	1525.4	1572.8
25°	1289.2	1346.8	1399.3	1490.7	1545.7
27.5°	1213.0	1256.2	1364.6	1461.1	1513.5
30°	1157.2	1191.0	1312.9	1417.9	1483.1
32.5°	1089.4	1144.5	1243.5	1375.6	1445.0
35°	987.0	1071.7	1161.4	1329.8	1409.4
37.5°	915.1	973.5	1095.4	1282.4	1356.1
40°	855.0	908.3	1036.1	1223.2	1327.3
42.5°	794.9	838.0	961.6	1179.2	1274.0
45°	706.0	772.9	866.8	1112.3	1211.3
47.5°	612.9	684.0	805.0	1055.6	1131.8
50°	532.4	589.2	738.1	943.0	369.9
52.5°	462.2	514.7	667.0	341.1	279.3
55°	413.9	434.3	578.2	298.0	264.1
57.5°	356.4	389.4	485.0	283.6	250.6
60°	319.1	333.5	328.4	269.2	238.7
62.5°	289.5	299.7	298.0	254.8	225.2
65°	256.5	265.0	270.0	240.4	214.2
67.5°	223.5	231.1	238.7	222.6	198.9
70°	194.7	199.8	206.5	201.5	182.8
72.5°	165.1	171.0	175.2	179.5	161.7
75°	137.1	139.7	147.3	154.9	142.2
77.5°	111.7	114.3	119.4	127.8	121.0
80°	83.8	86.3	93.1	99.9	99.9
82.5°	59.3	60.9	65.2	74.5	78.7
85°	37.2	37.2	39.8	45.7	54.2
87.5°	14.4	14.4	16.9	20.3	27.1
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	16.52	18.01	16.89	18.32	18.63	14.33	15.81	14.69	16.12	16.44
	3H	18.05	19.38	18.43	19.70	20.07	16.66	17.98	17.03	18.31	18.67
	4H	18.64	19.88	19.04	20.23	20.61	17.61	18.85	18.01	19.20	19.58
	6H	19.10	20.25	19.51	20.61	21.01	18.39	19.54	18.80	19.90	20.30
	8H	19.24	20.33	19.67	20.72	21.13	18.70	19.79	19.13	20.18	20.59
	12H	19.34	20.38	19.77	20.77	21.20	18.95	19.99	19.38	20.38	20.81
4H	2H	17.07	18.32	17.47	18.67	19.05	15.43	16.67	15.83	17.02	17.40
	3H	18.85	19.87	19.26	20.28	20.68	17.88	18.90	18.29	19.30	19.71
	4H	19.57	20.49	20.00	20.91	21.35	18.94	19.87	19.37	20.28	20.72
	6H	20.15	20.96	20.61	21.40	21.86	19.83	20.63	20.29	21.08	21.54
	8H	20.34	21.09	20.80	21.54	22.01	20.18	20.93	20.64	21.38	21.85
	12H	20.48	21.15	20.96	21.63	22.10	20.47	21.14	20.95	21.62	22.09
8H	4H	19.87	20.63	20.34	21.07	21.54	19.33	20.08	19.79	20.53	20.99
	6H	20.58	21.21	21.08	21.70	22.18	20.36	20.99	20.86	21.48	21.96
	8H	20.85	21.41	21.36	21.92	22.41	20.81	21.37	21.32	21.88	22.37
	12H	21.05	21.55	21.56	22.05	22.61	21.19	21.69	21.70	22.18	22.75
12H	4H	19.91	20.58	20.39	21.06	21.53	19.36	20.04	19.85	20.51	20.99
	6H	20.65	21.21	21.16	21.72	22.21	20.43	20.99	20.94	21.50	21.99
	8H	20.97	21.47	21.48	21.96	22.52	20.94	21.43	21.45	21.93	22.49