

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: P893423

Luminaire Tested: 4MB-3SL-LVRA-UNV-L940

Issue Date: 11/11/2024

**Test Information**

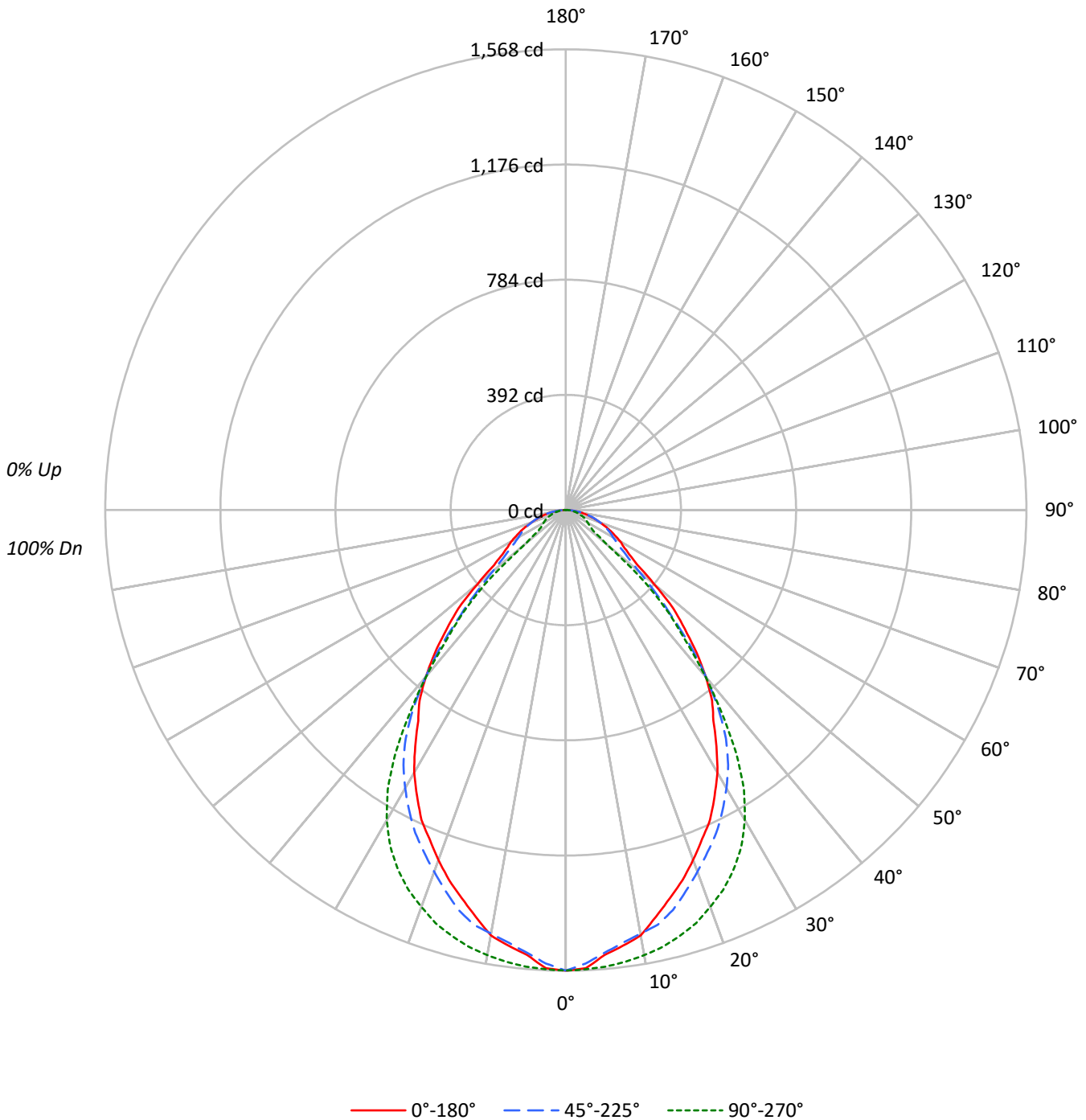
Test Method: LM-79-2019  
Report Number: P893423  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-3SL-LVRA-UNV-L940  
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 4000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2544.0 lumens  
Efficiency: N/A  
Efficacy: 120.6 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12  
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78		
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69		
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62		
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55		
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50		
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45		
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41		
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38		
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11153	11153	11153
5°	10852	10803	11140
10°	10621	10575	11115
15°	10073	10382	11052
20°	9596	9920	10883
25°	9128	9518	10606
30°	8480	8985	10014
35°	7604	8257	8783
40°	6889	6905	6867
45°	5761	5101	4976
50°	4351	3591	2034
55°	3272	2872	1283
60°	3041	2644	1237
65°	2830	2640	1237
70°	2588	2588	1219
75°	2455	2521	1177
80°	2266	2385	1209
85°	1976	2082	1322

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 5894 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.8	5.7
10°-20°	399.0	15.7
20°-30°	565.7	22.2
30°-40°	582.8	22.9
40°-50°	407.1	16.0
50°-60°	195.3	7.7
60°-70°	137.0	5.4
70°-80°	85.7	3.4
80°-90°	26.5	1.0
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°	1109.5	43.6
0°-40°	1692.3	66.5
0°-60°	2294.8	90.2
0°-90°	2544.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2544.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1568	1568	1568	1568	1568	
5°	1519	1517	1513	1552	1560	144
15°	1368	1378	1410	1450	1500	385
25°	1163	1174	1212	1294	1351	532
35°	876	899	951	970	1011	552
45°	572	586	507	481	494	441
55°	264	251	232	148	103	247
65°	168	157	157	119	74	167
75°	89	88	92	79	43	94
85°	24	24	26	25	16	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1567.5	1567.5	1567.5	1567.5	1567.5
2.5°	1561.4	1556.6	1544.9	1566.3	1564.7
5°	1519.4	1517.4	1512.6	1552.2	1559.8
7.5°	1495.6	1491.6	1485.9	1529.5	1550.9
10°	1470.1	1475.0	1463.7	1503.7	1538.4
12.5°	1417.6	1430.5	1445.9	1477.0	1523.1
15°	1367.5	1377.6	1409.5	1449.9	1500.4
17.5°	1320.7	1332.4	1359.9	1420.5	1474.2
20°	1267.3	1283.5	1310.2	1387.7	1437.4
22.5°	1212.4	1227.3	1260.9	1344.1	1399.4
25°	1162.7	1174.4	1212.4	1294.4	1351.0
27.5°	1096.8	1118.7	1154.6	1233.8	1293.2
30°	1032.2	1050.8	1093.6	1160.3	1218.9
32.5°	954.2	981.3	1028.6	1079.5	1128.4
35°	875.5	899.3	950.6	970.4	1011.2
37.5°	818.1	824.6	853.6	851.2	874.2
40°	741.7	754.7	743.4	713.1	739.3
42.5°	659.3	674.7	629.0	593.9	603.2
45°	572.5	585.8	507.0	481.2	494.5
47.5°	497.3	496.1	408.8	391.5	372.9
50°	393.1	406.0	324.4	292.1	183.8
52.5°	307.0	311.9	267.4	186.6	120.8
55°	263.8	250.9	231.5	148.3	103.4
57.5°	234.3	218.2	205.2	137.8	94.5
60°	213.7	195.5	185.8	130.9	86.9
62.5°	190.3	176.1	172.5	124.8	80.0
65°	168.1	157.2	156.8	119.2	73.5
67.5°	145.8	139.8	141.4	112.3	66.3
70°	124.4	123.2	124.4	103.4	58.6
72.5°	106.3	105.0	108.3	92.1	50.1
75°	89.3	88.1	91.7	79.2	42.8
77.5°	71.1	71.9	74.3	65.9	36.0
80°	55.3	55.3	58.2	51.7	29.5
82.5°	39.6	40.0	41.6	38.0	23.0
85°	24.2	24.2	25.5	25.0	16.2
87.5°	8.1	9.3	10.9	11.7	8.1
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	14.03	15.38	14.39	15.69	16.01	10.36	11.71	10.72	12.03	12.34
	3H	15.76	16.97	16.14	17.30	17.67	12.34	13.54	12.71	13.87	14.24
	4H	16.44	17.56	16.84	17.91	18.30	13.04	14.17	13.44	14.52	14.90
	6H	16.94	17.98	17.36	18.35	18.74	13.56	14.60	13.98	14.97	15.36
	8H	17.11	18.10	17.54	18.49	18.89	13.75	14.73	14.18	15.12	15.53
	12H	17.22	18.17	17.66	18.55	18.98	13.89	14.83	14.32	15.21	15.64
4H	2H	14.56	15.68	14.96	16.04	16.42	11.98	13.11	12.38	13.46	13.84
	3H	16.53	17.46	16.95	17.87	18.27	14.16	15.09	14.57	15.49	15.90
	4H	17.34	18.17	17.77	18.59	19.03	15.04	15.87	15.47	16.29	16.73
	6H	17.98	18.70	18.44	19.15	19.61	15.68	16.41	16.14	16.85	17.32
	8H	18.20	18.88	18.67	19.32	19.79	15.89	16.57	16.36	17.01	17.48
	12H	18.35	18.95	18.84	19.43	19.91	16.05	16.65	16.53	17.13	17.60
8H	4H	17.62	18.30	18.09	18.74	19.21	15.69	16.36	16.16	16.81	17.28
	6H	18.40	18.96	18.90	19.45	19.93	16.55	17.10	17.05	17.60	18.08
	8H	18.70	19.20	19.22	19.72	20.21	16.88	17.38	17.40	17.89	18.38
	12H	18.94	19.38	19.45	19.87	20.44	17.14	17.58	17.65	18.07	18.64
12H	4H	17.64	18.24	18.12	18.72	19.19	15.76	16.36	16.25	16.84	17.32
	6H	18.45	18.95	18.97	19.47	19.96	16.69	17.19	17.21	17.70	18.19
	8H	18.82	19.26	19.33	19.75	20.32	17.10	17.54	17.61	18.03	18.60