

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: P892764

Luminaire Tested: 2MB-4HL-LVRF-UNV-L950

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P892764  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-4HL-LVRF-UNV-L950  
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 5000K C  
Light Source: -  
Ballast/Driver: -

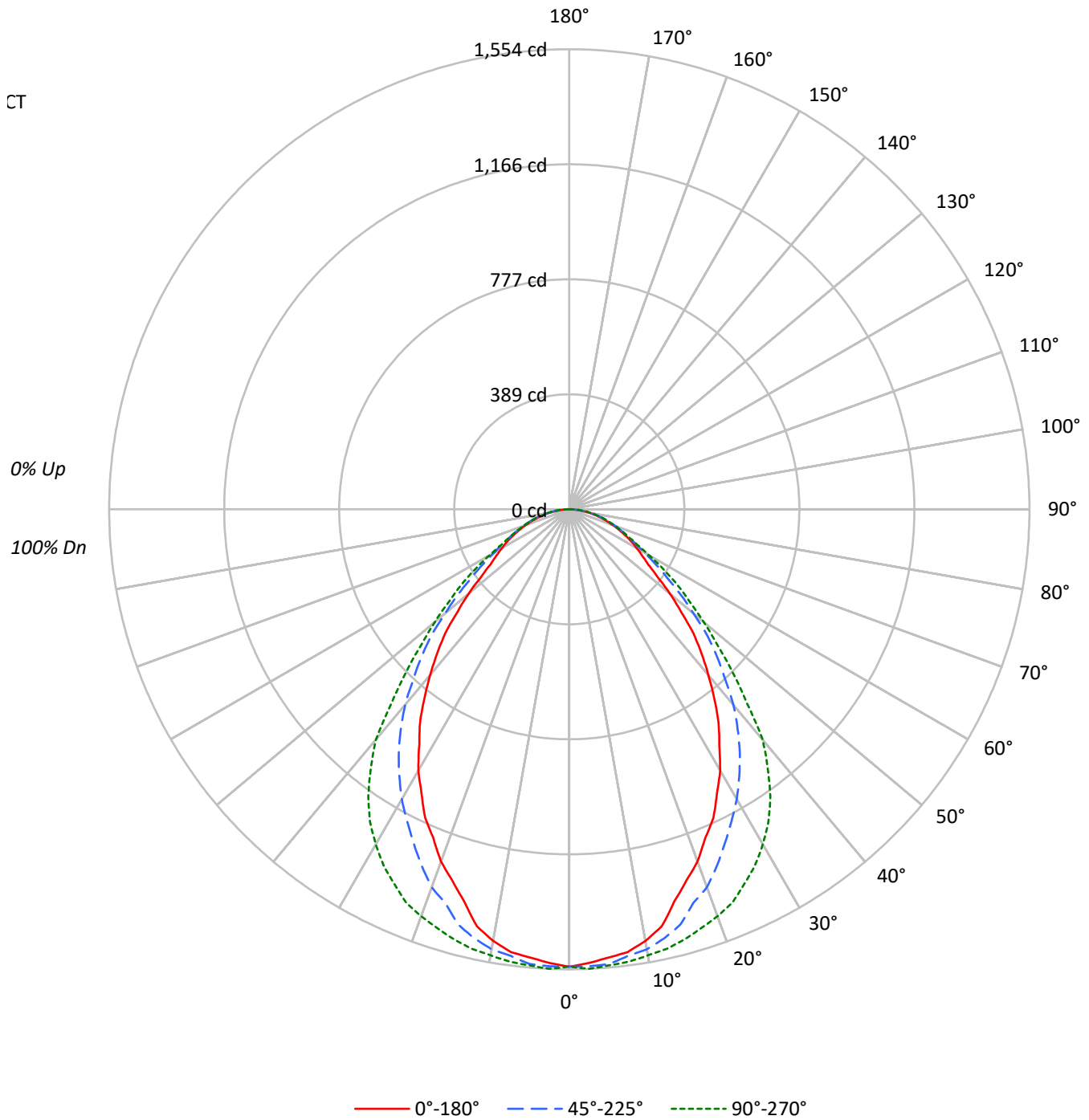
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3038.0 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.25 / 1.19  
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 27.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 6.5  
Total Harmonic Distortion (THDi): 0.99  
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	102	100	
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87	87	
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75	
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66	66	
4	87	76	68	62	85	75	68	62	73	66	61	70	65	60	68	63	60	58	58	
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51	51	
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46	46	
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41	41	
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37	37	
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34	34	
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31	31	

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

	0°	45°	90°
0°	22101	22101	22101
5°	21823	22143	22207
10°	21505	21924	22227
15°	20311	21497	22277
20°	19275	20686	22266
25°	18169	19633	22055
30°	16834	18684	21588
35°	15349	17539	20672
40°	13644	16109	18975
45°	11975	14299	15815
50°	9870	12183	13206
55°	8103	10064	11119
60°	7533	8360	8869
65°	7054	7430	7481
70°	6575	6947	6918
75°	6108	6599	6644
80°	5618	6113	6236
85°	4875	5351	7058

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 15815 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.7	4.8
10°-20°	406.4	13.4
20°-30°	580.9	19.1
30°-40°	633.7	20.9
40°-50°	533.8	17.6
50°-60°	355.5	11.7
60°-70°	219.3	7.2
70°-80°	124.3	4.1
80°-90°	38.4	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°	1132.9	37.3
0°-40°	1766.7	58.2
0°-60°	2656.0	87.4
0°-90°	3038.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3038.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1545	1545	1545	1545	1545	
5°	1520	1528	1542	1542	1546	144
15°	1371	1399	1452	1494	1504	387
25°	1151	1175	1244	1362	1397	526
35°	879	918	1004	1122	1184	546
45°	592	624	707	754	782	452
55°	325	348	404	431	446	300
65°	208	211	220	228	221	207
75°	110	112	119	124	120	117
85°	30	31	33	38	43	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1544.9	1544.9	1544.9	1544.9	1544.9
2.5°	1533.8	1534.6	1544.9	1550.9	1553.8
5°	1519.7	1527.9	1542.0	1542.0	1546.4
7.5°	1508.6	1510.1	1521.2	1537.5	1541.2
10°	1480.4	1487.8	1509.3	1527.9	1530.1
12.5°	1442.6	1447.0	1484.1	1519.7	1520.5
15°	1371.4	1398.8	1451.5	1494.5	1504.2
17.5°	1315.0	1343.2	1393.6	1470.8	1483.4
20°	1266.1	1281.6	1358.8	1442.6	1462.6
22.5°	1200.8	1229.7	1303.2	1409.2	1438.9
25°	1151.1	1174.8	1243.8	1361.7	1397.3
27.5°	1080.6	1116.2	1186.7	1311.3	1357.3
30°	1019.1	1057.7	1131.1	1257.9	1306.9
32.5°	942.7	983.5	1068.0	1193.4	1252.0
35°	878.9	917.5	1004.3	1122.2	1183.7
37.5°	803.3	847.0	933.8	1044.3	1100.7
40°	730.6	767.7	862.6	957.5	1016.1
42.5°	660.8	695.0	779.5	858.9	887.8
45°	591.9	624.5	706.8	753.6	781.7
47.5°	511.8	552.6	632.7	655.7	677.2
50°	443.5	477.6	547.4	568.1	593.4
52.5°	376.0	410.9	474.7	491.7	511.8
55°	324.9	347.9	403.5	430.9	445.8
57.5°	292.2	299.6	345.6	370.8	377.5
60°	263.3	267.8	292.2	315.2	310.0
62.5°	236.6	238.8	251.4	268.5	258.1
65°	208.4	210.6	219.5	228.4	221.0
67.5°	182.5	183.9	191.4	198.0	191.4
70°	157.2	158.0	166.1	170.6	165.4
72.5°	132.8	133.5	141.7	146.9	140.9
75°	110.5	112.0	119.4	123.9	120.2
77.5°	89.0	91.2	96.4	100.9	94.9
80°	68.2	69.7	74.2	79.4	75.7
82.5°	49.7	50.4	53.4	58.6	60.1
85°	29.7	31.2	32.6	37.8	43.0
87.5°	11.9	13.4	14.1	16.3	23.0
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	17.77	19.24	18.14	19.55	19.87	19.28	20.75	19.65	21.06	21.37
	3H	19.38	20.69	19.75	21.01	21.38	20.50	21.81	20.88	22.14	22.50
	4H	19.99	21.21	20.39	21.56	21.94	21.02	22.25	21.42	22.60	22.98
	6H	20.46	21.59	20.87	21.96	22.35	21.43	22.56	21.84	22.93	23.32
	8H	20.62	21.69	21.04	22.08	22.48	21.60	22.67	22.02	23.06	23.47
	12H	20.72	21.75	21.15	22.13	22.56	21.74	22.77	22.17	23.15	23.58
4H	2H	18.38	19.61	18.79	19.96	20.34	19.63	20.85	20.03	21.20	21.58
	3H	20.20	21.22	20.61	21.62	22.02	21.11	22.13	21.52	22.53	22.93
	4H	20.94	21.85	21.37	22.27	22.71	21.79	22.70	22.22	23.12	23.56
	6H	21.53	22.33	21.99	22.77	23.23	22.35	23.15	22.81	23.59	24.05
	8H	21.74	22.48	22.20	22.93	23.40	22.58	23.32	23.04	23.77	24.23
	12H	21.89	22.55	22.37	23.03	23.50	22.78	23.44	23.27	23.92	24.40
8H	4H	21.26	22.00	21.72	22.44	22.91	22.01	22.75	22.48	23.20	23.67
	6H	21.98	22.59	22.48	23.09	23.56	22.72	23.33	23.21	23.82	24.30
	8H	22.26	22.82	22.78	23.33	23.82	23.03	23.58	23.54	24.09	24.58
	12H	22.49	22.98	23.00	23.47	24.03	23.33	23.81	23.84	24.31	24.87
12H	4H	21.29	21.95	21.77	22.43	22.90	22.03	22.69	22.51	23.17	23.64
	6H	22.05	22.60	22.56	23.11	23.60	22.75	23.31	23.27	23.82	24.31
	8H	22.39	22.88	22.90	23.37	23.94	23.13	23.61	23.64	24.11	24.67