

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: P893304

Luminaire Tested: 4MB-2SL-LVR-UNV-L950

Issue Date: 11/11/2024

**Test Information**

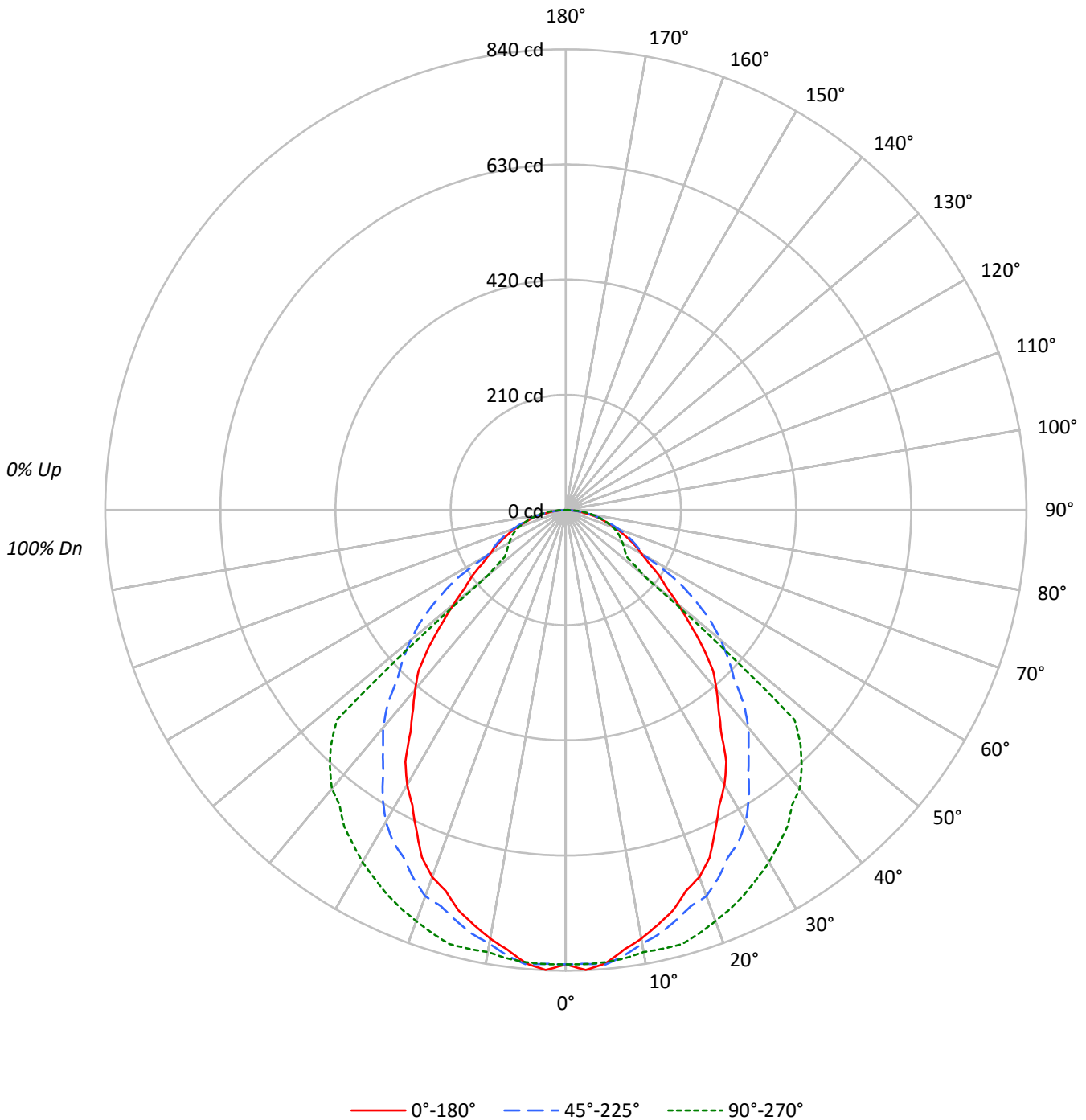
Test Method: LM-79-2019  
Report Number: P893304  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-2SL-LVR-UNV-L950  
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1768.0 lumens  
Efficiency: N/A  
Efficacy: 128.1 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): 13.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.92  
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°	5895	5895	5895
5°	5927	5942	5911
10°	5732	5799	5912
15°	5566	5707	6034
20°	5392	5674	6039
25°	5059	5491	6065
30°	4752	5392	6090
35°	4286	5042	6119
40°	3970	4810	6163
45°	3551	4360	6093
50°	2945	4084	2047
55°	2567	3585	1637
60°	2270	2337	1698
65°	2158	2273	1803
70°	2024	2147	1901
75°	1883	2023	1955
80°	1717	1905	2045
85°	1518	1625	2212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6093 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.6	4.4
10°-20°	221.1	12.5
20°-30°	325.2	18.4
30°-40°	371.9	21.0
40°-50°	352.1	19.9
50°-60°	194.0	11.0
60°-70°	124.6	7.0
70°-80°	76.9	4.3
80°-90°	23.7	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°	624.8	35.3
0°-40°	996.7	56.4
0°-60°	1542.9	87.3
0°-90°	1768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1768.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	830	836	832	832	828	78
15°	756	765	775	815	819	212
25°	644	673	699	745	773	297
35°	493	536	580	665	704	312
45°	353	386	433	556	606	270
55°	207	217	289	149	132	185
65°	128	132	135	120	107	127
75°	68	70	74	77	71	73
85°	19	19	20	23	27	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	828.5	828.5	828.5	828.5	828.5
2.5°	839.5	841.6	828.1	827.6	828.9
5°	829.8	836.5	831.9	831.9	827.6
7.5°	809.0	820.4	819.2	828.9	824.3
10°	793.4	802.7	802.7	828.1	818.3
12.5°	774.8	785.3	791.3	817.9	819.2
15°	755.7	765.0	774.8	815.4	819.2
17.5°	728.2	745.1	757.4	797.2	809.4
20°	712.1	722.3	749.4	781.5	797.6
22.5°	685.5	700.3	726.5	762.5	786.2
25°	644.4	673.2	699.4	745.1	772.6
27.5°	606.3	627.9	682.1	730.3	756.6
30°	578.4	595.3	656.3	708.7	741.3
32.5°	544.6	572.1	621.6	687.6	722.3
35°	493.4	535.7	580.5	664.7	704.5
37.5°	457.4	486.6	547.5	641.0	677.9
40°	427.4	454.0	517.9	611.4	663.5
42.5°	397.3	418.9	480.7	589.4	636.8
45°	352.9	386.3	433.3	556.0	605.5
47.5°	306.3	341.9	402.4	527.6	565.7
50°	266.1	294.5	369.0	471.4	184.9
52.5°	231.0	257.3	333.4	170.5	139.6
55°	206.9	217.1	289.0	148.9	132.0
57.5°	178.1	194.6	242.5	141.7	125.2
60°	159.5	166.7	164.2	134.6	119.3
62.5°	144.7	149.8	148.9	127.4	112.6
65°	128.2	132.4	135.0	120.2	107.1
67.5°	111.7	115.5	119.3	111.3	99.4
70°	97.3	99.9	103.2	100.7	91.4
72.5°	82.5	85.5	87.6	89.7	80.8
75°	68.5	69.8	73.6	77.4	71.1
77.5°	55.9	57.1	59.7	63.9	60.5
80°	41.9	43.2	46.5	49.9	49.9
82.5°	29.6	30.5	32.6	37.2	39.4
85°	18.6	18.6	19.9	22.8	27.1
87.5°	7.2	7.2	8.5	10.2	13.5
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	14.11	15.60	14.48	15.91	16.22	11.91	13.40	12.28	13.71	14.02
	3H	15.64	16.97	16.02	17.29	17.66	14.25	15.57	14.62	15.90	16.26
	4H	16.23	17.47	16.63	17.82	18.20	15.20	16.44	15.60	16.79	17.17
	6H	16.69	17.84	17.10	18.20	18.60	15.98	17.13	16.39	17.49	17.89
	8H	16.83	17.92	17.26	18.31	18.72	16.29	17.38	16.72	17.77	18.18
	12H	16.93	17.97	17.36	18.36	18.79	16.54	17.59	16.97	17.97	18.40
4H	2H	14.66	15.91	15.06	16.26	16.63	13.02	14.26	13.42	14.61	14.99
	3H	16.44	17.46	16.85	17.87	18.27	15.47	16.49	15.88	16.89	17.30
	4H	17.16	18.08	17.59	18.50	18.94	16.53	17.46	16.96	17.87	18.31
	6H	17.74	18.55	18.20	18.99	19.45	17.42	18.22	17.88	18.67	19.13
	8H	17.93	18.68	18.39	19.13	19.60	17.77	18.52	18.23	18.97	19.44
	12H	18.07	18.74	18.55	19.22	19.69	18.06	18.73	18.54	19.21	19.68
8H	4H	17.46	18.22	17.93	18.66	19.13	16.92	17.67	17.38	18.12	18.58
	6H	18.17	18.80	18.67	19.29	19.77	17.95	18.58	18.45	19.07	19.55
	8H	18.44	19.00	18.95	19.51	20.00	18.40	18.96	18.91	19.47	19.96
	12H	18.65	19.14	19.16	19.64	20.20	18.78	19.28	19.29	19.77	20.34
12H	4H	17.50	18.17	17.98	18.65	19.12	16.95	17.63	17.44	18.10	18.58
	6H	18.24	18.80	18.75	19.31	19.80	18.02	18.58	18.53	19.09	19.58
	8H	18.56	19.06	19.07	19.55	20.12	18.53	19.02	19.04	19.52	20.08