

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: P893320

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

Issue Date: 11/11/2024

**Test Information**

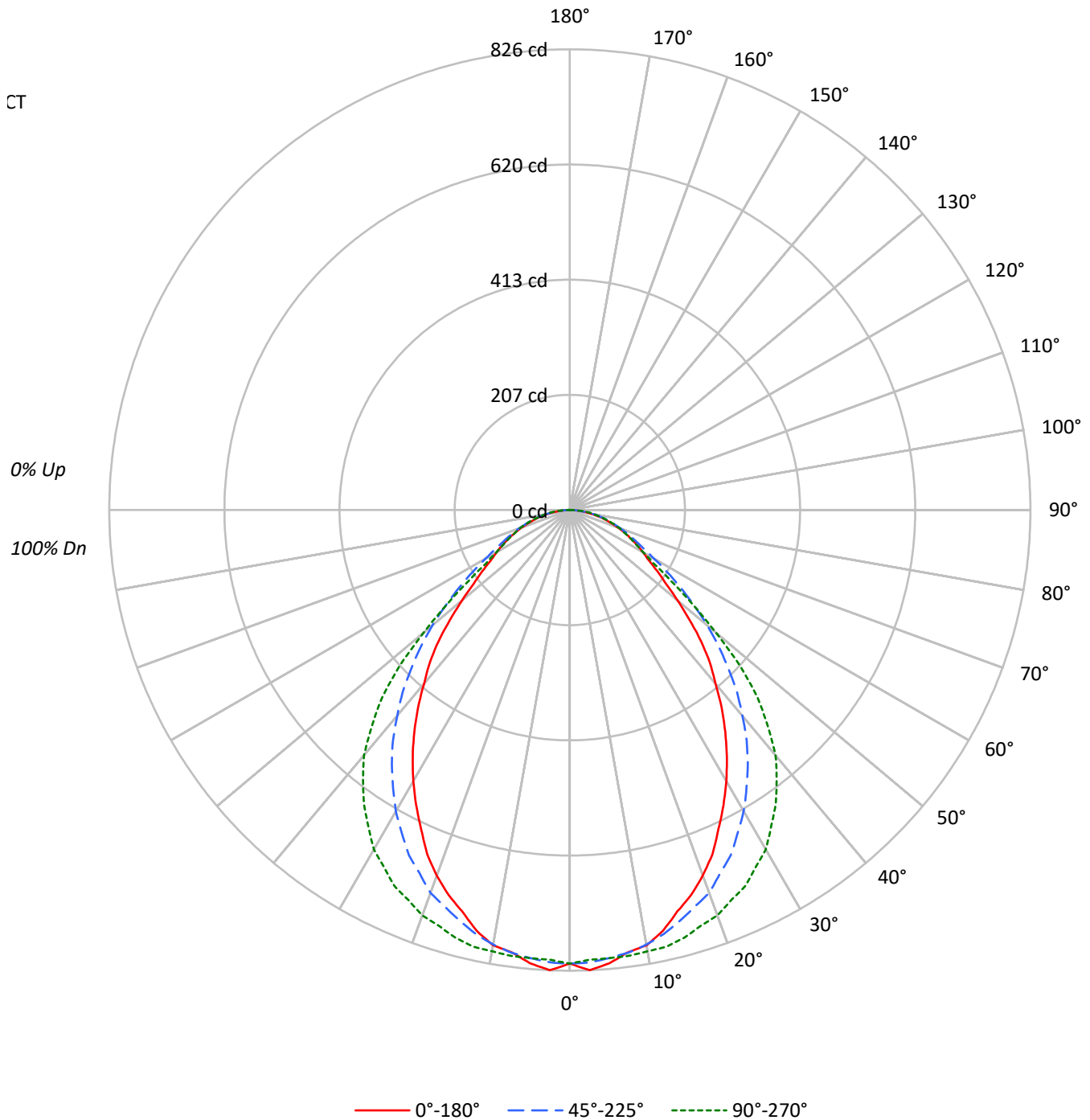
Test Method: LM-79-2019  
Report Number: P893320  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-2SL-LVRF-UNV-L950  
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 5000K C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1690.0 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.27 / 1.23  
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	70	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	60	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	56	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	44	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

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

	0°	45°	90°
0°	5786	5786	5786
5°	5826	5759	5759
10°	5725	5716	5804
15°	5488	5616	5846
20°	5280	5533	5856
25°	4953	5361	5842
30°	4610	5124	5774
35°	4220	4834	5590
40°	3778	4469	5333
45°	3353	4046	4796
50°	2789	3562	3782
55°	2377	3001	2749
60°	2154	2479	2173
65°	2029	2172	2022
70°	1910	2014	1970
75°	1779	1919	1883
80°	1627	1766	1819
85°	1412	1551	2033

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4796 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	4.6
10°-20°	216.6	12.8
20°-30°	314.6	18.6
30°-40°	350.3	20.7
40°-50°	309.5	18.3
50°-60°	203.1	12.0
60°-70°	124.4	7.4
70°-80°	72.4	4.3
80°-90°	22.2	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°	608.2	36.0
0°-40°	958.5	56.7
0°-60°	1471.1	87.0
0°-90°	1690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1690.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	813	813	813	813	813	
5°	816	816	806	814	806	77
15°	745	754	762	792	794	210
25°	631	646	683	726	744	290
35°	486	512	556	615	644	303
45°	333	354	402	456	477	255
55°	192	205	242	240	222	174
65°	120	123	129	125	120	120
75°	65	66	70	71	68	69
85°	17	18	19	22	25	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	813.2	813.2	813.2	813.2	813.2
2.5°	825.8	815.7	811.9	815.7	807.2
5°	815.7	816.1	806.4	814.4	806.4
7.5°	799.6	805.1	800.5	812.7	806.4
10°	792.4	792.9	791.2	803.8	803.4
12.5°	772.6	773.8	778.5	797.5	801.7
15°	745.1	753.5	762.4	792.4	793.7
17.5°	723.5	733.7	745.5	777.6	781.4
20°	697.3	701.5	730.7	759.0	773.4
22.5°	668.1	676.1	704.5	742.5	756.9
25°	630.9	646.1	682.9	726.5	744.2
27.5°	596.6	614.4	652.5	701.1	721.8
30°	561.1	581.4	623.7	671.5	702.8
32.5°	524.3	549.7	589.9	644.9	672.3
35°	485.9	512.1	556.5	615.3	643.6
37.5°	447.4	472.8	521.0	584.0	609.3
40°	406.8	431.7	481.2	545.1	574.2
42.5°	371.7	393.3	444.0	498.5	525.6
45°	333.2	353.5	402.1	456.3	476.6
47.5°	290.9	314.6	362.0	406.4	414.4
50°	252.0	276.5	321.8	347.6	341.7
52.5°	217.8	238.5	279.9	290.9	277.0
55°	191.6	205.1	241.9	239.8	221.6
57.5°	167.5	175.9	207.2	195.4	178.0
60°	151.4	155.2	174.2	163.2	152.7
62.5°	136.2	137.9	148.0	142.1	134.0
65°	120.5	122.6	129.0	125.2	120.1
67.5°	106.1	107.0	112.9	112.1	105.7
70°	91.8	93.0	96.8	98.5	94.7
72.5°	77.8	79.1	82.9	84.6	81.2
75°	64.7	65.5	69.8	71.0	68.5
77.5°	52.0	53.7	56.2	58.4	55.4
80°	39.7	40.6	43.1	45.7	44.4
82.5°	27.9	29.2	30.9	34.3	35.1
85°	17.3	18.2	19.0	21.6	24.9
87.5°	6.8	7.2	8.5	9.3	12.3
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	13.63	15.11	13.99	15.42	15.74	14.28	15.76	14.65	16.08	16.39
	3H	15.23	16.56	15.61	16.88	17.25	15.72	17.04	16.09	17.37	17.73
	4H	15.85	17.09	16.25	17.44	17.82	16.32	17.56	16.72	17.91	18.29
	6H	16.32	17.46	16.73	17.83	18.22	16.81	17.95	17.22	18.32	18.71
	8H	16.47	17.56	16.90	17.95	18.35	17.01	18.10	17.43	18.49	18.89
	12H	16.57	17.61	17.00	17.99	18.42	17.17	18.22	17.60	18.60	19.03
4H	2H	14.25	15.49	14.65	15.84	16.22	14.77	16.02	15.18	16.37	16.75
	3H	16.07	17.10	16.48	17.50	17.90	16.47	17.50	16.88	17.90	18.30
	4H	16.81	17.73	17.24	18.15	18.59	17.22	18.15	17.66	18.57	19.01
	6H	17.41	18.21	17.86	18.65	19.12	17.86	18.67	18.32	19.11	19.57
	8H	17.60	18.36	18.07	18.80	19.27	18.12	18.87	18.58	19.31	19.78
	12H	17.74	18.42	18.23	18.90	19.37	18.34	19.01	18.82	19.49	19.96
8H	4H	17.13	17.88	17.59	18.32	18.79	17.49	18.25	17.96	18.69	19.16
	6H	17.85	18.47	18.35	18.97	19.44	18.27	18.89	18.77	19.39	19.86
	8H	18.12	18.68	18.64	19.19	19.68	18.62	19.18	19.13	19.69	20.18
	12H	18.34	18.84	18.85	19.33	19.90	18.93	19.43	19.44	19.92	20.49
12H	4H	17.16	17.83	17.64	18.31	18.78	17.51	18.19	18.00	18.67	19.14
	6H	17.92	18.48	18.43	18.99	19.48	18.32	18.88	18.83	19.39	19.88
	8H	18.25	18.75	18.76	19.24	19.80	18.72	19.22	19.23	19.71	20.28