

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: P893306

Luminaire Tested: 4MB-2SL-LVRA-UNV-L835

Issue Date: 11/11/2024

**Test Information**

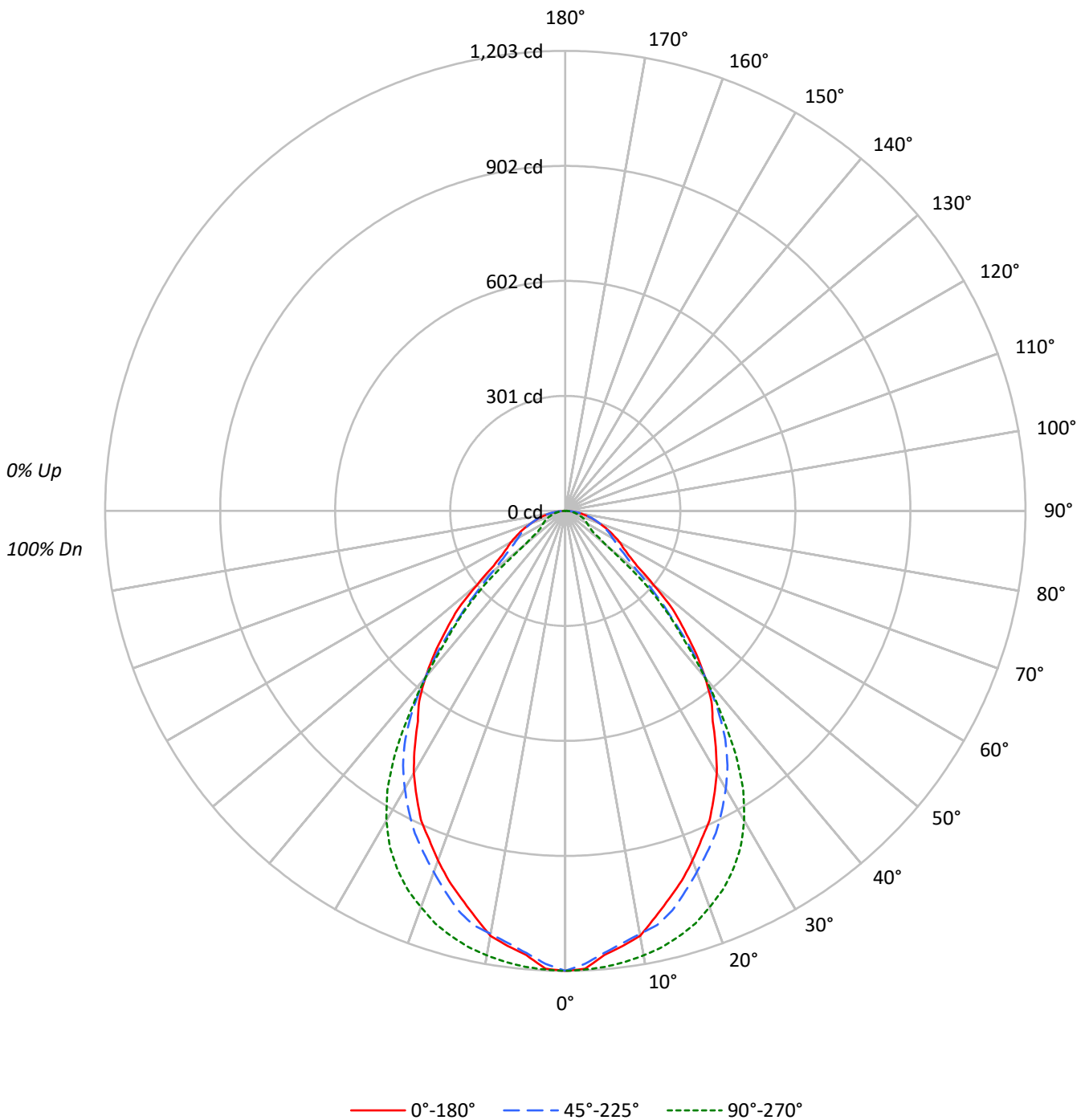
Test Method: LM-79-2019  
Report Number: P893306  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-2SL-LVRA-UNV-L835  
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1952.0 lumens  
Efficiency: N/A  
Efficacy: 141.4 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): 13.8  
Input Voltage (V): 120  
Input Current (Ain): 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		0
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°	8557	8557	8557
5°	8327	8289	8548
10°	8150	8114	8528
15°	7729	7966	8480
20°	7363	7612	8351
25°	7003	7303	8138
30°	6507	6894	7683
35°	5834	6335	6739
40°	5286	5298	5269
45°	4419	3914	3818
50°	3338	2755	1561
55°	2511	2203	985
60°	2334	2029	948
65°	2172	2025	950
70°	1987	1987	934
75°	1883	1935	904
80°	1741	1827	926
85°	1518	1592	1012

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 4523 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.1	5.7
10°-20°	306.1	15.7
20°-30°	434.1	22.2
30°-40°	447.2	22.9
40°-50°	312.4	16.0
50°-60°	149.9	7.7
60°-70°	105.2	5.4
70°-80°	65.8	3.4
80°-90°	20.3	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°	851.3	43.6
0°-40°	1298.5	66.5
0°-60°	1760.8	90.2
0°-90°	1952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1952.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1203	1203	1203	1203	1203	
5°	1166	1164	1161	1191	1197	110
15°	1049	1057	1082	1112	1151	295
25°	892	901	930	993	1037	408
35°	672	690	729	745	776	423
45°	439	450	389	369	379	338
55°	202	192	178	114	79	190
65°	129	121	120	91	56	128
75°	68	68	70	61	33	72
85°	19	19	20	19	12	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1202.7	1202.7	1202.7	1202.7	1202.7
2.5°	1198.1	1194.4	1185.4	1201.8	1200.6
5°	1165.9	1164.3	1160.6	1191.0	1196.8
7.5°	1147.6	1144.5	1140.1	1173.6	1190.0
10°	1128.0	1131.8	1123.1	1153.8	1180.4
12.5°	1087.7	1097.7	1109.4	1133.3	1168.6
15°	1049.3	1057.0	1081.5	1112.5	1151.3
17.5°	1013.3	1022.3	1043.4	1089.9	1131.1
20°	972.4	984.8	1005.3	1064.8	1102.9
22.5°	930.3	941.7	967.5	1031.3	1073.8
25°	892.1	901.1	930.3	993.2	1036.6
27.5°	841.6	858.3	885.9	946.7	992.3
30°	792.0	806.3	839.1	890.3	935.2
32.5°	732.2	753.0	789.2	828.3	865.8
35°	671.7	690.0	729.4	744.6	775.9
37.5°	627.7	632.7	655.0	653.1	670.8
40°	569.1	579.1	570.4	547.1	567.3
42.5°	505.9	517.7	482.6	455.7	462.8
45°	439.2	449.5	389.0	369.2	379.4
47.5°	381.6	380.7	313.7	300.4	286.1
50°	301.6	311.5	248.9	224.1	141.0
52.5°	235.6	239.3	205.2	143.2	92.7
55°	202.4	192.5	177.6	113.8	79.4
57.5°	179.8	167.4	157.5	105.7	72.5
60°	164.0	150.0	142.6	100.4	66.6
62.5°	146.0	135.2	132.4	95.8	61.4
65°	129.0	120.6	120.3	91.4	56.4
67.5°	111.9	107.3	108.5	86.2	50.8
70°	95.5	94.5	95.5	79.4	44.9
72.5°	81.5	80.6	83.1	70.7	38.4
75°	68.5	67.6	70.4	60.8	32.9
77.5°	54.6	55.2	57.0	50.5	27.6
80°	42.5	42.5	44.6	39.7	22.6
82.5°	30.4	30.7	31.9	29.1	17.7
85°	18.6	18.6	19.5	19.2	12.4
87.5°	6.2	7.1	8.4	9.0	6.2
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	13.11	14.46	13.47	14.77	15.09	9.44	10.79	9.80	11.10	11.42
	3H	14.84	16.05	15.22	16.38	16.75	11.41	12.62	11.79	12.95	13.31
	4H	15.52	16.64	15.92	16.99	17.38	12.12	13.25	12.52	13.60	13.98
	6H	16.02	17.06	16.44	17.43	17.82	12.64	13.68	13.06	14.05	14.44
	8H	16.19	17.18	16.62	17.57	17.97	12.83	13.81	13.26	14.20	14.61
	12H	16.30	17.25	16.74	17.63	18.06	12.97	13.91	13.40	14.29	14.72
4H	2H	13.64	14.76	14.04	15.11	15.50	11.06	12.19	11.46	12.54	12.92
	3H	15.61	16.54	16.03	16.95	17.35	13.24	14.17	13.65	14.57	14.97
	4H	16.42	17.25	16.85	17.67	18.11	14.12	14.95	14.55	15.37	15.82
	6H	17.06	17.78	17.52	18.23	18.69	14.76	15.49	15.22	15.93	16.40
	8H	17.28	17.96	17.75	18.40	18.87	14.97	15.65	15.44	16.09	16.56
	12H	17.43	18.03	17.92	18.52	18.99	15.13	15.73	15.61	16.21	16.68
8H	4H	16.70	17.38	17.17	17.82	18.29	14.77	15.44	15.24	15.89	16.36
	6H	17.48	18.04	17.98	18.53	19.01	15.63	16.18	16.13	16.68	17.16
	8H	17.79	18.29	18.31	18.80	19.29	15.96	16.45	16.48	16.97	17.46
	12H	18.02	18.46	18.53	18.96	19.53	16.22	16.66	16.73	17.15	17.72
12H	4H	16.72	17.32	17.20	17.80	18.27	14.84	15.44	15.33	15.92	16.40
	6H	17.54	18.04	18.06	18.55	19.04	15.77	16.26	16.29	16.78	17.27
	8H	17.90	18.34	18.41	18.84	19.40	16.18	16.62	16.69	17.11	17.68