

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: P892485

Luminaire Tested: 2MB-2SL-AOL-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-2SL-AOL-UNV-L830
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 8
3000K CCT
Light Source: -
Ballast/Driver: -

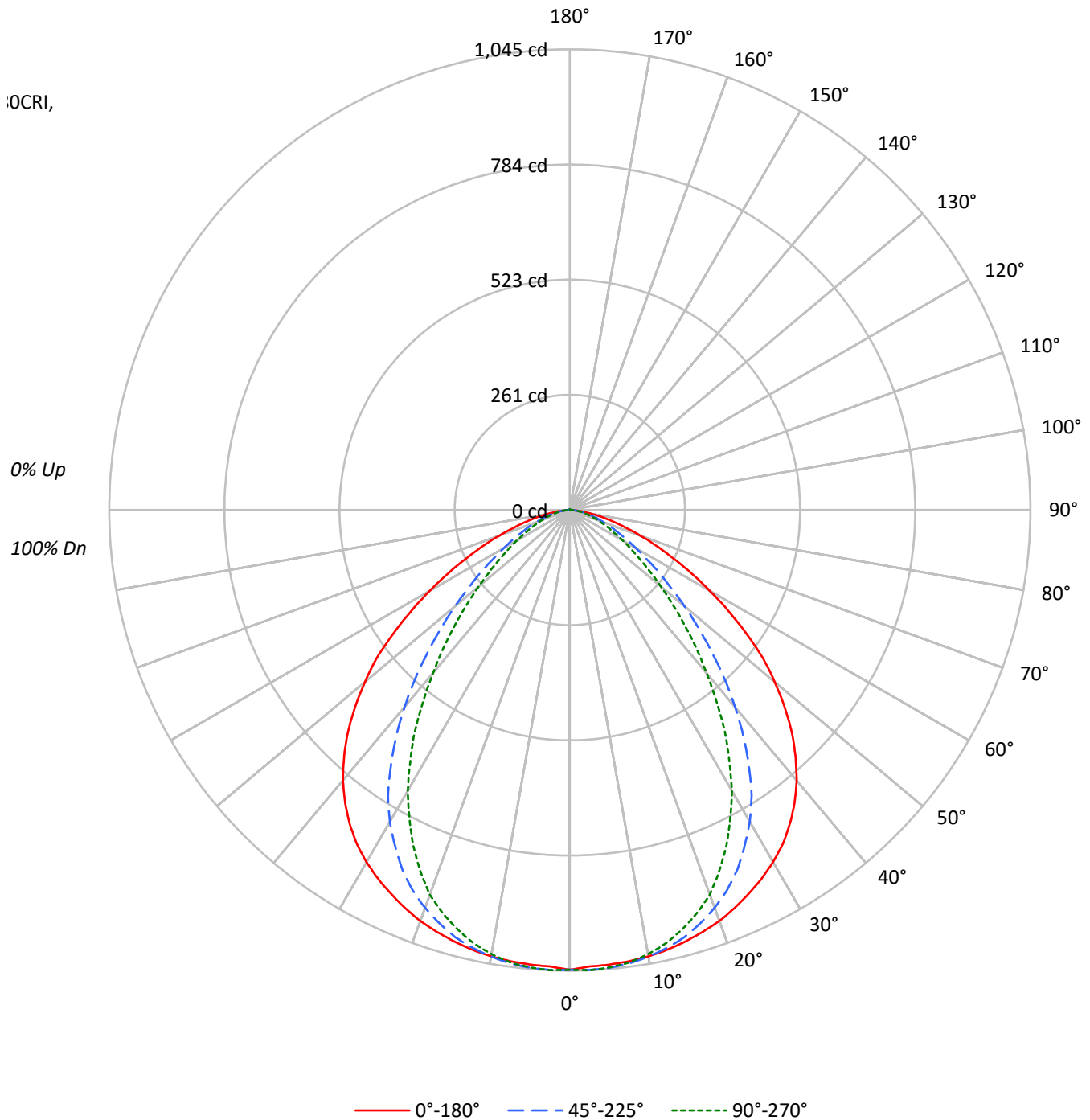
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2125.9 lumens
Efficiency: N/A
Efficacy: 142.7 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.08 / 1.18
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 14.9
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	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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	89	89	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	78	78	78	76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	68	68	68	66
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	60	60	60	58
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	53	53	53	52
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	48	48	48	46
7	70	58	50	44	69	57	49	44	56	49	44	54	48	43	53	47	43	43	43	43	41
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	39	39	39	37
9	62	49	42	36	60	49	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	33	33	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21353	21353	21353
5°	21274	21420	21406
10°	21375	21389	21271
15°	21479	21269	20881
20°	21616	20926	20235
25°	21696	20325	18987
30°	21805	19303	17388
35°	21748	17696	15333
40°	21408	15586	12892
45°	20621	13170	10636
50°	19336	10825	8579
55°	17468	8786	6897
60°	15042	7073	5717
65°	12500	5843	4748
70°	10256	4897	4053
75°	8141	4185	3513
80°	6155	3573	3160
85°	4135	3313	2984

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20621 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	4.7
10°-20°	282.2	13.3
20°-30°	413.3	19.4
30°-40°	451.1	21.2
40°-50°	382.4	18.0
50°-60°	260.0	12.2
60°-70°	146.8	6.9
70°-80°	67.0	3.2
80°-90°	17.5	0.8
90°-100°	2.2	0.1
100°-110°	1.3	0.1
110°-120°	0.7	0.0
120°-130°	0.6	0.0
130°-140°	0.5	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	794.5	37.4
0°-40°	1245.6	58.6
0°-60°	1888.0	88.8
0°-90°	2119.4	99.7
90°-120°	4.3	0.2
90°-150°	5.9	0.3
90°-180°	7.0	0.3
0°-180°	2125.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1035	1041	1042	1044	1041	99
15°	1013	1012	1003	992	985	286
25°	960	944	900	859	840	443
35°	870	814	708	634	613	543
45°	712	601	455	386	367	547
55°	489	362	246	204	193	437
65°	258	183	121	103	98	260
75°	103	75	53	46	44	112
85°	18	16	14	13	13	22
90°	0	2	3	4	4	1
95°	0	1	2	4	4	0
105°	0	1	1	2	2	0
115°	0	0	1	1	1	0
125°	0	0	1	1	1	0
135°	1	1	1	1	1	0
145°	1	1	1	1	1	0
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1042.8	1042.8	1042.8	1042.8	1042.8
2.5°	1036.4	1042.1	1044.2	1047.0	1044.9
5°	1035.0	1040.7	1042.1	1044.2	1041.4
7.5°	1032.2	1037.1	1037.1	1037.1	1035.0
10°	1028.0	1031.5	1028.7	1025.8	1023.0
12.5°	1021.6	1023.0	1017.4	1012.5	1006.8
15°	1013.2	1012.5	1003.3	992.0	985.0
17.5°	1003.3	1000.5	983.5	968.7	958.9
20°	992.0	985.0	960.3	937.0	928.6
22.5°	977.2	967.3	932.8	900.3	886.2
25°	960.3	944.1	899.6	858.8	840.4
27.5°	942.7	918.7	858.8	808.0	788.2
30°	922.2	889.1	816.4	757.9	735.4
32.5°	898.9	856.6	767.8	697.3	673.3
35°	870.0	814.3	707.9	633.8	613.4
37.5°	837.6	769.2	647.2	570.4	545.7
40°	800.9	717.7	583.1	506.2	482.3
42.5°	757.9	662.7	519.6	444.9	424.4
45°	712.1	601.4	454.8	386.4	367.3
47.5°	660.6	540.8	395.5	330.7	315.9
50°	607.0	480.1	339.8	284.1	269.3
52.5°	552.8	419.5	288.4	241.1	228.4
55°	489.3	361.7	246.1	204.5	193.2
57.5°	427.3	310.2	205.9	171.3	164.3
60°	367.3	260.9	172.7	144.5	139.6
62.5°	311.6	218.6	145.2	122.0	115.6
65°	258.0	183.3	120.6	102.9	98.0
67.5°	212.2	149.5	100.8	85.3	81.1
70°	171.3	120.6	81.8	69.8	67.7
72.5°	133.3	96.6	67.0	57.8	55.7
75°	102.9	75.4	52.9	46.5	44.4
77.5°	75.4	56.4	40.9	36.0	34.5
80°	52.2	40.2	30.3	27.5	26.8
82.5°	33.1	26.1	21.9	19.7	19.7
85°	17.6	16.2	14.1	13.4	12.7
87.5°	7.1	7.8	7.8	7.8	7.1
90°	0.0	2.1	2.8	3.5	3.5
92.5°	0.0	1.4	2.8	3.5	3.5
95°	0.0	0.7	2.1	3.5	3.5
97.5°	0.0	0.7	2.1	2.8	2.8
100°	0.0	0.7	1.4	2.8	2.8
102.5°	0.0	0.7	1.4	2.1	2.8
105°	0.0	0.7	1.4	2.1	2.1
107.5°	0.0	0.0	1.4	2.1	2.1
110°	0.0	0.0	0.7	1.4	2.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.7	1.4	2.1
115°	0.0	0.0	0.7	1.4	1.4
117.5°	0.0	0.0	0.7	1.4	1.4
120°	0.0	0.0	0.7	1.4	1.4
122.5°	0.0	0.0	0.7	1.4	1.4
125°	0.0	0.0	0.7	1.4	1.4
127.5°	0.0	0.7	0.7	0.7	1.4
130°	0.0	0.7	0.7	0.7	1.4
132.5°	0.7	0.7	0.7	0.7	0.7
135°	0.7	0.7	0.7	0.7	0.7
137.5°	0.7	0.7	0.7	0.7	0.7
140°	0.7	0.7	0.7	0.7	0.7
142.5°	0.7	0.7	0.7	0.7	0.7
145°	0.7	0.7	0.7	0.7	0.7
147.5°	0.7	0.7	0.7	0.7	0.7
150°	0.7	0.7	0.7	0.7	0.7
152.5°	0.7	0.7	0.7	0.7	0.7
155°	0.7	0.7	0.7	0.7	0.7
157.5°	0.7	0.7	0.7	0.7	0.7
160°	0.7	0.7	0.7	0.7	1.4
162.5°	0.7	0.7	0.7	1.4	1.4
165°	0.7	0.7	0.7	1.4	1.4
167.5°	0.7	0.7	0.7	1.4	1.4
170°	0.7	0.7	0.7	1.4	1.4
172.5°	0.7	0.7	0.7	1.4	1.4
175°	0.7	0.7	1.4	1.4	1.4
177.5°	0.7	0.7	1.4	1.4	1.4
180°	1.4	1.4	1.4	1.4	1.4



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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	20.97	22.41	21.34	22.73	23.06	16.33	17.78	16.70	18.10	18.42
	3H	22.22	23.51	22.61	23.85	24.22	17.37	18.66	17.76	19.00	19.37
	4H	22.62	23.83	23.03	24.18	24.57	17.74	18.95	18.15	19.30	19.69
	6H	22.86	23.97	23.28	24.35	24.75	18.00	19.11	18.42	19.49	19.89
	8H	22.92	23.97	23.35	24.37	24.78	18.09	19.15	18.53	19.54	19.95
	12H	22.94	23.94	23.37	24.33	24.77	18.16	19.17	18.59	19.56	19.99
4H	2H	20.99	22.19	21.39	22.55	22.93	16.91	18.11	17.31	18.47	18.86
	3H	22.39	23.39	22.81	23.79	24.20	18.13	19.13	18.55	19.53	19.94
	4H	22.89	23.77	23.32	24.20	24.65	18.59	19.48	19.03	19.91	20.35
	6H	23.23	24.00	23.69	24.45	24.92	18.95	19.72	19.42	20.17	20.64
	8H	23.31	24.03	23.78	24.48	24.96	19.07	19.79	19.55	20.24	20.72
	12H	23.36	24.00	23.85	24.49	24.97	19.17	19.81	19.66	20.30	20.78
8H	4H	22.88	23.60	23.35	24.05	24.52	18.88	19.60	19.36	20.05	20.53
	6H	23.27	23.86	23.77	24.36	24.85	19.33	19.92	19.83	20.42	20.91
	8H	23.39	23.92	23.91	24.44	24.94	19.51	20.04	20.03	20.56	21.05
	12H	23.48	23.95	24.00	24.45	25.03	19.67	20.14	20.19	20.64	21.22
12H	4H	22.85	23.49	23.34	23.98	24.46	18.91	19.56	19.40	20.04	20.52
	6H	23.24	23.77	23.76	24.29	24.79	19.38	19.91	19.90	20.43	20.93
	8H	23.40	23.87	23.91	24.37	24.94	19.61	20.08	20.13	20.58	21.15