

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: P892488

Luminaire Tested: 2MB-2SL-AOL-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892488
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-L850
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 8
5000K CCT
Light Source: -
Ballast/Driver: -

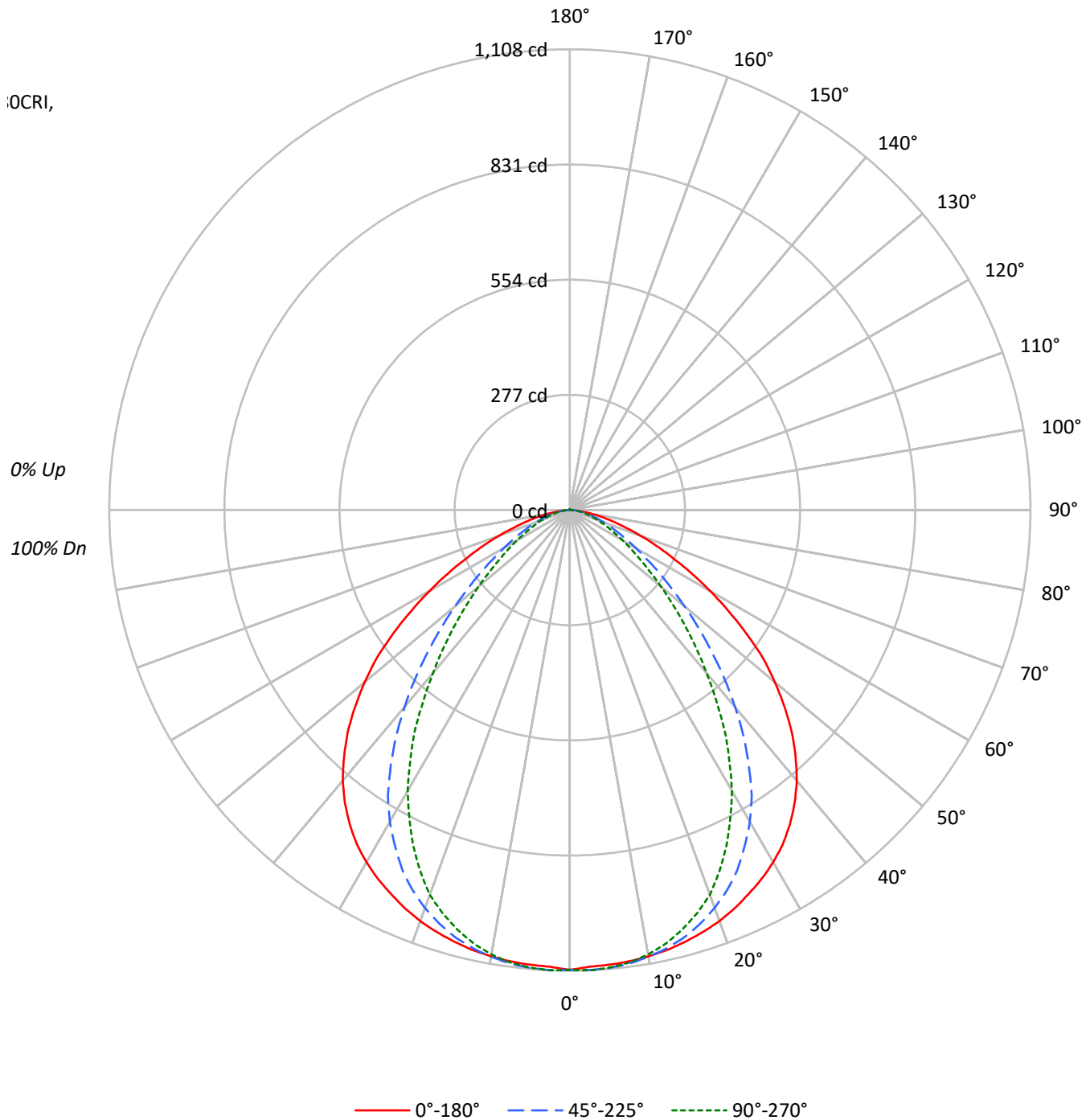
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2254.8 lumens
Efficiency: N/A
Efficacy: 151.3 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°	22647	22647	22647
5°	22565	22719	22703
10°	22670	22687	22562
15°	22780	22560	22146
20°	22928	22194	21462
25°	23011	21559	20140
30°	23129	20476	18442
35°	23067	18768	16263
40°	22707	16533	13672
45°	21872	13969	11282
50°	20512	11484	9101
55°	18528	9318	7315
60°	15955	7503	6065
65°	13261	6197	5034
70°	10878	5191	4299
75°	8639	4438	3726
80°	6521	3797	3349
85°	4393	3524	3172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21872 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	4.7
10°-20°	299.4	13.3
20°-30°	438.4	19.4
30°-40°	478.4	21.2
40°-50°	405.7	18.0
50°-60°	275.7	12.2
60°-70°	155.7	6.9
70°-80°	71.1	3.2
80°-90°	18.6	0.8
90°-100°	2.4	0.1
100°-110°	1.4	0.1
110°-120°	0.8	0.0
120°-130°	0.7	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°	842.8	37.4
0°-40°	1321.2	58.6
0°-60°	2002.6	88.8
0°-90°	2247.9	99.7
90°-120°	4.5	0.2
90°-150°	6.2	0.3
90°-180°	7.0	0.3
0°-180°	2254.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1098	1104	1105	1108	1104	105
15°	1075	1074	1064	1052	1045	304
25°	1018	1001	954	911	891	470
35°	923	864	751	672	651	576
45°	755	638	482	410	390	580
55°	519	384	261	217	205	463
65°	274	194	128	109	104	275
75°	109	80	56	49	47	118
85°	19	17	15	14	14	23
90°	0	2	3	4	4	1
95°	0	1	2	4	4	0
105°	0	1	2	2	2	0
115°	0	0	1	2	2	0
125°	0	0	1	2	2	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	2	2	0
175°	1	1	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1106.0	1106.0	1106.0	1106.0	1106.0
2.5°	1099.3	1105.3	1107.5	1110.5	1108.3
5°	1097.8	1103.8	1105.3	1107.5	1104.5
7.5°	1094.8	1100.1	1100.1	1100.1	1097.8
10°	1090.3	1094.1	1091.1	1088.1	1085.1
12.5°	1083.6	1085.1	1079.1	1073.9	1067.9
15°	1074.6	1073.9	1064.2	1052.2	1044.7
17.5°	1064.2	1061.2	1043.2	1027.5	1017.0
20°	1052.2	1044.7	1018.5	993.9	984.9
22.5°	1036.5	1026.0	989.4	955.0	940.0
25°	1018.5	1001.3	954.2	910.9	891.4
27.5°	999.8	974.4	910.9	857.0	836.1
30°	978.2	943.0	866.0	803.9	780.0
32.5°	953.5	908.6	814.4	739.6	714.2
35°	922.8	863.7	750.8	672.3	650.6
37.5°	888.4	815.9	686.5	605.0	578.8
40°	849.5	761.3	618.5	536.9	511.5
42.5°	803.9	703.0	551.2	471.9	450.2
45°	755.3	637.9	482.4	409.8	389.6
47.5°	700.7	573.6	419.5	350.7	335.0
50°	643.9	509.3	360.5	301.4	285.7
52.5°	586.3	445.0	305.9	255.8	242.3
55°	519.0	383.6	261.0	216.9	204.9
57.5°	453.2	329.0	218.4	181.7	174.2
60°	389.6	276.7	183.2	153.3	148.1
62.5°	330.5	231.8	154.1	129.4	122.6
65°	273.7	194.4	127.9	109.2	103.9
67.5°	225.1	158.5	106.9	90.5	86.0
70°	181.7	127.9	86.7	74.0	71.8
72.5°	141.3	102.5	71.0	61.3	59.1
75°	109.2	80.0	56.1	49.4	47.1
77.5°	80.0	59.8	43.4	38.1	36.6
80°	55.3	42.6	32.2	29.2	28.4
82.5°	35.1	27.7	23.2	20.9	20.9
85°	18.7	17.2	15.0	14.2	13.5
87.5°	7.5	8.2	8.2	8.2	7.5
90°	0.0	2.2	3.0	3.7	3.7
92.5°	0.0	1.5	3.0	3.7	3.7
95°	0.0	0.7	2.2	3.7	3.7
97.5°	0.0	0.7	2.2	3.0	3.0
100°	0.0	0.7	1.5	3.0	3.0
102.5°	0.0	0.7	1.5	2.2	3.0
105°	0.0	0.7	1.5	2.2	2.2
107.5°	0.0	0.0	1.5	2.2	2.2
110°	0.0	0.0	0.7	1.5	2.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.7	1.5	2.2
115°	0.0	0.0	0.7	1.5	1.5
117.5°	0.0	0.0	0.7	1.5	1.5
120°	0.0	0.0	0.7	1.5	1.5
122.5°	0.0	0.0	0.7	1.5	1.5
125°	0.0	0.0	0.7	1.5	1.5
127.5°	0.0	0.7	0.7	0.7	1.5
130°	0.0	0.7	0.7	0.7	1.5
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	1.5
162.5°	0.7	0.7	0.7	1.5	1.5
165°	0.7	0.7	0.7	1.5	1.5
167.5°	0.7	0.7	0.7	1.5	1.5
170°	0.7	0.7	0.7	1.5	1.5
172.5°	0.7	0.7	0.7	1.5	1.5
175°	0.7	0.7	1.5	1.5	1.5
177.5°	0.7	0.7	1.5	1.5	1.5
180°	1.5	1.5	1.5	1.5	1.5



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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	21.17	22.62	21.55	22.94	23.26	16.54	17.98	16.91	18.30	18.62
	3H	22.43	23.72	22.81	24.05	24.42	17.58	18.87	17.96	19.20	19.57
	4H	22.83	24.03	23.23	24.39	24.78	17.95	19.15	18.35	19.51	19.90
	6H	23.07	24.18	23.48	24.55	24.95	18.21	19.32	18.63	19.69	20.09
	8H	23.12	24.17	23.55	24.57	24.98	18.30	19.35	18.73	19.75	20.16
	12H	23.14	24.15	23.58	24.54	24.97	18.36	19.37	18.80	19.76	20.20
4H	2H	21.19	22.39	21.60	22.75	23.14	17.11	18.32	17.52	18.67	19.06
	3H	22.60	23.59	23.02	24.00	24.41	18.34	19.33	18.76	19.74	20.15
	4H	23.09	23.98	23.53	24.40	24.85	18.80	19.69	19.24	20.11	20.56
	6H	23.43	24.20	23.90	24.65	25.12	19.16	19.93	19.62	20.38	20.85
	8H	23.52	24.24	23.99	24.69	25.16	19.28	20.00	19.75	20.45	20.93
	12H	23.57	24.21	24.06	24.69	25.17	19.38	20.02	19.87	20.51	20.99
8H	4H	23.08	23.80	23.55	24.25	24.73	19.09	19.81	19.56	20.26	20.74
	6H	23.47	24.07	23.98	24.57	25.05	19.53	20.13	20.04	20.63	21.11
	8H	23.60	24.13	24.12	24.65	25.14	19.71	20.25	20.24	20.76	21.26
	12H	23.69	24.16	24.20	24.66	25.23	19.88	20.35	20.40	20.85	21.42
12H	4H	23.06	23.70	23.55	24.18	24.66	19.12	19.76	19.61	20.25	20.73
	6H	23.45	23.98	23.97	24.50	24.99	19.58	20.12	20.11	20.63	21.13
	8H	23.60	24.07	24.12	24.57	25.14	19.81	20.29	20.33	20.78	21.36