

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: P892600

Luminaire Tested: 2MB-3SL-AOL-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892600
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-3SL-AOL-UNV-L850
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 8
5000K CCT
Light Source: -
Ballast/Driver: -

Summary

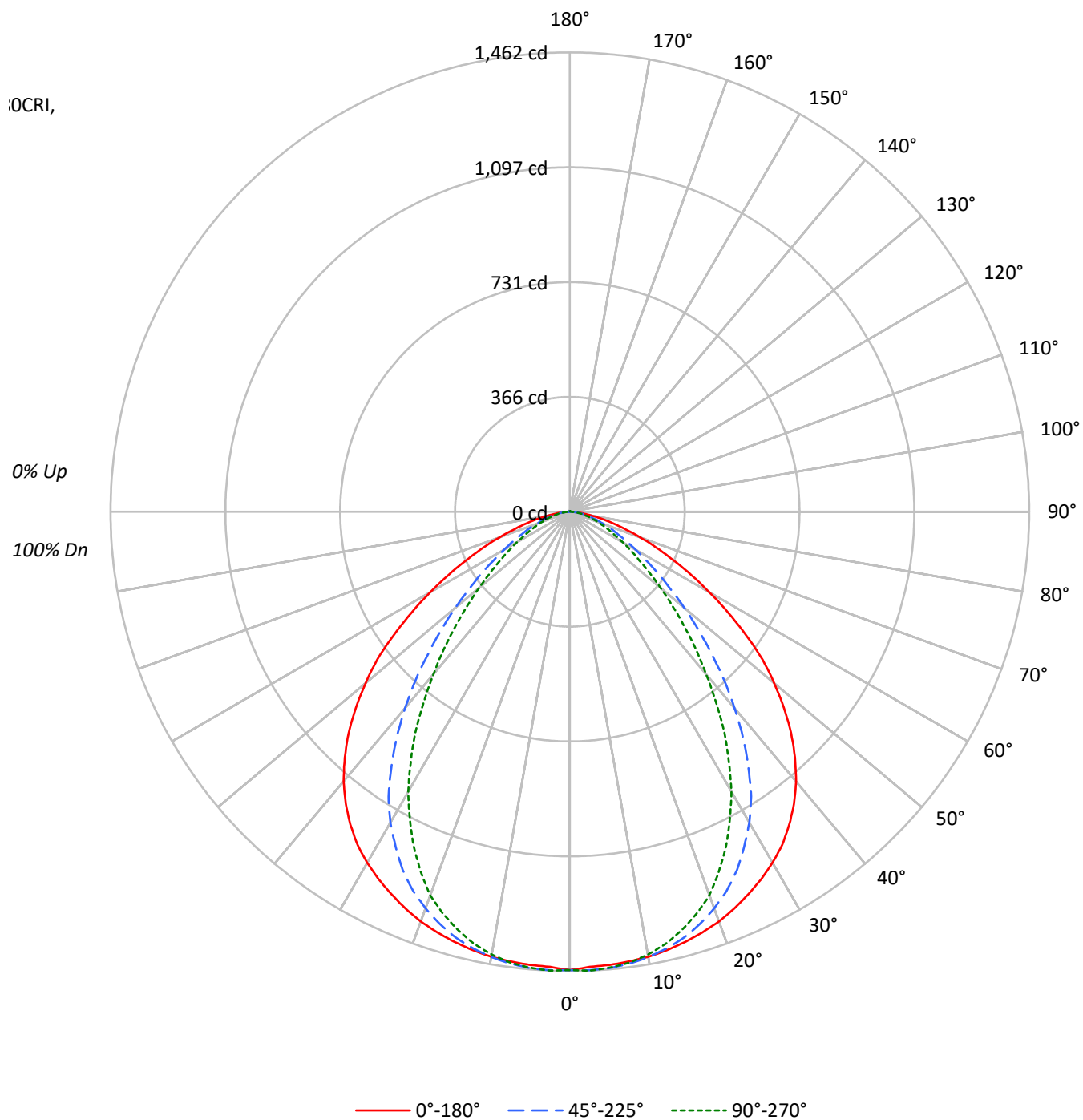
Lumens per Lamp: N/A
Luminaire Lumens: 2974.1 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.08 / 1.18
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 8
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P892600

CATALOG NUMBER: 2MB-3SL-AOL-UNV-L850

Luminous Intensity Polar Plot



TEST NUMBER: P892600

CATALOG NUMBER: 2MB-3SL-AOL-UNV-L850

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	104	101	98	100	97	95		96	94	92		93
2	102	95	89	84	100	93	88	83	90	85	81		87	83	80		84
3	94	85	78	72	92	84	77	72	81	75	71		78	73	69		76
4	87	77	69	63	85	75	68	63	73	67	62		71	65	61		69
5	81	69	61	55	79	68	61	55	66	60	55		64	59	54		63
6	75	63	55	49	73	62	55	49	61	54	49		59	53	48		57
7	70	58	50	44	69	57	49	44	56	49	44		54	48	43		53
8	66	53	45	40	64	52	45	40	51	44	40		50	44	39		49
9	62	49	42	36	60	49	41	36	47	41	36		46	40	36		45
10	58	46	38	33	57	45	38	33	44	38	33		43	37	33		42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29869	29869	29869
5°	29759	29963	29942
10°	29899	29920	29756
15°	30045	29753	29208
20°	30239	29271	28304
25°	30350	28434	26561
30°	30501	27004	24323
35°	30424	24752	21450
40°	29948	21801	18032
45°	28845	18420	14879
50°	27052	15144	12003
55°	24436	12288	9646
60°	21042	9894	7998
65°	17491	8174	6643
70°	14351	6849	5670
75°	11393	5855	4913
80°	8608	5000	4422
85°	5803	4628	4182

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 28845 cd/sqm

TEST NUMBER: P892600

CATALOG NUMBER: 2MB-3SL-AOL-UNV-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	4.7
10°-20°	394.8	13.3
20°-30°	578.2	19.4
30°-40°	631.0	21.2
40°-50°	535.0	18.0
50°-60°	363.6	12.2
60°-70°	205.4	6.9
70°-80°	93.7	3.2
80°-90°	24.5	0.8
90°-100°	3.1	0.1
100°-110°	1.9	0.1
110°-120°	1.0	0.0
120°-130°	0.9	0.0
130°-140°	0.8	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	1111.5	37.4
0°-40°	1742.4	58.6
0°-60°	2641.1	88.8
0°-90°	2964.7	99.7
90°-120°	6.1	0.2
90°-150°	8.4	0.3
90°-180°	9.0	0.3
0°-180°	2974.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1459	1459	1459	1459	1459	
5°	1448	1456	1458	1461	1457	138
15°	1417	1416	1404	1388	1378	401
25°	1343	1321	1258	1201	1176	620
35°	1217	1139	990	887	858	760
45°	996	841	636	540	514	765
55°	684	506	344	286	270	611
65°	361	256	169	144	137	363
75°	144	106	74	65	62	156
85°	25	23	20	19	18	31
90°	0	3	4	5	5	1
95°	0	1	3	5	5	0
105°	0	1	2	3	3	0
115°	0	0	1	2	2	0
125°	0	0	1	2	2	0
135°	1	1	1	1	1	1
145°	1	1	1	1	1	1
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	

TEST NUMBER: P892600

CATALOG NUMBER: 2MB-3SL-AOL-UNV-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1458.7	1458.7	1458.7	1458.7	1458.7
2.5°	1449.8	1457.7	1460.7	1464.6	1461.7
5°	1447.8	1455.7	1457.7	1460.7	1456.7
7.5°	1443.9	1450.8	1450.8	1450.8	1447.8
10°	1438.0	1442.9	1439.0	1435.0	1431.1
12.5°	1429.1	1431.1	1423.2	1416.3	1408.4
15°	1417.3	1416.3	1403.5	1387.7	1377.8
17.5°	1403.5	1399.5	1375.9	1355.1	1341.3
20°	1387.7	1377.8	1343.3	1310.8	1298.9
22.5°	1367.0	1353.2	1304.8	1259.5	1239.7
25°	1343.3	1320.6	1258.5	1201.3	1175.6
27.5°	1318.6	1285.1	1201.3	1130.3	1102.7
30°	1290.0	1243.7	1142.1	1060.2	1028.7
32.5°	1257.5	1198.3	1074.1	975.4	941.9
35°	1217.1	1139.1	990.2	886.7	858.1
37.5°	1171.7	1076.0	905.4	797.9	763.4
40°	1120.4	1004.0	815.6	708.1	674.6
42.5°	1060.2	927.1	726.9	622.3	593.7
45°	996.1	841.3	636.1	540.5	513.8
47.5°	924.1	756.5	553.3	462.6	441.9
50°	849.2	671.7	475.4	397.5	376.8
52.5°	773.2	586.8	403.4	337.3	319.6
55°	684.5	506.0	344.2	286.0	270.2
57.5°	597.7	434.0	288.0	239.7	229.8
60°	513.8	364.9	241.6	202.2	195.3
62.5°	435.9	305.7	203.2	170.6	161.7
65°	361.0	256.4	168.7	144.0	137.1
67.5°	296.9	209.1	141.0	119.3	113.4
70°	239.7	168.7	114.4	97.6	94.7
72.5°	186.4	135.1	93.7	80.9	77.9
75°	144.0	105.5	74.0	65.1	62.1
77.5°	105.5	78.9	57.2	50.3	48.3
80°	73.0	56.2	42.4	38.5	37.5
82.5°	46.4	36.5	30.6	27.6	27.6
85°	24.7	22.7	19.7	18.7	17.8
87.5°	9.9	10.8	10.8	10.8	9.9
90°	0.0	3.0	3.9	4.9	4.9
92.5°	0.0	2.0	3.9	4.9	4.9
95°	0.0	1.0	3.0	4.9	4.9
97.5°	0.0	1.0	3.0	3.9	3.9
100°	0.0	1.0	2.0	3.9	3.9
102.5°	0.0	1.0	2.0	3.0	3.9
105°	0.0	1.0	2.0	3.0	3.0
107.5°	0.0	0.0	2.0	3.0	3.0
110°	0.0	0.0	1.0	2.0	3.0



TEST NUMBER: P892600

CATALOG NUMBER: 2MB-3SL-AOL-UNV-L850

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	1.0	2.0	3.0
115°	0.0	0.0	1.0	2.0	2.0
117.5°	0.0	0.0	1.0	2.0	2.0
120°	0.0	0.0	1.0	2.0	2.0
122.5°	0.0	0.0	1.0	2.0	2.0
125°	0.0	0.0	1.0	2.0	2.0
127.5°	0.0	1.0	1.0	1.0	2.0
130°	0.0	1.0	1.0	1.0	2.0
132.5°	1.0	1.0	1.0	1.0	1.0
135°	1.0	1.0	1.0	1.0	1.0
137.5°	1.0	1.0	1.0	1.0	1.0
140°	1.0	1.0	1.0	1.0	1.0
142.5°	1.0	1.0	1.0	1.0	1.0
145°	1.0	1.0	1.0	1.0	1.0
147.5°	1.0	1.0	1.0	1.0	1.0
150°	1.0	1.0	1.0	1.0	1.0
152.5°	1.0	1.0	1.0	1.0	1.0
155°	1.0	1.0	1.0	1.0	1.0
157.5°	1.0	1.0	1.0	1.0	1.0
160°	1.0	1.0	1.0	1.0	2.0
162.5°	1.0	1.0	1.0	2.0	2.0
165°	1.0	1.0	1.0	2.0	2.0
167.5°	1.0	1.0	1.0	2.0	2.0
170°	1.0	1.0	1.0	2.0	2.0
172.5°	1.0	1.0	1.0	2.0	2.0
175°	1.0	1.0	2.0	2.0	2.0
177.5°	1.0	1.0	2.0	2.0	2.0
180°	2.0	2.0	2.0	2.0	2.0

TEST NUMBER: P892600

CATALOG NUMBER: 2MB-3SL-AOL-UNV-L850

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	22.14	23.58	22.51	23.90	24.22	17.50	18.94	17.87	19.26	19.59
	3H	23.39	24.68	23.77	25.01	25.38	18.54	19.83	18.92	20.16	20.53
	4H	23.79	24.99	24.20	25.35	25.74	18.91	20.11	19.32	20.47	20.86
	6H	24.03	25.14	24.45	25.51	25.91	19.17	20.28	19.59	20.65	21.05
	8H	24.08	25.14	24.52	25.53	25.94	19.26	20.31	19.69	20.71	21.12
	12H	24.10	25.11	24.54	25.50	25.94	19.33	20.33	19.76	20.72	21.16
4H	2H	22.15	23.36	22.56	23.71	24.10	18.07	19.28	18.48	19.63	20.02
	3H	23.56	24.55	23.98	24.96	25.37	19.30	20.29	19.72	20.70	21.11
	4H	24.05	24.94	24.49	25.36	25.81	19.76	20.65	20.20	21.07	21.52
	6H	24.39	25.16	24.86	25.61	26.08	20.12	20.89	20.58	21.34	21.81
	8H	24.48	25.20	24.95	25.65	26.13	20.24	20.96	20.71	21.41	21.89
	12H	24.53	25.17	25.02	25.65	26.13	20.34	20.98	20.83	21.47	21.95
8H	4H	24.04	24.76	24.52	25.21	25.69	20.05	20.77	20.52	21.22	21.70
	6H	24.44	25.03	24.94	25.53	26.01	20.50	21.09	21.00	21.59	22.07
	8H	24.56	25.09	25.08	25.61	26.10	20.67	21.21	21.20	21.72	22.22
	12H	24.65	25.12	25.17	25.62	26.19	20.84	21.31	21.36	21.81	22.38
12H	4H	24.02	24.66	24.51	25.14	25.62	20.08	20.72	20.57	21.21	21.69
	6H	24.41	24.94	24.93	25.46	25.95	20.55	21.08	21.07	21.60	22.09
	8H	24.56	25.03	25.08	25.53	26.11	20.78	21.25	21.29	21.75	22.32

END OF REPORT