

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: P895760

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

Issue Date: 11/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P895760
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-2SL-ACL-UNV-L850
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 5000K (C)
Light Source: -
Ballast/Driver: -

Summary

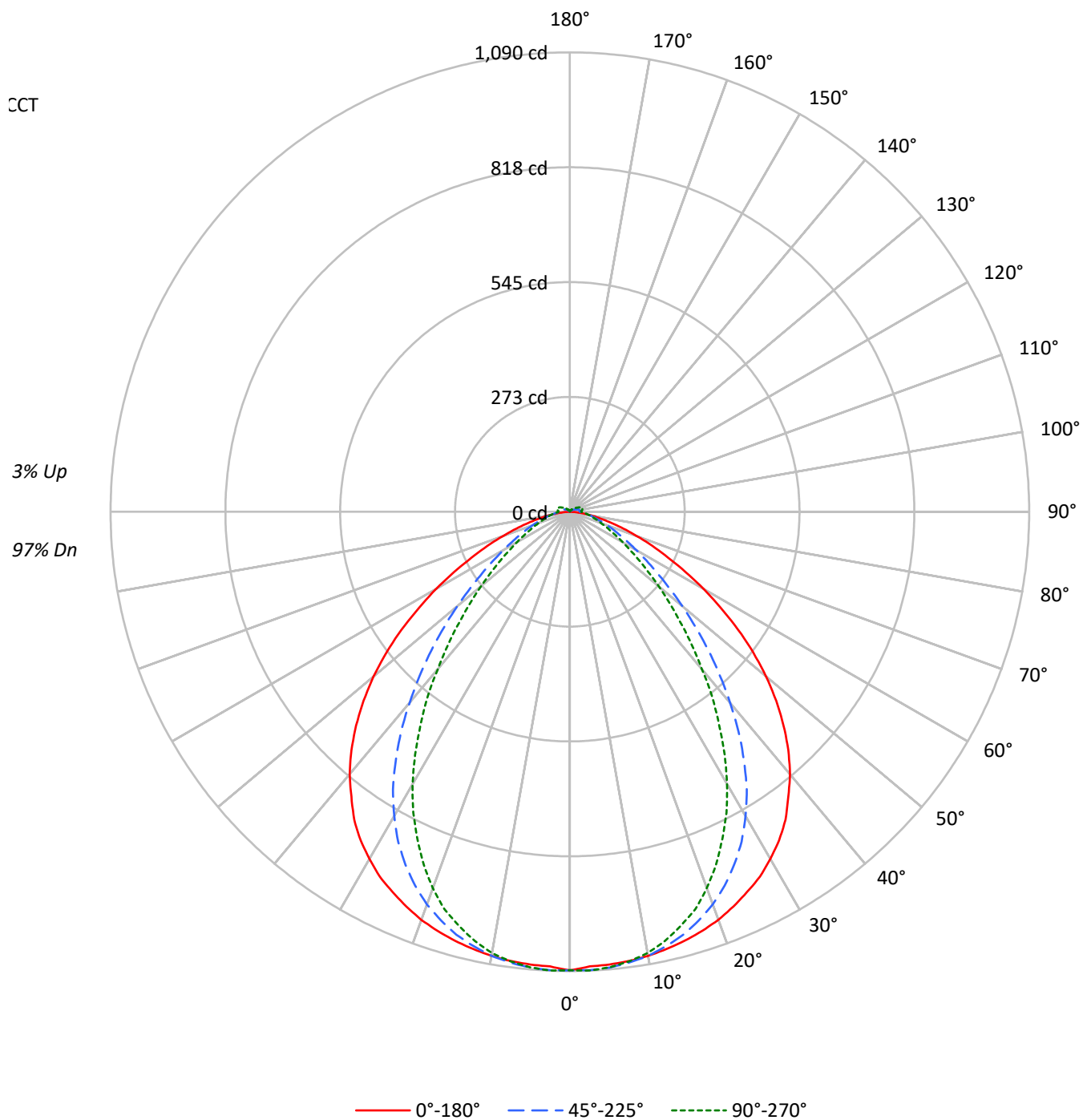
Lumens per Lamp: N/A
Luminaire Lumens: 2267.0 lumens
Efficiency: N/A
Efficacy: 152.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.07 / 1.17
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')
CIE Type: Direct

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

TEST NUMBER: P895760

CATALOG NUMBER: 2MB-2SL-ACL-UNV-L850

Luminous Intensity Polar Plot



TEST NUMBER: P895760

CATALOG NUMBER: 2MB-2SL-ACL-UNV-L850

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
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	97
1	110	105	102	98	107	103	100	97	98	96	93	94	92	90	90	88	87	87	87	84
2	101	94	88	83	98	92	86	82	88	83	80	84	81	77	81	78	75	75	75	73
3	93	84	77	71	91	82	76	70	79	73	69	76	71	67	73	69	66	66	66	64
4	86	76	68	62	84	74	67	61	71	65	60	69	63	59	66	62	58	58	58	56
5	80	68	60	54	78	67	60	54	65	58	53	63	57	52	61	56	52	52	52	50
6	74	62	54	48	72	61	54	48	59	52	47	57	51	47	56	50	46	46	46	44
7	69	57	49	43	68	56	49	43	54	48	43	53	47	42	51	46	42	42	42	40
8	65	52	45	39	63	52	44	39	50	43	39	49	43	38	47	42	38	38	38	36
9	61	48	41	36	59	48	40	35	46	40	35	45	39	35	44	39	35	35	35	33
10	57	45	38	33	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22278	22278	22278
5°	22083	21836	21706
10°	22084	21303	20950
15°	22086	20643	19886
20°	22114	19793	18588
25°	22054	18675	16876
30°	21954	17213	14941
35°	21662	15305	12659
40°	20985	13056	10316
45°	19927	10746	8176
50°	18440	8541	6382
55°	16417	6637	4941
60°	13986	5183	3869
65°	11430	4120	3077
70°	9069	3335	2525
75°	7002	2714	2209
80°	4979	2289	1999
85°	2839	1995	1799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19927 cd/sqm

TEST NUMBER: P895760

CATALOG NUMBER: 2MB-2SL-ACL-UNV-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	4.5
10°-20°	292.4	12.9
20°-30°	424.9	18.7
30°-40°	459.3	20.3
40°-50°	387.6	17.1
50°-60°	265.5	11.7
60°-70°	154.8	6.8
70°-80°	79.0	3.5
80°-90°	34.1	1.5
90°-100°	20.7	0.9
100°-110°	18.5	0.8
110°-120°	12.6	0.6
120°-130°	7.0	0.3
130°-140°	3.9	0.2
140°-150°	2.0	0.1
150°-160°	1.1	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	820.4	36.2
0°-40°	1279.7	56.5
0°-60°	1932.8	85.3
0°-90°	2200.8	97.1
90°-120°	51.7	2.3
90°-150°	64.6	2.9
90°-180°	66.0	2.9
0°-180°	2267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1078	1085	1086	1088	1085	103
15°	1054	1053	1039	1027	1017	298
25°	995	976	924	878	856	459
35°	892	834	720	643	618	556
45°	717	606	464	393	371	551
55°	488	369	253	212	200	435
65°	257	189	131	111	106	258
75°	102	84	66	62	61	111
85°	18	25	33	35	35	22
90°	1	11	24	27	27	1
95°	0	10	23	28	28	0
105°	0	6	20	29	31	0
115°	0	4	13	22	25	0
125°	0	2	8	13	15	0
135°	1	2	5	8	9	1
145°	1	2	4	4	5	0
155°	1	2	2	3	4	0
165°	1	1	2	2	2	0
175°	1	1	2	2	1	0
180°	1	1	1	1	1	

TEST NUMBER: P895760

CATALOG NUMBER: 2MB-2SL-ACL-UNV-L850

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.0	1088.0	1088.0	1088.0	1088.0
2.5°	1079.8	1086.5	1088.7	1091.7	1089.5
5°	1078.3	1085.0	1085.7	1088.0	1085.0
7.5°	1075.3	1080.5	1079.0	1079.0	1076.0
10°	1070.0	1073.0	1070.0	1066.3	1063.3
12.5°	1062.6	1064.8	1055.8	1050.6	1043.1
15°	1053.6	1052.8	1039.4	1026.7	1016.9
17.5°	1043.1	1037.9	1016.9	997.5	989.3
20°	1030.4	1020.7	991.5	963.1	950.4
22.5°	1013.9	1000.5	960.1	923.5	906.3
25°	995.3	975.8	923.5	877.9	856.2
27.5°	976.6	947.4	882.3	825.5	804.6
30°	951.1	914.5	833.7	769.4	746.3
32.5°	924.2	877.9	781.4	706.6	683.4
35°	892.1	834.5	720.1	643.1	617.6
37.5°	851.7	783.6	658.0	577.3	555.6
40°	812.8	728.3	591.5	511.5	487.5
42.5°	767.2	668.5	527.2	449.4	427.7
45°	717.1	606.4	464.4	392.6	370.9
47.5°	664.0	547.4	404.5	338.0	320.8
50°	607.9	486.8	348.5	290.9	275.2
52.5°	548.1	426.2	296.9	249.0	234.8
55°	487.5	369.4	252.7	211.6	200.4
57.5°	424.0	314.8	215.4	180.2	169.7
60°	366.4	269.2	181.7	154.0	145.8
62.5°	309.6	227.3	154.8	130.9	124.1
65°	257.2	189.2	130.9	111.4	106.2
67.5°	211.6	158.5	112.2	95.7	92.0
70°	169.0	129.4	94.2	82.3	78.5
72.5°	133.1	104.7	79.3	71.0	68.8
75°	102.4	83.7	66.5	62.1	60.6
77.5°	74.8	64.3	56.1	53.8	53.1
80°	52.3	48.6	47.1	47.1	47.1
82.5°	32.9	35.9	39.6	41.1	41.1
85°	17.9	24.7	32.9	35.1	35.1
87.5°	7.5	17.2	27.7	29.9	29.2
90°	0.7	11.2	23.9	26.9	26.9
92.5°	0.0	11.2	23.9	26.9	26.9
95°	0.0	10.5	23.2	27.7	28.4
97.5°	0.0	9.7	23.2	28.4	29.2
100°	0.7	9.0	23.2	29.2	29.9
102.5°	0.0	7.5	21.7	29.2	30.7
105°	0.0	6.0	20.2	29.2	30.7
107.5°	0.0	4.5	18.7	27.7	29.9
110°	0.0	4.5	17.2	26.2	28.4



TEST NUMBER: P895760

CATALOG NUMBER: 2MB-2SL-ACL-UNV-L850

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	3.7	15.0	23.9	26.9
115°	0.0	3.7	12.7	21.7	24.7
117.5°	0.0	3.0	11.2	19.4	21.7
120°	0.0	3.0	9.7	17.2	19.4
122.5°	0.0	3.0	9.0	15.0	17.2
125°	0.0	2.2	7.5	12.7	15.0
127.5°	0.7	2.2	6.7	11.2	13.5
130°	0.7	2.2	6.0	9.7	12.0
132.5°	0.7	2.2	5.2	9.0	10.5
135°	0.7	2.2	5.2	7.5	9.0
137.5°	0.7	2.2	4.5	6.7	7.5
140°	0.7	2.2	3.7	6.0	6.7
142.5°	0.7	1.5	3.7	5.2	6.0
145°	0.7	1.5	3.7	4.5	5.2
147.5°	0.7	1.5	3.0	4.5	4.5
150°	0.7	1.5	3.0	3.7	4.5
152.5°	0.7	1.5	2.2	3.7	3.7
155°	0.7	1.5	2.2	3.0	3.7
157.5°	0.7	1.5	2.2	3.0	3.0
160°	0.7	1.5	1.5	2.2	3.0
162.5°	0.7	0.7	1.5	2.2	2.2
165°	0.7	0.7	1.5	2.2	2.2
167.5°	0.7	0.7	1.5	1.5	2.2
170°	0.7	0.7	1.5	1.5	1.5
172.5°	0.7	0.7	1.5	1.5	0.7
175°	0.7	0.7	1.5	1.5	0.7
177.5°	0.7	0.7	1.5	0.7	0.7
180°	0.7	0.7	0.7	0.7	0.7

TEST NUMBER: P895760

CATALOG NUMBER: 2MB-2SL-ACL-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	19.32	20.72	19.73	21.09	21.48	15.64	17.04	16.05	17.42	17.81
	3H	20.38	21.63	20.81	22.03	22.46	16.82	18.07	17.25	18.46	18.90
	4H	20.67	21.85	21.12	22.26	22.71	17.35	18.52	17.80	18.93	19.38
	6H	20.81	21.89	21.27	22.32	22.78	17.88	18.97	18.35	19.39	19.86
	8H	20.82	21.85	21.30	22.30	22.77	18.16	19.19	18.64	19.64	20.11
	12H	20.81	21.79	21.29	22.23	22.73	18.45	19.44	18.93	19.88	20.38
4H	2H	19.35	20.52	19.80	20.93	21.38	16.10	17.27	16.55	17.68	18.13
	3H	20.57	21.54	21.03	22.00	22.47	17.46	18.43	17.92	18.89	19.36
	4H	20.95	21.82	21.43	22.29	22.80	18.09	18.97	18.57	19.44	19.95
	6H	21.17	21.93	21.68	22.43	22.96	18.76	19.52	19.27	20.02	20.55
	8H	21.20	21.91	21.71	22.41	22.95	19.11	19.82	19.62	20.32	20.85
	12H	21.21	21.84	21.74	22.37	22.91	19.48	20.12	20.02	20.65	21.19
8H	4H	20.97	21.68	21.48	22.18	22.71	18.31	19.02	18.82	19.52	20.05
	6H	21.24	21.83	21.79	22.38	22.92	19.09	19.68	19.64	20.23	20.77
	8H	21.31	21.84	21.87	22.40	22.96	19.53	20.06	20.09	20.62	21.18
	12H	21.35	21.82	21.91	22.36	22.99	20.03	20.50	20.59	21.05	21.68
12H	4H	20.95	21.59	21.49	22.12	22.66	18.32	18.95	18.85	19.48	20.02
	6H	21.24	21.77	21.80	22.33	22.88	19.13	19.65	19.69	20.22	20.77
	8H	21.34	21.81	21.90	22.35	22.99	19.62	20.09	20.18	20.63	21.26