

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: P892608

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-185-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-3SL-ASMF-UNV-L850
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

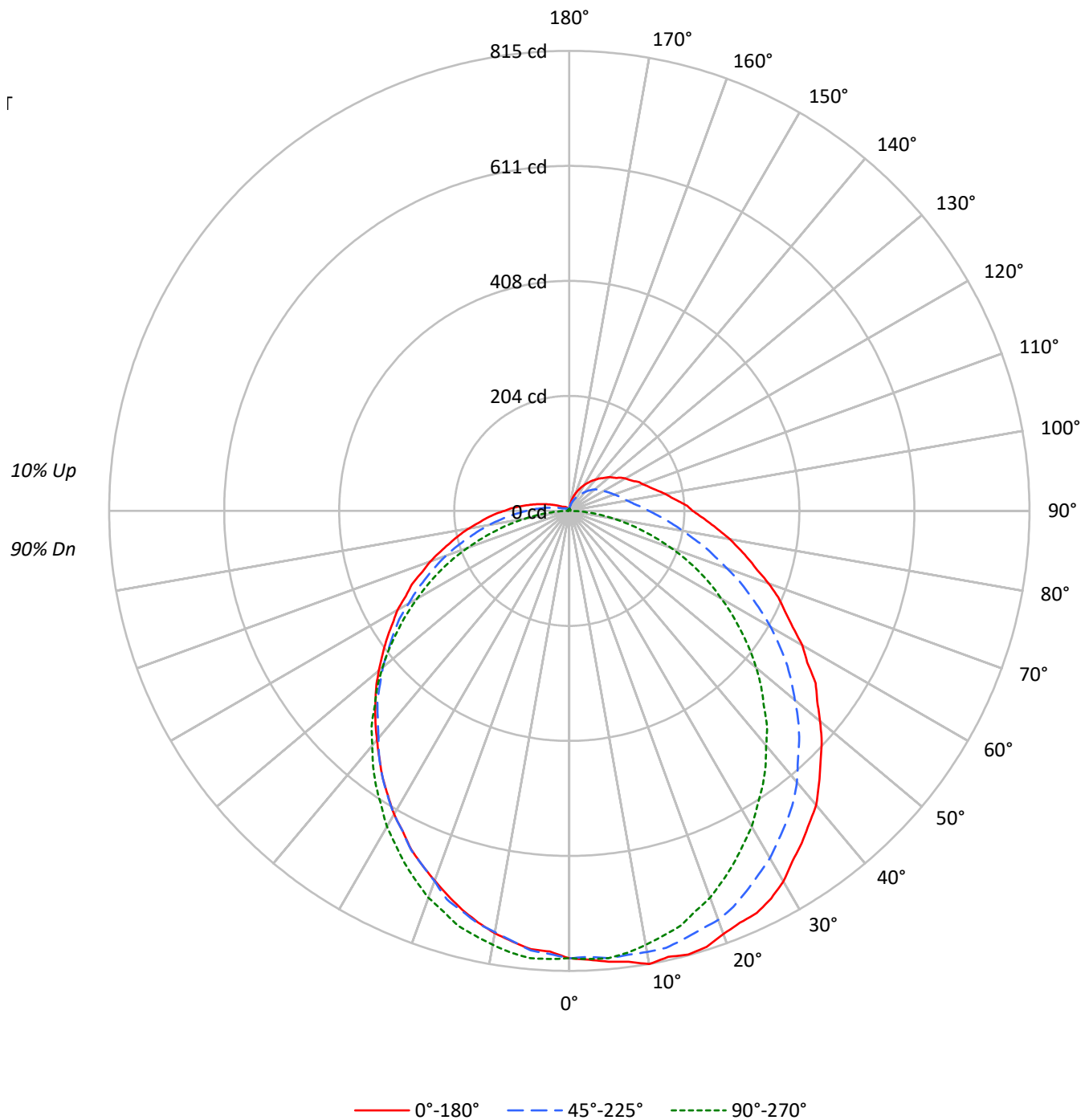
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2725.0 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.21 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V): 120
Input Current (A_{in}): 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

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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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	93	93	93	90
1	105	99	95	90	101	96	92	88	90	87	83	85	82	79	79	77	75	75	75	75	72
2	95	86	79	72	91	83	76	71	78	72	68	73	69	65	69	65	62	62	62	62	59
3	86	75	66	60	83	73	65	58	68	62	56	64	59	54	60	56	52	52	52	52	49
4	79	66	57	50	76	64	56	49	60	53	48	57	51	46	54	49	44	44	44	44	42
5	72	59	50	43	69	57	49	42	54	47	41	51	45	40	48	43	38	38	38	38	36
6	67	53	44	37	64	52	43	37	49	41	36	46	40	35	44	38	34	34	34	34	31
7	62	48	39	33	59	47	38	32	44	37	32	42	36	31	40	34	30	30	30	30	28
8	57	44	35	29	55	43	35	29	41	33	28	39	32	27	37	31	27	27	27	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	28	24	24	24	24	22
10	50	37	29	24	49	36	29	23	34	28	23	33	27	22	31	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16230	16230	16230	16230	16230
5°	16388	15827	15703	15550	15934
10°	16763	15467	14989	14771	15622
15°	16960	15115	14324	14129	15251
20°	16992	14775	13566	13371	14849
25°	17246	14275	12769	12738	14533
30°	17294	13795	12011	12056	14157
35°	17190	13273	11213	11401	13803
40°	17272	12735	10396	10668	13449
45°	17141	12105	9590	10106	13224
50°	17177	11459	8817	9466	13044
55°	17440	10893	7927	8824	12912
60°	17582	10195	7019	8145	12975
65°	17995	9445	6096	7471	13121
70°	19167	8723	4998	6825	13361
75°	21032	8189	3823	6080	13957
80°	25082	7664	2562	5418	15723
85°	34123	7498	1285	4731	20056

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 70802 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	2.8
10°-20°	215.5	7.9
20°-30°	325.0	11.9
30°-40°	390.1	14.3
40°-50°	406.2	14.9
50°-60°	376.5	13.8
60°-70°	310.1	11.4
70°-80°	223.7	8.2
80°-90°	142.0	5.2
90°-100°	87.6	3.2
100°-110°	58.4	2.1
110°-120°	41.6	1.5
120°-130°	30.5	1.1
130°-140°	20.9	0.8
140°-150°	12.8	0.5
150°-160°	6.3	0.2
160°-170°	2.3	0.1
170°-180°	0.4	0.0
0°-30°	615.8	22.6
0°-40°	1005.8	36.9
0°-60°	1788.6	65.6
0°-90°	2464.3	90.4
90°-120°	187.5	6.9
90°-150°	251.7	9.2
90°-180°	261.0	9.6
0°-180°	2725.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	793	793	793	793	793	
5°	802	795	795	782	780	77
15°	814	785	761	734	732	229
25°	786	743	689	663	662	361
35°	718	671	596	577	577	450
45°	629	576	487	481	486	487
55°	533	470	371	380	394	473
65°	422	353	253	279	308	420
75°	328	249	133	185	218	348
85°	250	170	35	107	147	212
90°	218	141	3	76	114	120
95°	195	119	2	51	88	155
105°	153	94	2	21	46	163
115°	125	77	2	10	22	125
125°	102	65	3	8	13	93
135°	82	52	3	6	10	64
145°	63	36	3	4	7	40
155°	43	24	3	3	4	20
165°	25	14	3	2	2	7
175°	4	6	4	2	0	1
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	792.6	792.6	792.6	792.6	792.6	792.6	792.6	792.6	792.6
2.5°	795.8	798.1	790.6	795.4	794.6	795.4	785.8	793.8	781.5
5°	801.7	802.9	795.4	798.1	795.4	788.6	781.5	778.7	779.5
7.5°	805.7	812.0	793.4	794.2	789.4	782.3	768.8	771.2	769.6
10°	815.2	808.0	793.4	789.8	780.7	773.2	757.7	758.9	759.7
12.5°	809.2	807.6	793.0	779.9	770.8	764.4	748.6	744.6	746.6
15°	813.6	806.9	785.1	774.8	760.9	749.8	733.9	731.2	731.6
17.5°	809.6	804.1	777.1	762.9	743.4	736.7	721.7	716.9	714.5
20°	797.7	795.0	771.2	746.6	729.2	716.1	697.9	695.1	697.1
22.5°	789.8	783.1	759.3	734.7	709.4	697.9	679.6	679.2	679.6
25°	785.8	777.1	743.0	717.3	689.2	678.9	663.0	657.1	662.2
27.5°	774.0	766.0	726.0	697.9	666.6	652.7	639.6	638.4	639.2
30°	758.1	742.7	710.6	676.1	646.0	631.7	621.0	613.1	620.6
32.5°	735.5	726.8	690.3	652.7	619.4	609.5	598.8	598.0	598.0
35°	718.1	711.7	671.3	632.1	596.4	582.9	576.6	573.8	576.6
37.5°	697.9	688.4	651.1	607.1	570.7	559.2	552.8	550.5	552.4
40°	680.4	663.0	627.3	581.4	542.5	532.2	525.5	527.9	529.8
42.5°	654.7	644.8	599.2	555.2	518.4	507.3	501.7	503.7	508.4
45°	629.3	620.2	575.8	527.9	487.0	481.1	480.7	479.5	485.5
47.5°	606.3	593.3	550.1	500.9	460.9	454.2	454.9	458.9	464.1
50°	579.8	564.3	521.5	472.0	432.0	427.6	430.8	433.5	440.3
52.5°	553.2	540.9	495.4	444.6	402.6	399.5	403.8	412.9	416.9
55°	532.6	510.4	469.6	412.5	371.3	371.7	380.4	385.6	394.3
57.5°	499.7	483.1	440.3	384.0	342.0	344.8	356.7	365.4	370.9
60°	476.3	455.3	411.7	353.5	311.1	315.4	328.9	342.0	351.5
62.5°	446.2	428.0	382.0	323.4	282.6	288.9	304.0	319.4	326.1
65°	421.7	401.0	352.7	293.3	252.8	260.4	279.0	296.4	307.5
67.5°	400.7	379.3	326.5	265.5	222.7	233.8	255.6	272.6	281.4
70°	375.7	350.7	296.8	234.6	191.4	204.5	232.2	252.0	261.9
72.5°	349.1	328.9	271.1	206.1	162.5	178.3	208.8	229.5	239.0
75°	328.5	305.9	249.3	177.5	133.2	152.2	185.1	208.5	218.0
77.5°	307.5	286.9	224.7	151.4	107.0	128.4	164.1	189.8	199.7
80°	288.9	265.1	204.1	130.0	79.7	105.0	144.3	169.6	181.1
82.5°	268.3	247.7	186.3	107.4	56.7	83.6	124.8	152.6	162.1
85°	250.1	228.7	169.6	89.6	34.9	64.6	107.0	135.5	147.0
87.5°	233.4	215.6	154.2	76.1	17.4	49.1	90.0	118.9	132.0
90°	218.4	198.1	141.1	63.8	3.2	35.7	76.1	104.6	114.5
92.5°	208.8	184.7	130.4	55.9	2.0	25.4	63.4	91.5	103.0
95°	194.6	173.2	119.3	49.9	2.0	17.0	51.1	78.5	88.4
97.5°	182.3	162.5	111.4	46.4	1.6	11.5	42.0	65.8	76.1
100°	172.8	154.2	104.2	43.2	2.0	8.3	33.3	55.9	65.0
102.5°	162.1	145.0	98.7	41.2	2.0	5.9	26.2	47.2	55.5
105°	152.6	137.5	93.5	39.2	2.0	5.2	21.0	38.8	46.4
107.5°	145.4	129.6	89.2	38.0	2.0	5.2	16.6	31.7	38.0
110°	138.3	123.2	84.8	36.9	2.0	4.8	13.1	26.2	31.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	133.6	117.3	80.8	35.7	2.4	4.8	10.7	21.8	26.2
115°	125.2	112.2	77.3	35.3	2.4	4.4	9.9	17.8	22.2
117.5°	119.3	107.4	73.7	34.1	2.4	4.4	9.5	14.7	17.8
120°	114.9	101.8	70.5	32.9	2.4	4.0	8.7	13.1	15.1
122.5°	109.4	96.7	67.8	32.1	2.4	4.0	8.3	12.3	13.5
125°	101.8	91.9	64.6	30.5	2.8	4.0	7.9	11.5	12.7
127.5°	97.1	87.6	62.2	28.5	2.8	3.6	7.5	10.7	11.9
130°	93.1	82.8	59.4	26.6	2.8	3.6	7.1	9.9	11.1
132.5°	87.2	78.1	55.5	25.0	2.8	3.2	6.3	9.1	10.3
135°	81.6	74.1	51.5	23.4	2.8	3.2	5.9	8.7	9.5
137.5°	78.1	70.1	48.0	21.8	2.8	2.8	5.5	7.9	8.7
140°	72.1	65.8	44.0	20.2	2.8	2.8	5.2	7.5	7.9
142.5°	67.8	61.4	40.4	18.6	2.8	2.8	4.8	6.7	7.5
145°	62.6	57.1	36.5	17.0	2.8	2.4	4.4	6.3	6.7
147.5°	57.9	51.9	33.3	15.9	2.8	2.4	4.0	5.5	5.9
150°	53.1	46.8	30.1	14.7	2.8	2.4	3.6	4.8	5.5
152.5°	48.0	40.4	26.9	13.5	2.8	2.4	3.2	4.4	4.8
155°	42.8	35.3	24.2	12.3	3.2	2.4	2.8	3.6	4.4
157.5°	38.4	30.5	21.4	11.1	3.2	2.0	2.8	3.2	3.6
160°	33.3	26.2	19.0	9.9	3.2	2.0	2.4	2.8	3.2
162.5°	29.3	21.8	16.6	9.1	3.2	2.0	2.4	2.4	2.8
165°	25.0	18.2	13.9	8.3	3.2	2.0	2.0	2.0	2.4
167.5°	20.2	14.3	11.5	7.5	3.2	2.0	2.0	1.6	2.0
170°	15.1	10.7	9.5	6.7	3.2	2.0	1.6	1.2	1.6
172.5°	6.7	8.3	7.5	5.9	3.6	2.0	1.6	1.2	0.8
175°	3.6	5.9	5.9	5.2	3.6	2.0	1.6	1.2	0.4
177.5°	2.8	3.6	4.4	4.4	3.6	2.4	1.6	0.8	0.4
180°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4



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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	20.01	21.49	20.52	21.99	22.54	18.89	20.37	19.40	20.87	21.41
	3H	22.10	23.45	22.62	23.96	24.55	20.73	22.08	21.25	22.59	23.17
	4H	23.05	24.33	23.59	24.85	25.45	21.45	22.73	21.99	23.26	23.85
	6H	23.97	25.16	24.52	25.70	26.31	22.05	23.24	22.60	23.78	24.39
	8H	24.40	25.54	24.97	26.10	26.72	22.28	23.42	22.85	23.99	24.60
	12H	24.82	25.92	25.39	26.47	27.12	22.49	23.58	23.06	24.14	24.78
4H	2H	20.50	21.77	21.04	22.30	22.90	19.46	20.74	20.00	21.27	21.86
	3H	22.81	23.90	23.37	24.47	25.09	21.49	22.58	22.04	23.14	23.76
	4H	23.93	24.92	24.50	25.50	26.15	22.32	23.31	22.89	23.89	24.54
	6H	25.03	25.91	25.63	26.52	27.18	23.04	23.92	23.63	24.52	25.19
	8H	25.56	26.39	26.16	26.99	27.67	23.33	24.16	23.93	24.76	25.44
	12H	26.09	26.84	26.71	27.48	28.16	23.60	24.35	24.22	24.98	25.66
8H	4H	24.18	25.00	24.77	25.60	26.28	22.66	23.49	23.26	24.09	24.77
	6H	25.46	26.16	26.09	26.80	27.48	23.52	24.22	24.14	24.86	25.54
	8H	26.13	26.76	26.77	27.41	28.11	23.89	24.52	24.53	25.18	25.87
	12H	26.83	27.40	27.48	28.04	28.80	24.25	24.81	24.89	25.46	26.21
12H	4H	24.19	24.94	24.81	25.57	26.25	22.73	23.48	23.35	24.11	24.79
	6H	25.51	26.14	26.15	26.80	27.49	23.63	24.26	24.27	24.91	25.61
	8H	26.25	26.82	26.90	27.46	28.22	24.07	24.63	24.71	25.28	26.03