

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: P892609

Luminaire Tested: 2MB-3SL-ASMF-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892609
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-L930
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with FROSTED ASYMMETRIC LENS, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

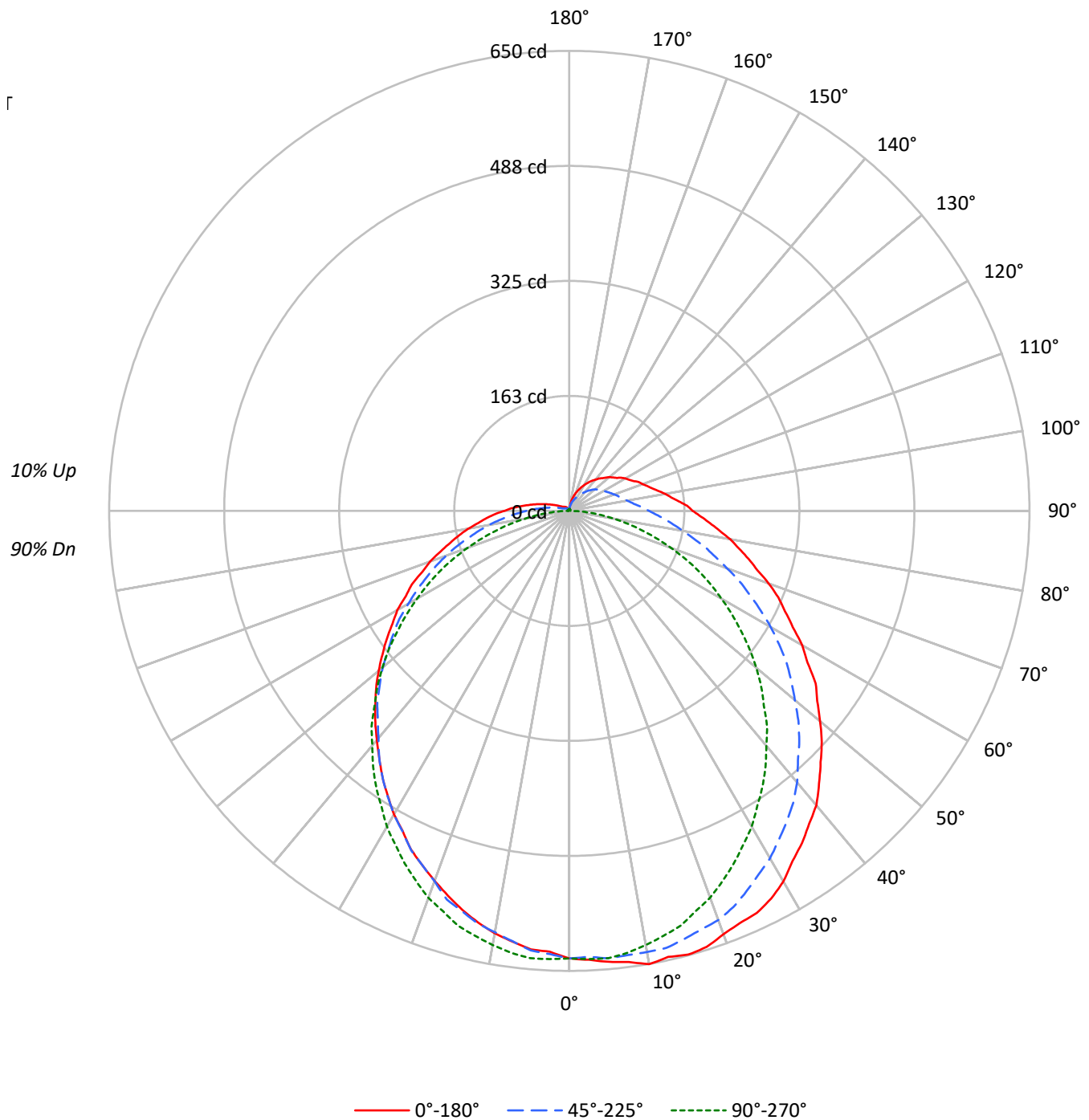
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2174.0 lumens
Efficiency: N/A
Efficacy: 103.5 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	61	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°	12947	12947	12947	12947	12947
5°	13075	12625	12526	12406	12713
10°	13372	12340	11957	11785	12463
15°	13531	12057	11427	11272	12166
20°	13556	11788	10822	10668	11845
25°	13759	11389	10186	10161	11595
30°	13797	11006	9581	9618	11294
35°	13714	10590	8946	9095	11012
40°	13781	10161	8294	8510	10730
45°	13676	9658	7652	8063	10549
50°	13702	9143	7033	7552	10408
55°	13914	8692	6324	7040	10302
60°	14027	8135	5600	6498	10351
65°	14355	7535	4864	5961	10467
70°	15289	6960	3987	5446	10662
75°	16780	6533	3048	4848	11134
80°	20012	6113	2041	4322	12545
85°	27219	5982	1024	3776	16004

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 56473 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	2.8
10°-20°	171.9	7.9
20°-30°	259.3	11.9
30°-40°	311.2	14.3
40°-50°	324.1	14.9
50°-60°	300.4	13.8
60°-70°	247.4	11.4
70°-80°	178.4	8.2
80°-90°	113.3	5.2
90°-100°	69.8	3.2
100°-110°	46.6	2.1
110°-120°	33.2	1.5
120°-130°	24.3	1.1
130°-140°	16.7	0.8
140°-150°	10.2	0.5
150°-160°	5.0	0.2
160°-170°	1.8	0.1
170°-180°	0.3	0.0
0°-30°	491.2	22.6
0°-40°	802.5	36.9
0°-60°	1426.9	65.6
0°-90°	1966.0	90.4
90°-120°	149.6	6.9
90°-150°	200.8	9.2
90°-180°	208.0	9.6
0°-180°	2174.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	632	632	632	632	632	
5°	640	634	634	624	622	61
15°	649	626	607	586	584	183
25°	627	593	550	529	528	288
35°	573	536	476	460	460	359
45°	502	459	389	384	387	388
55°	425	375	296	304	315	377
65°	336	281	202	223	245	335
75°	262	199	106	148	174	278
85°	200	135	28	85	117	169
90°	174	113	2	61	91	96
95°	155	95	2	41	70	123
105°	122	75	2	17	37	130
115°	100	62	2	8	18	100
125°	81	52	2	6	10	74
135°	65	41	2	5	8	51
145°	50	29	2	4	5	32
155°	34	19	2	2	4	16
165°	20	11	2	2	2	6
175°	3	5	3	1	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°	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3
2.5°	634.9	636.8	630.7	634.5	633.9	634.5	626.9	633.3	623.5
5°	639.6	640.5	634.5	636.8	634.5	629.2	623.5	621.3	621.9
7.5°	642.8	647.8	633.0	633.6	629.8	624.1	613.4	615.3	614.0
10°	650.3	644.7	633.0	630.1	622.8	616.8	604.5	605.5	606.1
12.5°	645.6	644.3	632.6	622.2	614.9	609.9	597.2	594.1	595.6
15°	649.1	643.7	626.3	618.1	607.0	598.2	585.5	583.3	583.6
17.5°	645.9	641.5	620.0	608.6	593.1	587.7	575.7	571.9	570.0
20°	636.4	634.2	615.3	595.6	581.7	571.3	556.8	554.5	556.1
22.5°	630.1	624.7	605.8	586.2	565.9	556.8	542.2	541.9	542.2
25°	626.9	620.0	592.8	572.3	549.8	541.6	528.9	524.2	528.3
27.5°	617.5	611.1	579.2	556.8	531.8	520.7	510.3	509.3	510.0
30°	604.8	592.5	566.9	539.4	515.3	504.0	495.4	489.1	495.1
32.5°	586.8	579.8	550.8	520.7	494.2	486.3	477.7	477.1	477.1
35°	572.9	567.8	535.6	504.3	475.8	465.1	460.0	457.8	460.0
37.5°	556.8	549.2	519.5	484.4	455.3	446.1	441.0	439.1	440.7
40°	542.9	528.9	500.5	463.8	432.8	424.6	419.2	421.1	422.7
42.5°	522.3	514.4	478.0	442.9	413.5	404.7	400.3	401.8	405.6
45°	502.1	494.8	459.4	421.1	388.6	383.8	383.5	382.6	387.3
47.5°	483.7	473.3	438.8	399.6	367.7	362.3	363.0	366.1	370.2
50°	462.5	450.2	416.1	376.5	344.6	341.1	343.7	345.9	351.3
52.5°	441.4	431.6	395.2	354.7	321.2	318.7	322.2	329.4	332.6
55°	424.9	407.2	374.7	329.1	296.2	296.6	303.5	307.6	314.6
57.5°	398.7	385.4	351.3	306.4	272.8	275.1	284.5	291.5	295.9
60°	380.0	363.3	328.5	282.0	248.2	251.7	262.4	272.8	280.4
62.5°	356.0	341.5	304.8	258.0	225.4	230.5	242.5	254.8	260.2
65°	336.4	320.0	281.4	234.0	201.7	207.7	222.6	236.5	245.3
67.5°	319.6	302.6	260.5	211.8	177.7	186.5	203.9	217.5	224.5
70°	299.7	279.8	236.8	187.2	152.7	163.1	185.3	201.1	209.0
72.5°	278.5	262.4	216.3	164.4	129.6	142.3	166.6	183.1	190.6
75°	262.1	244.1	198.9	141.6	106.2	121.4	147.6	166.3	173.9
77.5°	245.3	228.9	179.3	120.8	85.4	102.4	130.9	151.4	159.3
80°	230.5	211.5	162.8	103.7	63.5	83.8	115.1	135.3	144.5
82.5°	214.0	197.6	148.6	85.7	45.2	66.7	99.6	121.7	129.3
85°	199.5	182.4	135.3	71.5	27.8	51.5	85.4	108.1	117.3
87.5°	186.2	172.0	123.0	60.7	13.9	39.2	71.8	94.8	105.3
90°	174.2	158.1	112.6	50.9	2.5	28.5	60.7	83.5	91.4
92.5°	166.6	147.3	104.0	44.6	1.6	20.2	50.6	73.0	82.2
95°	155.2	138.2	95.2	39.8	1.6	13.6	40.8	62.6	70.5
97.5°	145.4	129.6	88.8	37.0	1.3	9.2	33.5	52.5	60.7
100°	137.8	123.0	83.2	34.5	1.6	6.6	26.6	44.6	51.9
102.5°	129.3	115.7	78.7	32.9	1.6	4.7	20.9	37.6	44.3
105°	121.7	109.7	74.6	31.3	1.6	4.1	16.8	31.0	37.0
107.5°	116.0	103.4	71.1	30.4	1.6	4.1	13.3	25.3	30.4
110°	110.3	98.3	67.7	29.4	1.6	3.8	10.4	20.9	25.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	106.5	93.6	64.5	28.5	1.9	3.8	8.5	17.4	20.9
115°	99.9	89.5	61.7	28.1	1.9	3.5	7.9	14.2	17.7
117.5°	95.2	85.7	58.8	27.2	1.9	3.5	7.6	11.7	14.2
120°	91.7	81.3	56.3	26.2	1.9	3.2	7.0	10.4	12.0
122.5°	87.3	77.1	54.1	25.6	1.9	3.2	6.6	9.8	10.7
125°	81.3	73.3	51.5	24.3	2.2	3.2	6.3	9.2	10.1
127.5°	77.5	69.9	49.6	22.8	2.2	2.8	6.0	8.5	9.5
130°	74.3	66.1	47.4	21.2	2.2	2.8	5.7	7.9	8.9
132.5°	69.6	62.3	44.3	19.9	2.2	2.5	5.1	7.3	8.2
135°	65.1	59.1	41.1	18.7	2.2	2.5	4.7	7.0	7.6
137.5°	62.3	56.0	38.3	17.4	2.2	2.2	4.4	6.3	7.0
140°	57.5	52.5	35.1	16.1	2.2	2.2	4.1	6.0	6.3
142.5°	54.1	49.0	32.2	14.9	2.2	2.2	3.8	5.4	6.0
145°	50.0	45.5	29.1	13.6	2.2	1.9	3.5	5.1	5.4
147.5°	46.2	41.4	26.6	12.6	2.2	1.9	3.2	4.4	4.7
150°	42.4	37.3	24.0	11.7	2.2	1.9	2.8	3.8	4.4
152.5°	38.3	32.2	21.5	10.7	2.2	1.9	2.5	3.5	3.8
155°	34.1	28.1	19.3	9.8	2.5	1.9	2.2	2.8	3.5
157.5°	30.7	24.3	17.1	8.9	2.5	1.6	2.2	2.5	2.8
160°	26.6	20.9	15.2	7.9	2.5	1.6	1.9	2.2	2.5
162.5°	23.4	17.4	13.3	7.3	2.5	1.6	1.9	1.9	2.2
165°	19.9	14.5	11.1	6.6	2.5	1.6	1.6	1.6	1.9
167.5°	16.1	11.4	9.2	6.0	2.5	1.6	1.6	1.3	1.6
170°	12.0	8.5	7.6	5.4	2.5	1.6	1.3	0.9	1.3
172.5°	5.4	6.6	6.0	4.7	2.8	1.6	1.3	0.9	0.6
175°	2.8	4.7	4.7	4.1	2.8	1.6	1.3	0.9	0.3
177.5°	2.2	2.8	3.5	3.5	2.8	1.9	1.3	0.6	0.3
180°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9



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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	19.23	20.71	19.74	21.21	21.75	18.10	19.58	18.61	20.08	20.63
	3H	21.32	22.67	21.84	23.18	23.76	19.94	21.29	20.46	21.80	22.38
	4H	22.26	23.54	22.80	24.07	24.67	20.67	21.94	21.20	22.47	23.07
	6H	23.19	24.37	23.74	24.91	25.53	21.27	22.45	21.82	22.99	23.61
	8H	23.62	24.75	24.18	25.32	25.94	21.50	22.64	22.06	23.20	23.82
	12H	24.04	25.13	24.61	25.69	26.34	21.70	22.79	22.27	23.35	24.00
4H	2H	19.71	20.99	20.25	21.52	22.11	18.68	19.95	19.22	20.48	21.08
	3H	22.03	23.12	22.58	23.68	24.30	20.70	21.79	21.26	22.36	22.98
	4H	23.14	24.14	23.71	24.72	25.37	21.53	22.53	22.10	23.11	23.76
	6H	24.25	25.13	24.84	25.73	26.39	22.26	23.13	22.85	23.74	24.40
	8H	24.78	25.61	25.38	26.21	26.88	22.55	23.37	23.15	23.98	24.65
	12H	25.31	26.06	25.93	26.69	27.37	22.81	23.56	23.43	24.19	24.87
8H	4H	23.39	24.22	23.99	24.82	25.50	21.88	22.70	22.47	23.31	23.98
	6H	24.67	25.37	25.30	26.02	26.70	22.73	23.43	23.36	24.08	24.76
	8H	25.34	25.98	25.98	26.63	27.32	23.11	23.74	23.75	24.39	25.09
	12H	26.05	26.61	26.69	27.26	28.01	23.47	24.03	24.11	24.67	25.43
12H	4H	23.41	24.16	24.03	24.79	25.47	21.94	22.69	22.56	23.32	24.00
	6H	24.73	25.36	25.37	26.01	26.71	22.84	23.48	23.48	24.13	24.82
	8H	25.47	26.03	26.11	26.67	27.43	23.28	23.85	23.93	24.49	25.25