

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: P893412

Luminaire Tested: 4MB-3SL-LVR-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-3SL-LVR-UNV-L850
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

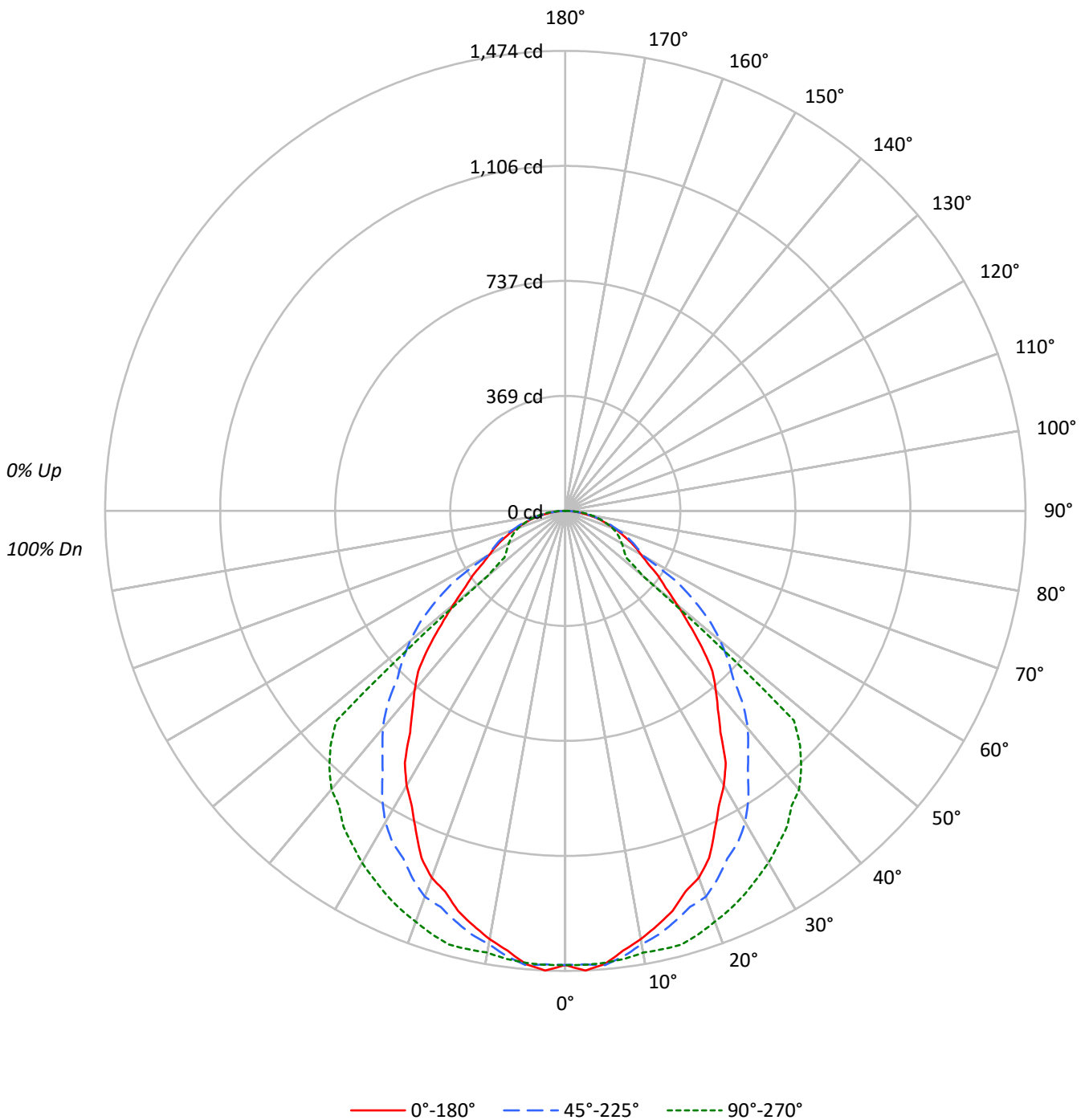
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3105.0 lumens
Efficiency: N/A
Efficacy: 147.2 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.2
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45	45	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	36
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	33	33	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30	30	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10352	10352	10352
5°	10408	10435	10381
10°	10066	10185	10383
15°	9776	10022	10597
20°	9470	9964	10606
25°	8885	9644	10652
30°	8345	9469	10696
35°	7526	8855	10747
40°	6971	8448	10822
45°	6237	7656	10700
50°	5174	7173	3594
55°	4508	6295	2877
60°	3987	4103	2983
65°	3791	3992	3165
70°	3555	3772	3339
75°	3310	3554	3431
80°	3016	3348	3593
85°	2669	2849	3886

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10700 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	4.4
10°-20°	388.2	12.5
20°-30°	571.1	18.4
30°-40°	653.1	21.0
40°-50°	618.4	19.9
50°-60°	340.7	11.0
60°-70°	218.8	7.0
70°-80°	135.0	4.3
80°-90°	41.6	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1097.4	35.3
0°-40°	1750.5	56.4
0°-60°	2709.7	87.3
0°-90°	3105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3105.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1455	1455	1455	1455	1455	
5°	1457	1469	1461	1461	1454	137
15°	1327	1344	1361	1432	1439	373
25°	1132	1182	1228	1309	1357	521
35°	866	941	1020	1167	1237	548
45°	620	678	761	976	1063	474
55°	363	381	508	262	232	325
65°	225	233	237	211	188	223
75°	120	123	129	136	125	128
85°	33	33	35	40	48	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1455.0	1455.0	1455.0	1455.0	1455.0
2.5°	1474.3	1478.0	1454.3	1453.5	1455.8
5°	1457.2	1469.1	1461.0	1461.0	1453.5
7.5°	1420.8	1440.9	1438.7	1455.8	1447.6
10°	1393.3	1409.7	1409.7	1454.3	1437.2
12.5°	1360.6	1379.2	1389.6	1436.4	1438.7
15°	1327.2	1343.5	1360.6	1432.0	1438.7
17.5°	1278.9	1308.6	1330.2	1400.0	1421.6
20°	1250.7	1268.5	1316.0	1372.5	1400.8
22.5°	1203.8	1229.8	1275.9	1339.1	1380.7
25°	1131.8	1182.3	1228.4	1308.6	1356.9
27.5°	1064.9	1102.8	1197.9	1282.6	1328.7
30°	1015.8	1045.6	1152.6	1244.7	1301.9
32.5°	956.4	1004.7	1091.6	1207.6	1268.5
35°	866.5	940.8	1019.5	1167.4	1237.3
37.5°	803.3	854.6	961.6	1125.8	1190.5
40°	750.5	797.4	909.6	1073.8	1165.2
42.5°	697.8	735.7	844.2	1035.2	1118.4
45°	619.8	678.5	760.9	976.4	1063.4
47.5°	538.0	600.4	706.7	926.7	993.5
50°	467.4	517.2	648.0	827.8	324.7
52.5°	405.7	451.8	585.6	299.5	245.2
55°	363.4	381.2	507.5	261.6	231.9
57.5°	312.8	341.8	425.8	248.9	220.0
60°	280.2	292.8	288.3	236.3	209.6
62.5°	254.1	263.1	261.6	223.7	197.7
65°	225.2	232.6	237.1	211.0	188.0
67.5°	196.2	202.9	209.6	195.4	174.6
70°	170.9	175.4	181.3	176.9	160.5
72.5°	144.9	150.1	153.8	157.5	141.9
75°	120.4	122.6	129.3	136.0	124.8
77.5°	98.1	100.3	104.8	112.2	106.3
80°	73.6	75.8	81.7	87.7	87.7
82.5°	52.0	53.5	57.2	65.4	69.1
85°	32.7	32.7	34.9	40.1	47.6
87.5°	12.6	12.6	14.9	17.8	23.8
90°	0.0	0.0	0.0	0.0	0.0



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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	16.07	17.55	16.44	17.87	18.18	13.87	15.35	14.24	15.67	15.98
	3H	17.60	18.92	17.97	19.25	19.61	16.20	17.53	16.58	17.86	18.22
	4H	18.19	19.43	18.59	19.78	20.16	17.15	18.40	17.55	18.74	19.12
	6H	18.65	19.79	19.06	20.16	20.55	17.94	19.08	18.35	19.45	19.84
	8H	18.79	19.88	19.22	20.27	20.67	18.25	19.34	18.68	19.73	20.13
	12H	18.89	19.93	19.32	20.31	20.74	18.50	19.54	18.93	19.92	20.35
4H	2H	16.62	17.86	17.02	18.21	18.59	14.98	16.22	15.38	16.57	16.95
	3H	18.39	19.42	18.80	19.82	20.22	17.42	18.45	17.83	18.85	19.25
	4H	19.11	20.04	19.55	20.45	20.89	18.49	19.41	18.92	19.83	20.27
	6H	19.70	20.50	20.16	20.95	21.41	19.38	20.18	19.84	20.63	21.09
	8H	19.89	20.64	20.35	21.09	21.55	19.73	20.48	20.19	20.93	21.39
	12H	20.02	20.70	20.51	21.18	21.65	20.02	20.69	20.50	21.17	21.64
8H	4H	19.42	20.17	19.88	20.62	21.09	18.87	19.63	19.34	20.07	20.54
	6H	20.13	20.76	20.63	21.25	21.73	19.91	20.54	20.41	21.03	21.51
	8H	20.39	20.95	20.91	21.47	21.95	20.36	20.92	20.87	21.43	21.92
	12H	20.60	21.10	21.11	21.59	22.16	20.74	21.24	21.25	21.73	22.30
12H	4H	19.46	20.13	19.94	20.61	21.08	18.91	19.58	19.39	20.06	20.53
	6H	20.20	20.76	20.71	21.27	21.76	19.97	20.54	20.49	21.05	21.54
	8H	20.52	21.01	21.03	21.51	22.07	20.48	20.98	20.99	21.47	22.04