

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: P893417

Luminaire Tested: 4MB-3SL-LVRA-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893417
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-3SL-LVRA-UNV-L830
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

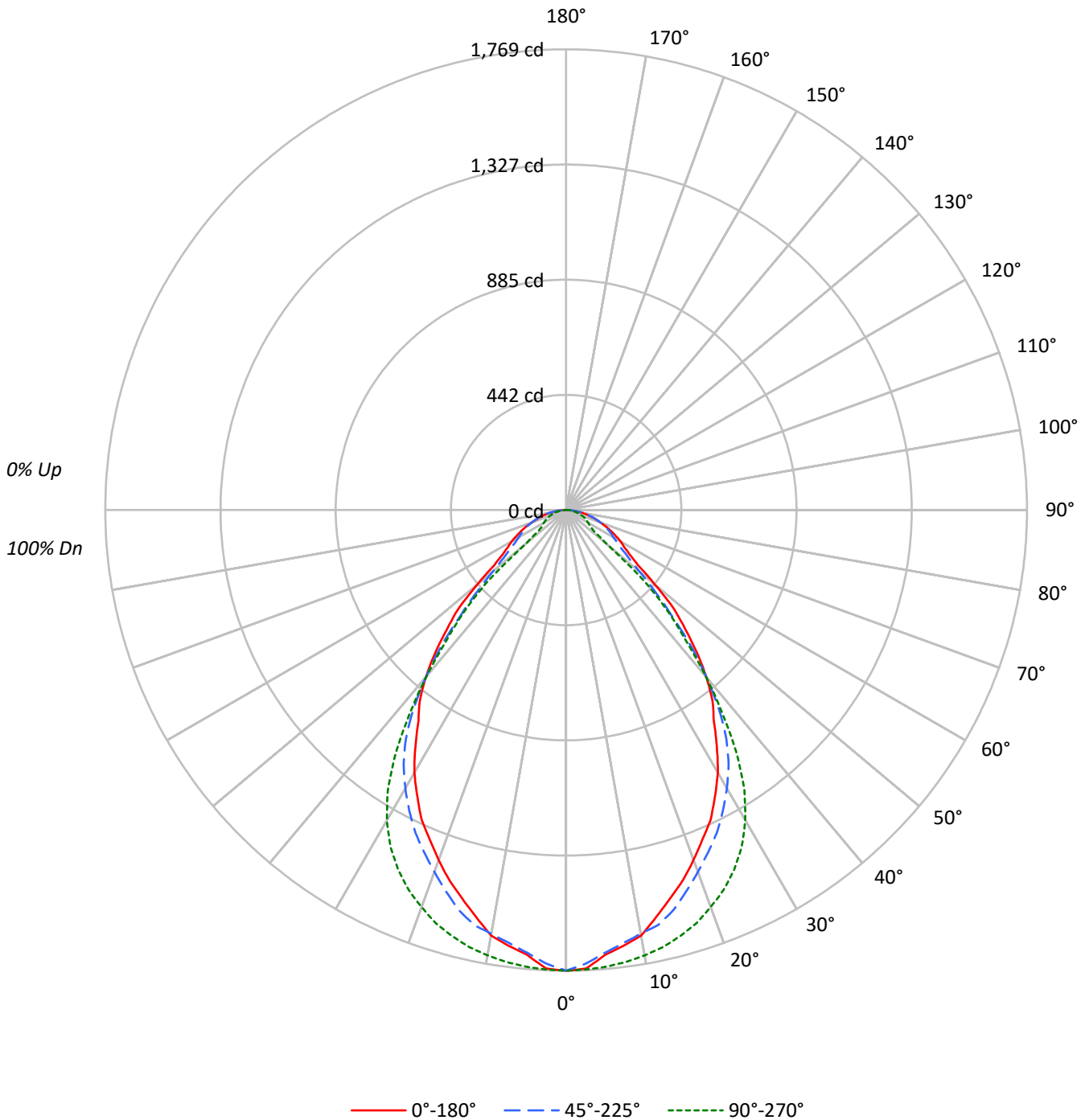
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2871.0 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
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

TEST NUMBER: P893417
CATALOG NUMBER: 4MB-3SL-LVRA-UNV-L830

Luminous Intensity Polar Plot





TEST NUMBER: P893417

CATALOG NUMBER: 4MB-3SL-LVRA-UNV-L830

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	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12586	12586	12586
5°	12247	12192	12572
10°	11987	11934	12544
15°	11368	11717	12473
20°	10829	11195	12283
25°	10301	10741	11969
30°	9570	10140	11301
35°	8582	9318	9912
40°	7775	7792	7749
45°	6500	5758	5616
50°	4910	4052	2296
55°	3693	3240	1448
60°	3432	2984	1395
65°	3194	2978	1397
70°	2921	2921	1375
75°	2771	2845	1328
80°	2561	2692	1364
85°	2237	2343	1486

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6652 cd/sqm



TEST NUMBER: P893417
 CATALOG NUMBER: 4MB-3SL-LVRA-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.4	5.7
10°-20°	450.2	15.7
20°-30°	638.5	22.2
30°-40°	657.7	22.9
40°-50°	459.4	16.0
50°-60°	220.4	7.7
60°-70°	154.7	5.4
70°-80°	96.7	3.4
80°-90°	29.9	1.0
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°	1252.1	43.6
0°-40°	1909.9	66.5
0°-60°	2589.7	90.2
0°-90°	2871.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2871.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1769	1769	1769	1769	1769	
5°	1715	1712	1707	1752	1760	162
15°	1543	1555	1591	1636	1693	435
25°	1312	1325	1368	1461	1525	600
35°	988	1015	1073	1095	1141	623
45°	646	661	572	543	558	498
55°	298	283	261	167	117	279
65°	190	177	177	134	83	188
75°	101	99	104	89	48	106
85°	27	27	29	28	18	31
90°	0	0	0	0	0	



TEST NUMBER: P893417

CATALOG NUMBER: 4MB-3SL-LVRA-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1769.0	1769.0	1769.0	1769.0	1769.0
2.5°	1762.1	1756.7	1743.5	1767.6	1765.8
5°	1714.7	1712.5	1707.0	1751.7	1760.3
7.5°	1687.8	1683.3	1676.9	1726.1	1750.3
10°	1659.1	1664.6	1651.8	1697.0	1736.2
12.5°	1599.8	1614.4	1631.8	1666.9	1718.8
15°	1543.3	1554.7	1590.7	1636.3	1693.3
17.5°	1490.4	1503.6	1534.6	1603.0	1663.7
20°	1430.2	1448.5	1478.6	1566.1	1622.2
22.5°	1368.2	1385.1	1422.9	1516.9	1579.3
25°	1312.2	1325.4	1368.2	1460.8	1524.6
27.5°	1237.8	1262.5	1303.0	1392.4	1459.4
30°	1164.9	1185.9	1234.2	1309.4	1375.5
32.5°	1076.9	1107.4	1160.8	1218.2	1273.4
35°	988.0	1014.9	1072.8	1095.1	1141.2
37.5°	923.2	930.5	963.4	960.6	986.6
40°	837.1	851.7	838.9	804.7	834.3
42.5°	744.1	761.4	709.9	670.2	680.7
45°	646.0	661.1	572.2	543.0	558.1
47.5°	561.2	559.9	461.4	441.8	420.8
50°	443.6	458.2	366.1	329.6	207.4
52.5°	346.5	352.0	301.8	210.6	136.3
55°	297.7	283.1	261.2	167.3	116.7
57.5°	264.4	246.2	231.6	155.5	106.7
60°	241.2	220.7	209.7	147.7	98.0
62.5°	214.7	198.8	194.7	140.9	90.3
65°	189.7	177.4	176.9	134.5	83.0
67.5°	164.6	157.7	159.6	126.7	74.8
70°	140.4	139.1	140.4	116.7	66.1
72.5°	119.9	118.5	122.2	104.0	56.5
75°	100.8	99.4	103.5	89.4	48.3
77.5°	80.2	81.2	83.9	74.3	40.6
80°	62.5	62.5	65.7	58.4	33.3
82.5°	44.7	45.1	47.0	42.9	26.0
85°	27.4	27.4	28.7	28.3	18.2
87.5°	9.1	10.5	12.3	13.2	9.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P893417
 CATALOG NUMBER: 4MB-3SL-LVRA-UNV-L830

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	14.45	15.80	14.81	16.11	16.43	10.78	12.13	11.14	12.45	12.76
	3H	16.18	17.39	16.56	17.72	18.08	12.75	13.96	13.13	14.29	14.65
	4H	16.86	17.98	17.26	18.33	18.72	13.46	14.59	13.86	14.94	15.32
	6H	17.36	18.40	17.78	18.77	19.16	13.98	15.02	14.40	15.39	15.78
	8H	17.53	18.52	17.96	18.91	19.31	14.17	15.15	14.60	15.54	15.95
	12H	17.64	18.59	18.08	18.97	19.40	14.31	15.25	14.74	15.63	16.06
4H	2H	14.98	16.10	15.38	16.45	16.84	12.40	13.53	12.80	13.88	14.26
	3H	16.95	17.88	17.37	18.29	18.69	14.58	15.51	14.99	15.91	16.31
	4H	17.76	18.59	18.19	19.01	19.45	15.46	16.29	15.89	16.71	17.15
	6H	18.40	19.12	18.86	19.57	20.03	16.10	16.83	16.56	17.27	17.74
	8H	18.62	19.30	19.09	19.74	20.21	16.31	16.99	16.78	17.43	17.90
	12H	18.77	19.37	19.26	19.86	20.33	16.47	17.07	16.95	17.55	18.02
8H	4H	18.04	18.72	18.51	19.16	19.63	16.11	16.78	16.58	17.23	17.70
	6H	18.82	19.38	19.32	19.87	20.35	16.97	17.52	17.47	18.02	18.50
	8H	19.13	19.62	19.65	20.14	20.63	17.30	17.80	17.82	18.31	18.80
	12H	19.36	19.80	19.87	20.30	20.87	17.56	18.00	18.07	18.50	19.07
12H	4H	18.06	18.66	18.54	19.14	19.61	16.18	16.78	16.67	17.26	17.74
	6H	18.88	19.38	19.40	19.89	20.38	17.11	17.61	17.63	18.12	18.61
	8H	19.24	19.68	19.75	20.18	20.74	17.52	17.96	18.03	18.46	19.03