

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: P893521

Luminaire Tested: 4MB-4SL-LVR-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893521
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-4SL-LVR-UNV-L830
Description: 4000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

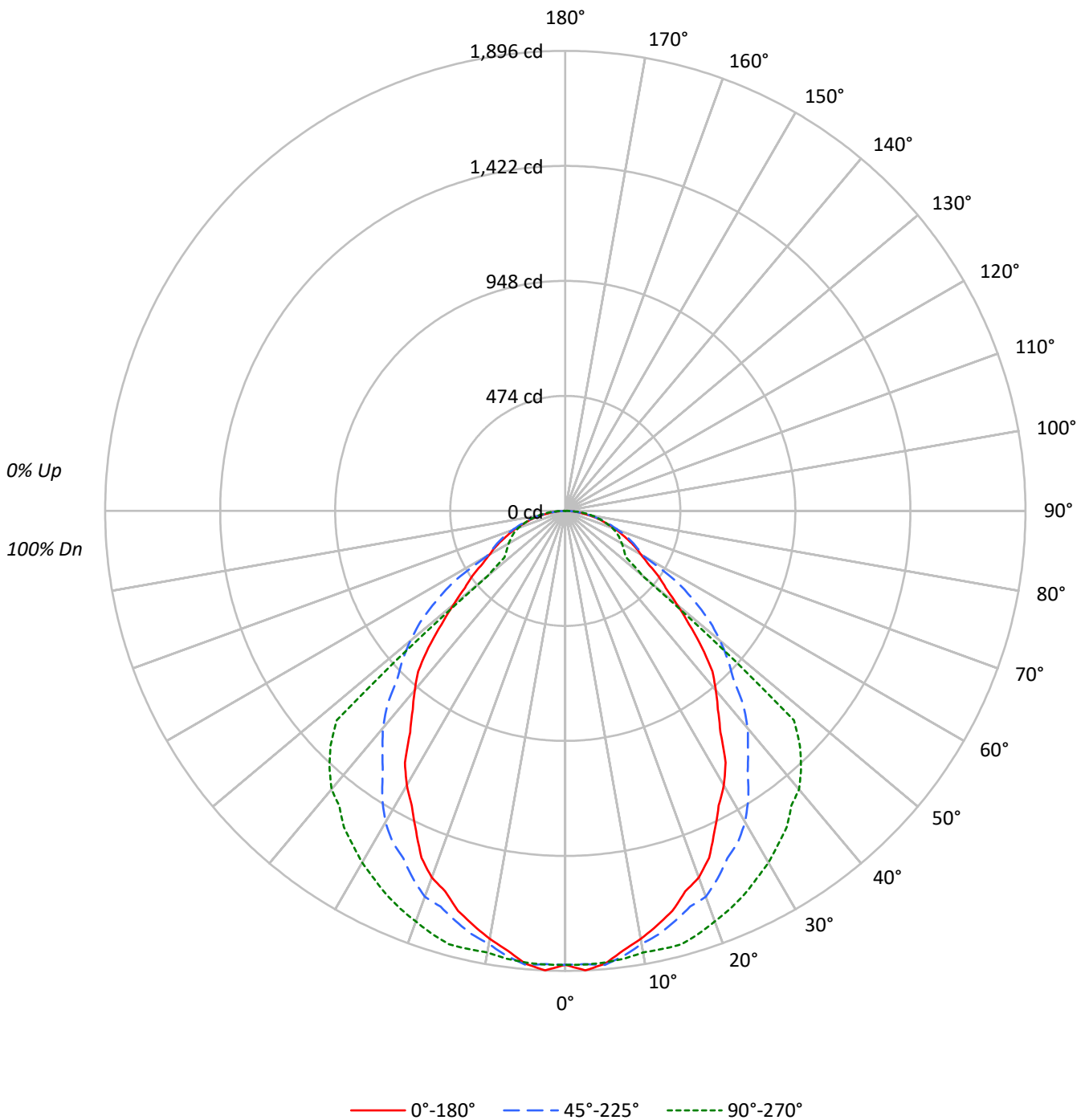
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3992.0 lumens
Efficiency: N/A
Efficacy: 134.0 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): 29.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.5
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893521
CATALOG NUMBER: 4MB-4SL-LVR-UNV-L830

Luminous Intensity Polar Plot





TEST NUMBER: P893521
 CATALOG NUMBER: 4MB-4SL-LVR-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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13310	13310	13310
5°	13381	13415	13347
10°	12942	13094	13349
15°	12569	12885	13624
20°	12174	12811	13636
25°	11423	12398	13695
30°	10730	12174	13751
35°	9676	11385	13817
40°	8962	10861	13914
45°	8018	9844	13757
50°	6651	9222	4621
55°	5795	8094	3698
60°	5126	5275	3834
65°	4874	5131	4069
70°	4570	4849	4294
75°	4255	4569	4412
80°	3876	4306	4618
85°	3429	3665	4988

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13757 cd/sqm



TEST NUMBER: P893521
 CATALOG NUMBER: 4MB-4SL-LVR-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	4.4
10°-20°	499.2	12.5
20°-30°	734.3	18.4
30°-40°	839.7	21.0
40°-50°	795.1	19.9
50°-60°	438.1	11.0
60°-70°	281.3	7.0
70°-80°	173.6	4.3
80°-90°	53.4	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°	1410.8	35.3
0°-40°	2250.5	56.4
0°-60°	3483.7	87.3
0°-90°	3992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3992.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1871	1871	1871	1871	1871	
5°	1874	1889	1878	1878	1869	176
15°	1706	1727	1749	1841	1850	479
25°	1455	1520	1579	1682	1744	670
35°	1114	1210	1311	1501	1591	704
45°	797	872	978	1255	1367	609
55°	467	490	652	336	298	418
65°	290	299	305	271	242	287
75°	155	158	166	175	160	165
85°	42	42	45	52	61	47
90°	0	0	0	0	0	



TEST NUMBER: P893521
 CATALOG NUMBER: 4MB-4SL-LVR-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1870.7	1870.7	1870.7	1870.7	1870.7
2.5°	1895.5	1900.3	1869.7	1868.7	1871.6
5°	1873.5	1888.8	1878.3	1878.3	1868.7
7.5°	1826.7	1852.5	1849.6	1871.6	1861.1
10°	1791.4	1812.4	1812.4	1869.7	1847.7
12.5°	1749.3	1773.2	1786.6	1846.8	1849.6
15°	1706.3	1727.3	1749.3	1841.0	1849.6
17.5°	1644.2	1682.4	1710.2	1800.0	1827.7
20°	1607.9	1630.9	1692.0	1764.6	1800.9
22.5°	1547.7	1581.2	1640.4	1721.6	1775.1
25°	1455.1	1520.0	1579.3	1682.4	1744.5
27.5°	1369.1	1417.8	1540.1	1649.0	1708.2
30°	1306.0	1344.2	1481.8	1600.3	1673.8
32.5°	1229.6	1291.7	1403.5	1552.5	1630.9
35°	1114.0	1209.5	1310.8	1500.9	1590.7
37.5°	1032.8	1098.7	1236.3	1447.4	1530.5
40°	964.9	1025.1	1169.4	1380.5	1498.1
42.5°	897.1	945.8	1085.3	1330.9	1437.9
45°	796.8	872.3	978.3	1255.4	1367.2
47.5°	691.7	772.0	908.6	1191.4	1277.4
50°	600.9	665.0	833.1	1064.3	417.5
52.5°	521.6	580.9	752.8	385.0	315.3
55°	467.2	490.1	652.5	336.3	298.1
57.5°	402.2	439.5	547.4	320.1	282.8
60°	360.2	376.4	370.7	303.8	269.4
62.5°	326.7	338.2	336.3	287.6	254.1
65°	289.5	299.0	304.8	271.3	241.7
67.5°	252.2	260.8	269.4	251.3	224.5
70°	219.7	225.5	233.1	227.4	206.4
72.5°	186.3	193.0	197.8	202.5	182.5
75°	154.8	157.6	166.2	174.8	160.5
77.5°	126.1	129.0	134.7	144.3	136.6
80°	94.6	97.4	105.1	112.7	112.7
82.5°	66.9	68.8	73.6	84.1	88.9
85°	42.0	42.0	44.9	51.6	61.1
87.5°	16.2	16.2	19.1	22.9	30.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P893521
 CATALOG NUMBER: 4MB-4SL-LVR-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	16.94	18.43	17.31	18.74	19.05	14.75	16.23	15.11	16.54	16.86
	3H	18.47	19.80	18.85	20.12	20.49	17.08	18.40	17.46	18.73	19.09
	4H	19.06	20.30	19.46	20.65	21.03	18.03	19.27	18.43	19.62	20.00
	6H	19.52	20.67	19.93	21.03	21.43	18.81	19.96	19.22	20.33	20.72
	8H	19.66	20.76	20.09	21.15	21.55	19.12	20.21	19.55	20.60	21.01
	12H	19.76	20.80	20.19	21.19	21.62	19.37	20.42	19.80	20.80	21.23
4H	2H	17.49	18.74	17.89	19.09	19.47	15.85	17.09	16.25	17.44	17.82
	3H	19.27	20.29	19.68	20.70	21.10	18.30	19.32	18.71	19.73	20.13
	4H	19.99	20.91	20.42	21.33	21.77	19.36	20.29	19.79	20.70	21.14
	6H	20.57	21.38	21.03	21.82	22.28	20.25	21.06	20.71	21.50	21.96
	8H	20.76	21.51	21.22	21.96	22.43	20.60	21.35	21.07	21.80	22.27
	12H	20.90	21.57	21.38	22.05	22.52	20.89	21.56	21.37	22.04	22.51
8H	4H	20.29	21.05	20.76	21.49	21.96	19.75	20.50	20.21	20.95	21.41
	6H	21.00	21.63	21.50	22.12	22.60	20.78	21.41	21.28	21.90	22.38
	8H	21.27	21.83	21.78	22.34	22.83	21.23	21.79	21.74	22.30	22.79
	12H	21.47	21.97	21.98	22.47	23.03	21.61	22.11	22.12	22.60	23.17
12H	4H	20.33	21.00	20.81	21.48	21.95	19.78	20.46	20.27	20.94	21.41
	6H	21.07	21.63	21.58	22.14	22.63	20.85	21.41	21.36	21.92	22.41
	8H	21.39	21.89	21.90	22.38	22.95	21.36	21.86	21.87	22.35	22.91