

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: P893409

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893409
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-L830
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

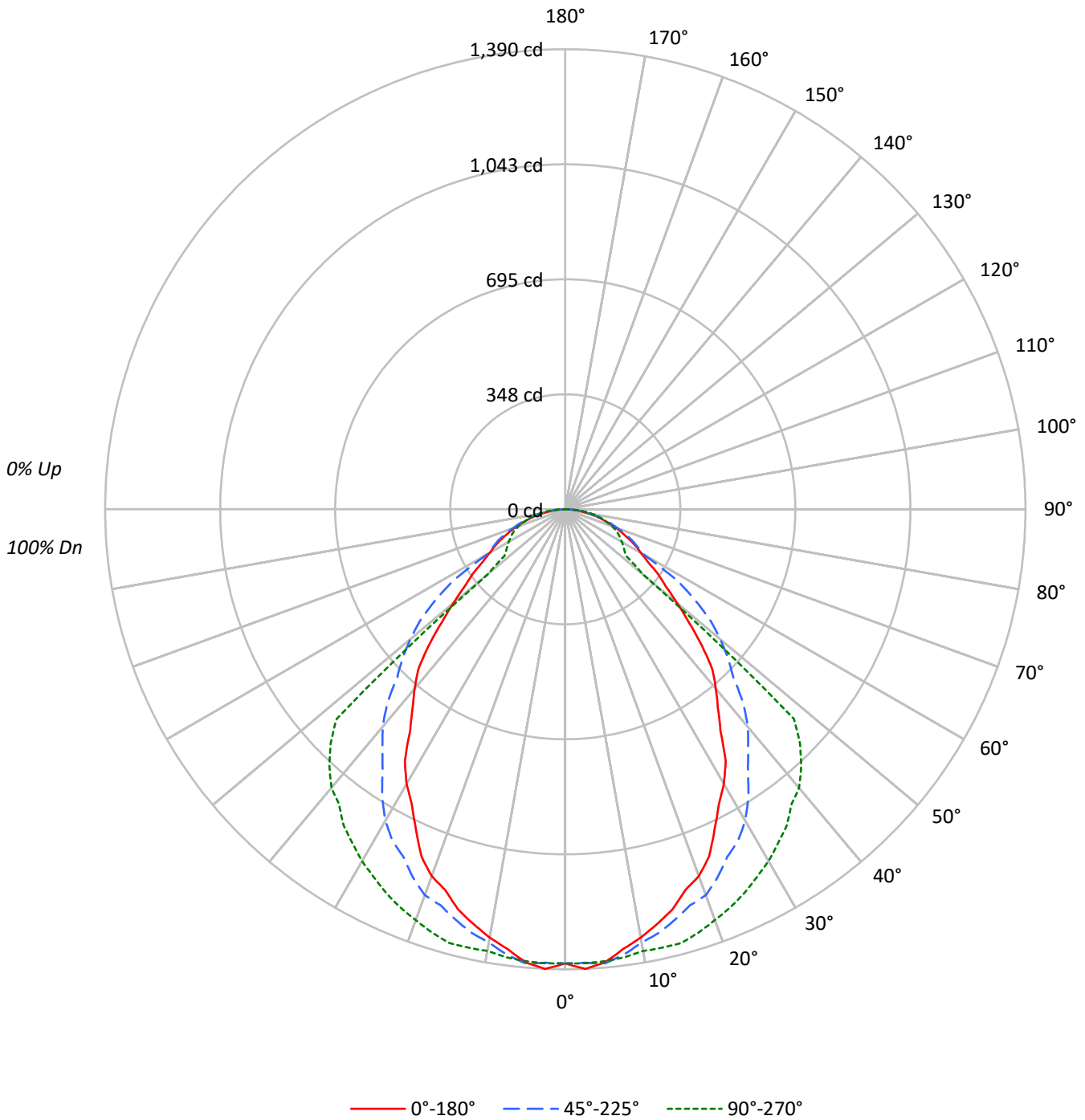
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2928.0 lumens
Efficiency: N/A
Efficacy: 138.8 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

TEST NUMBER: P893409
CATALOG NUMBER: 4MB-3SL-LVR-UNV-L830

Luminous Intensity Polar Plot





TEST NUMBER: P893409

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

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	9762	9762	9762
5°	9815	9840	9790
10°	9493	9604	9791
15°	9219	9451	9993
20°	8930	9396	10001
25°	8378	9093	10046
30°	7870	8930	10086
35°	7097	8351	10134
40°	6574	7966	10206
45°	5880	7221	10090
50°	4879	6764	3389
55°	4251	5937	2712
60°	3760	3869	2812
65°	3574	3763	2985
70°	3353	3557	3150
75°	3120	3351	3236
80°	2844	3159	3389
85°	2514	2686	3657

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10090 cd/sqm



TEST NUMBER: P893409
 CATALOG NUMBER: 4MB-3SL-LVR-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.1	4.4
10°-20°	366.1	12.5
20°-30°	538.6	18.4
30°-40°	615.9	21.0
40°-50°	583.2	19.9
50°-60°	321.3	11.0
60°-70°	206.3	7.0
70°-80°	127.3	4.3
80°-90°	39.2	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°	1034.8	35.3
0°-40°	1650.7	56.4
0°-60°	2555.2	87.3
0°-90°	2928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1374	1385	1378	1378	1371	129
15°	1252	1267	1283	1350	1357	351
25°	1067	1115	1158	1234	1280	491
35°	817	887	961	1101	1167	516
45°	584	640	718	921	1003	447
55°	343	360	479	247	219	306
65°	212	219	224	199	177	210
75°	114	116	122	128	118	121
85°	31	31	33	38	45	34
90°	0	0	0	0	0	



TEST NUMBER: P893409

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1372.1	1372.1	1372.1	1372.1	1372.1
2.5°	1390.3	1393.8	1371.4	1370.7	1372.8
5°	1374.2	1385.4	1377.7	1377.7	1370.7
7.5°	1339.8	1358.8	1356.6	1372.8	1365.1
10°	1313.9	1329.3	1329.3	1371.4	1355.2
12.5°	1283.1	1300.6	1310.4	1354.5	1356.6
15°	1251.5	1267.0	1283.1	1350.3	1356.6
17.5°	1206.0	1234.0	1254.3	1320.2	1340.5
20°	1179.4	1196.2	1241.0	1294.3	1320.9
22.5°	1135.2	1159.7	1203.2	1262.7	1302.0
25°	1067.2	1114.9	1158.3	1234.0	1279.6
27.5°	1004.2	1039.9	1129.6	1209.5	1252.9
30°	957.9	986.0	1086.9	1173.8	1227.7
32.5°	901.9	947.4	1029.4	1138.7	1196.2
35°	817.1	887.1	961.4	1100.9	1166.7
37.5°	757.5	805.9	906.8	1061.6	1122.6
40°	707.8	751.9	857.7	1012.6	1098.8
42.5°	658.0	693.7	796.1	976.1	1054.6
45°	584.4	639.8	717.6	920.8	1002.8
47.5°	507.3	566.2	666.4	873.8	936.9
50°	440.8	487.7	611.1	780.6	306.2
52.5°	382.6	426.1	552.2	282.4	231.2
55°	342.7	359.5	478.6	246.7	218.6
57.5°	295.0	322.3	401.5	234.8	207.4
60°	264.2	276.1	271.9	222.8	197.6
62.5°	239.7	248.1	246.7	210.9	186.4
65°	212.3	219.3	223.5	199.0	177.3
67.5°	185.0	191.3	197.6	184.3	164.7
70°	161.2	165.4	171.0	166.8	151.4
72.5°	136.6	141.6	145.1	148.6	133.8
75°	113.5	115.6	121.9	128.2	117.7
77.5°	92.5	94.6	98.8	105.8	100.2
80°	69.4	71.5	77.1	82.7	82.7
82.5°	49.1	50.5	54.0	61.7	65.2
85°	30.8	30.8	32.9	37.8	44.8
87.5°	11.9	11.9	14.0	16.8	22.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P893409
 CATALOG NUMBER: 4MB-3SL-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	15.87	17.35	16.23	17.66	17.98	13.67	15.15	14.03	15.47	15.78
	3H	17.39	18.72	17.77	19.05	19.41	16.00	17.33	16.38	17.66	18.02
	4H	17.98	19.23	18.38	19.58	19.96	16.95	18.19	17.35	18.54	18.92
	6H	18.44	19.59	18.85	19.96	20.35	17.73	18.88	18.15	19.25	19.64
	8H	18.59	19.68	19.01	20.07	20.47	18.05	19.14	18.47	19.53	19.93
	12H	18.68	19.73	19.11	20.11	20.54	18.29	19.34	18.72	19.72	20.15
4H	2H	16.42	17.66	16.82	18.01	18.39	14.77	16.02	15.17	16.37	16.75
	3H	18.19	19.22	18.60	19.62	20.02	17.22	18.25	17.63	18.65	19.05
	4H	18.91	19.83	19.34	20.25	20.69	18.28	19.21	18.72	19.63	20.07
	6H	19.49	20.30	19.95	20.74	21.20	19.17	19.98	19.63	20.42	20.88
	8H	19.68	20.44	20.15	20.88	21.35	19.52	20.28	19.99	20.72	21.19
	12H	19.82	20.49	20.30	20.97	21.44	19.81	20.49	20.30	20.96	21.44
8H	4H	19.22	19.97	19.68	20.41	20.88	18.67	19.42	19.14	19.87	20.34
	6H	19.93	20.55	20.43	21.04	21.52	19.71	20.33	20.20	20.82	21.30
	8H	20.19	20.75	20.70	21.26	21.75	20.15	20.71	20.67	21.23	21.71
	12H	20.40	20.90	20.91	21.39	21.95	20.54	21.04	21.05	21.53	22.09
12H	4H	19.25	19.92	19.73	20.40	20.88	18.71	19.38	19.19	19.86	20.33
	6H	19.99	20.55	20.51	21.07	21.55	19.77	20.33	20.29	20.84	21.33
	8H	20.31	20.81	20.82	21.30	21.87	20.28	20.78	20.79	21.27	21.84