

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: P893413

Luminaire Tested: 4MB-3SL-LVR-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893413
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-L930
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

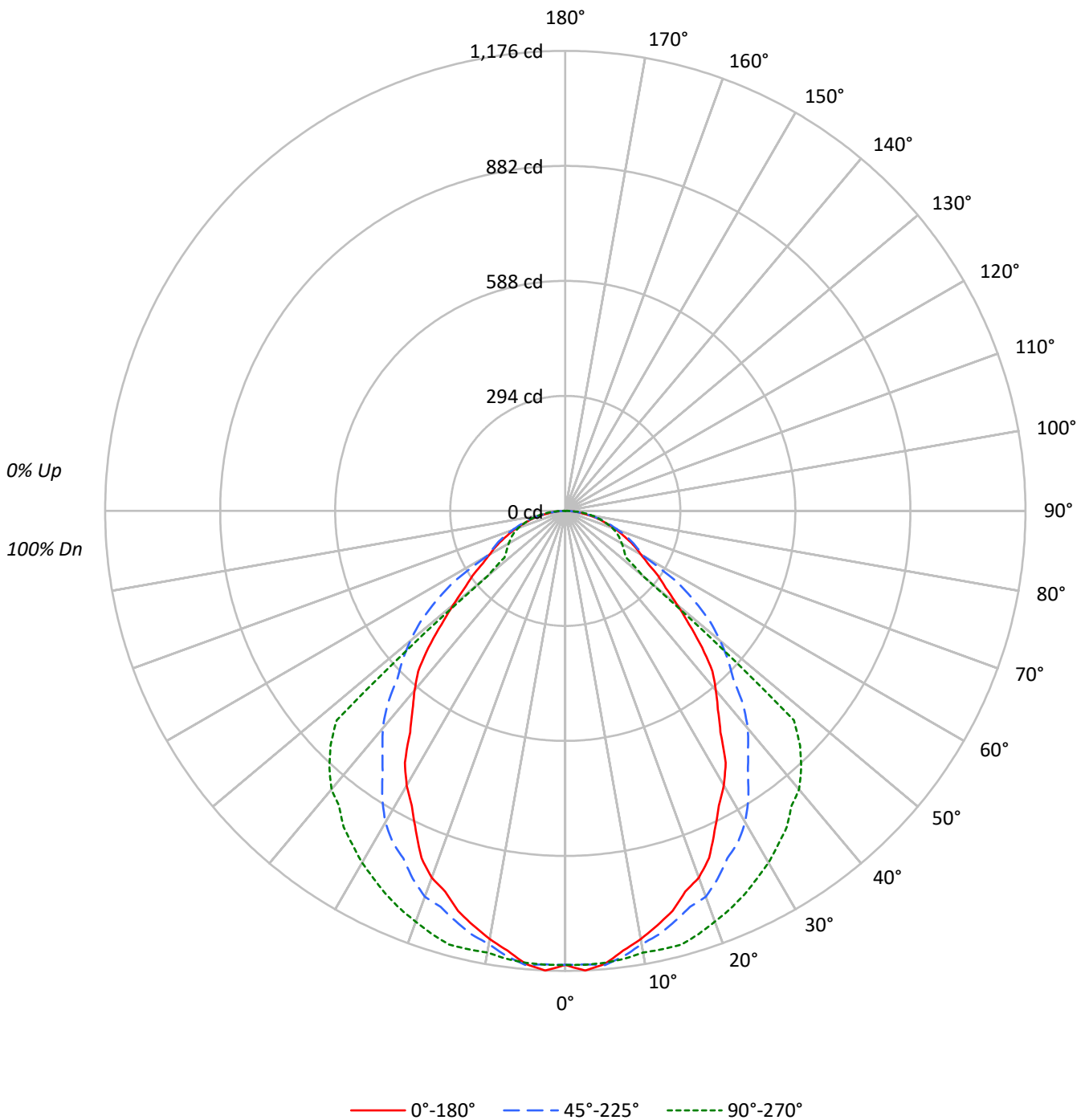
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2477.0 lumens
Efficiency: N/A
Efficacy: 117.4 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	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°	8258	8258	8258
5°	8303	8324	8281
10°	8030	8125	8283
15°	7799	7995	8454
20°	7554	7949	8461
25°	7088	7693	8498
30°	6658	7554	8533
35°	6004	7064	8573
40°	5561	6739	8633
45°	4975	6108	8536
50°	4128	5722	2868
55°	3596	5023	2295
60°	3180	3273	2379
65°	3024	3184	2525
70°	2835	3008	2663
75°	2639	2834	2738
80°	2405	2671	2868
85°	2131	2278	3094

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8536 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.1	4.4
10°-20°	309.7	12.5
20°-30°	455.6	18.4
30°-40°	521.0	21.0
40°-50°	493.4	19.9
50°-60°	271.8	11.0
60°-70°	174.5	7.0
70°-80°	107.7	4.3
80°-90°	33.2	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°	875.4	35.3
0°-40°	1396.4	56.4
0°-60°	2161.6	87.3
0°-90°	2477.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2477.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1161	1161	1161	1161	1161	
5°	1162	1172	1166	1166	1160	109
15°	1059	1072	1085	1142	1148	297
25°	903	943	980	1044	1082	416
35°	691	750	813	931	987	437
45°	494	541	607	779	848	378
55°	290	304	405	209	185	259
65°	180	186	189	168	150	178
75°	96	98	103	108	100	102
85°	26	26	28	32	38	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1160.7	1160.7	1160.7	1160.7	1160.7
2.5°	1176.1	1179.1	1160.1	1159.5	1161.3
5°	1162.5	1172.0	1165.5	1165.5	1159.5
7.5°	1133.5	1149.5	1147.7	1161.3	1154.8
10°	1111.5	1124.6	1124.6	1160.1	1146.5
12.5°	1085.4	1100.3	1108.6	1145.9	1147.7
15°	1058.8	1071.8	1085.4	1142.3	1147.7
17.5°	1020.2	1043.9	1061.1	1116.9	1134.0
20°	997.7	1011.9	1049.9	1094.9	1117.5
22.5°	960.4	981.1	1017.9	1068.2	1101.4
25°	902.9	943.2	979.9	1043.9	1082.5
27.5°	849.5	879.7	955.6	1023.2	1059.9
30°	810.4	834.1	919.5	993.0	1038.6
32.5°	762.9	801.5	870.8	963.3	1011.9
35°	691.2	750.5	813.3	931.3	987.0
37.5°	640.8	681.7	767.1	898.1	949.7
40°	598.7	636.1	725.6	856.6	929.5
42.5°	556.7	586.9	673.4	825.8	892.2
45°	494.4	541.2	607.0	779.0	848.3
47.5°	429.2	479.0	563.8	739.2	792.6
50°	372.9	412.6	516.9	660.4	259.1
52.5°	323.7	360.4	467.1	238.9	195.6
55°	289.9	304.1	404.9	208.7	185.0
57.5°	249.6	272.7	339.7	198.6	175.5
60°	223.5	233.6	230.0	188.5	167.2
62.5°	202.7	209.9	208.7	178.4	157.7
65°	179.6	185.6	189.1	168.4	150.0
67.5°	156.5	161.8	167.2	155.9	139.3
70°	136.3	139.9	144.6	141.1	128.0
72.5°	115.6	119.7	122.7	125.7	113.2
75°	96.0	97.8	103.1	108.5	99.6
77.5°	78.3	80.0	83.6	89.5	84.8
80°	58.7	60.5	65.2	70.0	70.0
82.5°	41.5	42.7	45.6	52.2	55.1
85°	26.1	26.1	27.9	32.0	37.9
87.5°	10.1	10.1	11.9	14.2	19.0
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	15.29	16.77	15.65	17.08	17.40	13.09	14.57	13.45	14.88	15.20
	3H	16.81	18.14	17.19	18.47	18.83	15.42	16.74	15.80	17.07	17.44
	4H	17.40	18.65	17.80	19.00	19.37	16.37	17.61	16.77	17.96	18.34
	6H	17.86	19.01	18.27	19.38	19.77	17.15	18.30	17.57	18.67	19.06
	8H	18.01	19.10	18.43	19.49	19.89	17.46	18.56	17.89	18.95	19.35
	12H	18.10	19.15	18.53	19.53	19.96	17.71	18.76	18.14	19.14	19.57
4H	2H	15.84	17.08	16.24	17.43	17.81	14.19	15.44	14.59	15.78	16.16
	3H	17.61	18.64	18.02	19.04	19.44	16.64	17.67	17.05	18.07	18.47
	4H	18.33	19.25	18.76	19.67	20.11	17.70	18.63	18.14	19.05	19.49
	6H	18.91	19.72	19.37	20.16	20.62	18.59	19.40	19.05	19.84	20.30
	8H	19.10	19.86	19.57	20.30	20.77	18.94	19.70	19.41	20.14	20.61
	12H	19.24	19.91	19.72	20.39	20.86	19.23	19.90	19.71	20.38	20.86
8H	4H	18.63	19.39	19.10	19.83	20.30	18.09	18.84	18.55	19.29	19.76
	6H	19.35	19.97	19.84	20.46	20.94	19.13	19.75	19.62	20.24	20.72
	8H	19.61	20.17	20.12	20.68	21.17	19.57	20.13	20.09	20.64	21.13
	12H	19.82	20.32	20.33	20.81	21.37	19.96	20.45	20.47	20.95	21.51
12H	4H	18.67	19.34	19.15	19.82	20.29	18.13	18.80	18.61	19.28	19.75
	6H	19.41	19.97	19.93	20.48	20.97	19.19	19.75	19.71	20.26	20.75
	8H	19.73	20.23	20.24	20.72	21.29	19.70	20.20	20.21	20.69	21.26