

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: P892669

Luminaire Tested: 2MB-3SL-RFLW-UNV-L830

Issue Date: 11/11/2024

**Test Information**

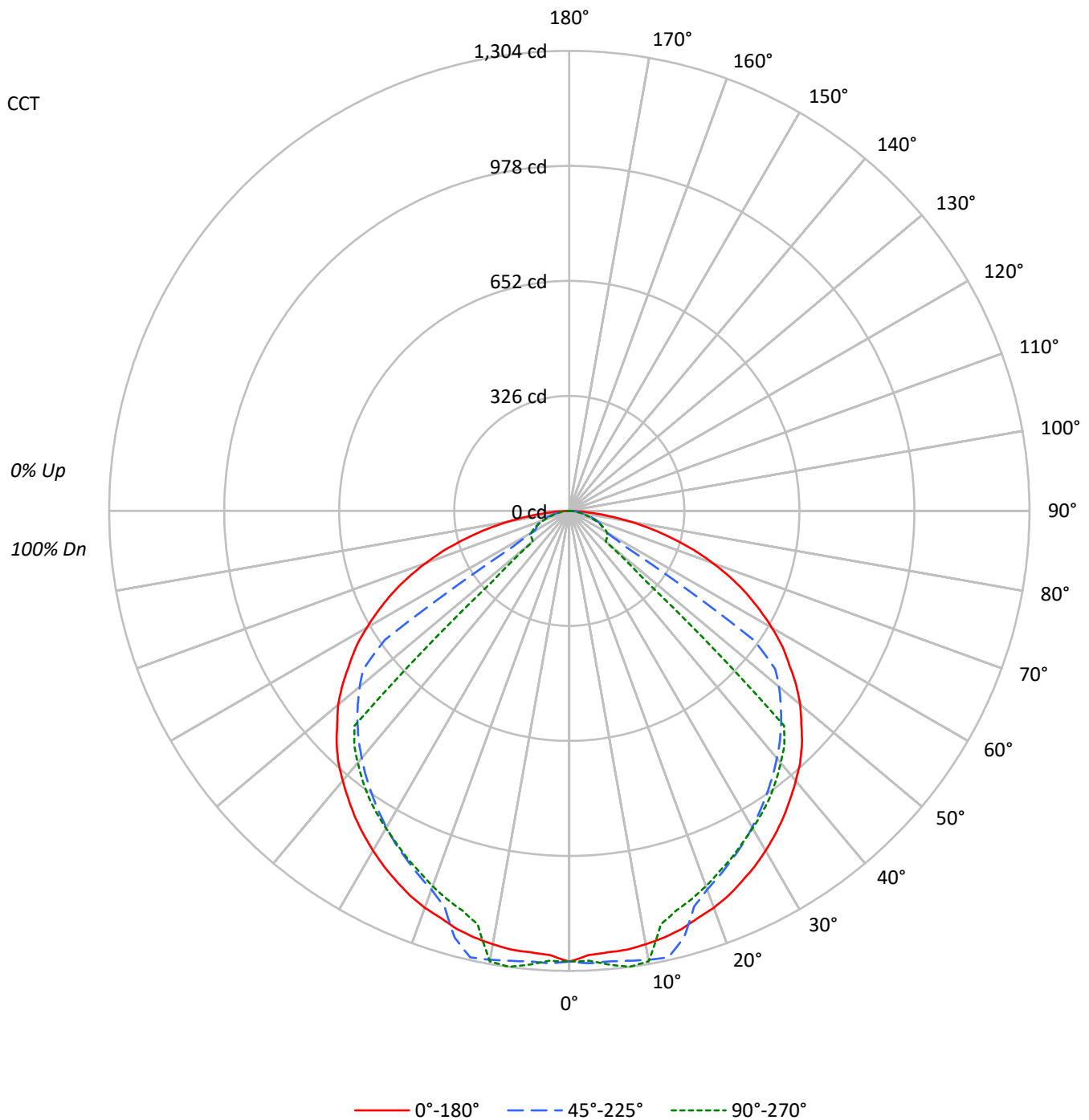
Test Method: LM-79-2019  
Report Number: P892669  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-3SL-RFLW-UNV-L830  
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3000.0 lumens  
Efficiency: N/A  
Efficacy: 142.9 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.22 / 1.37  
Luminous Opening: Rectangular (W 0.21' x L: 1.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 8  
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	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	67	67	67	67	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	58	58	58	56
5	80	68	59	53	77	67	59	53	64	58	52	63	57	52	61	55	51	51	51	51	49
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	46	46	46	44
7	69	56	48	42	67	55	47	42	53	46	41	52	46	41	51	45	41	41	41	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	37	37	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	33	33	33	32
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	30	30	30	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	33356	33356	33356
5°	32917	33596	33824
10°	33069	34252	34366
15°	33173	33870	31694
20°	33257	31740	31459
25°	33364	31417	31293
30°	33529	31229	31317
35°	33749	31136	31595
40°	34030	31185	31774
45°	34423	31343	31768
50°	34711	31498	5491
55°	34644	29013	5958
60°	34635	5859	6459
65°	34218	6221	6400
70°	33060	6481	5931
75°	30766	6093	5225
80°	26386	5413	4541
85°	17674	5182	3864

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 57.5°  
 Luminance: 34815 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.5	4.1
10°-20°	345.2	11.5
20°-30°	516.6	17.2
30°-40°	622.8	20.8
40°-50°	627.2	20.9
50°-60°	391.3	13.0
60°-70°	246.0	8.2
70°-80°	102.3	3.4
80°-90°	26.2	0.9
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°	984.2	32.8
0°-40°	1607.0	53.6
0°-60°	2625.5	87.5
0°-90°	3000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3000.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1256	1282	1282	1283	1291	120
15°	1227	1265	1253	1173	1173	346
25°	1158	1203	1091	1082	1086	535
35°	1059	991	977	983	991	663
45°	932	843	849	860	860	719
55°	761	670	637	125	131	682
65°	554	479	101	105	104	546
75°	305	73	60	53	52	322
85°	59	22	17	13	13	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1277.6	1277.6	1277.6	1277.6	1277.6
2.5°	1260.3	1283.4	1283.4	1277.6	1276.2
5°	1256.0	1281.9	1281.9	1283.4	1290.6
7.5°	1254.6	1279.0	1286.2	1294.9	1303.5
10°	1247.4	1276.2	1292.0	1303.5	1296.3
12.5°	1238.8	1270.4	1296.3	1222.9	1199.9
15°	1227.3	1264.7	1253.1	1172.6	1172.6
17.5°	1210.0	1256.0	1175.5	1152.4	1153.9
20°	1197.0	1248.8	1142.4	1129.4	1132.3
22.5°	1179.8	1234.4	1116.5	1105.0	1107.8
25°	1158.2	1202.8	1090.6	1081.9	1086.3
27.5°	1136.6	1138.0	1064.7	1058.9	1061.8
30°	1112.2	1076.2	1035.9	1034.5	1038.8
32.5°	1086.3	1030.1	1007.1	1010.0	1015.8
35°	1058.9	991.3	976.9	982.7	991.3
37.5°	1028.7	955.3	946.7	956.8	962.5
40°	998.5	917.9	915.0	925.1	932.3
42.5°	968.3	882.0	883.4	893.5	902.1
45°	932.3	843.1	848.9	860.4	860.4
47.5°	892.0	801.4	812.9	788.4	292.1
50°	854.6	759.7	775.5	233.1	135.2
52.5°	810.0	715.1	735.2	128.0	132.4
55°	761.1	670.5	637.4	125.2	130.9
57.5°	716.5	624.4	189.9	123.7	128.0
60°	663.3	578.4	112.2	120.9	123.7
62.5°	608.6	529.5	106.5	115.1	115.1
65°	553.9	479.1	100.7	105.0	103.6
67.5°	494.9	427.3	95.0	92.1	90.6
70°	433.1	263.3	84.9	79.1	77.7
72.5°	371.2	90.6	73.4	66.2	64.7
75°	305.0	73.4	60.4	53.2	51.8
77.5°	240.3	60.4	47.5	41.7	40.3
80°	175.5	46.0	36.0	31.7	30.2
82.5°	113.7	33.1	27.3	21.6	20.1
85°	59.0	21.6	17.3	12.9	12.9
87.5°	23.0	12.9	8.6	5.8	4.3
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	25.18	26.69	25.54	27.00	27.32	13.81	15.33	14.18	15.64	15.96
	3H	27.10	28.45	27.48	28.78	29.14	15.95	17.30	16.32	17.63	17.99
	4H	27.58	28.85	27.98	29.20	29.58	16.63	17.90	17.03	18.25	18.63
	6H	28.02	29.19	28.43	29.55	29.94	17.09	18.26	17.51	18.63	19.02
	8H	28.16	29.27	28.58	29.66	30.06	17.23	18.34	17.66	18.73	19.13
	12H	28.23	29.30	28.66	29.68	30.11	17.31	18.38	17.75	18.76	19.19
4H	2H	25.02	26.29	25.42	26.64	27.02	14.57	15.83	14.97	16.18	16.56
	3H	27.05	28.10	27.46	28.50	28.90	16.91	17.95	17.32	18.35	18.75
	4H	27.54	28.48	27.97	28.89	29.33	17.70	18.64	18.13	19.05	19.49
	6H	28.05	28.86	28.51	29.31	29.77	18.27	19.09	18.73	19.53	19.99
	8H	28.24	29.00	28.70	29.44	29.91	18.45	19.20	18.91	19.65	20.12
	12H	28.36	29.04	28.85	29.52	29.99	18.57	19.24	19.05	19.72	20.19
8H	4H	27.46	28.22	27.93	28.67	29.13	18.29	19.05	18.75	19.49	19.96
	6H	27.97	28.60	28.47	29.09	29.57	18.94	19.57	19.44	20.06	20.54
	8H	28.17	28.74	28.69	29.25	29.74	19.17	19.73	19.68	20.24	20.73
	12H	28.33	28.83	28.84	29.33	29.89	19.34	19.84	19.85	20.33	20.90
12H	4H	27.43	28.11	27.92	28.59	29.06	18.37	19.05	18.85	19.53	20.00
	6H	27.93	28.49	28.45	29.00	29.49	19.05	19.62	19.57	20.13	20.62
	8H	28.15	28.65	28.66	29.15	29.71	19.34	19.84	19.85	20.33	20.89