

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: P892559

Luminaire Tested: 2MB-2SL-RFLW-UNV-L840

Issue Date: 11/11/2024

**Test Information**

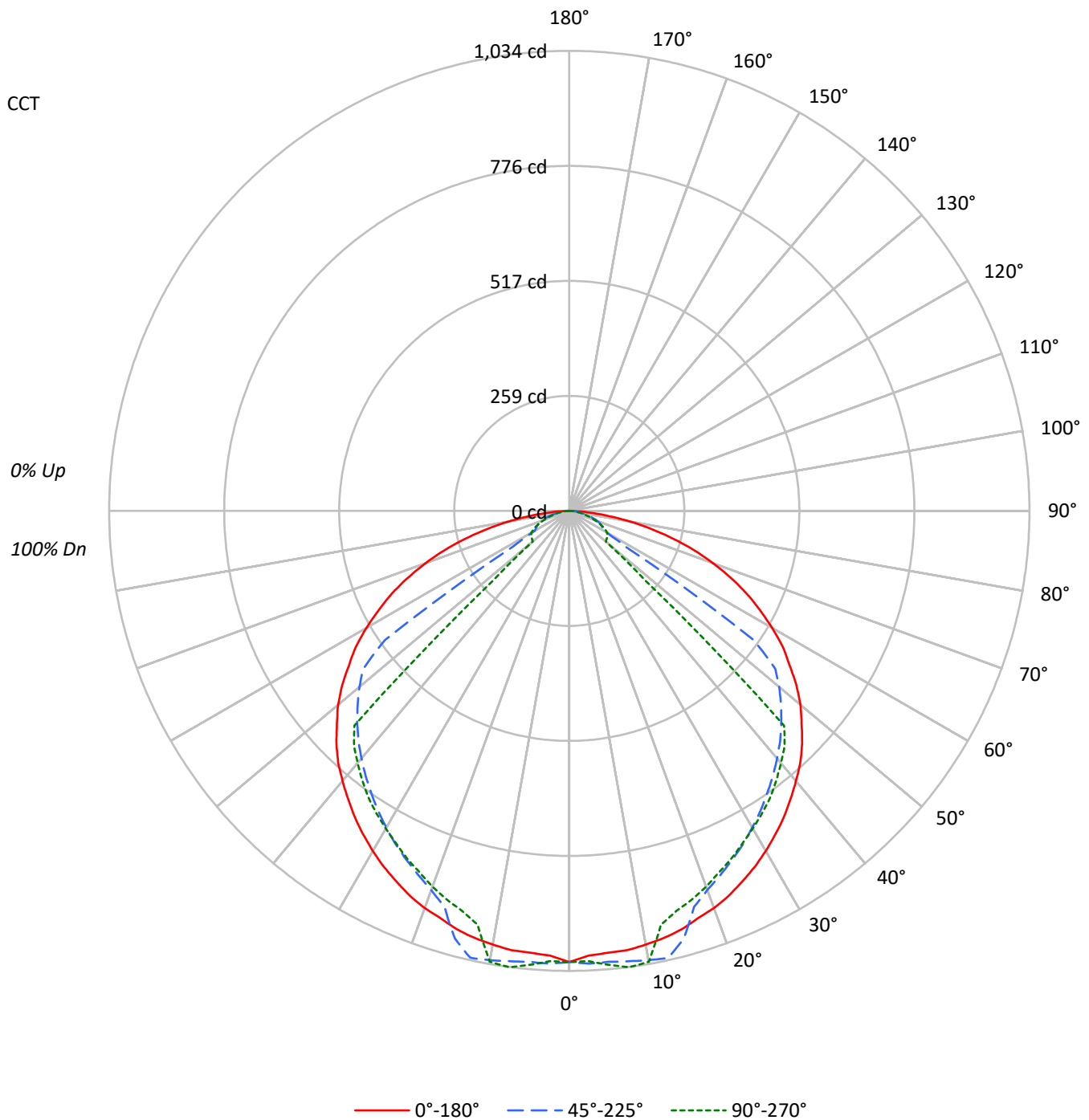
Test Method: LM-79-2019  
Report Number: P892559  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-2SL-RFLW-UNV-L840  
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 4000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2381.0 lumens  
Efficiency: N/A  
Efficacy: 159.8 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): 14.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.92  
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°	26473	26473	26473
5°	26126	26664	26845
10°	26246	27184	27274
15°	26326	26883	25153
20°	26394	25191	24969
25°	26479	24932	24834
30°	26611	24787	24853
35°	26785	24710	25077
40°	27010	24750	25217
45°	27319	24874	25210
50°	27550	25000	4358
55°	27497	23027	4729
60°	27486	4652	5128
65°	27157	4936	5078
70°	26236	5145	4710
75°	24421	4842	4146
80°	20944	4285	3608
85°	14019	4104	3085

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 57.5°  
 Luminance: 27634 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.2	4.1
10°-20°	274.0	11.5
20°-30°	410.0	17.2
30°-40°	494.3	20.8
40°-50°	497.8	20.9
50°-60°	310.5	13.0
60°-70°	195.2	8.2
70°-80°	81.2	3.4
80°-90°	20.8	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°	781.1	32.8
0°-40°	1275.4	53.6
0°-60°	2083.7	87.5
0°-90°	2381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2381.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1014	1014	1014	1014	1014	
5°	997	1017	1017	1019	1024	95
15°	974	1004	995	931	931	275
25°	919	955	866	859	862	424
35°	840	787	775	780	787	526
45°	740	669	674	683	683	570
55°	604	532	506	99	104	541
65°	440	380	80	83	82	433
75°	242	58	48	42	41	255
85°	47	17	14	10	10	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1014.0	1014.0	1014.0	1014.0	1014.0
2.5°	1000.3	1018.6	1018.6	1014.0	1012.9
5°	996.9	1017.4	1017.4	1018.6	1024.3
7.5°	995.7	1015.1	1020.8	1027.7	1034.5
10°	990.0	1012.9	1025.4	1034.5	1028.8
12.5°	983.2	1008.3	1028.8	970.6	952.3
15°	974.0	1003.7	994.6	930.6	930.6
17.5°	960.3	996.9	932.9	914.6	915.8
20°	950.0	991.2	906.7	896.4	898.7
22.5°	936.3	979.7	886.1	877.0	879.3
25°	919.2	954.6	865.5	858.7	862.1
27.5°	902.1	903.2	845.0	840.4	842.7
30°	882.7	854.1	822.2	821.0	824.4
32.5°	862.1	817.6	799.3	801.6	806.2
35°	840.4	786.8	775.3	779.9	786.8
37.5°	816.4	758.2	751.4	759.4	763.9
40°	792.5	728.5	726.2	734.2	739.9
42.5°	768.5	700.0	701.1	709.1	716.0
45°	739.9	669.1	673.7	682.8	682.8
47.5°	708.0	636.0	645.2	625.8	231.8
50°	678.3	602.9	615.5	185.0	107.3
52.5°	642.9	567.5	583.5	101.6	105.1
55°	604.1	532.1	505.9	99.3	103.9
57.5°	568.7	495.6	150.7	98.2	101.6
60°	526.4	459.0	89.1	95.9	98.2
62.5°	483.0	420.2	84.5	91.4	91.4
65°	439.6	380.2	79.9	83.4	82.2
67.5°	392.8	339.1	75.4	73.1	71.9
70°	343.7	209.0	67.4	62.8	61.7
72.5°	294.6	71.9	58.2	52.5	51.4
75°	242.1	58.2	48.0	42.2	41.1
77.5°	190.7	48.0	37.7	33.1	32.0
80°	139.3	36.5	28.5	25.1	24.0
82.5°	90.2	26.3	21.7	17.1	16.0
85°	46.8	17.1	13.7	10.3	10.3
87.5°	18.3	10.3	6.9	4.6	3.4
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	24.38	25.89	24.74	26.20	26.52	13.01	14.53	13.38	14.84	15.15
	3H	26.30	27.65	26.67	27.98	28.34	15.14	16.50	15.52	16.82	17.19
	4H	26.78	28.05	27.18	28.39	28.77	15.83	17.10	16.23	17.45	17.82
	6H	27.22	28.38	27.63	28.75	29.14	16.29	17.46	16.70	17.83	18.22
	8H	27.35	28.47	27.78	28.86	29.26	16.43	17.54	16.85	17.93	18.33
	12H	27.43	28.49	27.86	28.88	29.30	16.51	17.58	16.94	17.96	18.39
4H	2H	24.22	25.49	24.62	25.84	26.21	13.76	15.03	14.16	15.38	15.76
	3H	26.25	27.29	26.66	27.69	28.09	16.11	17.15	16.52	17.55	17.95
	4H	26.74	27.67	27.17	28.09	28.53	16.90	17.84	17.33	18.25	18.69
	6H	27.25	28.06	27.71	28.50	28.97	17.47	18.28	17.93	18.73	19.19
	8H	27.44	28.19	27.90	28.64	29.11	17.64	18.40	18.11	18.85	19.31
	12H	27.56	28.24	28.04	28.72	29.19	17.76	18.44	18.25	18.92	19.39
8H	4H	26.66	27.42	27.12	27.86	28.33	17.49	18.25	17.95	18.69	19.16
	6H	27.17	27.80	27.67	28.29	28.77	18.14	18.77	18.64	19.26	19.74
	8H	27.37	27.93	27.89	28.44	28.93	18.36	18.93	18.88	19.44	19.93
	12H	27.53	28.03	28.04	28.52	29.09	18.54	19.04	19.05	19.53	20.09
12H	4H	26.63	27.31	27.11	27.79	28.26	17.57	18.25	18.05	18.73	19.20
	6H	27.13	27.69	27.64	28.20	28.69	18.25	18.81	18.77	19.32	19.81
	8H	27.35	27.85	27.86	28.34	28.91	18.53	19.03	19.04	19.52	20.09