

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: P892884

Luminaire Tested: 2MB-5HL-RNDU-UNV-L950

Issue Date: 11/11/2024

**Test Information**

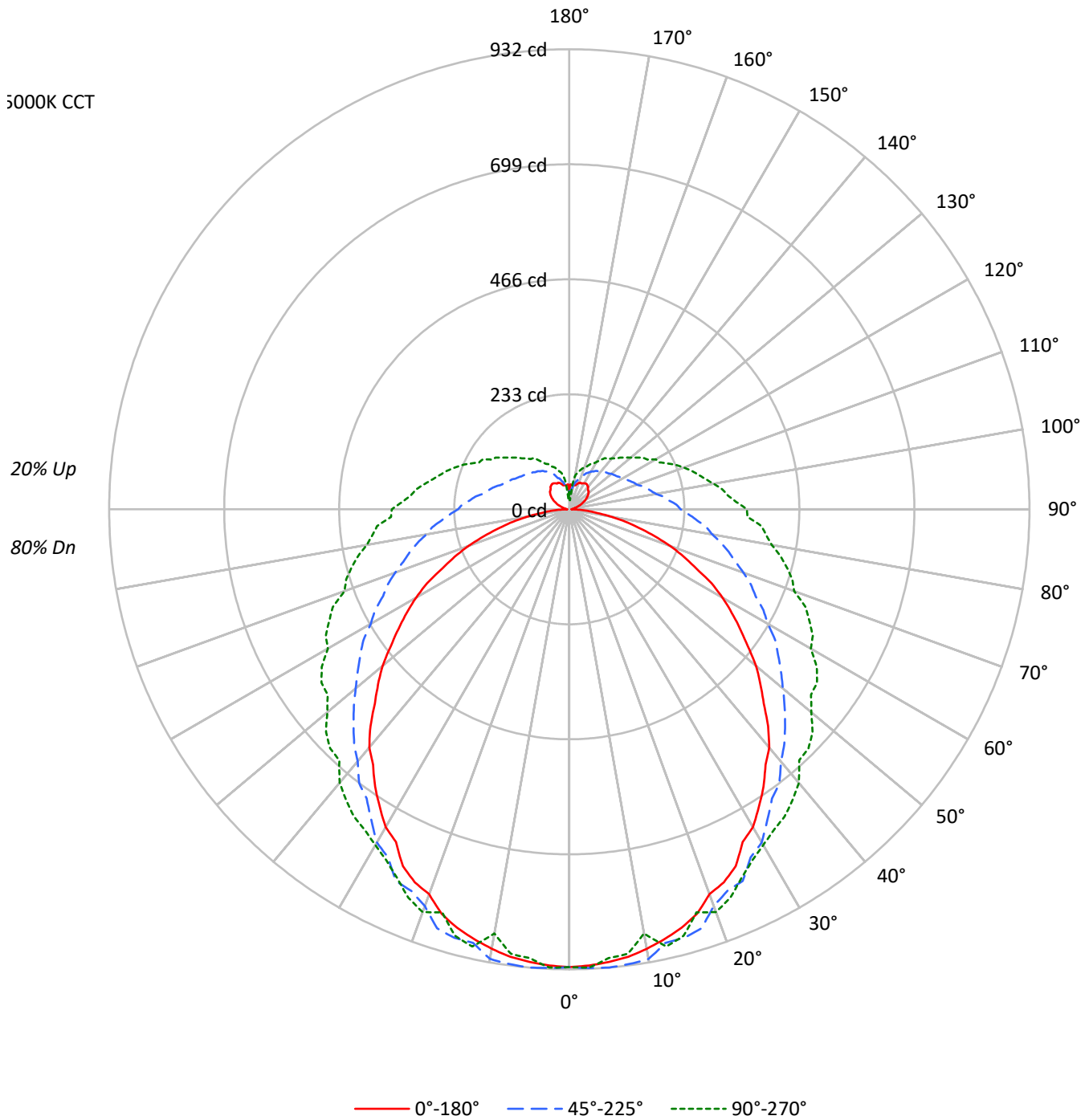
Test Method: LM-79-2019  
Report Number: P892884  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-RNDU-UNV-L950  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, 5  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3909.0 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 1.98' x H: 0.21')  
CIE Type: Semi-Direct  
  
Input Watts (W): 33.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 4.5  
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
RCR																				
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80		
1	102	96	91	86	97	92	87	83	84	80	76	76	73	70	69	67	65	61		
2	92	82	75	68	87	79	72	66	72	66	61	65	61	57	60	56	53	49		
3	83	72	63	56	79	69	61	54	63	56	51	57	52	47	52	48	44	41		
4	76	63	54	47	72	60	52	45	55	48	43	51	45	40	46	41	37	34		
5	69	56	47	40	66	54	45	39	49	42	37	45	39	34	41	36	32	29		
6	64	50	41	35	61	48	40	34	44	37	32	41	35	30	37	32	28	26		
7	59	46	37	30	56	44	35	30	40	33	28	37	31	26	34	29	25	23		
8	55	41	33	27	52	40	32	26	37	30	25	34	28	24	31	26	22	20		
9	51	38	30	24	49	37	29	23	34	27	22	31	25	21	29	24	20	18		
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	16		

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

	0°	45°	90°
0°	13270	13270	13270
5°	13099	12864	12508
10°	12892	12425	11559
15°	12645	11845	11550
20°	12168	11146	11021
25°	12001	10788	10367
30°	11578	10163	9856
35°	11156	9443	9593
40°	10810	8973	9254
45°	10190	8550	8953
50°	9767	8104	8611
55°	9158	7763	8571
60°	8678	7378	8288
65°	7832	7078	8352
70°	7050	6916	8085
75°	5817	6782	8285
80°	4364	6694	8348
85°	2734	6796	8834

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10190 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.2	2.3
10°-20°	251.6	6.4
20°-30°	377.0	9.6
30°-40°	452.5	11.6
40°-50°	477.3	12.2
50°-60°	460.4	11.8
60°-70°	408.2	10.4
70°-80°	336.4	8.6
80°-90°	261.5	6.7
90°-100°	203.8	5.2
100°-110°	162.6	4.2
110°-120°	130.2	3.3
120°-130°	103.4	2.6
130°-140°	79.4	2.0
140°-150°	57.7	1.5
150°-160°	36.5	0.9
160°-170°	17.8	0.5
170°-180°	4.2	0.1
0°-30°	716.9	18.3
0°-40°	1169.4	29.9
0°-60°	2107.1	53.9
0°-90°	3113.3	79.6
90°-120°	496.7	12.7
90°-150°	737.2	18.9
90°-180°	796.0	20.4
0°-180°	3909.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	921	934	932	924	913	87
15°	878	889	899	903	894	247
25°	798	810	831	830	825	365
35°	686	697	716	753	760	429
45°	557	570	618	660	685	432
55°	422	448	517	582	613	379
65°	284	318	416	492	537	284
75°	147	212	334	425	456	157
85°	37	129	260	353	391	40
90°	5	102	225	326	360	4
95°	6	85	202	290	322	6
105°	14	70	163	241	270	15
115°	29	67	135	198	220	29
125°	44	67	117	161	182	40
135°	54	68	106	134	148	42
145°	62	66	95	114	126	38
155°	58	61	80	93	101	27
165°	51	52	59	69	80	15
175°	50	46	38	35	18	5
180°	36	36	36	36	36	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	927.6	927.6	927.6	927.6	927.6
2.5°	925.0	931.1	930.2	941.6	929.3
5°	920.6	933.7	932.0	924.1	912.8
7.5°	914.5	932.8	929.3	927.6	908.4
10°	904.0	918.9	925.0	926.7	872.6
12.5°	891.8	905.8	899.7	907.5	907.5
15°	877.9	889.2	898.8	903.2	894.4
17.5°	859.5	877.9	890.1	887.5	856.0
20°	829.9	855.2	855.2	870.9	868.3
22.5°	817.7	838.6	836.8	847.3	851.7
25°	797.6	809.8	830.7	829.9	824.6
27.5°	760.1	793.2	795.0	801.1	801.9
30°	743.5	765.3	779.3	788.9	785.4
32.5°	714.7	726.0	746.1	766.2	770.5
35°	685.9	697.2	715.6	753.1	760.1
37.5°	652.7	677.2	699.0	722.5	742.6
40°	630.0	638.8	666.7	701.6	723.4
42.5°	596.0	610.8	644.9	674.5	689.4
45°	556.7	569.8	617.8	659.7	685.0
47.5°	525.3	545.4	591.6	640.5	668.4
50°	493.9	510.5	564.6	610.0	639.6
52.5°	455.5	478.2	540.2	608.2	616.9
55°	422.4	447.7	516.6	582.0	612.6
57.5°	390.1	412.8	494.8	553.2	594.3
60°	358.6	383.1	464.2	534.0	564.6
62.5°	324.6	348.2	443.3	517.5	555.9
65°	283.6	317.6	416.2	492.2	536.7
67.5°	251.3	293.2	397.9	486.1	518.3
70°	217.3	260.9	375.2	455.5	484.3
72.5°	181.5	235.6	352.5	446.8	473.8
75°	146.6	212.0	334.2	425.0	456.4
77.5°	116.9	188.5	315.0	407.5	438.1
80°	84.6	165.8	294.1	385.7	416.2
82.5°	57.6	145.7	280.1	373.5	402.3
85°	36.7	129.1	260.0	353.4	390.9
87.5°	17.5	114.3	242.6	338.6	361.3
90°	5.2	102.1	225.1	325.5	359.5
92.5°	4.4	92.5	217.3	306.3	338.6
95°	6.1	84.6	202.4	289.7	322.0
97.5°	8.7	78.5	192.9	275.7	312.4
100°	9.6	73.3	178.9	264.4	296.7
102.5°	11.3	70.7	170.2	253.1	282.7
105°	14.0	69.8	163.2	240.8	270.5
107.5°	17.5	66.3	155.3	224.3	259.2
110°	20.9	67.2	145.7	217.3	247.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	25.3	66.3	141.4	204.2	234.7
115°	28.8	67.2	135.3	198.1	219.9
117.5°	33.2	66.3	130.9	185.0	205.9
120°	37.5	67.2	124.8	180.6	202.4
122.5°	41.0	68.1	121.3	170.2	187.6
125°	44.5	67.2	116.9	161.4	182.4
127.5°	48.0	68.1	114.3	153.6	171.9
130°	50.6	67.2	111.7	147.5	163.2
132.5°	53.2	67.2	107.3	140.5	155.3
135°	54.1	68.1	105.6	134.4	148.3
137.5°	55.8	68.9	102.1	128.3	139.6
140°	59.3	68.9	100.4	124.8	134.4
142.5°	60.2	67.2	96.9	117.8	128.3
145°	62.0	66.3	95.1	114.3	126.5
147.5°	62.0	66.3	90.8	107.3	118.7
150°	61.1	63.7	88.1	103.0	110.8
152.5°	59.3	63.7	83.8	98.6	103.8
155°	57.6	61.1	80.3	93.4	101.2
157.5°	58.5	60.2	74.2	90.8	94.2
160°	56.7	57.6	67.2	85.5	90.8
162.5°	54.1	55.0	65.4	78.5	86.4
165°	50.6	52.4	59.3	68.9	80.3
167.5°	49.7	48.9	55.8	62.0	75.9
170°	49.7	48.0	49.7	52.4	69.8
172.5°	48.9	46.2	44.5	41.9	51.5
175°	49.7	46.2	38.4	34.9	18.3
177.5°	50.6	47.1	37.5	26.2	19.2
180°	35.8	35.8	35.8	35.8	35.8



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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	15.96	17.27	16.60	17.93	18.70	19.11	20.42	19.75	21.09	21.86
	3H	17.43	18.63	18.08	19.30	20.10	21.94	23.14	22.59	23.81	24.61
	4H	17.90	19.04	18.58	19.73	20.54	23.36	24.50	24.03	25.18	26.00
	6H	18.19	19.25	18.88	19.95	20.78	24.83	25.89	25.52	26.59	27.42
	8H	18.25	19.27	18.95	19.99	20.82	25.59	26.61	26.28	27.32	28.16
	12H	18.27	19.25	18.98	19.96	20.82	26.40	27.38	27.10	28.09	28.95
4H	2H	17.06	18.20	17.74	18.89	19.70	19.47	20.61	20.15	21.30	22.11
	3H	18.78	19.75	19.46	20.48	21.31	22.53	23.51	23.22	24.23	25.07
	4H	19.38	20.28	20.09	21.01	21.87	24.14	25.05	24.85	25.77	26.63
	6H	19.80	20.60	20.53	21.35	22.22	25.82	26.62	26.55	27.37	28.24
	8H	19.92	20.67	20.64	21.41	22.30	26.70	27.45	27.42	28.19	29.08
	12H	19.98	20.66	20.72	21.43	22.32	27.64	28.33	28.39	29.10	29.99
8H	4H	20.39	21.14	21.11	21.88	22.77	24.34	25.09	25.06	25.84	26.72
	6H	21.04	21.68	21.80	22.47	23.36	26.21	26.85	26.96	27.64	28.52
	8H	21.27	21.85	22.03	22.64	23.53	27.24	27.82	28.00	28.60	29.50
	12H	21.42	21.94	22.19	22.72	23.67	28.38	28.90	29.15	29.67	30.63
12H	4H	20.70	21.38	21.44	22.15	23.04	24.34	25.02	25.08	25.79	26.68
	6H	21.52	22.10	22.28	22.88	23.78	26.25	26.83	27.01	27.61	28.51
	8H	21.86	22.38	22.63	23.16	24.12	27.34	27.86	28.11	28.64	29.59