

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: P892882

Luminaire Tested: 2MB-5HL-RNDU-UNV-L935

Issue Date: 11/11/2024

**Test Information**

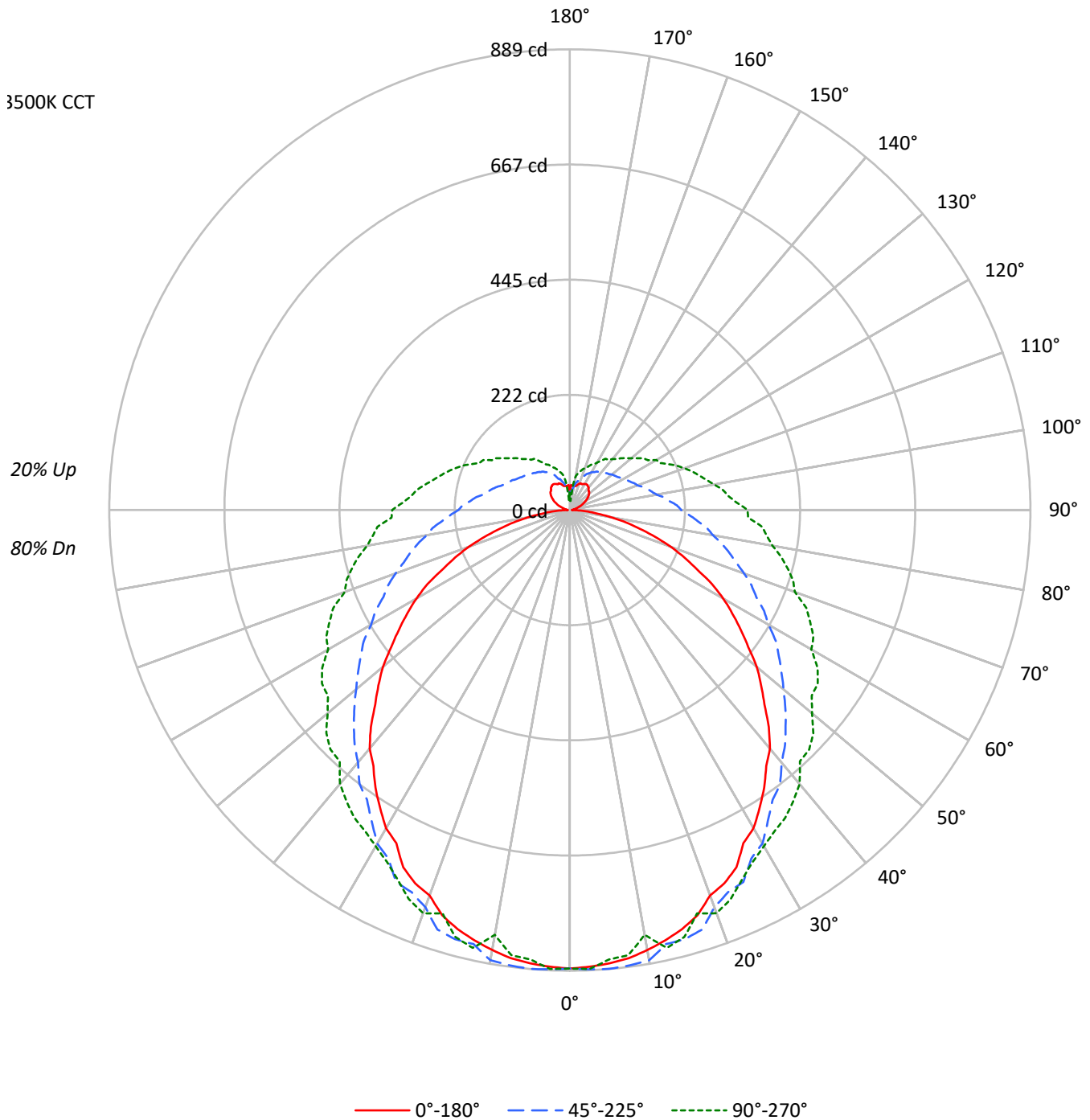
Test Method: LM-79-2019  
Report Number: P892882  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-RNDU-UNV-L935  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with ROUND FROSTED LENS WITH UPLIGHT, 90CRI, 5  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3728.0 lumens  
Efficiency: N/A  
Efficacy: 110.6 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°	12656	12656	12656
5°	12493	12268	11929
10°	12296	11850	11024
15°	12059	11297	11016
20°	11603	10629	10511
25°	11444	10290	9887
30°	11042	9692	9399
35°	10639	9005	9149
40°	10311	8557	8826
45°	9719	8154	8538
50°	9314	7728	8213
55°	8733	7404	8174
60°	8276	7037	7903
65°	7470	6751	7965
70°	6722	6597	7711
75°	5548	6467	7902
80°	4163	6384	7962
85°	2607	6482	8425

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9719 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.1	2.3
10°-20°	240.0	6.4
20°-30°	359.6	9.6
30°-40°	431.6	11.6
40°-50°	455.2	12.2
50°-60°	439.1	11.8
60°-70°	389.3	10.4
70°-80°	320.8	8.6
80°-90°	249.4	6.7
90°-100°	194.4	5.2
100°-110°	155.1	4.2
110°-120°	124.2	3.3
120°-130°	98.6	2.6
130°-140°	75.7	2.0
140°-150°	55.1	1.5
150°-160°	34.8	0.9
160°-170°	17.0	0.5
170°-180°	4.0	0.1
0°-30°	683.7	18.3
0°-40°	1115.3	29.9
0°-60°	2009.5	53.9
0°-90°	2969.1	79.6
90°-120°	473.7	12.7
90°-150°	703.0	18.9
90°-180°	759.0	20.4
0°-180°	3728.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	878	890	889	881	870	83
15°	837	848	857	861	853	235
25°	761	772	792	791	786	348
35°	654	665	682	718	725	409
45°	531	543	589	629	653	412
55°	403	427	493	555	584	361
65°	270	303	397	469	512	271
75°	140	202	319	405	435	150
85°	35	123	248	337	373	38
90°	5	97	215	310	343	4
95°	6	81	193	276	307	6
105°	13	67	156	230	258	15
115°	28	64	129	189	210	27
125°	42	64	112	154	174	38
135°	52	65	101	128	142	40
145°	59	63	91	109	121	37
155°	55	58	77	89	96	26
165°	48	50	57	66	77	14
175°	47	44	37	33	18	4
180°	34	34	34	34	34	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	884.7	884.7	884.7	884.7	884.7
2.5°	882.2	888.0	887.1	898.0	886.3
5°	878.0	890.5	888.8	881.3	870.5
7.5°	872.2	889.6	886.3	884.7	866.3
10°	862.2	876.3	882.2	883.8	832.2
12.5°	850.5	863.8	858.0	865.5	865.5
15°	837.2	848.0	857.2	861.3	853.0
17.5°	819.7	837.2	848.9	846.4	816.4
20°	791.4	815.6	815.6	830.6	828.1
22.5°	779.8	799.8	798.1	808.1	812.2
25°	760.6	772.3	792.3	791.4	786.4
27.5°	724.9	756.5	758.2	764.0	764.8
30°	709.1	729.9	743.2	752.3	749.0
32.5°	681.6	692.4	711.5	730.7	734.9
35°	654.1	664.9	682.4	718.2	724.9
37.5°	622.5	645.8	666.6	689.1	708.2
40°	600.9	609.2	635.8	669.1	689.9
42.5°	568.4	582.6	615.0	643.3	657.5
45°	531.0	543.4	589.2	629.2	653.3
47.5°	501.0	520.1	564.2	610.8	637.5
50°	471.0	486.8	538.4	581.7	610.0
52.5°	434.4	456.1	515.1	580.1	588.4
55°	402.8	426.9	492.7	555.1	584.2
57.5°	372.0	393.6	471.9	527.6	566.7
60°	342.0	365.3	442.7	509.3	538.4
62.5°	309.6	332.1	422.8	493.5	530.1
65°	270.5	302.9	397.0	469.4	511.8
67.5°	239.7	279.6	379.5	463.5	494.3
70°	207.2	248.8	357.9	434.4	461.9
72.5°	173.1	224.7	336.2	426.1	451.9
75°	139.8	202.2	318.7	405.3	435.3
77.5°	111.5	179.8	300.4	388.6	417.8
80°	80.7	158.1	280.5	367.8	397.0
82.5°	54.9	139.0	267.1	356.2	383.7
85°	35.0	123.2	248.0	337.0	372.8
87.5°	16.6	109.0	231.4	322.9	344.5
90°	5.0	97.4	214.7	310.4	342.9
92.5°	4.2	88.2	207.2	292.1	322.9
95°	5.8	80.7	193.1	276.3	307.1
97.5°	8.3	74.9	183.9	263.0	297.9
100°	9.2	69.9	170.6	252.2	283.0
102.5°	10.8	67.4	162.3	241.3	269.6
105°	13.3	66.6	155.6	229.7	258.0
107.5°	16.6	63.2	148.1	213.9	247.2
110°	20.0	64.1	139.0	207.2	235.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	24.1	63.2	134.8	194.7	223.9
115°	27.5	64.1	129.0	188.9	209.7
117.5°	31.6	63.2	124.8	176.4	196.4
120°	35.8	64.1	119.0	172.3	193.1
122.5°	39.1	64.9	115.7	162.3	178.9
125°	42.4	64.1	111.5	154.0	173.9
127.5°	45.8	64.9	109.0	146.5	163.9
130°	48.3	64.1	106.5	140.6	155.6
132.5°	50.8	64.1	102.4	134.0	148.1
135°	51.6	64.9	100.7	128.2	141.5
137.5°	53.3	65.7	97.4	122.3	133.2
140°	56.6	65.7	95.7	119.0	128.2
142.5°	57.4	64.1	92.4	112.3	122.3
145°	59.1	63.2	90.7	109.0	120.7
147.5°	59.1	63.2	86.6	102.4	113.2
150°	58.3	60.8	84.1	98.2	105.7
152.5°	56.6	60.8	79.9	94.0	99.0
155°	54.9	58.3	76.6	89.0	96.5
157.5°	55.8	57.4	70.7	86.6	89.9
160°	54.1	54.9	64.1	81.6	86.6
162.5°	51.6	52.4	62.4	74.9	82.4
165°	48.3	49.9	56.6	65.7	76.6
167.5°	47.4	46.6	53.3	59.1	72.4
170°	47.4	45.8	47.4	49.9	66.6
172.5°	46.6	44.1	42.4	39.9	49.1
175°	47.4	44.1	36.6	33.3	17.5
177.5°	48.3	44.9	35.8	25.0	18.3
180°	34.1	34.1	34.1	34.1	34.1



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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	15.79	17.10	16.43	17.77	18.54	18.94	20.25	19.59	20.92	21.69
	3H	17.26	18.46	17.92	19.14	19.94	21.77	22.97	22.43	23.65	24.45
	4H	17.74	18.88	18.41	19.56	20.38	23.19	24.33	23.86	25.02	25.83
	6H	18.03	19.09	18.71	19.78	20.61	24.67	25.73	25.35	26.43	27.26
	8H	18.08	19.10	18.78	19.82	20.65	25.42	26.44	26.12	27.16	27.99
	12H	18.11	19.08	18.81	19.79	20.66	26.24	27.21	26.94	27.92	28.79
4H	2H	16.89	18.03	17.57	18.72	19.53	19.31	20.45	19.98	21.13	21.95
	3H	18.61	19.59	19.30	20.31	21.14	22.37	23.35	23.06	24.07	24.90
	4H	19.22	20.12	19.92	20.84	21.70	23.98	24.88	24.68	25.61	26.47
	6H	19.64	20.44	20.36	21.19	22.05	25.66	26.46	26.38	27.21	28.08
	8H	19.75	20.50	20.48	21.25	22.13	26.53	27.28	27.26	28.03	28.91
	12H	19.81	20.50	20.56	21.27	22.16	27.48	28.16	28.22	28.93	29.82
8H	4H	20.22	20.97	20.95	21.72	22.60	24.17	24.93	24.90	25.67	26.56
	6H	20.88	21.52	21.63	22.31	23.19	26.04	26.68	26.80	27.47	28.36
	8H	21.10	21.68	21.87	22.47	23.37	27.07	27.65	27.84	28.44	29.34
	12H	21.26	21.77	22.03	22.55	23.51	28.21	28.73	28.98	29.51	30.47
12H	4H	20.53	21.22	21.28	21.99	22.88	24.17	24.86	24.92	25.63	26.52
	6H	21.35	21.93	22.12	22.72	23.62	26.08	26.66	26.85	27.45	28.35
	8H	21.70	22.22	22.47	23.00	23.95	27.18	27.70	27.95	28.47	29.43