

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: P894082

Luminaire Tested: 4MB-SC3-A-UNV-CC83-HI-4000K

Issue Date: 11/11/2024

**Test Information**

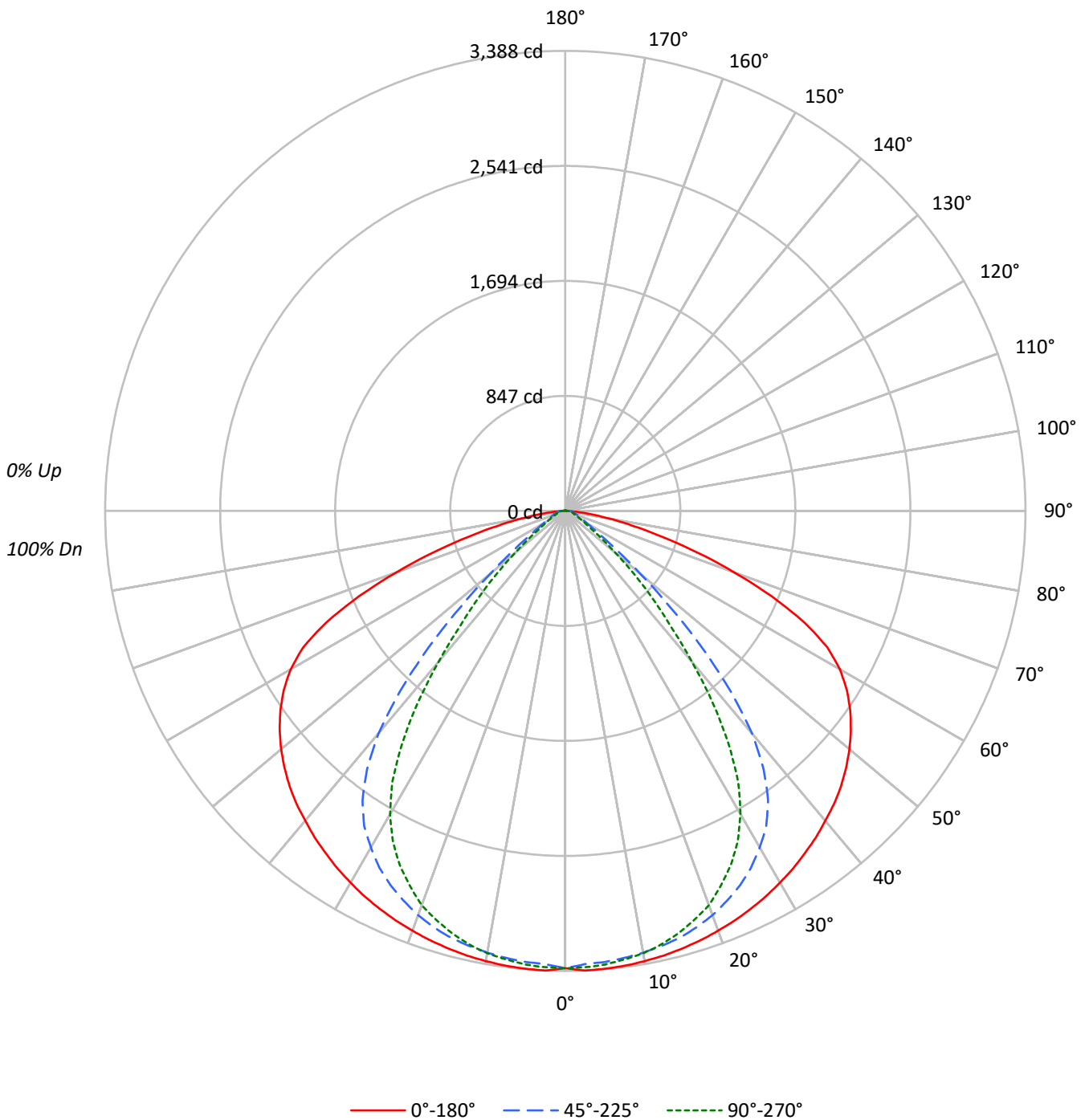
Test Method: LM-79-2019  
Report Number: P894082  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-A-UNV-CC83-HI-4000K  
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 4000K CCT, HI lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6904.0 lumens  
Efficiency: N/A  
Efficacy: 136.2 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1.15 / 1.23  
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 50.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.39961257980444  
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	111	107	103	100	108	105	102	99	100	98	96	97	95	93	93	91	90	90	90	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	79	79	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	69	69	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	62	62	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	55	64	59	55	55	55	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	49	49	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	45	45	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	40	40	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	37	37	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	34	34	34	32

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

	0°	45°	90°
0°	34299	34299	34299
5°	34602	34088	34287
10°	34819	34164	34212
15°	35166	34311	33957
20°	35663	34340	33501
25°	36327	34191	32368
30°	37172	33655	30334
35°	38234	32360	26080
40°	39596	28421	19277
45°	41340	20508	12965
50°	43262	11458	7737
55°	45470	5923	4236
60°	47568	3854	2998
65°	46755	3166	2381
70°	39430	2912	2221
75°	29004	2971	2385
80°	19348	3495	3009
85°	10563	5667	4569

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 62.5°  
 Luminance: 47973 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	319.8	4.6
10°-20°	924.1	13.4
20°-30°	1405.8	20.4
30°-40°	1605.5	23.3
40°-50°	1295.2	18.8
50°-60°	709.0	10.3
60°-70°	373.8	5.4
70°-80°	183.3	2.7
80°-90°	64.6	0.9
90°-100°	13.9	0.2
100°-110°	1.9	0.0
110°-120°	1.1	0.0
120°-130°	1.1	0.0
130°-140°	1.1	0.0
140°-150°	1.3	0.0
150°-160°	1.2	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	2649.7	38.4
0°-40°	4255.2	61.6
0°-60°	6259.3	90.7
0°-90°	6881.0	99.7
90°-120°	16.9	0.2
90°-150°	20.5	0.3
90°-180°	23.0	0.3
0°-180°	6904.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3368	3368	3368	3368	3368	
5°	3385	3374	3334	3364	3354	322
15°	3335	3315	3254	3249	3221	944
25°	3233	3186	3043	2939	2880	1494
35°	3075	2946	2603	2249	2098	1929
45°	2870	2466	1424	973	900	2215
55°	2561	1054	334	258	239	2285
65°	1940	243	131	106	99	1877
75°	737	137	76	63	61	814
85°	90	72	48	44	39	125
90°	4	37	30	26	24	5
95°	3	5	10	16	15	2
105°	1	0	1	2	2	1
115°	1	1	1	2	1	1
125°	1	1	1	2	1	1
135°	1	1	2	2	1	1
145°	2	2	2	3	2	1
155°	2	2	3	4	3	1
165°	2	3	4	4	4	1
175°	3	3	4	5	4	0
180°	4	4	4	4	4	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3367.9	3367.9	3367.9	3367.9	3367.9
2.5°	3388.4	3379.1	3340.9	3373.5	3364.2
5°	3384.7	3374.4	3334.4	3364.2	3353.9
7.5°	3378.2	3365.1	3321.3	3348.3	3332.5
10°	3367.0	3353.9	3303.6	3325.0	3308.3
12.5°	3353.9	3336.2	3280.3	3291.5	3270.1
15°	3335.3	3314.8	3254.2	3248.6	3220.7
17.5°	3314.8	3289.6	3216.0	3191.8	3158.2
20°	3290.6	3259.8	3168.5	3120.9	3091.1
22.5°	3263.5	3223.5	3108.8	3036.1	2989.5
25°	3232.8	3186.2	3042.7	2939.2	2880.5
27.5°	3200.2	3136.8	2962.5	2826.5	2747.3
30°	3161.0	3084.6	2861.9	2678.3	2579.5
32.5°	3121.9	3019.4	2753.8	2487.3	2369.8
35°	3075.3	2945.7	2602.8	2248.7	2097.7
37.5°	3031.5	2857.2	2398.7	1949.5	1787.4
40°	2978.4	2752.8	2137.8	1605.7	1450.0
42.5°	2928.0	2631.7	1799.5	1273.9	1138.8
45°	2870.3	2465.8	1423.9	972.9	900.2
47.5°	2803.2	2239.4	1035.3	724.1	678.4
50°	2730.5	1928.1	723.2	525.6	488.3
52.5°	2650.3	1507.8	487.4	365.3	344.8
55°	2560.9	1054.0	333.6	258.1	238.6
57.5°	2457.4	685.9	242.3	194.8	181.7
60°	2335.4	438.0	189.2	154.7	147.2
62.5°	2175.1	307.5	155.6	127.7	121.1
65°	1940.2	243.2	131.4	106.2	98.8
67.5°	1642.9	206.0	112.8	89.5	84.8
70°	1324.2	178.9	97.8	77.3	74.6
72.5°	1017.6	156.6	84.8	69.0	67.1
75°	737.1	137.0	75.5	63.4	60.6
77.5°	510.7	118.4	67.1	56.8	55.0
80°	329.9	102.5	59.6	52.2	51.3
82.5°	189.2	85.7	54.1	50.3	49.4
85°	90.4	71.8	48.5	43.8	39.1
87.5°	28.9	53.1	38.2	33.5	29.8
90°	3.7	37.3	29.8	26.1	24.2
92.5°	3.7	20.5	21.4	21.4	20.5
95°	2.8	4.7	10.3	15.8	14.9
97.5°	2.8	1.9	6.5	11.2	11.2
100°	1.9	0.9	2.8	7.5	7.5
102.5°	1.9	0.9	0.9	4.7	4.7
105°	0.9	0.0	0.9	1.9	1.9
107.5°	0.9	0.9	0.9	1.9	0.9
110°	0.9	0.9	0.9	1.9	0.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.9	1.9	0.9
115°	0.9	0.9	0.9	1.9	0.9
117.5°	0.9	0.9	0.9	1.9	0.9
120°	0.9	0.9	0.9	1.9	0.9
122.5°	0.9	0.9	0.9	1.9	0.9
125°	0.9	0.9	0.9	1.9	0.9
127.5°	0.9	0.9	0.9	1.9	0.9
130°	0.9	0.9	1.9	1.9	0.9
132.5°	0.9	0.9	1.9	1.9	0.9
135°	0.9	0.9	1.9	1.9	0.9
137.5°	0.9	0.9	1.9	1.9	1.9
140°	1.9	0.9	1.9	1.9	1.9
142.5°	1.9	1.9	1.9	2.8	1.9
145°	1.9	1.9	1.9	2.8	1.9
147.5°	1.9	1.9	2.8	2.8	1.9
150°	1.9	1.9	2.8	2.8	1.9
152.5°	1.9	1.9	2.8	2.8	2.8
155°	1.9	1.9	2.8	3.7	2.8
157.5°	1.9	1.9	2.8	3.7	2.8
160°	1.9	2.8	3.7	3.7	2.8
162.5°	1.9	2.8	3.7	3.7	3.7
165°	1.9	2.8	3.7	3.7	3.7
167.5°	2.8	2.8	3.7	4.7	3.7
170°	2.8	2.8	3.7	4.7	3.7
172.5°	2.8	2.8	3.7	4.7	3.7
175°	2.8	2.8	3.7	4.7	3.7
177.5°	2.8	2.8	3.7	4.7	4.7
180°	3.7	3.7	3.7	3.7	3.7



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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	22.19	23.59	22.56	23.91	24.23	10.70	12.10	11.07	12.42	12.75
	3H	25.10	26.34	25.48	26.68	27.05	11.64	12.88	12.02	13.22	13.59
	4H	25.99	27.15	26.40	27.51	27.90	12.16	13.32	12.56	13.68	14.07
	6H	26.49	27.56	26.91	27.93	28.34	12.79	13.86	13.21	14.24	14.64
	8H	26.60	27.62	27.04	28.01	28.43	13.21	14.23	13.64	14.62	15.04
	12H	26.64	27.62	27.08	28.01	28.44	13.66	14.63	14.09	15.02	15.46
4H	2H	22.00	23.17	22.41	23.52	23.91	11.22	12.38	11.63	12.74	13.13
	3H	24.93	25.89	25.35	26.30	26.71	12.41	13.37	12.83	13.78	14.19
	4H	25.83	26.69	26.27	27.11	27.56	13.08	13.94	13.52	14.36	14.81
	6H	26.43	27.17	26.89	27.62	28.09	13.91	14.65	14.37	15.10	15.57
	8H	26.59	27.28	27.06	27.73	28.21	14.44	15.13	14.91	15.58	16.06
	12H	26.68	27.30	27.17	27.78	28.26	15.02	15.63	15.51	16.12	16.60
8H	4H	25.73	26.42	26.20	26.87	27.35	13.67	14.37	14.15	14.82	15.29
	6H	26.32	26.89	26.83	27.40	27.88	14.68	15.25	15.18	15.75	16.24
	8H	26.51	27.03	27.04	27.54	28.04	15.35	15.87	15.88	16.38	16.88
	12H	26.66	27.11	27.18	27.61	28.19	16.12	16.57	16.64	17.07	17.65
12H	4H	25.69	26.30	26.18	26.79	27.27	13.93	14.55	14.42	15.04	15.52
	6H	26.27	26.79	26.80	27.31	27.80	14.99	15.50	15.51	16.02	16.52
	8H	26.49	26.95	27.01	27.44	28.02	15.75	16.21	16.27	16.71	17.28