

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: P894081

Luminaire Tested: 4MB-SC3-A-UNV-CC83-HI-3500K

Issue Date: 11/11/2024

**Test Information**

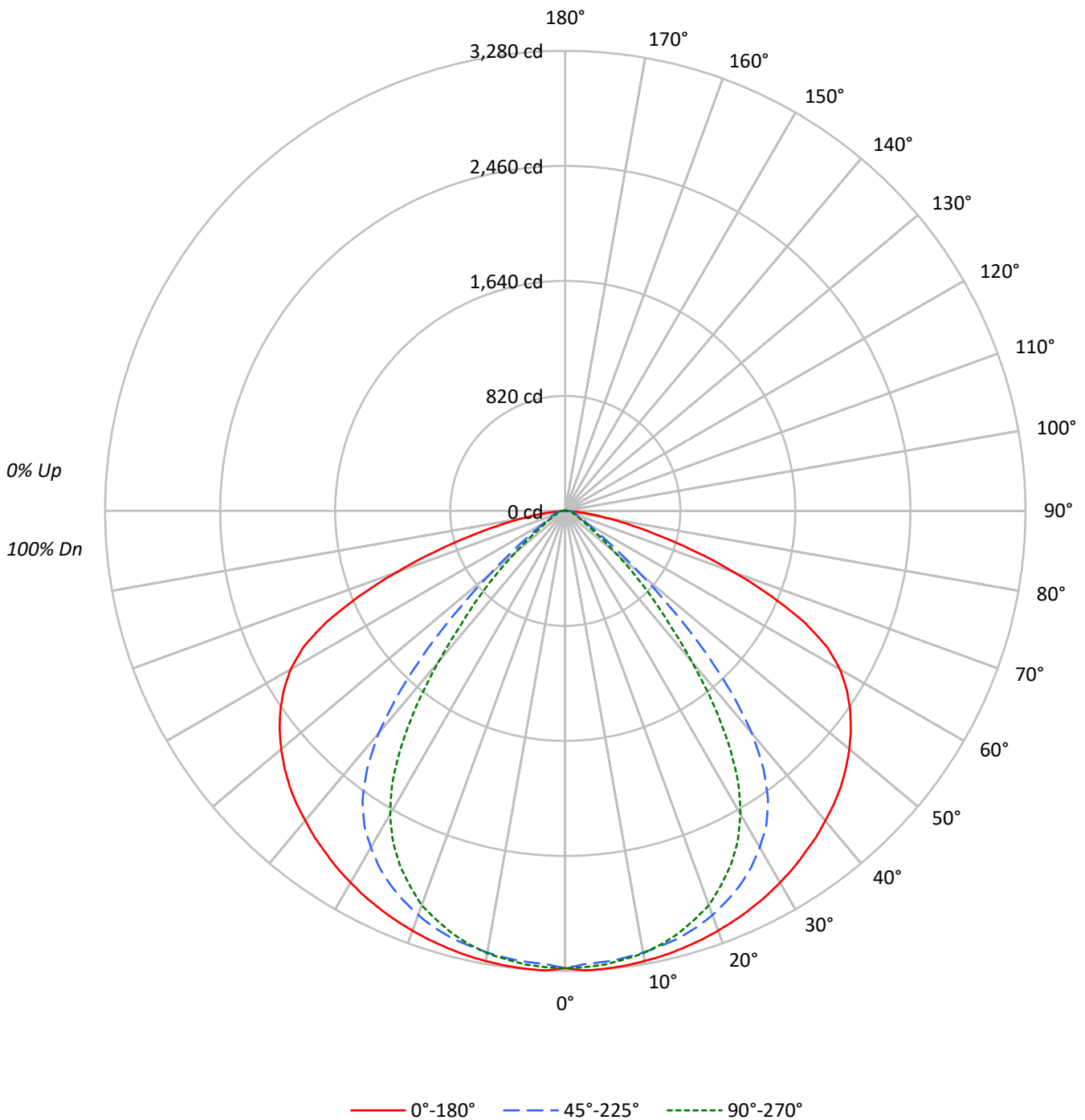
Test Method: LM-79-2019  
Report Number: P894081  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-SC3-A-UNV-CC83-HI-3500K  
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3500K CCT, HI lumen setting  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6683.0 lumens  
Efficiency: N/A  
Efficacy: 131.8 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°	33202	33202	33202
5°	33494	32996	33190
10°	33704	33069	33117
15°	34040	33212	32870
20°	34521	33240	32429
25°	35164	33096	31332
30°	35982	32578	29363
35°	37009	31324	25246
40°	38328	27512	18660
45°	40016	19853	12550
50°	41877	11091	7489
55°	44014	5733	4100
60°	46045	3729	2903
65°	45258	3065	2304
70°	38168	2820	2150
75°	28075	2876	2306
80°	18726	3384	2909
85°	10224	5480	4429

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 62.5°  
 Luminance: 46436 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.5	4.6
10°-20°	894.6	13.4
20°-30°	1360.8	20.4
30°-40°	1554.1	23.3
40°-50°	1253.7	18.8
50°-60°	686.3	10.3
60°-70°	361.8	5.4
70°-80°	177.4	2.7
80°-90°	62.5	0.9
90°-100°	13.4	0.2
100°-110°	1.9	0.0
110°-120°	1.1	0.0
120°-130°	1.0	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°	2564.9	38.4
0°-40°	4119.0	61.6
0°-60°	6059.0	90.7
0°-90°	6660.7	99.7
90°-120°	16.4	0.2
90°-150°	19.8	0.3
90°-180°	22.0	0.3
0°-180°	6683.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3260	3260	3260	3260	3260	
5°	3276	3266	3228	3256	3247	312
15°	3228	3209	3150	3145	3118	914
25°	3129	3084	2945	2845	2788	1446
35°	2977	2852	2520	2177	2031	1867
45°	2778	2387	1378	942	871	2144
55°	2479	1020	323	250	231	2212
65°	1878	235	127	103	96	1816
75°	714	133	73	61	59	788
85°	88	70	47	42	38	121
90°	4	36	29	25	24	5
95°	3	4	10	15	14	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	4	4	0
180°	4	4	4	4	4	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3260.1	3260.1	3260.1	3260.1	3260.1
2.5°	3279.9	3270.9	3233.9	3265.5	3256.5
5°	3276.3	3266.4	3227.6	3256.5	3246.6
7.5°	3270.0	3257.4	3215.0	3241.1	3225.8
10°	3259.2	3246.6	3197.8	3218.6	3202.4
12.5°	3246.6	3229.4	3175.3	3186.1	3165.4
15°	3228.5	3208.7	3150.0	3144.6	3117.6
17.5°	3208.7	3184.3	3113.1	3089.6	3057.1
20°	3185.2	3155.5	3067.0	3021.0	2992.2
22.5°	3159.1	3120.3	3009.3	2939.0	2893.9
25°	3129.3	3084.2	2945.3	2845.1	2788.3
27.5°	3097.7	3036.4	2867.7	2736.0	2659.3
30°	3059.8	2985.9	2770.3	2592.6	2496.9
32.5°	3021.9	2922.7	2665.6	2407.6	2294.0
35°	2976.8	2851.5	2519.5	2176.7	2030.6
37.5°	2934.4	2765.8	2321.9	1887.1	1730.2
40°	2883.0	2664.7	2069.4	1554.3	1403.6
42.5°	2834.3	2547.5	1741.9	1233.1	1102.3
45°	2778.4	2386.9	1378.4	941.8	871.4
47.5°	2713.4	2167.7	1002.2	700.9	656.7
50°	2643.1	1866.4	700.0	508.8	472.7
52.5°	2565.5	1459.6	471.8	353.6	333.8
55°	2478.9	1020.2	322.9	249.9	230.9
57.5°	2378.8	663.9	234.5	188.5	175.9
60°	2260.6	424.0	183.1	149.7	142.5
62.5°	2105.4	297.7	150.6	123.6	117.3
65°	1878.1	235.4	127.2	102.8	95.6
67.5°	1590.4	199.4	109.2	86.6	82.1
70°	1281.8	173.2	94.7	74.9	72.2
72.5°	985.1	151.5	82.1	66.8	64.9
75°	713.5	132.6	73.1	61.3	58.6
77.5°	494.3	114.6	64.9	55.0	53.2
80°	319.3	99.2	57.7	50.5	49.6
82.5°	183.1	83.0	52.3	48.7	47.8
85°	87.5	69.5	46.9	42.4	37.9
87.5°	28.0	51.4	37.0	32.5	28.9
90°	3.6	36.1	28.9	25.3	23.5
92.5°	3.6	19.8	20.7	20.7	19.8
95°	2.7	4.5	9.9	15.3	14.4
97.5°	2.7	1.8	6.3	10.8	10.8
100°	1.8	0.9	2.7	7.2	7.2
102.5°	1.8	0.9	0.9	4.5	4.5
105°	0.9	0.0	0.9	1.8	1.8
107.5°	0.9	0.9	0.9	1.8	0.9
110°	0.9	0.9	0.9	1.8	0.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.9	1.8	0.9
115°	0.9	0.9	0.9	1.8	0.9
117.5°	0.9	0.9	0.9	1.8	0.9
120°	0.9	0.9	0.9	1.8	0.9
122.5°	0.9	0.9	0.9	1.8	0.9
125°	0.9	0.9	0.9	1.8	0.9
127.5°	0.9	0.9	0.9	1.8	0.9
130°	0.9	0.9	1.8	1.8	0.9
132.5°	0.9	0.9	1.8	1.8	0.9
135°	0.9	0.9	1.8	1.8	0.9
137.5°	0.9	0.9	1.8	1.8	1.8
140°	1.8	0.9	1.8	1.8	1.8
142.5°	1.8	1.8	1.8	2.7	1.8
145°	1.8	1.8	1.8	2.7	1.8
147.5°	1.8	1.8	2.7	2.7	1.8
150°	1.8	1.8	2.7	2.7	1.8
152.5°	1.8	1.8	2.7	2.7	2.7
155°	1.8	1.8	2.7	3.6	2.7
157.5°	1.8	1.8	2.7	3.6	2.7
160°	1.8	2.7	3.6	3.6	2.7
162.5°	1.8	2.7	3.6	3.6	3.6
165°	1.8	2.7	3.6	3.6	3.6
167.5°	2.7	2.7	3.6	4.5	3.6
170°	2.7	2.7	3.6	4.5	3.6
172.5°	2.7	2.7	3.6	4.5	3.6
175°	2.7	2.7	3.6	4.5	3.6
177.5°	2.7	2.7	3.6	4.5	4.5
180°	3.6	3.6	3.6	3.6	3.6



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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	22.07	23.47	22.45	23.79	24.12	10.59	11.99	10.96	12.31	12.63
	3H	24.99	26.23	25.37	26.57	26.94	11.52	12.77	11.91	13.11	13.48
	4H	25.88	27.04	26.29	27.40	27.79	12.04	13.21	12.45	13.56	13.95
	6H	26.38	27.45	26.80	27.82	28.22	12.68	13.75	13.10	14.12	14.52
	8H	26.49	27.50	26.92	27.90	28.31	13.09	14.11	13.53	14.51	14.92
	12H	26.53	27.50	26.97	27.89	28.33	13.54	14.51	13.98	14.90	15.34
4H	2H	21.89	23.05	22.30	23.41	23.80	11.11	12.27	11.51	12.63	13.02
	3H	24.82	25.77	25.24	26.18	26.59	12.30	13.26	12.72	13.66	14.07
	4H	25.72	26.58	26.16	27.00	27.45	12.97	13.82	13.41	14.25	14.70
	6H	26.31	27.06	26.78	27.51	27.98	13.79	14.53	14.26	14.98	15.45
	8H	26.48	27.17	26.95	27.62	28.10	14.32	15.01	14.79	15.47	15.94
	12H	26.57	27.18	27.06	27.67	28.15	14.90	15.52	15.39	16.00	16.48
8H	4H	25.61	26.30	26.08	26.76	27.23	13.56	14.25	14.03	14.70	15.18
	6H	26.21	26.78	26.72	27.28	27.77	14.56	15.13	15.07	15.63	16.12
	8H	26.40	26.91	26.92	27.43	27.93	15.24	15.75	15.76	16.27	16.77
	12H	26.55	27.00	27.06	27.50	28.08	16.00	16.46	16.52	16.96	17.53
12H	4H	25.57	26.19	26.06	26.68	27.16	13.82	14.43	14.31	14.92	15.40
	6H	26.16	26.67	26.68	27.19	27.69	14.87	15.39	15.40	15.90	16.40
	8H	26.38	26.83	26.89	27.33	27.91	15.64	16.09	16.15	16.59	17.17