

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: P894099

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-15)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-ACL-UNV-CC83-HI-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 3500K CC
HI lumen setting
Light Source: -
Ballast/Driver: -

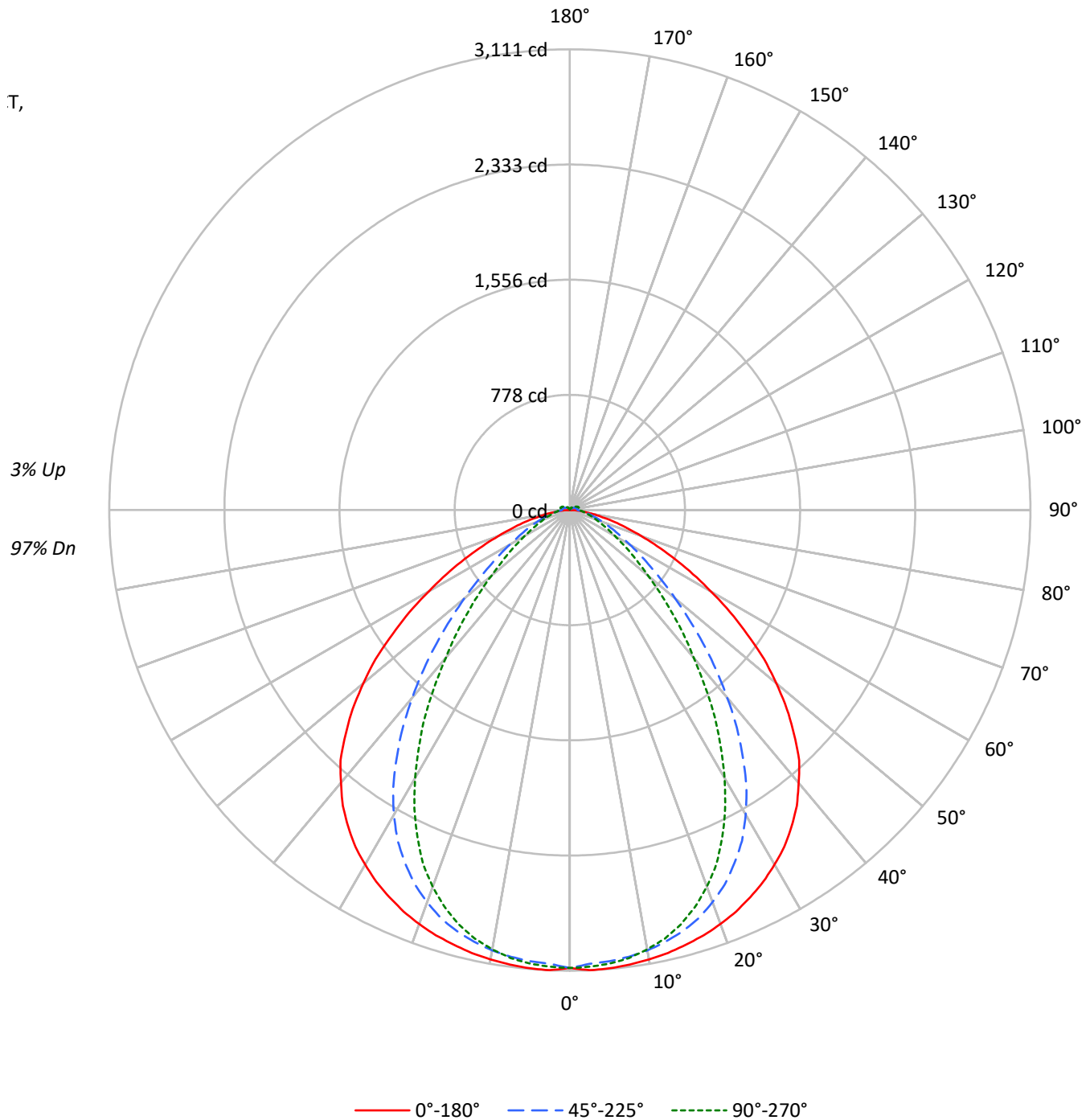
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6343.9 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.08')
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				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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97				97
1	110	106	102	99	107	103	100	97	99	96	93	94	92	90	90	89	87	85				85
2	101	94	88	84	99	92	87	82	88	84	80	85	81	78	82	79	76	74				74
3	94	85	77	72	91	83	76	71	80	74	69	77	72	68	74	70	66	64				64
4	87	76	68	62	84	75	67	62	72	66	61	69	64	60	67	62	59	57				57
5	80	69	61	55	78	68	60	55	65	59	54	63	58	53	61	56	52	50				50
6	75	63	55	49	73	62	54	49	60	53	48	58	52	47	56	51	47	45				45
7	70	57	50	44	68	57	49	44	55	48	43	53	47	43	52	46	42	40				40
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	37				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31495	31495	31495
5°	31696	30640	30592
10°	31752	29975	29518
15°	31847	29196	28175
20°	32002	28123	26335
25°	32095	26633	23888
30°	32128	24586	20813
35°	31990	21727	17410
40°	31423	18353	13701
45°	30214	14816	10623
50°	28128	11496	7970
55°	25181	8801	6096
60°	21633	6765	4643
65°	18039	5337	3691
70°	14428	4283	3015
75°	11489	3450	2567
80°	8419	2848	2248
85°	5780	2420	2070

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30214 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.9	4.6
10°-20°	834.5	13.2
20°-30°	1216.6	19.2
30°-40°	1307.1	20.6
40°-50°	1087.8	17.1
50°-60°	727.6	11.5
60°-70°	416.5	6.6
70°-80°	207.1	3.3
80°-90°	84.7	1.3
90°-100°	49.2	0.8
100°-110°	43.4	0.7
110°-120°	31.8	0.5
120°-130°	20.5	0.3
130°-140°	12.2	0.2
140°-150°	6.9	0.1
150°-160°	3.4	0.1
160°-170°	1.5	0.0
170°-180°	0.3	0.0
0°-30°	2344.0	36.9
0°-40°	3651.1	57.6
0°-60°	5466.5	86.2
0°-90°	6174.8	97.3
90°-120°	124.4	2.0
90°-150°	163.9	2.6
90°-180°	169.0	2.7
0°-180°	6343.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3092	3092	3092	3092	3092	
5°	3106	3096	3059	3084	3074	296
15°	3038	3017	2945	2923	2897	859
25°	2884	2816	2632	2499	2437	1330
35°	2611	2421	2037	1786	1708	1631
45°	2142	1780	1272	1029	969	1646
55°	1461	1054	663	524	497	1308
65°	782	530	334	271	256	782
75°	315	229	165	146	142	338
85°	61	69	77	80	81	72
90°	9	29	52	62	64	9
95°	14	29	51	62	64	11
105°	9	24	46	60	63	10
115°	4	14	36	50	54	4
125°	3	9	24	36	40	2
135°	2	7	16	24	27	1
145°	2	5	11	16	19	1
155°	2	4	7	10	13	1
165°	3	4	5	6	8	1
175°	3	3	4	4	4	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3092.5	3092.5	3092.5	3092.5	3092.5
2.5°	3110.6	3102.5	3067.3	3095.2	3087.1
5°	3106.1	3096.1	3059.2	3084.4	3074.5
7.5°	3096.1	3085.3	3042.9	3062.8	3051.9
10°	3081.7	3068.2	3019.5	3029.4	3012.2
12.5°	3063.7	3046.5	2986.1	2983.4	2964.4
15°	3037.5	3016.8	2944.6	2922.9	2896.8
17.5°	3010.4	2979.8	2891.4	2847.2	2811.1
20°	2975.3	2934.7	2818.3	2752.4	2707.3
22.5°	2934.7	2879.6	2736.2	2635.2	2588.2
25°	2884.1	2815.6	2631.5	2498.9	2436.7
27.5°	2830.0	2738.9	2517.9	2343.8	2272.5
30°	2765.1	2652.3	2376.2	2166.9	2090.3
32.5°	2696.5	2542.2	2221.1	1981.1	1897.2
35°	2610.8	2421.3	2037.0	1786.2	1707.8
37.5°	2517.9	2277.0	1854.8	1586.9	1498.5
40°	2405.1	2124.5	1654.5	1389.3	1301.8
42.5°	2293.2	1958.5	1462.4	1210.7	1134.9
45°	2141.7	1779.9	1272.0	1029.3	968.9
47.5°	1989.2	1588.7	1089.8	882.3	822.8
50°	1819.6	1401.0	930.1	740.7	691.0
52.5°	1654.5	1226.0	784.9	626.1	583.7
55°	1460.6	1053.7	663.1	524.1	497.1
57.5°	1285.6	894.0	559.3	443.9	418.6
60°	1100.6	757.8	468.2	375.3	351.8
62.5°	938.2	636.9	394.2	318.5	302.2
65°	782.2	530.5	333.8	270.6	256.2
67.5°	638.7	443.0	281.5	230.9	219.2
70°	512.4	359.1	237.3	196.7	188.5
72.5°	403.3	288.7	197.6	169.6	162.4
75°	314.8	229.1	165.1	146.1	141.6
77.5°	227.3	178.6	138.0	125.4	122.7
80°	160.6	135.3	113.7	108.3	106.5
82.5°	106.5	98.3	93.8	93.8	92.9
85°	61.3	68.6	76.7	80.3	81.2
87.5°	31.6	46.0	61.3	68.6	69.5
90°	9.0	28.9	52.3	62.2	64.1
92.5°	13.5	28.9	51.4	62.2	64.1
95°	13.5	28.9	51.4	62.2	64.1
97.5°	12.6	28.0	51.4	62.2	64.1
100°	11.7	26.2	50.5	62.2	64.1
102.5°	9.9	25.3	48.7	61.3	64.1
105°	9.0	23.5	46.0	60.4	63.1
107.5°	8.1	19.8	43.3	57.7	61.3
110°	6.3	17.1	41.5	55.0	59.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.4	15.3	38.8	52.3	56.8
115°	4.5	13.5	36.1	49.6	54.1
117.5°	3.6	12.6	32.5	46.0	50.5
120°	2.7	11.7	29.8	43.3	46.9
122.5°	2.7	10.8	26.2	39.7	43.3
125°	2.7	9.0	24.4	36.1	39.7
127.5°	1.8	8.1	21.7	32.5	36.1
130°	1.8	8.1	19.8	29.8	32.5
132.5°	1.8	7.2	18.0	27.1	29.8
135°	1.8	7.2	16.2	24.4	27.1
137.5°	1.8	6.3	14.4	22.6	25.3
140°	1.8	6.3	13.5	19.8	22.6
142.5°	1.8	5.4	11.7	18.9	20.7
145°	1.8	5.4	10.8	16.2	18.9
147.5°	1.8	5.4	9.9	15.3	17.1
150°	1.8	4.5	9.0	12.6	15.3
152.5°	1.8	4.5	8.1	11.7	14.4
155°	1.8	4.5	7.2	9.9	12.6
157.5°	1.8	4.5	7.2	9.0	10.8
160°	2.7	3.6	6.3	8.1	9.9
162.5°	2.7	3.6	5.4	7.2	9.0
165°	2.7	3.6	5.4	6.3	8.1
167.5°	2.7	3.6	4.5	5.4	6.3
170°	2.7	2.7	4.5	4.5	4.5
172.5°	2.7	2.7	3.6	4.5	3.6
175°	2.7	2.7	3.6	3.6	3.6
177.5°	2.7	2.7	3.6	3.6	3.6
180°	2.7	2.7	2.7	2.7	2.7



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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	20.72	22.11	21.13	22.48	22.87	16.02	17.41	16.43	17.78	18.16
	3H	21.81	23.06	22.24	23.44	23.87	17.16	18.40	17.58	18.79	19.21
	4H	22.12	23.28	22.57	23.69	24.14	17.66	18.82	18.10	19.23	19.67
	6H	22.27	23.34	22.72	23.76	24.22	18.16	19.23	18.62	19.65	20.11
	8H	22.28	23.30	22.76	23.75	24.22	18.42	19.44	18.89	19.88	20.35
	12H	22.28	23.25	22.75	23.69	24.18	18.71	19.69	19.19	20.12	20.62
4H	2H	20.70	21.87	21.15	22.27	22.72	16.51	17.68	16.96	18.08	18.53
	3H	21.94	22.90	22.40	23.35	23.82	17.83	18.79	18.28	19.24	19.71
	4H	22.32	23.19	22.80	23.66	24.16	18.42	19.28	18.90	19.75	20.26
	6H	22.56	23.31	23.06	23.80	24.32	19.04	19.79	19.55	20.29	20.81
	8H	22.60	23.30	23.11	23.79	24.32	19.36	20.06	19.87	20.56	21.09
	12H	22.61	23.23	23.14	23.76	24.30	19.74	20.36	20.26	20.89	21.43
8H	4H	22.31	23.01	22.82	23.51	24.04	18.66	19.36	19.17	19.86	20.39
	6H	22.59	23.17	23.13	23.71	24.25	19.38	19.96	19.93	20.51	21.05
	8H	22.66	23.18	23.22	23.74	24.29	19.79	20.31	20.35	20.87	21.42
	12H	22.71	23.17	23.26	23.71	24.33	20.28	20.74	20.84	21.28	21.91
12H	4H	22.29	22.91	22.82	23.44	23.98	18.67	19.30	19.20	19.83	20.36
	6H	22.57	23.09	23.13	23.65	24.20	19.42	19.94	19.98	20.50	21.05
	8H	22.67	23.14	23.23	23.68	24.30	19.88	20.34	20.44	20.88	21.51