

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: P894100

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894100
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-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 4000K CC
HI lumen setting
Light Source: -
Ballast/Driver: -

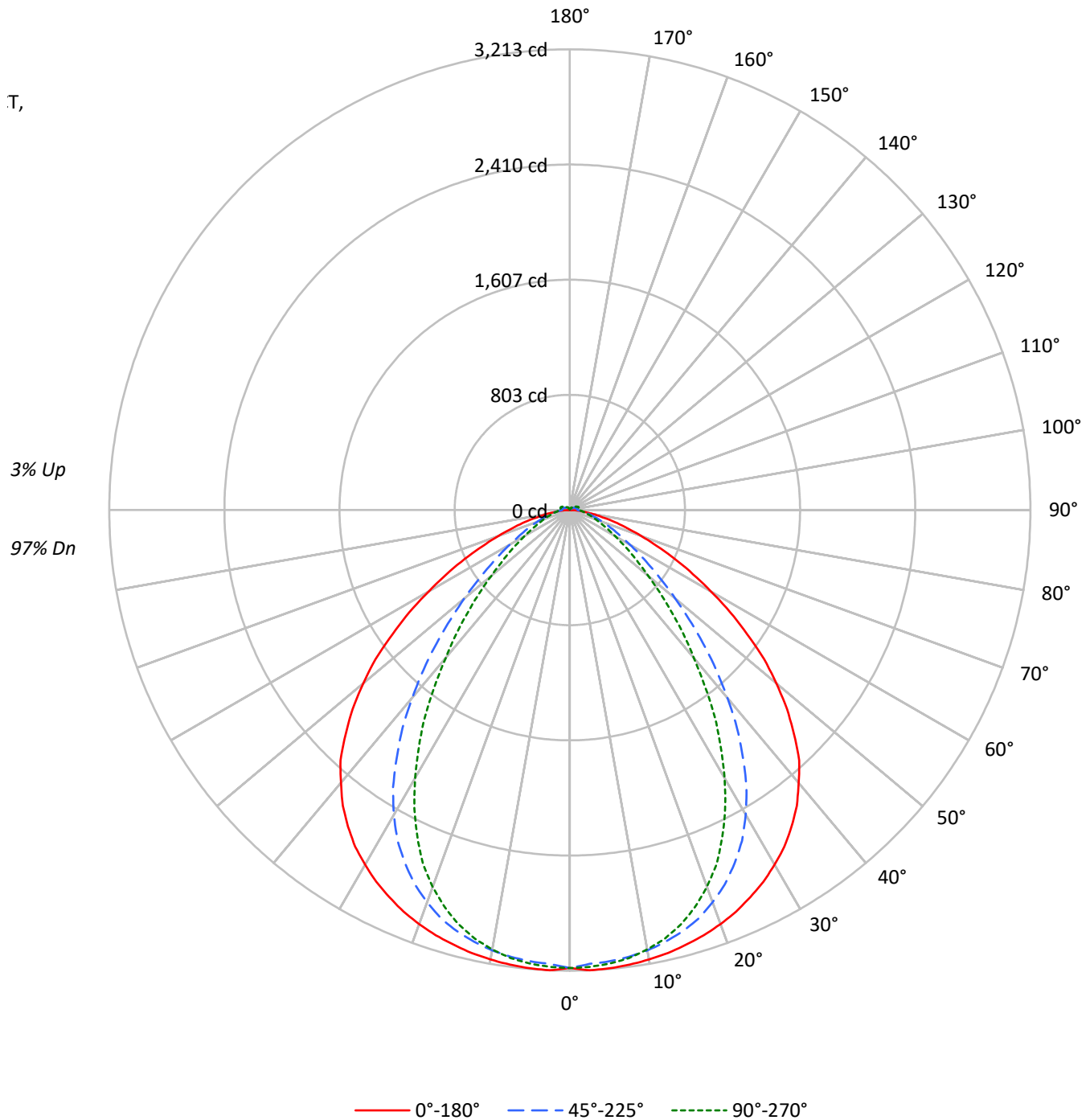
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6553.0 lumens
Efficiency: N/A
Efficacy: 129.3 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				
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°	32532	32532	32532
5°	32740	31649	31600
10°	32797	30962	30491
15°	32897	30158	29103
20°	33056	29049	27203
25°	33154	27510	24675
30°	33187	25396	21498
35°	33044	22442	17982
40°	32457	18957	14153
45°	31208	15304	10973
50°	29055	11874	8233
55°	26010	9090	6297
60°	22347	6987	4797
65°	18632	5513	3812
70°	14904	4423	3116
75°	11869	3563	2652
80°	8697	2941	2322
85°	5978	2499	2138

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 31208 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.6	4.6
10°-20°	862.0	13.2
20°-30°	1256.7	19.2
30°-40°	1350.1	20.6
40°-50°	1123.7	17.1
50°-60°	751.6	11.5
60°-70°	430.2	6.6
70°-80°	213.9	3.3
80°-90°	87.5	1.3
90°-100°	50.8	0.8
100°-110°	44.8	0.7
110°-120°	32.9	0.5
120°-130°	21.2	0.3
130°-140°	12.6	0.2
140°-150°	7.1	0.1
150°-160°	3.6	0.1
160°-170°	1.5	0.0
170°-180°	0.3	0.0
0°-30°	2421.2	36.9
0°-40°	3771.3	57.6
0°-60°	5646.6	86.2
0°-90°	6378.2	97.3
90°-120°	128.5	2.0
90°-150°	169.3	2.6
90°-180°	175.0	2.7
0°-180°	6553.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3194	3194	3194	3194	3194	
5°	3208	3198	3160	3186	3176	305
15°	3138	3116	3042	3019	2992	887
25°	2979	2908	2718	2581	2517	1374
35°	2697	2501	2104	1845	1764	1684
45°	2212	1839	1314	1063	1001	1701
55°	1509	1088	685	541	514	1351
65°	808	548	345	280	265	808
75°	325	237	170	151	146	349
85°	63	71	79	83	84	74
90°	9	30	54	64	66	9
95°	14	30	53	64	66	11
105°	9	24	48	62	65	10
115°	5	14	37	51	56	5
125°	3	9	25	37	41	2
135°	2	8	17	25	28	1
145°	2	6	11	17	20	1
155°	2	5	8	10	13	1
165°	3	4	6	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°	3194.4	3194.4	3194.4	3194.4	3194.4
2.5°	3213.1	3204.7	3168.3	3197.2	3188.8
5°	3208.4	3198.1	3159.9	3186.0	3175.8
7.5°	3198.1	3187.0	3143.2	3163.7	3152.5
10°	3183.2	3169.3	3118.9	3129.2	3111.5
12.5°	3164.6	3146.9	3084.5	3081.7	3062.1
15°	3137.6	3116.1	3041.6	3019.2	2992.2
17.5°	3109.6	3077.9	2986.6	2941.0	2903.7
20°	3073.3	3031.3	2911.1	2843.1	2796.5
22.5°	3031.3	2974.5	2826.3	2722.0	2673.5
25°	2979.2	2908.3	2718.2	2581.3	2517.0
27.5°	2923.2	2829.1	2600.8	2421.0	2347.4
30°	2856.2	2739.7	2454.5	2238.3	2159.1
32.5°	2785.3	2626.0	2294.2	2046.4	1959.7
35°	2696.8	2501.1	2104.1	1845.1	1764.0
37.5°	2600.8	2352.0	1915.9	1639.1	1547.8
40°	2484.3	2194.5	1709.0	1435.1	1344.7
42.5°	2368.8	2023.1	1510.5	1250.6	1172.3
45°	2212.2	1838.6	1313.9	1063.3	1000.8
47.5°	2054.8	1641.0	1125.7	911.4	849.9
50°	1879.6	1447.2	960.7	765.1	713.8
52.5°	1709.0	1266.4	810.7	646.7	602.9
55°	1508.7	1088.4	684.9	541.4	513.5
57.5°	1327.9	923.5	577.8	458.5	432.4
60°	1136.9	782.8	483.6	387.7	363.4
62.5°	969.1	657.9	407.2	328.9	312.2
65°	807.9	547.9	344.8	279.6	264.6
67.5°	659.8	457.5	290.7	238.6	226.4
70°	529.3	370.9	245.1	203.1	194.8
72.5°	416.5	298.2	204.1	175.2	167.7
75°	325.2	236.7	170.5	151.0	146.3
77.5°	234.8	184.5	142.6	129.5	126.7
80°	165.9	139.8	117.4	111.8	110.0
82.5°	110.0	101.6	96.9	96.9	96.0
85°	63.4	70.8	79.2	82.9	83.9
87.5°	32.6	47.5	63.4	70.8	71.8
90°	9.3	29.8	54.0	64.3	66.2
92.5°	14.0	29.8	53.1	64.3	66.2
95°	14.0	29.8	53.1	64.3	66.2
97.5°	13.0	28.9	53.1	64.3	66.2
100°	12.1	27.0	52.2	64.3	66.2
102.5°	10.3	26.1	50.3	63.4	66.2
105°	9.3	24.2	47.5	62.4	65.2
107.5°	8.4	20.5	44.7	59.6	63.4
110°	6.5	17.7	42.9	56.8	61.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.6	15.8	40.1	54.0	58.7
115°	4.7	14.0	37.3	51.3	55.9
117.5°	3.7	13.0	33.5	47.5	52.2
120°	2.8	12.1	30.8	44.7	48.5
122.5°	2.8	11.2	27.0	41.0	44.7
125°	2.8	9.3	25.2	37.3	41.0
127.5°	1.9	8.4	22.4	33.5	37.3
130°	1.9	8.4	20.5	30.8	33.5
132.5°	1.9	7.5	18.6	28.0	30.8
135°	1.9	7.5	16.8	25.2	28.0
137.5°	1.9	6.5	14.9	23.3	26.1
140°	1.9	6.5	14.0	20.5	23.3
142.5°	1.9	5.6	12.1	19.6	21.4
145°	1.9	5.6	11.2	16.8	19.6
147.5°	1.9	5.6	10.3	15.8	17.7
150°	1.9	4.7	9.3	13.0	15.8
152.5°	1.9	4.7	8.4	12.1	14.9
155°	1.9	4.7	7.5	10.3	13.0
157.5°	1.9	4.7	7.5	9.3	11.2
160°	2.8	3.7	6.5	8.4	10.3
162.5°	2.8	3.7	5.6	7.5	9.3
165°	2.8	3.7	5.6	6.5	8.4
167.5°	2.8	3.7	4.7	5.6	6.5
170°	2.8	2.8	4.7	4.7	4.7
172.5°	2.8	2.8	3.7	4.7	3.7
175°	2.8	2.8	3.7	3.7	3.7
177.5°	2.8	2.8	3.7	3.7	3.7
180°	2.8	2.8	2.8	2.8	2.8



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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	20.83	22.23	21.24	22.60	22.98	16.13	17.52	16.54	17.89	18.28
	3H	21.93	23.17	22.35	23.56	23.99	17.27	18.51	17.69	18.90	19.33
	4H	22.23	23.40	22.68	23.80	24.25	17.77	18.93	18.21	19.34	19.78
	6H	22.38	23.45	22.84	23.87	24.33	18.27	19.34	18.73	19.77	20.22
	8H	22.40	23.42	22.87	23.86	24.33	18.53	19.55	19.00	19.99	20.46
	12H	22.39	23.37	22.87	23.80	24.30	18.82	19.80	19.30	20.24	20.73
4H	2H	20.81	21.98	21.26	22.38	22.83	16.63	17.79	17.07	18.19	18.64
	3H	22.05	23.01	22.51	23.47	23.93	17.94	18.90	18.40	19.36	19.82
	4H	22.44	23.30	22.92	23.77	24.27	18.53	19.40	19.01	19.87	20.37
	6H	22.67	23.42	23.17	23.91	24.44	19.15	19.90	19.66	20.40	20.92
	8H	22.71	23.41	23.22	23.91	24.44	19.47	20.18	19.98	20.67	21.20
	12H	22.72	23.35	23.25	23.87	24.41	19.85	20.47	20.38	21.00	21.54
8H	4H	22.42	23.12	22.93	23.62	24.15	18.77	19.47	19.28	19.97	20.50
	6H	22.70	23.28	23.24	23.82	24.36	19.50	20.08	20.04	20.62	21.16
	8H	22.77	23.29	23.33	23.85	24.40	19.90	20.42	20.46	20.98	21.53
	12H	22.82	23.28	23.37	23.82	24.45	20.39	20.86	20.95	21.40	22.02
12H	4H	22.40	23.03	22.93	23.55	24.09	18.79	19.41	19.32	19.94	20.48
	6H	22.68	23.20	23.24	23.76	24.31	19.53	20.05	20.09	20.61	21.16
	8H	22.79	23.25	23.34	23.79	24.41	19.99	20.46	20.55	21.00	21.62