

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: P894128

Luminaire Tested: 4MB-SC3-AOL-UNV-CC93-HI-5000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894128
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-14)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-AOL-UNV-CC93-HI-5000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 9000
5000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

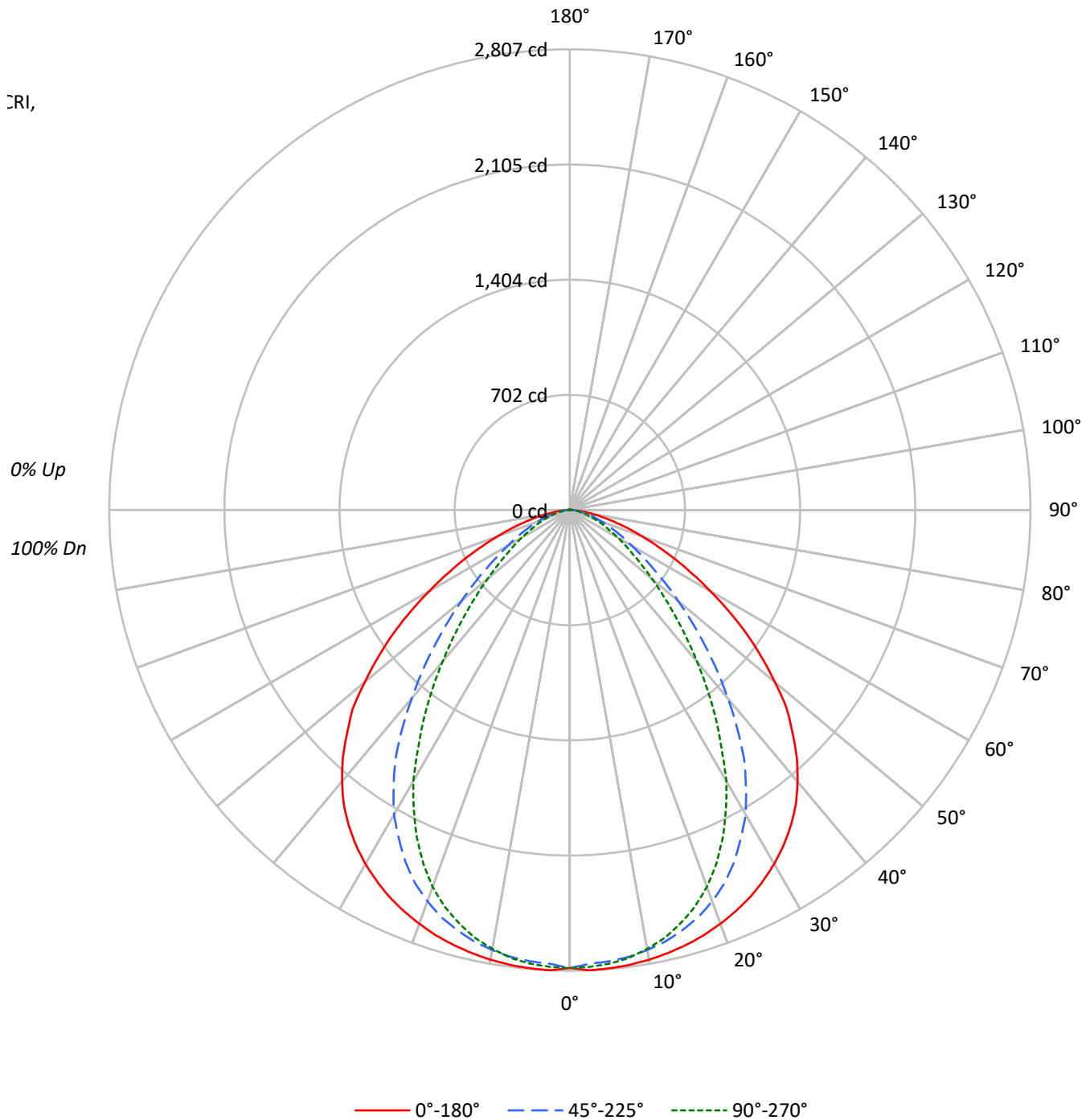
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5575.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
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	100	100	100	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	87	87	87	87
2	102	95	89	85	100	93	88	84	90	85	82	87	83	80	84	81	78	76	76	76	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	70	76	72	68	66	66	66	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58	58	58	58
5	81	70	62	56	79	69	61	55	66	60	55	65	59	54	63	58	54	52	52	52	52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46	46	46	46
7	70	58	50	45	69	57	50	44	56	49	44	54	48	44	53	48	43	42	42	42	42
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38	38	38	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34	34	34	34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	31	31	31	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28422	28422	28422
5°	28654	28220	28367
10°	28770	28149	28075
15°	28919	27948	27484
20°	29076	27497	26481
25°	29238	26601	24766
30°	29289	25203	22426
35°	29193	23023	19289
40°	28706	19925	16029
45°	27639	16743	12972
50°	25863	13635	10389
55°	23370	10961	8329
60°	20155	8919	6897
65°	17054	7427	5673
70°	13921	6319	4815
75°	11151	5324	4096
80°	8686	4557	3519
85°	6731	4020	3178

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27639 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.3	4.7
10°-20°	752.1	13.5
20°-30°	1096.2	19.7
30°-40°	1181.6	21.2
40°-50°	990.5	17.8
50°-60°	670.6	12.0
60°-70°	382.4	6.9
70°-80°	174.9	3.1
80°-90°	45.8	0.8
90°-100°	5.6	0.1
100°-110°	3.8	0.1
110°-120°	2.1	0.0
120°-130°	1.2	0.0
130°-140°	1.1	0.0
140°-150°	1.0	0.0
150°-160°	0.9	0.0
160°-170°	0.6	0.0
170°-180°	0.3	0.0
0°-30°	2112.5	37.9
0°-40°	3294.1	59.1
0°-60°	4955.2	88.9
0°-90°	5558.3	99.7
90°-120°	11.6	0.2
90°-150°	14.9	0.3
90°-180°	17.0	0.3
0°-180°	5575.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2791	2791	2791	2791	2791	
5°	2803	2794	2760	2783	2775	267
15°	2743	2719	2651	2633	2607	775
25°	2602	2533	2367	2258	2204	1199
35°	2348	2171	1852	1625	1552	1466
45°	1919	1601	1162	958	901	1477
55°	1316	963	617	500	469	1172
65°	708	492	308	250	235	706
75°	283	208	135	110	104	309
85°	58	49	34	29	27	67
90°	8	8	5	4	3	8
95°	12	7	4	2	2	9
105°	8	6	2	2	1	9
115°	4	3	2	1	1	4
125°	2	2	2	1	1	2
135°	1	2	2	2	1	1
145°	2	2	2	2	2	1
155°	2	2	2	2	2	1
165°	2	2	2	2	2	0
175°	2	2	2	3	3	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2790.8	2790.8	2790.8	2790.8	2790.8
2.5°	2806.9	2799.7	2767.6	2794.0	2786.0
5°	2802.9	2794.0	2760.4	2782.8	2774.8
7.5°	2794.9	2783.6	2746.0	2762.8	2752.4
10°	2782.0	2768.4	2722.0	2731.6	2714.8
12.5°	2764.4	2747.6	2692.4	2690.0	2670.0
15°	2742.8	2718.8	2650.7	2633.1	2606.7
17.5°	2716.4	2686.0	2601.1	2565.9	2533.9
20°	2682.8	2643.5	2537.1	2481.0	2443.4
22.5°	2644.3	2591.5	2462.6	2372.9	2332.1
25°	2601.9	2533.1	2367.3	2258.5	2204.0
27.5°	2549.1	2462.6	2256.9	2116.0	2059.9
30°	2490.6	2380.9	2143.2	1963.0	1907.0
32.5°	2424.2	2287.3	1998.3	1798.1	1719.7
35°	2348.1	2171.2	1851.8	1625.2	1551.5
37.5°	2262.5	2050.3	1676.4	1450.7	1376.2
40°	2159.2	1907.0	1498.7	1275.3	1205.7
42.5°	2047.9	1761.3	1328.2	1108.8	1048.8
45°	1919.0	1601.2	1162.5	958.3	900.7
47.5°	1794.9	1439.5	1007.1	820.6	773.4
50°	1632.4	1267.3	860.6	694.9	655.7
52.5°	1473.9	1108.0	735.7	594.0	557.2
55°	1316.2	963.1	617.3	500.4	469.1
57.5°	1149.6	821.4	519.6	423.5	402.7
60°	989.5	698.9	437.9	355.5	338.6
62.5°	843.0	586.0	370.7	300.2	284.2
65°	707.7	492.4	308.2	249.8	235.4
67.5°	579.6	405.1	257.0	208.2	197.7
70°	467.5	328.2	212.2	171.3	161.7
72.5°	370.7	262.6	169.7	140.1	129.7
75°	283.4	208.2	135.3	110.5	104.1
77.5°	211.4	156.9	104.1	84.9	80.1
80°	148.1	113.7	77.7	64.0	60.0
82.5°	100.9	78.5	54.4	44.8	42.4
85°	57.6	48.8	34.4	28.8	27.2
87.5°	29.6	25.6	18.4	13.6	12.0
90°	8.0	8.0	4.8	4.0	3.2
92.5°	12.8	7.2	4.8	3.2	2.4
95°	12.0	7.2	4.0	2.4	2.4
97.5°	11.2	7.2	3.2	2.4	1.6
100°	10.4	6.4	3.2	1.6	1.6
102.5°	9.6	6.4	3.2	1.6	1.6
105°	8.0	5.6	2.4	1.6	0.8
107.5°	7.2	4.8	2.4	1.6	0.8
110°	5.6	4.0	2.4	1.6	0.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.8	4.0	1.6	1.6	0.8
115°	4.0	3.2	1.6	0.8	0.8
117.5°	3.2	2.4	1.6	0.8	0.8
120°	2.4	2.4	1.6	0.8	0.8
122.5°	2.4	1.6	1.6	0.8	0.8
125°	1.6	1.6	1.6	0.8	0.8
127.5°	1.6	1.6	1.6	0.8	0.8
130°	1.6	1.6	1.6	0.8	0.8
132.5°	1.6	1.6	1.6	1.6	0.8
135°	0.8	1.6	1.6	1.6	0.8
137.5°	1.6	1.6	1.6	1.6	1.6
140°	1.6	1.6	1.6	1.6	1.6
142.5°	1.6	1.6	1.6	1.6	1.6
145°	1.6	1.6	1.6	1.6	1.6
147.5°	1.6	1.6	1.6	1.6	1.6
150°	1.6	1.6	1.6	1.6	1.6
152.5°	1.6	1.6	1.6	1.6	1.6
155°	1.6	1.6	1.6	2.4	2.4
157.5°	1.6	1.6	2.4	2.4	2.4
160°	1.6	1.6	2.4	2.4	2.4
162.5°	1.6	1.6	2.4	2.4	2.4
165°	1.6	2.4	2.4	2.4	2.4
167.5°	1.6	2.4	2.4	2.4	3.2
170°	1.6	2.4	2.4	3.2	3.2
172.5°	1.6	2.4	2.4	3.2	3.2
175°	2.4	2.4	2.4	3.2	3.2
177.5°	2.4	2.4	2.4	3.2	3.2
180°	2.4	2.4	2.4	2.4	2.4



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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	22.00	23.44	22.37	23.76	24.08	16.84	18.28	17.21	18.60	18.92
	3H	23.31	24.59	23.69	24.92	25.29	17.85	19.14	18.24	19.47	19.84
	4H	23.73	24.93	24.14	25.29	25.67	18.19	19.39	18.59	19.74	20.13
	6H	24.00	25.10	24.42	25.48	25.88	18.41	19.52	18.83	19.89	20.29
	8H	24.07	25.12	24.50	25.52	25.93	18.48	19.53	18.91	19.93	20.34
	12H	24.11	25.11	24.54	25.50	25.94	18.52	19.53	18.96	19.92	20.35
4H	2H	22.00	23.19	22.40	23.55	23.94	17.46	18.66	17.87	19.02	19.41
	3H	23.46	24.45	23.88	24.86	25.27	18.66	19.65	19.08	20.06	20.47
	4H	23.99	24.87	24.43	25.30	25.74	19.08	19.96	19.52	20.39	20.83
	6H	24.36	25.13	24.83	25.58	26.05	19.39	20.15	19.85	20.60	21.07
	8H	24.48	25.19	24.95	25.64	26.12	19.48	20.20	19.95	20.65	21.12
	12H	24.55	25.19	25.04	25.68	26.15	19.55	20.19	20.04	20.68	21.16
8H	4H	23.97	24.68	24.44	25.14	25.61	19.41	20.13	19.88	20.58	21.06
	6H	24.40	24.99	24.90	25.49	25.97	19.80	20.39	20.31	20.89	21.38
	8H	24.56	25.09	25.08	25.60	26.10	19.94	20.47	20.47	20.99	21.49
	12H	24.69	25.15	25.20	25.65	26.23	20.07	20.54	20.58	21.04	21.61
12H	4H	23.94	24.58	24.43	25.06	25.54	19.46	20.10	19.95	20.58	21.06
	6H	24.37	24.90	24.89	25.41	25.91	19.87	20.40	20.39	20.92	21.42
	8H	24.56	25.03	25.07	25.52	26.10	20.06	20.53	20.58	21.03	21.60