

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: P894127

Luminaire Tested: 4MB-SC3-AOL-UNV-CC93-HI-4000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894127
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-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 900
4000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

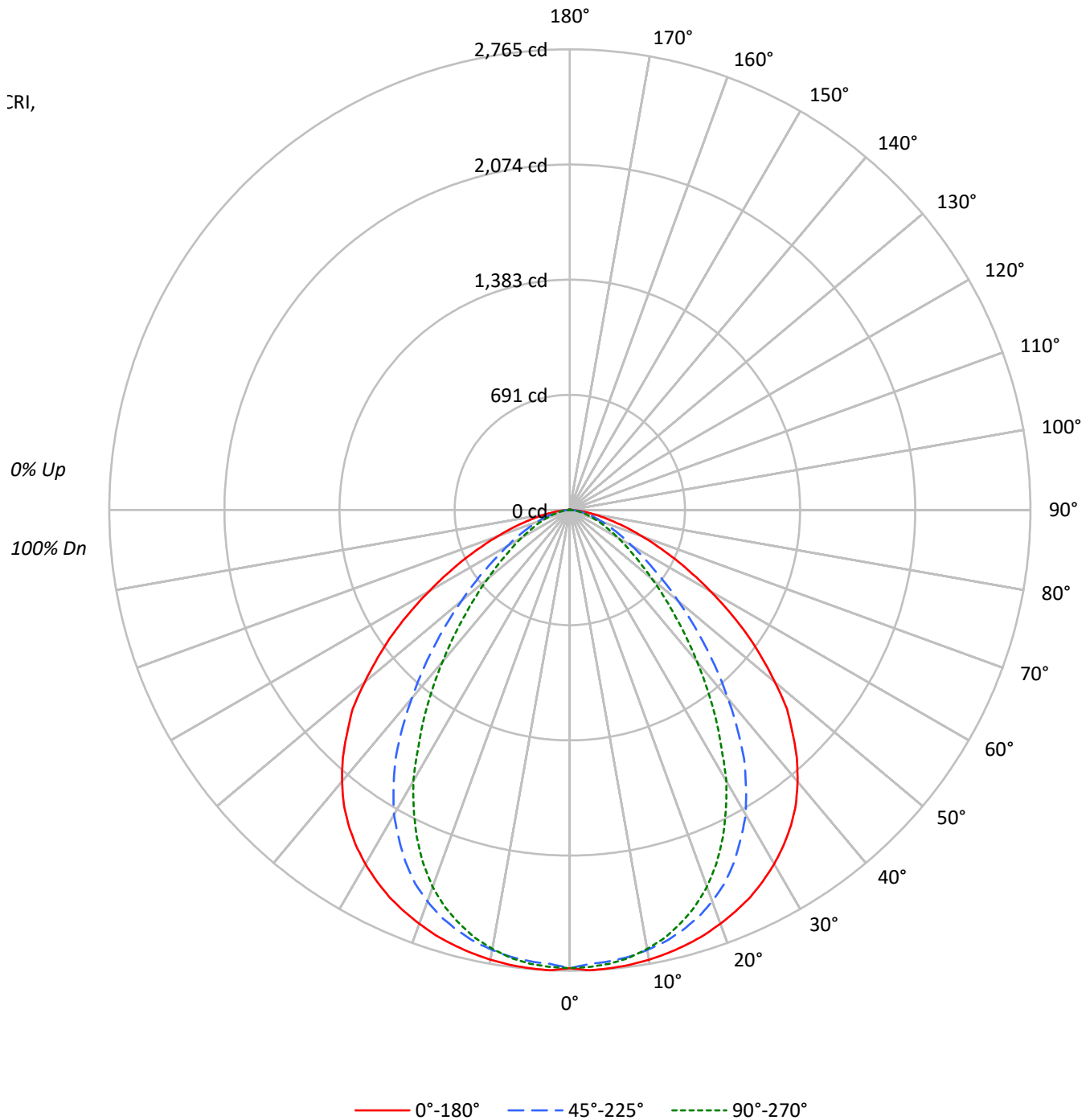
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5492.1 lumens
Efficiency: N/A
Efficacy: 108.3 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

TEST NUMBER: P894127
CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC93-HI-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P894127

CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC93-HI-4000K

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	104	101	98	100	98	95	96	94	92	93	91	89	89	89	89	87
2	102	95	89	85	100	93	88	84	90	85	82	87	83	80	84	81	78	78	78	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	70	76	72	68	68	68	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	60	60	60	58
5	81	70	62	56	79	69	61	55	66	60	55	65	59	54	63	58	54	54	54	54	52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	48	48	48	46
7	70	58	50	45	69	57	50	44	56	49	44	54	48	44	53	48	43	43	43	43	42
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	39	39	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	36	36	36	34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	33	33	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27999	27999	27999
5°	28227	27800	27945
10°	28341	27730	27657
15°	28488	27532	27075
20°	28642	27087	26087
25°	28803	26206	24398
30°	28852	24828	22092
35°	28759	22680	19002
40°	28277	19628	15790
45°	27227	16492	12779
50°	25478	13432	10234
55°	23022	10797	8207
60°	19855	8787	6795
65°	16801	7316	5588
70°	13715	6223	4743
75°	10986	5245	4033
80°	8557	4487	3472
85°	6637	3961	3132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27227 cd/sqm



TEST NUMBER: P894127
 CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC93-HI-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.4	4.7
10°-20°	740.9	13.5
20°-30°	1079.9	19.7
30°-40°	1164.0	21.2
40°-50°	975.8	17.8
50°-60°	660.6	12.0
60°-70°	376.7	6.9
70°-80°	172.3	3.1
80°-90°	45.1	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°	2081.1	37.9
0°-40°	3245.0	59.1
0°-60°	4881.4	88.9
0°-90°	5475.6	99.7
90°-120°	11.4	0.2
90°-150°	14.8	0.3
90°-180°	17.0	0.3
0°-180°	5492.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2749	2749	2749	2749	2749	
5°	2761	2752	2719	2741	2734	263
15°	2702	2678	2611	2594	2568	763
25°	2563	2495	2332	2225	2171	1181
35°	2313	2139	1824	1601	1528	1444
45°	1890	1577	1145	944	887	1455
55°	1297	949	608	493	462	1155
65°	697	485	304	246	232	696
75°	279	205	133	109	102	304
85°	57	48	34	28	27	66
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	



TEST NUMBER: P894127

CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC93-HI-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2749.3	2749.3	2749.3	2749.3	2749.3
2.5°	2765.1	2758.0	2726.4	2752.5	2744.6
5°	2761.1	2752.5	2719.3	2741.4	2733.5
7.5°	2753.2	2742.2	2705.1	2721.7	2711.4
10°	2740.6	2727.2	2681.5	2690.9	2674.4
12.5°	2723.3	2706.7	2652.3	2649.9	2630.2
15°	2702.0	2678.3	2611.3	2593.9	2567.9
17.5°	2676.0	2646.0	2562.4	2527.7	2496.1
20°	2642.8	2604.2	2499.3	2444.1	2407.0
22.5°	2605.0	2552.9	2425.9	2337.6	2297.4
25°	2563.2	2495.3	2332.1	2224.8	2171.2
27.5°	2511.1	2425.9	2223.3	2084.5	2029.2
30°	2453.5	2345.5	2111.3	1933.8	1878.6
32.5°	2388.1	2253.2	1968.5	1771.3	1694.1
35°	2313.2	2138.9	1824.2	1601.0	1528.4
37.5°	2228.8	2019.8	1651.5	1429.1	1355.7
40°	2127.0	1878.6	1476.4	1256.3	1187.7
42.5°	2017.4	1735.1	1308.4	1092.3	1033.2
45°	1890.4	1577.3	1145.1	944.0	887.3
47.5°	1768.2	1418.0	992.1	808.4	761.9
50°	1608.1	1248.5	847.8	684.6	645.9
52.5°	1451.9	1091.5	724.8	585.2	548.9
55°	1296.6	948.8	608.1	492.9	462.2
57.5°	1132.5	809.2	511.8	417.2	396.7
60°	974.8	688.5	431.4	350.2	333.6
62.5°	830.5	577.3	365.2	295.8	280.0
65°	697.2	485.0	303.6	246.1	231.9
67.5°	571.0	399.1	253.2	205.1	194.8
70°	460.6	323.4	209.0	168.8	159.3
72.5°	365.2	258.7	167.2	138.0	127.8
75°	279.2	205.1	133.3	108.8	102.5
77.5°	208.2	154.6	102.5	83.6	78.9
80°	145.9	112.0	76.5	63.1	59.2
82.5°	99.4	77.3	53.6	44.2	41.8
85°	56.8	48.1	33.9	28.4	26.8
87.5°	29.2	25.2	18.1	13.4	11.8
90°	7.9	7.9	4.7	3.9	3.2
92.5°	12.6	7.1	4.7	3.2	2.4
95°	11.8	7.1	3.9	2.4	2.4
97.5°	11.0	7.1	3.2	2.4	1.6
100°	10.3	6.3	3.2	1.6	1.6
102.5°	9.5	6.3	3.2	1.6	1.6
105°	7.9	5.5	2.4	1.6	0.8
107.5°	7.1	4.7	2.4	1.6	0.8
110°	5.5	3.9	2.4	1.6	0.8



TEST NUMBER: P894127
 CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC93-HI-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	4.7	3.9	1.6	1.6	0.8
115°	3.9	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



TEST NUMBER: P894127
 CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC93-HI-4000K

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	21.95	23.38	22.32	23.70	24.03	16.79	18.23	17.16	18.55	18.87
	3H	23.25	24.54	23.64	24.87	25.24	17.80	19.08	18.18	19.42	19.79
	4H	23.68	24.88	24.08	25.23	25.62	18.14	19.34	18.54	19.69	20.08
	6H	23.94	25.05	24.36	25.42	25.82	18.36	19.47	18.78	19.84	20.24
	8H	24.02	25.07	24.45	25.46	25.87	18.43	19.48	18.86	19.88	20.29
	12H	24.06	25.06	24.49	25.45	25.89	18.47	19.48	18.91	19.86	20.30
4H	2H	21.94	23.14	22.35	23.50	23.89	17.41	18.61	17.82	18.97	19.35
	3H	23.41	24.40	23.83	24.81	25.21	18.61	19.60	19.03	20.00	20.41
	4H	23.93	24.82	24.37	25.24	25.69	19.02	19.91	19.46	20.33	20.78
	6H	24.31	25.08	24.78	25.53	26.00	19.34	20.10	19.80	20.55	21.02
	8H	24.42	25.14	24.89	25.59	26.07	19.43	20.15	19.90	20.60	21.07
	12H	24.50	25.14	24.99	25.62	26.10	19.50	20.14	19.99	20.62	21.10
8H	4H	23.92	24.63	24.39	25.08	25.56	19.36	20.08	19.83	20.53	21.00
	6H	24.35	24.94	24.85	25.44	25.92	19.75	20.34	20.26	20.84	21.33
	8H	24.50	25.03	25.03	25.55	26.05	19.89	20.42	20.42	20.94	21.44
	12H	24.63	25.10	25.15	25.60	26.18	20.02	20.48	20.53	20.98	21.56
12H	4H	23.89	24.53	24.38	25.01	25.49	19.41	20.04	19.89	20.53	21.01
	6H	24.32	24.85	24.84	25.36	25.86	19.82	20.35	20.34	20.87	21.36
	8H	24.51	24.97	25.02	25.47	26.05	20.01	20.48	20.53	20.98	21.55