

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: P892801

Luminaire Tested: 2MB-5HL-ACL-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-ACL-UNV-L930
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 90CRI, 3000K (C)
Light Source: -
Ballast/Driver: -

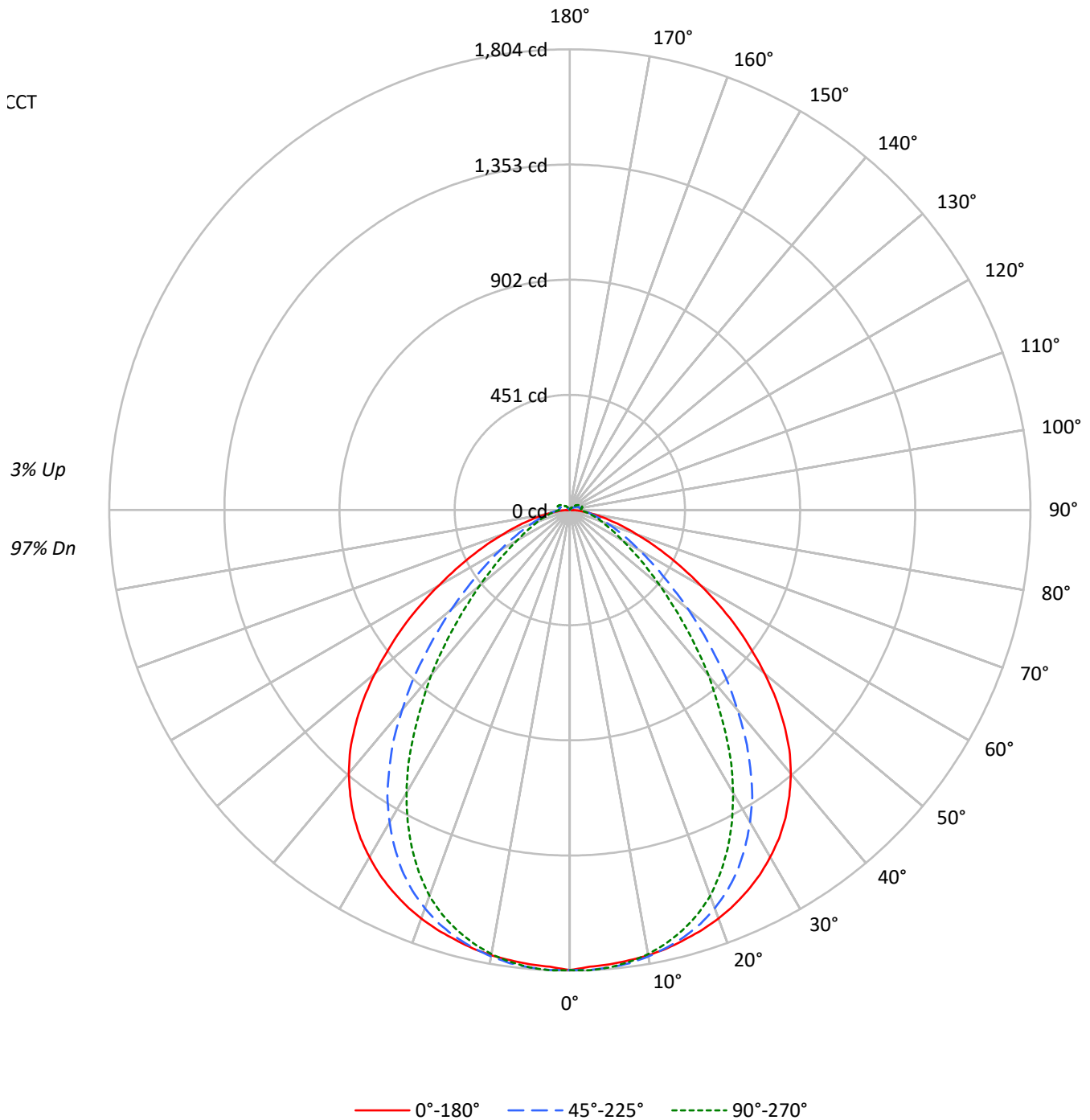
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3850.0 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.09 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
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	109	109	109	104	104	104	99	99	99	99	99	99	97
1	109	105	102	98	106	103	99	96	98	95	93	94	91	89	89	88	86	89	88	86	84
2	101	94	88	83	98	92	86	82	88	83	79	84	80	77	81	77	75	81	77	75	73
3	93	84	77	71	90	82	75	70	79	73	68	76	71	67	73	69	65	73	69	65	63
4	86	75	68	62	84	74	67	61	71	65	60	68	63	59	66	61	58	66	61	58	56
5	80	68	60	54	78	67	59	54	65	58	53	62	57	52	60	55	51	60	55	51	49
6	74	62	54	48	72	61	53	48	59	52	47	57	51	46	55	50	46	55	50	46	44
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41	51	45	41	39
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	42	37	47	42	37	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	38	34	44	38	34	32
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36884	36884	36884
5°	36582	36168	35962
10°	36542	35339	34793
15°	36498	34370	33327
20°	36528	33135	31448
25°	36462	31463	28829
30°	36229	29154	25603
35°	35752	26189	21755
40°	34769	22529	17888
45°	32965	18585	13957
50°	30231	14833	10683
55°	26819	11567	8223
60°	22669	8974	6332
65°	18731	7107	5125
70°	14945	5728	4284
75°	11836	4730	3678
80°	8958	4024	3162
85°	6694	3468	2778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 32965 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.7	4.4
10°-20°	487.0	12.6
20°-30°	714.2	18.5
30°-40°	778.7	20.2
40°-50°	660.8	17.2
50°-60°	449.9	11.7
60°-70°	262.5	6.8
70°-80°	136.7	3.6
80°-90°	59.6	1.5
90°-100°	37.8	1.0
100°-110°	34.9	0.9
110°-120°	26.0	0.7
120°-130°	15.6	0.4
130°-140°	8.3	0.2
140°-150°	4.2	0.1
150°-160°	2.1	0.1
160°-170°	0.8	0.0
170°-180°	0.2	0.0
0°-30°	1371.8	35.6
0°-40°	2150.6	55.9
0°-60°	3261.2	84.7
0°-90°	3720.0	96.6
90°-120°	98.7	2.6
90°-150°	126.9	3.3
90°-180°	130.0	3.4
0°-180°	3850.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1801	1801	1801	1801	1801	
5°	1786	1794	1798	1800	1798	170
15°	1741	1746	1731	1715	1704	492
25°	1646	1622	1556	1495	1463	758
35°	1472	1397	1232	1109	1061	919
45°	1186	1039	803	677	633	911
55°	796	634	440	354	334	710
65°	422	333	226	187	177	422
75°	173	149	116	105	101	188
85°	42	50	57	56	54	45
90°	7	23	40	43	42	7
95°	13	25	41	45	44	9
105°	4	19	38	49	50	4
115°	3	11	29	41	44	3
125°	2	6	17	28	32	1
135°	2	4	10	17	20	1
145°	2	3	7	10	11	1
155°	2	2	4	7	7	1
165°	2	2	3	4	4	0
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1801.3	1801.3	1801.3	1801.3	1801.3
2.5°	1790.0	1798.3	1802.8	1805.8	1804.3
5°	1786.3	1794.5	1798.3	1799.8	1797.6
7.5°	1778.7	1787.8	1790.0	1788.5	1784.8
10°	1770.5	1778.0	1775.0	1771.2	1765.9
12.5°	1758.4	1763.7	1755.4	1747.1	1738.8
15°	1741.1	1745.6	1730.6	1714.8	1704.2
17.5°	1723.8	1722.3	1699.7	1674.1	1661.3
20°	1702.0	1693.7	1659.8	1622.9	1607.9
22.5°	1676.4	1662.1	1612.4	1562.7	1540.1
25°	1645.5	1622.2	1555.9	1495.0	1462.6
27.5°	1610.9	1577.8	1487.4	1411.4	1375.3
30°	1569.5	1524.3	1412.1	1318.8	1278.9
32.5°	1525.1	1467.1	1330.1	1213.4	1176.5
35°	1472.4	1397.1	1232.2	1108.8	1061.4
37.5°	1412.1	1316.6	1132.1	996.6	947.0
40°	1346.7	1231.5	1020.7	885.2	845.3
42.5°	1272.9	1141.2	916.8	774.6	734.7
45°	1186.3	1038.8	803.2	676.7	633.1
47.5°	1095.2	937.9	698.5	575.1	539.0
50°	996.6	831.8	605.2	492.3	460.7
52.5°	895.0	733.2	515.6	417.0	390.7
55°	796.4	633.8	440.4	353.8	333.5
57.5°	693.3	550.3	374.1	301.1	280.8
60°	593.9	465.9	314.6	254.4	238.6
62.5°	504.3	392.9	268.0	216.8	205.5
65°	421.5	332.7	225.8	186.7	176.9
67.5°	347.8	275.5	193.5	161.8	152.8
70°	278.5	225.1	161.8	139.3	133.2
72.5°	225.8	187.4	137.0	121.9	117.4
75°	173.1	149.0	115.9	105.4	100.9
77.5°	130.2	116.7	98.6	90.3	86.6
80°	94.1	90.3	82.8	78.3	74.5
82.5°	64.7	68.5	69.3	65.5	64.0
85°	42.2	50.4	57.2	55.7	54.2
87.5°	23.3	33.9	46.7	47.4	45.9
90°	6.8	22.6	39.9	42.9	42.2
92.5°	12.8	24.1	40.6	43.7	42.9
95°	12.8	24.8	41.4	45.2	44.4
97.5°	12.0	24.8	42.2	46.7	46.7
100°	6.0	24.1	42.2	48.2	48.2
102.5°	3.8	21.8	40.6	48.9	49.7
105°	3.8	18.8	38.4	48.9	49.7
107.5°	3.8	15.8	36.9	47.4	49.7
110°	3.0	13.5	34.6	45.2	48.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.0	12.0	32.4	43.7	46.7
115°	3.0	11.3	29.4	41.4	44.4
117.5°	2.3	9.8	25.6	38.4	42.2
120°	2.3	8.3	22.6	35.4	39.1
122.5°	1.5	7.5	19.6	31.6	36.1
125°	1.5	6.0	17.3	27.9	32.4
127.5°	1.5	6.0	15.8	24.8	28.6
130°	1.5	5.3	13.5	21.8	24.8
132.5°	1.5	5.3	12.0	18.8	21.8
135°	1.5	4.5	10.5	16.6	19.6
137.5°	1.5	4.5	9.8	14.3	17.3
140°	1.5	3.8	8.3	12.8	15.1
142.5°	1.5	3.8	7.5	11.3	12.8
145°	1.5	3.0	6.8	9.8	11.3
147.5°	1.5	3.0	6.0	8.3	9.8
150°	1.5	3.0	6.0	7.5	8.3
152.5°	1.5	2.3	5.3	6.8	7.5
155°	1.5	2.3	4.5	6.8	6.8
157.5°	1.5	2.3	3.8	6.0	6.8
160°	1.5	2.3	3.8	5.3	6.0
162.5°	1.5	2.3	3.0	3.8	5.3
165°	1.5	1.5	3.0	3.8	4.5
167.5°	1.5	1.5	2.3	3.0	3.8
170°	1.5	1.5	2.3	2.3	2.3
172.5°	1.5	1.5	2.3	2.3	1.5
175°	1.5	1.5	2.3	2.3	1.5
177.5°	1.5	1.5	2.3	2.3	1.5
180°	1.5	1.5	1.5	1.5	1.5



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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	21.23	22.62	21.65	23.01	23.41	17.33	18.72	17.75	19.11	19.51
	3H	22.25	23.50	22.69	23.90	24.34	18.53	19.78	18.97	20.18	20.62
	4H	22.55	23.72	23.00	24.13	24.60	19.07	20.23	19.52	20.65	21.12
	6H	22.70	23.77	23.17	24.21	24.69	19.57	20.65	20.04	21.09	21.56
	8H	22.72	23.75	23.20	24.20	24.69	19.82	20.84	20.30	21.30	21.78
	12H	22.72	23.70	23.21	24.15	24.66	20.07	21.05	20.56	21.50	22.01
4H	2H	21.26	22.43	21.72	22.85	23.31	17.83	19.00	18.29	19.42	19.88
	3H	22.45	23.42	22.92	23.89	24.37	19.21	20.18	19.68	20.65	21.13
	4H	22.84	23.71	23.33	24.19	24.71	19.85	20.72	20.34	21.20	21.72
	6H	23.09	23.84	23.60	24.35	24.89	20.48	21.24	21.00	21.75	22.29
	8H	23.14	23.85	23.66	24.35	24.90	20.79	21.49	21.31	22.00	22.55
	12H	23.16	23.79	23.70	24.33	24.89	21.11	21.75	21.65	22.29	22.84
8H	4H	22.87	23.57	23.39	24.08	24.63	20.09	20.80	20.61	21.31	21.85
	6H	23.17	23.76	23.73	24.31	24.87	20.84	21.42	21.39	21.98	22.53
	8H	23.27	23.79	23.84	24.36	24.93	21.23	21.75	21.80	22.32	22.89
	12H	23.34	23.80	23.90	24.36	25.00	21.67	22.14	22.23	22.69	23.33
12H	4H	22.85	23.48	23.39	24.02	24.57	20.11	20.74	20.64	21.28	21.83
	6H	23.17	23.70	23.74	24.27	24.83	20.88	21.41	21.45	21.98	22.54
	8H	23.30	23.77	23.87	24.32	24.96	21.33	21.79	21.89	22.35	22.99