

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: P892804

Luminaire Tested: 2MB-5HL-ACL-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892804
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-L950
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 90CRI, 5000K (C)
Light Source: -
Ballast/Driver: -

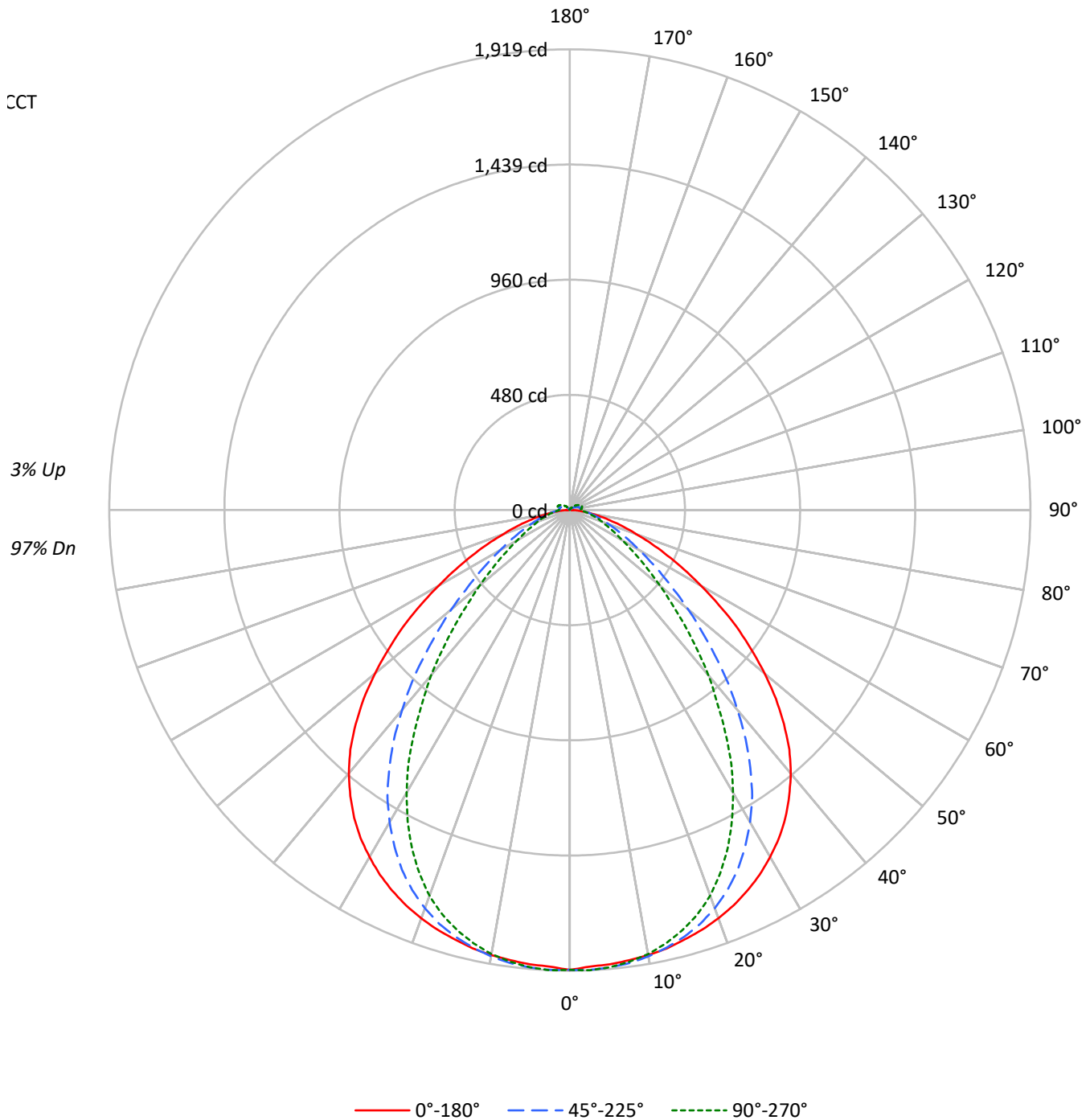
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4093.9 lumens
Efficiency: N/A
Efficacy: 121.5 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

TEST NUMBER: P892804
CATALOG NUMBER: 2MB-5HL-ACL-UNV-L950

Luminous Intensity Polar Plot





TEST NUMBER: P892804

CATALOG NUMBER: 2MB-5HL-ACL-UNV-L950

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	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°	39223	39223	39223
5°	38900	38460	38241
10°	38857	37579	37000
15°	38810	36547	35439
20°	38842	35235	33441
25°	38773	33457	30656
30°	38524	31002	27227
35°	38018	27849	23132
40°	36972	23957	19022
45°	35055	19763	14841
50°	32148	15774	11360
55°	28520	12300	8743
60°	24108	9545	6733
65°	19922	7557	5449
70°	15895	6093	4557
75°	12588	5032	3911
80°	9529	4277	3361
85°	7106	3686	2952

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 35055 cd/sqm



TEST NUMBER: P892804
 CATALOG NUMBER: 2MB-5HL-ACL-UNV-L950

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	4.4
10°-20°	517.8	12.6
20°-30°	759.4	18.5
30°-40°	828.1	20.2
40°-50°	702.7	17.2
50°-60°	478.4	11.7
60°-70°	279.2	6.8
70°-80°	145.4	3.6
80°-90°	63.3	1.5
90°-100°	40.2	1.0
100°-110°	37.1	0.9
110°-120°	27.6	0.7
120°-130°	16.6	0.4
130°-140°	8.9	0.2
140°-150°	4.5	0.1
150°-160°	2.2	0.1
160°-170°	0.9	0.0
170°-180°	0.2	0.0
0°-30°	1458.8	35.6
0°-40°	2286.9	55.9
0°-60°	3467.9	84.7
0°-90°	3955.7	96.6
90°-120°	104.9	2.6
90°-150°	134.9	3.3
90°-180°	138.0	3.4
0°-180°	4093.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1916	1916	1916	1916	1916	
5°	1900	1908	1912	1914	1912	181
15°	1851	1856	1840	1823	1812	523
25°	1750	1725	1654	1590	1555	806
35°	1566	1486	1310	1179	1129	977
45°	1262	1105	854	720	673	969
55°	847	674	468	376	355	755
65°	448	354	240	198	188	449
75°	184	158	123	112	107	200
85°	45	54	61	59	58	48
90°	7	24	42	46	45	7
95°	14	26	44	48	47	10
105°	4	20	41	52	53	4
115°	3	12	31	44	47	3
125°	2	6	18	30	34	2
135°	2	5	11	18	21	1
145°	2	3	7	10	12	1
155°	2	2	5	7	7	1
165°	2	2	3	4	5	0
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



TEST NUMBER: P892804

CATALOG NUMBER: 2MB-5HL-ACL-UNV-L950

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1915.5	1915.5	1915.5	1915.5	1915.5
2.5°	1903.5	1912.3	1917.1	1920.3	1918.7
5°	1899.5	1908.3	1912.3	1913.9	1911.5
7.5°	1891.5	1901.1	1903.5	1901.9	1897.9
10°	1882.7	1890.7	1887.5	1883.5	1877.9
12.5°	1869.9	1875.5	1866.7	1857.8	1849.0
15°	1851.4	1856.2	1840.2	1823.4	1812.2
17.5°	1833.0	1831.4	1807.4	1780.2	1766.6
20°	1809.8	1801.0	1765.0	1725.8	1709.8
22.5°	1782.6	1767.4	1714.6	1661.7	1637.7
25°	1749.8	1725.0	1654.5	1589.7	1555.3
27.5°	1713.0	1677.7	1581.7	1500.8	1462.4
30°	1668.9	1620.9	1501.6	1402.4	1360.0
32.5°	1621.7	1560.1	1414.4	1290.3	1251.1
35°	1565.7	1485.6	1310.3	1179.1	1128.6
37.5°	1501.6	1400.0	1203.9	1059.8	1007.0
40°	1432.0	1309.5	1085.4	941.3	898.9
42.5°	1353.6	1213.5	974.9	823.7	781.2
45°	1261.5	1104.6	854.1	719.6	673.2
47.5°	1164.7	997.4	742.8	611.5	573.1
50°	1059.8	884.5	643.6	523.5	489.9
52.5°	951.7	779.6	548.3	443.4	415.4
55°	846.9	674.0	468.3	376.2	354.6
57.5°	737.2	585.1	397.8	320.2	298.6
60°	631.6	495.5	334.6	270.6	253.7
62.5°	536.3	417.8	285.0	230.5	218.5
65°	448.3	353.8	240.1	198.5	188.1
67.5°	369.8	293.0	205.7	172.1	162.5
70°	296.2	239.3	172.1	148.1	141.7
72.5°	240.1	199.3	145.7	129.7	124.9
75°	184.1	158.5	123.3	112.1	107.3
77.5°	138.5	124.1	104.9	96.1	92.1
80°	100.1	96.1	88.0	83.2	79.2
82.5°	68.8	72.8	73.6	69.6	68.0
85°	44.8	53.6	60.8	59.2	57.6
87.5°	24.8	36.0	49.6	50.4	48.8
90°	7.2	24.0	42.4	45.6	44.8
92.5°	13.6	25.6	43.2	46.4	45.6
95°	13.6	26.4	44.0	48.0	47.2
97.5°	12.8	26.4	44.8	49.6	49.6
100°	6.4	25.6	44.8	51.2	51.2
102.5°	4.0	23.2	43.2	52.0	52.8
105°	4.0	20.0	40.8	52.0	52.8
107.5°	4.0	16.8	39.2	50.4	52.8
110°	3.2	14.4	36.8	48.0	51.2



TEST NUMBER: P892804

CATALOG NUMBER: 2MB-5HL-ACL-UNV-L950

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.2	12.8	34.4	46.4	49.6
115°	3.2	12.0	31.2	44.0	47.2
117.5°	2.4	10.4	27.2	40.8	44.8
120°	2.4	8.8	24.0	37.6	41.6
122.5°	1.6	8.0	20.8	33.6	38.4
125°	1.6	6.4	18.4	29.6	34.4
127.5°	1.6	6.4	16.8	26.4	30.4
130°	1.6	5.6	14.4	23.2	26.4
132.5°	1.6	5.6	12.8	20.0	23.2
135°	1.6	4.8	11.2	17.6	20.8
137.5°	1.6	4.8	10.4	15.2	18.4
140°	1.6	4.0	8.8	13.6	16.0
142.5°	1.6	4.0	8.0	12.0	13.6
145°	1.6	3.2	7.2	10.4	12.0
147.5°	1.6	3.2	6.4	8.8	10.4
150°	1.6	3.2	6.4	8.0	8.8
152.5°	1.6	2.4	5.6	7.2	8.0
155°	1.6	2.4	4.8	7.2	7.2
157.5°	1.6	2.4	4.0	6.4	7.2
160°	1.6	2.4	4.0	5.6	6.4
162.5°	1.6	2.4	3.2	4.0	5.6
165°	1.6	1.6	3.2	4.0	4.8
167.5°	1.6	1.6	2.4	3.2	4.0
170°	1.6	1.6	2.4	2.4	2.4
172.5°	1.6	1.6	2.4	2.4	1.6
175°	1.6	1.6	2.4	2.4	1.6
177.5°	1.6	1.6	2.4	2.4	1.6
180°	1.6	1.6	1.6	1.6	1.6



TEST NUMBER: P892804
 CATALOG NUMBER: 2MB-5HL-ACL-UNV-L950

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	21.44	22.83	21.86	23.22	23.62	17.54	18.94	17.96	19.32	19.72
	3H	22.46	23.71	22.90	24.11	24.56	18.74	19.99	19.18	20.39	20.84
	4H	22.76	23.93	23.22	24.35	24.81	19.28	20.45	19.74	20.87	21.33
	6H	22.91	23.99	23.38	24.42	24.90	19.79	20.86	20.26	21.30	21.78
	8H	22.93	23.96	23.42	24.42	24.90	20.03	21.05	20.51	21.51	22.00
	12H	22.93	23.92	23.42	24.37	24.88	20.28	21.26	20.77	21.71	22.23
4H	2H	21.47	22.64	21.93	23.06	23.52	18.04	19.21	18.50	19.63	20.09
	3H	22.66	23.63	23.13	24.10	24.58	19.43	20.39	19.89	20.86	21.34
	4H	23.06	23.93	23.55	24.41	24.93	20.06	20.94	20.55	21.42	21.94
	6H	23.30	24.06	23.81	24.56	25.10	20.70	21.45	21.21	21.96	22.50
	8H	23.35	24.06	23.87	24.57	25.11	21.00	21.71	21.52	22.22	22.76
	12H	23.38	24.01	23.91	24.55	25.10	21.33	21.96	21.87	22.50	23.05
8H	4H	23.08	23.79	23.60	24.29	24.84	20.31	21.01	20.83	21.52	22.07
	6H	23.39	23.97	23.94	24.53	25.08	21.05	21.64	21.61	22.19	22.75
	8H	23.48	24.01	24.05	24.58	25.14	21.44	21.97	22.01	22.54	23.10
	12H	23.55	24.02	24.12	24.57	25.21	21.88	22.35	22.45	22.90	23.54
12H	4H	23.06	23.70	23.60	24.24	24.79	20.32	20.95	20.86	21.49	22.04
	6H	23.38	23.91	23.95	24.48	25.05	21.09	21.62	21.66	22.19	22.76
	8H	23.51	23.98	24.08	24.53	25.17	21.54	22.01	22.11	22.56	23.20