

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: P892843

Luminaire Tested: 2MB-5HL-LVR-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-LVR-UNV-L940
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

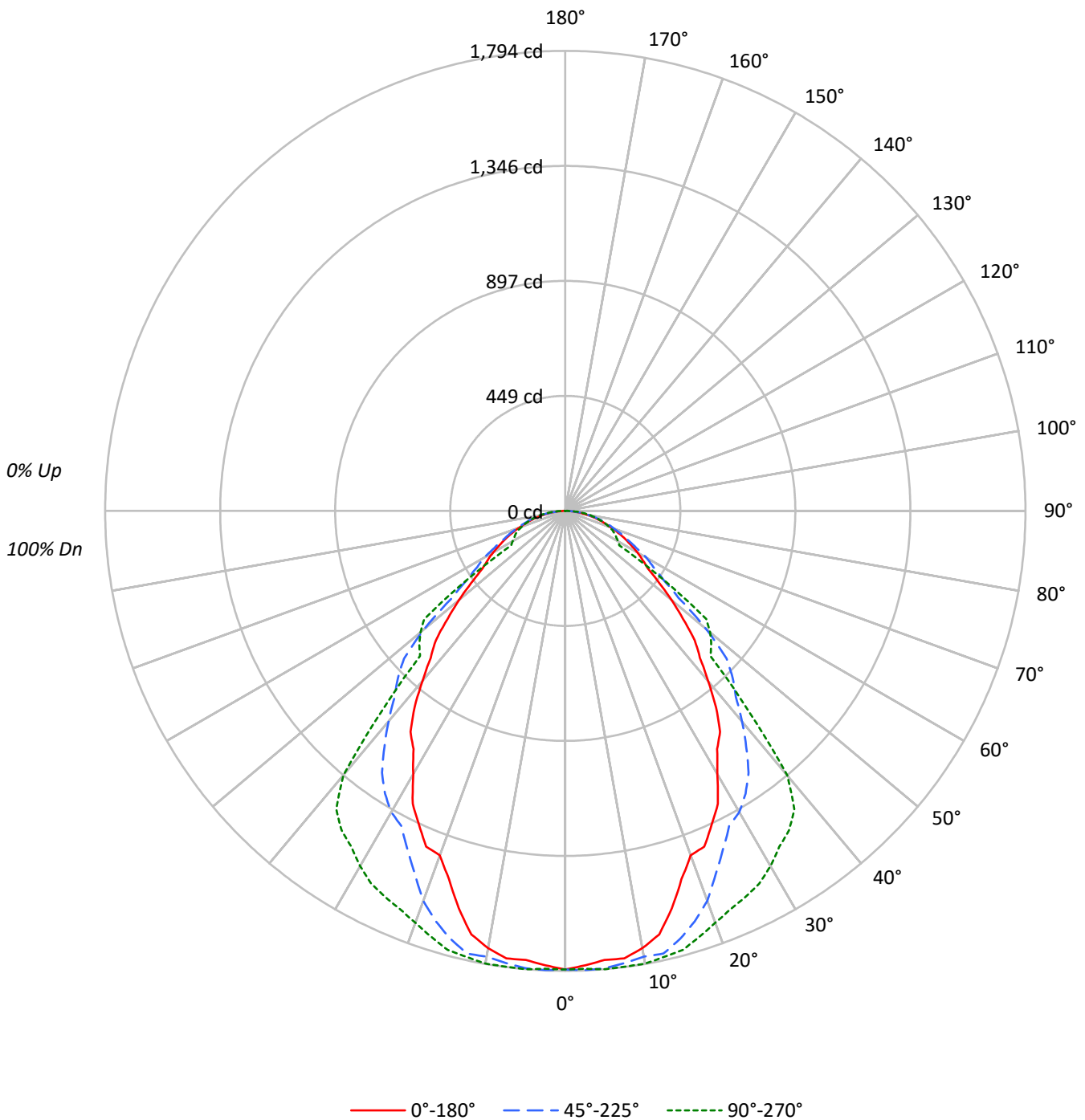
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3644.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.24
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')
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: P892843
CATALOG NUMBER: 2MB-5HL-LVR-UNV-L940

Luminous Intensity Polar Plot





TEST NUMBER: P892843

CATALOG NUMBER: 2MB-5HL-LVR-UNV-L940

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	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	60	60	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	47	47	47	46
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	53	47	43	43	43	43	41
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	35	35	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	32	32	32	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25581	25581	25581
5°	25241	25703	25764
10°	25152	25643	26037
15°	23763	25593	26245
20°	21759	24633	26025
25°	21306	22976	26221
30°	19584	22409	26420
35°	18370	21755	26557
40°	16167	20023	25128
45°	14433	18679	16197
50°	12036	16008	16404
55°	9857	11607	11545
60°	9321	10434	6781
65°	8652	9082	7220
70°	8001	8495	7575
75°	7484	8092	7810
80°	6829	7530	8156
85°	6106	6533	9028

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 18679 cd/sqm



TEST NUMBER: P892843
 CATALOG NUMBER: 2MB-5HL-LVR-UNV-L940

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	4.7
10°-20°	478.4	13.1
20°-30°	690.1	18.9
30°-40°	782.7	21.5
40°-50°	651.9	17.9
50°-60°	421.3	11.6
60°-70°	249.8	6.9
70°-80°	152.3	4.2
80°-90°	47.5	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1338.5	36.7
0°-40°	2121.2	58.2
0°-60°	3194.4	87.7
0°-90°	3644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1788	1788	1788	1788	1788	
5°	1758	1779	1790	1800	1794	168
15°	1604	1657	1728	1756	1772	448
25°	1350	1397	1456	1650	1661	617
35°	1052	1088	1246	1413	1521	647
45°	713	763	923	849	801	542
55°	395	433	465	559	463	368
65°	256	262	268	239	213	254
75°	135	139	146	154	141	144
85°	37	37	40	46	55	42
90°	0	0	0	0	0	



TEST NUMBER: P892843

CATALOG NUMBER: 2MB-5HL-LVR-UNV-L940

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1788.2	1788.2	1788.2	1788.2	1788.2
2.5°	1773.8	1789.9	1792.4	1806.8	1787.3
5°	1757.7	1778.9	1789.9	1800.0	1794.1
7.5°	1760.2	1772.1	1778.0	1795.8	1792.4
10°	1731.5	1755.2	1765.3	1786.5	1792.4
12.5°	1691.7	1722.2	1767.9	1763.6	1781.4
15°	1604.5	1657.0	1728.1	1756.0	1772.1
17.5°	1506.4	1564.8	1678.2	1744.2	1740.8
20°	1429.3	1473.4	1618.1	1711.2	1709.5
22.5°	1416.7	1426.8	1532.6	1688.3	1681.5
25°	1349.8	1397.2	1455.6	1650.2	1661.2
27.5°	1288.0	1330.3	1384.5	1602.0	1638.4
30°	1185.6	1258.4	1356.6	1550.4	1599.4
32.5°	1101.0	1171.2	1307.5	1486.9	1552.9
35°	1051.9	1088.3	1245.7	1413.3	1520.7
37.5°	965.6	1033.3	1158.5	1326.9	1466.6
40°	865.7	943.6	1072.2	1250.8	1345.6
42.5°	776.9	839.5	984.2	1106.9	1056.1
45°	713.4	763.3	923.3	848.8	800.6
47.5°	622.0	685.5	853.0	697.3	771.8
50°	540.8	595.8	719.3	659.2	737.1
52.5°	462.1	514.5	556.8	622.0	693.1
55°	395.2	433.3	465.4	559.4	462.9
57.5°	358.8	370.7	407.1	399.4	249.6
60°	325.8	330.9	364.7	270.0	237.0
62.5°	288.6	297.9	311.4	253.0	224.3
65°	255.6	262.3	268.3	238.6	213.3
67.5°	223.4	230.2	236.1	221.7	199.7
70°	191.3	195.5	203.1	199.7	181.1
72.5°	162.5	165.9	175.2	177.7	163.3
75°	135.4	138.8	146.4	154.0	141.3
77.5°	109.2	111.7	120.2	126.1	121.9
80°	82.9	87.2	91.4	99.0	99.0
82.5°	60.9	61.8	66.0	73.6	77.0
85°	37.2	37.2	39.8	45.7	55.0
87.5°	16.1	16.1	17.8	19.5	27.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P892843
 CATALOG NUMBER: 2MB-5HL-LVR-UNV-L940

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	18.61	20.08	18.98	20.39	20.70	18.59	20.05	18.95	20.36	20.68
	3H	20.21	21.52	20.59	21.85	22.21	20.06	21.37	20.44	21.70	22.06
	4H	20.82	22.04	21.22	22.39	22.77	20.76	21.99	21.17	22.34	22.72
	6H	21.28	22.41	21.69	22.78	23.17	21.38	22.51	21.80	22.88	23.27
	8H	21.44	22.51	21.87	22.90	23.31	21.63	22.70	22.05	23.09	23.49
	12H	21.54	22.57	21.97	22.95	23.38	21.83	22.86	22.26	23.24	23.67
4H	2H	19.21	20.44	19.61	20.79	21.17	19.19	20.41	19.59	20.76	21.14
	3H	21.03	22.04	21.44	22.45	22.85	20.94	21.96	21.36	22.36	22.76
	4H	21.77	22.68	22.20	23.09	23.53	21.81	22.72	22.24	23.14	23.58
	6H	22.36	23.15	22.82	23.59	24.05	22.57	23.36	23.03	23.81	24.27
	8H	22.56	23.30	23.03	23.75	24.21	22.87	23.61	23.33	24.05	24.52
	12H	22.71	23.37	23.19	23.85	24.32	23.12	23.79	23.61	24.26	24.74
8H	4H	22.08	22.82	22.55	23.27	23.74	22.12	22.86	22.59	23.31	23.78
	6H	22.80	23.42	23.30	23.91	24.39	23.02	23.64	23.52	24.13	24.61
	8H	23.08	23.64	23.60	24.15	24.64	23.42	23.97	23.93	24.48	24.97
	12H	23.30	23.79	23.81	24.28	24.85	23.77	24.26	24.28	24.75	25.32
12H	4H	22.12	22.78	22.60	23.26	23.73	22.15	22.81	22.63	23.29	23.76
	6H	22.87	23.42	23.39	23.93	24.42	23.08	23.63	23.59	24.14	24.63
	8H	23.21	23.70	23.72	24.19	24.76	23.53	24.02	24.04	24.51	25.08