

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: P893830

Luminaire Tested: 4MB-7HL-FLT-UNV-L935

Issue Date: 11/11/2024

**Test Information**

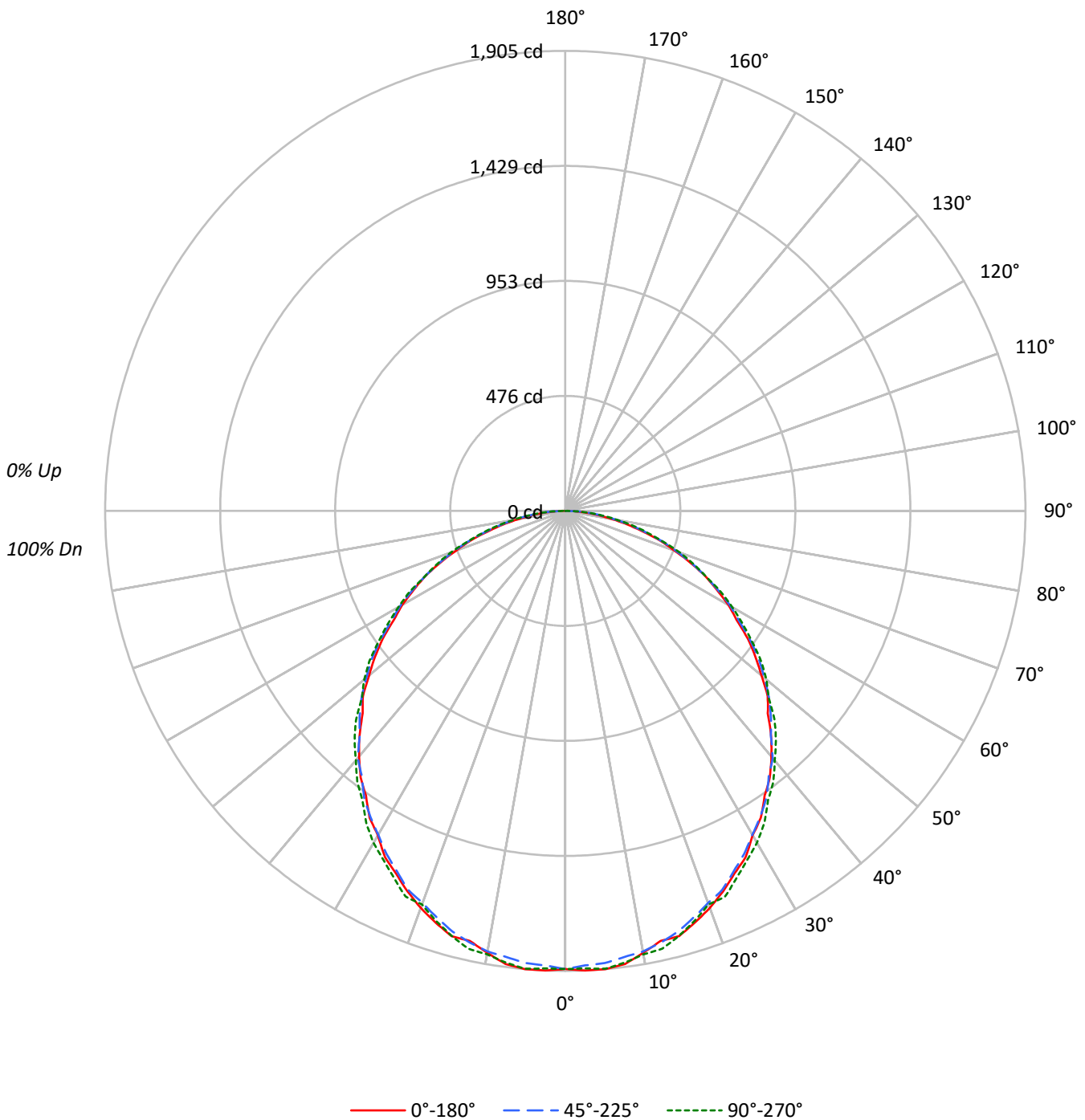
Test Method: LM-79-2019  
Report Number: P893830  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-7HL-FLT-UNV-L935  
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5256.0 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34  
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 51.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 4  
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	102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	86	86	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	61	61	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13496	13496	13496
5°	13607	13425	13595
10°	13421	13385	13474
15°	13423	13285	13411
20°	13246	13085	13134
25°	13007	12936	13168
30°	12743	12724	13040
35°	12498	12605	12711
40°	12329	12405	12527
45°	11931	12112	12334
50°	11736	11909	12026
55°	11445	11587	11709
60°	11088	11252	11357
65°	10760	10802	10802
70°	10006	10245	10501
75°	9212	9572	9776
80°	8125	8830	9133
85°	7290	8164	8759

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12334 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.5	3.4
10°-20°	511.7	9.7
20°-30°	767.5	14.6
30°-40°	911.5	17.3
40°-50°	933.3	17.8
50°-60°	836.2	15.9
60°-70°	635.2	12.1
70°-80°	370.0	7.0
80°-90°	111.1	2.1
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°	1458.7	27.8
0°-40°	2370.3	45.1
0°-60°	4139.7	78.8
0°-90°	5256.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5256.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1897	1897	1897	1897	1897	
5°	1905	1898	1880	1891	1904	180
15°	1822	1835	1804	1811	1821	511
25°	1657	1672	1648	1669	1677	765
35°	1439	1471	1451	1457	1463	904
45°	1186	1215	1204	1214	1226	922
55°	923	937	934	945	944	822
65°	639	639	642	650	642	628
75°	335	341	348	359	356	357
85°	89	91	100	106	107	100
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1896.9	1896.9	1896.9	1896.9	1896.9
2.5°	1905.1	1896.1	1883.8	1887.9	1896.1
5°	1905.1	1897.7	1879.7	1891.2	1903.5
7.5°	1892.8	1902.6	1863.3	1863.3	1886.3
10°	1857.6	1876.4	1852.7	1850.2	1865.0
12.5°	1824.0	1858.4	1830.5	1838.7	1856.8
15°	1822.3	1834.6	1803.5	1810.9	1820.7
17.5°	1787.1	1799.4	1765.8	1779.7	1779.7
20°	1749.4	1751.9	1728.1	1758.4	1734.7
22.5°	1706.0	1731.4	1698.6	1708.4	1728.9
25°	1656.8	1671.6	1647.8	1669.1	1677.3
27.5°	1616.7	1634.7	1601.9	1627.3	1629.8
30°	1551.1	1570.8	1548.7	1565.1	1587.2
32.5°	1506.9	1513.4	1502.0	1526.5	1533.1
35°	1438.9	1470.8	1451.2	1456.9	1463.4
37.5°	1391.3	1401.2	1384.0	1403.6	1414.3
40°	1327.4	1342.2	1335.6	1338.9	1348.7
42.5°	1261.1	1276.6	1259.4	1283.2	1290.6
45°	1185.7	1215.2	1203.7	1213.5	1225.8
47.5°	1136.5	1146.3	1143.1	1148.8	1140.6
50°	1060.3	1070.1	1075.9	1083.2	1086.5
52.5°	992.3	999.7	1010.3	1014.4	1021.8
55°	922.6	936.6	934.1	944.8	943.9
57.5°	841.5	862.0	855.5	871.0	871.0
60°	779.2	782.5	790.7	798.1	798.1
62.5°	707.1	711.2	715.3	721.9	726.8
65°	639.1	639.1	641.6	649.8	641.6
67.5°	560.5	557.2	565.4	575.2	574.4
70°	481.0	485.1	492.5	504.8	504.8
72.5°	413.0	413.0	421.2	427.7	426.9
75°	335.1	340.9	348.2	358.9	355.6
77.5°	265.5	269.6	281.9	291.7	292.5
80°	198.3	202.4	215.5	225.3	222.9
82.5°	138.5	144.2	156.5	163.9	163.1
85°	89.3	91.0	100.0	106.5	107.3
87.5°	41.0	44.2	50.8	53.3	53.3
90°	0.0	0.0	0.0	0.0	0.0



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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	20.57	22.21	20.94	22.52	22.84	20.68	22.31	21.04	22.63	22.94
	3H	22.35	23.83	22.73	24.16	24.52	22.51	24.00	22.89	24.32	24.68
	4H	23.01	24.41	23.41	24.76	25.14	23.21	24.61	23.61	24.96	25.33
	6H	23.49	24.79	23.90	25.15	25.54	23.76	25.06	24.17	25.42	25.81
	8H	23.64	24.88	24.06	25.27	25.66	23.95	25.19	24.37	25.58	25.98
	12H	23.75	24.93	24.17	25.31	25.74	24.09	25.28	24.52	25.66	26.09
4H	2H	21.22	22.61	21.61	22.96	23.34	21.30	22.70	21.70	23.04	23.42
	3H	23.22	24.39	23.63	24.79	25.19	23.36	24.54	23.77	24.93	25.33
	4H	24.01	25.07	24.44	25.49	25.92	24.20	25.26	24.63	25.68	26.11
	6H	24.61	25.54	25.06	25.98	26.43	24.89	25.82	25.34	26.26	26.71
	8H	24.81	25.68	25.27	26.12	26.58	25.13	26.01	25.59	26.45	26.91
	12H	24.96	25.74	25.44	26.22	26.69	25.33	26.12	25.81	26.59	27.06
8H	4H	24.35	25.22	24.80	25.66	26.12	24.51	25.38	24.97	25.83	26.29
	6H	25.07	25.79	25.56	26.28	26.76	25.34	26.06	25.83	26.55	27.02
	8H	25.34	25.99	25.85	26.50	26.98	25.67	26.32	26.18	26.83	27.31
	12H	25.57	26.15	26.08	26.64	27.20	25.96	26.53	26.46	27.02	27.58
12H	4H	24.39	25.17	24.87	25.65	26.12	24.55	25.33	25.03	25.80	26.27
	6H	25.14	25.79	25.65	26.30	26.78	25.39	26.05	25.90	26.55	27.04
	8H	25.48	26.05	25.98	26.54	27.10	25.79	26.37	26.30	26.86	27.42