

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: P893832

Luminaire Tested: 4MB-7HL-FLT-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893832
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-L950
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

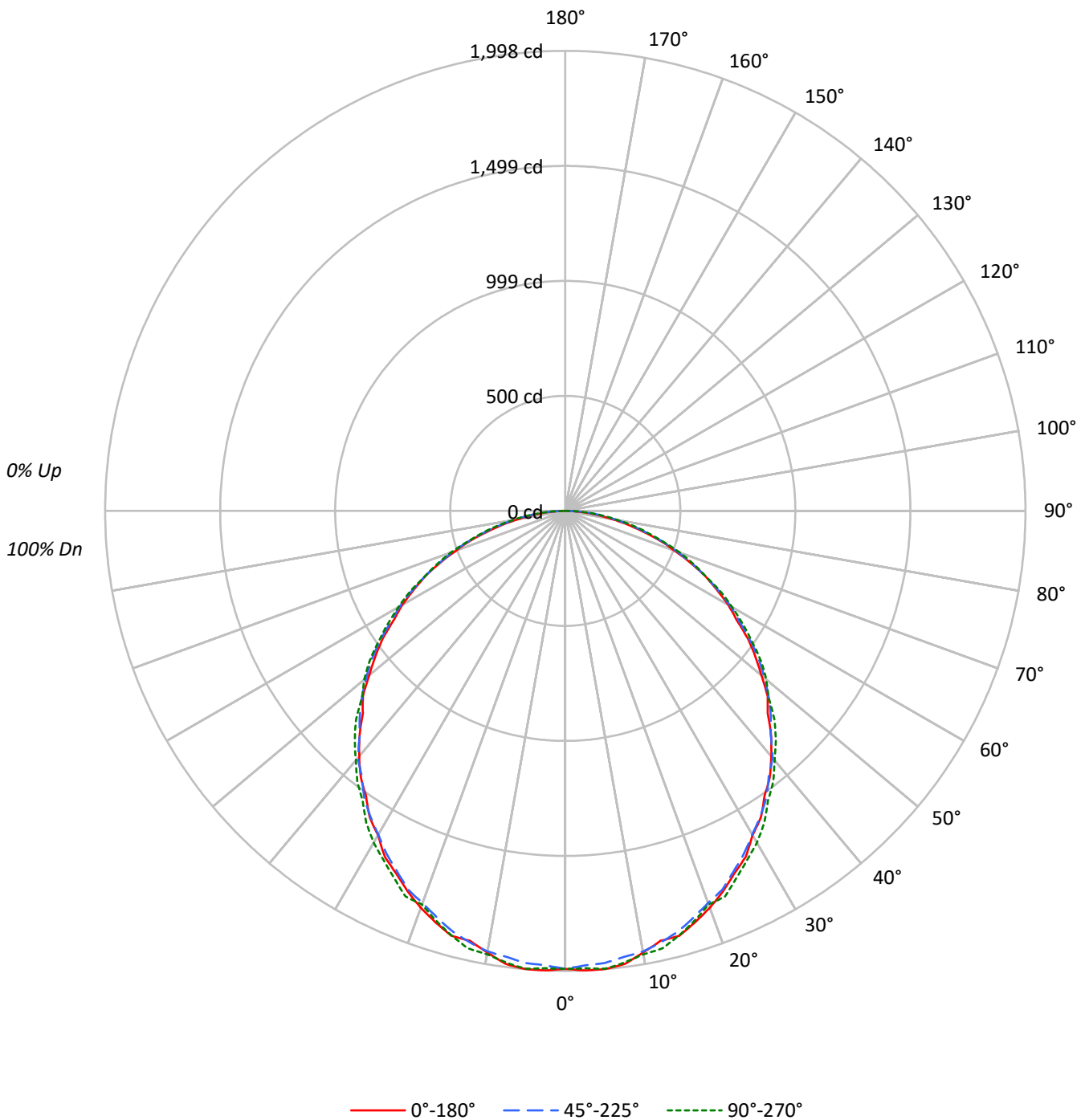
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5511.0 lumens
Efficiency: N/A
Efficacy: 106.4 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_{in}): 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°	14151	14151	14151
5°	14266	14077	14254
10°	14072	14034	14127
15°	14075	13929	14062
20°	13889	13720	13771
25°	13638	13564	13807
30°	13362	13341	13673
35°	13104	13216	13328
40°	12927	13007	13135
45°	12509	12699	12933
50°	12305	12487	12610
55°	12000	12149	12277
60°	11627	11798	11908
65°	11281	11325	11325
70°	10491	10743	11009
75°	9660	10037	10251
80°	8518	9260	9576
85°	7641	8555	9184

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12933 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.3	3.4
10°-20°	536.5	9.7
20°-30°	804.7	14.6
30°-40°	955.8	17.3
40°-50°	978.6	17.8
50°-60°	876.7	15.9
60°-70°	666.0	12.1
70°-80°	387.9	7.0
80°-90°	116.5	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°	1529.5	27.8
0°-40°	2485.3	45.1
0°-60°	4340.6	78.8
0°-90°	5511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5511.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1989	1989	1989	1989	1989	
5°	1998	1990	1971	1983	1996	189
15°	1911	1924	1891	1899	1909	536
25°	1737	1753	1728	1750	1759	802
35°	1509	1542	1522	1528	1534	948
45°	1243	1274	1262	1272	1285	967
55°	967	982	979	991	990	862
65°	670	670	673	681	673	658
75°	351	357	365	376	373	374
85°	94	95	105	112	112	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1988.9	1988.9	1988.9	1988.9	1988.9
2.5°	1997.5	1988.1	1975.2	1979.5	1988.1
5°	1997.5	1989.8	1970.9	1982.9	1995.8
7.5°	1984.6	1995.0	1953.7	1953.7	1977.8
10°	1947.7	1967.5	1942.5	1940.0	1955.4
12.5°	1912.5	1948.6	1919.4	1927.9	1946.8
15°	1910.8	1923.6	1891.0	1898.7	1909.0
17.5°	1873.8	1886.7	1851.5	1866.1	1866.1
20°	1834.3	1836.9	1812.0	1843.7	1818.8
22.5°	1788.8	1815.4	1781.0	1791.3	1812.8
25°	1737.2	1752.7	1727.8	1750.1	1758.7
27.5°	1695.1	1714.0	1679.6	1706.3	1708.9
30°	1626.4	1647.0	1623.8	1641.0	1664.2
32.5°	1580.0	1586.9	1574.8	1600.6	1607.5
35°	1508.7	1542.2	1521.6	1527.6	1534.4
37.5°	1458.8	1469.2	1451.1	1471.7	1482.9
40°	1391.8	1407.3	1400.4	1403.9	1414.2
42.5°	1322.2	1338.6	1320.5	1345.4	1353.2
45°	1243.2	1274.1	1262.1	1272.4	1285.3
47.5°	1191.6	1202.0	1198.5	1204.5	1195.9
50°	1111.7	1122.1	1128.1	1135.8	1139.2
52.5°	1040.4	1048.2	1059.3	1063.6	1071.4
55°	967.4	982.0	979.4	990.6	989.7
57.5°	882.4	903.8	897.0	913.3	913.3
60°	817.1	820.5	829.1	836.8	836.8
62.5°	741.5	745.7	750.0	756.9	762.1
65°	670.1	670.1	672.7	681.3	672.7
67.5°	587.7	584.2	592.8	603.1	602.3
70°	504.3	508.6	516.4	529.2	529.2
72.5°	433.0	433.0	441.6	448.5	447.6
75°	351.4	357.4	365.1	376.3	372.9
77.5°	278.4	282.7	295.5	305.9	306.7
80°	207.9	212.2	226.0	236.3	233.7
82.5°	145.2	151.2	164.1	171.8	171.0
85°	93.6	95.4	104.8	111.7	112.5
87.5°	43.0	46.4	53.3	55.8	55.8
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	20.74	22.37	21.10	22.69	23.00	20.84	22.48	21.21	22.79	23.11
	3H	22.52	24.00	22.89	24.32	24.68	22.68	24.16	23.05	24.49	24.85
	4H	23.18	24.58	23.58	24.92	25.30	23.38	24.77	23.77	25.12	25.50
	6H	23.65	24.95	24.06	25.31	25.70	23.93	25.22	24.34	25.59	25.98
	8H	23.80	25.04	24.23	25.43	25.83	24.12	25.35	24.54	25.74	26.14
	12H	23.91	25.10	24.34	25.48	25.91	24.26	25.45	24.69	25.83	26.26
4H	2H	21.38	22.78	21.78	23.12	23.50	21.46	22.86	21.86	23.21	23.58
	3H	23.38	24.56	23.79	24.95	25.35	23.53	24.70	23.94	25.10	25.50
	4H	24.17	25.24	24.61	25.65	26.09	24.36	25.43	24.80	25.84	26.28
	6H	24.77	25.70	25.23	26.14	26.60	25.05	25.98	25.51	26.42	26.88
	8H	24.97	25.84	25.43	26.28	26.75	25.30	26.17	25.76	26.61	27.08
	12H	25.12	25.91	25.60	26.38	26.85	25.50	26.28	25.98	26.75	27.22
8H	4H	24.51	25.38	24.97	25.82	26.29	24.68	25.55	25.14	25.99	26.46
	6H	25.23	25.96	25.73	26.45	26.92	25.50	26.23	25.99	26.71	27.19
	8H	25.51	26.16	26.01	26.66	27.15	25.83	26.48	26.34	26.99	27.48
	12H	25.73	26.31	26.24	26.80	27.36	26.12	26.70	26.63	27.19	27.75
12H	4H	24.55	25.34	25.03	25.81	26.28	24.71	25.49	25.19	25.97	26.44
	6H	25.31	25.96	25.81	26.46	26.95	25.56	26.21	26.07	26.72	27.20
	8H	25.64	26.22	26.15	26.71	27.27	25.96	26.53	26.46	27.02	27.58