

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: P893825

Luminaire Tested: 4MB-7HL-FLT-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893825
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-L830
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

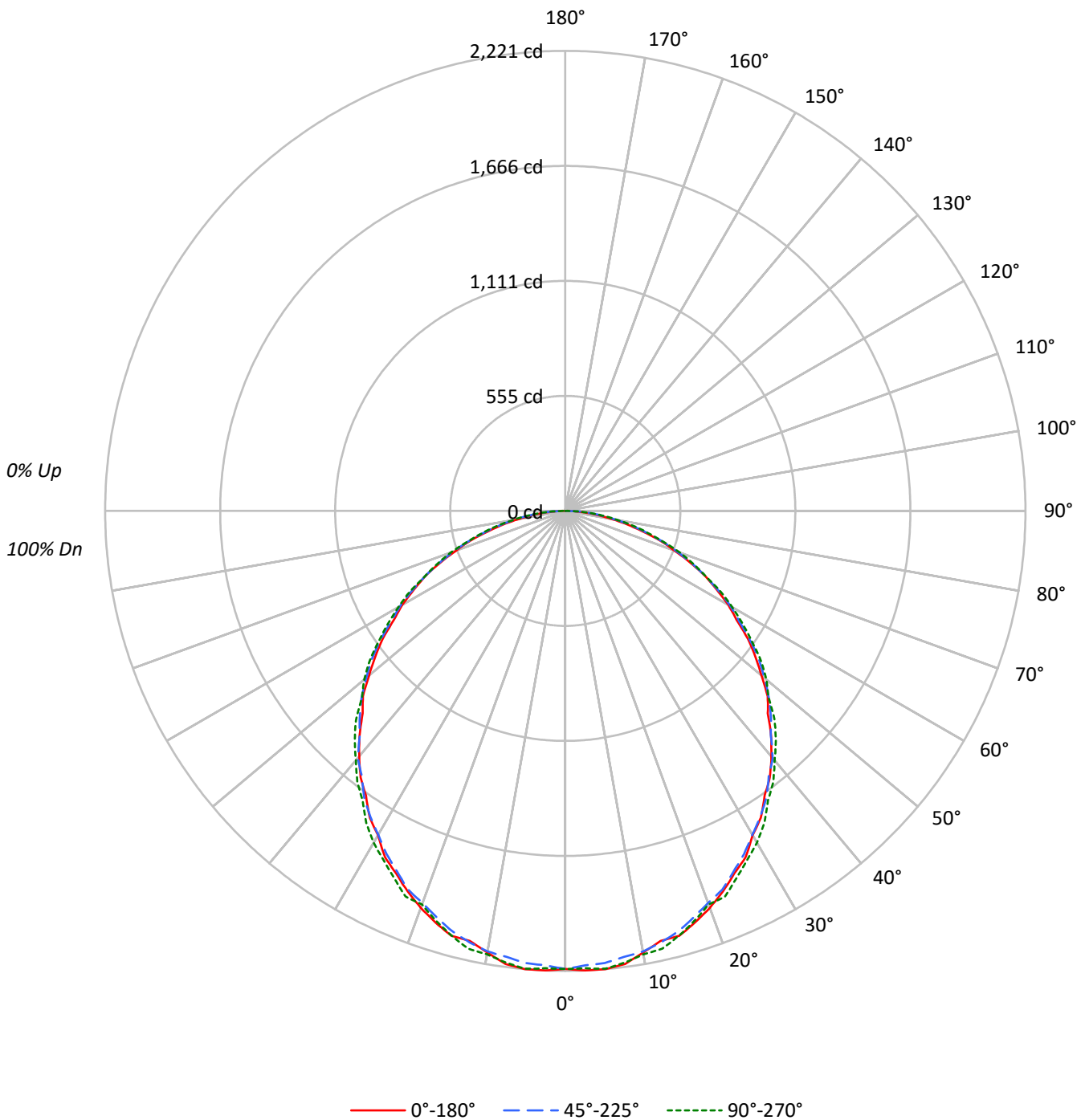
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6127.0 lumens
Efficiency: N/A
Efficacy: 118.3 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				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°	15733	15733	15733
5°	15861	15650	15848
10°	15644	15603	15707
15°	15648	15486	15634
20°	15441	15253	15311
25°	15163	15080	15350
30°	14856	14832	15201
35°	14569	14693	14818
40°	14372	14461	14603
45°	13908	14119	14379
50°	13681	13883	14020
55°	13341	13507	13650
60°	12927	13117	13240
65°	12542	12591	12591
70°	11664	11943	12240
75°	10740	11161	11397
80°	9473	10293	10645
85°	8498	9511	10213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14379 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.3	3.4
10°-20°	596.5	9.7
20°-30°	894.7	14.6
30°-40°	1062.6	17.3
40°-50°	1087.9	17.8
50°-60°	974.7	15.9
60°-70°	740.5	12.1
70°-80°	431.3	7.0
80°-90°	129.5	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°	1700.5	27.8
0°-40°	2763.1	45.1
0°-60°	4825.7	78.8
0°-90°	6127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6127.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2211	2211	2211	2211	2211	
5°	2221	2212	2191	2205	2219	210
15°	2124	2139	2102	2111	2122	596
25°	1931	1949	1921	1946	1955	891
35°	1677	1715	1692	1698	1706	1054
45°	1382	1416	1403	1415	1429	1075
55°	1076	1092	1089	1101	1100	958
65°	745	745	748	758	748	732
75°	391	397	406	418	415	416
85°	104	106	116	124	125	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2211.3	2211.3	2211.3	2211.3	2211.3
2.5°	2220.8	2210.3	2196.0	2200.8	2210.3
5°	2220.8	2212.2	2191.2	2204.6	2218.9
7.5°	2206.5	2217.9	2172.1	2172.1	2198.8
10°	2165.4	2187.4	2159.7	2156.8	2174.0
12.5°	2126.2	2166.4	2133.9	2143.4	2164.5
15°	2124.3	2138.7	2102.4	2111.0	2122.4
17.5°	2083.3	2097.6	2058.4	2074.7	2074.7
20°	2039.3	2042.2	2014.5	2049.8	2022.1
22.5°	1988.7	2018.3	1980.1	1991.6	2015.4
25°	1931.4	1948.6	1920.9	1945.7	1955.3
27.5°	1884.6	1905.6	1867.4	1897.0	1899.9
30°	1808.2	1831.1	1805.3	1824.4	1850.2
32.5°	1756.6	1764.2	1750.9	1779.5	1787.2
35°	1677.3	1714.6	1691.6	1698.3	1706.0
37.5°	1621.9	1633.4	1613.3	1636.2	1648.7
40°	1547.4	1564.6	1557.0	1560.8	1572.2
42.5°	1470.0	1488.2	1468.1	1495.8	1504.4
45°	1382.2	1416.5	1403.2	1414.6	1429.0
47.5°	1324.8	1336.3	1332.5	1339.2	1329.6
50°	1236.0	1247.5	1254.2	1262.8	1266.6
52.5°	1156.7	1165.3	1177.7	1182.5	1191.1
55°	1075.5	1091.8	1088.9	1101.3	1100.4
57.5°	981.0	1004.9	997.2	1015.4	1015.4
60°	908.4	912.2	921.8	930.4	930.4
62.5°	824.3	829.1	833.9	841.5	847.3
65°	745.0	745.0	747.9	757.5	747.9
67.5°	653.3	649.5	659.1	670.5	669.6
70°	560.7	565.5	574.1	588.4	588.4
72.5°	481.4	481.4	491.0	498.6	497.7
75°	390.7	397.4	406.0	418.4	414.6
77.5°	309.5	314.3	328.6	340.0	341.0
80°	231.2	235.9	251.2	262.7	259.8
82.5°	161.4	168.1	182.4	191.0	190.1
85°	104.1	106.0	116.5	124.2	125.1
87.5°	47.8	51.6	59.2	62.1	62.1
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	21.10	22.74	21.47	23.06	23.37	21.21	22.85	21.57	23.16	23.48
	3H	22.88	24.37	23.26	24.69	25.05	23.05	24.53	23.42	24.86	25.22
	4H	23.55	24.95	23.95	25.29	25.67	23.74	25.14	24.14	25.49	25.86
	6H	24.02	25.32	24.43	25.68	26.07	24.29	25.59	24.70	25.95	26.34
	8H	24.17	25.41	24.60	25.80	26.20	24.48	25.72	24.91	26.11	26.51
	12H	24.28	25.46	24.71	25.85	26.27	24.63	25.81	25.06	26.20	26.62
4H	2H	21.75	23.15	22.15	23.49	23.87	21.83	23.23	22.23	23.58	23.95
	3H	23.75	24.92	24.16	25.32	25.72	23.90	25.07	24.30	25.47	25.87
	4H	24.54	25.61	24.97	26.02	26.45	24.73	25.80	25.16	26.21	26.64
	6H	25.14	26.07	25.60	26.51	26.97	25.42	26.35	25.87	26.79	27.25
	8H	25.34	26.21	25.80	26.65	27.12	25.67	26.54	26.13	26.98	27.44
	12H	25.49	26.27	25.97	26.75	27.22	25.87	26.65	26.34	27.12	27.59
8H	4H	24.88	25.75	25.34	26.19	26.66	25.05	25.92	25.51	26.36	26.82
	6H	25.60	26.33	26.09	26.81	27.29	25.87	26.59	26.36	27.08	27.56
	8H	25.87	26.52	26.38	27.03	27.52	26.20	26.85	26.71	27.36	27.84
	12H	26.10	26.68	26.61	27.17	27.73	26.49	27.07	27.00	27.56	28.12
12H	4H	24.92	25.71	25.40	26.18	26.65	25.08	25.86	25.56	26.34	26.81
	6H	25.67	26.33	26.18	26.83	27.32	25.93	26.58	26.44	27.09	27.57
	8H	26.01	26.58	26.51	27.07	27.63	26.32	26.90	26.83	27.39	27.95