

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: P892853

Luminaire Tested: 2MB-5HL-LVRF-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892853
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-LVRF-UNV-L830
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3000K C
Light Source: -
Ballast/Driver: -

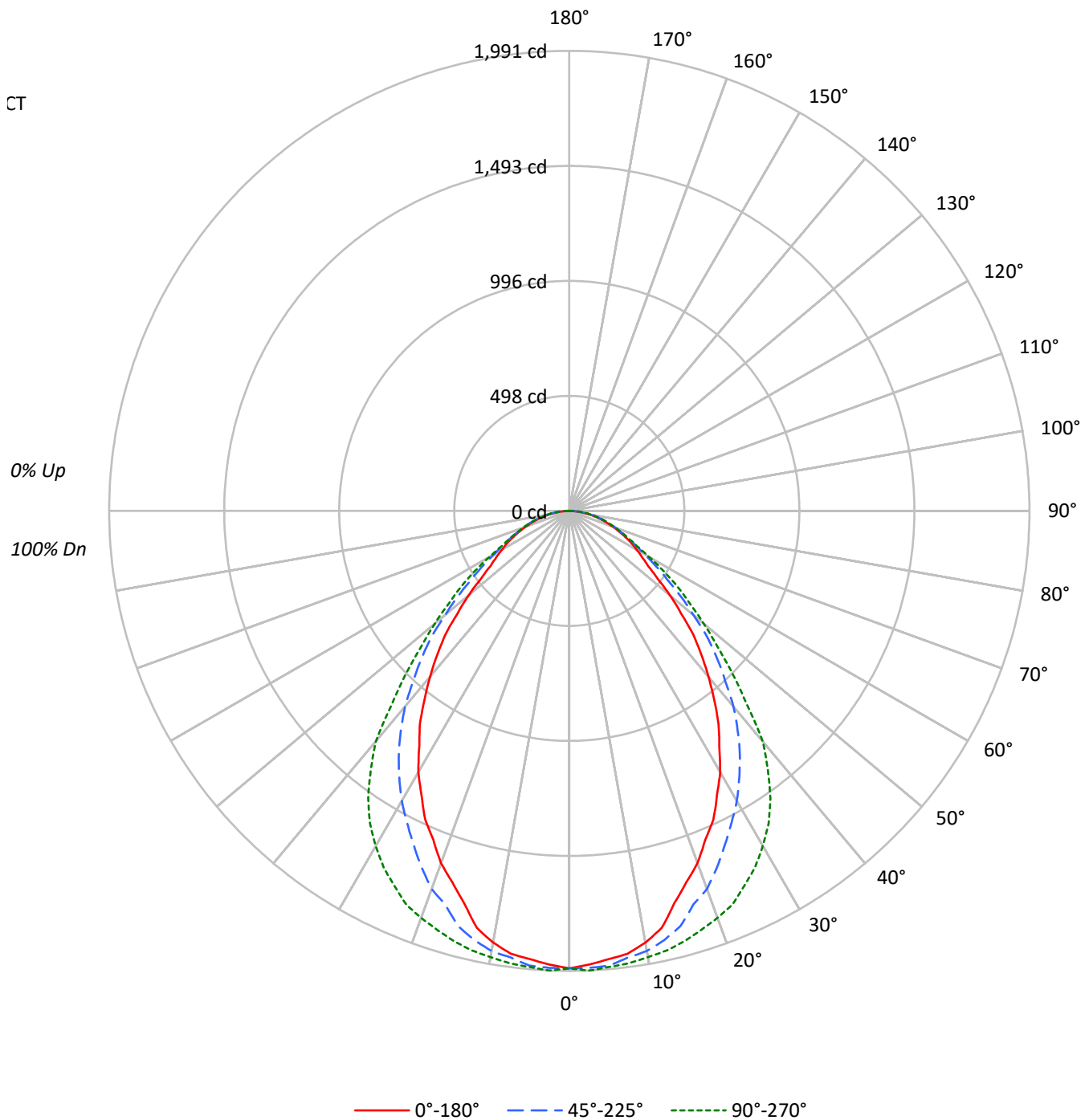
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3893.0 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.25 / 1.19
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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	85	75	68	62	73	66	61	70	65	60	68	63	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28321	28321	28321
5°	27965	28374	28456
10°	27558	28095	28481
15°	26026	27547	28547
20°	24699	26507	28532
25°	23284	25159	28263
30°	21572	23942	27664
35°	19669	22474	26491
40°	17483	20643	24316
45°	15343	18325	20267
50°	12650	15610	16921
55°	10383	12894	14246
60°	9653	10715	11367
65°	9041	9522	9586
70°	8428	8905	8863
75°	7827	8457	8512
80°	7200	7826	7983
85°	6237	6861	9044

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20267 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.7	4.8
10°-20°	520.7	13.4
20°-30°	744.4	19.1
30°-40°	812.1	20.9
40°-50°	684.0	17.6
50°-60°	455.6	11.7
60°-70°	281.1	7.2
70°-80°	159.3	4.1
80°-90°	49.2	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°	1451.8	37.3
0°-40°	2263.9	58.2
0°-60°	3403.4	87.4
0°-90°	3893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1980	1980	1980	1980	1980	
5°	1947	1958	1976	1976	1982	185
15°	1757	1792	1860	1915	1928	495
25°	1475	1506	1594	1745	1791	674
35°	1126	1176	1287	1438	1517	700
45°	758	800	906	966	1002	579
55°	416	446	517	552	571	385
65°	267	270	281	293	283	266
75°	142	144	153	159	154	150
85°	38	40	42	48	55	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1979.7	1979.7	1979.7	1979.7	1979.7
2.5°	1965.5	1966.4	1979.7	1987.3	1991.2
5°	1947.4	1957.9	1975.9	1975.9	1981.6
7.5°	1933.2	1935.1	1949.3	1970.2	1975.0
10°	1897.1	1906.6	1934.1	1957.9	1960.7
12.5°	1848.6	1854.3	1901.8	1947.4	1948.4
15°	1757.3	1792.5	1860.0	1915.1	1927.5
17.5°	1685.1	1721.2	1785.9	1884.7	1900.9
20°	1622.4	1642.3	1741.2	1848.6	1874.2
22.5°	1538.7	1575.8	1669.9	1805.8	1843.8
25°	1475.1	1505.5	1593.9	1745.0	1790.6
27.5°	1384.8	1430.4	1520.7	1680.4	1739.3
30°	1305.9	1355.3	1449.4	1611.9	1674.7
32.5°	1208.0	1260.3	1368.6	1529.2	1604.3
35°	1126.3	1175.7	1286.9	1438.0	1516.9
37.5°	1029.3	1085.4	1196.6	1338.2	1410.4
40°	936.2	983.7	1105.4	1227.0	1302.1
42.5°	846.8	890.6	998.9	1100.6	1137.7
45°	758.4	800.3	905.8	965.6	1001.8
47.5°	655.8	708.1	810.7	840.2	867.7
50°	568.4	612.1	701.4	728.0	760.3
52.5°	481.9	526.5	608.3	630.1	655.8
55°	416.3	445.8	517.0	552.2	571.2
57.5°	374.5	384.0	442.9	475.2	483.8
60°	337.4	343.1	374.5	403.9	397.3
62.5°	303.2	306.0	322.2	344.1	330.7
65°	267.1	269.9	281.3	292.7	283.2
67.5°	233.8	235.7	245.2	253.8	245.2
70°	201.5	202.4	212.9	218.6	211.9
72.5°	170.1	171.1	181.5	188.2	180.6
75°	141.6	143.5	153.0	158.7	154.0
77.5°	114.1	116.9	123.6	129.3	121.7
80°	87.4	89.3	95.0	101.7	96.9
82.5°	63.7	64.6	68.4	75.1	77.0
85°	38.0	39.9	41.8	48.5	55.1
87.5°	15.2	17.1	18.1	20.9	29.5
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	18.64	20.10	19.00	20.41	20.73	20.14	21.61	20.51	21.92	22.24
	3H	20.24	21.55	20.62	21.88	22.24	21.36	22.67	21.74	23.00	23.36
	4H	20.85	22.08	21.25	22.42	22.80	21.88	23.11	22.28	23.46	23.84
	6H	21.32	22.45	21.73	22.82	23.21	22.29	23.42	22.70	23.79	24.18
	8H	21.48	22.56	21.91	22.95	23.35	22.46	23.54	22.89	23.93	24.33
	12H	21.58	22.61	22.01	22.99	23.42	22.60	23.63	23.03	24.02	24.45
4H	2H	19.25	20.47	19.65	20.82	21.20	20.49	21.71	20.89	22.06	22.44
	3H	21.06	22.08	21.48	22.48	22.88	21.97	22.99	22.38	23.39	23.79
	4H	21.80	22.71	22.23	23.13	23.57	22.65	23.56	23.08	23.98	24.42
	6H	22.40	23.19	22.85	23.63	24.09	23.21	24.01	23.67	24.45	24.91
	8H	22.60	23.34	23.07	23.79	24.26	23.44	24.18	23.91	24.63	25.10
	12H	22.75	23.41	23.23	23.89	24.36	23.64	24.31	24.13	24.79	25.26
8H	4H	22.12	22.86	22.58	23.30	23.77	22.87	23.62	23.34	24.06	24.53
	6H	22.84	23.46	23.34	23.95	24.43	23.58	24.19	24.07	24.68	25.16
	8H	23.13	23.68	23.64	24.19	24.68	23.89	24.44	24.41	24.95	25.44
	12H	23.35	23.84	23.86	24.33	24.90	24.19	24.68	24.70	25.17	25.73
12H	4H	22.15	22.82	22.64	23.29	23.77	22.89	23.55	23.37	24.03	24.50
	6H	22.91	23.46	23.42	23.97	24.46	23.61	24.17	24.13	24.68	25.17
	8H	23.25	23.74	23.76	24.23	24.80	23.99	24.47	24.50	24.97	25.53