

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: P892861

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892861
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-RFLW-UNV-L830
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 3000K
Light Source: -
Ballast/Driver: -

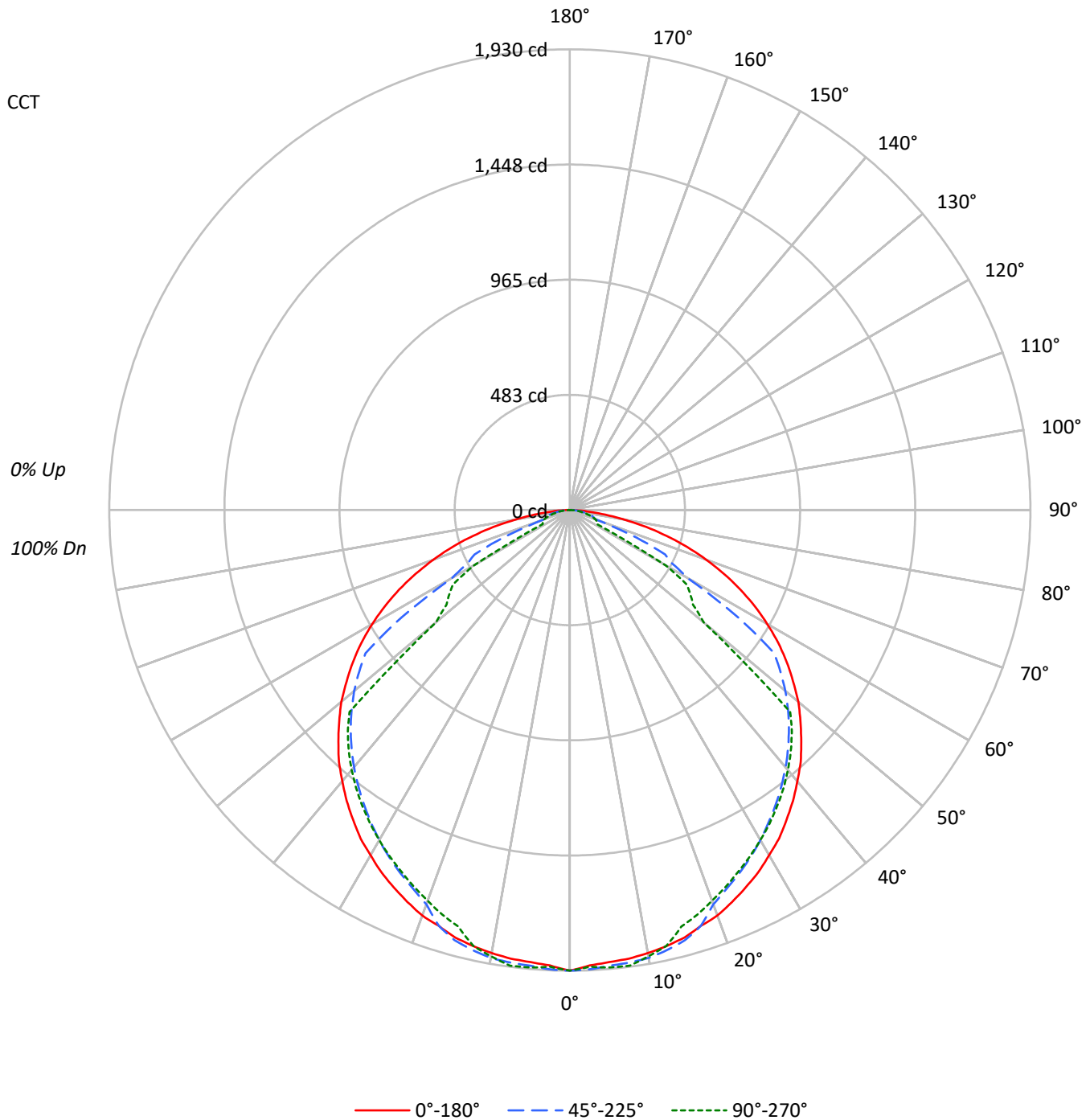
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4911.0 lumens
Efficiency: N/A
Efficacy: 145.7 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' 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: P892861
CATALOG NUMBER: 2MB-5HL-RFLW-UNV-L830

Luminous Intensity Polar Plot





TEST NUMBER: P892861
 CATALOG NUMBER: 2MB-5HL-RFLW-UNV-L830

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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	65	65	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	49	49	49	47
6	72	60	51	45	70	59	51	45	57	50	44	55	49	44	54	48	43	43	43	43	42
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	39	39	39	37
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	35	35	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	31	31	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	50375	50375	50375
5°	49821	50222	50424
10°	49962	50513	50339
15°	50112	50436	48839
20°	50233	48835	48410
25°	50257	48367	48145
30°	50351	48142	48142
35°	50479	47970	48283
40°	50550	47939	48460
45°	50642	47936	48582
50°	50779	47891	29764
55°	50484	47598	28080
60°	49918	29700	24275
65°	48717	27231	7704
70°	46503	8687	8687
75°	42367	9714	8604
80°	34701	9863	7893
85°	24564	9825	7219

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 50779 cd/sqm



TEST NUMBER: P892861
 CATALOG NUMBER: 2MB-5HL-RFLW-UNV-L830

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	3.7
10°-20°	521.0	10.6
20°-30°	785.5	16.0
30°-40°	954.5	19.4
40°-50°	1005.4	20.5
50°-60°	789.6	16.1
60°-70°	444.3	9.0
70°-80°	185.0	3.8
80°-90°	43.2	0.9
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°	1489.1	30.3
0°-40°	2443.5	49.8
0°-60°	4238.5	86.3
0°-90°	4911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4911.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1930	1930	1930	1930	1930	
5°	1901	1923	1916	1915	1924	181
15°	1854	1876	1866	1810	1807	523
25°	1745	1758	1679	1669	1671	805
35°	1584	1530	1505	1509	1515	992
45°	1372	1295	1298	1314	1316	1059
55°	1109	1029	1046	612	617	990
65°	789	725	441	119	125	778
75°	420	252	96	89	85	444
85°	82	36	33	27	24	104
90°	0	0	0	0	0	



TEST NUMBER: P892861
 CATALOG NUMBER: 2MB-5HL-RFLW-UNV-L830

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1929.5	1929.5	1929.5	1929.5	1929.5
2.5°	1909.8	1937.1	1926.2	1915.2	1915.2
5°	1901.0	1922.9	1916.3	1915.2	1924.0
7.5°	1895.5	1914.1	1912.0	1914.1	1925.1
10°	1884.6	1905.4	1905.4	1897.7	1898.8
12.5°	1871.5	1892.3	1887.9	1874.8	1870.4
15°	1854.0	1875.9	1866.0	1810.2	1806.9
17.5°	1826.6	1852.9	1826.6	1774.1	1777.4
20°	1808.0	1827.7	1757.7	1740.2	1742.4
22.5°	1777.4	1794.9	1717.3	1705.2	1707.4
25°	1744.6	1757.7	1679.0	1669.1	1671.3
27.5°	1710.7	1714.0	1639.6	1633.0	1635.2
30°	1670.2	1656.0	1596.9	1592.6	1596.9
32.5°	1631.9	1599.1	1551.0	1552.1	1557.6
35°	1583.8	1530.2	1505.1	1509.4	1514.9
37.5°	1535.7	1471.2	1456.9	1465.7	1470.1
40°	1483.2	1414.3	1406.6	1415.4	1421.9
42.5°	1431.8	1356.3	1354.1	1367.2	1370.5
45°	1371.6	1295.1	1298.3	1313.6	1315.8
47.5°	1310.4	1232.7	1240.4	1254.6	1252.4
50°	1250.2	1167.1	1179.1	1158.3	732.8
52.5°	1179.1	1099.3	1112.4	690.2	650.8
55°	1109.1	1029.3	1045.7	612.5	616.9
57.5°	1035.8	956.0	835.7	576.4	580.8
60°	956.0	881.6	568.8	539.2	464.9
62.5°	873.9	803.9	482.4	303.0	128.0
65°	788.6	725.2	440.8	119.2	124.7
67.5°	698.9	645.3	301.9	115.9	121.4
70°	609.2	501.0	113.8	111.6	113.8
72.5°	516.3	391.6	106.1	101.7	100.6
75°	420.0	251.6	96.3	88.6	85.3
77.5°	328.1	145.5	82.0	73.3	68.9
80°	230.8	74.4	65.6	55.8	52.5
82.5°	149.8	54.7	48.1	41.6	39.4
85°	82.0	36.1	32.8	27.3	24.1
87.5°	36.1	21.9	18.6	14.2	10.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P892861
 CATALOG NUMBER: 2MB-5HL-RFLW-UNV-L830

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	26.28	27.84	26.65	28.16	28.47	22.66	24.23	23.03	24.54	24.86
	3H	28.20	29.59	28.57	29.92	30.28	22.81	24.20	23.18	24.53	24.89
	4H	28.79	30.10	29.19	30.45	30.83	22.92	24.23	23.32	24.58	24.96
	6H	29.16	30.37	29.58	30.74	31.13	23.02	24.23	23.43	24.60	24.99
	8H	29.27	30.42	29.69	30.81	31.21	23.05	24.21	23.48	24.59	25.00
	12H	29.32	30.43	29.75	30.81	31.24	23.07	24.17	23.50	24.56	24.99
4H	2H	26.43	27.74	26.83	28.09	28.46	23.35	24.66	23.75	25.01	25.38
	3H	28.44	29.53	28.85	29.93	30.33	23.55	24.63	23.96	25.03	25.43
	4H	29.10	30.07	29.54	30.49	30.93	23.70	24.67	24.14	25.09	25.53
	6H	29.52	30.37	29.98	30.81	31.27	23.86	24.71	24.32	25.15	25.61
	8H	29.65	30.44	30.11	30.88	31.35	23.91	24.70	24.38	25.15	25.61
	12H	29.74	30.45	30.22	30.93	31.40	23.96	24.66	24.44	25.14	25.61
8H	4H	29.04	29.83	29.51	30.28	30.74	23.93	24.72	24.39	25.16	25.63
	6H	29.47	30.12	29.96	30.61	31.09	24.14	24.79	24.63	25.28	25.76
	8H	29.61	30.19	30.12	30.70	31.19	24.22	24.81	24.74	25.32	25.81
	12H	29.73	30.25	30.24	30.74	31.31	24.31	24.83	24.82	25.32	25.88
12H	4H	29.02	29.72	29.50	30.20	30.67	23.94	24.65	24.42	25.12	25.59
	6H	29.43	30.01	29.94	30.52	31.01	24.16	24.74	24.67	25.25	25.74
	8H	29.59	30.11	30.10	30.61	31.17	24.29	24.81	24.80	25.30	25.86