

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: P892864

Luminaire Tested: 2MB-5HL-RFLW-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892864
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-L850
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 80CRI, 5000K
Light Source: -
Ballast/Driver: -

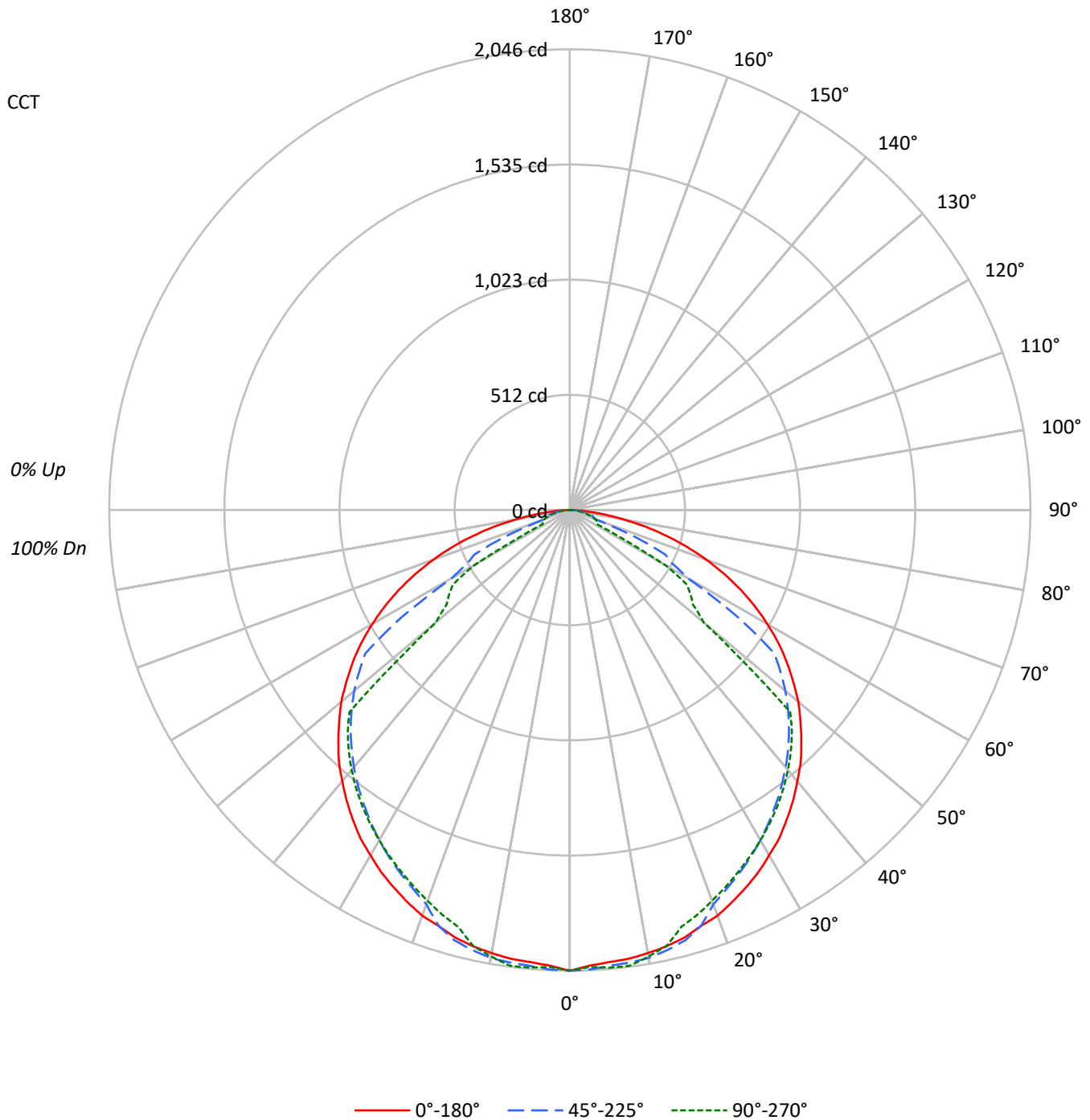
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5207.0 lumens
Efficiency: N/A
Efficacy: 154.5 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

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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	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°	53409	53409	53409
5°	52824	53249	53461
10°	52974	53557	53374
15°	53131	53477	51785
20°	53261	51780	51327
25°	53287	51282	51049
30°	53387	51045	51045
35°	53523	50861	51193
40°	53597	50829	51381
45°	53696	50827	51510
50°	53842	50779	31559
55°	53529	50466	29773
60°	52926	31491	25737
65°	51658	28874	8167
70°	49312	9206	9206
75°	44919	10299	9129
80°	36791	10464	8374
85°	26061	10425	7639

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 53842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.6	3.7
10°-20°	552.4	10.6
20°-30°	832.8	16.0
30°-40°	1012.0	19.4
40°-50°	1066.0	20.5
50°-60°	837.1	16.1
60°-70°	471.1	9.0
70°-80°	196.1	3.8
80°-90°	45.8	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°	1578.8	30.3
0°-40°	2590.8	49.8
0°-60°	4494.0	86.3
0°-90°	5207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5207.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2046	2046	2046	2046	2046	
5°	2016	2039	2032	2031	2040	192
15°	1966	1989	1978	1919	1916	555
25°	1850	1864	1780	1770	1772	853
35°	1679	1622	1596	1600	1606	1051
45°	1454	1373	1377	1393	1395	1122
55°	1176	1091	1109	649	654	1050
65°	836	769	467	126	132	825
75°	445	267	102	94	90	471
85°	87	38	35	29	26	111
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2045.7	2045.7	2045.7	2045.7	2045.7
2.5°	2024.9	2053.9	2042.3	2030.7	2030.7
5°	2015.6	2038.8	2031.8	2030.7	2039.9
7.5°	2009.8	2029.5	2027.2	2029.5	2041.1
10°	1998.2	2020.2	2020.2	2012.1	2013.3
12.5°	1984.3	2006.3	2001.7	1987.8	1983.1
15°	1965.7	1988.9	1978.5	1919.3	1915.9
17.5°	1936.7	1964.6	1936.7	1881.1	1884.5
20°	1917.0	1937.9	1863.7	1845.1	1847.4
22.5°	1884.5	1903.1	1820.8	1808.0	1810.3
25°	1849.8	1863.7	1780.2	1769.7	1772.1
27.5°	1813.8	1817.3	1738.4	1731.5	1733.8
30°	1770.9	1755.8	1693.2	1688.6	1693.2
32.5°	1730.3	1695.5	1644.5	1645.6	1651.4
35°	1679.3	1622.4	1595.8	1600.4	1606.2
37.5°	1628.2	1559.8	1544.7	1554.0	1558.7
40°	1572.6	1499.5	1491.4	1500.7	1507.6
42.5°	1518.1	1438.1	1435.7	1449.7	1453.1
45°	1454.3	1373.1	1376.6	1392.8	1395.1
47.5°	1389.3	1307.0	1315.1	1330.2	1327.9
50°	1325.6	1237.4	1250.2	1228.1	777.0
52.5°	1250.2	1165.5	1179.4	731.8	690.0
55°	1176.0	1091.3	1108.7	649.4	654.1
57.5°	1098.3	1013.6	886.0	611.2	615.8
60°	1013.6	934.7	603.1	571.7	492.9
62.5°	926.6	852.4	511.4	321.2	135.7
65°	836.2	768.9	467.4	126.4	132.2
67.5°	741.1	684.2	320.1	122.9	128.7
70°	646.0	531.2	120.6	118.3	120.6
72.5°	547.4	415.2	112.5	107.9	106.7
75°	445.3	266.7	102.1	93.9	90.5
77.5°	347.9	154.2	87.0	77.7	73.1
80°	244.7	78.9	69.6	59.1	55.7
82.5°	158.9	58.0	51.0	44.1	41.7
85°	87.0	38.3	34.8	29.0	25.5
87.5°	38.3	23.2	19.7	15.1	11.6
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	26.48	28.05	26.85	28.36	28.68	22.87	24.43	23.23	24.74	25.06
	3H	28.40	29.80	28.78	30.13	30.49	23.01	24.41	23.39	24.74	25.10
	4H	29.00	30.31	29.40	30.66	31.03	23.12	24.43	23.52	24.78	25.16
	6H	29.37	30.58	29.78	30.94	31.33	23.23	24.43	23.64	24.80	25.19
	8H	29.47	30.62	29.90	31.01	31.41	23.26	24.41	23.68	24.80	25.20
	12H	29.53	30.63	29.96	31.01	31.44	23.28	24.38	23.71	24.76	25.19
4H	2H	26.63	27.94	27.03	28.29	28.67	23.55	24.86	23.95	25.21	25.59
	3H	28.65	29.73	29.06	30.13	30.53	23.75	24.83	24.16	25.23	25.63
	4H	29.31	30.28	29.74	30.69	31.13	23.91	24.88	24.34	25.29	25.73
	6H	29.73	30.57	30.18	31.01	31.47	24.07	24.91	24.52	25.35	25.81
	8H	29.85	30.64	30.32	31.09	31.55	24.12	24.91	24.58	25.35	25.82
	12H	29.95	30.65	30.43	31.13	31.60	24.16	24.86	24.64	25.34	25.81
8H	4H	29.25	30.03	29.71	30.48	30.95	24.13	24.92	24.59	25.36	25.83
	6H	29.67	30.32	30.17	30.81	31.29	24.34	24.99	24.84	25.48	25.96
	8H	29.81	30.40	30.32	30.91	31.39	24.43	25.01	24.94	25.52	26.01
	12H	29.94	30.45	30.44	30.95	31.51	24.51	25.03	25.02	25.52	26.08
12H	4H	29.22	29.93	29.70	30.40	30.87	24.15	24.85	24.63	25.33	25.80
	6H	29.63	30.22	30.14	30.73	31.21	24.36	24.95	24.87	25.46	25.95
	8H	29.80	30.32	30.31	30.81	31.37	24.49	25.01	25.00	25.50	26.07