

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: P892840

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

Issue Date: 11/11/2024

**Test Information**

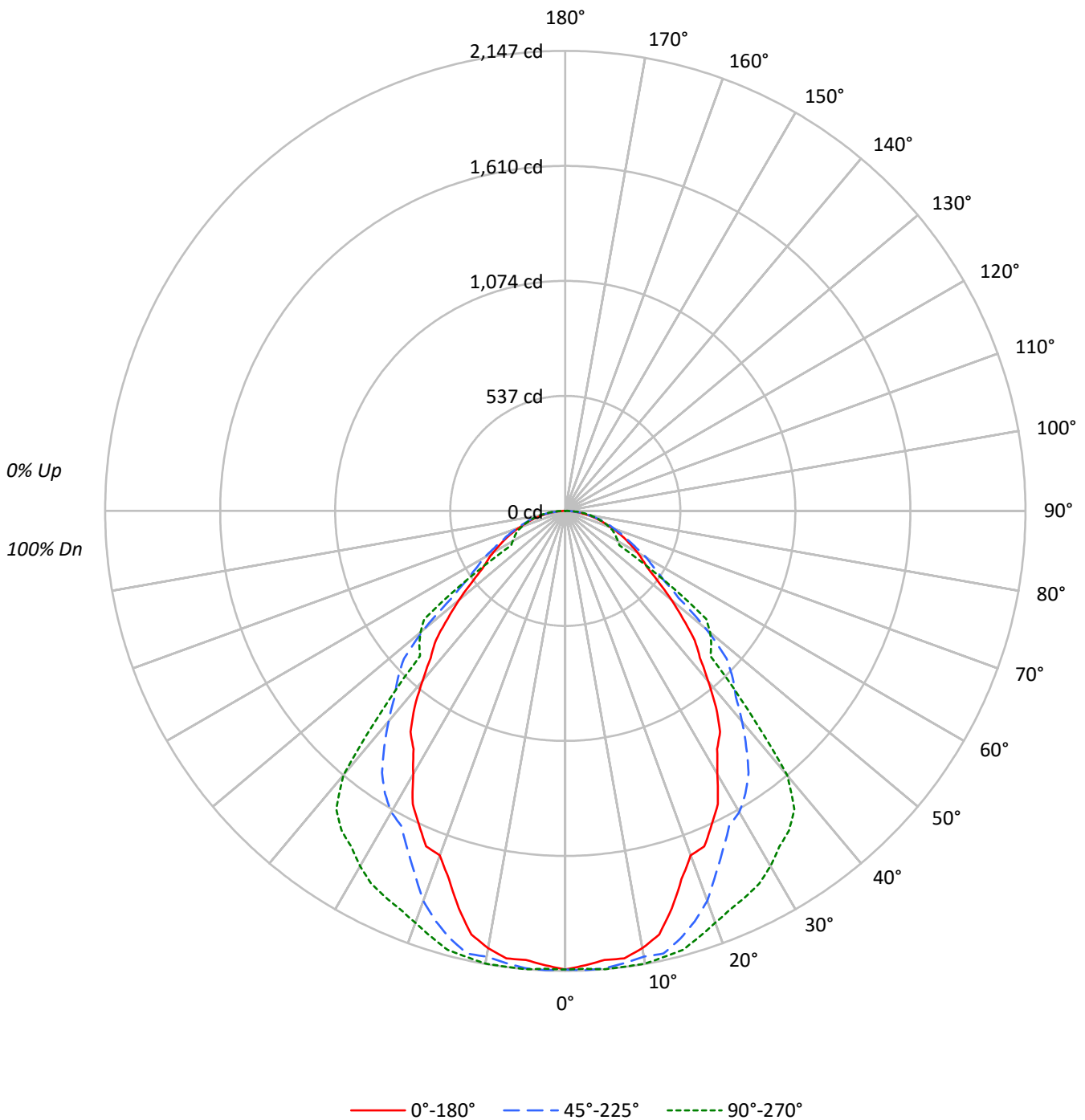
Test Method: LM-79-2019  
Report Number: P892840  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-LVR-UNV-L850  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4361.0 lumens  
Efficiency: N/A  
Efficacy: 129.4 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.24  
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<sub>in</sub>): 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	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	99	108	104	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	60	60	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	47	47	47	46
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	53	47	43	43	43	43	41
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	35	35	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	32	32	32	32	31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	30614	30614	30614
5°	30207	30759	30833
10°	30101	30689	31160
15°	28438	30629	31409
20°	26041	29479	31144
25°	25498	27496	31381
30°	23438	26818	31620
35°	21985	26035	31784
40°	19349	23963	30072
45°	17273	22353	19383
50°	14404	19160	19631
55°	11797	13892	13817
60°	11155	12489	8114
65°	10355	10869	8638
70°	9574	10168	9064
75°	8954	9684	9347
80°	8181	9013	9762
85°	7321	7813	10800

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 22353 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.4	4.7
10°-20°	572.5	13.1
20°-30°	825.9	18.9
30°-40°	936.7	21.5
40°-50°	780.1	17.9
50°-60°	504.2	11.6
60°-70°	298.9	6.9
70°-80°	182.2	4.2
80°-90°	56.9	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°	1601.8	36.7
0°-40°	2538.6	58.2
0°-60°	3822.9	87.7
0°-90°	4361.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4361.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2140	2140	2140	2140	2140	
5°	2104	2129	2142	2154	2147	201
15°	1920	1983	2068	2102	2121	536
25°	1615	1672	1742	1975	1988	739
35°	1259	1302	1491	1691	1820	775
45°	854	914	1105	1016	958	648
55°	473	518	557	669	554	441
65°	306	314	321	286	255	304
75°	162	166	175	184	169	172
85°	45	45	48	55	66	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2140.0	2140.0	2140.0	2140.0	2140.0
2.5°	2122.8	2142.0	2145.1	2162.3	2139.0
5°	2103.5	2128.9	2142.0	2154.2	2147.1
7.5°	2106.6	2120.8	2127.9	2149.1	2145.1
10°	2072.2	2100.5	2112.7	2138.0	2145.1
12.5°	2024.6	2061.0	2115.7	2110.6	2131.9
15°	1920.2	1983.0	2068.1	2101.5	2120.8
17.5°	1802.8	1872.6	2008.3	2087.3	2083.3
20°	1710.6	1763.3	1936.4	2047.8	2045.8
22.5°	1695.4	1707.5	1834.1	2020.5	2012.4
25°	1615.4	1672.1	1742.0	1974.9	1988.1
27.5°	1541.5	1592.1	1656.9	1917.2	1960.7
30°	1418.9	1506.0	1623.5	1855.4	1914.2
32.5°	1317.6	1401.7	1564.7	1779.5	1858.5
35°	1258.9	1302.4	1490.8	1691.3	1820.0
37.5°	1155.6	1236.6	1386.5	1588.0	1755.2
40°	1036.1	1129.3	1283.2	1496.9	1610.3
42.5°	929.7	1004.7	1177.9	1324.7	1264.0
45°	853.8	913.5	1104.9	1015.8	958.1
47.5°	744.4	820.4	1020.9	834.5	923.7
50°	647.2	713.0	860.9	789.0	882.1
52.5°	553.0	615.8	666.4	744.4	829.5
55°	473.0	518.5	557.0	669.4	554.0
57.5°	429.4	443.6	487.1	478.0	298.8
60°	389.9	396.0	436.5	323.1	283.6
62.5°	345.4	356.5	372.7	302.8	268.4
65°	305.9	314.0	321.1	285.6	255.2
67.5°	267.4	275.5	282.6	265.3	239.0
70°	228.9	234.0	243.1	239.0	216.7
72.5°	194.5	198.5	209.6	212.7	195.5
75°	162.0	166.1	175.2	184.3	169.1
77.5°	130.6	133.7	143.8	150.9	145.8
80°	99.3	104.3	109.4	118.5	118.5
82.5°	72.9	73.9	79.0	88.1	92.2
85°	44.6	44.6	47.6	54.7	65.8
87.5°	19.2	19.2	21.3	23.3	33.4
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	19.24	20.70	19.60	21.01	21.33	19.21	20.67	19.57	20.99	21.30
	3H	20.84	22.14	21.22	22.47	22.84	20.69	21.99	21.06	22.32	22.68
	4H	21.44	22.67	21.84	23.02	23.40	21.39	22.61	21.79	22.96	23.34
	6H	21.90	23.03	22.32	23.40	23.80	22.01	23.14	22.42	23.50	23.90
	8H	22.06	23.14	22.49	23.53	23.93	22.25	23.33	22.68	23.72	24.12
	12H	22.17	23.20	22.60	23.58	24.01	22.46	23.48	22.89	23.87	24.30
4H	2H	19.84	21.06	20.24	21.41	21.79	19.81	21.04	20.21	21.39	21.77
	3H	21.66	22.67	22.07	23.07	23.47	21.57	22.58	21.98	22.98	23.38
	4H	22.39	23.30	22.82	23.72	24.16	22.44	23.35	22.87	23.76	24.20
	6H	22.98	23.77	23.44	24.22	24.68	23.19	23.99	23.65	24.43	24.89
	8H	23.18	23.93	23.65	24.37	24.84	23.49	24.23	23.96	24.68	25.15
	12H	23.33	23.99	23.81	24.47	24.94	23.75	24.41	24.23	24.89	25.36
8H	4H	22.71	23.45	23.17	23.89	24.36	22.75	23.49	23.21	23.93	24.40
	6H	23.43	24.04	23.93	24.53	25.01	23.65	24.26	24.15	24.75	25.23
	8H	23.71	24.26	24.22	24.77	25.26	24.04	24.59	24.56	25.10	25.59
	12H	23.93	24.42	24.44	24.91	25.48	24.39	24.88	24.90	25.37	25.94
12H	4H	22.74	23.40	23.22	23.88	24.35	22.77	23.43	23.25	23.91	24.38
	6H	23.49	24.05	24.01	24.56	25.05	23.70	24.25	24.22	24.76	25.25
	8H	23.83	24.32	24.34	24.82	25.38	24.15	24.64	24.66	25.14	25.70