

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: P892856

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

Issue Date: 11/11/2024

**Test Information**

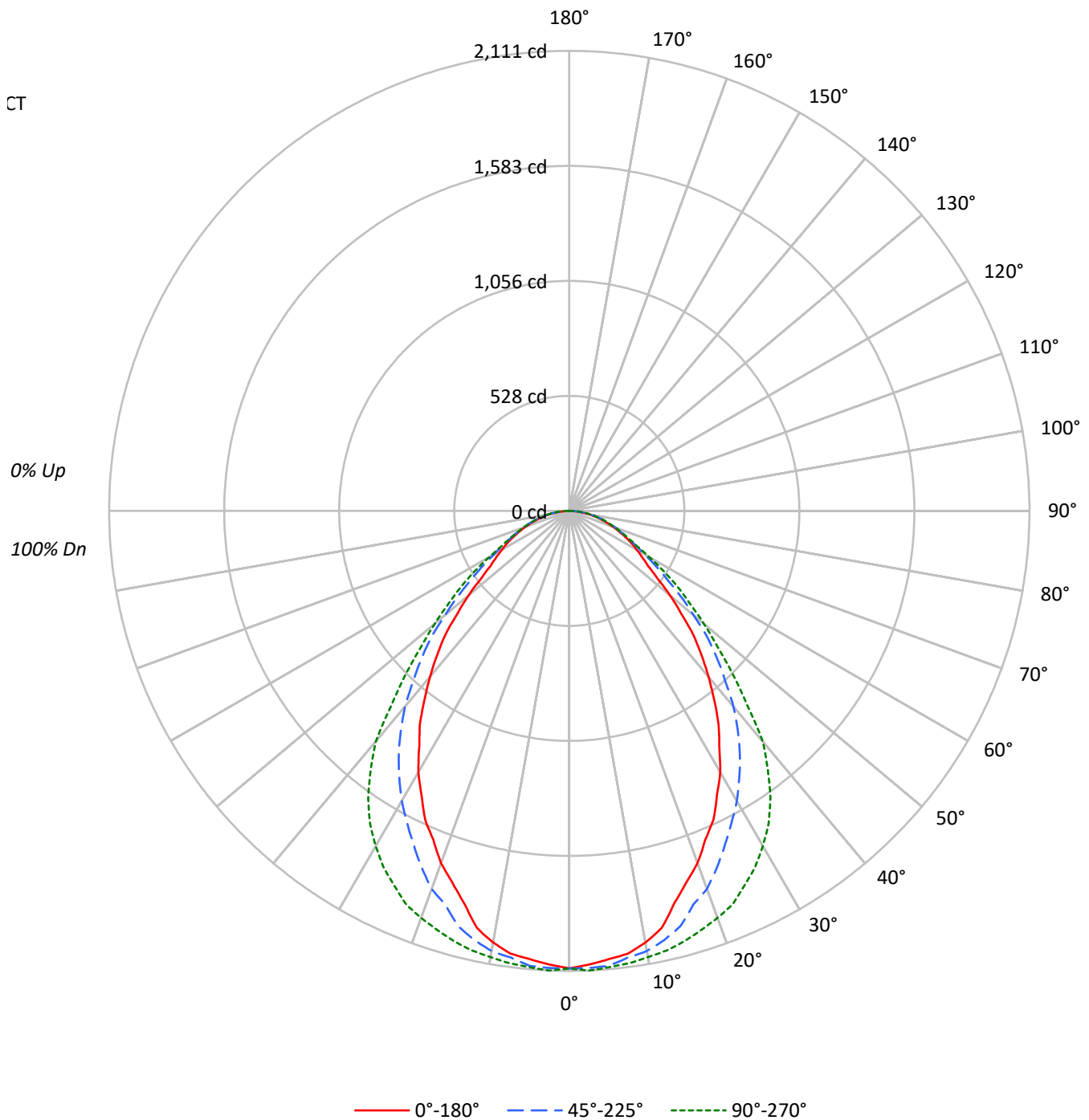
Test Method: LM-79-2019  
Report Number: P892856  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-5HL-LVRF-UNV-L850  
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 5000K C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4128.0 lumens  
Efficiency: N/A  
Efficacy: 122.5 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<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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	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	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	68	68	66
4	87	76	68	62	85	75	68	62	73	66	61	70	65	60	68	63	60	60	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	48	48	46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	43	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	39	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	36	34
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	33	33	31

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

	0°	45°	90°
0°	30032	30032	30032
5°	29654	30087	30175
10°	29221	29792	30201
15°	27597	29210	30269
20°	26189	28107	30255
25°	24688	26677	29970
30°	22873	25387	29332
35°	20855	23831	28090
40°	18538	21888	25784
45°	16270	19430	21489
50°	13413	16554	17942
55°	11009	13673	15107
60°	10237	11361	12054
65°	9586	10097	10165
70°	8938	9440	9398
75°	8302	8971	9026
80°	7637	8304	8469
85°	6615	7271	9602

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 21489 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.0	4.8
10°-20°	552.2	13.4
20°-30°	789.3	19.1
30°-40°	861.1	20.9
40°-50°	725.3	17.6
50°-60°	483.1	11.7
60°-70°	298.1	7.2
70°-80°	168.9	4.1
80°-90°	52.1	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°	1539.4	37.3
0°-40°	2400.5	58.2
0°-60°	3608.9	87.4
0°-90°	4128.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4128.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2099	2099	2099	2099	2099	
5°	2065	2076	2095	2095	2101	196
15°	1863	1901	1972	2031	2044	525
25°	1564	1596	1690	1850	1899	715
35°	1194	1247	1365	1525	1608	742
45°	804	849	960	1024	1062	614
55°	441	473	548	586	606	408
65°	283	286	298	310	300	282
75°	150	152	162	168	163	159
85°	40	42	44	51	58	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2099.3	2099.3	2099.3	2099.3	2099.3
2.5°	2084.1	2085.1	2099.3	2107.3	2111.3
5°	2065.0	2076.1	2095.2	2095.2	2101.3
7.5°	2049.9	2051.9	2067.0	2089.2	2094.2
10°	2011.6	2021.7	2050.9	2076.1	2079.1
12.5°	1960.2	1966.2	2016.6	2065.0	2066.0
15°	1863.4	1900.7	1972.3	2030.7	2043.8
17.5°	1786.8	1825.1	1893.7	1998.5	2015.6
20°	1720.3	1741.5	1846.3	1960.2	1987.4
22.5°	1631.6	1670.9	1770.7	1914.8	1955.1
25°	1564.1	1596.4	1690.1	1850.3	1898.7
27.5°	1468.4	1516.7	1612.5	1781.8	1844.3
30°	1384.7	1437.1	1536.9	1709.2	1775.7
32.5°	1280.9	1336.3	1451.2	1621.6	1701.2
35°	1194.2	1246.7	1364.6	1524.8	1608.5
37.5°	1091.5	1150.9	1268.8	1419.0	1495.6
40°	992.7	1043.1	1172.1	1301.1	1380.7
42.5°	898.0	944.3	1059.2	1167.0	1206.3
45°	804.2	848.6	960.4	1023.9	1062.2
47.5°	695.4	750.8	859.7	890.9	920.1
50°	602.7	649.0	743.8	772.0	806.2
52.5°	511.0	558.3	645.0	668.2	695.4
55°	441.4	472.7	548.2	585.5	605.7
57.5°	397.1	407.2	469.6	503.9	513.0
60°	357.8	363.8	397.1	428.3	421.3
62.5°	321.5	324.5	341.6	364.8	350.7
65°	283.2	286.2	298.3	310.4	300.3
67.5°	247.9	249.9	260.0	269.1	260.0
70°	213.7	214.7	225.7	231.8	224.7
72.5°	180.4	181.4	192.5	199.5	191.5
75°	150.2	152.2	162.3	168.3	163.3
77.5°	120.9	124.0	131.0	137.1	129.0
80°	92.7	94.7	100.8	107.8	102.8
82.5°	67.5	68.5	72.6	79.6	81.6
85°	40.3	42.3	44.3	51.4	58.5
87.5°	16.1	18.1	19.1	22.2	31.2
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	18.84	20.30	19.21	20.62	20.93	20.35	21.81	20.71	22.13	22.44
	3H	20.44	21.75	20.82	22.08	22.44	21.57	22.87	21.94	23.20	23.57
	4H	21.05	22.28	21.45	22.63	23.01	22.08	23.31	22.49	23.66	24.04
	6H	21.52	22.65	21.94	23.02	23.41	22.50	23.63	22.91	23.99	24.39
	8H	21.68	22.76	22.11	23.15	23.55	22.66	23.74	23.09	24.13	24.53
	12H	21.79	22.82	22.22	23.20	23.63	22.81	23.84	23.24	24.22	24.65
4H	2H	19.45	20.68	19.85	21.03	21.41	20.69	21.92	21.09	22.27	22.65
	3H	21.27	22.28	21.68	22.68	23.09	22.18	23.19	22.59	23.59	23.99
	4H	22.00	22.92	22.44	23.33	23.77	22.85	23.76	23.28	24.18	24.62
	6H	22.60	23.39	23.06	23.84	24.30	23.42	24.21	23.88	24.66	25.12
	8H	22.81	23.55	23.27	23.99	24.46	23.64	24.39	24.11	24.83	25.30
	12H	22.95	23.61	23.44	24.09	24.57	23.85	24.51	24.33	24.99	25.46
8H	4H	22.32	23.06	22.79	23.51	23.98	23.08	23.82	23.54	24.26	24.73
	6H	23.05	23.66	23.55	24.15	24.63	23.78	24.39	24.28	24.89	25.36
	8H	23.33	23.88	23.85	24.39	24.88	24.09	24.64	24.61	25.16	25.64
	12H	23.55	24.04	24.06	24.53	25.10	24.39	24.88	24.90	25.37	25.94
12H	4H	22.36	23.02	22.84	23.50	23.97	23.09	23.75	23.57	24.23	24.70
	6H	23.11	23.67	23.63	24.18	24.67	23.82	24.37	24.33	24.88	25.37
	8H	23.46	23.94	23.97	24.44	25.00	24.19	24.68	24.70	25.17	25.74