

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: P893636

Luminaire Tested: 4MB-5SL-LVR-UNV-L850

Issue Date: 11/11/2024

**Test Information**

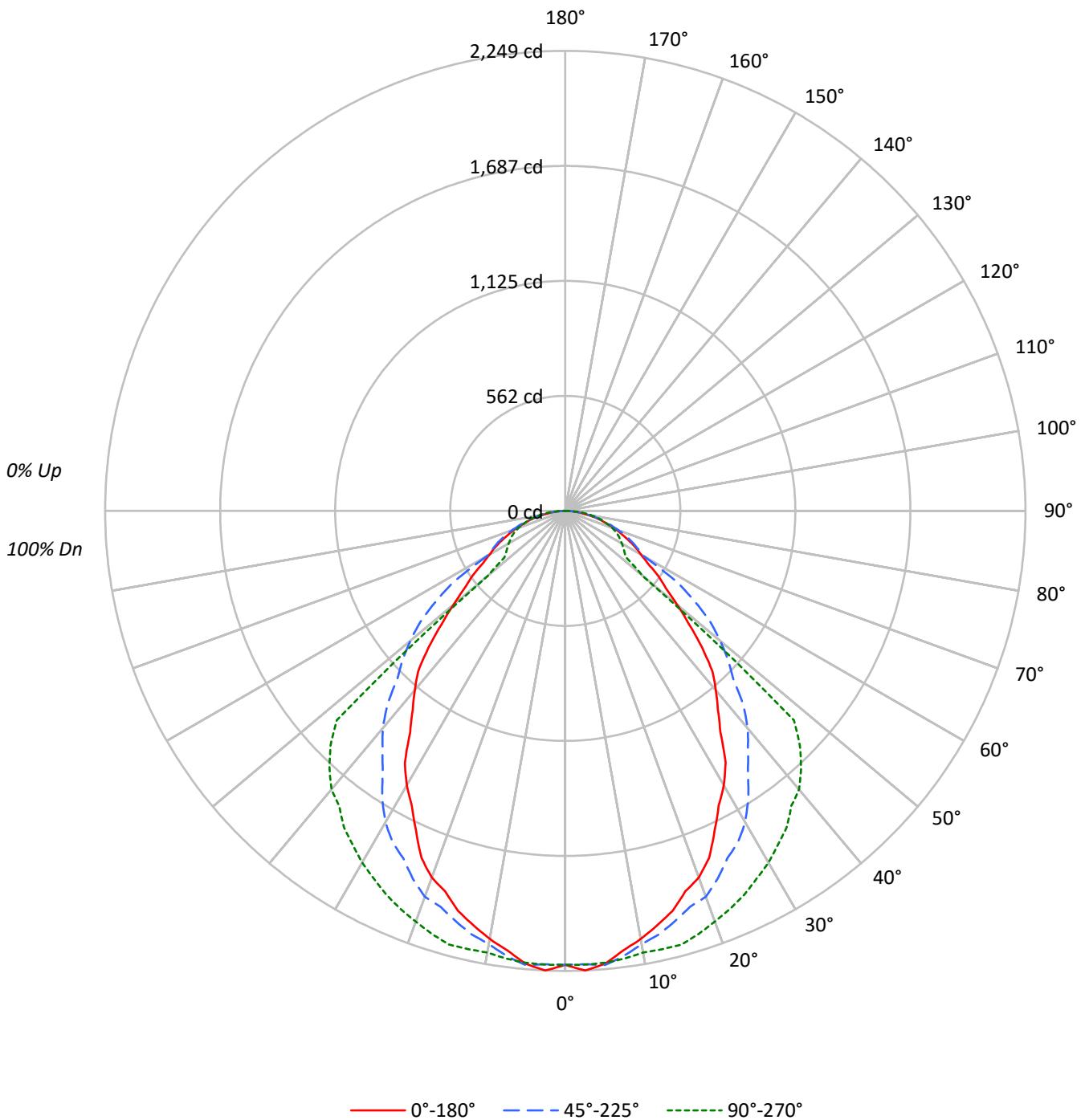
Test Method: LM-79-2019  
Report Number: P893636  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-5SL-LVR-UNV-L850  
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4736.0 lumens  
Efficiency: N/A  
Efficacy: 135.3 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27  
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 9.55  
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	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	33	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30	30	

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

	0°	45°	90°
0°	15790	15790	15790
5°	15875	15916	15834
10°	15354	15535	15837
15°	14911	15287	16164
20°	14444	15199	16178
25°	13552	14709	16248
30°	12729	14443	16315
35°	11479	13507	16392
40°	10633	12885	16508
45°	9512	11679	16321
50°	7891	10941	5482
55°	6876	9602	4386
60°	6080	6258	4548
65°	5781	6088	4828
70°	5423	5754	5093
75°	5047	5421	5234
80°	4597	5109	5478
85°	4074	4351	5919

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 16321 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.5	4.4
10°-20°	592.2	12.5
20°-30°	871.1	18.4
30°-40°	996.2	21.0
40°-50°	943.3	19.9
50°-60°	519.7	11.0
60°-70°	333.7	7.0
70°-80°	205.9	4.3
80°-90°	63.4	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°	1673.8	35.3
0°-40°	2670.0	56.4
0°-60°	4133.0	87.3
0°-90°	4736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4736.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2219	2219	2219	2219	2219	
5°	2223	2241	2228	2228	2217	208
15°	2024	2049	2075	2184	2194	568
25°	1726	1803	1874	1996	2070	795
35°	1322	1435	1555	1781	1887	835
45°	945	1035	1161	1489	1622	723
55°	554	582	774	399	354	496
65°	343	355	362	322	287	340
75°	184	187	197	207	190	195
85°	50	50	53	61	72	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2219.3	2219.3	2219.3	2219.3	2219.3
2.5°	2248.8	2254.4	2218.2	2217.0	2220.4
5°	2222.7	2240.8	2228.4	2228.4	2217.0
7.5°	2167.2	2197.8	2194.4	2220.4	2208.0
10°	2125.2	2150.2	2150.2	2218.2	2192.1
12.5°	2075.3	2103.7	2119.6	2191.0	2194.4
15°	2024.3	2049.3	2075.3	2184.2	2194.4
17.5°	1950.7	1996.0	2028.9	2135.4	2168.3
20°	1907.6	1934.8	2007.3	2093.5	2136.6
22.5°	1836.2	1875.9	1946.1	2042.5	2106.0
25°	1726.2	1803.3	1873.6	1996.0	2069.7
27.5°	1624.2	1682.0	1827.1	1956.3	2026.6
30°	1549.4	1594.8	1758.0	1898.5	1985.8
32.5°	1458.8	1532.4	1665.0	1841.9	1934.8
35°	1321.6	1434.9	1555.1	1780.7	1887.2
37.5°	1225.3	1303.5	1466.7	1717.2	1815.8
40°	1144.8	1216.2	1387.3	1637.8	1777.3
42.5°	1064.3	1122.1	1287.6	1578.9	1705.8
45°	945.3	1034.8	1160.7	1489.4	1622.0
47.5°	820.6	915.8	1077.9	1413.4	1515.4
50°	712.9	788.9	988.4	1262.7	495.3
52.5°	618.9	689.1	893.2	456.8	374.0
55°	554.3	581.5	774.1	399.0	353.6
57.5°	477.2	521.4	649.5	379.7	335.5
60°	427.3	446.6	439.8	360.4	319.6
62.5°	387.6	401.2	399.0	341.2	301.5
65°	343.4	354.8	361.6	321.9	286.8
67.5°	299.2	309.4	319.6	298.1	266.4
70°	260.7	267.5	276.6	269.8	244.8
72.5°	221.0	229.0	234.6	240.3	216.5
75°	183.6	187.0	197.2	207.4	190.4
77.5°	149.6	153.0	159.8	171.2	162.1
80°	112.2	115.6	124.7	133.7	133.7
82.5°	79.3	81.6	87.3	99.7	105.4
85°	49.9	49.9	53.3	61.2	72.5
87.5°	19.3	19.3	22.7	27.2	36.3
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	17.54	19.02	17.90	19.33	19.65	15.34	16.82	15.70	17.14	17.45
	3H	19.06	20.39	19.44	20.72	21.08	17.67	19.00	18.05	19.32	19.69
	4H	19.66	20.90	20.06	21.25	21.63	18.62	19.86	19.02	20.21	20.59
	6H	20.11	21.26	20.53	21.63	22.02	19.40	20.55	19.82	20.92	21.31
	8H	20.26	21.35	20.68	21.74	22.14	19.72	20.81	20.14	21.20	21.60
	12H	20.35	21.40	20.78	21.78	22.21	19.96	21.01	20.39	21.39	21.82
4H	2H	18.09	19.33	18.49	19.68	20.06	16.44	17.69	16.84	18.04	18.42
	3H	19.86	20.89	20.27	21.29	21.69	18.89	19.92	19.30	20.32	20.72
	4H	20.58	21.51	21.01	21.92	22.36	19.96	20.88	20.39	21.30	21.74
	6H	21.17	21.97	21.62	22.41	22.87	20.84	21.65	21.30	22.09	22.55
	8H	21.35	22.11	21.82	22.55	23.02	21.19	21.95	21.66	22.39	22.86
	12H	21.49	22.16	21.97	22.64	23.11	21.48	22.16	21.97	22.64	23.11
8H	4H	20.89	21.64	21.35	22.08	22.55	20.34	21.10	20.81	21.54	22.01
	6H	21.60	22.22	22.10	22.71	23.19	21.38	22.00	21.88	22.49	22.97
	8H	21.86	22.42	22.37	22.93	23.42	21.82	22.38	22.34	22.89	23.38
	12H	22.07	22.57	22.58	23.06	23.63	22.21	22.71	22.72	23.20	23.76
12H	4H	20.92	21.60	21.41	22.07	22.55	20.38	21.05	20.86	21.53	22.00
	6H	21.66	22.23	22.18	22.74	23.22	21.44	22.00	21.96	22.51	23.00
	8H	21.98	22.48	22.49	22.97	23.54	21.95	22.45	22.46	22.94	23.51