

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: P892750

Luminaire Tested: 2MB-4HL-LVRA-UNV-L835

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P892750  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-4HL-LVRA-UNV-L835  
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

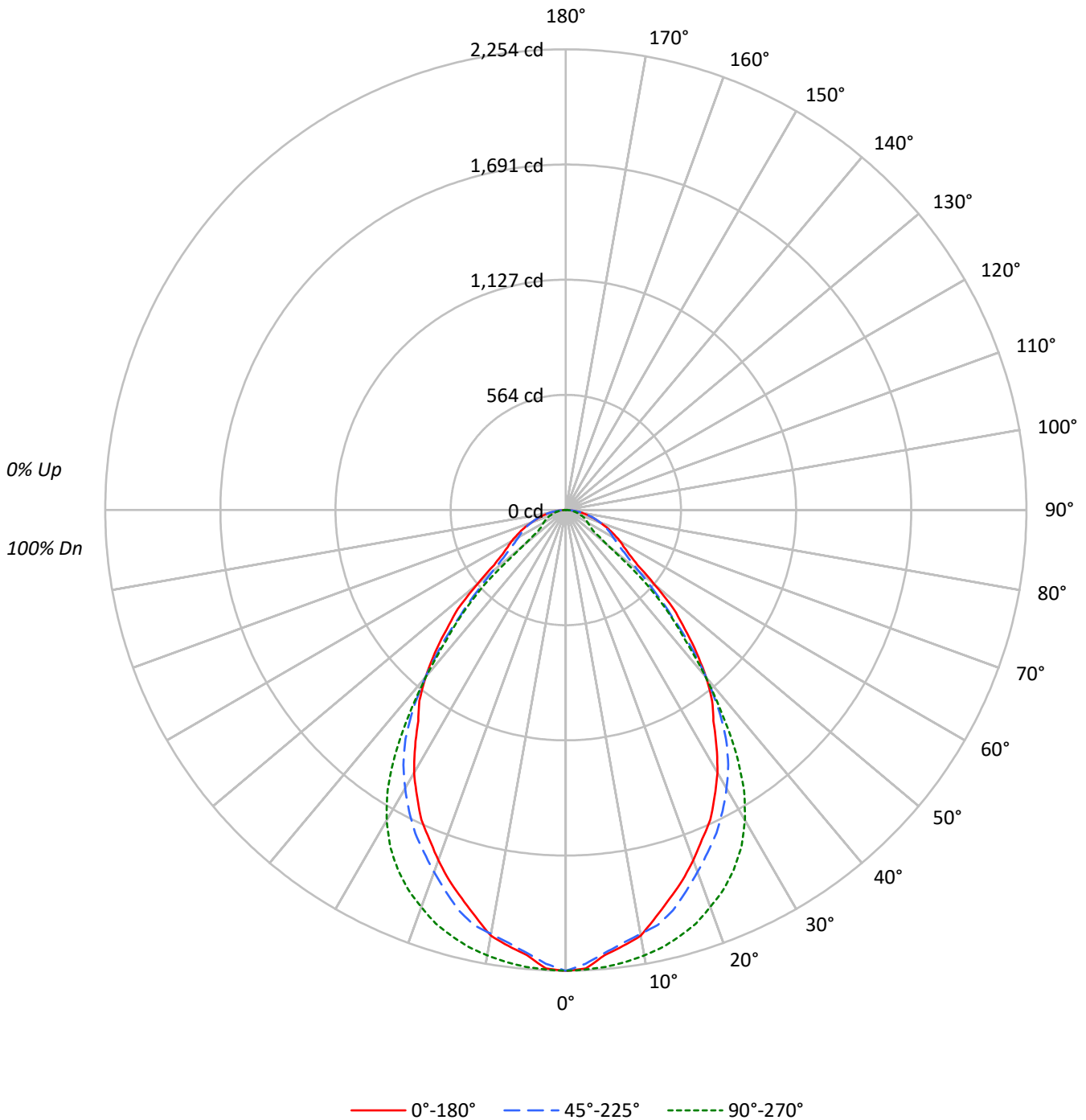
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3659.0 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12  
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 27.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 6.5  
Total Harmonic Distortion (THDi): 0.99  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	80	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	71	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	63	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	57	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	52	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	47	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	43	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	40	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	37	37	35

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

	0°	45°	90°
0°	32252	32252	32252
5°	31383	31240	32217
10°	30716	30581	32142
15°	29130	30025	31962
20°	27750	28687	31473
25°	26396	27525	30671
30°	24523	25982	28959
35°	21990	23876	25399
40°	19922	19967	19857
45°	16658	14752	14388
50°	12583	10384	5884
55°	9463	8303	3711
60°	8795	7648	3574
65°	8181	7633	3581
70°	7487	7487	3526
75°	7097	7290	3405
80°	6558	6895	3493
85°	5728	6007	3808

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 17045 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.3	5.7
10°-20°	573.8	15.7
20°-30°	813.7	22.2
30°-40°	838.3	22.9
40°-50°	585.5	16.0
50°-60°	281.0	7.7
60°-70°	197.1	5.4
70°-80°	123.2	3.4
80°-90°	38.1	1.0
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°	1595.8	43.6
0°-40°	2434.1	66.5
0°-60°	3300.5	90.2
0°-90°	3659.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3659.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2254	2254	2254	2254	2254	
5°	2185	2182	2176	2232	2244	207
15°	1967	1981	2027	2085	2158	554
25°	1672	1689	1744	1862	1943	765
35°	1259	1293	1367	1396	1454	793
45°	823	842	729	692	711	634
55°	379	361	333	213	149	356
65°	242	226	226	171	106	240
75°	128	127	132	114	62	135
85°	35	35	37	36	23	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2254.5	2254.5	2254.5	2254.5	2254.5
2.5°	2245.8	2238.8	2222.0	2252.8	2250.5
5°	2185.4	2182.5	2175.5	2232.4	2243.5
7.5°	2151.1	2145.3	2137.1	2199.9	2230.7
10°	2114.5	2121.5	2105.2	2162.7	2212.7
12.5°	2038.9	2057.5	2079.6	2124.4	2190.6
15°	1966.9	1981.4	2027.3	2085.4	2158.1
17.5°	1899.5	1916.3	1955.9	2043.0	2120.3
20°	1822.8	1846.0	1884.4	1995.9	2067.4
22.5°	1743.8	1765.3	1813.5	1933.2	2012.8
25°	1672.3	1689.1	1743.8	1861.7	1943.1
27.5°	1577.6	1609.0	1660.7	1774.6	1860.0
30°	1484.6	1511.3	1572.9	1668.8	1753.1
32.5°	1372.5	1411.4	1479.4	1552.6	1622.9
35°	1259.2	1293.4	1367.2	1395.7	1454.4
37.5°	1176.7	1185.9	1227.8	1224.3	1257.4
40°	1066.8	1085.4	1069.2	1025.6	1063.3
42.5°	948.3	970.4	904.7	854.2	867.5
45°	823.4	842.5	729.2	692.0	711.2
47.5°	715.3	713.5	588.0	563.0	536.3
50°	565.4	584.0	466.6	420.1	264.4
52.5°	441.6	448.6	384.7	268.5	173.7
55°	379.4	360.8	332.9	213.2	148.8
57.5°	337.0	313.8	295.2	198.1	136.0
60°	307.4	281.2	267.3	188.3	124.9
62.5°	273.7	253.3	248.1	179.5	115.1
65°	241.7	226.0	225.5	171.4	105.8
67.5°	209.8	201.0	203.4	161.5	95.3
70°	179.0	177.2	179.0	148.8	84.3
72.5°	152.8	151.1	155.7	132.5	72.1
75°	128.4	126.7	131.9	113.9	61.6
77.5°	102.3	103.4	106.9	94.7	51.7
80°	79.6	79.6	83.7	74.4	42.4
82.5°	56.9	57.5	59.8	54.6	33.1
85°	34.9	34.9	36.6	36.0	23.2
87.5°	11.6	13.4	15.7	16.9	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	17.72	19.07	18.08	19.38	19.70	14.05	15.40	14.41	15.71	16.03
	3H	19.45	20.66	19.83	20.99	21.35	16.02	17.23	16.40	17.56	17.92
	4H	20.13	21.25	20.53	21.60	21.99	16.73	17.86	17.13	18.21	18.59
	6H	20.63	21.67	21.05	22.04	22.43	17.25	18.29	17.67	18.66	19.05
	8H	20.80	21.79	21.23	22.18	22.58	17.44	18.42	17.87	18.81	19.22
	12H	20.91	21.86	21.34	22.24	22.67	17.57	18.52	18.01	18.90	19.33
4H	2H	18.25	19.37	18.65	19.72	20.11	15.67	16.80	16.07	17.15	17.53
	3H	20.22	21.15	20.64	21.56	21.96	17.85	18.78	18.26	19.18	19.58
	4H	21.03	21.86	21.46	22.28	22.72	18.73	19.56	19.16	19.98	20.42
	6H	21.67	22.39	22.13	22.84	23.30	19.37	20.09	19.83	20.54	21.00
	8H	21.89	22.56	22.36	23.01	23.48	19.58	20.26	20.05	20.70	21.17
	12H	22.04	22.64	22.53	23.12	23.60	19.74	20.34	20.22	20.82	21.29
8H	4H	21.31	21.99	21.78	22.43	22.90	19.38	20.05	19.84	20.50	20.97
	6H	22.09	22.65	22.59	23.14	23.62	20.24	20.79	20.74	21.29	21.77
	8H	22.39	22.89	22.91	23.41	23.90	20.57	21.06	21.09	21.58	22.07
	12H	22.63	23.07	23.14	23.56	24.13	20.83	21.27	21.34	21.76	22.33
12H	4H	21.33	21.93	21.81	22.41	22.88	19.45	20.05	19.93	20.53	21.00
	6H	22.14	22.64	22.66	23.16	23.65	20.37	20.87	20.89	21.39	21.88
	8H	22.51	22.95	23.02	23.44	24.01	20.79	21.23	21.30	21.72	22.29