

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: P893842

Luminaire Tested: 4MB-7HL-LVR-UNV-L835

Issue Date: 11/11/2024

**Test Information**

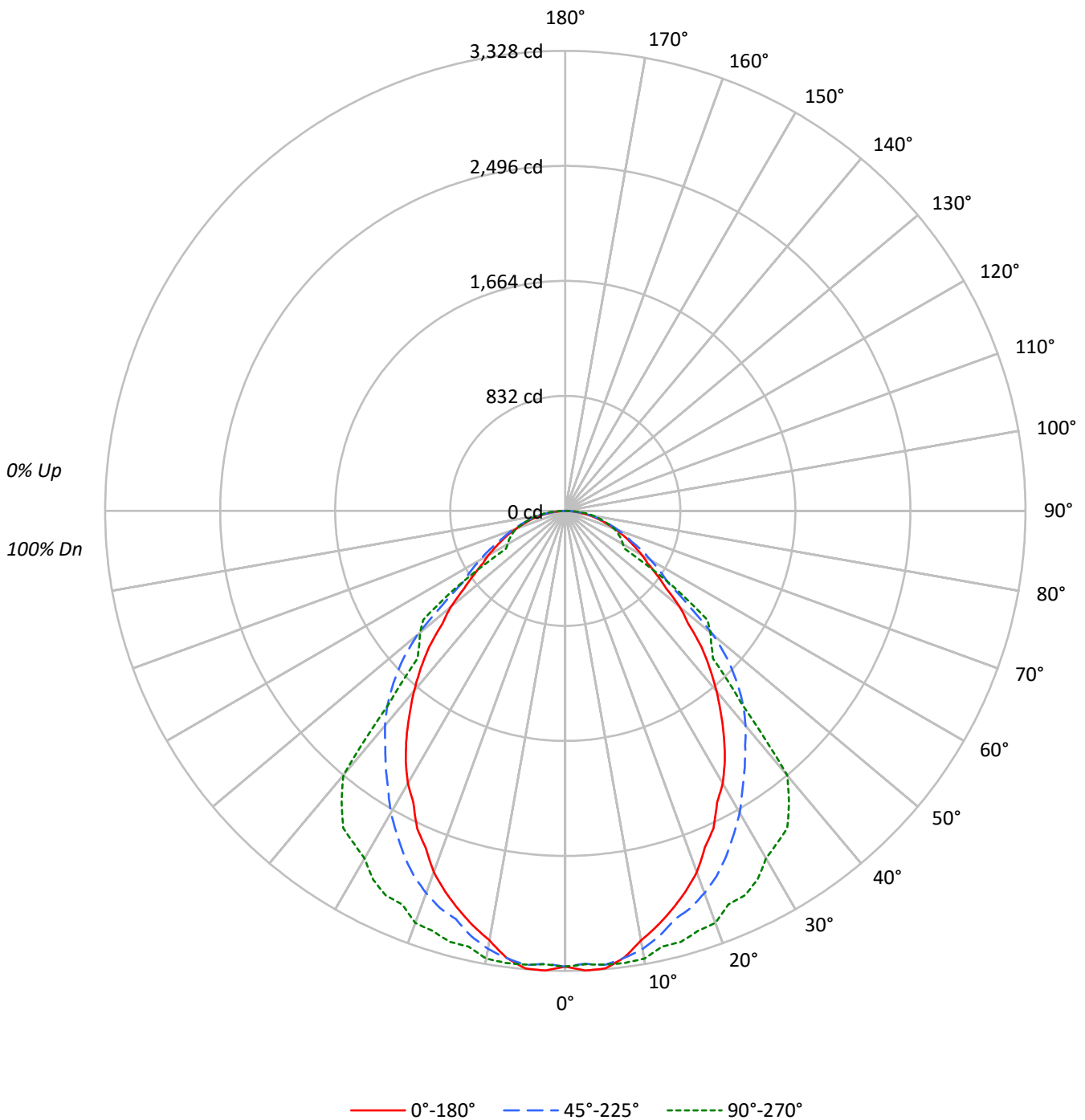
Test Method: LM-79-2019  
Report Number: P893842  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-7HL-LVR-UNV-L835  
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6900.0 lumens  
Efficiency: N/A  
Efficacy: 133.2 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26  
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 51.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 4  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P893842  
CATALOG NUMBER: 4MB-7HL-LVR-UNV-L835

### Luminous Intensity Polar Plot





TEST NUMBER: P893842

CATALOG NUMBER: 4MB-7HL-LVR-UNV-L835

**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	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

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

	0°	45°	90°
0°	23454	23454	23454
5°	23737	23550	23536
10°	22801	23249	23759
15°	21985	22527	23774
20°	21059	22276	24013
25°	19897	21622	24100
30°	18699	20719	23853
35°	17389	19651	24318
40°	15798	18838	23189
45°	13997	17680	15206
50°	11980	15452	15173
55°	10039	11276	11804
60°	9133	10180	6833
65°	8556	9014	7302
70°	7874	8540	7814
75°	7398	8011	7958
80°	6900	7576	8527
85°	5927	6319	9086

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 17680 cd/sqm



TEST NUMBER: P893842  
 CATALOG NUMBER: 4MB-7HL-LVR-UNV-L835

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.2	4.5
10°-20°	876.4	12.7
20°-30°	1277.3	18.5
30°-40°	1461.2	21.2
40°-50°	1250.0	18.1
50°-60°	824.3	11.9
60°-70°	498.4	7.2
70°-80°	304.9	4.4
80°-90°	94.2	1.4
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°	2467.0	35.8
0°-40°	3928.2	56.9
0°-60°	6002.6	87.0
0°-90°	6900.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6900.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3296	3296	3296	3296	3296	
5°	3324	3321	3297	3290	3295	311
15°	2985	3020	3058	3254	3228	839
25°	2534	2573	2754	2990	3070	1159
35°	2002	2103	2262	2618	2800	1247
45°	1391	1499	1757	1642	1511	1065
55°	809	855	909	1078	952	736
65°	508	521	535	478	434	502
75°	269	276	291	305	290	284
85°	73	72	77	92	111	82
90°	0	0	0	0	0	



TEST NUMBER: P893842

CATALOG NUMBER: 4MB-7HL-LVR-UNV-L835

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3296.4	3296.4	3296.4	3296.4	3296.4
2.5°	3328.3	3318.6	3278.9	3316.7	3282.8
5°	3323.5	3320.6	3297.3	3290.5	3295.4
7.5°	3259.6	3266.3	3262.5	3335.1	3298.3
10°	3156.0	3169.5	3217.9	3319.6	3288.6
12.5°	3074.7	3085.3	3150.2	3301.2	3228.6
15°	2984.6	3019.5	3058.2	3253.8	3227.6
17.5°	2887.8	2920.7	3012.7	3189.9	3187.0
20°	2781.3	2842.3	2942.0	3106.6	3171.5
22.5°	2637.1	2719.4	2859.7	3068.9	3081.4
25°	2534.5	2573.2	2754.2	2989.5	3069.8
27.5°	2378.6	2452.2	2637.1	2875.2	3007.9
30°	2276.0	2337.0	2521.9	2808.4	2903.3
32.5°	2147.2	2219.8	2385.4	2735.8	2850.1
35°	2002.0	2102.7	2262.4	2617.7	2799.7
37.5°	1849.1	1948.8	2137.5	2519.9	2657.4
40°	1700.9	1786.1	2028.2	2402.8	2496.7
42.5°	1548.9	1640.9	1903.3	2171.4	1878.1
45°	1391.1	1498.6	1757.1	1641.9	1511.2
47.5°	1204.3	1336.0	1595.4	1319.5	1431.8
50°	1082.3	1154.0	1396.0	1244.0	1370.8
52.5°	920.7	1017.5	1121.1	1161.7	1295.3
55°	809.3	854.8	909.0	1077.5	951.6
57.5°	706.7	747.4	810.3	760.0	507.3
60°	641.8	660.2	715.4	543.1	480.2
62.5°	568.3	586.7	627.3	507.3	460.8
65°	508.2	520.8	535.4	478.2	433.7
67.5°	444.4	451.1	466.6	441.4	407.6
70°	378.5	388.2	410.5	403.7	375.6
72.5°	320.4	329.2	348.5	358.2	332.1
75°	269.1	275.9	291.4	304.9	289.5
77.5°	213.9	220.7	241.1	255.6	248.8
80°	168.4	169.4	184.9	199.4	208.1
82.5°	118.1	120.0	131.7	147.1	164.6
85°	72.6	71.6	77.4	92.0	111.3
87.5°	28.1	27.1	31.9	38.7	57.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P893842  
 CATALOG NUMBER: 4MB-7HL-LVR-UNV-L835

**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	18.79	20.27	19.15	20.58	20.90	18.47	19.94	18.83	20.26	20.57
	3H	20.35	21.67	20.73	22.00	22.36	20.08	21.41	20.46	21.74	22.10
	4H	20.95	22.19	21.35	22.54	22.92	20.83	22.07	21.23	22.42	22.80
	6H	21.40	22.55	21.82	22.92	23.31	21.50	22.65	21.91	23.01	23.40
	8H	21.56	22.65	21.98	23.04	23.44	21.78	22.87	22.20	23.26	23.66
	12H	21.66	22.70	22.09	23.08	23.51	22.00	23.04	22.43	23.42	23.85
4H	2H	19.38	20.62	19.78	20.97	21.35	19.13	20.37	19.53	20.72	21.10
	3H	21.17	22.20	21.58	22.60	23.00	21.01	22.04	21.42	22.44	22.84
	4H	21.90	22.82	22.33	23.24	23.68	21.91	22.83	22.34	23.25	23.69
	6H	22.48	23.28	22.94	23.73	24.19	22.71	23.52	23.17	23.96	24.42
	8H	22.68	23.43	23.14	23.87	24.34	23.04	23.79	23.51	24.24	24.71
	12H	22.82	23.49	23.30	23.97	24.44	23.31	23.99	23.80	24.47	24.94
8H	4H	22.22	22.97	22.68	23.42	23.88	22.23	22.98	22.69	23.43	23.89
	6H	22.93	23.55	23.43	24.04	24.52	23.18	23.80	23.67	24.29	24.77
	8H	23.20	23.76	23.71	24.27	24.76	23.59	24.16	24.11	24.67	25.15
	12H	23.41	23.90	23.92	24.40	24.96	23.96	24.46	24.47	24.95	25.52
12H	4H	22.26	22.93	22.74	23.41	23.88	22.25	22.93	22.74	23.41	23.88
	6H	23.00	23.56	23.51	24.07	24.56	23.23	23.79	23.74	24.30	24.79
	8H	23.33	23.82	23.84	24.32	24.88	23.71	24.21	24.22	24.70	25.26