

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: P893954

Luminaire Tested: 4MB-8HL-LVRF-UNV-L835

Issue Date: 11/11/2024

**Test Information**

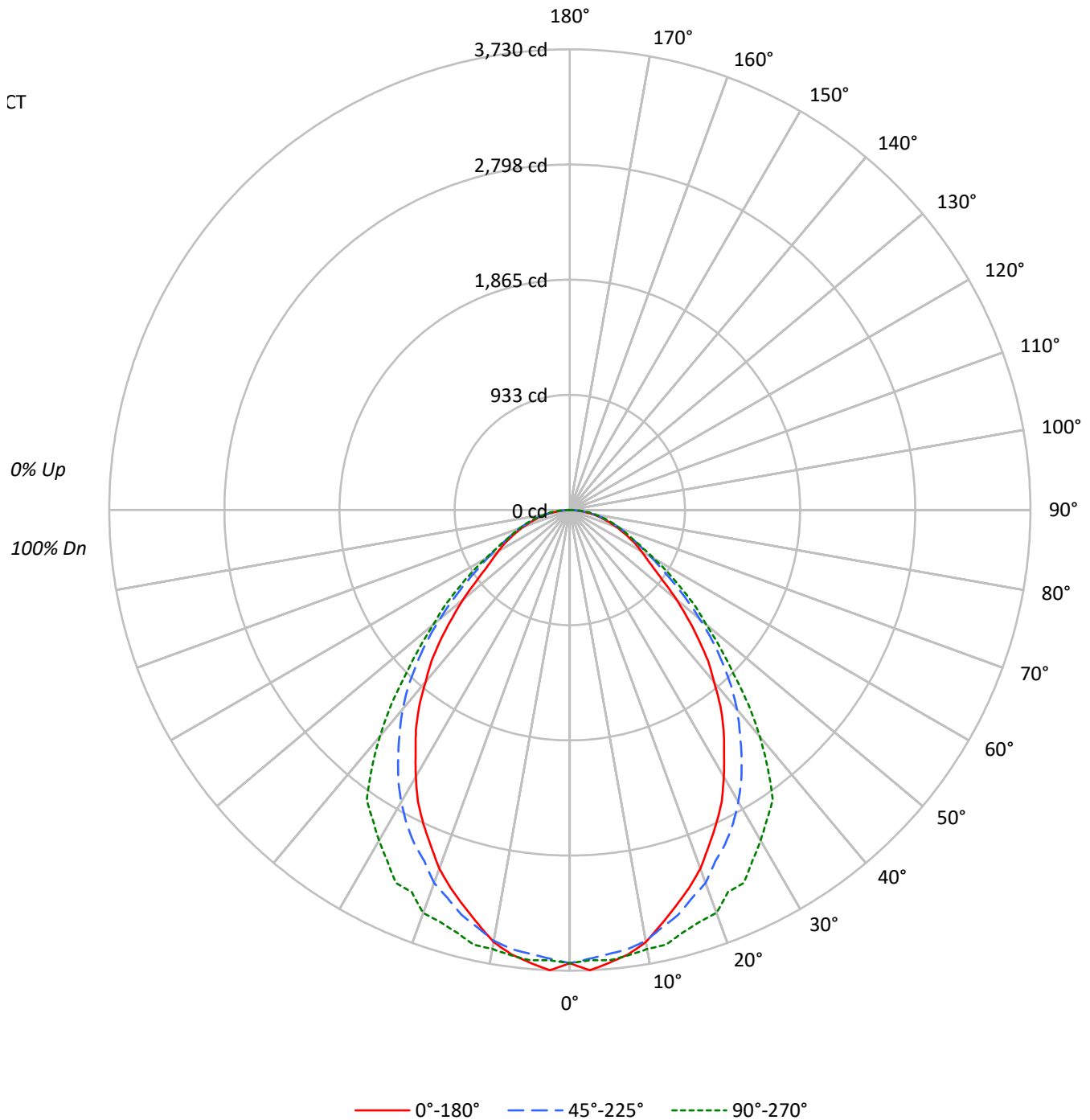
Test Method: LM-79-2019  
Report Number: P893954  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 4MB-8HL-LVRF-UNV-L835  
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7440.0 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21  
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 57.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.999  
Total Harmonic Distortion (THDi): 4.23  
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	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	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	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	38	38	38	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	35	35	35	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	32	32	32	30

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

	0°	45°	90°
0°	26108	26108	26108
5°	26278	25769	26137
10°	25662	25583	26075
15°	24451	24992	26075
20°	23389	24328	26288
25°	22021	23399	26154
30°	20485	22423	25388
35°	18866	21047	24897
40°	16873	19562	22232
45°	14790	17595	18852
50°	12482	15202	15955
55°	10355	12723	13608
60°	9523	10818	11223
65°	8919	9510	9584
70°	8307	9014	8945
75°	7749	8415	8714
80°	7236	7822	8359
85°	6090	6629	9225

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 18852 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	346.4	4.7
10°-20°	966.1	13.0
20°-30°	1391.3	18.7
30°-40°	1536.1	20.6
40°-50°	1318.0	17.7
50°-60°	897.9	12.1
60°-70°	564.9	7.6
70°-80°	321.6	4.3
80°-90°	97.7	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°	2703.8	36.3
0°-40°	4239.9	57.0
0°-60°	6455.8	86.8
0°-90°	7440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7440.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3669	3669	3669	3669	3669	
5°	3679	3665	3608	3684	3660	347
15°	3319	3355	3393	3546	3540	935
25°	2805	2861	2980	3221	3332	1288
35°	2172	2256	2423	2688	2866	1351
45°	1470	1568	1749	1854	1874	1133
55°	835	886	1026	1075	1097	767
65°	530	539	565	592	569	526
75°	282	284	306	319	317	300
85°	75	77	81	96	113	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3669.4	3669.4	3669.4	3669.4	3669.4
2.5°	3729.7	3691.3	3636.5	3689.1	3648.5
5°	3679.3	3665.0	3608.0	3683.6	3659.5
7.5°	3627.7	3597.0	3587.1	3668.3	3636.5
10°	3552.0	3534.5	3541.0	3645.3	3609.1
12.5°	3432.4	3444.5	3459.9	3592.6	3603.6
15°	3319.4	3354.6	3392.9	3546.5	3539.9
17.5°	3208.7	3256.9	3293.1	3490.6	3496.1
20°	3089.1	3116.5	3213.0	3403.9	3471.9
22.5°	2941.0	2994.7	3078.1	3316.2	3346.9
25°	2805.0	2860.9	2980.5	3220.7	3331.5
27.5°	2662.4	2713.9	2862.0	3107.7	3202.1
30°	2493.4	2562.5	2729.3	2979.4	3090.2
32.5°	2324.5	2425.4	2585.6	2842.3	2970.6
35°	2172.0	2256.5	2423.2	2687.6	2866.4
37.5°	2003.1	2091.9	2260.9	2518.7	2632.7
40°	1816.6	1912.0	2106.2	2314.6	2393.6
42.5°	1656.4	1738.7	1934.0	2081.0	2143.5
45°	1469.9	1567.6	1748.6	1853.9	1873.6
47.5°	1290.0	1401.9	1564.3	1613.7	1652.0
50°	1127.7	1215.4	1373.4	1404.1	1441.4
52.5°	962.0	1055.3	1193.5	1224.2	1279.1
55°	834.8	886.4	1025.7	1075.0	1097.0
57.5°	741.6	774.5	873.2	935.7	942.3
60°	669.2	685.6	760.2	807.4	788.7
62.5°	602.2	615.4	652.7	688.9	664.8
65°	529.8	538.6	564.9	592.4	569.3
67.5°	461.8	471.7	495.8	515.6	495.8
70°	399.3	407.0	433.3	442.1	430.0
72.5°	341.2	344.5	366.4	381.7	374.1
75°	281.9	284.1	306.1	319.2	317.0
77.5°	228.2	231.5	250.1	262.2	255.6
80°	176.6	178.8	190.9	208.4	204.0
82.5°	124.0	128.3	136.0	151.4	163.4
85°	74.6	76.8	81.2	96.5	113.0
87.5°	28.5	30.7	32.9	40.6	53.8
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	18.79	20.27	19.15	20.58	20.90	20.15	21.63	20.51	21.94	22.26
	3H	20.37	21.69	20.75	22.02	22.38	21.44	22.76	21.81	23.09	23.45
	4H	20.97	22.22	21.37	22.56	22.94	21.99	23.23	22.39	23.58	23.96
	6H	21.44	22.59	21.86	22.96	23.35	22.44	23.59	22.85	23.95	24.35
	8H	21.60	22.69	22.03	23.08	23.48	22.63	23.72	23.05	24.11	24.51
	12H	21.70	22.74	22.13	23.12	23.55	22.78	23.83	23.21	24.21	24.64
4H	2H	19.40	20.64	19.80	20.99	21.37	20.52	21.76	20.92	22.11	22.49
	3H	21.21	22.24	21.62	22.64	23.04	22.07	23.10	22.48	23.50	23.90
	4H	21.93	22.86	22.36	23.27	23.71	22.78	23.70	23.21	24.12	24.56
	6H	22.53	23.33	22.99	23.78	24.24	23.39	24.19	23.84	24.63	25.09
	8H	22.73	23.48	23.19	23.93	24.39	23.63	24.38	24.10	24.83	25.30
	12H	22.87	23.54	23.35	24.02	24.49	23.85	24.52	24.33	25.00	25.47
8H	4H	22.26	23.01	22.72	23.45	23.92	23.01	23.76	23.47	24.21	24.67
	6H	22.98	23.60	23.48	24.09	24.57	23.75	24.38	24.25	24.87	25.35
	8H	23.26	23.82	23.77	24.33	24.82	24.09	24.64	24.60	25.16	25.64
	12H	23.47	23.96	23.98	24.46	25.02	24.39	24.89	24.90	25.38	25.94
12H	4H	22.29	22.97	22.78	23.45	23.92	23.02	23.70	23.51	24.17	24.65
	6H	23.05	23.61	23.56	24.12	24.61	23.79	24.35	24.31	24.86	25.35
	8H	23.38	23.88	23.89	24.37	24.94	24.18	24.68	24.69	25.17	25.73