

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: P892746

Luminaire Tested: 2MB-4HL-LVR-UNV-L935

Issue Date: 11/11/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P892746  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-4HL-LVR-UNV-L935  
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3500K CCT  
Light Source: -  
Ballast/Driver: -

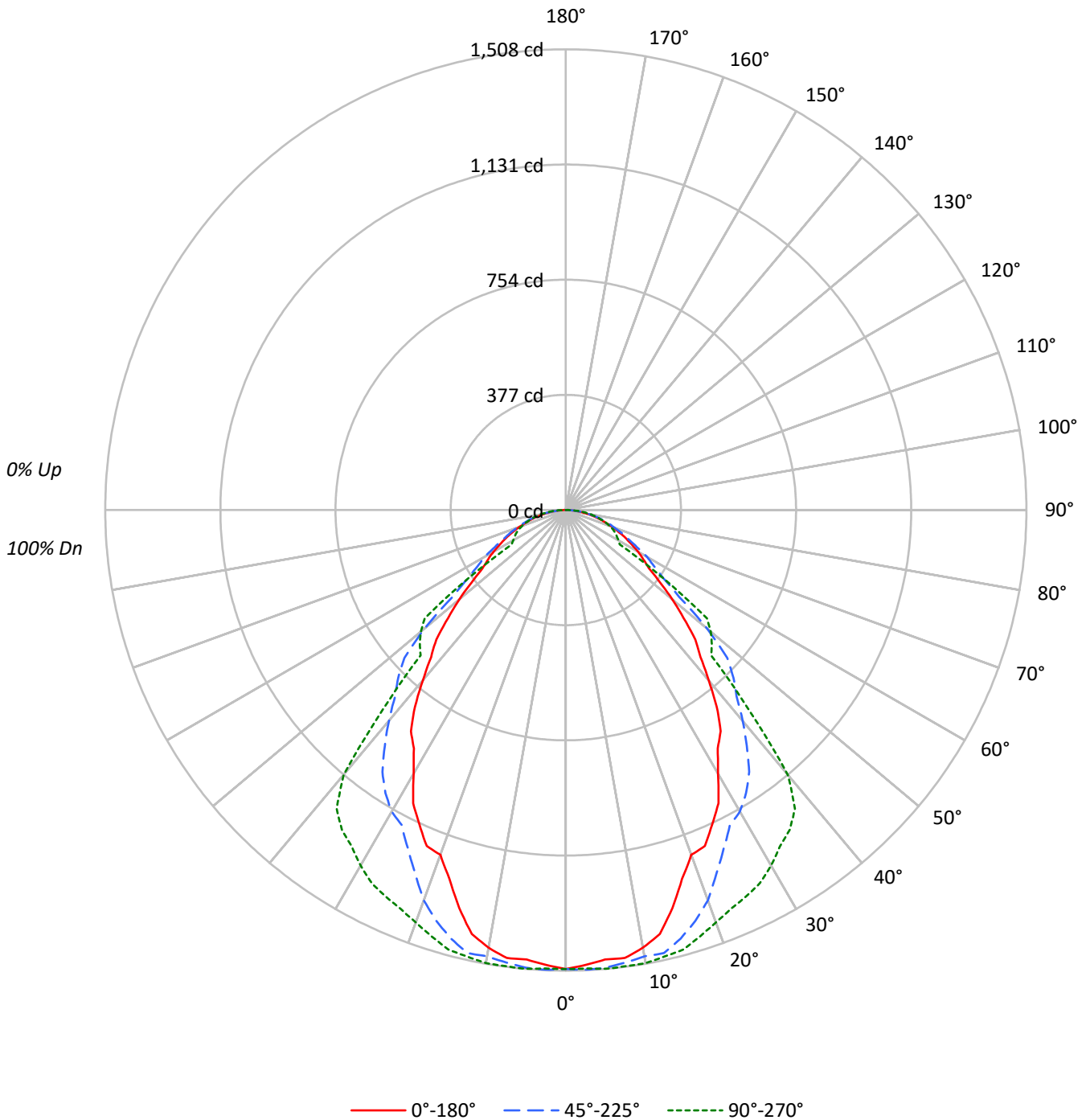
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3062.0 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.24  
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
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	101	98	100	97	94	96	94	92	92	91	89	87	87	
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75	
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66	66	
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58	58	
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51	51	
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	46	46	
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41	41	
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	37	37	
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34	34	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	32	31	31	

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

	0°	45°	90°
0°	21495	21495	21495
5°	21210	21598	21648
10°	21134	21548	21878
15°	19969	21506	22054
20°	18285	20698	21867
25°	17903	19306	22033
30°	16457	18830	22201
35°	15436	18279	22317
40°	13586	16826	21115
45°	12128	15695	13609
50°	10113	13451	13785
55°	8283	9754	9702
60°	7834	8769	5696
65°	7271	7630	6066
70°	6722	7140	6366
75°	6290	6798	6566
80°	5742	6327	6854
85°	5137	5482	7583

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 15695 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.8	4.7
10°-20°	402.0	13.1
20°-30°	579.9	18.9
30°-40°	657.7	21.5
40°-50°	547.7	17.9
50°-60°	354.0	11.6
60°-70°	209.9	6.9
70°-80°	128.0	4.2
80°-90°	39.9	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°	1124.7	36.7
0°-40°	1782.4	58.2
0°-60°	2684.2	87.7
0°-90°	3062.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3062.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1503	1503	1503	1503	1503	
5°	1477	1495	1504	1512	1508	141
15°	1348	1392	1452	1476	1489	376
25°	1134	1174	1223	1387	1396	519
35°	884	914	1047	1188	1278	544
45°	600	641	776	713	673	455
55°	332	364	391	470	389	309
65°	215	220	225	200	179	213
75°	114	117	123	129	119	121
85°	31	31	33	38	46	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1502.6	1502.6	1502.6	1502.6	1502.6
2.5°	1490.5	1504.0	1506.1	1518.2	1501.9
5°	1477.0	1494.7	1504.0	1512.5	1507.5
7.5°	1479.1	1489.1	1494.0	1509.0	1506.1
10°	1454.9	1474.8	1483.4	1501.1	1506.1
12.5°	1421.5	1447.1	1485.5	1481.9	1496.9
15°	1348.3	1392.3	1452.1	1475.5	1489.1
17.5°	1265.8	1314.8	1410.1	1465.6	1462.7
20°	1201.1	1238.0	1359.6	1437.9	1436.4
22.5°	1190.4	1198.9	1287.8	1418.7	1413.0
25°	1134.2	1174.0	1223.1	1386.7	1395.9
27.5°	1082.3	1117.9	1163.4	1346.1	1376.7
30°	996.3	1057.4	1139.9	1302.7	1344.0
32.5°	925.2	984.2	1098.7	1249.4	1304.9
35°	883.9	914.5	1046.7	1187.5	1277.9
37.5°	811.4	868.3	973.5	1115.0	1232.3
40°	727.5	792.9	901.0	1051.0	1130.7
42.5°	652.8	705.4	827.0	930.1	887.5
45°	599.5	641.4	775.8	713.2	672.7
47.5°	522.7	576.0	716.8	586.0	648.5
50°	454.4	500.6	604.4	554.0	619.4
52.5°	388.3	432.4	467.9	522.7	582.4
55°	332.1	364.1	391.1	470.0	389.0
57.5°	301.5	311.5	342.0	335.6	209.8
60°	273.8	278.0	306.5	226.8	199.1
62.5°	242.5	250.3	261.7	212.6	188.4
65°	214.8	220.4	225.4	200.5	179.2
67.5°	187.7	193.4	198.4	186.3	167.8
70°	160.7	164.3	170.7	167.8	152.2
72.5°	136.5	139.4	147.2	149.3	137.2
75°	113.8	116.6	123.0	129.4	118.8
77.5°	91.7	93.9	101.0	106.0	102.4
80°	69.7	73.2	76.8	83.2	83.2
82.5°	51.2	51.9	55.5	61.9	64.7
85°	31.3	31.3	33.4	38.4	46.2
87.5°	13.5	13.5	14.9	16.4	23.5
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	18.01	19.47	18.38	19.79	20.10	17.98	19.44	18.35	19.76	20.07
	3H	19.61	20.92	19.99	21.24	21.61	19.46	20.76	19.84	21.09	21.46
	4H	20.21	21.44	20.61	21.79	22.17	20.16	21.39	20.56	21.73	22.11
	6H	20.68	21.81	21.09	22.17	22.57	20.78	21.91	21.19	22.28	22.67
	8H	20.83	21.91	21.26	22.30	22.70	21.02	22.10	21.45	22.49	22.89
	12H	20.94	21.97	21.37	22.35	22.78	21.23	22.26	21.66	22.64	23.07
4H	2H	18.61	19.83	19.01	20.18	20.56	18.58	19.81	18.98	20.16	20.54
	3H	20.43	21.44	20.84	21.84	22.24	20.34	21.35	20.75	21.75	22.16
	4H	21.16	22.07	21.59	22.49	22.93	21.21	22.12	21.64	22.53	22.97
	6H	21.75	22.54	22.21	22.99	23.45	21.96	22.76	22.42	23.20	23.66
	8H	21.96	22.70	22.42	23.14	23.61	22.26	23.00	22.73	23.45	23.92
	12H	22.10	22.76	22.58	23.24	23.71	22.52	23.18	23.00	23.66	24.13
8H	4H	21.48	22.22	21.94	22.66	23.13	21.52	22.26	21.98	22.70	23.17
	6H	22.20	22.81	22.70	23.30	23.78	22.42	23.03	22.92	23.53	24.00
	8H	22.48	23.03	22.99	23.54	24.03	22.81	23.36	23.33	23.87	24.36
	12H	22.70	23.19	23.21	23.68	24.25	23.16	23.65	23.67	24.15	24.71
12H	4H	21.51	22.17	22.00	22.65	23.13	21.54	22.20	22.03	22.68	23.16
	6H	22.27	22.82	22.78	23.33	23.82	22.47	23.03	22.99	23.54	24.03
	8H	22.61	23.09	23.12	23.59	24.15	22.93	23.42	23.44	23.91	24.47