

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: P892762

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

Issue Date: 11/11/2024

**Test Information**

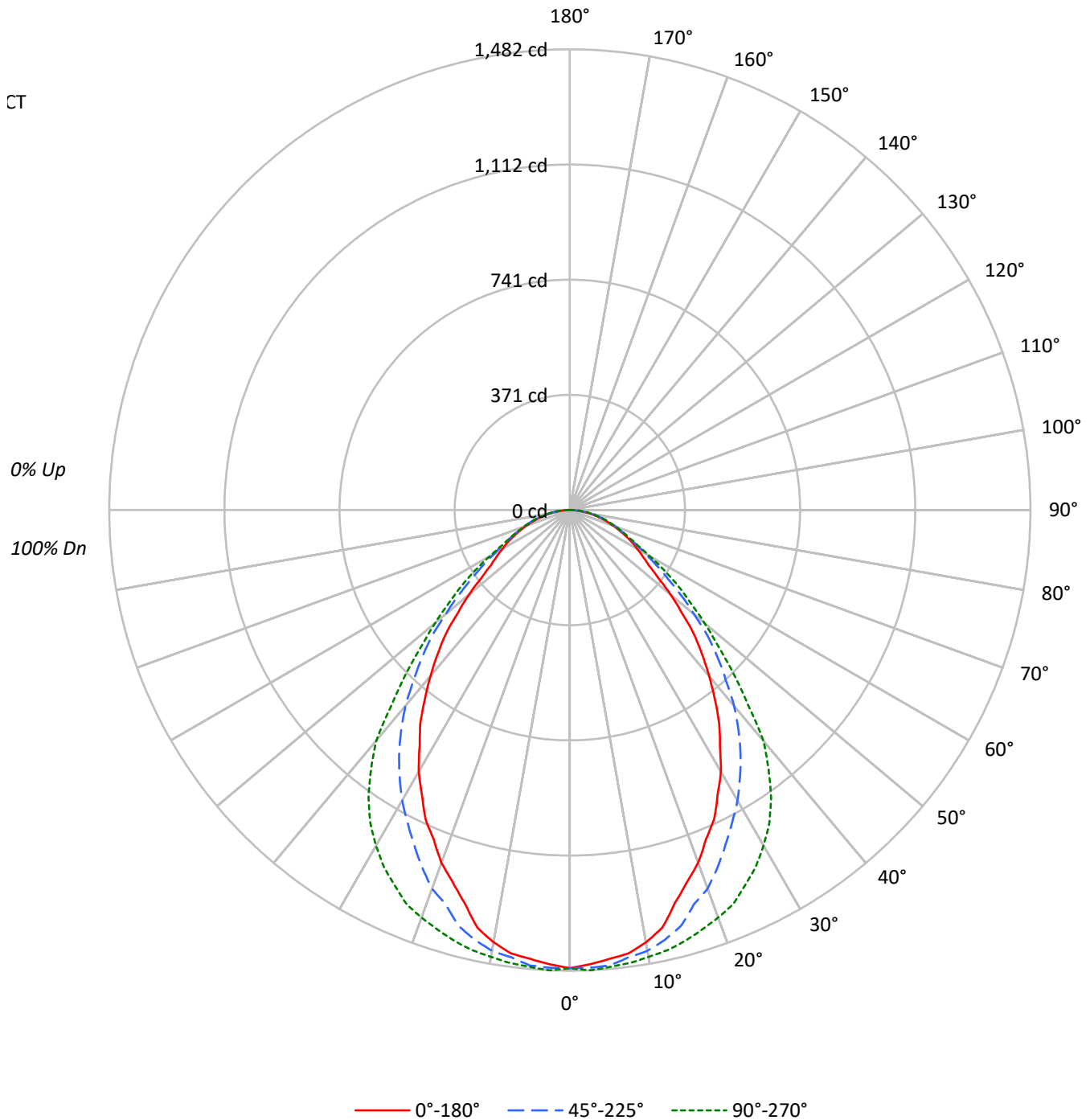
Test Method: LM-79-2019  
Report Number: P892762  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 2MB-4HL-LVRF-UNV-L935  
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 3500K C  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2898.0 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.25 / 1.19  
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	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	77	77	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	68	68	68	66
4	87	76	68	62	85	75	68	62	73	66	61	70	65	60	68	63	60	60	60	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	48	48	48	46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	43	43	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	36	36	36	34
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	33	33	33	31

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

	0°	45°	90°
0°	21082	21082	21082
5°	20818	21122	21184
10°	20514	20915	21202
15°	19375	20506	21250
20°	18386	19733	21240
25°	17333	18728	21041
30°	16058	17824	20592
35°	14642	16730	19720
40°	13014	15365	18101
45°	11422	13642	15086
50°	9416	11620	12597
55°	7729	9600	10605
60°	7187	7977	8460
65°	6729	7088	7136
70°	6274	6629	6600
75°	5826	6296	6334
80°	5363	5833	5948
85°	4645	5105	6730

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 15086 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.0	4.8
10°-20°	387.6	13.4
20°-30°	554.1	19.1
30°-40°	604.5	20.9
40°-50°	509.2	17.6
50°-60°	339.1	11.7
60°-70°	209.2	7.2
70°-80°	118.6	4.1
80°-90°	36.6	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°	1080.7	37.3
0°-40°	1685.3	58.2
0°-60°	2533.6	87.4
0°-90°	2898.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2898.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1450	1458	1471	1471	1475	137
15°	1308	1334	1385	1426	1435	369
25°	1098	1121	1186	1299	1333	502
35°	838	875	958	1070	1129	521
45°	565	596	674	719	746	431
55°	310	332	385	411	425	287
65°	199	201	209	218	211	198
75°	105	107	114	118	115	112
85°	28	30	31	36	41	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1473.7	1473.7	1473.7	1473.7	1473.7
2.5°	1463.1	1463.8	1473.7	1479.4	1482.2
5°	1449.7	1457.5	1470.9	1470.9	1475.2
7.5°	1439.1	1440.5	1451.1	1466.7	1470.2
10°	1412.2	1419.3	1439.8	1457.5	1459.6
12.5°	1376.1	1380.4	1415.7	1449.7	1450.4
15°	1308.2	1334.4	1384.6	1425.6	1434.8
17.5°	1254.4	1281.3	1329.4	1403.0	1415.0
20°	1207.7	1222.6	1296.2	1376.1	1395.2
22.5°	1145.5	1173.1	1243.1	1344.3	1372.6
25°	1098.1	1120.7	1186.5	1299.0	1333.0
27.5°	1030.8	1064.8	1132.0	1250.9	1294.7
30°	972.1	1008.9	1079.0	1199.9	1246.6
32.5°	899.2	938.2	1018.8	1138.4	1194.3
35°	838.4	875.2	958.0	1070.5	1129.2
37.5°	766.2	808.0	890.8	996.2	1049.9
40°	696.9	732.3	822.8	913.4	969.3
42.5°	630.4	662.9	743.6	819.3	846.9
45°	564.6	595.7	674.3	718.8	745.7
47.5°	488.2	527.1	603.5	625.4	646.0
50°	423.1	455.6	522.1	542.0	566.0
52.5°	358.7	392.0	452.8	469.1	488.2
55°	309.9	331.8	384.9	411.1	425.2
57.5°	278.8	285.8	329.7	353.8	360.1
60°	251.2	255.4	278.8	300.7	295.7
62.5°	225.7	227.8	239.8	256.1	246.2
65°	198.8	200.9	209.4	217.9	210.8
67.5°	174.0	175.5	182.5	188.9	182.5
70°	150.0	150.7	158.5	162.7	157.8
72.5°	126.6	127.4	135.1	140.1	134.4
75°	105.4	106.8	113.9	118.2	114.6
77.5°	84.9	87.0	92.0	96.2	90.6
80°	65.1	66.5	70.8	75.7	72.2
82.5°	47.4	48.1	50.9	55.9	57.3
85°	28.3	29.7	31.1	36.1	41.0
87.5°	11.3	12.7	13.4	15.6	21.9
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	17.61	19.07	17.98	19.39	19.70	19.12	20.58	19.49	20.90	21.21
	3H	19.21	20.52	19.59	20.85	21.21	20.34	21.65	20.71	21.97	22.34
	4H	19.82	21.05	20.22	21.40	21.78	20.86	22.08	21.26	22.43	22.81
	6H	20.29	21.42	20.71	21.79	22.18	21.27	22.40	21.68	22.77	23.16
	8H	20.45	21.53	20.88	21.92	22.32	21.43	22.51	21.86	22.90	23.30
	12H	20.56	21.59	20.99	21.97	22.40	21.58	22.61	22.01	22.99	23.42
4H	2H	18.22	19.45	18.62	19.80	20.18	19.46	20.69	19.86	21.04	21.42
	3H	20.04	21.05	20.45	21.45	21.86	20.95	21.96	21.36	22.36	22.76
	4H	20.77	21.69	21.21	22.10	22.54	21.62	22.54	22.06	22.95	23.39
	6H	21.37	22.16	21.83	22.61	23.07	22.19	22.98	22.65	23.43	23.89
	8H	21.58	22.32	22.04	22.76	23.23	22.42	23.16	22.88	23.60	24.07
	12H	21.72	22.38	22.21	22.86	23.34	22.62	23.28	23.10	23.76	24.23
8H	4H	21.09	21.83	21.56	22.28	22.75	21.85	22.59	22.31	23.04	23.50
	6H	21.82	22.43	22.32	22.92	23.40	22.55	23.16	23.05	23.66	24.14
	8H	22.10	22.65	22.62	23.16	23.65	22.86	23.42	23.38	23.93	24.42
	12H	22.32	22.81	22.83	23.30	23.87	23.16	23.65	23.67	24.14	24.71
12H	4H	21.13	21.79	21.61	22.27	22.74	21.86	22.52	22.35	23.00	23.48
	6H	21.88	22.44	22.40	22.95	23.44	22.59	23.14	23.11	23.65	24.14
	8H	22.23	22.72	22.74	23.21	23.77	22.96	23.45	23.47	23.94	24.51