

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: P892748

Luminaire Tested: 2MB-4HL-LVR-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892748
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-L950
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

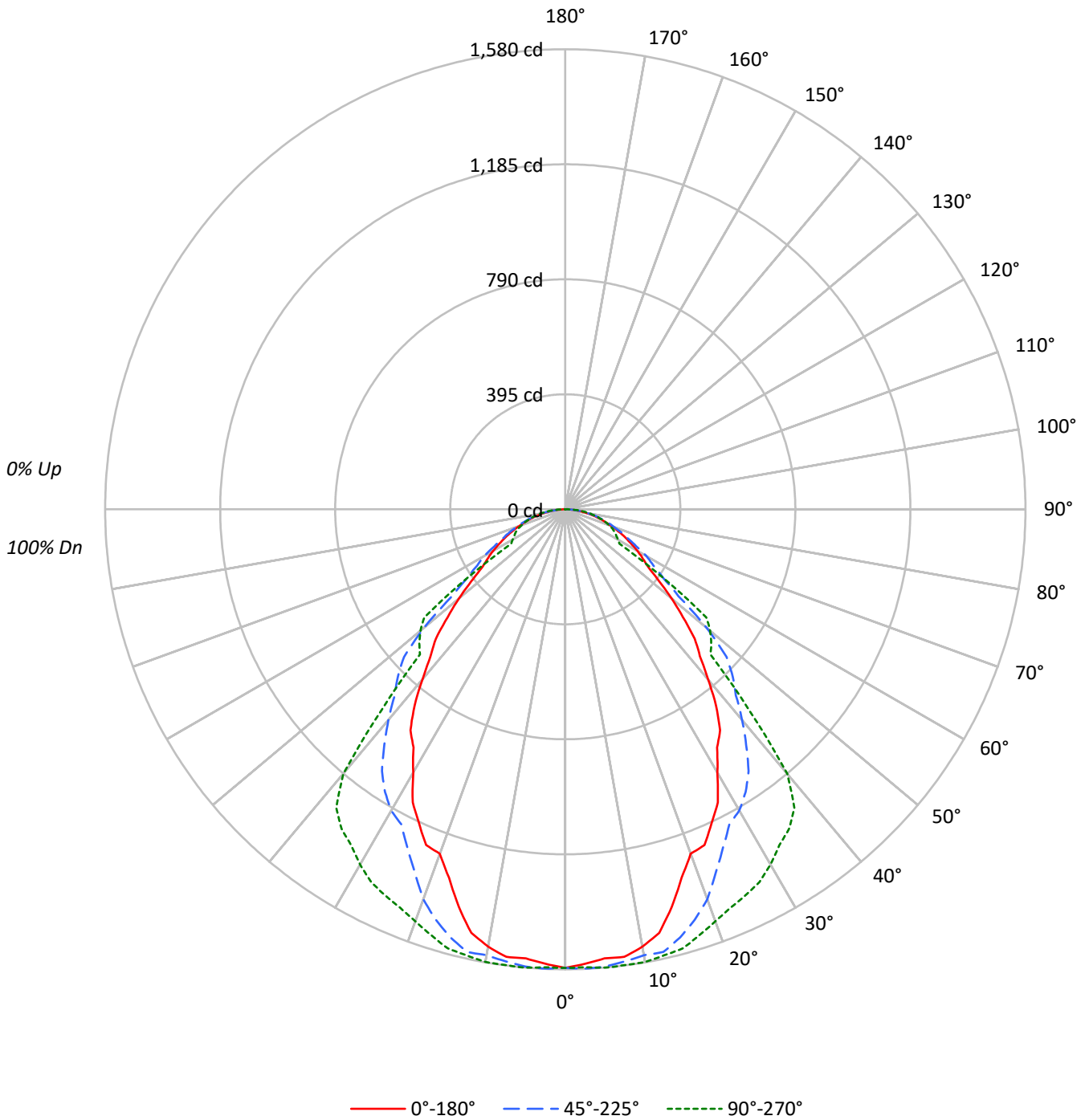
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3210.0 lumens
Efficiency: N/A
Efficacy: 116.3 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_{in}): 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	72	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	53	62	57	53	53	53	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	47	47	47	46
7	70	57	49	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	39	51	44	39	50	44	39	49	43	39	39	39	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	35	35	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	32	32	32	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22534	22534	22534
5°	22235	22642	22695
10°	22155	22590	22935
15°	20933	22545	23119
20°	19168	21700	22925
25°	18768	20239	23099
30°	17252	19740	23275
35°	16182	19163	23394
40°	14241	17638	22135
45°	12713	16454	14267
50°	10602	14103	14450
55°	8682	10226	10171
60°	8211	9193	5971
65°	7620	7999	6360
70°	7048	7483	6671
75°	6594	7130	6881
80°	6022	6632	7184
85°	5384	5745	7961

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16454 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.7	4.7
10°-20°	421.4	13.1
20°-30°	607.9	18.9
30°-40°	689.5	21.5
40°-50°	574.2	17.9
50°-60°	371.2	11.6
60°-70°	220.0	6.9
70°-80°	134.2	4.2
80°-90°	41.9	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°	1179.1	36.7
0°-40°	1868.6	58.2
0°-60°	2813.9	87.7
0°-90°	3210.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3210.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1575	1575	1575	1575	1575	
5°	1548	1567	1577	1586	1580	148
15°	1413	1460	1522	1547	1561	394
25°	1189	1231	1282	1454	1463	544
35°	927	959	1097	1245	1340	570
45°	628	672	813	748	705	477
55°	348	382	410	493	408	324
65°	225	231	236	210	188	224
75°	119	122	129	136	124	126
85°	33	33	35	40	48	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1575.2	1575.2	1575.2	1575.2	1575.2
2.5°	1562.5	1576.7	1578.9	1591.6	1574.4
5°	1548.4	1567.0	1576.7	1585.6	1580.4
7.5°	1550.6	1561.0	1566.2	1581.9	1578.9
10°	1525.2	1546.1	1555.1	1573.7	1578.9
12.5°	1490.2	1517.0	1557.3	1553.6	1569.2
15°	1413.4	1459.6	1522.3	1546.9	1561.0
17.5°	1327.0	1378.4	1478.3	1536.4	1533.4
20°	1259.1	1297.9	1425.4	1507.4	1505.9
22.5°	1247.9	1256.9	1350.1	1487.2	1481.3
25°	1189.0	1230.8	1282.2	1453.7	1463.4
27.5°	1134.6	1171.9	1219.6	1411.2	1443.2
30°	1044.4	1108.5	1195.0	1365.7	1409.0
32.5°	969.9	1031.7	1151.8	1309.8	1368.0
35°	926.6	958.7	1097.3	1244.9	1339.6
37.5°	850.6	910.2	1020.6	1168.9	1291.9
40°	762.6	831.2	944.5	1101.8	1185.3
42.5°	684.3	739.5	867.0	975.1	930.4
45°	628.4	672.4	813.3	747.7	705.2
47.5°	547.9	603.8	751.4	614.3	679.9
50°	476.4	524.8	633.7	580.7	649.3
52.5°	407.0	453.3	490.5	547.9	610.5
55°	348.1	381.7	410.0	492.8	407.8
57.5°	316.1	326.5	358.6	351.9	219.9
60°	287.0	291.5	321.3	237.8	208.7
62.5°	254.2	262.4	274.3	222.9	197.6
65°	225.1	231.1	236.3	210.2	187.9
67.5°	196.8	202.8	208.0	195.3	175.9
70°	168.5	172.2	178.9	175.9	159.5
72.5°	143.1	146.1	154.3	156.6	143.9
75°	119.3	122.3	129.0	135.7	124.5
77.5°	96.2	98.4	105.9	111.1	107.3
80°	73.1	76.8	80.5	87.2	87.2
82.5°	53.7	54.4	58.1	64.9	67.8
85°	32.8	32.8	35.0	40.3	48.5
87.5°	14.2	14.2	15.7	17.1	24.6
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	18.17	19.64	18.54	19.95	20.26	18.15	19.61	18.51	19.92	20.24
	3H	19.77	21.08	20.15	21.41	21.77	19.62	20.93	20.00	21.26	21.62
	4H	20.38	21.60	20.78	21.95	22.33	20.33	21.55	20.73	21.90	22.28
	6H	20.84	21.97	21.25	22.34	22.73	20.94	22.07	21.35	22.44	22.83
	8H	21.00	22.07	21.43	22.46	22.87	21.19	22.26	21.61	22.65	23.05
	12H	21.10	22.13	21.53	22.51	22.94	21.39	22.42	21.82	22.80	23.23
4H	2H	18.77	19.99	19.17	20.34	20.72	18.75	19.97	19.15	20.32	20.70
	3H	20.59	21.60	21.00	22.00	22.41	20.50	21.52	20.91	21.92	22.32
	4H	21.32	22.24	21.76	22.65	23.09	21.37	22.28	21.80	22.70	23.14
	6H	21.92	22.71	22.37	23.15	23.61	22.13	22.92	22.59	23.36	23.83
	8H	22.12	22.86	22.58	23.31	23.77	22.43	23.17	22.89	23.61	24.08
	12H	22.27	22.93	22.75	23.41	23.88	22.68	23.35	23.17	23.82	24.30
8H	4H	21.64	22.38	22.11	22.83	23.30	21.68	22.42	22.15	22.87	23.34
	6H	22.36	22.98	22.86	23.47	23.95	22.58	23.20	23.08	23.69	24.17
	8H	22.64	23.19	23.16	23.71	24.20	22.98	23.53	23.49	24.04	24.53
	12H	22.86	23.35	23.37	23.84	24.41	23.33	23.82	23.84	24.31	24.88
12H	4H	21.68	22.34	22.16	22.82	23.29	21.71	22.37	22.19	22.85	23.32
	6H	22.43	22.98	22.95	23.49	23.98	22.64	23.19	23.15	23.70	24.19
	8H	22.77	23.26	23.28	23.75	24.32	23.09	23.58	23.60	24.07	24.64