

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: P893654

Luminaire Tested: 4MB-5SL-LVRF-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-LVRF-UNV-L935
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 3500K C
Light Source: -
Ballast/Driver: -

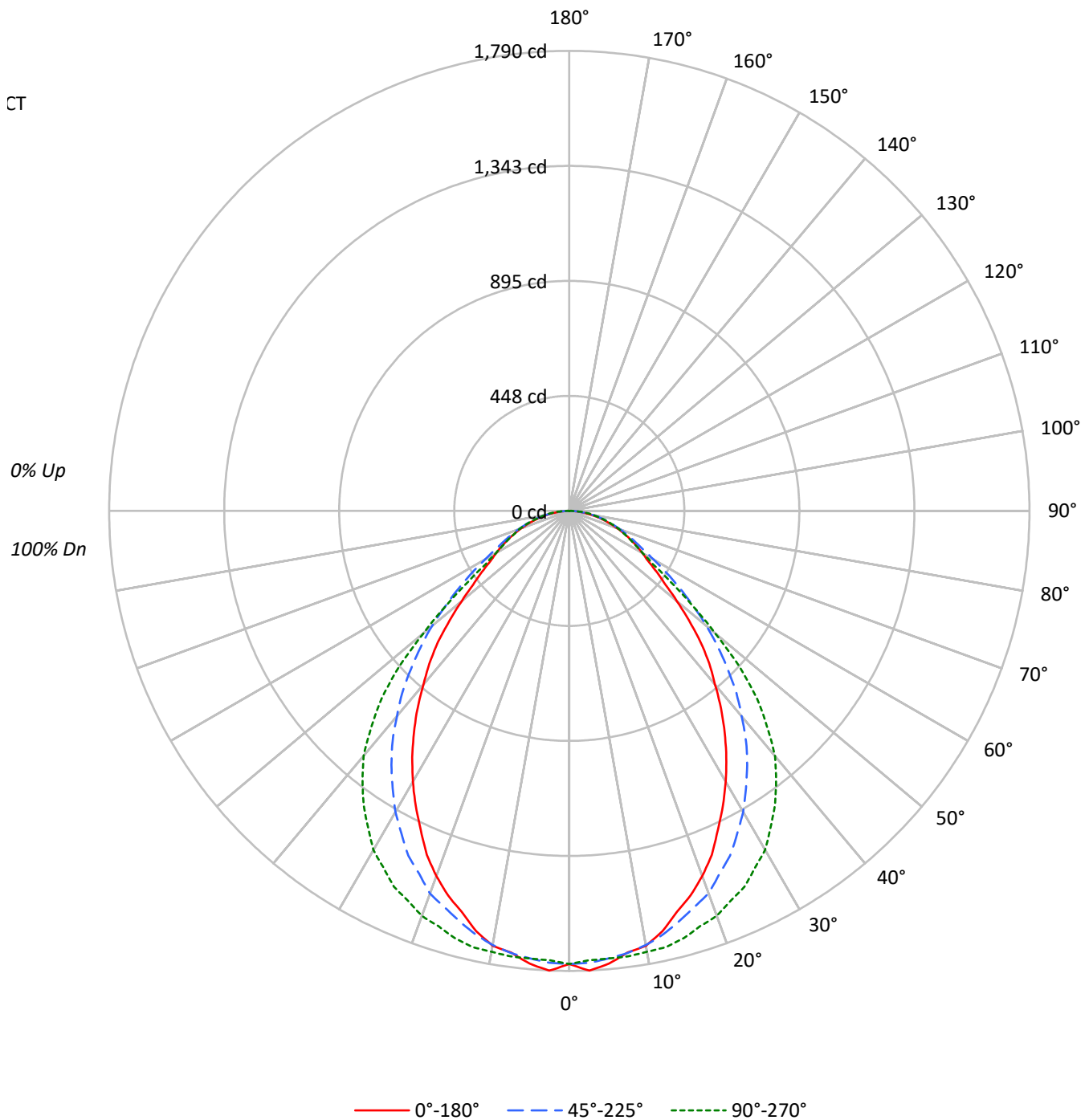
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3664.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.27 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 9.55
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	100	97	100	97	94	96	93	91	92	90	89	89	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	77	75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	71	67	67	65	
4	87	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	52	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	40	
8	65	52	44	39	63	52	44	39	50	44	39	49	43	38	48	42	38	38	36	
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	35	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12543	12543	12543
5°	12630	12487	12487
10°	12412	12393	12585
15°	11898	12175	12675
20°	11447	11995	12696
25°	10738	11623	12667
30°	9995	11109	12518
35°	9150	10479	12119
40°	8191	9690	11564
45°	7269	8772	10396
50°	6048	7723	8200
55°	5152	6505	5959
60°	4670	5375	4710
65°	4399	4707	4384
70°	4138	4367	4273
75°	3857	4159	4082
80°	3532	3831	3946
85°	3069	3372	4416

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10396 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	4.6
10°-20°	469.7	12.8
20°-30°	682.1	18.6
30°-40°	759.5	20.7
40°-50°	671.0	18.3
50°-60°	440.3	12.0
60°-70°	269.6	7.4
70°-80°	156.9	4.3
80°-90°	48.1	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°	1318.6	36.0
0°-40°	2078.1	56.7
0°-60°	3189.4	87.0
0°-90°	3664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1763	1763	1763	1763	1763	
5°	1768	1769	1748	1766	1748	167
15°	1615	1634	1653	1718	1721	456
25°	1368	1401	1481	1575	1614	629
35°	1053	1110	1206	1334	1395	657
45°	722	766	872	989	1033	553
55°	415	445	524	520	480	377
65°	261	266	280	271	260	260
75°	140	142	151	154	148	149
85°	38	39	41	47	54	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1762.9	1762.9	1762.9	1762.9	1762.9
2.5°	1790.5	1768.4	1760.2	1768.4	1750.1
5°	1768.4	1769.4	1748.3	1765.7	1748.3
7.5°	1733.6	1745.5	1735.4	1762.0	1748.3
10°	1718.0	1718.9	1715.3	1742.8	1741.9
12.5°	1674.9	1677.7	1687.8	1729.0	1738.2
15°	1615.3	1633.7	1652.9	1718.0	1720.8
17.5°	1568.6	1590.6	1616.3	1685.9	1694.2
20°	1511.8	1520.9	1584.2	1645.6	1676.8
22.5°	1448.5	1465.9	1527.3	1609.8	1641.0
25°	1367.8	1400.8	1480.6	1575.0	1613.5
27.5°	1293.6	1332.1	1414.6	1520.0	1564.9
30°	1216.6	1260.6	1352.2	1455.8	1523.7
32.5°	1136.8	1191.8	1278.9	1398.1	1457.7
35°	1053.4	1110.2	1206.5	1333.9	1395.3
37.5°	969.9	1024.9	1129.5	1266.1	1321.1
40°	881.9	936.0	1043.3	1181.7	1245.0
42.5°	805.8	852.6	962.6	1080.9	1139.5
45°	722.4	766.4	871.8	989.2	1033.2
47.5°	630.7	682.1	784.8	881.0	898.4
50°	546.4	599.6	697.7	753.6	740.8
52.5°	472.1	517.1	606.9	630.7	600.5
55°	415.3	444.6	524.4	519.8	480.4
57.5°	363.0	381.4	449.2	423.5	386.0
60°	328.2	336.5	377.7	353.9	331.0
62.5°	295.2	298.9	320.9	308.0	290.6
65°	261.3	265.9	279.6	271.4	260.4
67.5°	230.1	231.9	244.8	242.9	229.2
70°	198.9	201.7	209.9	213.6	205.4
72.5°	168.7	171.4	179.7	183.4	176.0
75°	140.3	142.1	151.3	154.0	148.5
77.5°	112.8	116.4	121.9	126.5	120.1
80°	86.2	88.0	93.5	99.0	96.3
82.5°	60.5	63.3	66.9	74.3	76.1
85°	37.6	39.4	41.3	46.8	54.1
87.5°	14.7	15.6	18.3	20.2	26.6
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	16.32	17.80	16.68	18.11	18.43	16.97	18.45	17.33	18.76	19.08
	3H	17.92	19.24	18.30	19.57	19.93	18.40	19.73	18.78	20.06	20.42
	4H	18.53	19.78	18.93	20.13	20.51	19.01	20.25	19.41	20.60	20.98
	6H	19.01	20.15	19.42	20.52	20.91	19.50	20.64	19.91	21.01	21.40
	8H	19.16	20.25	19.58	20.64	21.04	19.69	20.78	20.12	21.17	21.58
	12H	19.26	20.30	19.69	20.68	21.11	19.86	20.91	20.29	21.29	21.72
4H	2H	16.94	18.18	17.34	18.53	18.91	17.46	18.70	17.86	19.05	19.43
	3H	18.76	19.79	19.17	20.19	20.59	19.16	20.19	19.57	20.59	20.99
	4H	19.50	20.42	19.93	20.84	21.28	19.91	20.84	20.35	21.25	21.69
	6H	20.10	20.90	20.55	21.34	21.80	20.55	21.35	21.01	21.80	22.26
	8H	20.29	21.05	20.76	21.49	21.96	20.80	21.56	21.27	22.00	22.47
	12H	20.43	21.11	20.92	21.59	22.06	21.03	21.70	21.51	22.18	22.65
8H	4H	19.82	20.57	20.28	21.01	21.48	20.18	20.94	20.65	21.38	21.85
	6H	20.54	21.16	21.04	21.66	22.13	20.96	21.58	21.46	22.07	22.55
	8H	20.81	21.37	21.33	21.88	22.37	21.30	21.86	21.82	22.37	22.86
	12H	21.03	21.53	21.54	22.02	22.59	21.62	22.12	22.13	22.61	23.18
12H	4H	19.85	20.52	20.33	21.00	21.47	20.20	20.87	20.69	21.35	21.83
	6H	20.60	21.17	21.12	21.68	22.16	21.00	21.56	21.52	22.08	22.56
	8H	20.94	21.43	21.45	21.93	22.49	21.41	21.91	21.92	22.40	22.96