

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: P893662

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893662
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-RFLW-UNV-L935
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 3500K
Light Source: -
Ballast/Driver: -

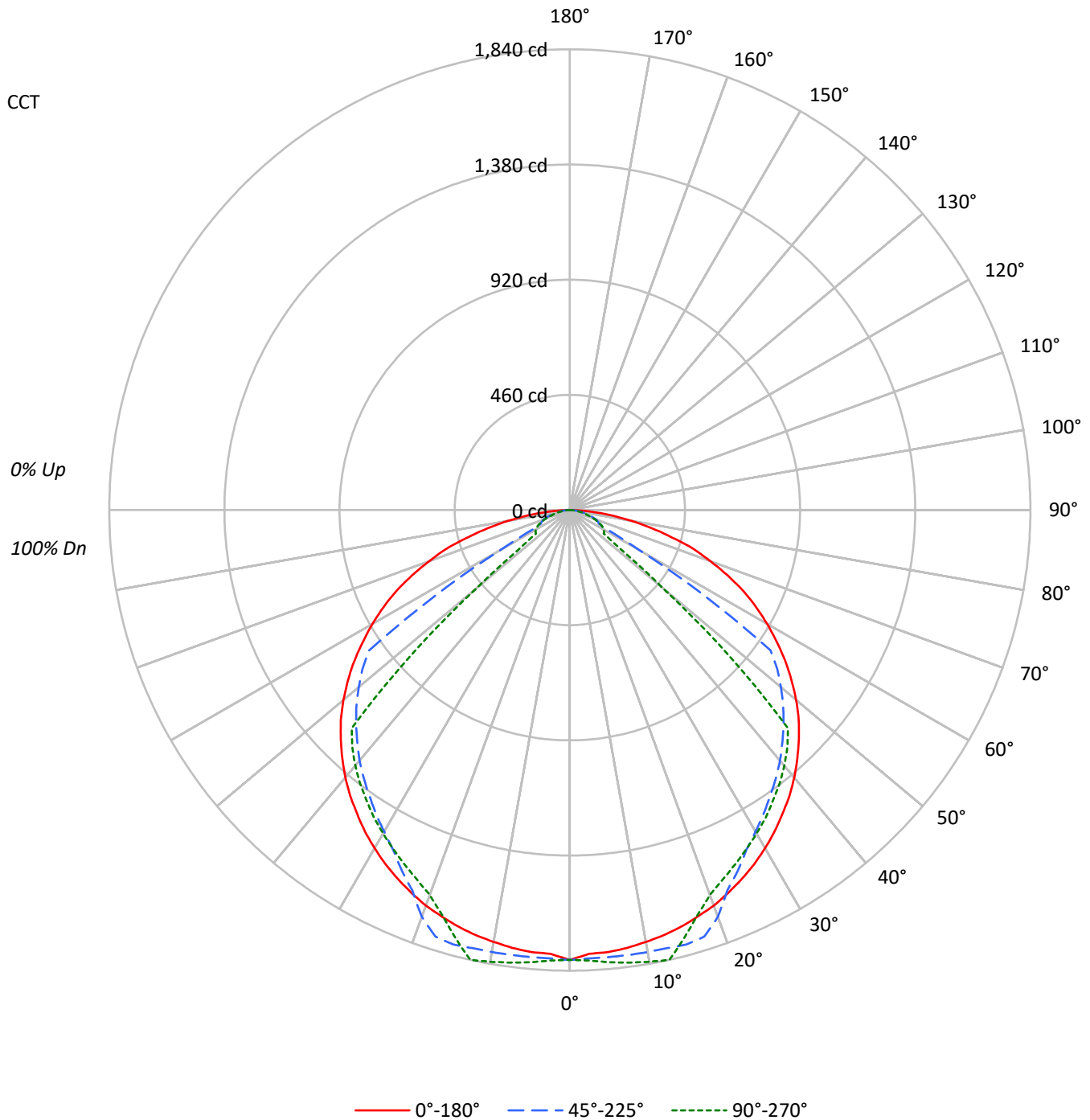
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4382.0 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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				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	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	66	66	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	61	55	51	51	51	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	40	40	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	36	36	36	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	33	33	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23330	23330	23330
5°	23096	23365	23633
10°	23092	23635	24152
15°	23156	24153	23765
20°	23233	23888	22606
25°	23291	22761	22377
30°	23386	22243	22366
35°	23483	22112	22438
40°	23645	22143	22597
45°	23761	22172	22626
50°	23850	22225	9781
55°	23789	22157	3731
60°	23651	8453	4067
65°	23486	3924	4179
70°	22685	4226	3910
75°	21192	4034	3412
80°	18642	3544	2924
85°	14735	3069	2458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 23850 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.6	3.9
10°-20°	498.2	11.4
20°-30°	743.4	17.0
30°-40°	901.0	20.6
40°-50°	922.6	21.1
50°-60°	613.5	14.0
60°-70°	349.7	8.0
70°-80°	146.9	3.4
80°-90°	35.0	0.8
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°	1413.2	32.2
0°-40°	2314.2	52.8
0°-60°	3850.3	87.9
0°-90°	4382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1797	1797	1797	1797	1797	
5°	1772	1807	1792	1797	1813	169
15°	1722	1770	1797	1790	1768	487
25°	1626	1704	1589	1554	1562	750
35°	1481	1508	1395	1401	1416	928
45°	1294	1216	1207	1222	1232	998
55°	1051	962	979	214	165	938
65°	764	684	128	136	136	752
75°	422	89	80	70	68	448
85°	99	25	21	16	16	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1796.7	1796.7	1796.7	1796.7	1796.7
2.5°	1774.0	1811.1	1792.5	1794.6	1800.8
5°	1771.9	1807.0	1792.5	1796.7	1813.1
7.5°	1763.7	1800.8	1792.5	1804.9	1823.4
10°	1751.3	1794.6	1792.5	1813.1	1831.7
12.5°	1739.0	1782.2	1792.5	1823.4	1839.9
15°	1722.5	1769.9	1796.7	1790.5	1767.8
17.5°	1701.9	1757.5	1786.4	1697.8	1695.7
20°	1681.3	1741.0	1728.7	1644.2	1635.9
22.5°	1654.5	1724.5	1644.2	1586.5	1596.8
25°	1625.6	1703.9	1588.6	1553.5	1561.8
27.5°	1594.7	1683.3	1528.8	1516.4	1526.7
30°	1559.7	1654.5	1483.5	1479.4	1491.7
32.5°	1522.6	1598.9	1440.2	1442.3	1456.7
35°	1481.4	1508.2	1394.9	1401.1	1415.5
37.5°	1440.2	1423.7	1351.6	1361.9	1376.3
40°	1394.9	1357.8	1306.3	1316.6	1333.1
42.5°	1345.4	1287.7	1256.8	1271.3	1285.7
45°	1293.9	1215.6	1207.4	1221.8	1232.1
47.5°	1240.4	1153.8	1155.9	1166.2	873.6
50°	1180.6	1092.0	1100.2	762.3	484.2
52.5°	1116.7	1028.1	1044.6	424.4	245.2
55°	1050.8	962.2	978.7	214.3	164.8
57.5°	980.7	896.3	638.7	154.5	162.8
60°	910.7	826.2	325.5	152.5	156.6
62.5°	838.6	756.2	154.5	146.3	148.3
65°	764.4	684.0	127.7	136.0	136.0
67.5°	682.0	607.8	121.6	121.6	119.5
70°	597.5	504.8	111.3	105.1	103.0
72.5°	519.2	193.7	96.8	86.5	84.5
75°	422.4	88.6	80.4	70.1	68.0
77.5°	335.8	74.2	63.9	55.6	53.6
80°	249.3	57.7	47.4	41.2	39.1
82.5°	173.1	39.1	33.0	26.8	26.8
85°	98.9	24.7	20.6	16.5	16.5
87.5°	39.1	12.4	10.3	6.2	6.2
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	23.87	25.39	24.23	25.70	26.02	11.63	13.16	12.00	13.47	13.78
	3H	25.89	27.25	26.27	27.58	27.94	13.95	15.31	14.33	15.64	16.00
	4H	26.35	27.62	26.75	27.97	28.35	14.66	15.93	15.06	16.28	16.66
	6H	26.76	27.93	27.17	28.30	28.69	15.15	16.32	15.56	16.69	17.08
	8H	26.91	28.02	27.33	28.41	28.81	15.28	16.40	15.71	16.79	17.19
	12H	27.01	28.07	27.44	28.46	28.88	15.37	16.44	15.80	16.82	17.25
4H	2H	23.71	24.98	24.11	25.33	25.71	12.43	13.70	12.83	14.05	14.43
	3H	25.91	26.96	26.32	27.36	27.76	14.94	15.99	15.35	16.39	16.79
	4H	26.36	27.30	26.79	27.72	28.16	15.76	16.70	16.20	17.12	17.56
	6H	26.83	27.64	27.28	28.08	28.55	16.36	17.17	16.81	17.61	18.07
	8H	27.02	27.78	27.48	28.22	28.69	16.53	17.29	16.99	17.73	18.20
	12H	27.17	27.85	27.65	28.33	28.80	16.64	17.32	17.13	17.80	18.27
8H	4H	26.28	27.04	26.74	27.49	27.95	16.60	17.36	17.07	17.81	18.28
	6H	26.74	27.37	27.24	27.86	28.34	17.23	17.85	17.72	18.35	18.82
	8H	26.94	27.50	27.45	28.01	28.50	17.43	17.99	17.94	18.50	18.99
	12H	27.12	27.62	27.63	28.12	28.68	17.58	18.08	18.09	18.58	19.14
12H	4H	26.25	26.93	26.73	27.41	27.88	16.67	17.35	17.16	17.83	18.30
	6H	26.69	27.26	27.21	27.77	28.26	17.32	17.88	17.83	18.39	18.88
	8H	26.91	27.42	27.43	27.91	28.47	17.57	18.07	18.08	18.57	19.13