

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: P892867

Luminaire Tested: 2MB-5HL-RFLW-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892867
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-RFLW-UNV-L940
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 4000K
Light Source: -
Ballast/Driver: -

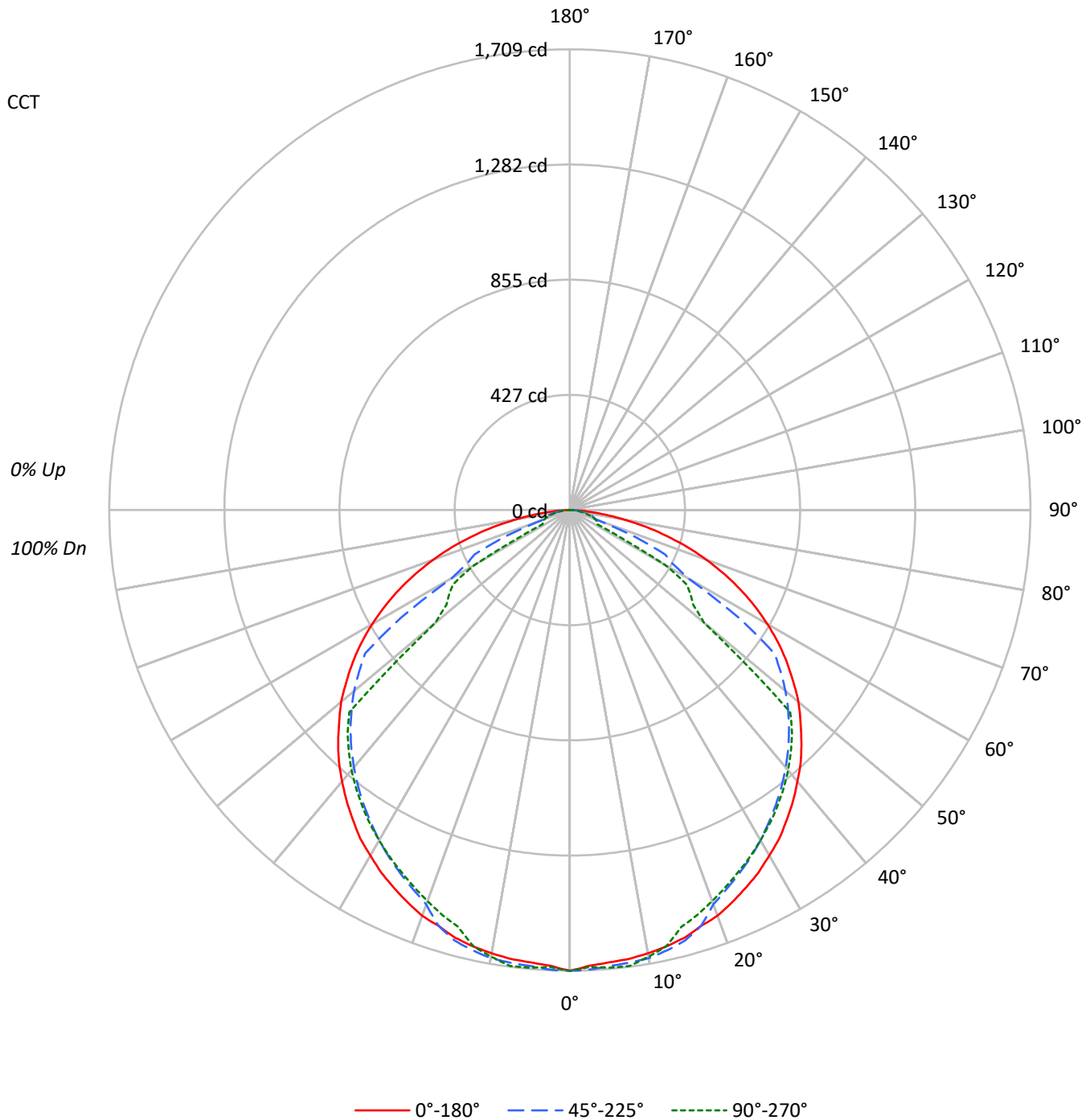
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4351.0 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	65	65	65	63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	49	49	49	47
6	72	60	51	45	70	59	51	45	57	50	44	55	49	44	54	48	43	43	43	43	42
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	39	39	39	37
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	35	35	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	31	31	31	30
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44629	44629	44629
5°	44139	44495	44674
10°	44265	44753	44599
15°	44398	44684	43271
20°	44506	43267	42889
25°	44527	42850	42654
30°	44611	42652	42652
35°	44723	42498	42778
40°	44786	42472	42936
45°	44868	42472	43044
50°	44987	42432	26372
55°	44726	42168	24880
60°	44227	26312	21508
65°	43163	24124	6826
70°	41205	7695	7695
75°	37535	8604	7626
80°	30747	8735	6991
85°	21778	8717	6381

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 44987 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.8	3.7
10°-20°	461.6	10.6
20°-30°	695.9	16.0
30°-40°	845.6	19.4
40°-50°	890.8	20.5
50°-60°	699.5	16.1
60°-70°	393.7	9.0
70°-80°	163.9	3.8
80°-90°	38.3	0.9
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°	1319.3	30.3
0°-40°	2164.9	49.8
0°-60°	3755.2	86.3
0°-90°	4351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4351.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1709	1709	1709	1709	1709	
5°	1684	1704	1698	1697	1705	160
15°	1643	1662	1653	1604	1601	463
25°	1546	1557	1488	1479	1481	713
35°	1403	1356	1333	1337	1342	878
45°	1215	1147	1150	1164	1166	938
55°	983	912	926	543	547	878
65°	699	642	390	106	110	689
75°	372	223	85	78	76	393
85°	73	32	29	24	21	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1709.4	1709.4	1709.4	1709.4	1709.4
2.5°	1692.0	1716.2	1706.5	1696.8	1696.8
5°	1684.2	1703.6	1697.8	1696.8	1704.6
7.5°	1679.4	1695.9	1693.9	1695.9	1705.6
10°	1669.7	1688.1	1688.1	1681.3	1682.3
12.5°	1658.1	1676.5	1672.6	1661.0	1657.1
15°	1642.6	1662.0	1653.2	1603.8	1600.9
17.5°	1618.3	1641.6	1618.3	1571.8	1574.7
20°	1601.9	1619.3	1557.3	1541.8	1543.7
22.5°	1574.7	1590.2	1521.4	1510.8	1512.7
25°	1545.7	1557.3	1487.5	1478.8	1480.7
27.5°	1515.6	1518.5	1452.6	1446.8	1448.8
30°	1479.8	1467.2	1414.8	1411.0	1414.8
32.5°	1445.9	1416.8	1374.1	1375.1	1380.0
35°	1403.2	1355.7	1333.4	1337.3	1342.2
37.5°	1360.6	1303.4	1290.8	1298.6	1302.4
40°	1314.1	1253.0	1246.2	1254.0	1259.8
42.5°	1268.5	1201.6	1199.7	1211.3	1214.2
45°	1215.2	1147.4	1150.3	1163.9	1165.8
47.5°	1160.9	1092.1	1098.9	1111.5	1109.6
50°	1107.6	1034.0	1044.7	1026.2	649.3
52.5°	1044.7	973.9	985.5	611.5	576.6
55°	982.6	911.9	926.4	542.7	546.6
57.5°	917.7	847.0	740.4	510.7	514.6
60°	847.0	781.1	503.9	477.8	411.9
62.5°	774.3	712.3	427.4	268.4	113.4
65°	698.7	642.5	390.5	105.6	110.5
67.5°	619.2	571.8	267.5	102.7	107.6
70°	539.8	443.8	100.8	98.8	100.8
72.5°	457.4	346.9	94.0	90.1	89.2
75°	372.1	222.9	85.3	78.5	75.6
77.5°	290.7	128.9	72.7	64.9	61.1
80°	204.5	65.9	58.1	49.4	46.5
82.5°	132.8	48.5	42.6	36.8	34.9
85°	72.7	32.0	29.1	24.2	21.3
87.5°	32.0	19.4	16.5	12.6	9.7
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	25.86	27.42	26.23	27.74	28.05	22.24	23.81	22.61	24.12	24.44
	3H	27.78	29.17	28.15	29.50	29.86	22.39	23.78	22.76	24.11	24.47
	4H	28.37	29.68	28.77	30.03	30.41	22.50	23.81	22.90	24.16	24.54
	6H	28.74	29.95	29.16	30.32	30.71	22.60	23.81	23.01	24.18	24.57
	8H	28.85	30.00	29.27	30.39	30.79	22.63	23.78	23.06	24.17	24.57
	12H	28.90	30.01	29.33	30.39	30.82	22.65	23.75	23.08	24.14	24.57
4H	2H	26.01	27.32	26.41	27.67	28.04	22.93	24.24	23.33	24.59	24.96
	3H	28.02	29.11	28.43	29.50	29.91	23.13	24.21	23.54	24.61	25.01
	4H	28.68	29.65	29.12	30.07	30.51	23.28	24.25	23.72	24.67	25.11
	6H	29.10	29.95	29.56	30.39	30.85	23.44	24.29	23.90	24.73	25.19
	8H	29.23	30.02	29.69	30.46	30.93	23.49	24.28	23.96	24.73	25.19
	12H	29.32	30.03	29.80	30.50	30.98	23.54	24.24	24.02	24.72	25.19
8H	4H	28.62	29.41	29.09	29.85	30.32	23.51	24.30	23.97	24.74	25.21
	6H	29.05	29.70	29.54	30.19	30.67	23.72	24.37	24.21	24.86	25.34
	8H	29.19	29.77	29.70	30.28	30.77	23.80	24.39	24.32	24.90	25.38
	12H	29.31	29.83	29.82	30.32	30.89	23.88	24.40	24.39	24.90	25.46
12H	4H	28.60	29.30	29.08	29.78	30.25	23.52	24.23	24.00	24.70	25.17
	6H	29.01	29.59	29.52	30.10	30.59	23.74	24.32	24.25	24.83	25.32
	8H	29.17	29.69	29.68	30.18	30.75	23.87	24.39	24.38	24.88	25.44