

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: P894178

Luminaire Tested: 4MB-SC3-ASYMR-UNV-CC83-MID-4000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-ASYMR-UNV-CC83-MID-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 4000K CCT, MID setting
Light Source: -
Ballast/Driver: -

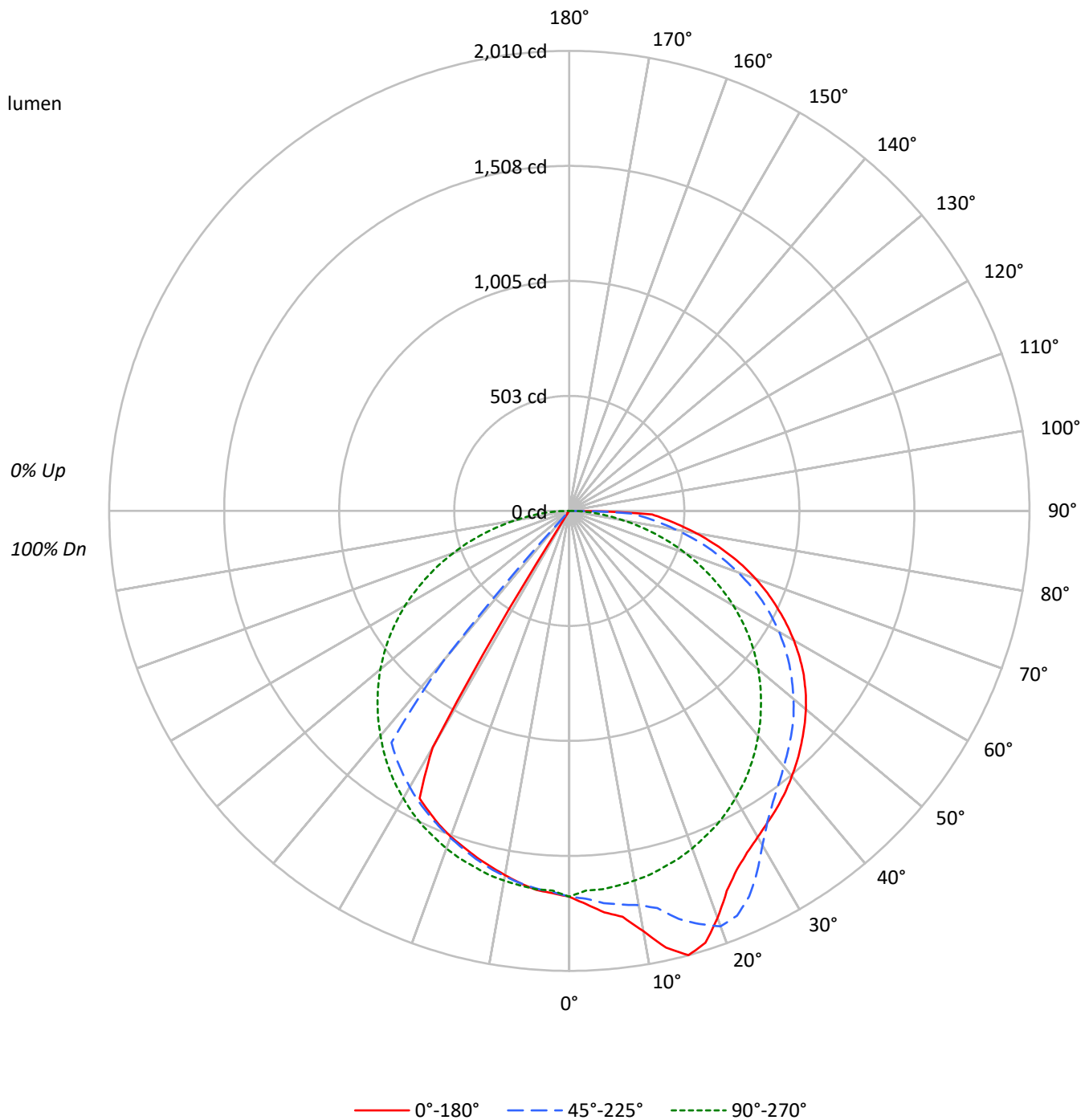
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4560.0 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9948
Total Harmonic Distortion (THDi): 5.65231997856897
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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	85	85	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	71	71	71	69
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	50
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	30	30	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	27	27	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	21885	21885	21885	21885	21885
5°	22950	22421	21628	21591	21666
10°	24589	23063	21624	21370	21306
15°	27017	24811	21631	21165	21061
20°	26157	26690	21689	20996	20928
25°	24784	26636	21740	20925	20773
30°	24677	25286	21740	20900	17889
35°	25095	24589	21774	20902	244
40°	25640	24708	21746	14415	164
45°	26341	25206	21750	266	107
50°	27262	25837	21763	196	38
55°	28298	26573	21699	131	23
60°	29429	27476	21508	49	26
65°	30814	28562	21118	58	58
70°	32875	29758	20448	72	72
75°	35982	31673	19566	196	95
80°	42227	35445	18119	292	142
85°	62843	49762	16970	432	283

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 107764 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	3.5
10°-20°	482.2	10.6
20°-30°	741.2	16.3
30°-40°	794.4	17.4
40°-50°	721.5	15.8
50°-60°	658.1	14.4
60°-70°	489.6	10.7
70°-80°	344.6	7.6
80°-90°	166.9	3.7
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°	1385.0	30.4
0°-40°	2179.3	47.8
0°-60°	3558.9	78.0
0°-90°	4560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4560.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1685	1685	1685	1685	1685	
5°	1761	1720	1659	1656	1662	171
15°	2010	1846	1609	1574	1567	555
25°	1730	1859	1517	1460	1450	804
35°	1583	1551	1374	1319	15	992
45°	1434	1373	1184	14	6	1108
55°	1250	1174	958	6	1	1116
65°	1003	930	687	2	2	993
75°	717	631	390	4	2	756
85°	422	334	114	3	2	424
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4	1685.4
2.5°	1720.1	1700.8	1696.0	1709.5	1660.3	1693.1	1666.1	1671.9	1671.9
5°	1760.7	1733.7	1720.1	1716.3	1659.3	1681.5	1656.4	1656.4	1662.2
7.5°	1788.7	1758.7	1734.6	1725.0	1650.6	1669.9	1641.0	1641.0	1641.0
10°	1864.9	1808.9	1749.1	1731.7	1640.0	1654.5	1620.7	1622.6	1615.9
12.5°	1954.7	1904.5	1777.1	1728.8	1628.4	1635.2	1599.5	1598.5	1590.8
15°	2009.7	1972.1	1845.6	1725.0	1609.1	1614.9	1574.4	1571.5	1566.7
17.5°	1978.8	1973.0	1892.9	1722.1	1591.8	1586.9	1546.4	1543.5	1539.6
20°	1892.9	1907.4	1931.5	1716.3	1569.6	1559.9	1519.4	1517.4	1514.5
22.5°	1797.4	1811.8	1914.2	1725.9	1542.5	1530.9	1490.4	1488.5	1484.6
25°	1729.8	1729.8	1859.1	1749.1	1517.4	1496.2	1460.5	1457.6	1449.9
27.5°	1682.5	1673.8	1777.1	1775.2	1485.6	1461.4	1428.6	1425.7	1416.1
30°	1645.8	1631.3	1686.4	1787.7	1449.9	1423.8	1393.9	1391.0	1193.1
32.5°	1613.0	1597.5	1610.1	1798.3	1414.1	1383.3	1357.2	968.2	42.5
35°	1583.1	1565.7	1551.2	1790.6	1373.6	1342.7	1318.6	28.0	15.4
37.5°	1549.3	1535.8	1502.9	1750.1	1330.2	1299.3	1276.1	15.4	13.5
40°	1512.6	1500.1	1457.6	1690.2	1282.9	1256.8	850.4	13.5	9.7
42.5°	1475.0	1465.3	1415.1	1603.3	1235.6	1209.5	27.0	10.6	7.7
45°	1434.4	1425.7	1372.6	1498.1	1184.4	1160.3	14.5	7.7	5.8
47.5°	1392.9	1380.4	1328.2	1385.2	1132.3	1108.1	12.5	5.8	3.9
50°	1349.5	1336.0	1279.0	1285.8	1077.3	1053.1	9.7	3.9	1.9
52.5°	1301.2	1284.8	1226.9	1196.0	1019.3	997.1	7.7	1.9	1.0
55°	1250.0	1231.7	1173.8	1117.8	958.5	933.4	5.8	1.9	1.0
57.5°	1193.1	1172.8	1117.8	1043.5	893.9	631.3	3.9	1.9	1.0
60°	1133.2	1113.0	1058.0	974.0	828.2	43.4	1.9	1.9	1.0
62.5°	1069.5	1048.3	995.2	903.5	757.7	35.7	1.9	1.9	1.9
65°	1002.9	977.8	929.6	831.1	687.3	29.9	1.9	1.9	1.9
67.5°	936.3	904.5	859.1	756.8	614.9	25.1	1.9	1.9	1.9
70°	865.9	831.1	783.8	681.5	538.6	20.3	1.9	1.9	1.9
72.5°	793.5	759.7	708.5	605.2	467.2	15.4	1.9	1.9	1.9
75°	717.2	686.3	631.3	529.0	390.0	11.6	3.9	1.9	1.9
77.5°	638.1	613.9	552.1	450.8	314.7	7.7	3.9	1.9	1.9
80°	564.7	537.7	474.0	371.6	242.3	5.8	3.9	2.9	1.9
82.5°	489.4	465.3	401.6	299.2	173.8	4.8	3.9	2.9	1.9
85°	421.8	398.7	334.0	233.6	113.9	3.9	2.9	2.9	1.9
87.5°	362.0	340.7	277.0	170.9	64.7	2.9	2.9	2.9	1.9
90°	0.0	0.0	0.0	0.0	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	25.25	26.87	25.62	27.18	27.50	20.69	22.30	21.05	22.61	22.93
	3H	27.70	29.16	28.08	29.49	29.85	21.33	22.79	21.70	23.12	23.48
	4H	28.82	30.21	29.22	30.55	30.93	21.47	22.86	21.87	23.20	23.58
	6H	29.92	31.20	30.33	31.57	31.96	21.51	22.80	21.92	23.16	23.55
	8H	30.45	31.67	30.87	32.06	32.46	21.50	22.73	21.93	23.12	23.52
	12H	31.01	32.19	31.44	32.57	33.00	21.48	22.66	21.91	23.04	23.47
4H	2H	25.91	27.29	26.31	27.64	28.02	21.81	23.20	22.21	23.54	23.92
	3H	28.60	29.77	29.01	30.16	30.56	23.16	24.32	23.56	24.72	25.12
	4H	29.89	30.96	30.33	31.37	31.81	23.69	24.75	24.12	25.17	25.60
	6H	31.18	32.11	31.63	32.55	33.00	23.97	24.90	24.42	25.34	25.79
	8H	31.80	32.68	32.26	33.12	33.59	24.00	24.88	24.46	25.32	25.79
	12H	32.49	33.28	32.97	33.76	34.22	24.01	24.81	24.49	25.28	25.75
8H	4H	30.26	31.13	30.72	31.58	32.04	24.64	25.51	25.10	25.96	26.42
	6H	31.74	32.48	32.23	32.96	33.44	25.23	25.96	25.72	26.45	26.93
	8H	32.52	33.19	33.03	33.69	34.18	25.41	26.07	25.91	26.58	27.06
	12H	33.41	34.01	33.92	34.50	35.05	25.51	26.10	26.01	26.59	27.15
12H	4H	30.30	31.09	30.78	31.56	32.03	24.85	25.65	25.33	26.12	26.59
	6H	31.83	32.49	32.34	33.00	33.48	25.58	26.24	26.08	26.75	27.23
	8H	32.71	33.30	33.21	33.79	34.35	25.89	26.48	26.39	26.97	27.53