

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: P894186

Luminaire Tested: 4MB-SC3-ASYMR-UNV-CC93-MID-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894186
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-CC93-MID-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 90CRI, 3500K CCT, MID setting
Light Source: -
Ballast/Driver: -

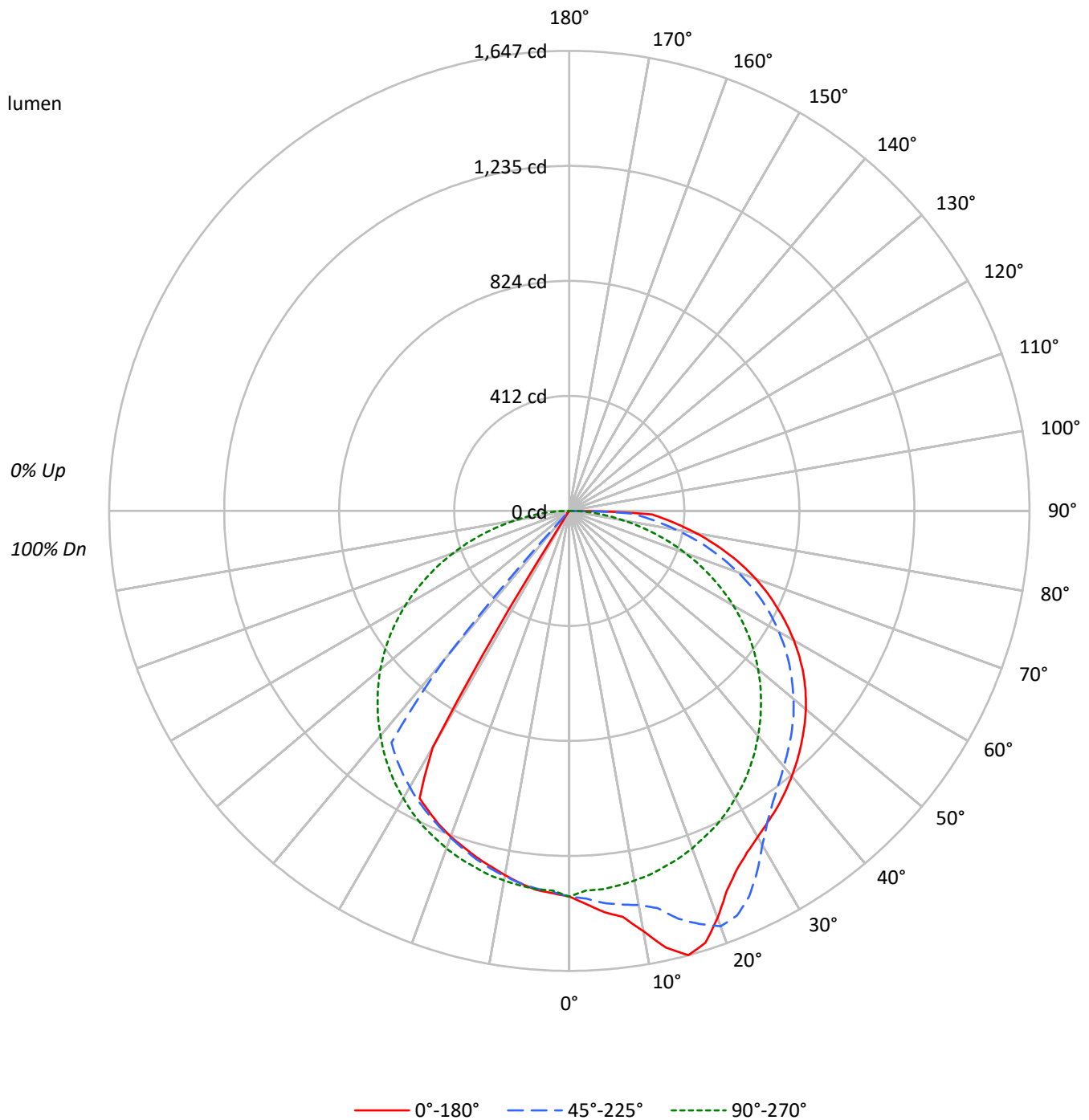
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3736.0 lumens
Efficiency: N/A
Efficacy: 111.5 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°	17930	17930	17930	17930	17930
5°	18803	18370	17721	17689	17752
10°	20146	18895	17717	17508	17456
15°	22135	20327	17723	17340	17256
20°	21431	21868	17769	17201	17147
25°	20305	21824	17812	17144	17020
30°	20218	20716	17811	17123	14657
35°	20560	20146	17840	17125	201
40°	21007	20243	17815	11810	134
45°	21581	20652	17820	219	86
50°	22334	21169	17830	160	32
55°	23187	21772	17778	106	18
60°	24113	22511	17623	42	21
65°	25247	23400	17301	49	49
70°	26933	24382	16754	61	61
75°	29480	25948	16029	161	80
80°	34600	29036	14843	239	120
85°	51490	40763	13900	358	238

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 88295 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.3	3.5
10°-20°	395.1	10.6
20°-30°	607.3	16.3
30°-40°	650.8	17.4
40°-50°	591.1	15.8
50°-60°	539.2	14.4
60°-70°	401.1	10.7
70°-80°	282.3	7.6
80°-90°	136.8	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°	1134.7	30.4
0°-40°	1785.5	47.8
0°-60°	2915.8	78.0
0°-90°	3736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3736.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1381	1381	1381	1381	1381	
5°	1442	1409	1360	1357	1362	140
15°	1647	1512	1318	1290	1284	455
25°	1417	1523	1243	1197	1188	659
35°	1297	1271	1125	1080	13	812
45°	1175	1125	970	12	5	908
55°	1024	962	785	5	1	915
65°	822	762	563	2	2	814
75°	588	517	320	3	2	620
85°	346	274	93	2	2	347
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°	1380.8	1380.8	1380.8	1380.8	1380.8	1380.8	1380.8	1380.8	1380.8
2.5°	1409.3	1393.5	1389.5	1400.6	1360.3	1387.2	1365.0	1369.8	1369.8
5°	1442.5	1420.4	1409.3	1406.1	1359.5	1377.7	1357.1	1357.1	1361.9
7.5°	1465.5	1440.9	1421.2	1413.3	1352.4	1368.2	1344.5	1344.5	1344.5
10°	1527.9	1482.1	1433.0	1418.8	1343.7	1355.5	1327.8	1329.4	1323.9
12.5°	1601.5	1560.4	1456.0	1416.4	1334.2	1339.7	1310.4	1309.7	1303.3
15°	1646.6	1615.7	1512.1	1413.3	1318.4	1323.1	1289.9	1287.5	1283.6
17.5°	1621.3	1616.5	1550.9	1410.9	1304.1	1300.2	1267.0	1264.6	1261.4
20°	1550.9	1562.7	1582.5	1406.1	1285.9	1278.0	1244.8	1243.2	1240.9
22.5°	1472.6	1484.4	1568.3	1414.1	1263.8	1254.3	1221.1	1219.5	1216.3
25°	1417.2	1417.2	1523.2	1433.0	1243.2	1225.8	1196.6	1194.2	1187.9
27.5°	1378.5	1371.3	1456.0	1454.4	1217.1	1197.4	1170.5	1168.1	1160.2
30°	1348.4	1336.5	1381.6	1464.7	1187.9	1166.5	1142.0	1139.6	977.5
32.5°	1321.5	1308.9	1319.1	1473.4	1158.6	1133.3	1111.9	793.2	34.8
35°	1297.0	1282.8	1270.9	1467.0	1125.4	1100.1	1080.3	22.9	12.7
37.5°	1269.3	1258.3	1231.4	1433.8	1089.8	1064.5	1045.5	12.7	11.1
40°	1239.3	1229.0	1194.2	1384.8	1051.0	1029.7	696.7	11.1	7.9
42.5°	1208.4	1200.5	1159.4	1313.6	1012.3	990.9	22.1	8.7	6.3
45°	1175.2	1168.1	1124.6	1227.4	970.4	950.6	11.9	6.3	4.7
47.5°	1141.2	1130.9	1088.2	1134.9	927.7	907.9	10.3	4.7	3.2
50°	1105.6	1094.5	1047.9	1053.4	882.6	862.8	7.9	3.2	1.6
52.5°	1066.1	1052.6	1005.2	979.9	835.1	817.0	6.3	1.6	0.8
55°	1024.2	1009.1	961.7	915.8	785.3	764.8	4.7	1.6	0.8
57.5°	977.5	960.9	915.8	854.9	732.3	517.2	3.2	1.6	0.8
60°	928.5	911.9	866.8	798.0	678.6	35.6	1.6	1.6	0.8
62.5°	876.3	858.9	815.4	740.2	620.8	29.3	1.6	1.6	1.6
65°	821.7	801.1	761.6	680.9	563.1	24.5	1.6	1.6	1.6
67.5°	767.1	741.0	703.9	620.0	503.8	20.6	1.6	1.6	1.6
70°	709.4	680.9	642.2	558.3	441.3	16.6	1.6	1.6	1.6
72.5°	650.1	622.4	580.5	495.9	382.8	12.7	1.6	1.6	1.6
75°	587.6	562.3	517.2	433.4	319.5	9.5	3.2	1.6	1.6
77.5°	522.8	503.0	452.4	369.3	257.8	6.3	3.2	1.6	1.6
80°	462.7	440.5	388.3	304.5	198.5	4.7	3.2	2.4	1.6
82.5°	401.0	381.2	329.0	245.2	142.4	4.0	3.2	2.4	1.6
85°	345.6	326.6	273.6	191.4	93.3	3.2	2.4	2.4	1.6
87.5°	296.6	279.2	227.0	140.0	53.0	2.4	2.4	2.4	1.6
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	24.56	26.17	24.93	26.49	26.80	19.99	21.61	20.36	21.92	22.24
	3H	27.01	28.47	27.38	28.80	29.16	20.64	22.10	21.01	22.43	22.79
	4H	28.13	29.51	28.53	29.86	30.24	20.78	22.16	21.18	22.51	22.89
	6H	29.22	30.51	29.64	30.87	31.26	20.82	22.11	21.23	22.47	22.86
	8H	29.75	30.98	30.18	31.37	31.77	20.81	22.04	21.23	22.43	22.82
	12H	30.32	31.50	30.75	31.88	32.31	20.79	21.97	21.22	22.35	22.78
4H	2H	25.22	26.60	25.62	26.95	27.32	21.12	22.50	21.52	22.85	23.23
	3H	27.91	29.07	28.32	29.47	29.87	22.46	23.63	22.87	24.03	24.43
	4H	29.20	30.26	29.63	30.68	31.11	23.00	24.06	23.43	24.47	24.91
	6H	30.48	31.42	30.94	31.86	32.31	23.27	24.21	23.73	24.65	25.10
	8H	31.11	31.99	31.57	32.43	32.89	23.31	24.19	23.77	24.63	25.09
	12H	31.80	32.59	32.28	33.06	33.53	23.32	24.11	23.80	24.59	25.06
8H	4H	29.57	30.44	30.02	30.88	31.35	23.94	24.82	24.40	25.26	25.73
	6H	31.05	31.79	31.54	32.27	32.75	24.53	25.27	25.03	25.76	26.23
	8H	31.83	32.50	32.34	33.00	33.49	24.71	25.38	25.22	25.88	26.37
	12H	32.72	33.31	33.23	33.80	34.36	24.82	25.41	25.32	25.90	26.45
12H	4H	29.61	30.40	30.09	30.87	31.34	24.16	24.95	24.64	25.43	25.90
	6H	31.14	31.80	31.64	32.31	32.79	24.88	25.55	25.39	26.06	26.54
	8H	32.02	32.61	32.52	33.10	33.66	25.20	25.79	25.70	26.28	26.84