

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: P894187

Luminaire Tested: 4MB-SC3-ASYMR-UNV-CC93-MID-4000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894187
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-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 90CRI, 4000K CCT, MID setting
Light Source: -
Ballast/Driver: -

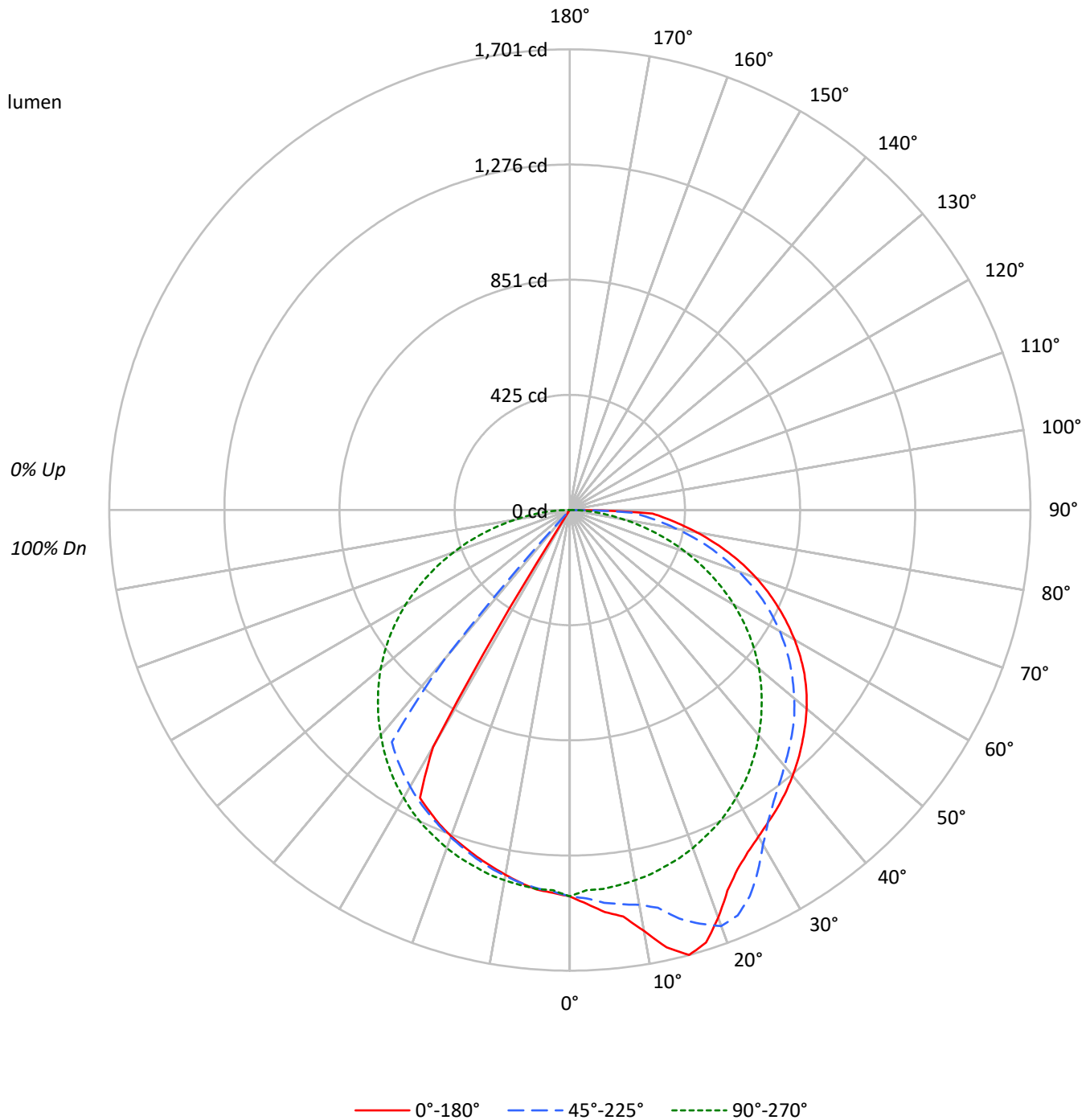
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3859.0 lumens
Efficiency: N/A
Efficacy: 115.2 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°	18521	18521	18521	18521	18521
5°	19422	18975	18303	18272	18336
10°	20809	19517	18300	18085	18031
15°	22864	20997	18307	17912	17823
20°	22136	22588	18355	17768	17711
25°	20974	22541	18399	17709	17580
30°	20883	21398	18397	17687	15139
35°	21237	20809	18426	17689	208
40°	21699	20909	18403	12200	139
45°	22292	21331	18406	226	90
50°	23070	21866	18417	166	32
55°	23950	22487	18365	111	18
60°	24905	23251	18202	42	21
65°	26080	24172	17870	49	49
70°	27821	25183	17305	61	61
75°	30453	26801	16556	166	80
80°	35736	29993	15330	247	120
85°	53188	42104	14362	372	238

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 91183 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	3.5
10°-20°	408.1	10.6
20°-30°	627.3	16.3
30°-40°	672.3	17.4
40°-50°	610.6	15.8
50°-60°	556.9	14.4
60°-70°	414.3	10.7
70°-80°	291.6	7.6
80°-90°	141.3	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°	1172.1	30.4
0°-40°	1844.3	47.8
0°-60°	3011.8	78.0
0°-90°	3859.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3859.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1426	1426	1426	1426	1426	
5°	1490	1456	1404	1402	1407	144
15°	1701	1562	1362	1332	1326	470
25°	1464	1573	1284	1236	1227	681
35°	1340	1313	1162	1116	13	839
45°	1214	1162	1002	12	5	938
55°	1058	993	811	5	1	945
65°	849	787	582	2	2	840
75°	607	534	330	3	2	640
85°	357	283	96	2	2	359
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°	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3	1426.3
2.5°	1455.7	1439.4	1435.3	1446.7	1405.1	1432.8	1410.0	1414.9	1414.9
5°	1490.0	1467.1	1455.7	1452.4	1404.2	1423.0	1401.8	1401.8	1406.7
7.5°	1513.7	1488.4	1468.0	1459.8	1396.9	1413.2	1388.7	1388.7	1388.7
10°	1578.2	1530.9	1480.2	1465.5	1387.9	1400.2	1371.6	1373.2	1367.5
12.5°	1654.2	1611.7	1503.9	1463.1	1378.1	1383.8	1353.6	1352.8	1346.2
15°	1700.8	1668.9	1561.9	1459.8	1361.8	1366.7	1332.4	1329.9	1325.8
17.5°	1674.6	1669.7	1601.9	1457.3	1347.1	1343.0	1308.7	1306.2	1302.9
20°	1601.9	1614.2	1634.6	1452.4	1328.3	1320.1	1285.8	1284.2	1281.7
22.5°	1521.1	1533.3	1619.9	1460.6	1305.4	1295.6	1261.3	1259.6	1256.4
25°	1463.9	1463.9	1573.3	1480.2	1284.2	1266.2	1236.0	1233.5	1227.0
27.5°	1423.8	1416.5	1503.9	1502.3	1257.2	1236.8	1209.0	1206.6	1198.4
30°	1392.8	1380.5	1427.1	1512.9	1227.0	1204.9	1179.6	1177.1	1009.7
32.5°	1365.0	1352.0	1362.6	1521.9	1196.7	1170.6	1148.6	819.3	35.9
35°	1339.7	1325.0	1312.7	1515.3	1162.4	1136.3	1115.9	23.7	13.1
37.5°	1311.1	1299.7	1271.9	1481.0	1125.7	1099.5	1079.9	13.1	11.4
40°	1280.1	1269.5	1233.5	1430.4	1085.7	1063.6	719.7	11.4	8.2
42.5°	1248.2	1240.0	1197.6	1356.9	1045.6	1023.6	22.9	9.0	6.5
45°	1213.9	1206.6	1161.6	1267.8	1002.3	981.9	12.3	6.5	4.9
47.5°	1178.8	1168.2	1124.0	1172.2	958.2	937.8	10.6	4.9	3.3
50°	1142.0	1130.6	1082.4	1088.1	911.7	891.2	8.2	3.3	1.6
52.5°	1101.2	1087.3	1038.3	1012.1	862.6	843.9	6.5	1.6	0.8
55°	1057.9	1042.4	993.3	946.0	811.2	789.9	4.9	1.6	0.8
57.5°	1009.7	992.5	946.0	883.1	756.4	534.2	3.3	1.6	0.8
60°	959.0	941.9	895.3	824.2	700.9	36.8	1.6	1.6	0.8
62.5°	905.1	887.1	842.2	764.6	641.3	30.2	1.6	1.6	1.6
65°	848.8	827.5	786.7	703.3	581.6	25.3	1.6	1.6	1.6
67.5°	792.4	765.4	727.0	640.4	520.4	21.2	1.6	1.6	1.6
70°	732.8	703.3	663.3	576.7	455.8	17.2	1.6	1.6	1.6
72.5°	671.5	642.9	599.6	512.2	395.4	13.1	1.6	1.6	1.6
75°	607.0	580.8	534.2	447.7	330.0	9.8	3.3	1.6	1.6
77.5°	540.0	519.5	467.3	381.5	266.3	6.5	3.3	1.6	1.6
80°	477.9	455.0	401.1	314.5	205.0	4.9	3.3	2.5	1.6
82.5°	414.2	393.7	339.8	253.2	147.0	4.1	3.3	2.5	1.6
85°	357.0	337.4	282.6	197.7	96.4	3.3	2.5	2.5	1.6
87.5°	306.3	288.4	234.4	144.6	54.7	2.5	2.5	2.5	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	24.67	26.29	25.04	26.60	26.92	20.11	21.72	20.47	22.03	22.35
	3H	27.12	28.58	27.50	28.91	29.27	20.75	22.21	21.12	22.54	22.90
	4H	28.24	29.63	28.64	29.97	30.35	20.89	22.27	21.29	22.62	23.00
	6H	29.34	30.62	29.75	30.99	31.38	20.93	22.22	21.34	22.58	22.97
	8H	29.87	31.09	30.29	31.48	31.88	20.92	22.15	21.35	22.54	22.94
	12H	30.43	31.61	30.86	31.99	32.42	20.90	22.08	21.33	22.46	22.89
4H	2H	25.33	26.71	25.73	27.06	27.44	21.23	22.61	21.63	22.96	23.34
	3H	28.02	29.19	28.43	29.58	29.98	22.57	23.74	22.98	24.14	24.54
	4H	29.31	30.38	29.75	30.79	31.23	23.11	24.17	23.54	24.59	25.02
	6H	30.60	31.53	31.05	31.97	32.42	23.39	24.32	23.84	24.76	25.21
	8H	31.22	32.10	31.68	32.54	33.01	23.42	24.30	23.88	24.74	25.21
	12H	31.91	32.70	32.39	33.18	33.64	23.43	24.23	23.91	24.70	25.17
8H	4H	29.68	30.55	30.14	31.00	31.46	24.06	24.93	24.52	25.38	25.84
	6H	31.16	31.90	31.65	32.38	32.86	24.65	25.38	25.14	25.87	26.35
	8H	31.94	32.61	32.45	33.11	33.60	24.82	25.49	25.33	25.99	26.48
	12H	32.83	33.43	33.34	33.92	34.47	24.93	25.52	25.43	26.01	26.57
12H	4H	29.72	30.51	30.20	30.98	31.45	24.27	25.07	24.75	25.54	26.01
	6H	31.25	31.91	31.76	32.42	32.90	25.00	25.66	25.50	26.17	26.65
	8H	32.13	32.72	32.63	33.21	33.77	25.31	25.90	25.81	26.39	26.95