

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: P892886

Luminaire Tested: 2MB-SC3-A-UNV-CC83-HI-4000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892886
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-SC3-A-UNV-CC83-HI-4000K
Description: Selectable 2FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 4000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

Summary

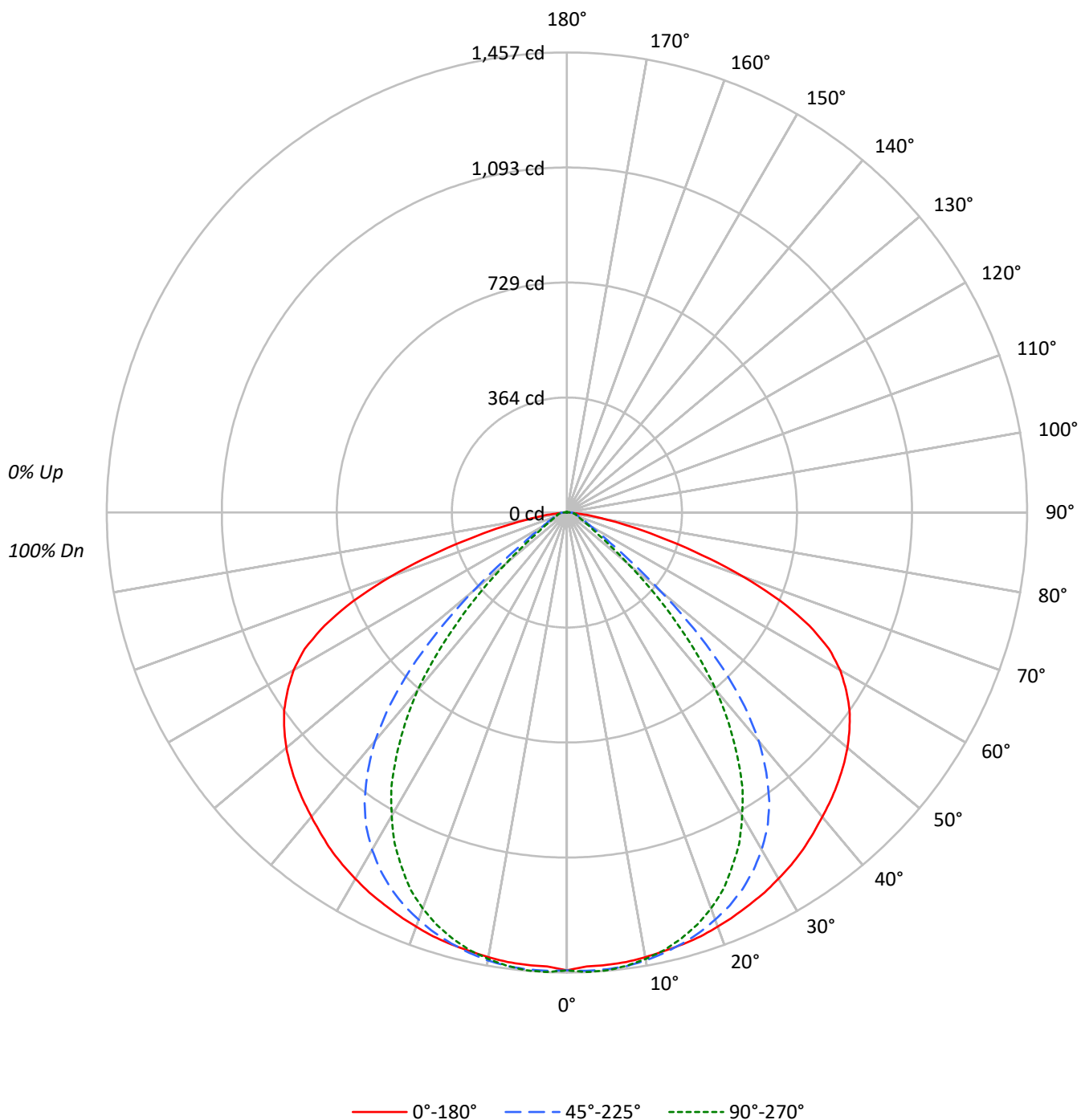
Lumens per Lamp: N/A
Luminaire Lumens: 3040.9 lumens
Efficiency: N/A
Efficacy: 144.8 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.15 / 1.25
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.39961257980444
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	105	101	99	100	98	95		97	94	93		93
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		84
3	95	86	79	74	93	84	78	73	82	76	72		79	74	70		76
4	88	78	70	64	86	76	69	64	74	68	63		72	66	62		70
5	82	70	62	57	80	69	62	56	67	61	56		65	60	55		63
6	76	64	56	50	74	63	56	50	61	55	50		60	54	49		58
7	71	59	51	45	69	58	50	45	56	50	45		55	49	44		54
8	66	54	46	41	65	53	46	41	52	45	40		51	45	40		50
9	62	50	42	37	61	49	42	37	48	41	37		47	41	37		46
10	58	46	39	34	57	46	39	34	45	38	34		44	38	33		43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29691	29691	29691
5°	29572	29843	29921
10°	29735	29951	29854
15°	30018	29956	29617
20°	30422	29908	29084
25°	30944	29728	27977
30°	31669	29165	26238
35°	32584	27929	23510
40°	33629	25265	19657
45°	35118	20256	14016
50°	36946	12315	8040
55°	39009	5940	4320
60°	40916	3641	2940
65°	40990	2931	2427
70°	35485	2658	2263
75°	24977	2690	2468
80°	14716	3231	3125
85°	6884	4887	4652

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 62.5°

Luminance: 41499 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.1	4.5
10°-20°	398.7	13.1
20°-30°	603.4	19.8
30°-40°	696.9	22.9
40°-50°	595.9	19.6
50°-60°	325.5	10.7
60°-70°	164.4	5.4
70°-80°	79.8	2.6
80°-90°	27.4	0.9
90°-100°	6.6	0.2
100°-110°	1.1	0.0
110°-120°	0.4	0.0
120°-130°	0.4	0.0
130°-140°	0.6	0.0
140°-150°	0.6	0.0
150°-160°	0.5	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	1140.2	37.5
0°-40°	1837.1	60.4
0°-60°	2758.5	90.7
0°-90°	3030.2	99.6
90°-120°	8.1	0.3
90°-150°	9.6	0.3
90°-180°	11.0	0.4
0°-180°	3040.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1439	1450	1452	1458	1456	137
15°	1416	1424	1413	1406	1397	401
25°	1370	1362	1316	1265	1238	633
35°	1304	1259	1117	987	940	817
45°	1213	1059	700	520	484	937
55°	1093	502	166	130	121	974
65°	846	94	60	54	50	819
75°	316	52	34	33	31	350
85°	29	29	21	21	20	45
90°	0	17	13	13	12	1
95°	0	2	6	8	8	0
105°	0	0	1	2	1	0
115°	0	0	0	1	1	0
125°	0	0	1	1	0	0
135°	1	1	1	1	1	1
145°	1	1	1	1	1	1
155°	1	1	1	2	1	0
165°	1	1	2	2	2	0
175°	1	1	2	2	2	0
180°	2	2	2	2	2	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1450.0	1450.0	1450.0	1450.0	1450.0
2.5°	1438.7	1449.0	1452.8	1459.4	1456.6
5°	1438.7	1450.0	1451.9	1457.6	1455.7
7.5°	1435.8	1446.2	1449.0	1451.9	1448.1
10°	1430.1	1440.5	1440.5	1440.5	1435.8
12.5°	1422.6	1433.9	1428.3	1424.5	1419.7
15°	1416.0	1424.5	1413.1	1406.5	1397.1
17.5°	1407.5	1414.1	1395.2	1381.9	1369.6
20°	1396.1	1399.0	1372.5	1347.9	1334.7
22.5°	1383.8	1381.0	1347.0	1311.0	1293.1
25°	1369.6	1362.1	1315.8	1264.7	1238.3
27.5°	1356.4	1340.3	1278.0	1209.0	1181.5
30°	1339.4	1317.7	1233.5	1146.6	1109.7
32.5°	1322.4	1290.2	1181.5	1075.7	1035.0
35°	1303.5	1259.1	1117.3	986.8	940.5
37.5°	1280.8	1220.3	1036.9	890.4	841.3
40°	1258.1	1174.9	945.2	778.9	735.4
42.5°	1236.4	1123.9	832.8	654.1	611.6
45°	1212.7	1058.7	699.5	519.9	484.0
47.5°	1187.2	968.9	545.4	394.2	363.9
50°	1159.8	852.6	386.6	276.0	252.4
52.5°	1127.7	691.9	255.2	186.2	171.1
55°	1092.7	501.9	166.4	129.5	121.0
57.5°	1048.3	327.1	117.2	96.4	89.8
60°	999.1	195.7	88.9	76.6	71.8
62.5°	935.8	126.7	71.8	64.3	58.6
65°	846.0	93.6	60.5	53.9	50.1
67.5°	732.6	77.5	51.0	46.3	42.5
70°	592.7	68.1	44.4	40.6	37.8
72.5°	448.0	59.5	38.8	35.9	34.0
75°	315.7	52.0	34.0	33.1	31.2
77.5°	207.0	45.4	31.2	30.2	29.3
80°	124.8	38.8	27.4	27.4	26.5
82.5°	69.9	34.0	24.6	24.6	22.7
85°	29.3	29.3	20.8	20.8	19.8
87.5°	8.5	22.7	17.0	17.0	15.1
90°	0.0	17.0	13.2	13.2	12.3
92.5°	0.0	9.5	9.5	10.4	9.5
95°	0.0	1.9	5.7	8.5	7.6
97.5°	0.0	0.9	3.8	6.6	5.7
100°	0.0	0.0	1.9	4.7	3.8
102.5°	0.0	0.0	0.9	2.8	2.8
105°	0.0	0.0	0.9	1.9	0.9
107.5°	0.0	0.0	0.9	0.9	0.9
110°	0.0	0.0	0.9	0.9	0.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.9	0.9	0.9
115°	0.0	0.0	0.0	0.9	0.9
117.5°	0.0	0.0	0.0	0.9	0.0
120°	0.0	0.0	0.0	0.9	0.0
122.5°	0.0	0.0	0.0	0.9	0.0
125°	0.0	0.0	0.9	0.9	0.0
127.5°	0.0	0.0	0.9	0.9	0.9
130°	0.0	0.0	0.9	0.9	0.9
132.5°	0.9	0.0	0.9	0.9	0.9
135°	0.9	0.9	0.9	0.9	0.9
137.5°	0.9	0.9	0.9	0.9	0.9
140°	0.9	0.9	0.9	0.9	0.9
142.5°	0.9	0.9	0.9	0.9	0.9
145°	0.9	0.9	0.9	0.9	0.9
147.5°	0.9	0.9	0.9	0.9	0.9
150°	0.9	0.9	0.9	0.9	0.9
152.5°	0.9	0.9	0.9	0.9	0.9
155°	0.9	0.9	0.9	1.9	0.9
157.5°	0.9	0.9	0.9	1.9	0.9
160°	0.9	0.9	0.9	1.9	0.9
162.5°	0.9	0.9	1.9	1.9	1.9
165°	0.9	0.9	1.9	1.9	1.9
167.5°	0.9	0.9	1.9	1.9	1.9
170°	0.9	0.9	1.9	1.9	1.9
172.5°	0.9	0.9	1.9	1.9	1.9
175°	0.9	0.9	1.9	1.9	1.9
177.5°	0.9	0.9	1.9	1.9	1.9
180°	1.9	1.9	1.9	1.9	1.9

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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	21.95	23.36	22.32	23.69	24.01	11.07	12.48	11.44	12.80	13.13
	3H	24.73	25.99	25.12	26.32	26.70	12.07	13.33	12.46	13.67	14.04
	4H	25.56	26.74	25.97	27.09	27.48	12.63	13.80	13.04	14.16	14.55
	6H	25.96	27.04	26.38	27.41	27.82	13.33	14.41	13.75	14.79	15.19
	8H	26.03	27.06	26.47	27.45	27.87	13.70	14.73	14.14	15.13	15.54
	12H	26.05	27.03	26.49	27.42	27.86	14.12	15.10	14.56	15.49	15.93
4H	2H	21.77	22.94	22.18	23.30	23.69	11.50	12.68	11.91	13.03	13.42
	3H	24.56	25.53	24.98	25.94	26.35	12.78	13.74	13.20	14.15	14.56
	4H	25.40	26.26	25.84	26.68	27.13	13.51	14.37	13.95	14.80	15.25
	6H	25.87	26.62	26.34	27.07	27.54	14.43	15.17	14.89	15.62	16.10
	8H	25.98	26.68	26.45	27.13	27.61	14.91	15.61	15.38	16.06	16.54
	12H	26.03	26.65	26.52	27.14	27.62	15.46	16.08	15.95	16.56	17.05
8H	4H	25.29	25.99	25.76	26.44	26.92	13.95	14.65	14.43	15.10	15.58
	6H	25.76	26.34	26.27	26.84	27.33	15.07	15.64	15.57	16.15	16.63
	8H	25.90	26.41	26.42	26.93	27.43	15.71	16.23	16.24	16.75	17.25
	12H	25.99	26.45	26.51	26.95	27.53	16.45	16.91	16.97	17.41	17.99
12H	4H	25.25	25.87	25.74	26.36	26.84	14.12	14.74	14.61	15.23	15.71
	6H	25.71	26.23	26.24	26.75	27.25	15.28	15.80	15.81	16.32	16.82
	8H	25.87	26.33	26.39	26.83	27.41	16.02	16.48	16.54	16.98	17.56