

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: P892771

Luminaire Tested: 2MB-4HL-RFLW-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892771
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-4HL-RFLW-UNV-L940
Description: 4000 Lumen 2FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 4000K
Light Source: -
Ballast/Driver: -

Summary

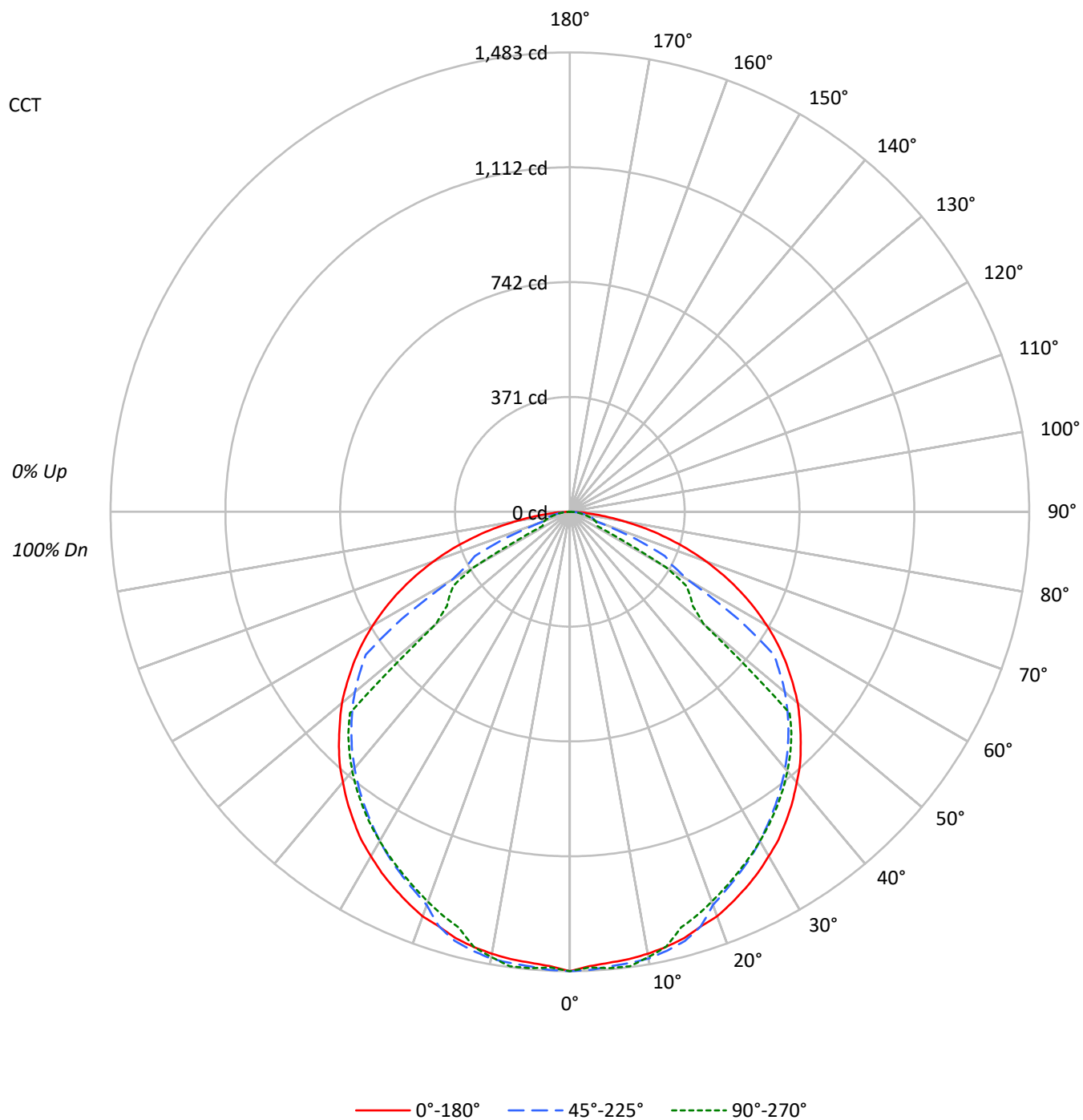
Lumens per Lamp: N/A
Luminaire Lumens: 3775.0 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 27.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 6.5
Total Harmonic Distortion (THDi): 0.99
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	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82
3	92	83	75	69	90	81	74	68	78	72	67		75	70	66		73
4	85	74	65	59	83	72	65	59	70	63	58		68	62	57		65
5	78	66	57	51	76	65	57	51	63	56	50		61	55	50		59
6	72	60	51	45	70	59	51	45	57	50	44		55	49	44		54
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49
8	63	49	41	35	61	49	41	35	47	40	35		46	40	35		45
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	41	34	29	40	34	29		39	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38721	38721	38721
5°	38297	38604	38759
10°	38406	38828	38695
15°	38519	38770	37543
20°	38613	37538	37213
25°	38630	37178	37008
30°	38706	37005	37005
35°	38804	36873	37115
40°	38856	36849	37251
45°	38927	36848	37347
50°	39033	36815	22879
55°	38808	36587	21585
60°	38368	22829	18657
65°	37449	20930	5918
70°	35747	6672	6672
75°	32572	7465	6617
80°	26672	7578	6074
85°	18902	7549	5542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 50°

Luminance: 39033 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	3.7
10°-20°	400.5	10.6
20°-30°	603.8	16.0
30°-40°	733.7	19.4
40°-50°	772.8	20.5
50°-60°	606.9	16.1
60°-70°	341.5	9.0
70°-80°	142.2	3.8
80°-90°	33.2	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°	1144.6	30.3
0°-40°	1878.3	49.8
0°-60°	3258.1	86.3
0°-90°	3775.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3775.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1483	1483	1483	1483	1483	
5°	1461	1478	1473	1472	1479	139
15°	1425	1442	1434	1392	1389	402
25°	1341	1351	1291	1283	1285	619
35°	1218	1176	1157	1160	1164	762
45°	1054	996	998	1010	1012	814
55°	853	791	804	471	474	761
65°	606	557	339	92	96	598
75°	323	193	74	68	66	341
85°	63	28	25	21	18	80
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1483.1	1483.1	1483.1	1483.1	1483.1
2.5°	1468.0	1489.0	1480.6	1472.2	1472.2
5°	1461.3	1478.1	1473.0	1472.2	1478.9
7.5°	1457.1	1471.4	1469.7	1471.4	1479.8
10°	1448.7	1464.6	1464.6	1458.8	1459.6
12.5°	1438.6	1454.6	1451.2	1441.1	1437.7
15°	1425.1	1441.9	1434.4	1391.5	1389.0
17.5°	1404.1	1424.3	1404.1	1363.7	1366.3
20°	1389.8	1404.9	1351.1	1337.7	1339.4
22.5°	1366.3	1379.7	1320.0	1310.8	1312.5
25°	1341.0	1351.1	1290.6	1283.0	1284.7
27.5°	1315.0	1317.5	1260.3	1255.3	1257.0
30°	1283.9	1272.9	1227.5	1224.2	1227.5
32.5°	1254.4	1229.2	1192.2	1193.1	1197.3
35°	1217.5	1176.3	1156.9	1160.3	1164.5
37.5°	1180.5	1130.9	1119.9	1126.6	1130.0
40°	1140.1	1087.1	1081.2	1088.0	1093.0
42.5°	1100.6	1042.6	1040.9	1051.0	1053.5
45°	1054.3	995.5	998.0	1009.8	1011.5
47.5°	1007.3	947.6	953.4	964.4	962.7
50°	961.0	897.1	906.4	890.4	563.3
52.5°	906.4	845.0	855.1	530.5	500.3
55°	852.6	791.2	803.8	470.8	474.2
57.5°	796.2	734.8	642.4	443.1	446.5
60°	734.8	677.7	437.2	414.5	357.3
62.5°	671.8	618.0	370.8	232.9	98.4
65°	606.2	557.4	338.8	91.6	95.8
67.5°	537.3	496.1	232.1	89.1	93.3
70°	468.3	385.1	87.4	85.8	87.4
72.5°	396.8	301.0	81.6	78.2	77.4
75°	322.9	193.4	74.0	68.1	65.6
77.5°	252.2	111.8	63.1	56.3	53.0
80°	177.4	57.2	50.4	42.9	40.4
82.5°	115.2	42.0	37.0	31.9	30.3
85°	63.1	27.7	25.2	21.0	18.5
87.5°	27.7	16.8	14.3	10.9	8.4
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	25.37	26.93	25.73	27.24	27.56	21.75	23.31	22.12	23.63	23.94
	3H	27.28	28.68	27.66	29.01	29.37	21.89	23.29	22.27	23.62	23.98
	4H	27.88	29.19	28.28	29.54	29.92	22.01	23.32	22.41	23.67	24.04
	6H	28.25	29.46	28.66	29.83	30.22	22.11	23.32	22.52	23.68	24.08
	8H	28.35	29.50	28.78	29.89	30.29	22.14	23.29	22.57	23.68	24.08
	12H	28.41	29.51	28.84	29.89	30.32	22.16	23.26	22.59	23.64	24.07
4H	2H	25.51	26.82	25.91	27.17	27.55	22.43	23.74	22.83	24.09	24.47
	3H	27.53	28.61	27.94	29.01	29.41	22.63	23.71	23.04	24.11	24.52
	4H	28.19	29.16	28.62	29.58	30.01	22.79	23.76	23.22	24.18	24.61
	6H	28.61	29.45	29.07	29.89	30.35	22.95	23.79	23.41	24.24	24.69
	8H	28.74	29.52	29.20	29.97	30.44	23.00	23.79	23.46	24.23	24.70
	12H	28.83	29.53	29.31	30.01	30.48	23.04	23.75	23.53	24.23	24.70
8H	4H	28.13	28.92	28.59	29.36	29.83	23.01	23.80	23.48	24.25	24.71
	6H	28.55	29.21	29.05	29.70	30.17	23.22	23.87	23.72	24.37	24.84
	8H	28.69	29.28	29.21	29.79	30.28	23.31	23.89	23.82	24.40	24.89
	12H	28.82	29.34	29.33	29.83	30.39	23.39	23.91	23.90	24.40	24.97
12H	4H	28.10	28.81	28.59	29.29	29.76	23.03	23.73	23.51	24.21	24.68
	6H	28.51	29.10	29.03	29.61	30.10	23.24	23.83	23.76	24.34	24.83
	8H	28.68	29.20	29.19	29.69	30.25	23.37	23.89	23.88	24.38	24.95