

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: P893426

Luminaire Tested: 4MB-3SL-LVRF-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893426
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-3SL-LVRF-UNV-L835
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3500K C
Light Source: -
Ballast/Driver: -

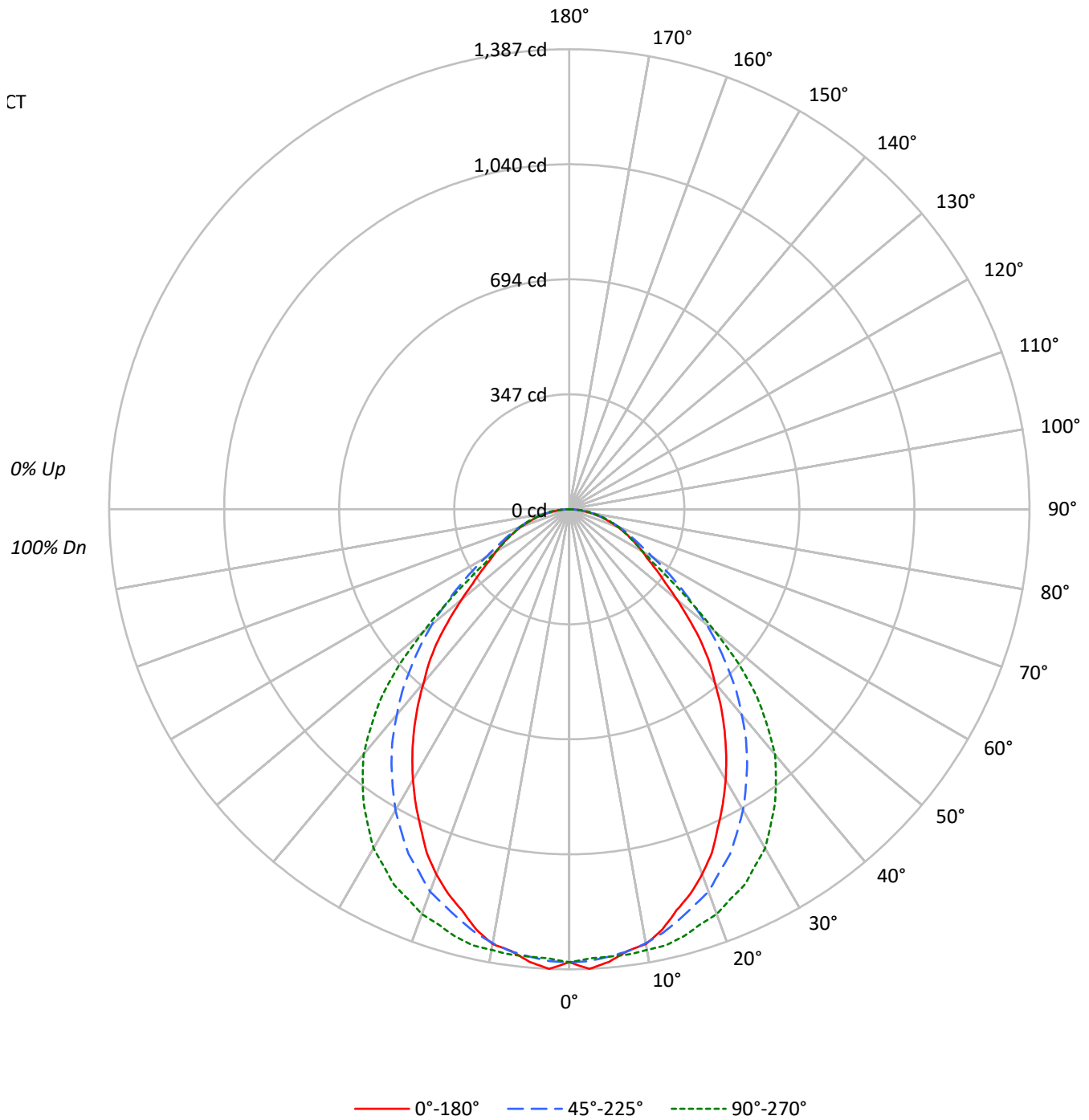
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2838.0 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.27 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.2
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	44	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9716	9716	9716
5°	9783	9672	9672
10°	9614	9599	9748
15°	9216	9431	9818
20°	8866	9290	9834
25°	8318	9003	9812
30°	7742	8605	9696
35°	7087	8117	9388
40°	6345	7506	8956
45°	5631	6795	8053
50°	4684	5982	6351
55°	3991	5039	4616
60°	3617	4164	3647
65°	3408	3647	3396
70°	3206	3383	3310
75°	2985	3222	3161
80°	2733	2966	3057
85°	2376	2612	3421

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8053 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	4.6
10°-20°	363.8	12.8
20°-30°	528.3	18.6
30°-40°	588.3	20.7
40°-50°	519.7	18.3
50°-60°	341.0	12.0
60°-70°	208.8	7.4
70°-80°	121.5	4.3
80°-90°	37.2	1.3
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°	1021.4	36.0
0°-40°	1609.6	56.7
0°-60°	2470.4	87.0
0°-90°	2838.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2838.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1370	1370	1354	1368	1354	129
15°	1251	1265	1280	1331	1333	353
25°	1060	1085	1147	1220	1250	487
35°	816	860	934	1033	1081	509
45°	560	594	675	766	800	428
55°	322	344	406	403	372	292
65°	202	206	217	210	202	201
75°	109	110	117	119	115	115
85°	29	30	32	36	42	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1365.5	1365.5	1365.5	1365.5	1365.5
2.5°	1386.8	1369.8	1363.4	1369.8	1355.6
5°	1369.8	1370.5	1354.2	1367.6	1354.2
7.5°	1342.8	1352.0	1344.2	1364.8	1354.2
10°	1330.7	1331.4	1328.6	1349.9	1349.2
12.5°	1297.3	1299.5	1307.3	1339.2	1346.3
15°	1251.2	1265.4	1280.3	1330.7	1332.9
17.5°	1215.0	1232.0	1251.9	1305.9	1312.3
20°	1170.9	1178.1	1227.0	1274.6	1298.8
22.5°	1122.0	1135.4	1183.0	1246.9	1271.1
25°	1059.5	1085.0	1146.8	1219.9	1249.8
27.5°	1001.9	1031.8	1095.7	1177.3	1212.1
30°	942.3	976.4	1047.4	1127.6	1180.2
32.5°	880.5	923.1	990.6	1082.9	1129.1
35°	815.9	859.9	934.5	1033.2	1080.8
37.5°	751.3	793.9	874.8	980.6	1023.2
40°	683.1	725.0	808.1	915.3	964.3
42.5°	624.2	660.4	745.6	837.2	882.6
45°	559.6	593.6	675.3	766.2	800.3
47.5°	488.5	528.3	607.8	682.4	695.9
50°	423.2	464.4	540.4	583.7	573.8
52.5°	365.7	400.5	470.1	488.5	465.1
55°	321.7	344.4	406.2	402.6	372.1
57.5°	281.2	295.4	347.9	328.1	299.0
60°	254.2	260.6	292.6	274.1	256.3
62.5°	228.7	231.5	248.5	238.6	225.1
65°	202.4	205.9	216.6	210.2	201.7
67.5°	178.2	179.7	189.6	188.2	177.5
70°	154.1	156.2	162.6	165.5	159.1
72.5°	130.7	132.8	139.2	142.0	136.3
75°	108.6	110.1	117.2	119.3	115.0
77.5°	87.3	90.2	94.4	98.0	93.0
80°	66.7	68.2	72.4	76.7	74.6
82.5°	46.9	49.0	51.8	57.5	58.9
85°	29.1	30.5	32.0	36.2	41.9
87.5°	11.4	12.1	14.2	15.6	20.6
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	15.43	16.91	15.79	17.22	17.54	16.08	17.56	16.45	17.88	18.19
	3H	17.03	18.36	17.41	18.68	19.05	17.52	18.84	17.90	19.17	19.53
	4H	17.65	18.89	18.05	19.24	19.62	18.12	19.36	18.52	19.71	20.09
	6H	18.12	19.26	18.53	19.63	20.02	18.61	19.76	19.02	20.12	20.52
	8H	18.27	19.36	18.70	19.75	20.15	18.81	19.90	19.23	20.29	20.69
	12H	18.37	19.41	18.80	19.80	20.23	18.97	20.02	19.40	20.40	20.83
4H	2H	16.05	17.29	16.45	17.64	18.02	16.58	17.82	16.98	18.17	18.55
	3H	17.87	18.90	18.28	19.30	19.70	18.27	19.30	18.68	19.70	20.10
	4H	18.61	19.54	19.04	19.95	20.39	19.03	19.95	19.46	20.37	20.81
	6H	19.21	20.01	19.67	20.46	20.92	19.66	20.47	20.12	20.91	21.37
	8H	19.40	20.16	19.87	20.60	21.07	19.92	20.67	20.38	21.11	21.58
	12H	19.55	20.22	20.03	20.70	21.17	20.14	20.81	20.62	21.29	21.76
8H	4H	18.93	19.68	19.39	20.13	20.59	19.30	20.05	19.76	20.49	20.96
	6H	19.65	20.28	20.15	20.77	21.25	20.07	20.69	20.57	21.19	21.66
	8H	19.93	20.49	20.44	21.00	21.49	20.42	20.98	20.93	21.49	21.98
	12H	20.14	20.64	20.65	21.13	21.70	20.73	21.23	21.24	21.72	22.29
12H	4H	18.96	19.64	19.45	20.11	20.59	19.32	19.99	19.80	20.47	20.94
	6H	19.72	20.28	20.23	20.79	21.28	20.12	20.68	20.63	21.19	21.68
	8H	20.05	20.55	20.56	21.04	21.60	20.52	21.02	21.03	21.51	22.08