

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: P895765

Luminaire Tested: 2MB-3SL-ACL-UNV-L830

Issue Date: 11/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P895765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-3SL-ACL-UNV-L830
Description: 3000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 3000K (C)
Light Source: -
Ballast/Driver: -

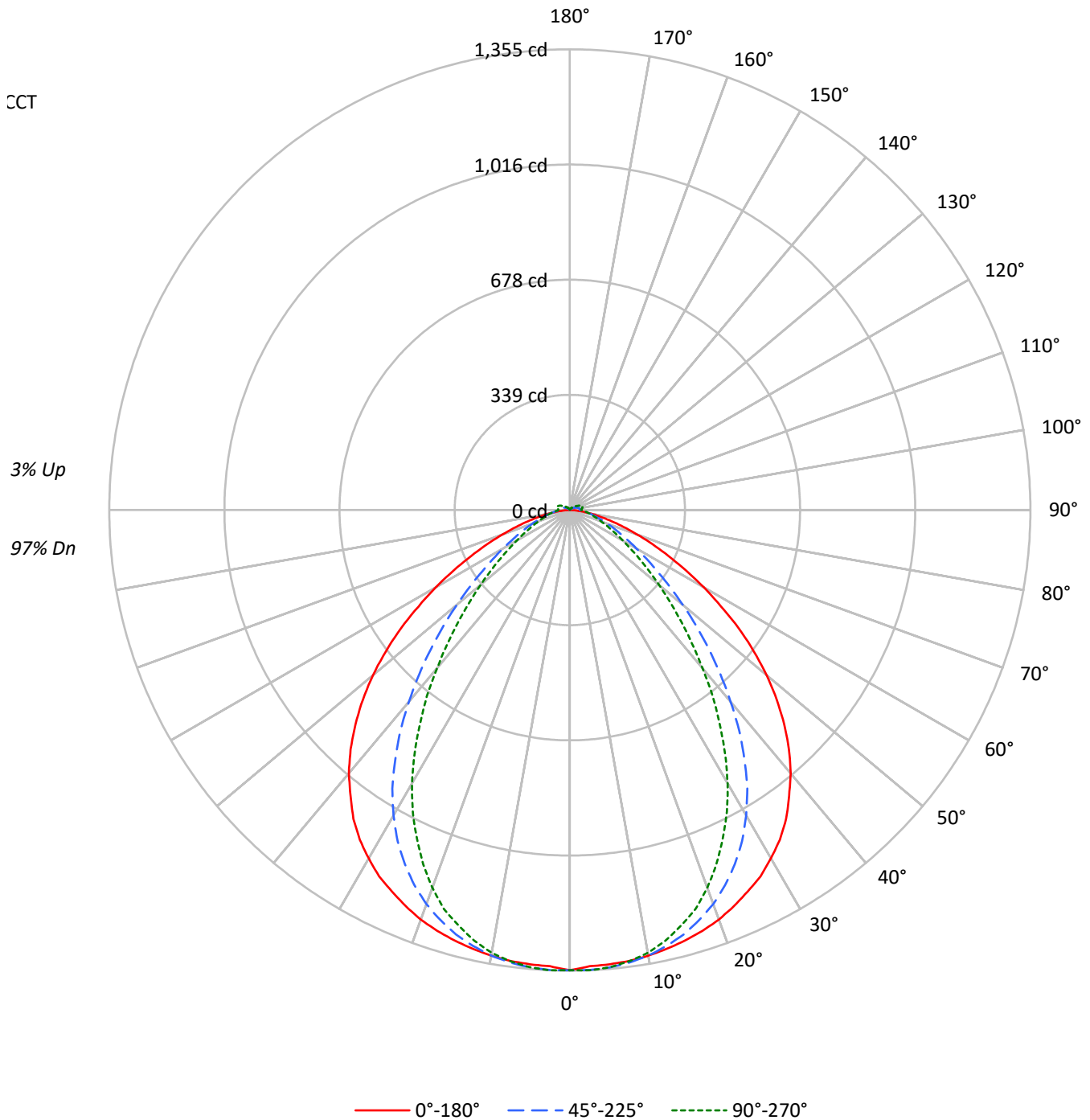
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2820.1 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.07 / 1.17
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 8
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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	97
1	110	105	102	98	107	103	100	97	98	96	93	94	92	90	90	88	87	87	87	87	84
2	101	94	88	83	98	92	86	82	88	83	80	84	81	77	81	78	75	75	75	75	73
3	93	84	77	71	91	82	76	70	79	73	69	76	71	67	73	69	66	66	66	66	64
4	86	76	68	62	84	74	67	61	71	65	60	69	63	59	66	62	58	58	58	58	56
5	80	68	60	54	78	67	60	54	65	58	53	63	57	52	61	56	52	52	52	52	50
6	74	62	54	48	72	61	54	48	59	52	47	57	51	47	56	50	46	46	46	46	44
7	69	57	49	43	68	56	49	43	54	48	43	53	47	42	51	46	42	42	42	42	40
8	65	52	45	39	63	52	44	39	50	43	39	49	43	38	47	42	38	38	38	38	36
9	61	48	41	36	59	48	40	35	46	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	38	33	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27713	27713	27713
5°	27469	27163	27002
10°	27471	26499	26061
15°	27473	25677	24738
20°	27510	24623	23122
25°	27432	23229	20992
30°	27312	21412	18584
35°	26945	19037	15747
40°	26105	16241	12835
45°	24787	13365	10171
50°	22939	10625	7938
55°	20424	8258	6147
60°	17398	6447	4814
65°	14221	5124	3827
70°	11280	4149	3142
75°	8711	3379	2745
80°	6197	2848	2487
85°	3537	2480	2240

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24787 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.2	4.5
10°-20°	363.7	12.9
20°-30°	528.6	18.7
30°-40°	571.4	20.3
40°-50°	482.1	17.1
50°-60°	330.3	11.7
60°-70°	192.6	6.8
70°-80°	98.3	3.5
80°-90°	42.4	1.5
90°-100°	25.7	0.9
100°-110°	23.0	0.8
110°-120°	15.6	0.6
120°-130°	8.7	0.3
130°-140°	4.8	0.2
140°-150°	2.5	0.1
150°-160°	1.3	0.0
160°-170°	0.5	0.0
170°-180°	0.1	0.0
0°-30°	1020.5	36.2
0°-40°	1591.9	56.4
0°-60°	2404.3	85.3
0°-90°	2737.6	97.1
90°-120°	64.4	2.3
90°-150°	80.5	2.9
90°-180°	82.0	2.9
0°-180°	2820.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1353	1353	1353	1353	1353	
5°	1341	1350	1351	1353	1350	128
15°	1311	1310	1293	1277	1265	370
25°	1238	1214	1149	1092	1065	571
35°	1110	1038	896	800	768	691
45°	892	754	578	488	461	686
55°	606	460	314	263	249	541
65°	320	235	163	139	132	321
75°	127	104	83	77	75	138
85°	22	31	41	44	44	27
90°	1	14	30	34	34	2
95°	0	13	29	34	35	0
105°	0	7	25	36	38	0
115°	0	5	16	27	31	0
125°	0	3	9	16	19	0
135°	1	3	6	9	11	1
145°	1	2	5	6	6	1
155°	1	2	3	4	5	0
165°	1	1	2	3	3	0
175°	1	1	2	2	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1353.4	1353.4	1353.4	1353.4	1353.4
2.5°	1343.1	1351.5	1354.3	1358.0	1355.2
5°	1341.3	1349.7	1350.6	1353.4	1349.7
7.5°	1337.6	1344.1	1342.2	1342.2	1338.5
10°	1331.0	1334.8	1331.0	1326.4	1322.7
12.5°	1321.7	1324.5	1313.4	1306.9	1297.6
15°	1310.6	1309.7	1292.9	1277.1	1265.0
17.5°	1297.6	1291.1	1265.0	1240.8	1230.6
20°	1281.8	1269.7	1233.4	1198.0	1182.2
22.5°	1261.3	1244.5	1194.3	1148.7	1127.3
25°	1238.0	1213.8	1148.7	1092.0	1065.0
27.5°	1214.8	1178.5	1097.6	1026.9	1000.8
30°	1183.2	1137.6	1037.1	957.1	928.3
32.5°	1149.7	1092.0	972.0	879.0	850.2
35°	1109.7	1038.1	895.7	799.9	768.3
37.5°	1059.4	974.8	818.5	718.1	691.1
40°	1011.1	906.0	735.8	636.2	606.5
42.5°	954.3	831.6	655.8	559.0	532.0
45°	892.0	754.4	577.6	488.3	461.4
47.5°	826.0	680.9	503.2	420.4	399.0
50°	756.2	605.5	433.5	361.8	342.3
52.5°	681.8	530.2	369.3	309.7	292.1
55°	606.5	459.5	314.4	263.2	249.3
57.5°	527.4	391.6	267.9	224.2	211.1
60°	455.8	334.9	226.0	191.6	181.4
62.5°	385.1	282.8	192.5	162.8	154.4
65°	320.0	235.3	162.8	138.6	132.1
67.5°	263.2	197.2	139.5	119.1	114.4
70°	210.2	160.9	117.2	102.3	97.7
72.5°	165.6	130.2	98.6	88.4	85.6
75°	127.4	104.2	82.8	77.2	75.3
77.5°	93.0	80.0	69.8	67.0	66.0
80°	65.1	60.5	58.6	58.6	58.6
82.5°	40.9	44.6	49.3	51.2	51.2
85°	22.3	30.7	40.9	43.7	43.7
87.5°	9.3	21.4	34.4	37.2	36.3
90°	0.9	14.0	29.8	33.5	33.5
92.5°	0.0	14.0	29.8	33.5	33.5
95°	0.0	13.0	28.8	34.4	35.3
97.5°	0.0	12.1	28.8	35.3	36.3
100°	0.9	11.2	28.8	36.3	37.2
102.5°	0.0	9.3	27.0	36.3	38.1
105°	0.0	7.4	25.1	36.3	38.1
107.5°	0.0	5.6	23.3	34.4	37.2
110°	0.0	5.6	21.4	32.6	35.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	4.7	18.6	29.8	33.5
115°	0.0	4.7	15.8	27.0	30.7
117.5°	0.0	3.7	14.0	24.2	27.0
120°	0.0	3.7	12.1	21.4	24.2
122.5°	0.0	3.7	11.2	18.6	21.4
125°	0.0	2.8	9.3	15.8	18.6
127.5°	0.9	2.8	8.4	14.0	16.7
130°	0.9	2.8	7.4	12.1	14.9
132.5°	0.9	2.8	6.5	11.2	13.0
135°	0.9	2.8	6.5	9.3	11.2
137.5°	0.9	2.8	5.6	8.4	9.3
140°	0.9	2.8	4.7	7.4	8.4
142.5°	0.9	1.9	4.7	6.5	7.4
145°	0.9	1.9	4.7	5.6	6.5
147.5°	0.9	1.9	3.7	5.6	5.6
150°	0.9	1.9	3.7	4.7	5.6
152.5°	0.9	1.9	2.8	4.7	4.7
155°	0.9	1.9	2.8	3.7	4.7
157.5°	0.9	1.9	2.8	3.7	3.7
160°	0.9	1.9	1.9	2.8	3.7
162.5°	0.9	0.9	1.9	2.8	2.8
165°	0.9	0.9	1.9	2.8	2.8
167.5°	0.9	0.9	1.9	1.9	2.8
170°	0.9	0.9	1.9	1.9	1.9
172.5°	0.9	0.9	1.9	1.9	0.9
175°	0.9	0.9	1.9	1.9	0.9
177.5°	0.9	0.9	1.9	0.9	0.9
180°	0.9	0.9	0.9	0.9	0.9



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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	20.07	21.47	20.49	21.85	22.24	16.40	17.80	16.81	18.18	18.57
	3H	21.14	22.39	21.57	22.78	23.22	17.58	18.83	18.01	19.22	19.66
	4H	21.43	22.60	21.88	23.02	23.47	18.10	19.28	18.55	19.69	20.14
	6H	21.57	22.65	22.03	23.08	23.54	18.64	19.72	19.10	20.15	20.62
	8H	21.58	22.61	22.06	23.06	23.53	18.92	19.95	19.40	20.40	20.87
	12H	21.57	22.55	22.05	22.99	23.49	19.21	20.20	19.69	20.64	21.14
4H	2H	20.11	21.28	20.56	21.69	22.14	16.86	18.03	17.31	18.44	18.89
	3H	21.33	22.30	21.79	22.76	23.23	18.22	19.19	18.68	19.65	20.12
	4H	21.71	22.58	22.19	23.05	23.56	18.85	19.72	19.33	20.20	20.71
	6H	21.93	22.69	22.43	23.18	23.71	19.52	20.28	20.03	20.78	21.31
	8H	21.96	22.67	22.47	23.17	23.71	19.87	20.58	20.38	21.07	21.61
	12H	21.96	22.60	22.50	23.13	23.67	20.24	20.88	20.78	21.41	21.95
8H	4H	21.73	22.44	22.24	22.94	23.47	19.07	19.78	19.58	20.28	20.81
	6H	22.00	22.59	22.55	23.13	23.68	19.85	20.44	20.40	20.99	21.53
	8H	22.07	22.60	22.63	23.16	23.71	20.29	20.82	20.85	21.38	21.94
	12H	22.11	22.57	22.66	23.12	23.75	20.79	21.26	21.35	21.81	22.44
12H	4H	21.71	22.35	22.24	22.88	23.42	19.07	19.71	19.61	20.24	20.78
	6H	22.00	22.52	22.56	23.09	23.64	19.88	20.41	20.45	20.97	21.53
	8H	22.10	22.57	22.66	23.11	23.74	20.38	20.85	20.94	21.39	22.02