

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: P893354

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-15)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-3SL-ACL-UNV-L835
Description: 3000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

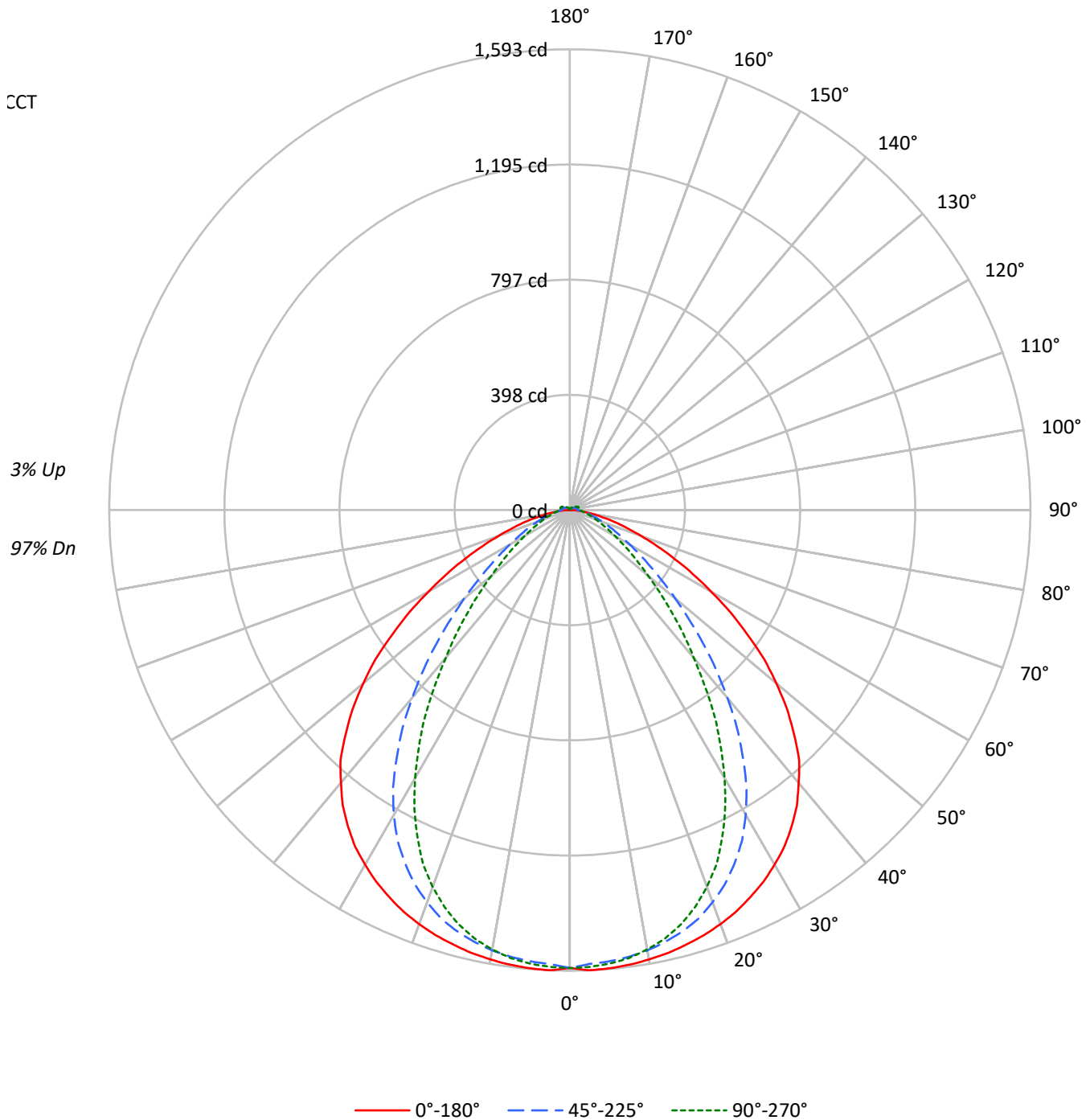
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3249.0 lumens
Efficiency: N/A
Efficacy: 154.0 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.08')
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				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	110	110	110	104	104	104	100	100	100	100	100	100	97
1	110	106	102	99	107	103	100	97	99	96	93	94	92	90	90	89	87	87	87	87	85
2	101	94	88	84	99	92	87	82	88	84	80	85	81	78	82	79	76	76	76	76	74
3	94	85	77	72	91	83	76	71	80	74	69	77	72	68	74	70	66	66	66	66	64
4	87	76	68	62	84	75	67	62	72	66	61	69	64	60	67	62	59	59	59	59	57
5	80	69	61	55	78	68	60	55	65	59	54	63	58	53	61	56	52	52	52	52	50
6	75	63	55	49	73	62	54	49	60	53	48	58	52	47	56	51	47	47	47	47	45
7	70	57	50	44	68	57	49	44	55	48	43	53	47	43	52	46	42	42	42	42	40
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	38	38	38	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	35	35	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	32	32	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16130	16130	16130
5°	16232	15692	15667
10°	16262	15351	15118
15°	16310	14952	14429
20°	16389	14403	13487
25°	16438	13640	12234
30°	16454	12592	10659
35°	16384	11127	8916
40°	16092	9399	7017
45°	15473	7587	5440
50°	14405	5887	4082
55°	12896	4507	3122
60°	11080	3465	2378
65°	9239	2732	1890
70°	7388	2193	1545
75°	5883	1766	1314
80°	4309	1458	1150
85°	2961	1240	1060

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15473 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	4.6
10°-20°	427.4	13.2
20°-30°	623.1	19.2
30°-40°	669.4	20.6
40°-50°	557.1	17.1
50°-60°	372.6	11.5
60°-70°	213.3	6.6
70°-80°	106.0	3.3
80°-90°	43.4	1.3
90°-100°	25.2	0.8
100°-110°	22.2	0.7
110°-120°	16.3	0.5
120°-130°	10.5	0.3
130°-140°	6.2	0.2
140°-150°	3.5	0.1
150°-160°	1.8	0.1
160°-170°	0.7	0.0
170°-180°	0.2	0.0
0°-30°	1200.4	36.9
0°-40°	1869.9	57.6
0°-60°	2799.6	86.2
0°-90°	3162.4	97.3
90°-120°	63.7	2.0
90°-150°	84.0	2.6
90°-180°	87.0	2.7
0°-180°	3249.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1584	1584	1584	1584	1584	
5°	1591	1586	1567	1580	1575	151
15°	1556	1545	1508	1497	1484	440
25°	1477	1442	1348	1280	1248	681
35°	1337	1240	1043	915	875	835
45°	1097	912	651	527	496	843
55°	748	540	340	268	255	670
65°	401	272	171	139	131	400
75°	161	117	84	75	72	173
85°	31	35	39	41	42	37
90°	5	15	27	32	33	4
95°	7	15	26	32	33	5
105°	5	12	24	31	32	5
115°	2	7	18	25	28	2
125°	1	5	12	18	20	1
135°	1	4	8	12	14	1
145°	1	3	6	8	10	1
155°	1	2	4	5	6	0
165°	1	2	3	3	4	0
175°	1	1	2	2	2	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.8	1583.8	1583.8	1583.8	1583.8
2.5°	1593.0	1588.9	1570.9	1585.2	1581.0
5°	1590.7	1585.7	1566.7	1579.6	1574.6
7.5°	1585.7	1580.1	1558.4	1568.6	1563.0
10°	1578.3	1571.3	1546.4	1551.5	1542.7
12.5°	1569.0	1560.2	1529.3	1527.9	1518.2
15°	1555.6	1545.0	1508.0	1496.9	1483.5
17.5°	1541.8	1526.1	1480.8	1458.1	1439.7
20°	1523.7	1503.0	1443.4	1409.6	1386.5
22.5°	1503.0	1474.8	1401.3	1349.6	1325.5
25°	1477.1	1442.0	1347.7	1279.8	1247.9
27.5°	1449.4	1402.7	1289.5	1200.3	1163.8
30°	1416.1	1358.3	1217.0	1109.8	1070.5
32.5°	1381.0	1302.0	1137.5	1014.6	971.6
35°	1337.1	1240.1	1043.2	914.8	874.6
37.5°	1289.5	1166.1	949.9	812.7	767.4
40°	1231.7	1088.1	847.3	711.5	666.7
42.5°	1174.5	1003.0	748.9	620.0	581.2
45°	1096.8	911.6	651.4	527.2	496.2
47.5°	1018.8	813.6	558.1	451.9	421.4
50°	931.9	717.5	476.3	379.3	353.9
52.5°	847.3	627.9	402.0	320.6	298.9
55°	748.0	539.6	339.6	268.4	254.6
57.5°	658.4	457.9	286.5	227.3	214.4
60°	563.7	388.1	239.8	192.2	180.2
62.5°	480.5	326.2	201.9	163.1	154.8
65°	400.6	271.7	170.9	138.6	131.2
67.5°	327.1	226.9	144.2	118.3	112.3
70°	262.4	183.9	121.5	100.7	96.6
72.5°	206.5	147.8	101.2	86.9	83.2
75°	161.2	117.4	84.5	74.8	72.5
77.5°	116.4	91.5	70.7	64.2	62.8
80°	82.2	69.3	58.2	55.4	54.5
82.5°	54.5	50.4	48.1	48.1	47.6
85°	31.4	35.1	39.3	41.1	41.6
87.5°	16.2	23.6	31.4	35.1	35.6
90°	4.6	14.8	26.8	31.9	32.8
92.5°	6.9	14.8	26.3	31.9	32.8
95°	6.9	14.8	26.3	31.9	32.8
97.5°	6.5	14.3	26.3	31.9	32.8
100°	6.0	13.4	25.9	31.9	32.8
102.5°	5.1	12.9	24.9	31.4	32.8
105°	4.6	12.0	23.6	31.0	32.3
107.5°	4.2	10.2	22.2	29.6	31.4
110°	3.2	8.8	21.3	28.2	30.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.8	7.9	19.9	26.8	29.1
115°	2.3	6.9	18.5	25.4	27.7
117.5°	1.8	6.5	16.6	23.6	25.9
120°	1.4	6.0	15.2	22.2	24.0
122.5°	1.4	5.5	13.4	20.3	22.2
125°	1.4	4.6	12.5	18.5	20.3
127.5°	0.9	4.2	11.1	16.6	18.5
130°	0.9	4.2	10.2	15.2	16.6
132.5°	0.9	3.7	9.2	13.9	15.2
135°	0.9	3.7	8.3	12.5	13.9
137.5°	0.9	3.2	7.4	11.6	12.9
140°	0.9	3.2	6.9	10.2	11.6
142.5°	0.9	2.8	6.0	9.7	10.6
145°	0.9	2.8	5.5	8.3	9.7
147.5°	0.9	2.8	5.1	7.9	8.8
150°	0.9	2.3	4.6	6.5	7.9
152.5°	0.9	2.3	4.2	6.0	7.4
155°	0.9	2.3	3.7	5.1	6.5
157.5°	0.9	2.3	3.7	4.6	5.5
160°	1.4	1.8	3.2	4.2	5.1
162.5°	1.4	1.8	2.8	3.7	4.6
165°	1.4	1.8	2.8	3.2	4.2
167.5°	1.4	1.8	2.3	2.8	3.2
170°	1.4	1.4	2.3	2.3	2.3
172.5°	1.4	1.4	1.8	2.3	1.8
175°	1.4	1.4	1.8	1.8	1.8
177.5°	1.4	1.4	1.8	1.8	1.8
180°	1.4	1.4	1.4	1.4	1.4



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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	18.40	19.79	18.81	20.16	20.54	13.69	15.08	14.10	15.45	15.84
	3H	19.49	20.73	19.91	21.12	21.55	14.83	16.07	15.26	16.46	16.89
	4H	19.80	20.96	20.24	21.36	21.81	15.33	16.49	15.78	16.90	17.35
	6H	19.94	21.01	20.40	21.44	21.90	15.83	16.90	16.29	17.33	17.79
	8H	19.96	20.98	20.43	21.42	21.89	16.09	17.11	16.56	17.56	18.02
	12H	19.95	20.93	20.43	21.37	21.86	16.39	17.36	16.86	17.80	18.29
4H	2H	18.38	19.54	18.82	19.95	20.39	14.19	15.35	14.63	15.76	16.20
	3H	19.61	20.58	20.07	21.03	21.50	15.50	16.46	15.96	16.92	17.38
	4H	20.00	20.86	20.48	21.33	21.84	16.09	16.96	16.57	17.43	17.93
	6H	20.23	20.98	20.73	21.48	22.00	16.72	17.47	17.22	17.96	18.48
	8H	20.27	20.97	20.78	21.47	22.00	17.04	17.74	17.55	18.23	18.76
	12H	20.28	20.91	20.81	21.44	21.97	17.41	18.04	17.94	18.56	19.10
8H	4H	19.99	20.69	20.50	21.18	21.71	16.33	17.04	16.84	17.53	18.06
	6H	20.26	20.84	20.81	21.38	21.92	17.06	17.64	17.60	18.18	18.72
	8H	20.34	20.86	20.90	21.41	21.97	17.46	17.98	18.02	18.54	19.09
	12H	20.38	20.84	20.94	21.38	22.01	17.96	18.42	18.51	18.96	19.58
12H	4H	19.96	20.59	20.49	21.12	21.65	16.35	16.98	16.88	17.50	18.04
	6H	20.24	20.76	20.80	21.32	21.87	17.09	17.62	17.65	18.17	18.73
	8H	20.35	20.81	20.90	21.35	21.98	17.56	18.02	18.11	18.56	19.18