

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: P893526

Luminaire Tested: 4MB-4SL-LVR-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-4SL-LVR-UNV-L935
Description: 4000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

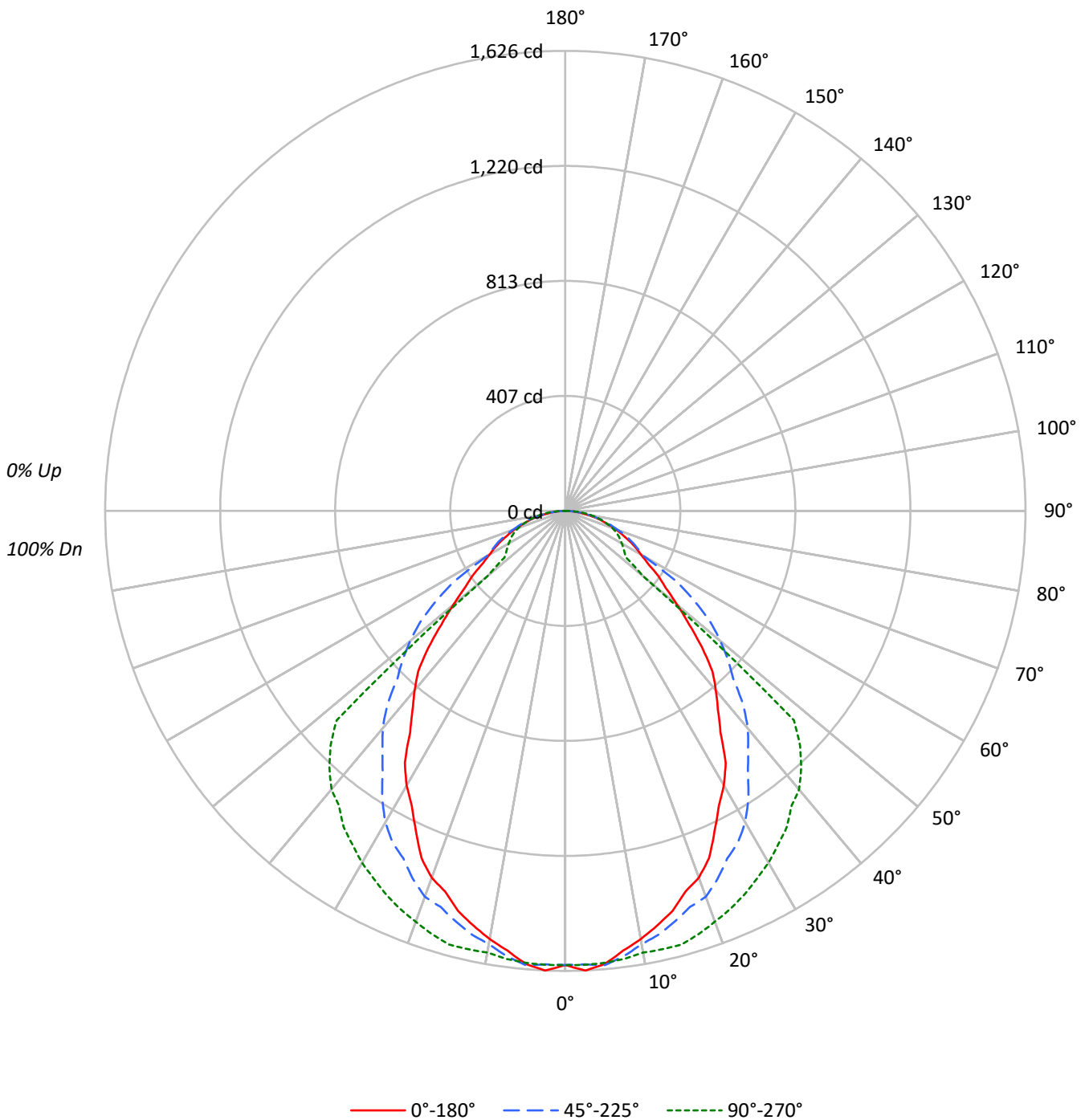
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3425.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 29.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 5.5
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	71	80	74	69	77	72	68	75	71	67	67	67	67	65
4	87	76	68	62	84	74	67	61	72	66	61	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	57	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	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	37	32	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°	11420	11420	11420
5°	11480	11510	11451
10°	11104	11234	11453
15°	10784	11056	11689
20°	10445	10992	11699
25°	9801	10637	11751
30°	9206	10445	11799
35°	8302	9768	11854
40°	7690	9319	11938
45°	6878	8446	11803
50°	5707	7912	3965
55°	4972	6945	3172
60°	4397	4525	3290
65°	4182	4402	3492
70°	3921	4161	3684
75°	3651	3920	3785
80°	3323	3696	3962
85°	2947	3143	4286

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11803 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.2	4.4
10°-20°	428.3	12.5
20°-30°	630.0	18.4
30°-40°	720.4	21.0
40°-50°	682.2	19.9
50°-60°	375.9	11.0
60°-70°	241.3	7.0
70°-80°	148.9	4.3
80°-90°	45.8	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°	1210.5	35.3
0°-40°	1930.9	56.4
0°-60°	2988.9	87.3
0°-90°	3425.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3425.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1605	1605	1605	1605	1605	
5°	1607	1620	1612	1612	1603	151
15°	1464	1482	1501	1580	1587	411
25°	1248	1304	1355	1444	1497	575
35°	956	1038	1125	1288	1365	604
45°	684	748	839	1077	1173	523
55°	401	420	560	288	256	358
65°	248	257	262	233	207	246
75°	133	135	143	150	138	141
85°	36	36	38	44	52	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1605.0	1605.0	1605.0	1605.0	1605.0
2.5°	1626.3	1630.4	1604.1	1603.3	1605.8
5°	1607.4	1620.5	1611.5	1611.5	1603.3
7.5°	1567.3	1589.4	1586.9	1605.8	1596.8
10°	1536.9	1555.0	1555.0	1604.1	1585.3
12.5°	1500.9	1521.4	1532.8	1584.5	1586.9
15°	1464.0	1482.0	1500.9	1579.6	1586.9
17.5°	1410.7	1443.5	1467.3	1544.3	1568.1
20°	1379.5	1399.2	1451.7	1514.0	1545.1
22.5°	1327.9	1356.6	1407.4	1477.1	1523.0
25°	1248.4	1304.1	1355.0	1443.5	1496.8
27.5°	1174.6	1216.4	1321.3	1414.8	1465.6
30°	1120.5	1153.3	1271.3	1373.0	1436.1
32.5°	1054.9	1108.2	1204.1	1332.0	1399.2
35°	955.8	1037.7	1124.6	1287.7	1364.8
37.5°	886.1	942.6	1060.7	1241.8	1313.1
40°	827.9	879.5	1003.3	1184.5	1285.3
42.5°	769.7	811.5	931.2	1141.8	1233.6
45°	683.6	748.4	839.4	1077.1	1173.0
47.5°	593.5	662.3	779.5	1022.2	1095.9
50°	515.6	570.5	714.8	913.1	358.2
52.5°	447.6	498.4	645.9	330.3	270.5
55°	400.8	420.5	559.9	288.5	255.7
57.5°	345.1	377.1	469.7	274.6	242.6
60°	309.0	323.0	318.0	260.7	231.2
62.5°	280.3	290.2	288.5	246.7	218.0
65°	248.4	256.6	261.5	232.8	207.4
67.5°	216.4	223.8	231.2	215.6	192.6
70°	188.5	193.4	200.0	195.1	177.1
72.5°	159.8	165.6	169.7	173.8	156.6
75°	132.8	135.2	142.6	150.0	137.7
77.5°	108.2	110.7	115.6	123.8	117.2
80°	81.1	83.6	90.2	96.7	96.7
82.5°	57.4	59.0	63.1	72.1	76.2
85°	36.1	36.1	38.5	44.3	52.5
87.5°	13.9	13.9	16.4	19.7	26.2
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	16.41	17.89	16.78	18.21	18.52	14.21	15.70	14.58	16.01	16.32
	3H	17.94	19.26	18.32	19.59	19.95	16.54	17.87	16.92	18.20	18.56
	4H	18.53	19.77	18.93	20.12	20.50	17.49	18.74	17.89	19.09	19.47
	6H	18.99	20.13	19.40	20.50	20.89	18.28	19.43	18.69	19.79	20.19
	8H	19.13	20.22	19.56	20.61	21.01	18.59	19.68	19.02	20.07	20.47
	12H	19.23	20.27	19.66	20.65	21.08	18.84	19.88	19.27	20.27	20.69
4H	2H	16.96	18.21	17.36	18.55	18.93	15.32	16.56	15.72	16.91	17.29
	3H	18.73	19.76	19.14	20.16	20.56	17.76	18.79	18.17	19.19	19.59
	4H	19.45	20.38	19.89	20.80	21.23	18.83	19.76	19.26	20.17	20.61
	6H	20.04	20.84	20.50	21.29	21.75	19.72	20.52	20.18	20.97	21.43
	8H	20.23	20.98	20.69	21.43	21.89	20.07	20.82	20.53	21.27	21.73
	12H	20.37	21.04	20.85	21.52	21.99	20.36	21.03	20.84	21.51	21.98
8H	4H	19.76	20.51	20.22	20.96	21.43	19.22	19.97	19.68	20.41	20.88
	6H	20.47	21.10	20.97	21.59	22.07	20.25	20.88	20.75	21.37	21.85
	8H	20.73	21.30	21.25	21.81	22.29	20.70	21.26	21.21	21.77	22.26
	12H	20.94	21.44	21.45	21.93	22.50	21.08	21.58	21.59	22.07	22.64
12H	4H	19.80	20.47	20.28	20.95	21.42	19.25	19.92	19.73	20.40	20.87
	6H	20.54	21.10	21.05	21.61	22.10	20.32	20.88	20.83	21.39	21.88
	8H	20.86	21.36	21.37	21.85	22.41	20.82	21.32	21.33	21.82	22.38