

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: P893582

Luminaire Tested: 4MB-5SL-ACL-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893582
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-5SL-ACL-UNV-L935
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 90CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

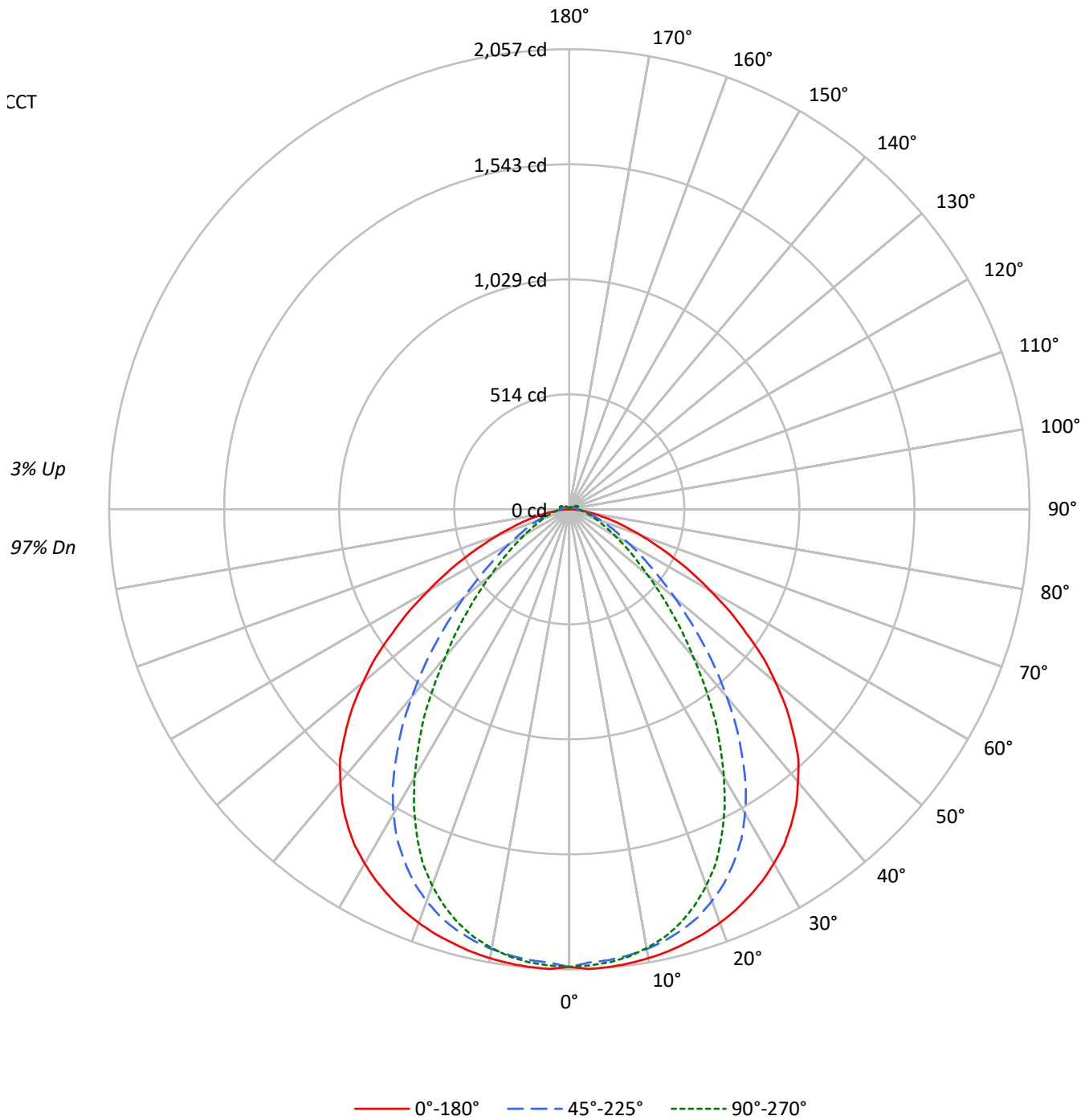
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4196.1 lumens
Efficiency: N/A
Efficacy: 119.9 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): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 9.55
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893582
CATALOG NUMBER: 4MB-5SL-ACL-UNV-L935

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°	20831	20831	20831
5°	20964	20266	20234
10°	21001	19826	19523
15°	21064	19310	18635
20°	21166	18601	17419
25°	21229	17615	15800
30°	21249	16262	13765
35°	21159	14370	11514
40°	20784	12139	9062
45°	19983	9799	7026
50°	18604	7604	5272
55°	16654	5821	4032
60°	14309	4475	3071
65°	11930	3530	2442
70°	9542	2832	1995
75°	7599	2282	1699
80°	5567	1884	1486
85°	3828	1600	1369

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19983 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.7	4.6
10°-20°	551.9	13.2
20°-30°	804.7	19.2
30°-40°	864.5	20.6
40°-50°	719.5	17.1
50°-60°	481.2	11.5
60°-70°	275.5	6.6
70°-80°	137.0	3.3
80°-90°	56.0	1.3
90°-100°	32.5	0.8
100°-110°	28.7	0.7
110°-120°	21.1	0.5
120°-130°	13.6	0.3
130°-140°	8.1	0.2
140°-150°	4.5	0.1
150°-160°	2.3	0.1
160°-170°	1.0	0.0
170°-180°	0.2	0.0
0°-30°	1550.3	36.9
0°-40°	2414.9	57.6
0°-60°	3615.6	86.2
0°-90°	4084.1	97.3
90°-120°	82.3	2.0
90°-150°	108.5	2.6
90°-180°	112.0	2.7
0°-180°	4196.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2045	2045	2045	2045	2045	
5°	2054	2048	2023	2040	2034	196
15°	2009	1995	1948	1933	1916	568
25°	1908	1862	1740	1653	1612	880
35°	1727	1602	1347	1181	1130	1078
45°	1416	1177	841	681	641	1089
55°	966	697	439	347	329	865
65°	517	351	221	179	170	517
75°	208	152	109	97	94	223
85°	41	45	51	53	54	47
90°	6	19	35	41	42	6
95°	9	19	34	41	42	7
105°	6	16	30	40	42	6
115°	3	9	24	33	36	3
125°	2	6	16	24	26	1
135°	1	5	11	16	18	1
145°	1	4	7	11	12	1
155°	1	3	5	7	8	1
165°	2	2	4	4	5	1
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2045.4	2045.4	2045.4	2045.4	2045.4
2.5°	2057.4	2052.0	2028.7	2047.2	2041.9
5°	2054.4	2047.8	2023.4	2040.1	2033.5
7.5°	2047.8	2040.7	2012.6	2025.8	2018.6
10°	2038.3	2029.3	1997.1	2003.7	1992.3
12.5°	2026.3	2015.0	1975.0	1973.2	1960.7
15°	2009.0	1995.3	1947.6	1933.3	1916.0
17.5°	1991.1	1970.9	1912.4	1883.1	1859.3
20°	1967.9	1941.0	1864.1	1820.5	1790.7
22.5°	1941.0	1904.6	1809.8	1742.9	1711.9
25°	1907.6	1862.3	1740.5	1652.8	1611.7
27.5°	1871.8	1811.5	1665.4	1550.2	1503.1
30°	1828.8	1754.3	1571.7	1433.2	1382.5
32.5°	1783.5	1681.5	1469.0	1310.3	1254.8
35°	1726.8	1601.5	1347.3	1181.4	1129.5
37.5°	1665.4	1506.0	1226.8	1049.6	991.1
40°	1590.8	1405.2	1094.3	918.9	861.0
42.5°	1516.8	1295.4	967.2	800.8	750.6
45°	1416.5	1177.3	841.3	680.8	640.8
47.5°	1315.7	1050.8	720.8	583.6	544.2
50°	1203.5	926.7	615.2	489.9	457.1
52.5°	1094.3	810.9	519.1	414.1	386.1
55°	966.0	696.9	438.6	346.7	328.8
57.5°	850.3	591.3	369.9	293.6	276.9
60°	728.0	501.2	309.7	248.2	232.7
62.5°	620.6	421.3	260.8	210.6	199.9
65°	517.3	350.9	220.8	179.0	169.5
67.5°	422.5	293.0	186.2	152.8	145.0
70°	338.9	237.5	156.9	130.1	124.7
72.5°	266.7	190.9	130.7	112.2	107.4
75°	208.2	151.6	109.2	96.7	93.7
77.5°	150.4	118.1	91.3	82.9	81.1
80°	106.2	89.5	75.2	71.6	70.4
82.5°	70.4	65.0	62.1	62.1	61.5
85°	40.6	45.3	50.7	53.1	53.7
87.5°	20.9	30.4	40.6	45.3	45.9
90°	6.0	19.1	34.6	41.2	42.4
92.5°	9.0	19.1	34.0	41.2	42.4
95°	9.0	19.1	34.0	41.2	42.4
97.5°	8.4	18.5	34.0	41.2	42.4
100°	7.8	17.3	33.4	41.2	42.4
102.5°	6.6	16.7	32.2	40.6	42.4
105°	6.0	15.5	30.4	40.0	41.8
107.5°	5.4	13.1	28.6	38.2	40.6
110°	4.2	11.3	27.4	36.4	39.4



TEST NUMBER: P893582

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.6	10.1	25.7	34.6	37.6
115°	3.0	9.0	23.9	32.8	35.8
117.5°	2.4	8.4	21.5	30.4	33.4
120°	1.8	7.8	19.7	28.6	31.0
122.5°	1.8	7.2	17.3	26.3	28.6
125°	1.8	6.0	16.1	23.9	26.3
127.5°	1.2	5.4	14.3	21.5	23.9
130°	1.2	5.4	13.1	19.7	21.5
132.5°	1.2	4.8	11.9	17.9	19.7
135°	1.2	4.8	10.7	16.1	17.9
137.5°	1.2	4.2	9.5	14.9	16.7
140°	1.2	4.2	9.0	13.1	14.9
142.5°	1.2	3.6	7.8	12.5	13.7
145°	1.2	3.6	7.2	10.7	12.5
147.5°	1.2	3.6	6.6	10.1	11.3
150°	1.2	3.0	6.0	8.4	10.1
152.5°	1.2	3.0	5.4	7.8	9.5
155°	1.2	3.0	4.8	6.6	8.4
157.5°	1.2	3.0	4.8	6.0	7.2
160°	1.8	2.4	4.2	5.4	6.6
162.5°	1.8	2.4	3.6	4.8	6.0
165°	1.8	2.4	3.6	4.2	5.4
167.5°	1.8	2.4	3.0	3.6	4.2
170°	1.8	1.8	3.0	3.0	3.0
172.5°	1.8	1.8	2.4	3.0	2.4
175°	1.8	1.8	2.4	2.4	2.4
177.5°	1.8	1.8	2.4	2.4	2.4
180°	1.8	1.8	1.8	1.8	1.8



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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	19.28	20.68	19.69	21.05	21.43	14.58	15.97	14.99	16.34	16.73
	3H	20.38	21.62	20.80	22.01	22.44	15.72	16.96	16.14	17.35	17.78
	4H	20.68	21.85	21.13	22.25	22.70	16.22	17.38	16.67	17.79	18.24
	6H	20.83	21.90	21.29	22.33	22.78	16.72	17.79	17.18	18.22	18.68
	8H	20.85	21.87	21.32	22.31	22.78	16.98	18.00	17.45	18.45	18.91
	12H	20.84	21.82	21.32	22.25	22.75	17.28	18.25	17.75	18.69	19.18
4H	2H	19.27	20.43	19.71	20.83	21.28	15.08	16.24	15.52	16.65	17.09
	3H	20.50	21.46	20.96	21.92	22.39	16.39	17.35	16.85	17.81	18.27
	4H	20.89	21.75	21.37	22.22	22.72	16.98	17.85	17.46	18.32	18.82
	6H	21.12	21.87	21.62	22.36	22.89	17.61	18.36	18.11	18.85	19.37
	8H	21.16	21.86	21.67	22.36	22.89	17.93	18.63	18.44	19.12	19.65
	12H	21.17	21.80	21.70	22.33	22.86	18.30	18.93	18.83	19.45	19.99
8H	4H	20.87	21.58	21.38	22.07	22.60	17.22	17.93	17.73	18.42	18.95
	6H	21.15	21.73	21.69	22.27	22.81	17.95	18.53	18.49	19.07	19.61
	8H	21.22	21.75	21.78	22.30	22.85	18.35	18.87	18.91	19.43	19.98
	12H	21.27	21.73	21.83	22.27	22.90	18.85	19.31	19.40	19.85	20.47
12H	4H	20.85	21.48	21.38	22.01	22.54	17.24	17.86	17.77	18.39	18.93
	6H	21.13	21.65	21.69	22.21	22.76	17.98	18.51	18.54	19.06	19.62
	8H	21.24	21.70	21.79	22.24	22.87	18.45	18.91	19.00	19.45	20.07