

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: P893576

Luminaire Tested: 4MB-5SL-A-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893576
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-A-UNV-L950
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

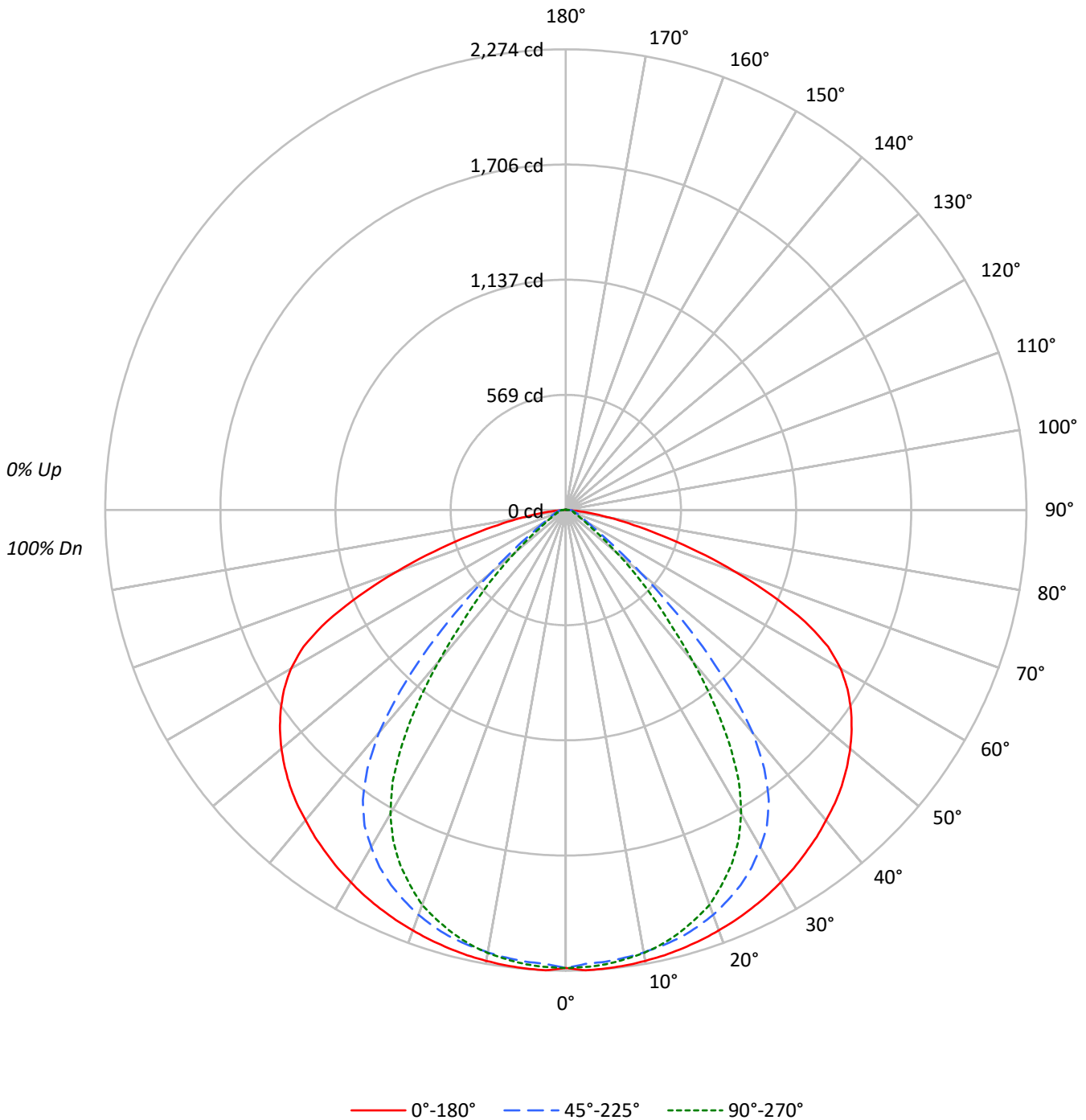
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4634.0 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.15 / 1.23
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')
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

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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	111	107	103	100	108	105	102	99	100	98	96	97	95	93	93	91	90	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	84	81	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	77	73	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	55	64	59	55	64	59	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	59	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	54	49	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	50	44	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23022	23022	23022
5°	23225	22879	23014
10°	23370	22931	22963
15°	23604	23029	22792
20°	23936	23049	22486
25°	24383	22949	21726
30°	24951	22589	20361
35°	25662	21720	17505
40°	26577	19076	12940
45°	27747	13766	8702
50°	29037	7691	5194
55°	30520	3975	2843
60°	31928	2587	2012
65°	31383	2125	1598
70°	26465	1956	1489
75°	19470	1995	1601
80°	12985	2346	2018
85°	7093	3798	3073

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 32199 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.6	4.6
10°-20°	620.3	13.4
20°-30°	943.6	20.4
30°-40°	1077.6	23.3
40°-50°	869.3	18.8
50°-60°	475.9	10.3
60°-70°	250.9	5.4
70°-80°	123.0	2.7
80°-90°	43.3	0.9
90°-100°	9.3	0.2
100°-110°	1.3	0.0
110°-120°	0.8	0.0
120°-130°	0.7	0.0
130°-140°	0.8	0.0
140°-150°	0.9	0.0
150°-160°	0.8	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	1778.5	38.4
0°-40°	2856.1	61.6
0°-60°	4201.3	90.7
0°-90°	4618.6	99.7
90°-120°	11.4	0.2
90°-150°	13.8	0.3
90°-180°	15.0	0.3
0°-180°	4634.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2261	2261	2261	2261	2261	
5°	2272	2265	2238	2258	2251	216
15°	2239	2225	2184	2180	2162	633
25°	2170	2139	2042	1973	1933	1003
35°	2064	1977	1747	1509	1408	1295
45°	1926	1655	956	653	604	1487
55°	1719	707	224	173	160	1534
65°	1302	163	88	71	66	1260
75°	495	92	51	42	41	546
85°	61	48	32	29	26	84
90°	2	25	20	18	16	4
95°	2	3	7	11	10	2
105°	1	0	1	1	1	1
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	1	1	1	1
145°	1	1	1	2	1	1
155°	1	1	2	2	2	1
165°	1	2	2	2	2	0
175°	2	2	2	3	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2260.6	2260.6	2260.6	2260.6	2260.6
2.5°	2274.3	2268.1	2242.4	2264.3	2258.0
5°	2271.8	2264.9	2238.0	2258.0	2251.2
7.5°	2267.4	2258.7	2229.3	2247.4	2236.8
10°	2259.9	2251.2	2217.4	2231.8	2220.5
12.5°	2251.2	2239.3	2201.8	2209.3	2194.9
15°	2238.7	2224.9	2184.2	2180.5	2161.7
17.5°	2224.9	2208.0	2158.6	2142.3	2119.8
20°	2208.6	2188.0	2126.7	2094.8	2074.8
22.5°	2190.5	2163.6	2086.7	2037.9	2006.6
25°	2169.9	2138.6	2042.3	1972.8	1933.4
27.5°	2148.0	2105.4	1988.5	1897.1	1844.0
30°	2121.7	2070.4	1920.9	1797.7	1731.4
32.5°	2095.4	2026.6	1848.3	1669.5	1590.6
35°	2064.1	1977.2	1747.0	1509.3	1408.0
37.5°	2034.7	1917.8	1610.0	1308.5	1199.7
40°	1999.1	1847.7	1434.9	1077.7	973.3
42.5°	1965.3	1766.4	1207.8	855.1	764.4
45°	1926.5	1655.1	955.8	653.0	604.2
47.5°	1881.5	1503.1	694.9	486.0	455.4
50°	1832.7	1294.2	485.4	352.8	327.8
52.5°	1778.9	1012.1	327.1	245.2	231.4
55°	1718.9	707.4	223.9	173.3	160.1
57.5°	1649.4	460.4	162.6	130.7	122.0
60°	1567.5	294.0	127.0	103.8	98.8
62.5°	1459.9	206.4	104.5	85.7	81.3
65°	1302.3	163.3	88.2	71.3	66.3
67.5°	1102.8	138.2	75.7	60.0	56.9
70°	888.8	120.1	65.7	51.9	50.0
72.5°	683.0	105.1	56.9	46.3	45.0
75°	494.8	91.9	50.7	42.5	40.7
77.5°	342.8	79.4	45.0	38.2	36.9
80°	221.4	68.8	40.0	35.0	34.4
82.5°	127.0	57.5	36.3	33.8	33.2
85°	60.7	48.2	32.5	29.4	26.3
87.5°	19.4	35.7	25.6	22.5	20.0
90°	2.5	25.0	20.0	17.5	16.3
92.5°	2.5	13.8	14.4	14.4	13.8
95°	1.9	3.1	6.9	10.6	10.0
97.5°	1.9	1.3	4.4	7.5	7.5
100°	1.3	0.6	1.9	5.0	5.0
102.5°	1.3	0.6	0.6	3.1	3.1
105°	0.6	0.0	0.6	1.3	1.3
107.5°	0.6	0.6	0.6	1.3	0.6
110°	0.6	0.6	0.6	1.3	0.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	0.6	0.6	1.3	0.6
115°	0.6	0.6	0.6	1.3	0.6
117.5°	0.6	0.6	0.6	1.3	0.6
120°	0.6	0.6	0.6	1.3	0.6
122.5°	0.6	0.6	0.6	1.3	0.6
125°	0.6	0.6	0.6	1.3	0.6
127.5°	0.6	0.6	0.6	1.3	0.6
130°	0.6	0.6	1.3	1.3	0.6
132.5°	0.6	0.6	1.3	1.3	0.6
135°	0.6	0.6	1.3	1.3	0.6
137.5°	0.6	0.6	1.3	1.3	1.3
140°	1.3	0.6	1.3	1.3	1.3
142.5°	1.3	1.3	1.3	1.9	1.3
145°	1.3	1.3	1.3	1.9	1.3
147.5°	1.3	1.3	1.9	1.9	1.3
150°	1.3	1.3	1.9	1.9	1.3
152.5°	1.3	1.3	1.9	1.9	1.9
155°	1.3	1.3	1.9	2.5	1.9
157.5°	1.3	1.3	1.9	2.5	1.9
160°	1.3	1.9	2.5	2.5	1.9
162.5°	1.3	1.9	2.5	2.5	2.5
165°	1.3	1.9	2.5	2.5	2.5
167.5°	1.9	1.9	2.5	3.1	2.5
170°	1.9	1.9	2.5	3.1	2.5
172.5°	1.9	1.9	2.5	3.1	2.5
175°	1.9	1.9	2.5	3.1	2.5
177.5°	1.9	1.9	2.5	3.1	3.1
180°	2.5	2.5	2.5	2.5	2.5



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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	20.80	22.20	21.17	22.52	22.85	9.32	10.72	9.69	11.04	11.36
	3H	23.71	24.96	24.10	25.30	25.67	10.25	11.50	10.64	11.83	12.20
	4H	24.61	25.77	25.01	26.13	26.52	10.77	11.93	11.18	12.29	12.68
	6H	25.10	26.17	25.52	26.55	26.95	11.40	12.47	11.82	12.85	13.25
	8H	25.22	26.23	25.65	26.63	27.04	11.82	12.84	12.26	13.24	13.65
	12H	25.26	26.23	25.70	26.62	27.06	12.27	13.24	12.71	13.63	14.07
4H	2H	20.62	21.78	21.03	22.14	22.53	9.84	11.00	10.24	11.35	11.74
	3H	23.55	24.50	23.97	24.91	25.32	11.03	11.98	11.45	12.39	12.80
	4H	24.45	25.30	24.89	25.73	26.18	11.69	12.55	12.13	12.97	13.42
	6H	25.04	25.78	25.51	26.23	26.71	12.52	13.26	12.98	13.71	14.18
	8H	25.20	25.90	25.68	26.35	26.83	13.05	13.74	13.52	14.20	14.67
	12H	25.30	25.91	25.79	26.40	26.88	13.63	14.25	14.12	14.73	15.21
8H	4H	24.34	25.03	24.81	25.48	25.96	12.29	12.98	12.76	13.43	13.91
	6H	24.94	25.51	25.44	26.01	26.50	13.29	13.86	13.80	14.36	14.85
	8H	25.13	25.64	25.65	26.16	26.66	13.97	14.48	14.49	15.00	15.50
	12H	25.27	25.73	25.79	26.23	26.80	14.73	15.19	15.25	15.69	16.26
12H	4H	24.30	24.92	24.79	25.40	25.88	12.55	13.16	13.04	13.65	14.13
	6H	24.89	25.40	25.41	25.92	26.42	13.60	14.11	14.12	14.63	15.13
	8H	25.10	25.56	25.62	26.06	26.64	14.36	14.82	14.88	15.32	15.90