

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: P893648

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-LVRA-UNV-L950
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

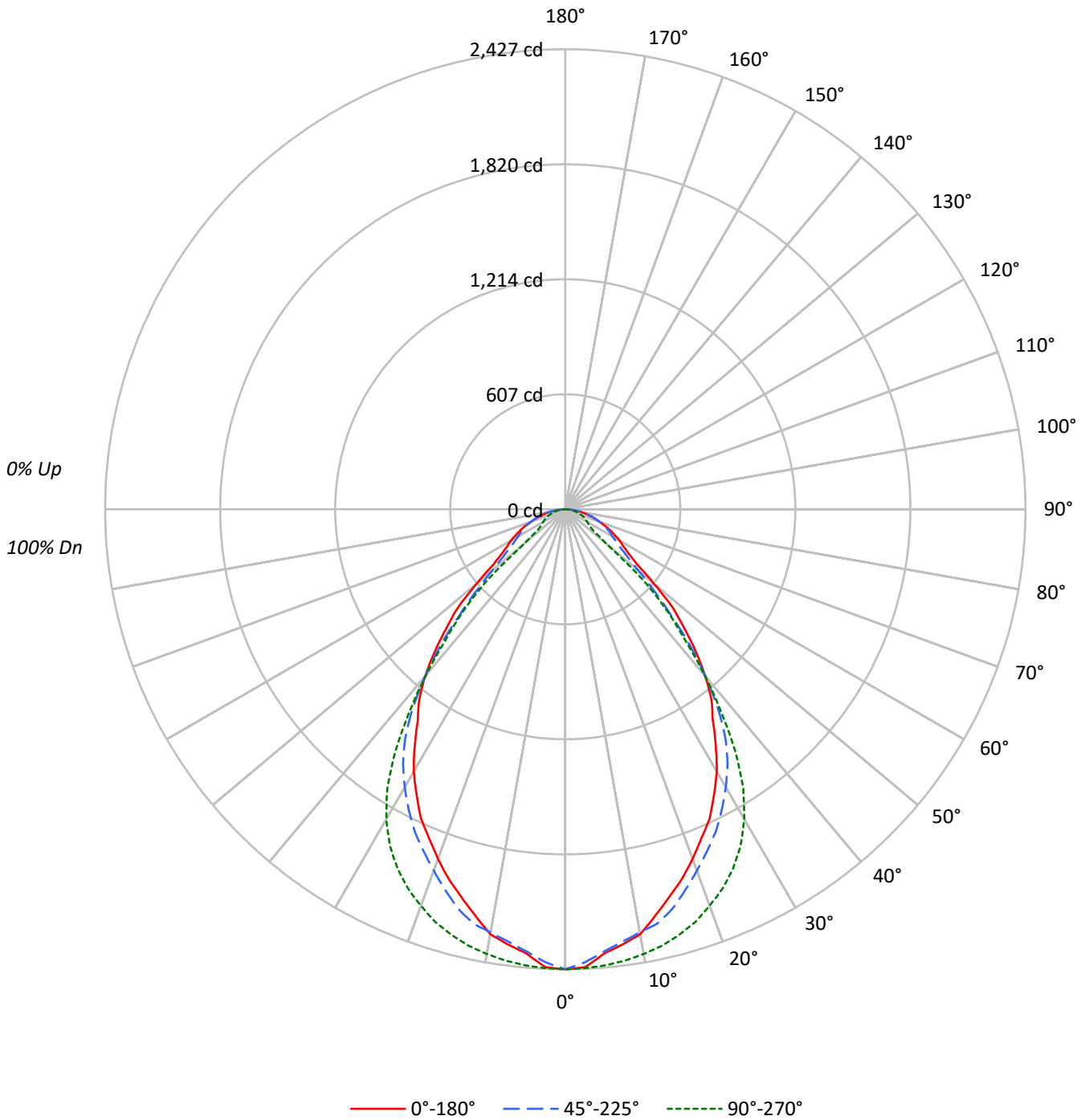
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3939.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	80	80	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	71	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	63	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	57	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	52	52	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	47	47	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	43	43	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	40	40	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	37	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17268	17268	17268
5°	16803	16727	17250
10°	16446	16373	17209
15°	15597	16076	17113
20°	14858	15360	16851
25°	14133	14737	16422
30°	13130	13912	15505
35°	11774	12785	13599
40°	10667	10690	10632
45°	8919	7899	7704
50°	6737	5560	3150
55°	5067	4446	1986
60°	4709	4094	1914
65°	4381	4086	1916
70°	4009	4009	1887
75°	3799	3904	1823
80°	3511	3692	1872
85°	3061	3216	2041

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 9126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.2	5.7
10°-20°	617.7	15.7
20°-30°	876.0	22.2
30°-40°	902.4	22.9
40°-50°	630.3	16.0
50°-60°	302.5	7.7
60°-70°	212.2	5.4
70°-80°	132.7	3.4
80°-90°	41.0	1.0
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°	1717.9	43.6
0°-40°	2620.3	66.5
0°-60°	3553.1	90.2
0°-90°	3939.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3939.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2427	2427	2427	2427	2427	
5°	2353	2350	2342	2403	2415	223
15°	2117	2133	2182	2245	2323	596
25°	1800	1818	1877	2004	2092	823
35°	1356	1392	1472	1502	1566	854
45°	886	907	785	745	766	683
55°	408	388	358	230	160	383
65°	260	243	243	184	114	258
75°	138	136	142	123	66	146
85°	38	38	39	39	25	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2427.0	2427.0	2427.0	2427.0	2427.0
2.5°	2417.7	2410.2	2392.0	2425.2	2422.7
5°	2352.6	2349.5	2342.0	2403.3	2415.2
7.5°	2315.7	2309.4	2300.7	2368.2	2401.4
10°	2276.3	2283.8	2266.3	2328.2	2382.0
12.5°	2195.0	2215.0	2238.8	2286.9	2358.2
15°	2117.4	2133.0	2182.5	2245.0	2323.2
17.5°	2044.8	2063.0	2105.5	2199.4	2282.5
20°	1962.3	1987.3	2028.6	2148.7	2225.6
22.5°	1877.2	1900.4	1952.3	2081.1	2166.8
25°	1800.3	1818.4	1877.2	2004.2	2091.8
27.5°	1698.3	1732.1	1787.8	1910.4	2002.3
30°	1598.2	1627.0	1693.3	1796.5	1887.2
32.5°	1477.5	1519.4	1592.6	1671.4	1747.1
35°	1355.5	1392.4	1471.9	1502.5	1565.7
37.5°	1266.7	1276.7	1321.7	1318.0	1353.6
40°	1148.5	1168.5	1151.0	1104.1	1144.7
42.5°	1020.9	1044.6	973.9	919.5	933.9
45°	886.4	907.0	785.0	745.0	765.6
47.5°	770.0	768.1	633.0	606.1	577.4
50°	608.6	628.7	502.3	452.3	284.6
52.5°	475.4	482.9	414.1	289.0	187.0
55°	408.5	388.5	358.4	229.6	160.1
57.5°	362.8	337.8	317.8	213.3	146.4
60°	330.9	302.8	287.7	202.7	134.5
62.5°	294.6	272.7	267.1	193.3	123.9
65°	260.2	243.3	242.7	184.5	113.8
67.5°	225.8	216.4	218.9	173.9	102.6
70°	192.7	190.8	192.7	160.1	90.7
72.5°	164.5	162.6	167.6	142.6	77.6
75°	138.2	136.4	142.0	122.6	66.3
77.5°	110.1	111.3	115.1	102.0	55.7
80°	85.7	85.7	90.1	80.1	45.7
82.5°	61.3	61.9	64.4	58.8	35.7
85°	37.5	37.5	39.4	38.8	25.0
87.5°	12.5	14.4	16.9	18.1	12.5
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	15.55	16.90	15.91	17.21	17.53	11.88	13.23	12.24	13.54	13.86
	3H	17.28	18.49	17.66	18.82	19.18	13.85	15.06	14.23	15.39	15.75
	4H	17.95	19.08	18.36	19.43	19.81	14.56	15.69	14.96	16.04	16.42
	6H	18.46	19.50	18.88	19.87	20.26	15.08	16.12	15.50	16.49	16.88
	8H	18.63	19.62	19.06	20.01	20.41	15.27	16.25	15.70	16.64	17.05
	12H	18.74	19.68	19.17	20.07	20.50	15.41	16.35	15.84	16.73	17.16
4H	2H	16.08	17.20	16.48	17.55	17.94	13.50	14.63	13.90	14.98	15.36
	3H	18.05	18.98	18.46	19.39	19.79	15.68	16.61	16.09	17.01	17.41
	4H	18.85	19.69	19.29	20.11	20.55	16.56	17.39	16.99	17.81	18.25
	6H	19.50	20.22	19.96	20.67	21.13	17.20	17.92	17.66	18.37	18.83
	8H	19.72	20.39	20.19	20.84	21.31	17.41	18.09	17.88	18.53	19.00
	12H	19.87	20.47	20.36	20.95	21.43	17.57	18.17	18.05	18.65	19.12
8H	4H	19.14	19.82	19.61	20.26	20.73	17.21	17.88	17.67	18.33	18.80
	6H	19.92	20.48	20.42	20.97	21.45	18.07	18.62	18.57	19.12	19.60
	8H	20.22	20.72	20.74	21.24	21.73	18.40	18.89	18.92	19.41	19.90
	12H	20.46	20.90	20.97	21.39	21.96	18.66	19.10	19.17	19.59	20.16
12H	4H	19.16	19.76	19.64	20.24	20.71	17.28	17.88	17.76	18.36	18.83
	6H	19.97	20.47	20.49	20.99	21.48	18.20	18.70	18.72	19.22	19.71
	8H	20.34	20.78	20.85	21.27	21.84	18.62	19.06	19.13	19.55	20.12