

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: P893637

Luminaire Tested: 4MB-5SL-LVR-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893637
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-5SL-LVR-UNV-L930
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

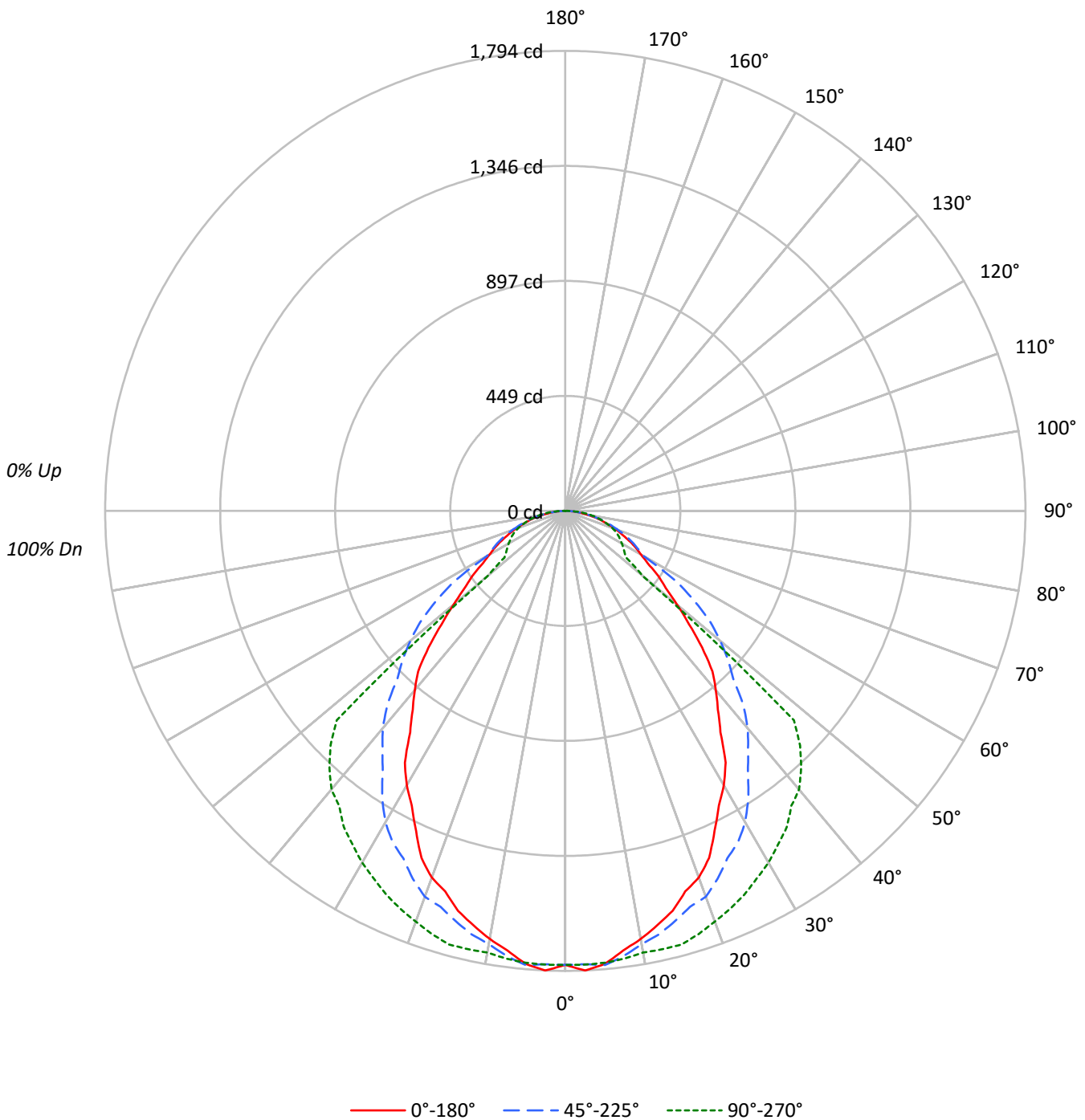
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3778.0 lumens
Efficiency: N/A
Efficacy: 107.9 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): 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: P893637
CATALOG NUMBER: 4MB-5SL-LVR-UNV-L930

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°	12596	12596	12596
5°	12664	12696	12632
10°	12248	12392	12634
15°	11895	12194	12894
20°	11522	12124	12905
25°	10811	11733	12961
30°	10155	11522	13014
35°	9157	10775	13076
40°	8482	10279	13168
45°	7588	9317	13019
50°	6295	8727	4373
55°	5484	7661	3499
60°	4851	4992	3629
65°	4613	4855	3852
70°	4327	4589	4063
75°	4027	4324	4176
80°	3667	4077	4372
85°	3249	3470	4727

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13019 cd/sqm



TEST NUMBER: P893637
 CATALOG NUMBER: 4MB-5SL-LVR-UNV-L930

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.9	4.4
10°-20°	472.4	12.5
20°-30°	694.9	18.4
30°-40°	794.7	21.0
40°-50°	752.5	19.9
50°-60°	414.6	11.0
60°-70°	266.2	7.0
70°-80°	164.3	4.3
80°-90°	50.6	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°	1335.2	35.3
0°-40°	2129.9	56.4
0°-60°	3297.0	87.3
0°-90°	3778.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3778.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1773	1788	1778	1778	1769	166
15°	1615	1635	1656	1742	1750	453
25°	1377	1438	1495	1592	1651	634
35°	1054	1145	1240	1420	1506	666
45°	754	826	926	1188	1294	577
55°	442	464	618	318	282	395
65°	274	283	288	257	229	271
75°	146	149	157	166	152	156
85°	40	40	42	49	58	44
90°	0	0	0	0	0	



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CATALOG NUMBER: 4MB-5SL-LVR-UNV-L930

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.4	1770.4	1770.4	1770.4	1770.4
2.5°	1793.9	1798.4	1769.5	1768.6	1771.3
5°	1773.1	1787.6	1777.6	1777.6	1768.6
7.5°	1728.8	1753.2	1750.5	1771.3	1761.3
10°	1695.3	1715.2	1715.2	1769.5	1748.7
12.5°	1655.5	1678.2	1690.8	1747.8	1750.5
15°	1614.9	1634.8	1655.5	1742.3	1750.5
17.5°	1556.1	1592.3	1618.5	1703.5	1729.7
20°	1521.7	1543.4	1601.3	1670.0	1704.4
22.5°	1464.8	1496.4	1552.5	1629.3	1680.0
25°	1377.1	1438.5	1494.6	1592.3	1651.0
27.5°	1295.7	1341.8	1457.5	1560.6	1616.7
30°	1236.0	1272.2	1402.4	1514.5	1584.1
32.5°	1163.7	1222.4	1328.2	1469.3	1543.4
35°	1054.3	1144.7	1240.5	1420.5	1505.5
37.5°	977.4	1039.8	1170.0	1369.8	1448.5
40°	913.2	970.2	1106.7	1306.5	1417.7
42.5°	849.0	895.1	1027.1	1259.5	1360.8
45°	754.1	825.5	925.9	1188.1	1293.9
47.5°	654.6	730.6	859.9	1127.5	1208.9
50°	568.7	629.3	788.4	1007.3	395.1
52.5°	493.7	549.7	712.5	364.4	298.4
55°	442.1	463.8	617.6	318.3	282.1
57.5°	380.7	415.9	518.1	302.9	267.6
60°	340.9	356.2	350.8	287.5	255.0
62.5°	309.2	320.1	318.3	272.2	240.5
65°	274.0	283.0	288.4	256.8	228.8
67.5°	238.7	246.8	255.0	237.8	212.5
70°	208.0	213.4	220.6	215.2	195.3
72.5°	176.3	182.6	187.2	191.7	172.7
75°	146.5	149.2	157.3	165.5	151.9
77.5°	119.4	122.1	127.5	136.5	129.3
80°	89.5	92.2	99.5	106.7	106.7
82.5°	63.3	65.1	69.6	79.6	84.1
85°	39.8	39.8	42.5	48.8	57.9
87.5°	15.4	15.4	18.1	21.7	28.9
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	16.75	18.23	17.12	18.55	18.86	14.55	16.04	14.92	16.35	16.66
	3H	18.28	19.60	18.66	19.93	20.30	16.88	18.21	17.26	18.54	18.90
	4H	18.87	20.11	19.27	20.46	20.84	17.83	19.08	18.24	19.43	19.81
	6H	19.33	20.47	19.74	20.84	21.23	18.62	19.77	19.03	20.13	20.53
	8H	19.47	20.56	19.90	20.95	21.36	18.93	20.02	19.36	20.41	20.81
	12H	19.57	20.61	20.00	21.00	21.42	19.18	20.22	19.61	20.61	21.04
4H	2H	17.30	18.55	17.70	18.89	19.27	15.66	16.90	16.06	17.25	17.63
	3H	19.07	20.10	19.49	20.50	20.91	18.10	19.13	18.52	19.53	19.94
	4H	19.79	20.72	20.23	21.14	21.58	19.17	20.10	19.60	20.51	20.95
	6H	20.38	21.19	20.84	21.63	22.09	20.06	20.86	20.52	21.31	21.77
	8H	20.57	21.32	21.03	21.77	22.23	20.41	21.16	20.87	21.61	22.08
	12H	20.71	21.38	21.19	21.86	22.33	20.70	21.37	21.18	21.85	22.32
8H	4H	20.10	20.85	20.57	21.30	21.77	19.56	20.31	20.02	20.75	21.22
	6H	20.81	21.44	21.31	21.93	22.41	20.59	21.22	21.09	21.71	22.19
	8H	21.07	21.64	21.59	22.15	22.64	21.04	21.60	21.55	22.11	22.60
	12H	21.28	21.78	21.79	22.27	22.84	21.42	21.92	21.93	22.41	22.98
12H	4H	20.14	20.81	20.62	21.29	21.76	19.59	20.26	20.07	20.74	21.22
	6H	20.88	21.44	21.39	21.95	22.44	20.66	21.22	21.17	21.73	22.22
	8H	21.20	21.70	21.71	22.19	22.75	21.17	21.66	21.68	22.16	22.72