

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: P893664

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893664
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-RFLW-UNV-L950
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 5000K
Light Source: -
Ballast/Driver: -

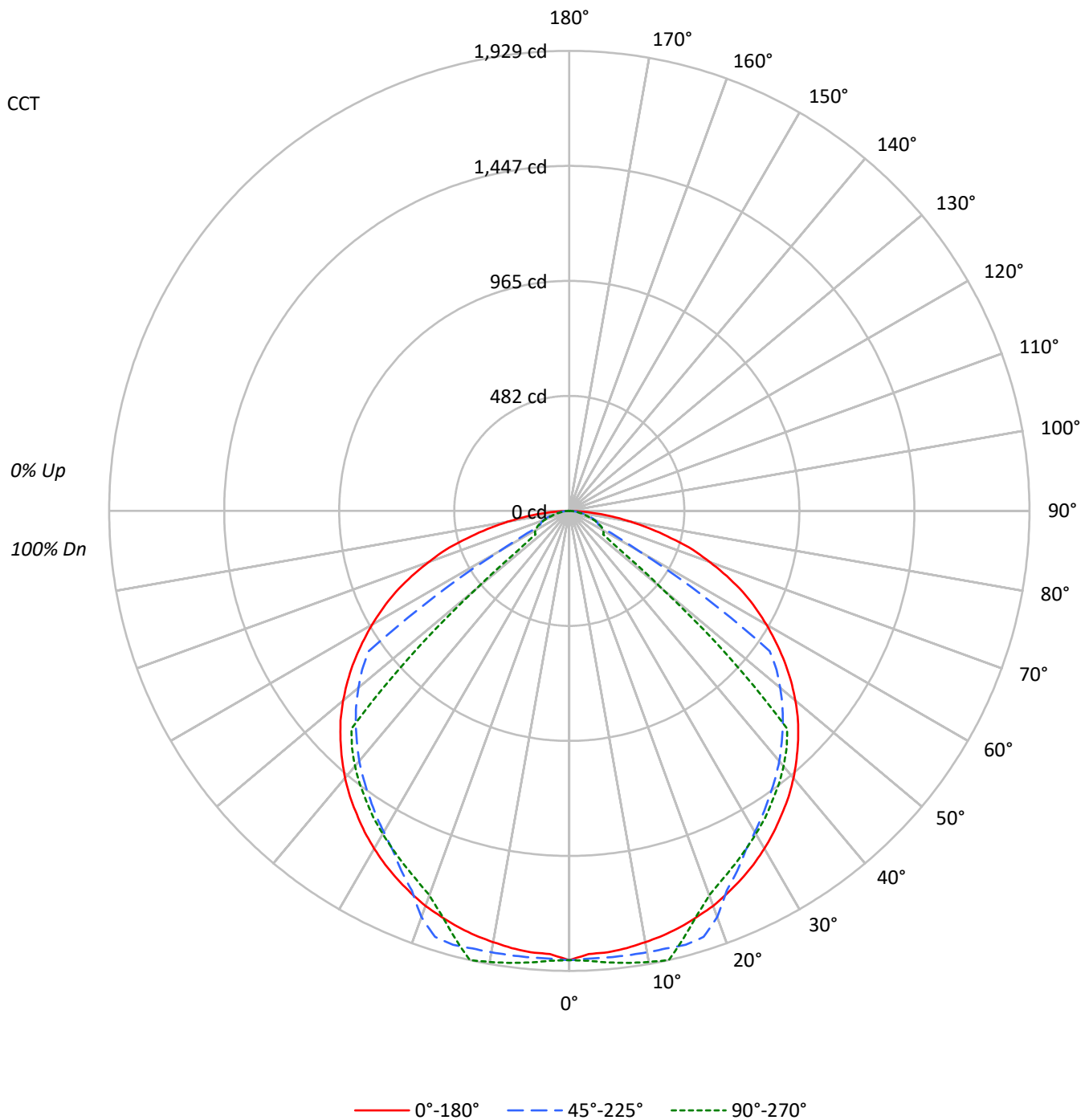
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4594.0 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.24 / 1.38
Luminous Opening: Rectangular (W 0.21' 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				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	101	98	100	97	94	96	94	92	92	91	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	66	66	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	58	58	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	61	55	51	51	51	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	45	45	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	40	40	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	36	36	36	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	33	33	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24459	24459	24459
5°	24215	24496	24778
10°	24210	24779	25320
15°	24276	25321	24914
20°	24356	25043	23700
25°	24418	23861	23458
30°	24518	23318	23449
35°	24620	23182	23524
40°	24789	23214	23690
45°	24910	23245	23720
50°	25003	23302	10254
55°	24939	23227	3912
60°	24794	8864	4264
65°	24623	4114	4381
70°	23782	4427	4100
75°	22215	4224	3577
80°	19547	3716	3066
85°	15450	3218	2577

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 25003 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.9	3.9
10°-20°	522.3	11.4
20°-30°	779.3	17.0
30°-40°	944.6	20.6
40°-50°	967.2	21.1
50°-60°	643.2	14.0
60°-70°	366.6	8.0
70°-80°	154.0	3.4
80°-90°	36.7	0.8
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°	1481.5	32.2
0°-40°	2426.2	52.8
0°-60°	4036.6	87.9
0°-90°	4594.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4594.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1884	1884	1884	1884	1884	
5°	1858	1894	1879	1884	1901	177
15°	1806	1856	1884	1877	1853	510
25°	1704	1786	1665	1629	1637	786
35°	1553	1581	1462	1469	1484	973
45°	1356	1274	1266	1281	1292	1047
55°	1102	1009	1026	225	173	984
65°	801	717	134	143	143	789
75°	443	93	84	73	71	470
85°	104	26	22	17	17	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1883.6	1883.6	1883.6	1883.6	1883.6
2.5°	1859.8	1898.7	1879.3	1881.4	1887.9
5°	1857.7	1894.4	1879.3	1883.6	1900.9
7.5°	1849.0	1887.9	1879.3	1892.2	1911.7
10°	1836.1	1881.4	1879.3	1900.9	1920.3
12.5°	1823.1	1868.5	1879.3	1911.7	1928.9
15°	1805.8	1855.5	1883.6	1877.1	1853.3
17.5°	1784.2	1842.5	1872.8	1779.9	1777.7
20°	1762.6	1825.3	1812.3	1723.7	1715.1
22.5°	1734.5	1808.0	1723.7	1663.2	1674.0
25°	1704.3	1786.4	1665.4	1628.7	1637.3
27.5°	1671.9	1764.8	1602.8	1589.8	1600.6
30°	1635.2	1734.5	1555.2	1550.9	1563.9
32.5°	1596.3	1676.2	1509.9	1512.0	1527.2
35°	1553.1	1581.2	1462.4	1468.8	1484.0
37.5°	1509.9	1492.6	1417.0	1427.8	1442.9
40°	1462.4	1423.5	1369.5	1380.3	1397.6
42.5°	1410.5	1350.0	1317.6	1332.8	1347.9
45°	1356.5	1274.4	1265.8	1280.9	1291.7
47.5°	1300.4	1209.6	1211.8	1222.6	915.9
50°	1237.7	1144.8	1153.5	799.2	507.6
52.5°	1170.8	1077.9	1095.2	445.0	257.0
55°	1101.6	1008.7	1026.0	224.6	172.8
57.5°	1028.2	939.6	669.6	162.0	170.6
60°	954.7	866.2	341.3	159.8	164.2
62.5°	879.1	792.7	162.0	153.4	155.5
65°	801.4	717.1	133.9	142.6	142.6
67.5°	715.0	637.2	127.4	127.4	125.3
70°	626.4	529.2	116.6	110.2	108.0
72.5°	544.3	203.0	101.5	90.7	88.6
75°	442.8	92.9	84.2	73.4	71.3
77.5°	352.1	77.8	67.0	58.3	56.2
80°	261.4	60.5	49.7	43.2	41.0
82.5°	181.4	41.0	34.6	28.1	28.1
85°	103.7	25.9	21.6	17.3	17.3
87.5°	41.0	13.0	10.8	6.5	6.5
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	24.03	25.55	24.40	25.87	26.18	11.80	13.32	12.16	13.63	13.95
	3H	26.05	27.41	26.43	27.74	28.10	14.11	15.47	14.49	15.80	16.16
	4H	26.52	27.79	26.92	28.14	28.51	14.83	16.10	15.23	16.45	16.83
	6H	26.92	28.10	27.34	28.46	28.85	15.31	16.48	15.72	16.85	17.24
	8H	27.07	28.19	27.50	28.58	28.98	15.45	16.56	15.87	16.95	17.35
	12H	27.17	28.24	27.60	28.62	29.05	15.53	16.60	15.97	16.98	17.41
4H	2H	23.87	25.15	24.27	25.49	25.87	12.60	13.87	13.00	14.22	14.60
	3H	26.08	27.12	26.49	27.53	27.93	15.11	16.15	15.52	16.55	16.96
	4H	26.53	27.46	26.96	27.88	28.32	15.93	16.87	16.36	17.28	17.72
	6H	26.99	27.81	27.45	28.25	28.71	16.52	17.33	16.98	17.78	18.24
	8H	27.18	27.94	27.65	28.39	28.86	16.69	17.45	17.15	17.89	18.36
	12H	27.33	28.01	27.82	28.49	28.96	16.81	17.49	17.29	17.97	18.44
8H	4H	26.44	27.20	26.91	27.65	28.12	16.77	17.53	17.23	17.97	18.44
	6H	26.90	27.53	27.40	28.02	28.50	17.39	18.02	17.89	18.51	18.99
	8H	27.10	27.67	27.62	28.18	28.67	17.59	18.15	18.10	18.67	19.15
	12H	27.29	27.79	27.80	28.28	28.85	17.75	18.25	18.26	18.74	19.31
12H	4H	26.41	27.09	26.90	27.57	28.04	16.84	17.52	17.32	18.00	18.47
	6H	26.86	27.42	27.37	27.93	28.42	17.48	18.05	18.00	18.56	19.05
	8H	27.08	27.58	27.59	28.07	28.64	17.74	18.24	18.25	18.73	19.29