

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: P893928

Luminaire Tested: 4MB-8HL-FLT-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2403-334-4)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-8HL-FLT-UNV-L950
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

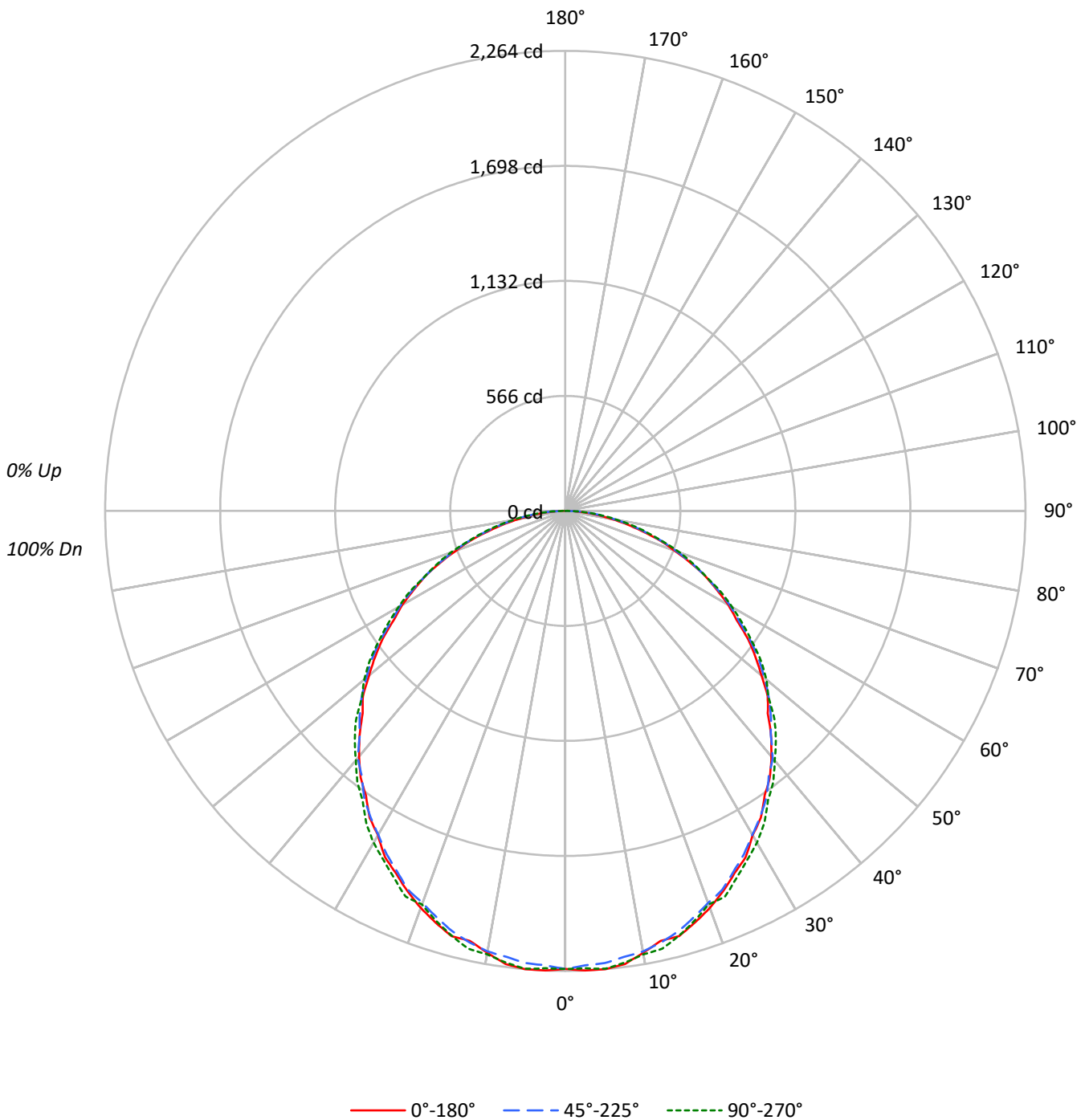
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6246.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.34
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 57.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 4.23
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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	86	86	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	61	61	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	45	45	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	40	40	40	38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	35	35	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	32	32	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16039	16039	16039
5°	16169	15954	16156
10°	15949	15906	16012
15°	15952	15787	15937
20°	15741	15549	15608
25°	15457	15373	15648
30°	15144	15120	15496
35°	14852	14979	15105
40°	14652	14742	14887
45°	14178	14393	14657
50°	13947	14152	14292
55°	13600	13770	13914
60°	13177	13372	13496
65°	12787	12835	12835
70°	11891	12174	12478
75°	10949	11375	11617
80°	9653	10493	10854
85°	8662	9698	10417

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14657 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.4	3.4
10°-20°	608.1	9.7
20°-30°	912.1	14.6
30°-40°	1083.2	17.3
40°-50°	1109.1	17.8
50°-60°	993.7	15.9
60°-70°	754.8	12.1
70°-80°	439.7	7.0
80°-90°	132.0	2.1
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°	1733.5	27.8
0°-40°	2816.7	45.1
0°-60°	4919.5	78.8
0°-90°	6246.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6246.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2254	2254	2254	2254	2254	
5°	2264	2255	2234	2247	2262	214
15°	2166	2180	2143	2152	2164	608
25°	1969	1986	1958	1984	1993	909
35°	1710	1748	1724	1731	1739	1075
45°	1409	1444	1430	1442	1457	1096
55°	1096	1113	1110	1123	1122	977
65°	760	760	762	772	762	746
75°	398	405	414	426	423	424
85°	106	108	119	127	128	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2254.2	2254.2	2254.2	2254.2	2254.2
2.5°	2263.9	2253.2	2238.6	2243.5	2253.2
5°	2263.9	2255.2	2233.8	2247.4	2262.0
7.5°	2249.3	2261.0	2214.3	2214.3	2241.5
10°	2207.5	2229.9	2201.6	2198.7	2216.2
12.5°	2167.5	2208.4	2175.3	2185.1	2206.5
15°	2165.6	2180.2	2143.2	2152.0	2163.6
17.5°	2123.7	2138.3	2098.4	2115.0	2115.0
20°	2078.9	2081.9	2053.6	2089.6	2061.4
22.5°	2027.3	2057.5	2018.6	2030.2	2054.6
25°	1968.9	1986.4	1958.2	1983.5	1993.2
27.5°	1921.2	1942.6	1903.7	1933.8	1936.8
30°	1843.3	1866.7	1840.4	1859.8	1886.1
32.5°	1790.7	1798.5	1784.9	1814.1	1821.9
35°	1709.9	1747.9	1724.5	1731.3	1739.1
37.5°	1653.4	1665.1	1644.6	1668.0	1680.7
40°	1577.5	1595.0	1587.2	1591.1	1602.8
42.5°	1498.6	1517.1	1496.6	1524.9	1533.6
45°	1409.0	1444.1	1430.4	1442.1	1456.7
47.5°	1350.6	1362.3	1358.4	1365.2	1355.4
50°	1260.0	1271.7	1278.5	1287.3	1291.2
52.5°	1179.2	1188.0	1200.6	1205.5	1214.3
55°	1096.4	1113.0	1110.1	1122.7	1121.7
57.5°	1000.0	1024.4	1016.6	1035.1	1035.1
60°	926.0	929.9	939.7	948.4	948.4
62.5°	840.3	845.2	850.1	857.9	863.7
65°	759.5	759.5	762.4	772.2	762.4
67.5°	666.0	662.1	671.9	683.6	682.6
70°	571.6	576.5	585.2	599.8	599.8
72.5°	490.8	490.8	500.5	508.3	507.3
75°	398.3	405.1	413.8	426.5	422.6
77.5°	315.5	320.4	335.0	346.7	347.6
80°	235.6	240.5	256.1	267.8	264.9
82.5°	164.6	171.4	186.0	194.7	193.8
85°	106.1	108.1	118.8	126.6	127.6
87.5°	48.7	52.6	60.4	63.3	63.3
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	21.17	22.81	21.54	23.12	23.44	21.28	22.91	21.64	23.23	23.54
	3H	22.95	24.43	23.33	24.76	25.12	23.11	24.60	23.49	24.92	25.28
	4H	23.61	25.01	24.01	25.36	25.73	23.81	25.21	24.21	25.56	25.93
	6H	24.09	25.38	24.50	25.75	26.14	24.36	25.66	24.77	26.02	26.41
	8H	24.24	25.48	24.66	25.87	26.26	24.55	25.79	24.97	26.18	26.58
	12H	24.34	25.53	24.77	25.91	26.34	24.69	25.88	25.12	26.26	26.69
4H	2H	21.82	23.21	22.21	23.56	23.94	21.90	23.30	22.30	23.64	24.02
	3H	23.82	24.99	24.23	25.39	25.79	23.96	25.14	24.37	25.53	25.93
	4H	24.61	25.67	25.04	26.08	26.52	24.80	25.86	25.23	26.27	26.71
	6H	25.21	26.14	25.66	26.58	27.03	25.49	26.42	25.94	26.86	27.31
	8H	25.41	26.28	25.87	26.72	27.18	25.73	26.60	26.19	27.05	27.51
	12H	25.56	26.34	26.04	26.82	27.28	25.93	26.72	26.41	27.19	27.66
8H	4H	24.94	25.82	25.40	26.26	26.72	25.11	25.98	25.57	26.43	26.89
	6H	25.67	26.39	26.16	26.88	27.36	25.94	26.66	26.43	27.15	27.62
	8H	25.94	26.59	26.45	27.10	27.58	26.27	26.92	26.78	27.43	27.91
	12H	26.17	26.74	26.67	27.23	27.79	26.56	27.13	27.06	27.62	28.18
12H	4H	24.99	25.77	25.47	26.25	26.72	25.15	25.93	25.63	26.40	26.87
	6H	25.74	26.39	26.25	26.90	27.38	25.99	26.65	26.50	27.15	27.64
	8H	26.08	26.65	26.58	27.14	27.70	26.39	26.97	26.90	27.46	28.02