

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: P893927

Luminaire Tested: 4MB-8HL-FLT-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893927
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-L940
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

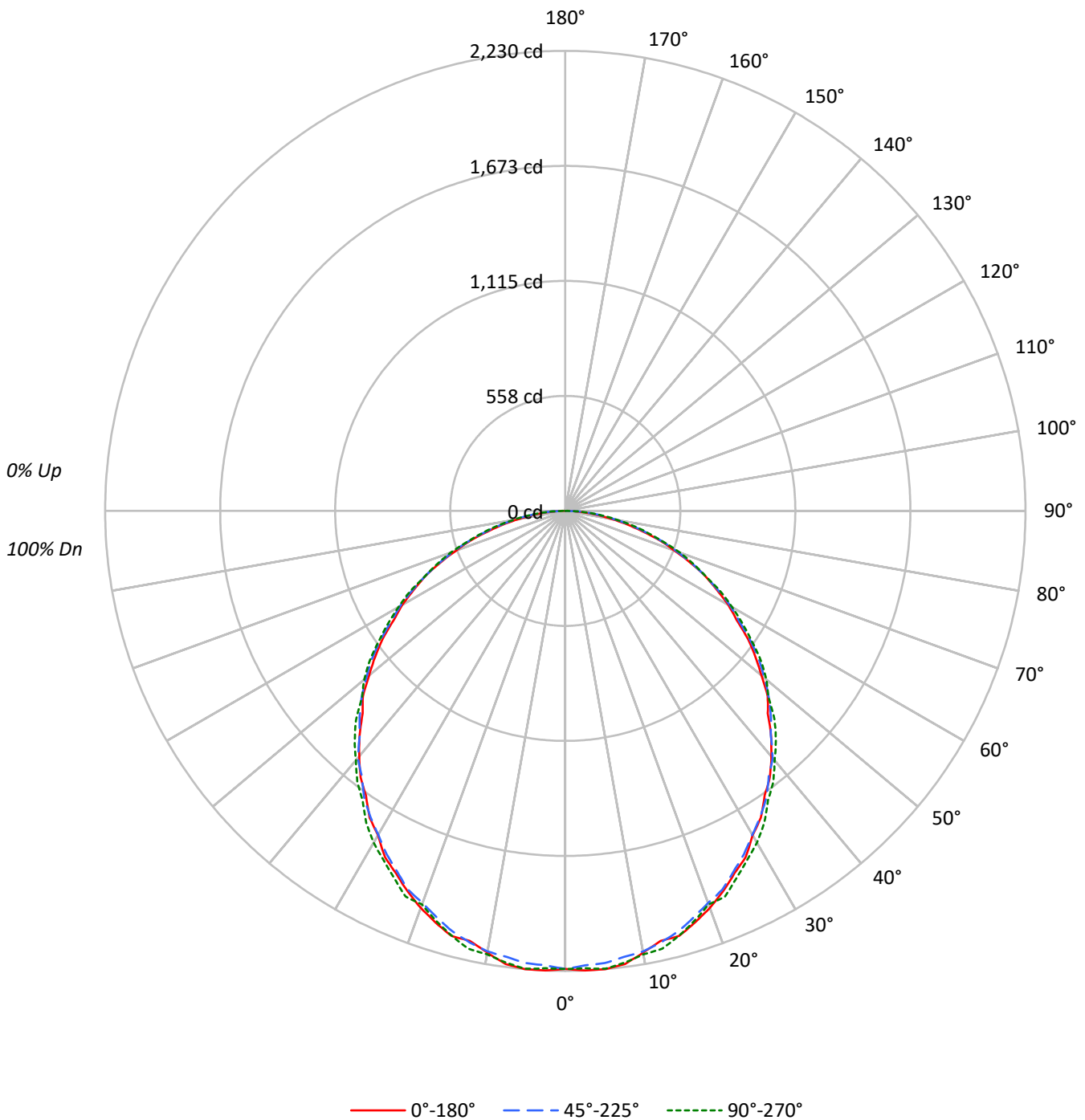
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6152.0 lumens
Efficiency: N/A
Efficacy: 106.3 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 (Ain): 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°	15797	15797	15797
5°	15926	15713	15913
10°	15708	15667	15771
15°	15712	15549	15698
20°	15504	15315	15373
25°	15225	15141	15412
30°	14916	14893	15262
35°	14629	14753	14878
40°	14431	14520	14663
45°	13964	14177	14437
50°	13738	13939	14076
55°	13396	13563	13706
60°	12979	13170	13292
65°	12595	12643	12643
70°	11712	11991	12290
75°	10784	11205	11441
80°	9510	10334	10690
85°	8531	9551	10253

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14437 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.2	3.4
10°-20°	598.9	9.7
20°-30°	898.3	14.6
30°-40°	1066.9	17.3
40°-50°	1092.4	17.8
50°-60°	978.7	15.9
60°-70°	743.5	12.1
70°-80°	433.0	7.0
80°-90°	130.1	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°	1707.4	27.8
0°-40°	2774.3	45.1
0°-60°	4845.4	78.8
0°-90°	6152.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6152.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2220	2220	2220	2220	2220	
5°	2230	2221	2200	2214	2228	211
15°	2133	2147	2111	2120	2131	599
25°	1939	1956	1929	1954	1963	895
35°	1684	1722	1698	1705	1713	1059
45°	1388	1422	1409	1420	1435	1079
55°	1080	1096	1093	1106	1105	962
65°	748	748	751	761	751	735
75°	392	399	408	420	416	418
85°	104	106	117	125	126	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2220.3	2220.3	2220.3	2220.3	2220.3
2.5°	2229.9	2219.3	2204.9	2209.7	2219.3
5°	2229.9	2221.2	2200.1	2213.6	2228.0
7.5°	2215.5	2227.0	2181.0	2181.0	2207.8
10°	2174.2	2196.3	2168.5	2165.6	2182.9
12.5°	2134.9	2175.2	2142.6	2152.2	2173.3
15°	2133.0	2147.4	2110.9	2119.6	2131.1
17.5°	2091.8	2106.2	2066.8	2083.1	2083.1
20°	2047.6	2050.5	2022.7	2058.2	2030.4
22.5°	1996.8	2026.5	1988.2	1999.7	2023.7
25°	1939.3	1956.5	1928.7	1953.7	1963.2
27.5°	1892.3	1913.4	1875.0	1904.7	1907.6
30°	1815.5	1838.6	1812.7	1831.9	1857.7
32.5°	1763.8	1771.4	1758.0	1786.8	1794.4
35°	1684.2	1721.6	1698.5	1705.3	1712.9
37.5°	1628.5	1640.0	1619.9	1642.9	1655.4
40°	1553.7	1571.0	1563.3	1567.1	1578.7
42.5°	1476.0	1494.3	1474.1	1501.9	1510.6
45°	1387.8	1422.3	1408.9	1420.4	1434.8
47.5°	1330.3	1341.8	1337.9	1344.6	1335.0
50°	1241.1	1252.6	1259.3	1267.9	1271.7
52.5°	1161.5	1170.1	1182.6	1187.3	1196.0
55°	1079.9	1096.2	1093.4	1105.8	1104.9
57.5°	985.0	1009.0	1001.3	1019.5	1019.5
60°	912.1	915.9	925.5	934.1	934.1
62.5°	827.7	832.5	837.3	845.0	850.7
65°	748.1	748.1	751.0	760.6	751.0
67.5°	656.0	652.2	661.8	673.3	672.3
70°	563.0	567.8	576.4	590.8	590.8
72.5°	483.4	483.4	493.0	500.6	499.7
75°	392.3	399.0	407.6	420.1	416.2
77.5°	310.7	315.5	329.9	341.4	342.4
80°	232.1	236.9	252.2	263.7	260.9
82.5°	162.1	168.8	183.2	191.8	190.9
85°	104.5	106.5	117.0	124.7	125.6
87.5°	48.0	51.8	59.5	62.3	62.3
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	21.12	22.76	21.48	23.07	23.38	21.22	22.86	21.59	23.18	23.49
	3H	22.90	24.38	23.27	24.71	25.07	23.06	24.54	23.44	24.87	25.23
	4H	23.56	24.96	23.96	25.31	25.68	23.76	25.16	24.16	25.50	25.88
	6H	24.04	25.33	24.45	25.70	26.09	24.31	25.60	24.72	25.97	26.36
	8H	24.19	25.42	24.61	25.81	26.21	24.50	25.74	24.92	26.12	26.52
	12H	24.29	25.48	24.72	25.86	26.29	24.64	25.83	25.07	26.21	26.64
4H	2H	21.76	23.16	22.16	23.51	23.88	21.85	23.24	22.24	23.59	23.97
	3H	23.76	24.94	24.17	25.34	25.74	23.91	25.08	24.32	25.48	25.88
	4H	24.56	25.62	24.99	26.03	26.47	24.75	25.81	25.18	26.22	26.66
	6H	25.16	26.09	25.61	26.53	26.98	25.44	26.37	25.89	26.81	27.26
	8H	25.35	26.22	25.81	26.67	27.13	25.68	26.55	26.14	26.99	27.46
	12H	25.51	26.29	25.98	26.76	27.23	25.88	26.66	26.36	27.14	27.61
8H	4H	24.89	25.76	25.35	26.20	26.67	25.06	25.93	25.52	26.37	26.84
	6H	25.62	26.34	26.11	26.83	27.30	25.88	26.61	26.38	27.10	27.57
	8H	25.89	26.54	26.40	27.04	27.53	26.22	26.87	26.72	27.37	27.86
	12H	26.12	26.69	26.62	27.18	27.74	26.50	27.08	27.01	27.57	28.13
12H	4H	24.94	25.72	25.42	26.19	26.66	25.09	25.88	25.57	26.35	26.82
	6H	25.69	26.34	26.20	26.85	27.33	25.94	26.59	26.45	27.10	27.59
	8H	26.02	26.60	26.53	27.09	27.65	26.34	26.91	26.84	27.40	27.96