

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: P893173

Luminaire Tested: 4MB-10HL-FLT-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893173
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-10HL-FLT-UNV-L930
Description: 10000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

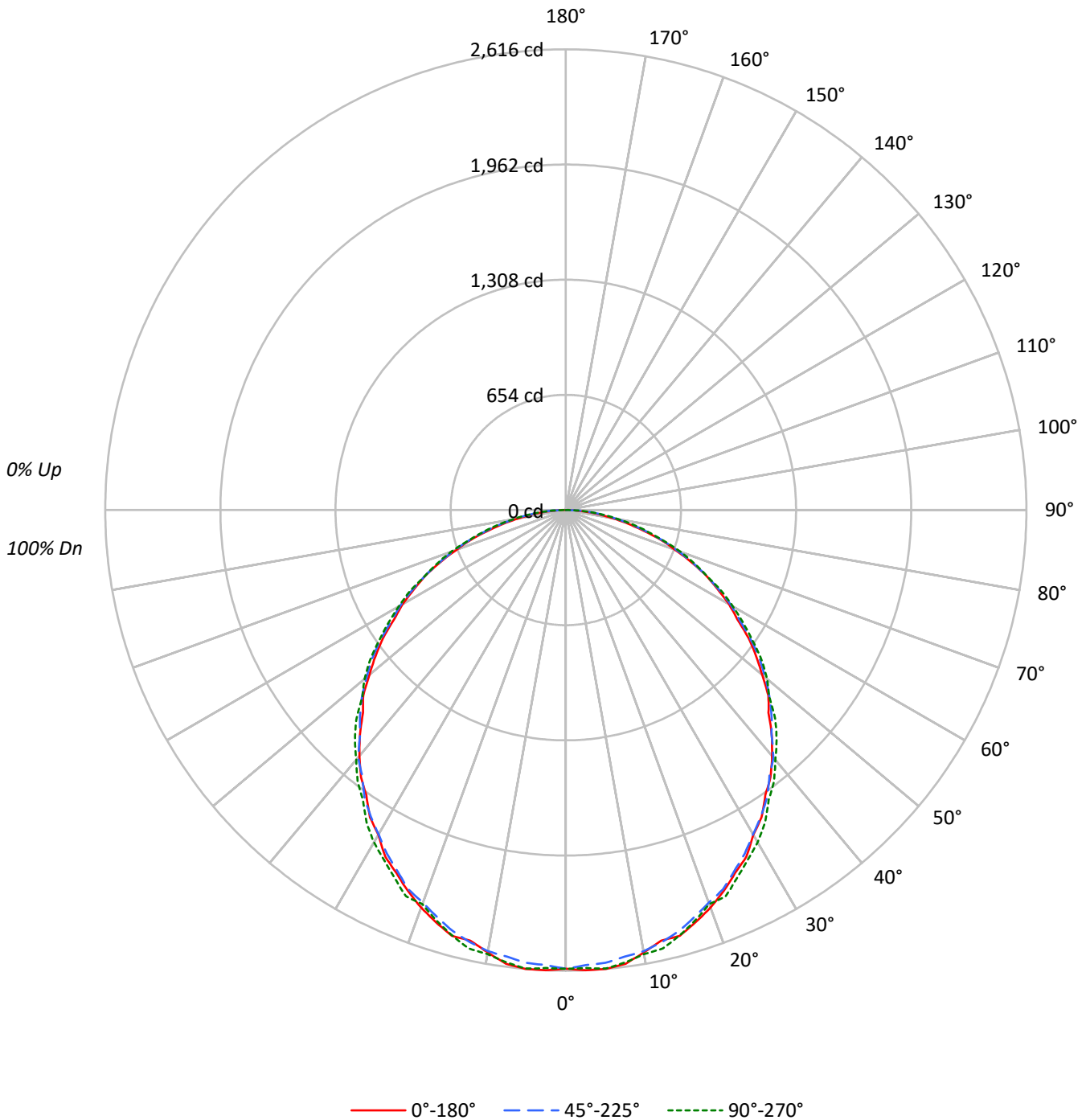
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7217.0 lumens
Efficiency: N/A
Efficacy: 95.6 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): 75.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.45
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893173
CATALOG NUMBER: 4MB-10HL-FLT-UNV-L930

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°	18532	18532	18532
5°	18683	18434	18667
10°	18427	18379	18501
15°	18432	18241	18415
20°	18188	17967	18035
25°	17860	17763	18081
30°	17498	17471	17905
35°	17161	17307	17454
40°	16929	17033	17200
45°	16381	16631	16937
50°	16115	16352	16514
55°	15715	15910	16078
60°	15226	15450	15595
65°	14775	14832	14832
70°	13738	14067	14418
75°	12651	13146	13423
80°	11157	12124	12538
85°	10009	11209	12033

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 16937 cd/sqm



TEST NUMBER: P893173
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.5	3.4
10°-20°	702.6	9.7
20°-30°	1053.8	14.6
30°-40°	1251.6	17.3
40°-50°	1281.5	17.8
50°-60°	1148.1	15.9
60°-70°	872.2	12.1
70°-80°	508.0	7.0
80°-90°	152.6	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°	2003.0	27.8
0°-40°	3254.6	45.1
0°-60°	5684.2	78.8
0°-90°	7217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2605	2605	2605	2605	2605	
5°	2616	2606	2581	2597	2614	248
15°	2502	2519	2476	2486	2500	702
25°	2275	2295	2263	2292	2303	1050
35°	1976	2020	1993	2000	2010	1242
45°	1628	1668	1653	1666	1683	1266
55°	1267	1286	1283	1297	1296	1129
65°	878	878	881	892	881	862
75°	460	468	478	493	488	490
85°	123	125	137	146	147	137
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2604.6	2604.6	2604.6	2604.6	2604.6
2.5°	2615.9	2603.5	2586.6	2592.3	2603.5
5°	2615.9	2605.8	2581.0	2596.8	2613.6
7.5°	2599.0	2612.5	2558.5	2558.5	2590.0
10°	2550.6	2576.5	2543.9	2540.5	2560.8
12.5°	2504.5	2551.8	2513.5	2524.8	2549.5
15°	2502.3	2519.1	2476.4	2486.5	2500.0
17.5°	2453.9	2470.8	2424.6	2443.8	2443.8
20°	2402.1	2405.5	2372.9	2414.5	2381.9
22.5°	2342.5	2377.4	2332.4	2345.9	2374.0
25°	2275.0	2295.2	2262.6	2291.9	2303.1
27.5°	2219.9	2244.6	2199.6	2234.5	2237.9
30°	2129.8	2156.8	2126.5	2149.0	2179.4
32.5°	2069.1	2078.1	2062.3	2096.1	2105.1
35°	1975.7	2019.6	1992.6	2000.5	2009.5
37.5°	1910.4	1923.9	1900.3	1927.3	1942.0
40°	1822.7	1842.9	1833.9	1838.4	1851.9
42.5°	1731.6	1752.9	1729.3	1761.9	1772.1
45°	1628.0	1668.5	1652.8	1666.3	1683.2
47.5°	1560.5	1574.0	1569.5	1577.4	1566.2
50°	1455.9	1469.4	1477.3	1487.4	1491.9
52.5°	1362.5	1372.6	1387.3	1392.9	1403.0
55°	1266.9	1286.0	1282.6	1297.3	1296.1
57.5°	1155.5	1183.6	1174.6	1196.0	1196.0
60°	1070.0	1074.5	1085.7	1095.9	1095.9
62.5°	971.0	976.6	982.2	991.2	998.0
65°	877.6	877.6	881.0	892.2	881.0
67.5°	769.6	765.1	776.3	789.8	788.7
70°	660.4	666.1	676.2	693.1	693.1
72.5°	567.1	567.1	578.3	587.3	586.2
75°	460.2	468.0	478.2	492.8	488.3
77.5°	364.5	370.2	387.0	400.5	401.7
80°	272.3	277.9	295.9	309.4	306.0
82.5°	190.1	198.0	214.9	225.0	223.9
85°	122.6	124.9	137.3	146.3	147.4
87.5°	56.3	60.8	69.8	73.1	73.1
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	21.67	23.31	22.04	23.62	23.94	21.78	23.42	22.14	23.73	24.04
	3H	23.45	24.94	23.83	25.26	25.62	23.62	25.10	23.99	25.42	25.78
	4H	24.12	25.51	24.51	25.86	26.24	24.31	25.71	24.71	26.06	26.43
	6H	24.59	25.89	25.00	26.25	26.64	24.86	26.16	25.27	26.52	26.91
	8H	24.74	25.98	25.16	26.37	26.77	25.05	26.29	25.48	26.68	27.08
	12H	24.85	26.03	25.28	26.41	26.84	25.20	26.38	25.62	26.76	27.19
4H	2H	22.32	23.71	22.72	24.06	24.44	22.40	23.80	22.80	24.14	24.52
	3H	24.32	25.49	24.73	25.89	26.29	24.46	25.64	24.87	26.03	26.43
	4H	25.11	26.17	25.54	26.59	27.02	25.30	26.36	25.73	26.78	27.21
	6H	25.71	26.64	26.16	27.08	27.54	25.99	26.92	26.44	27.36	27.82
	8H	25.91	26.78	26.37	27.22	27.69	26.24	27.11	26.70	27.55	28.01
	12H	26.06	26.84	26.54	27.32	27.79	26.43	27.22	26.91	27.69	28.16
8H	4H	25.45	26.32	25.91	26.76	27.22	25.62	26.49	26.07	26.93	27.39
	6H	26.17	26.90	26.66	27.38	27.86	26.44	27.16	26.93	27.65	28.13
	8H	26.44	27.09	26.95	27.60	28.08	26.77	27.42	27.28	27.93	28.41
	12H	26.67	27.25	27.18	27.74	28.30	27.06	27.64	27.57	28.13	28.69
12H	4H	25.49	26.27	25.97	26.75	27.22	25.65	26.43	26.13	26.91	27.38
	6H	26.24	26.90	26.75	27.40	27.89	26.50	27.15	27.00	27.65	28.14
	8H	26.58	27.15	27.08	27.64	28.20	26.89	27.47	27.40	27.96	28.52