

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: P893921

Luminaire Tested: 4MB-8HL-FLT-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893921
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-L830
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with FLAT FROSTED LENS, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

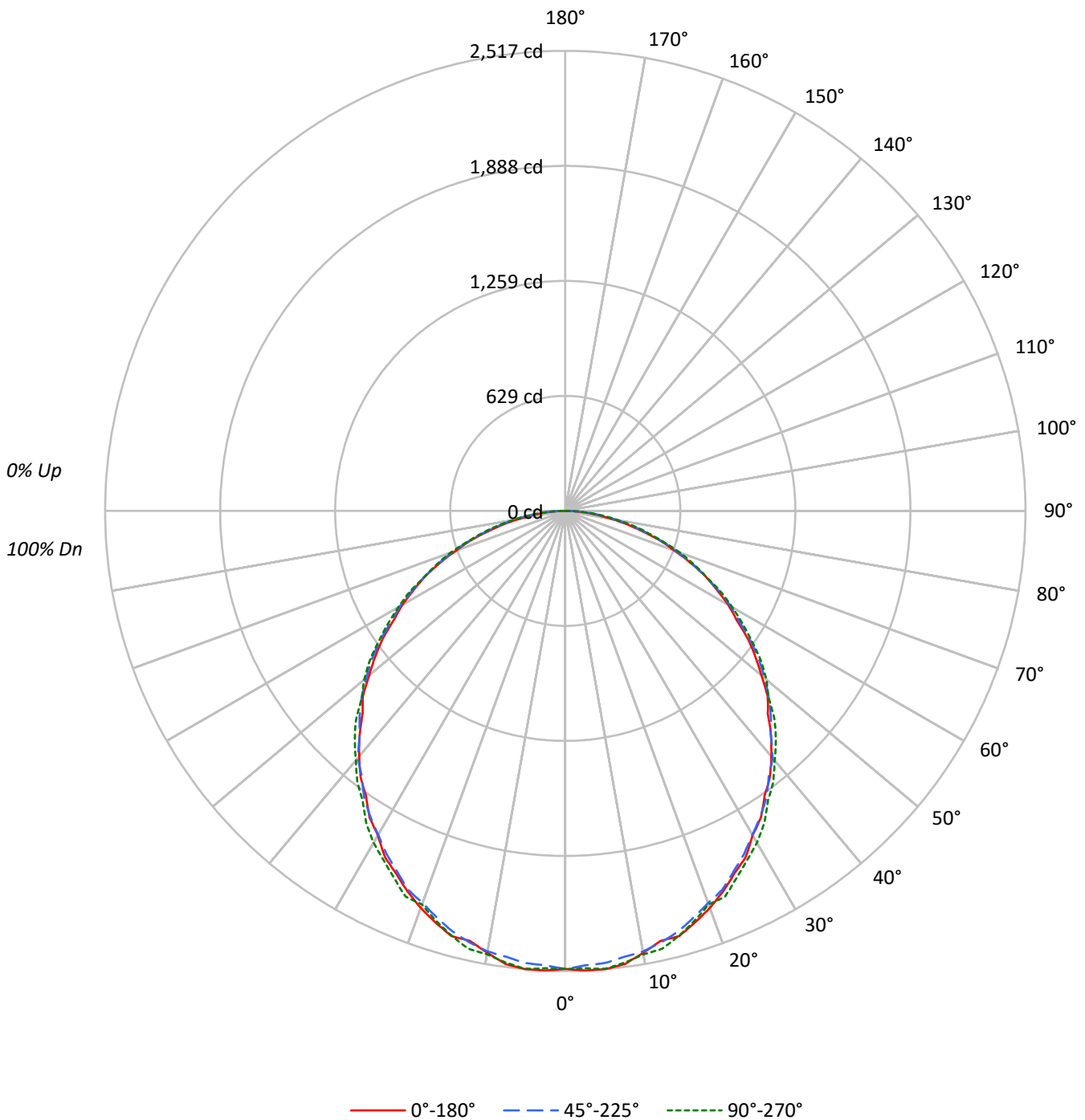
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6944.0 lumens
Efficiency: N/A
Efficacy: 119.9 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°	17831	17831	17831
5°	17976	17737	17961
10°	17731	17684	17801
15°	17734	17551	17718
20°	17500	17287	17353
25°	17184	17091	17397
30°	16836	16809	17227
35°	16512	16652	16793
40°	16288	16390	16550
45°	15762	16002	16296
50°	15505	15733	15890
55°	15121	15309	15470
60°	14650	14866	15004
65°	14216	14270	14270
70°	13220	13534	13873
75°	12173	12648	12915
80°	10735	11665	12067
85°	9633	10784	11576

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 16296 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.2	3.4
10°-20°	676.0	9.7
20°-30°	1014.0	14.6
30°-40°	1204.3	17.3
40°-50°	1233.0	17.8
50°-60°	1104.7	15.9
60°-70°	839.2	12.1
70°-80°	488.8	7.0
80°-90°	146.8	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°	1927.2	27.8
0°-40°	3131.5	45.1
0°-60°	5469.2	78.8
0°-90°	6944.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6944.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2506	2506	2506	2506	2506	
5°	2517	2507	2483	2498	2515	238
15°	2408	2424	2383	2392	2405	676
25°	2189	2208	2177	2205	2216	1010
35°	1901	1943	1917	1925	1933	1195
45°	1566	1605	1590	1603	1620	1218
55°	1219	1237	1234	1248	1247	1086
65°	844	844	848	858	848	829
75°	443	450	460	474	470	471
85°	118	120	132	141	142	132
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2506.1	2506.1	2506.1	2506.1	2506.1
2.5°	2516.9	2505.0	2488.8	2494.2	2505.0
5°	2516.9	2507.2	2483.4	2498.5	2514.8
7.5°	2500.7	2513.7	2461.7	2461.7	2492.0
10°	2454.2	2479.1	2447.7	2444.4	2463.9
12.5°	2409.8	2455.2	2418.4	2429.3	2453.1
15°	2407.6	2423.8	2382.7	2392.4	2405.4
17.5°	2361.1	2377.3	2332.9	2351.3	2351.3
20°	2311.3	2314.5	2283.1	2323.2	2291.8
22.5°	2253.9	2287.4	2244.1	2257.1	2284.2
25°	2188.9	2208.4	2177.0	2205.2	2216.0
27.5°	2135.9	2159.7	2116.4	2150.0	2153.2
30°	2049.3	2075.3	2046.0	2067.7	2096.9
32.5°	1990.8	1999.5	1984.3	2016.8	2025.5
35°	1901.0	1943.2	1917.2	1924.8	1933.4
37.5°	1838.2	1851.2	1828.4	1854.4	1868.5
40°	1753.7	1773.2	1764.6	1768.9	1781.9
42.5°	1666.1	1686.6	1663.9	1695.3	1705.0
45°	1566.5	1605.4	1590.3	1603.3	1619.5
47.5°	1501.5	1514.5	1510.2	1517.7	1506.9
50°	1400.8	1413.8	1421.4	1431.1	1435.5
52.5°	1311.0	1320.7	1334.8	1340.2	1349.9
55°	1219.0	1237.4	1234.1	1248.2	1247.1
57.5°	1111.8	1138.8	1130.2	1150.8	1150.8
60°	1029.5	1033.8	1044.7	1054.4	1054.4
62.5°	934.2	939.7	945.1	953.7	960.2
65°	844.4	844.4	847.6	858.5	847.6
67.5°	740.5	736.1	747.0	760.0	758.9
70°	635.5	640.9	650.6	666.9	666.9
72.5°	545.6	545.6	556.4	565.1	564.0
75°	442.8	450.3	460.1	474.2	469.8
77.5°	350.7	356.2	372.4	385.4	386.5
80°	262.0	267.4	284.7	297.7	294.5
82.5°	183.0	190.5	206.8	216.5	215.4
85°	118.0	120.2	132.1	140.7	141.8
87.5°	54.1	58.5	67.1	70.4	70.4
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	21.54	23.18	21.90	23.49	23.80	21.64	23.28	22.01	23.60	23.91
	3H	23.32	24.80	23.70	25.13	25.49	23.48	24.96	23.86	25.29	25.65
	4H	23.98	25.38	24.38	25.73	26.10	24.18	25.58	24.58	25.92	26.30
	6H	24.46	25.75	24.87	26.12	26.51	24.73	26.02	25.14	26.39	26.78
	8H	24.61	25.84	25.03	26.23	26.63	24.92	26.16	25.34	26.55	26.94
	12H	24.71	25.90	25.14	26.28	26.71	25.06	26.25	25.49	26.63	27.06
4H	2H	22.18	23.58	22.58	23.93	24.30	22.27	23.66	22.66	24.01	24.39
	3H	24.19	25.36	24.59	25.76	26.16	24.33	25.50	24.74	25.90	26.30
	4H	24.98	26.04	25.41	26.45	26.89	25.17	26.23	25.60	26.64	27.08
	6H	25.58	26.51	26.03	26.95	27.40	25.86	26.79	26.31	27.23	27.68
	8H	25.77	26.64	26.23	27.09	27.55	26.10	26.97	26.56	27.41	27.88
	12H	25.93	26.71	26.41	27.18	27.65	26.30	27.08	26.78	27.56	28.03
8H	4H	25.31	26.18	25.77	26.63	27.09	25.48	26.35	25.94	26.79	27.26
	6H	26.04	26.76	26.53	27.25	27.72	26.30	27.03	26.80	27.52	27.99
	8H	26.31	26.96	26.82	27.47	27.95	26.64	27.29	27.14	27.79	28.28
	12H	26.54	27.11	27.04	27.60	28.16	26.93	27.50	27.43	27.99	28.55
12H	4H	25.36	26.14	25.84	26.61	27.08	25.51	26.30	25.99	26.77	27.24
	6H	26.11	26.76	26.62	27.27	27.75	26.36	27.02	26.87	27.52	28.01
	8H	26.44	27.02	26.95	27.51	28.07	26.76	27.34	27.26	27.83	28.39