

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: P893846

Luminaire Tested: 4MB-7HL-LVR-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893846
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-7HL-LVR-UNV-L935
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

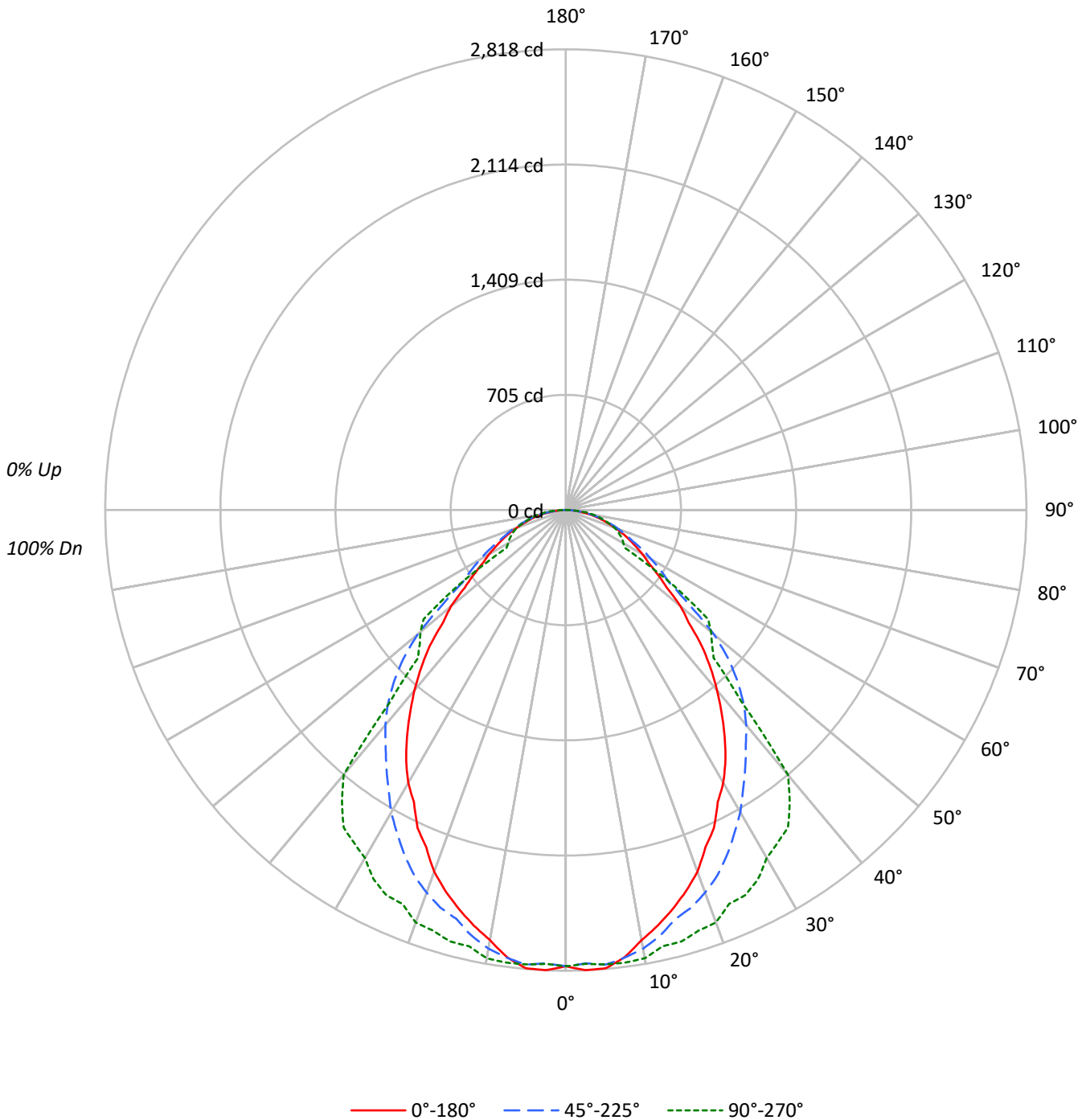
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5841.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 51.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
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				
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	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19854	19854	19854
5°	20094	19936	19924
10°	19302	19681	20113
15°	18611	19069	20125
20°	17827	18857	20328
25°	16843	18304	20401
30°	15829	17539	20192
35°	14720	16635	20585
40°	13374	15947	19630
45°	11849	14966	12872
50°	10141	13080	12844
55°	8498	9545	9993
60°	7731	8618	5784
65°	7243	7630	6180
70°	6665	7229	6615
75°	6262	6782	6735
80°	5843	6412	7220
85°	5021	5355	7690

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 14966 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.2	4.5
10°-20°	741.9	12.7
20°-30°	1081.3	18.5
30°-40°	1237.0	21.2
40°-50°	1058.2	18.1
50°-60°	697.8	11.9
60°-70°	421.9	7.2
70°-80°	258.1	4.4
80°-90°	79.7	1.4
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°	2088.4	35.8
0°-40°	3325.3	56.9
0°-60°	5081.3	87.0
0°-90°	5841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5841.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2790	2790	2790	2790	2790	
5°	2813	2811	2791	2786	2790	264
15°	2527	2556	2589	2754	2732	710
25°	2146	2178	2332	2531	2599	981
35°	1695	1780	1915	2216	2370	1056
45°	1178	1269	1487	1390	1279	902
55°	685	724	770	912	806	623
65°	430	441	453	405	367	425
75°	228	234	247	258	245	240
85°	62	61	66	78	94	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2790.4	2790.4	2790.4	2790.4	2790.4
2.5°	2817.5	2809.3	2775.7	2807.6	2779.0
5°	2813.4	2810.9	2791.3	2785.5	2789.6
7.5°	2759.3	2765.0	2761.8	2823.2	2792.1
10°	2671.6	2683.1	2724.1	2810.1	2783.9
12.5°	2602.8	2611.8	2666.7	2794.5	2733.1
15°	2526.6	2556.1	2588.8	2754.4	2732.2
17.5°	2444.6	2472.5	2550.3	2700.3	2697.8
20°	2354.5	2406.1	2490.5	2629.8	2684.7
22.5°	2232.3	2302.0	2420.8	2597.8	2608.5
25°	2145.5	2178.3	2331.5	2530.6	2598.7
27.5°	2013.5	2075.8	2232.3	2433.9	2546.2
30°	1926.7	1978.3	2134.8	2377.4	2457.7
32.5°	1817.7	1879.1	2019.3	2315.9	2412.6
35°	1694.7	1780.0	1915.2	2216.0	2370.0
37.5°	1565.3	1649.7	1809.5	2133.2	2249.6
40°	1439.9	1512.0	1716.9	2034.0	2113.5
42.5°	1311.2	1389.1	1611.2	1838.2	1589.9
45°	1177.6	1268.6	1487.4	1389.9	1279.3
47.5°	1019.5	1130.9	1350.6	1117.0	1212.1
50°	916.2	976.9	1181.7	1053.1	1160.4
52.5°	779.4	861.3	949.0	983.4	1096.5
55°	685.1	723.6	769.5	912.1	805.6
57.5°	598.2	632.7	685.9	643.3	429.4
60°	543.3	558.9	605.6	459.7	406.5
62.5°	481.1	496.6	531.0	429.4	390.1
65°	430.2	440.9	453.2	404.8	367.1
67.5°	376.2	381.9	395.0	373.7	345.0
70°	320.4	328.6	347.5	341.7	318.0
72.5°	271.3	278.6	295.0	303.2	281.1
75°	227.8	233.6	246.7	258.1	245.0
77.5°	181.1	186.8	204.1	216.4	210.6
80°	142.6	143.4	156.5	168.8	176.2
82.5°	100.0	101.6	111.5	124.6	139.3
85°	61.5	60.6	65.6	77.9	94.2
87.5°	23.8	22.9	27.0	32.8	48.4
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	18.21	19.69	18.57	20.00	20.32	17.89	19.36	18.25	19.68	19.99
	3H	19.77	21.09	20.15	21.42	21.78	19.50	20.83	19.88	21.16	21.52
	4H	20.37	21.61	20.77	21.96	22.34	20.25	21.49	20.65	21.84	22.22
	6H	20.82	21.97	21.24	22.34	22.73	20.92	22.07	21.33	22.43	22.83
	8H	20.98	22.07	21.41	22.46	22.86	21.20	22.29	21.62	22.68	23.08
	12H	21.08	22.12	21.51	22.50	22.93	21.42	22.46	21.85	22.84	23.27
4H	2H	18.80	20.04	19.20	20.39	20.77	18.55	19.79	18.95	20.14	20.52
	3H	20.59	21.62	21.00	22.02	22.42	20.43	21.46	20.84	21.86	22.26
	4H	21.32	22.24	21.75	22.66	23.10	21.33	22.25	21.76	22.67	23.11
	6H	21.90	22.71	22.36	23.15	23.61	22.13	22.94	22.59	23.38	23.84
	8H	22.10	22.85	22.56	23.30	23.76	22.46	23.22	22.93	23.66	24.13
	12H	22.24	22.91	22.72	23.39	23.86	22.74	23.41	23.22	23.89	24.36
8H	4H	21.64	22.39	22.10	22.84	23.30	21.65	22.40	22.11	22.85	23.31
	6H	22.35	22.97	22.85	23.47	23.94	22.60	23.22	23.10	23.71	24.19
	8H	22.62	23.18	23.13	23.69	24.18	23.02	23.58	23.53	24.09	24.58
	12H	22.83	23.33	23.34	23.82	24.38	23.38	23.88	23.89	24.37	24.94
12H	4H	21.68	22.35	22.16	22.83	23.30	21.67	22.35	22.16	22.83	23.30
	6H	22.42	22.98	22.93	23.49	23.98	22.65	23.21	23.17	23.72	24.21
	8H	22.75	23.25	23.26	23.74	24.30	23.13	23.63	23.64	24.12	24.68