

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: P893848

Luminaire Tested: 4MB-7HL-LVR-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893848
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-L950
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

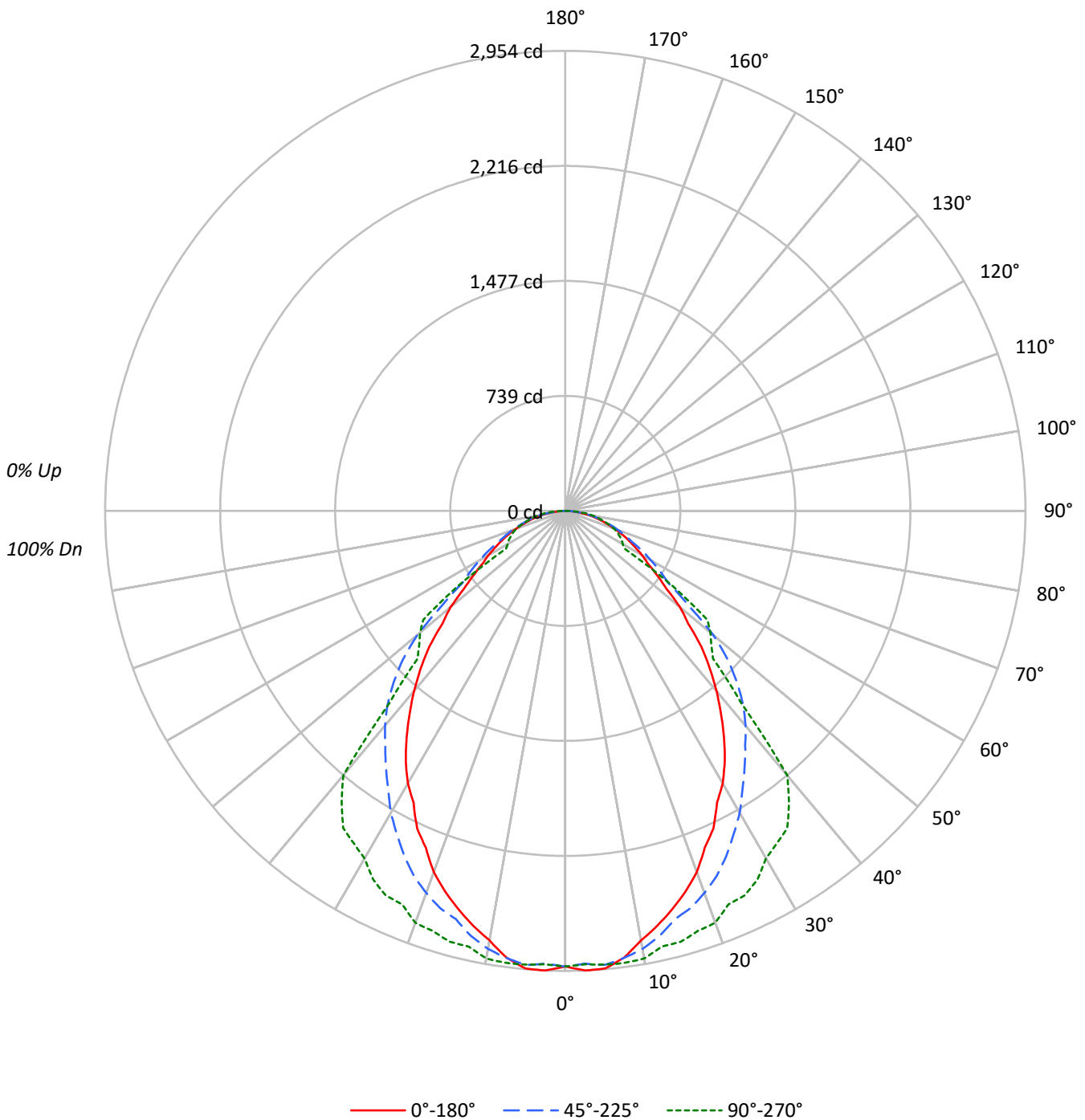
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6124.0 lumens
Efficiency: N/A
Efficacy: 118.2 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				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°	20816	20816	20816
5°	21067	20902	20889
10°	20237	20634	21088
15°	19512	19993	21101
20°	18691	19771	21313
25°	17659	19191	21390
30°	16596	18389	21170
35°	15434	17441	21583
40°	14021	16719	20581
45°	12424	15692	13495
50°	10633	13714	13468
55°	8910	10008	10477
60°	8107	9036	6065
65°	7595	7999	6480
70°	6990	7578	6936
75°	6567	7109	7062
80°	6126	6724	7568
85°	5257	5608	8066

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15692 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.0	4.5
10°-20°	777.9	12.7
20°-30°	1133.7	18.5
30°-40°	1296.9	21.2
40°-50°	1109.5	18.1
50°-60°	731.6	11.9
60°-70°	442.3	7.2
70°-80°	270.6	4.4
80°-90°	83.6	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°	2189.5	35.8
0°-40°	3486.5	56.9
0°-60°	5327.5	87.0
0°-90°	6124.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6124.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2926	2926	2926	2926	2926	
5°	2950	2947	2926	2920	2925	276
15°	2649	2680	2714	2888	2865	745
25°	2249	2284	2444	2653	2725	1029
35°	1777	1866	2008	2323	2485	1107
45°	1235	1330	1560	1457	1341	945
55°	718	759	807	956	845	653
65°	451	462	475	424	385	446
75°	239	245	259	271	257	252
85°	64	64	69	82	99	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2925.6	2925.6	2925.6	2925.6	2925.6
2.5°	2954.0	2945.4	2910.2	2943.7	2913.6
5°	2949.7	2947.1	2926.5	2920.5	2924.8
7.5°	2893.0	2899.0	2895.6	2960.0	2927.4
10°	2801.0	2813.1	2856.0	2946.3	2918.8
12.5°	2728.9	2738.3	2795.9	2929.9	2865.5
15°	2649.0	2679.9	2714.3	2887.8	2864.6
17.5°	2563.0	2592.3	2673.9	2831.1	2828.5
20°	2468.5	2522.7	2611.2	2757.2	2814.8
22.5°	2340.5	2413.5	2538.1	2723.7	2734.9
25°	2249.4	2283.8	2444.5	2653.3	2724.6
27.5°	2111.1	2176.4	2340.5	2551.9	2669.6
30°	2020.0	2074.1	2238.3	2492.6	2576.8
32.5°	1905.7	1970.2	2117.1	2428.1	2529.5
35°	1776.9	1866.2	2008.0	2323.3	2484.9
37.5°	1641.1	1729.6	1897.2	2236.5	2358.5
40°	1509.6	1585.3	1800.1	2132.6	2215.9
42.5°	1374.7	1456.4	1689.2	1927.2	1666.9
45°	1234.7	1330.1	1559.5	1457.2	1341.2
47.5°	1068.9	1185.7	1416.0	1171.1	1270.8
50°	960.6	1024.2	1239.0	1104.1	1216.7
52.5°	817.1	903.0	995.0	1031.1	1149.6
55°	718.3	758.7	806.8	956.3	844.6
57.5°	627.2	663.3	719.2	674.5	450.2
60°	569.7	586.0	635.0	482.0	426.2
62.5°	504.4	520.7	556.8	450.2	409.0
65°	451.1	462.3	475.1	424.5	384.9
67.5°	394.4	400.4	414.1	391.8	361.7
70°	336.0	344.5	364.3	358.3	333.4
72.5°	284.4	292.1	309.3	317.9	294.7
75°	238.9	244.9	258.6	270.7	256.9
77.5°	189.9	195.9	213.9	226.8	220.8
80°	149.5	150.4	164.1	177.0	184.7
82.5°	104.8	106.5	116.9	130.6	146.1
85°	64.4	63.6	68.7	81.6	98.8
87.5°	24.9	24.1	28.4	34.4	50.7
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	18.37	19.85	18.74	20.17	20.48	18.05	19.53	18.42	19.84	20.16
	3H	19.93	21.26	20.31	21.59	21.95	19.67	20.99	20.05	21.32	21.68
	4H	20.53	21.77	20.93	22.12	22.50	20.42	21.66	20.82	22.01	22.39
	6H	20.99	22.14	21.40	22.50	22.89	21.08	22.23	21.50	22.60	22.99
	8H	21.14	22.23	21.57	22.62	23.02	21.36	22.45	21.79	22.84	23.24
	12H	21.24	22.28	21.67	22.67	23.10	21.58	22.63	22.01	23.01	23.44
4H	2H	18.97	20.21	19.37	20.56	20.94	18.71	19.95	19.11	20.30	20.68
	3H	20.75	21.78	21.17	22.18	22.58	20.60	21.62	21.01	22.02	22.43
	4H	21.48	22.41	21.92	22.82	23.26	21.49	22.42	21.93	22.83	23.27
	6H	22.06	22.87	22.52	23.31	23.77	22.30	23.10	22.76	23.55	24.01
	8H	22.26	23.01	22.73	23.46	23.93	22.63	23.38	23.09	23.82	24.29
	12H	22.40	23.07	22.88	23.55	24.02	22.90	23.57	23.38	24.05	24.52
8H	4H	21.80	22.56	22.27	23.00	23.47	21.81	22.57	22.28	23.01	23.48
	6H	22.51	23.14	23.01	23.63	24.11	22.76	23.39	23.26	23.88	24.36
	8H	22.78	23.34	23.30	23.85	24.34	23.18	23.74	23.69	24.25	24.74
	12H	22.99	23.49	23.50	23.98	24.55	23.55	24.04	24.06	24.54	25.10
12H	4H	21.84	22.52	22.33	22.99	23.47	21.84	22.51	22.32	22.99	23.46
	6H	22.58	23.15	23.10	23.66	24.14	22.81	23.38	23.33	23.89	24.38
	8H	22.91	23.41	23.42	23.90	24.47	23.29	23.79	23.80	24.28	24.85