

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: P893843

Luminaire Tested: 4MB-7HL-LVR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893843
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-L840
Description: 7000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

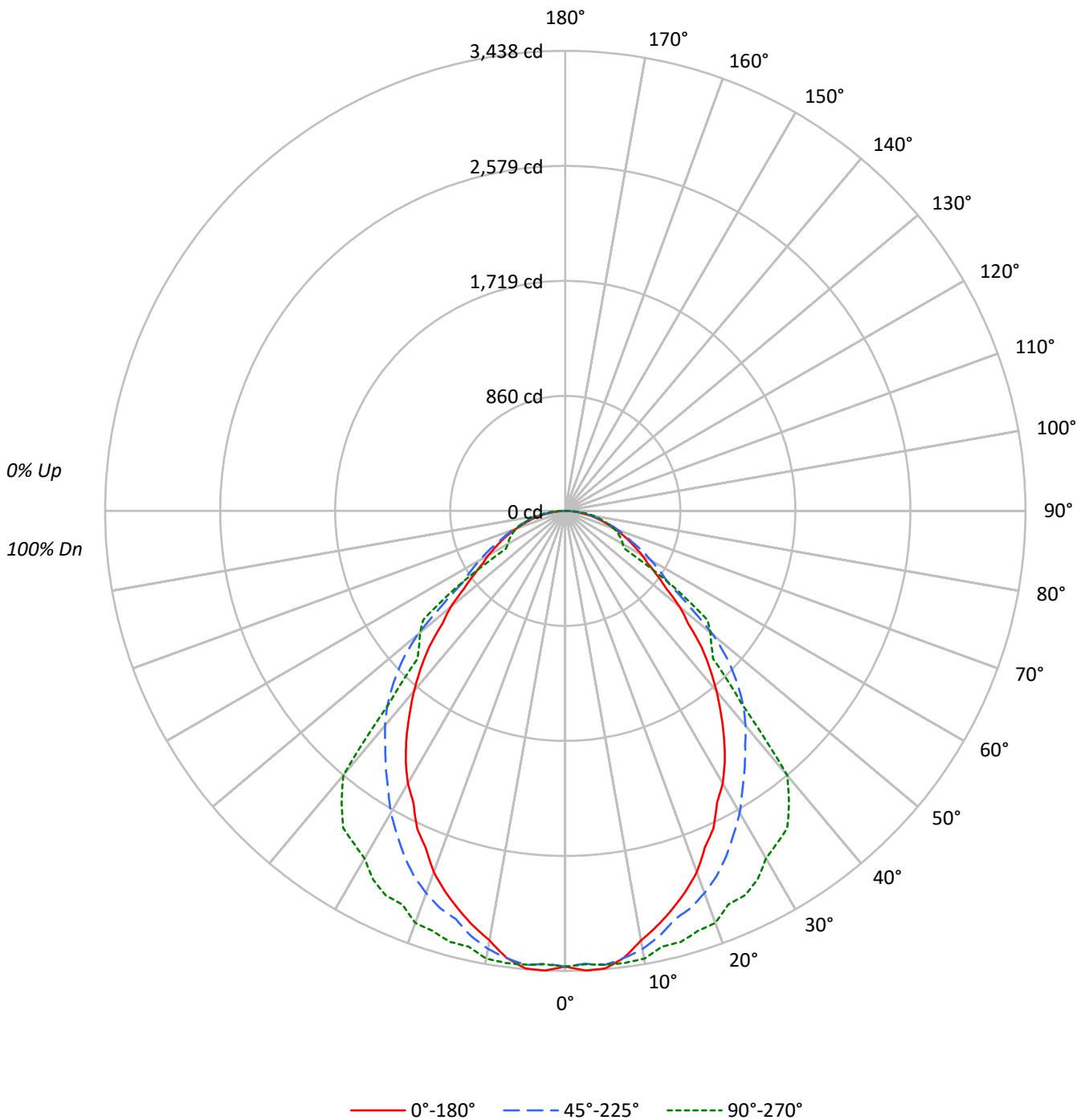
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7127.9 lumens
Efficiency: N/A
Efficacy: 137.6 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°	24229	24229	24229
5°	24521	24328	24314
10°	23555	24017	24545
15°	22711	23271	24560
20°	21755	23012	24807
25°	20554	22336	24896
30°	19317	21404	24640
35°	17964	20300	25121
40°	16320	19460	23956
45°	14460	18264	15708
50°	12376	15963	15675
55°	10372	11649	12195
60°	9436	10517	7058
65°	8839	9310	7542
70°	8134	8820	8072
75°	7642	8275	8220
80°	7129	7826	8809
85°	6123	6531	9388

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 18264 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.6	4.5
10°-20°	905.4	12.7
20°-30°	1319.5	18.5
30°-40°	1509.5	21.2
40°-50°	1291.3	18.1
50°-60°	851.6	11.9
60°-70°	514.8	7.2
70°-80°	314.9	4.4
80°-90°	97.3	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°	2548.5	35.8
0°-40°	4058.0	56.9
0°-60°	6201.0	87.0
0°-90°	7127.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7127.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3405	3405	3405	3405	3405	
5°	3433	3430	3406	3399	3404	322
15°	3083	3119	3159	3361	3334	867
25°	2618	2658	2845	3088	3171	1198
35°	2068	2172	2337	2704	2892	1288
45°	1437	1548	1815	1696	1561	1100
55°	836	883	939	1113	983	760
65°	525	538	553	494	448	519
75°	278	285	301	315	299	293
85°	75	74	80	95	115	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3405.3	3405.3	3405.3	3405.3	3405.3
2.5°	3438.3	3428.3	3387.3	3426.3	3391.3
5°	3433.3	3430.3	3406.3	3399.3	3404.3
7.5°	3367.3	3374.3	3370.3	3445.3	3407.3
10°	3260.3	3274.3	3324.3	3429.3	3397.3
12.5°	3176.3	3187.3	3254.3	3410.3	3335.3
15°	3083.2	3119.3	3159.3	3361.3	3334.3
17.5°	2983.2	3017.2	3112.3	3295.3	3292.3
20°	2873.2	2936.2	3039.2	3209.3	3276.3
22.5°	2724.2	2809.2	2954.2	3170.3	3183.3
25°	2618.2	2658.2	2845.2	3088.3	3171.3
27.5°	2457.2	2533.2	2724.2	2970.2	3107.3
30°	2351.2	2414.2	2605.2	2901.2	2999.2
32.5°	2218.2	2293.2	2464.2	2826.2	2944.2
35°	2068.2	2172.2	2337.2	2704.2	2892.2
37.5°	1910.2	2013.2	2208.2	2603.2	2745.2
40°	1757.1	1845.1	2095.2	2482.2	2579.2
42.5°	1600.1	1695.1	1966.2	2243.2	1940.2
45°	1437.1	1548.1	1815.1	1696.1	1561.1
47.5°	1244.1	1380.1	1648.1	1363.1	1479.1
50°	1118.1	1192.1	1442.1	1285.1	1416.1
52.5°	951.1	1051.1	1158.1	1200.1	1338.1
55°	836.1	883.1	939.1	1113.1	983.1
57.5°	730.1	772.1	837.1	785.1	524.0
60°	663.1	682.1	739.1	561.0	496.0
62.5°	587.0	606.0	648.1	524.0	476.0
65°	525.0	538.0	553.0	494.0	448.0
67.5°	459.0	466.0	482.0	456.0	421.0
70°	391.0	401.0	424.0	417.0	388.0
72.5°	331.0	340.0	360.0	370.0	343.0
75°	278.0	285.0	301.0	315.0	299.0
77.5°	221.0	228.0	249.0	264.0	257.0
80°	174.0	175.0	191.0	206.0	215.0
82.5°	122.0	124.0	136.0	152.0	170.0
85°	75.0	74.0	80.0	95.0	115.0
87.5°	29.0	28.0	33.0	40.0	59.0
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	18.90	20.38	19.27	20.69	21.01	18.58	20.06	18.94	20.37	20.69
	3H	20.46	21.79	20.84	22.11	22.48	20.20	21.52	20.57	21.85	22.21
	4H	21.06	22.30	21.46	22.65	23.03	20.94	22.18	21.34	22.53	22.91
	6H	21.52	22.66	21.93	23.03	23.42	21.61	22.76	22.02	23.13	23.52
	8H	21.67	22.76	22.10	23.15	23.55	21.89	22.98	22.32	23.37	23.77
	12H	21.77	22.81	22.20	23.19	23.62	22.11	23.15	22.54	23.54	23.97
4H	2H	19.49	20.73	19.89	21.08	21.46	19.24	20.48	19.64	20.83	21.21
	3H	21.28	22.31	21.69	22.71	23.11	21.12	22.15	21.53	22.55	22.95
	4H	22.01	22.93	22.44	23.35	23.79	22.02	22.94	22.45	23.36	23.80
	6H	22.59	23.40	23.05	23.84	24.30	22.83	23.63	23.28	24.07	24.53
	8H	22.79	23.54	23.25	23.99	24.45	23.15	23.91	23.62	24.35	24.82
	12H	22.93	23.60	23.41	24.08	24.55	23.43	24.10	23.91	24.58	25.05
8H	4H	22.33	23.08	22.80	23.53	24.00	22.34	23.09	22.80	23.54	24.01
	6H	23.04	23.66	23.54	24.16	24.63	23.29	23.91	23.79	24.41	24.88
	8H	23.31	23.87	23.83	24.38	24.87	23.71	24.27	24.22	24.78	25.27
	12H	23.52	24.02	24.03	24.51	25.07	24.07	24.57	24.58	25.06	25.63
12H	4H	22.37	23.04	22.85	23.52	23.99	22.37	23.04	22.85	23.52	23.99
	6H	23.11	23.67	23.63	24.18	24.67	23.34	23.90	23.86	24.41	24.90
	8H	23.44	23.94	23.95	24.43	24.99	23.82	24.32	24.33	24.81	25.38