

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: P893643

Luminaire Tested: 4MB-5SL-LVRA-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893643
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-26)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-LVRA-UNV-L840
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

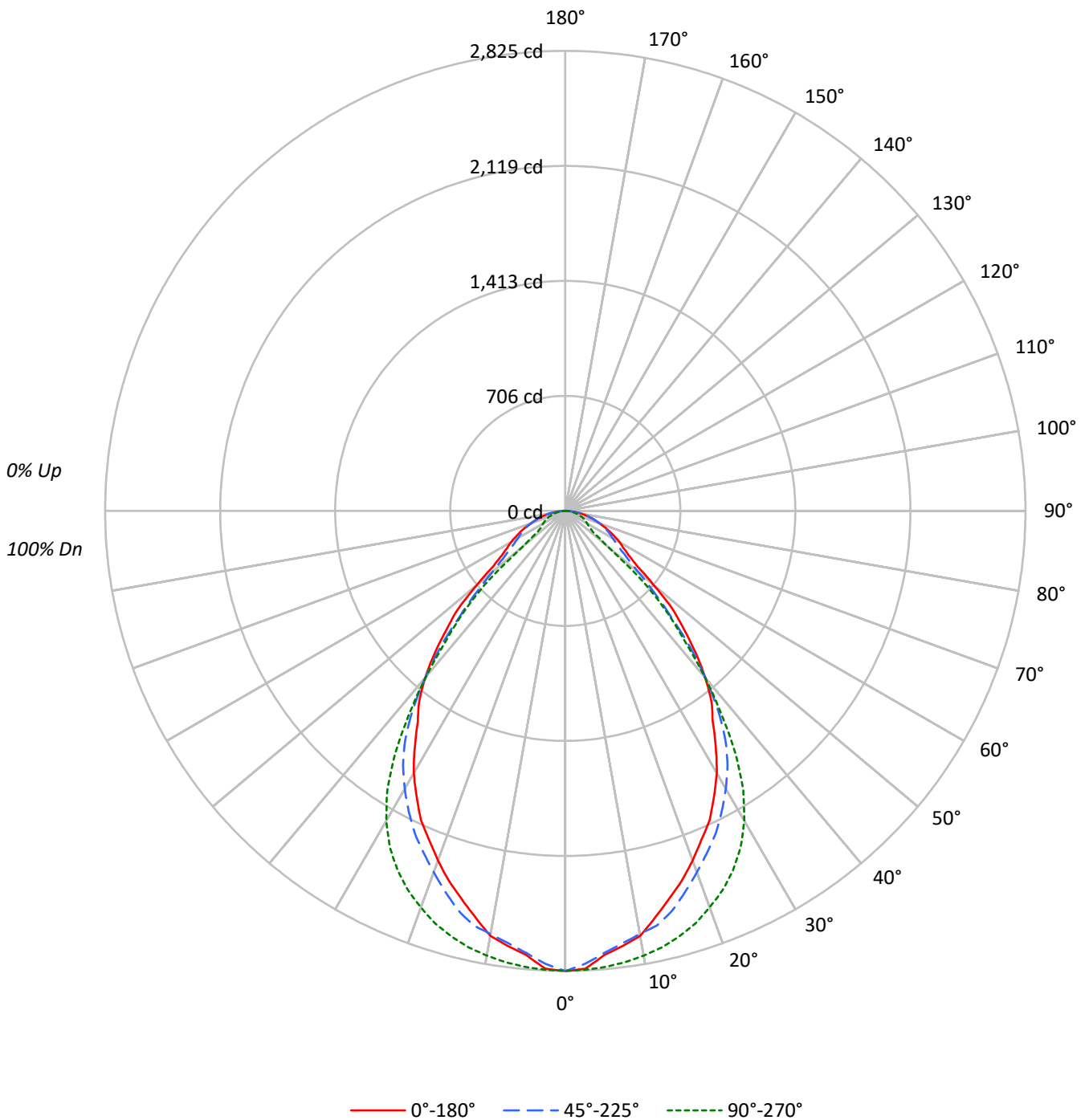
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4585.0 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 9.55
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78		
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69		
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62		
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55		
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50		
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45		
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41		
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38		
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20101	20101	20101
5°	19558	19470	20078
10°	19143	19059	20032
15°	18155	18713	19919
20°	17294	17879	19615
25°	16451	17154	19114
30°	15284	16193	18047
35°	13704	14881	15830
40°	12416	12443	12375
45°	10381	9195	8967
50°	7842	6472	3667
55°	5898	5175	2312
60°	5481	4766	2227
65°	5099	4756	2231
70°	4666	4666	2197
75°	4423	4544	2122
80°	4089	4294	2180
85°	3567	3747	2376

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 10624 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.0	5.7
10°-20°	719.0	15.7
20°-30°	1019.6	22.2
30°-40°	1050.4	22.9
40°-50°	733.7	16.0
50°-60°	352.1	7.7
60°-70°	247.0	5.4
70°-80°	154.4	3.4
80°-90°	47.8	1.0
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°	1999.6	43.6
0°-40°	3050.1	66.5
0°-60°	4135.8	90.2
0°-90°	4585.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4585.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2825	2825	2825	2825	2825	
5°	2738	2735	2726	2797	2811	259
15°	2465	2483	2540	2613	2704	694
25°	2096	2117	2185	2333	2435	958
35°	1578	1621	1713	1749	1822	994
45°	1032	1056	914	867	891	795
55°	476	452	417	267	186	446
65°	303	283	282	215	132	300
75°	161	159	165	143	77	169
85°	44	44	46	45	29	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2825.1	2825.1	2825.1	2825.1	2825.1
2.5°	2814.2	2805.4	2784.3	2822.9	2820.0
5°	2738.4	2734.8	2726.1	2797.4	2811.2
7.5°	2695.5	2688.2	2678.0	2756.6	2795.2
10°	2649.6	2658.3	2638.0	2710.0	2772.7
12.5°	2555.0	2578.3	2605.9	2662.0	2745.0
15°	2464.7	2482.9	2540.4	2613.2	2704.2
17.5°	2380.2	2401.3	2450.8	2560.0	2656.9
20°	2284.1	2313.2	2361.3	2501.1	2590.6
22.5°	2185.1	2212.0	2272.4	2422.4	2522.2
25°	2095.5	2116.6	2185.1	2332.9	2434.8
27.5°	1976.8	2016.1	2080.9	2223.7	2330.7
30°	1860.3	1893.8	1971.0	2091.1	2196.7
32.5°	1719.8	1768.6	1853.8	1945.5	2033.6
35°	1577.8	1620.8	1713.3	1748.9	1822.5
37.5°	1474.4	1486.1	1538.5	1534.1	1575.6
40°	1336.8	1360.1	1339.7	1285.1	1332.4
42.5°	1188.3	1216.0	1133.7	1070.3	1087.1
45°	1031.7	1055.8	913.8	867.2	891.2
47.5°	896.3	894.1	736.9	705.5	672.0
50°	708.5	731.8	584.7	526.4	331.3
52.5°	553.4	562.1	482.0	336.4	217.7
55°	475.5	452.2	417.2	267.2	186.4
57.5°	422.3	393.2	369.9	248.3	170.4
60°	385.2	352.4	334.9	235.9	156.5
62.5°	342.9	317.5	310.9	225.0	144.2
65°	302.9	283.2	282.5	214.8	132.5
67.5°	262.8	251.9	254.8	202.4	119.4
70°	224.3	222.1	224.3	186.4	105.6
72.5°	191.5	189.3	195.1	166.0	90.3
75°	160.9	158.7	165.3	142.7	77.2
77.5°	128.1	129.6	134.0	118.7	64.8
80°	99.8	99.8	104.8	93.2	53.2
82.5°	71.4	72.1	75.0	68.4	41.5
85°	43.7	43.7	45.9	45.1	29.1
87.5°	14.6	16.7	19.7	21.1	14.6
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	16.07	17.43	16.44	17.74	18.05	12.41	13.76	12.77	14.07	14.39
	3H	17.81	19.02	18.19	19.35	19.71	14.38	15.59	14.76	15.92	16.28
	4H	18.48	19.61	18.88	19.96	20.34	15.09	16.21	15.49	16.56	16.95
	6H	18.99	20.03	19.40	20.40	20.79	15.61	16.65	16.02	17.02	17.41
	8H	19.16	20.15	19.59	20.54	20.94	15.79	16.78	16.22	17.17	17.57
	12H	19.27	20.21	19.70	20.60	21.03	15.93	16.88	16.36	17.26	17.69
4H	2H	16.60	17.73	17.00	18.08	18.46	14.03	15.15	14.43	15.50	15.89
	3H	18.58	19.51	18.99	19.91	20.32	16.20	17.14	16.62	17.54	17.94
	4H	19.38	20.22	19.82	20.64	21.08	17.08	17.92	17.52	18.34	18.78
	6H	20.03	20.75	20.49	21.19	21.66	17.73	18.45	18.19	18.90	19.36
	8H	20.25	20.92	20.71	21.37	21.84	17.94	18.61	18.40	19.06	19.53
	12H	20.40	21.00	20.88	21.48	21.95	18.09	18.69	18.58	19.18	19.65
8H	4H	19.67	20.34	20.13	20.79	21.26	17.73	18.41	18.20	18.86	19.33
	6H	20.45	21.01	20.95	21.50	21.98	18.59	19.15	19.10	19.65	20.13
	8H	20.75	21.25	21.27	21.76	22.26	18.92	19.42	19.44	19.94	20.43
	12H	20.99	21.43	21.50	21.92	22.49	19.19	19.63	19.70	20.12	20.69
12H	4H	19.68	20.28	20.17	20.77	21.24	17.81	18.41	18.29	18.89	19.36
	6H	20.50	21.00	21.02	21.52	22.01	18.73	19.23	19.25	19.75	20.24
	8H	20.87	21.31	21.38	21.80	22.37	19.15	19.59	19.66	20.08	20.65