

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: P892848

Luminaire Tested: 2MB-5HL-LVRA-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892848
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: 2MB-5HL-LVRA-UNV-L850
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with LOUVER WITH AISLE OPTIC, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

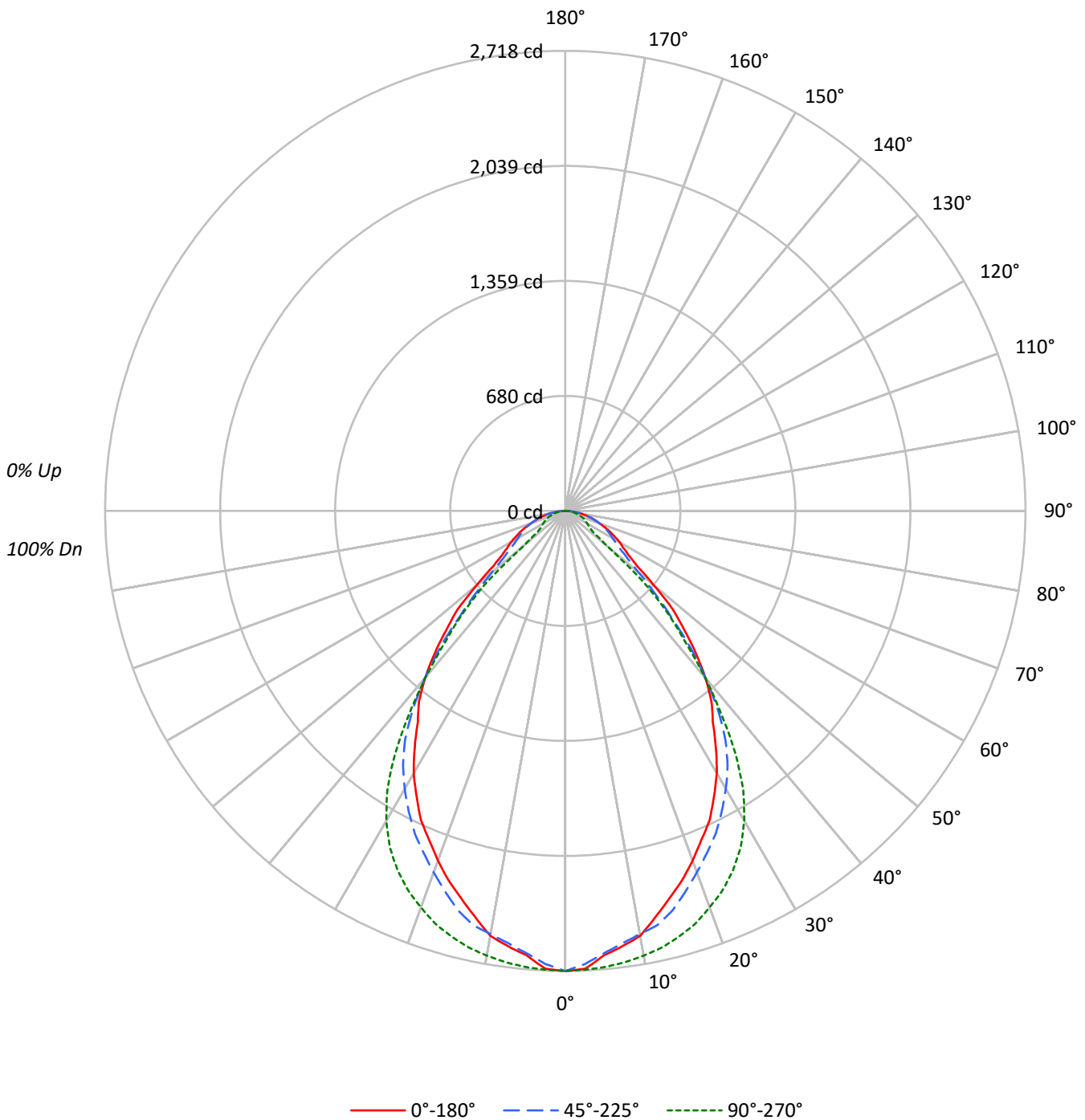
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4412.0 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.16 / 1.12
Luminous Opening: Rectangular (W 0.38' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4.5
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	100	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88	88	88
2	103	96	91	86	101	95	90	85	91	87	83	88	85	82	85	82	80	78	78	78
3	96	87	80	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55	55	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50	50	50
7	73	61	54	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45	45	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41	41	41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38	38	38
10	61	49	42	37	60	48	42	37	47	41	37	47	41	37	46	40	37	35	35	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38889	38889	38889
5°	37840	37670	38847
10°	37036	36873	38756
15°	35125	36203	38539
20°	33460	34591	37951
25°	31828	33188	36981
30°	29570	31329	34917
35°	26515	28791	30626
40°	24023	24075	23944
45°	20085	17789	17350
50°	15172	12521	7095
55°	11410	10014	4474
60°	10603	9221	4309
65°	9867	9200	4316
70°	9026	9026	4250
75°	8556	8788	4107
80°	7909	8312	4210
85°	6894	7238	4596

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 20553 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.1	5.7
10°-20°	691.9	15.7
20°-30°	981.1	22.2
30°-40°	1010.8	22.9
40°-50°	706.0	16.0
50°-60°	338.8	7.7
60°-70°	237.7	5.4
70°-80°	148.6	3.4
80°-90°	46.0	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°	1924.2	43.6
0°-40°	2935.0	66.5
0°-60°	3979.8	90.2
0°-90°	4412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4412.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2718	2718	2718	2718	2718	
5°	2635	2632	2623	2692	2705	249
15°	2372	2389	2444	2515	2602	668
25°	2016	2037	2103	2245	2343	922
35°	1518	1560	1649	1683	1754	957
45°	993	1016	879	834	858	765
55°	458	435	402	257	179	429
65°	292	272	272	207	128	289
75°	155	153	159	137	74	163
85°	42	42	44	43	28	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2718.5	2718.5	2718.5	2718.5	2718.5
2.5°	2708.0	2699.6	2679.3	2716.4	2713.6
5°	2635.1	2631.6	2623.2	2691.9	2705.2
7.5°	2593.8	2586.8	2577.0	2652.6	2689.8
10°	2549.6	2558.0	2538.4	2607.8	2668.0
12.5°	2458.5	2481.0	2507.6	2561.5	2641.4
15°	2371.7	2389.2	2444.5	2514.6	2602.2
17.5°	2290.4	2310.7	2358.4	2463.5	2556.6
20°	2197.9	2225.9	2272.2	2406.7	2492.9
22.5°	2102.6	2128.5	2186.7	2331.0	2427.0
25°	2016.4	2036.8	2102.6	2244.9	2342.9
27.5°	1902.2	1940.1	2002.4	2139.8	2242.8
30°	1790.1	1822.4	1896.6	2012.2	2113.8
32.5°	1654.9	1701.9	1783.8	1872.1	1956.9
35°	1518.3	1559.6	1648.6	1682.9	1753.7
37.5°	1418.8	1430.0	1480.5	1476.3	1516.2
40°	1286.4	1308.8	1289.2	1236.6	1282.2
42.5°	1143.4	1170.1	1090.9	1029.9	1046.1
45°	992.8	1015.9	879.3	834.5	857.6
47.5°	862.5	860.4	709.0	678.9	646.7
50°	681.7	704.1	562.6	506.6	318.8
52.5°	532.5	540.9	463.8	323.7	209.5
55°	457.5	435.1	401.5	257.1	179.4
57.5°	406.4	378.3	355.9	238.9	163.9
60°	370.6	339.1	322.3	227.0	150.6
62.5°	330.0	305.5	299.2	216.5	138.7
65°	291.5	272.5	271.8	206.7	127.5
67.5°	252.9	242.4	245.2	194.8	114.9
70°	215.8	213.7	215.8	179.4	101.6
72.5°	184.3	182.2	187.8	159.7	86.9
75°	154.8	152.7	159.0	137.3	74.3
77.5°	123.3	124.7	128.9	114.2	62.4
80°	96.0	96.0	100.9	89.7	51.1
82.5°	68.7	69.4	72.2	65.9	39.9
85°	42.0	42.0	44.1	43.4	28.0
87.5°	14.0	16.1	18.9	20.3	14.0
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	18.37	19.72	18.73	20.03	20.35	14.70	16.05	15.06	16.36	16.68
	3H	20.10	21.31	20.48	21.64	22.00	16.67	17.88	17.05	18.21	18.57
	4H	20.77	21.90	21.18	22.25	22.63	17.38	18.51	17.78	18.86	19.24
	6H	21.28	22.32	21.70	22.69	23.08	17.90	18.94	18.32	19.31	19.70
	8H	21.45	22.44	21.88	22.83	23.23	18.09	19.07	18.52	19.46	19.87
	12H	21.56	22.51	21.99	22.89	23.32	18.23	19.17	18.66	19.55	19.98
4H	2H	18.89	20.02	19.30	20.37	20.76	16.32	17.45	16.72	17.80	18.18
	3H	20.87	21.80	21.28	22.21	22.61	18.50	19.43	18.91	19.83	20.23
	4H	21.67	22.51	22.11	22.93	23.37	19.38	20.21	19.81	20.63	21.07
	6H	22.32	23.04	22.78	23.49	23.95	20.02	20.74	20.48	21.19	21.65
	8H	22.54	23.21	23.01	23.66	24.13	20.23	20.91	20.70	21.35	21.82
	12H	22.69	23.29	23.18	23.77	24.25	20.39	20.99	20.87	21.47	21.94
8H	4H	21.96	22.64	22.43	23.08	23.55	20.03	20.70	20.49	21.15	21.62
	6H	22.74	23.30	23.24	23.79	24.27	20.89	21.44	21.39	21.94	22.42
	8H	23.04	23.54	23.56	24.06	24.55	21.22	21.71	21.74	22.23	22.72
	12H	23.28	23.72	23.79	24.21	24.78	21.48	21.92	21.99	22.41	22.98
12H	4H	21.98	22.58	22.46	23.06	23.53	20.10	20.70	20.58	21.18	21.65
	6H	22.79	23.29	23.31	23.81	24.30	21.02	21.52	21.54	22.04	22.53
	8H	23.16	23.60	23.67	24.09	24.66	21.44	21.88	21.95	22.37	22.94