

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: P892800

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892800
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-ACL-UNV-L850
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 5000K (C)
Light Source: -
Ballast/Driver: -

Summary

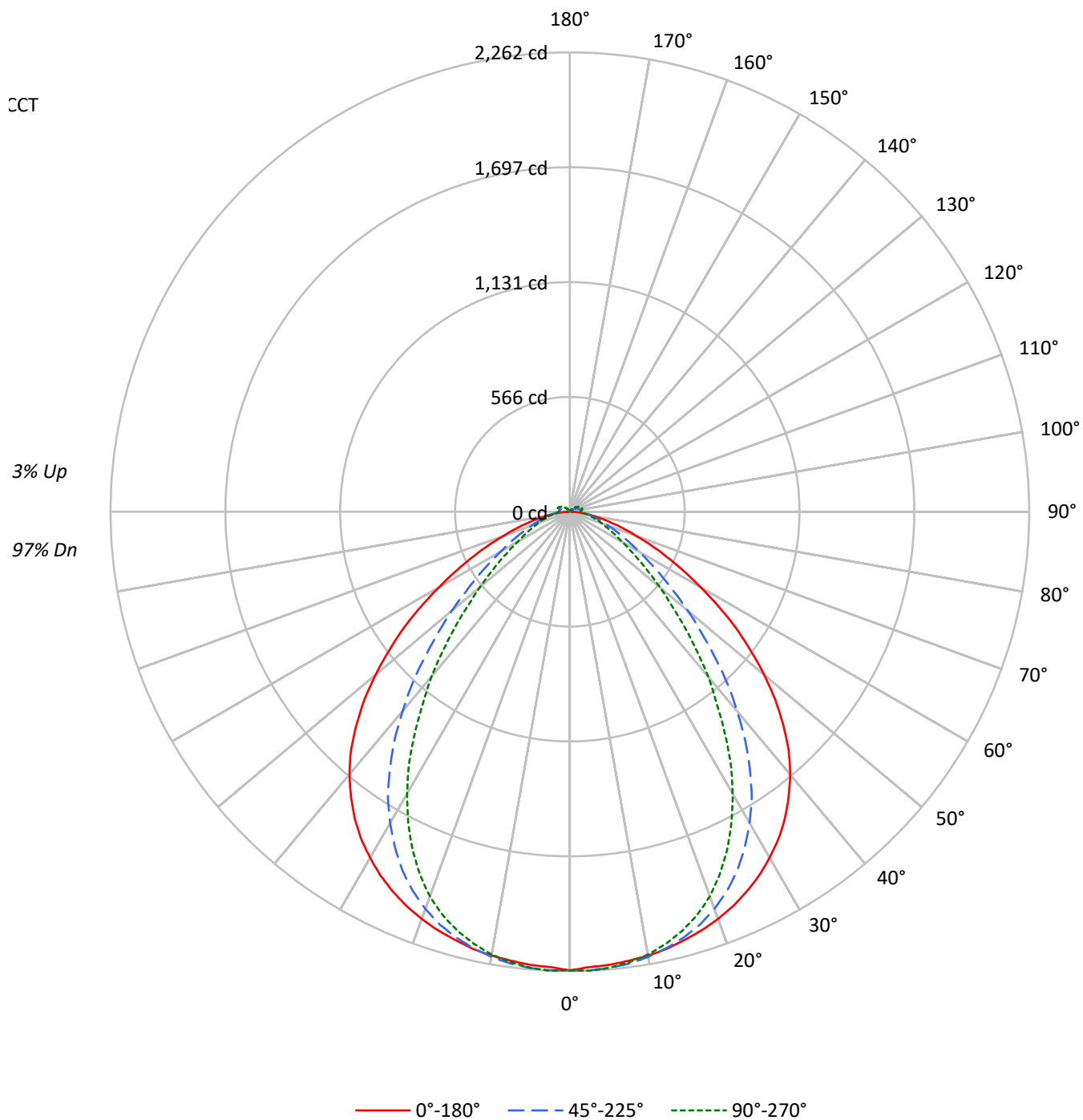
Lumens per Lamp: N/A
Luminaire Lumens: 4825.9 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.09 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')
CIE Type: Direct

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

TEST NUMBER: P892800

CATALOG NUMBER: 2MB-5HL-ACL-UNV-L850

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99
1	109	105	102	98	106	103	99	96	98	95	93	94	91	89	89	88	86
2	101	94	88	83	98	92	86	82	88	83	79	84	80	77	81	77	75
3	93	84	77	71	90	82	75	70	79	73	68	76	71	67	73	69	65
4	86	75	68	62	84	74	67	61	71	65	60	68	63	59	66	61	58
5	80	68	60	54	78	67	59	54	65	58	53	62	57	52	60	55	51
6	74	62	54	48	72	61	53	48	59	52	47	57	51	46	55	50	46
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	42	37
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	38	34
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	46236	46236	46236
5°	45855	45337	45077
10°	45805	44296	43614
15°	45750	43083	41775
20°	45787	41535	39420
25°	45704	39440	36138
30°	45412	36546	32093
35°	44814	32829	27268
40°	43581	28241	22423
45°	41324	23296	17493
50°	37896	18593	13392
55°	33618	14498	10307
60°	28418	11251	7938
65°	23482	8911	6422
70°	18734	7183	5371
75°	14837	5930	4608
80°	11223	5045	3964
85°	8375	4347	3480

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 41324 cd/sqm

TEST NUMBER: P892800

CATALOG NUMBER: 2MB-5HL-ACL-UNV-L850

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.0	4.4
10°-20°	610.4	12.6
20°-30°	895.2	18.5
30°-40°	976.1	20.2
40°-50°	828.3	17.2
50°-60°	563.9	11.7
60°-70°	329.1	6.8
70°-80°	171.3	3.6
80°-90°	74.7	1.5
90°-100°	47.4	1.0
100°-110°	43.8	0.9
110°-120°	32.5	0.7
120°-130°	19.6	0.4
130°-140°	10.5	0.2
140°-150°	5.3	0.1
150°-160°	2.6	0.1
160°-170°	1.0	0.0
170°-180°	0.2	0.0
0°-30°	1719.6	35.6
0°-40°	2695.7	55.9
0°-60°	4087.9	84.7
0°-90°	4663.0	96.6
90°-120°	123.8	2.6
90°-150°	159.1	3.3
90°-180°	163.0	3.4
0°-180°	4825.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2258	2258	2258	2258	2258	
5°	2239	2250	2254	2256	2253	213
15°	2182	2188	2169	2150	2136	617
25°	2063	2033	1950	1874	1833	951
35°	1846	1751	1545	1390	1330	1152
45°	1487	1302	1007	848	794	1142
55°	998	794	552	444	418	890
65°	528	417	283	234	222	529
75°	217	187	145	132	126	236
85°	53	63	72	70	68	56
90°	8	28	50	54	53	9
95°	16	31	52	57	56	12
105°	5	24	48	61	62	5
115°	4	14	37	52	56	3
125°	2	8	22	35	41	2
135°	2	6	13	21	24	1
145°	2	4	8	12	14	1
155°	2	3	6	8	8	1
165°	2	2	4	5	6	1
175°	2	2	3	3	2	0
180°	2	2	2	2	2	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2258.0	2258.0	2258.0	2258.0	2258.0
2.5°	2243.8	2254.2	2259.9	2263.6	2261.7
5°	2239.1	2249.5	2254.2	2256.1	2253.2
7.5°	2229.7	2241.0	2243.8	2241.9	2237.2
10°	2219.3	2228.7	2224.9	2220.2	2213.6
12.5°	2204.2	2210.8	2200.4	2190.0	2179.6
15°	2182.5	2188.1	2169.3	2149.5	2136.2
17.5°	2160.8	2158.9	2130.6	2098.5	2082.5
20°	2133.4	2123.0	2080.6	2034.3	2015.5
22.5°	2101.3	2083.4	2021.1	1958.9	1930.5
25°	2062.6	2033.4	1950.4	1873.9	1833.4
27.5°	2019.2	1977.7	1864.5	1769.2	1723.9
30°	1967.3	1910.7	1770.1	1653.1	1603.1
32.5°	1911.7	1839.0	1667.3	1521.0	1474.8
35°	1845.6	1751.3	1544.6	1389.9	1330.4
37.5°	1770.1	1650.3	1419.1	1249.3	1187.0
40°	1688.0	1543.7	1279.5	1109.6	1059.6
42.5°	1595.6	1430.5	1149.3	970.9	920.9
45°	1487.1	1302.1	1006.8	848.3	793.5
47.5°	1372.9	1175.7	875.6	720.9	675.6
50°	1249.3	1042.6	758.6	617.1	577.5
52.5°	1121.9	919.0	646.3	522.7	489.7
55°	998.3	794.5	552.0	443.5	418.0
57.5°	869.0	689.7	469.0	377.4	352.0
60°	744.5	584.1	394.4	318.9	299.1
62.5°	632.2	492.5	335.9	271.7	257.6
65°	528.4	417.1	283.1	234.0	221.7
67.5°	435.9	345.3	242.5	202.9	191.5
70°	349.1	282.1	202.9	174.6	167.0
72.5°	283.1	234.9	171.7	152.9	147.2
75°	217.0	186.8	145.3	132.1	126.4
77.5°	163.2	146.3	123.6	113.2	108.5
80°	117.9	113.2	103.8	98.1	93.4
82.5°	81.1	85.9	86.8	82.1	80.2
85°	52.8	63.2	71.7	69.8	67.9
87.5°	29.3	42.5	58.5	59.4	57.6
90°	8.5	28.3	50.0	53.8	52.8
92.5°	16.0	30.2	51.0	54.7	53.8
95°	16.0	31.1	51.9	56.6	55.7
97.5°	15.1	31.1	52.8	58.5	58.5
100°	7.5	30.2	52.8	60.4	60.4
102.5°	4.7	27.4	51.0	61.3	62.3
105°	4.7	23.6	48.1	61.3	62.3
107.5°	4.7	19.8	46.2	59.4	62.3
110°	3.8	17.0	43.4	56.6	60.4



TEST NUMBER: P892800

CATALOG NUMBER: 2MB-5HL-ACL-UNV-L850

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.8	15.1	40.6	54.7	58.5
115°	3.8	14.2	36.8	51.9	55.7
117.5°	2.8	12.3	32.1	48.1	52.8
120°	2.8	10.4	28.3	44.3	49.1
122.5°	1.9	9.4	24.5	39.6	45.3
125°	1.9	7.5	21.7	34.9	40.6
127.5°	1.9	7.5	19.8	31.1	35.9
130°	1.9	6.6	17.0	27.4	31.1
132.5°	1.9	6.6	15.1	23.6	27.4
135°	1.9	5.7	13.2	20.8	24.5
137.5°	1.9	5.7	12.3	17.9	21.7
140°	1.9	4.7	10.4	16.0	18.9
142.5°	1.9	4.7	9.4	14.2	16.0
145°	1.9	3.8	8.5	12.3	14.2
147.5°	1.9	3.8	7.5	10.4	12.3
150°	1.9	3.8	7.5	9.4	10.4
152.5°	1.9	2.8	6.6	8.5	9.4
155°	1.9	2.8	5.7	8.5	8.5
157.5°	1.9	2.8	4.7	7.5	8.5
160°	1.9	2.8	4.7	6.6	7.5
162.5°	1.9	2.8	3.8	4.7	6.6
165°	1.9	1.9	3.8	4.7	5.7
167.5°	1.9	1.9	2.8	3.8	4.7
170°	1.9	1.9	2.8	2.8	2.8
172.5°	1.9	1.9	2.8	2.8	1.9
175°	1.9	1.9	2.8	2.8	1.9
177.5°	1.9	1.9	2.8	2.8	1.9
180°	1.9	1.9	1.9	1.9	1.9

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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	22.01	23.40	22.43	23.79	24.19	18.11	19.51	18.53	19.89	20.29
	3H	23.04	24.28	23.47	24.68	25.13	19.31	20.56	19.75	20.96	21.41
	4H	23.33	24.50	23.79	24.92	25.38	19.85	21.02	20.31	21.44	21.90
	6H	23.48	24.56	23.95	25.00	25.47	20.36	21.43	20.83	21.87	22.35
	8H	23.50	24.53	23.99	24.99	25.47	20.60	21.63	21.08	22.08	22.57
	12H	23.51	24.49	23.99	24.94	25.45	20.85	21.83	21.34	22.28	22.80
4H	2H	22.04	23.21	22.50	23.63	24.09	18.61	19.78	19.07	20.20	20.66
	3H	23.24	24.20	23.70	24.67	25.15	20.00	20.96	20.47	21.43	21.92
	4H	23.63	24.50	24.12	24.98	25.50	20.64	21.51	21.13	21.99	22.51
	6H	23.87	24.63	24.39	25.14	25.68	21.27	22.03	21.78	22.53	23.07
	8H	23.92	24.63	24.44	25.14	25.68	21.57	22.28	22.09	22.79	23.33
	12H	23.95	24.58	24.49	25.12	25.67	21.90	22.53	22.44	23.07	23.62
8H	4H	23.65	24.36	24.17	24.87	25.41	20.88	21.58	21.40	22.09	22.64
	6H	23.96	24.55	24.51	25.10	25.65	21.62	22.21	22.18	22.76	23.32
	8H	24.05	24.58	24.62	25.15	25.71	22.01	22.54	22.58	23.11	23.67
	12H	24.12	24.59	24.69	25.14	25.78	22.45	22.92	23.02	23.47	24.11
12H	4H	23.64	24.27	24.17	24.81	25.36	20.89	21.52	21.43	22.06	22.61
	6H	23.95	24.48	24.52	25.05	25.62	21.66	22.19	22.23	22.76	23.33
	8H	24.09	24.55	24.65	25.10	25.75	22.11	22.58	22.68	23.13	23.77