

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: P892790

Luminaire Tested: 2MB-5HL-A-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892790
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-8)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-5HL-A-UNV-L835
Description: 5000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

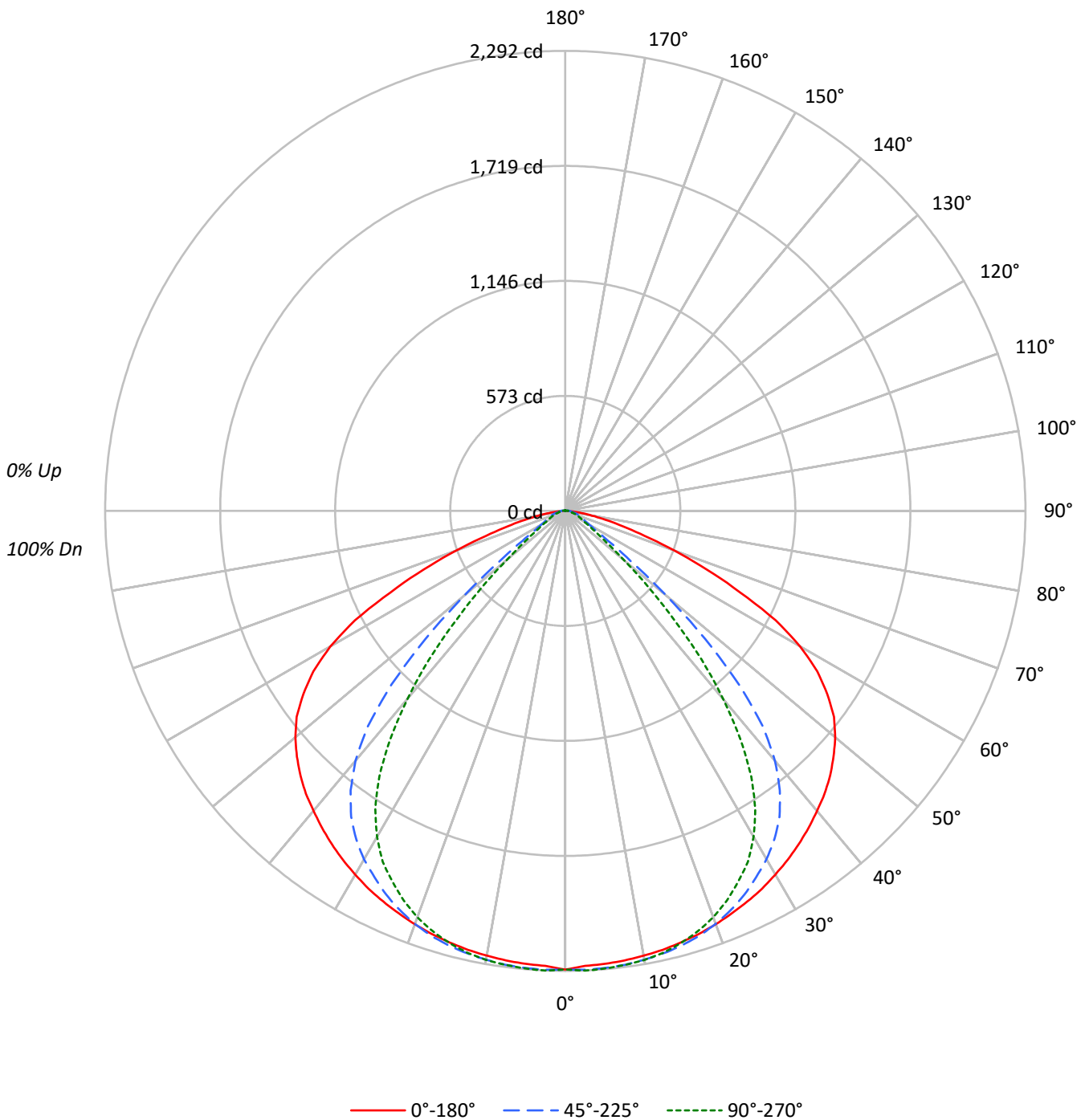
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4860.0 lumens
Efficiency: N/A
Efficacy: 144.2 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.21 / 1.29
Luminous Opening: Rectangular (W 0.27' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (A_{in}): 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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	90	90	90	88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	79	79	79	77
3	95	86	80	74	93	85	78	73	82	77	72	79	75	71	77	73	70	70	70	70	68
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	62	62	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	55	64	59	55	55	55	55	53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	58	53	49	49	49	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	44	44	44	43
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	40	40	40	38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	37	37	37	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	37	33	33	33	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	46793	46793	46793
5°	46563	46990	47046
10°	46783	47213	47232
15°	47180	47526	47256
20°	47752	47713	46946
25°	48512	47676	46047
30°	49468	47400	44349
35°	50674	46482	40373
40°	52140	43437	32710
45°	54004	35436	22144
50°	55904	20885	12038
55°	56887	9303	6537
60°	55323	5688	4652
65°	46576	4763	3978
70°	34718	4592	3616
75°	23473	4779	3070
80°	15954	4363	3514
85°	9750	6367	6155

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 55°
 Luminance: 56887 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.4	4.5
10°-20°	631.5	13.0
20°-30°	969.0	19.9
30°-40°	1141.5	23.5
40°-50°	973.5	20.0
50°-60°	531.8	10.9
60°-70°	235.7	4.9
70°-80°	103.5	2.1
80°-90°	37.0	0.8
90°-100°	11.4	0.2
100°-110°	2.9	0.1
110°-120°	0.8	0.0
120°-130°	0.8	0.0
130°-140°	0.7	0.0
140°-150°	0.8	0.0
150°-160°	0.8	0.0
160°-170°	0.7	0.0
170°-180°	0.2	0.0
0°-30°	1817.9	37.4
0°-40°	2959.4	60.9
0°-60°	4464.7	91.9
0°-90°	4840.9	99.6
90°-120°	15.1	0.3
90°-150°	17.4	0.4
90°-180°	19.0	0.4
0°-180°	4860.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2265	2278	2286	2292	2289	216
15°	2226	2238	2242	2236	2229	630
25°	2147	2147	2110	2067	2038	992
35°	2027	1989	1860	1690	1615	1270
45°	1865	1712	1224	852	765	1439
55°	1594	977	261	191	183	1414
65°	961	207	98	88	82	955
75°	297	105	60	46	39	335
85°	42	38	27	26	26	54
90°	4	15	21	21	17	4
95°	4	6	14	12	12	2
105°	1	1	2	4	5	1
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	1	1	1	1
145°	1	1	2	2	2	1
155°	1	2	2	2	2	0
165°	2	2	3	3	3	1
175°	2	2	3	3	3	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2285.2	2285.2	2285.2	2285.2	2285.2
2.5°	2268.9	2280.6	2287.9	2293.3	2292.4
5°	2265.3	2277.9	2286.1	2291.5	2288.8
7.5°	2259.0	2272.5	2280.6	2286.1	2281.5
10°	2250.0	2263.5	2270.7	2274.3	2271.6
12.5°	2240.1	2252.7	2258.1	2259.9	2254.5
15°	2225.6	2238.3	2241.9	2235.6	2229.2
17.5°	2210.3	2221.1	2219.3	2207.6	2195.9
20°	2191.4	2200.4	2189.6	2167.0	2154.4
22.5°	2169.7	2176.0	2153.5	2120.1	2102.1
25°	2147.2	2147.2	2110.2	2066.9	2038.1
27.5°	2121.9	2115.6	2057.9	2000.2	1970.4
30°	2092.2	2077.7	2004.7	1922.6	1875.7
32.5°	2061.5	2038.1	1938.9	1821.6	1761.2
35°	2027.2	1989.4	1859.5	1690.0	1615.1
37.5°	1990.3	1937.1	1755.8	1523.1	1431.2
40°	1950.6	1873.0	1625.0	1325.6	1223.7
42.5°	1911.8	1800.0	1455.5	1098.4	1004.6
45°	1864.9	1711.6	1223.7	852.2	764.7
47.5°	1812.6	1602.5	945.1	614.1	560.9
50°	1754.9	1453.7	655.6	422.9	377.9
52.5°	1686.4	1251.7	413.0	281.4	259.7
55°	1593.5	976.6	260.6	191.2	183.1
57.5°	1488.0	682.7	177.7	145.2	139.8
60°	1350.9	437.4	138.9	119.0	113.6
62.5°	1181.4	290.4	115.4	101.0	95.6
65°	961.3	207.4	98.3	87.5	82.1
67.5°	762.0	165.9	86.6	76.7	69.4
70°	579.9	138.9	76.7	67.6	60.4
72.5°	413.0	120.8	68.5	57.7	50.5
75°	296.7	104.6	60.4	46.0	38.8
77.5°	204.7	91.1	50.5	35.2	33.4
80°	135.3	79.4	37.0	31.6	29.8
82.5°	82.1	64.0	31.6	27.1	28.9
85°	41.5	37.9	27.1	26.2	26.2
87.5°	16.2	22.5	22.5	25.3	25.3
90°	3.6	15.3	20.7	20.7	17.1
92.5°	3.6	11.7	18.9	14.4	12.6
95°	3.6	6.3	14.4	11.7	11.7
97.5°	2.7	2.7	9.9	9.9	9.9
100°	0.9	1.8	6.3	9.0	9.0
102.5°	0.9	0.9	3.6	6.3	7.2
105°	0.9	0.9	1.8	4.5	5.4
107.5°	0.0	0.0	0.9	2.7	3.6
110°	0.0	0.0	0.9	1.8	1.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.9	0.9	0.9
115°	0.9	0.9	0.9	0.9	0.9
117.5°	0.9	0.9	0.9	0.9	0.9
120°	0.9	0.9	0.9	0.9	0.9
122.5°	0.9	0.9	0.9	0.9	0.9
125°	0.9	0.9	0.9	0.9	0.9
127.5°	0.9	0.9	0.9	0.9	0.9
130°	0.9	0.9	0.9	0.9	0.9
132.5°	0.9	0.9	0.9	0.9	0.9
135°	0.9	0.9	0.9	0.9	0.9
137.5°	0.9	0.9	0.9	0.9	0.9
140°	0.9	0.9	0.9	0.9	0.9
142.5°	0.9	0.9	0.9	1.8	0.9
145°	0.9	0.9	1.8	1.8	1.8
147.5°	0.9	0.9	1.8	1.8	1.8
150°	0.9	0.9	1.8	1.8	1.8
152.5°	0.9	1.8	1.8	1.8	1.8
155°	0.9	1.8	1.8	1.8	1.8
157.5°	0.9	1.8	1.8	2.7	1.8
160°	1.8	1.8	1.8	2.7	1.8
162.5°	1.8	1.8	2.7	2.7	2.7
165°	1.8	1.8	2.7	2.7	2.7
167.5°	1.8	1.8	2.7	2.7	2.7
170°	1.8	1.8	2.7	2.7	2.7
172.5°	1.8	1.8	2.7	2.7	2.7
175°	1.8	1.8	2.7	2.7	2.7
177.5°	1.8	1.8	2.7	3.6	2.7
180°	2.7	2.7	2.7	2.7	2.7



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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	24.45	25.85	24.82	26.17	26.50	12.35	13.75	12.72	14.07	14.40
	3H	25.74	26.99	26.13	27.32	27.70	13.52	14.76	13.90	15.10	15.47
	4H	26.14	27.30	26.55	27.66	28.05	13.95	15.11	14.35	15.47	15.86
	6H	26.37	27.44	26.79	27.82	28.22	14.33	15.39	14.75	15.77	16.17
	8H	26.42	27.44	26.86	27.83	28.25	14.57	15.59	15.01	15.99	16.40
	12H	26.44	27.41	26.88	27.80	28.24	14.91	15.88	15.35	16.27	16.71
4H	2H	24.26	25.42	24.67	25.78	26.17	12.87	14.03	13.28	14.39	14.78
	3H	25.60	26.55	26.02	26.96	27.37	14.33	15.27	14.74	15.68	16.10
	4H	26.03	26.88	26.47	27.30	27.75	14.88	15.73	15.32	16.16	16.61
	6H	26.35	27.09	26.82	27.54	28.01	15.39	16.12	15.86	16.58	17.05
	8H	26.45	27.13	26.92	27.59	28.06	15.71	16.39	16.18	16.85	17.33
	12H	26.49	27.10	26.99	27.59	28.07	16.15	16.76	16.64	17.25	17.73
8H	4H	25.93	26.61	26.40	27.07	27.55	15.46	16.15	15.93	16.60	17.08
	6H	26.28	26.84	26.78	27.34	27.83	16.09	16.66	16.60	17.16	17.65
	8H	26.41	26.92	26.93	27.44	27.94	16.50	17.01	17.02	17.53	18.03
	12H	26.50	26.96	27.02	27.46	28.03	17.09	17.54	17.61	18.04	18.62
12H	4H	25.89	26.50	26.38	26.99	27.47	15.66	16.27	16.15	16.76	17.24
	6H	26.23	26.74	26.75	27.26	27.76	16.33	16.84	16.86	17.36	17.86
	8H	26.39	26.84	26.91	27.34	27.92	16.81	17.27	17.33	17.77	18.35