

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: P893570

Luminaire Tested: 4MB-5SL-A-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-5SL-A-UNV-L835
Description: 5000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3500K CCT
Light Source: -
Ballast/Driver: -

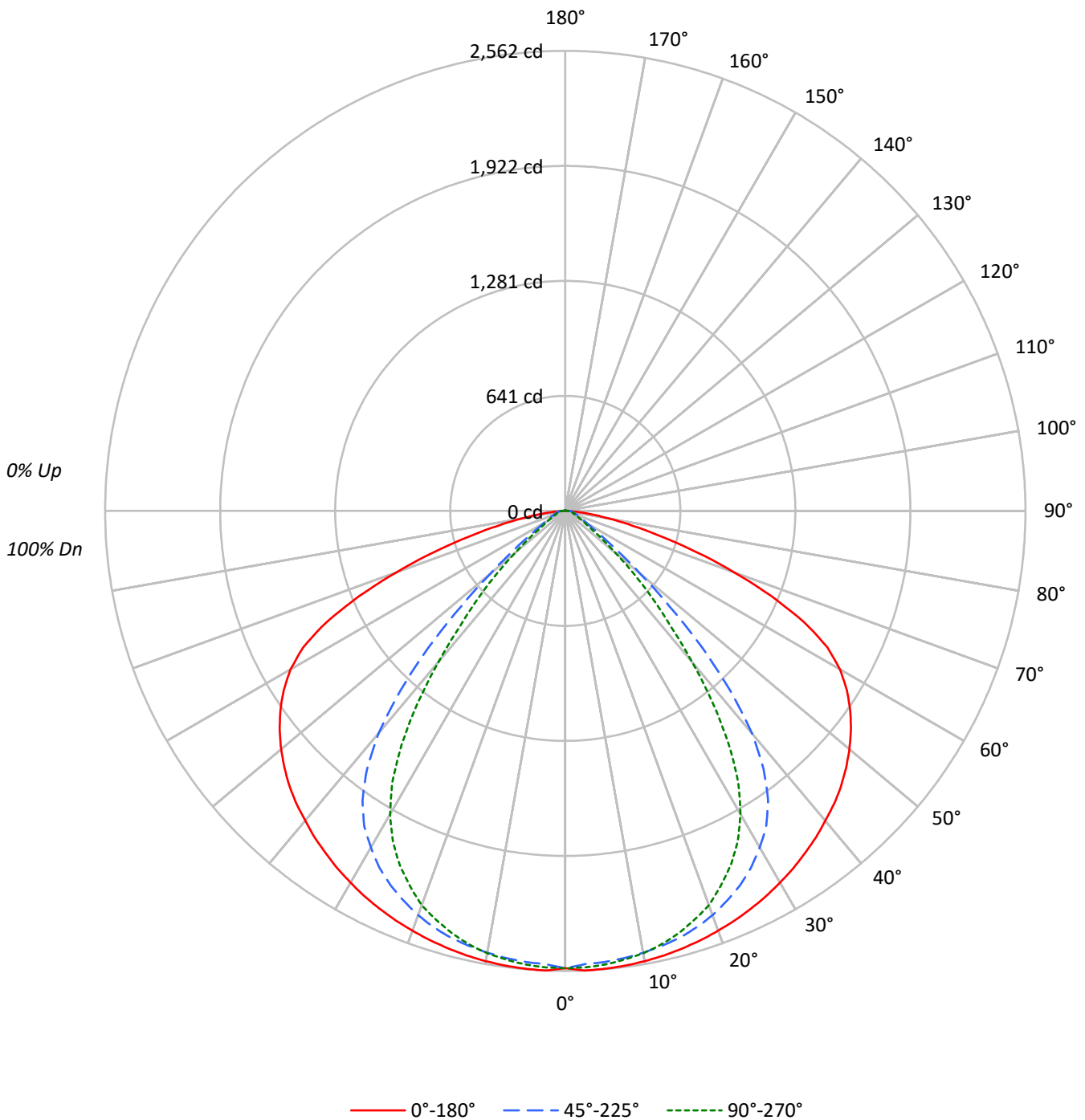
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5221.0 lumens
Efficiency: N/A
Efficacy: 149.2 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.15 / 1.23
Luminous Opening: Rectangular (W 0.27' 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

TEST NUMBER: P893570
CATALOG NUMBER: 4MB-5SL-A-UNV-L835

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	103	100	108	105	102	99	100	98	96	97	95	93	93	91	90	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	84	81	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	77	73	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	55	64	59	55	64	59	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	59	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	54	49	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	50	44	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25938	25938	25938
5°	26167	25778	25929
10°	26331	25836	25872
15°	26593	25946	25680
20°	26969	25968	25334
25°	27471	25855	24478
30°	28112	25450	22940
35°	28913	24471	19723
40°	29943	21493	14579
45°	31262	15509	9805
50°	32716	8665	5851
55°	34386	4480	3203
60°	35973	2915	2267
65°	35359	2395	1800
70°	29818	2203	1679
75°	21933	2247	1802
80°	14633	2645	2276
85°	7993	4277	3459

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 36277 cd/sqm



TEST NUMBER: P893570
 CATALOG NUMBER: 4MB-5SL-A-UNV-L835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.8	4.6
10°-20°	698.9	13.4
20°-30°	1063.1	20.4
30°-40°	1214.1	23.3
40°-50°	979.5	18.8
50°-60°	536.2	10.3
60°-70°	282.7	5.4
70°-80°	138.6	2.7
80°-90°	48.8	0.9
90°-100°	10.5	0.2
100°-110°	1.4	0.0
110°-120°	0.9	0.0
120°-130°	0.8	0.0
130°-140°	0.8	0.0
140°-150°	1.0	0.0
150°-160°	0.9	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	2003.8	38.4
0°-40°	3217.9	61.6
0°-60°	4733.5	90.7
0°-90°	5203.6	99.7
90°-120°	12.8	0.2
90°-150°	15.5	0.3
90°-180°	17.0	0.3
0°-180°	5221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2547	2547	2547	2547	2547	
5°	2560	2552	2522	2544	2536	244
15°	2522	2507	2461	2457	2436	714
25°	2445	2410	2301	2223	2178	1129
35°	2326	2228	1968	1700	1586	1459
45°	2171	1865	1077	736	681	1675
55°	1937	797	252	195	180	1728
65°	1467	184	99	80	75	1419
75°	557	104	57	48	46	616
85°	68	54	37	33	30	94
90°	3	28	23	20	18	4
95°	2	4	8	12	11	2
105°	1	0	1	1	1	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	1	2	1	1
155°	1	1	2	3	2	1
165°	1	2	3	3	3	0
175°	2	2	3	4	3	0
180°	3	3	3	3	3	



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CATALOG NUMBER: 4MB-5SL-A-UNV-L835

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2546.9	2546.9	2546.9	2546.9	2546.9
2.5°	2562.4	2555.4	2526.5	2551.1	2544.1
5°	2559.6	2551.8	2521.5	2544.1	2536.3
7.5°	2554.7	2544.8	2511.7	2532.1	2520.1
10°	2546.2	2536.3	2498.3	2514.5	2501.8
12.5°	2536.3	2522.9	2480.7	2489.1	2472.9
15°	2522.2	2506.7	2460.9	2456.7	2435.6
17.5°	2506.7	2487.7	2432.0	2413.7	2388.3
20°	2488.4	2465.2	2396.1	2360.1	2337.6
22.5°	2468.0	2437.7	2351.0	2296.0	2260.8
25°	2444.7	2409.5	2300.9	2222.7	2178.3
27.5°	2420.0	2372.1	2240.3	2137.5	2077.5
30°	2390.5	2332.7	2164.2	2025.4	1950.7
32.5°	2360.9	2283.3	2082.5	1880.9	1792.1
35°	2325.6	2227.7	1968.3	1700.5	1586.4
37.5°	2292.5	2160.7	1814.0	1474.3	1351.7
40°	2252.3	2081.8	1616.7	1214.3	1096.6
42.5°	2214.3	1990.2	1360.8	963.4	861.2
45°	2170.6	1864.7	1076.8	735.7	680.8
47.5°	2119.8	1693.5	783.0	547.6	513.0
50°	2064.9	1458.1	546.9	397.5	369.3
52.5°	2004.3	1140.3	368.6	276.3	260.8
55°	1936.6	797.1	252.3	195.2	180.4
57.5°	1858.4	518.7	183.2	147.3	137.4
60°	1766.1	331.2	143.1	117.0	111.3
62.5°	1644.8	232.6	117.7	96.5	91.6
65°	1467.3	183.9	99.4	80.3	74.7
67.5°	1242.4	155.7	85.3	67.7	64.1
70°	1001.4	135.3	74.0	58.5	56.4
72.5°	769.6	118.4	64.1	52.2	50.7
75°	557.4	103.6	57.1	47.9	45.8
77.5°	386.2	89.5	50.7	43.0	41.6
80°	249.5	77.5	45.1	39.5	38.8
82.5°	143.1	64.8	40.9	38.1	37.4
85°	68.4	54.3	36.6	33.1	29.6
87.5°	21.8	40.2	28.9	25.4	22.6
90°	2.8	28.2	22.6	19.7	18.3
92.5°	2.8	15.5	16.2	16.2	15.5
95°	2.1	3.5	7.8	12.0	11.3
97.5°	2.1	1.4	4.9	8.5	8.5
100°	1.4	0.7	2.1	5.6	5.6
102.5°	1.4	0.7	0.7	3.5	3.5
105°	0.7	0.0	0.7	1.4	1.4
107.5°	0.7	0.7	0.7	1.4	0.7
110°	0.7	0.7	0.7	1.4	0.7



TEST NUMBER: P893570

CATALOG NUMBER: 4MB-5SL-A-UNV-L835

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	0.7	1.4	0.7
115°	0.7	0.7	0.7	1.4	0.7
117.5°	0.7	0.7	0.7	1.4	0.7
120°	0.7	0.7	0.7	1.4	0.7
122.5°	0.7	0.7	0.7	1.4	0.7
125°	0.7	0.7	0.7	1.4	0.7
127.5°	0.7	0.7	0.7	1.4	0.7
130°	0.7	0.7	1.4	1.4	0.7
132.5°	0.7	0.7	1.4	1.4	0.7
135°	0.7	0.7	1.4	1.4	0.7
137.5°	0.7	0.7	1.4	1.4	1.4
140°	1.4	0.7	1.4	1.4	1.4
142.5°	1.4	1.4	1.4	2.1	1.4
145°	1.4	1.4	1.4	2.1	1.4
147.5°	1.4	1.4	2.1	2.1	1.4
150°	1.4	1.4	2.1	2.1	1.4
152.5°	1.4	1.4	2.1	2.1	2.1
155°	1.4	1.4	2.1	2.8	2.1
157.5°	1.4	1.4	2.1	2.8	2.1
160°	1.4	2.1	2.8	2.8	2.1
162.5°	1.4	2.1	2.8	2.8	2.8
165°	1.4	2.1	2.8	2.8	2.8
167.5°	2.1	2.1	2.8	3.5	2.8
170°	2.1	2.1	2.8	3.5	2.8
172.5°	2.1	2.1	2.8	3.5	2.8
175°	2.1	2.1	2.8	3.5	2.8
177.5°	2.1	2.1	2.8	3.5	3.5
180°	2.8	2.8	2.8	2.8	2.8



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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	21.22	22.62	21.59	22.94	23.26	9.73	11.13	10.10	11.45	11.78
	3H	24.13	25.37	24.51	25.71	26.08	10.67	11.91	11.05	12.25	12.62
	4H	25.02	26.18	25.43	26.54	26.93	11.19	12.35	11.59	12.71	13.10
	6H	25.52	26.59	25.94	26.96	27.37	11.82	12.89	12.24	13.27	13.67
	8H	25.63	26.65	26.06	27.04	27.46	12.24	13.26	12.67	13.65	14.07
	12H	25.67	26.65	26.11	27.04	27.47	12.69	13.66	13.13	14.05	14.49
4H	2H	21.03	22.19	21.44	22.55	22.94	10.25	11.41	10.66	11.77	12.16
	3H	23.96	24.92	24.38	25.33	25.74	11.44	12.40	11.86	12.81	13.22
	4H	24.86	25.72	25.30	26.14	26.59	12.11	12.97	12.55	13.39	13.84
	6H	25.46	26.20	25.92	26.65	27.12	12.93	13.68	13.40	14.13	14.60
	8H	25.62	26.31	26.09	26.76	27.24	13.47	14.16	13.94	14.61	15.09
	12H	25.71	26.33	26.20	26.81	27.29	14.05	14.66	14.54	15.15	15.63
8H	4H	24.75	25.45	25.23	25.90	26.38	12.70	13.39	13.17	13.85	14.32
	6H	25.35	25.92	25.86	26.42	26.91	13.71	14.28	14.21	14.78	15.27
	8H	25.54	26.06	26.07	26.57	27.07	14.38	14.90	14.91	15.42	15.91
	12H	25.69	26.14	26.21	26.64	27.22	15.15	15.60	15.67	16.10	16.68
12H	4H	24.72	25.33	25.21	25.82	26.30	12.96	13.58	13.45	14.06	14.55
	6H	25.30	25.82	25.83	26.34	26.83	14.02	14.53	14.54	15.05	15.55
	8H	25.52	25.97	26.04	26.47	27.05	14.78	15.24	15.30	15.74	16.31