

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: P893683

Luminaire Tested: 4MB-6SL-A-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893683
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-6SL-A-UNV-L840
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

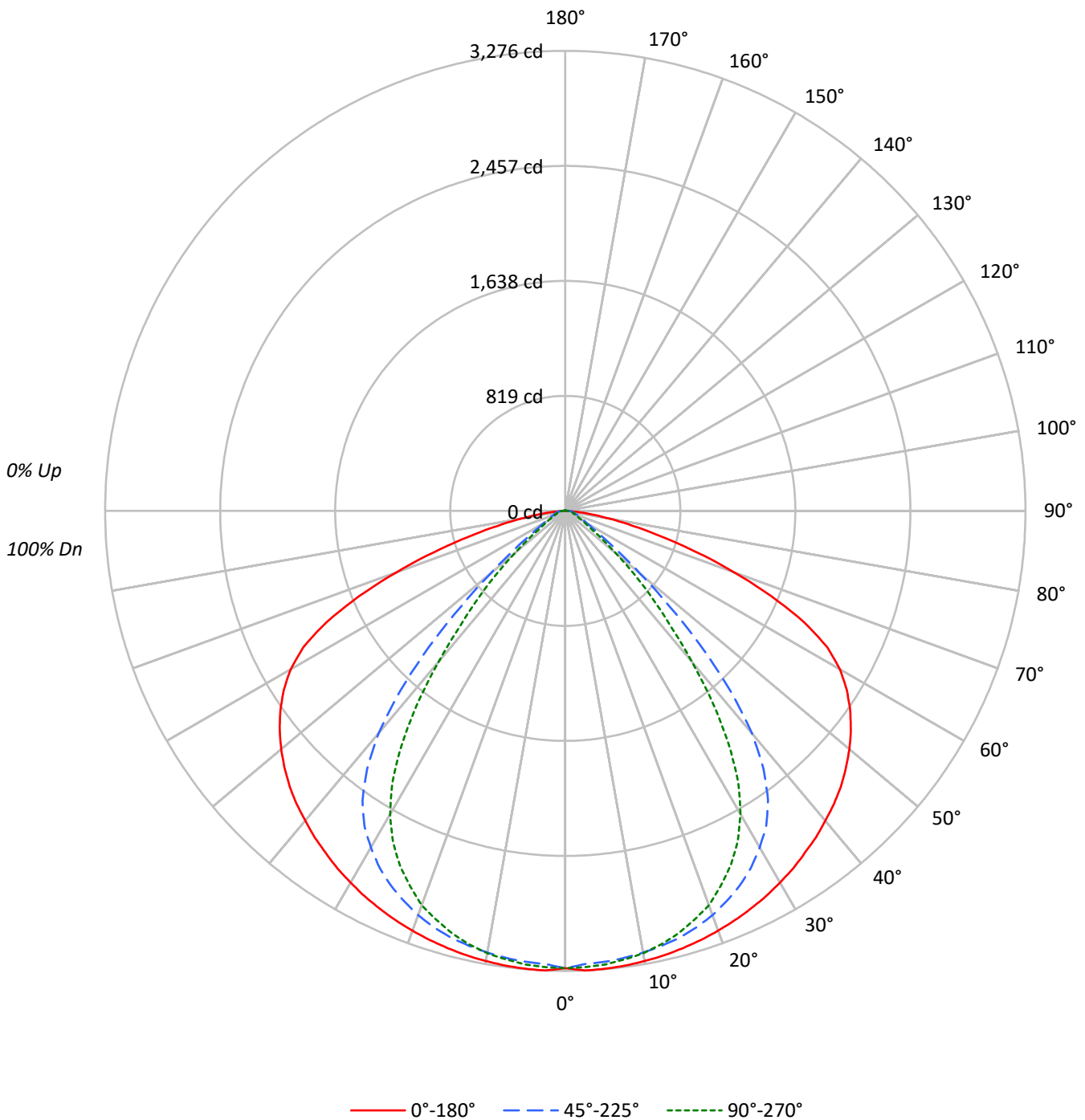
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6675.0 lumens
Efficiency: N/A
Efficacy: 150.3 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): 44.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
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	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°	33162	33162	33162
5°	33454	32957	33150
10°	33664	33030	33077
15°	34000	33173	32830
20°	34479	33201	32390
25°	35121	33056	31295
30°	35940	32539	29328
35°	36966	31287	25215
40°	38283	27478	18638
45°	39969	19828	12536
50°	41826	11078	7480
55°	43961	5728	4096
60°	45990	3725	2900
65°	45205	3060	2301
70°	38123	2817	2147
75°	28044	2872	2306
80°	18709	3384	2909
85°	10213	5480	4417

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 46381 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.2	4.6
10°-20°	893.5	13.4
20°-30°	1359.1	20.4
30°-40°	1552.2	23.3
40°-50°	1252.2	18.8
50°-60°	685.5	10.3
60°-70°	361.4	5.4
70°-80°	177.2	2.7
80°-90°	62.4	0.9
90°-100°	13.4	0.2
100°-110°	1.9	0.0
110°-120°	1.1	0.0
120°-130°	1.0	0.0
130°-140°	1.1	0.0
140°-150°	1.3	0.0
150°-160°	1.2	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	2561.8	38.4
0°-40°	4114.0	61.6
0°-60°	6051.7	90.7
0°-90°	6652.8	99.7
90°-120°	16.4	0.2
90°-150°	19.8	0.3
90°-180°	22.0	0.3
0°-180°	6675.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3256	3256	3256	3256	3256	
5°	3272	3262	3224	3253	3243	312
15°	3225	3205	3146	3141	3114	912
25°	3126	3080	2942	2842	2785	1444
35°	2973	2848	2516	2174	2028	1865
45°	2775	2384	1377	941	870	2142
55°	2476	1019	323	250	231	2209
65°	1876	235	127	103	96	1814
75°	713	132	73	61	59	787
85°	87	69	47	42	38	121
90°	4	36	29	25	23	5
95°	3	4	10	15	14	2
105°	1	0	1	2	2	1
115°	1	1	1	2	1	1
125°	1	1	1	2	1	1
135°	1	1	2	2	1	1
145°	2	2	2	3	2	1
155°	2	2	3	4	3	1
165°	2	3	4	4	4	1
175°	3	3	4	4	4	0
180°	4	4	4	4	4	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3256.2	3256.2	3256.2	3256.2	3256.2
2.5°	3276.0	3267.0	3230.1	3261.6	3252.6
5°	3272.4	3262.5	3223.8	3252.6	3242.7
7.5°	3266.1	3253.5	3211.1	3237.3	3222.0
10°	3255.3	3242.7	3194.0	3214.7	3198.5
12.5°	3242.7	3225.6	3171.5	3182.3	3161.6
15°	3224.7	3204.8	3146.3	3140.9	3113.8
17.5°	3204.8	3180.5	3109.3	3085.9	3053.5
20°	3181.4	3151.7	3063.4	3017.4	2988.6
22.5°	3155.3	3116.5	3005.7	2935.4	2890.4
25°	3125.5	3080.5	2941.7	2841.7	2785.0
27.5°	3094.0	3032.7	2864.3	2732.7	2656.1
30°	3056.2	2982.3	2767.0	2589.5	2493.9
32.5°	3018.3	2919.2	2662.4	2404.8	2291.2
35°	2973.3	2848.0	2516.5	2174.1	2028.1
37.5°	2930.9	2762.4	2319.2	1884.9	1728.1
40°	2879.6	2661.5	2066.9	1552.4	1401.9
42.5°	2830.9	2544.4	1739.8	1231.7	1101.0
45°	2775.1	2384.0	1376.7	940.6	870.4
47.5°	2710.2	2165.1	1001.0	700.1	655.9
50°	2639.9	1864.2	699.2	508.2	472.1
52.5°	2562.4	1457.8	471.2	353.2	333.4
55°	2475.9	1019.0	322.6	249.6	230.7
57.5°	2375.9	663.1	234.3	188.3	175.7
60°	2257.9	423.5	182.9	149.6	142.4
62.5°	2102.9	297.3	150.5	123.4	117.1
65°	1875.9	235.2	127.0	102.7	95.5
67.5°	1588.5	199.1	109.0	86.5	82.0
70°	1280.3	173.0	94.6	74.8	72.1
72.5°	983.9	151.4	82.0	66.7	64.9
75°	712.7	132.4	73.0	61.3	58.6
77.5°	493.7	114.4	64.9	55.0	53.2
80°	319.0	99.1	57.7	50.5	49.6
82.5°	182.9	82.9	52.3	48.7	47.8
85°	87.4	69.4	46.9	42.3	37.8
87.5°	27.9	51.4	36.9	32.4	28.8
90°	3.6	36.0	28.8	25.2	23.4
92.5°	3.6	19.8	20.7	20.7	19.8
95°	2.7	4.5	9.9	15.3	14.4
97.5°	2.7	1.8	6.3	10.8	10.8
100°	1.8	0.9	2.7	7.2	7.2
102.5°	1.8	0.9	0.9	4.5	4.5
105°	0.9	0.0	0.9	1.8	1.8
107.5°	0.9	0.9	0.9	1.8	0.9
110°	0.9	0.9	0.9	1.8	0.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.9	1.8	0.9
115°	0.9	0.9	0.9	1.8	0.9
117.5°	0.9	0.9	0.9	1.8	0.9
120°	0.9	0.9	0.9	1.8	0.9
122.5°	0.9	0.9	0.9	1.8	0.9
125°	0.9	0.9	0.9	1.8	0.9
127.5°	0.9	0.9	0.9	1.8	0.9
130°	0.9	0.9	1.8	1.8	0.9
132.5°	0.9	0.9	1.8	1.8	0.9
135°	0.9	0.9	1.8	1.8	0.9
137.5°	0.9	0.9	1.8	1.8	1.8
140°	1.8	0.9	1.8	1.8	1.8
142.5°	1.8	1.8	1.8	2.7	1.8
145°	1.8	1.8	1.8	2.7	1.8
147.5°	1.8	1.8	2.7	2.7	1.8
150°	1.8	1.8	2.7	2.7	1.8
152.5°	1.8	1.8	2.7	2.7	2.7
155°	1.8	1.8	2.7	3.6	2.7
157.5°	1.8	1.8	2.7	3.6	2.7
160°	1.8	2.7	3.6	3.6	2.7
162.5°	1.8	2.7	3.6	3.6	3.6
165°	1.8	2.7	3.6	3.6	3.6
167.5°	2.7	2.7	3.6	4.5	3.6
170°	2.7	2.7	3.6	4.5	3.6
172.5°	2.7	2.7	3.6	4.5	3.6
175°	2.7	2.7	3.6	4.5	3.6
177.5°	2.7	2.7	3.6	4.5	4.5
180°	3.6	3.6	3.6	3.6	3.6



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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	22.07	23.47	22.44	23.79	24.11	10.58	11.98	10.96	12.31	12.63
	3H	24.98	26.23	25.37	26.56	26.94	11.52	12.77	11.91	13.10	13.47
	4H	25.87	27.04	26.28	27.39	27.78	12.04	13.20	12.45	13.56	13.95
	6H	26.37	27.44	26.79	27.82	28.22	12.68	13.75	13.09	14.12	14.52
	8H	26.48	27.50	26.92	27.90	28.31	13.09	14.11	13.53	14.51	14.92
	12H	26.53	27.50	26.96	27.89	28.33	13.54	14.51	13.98	14.90	15.34
4H	2H	21.89	23.05	22.29	23.41	23.79	11.10	12.27	11.51	12.62	13.01
	3H	24.82	25.77	25.23	26.18	26.59	12.30	13.25	12.71	13.66	14.07
	4H	25.72	26.57	26.16	27.00	27.45	12.96	13.82	13.40	14.24	14.69
	6H	26.31	27.05	26.78	27.50	27.97	13.79	14.53	14.26	14.98	15.45
	8H	26.47	27.16	26.94	27.62	28.09	14.32	15.01	14.79	15.47	15.94
	12H	26.56	27.18	27.05	27.67	28.15	14.90	15.51	15.39	16.00	16.48
8H	4H	25.61	26.30	26.08	26.75	27.23	13.56	14.25	14.03	14.70	15.18
	6H	26.21	26.78	26.71	27.28	27.77	14.56	15.13	15.07	15.63	16.12
	8H	26.40	26.91	26.92	27.43	27.93	15.24	15.75	15.76	16.27	16.77
	12H	26.54	27.00	27.06	27.50	28.07	16.00	16.46	16.52	16.96	17.53
12H	4H	25.57	26.18	26.06	26.67	27.15	13.82	14.43	14.31	14.92	15.40
	6H	26.16	26.67	26.68	27.19	27.69	14.87	15.38	15.39	15.90	16.40
	8H	26.37	26.83	26.89	27.33	27.90	15.64	16.09	16.15	16.59	17.17