

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: P893690

Luminaire Tested: 4MB-6SL-ACL-UNV-L835

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893690
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-15)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-6SL-ACL-UNV-L835
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 3500K (C)
Light Source: -
Ballast/Driver: -

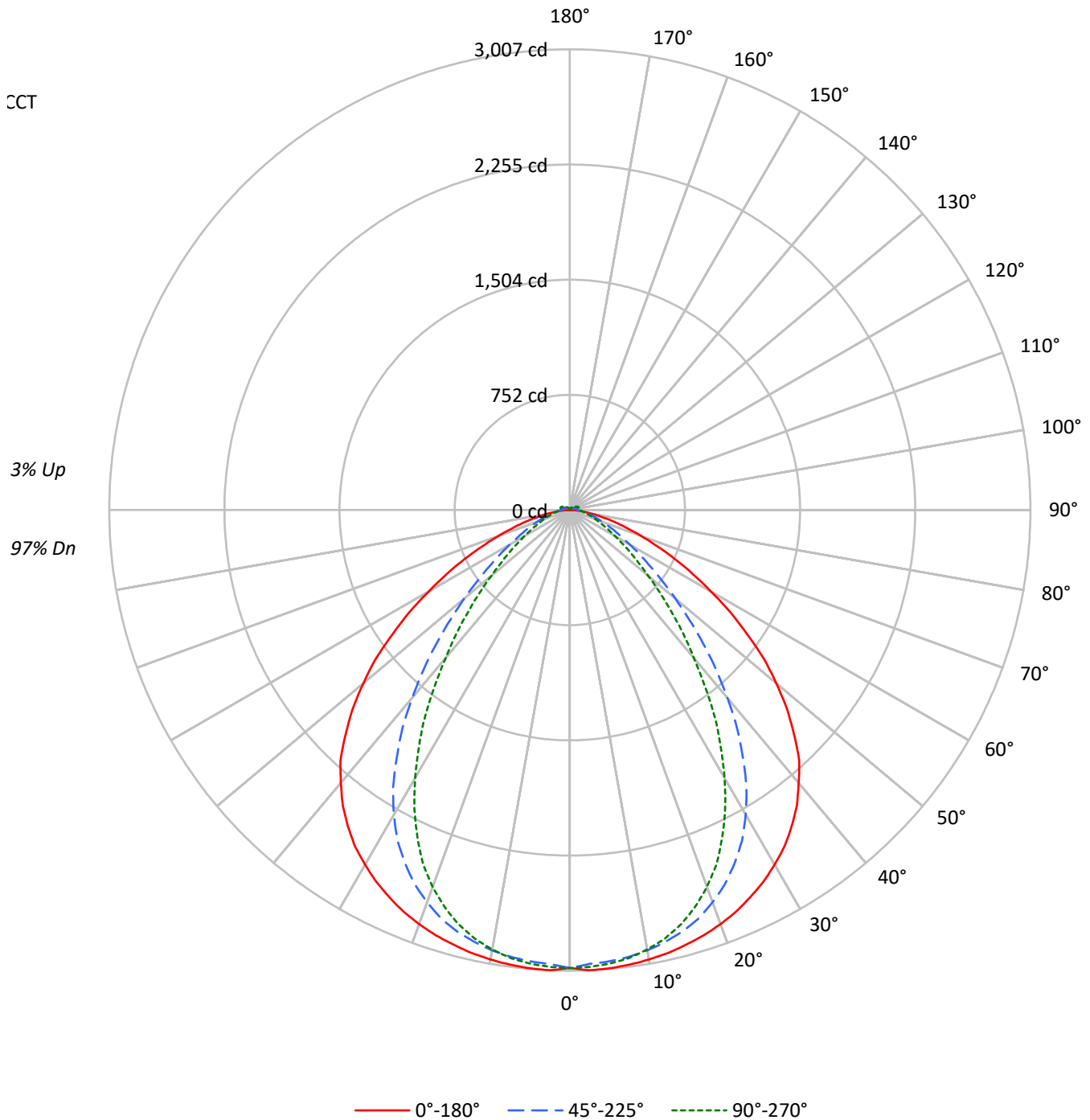
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6133.0 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 3.98' x H: 0.08')
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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	100	100	100	97
1	110	106	102	99	107	103	100	97	99	96	93	94	92	90	90	89	87	87	87	87	85
2	101	94	88	84	99	92	87	82	88	84	80	85	81	78	82	79	76	76	76	76	74
3	94	85	77	72	91	83	76	71	80	74	69	77	72	68	74	70	66	66	66	66	64
4	87	76	68	62	84	75	67	62	72	66	61	69	64	60	67	62	59	59	59	59	57
5	80	69	61	55	78	68	60	55	65	59	54	63	58	53	61	56	52	52	52	52	50
6	75	63	55	49	73	62	54	49	60	53	48	58	52	47	56	51	47	47	47	47	45
7	70	57	50	44	68	57	49	44	55	48	43	53	47	43	52	46	42	42	42	42	40
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	38	38	38	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	35	35	35	33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	32	32	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30448	30448	30448
5°	30642	29621	29574
10°	30696	28978	28537
15°	30788	28225	27237
20°	30937	27188	25460
25°	31028	25747	23093
30°	31059	23768	20120
35°	30927	21004	16831
40°	30378	17743	13246
45°	29209	14323	10270
50°	27192	11114	7705
55°	24343	8507	5893
60°	20914	6539	4489
65°	17438	5159	3569
70°	13949	4140	2916
75°	11110	3335	2482
80°	8136	2753	2172
85°	5591	2338	2001

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 29209 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	4.6
10°-20°	806.7	13.2
20°-30°	1176.1	19.2
30°-40°	1263.6	20.6
40°-50°	1051.7	17.1
50°-60°	703.4	11.5
60°-70°	402.6	6.6
70°-80°	200.2	3.3
80°-90°	81.9	1.3
90°-100°	47.5	0.8
100°-110°	41.9	0.7
110°-120°	30.8	0.5
120°-130°	19.8	0.3
130°-140°	11.8	0.2
140°-150°	6.6	0.1
150°-160°	3.3	0.1
160°-170°	1.4	0.0
170°-180°	0.3	0.0
0°-30°	2266.0	36.9
0°-40°	3529.6	57.6
0°-60°	5284.7	86.2
0°-90°	5969.5	97.3
90°-120°	120.3	2.0
90°-150°	158.5	2.6
90°-180°	164.0	2.7
0°-180°	6133.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2990	2990	2990	2990	2990	
5°	3003	2993	2957	2982	2972	286
15°	2936	2916	2847	2826	2800	830
25°	2788	2722	2544	2416	2356	1286
35°	2524	2341	1969	1727	1651	1576
45°	2070	1721	1230	995	937	1592
55°	1412	1019	641	507	480	1265
65°	756	513	323	262	248	756
75°	304	222	160	141	137	326
85°	59	66	74	78	78	69
90°	9	28	51	60	62	8
95°	13	28	50	60	62	10
105°	9	23	44	58	61	9
115°	4	13	35	48	52	4
125°	3	9	24	35	38	2
135°	2	7	16	24	26	1
145°	2	5	10	16	18	1
155°	2	4	7	10	12	1
165°	3	4	5	6	8	1
175°	3	3	4	4	4	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2989.7	2989.7	2989.7	2989.7	2989.7
2.5°	3007.1	2999.3	2965.3	2992.3	2984.4
5°	3002.8	2993.2	2957.4	2981.8	2972.2
7.5°	2993.2	2982.7	2941.7	2960.9	2950.4
10°	2979.2	2966.1	2919.0	2928.6	2912.1
12.5°	2961.8	2945.2	2886.8	2884.2	2865.8
15°	2936.5	2916.4	2846.7	2825.7	2800.4
17.5°	2910.3	2880.7	2795.2	2752.5	2717.6
20°	2876.3	2837.1	2724.6	2660.9	2617.3
22.5°	2837.1	2783.9	2645.2	2547.5	2502.2
25°	2788.2	2721.9	2544.0	2415.8	2355.6
27.5°	2735.9	2647.8	2434.1	2265.8	2196.9
30°	2673.1	2564.1	2297.2	2094.9	2020.7
32.5°	2606.8	2457.7	2147.2	1915.2	1834.1
35°	2524.0	2340.8	1969.3	1726.8	1651.0
37.5°	2434.1	2201.3	1793.1	1534.1	1448.6
40°	2325.1	2053.9	1599.5	1343.1	1258.5
42.5°	2217.0	1893.4	1413.7	1170.4	1097.1
45°	2070.5	1720.7	1229.7	995.1	936.7
47.5°	1923.1	1535.8	1053.5	852.9	795.4
50°	1759.1	1354.4	899.2	716.0	668.1
52.5°	1599.5	1185.2	758.8	605.3	564.3
55°	1412.0	1018.7	641.0	506.7	480.5
57.5°	1242.8	864.3	540.7	429.1	404.7
60°	1064.0	732.6	452.6	362.8	340.1
62.5°	907.0	615.7	381.1	307.9	292.2
65°	756.1	512.8	322.7	261.6	247.7
67.5°	617.5	428.2	272.1	223.3	211.9
70°	495.4	347.1	229.4	190.1	182.3
72.5°	389.8	279.1	191.0	164.0	157.0
75°	304.4	221.5	159.6	141.3	136.9
77.5°	219.8	172.7	133.4	121.2	118.6
80°	155.2	130.8	109.9	104.7	102.9
82.5°	102.9	95.1	90.7	90.7	89.8
85°	59.3	66.3	74.1	77.6	78.5
87.5°	30.5	44.5	59.3	66.3	67.2
90°	8.7	27.9	50.6	60.2	61.9
92.5°	13.1	27.9	49.7	60.2	61.9
95°	13.1	27.9	49.7	60.2	61.9
97.5°	12.2	27.0	49.7	60.2	61.9
100°	11.3	25.3	48.8	60.2	61.9
102.5°	9.6	24.4	47.1	59.3	61.9
105°	8.7	22.7	44.5	58.4	61.0
107.5°	7.8	19.2	41.9	55.8	59.3
110°	6.1	16.6	40.1	53.2	57.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.2	14.8	37.5	50.6	54.9
115°	4.4	13.1	34.9	48.0	52.3
117.5°	3.5	12.2	31.4	44.5	48.8
120°	2.6	11.3	28.8	41.9	45.4
122.5°	2.6	10.5	25.3	38.4	41.9
125°	2.6	8.7	23.5	34.9	38.4
127.5°	1.7	7.8	20.9	31.4	34.9
130°	1.7	7.8	19.2	28.8	31.4
132.5°	1.7	7.0	17.4	26.2	28.8
135°	1.7	7.0	15.7	23.5	26.2
137.5°	1.7	6.1	14.0	21.8	24.4
140°	1.7	6.1	13.1	19.2	21.8
142.5°	1.7	5.2	11.3	18.3	20.1
145°	1.7	5.2	10.5	15.7	18.3
147.5°	1.7	5.2	9.6	14.8	16.6
150°	1.7	4.4	8.7	12.2	14.8
152.5°	1.7	4.4	7.8	11.3	14.0
155°	1.7	4.4	7.0	9.6	12.2
157.5°	1.7	4.4	7.0	8.7	10.5
160°	2.6	3.5	6.1	7.8	9.6
162.5°	2.6	3.5	5.2	7.0	8.7
165°	2.6	3.5	5.2	6.1	7.8
167.5°	2.6	3.5	4.4	5.2	6.1
170°	2.6	2.6	4.4	4.4	4.4
172.5°	2.6	2.6	3.5	4.4	3.5
175°	2.6	2.6	3.5	3.5	3.5
177.5°	2.6	2.6	3.5	3.5	3.5
180°	2.6	2.6	2.6	2.6	2.6



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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	20.60	22.00	21.01	22.37	22.75	15.90	17.29	16.31	17.66	18.04
	3H	21.70	22.94	22.12	23.33	23.76	17.04	18.28	17.46	18.67	19.10
	4H	22.00	23.17	22.45	23.57	24.02	17.54	18.70	17.98	19.11	19.55
	6H	22.15	23.22	22.61	23.64	24.10	18.04	19.11	18.50	19.54	19.99
	8H	22.17	23.19	22.64	23.63	24.10	18.30	19.32	18.77	19.76	20.23
	12H	22.16	23.14	22.64	23.57	24.07	18.59	19.57	19.07	20.01	20.50
4H	2H	20.58	21.75	21.03	22.15	22.60	16.40	17.56	16.84	17.96	18.41
	3H	21.82	22.78	22.28	23.24	23.70	17.71	18.67	18.17	19.13	19.59
	4H	22.21	23.07	22.69	23.54	24.04	18.30	19.17	18.78	19.64	20.14
	6H	22.44	23.19	22.94	23.68	24.21	18.92	19.67	19.43	20.17	20.69
	8H	22.48	23.18	22.99	23.68	24.21	19.24	19.95	19.75	20.44	20.97
	12H	22.49	23.12	23.02	23.64	24.18	19.62	20.24	20.15	20.77	21.31
8H	4H	22.19	22.89	22.70	23.39	23.92	18.54	19.24	19.05	19.74	20.27
	6H	22.47	23.05	23.01	23.59	24.13	19.27	19.85	19.81	20.39	20.93
	8H	22.54	23.06	23.10	23.62	24.17	19.67	20.19	20.23	20.75	21.30
	12H	22.59	23.05	23.14	23.59	24.22	20.16	20.63	20.72	21.17	21.79
12H	4H	22.17	22.80	22.70	23.32	23.86	18.56	19.18	19.09	19.71	20.25
	6H	22.45	22.97	23.01	23.53	24.08	19.30	19.82	19.86	20.38	20.93
	8H	22.56	23.02	23.11	23.56	24.18	19.76	20.23	20.32	20.77	21.39