

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: P895757

Luminaire Tested: 2MB-2SL-ACL-UNV-L830

Issue Date: 11/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P895757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-3)
Test Lab: INNOVATION CENTER
Issue Date: 11/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-2SL-ACL-UNV-L830
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 3000K (C)
Light Source: -
Ballast/Driver: -

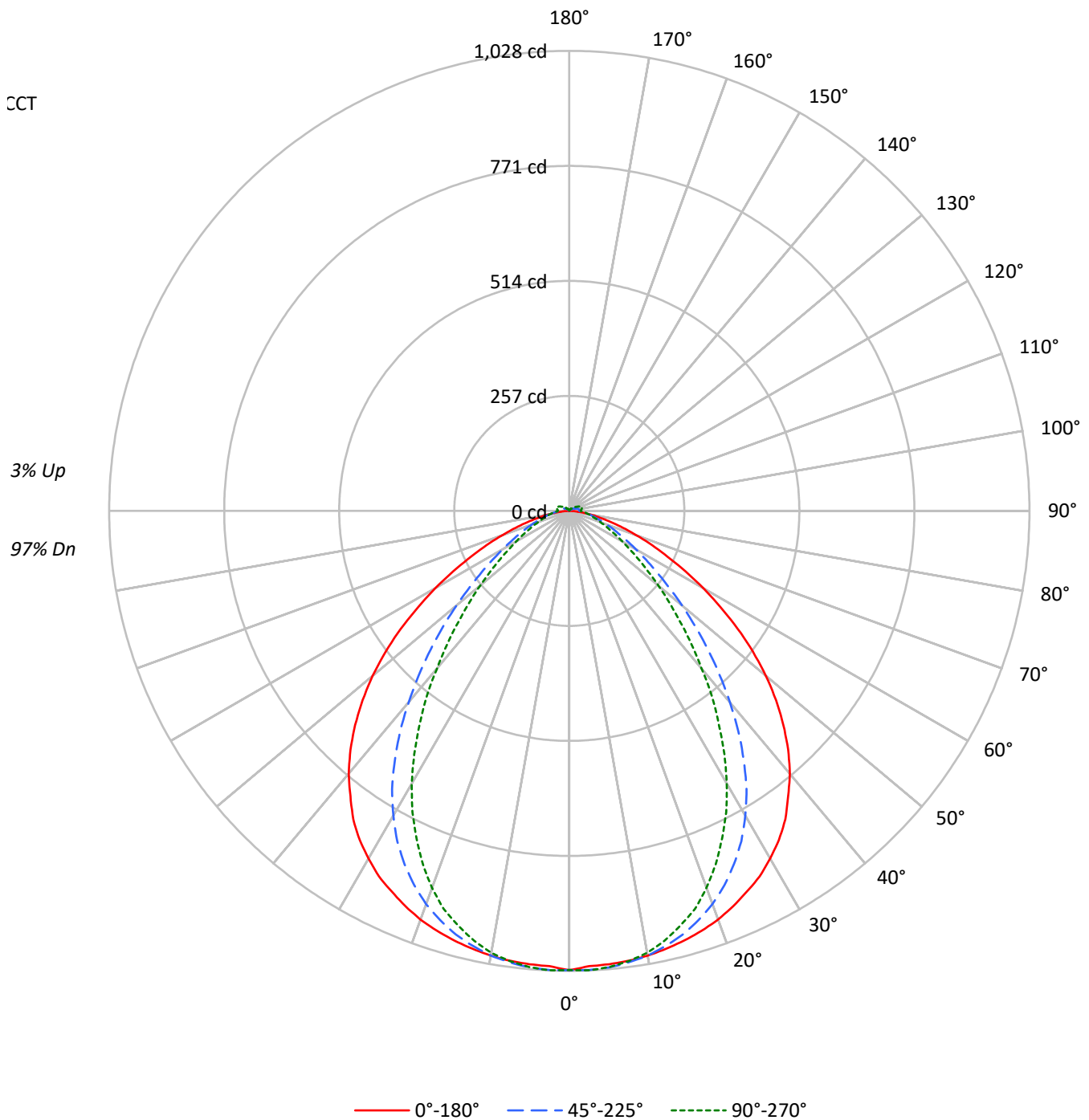
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2138.0 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.07 / 1.17
Luminous Opening: Rectangular w/ Sides (W: 0.27' x L: 1.98' x H: 0.08')
CIE Type: Direct

Input Watts (W): 14.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.92
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
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	97	
1	110	105	102	98	107	103	100	97	98	96	93	94	92	90	90	88	87	87	84	
2	101	94	88	83	98	92	86	82	88	83	80	84	81	77	81	78	75	75	73	
3	93	84	77	71	91	82	76	70	79	73	69	76	71	67	73	69	66	66	64	
4	86	76	68	62	84	74	67	61	71	65	60	69	63	59	66	62	58	58	56	
5	80	68	60	54	78	67	60	54	65	58	53	63	57	52	61	56	52	52	50	
6	74	62	54	48	72	61	54	48	59	52	47	57	51	47	56	50	46	46	44	
7	69	57	49	43	68	56	49	43	54	48	43	53	47	42	51	46	42	42	40	
8	65	52	45	39	63	52	44	39	50	43	39	49	43	38	47	42	38	38	36	
9	61	48	41	36	59	48	40	35	46	40	35	45	39	35	44	39	35	35	33	
10	57	45	38	33	56	44	37	32	43	37	32	42	36	32	41	36	32	32	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21011	21011	21011
5°	20825	20595	20470
10°	20827	20091	19758
15°	20828	19467	18756
20°	20857	18668	17530
25°	20798	17611	15917
30°	20706	16234	14090
35°	20428	14434	11939
40°	19792	12312	9730
45°	18793	10132	7711
50°	17391	8054	6018
55°	15484	6262	4660
60°	13188	4889	3649
65°	10781	3884	2900
70°	8554	3147	2380
75°	6605	2563	2081
80°	4703	2158	1884
85°	2681	1880	1696

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18793 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.2	4.5
10°-20°	275.8	12.9
20°-30°	400.8	18.7
30°-40°	433.2	20.3
40°-50°	365.5	17.1
50°-60°	250.4	11.7
60°-70°	146.0	6.8
70°-80°	74.6	3.5
80°-90°	32.1	1.5
90°-100°	19.5	0.9
100°-110°	17.4	0.8
110°-120°	11.8	0.6
120°-130°	6.6	0.3
130°-140°	3.6	0.2
140°-150°	1.9	0.1
150°-160°	1.0	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	773.7	36.2
0°-40°	1206.9	56.5
0°-60°	1822.8	85.3
0°-90°	2075.5	97.1
90°-120°	48.8	2.3
90°-150°	61.0	2.9
90°-180°	62.0	2.9
0°-180°	2138.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1017	1023	1024	1026	1023	97
15°	994	993	980	968	959	281
25°	939	920	871	828	808	433
35°	841	787	679	606	582	524
45°	676	572	438	370	350	520
55°	460	348	238	200	189	410
65°	243	178	123	105	100	244
75°	97	79	63	58	57	105
85°	17	23	31	33	33	21
90°	1	11	23	25	25	1
95°	0	10	22	26	27	0
105°	0	6	19	28	29	0
115°	0	4	12	20	23	0
125°	0	2	7	12	14	0
135°	1	2	5	7	8	1
145°	1	1	4	4	5	0
155°	1	1	2	3	4	0
165°	1	1	1	2	2	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1026.1	1026.1	1026.1	1026.1	1026.1
2.5°	1018.3	1024.7	1026.8	1029.6	1027.5
5°	1016.9	1023.2	1024.0	1026.1	1023.2
7.5°	1014.1	1019.0	1017.6	1017.6	1014.8
10°	1009.1	1012.0	1009.1	1005.6	1002.8
12.5°	1002.1	1004.2	995.7	990.8	983.8
15°	993.6	992.9	980.2	968.2	959.1
17.5°	983.8	978.8	959.1	940.7	933.0
20°	971.8	962.6	935.1	908.3	896.3
22.5°	956.3	943.6	905.5	870.9	854.7
25°	938.6	920.3	870.9	827.9	807.5
27.5°	921.0	893.5	832.1	778.5	758.8
30°	897.0	862.5	786.3	725.7	703.8
32.5°	871.6	827.9	736.9	666.4	644.6
35°	841.3	787.0	679.1	606.5	582.5
37.5°	803.2	739.1	620.6	544.4	524.0
40°	766.6	686.9	557.8	482.4	459.8
42.5°	723.5	630.4	497.2	423.8	403.4
45°	676.3	571.9	437.9	370.2	349.8
47.5°	626.2	516.2	381.5	318.8	302.5
50°	573.3	459.1	328.6	274.3	259.5
52.5°	516.9	402.0	280.0	234.8	221.4
55°	459.8	348.4	238.4	199.6	189.0
57.5°	399.8	296.9	203.1	170.0	160.1
60°	345.5	253.9	171.4	145.3	137.5
62.5°	292.0	214.4	146.0	123.4	117.1
65°	242.6	178.4	123.4	105.1	100.1
67.5°	199.6	149.5	105.8	90.3	86.7
70°	159.4	122.0	88.9	77.6	74.0
72.5°	125.5	98.7	74.8	67.0	64.9
75°	96.6	79.0	62.8	58.5	57.1
77.5°	70.5	60.6	52.9	50.8	50.1
80°	49.4	45.8	44.4	44.4	44.4
82.5°	31.0	33.8	37.4	38.8	38.8
85°	16.9	23.3	31.0	33.1	33.1
87.5°	7.1	16.2	26.1	28.2	27.5
90°	0.7	10.6	22.6	25.4	25.4
92.5°	0.0	10.6	22.6	25.4	25.4
95°	0.0	9.9	21.9	26.1	26.8
97.5°	0.0	9.2	21.9	26.8	27.5
100°	0.7	8.5	21.9	27.5	28.2
102.5°	0.0	7.1	20.5	27.5	28.9
105°	0.0	5.6	19.0	27.5	28.9
107.5°	0.0	4.2	17.6	26.1	28.2
110°	0.0	4.2	16.2	24.7	26.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	3.5	14.1	22.6	25.4
115°	0.0	3.5	12.0	20.5	23.3
117.5°	0.0	2.8	10.6	18.3	20.5
120°	0.0	2.8	9.2	16.2	18.3
122.5°	0.0	2.8	8.5	14.1	16.2
125°	0.0	2.1	7.1	12.0	14.1
127.5°	0.7	2.1	6.3	10.6	12.7
130°	0.7	2.1	5.6	9.2	11.3
132.5°	0.7	2.1	4.9	8.5	9.9
135°	0.7	2.1	4.9	7.1	8.5
137.5°	0.7	2.1	4.2	6.3	7.1
140°	0.7	2.1	3.5	5.6	6.3
142.5°	0.7	1.4	3.5	4.9	5.6
145°	0.7	1.4	3.5	4.2	4.9
147.5°	0.7	1.4	2.8	4.2	4.2
150°	0.7	1.4	2.8	3.5	4.2
152.5°	0.7	1.4	2.1	3.5	3.5
155°	0.7	1.4	2.1	2.8	3.5
157.5°	0.7	1.4	2.1	2.8	2.8
160°	0.7	1.4	1.4	2.1	2.8
162.5°	0.7	0.7	1.4	2.1	2.1
165°	0.7	0.7	1.4	2.1	2.1
167.5°	0.7	0.7	1.4	1.4	2.1
170°	0.7	0.7	1.4	1.4	1.4
172.5°	0.7	0.7	1.4	1.4	0.7
175°	0.7	0.7	1.4	1.4	0.7
177.5°	0.7	0.7	1.4	0.7	0.7
180°	0.7	0.7	0.7	0.7	0.7



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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	19.11	20.51	19.53	20.89	21.28	15.44	16.84	15.85	17.22	17.60
	3H	20.18	21.43	20.61	21.82	22.26	16.62	17.87	17.05	18.26	18.70
	4H	20.47	21.64	20.92	22.05	22.51	17.14	18.32	17.59	18.73	19.18
	6H	20.61	21.69	21.07	22.11	22.58	17.68	18.76	18.14	19.19	19.65
	8H	20.62	21.65	21.09	22.10	22.57	17.96	18.99	18.43	19.44	19.91
	12H	20.61	21.59	21.09	22.03	22.53	18.25	19.23	18.73	19.68	20.18
4H	2H	19.14	20.32	19.59	20.73	21.18	15.89	17.07	16.34	17.48	17.93
	3H	20.37	21.34	20.83	21.80	22.27	17.26	18.23	17.72	18.69	19.16
	4H	20.75	21.62	21.23	22.09	22.60	17.89	18.76	18.37	19.23	19.74
	6H	20.97	21.72	21.47	22.22	22.75	18.56	19.32	19.07	19.82	20.35
	8H	21.00	21.71	21.51	22.21	22.74	18.90	19.61	19.42	20.11	20.65
	12H	21.00	21.64	21.53	22.17	22.71	19.28	19.91	19.81	20.45	20.99
8H	4H	20.76	21.47	21.28	21.97	22.51	18.11	18.81	18.62	19.31	19.85
	6H	21.04	21.63	21.58	22.17	22.72	18.89	19.48	19.44	20.02	20.57
	8H	21.11	21.63	21.67	22.20	22.75	19.33	19.86	19.89	20.42	20.97
	12H	21.14	21.61	21.70	22.16	22.79	19.83	20.30	20.39	20.84	21.47
12H	4H	20.75	21.38	21.28	21.92	22.46	18.11	18.75	18.64	19.28	19.82
	6H	21.03	21.56	21.60	22.12	22.68	18.92	19.45	19.48	20.01	20.57
	8H	21.14	21.61	21.70	22.15	22.78	19.42	19.89	19.98	20.43	21.06