

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: P895759

Luminaire Tested: 2MB-2SL-ACL-UNV-L840

Issue Date: 11/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P895759
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-L840
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 4000K (C)
Light Source: -
Ballast/Driver: -

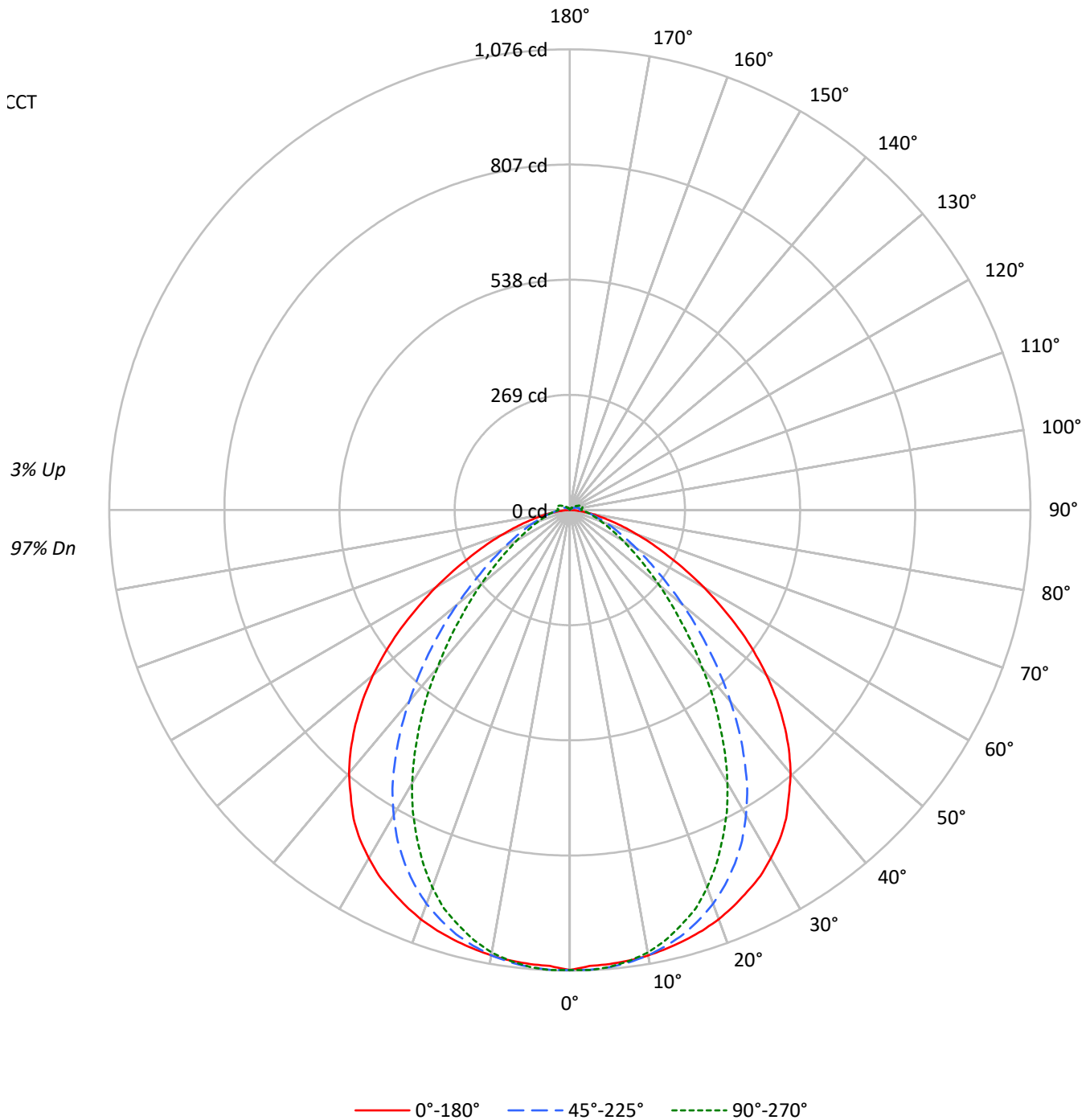
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2238.0 lumens
Efficiency: N/A
Efficacy: 150.2 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

TEST NUMBER: P895759
CATALOG NUMBER: 2MB-2SL-ACL-UNV-L840

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	109	109	109	104	104	104	99	99	99	99	99	99	97
1	110	105	102	98	107	103	100	97	98	96	93	94	92	90	90	88	87	87	87	87	84
2	101	94	88	83	98	92	86	82	88	83	80	84	81	77	81	78	75	75	75	75	73
3	93	84	77	71	91	82	76	70	79	73	69	76	71	67	73	69	66	66	66	66	64
4	86	76	68	62	84	74	67	61	71	65	60	69	63	59	66	62	58	58	58	58	56
5	80	68	60	54	78	67	60	54	65	58	53	63	57	52	61	56	52	52	52	52	50
6	74	62	54	48	72	61	54	48	59	52	47	57	51	47	56	50	46	46	46	46	44
7	69	57	49	43	68	56	49	43	54	48	43	53	47	42	51	46	42	42	42	42	40
8	65	52	45	39	63	52	44	39	50	43	39	49	43	38	47	42	38	38	38	38	36
9	61	48	41	36	59	48	40	35	46	40	35	45	39	35	44	39	35	35	35	35	33
10	57	45	38	33	56	44	37	32	43	37	32	42	36	32	41	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21994	21994	21994
5°	21800	21556	21428
10°	21801	21030	20682
15°	21803	20379	19632
20°	21831	19540	18350
25°	21771	18436	16660
30°	21675	16994	14748
35°	21385	15110	12497
40°	20717	12888	10185
45°	19671	10607	8071
50°	18203	8431	6301
55°	16208	6553	4877
60°	13806	5118	3819
65°	11283	4067	3036
70°	8951	3293	2492
75°	6913	2681	2180
80°	4922	2260	1973
85°	2808	1971	1778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19671 cd/sqm



TEST NUMBER: P895759
 CATALOG NUMBER: 2MB-2SL-ACL-UNV-L840

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	4.5
10°-20°	288.7	12.9
20°-30°	419.5	18.7
30°-40°	453.5	20.3
40°-50°	382.6	17.1
50°-60°	262.2	11.7
60°-70°	152.8	6.8
70°-80°	78.0	3.5
80°-90°	33.6	1.5
90°-100°	20.4	0.9
100°-110°	18.3	0.8
110°-120°	12.4	0.6
120°-130°	6.9	0.3
130°-140°	3.8	0.2
140°-150°	2.0	0.1
150°-160°	1.1	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	809.9	36.2
0°-40°	1263.4	56.4
0°-60°	1908.1	85.3
0°-90°	2172.6	97.1
90°-120°	51.1	2.3
90°-150°	63.9	2.9
90°-180°	65.0	2.9
0°-180°	2238.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1064	1071	1072	1074	1071	101
15°	1040	1039	1026	1014	1004	294
25°	982	963	912	867	845	453
35°	881	824	711	635	610	549
45°	708	599	458	388	366	544
55°	481	365	250	209	198	429
65°	254	187	129	110	105	255
75°	101	83	66	61	60	109
85°	18	24	32	35	35	22
90°	1	11	24	27	27	1
95°	0	10	23	27	28	0
105°	0	6	20	29	30	0
115°	0	4	12	21	24	0
125°	0	2	7	12	15	0
135°	1	2	5	7	9	1
145°	1	2	4	4	5	0
155°	1	2	2	3	4	0
165°	1	1	2	2	2	0
175°	1	1	2	2	1	0
180°	1	1	1	1	1	



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 CATALOG NUMBER: 2MB-2SL-ACL-UNV-L840

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1065.9	1072.6	1074.8	1077.7	1075.5
5°	1064.5	1071.1	1071.8	1074.1	1071.1
7.5°	1061.5	1066.7	1065.2	1065.2	1062.2
10°	1056.3	1059.3	1056.3	1052.7	1049.7
12.5°	1049.0	1051.2	1042.3	1037.1	1029.8
15°	1040.1	1039.4	1026.1	1013.5	1003.9
17.5°	1029.8	1024.6	1003.9	984.7	976.6
20°	1017.2	1007.6	978.8	950.8	938.2
22.5°	1001.0	987.7	947.8	911.7	894.7
25°	982.5	963.3	911.7	866.6	845.2
27.5°	964.1	935.3	871.1	815.0	794.3
30°	939.0	902.8	823.1	759.6	736.7
32.5°	912.4	866.6	771.4	697.6	674.7
35°	880.7	823.8	710.9	634.8	609.7
37.5°	840.8	773.6	649.6	569.9	548.5
40°	802.4	719.0	583.9	504.9	481.3
42.5°	757.4	659.9	520.4	443.6	422.2
45°	707.9	598.7	458.4	387.5	366.1
47.5°	655.5	540.4	399.4	333.7	316.7
50°	600.1	480.6	344.0	287.2	271.7
52.5°	541.1	420.8	293.1	245.8	231.8
55°	481.3	364.7	249.5	208.9	197.8
57.5°	418.6	310.8	212.6	177.9	167.6
60°	361.7	265.7	179.4	152.1	143.9
62.5°	305.6	224.4	152.8	129.2	122.5
65°	253.9	186.8	129.2	110.0	104.8
67.5°	208.9	156.5	110.7	94.5	90.8
70°	166.8	127.7	93.0	81.2	77.5
72.5°	131.4	103.3	78.2	70.1	67.9
75°	101.1	82.7	65.7	61.3	59.8
77.5°	73.8	63.5	55.4	53.1	52.4
80°	51.7	48.0	46.5	46.5	46.5
82.5°	32.5	35.4	39.1	40.6	40.6
85°	17.7	24.4	32.5	34.7	34.7
87.5°	7.4	17.0	27.3	29.5	28.8
90°	0.7	11.1	23.6	26.6	26.6
92.5°	0.0	11.1	23.6	26.6	26.6
95°	0.0	10.3	22.9	27.3	28.1
97.5°	0.0	9.6	22.9	28.1	28.8
100°	0.7	8.9	22.9	28.8	29.5
102.5°	0.0	7.4	21.4	28.8	30.3
105°	0.0	5.9	19.9	28.8	30.3
107.5°	0.0	4.4	18.5	27.3	29.5
110°	0.0	4.4	17.0	25.8	28.1



TEST NUMBER: P895759
 CATALOG NUMBER: 2MB-2SL-ACL-UNV-L840

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	3.7	14.8	23.6	26.6
115°	0.0	3.7	12.5	21.4	24.4
117.5°	0.0	3.0	11.1	19.2	21.4
120°	0.0	3.0	9.6	17.0	19.2
122.5°	0.0	3.0	8.9	14.8	17.0
125°	0.0	2.2	7.4	12.5	14.8
127.5°	0.7	2.2	6.6	11.1	13.3
130°	0.7	2.2	5.9	9.6	11.8
132.5°	0.7	2.2	5.2	8.9	10.3
135°	0.7	2.2	5.2	7.4	8.9
137.5°	0.7	2.2	4.4	6.6	7.4
140°	0.7	2.2	3.7	5.9	6.6
142.5°	0.7	1.5	3.7	5.2	5.9
145°	0.7	1.5	3.7	4.4	5.2
147.5°	0.7	1.5	3.0	4.4	4.4
150°	0.7	1.5	3.0	3.7	4.4
152.5°	0.7	1.5	2.2	3.7	3.7
155°	0.7	1.5	2.2	3.0	3.7
157.5°	0.7	1.5	2.2	3.0	3.0
160°	0.7	1.5	1.5	2.2	3.0
162.5°	0.7	0.7	1.5	2.2	2.2
165°	0.7	0.7	1.5	2.2	2.2
167.5°	0.7	0.7	1.5	1.5	2.2
170°	0.7	0.7	1.5	1.5	1.5
172.5°	0.7	0.7	1.5	1.5	0.7
175°	0.7	0.7	1.5	1.5	0.7
177.5°	0.7	0.7	1.5	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	19.27	20.67	19.69	21.05	21.44	15.60	17.00	16.01	17.37	17.76
	3H	20.34	21.59	20.77	21.98	22.42	16.78	18.03	17.20	18.42	18.85
	4H	20.63	21.80	21.08	22.21	22.66	17.30	18.47	17.75	18.88	19.34
	6H	20.76	21.85	21.23	22.27	22.74	17.84	18.92	18.30	19.35	19.81
	8H	20.78	21.81	21.25	22.25	22.73	18.12	19.14	18.59	19.59	20.07
	12H	20.76	21.75	21.24	22.19	22.69	18.41	19.39	18.89	19.83	20.33
4H	2H	19.30	20.48	19.75	20.89	21.34	16.05	17.22	16.50	17.63	18.09
	3H	20.53	21.50	20.99	21.96	22.43	17.42	18.39	17.88	18.84	19.32
	4H	20.90	21.78	21.39	22.25	22.76	18.05	18.92	18.53	19.39	19.90
	6H	21.12	21.88	21.63	22.38	22.91	18.72	19.48	19.22	19.97	20.50
	8H	21.16	21.87	21.67	22.37	22.90	19.06	19.77	19.58	20.27	20.81
	12H	21.16	21.79	21.69	22.33	22.87	19.44	20.07	19.97	20.61	21.15
8H	4H	20.92	21.63	21.44	22.13	22.67	18.26	18.97	18.78	19.47	20.01
	6H	21.20	21.79	21.74	22.33	22.88	19.05	19.64	19.59	20.18	20.73
	8H	21.27	21.79	21.83	22.36	22.91	19.49	20.01	20.05	20.58	21.13
	12H	21.30	21.77	21.86	22.32	22.95	19.99	20.46	20.55	21.00	21.63
12H	4H	20.91	21.54	21.44	22.08	22.62	18.27	18.91	18.80	19.44	19.98
	6H	21.19	21.72	21.76	22.28	22.84	19.08	19.61	19.64	20.17	20.73
	8H	21.30	21.77	21.86	22.31	22.94	19.58	20.04	20.14	20.59	21.22