

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: P894122

Luminaire Tested: 4MB-SC3-AOL-UNV-CC83-LOW-5000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894122
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-14)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-AOL-UNV-CC83-LOW-5000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 800
5000K CCT, LOW lumen setting
Light Source: -
Ballast/Driver: -

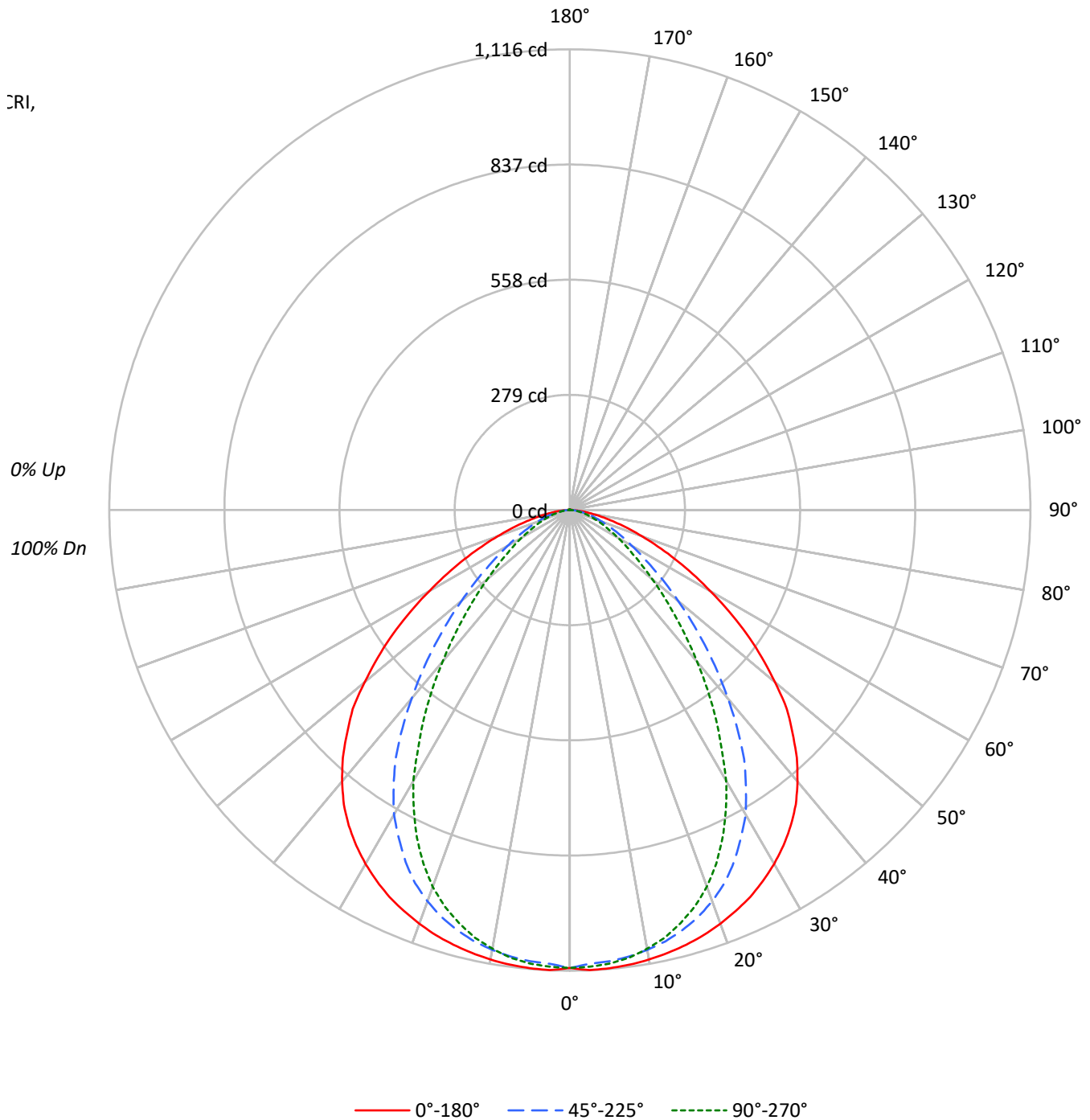
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2215.9 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.06 / 1.16
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 16.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9915
Total Harmonic Distortion (THDi): 6.67573310469889
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P894122
CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-LOW-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P894122

CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-LOW-5000K

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	104	101	98	100	98	95	96	94	92	93	91	89	89	89	89	87
2	102	95	89	85	100	93	88	84	90	85	82	87	83	80	84	81	78	78	78	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	70	76	72	68	68	68	68	66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	60	60	60	58
5	81	70	62	56	79	69	61	55	67	60	55	65	59	54	63	58	54	54	54	54	52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	48	48	48	46
7	70	58	50	45	69	57	50	44	56	49	44	54	48	44	53	48	43	43	43	43	42
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	39	39	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	36	36	36	34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	33	33	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11297	11297	11297
5°	11390	11217	11276
10°	11435	11189	11159
15°	11494	11109	10924
20°	11557	10930	10526
25°	11621	10574	9845
30°	11642	10018	8914
35°	11605	9152	7667
40°	11411	7920	6371
45°	10986	6655	5156
50°	10281	5420	4129
55°	9290	4357	3311
60°	8011	3546	2742
65°	6779	2952	2256
70°	5532	2510	1915
75°	4435	2117	1629
80°	3454	1812	1402
85°	2676	1601	1262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10986 cd/sqm



TEST NUMBER: P894122

CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-LOW-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.1	4.7
10°-20°	298.9	13.5
20°-30°	435.7	19.7
30°-40°	469.7	21.2
40°-50°	393.7	17.8
50°-60°	266.6	12.0
60°-70°	152.0	6.9
70°-80°	69.5	3.1
80°-90°	18.2	0.8
90°-100°	2.3	0.1
100°-110°	1.5	0.1
110°-120°	0.8	0.0
120°-130°	0.5	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	839.7	37.9
0°-40°	1309.4	59.1
0°-60°	1969.6	88.9
0°-90°	2209.4	99.7
90°-120°	4.6	0.2
90°-150°	5.9	0.3
90°-180°	7.0	0.3
0°-180°	2215.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1109	1109	1109	1109	1109	
5°	1114	1111	1097	1106	1103	106
15°	1090	1081	1054	1047	1036	308
25°	1034	1007	941	898	876	476
35°	933	863	736	646	617	583
45°	763	636	462	381	358	587
55°	523	383	245	199	186	466
65°	281	196	122	99	94	281
75°	113	83	54	44	41	123
85°	23	19	14	12	11	27
90°	3	3	2	2	1	3
95°	5	3	2	1	1	4
105°	3	2	1	1	0	3
115°	2	1	1	0	0	2
125°	1	1	1	0	0	1
135°	0	1	1	1	0	0
145°	1	1	1	1	1	0
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P894122

CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-LOW-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1109.3	1109.3	1109.3	1109.3	1109.3
2.5°	1115.7	1112.8	1100.1	1110.6	1107.4
5°	1114.1	1110.6	1097.2	1106.1	1103.0
7.5°	1110.9	1106.5	1091.5	1098.2	1094.1
10°	1105.8	1100.4	1082.0	1085.8	1079.1
12.5°	1098.8	1092.1	1070.2	1069.2	1061.3
15°	1090.2	1080.7	1053.6	1046.6	1036.1
17.5°	1079.7	1067.6	1033.9	1019.9	1007.2
20°	1066.4	1050.8	1008.5	986.2	971.2
22.5°	1051.1	1030.1	978.9	943.2	927.0
25°	1034.2	1006.9	941.0	897.7	876.1
27.5°	1013.2	978.9	897.1	841.1	818.8
30°	990.0	946.4	851.9	780.3	758.0
32.5°	963.6	909.2	794.3	714.7	683.5
35°	933.4	863.0	736.1	646.0	616.7
37.5°	899.3	815.0	666.4	576.6	547.0
40°	858.3	758.0	595.7	506.9	479.2
42.5°	814.0	700.1	527.9	440.7	416.9
45°	762.8	636.4	462.1	380.9	358.0
47.5°	713.5	572.2	400.3	326.2	307.4
50°	648.9	503.7	342.1	276.2	260.6
52.5°	585.9	440.4	292.4	236.1	221.5
55°	523.2	382.8	245.4	198.9	186.5
57.5°	457.0	326.5	206.5	168.3	160.1
60°	393.3	277.8	174.1	141.3	134.6
62.5°	335.1	232.9	147.3	119.3	113.0
65°	281.3	195.7	122.5	99.3	93.6
67.5°	230.4	161.0	102.2	82.7	78.6
70°	185.8	130.5	84.3	68.1	64.3
72.5°	147.3	104.4	67.5	55.7	51.6
75°	112.7	82.7	53.8	43.9	41.4
77.5°	84.0	62.4	41.4	33.7	31.8
80°	58.9	45.2	30.9	25.5	23.9
82.5°	40.1	31.2	21.6	17.8	16.9
85°	22.9	19.4	13.7	11.5	10.8
87.5°	11.8	10.2	7.3	5.4	4.8
90°	3.2	3.2	1.9	1.6	1.3
92.5°	5.1	2.9	1.9	1.3	1.0
95°	4.8	2.9	1.6	1.0	1.0
97.5°	4.5	2.9	1.3	1.0	0.6
100°	4.1	2.5	1.3	0.6	0.6
102.5°	3.8	2.5	1.3	0.6	0.6
105°	3.2	2.2	1.0	0.6	0.3
107.5°	2.9	1.9	1.0	0.6	0.3
110°	2.2	1.6	1.0	0.6	0.3



TEST NUMBER: P894122

CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-LOW-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.9	1.6	0.6	0.6	0.3
115°	1.6	1.3	0.6	0.3	0.3
117.5°	1.3	1.0	0.6	0.3	0.3
120°	1.0	1.0	0.6	0.3	0.3
122.5°	1.0	0.6	0.6	0.3	0.3
125°	0.6	0.6	0.6	0.3	0.3
127.5°	0.6	0.6	0.6	0.3	0.3
130°	0.6	0.6	0.6	0.3	0.3
132.5°	0.6	0.6	0.6	0.6	0.3
135°	0.3	0.6	0.6	0.6	0.3
137.5°	0.6	0.6	0.6	0.6	0.6
140°	0.6	0.6	0.6	0.6	0.6
142.5°	0.6	0.6	0.6	0.6	0.6
145°	0.6	0.6	0.6	0.6	0.6
147.5°	0.6	0.6	0.6	0.6	0.6
150°	0.6	0.6	0.6	0.6	0.6
152.5°	0.6	0.6	0.6	0.6	0.6
155°	0.6	0.6	0.6	1.0	1.0
157.5°	0.6	0.6	1.0	1.0	1.0
160°	0.6	0.6	1.0	1.0	1.0
162.5°	0.6	0.6	1.0	1.0	1.0
165°	0.6	1.0	1.0	1.0	1.0
167.5°	0.6	1.0	1.0	1.0	1.3
170°	0.6	1.0	1.0	1.3	1.3
172.5°	0.6	1.0	1.0	1.3	1.3
175°	1.0	1.0	1.0	1.3	1.3
177.5°	1.0	1.0	1.0	1.3	1.3
180°	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P894122
 CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-LOW-5000K

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	18.79	20.23	19.16	20.55	20.87	13.64	15.07	14.01	15.39	15.72
	3H	20.10	21.38	20.48	21.72	22.09	14.65	15.93	15.03	16.26	16.64
	4H	20.53	21.72	20.93	22.08	22.47	14.98	16.18	15.39	16.54	16.93
	6H	20.79	21.90	21.21	22.27	22.67	15.21	16.31	15.63	16.69	17.09
	8H	20.86	21.91	21.30	22.31	22.72	15.28	16.33	15.71	16.72	17.13
	12H	20.90	21.91	21.34	22.29	22.73	15.32	16.32	15.76	16.71	17.15
4H	2H	18.79	19.99	19.20	20.35	20.73	14.26	15.46	14.66	15.81	16.20
	3H	20.26	21.24	20.67	21.65	22.06	15.46	16.44	15.87	16.85	17.26
	4H	20.78	21.67	21.22	22.09	22.54	15.87	16.76	16.31	17.18	17.63
	6H	21.16	21.93	21.62	22.38	22.85	16.18	16.95	16.65	17.40	17.87
	8H	21.27	21.99	21.74	22.44	22.91	16.28	16.99	16.75	17.44	17.92
	12H	21.35	21.98	21.84	22.47	22.95	16.35	16.98	16.84	17.47	17.95
8H	4H	20.76	21.48	21.23	21.93	22.41	16.21	16.92	16.68	17.37	17.85
	6H	21.20	21.78	21.70	22.28	22.77	16.60	17.19	17.10	17.69	18.17
	8H	21.35	21.88	21.87	22.40	22.89	16.74	17.27	17.26	17.79	18.28
	12H	21.48	21.95	22.00	22.45	23.02	16.86	17.33	17.38	17.83	18.41
12H	4H	20.74	21.37	21.22	21.86	22.34	16.25	16.89	16.74	17.38	17.85
	6H	21.16	21.69	21.68	22.21	22.71	16.67	17.20	17.19	17.71	18.21
	8H	21.35	21.82	21.87	22.32	22.89	16.86	17.33	17.37	17.82	18.40