

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: P894103

Luminaire Tested: 4MB-SC3-ACL-UNV-CC83-LOW-4000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894103
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-SC3-ACL-UNV-CC83-LOW-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS, 80CRI, 4000K CC
LOW lumen setting
Light Source: -
Ballast/Driver: -

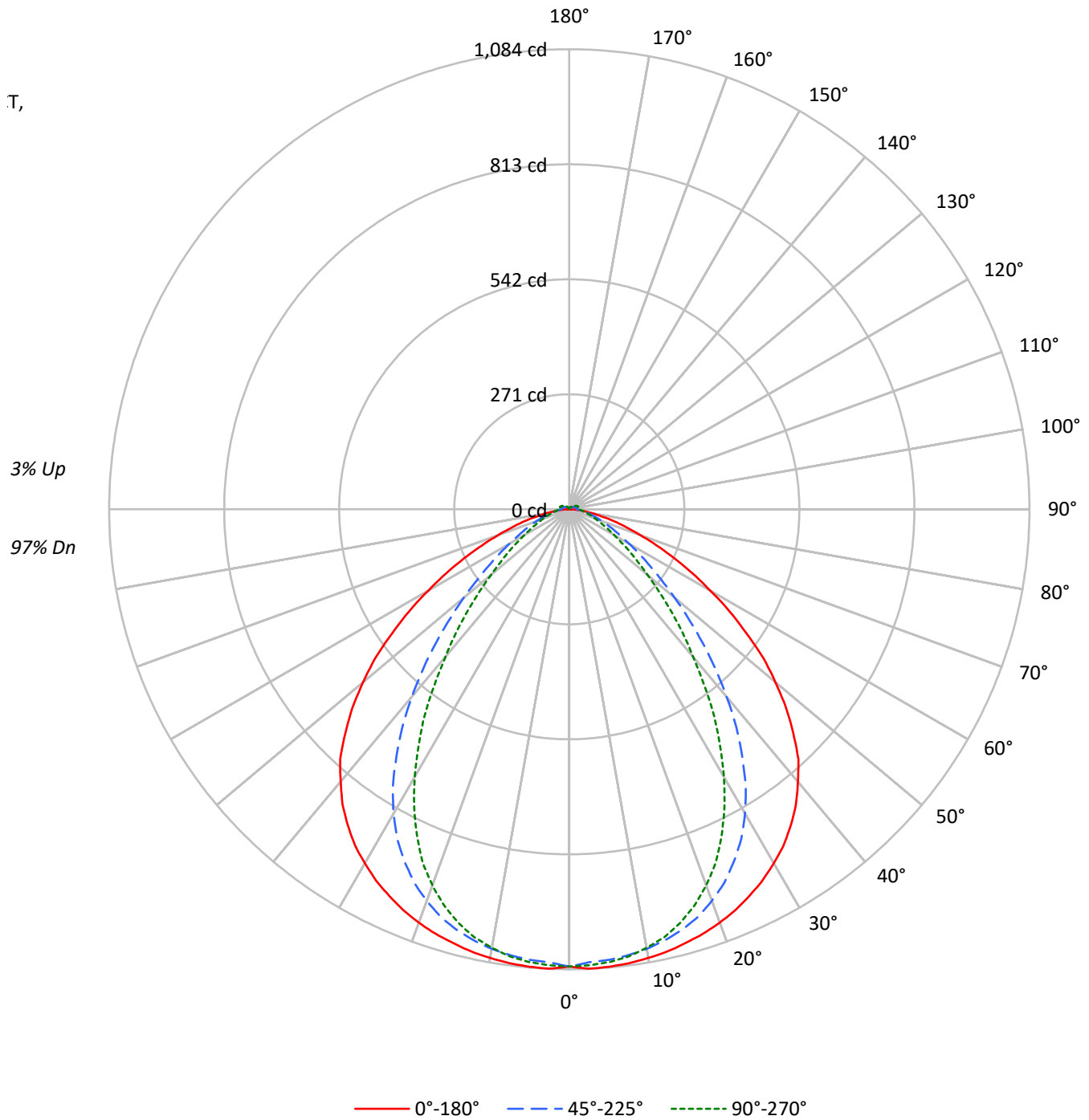
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2210.0 lumens
Efficiency: N/A
Efficacy: 132.3 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): 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: P894103
CATALOG NUMBER: 4MB-SC3-ACL-UNV-CC83-LOW-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P894103

CATALOG NUMBER: 4MB-SC3-ACL-UNV-CC83-LOW-4000K

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	110	110	110	104	104	104	100	100	100	97				97
1	110	106	102	99	107	103	100	97	99	96	93	94	92	90	90	89	87	85				85
2	101	94	88	84	99	92	87	82	88	84	80	85	81	78	82	79	76	74				74
3	94	85	77	72	91	83	76	71	80	74	69	77	72	68	74	70	66	64				64
4	87	76	68	62	84	75	67	62	72	66	61	69	64	60	67	62	59	57				57
5	80	69	61	55	78	68	60	55	65	59	54	63	58	53	61	56	52	50				50
6	75	63	55	49	73	62	54	49	60	53	48	58	52	47	56	51	47	45				45
7	70	57	50	44	68	57	49	44	55	48	43	53	47	43	52	46	42	40				40
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	37				37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33				33
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10971	10971	10971
5°	11041	10674	10657
10°	11061	10442	10283
15°	11094	10171	9815
20°	11148	9797	9174
25°	11181	9278	8321
30°	11192	8565	7251
35°	11144	7569	6064
40°	10946	6394	4773
45°	10525	5161	3700
50°	9799	4004	2776
55°	8772	3066	2124
60°	7536	2357	1618
65°	6285	1859	1287
70°	5026	1493	1051
75°	4004	1202	894
80°	2931	992	783
85°	2018	842	721

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10525 cd/sqm



TEST NUMBER: P894103

CATALOG NUMBER: 4MB-SC3-ACL-UNV-CC83-LOW-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.0	4.6
10°-20°	290.7	13.2
20°-30°	423.8	19.2
30°-40°	455.3	20.6
40°-50°	379.0	17.1
50°-60°	253.5	11.5
60°-70°	145.1	6.6
70°-80°	72.1	3.3
80°-90°	29.5	1.3
90°-100°	17.1	0.8
100°-110°	15.1	0.7
110°-120°	11.1	0.5
120°-130°	7.1	0.3
130°-140°	4.2	0.2
140°-150°	2.4	0.1
150°-160°	1.2	0.1
160°-170°	0.5	0.0
170°-180°	0.1	0.0
0°-30°	816.5	36.9
0°-40°	1271.9	57.6
0°-60°	1904.3	86.2
0°-90°	2151.1	97.3
90°-120°	43.3	2.0
90°-150°	57.1	2.6
90°-180°	59.0	2.7
0°-180°	2210.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1077	1077	1077	1077	1077	
5°	1082	1079	1066	1074	1071	103
15°	1058	1051	1026	1018	1009	299
25°	1005	981	917	870	849	463
35°	910	844	710	622	595	568
45°	746	620	443	359	338	574
55°	509	367	231	183	173	456
65°	272	185	116	94	89	272
75°	110	80	58	51	49	118
85°	21	24	27	28	28	25
90°	3	10	18	22	22	3
95°	5	10	18	22	22	4
105°	3	8	16	21	22	3
115°	2	5	13	17	19	2
125°	1	3	8	13	14	1
135°	1	2	6	8	9	0
145°	1	2	4	6	7	0
155°	1	2	2	4	4	0
165°	1	1	2	2	3	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P894103

CATALOG NUMBER: 4MB-SC3-ACL-UNV-CC83-LOW-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1077.3	1077.3	1077.3	1077.3	1077.3
2.5°	1083.6	1080.8	1068.5	1078.3	1075.4
5°	1082.0	1078.6	1065.7	1074.5	1071.0
7.5°	1078.6	1074.8	1060.0	1066.9	1063.2
10°	1073.5	1068.8	1051.9	1055.3	1049.3
12.5°	1067.3	1061.3	1040.2	1039.3	1032.7
15°	1058.1	1050.9	1025.8	1018.2	1009.1
17.5°	1048.7	1038.0	1007.2	991.8	979.3
20°	1036.5	1022.3	981.8	958.8	943.1
22.5°	1022.3	1003.2	953.2	918.0	901.6
25°	1004.7	980.8	916.7	870.5	848.8
27.5°	985.9	954.1	877.1	816.5	791.6
30°	963.2	924.0	827.8	754.9	728.2
32.5°	939.4	885.6	773.7	690.1	660.9
35°	909.5	843.5	709.6	622.3	594.9
37.5°	877.1	793.2	646.1	552.8	522.0
40°	837.8	740.1	576.4	484.0	453.5
42.5°	798.9	682.3	509.4	421.8	395.4
45°	746.1	620.1	443.1	358.6	337.5
47.5°	693.0	553.4	379.6	307.4	286.6
50°	633.9	488.1	324.0	258.0	240.7
52.5°	576.4	427.1	273.4	218.1	203.3
55°	508.8	367.1	231.0	182.6	173.2
57.5°	447.8	311.4	194.8	154.6	145.8
60°	383.4	264.0	163.1	130.7	122.6
62.5°	326.8	221.9	137.3	110.9	105.3
65°	272.5	184.8	116.3	94.3	89.3
67.5°	222.5	154.3	98.1	80.5	76.4
70°	178.5	125.1	82.7	68.5	65.7
72.5°	140.5	100.6	68.8	59.1	56.6
75°	109.7	79.8	57.5	50.9	49.3
77.5°	79.2	62.2	48.1	43.7	42.7
80°	55.9	47.1	39.6	37.7	37.1
82.5°	37.1	34.3	32.7	32.7	32.4
85°	21.4	23.9	26.7	28.0	28.3
87.5°	11.0	16.0	21.4	23.9	24.2
90°	3.1	10.1	18.2	21.7	22.3
92.5°	4.7	10.1	17.9	21.7	22.3
95°	4.7	10.1	17.9	21.7	22.3
97.5°	4.4	9.7	17.9	21.7	22.3
100°	4.1	9.1	17.6	21.7	22.3
102.5°	3.5	8.8	17.0	21.4	22.3
105°	3.1	8.2	16.0	21.1	22.0
107.5°	2.8	6.9	15.1	20.1	21.4
110°	2.2	6.0	14.5	19.2	20.7



TEST NUMBER: P894103

CATALOG NUMBER: 4MB-SC3-ACL-UNV-CC83-LOW-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.9	5.3	13.5	18.2	19.8
115°	1.6	4.7	12.6	17.3	18.9
117.5°	1.3	4.4	11.3	16.0	17.6
120°	0.9	4.1	10.4	15.1	16.3
122.5°	0.9	3.8	9.1	13.8	15.1
125°	0.9	3.1	8.5	12.6	13.8
127.5°	0.6	2.8	7.5	11.3	12.6
130°	0.6	2.8	6.9	10.4	11.3
132.5°	0.6	2.5	6.3	9.4	10.4
135°	0.6	2.5	5.7	8.5	9.4
137.5°	0.6	2.2	5.0	7.9	8.8
140°	0.6	2.2	4.7	6.9	7.9
142.5°	0.6	1.9	4.1	6.6	7.2
145°	0.6	1.9	3.8	5.7	6.6
147.5°	0.6	1.9	3.5	5.3	6.0
150°	0.6	1.6	3.1	4.4	5.3
152.5°	0.6	1.6	2.8	4.1	5.0
155°	0.6	1.6	2.5	3.5	4.4
157.5°	0.6	1.6	2.5	3.1	3.8
160°	0.9	1.3	2.2	2.8	3.5
162.5°	0.9	1.3	1.9	2.5	3.1
165°	0.9	1.3	1.9	2.2	2.8
167.5°	0.9	1.3	1.6	1.9	2.2
170°	0.9	0.9	1.6	1.6	1.6
172.5°	0.9	0.9	1.3	1.6	1.3
175°	0.9	0.9	1.3	1.3	1.3
177.5°	0.9	0.9	1.3	1.3	1.3
180°	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P894103
 CATALOG NUMBER: 4MB-SC3-ACL-UNV-CC83-LOW-4000K

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	17.06	18.45	17.47	18.82	19.20	12.35	13.74	12.76	14.11	14.50
	3H	18.15	19.39	18.57	19.78	20.21	13.49	14.74	13.92	15.12	15.55
	4H	18.46	19.62	18.90	20.03	20.47	13.99	15.16	14.44	15.56	16.01
	6H	18.60	19.68	19.06	20.10	20.56	14.49	15.57	14.95	15.99	16.45
	8H	18.62	19.64	19.09	20.08	20.55	14.75	15.77	15.23	16.22	16.68
	12H	18.61	19.59	19.09	20.03	20.52	15.05	16.02	15.52	16.46	16.95
4H	2H	17.04	18.20	17.48	18.61	19.05	12.85	14.01	13.29	14.42	14.86
	3H	18.27	19.24	18.73	19.69	20.16	14.16	15.12	14.62	15.58	16.05
	4H	18.66	19.52	19.14	19.99	20.50	14.76	15.62	15.24	16.09	16.59
	6H	18.89	19.64	19.39	20.14	20.66	15.38	16.13	15.88	16.62	17.15
	8H	18.93	19.63	19.44	20.13	20.66	15.70	16.40	16.21	16.90	17.43
	12H	18.94	19.57	19.47	20.10	20.63	16.07	16.70	16.60	17.23	17.76
8H	4H	18.65	19.35	19.16	19.84	20.37	15.00	15.70	15.51	16.19	16.72
	6H	18.92	19.50	19.47	20.05	20.59	15.72	16.30	16.26	16.84	17.38
	8H	19.00	19.52	19.56	20.08	20.63	16.13	16.65	16.68	17.20	17.76
	12H	19.04	19.50	19.60	20.04	20.67	16.62	17.08	17.17	17.62	18.25
12H	4H	18.62	19.25	19.15	19.78	20.31	15.01	15.64	15.54	16.16	16.70
	6H	18.90	19.42	19.46	19.98	20.53	15.76	16.28	16.32	16.84	17.39
	8H	19.01	19.47	19.56	20.01	20.64	16.22	16.68	16.77	17.22	17.85