

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: P894119

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894119
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-HI-5000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTICS WITH CLEAR LENS NO UPLIGHT, 800
5000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

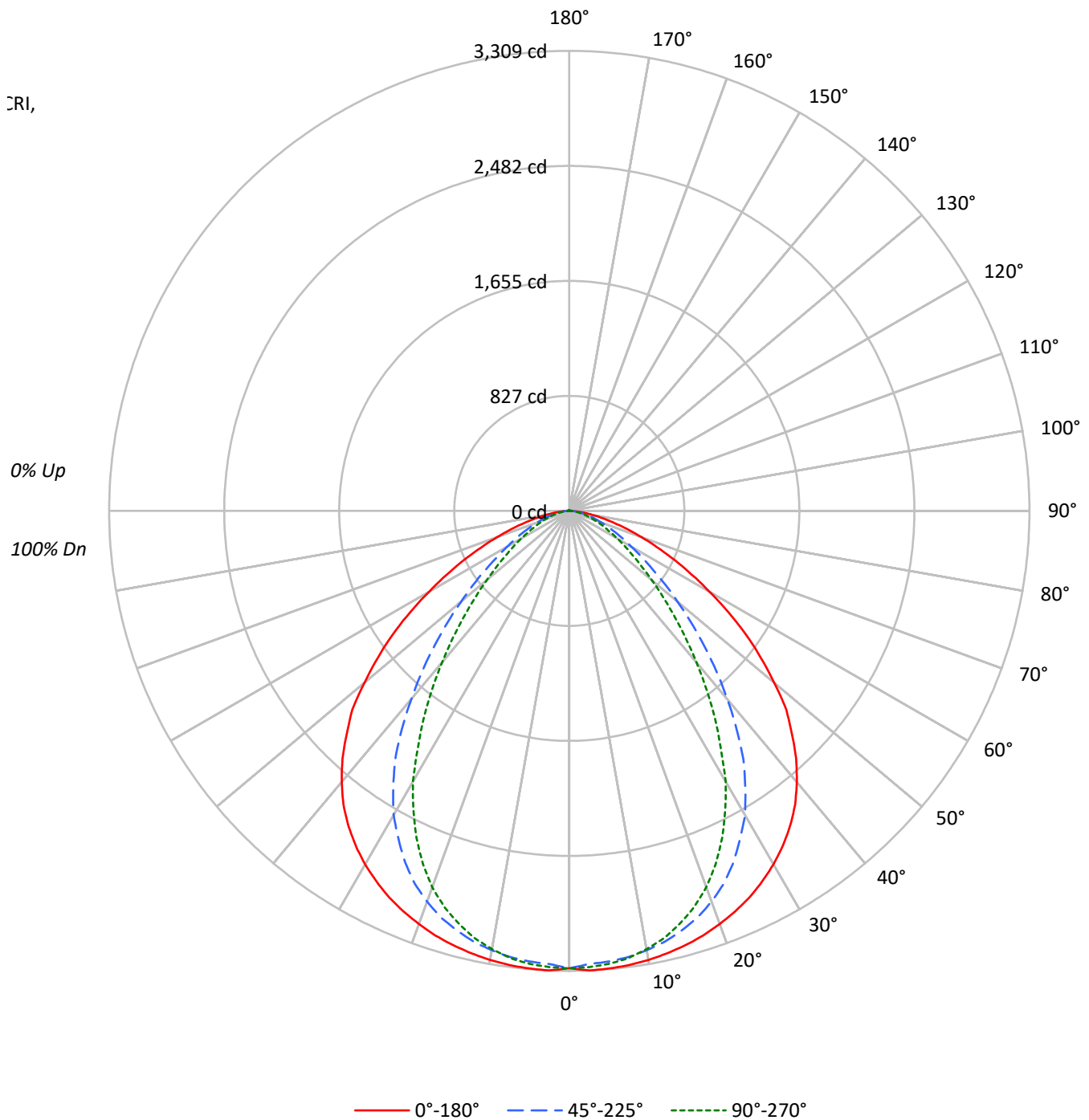
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6572.0 lumens
Efficiency: N/A
Efficacy: 129.6 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): 50.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.39961257980444
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P894119
CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-HI-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P894119
 CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-HI-5000K

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	87				87
2	102	95	89	85	100	93	88	84	90	85	82	87	83	80	84	81	78	76				76
3	94	85	78	73	92	84	77	72	81	75	71	78	73	70	76	72	68	66				66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				58
5	81	70	62	56	79	69	61	55	66	60	55	65	59	54	63	58	54	52				52
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				46
7	70	58	50	45	69	57	50	44	56	49	44	54	48	44	53	48	43	42				42
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				34
10	58	46	38	34	57	45	38	33	44	38	33	43	37	33	43	37	33	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33505	33505	33505
5°	33778	33267	33441
10°	33915	33183	33095
15°	34090	32946	32399
20°	34275	32414	31217
25°	34466	31359	29196
30°	34527	29710	26436
35°	34414	27139	22739
40°	33839	23487	18896
45°	32582	19736	15291
50°	30488	16074	12246
55°	27548	12919	9819
60°	23760	10514	8131
65°	20105	8755	6687
70°	16413	7447	5675
75°	13146	6276	4828
80°	10240	5366	4152
85°	7946	4744	3751

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 32582 cd/sqm



TEST NUMBER: P894119
 CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-HI-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.6	4.7
10°-20°	886.5	13.5
20°-30°	1292.2	19.7
30°-40°	1392.9	21.2
40°-50°	1167.7	17.8
50°-60°	790.5	12.0
60°-70°	450.8	6.9
70°-80°	206.2	3.1
80°-90°	54.0	0.8
90°-100°	6.7	0.1
100°-110°	4.5	0.1
110°-120°	2.5	0.0
120°-130°	1.4	0.0
130°-140°	1.4	0.0
140°-150°	1.2	0.0
150°-160°	1.0	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	2490.3	37.9
0°-40°	3883.2	59.1
0°-60°	5841.4	88.9
0°-90°	6552.3	99.7
90°-120°	13.6	0.2
90°-150°	17.6	0.3
90°-180°	20.0	0.3
0°-180°	6572.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3290	3290	3290	3290	3290	
5°	3304	3294	3254	3280	3271	315
15°	3233	3205	3125	3104	3073	914
25°	3067	2986	2791	2662	2598	1413
35°	2768	2560	2183	1916	1829	1728
45°	2262	1888	1370	1130	1062	1741
55°	1552	1135	728	590	553	1382
65°	834	580	363	294	278	832
75°	334	245	160	130	123	364
85°	68	58	41	34	32	79
90°	9	9	6	5	4	9
95°	14	8	5	3	3	11
105°	9	7	3	2	1	10
115°	5	4	2	1	1	5
125°	2	2	2	1	1	2
135°	1	2	2	2	1	1
145°	2	2	2	2	2	1
155°	2	2	2	3	3	1
165°	2	3	3	3	3	1
175°	3	3	3	4	4	0
180°	3	3	3	3	3	



TEST NUMBER: P894119

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3289.9	3289.9	3289.9	3289.9	3289.9
2.5°	3308.8	3300.3	3262.6	3293.7	3284.3
5°	3304.1	3293.7	3254.1	3280.5	3271.1
7.5°	3294.7	3281.5	3237.1	3256.9	3244.6
10°	3279.6	3263.5	3208.8	3220.1	3200.3
12.5°	3258.8	3239.0	3173.9	3171.0	3147.4
15°	3233.3	3205.0	3124.8	3104.0	3072.9
17.5°	3202.2	3166.3	3066.3	3024.7	2987.0
20°	3162.5	3116.3	2990.8	2924.7	2880.4
22.5°	3117.2	3055.0	2903.0	2797.3	2749.2
25°	3067.2	2986.1	2790.7	2662.3	2598.2
27.5°	3004.9	2903.0	2660.5	2494.4	2428.3
30°	2936.0	2806.7	2526.4	2314.1	2248.0
32.5°	2857.7	2696.3	2355.6	2119.7	2027.2
35°	2768.0	2559.5	2182.9	1915.8	1829.0
37.5°	2667.1	2417.0	1976.2	1710.1	1622.3
40°	2545.3	2248.0	1766.7	1503.4	1421.3
42.5°	2414.1	2076.3	1565.7	1307.1	1236.3
45°	2262.2	1887.5	1370.3	1129.7	1061.7
47.5°	2115.9	1696.9	1187.2	967.4	911.7
50°	1924.3	1494.0	1014.5	819.2	772.9
52.5°	1737.5	1306.2	867.3	700.3	656.9
55°	1551.5	1135.3	727.6	589.8	553.0
57.5°	1355.2	968.3	612.5	499.2	474.7
60°	1166.5	823.9	516.2	419.0	399.2
62.5°	993.8	690.8	437.0	353.9	335.0
65°	834.3	580.4	363.3	294.5	277.5
67.5°	683.3	477.5	302.9	245.4	233.1
70°	551.2	386.9	250.1	202.0	190.6
72.5°	437.0	309.6	200.1	165.2	152.9
75°	334.1	245.4	159.5	130.2	122.7
77.5°	249.2	185.0	122.7	100.0	94.4
80°	174.6	134.0	91.5	75.5	70.8
82.5°	118.9	92.5	64.2	52.9	50.0
85°	68.0	57.6	40.6	34.0	32.1
87.5°	34.9	30.2	21.7	16.0	14.2
90°	9.4	9.4	5.7	4.7	3.8
92.5°	15.1	8.5	5.7	3.8	2.8
95°	14.2	8.5	4.7	2.8	2.8
97.5°	13.2	8.5	3.8	2.8	1.9
100°	12.3	7.6	3.8	1.9	1.9
102.5°	11.3	7.6	3.8	1.9	1.9
105°	9.4	6.6	2.8	1.9	0.9
107.5°	8.5	5.7	2.8	1.9	0.9
110°	6.6	4.7	2.8	1.9	0.9



TEST NUMBER: P894119

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	5.7	4.7	1.9	1.9	0.9
115°	4.7	3.8	1.9	0.9	0.9
117.5°	3.8	2.8	1.9	0.9	0.9
120°	2.8	2.8	1.9	0.9	0.9
122.5°	2.8	1.9	1.9	0.9	0.9
125°	1.9	1.9	1.9	0.9	0.9
127.5°	1.9	1.9	1.9	0.9	0.9
130°	1.9	1.9	1.9	0.9	0.9
132.5°	1.9	1.9	1.9	1.9	0.9
135°	0.9	1.9	1.9	1.9	0.9
137.5°	1.9	1.9	1.9	1.9	1.9
140°	1.9	1.9	1.9	1.9	1.9
142.5°	1.9	1.9	1.9	1.9	1.9
145°	1.9	1.9	1.9	1.9	1.9
147.5°	1.9	1.9	1.9	1.9	1.9
150°	1.9	1.9	1.9	1.9	1.9
152.5°	1.9	1.9	1.9	1.9	1.9
155°	1.9	1.9	1.9	2.8	2.8
157.5°	1.9	1.9	2.8	2.8	2.8
160°	1.9	1.9	2.8	2.8	2.8
162.5°	1.9	1.9	2.8	2.8	2.8
165°	1.9	2.8	2.8	2.8	2.8
167.5°	1.9	2.8	2.8	2.8	3.8
170°	1.9	2.8	2.8	3.8	3.8
172.5°	1.9	2.8	2.8	3.8	3.8
175°	2.8	2.8	2.8	3.8	3.8
177.5°	2.8	2.8	2.8	3.8	3.8
180°	2.8	2.8	2.8	2.8	2.8



TEST NUMBER: P894119
 CATALOG NUMBER: 4MB-SC3-AOL-UNV-CC83-HI-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	22.57	24.01	22.94	24.33	24.65	17.41	18.85	17.78	19.17	19.49
	3H	23.88	25.16	24.26	25.50	25.87	18.42	19.71	18.81	20.04	20.41
	4H	24.30	25.50	24.71	25.86	26.25	18.76	19.96	19.17	20.31	20.70
	6H	24.57	25.67	24.99	26.05	26.45	18.98	20.09	19.40	20.46	20.86
	8H	24.64	25.69	25.07	26.09	26.50	19.05	20.10	19.49	20.50	20.91
	12H	24.68	25.68	25.12	26.07	26.51	19.10	20.10	19.53	20.49	20.93
4H	2H	22.57	23.77	22.97	24.12	24.51	18.04	19.23	18.44	19.59	19.98
	3H	24.03	25.02	24.45	25.43	25.84	19.23	20.22	19.65	20.63	21.04
	4H	24.56	25.44	25.00	25.87	26.31	19.65	20.53	20.09	20.96	21.40
	6H	24.94	25.70	25.40	26.15	26.62	19.96	20.73	20.42	21.18	21.65
	8H	25.05	25.76	25.52	26.21	26.69	20.05	20.77	20.52	21.22	21.70
	12H	25.12	25.76	25.61	26.25	26.73	20.12	20.76	20.61	21.25	21.73
8H	4H	24.54	25.26	25.01	25.71	26.18	19.98	20.70	20.45	21.15	21.63
	6H	24.97	25.56	25.48	26.06	26.55	20.38	20.97	20.88	21.46	21.95
	8H	25.13	25.66	25.65	26.17	26.67	20.52	21.05	21.04	21.56	22.06
	12H	25.26	25.73	25.77	26.23	26.80	20.64	21.11	21.16	21.61	22.18
12H	4H	24.51	25.15	25.00	25.64	26.11	20.03	20.67	20.52	21.15	21.63
	6H	24.94	25.47	25.46	25.99	26.48	20.44	20.97	20.96	21.49	21.99
	8H	25.13	25.60	25.65	26.10	26.67	20.63	21.10	21.15	21.60	22.17