

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: P894085

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894085
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-077-16)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-SC3-A-UNV-CC83-LOW-4000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 4000K CCT, LOW lumen settir
Light Source: -
Ballast/Driver: -

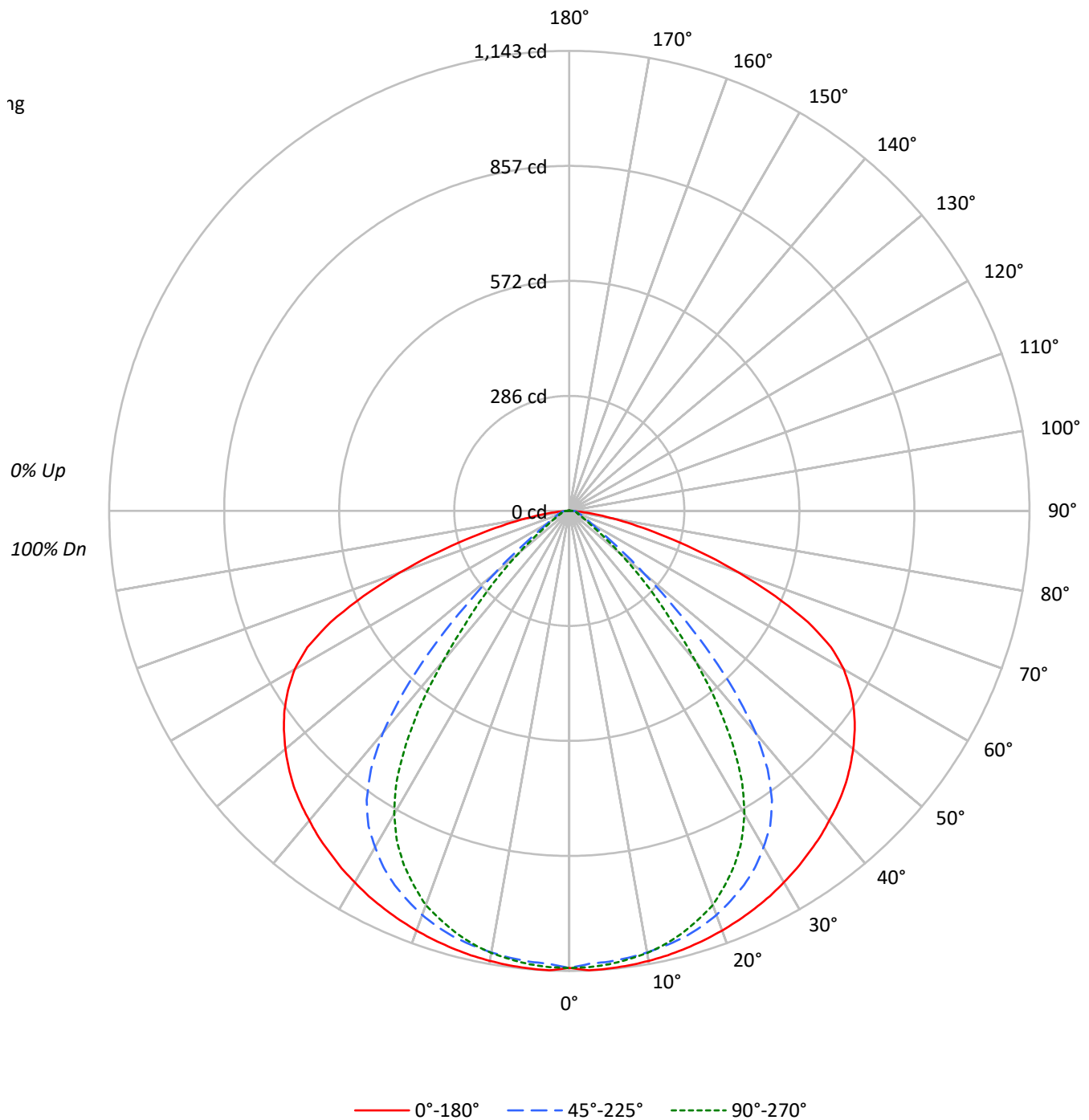
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2327.9 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 1.41 / 1.15 / 1.23
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

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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	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	105	102	99	100	98	96	97	95	93	93	91	90	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	84	81	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	77	73	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	70	65	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	64	59	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	59	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	54	49	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	50	44	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11565	11565	11565
5°	11668	11494	11561
10°	11740	11520	11536
15°	11857	11569	11450
20°	12026	11579	11296
25°	12249	11529	10915
30°	12535	11348	10229
35°	12893	10912	8794
40°	13352	9584	6500
45°	13939	6915	4373
50°	14587	3863	2609
55°	15332	1998	1428
60°	16040	1300	1010
65°	15765	1068	802
70°	13295	983	747
75°	9782	1003	803
80°	6522	1179	1015
85°	3564	1905	1542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 16176 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.8	4.6
10°-20°	311.6	13.4
20°-30°	474.0	20.4
30°-40°	541.4	23.3
40°-50°	436.7	18.8
50°-60°	239.1	10.3
60°-70°	126.0	5.4
70°-80°	61.8	2.7
80°-90°	21.8	0.9
90°-100°	4.7	0.2
100°-110°	0.6	0.0
110°-120°	0.4	0.0
120°-130°	0.3	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	893.5	38.4
0°-40°	1434.8	61.6
0°-60°	2110.6	90.7
0°-90°	2320.3	99.7
90°-120°	5.7	0.2
90°-150°	6.8	0.3
90°-180°	8.0	0.3
0°-180°	2327.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1141	1138	1124	1134	1131	109
15°	1125	1118	1097	1095	1086	318
25°	1090	1074	1026	991	971	504
35°	1037	993	878	758	707	651
45°	968	832	480	328	304	747
55°	864	355	112	87	80	770
65°	654	82	44	36	33	633
75°	249	46	26	21	20	274
85°	30	24	16	15	13	42
90°	1	13	10	9	8	2
95°	1	2	4	5	5	1
105°	0	0	0	1	1	0
115°	0	0	0	1	0	0
125°	0	0	0	1	0	0
135°	0	0	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	2	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1135.6	1135.6	1135.6	1135.6	1135.6
2.5°	1142.6	1139.4	1126.5	1137.5	1134.4
5°	1141.3	1137.8	1124.3	1134.4	1130.9
7.5°	1139.1	1134.7	1119.9	1129.0	1123.7
10°	1135.3	1130.9	1114.0	1121.2	1115.5
12.5°	1130.9	1125.0	1106.1	1109.9	1102.6
15°	1124.6	1117.7	1097.3	1095.4	1086.0
17.5°	1117.7	1109.2	1084.4	1076.3	1064.9
20°	1109.6	1099.2	1068.4	1052.4	1042.3
22.5°	1100.4	1086.9	1048.3	1023.8	1008.1
25°	1090.1	1074.4	1026.0	991.1	971.3
27.5°	1079.1	1057.7	999.0	953.1	926.4
30°	1065.9	1040.1	965.0	903.1	869.8
32.5°	1052.7	1018.1	928.6	838.7	799.1
35°	1037.0	993.3	877.7	758.2	707.3
37.5°	1022.2	963.4	808.8	657.4	602.7
40°	1004.3	928.2	720.9	541.4	488.9
42.5°	987.3	887.4	606.8	429.6	384.0
45°	967.8	831.5	480.1	328.1	303.6
47.5°	945.2	755.1	349.1	244.2	228.8
50°	920.7	650.2	243.8	177.2	164.7
52.5°	893.7	508.4	164.3	123.2	116.3
55°	863.5	355.4	112.5	87.0	80.4
57.5°	828.6	231.3	81.7	65.7	61.3
60°	787.5	147.7	63.8	52.2	49.6
62.5°	733.4	103.7	52.5	43.1	40.9
65°	654.2	82.0	44.3	35.8	33.3
67.5°	554.0	69.4	38.0	30.2	28.6
70°	446.5	60.3	33.0	26.1	25.1
72.5°	343.1	52.8	28.6	23.3	22.6
75°	248.6	46.2	25.5	21.4	20.4
77.5°	172.2	39.9	22.6	19.2	18.5
80°	111.2	34.6	20.1	17.6	17.3
82.5°	63.8	28.9	18.2	17.0	16.7
85°	30.5	24.2	16.3	14.8	13.2
87.5°	9.7	17.9	12.9	11.3	10.1
90°	1.3	12.6	10.1	8.8	8.2
92.5°	1.3	6.9	7.2	7.2	6.9
95°	0.9	1.6	3.5	5.3	5.0
97.5°	0.9	0.6	2.2	3.8	3.8
100°	0.6	0.3	0.9	2.5	2.5
102.5°	0.6	0.3	0.3	1.6	1.6
105°	0.3	0.0	0.3	0.6	0.6
107.5°	0.3	0.3	0.3	0.6	0.3
110°	0.3	0.3	0.3	0.6	0.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.3	0.6	0.3
115°	0.3	0.3	0.3	0.6	0.3
117.5°	0.3	0.3	0.3	0.6	0.3
120°	0.3	0.3	0.3	0.6	0.3
122.5°	0.3	0.3	0.3	0.6	0.3
125°	0.3	0.3	0.3	0.6	0.3
127.5°	0.3	0.3	0.3	0.6	0.3
130°	0.3	0.3	0.6	0.6	0.3
132.5°	0.3	0.3	0.6	0.6	0.3
135°	0.3	0.3	0.6	0.6	0.3
137.5°	0.3	0.3	0.6	0.6	0.6
140°	0.6	0.3	0.6	0.6	0.6
142.5°	0.6	0.6	0.6	0.9	0.6
145°	0.6	0.6	0.6	0.9	0.6
147.5°	0.6	0.6	0.9	0.9	0.6
150°	0.6	0.6	0.9	0.9	0.6
152.5°	0.6	0.6	0.9	0.9	0.9
155°	0.6	0.6	0.9	1.3	0.9
157.5°	0.6	0.6	0.9	1.3	0.9
160°	0.6	0.9	1.3	1.3	0.9
162.5°	0.6	0.9	1.3	1.3	1.3
165°	0.6	0.9	1.3	1.3	1.3
167.5°	0.9	0.9	1.3	1.6	1.3
170°	0.9	0.9	1.3	1.6	1.3
172.5°	0.9	0.9	1.3	1.6	1.3
175°	0.9	0.9	1.3	1.6	1.3
177.5°	0.9	0.9	1.3	1.6	1.6
180°	1.3	1.3	1.3	1.3	1.3



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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	18.41	19.81	18.78	20.13	20.45	6.93	8.33	7.30	8.65	8.97
	3H	21.32	22.57	21.71	22.90	23.28	7.86	9.11	8.25	9.45	9.82
	4H	22.22	23.38	22.62	23.73	24.12	8.38	9.54	8.79	9.90	10.29
	6H	22.71	23.78	23.13	24.16	24.56	9.02	10.09	9.43	10.46	10.86
	8H	22.82	23.84	23.26	24.24	24.65	9.44	10.45	9.87	10.85	11.26
	12H	22.87	23.84	23.31	24.23	24.67	9.88	10.85	10.32	11.24	11.68
4H	2H	18.23	19.39	18.63	19.75	20.14	7.45	8.61	7.85	8.97	9.36
	3H	21.16	22.11	21.57	22.52	22.93	8.64	9.59	9.06	10.00	10.41
	4H	22.06	22.91	22.50	23.34	23.79	9.31	10.16	9.75	10.59	11.04
	6H	22.65	23.39	23.12	23.84	24.31	10.13	10.87	10.60	11.32	11.79
	8H	22.81	23.51	23.29	23.96	24.43	10.66	11.36	11.14	11.81	12.29
	12H	22.90	23.52	23.39	24.01	24.49	11.24	11.86	11.73	12.35	12.83
8H	4H	21.95	22.64	22.42	23.09	23.57	9.90	10.59	10.37	11.04	11.52
	6H	22.55	23.12	23.05	23.62	24.11	10.90	11.47	11.41	11.97	12.46
	8H	22.74	23.25	23.26	23.77	24.27	11.58	12.09	12.10	12.61	13.11
	12H	22.88	23.34	23.40	23.84	24.41	12.35	12.80	12.86	13.30	13.88
12H	4H	21.91	22.53	22.40	23.01	23.49	10.16	10.77	10.65	11.26	11.74
	6H	22.50	23.01	23.02	23.53	24.03	11.21	11.72	11.73	12.24	12.74
	8H	22.71	23.17	23.23	23.67	24.24	11.98	12.43	12.49	12.93	13.51