

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: P894084

Luminaire Tested: 4MB-SC3-A-UNV-CC83-LOW-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894084
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-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 3500K CCT, LOW lumen settir
Light Source: -
Ballast/Driver: -

Summary

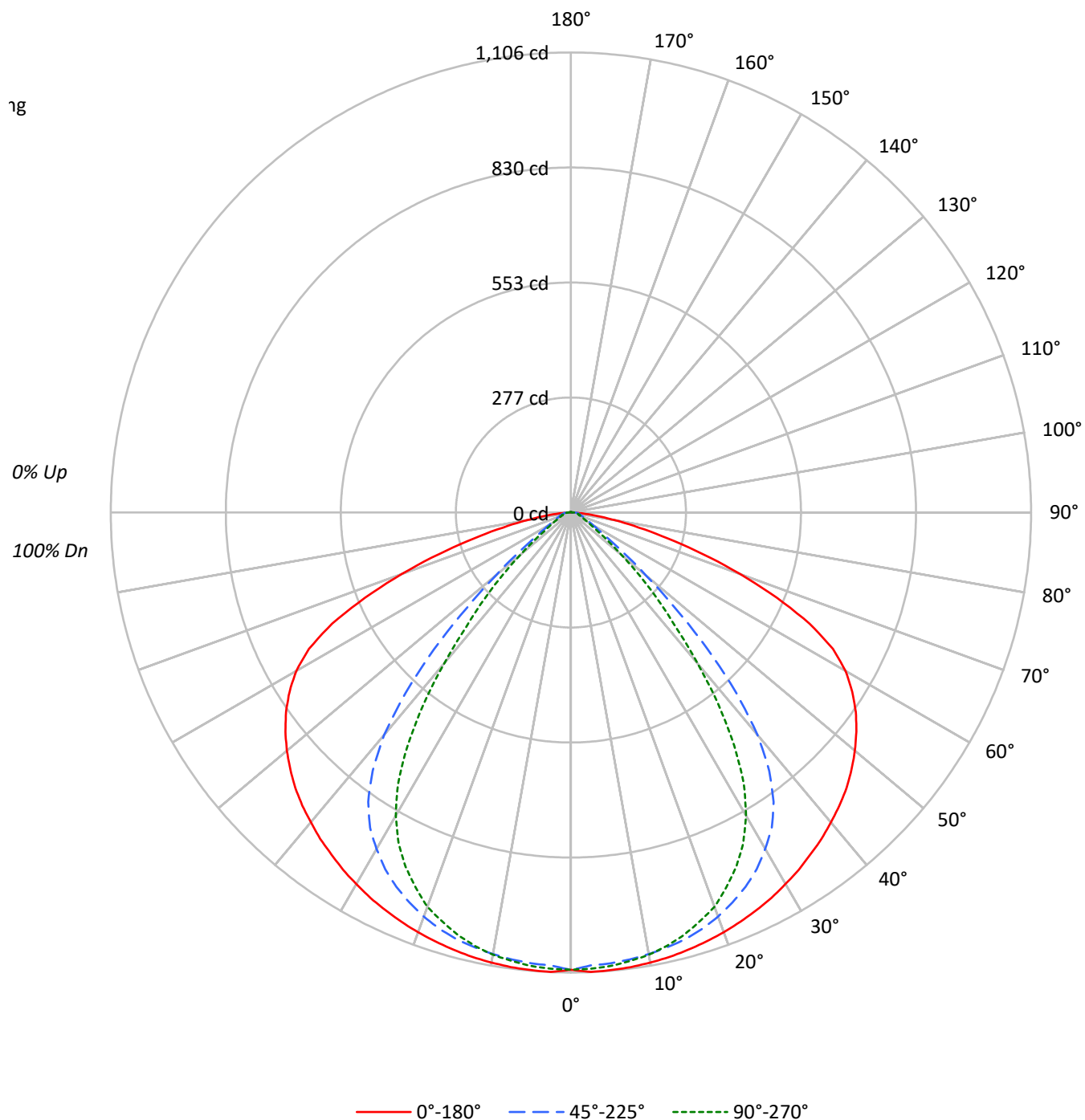
Lumens per Lamp: N/A
Luminaire Lumens: 2253.0 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.15 / 1.23
Luminous Opening: Rectangular (W 0.27' x L: 3.98' x H: 0')
CIE Type: Direct

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
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	111	107	103	100	108	105	102	99	100	98	96	97	95	93	93	91	90	90	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	81	79	79	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	74	71	77	73	69	69	69	67
4	88	78	70	65	86	77	70	64	74	68	63	72	67	62	70	65	62	62	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	55	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	49	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	45	45	43
8	66	54	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	40	40	39
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	46	41	37	37	37	35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	34	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11193	11193	11193
5°	11291	11124	11189
10°	11363	11149	11164
15°	11476	11197	11081
20°	11638	11206	10932
25°	11855	11157	10563
30°	12130	10982	9899
35°	12477	10560	8511
40°	12921	9274	6291
45°	13491	6693	4231
50°	14117	3739	2526
55°	14838	1934	1383
60°	15523	1257	978
65°	15259	1034	776
70°	12866	950	724
75°	9467	968	779
80°	6316	1144	979
85°	3447	1846	1496

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 62.5°

Luminance: 15655 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	4.6
10°-20°	301.6	13.4
20°-30°	458.7	20.4
30°-40°	523.9	23.3
40°-50°	422.7	18.8
50°-60°	231.4	10.3
60°-70°	122.0	5.4
70°-80°	59.8	2.7
80°-90°	21.1	0.9
90°-100°	4.5	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°	864.7	38.4
0°-40°	1388.6	61.6
0°-60°	2042.6	90.7
0°-90°	2245.5	99.7
90°-120°	5.5	0.2
90°-150°	6.6	0.3
90°-180°	7.0	0.3
0°-180°	2253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1099	1099	1099	1099	1099	
5°	1104	1101	1088	1098	1094	105
15°	1088	1082	1062	1060	1051	308
25°	1055	1040	993	959	940	487
35°	1004	961	849	734	685	630
45°	937	805	465	318	294	723
55°	836	344	109	84	78	746
65°	633	79	43	35	32	612
75°	241	45	25	21	20	266
85°	30	23	16	14	13	41
90°	1	12	10	8	8	2
95°	1	2	3	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°	1099.1	1099.1	1099.1	1099.1	1099.1
2.5°	1105.7	1102.7	1090.2	1100.9	1097.8
5°	1104.5	1101.2	1088.1	1097.8	1094.5
7.5°	1102.4	1098.1	1083.8	1092.7	1087.5
10°	1098.8	1094.5	1078.1	1085.1	1079.6
12.5°	1094.5	1088.7	1070.5	1074.1	1067.1
15°	1088.4	1081.7	1062.0	1060.1	1051.0
17.5°	1081.7	1073.5	1049.5	1041.6	1030.6
20°	1073.8	1063.8	1034.0	1018.5	1008.7
22.5°	1065.0	1051.9	1014.5	990.8	975.6
25°	1055.0	1039.8	992.9	959.2	940.0
27.5°	1044.3	1023.6	966.8	922.4	896.5
30°	1031.5	1006.6	933.9	874.0	841.8
32.5°	1018.8	985.3	898.6	811.7	773.4
35°	1003.6	961.3	849.4	733.8	684.6
37.5°	989.3	932.4	782.8	636.2	583.3
40°	971.9	898.3	697.6	524.0	473.2
42.5°	955.5	858.8	587.2	415.7	371.6
45°	936.7	804.7	464.7	317.5	293.8
47.5°	914.8	730.8	337.9	236.3	221.4
50°	891.0	629.2	236.0	171.5	159.4
52.5°	864.9	492.1	159.0	119.2	112.5
55°	835.7	343.9	108.9	84.2	77.9
57.5°	801.9	223.8	79.1	63.6	59.3
60°	762.1	142.9	61.7	50.5	48.0
62.5°	709.8	100.4	50.8	41.7	39.5
65°	633.2	79.4	42.9	34.7	32.2
67.5°	536.1	67.2	36.8	29.2	27.7
70°	432.1	58.4	31.9	25.2	24.3
72.5°	332.1	51.1	27.7	22.5	21.9
75°	240.6	44.7	24.6	20.7	19.8
77.5°	166.7	38.6	21.9	18.6	17.9
80°	107.7	33.5	19.5	17.0	16.7
82.5°	61.7	28.0	17.6	16.4	16.1
85°	29.5	23.4	15.8	14.3	12.8
87.5°	9.4	17.3	12.5	10.9	9.7
90°	1.2	12.2	9.7	8.5	7.9
92.5°	1.2	6.7	7.0	7.0	6.7
95°	0.9	1.5	3.3	5.2	4.9
97.5°	0.9	0.6	2.1	3.6	3.6
100°	0.6	0.3	0.9	2.4	2.4
102.5°	0.6	0.3	0.3	1.5	1.5
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	1.2	0.9
157.5°	0.6	0.6	0.9	1.2	0.9
160°	0.6	0.9	1.2	1.2	0.9
162.5°	0.6	0.9	1.2	1.2	1.2
165°	0.6	0.9	1.2	1.2	1.2
167.5°	0.9	0.9	1.2	1.5	1.2
170°	0.9	0.9	1.2	1.5	1.2
172.5°	0.9	0.9	1.2	1.5	1.2
175°	0.9	0.9	1.2	1.5	1.2
177.5°	0.9	0.9	1.2	1.5	1.5
180°	1.2	1.2	1.2	1.2	1.2

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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	18.30	19.70	18.67	20.02	20.34	6.82	8.21	7.19	8.54	8.86
	3H	21.21	22.45	21.59	22.79	23.16	7.75	8.99	8.13	9.33	9.70
	4H	22.10	23.26	22.51	23.62	24.01	8.27	9.43	8.68	9.79	10.18
	6H	22.60	23.67	23.02	24.04	24.45	8.90	9.97	9.32	10.35	10.75
	8H	22.71	23.73	23.14	24.12	24.54	9.32	10.33	9.75	10.73	11.14
	12H	22.75	23.73	23.19	24.12	24.55	9.77	10.74	10.20	11.13	11.57
4H	2H	18.11	19.27	18.52	19.63	20.02	7.33	8.50	7.74	8.85	9.24
	3H	21.04	22.00	21.46	22.41	22.82	8.52	9.48	8.94	9.89	10.30
	4H	21.94	22.80	22.38	23.22	23.67	9.19	10.05	9.63	10.47	10.92
	6H	22.54	23.28	23.00	23.73	24.20	10.01	10.75	10.48	11.21	11.68
	8H	22.70	23.39	23.17	23.84	24.32	10.54	11.24	11.02	11.69	12.17
	12H	22.79	23.41	23.28	23.89	24.37	11.12	11.74	11.61	12.23	12.71
8H	4H	21.83	22.53	22.31	22.98	23.46	9.78	10.48	10.26	10.93	11.41
	6H	22.43	23.00	22.94	23.51	23.99	10.79	11.36	11.29	11.86	12.34
	8H	22.62	23.14	23.15	23.65	24.15	11.46	11.97	11.98	12.49	12.99
	12H	22.77	23.22	23.29	23.72	24.30	12.23	12.68	12.74	13.18	13.76
12H	4H	21.80	22.41	22.29	22.90	23.38	10.04	10.66	10.53	11.15	11.63
	6H	22.38	22.90	22.91	23.42	23.91	11.10	11.61	11.62	12.13	12.63
	8H	22.60	23.05	23.12	23.55	24.13	11.86	12.31	12.38	12.81	13.39