

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: P894093

Luminaire Tested: 4MB-SC3-A-UNV-CC93-LOW-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894093
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-CC93-LOW-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 3500K CCT, LOW lumen settir
Light Source: -
Ballast/Driver: -

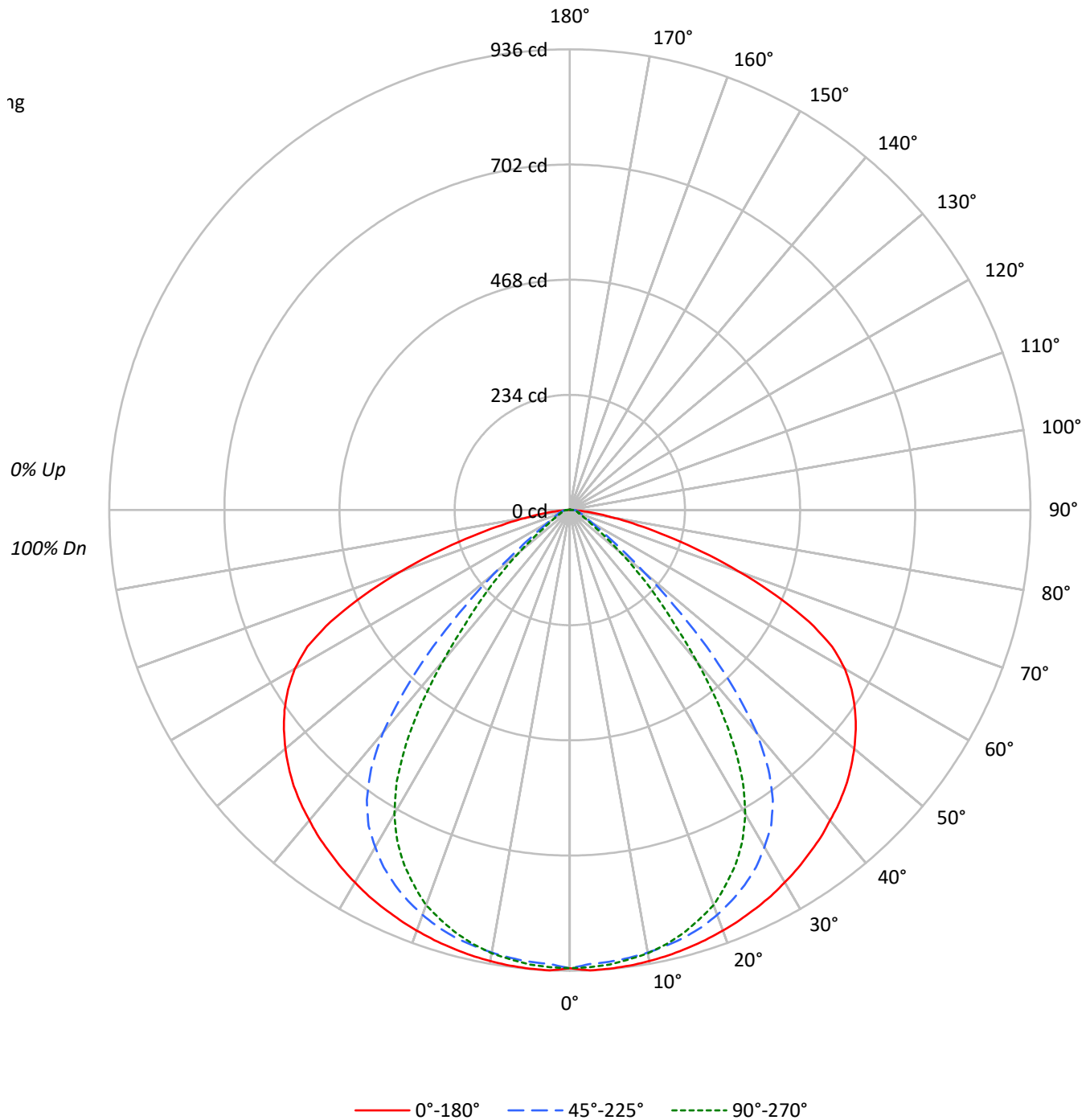
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1908.1 lumens
Efficiency: N/A
Efficacy: 114.3 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			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	55	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°	9479	9479	9479
5°	9563	9421	9476
10°	9623	9442	9455
15°	9718	9482	9385
20°	9856	9490	9259
25°	10039	9449	8946
30°	10273	9301	8383
35°	10566	8943	7207
40°	10943	7854	5327
45°	11424	5667	3583
50°	11956	3167	2139
55°	12566	1637	1170
60°	13146	1065	829
65°	12921	875	658
70°	10898	804	613
75°	8015	822	657
80°	5349	968	833
85°	2921	1566	1262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 13258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.4	4.6
10°-20°	255.4	13.4
20°-30°	388.5	20.4
30°-40°	443.7	23.3
40°-50°	357.9	18.8
50°-60°	195.9	10.3
60°-70°	103.3	5.4
70°-80°	50.7	2.7
80°-90°	17.8	0.9
90°-100°	3.8	0.2
100°-110°	0.6	0.0
110°-120°	0.3	0.0
120°-130°	0.3	0.0
130°-140°	0.3	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°	732.3	38.4
0°-40°	1176.0	61.6
0°-60°	1729.8	90.7
0°-90°	1901.6	99.7
90°-120°	4.7	0.2
90°-150°	5.7	0.3
90°-180°	6.0	0.3
0°-180°	1908.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	931	931	931	931	931	
5°	935	933	922	930	927	89
15°	922	916	899	898	890	261
25°	893	880	841	812	796	413
35°	850	814	719	621	580	533
45°	793	682	394	269	249	612
55°	708	291	92	71	66	631
65°	536	67	36	29	27	519
75°	204	38	21	18	17	225
85°	25	20	13	12	11	34
90°	1	10	8	7	7	2
95°	1	1	3	4	4	1
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	1	0	0
155°	0	0	1	1	1	0
165°	0	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.8	930.8	930.8	930.8	930.8
2.5°	936.4	933.8	923.3	932.3	929.7
5°	935.4	932.6	921.5	929.7	926.9
7.5°	933.6	930.0	917.9	925.3	921.0
10°	930.5	926.9	913.0	918.9	914.3
12.5°	926.9	922.0	906.5	909.6	903.7
15°	921.7	916.1	899.3	897.8	890.1
17.5°	916.1	909.1	888.8	882.1	872.8
20°	909.4	900.9	875.6	862.5	854.3
22.5°	901.9	890.8	859.2	839.1	826.2
25°	893.4	880.5	840.9	812.3	796.1
27.5°	884.4	866.9	818.7	781.1	759.2
30°	873.6	852.5	790.9	740.2	712.9
32.5°	862.8	834.4	761.0	687.4	654.9
35°	849.9	814.1	719.3	621.4	579.7
37.5°	837.8	789.6	662.9	538.8	494.0
40°	823.1	760.8	590.8	443.7	400.7
42.5°	809.2	727.3	497.3	352.1	314.7
45°	793.2	681.5	393.5	268.9	248.8
47.5°	774.7	618.9	286.1	200.1	187.5
50°	754.6	532.9	199.9	145.3	135.0
52.5°	732.5	416.7	134.7	101.0	95.3
55°	707.7	291.3	92.2	71.3	65.9
57.5°	679.1	189.6	67.0	53.8	50.2
60°	645.4	121.0	52.3	42.8	40.7
62.5°	601.1	85.0	43.0	35.3	33.5
65°	536.2	67.2	36.3	29.4	27.3
67.5°	454.0	56.9	31.2	24.7	23.4
70°	366.0	49.4	27.0	21.4	20.6
72.5°	281.2	43.3	23.4	19.1	18.5
75°	203.7	37.9	20.9	17.5	16.7
77.5°	141.1	32.7	18.5	15.7	15.2
80°	91.2	28.3	16.5	14.4	14.2
82.5°	52.3	23.7	14.9	13.9	13.6
85°	25.0	19.8	13.4	12.1	10.8
87.5°	8.0	14.7	10.6	9.3	8.2
90°	1.0	10.3	8.2	7.2	6.7
92.5°	1.0	5.7	5.9	5.9	5.7
95°	0.8	1.3	2.8	4.4	4.1
97.5°	0.8	0.5	1.8	3.1	3.1
100°	0.5	0.3	0.8	2.1	2.1
102.5°	0.5	0.3	0.3	1.3	1.3
105°	0.3	0.0	0.3	0.5	0.5
107.5°	0.3	0.3	0.3	0.5	0.3
110°	0.3	0.3	0.3	0.5	0.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.3	0.5	0.3
115°	0.3	0.3	0.3	0.5	0.3
117.5°	0.3	0.3	0.3	0.5	0.3
120°	0.3	0.3	0.3	0.5	0.3
122.5°	0.3	0.3	0.3	0.5	0.3
125°	0.3	0.3	0.3	0.5	0.3
127.5°	0.3	0.3	0.3	0.5	0.3
130°	0.3	0.3	0.5	0.5	0.3
132.5°	0.3	0.3	0.5	0.5	0.3
135°	0.3	0.3	0.5	0.5	0.3
137.5°	0.3	0.3	0.5	0.5	0.5
140°	0.5	0.3	0.5	0.5	0.5
142.5°	0.5	0.5	0.5	0.8	0.5
145°	0.5	0.5	0.5	0.8	0.5
147.5°	0.5	0.5	0.8	0.8	0.5
150°	0.5	0.5	0.8	0.8	0.5
152.5°	0.5	0.5	0.8	0.8	0.8
155°	0.5	0.5	0.8	1.0	0.8
157.5°	0.5	0.5	0.8	1.0	0.8
160°	0.5	0.8	1.0	1.0	0.8
162.5°	0.5	0.8	1.0	1.0	1.0
165°	0.5	0.8	1.0	1.0	1.0
167.5°	0.8	0.8	1.0	1.3	1.0
170°	0.8	0.8	1.0	1.3	1.0
172.5°	0.8	0.8	1.0	1.3	1.0
175°	0.8	0.8	1.0	1.3	1.0
177.5°	0.8	0.8	1.0	1.3	1.3
180°	1.0	1.0	1.0	1.0	1.0



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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	17.72	19.12	18.09	19.44	19.76	6.23	7.63	6.60	7.95	8.27
	3H	20.63	21.88	21.02	22.21	22.58	7.17	8.41	7.55	8.75	9.12
	4H	21.52	22.69	21.93	23.04	23.43	7.68	8.85	8.09	9.20	9.59
	6H	22.02	23.09	22.44	23.47	23.87	8.32	9.39	8.74	9.77	10.17
	8H	22.13	23.15	22.57	23.55	23.96	8.74	9.75	9.17	10.15	10.56
	12H	22.18	23.15	22.61	23.54	23.98	9.18	10.15	9.62	10.54	10.98
4H	2H	17.53	18.70	17.94	19.05	19.44	6.75	7.91	7.16	8.27	8.66
	3H	20.46	21.42	20.88	21.83	22.24	7.94	8.90	8.36	9.31	9.72
	4H	21.37	22.22	21.81	22.65	23.10	8.61	9.46	9.05	9.89	10.34
	6H	21.96	22.70	22.43	23.15	23.62	9.43	10.17	9.90	10.63	11.10
	8H	22.12	22.81	22.59	23.27	23.74	9.96	10.66	10.44	11.11	11.59
	12H	22.21	22.83	22.70	23.32	23.80	10.54	11.16	11.03	11.64	12.12
8H	4H	21.26	21.95	21.73	22.40	22.88	9.20	9.89	9.67	10.35	10.82
	6H	21.86	22.43	22.36	22.93	23.41	10.21	10.78	10.71	11.28	11.76
	8H	22.04	22.56	22.57	23.08	23.57	10.88	11.39	11.40	11.91	12.41
	12H	22.19	22.65	22.71	23.15	23.72	11.64	12.10	12.16	12.60	13.17
12H	4H	21.22	21.83	21.71	22.32	22.80	9.46	10.08	9.95	10.56	11.04
	6H	21.80	22.32	22.33	22.84	23.34	10.51	11.03	11.04	11.55	12.05
	8H	22.02	22.48	22.54	22.98	23.55	11.28	11.73	11.80	12.23	12.81