

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: P894092

Luminaire Tested: 4MB-SC3-A-UNV-CC93-HI-5000K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894092
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-HI-5000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 90CRI, 5000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

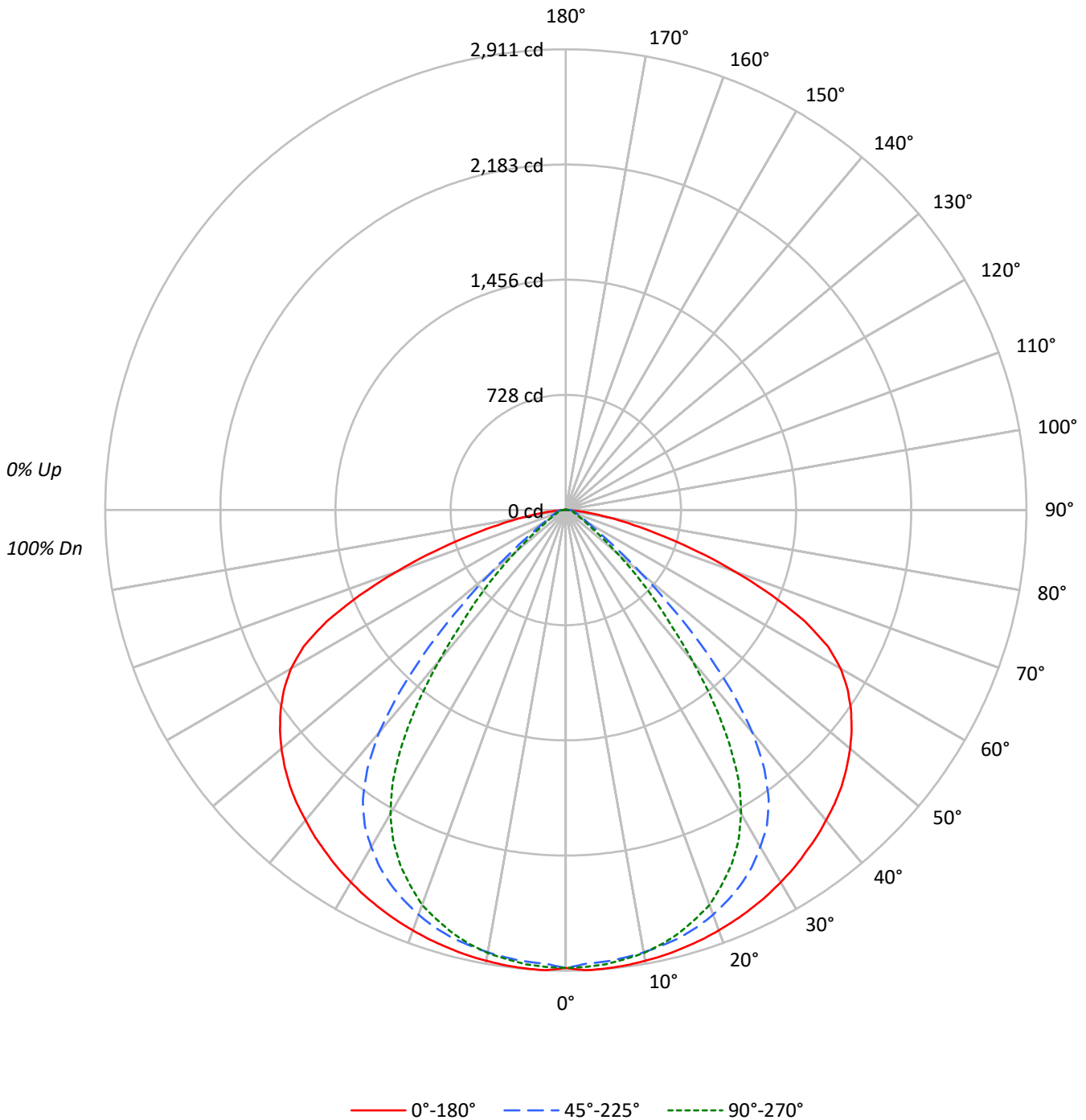
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5931.0 lumens
Efficiency: N/A
Efficacy: 117.0 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): 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

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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°	29466	29466	29466
5°	29726	29283	29455
10°	29912	29349	29390
15°	30209	29475	29172
20°	30636	29499	28780
25°	31207	29372	27807
30°	31934	28911	26060
35°	32846	27799	22405
40°	34015	24415	16561
45°	35513	17619	11138
50°	37165	9842	6646
55°	39062	5089	3638
60°	40863	3310	2577
65°	40166	2721	2046
70°	33874	2504	1906
75°	24916	2550	2046
80°	16621	3003	2581
85°	9079	4861	3926

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 41211 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.7	4.6
10°-20°	793.9	13.4
20°-30°	1207.7	20.4
30°-40°	1379.2	23.3
40°-50°	1112.7	18.8
50°-60°	609.0	10.3
60°-70°	321.1	5.4
70°-80°	157.4	2.7
80°-90°	55.5	0.9
90°-100°	11.9	0.2
100°-110°	1.6	0.0
110°-120°	1.0	0.0
120°-130°	0.9	0.0
130°-140°	1.0	0.0
140°-150°	1.1	0.0
150°-160°	1.0	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	2276.3	38.4
0°-40°	3655.5	61.6
0°-60°	5377.2	90.7
0°-90°	5911.2	99.7
90°-120°	14.6	0.2
90°-150°	17.6	0.3
90°-180°	20.0	0.3
0°-180°	5931.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2893	2893	2893	2893	2893	
5°	2908	2899	2864	2890	2881	277
15°	2865	2848	2796	2791	2767	811
25°	2777	2737	2614	2525	2475	1283
35°	2642	2531	2236	1932	1802	1657
45°	2466	2118	1223	836	773	1903
55°	2200	905	287	222	205	1963
65°	1667	209	113	91	85	1612
75°	633	118	65	54	52	699
85°	78	62	42	38	34	107
90°	3	32	26	22	21	5
95°	2	4	9	14	13	2
105°	1	0	1	2	2	1
115°	1	1	1	2	1	1
125°	1	1	1	2	1	1
135°	1	1	2	2	1	1
145°	2	2	2	2	2	1
155°	2	2	2	3	2	1
165°	2	2	3	3	3	1
175°	2	2	3	4	3	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2893.3	2893.3	2893.3	2893.3	2893.3
2.5°	2910.9	2902.9	2870.0	2898.1	2890.1
5°	2907.7	2898.9	2864.4	2890.1	2881.2
7.5°	2902.1	2890.9	2853.2	2876.4	2862.8
10°	2892.5	2881.2	2838.0	2856.4	2842.0
12.5°	2881.2	2866.0	2818.0	2827.6	2809.2
15°	2865.2	2847.6	2795.6	2790.8	2766.8
17.5°	2847.6	2826.0	2762.8	2741.9	2713.1
20°	2826.8	2800.4	2721.9	2681.1	2655.5
22.5°	2803.6	2769.2	2670.7	2608.3	2568.2
25°	2777.2	2737.1	2613.9	2525.0	2474.6
27.5°	2749.2	2694.7	2545.0	2428.1	2360.1
30°	2715.5	2649.9	2458.5	2300.8	2216.0
32.5°	2681.9	2593.8	2365.7	2136.7	2035.8
35°	2641.9	2530.6	2236.0	1931.8	1802.1
37.5°	2604.2	2454.5	2060.7	1674.8	1535.5
40°	2558.6	2364.9	1836.5	1379.4	1245.7
42.5°	2515.4	2260.8	1545.9	1094.4	978.3
45°	2465.7	2118.3	1223.3	835.8	773.3
47.5°	2408.1	1923.8	889.4	622.0	582.8
50°	2345.7	1656.4	621.2	451.5	419.5
52.5°	2276.8	1295.3	418.7	313.8	296.2
55°	2200.0	905.4	286.6	221.8	204.9
57.5°	2111.1	589.2	208.1	167.3	156.1
60°	2006.2	376.3	162.5	132.9	126.5
62.5°	1868.5	264.2	133.7	109.7	104.1
65°	1666.8	208.9	112.9	91.3	84.9
67.5°	1411.4	176.9	96.9	76.9	72.9
70°	1137.6	153.7	84.1	66.4	64.0
72.5°	874.2	134.5	72.9	59.2	57.6
75°	633.2	117.7	64.8	54.4	52.0
77.5°	438.7	101.7	57.6	48.8	47.2
80°	283.4	88.1	51.2	44.8	44.0
82.5°	162.5	73.7	46.4	43.2	42.4
85°	77.7	61.6	41.6	37.6	33.6
87.5°	24.8	45.6	32.8	28.8	25.6
90°	3.2	32.0	25.6	22.4	20.8
92.5°	3.2	17.6	18.4	18.4	17.6
95°	2.4	4.0	8.8	13.6	12.8
97.5°	2.4	1.6	5.6	9.6	9.6
100°	1.6	0.8	2.4	6.4	6.4
102.5°	1.6	0.8	0.8	4.0	4.0
105°	0.8	0.0	0.8	1.6	1.6
107.5°	0.8	0.8	0.8	1.6	0.8
110°	0.8	0.8	0.8	1.6	0.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	0.8	1.6	0.8
115°	0.8	0.8	0.8	1.6	0.8
117.5°	0.8	0.8	0.8	1.6	0.8
120°	0.8	0.8	0.8	1.6	0.8
122.5°	0.8	0.8	0.8	1.6	0.8
125°	0.8	0.8	0.8	1.6	0.8
127.5°	0.8	0.8	0.8	1.6	0.8
130°	0.8	0.8	1.6	1.6	0.8
132.5°	0.8	0.8	1.6	1.6	0.8
135°	0.8	0.8	1.6	1.6	0.8
137.5°	0.8	0.8	1.6	1.6	1.6
140°	1.6	0.8	1.6	1.6	1.6
142.5°	1.6	1.6	1.6	2.4	1.6
145°	1.6	1.6	1.6	2.4	1.6
147.5°	1.6	1.6	2.4	2.4	1.6
150°	1.6	1.6	2.4	2.4	1.6
152.5°	1.6	1.6	2.4	2.4	2.4
155°	1.6	1.6	2.4	3.2	2.4
157.5°	1.6	1.6	2.4	3.2	2.4
160°	1.6	2.4	3.2	3.2	2.4
162.5°	1.6	2.4	3.2	3.2	3.2
165°	1.6	2.4	3.2	3.2	3.2
167.5°	2.4	2.4	3.2	4.0	3.2
170°	2.4	2.4	3.2	4.0	3.2
172.5°	2.4	2.4	3.2	4.0	3.2
175°	2.4	2.4	3.2	4.0	3.2
177.5°	2.4	2.4	3.2	4.0	4.0
180°	3.2	3.2	3.2	3.2	3.2



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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	21.66	23.06	22.03	23.38	23.70	10.17	11.57	10.54	11.89	12.22
	3H	24.57	25.82	24.96	26.15	26.52	11.11	12.35	11.49	12.69	13.06
	4H	25.46	26.63	25.87	26.98	27.37	11.63	12.79	12.03	13.15	13.54
	6H	25.96	27.03	26.38	27.41	27.81	12.26	13.33	12.68	13.71	14.11
	8H	26.07	27.09	26.51	27.49	27.90	12.68	13.69	13.11	14.09	14.50
	12H	26.12	27.09	26.55	27.48	27.92	13.13	14.10	13.56	14.49	14.93
4H	2H	21.47	22.64	21.88	22.99	23.38	10.69	11.86	11.10	12.21	12.60
	3H	24.41	25.36	24.82	25.77	26.18	11.89	12.84	12.30	13.25	13.66
	4H	25.31	26.16	25.75	26.59	27.04	12.55	13.41	12.99	13.83	14.28
	6H	25.90	26.64	26.37	27.09	27.56	13.37	14.12	13.84	14.57	15.04
	8H	26.06	26.75	26.53	27.21	27.68	13.91	14.60	14.38	15.05	15.53
	12H	26.15	26.77	26.64	27.26	27.74	14.48	15.10	14.97	15.59	16.07
8H	4H	25.20	25.89	25.67	26.34	26.82	13.14	13.84	13.62	14.29	14.77
	6H	25.80	26.37	26.30	26.87	27.36	14.15	14.72	14.65	15.22	15.71
	8H	25.98	26.50	26.51	27.02	27.52	14.82	15.33	15.35	15.85	16.35
	12H	26.13	26.59	26.65	27.09	27.66	15.59	16.04	16.10	16.54	17.12
12H	4H	25.16	25.77	25.65	26.26	26.74	13.40	14.02	13.89	14.51	14.99
	6H	25.75	26.26	26.27	26.78	27.28	14.46	14.97	14.98	15.49	15.99
	8H	25.96	26.42	26.48	26.92	27.49	15.22	15.68	15.74	16.18	16.75