

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: P894083

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894083
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-HI-5000K
Description: Selectable 4FT MICROBAY LINEAR BAY with AISLE OPTIC, 80CRI, 5000K CCT, HI lumen setting
Light Source: -
Ballast/Driver: -

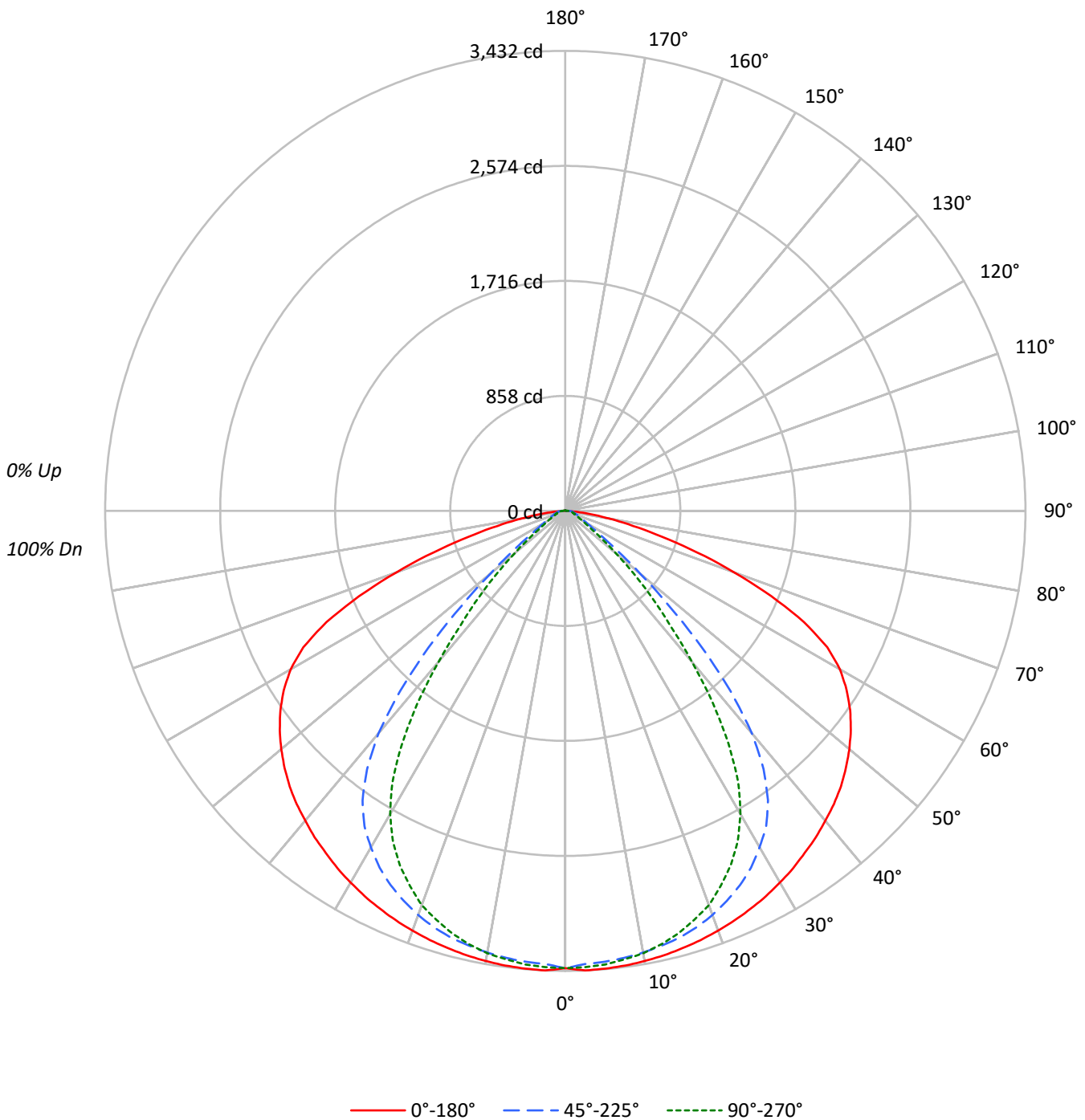
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6991.9 lumens
Efficiency: N/A
Efficacy: 137.9 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): 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°	34736	34736	34736
5°	35043	34522	34725
10°	35263	34599	34648
15°	35614	34748	34390
20°	36117	34777	33928
25°	36790	34626	32781
30°	37646	34084	30721
35°	38721	32772	26413
40°	40100	28783	19523
45°	41866	20770	13131
50°	43813	11604	7835
55°	46049	6000	4290
60°	48173	3903	3037
65°	47352	3207	2410
70°	39933	2951	2248
75°	29374	3006	2412
80°	19594	3542	3044
85°	10692	5737	4627

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 62.5°
 Luminance: 48584 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.9	4.6
10°-20°	935.9	13.4
20°-30°	1423.7	20.4
30°-40°	1625.9	23.3
40°-50°	1311.7	18.8
50°-60°	718.0	10.3
60°-70°	378.6	5.4
70°-80°	185.6	2.7
80°-90°	65.4	0.9
90°-100°	14.1	0.2
100°-110°	1.9	0.0
110°-120°	1.1	0.0
120°-130°	1.1	0.0
130°-140°	1.1	0.0
140°-150°	1.3	0.0
150°-160°	1.2	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	2683.5	38.4
0°-40°	4309.4	61.6
0°-60°	6339.1	90.7
0°-90°	6968.7	99.7
90°-120°	17.1	0.2
90°-150°	20.7	0.3
90°-180°	23.0	0.3
0°-180°	6991.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3411	3411	3411	3411	3411	
5°	3428	3417	3377	3407	3397	327
15°	3378	3357	3296	3290	3262	956
25°	3274	3227	3081	2977	2917	1513
35°	3114	2983	2636	2277	2124	1954
45°	2907	2497	1442	985	912	2244
55°	2594	1067	338	261	242	2314
65°	1965	246	133	108	100	1900
75°	746	139	76	64	61	824
85°	92	73	49	44	40	126
90°	4	38	30	26	24	6
95°	3	5	10	16	15	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	3	2	1
155°	2	2	3	4	3	1
165°	2	3	4	4	4	1
175°	3	3	4	5	4	0
180°	4	4	4	4	4	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3410.8	3410.8	3410.8	3410.8	3410.8
2.5°	3431.6	3422.2	3383.5	3416.5	3407.1
5°	3427.8	3417.4	3376.9	3407.1	3396.7
7.5°	3421.2	3408.0	3363.6	3391.0	3375.0
10°	3409.9	3396.7	3345.7	3367.4	3350.4
12.5°	3396.7	3378.7	3322.1	3333.4	3311.7
15°	3377.8	3357.0	3295.7	3290.0	3261.7
17.5°	3357.0	3331.6	3257.0	3232.5	3198.5
20°	3332.5	3301.3	3208.9	3160.7	3130.5
22.5°	3305.1	3264.5	3148.5	3074.8	3027.7
25°	3274.0	3226.8	3081.4	2976.7	2917.2
27.5°	3240.9	3176.8	3000.3	2862.5	2782.3
30°	3201.3	3123.9	2898.4	2712.4	2612.4
32.5°	3161.7	3057.9	2788.9	2519.0	2400.0
35°	3114.5	2983.3	2636.0	2277.3	2124.5
37.5°	3070.1	2893.6	2429.3	1974.4	1810.2
40°	3016.3	2787.9	2165.0	1626.1	1468.5
42.5°	2965.4	2665.2	1822.4	1290.2	1153.3
45°	2906.8	2497.2	1442.1	985.3	911.7
47.5°	2838.9	2267.9	1048.5	733.3	687.1
50°	2765.3	1952.7	732.4	532.3	494.5
52.5°	2684.1	1527.0	493.6	370.0	349.2
55°	2593.5	1067.4	337.9	261.4	241.6
57.5°	2488.8	694.6	245.4	197.3	184.0
60°	2365.1	443.6	191.6	156.7	149.1
62.5°	2202.8	311.4	157.6	129.3	122.7
65°	1965.0	246.3	133.1	107.6	100.0
67.5°	1663.9	208.6	114.2	90.6	85.9
70°	1341.1	181.2	99.1	78.3	75.5
72.5°	1030.6	158.6	85.9	69.8	68.0
75°	746.5	138.7	76.4	64.2	61.3
77.5°	517.2	119.9	68.0	57.6	55.7
80°	334.1	103.8	60.4	52.9	51.9
82.5°	191.6	86.8	54.7	51.0	50.0
85°	91.5	72.7	49.1	44.4	39.6
87.5°	29.3	53.8	38.7	34.0	30.2
90°	3.8	37.8	30.2	26.4	24.5
92.5°	3.8	20.8	21.7	21.7	20.8
95°	2.8	4.7	10.4	16.0	15.1
97.5°	2.8	1.9	6.6	11.3	11.3
100°	1.9	0.9	2.8	7.6	7.6
102.5°	1.9	0.9	0.9	4.7	4.7
105°	0.9	0.0	0.9	1.9	1.9
107.5°	0.9	0.9	0.9	1.9	0.9
110°	0.9	0.9	0.9	1.9	0.9



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CANDELA DISTRIBUTION (continued):

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



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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	22.23	23.63	22.60	23.95	24.28	10.75	12.15	11.12	12.47	12.79
	3H	25.14	26.39	25.53	26.72	27.10	11.68	12.93	12.07	13.26	13.64
	4H	26.04	27.20	26.44	27.56	27.95	12.20	13.36	12.61	13.72	14.11
	6H	26.53	27.60	26.95	27.98	28.38	12.84	13.91	13.26	14.28	14.68
	8H	26.64	27.66	27.08	28.06	28.47	13.25	14.27	13.69	14.67	15.08
	12H	26.69	27.66	27.13	28.05	28.49	13.70	14.67	14.14	15.06	15.50
4H	2H	22.05	23.21	22.45	23.57	23.96	11.27	12.43	11.67	12.79	13.18
	3H	24.98	25.93	25.39	26.34	26.75	12.46	13.41	12.88	13.82	14.23
	4H	25.88	26.73	26.32	27.16	27.61	13.13	13.98	13.57	14.41	14.85
	6H	26.47	27.21	26.94	27.66	28.14	13.95	14.69	14.42	15.14	15.61
	8H	26.63	27.33	27.11	27.78	28.26	14.48	15.17	14.95	15.63	16.10
	12H	26.73	27.34	27.22	27.83	28.31	15.06	15.67	15.55	16.16	16.64
8H	4H	25.77	26.46	26.24	26.91	27.39	13.72	14.41	14.19	14.86	15.34
	6H	26.37	26.94	26.87	27.44	27.93	14.72	15.29	15.23	15.79	16.28
	8H	26.56	27.07	27.08	27.59	28.09	15.40	15.91	15.92	16.43	16.93
	12H	26.70	27.16	27.22	27.66	28.23	16.16	16.62	16.68	17.12	17.69
12H	4H	25.73	26.35	26.22	26.83	27.31	13.98	14.59	14.47	15.08	15.56
	6H	26.32	26.83	26.84	27.35	27.85	15.03	15.54	15.55	16.06	16.56
	8H	26.53	26.99	27.05	27.49	28.06	15.80	16.25	16.31	16.75	17.33