

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: P893967

Luminaire Tested: 4MB-8HL-RFLW-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893967
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2408-210-7)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-8HL-RFLW-UNV-L940
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 4000K
Light Source: -
Ballast/Driver: -

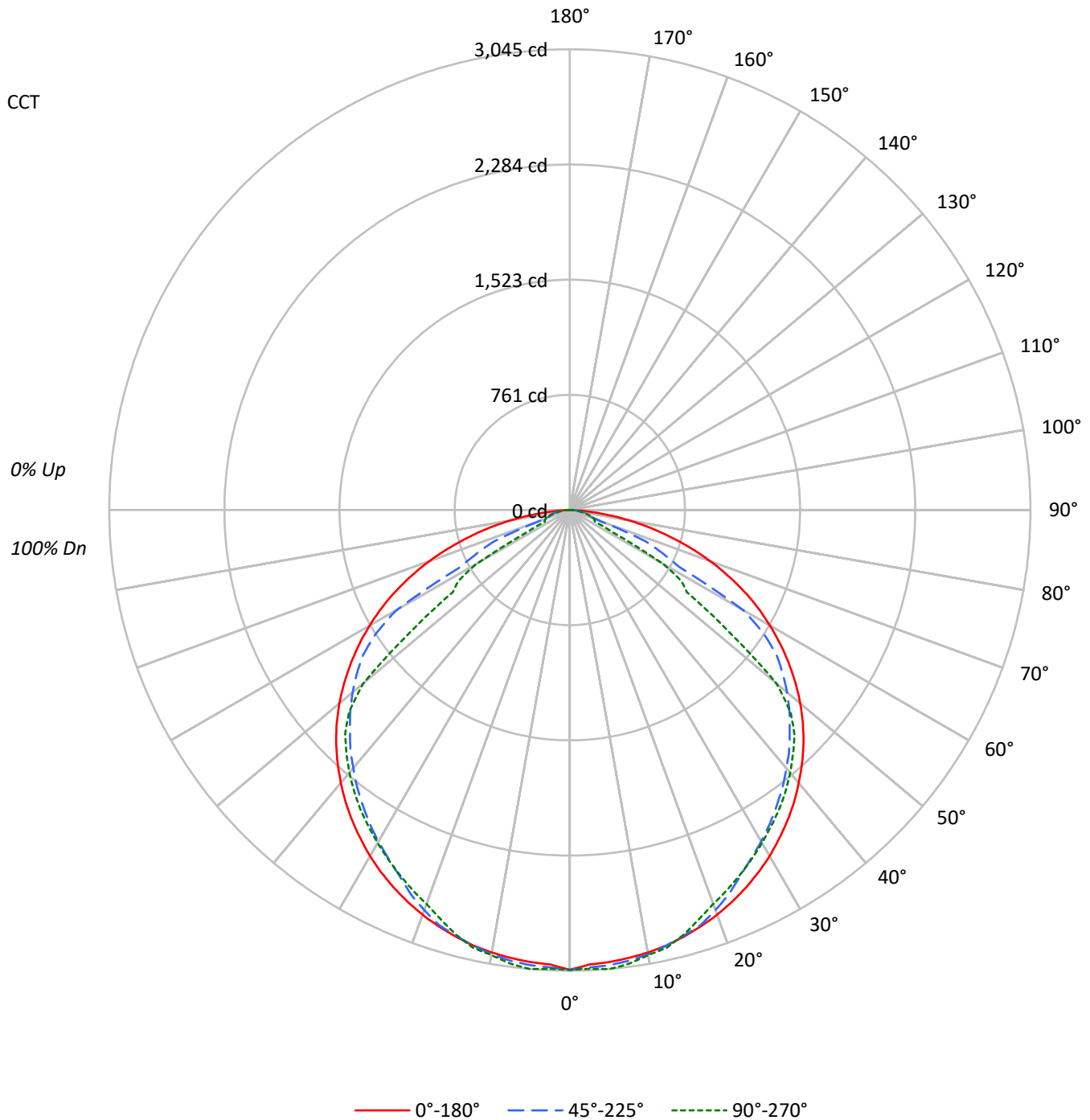
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7923.0 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.21' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 57.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 4.23
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	88	88	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	75	75	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	65	65	65	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	56	56	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	49	49	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	43	43	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	38	38	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	34	34	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	31	31	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	28	28	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39463	39463	39463
5°	39101	39358	39688
10°	39158	39307	39381
15°	39245	39156	39068
20°	39344	38891	38295
25°	39451	38203	38122
30°	39600	37943	38098
35°	39744	37799	38258
40°	39911	37751	38419
45°	40125	37734	38577
50°	40186	37877	36043
55°	40010	37762	21373
60°	39669	34416	18535
65°	39021	20804	5610
70°	37476	8250	6435
75°	34723	6768	6577
80°	30046	7141	6162
85°	21350	6704	5855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 40186 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.9	3.6
10°-20°	824.4	10.4
20°-30°	1245.8	15.7
30°-40°	1520.0	19.2
40°-50°	1607.9	20.3
50°-60°	1331.8	16.8
60°-70°	740.3	9.3
70°-80°	300.1	3.8
80°-90°	64.7	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2358.1	29.8
0°-40°	3878.2	48.9
0°-60°	6817.9	86.1
0°-90°	7923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7923.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3039	3039	3039	3039	3039	
5°	3000	3053	3020	3024	3045	285
15°	2919	2964	2913	2911	2906	825
25°	2754	2773	2666	2650	2661	1270
35°	2507	2476	2384	2394	2414	1569
45°	2185	2073	2055	2080	2101	1684
55°	1767	1647	1668	1144	944	1579
65°	1270	1164	677	228	183	1252
75°	692	386	135	133	131	731
85°	143	48	45	41	39	180
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3039.1	3039.1	3039.1	3039.1	3039.1
2.5°	3006.4	3058.8	3026.0	3032.6	3035.4
5°	2999.8	3053.2	3019.5	3024.2	3044.8
7.5°	2985.8	3040.1	3004.5	3007.3	3023.2
10°	2969.8	3019.5	2981.1	2976.4	2986.7
12.5°	2948.3	2993.3	2948.3	2950.2	2963.3
15°	2919.3	2964.2	2912.7	2910.8	2906.2
17.5°	2884.6	2926.8	2876.2	2846.2	2835.9
20°	2847.2	2879.9	2814.4	2768.5	2771.3
22.5°	2802.2	2830.3	2747.9	2705.7	2717.9
25°	2753.5	2773.2	2666.4	2649.5	2660.8
27.5°	2700.1	2715.1	2596.2	2592.4	2601.8
30°	2641.1	2646.7	2530.6	2528.7	2540.9
32.5°	2575.5	2566.2	2460.4	2462.2	2478.1
35°	2507.2	2476.3	2384.5	2393.9	2413.5
37.5°	2435.1	2379.8	2309.6	2321.7	2343.3
40°	2354.5	2279.6	2227.1	2245.9	2266.5
42.5°	2272.1	2174.7	2147.5	2165.3	2185.0
45°	2185.0	2072.6	2054.8	2080.1	2100.7
47.5°	2090.4	1972.4	1969.6	1989.3	1979.9
50°	1989.3	1868.4	1875.0	1848.8	1784.2
52.5°	1880.6	1760.7	1773.9	1660.5	1342.1
55°	1767.3	1647.4	1668.0	1144.5	944.1
57.5°	1651.2	1531.3	1518.2	875.7	874.8
60°	1527.5	1413.3	1325.2	773.6	713.7
62.5°	1403.0	1290.6	813.9	582.5	327.8
65°	1270.0	1164.1	677.1	227.6	182.6
67.5°	1130.4	1035.8	542.3	171.4	177.9
70°	987.1	902.8	217.3	165.8	169.5
72.5°	841.0	696.8	144.2	153.6	153.6
75°	692.1	385.9	134.9	133.0	131.1
77.5°	544.1	258.5	118.0	109.6	106.8
80°	401.8	92.7	95.5	85.2	82.4
82.5°	266.0	72.1	68.4	61.8	59.9
85°	143.3	47.8	45.0	41.2	39.3
87.5°	51.5	24.4	24.4	19.7	17.8
90°	0.0	0.0	0.0	0.0	0.0



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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	25.45	27.02	25.81	27.33	27.65	21.44	23.01	21.80	23.32	23.64
	3H	27.45	28.86	27.83	29.19	29.55	21.57	22.98	21.95	23.30	23.67
	4H	28.07	29.39	28.47	29.73	30.11	21.69	23.01	22.09	23.35	23.73
	6H	28.47	29.68	28.88	30.05	30.44	21.80	23.01	22.21	23.38	23.77
	8H	28.58	29.74	29.01	30.13	30.53	21.83	22.99	22.26	23.38	23.78
	12H	28.66	29.77	29.09	30.15	30.58	21.85	22.96	22.28	23.35	23.77
4H	2H	25.58	26.90	25.98	27.24	27.62	22.16	23.48	22.56	23.83	24.21
	3H	27.74	28.83	28.15	29.22	29.63	22.36	23.45	22.77	23.85	24.25
	4H	28.39	29.37	28.82	29.78	30.22	22.51	23.49	22.95	23.91	24.35
	6H	28.84	29.69	29.29	30.13	30.59	22.68	23.53	23.14	23.97	24.43
	8H	28.98	29.77	29.44	30.21	30.68	22.73	23.53	23.20	23.97	24.44
	12H	29.08	29.79	29.56	30.27	30.74	22.78	23.49	23.26	23.97	24.44
8H	4H	28.33	29.12	28.79	29.56	30.03	22.79	23.58	23.25	24.02	24.49
	6H	28.77	29.43	29.27	29.92	30.39	22.99	23.65	23.49	24.14	24.62
	8H	28.92	29.51	29.43	30.02	30.50	23.08	23.67	23.59	24.18	24.66
	12H	29.05	29.57	29.56	30.06	30.63	23.16	23.69	23.67	24.18	24.74
12H	4H	28.30	29.01	28.78	29.49	29.96	22.80	23.51	23.28	23.99	24.46
	6H	28.73	29.32	29.24	29.83	30.32	23.01	23.60	23.52	24.11	24.60
	8H	28.90	29.42	29.41	29.91	30.48	23.13	23.66	23.64	24.15	24.71