

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: P893966

Luminaire Tested: 4MB-8HL-RFLW-UNV-L935

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893966
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-L935
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 3500K
Light Source: -
Ballast/Driver: -

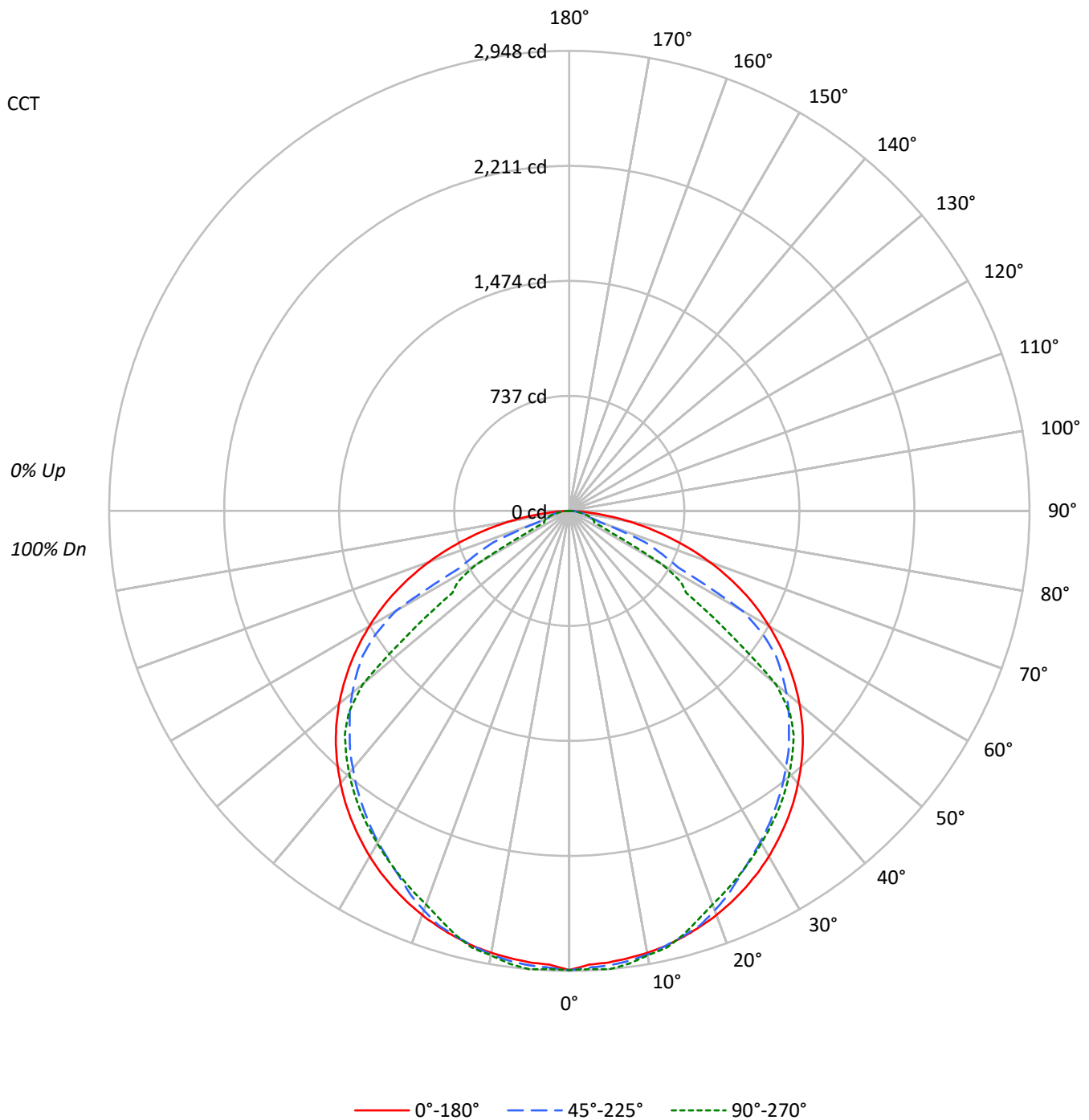
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7671.0 lumens
Efficiency: N/A
Efficacy: 132.5 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	
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49	47
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	38209	38209	38209
5°	37858	38106	38425
10°	37913	38057	38128
15°	37996	37911	37825
20°	38092	37654	37076
25°	38196	36988	36909
30°	38341	36736	36886
35°	38479	36596	37043
40°	38641	36551	37197
45°	38848	36535	37350
50°	38907	36673	34896
55°	38737	36562	20692
60°	38407	33322	17945
65°	37780	20144	5432
70°	36284	7988	6230
75°	33619	6552	6367
80°	29089	6917	5967
85°	20665	6481	5676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 38907 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.7	3.6
10°-20°	798.2	10.4
20°-30°	1206.2	15.7
30°-40°	1471.7	19.2
40°-50°	1556.8	20.3
50°-60°	1289.4	16.8
60°-70°	716.8	9.3
70°-80°	290.6	3.8
80°-90°	62.6	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°	2283.1	29.8
0°-40°	3754.8	48.9
0°-60°	6601.0	86.1
0°-90°	7671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2942	2942	2942	2942	2942	
5°	2904	2956	2923	2928	2948	276
15°	2826	2870	2820	2818	2814	798
25°	2666	2685	2582	2565	2576	1230
35°	2427	2398	2309	2318	2337	1520
45°	2116	2007	1990	2014	2034	1631
55°	1711	1595	1615	1108	914	1529
65°	1230	1127	656	220	177	1213
75°	670	374	131	129	127	708
85°	139	46	44	40	38	174
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2942.5	2942.5	2942.5	2942.5	2942.5
2.5°	2910.7	2961.5	2929.8	2936.1	2938.9
5°	2904.4	2956.1	2923.4	2928.0	2947.9
7.5°	2890.8	2943.4	2908.9	2911.7	2927.1
10°	2875.4	2923.4	2886.3	2881.7	2891.7
12.5°	2854.5	2898.1	2854.5	2856.3	2869.0
15°	2826.4	2869.9	2820.1	2818.3	2813.7
17.5°	2792.9	2833.7	2784.7	2755.7	2745.7
20°	2756.6	2788.3	2724.9	2680.4	2683.1
22.5°	2713.1	2740.3	2660.5	2619.7	2631.5
25°	2665.9	2685.0	2581.6	2565.3	2576.1
27.5°	2614.2	2628.7	2513.6	2510.0	2519.0
30°	2557.1	2562.5	2450.1	2448.3	2460.1
32.5°	2493.6	2484.6	2382.1	2383.9	2399.3
35°	2427.4	2397.5	2308.6	2317.7	2336.8
37.5°	2357.6	2304.1	2236.1	2247.9	2268.8
40°	2279.6	2207.1	2156.3	2174.4	2194.4
42.5°	2199.8	2105.5	2079.2	2096.5	2115.5
45°	2115.5	2006.7	1989.5	2013.9	2033.9
47.5°	2023.9	1909.7	1906.9	1926.0	1916.9
50°	1926.0	1809.0	1815.4	1790.0	1727.4
52.5°	1820.8	1704.7	1717.4	1607.7	1299.4
55°	1711.1	1595.0	1615.0	1108.1	914.0
57.5°	1598.6	1482.6	1469.9	847.8	846.9
60°	1478.9	1368.3	1283.1	749.0	691.0
62.5°	1358.3	1249.5	788.0	564.0	317.4
65°	1229.6	1127.1	655.6	220.3	176.8
67.5°	1094.5	1002.9	525.0	165.9	172.3
70°	955.7	874.1	210.4	160.5	164.1
72.5°	814.3	674.6	139.6	148.7	148.7
75°	670.1	373.6	130.6	128.8	126.9
77.5°	526.8	250.3	114.3	106.1	103.4
80°	389.0	89.8	92.5	82.5	79.8
82.5°	257.5	69.8	66.2	59.8	58.0
85°	138.7	46.2	43.5	39.9	38.1
87.5°	49.9	23.6	23.6	19.0	17.2
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	25.34	26.91	25.70	27.22	27.54	21.32	22.90	21.69	23.21	23.53
	3H	27.34	28.75	27.72	29.08	29.44	21.46	22.86	21.83	23.19	23.55
	4H	27.95	29.27	28.35	29.62	30.00	21.57	22.89	21.97	23.24	23.62
	6H	28.35	29.57	28.77	29.94	30.33	21.68	22.90	22.10	23.27	23.66
	8H	28.47	29.63	28.90	30.02	30.42	21.72	22.88	22.14	23.27	23.67
	12H	28.54	29.65	28.97	30.03	30.46	21.74	22.85	22.17	23.23	23.66
4H	2H	25.46	26.78	25.86	27.13	27.51	22.05	23.37	22.45	23.72	24.09
	3H	27.62	28.71	28.03	29.11	29.51	22.25	23.34	22.66	23.74	24.14
	4H	28.28	29.26	28.71	29.67	30.11	22.40	23.38	22.83	23.79	24.23
	6H	28.72	29.57	29.18	30.02	30.47	22.57	23.42	23.02	23.86	24.32
	8H	28.87	29.66	29.33	30.10	30.57	22.62	23.41	23.08	23.86	24.32
	12H	28.97	29.68	29.45	30.16	30.63	22.67	23.38	23.15	23.85	24.32
8H	4H	28.21	29.01	28.68	29.45	29.92	22.67	23.47	23.14	23.91	24.38
	6H	28.66	29.31	29.15	29.80	30.28	22.88	23.54	23.38	24.03	24.51
	8H	28.81	29.39	29.32	29.90	30.39	22.97	23.55	23.48	24.06	24.55
	12H	28.94	29.46	29.45	29.95	30.52	23.05	23.57	23.56	24.06	24.63
12H	4H	28.19	28.90	28.67	29.38	29.85	22.69	23.40	23.17	23.88	24.35
	6H	28.62	29.21	29.13	29.72	30.20	22.90	23.49	23.41	24.00	24.49
	8H	28.79	29.31	29.30	29.80	30.37	23.02	23.54	23.53	24.04	24.60