

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: P893968

Luminaire Tested: 4MB-8HL-RFLW-UNV-L950

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893968
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-L950
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with REFLECTOR WITH WHITE FINISH, 90CRI, 5000K
Light Source: -
Ballast/Driver: -

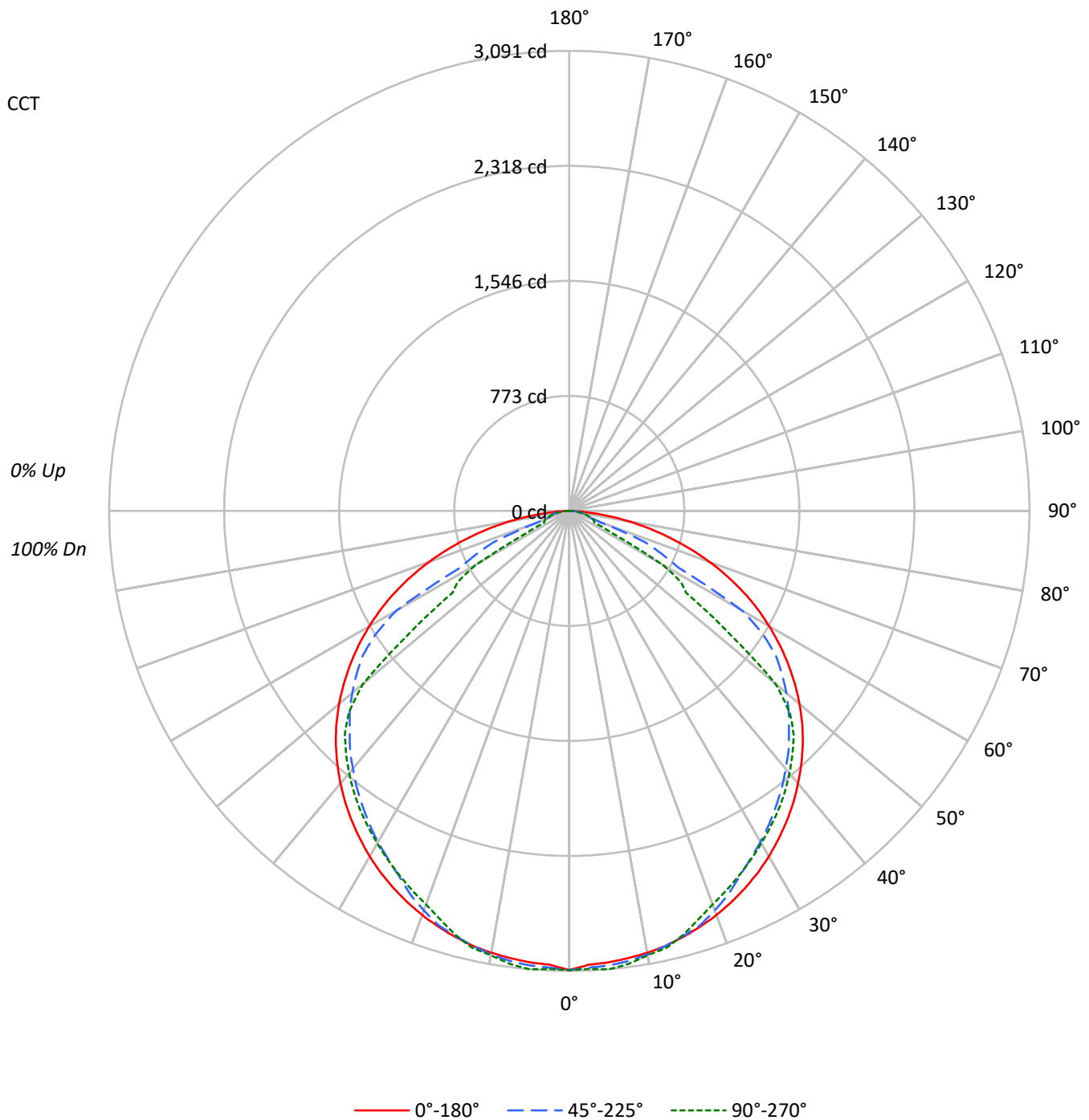
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8043.0 lumens
Efficiency: N/A
Efficacy: 138.9 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 (Ain): 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°	40062	40062	40062
5°	39693	39954	40289
10°	39751	39902	39977
15°	39839	39749	39660
20°	39939	39479	38875
25°	40048	38782	38700
30°	40200	38518	38675
35°	40346	38371	38839
40°	40516	38324	39000
45°	40732	38305	39161
50°	40794	38451	36588
55°	40616	38334	21697
60°	40272	34938	18815
65°	39611	21121	5696
70°	38046	8375	6534
75°	35250	6868	6678
80°	30502	7253	6259
85°	21678	6794	5945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 40794 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.2	3.6
10°-20°	836.9	10.4
20°-30°	1264.7	15.7
30°-40°	1543.1	19.2
40°-50°	1632.3	20.3
50°-60°	1352.0	16.8
60°-70°	751.6	9.3
70°-80°	304.6	3.8
80°-90°	65.7	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°	2393.8	29.8
0°-40°	3936.9	48.9
0°-60°	6921.1	86.1
0°-90°	8043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3085	3085	3085	3085	3085	
5°	3045	3099	3065	3070	3091	290
15°	2964	3009	2957	2955	2950	837
25°	2795	2815	2707	2690	2701	1289
35°	2545	2514	2421	2430	2450	1593
45°	2218	2104	2086	2112	2132	1710
55°	1794	1672	1693	1162	958	1603
65°	1289	1182	687	231	185	1271
75°	703	392	137	135	133	742
85°	146	48	46	42	40	183
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3085.2	3085.2	3085.2	3085.2	3085.2
2.5°	3051.9	3105.1	3071.9	3078.5	3081.4
5°	3045.2	3099.4	3065.2	3070.0	3090.9
7.5°	3031.0	3086.1	3050.0	3052.9	3069.0
10°	3014.8	3065.2	3026.2	3021.5	3031.9
12.5°	2993.0	3038.6	2993.0	2994.9	3008.2
15°	2963.5	3009.1	2956.8	2954.9	2950.2
17.5°	2928.3	2971.1	2919.7	2889.3	2878.9
20°	2890.3	2923.6	2857.0	2810.4	2813.3
22.5°	2844.6	2873.2	2789.5	2746.7	2759.1
25°	2795.2	2815.2	2706.8	2689.7	2701.1
27.5°	2741.0	2756.2	2635.5	2631.7	2641.2
30°	2681.1	2686.8	2568.9	2567.0	2579.4
32.5°	2614.6	2605.1	2497.6	2499.5	2515.7
35°	2545.2	2513.8	2420.6	2430.1	2450.1
37.5°	2471.9	2415.9	2344.5	2356.9	2378.8
40°	2390.2	2314.1	2260.9	2279.9	2300.8
42.5°	2306.5	2207.6	2180.1	2198.1	2218.1
45°	2218.1	2104.0	2085.9	2111.6	2132.5
47.5°	2122.1	2002.3	1999.4	2019.4	2009.9
50°	2019.4	1896.7	1903.4	1876.8	1811.2
52.5°	1909.1	1787.4	1800.7	1685.7	1362.4
55°	1794.1	1672.4	1693.3	1161.8	958.4
57.5°	1676.2	1554.5	1541.2	888.9	888.0
60°	1550.7	1434.7	1345.3	785.3	724.5
62.5°	1424.2	1310.1	826.2	591.4	332.8
65°	1289.2	1181.8	687.4	231.0	185.4
67.5°	1147.6	1051.5	550.5	174.0	180.6
70°	1002.1	916.5	220.6	168.3	172.1
72.5°	853.8	707.4	146.4	155.9	155.9
75°	702.6	391.7	136.9	135.0	133.1
77.5°	552.4	262.4	119.8	111.2	108.4
80°	407.9	94.1	97.0	86.5	83.7
82.5°	270.0	73.2	69.4	62.7	60.8
85°	145.5	48.5	45.6	41.8	39.9
87.5°	52.3	24.7	24.7	20.0	18.1
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	25.50	27.07	25.86	27.39	27.70	21.49	23.06	21.85	23.38	23.69
	3H	27.51	28.91	27.88	29.24	29.60	21.62	23.03	22.00	23.36	23.72
	4H	28.12	29.44	28.52	29.79	30.16	21.74	23.06	22.14	23.41	23.78
	6H	28.52	29.74	28.93	30.10	30.49	21.85	23.07	22.26	23.43	23.82
	8H	28.64	29.80	29.06	30.19	30.59	21.88	23.04	22.31	23.43	23.83
	12H	28.71	29.82	29.14	30.20	30.63	21.91	23.02	22.34	23.40	23.83
4H	2H	25.63	26.95	26.03	27.30	27.67	22.21	23.53	22.61	23.88	24.26
	3H	27.79	28.88	28.20	29.28	29.68	22.41	23.50	22.82	23.90	24.30
	4H	28.44	29.42	28.88	29.84	30.27	22.57	23.54	23.00	23.96	24.40
	6H	28.89	29.74	29.35	30.18	30.64	22.73	23.58	23.19	24.02	24.48
	8H	29.03	29.82	29.49	30.27	30.73	22.78	23.58	23.25	24.02	24.49
	12H	29.13	29.84	29.62	30.32	30.79	22.83	23.54	23.31	24.02	24.49
8H	4H	28.38	29.17	28.84	29.62	30.08	22.84	23.63	23.30	24.08	24.54
	6H	28.82	29.48	29.32	29.97	30.45	23.05	23.70	23.54	24.19	24.67
	8H	28.97	29.56	29.48	30.07	30.56	23.13	23.72	23.64	24.23	24.72
	12H	29.10	29.62	29.61	30.12	30.68	23.22	23.74	23.72	24.23	24.79
12H	4H	28.35	29.06	28.84	29.54	30.01	22.85	23.56	23.33	24.04	24.51
	6H	28.78	29.37	29.29	29.88	30.37	23.06	23.65	23.58	24.16	24.65
	8H	28.95	29.48	29.46	29.97	30.53	23.19	23.71	23.70	24.20	24.76