

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: P893944

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

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-6)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-8HL-LVR-UNV-L950
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

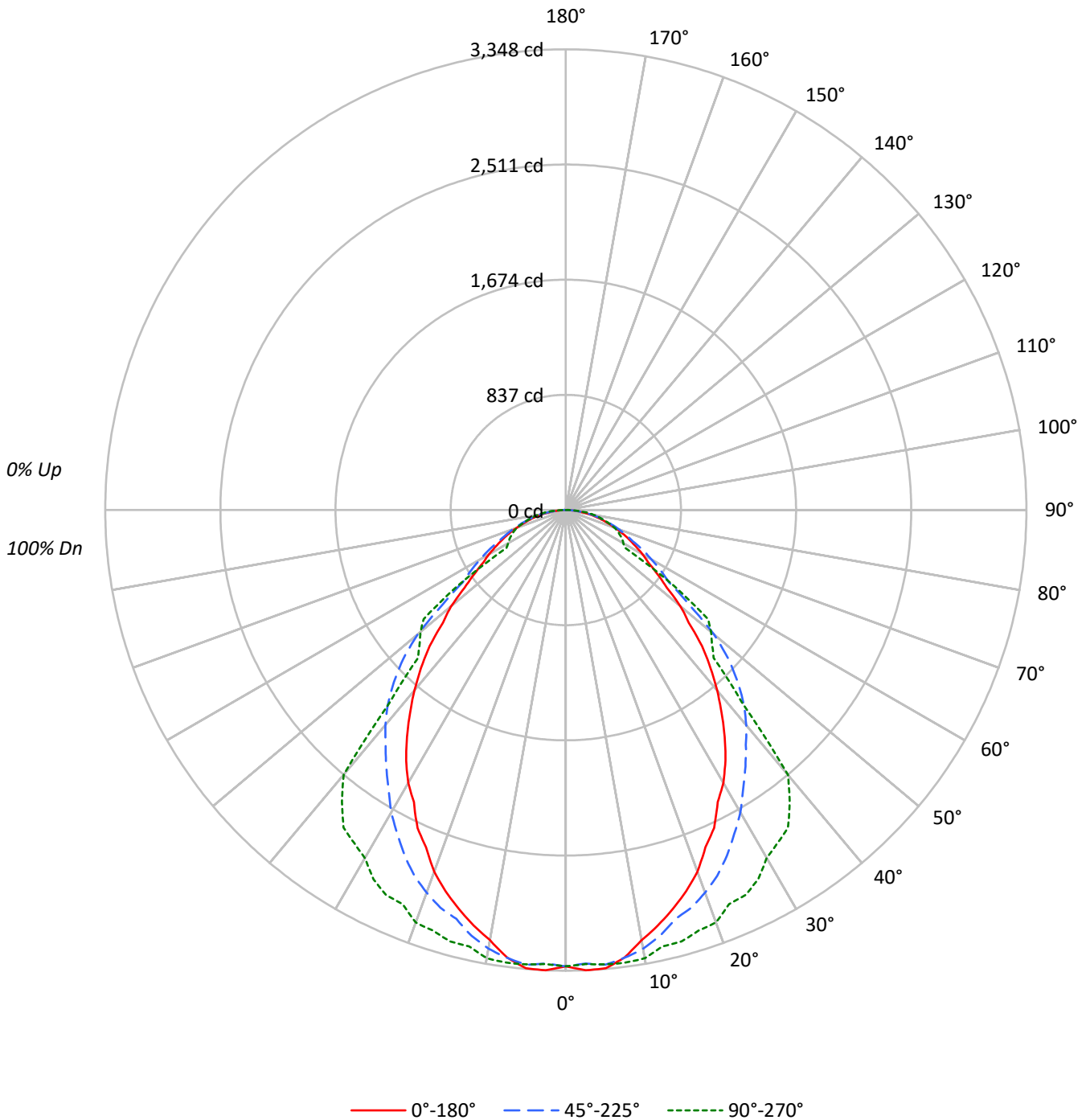
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6941.0 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.32 / 1.26
Luminous Opening: Rectangular (W 0.38' 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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CATALOG NUMBER: 4MB-8HL-LVR-UNV-L950

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	77	77	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	67	67	67	65
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	52	52	52	50
6	74	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	47	47	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	38	38	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	35	35	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23593	23593	23593
5°	23878	23690	23676
10°	22936	23387	23900
15°	22116	22661	23916
20°	21185	22408	24156
25°	20015	21751	24243
30°	18810	20842	23995
35°	17492	19768	24463
40°	15892	18949	23327
45°	14081	17785	15296
50°	12052	15544	15264
55°	10099	11343	11875
60°	9188	10241	6873
65°	8608	9066	7345
70°	7922	8590	7861
75°	7442	8057	8005
80°	6941	7621	8580
85°	5959	6359	9143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17785 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.1	4.5
10°-20°	881.6	12.7
20°-30°	1284.9	18.5
30°-40°	1469.9	21.2
40°-50°	1257.5	18.1
50°-60°	829.2	11.9
60°-70°	501.3	7.2
70°-80°	306.7	4.4
80°-90°	94.7	1.4
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°	2481.6	35.8
0°-40°	3951.6	56.9
0°-60°	6038.3	87.0
0°-90°	6941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6941.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3316	3316	3316	3316	3316	
5°	3343	3340	3317	3310	3315	313
15°	3002	3037	3076	3273	3247	844
25°	2550	2588	2771	3007	3088	1166
35°	2014	2115	2276	2633	2816	1255
45°	1399	1508	1768	1652	1520	1071
55°	814	860	914	1084	957	741
65°	511	524	538	481	436	505
75°	271	278	293	307	291	286
85°	73	72	78	92	112	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3315.9	3315.9	3315.9	3315.9	3315.9
2.5°	3348.1	3338.3	3298.4	3336.4	3302.3
5°	3343.2	3340.3	3316.9	3310.1	3315.0
7.5°	3278.9	3285.8	3281.9	3354.9	3317.9
10°	3174.7	3188.4	3237.1	3339.3	3308.1
12.5°	3092.9	3103.6	3168.9	3320.8	3247.8
15°	3002.4	3037.4	3076.4	3273.1	3246.8
17.5°	2905.0	2938.1	3030.6	3208.8	3205.9
20°	2797.9	2859.2	2959.5	3125.1	3190.3
22.5°	2652.8	2735.5	2876.7	3087.1	3099.7
25°	2549.5	2588.5	2770.6	3007.2	3088.1
27.5°	2392.7	2466.7	2652.8	2892.3	3025.7
30°	2289.5	2350.9	2536.9	2825.1	2920.6
32.5°	2160.0	2233.0	2399.6	2752.1	2867.0
35°	2013.9	2115.2	2275.9	2633.3	2816.4
37.5°	1860.0	1960.3	2150.2	2534.9	2673.2
40°	1711.0	1796.7	2040.2	2417.1	2511.5
42.5°	1558.2	1650.7	1914.6	2184.3	1889.3
45°	1399.4	1507.5	1767.5	1651.6	1520.2
47.5°	1211.5	1343.9	1604.9	1327.3	1440.3
50°	1088.8	1160.8	1404.3	1251.4	1379.0
52.5°	926.1	1023.5	1127.7	1168.6	1303.0
55°	814.1	859.9	914.4	1083.9	957.3
57.5°	710.9	751.8	815.1	764.5	510.3
60°	645.7	664.2	719.7	546.3	483.0
62.5°	571.6	590.1	631.1	510.3	463.5
65°	511.3	523.9	538.5	481.1	436.3
67.5°	447.0	453.8	469.4	444.1	410.0
70°	380.8	390.5	412.9	406.1	377.9
72.5°	322.3	331.1	350.6	360.3	334.0
75°	270.7	277.5	293.1	306.8	291.2
77.5°	215.2	222.0	242.5	257.1	250.3
80°	169.4	170.4	186.0	200.6	209.4
82.5°	118.8	120.8	132.4	148.0	165.6
85°	73.0	72.1	77.9	92.5	112.0
87.5°	28.2	27.3	32.1	39.0	57.5
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	18.81	20.29	19.17	20.60	20.92	18.49	19.96	18.85	20.28	20.59
	3H	20.37	21.69	20.75	22.02	22.38	20.10	21.43	20.48	21.76	22.12
	4H	20.97	22.21	21.37	22.56	22.94	20.85	22.09	21.25	22.44	22.82
	6H	21.42	22.57	21.84	22.94	23.33	21.52	22.67	21.93	23.03	23.43
	8H	21.58	22.67	22.00	23.06	23.46	21.80	22.89	22.22	23.28	23.68
	12H	21.68	22.72	22.11	23.10	23.53	22.02	23.06	22.45	23.44	23.87
4H	2H	19.40	20.64	19.80	20.99	21.37	19.15	20.39	19.55	20.74	21.12
	3H	21.19	22.22	21.60	22.62	23.02	21.03	22.06	21.44	22.46	22.86
	4H	21.92	22.84	22.35	23.26	23.70	21.93	22.85	22.36	23.27	23.71
	6H	22.50	23.30	22.96	23.75	24.21	22.73	23.54	23.19	23.98	24.44
	8H	22.70	23.45	23.16	23.89	24.36	23.06	23.82	23.53	24.26	24.73
	12H	22.84	23.51	23.32	23.99	24.46	23.34	24.01	23.82	24.49	24.96
8H	4H	22.24	22.99	22.70	23.44	23.90	22.25	23.00	22.71	23.45	23.91
	6H	22.95	23.57	23.45	24.06	24.54	23.20	23.82	23.70	24.31	24.79
	8H	23.22	23.78	23.73	24.29	24.78	23.62	24.18	24.13	24.69	25.18
	12H	23.43	23.92	23.94	24.42	24.98	23.98	24.48	24.49	24.97	25.54
12H	4H	22.28	22.95	22.76	23.43	23.90	22.27	22.95	22.76	23.43	23.90
	6H	23.02	23.58	23.53	24.09	24.58	23.25	23.81	23.77	24.32	24.81
	8H	23.35	23.84	23.86	24.34	24.90	23.73	24.23	24.24	24.72	25.28