

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: P893953

Luminaire Tested: 4MB-8HL-LVRF-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893953
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-5)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-8HL-LVRF-UNV-L830
Description: 8000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 80CRI, 3000K C
Light Source: -
Ballast/Driver: -

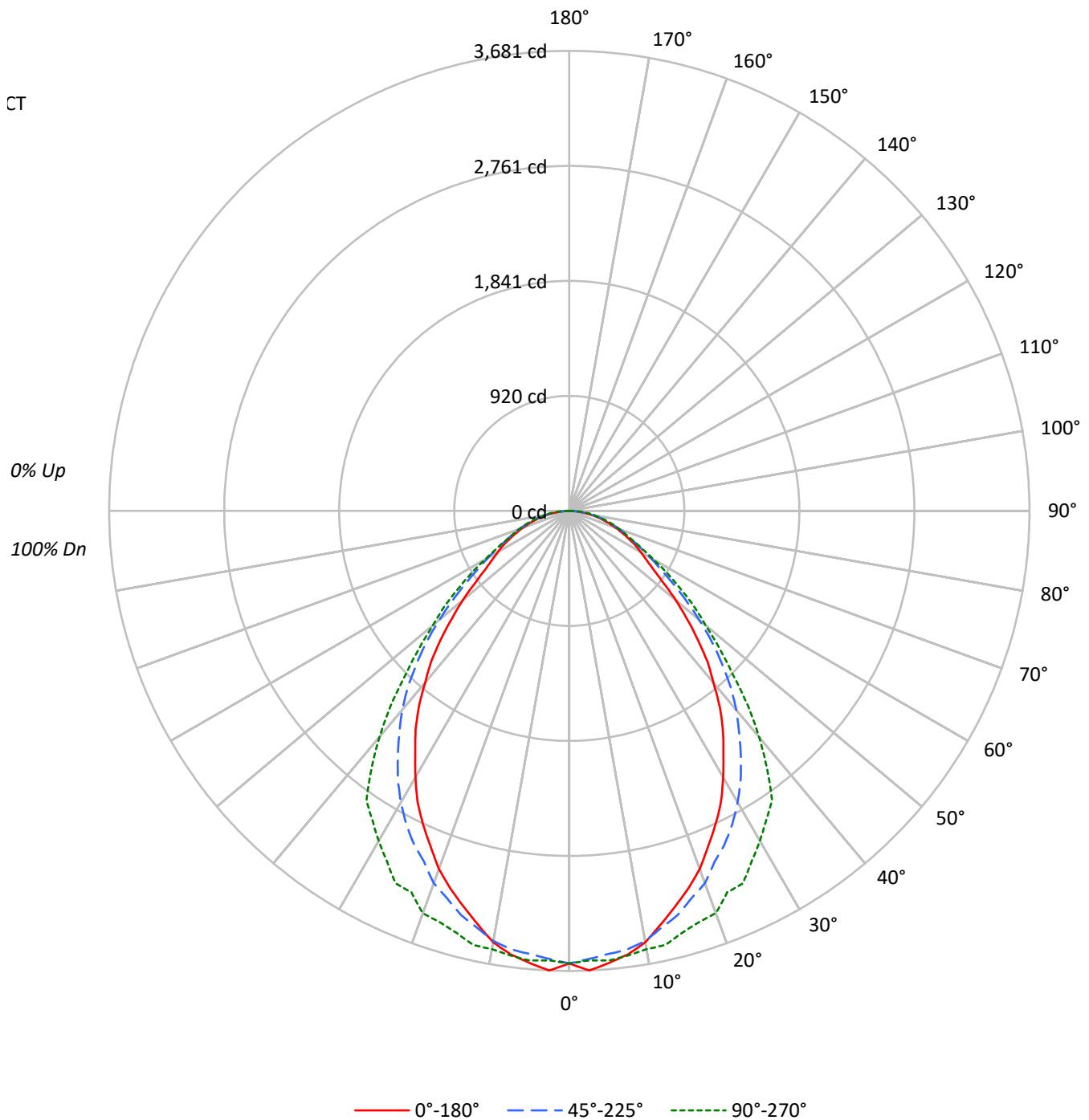
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7342.0 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.25 / 1.21
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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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	102	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	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	59	59	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	52	52	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	47	47	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	42	42	42	40
8	65	52	44	39	64	52	44	39	50	44	39	49	43	39	48	43	38	38	38	38	37
9	61	48	41	36	60	48	40	35	47	40	35	46	40	35	45	39	35	35	35	35	33
10	57	45	37	33	56	44	37	32	43	37	32	43	36	32	42	36	32	32	32	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25764	25764	25764
5°	25932	25429	25793
10°	25324	25246	25731
15°	24129	24664	25732
20°	23081	24007	25942
25°	21730	23090	25809
30°	20216	22127	25054
35°	18617	20770	24569
40°	16651	19305	21939
45°	14596	17362	18605
50°	12318	15002	15745
55°	10219	12556	13428
60°	9396	10675	11075
65°	8803	9386	9458
70°	8196	8895	8829
75°	7648	8302	8602
80°	7142	7719	8248
85°	6008	6539	9102

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 18605 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.8	4.7
10°-20°	953.4	13.0
20°-30°	1373.0	18.7
30°-40°	1515.8	20.6
40°-50°	1300.7	17.7
50°-60°	886.1	12.1
60°-70°	557.4	7.6
70°-80°	317.4	4.3
80°-90°	96.5	1.3
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°	2668.2	36.3
0°-40°	4184.0	57.0
0°-60°	6370.8	86.8
0°-90°	7342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7342.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3621	3621	3621	3621	3621	
5°	3631	3617	3560	3635	3611	343
15°	3276	3310	3348	3500	3493	922
25°	2768	2823	2941	3178	3288	1271
35°	2143	2227	2391	2652	2829	1333
45°	1451	1547	1726	1830	1849	1118
55°	824	875	1012	1061	1082	757
65°	523	532	558	585	562	519
75°	278	280	302	315	313	296
85°	74	76	80	95	112	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3621.1	3621.1	3621.1	3621.1	3621.1
2.5°	3680.6	3642.7	3588.6	3640.5	3600.5
5°	3630.8	3616.7	3560.4	3635.1	3611.3
7.5°	3579.9	3549.6	3539.9	3620.0	3588.6
10°	3505.2	3487.9	3494.4	3597.2	3561.5
12.5°	3387.2	3399.1	3414.3	3545.3	3556.1
15°	3275.7	3310.4	3348.3	3499.8	3493.3
17.5°	3166.4	3214.0	3249.7	3444.6	3450.0
20°	3048.4	3075.5	3170.7	3359.1	3426.2
22.5°	2902.3	2955.3	3037.6	3272.5	3302.8
25°	2768.0	2823.2	2941.2	3178.3	3287.6
27.5°	2627.3	2678.2	2824.3	3066.8	3159.9
30°	2460.6	2528.8	2693.3	2940.1	3049.5
32.5°	2293.9	2393.5	2551.5	2804.8	2931.5
35°	2143.4	2226.8	2391.3	2652.2	2828.6
37.5°	1976.7	2064.4	2231.1	2485.5	2598.1
40°	1792.7	1886.8	2078.5	2284.1	2362.1
42.5°	1634.6	1715.8	1908.5	2053.6	2115.3
45°	1450.6	1546.9	1725.5	1829.5	1849.0
47.5°	1273.1	1383.5	1543.7	1592.4	1630.3
50°	1112.8	1199.4	1355.3	1385.6	1422.4
52.5°	949.4	1041.4	1177.8	1208.1	1262.2
55°	823.8	874.7	1012.2	1060.9	1082.5
57.5°	731.8	764.3	861.7	923.4	929.9
60°	660.3	676.6	750.2	796.7	778.3
62.5°	594.3	607.3	644.1	679.8	656.0
65°	522.9	531.5	557.5	584.6	561.8
67.5°	455.7	465.5	489.3	508.8	489.3
70°	394.0	401.6	427.6	436.3	424.4
72.5°	336.7	339.9	361.6	376.7	369.1
75°	278.2	280.4	302.0	315.0	312.9
77.5°	225.2	228.4	246.8	258.7	252.2
80°	174.3	176.5	188.4	205.7	201.3
82.5°	122.3	126.7	134.2	149.4	161.3
85°	73.6	75.8	80.1	95.3	111.5
87.5°	28.1	30.3	32.5	40.1	53.0
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	18.74	20.22	19.11	20.54	20.85	20.10	21.58	20.47	21.90	22.21
	3H	20.32	21.65	20.70	21.97	22.34	21.39	22.71	21.77	23.04	23.40
	4H	20.93	22.17	21.33	22.52	22.90	21.94	23.18	22.34	23.53	23.91
	6H	21.40	22.54	21.81	22.91	23.30	22.39	23.54	22.81	23.91	24.30
	8H	21.55	22.65	21.98	23.04	23.44	22.58	23.67	23.01	24.06	24.46
	12H	21.65	22.70	22.08	23.08	23.51	22.74	23.78	23.17	24.16	24.59
4H	2H	19.36	20.60	19.76	20.95	21.33	20.47	21.71	20.87	22.06	22.44
	3H	21.16	22.19	21.57	22.59	22.99	22.03	23.05	22.44	23.46	23.86
	4H	21.88	22.81	22.32	23.23	23.67	22.73	23.66	23.16	24.07	24.51
	6H	22.48	23.29	22.94	23.73	24.19	23.34	24.14	23.80	24.59	25.05
	8H	22.68	23.44	23.15	23.88	24.35	23.59	24.34	24.05	24.78	25.25
	12H	22.82	23.49	23.30	23.97	24.44	23.80	24.47	24.28	24.95	25.42
8H	4H	22.21	22.96	22.67	23.41	23.88	22.96	23.72	23.43	24.16	24.63
	6H	22.93	23.56	23.43	24.05	24.53	23.71	24.33	24.21	24.82	25.30
	8H	23.21	23.77	23.73	24.28	24.77	24.04	24.60	24.55	25.11	25.60
	12H	23.42	23.92	23.93	24.41	24.98	24.35	24.84	24.86	25.33	25.90
12H	4H	22.25	22.92	22.73	23.40	23.87	22.98	23.65	23.46	24.13	24.60
	6H	23.00	23.56	23.52	24.07	24.56	23.74	24.31	24.26	24.82	25.30
	8H	23.34	23.83	23.85	24.33	24.89	24.13	24.63	24.64	25.12	25.69