

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: P893189

Luminaire Tested: 4MB-10HL-LVR-UNV-L930

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893189
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-10HL-LVR-UNV-L930
Description: 10000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 90CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

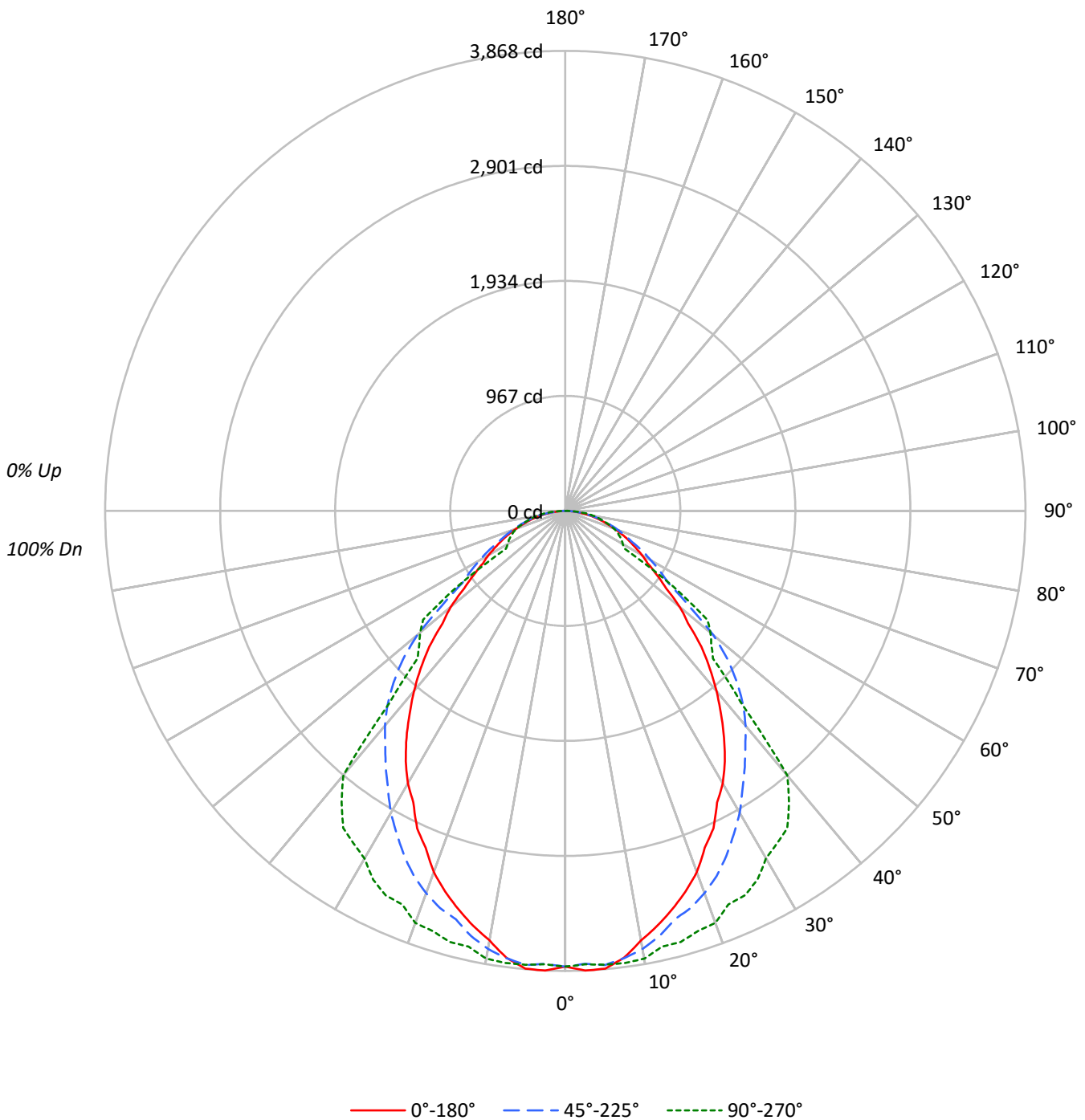
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8020.0 lumens
Efficiency: N/A
Efficacy: 106.2 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): 75.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 7.45
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	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°	27260	27260	27260
5°	27590	27372	27357
10°	26503	27023	27616
15°	25553	26183	27633
20°	24478	25892	27911
25°	23127	25132	28011
30°	21734	24082	27725
35°	20212	22841	28265
40°	18362	21895	26954
45°	16270	20550	17674
50°	13925	17961	17636
55°	11669	13107	13721
60°	10616	11832	7942
65°	9945	10477	8487
70°	9153	9925	9083
75°	8599	9311	9248
80°	8023	8805	9912
85°	6890	7347	10564

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 20550 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.1	4.5
10°-20°	1018.7	12.7
20°-30°	1484.7	18.5
30°-40°	1698.4	21.2
40°-50°	1452.9	18.1
50°-60°	958.1	11.9
60°-70°	579.3	7.2
70°-80°	354.4	4.4
80°-90°	109.4	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°	2867.4	35.8
0°-40°	4565.9	56.9
0°-60°	6977.0	87.0
0°-90°	8020.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8020.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3831	3831	3831	3831	3831	
5°	3863	3860	3832	3825	3830	362
15°	3469	3510	3555	3782	3752	975
25°	2946	2991	3201	3475	3568	1348
35°	2327	2444	2630	3043	3254	1450
45°	1617	1742	2042	1908	1756	1238
55°	941	994	1057	1252	1106	856
65°	591	605	622	556	504	584
75°	313	321	339	354	336	330
85°	84	83	90	107	129	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3831.4	3831.4	3831.4	3831.4	3831.4
2.5°	3868.5	3857.3	3811.2	3855.0	3815.7
5°	3862.9	3859.5	3832.5	3824.7	3830.3
7.5°	3788.7	3796.5	3792.0	3876.4	3833.7
10°	3668.3	3684.0	3740.3	3858.4	3822.4
12.5°	3573.7	3586.1	3661.5	3837.0	3752.6
15°	3469.1	3509.6	3554.6	3781.9	3751.5
17.5°	3356.6	3394.8	3501.7	3707.6	3704.3
20°	3232.8	3303.7	3419.6	3610.9	3686.3
22.5°	3065.1	3160.8	3323.9	3567.0	3581.6
25°	2945.9	2990.9	3201.3	3474.7	3568.1
27.5°	2764.7	2850.2	3065.1	3341.9	3496.1
30°	2645.4	2716.3	2931.2	3264.3	3374.6
32.5°	2495.8	2580.2	2772.6	3179.9	3312.7
35°	2327.0	2444.0	2629.7	3042.6	3254.2
37.5°	2149.2	2265.1	2484.5	2929.0	3088.8
40°	1977.0	2076.1	2357.4	2792.8	2902.0
42.5°	1800.4	1907.3	2212.2	2523.9	2182.9
45°	1617.0	1741.9	2042.3	1908.4	1756.5
47.5°	1399.8	1552.8	1854.4	1533.7	1664.2
50°	1258.0	1341.3	1622.6	1445.9	1593.3
52.5°	1070.1	1182.6	1303.0	1350.3	1505.6
55°	940.7	993.6	1056.6	1252.4	1106.1
57.5°	821.4	868.7	941.8	883.3	589.6
60°	746.0	767.4	831.5	631.3	558.1
62.5°	660.5	681.9	729.1	589.6	535.6
65°	590.7	605.4	622.3	555.9	504.1
67.5°	516.5	524.4	542.4	513.1	473.7
70°	440.0	451.2	477.1	469.2	436.6
72.5°	372.5	382.6	405.1	416.3	386.0
75°	312.8	320.7	338.7	354.4	336.4
77.5°	248.7	256.6	280.2	297.1	289.2
80°	195.8	196.9	214.9	231.8	241.9
82.5°	137.3	139.5	153.0	171.0	191.3
85°	84.4	83.3	90.0	106.9	129.4
87.5°	32.6	31.5	37.1	45.0	66.4
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	19.31	20.79	19.68	21.10	21.42	18.99	20.47	19.35	20.78	21.09
	3H	20.87	22.19	21.25	22.52	22.89	20.61	21.93	20.98	22.26	22.62
	4H	21.47	22.71	21.87	23.06	23.44	21.35	22.59	21.75	22.94	23.32
	6H	21.93	23.07	22.34	23.44	23.83	22.02	23.17	22.43	23.53	23.93
	8H	22.08	23.17	22.51	23.56	23.96	22.30	23.39	22.73	23.78	24.18
	12H	22.18	23.22	22.61	23.60	24.03	22.52	23.56	22.95	23.95	24.37
4H	2H	19.90	21.14	20.30	21.49	21.87	19.65	20.89	20.05	21.24	21.62
	3H	21.69	22.72	22.10	23.12	23.52	21.53	22.56	21.94	22.96	23.36
	4H	22.42	23.34	22.85	23.76	24.20	22.43	23.35	22.86	23.77	24.21
	6H	23.00	23.81	23.46	24.25	24.71	23.24	24.04	23.69	24.48	24.94
	8H	23.20	23.95	23.66	24.40	24.86	23.56	24.32	24.03	24.76	25.23
	12H	23.34	24.01	23.82	24.49	24.96	23.84	24.51	24.32	24.99	25.46
8H	4H	22.74	23.49	23.21	23.94	24.41	22.75	23.50	23.21	23.95	24.42
	6H	23.45	24.07	23.95	24.57	25.04	23.70	24.32	24.20	24.82	25.29
	8H	23.72	24.28	24.24	24.79	25.28	24.12	24.68	24.63	25.19	25.68
	12H	23.93	24.43	24.44	24.92	25.48	24.48	24.98	24.99	25.47	26.04
12H	4H	22.78	23.45	23.26	23.93	24.40	22.78	23.45	23.26	23.93	24.40
	6H	23.52	24.08	24.04	24.59	25.08	23.75	24.31	24.27	24.82	25.31
	8H	23.85	24.35	24.36	24.84	25.41	24.23	24.73	24.74	25.22	25.79