

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: P893207

Luminaire Tested: 4MB-10HL-LVRF-UNV-L940

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893207
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-10HL-LVRF-UNV-L940
Description: 10000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER WITH FROSTED INLAY, 90CRI, 4000K (C
Light Source: -
Ballast/Driver: -

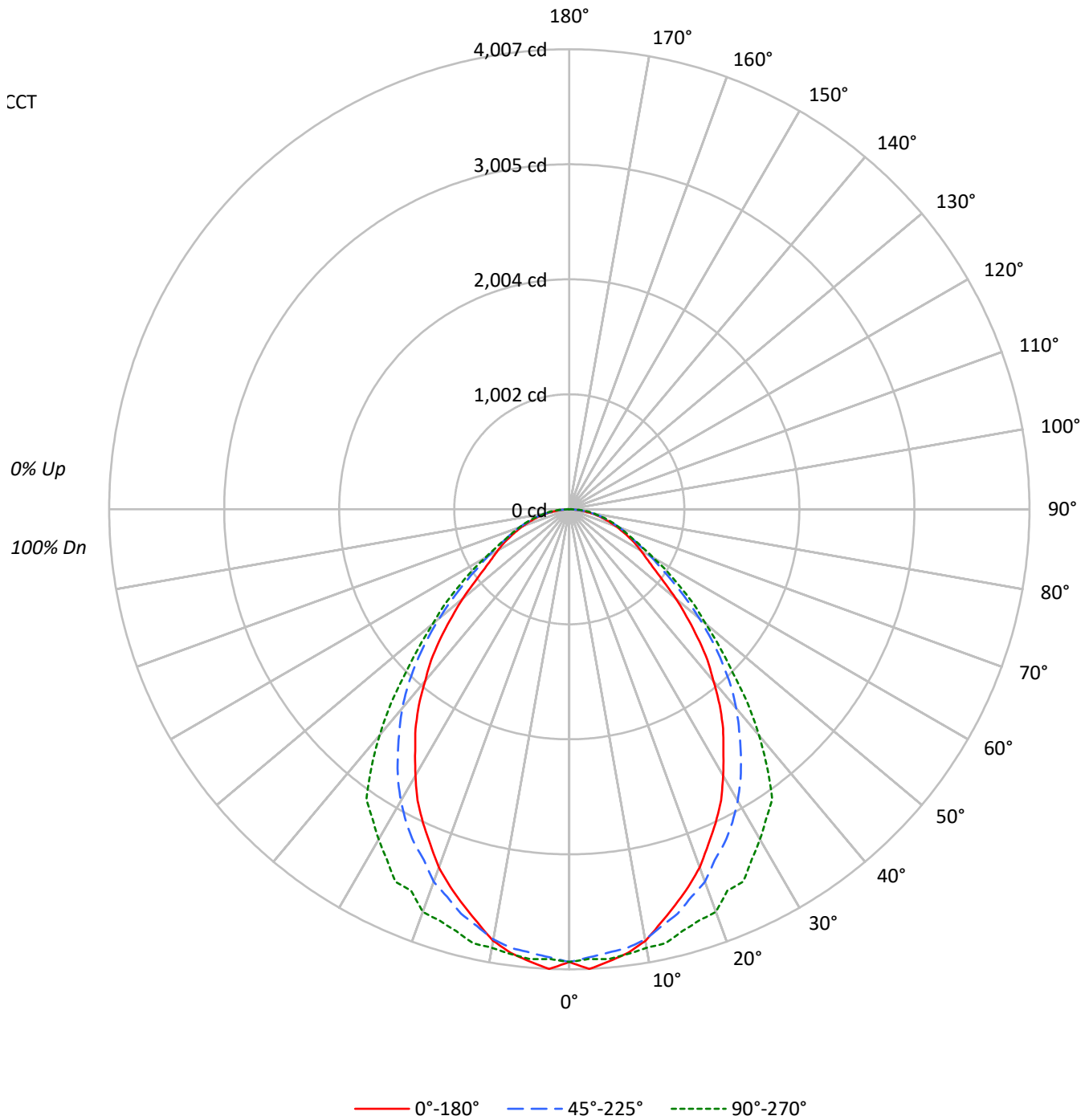
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7994.0 lumens
Efficiency: N/A
Efficacy: 105.9 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): 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	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°	28052	28052	28052
5°	28234	27687	28083
10°	27573	27488	28016
15°	26272	26853	28017
20°	25131	26140	28246
25°	23660	25141	28102
30°	22011	24093	27279
35°	20270	22615	26751
40°	18129	21019	23887
45°	15892	18905	20257
50°	13412	16334	17144
55°	11127	13670	14621
60°	10231	11623	12060
65°	9584	10219	10298
70°	8924	9686	9611
75°	8327	9039	9363
80°	7777	8404	8981
85°	6539	7119	9911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 20257 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.1	4.7
10°-20°	1038.0	13.0
20°-30°	1494.9	18.7
30°-40°	1650.4	20.6
40°-50°	1416.2	17.7
50°-60°	964.8	12.1
60°-70°	606.9	7.6
70°-80°	345.5	4.3
80°-90°	105.0	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°	2905.1	36.3
0°-40°	4555.5	57.0
0°-60°	6936.5	86.8
0°-90°	7994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7994.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3943	3943	3943	3943	3943	
5°	3953	3938	3877	3958	3932	373
15°	3567	3604	3646	3811	3804	1004
25°	3014	3074	3202	3460	3580	1384
35°	2334	2424	2604	2888	3080	1452
45°	1579	1684	1879	1992	2013	1217
55°	897	952	1102	1155	1179	824
65°	569	579	607	636	612	566
75°	303	305	329	343	341	323
85°	80	82	87	104	121	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3942.6	3942.6	3942.6	3942.6	3942.6
2.5°	4007.4	3966.2	3907.3	3963.8	3920.2
5°	3953.2	3937.9	3876.6	3957.9	3932.0
7.5°	3897.8	3864.8	3854.2	3941.4	3907.3
10°	3816.5	3797.6	3804.7	3916.7	3877.8
12.5°	3688.0	3701.0	3717.5	3860.1	3871.9
15°	3566.6	3604.3	3645.6	3810.6	3803.5
17.5°	3447.6	3499.4	3538.3	3750.5	3756.4
20°	3319.1	3348.6	3452.3	3657.4	3730.5
22.5°	3160.0	3217.7	3307.3	3563.1	3596.1
25°	3013.8	3073.9	3202.4	3460.5	3579.6
27.5°	2860.6	2916.0	3075.1	3339.1	3440.5
30°	2679.1	2753.3	2932.5	3201.2	3320.3
32.5°	2497.6	2606.0	2778.1	3053.9	3191.8
35°	2333.7	2424.5	2603.7	2887.7	3079.8
37.5°	2152.2	2247.7	2429.2	2706.2	2828.8
40°	1951.9	2054.4	2263.0	2487.0	2571.8
42.5°	1779.8	1868.2	2078.0	2235.9	2303.1
45°	1579.4	1684.3	1878.8	1991.9	2013.2
47.5°	1386.1	1506.3	1680.8	1733.8	1775.1
50°	1211.7	1306.0	1475.7	1508.7	1548.8
52.5°	1033.7	1133.9	1282.4	1315.4	1374.3
55°	897.0	952.4	1102.0	1155.1	1178.7
57.5°	796.8	832.1	938.2	1005.4	1012.5
60°	719.0	736.7	816.8	867.5	847.5
62.5°	647.1	661.2	701.3	740.2	714.3
65°	569.3	578.7	607.0	636.5	611.7
67.5°	496.2	506.8	532.8	554.0	532.8
70°	429.0	437.3	465.6	475.0	462.0
72.5°	366.6	370.1	393.7	410.2	401.9
75°	302.9	305.3	328.8	343.0	340.6
77.5°	245.2	248.7	268.7	281.7	274.6
80°	189.8	192.1	205.1	223.9	219.2
82.5°	133.2	137.9	146.2	162.7	175.6
85°	80.1	82.5	87.2	103.7	121.4
87.5°	30.6	33.0	35.4	43.6	57.8
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	19.04	20.52	19.40	20.83	21.15	20.40	21.88	20.76	22.19	22.51
	3H	20.62	21.94	21.00	22.27	22.63	21.68	23.01	22.06	23.34	23.70
	4H	21.22	22.46	21.62	22.81	23.19	22.24	23.48	22.64	23.83	24.21
	6H	21.69	22.84	22.11	23.21	23.60	22.69	23.84	23.10	24.20	24.60
	8H	21.85	22.94	22.28	23.33	23.73	22.88	23.97	23.30	24.36	24.76
	12H	21.95	22.99	22.38	23.37	23.80	23.03	24.08	23.46	24.46	24.89
4H	2H	19.65	20.89	20.05	21.24	21.62	20.77	22.01	21.17	22.36	22.74
	3H	21.46	22.48	21.87	22.89	23.29	22.32	23.35	22.73	23.75	24.15
	4H	22.18	23.11	22.61	23.52	23.96	23.03	23.95	23.46	24.37	24.81
	6H	22.78	23.58	23.23	24.02	24.49	23.63	24.44	24.09	24.88	25.34
	8H	22.98	23.73	23.44	24.18	24.64	23.88	24.63	24.35	25.08	25.55
	12H	23.12	23.79	23.60	24.27	24.74	24.10	24.77	24.58	25.25	25.72
8H	4H	22.51	23.26	22.97	23.70	24.17	23.26	24.01	23.72	24.46	24.92
	6H	23.23	23.85	23.73	24.34	24.82	24.00	24.63	24.50	25.12	25.60
	8H	23.51	24.07	24.02	24.58	25.07	24.33	24.89	24.85	25.41	25.89
	12H	23.72	24.21	24.23	24.71	25.27	24.64	25.14	25.15	25.63	26.19
12H	4H	22.54	23.22	23.03	23.69	24.17	23.27	23.94	23.76	24.42	24.90
	6H	23.30	23.86	23.81	24.37	24.86	24.04	24.60	24.56	25.11	25.60
	8H	23.63	24.13	24.14	24.62	25.19	24.43	24.93	24.94	25.42	25.98