

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: P892509

Luminaire Tested: 2MB-2SL-ASYMR-UNV-L830

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2410-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2MB-2SL-ASYMR-UNV-L830
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 3000K CCT
Light Source: -
Ballast/Driver: -

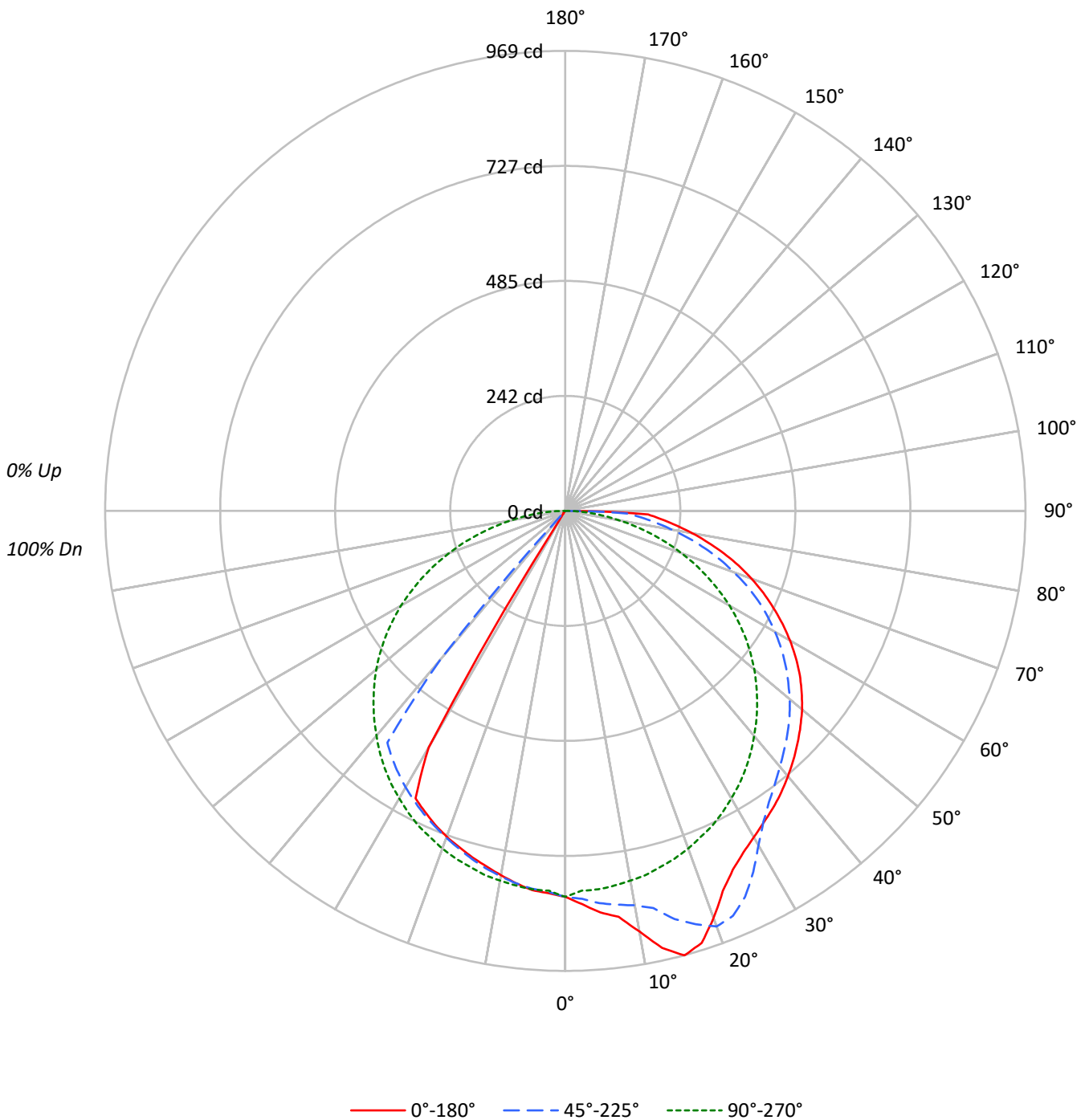
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2199.0 lumens
Efficiency: N/A
Efficacy: 147.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.28 / 1.25
Luminous Opening: Rectangular (W 0.21' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 14.9
Input Voltage (V):
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.92
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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CATALOG NUMBER: 2MB-2SL-ASYMR-UNV-L830

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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	85	85	85	83	
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	71	71	71	69	
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	61	61	61	59	
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	50	
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44	
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39	
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	35	
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	33	33	33	31	
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	30	30	30	28	
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	27	27	27	26	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	21221	21221	21221	21221	21221
5°	22253	21739	20971	20935	21008
10°	23841	22362	20967	20721	20657
15°	26196	24056	20974	20520	20420
20°	25361	25880	21029	20357	20293
25°	24031	25825	21081	20289	20142
30°	23928	24515	21079	20265	17347
35°	24331	23843	21112	20267	236
40°	24859	23956	21083	13977	160
45°	25539	24439	21090	258	103
50°	26433	25052	21100	191	37
55°	27438	25763	21038	127	23
60°	28536	26641	20855	47	26
65°	29881	27694	20473	56	56
70°	31870	28854	19824	69	69
75°	34892	30706	18974	192	91
80°	40940	34370	17561	286	135
85°	60929	48258	16446	419	270

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 104505 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	3.5
10°-20°	232.5	10.6
20°-30°	357.5	16.3
30°-40°	383.1	17.4
40°-50°	347.9	15.8
50°-60°	317.3	14.4
60°-70°	236.1	10.7
70°-80°	166.2	7.6
80°-90°	80.5	3.7
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°	667.9	30.4
0°-40°	1051.0	47.8
0°-60°	1716.2	78.0
0°-90°	2199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2199.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	813	813	813	813	813	
5°	849	830	800	799	802	82
15°	969	890	776	759	756	268
25°	834	896	732	704	699	388
35°	763	748	662	636	7	478
45°	692	662	571	7	3	534
55°	603	566	462	3	0	538
65°	484	448	331	1	1	479
75°	346	304	188	2	1	365
85°	203	161	55	1	1	204
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	812.8	812.8	812.8	812.8	812.8	812.8	812.8	812.8	812.8
2.5°	829.5	820.2	817.9	824.4	800.7	816.5	803.4	806.2	806.2
5°	849.1	836.0	829.5	827.7	800.2	810.9	798.8	798.8	801.6
7.5°	862.6	848.1	836.5	831.8	796.0	805.3	791.3	791.3	791.3
10°	899.3	872.3	843.5	835.1	790.9	797.9	781.6	782.5	779.2
12.5°	942.6	918.4	857.0	833.7	785.3	788.5	771.3	770.9	767.1
15°	969.2	951.0	890.0	831.8	776.0	778.8	759.2	757.8	755.5
17.5°	954.3	951.5	912.8	830.4	767.6	765.3	745.7	744.3	742.5
20°	912.8	919.8	931.5	827.7	756.9	752.2	732.7	731.8	730.4
22.5°	866.8	873.7	923.1	832.3	743.9	738.3	718.7	717.8	715.9
25°	834.2	834.2	896.5	843.5	731.8	721.5	704.3	702.9	699.2
27.5°	811.4	807.2	857.0	856.0	716.4	704.8	688.9	687.5	682.9
30°	793.7	786.7	813.2	862.1	699.2	686.6	672.2	670.8	575.4
32.5°	777.8	770.4	776.4	867.2	682.0	667.1	654.5	466.9	20.5
35°	763.4	755.0	748.1	863.5	662.4	647.5	635.9	13.5	7.4
37.5°	747.1	740.6	724.8	843.9	641.5	626.6	615.4	7.4	6.5
40°	729.4	723.4	702.9	815.1	618.6	606.1	410.1	6.5	4.7
42.5°	711.3	706.6	682.4	773.2	595.8	583.3	13.0	5.1	3.7
45°	691.7	687.5	661.9	722.4	571.2	559.5	7.0	3.7	2.8
47.5°	671.7	665.7	640.5	668.0	546.0	534.4	6.1	2.8	1.9
50°	650.8	644.2	616.8	620.0	519.5	507.9	4.7	1.9	0.9
52.5°	627.5	619.6	591.6	576.7	491.6	480.9	3.7	0.9	0.5
55°	602.8	594.0	566.0	539.0	462.2	450.1	2.8	0.9	0.5
57.5°	575.4	565.6	539.0	503.2	431.0	304.4	1.9	0.9	0.5
60°	546.5	536.7	510.2	469.7	399.4	20.9	0.9	0.9	0.5
62.5°	515.8	505.5	479.9	435.7	365.4	17.2	0.9	0.9	0.9
65°	483.7	471.5	448.3	400.8	331.4	14.4	0.9	0.9	0.9
67.5°	451.5	436.2	414.3	364.9	296.5	12.1	0.9	0.9	0.9
70°	417.5	400.8	378.0	328.6	259.7	9.8	0.9	0.9	0.9
72.5°	382.6	366.3	341.7	291.9	225.3	7.4	0.9	0.9	0.9
75°	345.9	331.0	304.4	255.1	188.1	5.6	1.9	0.9	0.9
77.5°	307.7	296.1	266.3	217.4	151.8	3.7	1.9	0.9	0.9
80°	272.3	259.3	228.6	179.2	116.8	2.8	1.9	1.4	0.9
82.5°	236.0	224.4	193.6	144.3	83.8	2.3	1.9	1.4	0.9
85°	203.4	192.2	161.1	112.6	54.9	1.9	1.4	1.4	0.9
87.5°	174.6	164.3	133.6	82.4	31.2	1.4	1.4	1.4	0.9
90°	0.0	0.0	0.0	0.0	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	25.15	26.76	25.51	27.07	27.39	20.58	22.19	20.94	22.51	22.82
	3H	27.59	29.06	27.97	29.38	29.74	21.22	22.68	21.60	23.01	23.37
	4H	28.72	30.10	29.11	30.45	30.82	21.36	22.75	21.76	23.09	23.47
	6H	29.81	31.09	30.22	31.46	31.85	21.41	22.69	21.82	23.05	23.44
	8H	30.34	31.57	30.76	31.96	32.35	21.39	22.62	21.82	23.01	23.41
	12H	30.91	32.09	31.34	32.47	32.90	21.38	22.55	21.80	22.93	23.36
4H	2H	25.80	27.19	26.20	27.53	27.91	21.70	23.09	22.10	23.43	23.81
	3H	28.49	29.66	28.90	30.06	30.46	23.05	24.22	23.46	24.61	25.01
	4H	29.79	30.85	30.22	31.26	31.70	23.58	24.65	24.01	25.06	25.49
	6H	31.07	32.00	31.52	32.44	32.90	23.86	24.79	24.31	25.23	25.69
	8H	31.70	32.57	32.16	33.01	33.48	23.90	24.77	24.35	25.21	25.68
	12H	32.38	33.17	32.86	33.65	34.12	23.91	24.70	24.39	25.17	25.64
8H	4H	30.15	31.03	30.61	31.47	31.93	24.53	25.41	24.99	25.85	26.31
	6H	31.63	32.37	32.13	32.86	33.33	25.12	25.86	25.61	26.34	26.82
	8H	32.42	33.08	32.92	33.59	34.07	25.30	25.96	25.81	26.47	26.95
	12H	33.31	33.90	33.81	34.39	34.95	25.40	25.99	25.91	26.48	27.04
12H	4H	30.19	30.98	30.67	31.46	31.93	24.75	25.54	25.23	26.01	26.48
	6H	31.72	32.39	32.23	32.89	33.38	25.47	26.14	25.98	26.64	27.13
	8H	32.60	33.19	33.11	33.68	34.24	25.78	26.37	26.29	26.86	27.42