

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: P892511

Luminaire Tested: 2MB-2SL-ASYMR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P892511
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-L840
Description: 2000 Lumen 2FT MICROBAY LINEAR BAY with ASYMMERIC REFLECTOR, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

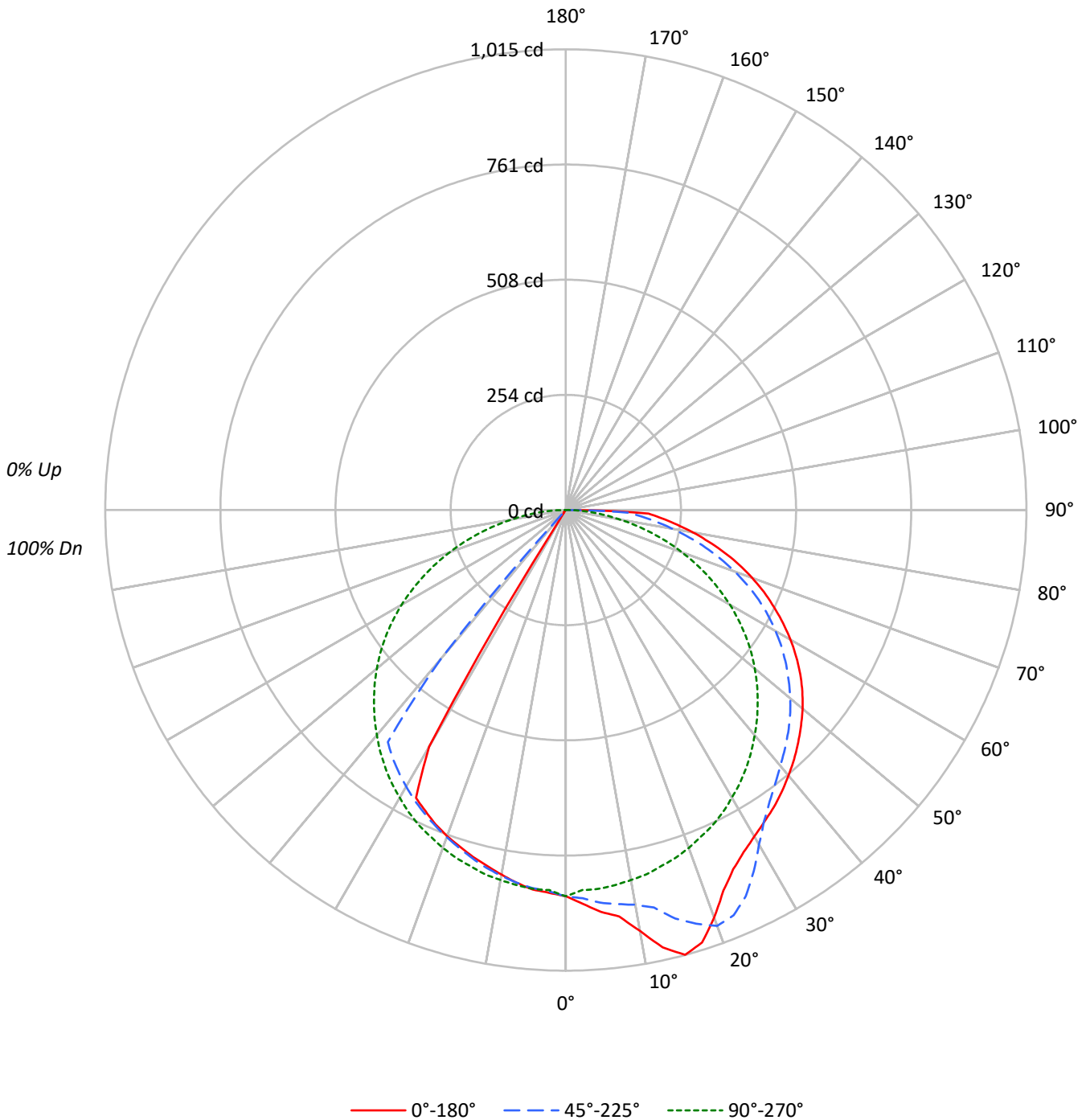
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2302.0 lumens
Efficiency: N/A
Efficacy: 154.5 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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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°	22213	22213	22213	22213	22213
5°	23293	22759	21954	21915	21991
10°	24960	23409	21948	21691	21625
15°	27424	25183	21956	21483	21377
20°	26550	27092	22013	21310	21243
25°	25154	27035	22066	21239	21084
30°	25046	25664	22064	21214	18157
35°	25472	24959	22100	21217	249
40°	26025	25077	22071	14631	167
45°	26735	25583	22076	270	107
50°	27668	26226	22087	199	41
55°	28726	26974	22026	132	23
60°	29873	27889	21831	52	26
65°	31278	28992	21436	62	62
70°	33366	30206	20755	76	76
75°	36526	32148	19862	192	101
80°	42865	35979	18388	286	150
85°	63775	50505	17224	449	300

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 87.5°
 Luminance: 109353 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	3.5
10°-20°	243.4	10.6
20°-30°	374.2	16.3
30°-40°	401.0	17.4
40°-50°	364.2	15.8
50°-60°	332.2	14.4
60°-70°	247.2	10.7
70°-80°	174.0	7.6
80°-90°	84.3	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°	699.2	30.4
0°-40°	1100.2	47.8
0°-60°	1796.6	78.0
0°-90°	2302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2302.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	851	851	851	851	851	
5°	889	868	838	836	839	86
15°	1015	932	812	795	791	280
25°	873	938	766	737	732	406
35°	799	783	693	666	8	501
45°	724	693	598	7	3	559
55°	631	593	484	3	0	564
65°	506	469	347	1	1	501
75°	362	319	197	2	1	382
85°	213	169	58	2	1	214
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°	850.8	850.8	850.8	850.8	850.8	850.8	850.8	850.8	850.8
2.5°	868.4	858.6	856.2	863.0	838.2	854.7	841.1	844.0	844.0
5°	888.8	875.2	868.4	866.4	837.7	848.9	836.2	836.2	839.1
7.5°	903.0	887.9	875.7	870.8	833.3	843.0	828.4	828.4	828.4
10°	941.5	913.2	883.0	874.2	827.9	835.2	818.2	819.2	815.7
12.5°	986.8	961.4	897.1	872.8	822.1	825.5	807.5	807.0	803.1
15°	1014.6	995.6	931.7	870.8	812.3	815.3	794.8	793.3	790.9
17.5°	999.0	996.0	955.6	869.3	803.6	801.1	780.7	779.2	777.2
20°	955.6	962.9	975.1	866.4	792.3	787.5	767.0	766.0	764.6
22.5°	907.4	914.7	966.3	871.3	778.7	772.9	752.4	751.4	749.5
25°	873.2	873.2	938.5	883.0	766.0	755.3	737.3	735.8	731.9
27.5°	849.4	845.0	897.1	896.1	750.0	737.8	721.2	719.7	714.9
30°	830.8	823.5	851.3	902.5	731.9	718.8	703.7	702.2	602.3
32.5°	814.3	806.5	812.8	907.8	713.9	698.3	685.1	488.8	21.4
35°	799.2	790.4	783.1	903.9	693.4	677.8	665.7	14.1	7.8
37.5°	782.1	775.3	758.7	883.5	671.5	655.9	644.2	7.8	6.8
40°	763.6	757.3	735.8	853.3	647.6	634.5	429.3	6.8	4.9
42.5°	744.6	739.7	714.4	809.4	623.7	610.6	13.6	5.4	3.9
45°	724.1	719.7	692.9	756.3	597.9	585.7	7.3	3.9	2.9
47.5°	703.2	696.8	670.5	699.3	571.6	559.4	6.3	2.9	1.9
50°	681.2	674.4	645.7	649.1	543.8	531.6	4.9	1.9	1.0
52.5°	656.9	648.6	619.4	603.8	514.6	503.4	3.9	1.0	0.5
55°	631.1	621.8	592.6	564.3	483.9	471.2	2.9	1.0	0.5
57.5°	602.3	592.1	564.3	526.8	451.2	318.7	1.9	1.0	0.5
60°	572.1	561.9	534.1	491.7	418.1	21.9	1.0	1.0	0.5
62.5°	539.9	529.2	502.4	456.1	382.5	18.0	1.0	1.0	1.0
65°	506.3	493.6	469.3	419.6	347.0	15.1	1.0	1.0	1.0
67.5°	472.7	456.6	433.7	382.0	310.4	12.7	1.0	1.0	1.0
70°	437.1	419.6	395.7	344.0	271.9	10.2	1.0	1.0	1.0
72.5°	400.6	383.5	357.7	305.5	235.9	7.8	1.0	1.0	1.0
75°	362.1	346.5	318.7	267.0	196.9	5.8	1.9	1.0	1.0
77.5°	322.1	309.9	278.7	227.6	158.9	3.9	1.9	1.0	1.0
80°	285.1	271.4	239.3	187.6	122.3	2.9	1.9	1.5	1.0
82.5°	247.1	234.9	202.7	151.1	87.7	2.4	1.9	1.5	1.0
85°	212.9	201.3	168.6	117.9	57.5	1.9	1.5	1.5	1.0
87.5°	182.7	172.0	139.9	86.3	32.6	1.5	1.5	1.5	1.0
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	25.30	26.92	25.67	27.23	27.55	20.74	22.35	21.10	22.67	22.98
	3H	27.75	29.22	28.13	29.54	29.90	21.38	22.84	21.76	23.17	23.53
	4H	28.88	30.26	29.27	30.61	30.98	21.52	22.91	21.92	23.25	23.63
	6H	29.97	31.25	30.38	31.62	32.01	21.56	22.85	21.98	23.21	23.60
	8H	30.50	31.73	30.92	32.12	32.51	21.55	22.78	21.98	23.17	23.57
	12H	31.07	32.24	31.50	32.63	33.05	21.53	22.71	21.96	23.09	23.52
4H	2H	25.96	27.34	26.36	27.69	28.07	21.86	23.25	22.26	23.59	23.97
	3H	28.65	29.82	29.06	30.22	30.62	23.21	24.37	23.62	24.77	25.17
	4H	29.95	31.01	30.38	31.42	31.86	23.74	24.80	24.17	25.22	25.65
	6H	31.23	32.16	31.68	32.60	33.06	24.02	24.95	24.47	25.39	25.85
	8H	31.85	32.73	32.31	33.17	33.64	24.05	24.93	24.51	25.37	25.84
	12H	32.54	33.33	33.02	33.81	34.28	24.07	24.86	24.54	25.33	25.80
8H	4H	30.31	31.19	30.77	31.63	32.09	24.69	25.57	25.15	26.01	26.47
	6H	31.79	32.53	32.28	33.02	33.49	25.28	26.02	25.77	26.50	26.98
	8H	32.58	33.24	33.08	33.75	34.23	25.46	26.12	25.96	26.63	27.11
	12H	33.47	34.06	33.97	34.55	35.11	25.56	26.15	26.06	26.64	27.20
12H	4H	30.35	31.14	30.83	31.62	32.09	24.91	25.70	25.39	26.17	26.64
	6H	31.88	32.55	32.39	33.05	33.54	25.63	26.30	26.14	26.80	27.28
	8H	32.76	33.35	33.27	33.84	34.40	25.94	26.53	26.45	27.02	27.58