

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: P893300

Luminaire Tested: 4MB-2SL-LVR-UNV-L850

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2407-175-8)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-2SL-LVR-UNV-L850
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 5000K CCT
Light Source: -
Ballast/Driver: -

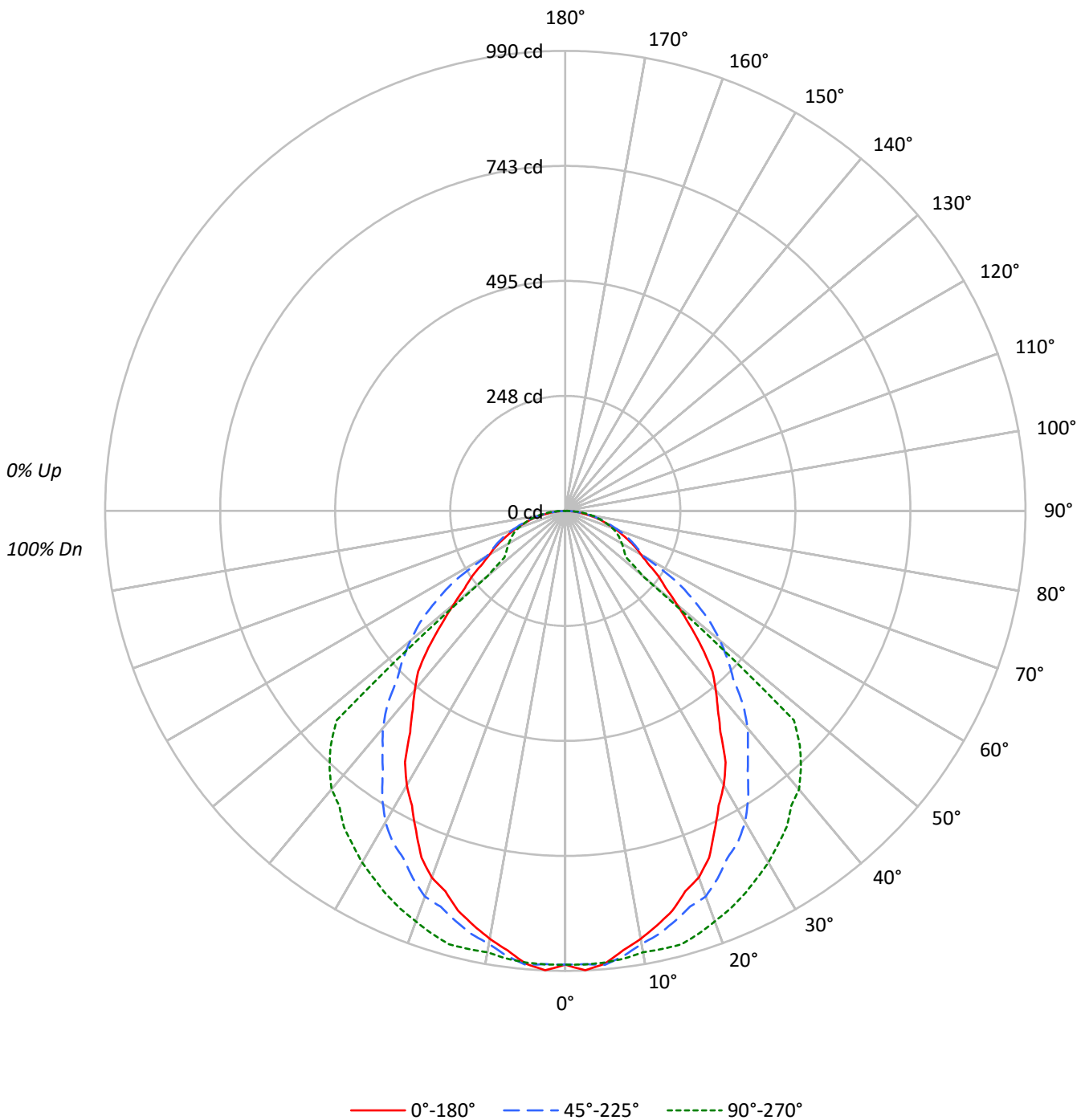
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2084.0 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.32 / 1.27
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 13.8
Input Voltage (V): 120
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	57	52	50	50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45	45	
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	
9	61	48	40	35	59	48	40	35	47	40	35	45	39	35	44	39	35	33	33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6949	6949	6949
5°	6986	7004	6968
10°	6757	6835	6969
15°	6562	6727	7113
20°	6356	6688	7119
25°	5963	6472	7149
30°	5601	6356	7179
35°	5052	5944	7213
40°	4678	5670	7264
45°	4186	5139	7181
50°	3472	4814	2413
55°	3025	4226	1930
60°	2675	2754	2001
65°	2544	2679	2125
70°	2386	2532	2240
75°	2221	2386	2304
80°	2024	2249	2413
85°	1788	1910	2604

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7181 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	4.4
10°-20°	260.6	12.5
20°-30°	383.3	18.4
30°-40°	438.4	21.0
40°-50°	415.1	19.9
50°-60°	228.7	11.0
60°-70°	146.8	7.0
70°-80°	90.6	4.3
80°-90°	27.9	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°	736.5	35.3
0°-40°	1174.9	56.4
0°-60°	1818.7	87.3
0°-90°	2084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	978	986	981	981	976	92
15°	891	902	913	961	966	250
25°	760	794	824	878	911	350
35°	582	631	684	784	830	368
45°	416	455	511	655	714	318
55°	244	256	341	176	156	218
65°	151	156	159	142	126	150
75°	81	82	87	91	84	86
85°	22	22	23	27	32	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	976.6	976.6	976.6	976.6	976.6
2.5°	989.5	992.0	976.1	975.6	977.1
5°	978.1	986.0	980.6	980.6	975.6
7.5°	953.6	967.1	965.6	977.1	971.6
10°	935.2	946.1	946.1	976.1	964.6
12.5°	913.2	925.7	932.7	964.1	965.6
15°	890.8	901.8	913.2	961.1	965.6
17.5°	858.4	878.3	892.8	939.7	954.1
20°	839.4	851.4	883.3	921.2	940.2
22.5°	808.0	825.4	856.4	898.8	926.7
25°	759.6	793.5	824.4	878.3	910.7
27.5°	714.7	740.2	804.0	860.9	891.8
30°	681.8	701.8	773.6	835.4	873.8
32.5°	641.9	674.3	732.7	810.5	851.4
35°	581.6	631.4	684.3	783.5	830.4
37.5°	539.2	573.6	645.4	755.6	799.0
40°	503.7	535.2	610.5	720.7	782.1
42.5°	468.3	493.8	566.6	694.8	750.6
45°	416.0	455.4	510.7	655.4	713.7
47.5°	361.1	403.0	474.3	621.9	666.8
50°	313.7	347.1	434.9	555.6	218.0
52.5°	272.3	303.2	393.0	201.0	164.6
55°	243.9	255.9	340.7	175.6	155.6
57.5°	210.0	229.4	285.8	167.1	147.6
60°	188.0	196.5	193.5	158.6	140.6
62.5°	170.6	176.6	175.6	150.1	132.7
65°	151.1	156.1	159.1	141.6	126.2
67.5°	131.7	136.2	140.6	131.2	117.2
70°	114.7	117.7	121.7	118.7	107.7
72.5°	97.3	100.7	103.2	105.7	95.3
75°	80.8	82.3	86.8	91.3	83.8
77.5°	65.8	67.3	70.3	75.3	71.3
80°	49.4	50.9	54.9	58.9	58.9
82.5°	34.9	35.9	38.4	43.9	46.4
85°	21.9	21.9	23.4	26.9	31.9
87.5°	8.5	8.5	10.0	12.0	16.0
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	14.68	16.17	15.05	16.48	16.80	12.49	13.97	12.85	14.28	14.60
	3H	16.21	17.54	16.59	17.87	18.23	14.82	16.14	15.20	16.47	16.84
	4H	16.80	18.05	17.20	18.40	18.78	15.77	17.01	16.17	17.36	17.74
	6H	17.26	18.41	17.67	18.77	19.17	16.55	17.70	16.97	18.07	18.46
	8H	17.40	18.50	17.83	18.89	19.29	16.86	17.96	17.29	18.35	18.75
	12H	17.50	18.55	17.93	18.93	19.36	17.11	18.16	17.54	18.54	18.97
4H	2H	15.24	16.48	15.64	16.83	17.21	13.59	14.84	13.99	15.18	15.56
	3H	17.01	18.04	17.42	18.44	18.84	16.04	17.07	16.45	17.47	17.87
	4H	17.73	18.65	18.16	19.07	19.51	17.10	18.03	17.54	18.45	18.89
	6H	18.31	19.12	18.77	19.56	20.02	17.99	18.80	18.45	19.24	19.70
	8H	18.50	19.26	18.97	19.70	20.17	18.34	19.10	18.81	19.54	20.01
	12H	18.64	19.31	19.12	19.79	20.26	18.63	19.30	19.11	19.78	20.26
8H	4H	18.03	18.79	18.50	19.23	19.70	17.49	18.24	17.95	18.69	19.16
	6H	18.75	19.37	19.24	19.86	20.34	18.53	19.15	19.02	19.64	20.12
	8H	19.01	19.57	19.52	20.08	20.57	18.97	19.53	19.49	20.04	20.53
	12H	19.22	19.71	19.73	20.21	20.77	19.36	19.85	19.87	20.35	20.91
12H	4H	18.07	18.74	18.55	19.22	19.69	17.53	18.20	18.01	18.68	19.15
	6H	18.81	19.37	19.33	19.88	20.37	18.59	19.15	19.11	19.66	20.15
	8H	19.13	19.63	19.64	20.12	20.69	19.10	19.60	19.61	20.09	20.66