

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: P893299

Luminaire Tested: 4MB-2SL-LVR-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893299
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-L840
Description: 2000 Lumen 4FT MICROBAY LINEAR BAY with LOUVER, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

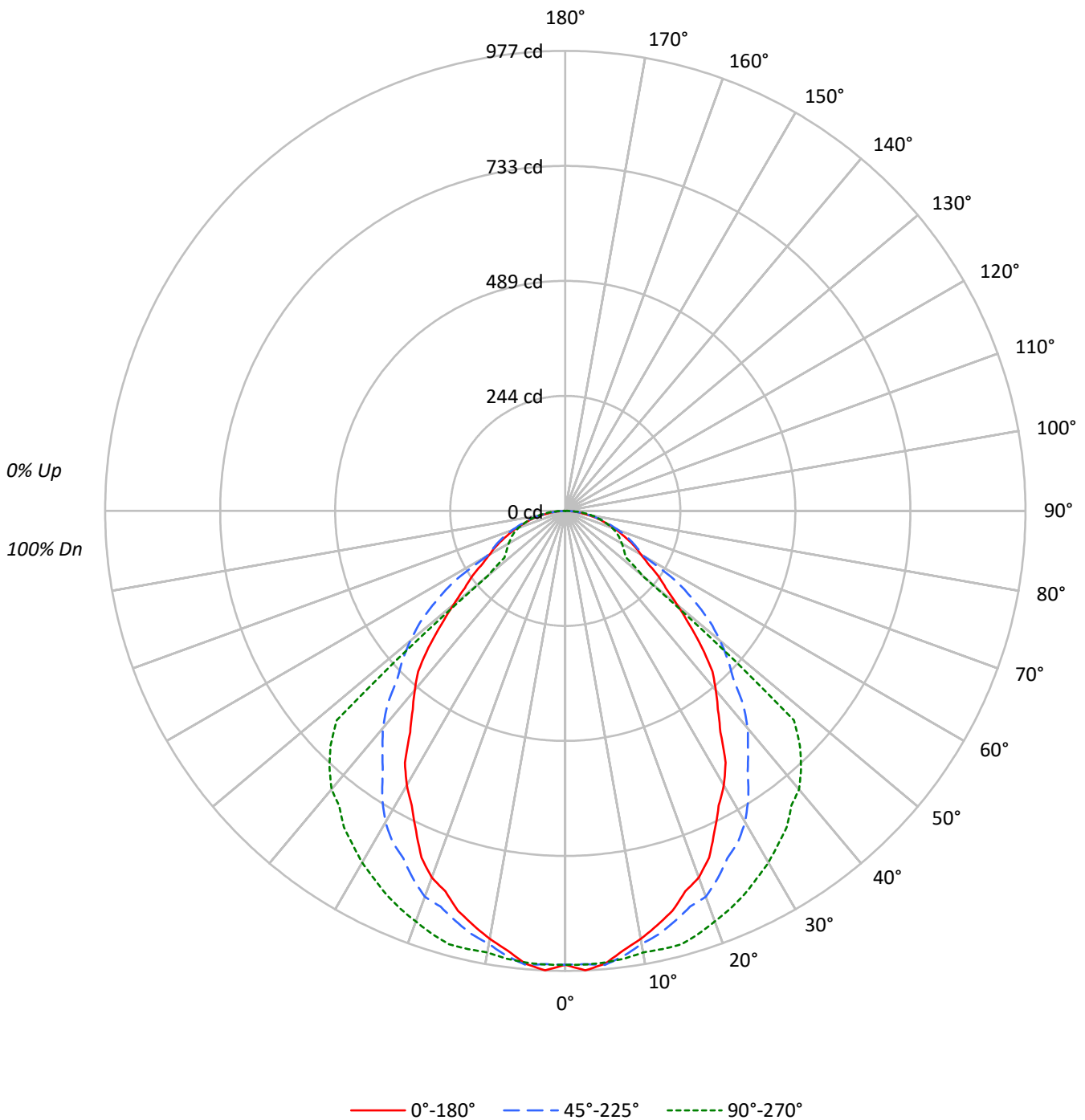
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2057.0 lumens
Efficiency: N/A
Efficacy: 149.1 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°	6858	6858	6858
5°	6895	6913	6877
10°	6669	6747	6879
15°	6476	6640	7021
20°	6273	6602	7026
25°	5886	6389	7057
30°	5529	6273	7086
35°	4986	5866	7120
40°	4618	5597	7169
45°	4132	5072	7089
50°	3428	4752	2381
55°	2986	4170	1905
60°	2641	2718	1975
65°	2512	2643	2098
70°	2355	2498	2211
75°	2194	2356	2273
80°	1995	2221	2381
85°	1771	1886	2572

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7089 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	4.4
10°-20°	257.2	12.5
20°-30°	378.3	18.4
30°-40°	432.7	21.0
40°-50°	409.7	19.9
50°-60°	225.7	11.0
60°-70°	144.9	7.0
70°-80°	89.4	4.3
80°-90°	27.5	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°	727.0	35.3
0°-40°	1159.7	56.4
0°-60°	1795.1	87.3
0°-90°	2057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2057.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	965	973	968	968	963	91
15°	879	890	901	949	953	247
25°	750	783	814	867	899	345
35°	574	623	675	773	820	363
45°	411	450	504	647	704	314
55°	241	252	336	173	154	215
65°	149	154	157	140	125	148
75°	80	81	86	90	83	85
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°	963.9	963.9	963.9	963.9	963.9
2.5°	976.7	979.2	963.4	962.9	964.4
5°	965.4	973.3	967.9	967.9	962.9
7.5°	941.3	954.6	953.1	964.4	959.0
10°	923.1	933.9	933.9	963.4	952.1
12.5°	901.4	913.7	920.6	951.6	953.1
15°	879.2	890.1	901.4	948.7	953.1
17.5°	847.2	866.9	881.2	927.5	941.8
20°	828.5	840.3	871.9	909.3	928.0
22.5°	797.5	814.7	845.3	887.1	914.7
25°	749.8	783.2	813.8	866.9	898.9
27.5°	705.5	730.6	793.6	849.7	880.2
30°	673.0	692.7	763.5	824.6	862.5
32.5°	633.6	665.6	723.2	800.0	840.3
35°	574.0	623.2	675.4	773.4	819.7
37.5°	532.2	566.1	637.0	745.8	788.7
40°	497.2	528.2	602.6	711.4	771.9
42.5°	462.3	487.4	559.2	685.8	740.9
45°	410.6	449.5	504.1	646.9	704.5
47.5°	356.4	397.8	468.2	613.9	658.2
50°	309.7	342.6	429.3	548.4	215.1
52.5°	268.8	299.3	387.9	198.4	162.5
55°	240.7	252.5	336.2	173.3	153.6
57.5°	207.3	226.5	282.1	164.9	145.7
60°	185.6	194.0	191.0	156.5	138.8
62.5°	168.4	174.3	173.3	148.2	131.0
65°	149.2	154.1	157.0	139.8	124.6
67.5°	130.0	134.4	138.8	129.5	115.7
70°	113.2	116.2	120.1	117.2	106.3
72.5°	96.0	99.4	101.9	104.4	94.0
75°	79.8	81.2	85.7	90.1	82.7
77.5°	65.0	66.5	69.4	74.3	70.4
80°	48.7	50.2	54.2	58.1	58.1
82.5°	34.5	35.4	37.9	43.3	45.8
85°	21.7	21.7	23.1	26.6	31.5
87.5°	8.4	8.4	9.8	11.8	15.8
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	14.64	16.12	15.01	16.44	16.75	12.44	13.92	12.81	14.24	14.55
	3H	16.17	17.49	16.55	17.82	18.18	14.77	16.10	15.15	16.43	16.79
	4H	16.76	18.00	17.16	18.35	18.73	15.72	16.97	16.12	17.31	17.69
	6H	17.22	18.36	17.63	18.73	19.12	16.51	17.65	16.92	18.02	18.41
	8H	17.36	18.45	17.79	18.84	19.24	16.82	17.91	17.25	18.30	18.70
	12H	17.46	18.50	17.89	18.88	19.31	17.07	18.11	17.50	18.49	18.92
4H	2H	15.19	16.43	15.59	16.78	17.16	13.55	14.79	13.95	15.14	15.52
	3H	16.96	17.99	17.37	18.39	18.79	15.99	17.02	16.40	17.42	17.82
	4H	17.68	18.61	18.12	19.02	19.46	17.06	17.98	17.49	18.40	18.84
	6H	18.27	19.07	18.73	19.52	19.98	17.95	18.75	18.40	19.19	19.66
	8H	18.46	19.21	18.92	19.65	20.12	18.30	19.05	18.76	19.49	19.96
	12H	18.59	19.27	19.08	19.75	20.22	18.59	19.26	19.07	19.74	20.21
8H	4H	17.99	18.74	18.45	19.19	19.66	17.44	18.20	17.91	18.64	19.11
	6H	18.70	19.33	19.20	19.82	20.30	18.48	19.10	18.98	19.60	20.07
	8H	18.96	19.52	19.48	20.03	20.52	18.93	19.49	19.44	20.00	20.49
	12H	19.17	19.67	19.68	20.16	20.73	19.31	19.81	19.82	20.30	20.87
12H	4H	18.03	18.70	18.51	19.18	19.65	17.48	18.15	17.96	18.63	19.10
	6H	18.77	19.33	19.28	19.84	20.33	18.54	19.11	19.06	19.62	20.11
	8H	19.09	19.58	19.60	20.08	20.64	19.05	19.55	19.56	20.04	20.61