

□ Metal halide & Xenon Arc Lamp Weathering Test Chamber



MXL-1000

Temperature Range

$-40^{\circ}\text{C} \sim 100^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Humidity Range

50%~98% RH

Irradiance

400-1200w/m² at 300-3000nm (Metal halide lamp)

100-1200w/m² at 290nm-800nm (Xenon arc lamp)

BPT

$35^{\circ}\text{C} \sim 85^{\circ}\text{C} \pm 2^{\circ}\text{C}$



Paintings & coatings



Plastic

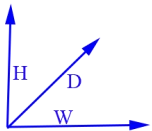


Textile



Metal halide & Xenon Arc Lamp Test Chamber

【Technical Parameter】



Model		MXL-1000	
Internal Dimension (mm)		1400*1400*1000mm	
Internal Dimension (mm)		1750*1870*1950mm	
Specimen Holder Size(mm)		1400*1400	
Specimen Capacity		2PCS	
Chamber Type		Flat Holder	
Irradiation Source		1 piece of Metal halide lamp With AM 1.5 filter	1 piece of 4500w water-cooled xenon arc lamp with inner quartz and outer borosilicate filter
Parameter	Irradiance Range	400-1200w/m2	100-1200w/m2 at 290nm-800nm
	Bandwidth Measurement	300nm~3000nm	290nm-800nm ;300nm~400nm ;340nm ;420nm
	Chamber Temperature Range	-40℃ ~ 100℃ ±2℃	
	Black Panel Temperature	BPT 35 ~ 85℃ ±2℃	
	Humidity Range	50% ~ 98% RH	
	Humidity Deviation	± 5% RH	
	Water Spray Cycle	1~9999H59M (Adjustable)	
Constructure	Controller	Programmable color LCD touch screen controller	
	Water supply system	Automatic water supply	
		Water purification system	
	Build-in Water Tank(mm)	270*300*900	
	Air Circulation	Centrifugal wind fan	
	Radiometer	290-800nm full spectrum Radiometer; 340nm Radiometer; 420nm Radiometer; 300-400nm Radiometer;Tolerance: ±5%	
	Heating Element	Nichrome heater	
	Cooling System	Mechanical compression refrigeration system	
	Refrigerating Unit	French TECUMSEH compressor	
	Humidification System	External isolation, stainless steel surface evaporation humidifier	
	Air Circulation	Centrifugal wind fan	
	Safety Device	Over-temperature Protection; Over-current Protection; Water Shortage Protection; Earth leakage Protection; Phase Sequence Protection	
Material	Exterior Material	Steel plate with protective coating	
	Interior Material	SUS304 stainless steel	
	Thermal Insulation	Polyurethane foam and insulation cotton	
	Observation Window	Interior lighting, double-layer thermo stability silicone rubber sealing	
Power Supply		AC380V 50Hz 3P	
Maximum Noise		65 dBA	
Environmental Conditional		5℃ ~ +35℃ ≤85% RH	

1.Workroom

- The internal material is 304 stainless steel.
- Mirror surface, rust-proof to high and low temperature and moisture corrosion resistance.
- Nice ruggedness and long life.

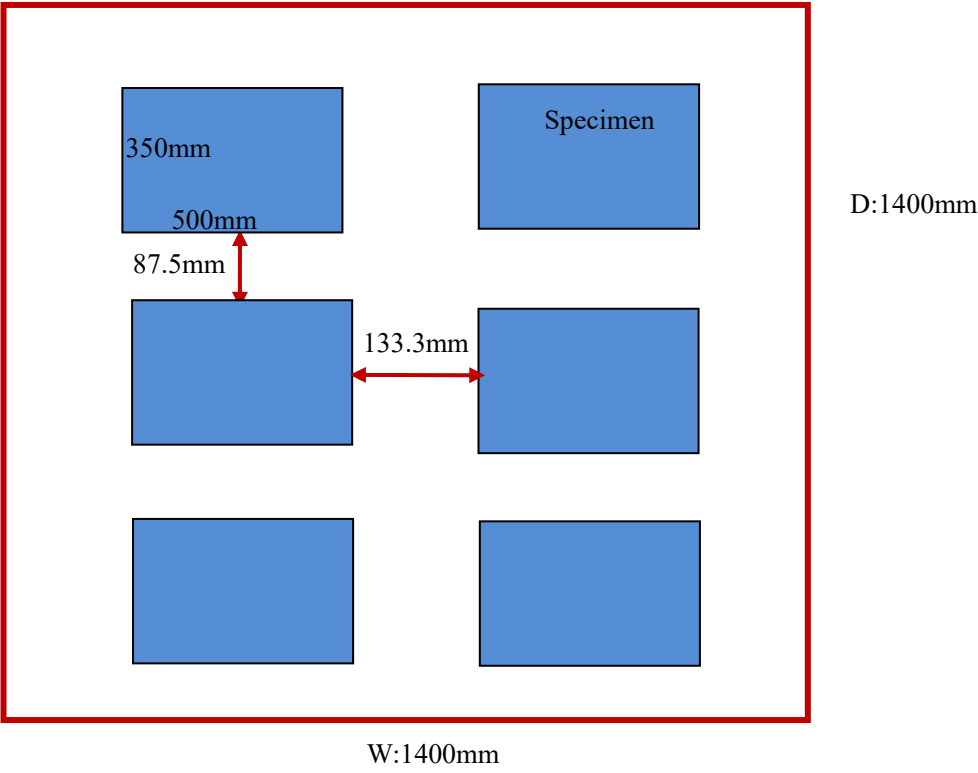
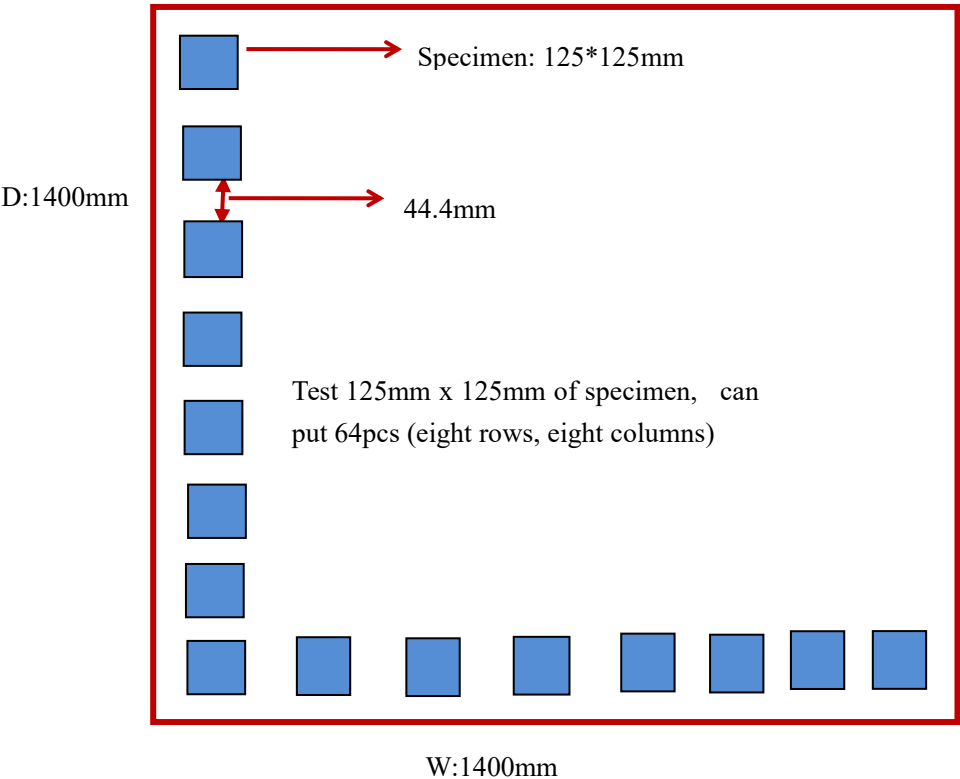


2.Specimen Holder

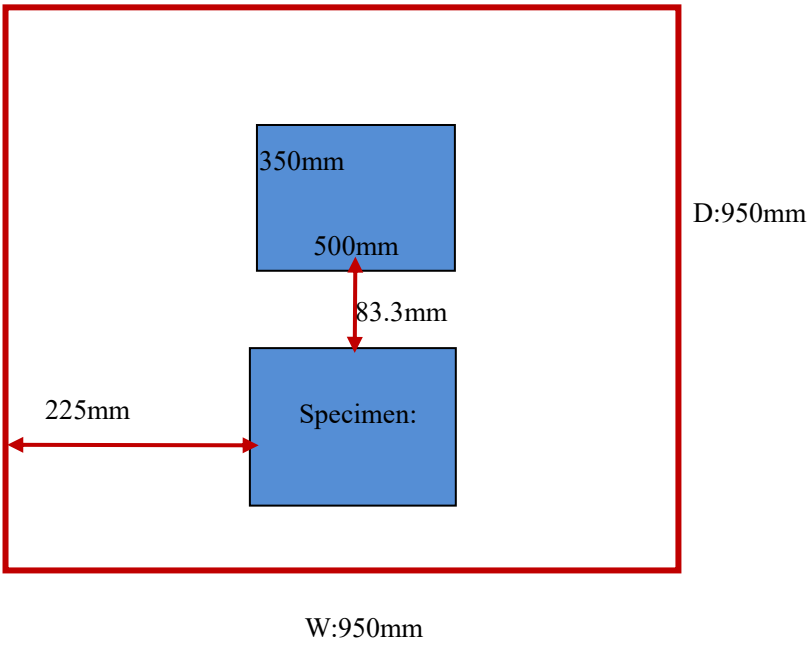
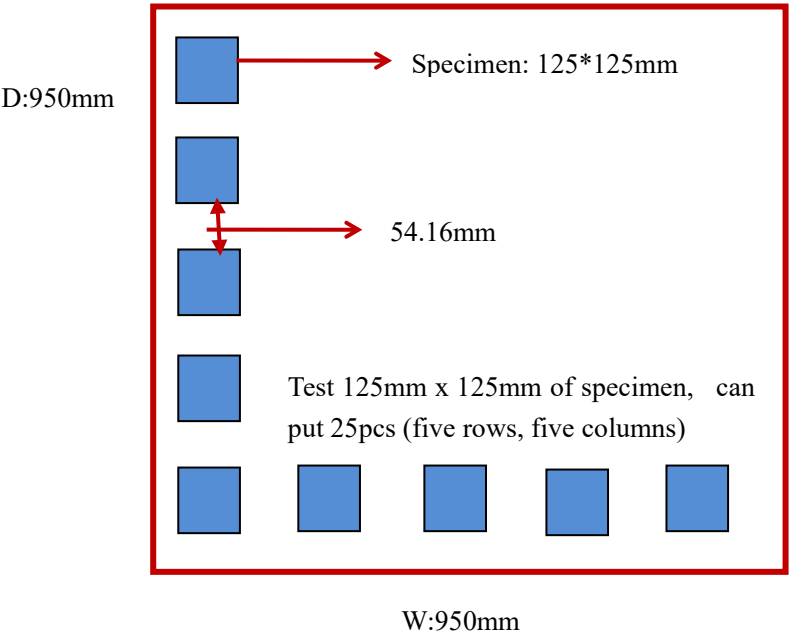
- 2 pieces of adjustable and removable SUS304 stainless steel punching sample shelves
- Conducive to the air circulation.
- Standard load of 50KGS for each layer of sample shelf;



Model MXL-1400 or Model MXL- 1000



Model MXL-750 :



3. Irradiation Source

- Irradiation Source:
 - 1pcs Full spectrum Metal halide lamp with AM 1.5 filters
 - 1 pc of water-cooled xenon lamp with inner quartz and outer borosilicate filter
- Metal halide lamp : Average Lamp Life is 3000 - 5000 hours
- Xenon lamp Average Lamp Life is 1600 hours.

4.Cable Hole

- A standard test hole, located at the left side of the work room, is provided with a sleeve inside to prevent moisture from entering the insulation layer.
- Equipped with flange.
- Soft silicone plug seal; Metal enclosure closed, beautiful designed.
- The inner hole diameter is 100mm.
- 8PCS



5. Controller

- PID programmable color touch screen controller, network connection computer.
- Can edit 100 programs 20 segment.
- LIB also can preset program into the controller based on user testing requirements.
- Display workroom temperature, BPT, Humidity and Irradiation
- The set system language is English for standard.



6. Viewing Window

- Double layer insulating glass 8cm thickness, made of tempered glass.
- The conductive film is located on the interior glass to prevent window frosting, built-in LED light for the work room lighting ;can clearly observe samples.
- The light control button is located below the controller.



7.Water Re-circulation

- Water purifier: mainly purification from water source to water tank.
- Water re-circulation system that reduced water use and a series of water pipes.



8.Automatic Water Inlet

- Automatic control of the water intake of equipment, the customer can be directly connected to the laboratory faucet,so as to achieve automated testing;
- Automatic inlet diameter 1/2 inch (13.5mm);
- High and low water level alarm, water shortage lights and sound.
- Standard 2 meter drain pipe.



9.Castor

- Install 4 castors for ease moving, and with brakes function. Caster height adjustable.



10.Insulation

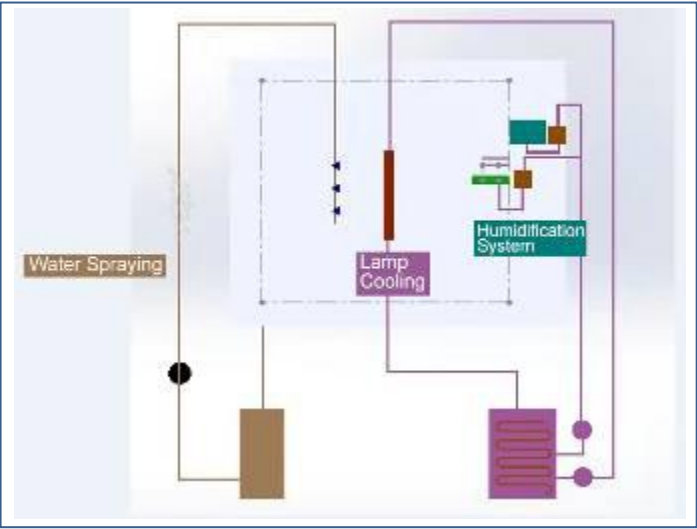
- 10cm thick polyurethane foam and insulation cotton;
- Better insulation performance, degradation resistance, environmental protection, noise reduction.



11.External Materials

- A3 steel plate with galvanized coating;
- Electrostatic treatment; High and low temperature corrosion resistance; High hardness, anti - impact, very high safety factor;
- Color can be customized.

Core Function



Water Way System



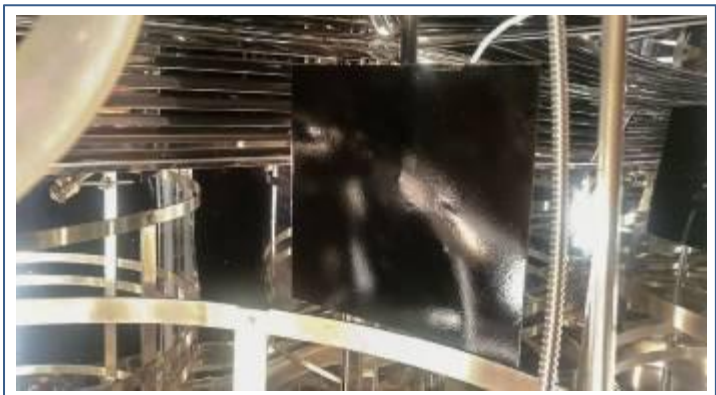
Water Spray System



Cooling System



Radiometer



Black Panel Thermometer

- ❖ Two independent water way systems, one water tank supplies water to the lamp cooling and humidification system, and the other water tank supplies water to the water spray.

- ❖ The water spray pipe is equipped with three nozzles,
- ❖ The diameter of the nozzle is 0.5mm, the settlement is 0.8 ~ 1.0mm / 80cm² / H
- ❖ the flow rate is 0.3L / min, which simulates the outdoor moisture damage to the material.
- ❖ Can be customized to front and rear spraying.

- ❖ The refrigerant completes a refrigeration cycle through four basic processes of evaporation, compression, condensation, and throttling in the system.
- ❖ Mechanical compression refrigeration system
- ❖ Refrigerating unit is French TECUMSEH compressor
- ❖ Environment friendly refrigerant R404A for first stage R23 for the second stage

- ❖ UV Irradiance Radiometer is available for xenon test chamber.
- ❖ The radiometer is a photoelectric sensor with fast response, reliable performance and high accuracy.

- ❖ The blackboard thermometer is composed of a stainless steel flat plate with a length of 150 mm, a width of 70 mm, and a thickness of 1 mm.
- ❖ The side of the board facing the light source should be coated with a black flat lacquer to absorb at least 90% of the total incidence.
- ❖ The temperature measurement of the blackboard is made by a platinum resistance sensor located in the center of the plate.

- | | | |
|--------------------------------|------------------------------|---|
| 1) Over Temperature Protection | 3) Over Current Protection | 6) Humidifier Dry Combustion Protection |
| 2) Water Shortage Protection | 4) Earth Leakage Protection | 7) Refrigerant High Pressure Protection |
| | 5) Phase Sequence Protection | |

Protection System

Packaging & Shipping & Installation



【Packaging】

- 1) Seal chamber with waterproof plastic film. Protect chamber from seawater corrosion.
- 2) Buffer foam is placed in the four corners of the chamber. It is used for fixing equipment to prevent shaking and damaging chamber during transportation
- 3) Plywood: standard wood export packaging. The wooden box is fixed by sheet metal to prevent damage during transportation.



【Shipping】

- ❖ **Material:** Export standard wooden box
- *Can be used for Sea, Air, Railway, Truck and Multimodal transport.



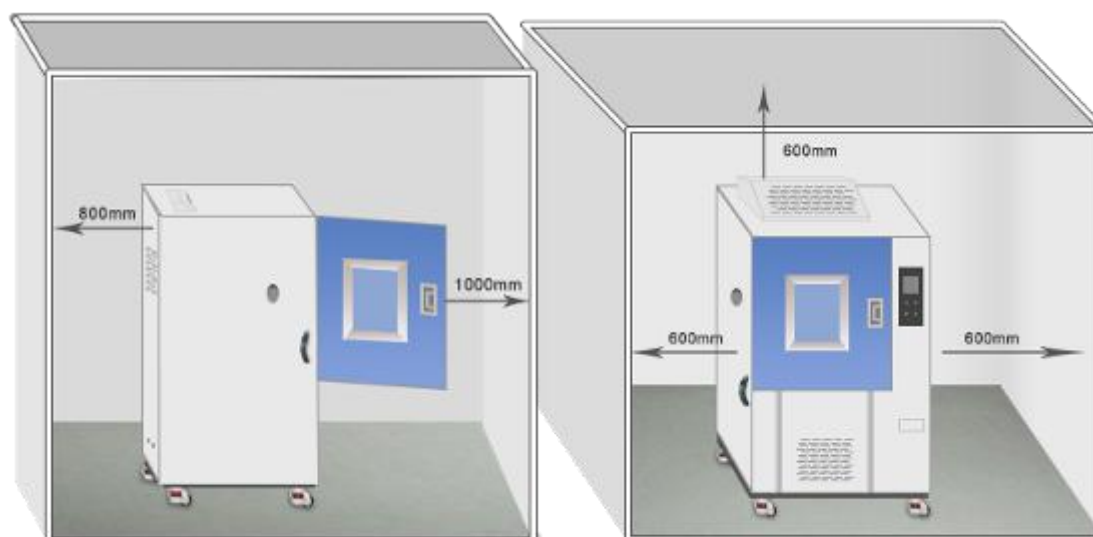
【Installation】

Environment Conditions:

- ❖ Temperature: +5° C ~ +35° C
- ❖ Relative humidity: ≤85%;
- ❖ Pressure: 86 KPa—106 KPa

Space Conditions:

- ❖ Chamber shall be installed on flat floor, with good ventilation
- ❖ No combustible material, explosive material or strong vibration around.
- ❖ No direct sunlight or other heat sources direct radiation.
- ❖ No strong airflow around.
- ❖ No strong electric field around



- *Safety Instruction:**
1. Prohibited to test explosive, inflammable and high corrosive substance
 2. Chemical exposure to the equipment is prohibited
 3. Equipment must be safety on the ground to avoid electrostatic induction

3 Years Warranty, Lifelong Follow-up Services

✧ **Professional After-sales Team** : If you have any questions during operation, we will supply solution to you with 24 hours.

【Warranty Condition】

- ❖ **Within three years warranty period** since the date of dispatching by the customer, LIB will repair the product. if the product, the material of the parts, the design and manufacturing of the products raised hardware problems caused by product itself rather than human error.
- ❖ **After the warranty period**, LIB repairs the products, and will collect the basic costs of the spare parts , but service is free always.

【How to Service】

- ❖ At first, our test chambers are produced based on 20 years product lifetime. Normally once test chambers have problems, we judge the problems, and send spare parts to our customers, and teach them how to change new parts on by email or video, all spare parts and shipping cost (by DHL, TNT, and FedEx) paid by LIB.
- ❖ If the customer needs our engineer on-site service, they only need pay the ticket accommodation to our Engineers, service is for free.
- ❖ If products still can't use after our engineers repair, we will produce a new test chamber (same as the old one) to our customers with no charge.

【After Sale Service Ways】



Response within 12 hours



Online Service



Teach through Video



Engineers On-site installation, Commissioning, training



On-site repair and Maintenance

PROVIDING TEST SOLUTION, PROVIDING TEST EQUIPMENT

Xi'an LIB Environmental Simulation Industry is a lead provider of environmental test chamber in China, with its own brand (LIB) design, production, sales and service since 2009. We continually update technology and develop new products for customer's needs.

Our main products included temperature and climate test chambers, corrosion chambers, weathering testers, IP dust and rain chambers, ozone test chamber, noxious gas SO₂ H₂S chamber, walk-in chambers. We provide test chamber, we provide test solution. Standard and customized products to meet different customer needs.

By 2018, global market has spread to 53 countries to USA, Canada, Mexico, Brazil, Peru, Russia, German, UK, France, Finland, Netherlands, Poland, Switzerland, Thailand, Philippines, Singapore, Malaysia, Australian, South Africa etc. and the market continues to expand.

At present 7 Tier-one agents around the world provide LIB products, installation and maintenance service for customers. Make things simple and convenient.

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PARTNER

LIB Industry®

LIB became a registered trademark of our company since 2017 year.



CE
ROHS

