COMPLEX ENVIRONMENT TEST EQUIPMENT

EYE 4D MULTI-Chamber

DIN/MIL-STD/IEC weather resistance standard test compliant

The DIN 75220 weathering test standard is one of the 50 items in the LV 124 standard, components to European and European automobile manufacturers.
The test standard established by the German automobile manufacturers' association.
It is widely used by automotive component manufacturers who sell components to European and European car manufacturers.

DIN 75220 compliant

MIL810G(H) compliant

IEC 60068-2-5 compliant

Example specifications (test facilities)

Dimensions inside the tank	1100mm(W)×1000mm(D)×1020mm(H)
Irradiated area	800mm(W)×800mm(D) Pointing down
Light source type	DIN 75220-compliant light source unit
Tank temperature control	Temperature range -45°C to +120°C Accuracy ±1°C
Tank humidity control	Temperature range 30% to 95% Accuracy ±5%

⚠ Important safety information

●For your safety, be sure to observe the following.
●Read through the Operation Manual prior to use. Always operate in accordance with the Operation Manual.
●For optimum results, use only as directed and for the stated purpose.

Warning

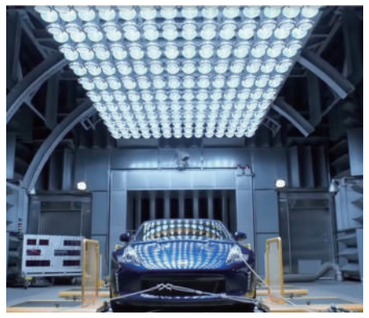
Improper usage could lead to serious injury or death.

●Always shut off the power before opening the lid or commencing inspection or maintenance procedures.
●Due to the risk of electric shock and injury, the mains power box should only be opened by suitably qualified operators.
●Irradiation can harm the eyes and cause skin inflammation. During inspection, do not look directly at the lamp or expose the skin to irradiation.
●Keep hands away from conveyors and other rotating parts to avoid injury.

Caution

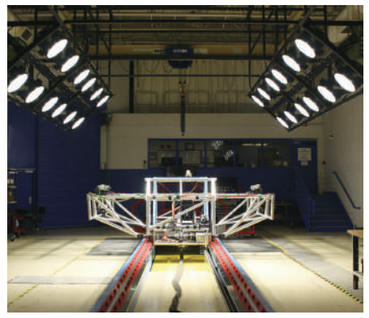
Improper usage could lead to danger with potential for injury or damage.

●The lamp becomes very hot during use. When replacing the lamp, wait until it has cooled down completely to prevent injury or burns.
●The power supply and self-ballasted irradiator must be properly earthed.
●Do not block external ventilation intake holes, which are used for internal ventilation of the system.
●Keep hands away from moving parts such as the ventilator fan and conveyor motor to avoid injury.
●Do not operate the system if the ambient temperature is 35°C or higher, as this may cause the cooling system to perform a safety shutdown. Contact Iwasaki Electric for advice.
●The operating environment should be relatively free of contaminants such as foreign gases and dust particles, which can cause corrosion or compromise system control.



Solar simulator

Light-Soaking System



Lighting system for high speed photography

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The information presented in this catalog is true and correct as of February 2025. Catalog No. SUVE8.25.02

IWASAKI

Accelerated Weather Durability Tester General Catalog

EYE SUPER XENON TESTER UV TESTER

IWASAKI ELECTRIC CO., LTD.

EYE SUPER XENON TESTER

new

XER-W85

High-intensity irradiation rotating drum

XER-W83-A

Standard irradiation rotating drum

Medium-intensity irradiation rotating drum

High-intensity irradiation rotating drum

SPECIFICATIONS

Specifications for EYE SUPER XENON TESTER

Model			XER-W85	XER-W83-A
Light source	Lamp		Water-cooled 7.5kW xenon arc lamp	
	Filters	Inner	Quartz glass (option available)	
		Outer	Borosilicate glass (option available)	
Test method			Irradiation, irradiation and spray/dark cycle Combinations are possible. Shower available at any time during irradiation or before or after dark	
Irradiation intensity		Standard irradiation test	——	Control range: 20 to 70W(100W*)/m² Control system: Automatic Measured wavelength range: 300 to 400nm
		Medium-intensity irradiation test	——	Control range: 40 to 100W/m² Control system: Automatic Measured wavelength range: 300 to 400nm
		High-intensity irradiation test	Control range: 60 to 180W/m² Control system: Automatic Measured wavelength range: 300 to 400nm	Control range: 60 to 180W/m² Control system: Automatic Measured wavelength range: 300 to 400nm
Uniformity			90% or higher	
Number of samples and effective irradiation area		Standard irradiation test	——	108 samples [70mm × 150mm] 11340cm² (including BPT panel)**
		Medium-intensity irradiation test	——	90 samples [70mm ×150mm] 9540cm² (including BPT panel)**
		High-intensity irradiation test	54 samples [70mm × 150mm] 5670cm² (including BPT panel)**	54 samples [70mm × 150mm] 5670cm² (including BPT panel)**
Temperature control range	Control range		Irradiation time: 40°C to 110°C (BPT)**	
Humidity control range	Control range		Irradiation time: 10% to 75%RH	
Power consumption			16kW (three-phase 3W, 200V, 50/60Hz), Input current: 65A	19kW (three-phase 3W, 200V, 50/60Hz), Input current: 80A
External dimensions			1090mm (W) × 1490mm (D) × 1850mm (H) (not including protrusions)	1400mm (W) × 1600mm (D) × 1850mm (H) (not including protrusions)
Weight			Approx. 600kg	Approx. 800kg

* Lamp life may be affected when 100W is used.
** BPT = Black panel thermometer

- Wet temperature control range depends on test conditions, etc.
- Please note that specifications may change due to continuous system improvement program.

FEATURES

- Pre-set Various Test Standards
- Natural Sunlight Correlation
- Stable Testing without Influence from Ambient Air
- Outstanding Reproducibility
- Capable with ASTM D 7869 (XER-W83A)
- Easy Operation and Monitoring

Test Standard

1 Paints Related

- JIS K 5600-7-7 (ISO 11341)
- JIS K 5101-09 (ISO787/15)
- ASTM D 4303
- ASTM D 7869

2 Plastics Related

- JIS K 7350-2 (ISO4892-2)
- ASTM D 2565
- ASTM D 4459
- ASTM D 5071

3 Textiles Related

(Dye durability; Bluescale; Grayscale, etc.)

- JIS L 0843 (ISO 105-B02)
- ISO 105B-02
- AATCC 169
- ASTM D 4355

4 Automotives Related

- ISO 3917
- JASO M 346
- JASO M 351
- SAE J 1885
- SAE J 2412
- SAE J 2527

5 Others

- JIS B 7754
- ASTM C 732
- ASTM D 4434
- ASTM D 4637
- ASTM G 26

※Not all conditions of all standards test are necessarily met in full. ※Options required subject to conditions.
※Compliant also with additional standards not amongst those listed above; please contact for details.

EYE SUPER UV TESTER

new

SUV-W171

Test Standard

- JIS A 1501
- JTM G 01

SPECIFICATIONS

Specification for EYE SUPER UV TESTER

Model		SUV-W171
Light source		Water-cooled 6kW metal halide lamp
Test case		Irradiation, condensation, darkness, showers
UV irradiation intensity		150mW/cm² (maximum)*
Uniformity ratio		90% or higher
Temperature control range	Irradiation period (BPT)**	50 to 85°C RH (room temperature: 20°C)
	In darkness (temperature in chamber)	35 to 75°C RH (room temperature: 20°C)
Humidity control range	Irradiation	40 to 70% RH (BPT 63°C)**
	Dark hour	50 to 90% RH (tank temperature50°C)
Effective irradiation area		96000mm² (480mm × 200mm)
Power consumption		14kW (three-phase 3W, 200V, 50/60Hz) Input current: 50A
External dimensions		1350mm (W) × 1200mm (D) × 1800mm (H) (not including protrusions)
Weight		Approx. 750kg
Interface		USB flash drive

* Value specified by the JIS standard (100mW/cm2 for conventional photometer (UVP365-01)).
** BPT= Black panel thermometer

- Wet temperature control range depends on test conditions, etc.
- Please note that specifications may change due to continuous system improvement program.
- Contact us for other specifications. A “drain pan” for preventing water leakage is available.

FEATURES

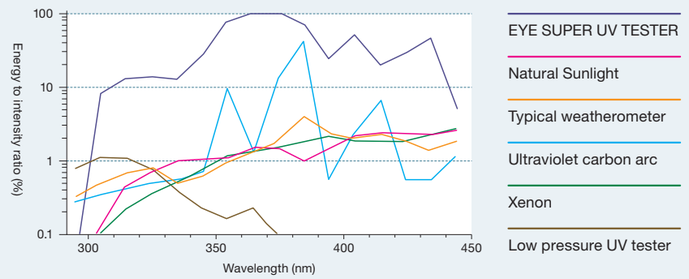
- Automated UV Irradiation Control
- Easy to Maintain
- Simple Form, Intuitive Operation
- Reduces Running Costs
- Easy check of UV Irradiation
- Supports Diverse Irradiation Conditions

Example of color differences in paint
(time required until reaching an identical value)

	Hours	Days
EYE SUPER UV TESTER	100	4
Xenon	1000	42
Sunshine weather meter	1000	42
Outdoor exposure	10000	420

30 times or greater UV irradiation intensity than conventional wheathermeters. Unprecedented test speeds.

Ratio of energy to intensity by wavelength for different testers



Handheld UV photometer

Numerical values can be set for the UV irradiance wavelength ranges to be controlled.

For EYE Super Xenon Tester

UVP365-Xe01
Numerical Settings : UV Irradiance 300-400nm

UVP340-Xe01
Numerical Settings : UV Irradiance 340nm

UVP420-Xe01
Numerical Settings : UV Irradiance 420nm

For EYE Super UV Tester

UVP365-03A
Numerical Settings : UV Irradiance 300-400nm

※ JIS C 1613:2007 compliant
Metal halide lamp configuration
High energy UV irradiance meter for testing equipment