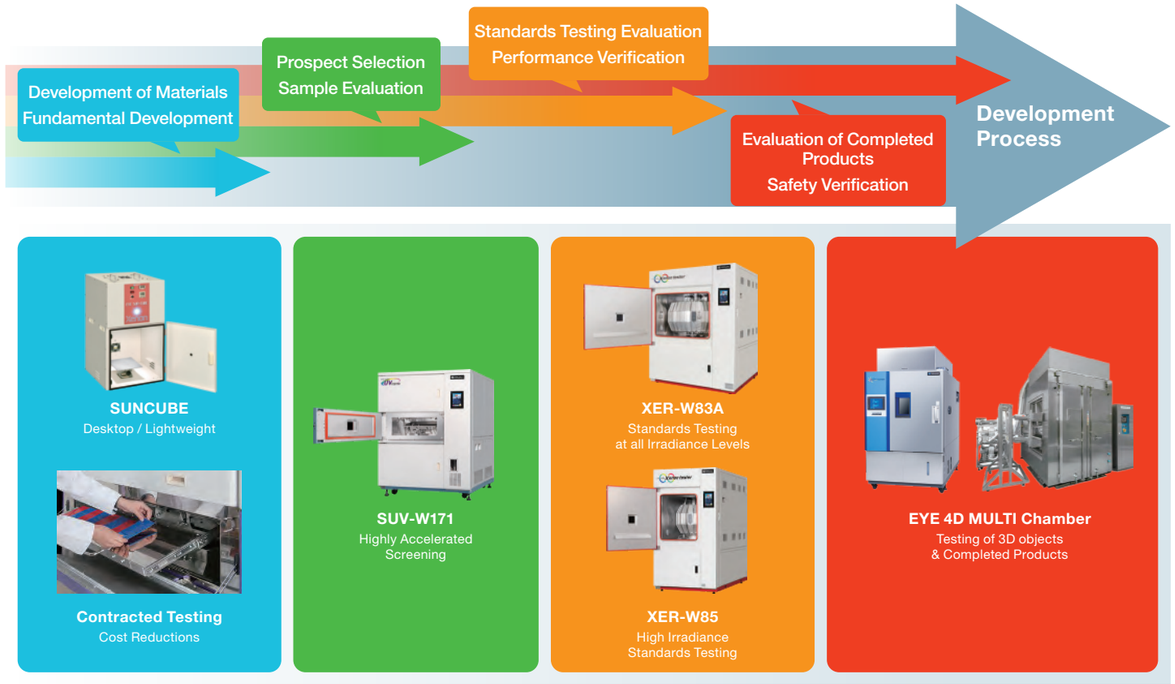
From as early as the developmental stage, IWASAKI Electric contributes to reducing running costs and environmental burden for customers.



⚠ Safety Precautions

- For your safety, please pay particular attention to the following points.
- Please read through the instruction manual thoroughly prior to use, and use equipment correctly.
- Do not use for any specialist purposes other than those indicated, as this can result in a deterioration in product quality.

Warning

Situations where improper use could potentially result in death or serious injury to user(s).

- Always turn off power prior to opening device cover, performing inspections, or carrying out maintenance works.
- The power supply box should only be opened and accessed by authorized personnel, due to risk of electric shock or injury.
- Never look directly at the lamp when lit, nor work with exposed skin, as this can cause damage to the eyes or skin inflammation.
- Never place hands near rotating parts such as the sample frame, as there is a risk they may catch and get injured.
- This product uses fluorocarbons as a refrigerant and is classed as a Class 1 Specified Product under the Fluorocarbons Emissions Control Law (Law No. 64 of 2001). When using this product, ensure appropriate measures are taken to prevent refrigerant leakage. If the product is installed in a machine room or similar, measures must be taken to prevent refrigerant leakage from exceeding the concentration limit. If refrigerant leakage does occur and the concentration limit is exceeded, this can lead to an oxygen deficiency incident.

Caution

Situations where there is a risk of injury to the user through improper usage, as well as situations where only property damage is expected to occur.

- Lamps remain extremely hot immediately after being switched off; ensure they have cooled sufficiently prior to replacing, to avoid risk of burns or injury.
- Ensure the wiring to power supply units and irradiators with integrated ballast are suitably earthed.
- Do not place any obstacles near the ventilation holes, as they serve to cool the inside of the device.
- Do not touch moving parts such as the cooling fan, or the motor driving the specimen frame, as hands may get caught.
- Do not install unit in locations where ambient temperature exceeds 35°C, as this may cause the cooler safety device to activate and shut down the unit. If ambient temperatures are expected to exceed 35°C, please consult us prior to installation and use.
- Install in a clean location with little by way of polluting gases, dust, etc; these can cause device corrosion and adversely affect controls.

IWASAKI ELECTRIC CO., LTD.

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●For further information contact:

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Tokyo Office
7thfloor, Keio-higashinihonbashi Bldg. 1-1-7,
Higashinihonbashi, Chuo-ku, Tokyo
103-0004
TEL:+81-3-5846-9029

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Information contained in this catalog is current as at August 2025. Please note that in the event of product improvements, details and specifications may be subject to change without prior notice.
Catalog No. SUVE8.26.05

IWASAKI

General Catalog: Environmental Testing Chamber

EYE SUPER XENON TESTER / UV TESTER

EYE 4D MULTI Chamber

Accelerated Weathering Test Chamber
Xenon Lamp Weathering Meter
EYE Super Xenon Tester

Accelerated Weathering Test Chamber
Metal Halide SUV Weathering Meter
EYE Super UV Tester

Combined Environmental Testing Chamber
EYE 4D Multi-Chamber

IWASAKI ELECTRIC CO., LTD.

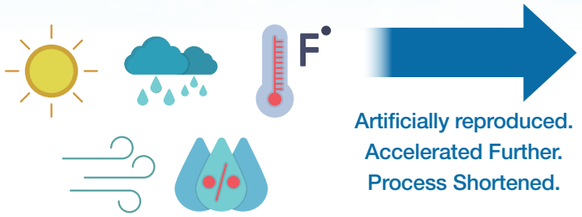
Products deteriorate in natural outdoor environments

Exposure to natural conditions such as sunlight, wind, rain, temperature and humidity, will lead to the deterioration of product properties. Deterioration and corrosion not only impact negatively on an aesthetic level, but also pose risks to product quality and safety and it is important to know the durability of a product in order to determine its lifespan.

What is a weather meter?

One way to assess the weather resistance of a product is through a method known as “Outdoors Exposure” which involves exposure to real-world environments; this however requires significant time and effort, with regional and seasonal variations also leading to unstable conditions.
Weather resistance testing equipment is able to artificially reproduce such exposure environments, enabling the durability of products to be assessed in a short amount of time.

Emitting around 20 - 30 times more UV than natural sunlight, metal halide lamps can produce an acceleration factor around that is around 100 times more powerful.
The adverse effects of wavelengths not found in natural sunlight are negated thanks to wavelengths of 295 nm or less being blocked by the EYE Super UV Tester.



Artificially reproduced.
Accelerated Further.
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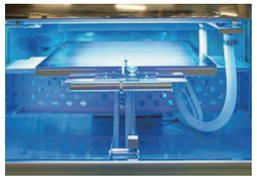
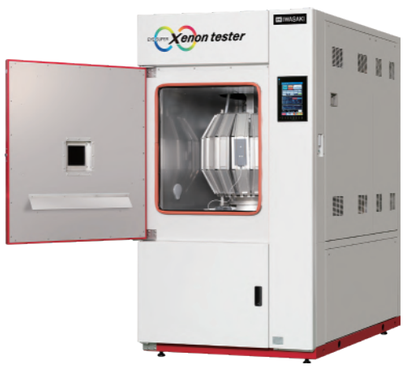




Used in places such as:

Industries

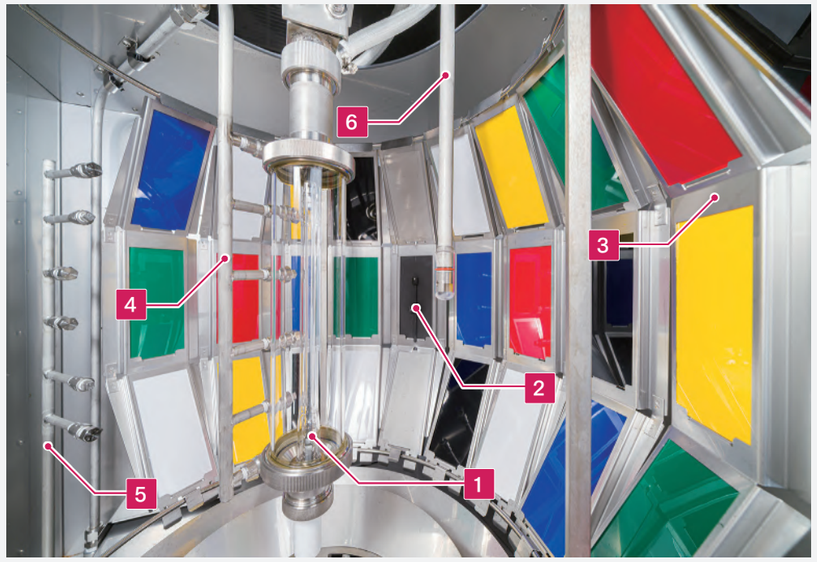
Automotive / Transport (air; rail) / Building Materials
Chemicals (rubber; glass; film) / Materials (resins, fibers)
Paints / Printing / Electrical Equipment / Solar Cells / Electrical Wires
Displays / Contract Test Laboratories

Uses

Research & Development /
Quality Assurance /
Performance Verification /
Safety Evaluation

EYE Super Xenon Tester: Device Configurations

Illustration of Device Interior



1 Lamp Unit
2 Temperature Sensor (BPT,BST)
3 Test Subject Mount
4 Front Shower
5 Rear Shower
6 Illuminance Meter Light Receiving Section
(300-400nm/340nm*/420nm*)
*Advantages of Fixed Settings When Ordering
①High irradiation stability
②Lower malfunction risk

Structural Diagram

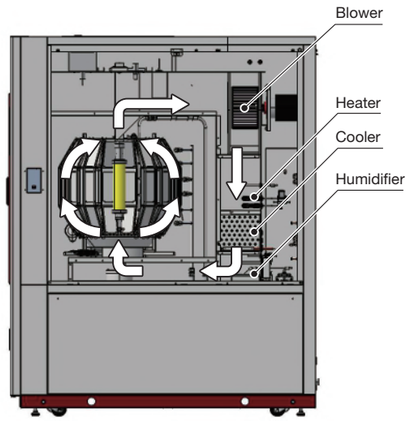
Closed Circulation System

Adopting a closed circulation system makes stable testing conditions possible, unimpacted by the temperature and humidity of the air outside.

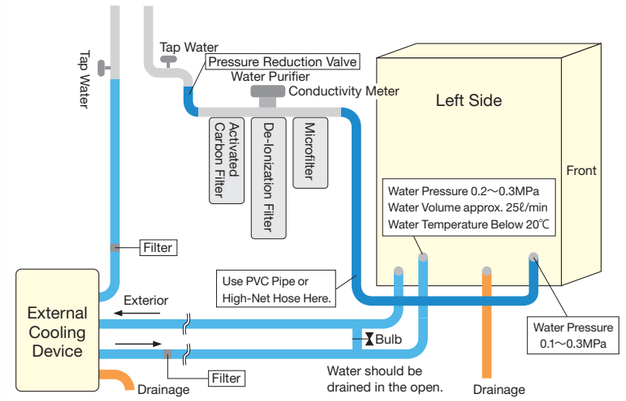
Integrated Water-Cooled Chiller

Stable, highly efficient controls are made possible through use in conjunction with an external cooling device.

Device Structure Diagram



Water Piping Diagram (example)



Please contact us if intending to use an external cooling device indoors, as there may be potential issues with heat dissipation.

Accelerated Weathering Test Chamber

EYE Super Xenon Tester XER-W85

Compact model, compatible with high-intensity irradiation xenon testing (180W/m²)

Offers significant space and power savings by comparison to previous models, and its specifications mean it can easily replace other models of weather meters widely used in Japan.

High-Intensity Sample Frame

- Achieved GWP value of ≤1500
- Energy Consumption 16kW
- Space Saving
- Energy Saving
- High-Intensity Sample Frame

Touchscreen Operating Panel

Tablet Use Example (optional)

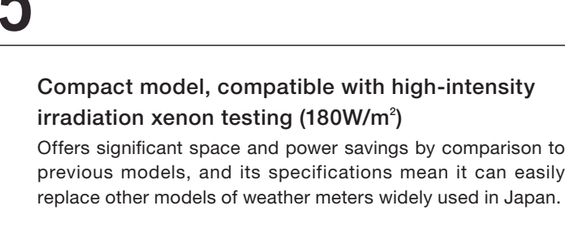
Model		XER-W85
Irradiance	High-Intensity Irradiation Sample Frame	Control Range 60-180W/m² Control Method : Automatic Controls Wavelength Measurement Range : 300-400nm
Number of Samples / Effective Irradiation Area	High-Intensity Irradiation Sample Frame	54 (70mm×150mm) 5670cm²(Including BPT)*1
Energy Consumption		16kW (3-Phase 3W, 200V, 50/60Hz), Input Current 65A
External Dimensions		Width1090mm×Depth1490mm×Height1850mm (Not including protrusions)
Weight		Approx. 600kg
Temperature Control Range	During Control Area Irradiation	40℃ -110℃ (BPT)*1
Humidity Control Range	During Control Area Irradiation	10%-75%RH

*1 BPT=Black Panel Thermometer

What are Xenon Lamps?

Xenon lamps are an artificial light source using light emitted by discharges in xenon gas. Their spectral distribution consists of a uniform continuous spectrum from UV through to visible light, and a strong linear spectrum in the near-infrared range. With the visible range in particular being similar to natural daylight, they are also used as a light source that approximates the effects of sunlight.

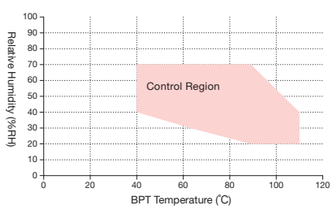
EYE Super Xenon Tester Spectral Energy Distribution



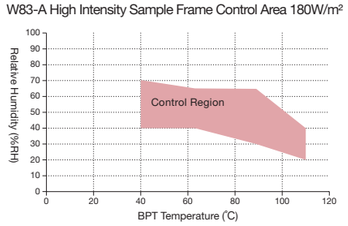
Temperature and Humidity Characteristics of the EYE Super Xenon Tester

Relationship between black panel temperatures and humidity values that can be set during irradiation

W83-A Standard Frame Control Area 60W/m²

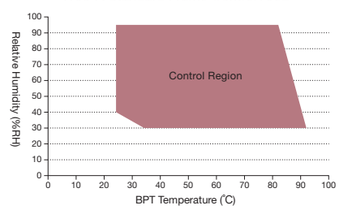


W83-A High Intensity Sample Frame Control Area 180W/m²



Relationship between programmable black panel temperature and humidity values in darkness

W83-A Standard Frame Control Area



*The control range may deviate from the above, subject to lamp power.

Accelerated Weathering Test Chamber

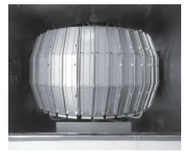
EYE Super Xenon Tester XER-W83-A

Suitable for use across a wide variety of applications

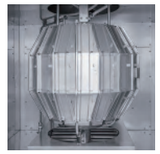
Selecting the optimal sample frame from three highly uniform options (standard, medium, and high intensity irradiation), enables the maximum sample capacity and optimal lamp life for the desired test conditions to be achieved.

NEW

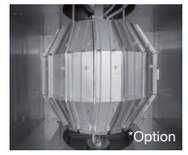
- Equipped with "eco mode"
- Energy Consumption 19kW
- ASTM D 7869 Compliant*
- Sample Frame Selection Available



Standard Intensity Irradiation Sample Frame



Medium Intensity Irradiation Sample Frame



High Intensity Irradiation Sample Frame

Touchscreen Operating Panel

Tablet Use Example (optional)

Model		XER-W83-A
Irradiance	Standard Intensity Irradiation Sample Frame	Control range: 20-70W(100W*1)/m² Control Method: Automatic Controls Wavelength Measurement Range: 300 to 400 nm
	Medium Intensity Irradiation Sample Frame	Control Range: 40 - 100W /m² Control Method: Automatic Controls Wavelength Measurement Range: 300 to 400 nm
	High Intensity Irradiation Sample Frame	Control range: 60 - 180W /m² Control Method: Automatic Controls Wavelength Measurement Range: 300 to 400 nm
Number of Samples / Effective Irradiation Area	Standard Intensity Irradiation Sample Frame	108 (70mm×150mm) 11340cm²(Includes BPT)*2
	Medium Intensity Irradiation Sample Frame	90 (70mm×150mm) 9450cm²(Includes BPT)*2
	High Intensity Irradiation Sample Frame	54 (70mm×150mm) 5670cm²(Includes BPT)*2
Energy Consumption		19kW (3-Phase 3W, 200V, 50/60Hz), Input Current 80A
External Dimensions		Width1400mm×Depth1600mm×Height1850mm (Not including protrusions)
Weight		Approx. 800kg
Temperature Control Range	Control Range	During Irradiation : 40℃ -110℃ (BPT)*1
Humidity Control Range	Control Range	During Irradiation : 10%-75%RH

*1 Lamp life may be impacted when using at 100W. *2 BPT=Black Panel Thermometer

Accelerated Weathering Test Chamber

EYE SUN-CUBE® Xenon SCX400/1-2

Examples of samples tested

- Various packaging containers (printed boxes; printed films; etc.)
- Bottled products with translucent properties (medicines; foodstuffs; cosmetics; etc.)
- Light resistance test of various texts
- Cameras and sensors used for automotives
- Automotive interior parts (plastic); small parts; console boxes; drinks holders
- Automotives paintwork
- Painted surfaces of building materials
- Evaluation of resin fade in domestic beauty appliances and small electrical appliances
- Solar cells for small appliances

Compact, Simple, Low-Cost Model

This compact light irradiation testing device is ideally suited to those who do not require testing to the most stringent standards, but wish to test light resistance easily and at low cost.

- No Installation Work Required
- For Small Samples
- Dimmable
- JIS Spectrum Compliant

Model		SCX400/1-2
Light Source	Lamp	400W Xenon Lamp
	Filter	IWASAKI Electric, ø198 UVIR Filter
Dimming Range		250-500W (Rated Value 400W)
Average Irradiance*1		Over 50W/m² (60W/m² testing possible)
Effective Irradiation Area*2		ø100mm
Uniformity		Over 90% (ø100mm range)
Timer Setting Range		0-9999hr
Sample cooling		Forced cooling by cooling fan
Energy Consumption		700W (max)
Input Voltage		AC100V±6% (50Hz/60Hz)
Input Current		9A
External Dimensions		Width450mm×Depth500mm×Height872mm (Not including protrusions)
Internal Dimensions		Width446mm×Depth396mm×Height500mm
Weight		41kg

*1 Using IWASAKI Electric illuminance meter UVP365-Xe01 (irradiation distance 400 mm; measurements at 17 points within effective irradiation area)
*2 Sample stage size is 200mm²

Please note specifications may be subject to change without prior notice, for product improvement purposes.
An optional illuminance meter (UVP365-Xe01) is also available.

Globally, Xenon lamp based weather meters represent the mainstream.

Companies and industries operating internationally are required to use Xenon Lamp based testing.

Xenon lamps are also increasingly being adopted for JIS standards.

Xenon lamps also represent the mainstream for ISO standards.

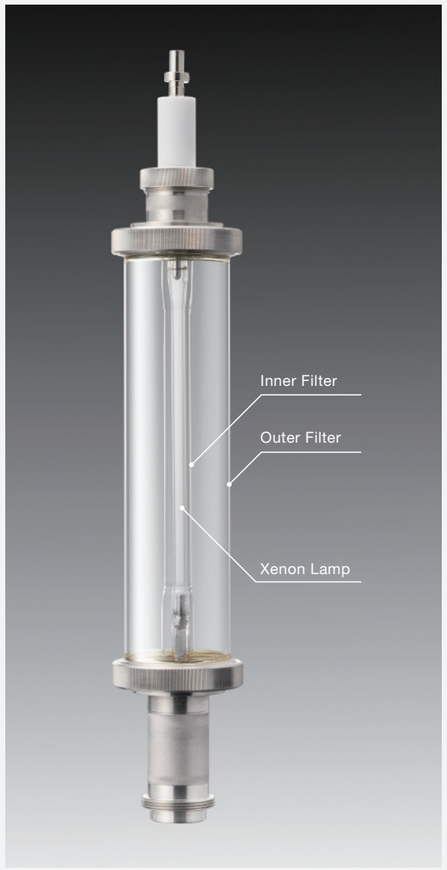
Standards Compliance List

◎=Compliant ○=Partially Compliant △=TBD

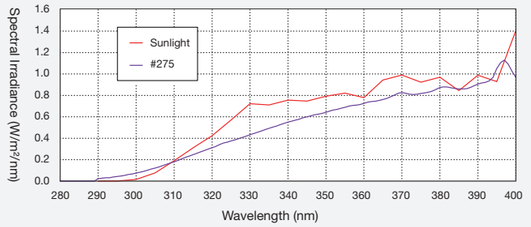
	Standard	Norm	W85	W83-A
Plastic Resins Related	JIS	K7350-2	◎	◎
	ISO	4892-2	◎	◎
	ASTM	D2565	-	◎
	ASTM	D4459	-	◎
	ASTM	D5071	◎	◎
Paints	JIS	K5600-7-7	◎	◎
	ASTM	D6695	◎	◎
	ISO	16474-2	◎	◎
	ASTM	D7869	-	◎
	ASTM	D4303	-	◎
	JIS	K5101-9:2004	◎	◎
Construction	JIS	A 1415:2013	◎	◎
	ISO	11431	◎	◎
Printed Materials and Inks	JIS	K 5701-1	◎	◎
	ISO	12040	◎	◎
Fibers	JIS	L0891:2007	◎	◎
	AATCC	16	-	◎
	ISO	105B-02	-	◎
	JIS	L0843	○	○
	AATCC	169	-	◎
	ISO	105B-04	-	△
	ISO	105B-06	◎	◎
	ASTM	D4355	-	◎
Aluminum	ISO	2135	◎	◎
	JIS	H 8685-1	◎	◎
Glass	ISO	3917	◎	◎
Rubber	JIS	K6266:2007	○	○
	ISO	4665	○	○
	JIS	K6404-4	◎	◎
Electricals / Electronics	IEC	60068-2-5	△	△
Solar Batteries	IEC	61215	△	△
Automotives Related	SAE	J2527	-	◎
	SAE	J2412	◎	◎
	JASO	M346	○	◎
	JASO	M351	○	◎
	JIS	D0205:1987	△	△
	SAE	J1885	◎	◎
Rail	JIS	E4037:2001	◎	◎
Packaging Materials	JIS	Z0237/1528	◎	◎
Digitally Printed Images	ISO	18930	◎	◎
	JEITA	CP-3901	△	△
General Non-Metallic Materials	ASTM	G155	○	○
Safety Marks	JIS	Z9107	◎	◎
	ISO	17398	◎	◎
Testing Equipment	JIS	B7754	○	◎
Other	ASTM	C732	-	○
	ASTM	D4434	-	○
	ASTM	D4637	-	○
	ASTM	G26	-	○

*The above table is correct as at 2025 - please check for the most up-to-date testing content.
*Please contact us regarding any standards not listed in the above table.

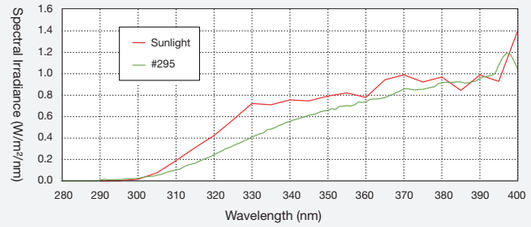
Outer Filter



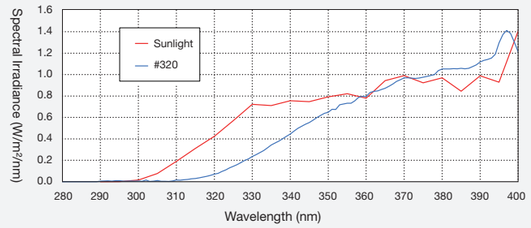
#275 : Daylight (extended UV)



#295 : Daylight

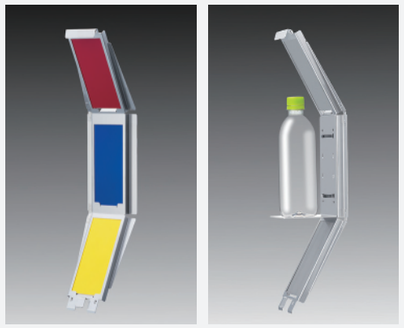


#320 : Window Glass



Holder

Bespoke holders can also be produced to meet requirements - such as those tailored to the purpose of testing, or the form of the testing sample (photo is an example).



Handheld UV illuminance Meter

Enables control of UV wavelength irradiance range settings to numerical values.

For EYE Super Xenon Tester

UVP365-Xe01

Numerical Value Settings:
UV Irradiance 300-400nm

UVP340-Xe01

Numerical Value Settings:
UV irradiance 340nm

UVP420-Xe01

Numerical Value Settings:
UV irradiance 420nm

* JIS C 1613:2007 compliant
Metal halide lamp type, high-energy UV irradiance meter for testing equipment

Accelerated Weathering Test Chamber

EYE Super UV Tester SUV-W171

Touchscreen Operating Panel

Connector System does not require tools

Standard Model

Compliant with "JIS A 1501: Accelerated weather resistance test method for resin building materials using metal halide lamps" standards, newly enacted on November 22, 2021.

Offers a wider effective irradiation area and reduced power consumption compared to preceding models.
In addition, a UV + Visible Light transmission filter can be supplied as a supplementary option.
UV + Visible Light (295-780nm) can be evaluated whilst maintaining the same functionality.

Effective irradiation area approx. **98,000**mm²

Energy Consumption **14**kW

Water-cooled **6**kW Metal Halide Lamp

Lamp Connector Type

Freon-Free Device Body

UV + Visible Light Filter*

* Option

Model		SUV-W171
Light Source		Water cooled 6kW Metal Halide Lamp
Testing Fields		Irradiation; Condensation; Darkness; Showers
UV Irradiation		150mW/cm² (max.)*1
Uniformity		Over 90%
Temperature Control Range	During Irradiation (BPT)*2	50-85℃ RH (where room temp. 20℃)
	During Darkness (Tank Temperature)	35-75℃ RH (where room temp. 20℃)
Humidity Control Range	During Irradiation	40-70% RH (where BPT is 63℃)*2
	During Darkness	50-90% RH (where in-tank temp. is 50℃)
Effective Irradiation Area		98000mm² (width490mm×depth200mm)
Energy Consumption		14kW(3-phase 3W…) Input Current : 50A
External Dimensions		Width1350mm×Depth1200mm×Height1800mm (Not including protrusions)
Weight		Approx. 560kg
Data Output		USB Memory

*1 Value compliant with JIS standards (existing illuminance meters (UVP365-01) measure at 100mW/cm²).
*2 BPT=Black Panel Thermometer
Temperature and humidity control ranges depend on test conditions and other factors.
Please note specifications may be subject to change without prior notice, for product improvement purposes.
For other bespoke specifications, please contact us.

Key features

- Expanded effective irradiation area* * 20% vs existing model
- Simpler lamp replacement process
- Also compatible with UV + Visible Light filters
- Long filter life reduces running costs
- Easy to check UV irradiance
- Uniform irradiance
- Automatic dimming mechanism allows for UV irradiation controls
- Highly visible and easy to operable touchscreen panel
- Makes use of new user interface

What are Metal Halide Lamps?

Metal halide lamps contain various metal halides along with mercury and rare gases within their light-emitting tube, emitting a broad spectrum of UV light from 200 to 450 nm.

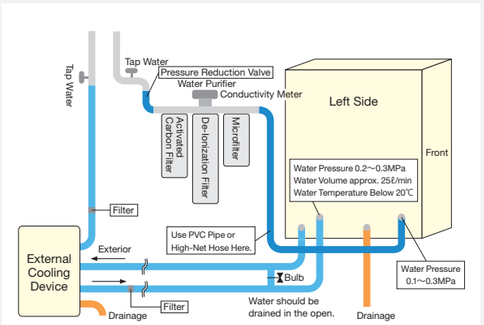
Replicates the equivalent of 10 years' outdoor exposure in approximately 1,000 hours.

Emitting around 20 - 30 times more UV than natural sunlight, metal halide lamps can produce an acceleration factor around that is around 100 times more powerful. The adverse effects of wavelengths not found in natural sunlight are negated thanks to wavelengths of 295 nm or less being blocked by the EYE Super UV Tester.

Example results of differences in paint color (approximate time until equivalent values reached)

	Hours	Days
EYE Super UV Tester	100	4
Xenon Weather Meter	1000	42
Sunshine Weather Meter	1000	42
Outdoor Exposure	10000	420

■ Water Piping Diagram (example)



Please contact us if intending to use an external cooling device indoors, as there may be potential issues with heat dissipation.

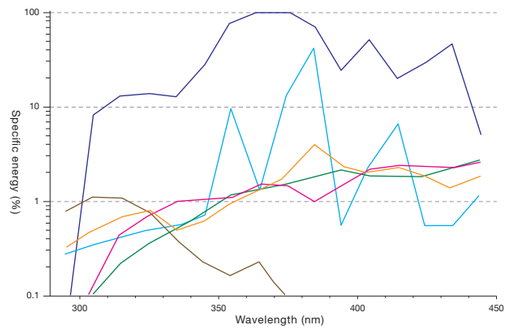
The biggest cause of deterioration is UV rays.

EYE Super UV Tester concentrates, enhances and accelerates the potent degradation properties of UV rays, producing alterations in the physical properties of materials that replicate those resulting from outdoor exposure or conventional weather meters.

Testing example using EYE Super UV Tester (hard PVC; blue)
Test cycle consisted of 3 hours exposure / 2 hours condensation.

Prior to irradiation　After 150hrs　After 300hrs

Wavelength / energy / irradiance ratio of different testers



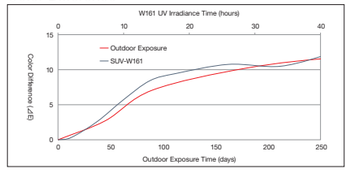
EYE Super UV Tester (Metal Halide Lamp version)
Sunlight
Sunshine Carbon Arc Method
UV Carbon Arc Method
Xenon Lamp Method
UV Fluorescent Lamp Method

Reference Data : Correlation evaluation test between EYE Super UV Tester and outdoor exposure

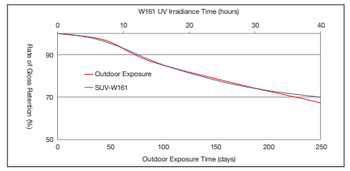
Test data 1: ABS (black); commercially available product

Test Conditions	Model : SUV-W161
Set Irradiance	100mW/cm² (illuminance meter : UVP365-01)*
BPT Temperature	63˚C
Humidity	50%RH
Cycle	2 hours irradiation / 2 hours condensation; after 20 hours, 4 hours irradiation / 4 hours condensation

Color Difference



Gloss Retention



Comments

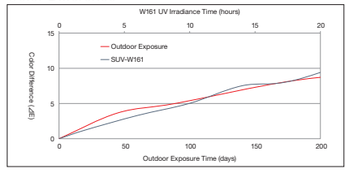
Outdoor Exposure	Over time, the gloss faded and turned white.
SUV-W161	Over time, the gloss faded and turned white.

Similar visual changes in color and gloss. Measurements also indicated correlation by showing similar levels of color difference and gloss retention, with an estimated acceleration factor of around 150x.

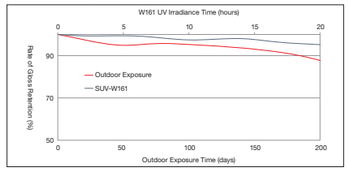
Test data 2: PC (transparent) commercially available product

Test Conditions	Model : SUV-W161
Set Irradiance	100mW/cm² (illuminance meter : UVP365-01)*
BPT Temperature	63˚C
Humidity	50%RH
Cycle	2 hours irradiation / 2 hours condensation

Color Difference



Gloss Retention



Comments

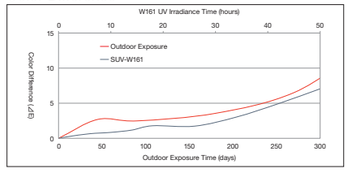
Outdoor Exposure	Over time, the color changed from transparent to brown; there was little change in gloss.
SUV-W161	Over time, the color changed from transparent to brown; there was little change in gloss.

There were similar visual changes to color, while there was no significant change in gloss retention. Measurements showed that the color differences followed a similar course, with an estimated acceleration factor of approximately 240. Changes in the gloss change were however less in the accelerated test than in the natural exposure test, resulting in a slight difference in correlation.

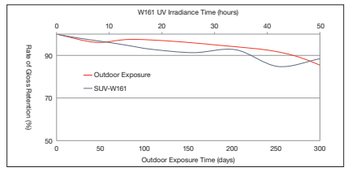
Test data 3: PVC (black) commercially available product

Test Conditions	Model : SUV-W161
Set Irradiance	100mW/cm² (illuminance meter : UVP365-01)*
BPT Temperature	63˚C
Humidity	50%RH
Cycle	2 hours irradiation / 2 hours condensation; after 20 hours, 4 hours irradiation / 4 hours condensation

Color Difference



Gloss Retention



Comments

Outdoor Exposure	The color turned white over time, while there was little change in the gloss.
SUV-W161	The color turned white over time, while there was little change in the gloss.

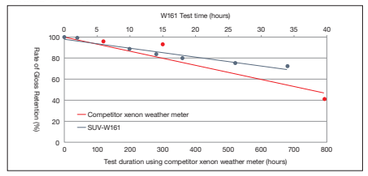
Changes in color and gloss were visually similar, and measurements showed a similar trend in color difference, with the enhancement factor is estimated to be about 140x. Measurements of gloss retention showed high retention levels in both tests.

* To comply with JIS standards (UVP365-03A), 150mW/cm².

Reference Data : Comparative exposure test between EYE Super UV Tester and other products on the market

Test Data 1: Comparison with competitor xenon weather meters

Gloss retention



Handheld UV Illuminance Meter

Enables control of UV wavelength irradiance range settings to numerical values.

For EYE Super UV Tester

UVP365-03A

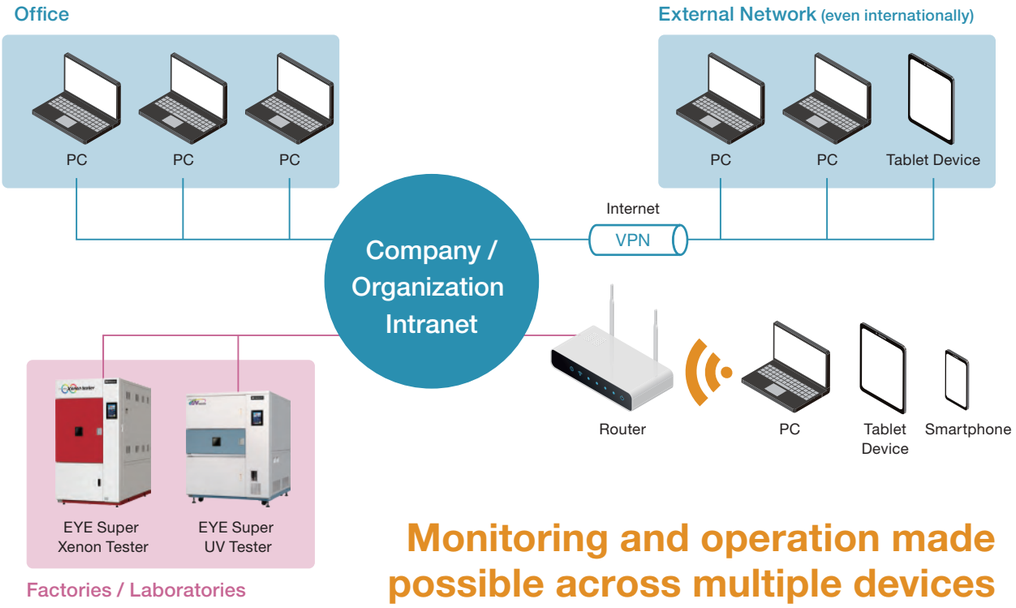
Numerical Value Settings:
UV irradiance 300-400nm

* JIS C 1613:2007 compliant
Metal halide lamp type, high-energy UV irradiance meter for testing equipment

Remote Monitoring and Operation　EYE Super Xenon Tester　EYE Super UV Tester

By connecting the EYE Super UV Tester to an internal company network, operation of the device monitoring of its status can be conducted remotely via a tablet device or PC on the same network.

Furthermore the testing progress and equipment status can be monitored easily and instantly from anywhere in the world at any time, through use of a VPN to access the company network from an external network.



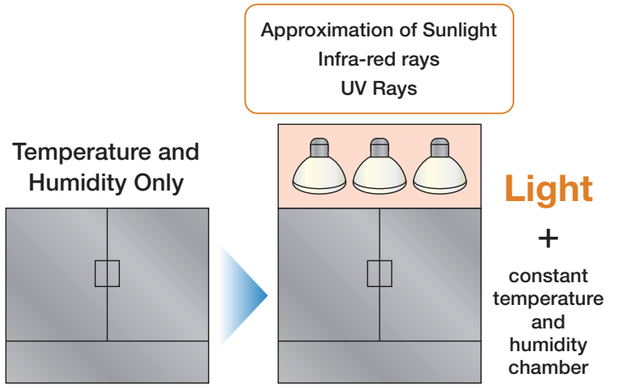
Monitoring and operation made possible across multiple devices

Combined Environmental Testing Chamber

EYE 4D MULTI Chamber®

What is Combined Environmental Testing Chamber?

Combined Environmental Testing Chamber adds solar radiation conditions to conventional environmental testing, which mainly involves temperature changes via air conditioning equipment and humidity changes via humidifiers, in order to create a test environment that more closely replicates real-world outdoor conditions.



Examples of samples tested

Single-substance samples

Composite Samples

Example Specifications (Testing Chamber)
Visible Light (SUN) Model / Ultraviolet (UV) Model / Infrared (IR) model

Tank Interior Dimensions	Width1300mm×Depth1970mm×Height2356mm
Irradiation Area	Width800mm×Depth800mm
Tank Temperature Control	-45℃ - +120℃
In-Tank Humidity Controls	Humidity Range 10%-95% Accuracy ±5% (With Temperature Factors)
Environmental Factors	Light / Temperature / Humidity / Showers / Rotation

Please refer to following page for further details.

Large Model

Spacious testing area allows for finished products and molded 3D products to be evaluated as a whole.
Tests can be tailored through controlling conditions such as light, temperature, humidity, and water spray, offering environmental testing that is more realistic and reliable.

Temperature Settings **-40℃ - +150℃**

Evaluate Completed Products

Choice of Solar Radiation Conditions

Example Specifications (Testing Chamber)

Tank Interior Dimensions	Width1700mm×Depth1600mm×Height2300mm
Irradiation Area	Width1000mm×Depth1400mm Downward or horizontal facing* Can also be rotated using a turntable
Light Source	UV Lamps / Halogen (IR) Lamps / Metal Halide Lamps
In-Tank Temperature Controls	Temperature Range -40℃ - +150℃ Accuracy±1℃
In-Tank Humidity Controls	Humidity Range 10%-95% Accuracy±5%(With Temperature Factors)
Environmental Factors	Light / Temperature / Humidity / Showers / Rotation

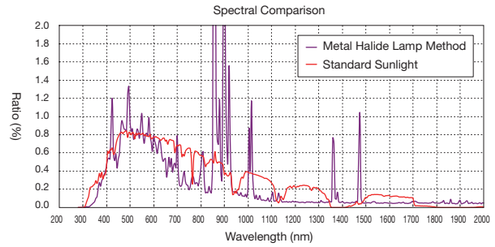
Visible Light (SUN) Model WP4D-D

Quasi-Sunlight Metal Halide Lamp

DIN 75220 Compliant

MIL810G (H) Compliant

IEC 60068-2-5 Compliant



Example Uses

- Testing of automotive parts to LV124 Standards
- Evaluation of Perovskite Solar Cells

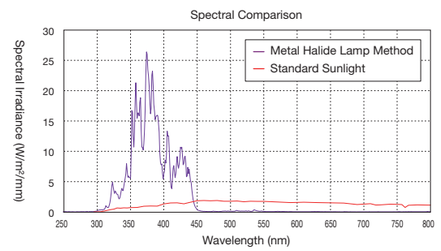
Ultraviolet (UV) Model WP4D-UV

UV Metal Halide Lamps

UV Rays

Weather Resistant

Deterioration Testing



Example Uses

- Deterioration testing of single substance and composite samples under UV light
- Screening tests during development processes

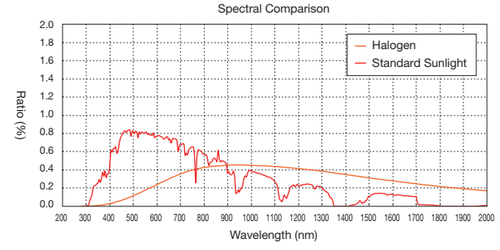
Infrared (IR) Model WP4D-H

Infrared Halogen Lamps

Infrared

Heat Resistance

Temperature Increase Testing



Example Uses

- Heat resistance and heat cycle testing of samples
- Operation verification testing for various products

Environmental Testing Chamber Lineup

	Model	Xenon Lamp Type Weather Meter					Metal Halide Type Weather Meter		Environmental Testing Chamber		
		XER-W85	XER-W83-A			SCX400/1-2	SUV-W171	SUV-W262	WP4D-D	WP4D-UV	WP4D-H
		High Irradiation	Standard	Medium Irradiation	High Irradiation	Small	Regular	Large	Visible Light (SUN)	Ultraviolet Rays (UV)	Infrared Rays (IR)
1	Light Source	1×7.5W Xenon Lamp	1×7.5W Xenon Lamp			1×0.4kW Xenon Lamp	1×6kW Metal Halide Lamp	1×10kW Metal Halide Lamp	2×5.5kW Metal Halide Lamps	2×5.5kW Metal Halide Lamps	2×2kW Halogen Lamps
2	Irradiance 300-400nm	60-180W/m²	20-70(100)W/m²	40-100W/m²	60-180W/m²	50(60)W/m²	75-150mW/cm²* (750-1500W/m²)	75-150mW/cm²* (750-1500W/m²)	800-1600W/m² (via pyranometer)	40-130mW/cm²* (400-1300W/m²)	0-1000W/m² (via pyranometer)
	Irradiance 420nm	0.99-2.97W/m²	0.33-1.65W/m²	0.66-1.65W/m²	0.99-2.97W/m²						
	Irradiance 340nm	0.57-1.72W/m²	0.19-0.96W/m²	0.38-0.96W/m²	0.57-1.72W/m²						
3	Test Specimen No. of Sheets	54	108	90	54	Φ100mm	98000mm²	160000mm²	640,000mm²		
	Test Specimen Dimensions(W×H)mm	(70×150)	(70×150)	(70×150)	(70×150)		(490×200)	(800×200)	(800×800)		
4	Test Cycle	Irradiation / Pause / Condensation	Irradiation / Pause / Condensation			Irradiation / Pause	Irradiation / Pause / Condensation	Irradiation / Pause / Condensation	Irradiation / Pause		
5	Showers y / n	○	○			-	○	○	Optional		
6	Temperature During Irradiation (BPT Temperature) (℃)	40-110℃	40-110℃			-	50-85℃	50-85℃	-45 - +120℃ (In-Tank Temperature)		
	Temperature During Darkness (In-Tank Temperature) (℃)	38℃	38℃				35-75℃	35-75℃			
7	Humidity During Irradiation (%RH)	10-75%	10-75%			-	40-70%	40-70%	Subject to Test Conditions		
	Humidity During Darkness (%RH)	95%	95%				50-90%	50-90%			
8	Device Dimensions W×D×H(mm)	1090×1490×1850	1400×1600×1850			450×500×872	1350×1200×1800	1700×1200×1900	1300×1970×2356		
9	Input Current	3Phase 200V 65A	3Phase 200V 80A			AC100V 9A	3Phase 200V 50A	3Phase 200V 80A	3Phase 200V 125A		
10	Weight (kg)	600	800			41	560	1020	800		
11	Options	Sample Rotation: 3/6/12rpm	Sample Rotation: 3/6/12rpm ASTM D 7869 Compliant				UV + Visible Light Filter		Customizations of showers & turntables possible		

* Measured with UV illuminance meter (UVP365-03A)

Introducing : Contract Testing Services

A variety of environmental testing equipment and weather meters can be tested and trialed from as little as one hour.

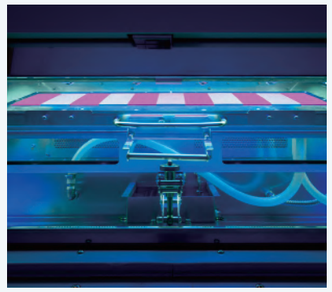
Contract irradiation testing services using environmental testing equipment and weather meters are available.

We can outsource in-house testing or conduct pre-testing prior to equipment installation, and undertake testing according to client requirements.

Please feel free to contact us for more information.

Sample Set (SUV-W262)

In-house Laboratory



Irradiation Testing Example

List of Contract Testing Chamber

	Model	Effective Irradiation Area	Remarks
Weather Meter	SUV-W171	Width490mm×Depth200mm	
	SUV-W161	Width422mm×Depth190mm	Visible Light Filter Possible
	SUV-W262	Width800mm×Depth200mm	
	XER-W85	70mm×150mm Plates×54	
	XER-W83-A	70mm×150mm Plates×max. 108	ASTMD7869 Possible
Environmental Testing Chamber	EYE 4D MULTI Chamber(Large)	Width1000mm×Depth1000mm×Height1000mm*	Choice of light source (UV / simulated sun / IR), and possible to evaluate products in their entirety
	EYE 4D MULTI Chamber(Medium)	Width600mm×Depth600mm×Height1000mm*	
	EYE 4D MULTI Chamber(Small)	Width800mm×Depth800mm×Heigh300mm*	Equipped with DIN75220/MIL810G compliant light source

*If irradiation area sizes other than those listed above are required, please contact us.