

Weather Meters



3. Other Irradiation Instruments

For Photovoltaic Modules



CCT-LXU Super Xenon Combined Weather Chamber Determines the outdoor durability of photovoltaic modules

This model performs accelerated weathering tests on photovoltaic modules, simulating various harsh outdoor conditions. Up to two full-scale photovoltaic modules can be tested.

Light source	Eight xenon-arc lamps WX7.5 (7.5 kW water-cooled type)
Test types	Single or cyclic tests of: light test, dry test (high temperature test), humidity test (high temperature high humidity test), low temperature test, water test
Irradiance	60 to 180 W/m ² (three times that of sunlight) at 300 to 400 nm
Chamber temperature range	-30 to 90 °C (-10 to 90 °C during light test)
Number of specimens	2 units (120 × 150 × 5cm)
External dimension of the instrument	Approx. width 530 cm, depth 338 cm, height 370 cm [weight approx: 8,000 kg]

Light + Corrosion



CCT-1LX Combined Cyclic Corrosion Test Instrument with light test Determines the outdoor durability of numerous materials and products

This is a compact combined cyclic weather meter capable of simulating^{*1} various harsh outdoor conditions via combination of light, salt spray, dry, humidity, salt immersion, low temperature, and water washing tests.

Light source	Xenon-arc lamp WX7.5 ^{*2} (7.5 kW water-cooled type)
Test types	Single or cyclic tests of: light, salt spray, dry, humidity, salt immersion, low temperature, water washing
Chamber temperature range	-30 to 70 °C (depending on test type, such as 40 to 70 °C during light test)
Internal dimension of chamber	Approx. width 96 cm, depth 61 cm, height 86 cm
External dimension of the instrument	Approx. width 180 cm, depth 190 cm, and height 217 cm [weight: approx. 1,400 kg]

^{*1} Models with corrosive gases such as O₃, SO₂, H₂S, NO₂, Cl₂ are also available.
^{*2} Models with different light source such as metal halide lamps are also available.



CCT-RX Weather Test Chamber

Determines the outdoor resistance of large full-scale products

This combined cyclic test chamber simulates various harsh outdoor conditions (light, acid rain spray, dry, humidity, dew, low temperature) in combination of the user's choice. It is capable of testing large-sized components and full-scale products such as automobiles and motorcycles.

Light source	Three xenon-arc lamps WX7.5* (7.5 kW water-cooled type)
Test types	Single or cyclic tests of: light, acid rain, dry, humidity, dew, low temperature
Irradiance	60 W/m ² (at wavelength of 300 to 400 nm)
Chamber temperature range	-20 to 80 °C, depending on test type (example: 40 to 70 °C during light test)
Internal dimension of the chamber	Approx. width 350 cm, depth 302 cm, height 176 cm
External dimension of the instrument	Approx. width 540 cm, depth 377 cm, height 279 cm [weight: approx. 5,000 kg]

* Models using other light sources such as metal halide lamps are also available.

Mercury vapor lamp



H75 Ultraviolet Fade Meter for Glass

Specifically designed for ultraviolet deterioration tests of laminated glass

This is an ultraviolet fade meter with a light source of 750W mercury vapour lamp. It performs deterioration tests for laminated glass used for windows of automobiles, railway, buildings and ships.

Light source	Mercury vapor lamp (750 W, approx. 500 V 1.6 A)
Chamber temperature	45 ± 5 °C
Specimen rotation	Approx. 3 rpm
Number of specimens	3 pieces (300 × 300 × 6.5 mm)
External dimension of the instrument	Approx. width 80 cm, depth 64 cm, height 123 cm [weight: approx. 130 kg]
Standards	JIS R 3212, ISO 3917, ISO 12543

Super fluorescent lamp



FL Super Fluorescent Fade Meter

Accurately simulates the indoor fluorescent light

This model is used to test lightfastness of digital print and other printed images, medical products, etc. under fluorescent light from its 40 high-power 110W super fluorescent lamps. Its irradiance is constantly adjusted and tests can be performed under constant temperature and humidity.

Light source	110 W Super fluorescent lamp (white) × 40
Illuminance	70,000 lx (adjustable between 3,000 to 90,000 lx)
Chamber temperature range	24 ± 2 °C, 60 ± 5 %rh
Number of specimens	38 pieces (150 × 70 × 1mm)
Internal dimension of the chamber	Approx. width 100 cm, depth 100 cm, height 135 cm
External dimension of the instrument	Approx. width 217 cm, depth 166cm, height 214 cm [weight: approx. 1,500 kg]