

ATI

ADVANCED TESTING INSTRUMENTS



COLOR FASTNESS
TESTING INSTRUMENTS
**TF422 WATER-COOLED
LIGHT & WEATHER
FASTNESS TESTER**

TF422 WATER-COOLED LIGHT & WEATHER FASTNESS TESTER

Water-cooled Light & Weather Fastness Tester (Weatherometer), is to determine the color fastness, aging resistance of textiles, plastics, rubber products or materials by objecting to the simulated conditions of nature weather (daylight, rain, temperature and humidity, etc.). The tester simulates both light and dark cycles and nature weather conditions by rack sprays and water-cooled long-arc-xenon lamp equipped.

FEATURES

- Light intensity set digitally, real-time monitoring, automatically adjust to meet the different standards required for testing the stability of light source (optional 420nm or 300 ~ 400nm band monitoring)
- Blackboard Thermometer (BPT), the Standard Blackboard Thermometer (BST), Irradiance detector and samples placed in the same position, a true reflection of the sample under test conditions, the data displayed as figures, charts, curves on the large color screen, no need to stop for observation.
- Large colorful display, a variety of test monitoring modes (animation, digital, graphics) operate easily and clearly.
- Sample holders can be timed independently to achieve different tests simultaneity in the same machine
- Equipped with Water-cooled rated 4500W long-arc-xenon- lamp, truly simulates the daylight spectrum.
- Professional water circulation system, reduces operating costs.
- Industrial temperature control (cooling) system offers quickly and smoothly control
- Ultrasonic humidifier, professional dehumidification system to ensure accurate and stable humidity conditions.
- Equipped with self-circulation system and air filtration system, significantly reducing the environmental requirements.
- Cooled by circulating water chillers / water cooling two options to choose from.
- Quality assurance of 1000 hours continuous running.
- Front and back sides spray pattern on samples.

SPECIFICATIONS

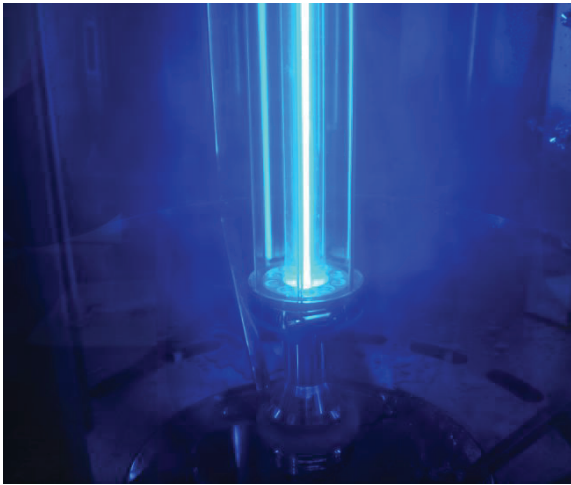
- Working modes: to simulate and reinforce the impact of the nature of the measured object, providing light, temperature, humidity, rain and other quantitative indicators.
- Light source: 4500W Water-cooled long-arc xenon lamp
- Average lifetime: 1200 h
- Temperature range: Room temp. 20 ~ 93 °C, accuracy 0.1 °C
- Humidity range: Light cycle 10 ~ 85% RH, Dark cycle 30 ~ 100% RH
- Test time control: 1000 h
- Irradiance range: (0.6 ~ 1.200) +/- 0.02 W/m² @ 420nm, Other range can be digitally set and automatic

compensation

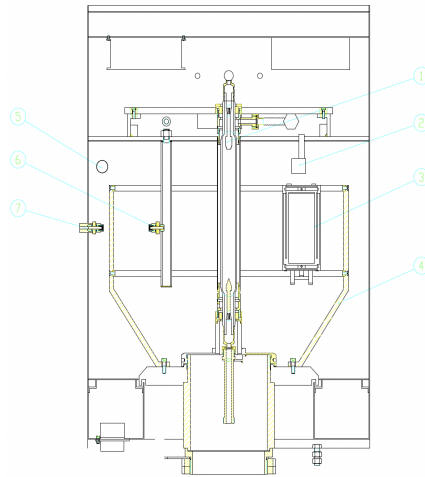
- Rotation speed of sample holder: 5 rpm adjustable
- Test time range: ≤ 10000 h
- BPT Range: 35 ~ 120°C, 0.5°C
- BST Range: 35 ~ 125°C, 0.5°C

STANDARDS

AATCC 16.3, ISO105-B02/B04, GB/T 8427, GB/T 8430, GB/T 14576, GB/T 15102



The xenon lamp in the center generates the simulated sunlight, and the light filter in the outside filters the other lights to ensure the required light will affect the test samples only; The heating generated by the light tube is cooled by the ultra pure water, which is flowing through the space between the light tube and the light filter.



- ① Long arc xenon lamp
- ② Optical irradiance monitoring sensor
- ③ BST, BPT, test sample holder, etc.
- ④ Drum type sample holder
- ⑤ Temperature and humidity probe
- ⑥ Spray (rain) front and back
- ⑦ The sample (back) spray (DEW)

POWER: 220 V 50 Hz 10 KW

WEIGHT: 400 kg

DIMENSIONS: 1200 x 900 x 1800 mm (L x W x H)

