

EY50 Sweating Guarded Hotplate

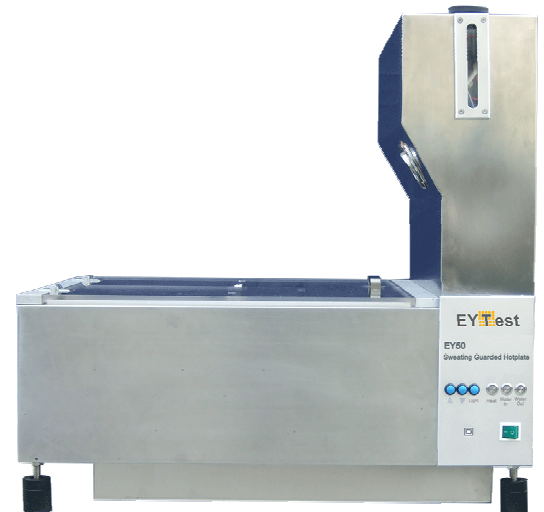
1. Test unit

1.1 Product Description

EY50 is the most professional, most advanced Thermal and Evaporative Resistance test instrument, simulate the human skin test plate, Automatic water supply system, Wind speed stabilization system, test host and Climate Chamber completely separated design, Automatically senses the thickness of the test sample.

1.2 Technical Specifications

(RCT) Thermal resistance range : 0.002-2.0 m² K / W
 Repeatability: $\leq \pm 2\%$
 Resolution: 0.001m²K / W
 (Ret) evaporative Resistance range : 0-1000m²Pa / W
 Repeatability: $\leq \pm 2\%$
 Resolution: 1m² · Pa / W
 Test plate temperature range: 30 °C-40 °C adjustable
 Temperature control accuracy: ± 0.03 °C
 Temperature measurement: ± 0.01 °C
 Air velocity: 0 ~ 1.2m / s continuously adjustable
 Air velocity accuracy: $\pm 1\%$
 The sample platform lift range : 0~50mm automatic lift
 Sample thickness: 0~50mm
 Test plate area: 254mm × 254mm
 Guard ring size: 512mm × 512mm
 Guard ring width: 127mm
 Dimensions: 770 × 560 × 750mm (L x W x H) (not including Climate Chamber)
 Weight: 30Kg (not including Climate Chamber)
 Host power: AC220V $\pm 10\%$, 100W or AC110V $\pm 10\%$, 100W
 Warranty: 24 Months



1.3 Professional Technology

1. The world's first independent design concept, integrated design of control systems and automatic water supply system, users can choose the standard Climate Chamber.
2. Automatic water supply, Automatic drain system, Strong feed water system (In the Evaporative Resistance, water uniformly wets test plate faster)
3. high-precision automatic platform mobile systems, enter the thickness of the test the test platform to move to the corresponding position.
4. According to the thickness of the sample, the machine automatically adjust the PID control parameters, test conditions can quickly reach.
5. The patented Air velocity parallel stabilization system, let the Air velocity homogeneous and stable, so that the test results are more stable.
6. Air velocity continuously adjustable from 0 ~ 1.2m / s to meet any Thermal and Evaporative resistance testing standards.
7. Guard ring width 127mm, to ensure that heat is passed from the test sample.
8. LED soft lighting system.

- 9. USB communication, optional wireless wifi communication, to make the connection more convenient.
- 10. Machine stainless steel shell to ensure the life of the machine more than 20 years.
- 11. Friendly and convenient testing software, test software to configure variety of test standard and user-friendly.

1.4 Testing standards

GB / T 11048, ISO 11092, ASTM F 1868-09, ASTM D 1518-85, JIS L1096-2010, ASTM F 1868-02

1.5 Test Principle

Clothing is often made of materials that impede the flow of heat and moisture from the skin to the environment. Consequently, people may suffer from heat stress or cold stress when wearing clothing in different environmental conditions. Therefore, it is important to quantify the thermal resistance and evaporative resistance of clothing materials and to consider these properties when selecting materials for different clothing applications.

1.6 Application

measurement of the thermal resistance and the evaporative resistance, under steady-state conditions, of fabrics, films, coatings, foams, and leathers, including multi-layer assemblies, for use in clothing systems.

1.7 Configuration

Standard configuration: host test unit, a power line, LABTest analysis PC software
 Optional accessories: Climate Chamber.

2. Optional accessories (Climate Chamber) Specifications

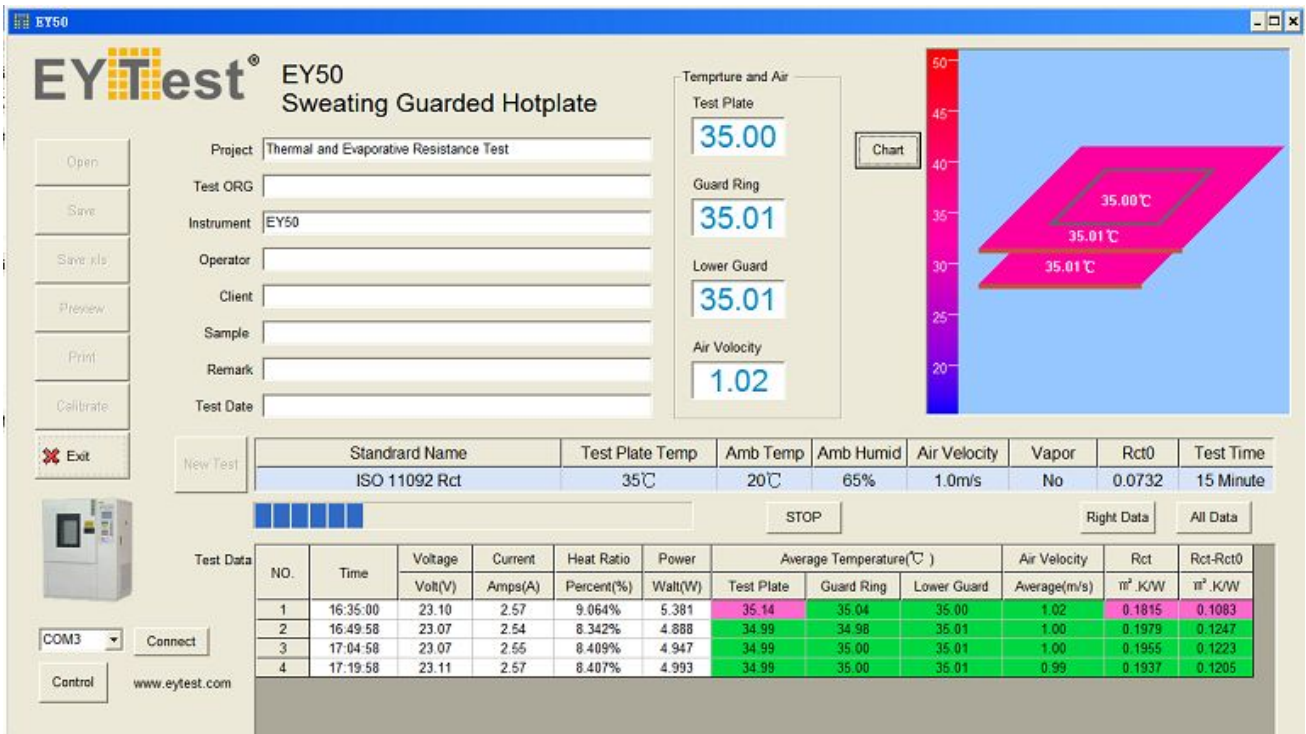
- Resolution degree: 0.1 ° C, 1%, P.I.D Control
- Temperature range: 0 ° C ~ 100 ° C
- Humidity range: 20 ~ 98% R.H.
- Temperature accuracy: ± 0.5 ° C
- Humidity accuracy: ± 2.5% R.H.
- Warming Time: 0 ° C ~ 100 ° C approximately 35 minutes
- Cooling Time: 40 ° C ~ 20 ° C about 40 minutes
- Within the box size: 100x100x100cm
- Carton size: 170 × 125 × 189cm
- Within the box material: SUS # 304 stainless steel mirror
- Carton Material: SUS # 304 stainless steel surface the matte lines hairline treatment
- Insulation material: rigid foam
- Refrigeration systems: single-stage air-cooled Europe and the United States imported Hermetic compressor, environmentally friendly refrigerants
- Protection device: compressor overload protection switch, refrigerant pressure protection switch, ceramic fuse the water dish water protection switch, electromagnetic switch and air burning protection switch, sirens
- Weight: about 95kg
- Power supply: 1 \$, AC220V ± 10% 50/60Hz



3. EY50 PC LABTest Software

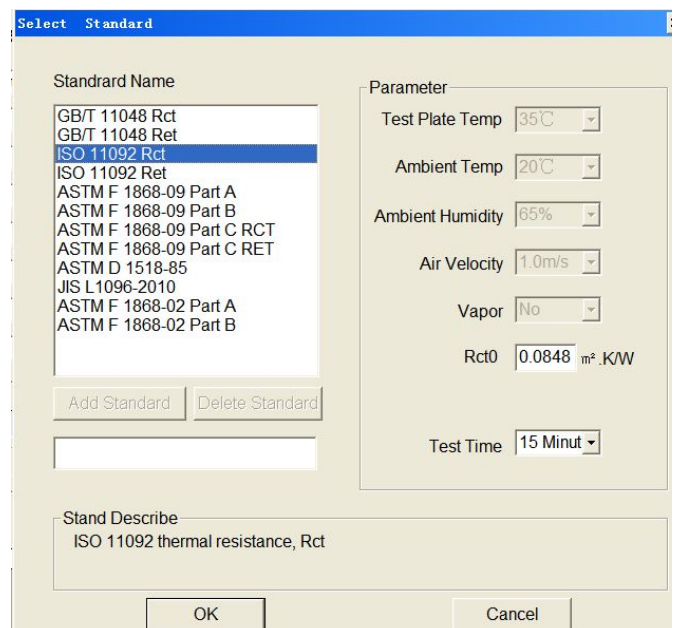
3.1 Main Screen

The Main is what the user sees when in during the test, a simple graphical temperature indication window, connection status indication, test results observation window is very convenient.



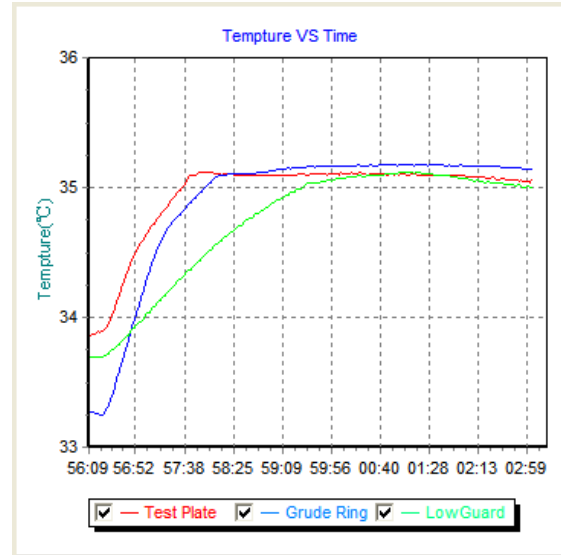
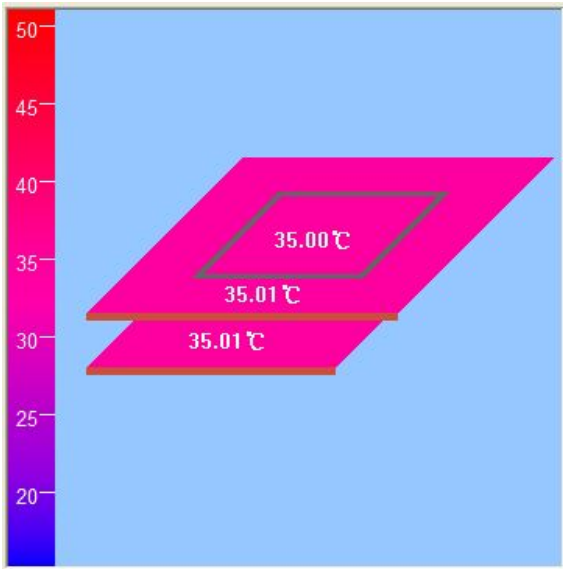
3.2 Test Standards Screen

The Test Standard Screen includes all the thermal Thermal and Evaporative Resistance resistance testing standards, users only need to select the test standard, the software in the background to complete the complex calculations and operations.



3.2 Temperature indication Screen

The temperature indicating that there are two windows, the graphical window may indicate the specific



location of the temperature, the color change is associated with temperature. Chart window indicates that the process of temperature vs time.

EYTEST LIMITED
香港易立测试科技有限公司
www.eytest.com
Email: jack@eytest.com
Tel: 0086-18675588906