



CoolMax

Cool Feeling Tester

The CoolMax Cool Feeling Tester is for testing textiles with instant cooling. It checks if they can dissipate heat and cool. The tester is suitable for sportswear, outdoor apparel, and home furnishing fabrics. It also works on underwear, car seat covers, and other functional fabrics. The test is fast and accurate. Its results are reliable. They are an authoritative reference for the R&D, production, and quality control of cool-feeling fabrics. Applicable to JIS L1927, FTTS-FA-019, GB/T 35263-2017, CNS 15687-2013, and other standards.

Test Principle: Under the specified test conditions, a heat detection board with a higher temperature is in contact with the sample. The board's temperature is measured over time. The contact coolness coefficient (Q-max) is calculated. It characterizes the sample's instantaneous coolness. A larger Q-max value means a stronger coolness felt by the skin and a greater cooling effect of the fabric. A smaller value means less of a cooling effect.

Q-max: The max heat flow density after contact between the heat detection board and the sample. The unit is Joule per square centimeter second [$\text{J}/(\text{cm}^2\cdot\text{s})$].

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- **Fast and accurate testing**
Rapidly heats the heat detection board to 35°C and responds with a Q-max value in seconds. So it minimizes the temperature loss of samples for accurate tests. You can preheat it or start it remotely via a mobile app.
- **Precise control of temperature deviation**
If the ambient temperature in the laboratory deviates due to the location of the instrument or other reasons, the built-in temperature sensor can record those deviation and you can trace it. Besides, the instrument ensures that the deviation between the detection board and the sample is constant and controlled.
- **More reliable test results**
Samples tested by one third-party organization are re-tested by our CoolMax and the results match the third-party data.
- **Smart Cool Feeling Test**
At SmarTexLab App, you can set up a program to start or stop the instrument remotely; and you can schedule a test or remotely reheat the detection board to make testing more efficient.



Power

220V 50/60Hz



Weight

35 kg



Dimension

540*468*345 mm(W*D*H)

Specification

Heat detection plate temperature: 35 ± 0.5 °C
(adjustable from 20 °C to 40 °C)

Cold plate 1 (polyester foam board) dimensions:
210 mm × 210 mm

Cold plate 2 (copper plate) temperature: 25 °C, precisely
controllable (supports adjustment to below 10 °C)

Temperature display resolution of sample stage: 0.01 °C

Cold plate 2 (copper plate) area: 180 mm × 180 mm

Test time: 1–600 s (adjustable)

Testing method: Automatic (no manual movement of the test
plate required)

Test sample area: 200 mm × 200 mm

Heat detection plate response time: < 0.2 s

Standard

JIS L1927

FTTS-FA-019

GB/T 35263-2017

CNS 15687-2013