Psychrometric Test Rooms

Get the most accurate and dependable measurement of a/c system performance with our dual-room, indoor-and-outdoor approach, and air enthalpy methodology.

Code testers, that include AMCA nozzles, provide precise determination of the test unit air flows and outlet air conditions. Tescor's control software allows the user to perform all of the ARI standard tests and allows the user to perform SEER and HSPF calculations off-line.

Tescor's Psychrometric Test Rooms are able to control parameters such as Indoor Room Dry Bulb Temperature, Indoor Room Dew Point, Outdoor Room Dry Bulb Temperature, Outdoor Room Dew Point Temperature, Indoor Room Unit Under Test (UUT) Airflow, Outdoor Room UUT Airflow and UUT Voltage.

If your a/c system application needs to be tested, Tescor can provide the facility to do so. Whether you need energy audit verification, product development, DOE compliance testing, or R&D, we can build the machine to test your needs, while also meeting industry standards.

Key Benefits:

 Tescor offers a standard line of psychrometric test rooms up to 50 ton capacity with a 10:1 turndown range for each facility

Applications and Test Types:

Capacity ranges: 0.5 to 5 tons, 1 to 10 tons, 2 to 20 tons, 5 to 50 tons

Specifications:

- Software
 - Create tests and sequences for automatic operation
 - · User configurable data acquisition channels
 - · User configurable calculation channels
 - Loop calibration utility
 - · Dedicated hardware checkout routine
 - Color coded stability status indicators
 - Stability tolerance adjustment on the fly
 - Time-history graphing capability
 - · Automatic test report generation
 - Data file management and search tools
 - Performance measurement
 - 3% agreement or better, indoor code tester to outdoor code tester
 - 1% repeatability of test results

- Available Options
 - Low dew point control to -17.78° C
 - Automated nozzle open/close system
 - Cyclic test
 - EER, SEER, COP automated tests
 - · Defrost test automation
 - HSPF calculations
 - Refrigerant mass-flow measurement and refrigerant-side capacity calculation
 - Voltage







Psychrometric Test Rooms (continued)

Typical Specifications:

Parameter	Range	Stability
Indoor Room		
Dry Bulb Temperature	4.44 to 37.37° C	± 0.11°C
Dew Point Temperature	1.67 to 27.78° C	± 0.11°C
Indoor Room Air Flow	200 to 2,000 CFM	± 0.5 %
Test Unit Voltage	90 to 520 V	± 1%
Outdoor Room		
Dry Bulb Temperature	-26.11 to 54.44° C	± 0.11° C
Dew Point Temperature	-15 to 32.22° C	± 0.11° C
Outdoor Room Air Flow	500 to 5,000 CFM	± 0.5 %
Test Unit Voltage		± 0.5 %



