

PSYCHROMETRIC TEST ROOMS

Climatic Testing Systems, Inc (CTS) designs and manufactures Psychrometric Test Rooms, in accordance with [ASHRAE Standard 37](#), that are used by air conditioner manufacturers to determine the thermal performance of unitary air conditioners, split systems and heat pumps. CTS uses dual rooms (indoor and outdoor) and the air enthalpy method to determine unit capacities and provide heat balances. Code testers, which include AMCA nozzles, provide accurate determination of the test unit air flows and outlet air conditions. CTS control software allows the user to perform all of the ARI standard tests.

CTS offer Psychrometric Test Rooms up to 150 Ton capacity with a 10:1 turndown range for each facility.



Psychrometric Test Rooms Typical Specifications

PARAMETER	RANGE	STABILITY
<i>Indoor Room</i>		
Dry Bulb Temperature	40 to 100°F	± 0.2°F
Dew Point Temperature	35 to 82°F	± 0.2°F
Indoor Room Air Flow	Up to 20,000 CFM	± 0.5 %
Test Unit Voltage	90 to 600 V	±1%
<i>Outdoor Room</i>		
Dry Bulb Temperature	-15 to 130°F	± 0.2°F
Dew Point Temperature	5 to 90°F	± 0.2°F
Outdoor Room Air Flow	Up to 20,000 CFM	± 0.5 %
Uniformity	--	± 0.5°F

<ul style="list-style-type: none"> ❑ Software <ul style="list-style-type: none"> • Editing of test programs • Automatic test sequencing • Loop calibration and calibration reports • Hardware checkout routine • Stability monitoring • Real Time tolerance adjustments • Real time-history graphing capability • Automatic Test Report Generation • Data File Management 	<ul style="list-style-type: none"> ❑ Performance Measurement <ul style="list-style-type: none"> • 3% agreement or better, indoor code tester to outdoor code tester. • 1% repeatability of test results ❑ Available Options: <ul style="list-style-type: none"> • Low Dew Point Control to 0°F • Automated Nozzle Open/Close System • Cyclic Test • Defrost Test Automation • HSPF Calculations • Refrigerant mass-flow measurement and Refrigerant-side Capacity Calculation
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Note: The specifications shown above are typical. Climatic Testing Systems, Inc. can customize your system to provide the performance that you desire.

Climatic Testing Systems, Inc. manufactures a full line of Climate Control Test Equipment for the Automotive and HVAC marketplace. For a master product list visit us at CLIMATICTESTING.COM

<http://climatictesting.com/>

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