Cirronet
FCC Part 15, Certification Application
WIT2450 Spread Spectrum Transceiver

UST Project: 04-0176
Issue Date: September 30, 2004

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U.S. TECH
A TRADITION IN TESTING SERVICES

I certify that I am authorized to sign for the manufacturer and that all of the statements in this report and in the Exhibits attached hereto are true and correct to the best of my knowledge and belief:

UNITED STATES TECHNOLOGIES, INC. (AGENT RESPONSIBLE FOR TEST):

By: _____

Name: Louis A. Feudi

Title: Operations Manager

Date: September 30 2004

Cirronet Corporation
5375 Oakbrook Parkway
Norcross, GA 30093

By:

Name:

Title:

Date:

MEASUREMENT/TECHNICAL REPORT

COMPANY NAME: **Cirronet**

MODEL: **WIT2450**

FCC ID: **HSW-2450**

DATE: **September 30, 2004**

This report concerns (check one): Original grant__X__
Class II change_____

Equipment type: **2.4 GHz Spread Spectrum Transceiver**

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? yes_____ No__X__

If yes, defer until:_____
date

__N.A.__ agrees to notify the Commission by__N.A.__
date
of the intended date of announcement of the product so that the grant can be issued on that date.

Report prepared by:

United States Technologies, Inc.
3505 Francis Circle
Alpharetta, GA 30004

Phone Number: (770) 740-0717
Fax Number: (770) 740-1508

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GENERAL INFORMATION

GENERAL INFORMATION

1.1 Product Description

The Equipment Under Test (EUT) is a Cirronet, Model WIT2450 modular 2.4 GHz spread spectrum transceiver. The EUT will be used with one of six different antennas.

1.2 Related Submittal(s)/Grant(s)

The EUT will be used to send/receive data. The transceiver presented in this report will be used with other like transceivers:

The EUT is subject to the following authorizations:

a) Certification as a transceiver (modular approval)
b) Verification as a digital device

The information contained in this report is presented for the certification & verification authorization(s) for the EUT. The manufacturer desires to seek a modular approval on this device.

SECTION 2

TESTS AND MEASUREMENTS

TEST AND MEASUREMENTS

2.1 Configuration of Tested System

The sample was tested per ANSI C63.4, Methods of Measurement from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz (1992). Conducted and radiated emissions data were taken with the test receiver or spectrum analyzer's resolution bandwidth adjusted to 9 kHz and 120 kHz, respectively. All measurements are peak unless stated otherwise. The video filter associated with the spectrum analyzer was off throughout the evaluation process. Bock diagrams of the tested systems are shown in Figures 1a and 16. Test configuration photographs for spurious and fundamental emissions are shown in Figure 2a -g.

The sample used for testing was received by U.S. Technologies on June 9, 2004 in good condition.

2.2 Test Facility

Testing was performed at US Tech's measurement facility at 3505 Francis Circle, Alpharetta, GA. This site has been fully described and submitted to the FCC, and accepted in their letter marked 31040/SIT. Additionally this site has also been fully described and submitted to Industry Canada (IC), and has been approved under file number IC2982.

2.3 Test Equipment

Table 2 describes test equipment used to evaluate this product.

2.4 Modifications

No modifications were made by US Tech, to bring the EUT into compliance with FCC Part 15, Class B Limits for the transmitter portion of the EUT or the Class B Digital Device Requirements.

FIGURE 1a
TEST CONFIGURATION
(Dipole Antenna)

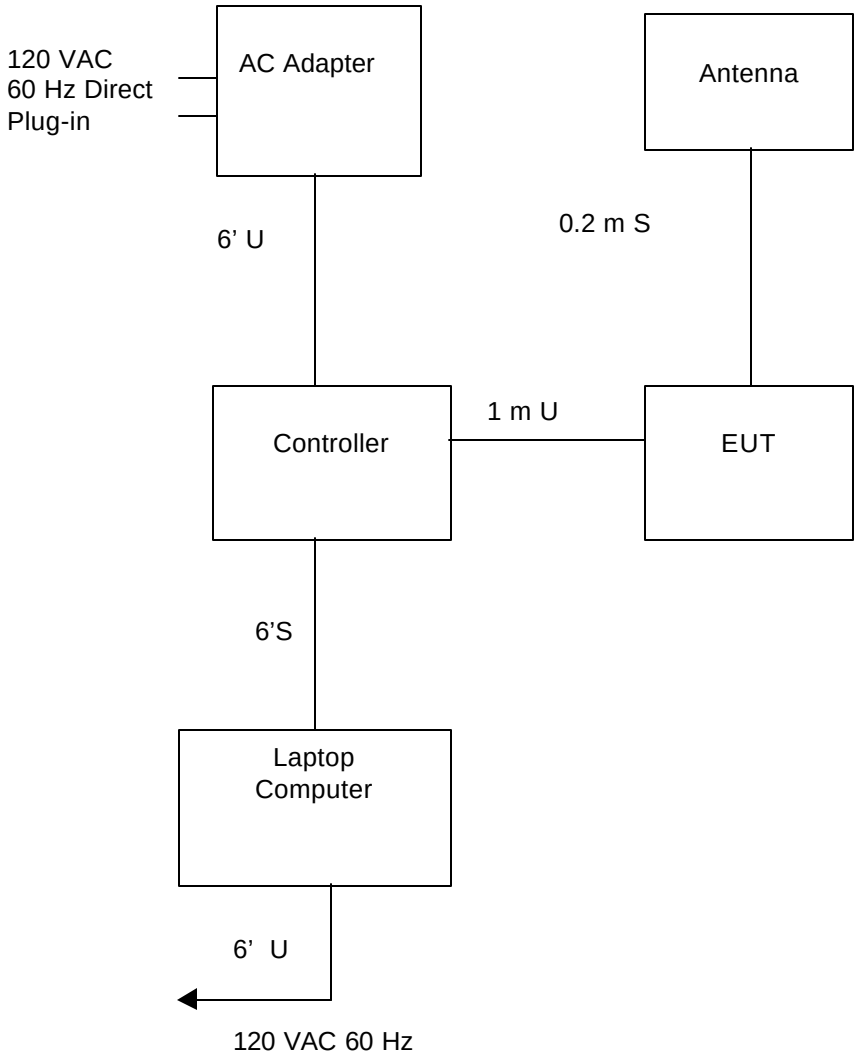

FIGURE 1b
TEST CONFIGURATION
(All Other Antenna)

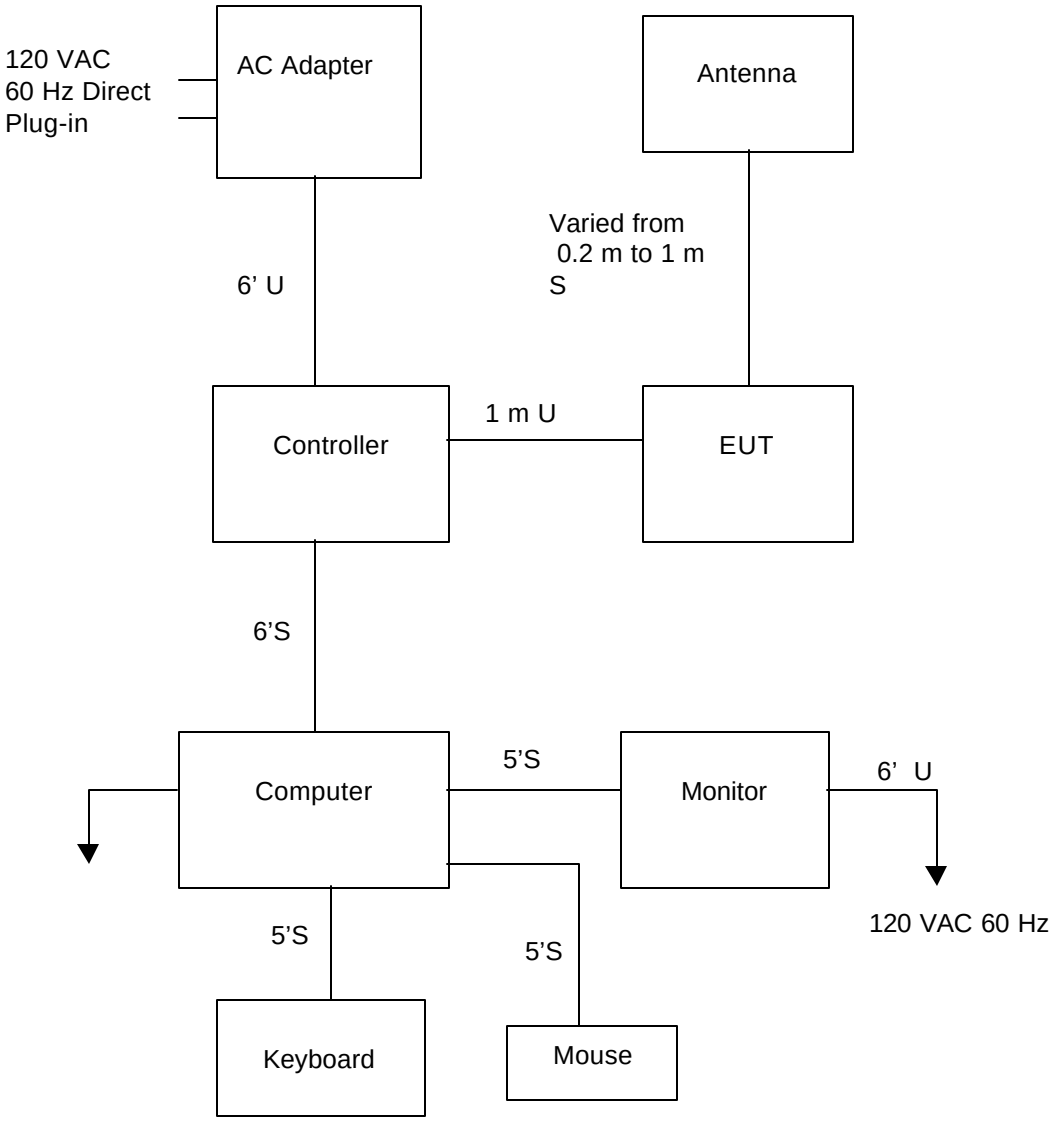

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FIGURE 2a

Photograph(s) for Spurious Emissions (Dipole Antenna)

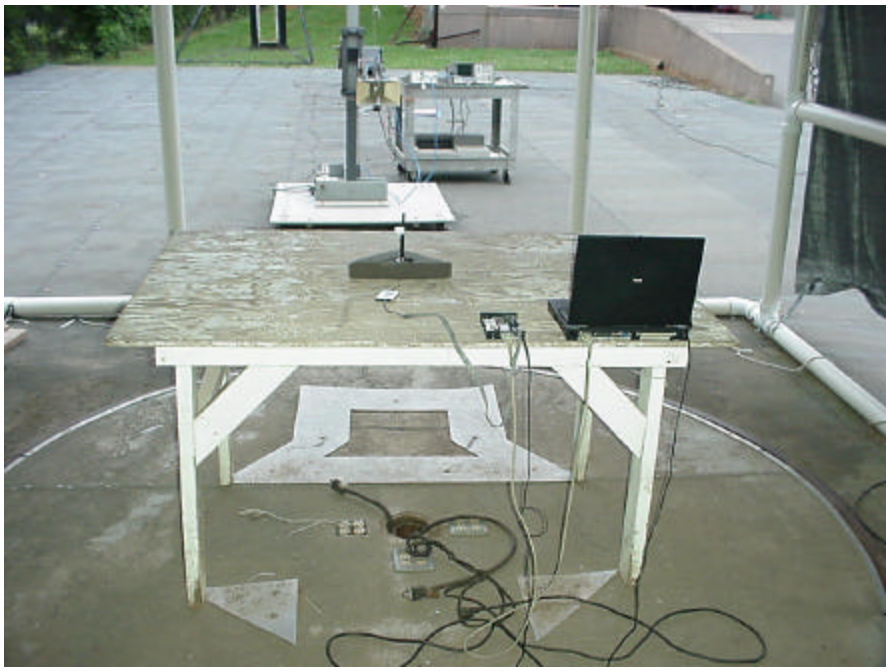

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FIGURE 2b

Photograph(s) for Spurious Emissions (Parabolic Dish Antenna)

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FIGURE 2c

Photograph(s) for Spurious Emissions (Omni Antenna)

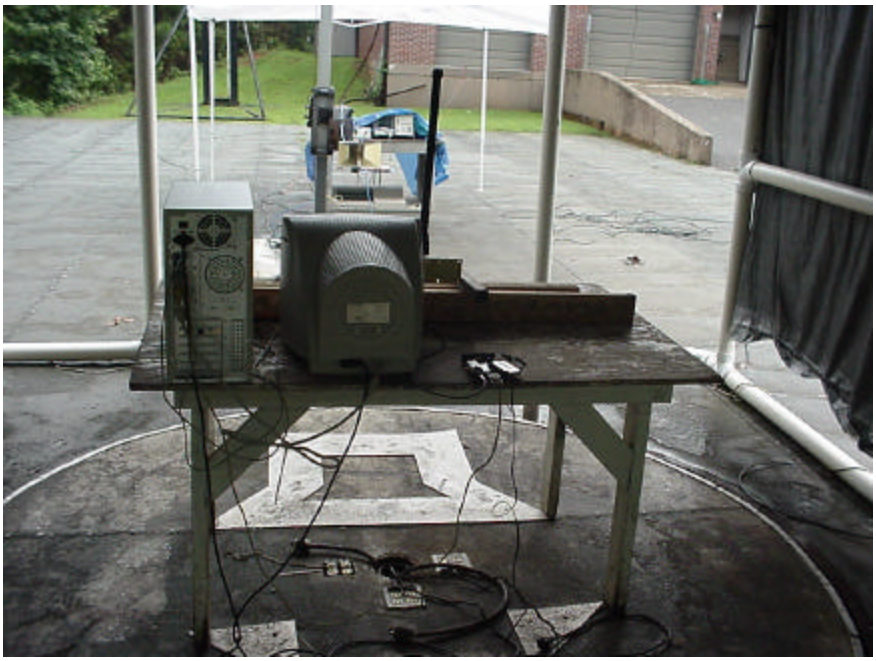

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FIGURE 2d

Photograph(s) for Spurious Emissions (Yagi Antenna)

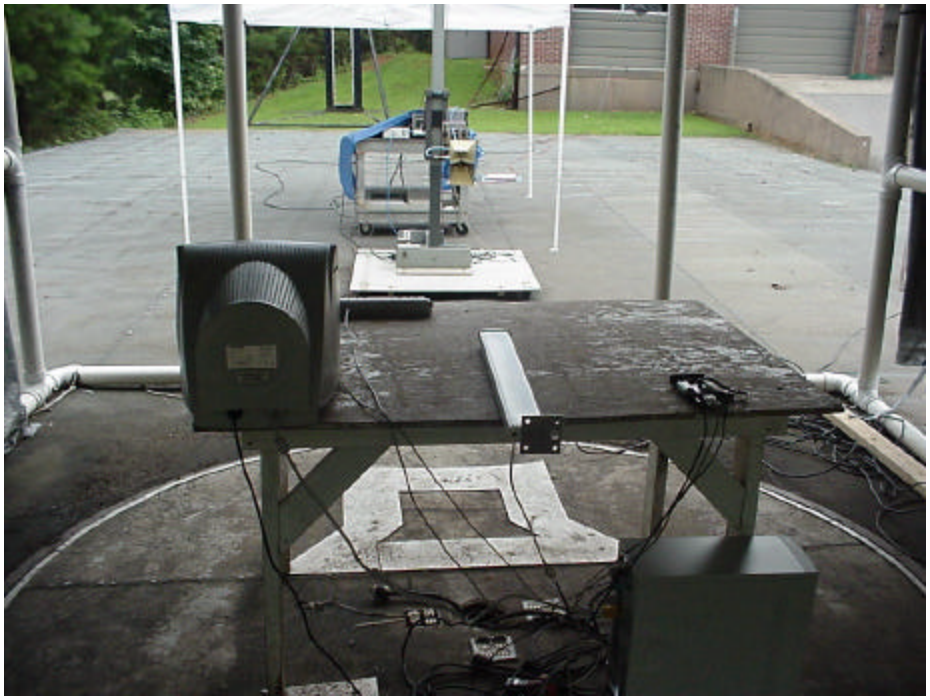

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FIGURE 2e

Photograph(s) for Spurious Emissions (Corner Reflector Antenna)

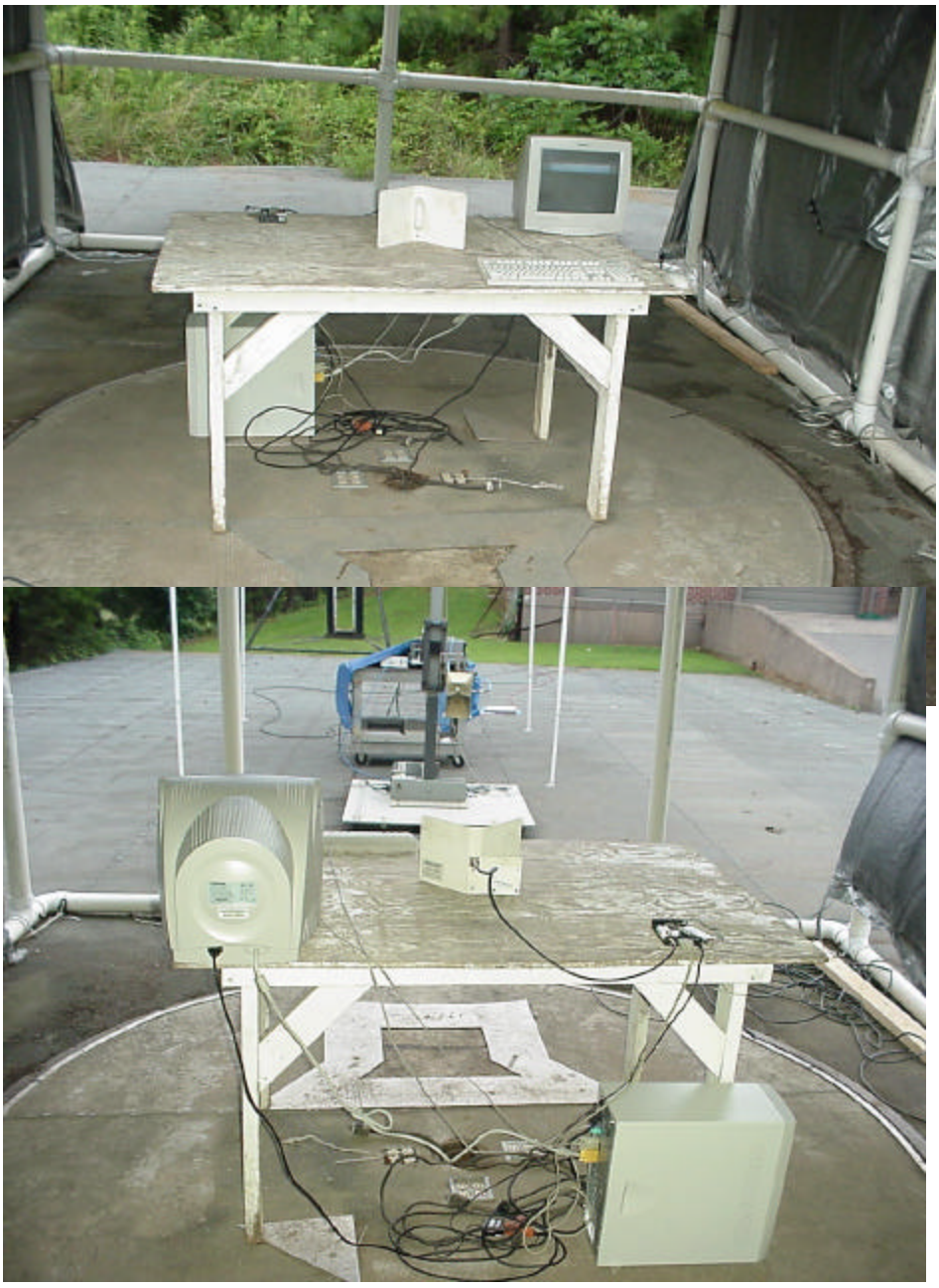

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FIGURE 2f

Photograph(s) for Spurious Emissions (Large Patch Antenna)

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FIGURE 2g

Photograph(s) for Spurious Emissions (Whip Antenna)

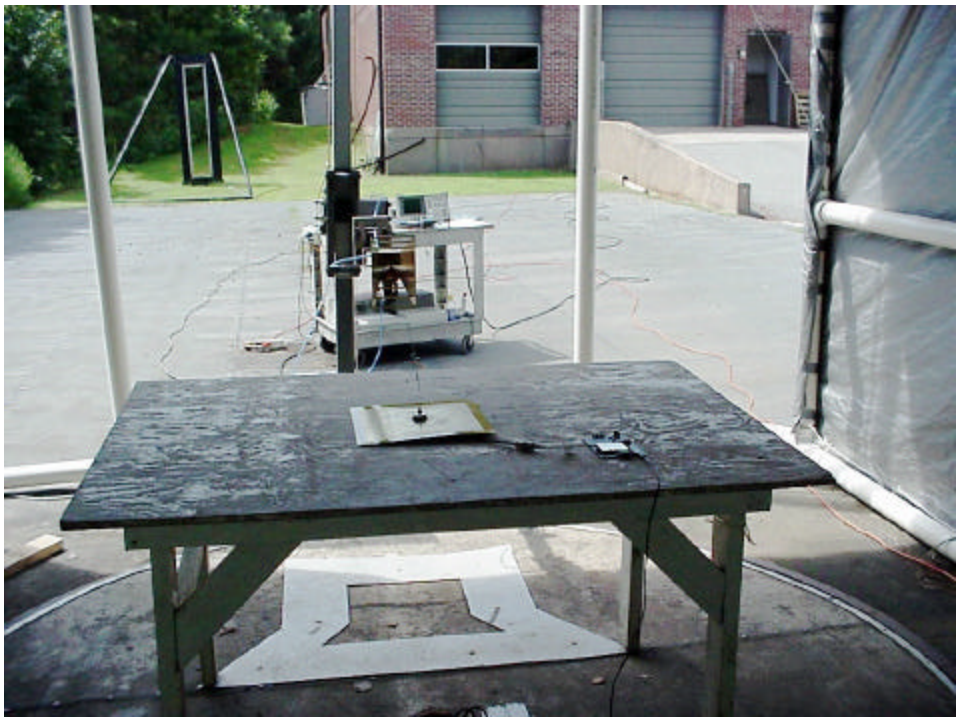

TABLE 1

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Model: WIT2450

EUT and Peripherals

PERIPHERAL MANU.	MODEL NUMBER	SERIAL NUMBER	FCC ID:	CABLES P/D
(EUT) Cirronet	WIT 2450	008517	HSW-2410M	1 m U
Antenna Various, see antenna descriptions			None	Varied from 0.2 to 1 m S
AC Adapter Volgen	SPU10R-1	None	None	6' U 120 VAC/ 60 Hz Direct Plug-in
Controller Cirronet	None	None	None	6' S
Laptop Computer Toshiba	Satelite Pro T2155CDS	09543879	CJ6UK323	6' U 120 VAC/ 60 Hz Power Cord
Monitor Toshiba	Tekbright 510V	49100036	None	5' U 120 VAC/ 60 Hz Power Cord
Mouse Hewlett Packard	M-S34	LZE92123016	DZL211029	5' S
Computer Cirronet	None	None	None	6' Serial Cable 6' U 120 VAC/ 60 Hz Power Cord
Keyboard Hewlett Packard	SK-2502C	C990608784	None	5' S