

Section 12: Test Setup Information

Overview

This section contains the test locations and photographs of each test setup for testing of the Honeywell Transceiver, TR-1 Part Number 930-2001-001 and 930-2000-001.

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12. Test Setup Photographs

12.1 Test Facility

During the months of February and March, 2005, a series of radio frequency interference measurements were performed on the Honeywell Transceiver (TR-1), part number 930-2001-001 and 930-2000-001. Testing was performed to the regulatory standards of the FCC CFR 46, Parts 2 and 87 at two locations while being witnessed and/or performed by a TCB.

Locations of testing:

1. Honeywell Inc., located in Redmond Washington
2. CKC laboratories, located in Redmond Washington

TCB witnessing and/or performing measurements:

1. CKC Laboratories, Inc.

For digital devices/intentional radiator, the tests were performed according to the procedures of the FCC as stated in the "Methods of Measurement of Radio-Noise Emissions from Low – Voltage Electrical and Electronic Equipment in the range of 9kHz to 40 GHz" found in the American National Standards Institute, ANSI C63.4-1992 (Revision of the ANSI C63.4-1988). These tests were performed by personnel of Honeywell, Inc. and CKC Laboratories, Inc. Equipment utilized during testing is listed in Section 11 of this report.

12.2 Test Setup Photos within Temperature Chamber

- 12.2.1 The following photos cover the setup used for Occupied Bandwidth, RF Out Power, and all Frequency Stability testing.



Figure 12-1 Temperature Chamber and Equipment Setup



Figure 12-2 Transmitter Output Connection



Figure 12-3 Peak Power Meter for Output Power Measurement



Figure 12-4 DataTrac RS Communication



Figure 12-5 Attenuation Connection

12.3 Test Setup Photos within the Anechoic EMI Chamber

12.3.1 The following photos cover the setup used for all Spurious Emissions testing



Figure 12-6 Transmitter Connection for Spurious at Antenna



Figure 12-7 Setup for Spurious Emissions at Antenna

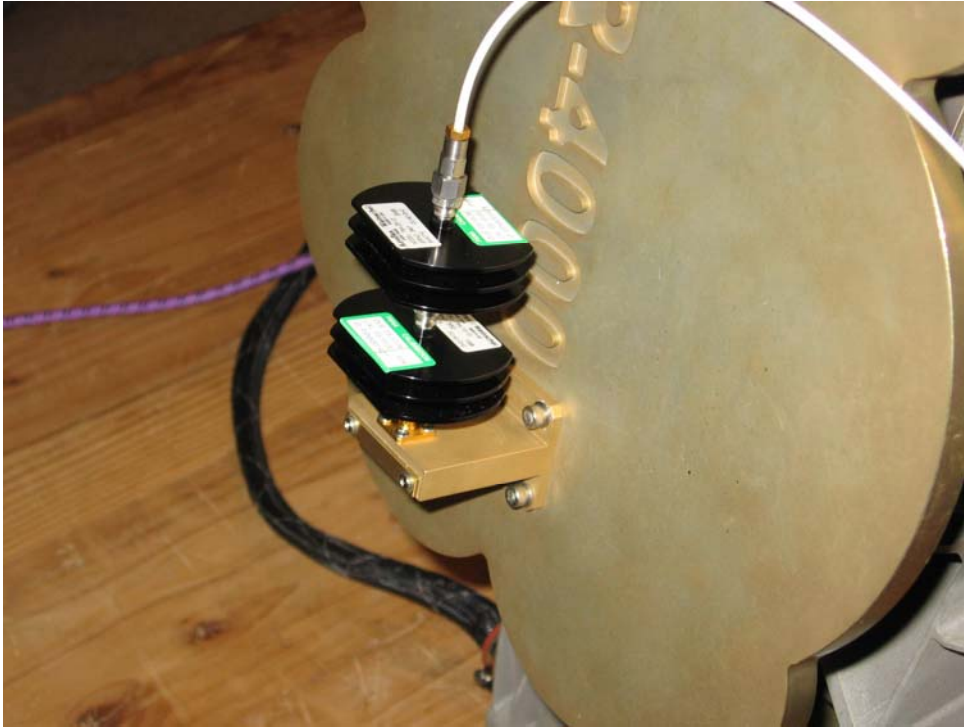


Figure 12-8 Calibrated Pads for Spurious Measurements



Figure 12-9 Overview Setup and Data Capture of Spurious Emissions at Antenna

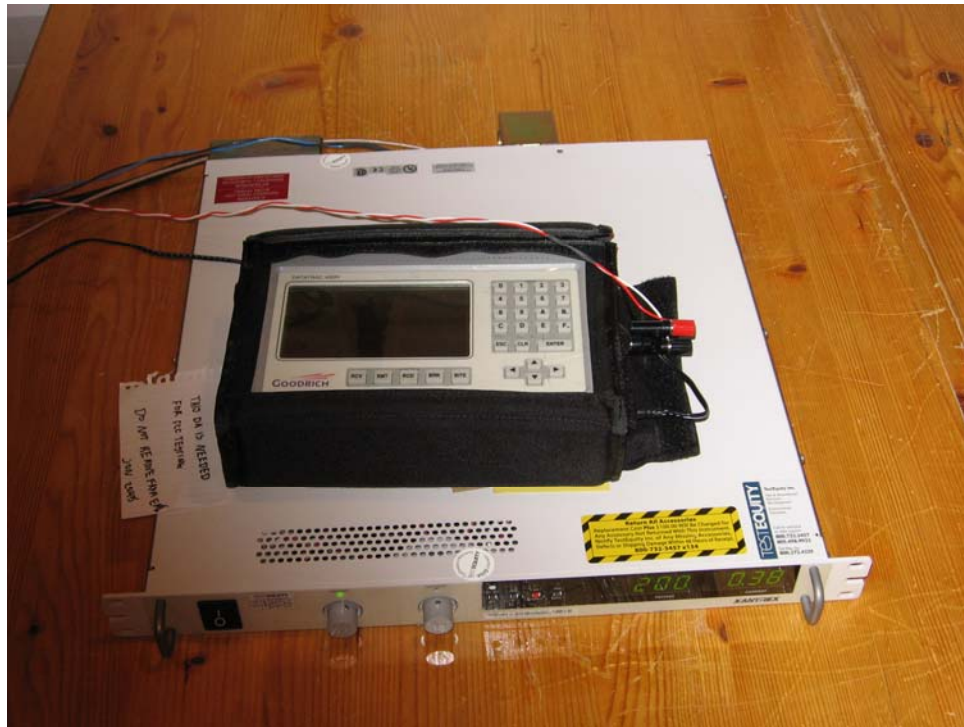


Figure 12-10 DataTrac and DC Power Supply (Support Equipment)



Figure 12-11 Antenna Load for Spurious Emissions – Field Strength



Figure 12-12 Field Strength Measurement 30 MHz – 18 GHz (two antennas)



Figure 12-13 Field Strength Measurement 18 – 26 GHz



Figure 12-14 Field Strength Measurement 26 – 40 GHz



Figure 12-15 High Frequency Antenna Mounting Configuration