SECTION 5

NEW MEASUREMENTS TO SUPPLEMENT PREVIOUS APPLICATION

TEST AND MEASUREMENTS

5.1 Configuration of Tested System

Since the unit was considered to be previously approved. Since the copy of the previous report available did not show the remeasured output power (that ITS previously performed and was requested by the FCC) and was not available from the previous submittal information, this test was remeasured. The sample was configured similar to the testing performed by ITS.

The sample used for testing was received by U.S. Technologies on April 23, 2001 in good condition.

5.2 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.

5.3 Test Equipment

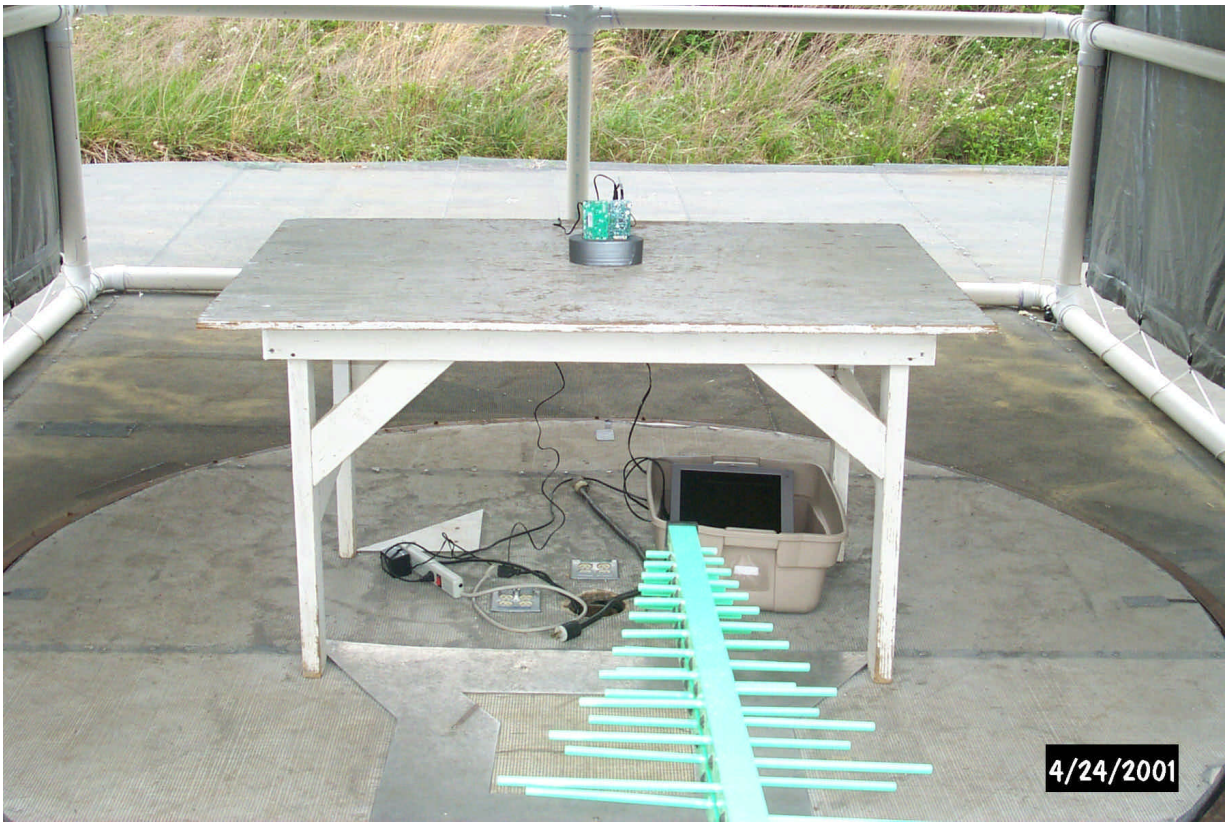
Table 1 describes test equipment used to evaluate this product.

5.4 Modifications

No modifications were made by US Tech, to bring the EUT into compliance with FCC Part 15 limits for the transmitter portion of the EUT.

Test Date: April 24, 2001
UST Project: 01-0137
Customer: Axonn L.L.C.
Model: AX-550 Transmitter

Photograph(s) for Spurious Emissions (Front)



Test Date: April 24, 2001
UST Project: 01-0137
Customer: Axonn L.L.C.
Model: AX-550 Transmitter

Photograph(s) for Spurious Emissions (Back)

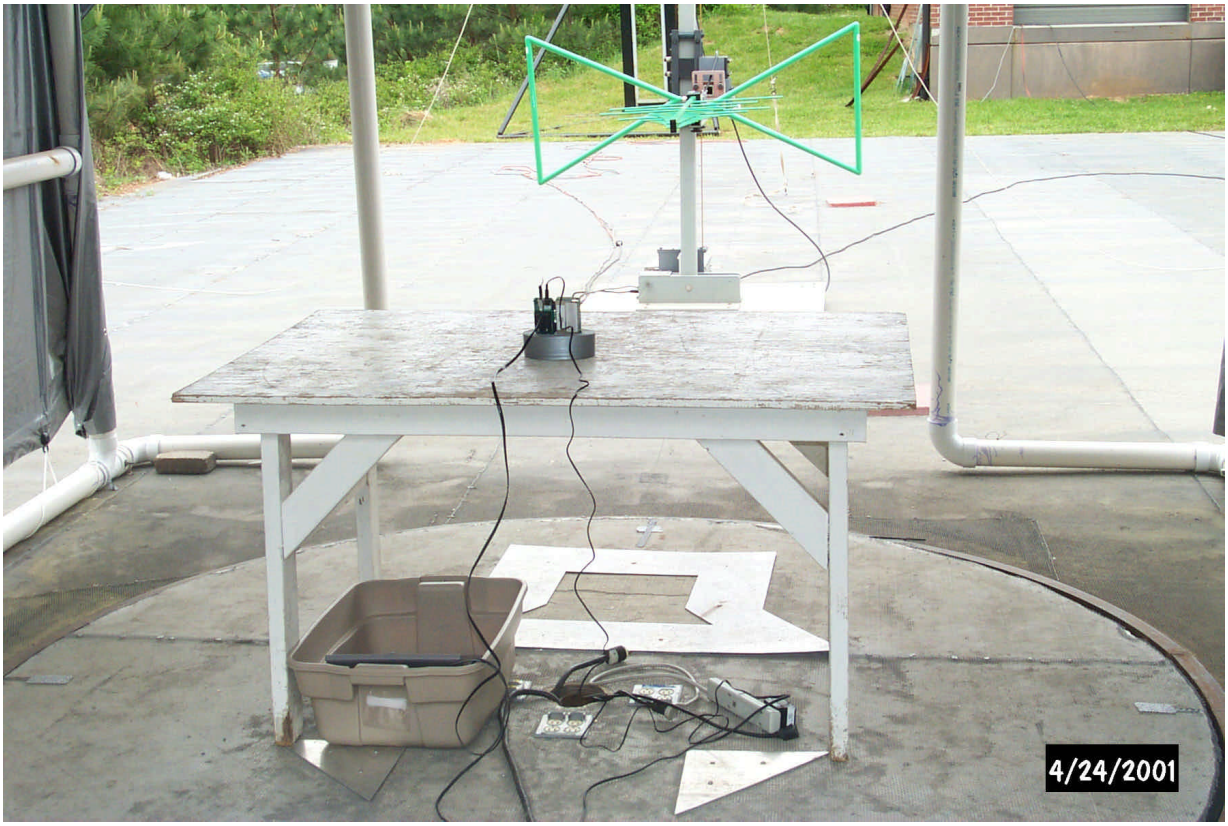


TABLE 1

EUT and Peripherals

PERIPHERAL MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID:	CABLES P/D
Modular TX Board Axonn Corporation	AX550 Rev F	0583-0500-CS0	L2VAX550 (pending)	6’ u to Power Source 6’ U to Serial Connection
Interface Board Axonn Corporation	AX550 Development Adapter	None	N/A	None

NOTE: Remote accessory equipment not listed

TABLE 2
TEST INSTRUMENTS

TYPE	MANUFACTURER	MODEL	SN.
SPECTRUM ANALYZER	HEWLETT-PACKARD	8593E	3205A00124
SPECTRUM ANALYZER	HEWLETT-PACKARD	8558B	2332A09900
S A DISPLAY	HEWLETT-PACKARD	853A	2404A02387
COMB GENERATOR	HEWLETT-PACKARD	8406A	1632A01519
BILOG	CHASE	CBL6112A	2238
PLOTTER	HEWLETT-PACKARD	7475A	2325A65394

5.5 Peak Power Within the Band 902 - 928 MHz per FCC Section 15.247(b)

Peak power within the band 902 - 928 MHz has been measured with a spectrum analyzer. Since the EUT incorporates an integrated antenna, this measurement was made on an OAT's site. The measurement was made with a spectrum analyzer using a peak detector with the VBW & RBW greater than the 6 dB bandwidth. The EIRP from the EUT was then calculated. The results of the measurements are given in Table 3 and Figure 3a through Figure 3b.

The EUT did not incorporate any antennas of directional gain greater than 6 dBi, therefore the output power has not been reduced as required by 15.247(b)(3).

TABLE 3
PEAK POWER OUTPUT

Test Date: **April 24, 2101**
UST Project: **01-0137**
Customer: **Axonn L.L.C.**
Model: **AX-550 Transmitter**

Frequency (MHz)	Receiver Reading (dBm) @ 3m	Correction Factor (dB)	Corrected Reading (V/m) @ 3m	Measured Power (Watt)	FCC Limit (Watt)
905.65	-25.0	28.7	0.342767	0.100	1.0
914.67	-26.7	28.8	0.285102	0.069	1.0
923.65	-27.0	28.9	0.278612	0.069	1.0

Transmitters peak power calculated using:

$$P\ (W) = \frac{(E*d)^2}{30*G}$$

where d = 3 meters, E = corrected measured field strength in V/m, and G = numeric gain of transmitting antenna (0.354 for –4.5 dBi)

Tester
Signature: _____ **Name:** **Tim R. Johnson**

Figure 3a
Peak Power per FCC Section 15.247(b) - Low

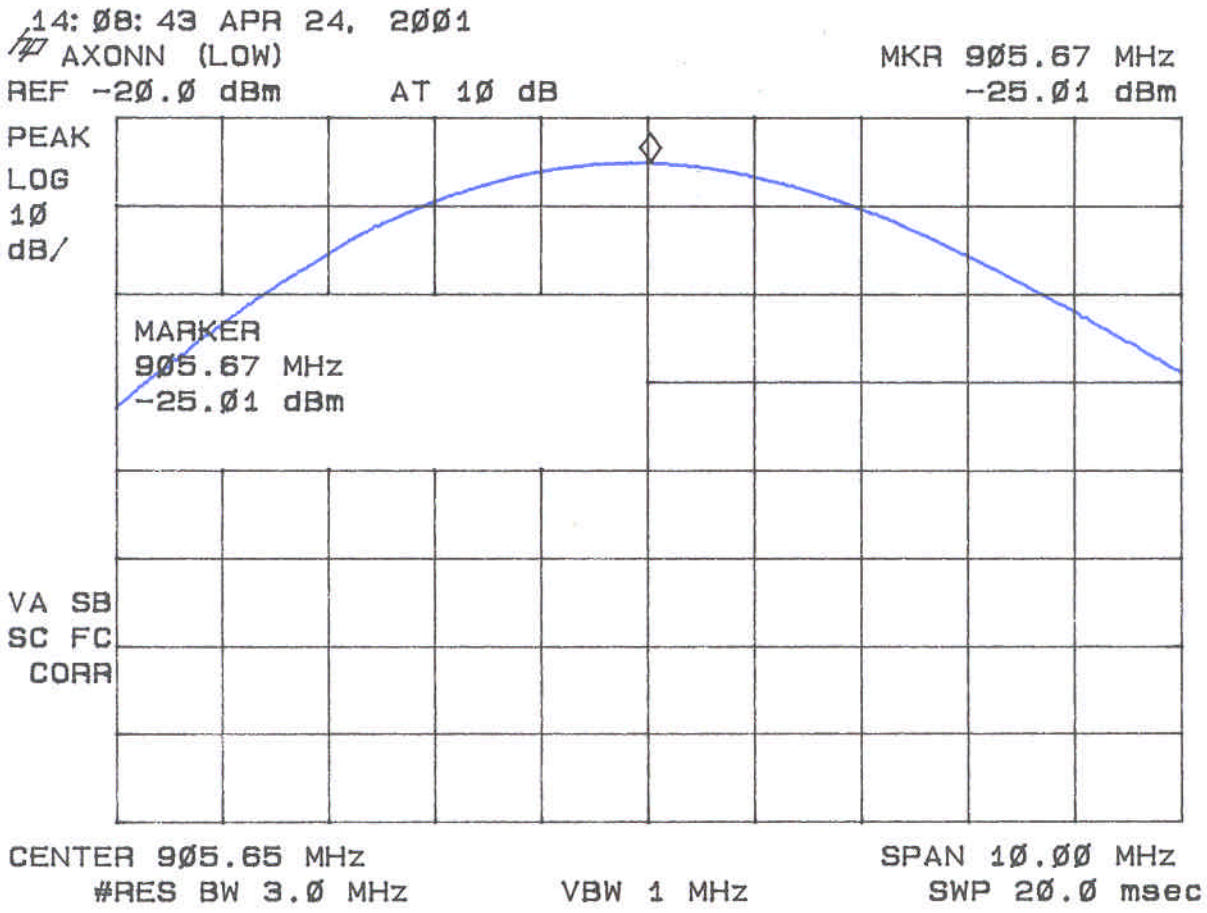


Figure 3b
Peak Power per FCC Section 15.247(b) - Mid

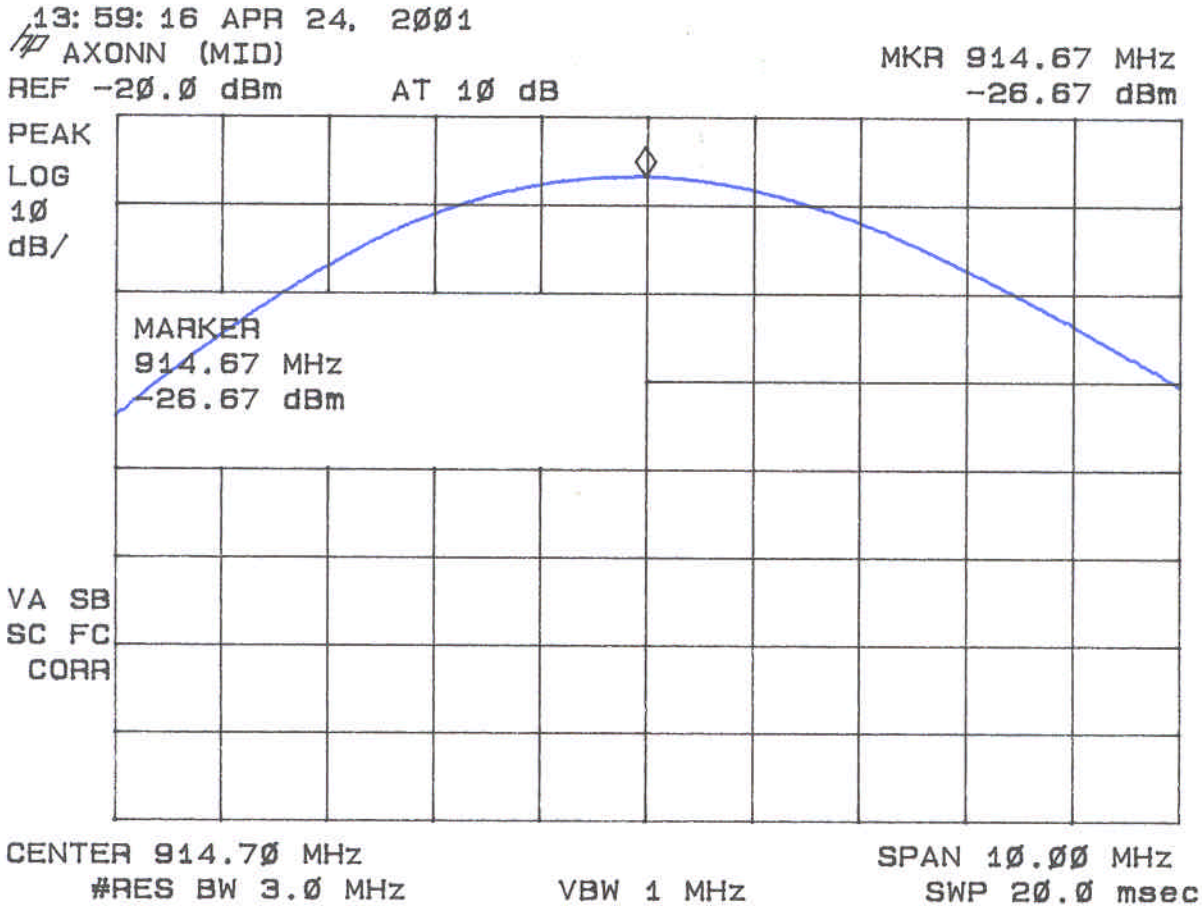


Figure 3c
Peak Power per FCC Section 15.247(b) - High