Exhibit B: Test Report
Xanboo
XBX200 Superxan Transmitter

Project Number: 04046-10

Prepared for:
Xanboo
1626 Vineyard
Grand Praire , TX 75052

By

Professional Testing (EMI), Inc.
1601 FM 1460, Suite B
Round Rock, Texas 78664

December 2003

CERTIFICATION
Electromagnetic Interference Test Report
Xanboo
Superxan, Model XPX200
(Intentional Radiator Portion)

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Certificate of Compliance

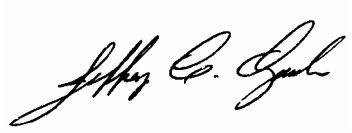
Applicant:	Xanboo
Applicant's Address:	1626 Vineyard Grand Praire, TX 75052
Serial Number:	N/A
FCC ID:	OU4-XBX200
Project Number:	04046-10
Test Dates:	July 7, 2003

I, Jeffrey A. Lenk, for Professional Testing (EMI), Inc., being familiar with the FCC rules and test procedures have reviewed the test setup, measured data and this report. I believe them to be true and accurate.

The **Xanboo, Superxan, Model XPX200** was tested to and found to be in compliance with FCC Part 15 Subpart C for an Intentional Radiator.

The highest emissions generated by the above equipment are listed below:

	Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Fundamental	418	74.2	80.3	-6.8
Spurious	836	41.5	60.3	-18.8
Conducted	0.15	54.6	66	-11.4
Occupied Bandwidth	125.2			



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Jeffrey A. Lenk
President

This report has been reviewed and accepted by Xanboo. The undersigned is responsible for ensuring that **Xanboo, Superxan, Model XPX200** will continue to comply with the FCC rules.

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1.0 EUT Description

The Equipment under Test (EUT) is the **Xanboo, Superxan, Model XPX200**. The Superxan is a wireless transmitter used for security systems, powered by the USB port of the host computer. It accepts additional TV cameras powered by a "Wall Wart" transformer. It has three ports for wired cameras. Top two ports are for development use and have no field use. The EUT operates at 418 MHz and is designed for compliance with 47 CFR 15.231 of the FCC rules. Specific test requirements for this device include the following:

47 CFR 15.209 & 15.231	Fundamental Transmit Power
47 CFR 15.231 & 15.205	Spurious Radiated Power
47 CFR 15.231	Occupied Bandwidth
47 CFR 15.203	Antenna Requirement
47 CFR 15.207	Conducted Emissions

The system tested consisted of the following:

Manufacturer & Model	**Serial #**	**FCC ID #**	**Description**
Xanboo, Superxan, Model XPX200	XRO20403	OU4-XBX200	Transmitter
Power Adapter DV-1270R			120 VAC to 12 VDC 700
Remote Equipment			
Dell PC	7NQR501	None	PC
System Peripherals			
Dell Keyboard	0593	GYUM90SK	Keyboard
Logitech Mouse	LZA82053358	PZL211107	Bus Mouse
Dell Monitor M570	6204TA002D	NA	Color Monitor
Epson Printer	1F8E706637	BKMP630B	Dot Matrix Printer

Cables and Cords:

Quantity	**Length**						
Each	**Feet**	**Meters**	**Shielded**	**Unshielded**	**Type**	**Cable**	**Cord**
1	6	2	X		USB	X	
1	10	3	X		Printer	X	
1	6	2	X	X	Video	X	
2	6	2		X	Power		X

1.1 EUT Operation

The **Xanboo Superxan, Model XPX200** was put in a mode of continuous transmission, which is atypical of normal operation. Normally the EUT operates in short bursts followed by a long period without transmission.

2.0 Electromagnetic Emissions Testing

Professional Testing (EMI), Inc. (PTI), follows the guidelines of NIST for all uncertainty calculations, estimates and expressions thereof for EMC testing.

2.1 Conducted Emissions Measurements

Conducted emissions measurements were made on the mains terminals of the host computer of the **Xanboo Superxan, Model XPX200** was attached to, to determine the line-to-ground radio noise emitted from each power-input terminal. Conducted emissions measurements on the mains terminals were performed at Professional Testing, located in Round Rock, Texas.

2.1.1 Test Procedure

The EUT was configured and operated in a continuously transmitting mode, which is an atypical mode used for the purpose of testing. The EUT power cord in excess of one meter was folded back and forth forming a bundle 30 to 40 cm long in the approximate center of the cable. Power supply cords for the peripheral equipment were powered from an auxiliary LISN. Excess interface cable lengths were separately bundled in a non-inductive arrangement at the approximate center of the cable with the bundle 30 to 40 centimeters in length. The conducted emissions were maximized, by varying the operating states and configuration of the EUT.

The tests were performed in a 12' x 16' RayProof modular shielded room. The EUT was placed on a non-metallic table 0.4 meters from a vertical metal reference plane and 0.8 meters from a horizontal metal reference plane.

The measurements were taken using a Line Impedance Stabilization Network (LISN). A Spectrum Analyzer with a measurement bandwidth of 10 kHz was used to record the conducted emissions measurements. The configuration of the shielded room showing the location of the EUT and the measurement equipment is given as Figure 1.

2.1.2 Test Criteria

The FCC Part 15.207 B conducted emissions limits are given below.

Frequency (MHz)	Limits (dBµV) Average	Limits (dBµV) Quasi-Peak
0.15 – .50	56 - 46	66 to 56
.50 - 5	46	56
5 – 30	50	60

The lower limit shall apply at the transition frequency.

2.1.3 Test Results

The conducted emissions data is included as Appendix A. The conducted emissions generated by the **Xanboo Superxan, Model XPX200** as measured on the mains terminal of the host computer were found to be below FCC 15.207 maximum emissions criteria.

2.2 Radiated Emissions Measurements

Radiated emission measurements were made of the Fundamental and Spurious Emission levels for the **Xanboo Superxan, Model XPX200.** Measurements of the occupied bandwidth were also made for the Superxan Transmitter.

Measurements of the maximum emission levels for the fundamental and the spurious/harmonic emissions of the **Xanboo Superxan, Model XPX200** were made at the Professional Testing "Open Field" Site 3, located in Round Rock, Texas to determine the radio noise radiated from the EUT. A "Description of Measurement Facilities" has been submitted to the FCC and approved pursuant to Section 2.948 of CFR 47 of the FCC rules.

Tests of the fundamental for the device were performed to determine the worst case polarization of the device.

2.2.1 Test Procedure

The EUT was placed on a non-conductive table 0.8 meters above the ground plane. The table was centered on a motorized turntable which allows 360 degree rotation. For measurements of the fundamental signal, a measurement antenna was positioned at a distance of 3 meters as measured from the closest point of the EUT. For harmonic measurements above 1 GHz, the measurement antenna was placed 1 meter from the EUT. The radiated emissions were maximized by rotating the EUT.

A Spectrum Analyzer with peak detection was used to find the maximums of the radiated emissions during the variability testing. A drawing showing the test setup is given as Figure 2.

2.2.2 Test Criteria

The table below shows FCC Part 15.231 radiated limits for an intentional radiator operating at 418 MHz band. FCC Part 15.231 allows the use of its spurious limit which is higher than the 15.209 limit normally associated with the restricted bands outlined in 15.205. The spurious measurements of the harmonic were recorded to the 3rd harmonic of the fundamental. The reference distance for each limit is also shown in this table.

	Test Distance	Field Strength	
Signal Type	(Meters)	(μV/m)	(dBμV/m)
Fundamental 418 MHz	3	10351	80.3
Harmonics (through 3rd)	3	1035	60.3

Note: Radiated emissions above 1000 MHz were measured at 1 meter and the limit was increased by 9.5 dB.

2.2.3 Test Results

The radiated test data for the fundamental is included in Appendix A. Peak detection was used during the test and the corrected signal level was then averaged to account for the duty cycle of the pulsed transmission of the 418 MHz transmitter The emissions were maximized at each frequency and the highest emissions identified were measured using average detection. The radiated emissions generated by the **Xanboo Superxan, Model XPX200** are below the FCC Part 15.231 maximum emission criteria.

3.0 Occupied Bandwidth Measurements

Measurements of the occupied bandwidth for the fundamental signals of the FCC Part 15.231 were made at the Professional Testing's Round Rock, Texas site. All measurements were made in a controlled indoor environment in a configuration which did not present measurement distortion or ambient interference.

3.1 Test Procedure

The EUT was placed on a non-conductive table 0.8 meters above the floor. The table was rotated to an angle which presented the highest signal level. The occupied bandwidth was measured on the device. The occupied bandwidth was based on a 20 dB criteria (20 dB down either side of the emission from the peak emission).

3.2 Test Criteria

According to FCC Part 15.231, the bandwidth of the emission shall not be wider than 0.25 % of the center frequency for the devices operating above 70 MHz and below 900 MHz. The limit is 1.045 MHz for the transmitter working at 418 MHz.

Measurement of the occupied bandwidth was performed to verify that the emission bandwidth from the EUT did not exceed 1.045 MHz. The typical occupied bandwidth for the module is 125 kHz.

3.3 Test Results

The occupied bandwidth test data is included in Appendix B. The occupied bandwidth for the fundamental frequency 418MHz is 150 KHz. The figure is typical for the **Superxan, Model XPX200** This occupied bandwidth complies with the FCC Part 15.231 requirement.

4.0 Antenna Requirement

An analysis of the **Xanboo Superxan, Model XPX200** was performed to determine compliance with Section 15.203 of the Rules. This section requires specific handling and control of antennas used for devices subject to regulations under the Intentional Radiator portions of Part 15.

4.1 Evaluation Procedure

The structure and application of the **Xanboo Superxan, Model XPX200** were analyzed with respect to the rules.

The EUT has an internal antenna permanently glued inside the EUT. The antenna is not accessible to the user. No auxiliary antenna port is present.

4.2 Evaluation Criteria

Section 15.203 of the rules states that the subject device must meet at least one of the following criteria:

(a) Antenna be permanently attached to the unit.

(b) Antenna must use a unique type of connector to attached to the EUT.

(c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

4.3 Evaluation Results

The **Superxan, Model XPX200** meets the criteria of this rule by virtue of having an external antenna permanently attached to the unit and an internal antenna not accessible to the user. The EUT is therefore compliant with §15.203.

5.0 Modifications to Equipment

No modification was made on the **Superxan, Model XPX200** during the performance of the test program in order to meet the FCC criteria.

6.0 List of Test Equipment

A list of the test equipment utilized to perform the testing is given below. The date of calibration is given for each.

Device	Description	Calibration Due
Electromagnetic Emissions Test Equipment		
EMCO 3146	Log Periodic Antenna	December 2004
HP 85662A	Display unit	November 2004
HP 8447D	Preamplifier	November 2004
HP 8568B	Spectrum Analyzer	November 2004
HP 85650A	Quasi-Peak Adapter	November 2004
HP 8566B	Spectrum Analyzer	November 2004
EMCO 3115	Ridge Guide Antenna	June 2004
Compliance Design B-100	Biconical Antenna	December 2004
Cond. EMI Cable	RG-223	November 2004
Tektronix 2706	RF Preselctor	January 2005
MITEQ	18GHz 20dB Preamplifier	December 2003
SOLAR 8012-50-R-24-BNC	LISN	October 2004
EMCO 3825/2	LISN	June 2004
10 Meter Armored Cable		Not Required

FIGURE 1: Conducted Emissions Mains Terminal Measurements

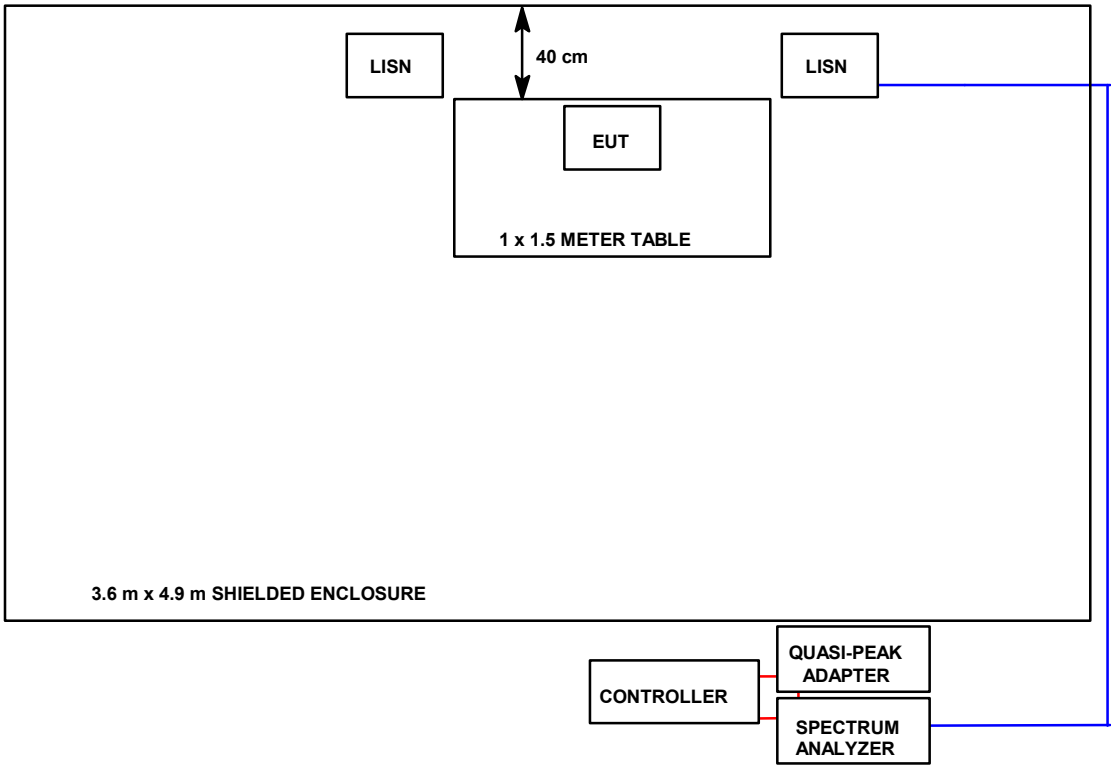
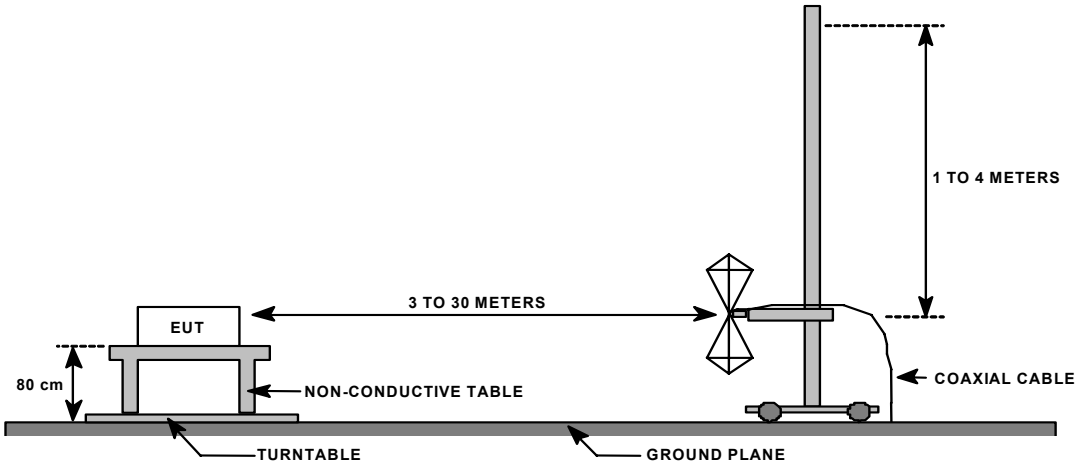


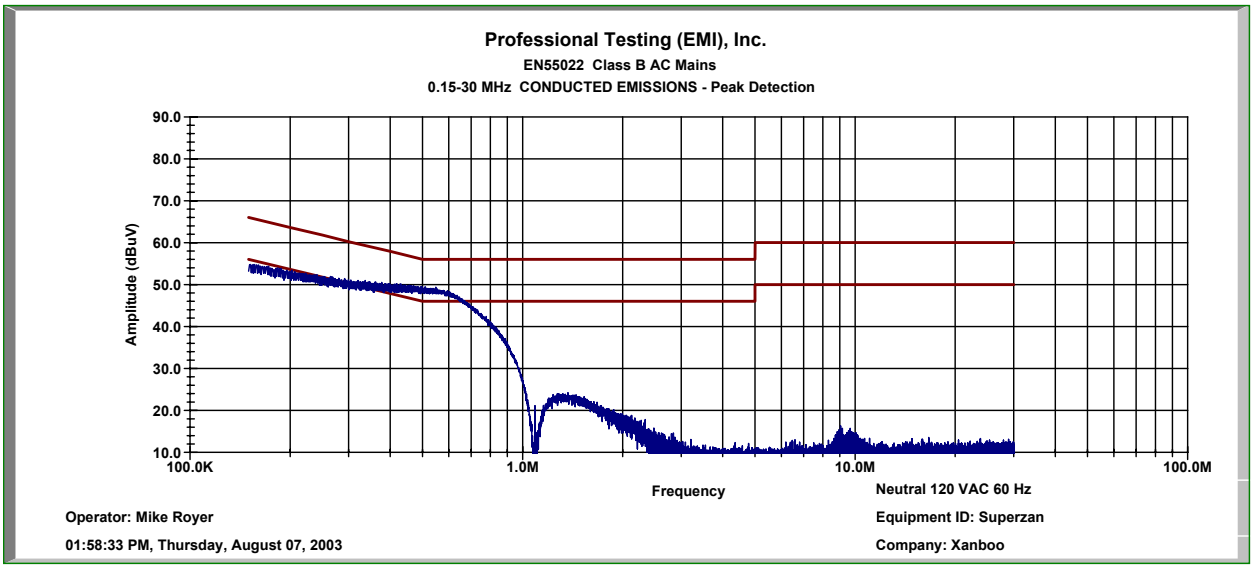
FIGURE 2: Radiated Emissions Test Setup

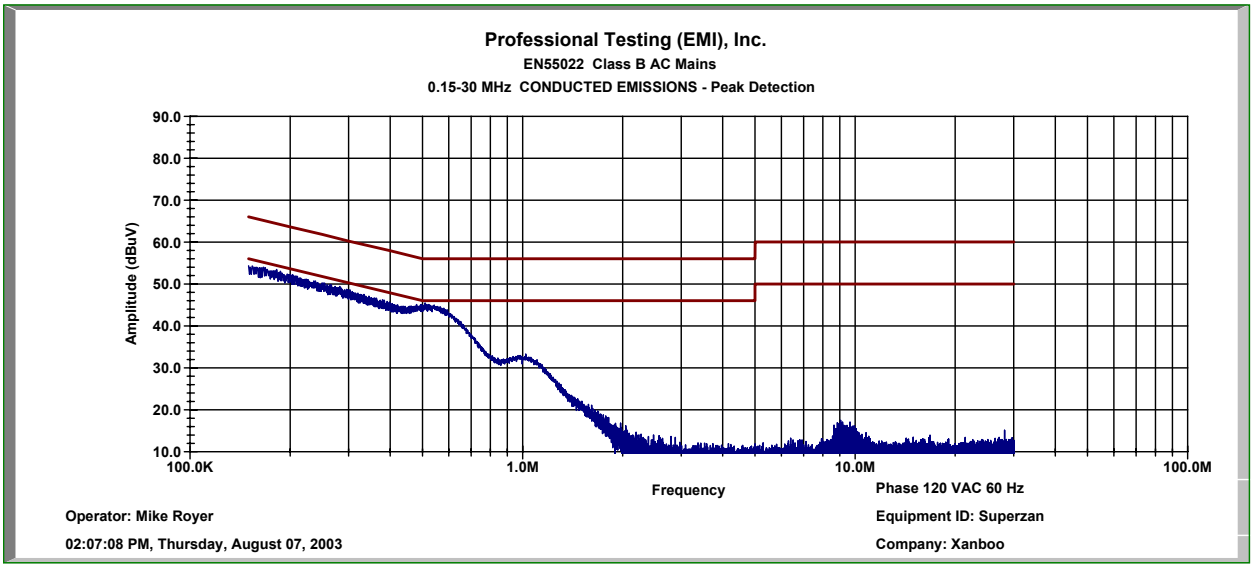


Appendix A Emissions Data Sheet

Conducted Data Sheet
Xanboo
Superxan, Model XPX200
Transmitter

PROJECT: 04046-10





The data presented here in graphical form is for overview only. Precise and detailed data is included in the datasheet that follows.

Conducted Data Sheet
Xanboo
Superxan, Model XPX200
Transmitter

DATE: August 7, 2003
PROJECT: 04046-10

Line Measured: Neutral

FREQ INPUT MHz	READING INPUT dBuV	CORR FACTOR dB	CORR READING dBuV	Limit dBuV	Margin dB	Detector Function
0.15	44	0.3	44.3	66	-21.7	QP
0.15	17	0.3	17.3	56	-38.7	Average
0.2	42	0.2	42.2	60	-17.8	QP
0.2	13	0.2	13.2	50	-36.8	Average
0.5	39	0.2	39.2	56	-16.8	QP
0.5	10	0.2	10.2	46	-35.8	Average

Line Measured: Phase

FREQ INPUT MHz	READING INPUT dBuV	CORR FACTOR dB	CORR READING dBuV	Limit dBuV	Margin dB	Detector Function
0.15	54.34	0.3	54.6	66	-11.4	QP
0.15	17	0.3	17.3	56	-38.7	Average
0.5	44.2	0.1	44.3	56	-11.7	QP
0.5	10	0.1	10.1	46	-35.9	Average

Comment: Transmitter connected to USB port

Test Engineer: Mike Royer

Radiated Data Sheet
Fundamental and Spurious
Superxan, Model XPX200
Transmitter

DATE: July 11, 2003
PROJECT: 04046-10

MEASUREMENT DISTANCE (m): 3
DETECTOR FUNCTION: Peak

Antenna Polarization: Horizontal

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
418	270	1	72.2	27.1	18.7	7.8	71.5	80.3	-8.8
836	90	1	32.2	26.1	24.4	10.9	41.5	61.9	-18.8

Antenna Polarization: Vertical

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
418	100	1	74.2	27.1	18.7	7.8	73.5	80.3	-6.8
836	0	1	31.4	26.1	24.4	10.9	40.7	61.9	-19.6

Corrected Level = Recorded Level - Amplifier Gain + Antenna Factor + Cable Loss

TEST ENGINEER: Mike Royer

Microwave Radiated Data Sheet
Harmonics
Xanboo
Superxan, Model XPX200
Transmitter

DATE: July 7, 2003
PROJECT: 04046-10

MEASUREMENT DISTANCE (m): 1
DETECTOR FUNCTION: Average

Antenna Polarization: Horizontal

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/M)	Cable Loss (dB)	Corrected Level (dBuV/M)	Limit (dBuV/M)	Margin (dB)
1254	185	1	58	23.3	24.4	2.0	61.1	71.4	-10.3
1672	180	1	50.1	23.0	26.0	2.3	55.4	71.4	-16.0
2508	0	1	45.7	22.5	28.3	2.9	54.4	71.4	-17.0

AntennaPolarization: Vertical

Freq. (MHz)	EUT Dir (Deg.)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/M)	Cable Loss (dB)	Corrected Level (dBuV/M)	Limit (dBuV/M)	Margin (dB)
1254	270	1	52.7	23.3	24.4	2.0	55.8	71.4	-15.6
2090	270	1	46.5	22.7	27.7	2.6	54.1	71.4	-17.3

Corrected Level = Recorded Level - Amplifier Gain + Antenna Factor + Cable Loss

TEST ENGINEER: Mike Royer

Appendix B Occupied Bandwidth Data Sheets

Occupied Bandwidth Datasheet
Xanboo
Superxan, Model XPX200

418 MHz Trasmitter