Exhibit B Test Report
Xanboo/Core Technologies
XWS30W Water Sensor

Project Number: 05233-10

Prepared for:

Xanboo/Core Technologies

115 West 30th Street
New York, NY 10001

By
Professional Testing (EMI), Inc.
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April 2005

CERTIFICATION
Electromagnetic Interference Test Report
Xanboo/Core Technologies
XWS30W Water Sensor

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Certificate Of Compliance

Applicant:	Xanboo/Core Technologies
Applicant's Address:	115 West 30th Street New York, NY 10001
FCC ID:	OU4-XWS30W
IC Number:	4576A-XWS30W
Project Number:	05233-10
Test Dates:	October 20-21, 2004 April 27, 2005

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

The **Xanboo/Core Technologies, XWS30W Water Sensor** was tested to and found to be in compliance with FCC Part 15 Subpart C and RSS 210 6.1.1 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 (peak)	83.4	92.3	-8.9
	418 (avg)	69.7	72.3	-2.6
Spurious	836	42.8	52.3	-9.5
Occupied Bandwidth	200 (kHz)			

Michael A. Royer, BSEE, NCE
EMC Department Manager

This report has been reviewed and accepted by Xanboo/Core Technologies. The undersigned is responsible for ensuring that **Xanboo/Core Technologies, XWS30W Water Sensor** will continue to comply with the FCC and IC rules.

1.0 EUT Description

The water sensor only sends a data packet if the sensor is submerged in water. The sensor has a deep sleep mode and does not have a "Keep Alive" packet. During **Alarm** condition, or **Low Batter**y condition, the unit transmits a 19 ms packet every 15 minutes.

The system tested consisted of the following:

Manufacturer & Model	FCC/IC Number	Description
Xanboo/Core Technologies, XWS30W Water Sensor	OU4-XWS30W 4576A-XWS30W	Water Sensor

1.1 Applicable Documents

Guidelines	FCC Rule Parts Part 15	IC Rule Parts RSS-210 Issue 5
Transmitter Characteristics	15.231e	6.1.1(e), 6.1.1(c)
Spurious Radiated Power	15.205, 15.209, 15.231e	6.3
Antenna Requirement	15.203	5.5
Receiver Requirement	15.105, 15.107, 15.109	7.3, 7.4

1.2 EUT Operation

The EUT was operated in continuous transmit mode at max power to measure fundamental, harmonics, and spurious radiation.

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 Radiated Emissions Measurements

Radiated emission measurements were made of the Fundamental and Spurious Emission levels for XWS30W Water Sensor. Measurements of the occupied bandwidth were also made for the EUT.

Measurements of the maximum emission levels for the fundamental and the spurious/harmonic emissions of the XWS30W Water Sensor were made at the Professional Testing "Open Field" Site 3, located in , 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 devices. The fundamental emissions of the device were measured with the antenna of the device in the three orthogonal axes.

2.1.1 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 spurious/harmonic measurements above 1 GHz, the measurement antenna was placed 3 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.

2.1.2 Test Criteria

The table below shows FCC Part 15.231e and RSS 210 6.1.1(e) radiated limits for an intentional radiator operating at 418 MHz band. FCC Part 15.231e allows the use of its spurious limit except for the restricted bands outlined in 15.205. The measurements of the harmonic were performed to the 10th harmonic of the fundamental. The reference distance for each limit is also shown in this table.

Frequency MHz	Test Distance (Meters)	Field Strength (uV/m)	(dBuV/m)
Fundamental (418)	3	4133	72.3
Harmonics (2 through 10)	3	413.3	52.3
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0

Note: Fundamental and Harmonic Limits are expressed in Average field strengths. The spurious limits are expressed in Quasi-Peak.

2.1.3 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 radiated emission test data for the harmonics is included in Appendix A. The radiated emissions generated by the XWS30W Water Sensor are below the FCC Part 15.231e and RSS 210 6.1.1(e).

3.0 Occupied Bandwidth Measurements

Measurements of the occupied bandwidth for the fundamental signals were made at Professional Testing 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 based on a 20 dB criteria (20 dB down either side of the emission from the peak emission). A drawing showing the test setup is given as Figure 1.

3.2 Test Criteria

According to FCC Part 15.231e and RSS 210 6.1.1(c), 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

3.3 Test Results

The occupied bandwidth test data is included in Appendix B. The occupied bandwidth for the fundamental frequency 418MHz is 200 kHz. This occupied bandwidth complies with the FCC and IC requirement.

4.0 Antenna Requirement

An analysis of the XWS30W Water Sensor was performed to determine compliance with FCC Section 15.203 and RSS 210 5.5 of the Rules. This section requires specific handling and control of antennas used for devices subject to regulations.

4.1 Evaluation Procedure

The structure and application of the XWS30W Water Sensor was analyzed with respect to the rules. The antenna is an external antenna, which is molded as part of the EUT housing and is not accessible to the user An auxiliary antenna port is not 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 must be permanently attached to the unit.

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

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 XWS30W Water Sensor meets the criteria of this rule by virtue of having an external antenna with a unique connector. The EUT is therefore compliant.

5.0 Modifications to Equipment

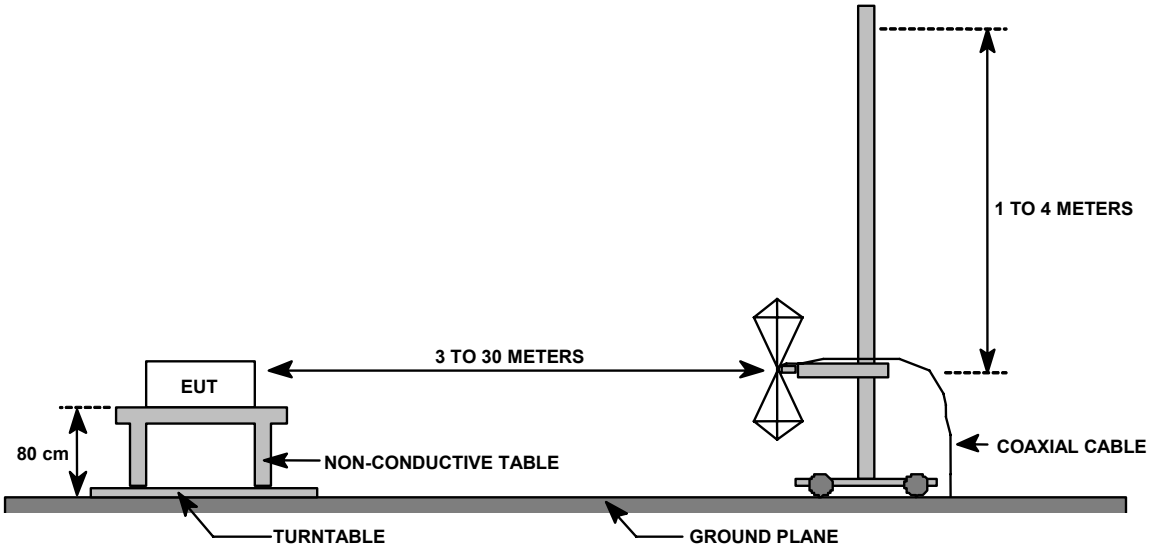
Shortened the antenna element to a length of 12 cm. A photograph is included with the external photographs Exhibit E2.

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
EMCO 3115	Horn Antenna	July 2005
MITEQ AFS4-00101800-40-10P	Preamp	July 2005
HP8566B	Spectrum Analyzer	March 2006
HP85650	Quasi-peak Adapter	March 2006
Tektronix 2706	Preselector	March 2006
Compliance Design B-100	Biconical Antenna	December 2004
EMCO 3146	Log Periodic Antenna	July 2005
HP8447D	Preamplifier	November 2005

FIGURE 1: Radiated Emissions Test Setup



APPENDIX A EMISSIONS DATA SHEET

Radiated Data Sheet
Fundamental
Xanboo/Core Technologies
XWS30W Water Sensor
Peak Detection RBW =100 kHz

Test Date: April 27, 2005
Measurement Distance (Meters): 3

Vertical

Frequency (MHz)	EUT Direction (degrees)	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)	Detector Function
418	290	1.5	61.1	0.0	16.1	6.2	83.3	92.3	-9.0	Peak
418	290	1.5	47.4	0.0	16.1	6.2	69.6	72.3	-2.7	Average

Horizontal

Frequency (MHz)	EUT Direction (degrees)	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)	Detector Function
418	240	2.5	61.2	0.0	16.1	6.2	83.4	92.3	-8.9	Peak
418	240	2.5	47.5	0.0	16.1	6.2	69.7	72.3	-2.6	Average

The average is calculated using a correction factor of -13.7 dB. The calculation can be found in Appendix A.

TEST ENGINEER: Jason Anderson

Radiated Data Sheet
Spurious and Harmonics
Xanboo/Core Technologies
XWS30W Water Sensor
Peak Detection
RBW=100kHz/<1GHz RBW=1MHz/>1GHz

Test Date: April 27, 2005
Measurement Distance (Meters): 3

Vertical

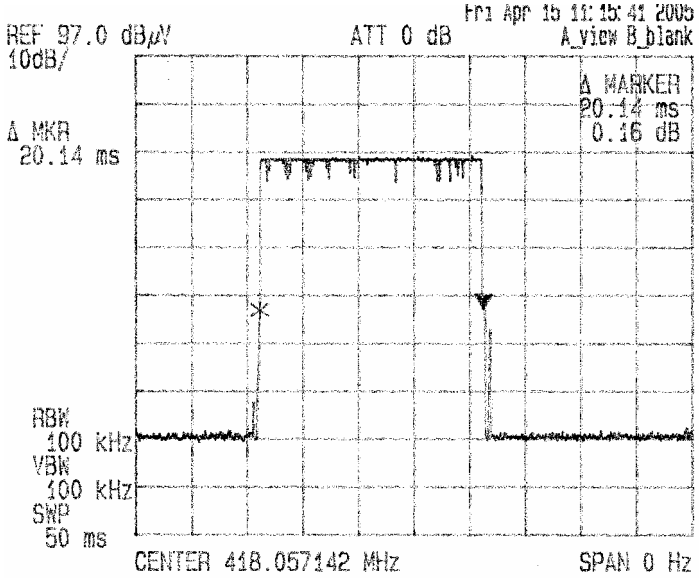
Frequency (MHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Function
836	290	1.5	10.7	0.0	22.4	9.7	42.8	52.3	-9.5	Peak
1254	275	1.5	41.7	29.3	24.4	3.4	40.2	54	-13.8	Peak
1672	280	1.5	44.1	32.7	26.0	4.1	41.6	54	-12.4	Peak
2090	noise	floor	40.5	34.1	27.7	4.8	39.0	54	-15.0	Peak
2508	noise	floor	39.4	34.9	28.3	5.5	38.3	54	-15.7	Peak
2926	noise	floor	41.2	34.8	30.3	5.9	42.7	54	-11.3	Peak

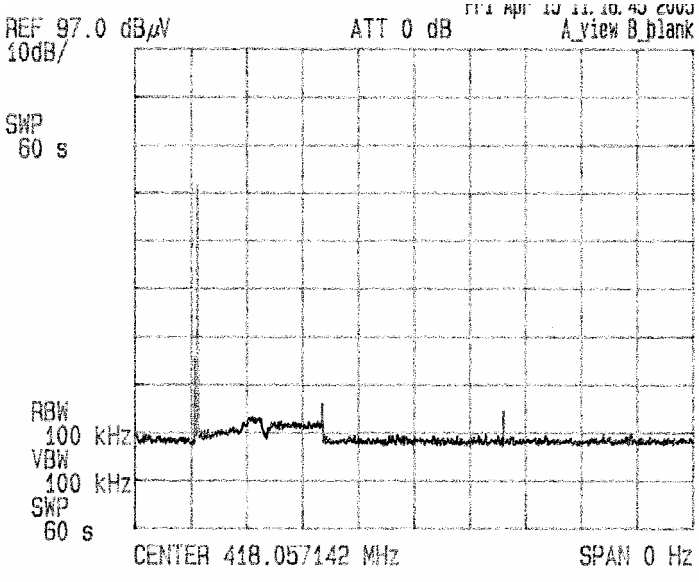
Horizontal

Frequency (MHz)	EUT Direction (degrees)	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)	Detector Function
836	325	2.5	6.2	0.0	22.4	9.7	38.3	52.3	-14.0	Peak
1254	33	1.5	42.8	29.3	24.4	3.4	41.3	54	-12.7	Peak
1672	33	1.5	40.6	32.7	26.0	4.1	38.1	54	-15.9	Peak
2090	noise	floor	40.5	34.1	27.7	4.8	39.0	54	-15.0	Peak
2508	noise	floor	39.4	34.9	28.3	5.5	38.3	54	-15.7	Peak
2926	noise	floor	41.2	34.8	30.3	5.9	42.7	54	-11.3	Peak

TEST ENGINEER: Jason Anderson

Pulse Datasheet
Xanboo/Core Technologies
XWS30W Water Sensor





Average Formula

$$Average.Correction = 20 * \log(\frac{pos.edge.width}{comp.period.width})$$

$$Average = Peak - Average.Correction$$

Average Calculation

$$Average.Correction = 20 * \log(\frac{20.1}{100}) \approx 13.7dB$$

$$Average \approx Peak - 13.7dB$$

Occupied Bandwidth Datasheet
Xanboo/Core Technologies
XWS30W Water Sensor