

**EMI TEST REPORT  
FOR  
E-Zone Networks Inc.  
Transmitter Module Model 1  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 CLASS Subpart C**

**PROJECT NO. 308A12**

**TEST COMPLETED: 02 November, 1999**

**Client: E-Zone Networks Inc.**  
Don La Font  
520 - 5 Avenue SW  
Calgary, AB  
T2P 3R7

Prepared by:

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Jeffery Taylor  
Test Technologist  
EMI/EMC

Approved by:

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Ian Guldberg  
Test Technologist  
EMI/EMC

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### 1.0 SUMMERY

The Transmitter Module Model 1, produced by E-Zone Networks Inc., **PASSED FCC Part 15 Class Subpart C**, radiated and conducted emissions in the configuration listed in this report on 02 November, 1999.

The results reported herein relate only to the item tested. This report shall not be reproduced, except in full, without the written approval of the Electronics Test Centre. Unless otherwise noted, the measurement uncertainty of the reported results is consistent with the requirements of the standard being evaluated.

## **2.0 INTRODUCTION**

### **2.1 Scope**

The purpose of this report is to present the findings and results of compliance testing performed against the electromagnetic compatibility and interference specifications, standards and requirements set forth in CFR 47, FCC Part 15.

### **2.2 Applicant**

The Transmitter Module Model 1 is manufactured by:  
E-Zone Networks Inc.  
520 - 5 Avenue SW  
Calgary, AB  
T2P 3R7

### **2.3 Applicability**

All test procedures, limits, and results defined in this document apply to the E-Zone Networks Inc.'s Transmitter Module Model 1.

The results contained in this report relate only to the item(s) tested.

### **2.4 Test Sample Description**

The test sample, provided for testing by E-Zone Networks Inc., was a Transmitter Module Model 1. The Transmitter Module Model 1 was a transmitter for the E-Zone Tower. The Transmitter Module Model 1 was powered from the AC/DC power adapter and was not grounded. <Other descriptions such as connections, manufacturer, and usage are to be included in parts lists and manuals.>

### 3.0 DETAILS OF FCC Part 15

#### 3.1 Conducted Emissions (450 kHz - 30 MHz)

| Frequency of emission (MHz) | Conducted limit (dB $\mu$ V) |
|-----------------------------|------------------------------|
| 0.45 to 1.705               | 60                           |
| 1.705 to 30.0               | 69.45                        |

#### 3.2 Radiated Emissions (30 MHz - 10 GHz)

| Frequency of emission<br>(MHz) | Class A Field strength<br>(dB $\mu$ V/m) (at 10 m) | Class B Field strength<br>(dB $\mu$ V/m) (at 3 m) |
|--------------------------------|----------------------------------------------------|---------------------------------------------------|
| 30 - 88                        | 39.1                                               | 40.0                                              |
| 88 - 216                       | 43.5                                               | 43.5                                              |
| 216 - 960                      | 46.4                                               | 46.0                                              |
| Above 960                      | 49.5                                               | 54.0                                              |

## **4.0 TEST FACILITY**

### **4.1 Test Sites**

Tests were performed at the Electronics Test Centre:

Street address:  
27 East Lake Hill  
Airdrie, Alberta  
T4B 2B7

Mailing Address:  
P.O. Box 3485  
Airdrie, Alberta  
T4B 2B7

Tel: (403) 912-0037  
Fax: (403) 912-0083

#### **RF Anaechoic Chamber**

References to the RF Anaechoic Chamber (RFAC) identify the test chamber located in the main building complex at the Electronics Test Centre. Its usable working space measures 8 m long x 4.9 m wide x 5.2 m high. The floor, walls and ceiling consist of annealed steel panels. The walls and ceiling are covered with 122 cm long pyramidal cones made of anechoic material. The floor supports a 15 cm high steel computer floor that acts as a ground plane. Test instrumentation is located in two shielded equipment vestibules located at the side of the main room. Cables are routed through bulkhead panels between the rooms as required. Power feeds are routed into the main room and vestibules through power line filters providing at least 100 MHz of attenuation between 10 KHz and 10 GHz.

#### **Open Field Test Site**

References to the Open Area Test Site (OATS) identify the open area located on the property of the Electronics Test Centre. It conforms to the requirements of CSA C108.8-M1983 and ANSI C63.4. A metal ground plane and an all weather structure constructed of wood and fiberglass are provided. Fiberglass antenna masts are located 3, 10, and 30 meters from a rotateable wooden turntable. The 30 meter mast is located outside the all weather structure. Test instrumentation is located below the metal ground plane. Antenna cables are routed through conduits buried beneath the ground plane. Power feeds and cables that connect the test sample to auxiliary instrumentation are routed through a hole in the ground plane at the centre of the turntable. Power is provided to the underground facility through filters having at least 100 MHz of attenuation between 10 KHz and 10 GHz. Test instrumentation is powered by a line isolation transformer. Calibration of the OATS was performed in accordance with ANSI C63.4. A report has been submitted to the FCC.

## **4.2 Test Equipment**

### **Equipment Calibration**

All measurement instrumentation conforms to ANSI C63.2. Calibration is maintained in accordance with manufacturer recommendations, NATO AQAP-6, and MIL-STD-45662. Each measurement device is labeled with its ETC asset number and calibration due date.

### Calibration Accuracy

Test equipment used to provide quantitative measurements are calibrated with standards traceable to the National Research Council, National Institute of Standards and Technology or other national standards. Instrumentation systems for emissions measurements have the following accuracy's:

Frequency:  $\pm 2\%$

Amplitude:  $\pm 2$  MHz

### Test Equipment Descriptions

| Instrument        | Manufacturer    | Model No. | Asset No. | Calibration Status |
|-------------------|-----------------|-----------|-----------|--------------------|
| Spectrum Analyzer | Hewlett Packard | 8566B     | 9565      | Annual Calibration |
| Spectrum Analyzer | Hewlett Packard | 8566B     | 9168      | Annual Calibration |

Measurement Range: 100 Hz To 22 GHz

Resolution Bandwidth: 3 MHz bandwidths of 10 Hz to 3 MHz in a 1, 3, 10 sequence.

Amplitude Measurement Range: -134 dBm to + 30 dBm

Dynamic Range Spurious Response: for signals < -40 dBm all harmonic and intermodulation distortion > 70 dBm below input signal.

RF Input: 100 Hz to 22 GHz precision female type N connector.

Input SWR: 1.2, 100 Hz to 2.5 GHz; 1.5, 2.5 GHz to 5.8 GHz; 1.9, 5.8 GHz to 22 GHz with 10 dB input attenuation.

| Instrument     | Manufacturer    | Model No. | Asset No. | Calibration Status |
|----------------|-----------------|-----------|-----------|--------------------|
| RF Preselector | Hewlett Packard | 85685A    | 9563      | Annual Calibration |
| RF Preselector | Hewlett Packard | 85685A    | 9728      | Annual Calibration |

Measurement Range: 20 Hz to 2 GHz

Displayed Average Noise Level: -115 dBm, 9 KHZ to 50 KHZ; -132 dBm, 50 KHZ to 1 MHz; -150 dBm, 1 MHz to 1500 MHz; -147 dBm, 1500 MHz to 2000 MHz.

Residual Response: -90 dBm, 2 KHZ to 1 MHz; -112 dBm, 1 MHz to 2000 MHz.

RF Input: 20 Hz to 2 GHz precision female type N connector.

Input SWR: < 1.5

| Instrument         | Manufacturer    | Model No. | Asset No. | Calibration Status |
|--------------------|-----------------|-----------|-----------|--------------------|
| Quasi-Peak Adapter | Hewlett Packard | 85650A    | 9243      | Annual Calibration |

Amplitude Accuracy: Bypass mode,  $\pm 0.3$  dB; normal mode,  $\pm 1.0$  dB

Frequency Accuracy in Normal Mode: 200 Hz BW,  $\pm 10$  Hz; 9 kHz BW,  $\pm 4.5$  kHz; 120 kHz BW,  $\pm 60$  kHz.

| Instrument                           | Manufacturer | Model No. | Asset No. | Calibration Status |
|--------------------------------------|--------------|-----------|-----------|--------------------|
| Line Impedance Stabilization Network | EMCO         | 3825/2r   | 9331      | Annual Inspection  |
| Line Impedance Stabilization Network | EMCO         | 3825/2r   | 9259      | Annual Inspection  |

Isolation Frequency Range: 10 kHz to 100 MHz

Power Source Frequencies: 0 Hz to 400 Hz

Current Rating: 25 amps

The 3825/2r LISN is designed to stabilize test units which operate with two line, single phase power.

| Instrument  | Manufacturer | Model No.  | Asset No. | Calibration Status |
|-------------|--------------|------------|-----------|--------------------|
| Biconal-Log | ARA          | Lpb-2520/A | 4318      | Annual Calibration |

Measurement Range: 25 MHz to 2000 MHz

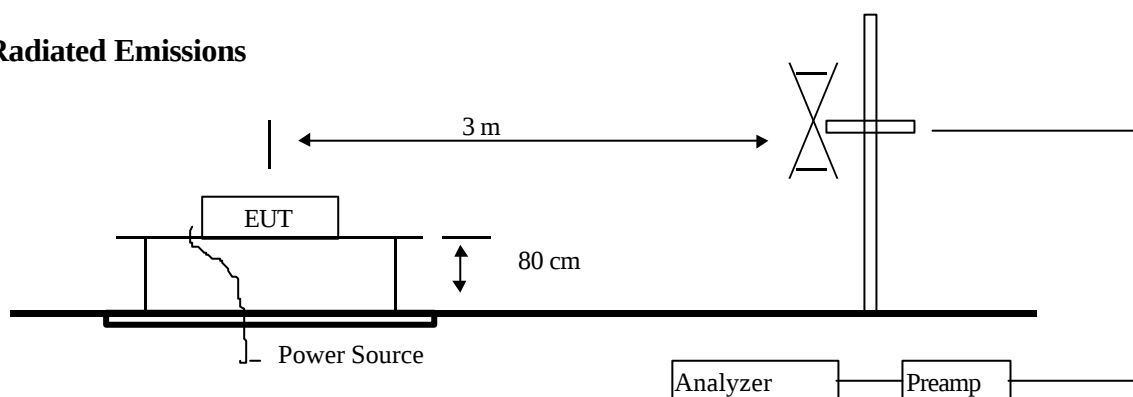
Power Handling Capability: 1000 W

Average VSWR: 2:1

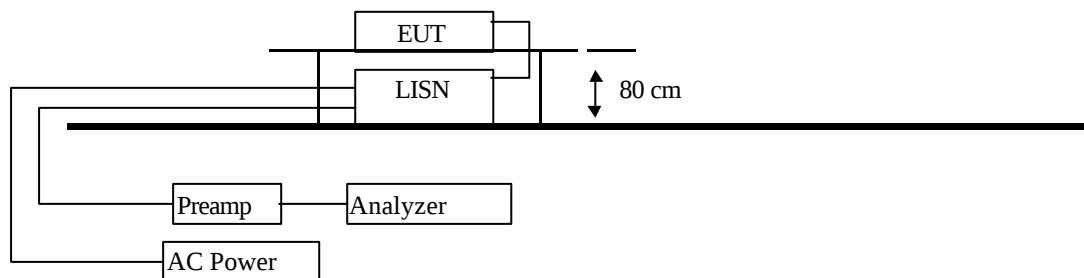
### 4.3 Test Configuration

The following diagrams illustrate the configuration of the Transmitter Module Model 1, and the test and measurement equipment used for FCC Part 15 Radiated and Conducted Emissions Testing.

#### Radiated Emissions



#### Conducted Emissions



#### **4.4 Measurement Uncertainty**

For Radiated E-Field Emissions:

Frequency =  $\pm 1 \times 10^{-3}$  MHz  
Amplitude = + 3.8 / -3.9 dB (from 30 MHz to 200 MHz)  
Amplitude =  $\pm 2.8$  dB (from 200 MHz to 1000 MHz)

For Conducted Emissions:

Frequency =  $\pm 3.5 \times 10^{-3}$  kHz (from 150 kHz - 1 MHz)  
Frequency =  $\pm 105.21 \times 10^{-3}$  kHz (from 1MHz - 30 MHz)  
Amplitude =  $\pm 3.3$  dB

## 5.0 FCC LABELING REQUIREMENTS

The FCC has labeling requirements for computing devices. Section 15.19 of the FCC rules specifies the requirements as follows.

### 15.19 Labeling Requirements

- A. In addition to the requirements in part 2 of this chapter, a device subject to certification, notification or verification shall be labeled as follows:
- Receivers associated with the operation of a licensed radio service, e.g., FM Broadcast under Part 73, Land Mobile Operation under Part 90, etc., Shall bear the following statement in a conspicuous location on the device:  
This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.
  - A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:  
This device is verified to comply with Part 15 of the FCC Rules for use with cable television service.
  - All other devices shall bear the following statement in a conspicuous location on the device:  
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
    - 1) This device may not cause harmful interference
    - 2) This device must accept any interference received, including interference that may cause undesired operation.
- B. Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified in this section is required to be affixed only to the main control unit.
- C. When the device is so small or for such use that it is not practicable to place the statement specified in this section on it, the information required by these paragraphs shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

The FCC has a requirement to provide user information in the equipment manuals of all devices subject to Part 15.

#### 15.21 Information To User

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The Electronics Test Centre recommends that the following statement be placed in a prominent location in the text of the manual.

**Note:** Equipment changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The FCC has a requirement to provide user information in equipment manuals of computing devices. Section 15.105 of the FCC Rules specifies the requirements as follows.

#### 15.105 Information To The User

- A. For a class a digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

**Note:** This equipment has been tested and found to comply with the limits for a class a digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

- B. For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

**Note:** This equipment has been tested and found to comply with the limits for a class b digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Re-Orient Or Relocate The Receiving Antenna.

Increase the separation between the equipment and the receiver.

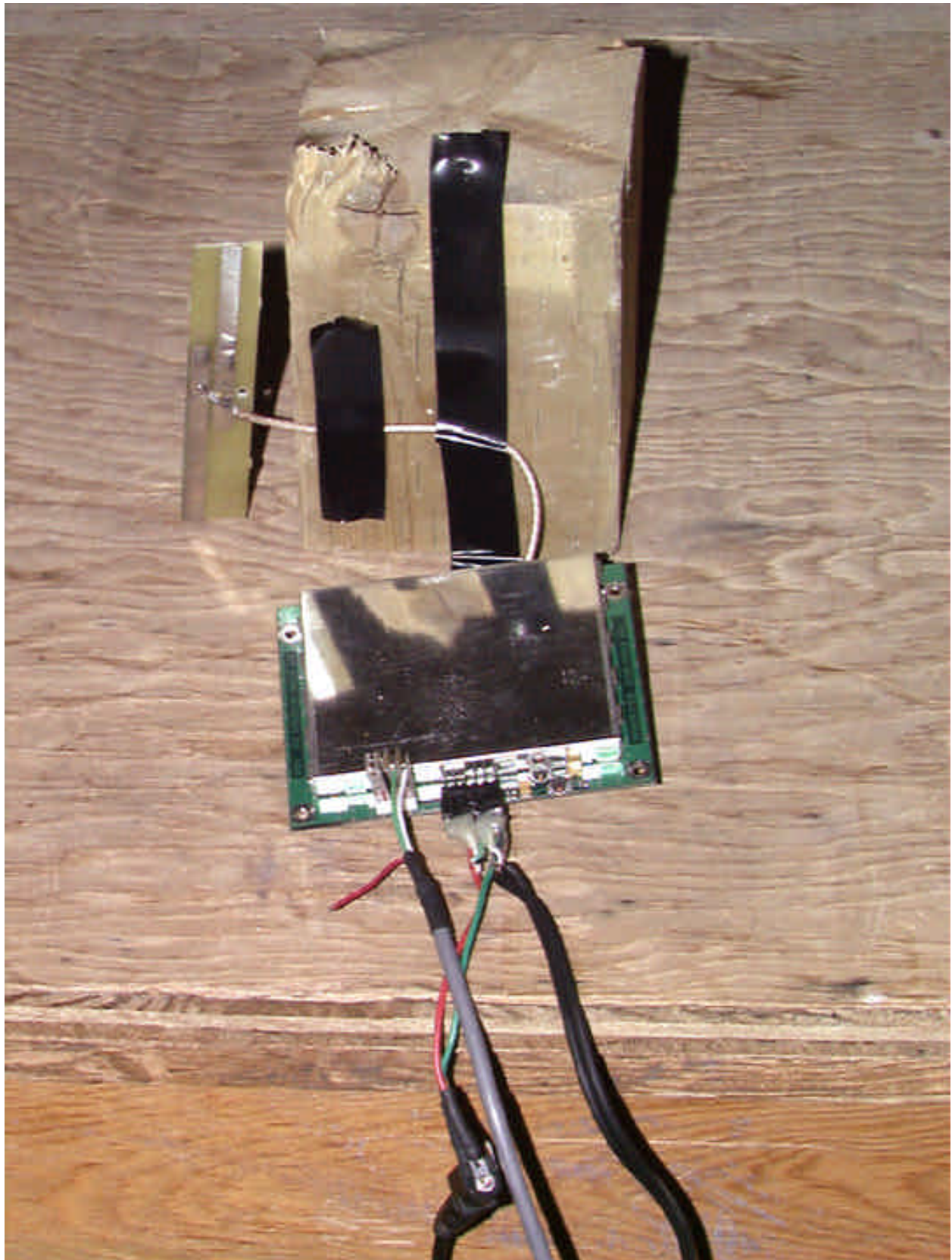
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

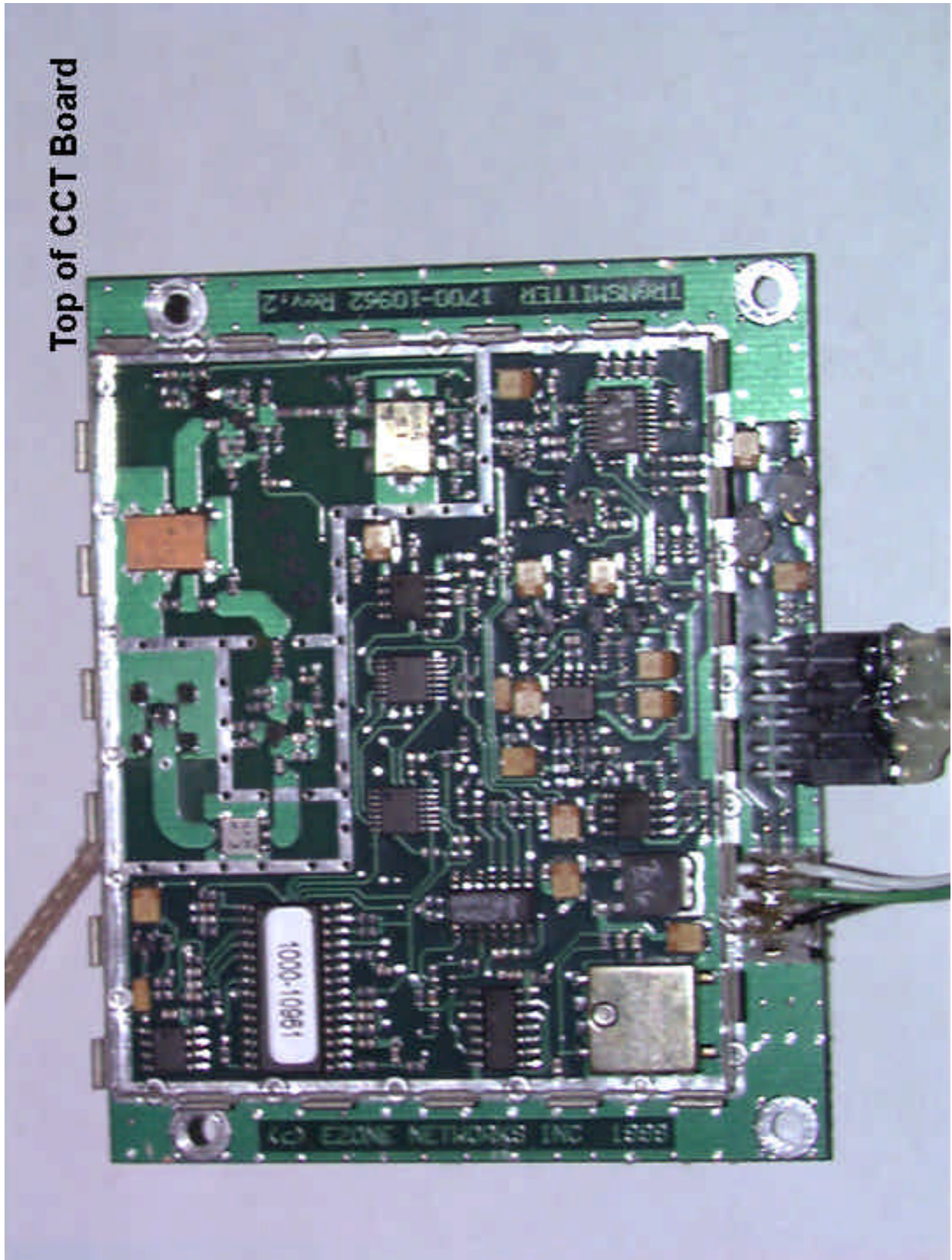
- C. The provisions of paragraphs (a) and (b) do not apply to digital devices exempted from the technical standards under the provisions of section 15.103.
- D. For systems incorporating several digital devices, the statement shown in paragraph (a) or (b) needs to be contained only in the instruction manual for the main control unit.

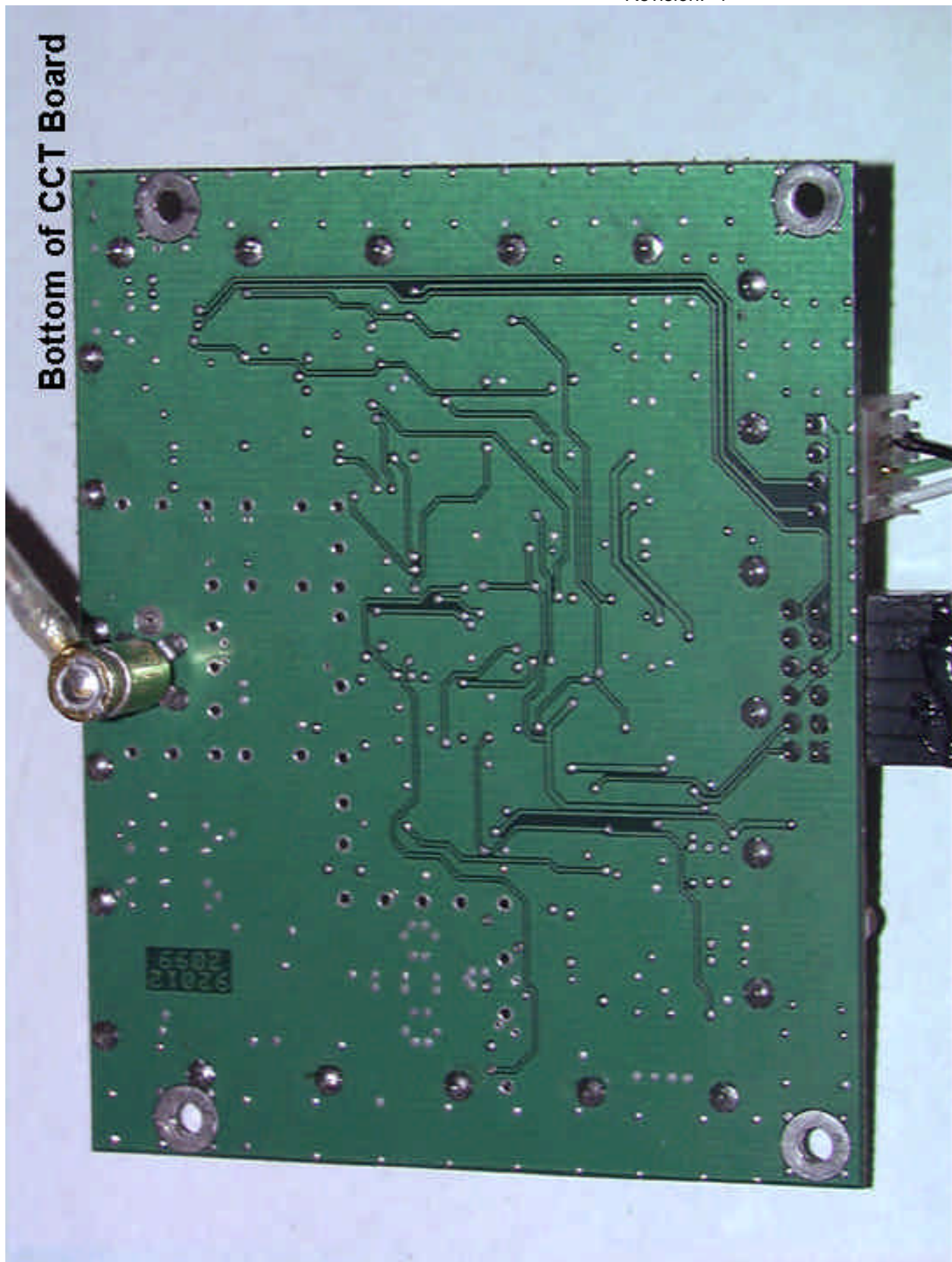
## 6.0 PHOTOGRAPHS





Top of CCT Board





## **Appendix 1**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
Transmitter Module Model 1  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 CLASS Subpart C  
Conducted Emissions**

**PROJECT NO. 308A12**

**TEST COMPLETED: 02 November, 1999**

**Client: E-Zone Networks Inc.**  
Don La Font  
520 - 5 Avenue SW  
Calgary, AB  
T2P 3R7

|                                     |          |
|-------------------------------------|----------|
| <b>Test Report Data Sheets</b>      | .....Pg. |
| <b>Conducted Emissions Data</b>     | ..... 15 |
| Neutral to Ground 450 kHz - 1.7 MHz | ..... 15 |
| Neutral to Ground 1.7 MHz - 30 MHz  | ..... 16 |
| Hot to Ground 450 kHz - 1.7 MHz     | ..... 17 |
| Hot to Ground 1.7 MHz - 30 MHz      | ..... 18 |

This testing was done using a Transmitter Module Model 1.  
This Test was done using FCC Part 15 Class Subpart C specifications.

There were no variations to the test method.

The Transmitter Module Model 1 produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Class Subpart C conducted emissions.

The Equipment Under Test is considered to have passed if the conducted power does not exceed the limit of the appropriate standard as shown in section 3.1 of this report.

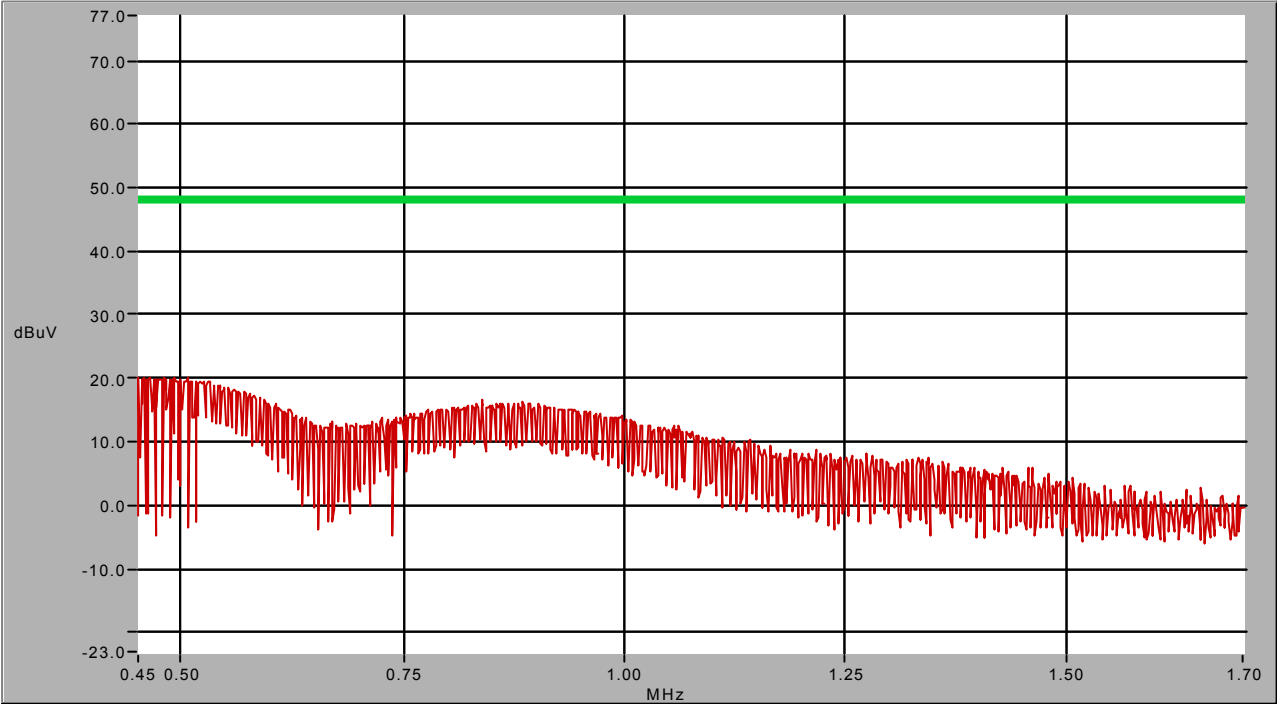
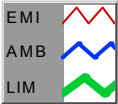
**Conducted Emissions  
Neutral to Ground  
FCC Part 15 Subpart C at 3m**

Title: 450 - 1700 kHz  
Mode of Operation: Transmit @ Mid freq.  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

12:13 PM

Plot Number: 1



|                |                      |                    |
|----------------|----------------------|--------------------|
| VBW 3.000 kHz  | Sweep Time: Auto     | PR Atten: 10.00 dB |
| RBW: 1.000 kHz | Ref. Lev: 77.00 dBuV | An Atten: 10.00 dB |

| Associated Files |           |
|------------------|-----------|
| ZERO.DAT         | 23/4/1997 |
| lism.dat         | 23/4/1997 |
| FCC15B3.DAT      | 20/8/1998 |

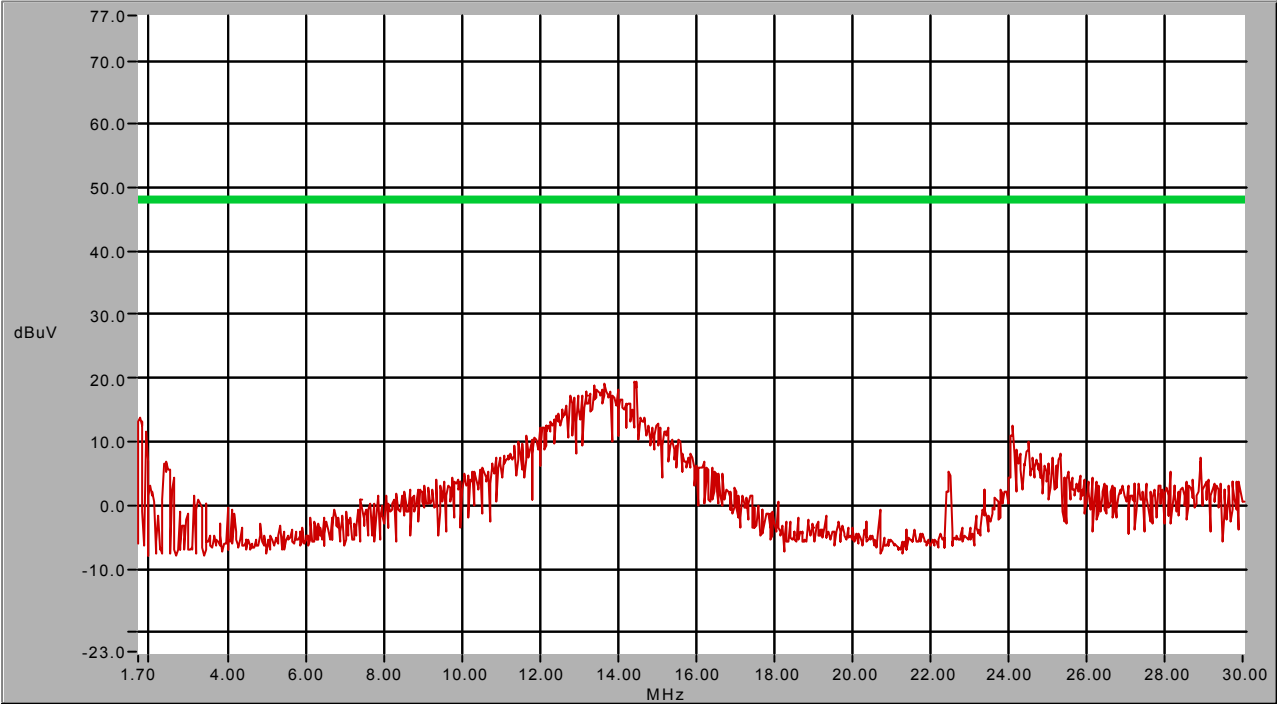
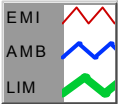
**Conducted Emissions  
Neutral to Ground  
FCC Part 15 Subpart C at 3m**

Title: 1.7 - 30 MHz  
Mode of Operation: Transmit @ Mid freq.  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

12:15 PM

Plot Number: 2



|                  |                       |                   |
|------------------|-----------------------|-------------------|
| VBW 30.000 kHz   | Sweep Time: 200.00 ms | PR Atten: 0.00 dB |
| RBW: 100.000 kHz | Ref. Lev: 77.00 dBuV  | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ZERO.DAT         | 23/4/1997 |
| lism.dat         | 23/4/1997 |
| FCC15B3.DAT      | 20/8/1998 |

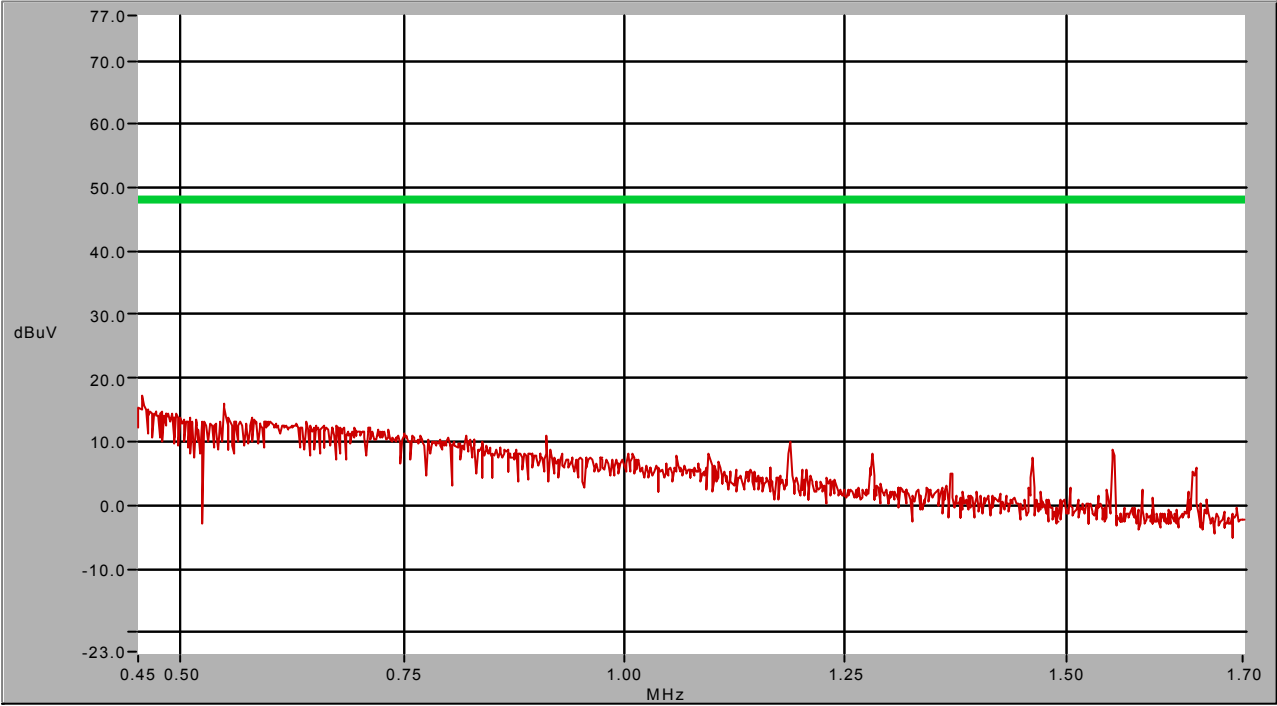
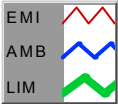
**Conducted Emissions  
Hot to Ground  
FCC Part 15 Subpart C at 3m**

Title: 450 - 1700 kHz  
Mode of Operation: Transmit @ Mid freq.  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

12:00 PM

Plot Number: 3



|               |                      |                    |
|---------------|----------------------|--------------------|
| VBW 3.000 kHz | Sweep Time: Auto     | PR Atten: 10.00 dB |
| RBW 1.000 kHz | Ref. Lev: 77.00 dBuV | An Atten: 10.00 dB |

| Associated Files |           |
|------------------|-----------|
| ZERO.DAT         | 23/4/1997 |
| lissn.dat        | 23/4/1997 |
| FCC15B3.DAT      | 20/8/1998 |

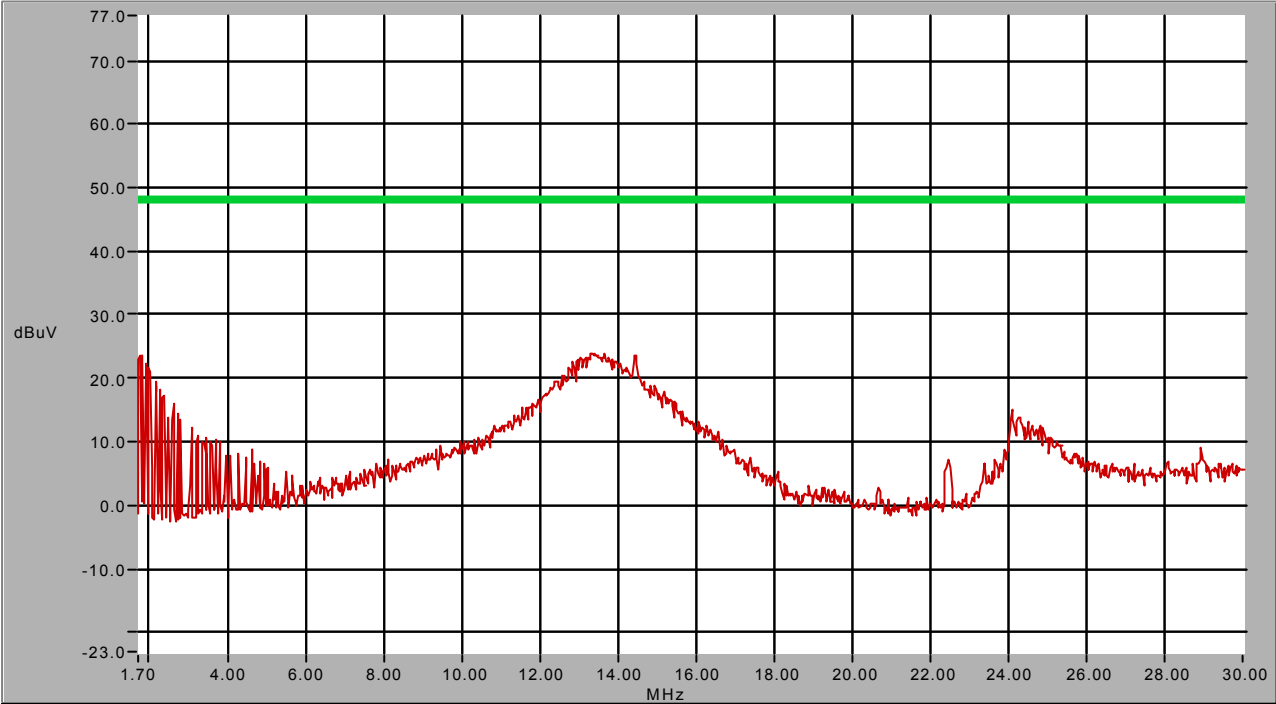
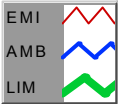
**Conducted Emissions  
Hot to Ground  
FCC Part 15 Subpart C at 3m**

Title: 1.7 - 30 MHz  
Mode of Operation: Transmit @ Mid freq.  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

12:06 PM

Plot Number: 4



|                  |                       |                   |
|------------------|-----------------------|-------------------|
| VBW 30.000 kHz   | Sweep Time: 200.00 ms | PR Atten: 0.00 dB |
| RBW: 100.000 kHz | Ref. Lev: 77.00 dBuV  | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ZERO.DAT         | 23/4/1997 |
| lisn.dat         | 23/4/1997 |
| FCC15B3.DAT      | 20/8/1998 |

## **Appendix 2**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
Transmitter Module Model 1  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 CLASS Subpart C  
Low Channel Radiated Emissions**

**PROJECT NO. 308A12**

**TEST COMPLETED: 02 November, 1999**

**Client: E-Zone Networks Inc.**  
Don La Font  
520 - 5 Avenue SW  
Calgary, AB  
T2P 3R7

|                                             |          |
|---------------------------------------------|----------|
| <b>Test Report Data Sheets</b>              | .....Pg. |
| <b>Radiated Emissions Data</b>              | .....23  |
| Horizontal Polarization 30 MHz - 88 MHz     | ..... 23 |
| Horizontal Polarization 88 MHz - 200 MHz    | ..... 24 |
| Horizontal Polarization 200 MHz - 1 GHz     | ..... 25 |
| Horizontal Polarization 1 GHz - 2 GHz       | ..... 26 |
| Horizontal Polarization 2 GHz - 5 GHz       | ..... 27 |
| Horizontal Polarization 5 GHz - 10 GHz      | ..... 28 |
| Horizontal Polarization Transmitter Carrier | ..... 29 |
| Vertical Polarization 30 MHz - 88 MHz       | ..... 30 |
| Vertical Polarization 88 MHz - 200 MHz      | ..... 31 |
| Vertical Polarization 200 MHz - 1 GHz       | ..... 32 |
| Vertical Polarization 1 GHz - 2 GHz         | ..... 33 |
| Vertical Polarization 2 GHz - 5 GHz         | ..... 34 |
| Vertical Polarization 5 GHz - 10 GHz        | ..... 35 |
| Vertical Polarizaion Transmitter Carrier    | ..... 36 |

This testing was done using a Transmitter Module Model 1.  
This Test was done using FCC Part 15 Class Subpart C specifications.

There were no variations to the test method.

The Transmitter Module Model 1 produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Class Subpart C radiated emissions while operating on the low channel (902.2 MHz).

The Equipment Under Test is considered to have passed if the radiated power does not exceed the limit of the appropriate standard as shown in section 3.2 of this report.

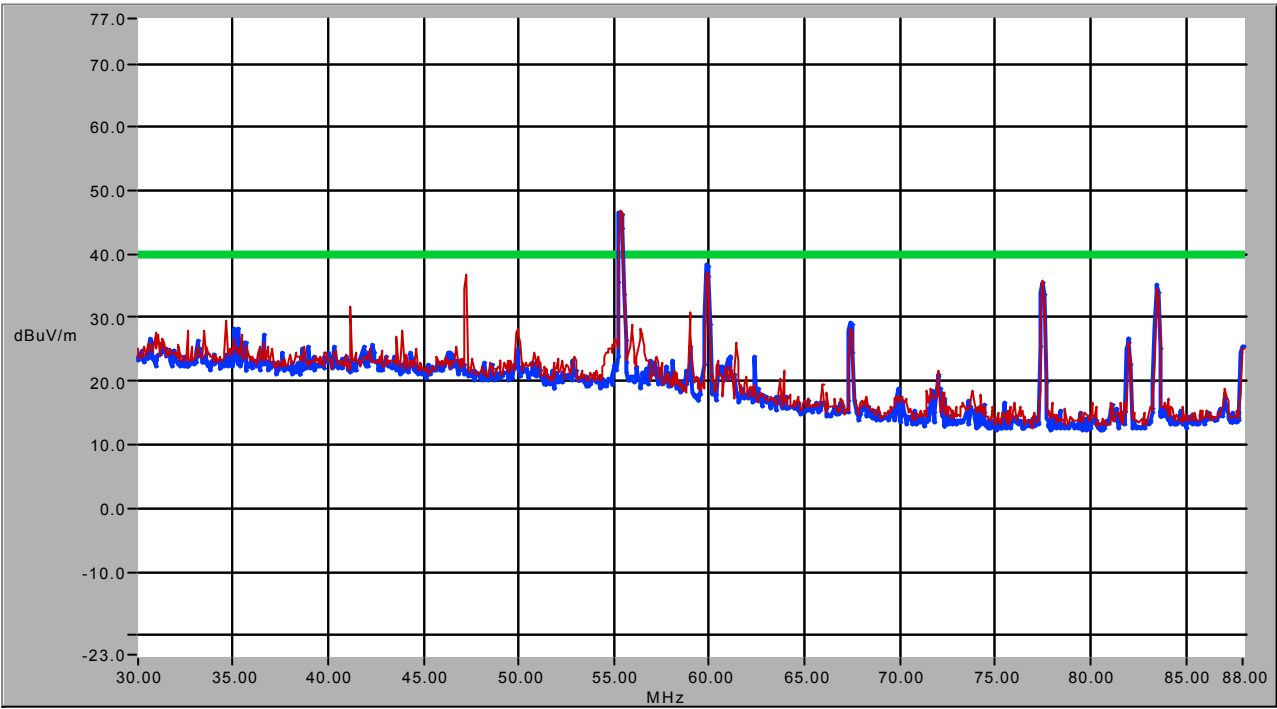
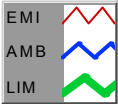
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

12:29 PM

Plot Number: 5



V BW 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

**Associated Files**

ofts3m.dat 16/6/1999  
04318h3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 46.536     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 55.288     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 59.736     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 77.258     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 83.268     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

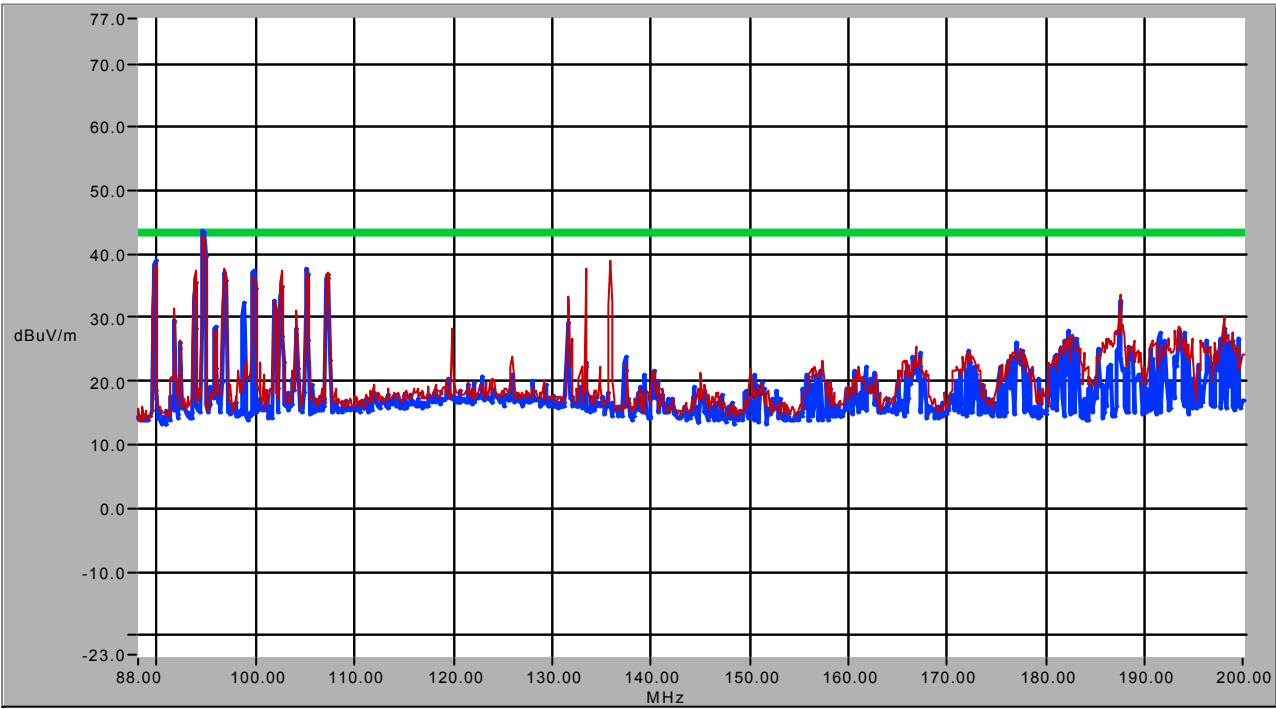
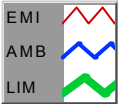
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

12:09 PM

Plot Number: 6



VBW 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 94.631     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 133.914    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 134.828    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

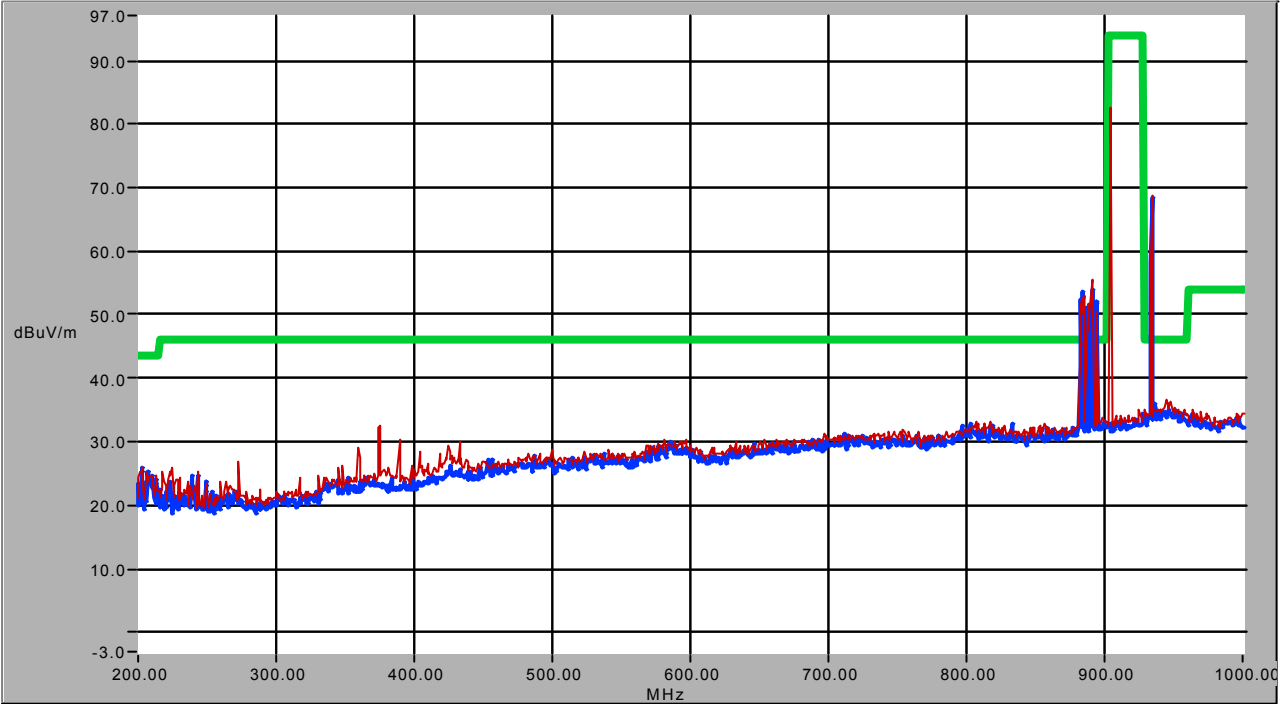
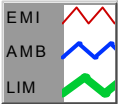
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

12:11 PM

Plot Number: 7



VBW 300.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 888.920    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 931.710    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

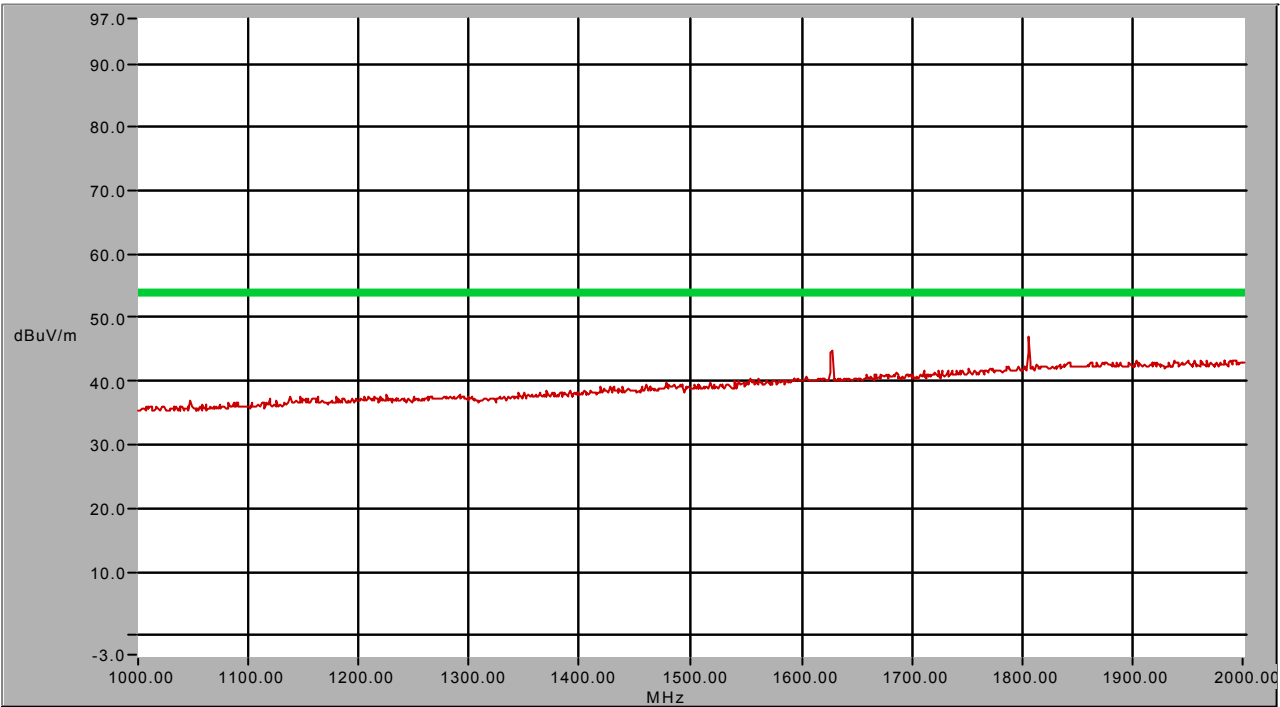
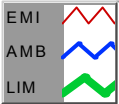
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: 4:22 PM  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

November 1, 1999

Plot Number: 8



VBW 30.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files  
ofts3m.dat 16/6/1999  
09588h3.dat 9/5/1997  
FCC15B3.DAT 20/8/1998

**AVERAGE DATA**

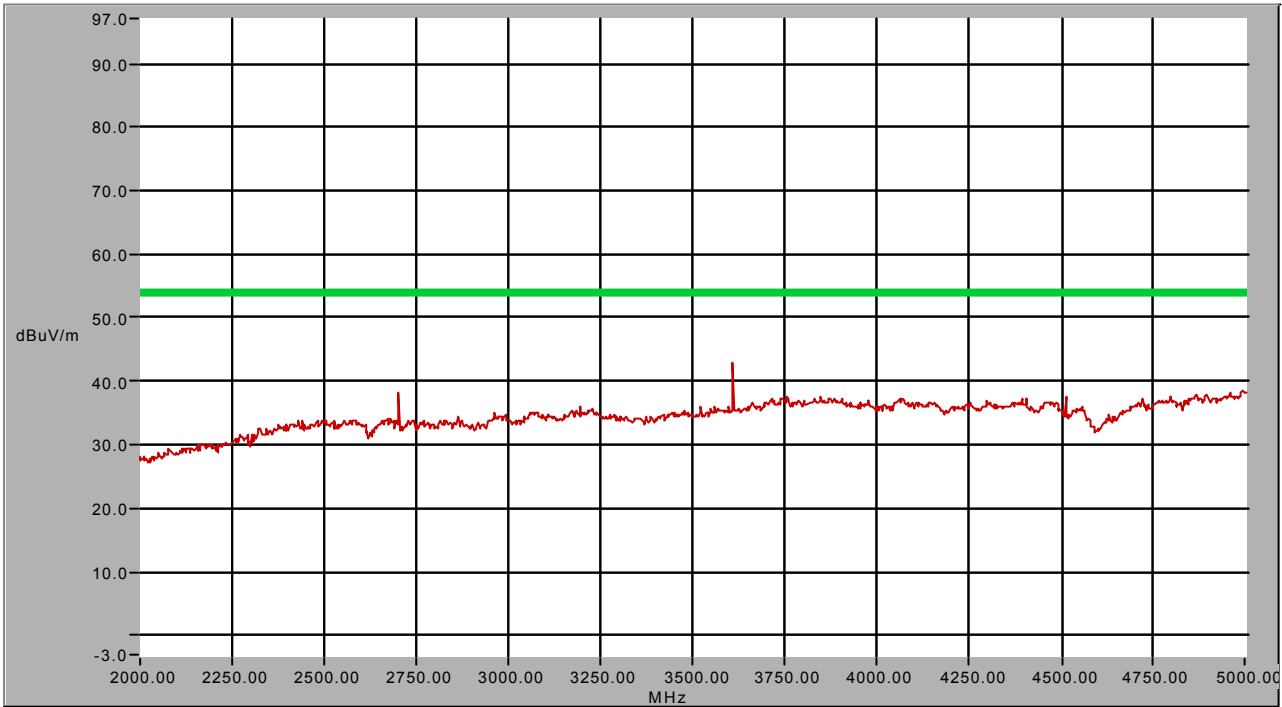
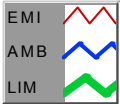
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 1804.400   | 259           | 132         | 13.70           | 27.86   | 5.79    | 0.00    | 47.35        | 53.98          | Pass   |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 2 - 5 GHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999 10:35 AM  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

Plot Number: 9



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW 1.000 MHz  | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

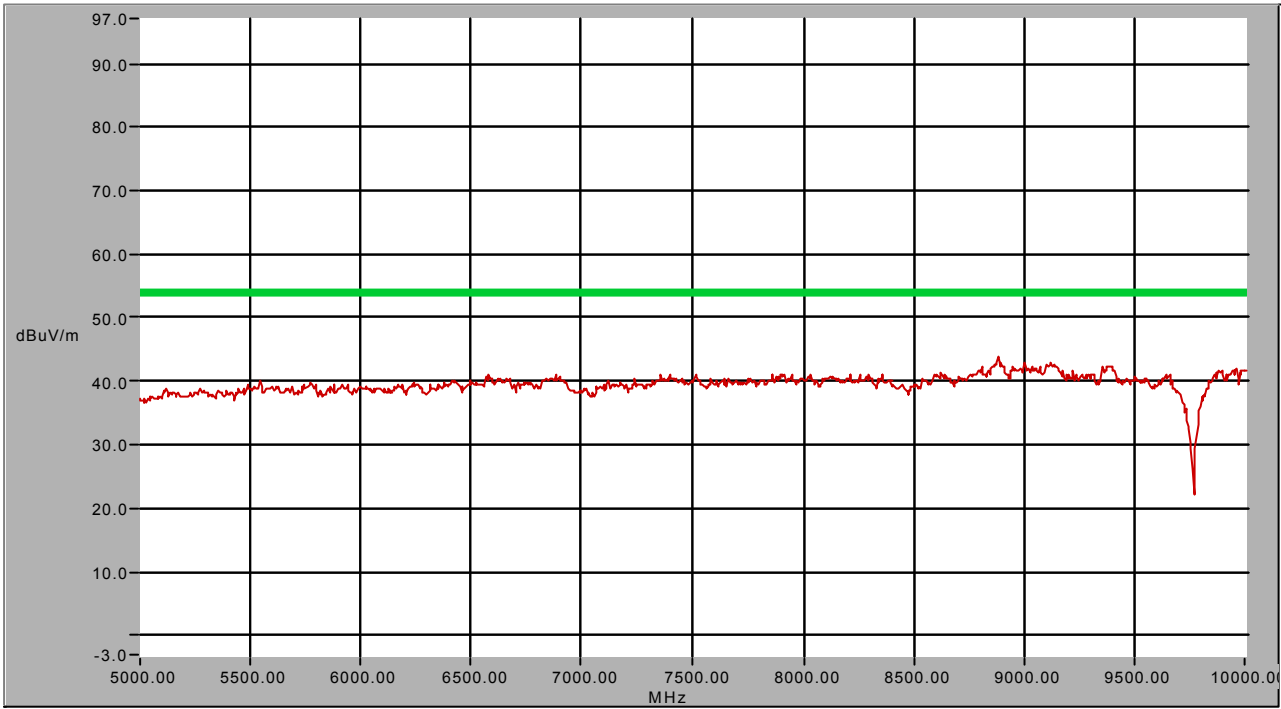
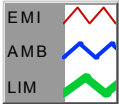
| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 5 - 10 GHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999 10:40 AM  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

Plot Number: 10



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW 1.000 MHz  | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

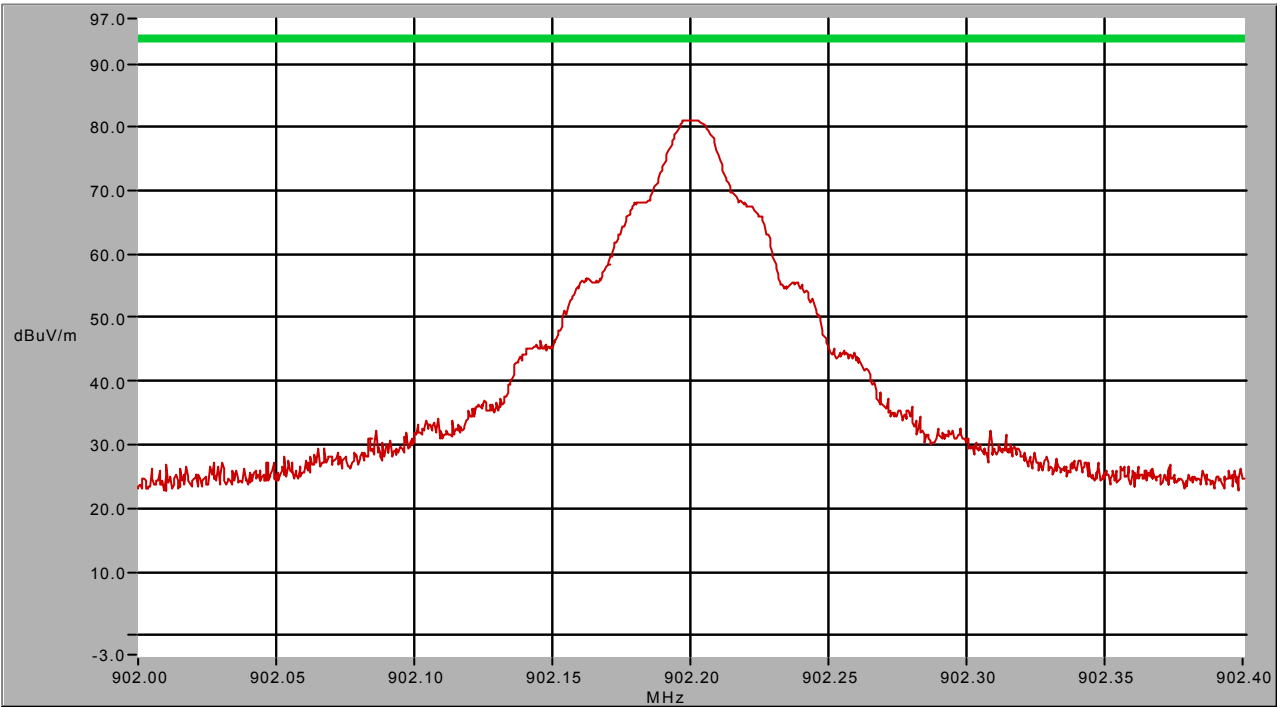
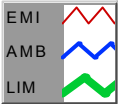
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 902.0 - 902.4 MHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

12:37 PM

Plot Number: 11



|                 |                        |                   |
|-----------------|------------------------|-------------------|
| VBW 30.000 kHz  | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 10.000 kHz | Ref. Lev: 77.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 902.200    | 255           | 113         | 51.00           | 23.60   | 4.00    | 0.00    | 78.60        | 93.98          | Pass   |

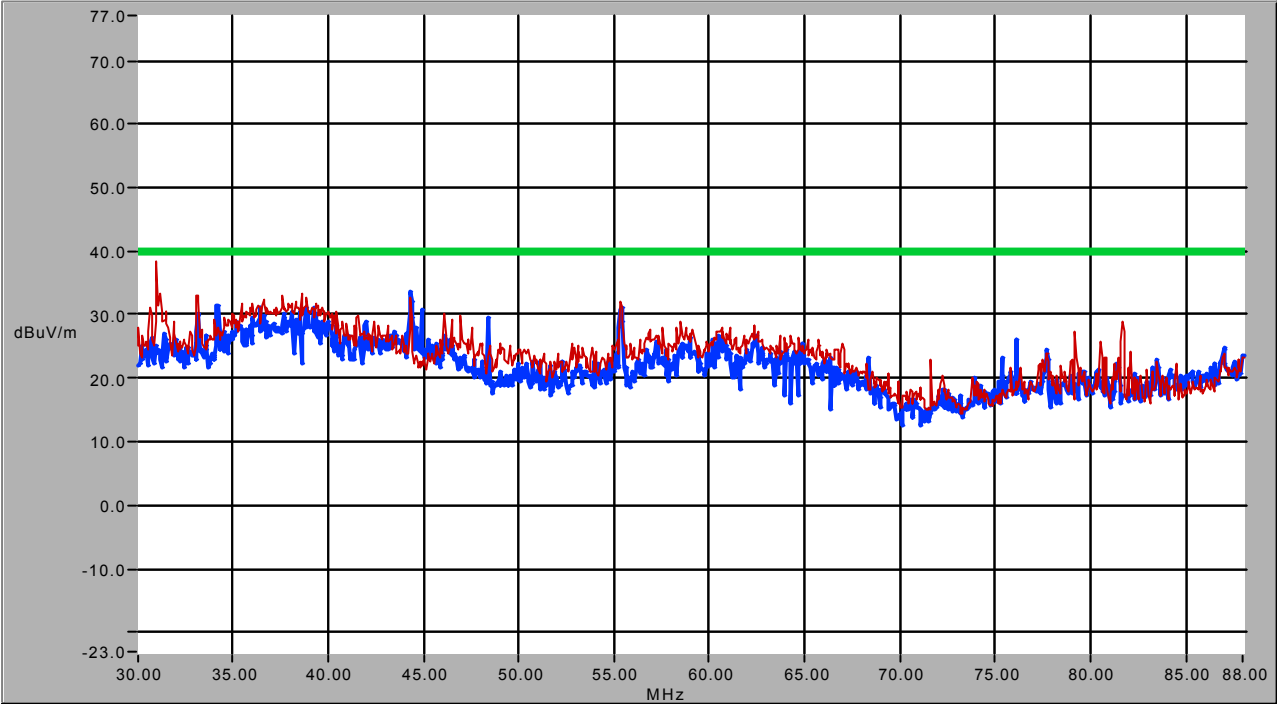
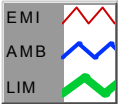
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit at 902.2 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

11:44 AM

Plot Number: 12



VBW 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

**QUASI-PEAK DATA**

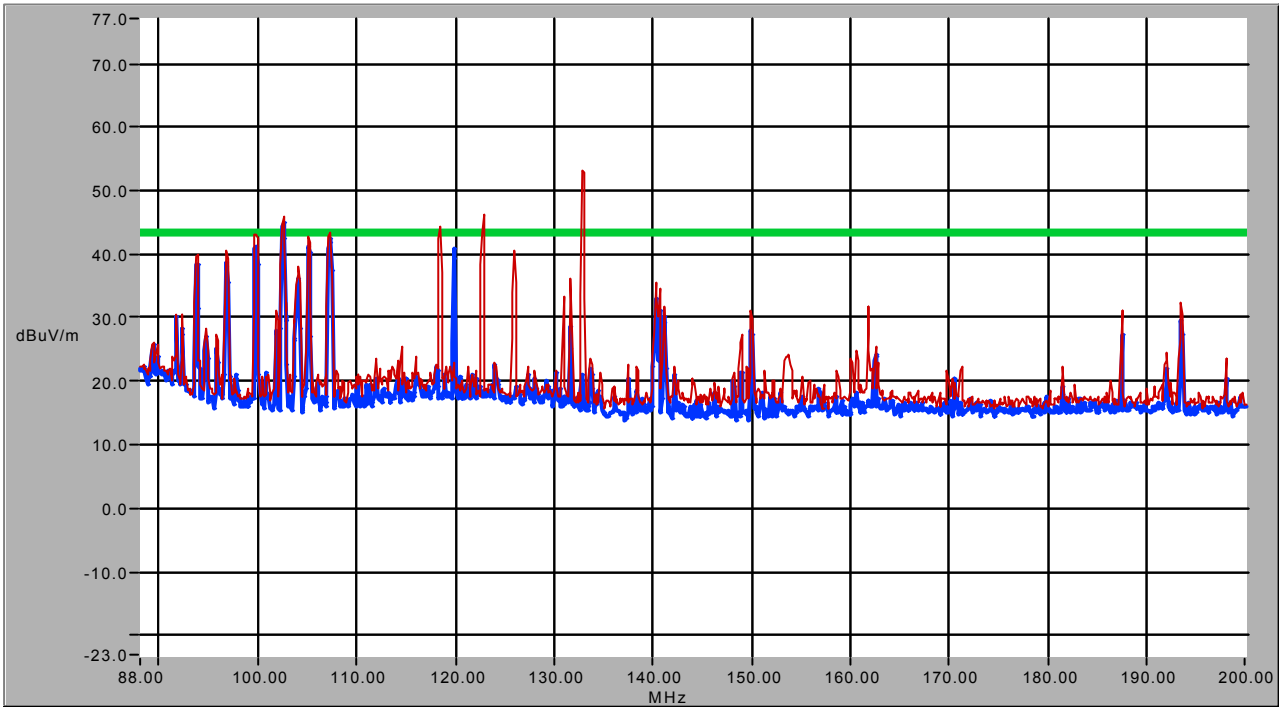
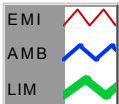
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 31.009     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999 11:36 AM  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

Plot Number: 13



VBW 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

QUASI-PEAK DATA

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 98.932     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 102.100    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 105.046    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 107.328    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 119.230    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 122.076    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 133.636    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

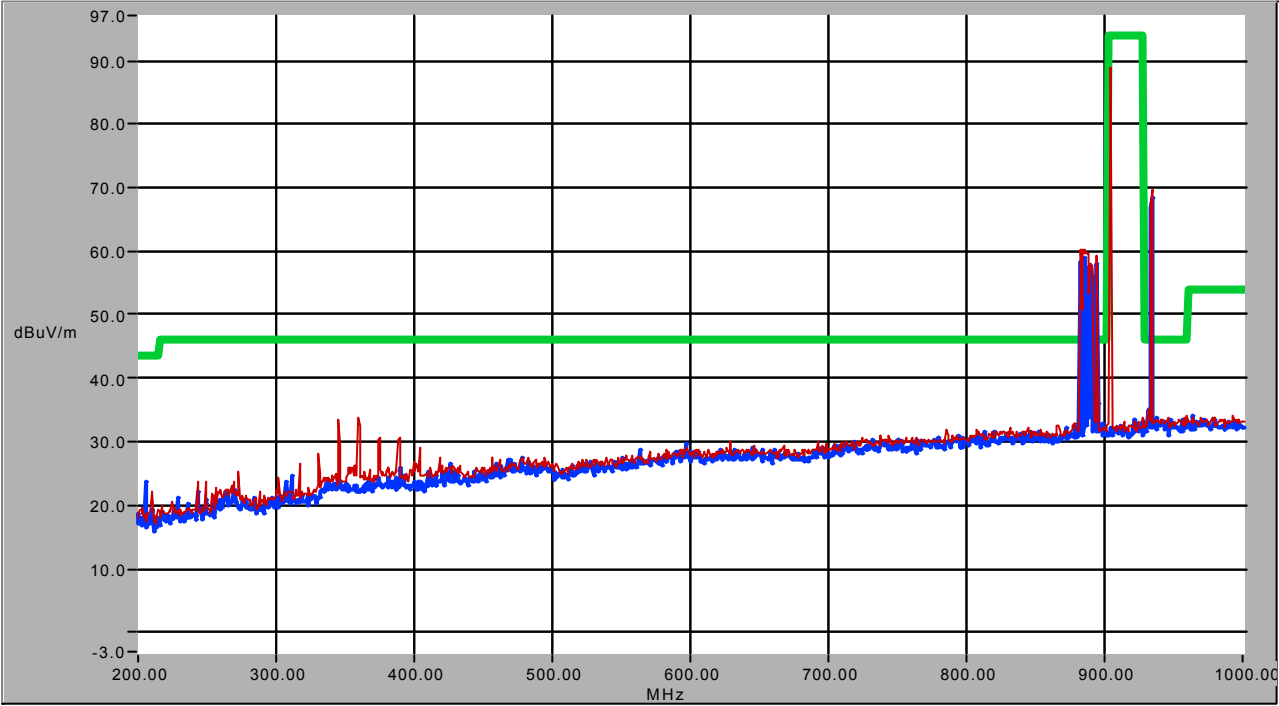
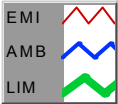
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

11:19 AM

Plot Number: 14



|      |             |             |              |           |         |
|------|-------------|-------------|--------------|-----------|---------|
| V BW | 300.000 kHz | Sweep Time: | 200.00 ms    | PR Atten: | 0.00 dB |
| RBW: | 1.000 MHz   | Ref. Lev:   | 77.00 dBuV/m | An Atten: | 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

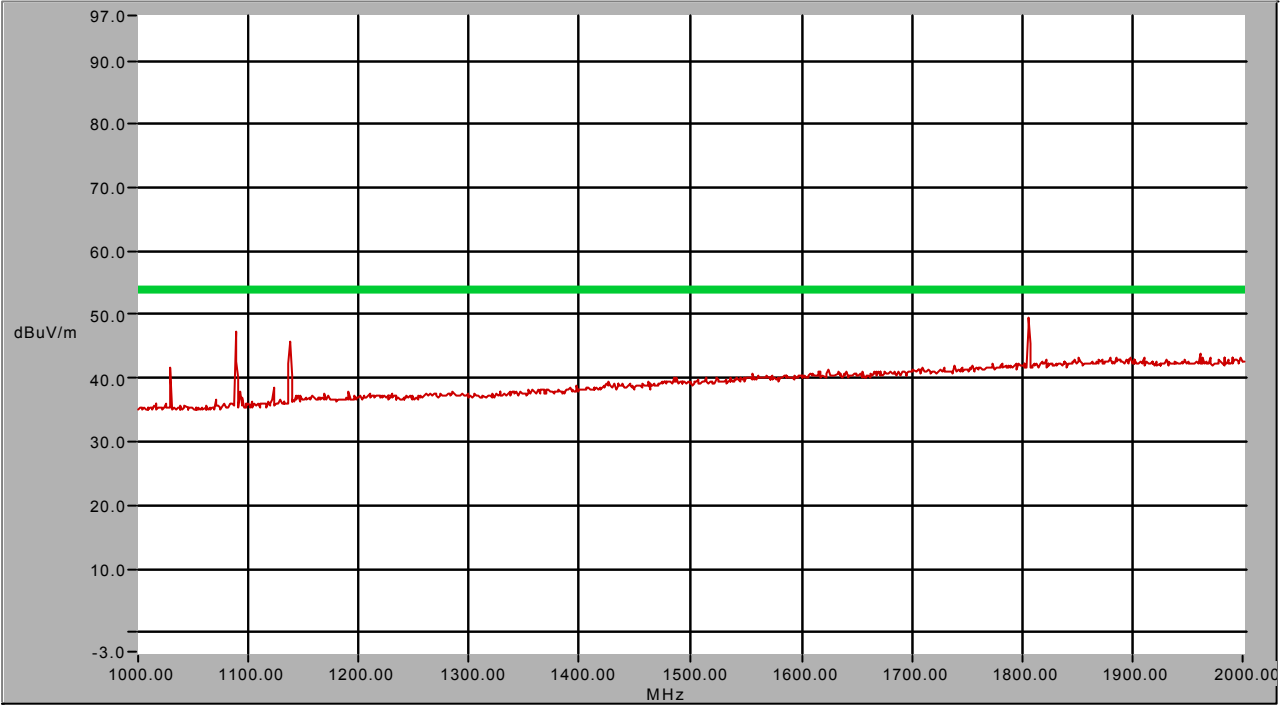
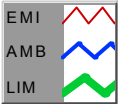
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 880.540    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 931.865    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999 4:11 PM  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

Plot Number: 15



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588v3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |

**AVERAGE DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1095.700   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1804.399   | 279           | 172         | 11.70           | 27.86   | 5.79    | 0.00    | 45.35        | 53.98          | Pass    |

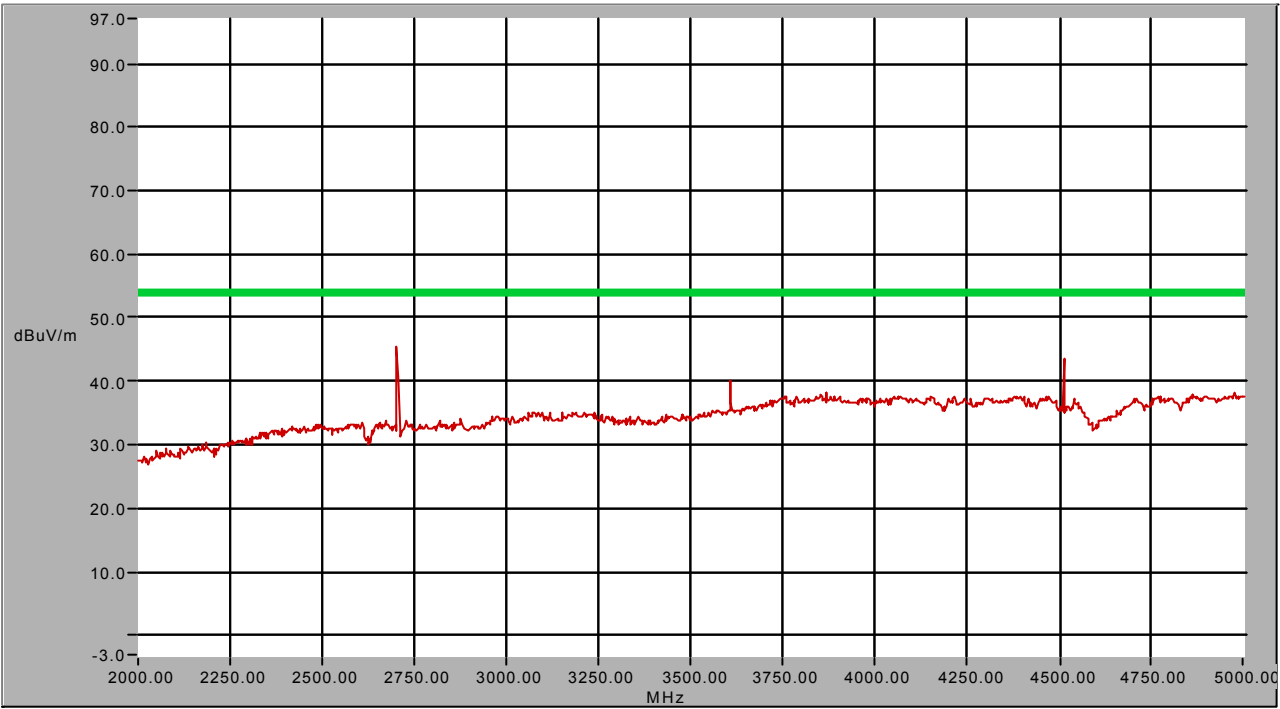
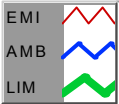
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 2 - 5 GHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

10:18 AM

Plot Number: 16



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588v3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 2706.608   | 177           | 131         | 70.20           | 30.85   | 7.58    | -62.90  | 45.74        | 53.98          | Pass   |

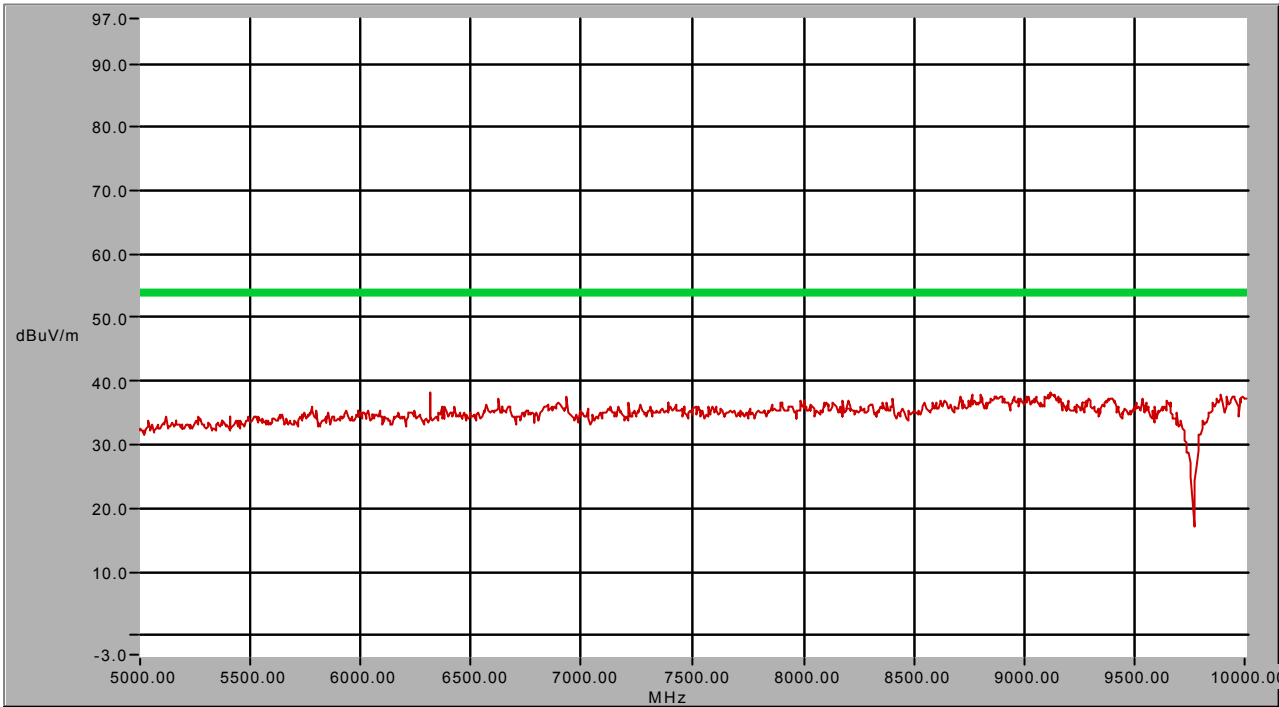
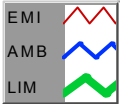
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 5 - 10 GHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

10:29 AM

Plot Number: 17



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588v3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

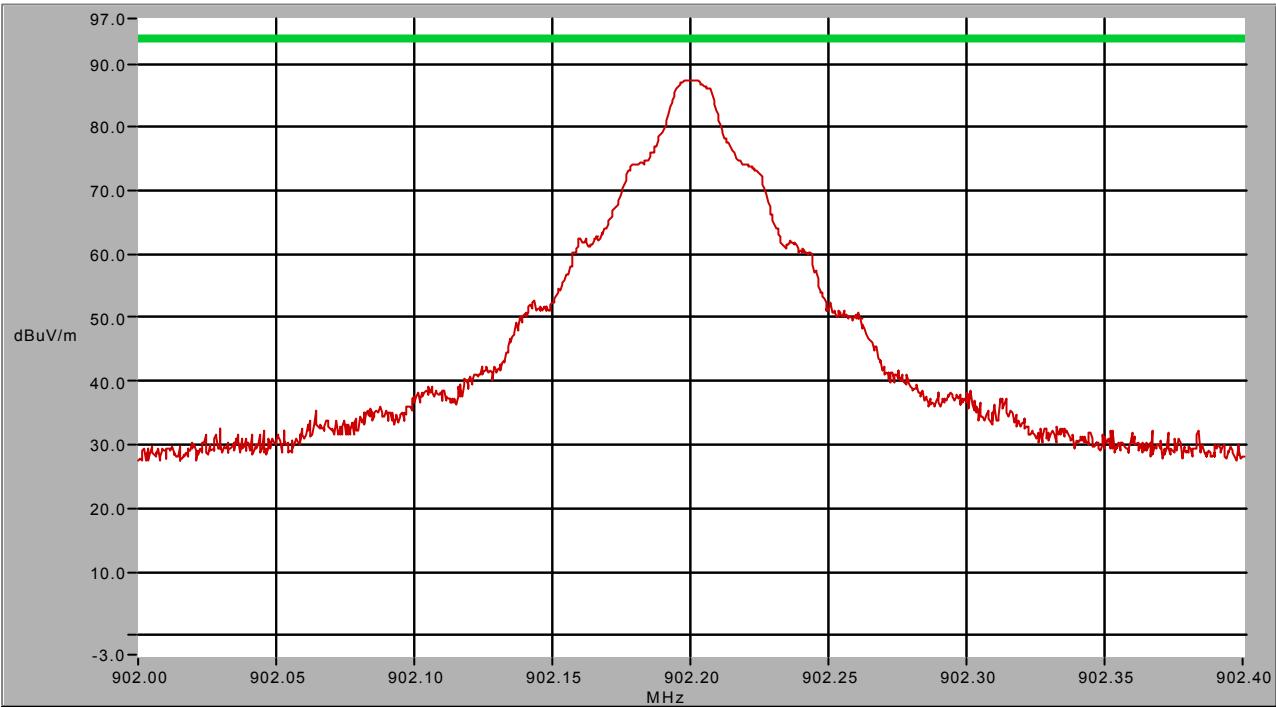
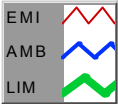
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 902.0 - 902.4 MHz  
Mode of Operation: Transmit @ 902.2  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone Networks  
Product: Transmitter modual model 1  
Serial #: 1

11:25 AM

Plot Number: 18



VBW 30.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW 10.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |
| zero.DAT         | 23/4/1997 |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 902.199    | 42            | 121         | 61.20           | 22.81   | 4.00    | 0.00    | 88.01        | 93.98          | Pass   |

## **Appendix 3**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
Transmitter Module Model 1  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 CLASS Subpart C  
Mid Channel Radiated Emissions**

**PROJECT NO. 308A12**

**TEST COMPLETED: 02 November, 1999**

**Client: E-Zone Networks Inc.**  
Don La Font  
520 - 5 Avenue SW  
Calgary, AB  
T2P 3R7

|                                             |          |
|---------------------------------------------|----------|
| <b>Test Report Data Sheets</b>              | .....Pg. |
| <b>Radiated Emissions Data</b>              | .....39  |
| Horizontal Polarization 30 MHz - 88 MHz     | .....39  |
| Horizontal Polarization 88 MHz - 200 MHz    | .....40  |
| Horizontal Polarization 200 MHz - 1 GHz     | .....41  |
| Horizontal Polarization 1 GHz - 2 GHz       | .....42  |
| Horizontal Polarization 2 GHz - 5 GHz       | .....43  |
| Horizontal Polarization 5 GHz - 10 GHz      | .....44  |
| Horizontal Polarization Transmitter Carrier | .....45  |
| Vertical Polarization 30 MHz - 88 MHz       | .....46  |
| Vertical Polarization 88 MHz - 200 MHz      | .....47  |
| Vertical Polarization 200 MHz - 1 GHz       | .....48  |
| Vertical Polarization 1 GHz - 2 GHz         | .....49  |
| Vertical Polarization 2 GHz - 5 GHz         | .....50  |
| Vertical Polarization 5 GHz - 10 GHz        | .....51  |
| Vertical Polarization Transmitter Carrier   | .....52  |

This testing was done using a Transmitter Module Model 1.  
 This Test was done using FCC Part 15 Class Subpart C specifications.

There were no variations to the test method.

The Transmitter Module Model 1 produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Class Subpart C radiated emissions while operating on the mid channel (915 MHz).

The Equipment Under Test is considered to have passed if the radiated power does not exceed the limit of the appropriate standard as shown in section 3.2 of this report.

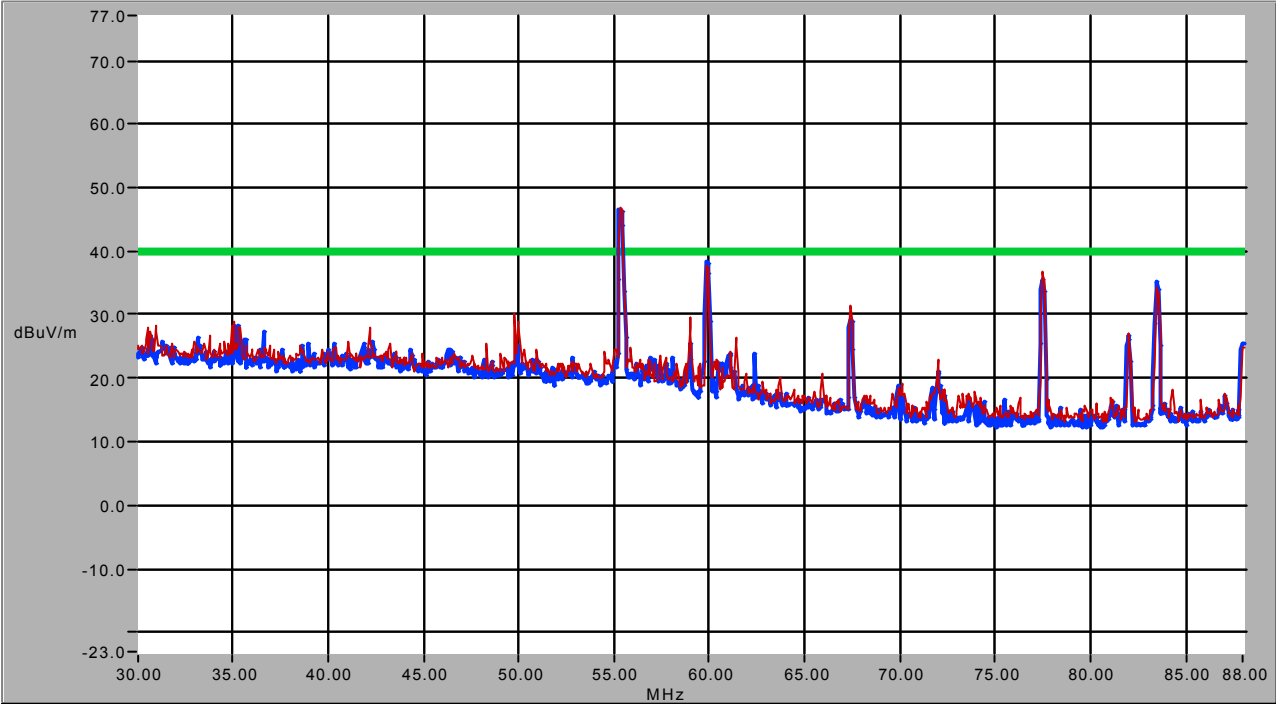
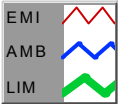
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

12:51 PM

Plot Number: 19



V BW 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

QUASI-PEAK DATA

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 55.248     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 59.742     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 77.282     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 83.224     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

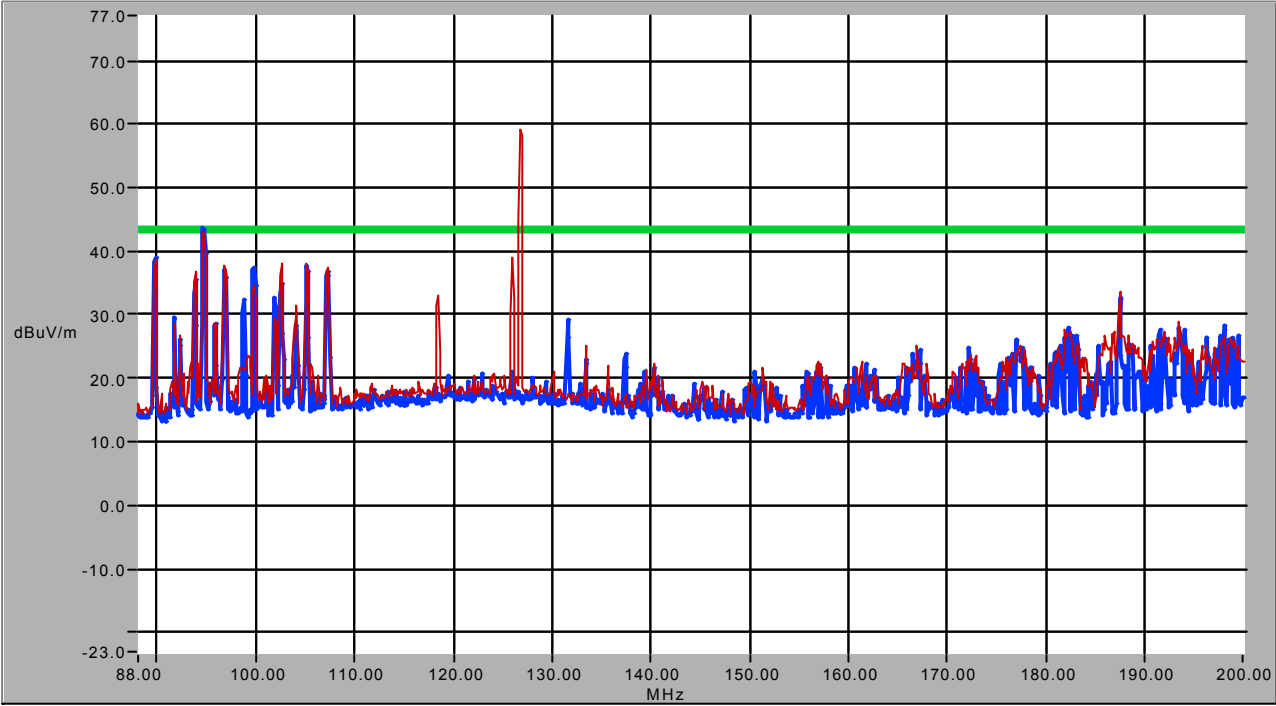
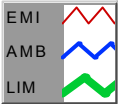
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

12:59 PM

Plot Number: 20



VBW 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

|             |           |
|-------------|-----------|
| ofts3m.dat  | 16/6/1999 |
| 04318h3.dat | 23/4/1998 |
| FCC15B3.DAT | 20/8/1998 |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 94.652     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 125.971    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 126.438    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

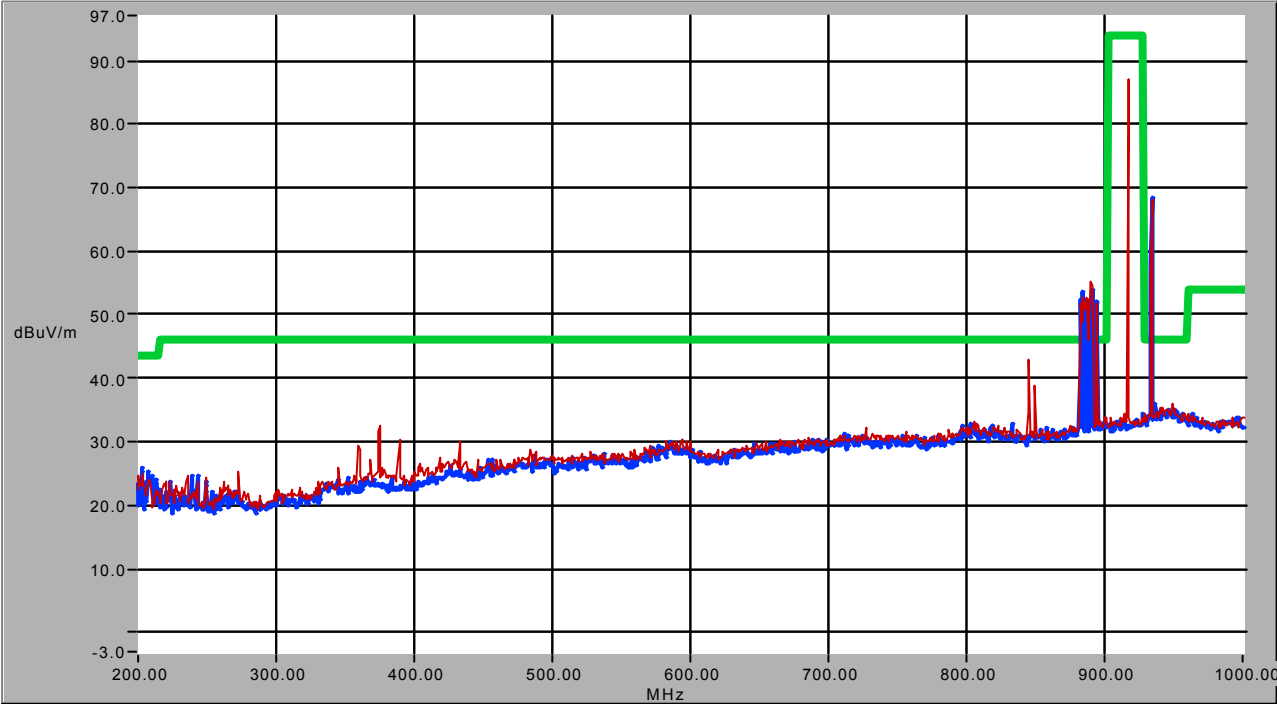
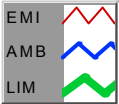
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

1:05 PM

Plot Number: 21



V BW 300.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

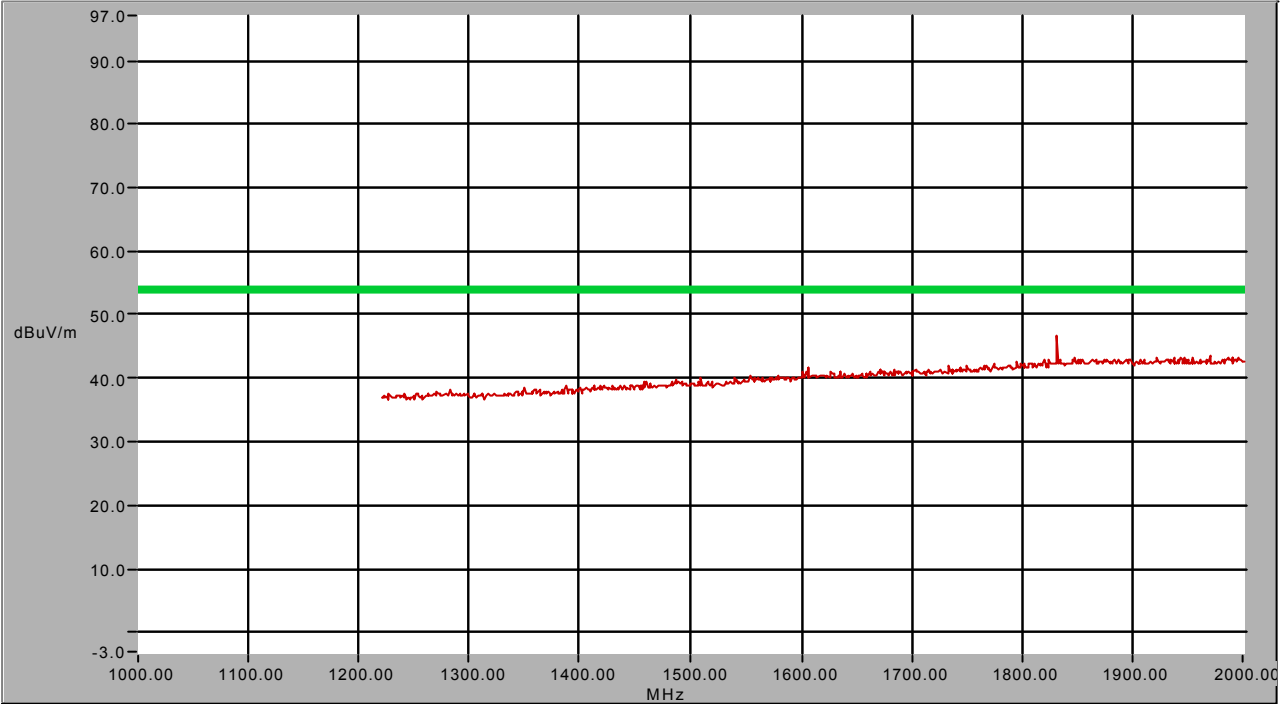
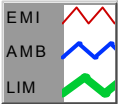
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 844.802    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 888.100    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 931.870    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999 3:50 PM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

Plot Number: 22



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |

QUASI-PEAK DATA

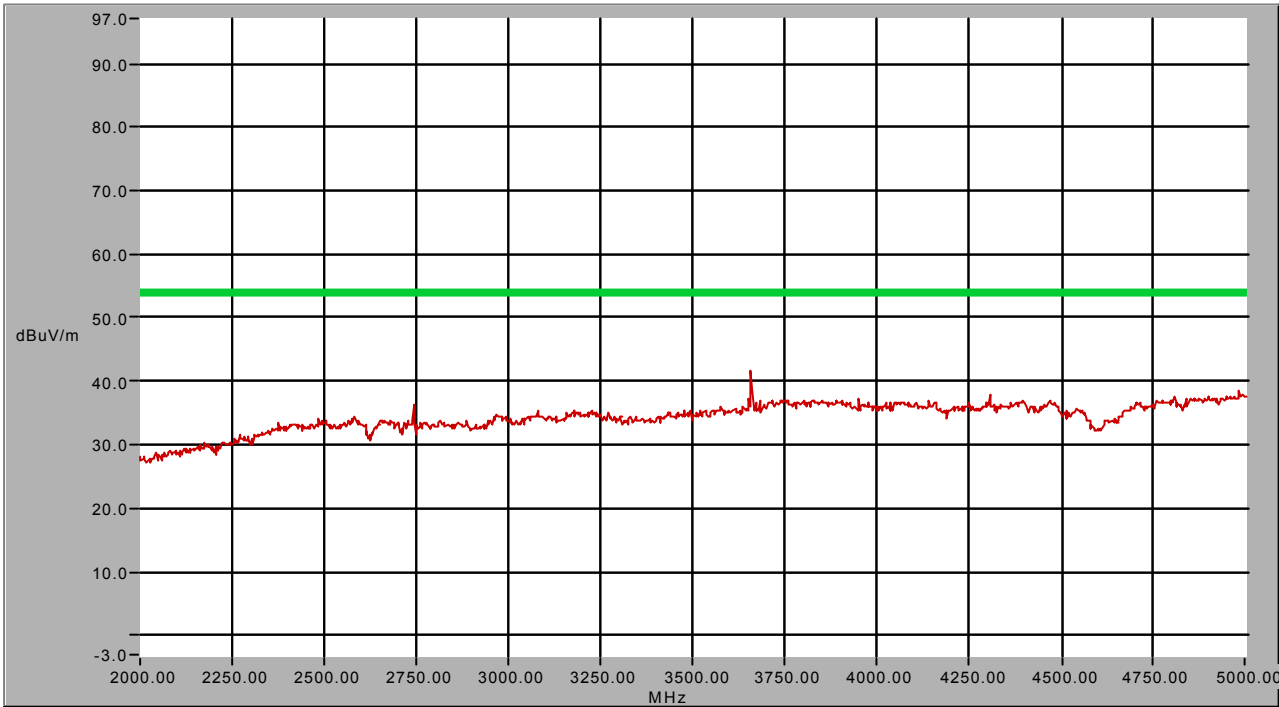
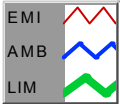
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1146.900   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1830.004   | 262           | 113         | 11.50           | 27.98   | 5.74    | 0.00    | 45.22        | 53.98          | Pass    |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 2 - 5 GHz  
Mode of Operation: Transmit @ 915 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999 10:46 AM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

Plot Number: 23



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW 1.000 MHz  | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

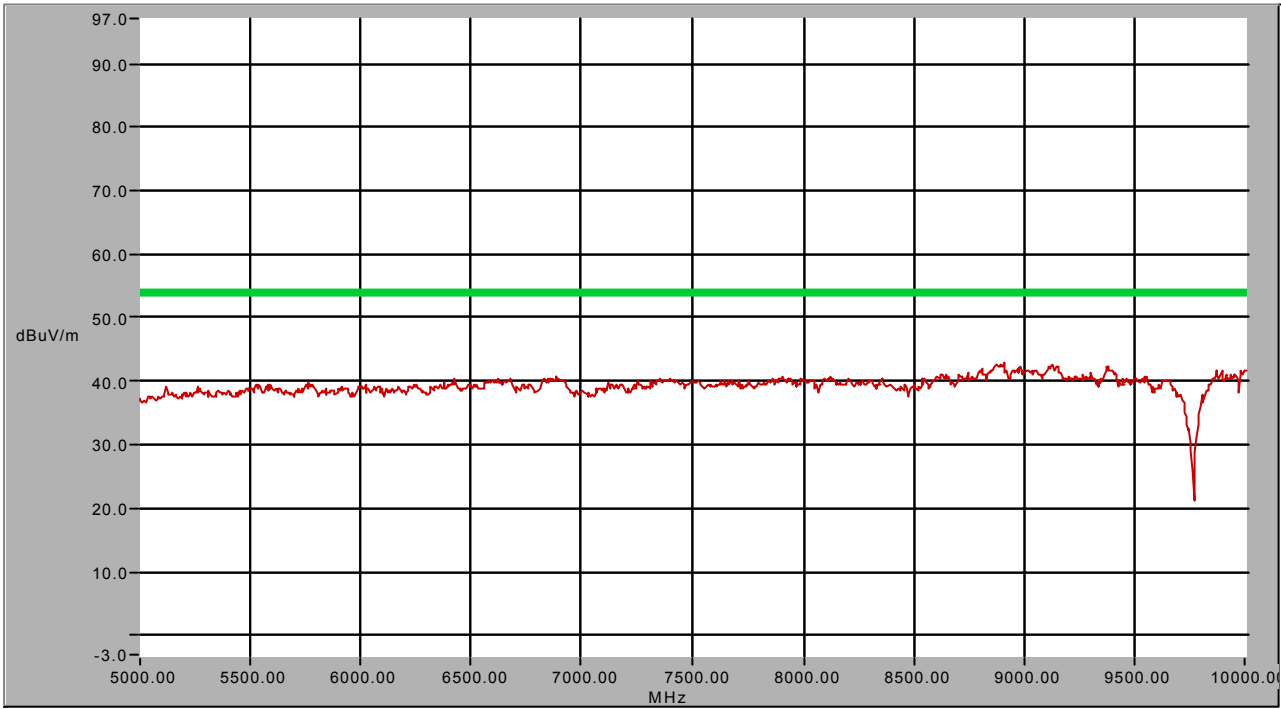
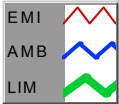
| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 5 - 10 GHz  
Mode of Operation: Transmit @ 915 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999 10:52 AM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

Plot Number: 24



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW 1.000 MHz  | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

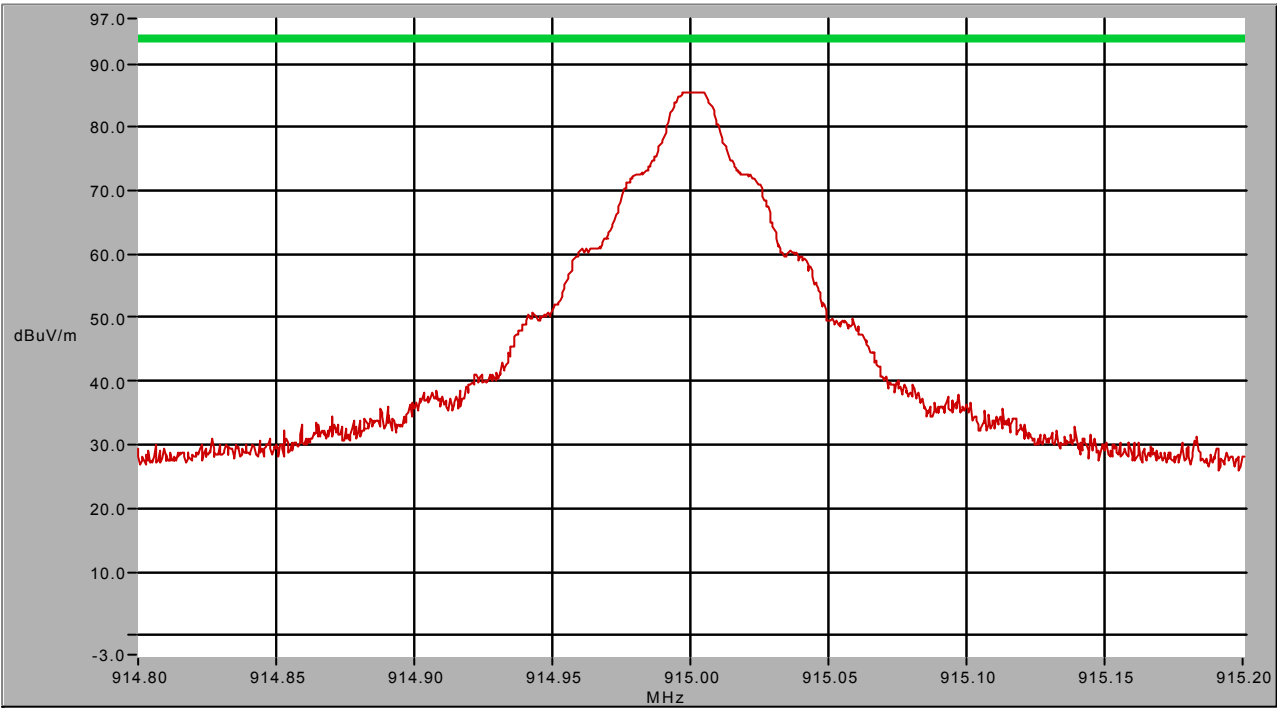
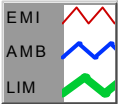
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 914.8 - 915.2 MHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

1:12 PM

Plot Number: 25



|                 |                        |                   |
|-----------------|------------------------|-------------------|
| VBW 30.000 kHz  | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 10.000 kHz | Ref. Lev: 77.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 915.000    | 85            | 113         | 53.20           | 23.90   | 4.00    | 0.00    | 81.10        | 93.98          | Pass   |

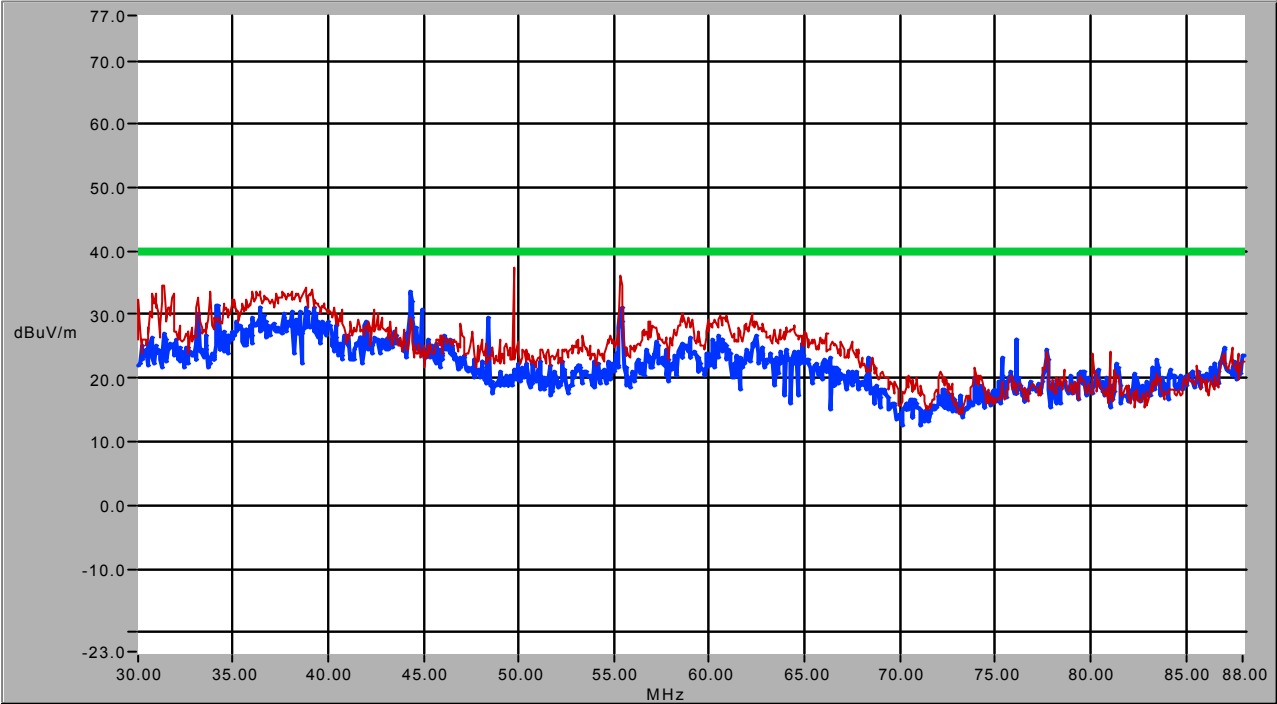
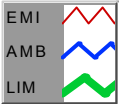
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit at 915 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

1:56 PM

Plot Number: 26



VBW 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 30.850     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 50.108     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 55.290     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

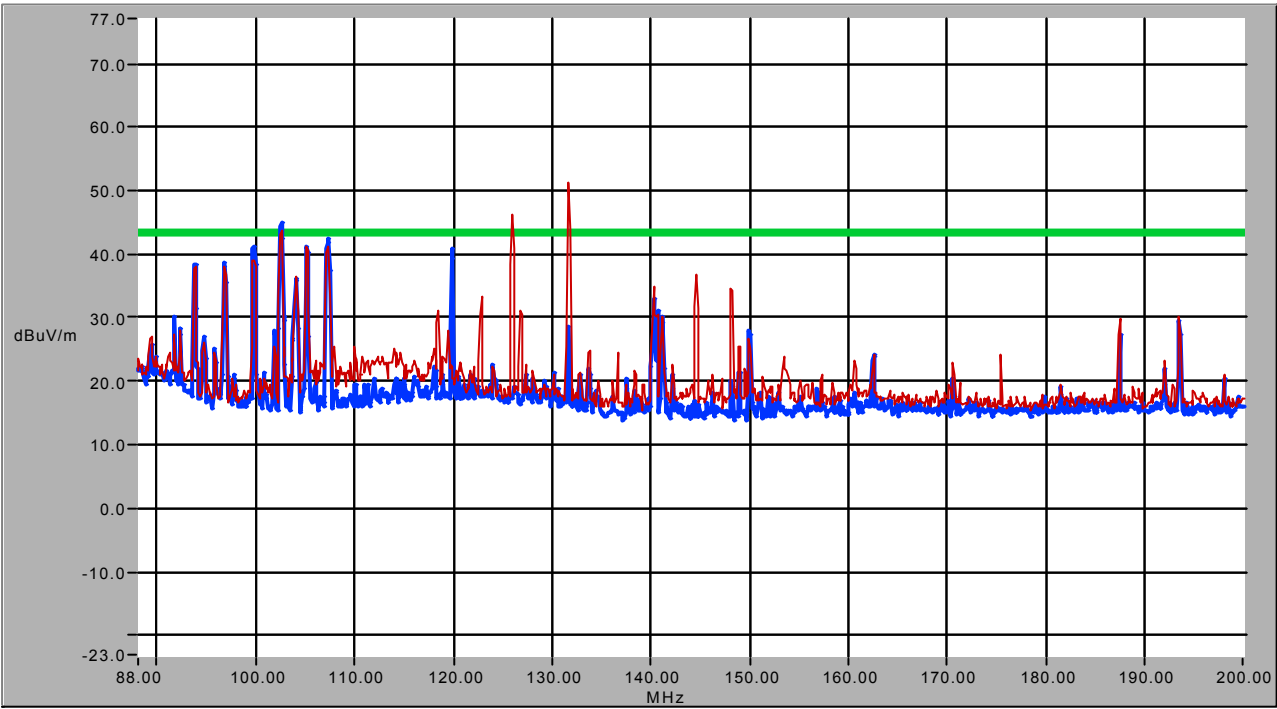
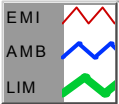
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

1:48 PM

Plot Number: 27



VBW 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files  
ofts3m.dat 16/6/1999  
04318v3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 98.874     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 102.104    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 105.058    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 107.282    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 119.510    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 126.072    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 131.722    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

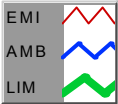
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

1:41 PM

Plot Number: 28



VBW 300.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

QUASI-PEAK DATA

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 884.055    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 931.720    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

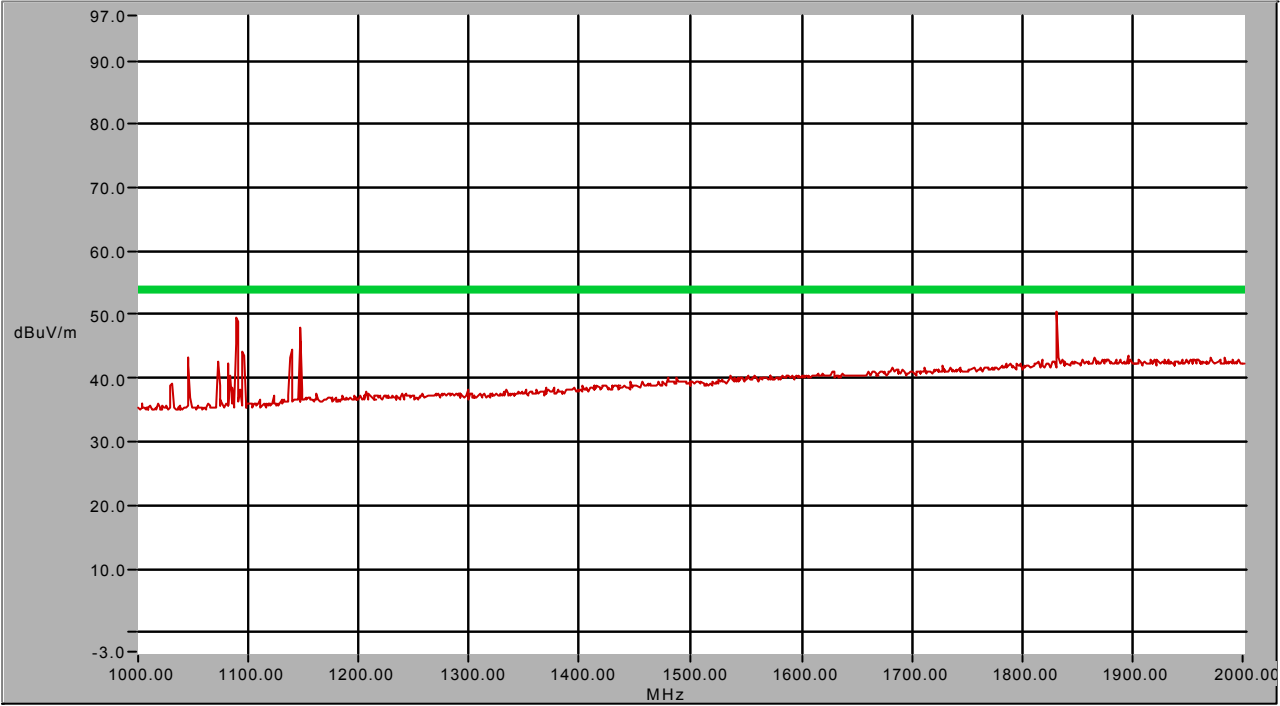
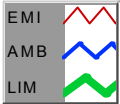
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit @ 915  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: 4:01 PM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

November 1, 1999

Plot Number: 29



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588v3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |

**AVERAGE DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1085.960   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1147.480   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1830.008   | 279           | 113         | 11.20           | 27.95   | 5.74    | 0.00    | 44.89        | 53.98          | Pass    |

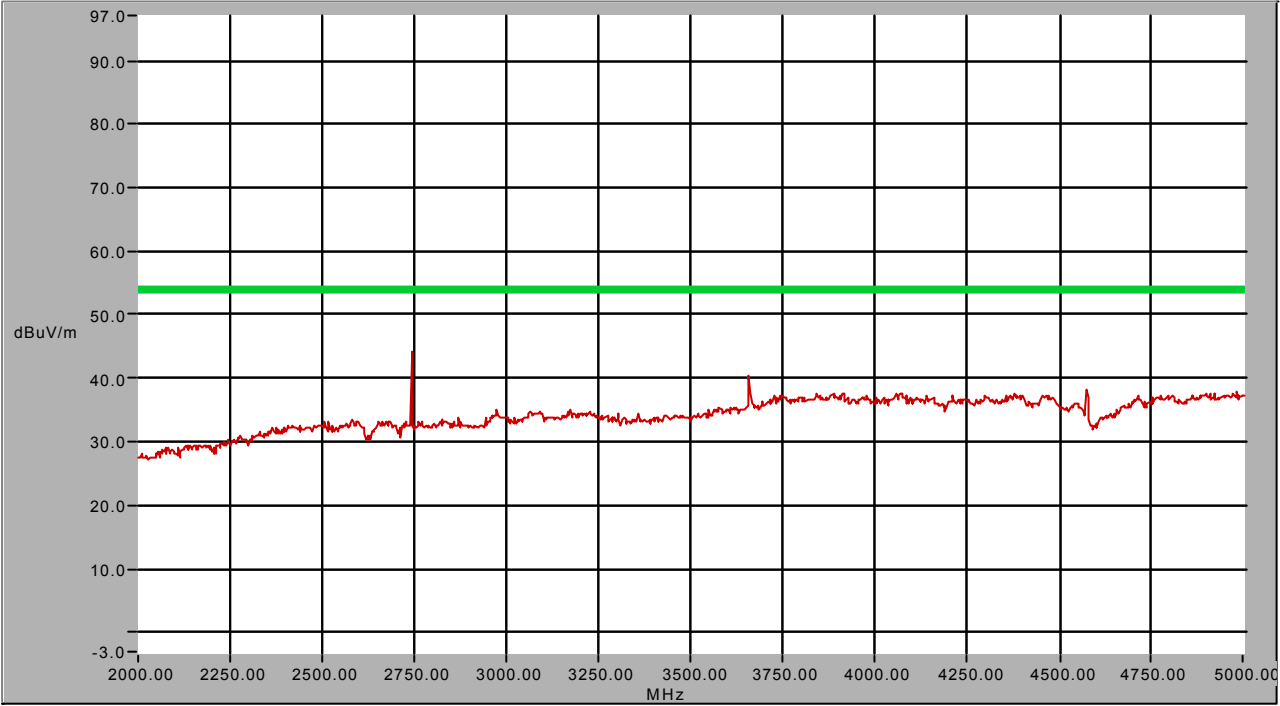
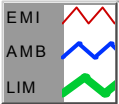
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 2-5 GHz  
Mode of Operation: Transmit @ 915 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

10:59 AM

Plot Number: 30



VBW 30.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999  
09588v3.dat 9/5/1997  
FCC15B3.DAT 20/8/1998  
Lnafilt.dat 8/8/1999

AVERAGE DATA

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 2745.004   | 178           | 124         | 68.90           | 30.94   | 7.60    | -62.88  | 44.56        | 53.98          | Pass   |

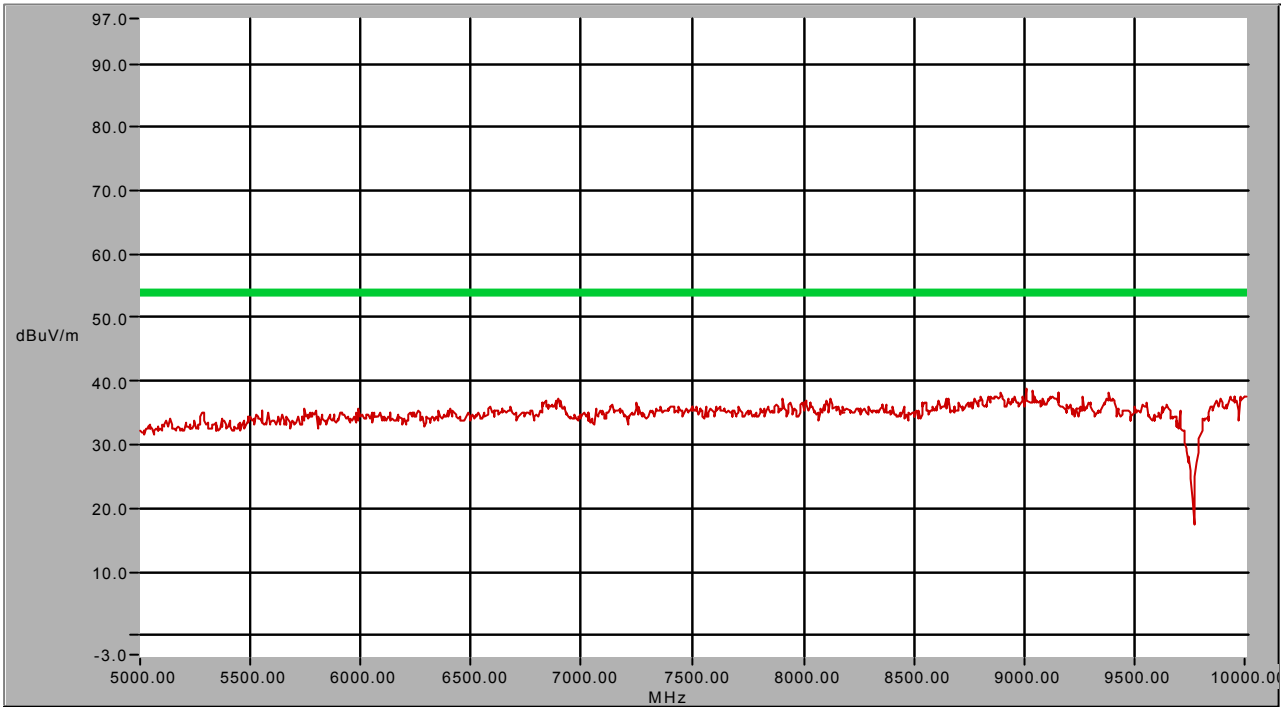
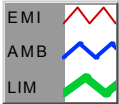
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 5 - 10 GHz  
Mode of Operation: Transmit @ 915 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

11:08 AM

Plot Number: 31



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588v3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

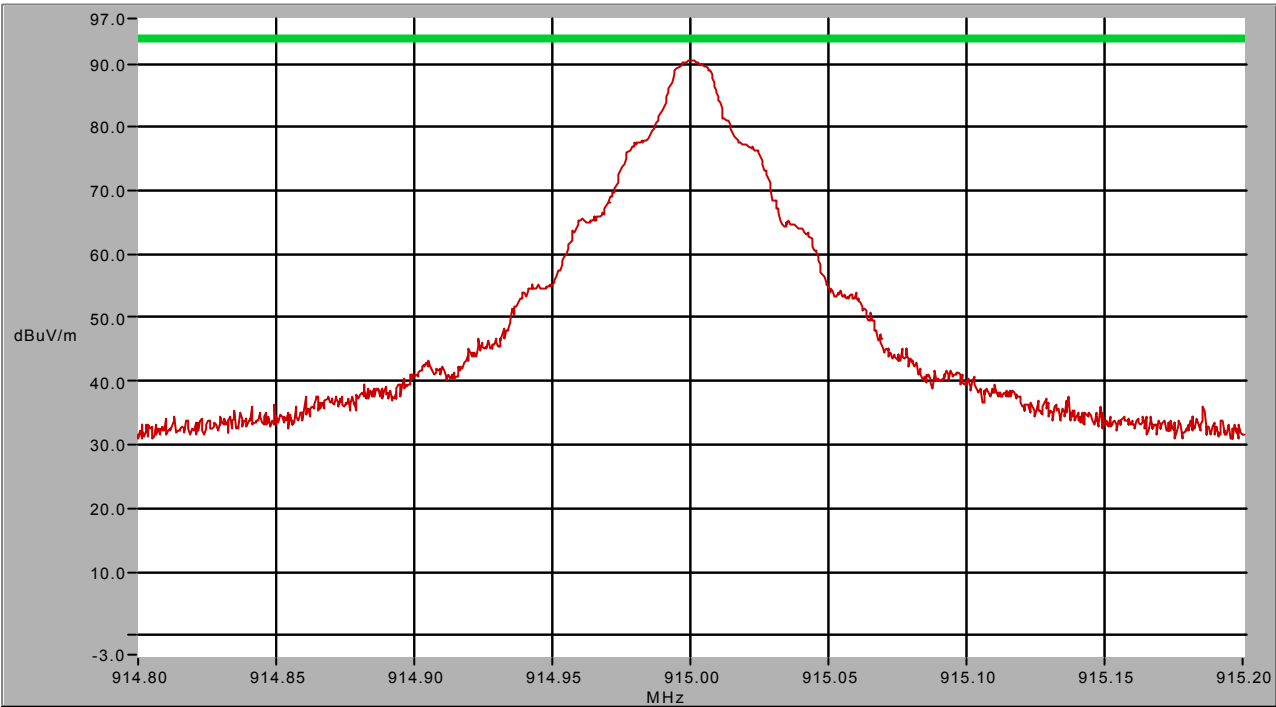
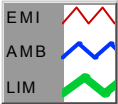
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 914.8 - 915.2 MHz  
Mode of Operation: Transmit at 915 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

1:25 PM

Plot Number: 32



|                 |                        |                   |
|-----------------|------------------------|-------------------|
| VBW 30.000 kHz  | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 10.000 kHz | Ref. Lev: 77.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 915.002    | 151           | 132         | 65.70           | 22.87   | 4.00    | 0.00    | 92.57        | 93.98          | Pass   |

## **Appendix 4**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
Transmitter Module Model 1  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 CLASS Subpart C  
High Channel Radiated Emissions**

**PROJECT NO. 308A12**

**TEST COMPLETED: 02 November, 1999**

**Client: E-Zone Networks Inc.**  
Don La Font  
520 - 5 Avenue SW  
Calgary, AB  
T2P 3R7

|                                             |          |
|---------------------------------------------|----------|
| <b>Test Report Data Sheets</b>              | .....Pg. |
| <b>Radiated Emissions Data</b>              | .....55  |
| Horizontal Polarization 30 MHz - 88 MHz     | .....55  |
| Horizontal Polarization 88 MHz - 200 MHz    | .....56  |
| Horizontal Polarization 200 MHz - 1 GHz     | .....57  |
| Horizontal Polarization 1 GHz - 2 GHz       | .....58  |
| Horizontal Polarization 2 GHz - 5 GHz       | .....59  |
| Horizontal Polarization 5 GHz - 10 GHz      | .....60  |
| Horizontal Polarization Transmitter Carrier | .....61  |
| Vertical Polarization 30 MHz - 88 MHz       | .....62  |
| Vertical Polarization 88 MHz - 200 MHz      | .....63  |
| Vertical Polarization 200 MHz - 1 GHz       | .....64  |
| Vertical Polarization 1 GHz - 2 GHz         | .....65  |
| Vertical Polarization 2 GHz - 5 GHz         | .....66  |
| Vertical Polarization 5 GHz - 10 GHz        | .....67  |
| Vertical Polarization Transmitter Carrier   | .....68  |

This testing was done using a Transmitter Module Model 1.  
 This Test was done using FCC Part 15 Class Subpart C specifications.

There were no variations to the test method.

The Transmitter Module Model 1 produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Class Subpart C radiated emissions while operating on the high channel (927.8 MHz).

The Equipment Under Test is considered to have passed if the radiated power does not exceed the limit of the appropriate standard as shown in section 3.2 of this report.

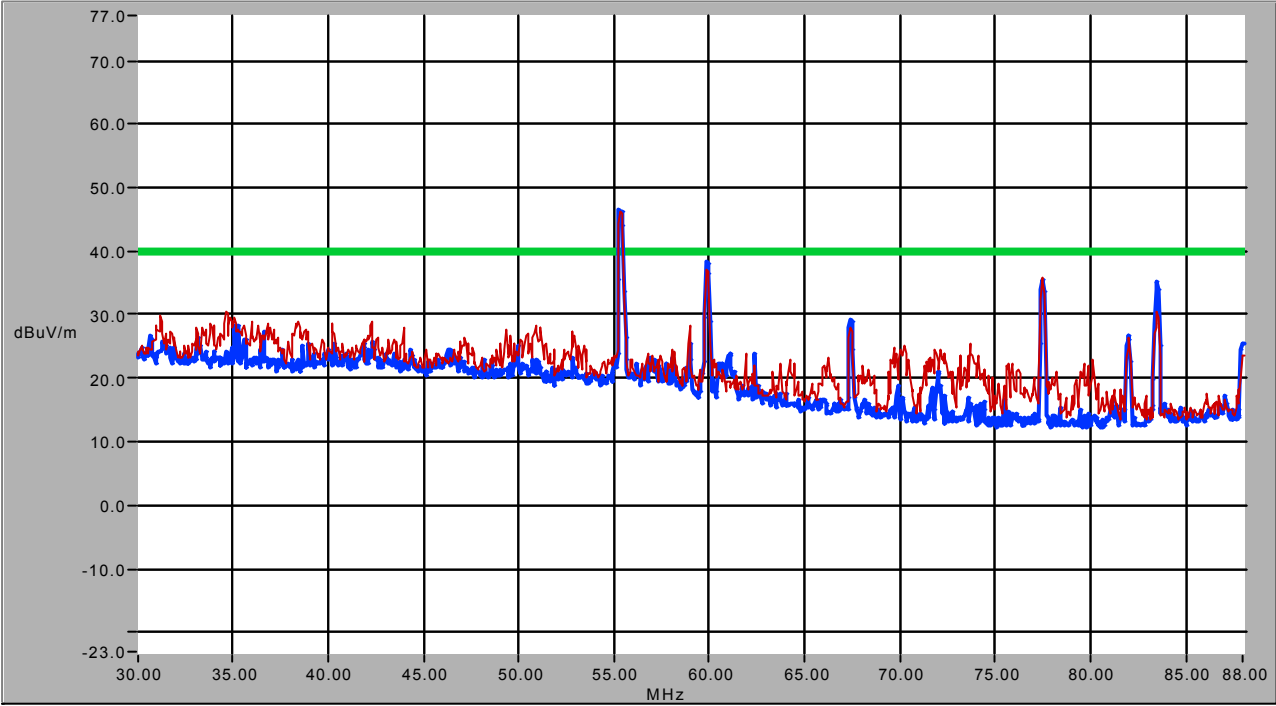
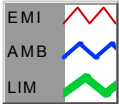
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

2:47 PM

Plot Number: 33



V BW 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

**QUASI-PEAK DATA**

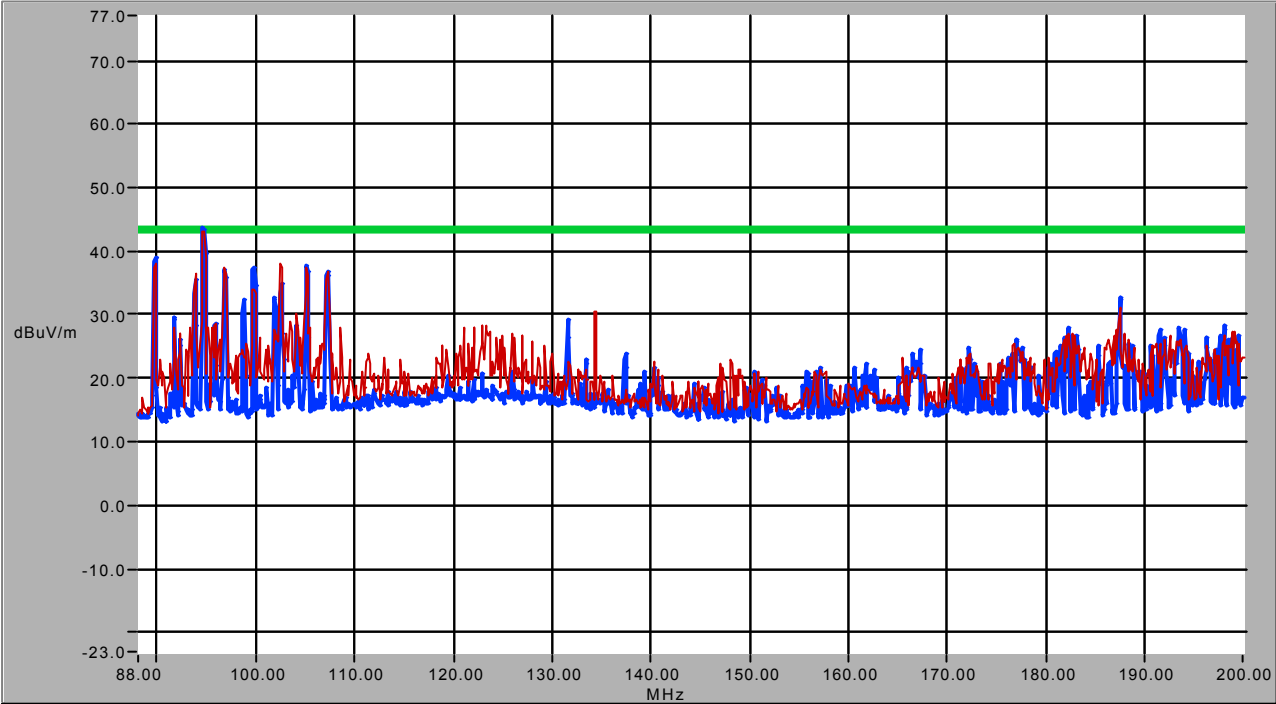
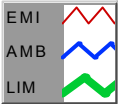
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 55.248     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 59.746     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 77.252     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 83.264     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999 3:03 PM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

Plot Number: 34



VBW 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

QUASI-PEAK DATA

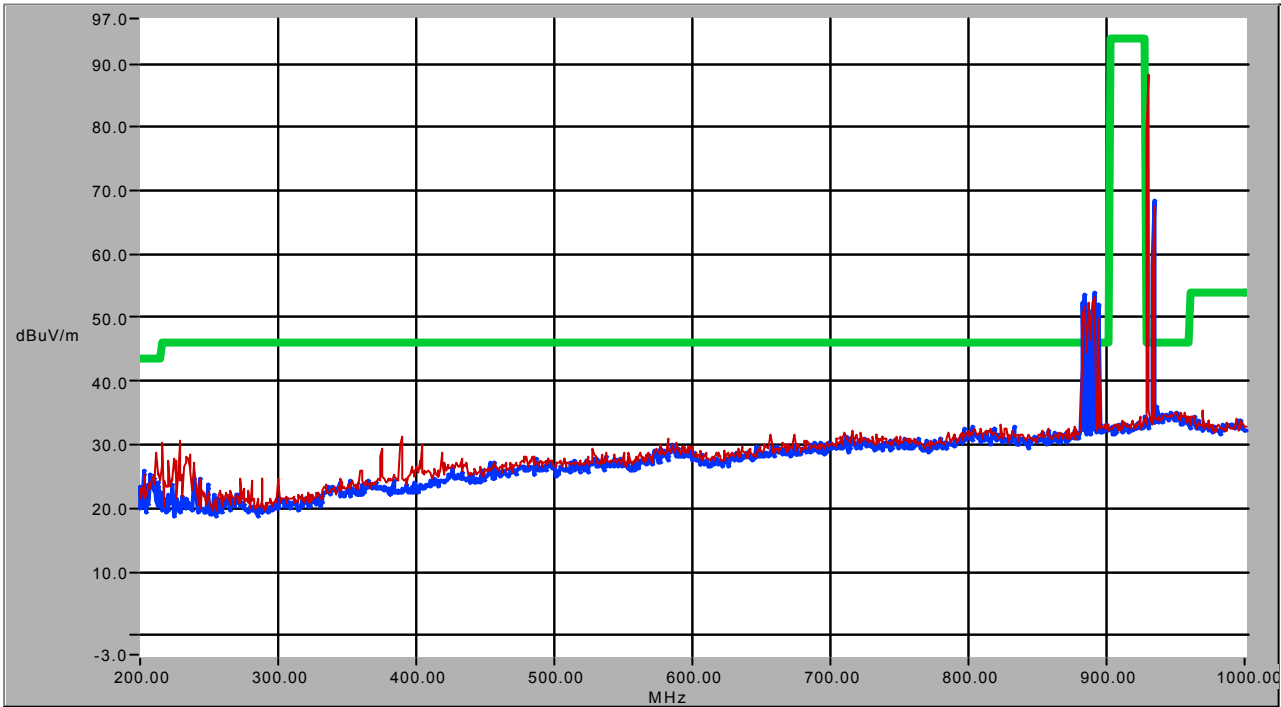
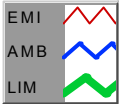
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 94.636     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999 3:08 PM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

Plot Number: 35



V BW 300.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 888.900    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 931.875    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

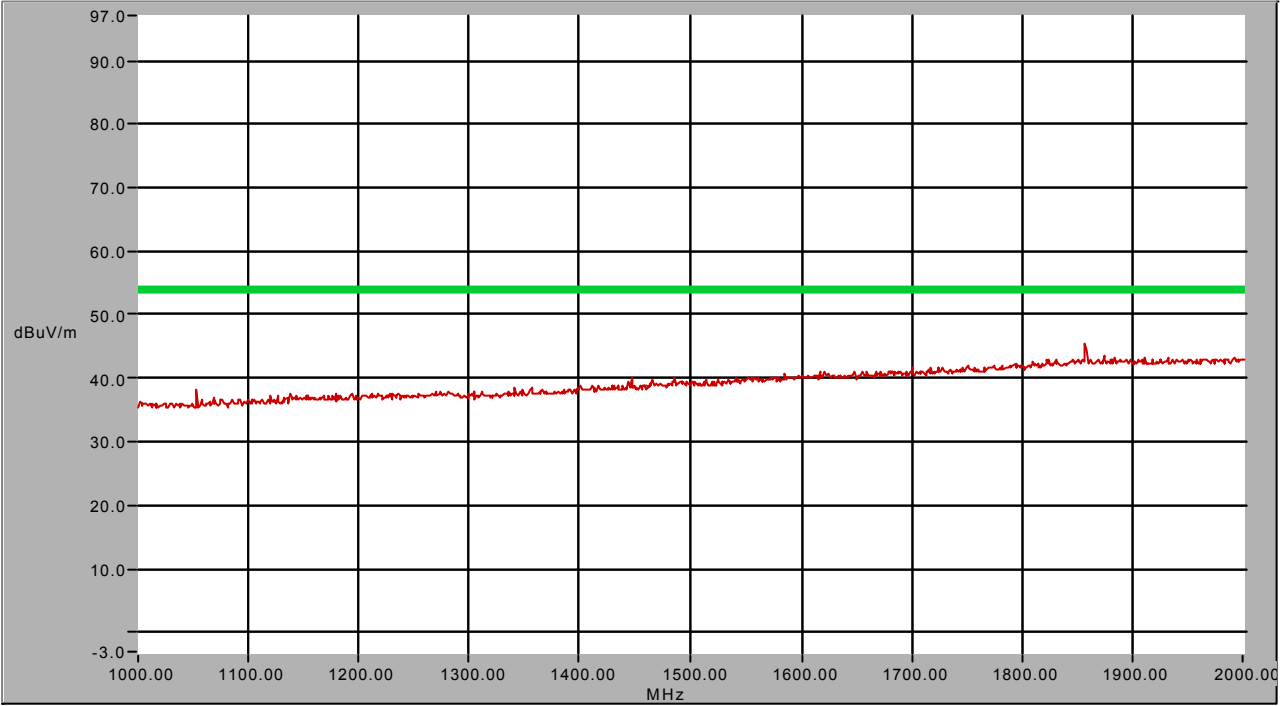
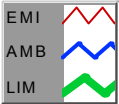
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

3:38 PM

Plot Number: 36



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |

**AVERAGE DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 1855.770   | 259           | 278         | 10.50           | 28.11   | 5.69    | 0.00    | 44.30        | 53.98          | Pass   |

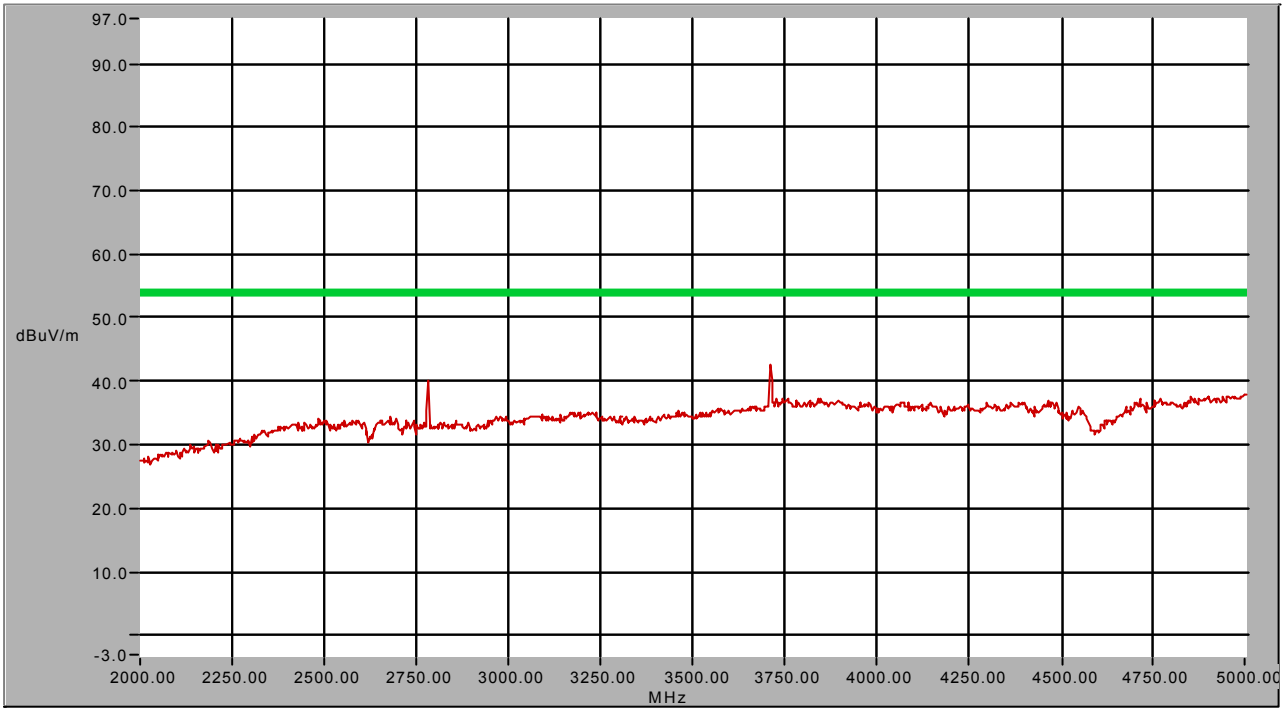
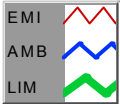
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 2-5 GHz  
Mode of Operation: Transmit @ 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

11:34 AM

Plot Number: 37



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW 1.000 MHz  | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

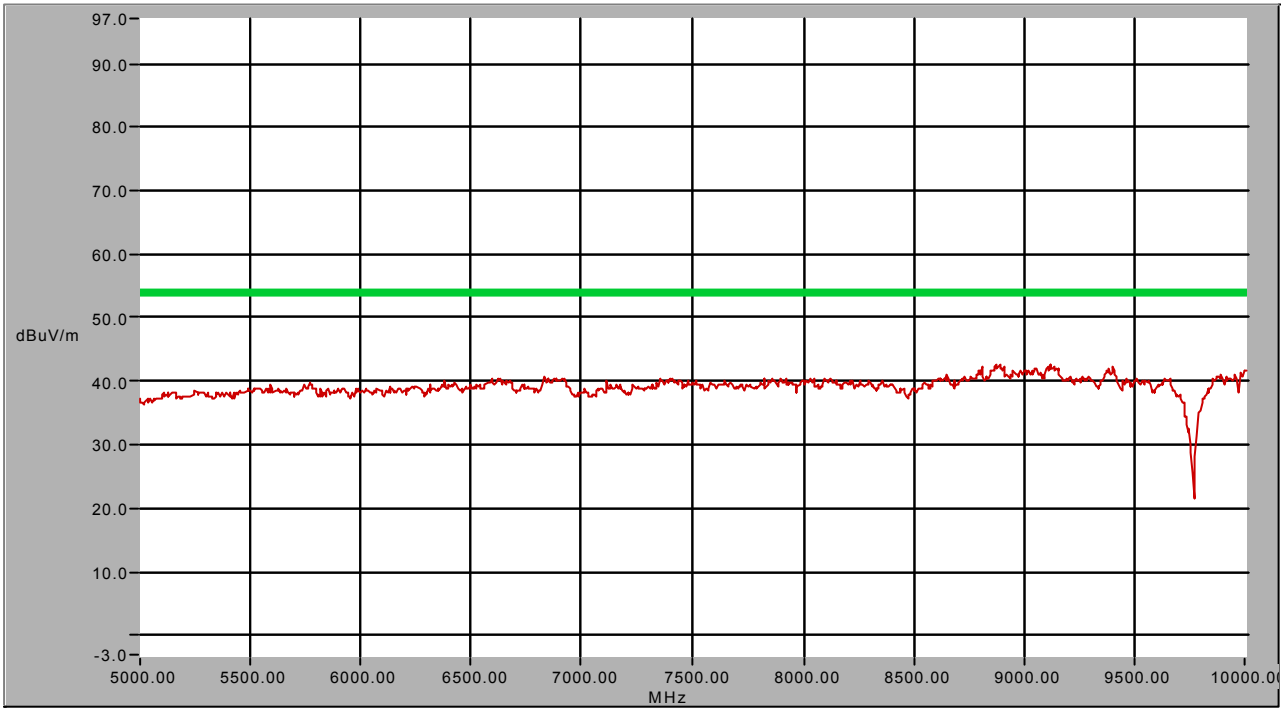
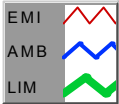
| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 5 - 10 GHz  
Mode of Operation: Transmit @ 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999 11:40 AM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

Plot Number: 38



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW 1.000 MHz  | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

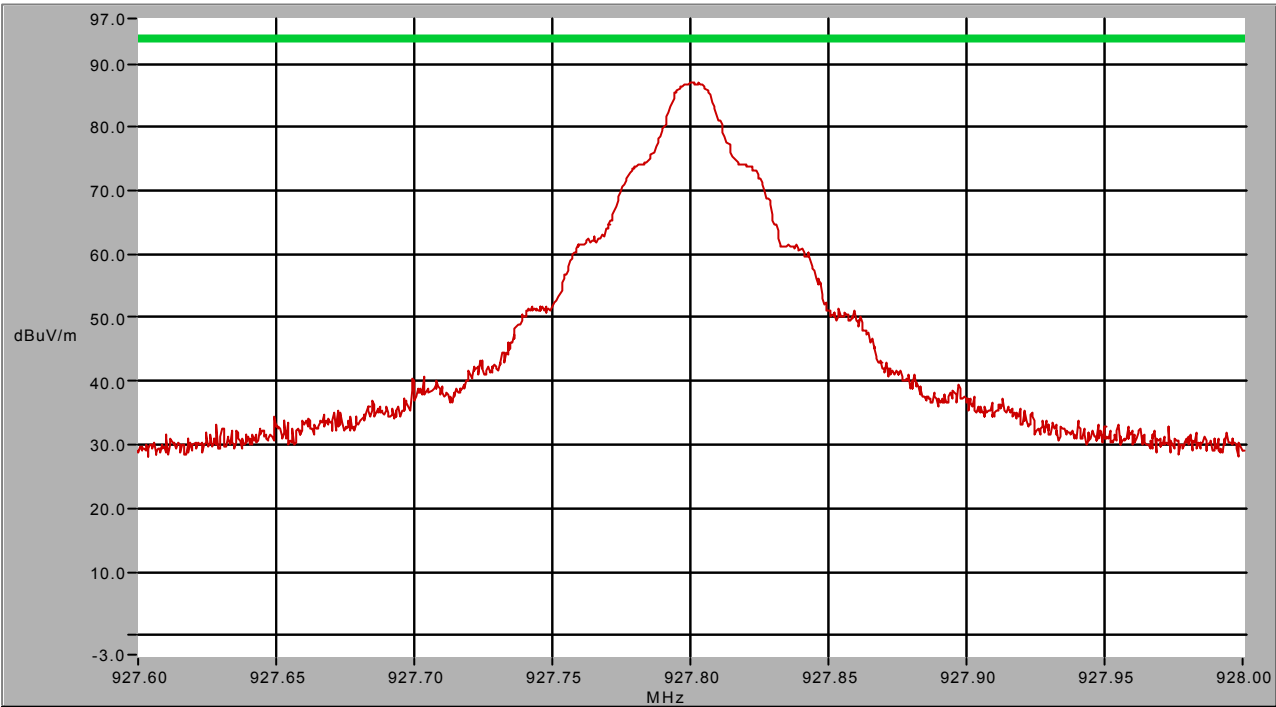
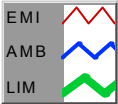
| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Subpart C at 3m**

Title: 927.6 - 928 MHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999 3:14 PM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

Plot Number: 39



VBW 30.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW 10.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318h3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 927.801    | 88            | 113         | 54.40           | 24.30   | 4.00    | 0.00    | 82.70        | 93.98          | Pass   |

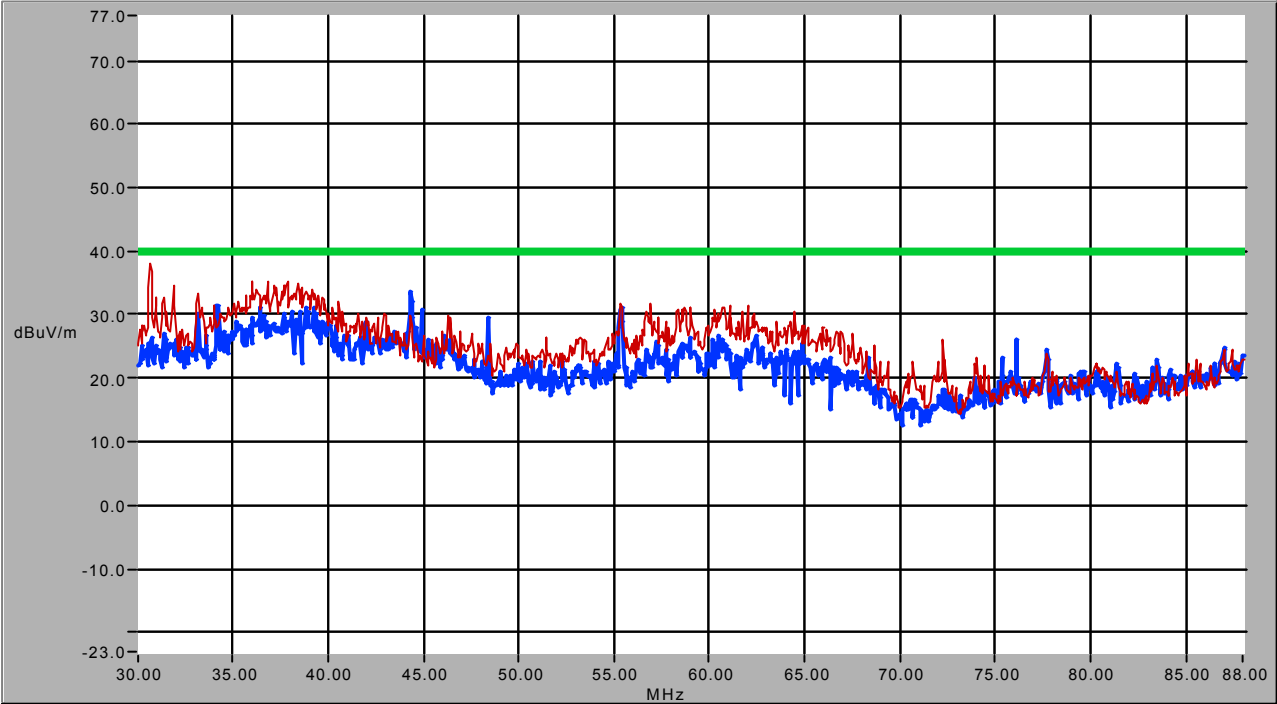
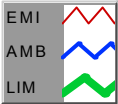
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit at 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

2:10 PM

Plot Number: 40



|      |             |             |              |           |         |
|------|-------------|-------------|--------------|-----------|---------|
| V BW | 300.000 kHz | Sweep Time: | 50.00 ms     | PR Atten: | 0.00 dB |
| RBW: | 1.000 MHz   | Ref. Lev:   | 77.00 dBuV/m | An Atten: | 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 30.974     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

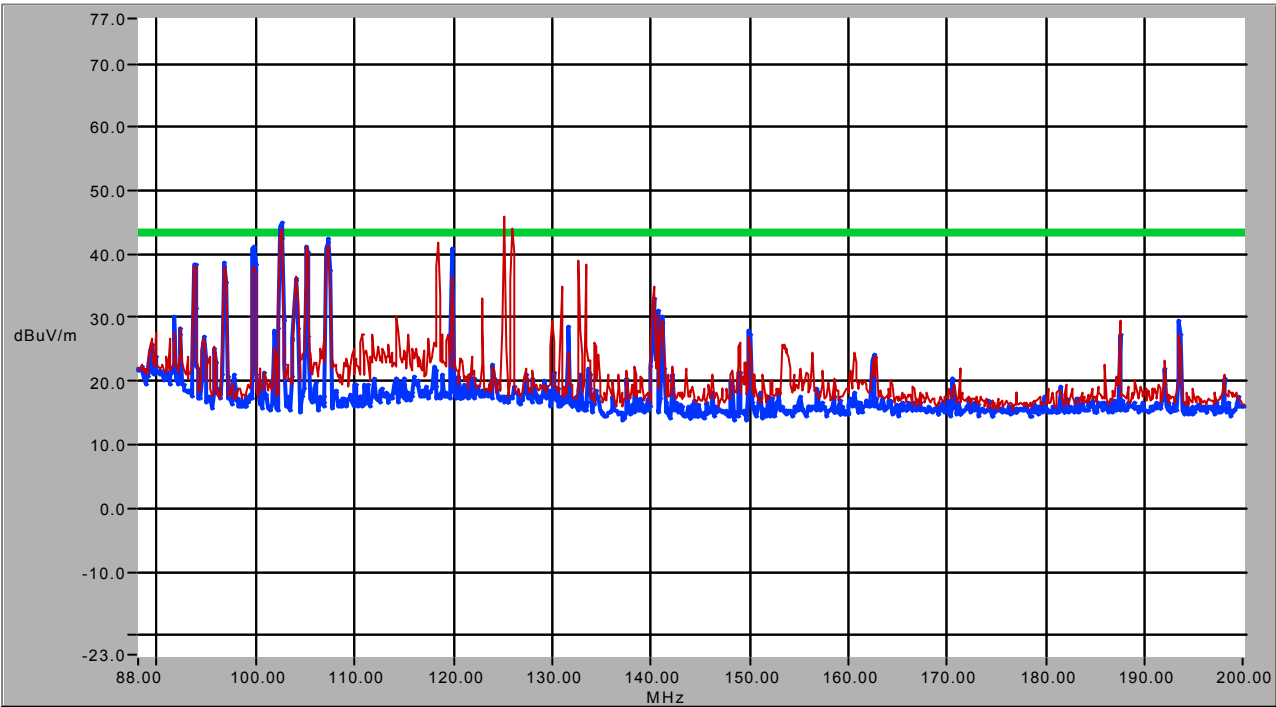
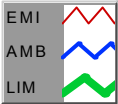
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

2:17 PM

Plot Number: 41



VBW 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| FCC15B3.DAT      | 20/8/1998 |

QUASI-PEAK DATA

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 98.876     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 102.096    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 105.032    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 107.324    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 118.010    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 120.016    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 125.734    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 125.872    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 132.794    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 132.768    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

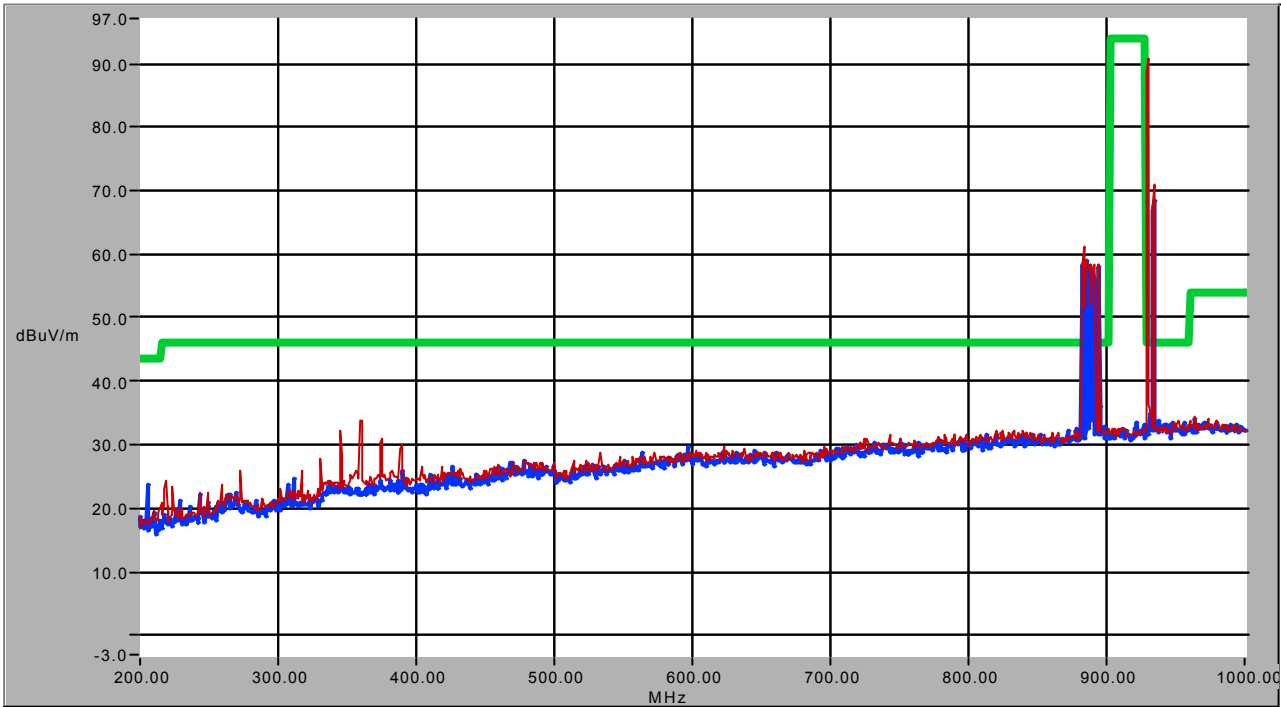
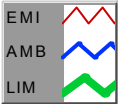
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

2:25 PM

Plot Number: 42



VBW 300.000 kHz Sweep Time: 200.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

**QUASI-PEAK DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 884.045    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 931.718    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

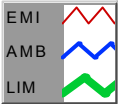
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: 3:27 PM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

November 1, 1999

Plot Number: 43



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 1.000 MHz | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588v3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |

**AVERAGE DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1089.680   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1138.060   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1855.605   | 216           | 135         | 13.00           | 28.05   | 5.69    | 0.00    | 46.74        | 53.98          | Pass    |

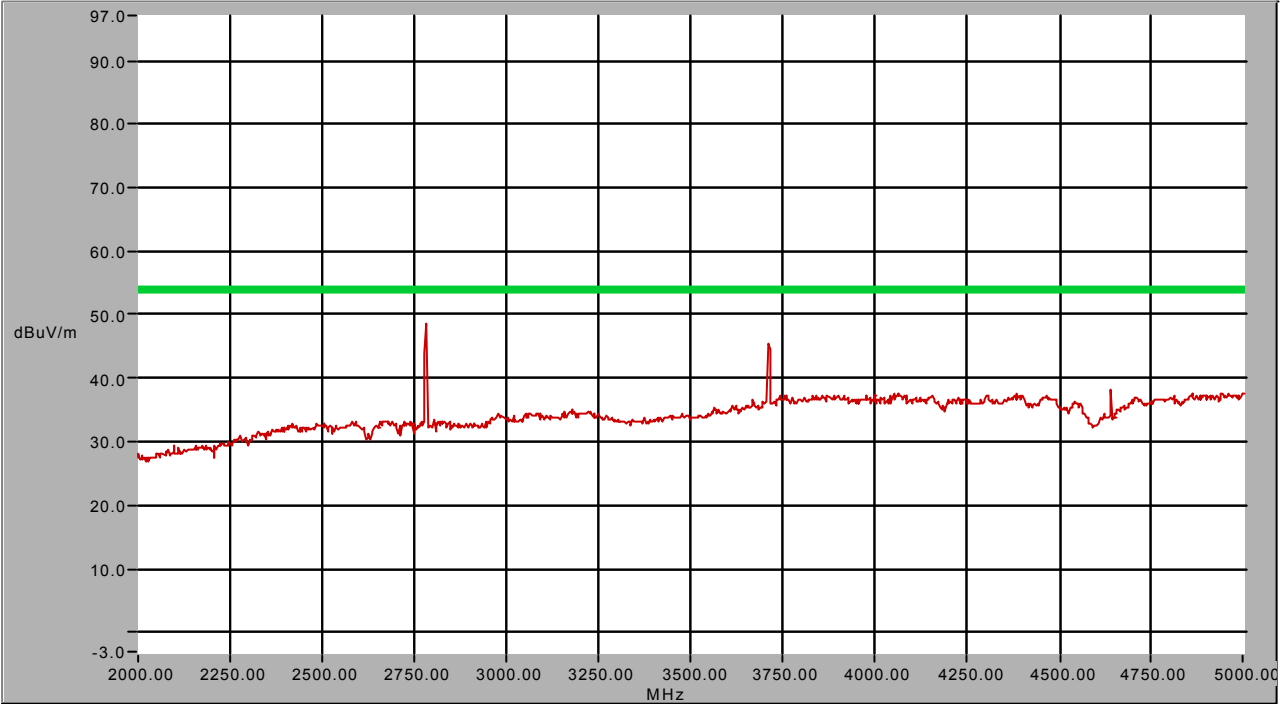
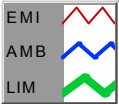
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 2 - 5 GHz  
Mode of Operation: Transmit @ 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

11:13 AM

Plot Number: 44



VBW 30.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588v3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

**AVERAGE DATA**

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 2783.370   | 184           | 127         | 71.10           | 31.02   | 7.61    | -62.86  | 46.88        | 53.98          | Pass   |
| 3711.216   | 127           | 120         | 66.00           | 33.59   | 8.52    | -63.11  | 45.00        | 53.98          | Pass   |

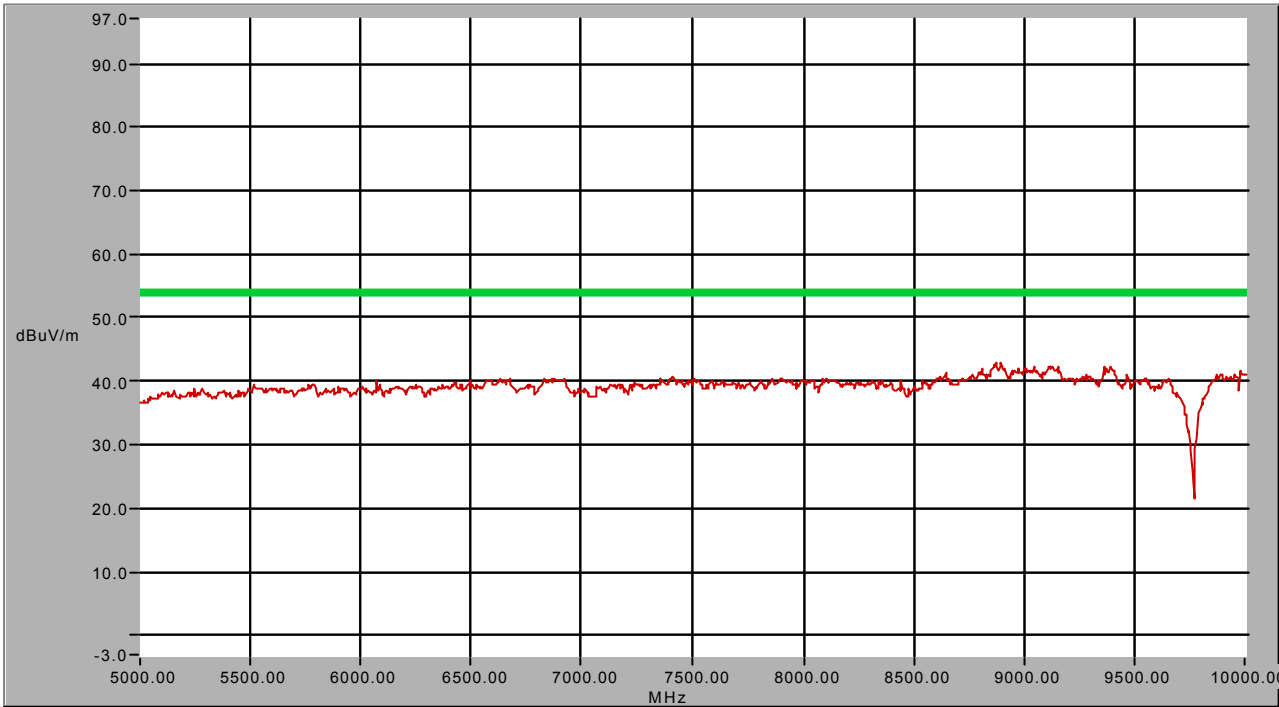
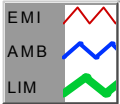
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 5 - 10 GHz  
Mode of Operation: Transmit @ 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 2, 1999  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modular Model 1  
Serial #: 1

11:28 AM

Plot Number: 45



|                |                        |                   |
|----------------|------------------------|-------------------|
| VBW 30.000 kHz | Sweep Time: Auto       | PR Atten: 0.00 dB |
| RBW 1.000 MHz  | Ref. Lev: 97.00 dBuV/m | An Atten: 0.00 dB |

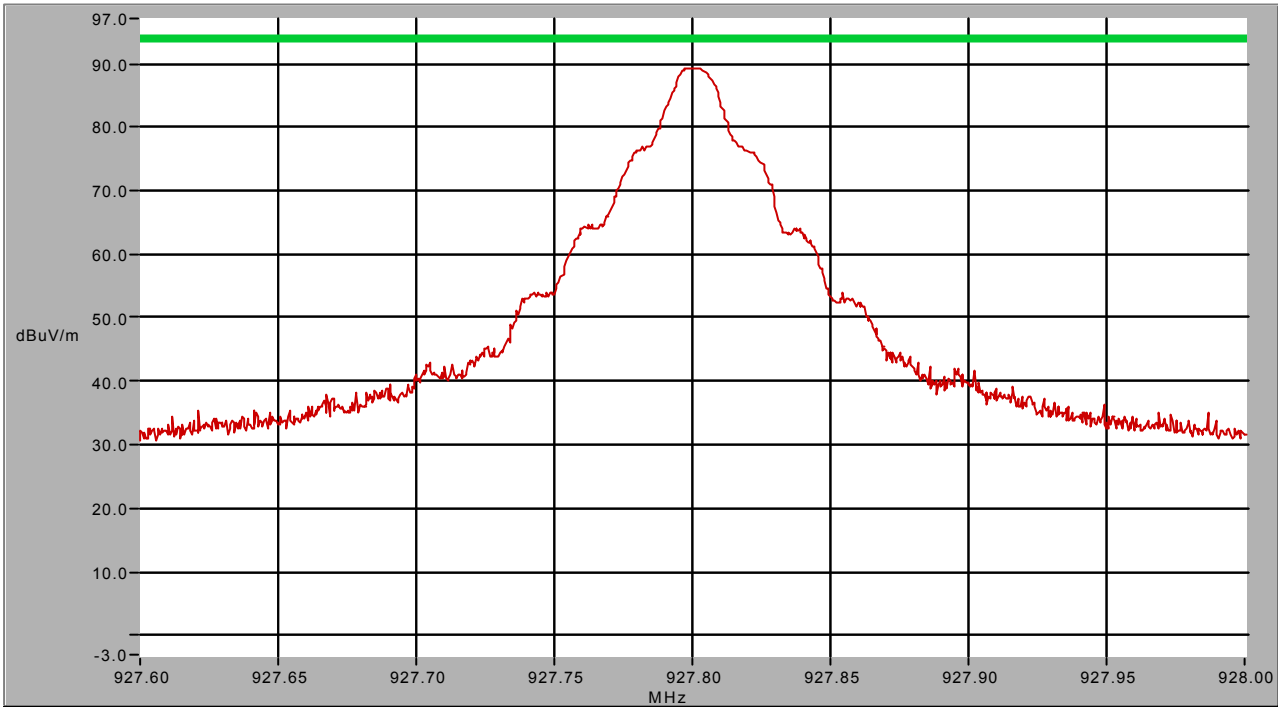
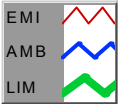
| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 09588h3.dat      | 9/5/1997  |
| FCC15B3.DAT      | 20/8/1998 |
| Lnafilt.dat      | 8/8/1999  |

**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Subpart C at 3m**

Title: 927.6 - 928 MHz  
Mode of Operation: Transmit @ 927.8  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: November 1, 1999 2:33 PM  
Project #: 308A12  
Company: E-Zone  
Product: Transmitter modual Model 1  
Serial #: 1

Plot Number: 46



|                 |                        |                   |
|-----------------|------------------------|-------------------|
| VBW 30.000 kHz  | Sweep Time: 200.00 ms  | PR Atten: 0.00 dB |
| RBW: 10.000 kHz | Ref. Lev: 77.00 dBuV/m | An Atten: 0.00 dB |

| Associated Files |           |
|------------------|-----------|
| ofts3m.dat       | 16/6/1999 |
| 04318v3.dat      | 23/4/1998 |
| 15.249.dat       | 4/2/1999  |

QUASI-PEAK DATA

| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | RESULT |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|--------|
| 927.799    | 294           | 136         | 64.00           | 23.01   | 4.00    | 0.00    | 91.01        | 93.98          | Pass   |

**END OF DOCUMENT**