

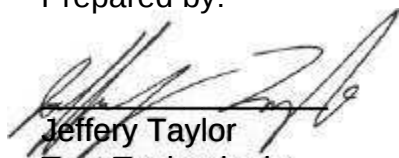
**EMI TEST REPORT  
FOR  
E-Zone Networks Inc.  
E-9000 Tower with Version 2 Transmitter  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 Subpart C**

**PROJECT NO. 308A08**

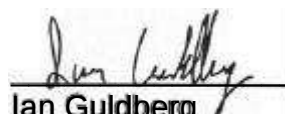
**TEST COMPLETED: 23 April, 1999**

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

Prepared by:

  
**Jeffery Taylor**  
Test Technologist  
EMI/EMC

Approved by:

  
**Ian Guldberg**  
Test Technologist  
EMI/EMC

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### 1.0 SUMMARY

The E-9000 Tower with Version 2 Transmitter, produced by E-Zone Networks Inc., **PASSED FCC Part 15 Subpart C under the provisions of 15.249**, radiated and conducted emissions in the configuration listed in this report on 23 April, 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 FCC part 15.

## **2.2 Applicant**

The E-9000 Tower with Version 2 Transmitter (EUT) is manufactured by:

E-Zone Networks Inc.  
520 - 5 Avenue SW  
Calgary, Alberta  
T2P 3R7

## **2.3 Applicability**

All test procedures, limits, and results defined in this document apply to the E-Zone Networks Inc.'s E-9000 Tower with Version 2 Transmitter.

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 E-9000 Tower with Version 2 Transmitter.

The E-9000 Tower with Version 2 Transmitter was a is an all inclusive entertainment system for use with wireless headsets. The 9000 Tower with Version 2 Transmitter operates in the 902 - 928 MHz ISM band. The 9000 Tower with Version 2 Transmitter was tested while transmitting at the lowest possible operating frequency (902.2 MHz), the middle frequency (915 MHz), and the highest possible operating frequency (927.8 MHz) (Conducted measurements were only tested with the transmitter at 915 MHz.). The transmitted signal was modulated with a 1 kHz tone and a 19 kHz tone using FM MPX modulation. The E-9000 Tower with Version 2 Transmitter had a video signal applied to the Video In port throughout the test.

The E-9000 Tower with Version 2 Transmitter was powered from the AC mains and was grounded to the AC mains.

<Other descriptions such as connections, manufacturer, and usage are to be included in parts lists and manuals.>

### 3.0 DETAILS OF FCC PART 15 SUBPART C

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

| Frequency of emission (MHz) | Class B Conducted limit (dB $\mu$ V) |
|-----------------------------|--------------------------------------|
| 0.45 to 1.705               | 47.95                                |
| 1.705 to 30.0               | 47.95                                |

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

| Frequency of emission (MHz) | Class B Field strength (dB $\mu$ V/m) (at 3 m) |
|-----------------------------|------------------------------------------------|
| 30 - 88                     | 40.0                                           |
| 88 - 216                    | 43.5                                           |
| 216 - 960                   | 46.0                                           |
| Above 960                   | 54.0                                           |

#### 3.3 Provisions Specified By 15.249

| FUNDAMENTAL FREQUENCY | FIELD STRENGTH OF FUNDAMENTAL (dB $m$ V/m) | FIELD STRENGTH OF HARMONICS (dB $m$ V/m) |
|-----------------------|--------------------------------------------|------------------------------------------|
| 902-928 MHz           | 93.98                                      | 53.98                                    |
| 2400-2483.5 MHz       | 93.98                                      | 53.98                                    |
| 5725-5875 MHz         | 93.98                                      | 53.98                                    |
| 24.0-24.25 GHz        | 107.96                                     | 67.96                                    |

## **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 Anechoic 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 dB 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 dB 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:  $\pm 2$  dB

### 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 dB 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

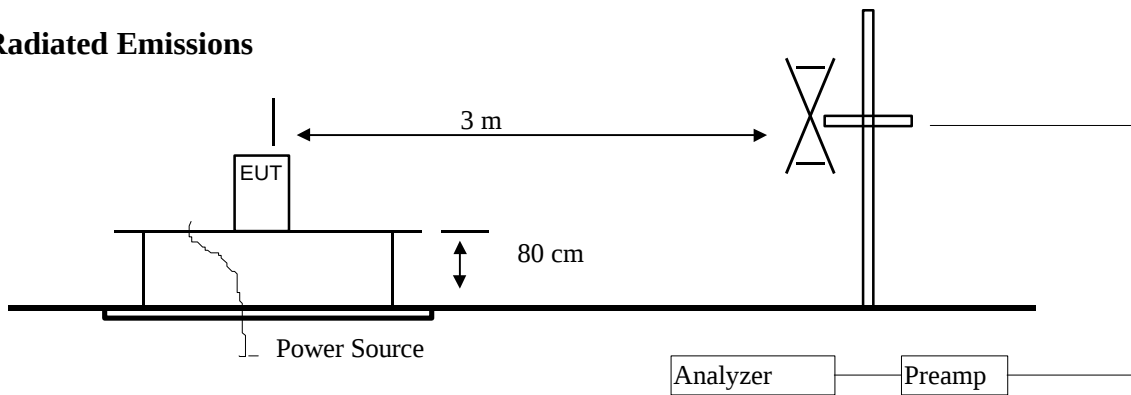
Power Handling Capability: 1000 W

Average VSWR: 2:1

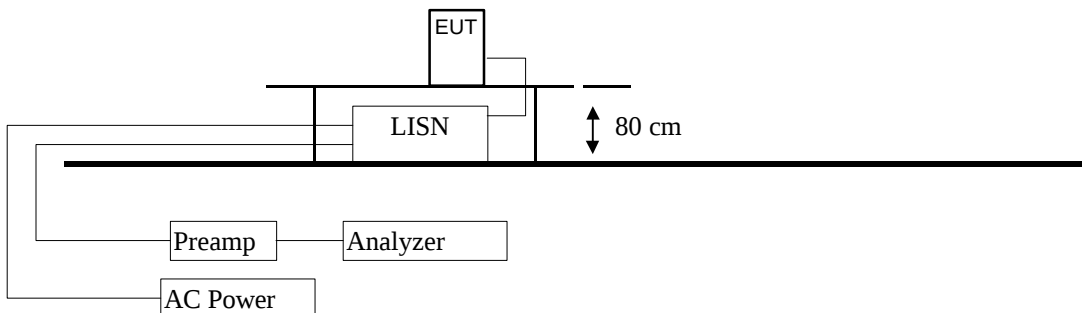
#### 4.3 Test Configuration

The following diagrams illustrate the configuration of the E-9000 Tower with Version 2 Transmitter, 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 =  $\pm 1 \times 10^{-3}$  MHz  
Amplitude = + 3.8 / -3.9 dB (from 30 MHz to 200 MHz)  
Amplitude =  $\pm 2.8$  dB (from 200 MHz to 1000 MHz)

## 5.0 LABELING REQUIREMENTS

### 5.1 Industry Canada Requirements

Industry Canada has labeling requirements for digital apparatus. Section 6.2 of ICES-003 Issue 2 specifies the requirements as follows:

6.2 A written notice indicating compliance must accompany each unit of digital apparatus to the end user. The notice shall be in the form of a label that is affixed to the apparatus. Where because of insufficient space or other restrictions it is not feasible to affix a label to the apparatus, the notice may be in the form of a statement included in the user's manual.

The suggested text for the notice, in English and in French, is as follows. RF causing equipment regulations.

This Class [\*] digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe [\*] respecte toutes les exigences du règlement sur le matériel brouilleur du Canada.

[\*] insert either "a" or "b" but not both as appropriate for the equipment requirements.

### 5.2 FCC 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.

## **Appendix 1**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
E-9000 Tower with Version 2 Transmitter  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 Subpart C, 15.207, Conducted Emissions**

**PROJECT NO. 308A08**

**TEST COMPLETED: 23 April, 1999**

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

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This testing was done using a E-9000 Tower with Version 2 Transmitter.  
This Test was done using FCC Part 15 Subpart C, 15.207 specifications.

There were no variations to the test method.

The E-9000 Tower with Version 2 Transmitter produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Subpart C, 15.207, conducted emission in the configuration described in section 2.4.

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 of this report.

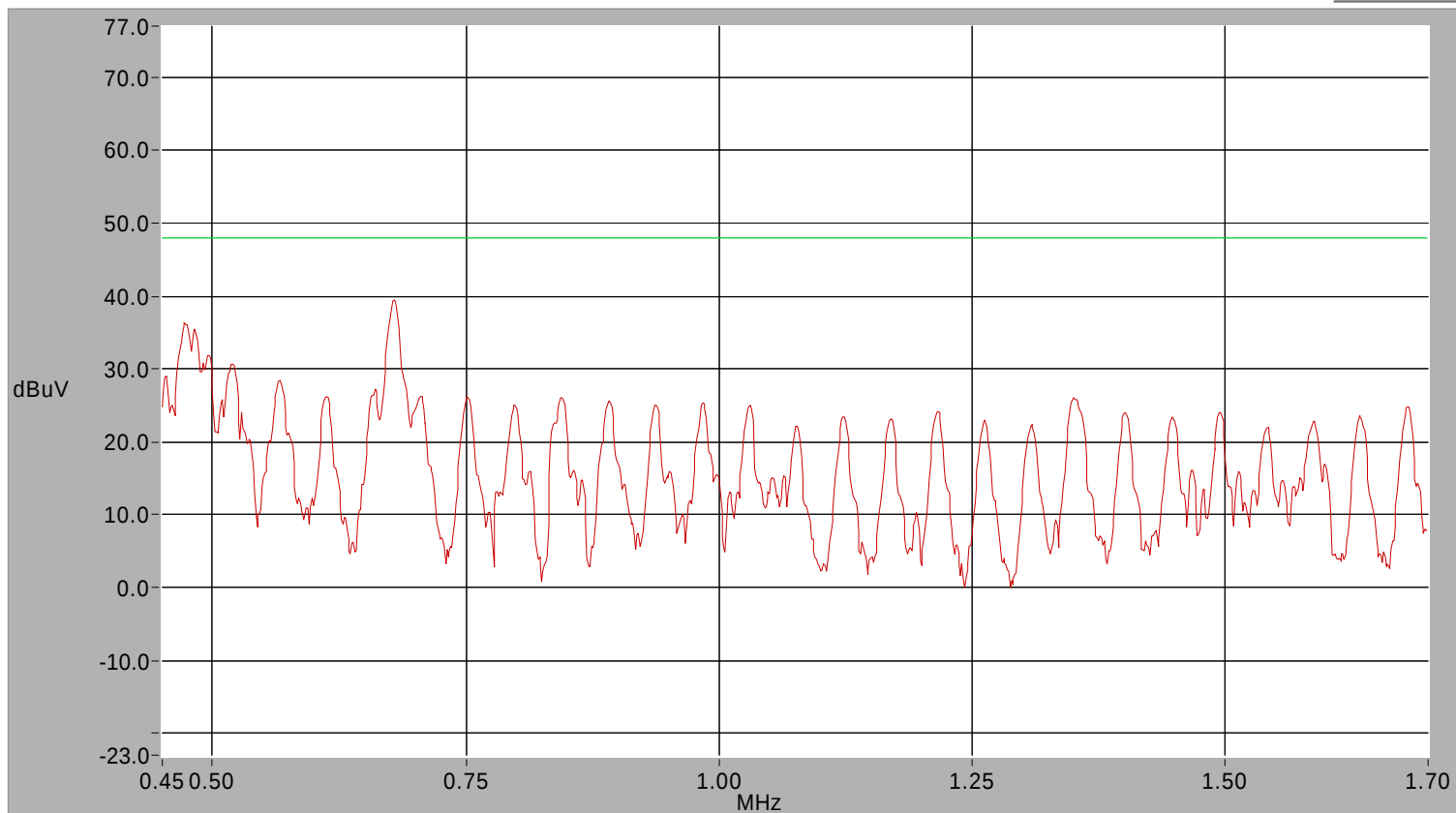
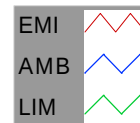
# **Conducted Emissions Neutral to Ground FCC Part 15 Class B 3m**

Title: 450 - 1700 kHz  
Mode of Operation: Normal  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: Kingtech Ferrite

Date & Time: April 23, 1999  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

12:33 PM

Plot Number: 3



VBW: 30.000 kHz  
RBW: 100.000 kHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ZERO.DAT 23/4/1997  
lisn.dat 23/4/1997  
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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 0.667      | -             | -           | 39.40           | 0.04    | 0.00    | 0.00    | 39.44        | 47.95          | Pass |

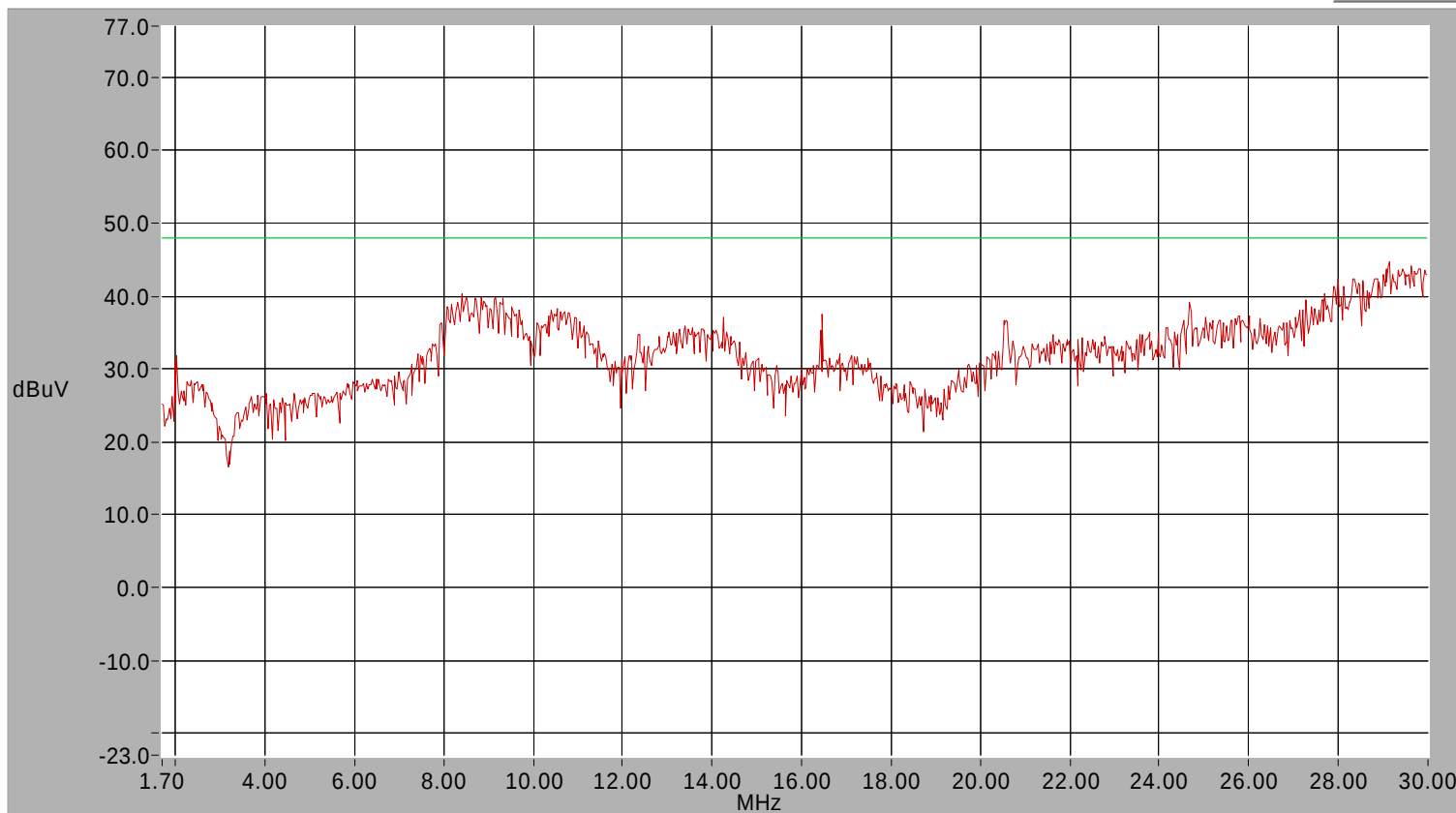
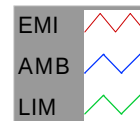
# **Conducted Emissions** **Neutral to Ground** **FCC Part 15 Class B 3m**

Title: 1.7 - 30 MHz  
Mode of Operation: Normal  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: Kingstech Ferrite

Date & Time: 12:37 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 23, 1999

Plot Number: 4



VBW: 30.000 kHz  
RBW: 100.000 kHz

Sweep Time: 240.00 ms  
Ref. Lev: 77.00 dBuV

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ZERO.DAT 23/4/1997  
lisn.dat 23/4/1997  
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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 29.384     | -             | -           | 31.40           | 0.04    | 0.00    | 0.00    | 31.44        | 47.95          | Pass |

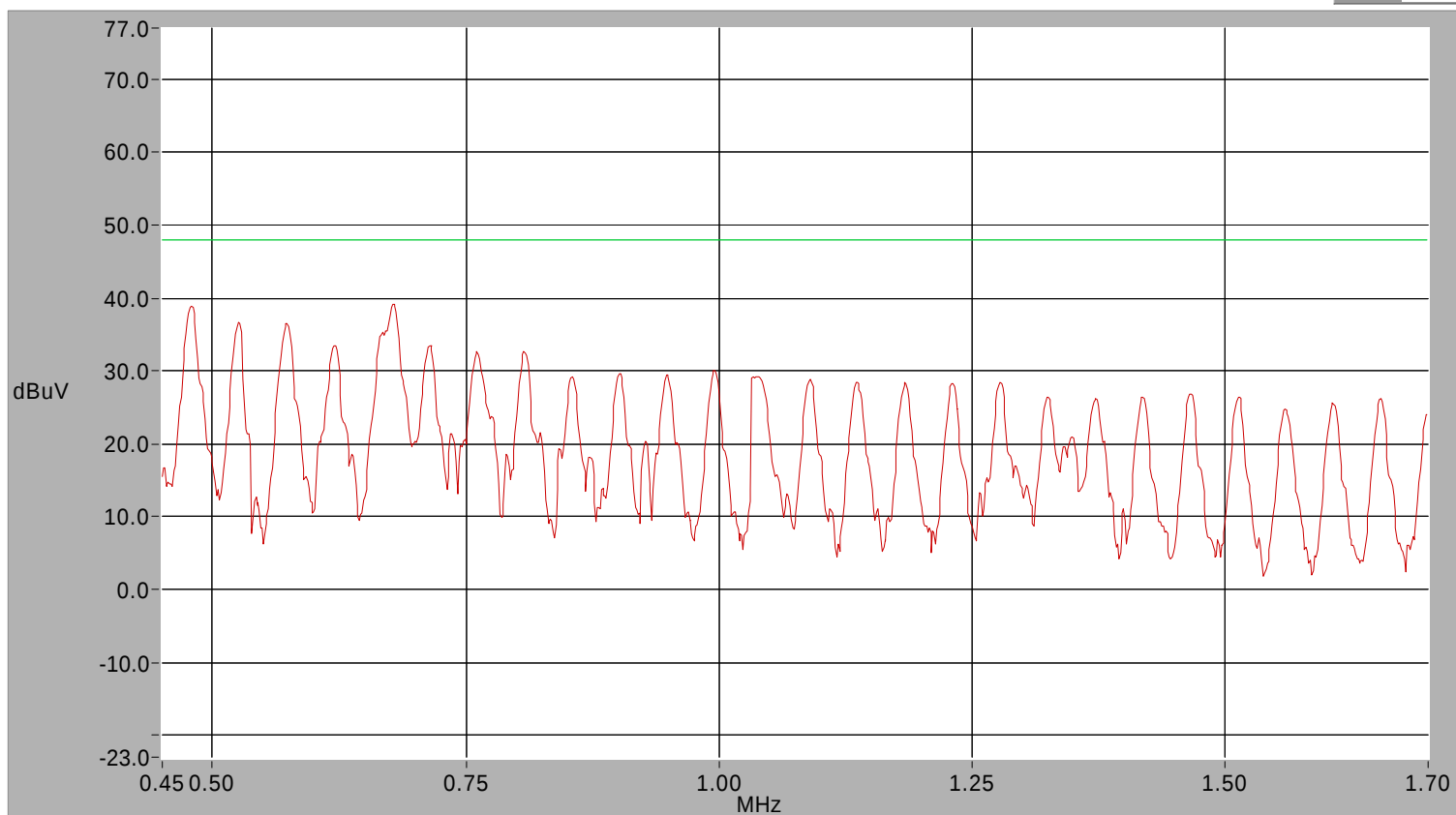
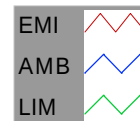
**Conducted Emissions  
Hot to Ground  
FCC Part 15 Class B 3m**

Title: 450 - 1700 kHz  
Mode of Operation: Normal  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: Kingtech Ferrite

Date & Time: April 23, 1999  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

12:42 PM

Plot Number: 1



VBW: 30.000 kHz  
RBW: 100.000 kHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV

PR Atten: 0.00 dB  
An Atten: 0.00 dB

**Associated Files**

ZERO.DAT 23/4/1997  
lisn.dat 23/4/1997  
FCC15B3.DAT 20/8/1998

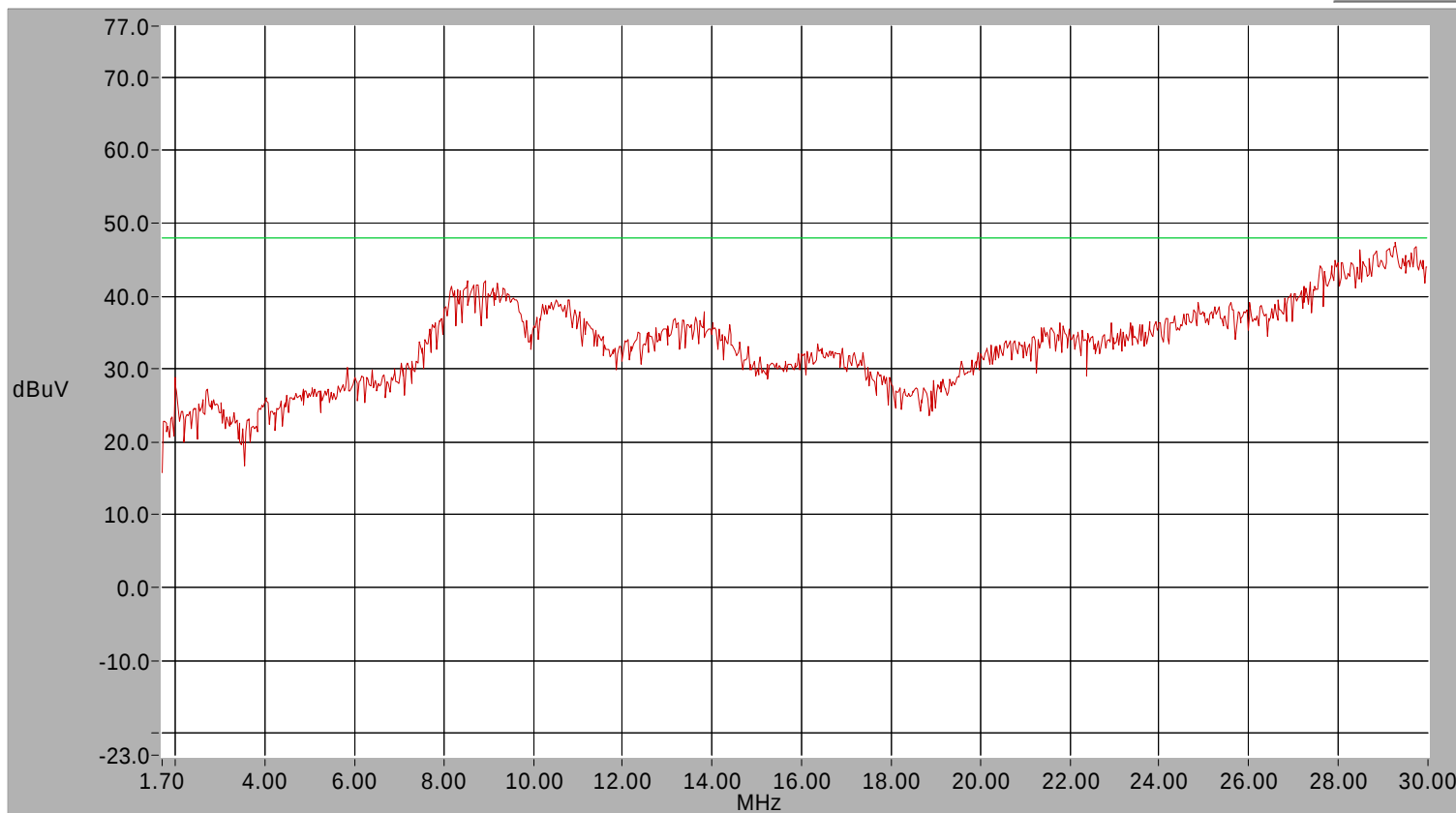
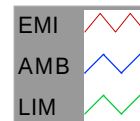
# **Conducted Emissions** **Hot to Ground** **FCC Part 15 Class B 3m**

Title: 1.7 - 30 MHz  
Mode of Operation: Normal  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: Kingtech Ferrite

Date & Time: April 23, 1999  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

12:45 PM

Plot Number: 2



VBW: 30.000 kHz  
RBW: 100.000 kHz

Sweep Time: 240.00 ms  
Ref. Lev: 77.00 dBuV

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ZERO.DAT 23/4/1997  
lisn.dat 23/4/1997  
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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 29.008     | -             | -           | 40.00           | 0.04    | 0.00    | 0.00    | 40.04        | 47.95          | Pass |

## **Appendix 2**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
E-9000 Tower with Version 2 Transmitter  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 Subpart C, Radiated Emissions  
When Transmitting At 902.2 MHz**

**PROJECT NO. 308A08**

**TEST COMPLETED: 22 April, 1999**

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

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This testing was done using a E-9000 Tower with Version 2 Transmitter.

This Test was done using FCC Part 15 Subpart C specifications.

There were no variations to the test method.

The E-9000 Tower with Version 2 Transmitter produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Subpart C radiated emission in the configuration described in section 2.4, while transmitting at 902.2 MHz.

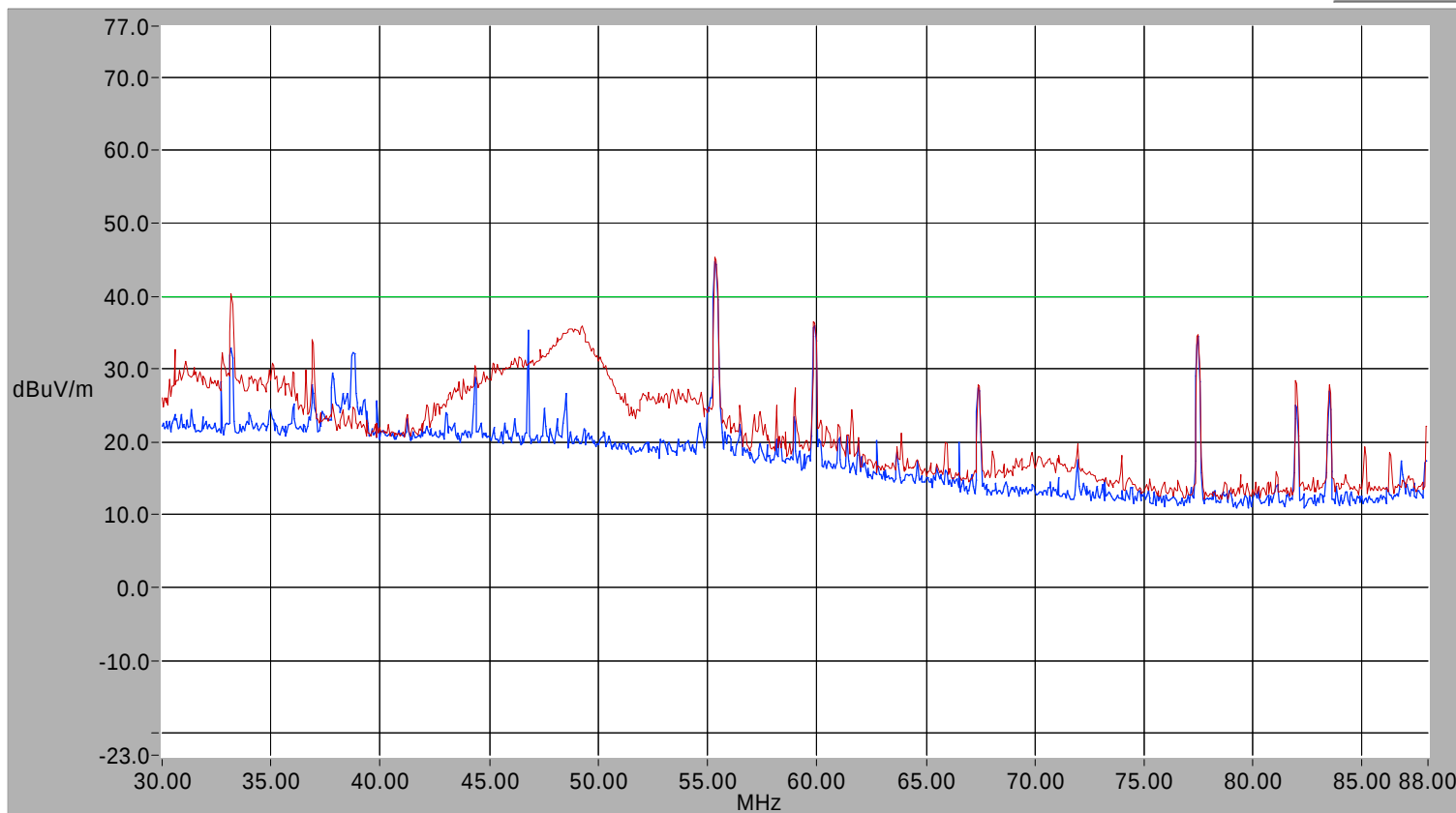
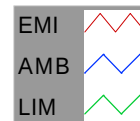
The Equipment Under Test is considered to have passed if the radiated field power does not exceed the limit of the appropriate standard as shown in section 3 of this report.

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 10:24 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 27



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

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

## **QUASI-PEAK DATA**

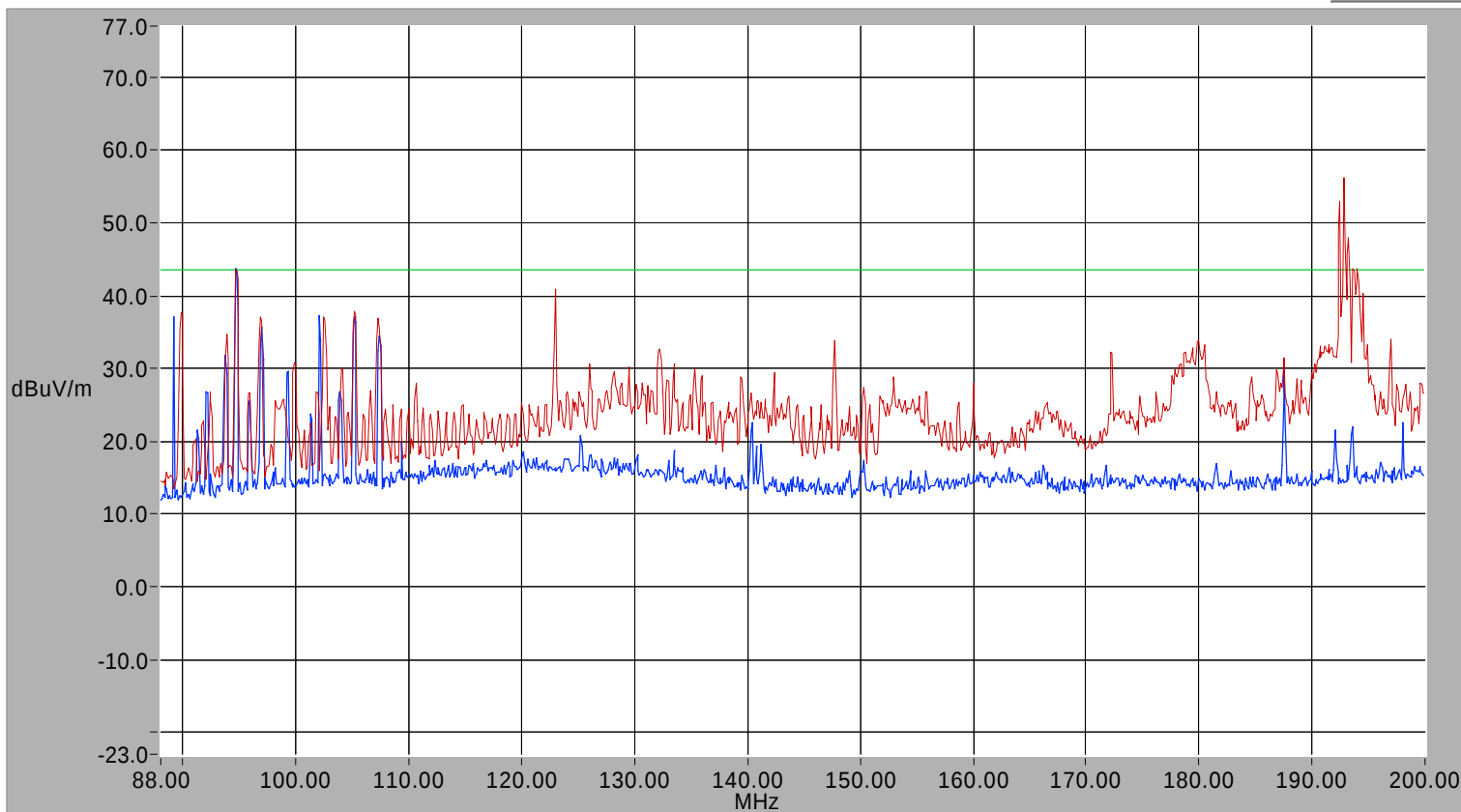
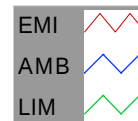
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 48.745     | 360           | 255         | 15.40           | 16.33   | 0.97    | 0.00    | 32.71        | 40.00          | Pass |
| 33.184     | 94            | 310         | 5.60            | 18.42   | 0.80    | 0.00    | 24.82        | 40.00          | Pass |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 10:53 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 28



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

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

## **QUASI-PEAK DATA**

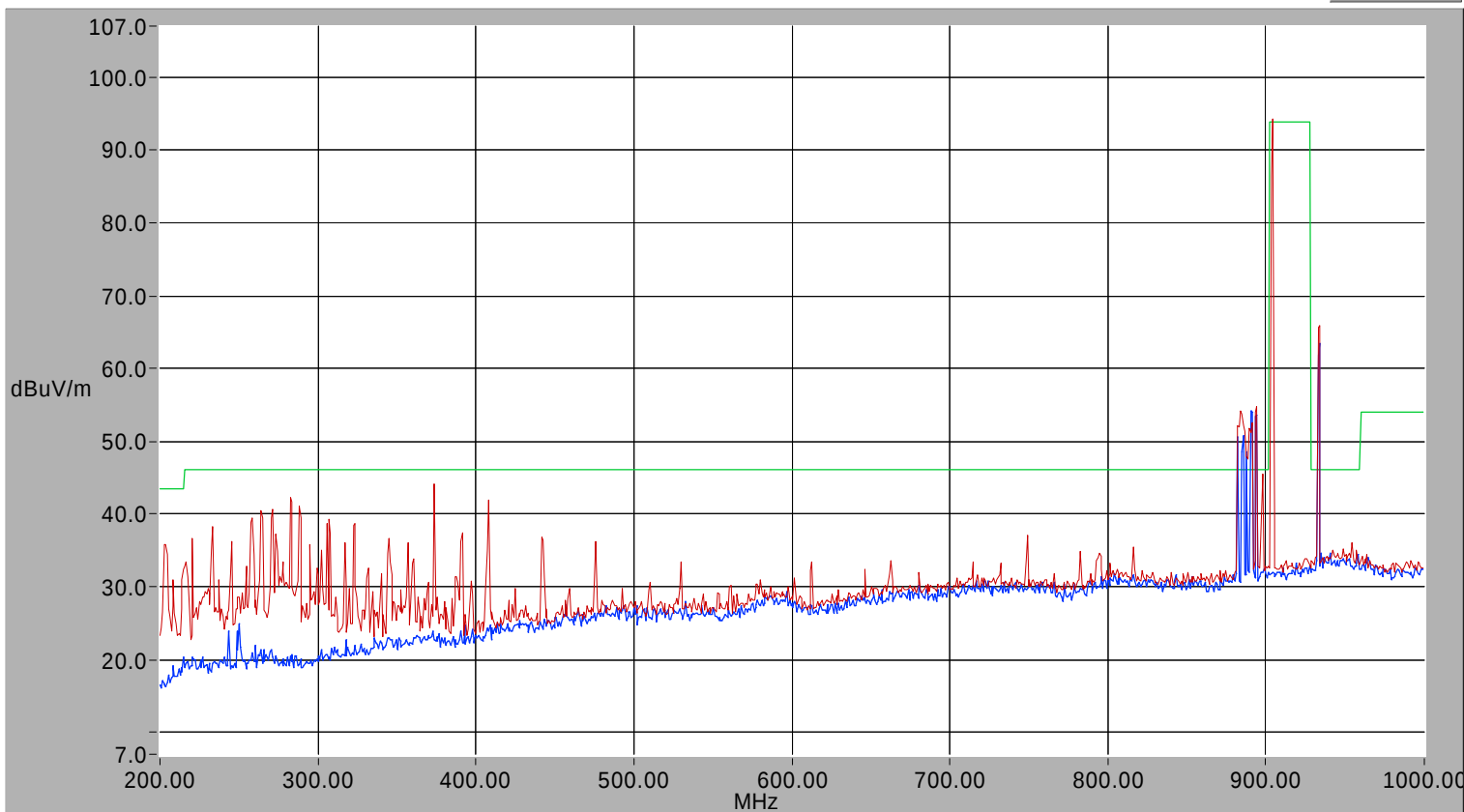
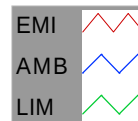
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 122.897    | 283           | 227         | 27.90           | 12.90   | 1.33    | 0.00    | 42.13        | 43.52          | Pass |
| 193.468    | 248           | 155         | 5.30            | 11.14   | 1.70    | 0.00    | 18.14        | 43.52          | Pass |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 11:12 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 29



VBW: 300.000 kHz Sweep Time: 240.00 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 4/8/1998  
04318h3.dat 23/4/1998  
Fcc152~1.dat 19/4/1999

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 282.678    | 117           | 113         | 24.50           | 13.58   | 2.13    | 0.00    | 40.21        | 46.02          | Pass |
| 373.363    | 105           | 113         | 22.80           | 15.98   | 2.60    | 0.00    | 41.38        | 46.02          | Pass |
| 407.317    | 126           | 113         | 19.30           | 16.42   | 2.70    | 0.00    | 38.42        | 46.02          | Pass |

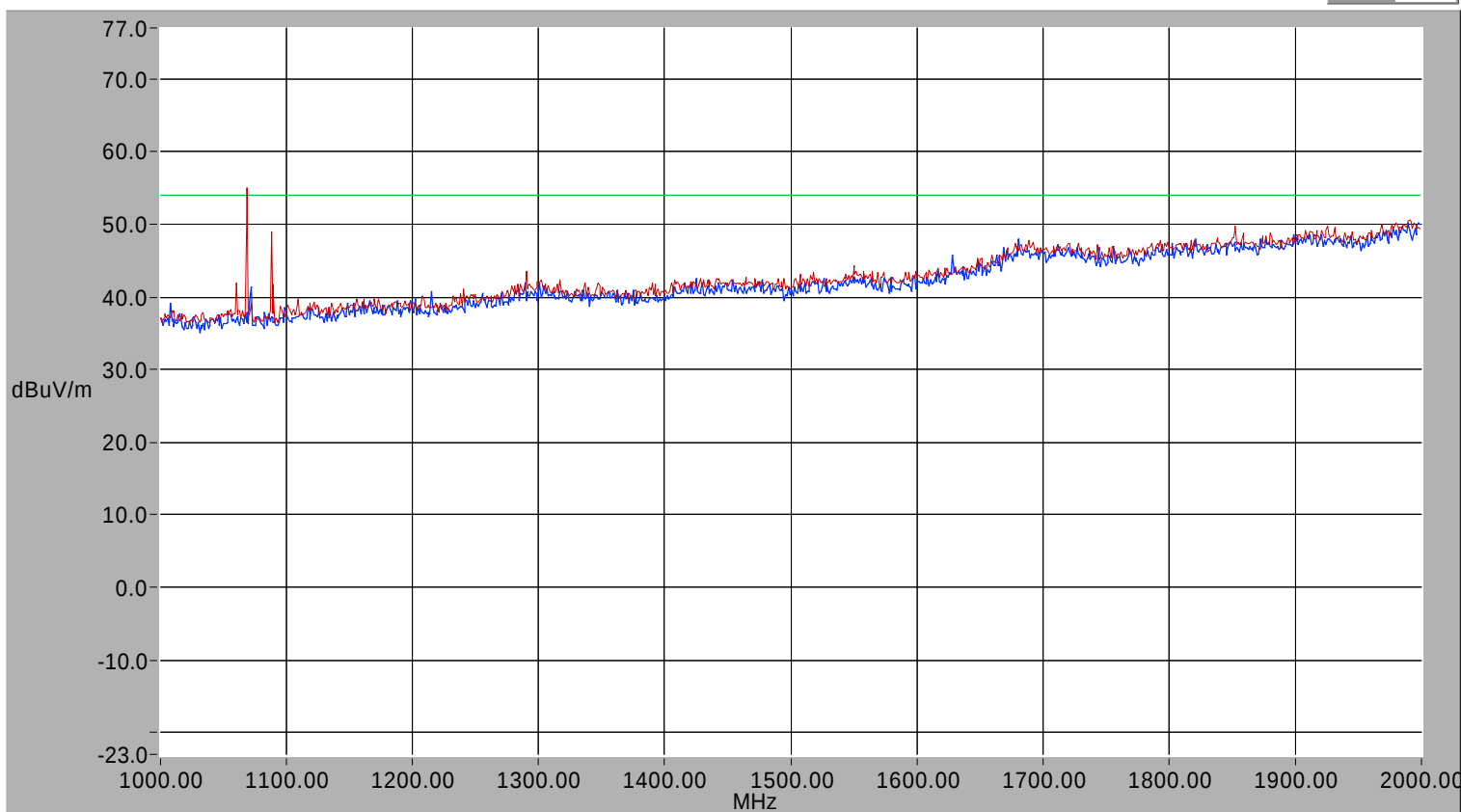
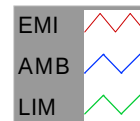
# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

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

Date & Time: 3:15 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 19, 1999

Plot Number: 30



VBW: 1.000 MHz  
RBW: 300.000 kHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 1070.010   | 3             | 161         | 3.00            | 24.00   | 4.61    | 0.00    | 31.61        | 53.98          | Pass |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 2 - 5 GHz

Date & Time: 10:39 AM

April 22, 1999

Mode of Operation: Transmit At 902.2 MHz

Project #: 308A08

Distance: 3 meters

Company: E-Zone

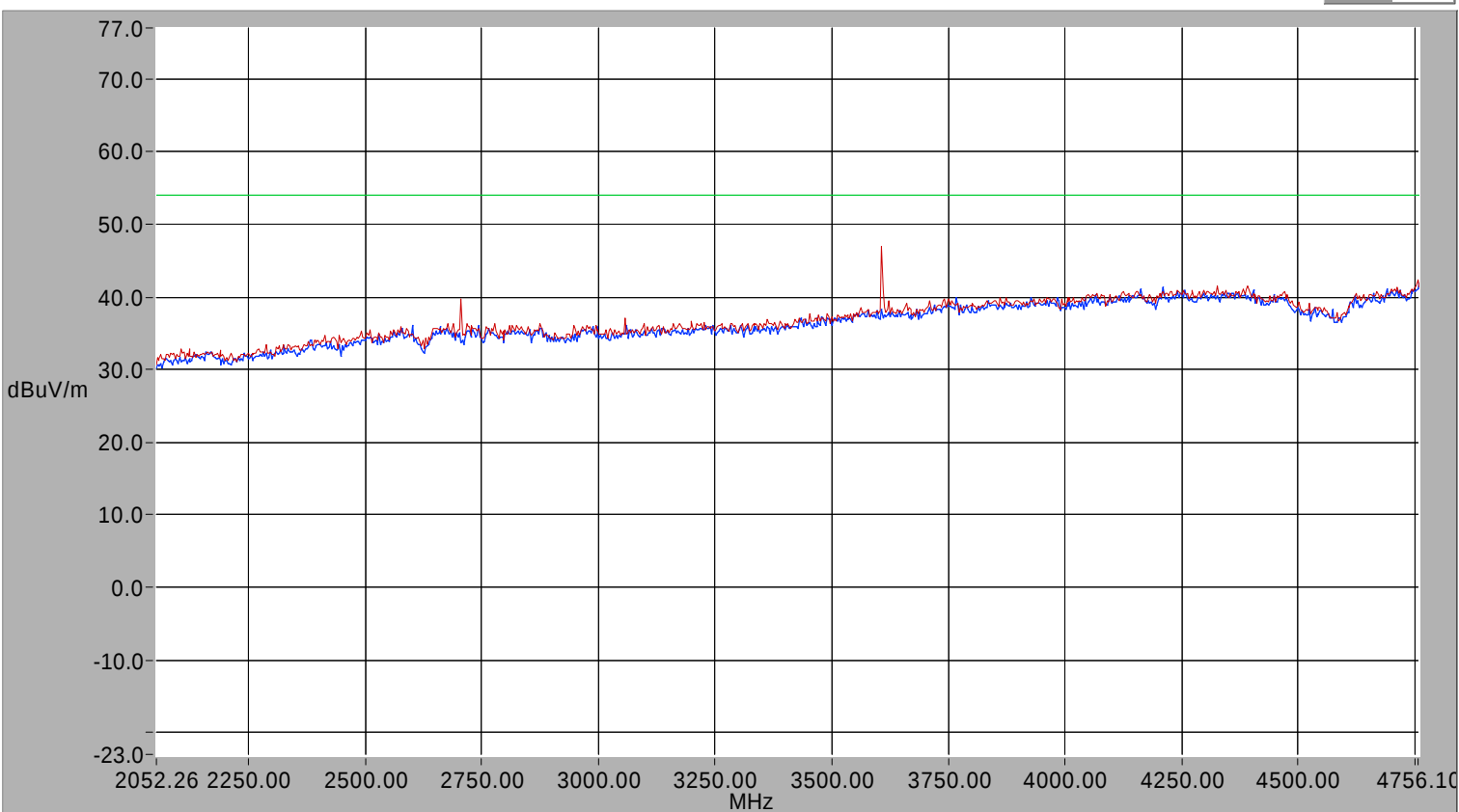
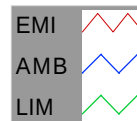
Technologist: Jeffery Taylor

Product: Tower with Version 2.0 TX

Comments:

Serial #: 001

Plot Number: 31



VBW: 100.000 kHz  
RBW: 1.000 MHz

Sweep Time: Auto

Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB

An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornh.dat 12/9/1998

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 3608.785   | 352           | 125         | 35.80           | 0.00    | 8.58    | -3.14   | 41.24        | 53.98          | Pass |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

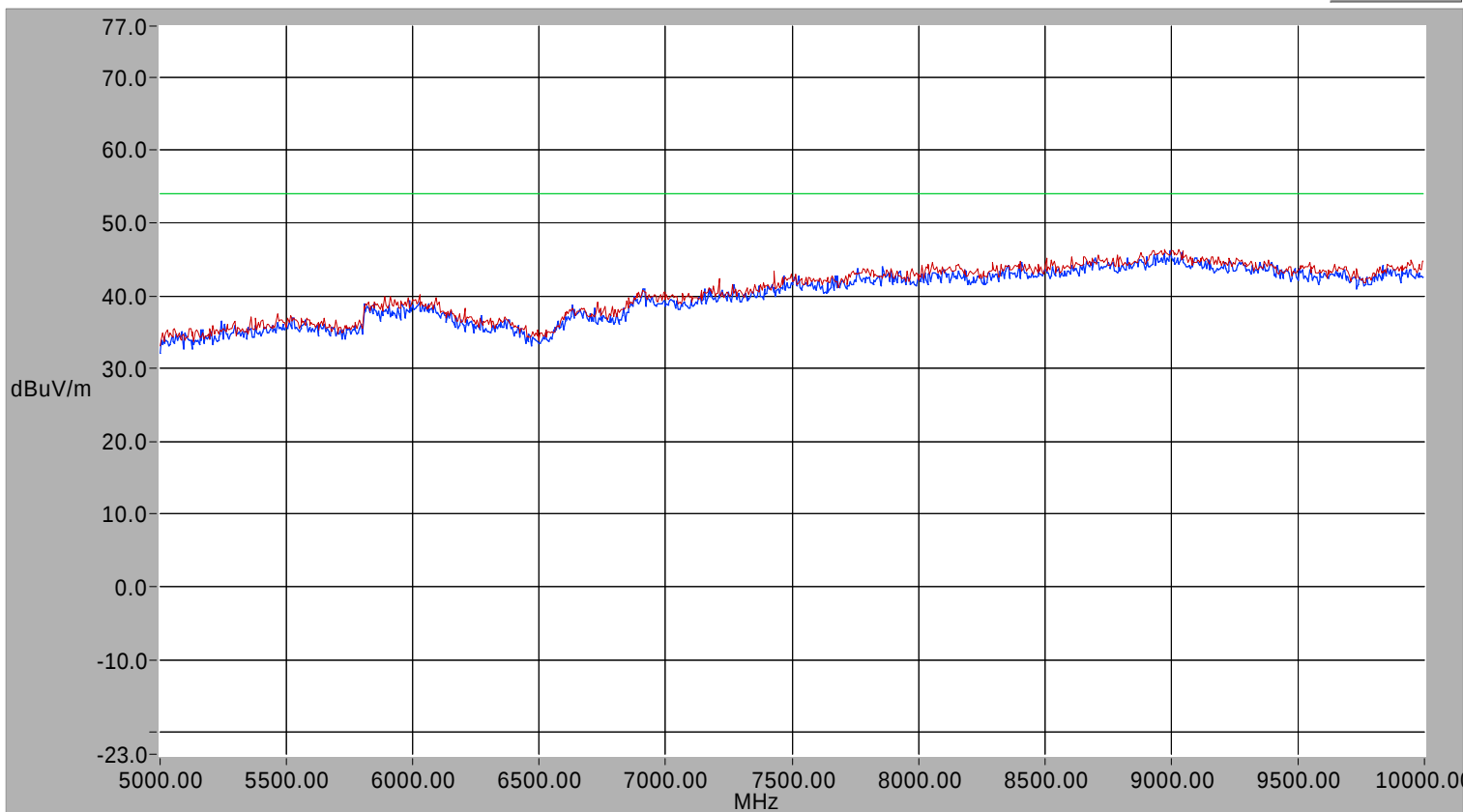
Title: 5 - 10 GHz  
Mode of Operation: Transmit At 902.2 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: April 22, 1999  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

10:52 AM

EMI  
AMB  
LIM

Plot Number: 32



VBW: 30.000 kHz  
RBW: 1.000 MHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornh.dat 12/9/1998

## **QUASI-PEAK DATA**

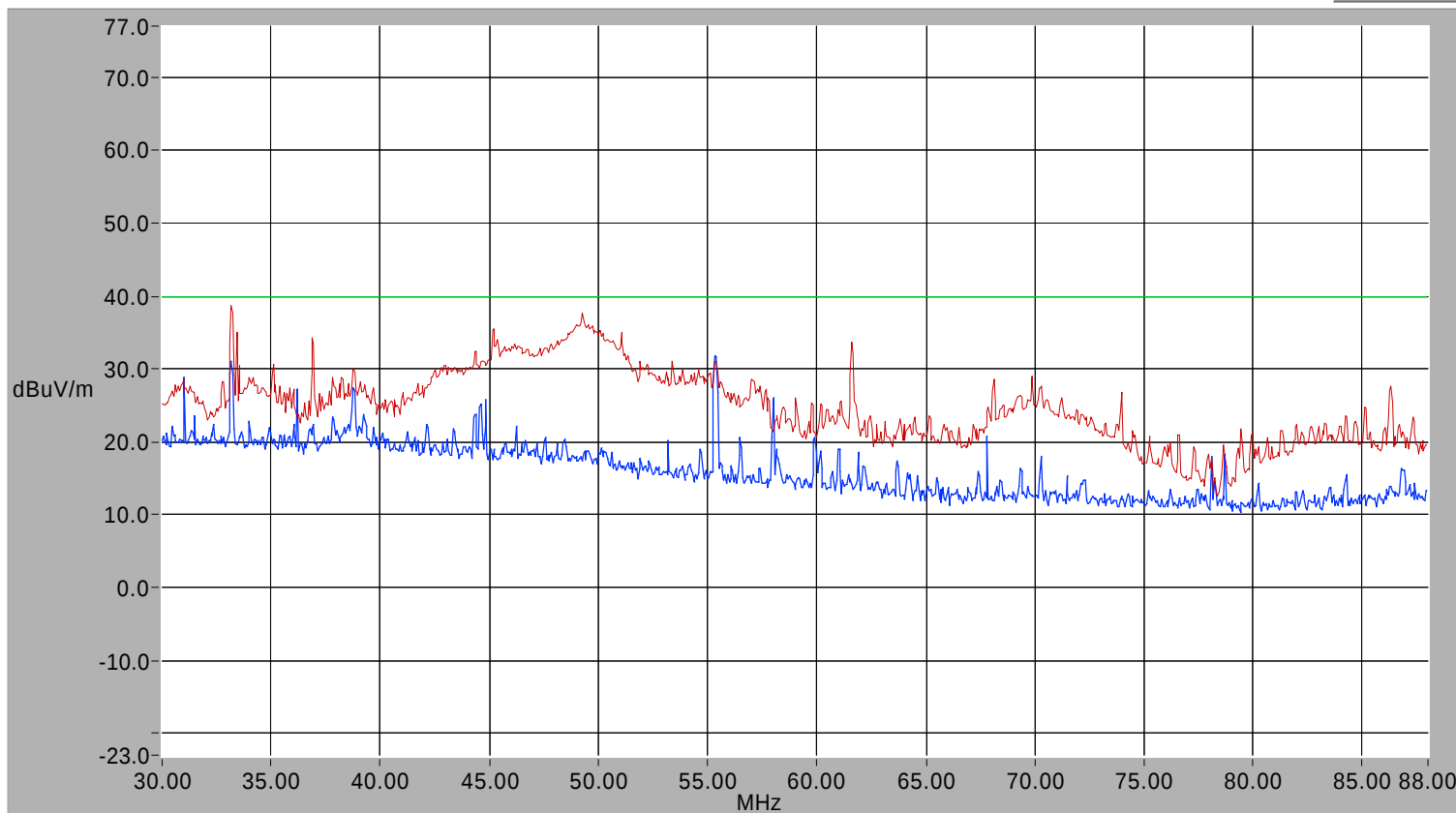
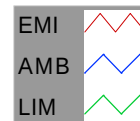
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|-----|
|------------|---------------|-------------|-----------------|---------|---------|---------|----------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

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 9:57 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 21



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

## **QUASI-PEAK DATA**

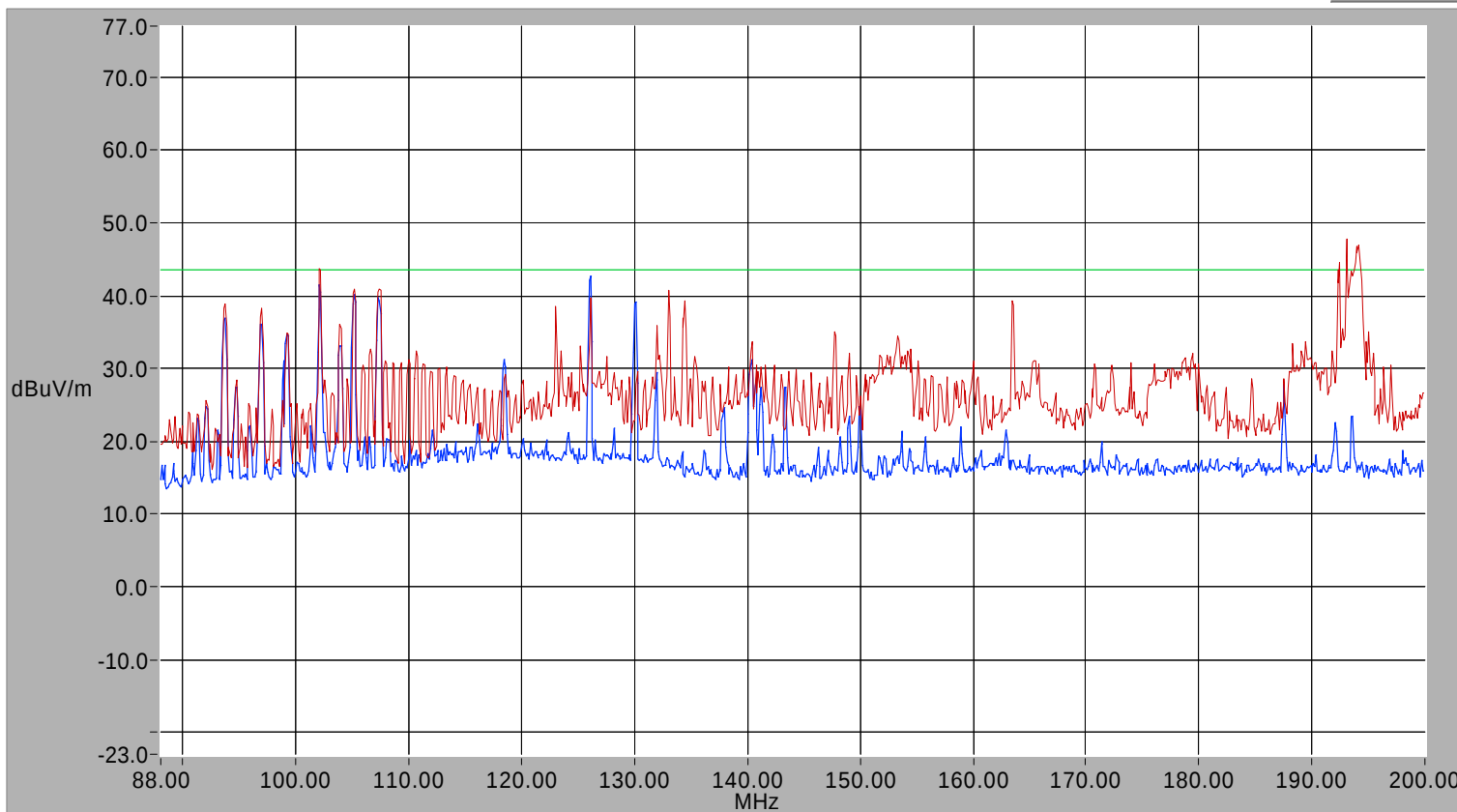
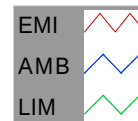
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 33.173     | 58            | 311         | 19.40           | 16.67   | 0.80    | 0.00    | 36.87        | 40.00          | Pass |
| 36.861     | 348           | 209         | 12.70           | 16.04   | 0.80    | 0.00    | 29.54        | 40.00          | Pass |
| 49.220     | 358           | 113         | 17.90           | 13.84   | 0.98    | 0.00    | 32.73        | 40.00          | Pass |

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 19, 1999 3:55 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 22



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
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) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 122.465    | 79            | 113         | 27.40           | 12.95   | 1.32    | 0.00    | 41.68        | 43.52          | Pass    |
| 183.752    | 336           | 161         | 22.70           | 11.07   | 1.76    | 0.00    | 35.53        | 43.52          | Pass    |
| 135.204    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 164.312    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 193.560    | 155           | 192         | 5.70            | 11.10   | 1.70    | 0.00    | 18.50        | 43.52          | Pass    |

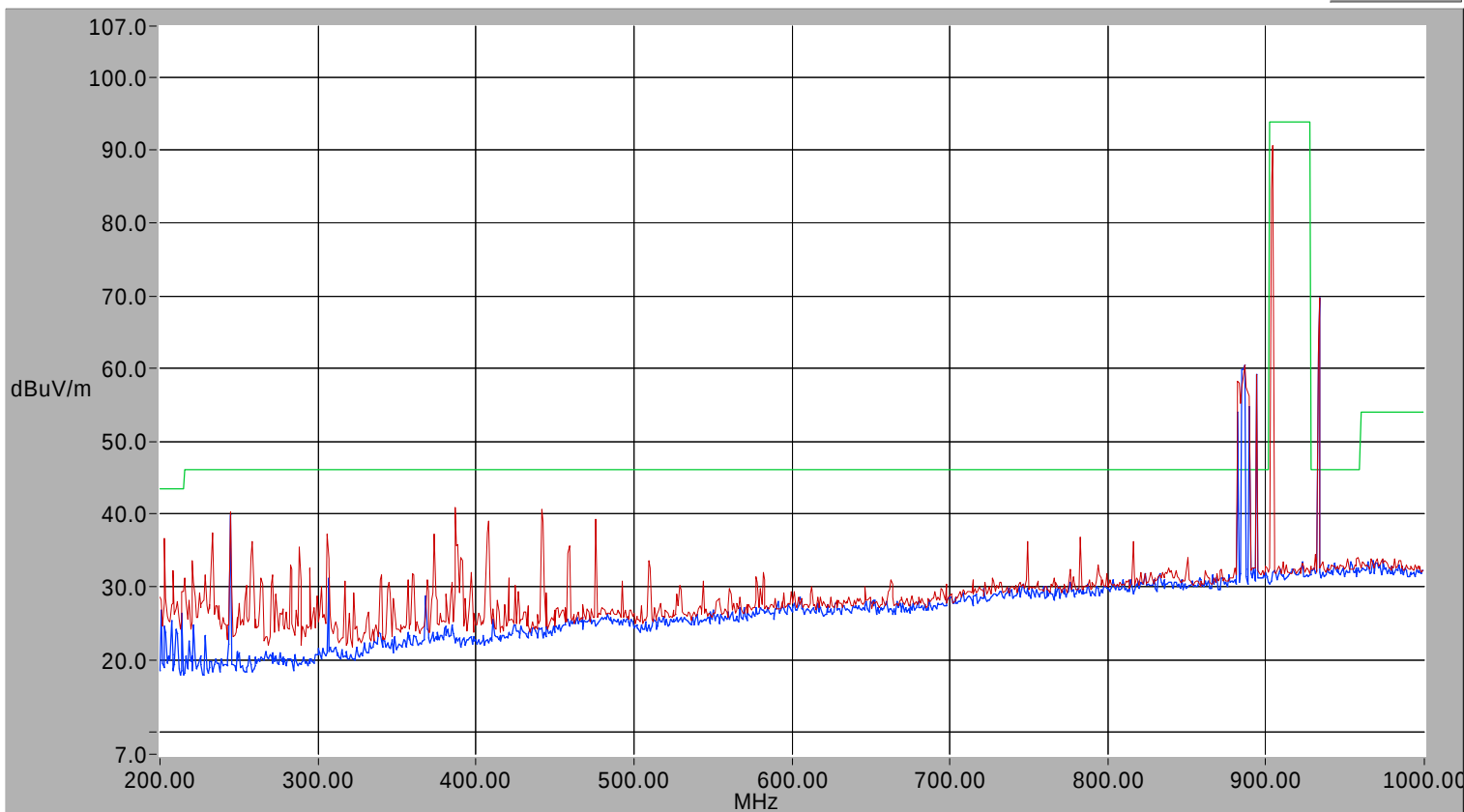
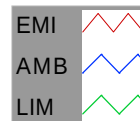
# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: 3:38 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Verson 2.0 TX  
Serial #: 001

April 19, 1999

Plot Number: 23



VBW: 300.000 kHz Sweep Time: 240.00 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 4/8/1998  
04318v3.dat 23/4/1998  
Fcc152~1.dat 19/4/1999

## **QUASI-PEAK DATA**

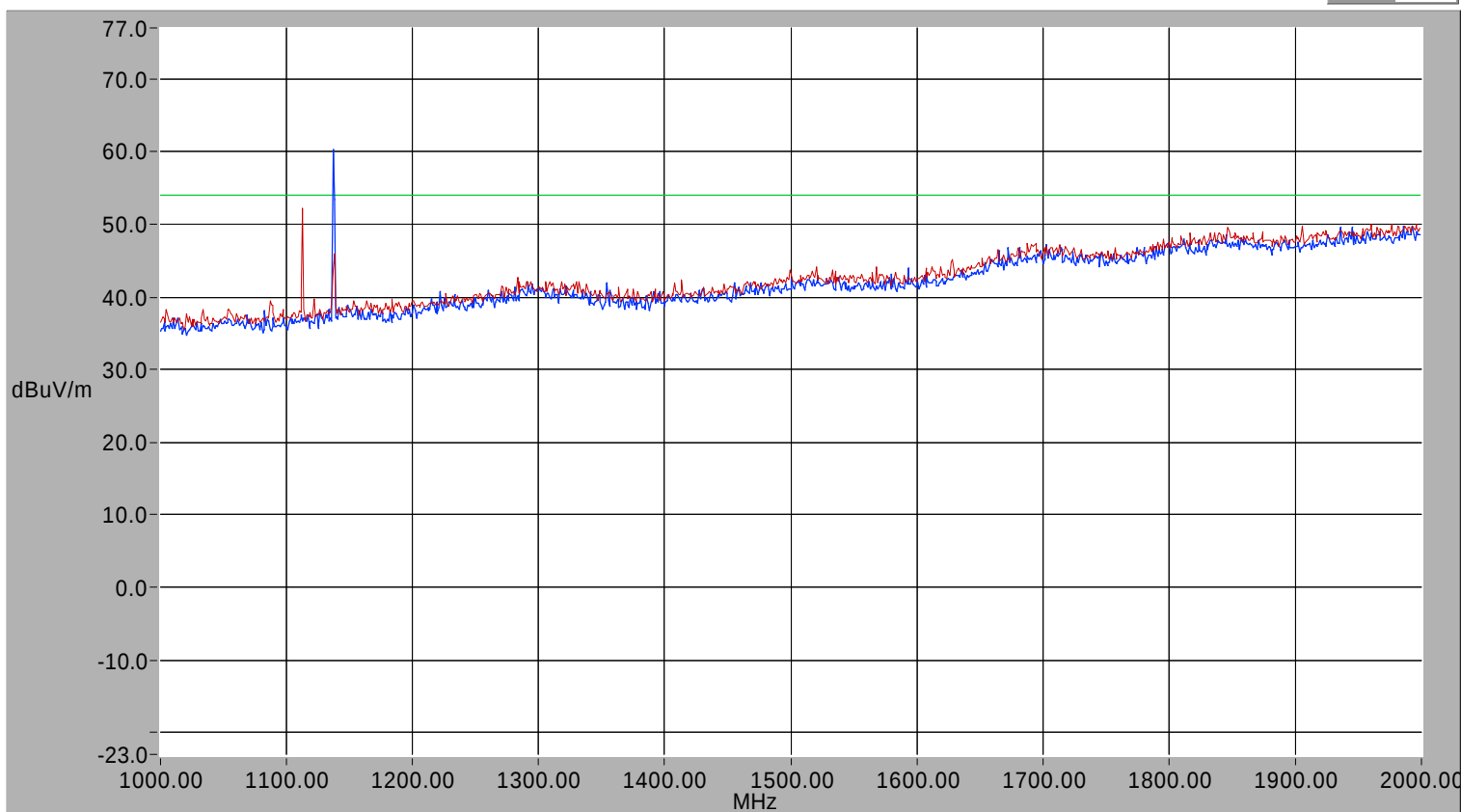
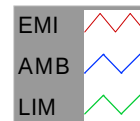
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 203.410    | 153           | 113         | 20.20           | 11.77   | 1.73    | 0.00    | 33.71        | 43.52          | Pass |
| 441.274    | 3             | 113         | 20.30           | 16.69   | 2.81    | 0.00    | 39.80        | 46.02          | Pass |

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 19, 1999 3:30 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 24



VBW: 1.000 MHz  
RBW: 300.000 kHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

## **QUASI-PEAK DATA**

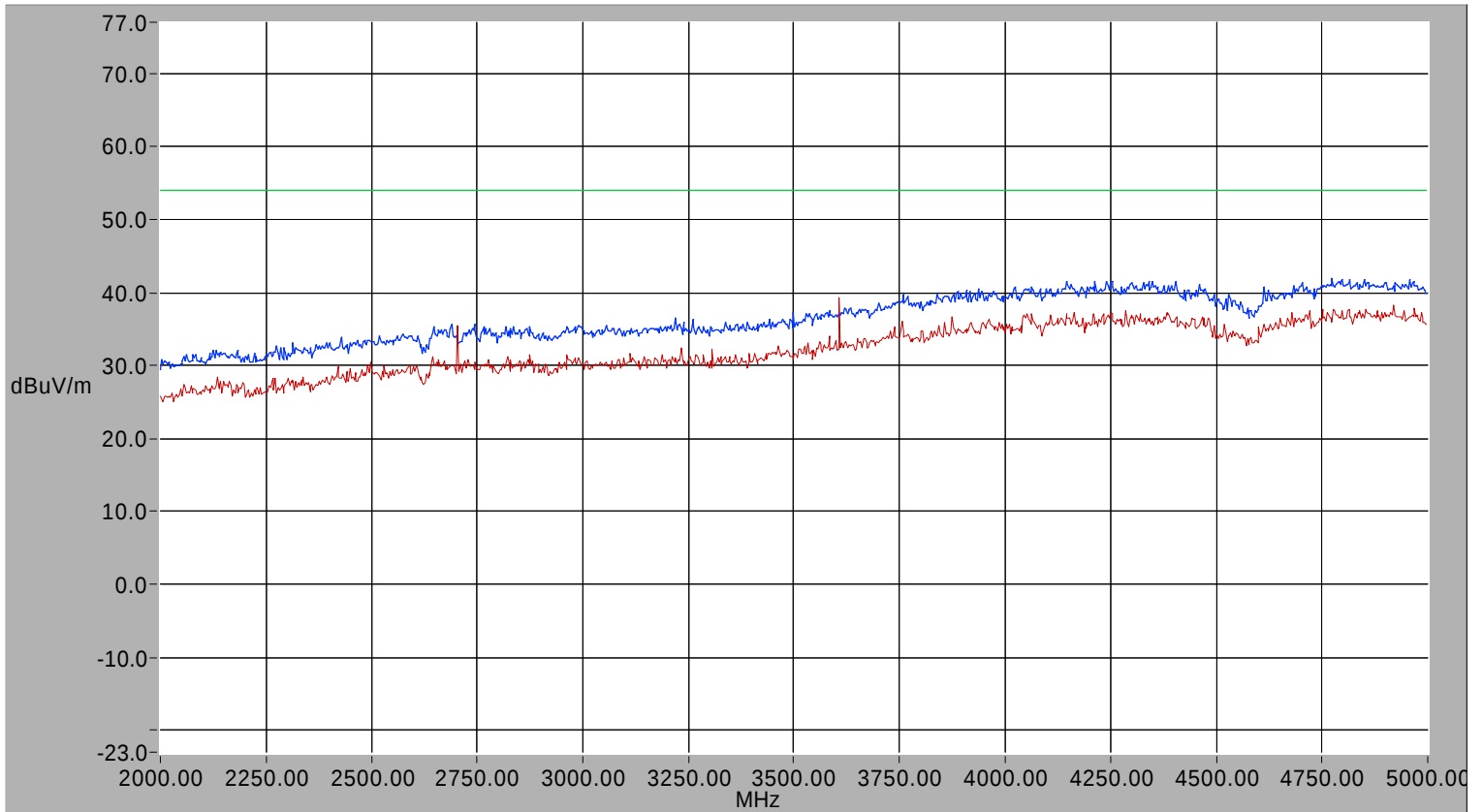
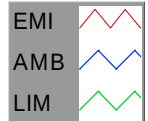
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1122.240   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Class B 3m**

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

Date & Time: April 22, 1999 11:27 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 25



VBW: 100.000 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**

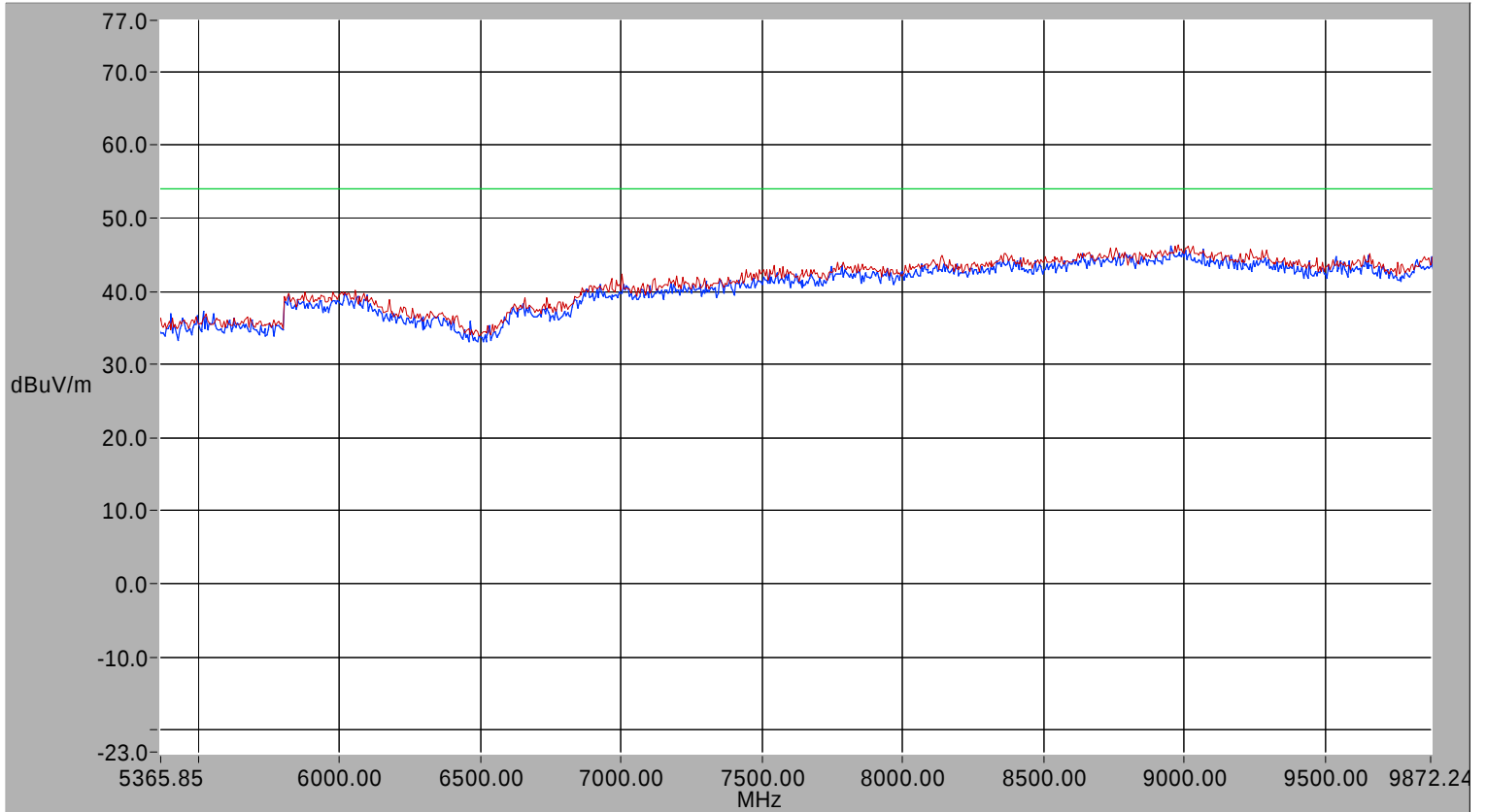
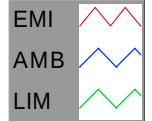
ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornv.dat 12/9/1998

**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Class B 3m**

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

Date & Time: April 22, 1999 11:17 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 26



VBW: 30.000 kHz  
RBW: 1.000 MHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

**Associated Files**

ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornv.dat 12/9/1998

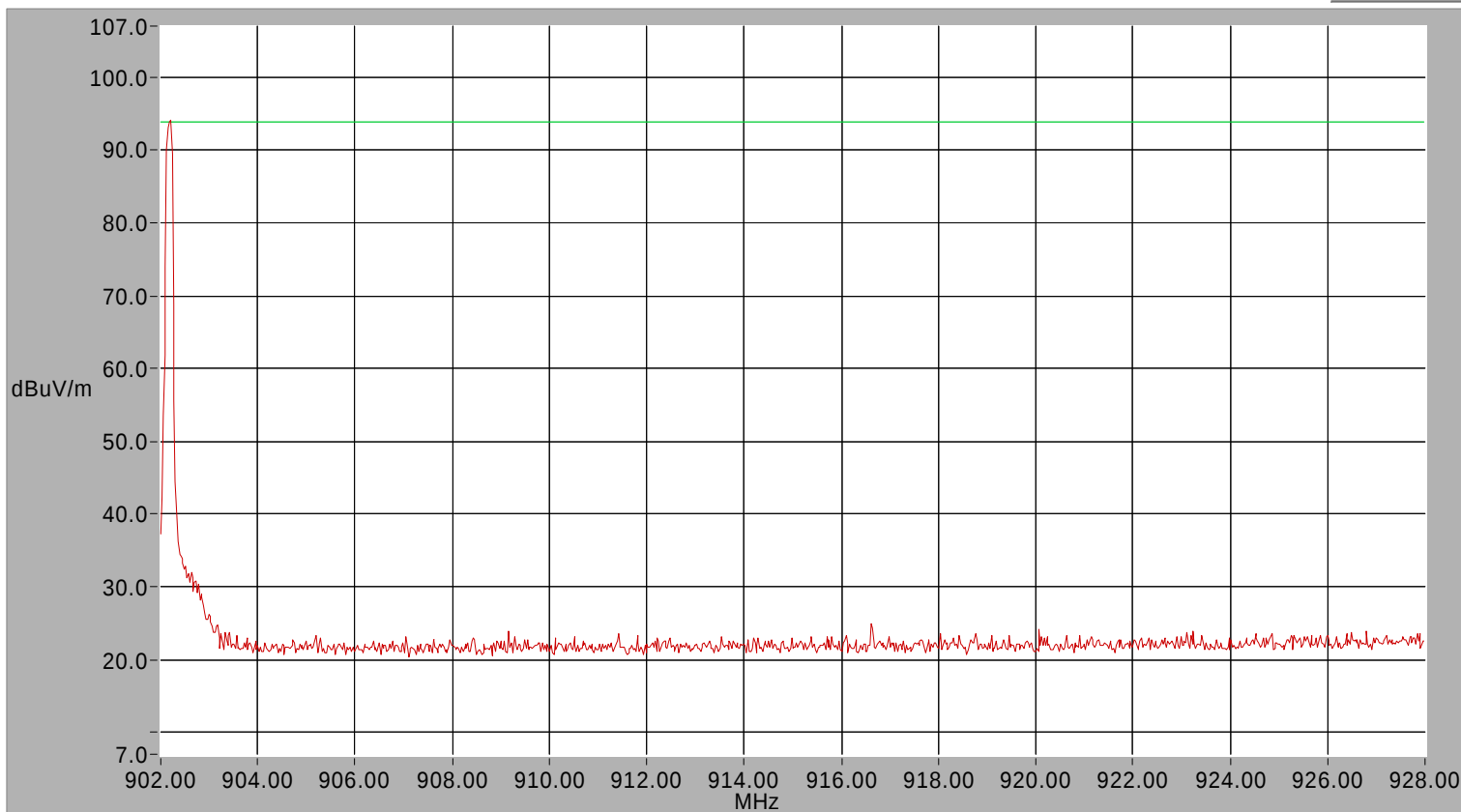
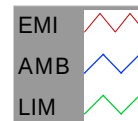
# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 902 - 928 MHz  
Mode of Operation: Transmit At 902.2 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: April 19, 1999  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

12:25 PM

Plot Number: 34



VBW: 30.000 kHz  
RBW: 10.000 kHz

Sweep Time: 240.00 ms  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318h3.dat 23/4/1998  
fcc15-2493.dat 28/4/1999

## **QUASI-PEAK DATA**

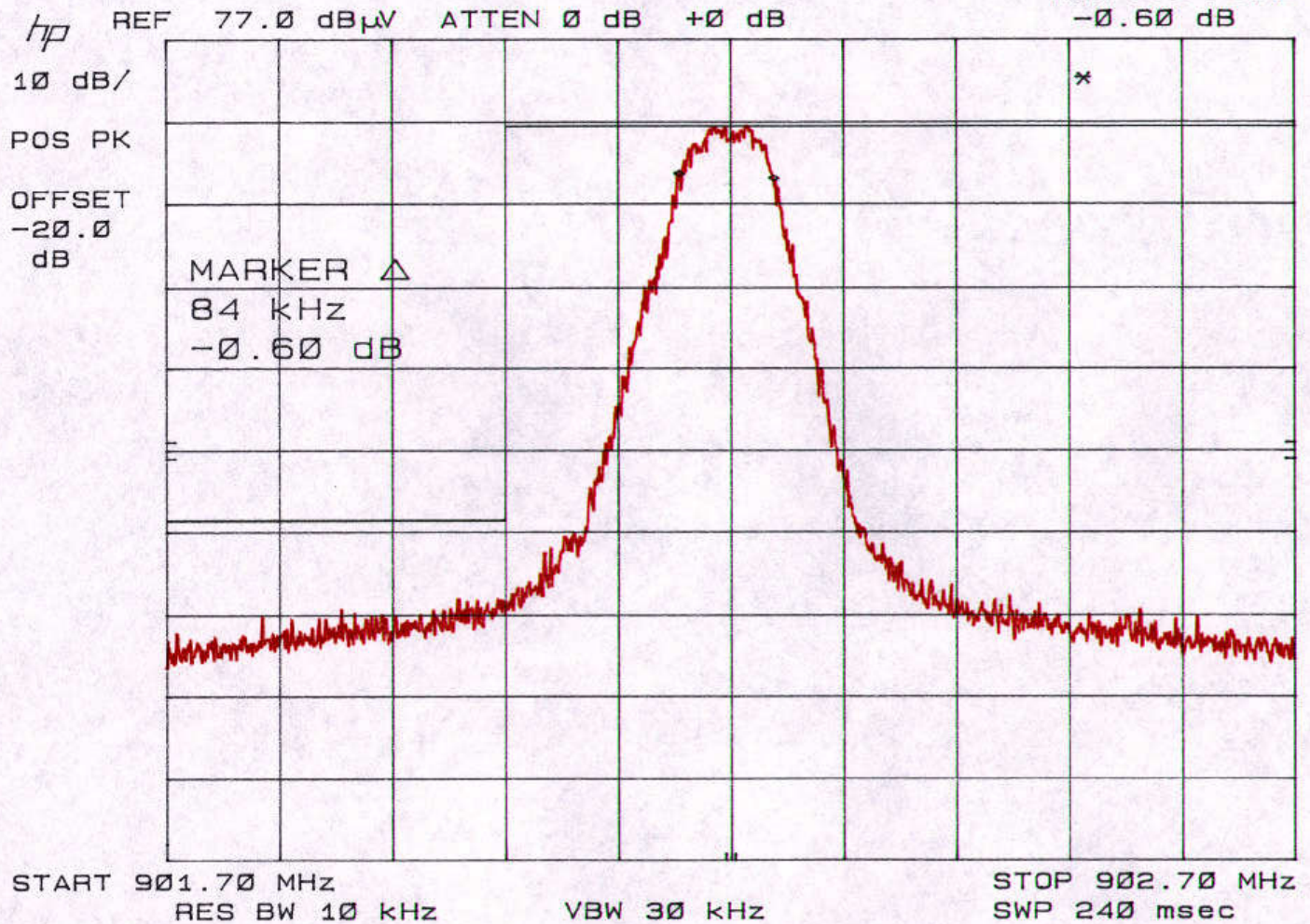
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 902.214    | 139           | 113         | 65.60           | 23.60   | 4.21    | 0.00    | 93.41        | 93.98          | Pass |

19 April 1999

Plot 6

H<sub>per</sub>

MKR  $\Delta$  84 kHz  
-0.60 dB



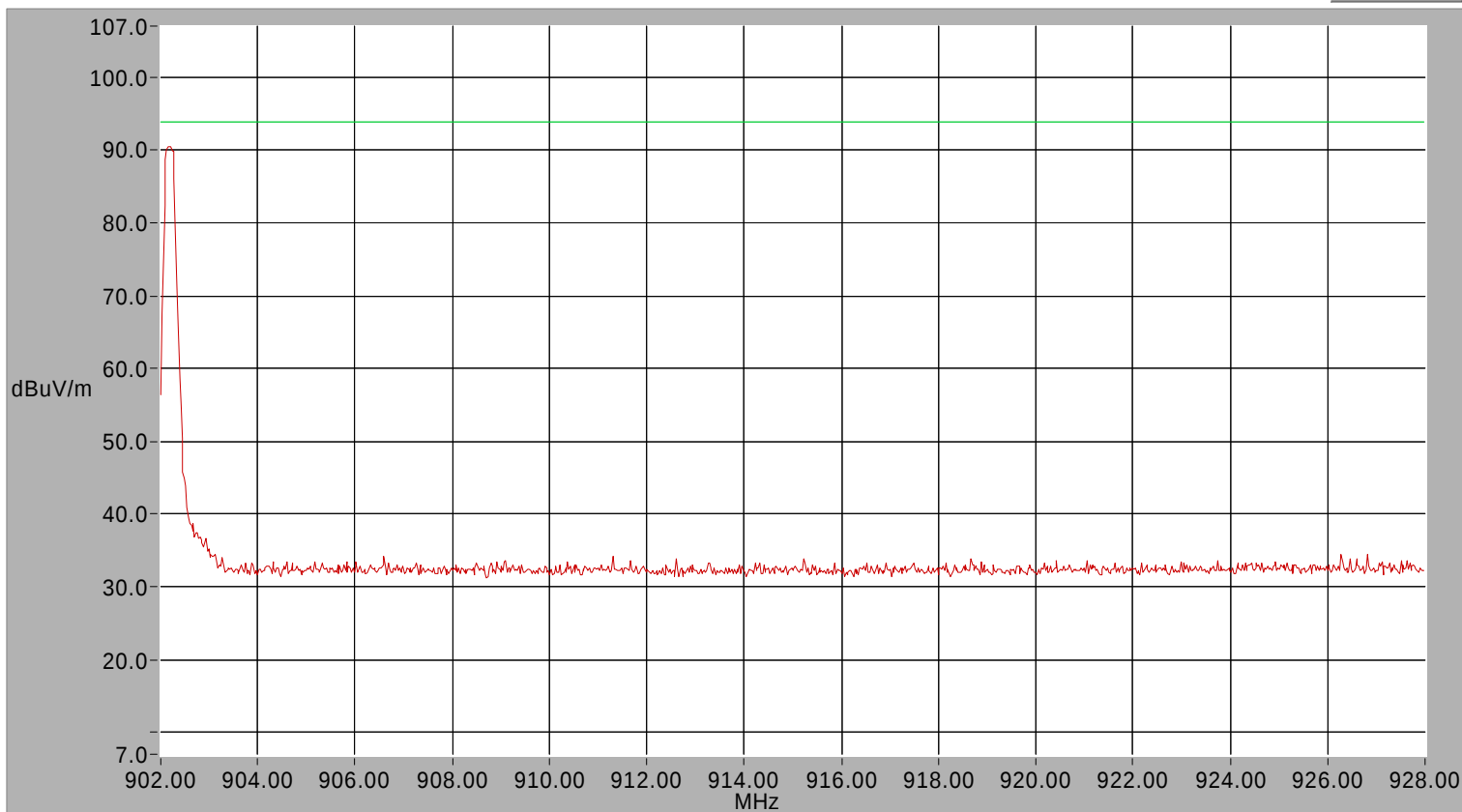
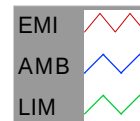
# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

Title: 902 - 928 MHz  
Mode of Operation: Transmit At 902.2 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: 12:20 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 19, 1999

Plot Number: 33



VBW: 300.000 kHz  
RBW: 1.000 MHz

Sweep Time: 240.00 ms  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

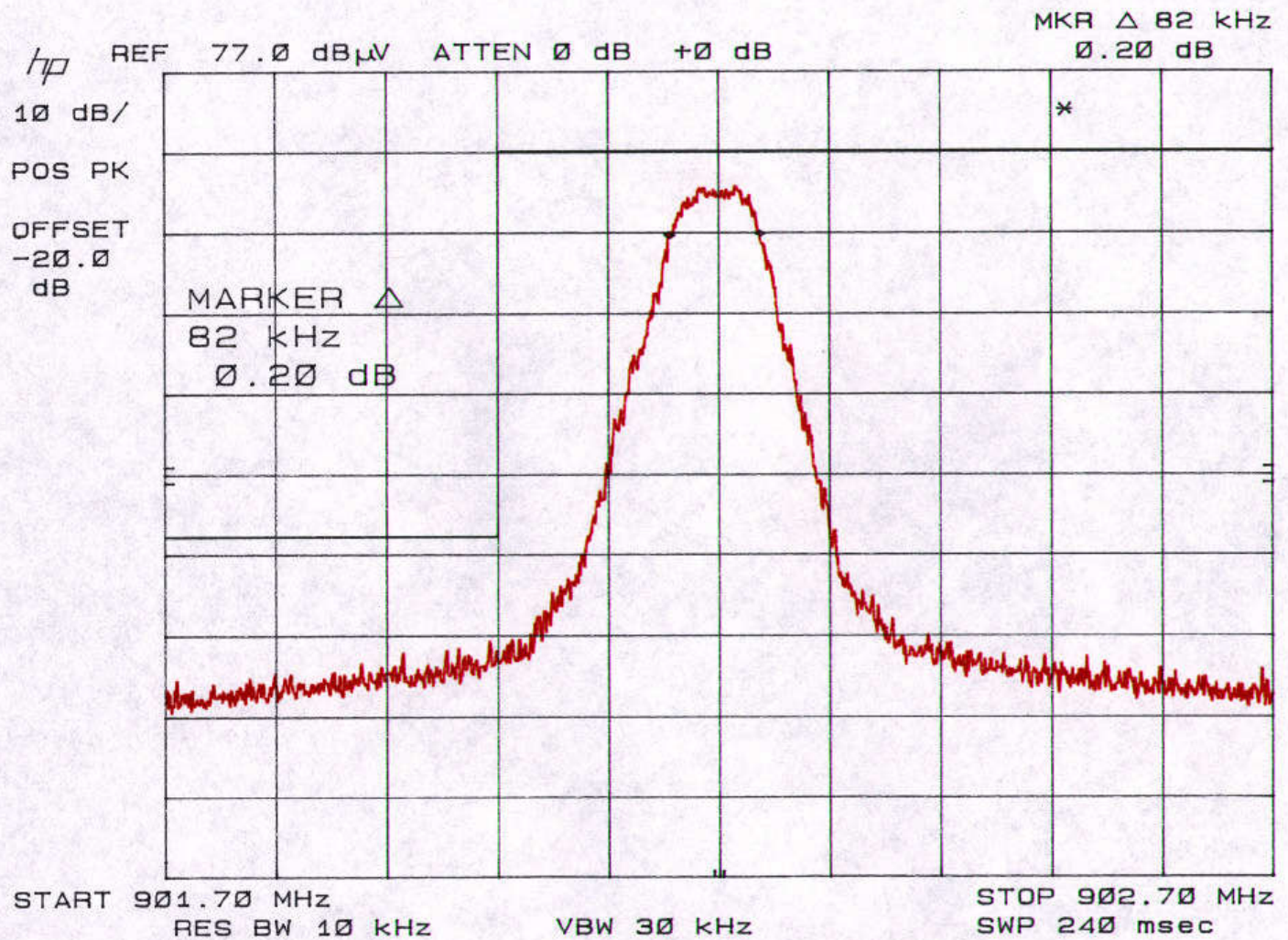
ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
Fcc152~1.dat 19/4/1999

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 902.195    | 100           | 124         | 64.10           | 22.81   | 4.21    | 0.00    | 91.12        | 93.97          | Pass |

19 April 1999

Plot 8  
V<sub>port</sub>



## **Appendix 3**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
E-9000 Tower with Version 2 Transmitter  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 Subpart C, Radiated Emissions  
When Transmitting At 915.0 MHz**

**PROJECT NO. 308A08**

**TEST COMPLETED: 22 April, 1999**

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

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This testing was done using a E-9000 Tower with Version 2 Transmitter.  
This Test was done using FCC Part 15 Subpart C specifications.

There were no variations to the test method.

The E-9000 Tower with Version 2 Transmitter produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Subpart C radiated emission in the configuration described in section 2.4, while transmitting at 915.0 MHz.

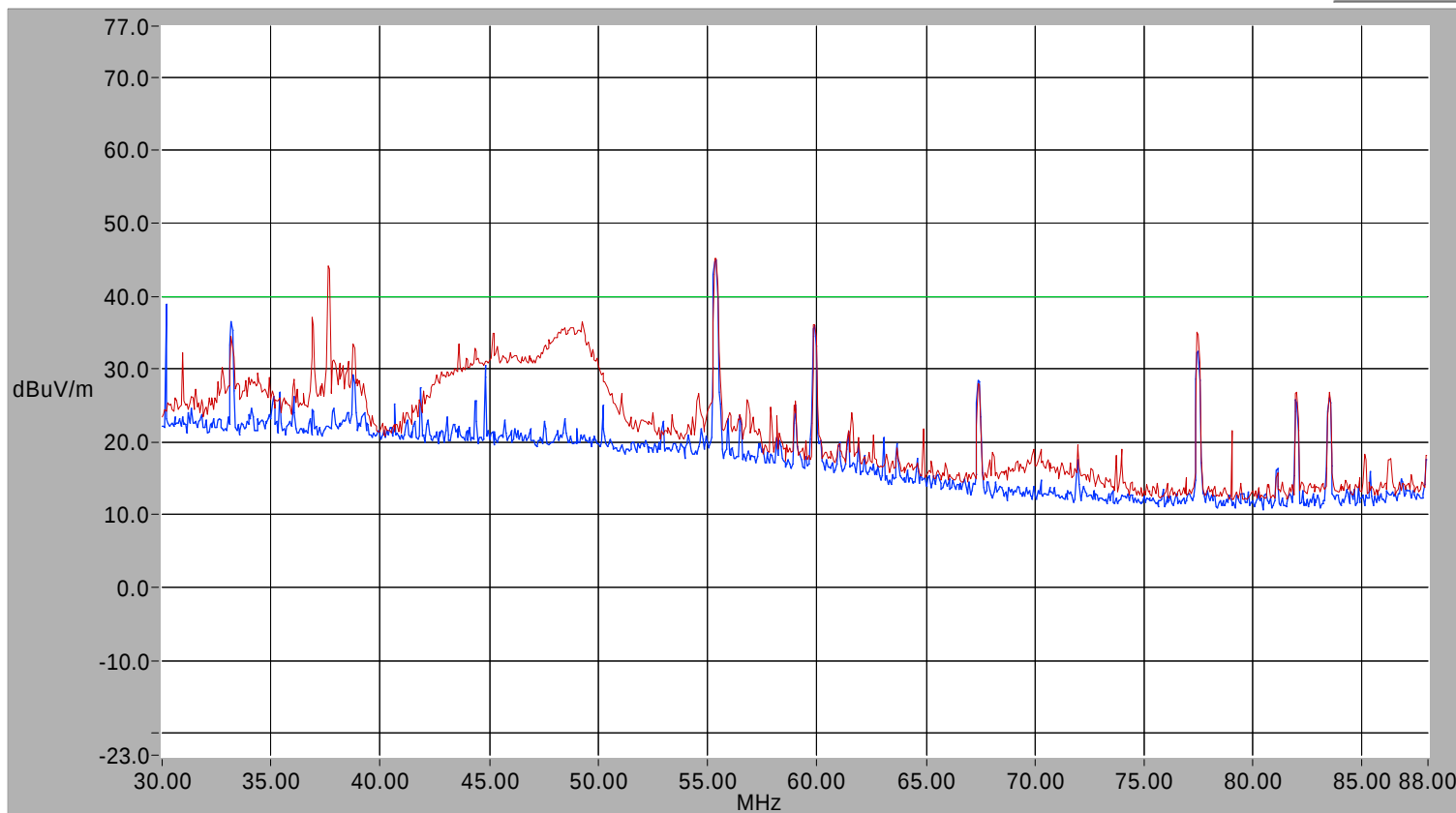
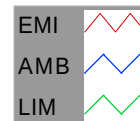
The Equipment Under Test is considered to have passed if the radiated field power does not exceed the limit of the appropriate standard as shown in section 3 of this report.

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: April 20, 1999 11:37 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 11



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
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) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 36.874     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 48.360     | 3             | 250         | 13.00           | 16.41   | 0.97    | 0.00    | 30.38        | 40.00          | Pass    |

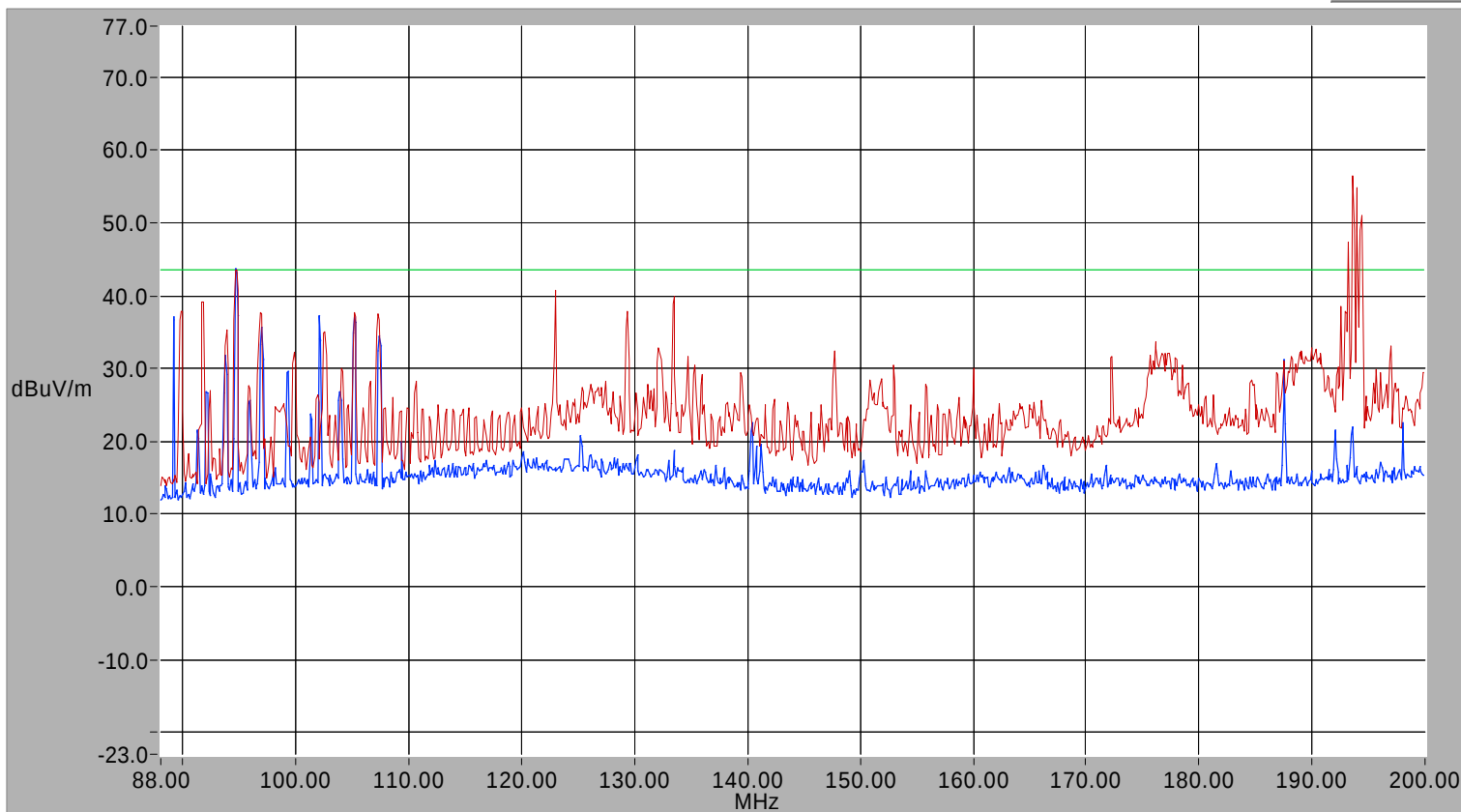
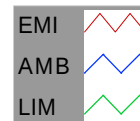
# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: 12:05 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 20, 1999

Plot Number: 12



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

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

## **QUASI-PEAK DATA**

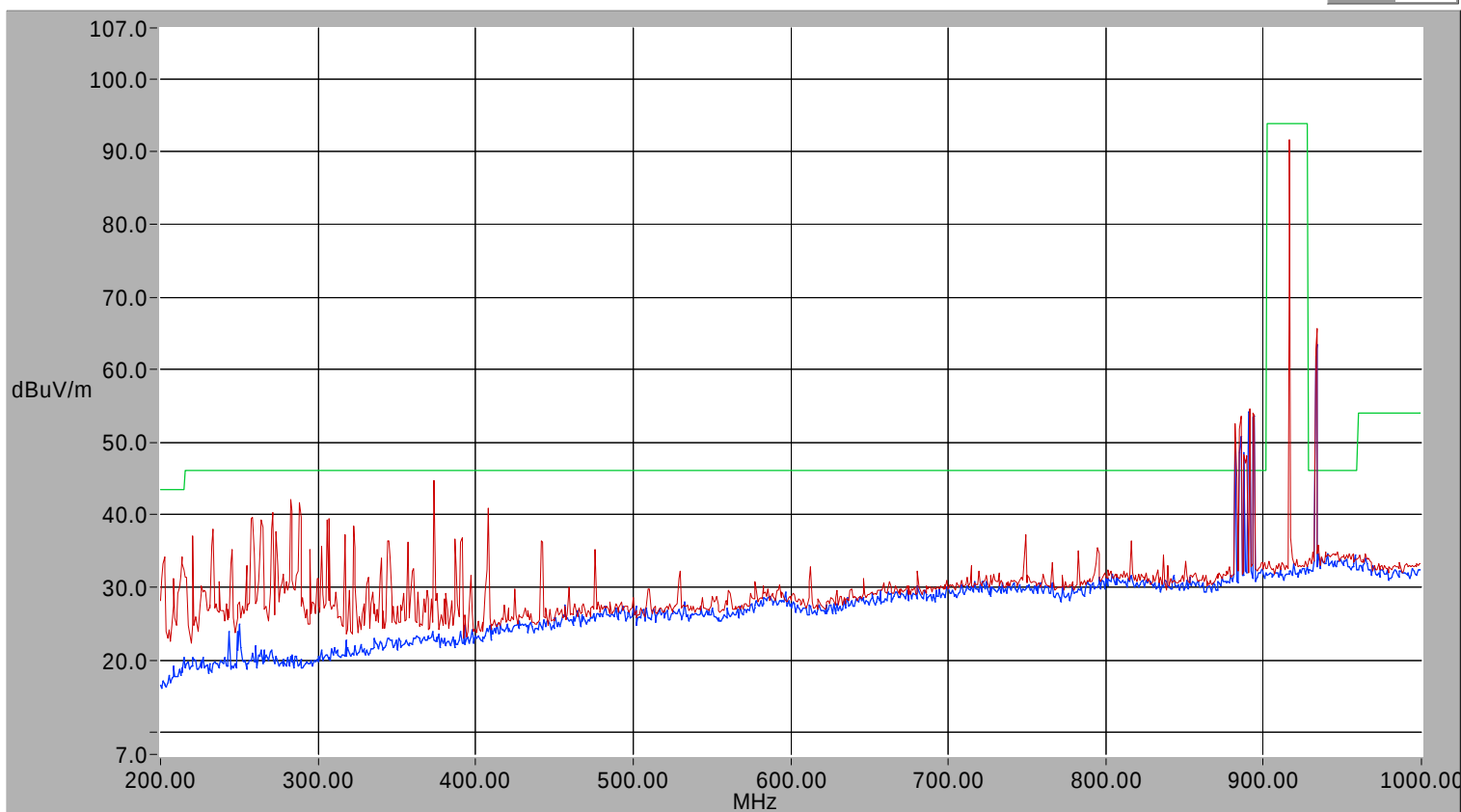
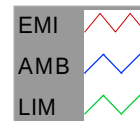
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 129.986    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 133.294    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 122.902    | 283           | 228         | 27.60           | 12.90   | 1.33    | 0.00    | 41.83        | 43.52          | Pass    |
| 193.392    | 82            | 158         | 5.00            | 11.13   | 1.70    | 0.00    | 17.83        | 43.52          | Pass    |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: April 20, 1999 12:21 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 13



VBW: 300.000 kHz Sweep Time: 240.00 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 4/8/1998  
04318h3.dat 23/4/1998  
fcc15-2493.dat 28/4/1999

## **QUASI-PEAK DATA**

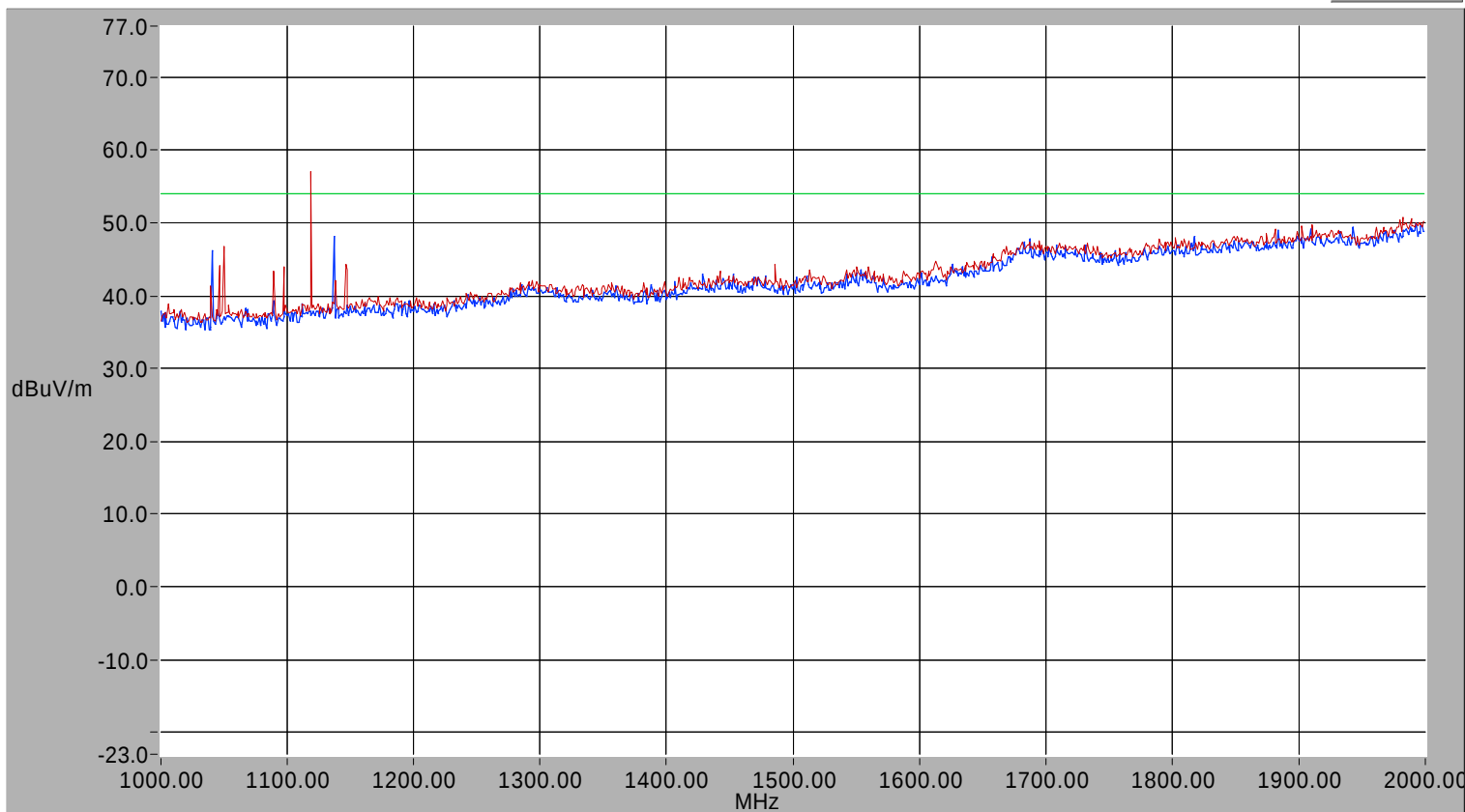
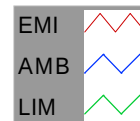
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 282.685    | 119           | 113         | 25.40           | 13.58   | 2.13    | 0.00    | 41.11        | 46.02          | Pass |
| 288.001    | 118           | 113         | 23.90           | 13.50   | 2.18    | 0.00    | 39.58        | 46.02          | Pass |
| 373.372    | 101           | 113         | 22.50           | 15.98   | 2.60    | 0.00    | 41.08        | 46.02          | Pass |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit At 215 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: April 19, 1999 3:05 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 14



VBW: 1.000 MHz  
RBW: 300.000 kHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

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

## **QUASI-PEAK DATA**

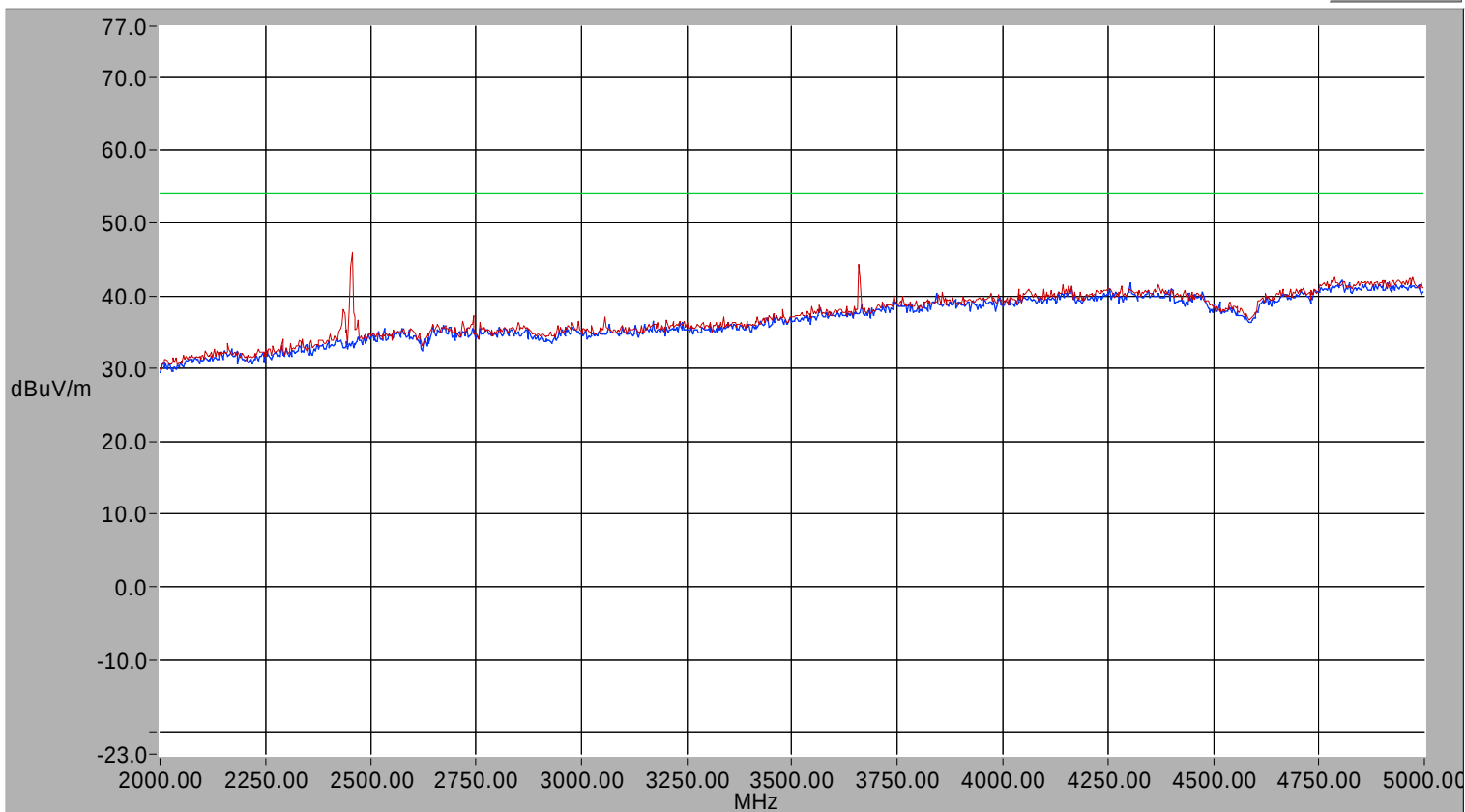
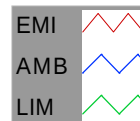
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1122.780   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 2 - 5 GHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: April 22, 1999 10:21 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 15



VBW: 100.000 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 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornh.dat 12/9/1998

## **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) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 2453.280   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

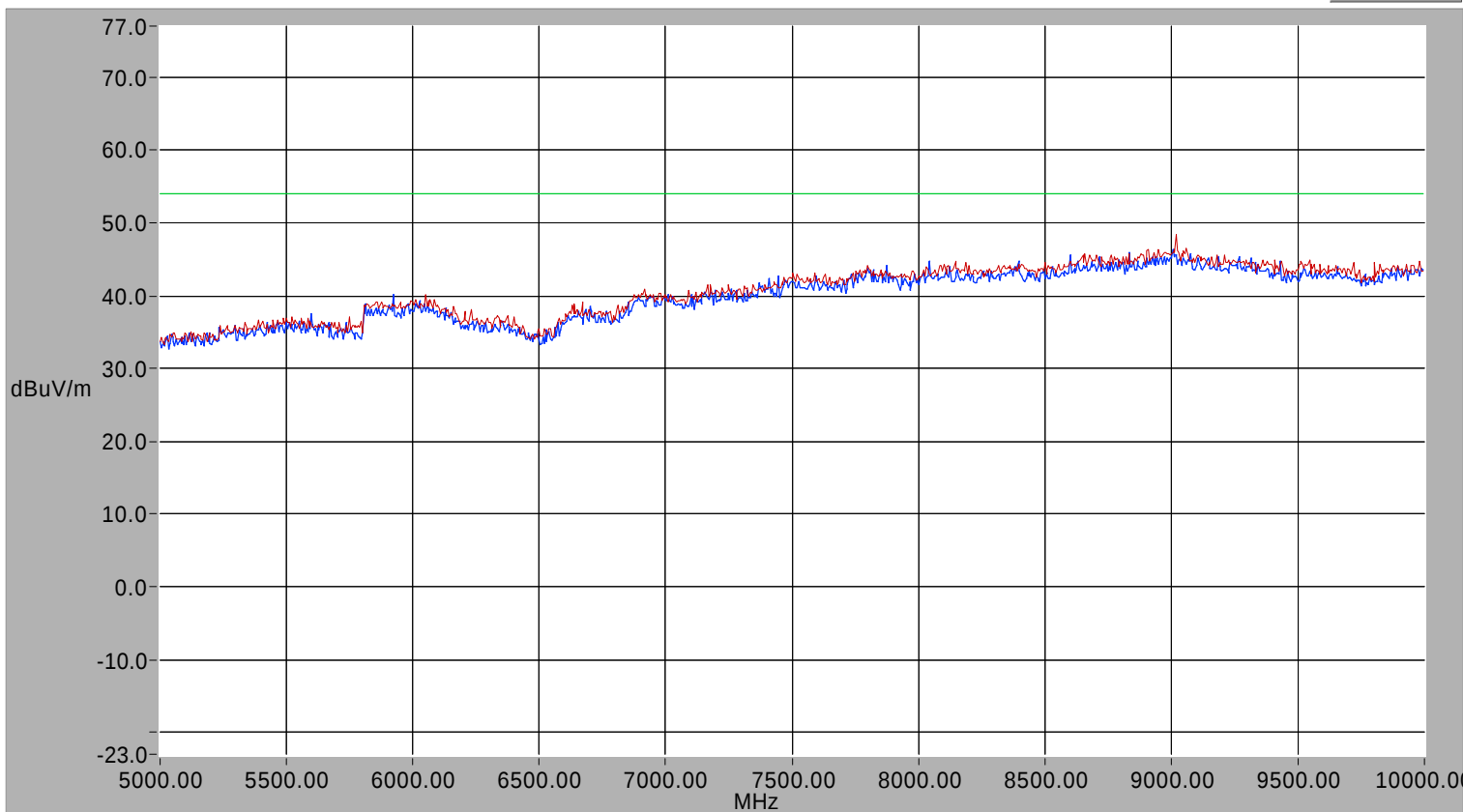
**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Class B 3m**

Title: 5 - 10 GHZ  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: April 22, 1999 10:31 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Verson 2.0 TX  
Serial #: 001

Plot Number: 16

EMI   
AMB   
LIM 



VBW: 30.000 kHz  
RBW: 1.000 MHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

**Associated Files**

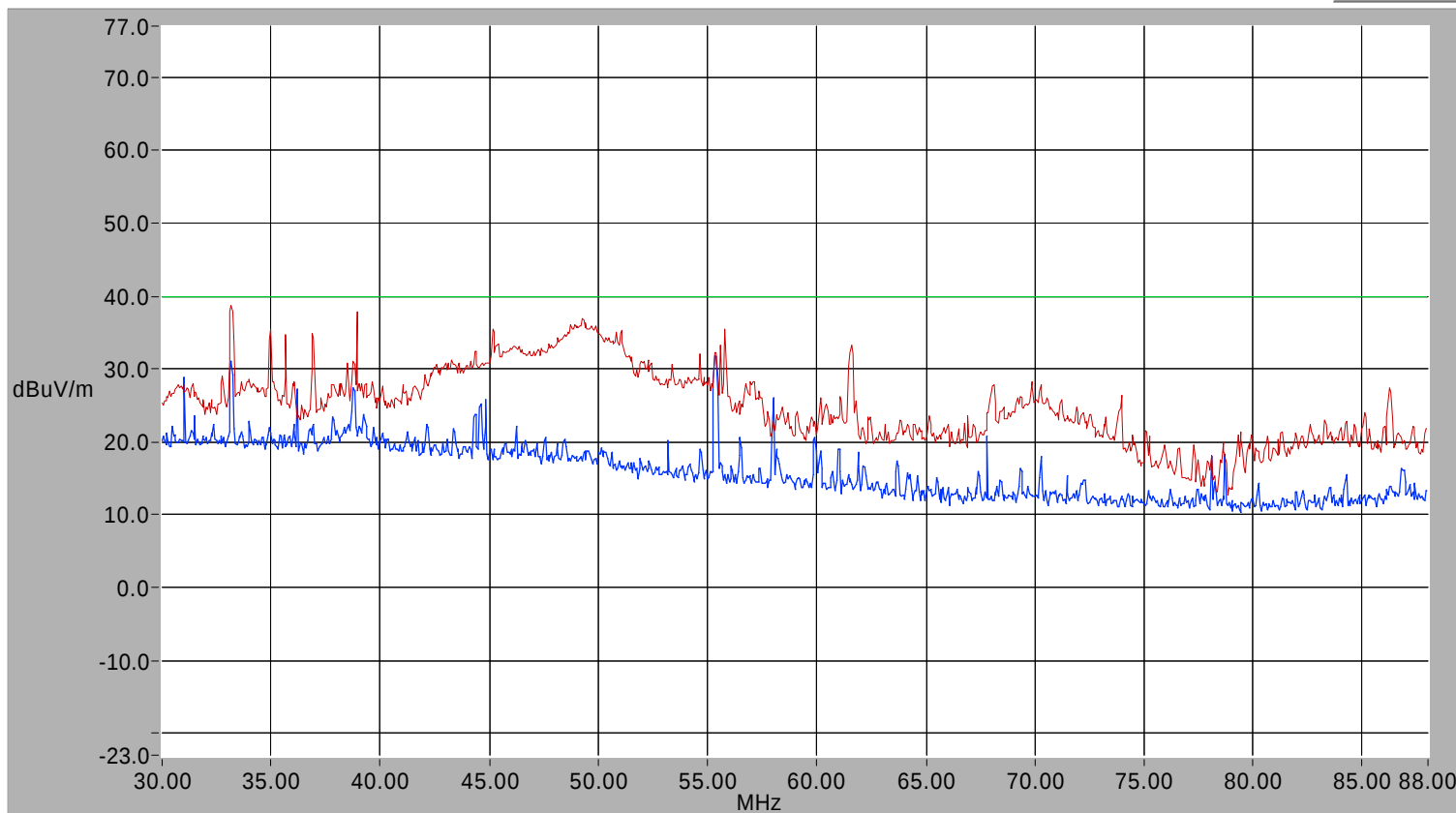
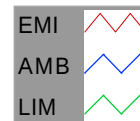
ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornh.dat 12/9/1998

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

Title: 30 - 88 MHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: April 20, 1999 12:38 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 5



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

## **QUASI-PEAK DATA**

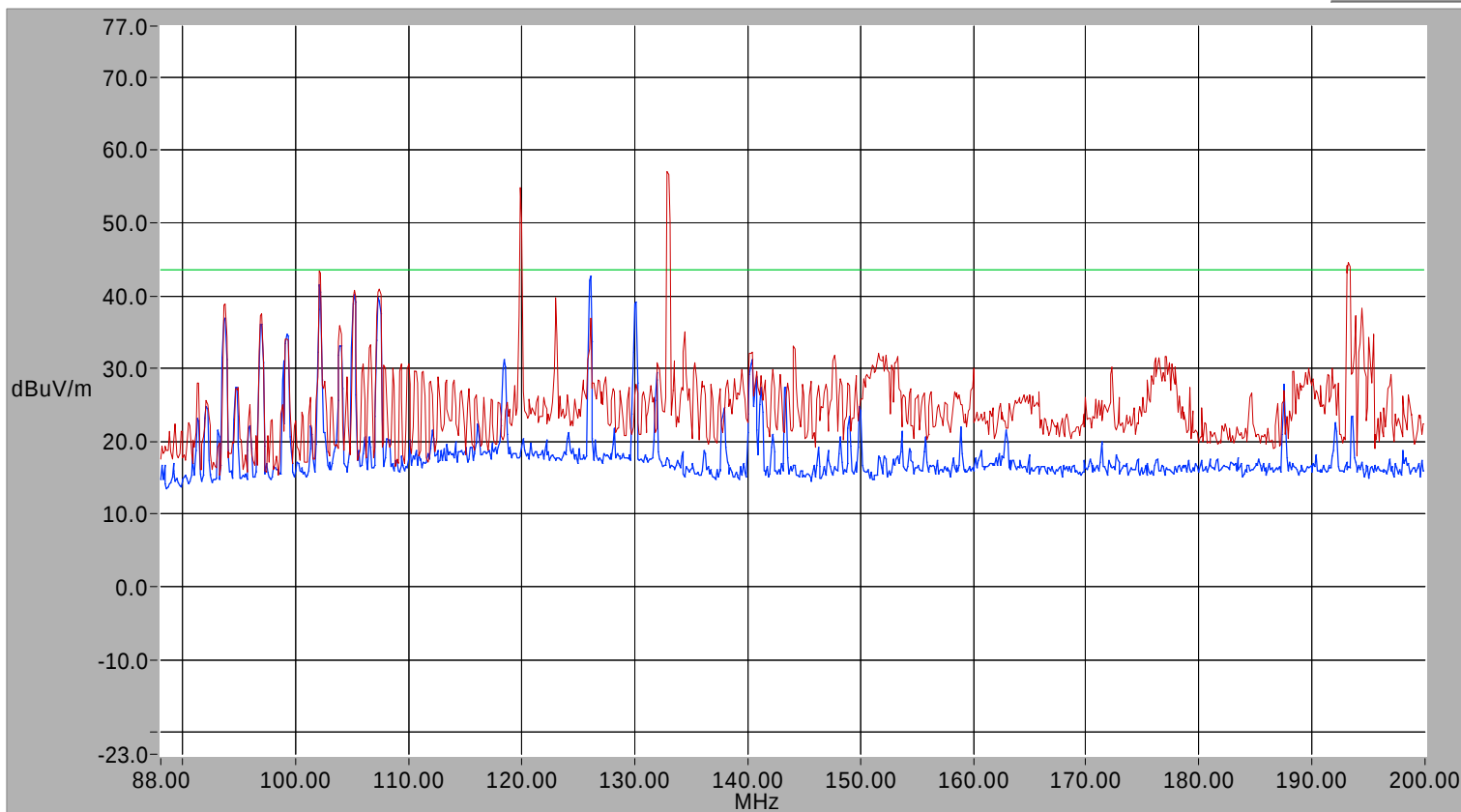
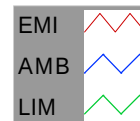
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 36.852     | 355           | 244         | 13.00           | 16.04   | 0.80    | 0.00    | 29.84        | 40.00          | Pass    |
| 49.162     | 250           | 113         | 17.90           | 13.86   | 0.98    | 0.00    | 32.74        | 40.00          | Pass    |
| 34.144     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 34.892     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 38.696     | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

Title: 88 - 200 MHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: April 20, 1999 12:58 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 6



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
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) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 120.034    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 131.992    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 122.896    | 356           | 113         | 24.80           | 12.90   | 1.33    | 0.00    | 39.03        | 43.52          | Pass    |
| 193.232    | 150           | 243         | 9.10            | 11.10   | 1.70    | 0.00    | 21.90        | 43.52          | Pass    |

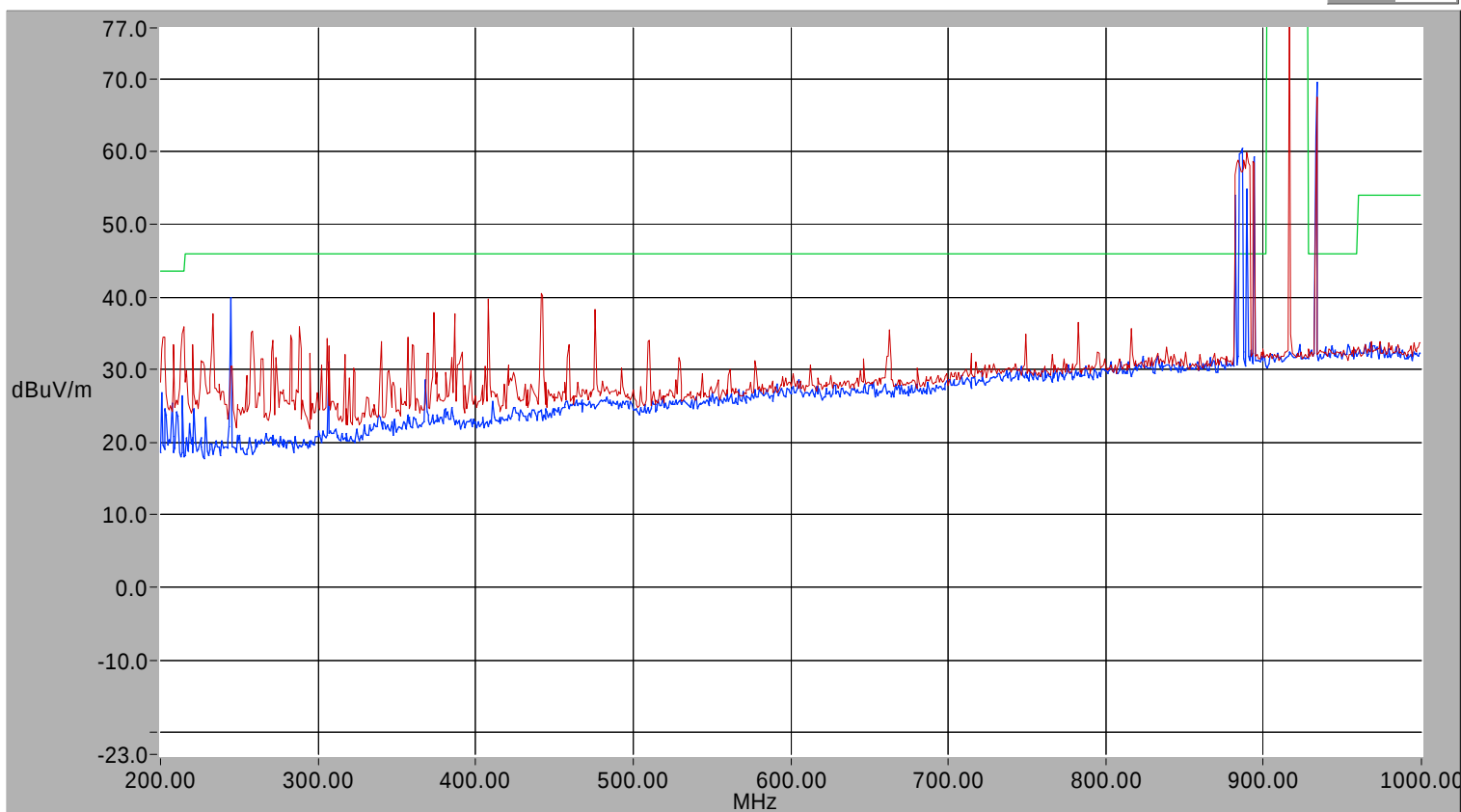
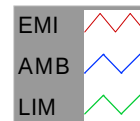
# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

Title: 200 - 1000 MHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: 1:19 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Verson 2.0 TX  
Serial #: 001

April 20, 1999

Plot Number: 7



VBW: 300.000 kHz Sweep Time: 240.00 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 4/8/1998  
04318v3.dat 23/4/1998  
Fcc15-24.dat 28/4/1999

## **QUASI-PEAK DATA**

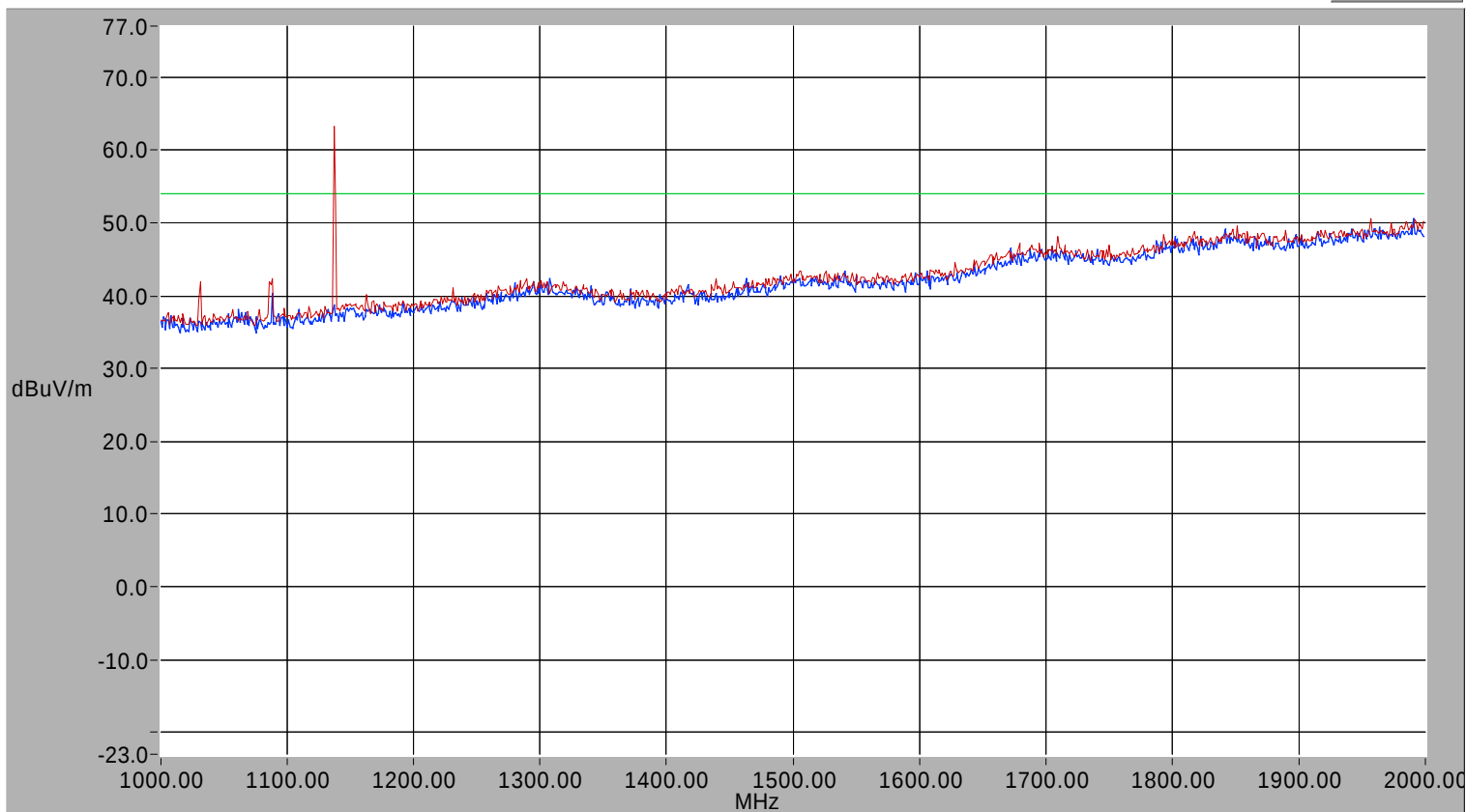
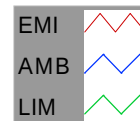
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 441.279    | 347           | 117         | 20.00           | 16.70   | 2.81    | 0.00    | 39.50        | 46.02          | Pass |

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

Title: 1 - 2 GHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: April 19, 1999 2:56 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 8



VBW: 1.000 MHz  
RBW: 300.000 kHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

## **QUASI-PEAK DATA**

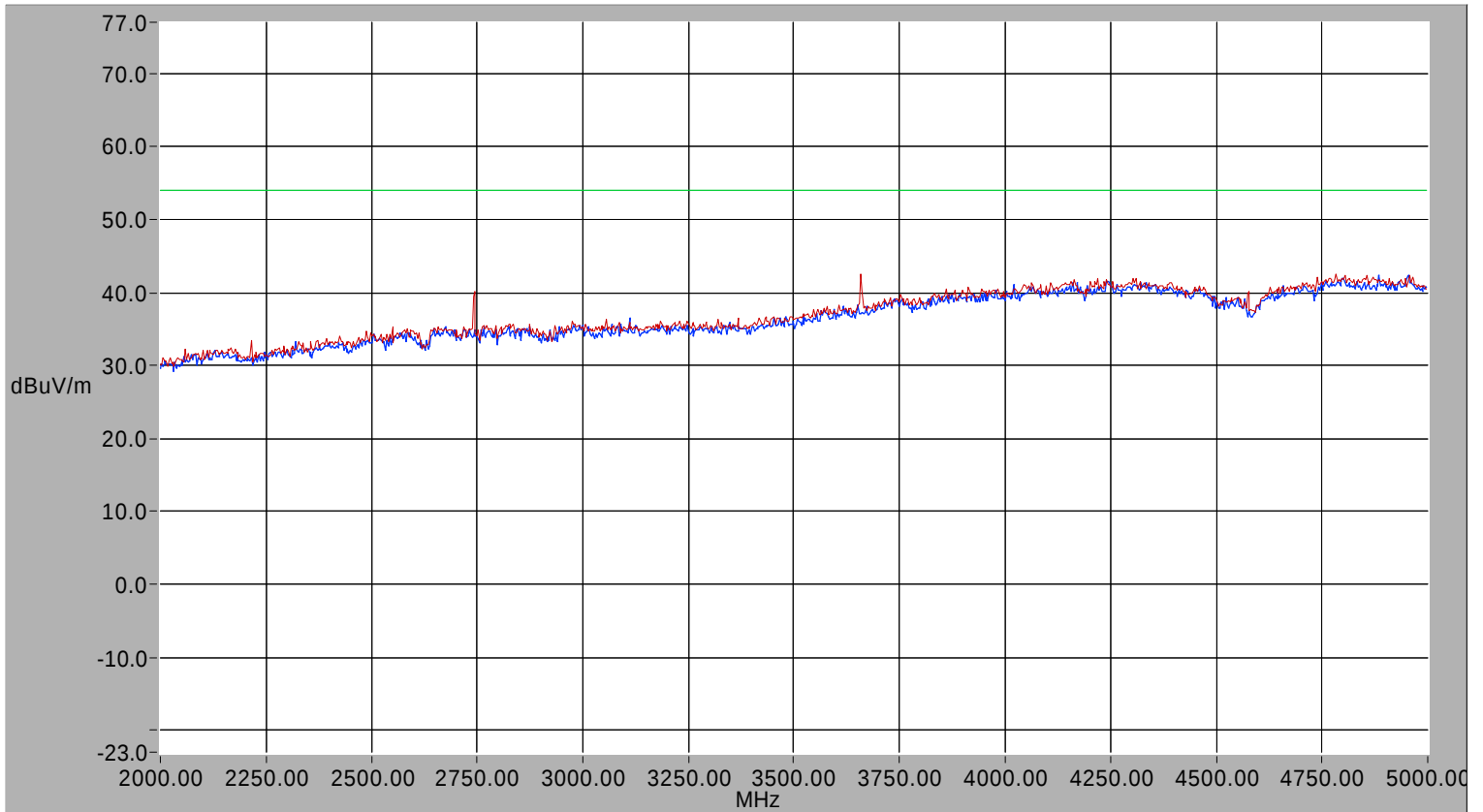
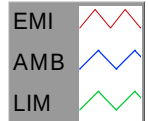
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1137.380   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Class B 3m**

Title: 2 - 5 GHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: April 22, 1999 10:05 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Verson 2.0 TX  
Serial #: 001

Plot Number: 9



VBW: 100.000 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**

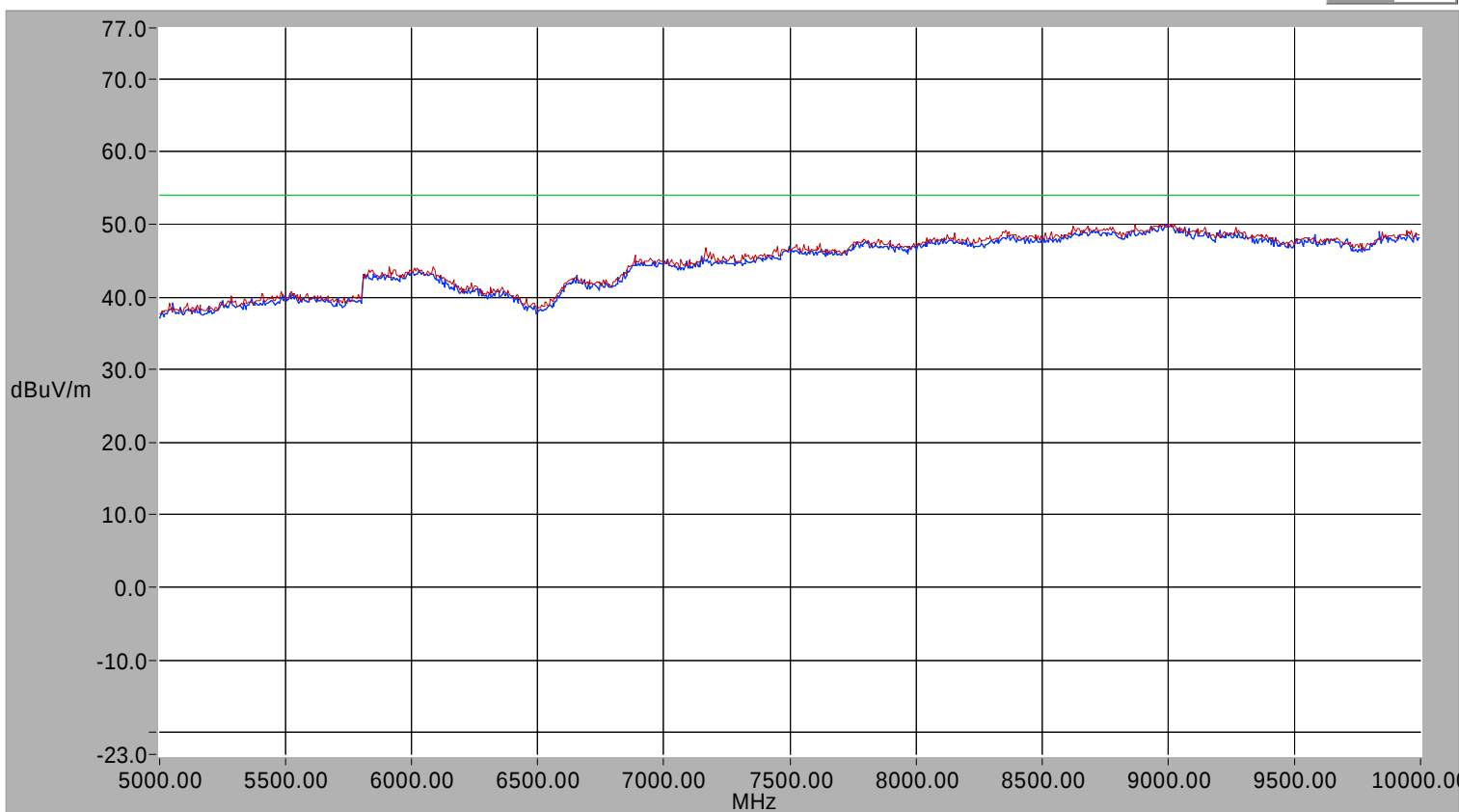
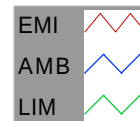
ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornv.dat 12/9/1998

**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Class B 3m**

Title: 5 - 10 GHz  
Mode of Operation: Transmit At 915.0 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments:

Date & Time: April 22, 1999 10:12 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Verson 2.0 TX  
Serial #: 001

Plot Number: 10



VBW: 30.000 kHz  
RBW: 1.000 MHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

**Associated Files**

ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornv.dat 12/9/1998

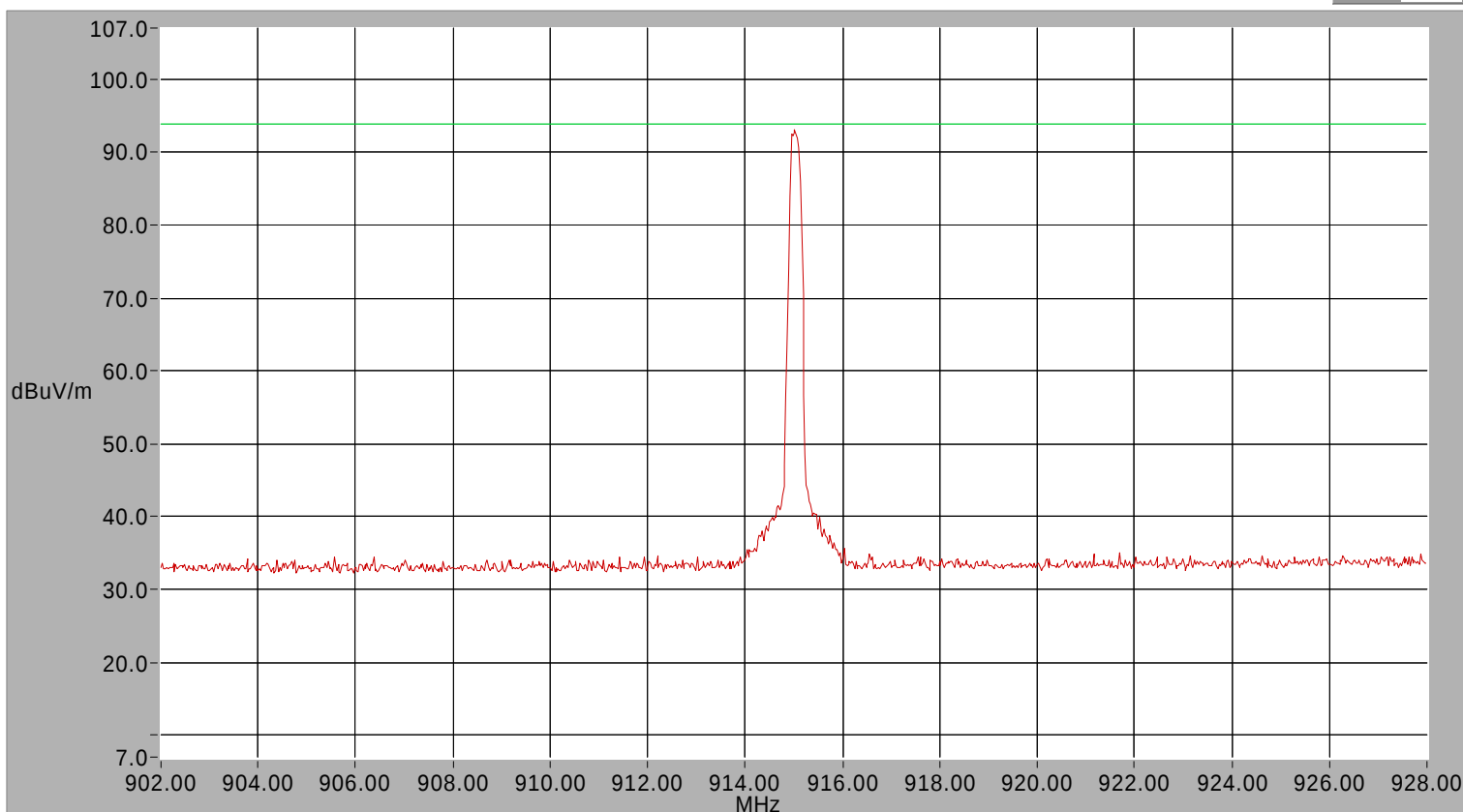
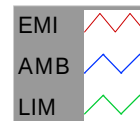
# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: Radiated Emissions  
Mode of Operation: Transmit At 915 MHz  
Distance: 3 meters  
Technologist: Jeffrey Good  
Comments: -

Date & Time: 11:54 AM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 19, 1999

Plot Number: 18



VBW: 1.000 GHz  
RBW: 100.000 kHz

Sweep Time: 240.00 ms  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

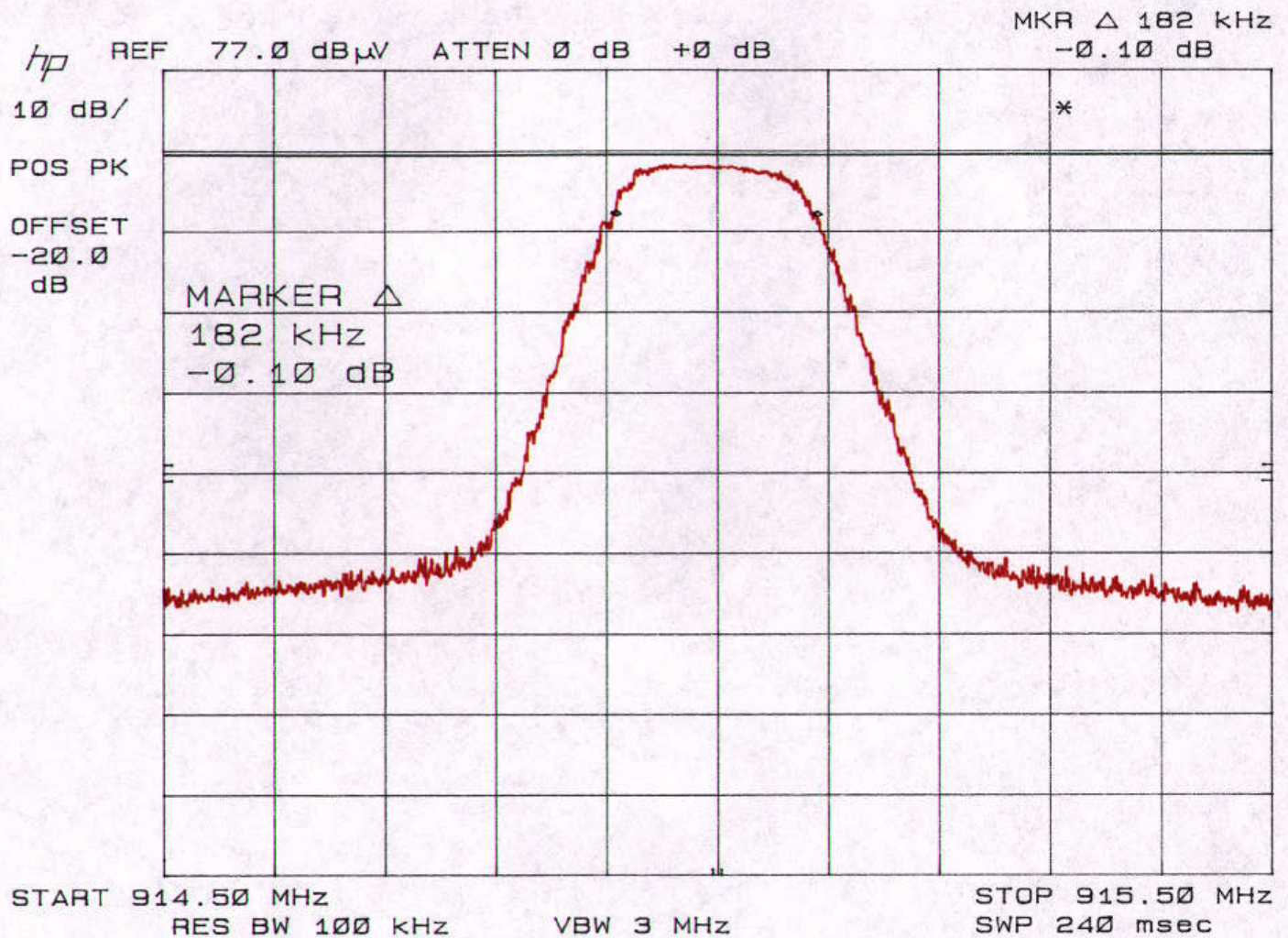
ofts3m.dat 4/8/1998  
04318h3.dat 23/4/1998  
Fcc15-24.dat 28/4/1999

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 914.983    | 138           | 297         | 63.40           | 23.90   | 4.26    | 0.00    | 91.56        | 93.98          | Pass |

19 April 1999

Plot 4  
Hpc1



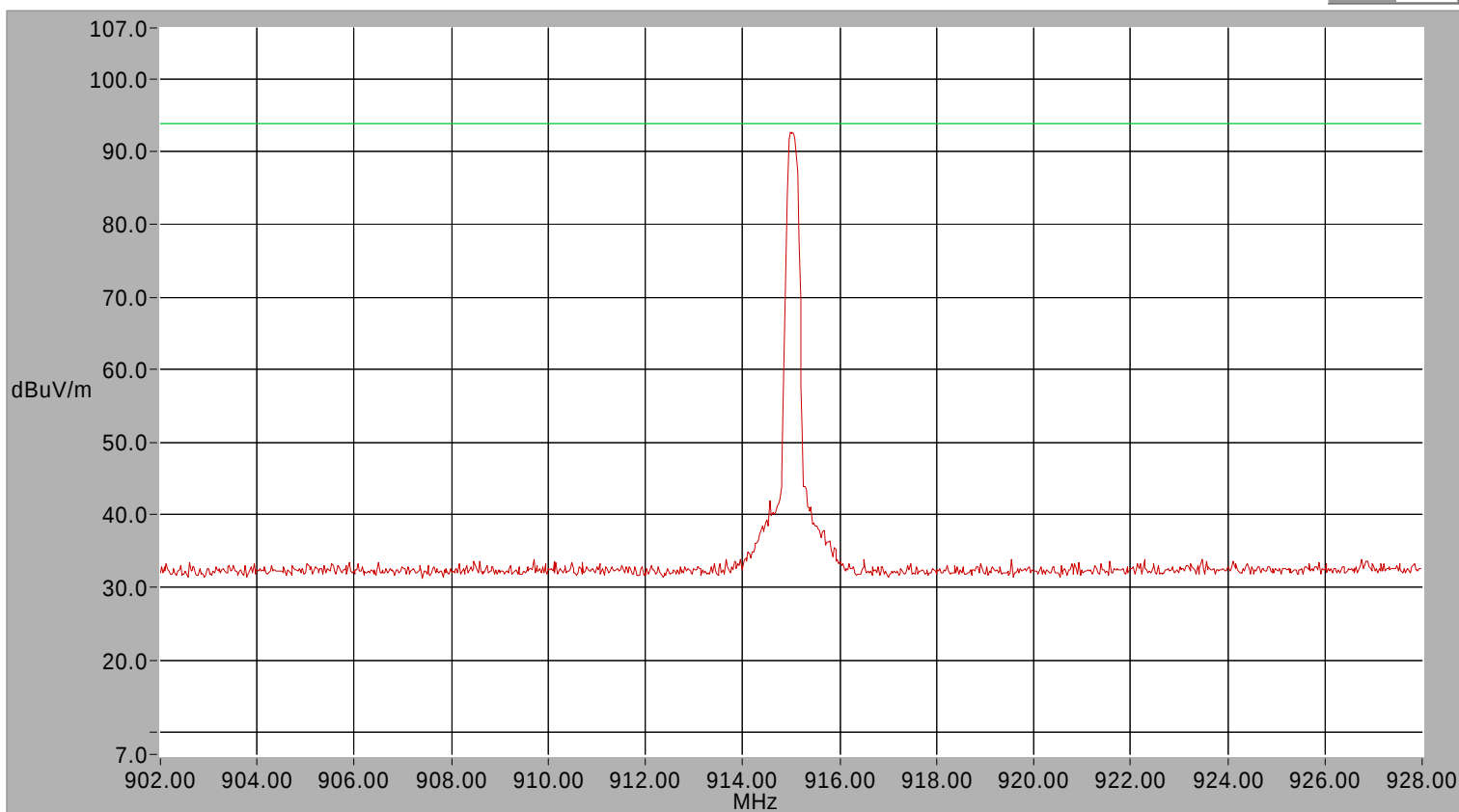
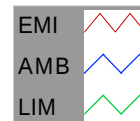
# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

Title: Radiated Emissions  
Mode of Operation: Transmit At 915 MHz  
Distance: 3 meters  
Technologist: Jeffrey Good  
Comments: -

Date & Time: April 19, 1999  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

10:57 AM

Plot Number: 17



VBW: 1.000 GHz Sweep Time: 240.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
Fcc15-24.dat 28/4/1999

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 914.984    | 93            | 113         | 65.00           | 22.87   | 4.26    | 0.00    | 92.13        | 93.98          | Pass |



## **Appendix 4**

**Test Result Data Forms  
FOR  
E-Zone Networks Inc.'s  
E-9000 Tower with Version 2 Transmitter  
TO DETERMINE COMPLIANCE WITH  
FCC Part 15 Subpart C, Radiated Emissions  
When Transmitting At 927.8.0 MHz**

**PROJECT NO. 308A08**

**TEST COMPLETED: 22 April, 1999**

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

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| Horizontal 200 MHz - 1000 MHz   | 57         |
| Horizontal 1 - 2 GHz            | 58         |
| Horizontal 2 - 5 GHz            | 59         |
| Horizontal 5 - 10 GHz           | 60         |
| Vertical 30 MHz - 88 MHz        | 61         |
| Vertical 88 MHz - 200 MHz       | 62         |
| Vertical 200 MHz - 1000 MHz     | 63         |
| Vertical 1 - 2 GHz              | 64         |
| Vertical 2 - 5 GHz              | 65         |
| Vertical 5 - 10 GHz             | 66         |
| <b>Transmitter measurements</b> | <b>67</b>  |
| Horizontal Power                | 67         |
| Horizontal Band Width           | 68         |
| Vertical Power                  | 69         |
| Horizontal Band Width           | 70         |

This testing was done using a E-9000 Tower with Version 2 Transmitter.  
This Test was done using FCC Part 15 Subpart C specifications.

There were no variations to the test method.

The E-9000 Tower with Version 2 Transmitter produced by E-Zone Networks Inc., **PASSED** FCC Part 15 Subpart C radiated emission in the configuration described in section 2.4, while transmitting at 927.8 MHz.

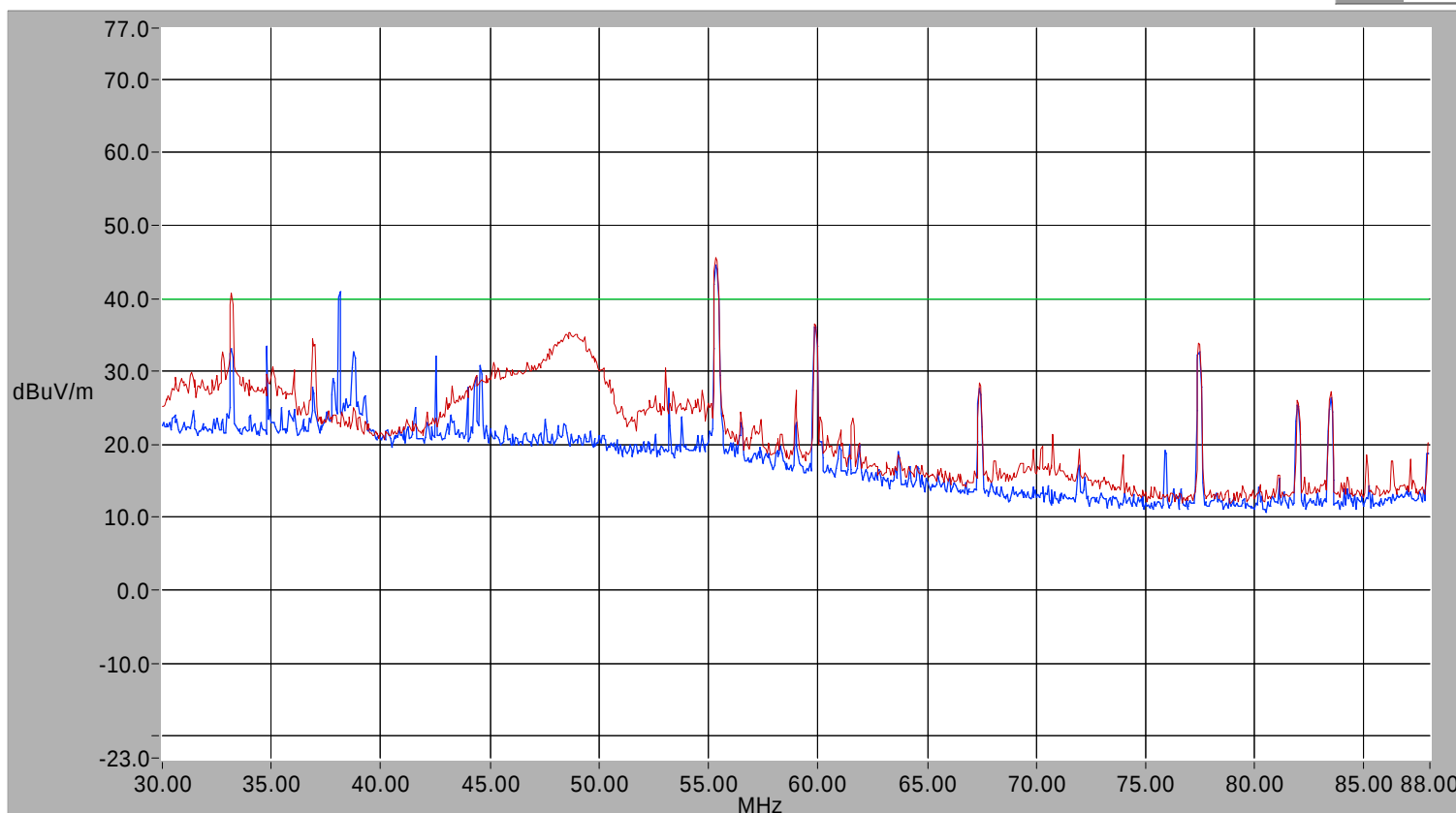
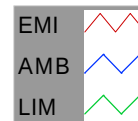
The Equipment Under Test is considered to have passed if the radiated field power does not exceed the limit of the appropriate standard as shown in section 3 of this report.

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 2:20 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 40



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

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

## **QUASI-PEAK DATA**

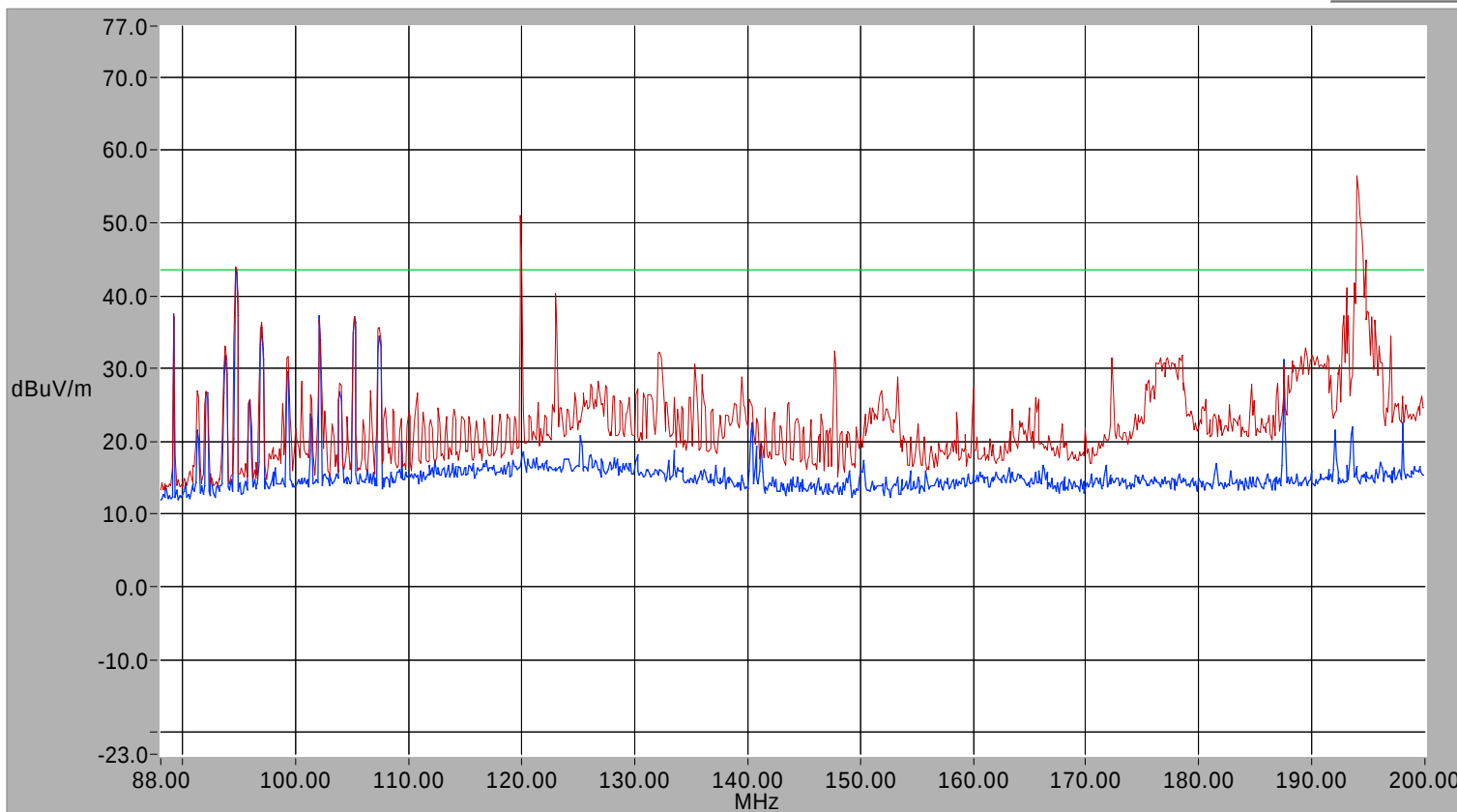
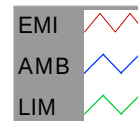
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 49.183     | 340           | 252         | 15.40           | 16.24   | 0.98    | 0.00    | 32.63        | 40.00          | Pass |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 2:44 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 41



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
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) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 119.278    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 122.898    | 287           | 234         | 27.70           | 12.90   | 1.33    | 0.00    | 41.93        | 43.52          | Pass    |
| 193.554    | 74            | 137         | 3.20            | 11.15   | 1.70    | 0.00    | 16.05        | 43.52          | Pass    |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

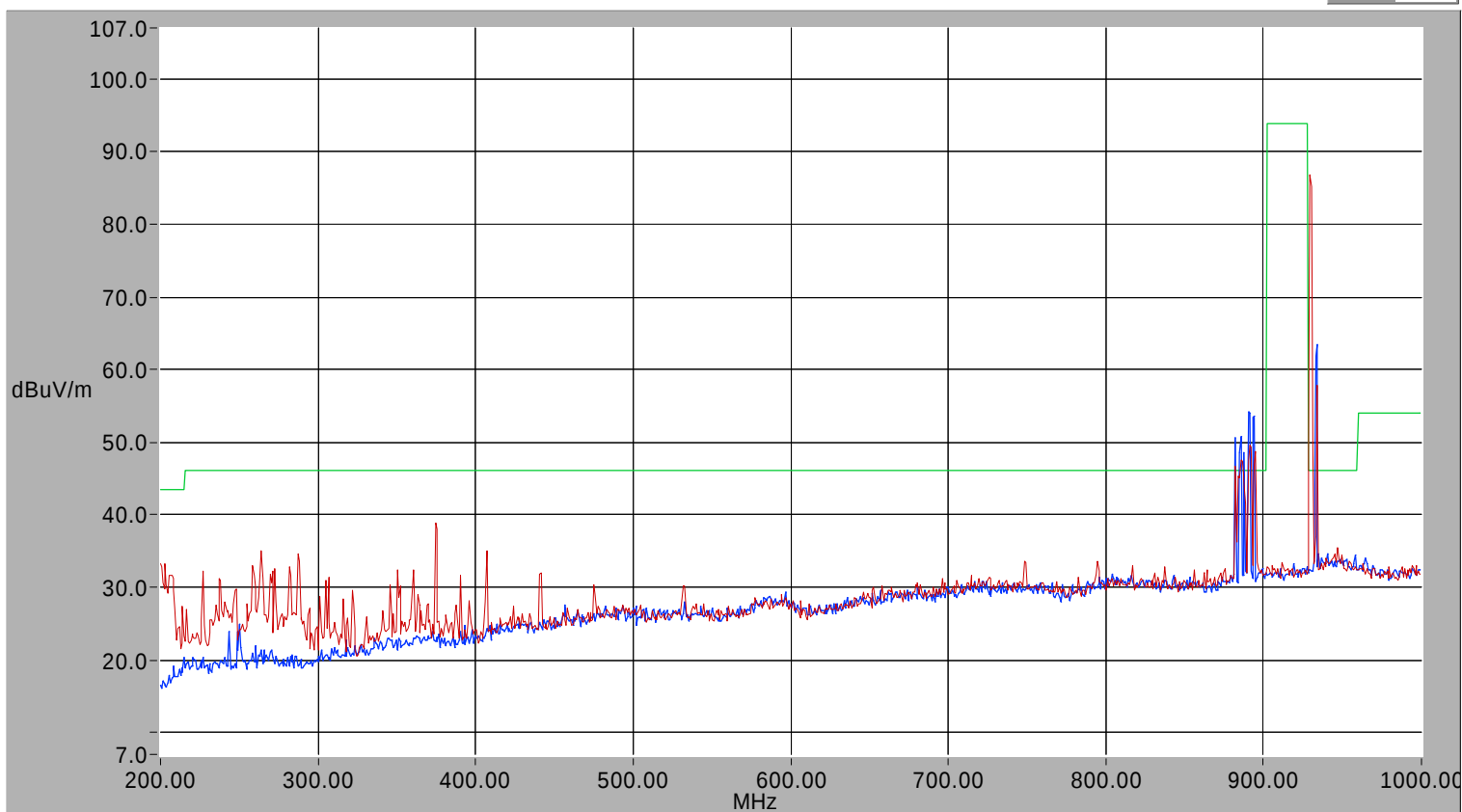
Title: 200 - 1000 MHz  
Mode of Operation: Transmit At 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: 2:57 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 20, 1999

Plot Number: 42

EMI  
AMB  
LIM



VBW: 300.000 kHz Sweep Time: 240.00 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 4/8/1998  
04318h3.dat 23/4/1998  
Fcc15-24.dat 28/4/1999

## **QUASI-PEAK DATA**

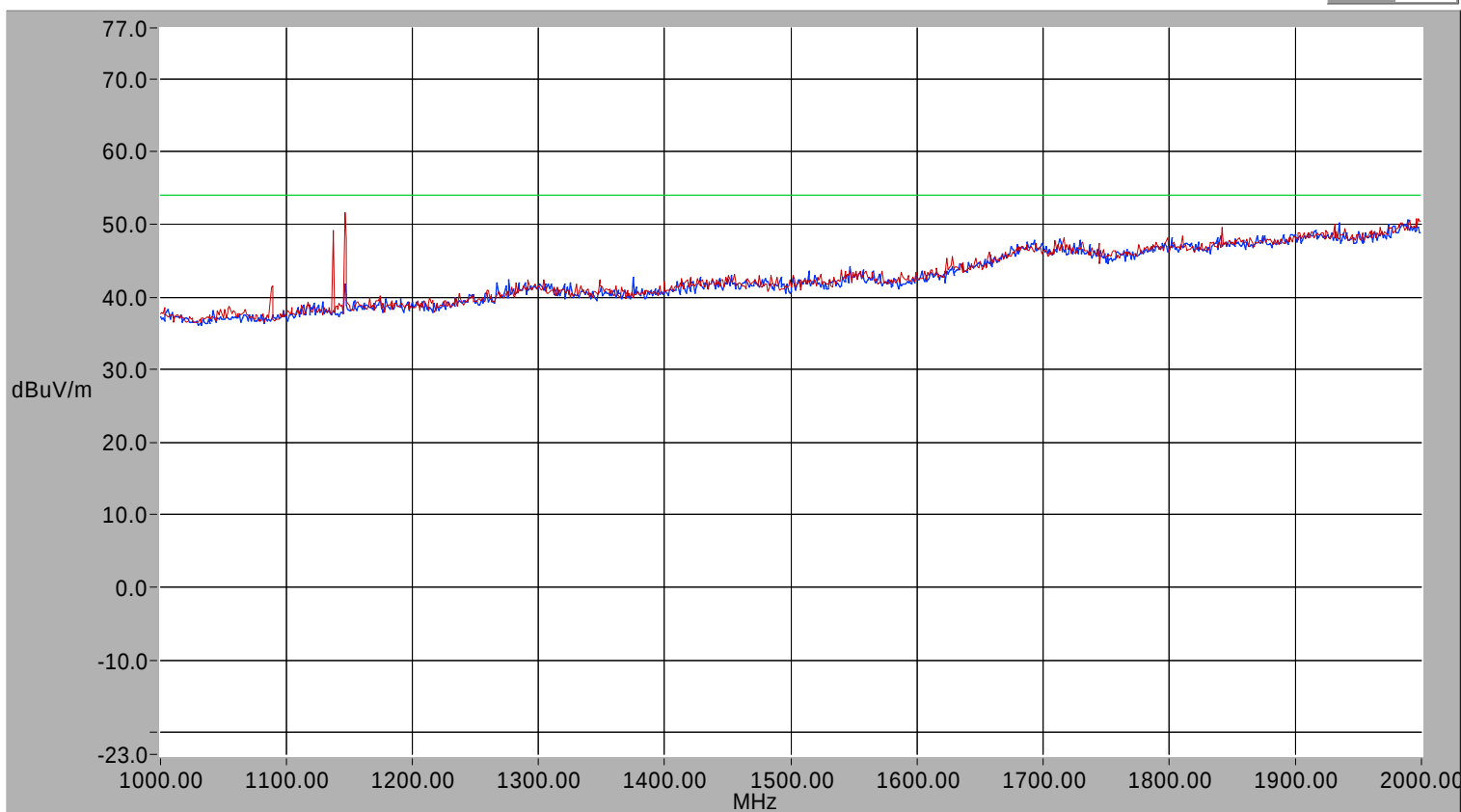
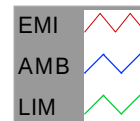
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 373.370    | 103           | 113         | 24.20           | 15.98   | 2.60    | 0.00    | 42.78        | 46.02          | Pass |

# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 19, 1999 2:21 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 43



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

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

## **QUASI-PEAK DATA**

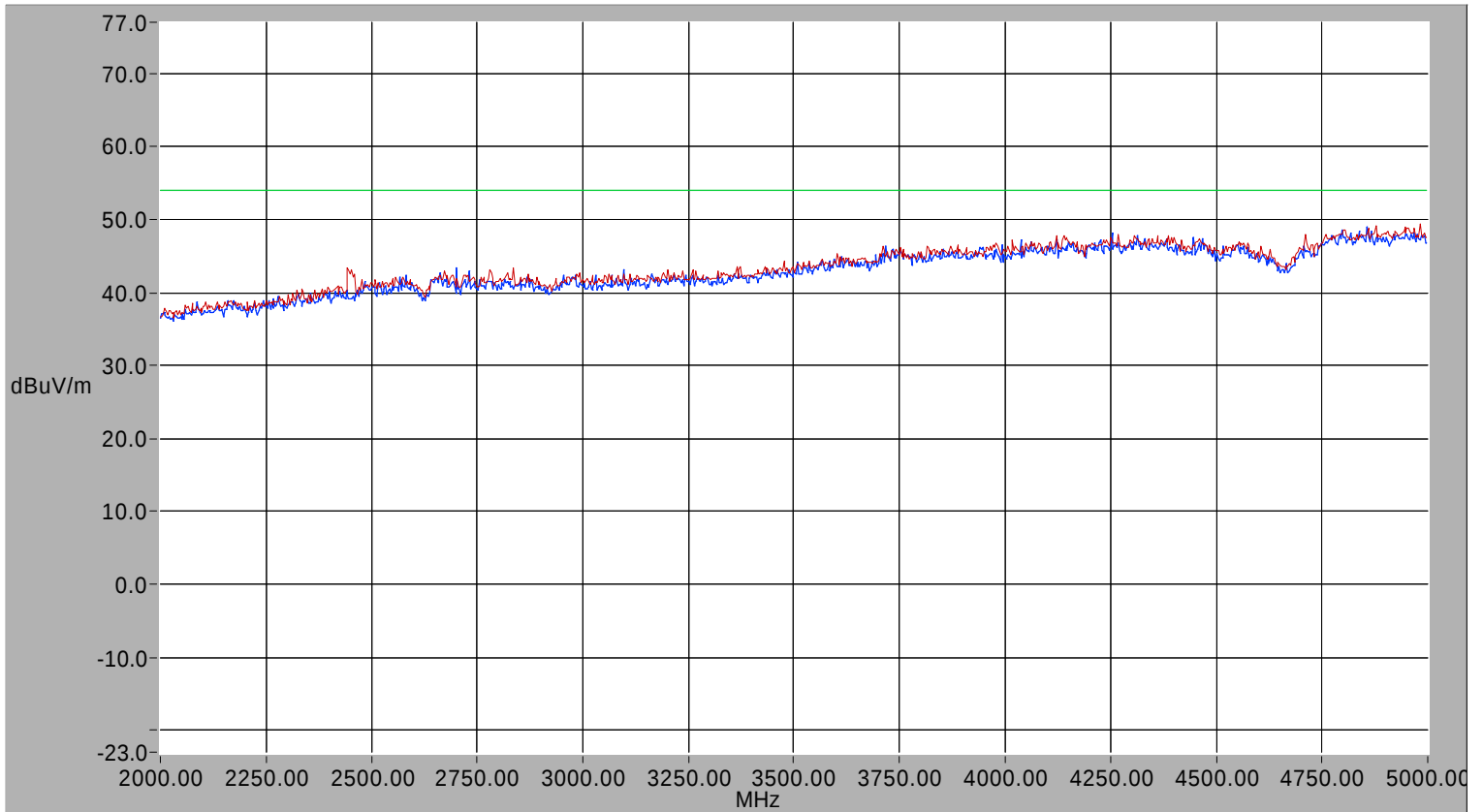
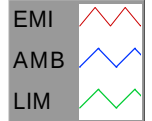
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1843.000   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1144.840   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 3:26 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 44



VBW: 3.000 MHz  
RBW: 1.000 MHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

**Associated Files**

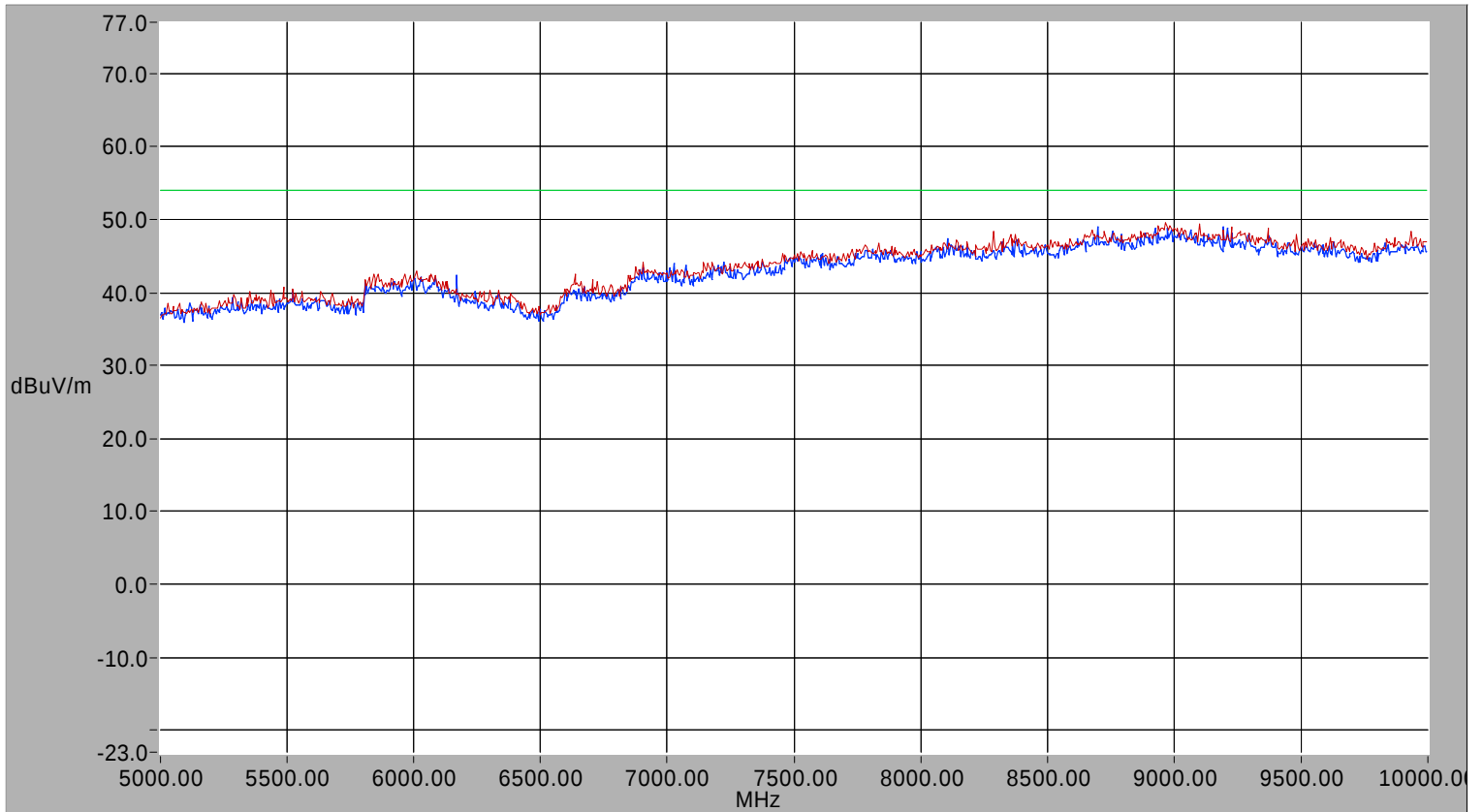
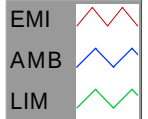
ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornh.dat 12/9/1998

**Radiated Emissions  
Horizontal Polarity  
FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 3:39 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Verson 2.0 TX  
Serial #: 001

Plot Number: 45



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

**Associated Files**

ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornh.dat 12/9/1998

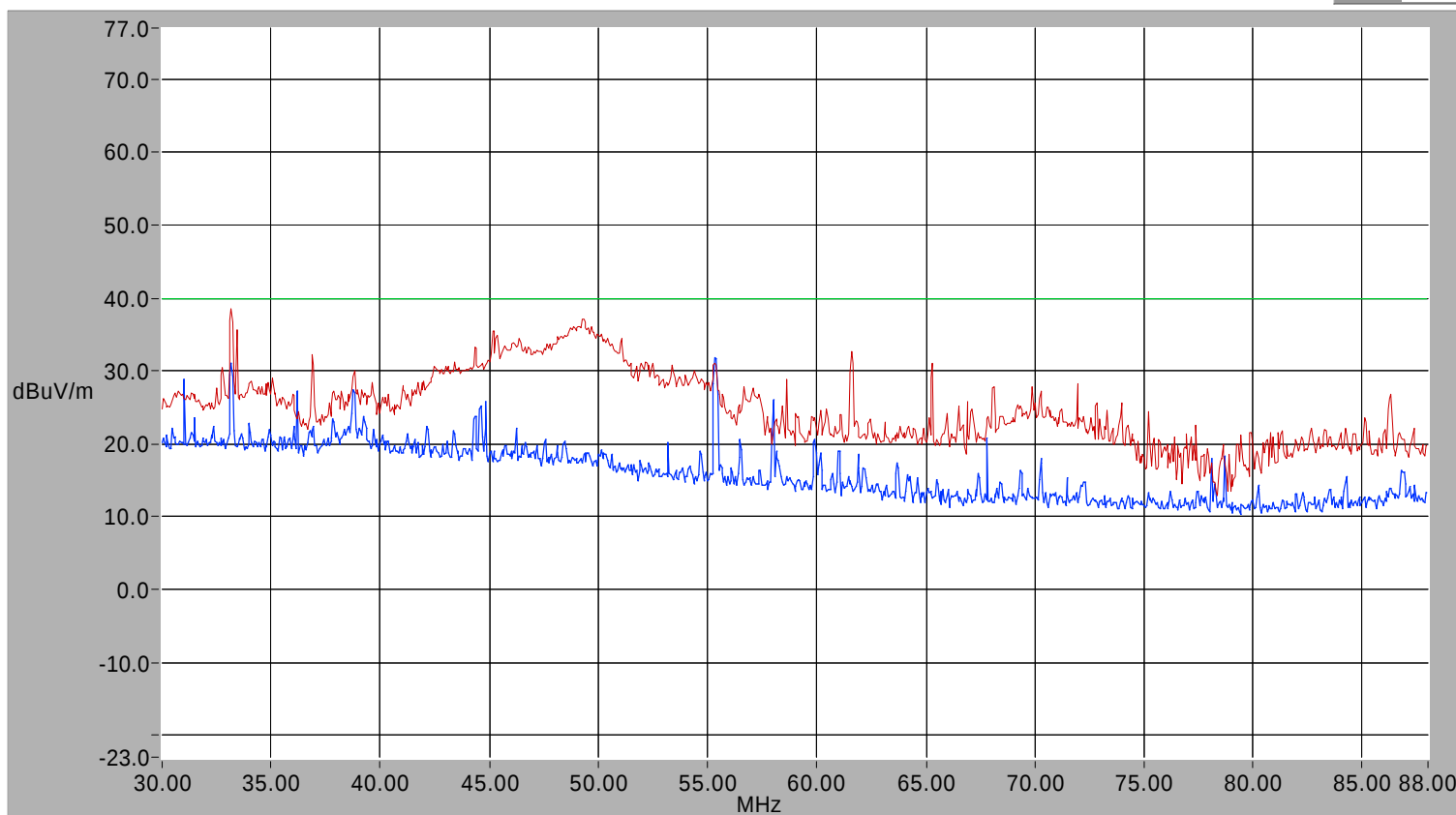
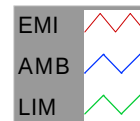
# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

1:27 PM

Plot Number: 34



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 33.180     | 127           | 256         | 19.10           | 16.67   | 0.80    | 0.00    | 36.57        | 40.00          | Pass |
| 49.176     | 197           | 113         | 16.90           | 13.85   | 0.98    | 0.00    | 31.74        | 40.00          | Pass |

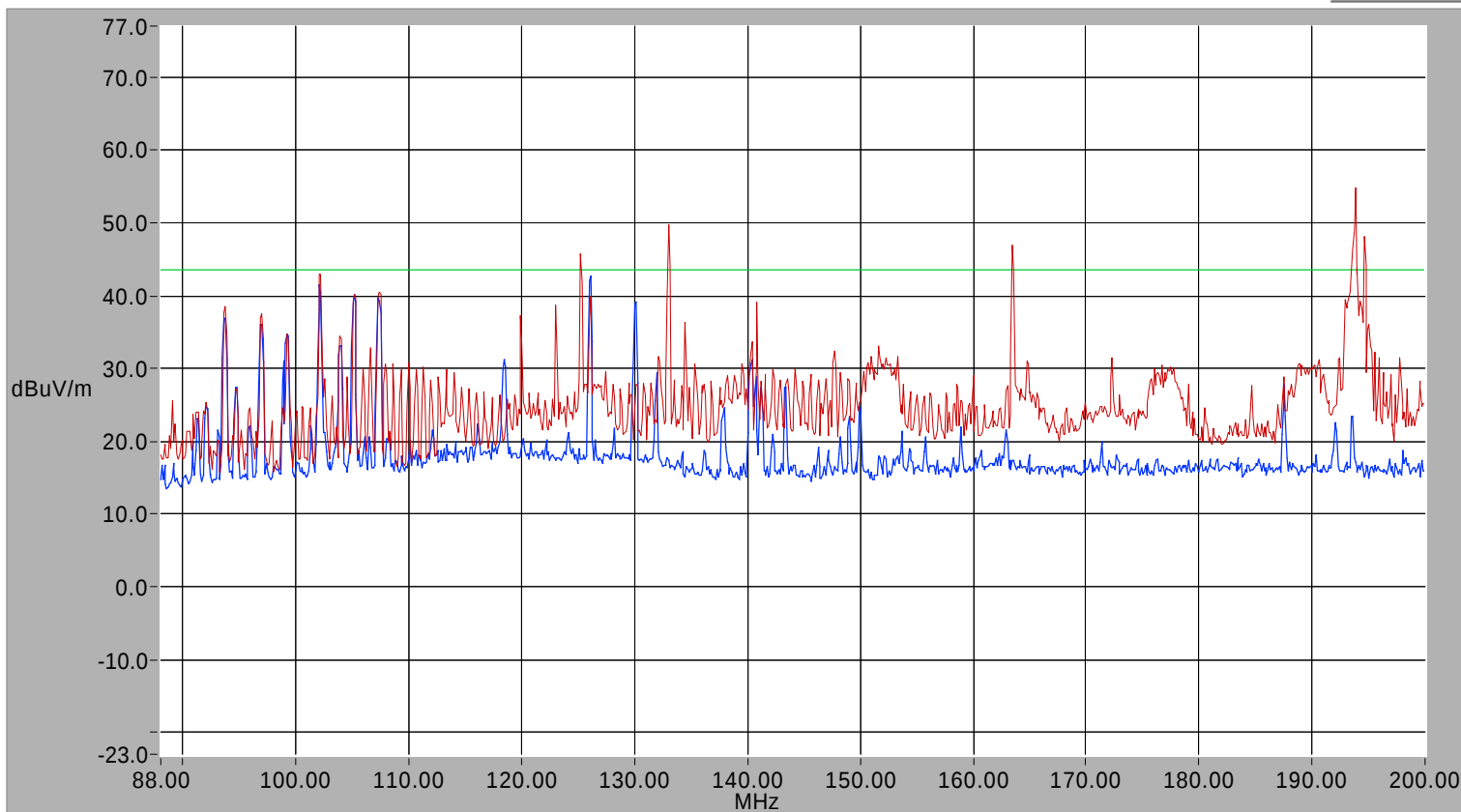
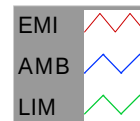
# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: 1:47 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 20, 1999

Plot Number: 35



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB  
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

## **QUASI-PEAK DATA**

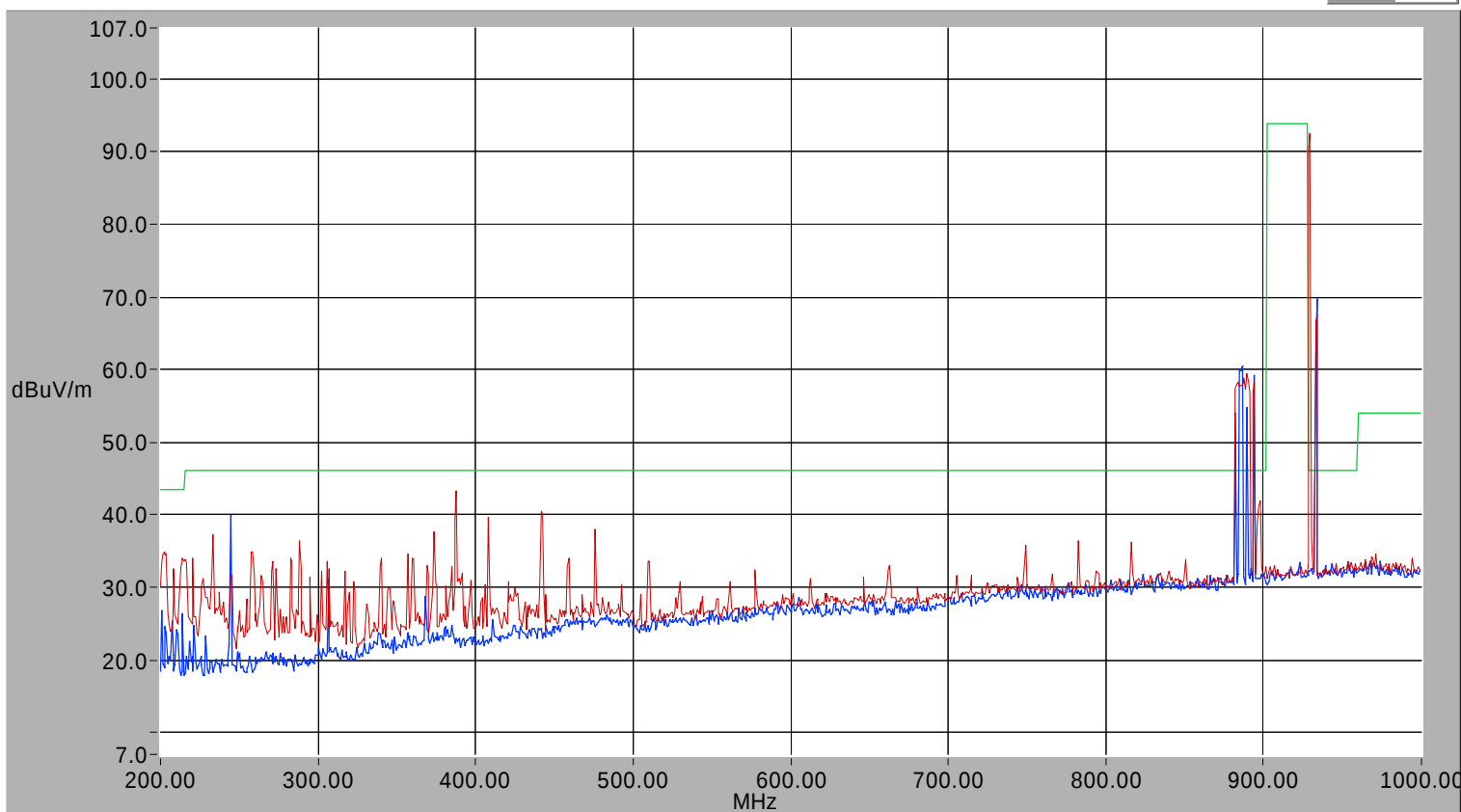
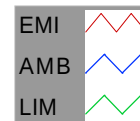
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 120.076    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 125.930    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 133.286    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 164.464    | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 122.900    | 351           | 113         | 24.60           | 12.90   | 1.33    | 0.00    | 38.83        | 43.52          | Pass    |
| 193.210    | 153           | 210         | 6.00            | 11.10   | 1.70    | 0.00    | 18.80        | 43.52          | Pass    |

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 2:03 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 36



VBW: 300.000 kHz Sweep Time: 240.00 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 4/8/1998  
04318v3.dat 23/4/1998  
Fcc15-24.dat 28/4/1999

## **QUASI-PEAK DATA**

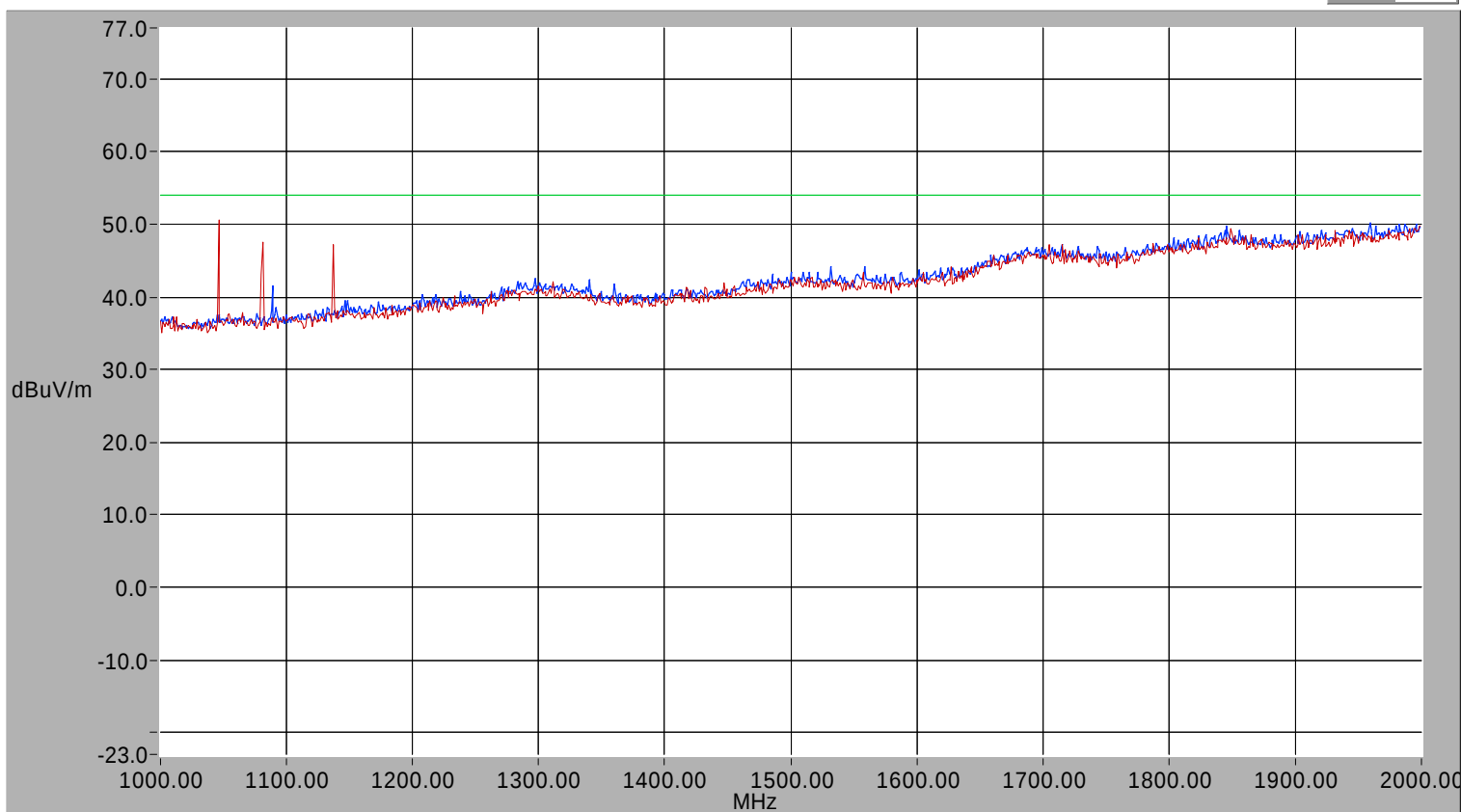
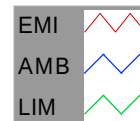
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 389.220    | 357           | 120         | 1.10            | 16.13   | 2.65    | 0.00    | 19.88        | 46.02          | Pass |
| 441.279    | 346           | 113         | 19.90           | 16.70   | 2.81    | 0.00    | 39.40        | 46.02          | Pass |

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 19, 1999 2:37 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 37



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

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
FCC15B3.DAT 20/8/1998

## **QUASI-PEAK DATA**

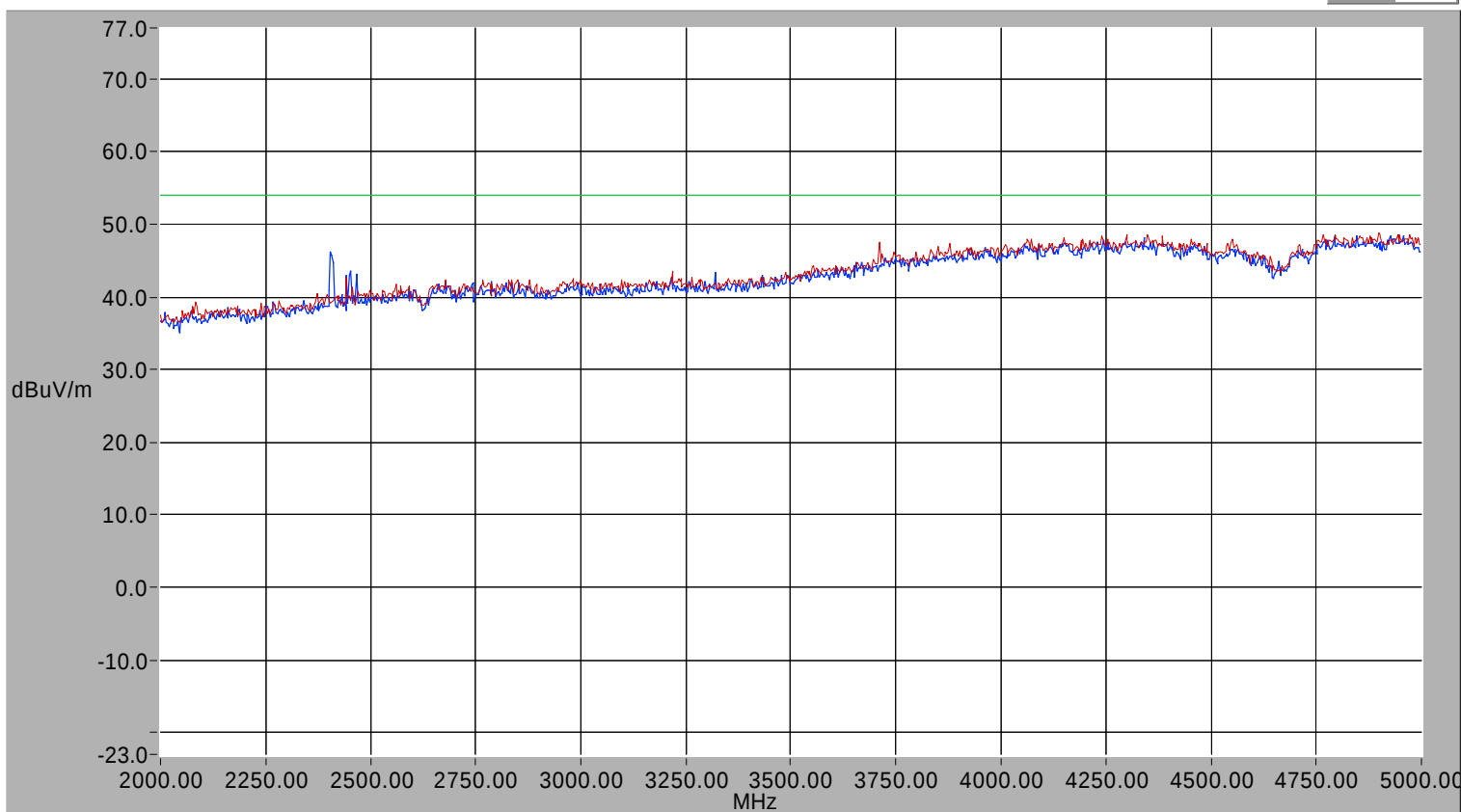
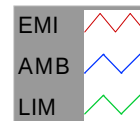
| Freq (MHz) | Azimuth (deg) | Height (cm) | SA Lvl (dBuV/m) | AF (dB) | CF (dB) | OF (dB) | Lvl (dBuV/m) | Limit (dBuV/m) | P/F     |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|---------|
| 1040.760   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1081.880   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |
| 1138.280   | -             | -           | -               | -       | -       | -       | -            | -              | Ambient |

# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 3:48 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

Plot Number: 38



VBW: 3.000 MHz  
RBW: 1.000 MHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
zero.DAT 23/4/1997  
FCC15B3.DAT 20/8/1998  
Amphornv.dat 12/9/1998

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 3711.030   | 357           | 145         | 31.10           | 0.00    | 8.85    | -3.04   | 36.90        | 53.98          | Pass |

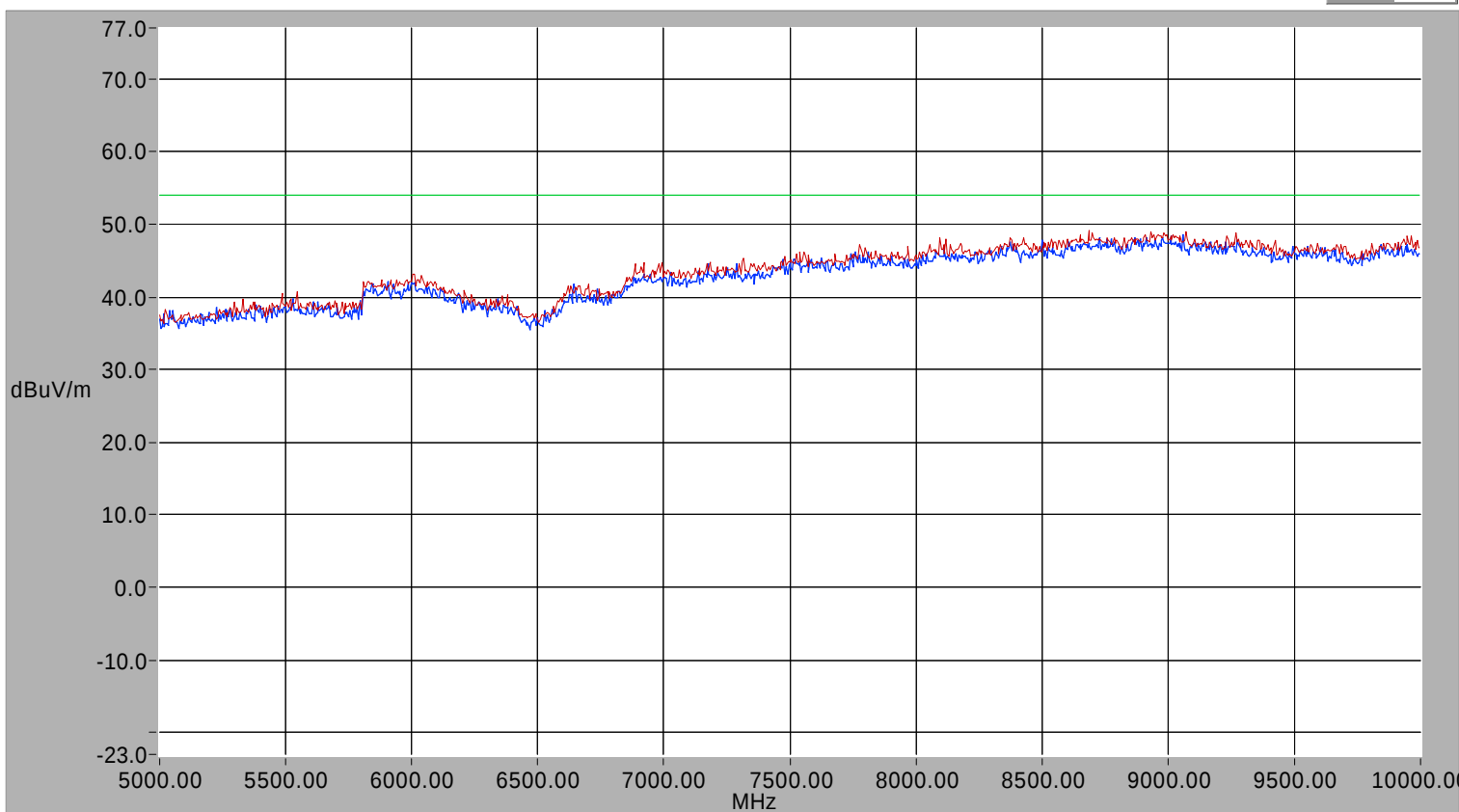
**Radiated Emissions  
Vertical Polarity  
FCC Part 15 Class B 3m**

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

Date & Time: April 20, 1999 4:20 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Verson 2.0 TX  
Serial #: 001

Plot Number: 39

EMI   
AMB   
LIM 



VBW: 300.000 kHz  
RBW: 100.000 kHz

Sweep Time: Auto  
Ref. Lev: 77.00 dBuV/m

PR Atten: 0.00 dB  
An Atten: 0.00 dB

**Associated Files**

|              |           |
|--------------|-----------|
| ofts3m.dat   | 4/8/1998  |
| zero.DAT     | 23/4/1997 |
| FCC15B3.DAT  | 20/8/1998 |
| Amphornv.dat | 12/9/1998 |

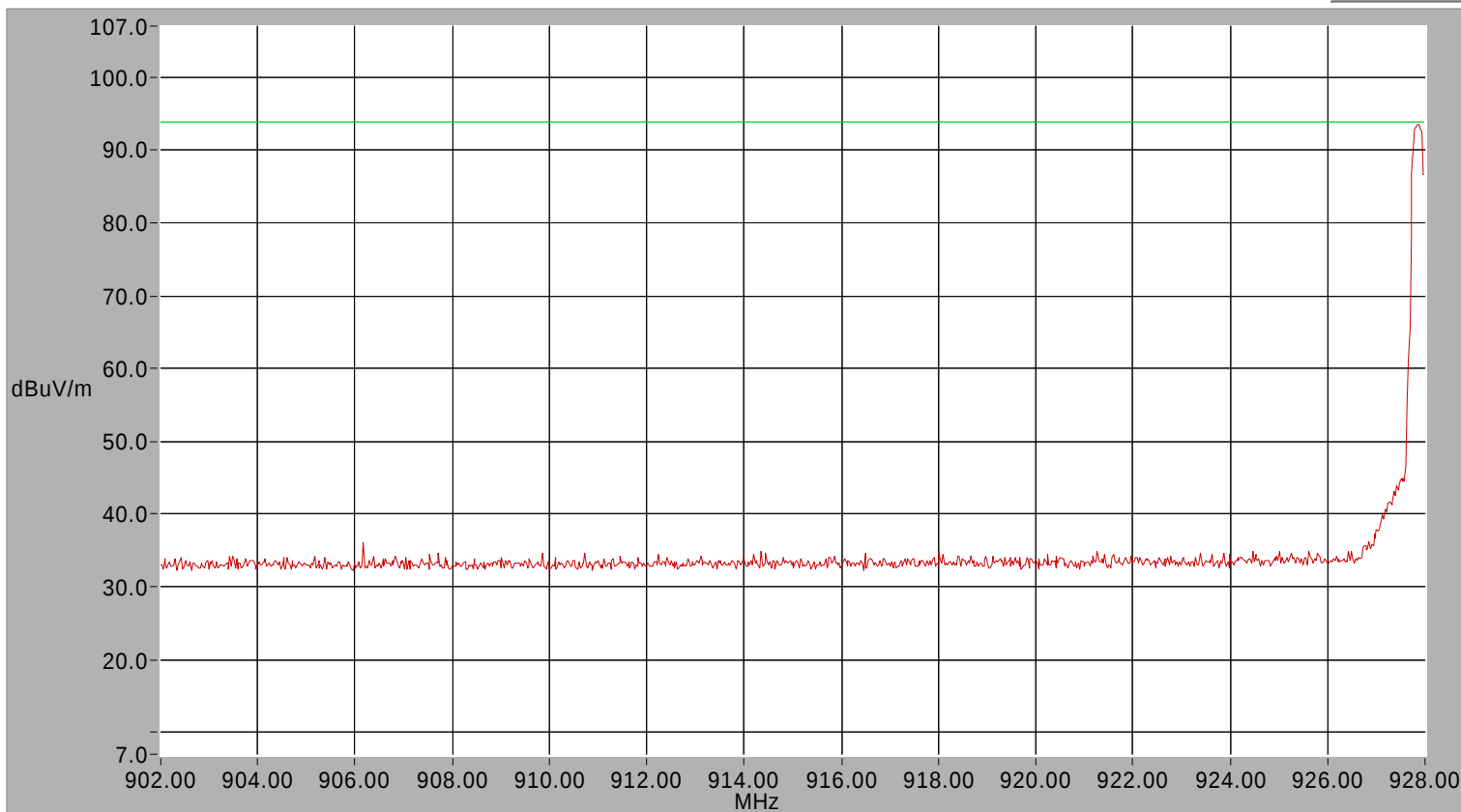
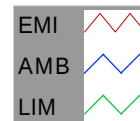
# **Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m**

Title: 902 - 928 MHz  
Mode of Operation: Transmit At 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: 2:02 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 19, 1999

Plot Number: 47



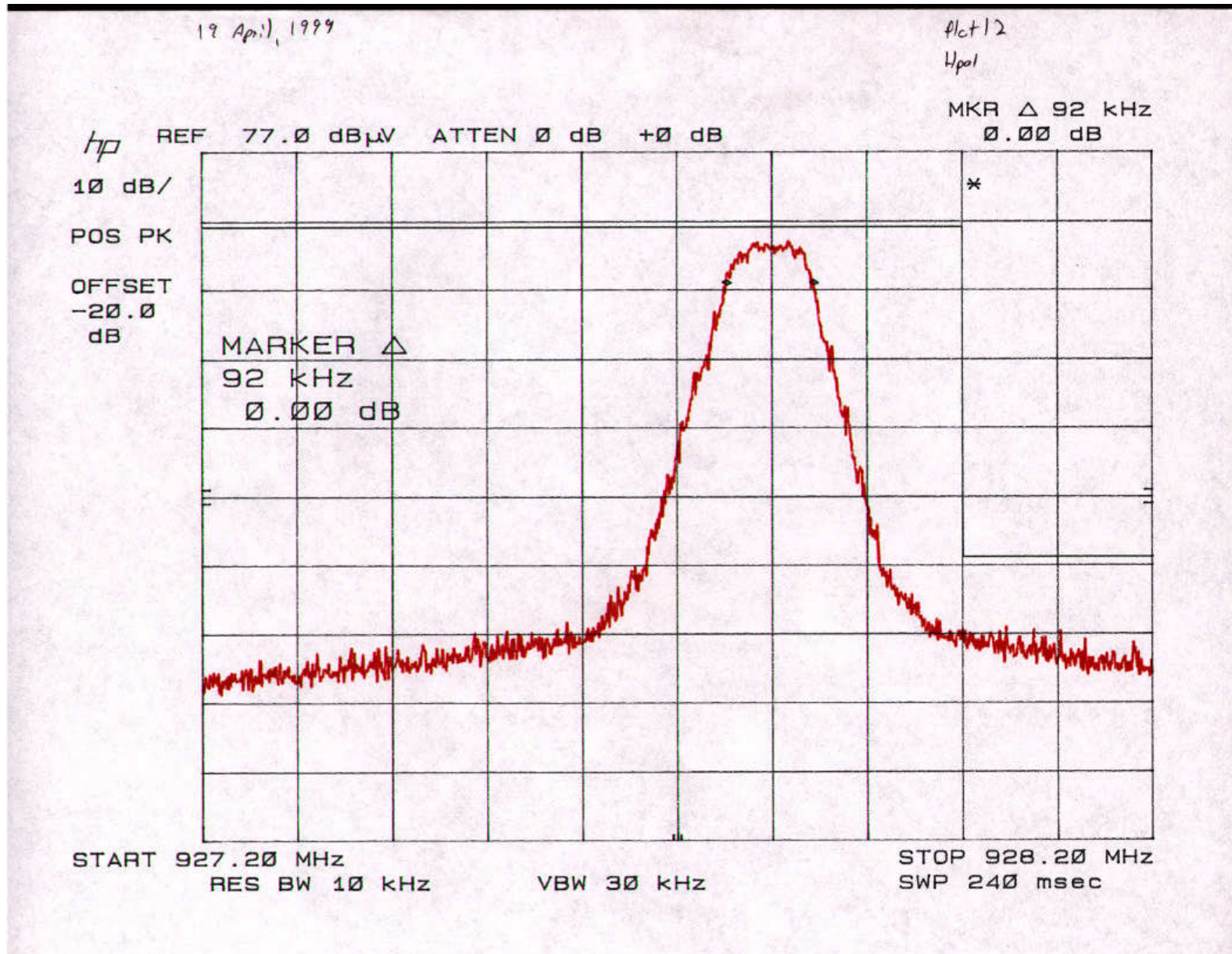
VBW: 300.000 kHz Sweep Time: 240.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318h3.dat 23/4/1998  
Fcc15-24.dat 28/4/1999

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 927.797    | 140           | 277         | 63.20           | 24.30   | 4.31    | 0.00    | 91.81        | 93.98          | Pass |



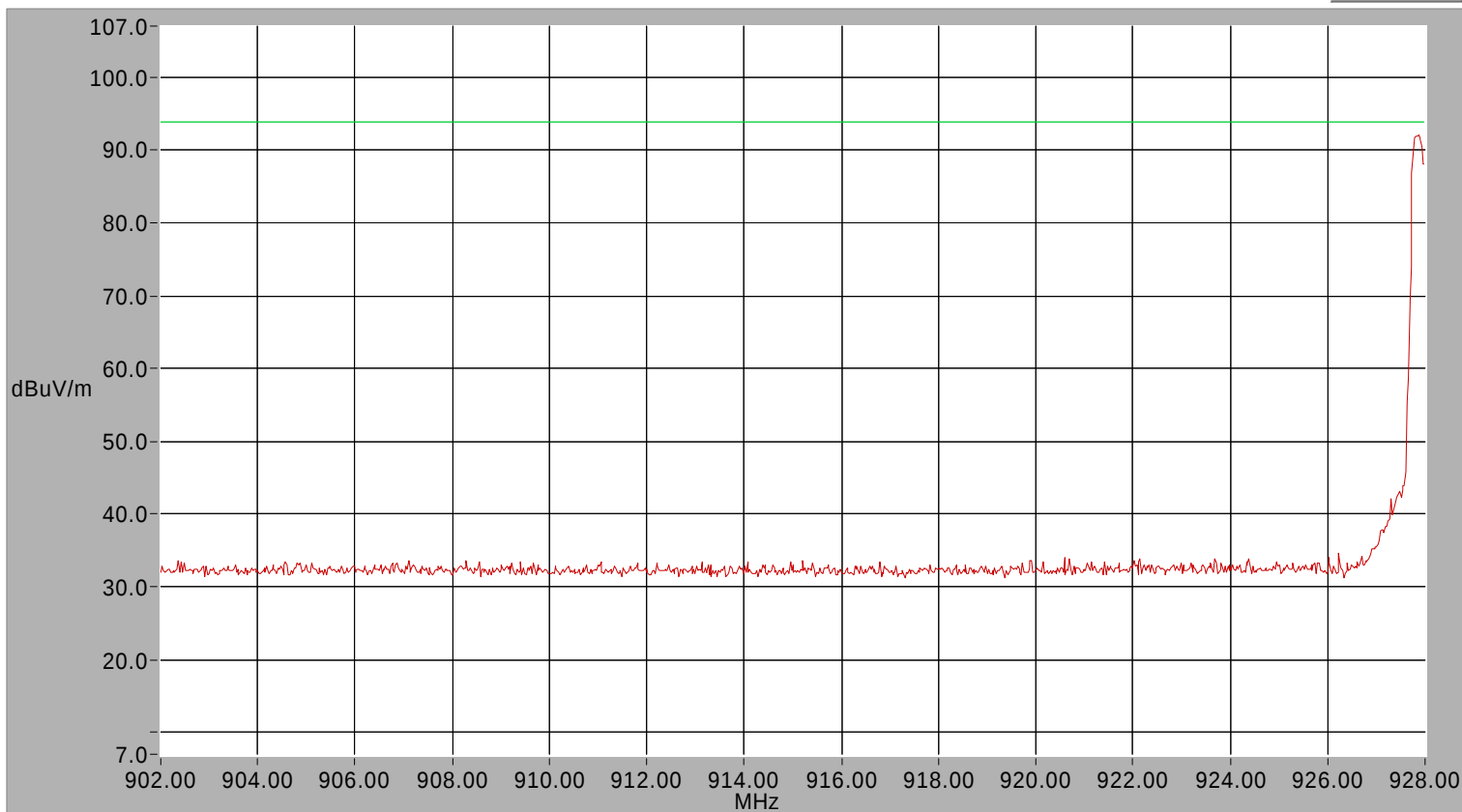
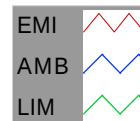
# **Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m**

Title: 902 - 928 MHz  
Mode of Operation: Transmit At 927.8 MHz  
Distance: 3 meters  
Technologist: Jeffery Taylor  
Comments: -

Date & Time: 1:45 PM  
Project #: 308A08  
Company: E-Zone  
Product: Tower with Version 2.0 TX  
Serial #: 001

April 19, 1999

Plot Number: 46



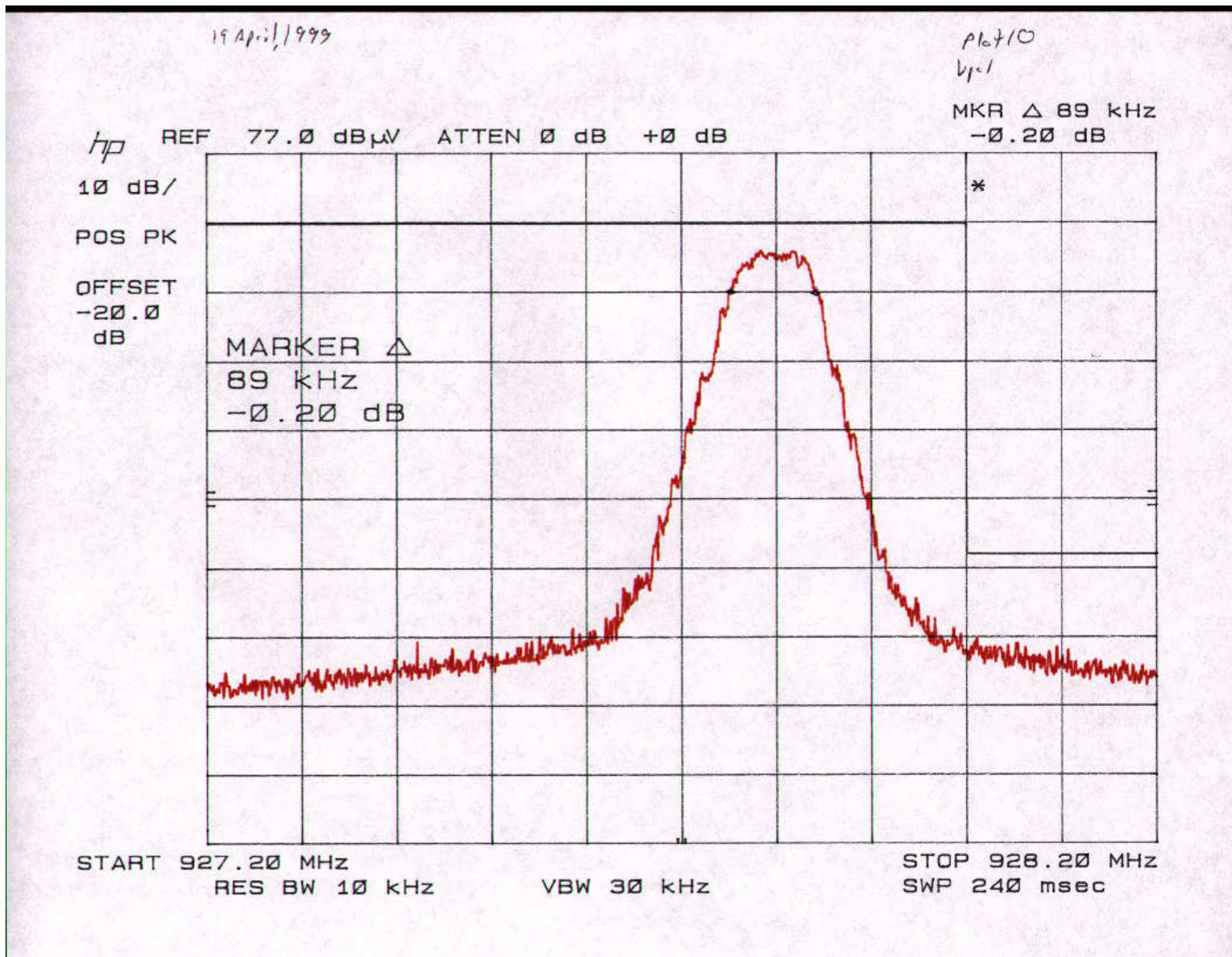
VBW: 300.000 kHz Sweep Time: 240.00 ms PR Atten: 0.00 dB  
RBW: 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

## **Associated Files**

ofts3m.dat 4/8/1998  
04318v3.dat 23/4/1998  
Fcc15-24.dat 28/4/1999

## **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) | P/F  |
|------------|---------------|-------------|-----------------|---------|---------|---------|--------------|----------------|------|
| 927.796    | 91            | 117         | 64.80           | 23.01   | 4.31    | 0.00    | 92.12        | 93.98          | Pass |



**END OF DOCUMENT**