

Straubing, 13 September 2006

**TEST - REPORT**

**No. 57403-060316-2 (Edition 2)**

**for**

**WRX01**

**Nurse Call Transceiver**

**Applicant:** Vigil Health Solutions Inc.

**Test Specifications:** FCC Code of Federal Regulations,  
CFR 47, Part 15,  
Sections 15.107, 15.109, 15.207 15.215  
and 15.247

Industry Canada Radio Standards  
Specifications  
RSS-Gen Issue 1, Sectons 7.2.2, 7.2.3 and  
RSS-210 Issue 6, Section A8  
(Category I Equipment)

**Note:**

The test data of this report is related only to the individual item which has been tested. This report shall not be reproduced except in full extent without the written approval of the testing laboratory.

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## 1 Description of the Equipment Under Test (EUT)

| General data of EUT             |                             |
|---------------------------------|-----------------------------|
| Type designation <sup>1</sup> : | WRX01                       |
| Parts <sup>2</sup> :            |                             |
| Serial number(s):               |                             |
| Manufacturer:                   | Vigil Health Solutions Inc. |
| Type of equipment:              | Nurse Call Transceiver      |
| Version:                        | As delivered                |
| FCC ID:                         |                             |
| Additional parts/accessories:   | ---                         |

| Technical data of EUT                   |                                                                                        |
|-----------------------------------------|----------------------------------------------------------------------------------------|
| Application frequency range:            | 902 - 928 MHz                                                                          |
| Frequency range:                        | 902 - 928 MHz                                                                          |
| Operating frequency:                    | 915 MHz                                                                                |
| Type of modulation:                     | FM                                                                                     |
| Pulse train:                            | ---                                                                                    |
| Pulse width:                            | ---                                                                                    |
| Number of RF-channels:                  | ---                                                                                    |
| Channel spacing:                        | ---                                                                                    |
| Designation of emissions <sup>3</sup> : | 250kF1D                                                                                |
| Type of antenna:                        | Monopole                                                                               |
| Size/length of antenna:                 | 16.5 cm                                                                                |
| Connection of antenna:                  | <input checked="" type="checkbox"/> detachable <input type="checkbox"/> not detachable |
| Antenna connector:                      | Reverse Polarity SMA                                                                   |
| Type of power supply:                   | Battery supply - lithium type                                                          |
| Specifications for power supply:        | nominal voltage: 3.6 V                                                                 |

<sup>1</sup> Type designation of the system if EUT consists of more than one part.

<sup>2</sup> Type designations of the parts of the system, if applicable.

<sup>3</sup> Also known as "Class of Emission".

## 2 Administrative Data

| Application details       |                                                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------|
| Applicant (full address): | Vigil Health Solutions Inc.<br>2102-4464 Markham Street<br>V8Z 7X8 Victoria<br>British Columbia<br>Canada |
| Contact person:           | Steven Smith                                                                                              |
| Receipt of EUT:           | 30 June 2006                                                                                              |
| Date(s) of test:          | July - August 2006                                                                                        |
| Note(s):                  | ---                                                                                                       |

| Report details |                   |
|----------------|-------------------|
| Report number: | 57403-060316-2    |
| Edition:       | 2                 |
| Issue date:    | 13 September 2006 |

### 3 Identification of the Test Laboratory

| Details of the Test Laboratory          |                                                              |
|-----------------------------------------|--------------------------------------------------------------|
| Company name:                           | Senton GmbH EMI/EMC Test Center                              |
| Address:                                | Aeussere Fruehlingstrasse 45<br>D-94315 Straubing<br>Germany |
| Laboratory accreditation:               | DAR-Registration No. DAT-P-171/94-02                         |
| FCC test site registration number       | 90926                                                        |
| Industry Canada test site registration: | IC 3050                                                      |
| Contact person:                         | Mr. Johann Roidt                                             |
|                                         | Phone: (+49) (0)9421 5522-0<br>Fax: (+49) (0)9421 5522-99    |

## 4 Summary

### Summary of test results

The tested sample complies with the requirements set forth in the

**Code of Federal Regulations CFR 47, Part 15, Sections 15.107, 15.109, 15.207 15.215 and 15.247**  
of the Federal Communication Commission (FCC) and the

**Radio Standards Specifications**  
**RSS-Gen Issue 1, Sections 7.2.2, 7.2.3 and**  
**RSS-210 Issue 6, Section A8 (Category I Equipment)**

of Industry Canada (IC).

### Personnel involved in this report

Laboratory Manager:



Mr. Johann Roidt

Responsible for testing:



Mr. Martin Steindl

Responsible for test report:

Mr. Martin Steindl

## 5 Operation Mode and Configuration of EUT

### Operation Mode

Tests were performed with on lowest, middle and highest channel.

### Configuration of EUT

The EUT was configured as stand alone device. The SDK board was used for adjusting the channel and mode only.

### List of ports and cables

| <i>Port</i> | <i>Description</i> | <i>Classification<sup>4</sup></i>  | <i>Cable type</i> | <i>Cable length</i> |
|-------------|--------------------|------------------------------------|-------------------|---------------------|
| 1           | CAN connector      | DC supply<br>signal / control port | shielded          | 3 m                 |

### List of devices connected to EUT

| <i>Item</i> | <i>Description</i> | <i>Type Designation</i> | <i>Serial no. or ID</i> | <i>Manufacturer</i> |
|-------------|--------------------|-------------------------|-------------------------|---------------------|
|             | Not applicable     |                         |                         |                     |

### List of support devices

| <i>Item</i> | <i>Description</i>              | <i>Type Designation</i> | <i>Serial no. or ID</i> | <i>Manufacturer</i> |
|-------------|---------------------------------|-------------------------|-------------------------|---------------------|
| 1           | SDK board with remote connector | Test Board              |                         | Aerocomm            |
| 2           | AC/DC convertor                 |                         |                         | Vigil               |

<sup>4</sup> Ports shall be classified as ac power, dc power or signal/control port

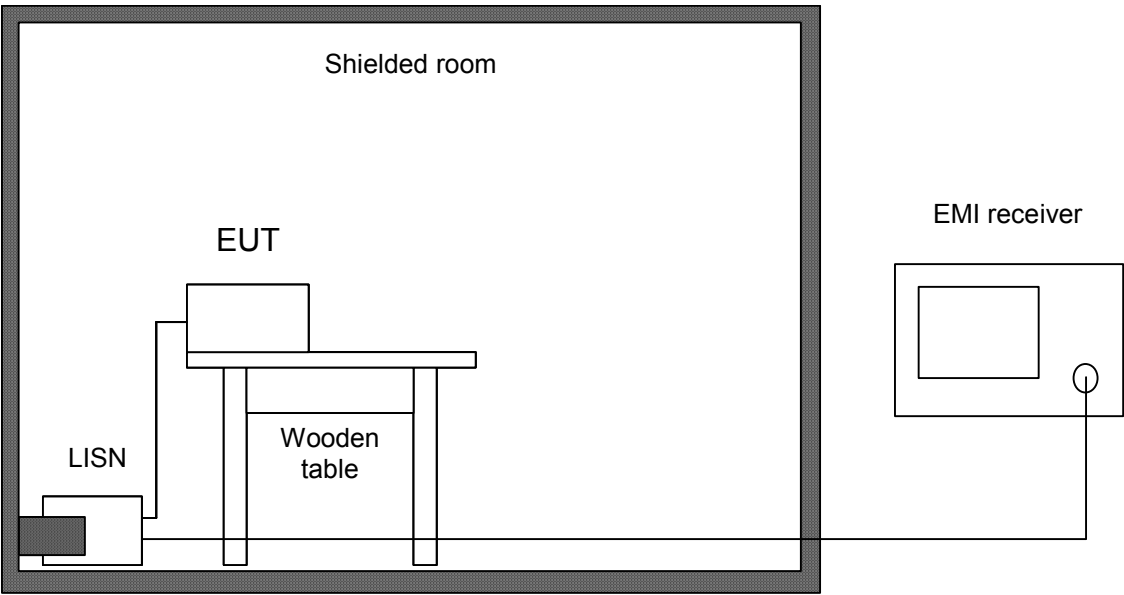
## **6 Measurement Procedures**

**6.1 Bandwidth Measurements**

| Measurement Procedure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CFR 47 Part 2, section 2.202(a)<br>CFR 47 Part 15, section 15.215(c) and 15.247(a)(2)<br>IC RSS-Gen Issue 1, sections 4.4.1 and 4.4.2<br>IC RSS-210 Issue 6, section A1.1.3<br>ANSI C63.4, annex H.6 |
| Guide:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ANSI C63.4                                                                                                                                                                                           |
| Measurement setup:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> Conducted: See below<br><input checked="" type="checkbox"/> Radiated: Radiated Emission in Fully or Semi Anechoic Room (6.3)                                                |
| <p>If antenna is detachable bandwidth measurements shall be performed at the antenna connector (conducted measurement) when the transmitter is adjusted in accordance with the tune-up procedure, if applicable. The RF output terminals are connected to a spectrum analyzer. If required, a resistive matching network equal to the impedance specified or employed for the antenna is used as well as dc block and appropriate attenuators (50 Ohms). The electrical characteristics of the radio frequency load attached to the output terminals shall be stated, if applicable.</p> <p>If radiated measurements are performed the same test setups and instruments are used as with radiated emission measurements for the appropriate frequency range.</p> <p>The analyzer settings are specified by the test description of the appropriate test record(s).</p> |                                                                                                                                                                                                      |

6.2 Conducted AC Powerline Emission

| Measurement Procedure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Rules and specifications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | CFR 47 Part 15, sections 15.107 and 15.207<br>IC RSS-Gen Issue 1, section 7.2.2 |
| Guide:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ANSI C63.4 (CISPR 22)                                                           |
| <p>Conducted emission tests in the frequency range 150 kHz to 30 MHz are performed using Line Impedance Stabilization Networks (LISNs). To simplify testing with quasi-peak and average detector the following procedure is used:</p> <p>First the whole spectrum of emission caused by the equipment under test (EUT) is recorded with detector set to peak using CISPR bandwidth of 10 kHz. After that all emission levels having less margin than 10 dB to or exceeding the average limit are retested with detector set to quasi-peak.</p> <p>If average limit is kept with quasi-peak levels no additional scan with average detector is necessary. In cases of emission levels between quasi-peak and average limit an additional scan with detector set to average is performed.</p> <p>According to ANSI C63.4, section 13.1.3.1, testing of intentional radiators with detachable antenna shall be performed using a suitable dummy load connected to the antenna output terminals. Otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended.</p> <p>Testing with dummy load may be necessary to distinguish (unintentional) conducted emissions on the supply lines from (intentional) emissions radiated by the antenna and coupling directly to supply lines and/or LISN. Usage of dummy load has to be stated in the appropriate test record(s) and notes should be added to clarify the test setup.</p> |                                                                                 |

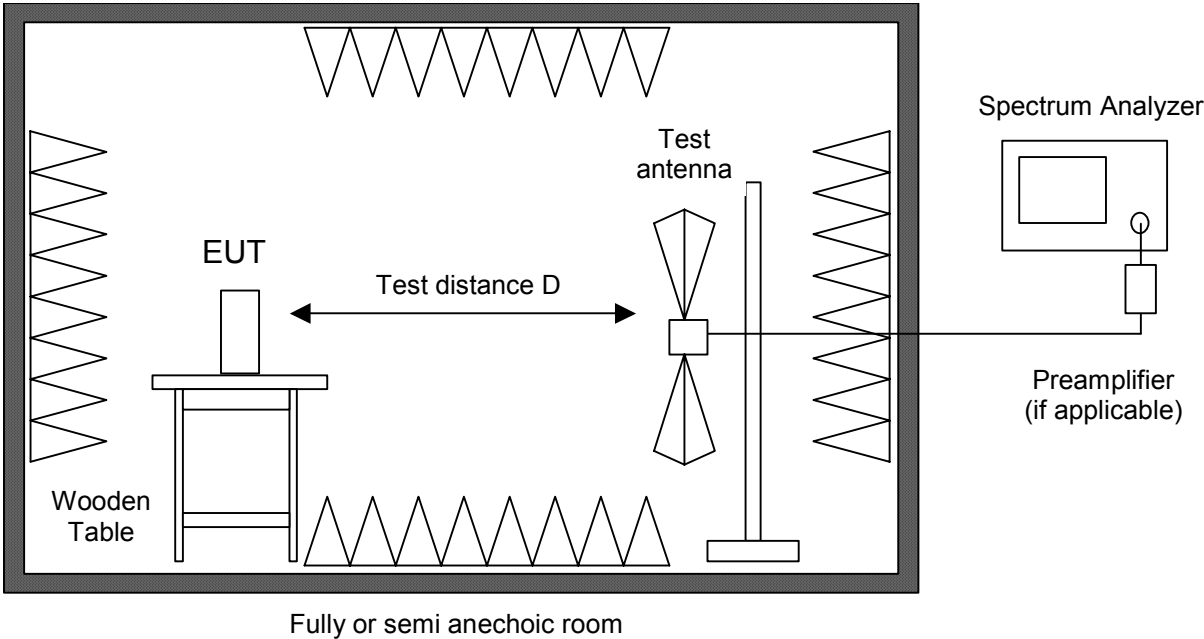


Test instruments used:

| Used                                | Type                     | Model    | Serial No. or ID | Manufacturer       |
|-------------------------------------|--------------------------|----------|------------------|--------------------|
| <input checked="" type="checkbox"/> | EMI receiver             | ESHS 10  | 860043/016       | Rohde & Schwarz    |
| <input checked="" type="checkbox"/> | LISN                     | ESH3-Z5  | 862770/021       | Rohde & Schwarz    |
| <input type="checkbox"/>            | LISN                     | ESH3-Z5  | 830952/025       | Rohde & Schwarz    |
| <input type="checkbox"/>            | Artificial mains network | ESH 2-Z5 | 842966/004       | Rohde & Schwarz    |
| <input type="checkbox"/>            | Shielded room            | No. 1    | 1451             | Albatross Projects |
| <input checked="" type="checkbox"/> | Shielded room            | No. 4    | 3FD-100 544      | Euroshield         |

6.3 Radiated Emission in Fully or Semi Anechoic Room

| Measurement Procedure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                   |
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| Rules and specifications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CFR 47 Part 15, sections 15.215(b) and 15.249<br>IC RSS-210 Issue 6, section A2.9 |
| Guide:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ANSI C63.4                                                                        |
| <p>Radiated emission in fully or semi anechoic room is measured in the frequency range from 30 MHz to the maximum frequency as specified in CFR 47 Part 15 section 15.33.</p> <p>Measurements are made in both the horizontal and vertical planes of polarization in a fully anechoic room using a spectrum analyzer with the detector function set to peak and resolution as well as video bandwidth set to 100 kHz (below 1 GHz) or 1 MHz (above 1 GHz).</p> <p>Testing up to 1 GHz is performed with a linear polarized logarithmic periodic antenna combined with a 4:1 broadband dipole ("Trilog broadband antenna"). For testing above 1 GHz horn antennas are used.</p> <p>All tests below 18 GHz are performed at a test distance D of 3 meters. For higher frequencies the test distance is reduced (e.g. to 1 meter) due to the sensitivity of the measuring instrument(s) and the test results are calculated according to CFR 47 Part 15 section 15.31(f)(1) using an extrapolation factor of 20 dB/decade. If required, preamplifiers are used for the whole frequency range. Special care is taken to avoid overload, using appropriate attenuators and filters, if necessary.</p> <p>If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value.</p> <p>Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing.</p> <p>During testing the EUT is rotated all around to find the maximum levels of emissions. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions.</p> <p>For final testing below 1 GHz an open field test-site is used and the plots recorded in the fully or semi anechoic room are indicated as prescans.</p> |                                                                                   |

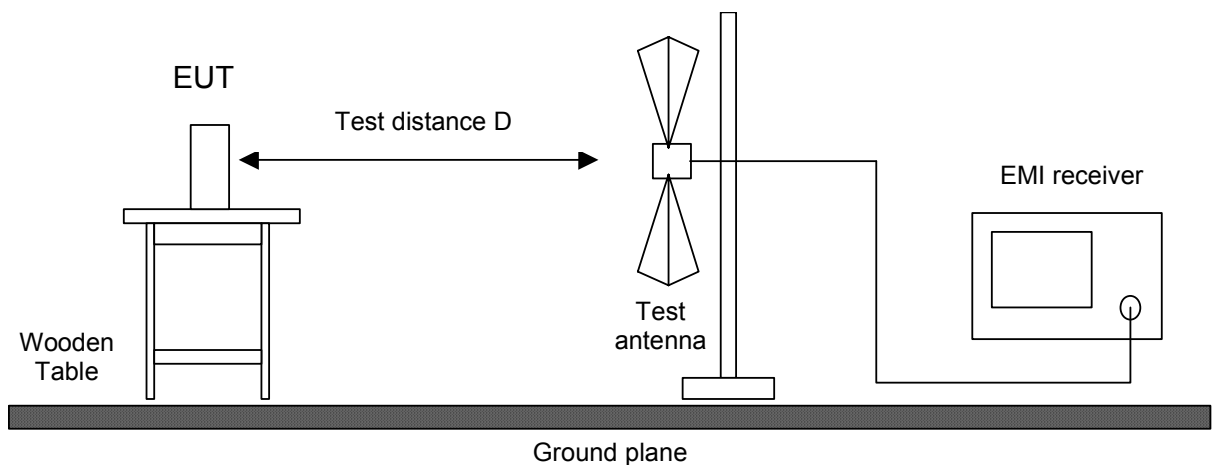


Test instruments used:

| Used                                | Type                     | Model                | Serial No. or ID         | Manufacturer       |
|-------------------------------------|--------------------------|----------------------|--------------------------|--------------------|
| <input checked="" type="checkbox"/> | Spectrum Analyzer        | FSP 30               | 100063                   | Rohde & Schwarz    |
| <input type="checkbox"/>            | Spectrum analyzer        | R 3271               | 05050023                 | Advantest          |
| <input type="checkbox"/>            | EMI test receiver        | ESMI                 | 839379/013<br>839587/006 | Rohde & Schwarz    |
| <input checked="" type="checkbox"/> | Preamplifier             | CPA9231A             | 3393                     | Schaffner          |
| <input type="checkbox"/>            | Preamplifier             | R14601               |                          | Advantest          |
| <input checked="" type="checkbox"/> | Preamplifier 1-8 GHz     | AFS3-00100800-32-LN  | 847743                   | Miteq              |
| <input type="checkbox"/>            | Preamplifier 0.5-8 GHz   | AMF-4D-005080-25-13P | 860149                   | Miteq              |
| <input checked="" type="checkbox"/> | Preamplifier 8-18 GHz    | ACO/180-3530         | 32641                    | CTT                |
| <input type="checkbox"/>            | External Mixer           | WM782A               | 845881/005               | Tektronix          |
| <input type="checkbox"/>            | Harmonic Mixer           | FS-Z30               | 843389/007               | Rohde & Schwarz    |
|                                     | Accessories              |                      |                          |                    |
| <input checked="" type="checkbox"/> | Trilog broadband antenna | VULB 9163            | 9163-188                 | Schwarzbeck        |
| <input checked="" type="checkbox"/> | Horn antenna             | 3115                 | 9508-4553                | EMCO               |
| <input type="checkbox"/>            | Horn antenna             | 3160-03              | 9112-1003                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna             | 3160-04              | 9112-1001                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna             | 3160-05              | 9112-1001                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna             | 3160-06              | 9112-1001                | EMCO               |
| <input checked="" type="checkbox"/> | Horn antenna             | 3160-07              | 9112-1008                | EMCO               |
| <input type="checkbox"/>            | Horn antenna             | 3160-08              | 9112-1002                | EMCO               |
| <input type="checkbox"/>            | Horn antenna             | 3160-09              | 9403-1025                | EMCO               |
| <input type="checkbox"/>            | Horn antenna             | 3160-10              | 399185                   | EMCO               |
| <input checked="" type="checkbox"/> | Fully anechoic room      | No. 2                | 1452                     | Albatross Projects |
| <input type="checkbox"/>            | Semi-anechoic room       | No. 3                | 1453                     | Siemens            |

## 6.4 Radiated Emission at Open Field Test Site

| Measurement Procedure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Rules and specifications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CFR 47 Part 15, sections 15.215(b) and 15.249<br>IC RSS-210 Issue 6, section A2.9 |
| Guide:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ANSI C63.4                                                                        |
| <p>Radiated emission at open field test site is measured in the frequency range 30 MHz to 1 GHz using a biconical antenna up to 300 MHz and a logarithmic periodic antenna above. The measurement bandwidth of the test receiver is set to 120 kHz with quasi-peak detector selected.</p> <p>If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value.</p> <p>Hand-held or body-worn devices are tested in the position producing the highest emission relative to the limit as verified by prescans in the fully anechoic room. EUT is rotated all around and receiving antenna is raised and lowered within 1 meter to 4 meters to find the maximum levels of emission. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions.</p> <p>For measuring emissions of intentional radiators and receivers a test distance D of 3 meters is selected. Testing of unintentional radiators is performed at a distance of 10 meters. If limits specified for 3 meters shall be used for measurements performed at 10 meters distance the limits are calculated according to CFR 47 Part 15 section 15.31(d) and (f)(1) using an inverse linear-distance extrapolation factor of 20 dB/decade.</p> |                                                                                   |



Test instruments used:

| Used                                | Type                 | Model       | Serial No. or ID | Manufacturer    |
|-------------------------------------|----------------------|-------------|------------------|-----------------|
| <input checked="" type="checkbox"/> | EMI receiver         | ESVP        | 881120/024       | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | Biconical antenna    | EG 1 HK 116 | 842204/001       | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | Log. per. antenna    | EG 1 HL 223 | 841516/023       | Rohde & Schwarz |
| <input checked="" type="checkbox"/> | Open field test site | EG 1        | 1450             | Senton          |

## **7      Photographs Taken During Testing**

**Test setup for conducted AC powerline emission measurement**



**Test setup for radiated emission measurement  
(fully anechoic room)**



**Test setup for radiated emission measurement  
(open field test site)**



**Test setup for radiated emission measurement  
(open field test site) - continued -**



## 8 Test Results for Transmitter

| FCC CFR 47 Parts 2 and 15 |                                                                   |      |                |
|---------------------------|-------------------------------------------------------------------|------|----------------|
| Section(s)                | Test                                                              | Page | Result         |
| 2.1046(a)                 | Conducted output power                                            | ---  | Not applicable |
| 2.1093                    | RF Exposure Requirement                                           | 68   | Test passed    |
| 2.202(a)                  | Occupied bandwidth                                                | 22   | Recorded       |
| 15.215(c)                 | Bandwidth of the emission                                         | 33   | Test passed    |
| 2.201, 2.202              | Class of emission                                                 | 37   | Calculated     |
| 15.35(c)                  | Pulse train measurement for pulsed operation                      | ---  | Not applicable |
| 15.207                    | Conducted AC powerline emission<br>150 kHz to 30 MHz              | 38   | Test passed    |
| 15.247(a)(1)              | Channel Bandwidth                                                 | 40   | Test passed    |
| 15.247(a)(1)              | Hopping channel separation                                        | 41   | Test passed    |
| 15.247(a)(1)(i)           | Number of hopping frequencies used                                | 45   | Test passed    |
| 15.247(a)(1)(i)           | Dwell time of each frequency within a 10 second period<br>of time | 47   | Test passed    |
| 15.247(b)(2)              | Maximum Peak Output Power                                         | 54   | Test passed    |
| 15.247(c)                 | Spurious emissions 30 MHz to 10 GHz - conducted                   | 58   | Test passed    |
| 15.247(c)                 | Spurious emissions 30 MHz to 10 GHz - radiated                    | 64   | Test passed    |
| 15.247(g)                 | Compliance with applicable requirements for FHSS                  | ---  | Test passed    |
| 15.247(h)                 | Limitation on avoidance on hopping in occupied channel            | ---  | Test passed    |

| IC RSS-Gen Issue 1 |                                                                     |      |                                           |
|--------------------|---------------------------------------------------------------------|------|-------------------------------------------|
| Section(s)         | Test                                                                | Page | Result                                    |
| 4.6                | Transmitter output power (conducted)                                | ---  | Not applicable                            |
| 4.4.1              | Occupied Bandwidth                                                  | 22   | Recorded                                  |
| 3.2(h), 8          | Designation of emissions                                            | 37   | Calculated                                |
| 4.3                | Pulsed operation                                                    | ---  | Not applicable                            |
| 7.2.2              | Transmitter AC power lines conducted emissions<br>150 kHz to 30 MHz | 38   | Test passed                               |
| 5.5                | Exposure of Humans to RF Fields                                     | 69   | Exempted from<br>SAR and RF<br>evaluation |

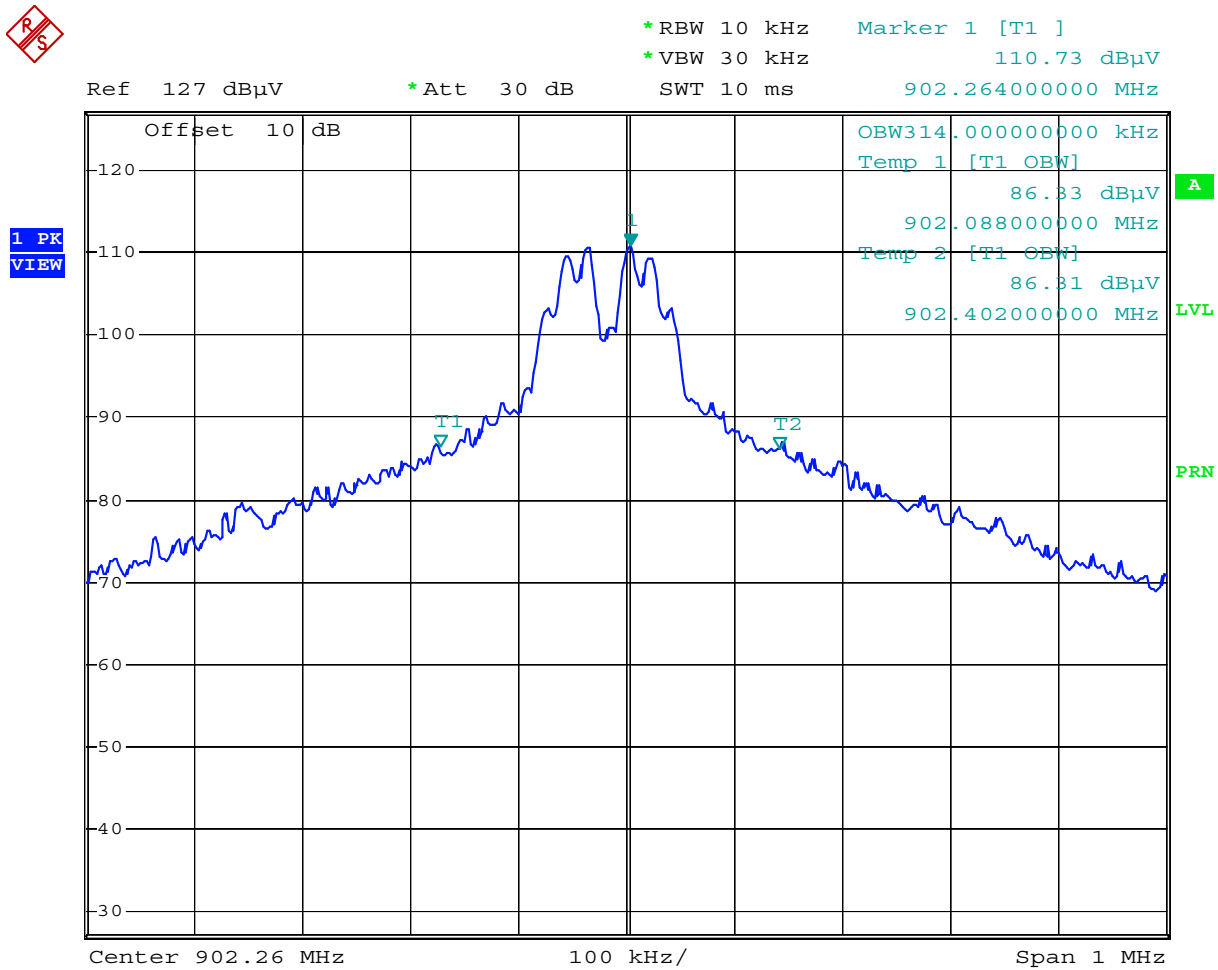
| IC RSS-210 Issue 6 |                                                 |      |             |
|--------------------|-------------------------------------------------|------|-------------|
| Section(s)         | Test                                            | Page | Result      |
| A8.1(2)            | Channel bandwidth                               | 40   | Test passed |
| A8.1(2)            | Hopping channel separation                      | 41   | Test passed |
| A8.1(4)            | Number of hopping frequencies used              | 45   | Test passed |
| A8.1(4)            | Time occupancy on any channel                   | 47   | Test passed |
| A8.4(2)            | Maximum peak output power                       | 54   | Test passed |
| A8.5               | Spurious emissions 30 MHz to 10 GHz - conducted | 58   | Test passed |
| A8.5               | Spurious emissions 30 MHz to 10 GHz - radiated  | 64   | Test passed |

## 8.1 Occupied Bandwidth

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Rules and specifications: | CFR 47 Part 2, section 2.202(a)<br>ANSI C63.4, annex H.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |
| Guide:                    | ANSI C63.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |
| Description:              | <p>The occupied bandwidth according to CFR 47 Part 2, section 2.202(a), is measured as the 99% emission bandwidth, i.e. below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission.</p> <p>The occupied bandwidth according to ANSI C63.4, annex H.6; is measured as the frequency range defined by the points that are 26 dB down relative to the maximum level of the modulated carrier.</p> <p>The resolution bandwidth of the spectrum analyzer shall be set to a value greater than 5.0% of the allowed bandwidth. If no bandwidth specifications are given, the following guidelines are used:</p> |                              |
|                           | Fundamental frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Minimum resolution bandwidth |
|                           | 9 kHz to 30 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 kHz                        |
|                           | 30 MHz to 1000 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10 kHz                       |
|                           | 1000 MHz to 40 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 100 kHz                      |
|                           | The video bandwidth shall be at least three times greater than the resolution bandwidth.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |
| Measurement procedure:    | Bandwidth Measurements (6.1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                              |

|               |                                  |
|---------------|----------------------------------|
| Comment:      |                                  |
| Date of test: | 4 August 2006                    |
| Test site:    | Fully anechoic room, cabin no. 2 |

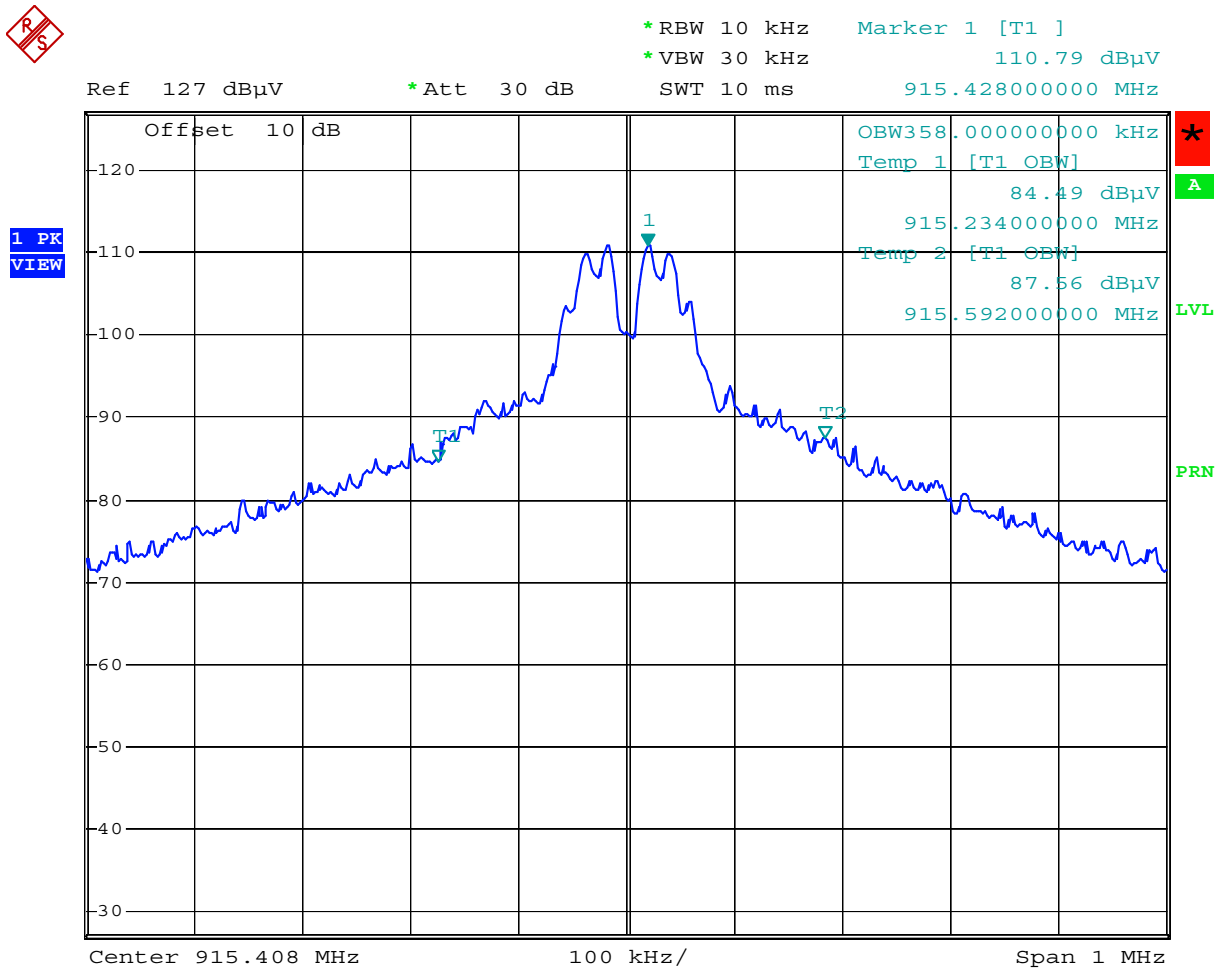
Occupied Bandwidth (99 %) on lowest channel:



Comment: vigil 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:04:06

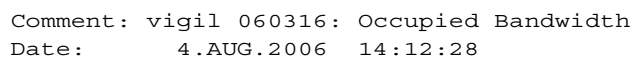
|                            |         |
|----------------------------|---------|
| Occupied Bandwidth (99 %): | 314 kHz |
|----------------------------|---------|

Occupied Bandwidth (99 %) on middle channel:



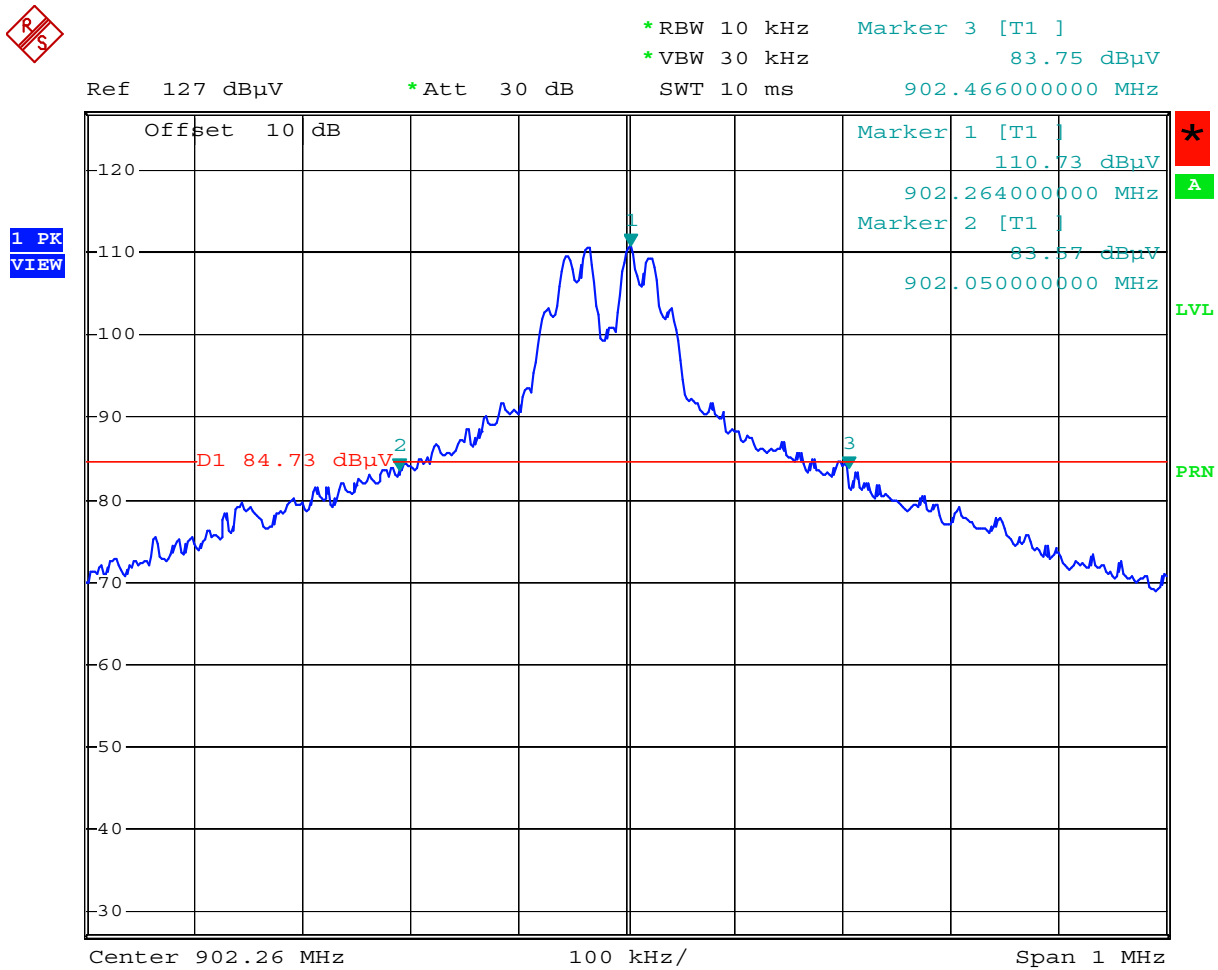
Comment: vigor 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:21:32

|                            |         |
|----------------------------|---------|
| Occupied Bandwidth (99 %): | 358 kHz |
|----------------------------|---------|



|                            |                |
|----------------------------|----------------|
| Occupied Bandwidth (99 %): | <b>400 kHz</b> |
|----------------------------|----------------|

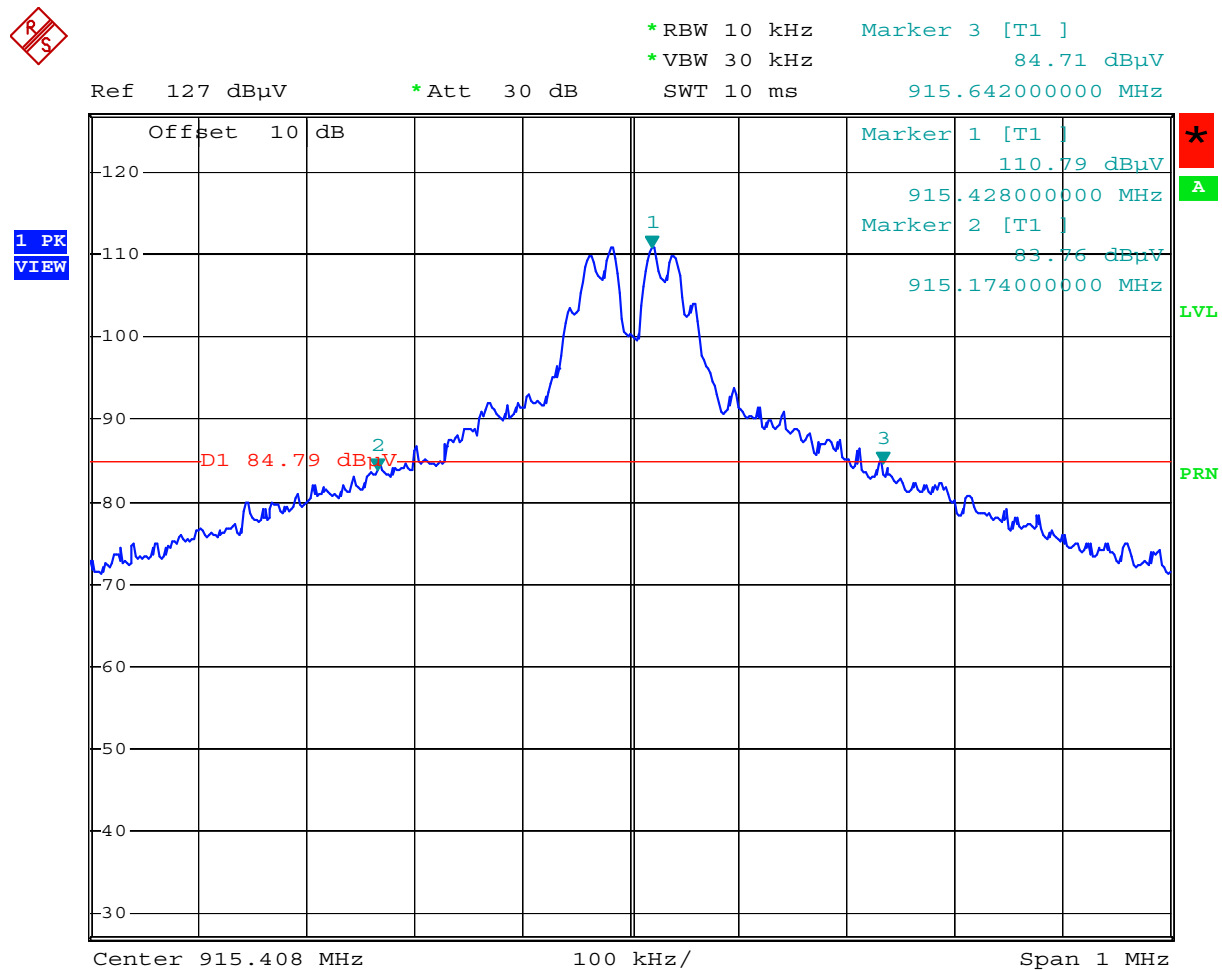
Occupied Bandwidth (-26 dB) on lowest channel:



Comment: vigil 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:05:22

Occupied Bandwidth (-26 dB): 405 kHz

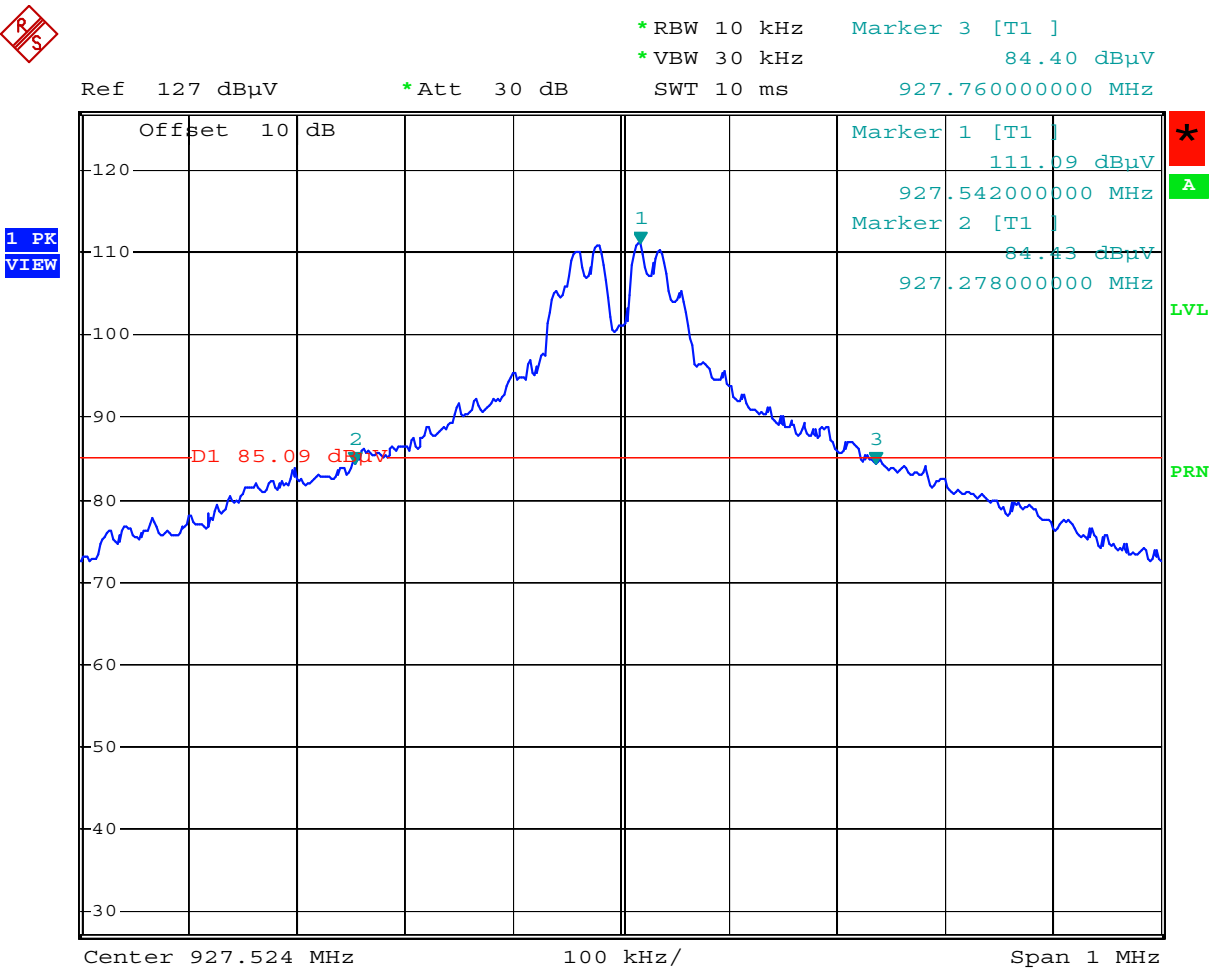
Occupied Bandwidth (-26 dB) on middle channel:



Comment: vigil 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:22:21

Occupied Bandwidth (-26 dB): 468 kHz

Occupied Bandwidth (-26 dB) on highest channel:



Comment: vigil 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:13:36

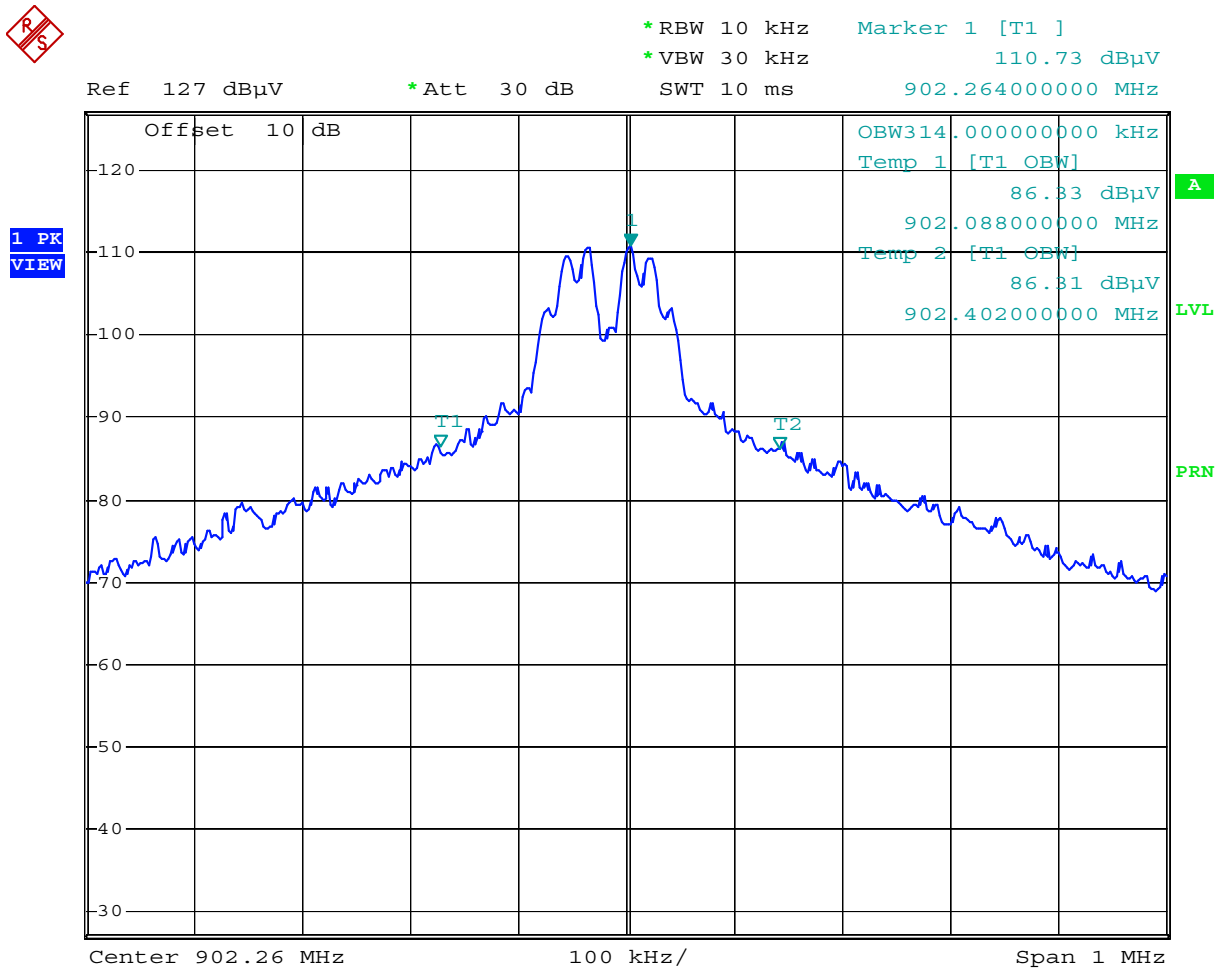
Occupied Bandwidth (-26 dB): 482 kHz

## Occupied Bandwidth (continued)

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications: | IC RSS-Gen Issue 1, section 4.4.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Guide:                    | IC RSS-Gen Issue 1, section 4.4.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Description:              | <p>If not specified in the applicable RSS the occupied bandwidth is measured as the 99% emission bandwidth.</p> <p>The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth.</p> <p>The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is also recorded. The span between the two recorded frequencies is the occupied bandwidth.</p> |
| Measurement procedure:    | Bandwidth Measurements (6.1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|               |                                  |
|---------------|----------------------------------|
| Comment:      |                                  |
| Date of test: | 4 August 2006                    |
| Test site:    | Fully anechoic room, cabin no. 2 |

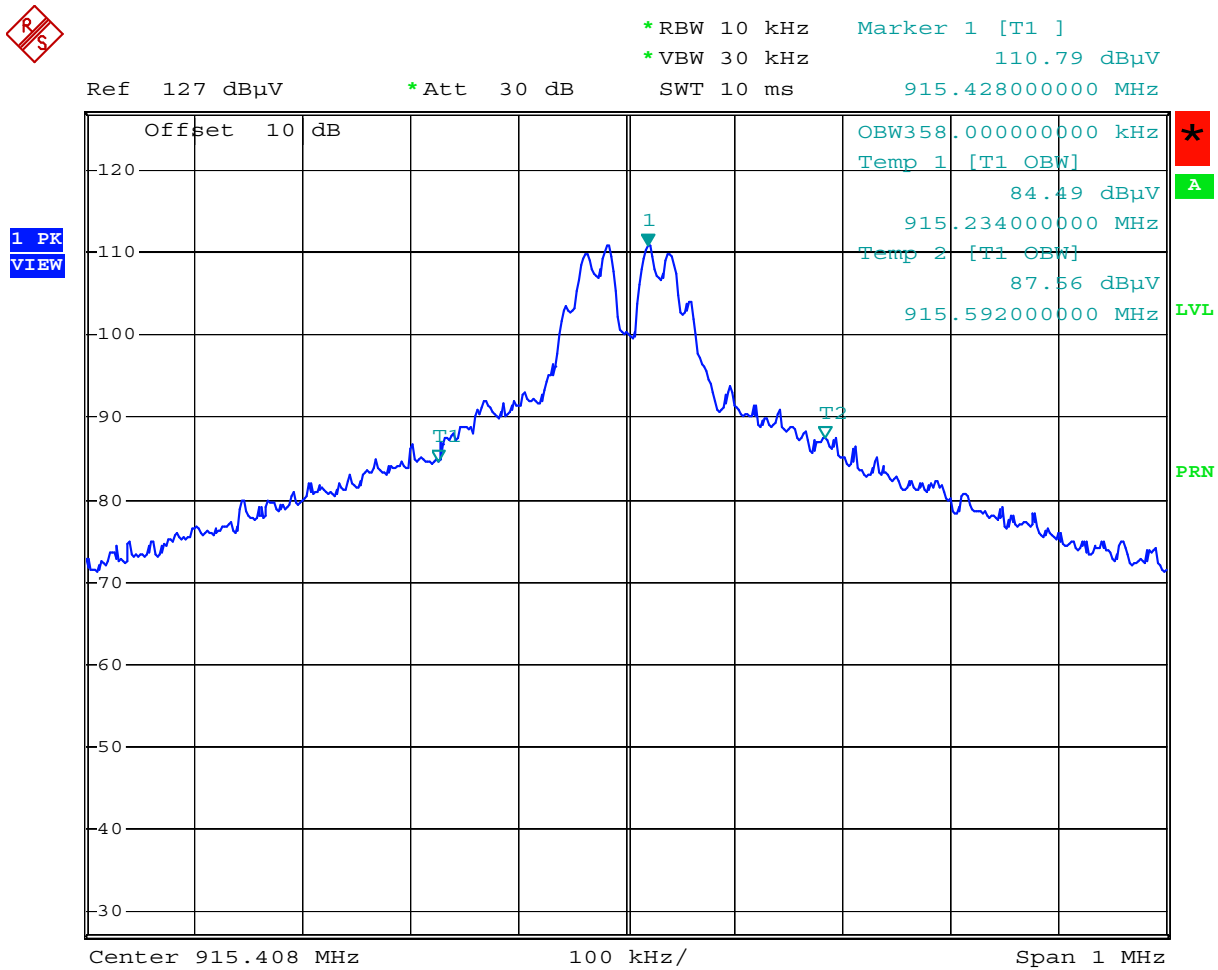
Occupied Bandwidth (99 %) on lowest channel:



Comment: vigil 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:04:06

|                            |         |
|----------------------------|---------|
| Occupied Bandwidth (99 %): | 314 kHz |
|----------------------------|---------|

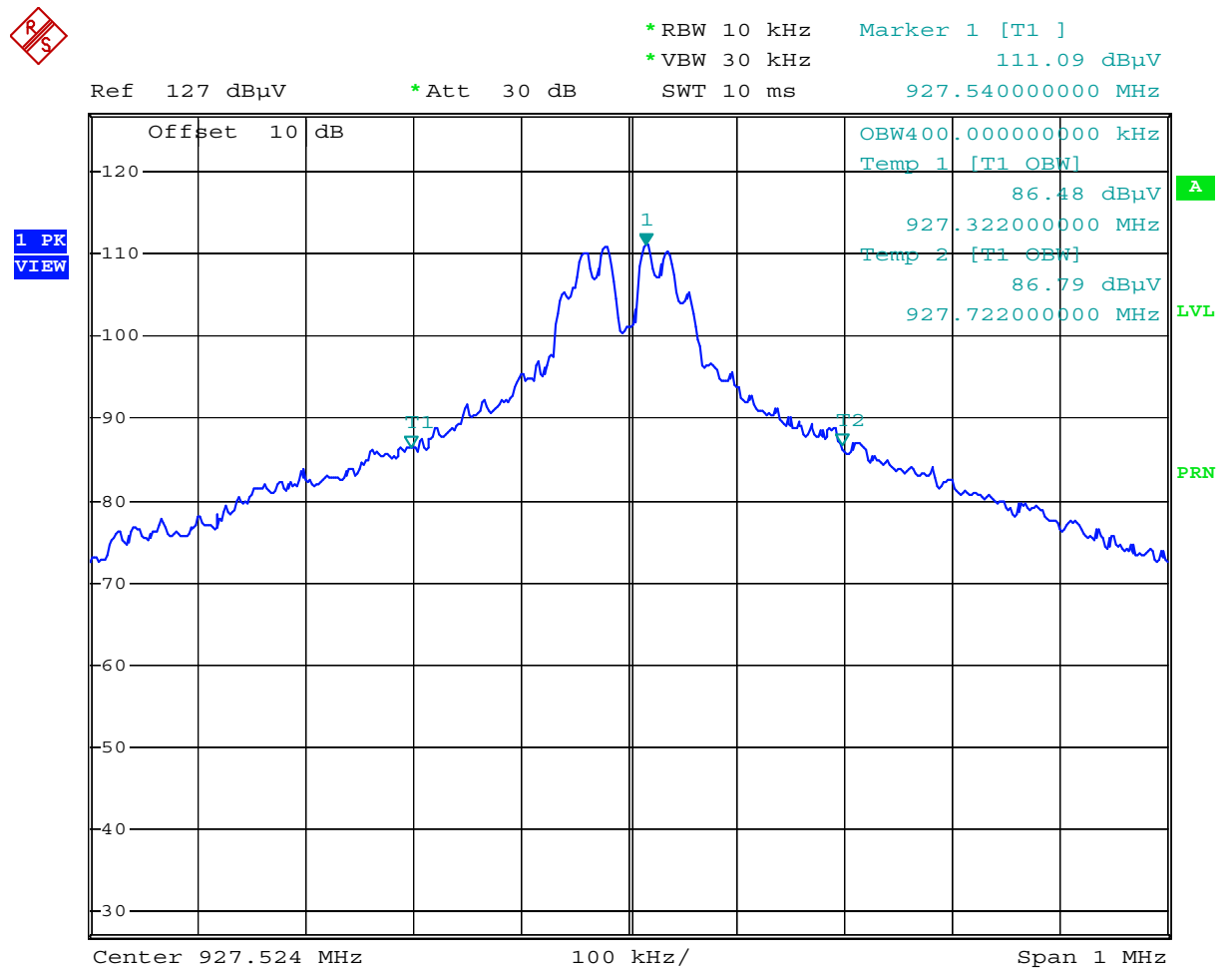
Occupied Bandwidth (99 %) on middle channel:



Comment: vigil 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:21:32

|                            |         |
|----------------------------|---------|
| Occupied Bandwidth (99 %): | 358 kHz |
|----------------------------|---------|

Occupied Bandwidth (99 %) on highest channel:



Comment: vigil 060316: Occupied Bandwidth  
Date: 4.AUG.2006 14:12:28

|                            |         |
|----------------------------|---------|
| Occupied Bandwidth (99 %): | 400 kHz |
|----------------------------|---------|

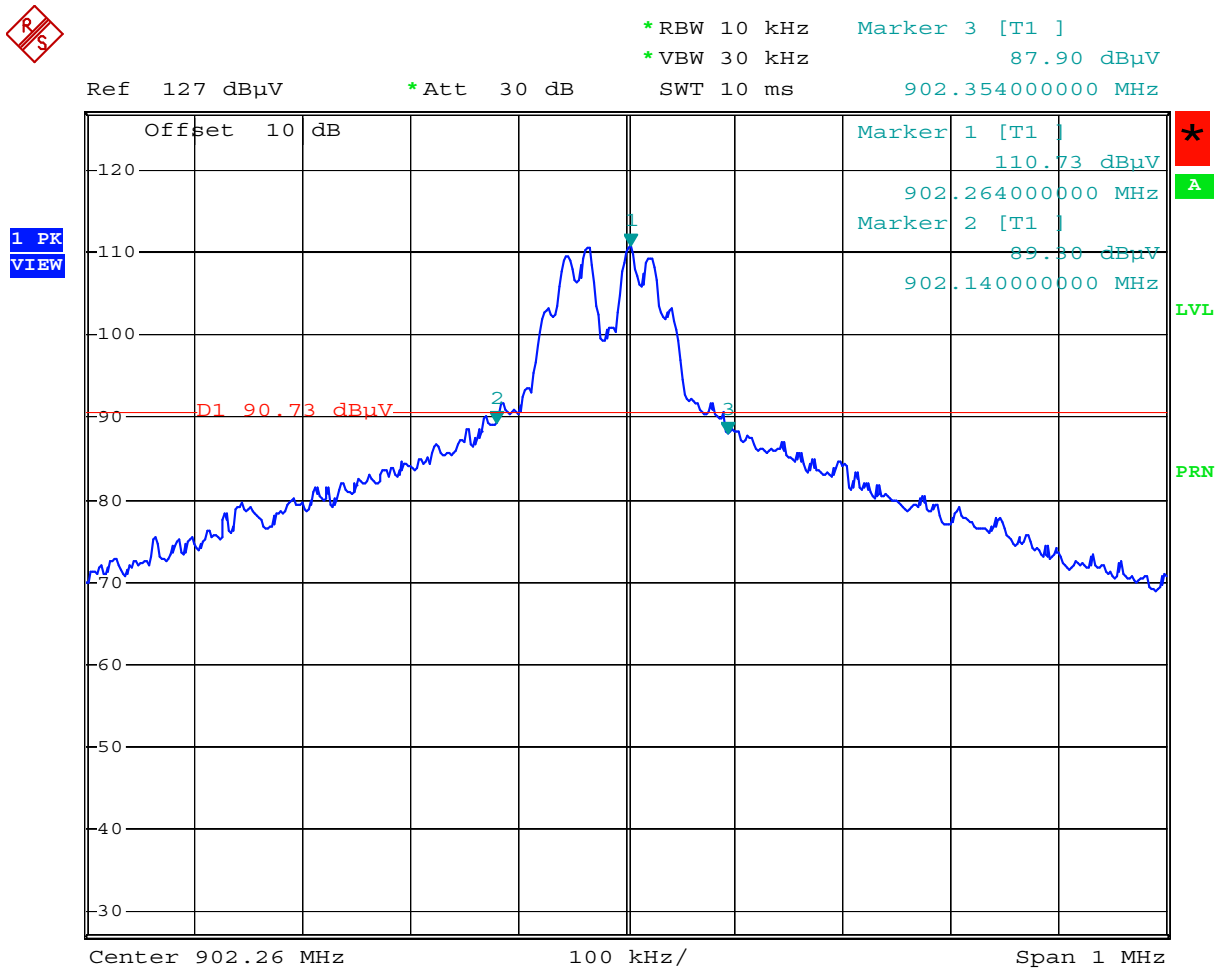
## 8.2 Bandwidth of the Emission

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.215(c)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |
| Guide:                    | ANSI C63.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                              |
| Description:              | <p>The 20 dB bandwidth of the emission is measured as the frequency range defined by the points that are 20 dB down relative to the maximum level of the modulated carrier.</p> <p>For intentional radiators operating under the alternative provisions to the general emission limits the requirement to contain the 20 dB bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.</p> <p>The resolution bandwidth of the spectrum analyzer shall be set to a value greater than 5.0% of the allowed bandwidth. If no bandwidth specifications are given, the following guidelines are used:</p> |                              |
|                           | Fundamental frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Minimum resolution bandwidth |
|                           | 9 kHz to 30 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1 kHz                        |
|                           | 30 MHz to 1000 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10 kHz                       |
|                           | 1000 MHz to 40 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100 kHz                      |
|                           | <p>The video bandwidth shall be at least three times greater than the resolution bandwidth.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |
| Measurement procedure:    | Bandwidth Measurements (6.1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                              |

|               |                                  |
|---------------|----------------------------------|
| Comment:      |                                  |
| Date of test: | 8 August 2006                    |
| Test site:    | Fully anechoic room, cabin no. 2 |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

-20 dB bandwidth on lowest channel:

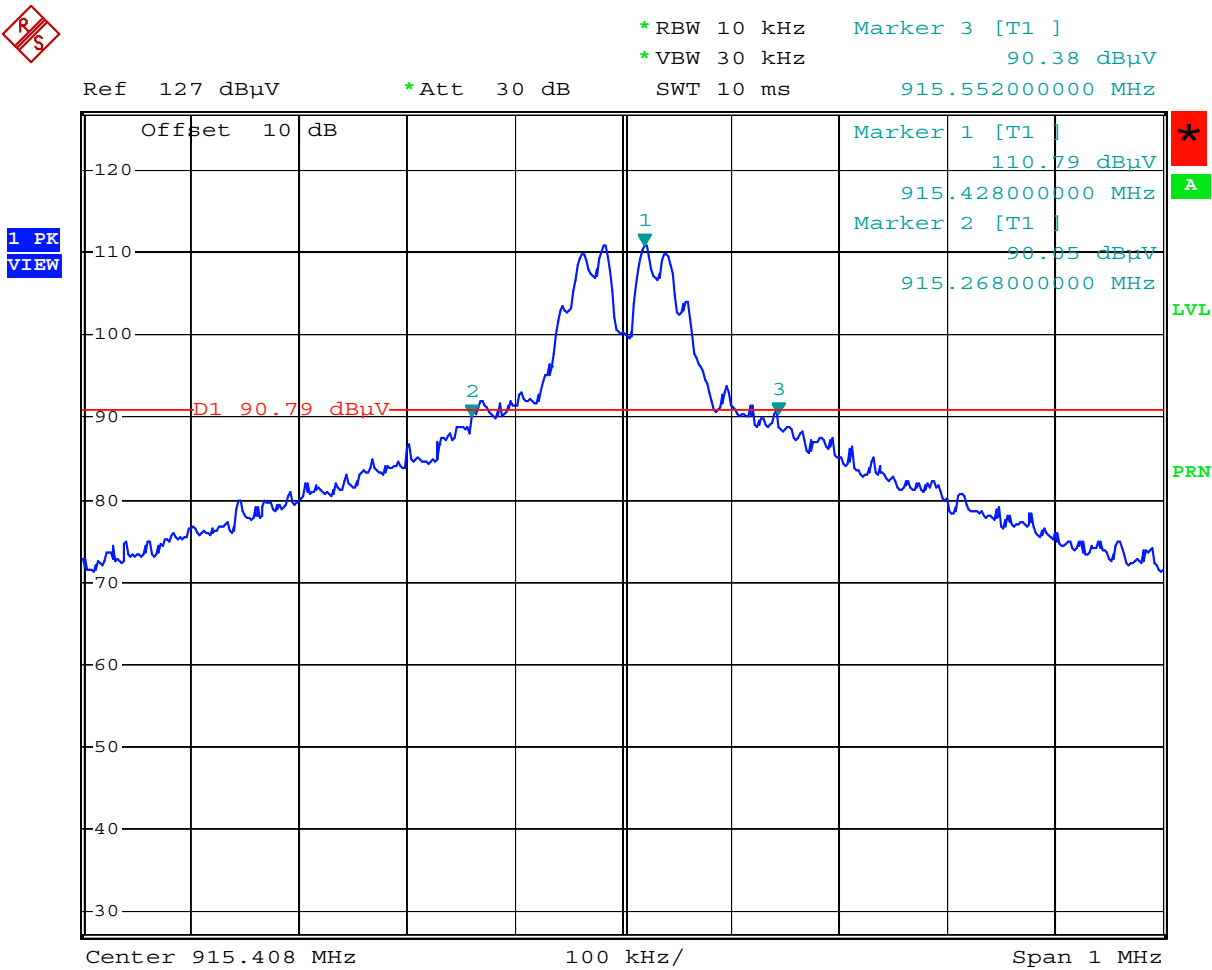


Comment: vigil 060316: Emission Bandwidth  
Date: 4.AUG.2006 14:06:26

|                               |                                                                                                                       |                                                   |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Permitted frequency band:     | 902 - 928 MHz                                                                                                         |                                                   |
| 20 dB bandwidth:              | 214 kHz                                                                                                               |                                                   |
| Carrier frequency stability:  | <input type="checkbox"/> specified                                                                                    | <input checked="" type="checkbox"/> not specified |
| Maximum frequency tolerances: |                                                                                                                       |                                                   |
| Bandwidth of the emission:    | within permitted frequency band <sup>5</sup> :<br><input checked="" type="checkbox"/> yes <input type="checkbox"/> no |                                                   |

<sup>5</sup> If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

-20 dB bandwidth on middle channel:

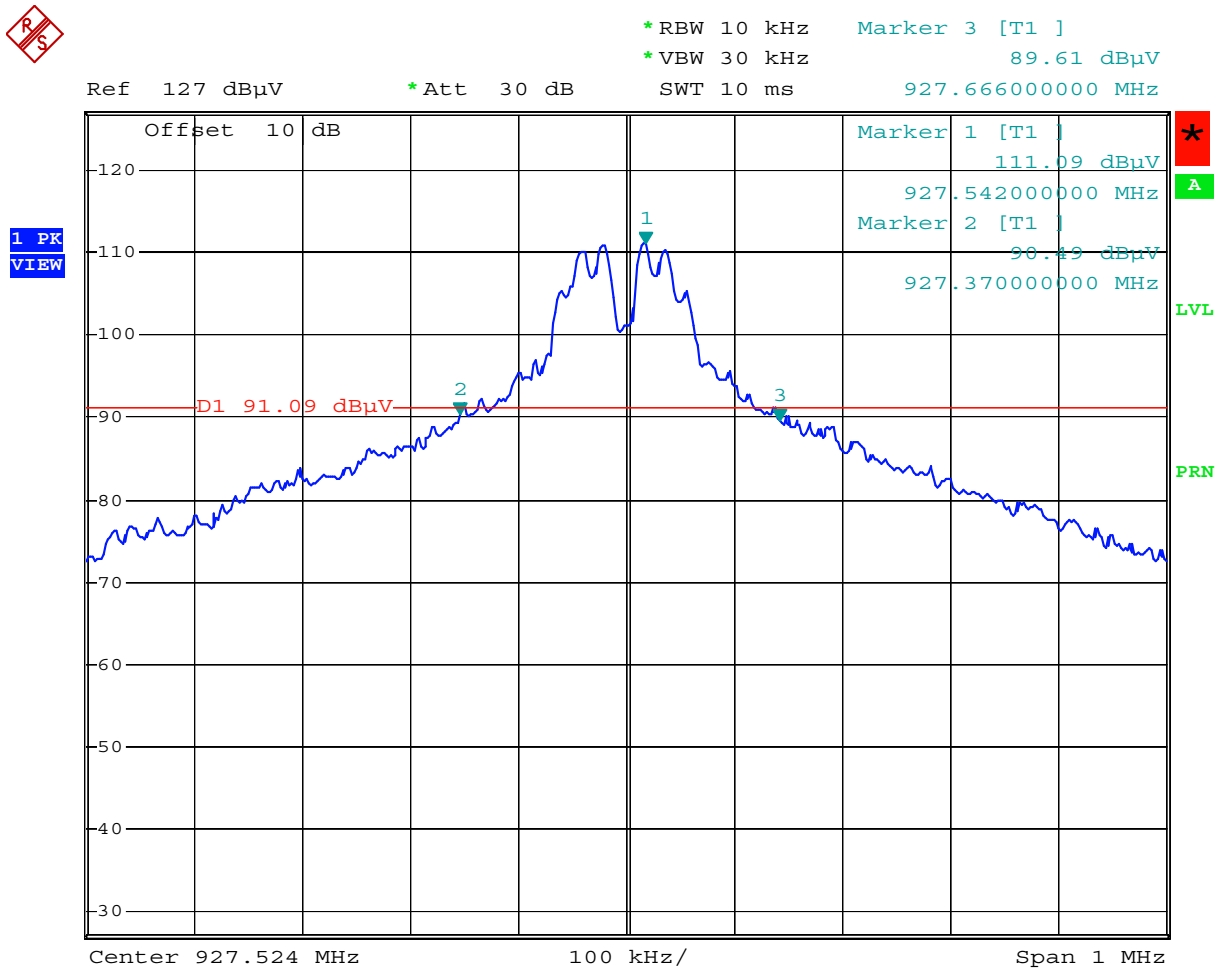


Comment: vigil 060316: Emission Bandwidth  
Date: 4.AUG.2006 14:22:59

|                               |                                                                                                                       |                                                   |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Permitted frequency band:     | 902 - 928 MHz                                                                                                         |                                                   |
| 20 dB bandwidth:              | 284 kHz                                                                                                               |                                                   |
| Carrier frequency stability:  | <input type="checkbox"/> specified                                                                                    | <input checked="" type="checkbox"/> not specified |
| Maximum frequency tolerances: |                                                                                                                       |                                                   |
| Bandwidth of the emission:    | within permitted frequency band <sup>6</sup> :<br><input checked="" type="checkbox"/> yes <input type="checkbox"/> no |                                                   |

<sup>6</sup> If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

-20 dB bandwidth on highest channel:



Comment: vigil 060316: Emission Bandwidth  
Date: 4.AUG.2006 14:14:19

|                               |                                                                                                                       |                                                   |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Permitted frequency band:     | 902 - 928 MHz                                                                                                         |                                                   |
| 20 dB bandwidth:              | 296 kHz                                                                                                               |                                                   |
| Carrier frequency stability:  | <input type="checkbox"/> specified                                                                                    | <input checked="" type="checkbox"/> not specified |
| Maximum frequency tolerances: |                                                                                                                       |                                                   |
| Bandwidth of the emission:    | within permitted frequency band <sup>7</sup> :<br><input checked="" type="checkbox"/> yes <input type="checkbox"/> no |                                                   |

<sup>7</sup> If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

### 8.3 Designation of Emissions

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 2, sections 2.201 and 2.202<br>IC RSS-Gen Issue 1, sections 3.2(h) and 8 |
| Guide:                    | ANSI C63.4 / TRC-43                                                                  |

|                     |                      |
|---------------------|----------------------|
| Type of modulation: | Frequency Modulation |
|---------------------|----------------------|

|                              |                                                                                        |
|------------------------------|----------------------------------------------------------------------------------------|
| $B_n$ = Necessary Bandwidth  | $B_n = 2M + 2DK$                                                                       |
| M = Modulation frequency     | M = 105 kHz                                                                            |
| D = Peak deviation           | D = 20 kHz                                                                             |
| K = Overall numerical factor | K = 1                                                                                  |
| Calculation:                 | $B_n = 2 \cdot (105 \text{ kHz}) + 2 \cdot (20 \text{ kHz}) \cdot 1 = 250 \text{ kHz}$ |

|                           |                |
|---------------------------|----------------|
| Designation of Emissions: | <b>250KF1D</b> |
|---------------------------|----------------|

## 8.4 Conducted Powerline Emission Measurement 150 kHz to 30 MHz

|                           |                                                                     |                        |          |
|---------------------------|---------------------------------------------------------------------|------------------------|----------|
| Rules and specifications: | CFR 47 Part 15, section 15.207<br>IC RSS-Gen Issue 1, section 7.2.2 |                        |          |
| Guide:                    | ANSI C63.4 / CISPR 22                                               |                        |          |
| Limit:                    | Frequency of Emission (MHz)                                         | Conducted Limit (dBµV) |          |
|                           |                                                                     | Quasi-peak             | Average  |
|                           | 0.15 - 0.5                                                          | 66 to 56               | 56 to 46 |
|                           | 0.5 - 5                                                             | 56                     | 46       |
|                           | 5 - 30                                                              | 60                     | 50       |
| Measurement procedure:    | Conducted AC Powerline Emission (6.2)                               |                        |          |

|               |                            |
|---------------|----------------------------|
| Comment:      |                            |
| Date of test: | 17 July 2006               |
| Test site:    | Shielded room, cabin no. 1 |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

|            |    |
|------------|----|
| Tested on: | L1 |
|------------|----|

| Frequency (MHz) | Detector   | Reading Value (dBµV) | Correction Factor (dB) | Final Value (dBµV) | Limit (dBµV) | Margin (dB) |
|-----------------|------------|----------------------|------------------------|--------------------|--------------|-------------|
| 0.350           | Quasi-Peak | 39.8                 | 0.0                    | 39.8               | 59.0         | 19.2        |
| 0.405           | Quasi-Peak | 37.8                 | 0.0                    | 37.8               | 57.8         | 20.0        |
| 0.465           | Quasi-Peak | 36.5                 | 0.0                    | 36.5               | 56.6         | 20.1        |
| 3.480           | Quasi-Peak | 36.7                 | 0.0                    | 36.7               | 56.0         | 19.3        |
| 3.710           | Quasi-Peak | 36.2                 | 0.0                    | 36.2               | 56.0         | 19.8        |
| 11.578          | Quasi-Peak | 38.4                 | 0.0                    | 38.4               | 60.0         | 21.6        |
| 15.359          | Quasi-Peak | 42.7                 | 0.0                    | 42.7               | 60.0         | 17.3        |
| 19.220          | Quasi-Peak | 38.6                 | 0.0                    | 38.6               | 60.0         | 21.4        |
| 22.910          | Quasi-Peak | 37.8                 | 0.0                    | 37.8               | 60.0         | 22.2        |

|            |   |
|------------|---|
| Tested on: | N |
|------------|---|

| Frequency<br>(MHz) | Detector   | Reading<br>Value<br>(dBμV) | Correction<br>Factor<br>(dB) | Final<br>Value<br>(dBμV) | Limit<br>(dBμV) | Margin<br>(dB) |
|--------------------|------------|----------------------------|------------------------------|--------------------------|-----------------|----------------|
| 0.175              | Quasi-Peak | 43.6                       | 0.0                          | 43.6                     | 64.7            | 21.1           |
| 11.115             | Quasi-Peak | 40.4                       | 0.0                          | 40.4                     | 60.0            | 19.6           |
| 15.595             | Quasi-Peak | 45.2                       | 0.0                          | 45.2                     | 60.0            | 14.8           |
| 16.065             | Quasi-Peak | 46.2                       | 0.0                          | 46.2                     | 60.0            | 13.8           |
| 22.910             | Quasi-Peak | 37.9                       | 0.0                          | 37.9                     | 60.0            | 22.1           |

**Sample calculation of final values:**

$$\text{Final Value (dB}\mu\text{V)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB)}$$

## 8.5 Channel Bandwidth

|                           |                                                                            |
|---------------------------|----------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.247(a)(1)(i)<br>RSS-210, Issue 6, section A8(3) |
| Guide:                    | ANSI C63.4                                                                 |
| Limit:                    | The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.     |
| Measurement procedure:    | Bandwidth Measurements (6.1)                                               |

|               |                                  |
|---------------|----------------------------------|
| Comment:      |                                  |
| Date of test: | 8 August 2006                    |
| Test site:    | Fully anechoic room, cabin no. 2 |

| Channel Frequency   | Channel Bandwidth |           | Result        |
|---------------------|-------------------|-----------|---------------|
|                     | Measured          | Limit     |               |
| Low (902.22 MHz)    | 214 kHz           | ≤ 500 kHz | <b>Passed</b> |
| Middle (915.39 MHz) | 284 kHz           | ≤ 500 kHz | <b>Passed</b> |
| High (927.40 MHz)   | 296 kHz           | ≤ 500 kHz | <b>Passed</b> |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

## 8.6 Hopping Channel Separation

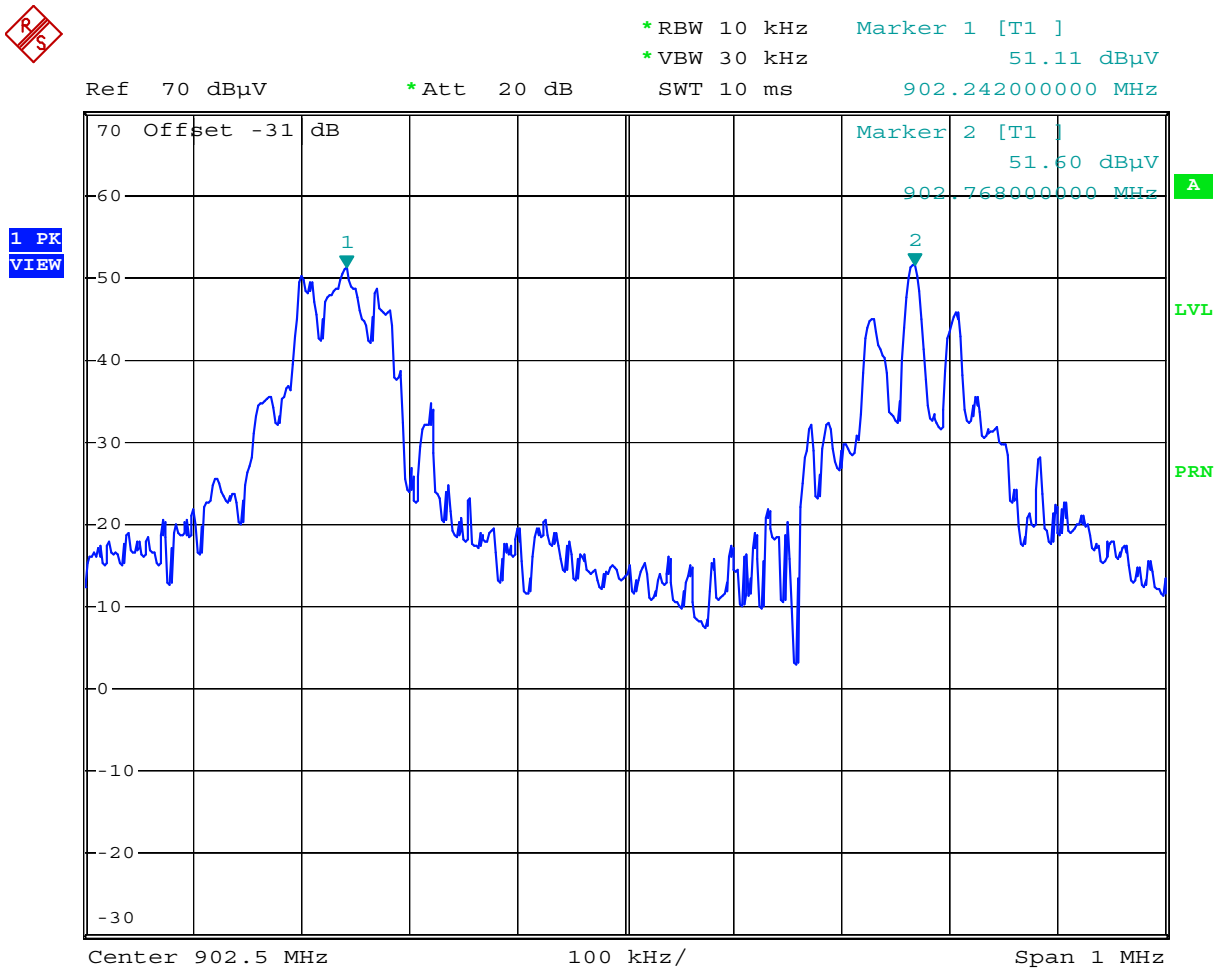
|                           |                                                                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.247(a)(1)(i)<br>RSS-210, Issue 6, section A8(3)                                                                             |
| Guide:                    | ANSI C63.4                                                                                                                                             |
| Limit:                    | Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth, whichever is greater |
| Measurement procedure:    | Bandwidth Measurements (6.1)                                                                                                                           |

|               |                                  |
|---------------|----------------------------------|
| Comment:      |                                  |
| Date of test: | 8 August 2006                    |
| Test site:    | Fully anechoic room, cabin no. 2 |

| Channel Frequency   | Hopping Channel Separation |                | Result        |
|---------------------|----------------------------|----------------|---------------|
|                     | Measured                   | Required       |               |
| Low (902.22 MHz)    | 526 kHz                    | $\leq 214$ kHz | <b>Passed</b> |
| Middle (915.39 MHz) | 530 kHz                    | $\leq 282$ kHz | <b>Passed</b> |
| High (927.40 MHz)   | 278 kHz                    | $\leq 296$ kHz | <b>Passed</b> |

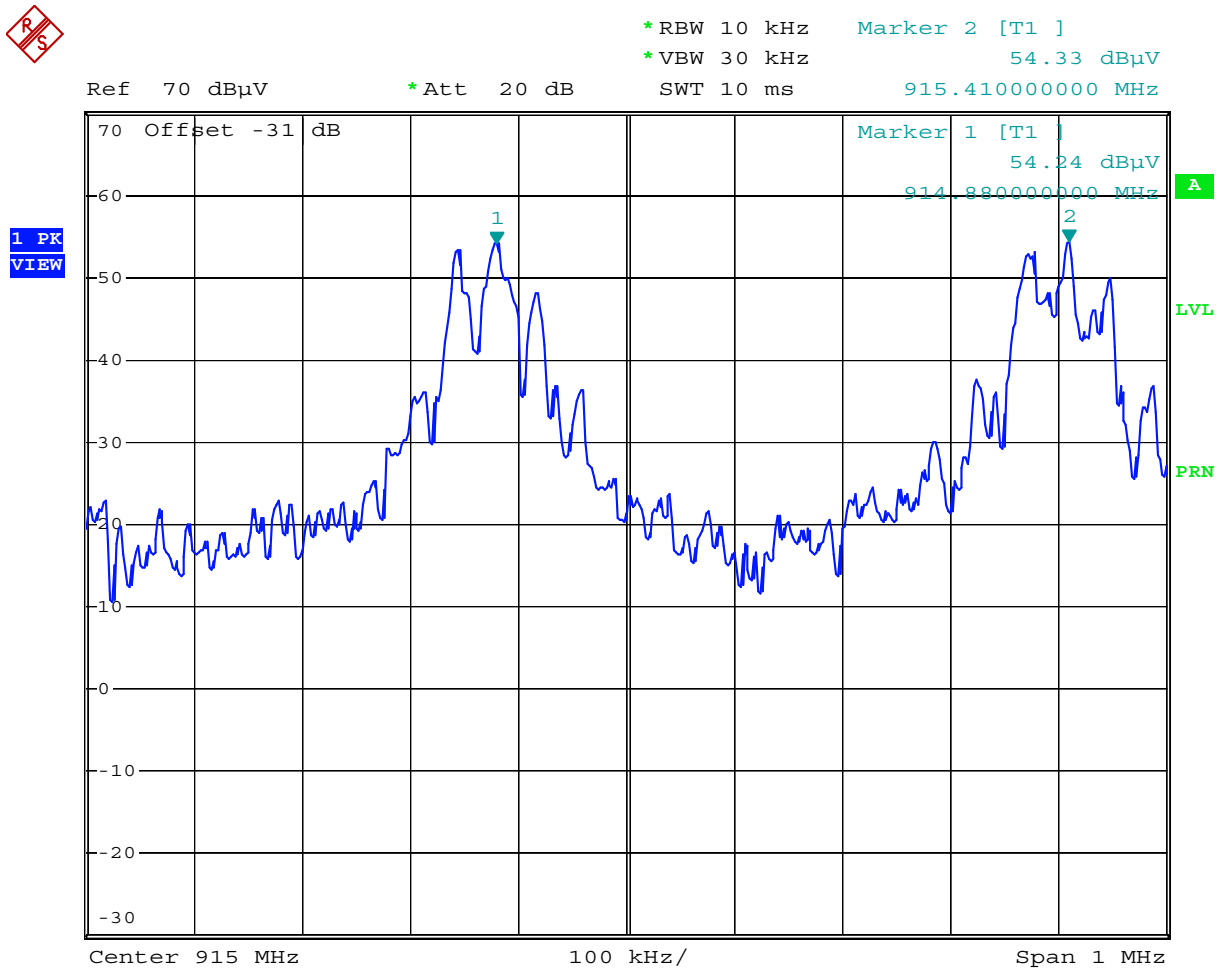
|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

Lowest Channel:



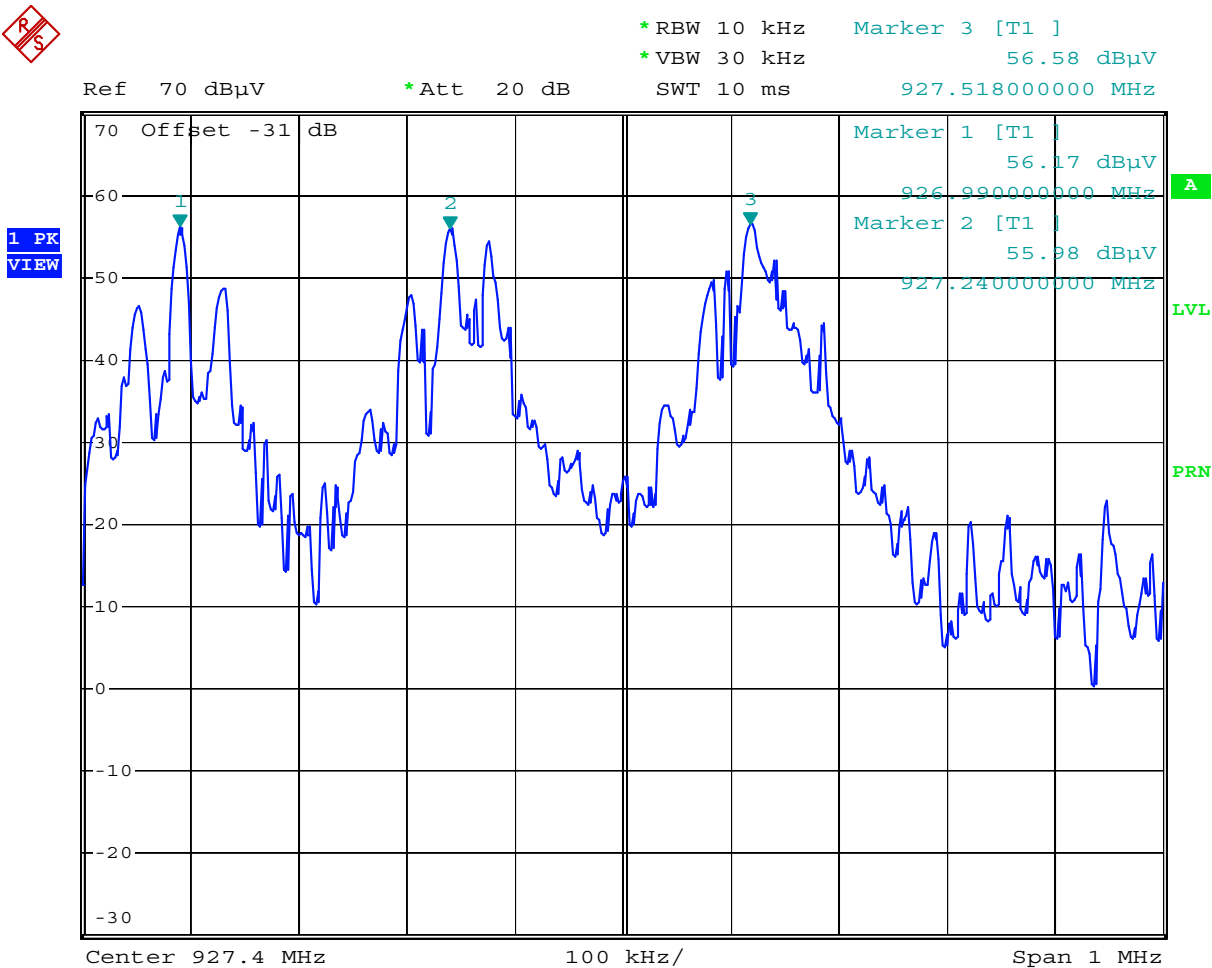
Comment: vigil 060316: Hopping Channel Separation  
Date: 4.AUG.2006 11:26:17

Middle Channel:



Comment: vigil 060316: Hopping Channel Separation  
Date: 4.AUG.2006 11:30:20

Highest Channel:



Comment: vigil 060316: Hopping Channel Separation  
Date: 4.AUG.2006 11:27:57

## 8.7 Number of Hopping Frequencies

|                           |                                                                                                                                                                                                                                                      |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.247(a)(1)(i)<br>RSS-210, Issue 6, section A8(3)                                                                                                                                                                           |
| Guide:                    | ANSI C63.4                                                                                                                                                                                                                                           |
| Limit:                    | If the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies. |
| Measurement procedure:    | Bandwidth Measurements (6.1)                                                                                                                                                                                                                         |

|               |                                  |
|---------------|----------------------------------|
| Comment:      |                                  |
| Date of test: | 8 August 2006                    |
| Test site:    | Fully anechoic room, cabin no. 2 |

| Number of Hopping Frequencies |          | Result |
|-------------------------------|----------|--------|
| Measured                      | Required |        |
| 50                            | ≥50      | Passed |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

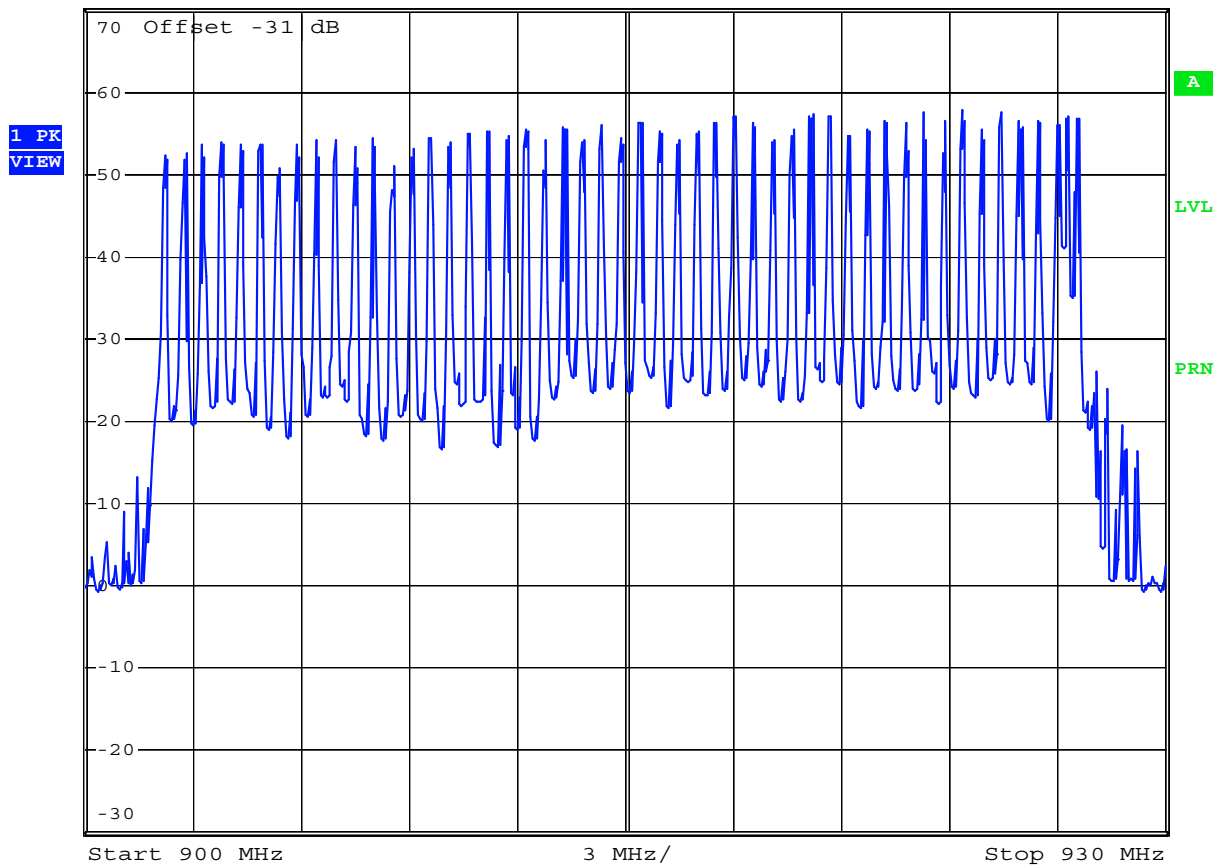


\*RBW 30 kHz  
\*VBW 100 kHz

Ref 70 dBμV

\*Att 20 dB

SWT 35 ms



Comment: vigil 060316: Number of Hopping Channels  
Date: 4.AUG.2006 11:23:18

## 8.8 Time Occupancy on any Channel

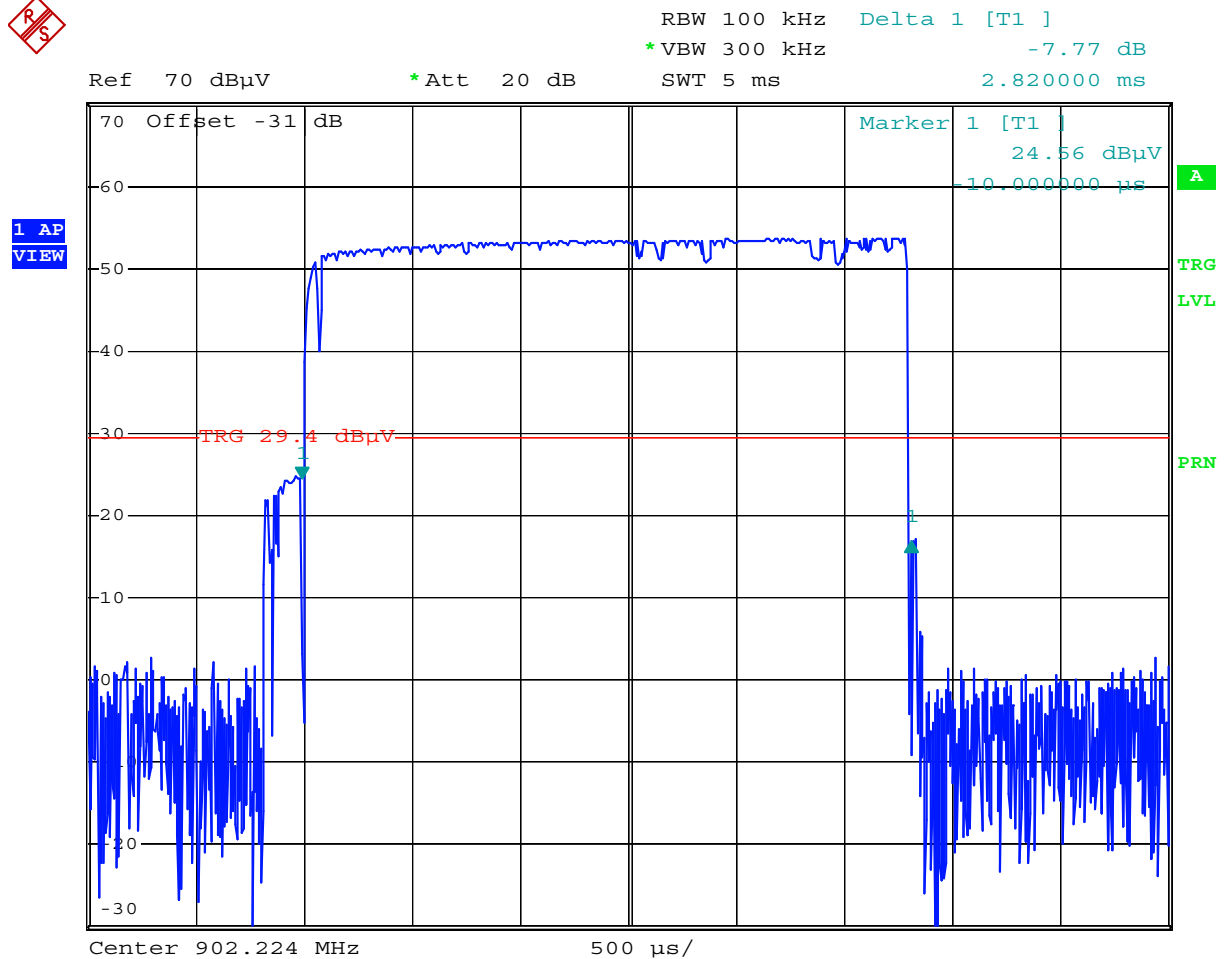
|                           |                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.247(a)(1)(i)<br>RSS-210, Issue 6, section A8(3)                                                                                                                                                                                                                                                                                                |
| Guide:                    | ANSI C63.4                                                                                                                                                                                                                                                                                                                                                                |
| Limit:                    | If the 20 dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 seconds period. |
| Measurement procedure:    | Bandwidth Measurements (6.1)                                                                                                                                                                                                                                                                                                                                              |

|               |                                  |
|---------------|----------------------------------|
| Comment:      |                                  |
| Date of test: | 8 August 2006                    |
| Test site:    | Fully anechoic room, cabin no. 2 |

| Channel Frequency   | Time Occupancy                            |                         | Result        |
|---------------------|-------------------------------------------|-------------------------|---------------|
|                     | Measured                                  | Required                |               |
| Low (902.22 MHz)    | 2.82 ms · 11 = 31.02 ms<br>in 10 s period | < 400 ms in 10 s period | <b>Passed</b> |
| Middle (915.39 MHz) | 2.82 ms · 11 = 31.02 ms<br>in 10 s period | < 400 ms in 10 s period | <b>Passed</b> |
| High (927.40 MHz)   | 2.82 ms · 11 = 31.02 ms<br>in 10 s period | < 400 ms in 20 s period | <b>Passed</b> |

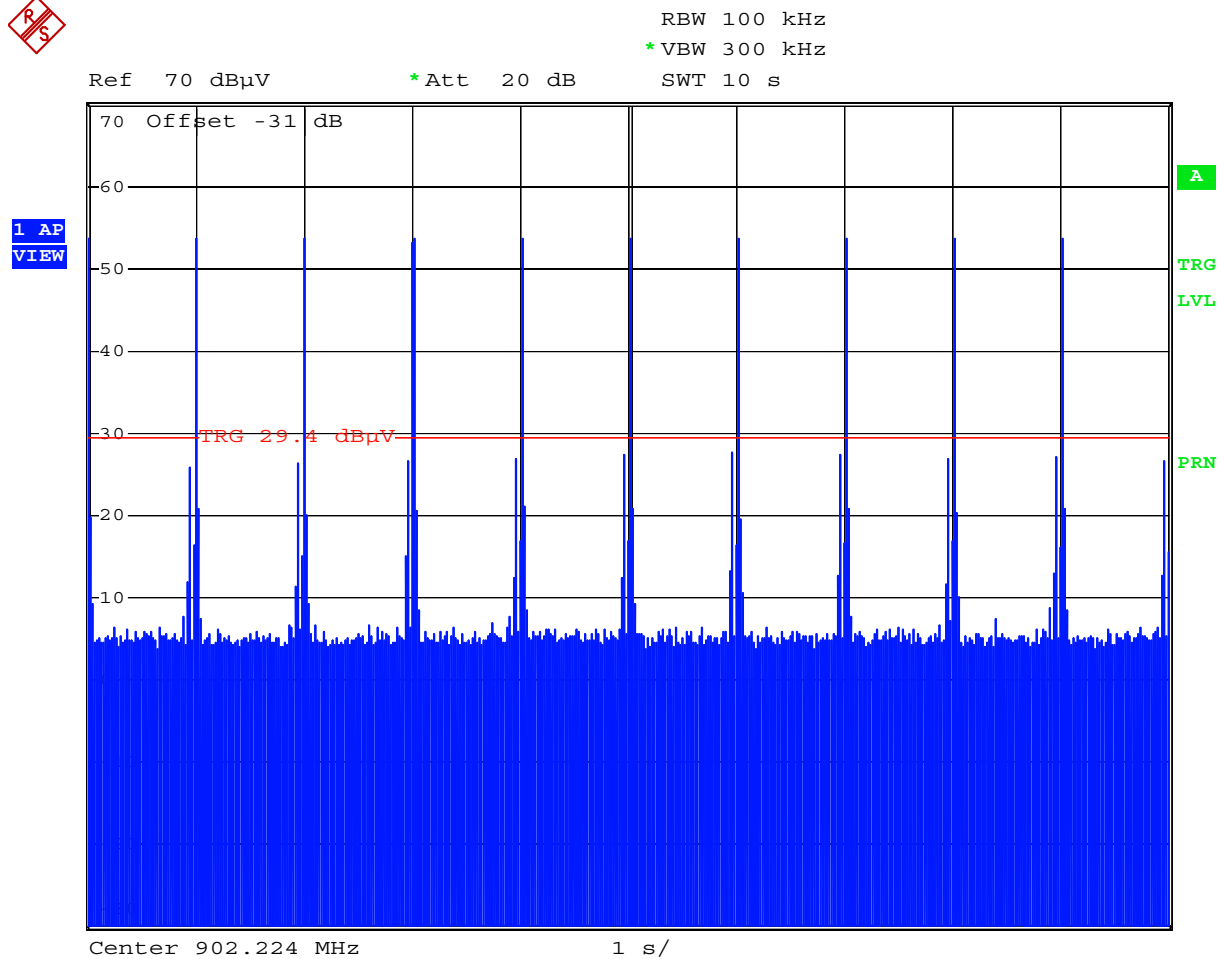
|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

**Lowest Channel:**



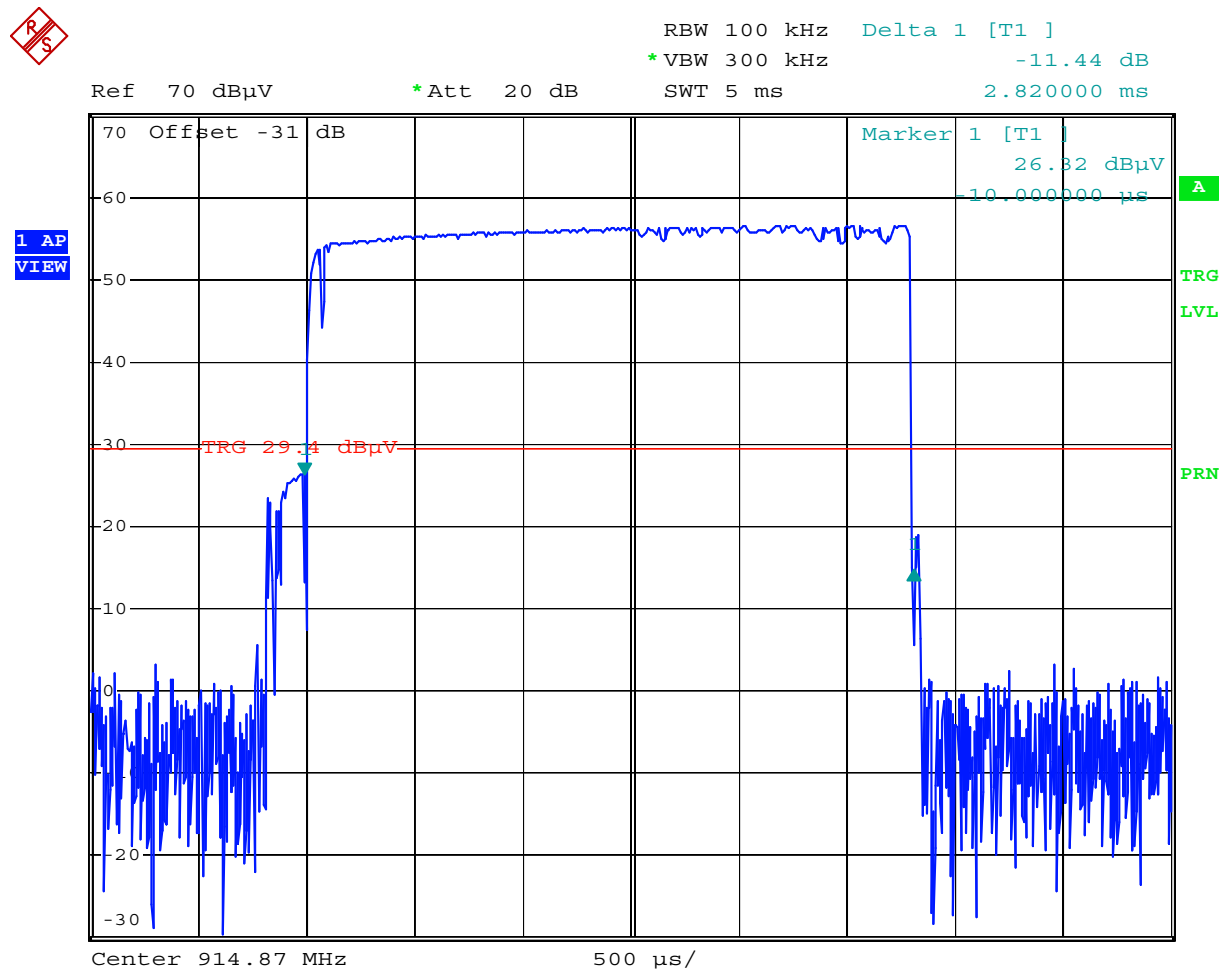
Comment: vigil 060316: Time Occupancy  
 Date: 4.AUG.2006 11:32:38

**Lowest Channel - continued:**

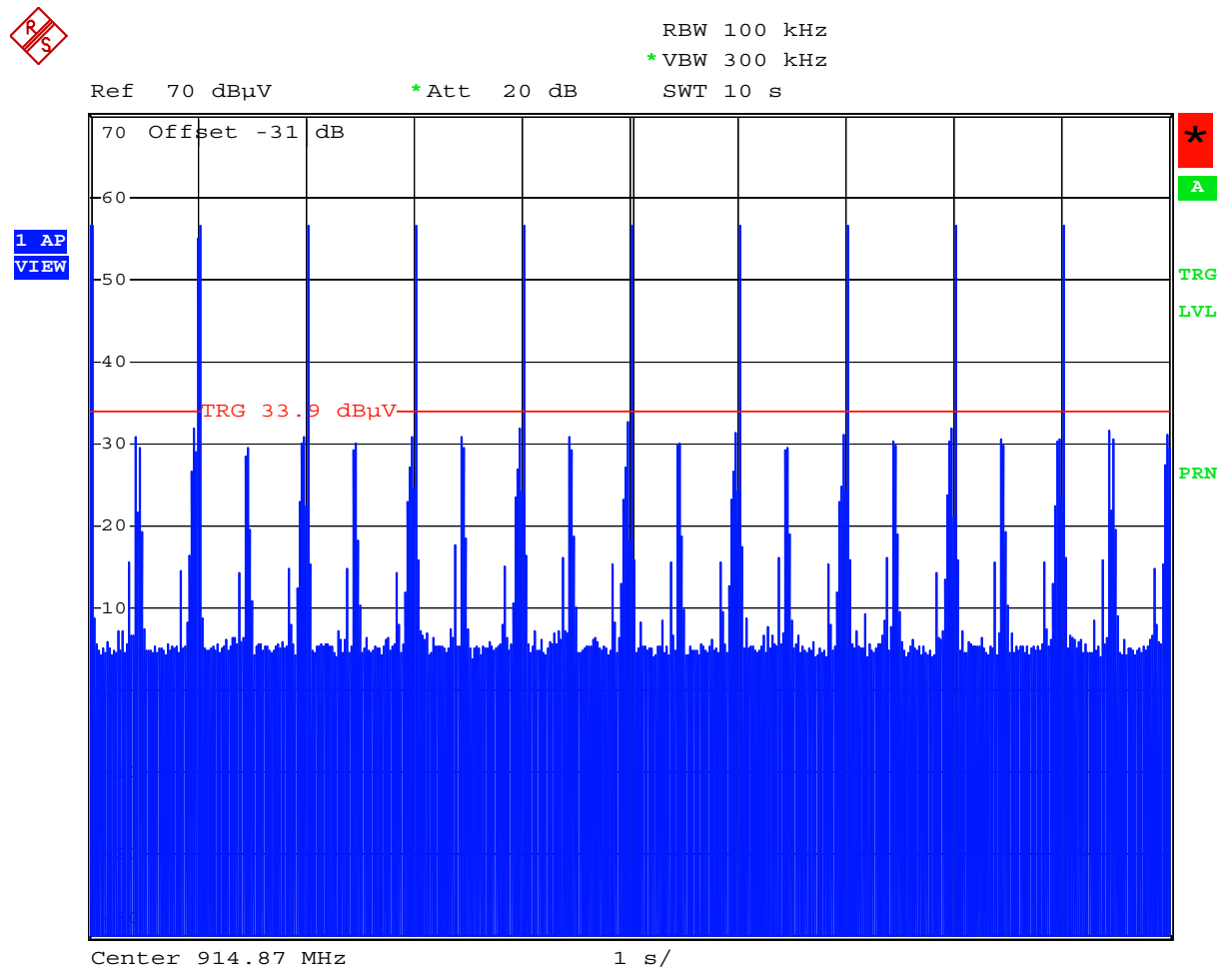


Comment: vigil 060316: Time Occupancy  
 Date: 4.AUG.2006 11:33:22

**Middle Channel:**

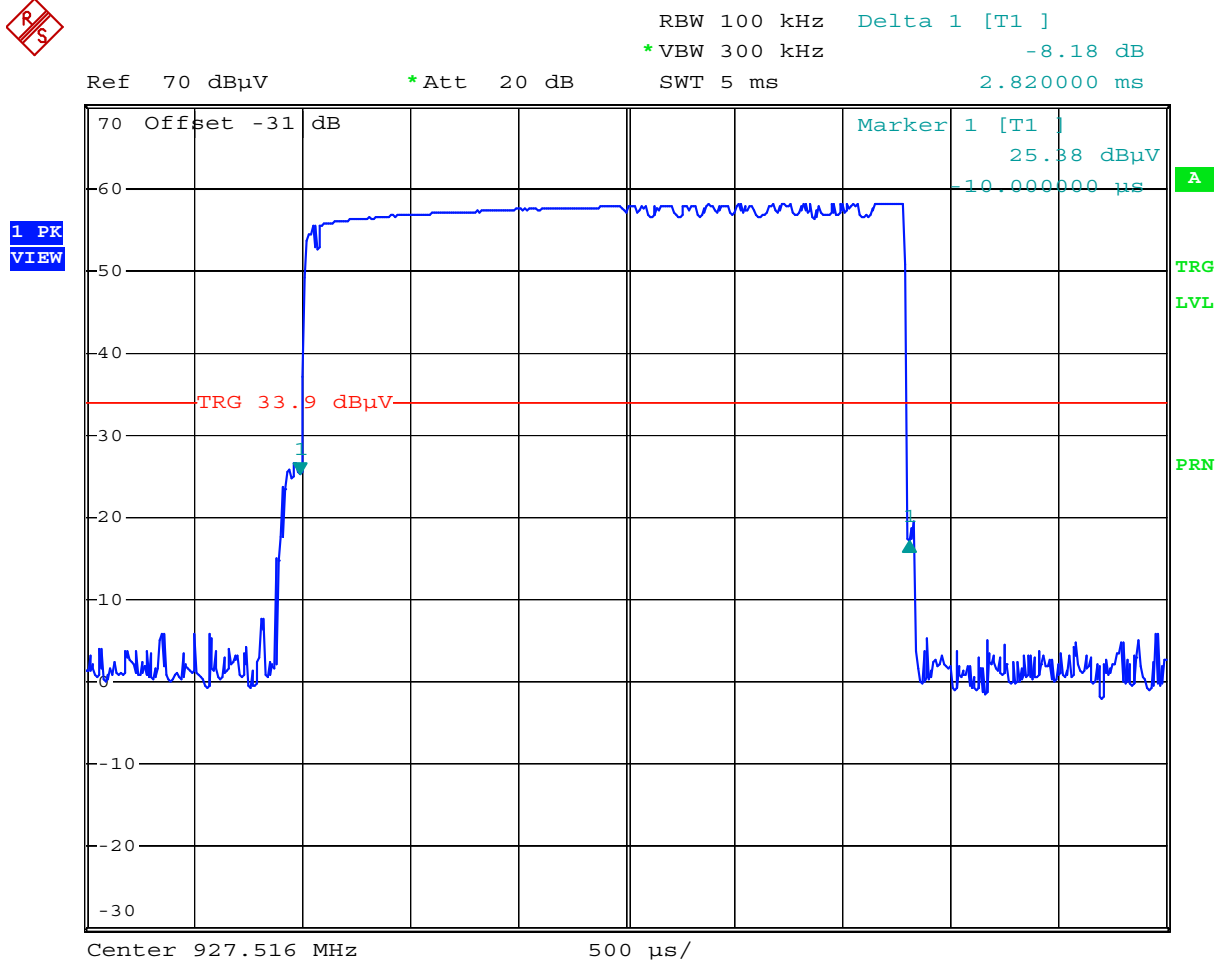


**Middle Channel - continued:**



Comment: vigil 060316: Time Occupancy  
 Date: 4.AUG.2006 11:35:31

# Highest Channel:



Comment: vigil 060316: Time Occupancy  
 Date: 4.AUG.2006 11:37:12

# Highest Channel - continued:



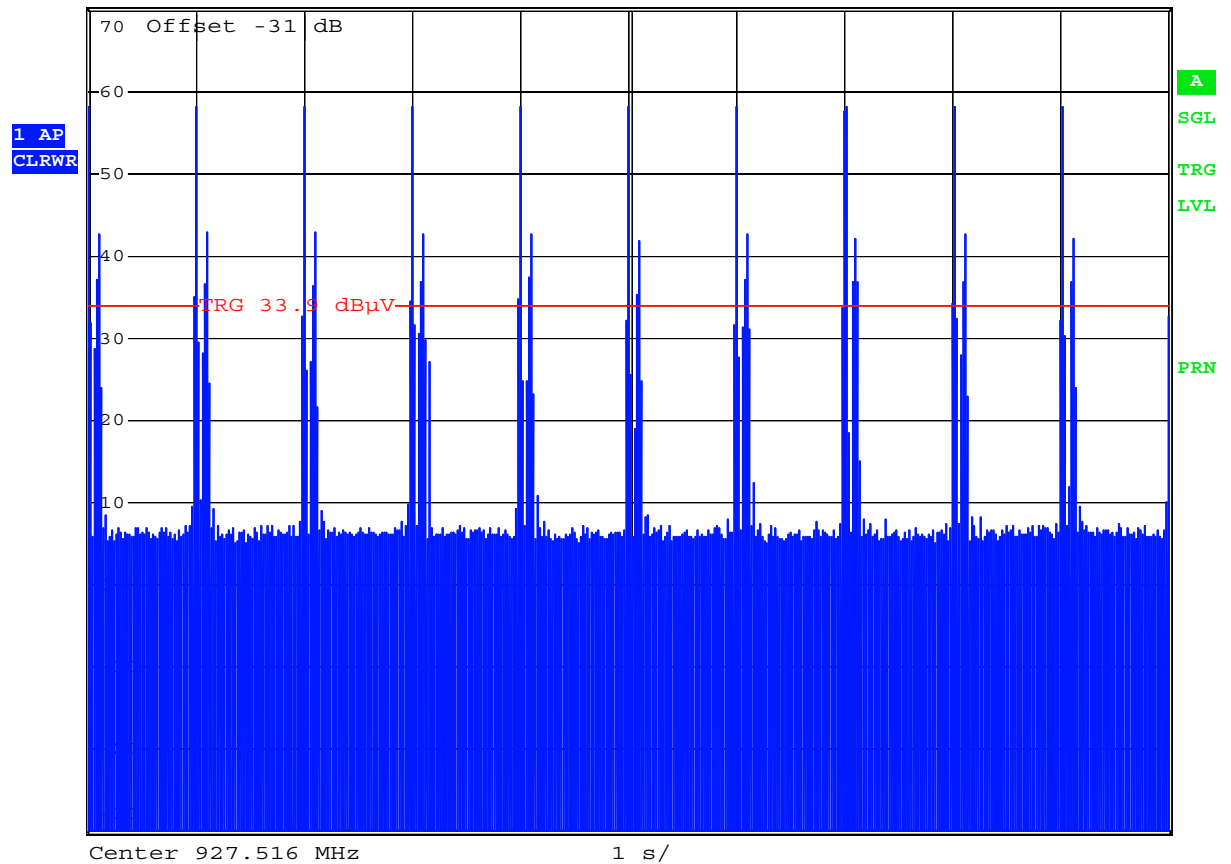
RBW 100 kHz

\*VBW 300 kHz

Ref 70 dBμV

\*Att 20 dB

SWT 10 s



Comment: vigil 060316: Time Occupancy  
 Date: 4.AUG.2006 11:37:50

## 8.9 Carrier Power Measurment

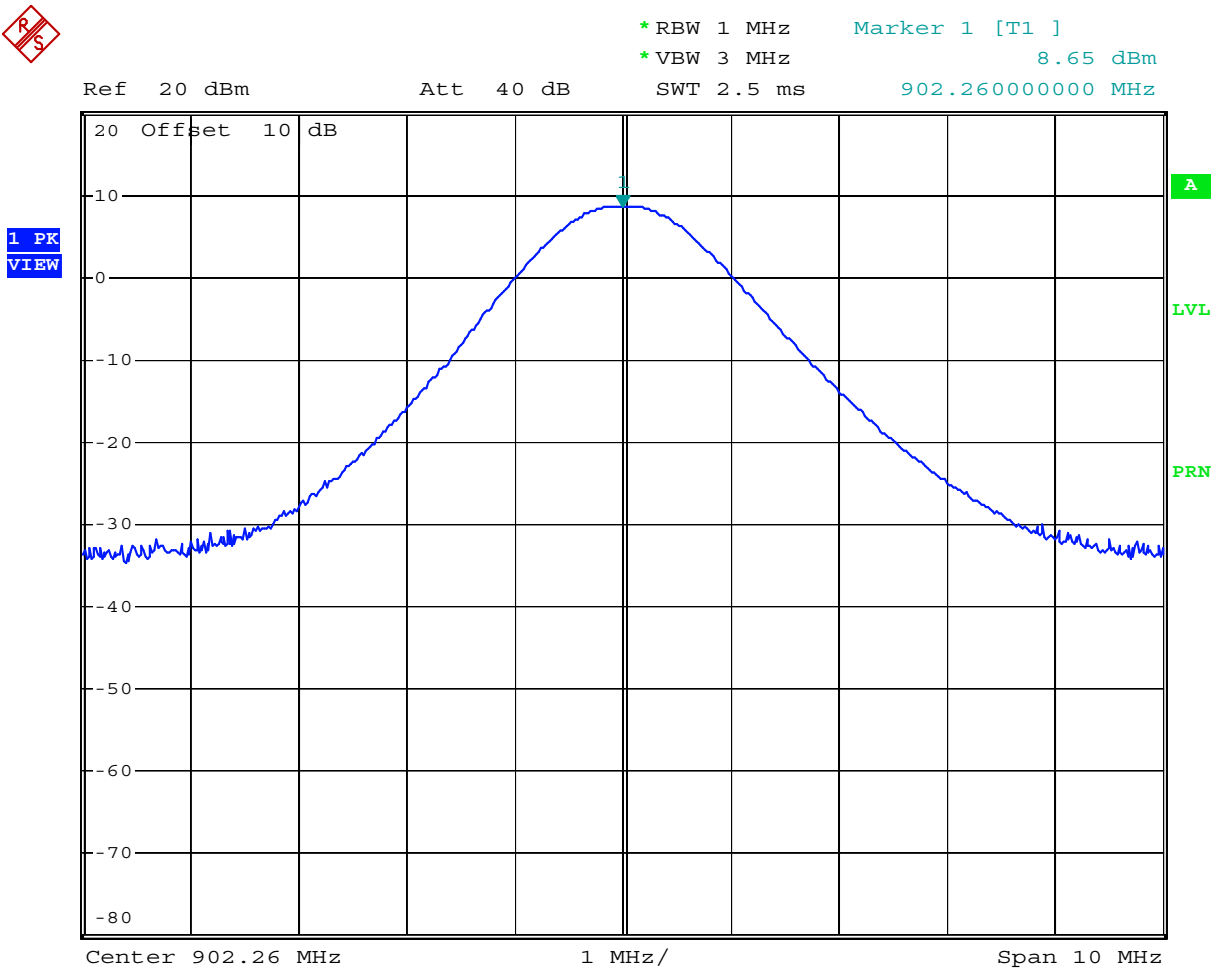
|                           |                                                                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.247(b)(1)<br>IC RSS-210, issue 6, section A8.4(2)                                                                                                                                                     |
| Guide:                    | ANSI C63.4                                                                                                                                                                                                                       |
| Limit:                    | For frequency hopping systems operation in the 902 - 928 MHz band: 1watt for systems employing at least 50 hopping channels; and 0.25 watt for systems employing less than 50 hopping channels, but at leas 25 hopping channels. |
| Measurement procedures:   | Conducted Measurement                                                                                                                                                                                                            |

|                |                                  |
|----------------|----------------------------------|
| Comment:       |                                  |
| Date of test:  | 8 August 2006                    |
| Test site:     | Fully anechoic room, cabin no. 2 |
| Test distance: | 3 meters                         |

| Channel Frequency   | Carrier Power |          | Result        |
|---------------------|---------------|----------|---------------|
|                     | Measured      | Required |               |
| Low (902.22 MHz)    | 8.65 dBm      | ≤30 dBm  | <b>Passed</b> |
| Middle (915.39 MHz) | 8.88 dBm      | ≤30 dBm  | <b>Passed</b> |
| High (927.40 MHz)   | 8.94 dBm      | ≤30 dBm  | <b>Passed</b> |

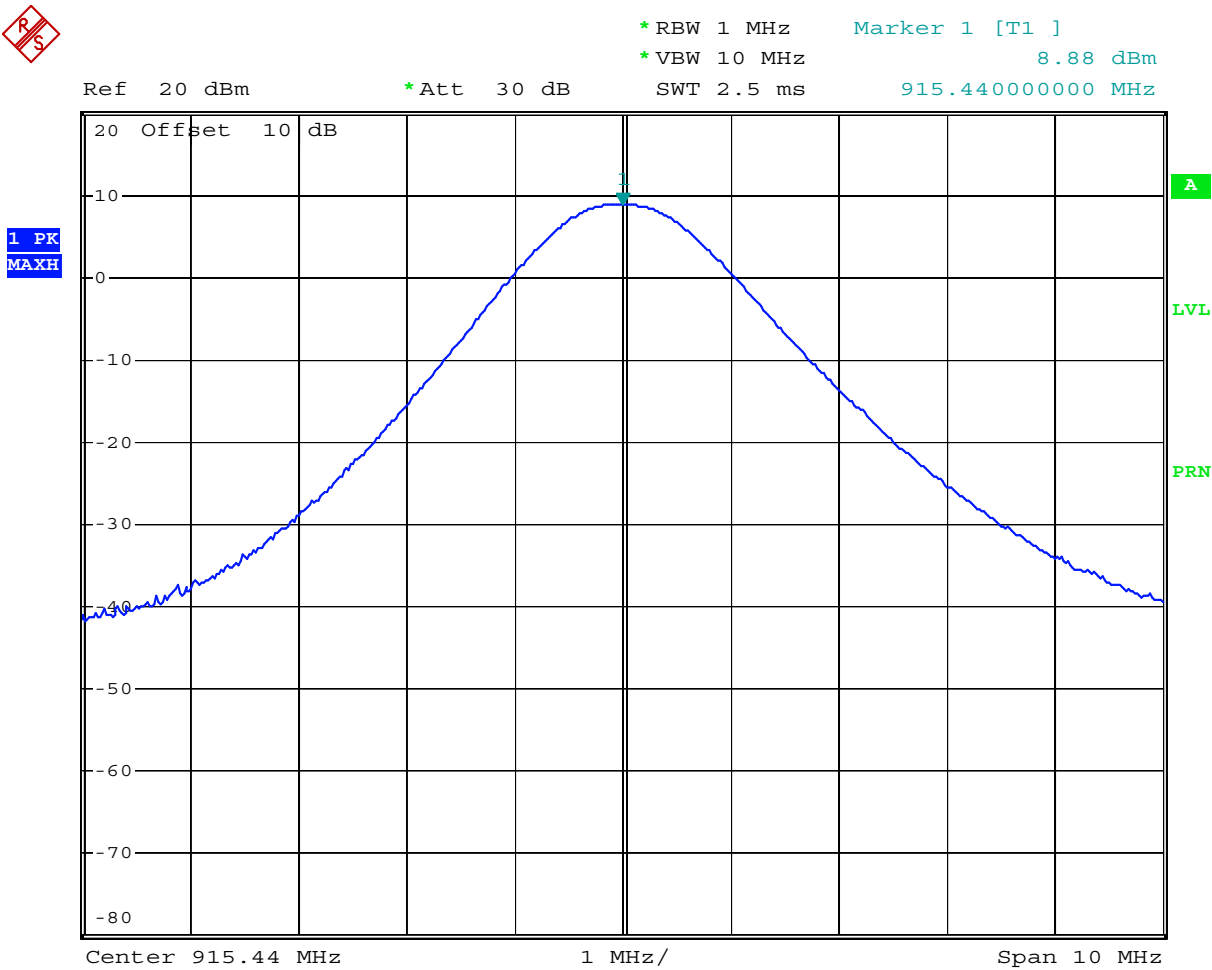
|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

Lowest Channel:



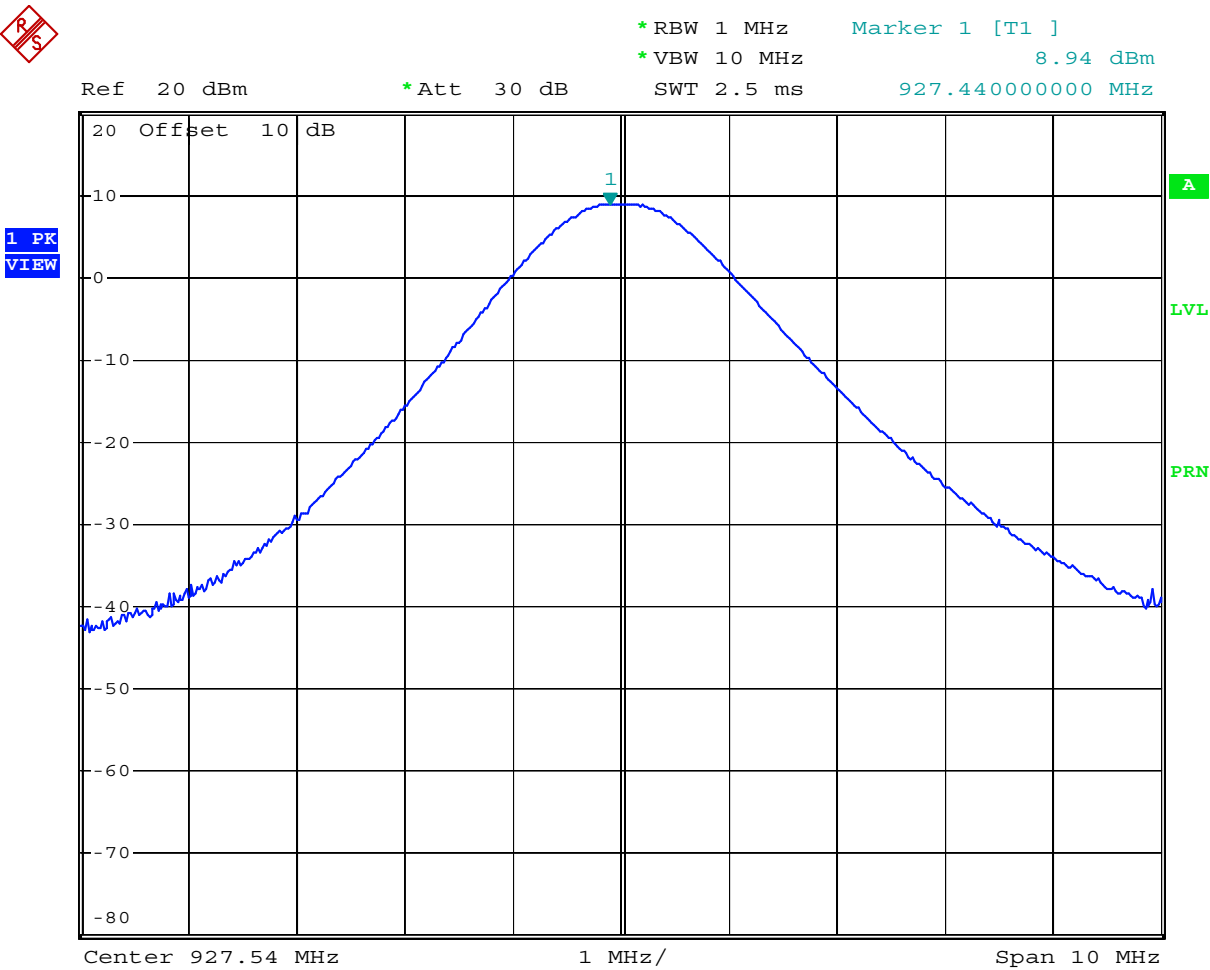
Comment: vigil 060316: Carrier Power  
Date: 4.AUG.2006 14:01:31

Middle Channel:



Comment: vigil 060316: Carrier Power  
Date: 4.AUG.2006 14:19:15

Highest Channel:



Comment: vigil 060316: Carrier Power  
Date: 4.AUG.2006 14:18:38

## 8.10 Spurious emissions 30 MHz to 10 GHz - conducted

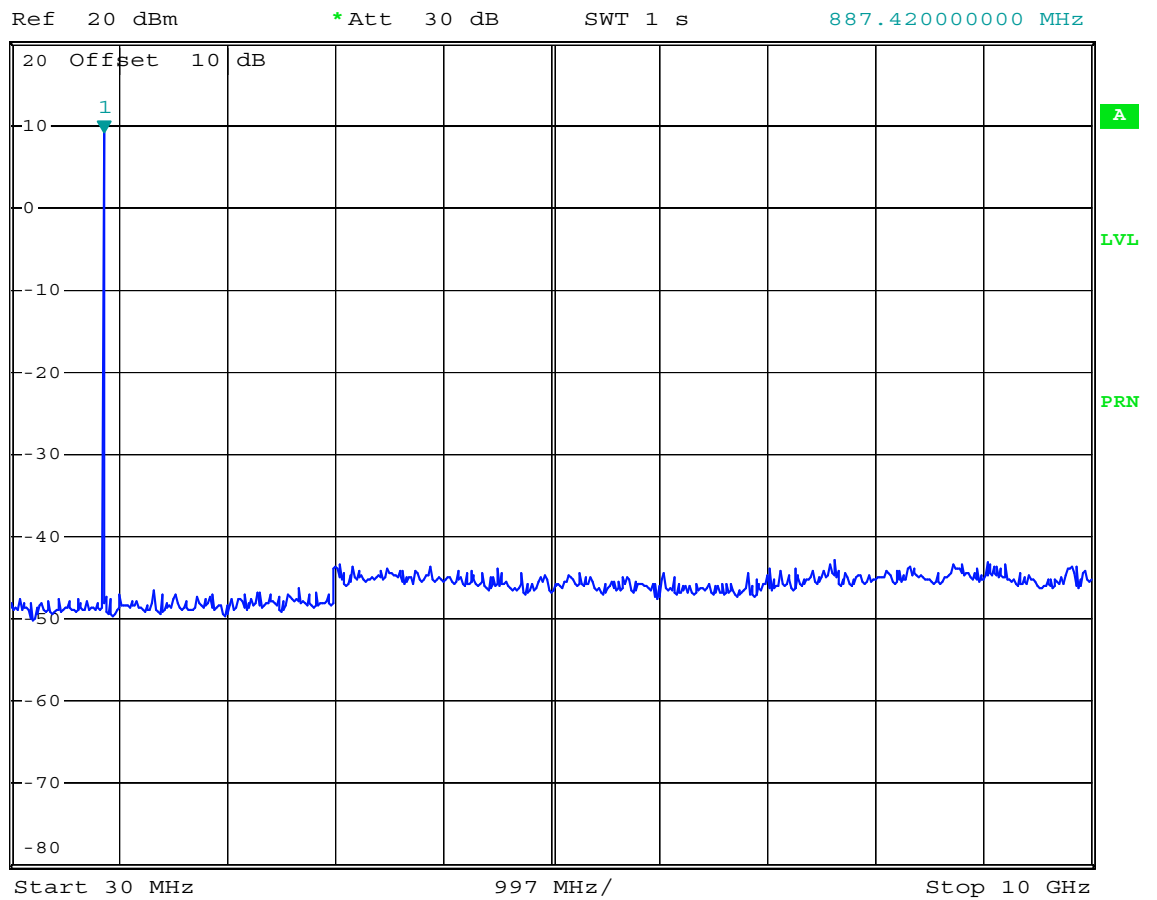
|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 15, sections 15.247(d)<br>IC RSS-210 Issue 6, section A8.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Guide:                    | ANSI C63.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Limit:                    | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition, radiated emissions which fall in the restricted bands, as specified in section 15.205(a), must also comply with the radiated emission limits. specified in section 15.209(a). |
| Measurement procedures:   | Radiated Emission in Fully or Semi Anechoic Room (6.3)<br>Radiated Emission at Open Field Test Site (6.4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

**Lowest Channel:**

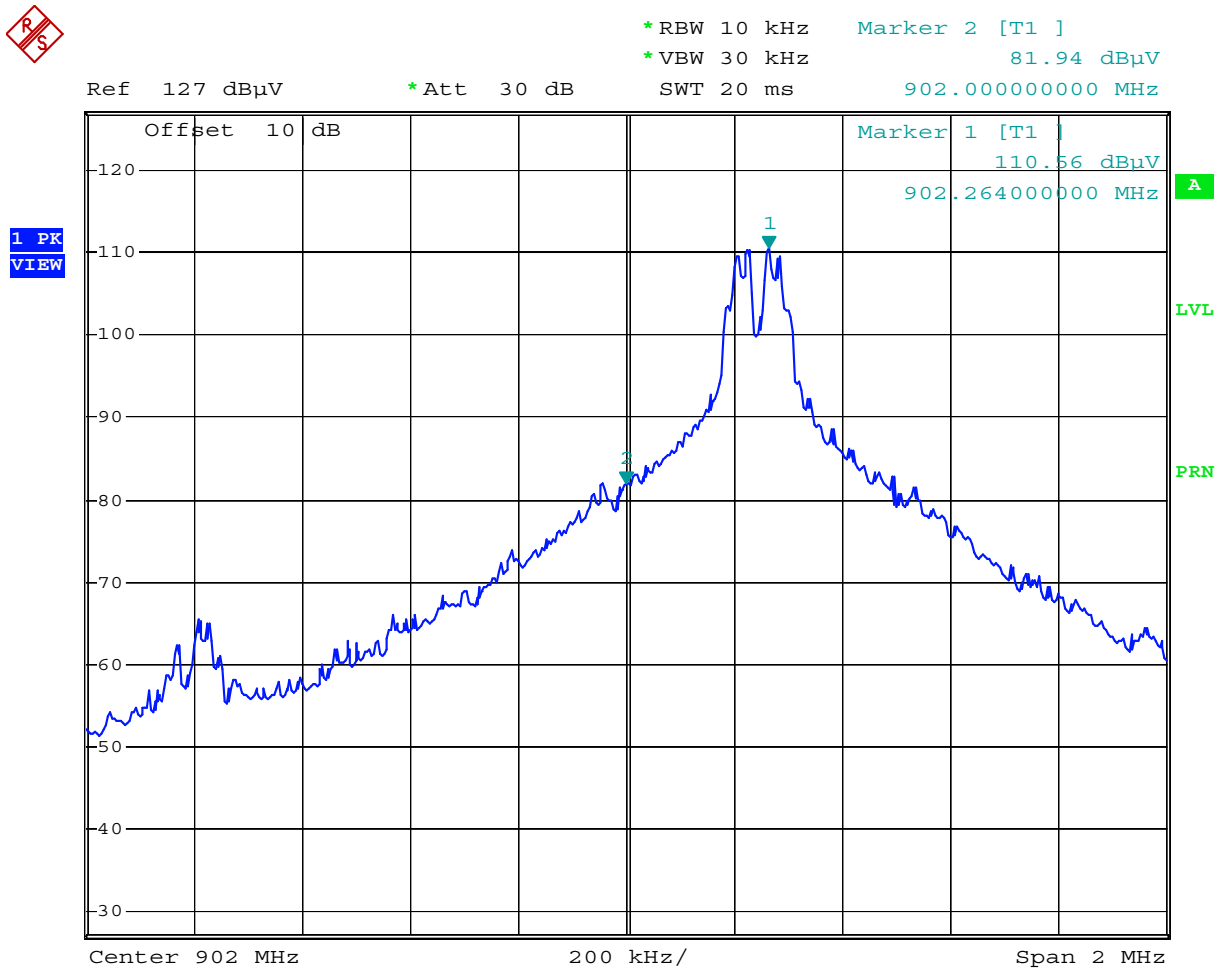


\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 300 kHz    9.17 dBm  
 SWT 1 s    887.420000000 MHz



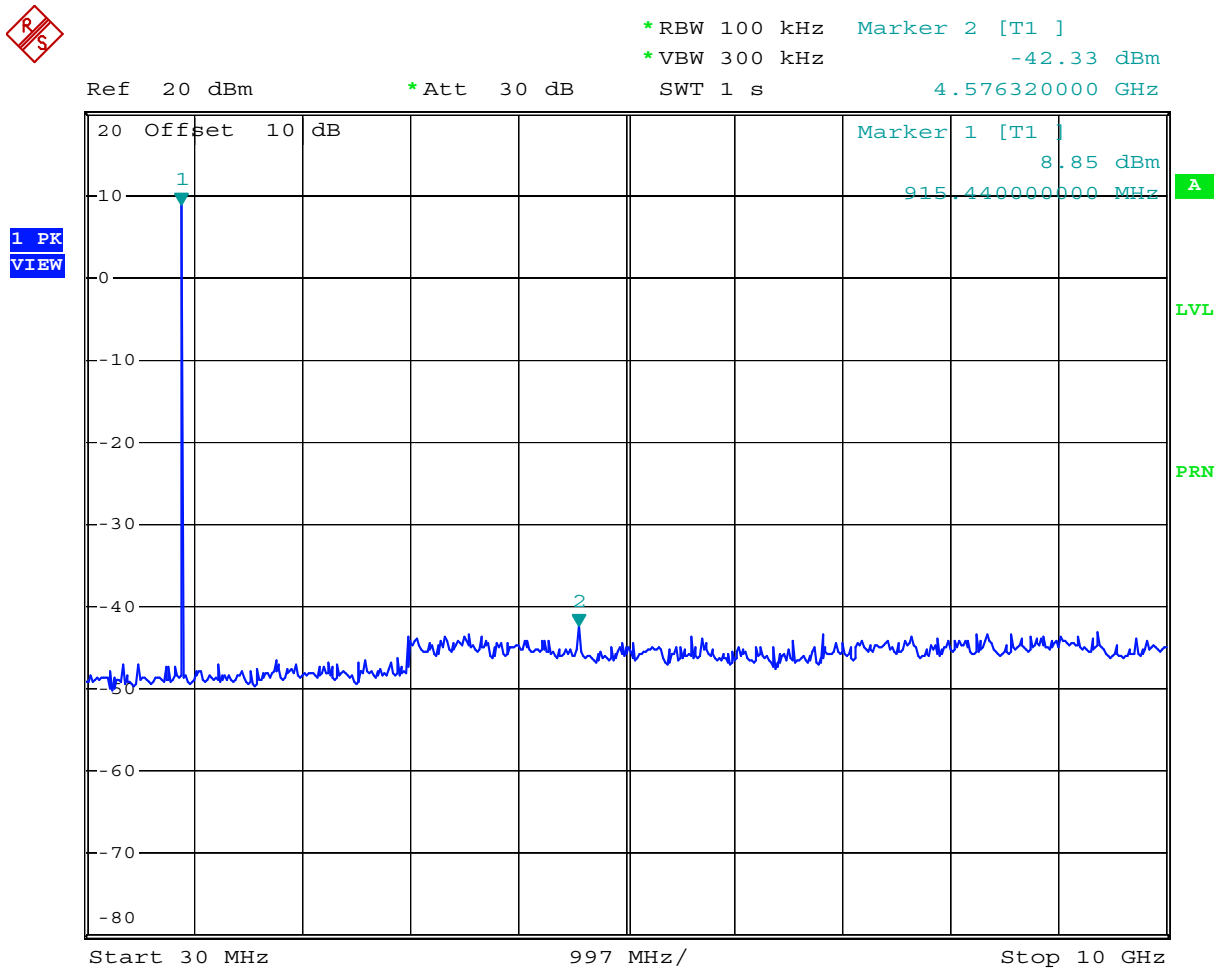
Comment: vigil 060316: Conducted Emissions  
 Date: 4.AUG.2006 14:17:35

Lowest Channel - continued:



Comment: vigil 060316: Band Edge  
Date: 4.AUG.2006 14:07:57

Middle Channel:



Comment: vigil 060316: Conducted Emissions  
Date: 4.AUG.2006 14:19:58



4.636140000 GHz

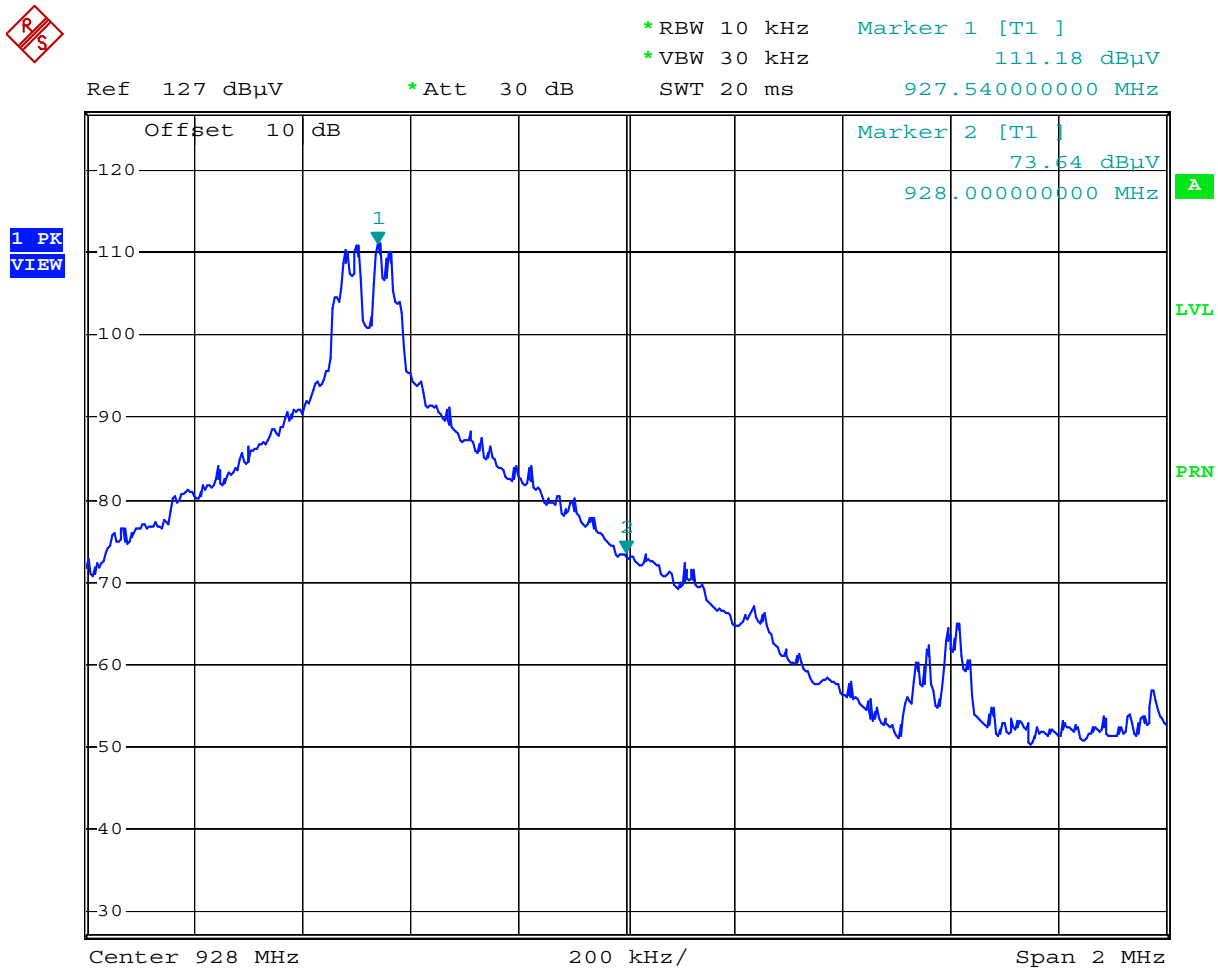


A

LVL

PRN

Highest Channel - continued:



Comment: vigil 060316: Band Edge  
Date: 4.AUG.2006 14:10:49

## 8.11 Spurious emissions 30 MHz to 10 GHz - radiated

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rules and specifications: | CFR 47 Part 15, sections 15.247(d)<br>IC RSS-210 Issue 6, section A8.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Guide:                    | ANSI C63.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Limit:                    | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition, radiated emissions which fall in the restricted bands, as specified in section 15.205(a), must also comply with the radiated emission limits. specified in section 15.209(a). |
| Measurement procedures:   | Radiated Emission in Fully or Semi Anechoic Room (6.3)<br>Radiated Emission at Open Field Test Site (6.4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

|                |                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------|
| Comment:       |                                                                                                    |
| Date of test:  | 1 August 2006                                                                                      |
| Mode:          | Transmitting continuously on lowest channel                                                        |
| Test site:     | Frequencies ≤ 1 GHz: Open field test site<br>Frequencies > 1 GHz: Fully anechoic room, cabin no. 2 |
| Test distance: | 3 meters for frequencies ≤ 8.2 GHz<br>1 meters for frequencies > 8.2 GHz                           |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

| Frequency<br>(MHz) | Antenna<br>Polarization | Detector   | Receiver<br>Reading<br>(dBμV) | Correction<br>Factor<br>(dB/m) | Pulse Train<br>Correction<br>(dB) | Final<br>Value<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------------|------------|-------------------------------|--------------------------------|-----------------------------------|----------------------------|-------------------|----------------|
| 516.090            | vertical                | Quasi-Peak | 16.4                          | 20.8                           |                                   | 37.2                       | 90.1              | 52.9           |
| 545.590            | vertical                | Quasi-Peak | 18.3                          | 20.9                           |                                   | 39.2                       | 90.1              | 50.9           |
| 604.570            | vertical                | Quasi-Peak | 16.5                          | 22.1                           |                                   | 38.6                       | 90.1              | 51.5           |
| 902.260            | vertical                | Quasi-Peak | 83.7                          | 26.4                           |                                   | 110.1                      |                   |                |
| 961.220            | vertical                | Quasi-Peak | 17.0                          | 27.5                           |                                   | 44.5                       | 54.0              | 9.5            |
| 1066.000           | vertical                | Peak       | 17.5                          | 28.0                           |                                   | 45.5                       | 54.0              | 8.5            |
| 1804.000           | horizontal              | Peak       | 11.0                          | 31.3                           |                                   | 42.3                       | 90.1              | 47.8           |
| 2710.000           | horizontal              | Peak       | 9.5                           | 34.6                           |                                   | 44.2                       | 54.0              | 9.8            |
| 3616.000           | vertical                | Peak       | 10.9                          | 38.1                           |                                   | 49.1                       | 54.0              | <b>4.9</b>     |
| 4512.400           | horizontal              | Peak       | 12.7                          | 34.0                           |                                   | 46.7                       | 54.0              | 7.4            |
| 5413.000           | vertical                | Peak       | 10.8                          | 34.9                           |                                   | 45.7                       | 54.0              | 8.4            |
| 6315.300           | horizontal              | Peak       | 10.7                          | 38.2                           |                                   | 48.9                       | 90.1              | 41.2           |
| 7217.700           | horizontal              | Peak       | 13.6                          | 39.0                           |                                   | 52.6                       | 90.1              | 37.5           |
| 9024.400           | horizontal              | Peak       | 12.9                          | 43.7                           |                                   | 56.6                       | 63.5              | 6.9            |
| 9928.000           | horizontal              | Peak       | 9.4                           | 44.4                           |                                   | 53.8                       | 90.1              | 36.3           |

Note: For test distances other 3 meters the limit was extrapolated using a extrapolation factor of 20 dB/decade.

#### Sample calculation of final values:

$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$

|                |                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------|
| Comment:       |                                                                                                    |
| Date of test:  | 1 August 2006                                                                                      |
| Mode:          | Transmitting continuously on middle channel                                                        |
| Test site:     | Frequencies ≤ 1 GHz: Open field test site<br>Frequencies > 1 GHz: Fully anechoic room, cabin no. 2 |
| Test distance: | 3 meters for frequencies ≤ 8.2 GHz<br>1 meters for frequencies > 8.2 GHz                           |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

| Frequency<br>(MHz) | Antenna<br>Polarization | Detector   | Receiver<br>Reading<br>(dBμV) | Correction<br>Factor<br>(dB/m) | Pulse Train<br>Correction<br>(dB) | Final<br>Value<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------------|------------|-------------------------------|--------------------------------|-----------------------------------|----------------------------|-------------------|----------------|
| 516.090            | vertical                | Quasi-Peak | 16.6                          | 20.8                           |                                   | 37.4                       | 84.8              | 47.4           |
| 545.590            | vertical                | Quasi-Peak | 17.9                          | 20.9                           |                                   | 38.8                       | 84.8              | 46.0           |
| 604.570            | vertical                | Quasi-Peak | 16.1                          | 22.1                           |                                   | 38.2                       | 84.8              | 46.6           |
| 915.340            | vertical                | Quasi-Peak | 83.6                          | 26.3                           |                                   | 109.9                      |                   |                |
| 974.390            | vertical                | Quasi-Peak | 18.1                          | 28.0                           |                                   | 46.1                       | 54.0              | 7.9            |
| 1084.000           | vertical                | Peak       | 17.8                          | 28.1                           |                                   | 45.8                       | 54.0              | 8.2            |
| 1828.000           | horizontal              | Peak       | 11.8                          | 31.4                           |                                   | 43.2                       | 84.8              | 41.6           |
| 2746.000           | vertical                | Peak       | 10.5                          | 34.8                           |                                   | 45.3                       | 54.0              | 8.7            |
| 3664.000           | horizontal              | Peak       | 11.8                          | 38.3                           |                                   | 50.1                       | 54.0              | 3.9            |
| 4577.000           | vertical                | Peak       | 14.4                          | 34.1                           |                                   | 48.5                       | 54.0              | 5.5            |
| 5496.600           | vertical                | Peak       | 10.7                          | 34.9                           |                                   | 45.7                       | 84.8              | 39.1           |
| 6409.300           | vertical                | Peak       | 12.5                          | 38.3                           |                                   | 50.8                       | 84.8              | 34.0           |
| 7325.800           | vertical                | Peak       | 13.8                          | 39.1                           |                                   | 52.9                       | 54.0              | 1.1            |
| 8239.600           | horizontal              | Peak       | 14.9                          | 43.2                           |                                   | 58.0                       | 63.5              | 5.5            |
| 9154.000           | horizontal              | Peak       | 14.8                          | 43.8                           |                                   | 58.6                       | 63.5              | 4.9            |

Note: For test distances other 3 meters the limit was extrapolated using a extrapolation factor of 20 dB/decade.

#### Sample calculation of final values:

$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$

|                |                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------|
| Comment:       |                                                                                                    |
| Date of test:  | 1 August 2006                                                                                      |
| Mode:          | Transmitting continuously on highest channel                                                       |
| Test site:     | Frequencies ≤ 1 GHz: Open field test site<br>Frequencies > 1 GHz: Fully anechoic room, cabin no. 2 |
| Test distance: | 3 meters for frequencies ≤ 8.2 GHz<br>1 meters for frequencies > 8.2 GHz                           |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

| Frequency<br>(MHz) | Antenna<br>Polarization | Detector   | Receiver<br>Reading<br>(dBμV) | Correction<br>Factor<br>(dB/m) | Pulse Train<br>Correction<br>(dB) | Final<br>Value<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------------|------------|-------------------------------|--------------------------------|-----------------------------------|----------------------------|-------------------|----------------|
| 516.090            | vertical                | Quasi-Peak | 16.4                          | 20.8                           |                                   | 37.2                       | 90.0              | 52.8           |
| 545.590            | vertical                | Quasi-Peak | 17.0                          | 20.9                           |                                   | 37.9                       | 90.0              | 52.1           |
| 604.570            | vertical                | Quasi-Peak | 16.1                          | 22.1                           |                                   | 38.2                       | 90.0              | 51.8           |
| 927.550            | vertical                | Quasi-Peak | 83.8                          | 26.2                           |                                   | 110.0                      |                   |                |
| 986.500            | vertical                | Quasi-Peak | 17.5                          | 28.3                           |                                   | 45.8                       | 54.0              | 8.2            |
| 1096.000           | vertical                | Peak       | 19.4                          | 28.1                           |                                   | 47.5                       | 54.0              | 6.5            |
| 1858.000           | vertical                | Peak       | 12.3                          | 31.6                           |                                   | 43.8                       | 90.0              | 46.2           |
| 2782.000           | vertical                | Peak       | 11.0                          | 35.0                           |                                   | 46.0                       | 54.0              | 8.1            |
| 3712.000           | horizontal              | Peak       | 11.1                          | 38.4                           |                                   | 49.5                       | 54.0              | 4.5            |
| 4637.800           | vertical                | Peak       | 18.5                          | 34.1                           |                                   | 52.6                       | 54.0              | 1.4            |
| 6493.900           | vertical                | Peak       | 12.3                          | 38.3                           |                                   | 50.6                       | 90.0              | 39.4           |
| 7419.800           | horizontal              | Peak       | 12.7                          | 39.2                           |                                   | 51.8                       | 54.0              | 2.2            |
| 8347.600           | horizontal              | Peak       | 17.3                          | 43.3                           |                                   | 60.5                       | 63.5              | 3.0            |
| 9276.400           | horizontal              | Peak       | 12.8                          | 43.9                           |                                   | 56.7                       | 90.0              | 33.4           |

Note: For test distances other 3 meters the limit was extrapolated using a extrapolation factor of 20 dB/decade.

#### Sample calculation of final values:

$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$

## 8.12 RF-Exposure

|                           |                                                                       |                               |                               |                                     |
|---------------------------|-----------------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|
| Rules and specifications: | CFR 47 Part 1, section 1.1310<br>CFR 47 Part 15, section 15.247(b)(4) |                               |                               |                                     |
| Guide:                    | OET Bulletin 65, Edition 97-01                                        |                               |                               |                                     |
| Limit:                    | Limits for General Population / Uncontrolled Exposure:                |                               |                               |                                     |
|                           | Frequency range [MHz]                                                 | Electric field strength [V/m] | Magnetic field strength [A/m] | Power density [mW/cm <sup>2</sup> ] |
|                           | 0.3 – 1.34                                                            | 614                           | 1.63                          | *(100)                              |
|                           | 1.34 – 30                                                             | 824 / f                       | 2.19 / f                      | *(180 / f <sup>2</sup> )            |
|                           | 30 – 300                                                              | 27.5                          | 0.073                         | 0.2                                 |
|                           | 300 – 1500                                                            | ---                           | ---                           | f / 1500                            |
|                           | 1500 - 100000                                                         | ---                           | ---                           | 1.0                                 |
|                           | Averaging time is 30 minutes for all frequency ranges.                |                               |                               |                                     |
|                           | f: Frequency in MHz                                                   |                               |                               |                                     |
|                           | *: Plane-wave equivalent power density                                |                               |                               |                                     |

MPE Prediction of MPE according to equation from page 19 of OET Bulletin 65, Edition 97-01:

$$S = (P G) / (4 \pi R^2)$$

Where: S = Power Density  
 P = Power to the Antenna  
 G = Gain of Antenna  
 R = Distance to the center of radiation of the antenna

|                                                         |                              |
|---------------------------------------------------------|------------------------------|
| Equivalent Isotropic Radiated Power (maximum measured): | 8.94 dBm = 7.83 mW           |
| Antenna Gain                                            | 3 dB = 2.00                  |
| Prediction distance:                                    | 20 cm                        |
| Power density at 20 cm:                                 | <b>312 µW/cm<sup>2</sup></b> |
| Limit:                                                  | 601 mW/cm <sup>2</sup>       |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

### 8.13 Exposure of Humans to RF Fields

|                           |                                 |
|---------------------------|---------------------------------|
| Rules and specifications: | IC RSS-Gen Issue 1, section 5.5 |
| Guide:                    | IC RSS-102 Issue 2, section 2.5 |

| Exposure of Humans to RF Fields                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Applicable | Declared by applicant               | Measured                            | Exemption                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------|-------------------------------------|-------------------------------------|
| The antenna is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                                     |                                     |                                     |
| <input checked="" type="checkbox"/> detachable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                                     |                                     |                                     |
| <p>The conducted output power (CP in watts) is measured at the antenna connector:</p> $CP = 8.94\text{dBm} = 7.83 \text{ mW}$ <p>The effective isotropic radiated power (EIRP in watts) is calculated using</p> <p><input checked="" type="checkbox"/> the numerical antenna gain: <math>G = 2.00</math></p> $EIRP = G \cdot CP \Rightarrow EIRP = 15.66 \text{ mW}$ <p><input checked="" type="checkbox"/> the field strength<sup>8</sup> in V/m: <math>FS = 110.1 \text{ dB}\mu\text{V/m}</math><br/> <math>= 319.9 \text{ mV/m}</math></p> $EIRP = \frac{(FS \cdot D)^2}{30} \Rightarrow EIRP = 30.70 \text{ mW}$ <p>with:</p> <p>Distance between the antennas in m: <math>D = 3.0 \text{ m}</math></p> |            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> not detachable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |                                     |                                     |                                     |
| <p>A field strength measurement is used to determine the effective isotropic radiated power (EIRP in watts) given by<sup>8</sup>:</p> $EIRP = \frac{(FS \cdot D)^2}{30} \Rightarrow EIRP = \dots\dots\dots \text{ W}$ <p>with:</p> <p>Field strength in V/m: <math>FS = \dots\dots\dots \text{ dB}\mu\text{V/m}</math></p> <p>Distance between the two antennas in m: <math>D = \dots\dots\dots \text{ m}</math></p>                                                                                                                                                                                                                                                                                        |            |                                     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Selection of output power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |                                     |                                     |                                     |
| <p>The output power TP is the higher of the conducted or effective isotropic radiated power (e.i.r.p.):</p> $TP = 30.70 \text{ mW}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |                                     |                                     |                                     |

<sup>8</sup> The conversion formula is valid only for properly matched antennas. In other cases the transmitter output power may have to be measured by a terminated measurement when applying the exemption clauses. If an open area test site is used for field strength measurement, the effect due to the metal ground reflecting plane should be subtracted from the maximum field strength value in order to reference it to free space, before calculating TP.

| Exposure of Humans to RF Fields (continued)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Applicable | Declared by applicant               | Measured | Exemption                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------|----------|-----------------------------------------------------------------|
| Separation distance between the user and the transmitting device is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |                                     |          |                                                                 |
| <input checked="" type="checkbox"/> less than or equal to 20 cm <input type="checkbox"/> greater than 20 cm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | <input checked="" type="checkbox"/> |          |                                                                 |
| Transmitting device is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |                                     |          |                                                                 |
| <input type="checkbox"/> in the vicinity of the human head <input type="checkbox"/> body-worn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            | <input type="checkbox"/>            |          |                                                                 |
| SAR evaluation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |                                     |          |                                                                 |
| <p>SAR evaluation is required if the separation distance between the user and the device is less than or equal to 20 cm.</p> <p><input checked="" type="checkbox"/> The device operates from 3 kHz up to 1 GHz inclusively and its source-based time-averaged output power is less than, or equal to 200 mW for General Public Use and 1000 mW for Controlled Use.</p> <p><input type="checkbox"/> The device operates above 1 GHz up to 2.2 GHz inclusively and its source-based time-averaged output power is less than, or equal to 100 mW for General Public Use and 500 mW for Controlled Use.</p> <p><input type="checkbox"/> The device operates above 2.2 GHz up to 3 GHz inclusively and its source-based time-averaged output power is less than, or equal to 20 mW for General Public Use and 100 mW for Controlled Use.</p> <p><input type="checkbox"/> The device operates above 3 GHz up to 6 GHz inclusively and its source-based time-averaged output power) is less than, or equal to 10 mW for General Public Use and 50 mW for Controlled Use.</p> <p><input type="checkbox"/> SAR evaluation is documented in test report no. ....</p> |            |                                     |          | <input checked="" type="checkbox"/><br><br><br><br><br><br><br> |
| RF exposure evaluation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |                                     |          |                                                                 |
| <p>RF exposure evaluation is required if the separation distance between the user and the device is greater than 20 cm.</p> <p><input type="checkbox"/> The device operates below 1.5 GHz and its e.i.r.p. is equal to or less than 2.5 W.</p> <p><input type="checkbox"/> The device operates at or above 1.5 GHz and the e.i.r.p. of the device is equal to or less than 5 W.</p> <p><input type="checkbox"/> RF exposure evaluation is documented in test report no. ....</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |                                     |          | <br><br><br>                                                    |

## 9 Test Results for Receiver

| FCC CFR 47 Part 15 |                                                                  |      |                |
|--------------------|------------------------------------------------------------------|------|----------------|
| Section(s)         | Test                                                             | Page | Result         |
| 15.107             | Conducted AC powerline emission<br>150 kHz to 30 MHz             | 38   | Test passed    |
| 15.109             | Radiated emission<br>30 MHz to 5 GHz                             | 72   | Test passed    |
| 15.111(a)          | Antenna power conduction emission of receivers<br>9 kHz to 5 GHz | ---  | Not applicable |

| IC RSS-Gen Issue 1 |                                                                     |      |                |
|--------------------|---------------------------------------------------------------------|------|----------------|
| Section(s)         | Test                                                                | Page | Result         |
| 7.2.2              | Transmitter AC power lines conducted emissions<br>150 kHz to 30 MHz | 38   | Test passed    |
| 6(a), 7.2.3.2      | Receiver spurious emissions (radiated)<br>30 MHz to 5 GHz           | 72   | Test passed    |
| 6(b), 7.2.3.1      | Receiver spurious emissions (antenna conducted)<br>9 kHz to 5 GHz   | ---  | Not applicable |

## 9.1 Radiated Emission Measurement 30 MHz to 5 GHz

|                           |                                                                                                           |                       |                         |
|---------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|
| Rules and specifications: | CFR 47 Part 15, section 15.109 (Class B)<br>IC RSS-Gen Issue 1, sections 6(a) and 7.2.3.2                 |                       |                         |
| Guide:                    | ANSI C63.4                                                                                                |                       |                         |
| Limit:                    | Frequency of Emission (MHz)                                                                               | Field Strength (µV/m) | Field Strength (dBµV/m) |
|                           | 30 - 88                                                                                                   | 100                   | 40.0                    |
|                           | 88 - 216                                                                                                  | 150                   | 43.5                    |
|                           | 216 - 960                                                                                                 | 200                   | 46.0                    |
|                           | Above 960                                                                                                 | 500                   | 54.0                    |
| Measurement procedures:   | Radiated Emission in Fully or Semi Anechoic Room (6.3)<br>Radiated Emission at Open Field Test Site (6.4) |                       |                         |

|                |                                                                                                                     |
|----------------|---------------------------------------------------------------------------------------------------------------------|
| Comment:       | 1 August 2006<br>Frequencies ≤ 1 GHz: Open field test site<br>Frequencies > 1 GHz: Fully anechoic room, cabin no. 2 |
| Date of test:  |                                                                                                                     |
| Test site:     |                                                                                                                     |
| Test distance: | 3 meters                                                                                                            |

|              |             |
|--------------|-------------|
| Test Result: | Test passed |
|--------------|-------------|

| Frequency (MHz) | Antenna Polarization | Detector   | Receiver Reading (dBµV) | Correction Factor (dB/m) | Final Value (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-----------------|----------------------|------------|-------------------------|--------------------------|----------------------|----------------|-------------|
| 915.280         | vertical             | Quasi-Peak | 15.4                    | 26.3                     | 41.7                 | 46.0           | 4.3         |

### Sample calculation of field final values:

$$\text{Final Value (dBµV/m)} = \text{Reading Value (dBµV)} + \text{Correction Factor (dB/m)}$$

## 10 Referenced Regulations

All tests were performed with reference to the following regulations and standards:

|                                     |                          |                                                                                                                                                                                                         |                                                      |
|-------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <input checked="" type="checkbox"/> | CFR 47 Part 2            | Code of Federal Regulations Part 2 (Frequency allocation and radio treaty matters; General rules and regulations) of the Federal Communication Commission (FCC)                                         | October 10, 2004                                     |
| <input checked="" type="checkbox"/> | CFR 47 Part 15           | Code of Federal Regulations Part 15 (Radio Frequency Devices) of the Federal Communication Commission (FCC)                                                                                             | September 19, 2005                                   |
| <input checked="" type="checkbox"/> | ANSI C63.4               | American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz                                     | December 11, 2003<br>(published on January 30, 2004) |
| <input checked="" type="checkbox"/> | RSS-Gen                  | Radio Standards Specification RSS-Gen Issue 1 containing General Requirements and Information for the Certification of Radiocommunication Equipmment, published by Industry Canada                      | September 2005                                       |
| <input checked="" type="checkbox"/> | RSS-210                  | Radio Standards Specification RSS-210 Issue 6 for Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment, published by Industry Canada                         | September 2005                                       |
| <input type="checkbox"/>            | RSS-310                  | Radio Standards Specification RSS-310 Issue 1 for Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category II Equipment, published by Industry Canada                        | September 2005                                       |
| <input checked="" type="checkbox"/> | RSS-102                  | Radio Standards Specification RSS-102 Issue 2: Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)                                                                | November 2005                                        |
| <input type="checkbox"/>            | ICES-003                 | Interference-Causing Equipment Standard ICES-003 Issue 4 for Digital Apparatus, published by Industry Canada                                                                                            | February 7, 2004                                     |
| <input checked="" type="checkbox"/> | CISPR 22                 | Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment – Radio Disturbance Characteristics – Limits and Methods of Measurement" | 1997                                                 |
| <input type="checkbox"/>            | CAN/CSA-CEI/IEC CISPR 22 | Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment                                                                                              | 2002                                                 |
| <input checked="" type="checkbox"/> | TRC-43                   | Notes Regarding Designation of Emission (Including Necessary Bandwidth and Classification), Class of Station and Nature of Service, published by Industry Canada                                        | October 9, 1982                                      |

## **11 Charts taken during testing**

# Conducted Emission Test 150 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:  
**WRX01**

Serial no.:  
---

Applicant:  
**Vigil Health Solutions Inc.**

Test site:  
**Shielded room, cabin no. 4**

Tested on:  
**Linecord  
Phase L1**

Date of test:  
**07/17/2006**

Operator:  
**M. Steindl**

Test performed:  
**semi automatically**

File name:

Mode:

- 115 V power supply  
with dedicated AC/DC adapter
- normal operation mode

Detector:

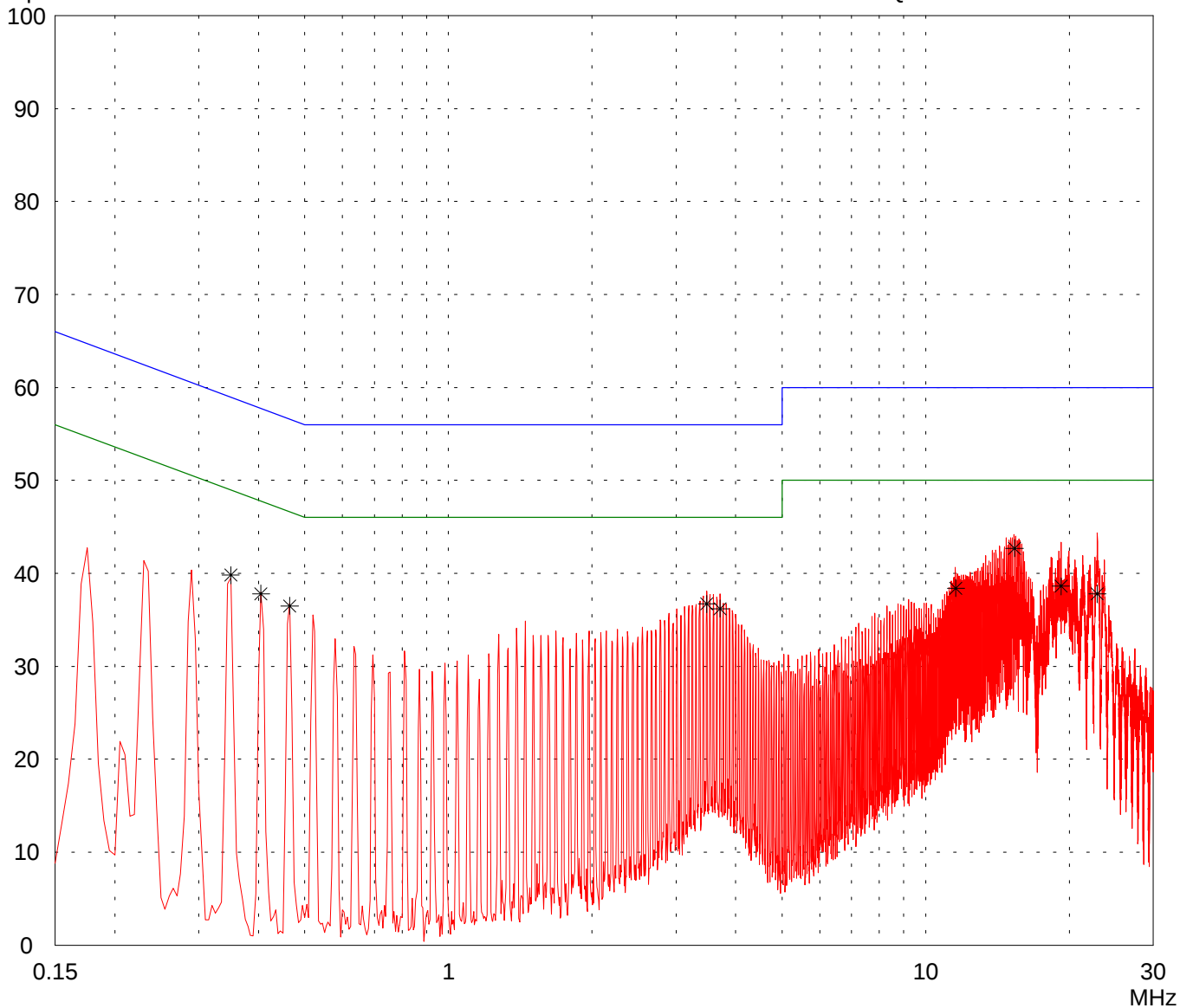
**Peak / Final Results: QP**

Final results:

**Selected by hand**

**dB $\mu$ V**

**Limit1: FCC C / QP    Limit2: FCC C / AV**



Result:  
**Limit kept**

Project file:  
**50516-060368**

# Conducted Emission Test 150 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:  
**WRX01**

Serial no.:  
---

Applicant:  
**Vigil Health Solutions Inc.**

Test site:  
**Shielded room, cabin no. 4**

Tested on:  
**Linecord  
Phase N**

Date of test:  
**07/17/2006**

Operator:  
**M. Steindl**

Test performed:  
**semi automatically**

File name:

Mode:

- 115 V power supply  
with dedicated AC/DC adapter
- normal operation mode

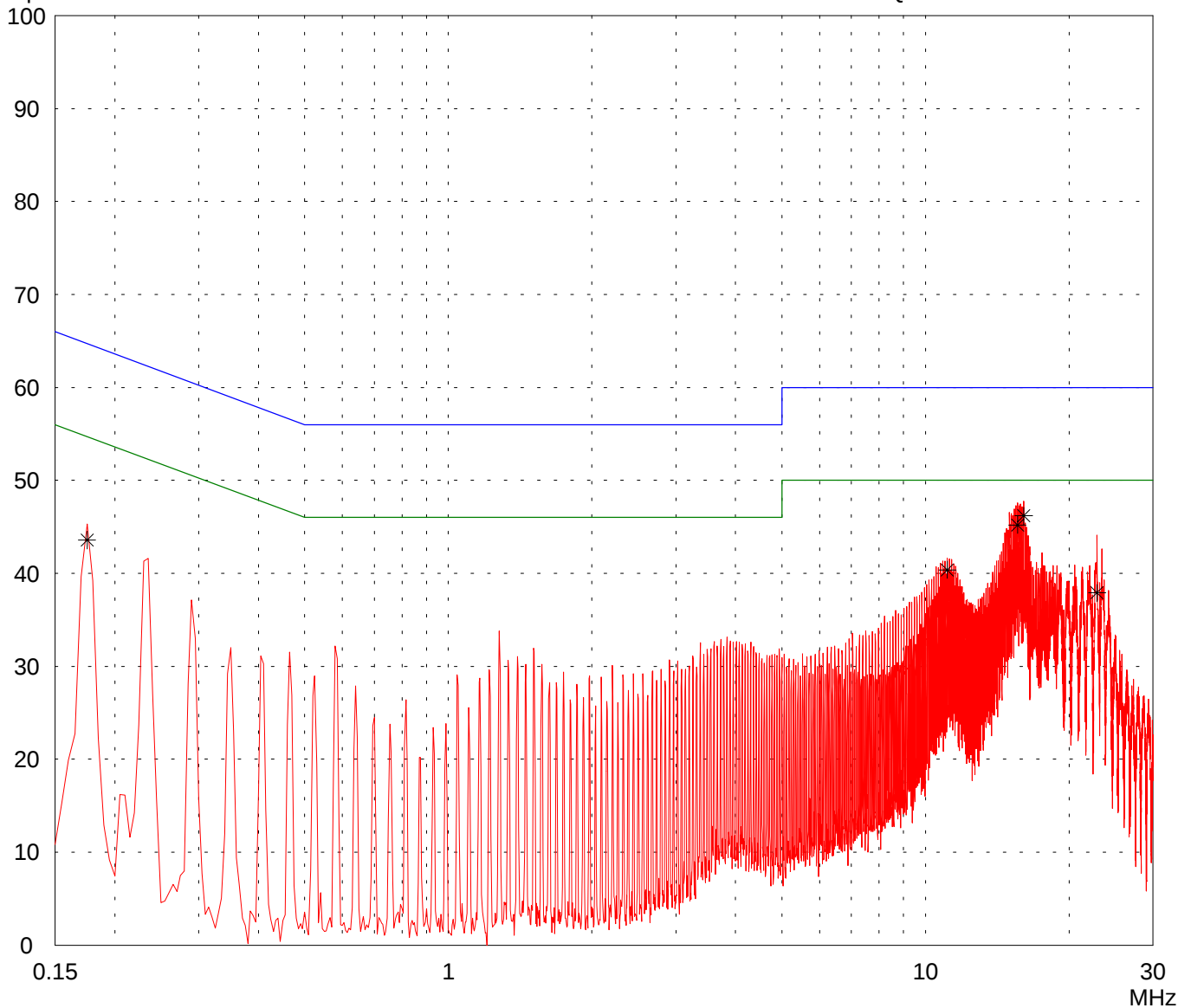
Detector:  
**Peak / Final Results: QP**

Final results:  
**20 dB Margin**

**25 Subranges**

**dB $\mu$ V**

**Limit1: FCC C / QP    Limit2: FCC C / AV**



Result:  
**Limit kept**

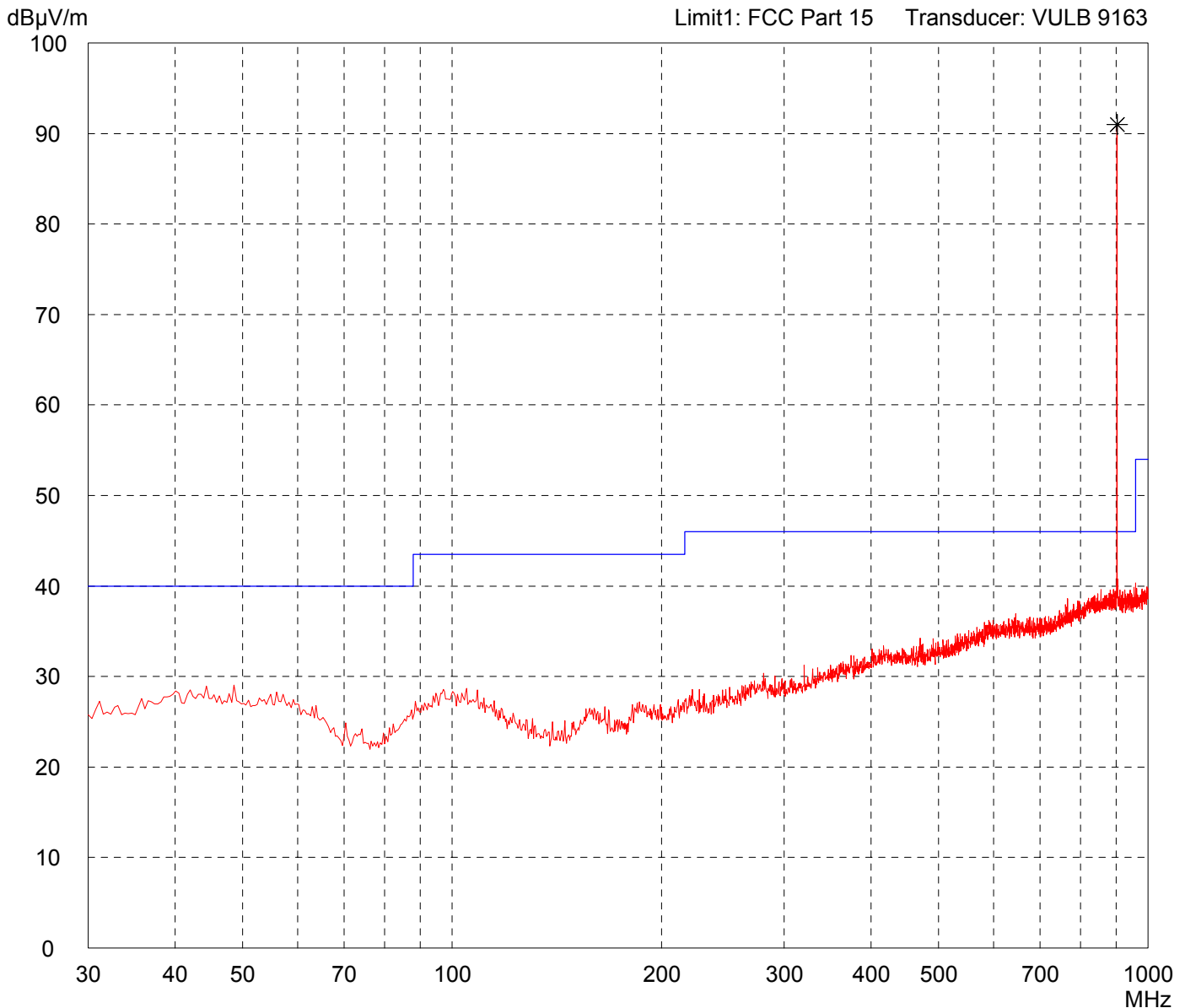
Project file:  
**50516-060368**

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

|                                                                               |                                                                                       |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                            |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/21/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                      |

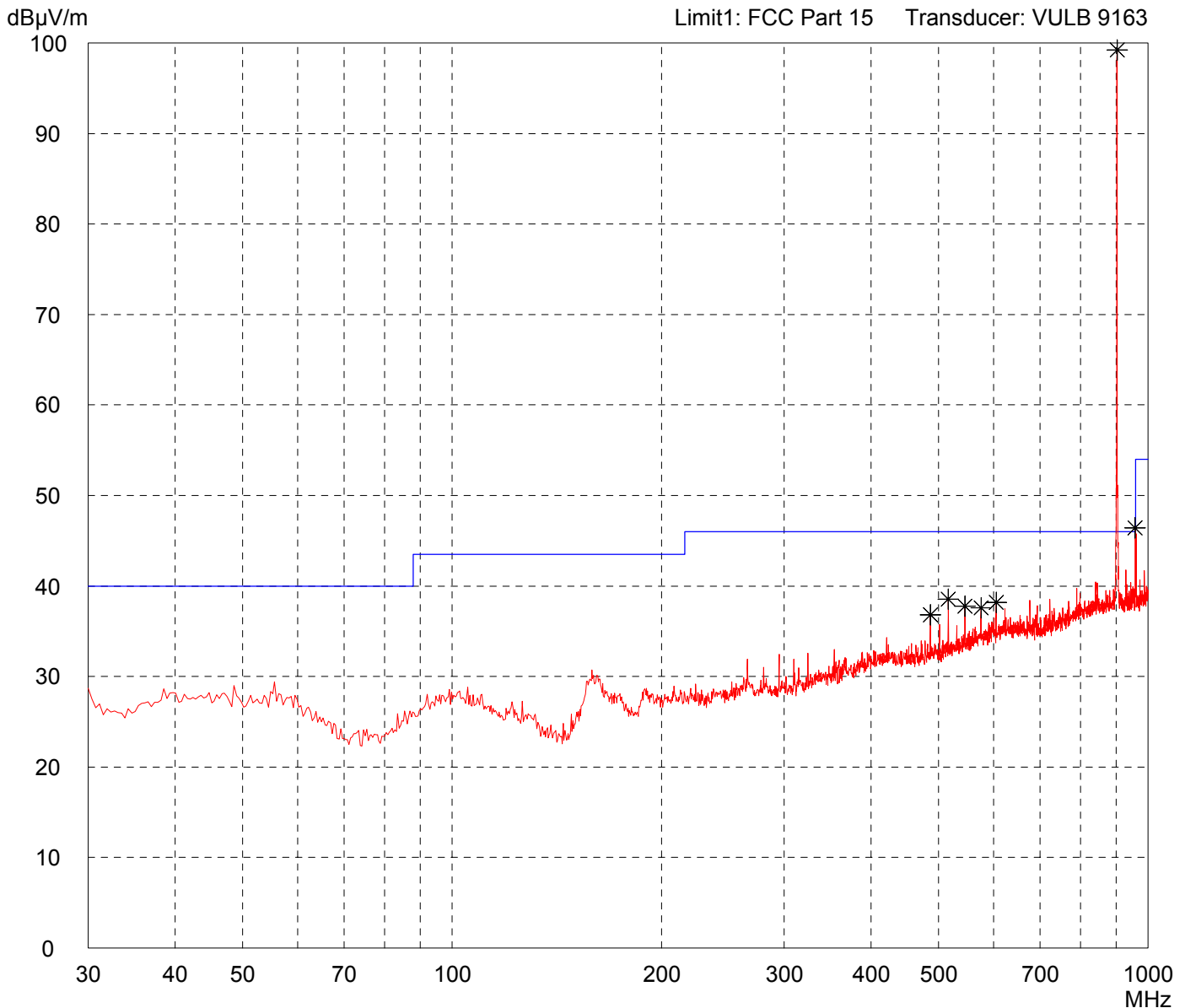
|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

|                                                                             |                                                                                       |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                      | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                          |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                            |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                       |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/21/2006</b>                                          | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                     | File name:<br><b>default.emi</b>                                                      |
| Detector:<br><b>Peak</b>                                                    | List of values:<br><b>Selected by hand</b>                                            |



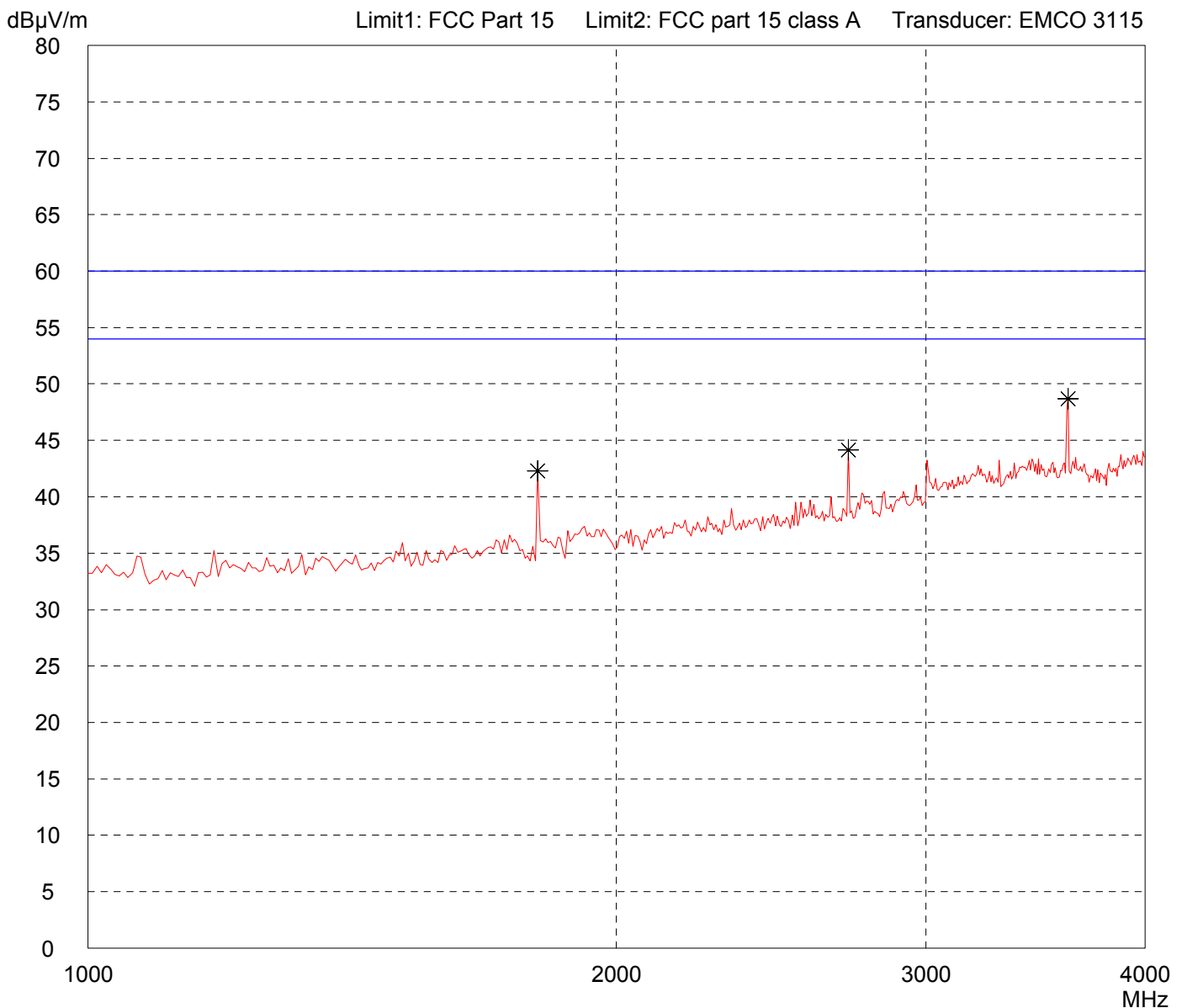
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                               |                                                                                       |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                            |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



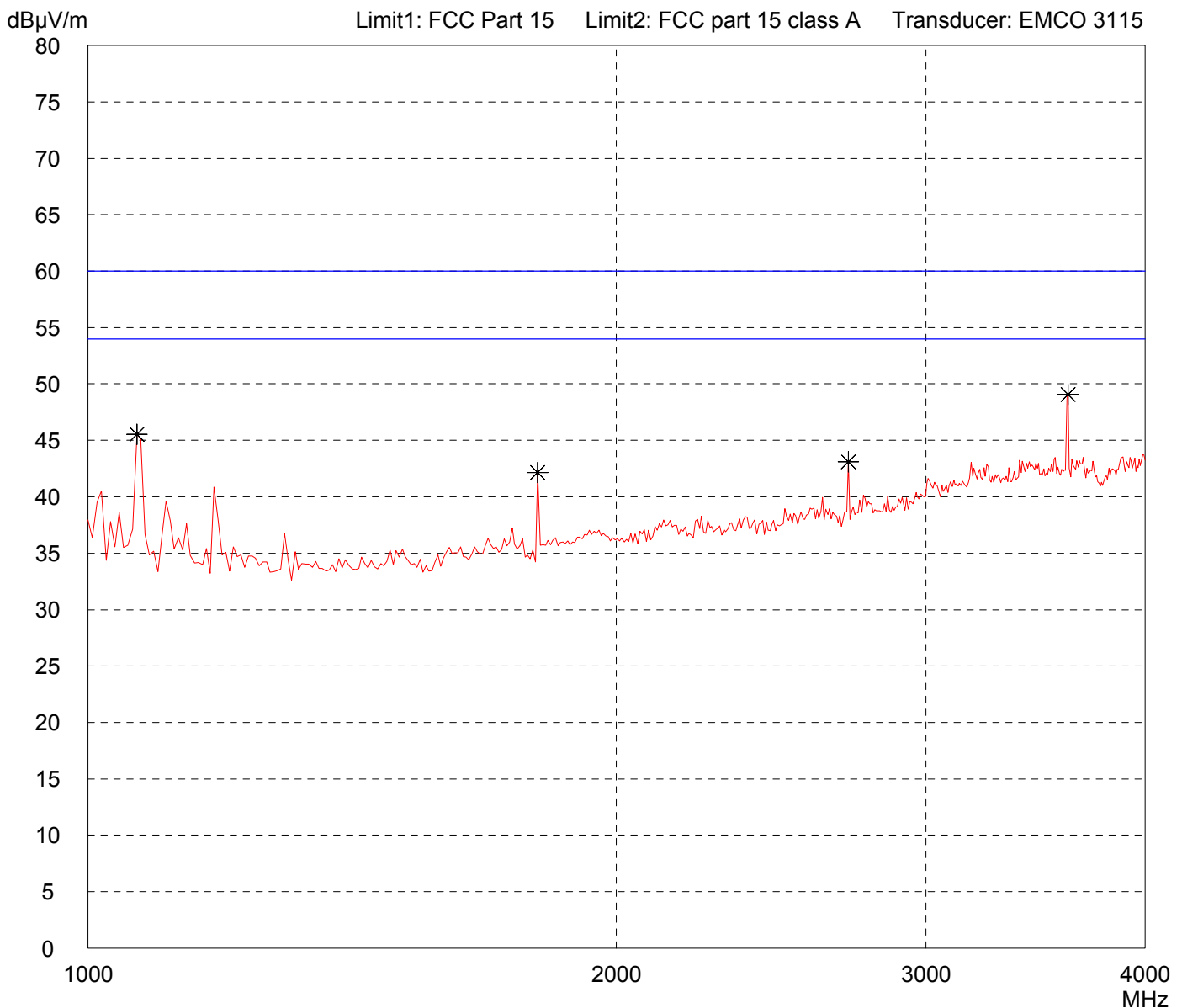
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                       |                                                                                       |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                    |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                       |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



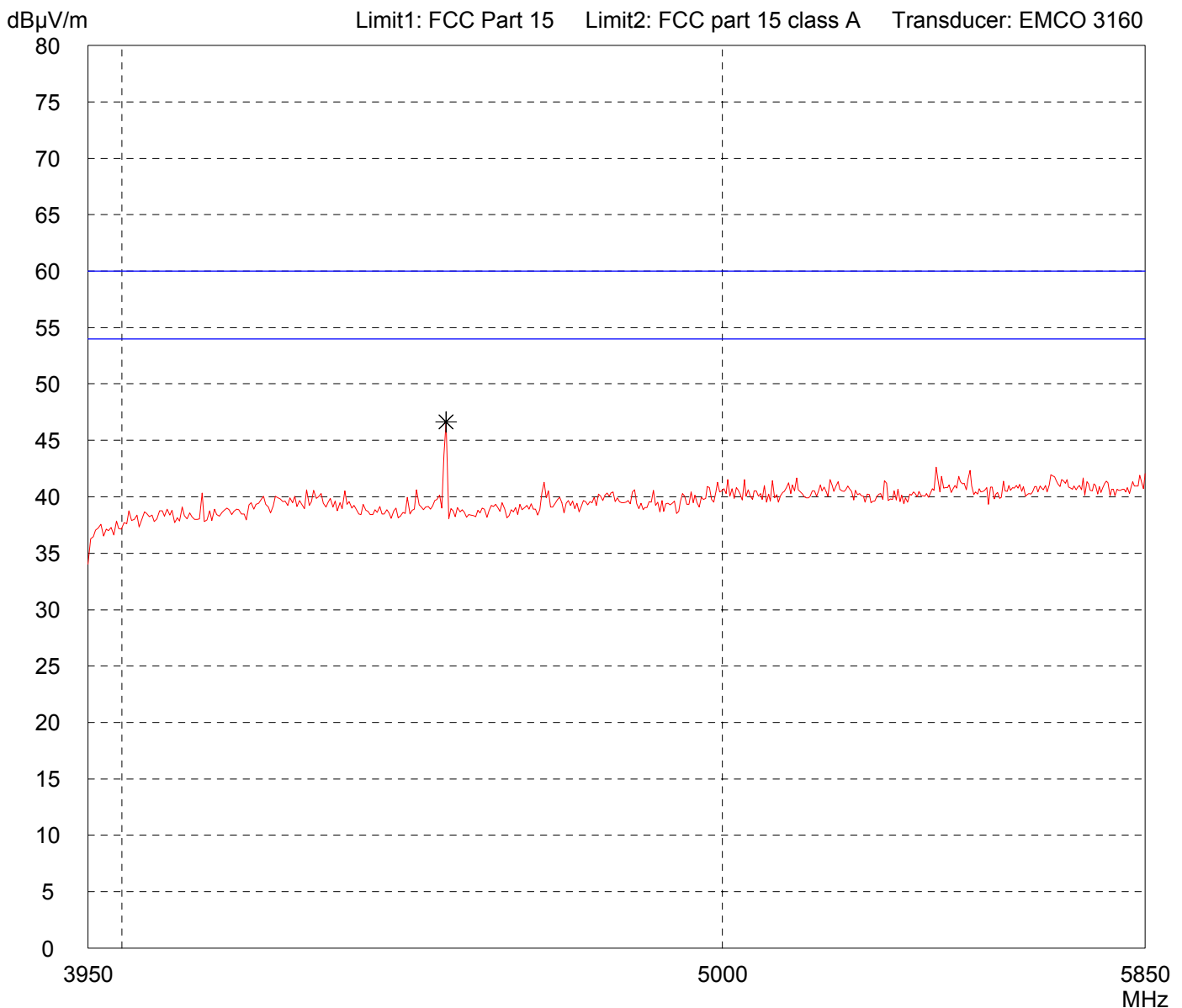
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                               |                                                                                       |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                            |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|

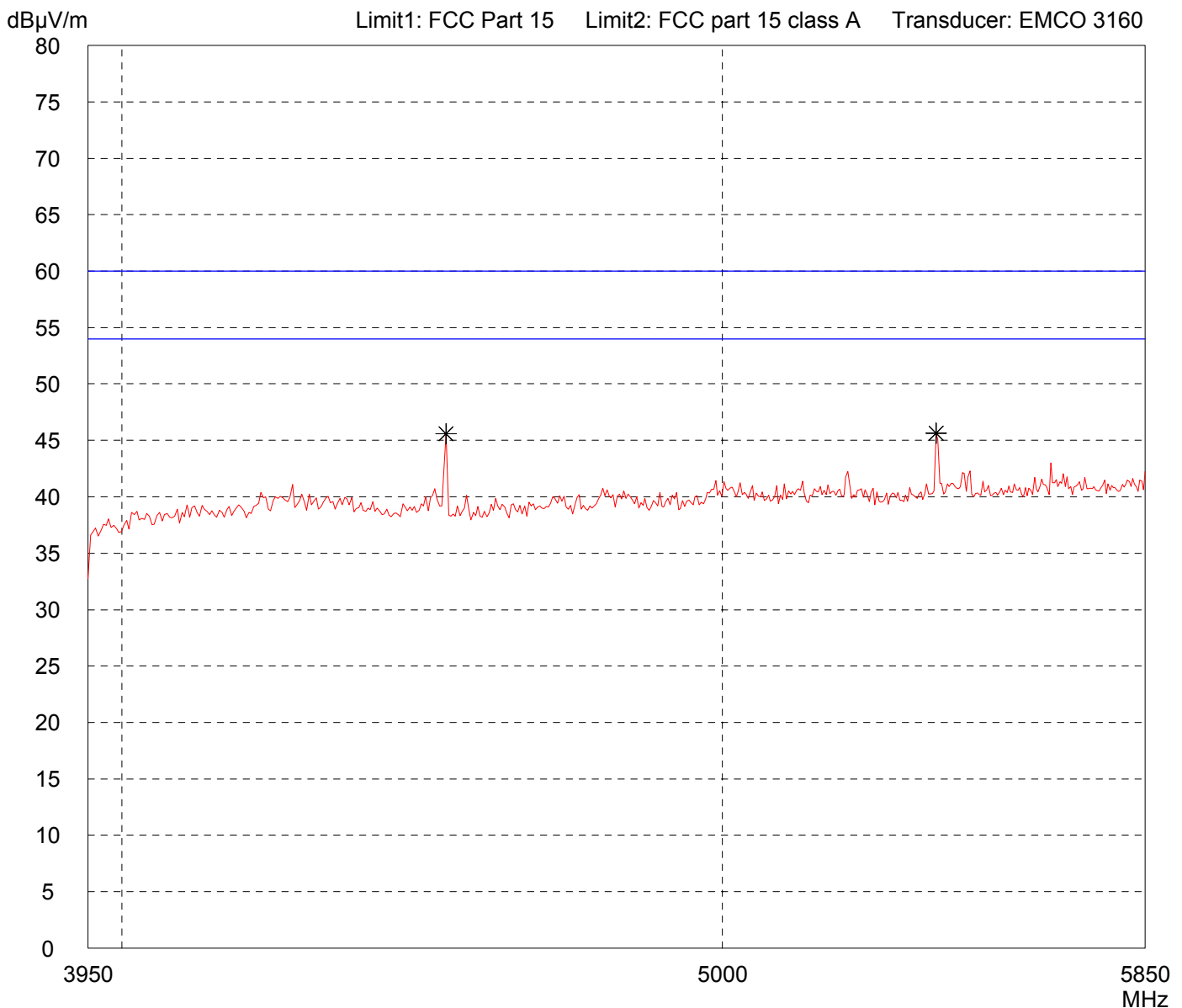


|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                             |                                                                                       |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                      | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                          |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                            |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                       |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                          | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                     | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



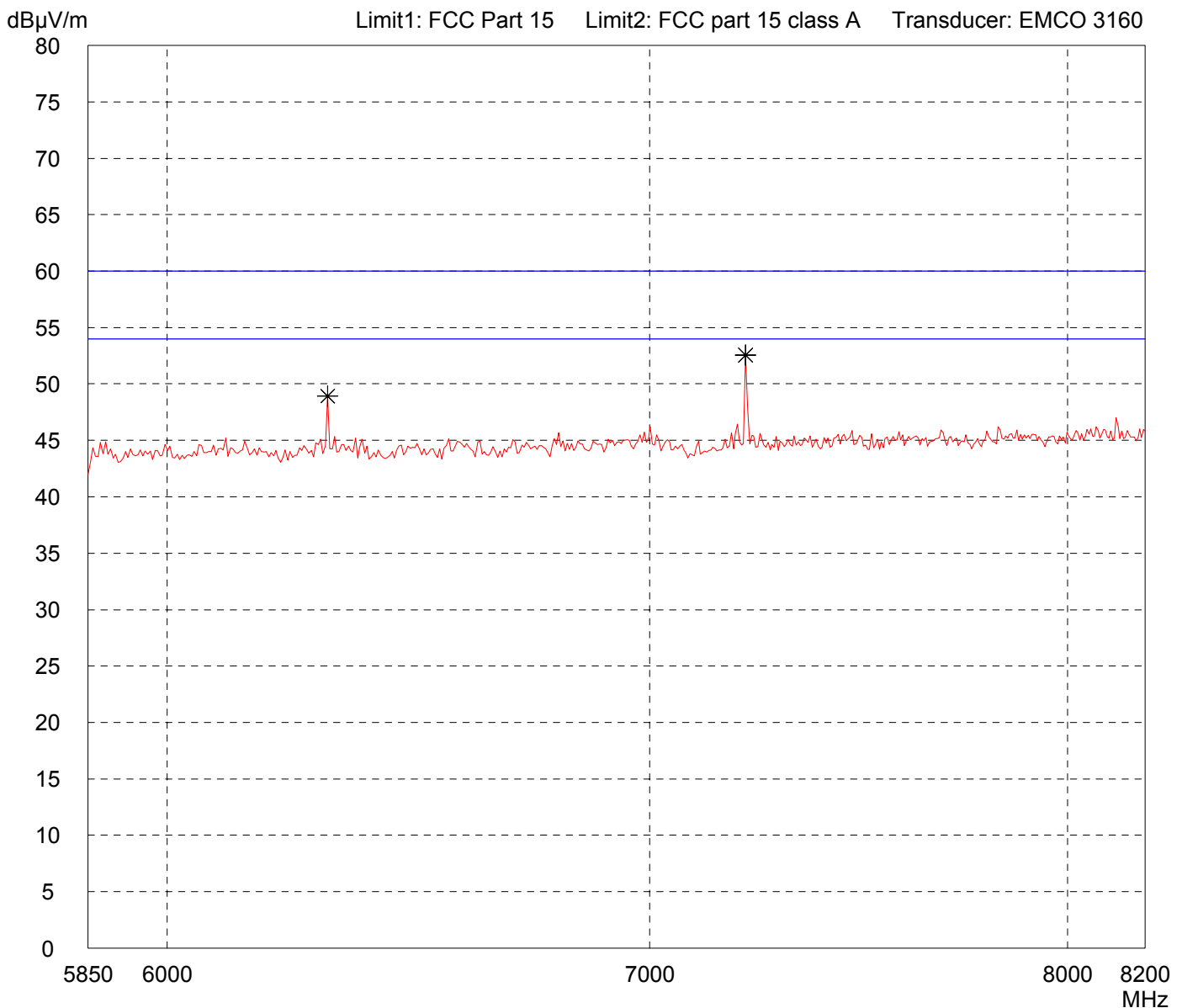
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                         |                                                                                       |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                  | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                      |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                        |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                   |                                                                                       |
| Tested on:<br><b>Test distance 3 metres<br/>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                      | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                 | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



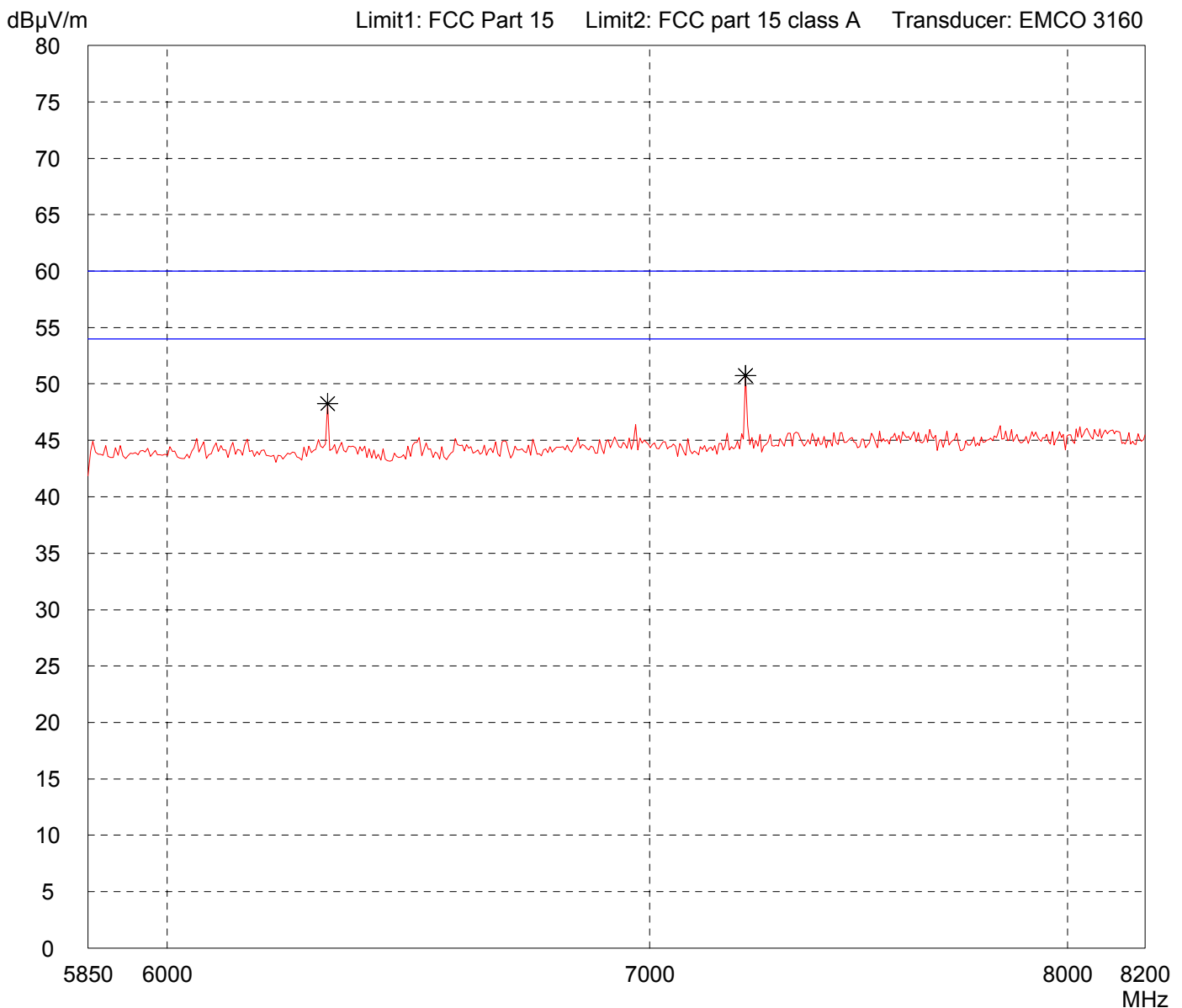
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                       |                                                                                       |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                    |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                       |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



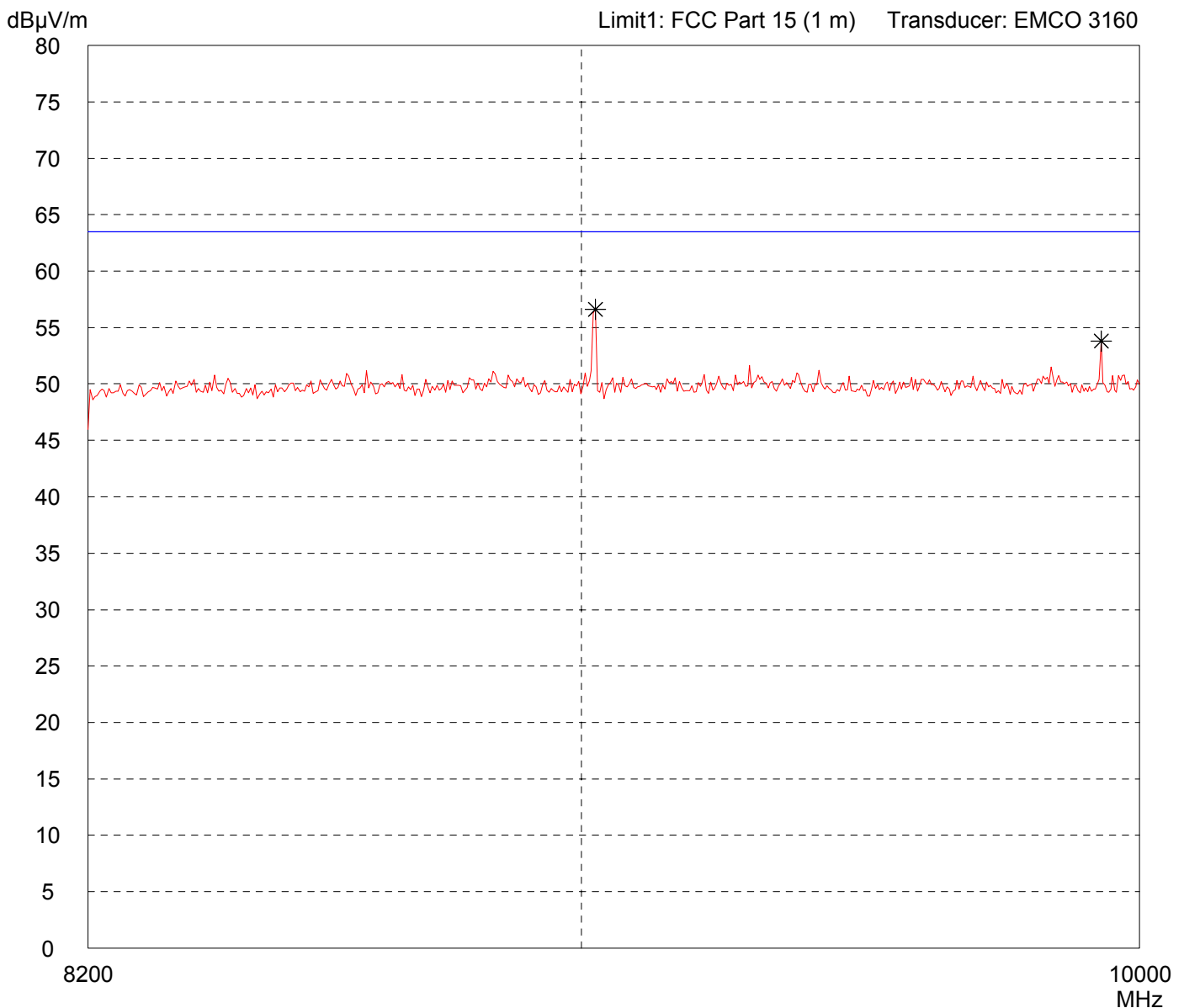
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 8.2 GHz - 10 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                        |                                                                                       |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                 | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                     |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                       |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                  |                                                                                       |
| Tested on:<br><b>Test distance 1 meter<br/>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                     | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                | File name:<br><b>default.emi</b>                                                      |

|                          |                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><div style="display: flex; justify-content: space-between;"> <span><b>10 dB Margin</b></span> <span><b>50 Subranges</b></span> </div> |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|



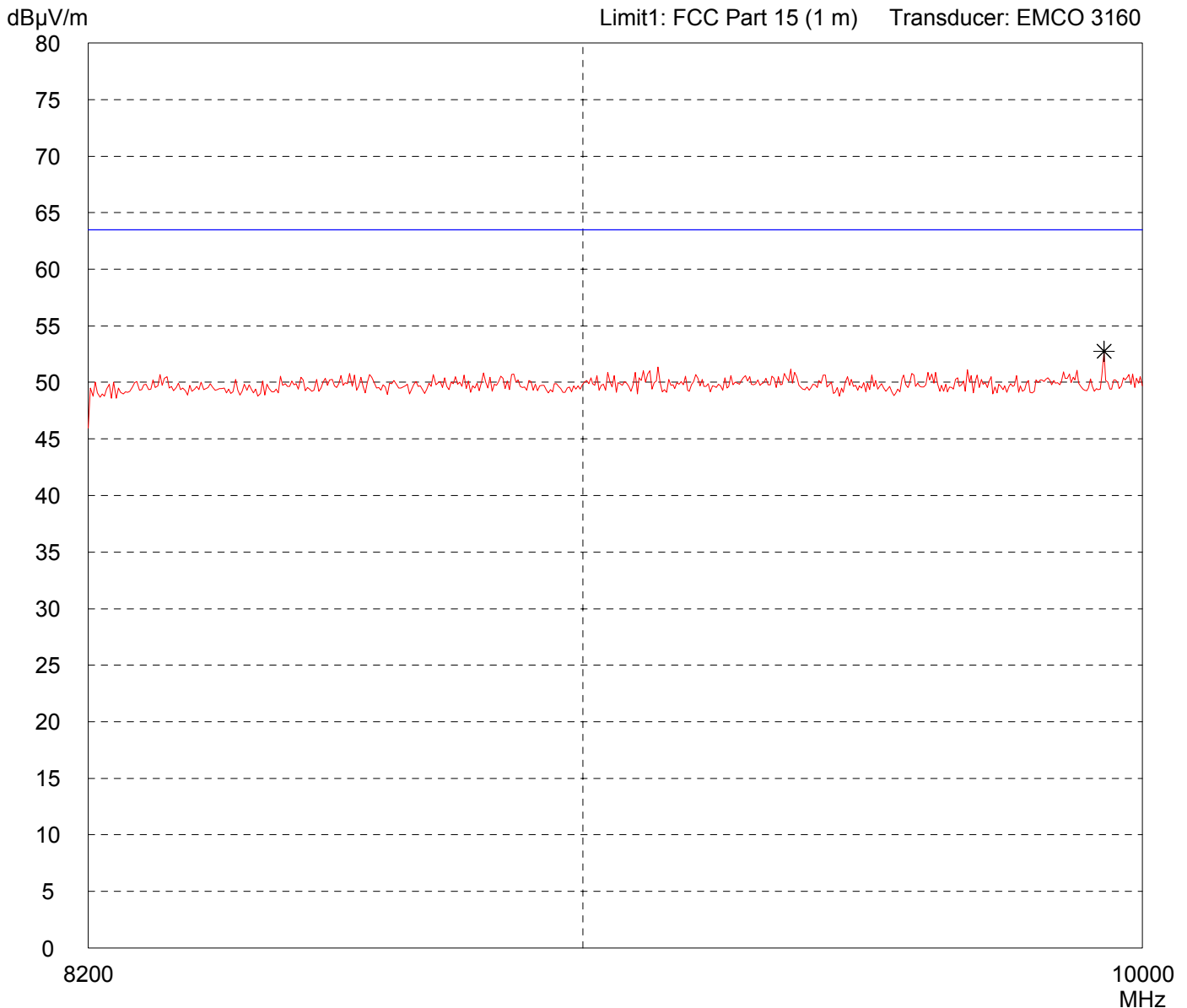
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 8.2 GHz - 10 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                            |                                                                                       |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                     | Comment:<br>- external DC supply<br><br>- transmitting continuously on lowest channel |
| Serial no.:<br>---                                                         |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                           |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                      |                                                                                       |
| Tested on:<br><b>Test distance 1 meter</b><br><b>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                         | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                    | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



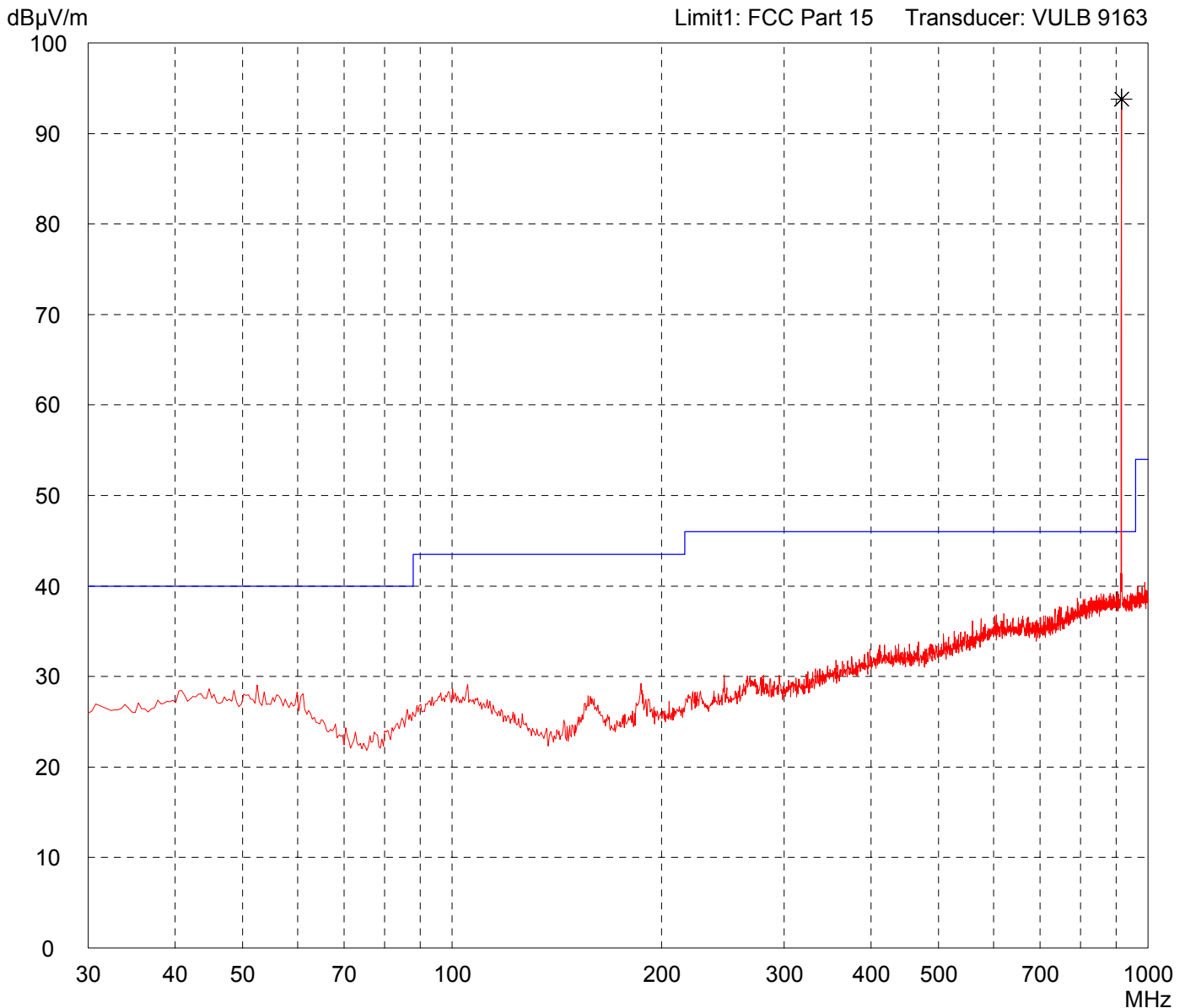
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

|                                                                               |                                                                                       |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                            |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/21/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:  
WRX01

Serial no.:  
---

Applicant:  
Vigil Health Solutions Inc.

Test site:  
Fully anechoic room, cabin no. 2

Tested on:  
Test distance 3 metres  
Vertical Polarization

Date of test:  
07/21/2006

Operator:  
M. Steindl

Test performed:  
automatically

File name:  
default.emi

Comment:

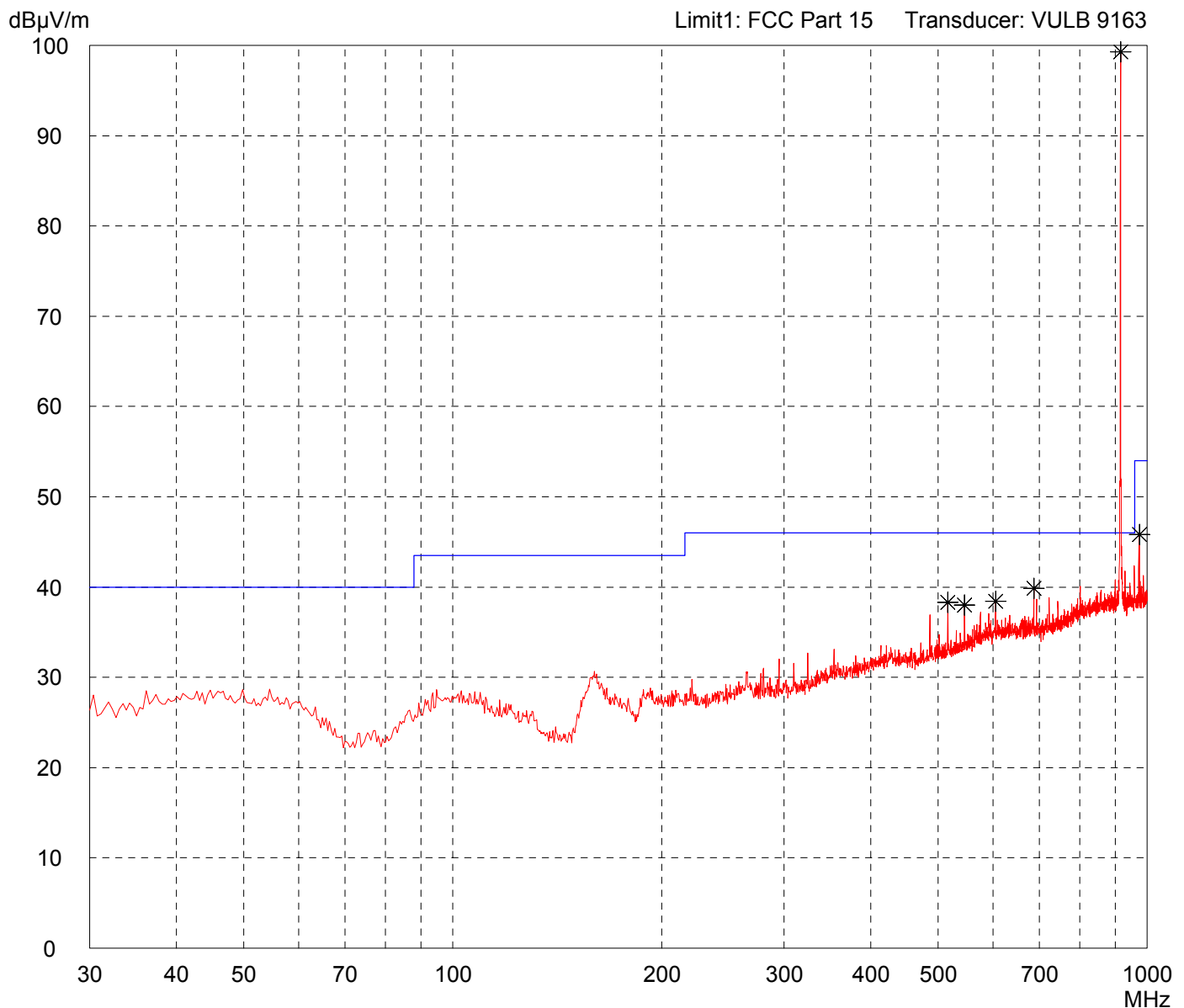
- external DC supply

- transmitting continuously on middle channel

Detector:  
Peak

List of values:

Selected by hand



Result:  
Prescan

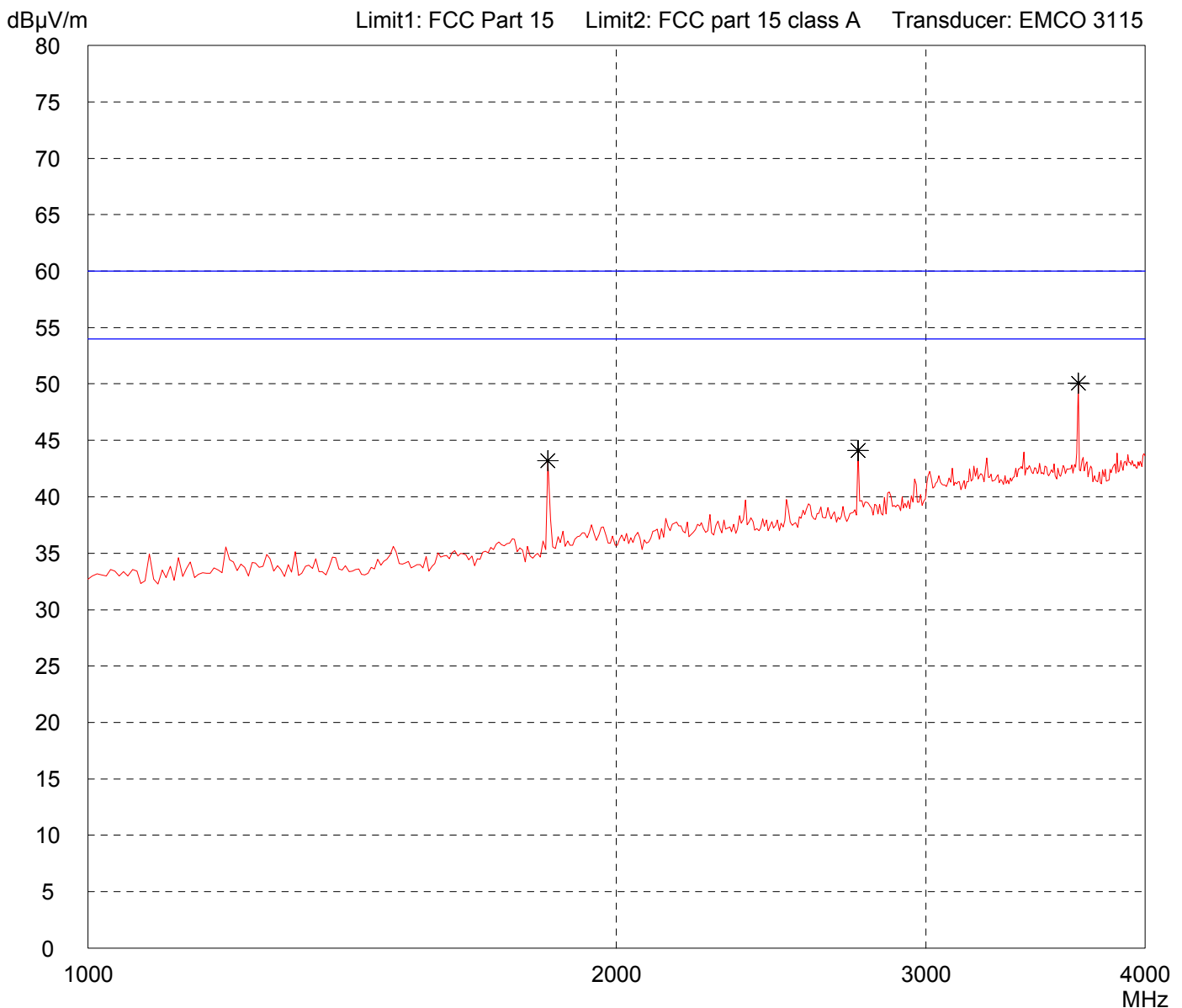
Project file:  
50516-60368

# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                               |                                                                                       |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                            |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



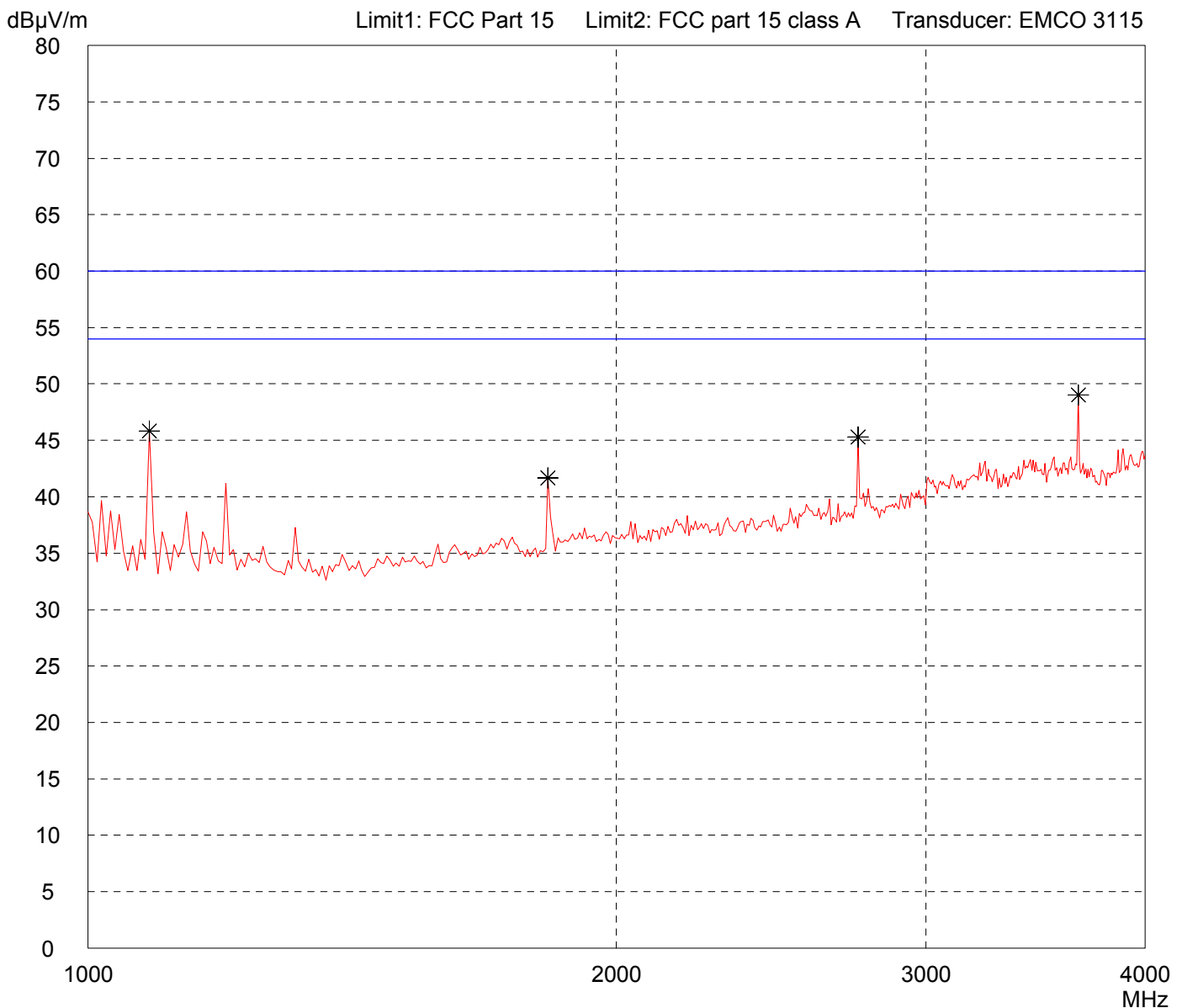
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                             |                                                                                       |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                      | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                          |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                            |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                       |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                          | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                     | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



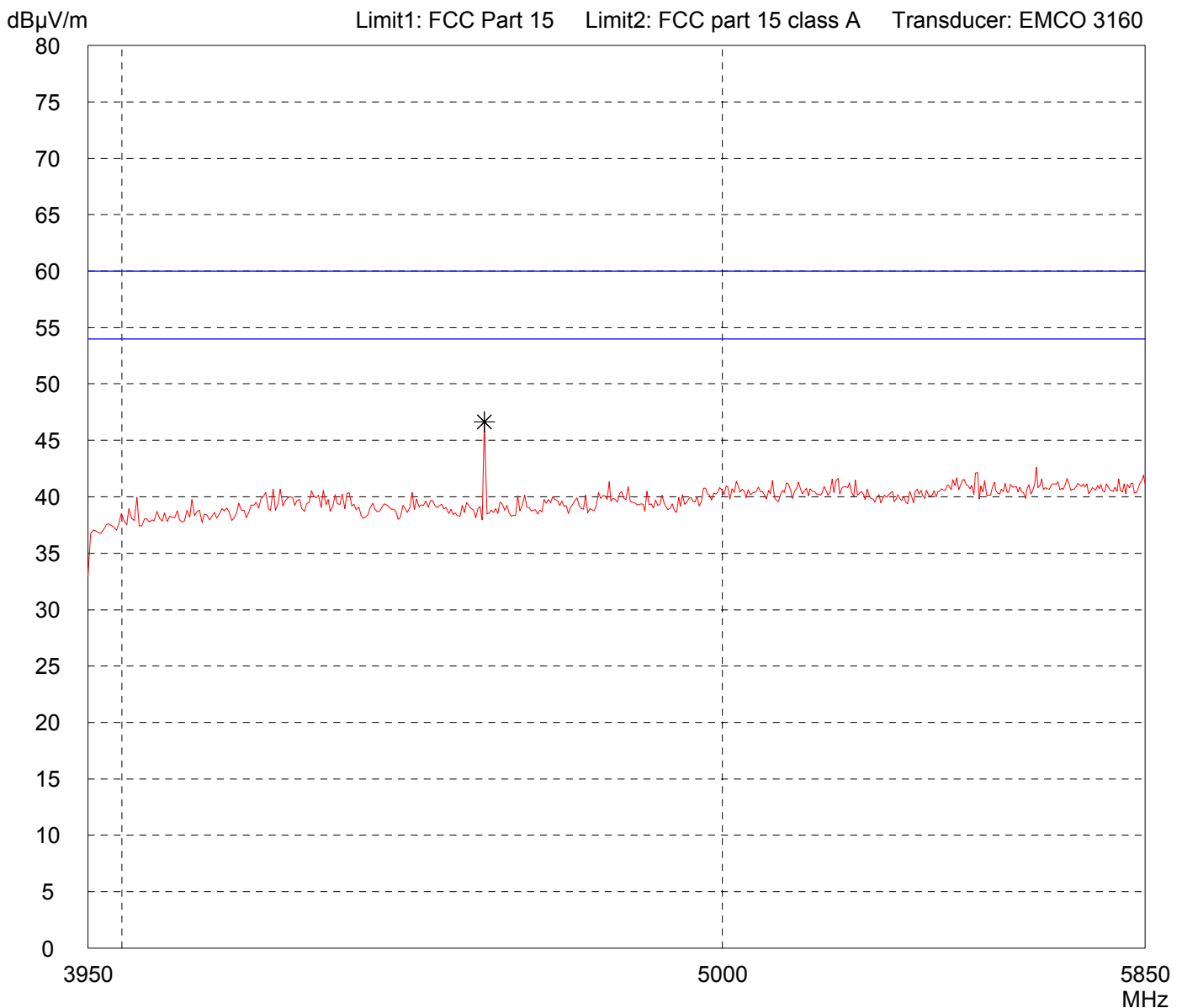
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                               |                                                                                       |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                            |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



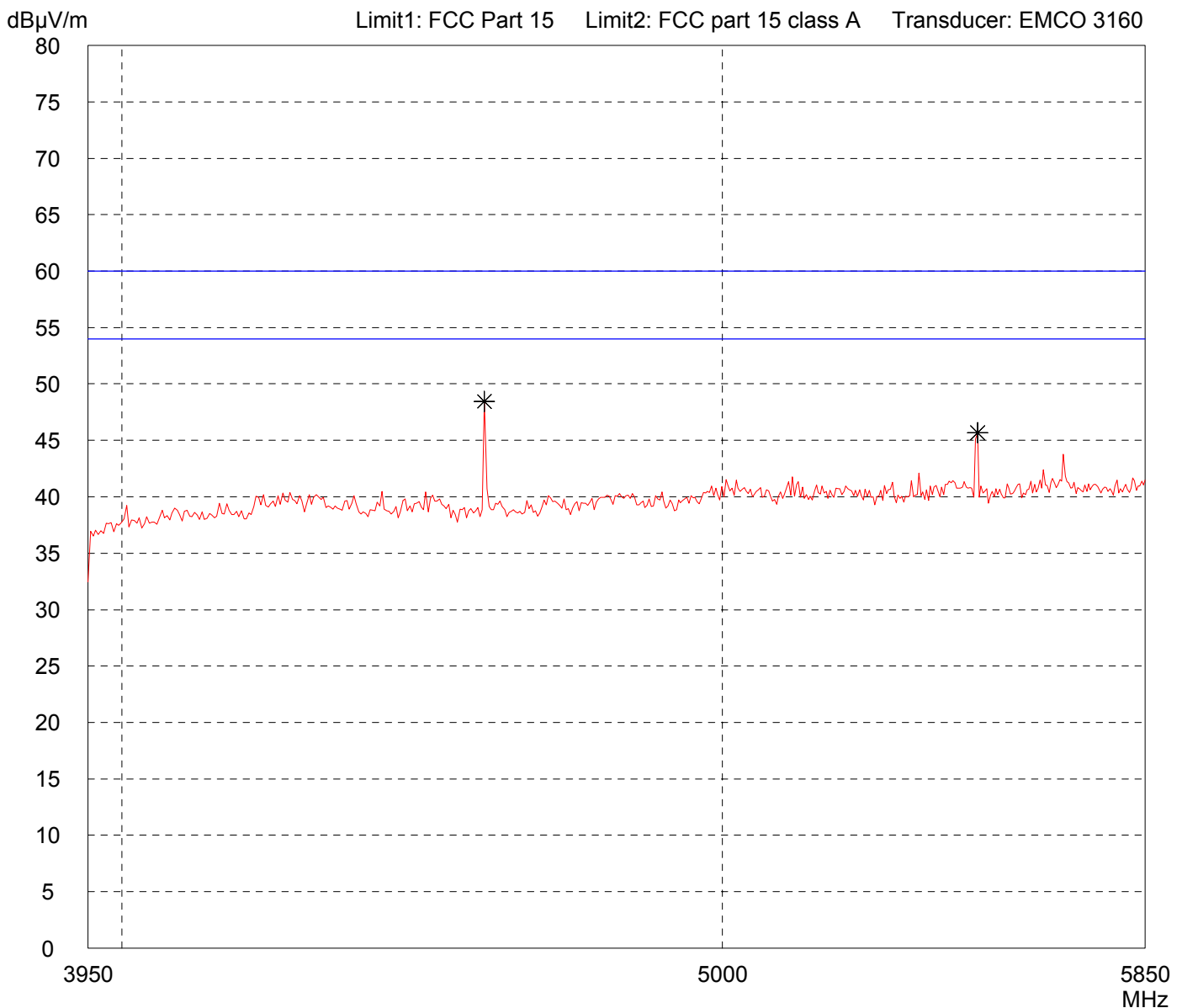
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                       |                                                                                       |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                    |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                       |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



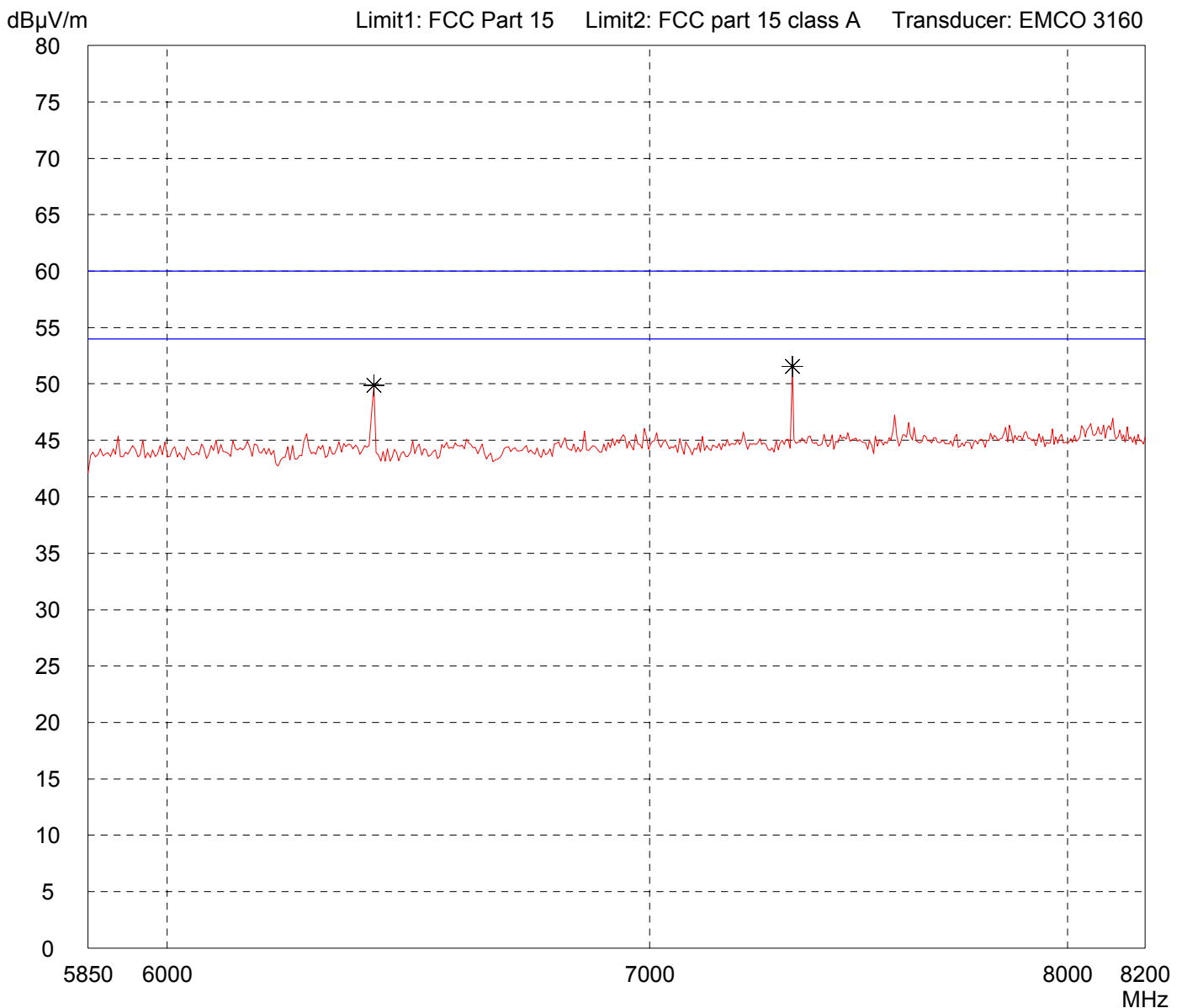
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                               |                                                                                       |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                            |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



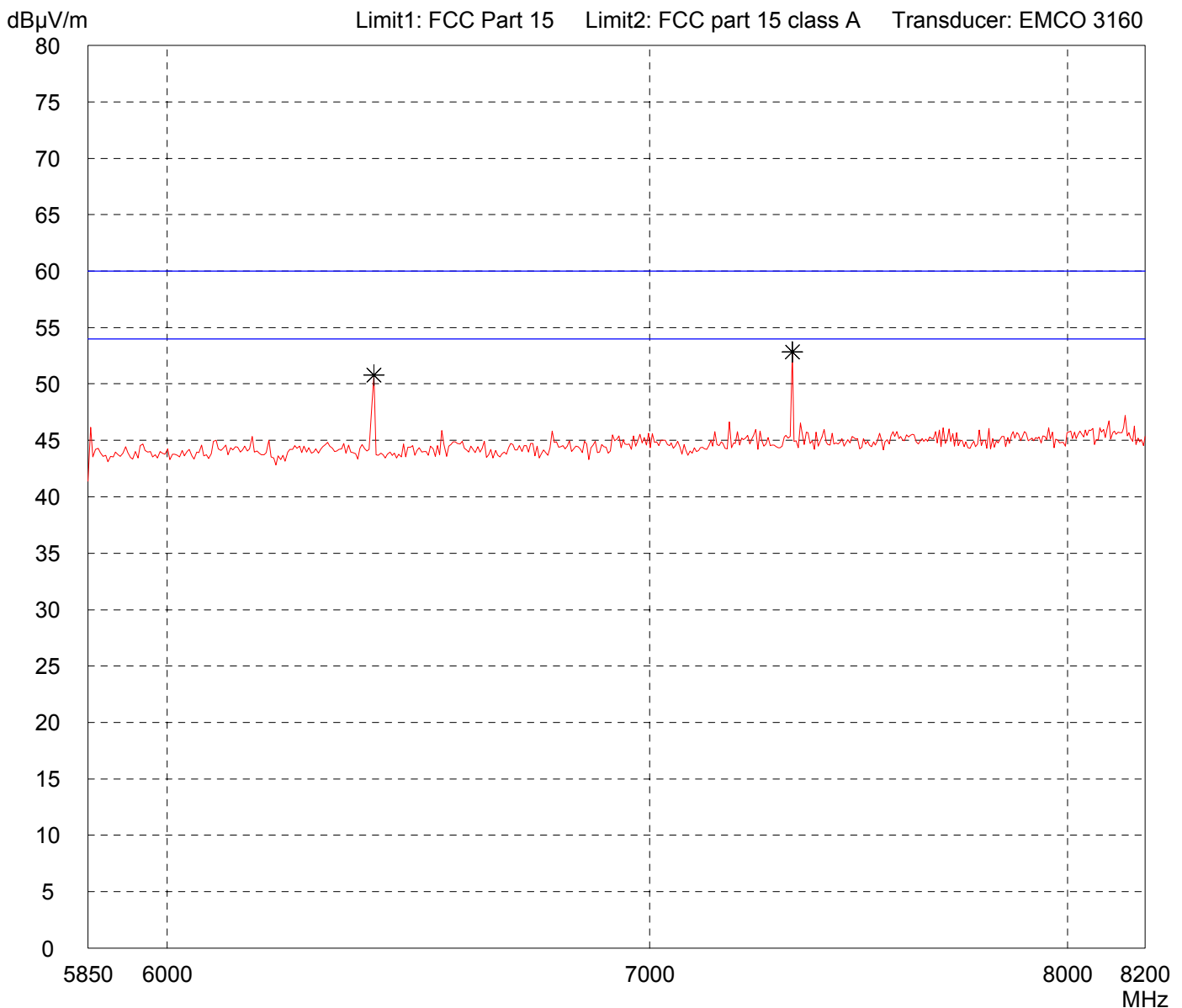
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                       |                                                                                       |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                    |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                       |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



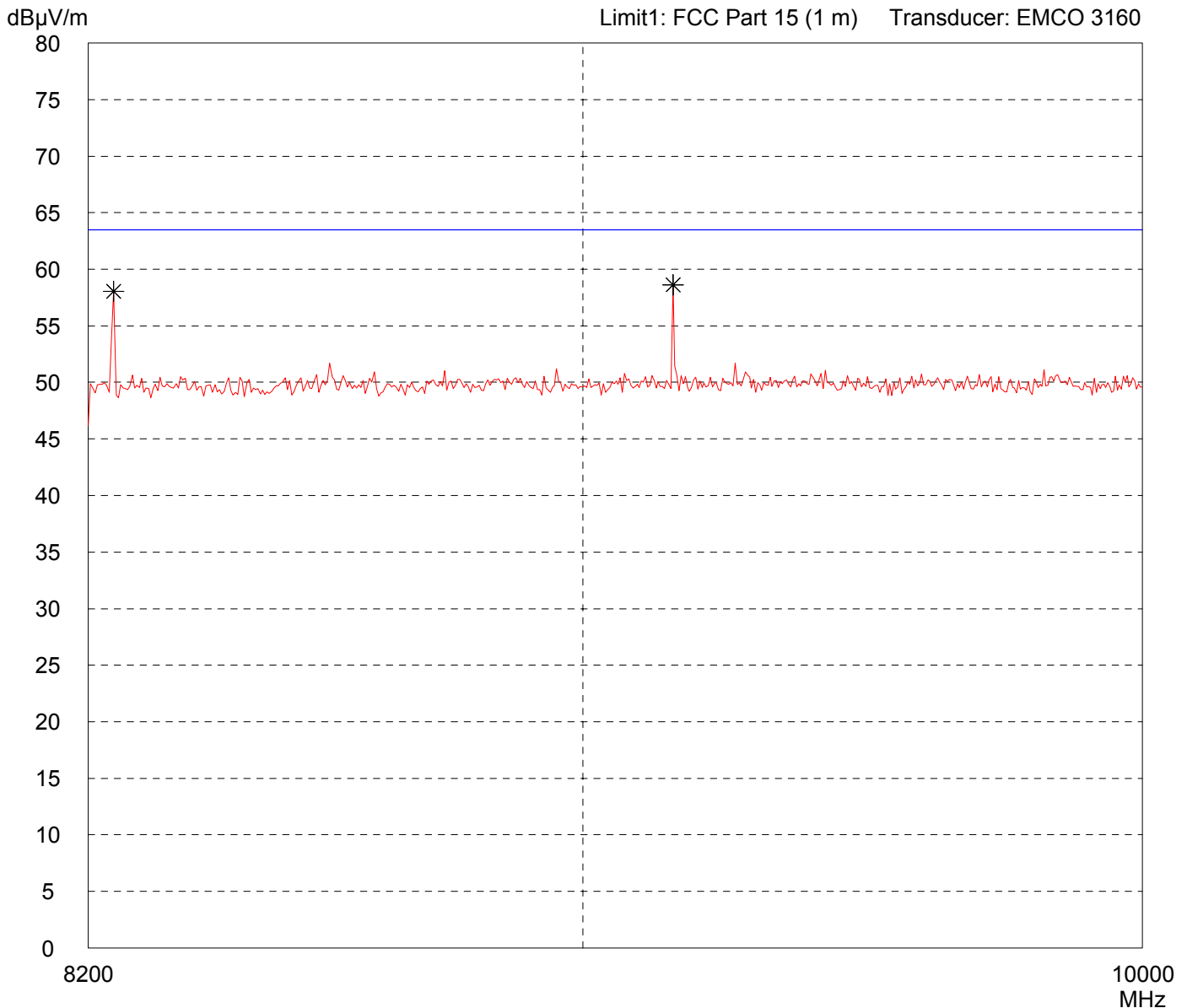
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 8.2 GHz - 10 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                        |                                                                                       |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                 | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                     |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                       |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                  |                                                                                       |
| Tested on:<br><b>Test distance 1 meter<br/>Horizontal Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                     | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                | File name:<br><b>default.emi</b>                                                      |

|                          |                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><div style="display: flex; justify-content: space-between;"> <span><b>10 dB Margin</b></span> <span><b>50 Subranges</b></span> </div> |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|



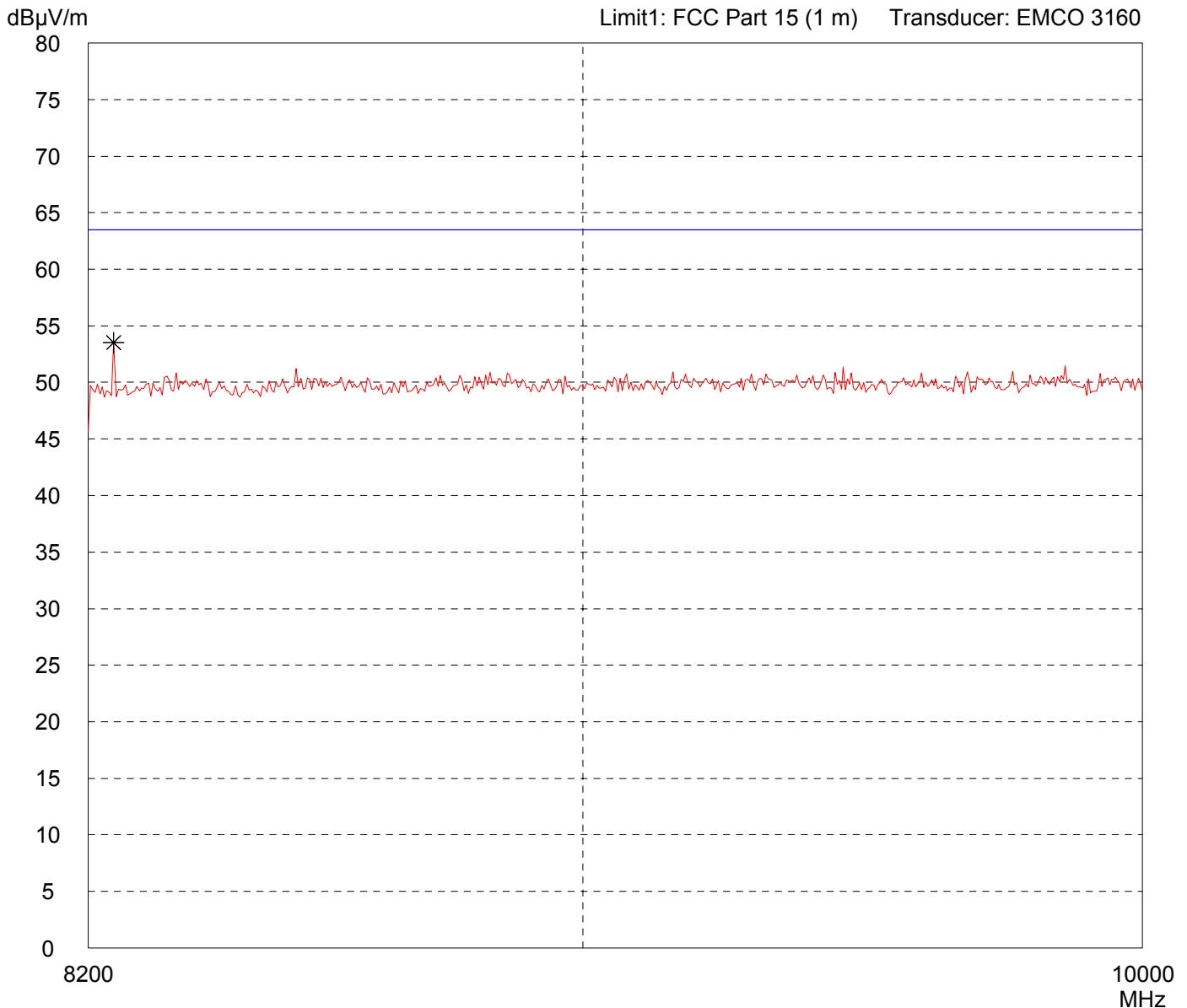
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 8.2 GHz - 10 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                            |                                                                                       |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                     | Comment:<br>- external DC supply<br><br>- transmitting continuously on middle channel |
| Serial no.:<br>---                                                         |                                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                           |                                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                      |                                                                                       |
| Tested on:<br><b>Test distance 1 meter</b><br><b>Vertical Polarization</b> |                                                                                       |
| Date of test:<br><b>07/19/2006</b>                                         | Operator:<br><b>M. Steindl</b>                                                        |
| Test performed:<br><b>automatically</b>                                    | File name:<br><b>default.emi</b>                                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



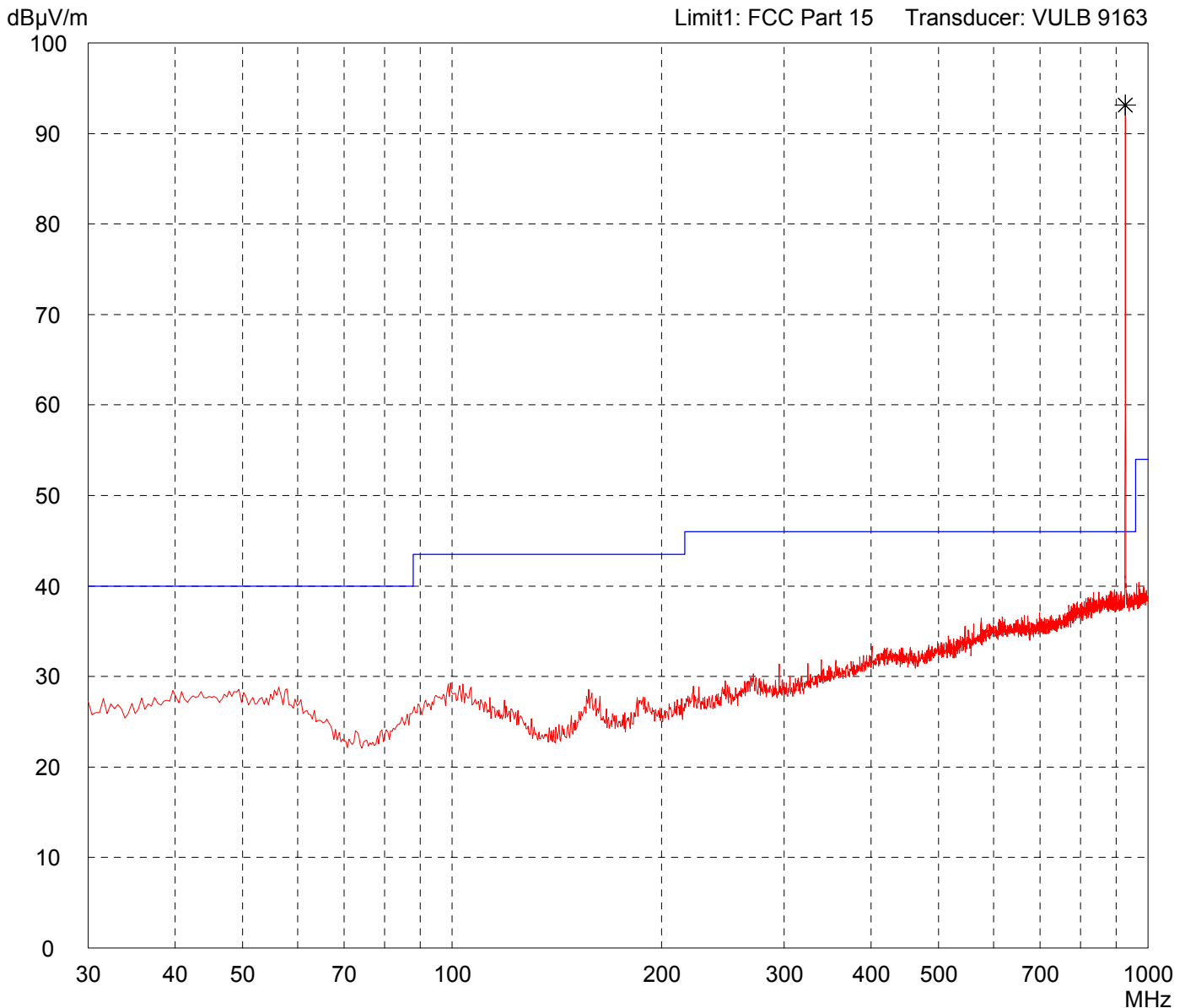
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

|                                                                               |                                                                                        |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                            |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                        |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                        |
| Date of test:<br><b>07/21/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



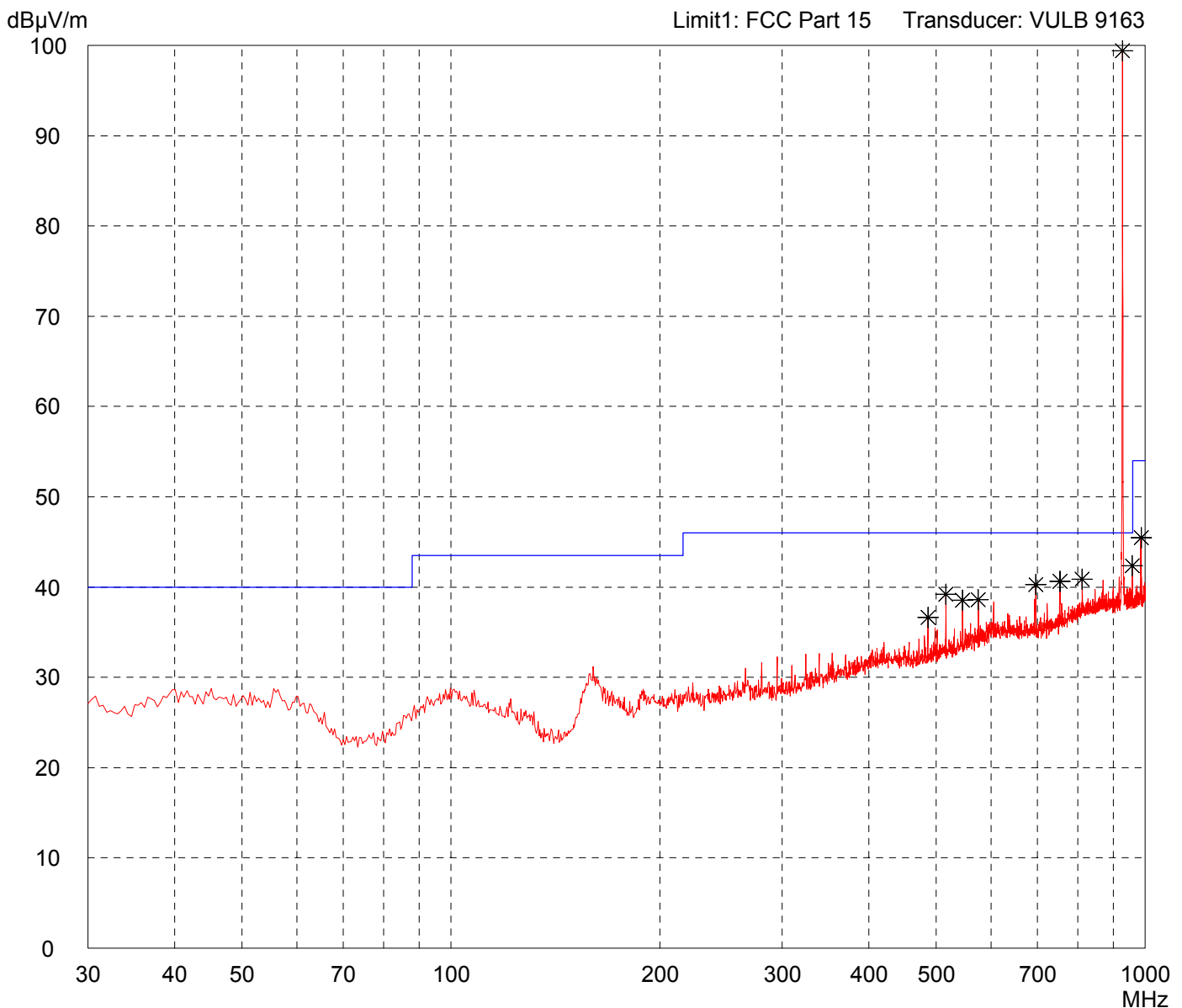
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

|                                                                       |                                                                                        |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                    |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                        |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                        |
| Date of test:<br><b>07/21/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|

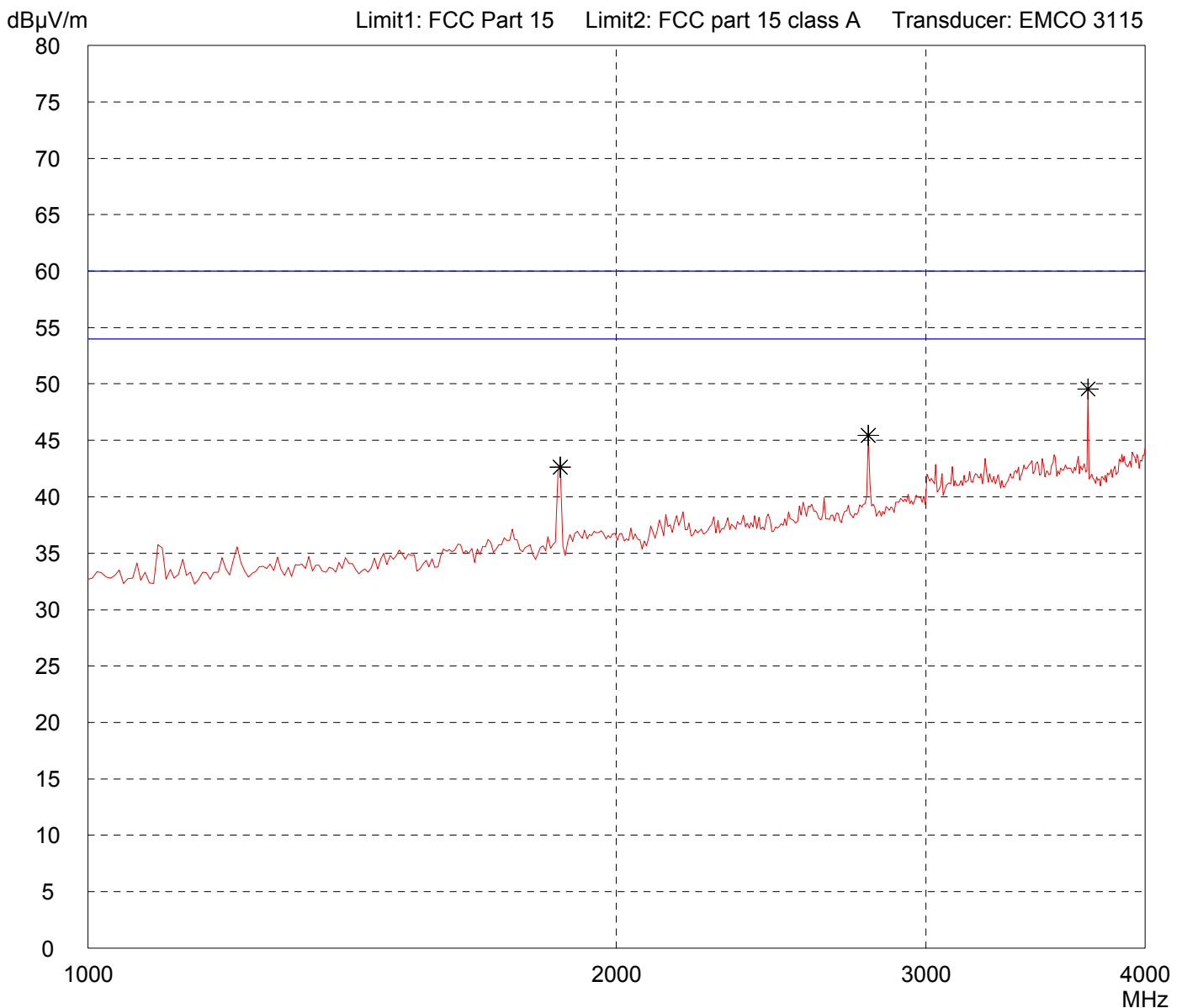


|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                         |                                                                                        |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                  | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                      |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                        |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                   |                                                                                        |
| Tested on:<br><b>Test distance 3 metres<br/>Horizontal Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                      | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                                 | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



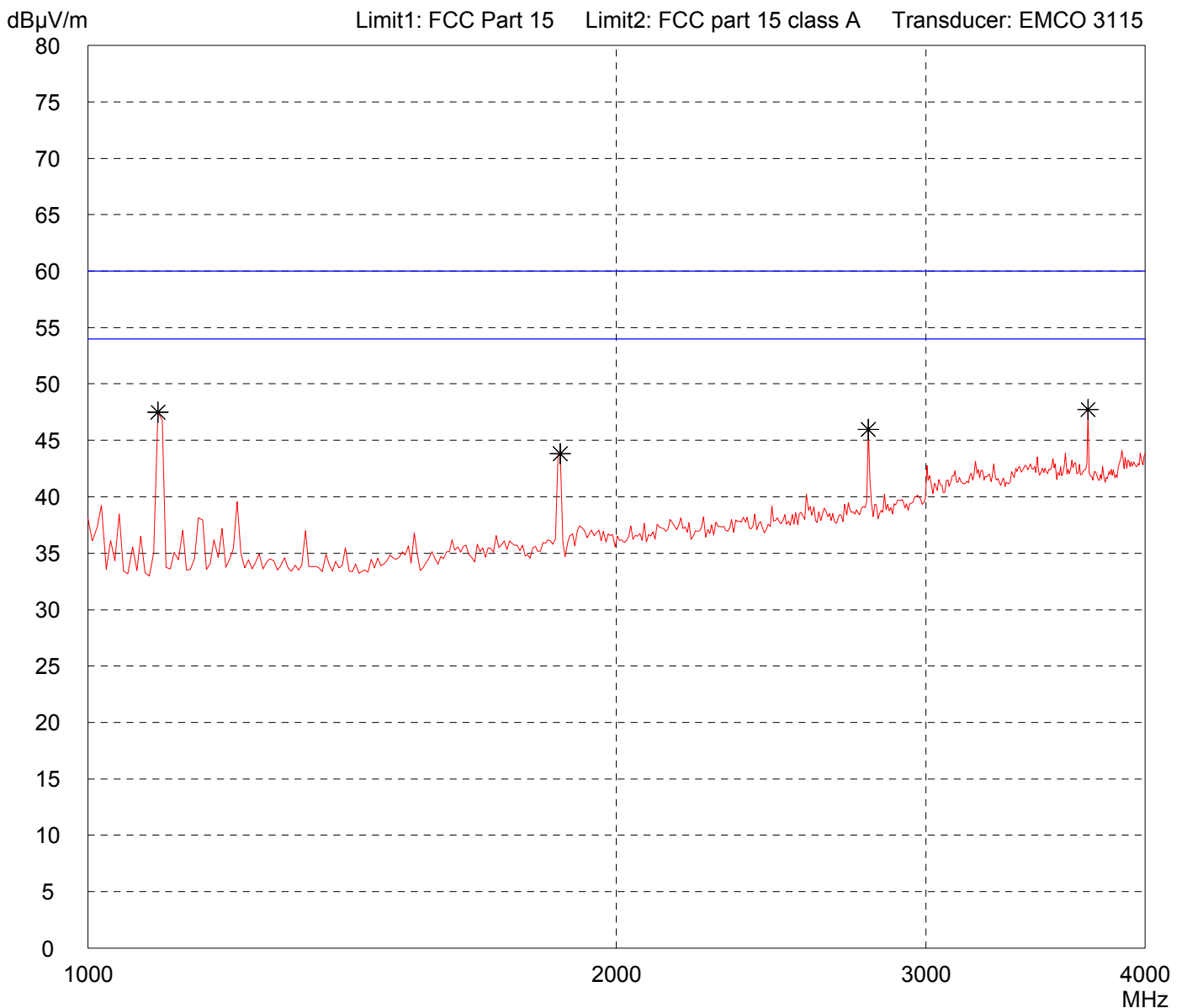
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                       |                                                                                        |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                    |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                        |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



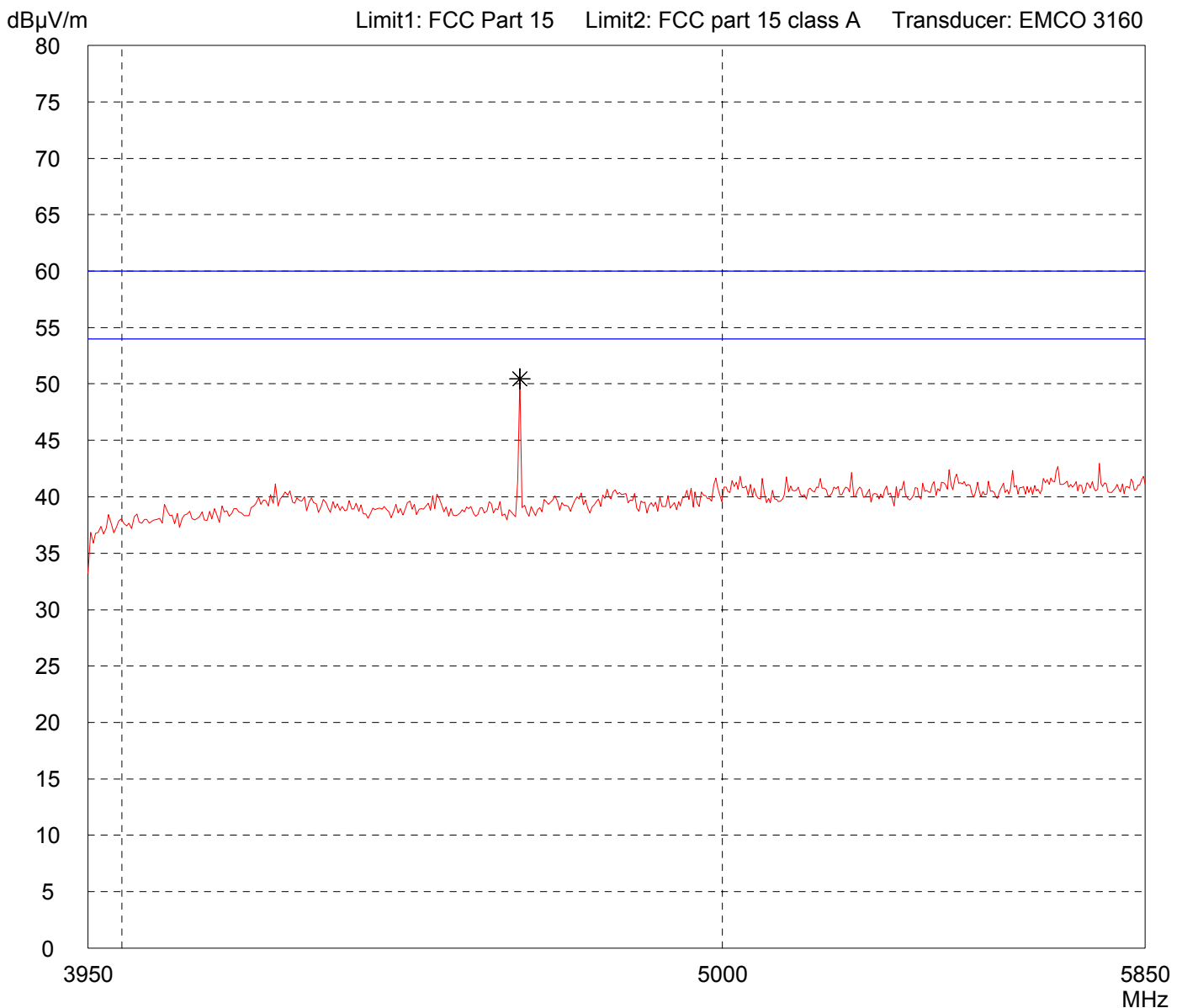
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                               |                                                                                        |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                            |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                        |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



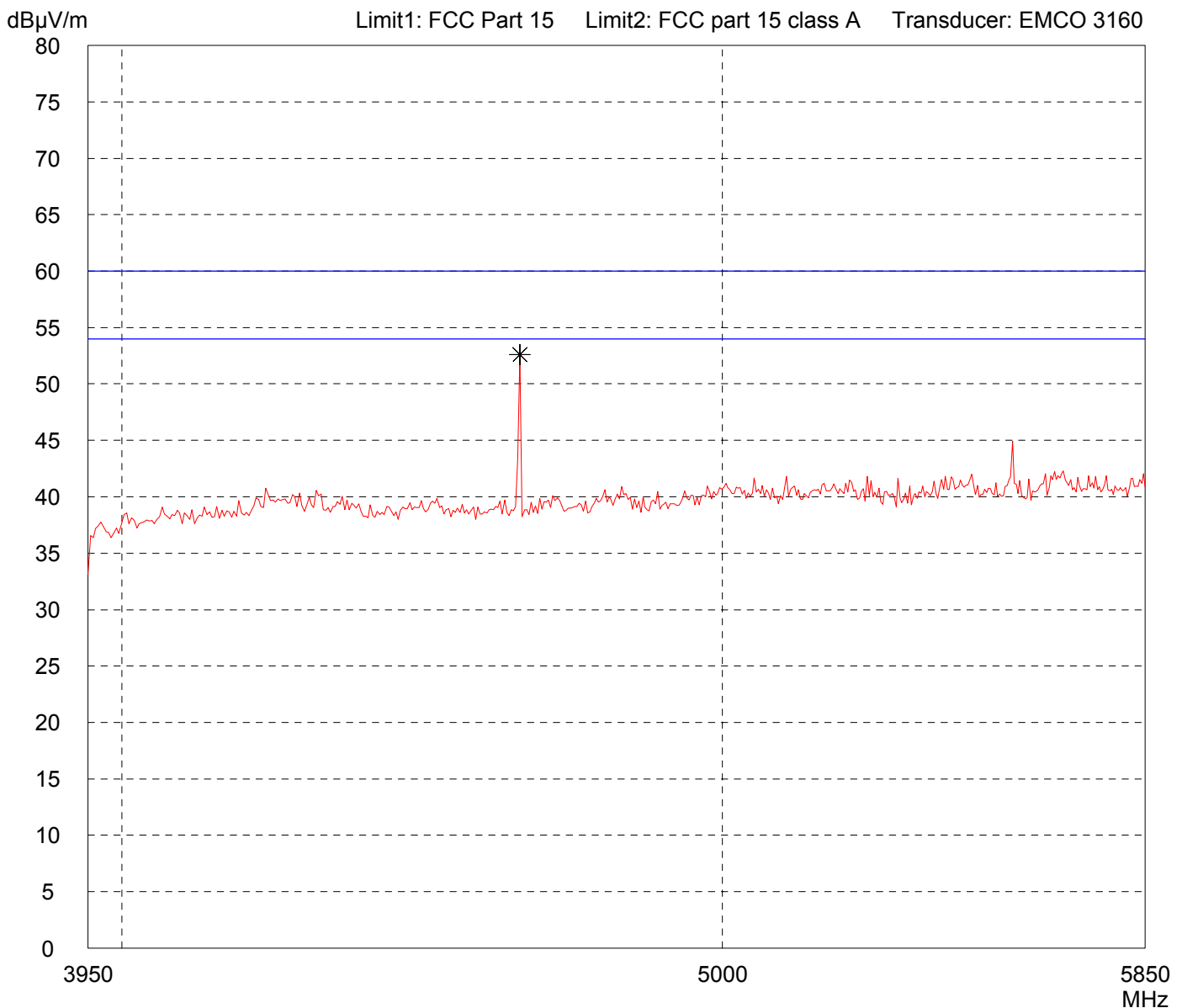
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                       |                                                                                        |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                    |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                        |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



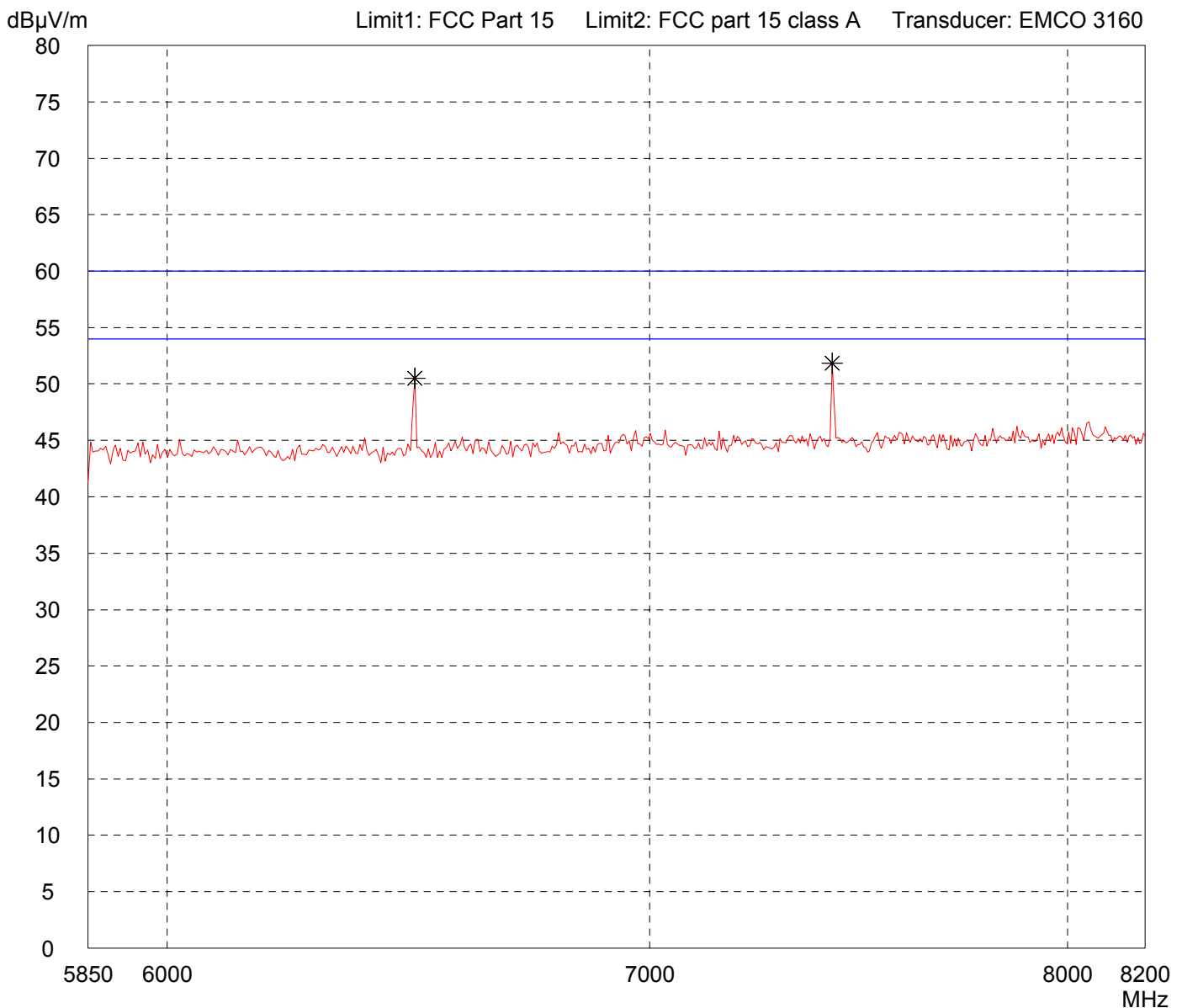
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                               |                                                                                        |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                            |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                                        |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



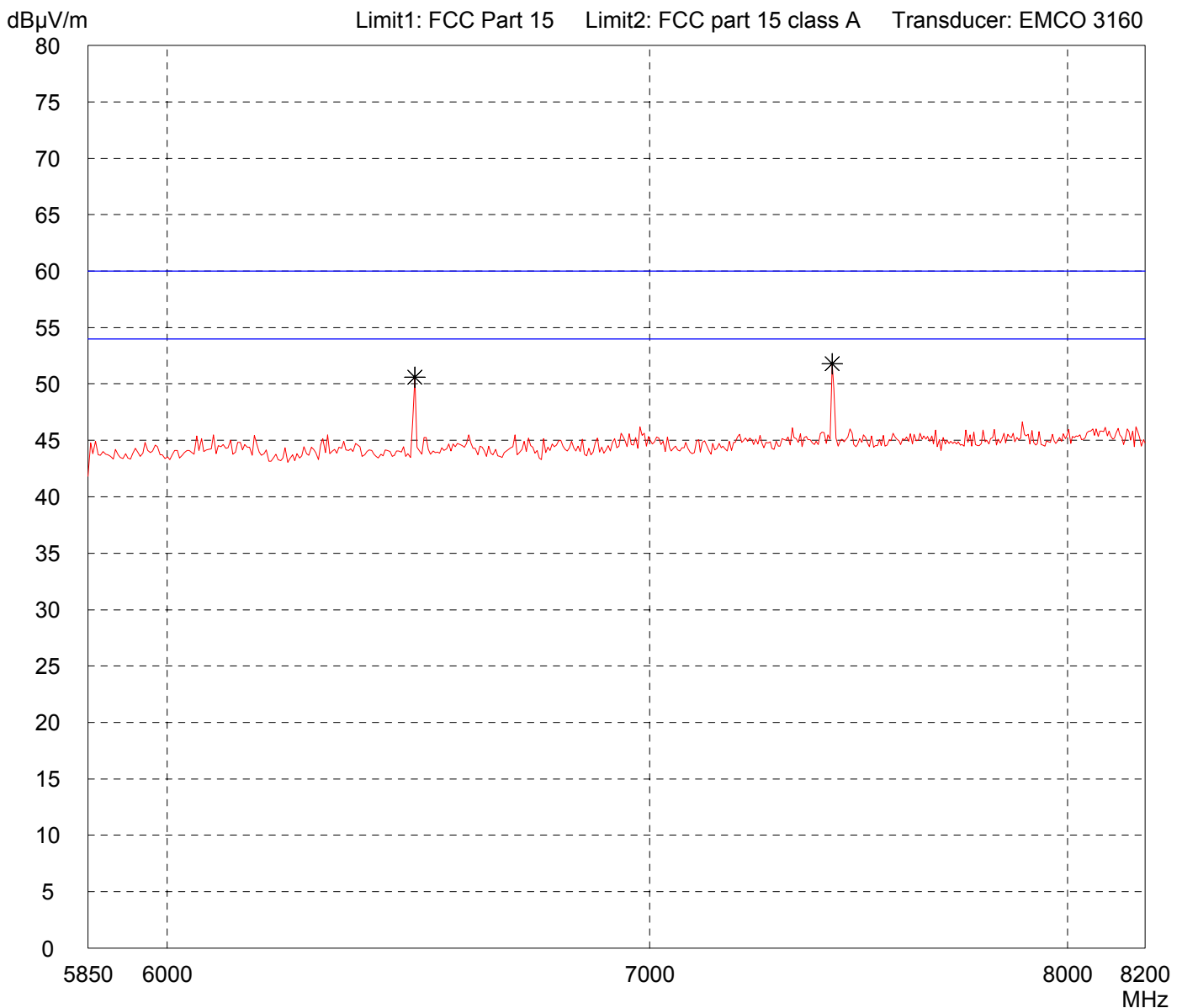
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                       |                                                                                        |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                    |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                                        |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                                       |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



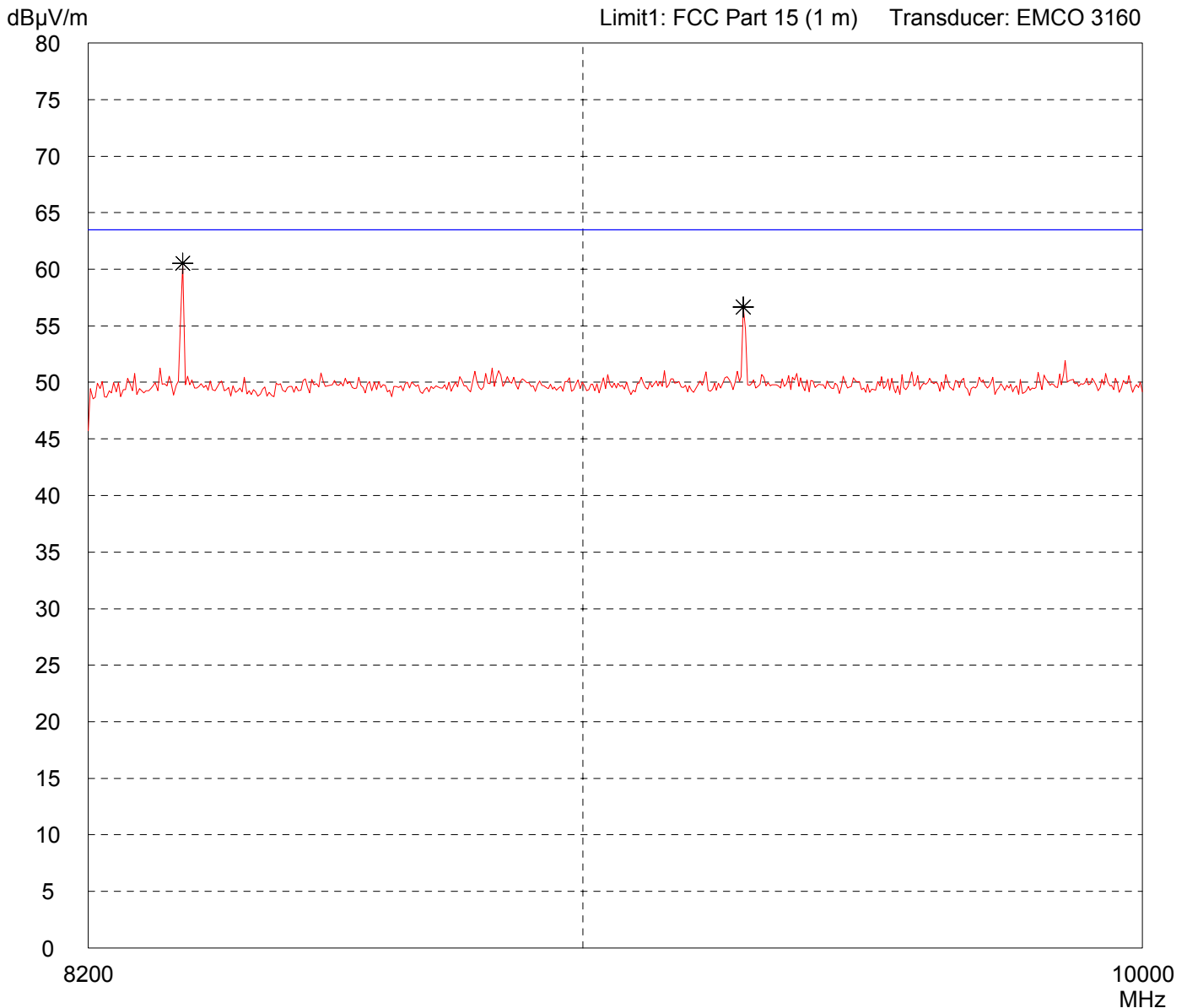
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 8.2 GHz - 10 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                        |                                                                                        |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                 | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                     |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                       |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                  |                                                                                        |
| Tested on:<br><b>Test distance 1 meter<br/>Horizontal Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                     | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                                | File name:<br><b>default.emi</b>                                                       |

|                          |                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><div style="display: flex; justify-content: space-between;"> <span><b>10 dB Margin</b></span> <span><b>50 Subranges</b></span> </div> |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|



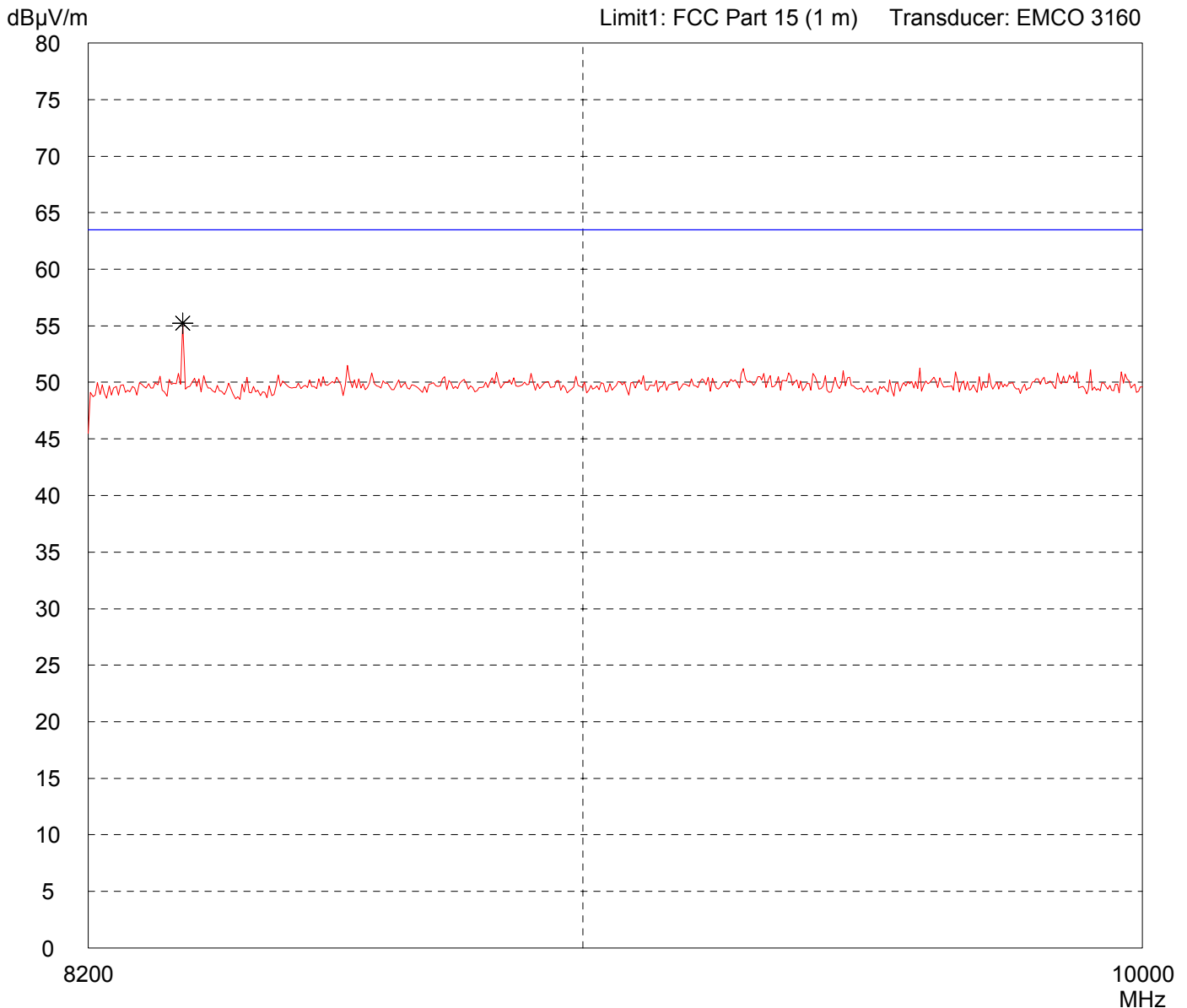
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 8.2 GHz - 10 GHz acc. to FCC Part 15 (EMCO 3160)

|                                                                            |                                                                                        |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                     | Comment:<br>- external DC supply<br><br>- transmitting continuously on highest channel |
| Serial no.:<br>---                                                         |                                                                                        |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                           |                                                                                        |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                      |                                                                                        |
| Tested on:<br><b>Test distance 1 meter</b><br><b>Vertical Polarization</b> |                                                                                        |
| Date of test:<br><b>07/19/2006</b>                                         | Operator:<br><b>M. Steindl</b>                                                         |
| Test performed:<br><b>automatically</b>                                    | File name:<br><b>default.emi</b>                                                       |

|                          |                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><div style="display: flex; justify-content: space-between;"> <span><b>10 dB Margin</b></span> <span><b>50 Subranges</b></span> </div> |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|



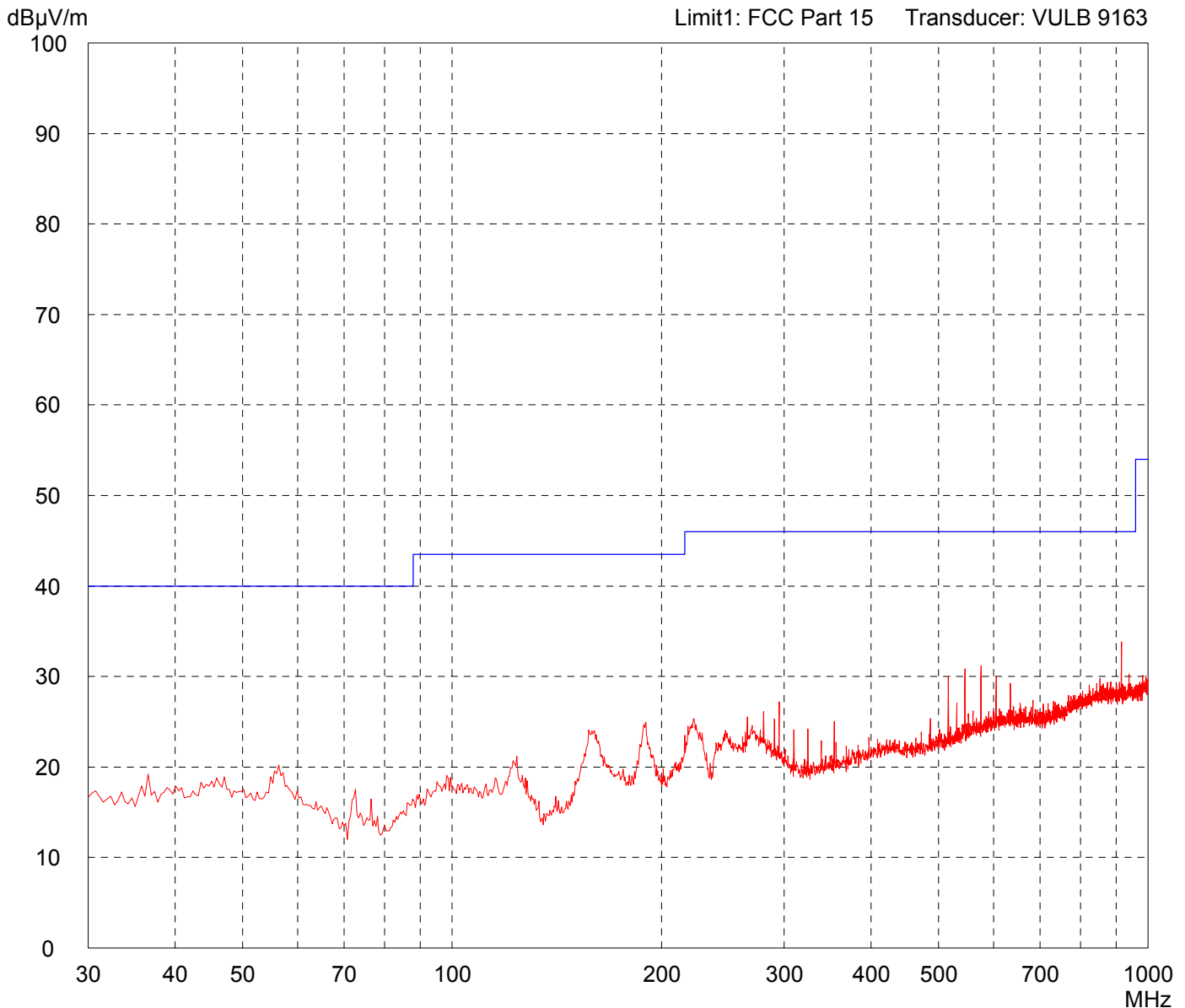
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

|                                                                               |                                                                       |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                        | Comment:<br>- external DC supply<br><br>- receiving on middle channel |
| Serial no.:<br>---                                                            |                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                              |                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                         |                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Horizontal Polarization</b> |                                                                       |
| Date of test:<br><b>07/21/2006</b>                                            | Operator:<br><b>M. Steindl</b>                                        |
| Test performed:<br><b>automatically</b>                                       | File name:<br><b>default.emi</b>                                      |

|                          |                                                                                                  |
|--------------------------|--------------------------------------------------------------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>10 dB Margin</b> <div style="text-align: right;"><b>50 Subranges</b></div> |
|--------------------------|--------------------------------------------------------------------------------------------------|



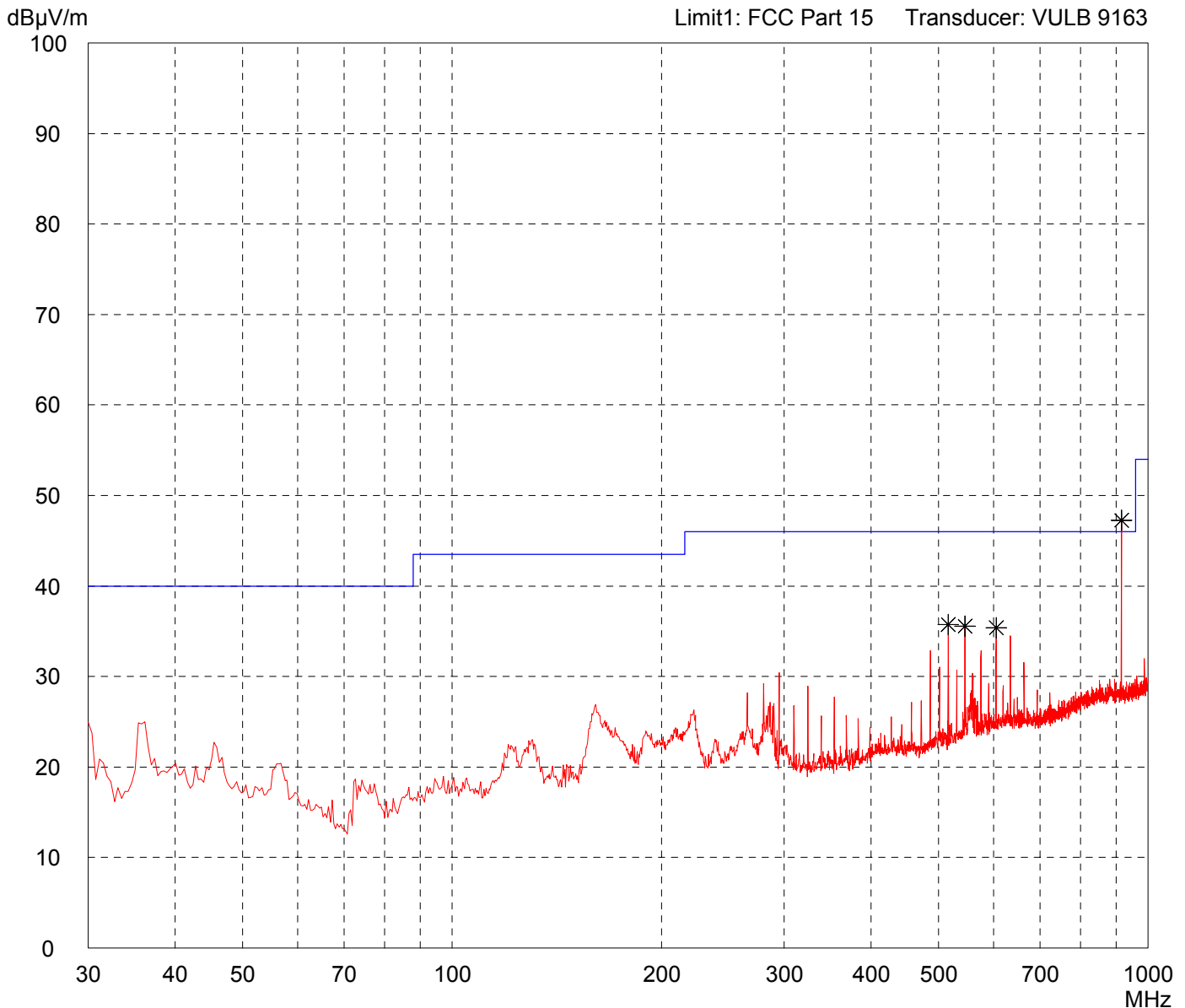
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

|                                                                             |                                                                       |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                      | Comment:<br>- external DC supply<br><br>- receiving on middle channel |
| Serial no.:<br>---                                                          |                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                            |                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                       |                                                                       |
| Tested on:<br><b>Test distance 3 metres</b><br><b>Vertical Polarization</b> |                                                                       |
| Date of test:<br><b>07/21/2006</b>                                          | Operator:<br><b>M. Steindl</b>                                        |
| Test performed:<br><b>automatically</b>                                     | File name:<br><b>default.emi</b>                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



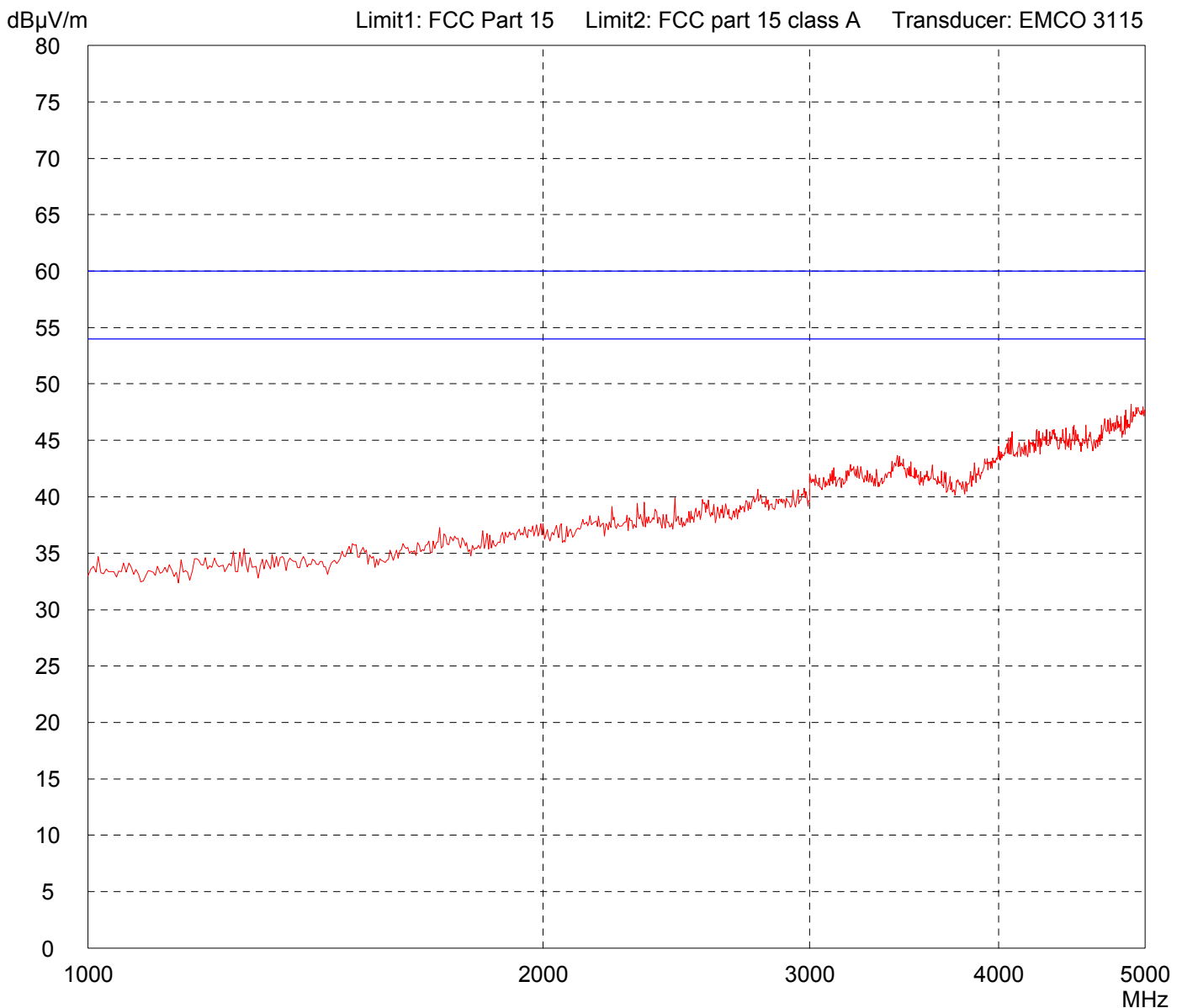
|                           |                                     |
|---------------------------|-------------------------------------|
| Result:<br><b>Prescan</b> | Project file:<br><b>50516-60368</b> |
|---------------------------|-------------------------------------|

# Radiated Emission Test 1 GHz - 5 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                         |                                                                       |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                  | Comment:<br>- external DC supply<br><br>- receiving on middle channel |
| Serial no.:<br>---                                                      |                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                        |                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                   |                                                                       |
| Tested on:<br><b>Test distance 3 metres<br/>Horizontal Polarization</b> |                                                                       |
| Date of test:<br><b>08/04/2006</b>                                      | Operator:<br><b>M. Steindl</b>                                        |
| Test performed:<br><b>automatically</b>                                 | File name:<br><b>default.emi</b>                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



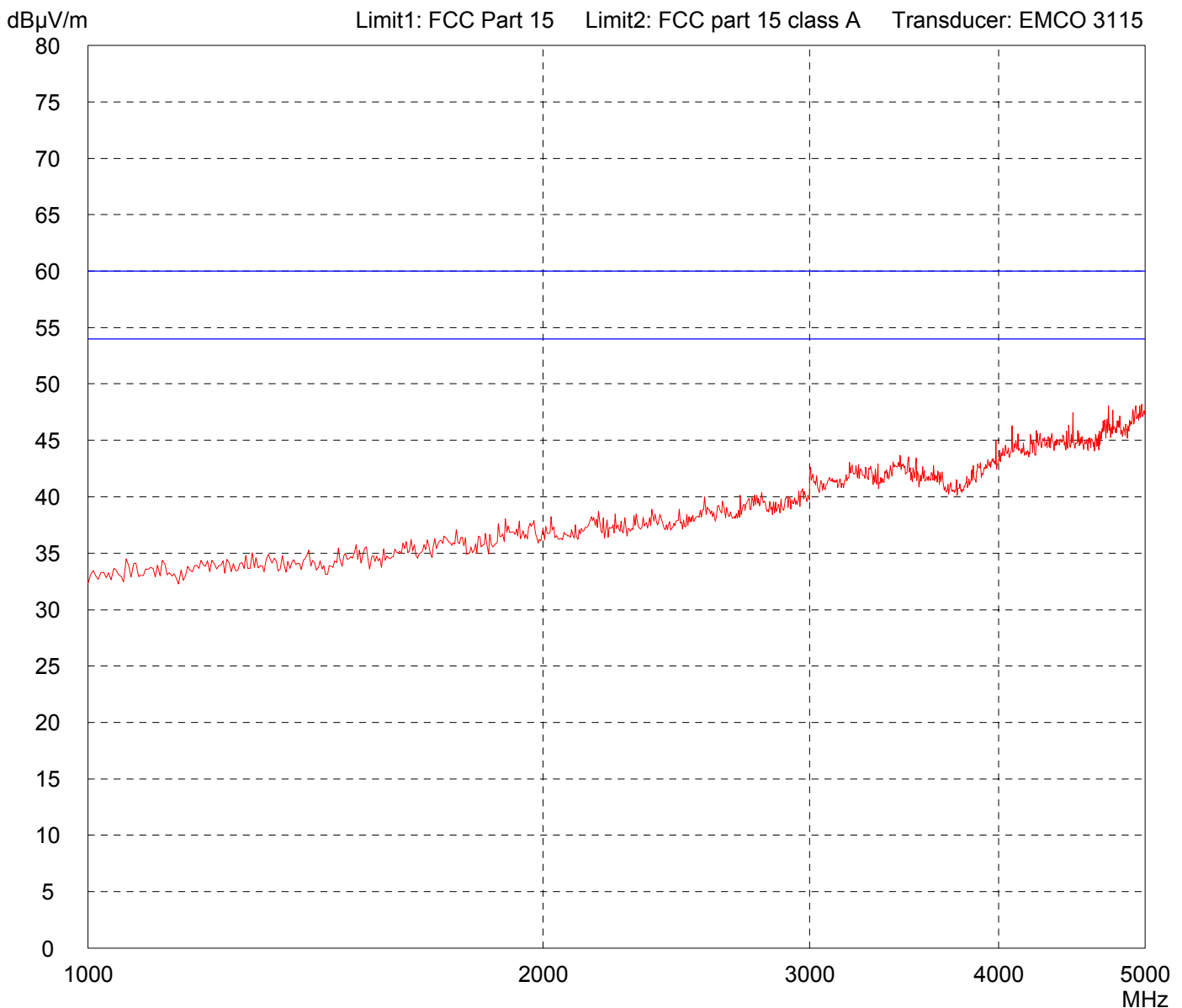
|                              |                                     |
|------------------------------|-------------------------------------|
| Result:<br><b>Limit kept</b> | Project file:<br><b>57403-60316</b> |
|------------------------------|-------------------------------------|

# Radiated Emission Test 1 GHz - 5 GHz acc. to FCC Part 15 (EMCO 3115)

|                                                                       |                                                                       |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------|
| Model:<br><b>WRX01</b>                                                | Comment:<br>- external DC supply<br><br>- receiving on middle channel |
| Serial no.:<br>---                                                    |                                                                       |
| Applicant:<br><b>Vigil Health Solutions Inc.</b>                      |                                                                       |
| Test site:<br><b>Fully anechoic room, cabin no. 2</b>                 |                                                                       |
| Tested on:<br><b>Test distance 3 metres<br/>Vertical Polarization</b> |                                                                       |
| Date of test:<br><b>08/04/2006</b>                                    | Operator:<br><b>M. Steindl</b>                                        |
| Test performed:<br><b>automatically</b>                               | File name:<br><b>default.emi</b>                                      |

|                          |                                            |
|--------------------------|--------------------------------------------|
| Detector:<br><b>Peak</b> | List of values:<br><b>Selected by hand</b> |
|--------------------------|--------------------------------------------|



|                              |                                     |
|------------------------------|-------------------------------------|
| Result:<br><b>Limit kept</b> | Project file:<br><b>57403-60316</b> |
|------------------------------|-------------------------------------|