

|   |                                 |                       |                |
|---|---------------------------------|-----------------------|----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                |
| Test No: T4354  |                                 | Test Report           | Page: 1 of 100 |



**dB Technology**

..... (Cambridge Ltd.) .....

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## REPORT ON ELECTROMAGNETIC COMPATIBILITY TESTS

**Performed at:  
TWENTY PENCE TEST SITE**

**Twenty Pence Road,  
Cottenham,  
Cambridge  
U.K.  
CB24 8PS**

on

Sepura PLC

SRG3500

dated

22nd June 2012

### Document History

| Issue | Date     | Affected page(s) | Description of modifications | Revised by | Approved by |
|-------|----------|------------------|------------------------------|------------|-------------|
| 1     | 06/07/12 |                  | Initial release              |            |             |
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|       |          |                  |                              |            |             |
|       |          |                  |                              |            |             |

Based on report template:  
v090319

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|---|---------------------------------|-----------------------|----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                |
| Test No: T4354  |                                 | Test Report           | Page: 2 of 100 |

Equipment Under Test (EUT): SRG3500

Test Commissioned by:  
Sepura PLC  
Radio House  
St Andrews Road  
Cambridge  
Cambridgeshire  
CB4 1GR

Representative: Bob Allen

Test Started: 10th May 2012

Test Completed: 20th June 2012

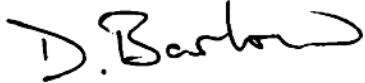
Test Engineer: Dave Smith

Date of Report: 22nd June 2012

Written by: Dave Smith Checked by: Derek Barlow

Signature: 

Date: 22nd June 2012 Date: 6th July 2012

Signature: 

**dB Technology can only report on the specific unit(s) tested at its site. The responsibility for extrapolating this data to a product line lies solely with the manufacturer.**

## Test Standards Applied

Part 90                    *Private Land Mobile Radio Services*  
of  
CFR47

CFR 47 Part 15            *Code of Federal Regulations: Pt 15 Subpart B- Radio Frequency Devices - Unintentional Radiators*

|   |                  |                       |             |  |                |
|---|------------------|-----------------------|-------------|--|----------------|
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## Emissions Test Results Summary

### Part 90

| Test                          | Port    | Method           | Limit                     | PASS/FAIL | PASS |
|-------------------------------|---------|------------------|---------------------------|-----------|------|
| Output Power Radiated         |         | 90.205           | 90.205(h)                 | No Limit  | #1   |
| Output Power Conducted        | antenna | 90.205<br>2.1046 | 90.205(h)                 | No Limit  | #1   |
| Types of Emissions            | antenna | 90.207<br>2.1047 | Specified by manufacturer |           |      |
| Bandwidth                     | antenna | 90.209<br>2.1049 | 90.209(b)(5)              | PASS      | #2   |
| Emissions Masks Radiated      |         | 90.210<br>2.1051 | 90.221(d)                 | PASS      | #3   |
| Emissions Masks Conducted     | antenna | 90.210<br>2.1051 | 90.221(d)                 | PASS      | #3   |
| Frequency Stability           | antenna | 90.213<br>2.1055 | 90.213                    | PASS      |      |
| Frequency Transient Behaviour | antenna | 90.214           | 90.214                    | PASS      |      |
| Adjacent Channel Power        |         | 90.221           | 90.221(b)                 | PASS      |      |

specs\_canadav111211

### CFR 47 Part 15

| Test                | Port     | Method          | Limit | PASS/FAIL | PASS |
|---------------------|----------|-----------------|-------|-----------|------|
| Conducted Emissions | ac power | ANSI C63.4:2003 | FCC_B | PASS      |      |
| Radiated Emissions  |          | ANSI C63.4:2003 | FCC_B | PASS      |      |

specs\_fccv100412

- #1 There is no specific limit on output power.
- #2 The additional note 6 of FCC Waiver 11-63 was applied which allows a bandwidth of up to 22kHz providing the additional Adjacent Channel Power requirements are met.
- #3 The additional note 5 of FCC Waiver 11-63 was applied which only stipulates limits 75kHz from the carrier providing the additional Adjacent Channel Power requirements are met.

**This Report shows that the EUT met all of the requirements for the tests performed - as shown above.**

|   |                  |                       |                |
|---|------------------|-----------------------|----------------|
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## 1 EUT Details

### 1.1 General

The EUT was a TETRA Voice + Data Mobile Station.

The transmitter can operate over the following frequency bands:

817MHz to 824MHz in Trunked Mode Operation (TMO mode)  
862MHz to 869MHz in Direct Mode Operation (DMO mode)

The receiver can operate over the following frequency bands:

817MHz to 824MHz

862MHz to 869MHz

Measurements were made at the top and bottom of the appropriate frequency range:

Bottom: 817 MHz  
Top: 824 MHz

Bottom: 862 MHz  
Top: 869 MHz

The nominal output power is 40dBm (10W).

The unit is normally powered from a lead acid vehicle battery with nominal voltage of 13.2V.

The product is intended to comply with the FCC part 90 requirements using the "Tetra Waiver" as described in FCC 11-63.

Radiated field strength tests were performed at the dB Technology Test Site Registered with the FCC: Registration number: 90528.

Unless otherwise stated, tests were performed with nominal power supply voltage.

The device can be used with a variety of peripherals and therefore radiated tests were performed in two separate configurations. Details of the configurations are given in the tables below.

|                     | Description   | P/N | Gain |
|---------------------|---------------|-----|------|
| Configuration 1     | Tetra         |     |      |
| Configuration 2/DMU | Tetra for DMU |     |      |

|   |                                 |                       |                |
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## 1.2 Modifications to EUT and Peripherals

Details of any modifications that were required to achieve compliance are listed below. The modification numbers are referred to in the results sections as appropriate.

| Mod No: | Details                      | Implemented for |
|---------|------------------------------|-----------------|
| 0       | Original sample as supplied. |                 |

## 1.3 EUT Operating Modes

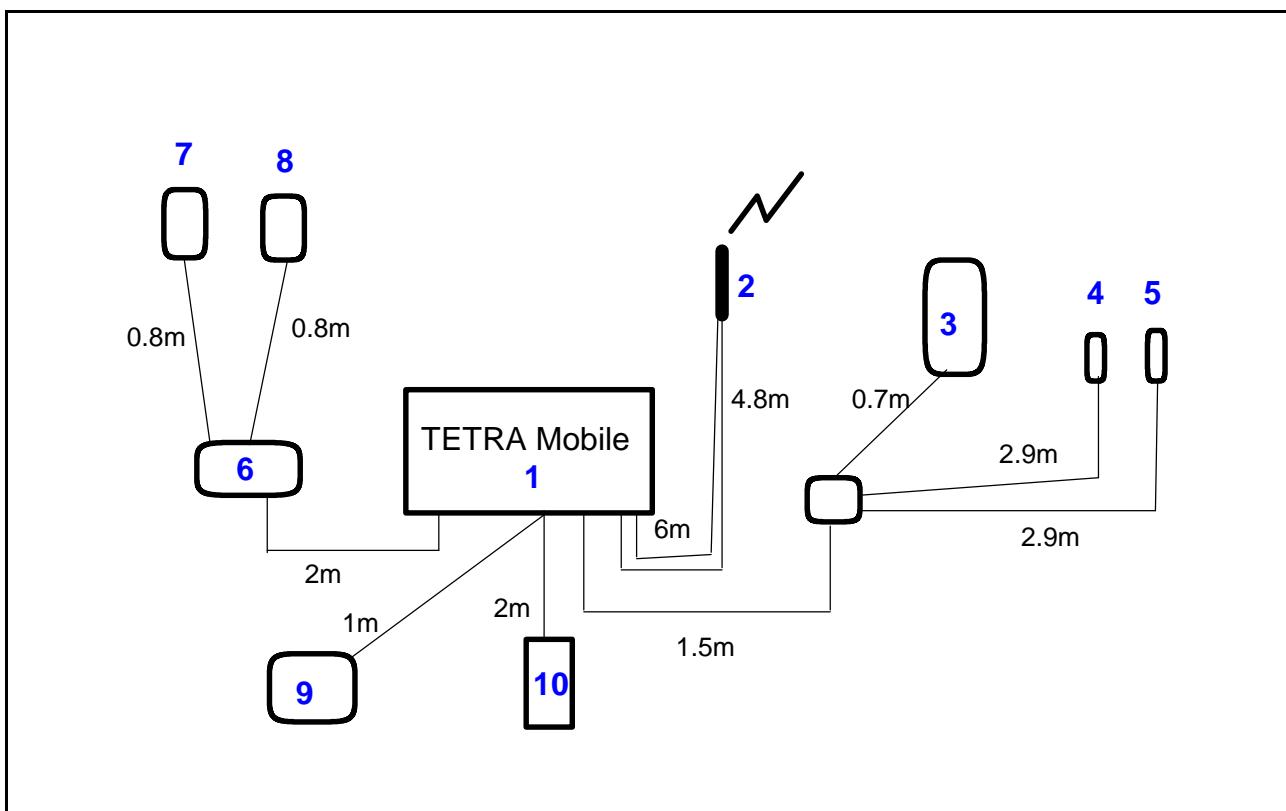
The EUT was tested in the following operating mode or modes. Generally, operating modes are chosen that will exercise the functions of the EUT as fully as possible and in a manner likely to produce maximum emission levels or susceptibility. Individual test result sheets reference the operating mode of the EUT.

| Operating Mode | Details                           |
|----------------|-----------------------------------|
| 1              | Transmitting on selected channel. |
| 2              | Receiving on selected channel.    |

### List of Equipment for Configuration 1:

| Item | Manufacturer | Model     | Description           | Serial No: | Notes |
|------|--------------|-----------|-----------------------|------------|-------|
| 1    | Sepura       | SRG3500   | TETRA Mobile Station  |            |       |
| 2    | Sepura       | 300-00390 | Antenna TETRA         |            |       |
| 3    | Sepura       | 300 00668 | Handset Based Console |            |       |
| 4    | Sepura       | 300 00295 | Hands Free Kit Switch |            |       |
| 5    | Sepura       | 300 00294 | Hands Free Kit Mic    |            |       |
| 6    | Sepura       | 300 00217 | Apps Interface Unit   |            |       |
| 7    | Sepura       | 300 00061 | Handset               |            |       |
| 8    | Sepura       | 300 00062 | Fist Mic              |            |       |
| 9    | Sepura       | 300 00719 | Speaker               |            |       |
| 10   | Kingshill    | 18V10CA   | Bench Power Supply    | 566        |       |

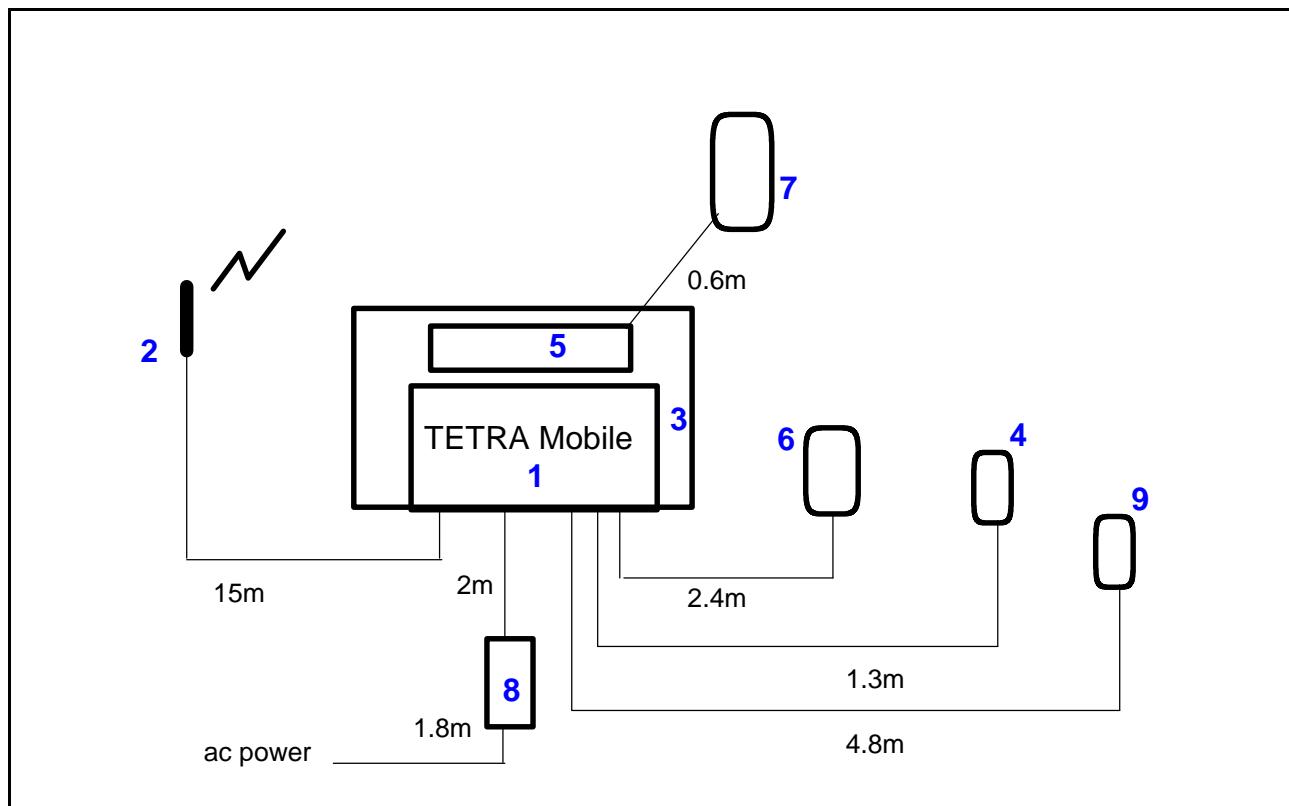
Figure 1 Configuration 1: EUT and Peripherals



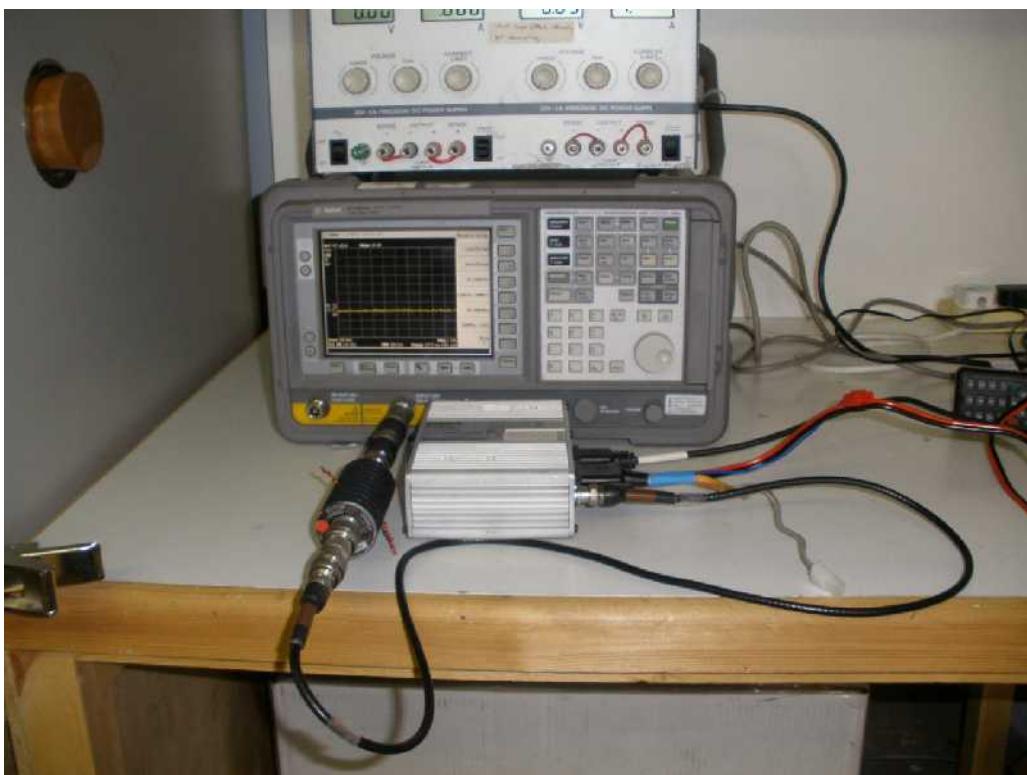
**List of Equipment for Configuration 2 - Desk Mount Unit (DMU) :**

| Item | Manufacturer | Model        | Description           | Serial No: | Notes |
|------|--------------|--------------|-----------------------|------------|-------|
| 1    | Sepura       | SRG3500      | TETRA Mobile Station  |            |       |
| 2    | Sepura       | 300-00993    | Antenna               |            |       |
| 3    | Sepura       | 300 00073    | Desk Mount Unit       |            |       |
| 4    | Sepura       | 300 00074    | Gooseneck Mic         |            |       |
| 5    | Sepura       | 300 00771    | IP 54 Colour Console  |            |       |
| 6    | Sepura       | 300 00076    | Foot Switch           |            |       |
| 7    | Sepura       | 300 00061    | Handset               |            |       |
| 8    | PowerSolve   | PSE65-12/SEY | AC-DC supply          | C2224642   |       |
| 9    | Sepura       | 300 00588    | Virtual Console cable |            |       |

**Figure 2 Configuration 2 - DMU: EUT and Peripherals**



|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
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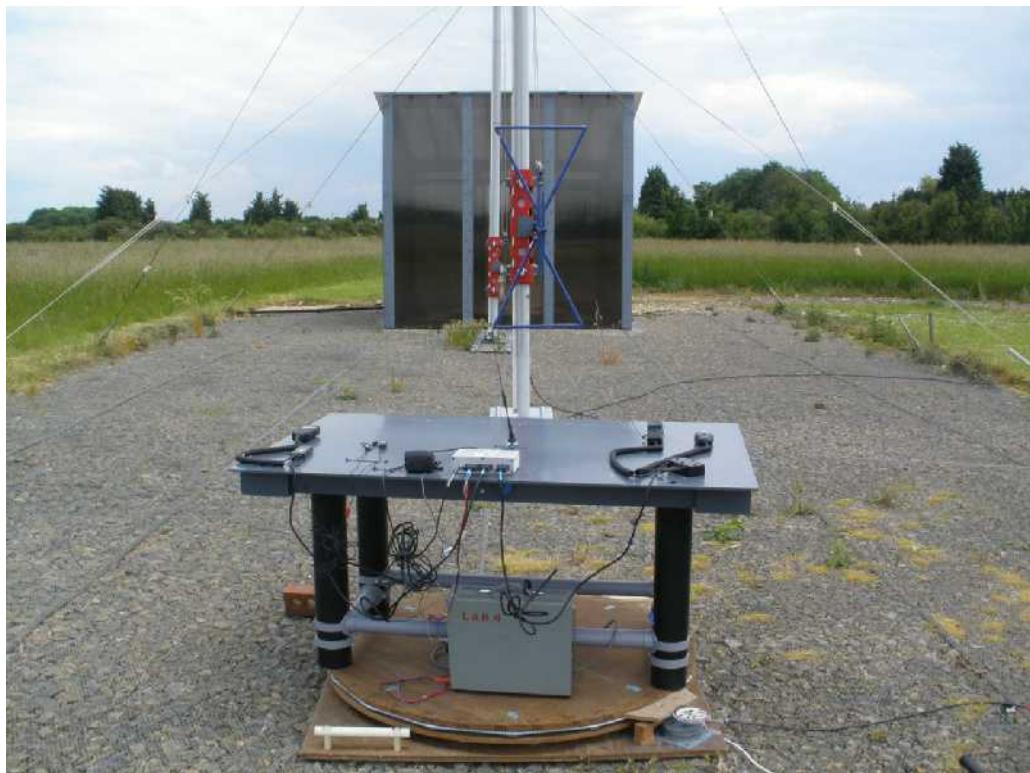


**Photograph 1 SRG3500: Connected to Agilent Analyser**

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
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**Photograph 2 Configuration 1: Radiated Emissions - Front**



**Photograph 3 Configuration 1: Radiated Emissions - Back**

|   |                                 |                       |                 |
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**Photograph 4 DMU: Radiated Emissions - Front**



**Photograph 5 DMU: Radiated Emissions - Back**

|   |                         |                              |  |                        |
|---|-------------------------|------------------------------|--|------------------------|
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## 2 Test Equipment

The test equipment used during the tests was one or more of the items listed below. Individual test result sheets indicate which items were used.

| Ref No: | Details  | Serial Number | Cal Date   | Cal Interval |
|---------|--|---------------|------------|--------------|
| A19     | EMCO 3115 DR Guide (1-18GHz)                                   | 2431          | 23/01/2012 | 1 year       |
| A23     | EMCO 3115 DR Guide (1-18GHz)                                   | 9507-4525     | 31/01/2012 | 1 year       |
| A24     | Chase X-wing Bilog CBL6144 26MHz-3GHz                          | 27590         | 18/11/2011 | 1 year       |
| A30     | Schwarzbeck MiniBicon (30MHz to 1GHz)                          | 9115-180      | 21/01/2010 | 3 years      |
| A5      | Chase Bilog CBL6111A   | 1760          | 31/01/2012 | 1 year       |
| L1      | EMCO 3825/2 LISN   | 1358          | 16/02/2012 | 1 year       |
| PM6     | Marconi 6960B RF Power Meter                                   | 236923/003    | 20/12/2011 | 1 year       |
| PRE3    | dB Tech 100M-20G 36dB pre-amp                                  | 03            | 08/01/2012 | 1 year       |
| PS10    | Marconi 6910 RF Power Sensor (-30dBm / + 20dBm) 10MHz to 20GHz | 5009          | 20/12/2011 | 1 year       |
| R1      | CHASE LHR 7000   | 1056          | 31/01/2012 | 1 year       |
| R4      | R&S ESVS10   | 843744/002    | 16/12/2011 | 1 year       |
| R8      | Agilent E7405A Spectrum Analyser                               | MY44212494    | 19/09/2011 | 1 year       |
| R9      | Agilent E7405A Spectrum Analyser                               | MY45110758    | 21/11/2011 | 1 year       |
| RFF15   | Band Pass Filter 1GHz to 2GHz                                  | 15            | 08/02/2012 | 1 year       |
| RFF16   | 500MHz to 1GHz Notch Filter                                    | FF204-3       | 08/02/2012 | 1 year       |
| RFF17   | Low Pass RF Filter 550MHz                                      | 17            | 08/02/2012 | 1 year       |
| RFF22   | High Pass Filter - 1.35GHz (10GHz) MicroTronics HPM13017       | 033           | 20/12/2011 | 1 year       |
| SG16    | Marconi 6203 Microwave Test Set (10MHz - 26.5GHz)              | 236252/025    | 08/02/2012 | 1 year       |
| SG9     | HP 8648C 9kHz-3.2GHz Signal Generator                          | 3847A05254    | 08/02/2012 | 1 year       |
| SEP1    | R&S FSU Spectrum Analyser                                      | 200088        | 02/04/2009 | 3 years      |
| TTS     | IFR 2968 Tetra radio Test Set                                  | 296501/107    | 11/11/2011 | 1 year       |

The Tetra Test Set is owned by Sepura.

The calibration of the signal generator was not critical because its output frequency, level and modulation were measured with calibrated equipment during each test.

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
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### 3 Test Methods

#### 3.1 Antenna Conducted Carrier Power

The antenna output is connected to a spectrum analyser via a suitable PAD. The bandwidth on the spectrum analyser is set to greater than the EUT occupied bandwidth. A peak measurement is recorded. Additional measurements are made with antenna output connected to a power meter providing average measurements.

#### 3.2 Antenna Conducted Transmitter Unwanted Emissions

Measurements are made with the antenna output connected to a spectrum analyser via a suitable PAD. Sweeps are made over the specified frequency ranges . The limit is set relative to the measured carrier power. A peak detector is used.

#### 3.3 Antenna Conducted Occupied Bandwidth

Measurements are made with the antenna output connected to a spectrum analyser via a suitable PAD. Sweeps are made with a 300Hz Resolution Bandwidth and a 1kHz Video Bandwidth. A peak detector is used. Markers are used to determine the 99% power bandwidth.

#### 3.4 Antenna Conducted Adjacent Channel Power

Measurements are made with the antenna output connected to an R&S FSU Spectrum Analyser via a suitable PAD. The Analyser is set to make adjacent channel power measurements using the pre-configured settings for Tetra with 25kHz channel spacing.

#### 3.5 Frequency Stability

The EUT is placed in an environmental chamber. The temperature inside the chamber is set to the required level and allowed to stabilise.

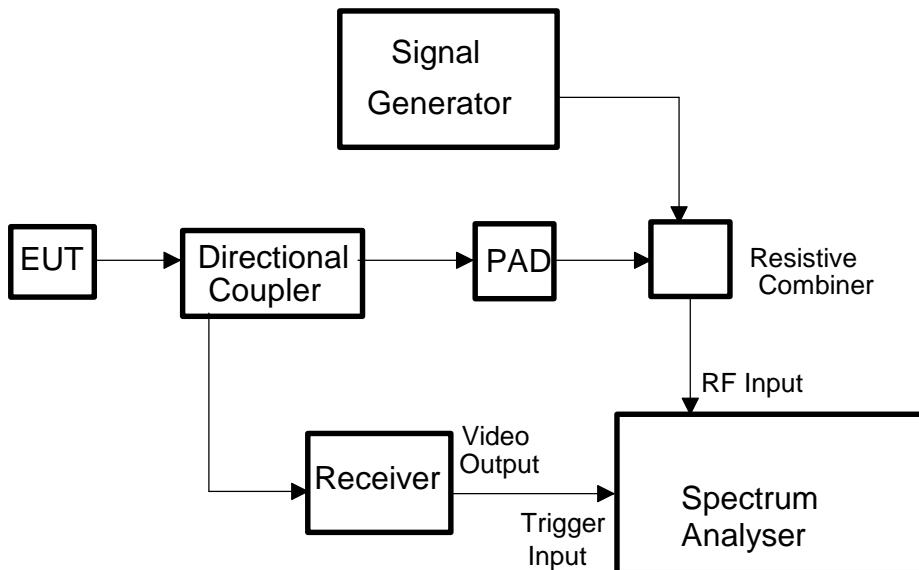
For DMO mode the antenna output is connected to a spectrum analyser via a suitable PAD. The EUT is set to transmit with constant carrier (at a frequency 2.25kHz above channel centre frequency). The frequency is measured using the frequency counter function of the spectrum analyser.

For TMO mode the antenna output is connected to a Tetra Test Set. The EUT is set to transmit using normal burst operation. the frequency error, as indicated by the Tetra Test Set, is recorded.

Measurements are made at the specified temperature and over the required voltage supply range of the EUT.

|   |                                 |                       |                 |
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### 3.6 Transient Frequency Behaviour



The test equipment was set up as shown above.

The spectrum analyser was set to 0Hz span with its inbuilt FM demodulation function activated.

Initially only the EUT was set to transmit an unmodulated signal and the centre frequency of the analyser adjusted to give 0Hz FM deviation.

The EUT transmitter was then switched off and the signal generator set to provide a carrier only output. The frequency of the signal generator was adjusted to again give 0Hz FM deviation on the spectrum analyser.

The signal generator FM modulation was then switched on and adjusted to give 25kHz FM deviation on the spectrum analyser.

The spectrum analyser was then set to trigger only on video output from the receiver. The directional coupler was used to feed an attenuated portion of the EUT transmitter into the receiver. The receiver was tuned to the transmit frequency and so produced a change on its video output when the transmitter was switched on and off. This signal was used to trigger the spectrum analyser.

FM deviation data was recorded from the spectrum analyser for both carrier switch on and switch off and at all three test frequencies.

|   |                                 |                       |                 |
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### 3.7 Radiated Transmitter Emissions (Substitution Method)

Initial scans are performed in a semi-anechoic screened room at a distance of 3m. Scans are performed over the frequency range specified in the test standard with the antenna both horizontally and vertically polarised. During these scans the EUT and peripherals are rotated through 360°. Bench top EUTs are placed on a non-conducting bench at a height of 0.8m above the ground plane. Floor standing EUTs are placed 0.1m above the ground plane. The EUT cables were manipulated in an attempt to produce maximum emissions. The results of the scans are shown in the plots included at the end of the report.

Significant emissions identified by the scans are measured using a substitution method. Maximised emission readings are obtained by rotating the EUT through 360° and adjusting the height of the antenna from 1m to 4m. Measurements are made with the antenna both horizontally and vertically polarised and the results tabulated.

The EUT is then replaced with a calibrated reference antenna fed from a signal generator. The level fed into the reference antenna is measured with a power meter. Measurements are made to determine the power output of the signal generator required to give the same emission levels as were observed from the EUT.

The radiated power from the EUT is calculated as:

Signal Level fed into Reference Antenna + Gain of Reference Antenna + Radiated Level From EUT - Radiated Level From Reference Antenna

For example, assuming following measurements:

|  |             |
|--|-------------|
| Signal Level fed into Reference Antenna                                  | = -14.3dBm  |
| Gain of Reference Antenna  | = 7.1 dBi   |
| Radiated Level from EUT (i.e. Level at Measuring Receiver)               | = 37 dBuV   |
| Radiated Level from Reference Antenna (i.e. Level at Measuring Receiver) | = 61.5 dBuV |

Then the Radiated Power from the EUT =  $-14.3 + 7.1 + 37 - 61.5$  dBm (isotropic)  
 $= -31.7$  dBm (isotropic)

### 3.8 Receiver Radiated Emissions

Initial scans are performed in a semi-anechoic screened room at a distance of 3m. Scans are performed over the frequency range specified in the test standard with the antenna both horizontally and vertically polarised. During these scans the EUT and peripherals are rotated through 360°. Bench top EUTs are placed on a non-conducting bench at a height of 0.8m above the ground plane. Floor standing EUTs are placed 0.1m above the ground plane. The EUT cables were manipulated in an attempt to produce maximum emissions. The results of the scans are shown in the plots included at the end of the report.

Significant emissions identified by the scans are measured on an open area test site at the appropriate test distance using a CISPR16 quasi-peak receiver. Maximised readings are obtained by rotating the EUT through 360° and adjusting the height of the antenna from 1m to 4m. Measurements are made with the antenna both horizontally and vertically polarised and the results tabulated.

Tabulated results show levels based on the following calculation:

Field Strength (dBuV) = receiver reading (dBuV) + CF (dB/m)

CF is the correction factor for the antenna and cable.

For example:

at 114MHz receiver reading was 17.9 dBuV, combined correction factor = 13.1 (dB/m).

$$\text{Total field strength} = 17.9 + 13.1 = 31.0 \text{ dBuV/m.}$$

|   |                  |                              |                 |
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### 3.9 Conducted Emissions - ac power

This section describes the general method of performing this test. The specific method used and any deviations from this general method are listed in the appropriate results section.

Bench top EUTs and peripheral equipment are normally placed on a 0.8m high non-conducting bench, positioned 0.4m from one of the metallic walls of a screened room. Floor standing EUTs are normally placed 0.1m above the metallic floor of the screened room. Mains leads are bundled so as not to exceed 1m.

The EUT is powered using a 50ohm/50uH Line Impedance Stabilisation Network (LISN). Peripherals are powered using a second a 50ohm/50uH LISN. These LISNs are bonded to the screened room floor.

With the correct supply voltage applied to the EUT scans are performed on both the live and neutral line outputs of the LISN using quasi-peak detection over the specified frequency range. The results of these scans are shown in the plots section at the end of the report.

Significant emissions identified by the scans are measured and the results tabulated. The table of results is shown in the conducted emissions results section.

$$\text{Final Level} = \text{Receiver Reading} + \text{Combined Cable \& Attenuator Correction Factor (dB)}$$

Example:

$$@ 191\text{kHz} \quad \text{Final Level} = 45.8 + 10.0 = 55.8 \text{ dBuV}$$

## 4 Test Results

The following sections contain tabulated test results. Plots of various scans are included at the back of this section.

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
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## 4.1 Conducted Antenna Output Power

Factor Set 1:  
Factor Set 2:  
Factor Set 3:  
Test Equipment: R9 PS10 PM6

### Conducted Emissions (Signal)

| Company: | Sepura PLC  |                 | Product:     | SRG3500    |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
|----------|---|-----------------|--------------|------------|---------|----------|-------------|---------|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|
| Date:    | 06/06/2012  |                 | Test Eng:    | Dave Smith |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| Ports:   | antenna   |                 |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| Test:    | 90.209  | using limits of | 90.209(b)(5) |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| Ports:   |   |                 |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| Test:    | using limits of   |                 |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| Notes    | Comments and Observations   |                 |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
|          | <p>Spectrum analyser results using a peak detector are shown in plots 1 to 4.</p> <p>Measurements were also made using a power meter with an average detector.</p> <p>Measurements were made with continuous modulation.</p> <p>Taking into account the loss of the cable and attenuators the following measurements were made:</p> <table> <thead> <tr> <th>Channel</th> <th>Peak dBm</th> <th>Average dBm</th> </tr> </thead> <tbody> <tr> <td>817 MHz</td> <td>40.9</td> <td>38.02</td> </tr> <tr> <td>824 MHz</td> <td>41.0</td> <td>38.08</td> </tr> <tr> <td>862 MHz</td> <td>40.6</td> <td>37.82</td> </tr> <tr> <td>869 MHz</td> <td>41.0</td> <td>38.13</td> </tr> </tbody> </table> |                 |              |            | Channel | Peak dBm | Average dBm | 817 MHz | 40.9 | 38.02 | 824 MHz | 41.0 | 38.08 | 862 MHz | 40.6 | 37.82 | 869 MHz | 41.0 | 38.13 |
| Channel  | Peak dBm  | Average dBm     |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| 817 MHz  | 40.9  | 38.02           |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| 824 MHz  | 41.0  | 38.08           |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| 862 MHz  | 40.6  | 37.82           |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |
| 869 MHz  | 41.0  | 38.13           |              |            |         |          |             |         |      |       |         |      |       |         |      |       |         |      |       |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
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## 4.2 Conducted Antenna Occupied Bandwidth

Factor Set 1:  
Factor Set 2: - - -  
Factor Set 3: - - -  
Test Equipment: R9

### Conducted Emissions (Signal)

| Company: Sepura PLC | Product: SRG3500   |        |           |        |           |        |           |        |           |
|---------------------|--|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| Date: 07/06/2012    | Test Eng: Dave Smith   |        |           |        |           |        |           |        |           |
| Ports: antenna      |  |        |           |        |           |        |           |        |           |
| Test: 90.210        | using limits of 90.221(d)  |        |           |        |           |        |           |        |           |
| Ports:              |  |        |           |        |           |        |           |        |           |
| Test:               | using limits of  |        |           |        |           |        |           |        |           |
| Notes               | Comments and Observations  |        |           |        |           |        |           |        |           |
|                     | <p>Measurements were made with continuous modulation applied.<br/>Spectrum analyser results are shown in plots 5 to 8.</p> <p>Using the "Bandwidth Power" function of the spectrum analyser, the following measurements were recorded:</p> <table> <tr> <td>817MHz</td> <td>21.03 kHz</td> </tr> <tr> <td>824MHz</td> <td>21.05 kHz</td> </tr> <tr> <td>862MHz</td> <td>20.89 kHz</td> </tr> <tr> <td>869MHz</td> <td>20.73 kHz</td> </tr> </table> <p>Limit:</p> <p>Using note 6 in the "Tetra Waiver" (FCC11-63) the limit is 22kHz (providing Adjacent Channel Power requirements are met).</p> <p>PASS</p> | 817MHz | 21.03 kHz | 824MHz | 21.05 kHz | 862MHz | 20.89 kHz | 869MHz | 20.73 kHz |
| 817MHz              | 21.03 kHz  |        |           |        |           |        |           |        |           |
| 824MHz              | 21.05 kHz  |        |           |        |           |        |           |        |           |
| 862MHz              | 20.89 kHz  |        |           |        |           |        |           |        |           |
| 869MHz              | 20.73 kHz  |        |           |        |           |        |           |        |           |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 20 of 100 |

### 4.3 Frequency Stability - DMO Mode - Absolute Frequency Measurements

Factor Set 1:  
Factor Set 2: - - -  
Factor Set 3: - - -  
Test Equipment: R9

#### Frequency Stability

| Company: Sepura PLC | Product: SRG3500  |                |                |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|---------------------|---|----------------|----------------|----------------|----------------|----------|-------|------------|------------|-------|------------|------------|-------|------------|------------|----------|-------|------------|------------|-------|------------|------------|-------|------------|------------|----------|-------|------------|------------|-------|------------|------------|-------|------------|------------|--------|-------|------------|------------|-------|------------|------------|-------|------------|------------|---------|-------|------------|------------|-------|------------|------------|-------|------------|------------|---------|-------|------------|------------|-------|------------|------------|-------|------------|------------|---------|-------|------------|------------|-------|------------|------------|-------|------------|------------|---------|-------|------------|------------|-------|------------|------------|-------|------------|------------|---------|-------|------------|------------|-------|------------|------------|-------|------------|------------|---------|-------|------------|------------|-------|------------|------------|-------|------------|------------|
| Date: 12/06/2012    | Test Eng: Dave Smith  |                |                |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| Ports: antenna      |   |                |                |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| Test: 90.205        | using limits of 90.205(h)   |                |                |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| Ports:              |   |                |                |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| Test:               | using limits of   |                |                |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| Notes               | Comments and Observations   |                |                |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | <p>DMO Frequency (as recorded from Spectrum Analyser Frequency Counter)</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th>862MHz Channel</th> <th>869MHz Channel</th> </tr> </thead> <tbody> <tr> <td rowspan="3">-30.0 °C</td> <td>10.8V</td> <td>862.002442</td> <td>869.002687</td> </tr> <tr> <td>13.2V</td> <td>862.002553</td> <td>869.002670</td> </tr> <tr> <td>15.6V</td> <td>862.002586</td> <td>869.002651</td> </tr> <tr> <td rowspan="3">-20.0 °C</td> <td>10.8V</td> <td>862.002589</td> <td>869.002562</td> </tr> <tr> <td>13.2V</td> <td>862.002647</td> <td>869.002527</td> </tr> <tr> <td>15.6V</td> <td>862.002658</td> <td>869.002467</td> </tr> <tr> <td rowspan="3">-10.0 °C</td> <td>10.8V</td> <td>862.002342</td> <td>869.002477</td> </tr> <tr> <td>13.2V</td> <td>862.002354</td> <td>869.002388</td> </tr> <tr> <td>15.6V</td> <td>862.002359</td> <td>869.002348</td> </tr> <tr> <td rowspan="3">0.0 °C</td> <td>10.8V</td> <td>862.002345</td> <td>869.002372</td> </tr> <tr> <td>13.2V</td> <td>862.002342</td> <td>869.002318</td> </tr> <tr> <td>15.6V</td> <td>862.002336</td> <td>869.002320</td> </tr> <tr> <td rowspan="3">10.0 °C</td> <td>10.8V</td> <td>862.002254</td> <td>869.002297</td> </tr> <tr> <td>13.2V</td> <td>862.002257</td> <td>869.002309</td> </tr> <tr> <td>15.6V</td> <td>862.002259</td> <td>869.002314</td> </tr> <tr> <td rowspan="3">20.0 °C</td> <td>10.8V</td> <td>862.002268</td> <td>869.002240</td> </tr> <tr> <td>13.2V</td> <td>862.002248</td> <td>869.002261</td> </tr> <tr> <td>15.6V</td> <td>862.002245</td> <td>869.002275</td> </tr> <tr> <td rowspan="3">30.0 °C</td> <td>10.8V</td> <td>862.002288</td> <td>869.002346</td> </tr> <tr> <td>13.2V</td> <td>862.002273</td> <td>869.002325</td> </tr> <tr> <td>15.6V</td> <td>862.002265</td> <td>869.002311</td> </tr> <tr> <td rowspan="3">40.0 °C</td> <td>10.8V</td> <td>862.002387</td> <td>869.002259</td> </tr> <tr> <td>13.2V</td> <td>862.002366</td> <td>869.002288</td> </tr> <tr> <td>15.6V</td> <td>862.002345</td> <td>869.002312</td> </tr> <tr> <td rowspan="3">50.0 °C</td> <td>10.8V</td> <td>862.002517</td> <td>869.002456</td> </tr> <tr> <td>13.2V</td> <td>862.002516</td> <td>869.002470</td> </tr> <tr> <td>15.6V</td> <td>862.002500</td> <td>869.002492</td> </tr> <tr> <td rowspan="3">55.0 °C</td> <td>10.8V</td> <td>862.002500</td> <td>869.002489</td> </tr> <tr> <td>13.2V</td> <td>862.002519</td> <td>869.002473</td> </tr> <tr> <td>15.6V</td> <td>862.002536</td> <td>869.002460</td> </tr> </tbody> </table> <p>See next page for deviation from nominal voltage/temperature.</p> |                |                | 862MHz Channel | 869MHz Channel | -30.0 °C | 10.8V | 862.002442 | 869.002687 | 13.2V | 862.002553 | 869.002670 | 15.6V | 862.002586 | 869.002651 | -20.0 °C | 10.8V | 862.002589 | 869.002562 | 13.2V | 862.002647 | 869.002527 | 15.6V | 862.002658 | 869.002467 | -10.0 °C | 10.8V | 862.002342 | 869.002477 | 13.2V | 862.002354 | 869.002388 | 15.6V | 862.002359 | 869.002348 | 0.0 °C | 10.8V | 862.002345 | 869.002372 | 13.2V | 862.002342 | 869.002318 | 15.6V | 862.002336 | 869.002320 | 10.0 °C | 10.8V | 862.002254 | 869.002297 | 13.2V | 862.002257 | 869.002309 | 15.6V | 862.002259 | 869.002314 | 20.0 °C | 10.8V | 862.002268 | 869.002240 | 13.2V | 862.002248 | 869.002261 | 15.6V | 862.002245 | 869.002275 | 30.0 °C | 10.8V | 862.002288 | 869.002346 | 13.2V | 862.002273 | 869.002325 | 15.6V | 862.002265 | 869.002311 | 40.0 °C | 10.8V | 862.002387 | 869.002259 | 13.2V | 862.002366 | 869.002288 | 15.6V | 862.002345 | 869.002312 | 50.0 °C | 10.8V | 862.002517 | 869.002456 | 13.2V | 862.002516 | 869.002470 | 15.6V | 862.002500 | 869.002492 | 55.0 °C | 10.8V | 862.002500 | 869.002489 | 13.2V | 862.002519 | 869.002473 | 15.6V | 862.002536 | 869.002460 |
|                     |   | 862MHz Channel | 869MHz Channel |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| -30.0 °C            | 10.8V   | 862.002442     | 869.002687     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002553     | 869.002670     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002586     | 869.002651     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| -20.0 °C            | 10.8V   | 862.002589     | 869.002562     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002647     | 869.002527     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002658     | 869.002467     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| -10.0 °C            | 10.8V   | 862.002342     | 869.002477     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002354     | 869.002388     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002359     | 869.002348     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| 0.0 °C              | 10.8V   | 862.002345     | 869.002372     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002342     | 869.002318     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002336     | 869.002320     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| 10.0 °C             | 10.8V   | 862.002254     | 869.002297     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002257     | 869.002309     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002259     | 869.002314     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| 20.0 °C             | 10.8V   | 862.002268     | 869.002240     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002248     | 869.002261     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002245     | 869.002275     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| 30.0 °C             | 10.8V   | 862.002288     | 869.002346     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002273     | 869.002325     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002265     | 869.002311     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| 40.0 °C             | 10.8V   | 862.002387     | 869.002259     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002366     | 869.002288     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002345     | 869.002312     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| 50.0 °C             | 10.8V   | 862.002517     | 869.002456     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002516     | 869.002470     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002500     | 869.002492     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
| 55.0 °C             | 10.8V   | 862.002500     | 869.002489     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 13.2V   | 862.002519     | 869.002473     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |
|                     | 15.6V   | 862.002536     | 869.002460     |                |                |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |          |       |            |            |       |            |            |       |            |            |        |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |         |       |            |            |       |            |            |       |            |            |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 21 of 100 |

#### 4.4 Frequency Stability - DMO Mode - Deviations from Nominal Volt/Temp - ppm

Factor Set 1:  
Factor Set 2: - - -  
Factor Set 3: - - -  
Test Equipment: R9

##### FrequencyStability

| Company: Sepura PLC | Product: SRG3500   |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|---------------------|--|-------------------|-------------------|-------------------|-------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|--------|-------|-------|-------|-------|--------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|--------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Date: 12/06/2012    | Test Eng: Dave Smith   |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Ports: antenna      |  |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Test: 90.205        | using limits of 90.205(h)  |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Ports:              |  |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Test:               | using limits of  |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Notes               | Comments and Observations  |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | <p>DMO Frequency deviation from nominal voltage/temperature - ppm</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th>862MHz<br/>Channel</th> <th>869MHz<br/>Channel</th> </tr> </thead> <tbody> <tr> <td rowspan="3">-30.0 °C</td> <td>10.8V</td> <td>0.225</td> <td>0.490</td> </tr> <tr> <td>13.2V</td> <td>0.354</td> <td>0.471</td> </tr> <tr> <td>15.6V</td> <td>0.392</td> <td>0.449</td> </tr> <tr> <td rowspan="3">-20.0 °C</td> <td>10.8V</td> <td>0.396</td> <td>0.346</td> </tr> <tr> <td>13.2V</td> <td>0.463</td> <td>0.306</td> </tr> <tr> <td>15.6V</td> <td>0.476</td> <td>0.237</td> </tr> <tr> <td rowspan="3">-10.0 °C</td> <td>10.8V</td> <td>0.109</td> <td>0.249</td> </tr> <tr> <td>13.2V</td> <td>0.123</td> <td>0.146</td> </tr> <tr> <td>15.6V</td> <td>0.129</td> <td>0.100</td> </tr> <tr> <td rowspan="3">0.0 °C</td> <td>10.8V</td> <td>0.113</td> <td>0.128</td> </tr> <tr> <td>13.2V</td> <td>0.109</td> <td>0.066</td> </tr> <tr> <td>15.6V</td> <td>0.102</td> <td>0.068</td> </tr> <tr> <td rowspan="3">10.0 °C</td> <td>10.8V</td> <td>0.007</td> <td>0.041</td> </tr> <tr> <td>13.2V</td> <td>0.010</td> <td>0.055</td> </tr> <tr> <td>15.6V</td> <td>0.013</td> <td>0.061</td> </tr> <tr> <td rowspan="3">20.0 °C</td> <td>10.8V</td> <td>0.023</td> <td>-0.024</td> </tr> <tr> <td>13.2V</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>15.6V</td> <td>-0.003</td> <td>0.016</td> </tr> <tr> <td rowspan="3">30.0 °C</td> <td>10.8V</td> <td>0.046</td> <td>0.098</td> </tr> <tr> <td>13.2V</td> <td>0.029</td> <td>0.074</td> </tr> <tr> <td>15.6V</td> <td>0.020</td> <td>0.058</td> </tr> <tr> <td rowspan="3">40.0 °C</td> <td>10.8V</td> <td>0.161</td> <td>-0.002</td> </tr> <tr> <td>13.2V</td> <td>0.137</td> <td>0.031</td> </tr> <tr> <td>15.6V</td> <td>0.113</td> <td>0.059</td> </tr> <tr> <td rowspan="3">50.0 °C</td> <td>10.8V</td> <td>0.312</td> <td>0.224</td> </tr> <tr> <td>13.2V</td> <td>0.311</td> <td>0.241</td> </tr> <tr> <td>15.6V</td> <td>0.292</td> <td>0.266</td> </tr> <tr> <td rowspan="3">55.0 °C</td> <td>10.8V</td> <td>0.292</td> <td>0.262</td> </tr> <tr> <td>13.2V</td> <td>0.314</td> <td>0.244</td> </tr> <tr> <td>15.6V</td> <td>0.334</td> <td>0.229</td> </tr> </tbody> </table> <p>The part 90 Limit for the 854MHz to 869MHz band is 2.5ppm</p> |                   |                   | 862MHz<br>Channel | 869MHz<br>Channel | -30.0 °C | 10.8V | 0.225 | 0.490 | 13.2V | 0.354 | 0.471 | 15.6V | 0.392 | 0.449 | -20.0 °C | 10.8V | 0.396 | 0.346 | 13.2V | 0.463 | 0.306 | 15.6V | 0.476 | 0.237 | -10.0 °C | 10.8V | 0.109 | 0.249 | 13.2V | 0.123 | 0.146 | 15.6V | 0.129 | 0.100 | 0.0 °C | 10.8V | 0.113 | 0.128 | 13.2V | 0.109 | 0.066 | 15.6V | 0.102 | 0.068 | 10.0 °C | 10.8V | 0.007 | 0.041 | 13.2V | 0.010 | 0.055 | 15.6V | 0.013 | 0.061 | 20.0 °C | 10.8V | 0.023 | -0.024 | 13.2V | 0.000 | 0.000 | 15.6V | -0.003 | 0.016 | 30.0 °C | 10.8V | 0.046 | 0.098 | 13.2V | 0.029 | 0.074 | 15.6V | 0.020 | 0.058 | 40.0 °C | 10.8V | 0.161 | -0.002 | 13.2V | 0.137 | 0.031 | 15.6V | 0.113 | 0.059 | 50.0 °C | 10.8V | 0.312 | 0.224 | 13.2V | 0.311 | 0.241 | 15.6V | 0.292 | 0.266 | 55.0 °C | 10.8V | 0.292 | 0.262 | 13.2V | 0.314 | 0.244 | 15.6V | 0.334 | 0.229 |
|                     |  | 862MHz<br>Channel | 869MHz<br>Channel |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| -30.0 °C            | 10.8V  | 0.225             | 0.490             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.354             | 0.471             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.392             | 0.449             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| -20.0 °C            | 10.8V  | 0.396             | 0.346             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.463             | 0.306             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.476             | 0.237             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| -10.0 °C            | 10.8V  | 0.109             | 0.249             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.123             | 0.146             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.129             | 0.100             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 0.0 °C              | 10.8V  | 0.113             | 0.128             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.109             | 0.066             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.102             | 0.068             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 10.0 °C             | 10.8V  | 0.007             | 0.041             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.010             | 0.055             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.013             | 0.061             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 20.0 °C             | 10.8V  | 0.023             | -0.024            |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.000             | 0.000             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | -0.003            | 0.016             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 30.0 °C             | 10.8V  | 0.046             | 0.098             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.029             | 0.074             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.020             | 0.058             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 40.0 °C             | 10.8V  | 0.161             | -0.002            |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.137             | 0.031             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.113             | 0.059             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 50.0 °C             | 10.8V  | 0.312             | 0.224             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.311             | 0.241             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.292             | 0.266             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 55.0 °C             | 10.8V  | 0.292             | 0.262             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.314             | 0.244             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.334             | 0.229             |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | PASS   |                   |                   |                   |                   |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |        |       |         |       |       |       |       |       |       |       |       |       |         |       |       |        |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 22 of 100 |

## 4.5 Frequency Stability - TMO Mode - Frequency Error Hz

Factor Set 1:

Factor Set 2:

Factor Set 3:

Test Equipment: TTS

### FrequencyStability

| Company: Sepura PLC | Product: SRG3500  |                   |                   |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|---------------------|---|-------------------|-------------------|-------------------|-------------------|----------|-------|------|-----|-------|------|-----|-------|-------|-----|----------|-------|------|-----|-------|------|-----|-------|------|-----|----------|-------|------|------|-------|-------|-----|-------|-------|-----|--------|-------|------|------|-------|------|------|-------|-------|------|---------|-------|-----|-----|-------|-----|-----|-------|-----|-----|---------|-------|-----|-----|-------|-----|-----|-------|-----|-----|---------|-------|-----|------|-------|-----|------|-------|-----|------|---------|-------|------|------|-------|------|------|-------|------|------|---------|-------|------|------|-------|------|------|-------|------|------|---------|-------|-----|------|-------|-----|------|-------|------|------|
| Date: 12/06/2012    | Test Eng: Dave Smith  |                   |                   |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| Ports: antenna      |   |                   |                   |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| Test: 90.205        | using limits of 90.205(h)   |                   |                   |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| Ports:              |   |                   |                   |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| Test:               | using limits of   |                   |                   |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| Notes               | Comments and Observations   |                   |                   |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | <p>TMO Frequency Error (as recorded from Tetra Test Set) (Hz)</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th>817MHz<br/>Channel</th> <th>824MHz<br/>Channel</th> </tr> </thead> <tbody> <tr> <td rowspan="3">-30.0 °C</td> <td>10.8V</td> <td>-7.4</td> <td>0.5</td> </tr> <tr> <td>13.2V</td> <td>-8.4</td> <td>0.9</td> </tr> <tr> <td>15.6V</td> <td>-10.4</td> <td>0.7</td> </tr> <tr> <td rowspan="3">-20.0 °C</td> <td>10.8V</td> <td>-1.2</td> <td>1.2</td> </tr> <tr> <td>13.2V</td> <td>-2.2</td> <td>1.4</td> </tr> <tr> <td>15.6V</td> <td>-4.7</td> <td>0.0</td> </tr> <tr> <td rowspan="3">-10.0 °C</td> <td>10.8V</td> <td>-8.6</td> <td>-1.6</td> </tr> <tr> <td>13.2V</td> <td>-10.0</td> <td>1.1</td> </tr> <tr> <td>15.6V</td> <td>-11.3</td> <td>0.3</td> </tr> <tr> <td rowspan="3">0.0 °C</td> <td>10.8V</td> <td>-7.8</td> <td>-0.5</td> </tr> <tr> <td>13.2V</td> <td>-9.3</td> <td>-0.8</td> </tr> <tr> <td>15.6V</td> <td>-11.0</td> <td>-0.6</td> </tr> <tr> <td rowspan="3">10.0 °C</td> <td>10.8V</td> <td>4.5</td> <td>7.8</td> </tr> <tr> <td>13.2V</td> <td>4.3</td> <td>7.0</td> </tr> <tr> <td>15.6V</td> <td>4.0</td> <td>6.8</td> </tr> <tr> <td rowspan="3">20.0 °C</td> <td>10.8V</td> <td>2.8</td> <td>7.3</td> </tr> <tr> <td>13.2V</td> <td>3.8</td> <td>6.5</td> </tr> <tr> <td>15.6V</td> <td>5.1</td> <td>5.9</td> </tr> <tr> <td rowspan="3">30.0 °C</td> <td>10.8V</td> <td>8.0</td> <td>18.4</td> </tr> <tr> <td>13.2V</td> <td>9.1</td> <td>16.1</td> </tr> <tr> <td>15.6V</td> <td>8.3</td> <td>14.6</td> </tr> <tr> <td rowspan="3">40.0 °C</td> <td>10.8V</td> <td>17.0</td> <td>13.2</td> </tr> <tr> <td>13.2V</td> <td>17.7</td> <td>12.7</td> </tr> <tr> <td>15.6V</td> <td>15.2</td> <td>14.3</td> </tr> <tr> <td rowspan="3">50.0 °C</td> <td>10.8V</td> <td>12.6</td> <td>12.7</td> </tr> <tr> <td>13.2V</td> <td>14.4</td> <td>13.1</td> </tr> <tr> <td>15.6V</td> <td>13.3</td> <td>12.7</td> </tr> <tr> <td rowspan="3">55.0 °C</td> <td>10.8V</td> <td>8.0</td> <td>12.4</td> </tr> <tr> <td>13.2V</td> <td>8.3</td> <td>12.5</td> </tr> <tr> <td>15.6V</td> <td>10.4</td> <td>12.2</td> </tr> </tbody> </table> |                   |                   | 817MHz<br>Channel | 824MHz<br>Channel | -30.0 °C | 10.8V | -7.4 | 0.5 | 13.2V | -8.4 | 0.9 | 15.6V | -10.4 | 0.7 | -20.0 °C | 10.8V | -1.2 | 1.2 | 13.2V | -2.2 | 1.4 | 15.6V | -4.7 | 0.0 | -10.0 °C | 10.8V | -8.6 | -1.6 | 13.2V | -10.0 | 1.1 | 15.6V | -11.3 | 0.3 | 0.0 °C | 10.8V | -7.8 | -0.5 | 13.2V | -9.3 | -0.8 | 15.6V | -11.0 | -0.6 | 10.0 °C | 10.8V | 4.5 | 7.8 | 13.2V | 4.3 | 7.0 | 15.6V | 4.0 | 6.8 | 20.0 °C | 10.8V | 2.8 | 7.3 | 13.2V | 3.8 | 6.5 | 15.6V | 5.1 | 5.9 | 30.0 °C | 10.8V | 8.0 | 18.4 | 13.2V | 9.1 | 16.1 | 15.6V | 8.3 | 14.6 | 40.0 °C | 10.8V | 17.0 | 13.2 | 13.2V | 17.7 | 12.7 | 15.6V | 15.2 | 14.3 | 50.0 °C | 10.8V | 12.6 | 12.7 | 13.2V | 14.4 | 13.1 | 15.6V | 13.3 | 12.7 | 55.0 °C | 10.8V | 8.0 | 12.4 | 13.2V | 8.3 | 12.5 | 15.6V | 10.4 | 12.2 |
|                     |   | 817MHz<br>Channel | 824MHz<br>Channel |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| -30.0 °C            | 10.8V   | -7.4              | 0.5               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | -8.4              | 0.9               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | -10.4             | 0.7               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| -20.0 °C            | 10.8V   | -1.2              | 1.2               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | -2.2              | 1.4               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | -4.7              | 0.0               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| -10.0 °C            | 10.8V   | -8.6              | -1.6              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | -10.0             | 1.1               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | -11.3             | 0.3               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| 0.0 °C              | 10.8V   | -7.8              | -0.5              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | -9.3              | -0.8              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | -11.0             | -0.6              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| 10.0 °C             | 10.8V   | 4.5               | 7.8               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | 4.3               | 7.0               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | 4.0               | 6.8               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| 20.0 °C             | 10.8V   | 2.8               | 7.3               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | 3.8               | 6.5               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | 5.1               | 5.9               |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| 30.0 °C             | 10.8V   | 8.0               | 18.4              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | 9.1               | 16.1              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | 8.3               | 14.6              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| 40.0 °C             | 10.8V   | 17.0              | 13.2              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | 17.7              | 12.7              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | 15.2              | 14.3              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| 50.0 °C             | 10.8V   | 12.6              | 12.7              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | 14.4              | 13.1              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | 13.3              | 12.7              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
| 55.0 °C             | 10.8V   | 8.0               | 12.4              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 13.2V   | 8.3               | 12.5              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |
|                     | 15.6V   | 10.4              | 12.2              |                   |                   |          |       |      |     |       |      |     |       |       |     |          |       |      |     |       |      |     |       |      |     |          |       |      |      |       |       |     |       |       |     |        |       |      |      |       |      |      |       |       |      |         |       |     |     |       |     |     |       |     |     |         |       |     |     |       |     |     |       |     |     |         |       |     |      |       |     |      |       |     |      |         |       |      |      |       |      |      |       |      |      |         |       |      |      |       |      |      |       |      |      |         |       |     |      |       |     |      |       |      |      |

See next page for deviation in ppm.

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 23 of 100 |

## 4.6 Frequency Stability - TMO Mode - Deviation from nominal volt/temp - ppm

Factor Set 1:

Factor Set 2:

Factor Set 3:

Test Equipment: TTS

### FrequencyStability

| Company: Sepura PLC | Product: SRG3500   |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|---------------------|--|----------------|----------------|----------------|----------------|----------|-------|--------|--------|-------|--------|--------|-------|--------|--------|----------|-------|--------|--------|-------|--------|--------|-------|--------|--------|----------|-------|--------|--------|-------|--------|--------|-------|--------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|--------|-------|-------|-------|-------|-------|-------|--------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Date: 12/06/2012    | Test Eng: Dave Smith   |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Ports: antenna      |  |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Test: 90.205        | using limits of 90.205(h)  |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Ports:              |  |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Test:               | using limits of  |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| Notes               | Comments and Observations  |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | <p>TMO Frequency deviation - ppm</p> <table border="1"> <thead> <tr> <th></th> <th></th> <th>817MHz Channel</th> <th>824MHz Channel</th> </tr> </thead> <tbody> <tr> <td rowspan="3">-30.0 °C</td> <td>10.8V</td> <td>-0.014</td> <td>-0.007</td> </tr> <tr> <td>13.2V</td> <td>-0.015</td> <td>-0.007</td> </tr> <tr> <td>15.6V</td> <td>-0.017</td> <td>-0.007</td> </tr> <tr> <td rowspan="3">-20.0 °C</td> <td>10.8V</td> <td>-0.006</td> <td>-0.006</td> </tr> <tr> <td>13.2V</td> <td>-0.007</td> <td>-0.006</td> </tr> <tr> <td>15.6V</td> <td>-0.010</td> <td>-0.008</td> </tr> <tr> <td rowspan="3">-10.0 °C</td> <td>10.8V</td> <td>-0.015</td> <td>-0.010</td> </tr> <tr> <td>13.2V</td> <td>-0.017</td> <td>-0.007</td> </tr> <tr> <td>15.6V</td> <td>-0.018</td> <td>-0.008</td> </tr> <tr> <td rowspan="3">0.0 °C</td> <td>10.8V</td> <td>-0.014</td> <td>-0.008</td> </tr> <tr> <td>13.2V</td> <td>-0.016</td> <td>-0.009</td> </tr> <tr> <td>15.6V</td> <td>-0.018</td> <td>-0.009</td> </tr> <tr> <td rowspan="3">10.0 °C</td> <td>10.8V</td> <td>0.001</td> <td>0.002</td> </tr> <tr> <td>13.2V</td> <td>0.001</td> <td>0.001</td> </tr> <tr> <td>15.6V</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td rowspan="3">20.0 °C</td> <td>10.8V</td> <td>-0.001</td> <td>0.001</td> </tr> <tr> <td>13.2V</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>15.6V</td> <td>0.002</td> <td>-0.001</td> </tr> <tr> <td rowspan="3">30.0 °C</td> <td>10.8V</td> <td>0.005</td> <td>0.014</td> </tr> <tr> <td>13.2V</td> <td>0.006</td> <td>0.012</td> </tr> <tr> <td>15.6V</td> <td>0.006</td> <td>0.010</td> </tr> <tr> <td rowspan="3">40.0 °C</td> <td>10.8V</td> <td>0.016</td> <td>0.008</td> </tr> <tr> <td>13.2V</td> <td>0.017</td> <td>0.008</td> </tr> <tr> <td>15.6V</td> <td>0.014</td> <td>0.009</td> </tr> <tr> <td rowspan="3">50.0 °C</td> <td>10.8V</td> <td>0.011</td> <td>0.008</td> </tr> <tr> <td>13.2V</td> <td>0.013</td> <td>0.008</td> </tr> <tr> <td>15.6V</td> <td>0.012</td> <td>0.008</td> </tr> <tr> <td rowspan="3">55.0 °C</td> <td>10.8V</td> <td>0.005</td> <td>0.007</td> </tr> <tr> <td>13.2V</td> <td>0.006</td> <td>0.007</td> </tr> <tr> <td>15.6V</td> <td>0.008</td> <td>0.007</td> </tr> </tbody> </table> <p>The part 90 Limit for the 809MHz to 824MHz band is 2.5ppm</p> |                |                | 817MHz Channel | 824MHz Channel | -30.0 °C | 10.8V | -0.014 | -0.007 | 13.2V | -0.015 | -0.007 | 15.6V | -0.017 | -0.007 | -20.0 °C | 10.8V | -0.006 | -0.006 | 13.2V | -0.007 | -0.006 | 15.6V | -0.010 | -0.008 | -10.0 °C | 10.8V | -0.015 | -0.010 | 13.2V | -0.017 | -0.007 | 15.6V | -0.018 | -0.008 | 0.0 °C | 10.8V | -0.014 | -0.008 | 13.2V | -0.016 | -0.009 | 15.6V | -0.018 | -0.009 | 10.0 °C | 10.8V | 0.001 | 0.002 | 13.2V | 0.001 | 0.001 | 15.6V | 0.000 | 0.000 | 20.0 °C | 10.8V | -0.001 | 0.001 | 13.2V | 0.000 | 0.000 | 15.6V | 0.002 | -0.001 | 30.0 °C | 10.8V | 0.005 | 0.014 | 13.2V | 0.006 | 0.012 | 15.6V | 0.006 | 0.010 | 40.0 °C | 10.8V | 0.016 | 0.008 | 13.2V | 0.017 | 0.008 | 15.6V | 0.014 | 0.009 | 50.0 °C | 10.8V | 0.011 | 0.008 | 13.2V | 0.013 | 0.008 | 15.6V | 0.012 | 0.008 | 55.0 °C | 10.8V | 0.005 | 0.007 | 13.2V | 0.006 | 0.007 | 15.6V | 0.008 | 0.007 |
|                     |  | 817MHz Channel | 824MHz Channel |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| -30.0 °C            | 10.8V  | -0.014         | -0.007         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | -0.015         | -0.007         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | -0.017         | -0.007         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| -20.0 °C            | 10.8V  | -0.006         | -0.006         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | -0.007         | -0.006         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | -0.010         | -0.008         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| -10.0 °C            | 10.8V  | -0.015         | -0.010         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | -0.017         | -0.007         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | -0.018         | -0.008         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 0.0 °C              | 10.8V  | -0.014         | -0.008         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | -0.016         | -0.009         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | -0.018         | -0.009         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 10.0 °C             | 10.8V  | 0.001          | 0.002          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.001          | 0.001          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.000          | 0.000          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 20.0 °C             | 10.8V  | -0.001         | 0.001          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.000          | 0.000          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.002          | -0.001         |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 30.0 °C             | 10.8V  | 0.005          | 0.014          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.006          | 0.012          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.006          | 0.010          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 40.0 °C             | 10.8V  | 0.016          | 0.008          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.017          | 0.008          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.014          | 0.009          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 50.0 °C             | 10.8V  | 0.011          | 0.008          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.013          | 0.008          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.012          | 0.008          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
| 55.0 °C             | 10.8V  | 0.005          | 0.007          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 13.2V  | 0.006          | 0.007          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | 15.6V  | 0.008          | 0.007          |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |
|                     | PASS   |                |                |                |                |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |          |       |        |        |       |        |        |       |        |        |        |       |        |        |       |        |        |       |        |        |         |       |       |       |       |       |       |       |       |       |         |       |        |       |       |       |       |       |       |        |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |         |       |       |       |       |       |       |       |       |       |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 24 of 100 |

## 4.7 Conducted Emission Antenna Adjacent Channel Power

Factor Set 1:  
Factor Set 2: - - -  
Factor Set 3: - - -  
Test Equipment: SEP1

### Conducted Emissions (Signal)

| Company:    | Sepura PLC   |        | Product:  | SRG3500    |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
|-------------|--|--------|-----------|------------|---------|---------|-----------------|--|--|--|--|--|--|---------|--|--|--|--|--|--|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|-----|-----|-----|-----|-----|-----|
| Date:       | 07/06/2012   |        | Test Eng: | Dave Smith |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| Ports:      | antenna  |        |           |            |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| Test:       | 90.213 using limits of   |        | 90.213    |            |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| Ports:      |  |        |           |            |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| Test:       |  |        |           |            |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| Notes       | Comments and Observations  |        |           |            |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
|             | <p>Using the R&amp;S FSU Spectrum analyser with the appropriate Tetra adjacent channel power settings. Captured results are shown in plots 9 to 12.</p> <table> <thead> <tr> <th></th> <th colspan="6">Readings in dBc</th> </tr> <tr> <th></th> <th colspan="6">Channel</th> </tr> <tr> <th></th> <th>-75kHz</th> <th>-50kHz</th> <th>-25kHz</th> <th>+ 25kHz</th> <th>+ 50kHz</th> <th>+ 75kHz</th> </tr> </thead> <tbody> <tr> <td>817MHz</td> <td>-79.26</td> <td>-76.60</td> <td>-65.30</td> <td>-65.48</td> <td>-76.42</td> <td>-79.26</td> </tr> <tr> <td>824MHz</td> <td>-79.60</td> <td>-76.28</td> <td>-63.98</td> <td>-65.90</td> <td>-75.97</td> <td>-79.61</td> </tr> <tr> <td>862MHz</td> <td>-79.38</td> <td>-75.52</td> <td>-63.63</td> <td>-64.23</td> <td>-75.46</td> <td>-79.36</td> </tr> <tr> <td>869MHz</td> <td>-78.51</td> <td>-75.59</td> <td>-62.57</td> <td>-63.56</td> <td>-75.61</td> <td>-78.31</td> </tr> <tr> <td>Limit (dBc)</td> <td>-65</td> <td>-65</td> <td>-55</td> <td>-55</td> <td>-65</td> <td>-65</td> </tr> </tbody> </table> <p>Limit shown is the maximum allowed level (dBc) for a product with output power less than 15 W and operating at a frequency above 700MHz (Part 90.221(c))</p> <p>PASS</p> |        |           |            |         |         | Readings in dBc |  |  |  |  |  |  | Channel |  |  |  |  |  |  | -75kHz | -50kHz | -25kHz | + 25kHz | + 50kHz | + 75kHz | 817MHz | -79.26 | -76.60 | -65.30 | -65.48 | -76.42 | -79.26 | 824MHz | -79.60 | -76.28 | -63.98 | -65.90 | -75.97 | -79.61 | 862MHz | -79.38 | -75.52 | -63.63 | -64.23 | -75.46 | -79.36 | 869MHz | -78.51 | -75.59 | -62.57 | -63.56 | -75.61 | -78.31 | Limit (dBc) | -65 | -65 | -55 | -55 | -65 | -65 |
|             | Readings in dBc  |        |           |            |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
|             | Channel  |        |           |            |         |         |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
|             | -75kHz   | -50kHz | -25kHz    | + 25kHz    | + 50kHz | + 75kHz |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| 817MHz      | -79.26   | -76.60 | -65.30    | -65.48     | -76.42  | -79.26  |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| 824MHz      | -79.60   | -76.28 | -63.98    | -65.90     | -75.97  | -79.61  |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| 862MHz      | -79.38   | -75.52 | -63.63    | -64.23     | -75.46  | -79.36  |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| 869MHz      | -78.51   | -75.59 | -62.57    | -63.56     | -75.61  | -78.31  |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |
| Limit (dBc) | -65  | -65    | -55       | -55        | -65     | -65     |                 |  |  |  |  |  |  |         |  |  |  |  |  |  |        |        |        |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |             |     |     |     |     |     |     |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 25 of 100 |

## 4.8 Transmitter Transient Frequency Behaviour - Results

Factor Set 1:  
Factor Set 2:  
Factor Set 3:  
Test Equipment: R9 R4 SG9

### Conducted Emissions (Signal)

| Company: | Sepura PLC  | Product:        | SRG3500    |  |           |          |    |          |         |    |            |         |    |          |         |
|----------|---|-----------------|------------|--|-----------|----------|----|----------|---------|----|------------|---------|----|----------|---------|
| Date:    | 06/06/2012  | Test Eng:       | Dave Smith |  |           |          |    |          |         |    |            |         |    |          |         |
| Ports:   | antenna   |                 |            |  |           |          |    |          |         |    |            |         |    |          |         |
| Test:    | 90.214  | using limits of | 90.214     |  |           |          |    |          |         |    |            |         |    |          |         |
| Ports:   |   |                 |            |  |           |          |    |          |         |    |            |         |    |          |         |
| Test:    | using limits of   |                 |            |  |           |          |    |          |         |    |            |         |    |          |         |
| Notes    | Comments and Observations   |                 |            |  |           |          |    |          |         |    |            |         |    |          |         |
|          | <p>The output of the antenna port of the EUT was fed through a Directional Coupler and then combined with the output of a signal generator.</p> <p>The spectrum analyser has an FM demodulation function.</p> <p>The EUT was initially set to produce a constant carrier output and the tuning of the spectrum analyser adjusted to give 0Hz FM deviation.</p> <p>The output of the EUT was turned off and a carrier only signal output from the signal generator set at approximately the same frequency as the EUT. This frequency was adjusted to again give 0Hz FM deviation on the spectrum analyser.</p> <p>The signal generator was then set to give 25kHz FM deviation (with 1kHz signal).</p> <p>The forward power output of the directional coupler was fed into a receiver tuned to the carrier frequency. The video output of this receiver was used to trigger the spectrum analyser when the EUT RF is turned on or off.</p> <p>The results of sweeps captured from the spectrum analyser are shown in plots 13 to 20.</p> <p>All of the plots show the EUT comfortably meets the Transient Frequency Behaviour limits for a 25kHz channel spacing transmitter as shown below:</p> <table> <thead> <tr> <th></th> <th>Frequency</th> <th>Duration</th> </tr> </thead> <tbody> <tr> <td>t1</td> <td>± 25 kHz</td> <td>10 msec</td> </tr> <tr> <td>t2</td> <td>± 12.5 kHz</td> <td>25 msec</td> </tr> <tr> <td>t3</td> <td>± 25 kHz</td> <td>10 msec</td> </tr> </tbody> </table> |                 |            |  | Frequency | Duration | t1 | ± 25 kHz | 10 msec | t2 | ± 12.5 kHz | 25 msec | t3 | ± 25 kHz | 10 msec |
|          | Frequency   | Duration        |            |  |           |          |    |          |         |    |            |         |    |          |         |
| t1       | ± 25 kHz  | 10 msec         |            |  |           |          |    |          |         |    |            |         |    |          |         |
| t2       | ± 12.5 kHz  | 25 msec         |            |  |           |          |    |          |         |    |            |         |    |          |         |
| t3       | ± 25 kHz  | 10 msec         |            |  |           |          |    |          |         |    |            |         |    |          |         |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 26 of 100 |

## 4.9 Conducted Emission Antenna Spurious Emissions

Factor Set 1:

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R9 RFF17 RFF15 RFF22

### *Conducted Emissions (Signal)*

| Company: | Sepura PLC   | Product:        | SRG3500    |
|----------|--|-----------------|------------|
| Date:    | 07/06/2012   | Test Eng:       | Dave Smith |
| Ports:   | antenna  |                 |            |
| Test:    | 90.213   | using limits of | 90.213     |
| Ports:   |  |                 |            |
| Test:    | using limits of  |                 |            |
| Notes    | Comments and Observations  |                 |            |
|          | <p>Results of scans shown in plots 21 to 28.</p> <p>The limit line shown on the plots is at -13dBm.</p> <p>All spurious emissions were below this limit.</p> |                 |            |
|          | PASS   |                 |            |

|   |                  |                       |  |  |  |  |  |             |  |  |                 |
|---|------------------|-----------------------|--|--|--|--|--|-------------|--|--|-----------------|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |  |             |  |  |                 |
|   | Issue No: 1      |                       |  |  |  |  |  | Test Report |  |  | Page: 27 of 100 |

## 4.10 Radiated Emissions - Transmit Carrier ERP - Configuration 1

Factor Set 1: A30\_dBi\_10A - - -  
 Factor Set 2: - - - -  
 Factor Set 3: - - - -  
 Test Equipment: R9 A24 A30 SG16 PM6 PS10

### Substitution Emissions

| <b>Company:</b> Sepura PLC<br><b>Date:</b> 01/06/2012   |           |        |           | <b>Product:</b> SRG3500<br><b>Test Eng:</b> Dave Smith |                    |         |                  |                     |                    |                |      |  |  |  |
|---|-----------|--------|-----------|--|--------------------|---------|------------------|---------------------|--------------------|----------------|------|--|--|--|
| <b>Ports:</b>   |           |        |           |  |                    |         |                  |                     |                    |                |      |  |  |  |
| <b>Test:</b> 90.205 using limits of   |           |        |           | 90.205(h)  |                    |         |                  |                     |                    |                |      |  |  |  |
| <b>Ports:</b>   |           |        |           |  |                    |         |                  |                     |                    |                |      |  |  |  |
| Op Mode   | Mod State | CF Set | Freq. MHz | Cable Loss   |                    |         |                  |                     |                    |                |      |  |  |  |
|   |           |        |           | Sig Gen Level Cable                                    | Rec'vr Level Cable | Ant Pol | Rec'vr Level EUT | Sig Gen Level Sub'n | Rec'vr Level Sub'n | Sub'n Ant Gain |      |  |  |  |
|   |           |        |           | dBm  | dBm                |         | dBuV             | dBm                 | dBuV               | dBi            |      |  |  |  |
| 1   | 0         | 1      | 817.000   | 0.0  | 0.0                | V       | 113.1            | -16.5               | 48.9               | -6.1           | 41.6 |  |  |  |
| 1   | 0         | 1      | 817.000   | 0.0  | 0.0                | H       | 109.9            | -16.5               | 48.7               | -6.1           | 38.6 |  |  |  |
| 1   | 0         | 1      | 824.000   | 0.0  | 0.0                | V       | 113.5            | -16.5               | 48.6               | -6.1           | 42.3 |  |  |  |
| 1   | 0         | 1      | 824.000   | 0.0  | 0.0                | H       | 109.8            | -16.5               | 48.8               | -6.1           | 38.4 |  |  |  |
| 1   | 0         | 1      | 862.000   | 0.0  | 0.0                | V       | 113.5            | -16.6               | 47.5               | -6.1           | 43.3 |  |  |  |
| 1   | 0         | 1      | 862.000   | 0.0  | 0.0                | H       | 106.4            | -16.6               | 48.0               | -6.1           | 35.6 |  |  |  |
| 1   | 0         | 1      | 869.000   | 0.0  | 0.0                | V       | 112.9            | -16.6               | 47.4               | -6.2           | 42.6 |  |  |  |
| 1   | 0         | 1      | 869.000   | 0.0  | 0.0                | H       | 106.9            | -16.6               | 48.2               | -6.2           | 35.8 |  |  |  |
| <b>Results</b>  |           |        |           | <b>Minimum Margin</b><br><b>PASS/FAIL</b>              |                    |         |                  | <b>N/A</b> dB       |                    |                |      |  |  |  |
| <b>Notes</b>  |           |        |           |  |                    |         |                  |                     |                    |                |      |  |  |  |
| <b>Configuration 1</b><br>The results above are radiated measurements using the substitution method.<br>There are no specific limits in the standard for this test. |           |        |           |  |                    |         |                  |                     |                    |                |      |  |  |  |

|   |                  |                       |  |  |  |  |  |             |  |  |                 |
|---|------------------|-----------------------|--|--|--|--|--|-------------|--|--|-----------------|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |  |             |  |  |                 |
|   | Issue No: 1      |                       |  |  |  |  |  | Test Report |  |  | Page: 28 of 100 |

## 4.11 Radiated Emissions - Transmit Carrier ERP - DMU

Factor Set 1: A30\_dBi\_10A - - -  
 Factor Set 2: - - - -  
 Factor Set 3: - - - -  
 Test Equipment: R9 A24 A30 SG16 PM6 PS10

### Substitution Emissions

| Company: Sepura PLC  |           |        |           | Product: SRG3500            |              |         |              |               |              |                |      |  |  |  |
|--|-----------|--------|-----------|-----------------------------|--------------|---------|--------------|---------------|--------------|----------------|------|--|--|--|
| Date: 01/06/2012   |           |        |           | Test Eng: Dave Smith        |              |         |              |               |              |                |      |  |  |  |
| Ports:   |           |        |           |                             |              |         |              |               |              |                |      |  |  |  |
| Test: 90.205 using limits of   |           |        |           | 90.205(h)                   |              |         |              |               |              |                |      |  |  |  |
| Ports:   |           |        |           |                             |              |         |              |               |              |                |      |  |  |  |
| Test: using limits of  |           |        |           |                             |              |         |              |               |              |                |      |  |  |  |
| Op Mode  | Mod State | CF Set | Freq. MHz | Cable Loss                  |              |         |              |               |              |                |      |  |  |  |
|  |           |        |           | Sig Gen Level               | Rec'vr Level | Ant Pol | Rec'vr Level | Sig Gen Level | Rec'vr Level | Sub'n Ant Gain |      |  |  |  |
|  |           |        |           | Cable                       | Cable        | EUT     | Sub'n Ant    | Sub'n Ant     | dBuV         | dBi            |      |  |  |  |
|  |           |        |           | dBm                         | dBm          |         | dBm          | dBm           |              | dBm            |      |  |  |  |
| 1  | 0         | 1      | 817.000   | 0.0                         | 0.0          | V       | 116.2        | -16.5         | 48.9         | -6.1           | 44.7 |  |  |  |
| 1  | 0         | 1      | 817.000   | 0.0                         | 0.0          | H       | 105.6        | -16.5         | 48.7         | -6.1           | 34.3 |  |  |  |
| 1  | 0         | 1      | 824.000   | 0.0                         | 0.0          | V       | 115.4        | -16.5         | 48.6         | -6.1           | 44.2 |  |  |  |
| 1  | 0         | 1      | 824.000   | 0.0                         | 0.0          | H       | 104.5        | -16.5         | 48.8         | -6.1           | 33.1 |  |  |  |
| 1  | 0         | 1      | 862.000   | 0.0                         | 0.0          | V       | 115.3        | -16.6         | 47.5         | -6.1           | 45.1 |  |  |  |
| 1  | 0         | 1      | 862.000   | 0.0                         | 0.0          | H       | 103.1        | -16.6         | 48.0         | -6.1           | 32.3 |  |  |  |
| 1  | 0         | 1      | 869.000   | 0.0                         | 0.0          | V       | 114.5        | -16.6         | 47.4         | -6.2           | 44.2 |  |  |  |
| 1  | 0         | 1      | 869.000   | 0.0                         | 0.0          | H       | 103.5        | -16.6         | 48.2         | -6.2           | 32.4 |  |  |  |
| Results  |           |        |           | Minimum Margin<br>PASS/FAIL |              |         |              | N/A           | dB           |                |      |  |  |  |
| Notes  |           |        |           |                             |              |         |              |               |              |                |      |  |  |  |
| DMU<br>The results above are radiated measurements using the substitution method.<br>There are no specific limits in the standard for this test. |           |        |           |                             |              |         |              |               |              |                |      |  |  |  |

|   |                  |                       |  |  |  |  |  |             |  |  |                 |
|---|------------------|-----------------------|--|--|--|--|--|-------------|--|--|-----------------|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |  |             |  |  |                 |
|   | Issue No: 1      |                       |  |  |  |  |  | Test Report |  |  | Page: 29 of 100 |

## 4.12 Radiated Emissions - Transmit Spur - Config 1 - 806MHz to 824MHz band

Factor Set 1: A19\_db1\_11A - - -

Factor Set 2: A30\_dBi\_10A - - -

Factor Set 3: - - - -

Test Equipment: R9 A24 A23 A19 SG16 PM6 PS10 PRE3 RFF15 RFF16 RFF17 RFF22

### Substitution Emissions

| Company:   | Sepura PLC   |           |              |                             |                 |     | Product:  | SRG3500          |                 |             |             |       |        |      |
|------------|--------------|-----------|--------------|-----------------------------|-----------------|-----|-----------|------------------|-----------------|-------------|-------------|-------|--------|------|
| Date:      | 28/05/2012   |           |              |                             |                 |     | Test Eng: | Dave Smith       |                 |             |             |       |        |      |
| Ports:     |              |           |              |                             |                 |     |           |                  |                 |             |             |       |        |      |
| Test:      | 90.210       |           |              | using limits of             |                 |     | 90.221(d) |                  |                 |             |             |       |        |      |
| Ports:     |              |           |              |                             |                 |     |           |                  |                 |             |             |       |        |      |
| Test:      |              |           |              | using limits of             |                 |     |           |                  |                 |             |             |       |        |      |
| Op<br>Mode | Mod<br>State | CF<br>Set | Freq.<br>MHz | Cable Loss                  |                 | Ant | Rec'vr    | Sig Gen          | Rec'vr          | Sub'n       | ERP         | Limit | Margin | Note |
|            |              |           |              | Sig Gen<br>Level            | Rec'vr<br>Level | Pol | Level     | Sig Gen<br>Level | Rec'vr<br>Level | Sub'n       | Ant<br>Gain |       |        |      |
|            |              |           |              | Cable                       | Cable           |     | EUT       | Sub'n<br>Ant     | Sub'n<br>Ant    | Ant<br>Gain |             |       |        |      |
|            |              |           |              | dBm                         | dBm             |     | dBuV      | dBm              | dBuV            | dBi         | dBm         | dBm   | dB     |      |
| 1          | 0            | 2         | 272.333      | 0.0                         | 0.0             | V   | 34.2      | -13.6            | 62.0            | -4.9        | -46.2       | -15.4 | 30.8   | #1   |
| 1          | 0            | 2         | 272.333      | 0.0                         | 0.0             | H   | 35.7      | -13.6            | 63.8            | -4.9        | -46.5       | -15.4 | 31.1   | #1   |
| 1          | 0            | 1         | 5446.750     | 0.0                         | 0.0             | V   | 65.3      | -17.7            | 86.0            | 11.0        | -27.4       | -15.4 | 12.0   | #1   |
| 1          | 0            | 1         | 5446.750     | 0.0                         | 0.0             | H   | 55.4      | -17.7            | 88.5            | 11.0        | -39.9       | -15.4 | 24.5   | #1   |
| 1          | 0            | 1         | 7353.065     | 0.0                         | 0.0             | V   | 52.9      | -18.5            | 87.2            | 11.1        | -41.7       | -15.4 | 26.3   | #1   |
| 1          | 0            | 1         | 7353.065     | 0.0                         | 0.0             | H   | 49.4      | -18.5            | 85.8            | 11.1        | -43.9       | -15.4 | 28.5   | #1   |
| 1          | 0            | 2         | 274.666      | 0.0                         | 0.0             | V   | 33.2      | -13.6            | 62.4            | -4.7        | -47.5       | -14.7 | 32.8   | #2   |
| 1          | 0            | 2         | 274.666      | 0.0                         | 0.0             | H   | 32.3      | -13.6            | 63.9            | -4.7        | -50.0       | -14.7 | 35.3   | #2   |
| 1          | 0            | 1         | 5493.350     | 0.0                         | 0.0             | V   | 65.4      | -17.8            | 85.9            | 11.1        | -27.3       | -14.7 | 12.6   | #2   |
| 1          | 0            | 1         | 5493.350     | 0.0                         | 0.0             | H   | 56.8      | -17.8            | 88.7            | 11.1        | -38.6       | -14.7 | 23.9   | #2   |
| Results    |              |           |              | Minimum Margin<br>PASS/FAIL |                 |     |           | 12.0 dB<br>PASS  |                 |             |             |       |        |      |

### Notes

Results of prescans shown in plots 29 to 40.

Configuration 1. 3m test distance. #1: Tx @ 817MHz, #2: Tx @824MHz  
Lmits set at -13dBm.

|   |                  |                       |  |  |  |  |  |  |  |                 |  |  |
|---|------------------|-----------------------|--|--|--|--|--|--|--|-----------------|--|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |  |  |  | Page: 30 of 100 |  |  |
|   | Issue No: 1      | Test Report           |  |  |  |  |  |  |  |                 |  |  |

## 4.13 Radiated Emissions - Transmit Spur - Config 1 - 851MHz to 869MHz band

Factor Set 1: A19\_db1\_11A - - -

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R9 A24 A23 A19 SG16 PM6 PS10 PRE3 RFF15 RFF16 RFF17 RFF22

### Substitution Emissions

| Company: Sepura PLC          |           |        |           | Product: SRG3500            |                    |         |                  |                     |                    |                |       |       |      |    |
|------------------------------|-----------|--------|-----------|-----------------------------|--------------------|---------|------------------|---------------------|--------------------|----------------|-------|-------|------|----|
| Date: 28/05/2012             |           |        |           | Test Eng: Dave Smith        |                    |         |                  |                     |                    |                |       |       |      |    |
| Ports:                       |           |        |           |                             |                    |         |                  |                     |                    |                |       |       |      |    |
| Test: 90.210 using limits of |           |        |           | 90.221(d)                   |                    |         |                  |                     |                    |                |       |       |      |    |
| Ports:                       |           |        |           |                             |                    |         |                  |                     |                    |                |       |       |      |    |
| Test: using limits of        |           |        |           |                             |                    |         |                  |                     |                    |                |       |       |      |    |
| Op Mode                      | Mod State | CF Set | Freq. MHz | Cable Loss                  |                    |         |                  |                     |                    |                |       |       |      |    |
|                              |           |        |           | Sig Gen Level Cable         | Rec'vr Level Cable | Ant Pol | Rec'vr Level EUT | Sig Gen Level Sub'n | Rec'vr Level Sub'n | Sub'n Ant Gain | ERP   | Limit |      |    |
|                              |           |        |           | dBm                         | dBm                |         | dBmV             | dBm                 | dBmV               | dBi            | dBm   | dBm   |      |    |
| 1                            | 0         | 1      | 2586.029  | 0.0                         | 0.0                | V       | 63.2             | -16.9               | 89.1               | 9.9            | -32.9 | -13.7 | 19.2 | #1 |
| 1                            | 0         | 1      | 2586.029  | 0.0                         | 0.0                | H       | 66.1             | -16.9               | 90.1               | 9.9            | -31.0 | -13.7 | 17.3 | #1 |
| 1                            | 0         | 1      | 2606.988  | 0.0                         | 0.0                | V       | 59.5             | -16.9               | 89.5               | 9.9            | -37.0 | -14.4 | 22.6 | #2 |
| 1                            | 0         | 1      | 2606.988  | 0.0                         | 0.0                | H       | 67.5             | -16.9               | 90.4               | 9.9            | -29.9 | -14.4 | 15.5 | #2 |
| 1                            | 0         | 1      | 4634.600  | 0.0                         | 0.0                | V       | 64.1             | -17.4               | 89.0               | 11.2           | -31.1 | -14.4 | 16.7 | #2 |
| 1                            | 0         | 1      | 4634.600  | 0.0                         | 0.0                | H       | 51.6             | -17.4               | 90.8               | 11.2           | -45.4 | -14.4 | 31.0 | #2 |
| 1                            | 0         | 1      | 5793.369  | 0.0                         | 0.0                | V       | 55.9             | -17.7               | 86.3               | 11.7           | -36.5 | -14.4 | 22.1 | #2 |
| 1                            | 0         | 1      | 5793.369  | 0.0                         | 0.0                | H       | 50.9             | -17.7               | 88.3               | 11.7           | -43.4 | -14.4 | 29.0 | #2 |
| 1                            | 0         | 1      | 8110.838  | 0.0                         | 0.0                | V       | 49.3             | -18.7               | 83.9               | 11.7           | -41.6 | -14.4 | 27.2 | #2 |
| 1                            | 0         | 1      | 8110.838  | 0.0                         | 0.0                | H       | 47.9             | -18.7               | 85.4               | 11.7           | -44.5 | -14.4 | 30.1 | #2 |
| 1                            | 0         | 1      | 8690.013  | 0.0                         | 0.0                | V       | 53.8             | -18.9               | 82.8               | 11.5           | -36.3 | -14.4 | 21.9 | #2 |
| 1                            | 0         | 1      | 8690.013  | 0.0                         | 0.0                | H       | 49.1             | -18.9               | 84.7               | 11.5           | -42.9 | -14.4 | 28.5 | #2 |
| Results                      |           |        |           | Minimum Margin<br>PASS/FAIL |                    |         |                  | 15.5 dB<br>PASS     |                    |                |       |       |      |    |

### Notes

Results of prescans shown in plots 29 to 40.

Configuration 1. 3m test distance. #1: Tx @ 862MHz, #2: Tx @869MHz  
Lmits set at -13dBm.

|   |                  |                       |  |  |  |  |  |             |  |  |                 |
|---|------------------|-----------------------|--|--|--|--|--|-------------|--|--|-----------------|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |  |             |  |  |                 |
|   | Issue No: 1      |                       |  |  |  |  |  | Test Report |  |  | Page: 31 of 100 |

## 4.14 Radiated Emissions - Transmit Spurious - DMU - 806MHz to 824MHz band

Factor Set 1: A19\_db1\_11A - - -

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R9 A24 A23 A19 SG16 PM6 PS10 PRE3 RFF15 RFF16 RFF17 RFF22

### Substitution Emissions

|                     |                           |
|---------------------|---------------------------|
| Company: Sepura PLC | Product: SRG3500          |
| Date: 28/05/2012    | Test Eng: Dave Smith      |
| Ports:              |                           |
| Test: 90.205        | using limits of 90.205(h) |
| Ports:              |                           |
| Test: 90.210        | using limits of 90.221(d) |

| Op Mode   | Mod State | CF Set | Freq. MHz | Cable Loss                  |                    | Ant Pol | Rec'vr Level EUT | Sig Gen Level Sub'n | Rec'vr Level Sub'n | Sub'n Ant Gain | ERP   | Limit | Margin | Note |  |  |  |  |  |  |  |  |  |  |
|---|-----------|--------|-----------|-----------------------------|--------------------|---------|------------------|---------------------|--------------------|----------------|-------|-------|--------|------|--|--|--|--|--|--|--|--|--|--|
|   |           |        |           | Sig Gen Level Cable         | Rec'vr Level Cable |         |                  |                     |                    |                |       |       |        |      |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 4357.350  | 0.0                         | 0.0                | V       | 62.2             | -17.5               | 89.2               | 11.0           | -33.4 | -15.0 | 18.4   | #1   |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 4357.350  | 0.0                         | 0.0                | H       | 57.8             | -17.5               | 91.7               | 11.0           | -40.3 | -15.0 | 25.3   | #1   |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 8170.125  | 0.0                         | 0.0                | V       | 59.2             | -18.8               | 83.1               | 11.7           | -30.9 | -15.0 | 15.9   | #1   |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 8170.125  | 0.0                         | 0.0                | H       | 58.4             | -18.8               | 85.0               | 11.7           | -33.7 | -15.0 | 18.7   | #1   |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 7416.150  | 0.0                         | 0.0                | V       | 59.3             | -18.6               | 84.2               | 11.0           | -32.4 | -15.0 | 17.4   | #2   |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 7416.150  | 0.0                         | 0.0                | H       | 53.8             | -18.6               | 85.5               | 11.0           | -39.4 | -15.0 | 24.4   | #2   |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 8240.047  | 0.0                         | 0.0                | V       | 59.2             | -18.8               | 82.9               | 11.7           | -30.9 | -15.0 | 15.9   | #2   |  |  |  |  |  |  |  |  |  |  |
| 1   | 0         | 1      | 8240.047  | 0.0                         | 0.0                | H       | 57.0             | -18.8               | 85.8               | 11.7           | -36.0 | -15.0 | 21.0   | #2   |  |  |  |  |  |  |  |  |  |  |
| Results   |           |        |           | Minimum Margin<br>PASS/FAIL |                    |         |                  | 15.9 dB<br>PASS     |                    |                |       |       |        |      |  |  |  |  |  |  |  |  |  |  |
| Notes   |           |        |           |                             |                    |         |                  |                     |                    |                |       |       |        |      |  |  |  |  |  |  |  |  |  |  |
| Results of prescans shown in plots 41 to 52.                                    |           |        |           |                             |                    |         |                  |                     |                    |                |       |       |        |      |  |  |  |  |  |  |  |  |  |  |
| DMU. 3m test distance. #1: Tx @ 817MHz, #2: Tx @824MHz<br>Limits set at -13dBm. |           |        |           |                             |                    |         |                  |                     |                    |                |       |       |        |      |  |  |  |  |  |  |  |  |  |  |

|   |                  |                       |  |  |  |  |  |             |  |  |                 |
|---|------------------|-----------------------|--|--|--|--|--|-------------|--|--|-----------------|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |  |             |  |  |                 |
|   | Issue No: 1      |                       |  |  |  |  |  | Test Report |  |  | Page: 32 of 100 |

## 4.15 Radiated Emissions - Transmit Spurious - DMU - 851MHz to 869MHz band

Factor Set 1: A19\_db1\_11A - - -

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R9 A24 A23 A19 SG16 PM6 PS10 PRE3 RFF15 RFF16 RFF17 RFF22

### Substitution Emissions

| Company:   | Sepura PLC   |           |                             |                           |                          |                 | Product:               | SRG3500                   |                          |                      |       |       |        |      |
|------------|--------------|-----------|-----------------------------|---------------------------|--------------------------|-----------------|------------------------|---------------------------|--------------------------|----------------------|-------|-------|--------|------|
| Date:      | 28/05/2012   |           |                             |                           |                          |                 | Test Eng:              | Dave Smith                |                          |                      |       |       |        |      |
| Ports:     |              |           |                             |                           |                          |                 |                        |                           |                          |                      |       |       |        |      |
| Test:      | 90.210       |           |                             | using limits of           |                          |                 | 90.221(d)              |                           |                          |                      |       |       |        |      |
| Ports:     |              |           |                             |                           |                          |                 |                        |                           |                          |                      |       |       |        |      |
| Test:      |              |           |                             | using limits of           |                          |                 |                        |                           |                          |                      |       |       |        |      |
| Op<br>Mode | Mod<br>State | CF<br>Set | Freq.<br>MHz                | Cable Loss                |                          | Ant             | Rec'vr                 | Sig Gen                   | Rec'vr                   | Sub'n                | ERP   | Limit | Margin | Note |
|            |              |           |                             | Sig Gen<br>Level<br>Cable | Rec'vr<br>Level<br>Cable | Ant<br>Pol      | Rec'vr<br>Level<br>EUT | Sig Gen<br>Level<br>Sub'n | Rec'vr<br>Level<br>Sub'n | Sub'n<br>Ant<br>Gain | ERP   | Limit | Margin | Note |
|            |              |           |                             | dBm                       | dBm                      |                 | dBuV                   | dBm                       | dBuV                     | dBi                  | dBm   | dBm   | dB     |      |
| 1          | 0            | 1         | 5746.675                    | 0.0                       | 0.0                      | V               | 57.3                   | -17.9                     | 89.7                     | 11.6                 | -38.8 | -15.0 | 23.8   | #1   |
| 1          | 0            | 1         | 5746.675                    | 0.0                       | 0.0                      | H               | 54.6                   | -17.9                     | 88.4                     | 11.6                 | -40.1 | -15.0 | 25.1   | #1   |
| 1          | 0            | 1         | 8045.333                    | 0.0                       | 0.0                      | V               | 49.9                   | -18.7                     | 82.8                     | 11.7                 | -39.8 | -15.0 | 24.8   | #1   |
| 1          | 0            | 1         | 8045.333                    | 0.0                       | 0.0                      | H               | 49.0                   | -18.7                     | 85.8                     | 11.7                 | -43.8 | -15.0 | 28.8   | #1   |
| 1          | 0            | 1         | 5214.050                    | 0.0                       | 0.0                      | V               | 62.3                   | -17.6                     | 89.5                     | 10.8                 | -33.9 | -15.0 | 18.9   | #2   |
| 1          | 0            | 1         | 5214.050                    | 0.0                       | 0.0                      | H               | 57.0                   | -17.6                     | 88.9                     | 10.8                 | -38.6 | -15.0 | 23.6   | #2   |
| 1          | 0            | 1         | 6952.088                    | 0.0                       | 0.0                      | V               | 57.6                   | -18.4                     | 87.5                     | 11.6                 | -36.6 | -15.0 | 21.6   | #2   |
| 1          | 0            | 1         | 6952.088                    | 0.0                       | 0.0                      | H               | 52.8                   | -18.4                     | 86.8                     | 11.6                 | -40.7 | -15.0 | 25.7   | #2   |
| Results    |              |           | Minimum Margin<br>PASS/FAIL |                           |                          | 18.9 dB<br>PASS |                        |                           |                          |                      |       |       |        |      |

### Notes

Results of prescans shown in plots 41 to 52.

DMU. 3m test distance. #1: Tx @ 862MHz, #2: Tx @869MHz  
Lmts set at -13dBm

|   |                  |                       |  |  |  |                 |  |
|---|------------------|-----------------------|--|--|--|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |                 |  |
|   | Issue No: 1      | Test Report           |  |  |  |                 |  |
| Test No: T4354  |                  |                       |  |  |  | Page: 33 of 100 |  |

## 4.16 Radiated Emissions - Receive Mode - Configuration 1 - below 1GHz

Factor Set 1: A5\_FS\_10C CBL015\_11A --

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R4 A5

### Radiated Emissions

| Company: Sepura PLC<br>Date: 20/06/2012<br>Ports:<br>Test: ANSI C63.4:2003 using limits of FCC_B |   |           |        |          |                              |         | Product: SRG3500<br>Test Eng: Dave Smith<br>Ports:<br>Test: using limits of FCC_B |                    |                  |                    |                    |                 |       |
|--|---|-----------|--------|----------|------------------------------|---------|---|--------------------|------------------|--------------------|--------------------|-----------------|-------|
|  |   |           |        |          |                              |         |   |                    |                  |                    |                    |                 |       |
| Plot   | Op Mode   | Mod State | Dist m | Fact Set | Freq. MHz                    | Ant Pol | Rec. Level dBuV   | Corr'n Factor dB/m | Corr'n Factor dB | Total Level dBuV/m | Limit FCC_B dBuV/m | Margin FCC_B dB | Notes |
| 53   | 1   | 0         | 3      | 1        | 862MHz Rx channel<br>114.620 | V       | 1.2   | 13.1               |                  | 14.3               | 43.5               | 29.2            |       |
| 53   | 1   | 0         | 3      | 1        | 114.620                      | H       | -3.1  | 13.1               |                  | 10.0               | 43.5               | 33.5            |       |
| 54   | 1   | 0         | 3      | 1        | 869MHz Rx channel<br>931.250 | V       | 0.3   | 31.0               |                  | 31.3               | 46.0               | 14.7            | #1    |
| 54   | 1   | 0         | 3      | 1        | 931.250                      | H       | 5.6   | 31.0               |                  | 36.6               | 46.0               | 9.4             |       |
| 54   | 1   | 0         | 3      | 1        | 938.250                      | V       | 1.6   | 31.5               |                  | 33.1               | 46.0               | 12.9            | #1    |
| 54   | 1   | 0         | 3      | 1        | 938.250                      | H       | -0.1  | 31.5               |                  | 31.4               | 46.0               | 14.6            | #1    |
| Results<br>Minimum Margin<br>PASS/FAIL   |   |           |        |          |                              |         | 9.4   | dB                 |                  |                    |                    |                 |       |
| Notes  | Comments and Observations   |           |        |          |                              |         |   |                    |                  |                    |                    |                 |       |
| #1   | Results of scans shown in plots 53 and 54.<br>Configuration 1.<br>Measured with 10kHz average detector because of high ambient.<br>Measurements in screened room show less than 2dB difference<br>between 120kHz Quasi Peak reading and 10kHz Average reading for this emission<br>All other measurements made with 120kHz bandwidth Quasi Peak detector. |           |        |          |                              |         |   |                    |                  |                    |                    |                 |       |

|   |                  |                       |  |  |  |  |
|---|------------------|-----------------------|--|--|--|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |
|   | Issue No: 1      | Test Report           |  |  |  |  |
| Test No: T4354  | Page: 34 of 100  |                       |  |  |  |  |

## 4.17 Radiated Emissions - Receive Mode - Configuration 1 - above 1GHz

|  |           |
|--|-----------|
| Factor Set 1: A23_3m_10A CBL049_11A PRE3_11A RFF22_11A | 1 m cable |
| Factor Set 2: - - -                                    |           |
| Factor Set 3: - - -                                    |           |
| Test Equipment: R9 A23 PRE3 RFF22                      |           |

### Radiated Emissions

| Company: Sepura PLC                         | Product: SRG3500     |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
|---|----------------------|--|--------|----------|-----------|---------|-----------------|--------------------|------------------|--------------------|--------------------|-----------------|-------|
| Date: 28/05/2012                            | Test Eng: Dave Smith |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Ports:                                      |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Test: ANSI C63.4:2003 using limits of FCC_B |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Ports:                                      |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Test: using limits of                       |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Plot  | Op Mode              | Mod State  | Dist m | Fact Set | Freq. MHz | Ant Pol | Rec. Level dBuV | Corr'n Factor dB/m | Corr'n Factor dB | Total Level dBuV/m | Limit FCC_B dBuV/m | Margin FCC_B dB | Notes |
| 862MHz Rx channel                           |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| 56  | 2                    | 0  | 3      | 1        | 3724.998  | V       | 51.2            | -2.4               |                  | 48.8               | 74.0               | 25.2            | PK    |
| 56  | 2                    | 0  | 3      | 1        | 3724.998  | V       | 47.2            | -2.4               |                  | 44.8               | 54.0               | 9.2             | AV    |
| 56  | 2                    | 0  | 3      | 1        | 3724.998  | H       | 49.0            | -2.4               |                  | 46.6               | 54.0               | 7.4             | PK    |
| 56  | 2                    | 0  | 3      | 1        | 5581.503  | V       | 45.2            | 1.6                |                  | 46.8               | 54.0               | 7.2             | PK    |
| 56  | 2                    | 0  | 3      | 1        | 5587.496  | H       | 44.1            | 1.6                |                  | 45.7               | 54.0               | 8.3             | PK    |
| 869MHz Rx channel                           |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| 56  | 2                    | 0  | 3      | 1        | 3753.026  | V       | 48.3            | -2.2               |                  | 46.1               | 54.0               | 7.9             | PK    |
| 56  | 2                    | 0  | 3      | 1        | 3753.026  | H       | 47.4            | -2.2               |                  | 45.2               | 54.0               | 8.8             | PK    |
| Results                                     |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Minimum Margin<br>PASS/FAIL                 |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Notes                                       |                      | Comments and Observations  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
|   |                      | Results of scans shown in plots 55 and 56.<br><br>Configuration 1.<br>Where peak measurements were comfortably below the average limit only the peak reading is recorded - in this case the average limit is show. Otherwise separate peak and average measurements were made and show against the corresponding limits. |        |          |           |         |                 |                    |                  |                    |                    |                 |       |

|   |                  |                       |  |  |  |  |  |  |
|---|------------------|-----------------------|--|--|--|--|--|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |  |  |
|   | Issue No: 1      | Test Report           |  |  |  |  |  |  |
| Test No: T4354  | Page: 35 of 100  |                       |  |  |  |  |  |  |

## 4.18 Radiated Emissions - Receive Mode - DMU- below 1GHz

Factor Set 1: A5\_FS\_10C CBL015\_11A - -

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R4 A5

### Radiated Emissions

| <b>Company:</b> Sepura PLC <b>Product:</b> SRG3500<br><b>Date:</b> 20/06/2012 <b>Test Eng:</b> Dave Smith |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
|---|---|----------------------------------|--------|----------|-----------|---------|-----------------|--------------------|------------------|--------------------|--------------------|-----------------|-------|
| <b>Ports:</b>   |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| <b>Test:</b> ANSI C63.4:2003 <b>using limits of</b> FCC_B   |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| <b>Ports:</b>   |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| <b>Test:</b> using limits of  |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Plot  | Op Mode   | Mod State                        | Dist m | Fact Set | Freq. MHz | Ant Pol | Rec. Level dBuV | Corr'n Factor dB/m | Corr'n Factor dB | Total Level dBuV/m | Limit FCC_B dBuV/m | Margin FCC_B dB | Notes |
| 862MHz Rx channel   |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| 57  | 1   | 0                                | 3      | 1        | 78.160    | V       | 4.3             | 8.1                |                  | 12.4               | 40.0               | 27.6            |       |
| 57  | 1   | 0                                | 3      | 1        | 78.160    | H       | 0.5             | 8.1                |                  | 8.6                | 40.0               | 31.4            |       |
| 58  | 1   | 0                                | 3      | 1        | 481.102   | V       | 11.4            | 21.6               |                  | 33.0               | 46.0               | 13.0            |       |
| 58  | 1   | 0                                | 3      | 1        | 481.102   | H       | 8.9             | 21.6               |                  | 30.5               | 46.0               | 15.5            |       |
| 58  | 1   | 0                                | 3      | 1        | 509.272   | V       | 7.6             | 22.4               |                  | 30.0               | 46.0               | 16.0            |       |
| 58  | 1   | 0                                | 3      | 1        | 509.272   | H       | 10.6            | 22.4               |                  | 33.0               | 46.0               | 13.0            |       |
| 58  | 1   | 0                                | 3      | 1        | 537.350   | V       | 3.5             | 23.5               |                  | 27.0               | 46.0               | 19.0            |       |
| 58  | 1   | 0                                | 3      | 1        | 537.350   | H       | 7.5             | 23.5               |                  | 31.0               | 46.0               | 15.0            |       |
| 58  | 1   | 0                                | 3      | 1        | 547.484   | V       | 5.9             | 24.5               |                  | 30.4               | 46.0               | 15.6            |       |
| 58  | 1   | 0                                | 3      | 1        | 547.484   | H       | 11.5            | 24.5               |                  | 36.0               | 46.0               | 10.0            |       |
| 58  | 1   | 0                                | 3      | 1        | 556.878   | V       | 2.9             | 24.9               |                  | 27.8               | 46.0               | 18.2            |       |
| 58  | 1   | 0                                | 3      | 1        | 556.878   | H       | 7.6             | 24.9               |                  | 32.5               | 46.0               | 13.5            |       |
| 869MHz Rx channel   |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| 58  | 1   | 0                                | 3      | 1        | 931.250   | V       | -0.8            | 31.0               |                  | 30.2               | 46.0               | 15.8            | #1    |
| 58  | 1   | 0                                | 3      | 1        | 931.250   | H       | 5.1             | 31.0               |                  | 36.1               | 46.0               | 9.9             |       |
| 58  | 1   | 0                                | 3      | 1        | 938.250   | V       | -0.1            | 31.5               |                  | 31.4               | 46.0               | 14.6            | #1    |
| 58  | 1   | 0                                | 3      | 1        | 938.250   | H       | 0.5             | 31.5               |                  | 32.0               | 46.0               | 14.0            | #1    |
| <b>Results</b>  |   |                                  |        |          |           |         |                 |                    |                  | 9.9                | dB                 |                 |       |
| <b>Minimum Margin</b><br><b>PASS/FAIL</b>   |   |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| <b>Notes</b>  |   | <b>Comments and Observations</b> |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| #1  | Results of scans shown in plots 57 and 58.<br>DMU.<br>Measured with 10kHz average detector because of high ambient.<br>Measurements in screened room show less than 2dB difference<br>between 120kHz Quasi Peak reading and 10kHz Average reading for this emission<br>All other measurements made with 120kHz bandwidth Quasi Peak detector. |                                  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |

|   |                  |                       |  |  |  |  |
|---|------------------|-----------------------|--|--|--|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |
|   | Issue No: 1      | Test Report           |  |  |  |  |
| Test No: T4354  | Page: 36 of 100  |                       |  |  |  |  |

## 4.19 Radiated Emissions - Receive Mode - DMU - above 1GHz - Vertical

|  |           |
|--|-----------|
| Factor Set 1: A23_3m_10A CBL049_11A PRE3_11A RFF22_11A | 1 m cable |
| Factor Set 2: - - -                                    |           |
| Factor Set 3: - - -                                    |           |
| Test Equipment: R9 A23 PRE3 RFF22                      |           |

### Radiated Emissions

| Company: Sepura PLC                         | Product: SRG3500     |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
|---|----------------------|--|--------|----------|-----------|---------|-----------------|--------------------|------------------|--------------------|--------------------|-----------------|-------|
| Date: 28/05/2012                            | Test Eng: Dave Smith |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Ports:                                      |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Test: ANSI C63.4:2003 using limits of FCC_B |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Ports:                                      |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Test: using limits of                       |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Plot  | Op Mode              | Mod State  | Dist m | Fact Set | Freq. MHz | Ant Pol | Rec. Level dBuV | Corr'n Factor dB/m | Corr'n Factor dB | Total Level dBuV/m | Limit FCC_B dBuV/m | Margin FCC_B dB | Notes |
| 862MHz Rx channel                           |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| 59  | 2                    | 0  | 3      | 1        | 1862.525  | V       | 50.9            | -6.7               |                  | 44.2               | 54.0               | 9.8             | PK    |
| 60  | 2                    | 0  | 3      | 1        | 2793.846  | V       | 47.4            | -5.2               |                  | 42.2               | 54.0               | 11.8            | PK    |
| 60  | 2                    | 0  | 3      | 1        | 3724.987  | V       | 51.9            | -2.4               |                  | 49.5               | 74.0               | 24.5            | PK    |
| 60  | 2                    | 0  | 3      | 1        | 3724.987  | V       | 48.9            | -2.4               |                  | 46.5               | 54.0               | 7.5             | AV    |
| 60  | 2                    | 0  | 3      | 1        | 4656.255  | V       | 45.8            | -1.8               |                  | 44.0               | 54.0               | 10.0            | PK    |
| 869MHz Rx channel                           |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| 59  | 2                    | 0  | 3      | 1        | 1876.500  | V       | 49.7            | -6.7               |                  | 43.1               | 54.0               | 10.9            | PK    |
| 60  | 2                    | 0  | 3      | 1        | 2814.708  | V       | 49.6            | -5.1               |                  | 44.4               | 54.0               | 9.6             | PK    |
| 60  | 2                    | 0  | 3      | 1        | 4691.247  | V       | 46.0            | -1.7               |                  | 44.3               | 54.0               | 9.7             | PK    |
| 60  | 2                    | 0  | 3      | 1        | 5629.815  | V       | 44.6            | 1.7                |                  | 46.3               | 54.0               | 7.7             | PK    |
| Results                                     |                      |  |        |          |           |         |                 |                    |                  | 7.5                | dB                 |                 |       |
| Minimum Margin<br>PASS/FAIL                 |                      |  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
| Notes                                       |                      | Comments and Observations  |        |          |           |         |                 |                    |                  |                    |                    |                 |       |
|   |                      | Results of scans shown in plots 59 and 60.<br><br>DMU.<br>Where peak measurements were comfortably below the average limit only the peak reading is recorded - in this case the average limit is show. Otherwise separate peak and average measurements were made and show against the corresponding limits. |        |          |           |         |                 |                    |                  |                    |                    |                 |       |

|   |                  |                       |  |  |  |  |
|---|------------------|-----------------------|--|--|--|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |
|   | Issue No: 1      | Test Report           |  |  |  |  |
| Test No: T4354  | Page: 37 of 100  |                       |  |  |  |  |

## 4.20 Radiated Emissions - Receive Mode - DMU - above 1GHz - Horizontal

|  |           |
|--|-----------|
| Factor Set 1: A23_3m_10A CBL049_11A PRE3_11A RFF22_11A | 1 m cable |
| Factor Set 2: - - -                                    |           |
| Factor Set 3: - - -                                    |           |
| Test Equipment: R9 A23 PRE3 RFF22                      |           |

### Radiated Emissions

| Company: Sepura PLC                         |         |  |        |          |           |         | Product: SRG3500     |                    |                  |                    |                    |                 |       |
|---|---------|--|--------|----------|-----------|---------|----------------------|--------------------|------------------|--------------------|--------------------|-----------------|-------|
| Date: 28/05/2012                            |         |  |        |          |           |         | Test Eng: Dave Smith |                    |                  |                    |                    |                 |       |
| Ports:                                      |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| Test: ANSI C63.4:2003 using limits of FCC_B |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| Ports:                                      |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| Test: using limits of                       |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| Plot  | Op Mode | Mod State  | Dist m | Fact Set | Freq. MHz | Ant Pol | Rec. Level dBuV      | Corr'n Factor dB/m | Corr'n Factor dB | Total Level dBuV/m | Limit FCC_B dBuV/m | Margin FCC_B dB | Notes |
| 862MHz Rx channel                           |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| 59  | 2       | 0  | 3      | 1        | 1862.525  | H       | 50.4                 | -6.7               |                  | 43.7               | 54.0               | 10.3            | PK    |
| 60  | 2       | 0  | 3      | 1        | 2793.846  | H       | 47.0                 | -5.2               |                  | 41.8               | 54.0               | 12.2            | PK    |
| 60  | 2       | 0  | 3      | 1        | 3724.987  | H       | 49.7                 | -2.4               |                  | 47.2               | 54.0               | 6.8             | PK    |
| 60  | 2       | 0  | 3      | 1        | 4656.255  | H       | 43.1                 | -1.8               |                  | 41.3               | 54.0               | 12.7            | PK    |
| 869MHz Rx channel                           |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| 59  | 2       | 0  | 3      | 1        | 1877.500  | H       | 44.7                 | -6.7               |                  | 38.1               | 54.0               | 15.9            | PK    |
| 60  | 2       | 0  | 3      | 1        | 2814.708  | H       | 47.3                 | -5.1               |                  | 42.2               | 54.0               | 11.8            | PK    |
| 60  | 2       | 0  | 3      | 1        | 4691.247  | H       | 43.7                 | -1.7               |                  | 42.0               | 54.0               | 12.0            | PK    |
| 60  | 2       | 0  | 3      | 1        | 5629.815  | H       | 44.0                 | 1.7                |                  | 45.7               | 54.0               | 8.3             | PK    |
| Results                                     |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| Minimum Margin PASS/FAIL                    |         |  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
| Notes                                       |         | Comments and Observations  |        |          |           |         |                      |                    |                  |                    |                    |                 |       |
|   |         | Results of scans shown in plots 59 and 60.<br><br>DMU.<br>Where peak measurements were comfortably below the average limit only the peak reading is recorded - in this case the average limit is show. Otherwise separate peak and average measurements were made and show against the corresponding limits. |        |          |           |         |                      |                    |                  |                    |                    |                 |       |

|   |                  |                       |  |  |  |  |
|---|------------------|-----------------------|--|--|--|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |  |  |  |  |
|   | Issue No: 1      | Test Report           |  |  |  |  |
| Test No: T4354  |                  | Page: 38 of 100       |  |  |  |  |

## 4.21 Conducted Emissions (Power) - Results

Factor Set 1: L1\_11A AB002\_CBL005\_CBL039\_11A - -

Factor Set 2: - - -

Factor Set 3: - - -

Test Equipment: R1 L1

### Conducted Emissions (Power)

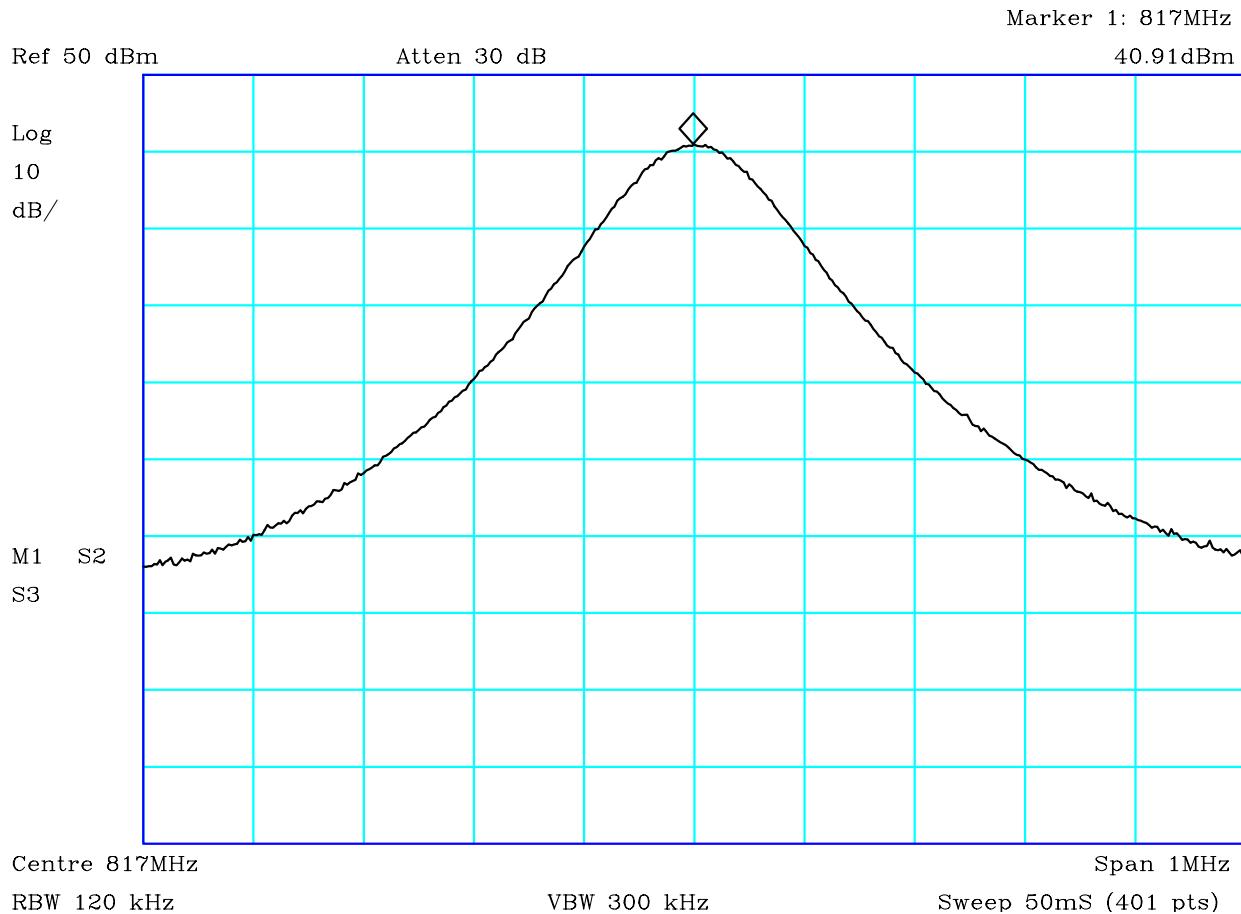
| Company: | Sepura PLC      |  |            | Product:  |           |                             | SRG3500                         |                  |                  |                  |                 |       |  |  |
|----------|-----------------|--|------------|-----------|-----------|-----------------------------|---------------------------------|------------------|------------------|------------------|-----------------|-------|--|--|
| Date:    | 08/06/12        |  |            | Test Eng: |           |                             | Dave Smith                      |                  |                  |                  |                 |       |  |  |
| Ports:   | ac power        |  |            | Test:     |           |                             | ANSI C63.4:2003 using limits of |                  |                  |                  |                 |       |  |  |
| Ports:   |                 |  |            |           |           |                             | FCC_B                           |                  |                  |                  |                 |       |  |  |
| Test:    | using limits of |  |            |           |           |                             |                                 |                  |                  |                  |                 |       |  |  |
| Plot     | Op Mode         | Mod State  | Line (L/N) | Fact Set  | Freq. MHz | Det qp/ av                  | Rec. Level dBuV                 | Corr'n Factor dB | Total Level dBuV | Limit FCC_B dBuV | Margin FCC_B dB | Notes |  |  |
| 61       | 1               | 0  | L          | 1         | 0.189     | qp                          | 40.3                            | 10.0             | 50.3             | 64.1             | 13.8            |       |  |  |
| 61       | 1               | 0  | L          | 1         | 0.189     | av                          | 29.0                            | 10.0             | 39.0             | 54.1             | 15.1            |       |  |  |
| 61       | 1               | 0  | L          | 1         | 0.252     | qp                          | 35.2                            | 10.0             | 45.2             | 61.7             | 16.5            |       |  |  |
| 61       | 1               | 0  | L          | 1         | 0.252     | av                          | 21.0                            | 10.0             | 31.0             | 51.7             | 20.7            |       |  |  |
| 61       | 1               | 0  | L          | 1         | 0.377     | qp                          | 23.6                            | 10.0             | 33.6             | 58.3             | 24.8            |       |  |  |
| 61       | 1               | 0  | L          | 1         | 0.377     | av                          | 12.8                            | 10.0             | 22.8             | 48.3             | 25.6            |       |  |  |
| 62       | 1               | 0  | N          | 1         | 0.189     | qp                          | 40.2                            | 10.0             | 50.2             | 64.1             | 13.9            |       |  |  |
| 62       | 1               | 0  | N          | 1         | 0.189     | av                          | 29.0                            | 10.0             | 39.0             | 54.1             | 15.1            |       |  |  |
| 62       | 1               | 0  | N          | 1         | 0.252     | qp                          | 35.0                            | 10.0             | 45.0             | 61.7             | 16.7            |       |  |  |
| 62       | 1               | 0  | N          | 1         | 0.252     | av                          | 21.0                            | 10.0             | 31.0             | 51.7             | 20.7            |       |  |  |
| 62       | 1               | 0  | N          | 1         | 0.377     | qp                          | 23.8                            | 10.0             | 33.8             | 58.3             | 24.6            |       |  |  |
| 62       | 1               | 0  | N          | 1         | 0.377     | av                          | 10.8                            | 10.0             | 20.8             | 48.3             | 27.6            |       |  |  |
| Results  |                 |  |            |           |           | Minimum Margin<br>PASS/FAIL |                                 |                  | 13.8 dB          |                  |                 |       |  |  |
| Notes    |                 | Comments and Observations  |            |           |           |                             |                                 |                  |                  |                  |                 |       |  |  |
|          |                 | Results of scans shown in plots 61 to 66.<br>Tabulated results above were for worst case mode - Transmit @ 817MHz. |            |           |           |                             |                                 |                  |                  |                  |                 |       |  |  |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

**Test Report**

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### PLOT 1 Conducted Antenna Output Power (817MHz)

|                     |                      |
|---------------------|----------------------|
| Company: Sepura     | Product: SRG3500     |
| Date: 06/06/2012    | Test Eng: Dave Smith |
| Method: FCC Part 90 | Method:              |
| Limit1:             | Limit2:              |
| Limit3:             | Limit4:              |

Peak: 40.91 dBm  
Average (measured with power meter): 38.02 dBm

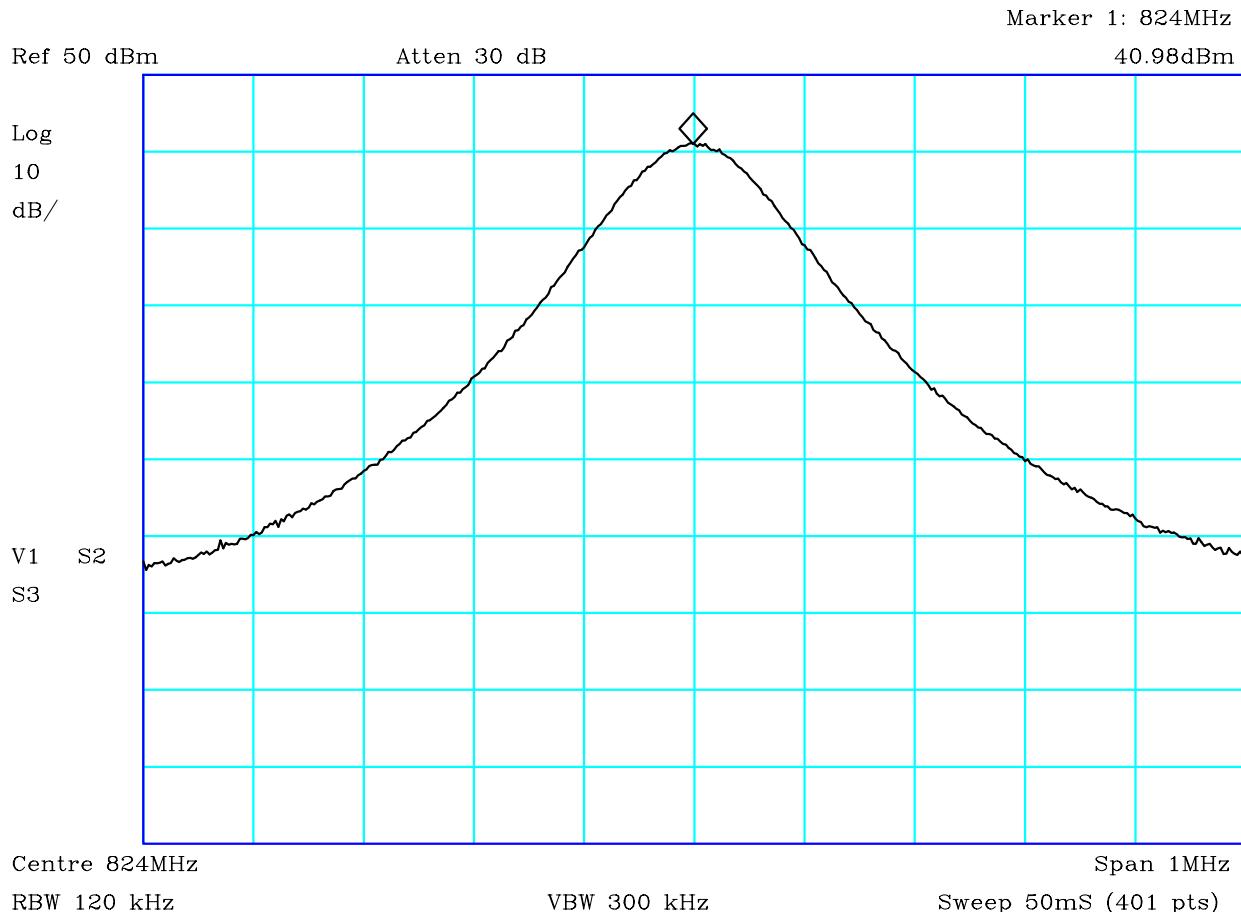
|                   |                       |
|-------------------|-----------------------|
| Facility: Anech_2 | Mode: 1               |
|                   | Modification State: 0 |
| File: H250675F    |                       |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

**Test Report**

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## PLOT 2 Conducted Antenna Output Power (824MHz)

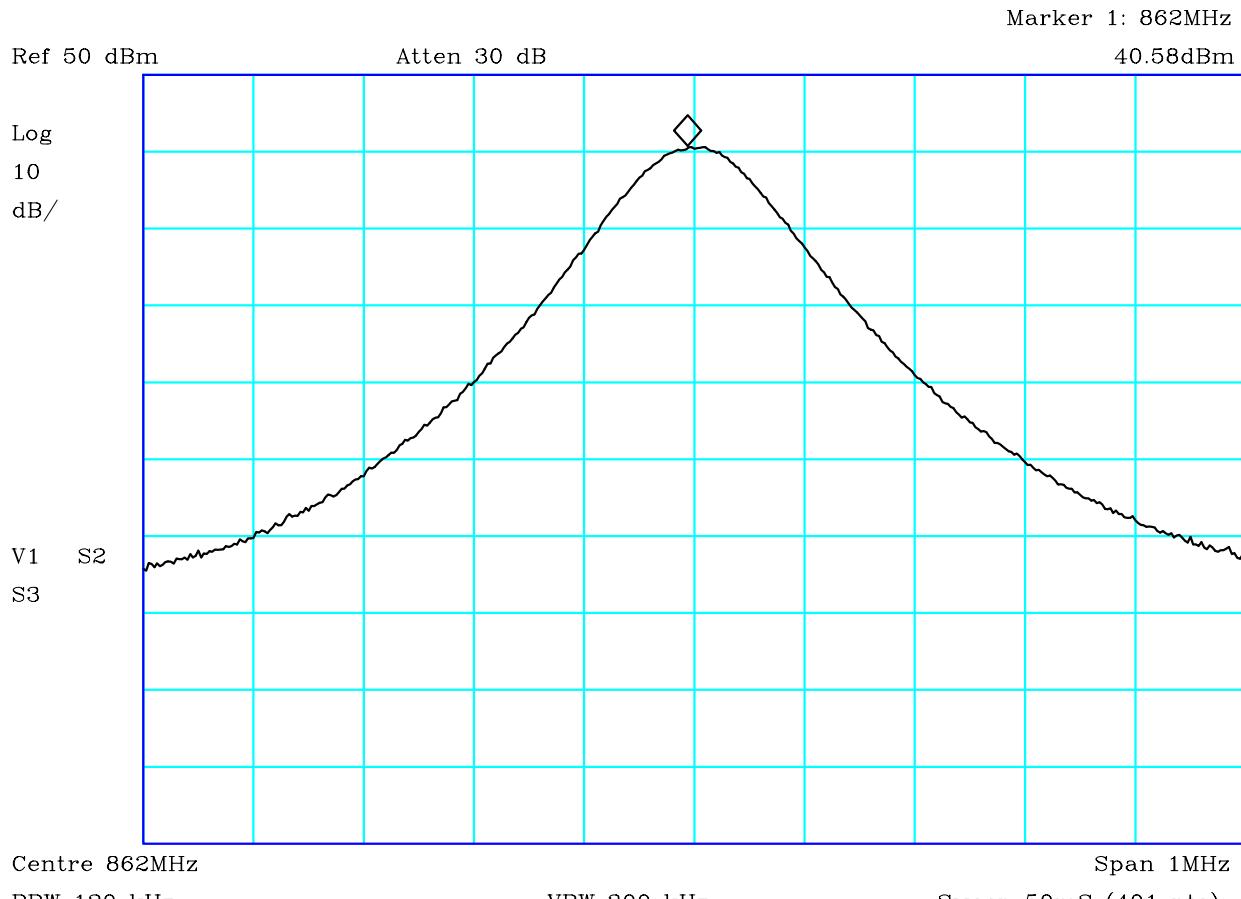
|  |                       |
|--|-----------------------|
| Company: Sepura                                | Product: SRG3500      |
| Date: 06/06/2012                               | Test Eng: Dave Smith  |
| Method: FCC Part 90                            | Method:               |
| Limit1:  | Limit2:               |
| Limit3:  | Limit4:               |
| Peak: 40.98 dBm                                |                       |
| Average (measured with power meter): 38.08 dBm |                       |
| Facility: Anech_2                              | Mode: 1               |
|  | Modification State: 0 |
| File: H2506762                                 |                       |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

**Test Report**

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CF1:30dB PAD + cable

### PLOT 3 Conducted Antenna Output Power (862MHz)

|                     |                      |
|---------------------|----------------------|
| Company: Sepura     | Product: SRG3500     |
| Date: 06/06/2012    | Test Eng: Dave Smith |
| Method: FCC Part 90 | Method:              |
| Limit1:             | Limit2:              |
| Limit3:             | Limit4:              |

Peak: 40.58 dBm  
Average (measured with power meter): 37.82 dBm

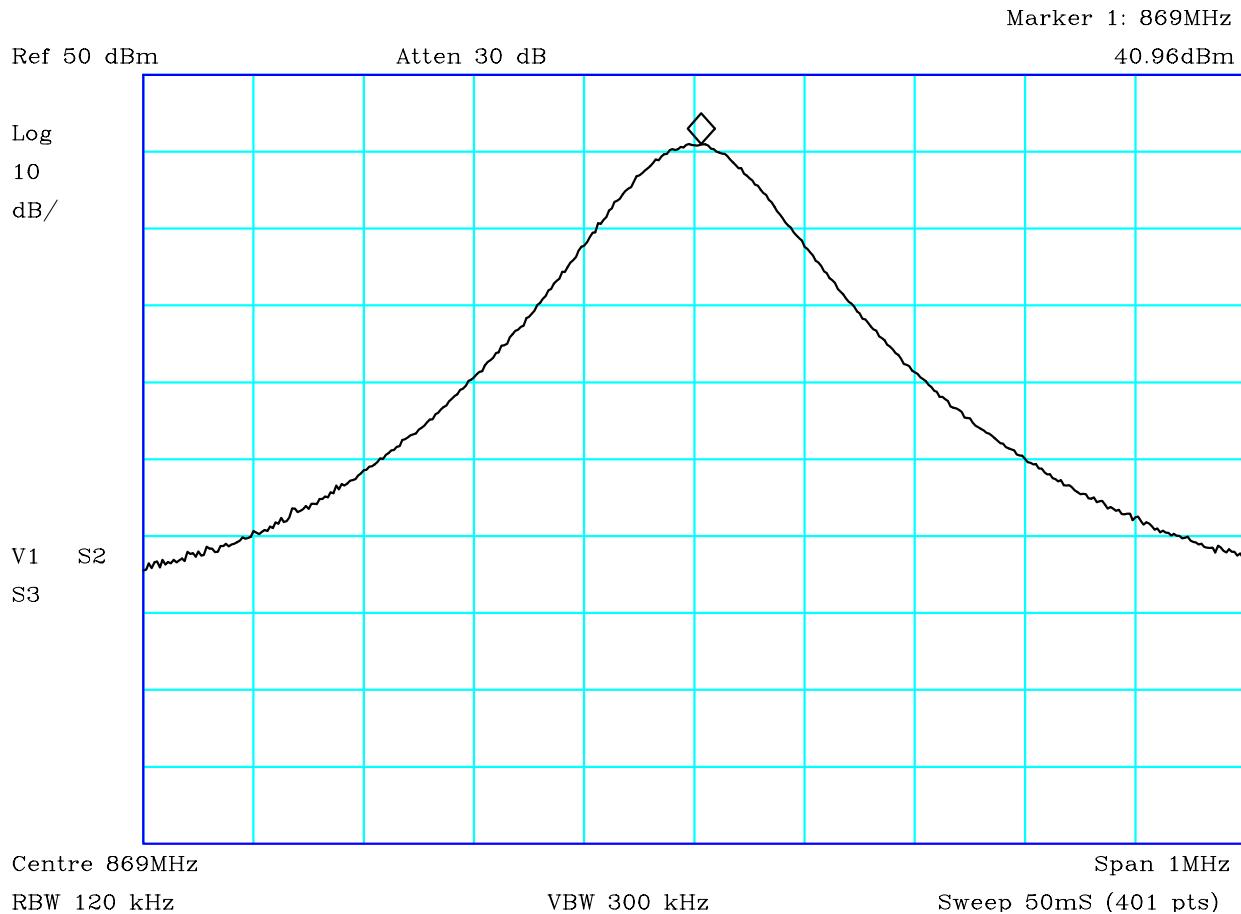
|                   |                       |
|-------------------|-----------------------|
| Facility: Anech_2 | Mode: 1               |
|                   | Modification State: 0 |
| File: H2506768    |                       |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

**Test Report**

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CF1:30dB PAD + cable

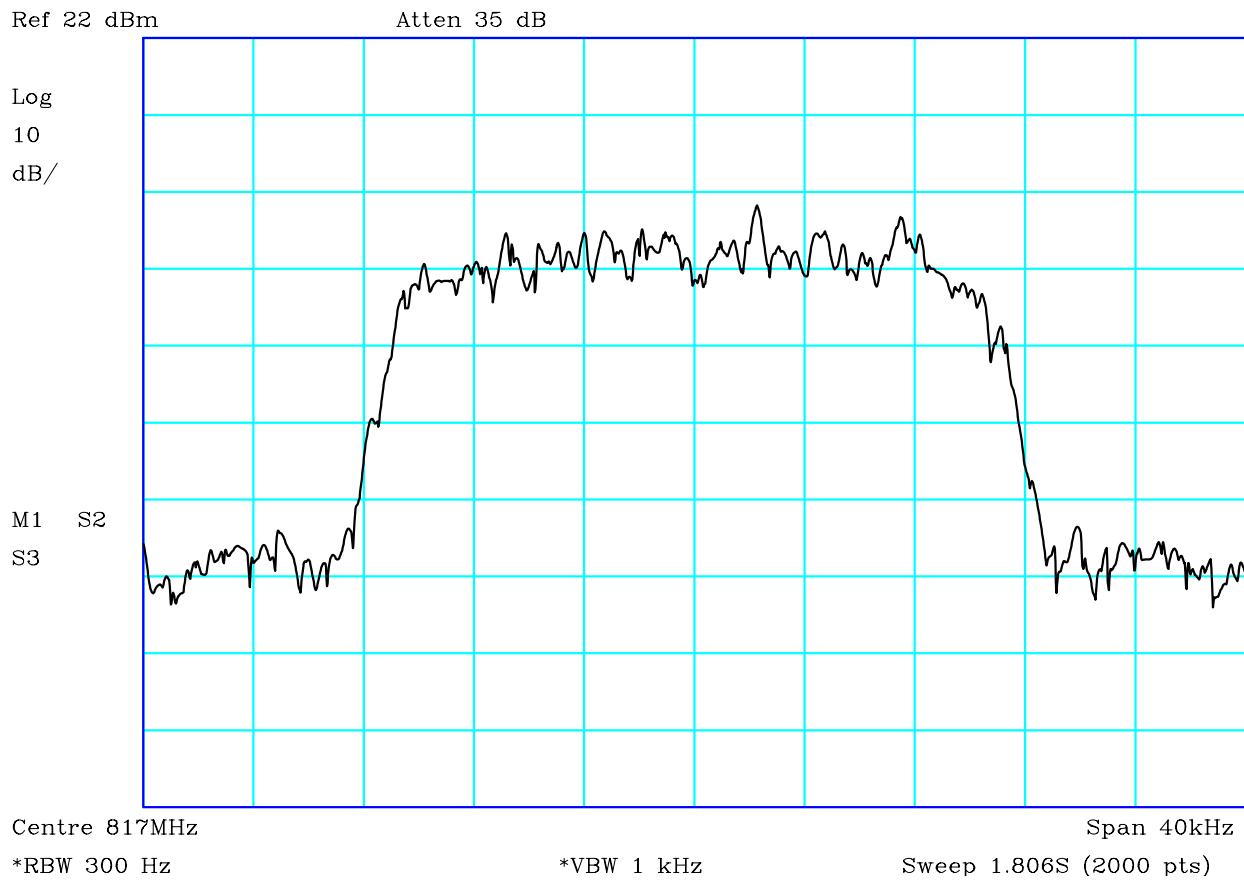
#### PLOT 4 Conducted Antenna Output Power (869MHz)

|                     |                      |
|---------------------|----------------------|
| Company: Sepura     | Product: SRG3500     |
| Date: 06/06/2012    | Test Eng: Dave Smith |
| Method: FCC Part 90 | Method:              |
| Limit1:             | Limit2:              |
| Limit3:             | Limit4:              |

Peak: 40.96 dBm  
Average (measured with power meter): 38.13 dBm

|                   |                       |
|-------------------|-----------------------|
| Facility: Anech_2 | Mode: 1               |
|                   | Modification State: 0 |
| File: H250676B    |                       |

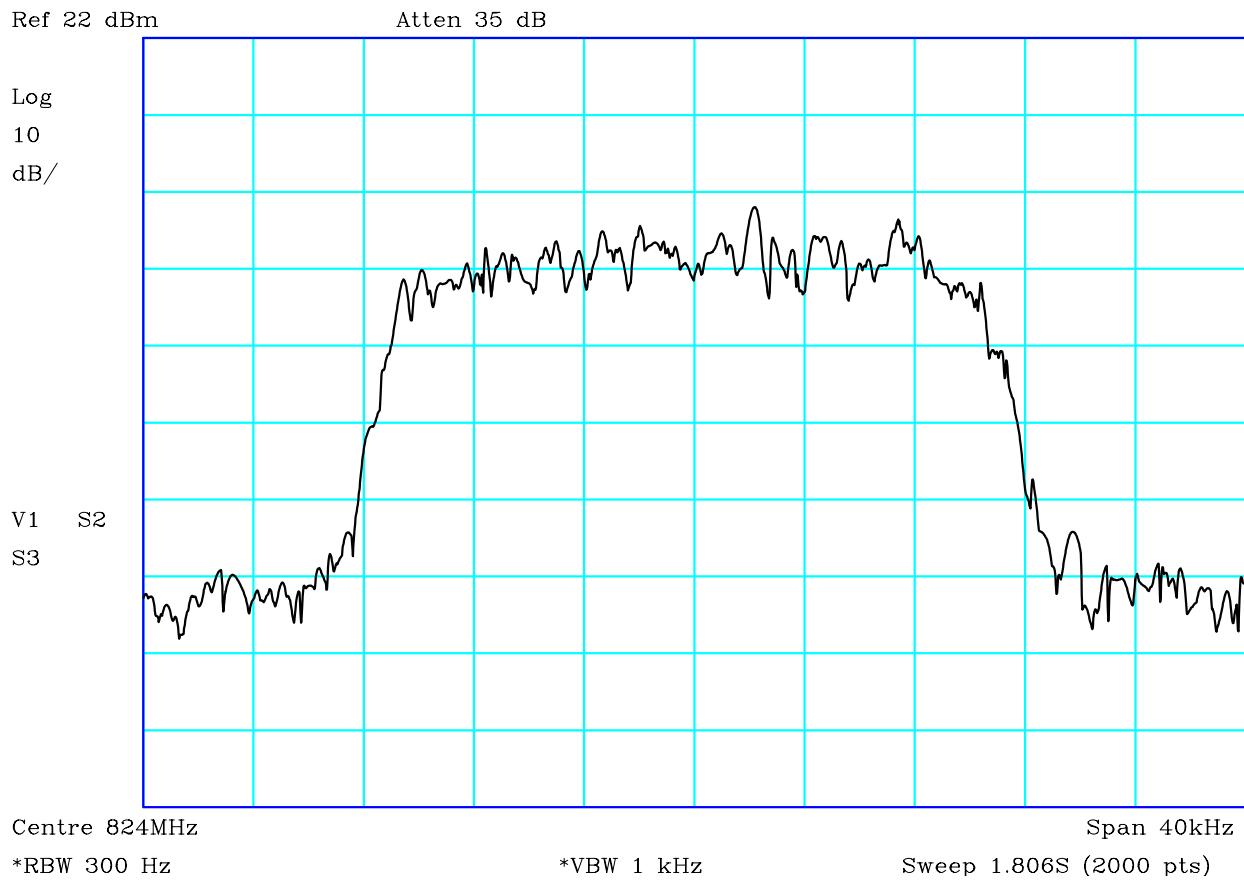
|  |                                 |                       |                 |
|--|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
|  | Test No: T4354                  | Test Report           | Page: 43 of 100 |



## PLOT 5 Occupied Bandwidth (817MHz)

|  |             |                     |            |
|--|-------------|---------------------|------------|
| Company:                                     | Sepura      | Product:            | SRG3500    |
| Date:  | 07/06/2012  | Test Eng:           | Dave Smith |
| Method:                                      | FCC Part 90 | Method:             |            |
| Limit1:                                      |             | Limit2:             |            |
| Limit3:                                      |             | Limit4:             |            |
| 817MHz                                       |             |                     |            |
| 99% Occupied bandwidth measurement: 21.03kHz |             |                     |            |
| Facility:                                    | Environ     | Mode:               | 1          |
|  |             | Modification State: | 0          |
| File:  |             | H2525574            |            |

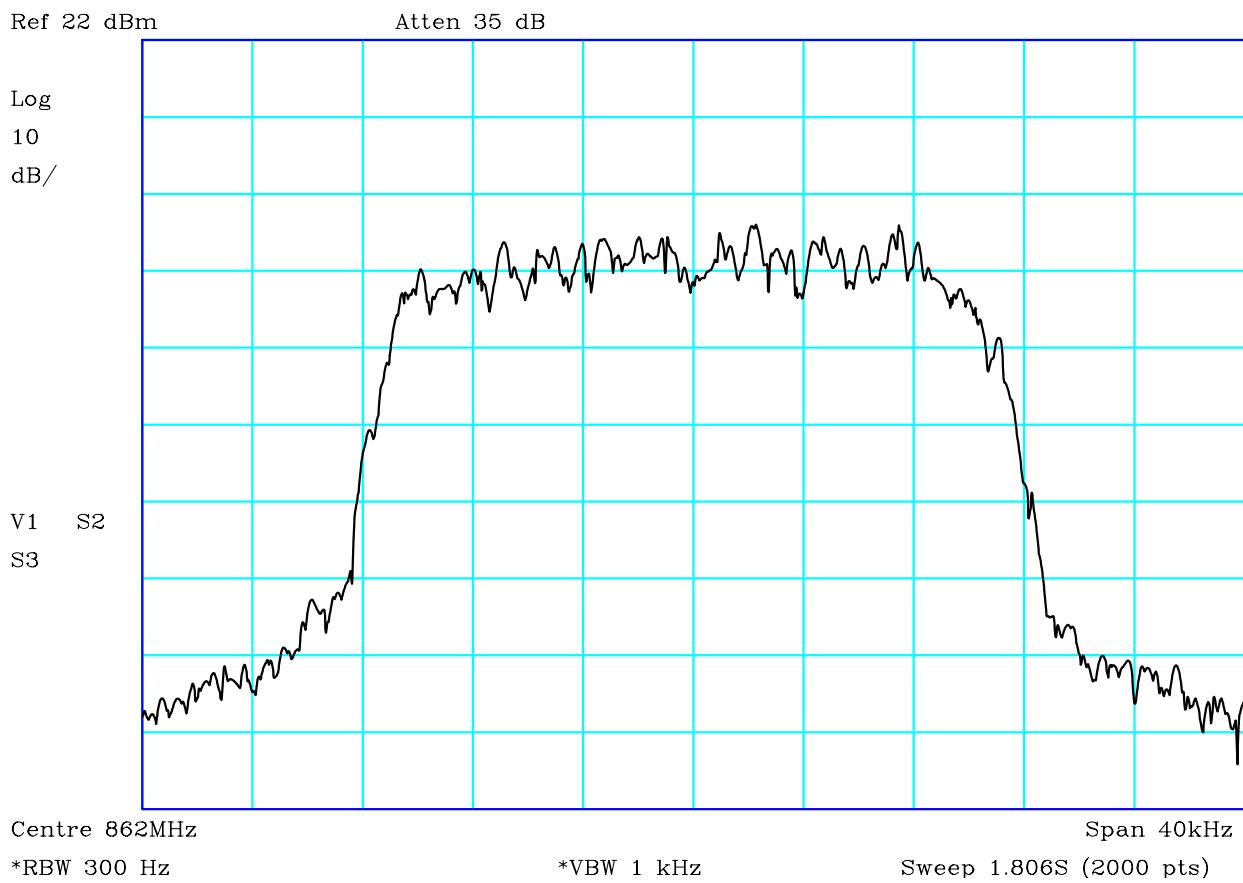
|  |                                 |                       |                 |
|--|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
|  | Test No: T4354                  | Test Report           | Page: 44 of 100 |



## PLOT 6 Occupied Bandwidth (824MHz)

|          |             |           |            |
|----------|-------------|-----------|------------|
| Company: | Sepura      | Product:  | SRG3500    |
| Date:    | 07/06/2012  | Test Eng: | Dave Smith |
| Method:  | FCC Part 90 | Method:   |            |
| Limit1:  |             | Limit2:   |            |
| Limit3:  |             | Limit4:   |            |

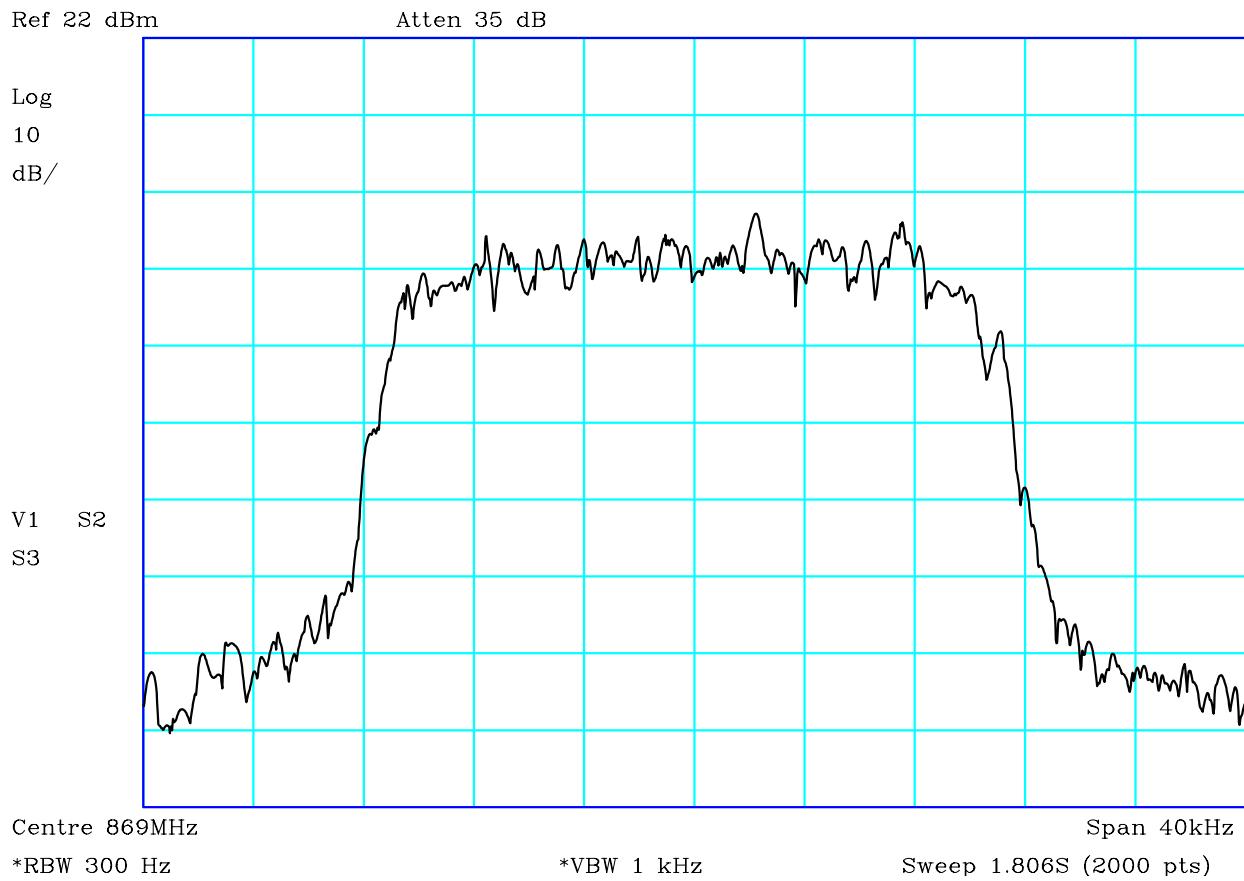
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
|   | Test No: T4354                  | Test Report           | Page: 45 of 100 |



## PLOT 7 Occupied Bandwidth (862MHz)

|  |             |                     |            |
|--|-------------|---------------------|------------|
| Company:   | Sepura      | Product:            | SRG3500    |
| Date:  | 07/06/2012  | Test Eng:           | Dave Smith |
| Method:  | FCC Part 90 | Method:             |            |
| Limit1:  |             | Limit2:             |            |
| Limit3:  |             | Limit4:             |            |
| 862MHz<br>99% Occupied bandwidth measurement: 20.89kHz |             |                     |            |
| Facility:  | Environ     | Mode:               | 1          |
|  |             | Modification State: | 0          |
| File:  |             | H252558C            |            |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
|   | Test No: T4354                  | Test Report           | Page: 46 of 100 |



## PLOT 8 Occupied Bandwidth (869MHz)

|  |             |                     |            |
|--|-------------|---------------------|------------|
| Company:   | Sepura      | Product:            | SRG3500    |
| Date:  | 07/06/2012  | Test Eng:           | Dave Smith |
| Method:  | FCC Part 90 | Method:             |            |
| Limit1:  |             | Limit2:             |            |
| Limit3:  |             | Limit4:             |            |
| 869MHz<br>99% Occupied bandwidth measurement: 20.73kHz |             |                     |            |
| Facility:  | Environ     | Mode:               | 1          |
|  |             | Modification State: | 0          |
| File:  | H2525595    |                     |            |

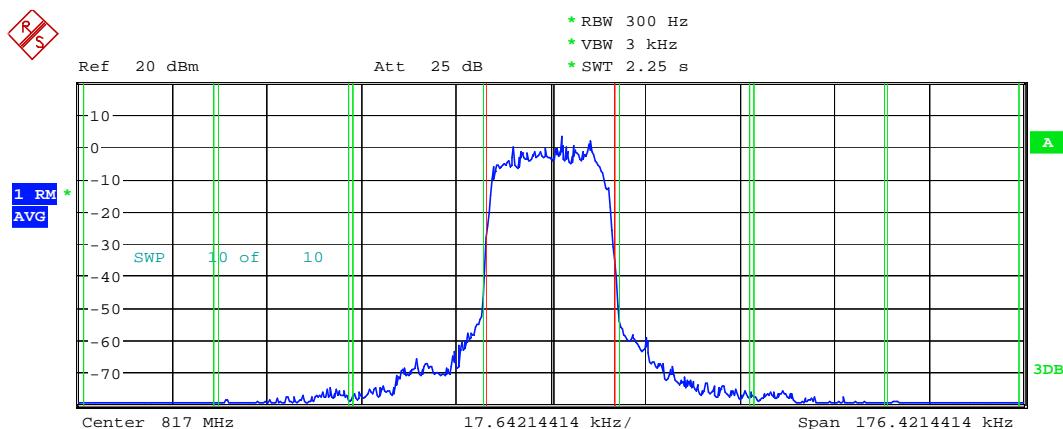
|   |   |
|---|---|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> |
| Test No: <b>T4354</b>   |   |

**FCC ID: XX6-SRG3500XB**

**Test Report**

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**R  
S**

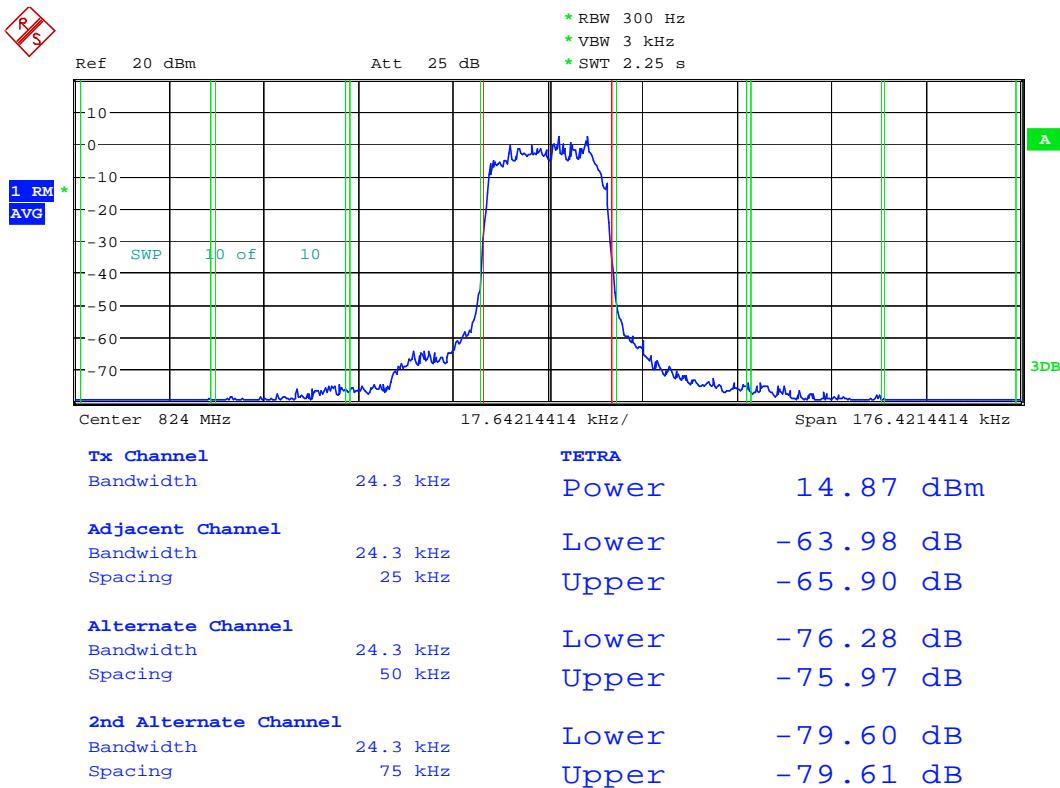


|                              |              |       |           |
|------------------------------|--------------|-------|-----------|
| <b>Tx Channel</b>            | <b>TETRA</b> |       |           |
| Bandwidth                    | 24.3 kHz     | Power | 14.89 dBm |
| <b>Adjacent Channel</b>      |              |       |           |
| Bandwidth                    | 24.3 kHz     | Lower | -65.30 dB |
| Spacing                      | 25 kHz       | Upper | -65.48 dB |
| <b>Alternate Channel</b>     |              |       |           |
| Bandwidth                    | 24.3 kHz     | Lower | -76.60 dB |
| Spacing                      | 50 kHz       | Upper | -76.42 dB |
| <b>2nd Alternate Channel</b> |              |       |           |
| Bandwidth                    | 24.3 kHz     | Lower | -79.26 dB |
| Spacing                      | 75 kHz       | Upper | -79.26 dB |

Date: 12.JUN.2012 13:21:24

**PLOT 9 Adjacent Channel Power (817MHz)**

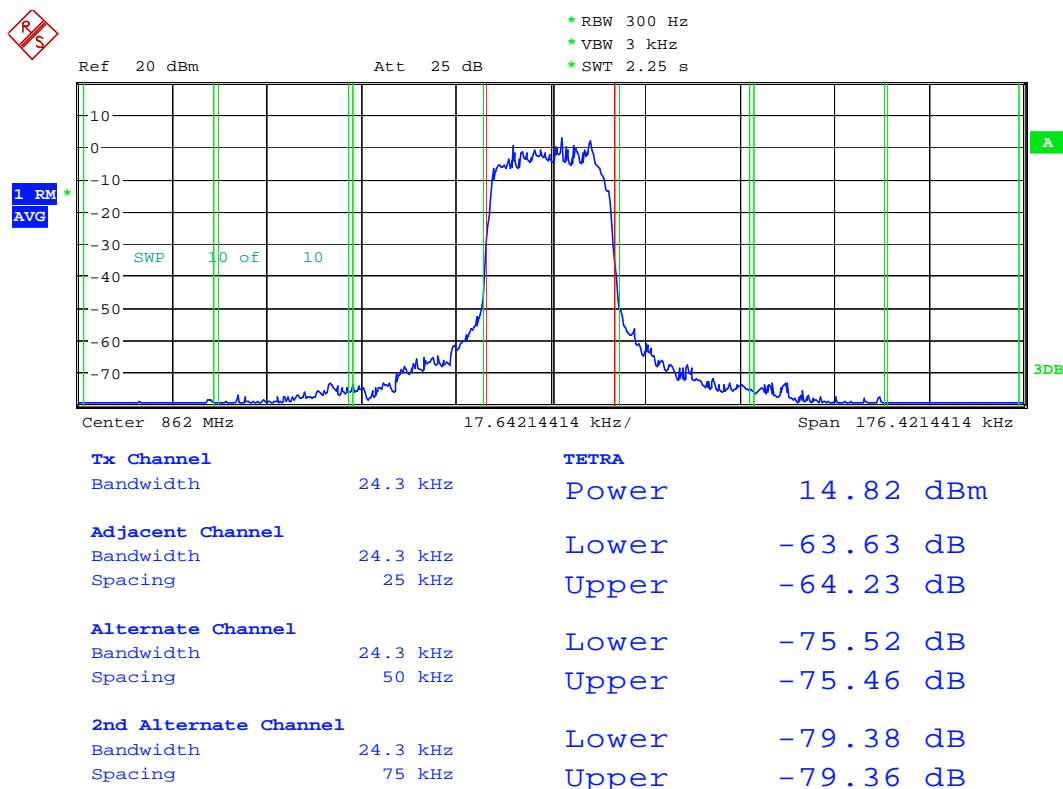
|  |                                 |                       |                 |
|--|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
|  | Test No: T4354                  | Test Report           | Page: 48 of 100 |



Date: 12.JUN.2012 13:22:10

## PLOT 10 Adjacent Channel Power (824MHz)

|   |   |                              |                        |
|---|---|------------------------------|------------------------|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> | <b>FCC ID: XX6-SRG3500XB</b> |                        |
|   | Test No: <b>T4354</b>                         | <b>Test Report</b>           | Page: <b>49 of 100</b> |



Date: 12.JUN.2012 13:24:12

### PLOT 11 Adjacent Channel Power (862MHz)

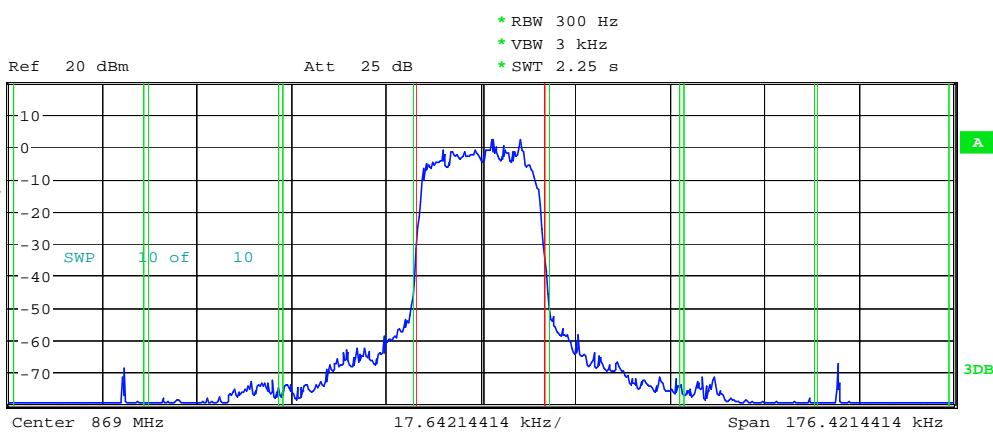
|   |   |
|---|---|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> |
| Test No: <b>T4354</b>   |   |

**FCC ID: XX6-SRG3500XB**

**Test Report**

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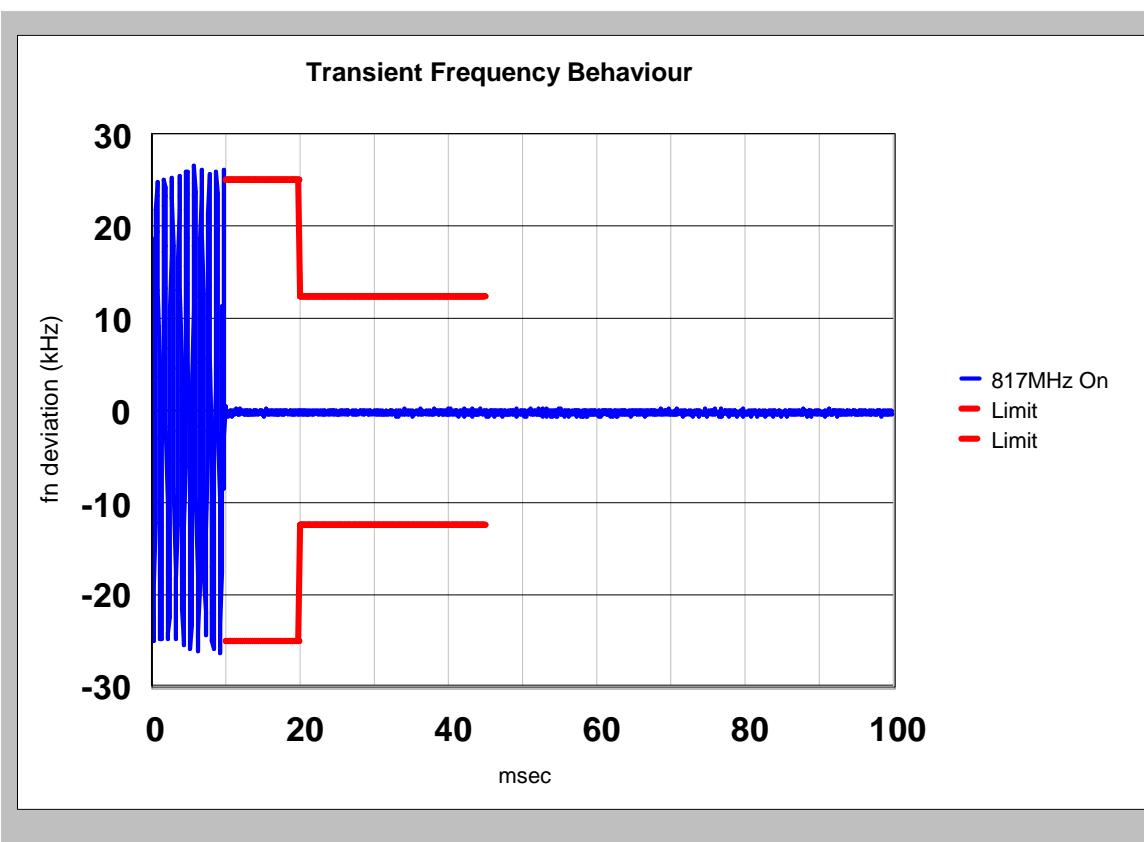
**R  
S**



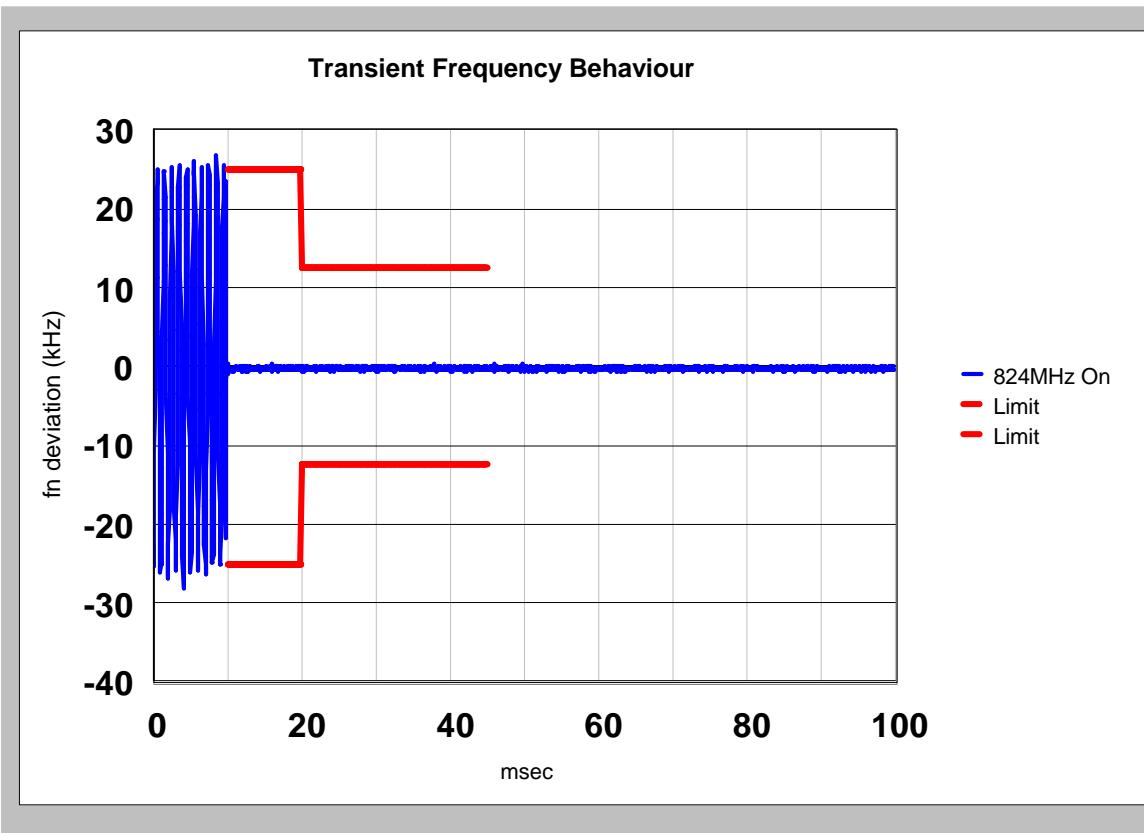
|                              |              |       |           |
|------------------------------|--------------|-------|-----------|
| <b>Tx Channel</b>            | <b>TETRA</b> |       |           |
| Bandwidth                    | 24.3 kHz     | Power | 15.04 dBm |
| <b>Adjacent Channel</b>      |              |       |           |
| Bandwidth                    | 24.3 kHz     | Lower | -62.57 dB |
| Spacing                      | 25 kHz       | Upper | -63.56 dB |
| <b>Alternate Channel</b>     |              |       |           |
| Bandwidth                    | 24.3 kHz     | Lower | -75.59 dB |
| Spacing                      | 50 kHz       | Upper | -75.61 dB |
| <b>2nd Alternate Channel</b> |              |       |           |
| Bandwidth                    | 24.3 kHz     | Lower | -78.51 dB |
| Spacing                      | 75 kHz       | Upper | -78.31 dB |

Date: 12.JUN.2012 13:24:50

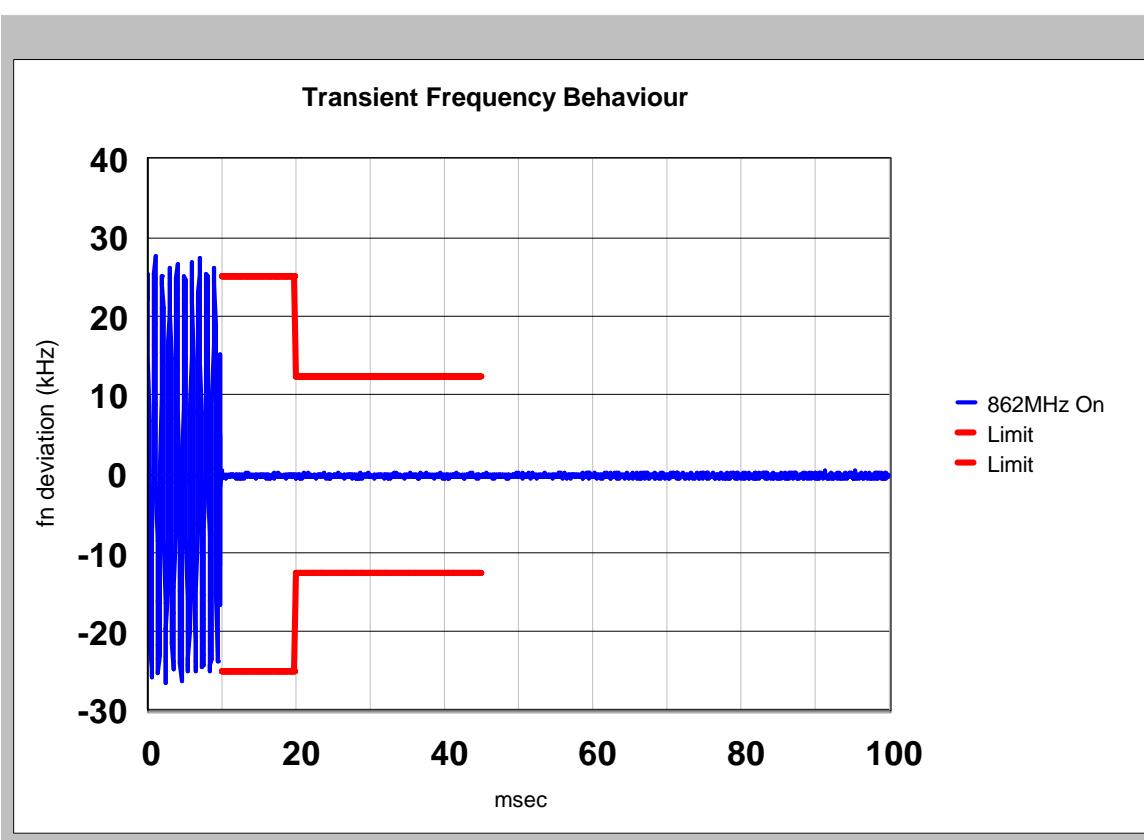
**PLOT 12 Adjacent Channel Power (869MHz)**



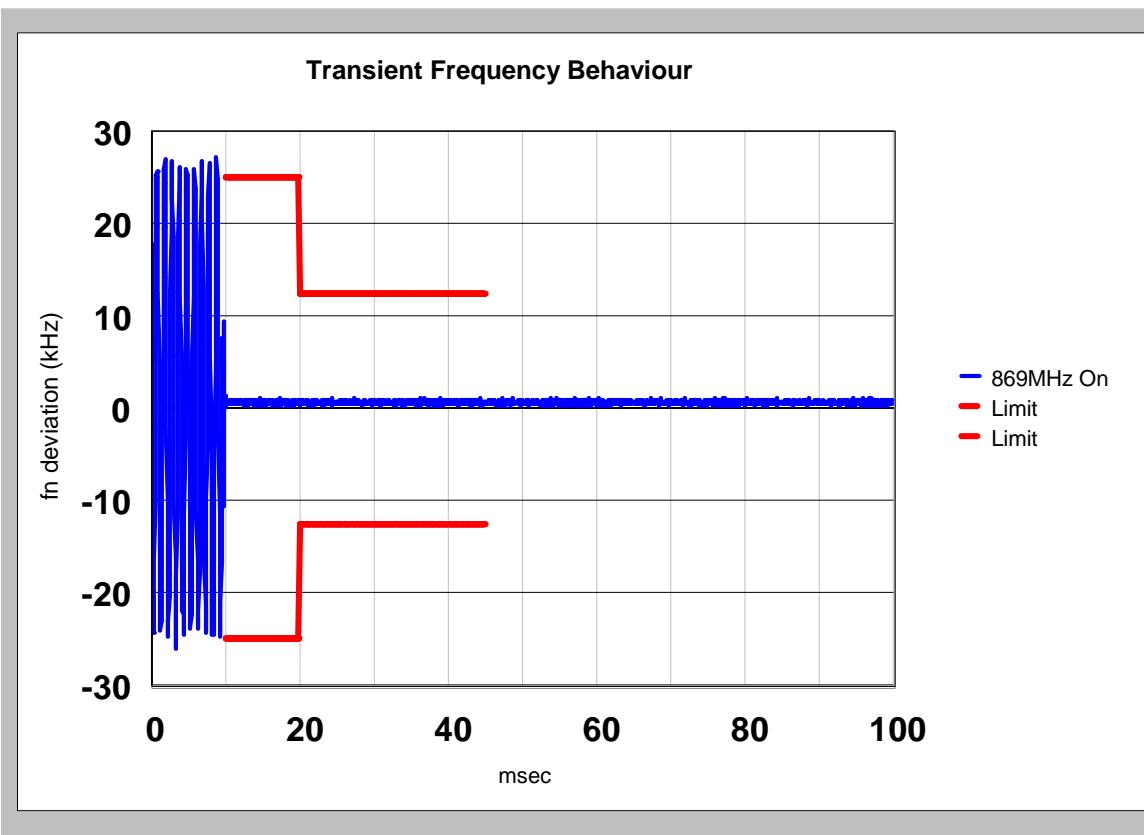
PLOT 13 Transient Frequency - 817MHz - On



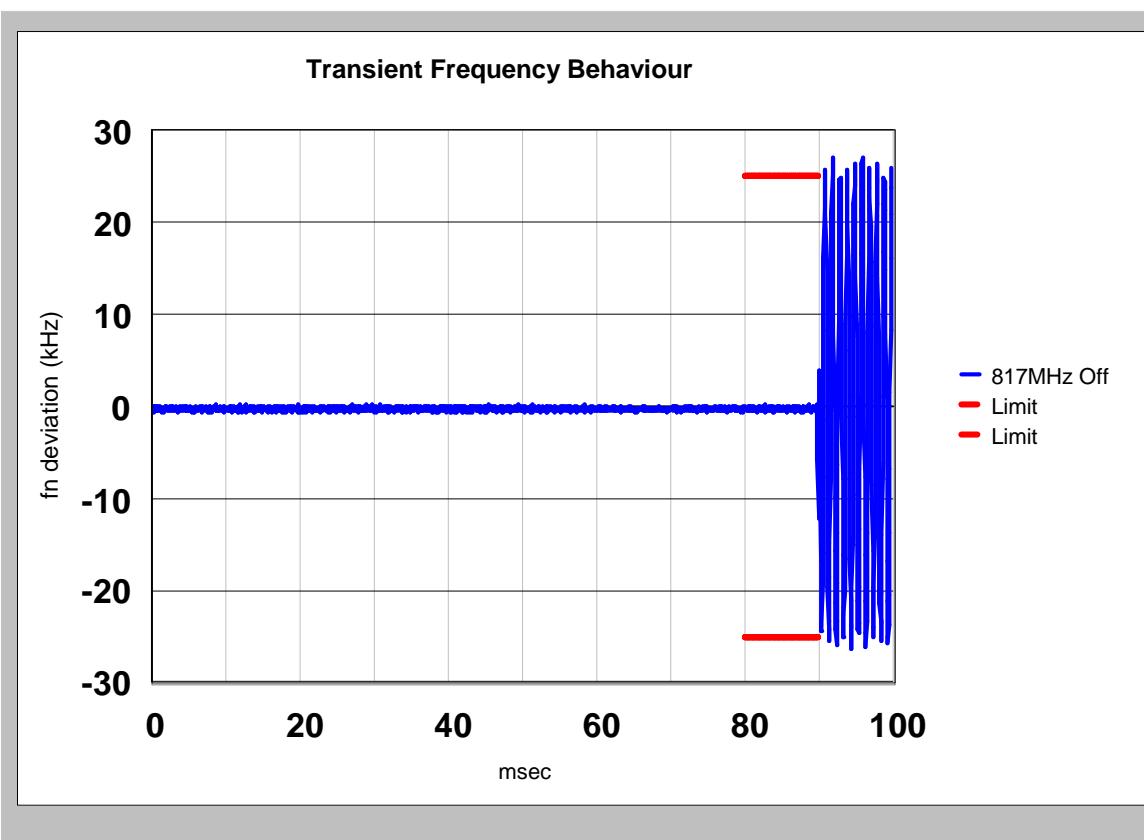
PLOT 14 Transient Frequency - 824MHz - On



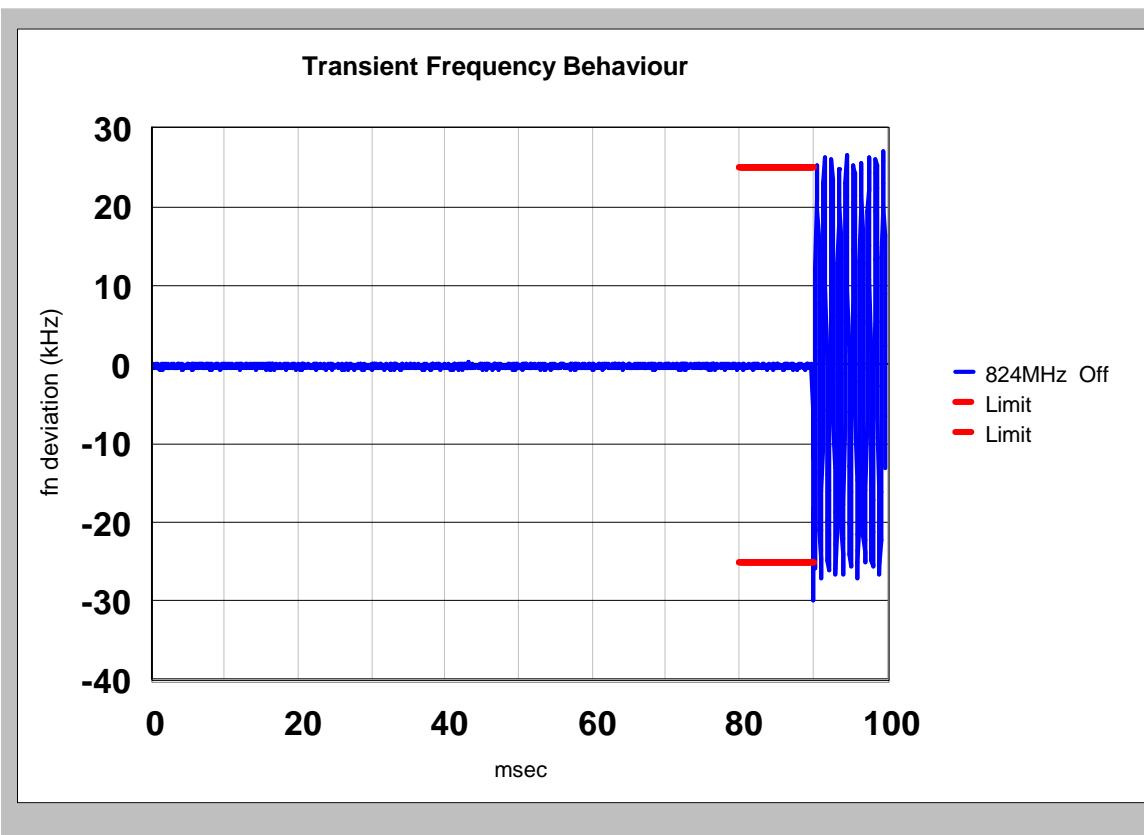
PLOT 15 Transient Frequency - 862MHz - On



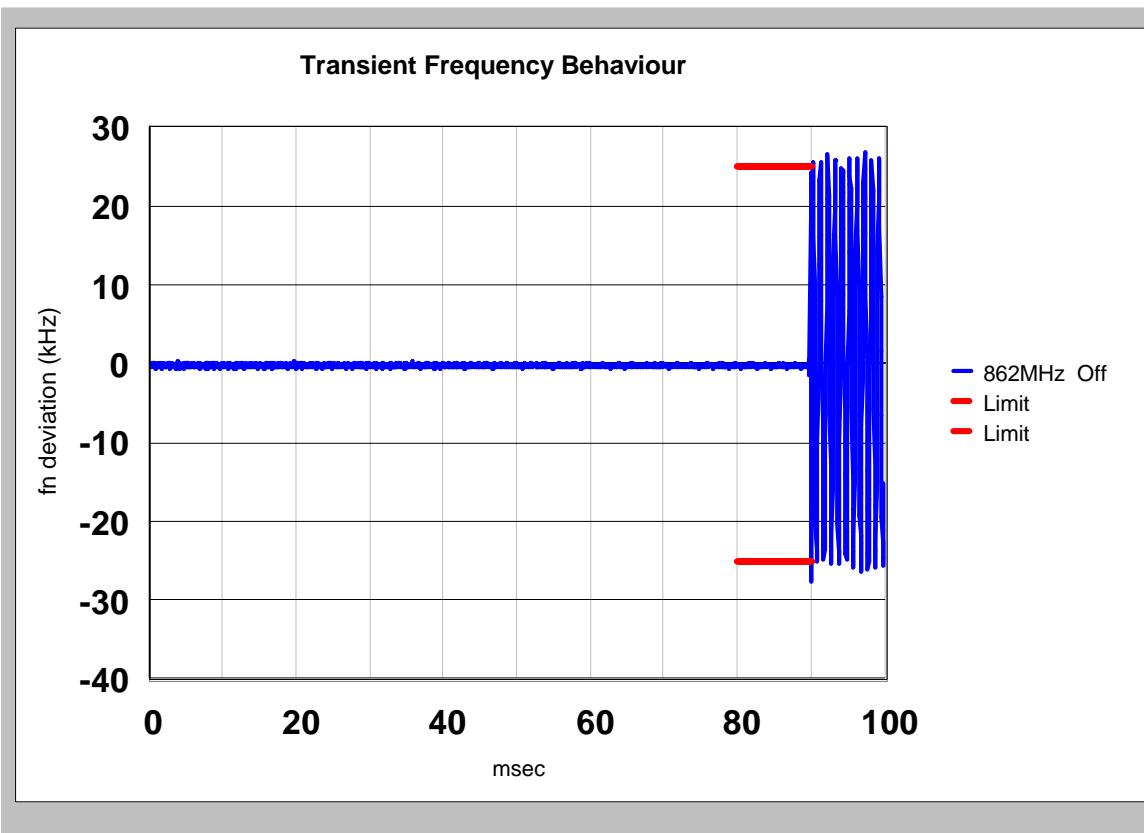
PLOT 16 Transient Frequency - 869MHz - On



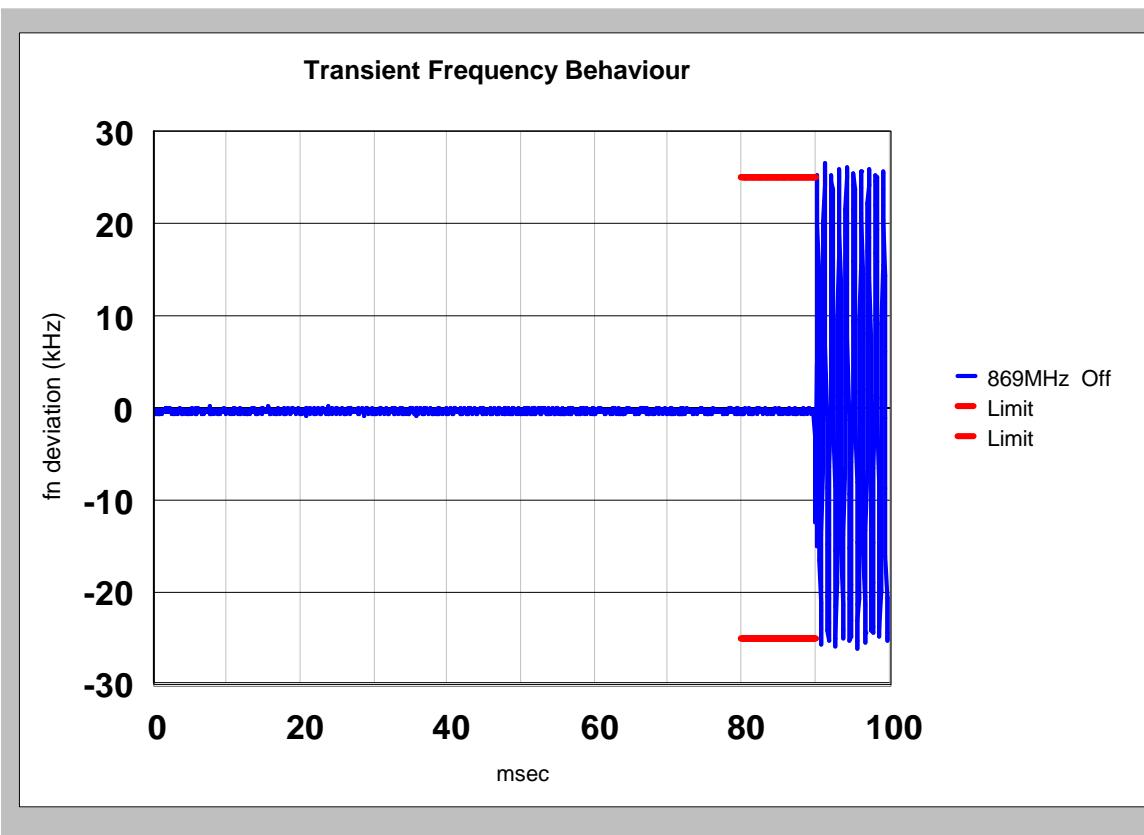
PLOT 17 Transient Frequency - 817MHz - Off



PLOT 18 Transient Frequency - 824MHz - Off



PLOT 19 Transient Frequency - 862MHz - Off



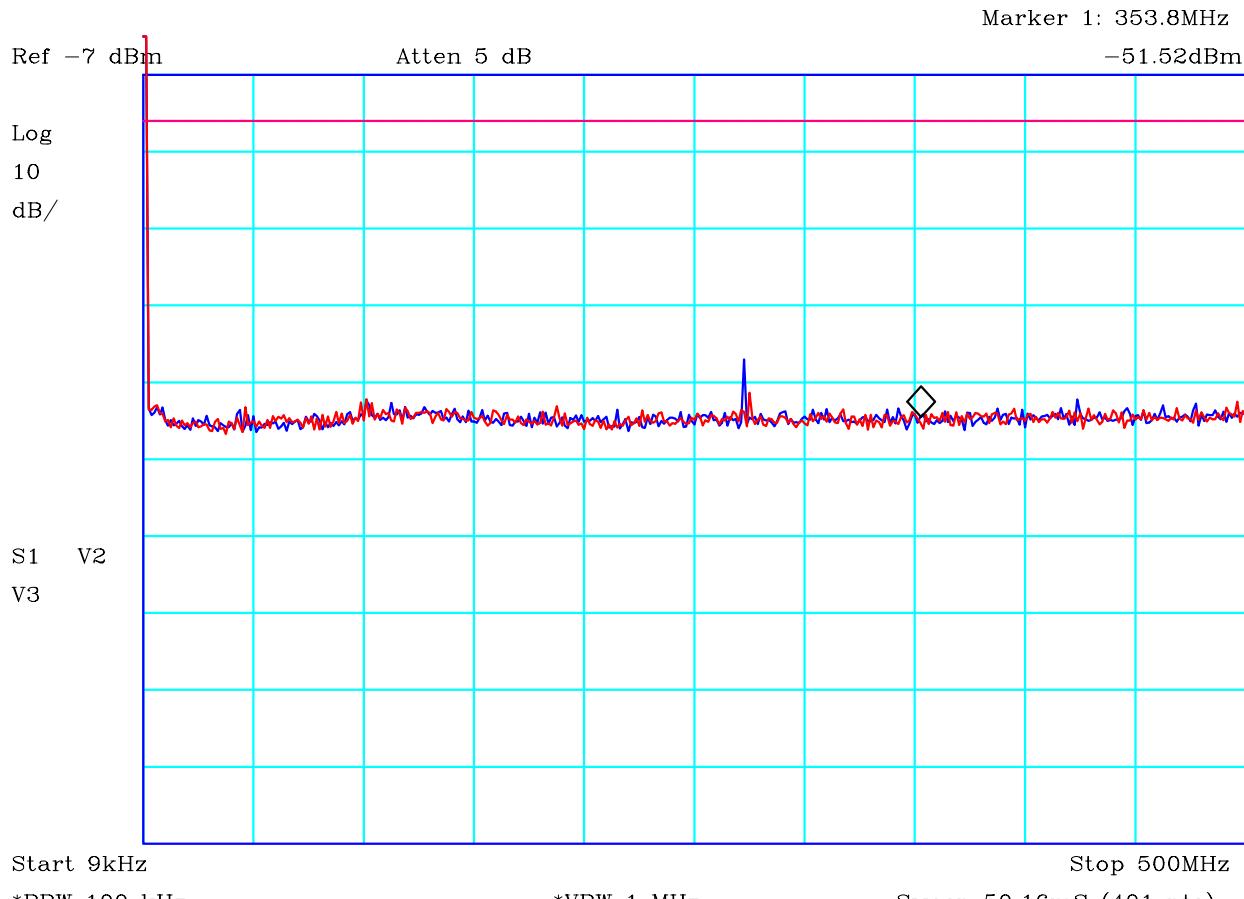
PLOT 20 Transient Frequency - 869MHz - Off

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

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PLOT 21 Antenna Conducted Spur Emissions - 817 to 824 Band - 9kHz to 500MHz

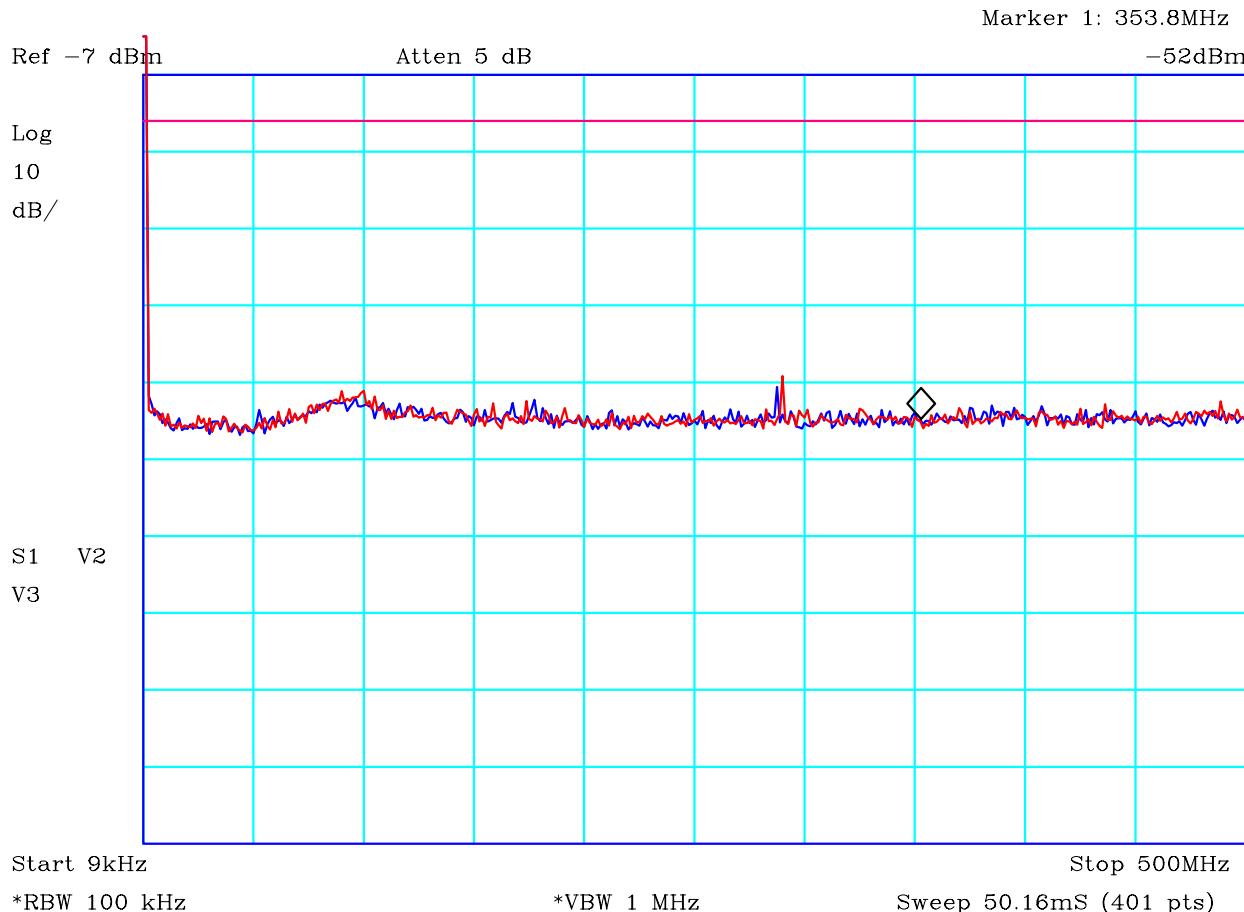
|              |             |                     |            |
|--------------|-------------|---------------------|------------|
| Company:     | Sepura      | Product:            | SRG3500    |
| Date:        | 07/06/2012  | Test Eng:           | Dave Smith |
| Method:      | FCC Part 90 | Method:             |            |
| Limit1:(VIO) | -13dBm      | Limit2:             |            |
| Limit3:      |             | Limit4:             |            |
| Blue: 817MHz |             |                     |            |
| Red 824MHz   |             |                     |            |
| Limit -13dBm |             |                     |            |
| Facility:    | Environ     | Mode:               | 1          |
|              |             | Modification State: | 0          |
|              |             | File:               | H25076E6   |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

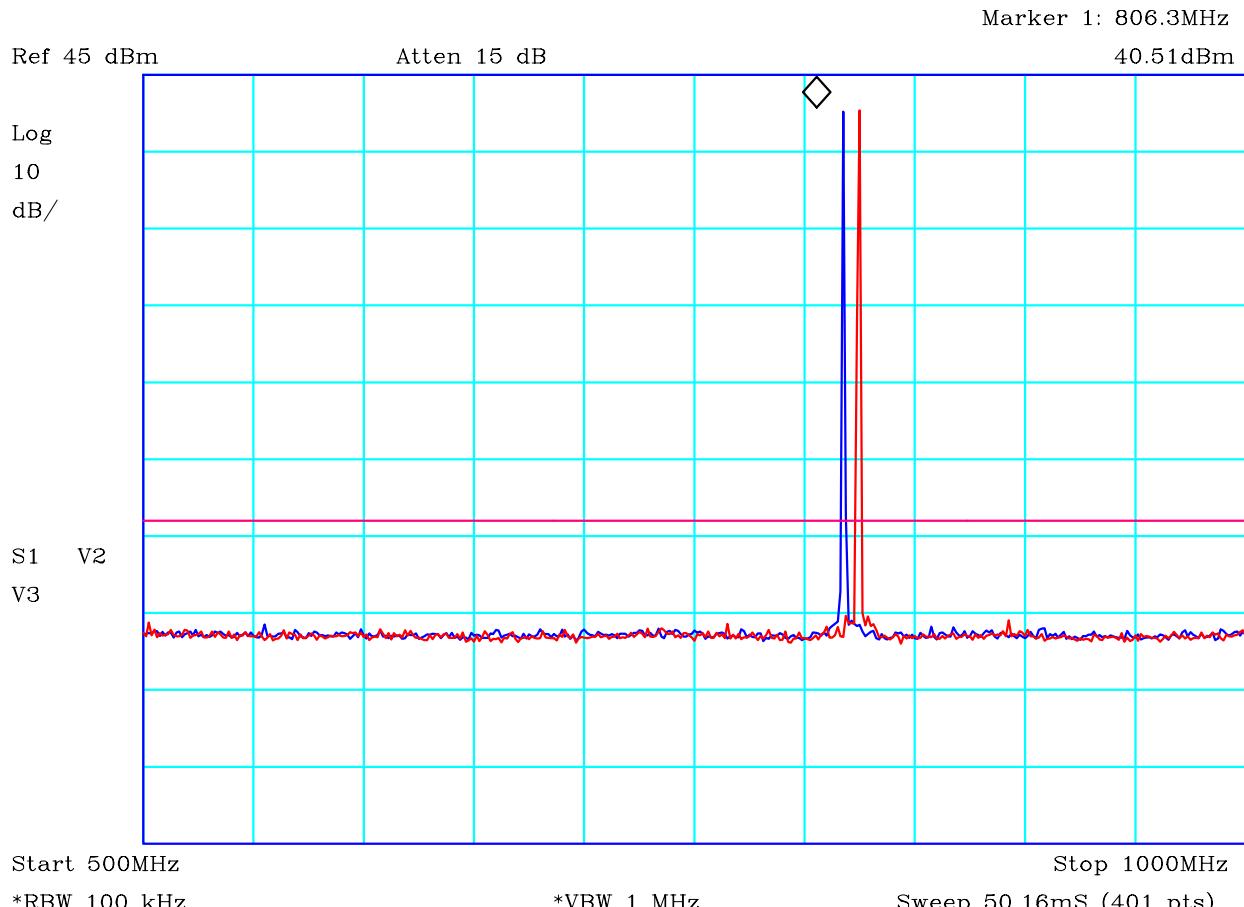
Page: 56 of 100



PLOT 22 Antenna Conducted Spur Emissions - 862 to 869 Band - 9kHz to 500MHz

|  |             |                     |            |
|--|-------------|---------------------|------------|
| Company:                                   | Sepura      | Product:            | SRG3500    |
| Date:                                      | 07/06/2012  | Test Eng:           | Dave Smith |
| Method:                                    | FCC Part 90 | Method:             |            |
| Limit1:(VIO)                               | -13dBm      | Limit2:             |            |
| Limit3:                                    |             | Limit4:             |            |
| Blue: 862MHz<br>Red 869MHz<br>Limit -13dBm |             |                     |            |
| Facility:                                  | Environ     | Mode:               | 1          |
|  |             | Modification State: | 0          |
|  |             | File:               | H25076F1   |

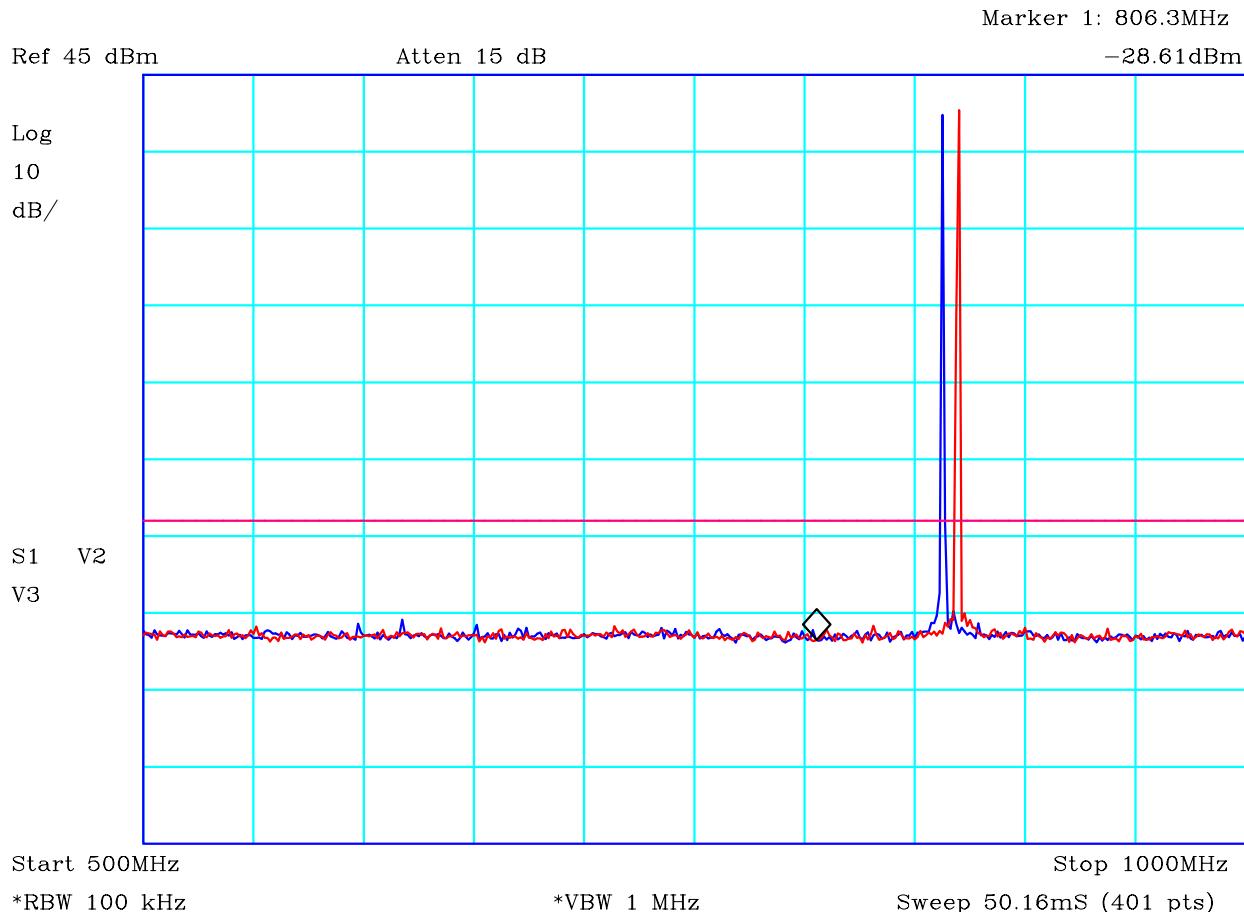
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 57 of 100 |



### PLOT 23 Antenna Conducted Spur Emissions - 817 to 824 Band - 500MHz to 1GHz

|                     |                       |
|---------------------|-----------------------|
| Company: Sepura     | Product: SRG3500      |
| Date: 07/06/2012    | Test Eng: Dave Smith  |
| Method: FCC Part 90 | Method:               |
| Limit1:(VIO) -13dBm | Limit2:               |
| Limit3:             | Limit4:               |
| Blue: 817MHz        |                       |
| Red 824MHz          |                       |
| Limit -13dBm        |                       |
| Facility: Environ   | Mode: 1               |
|                     | Modification State: 0 |
| File: H250771E      |                       |

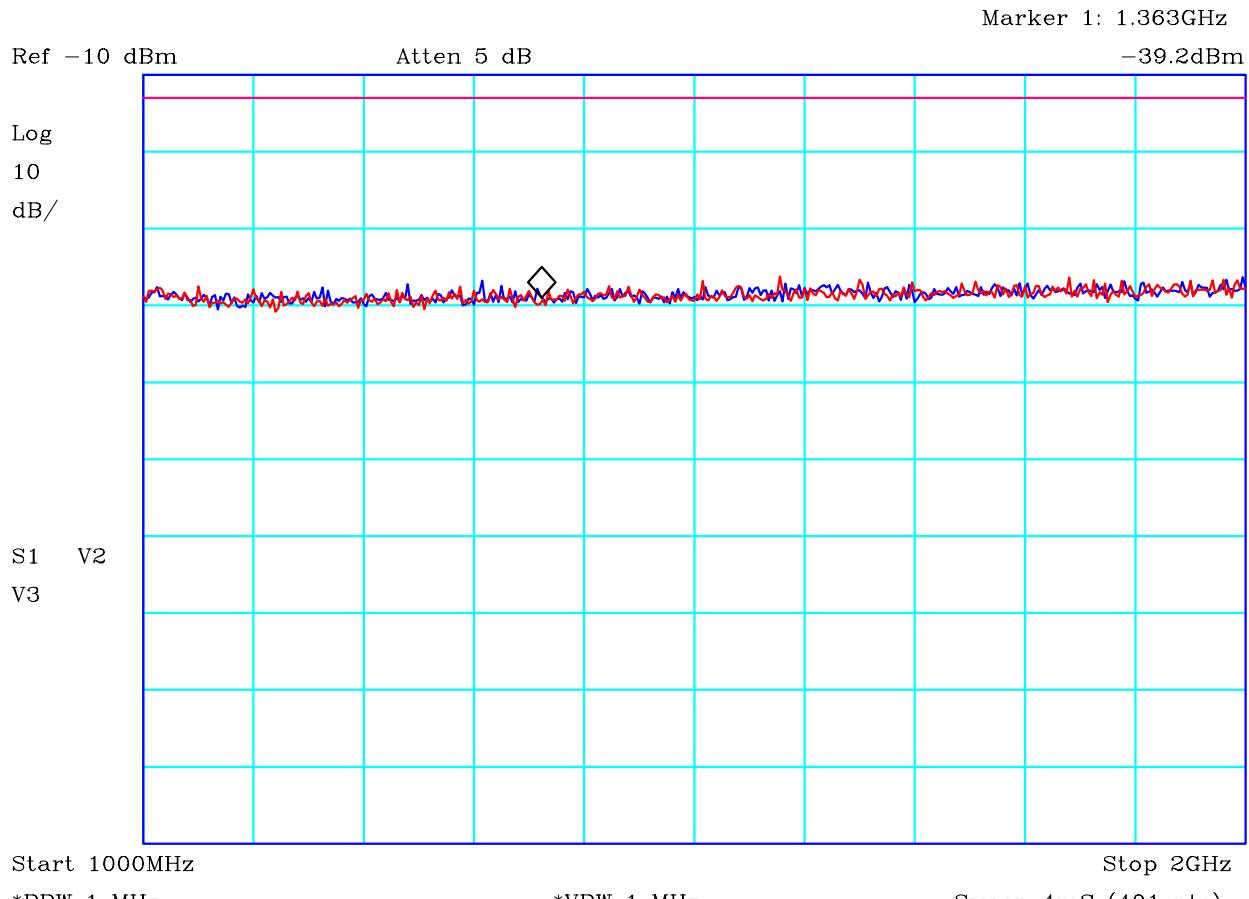
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 58 of 100 |



### PLOT 24 Antenna Conducted Spur Emissions - 862 to 869 Band - 500MHz to 1GHz

|                     |                       |
|---------------------|-----------------------|
| Company: Sepura     | Product: SRG3500      |
| Date: 07/06/2012    | Test Eng: Dave Smith  |
| Method: FCC Part 90 | Method:               |
| Limit1:(VIO) -13dBm | Limit2:               |
| Limit3:             | Limit4:               |
| Blue: 862MHz        |                       |
| Red 869MHz          |                       |
| Limit -13dBm        |                       |
| Facility: Environ   | Mode: 1               |
|                     | Modification State: 0 |
| File: H2507724      |                       |

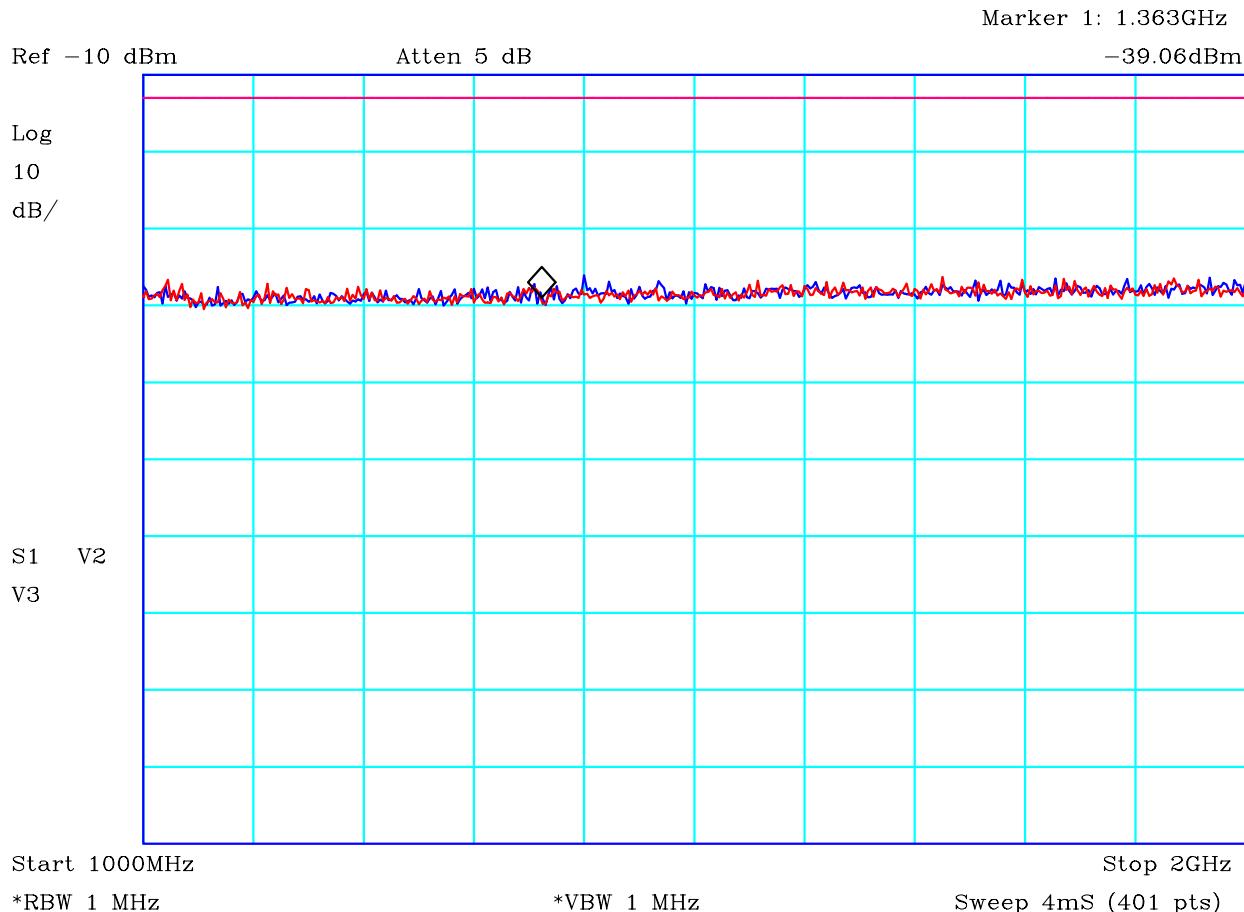
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 59 of 100 |



### PLOT 25 Antenna Conducted Spur Emissions - 817 to 824 Band - 1GHz to 2GHz

|  |                       |
|--|-----------------------|
| Company: Sepura                            | Product: SRG3500      |
| Date: 07/06/2012                           | Test Eng: Dave Smith  |
| Method: FCC Part 90                        | Method:               |
| Limit1:(VIO) -13dBm                        | Limit2:               |
| Limit3:                                    | Limit4:               |
| Blue: 817MHz<br>Red 824MHz<br>Limit -13dBm |                       |
| Facility: Environ                          | Mode: 1               |
|  | Modification State: 0 |
| File: H250777A                             |                       |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 60 of 100 |



## PLOT 26 Antenna Conducted Spur Emissions - 862 to 869 Band - 1GHz to 2GHz

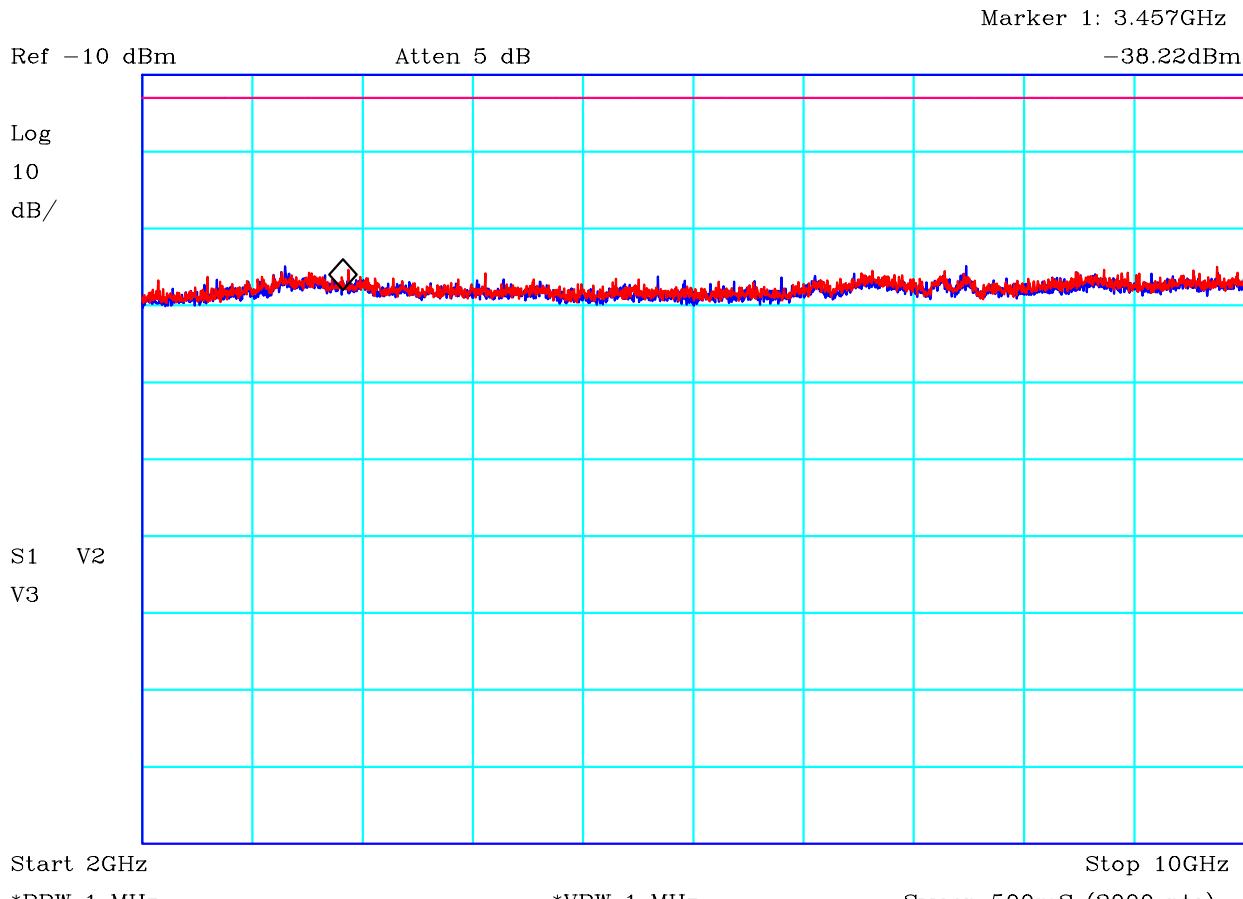
|                     |                       |
|---------------------|-----------------------|
| Company: Sepura     | Product: SRG3500      |
| Date: 07/06/2012    | Test Eng: Dave Smith  |
| Method: FCC Part 90 | Method:               |
| Limit1:(VIO) -13dBm | Limit2:               |
| Limit3:             | Limit4:               |
| Blue: 862MHz        |                       |
| Red 869MHz          |                       |
| Limit -13dBm        |                       |
| Facility: Environ   | Mode: 1               |
|                     | Modification State: 0 |
| File: H2507781      |                       |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

**Test Report**

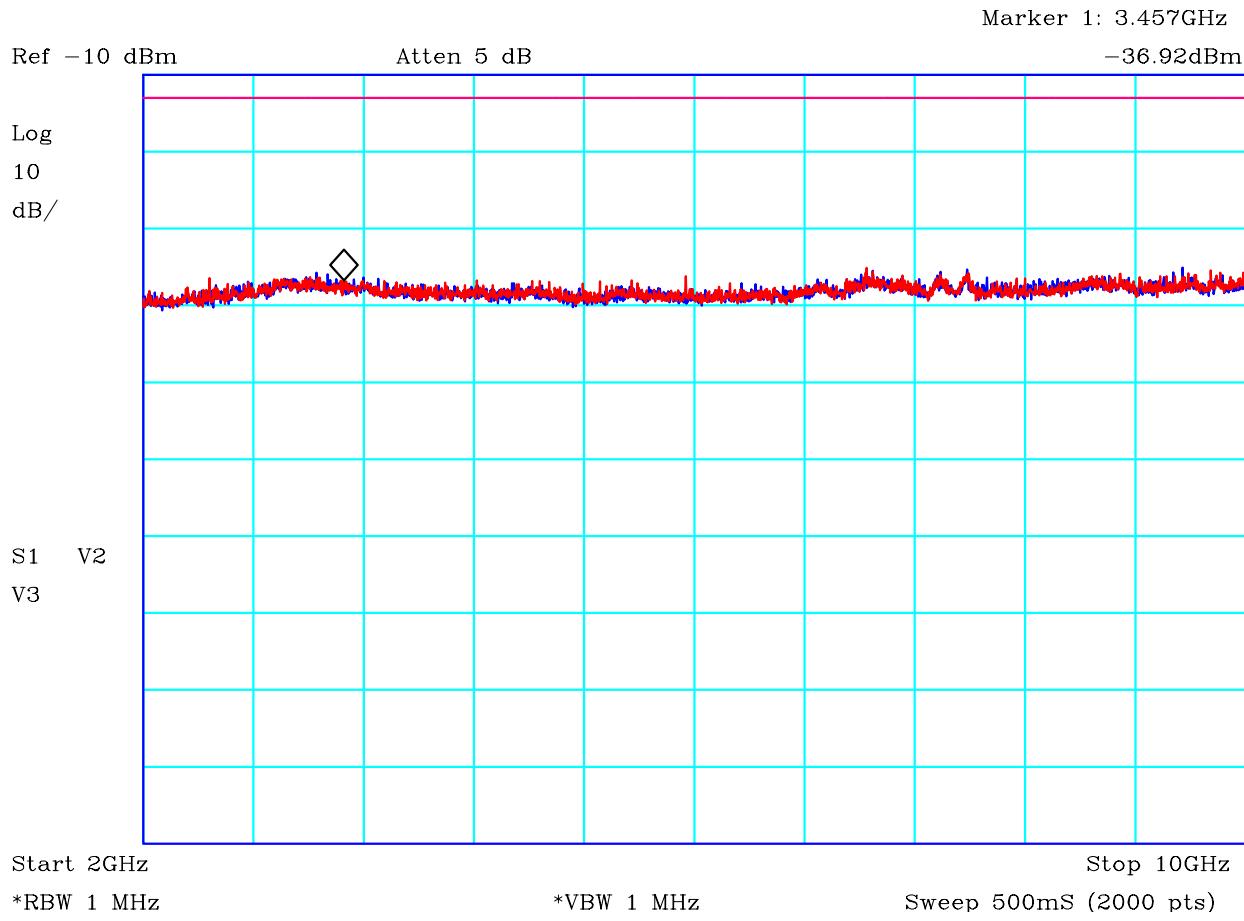
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### PLOT 27 Antenna Conducted Spur Emissions - 817 to 824 Band - 2GHz to 10GHz

|              |             |                     |            |
|--------------|-------------|---------------------|------------|
| Company:     | Sepura      | Product:            | SRG3500    |
| Date:        | 07/06/2012  | Test Eng:           | Dave Smith |
| Method:      | FCC Part 90 | Method:             |            |
| Limit1:(VIO) | -13dBm      | Limit2:             |            |
| Limit3:      |             | Limit4:             |            |
| Blue: 817MHz |             |                     |            |
| Red 824MHz   |             |                     |            |
| Limit -13dBm |             |                     |            |
| Facility:    | Environ     | Mode:               | 1          |
|              |             | Modification State: | 0          |
|              |             | File:               | H25077B8   |

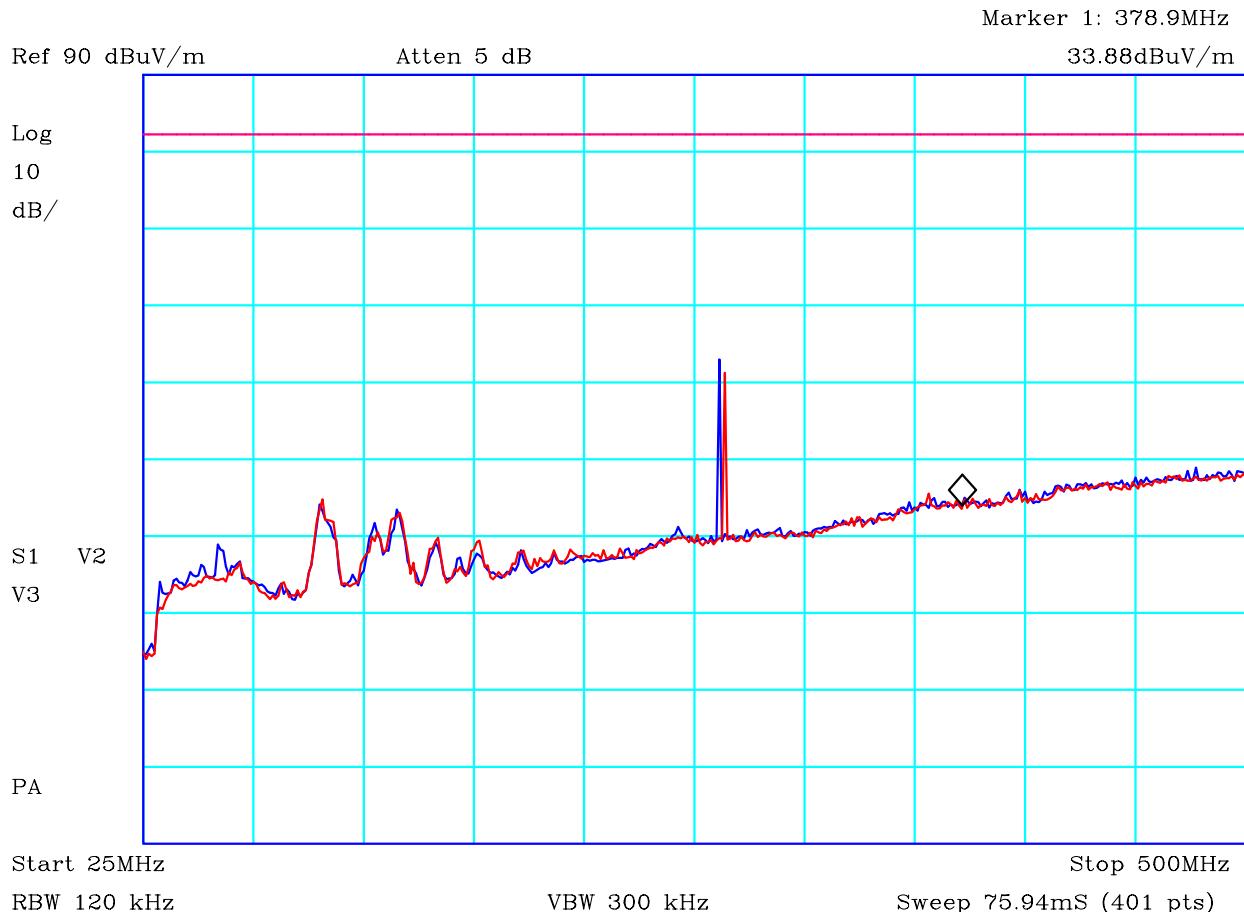
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 62 of 100 |



## PLOT 28 Antenna Conducted Spur Emissions - 862 to 869 Band - 2GHz to 10GHz

|  |                       |
|--|-----------------------|
| Company: Sepura                            | Product: SRG3500      |
| Date: 07/06/2012                           | Test Eng: Dave Smith  |
| Method: FCC Part 90                        | Method:               |
| Limit1:(VIO) -13dBm                        | Limit2:               |
| Limit3:                                    | Limit4:               |
| Blue: 862MHz<br>Red 869MHz<br>Limit -13dBm |                       |
| Facility: Environ                          | Mode: 1               |
|  | Modification State: 0 |
| File: H25077C1                             |                       |

|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      |                       |                 |  |
| Test No: T4354  | Test Report      |                       | Page: 63 of 100 |  |



### PLOT 29 Radiated Emissions - Config 1 - 817 - 824 band Tx - 25MHz to 500MHz

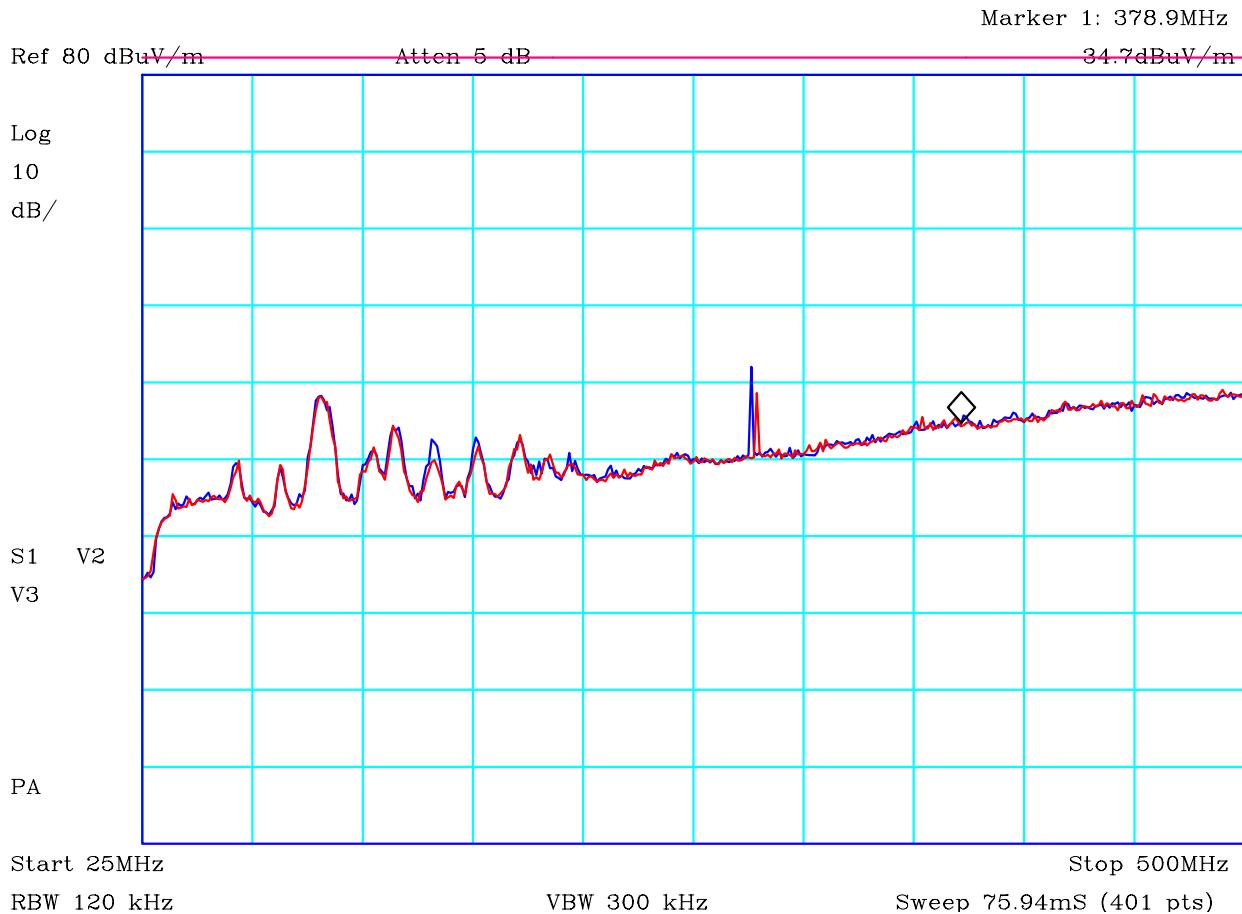
|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 18/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| <p>Config 1<br/>           Transmit mode. Maximum of both horizontal and vertical.<br/>           Blue: 817MHz<br/>           Red 824MHz<br/>           Limit is approximate field strength correlation to -13dBm</p> |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1.5        |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H2418559   |
| Mode:   | 1               | Modification State: | 0          |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

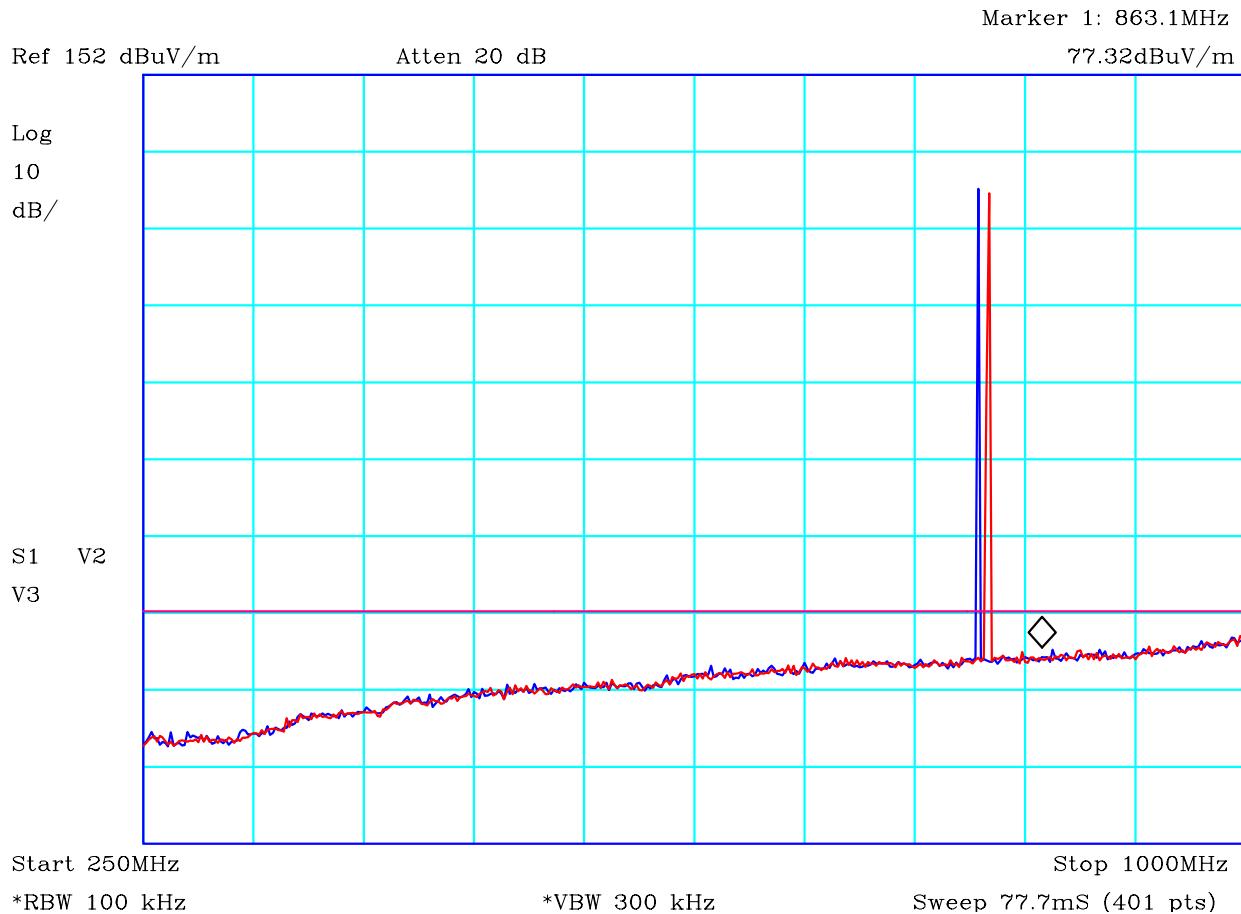
Page: 64 of 100



PLOT 30 Radiated Emissions - Config 1 - 862 - 869 band Tx - 25MHz to 500MHz

|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 18/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| Config 1  |                 |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |                     |            |
| Blue: 862MHz  |                 |                     |            |
| Red 869MHz  |                 |                     |            |
| Limit is approximate field strength correlation to -13dBm |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1.5        |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H2418577   |
| Mode:   | 1               | Modification State: | 0          |

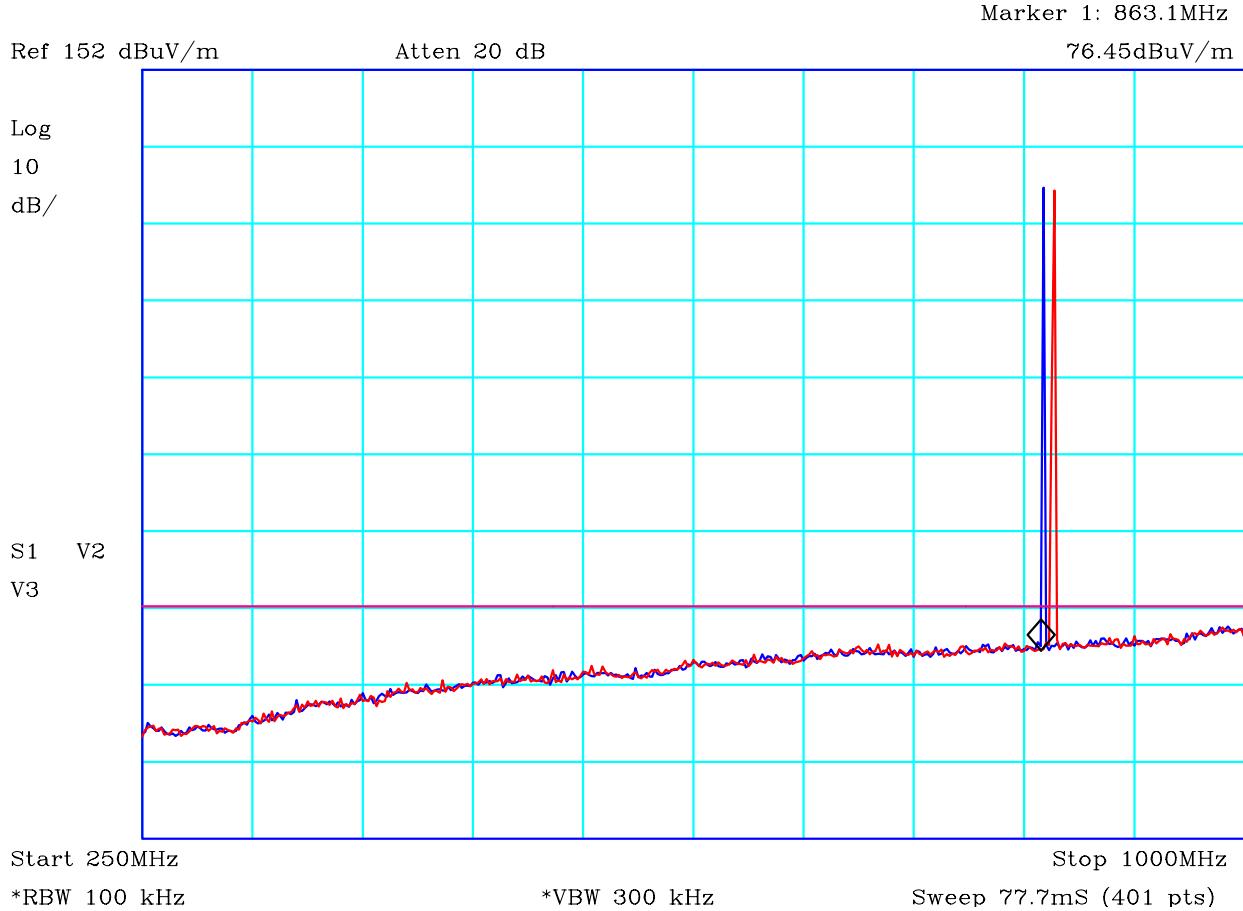
|   |                                 |                       |                 |  |
|---|---------------------------------|-----------------------|-----------------|--|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |  |
| Test No: T4354  | Test Report                     |                       | Page: 65 of 100 |  |



### PLOT 31 Radiated Emissions - Config 1 - 817 - 824 band Tx - 250MHz to 1GHz

|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 14/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| Configuration 1   |                 |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |                     |            |
| Blue: 817MHz  |                 |                     |            |
| Red 824MHz  |                 |                     |            |
| Limit is approximate field strength correlation to -13dBm |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1.5        |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H24157A3   |
| Mode:   | 1               | Modification State: | 0          |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
|   | Test No: T4354                  | Test Report           | Page: 66 of 100 |



CF1:A24\_3m\_101116 CF2:CBL059\_CBL018\_CBL065\_CBL060\_100806

PLOT 32 Radiated Emissions - Config 1 - 862 - 869 band Tx - 250MHz to 1GHz

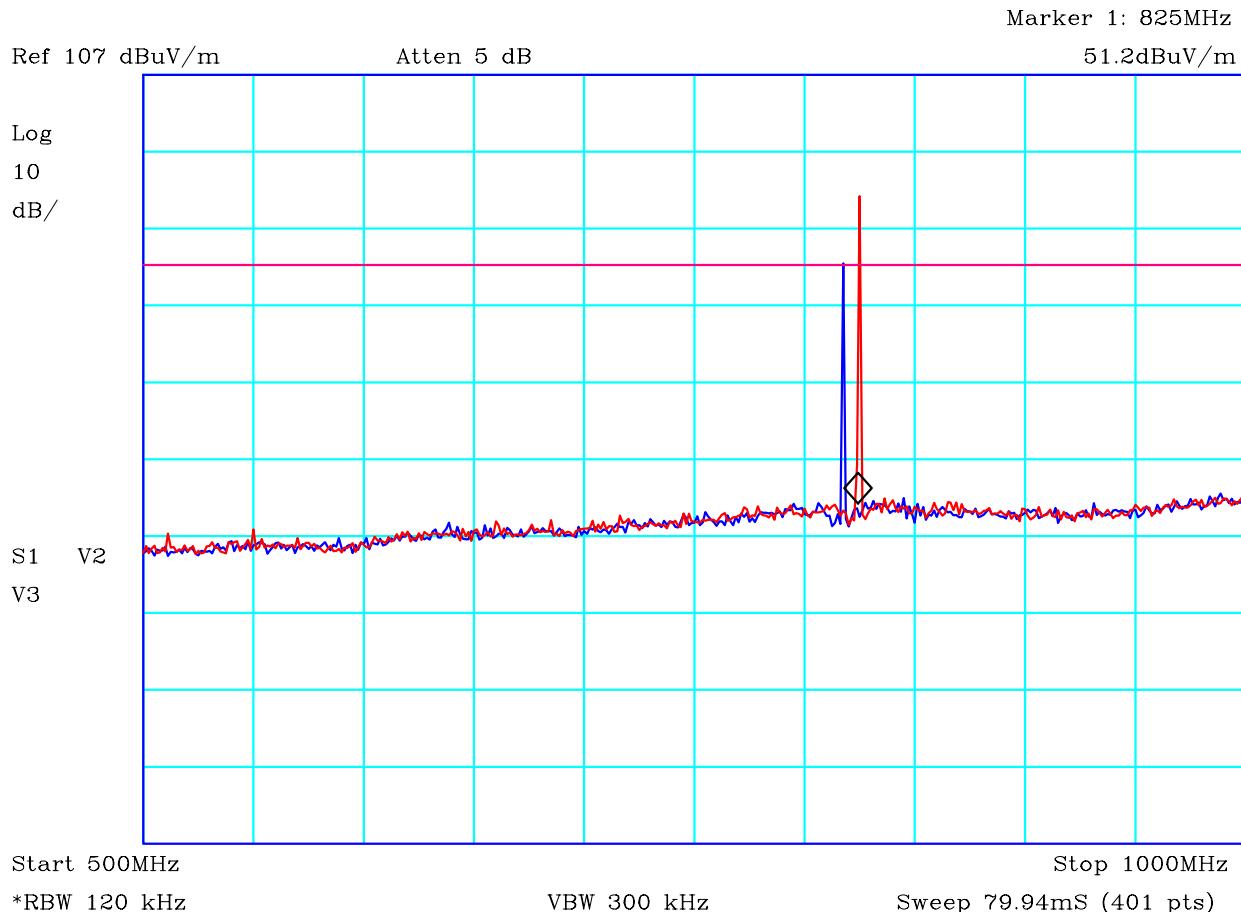
|   |                 |              |            |                     |   |
|---|-----------------|--------------|------------|---------------------|---|
| Company:  | Sepura          | Product:     | SRG3500    |                     |   |
| Date:   | 14/05/2012      | Test Eng:    | Dave Smith |                     |   |
| Method:   | FCC Part 90     | Method:      |            |                     |   |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:      |            |                     |   |
| Limit3:   |                 | Limit4:      |            |                     |   |
| Configuration 1   |                 |              |            |                     |   |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |              |            |                     |   |
| Blue: 862MHz  |                 |              |            |                     |   |
| Red 869MHz  |                 |              |            |                     |   |
| Limit is approximate field strength correlation to -13dBm |                 |              |            |                     |   |
| Facility:   | Anech_2         | Height       | 1.5        | Mode:               | 1 |
| Distance  | 3m              | Polarisation | V+H        | Modification State: | 0 |
| Angle   | 0-360           | File:        | H24157EE   |                     |   |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

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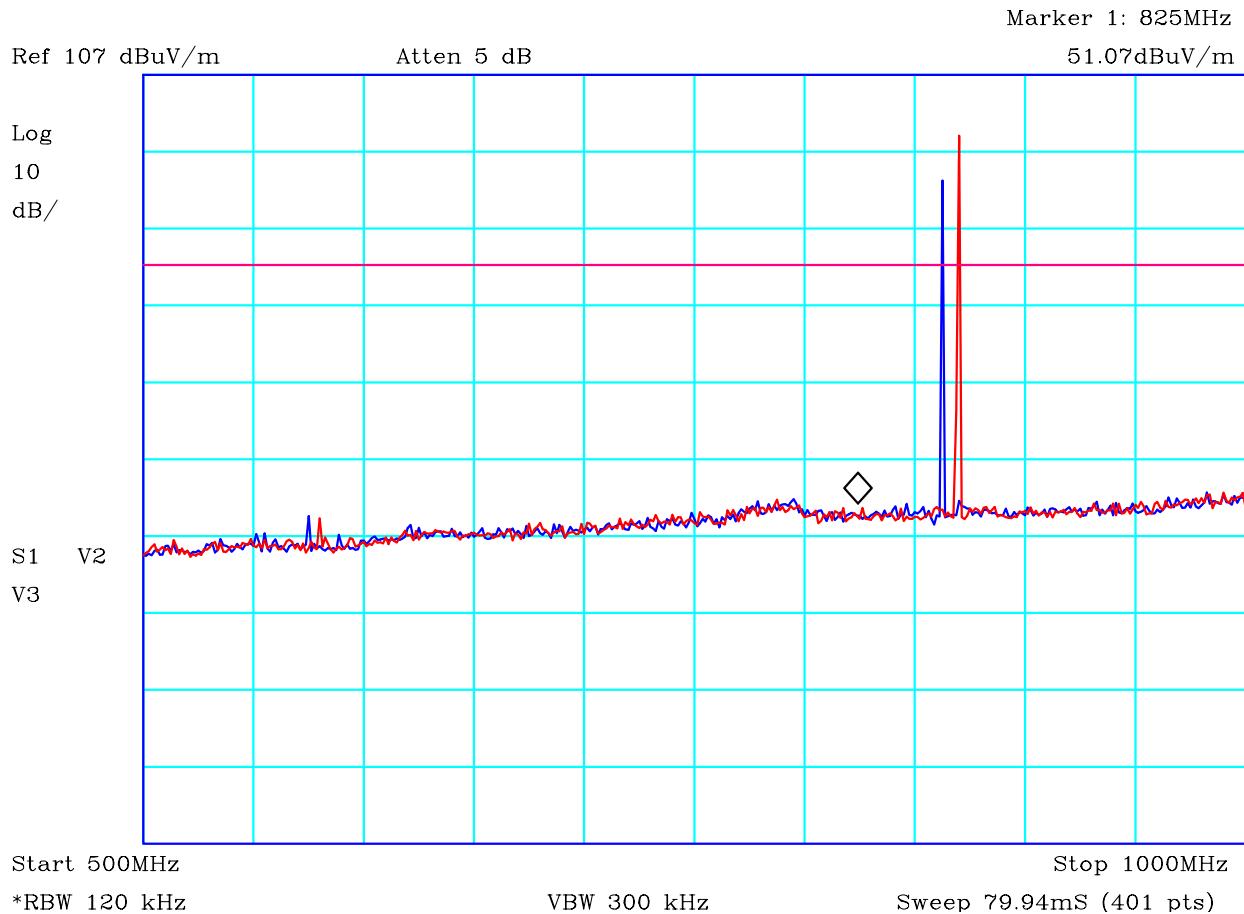
PLOT 33 Radiated Emissions - Config 1 - 817 - 824 band Tx - 500MHz to 1GHz - with notch filter

|              |                 |           |            |
|--------------|-----------------|-----------|------------|
| Company:     | Sepura          | Product:  | SRG3500    |
| Date:        | 18/05/2012      | Test Eng: | Dave Smith |
| Method:      | FCC Part 90     | Method:   |            |
| Limit1:(VIO) | 43+10 log(P)@3m | Limit2:   |            |
| Limit3:      |                 | Limit4:   |            |

Config 1. Using notch filter.  
Transmit mode. Maximum of both horizontal and vertical.  
Blue: 817MHz  
Red 824MHz  
Limit is approximate field strength correlation to -13dBm

|           |         |              |          |                     |   |
|-----------|---------|--------------|----------|---------------------|---|
| Facility: | Anech_2 | Height       | 1.5      | Mode:               | 1 |
| Distance  | 3m      | Polarisation | V+H      | Modification State: | 0 |
| Angle     | 0-360   | File:        | H24185C8 |                     |   |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 68 of 100 |



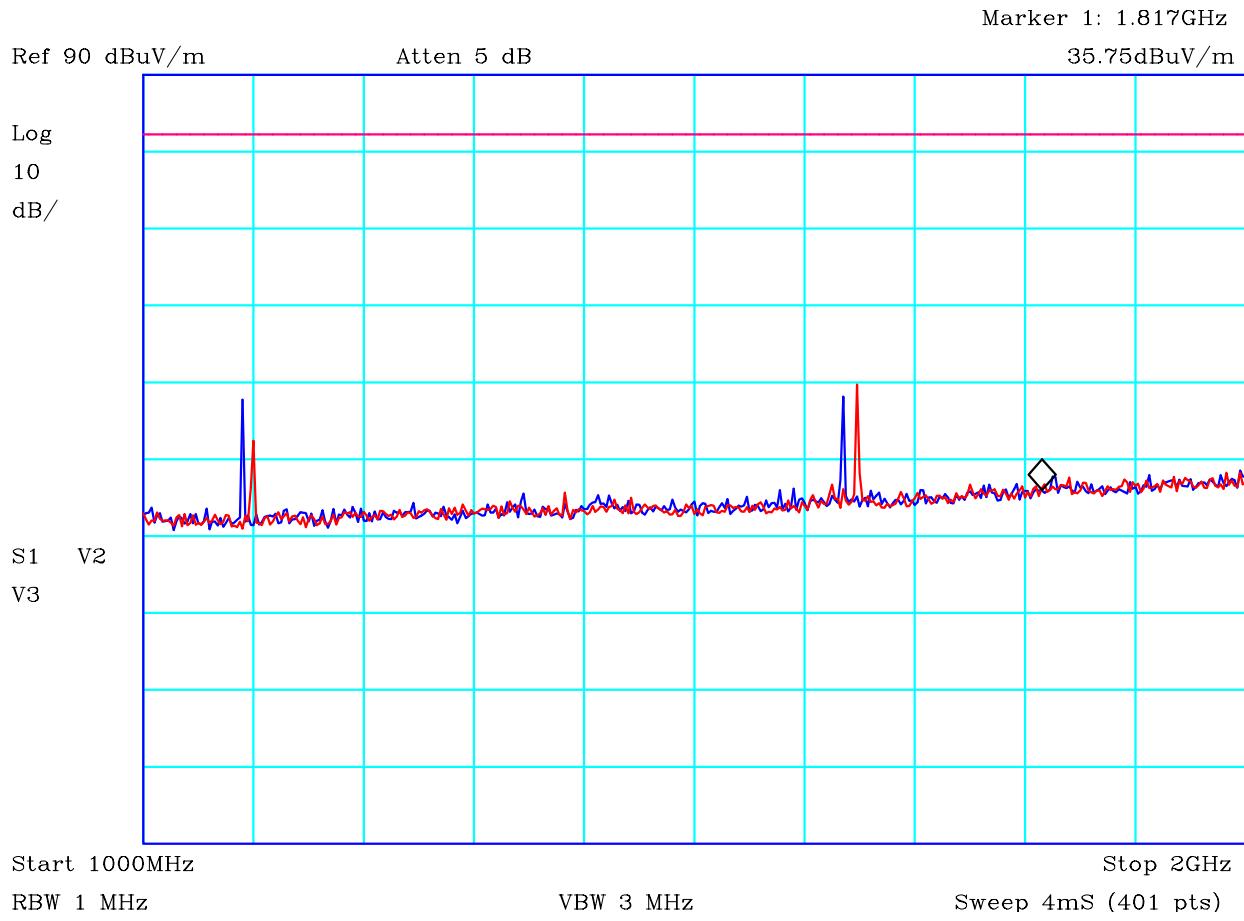
### PLOT 34 Radiated Emissions - Config 1 - 862 - 869 band Tx - 500MHz to 1GHz - with notch filter

|              |                 |           |            |
|--------------|-----------------|-----------|------------|
| Company:     | Sepura          | Product:  | SRG3500    |
| Date:        | 18/05/2012      | Test Eng: | Dave Smith |
| Method:      | FCC Part 90     | Method:   |            |
| Limit1:(VIO) | 43+10 log(P)@3m | Limit2:   |            |
| Limit3:      |                 | Limit4:   |            |

Config 1. Using notch filter.  
 Transmit mode. Maximum of both horizontal and vertical.  
 Blue: 862MHz  
 Red 869MHz  
 Limit is approximate field strength correlation to -13dBm

|           |         |              |          |                     |   |
|-----------|---------|--------------|----------|---------------------|---|
| Facility: | Anech_2 | Height       | 1.5      | Mode:               | 1 |
| Distance  | 3m      | Polarisation | V+H      | Modification State: | 0 |
| Angle     | 0-360   | File:        | H24185EA |                     |   |

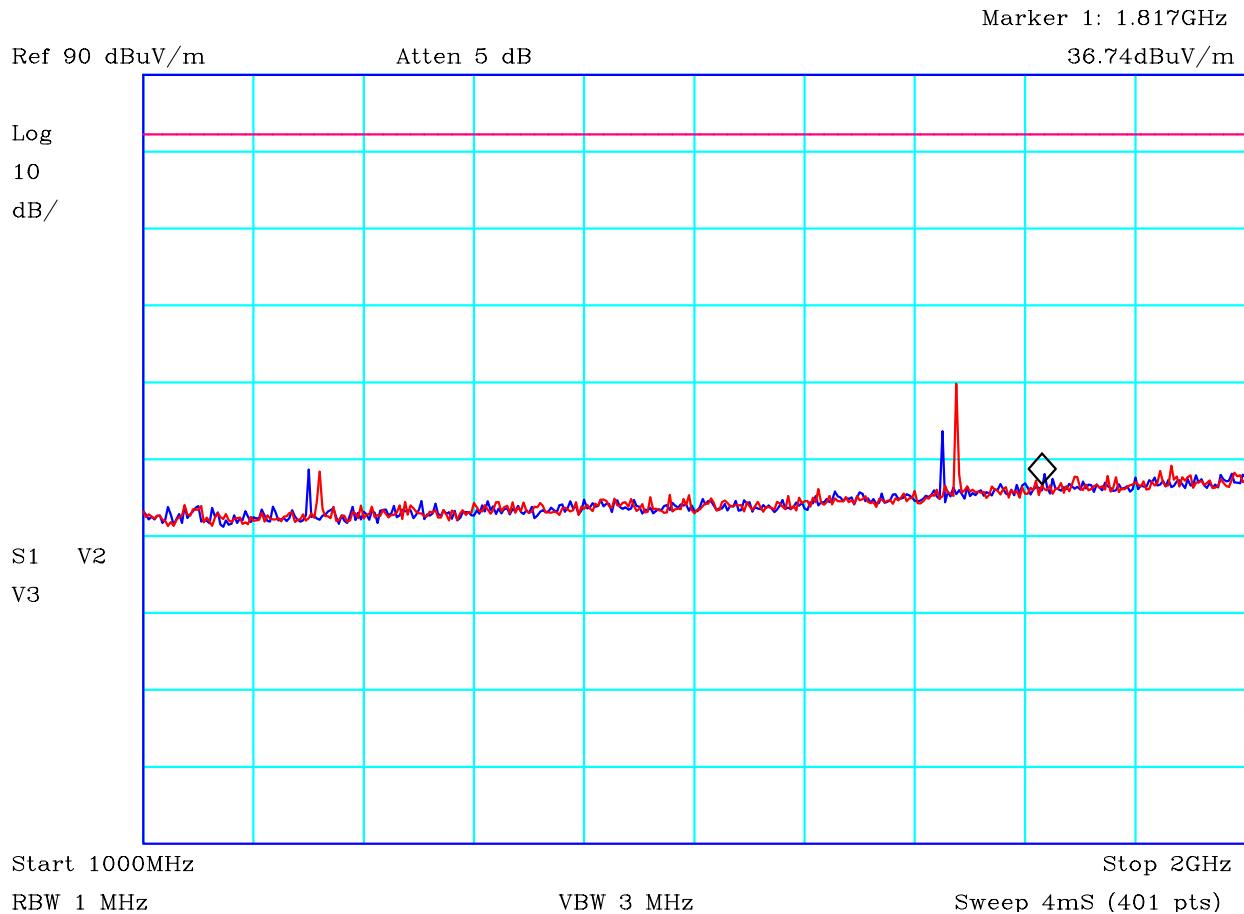
|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      | Test Report           |                 |  |
| Test No: T4354  |                  |                       | Page: 69 of 100 |  |



### PLOT 35 Radiated Emissions - Config 1 - 817 - 824 band Tx - 1GHz to 2GHz

|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 21/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| Configuration 1<br>Transmit mode. Maximum of both horizontal and vertical.<br>Blue: 817MHz<br>Red 824MHz<br>Limit is approximate field strength correlation to -13dBm |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1m         |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H2421804   |
| Mode:   | 1               | Modification State: | 0          |

|   |                                 |                       |                 |  |
|---|---------------------------------|-----------------------|-----------------|--|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |  |
| Test No: T4354  | Test Report                     |                       | Page: 70 of 100 |  |



### PLOT 36 Radiated Emissions - Config 1 - 862 - 869 band Tx - 1GHz to 2GHz

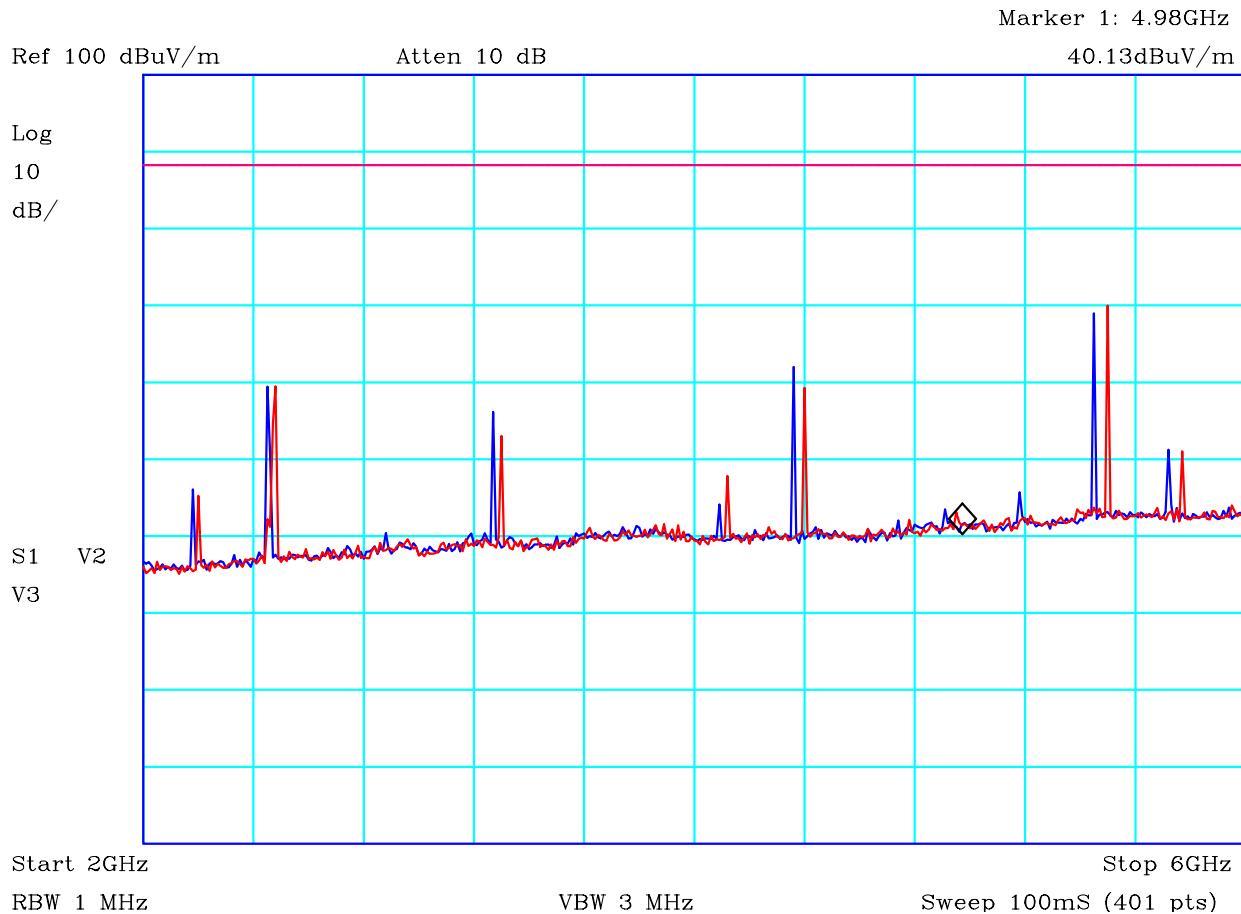
|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 22/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| Configuration 1   |                 |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |                     |            |
| Blue: 862MHz  |                 |                     |            |
| Red 869MHz  |                 |                     |            |
| Limit is approximate field strength correlation to -13dBm |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1m         |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H24223CB   |
| Mode:   | 1               | Modification State: | 0          |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

**Test Report**

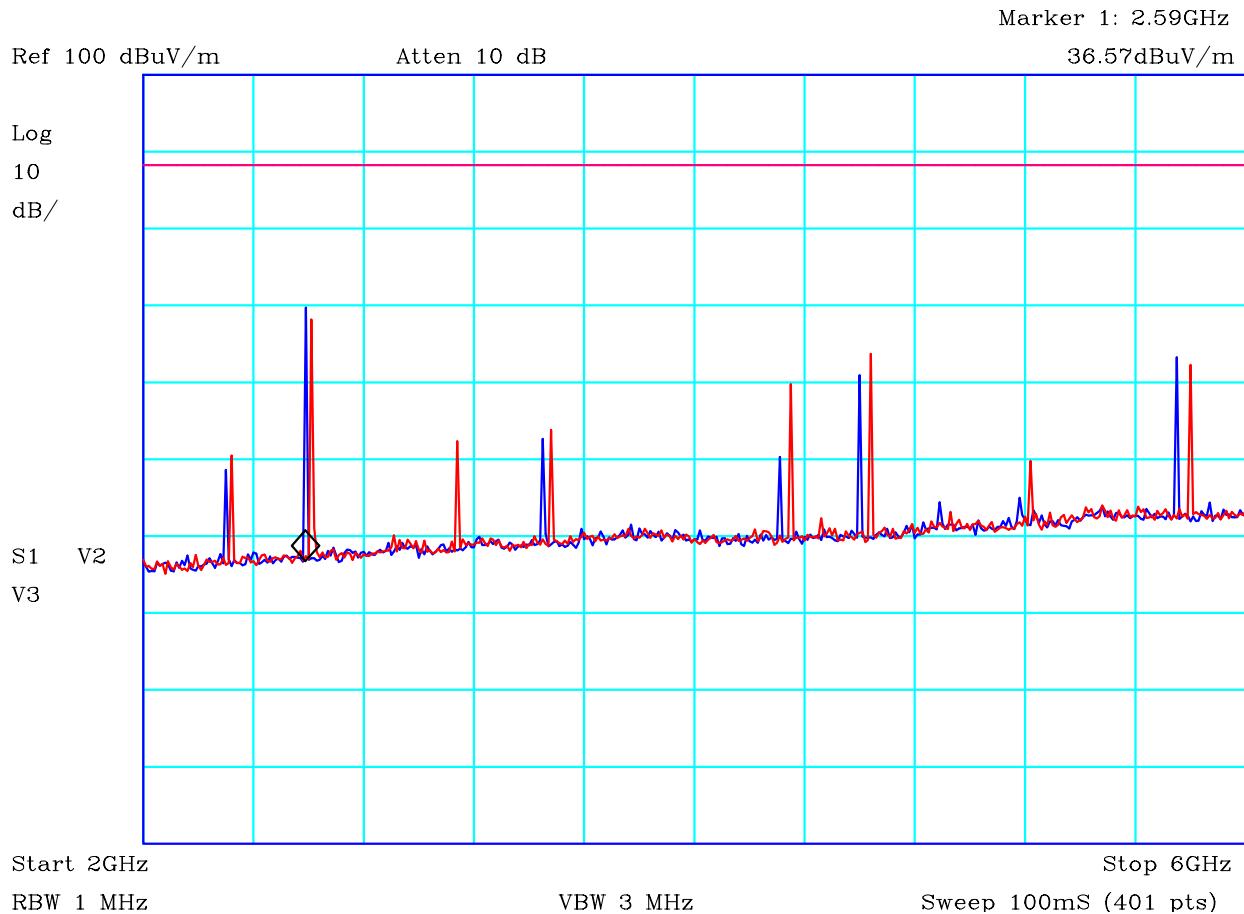
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**PLOT 37 Radiated Emissions - Config 1 - 817 - 824 band Tx- 2GHz to 6GHz**

|   |                   |                     |            |
|---|-------------------|---------------------|------------|
| Company:  | Sepura            | Product:            | SRG3500    |
| Date:   | 22/05/2012        | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90       | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@1.5m | Limit2:             |            |
| Limit3:   |                   | Limit4:             |            |
| Configuration 1   |                   |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                   |                     |            |
| Blue: 817MHz  |                   |                     |            |
| Red 824MHz  |                   |                     |            |
| Limit is approximate field strength correlation to -13dBm |                   |                     |            |
| Facility:   | Anech_2           | Height              | 1m         |
| Distance  | 1.5m              | Polarisation        | V+H        |
| Angle   | 0-360             | File:               | H24254BD   |
| Mode:   | 1                 | Modification State: | 0          |

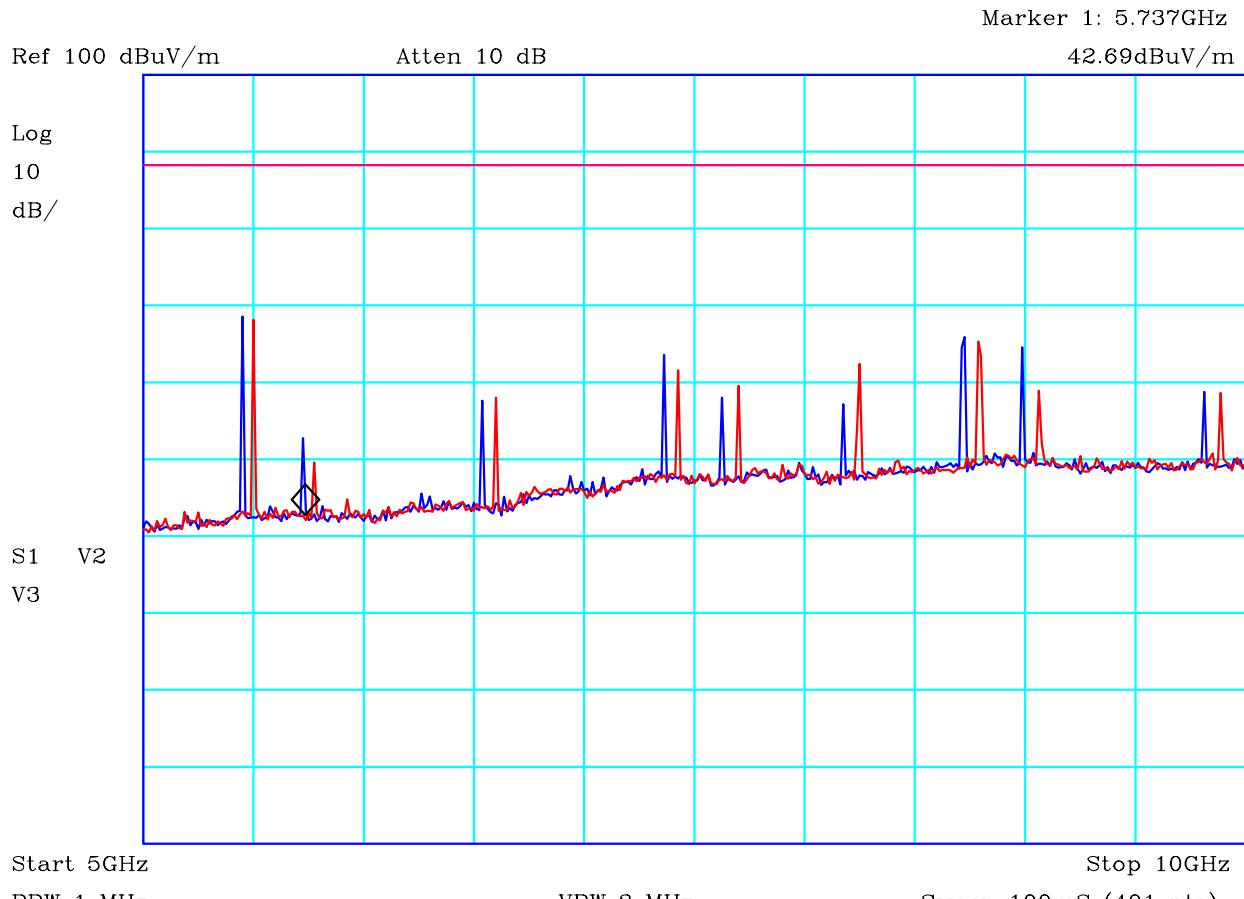
|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      |                       |                 |  |
| Test No: T4354  | Test Report      |                       | Page: 72 of 100 |  |



### PLOT 38 Radiated Emissions - Config 1 - 862 - 869 band Tx- 2GHz to 6GHz

|   |                   |                     |            |
|---|-------------------|---------------------|------------|
| Company:  | Sepura            | Product:            | SRG3500    |
| Date:   | 25/05/2012        | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90       | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@1.5m | Limit2:             |            |
| Limit3:   |                   | Limit4:             |            |
| Configuration 1<br>Transmit mode. Maximum of both horizontal and vertical.<br>Blue: 862MHz<br>Red 869MHz<br>Limit is approximate field strength correlation to -13dBc |                   |                     |            |
| Facility:   | Anech_2           | Height              | 1m         |
| Distance  | 1.5m              | Polarisation        | V+H        |
| Angle   | 0-360             | File:               | H2425598   |
| Mode:   | 1                 | Modification State: | 0          |

|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      |                       |                 |  |
| Test No: T4354  | Test Report      |                       | Page: 73 of 100 |  |



### PLOT 39 Radiated Emissions - Config 1 - 817 - 824 band Tx- 5GHz to 10GHz

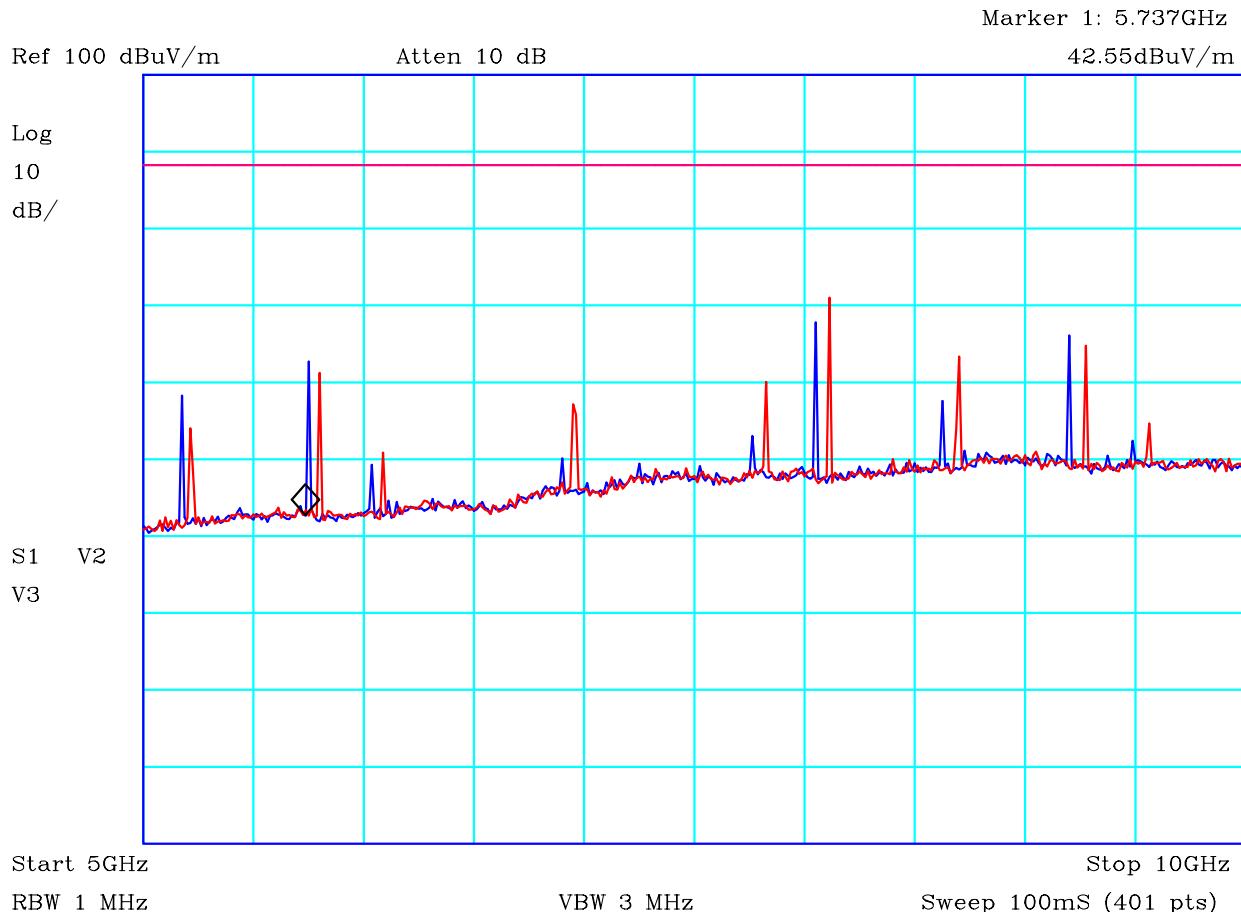
|   |                   |              |            |
|---|-------------------|--------------|------------|
| Company:  | Sepura            | Product:     | SRG3500    |
| Date:   | 25/05/2012        | Test Eng:    | Dave Smith |
| Method:   | FCC Part 90       | Method:      |            |
| Limit1:(VIO)  | 43+10 log(P)@1.5m | Limit2:      |            |
| Limit3:   |                   | Limit4:      |            |
| Configuration 1<br>Transmit mode. Maximum of both horizontal and vertical.<br>Blue: 817MHz<br>Red 824MHz<br>Limit is approximate field strength correlation to -13dBm |                   |              |            |
| Facility:   | Anech_2           | Height       | 1m         |
| Distance  | 1.5m              | Polarisation | V+H        |
| Angle   | 0-360             | File:        | H24255B0   |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

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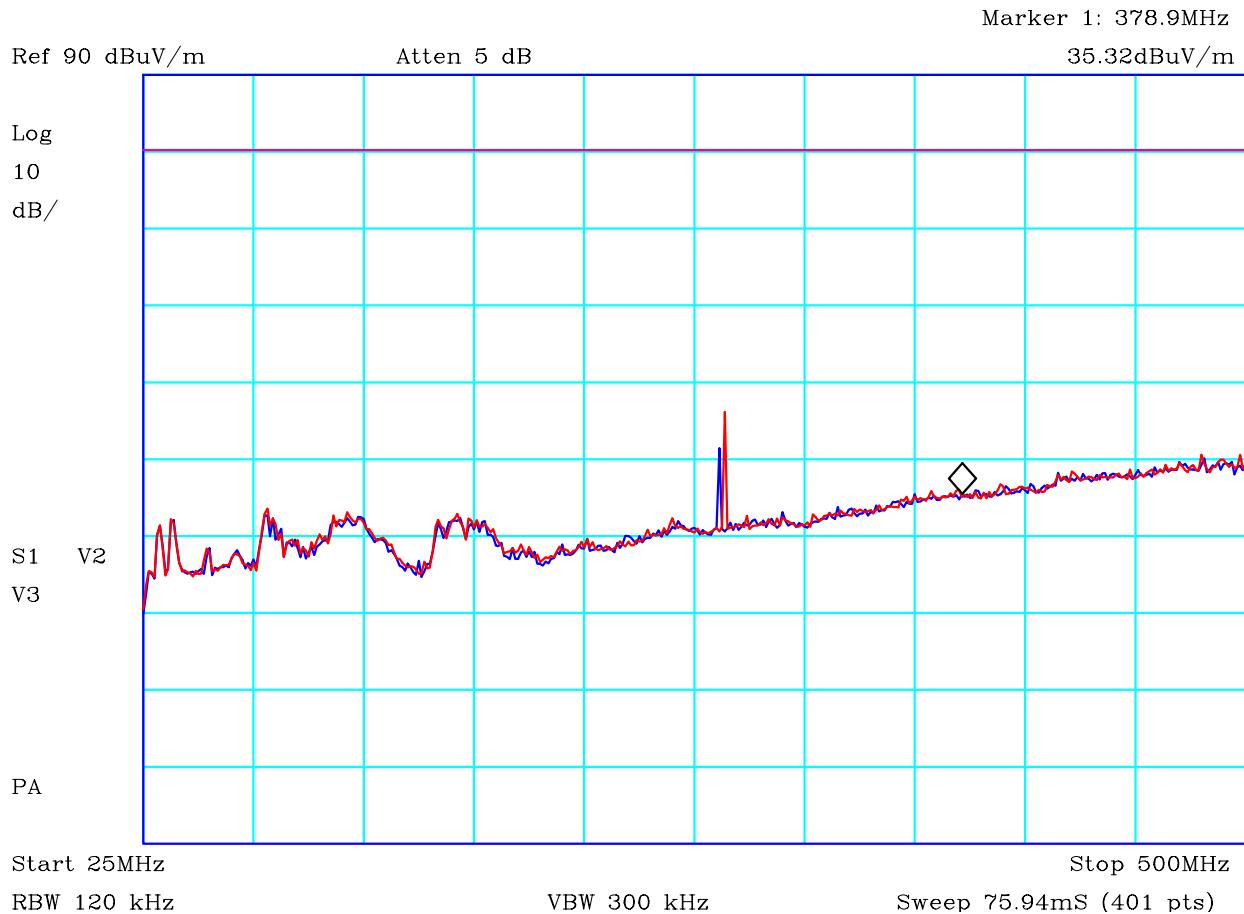


CF1:A23\_3m\_100806 CF2:CBL049\_110107 CF3:PRE3\_110113 CF4:RFF22\_110221

PLOT 40 Radiated Emissions - Config 1 - 862 - 869 band Tx- 5GHz to 10GHz

|   |                   |                     |            |
|---|-------------------|---------------------|------------|
| Company:  | Sepura            | Product:            | SRG3500    |
| Date:   | 25/05/2012        | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90       | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@1.5m | Limit2:             |            |
| Limit3:   |                   | Limit4:             |            |
| Configuration 1   |                   |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                   |                     |            |
| Blue: 862MHz  |                   |                     |            |
| Red 869MHz  |                   |                     |            |
| Limit is approximate field strength correlation to -13dBm |                   |                     |            |
| Facility:   | Anech_2           | Height              | 1m         |
| Distance  | 1.5m              | Polarisation        | V+H        |
| Angle   | 0-360             | File:               | H24255CE   |
| Mode:   | 1                 | Modification State: | 0          |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 75 of 100 |



### PLOT 41 Radiated Emissions - DMU - 817 - 824 band Tx - 25MHz to 500MHz

|   |             |                     |            |
|---|-------------|---------------------|------------|
| Company:  | Sepura      | Product:            | SRG3500    |
| Date:   | 14/05/2012  | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90 | Method:             |            |
| Limit1:(VIO)  | Mask Y @3m  | Limit2:             |            |
| Limit3:   |             | Limit4:             |            |
| DMU   |             |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |             |                     |            |
| Blue: 817MHz  |             |                     |            |
| Red 824MHz  |             |                     |            |
| Limit is approximate field strength correlation to -13dBm |             |                     |            |
| Facility:   | Anech_2     | Height              | 1.5        |
| Distance  | 3m          | Polarisation        | V+H        |
| Angle   | 0-360       | File:               | H24156F4   |
| Mode:   | 1           | Modification State: | 0          |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

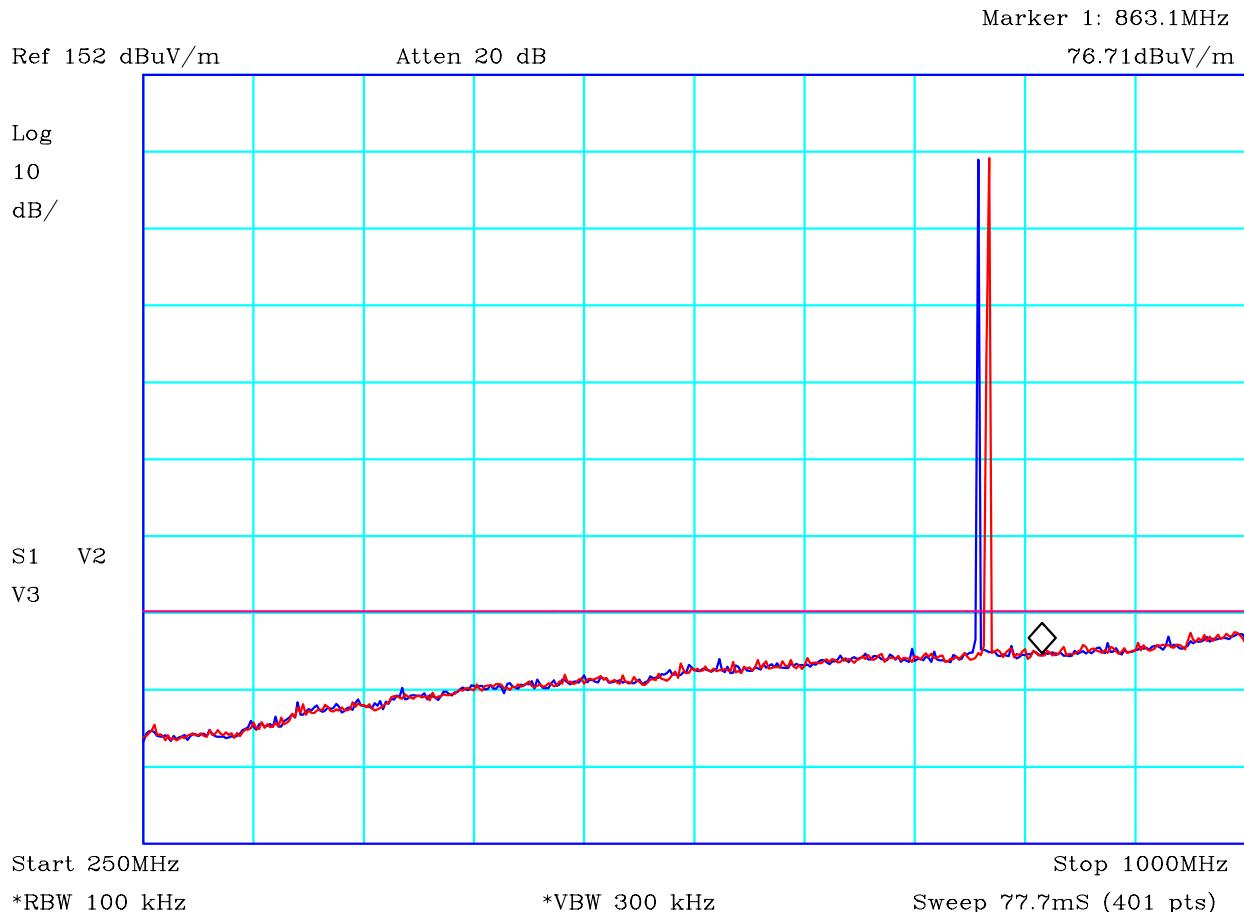
Page: 76 of 100



PLOT 42 Radiated Emissions - DMU - 862 - 869 band Tx - 25MHz to 500MHz

|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 14/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| DMU   |                 |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |                     |            |
| Blue: 862MHz  |                 |                     |            |
| Red 869MHz  |                 |                     |            |
| Limit is approximate field strength correlation to -13dBm |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1.5        |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H241574D   |
| Mode:   | 1               | Modification State: | 0          |

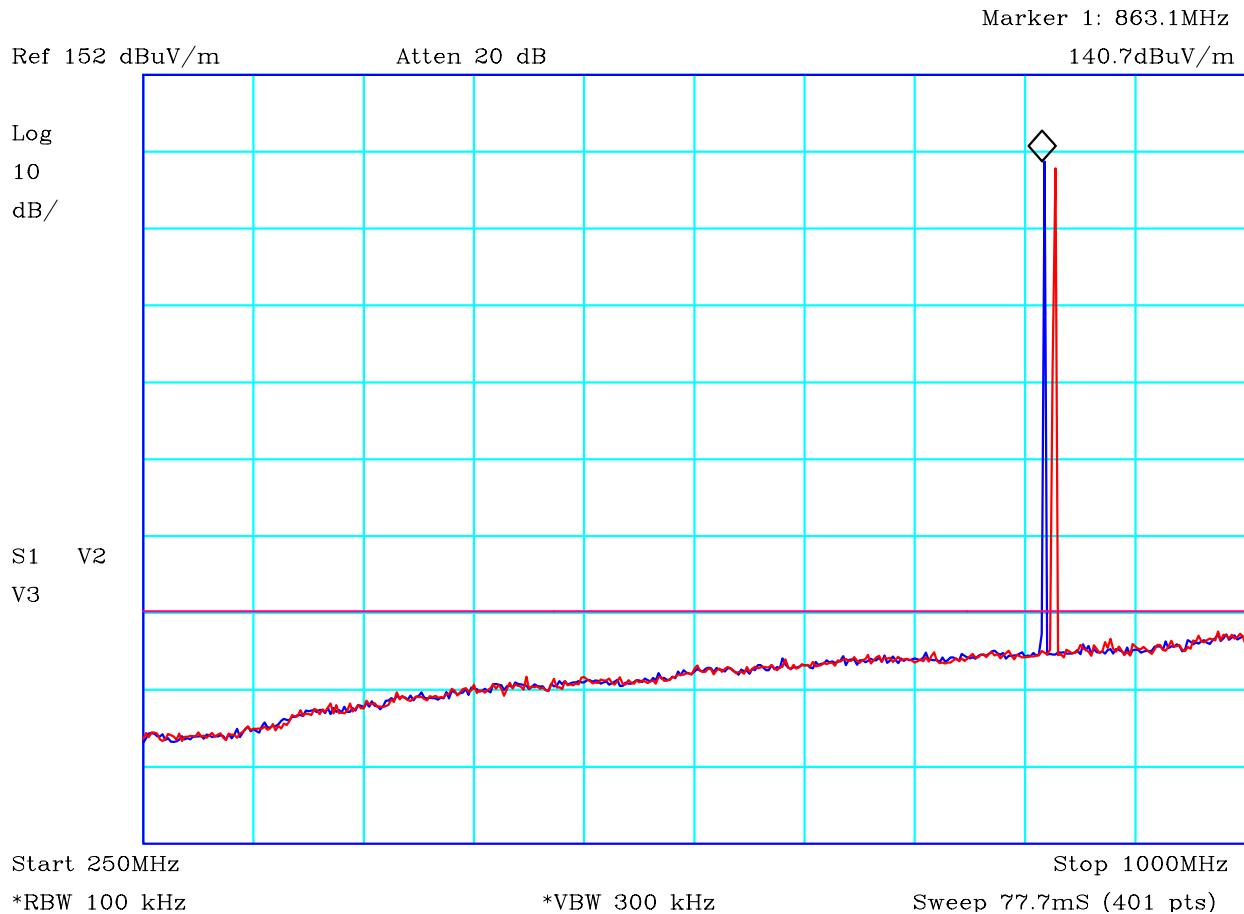
|   |                                 |                       |                 |  |
|---|---------------------------------|-----------------------|-----------------|--|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |  |
| Test No: T4354  | Test Report                     |                       | Page: 77 of 100 |  |



### PLOT 43 Radiated Emissions - DMU - 817 - 824 band Tx - 250MHz to 1GHz

|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 14/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| DMU   |                 |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |                     |            |
| Blue: 817MHz  |                 |                     |            |
| Red 824MHz  |                 |                     |            |
| Limit is approximate field strength correlation to -57dBc |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1.5        |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H2415516   |
| Mode:   | 1               | Modification State: | 0          |

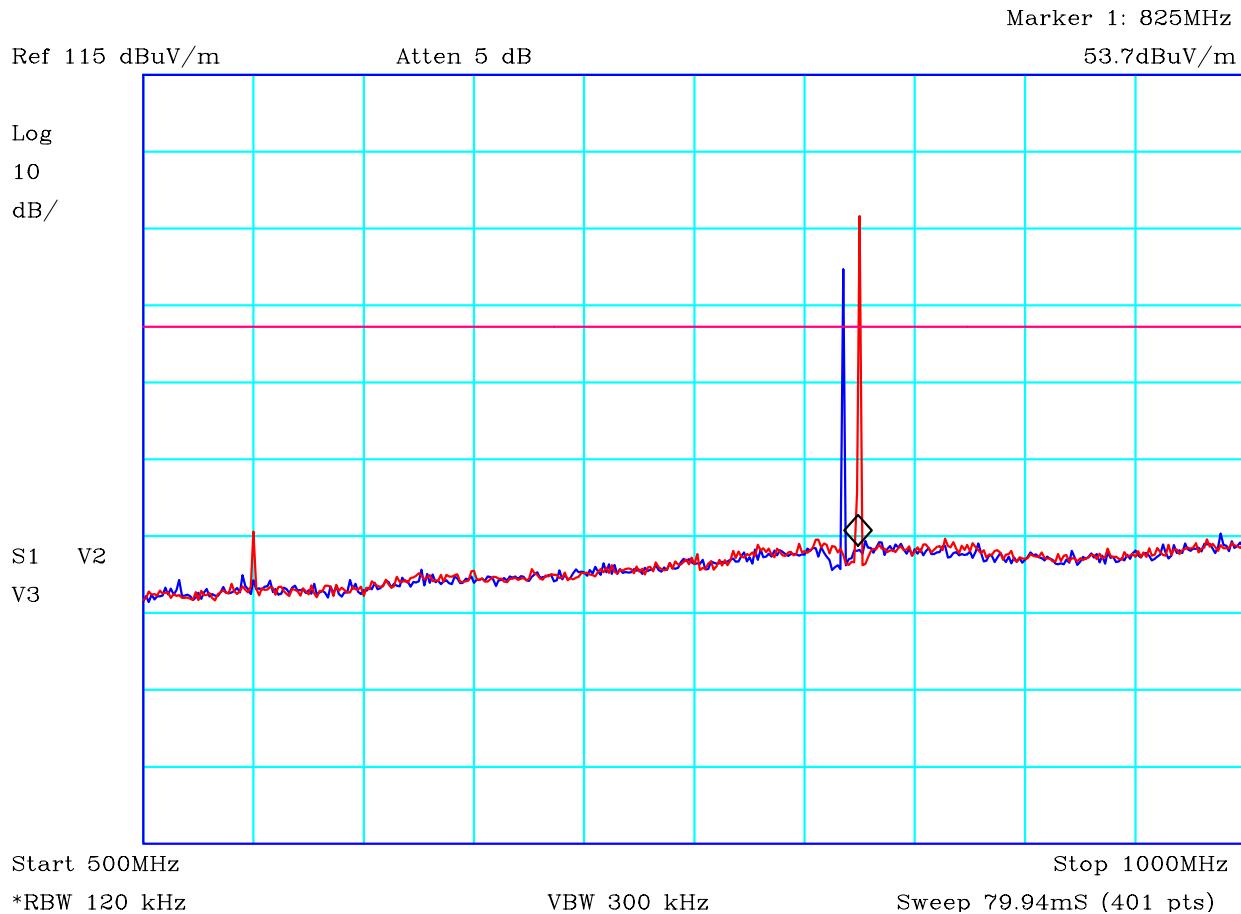
|   |                                 |                       |                 |  |
|---|---------------------------------|-----------------------|-----------------|--|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |  |
| Test No: T4354  | Test Report                     |                       | Page: 78 of 100 |  |



#### PLOT 44 Radiated Emissions - DMU - 862 - 869 band Tx - 250MHz to 1GHz

|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 14/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| DMU   |                 |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |                     |            |
| Blue: 862MHz  |                 |                     |            |
| Red 869MHz  |                 |                     |            |
| Limit is approximate field strength correlation to -13dBc |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1.5        |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H24154E6   |
| Mode:   | 1               | Modification State: | 0          |

|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 79 of 100 |



### PLOT 45 Radiated Emissions - DMU - 817 - 824 band Tx - 500MHz to 1GHz - with notch filter

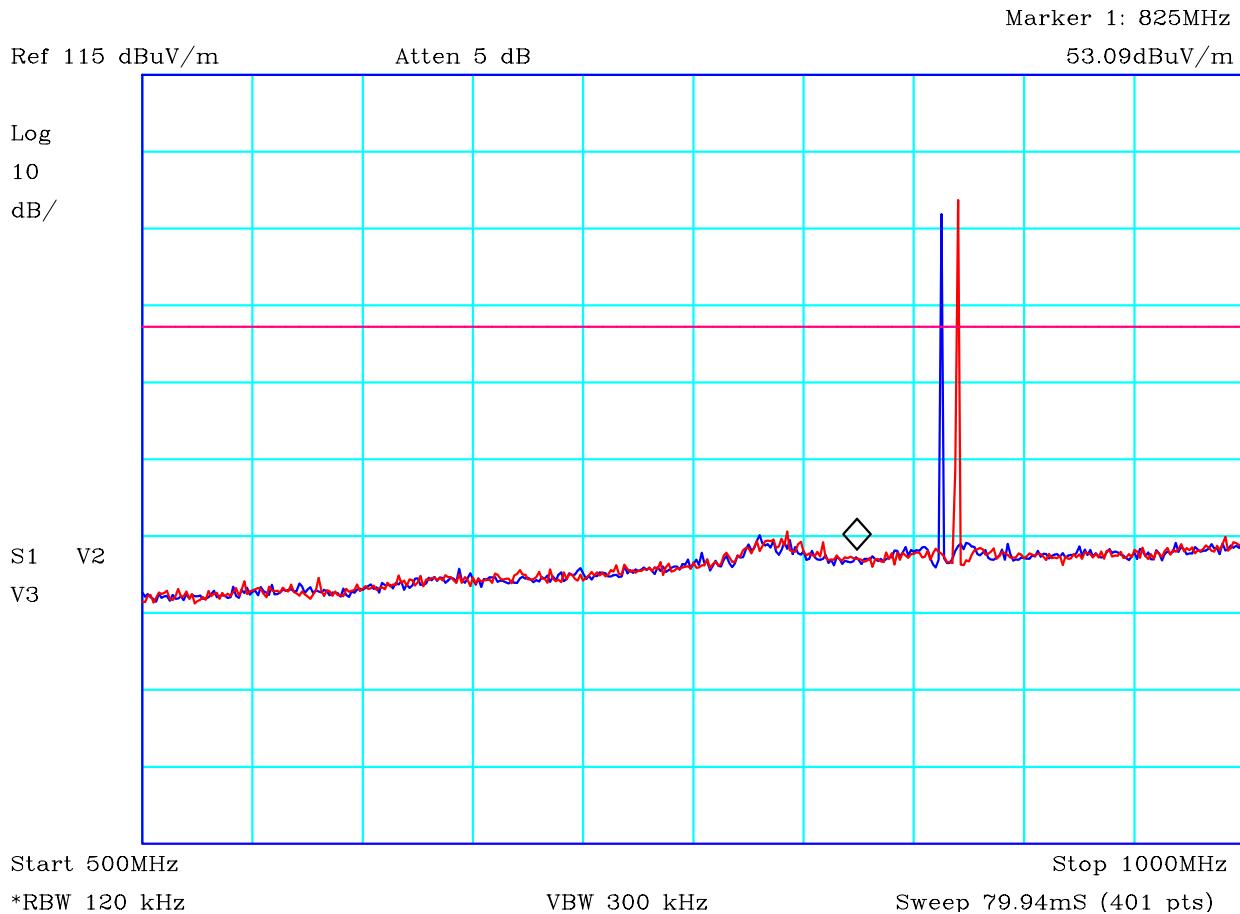
|  |                 |              |            |
|--|-----------------|--------------|------------|
| Company:   | Sepura          | Product:     | SRG3500    |
| Date:  | 14/05/2012      | Test Eng:    | Dave Smith |
| Method:  | FCC Part 90     | Method:      |            |
| Limit1:(VIO)   | 43+10 log(P)@3m | Limit2:      |            |
| Limit3:  |                 | Limit4:      |            |
| DMU. Using notch filter.<br>Transmit mode. Maximum of both horizontal and vertical.<br>Blue: 817MHz<br>Red 824MHz<br>Limit is approximate field strength correlation to -13dBm |                 |              |            |
| Facility:  | Anech_2         | Height       | 1.5        |
| Distance   | 3m              | Polarisation | V+H        |
| Angle  | 0-360           | File:        | H241553F   |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

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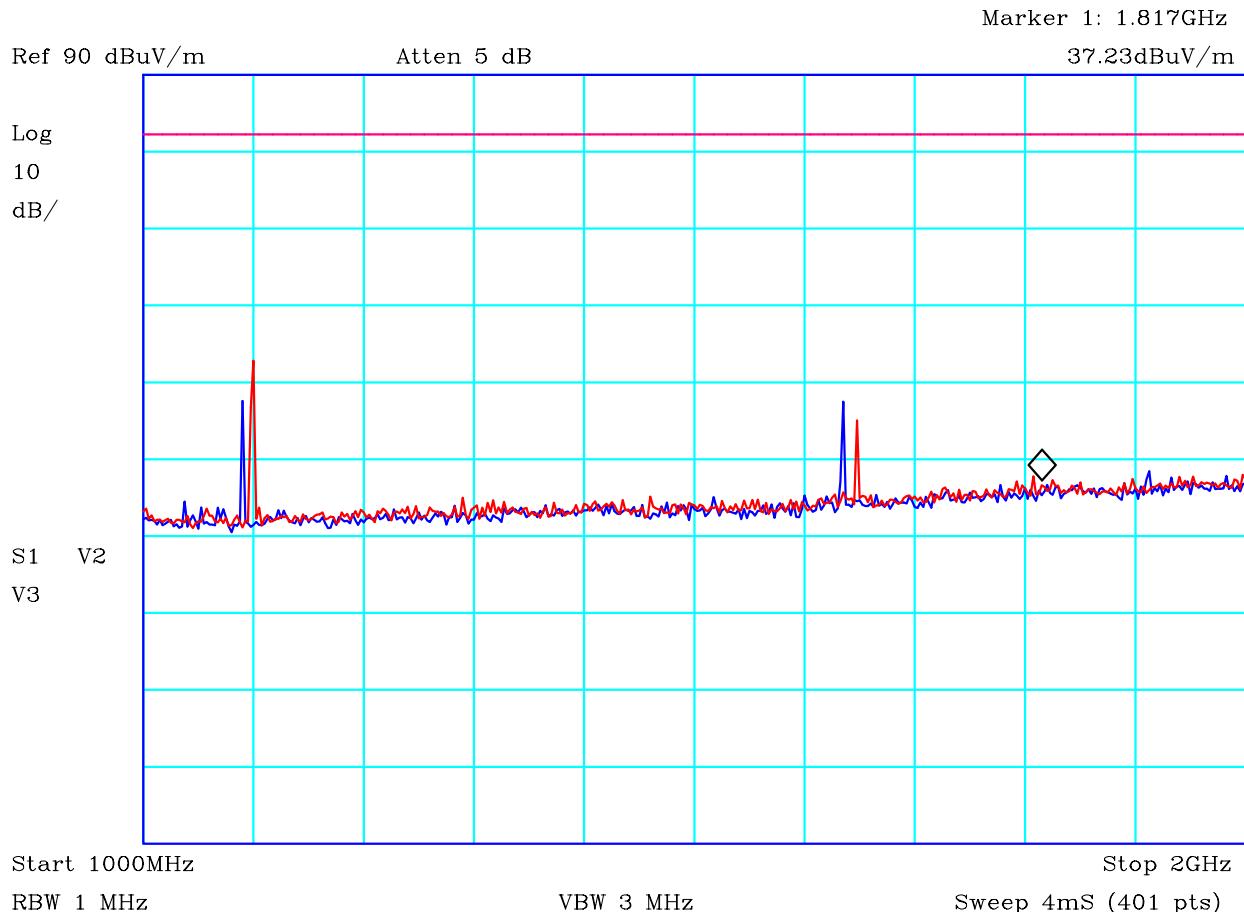
**PLOT 46 Radiated Emissions - DMU - 862 - 869 band Tx - 500MHz to 1GHz - with notch filter**

|              |                 |           |            |
|--------------|-----------------|-----------|------------|
| Company:     | Sepura          | Product:  | SRG3500    |
| Date:        | 14/05/2012      | Test Eng: | Dave Smith |
| Method:      | FCC Part 90     | Method:   |            |
| Limit1:(VIO) | 43+10 log(P)@3m | Limit2:   |            |
| Limit3:      |                 | Limit4:   |            |

DMU. Using notch filter.  
Transmit mode. Maximum of both horizontal and vertical.  
Blue: 862MHz  
Red 869MHz  
Limit is approximate field strength correlation to -13dBm

|           |         |              |          |                     |   |
|-----------|---------|--------------|----------|---------------------|---|
| Facility: | Anech_2 | Height       | 1.5      | Mode:               | 1 |
| Distance  | 3m      | Polarisation | V+H      | Modification State: | 0 |
| Angle     | 0-360   | File:        | H2415567 |                     |   |

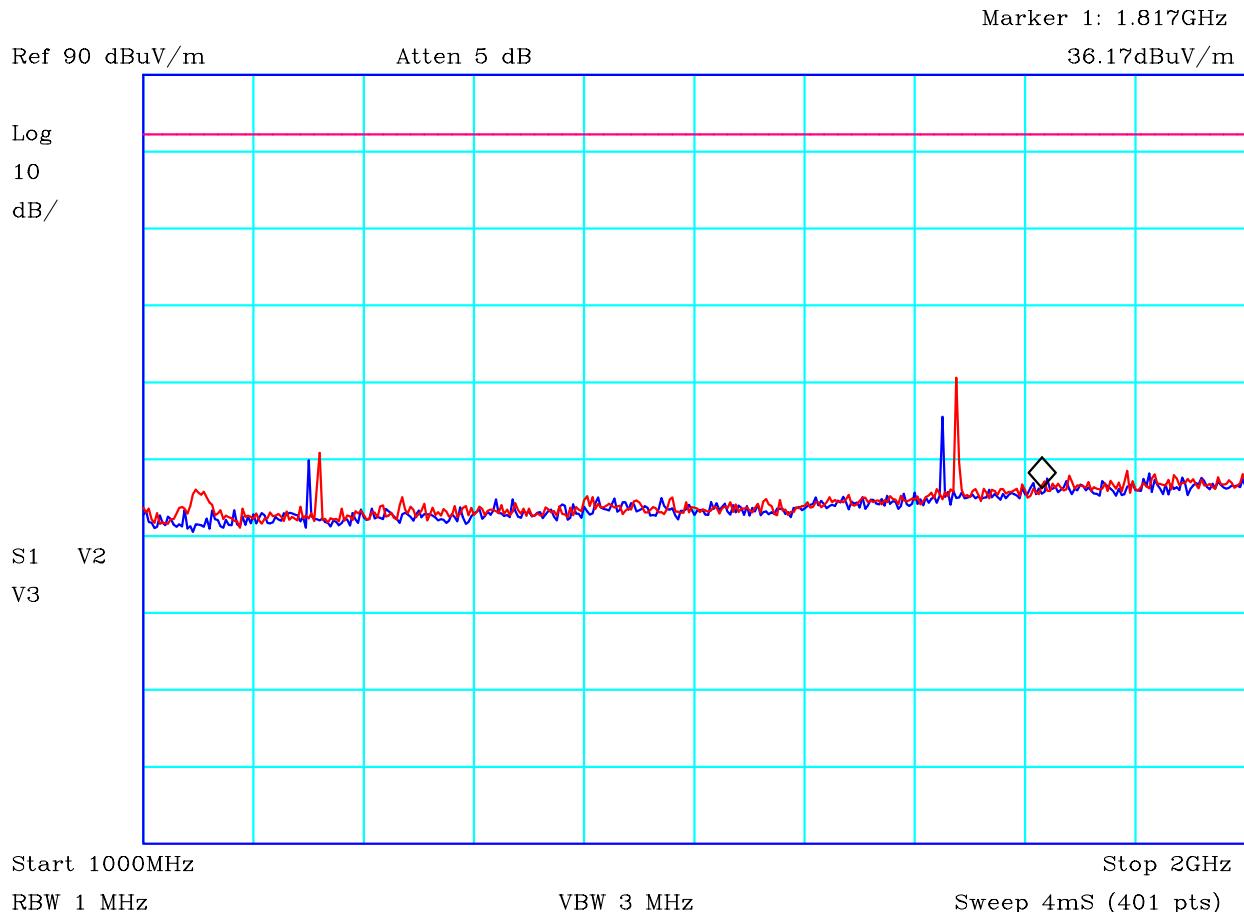
|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      | Test Report           |                 |  |
| Test No: T4354  |                  |                       | Page: 81 of 100 |  |



### PLOT 47 Radiated Emissions - DMU - 817 - 824 band Tx - 1GHz to 2GHz

|  |                 |              |            |
|--|-----------------|--------------|------------|
| Company:   | Sepura          | Product:     | SRG3500    |
| Date:  | 22/05/2012      | Test Eng:    | Dave Smith |
| Method:  | FCC Part 90     | Method:      |            |
| Limit1:(VIO)   | 43+10 log(P)@3m | Limit2:      |            |
| Limit3:  |                 | Limit4:      |            |
| <b>DMU</b><br>Transmit mode. Maximum of both horizontal and vertical.<br>Blue: 817MHz<br>Red 824MHz<br>Limit is approximate field strength correlation to -13dBm |                 |              |            |
| Facility:  | Anech_2         | Height       | 1m         |
| Distance   | 3m              | Polarisation | V+H        |
| Angle  | 0-360           | File:        | H2422422   |

|   |                                 |                       |                 |  |
|---|---------------------------------|-----------------------|-----------------|--|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |  |
| Test No: T4354  | Test Report                     |                       | Page: 82 of 100 |  |



### PLOT 48 Radiated Emissions - DMU - 862 - 869 band Tx - 1GHz to 2GHz

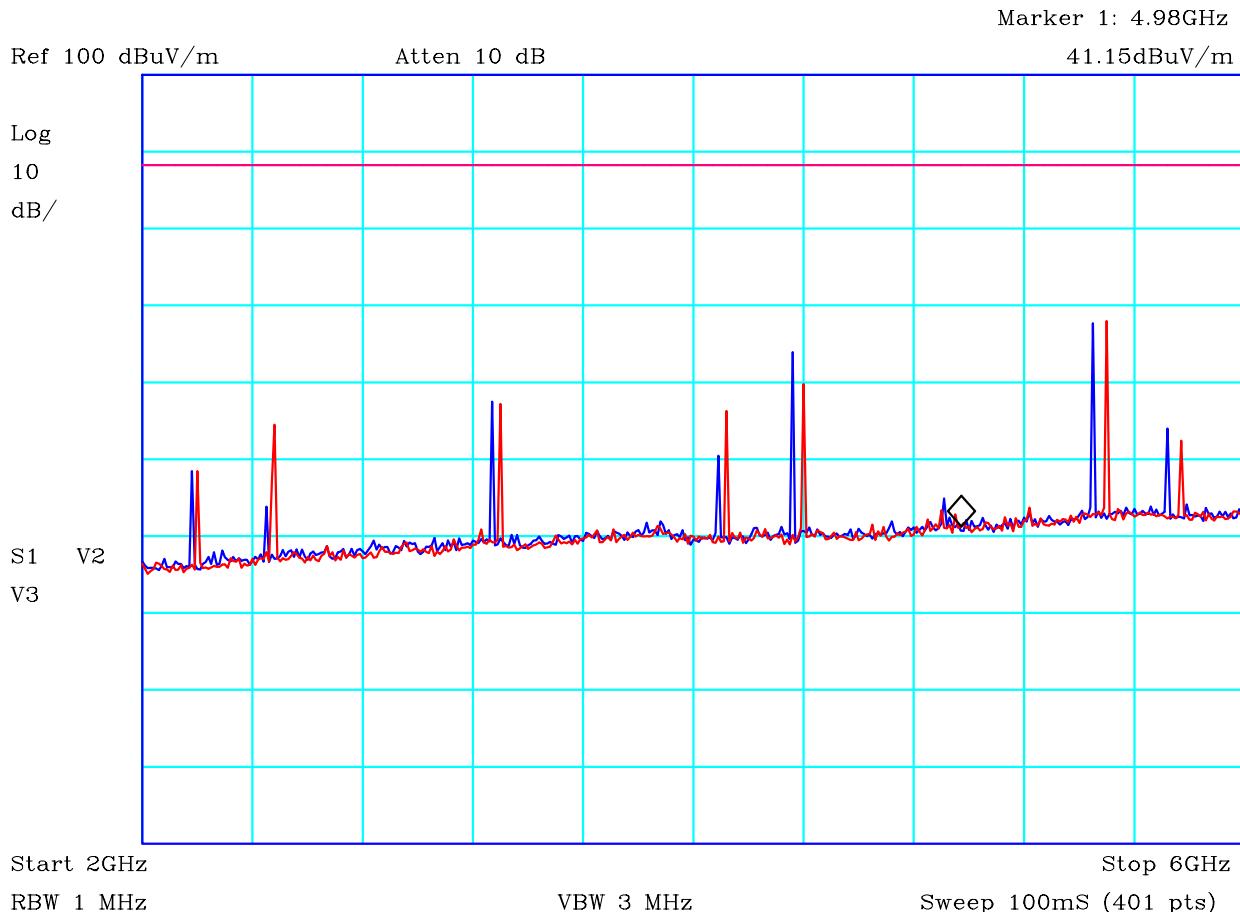
|   |                 |                     |            |
|---|-----------------|---------------------|------------|
| Company:  | Sepura          | Product:            | SRG3500    |
| Date:   | 22/05/2012      | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90     | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@3m | Limit2:             |            |
| Limit3:   |                 | Limit4:             |            |
| DMU   |                 |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                 |                     |            |
| Blue: 862MHz  |                 |                     |            |
| Red 869MHz  |                 |                     |            |
| Limit is approximate field strength correlation to -13dBm |                 |                     |            |
| Facility:   | Anech_2         | Height              | 1m         |
| Distance  | 3m              | Polarisation        | V+H        |
| Angle   | 0-360           | File:               | H242245C   |
| Mode:   | 1               | Modification State: | 0          |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

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CF1:A23\_3m\_100806 CF2:CBL049\_110107 CF3:PRE3\_110113 CF4:RFF22\_110221

### PLOT 49 Radiated Emissions - DMU - 817 - 824 band Tx- 2GHz to 6GHz

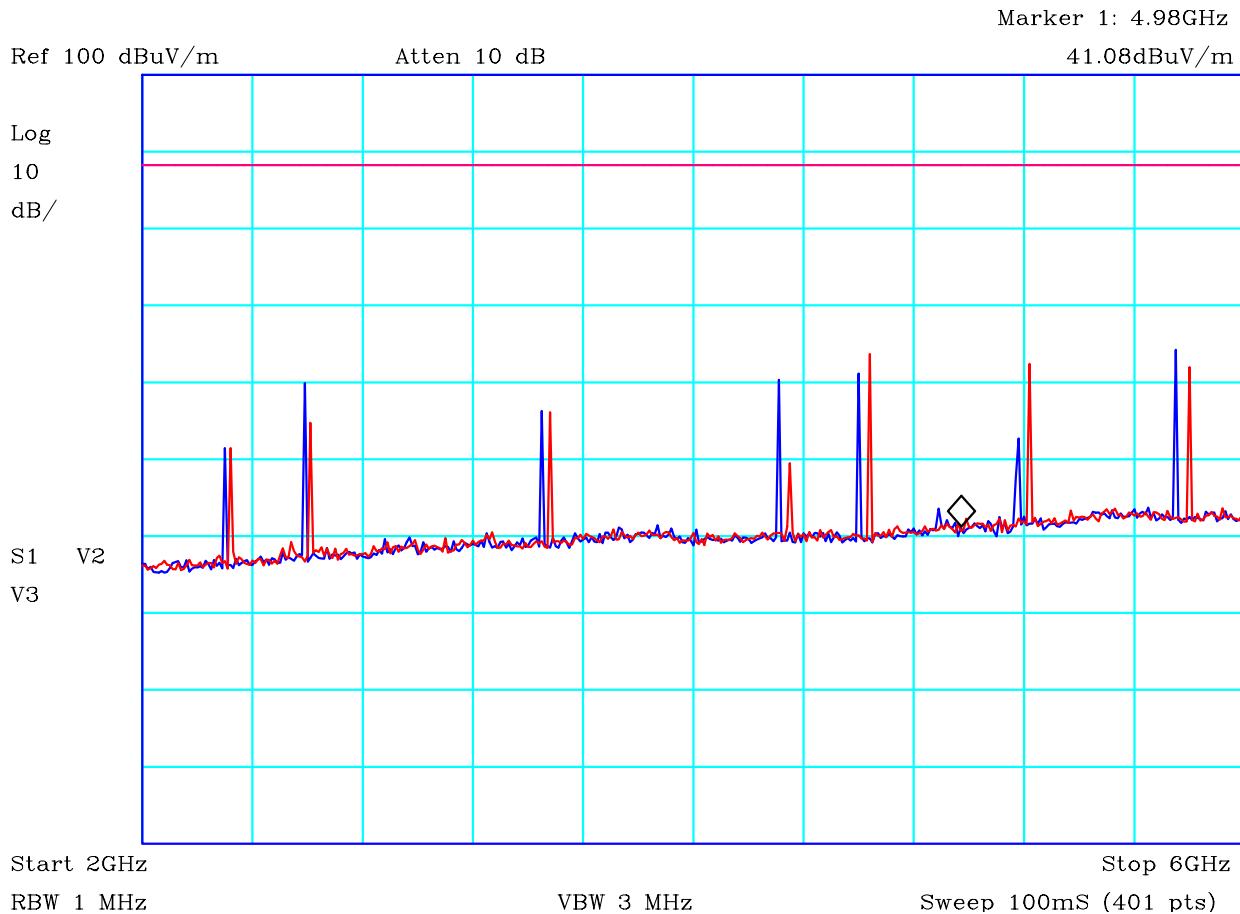
|   |                   |                     |            |
|---|-------------------|---------------------|------------|
| Company:  | Sepura            | Product:            | SRG3500    |
| Date:   | 25/05/2012        | Test Eng:           | Dave Smith |
| Method:   | FCC Part 90       | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@1.5m | Limit2:             |            |
| Limit3:   |                   | Limit4:             |            |
| <b>DMU</b>  |                   |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                   |                     |            |
| Blue: 817MHz  |                   |                     |            |
| Red 824MHz  |                   |                     |            |
| Limit is approximate field strength correlation to -13dBm |                   |                     |            |
| Facility:   | Anech_2           | Height              | 1m         |
| Distance  | 1.5m              | Polarisation        | V+H        |
| Angle   | 0-360             | File:               | H24254BA   |
| Mode:   | 1                 | Modification State: | 0          |

|   |                                 |
|---|---------------------------------|
|  | Report No: R3112<br>Issue No: 1 |
| Test No: T4354  |                                 |

FCC ID: XX6-SRG3500XB

Test Report

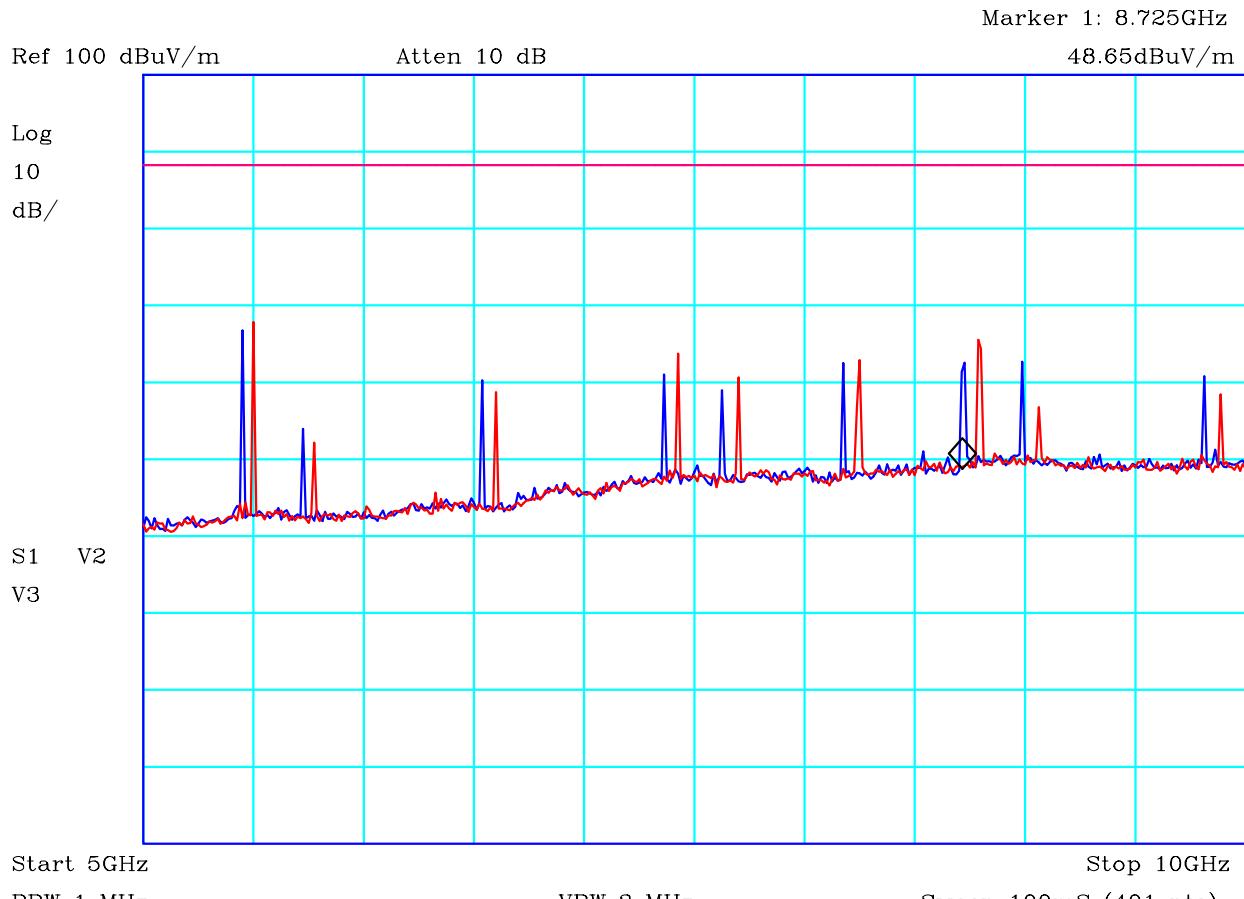
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PLOT 50 Radiated Emissions - DMU - 862 - 869 band Tx- 2GHz to 6GHz

|   |                   |                     |            |
|---|-------------------|---------------------|------------|
| Company:  | Sepura            | Product:            | SRG3500    |
| Date:   | 25/05/2012        | Test Eng:           | Dave Smith |
| Method:   | FCC part 90       | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@1.5m | Limit2:             |            |
| Limit3:   |                   | Limit4:             |            |
| DMU   |                   |                     |            |
| Transmit mode. Maximum of both horizontal and vertical.   |                   |                     |            |
| Blue: 862MHz  |                   |                     |            |
| Red 869MHz  |                   |                     |            |
| Limit is approximate field strength correlation to -13dBm |                   |                     |            |
| Facility:   | Anech_2           | Height              | 1m         |
| Distance  | 1.5m              | Polarisation        | V+H        |
| Angle   | 0-360             | File:               | H24254D8   |
| Mode:   | 1                 | Modification State: | 0          |

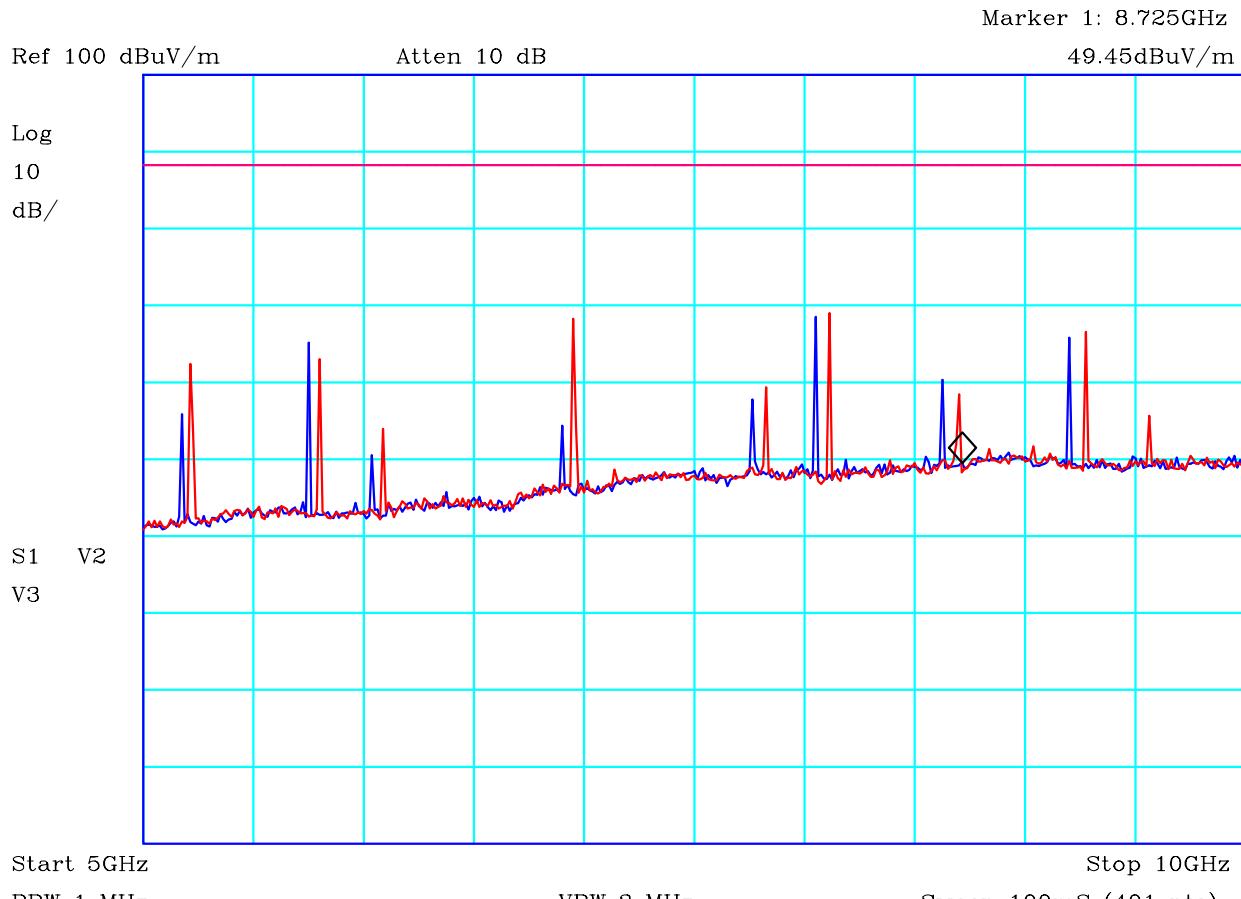
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|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      | Test Report           |                 |  |
| Test No: T4354  |                  |                       | Page: 85 of 100 |  |



### PLOT 51 Radiated Emissions - DMU - 817 - 824 band Tx- 5GHz to 10GHz

|  |                   |                     |            |
|--|-------------------|---------------------|------------|
| Company:   | Sepura            | Product:            | SRG3500    |
| Date:  | 25/05/2012        | Test Eng:           | Dave Smith |
| Method:  | FCC Part 90       | Method:             |            |
| Limit1:(VIO)   | 43+10 log(P)@1.5m | Limit2:             |            |
| Limit3:  |                   | Limit4:             |            |
| <b>DMU</b><br>Transmit mode. Maximum of both horizontal and vertical.<br>Blue: 817MHz<br>Red 824MHz<br>Limit is approximate field strength correlation to -13dBm |                   |                     |            |
| Facility:  | Anech_2           | Height              | 1m         |
| Distance   | 1.5m              | Polarisation        | V+H        |
| Angle  | 0-360             | File:               | H242550C   |
| Mode:  | 1                 | Modification State: | 0          |

|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      |                       |                 |  |
| Test No: T4354  | Test Report      |                       | Page: 86 of 100 |  |

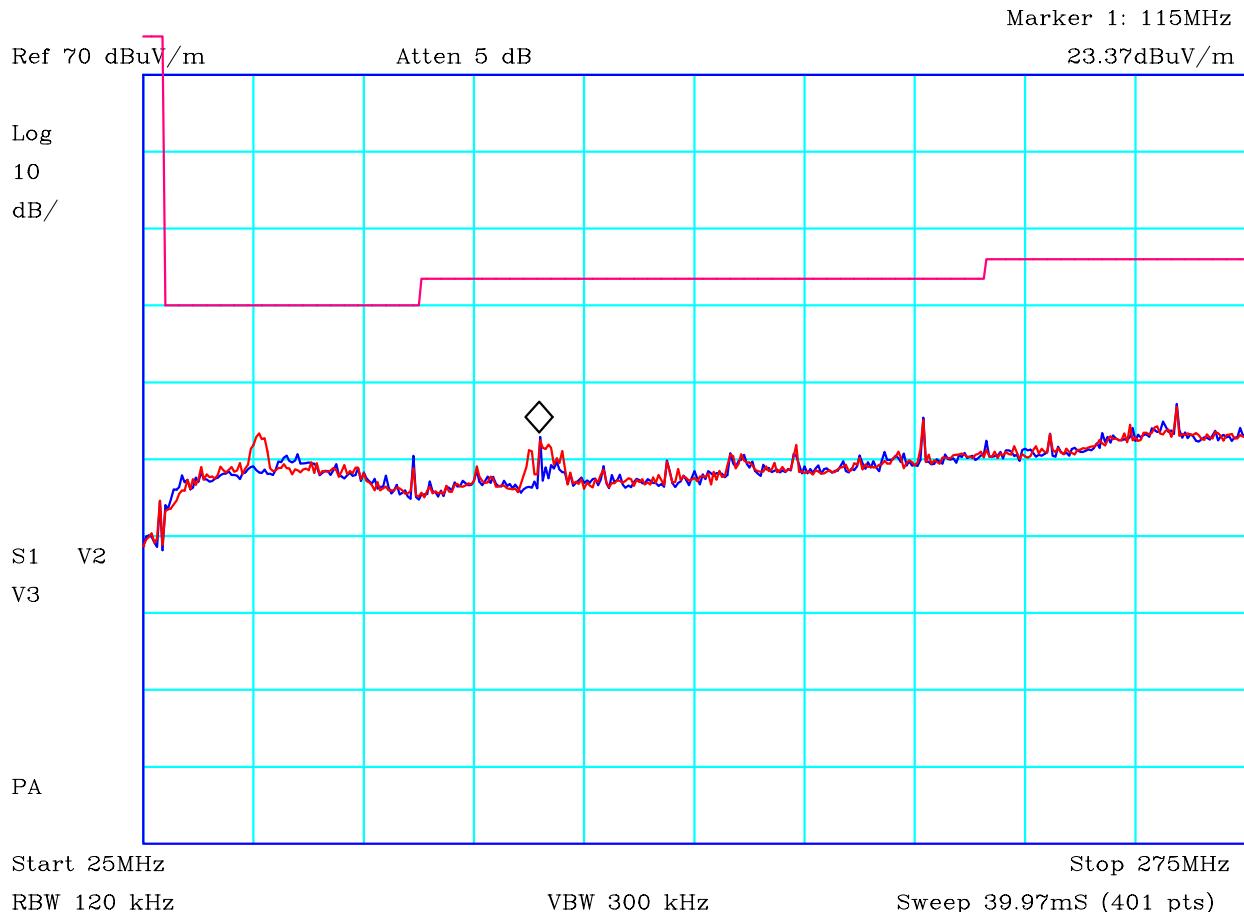


CF1:A23\_3m\_100806 CF2:CBL049\_110107 CF3:PRE3\_110113 CF4:RFF22\_110221

## PLOT 52 Radiated Emissions - DMU - 862 - 869 band Tx- 5GHz to 10GHz

|   |                   |                     |            |
|---|-------------------|---------------------|------------|
| Company:  | Sepura            | Product:            | SRG3500    |
| Date:   | 25/05/2012        | Test Eng:           | Dave Smith |
| Method:   | FCC part 90       | Method:             |            |
| Limit1:(VIO)  | 43+10 log(P)@1.5m | Limit2:             |            |
| Limit3:   |                   | Limit4:             |            |
| <p><b>DMU</b><br/>           Transmit mode. Maximum of both horizontal and vertical.<br/>           Blue: 862MHz<br/>           Red 869MHz<br/>           Limit is approximate field strength correlation to -13dBm</p> |                   |                     |            |
| Facility:   | Anech_2           | Height              | 1m         |
| Distance  | 1.5m              | Polarisation        | V+H        |
| Angle   | 0-360             | File:               | H242553A   |
| Mode:   | 1                 | Modification State: | 0          |

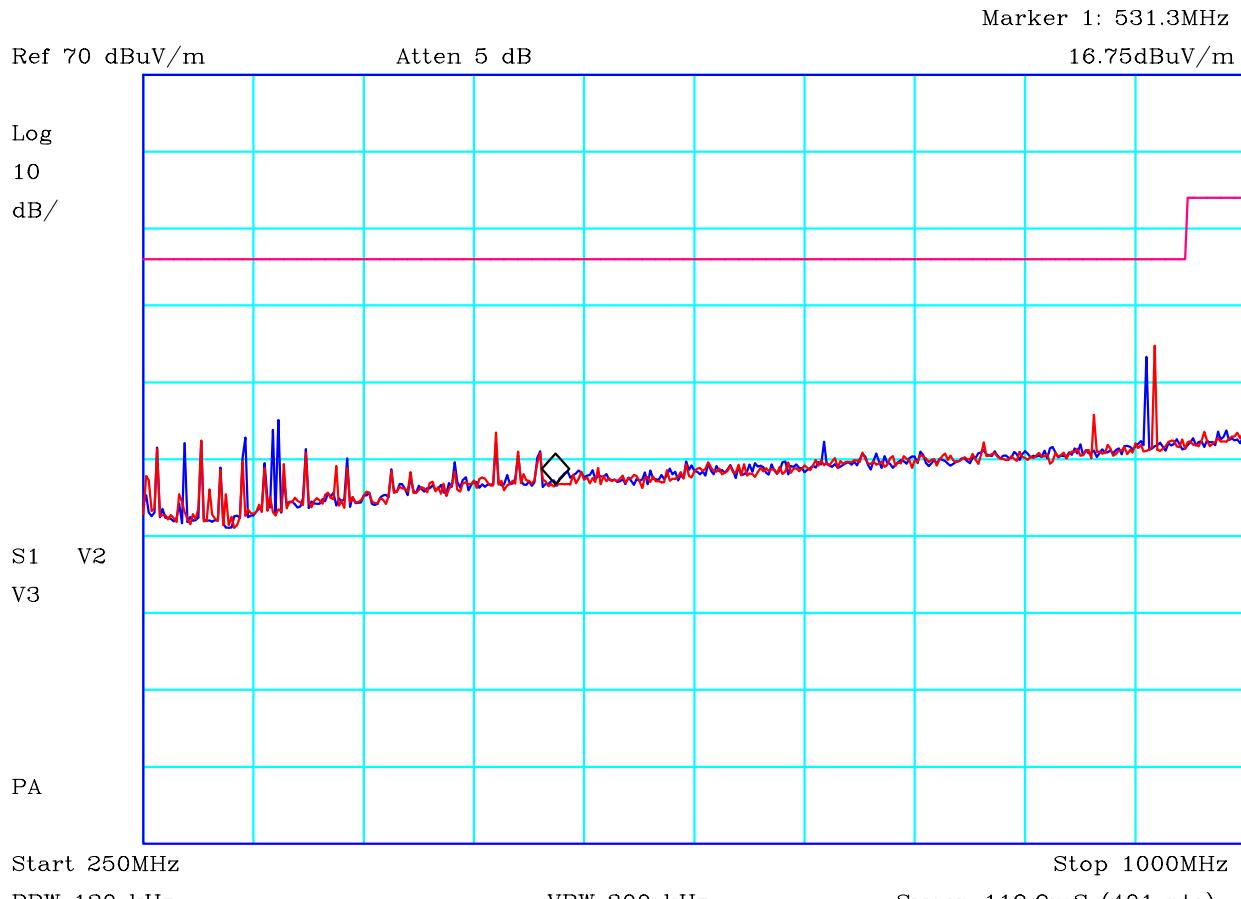
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|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      |                       |                 |  |
| Test No: T4354  | Test Report      |                       | Page: 87 of 100 |  |



### PLOT 53 Radiated Emissions - Config 1 - Rx - 25MHz to 275MHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 18/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_B@3m   | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| Config 1<br>Receive mode. Maximum of both horizontal and vertical.<br>Blue: 862MHz<br>Red 869MHz |            |                     |            |
| Facility:  | Anech_2    | Height              | 1.5        |
| Distance   | 3m         | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H24185AE   |
| Mode:  | 2          | Modification State: | 0          |

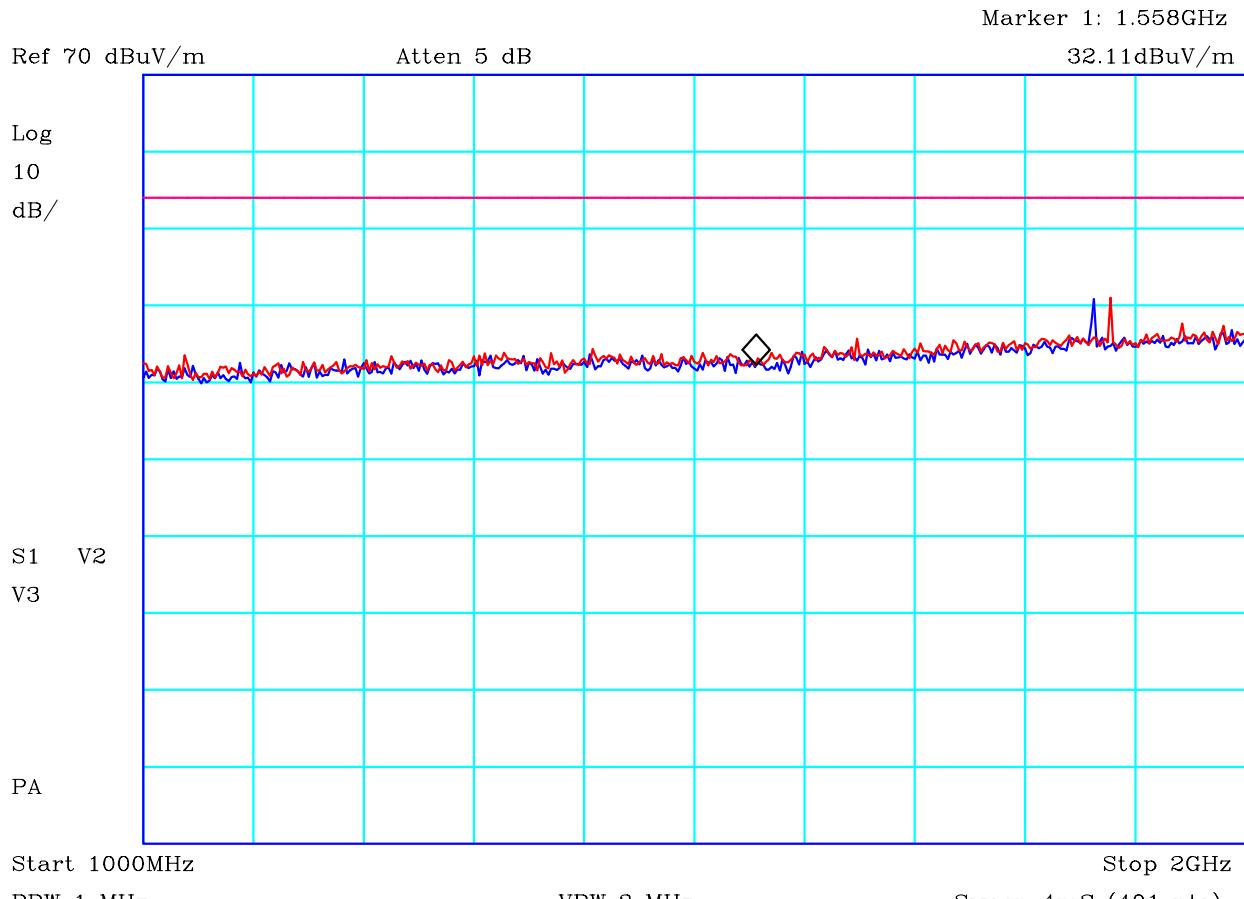
|   |                                 |                       |                 |  |
|---|---------------------------------|-----------------------|-----------------|--|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |  |
| Test No: T4354  | Test Report                     |                       | Page: 88 of 100 |  |



### PLOT 54 Radiated Emissions - Config 1 - Rx - 250MHz to 1GHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 14/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_B@3m   | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| Config 1   |            |                     |            |
| Receive mode. Maximum of both horizontal and vertical. |            |                     |            |
| Blue: 862MHz   |            |                     |            |
| Red 869MHz   |            |                     |            |
| Facility:  | Anech_2    | Height              | 1.5        |
| Distance   | 3m         | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H24157CC   |
| Mode:  | 2          | Modification State: | 0          |

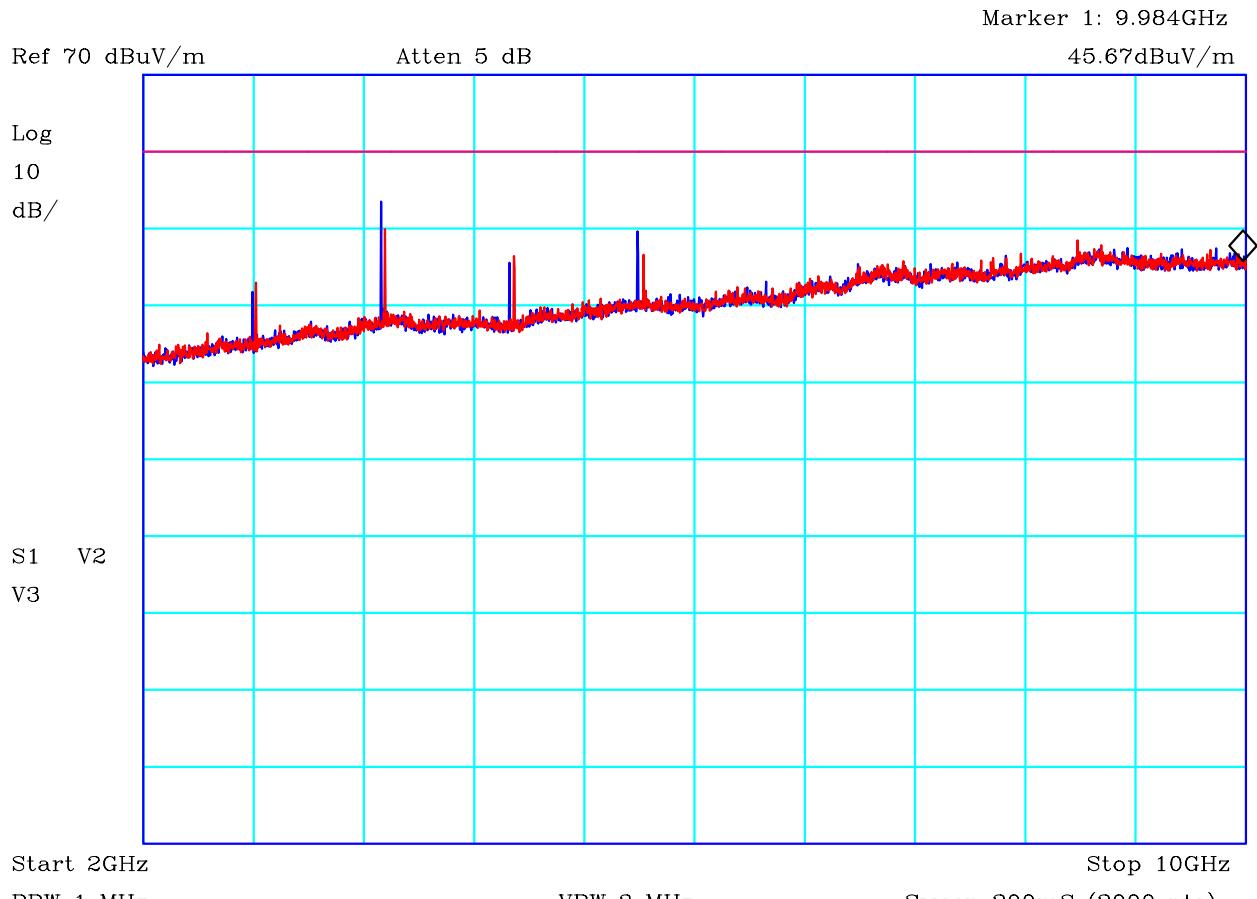
|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      | Test Report           |                 |  |
| Test No: T4354  |                  |                       | Page: 89 of 100 |  |



### PLOT 55 Radiated Emissions - Config 1 - Rx - 1GHz to 2GHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 21/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_B@3m   | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| Configuration 1  |            |                     |            |
| Receive mode. Maximum of both horizontal and vertical. |            |                     |            |
| Blue: 862MHz   |            |                     |            |
| Red 869MHz   |            |                     |            |
| Facility:  | Anech_2    | Height              | 1m         |
| Distance   | 3m         | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H24217D8   |
| Mode:  | 2          | Modification State: | 0          |

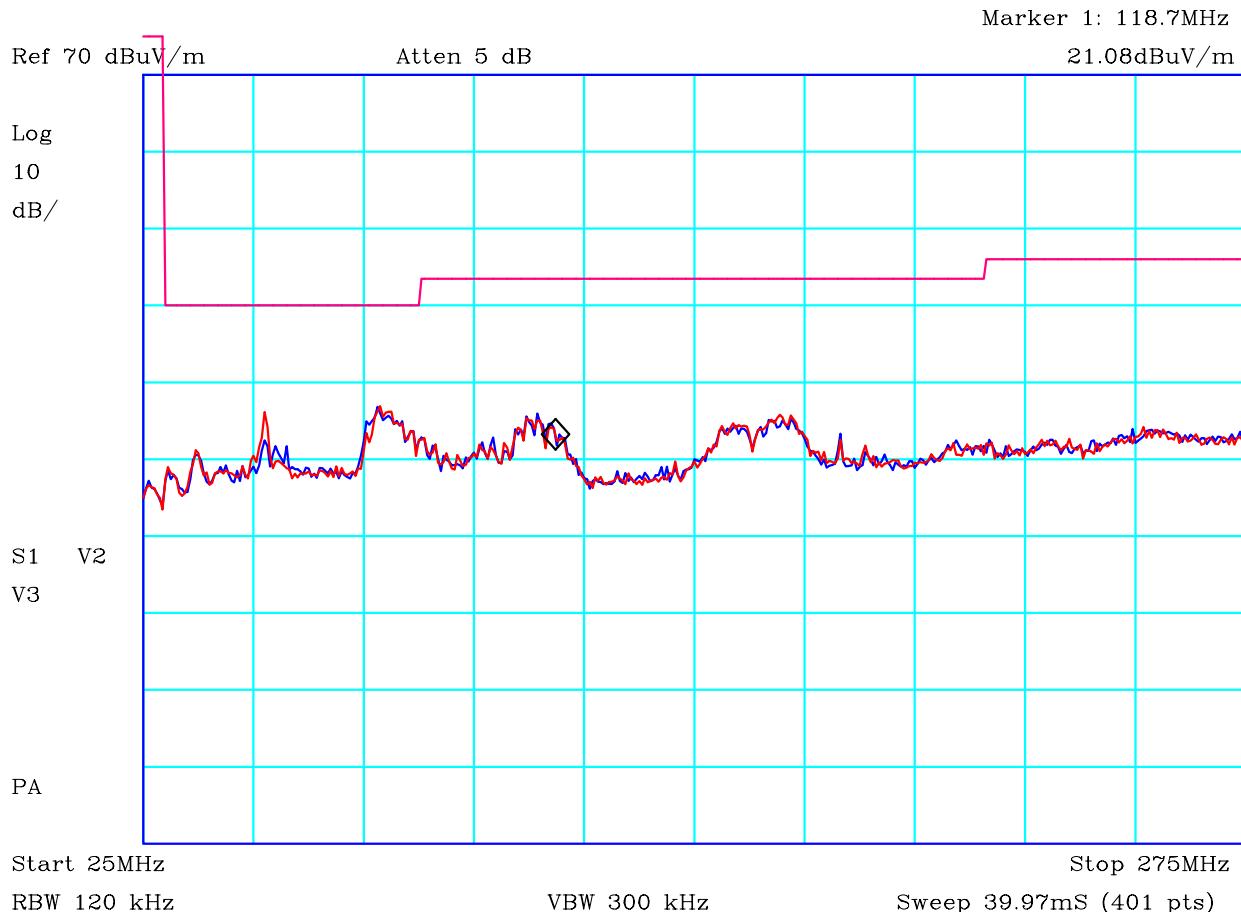
|   |                                 |                       |                 |  |
|---|---------------------------------|-----------------------|-----------------|--|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |  |
| Test No: T4354  | Test Report                     |                       | Page: 90 of 100 |  |



### PLOT 56 Radiated Emissions - Config 1 - Rx - 2GHz to 10GHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 22/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_B@1.5m | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| Configuration 1  |            |                     |            |
| Receive mode. Maximum of both horizontal and vertical. |            |                     |            |
| Blue: 862MHz   |            |                     |            |
| Red 869MHz   |            |                     |            |
| Facility:  | Anech_2    | Height              | 1m         |
| Distance   | 1.5m       | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H2422779   |
| Mode:  | 2          | Modification State: | 0          |

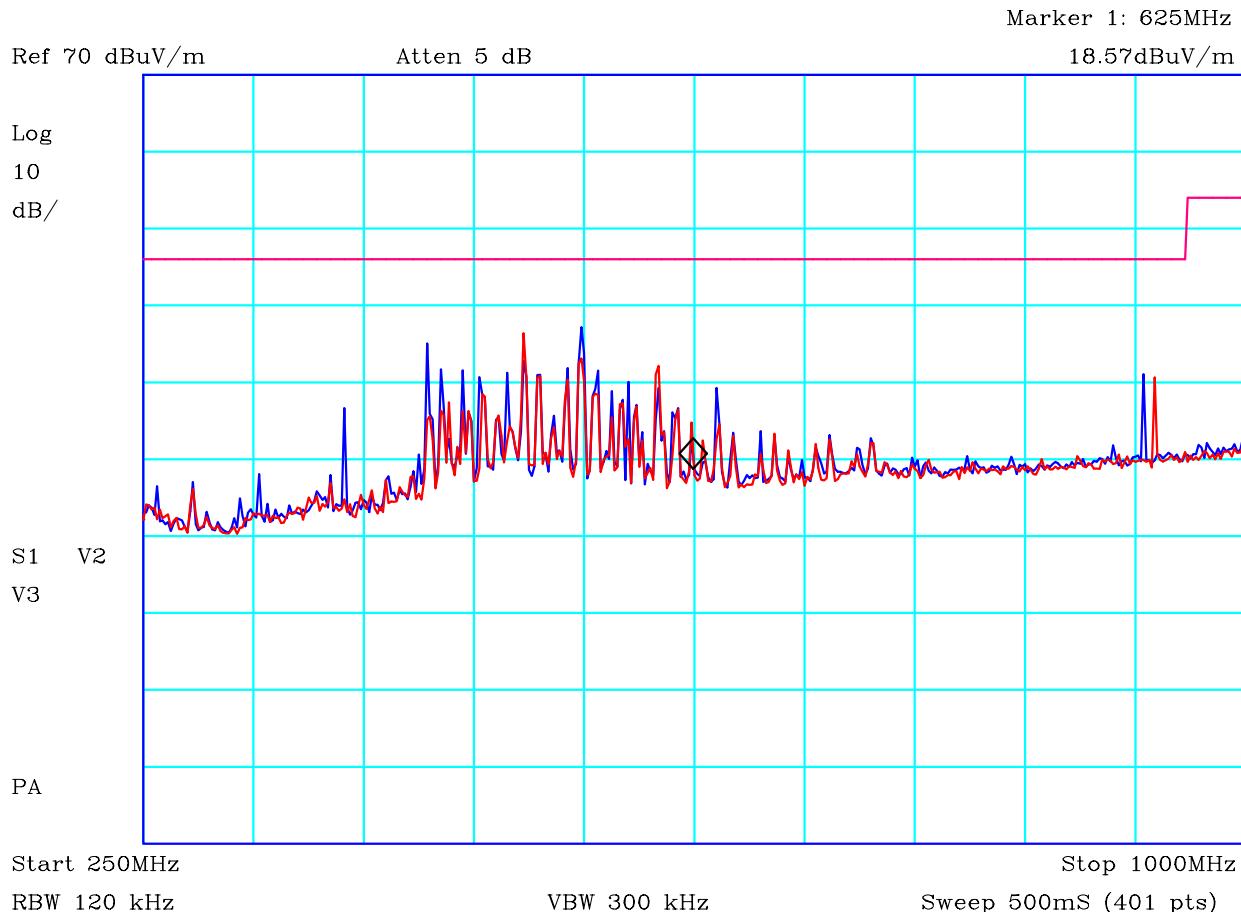
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 91 of 100 |



### PLOT 57 Radiated Emissions - DMU - Rx - 25MHz to 275MHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 14/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_B@3m   | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| DMU  |            |                     |            |
| Receive mode. Maximum of both horizontal and vertical. |            |                     |            |
| Blue: 862MHz   |            |                     |            |
| Red 869MHz   |            |                     |            |
| Facility:  | Anech_2    | Height              | 1.5        |
| Distance   | 3m         | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H24155C0   |
| Mode:  | 2          | Modification State: | 0          |

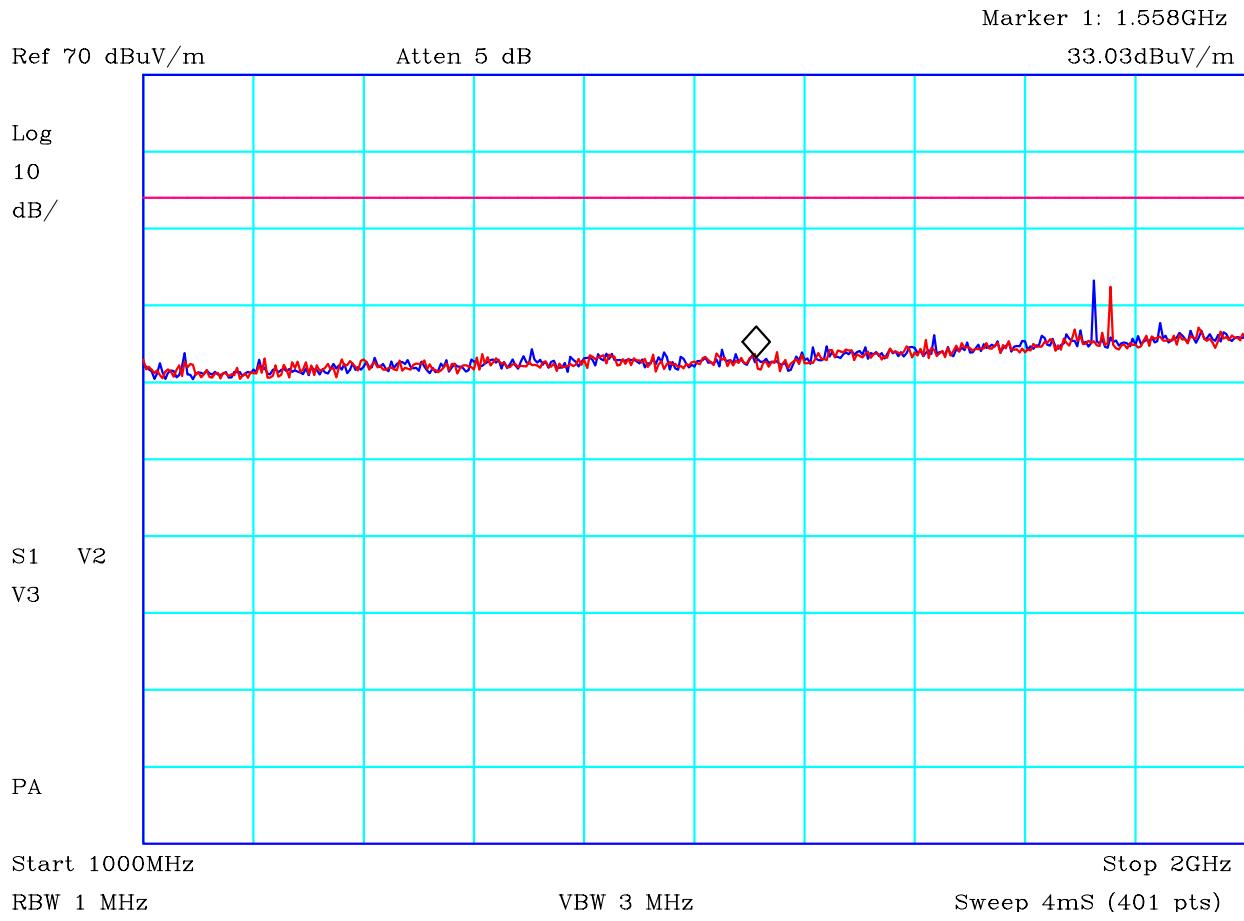
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 92 of 100 |



### PLOT 58 Radiated Emissions - DMU - Rx - 250MHz to 1GHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 18/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_Bx@3m  | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| DMU  |            |                     |            |
| Receive mode. Maximum of both horizontal and vertical. |            |                     |            |
| Blue: 862MHz   |            |                     |            |
| Red 869MHz   |            |                     |            |
| Facility:  | Anech_2    | Height              | 1.5        |
| Distance   | 3m         | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H24184DF   |
| Mode:  | 2          | Modification State: | 0          |

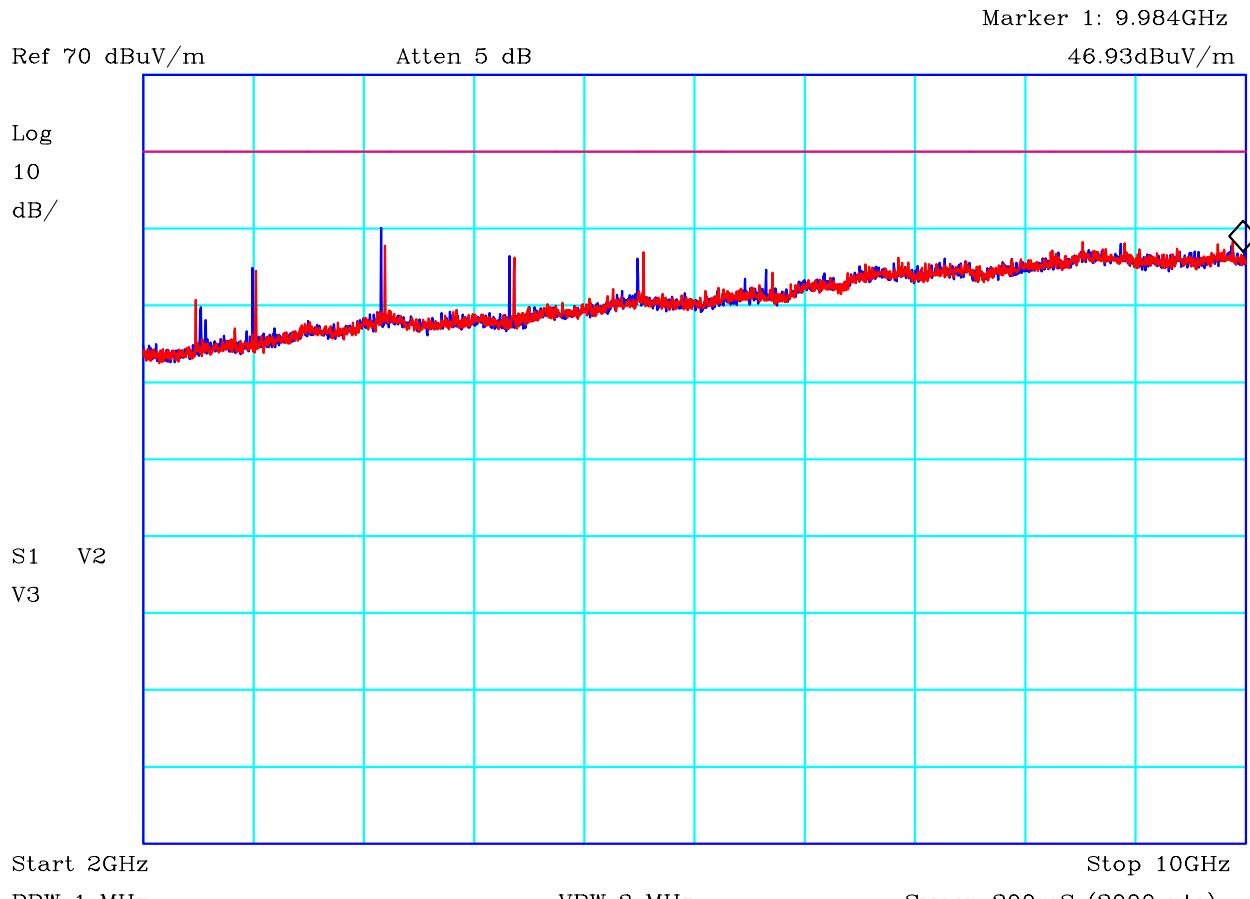
|   |                                 |                       |                 |
|---|---------------------------------|-----------------------|-----------------|
|  | Report No: R3112<br>Issue No: 1 | FCC ID: XX6-SRG3500XB |                 |
| Test No: T4354  |                                 | Test Report           | Page: 93 of 100 |



### PLOT 59 Radiated Emissions - DMU - Rx - 1GHz to 2GHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 22/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_B@3m   | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| DMU  |            |                     |            |
| Receive mode. Maximum of both horizontal and vertical. |            |                     |            |
| Blue: 862MHz   |            |                     |            |
| Red 869MHz   |            |                     |            |
| Facility:  | Anech_2    | Height              | 1m         |
| Distance   | 3m         | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H2422484   |
| Mode:  | 2          | Modification State: | 0          |

|   |                  |                       |                 |  |
|---|------------------|-----------------------|-----------------|--|
|  | Report No: R3112 | FCC ID: XX6-SRG3500XB |                 |  |
|   | Issue No: 1      | Test Report           |                 |  |
| Test No: T4354  |                  |                       | Page: 94 of 100 |  |



## PLOT 60 Radiated Emissions - DMU - Rx - 2GHz to 10GHz

|  |            |                     |            |
|--|------------|---------------------|------------|
| Company:   | Sepura     | Product:            | SRG3500    |
| Date:  | 25/05/2012 | Test Eng:           | Dave Smith |
| Method:  | ANSI C63.4 | Method:             |            |
| Limit1:(VIO)   | FCC_B@1.5m | Limit2:             |            |
| Limit3:  |            | Limit4:             |            |
| <b>DMU</b><br>Receive mode. Maximum of both horizontal and vertical.<br>Blue: 862MHz<br>Red 869MHz |            |                     |            |
| Facility:  | Anech_2    | Height              | 1m         |
| Distance   | 1.5m       | Polarisation        | V+H        |
| Angle  | 0-360      | File:               | H2425553   |
| Mode:  | 2          | Modification State: | 0          |

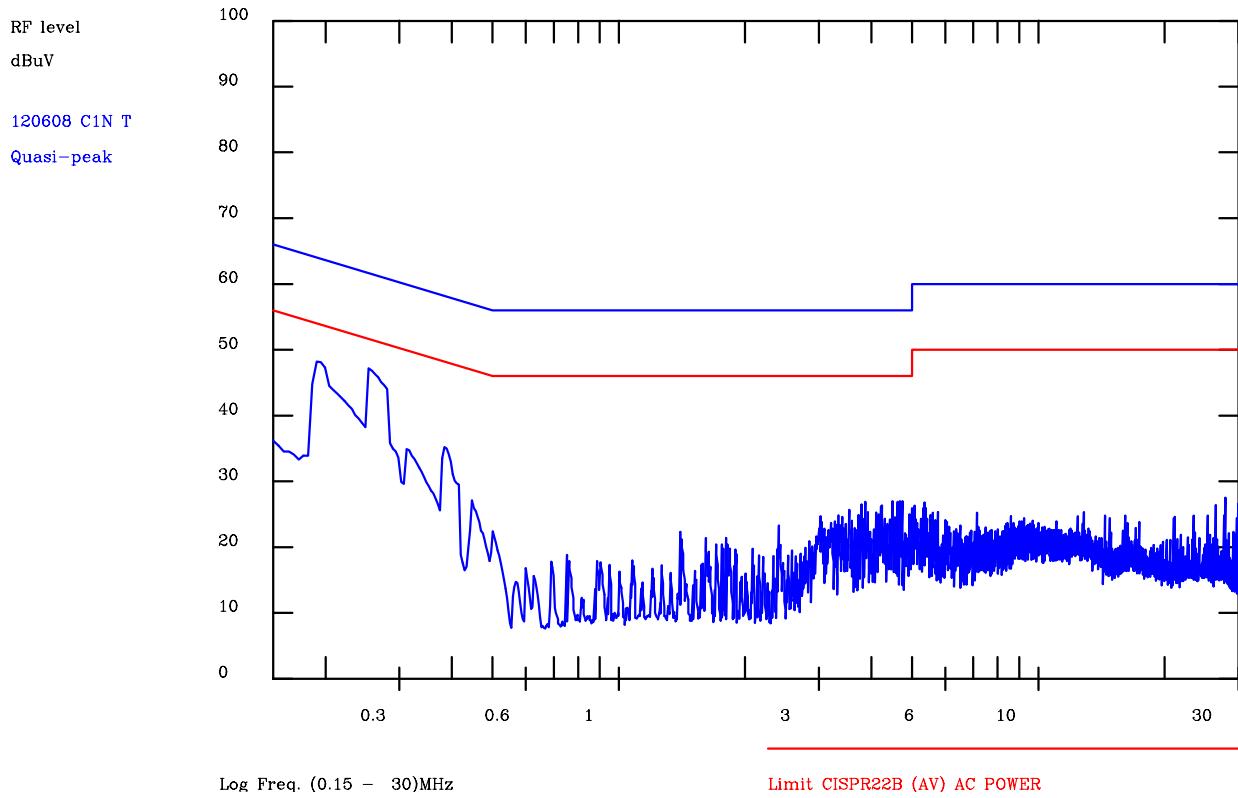
|   |   |                              |                        |
|---|---|------------------------------|------------------------|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> | <b>FCC ID: XX6-SRG3500XB</b> |                        |
| Test No: <b>T4354</b>   |   | <b>Test Report</b>           | Page: <b>95 of 100</b> |

Chase EMS 6.21

Notes

Analyse 120608 C1N Tx 817MHz

Test: 150kHz-30MHz (L1+CSET001) dBuV



### PLOT 61 Conducted Emissions - Transmit Mode (817MHz) - Neutral Line

|  |                           |
|--|---------------------------|
| Company: Sepura                                      | Product: SRG3500          |
| Date: 08 Jun 12                                      | Test Engineer: Dave Smith |
| Test: ANSI C63.4                                     | Limit: Class B            |
| Notes:   |                           |
| Transmit 817MHz<br>115V, Dummy load on antenna port. |                           |
| L1 R1  |                           |
| Line: Neutral  | Attenuator: 10dB PAD      |
| Detector: QuasiPeak                                  | Operating Mode: 1         |
| LISN: EMCO   | Mod. State: 0             |
| Filename: C26086A9.plt                               |                           |

#### Frequency List ( MHz )

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|---|---|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> |
| Test No: <b>T4354</b>   |   |

**FCC ID: XX6-SRG3500XB**

**Test Report**

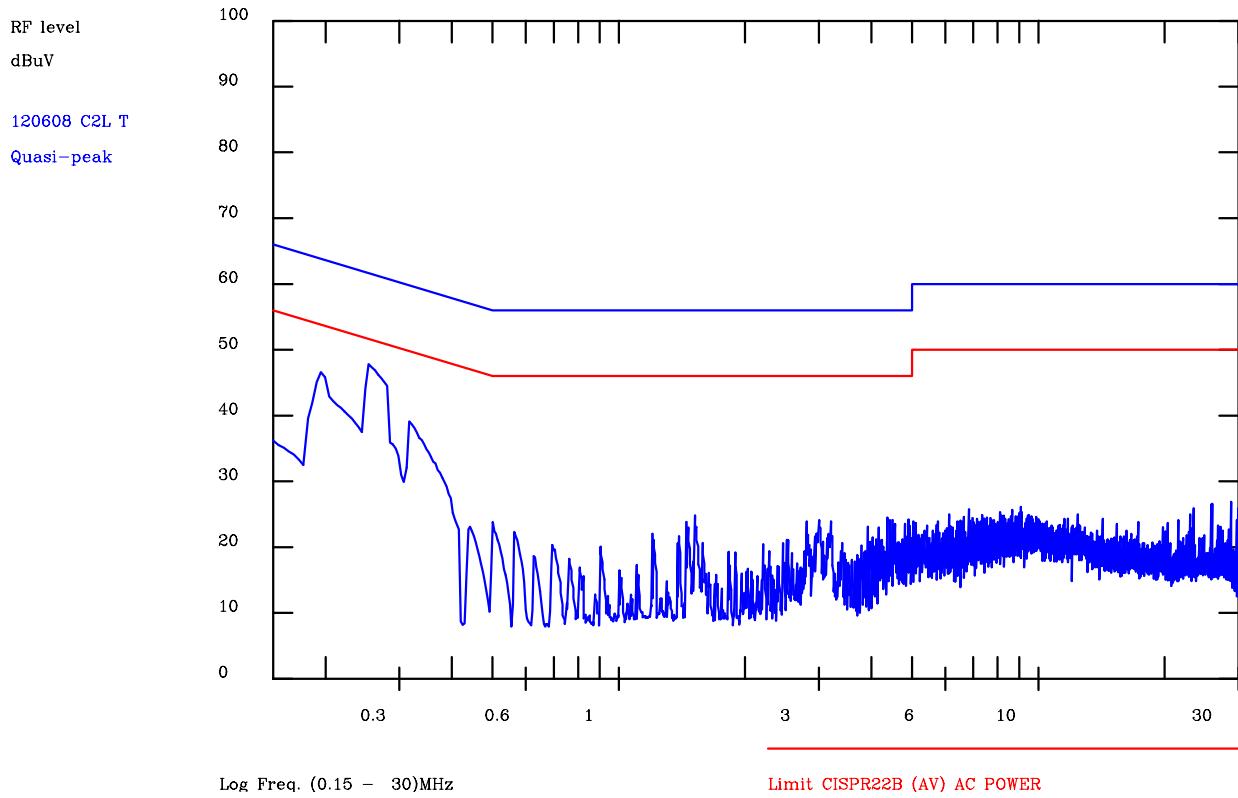
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Chase EMS 6.21

Notes

Analyse 120608 C2L Tx 817MHz

Test: 150kHz-30MHz (L1+CSET001) dBuV



**PLOT 62 Conducted Emissions - Transmit Mode (817MHz) - Live Line**

|  |                           |
|--|---------------------------|
| Company: Sepura                                      | Product: SRG3500          |
| Date: 08 Jun 12                                      | Test Engineer: Dave Smith |
| Test: ANSI C63.4                                     | Limit: Class B            |
| Notes:   |                           |
| Transmit 817MHz<br>115V, Dummy load on antenna port. |                           |
| L1 R1  |                           |
| Line: Live   | Attenuator: 10dB PAD      |
| Detector: QuasiPeak                                  | Operating Mode: 1         |
| LISN: EMCO   | Mod. State: 0             |
| Filename: C26086B6.plt                               |                           |

**Frequency List ( MHz )**

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|---|---|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> |
| Test No: <b>T4354</b>   |   |

**FCC ID: XX6-SRG3500XB**

**Test Report**

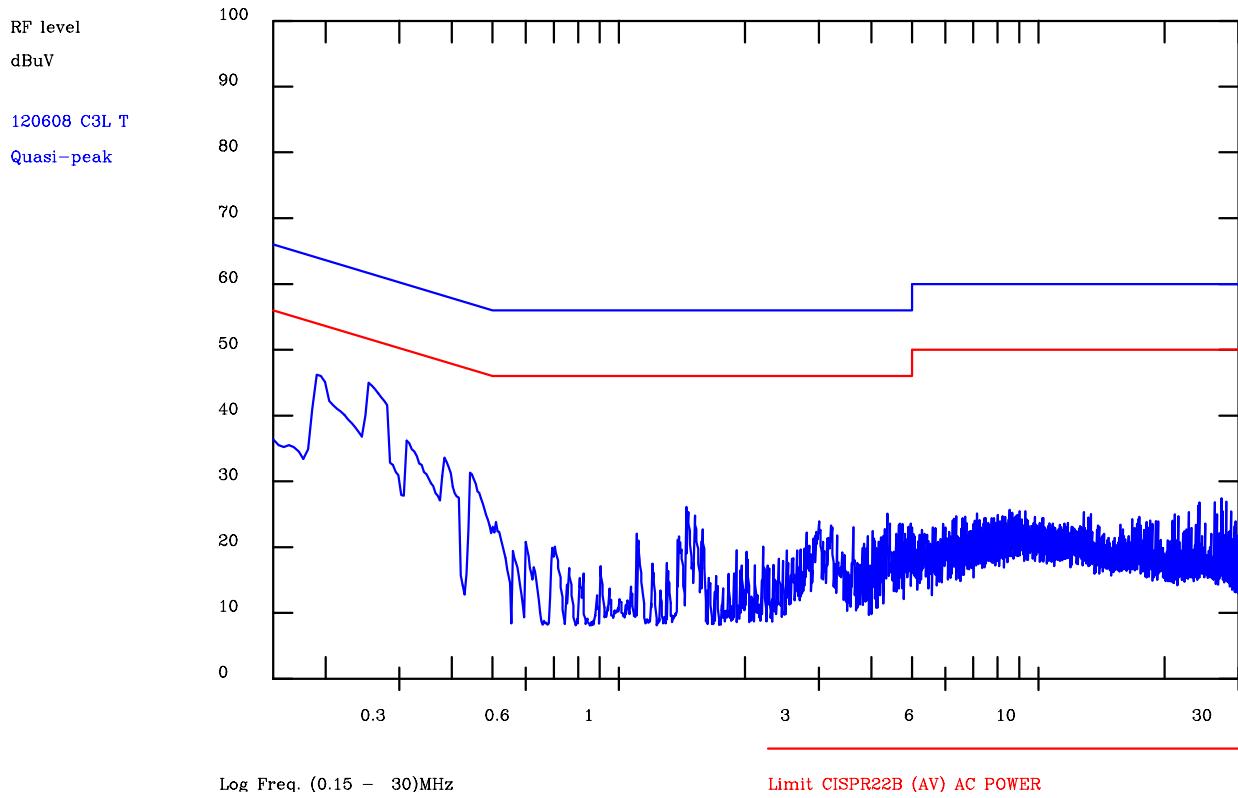
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Chase EMS 6.21

Notes

Analyse 120608 C3L Tx 862MHz

Test: 150kHz-30MHz (L1+CSET001) dBuV



**PLOT 63 Conducted Emissions - Transmit Mode (862MHz) - Live Line**

|  |                           |
|--|---------------------------|
| Company: Sepura                                      | Product: SRG3500          |
| Date: 08 Jun 12                                      | Test Engineer: Dave Smith |
| Test: ANSI C63.4                                     | Limit: Class B            |
| Notes:   |                           |
| Transmit 862MHz<br>115V, Dummy load on antenna port. |                           |
| L1 R1  |                           |
| Line: Live   | Attenuator: 10dB PAD      |
| Detector: QuasiPeak                                  | Operating Mode: 1         |
| LISN: EMCO   | Mod. State: 0             |
| Filename: C26086C2.plt                               |                           |

**Frequency List ( MHz )**

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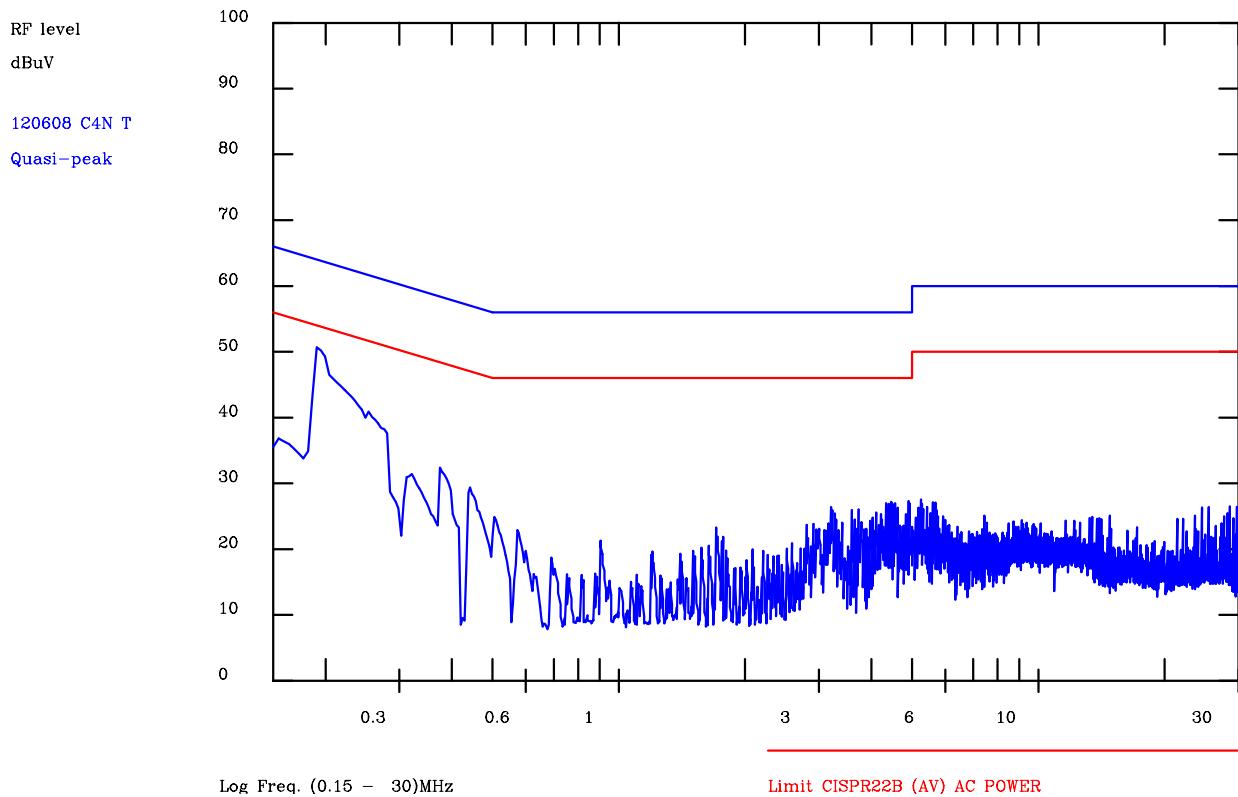
|   |   |                              |                        |
|---|---|------------------------------|------------------------|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> | <b>FCC ID: XX6-SRG3500XB</b> |                        |
|   | Test No: <b>T4354</b>                         | <b>Test Report</b>           | Page: <b>98 of 100</b> |

Chase EMS 6.21

Notes

Analyse 120608 C4N Tx 862MHz

Test: 150kHz-30MHz (L1+CSET001) dBuV



#### PLOT 64 Conducted Emissions - Transmit Mode (862MHz) - Neutral Line

|  |              |                 |            |
|--|--------------|-----------------|------------|
| Company:   | Sepura       | Product:        | SRG3500    |
| Date:  | 08 Jun 12    | Test Engineer:  | Dave Smith |
| Test:  | ANSI C63.4   | Limit:          | Class B    |
| Notes:   |              |                 |            |
| Transmit 862MHz<br>115V, Dummy load on antenna port. |              |                 |            |
| L1 R1  |              |                 |            |
| Line:  | Neutral      | Attenuator:     | 10dB PAD   |
| Detector:  | QuasiPeak    | Operating Mode: | 1          |
| LISN:  | EMCO         | Mod. State:     | 0          |
| Filename:  | C26086CA.plt |                 |            |

#### Frequency List ( MHz )

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|---|---|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> |
| Test No: <b>T4354</b>   |   |

**FCC ID: XX6-SRG3500XB**

**Test Report**

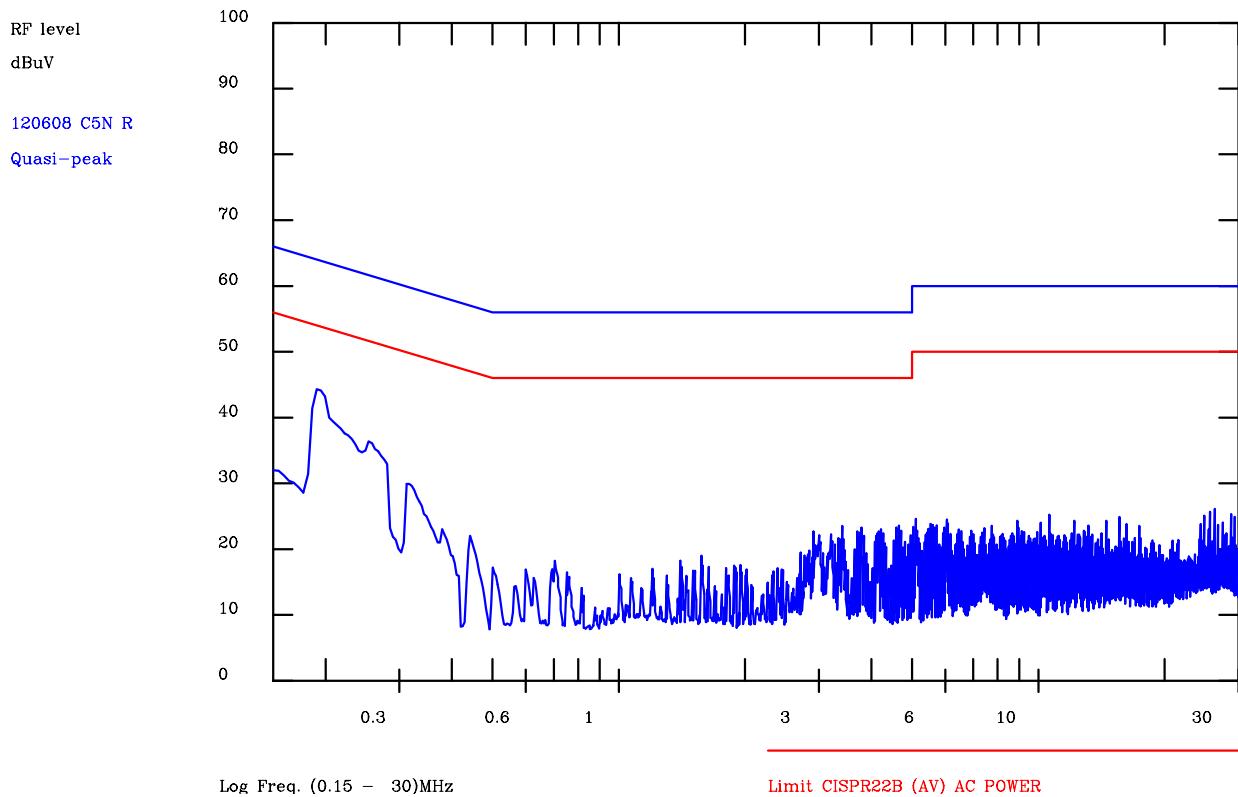
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Chase EMS 6.21

Notes

Analyse 120608 C5N Rx 862MHz

Test: 150kHz-30MHz (L1+CSET001) dBuV



**PLOT 65 Conducted Emissions - Receive Mode Neutral Line**

|   |                           |
|---|---------------------------|
| Company: Sepura                                     | Product: SRG3500          |
| Date: 08 Jun 12                                     | Test Engineer: Dave Smith |
| Test: ANSI C63.4                                    | Limit: Class B            |
| Notes:  |                           |
| Receive 862MHz<br>115V, Dummy load on antenna port. |                           |
| L1 R1   |                           |
| Line: Neutral                                       | Attenuator: 10dB PAD      |
| Detector: QuasiPeak                                 | Operating Mode: 2         |
| LISN: EMCO  | Mod. State: 0             |
| Filename: C26086D5.plt                              |                           |

**Frequency List ( MHz )**

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|---|---|
|  | Report No: <b>R3112</b><br>Issue No: <b>1</b> |
| Test No: <b>T4354</b>   |   |

**FCC ID: XX6-SRG3500XB**

**Test Report**

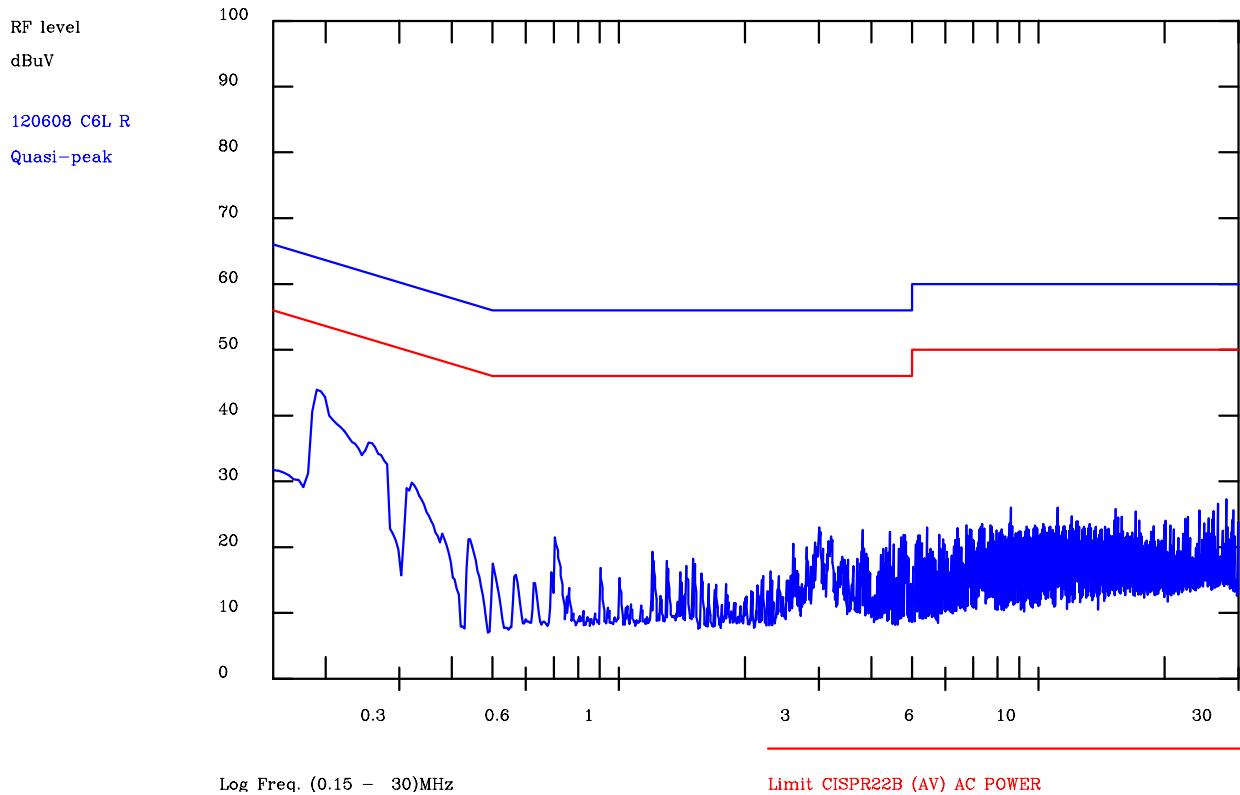
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Chase EMS 6.21

Notes

Analyse 120608 C6L Rx 862MHz

Test: 150kHz-30MHz (L1+CSET001) dBuV



**PLOT 66 Conducted Emissions - Receive Mode - Live Line**

|   |                           |
|---|---------------------------|
| Company: Sepura                                     | Product: SRG3500          |
| Date: 08 Jun 12                                     | Test Engineer: Dave Smith |
| Test: ANSI C63.4                                    | Limit: Class B            |
| Notes:  |                           |
| Receive 862MHz<br>115V, Dummy load on antenna port. |                           |
| L1 R1   |                           |
| Line: Live  | Attenuator: 10dB PAD      |
| Detector: QuasiPeak                                 | Operating Mode: 2         |
| LISN: EMCO  | Mod. State: 0             |
| Filename: C26086E1.plt                              |                           |

**Frequency List ( MHz )**

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