

# TEST REPORT FROM RFI GLOBAL SERVICES LTD

Test of: MTD

To: FCC Part 15.231: 2008

**Test Report Serial No:**  
RFI/RPT1/RP74737JD03A

|                                                                                                 |                                                                                      |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>This Test Report Is Issued Under The Authority<br/>Of Brian Watson, Operations Director:</b> |                                                                                      |
| <br>PP      |                                                                                      |
| <b>Checked By:</b>                                                                              | Nigel Davison                                                                        |
|                                                                                                 |  |
| <b>Date of Issue:</b>                                                                           | 06 April 2009                                                                        |

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**1. Customer Information**

|                      |                                        |
|----------------------|----------------------------------------|
| <b>Company Name:</b> | Pro Tech Monitoring inc                |
| <b>Address:</b>      | 2549 Success Dr<br>Odessa, Fl<br>33556 |

## **2. Summary of Testing**

### **2.1. General Information**

|                                 |                                                                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Specification Reference:</b> | 47CFR15.231                                                                                                                      |
| <b>Specification Title:</b>     | Code of Federal Regulations Volume 47 (Telecommunications) 2008:<br>Part 15 Subpart C (Radio Frequency Devices) - Section 15.231 |
| <b>Site Registration:</b>       | FCC: 209735                                                                                                                      |
| <b>Location of Testing:</b>     | RFI Global Services Ltd, Wade Road, Basingstoke, Hampshire, RG24 8AH.                                                            |
| <b>Test Dates:</b>              | 12 March 2009 to 23 March 2009                                                                                                   |

### **2.2. Summary of Test Results**

| FCC Reference (47CFR)                                                                                                                                                                                                        | Measurement                           | Port Type | Result                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------|---------------------------------------------------------------------------------------|
| FCC Part 15.107                                                                                                                                                                                                              | Receiver AC Conducted Emissions       | AC Mains  |    |
| FCC Part 15.109                                                                                                                                                                                                              | Receiver Radiated Spurious Emissions  | Antenna   |    |
| FCC Part 15.207                                                                                                                                                                                                              | Transmitter AC Conducted Emissions    | AC Mains  |    |
| FCC Part 15.231(b)                                                                                                                                                                                                           | Transmitter Fundamental Fieldstrength | Antenna   |   |
| FCC Part 15.231(c)                                                                                                                                                                                                           | Transmitter 20 dB Bandwidth           | Antenna   |  |
| FCC Part 15.231(a)                                                                                                                                                                                                           | Transmitter Timeout                   | Antenna   |  |
| FCC Part 15.35(c)                                                                                                                                                                                                            | Transmitter Duty Cycle                | Antenna   | Not Applicable                                                                        |
| FCC Part 15.231(b) & 15.209                                                                                                                                                                                                  | Transmitter Radiated Emissions        | Antenna   |  |
| <b>Key to Results</b><br> = Complied  = Did not comply |                                       |           |                                                                                       |

### **2.3. Methods and Procedures**

|                   |                                                                                                                                                                      |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reference:</b> | ANSI C63.4 (2003)                                                                                                                                                    |
| <b>Title:</b>     | American National Standard Methods of Measurement of Electromagnetic Emissions from Low Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz. |

### **2.4. Deviations from the Test Specification**

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

### **3. Equipment Under Test (EUT)**

#### **3.1. Identification of Equipment Under Test (EUT)**

|                              |                 |
|------------------------------|-----------------|
| <b>Description:</b>          | Tracking Device |
| <b>Brand Name:</b>           | MTD             |
| <b>Model Name or Number:</b> | Not stated      |
| <b>Serial Number:</b>        | 33592710        |
| <b>FCC ID Number:</b>        | NC3MTD3418      |

|                               |                                |
|-------------------------------|--------------------------------|
| <b>Description:</b>           | Cradle with two RJ11 interface |
| <b>Brand Name:</b>            | Pro Tech                       |
| <b>Model Name or Number:</b>  | MCS 1000                       |
| <b>Serial Number:</b>         | 50337535                       |
| <b>Cable Length and Type:</b> | 1.8m / Multicore               |
| <b>Connected to Port:</b>     | Interface port                 |

|                               |                                                      |
|-------------------------------|------------------------------------------------------|
| <b>Description:</b>           | AC Power Adaptor for battery charging through cradle |
| <b>Brand Name:</b>            | CUI INC                                              |
| <b>Model Name or Number:</b>  | DSA-0151A-05                                         |
| <b>Serial Number:</b>         | None Stated                                          |
| <b>Cable Length and Type:</b> | 1.8m / Multicore                                     |
| <b>Connected to Port:</b>     | Power                                                |

#### **3.2. Description of EUT**

The equipment under test was a belt worn GSM/GPRS and ISM band version tracking device.

#### **3.3. Modifications Incorporated in the EUT**

No modifications were applied to the EUT during testing.

**3.4. Additional Information Related to Testing**

|                                  |                          |                          |
|----------------------------------|--------------------------|--------------------------|
| <b>Tested Technology:</b>        | Short Range Device (SRD) |                          |
| <b>Power Supply Requirement:</b> | Nominal                  | 3.7 V via Li-ion battery |
| <b>Type of Unit:</b>             | Transceiver              |                          |
| <b>Transmit Frequency:</b>       | 418 MHz                  |                          |
| <b>Receive Frequency:</b>        | 418 MHz                  |                          |

**3.5. Support Equipment**

The following support equipment was used to exercise the EUT during testing:

|                               |                              |
|-------------------------------|------------------------------|
| <b>Description:</b>           | Infra Red Wireless Interface |
| <b>Brand Name:</b>            | ACTiSYS                      |
| <b>Model Name or Number:</b>  | ACT-IR220LN57                |
| <b>Serial Number:</b>         | LN001248                     |
| <b>Cable Length and Type:</b> | 1.2m / Multicore             |
| <b>Connected to Port:</b>     | Wireless (Infra Red)         |

## **4. Operation and Monitoring of the EUT during Testing**

### **4.1. Operating Modes**

The EUT was tested in the following operating modes, unless otherwise stated.

- Continuous transmit or transmitting at  $6 \pm 2$  ms transmission burst every 20 s repetitively (as required) at maximum output power
- Receive Mode

### **4.2. Configuration and Peripherals**

The EUT was tested in the following configuration:

- For transmitter tests the EUT was tested standalone. A test mode was enabled on the EUT to allow continuous transmission via MTD Term software
- For receiver tests, the EUT was tested with the EUT being charged whilst sat in the cradle. A test mode was enabled on the EUT via MTD Term software to allow the EUT in continuous receive mode
- AC mains conducted emissions were performed with the EUT being charged whilst sat in the cradle

## **5. Measurements, Examinations and Derived Results**

### **5.1. General Comments**

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to *Section 6. Measurement Uncertainty* for details.

**5.2. Test Results****5.3. Receiver AC Conducted Spurious Emissions****Test Summary:**

|                          |                                                          |
|--------------------------|----------------------------------------------------------|
| <b>FCC Part:</b>         | 15.107                                                   |
| <b>Test Method Used:</b> | As detailed in ANSI C63.4 Section 7 and relevant annexes |

**Environmental Conditions:**

|                               |    |
|-------------------------------|----|
| <b>Temperature (°C):</b>      | 17 |
| <b>Relative Humidity (%):</b> | 47 |

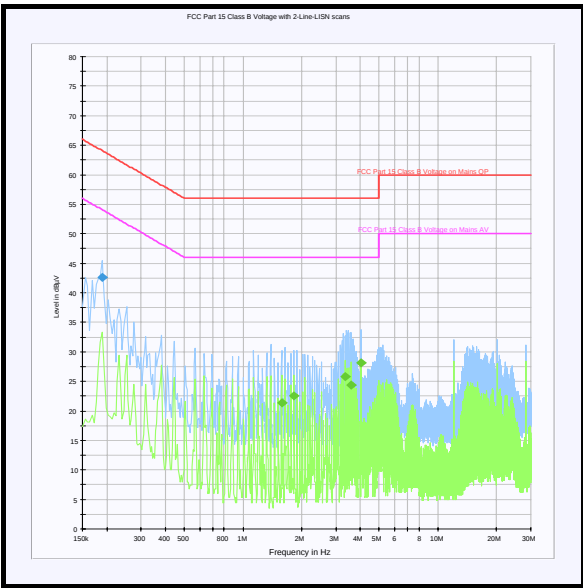
**Results: Quasi Peak Detector Measurements**

| Frequency (MHz) | Line    | Quasi Peak Level (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Result   |
|-----------------|---------|-------------------------------|--------------------|-------------|----------|
| 0.190500        | Neutral | 42.7                          | 64.0               | 21.3        | Complied |

**Results: Average Detector Measurements**

| Frequency (MHz) | Line   | Average Level (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Result   |
|-----------------|--------|----------------------------|--------------------|-------------|----------|
| 1.576500        | Live 1 | 21.4                       | 46.0               | 24.6        | Complied |
| 1.824000        | Live 1 | 22.6                       | 46.0               | 23.4        | Complied |
| 3.336000        | Live 1 | 25.8                       | 46.0               | 20.2        | Complied |
| 3.588000        | Live 1 | 24.4                       | 46.0               | 21.6        | Complied |
| 4.033500        | Live 1 | 28.2                       | 46.0               | 17.8        | Complied |

**Receiver AC Conducted Spurious Emissions (continued)**



*Note: This plot is a pre-scans and for indication purposes only. For final measurements, see accompanying table.*

**5.4. Receiver Radiated Spurious Emissions****Test Summary:**

|                          |                                                          |
|--------------------------|----------------------------------------------------------|
| <b>FCC Part:</b>         | 15.109                                                   |
| <b>Test Method Used:</b> | As detailed in ANSI C63.4 Section 8 and relevant annexes |
| <b>Frequency Range:</b>  | 30 to 1000 MHz                                           |

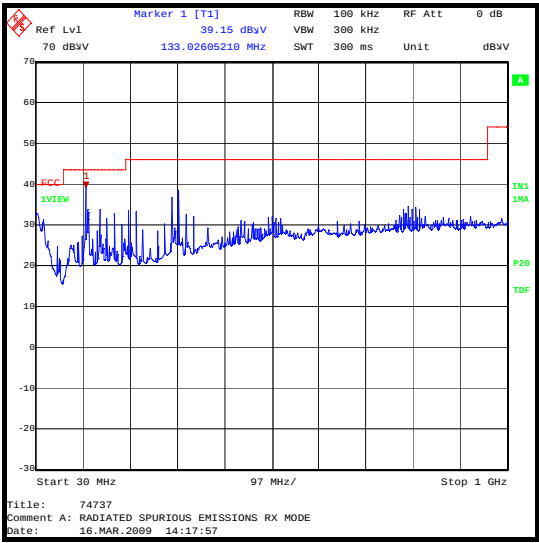
**Environmental Conditions:**

|                               |    |
|-------------------------------|----|
| <b>Temperature (°C):</b>      | 23 |
| <b>Relative Humidity (%):</b> | 27 |

**Results:**

| <b>Frequency (MHz)</b> | <b>Antenna Polarity</b> | <b>Q-P Level (dB<math>\mu</math>V/m)</b> | <b>Limit (dB<math>\mu</math>V/m)</b> | <b>Margin (dB)</b> | <b>Result</b> |
|------------------------|-------------------------|------------------------------------------|--------------------------------------|--------------------|---------------|
| 133.053                | Vertical                | 39.1                                     | 43.5                                 | 4.4                | Complied      |
| 162.200                | Vertical                | 35.0                                     | 43.5                                 | 8.5                | Complied      |
| 191.687                | Vertical                | 33.8                                     | 43.5                                 | 9.7                | Complied      |
| 220.182                | Vertical                | 25.1                                     | 46.0                                 | 20.9               | Complied      |
| 235.927                | Vertical                | 33.7                                     | 46.0                                 | 12.3               | Complied      |
| 309.650                | Horizontal              | 37.7                                     | 46.0                                 | 8.3                | Complied      |
| 339.140                | Vertical                | 33.2                                     | 46.0                                 | 12.8               | Complied      |
| 451.577                | Vertical                | 33.5                                     | 46.0                                 | 12.5               | Complied      |
| 516.089                | Horizontal              | 34.3                                     | 46.0                                 | 11.7               | Complied      |
| 794.302                | Vertical                | 37.1                                     | 46.0                                 | 8.9                | Complied      |

Receiver Radiated Spurious Emissions (continued)



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying table.

**Receiver Radiated Spurious Emissions (continued)****Test Summary:**

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| FCC Part:         | 15.109                                                   |
| Test Method Used: | As detailed in ANSI C63.4 Section 8 and relevant annexes |
| Frequency Range:  | 1 to 2 GHz                                               |

**Environmental Conditions:**

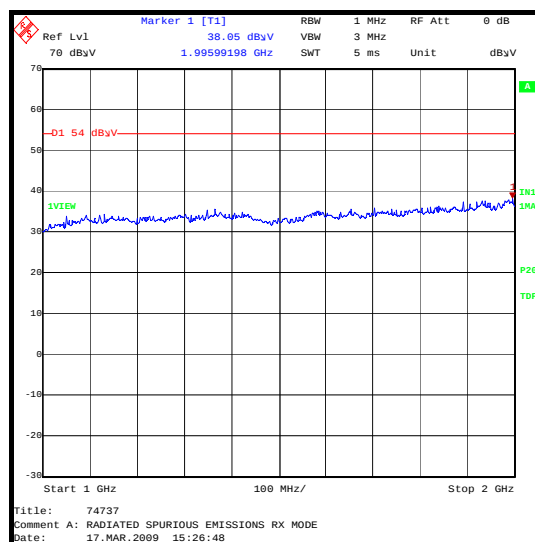
|                        |    |
|------------------------|----|
| Temperature (°C):      | 25 |
| Relative Humidity (%): | 26 |

**Highest Peak Level:**

| Frequency (GHz) | Antenna Polarity | Detector Level (dB $\mu$ V) | Transducer Factor (dB) | Peak Level (dB $\mu$ V/m) | Average Limit (dB $\mu$ V/m) | Margin (dB) | Result   |
|-----------------|------------------|-----------------------------|------------------------|---------------------------|------------------------------|-------------|----------|
| 1.996           | Vertical         | 38.2                        | -0.1                   | 38.1                      | 54.0                         | 15.9        | Complied |

**Note(s):**

- \*Note: No spurious emissions were detected above the noise floor of the measuring receiver; therefore, the highest peak noise floor reading of the measuring receiver was recorded as shown in the table above.  
\*\*Note: The peak level was compared to the average limit as opposed to being compared to the peak limit because this is the more onerous limit.



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying table.

## 5.5. Transmitter AC Conducted Spurious Emissions

### Test Summary:

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| FCC Part:         | 15.207                                                   |
| Test Method Used: | As detailed in ANSI C63.4 Section 7 and relevant annexes |

### Environmental Conditions:

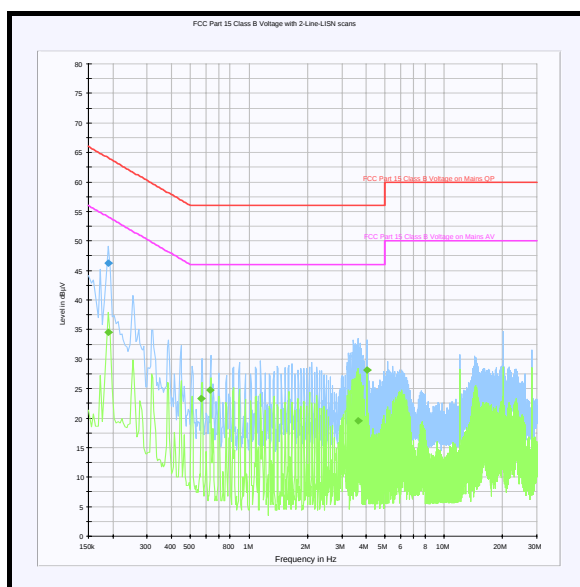
|                        |    |
|------------------------|----|
| Temperature (°C):      | 17 |
| Relative Humidity (%): | 47 |

### Results: Quasi Peak Detector Measurements

| Frequency (MHz) | Line    | Quasi Peak Level (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Result   |
|-----------------|---------|-------------------------------|--------------------|-------------|----------|
| 0.190500        | Neutral | 46.2                          | 64.0               | 17.8        | Complied |

### Results: Average Detector Measurements

| Frequency (MHz) | Line    | Average Level (dB $\mu$ V) | Limit (dB $\mu$ V) | Margin (dB) | Result   |
|-----------------|---------|----------------------------|--------------------|-------------|----------|
| 0.190500        | Neutral | 34.5                       | 54.0               | 19.5        | Complied |
| 0.568500        | Neutral | 23.4                       | 46.0               | 22.6        | Complied |
| 0.631500        | Neutral | 24.7                       | 46.0               | 21.3        | Complied |
| 3.615000        | Live 1  | 19.6                       | 46.0               | 26.4        | Complied |
| 4.033500        | Neutral | 28.1                       | 46.0               | 17.9        | Complied |



## 5.6. Transmitter Fundamental Fieldstrength

### Test Summary:

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| FCC Part:         | 15.231(b)                                                |
| Test Method Used: | As detailed in ANSI C63.4 Section 8 and relevant annexes |

### Environmental Conditions:

|                        |    |
|------------------------|----|
| Temperature (°C):      | 23 |
| Relative Humidity (%): | 27 |

### Results:

| Channel        | Peak Fieldstrength (dB $\mu$ V/m) | Average Fieldstrength (dB $\mu$ V/m) | Average Limit (dB $\mu$ V/m) | Margin (dB) | Result   |
|----------------|-----------------------------------|--------------------------------------|------------------------------|-------------|----------|
| Single Channel | 92.7                              | 70.8                                 | 80.3                         | 9.5         | Complied |

### Note(s):

1. The peak level was measured with the EUT in continuous transmit mode as it was impractical to measure the emission with the EUT transmitting a 6 $\pm$ 2 ms burst every 20 seconds. The average level was determined by subtracting the duty cycle correction factor from the measured peak level. The duty cycle correction factor was calculated using formula 20 log (On Time/100ms) as per FCC Part 15.35(c), with the EUT transmitting a 6 $\pm$ 2 ms burst every 20 seconds.

### **5.7. Transmitter 20 dB Bandwidth**

### Test Summary:

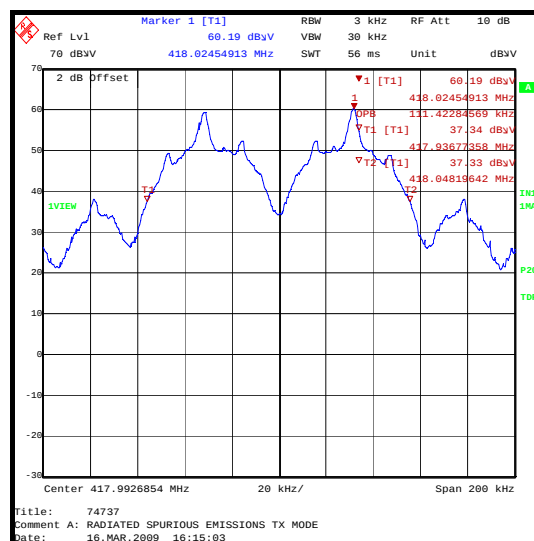
|                          |                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>FCC Part:</b>         | 15.231(c)                                                                                                       |
| <b>Test Method Used:</b> | The 20dBc (99%) occupied bandwidth was measured using the Occupied Bandwidth Function of the spectrum analyser. |

### Environmental Conditions:

|                        |    |
|------------------------|----|
| Temperature (°C):      | 24 |
| Relative Humidity (%): | 26 |

### Results:

| Transmitter 20 dB Bandwidth (MHz) | Limit (MHz) | Margin (MHz) | Result   |
|-----------------------------------|-------------|--------------|----------|
| 0.1114                            | 1.0450*     | 0.9336       | Complied |



**5.8. Transmitter Timeout****Test Summary:**

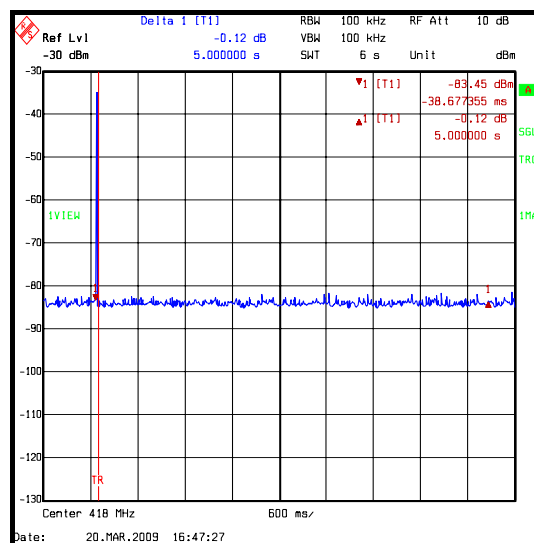
|                          |                                                                                                                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FCC Part:</b>         | 15.231(a)                                                                                                                                                                                 |
| <b>Test Method Used:</b> | The EUT transmitter was activated and monitored via a spectrum analyser for a period not exceeding 6 seconds. It was observed that the EUT ceased transmission within the 5 second limit. |

**Environmental Conditions:**

|                               |    |
|-------------------------------|----|
| <b>Temperature (°C):</b>      | 22 |
| <b>Relative Humidity (%):</b> | 24 |

**Results:**

| <b>Deactivation Time<br/>(seconds)</b> | <b>Limit<br/>(seconds)</b> |
|----------------------------------------|----------------------------|
| < 5s                                   | 5                          |



## 5.9. Transmitter Duty Cycle

### Test Summary:

|                   |                                                                                                                              |
|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| FCC Part:         | 15.35(c)                                                                                                                     |
| Test Method Used: | The transmitter duty cycle was measured using a spectrum analyser and calculated by $20\log(\text{On Time} / \text{Period})$ |

### Environmental Conditions:

|                        |    |
|------------------------|----|
| Temperature (°C):      | 22 |
| Relative Humidity (%): | 24 |

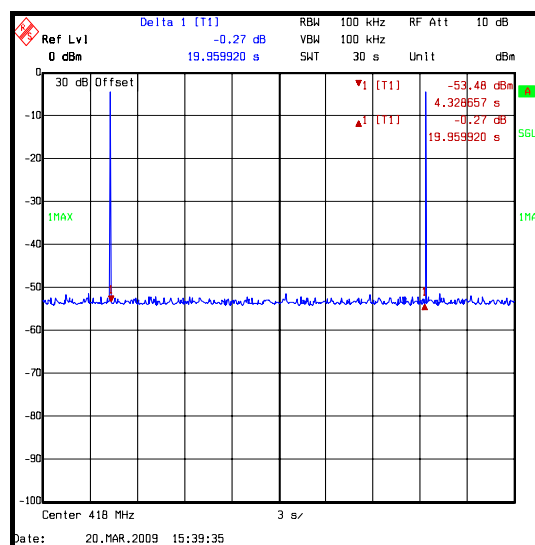
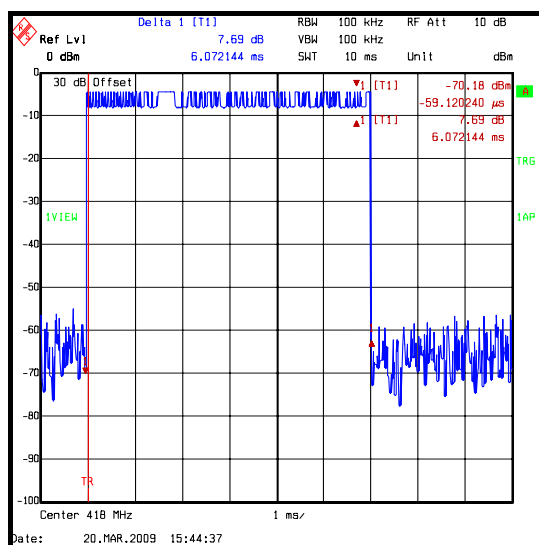
### Results:

| Pulse Duration (mS) |         | Duty Cycle (dB) |
|---------------------|---------|-----------------|
| Lowest              | (6 – 2) | 27.9            |
| Actual Measured     | (6.072) | 24.4            |
| Highest             | (6 + 2) | 21.9            |

| Silent Period (seconds) |
|-------------------------|
| 19.960                  |

### Note(s):

- In order to assist with the determination of the average level of fundamental and spurious emissions field strength, measurements were made of duty cycle to determine the transmission duration and the silent period time of the transmitter. However, the manufacturer declared a transmitter duration time of (6±2ms) therefore the worst case duty cycle of 6mS +2 was used throughout this report as it represented the worst case duration time.



## 5.10. Transmitter Radiated Emissions

### Test Summary:

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| FCC Part:         | 15.231(b) & 15.209                                       |
| Test Method Used: | As detailed in ANSI C63.4 Section 8 and relevant annexes |
| Frequency Range   | 30 to 1000                                               |

### Environmental Conditions:

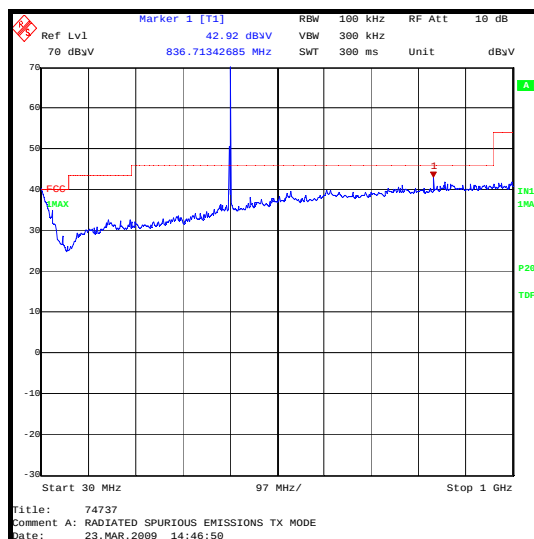
|                        |    |
|------------------------|----|
| Temperature (°C):      | 23 |
| Relative Humidity (%): | 26 |

### Results:

| Frequency (MHz) | Antenna Polarity | Peak Level (dB $\mu$ V/m) | Average Level (dB $\mu$ V/m) | Average Limit (dB $\mu$ V/m) | Margin (dB) | Result   |
|-----------------|------------------|---------------------------|------------------------------|------------------------------|-------------|----------|
| 836.000         | Horizontal       | 47.9                      | 23.6                         | 60.3                         | 36.7        | Complied |

### Note(s):

- The peak level was measured with the EUT in continuous transmit mode as it was impractical to measure the emission with EUT transmit a 6 $\pm$ 2 ms burst every 20 seconds. The average level was determined by subtracting the duty cycle correction factor from the measured peak level. The duty cycle correction factor was calculated using formula 20 log (On Time/100ms) as per FCC Part 15.35(c), with the EUT transmits a 6 $\pm$ 2 ms burst every 20 seconds.



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying tables.

**5.11. Transmitter Radiated Emissions****Test Summary:**

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| FCC Part:         | 15.231(b) & 15.209                                       |
| Test Method Used: | As detailed in ANSI C63.4 Section 8 and relevant annexes |
| Frequency Range   | 1 to 4.5 GHz                                             |

**Environmental Conditions:**

|                        |    |
|------------------------|----|
| Temperature (°C):      | 25 |
| Relative Humidity (%): | 27 |

**Highest Peak Level:**

| Frequency (GHz) | Antenna Polarity | Detector Level (dB $\mu$ V) | Transducer Factor (dB) | Actual Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Result   |
|-----------------|------------------|-----------------------------|------------------------|-----------------------------|----------------------|-------------|----------|
| 1.254           | Vertical         | 60.3                        | -4.8                   | 55.5                        | 84.6                 | 29.1        | Complied |

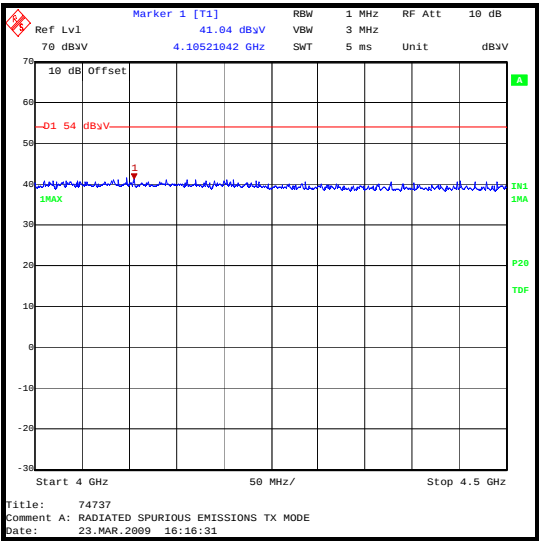
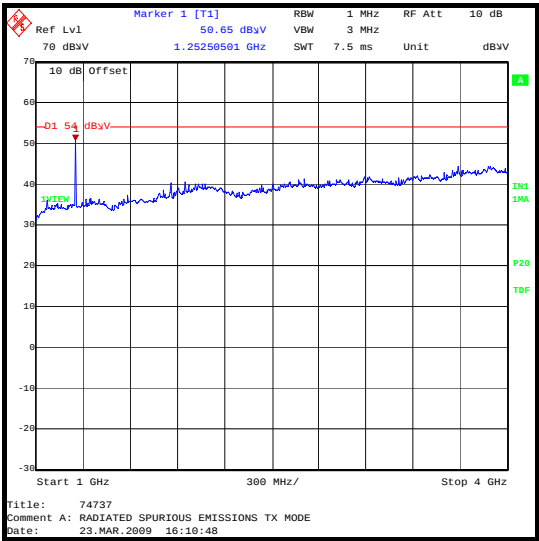
**Highest Average Level:**

| Frequency (GHz) | Antenna Polarity | Detector Level (dB $\mu$ V) | Transducer Factor (dB) | Actual Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Result   |
|-----------------|------------------|-----------------------------|------------------------|-----------------------------|----------------------|-------------|----------|
| 1.254           | Vertical         | 36.9                        | -4.8                   | 31.2                        | 60.3                 | 29.1        | Complied |

**Note(s):**

1. The peak level was measured with the EUT in continuous transmit mode as it was impractical to measure the emission with EUT transmit a 6 $\pm$ 2 ms burst every 20 seconds. The average level was determined by subtracting the duty cycle correction factor from the measured peak level. The duty cycle correction factor was calculated using formula 20 log (On Time/100ms) as per FCC Part 15.35(c), with the EUT transmits a 6 $\pm$ 2 ms burst every 20 seconds.

Transmitter Radiated Emissions (continued)



Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

## **6. Measurement Uncertainty**

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document “approximately” is interpreted as meaning “effectively” or “for most practical purposes”.

| Measurement Type                | Range              | Confidence Level (%) | Calculated Uncertainty |
|---------------------------------|--------------------|----------------------|------------------------|
| AC Conducted Spurious Emissions | 0.15 MHz to 30 MHz | 95%                  | ±3.25 dB               |
| Occupied Bandwidth              | 30 MHz to 1 GHz    | 95%                  | ± 0.12 %               |
| Radiated Spurious Emissions     | 30 MHz to 1000 MHz | 95%                  | ± 5.26 dB              |
| Radiated Spurious Emissions     | 1 GHz to 5 GHz     | 95%                  | ±1.78 dB               |

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

## **Appendix 1. Test Equipment Used**

| RFI No. | Instrument                           | Manufacturer            | Type No.      | Serial No.  | Date Last Calibrated     | Cal. Interval (Months) |
|---------|--------------------------------------|-------------------------|---------------|-------------|--------------------------|------------------------|
| A004    | Line Impedance Stabilization Network | Rohde & Schwarz         | ESH3-Z5       | 890604/027  | 19 May 2008              | 12                     |
| A1299   | Antenna                              | Schaffner               | CBL6143       | 5094        | 28 Jul 2008              | 12                     |
| A1534   | Pre Amplifier                        | Hewlett Packard         | 8449B OPT H02 | 3008A00405  | Calibrated before use    | -                      |
| A1818   | Antenna                              | EMCO                    | 3115          | 00075692    | 25 Oct 2008              | 12                     |
| A1830   | Pulse Limiter                        | Rhode & Schwarz         | ESH3-Z2       | 100668      | 05 Jan 2009              | 12                     |
| E013    | Environmental Chamber                | Sanyo                   | ATMOS chamber | None        | Calibrated before use    | -                      |
| K0002   | Site Reference 4421                  | Rainford EMC            | N/A           | N/A         | Calibration not required | -                      |
| K0004   | Site Reference 4428                  | RFI Global Services Ltd | N/A           | N/A         | Calibration not required | -                      |
| K0008   | Site Reference 4422                  | RFI Global Services Ltd | N/A           | N/A         | Calibration not required | -                      |
| M1124   | Spectrum Analyser                    | Rohde & Schwarz         | ESIB26        | 100046K     | 09 Mar 2009              | 12                     |
| M127    | Spectrum Analyser                    | Rohde & Schwarz         | FSEB 30       | 842 659/016 | 21 Aug 2008              | 12                     |
| M1379   | Test Receiver                        | Rohde and Schwarz       | ESIB7         | 100330      | 14 Aug 2008              | 12                     |

**NB** In accordance with UKAS requirements. All the measurement equipment is on a calibration schedule.