



**SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch**

No. 1 Workshop, M-10, Middle section, Science & Technology Park,  
Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053  
Fax: +86 (0) 755 2671 0594  
Email: ee.shenzhen@sgs.com

Report No.: SZEM180600551903  
Page: 1 of 18

## **TEST REPORT**

**Application No.:** SZEM1806005519RG  
**Applicant:** Novatel Wireless, Inc.  
**Address of Applicant:** 9605 Scranton Rd., Suite 300, San Diego, CA 92121  
**Manufacturer:** Novatel Wireless, Inc.  
**Address of Manufacturer:** 9605 Scranton Rd., Suite 300, San Diego, CA 92121  
**Factory:** Fujian Star-net Communication Co., Ltd  
**Address of Factory:** 3F, Bldg 1, Star-Net Science-based Haixi Industrial Park, No. 9 Gaoxin Road, Minhou County, Fuzhou, China

**Equipment Under Test (EUT):**  
**EUT Name:** Industrial Cellular Gateway with Ethernet, WiFi, Bluetooth, GPS/GLNSS and USB Connectivity  
**Model No.:** SKYUS 110B  
**Trade mark:** Inseego  
**FCC ID:** PKRNVWSK110B  
**Standard(s) :** 47 CFR Part 15, Subpart B  
**Date of Receipt:** 2018-03-14  
**Date of Test:** 2018-03-20 to 2018-03-22  
**Date of Issue:** 2018-06-25

|                     |              |
|---------------------|--------------|
| <b>Test Result:</b> | <b>Pass*</b> |
|---------------------|--------------|

\* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu  
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



**SGS-CSTC Standards Technical Services Co., Ltd.**  
**Shenzhen Branch**

Report No.: SZEM180600551903

Page: 2 of 18

| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2018-06-25 |          | Original |
|                 |         |            |          |          |
|                 |         |            |          |          |

|                          |  |                                                                                     |  |  |
|--------------------------|--|-------------------------------------------------------------------------------------|--|--|
| Authorized for issue by: |  |                                                                                     |  |  |
|                          |  |    |  |  |
|                          |  | <hr/>                                                                               |  |  |
|                          |  | Gray Gao /Project Engineer                                                          |  |  |
|                          |  |  |  |  |
|                          |  | <hr/>                                                                               |  |  |
|                          |  | Eric Fu /Reviewer                                                                   |  |  |



## 2 Test Summary

| Emission Part                                         |                           |            |             |        |
|-------------------------------------------------------|---------------------------|------------|-------------|--------|
| Item                                                  | Standard                  | Method     | Requirement | Result |
| Conducted Emissions at Mains Terminals (150kHz-30MHz) | 47 CFR Part 15, Subpart B | ANSI C63.4 | Class B     | Pass   |
| Radiated Emissions (30MHz-1GHz)                       | 47 CFR Part 15, Subpart B | ANSI C63.4 | Class B     | Pass   |
| Radiated Emissions (above 1GHz)                       | 47 CFR Part 15, Subpart B | ANSI C63.4 | Class B     | Pass   |

| InternalSource     | UpperFrequency                                                     |
|--------------------|--------------------------------------------------------------------|
| Below 1.705MHz     | 30MHz                                                              |
| 1.705MHz to 108MHz | 1GHz                                                               |
| 108MHz to 500MHz   | 2GHz                                                               |
| 500MHz to 1GHz     | 5GHz                                                               |
| Above 1GHz         | 5th harmonic of the highest frequency or 40GHz, whichever is lower |



### 3 Contents

|                                                                            | Page |
|----------------------------------------------------------------------------|------|
| 1 COVER PAGE .....                                                         | 1    |
| 2 TEST SUMMARY .....                                                       | 3    |
| 3 CONTENTS .....                                                           | 4    |
| 4 GENERAL INFORMATION .....                                                | 5    |
| 4.1 DETAILS OF E.U.T. ....                                                 | 5    |
| 4.2 DESCRIPTION OF SUPPORT UNITS .....                                     | 5    |
| 4.3 MEASUREMENT UNCERTAINTY .....                                          | 5    |
| 4.4 TEST LOCATION.....                                                     | 6    |
| 4.5 TEST FACILITY.....                                                     | 6    |
| 4.6 DEVIATION FROM STANDARDS.....                                          | 6    |
| 4.7 ABNORMALITIES FROM STANDARD CONDITIONS .....                           | 6    |
| 5 EQUIPMENT LIST.....                                                      | 7    |
| 6 EMISSION TEST RESULTS .....                                              | 9    |
| 6.1 CONDUCTED EMISSIONS AT MAINS TERMINALS (150kHz-30MHz) .....            | 9    |
| 6.1.1 E.U.T. Operation .....                                               | 9    |
| 6.1.2 Test Setup Diagram.....                                              | 9    |
| 6.1.3 Measurement Data .....                                               | 9    |
| 6.2 RADIATED EMISSIONS (30MHz-1GHz) .....                                  | 12   |
| 6.2.1 E.U.T. Operation .....                                               | 12   |
| 6.2.2 Test Setup Diagram.....                                              | 12   |
| 6.2.3 Measurement Data .....                                               | 12   |
| 6.3 RADIATED EMISSIONS (ABOVE 1GHz).....                                   | 15   |
| 6.3.1 E.U.T. Operation .....                                               | 15   |
| 6.3.2 Test Setup Diagram.....                                              | 15   |
| 6.3.3 Measurement Data .....                                               | 15   |
| 7 PHOTOGRAPHS.....                                                         | 18   |
| 7.1 CONDUCTED EMISSIONS AT MAINS TERMINALS (150kHz-30MHz) TEST SETUP ..... | 18   |
| 7.2 RADIATED EMISSIONS (30MHz-1GHz) TEST SETUP .....                       | 18   |
| 7.3 EUT CONSTRUCTIONAL DETAILS (EUT PHOTOS).....                           | 18   |



## 4 General Information

### 4.1 Details of E.U.T.

|               |                                                                                                            |
|---------------|------------------------------------------------------------------------------------------------------------|
| Power supply: | AC input: 100-240V 50/60Hz 0.45A<br>DC output: 5V 2.0A<br>rechargeable Li-Ion Battery: 3.8V 4400mAh 16.7Wh |
| Cable:        | USB cable: 150cm shielded.                                                                                 |

### 4.2 Description of Support Units

The EUT has been tested as an independent unit.

### 4.3 Measurement Uncertainty

| No. | Item                | Measurement Uncertainty |
|-----|---------------------|-------------------------|
| 1   | Conduction Emission | 3.0dB (150kHz to 30MHz) |
| 2   | Radiated Emission   | 4.5dB (30MHz-1GHz)      |
|     |                     | 4.8dB (1GHz-6GHz)       |
| 3   | Temperature test    | 1 °C                    |
| 4   | Humidity test       | 3%                      |



#### **4.4 Test Location**

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.  
518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

#### **4.5 Test Facility**

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

#### **4.6 Deviation from Standards**

None

#### **4.7 Abnormalities from Standard Conditions**

None



## 5 Equipment List

| Conducted Emissions at Mains Terminals (150kHz-30MHz) |                   |               |              |            |              |
|-------------------------------------------------------|-------------------|---------------|--------------|------------|--------------|
| Equipment                                             | Manufacturer      | Model No      | Inventory No | Cal Date   | Cal Due Date |
| Shielding Room                                        | ChangZhou ZhongYu | GB-88         | SEM001-06    | 2017-05-10 | 2018-05-09   |
| Measurement Software                                  | AUDIX             | e3 V5.4.1221d | N/A          | N/A        | N/A          |
| Coaxial Cable                                         | SGS               | N/A           | SEM024-01    | 2017-07-13 | 2018-07-12   |
| LISN                                                  | Rohde & Schwarz   | ENV216        | SEM007-01    | 2017-09-27 | 2018-09-26   |
| LISN                                                  | ETS-LINDGREN      | 3816/2        | SEM007-02    | 2018-04-02 | 2019-04-01   |
| EMI Test Receiver                                     | Rohde & Schwarz   | ESCI          | SEM004-02    | 2018-04-02 | 2019-04-01   |

| Radiated Emissions (30MHz-1GHz) |                      |                 |              |            |              |
|---------------------------------|----------------------|-----------------|--------------|------------|--------------|
| Equipment                       | Manufacturer         | Model No        | Inventory No | Cal Date   | Cal Due Date |
| 3m Semi-Anechoic Chamber        | ETS-LINDGREN         | N/A             | SEM001-01    | 2017-08-05 | 2020-08-04   |
| Measurement Software            | AUDIX                | e3 V8.2014-6-27 | N/A          | N/A        | N/A          |
| Coaxial Cable                   | SGS                  | N/A             | SEM025-01    | 2017-07-13 | 2018-07-12   |
| EMI Test Receiver               | Agilent Technologies | N9038A          | SEM004-05    | 2017-09-27 | 2018-09-26   |
| BiConiLog Antenna (26-3000MHz)  | ETS-LINDGREN         | 3142C           | SEM003-01    | 2017-06-27 | 2020-06-26   |
| Pre-amplifier (0.1-1300MHz)     | Agilent Technologies | 8447D           | SEM005-01    | 2018-04-02 | 2019-04-01   |

| Radiated Emissions (above 1GHz)   |                          |                   |              |            |              |
|-----------------------------------|--------------------------|-------------------|--------------|------------|--------------|
| Equipment                         | Manufacturer             | Model No          | Inventory No | Cal Date   | Cal Due Date |
| 3m Semi-Anechoic Chamber          | AUDIX                    | N/A               | SEM001-02    | 2017-05-02 | 2020-05-01   |
| Measurement Software              | AUDIX                    | e3 V8.2014-6-27   | N/A          | N/A        | N/A          |
| Coaxial Cable                     | SGS                      | N/A               | SEM026-01    | 2017-07-13 | 2018-07-12   |
| EXA Spectrum Analyzer             | Agilent Technologies Inc | N9010A            | SEM004-09    | 2017-06-05 | 2018-06-04   |
| Horn Antenna(1-18GHz)             | Rohde & Schwarz          | HF907             | SEM003-06    | 2015-06-14 | 2018-06-13   |
| Low Noise Amplifier(100MHz-18GHz) | Black Diamond Series     | BDLNA-0118-352810 | SEM005-05    | 2017-09-27 | 2018-09-26   |



**SGS-CSTC Standards Technical Services Co., Ltd.**  
**Shenzhen Branch**

Report No.: SZEM180600551903

Page: 8 of 18

| General used equipment          |                                           |          |              |            |              |
|---------------------------------|-------------------------------------------|----------|--------------|------------|--------------|
| Equipment                       | Manufacturer                              | Model No | Inventory No | Cal Date   | Cal Due Date |
| Humidity/ Temperature Indicator | Shanghai Meteorological Industry Factory  | ZJ1-2B   | SEM002-03    | 2017-09-29 | 2018-09-28   |
| Humidity/ Temperature Indicator | Shanghai Meteorological Industry Factory  | ZJ1-2B   | SEM002-04    | 2017-09-29 | 2018-09-28   |
| Humidity/ Temperature Indicator | Mingle                                    | N/A      | SEM002-08    | 2017-09-29 | 2018-09-28   |
| Barometer                       | Changchun Meteorological Industry Factory | DYM3     | SEM002-01    | 2017-04-18 | 2018-04-17   |

## 6 Emission Test Results

### 6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

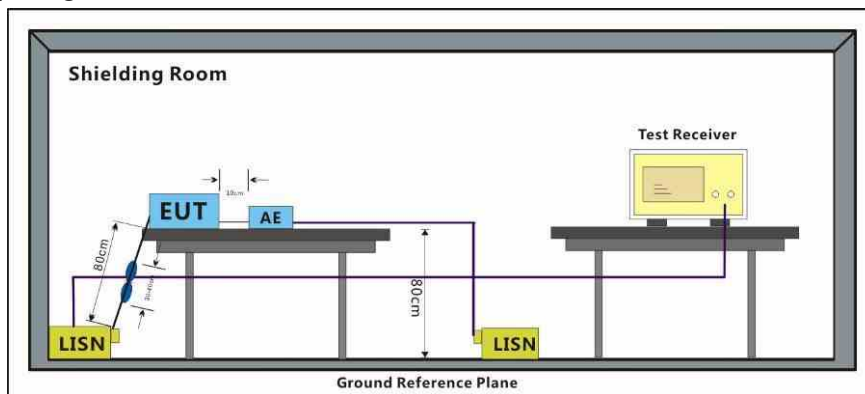
|                   |                                                              |
|-------------------|--------------------------------------------------------------|
| Test Requirement: | 47 CFR Part 15, Subpart B                                    |
| Test Method:      | ANSI C63.4                                                   |
| Frequency Range:  | 150kHz to 30MHz                                              |
| Limit:            |                                                              |
| 0.15M-0.5MHz      | 66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average      |
| 0.5M-5MHz         | 56dB(μV) quasi-peak, 46dB(μV) average                        |
| 5M-30MHz          | 60dB(μV) quasi-peak, 50dB(μV) average                        |
| Detector:         | Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz |

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 43.8 % RH Atmospheric Pressure: 1015 mbar  
Test mode a: Normal Working\_keep EUT working with assistant products.

#### 6.1.2 Test Setup Diagram

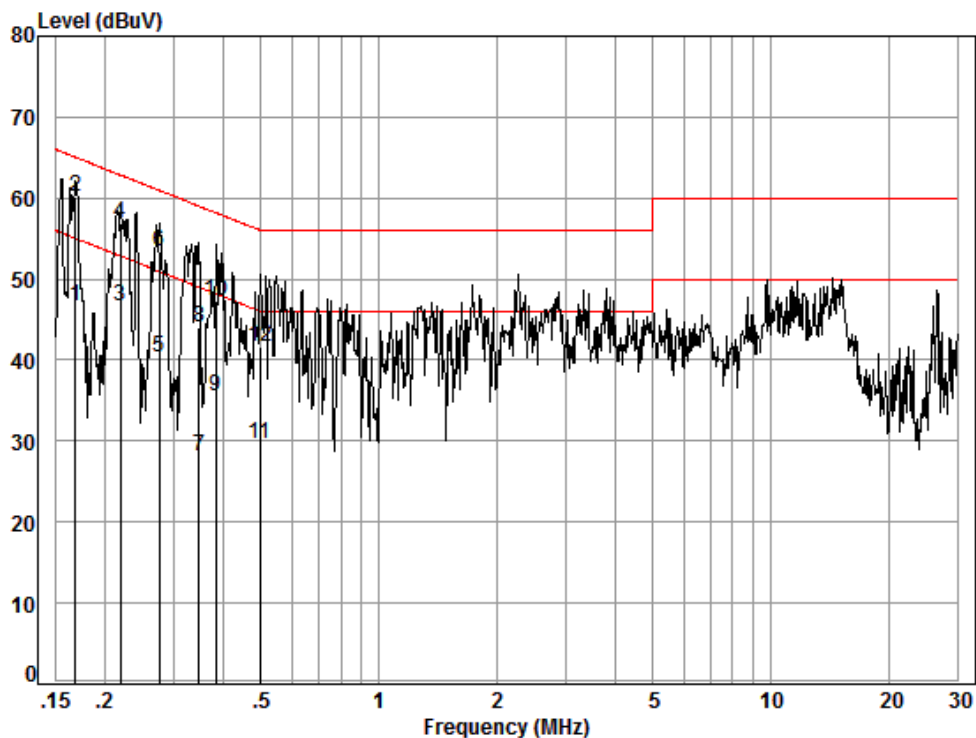


#### 6.1.3 Measurement Data

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.



Mode:a; Line:Live Line

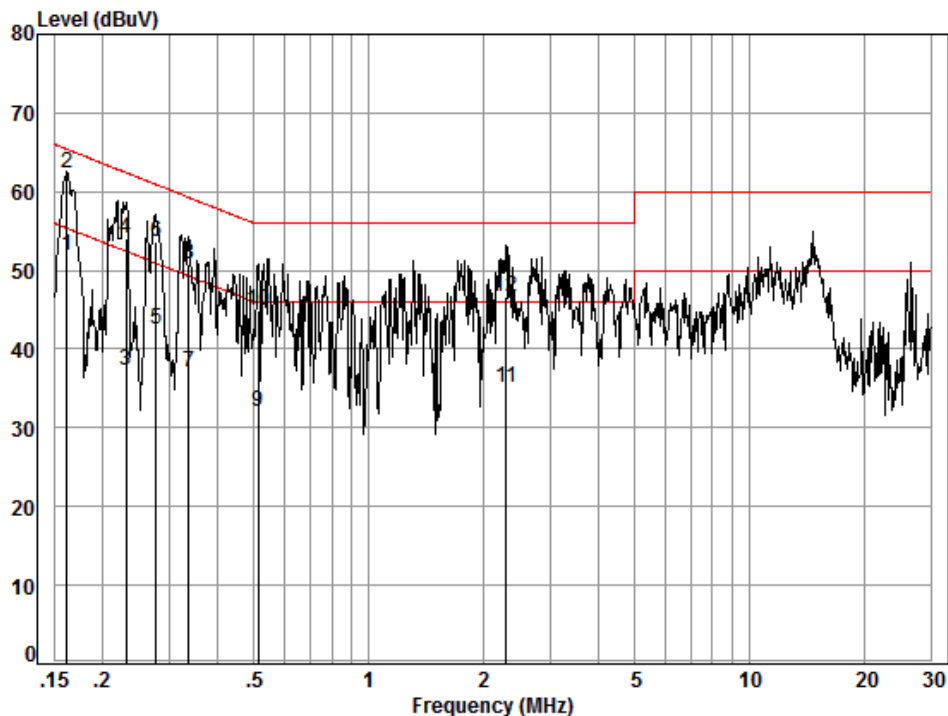


Site : Shielding Room  
Condition: Line  
Job No. : 01808RG  
Test mode: a

|    | Freq | Cable<br>Loss | LISN<br>Factor | Read<br>Level | Limit<br>Level | Limit<br>Line | Over<br>Limit | Remark  |
|----|------|---------------|----------------|---------------|----------------|---------------|---------------|---------|
|    | MHz  | dB            | dB             | dBuV          | dBuV           | dBuV          | dB            |         |
| 1  | 0.17 | 0.02          | 9.52           | 37.14         | 46.68          | 55.03         | -8.35         | Average |
| 2  | 0.17 | 0.02          | 9.52           | 50.69         | 60.23          | 65.03         | -4.80         | QP      |
| 3  | 0.22 | 0.03          | 9.50           | 37.10         | 46.63          | 52.83         | -6.20         | Average |
| 4  | 0.22 | 0.03          | 9.50           | 47.32         | 56.85          | 62.83         | -5.98         | QP      |
| 5  | 0.28 | 0.03          | 9.51           | 30.75         | 40.29          | 50.94         | -10.65        | Average |
| 6  | 0.28 | 0.03          | 9.51           | 43.87         | 53.41          | 60.94         | -7.53         | QP      |
| 7  | 0.35 | 0.03          | 9.50           | 18.61         | 28.14          | 49.00         | -20.86        | Average |
| 8  | 0.35 | 0.03          | 9.50           | 34.42         | 43.95          | 59.00         | -15.05        | QP      |
| 9  | 0.38 | 0.03          | 9.49           | 25.96         | 35.48          | 48.21         | -12.73        | Average |
| 10 | 0.38 | 0.03          | 9.49           | 37.81         | 47.33          | 58.21         | -10.88        | QP      |
| 11 | 0.50 | 0.04          | 9.49           | 20.17         | 29.70          | 46.05         | -16.35        | Average |
| 12 | 0.50 | 0.04          | 9.49           | 32.20         | 41.73          | 56.05         | -14.32        | QP      |



Mode:a; Line:Neutral Line



Site : Shielding Room  
Condition: Neutral  
Job No. : 01808RG  
Test mode: a

|    | Freq | Cable Loss | LISN Factor | Read Level | Level | Limit Line | Over Limit | Remark  |
|----|------|------------|-------------|------------|-------|------------|------------|---------|
|    | MHz  | dB         | dB          | dBuV       | dBuV  | dBuV       | dB         |         |
| 1  | 0.16 | 0.02       | 9.59        | 42.22      | 51.83 | 55.38      | -3.55      | Average |
| 2  | 0.16 | 0.02       | 9.59        | 52.77      | 62.38 | 65.38      | -3.00      | QP      |
| 3  | 0.23 | 0.03       | 9.58        | 27.71      | 37.32 | 52.44      | -15.12     | Average |
| 4  | 0.23 | 0.03       | 9.58        | 44.45      | 54.06 | 62.44      | -8.38      | QP      |
| 5  | 0.28 | 0.03       | 9.58        | 32.90      | 42.51 | 50.90      | -8.39      | Average |
| 6  | 0.28 | 0.03       | 9.58        | 43.99      | 53.60 | 60.90      | -7.30      | QP      |
| 7  | 0.34 | 0.03       | 9.58        | 27.35      | 36.96 | 49.27      | -12.31     | Average |
| 8  | 0.34 | 0.03       | 9.58        | 41.20      | 50.81 | 59.27      | -8.46      | QP      |
| 9  | 0.51 | 0.04       | 9.60        | 22.48      | 32.12 | 46.00      | -13.88     | Average |
| 10 | 0.51 | 0.04       | 9.60        | 35.30      | 44.94 | 56.00      | -11.06     | QP      |
| 11 | 2.30 | 0.16       | 9.64        | 25.33      | 35.13 | 46.00      | -10.87     | Average |
| 12 | 2.30 | 0.16       | 9.64        | 36.84      | 46.64 | 56.00      | -9.36      | QP      |

## 6.2 Radiated Emissions (30MHz-1GHz)

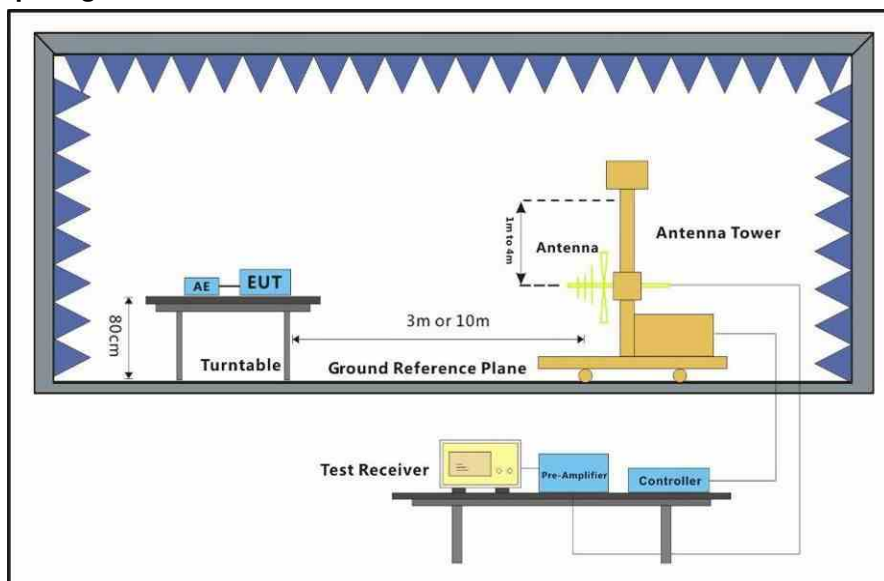
|                       |                                                               |
|-----------------------|---------------------------------------------------------------|
| Test Requirement:     | 47 CFR Part 15, Subpart B                                     |
| Test Method:          | ANSI C63.4                                                    |
| Frequency Range:      | 30MHz to 1GHz                                                 |
| Measurement Distance: | 3m                                                            |
| Limit:                |                                                               |
| 30MHz -88MHz          | 40.0(dB $\mu$ V/m) quasi-peak                                 |
| 88MHz-216MHz          | 43.5(dB $\mu$ V/m) quasi-peak                                 |
| 216MHz-960MHz         | 46.0(dB $\mu$ V/m) quasi-peak                                 |
| 960MHz-1000MHz        | 54.0(dB $\mu$ V/m) quasi-peak                                 |
| Detector:             | Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz |

### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22.8 °C Humidity: 41.6 % RH Atmospheric Pressure: 1015 mbar  
Test mode a:Normal Working\_keep EUT working with assistant products.

### 6.2.2 Test Setup Diagram

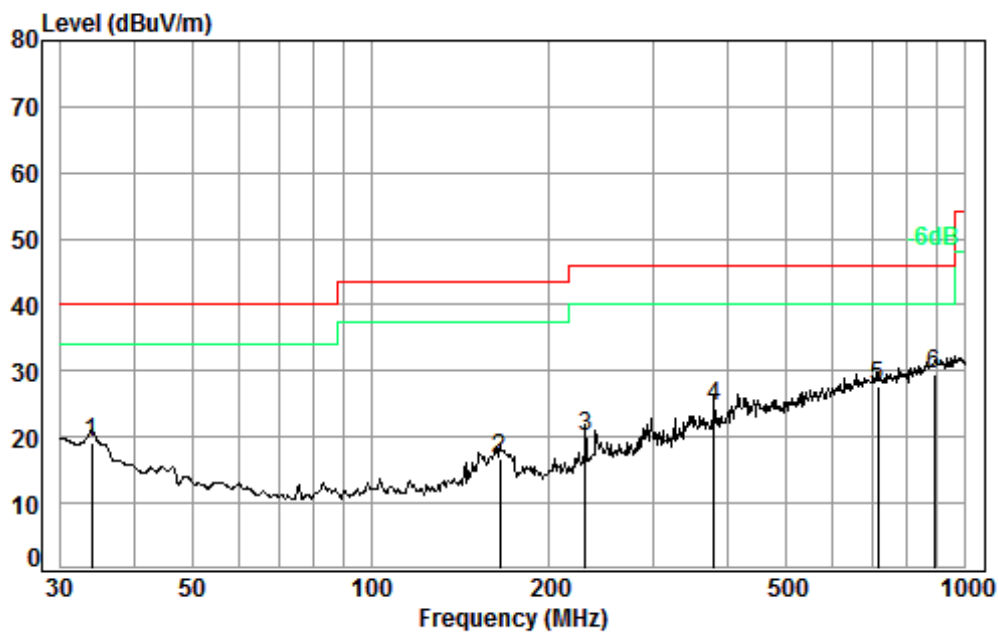


### 6.2.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.



Mode:a; Polarization:Horizontal



Condition: 3m HORIZONTAL

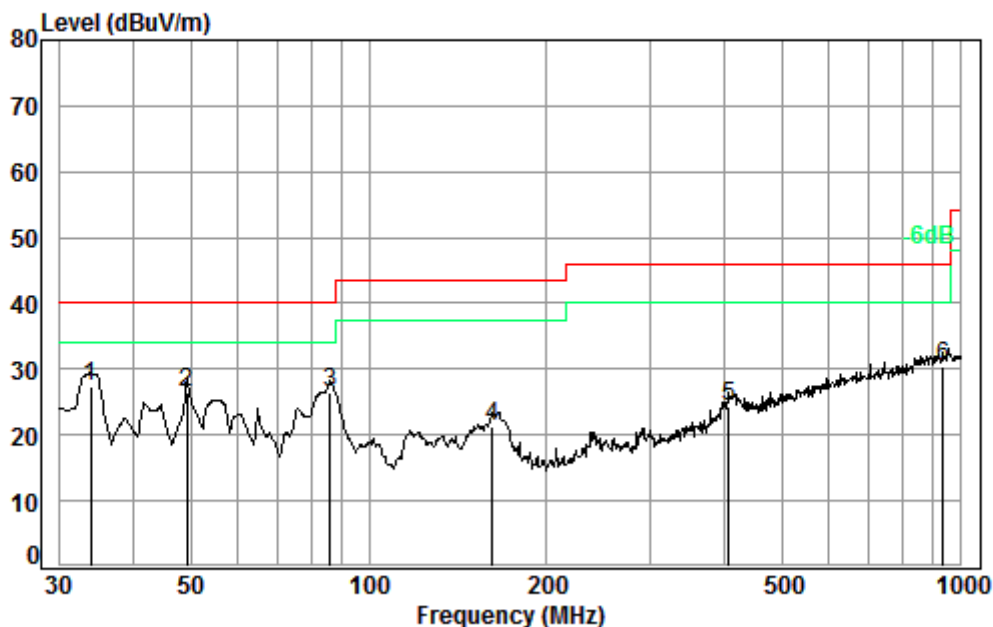
Job No. : 01808RG

Test mode: a

|      |        | Cable | Ant    | Preamp | Read  |        | Limit  | Over   |
|------|--------|-------|--------|--------|-------|--------|--------|--------|
|      | Freq   | Loss  | Factor | Factor | Level | Level  | Line   | Limit  |
|      | MHz    | dB    | dB/m   | dB     | dBuV  | dBuV/m | dBuV/m | dB     |
| 1    | 33.92  | 0.60  | 20.37  | 27.65  | 25.84 | 19.16  | 40.00  | -20.84 |
| 2    | 164.91 | 1.34  | 15.60  | 27.52  | 27.37 | 16.79  | 43.50  | -26.71 |
| 3    | 230.10 | 1.57  | 18.03  | 27.53  | 27.89 | 19.96  | 46.00  | -26.04 |
| 4    | 378.58 | 2.14  | 21.86  | 27.69  | 28.26 | 24.57  | 46.00  | -21.43 |
| 5    | 714.17 | 2.95  | 27.99  | 27.53  | 24.32 | 27.73  | 46.00  | -18.27 |
| 6 pp | 887.61 | 3.55  | 29.65  | 27.12  | 23.33 | 29.41  | 46.00  | -16.59 |



Mode:a; Polarization:Vertical



Condition: 3m VERTICAL

Job No. : 01808RG

Test mode: a

|      | Freq   | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level  | Limit  | Over Limit |
|------|--------|------------|------------|---------------|------------|--------|--------|------------|
|      | MHz    | dB         | dB/m       | dB            | dBuV       | dBuV/m | dBuV/m | dB         |
| 1 pp | 33.92  | 0.60       | 20.37      | 27.65         | 34.10      | 27.42  | 40.00  | -12.58     |
| 2    | 49.36  | 0.79       | 14.39      | 27.60         | 38.93      | 26.51  | 40.00  | -13.49     |
| 3    | 86.20  | 1.10       | 12.70      | 27.50         | 40.07      | 26.37  | 40.00  | -13.63     |
| 4    | 162.04 | 1.34       | 15.54      | 27.52         | 32.04      | 21.40  | 43.50  | -22.10     |
| 5    | 406.09 | 2.23       | 22.55      | 27.74         | 27.43      | 24.47  | 46.00  | -21.53     |
| 6    | 935.55 | 3.64       | 29.98      | 26.96         | 23.85      | 30.51  | 46.00  | -15.49     |

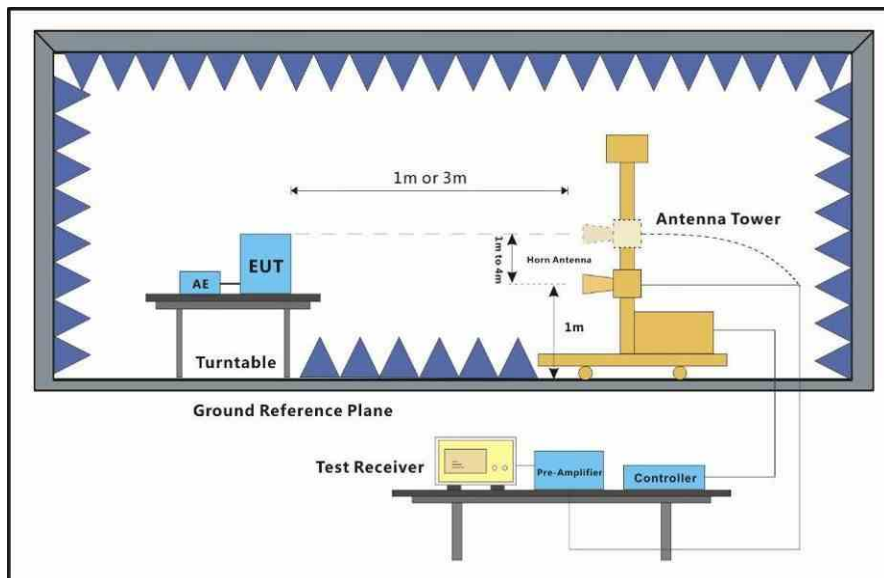
### 6.3 Radiated Emissions (above 1GHz)

Test Requirement: 47 CFR Part 15, Subpart B  
 Test Method: ANSI C63.4  
 Frequency Range: Above 1GHz  
 Measurement Distance: 3m  
 Limit:  
 Above 1GHz 74(dBμV/m) peak, 54(dBμV/m) average  
 Detector: Peak for pre-scan (1000kHz resolution bandwidth) 1000M to18000MHz

#### 6.3.1 E.U.T. Operation

Operating Environment:  
 Temperature: 26. °C Humidity: 51 % RH Atmospheric Pressure: 1015 mbar  
 Test mode a:Normal Working\_keep EUT working with assistant products.

#### 6.3.2 Test Setup Diagram

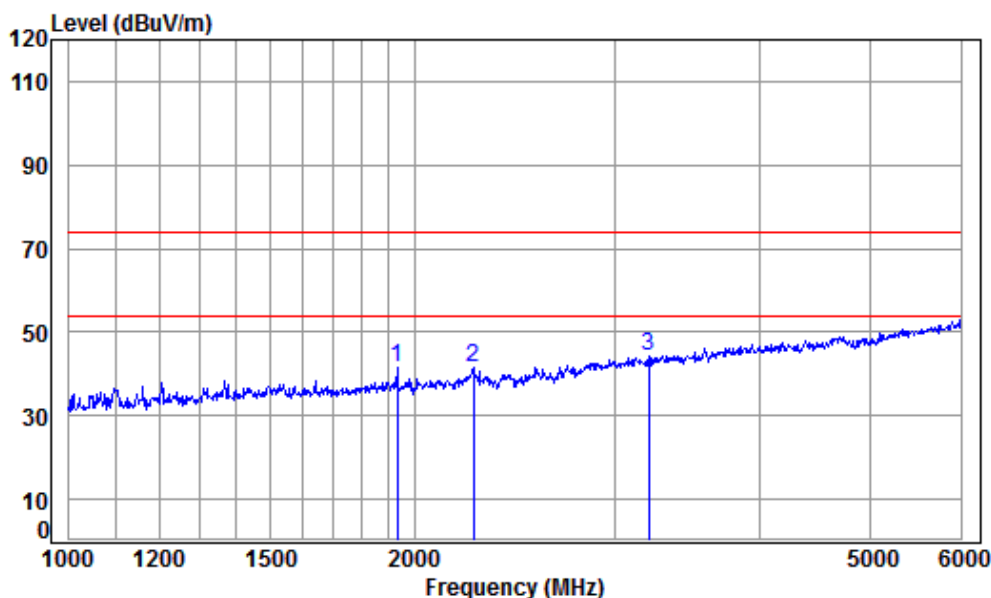


#### 6.3.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.



Mode:a; Polarization:Horizontal



Condition: 3m HORIZONTAL

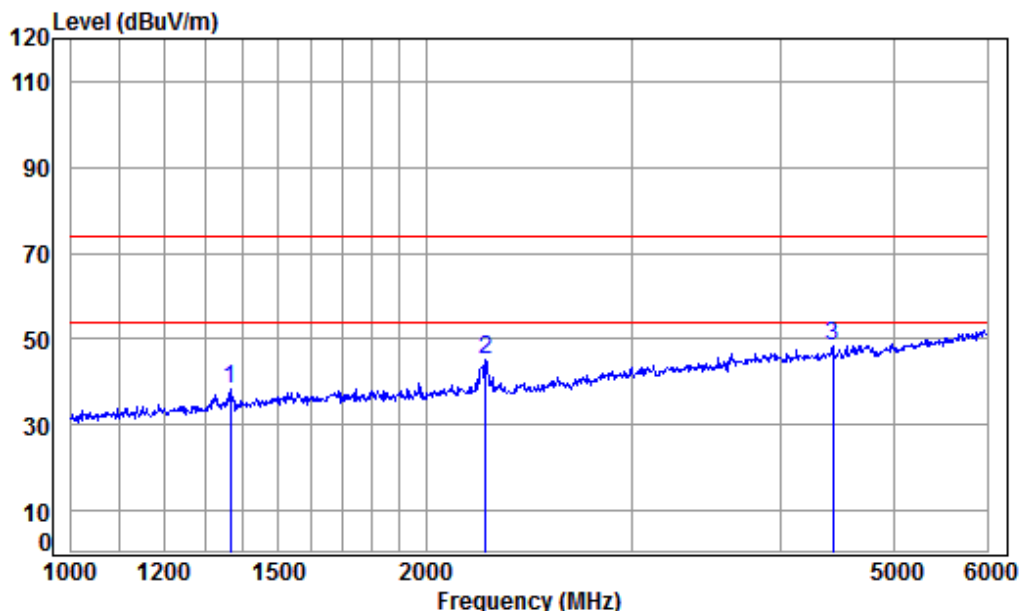
Job No : 01808RG

Mode : a

|      | Freq     | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|------|----------|------------|------------|---------------|------------|--------|------------|------------|--------|
|      | MHz      | dB         | dB/m       | dB            | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1    | 1933.569 | 4.97       | 27.57      | 41.66         | 50.70      | 41.58  | 74.00      | -32.42     | Peak   |
| 2    | 2255.697 | 5.29       | 28.66      | 41.81         | 49.22      | 41.36  | 74.00      | -32.64     | Peak   |
| 3 pp | 3204.781 | 6.19       | 31.69      | 42.15         | 48.32      | 44.05  | 74.00      | -29.95     | Peak   |



Mode:a; Polarization:Vertical



Condition: 3m VERTICAL

Job No : 01808RG

Mode : a

|      | Freq     | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level  | Limit Line | Over Limit | Remark |
|------|----------|------------|------------|---------------|------------|--------|------------|------------|--------|
|      | MHz      | dB         | dB/m       | dB            | dBuV       | dBuV/m | dBuV/m     | dB         |        |
| 1    | 1365.835 | 5.03       | 25.25      | 41.31         | 49.32      | 38.29  | 74.00      | -35.71     | Peak   |
| 2    | 2251.658 | 5.28       | 28.65      | 41.81         | 52.95      | 45.07  | 74.00      | -28.93     | Peak   |
| 3 pp | 4440.397 | 7.49       | 33.60      | 42.41         | 49.60      | 48.28  | 74.00      | -25.72     | Peak   |



Remark:

1) Scan from 1GHz to 13GHz, The disturbance above 6GHz was very low and all noise floor. The above radiated emissions were the highest point could be found when testing, so only the above radiated emissions had been displayed.

## **7 Photographs**

### **7.1 Conducted Emissions at Mains Terminals (150kHz-30MHz) Test Setup**

### **7.2 Radiated Emissions (30MHz-1GHz) Test Setup**

### **7.3 EUT Constructional Details (EUT Photos)**

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1806005519RG.

- End of the Report -