

Report No.: SEWM2211000238RG03  
 Rev.: 01  
 Page: 1 of 22

# TEST REPORT

**Application No.:** SEWM2211000238RG  
**Applicant:** Smawave Technology Co., Ltd  
**Address of Applicant:** 3/F, Building 8, 1001 North Qinzhou Road, Xuhui District, Shanghai, China  
**Manufacturer:** Smawave Technology Co., Ltd  
**Address of Manufacturer:** 3/F, Building 8, 1001 North Qinzhou Road, Xuhui District, Shanghai, China  
**EUT Description:** LTE Indoor CPE  
**Model No.:** SRT421  
**Trade Mark:** Smawave  
**FCC ID:** 2AU8HSRT421-CBRS  
**Standard(s):** FCC 47 CFR Part 15, Subpart B  
**Date of Receipt:** 2022/11/09  
**Date of Test:** 2022/11/24 to 2022/11/25  
**Date of Issue:** 2022/11/29

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

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

Authorized Signature:

Panta Sun  
 Wireless Laboratory Manager



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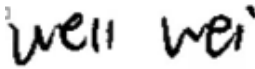
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| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2022/11/29 |          | Original |

|                    |  |   |
|--------------------|--|---|
| <b>Prepared By</b> |  | <br><hr/> <b>(King-p Li) / Test Engineer</b> |
| <b>Checked By</b>  |  | <br><hr/> <b>(Well Wei) / Reviewer</b>      |



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## Test Summary

| Emission Part   |                               |                 |             |        |
|---|-------------------------------|-----------------|-------------|--------|
| Item  | Standard                      | Method          | Requirement | Result |
| Conducted Emissions at Mains Terminals (150kHz-30MHz) | FCC 47 CFR Part 15, Subpart B | ANSI C63.4:2014 | Class B     | Pass   |
| Radiated Emissions (30MHz-1GHz)                       | FCC 47 CFR Part 15, Subpart B | ANSI C63.4:2014 | Class B     | Pass   |
| Radiated Emissions (above 1GHz)                       | FCC 47 CFR Part 15, Subpart B | ANSI C63.4:2014 | Class B     | Pass   |

| Internal Source    | Upper Frequency  |
|--------------------|--|
| 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 |



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# 1 General Information

|                   |                                       |                        |                        |
|-------------------|---------------------------------------|------------------------|------------------------|
| EUT Description:  | LTE Indoor CPE                        |                        |                        |
| Model No.:        | SRT421                                |                        |                        |
| Trade Mark:       | Smawave                               |                        |                        |
| Hardware Version: | V1.0                                  |                        |                        |
| Software Version: | ST_CBRS_V2.0.0                        |                        |                        |
| IMEI:             | 862165041541358                       |                        |                        |
| Frequency Bands:  | Band                                  | Tx (MHz)               | Rx (MHz)               |
|                   | LTE Band 48                           | 3550~3700              | 3550~3700              |
|                   | Wi-Fi 2.4G                            | 2412~2462              | 2412~2462              |
|                   | Wi-Fi 5G                              | 5150~5250<br>5725~5850 | 5150~5250<br>5725~5850 |
| Remark:           | EUT1 With Voice<br>EUT2 Without Voice |                        |                        |



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**1.1 Description of Support Units**

| Description      | Manufacturer | Model No.        | Inventory No. |
|------------------|--------------|------------------|---------------|
| Computer         | Lenovo       | T14              | SUWI-03-33-04 |
| Corded telephone | CHINO-E      | HCD6238(20)P/TSD | SUWI-03-33-30 |
| Mouse            | Lenovo       | 3D optical Mouse | SUWI-03-33-05 |

**1.2 Test Location**

All tests were performed at:

|                |  |
|----------------|--|
| Company:       | SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.   |
| Address:       | South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone |
| Post code:     | 215000   |
| Test engineer: | King-p Li  |

**1.3 Test Facility**

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

- A2LA (Certificate No. 6336.01)**  
 SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.
- Innovation, Science and Economic Development Canada**  
 SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.  
 CAB identifier: CN0120.  
 IC#: 27594.
- FCC –Designation Number: CN1312**  
 SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.  
 Designation Number: CN1312.  
 Test Firm Registration Number: 717327

**1.4 Deviation from Standards**

None

**1.5 Abnormalities from Standard Conditions**

None



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## 2 Emission Test Results

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

|  |                           |             |          |
|--|---------------------------|-------------|----------|
| Test Requirement:  | 47 CFR Part 15, Subpart B |             |          |
| Test Method:   | ANSI C63.4:2014           |             |          |
| Frequency Range:   | 150kHz to 30MHz           |             |          |
| Receiver Setup:  | RBW = 9kHz, VBW = 30kHz   |             |          |
| Limit:   | Frequency Range (MHz)     | Limit(dBμV) |          |
|  |                           | Quasi-peak  | average  |
|  | 0.15M-0.5MHz              | 66 ~ 56*    | 56 ~ 46* |
|  | 0.5M-5MHz                 | 56          | 46       |
|  | 5M-30MHz                  | 60          | 50       |
| *Decreases with the logarithm of the frequency<br>Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz |                           |             |          |

#### 2.1.1 E.U.T. Operation

Operating Environment:

|   |  |
|---|--|
| Temperature:                                | 22~23°C  |
| Humidity:                                   | 44~46%RH   |
| Atmospheric Pressure:                       | 101.0 kPa  |
| Pretest these modes to find the worst case: | a: EUT1+USB (adapter input)+2.4GWLAN<br>b: EUT1 USB (adapter input)+5GWLAN<br>c: EUT2 USB (adapter input)+5GWLAN |
| The worst case for final test:              | b: EUT1USB (adapter input)+5GWLAN  |

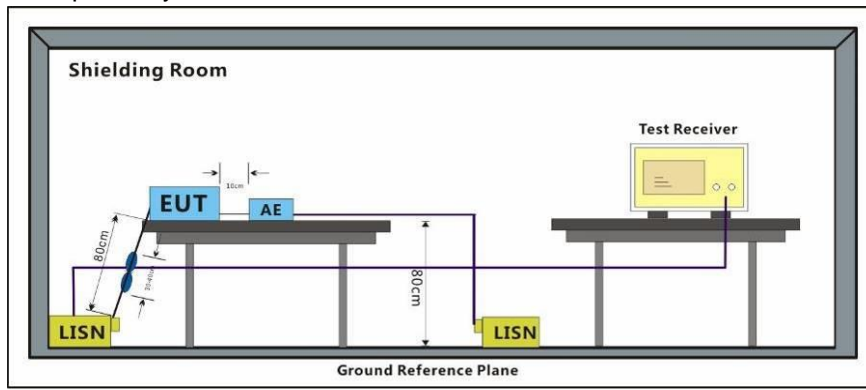


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**2.1.2 Test Setup Procedures**

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.



**2.1.3 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.



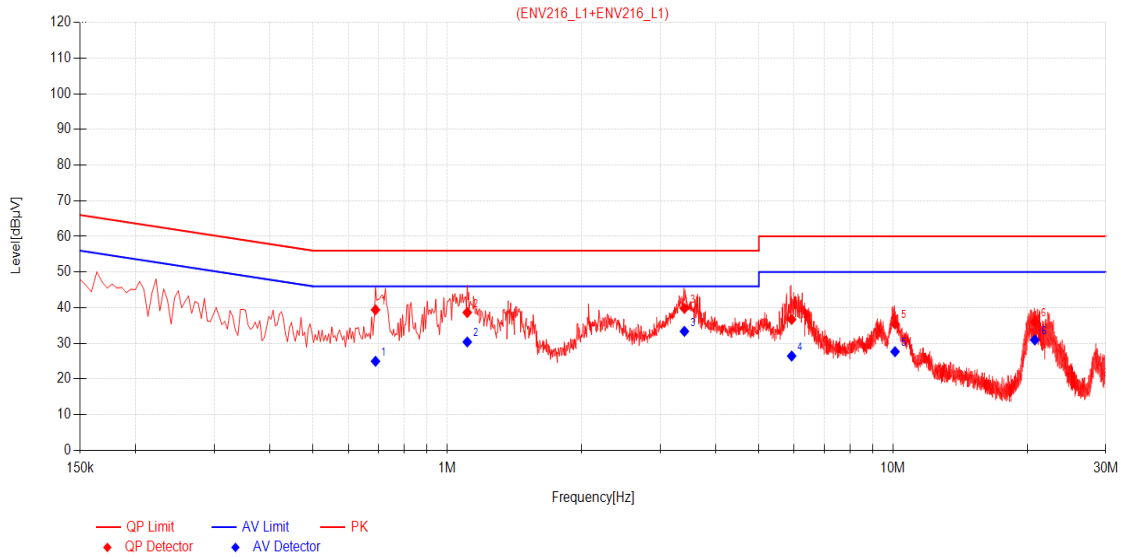
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|                  |        |        |      |
|------------------|--------|--------|------|
| Final Test Mode: | Mode b | Phase: | Line |
|------------------|--------|--------|------|



| Final Data List |                 |             |                   |                 |                 |                |                   |                 |                 |                |         |  |
|-----------------|-----------------|-------------|-------------------|-----------------|-----------------|----------------|-------------------|-----------------|-----------------|----------------|---------|--|
| NO              | Frequency [MHz] | Factor [dB] | QP Reading [dBµV] | QP Value [dBµV] | QP Limit [dBµV] | QP Margin [dB] | AV Reading [dBµV] | AV Value [dBµV] | AV Limit [dBµV] | AV Margin [dB] | Verdict |  |
| 1               | 0.6900          | 10.57       | 28.85             | 39.42           | 56.00           | 16.58          | 14.40             | 24.97           | 46.00           | 21.03          | PASS    |  |
| 2               | 1.1085          | 10.64       | 28.00             | 38.64           | 56.00           | 17.36          | 19.75             | 30.39           | 46.00           | 15.61          | PASS    |  |
| 3               | 3.4035          | 10.70       | 29.10             | 39.80           | 56.00           | 16.20          | 22.67             | 33.37           | 46.00           | 12.63          | PASS    |  |
| 4               | 5.9235          | 10.66       | 26.05             | 36.71           | 60.00           | 23.29          | 15.78             | 26.44           | 50.00           | 23.56          | PASS    |  |
| 5               | 10.1040         | 10.63       | 24.81             | 35.44           | 60.00           | 24.56          | 17.04             | 27.67           | 50.00           | 22.33          | PASS    |  |
| 6               | 20.8050         | 10.39       | 25.65             | 36.04           | 60.00           | 23.96          | 20.56             | 30.95           | 50.00           | 19.05          | PASS    |  |

Remark:

- The following Quasi-Peak and Average measurements were performed on the EUT:
- Value = Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
- Margin = Limit[dBµV] – Value[dBµV]

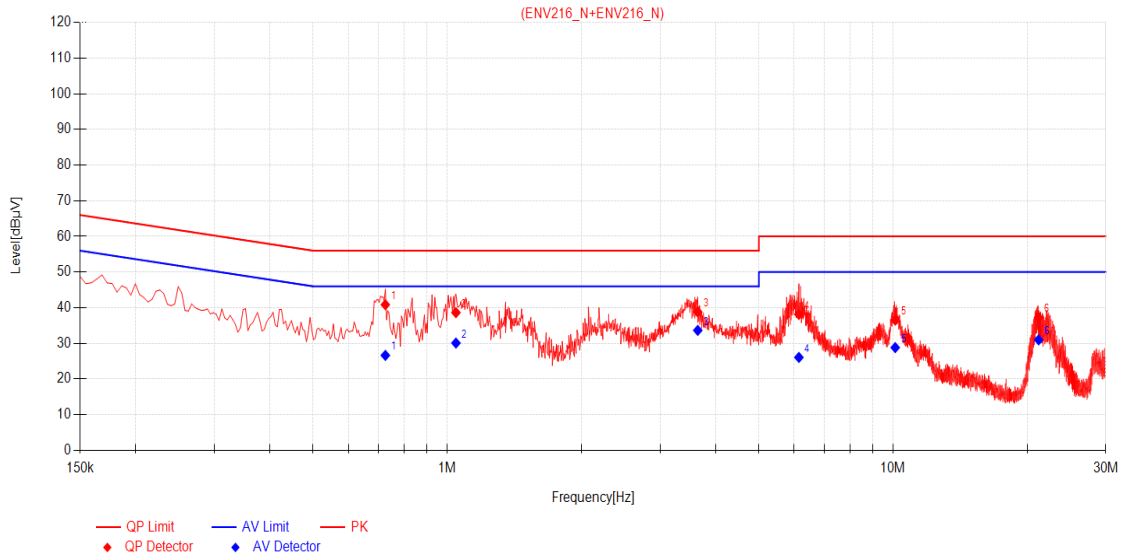


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|                  |        |        |         |
|------------------|--------|--------|---------|
| Final Test Mode: | Mode b | Phase: | Neutral |
|------------------|--------|--------|---------|



Final Data List

| NO | Frequency [MHz] | Factor [dB] | QP Reading [dBµV] | QP Value [dBµV] | QP Limit [dBµV] | QP Margin [dB] | AV Reading [dBµV] | AV Value [dBµV] | AV Limit [dBµV] | AV Margin [dB] | Verdict |
|----|-----------------|-------------|-------------------|-----------------|-----------------|----------------|-------------------|-----------------|-----------------|----------------|---------|
| 1  | 0.7260          | 10.81       | 30.03             | 40.84           | 56.00           | 15.16          | 15.81             | 26.62           | 46.00           | 19.38          | PASS    |
| 2  | 1.0455          | 10.67       | 27.95             | 38.62           | 56.00           | 17.38          | 19.42             | 30.09           | 46.00           | 15.91          | PASS    |
| 3  | 3.6465          | 10.69       | 28.13             | 38.82           | 56.00           | 17.18          | 22.96             | 33.65           | 46.00           | 12.35          | PASS    |
| 4  | 6.1485          | 10.56       | 27.54             | 38.10           | 60.00           | 21.90          | 15.50             | 26.06           | 50.00           | 23.94          | PASS    |
| 5  | 10.1130         | 10.67       | 25.85             | 36.52           | 60.00           | 23.48          | 18.14             | 28.81           | 50.00           | 21.19          | PASS    |
| 6  | 21.2145         | 10.43       | 26.79             | 37.22           | 60.00           | 22.78          | 20.55             | 30.98           | 50.00           | 19.02          | PASS    |

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Value = Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
3. Margin = Limit[dBµV] – Value[dBµV]



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**2.2 Radiated Emissions (30MHz-1GHz)**

|                       |   |               |            |
|-----------------------|---|---------------|------------|
| Test Requirement:     | 47 CFR Part 15, Subpart B                                     |               |            |
| Test Method:          | ANSI C63.4:2014   |               |            |
| Frequency Range:      | 30MHz to 1GHz   |               |            |
| Measurement Distance: | 3m  |               |            |
| Limit:                | Frequency Range (MHz)   | Limit(dBμV/m) | Detector   |
|                       | 30MHz -88MHz  | 40.0          | Quasi-peak |
|                       | 88MHz-216MHz  | 43.5          | Quasi-peak |
|                       | 216MHz-960MHz   | 46.0          | Quasi-peak |
| 960MHz-1000MHz        | 54.0  | Quasi-peak    |            |
| Detector:             | Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHZ |               |            |

**2.2.1 E.U.T. Operation**

|   |   |
|---|---|
| Temperature:                                | 22~23°C   |
| Humidity:                                   | 44~46%RH  |
| Atmospheric Pressure:                       | 101.0 kPa   |
| Pretest these modes to find the worst case: | a: EUT1+USB (adapter input)+2.4GWLAN<br>b: EUT1 USB (adapter input)+5GWLAN<br>c: EUT2 USB (adapter input) +2.4GWLAN |
| The worst case for final test:              | a: EUT1+USB (adapter input)+2.4GWLAN  |



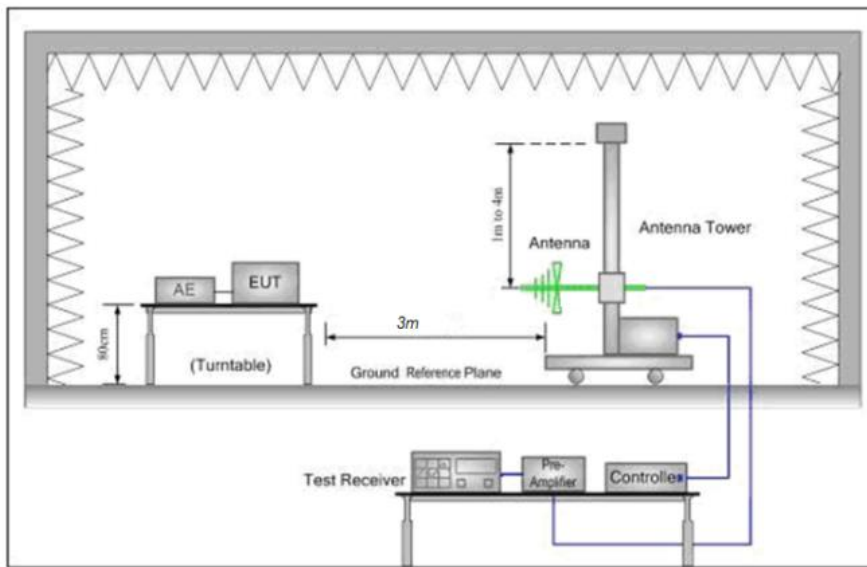
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**2.2.2 Test Setup Procedures**

1. The EUT was placed in a semi Anechoic Chamber as show below
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna height is adjusted between 1 to 4 meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function with specified bandwidth with Maximum Hold Mode, and the trace was allowed to stabilize.
7. If the emission level of the EUT in peak mode was 6 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.



**2.2.3 Measurement Data**

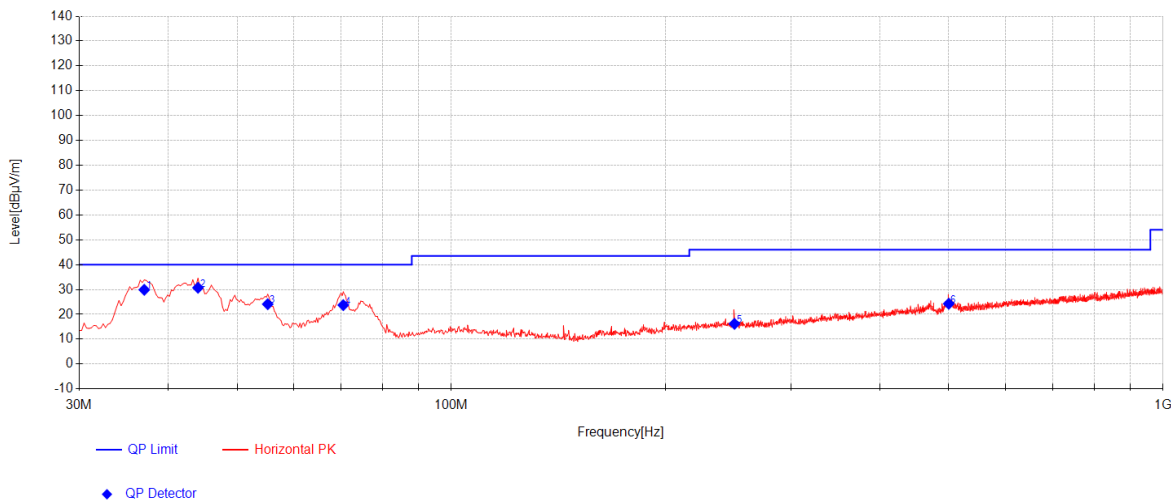
An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities. The three polarities of X,Y,Z were measured by EUT, but only the worst data had been displayed.



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|                  |        |               |            |
|------------------|--------|---------------|------------|
| Final Test Mode: | Mode a | Polarization: | Horizontal |
|------------------|--------|---------------|------------|



| Final Data List |                 |                |           |             |                   |                   |                |             |           |            |
|-----------------|-----------------|----------------|-----------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| NO.             | Frequency [MHz] | Reading [dBµV] | AF [dB/m] | Factor [dB] | QP Value [dBµV/m] | QP Limit [dBµV/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1               | 37.0325         | 46.85          | 11.27     | -28.23      | 29.89             | 40.00             | 10.11          | 102         | 360       | Horizontal |
| 2               | 44.065          | 45.86          | 12.91     | -28.05      | 30.72             | 40.00             | 9.28           | 185         | 355       | Horizontal |
| 3               | 55.22           | 39.35          | 12.55     | -27.81      | 24.09             | 40.00             | 15.91          | 244         | 251       | Horizontal |
| 4               | 70.4975         | 42.85          | 8.62      | -27.75      | 23.72             | 40.00             | 16.28          | 142         | 359       | Horizontal |
| 5               | 249.9475        | 30.28          | 11.90     | -26.00      | 16.18             | 46.00             | 29.82          | 263         | 74        | Horizontal |
| 6               | 499.965         | 31.96          | 16.80     | -24.49      | 24.27             | 46.00             | 21.73          | 251         | 338       | Horizontal |

Remark:

- The Quasi-Peak measurements were performed on the EUT.
- Value = Reading + AF + Factor:  
 AF = Antenna Factor(dB/m)  
 Factor = Cable Factor(dB) - Preamplifier (dB)  
 Margin = Limit[dBµV/m] - Value[dBµV/m]

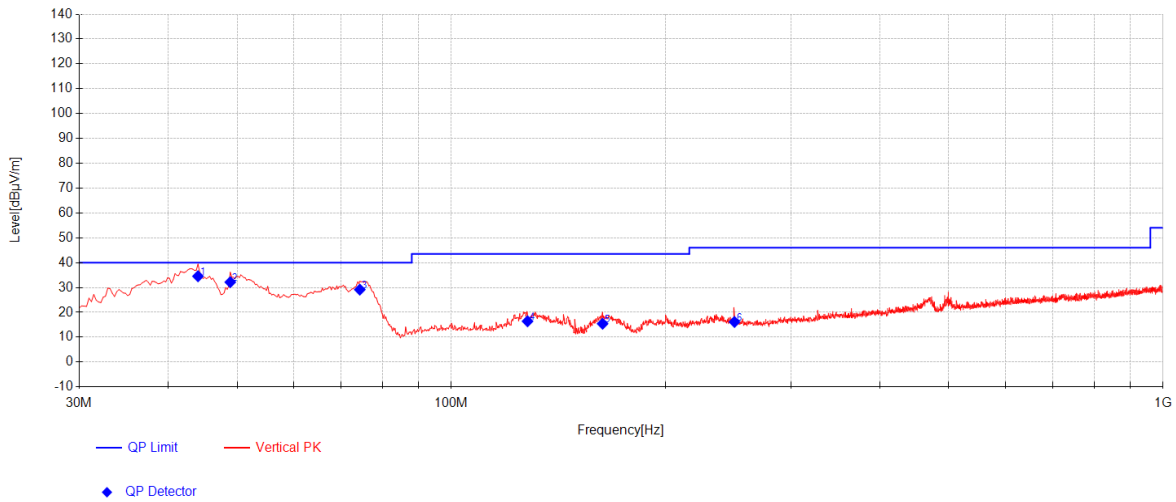


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|                  |        |               |          |
|------------------|--------|---------------|----------|
| Final Test Mode: | Mode a | Polarization: | Vertical |
|------------------|--------|---------------|----------|



| Final Data List |                 |                |           |             |                   |                   |                |             |           |          |
|-----------------|-----------------|----------------|-----------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| NO.             | Frequency [MHz] | Reading [dBµV] | AF [dB/m] | Factor [dB] | QP Value [dBµV/m] | QP Limit [dBµV/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1               | 44.065          | 49.68          | 12.91     | -28.05      | 34.54             | 40.00             | 5.46           | 102         | 360       | Vertical |
| 2               | 48.915          | 46.54          | 13.65     | -28.02      | 32.17             | 40.00             | 7.83           | 185         | 360       | Vertical |
| 3               | 74.3775         | 49.02          | 7.96      | -27.83      | 29.15             | 40.00             | 10.85          | 266         | 52        | Vertical |
| 4               | 127.97          | 35.25          | 8.42      | -27.26      | 16.41             | 43.50             | 27.09          | 254         | 208       | Vertical |
| 5               | 163.1325        | 34.26          | 7.83      | -26.67      | 15.42             | 43.50             | 28.08          | 142         | 239       | Vertical |
| 6               | 249.9475        | 30.24          | 11.90     | -26.00      | 16.14             | 46.00             | 29.86          | 223         | 355       | Vertical |

Remark:

1. The Quasi-Peak measurements were performed on the EUT.

2. Value = Reading + AF + Factor:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Margin = Limit[dBµV/m] -Value[dBµV/m]



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**2.3 Radiated Emissions (above 1GHz)**

|                       |  |                      |                 |
|-----------------------|--|----------------------|-----------------|
| Test Requirement:     | 47 CFR Part 15, Subpart B  |                      |                 |
| Test Method:          | ANSI C63.4:2014  |                      |                 |
| Frequency Range:      | Above 1GHz   |                      |                 |
| Measurement Distance: | 3m   |                      |                 |
| Limit:                | Frequency (MHz)  | Limit (dB $\mu$ V/m) | Detector        |
|                       | Above 1GHz   | 74<br>54             | Peak<br>Average |
| Detector:             | Peak for pre-scan (1000kHz resolution bandwidth) 5th harmonic of the highest frequency or 40GHz, whichever is lower. |                      |                 |

**2.3.1 E.U.T. Operation**

|   |  |
|---|--|
| Temperature:                                | 22~23°C  |
| Humidity:                                   | 44~46%RH   |
| Atmospheric Pressure:                       | 101.0 kPa  |
| Pretest these modes to find the worst case: | a: EUT1+USB (adapter input)+2.4GWLAN<br>b: EUT1+USB (adapter input)+5GWLAN<br>c: EUT2+USB (adapter input)+2.4GWLAN |
| The worst case for final test:              | a: EUT1+USB (adapter input)+2.4GWLAN   |



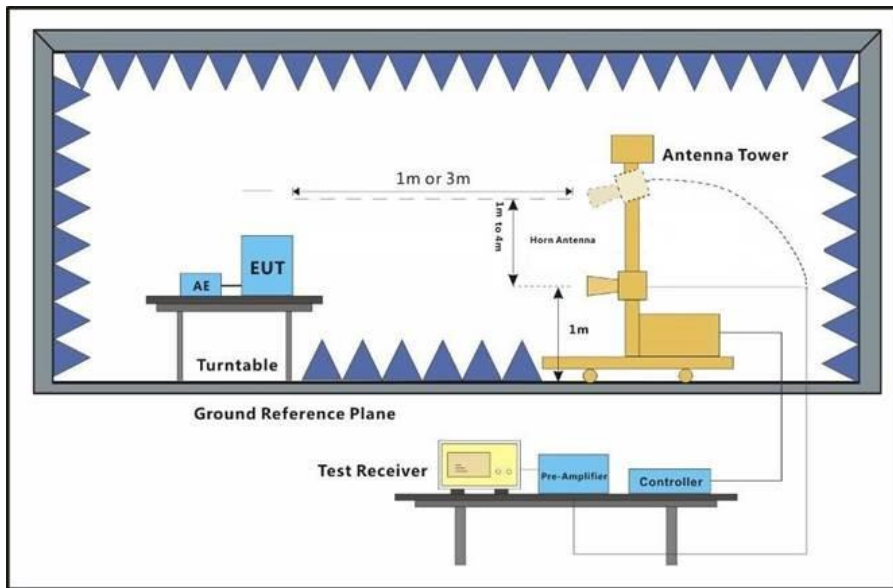
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**2.3.2 Test Setup Procedures**

1. The EUT was placed in a full Anechoic Chamber as show below
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation  
 (Distance from antenna to EUT is 1m for measurements >18GHz).
4. The antenna height is adjusted between 1 to 4 meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak and AV Detect Function with specified bandwidth with Maximum Hold Mode, and the trace was allowed to stabilize.
7. At a measurement distance of 1 meter the limit line was increased by  $20 \cdot \text{LOG}(3/1) = 9.54 \text{ dB}$ .



**2.3.3 Measurement Data**

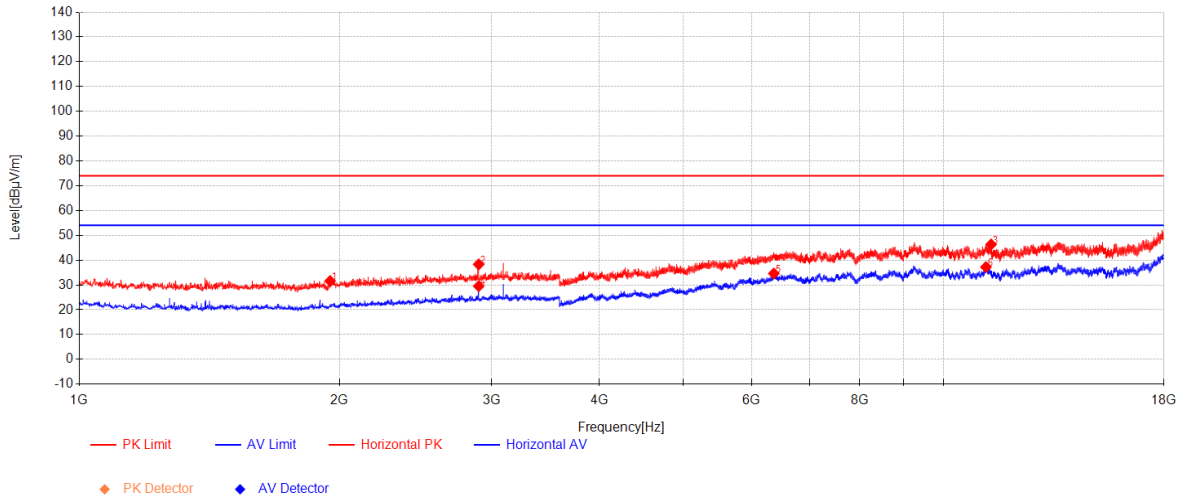
An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

The three polarities of X, Y, Z were measured by EUT, but only the worst data had been displayed. Scan from 5th harmonic of the highest frequency or 40GHz, whichever is lower, the disturbance above 18GHz was very low. The points marked on below plots are the highest emissions could be found when testing, so only below points had been displayed.





|                  |        |               |            |
|------------------|--------|---------------|------------|
| Final Test Mode: | Mode a | Polarization: | Horizontal |
|------------------|--------|---------------|------------|



| Final Data List |                 |                |           |             |                   |                   |                |             |           |            |
|-----------------|-----------------|----------------|-----------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| NO.             | Frequency [MHz] | Reading [dBμV] | AF [dB/m] | Factor [dB] | QP Value [dBμV/m] | QP Limit [dBμV/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity   |
| 1               | 1951.15         | 53.14          | 26.56     | 31.60       | -48.09            | 74.00             | 42.40          | 263         | 198       | Horizontal |
| 2               | 2898.9          | 55.83          | 29.26     | 38.29       | -46.80            | 74.00             | 35.71          | 265         | 294       | Horizontal |
| 3               | 11355.55        | 42.16          | 39.24     | 46.31       | -35.10            | 74.00             | 27.69          | 284         | 222       | Horizontal |
| 4               | 2898.9          | 47.03          | 29.26     | 29.49       | -46.80            | 54.00             | 24.51          | 142         | 319       | Horizontal |
| 5               | 6364.35         | 42.48          | 34.93     | 34.59       | -42.82            | 54.00             | 19.41          | 255         | 246       | Horizontal |
| 6               | 11200           | 33.18          | 39.40     | 37.21       | -35.37            | 54.00             | 16.79          | 263         | 246       | Horizontal |

Remark:

- The Peak and Average measurements were performed on the EUT.
- Level = Reading Level + AF + Factor:  
 AF = Antenna Factor(dB/m)  
 Factor = Cable Factor(dB) - Preamplifier gain(dB)  
 Margin = Limit[dBμV/m] – Level[dBμV/m]

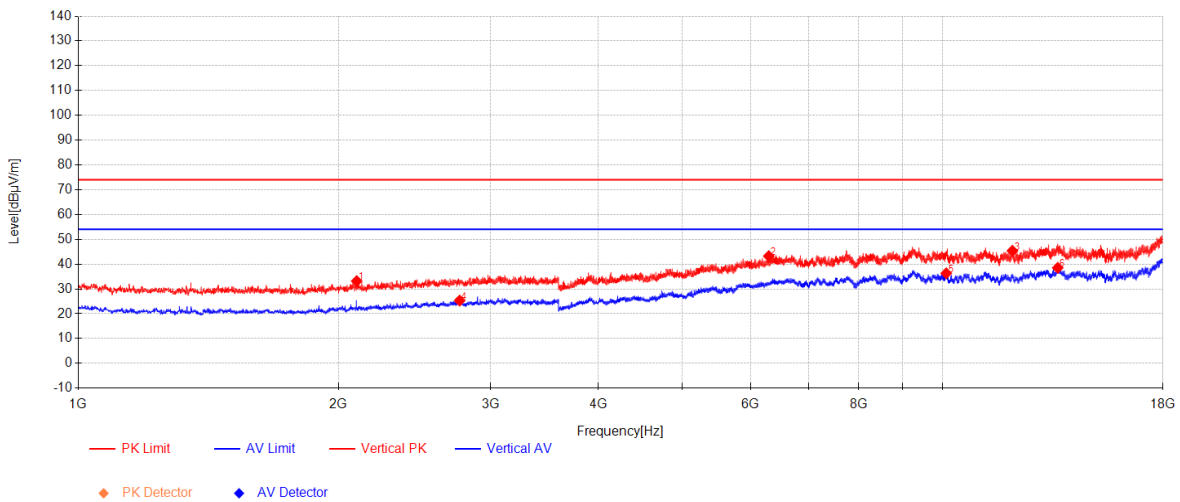


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|                  |        |               |          |
|------------------|--------|---------------|----------|
| Final Test Mode: | Mode a | Polarization: | Vertical |
|------------------|--------|---------------|----------|



| Final Data List |                 |                |           |             |                   |                   |                |             |           |          |
|-----------------|-----------------|----------------|-----------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| NO.             | Frequency [MHz] | Reading [dBµV] | AF [dB/m] | Factor [dB] | QP Value [dBµV/m] | QP Limit [dBµV/m] | QP Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1               | 2099.9          | 53.95          | 27.10     | 33.17       | -47.88            | 74.00             | 40.83          | 236         | 49        | Vertical |
| 2               | 6296.35         | 51.37          | 34.79     | 43.22       | -42.95            | 74.00             | 30.78          | 255         | 0         | Vertical |
| 3               | 12050.85        | 41.92          | 38.65     | 45.37       | -35.20            | 74.00             | 28.63          | 142         | 1         | Vertical |
| 4               | 2762.9          | 43.33          | 28.79     | 25.30       | -46.82            | 54.00             | 28.70          | 285         | 0         | Vertical |
| 5               | 10103.5         | 34.62          | 38.61     | 36.31       | -36.92            | 54.00             | 17.69          | 263         | 0         | Vertical |
| 6               | 13597           | 32.92          | 39.96     | 38.51       | -34.37            | 54.00             | 15.49          | 201         | 193       | Vertical |

Remark:

- The Peak and Average measurements were performed on the EUT.
- Level = Reading Level + AF + Factor:  
 AF = Antenna Factor(dB/m)  
 Factor = Cable Factor(dB) - Preamplifier gain(dB)  
 Margin = Limit[dBµV/m] – Level[dBµV/m]



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### 3 Equipment List

| CE Test System                 |               |                     |               |                           |                               |
|--------------------------------|---------------|---------------------|---------------|---------------------------|-------------------------------|
| Test Equipment                 | Manufacturer  | Model No.           | Inventory No. | Cal. date<br>(yyyy/mm/dd) | Cal. Due date<br>(yyyy/mm/dd) |
| Shielding Room                 | Brilliant-emc | N/A                 | SUWI-04-03-01 | 2021/05/08                | 2024/05/07                    |
| Temperature and humidity meter | MingGao       | TH101B              | SUWI-01-01-06 | 2022/02/16                | 2023/02/15                    |
| Test receiver                  | ROHDE&SCHWARZ | ESR7                | SUWI-01-10-01 | 2022/02/19                | 2023/02/18                    |
| Artificial network             | ROHDE&SCHWARZ | ENV216              | SUWI-01-19-01 | 2022/02/19                | 2023/02/18                    |
| Artificial network             | ROHDE&SCHWARZ | ENV216              | SUWI-01-19-02 | 2022/02/19                | 2023/02/18                    |
| Measurement Software CE        | Tonsend       | JS32-CE<br>V4.0.0.2 | SUWI-02-09-05 | NCR                       | NCR                           |



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| RE Test System                 |                            |                 |               |                        |                           |
|--------------------------------|----------------------------|-----------------|---------------|------------------------|---------------------------|
| Test Equipment                 | Manufacturer               | Model No.       | Inventory No. | Cal. date (yyyy/mm/dd) | Cal.Due date (yyyy/mm/dd) |
| Semi-Anechoic Chamber          | Brilliant-emc              | N/A             | SUWI-04-02-01 | 2021/05/08             | 2024/05/07                |
| Temperature and humidity meter | MingGao                    | TH101B          | SUWI-01-01-05 | 2022/02/16             | 2023/02/15                |
| Signal Analyzer                | ROHDE&SCHWARZ              | FSW43           | SUWI-01-02-04 | 2022/05/28             | 2023/05/27                |
| Test receiver                  | ROHDE&SCHWARZ              | ESR7            | SUWI-01-10-01 | 2022/02/19             | 2023/02/18                |
| Receiving antenna              | SCHWRZBECK MESS-ELEKTRONIK | VULB 9163       | SUWI-01-11-01 | 2021/05/16             | 2023/05/15                |
| Receiving antenna              | SCHWRZBECK MESS-ELEKTRONIK | BBHA 9120D      | SUWI-01-11-02 | 2021/05/16             | 2023/05/15                |
| Receiving antenna              | SCHWRZBECK MESS-ELEKTRONIK | BBHA 9170       | SUWI-01-11-03 | 2021/05/14             | 2023/05/13                |
| Amplifier                      | Tonscend                   | TAP9K3G40       | SUWI-01-14-01 | 2022/02/14             | 2023/02/13                |
| Amplifier                      | Tonscend                   | TAP01018050     | SUWI-01-14-02 | 2022/02/14             | 2023/02/13                |
| Amplifier                      | Tonscend                   | TAP18040048     | SUWI-01-14-03 | 2022/02/19             | 2023/02/18                |
| Active Loop Antenna            | SCHWRZBECK MESS-ELEKTRONIK | FMZB 1519B      | SUWI-01-21-01 | 2021/06/10             | 2023/06/09                |
| Measurement Software           | Tonscend                   | JS32-RE 4.0.0.0 | SUWI-02-09-04 | NCR                    | NCR                       |



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## 4 Measurement Uncertainty

| No.   | Item                | Measurement Uncertainty   |
|---|---------------------|---------------------------|
| 1   | Conduction Emission | ± 2.9dB (150kHz to 30MHz) |
| 2   | Radiated Emission   | ± 4.8dB (Below 1GHz)      |
|   |                     | ± 4.8dB (1GHz to 18GHz)   |
|   |                     | ± 4.8dB (Above 18GHz)     |
| Remark:<br>The $U_{lab}$ (lab Uncertainty) is less than $U_{CISPR/ETSI}$ (CISPR/ETSI Uncertainty), so the test results<br>– compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;<br>– non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit. |                     |                           |



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## 5 Photographs

### 5.1 Test Setup

Refer to Appendix A.1 15B Setup Photos.

--End of Report---



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