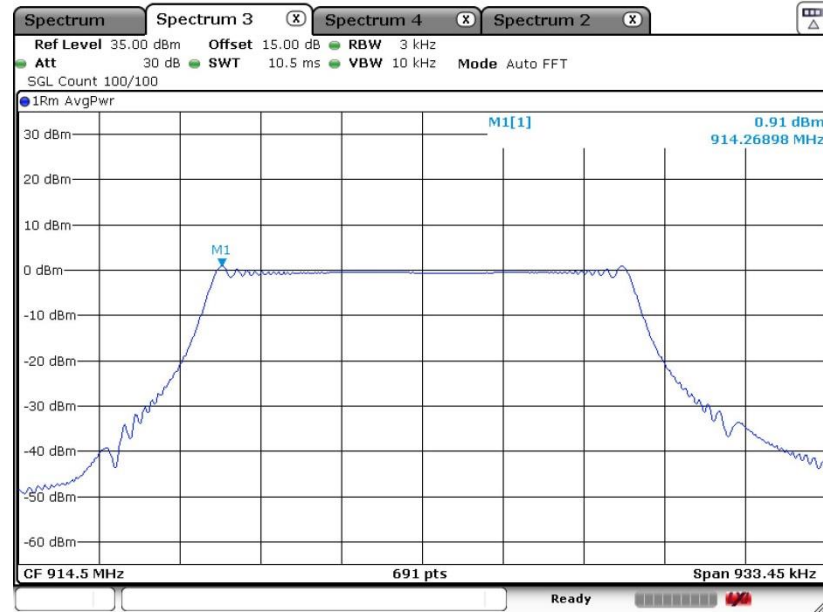


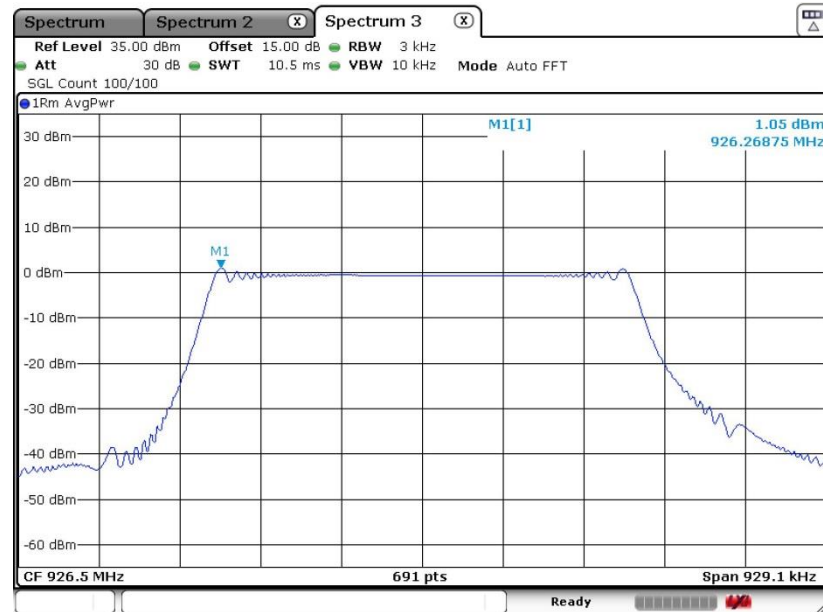


### PSD 3kHz Plot on 914.5 MHz



Date: 8 JUN 2022 03:21:15

### PSD 3kHz Plot on 926.5 MHz

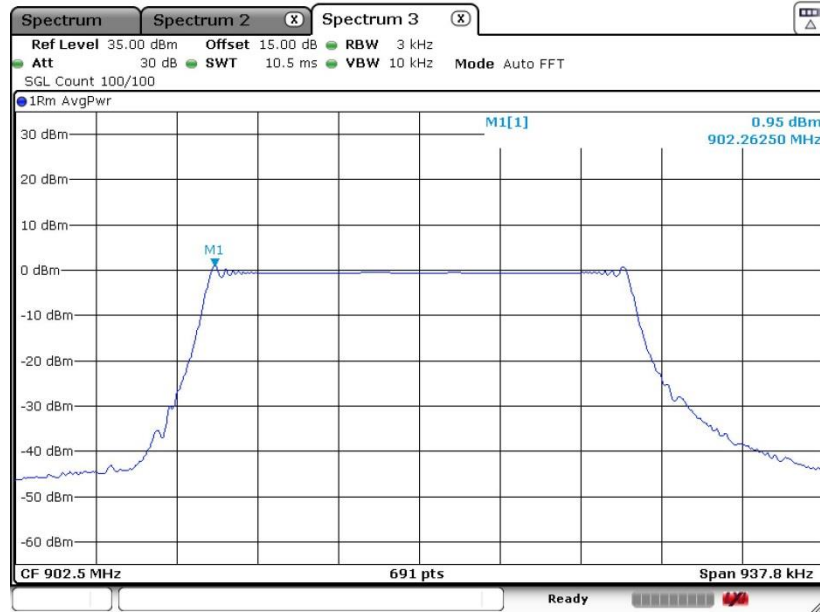


Date: 8 JUN 2022 03:28:57



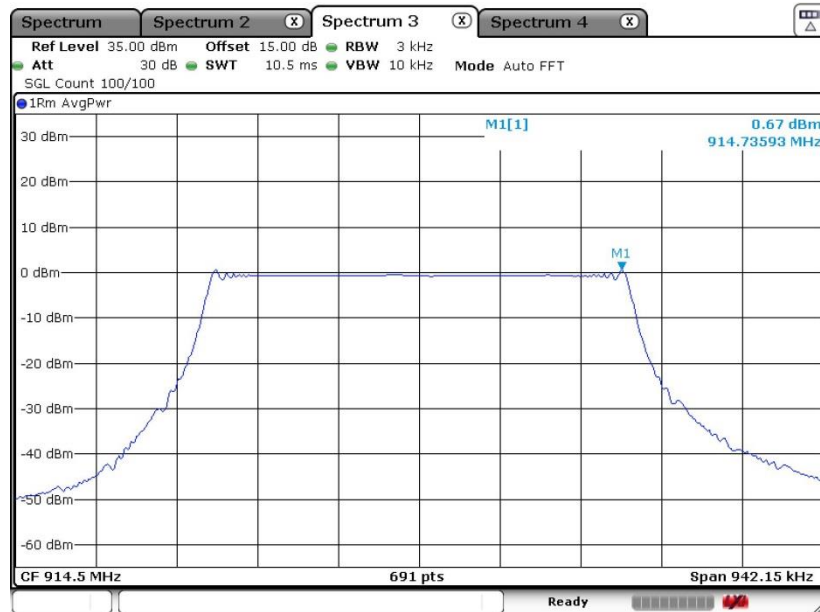
For SF10:

PSD 3kHz Plot on 902.5 MHz



Date: 8 JUN.2022 04:18:19

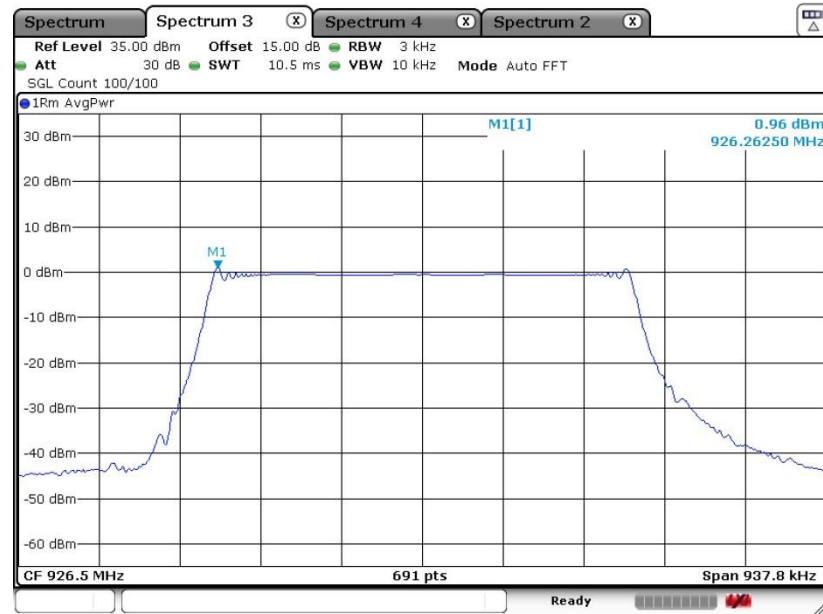
PSD 3kHz Plot on 914.5 MHz



Date: 8 JUN.2022 04:25:15



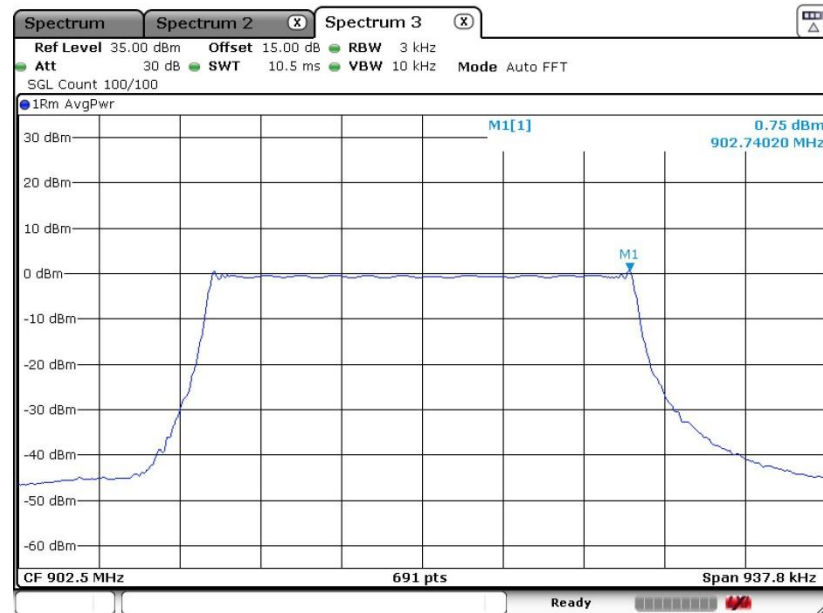
PSD 3kHz Plot on 926.5 MHz



Date: 8 JUN.2022 04:32:45

For SF11:

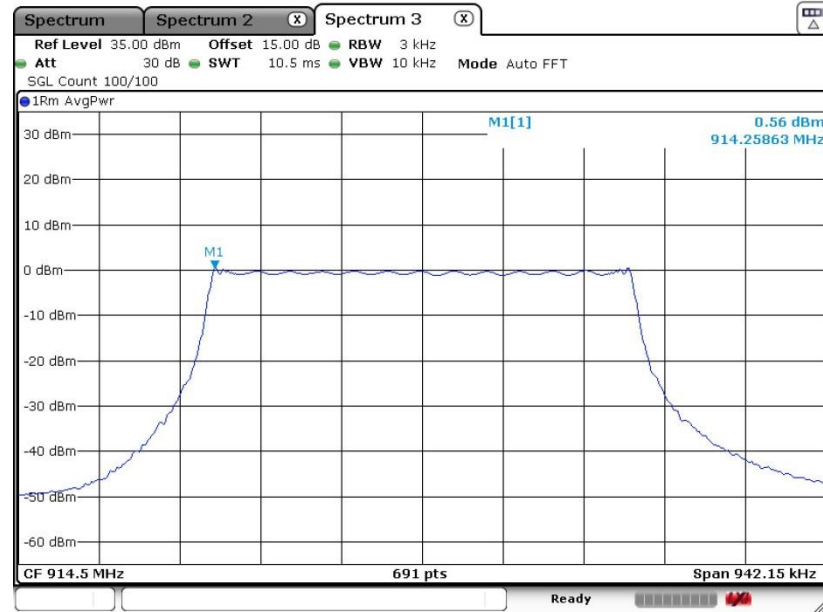
PSD 3kHz Plot on 902.5 MHz



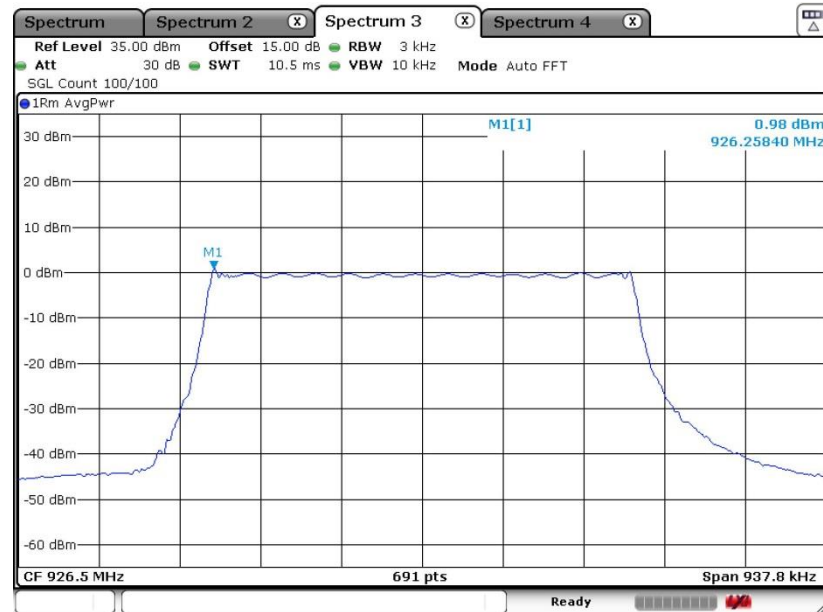
Date: 8 JUN.2022 05:09:37



### PSD 3kHz Plot on 914.5 MHz



### PSD 3kHz Plot on 926.5 MHz



## 3.4 Conducted Band Edges and Spurious Emission Measurement

### 3.4.1 Limit of Conducted Band Edges and Spurious Emission

All harmonics/spurious must be at least 30 dB down from the highest emission level within the authorized band.

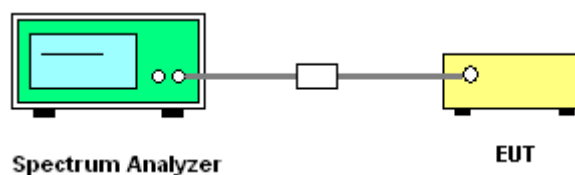
### 3.4.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

### 3.4.3 Test Procedure

1. The testing follows ANSI C63.10-2013 clause 11.13
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz when the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

### 3.4.4 Test Setup

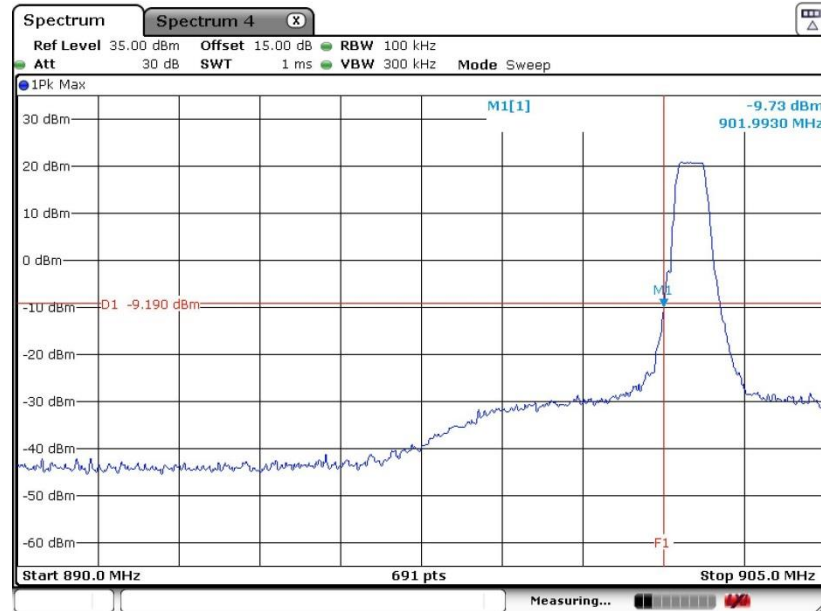




### 3.4.5 Test Result of Conducted Band Edges Plots

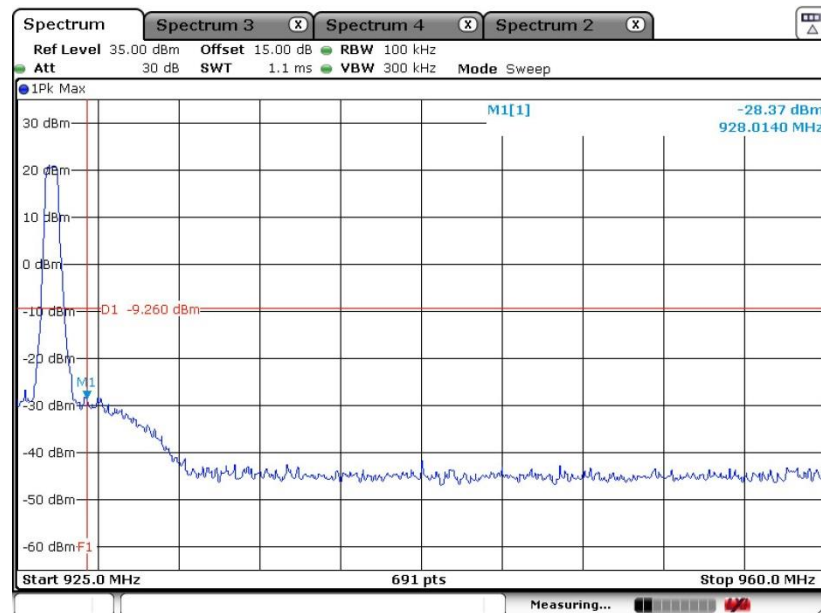
For SF5:

Low Band Edge Plot on 902.5 MHz



Date: 8.JUN.2022 20:27:32

High Band Edge Plot on 926.5 MHz

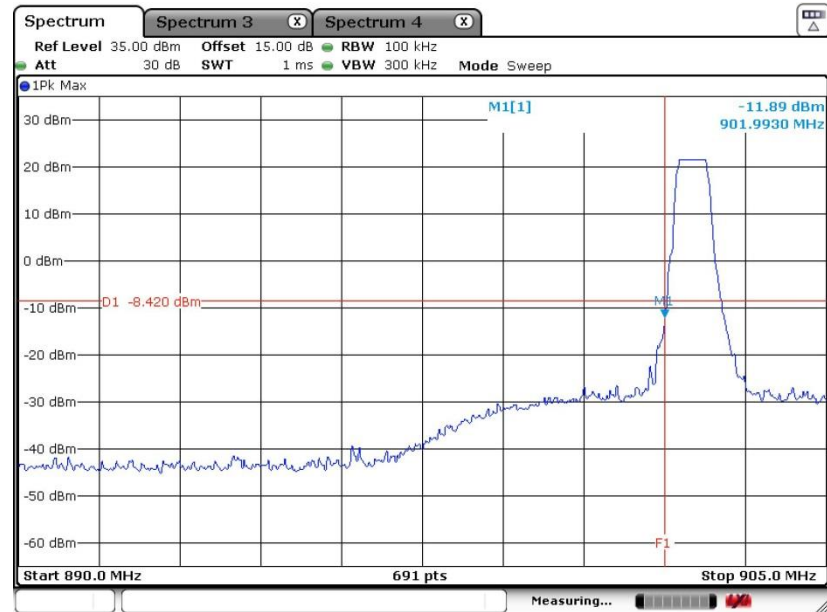


Date: 8.JUN.2022 20:40:11



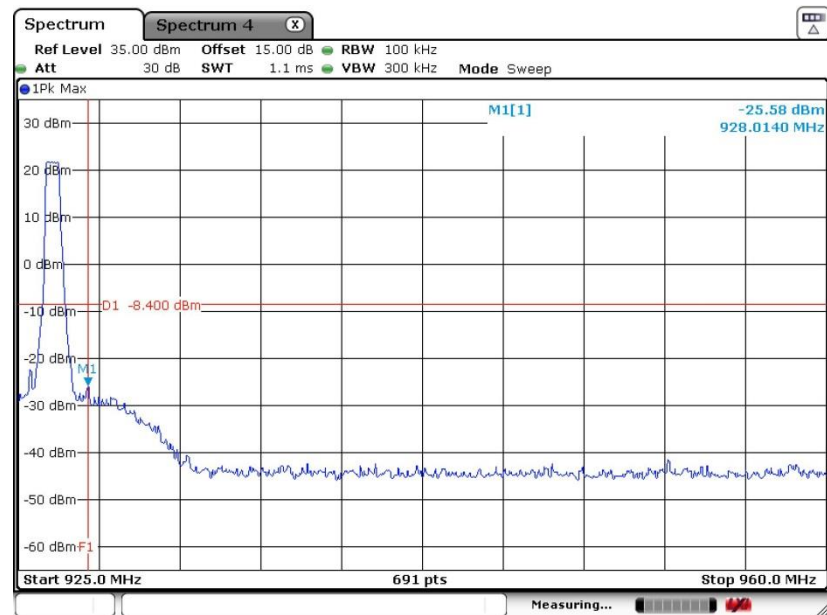
For SF7:

### Low Band Edge Plot on 902.5 MHz



Date: 8 JUN 2022 00:38:51

### High Band Edge Plot on 926.5 MHz

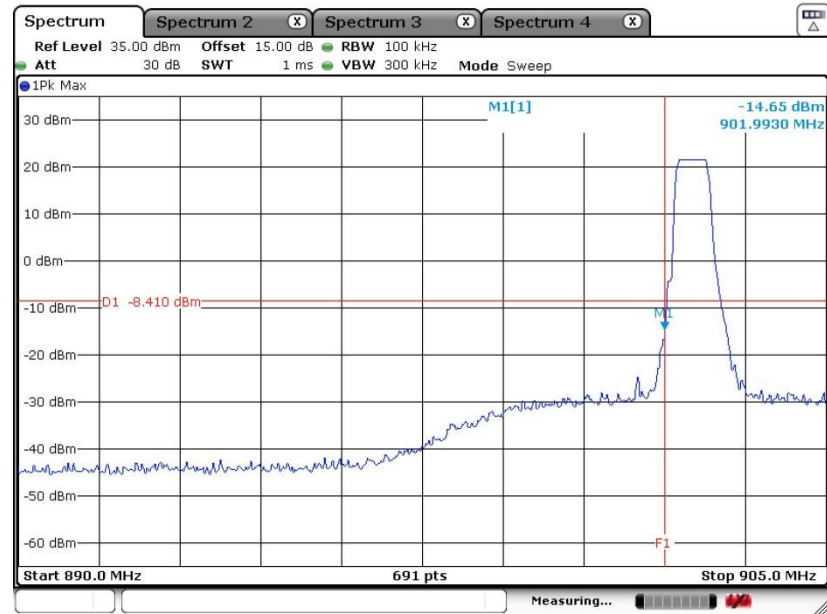


Date: 8 JUN 2022 00:53:29



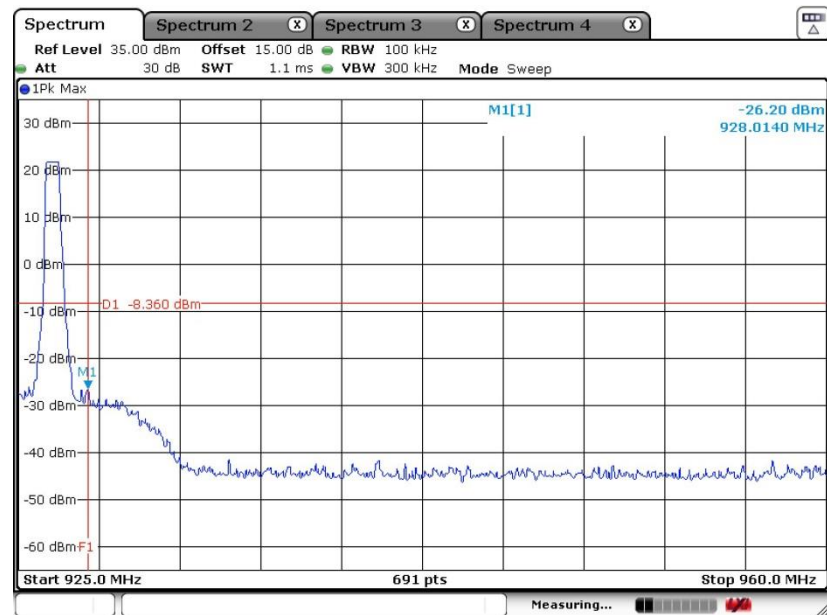
For SF8:

Low Band Edge Plot on 902.5 MHz



Date: 8 JUN.2022 02:18:22

High Band Edge Plot on 926.5 MHz

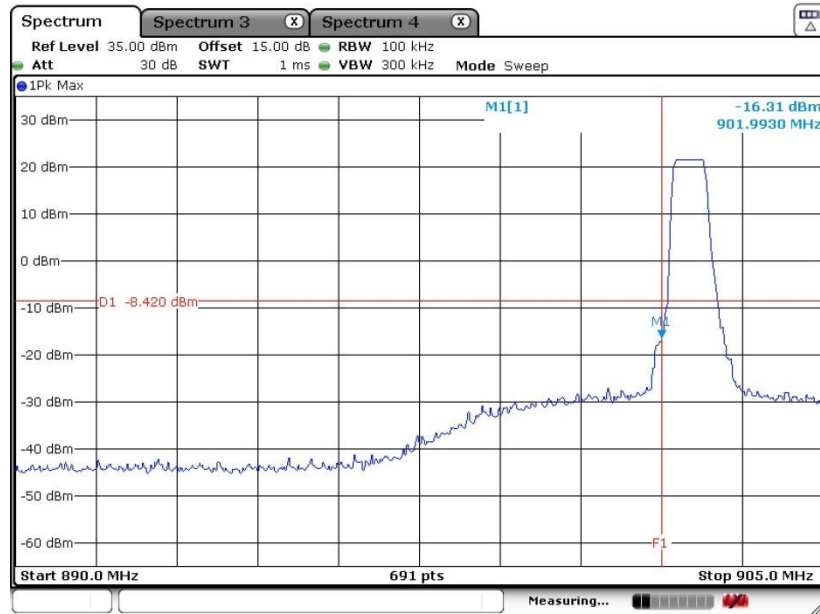


Date: 8 JUN.2022 02:37:59



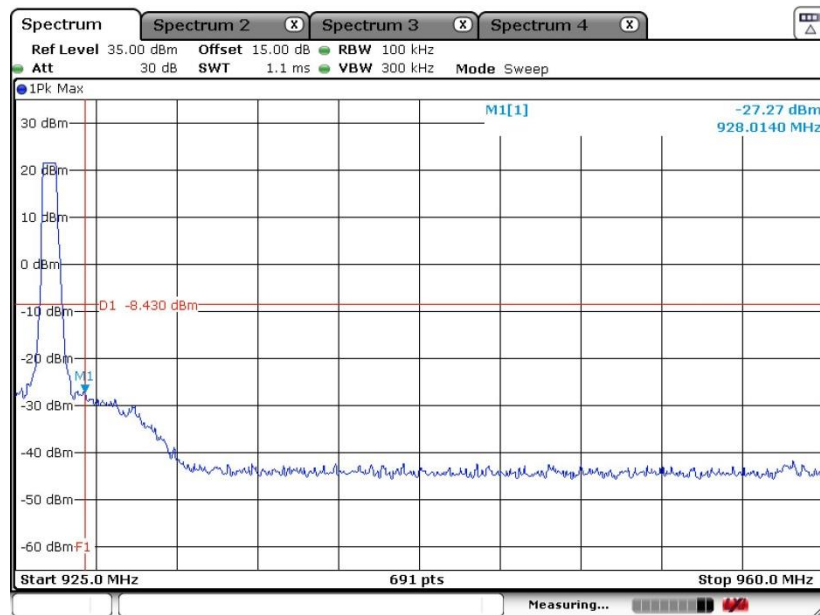
For SF9:

### Low Band Edge Plot on 902.5 MHz



Date: 8 JUN.2022 03:16:21

### High Band Edge Plot on 926.5 MHz

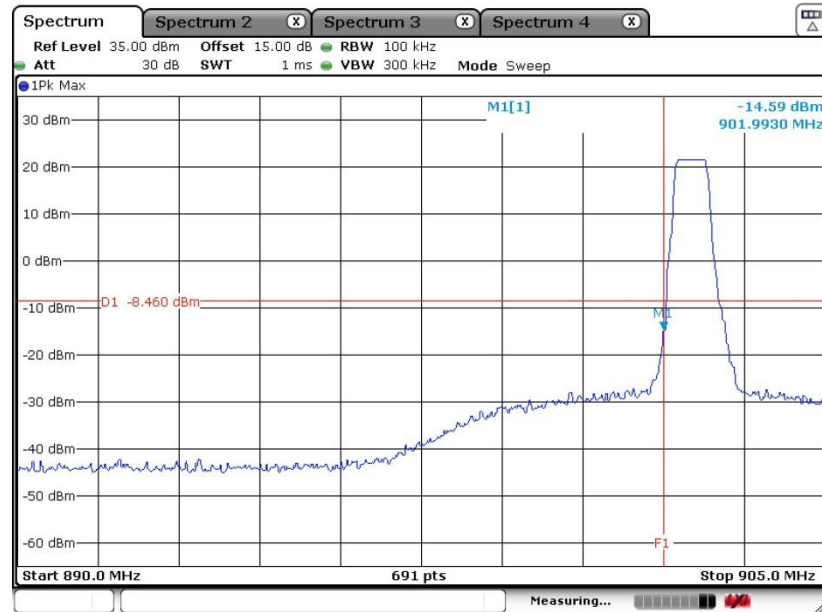


Date: 8 JUN.2022 03:31:01



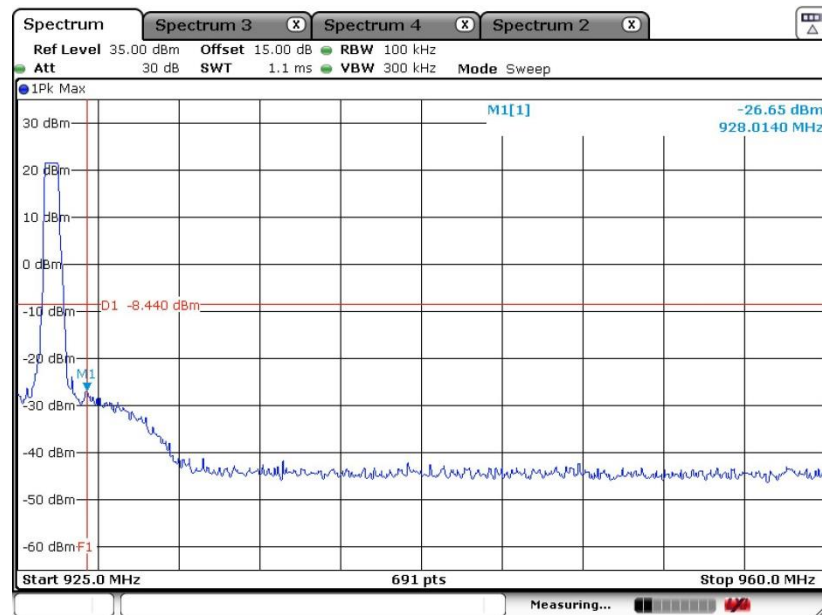
For SF10:

### Low Band Edge Plot on 902.5 MHz



Date: 8 JUN.2022 04:19:51

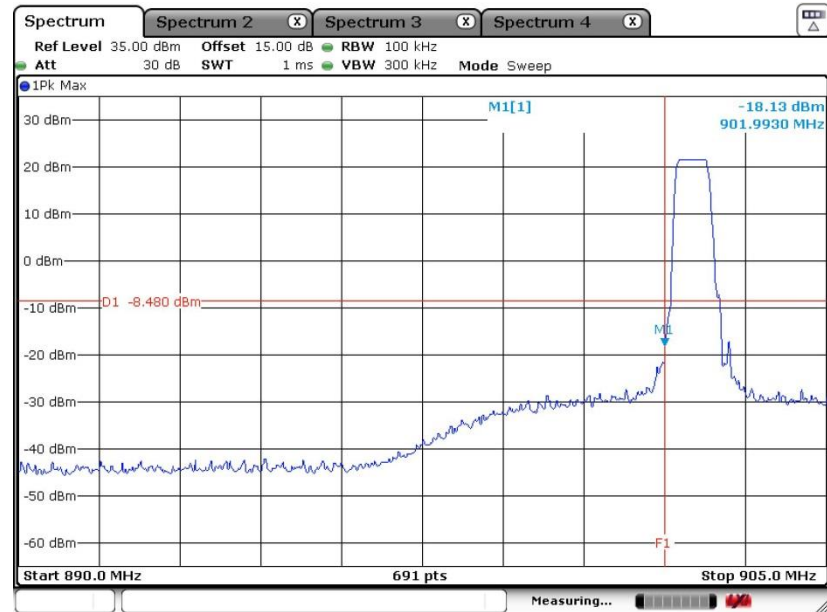
### High Band Edge Plot on 926.5 MHz



Date: 8 JUN.2022 04:34:32

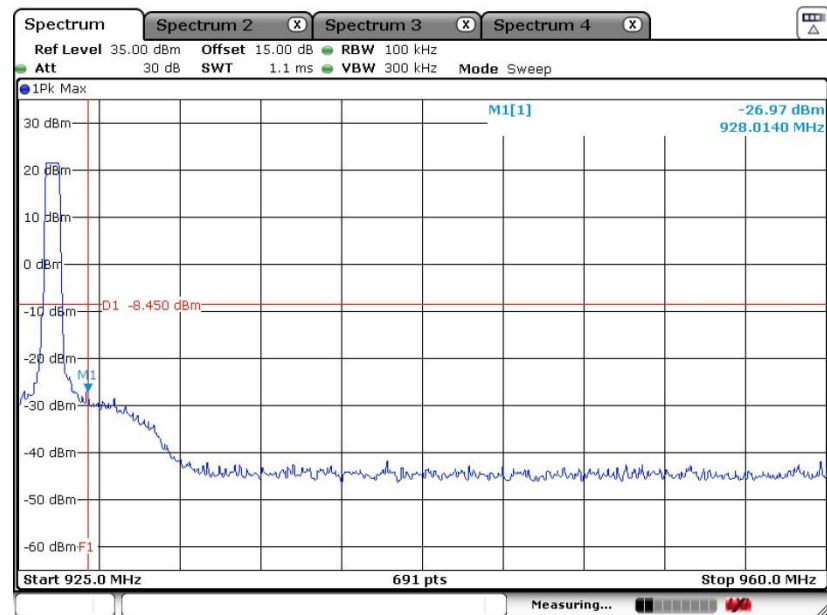
**For SF11:**

### Low Band Edge Plot on 902.5 MHz



Date: 8.JUN.2022 05:10:43

### High Band Edge Plot on 926.5 MHz



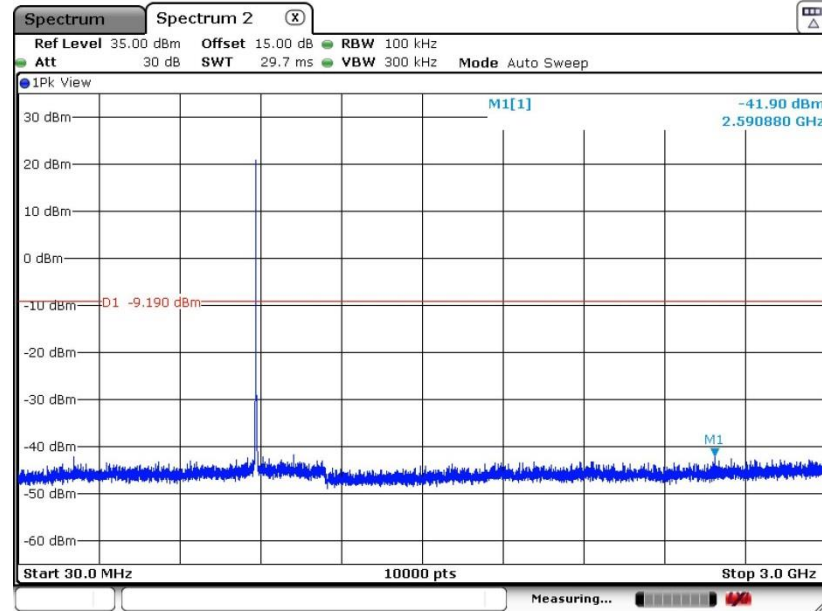
Date: 8.JUN.2022 05:25:01



### 3.4.6 Test Result of Conducted Spurious Emission Plots

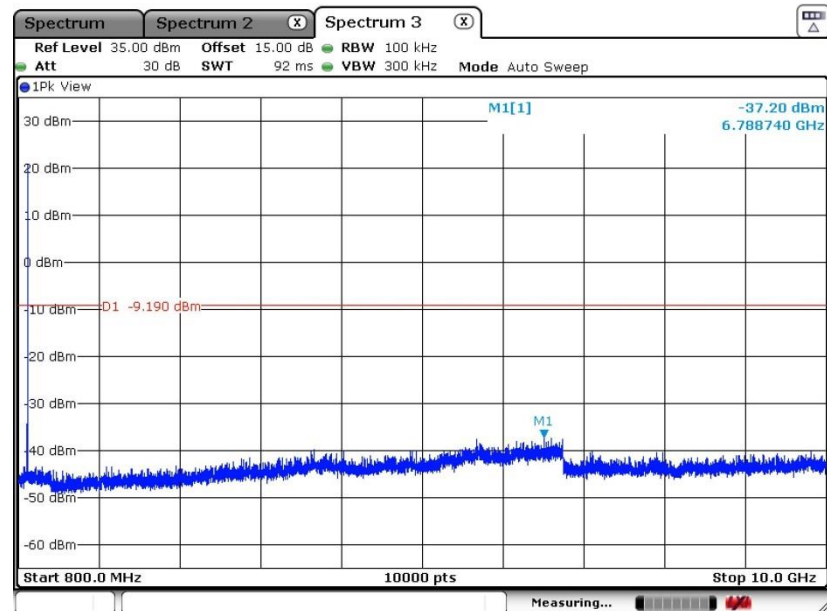
For SF5:

#### Conducted Spurious Emission Plot on 902.5 MHz



Date: 14.JUN.2022 21:27:50

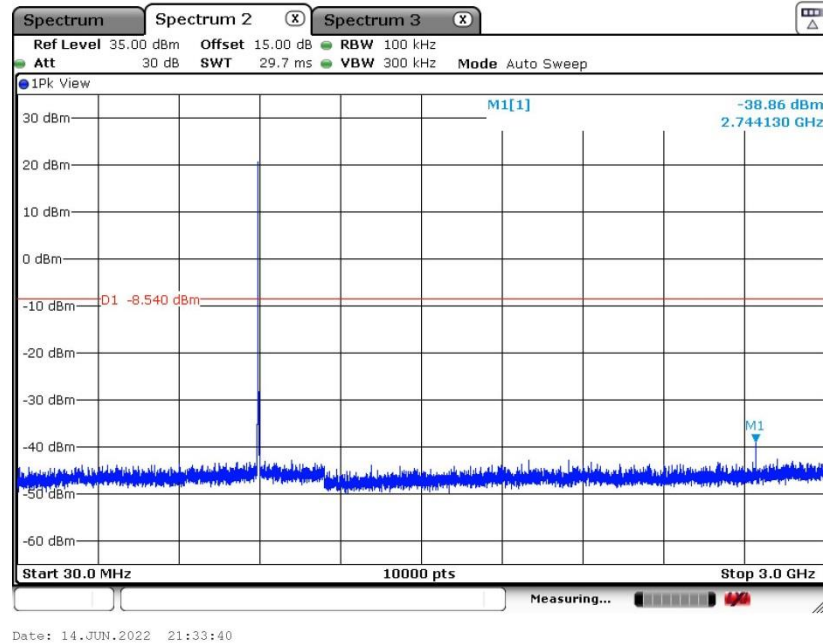
#### Conducted Spurious Emission Plot on 902.5 MHz



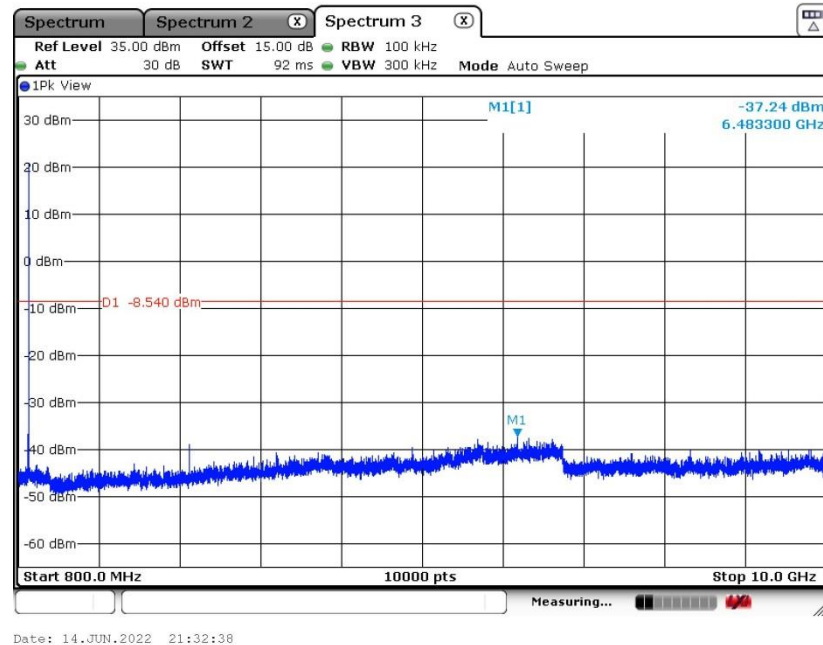
Date: 14.JUN.2022 21:35:15



### Conducted Spurious Emission Plot on 914.5 MHz

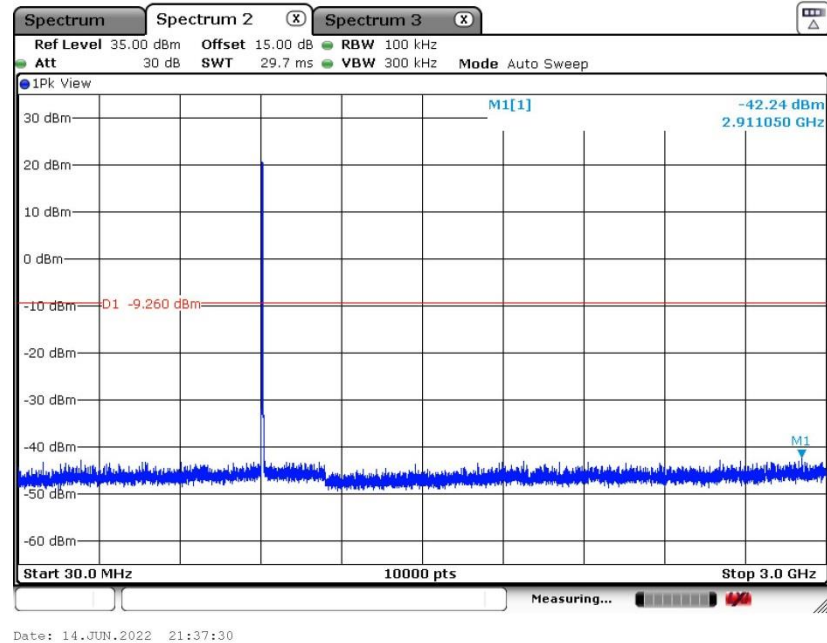


### Conducted Spurious Emission Plot on 914.5 MHz

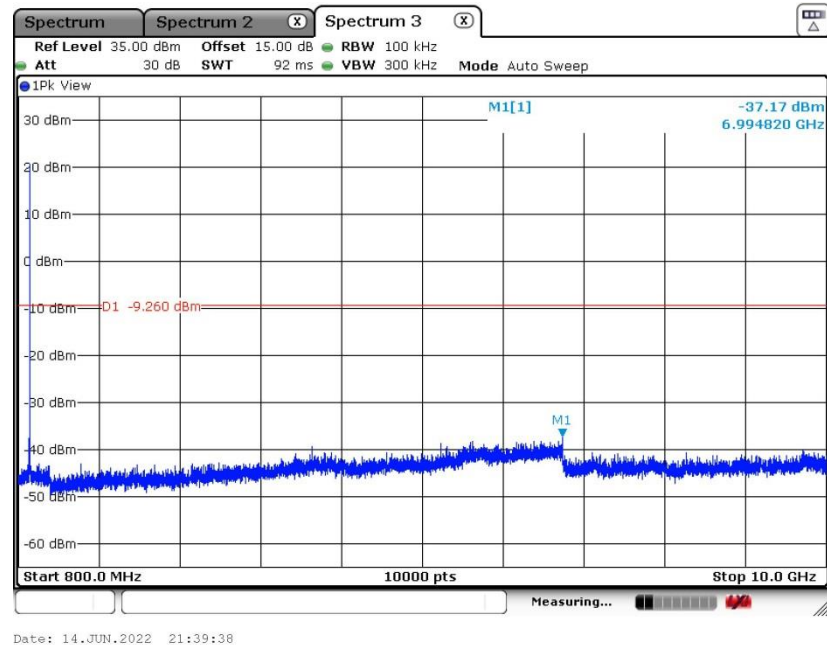




### Conducted Spurious Emission Plot on 926.5 MHz



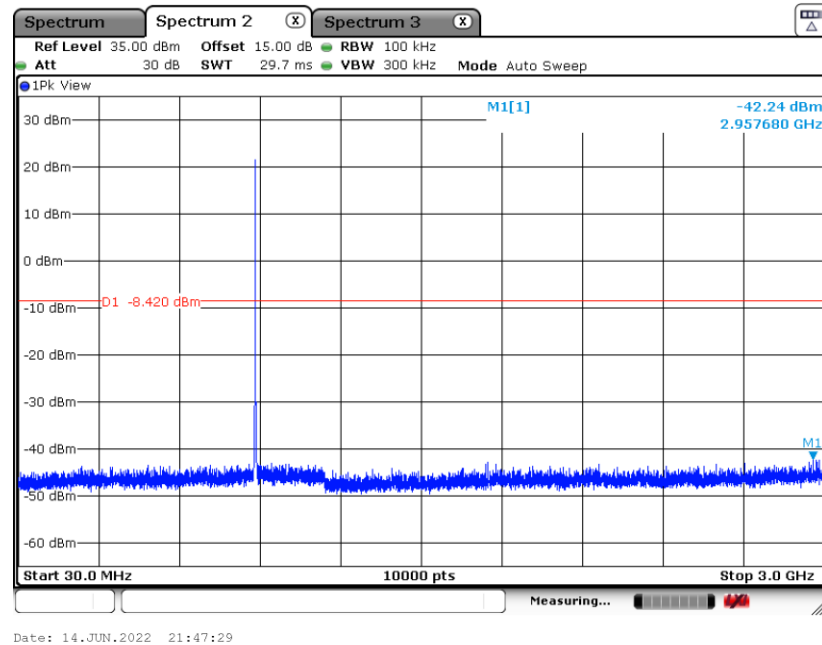
### Conducted Spurious Emission Plot on 926.5 MHz



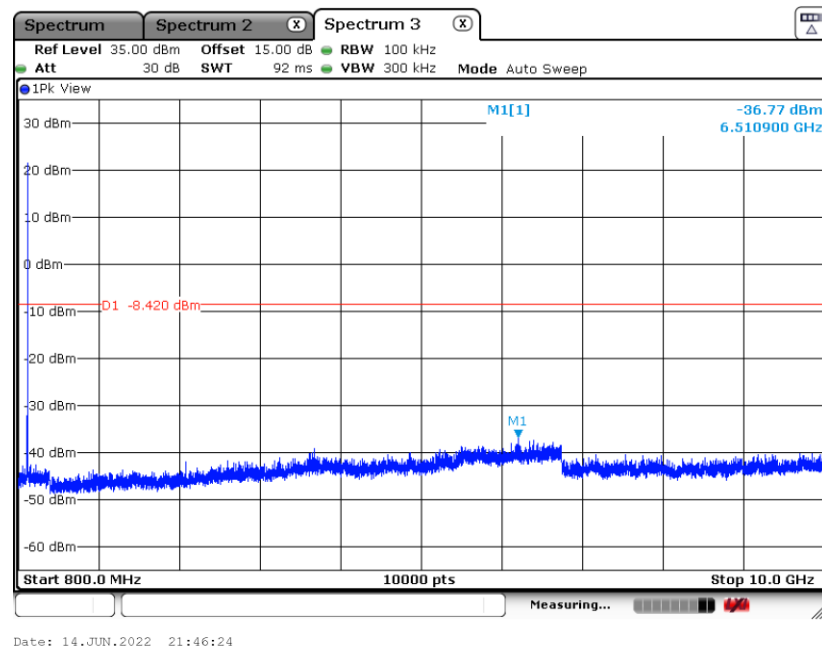


For SF7:

### Conducted Spurious Emission Plot on 902.5 MHz

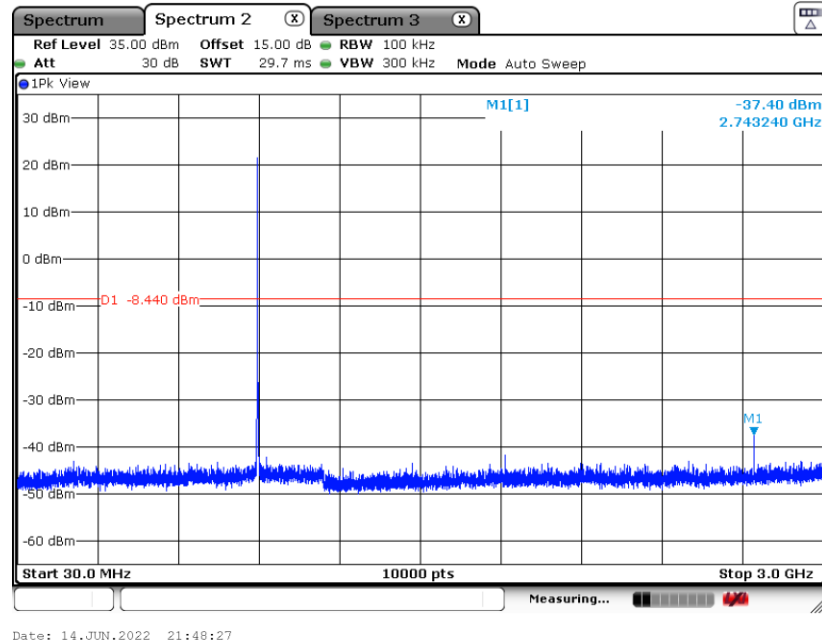


### Conducted Spurious Emission Plot on 902.5 MHz

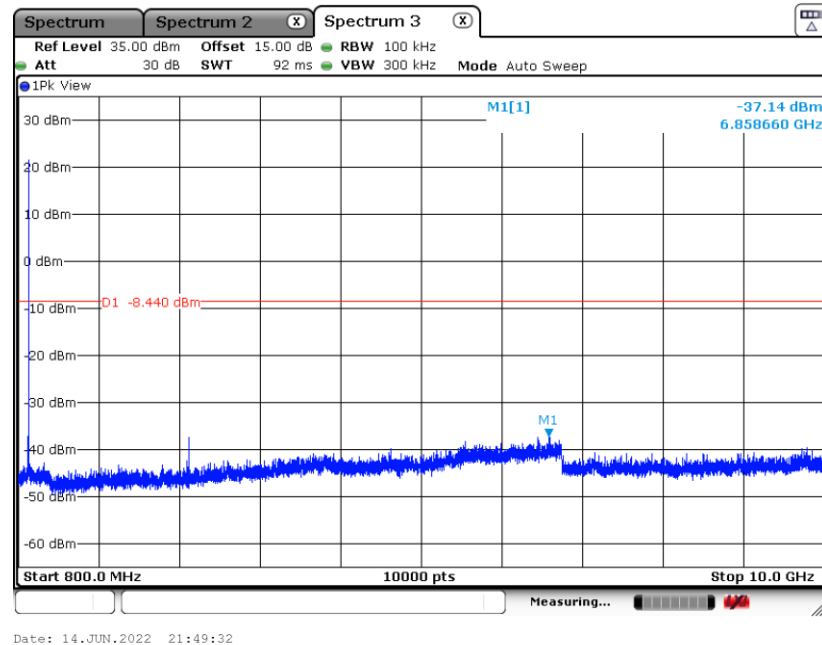




### Conducted Spurious Emission Plot on 914.5 MHz

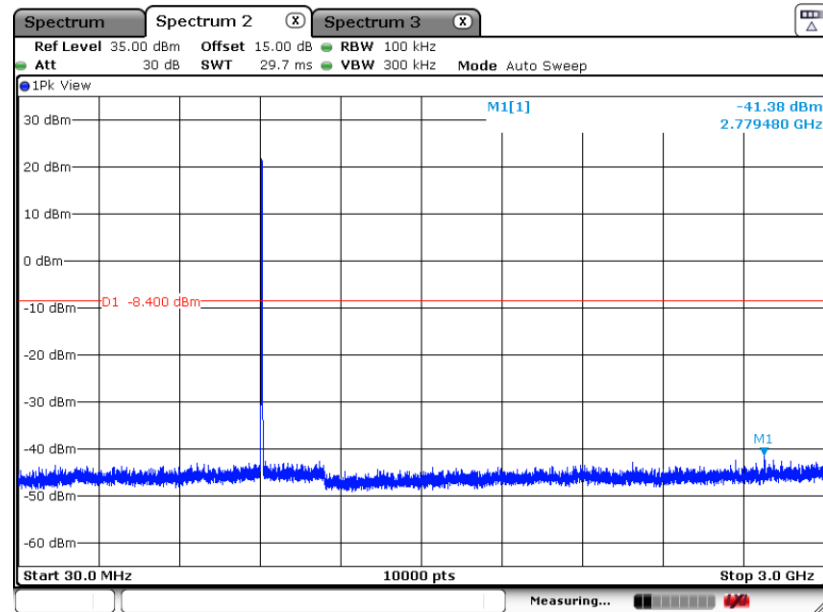


### Conducted Spurious Emission Plot on 914.5 MHz



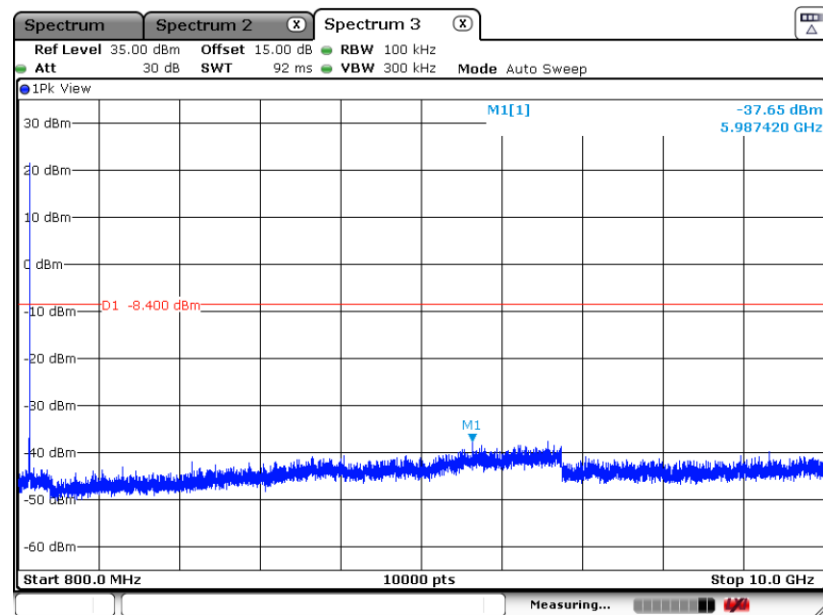


### Conducted Spurious Emission Plot on 926.5 MHz



Date: 14.JUN.2022 21:51:44

### Conducted Spurious Emission Plot on 926.5 MHz

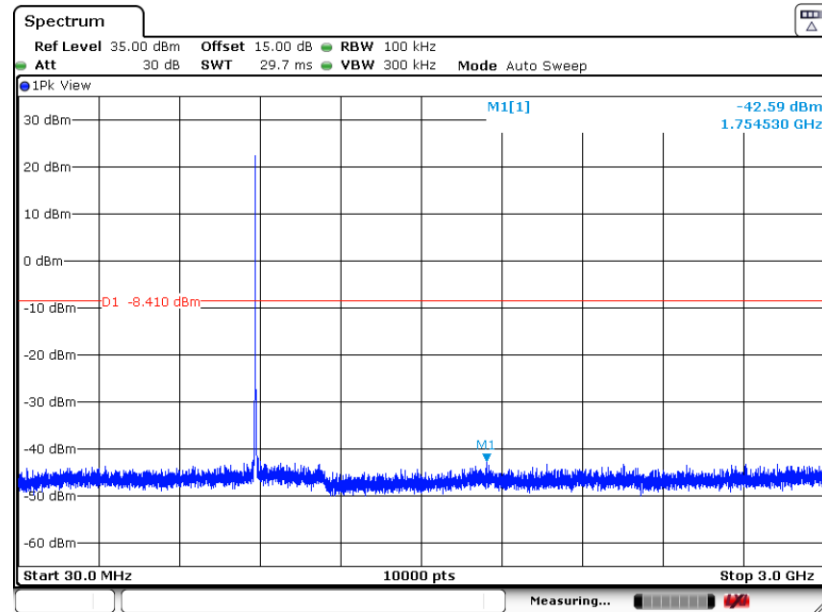


Date: 14.JUN.2022 21:50:31



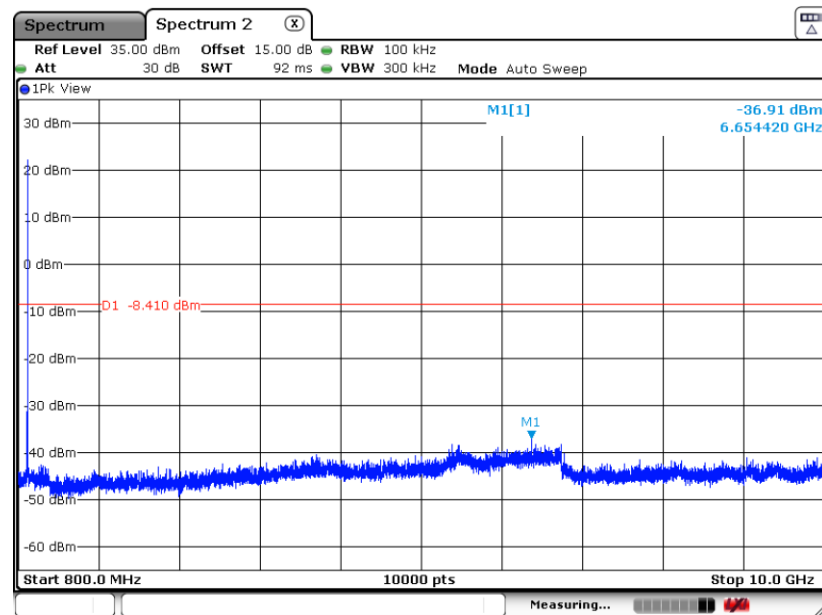
For SF8:

### Conducted Spurious Emission Plot on 902.5 MHz



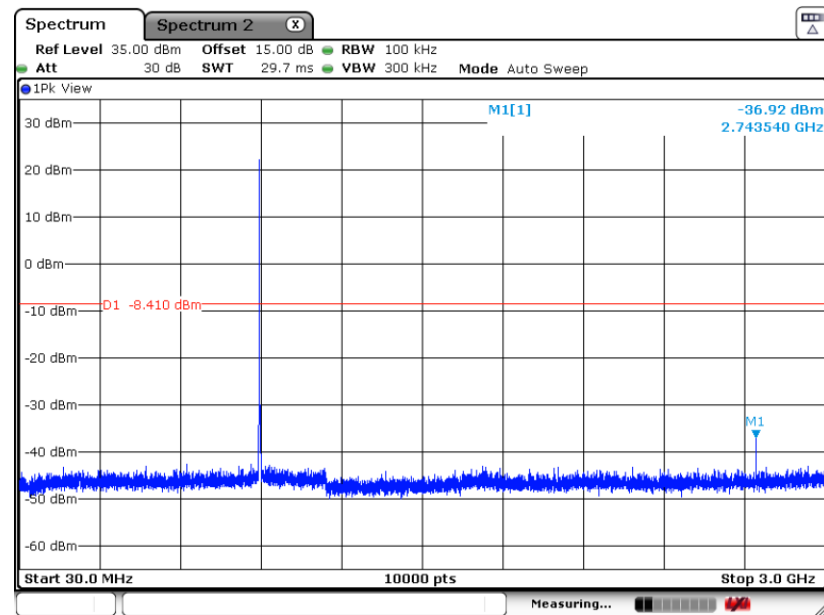
Date: 14 JUN 2022 21:52:09

### Conducted Spurious Emission Plot on 902.5 MHz



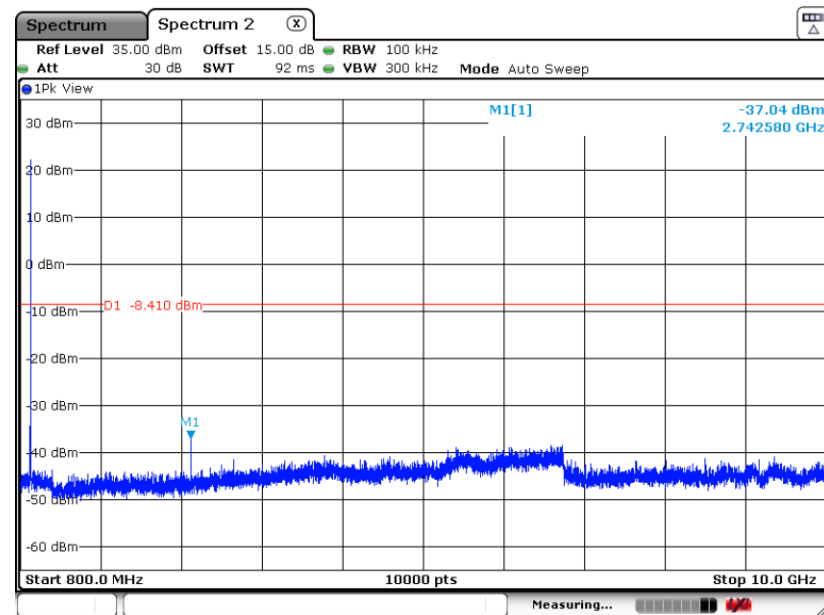
Date: 14 JUN 2022 21:54:07

### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14.JUN.2022 21:55:18

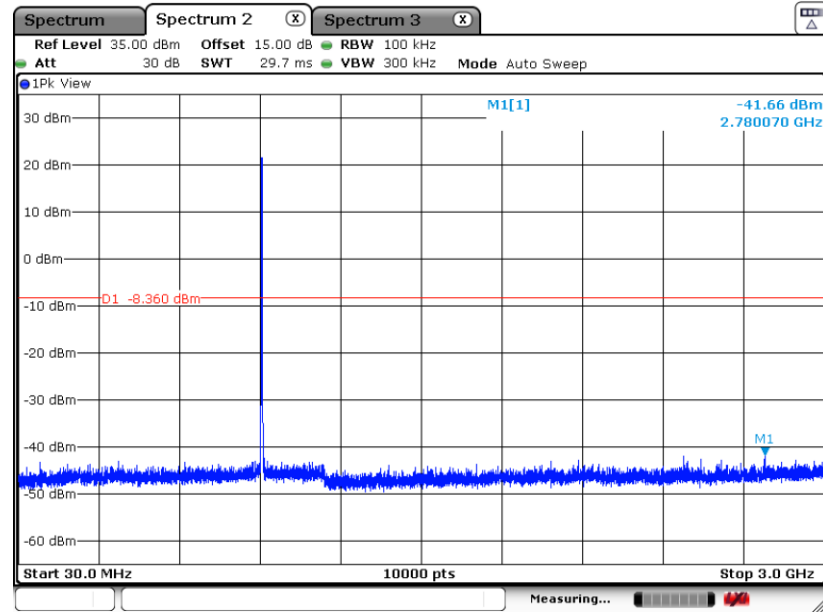
### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14.JUN.2022 21:56:00

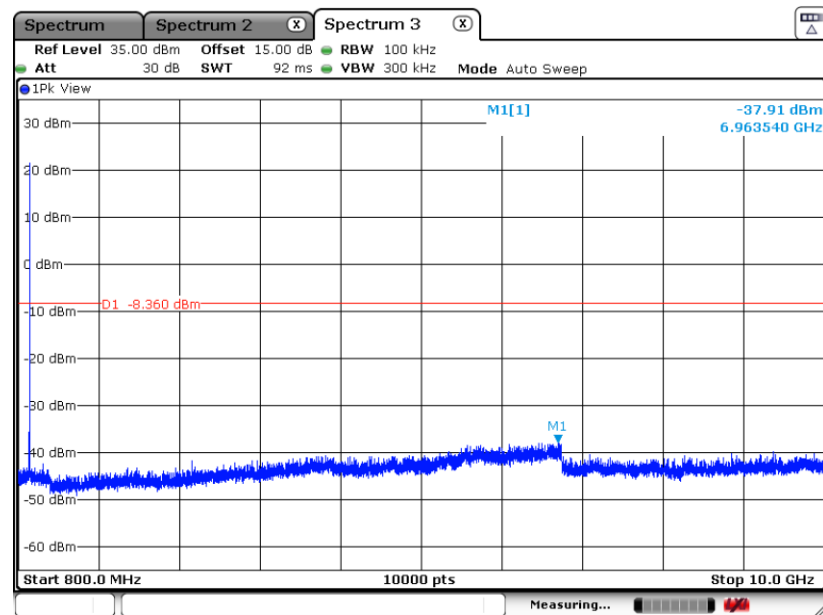


### Conducted Spurious Emission Plot on 926.5 MHz



Date: 14.JUN.2022 21:56:18

### Conducted Spurious Emission Plot on 926.5 MHz

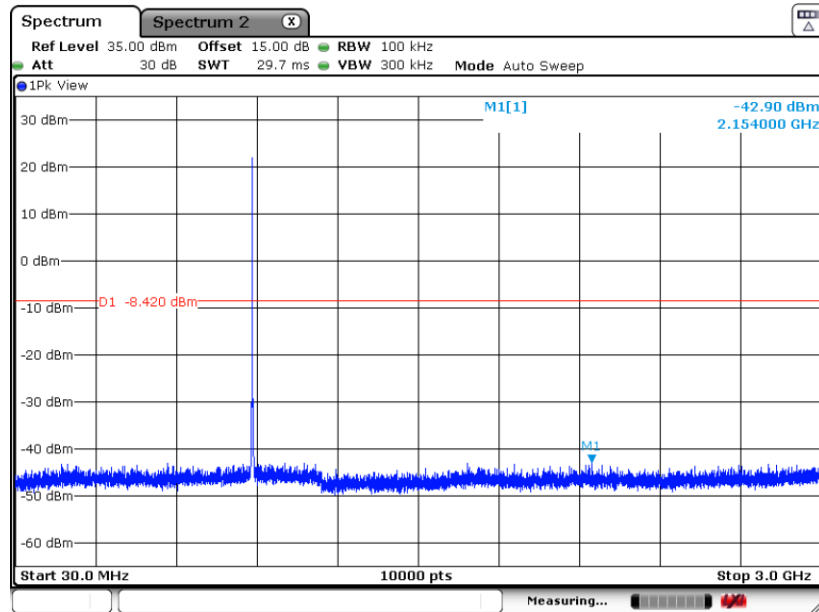


Date: 14.JUN.2022 21:55:35



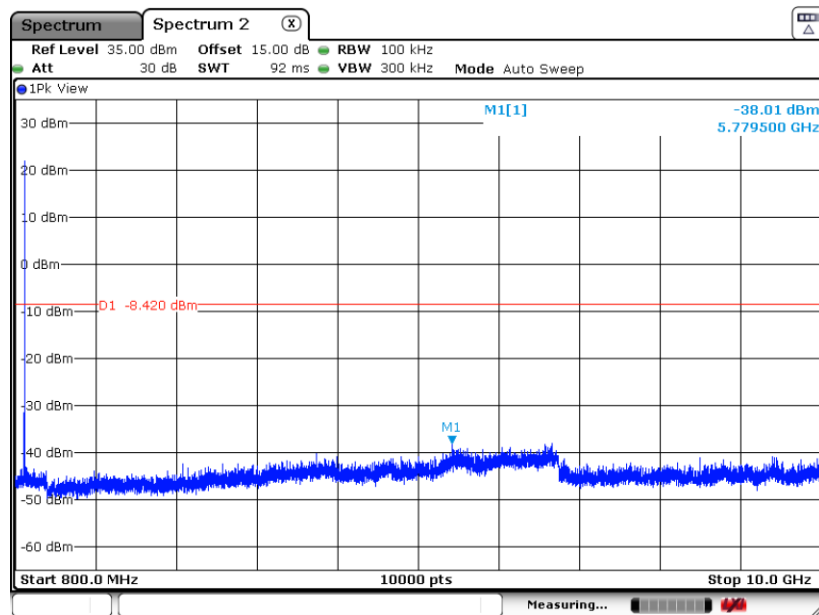
For SF9:

### Conducted Spurious Emission Plot on 902.5 MHz



Date: 14 JUN 2022 22:02:01

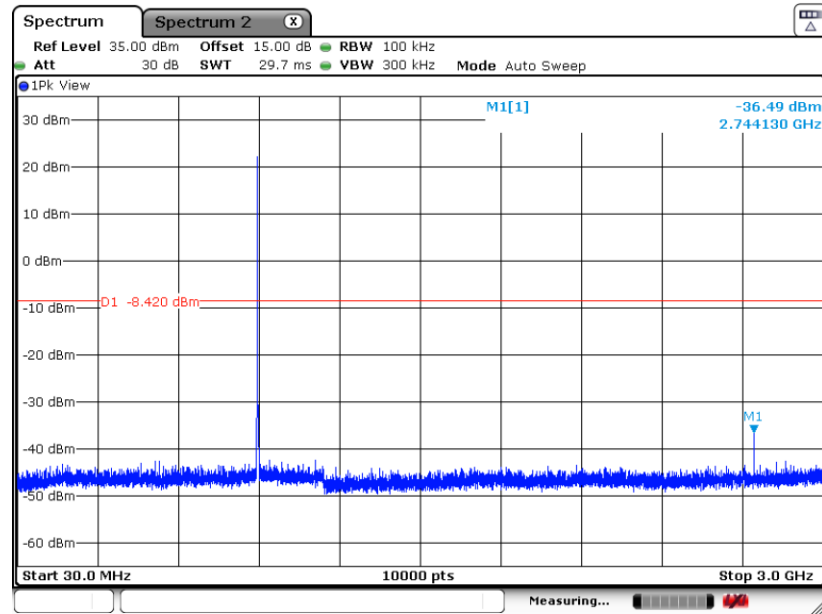
### Conducted Spurious Emission Plot on 902.5 MHz



Date: 14 JUN 2022 22:01:37

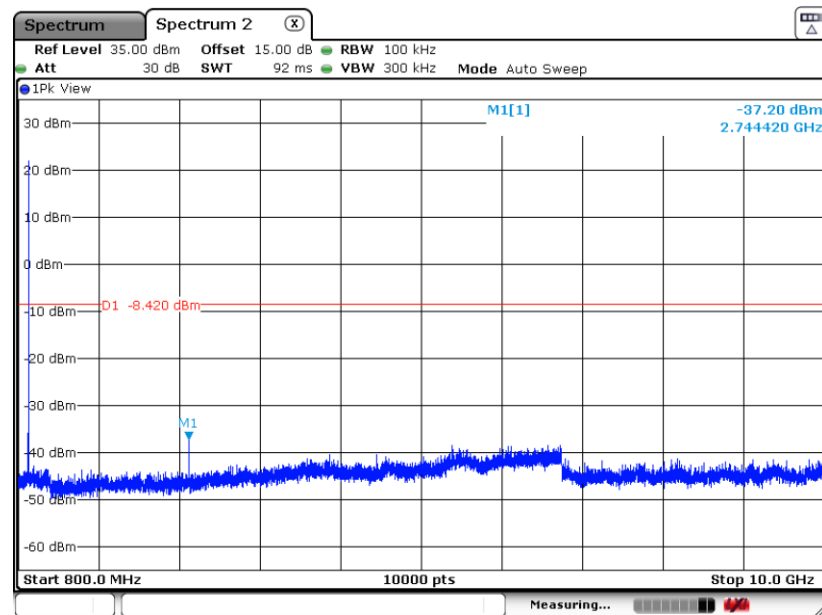


### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14 JUN 2022 21:59:07

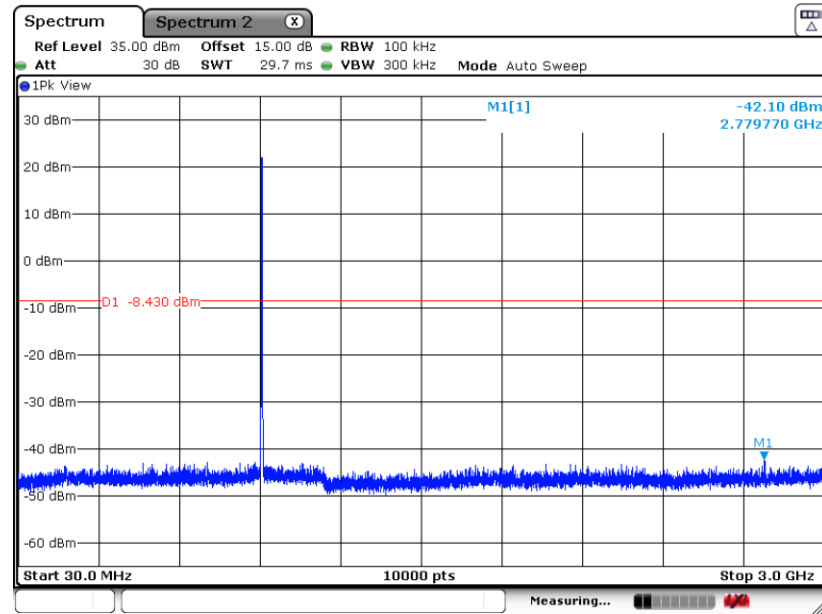
### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14 JUN 2022 22:05:05

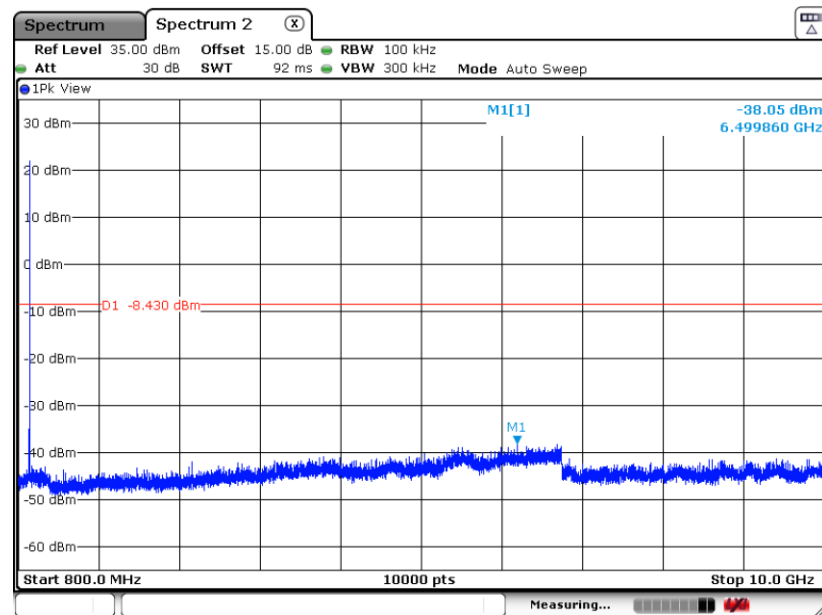


### Conducted Spurious Emission Plot on 926.5 MHz



Date: 14 JUN 2022 22:03:11

### Conducted Spurious Emission Plot on 926.5 MHz

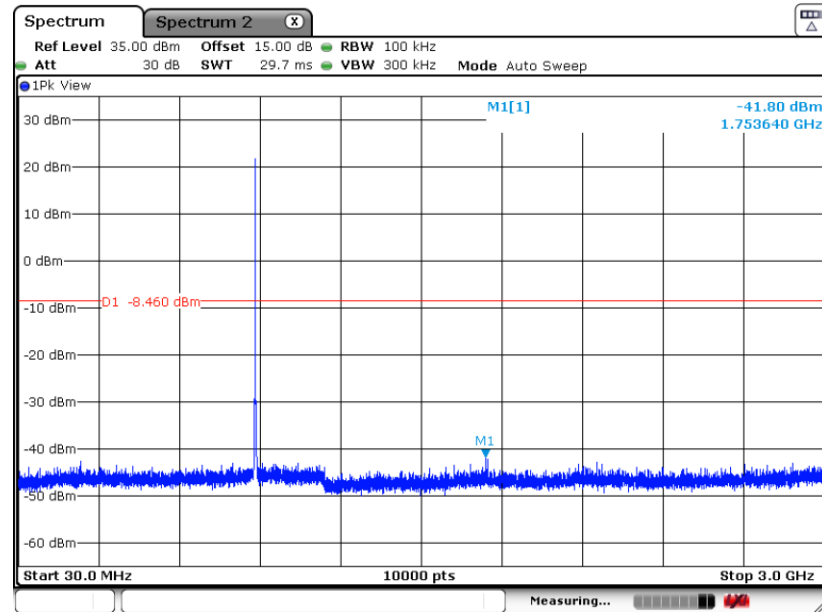


Date: 14 JUN 2022 22:03:46



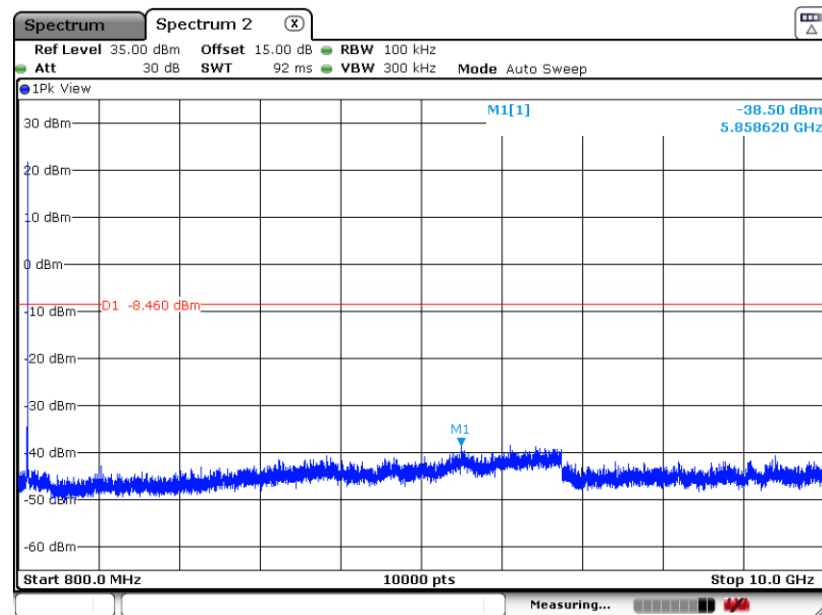
For SF10:

### Conducted Spurious Emission Plot on 902.5 MHz



Date: 14 JUN 2022 22:09:22

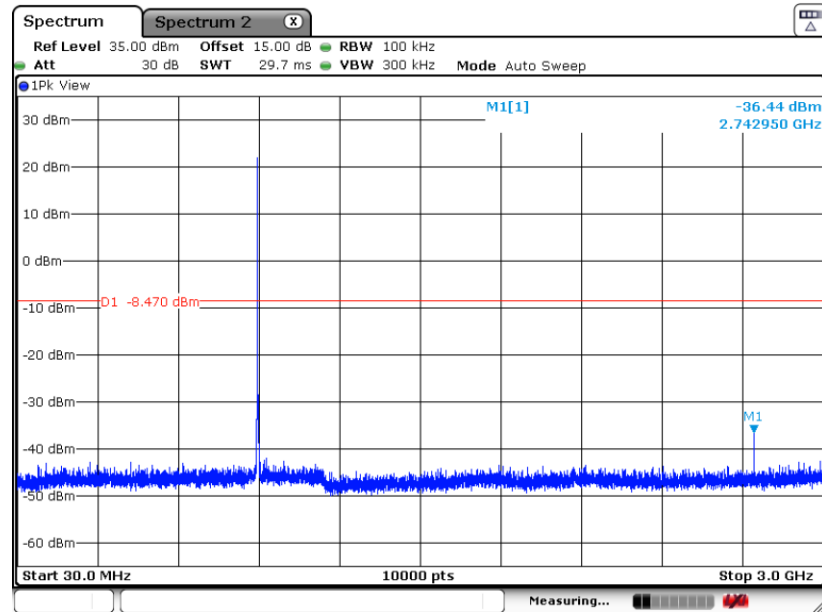
### Conducted Spurious Emission Plot on 902.5 MHz



Date: 14 JUN 2022 22:09:54

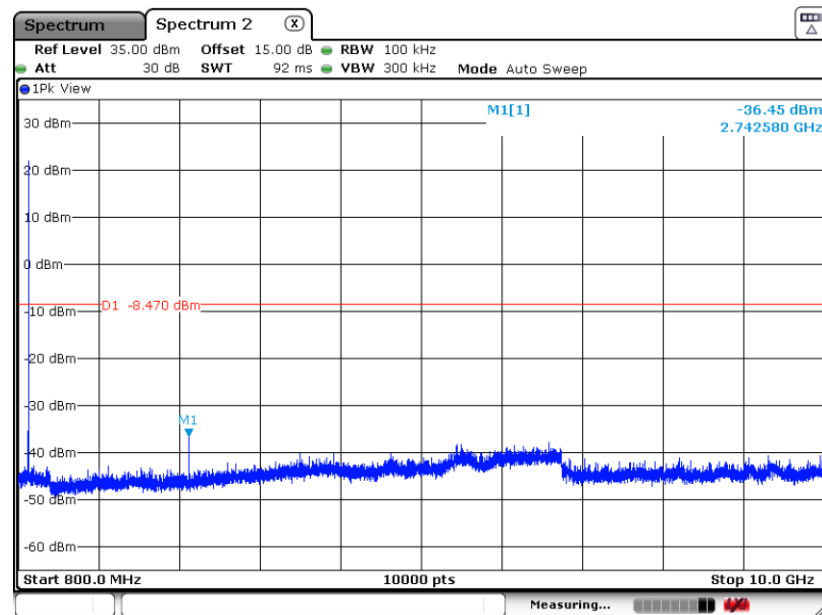


### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14 JUN 2022 22:08:31

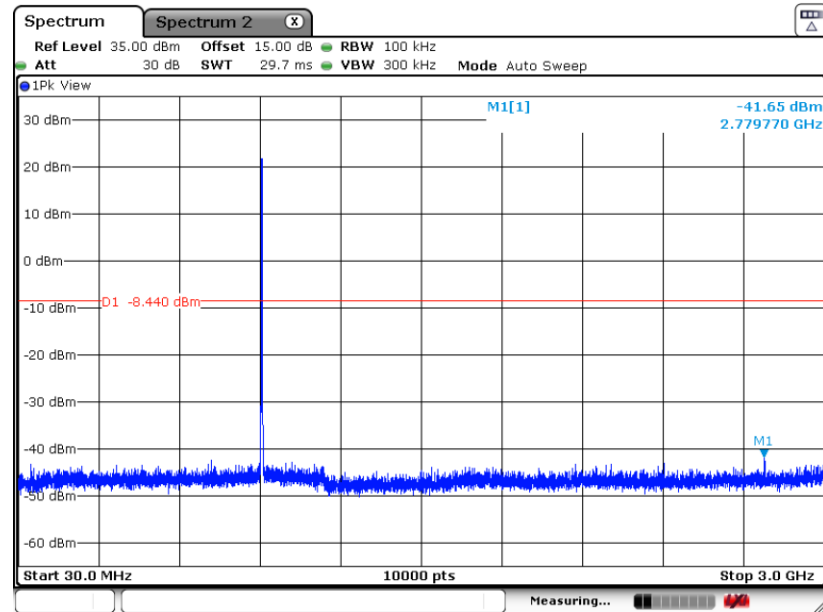
### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14 JUN 2022 22:07:59

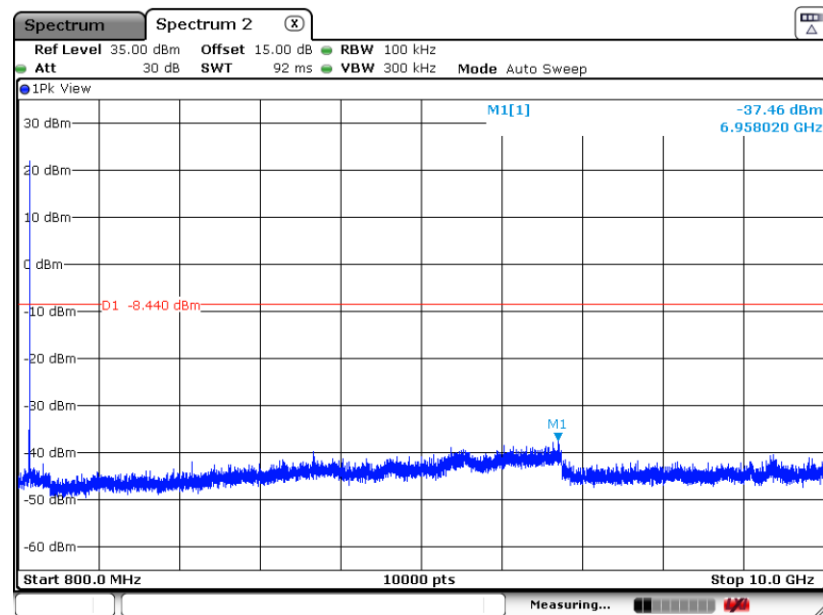


### Conducted Spurious Emission Plot on 926.5 MHz



Date: 14 JUN 2022 22:11:35

### Conducted Spurious Emission Plot on 926.5 MHz

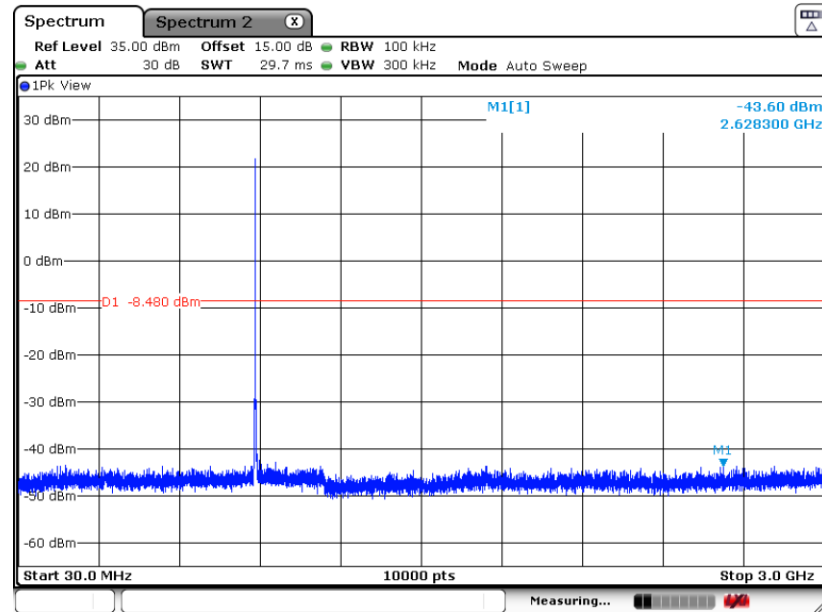


Date: 14 JUN 2022 22:11:08



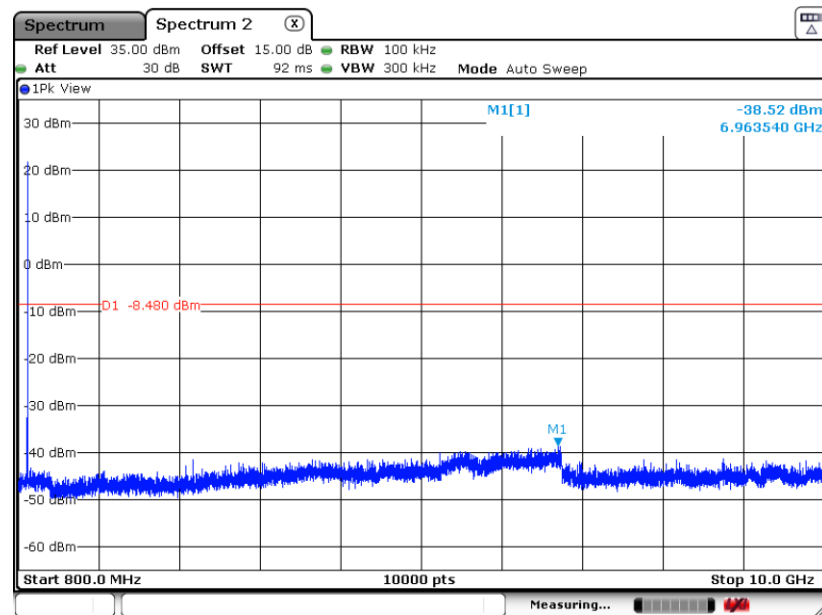
For SF11:

### Conducted Spurious Emission Plot on 902.5 MHz



Date: 14 JUN 2022 22:17:23

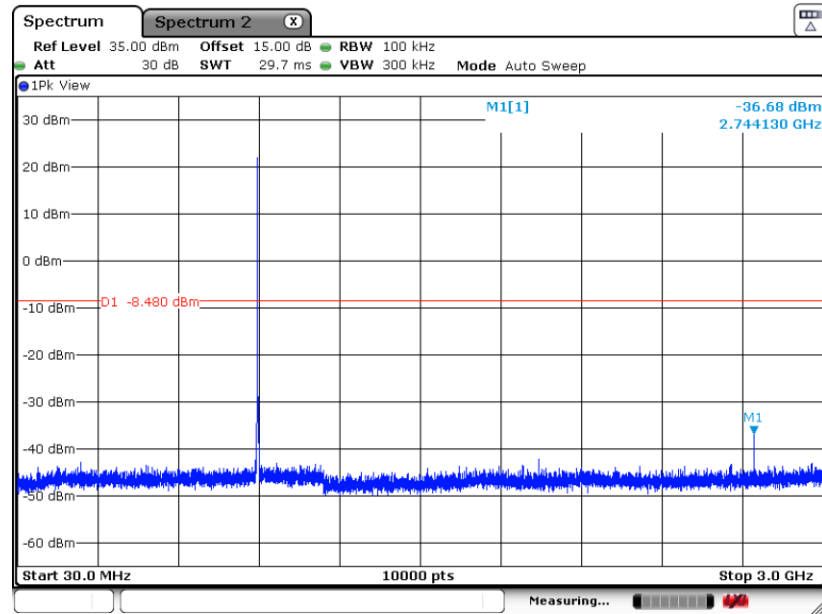
### Conducted Spurious Emission Plot on 902.5 MHz



Date: 14 JUN 2022 22:17:49

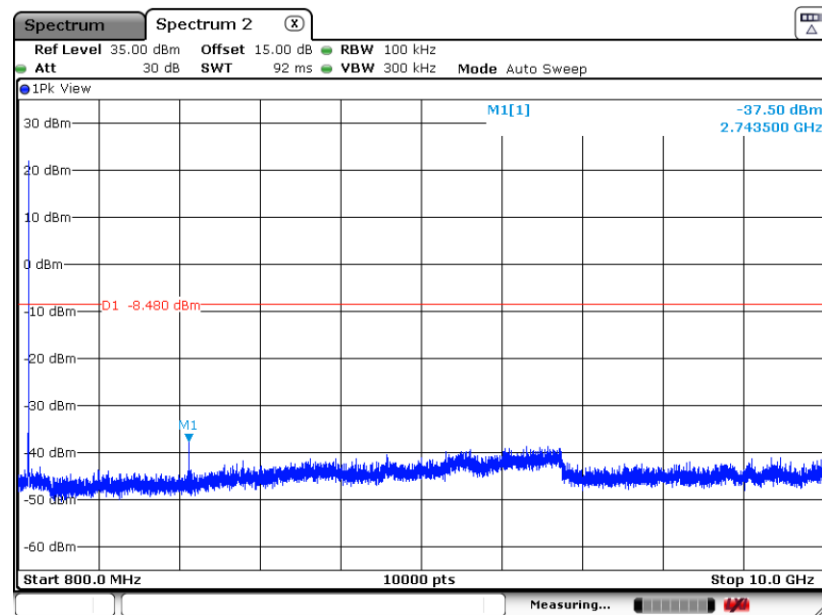


### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14 JUN 2022 22:15:38

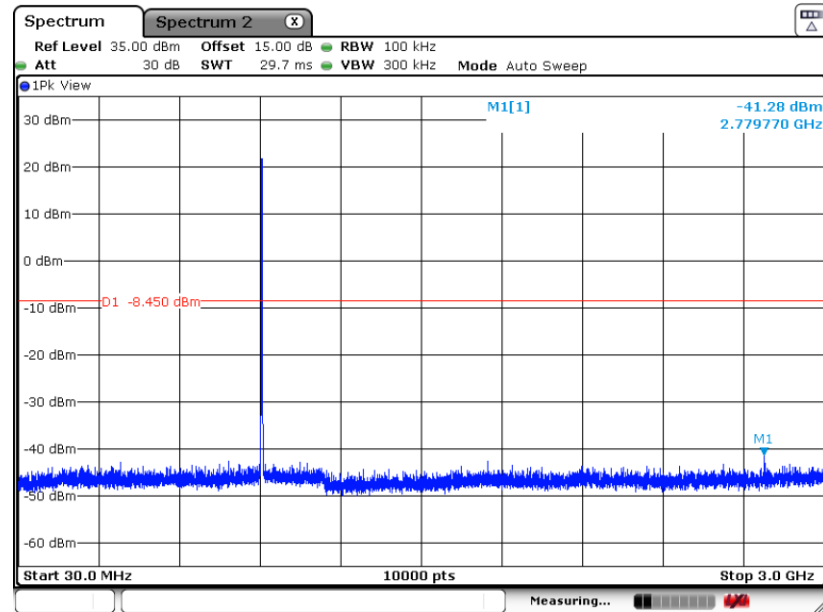
### Conducted Spurious Emission Plot on 914.5 MHz



Date: 14 JUN 2022 22:15:12

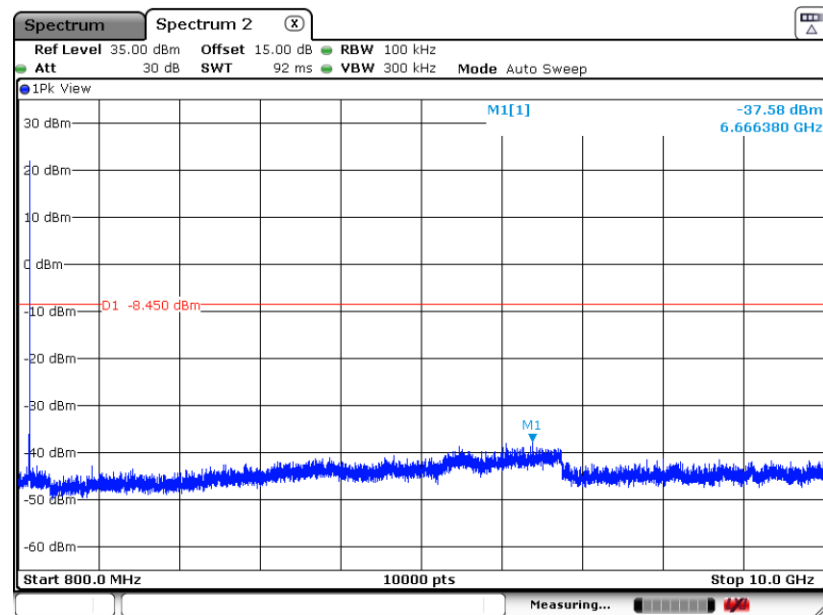


### Conducted Spurious Emission Plot on 926.5 MHz



Date: 14 JUN 2022 22:13:32

### Conducted Spurious Emission Plot on 926.5 MHz



Date: 14 JUN 2022 22:14:06

### 3.5 Radiated Band Edges and Spurious Emission Measurement

#### 3.5.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

| Frequency<br>(MHz) | Field Strength<br>(microvolts/meter) | Measurement Distance<br>(meters) |
|--------------------|--------------------------------------|----------------------------------|
| 0.009 – 0.490      | 2400/F(kHz)                          | 300                              |
| 0.490 – 1.705      | 24000/F(kHz)                         | 30                               |
| 1.705 – 30.0       | 30                                   | 30                               |
| 30 – 88            | 100                                  | 3                                |
| 88 – 216           | 150                                  | 3                                |
| 216 - 960          | 200                                  | 3                                |
| Above 960          | 500                                  | 3                                |

#### 3.5.2 Measuring Instruments

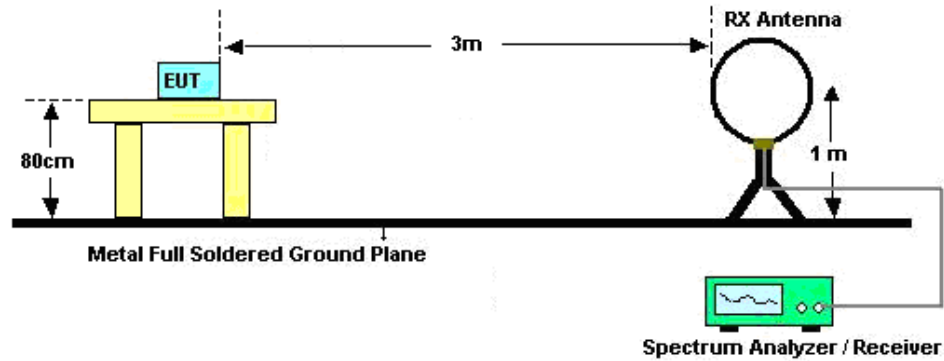
The section 4.0 of List of Measuring Equipment of this test report is used for test.

### 3.5.3 Test Procedures

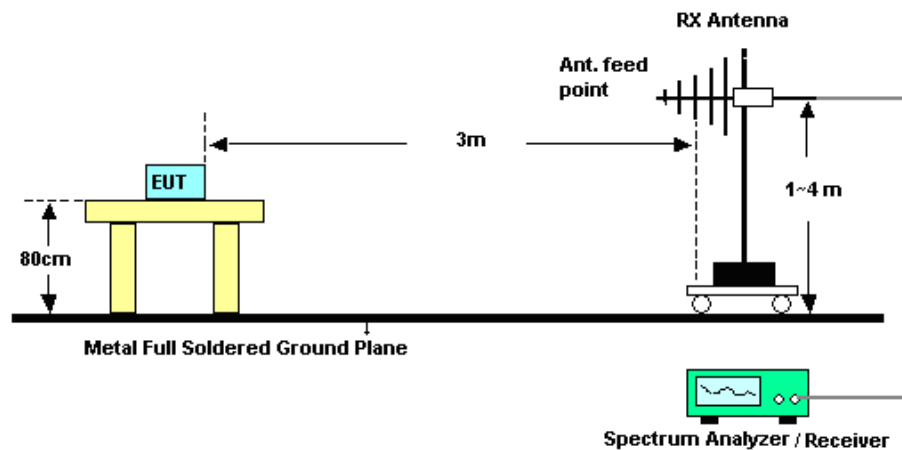
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW=100 kHz for  $f < 1$  GHz;  $VBW \geq RBW$ ; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz, VBW= 3MHz for  $f \geq 1$  GHz for peak measurement.  
For average measurement:
    - $VBW = 10$  Hz, when duty cycle is no less than 98 percent.
    - $VBW \geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

### 3.5.4 Test Setup

For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



**3.5.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

**3.5.6 Test Result of Radiated Spurious at Band Edges**

Please refer to Appendix C.

**3.5.7 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)**

Please refer to Appendix C.

## 3.6 AC Conducted Emission Measurement

### 3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency of emission (MHz) | Conducted limit (dBμV) |           |
|-----------------------------|------------------------|-----------|
|                             | Quasi-peak             | Average   |
| 0.15-0.5                    | 66 to 56*              | 56 to 46* |
| 0.5-5                       | 56                     | 46        |
| 5-30                        | 60                     | 50        |

\*Decreases with the logarithm of the frequency.

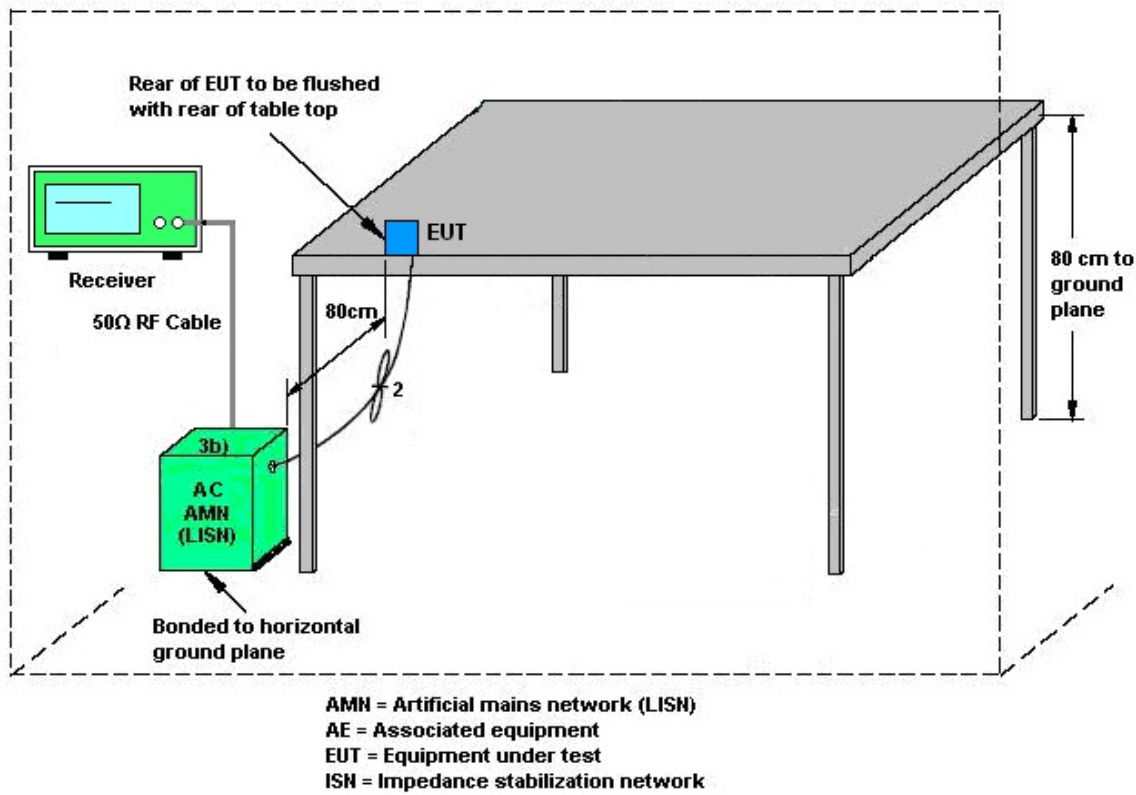
### 3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

### 3.6.3 Test 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.

### 3.6.4 Test Setup



### 3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



## **3.7 Antenna Requirements**

### **3.7.1 Standard Applicable**

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

### **3.7.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

### **3.7.3 Antenna Gain**

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



## 4 List of Measuring Equipment

| Instrument                        | Manufacturer | Model No.  | Serial No.   | Characteristics         | Calibration Date | Test Date                       | Due Date      | Remark                |
|-----------------------------------|--------------|------------|--------------|-------------------------|------------------|---------------------------------|---------------|-----------------------|
| Spectrum Analyzer                 | R&S          | FSV40      | 101040       | 10Hz~40GHz              | Oct. 14, 2021    | Jan. 02, 2022~<br>Jun. 14, 2022 | Oct. 13, 2022 | Conducted (TH01-KS)   |
| Pulse Power Sensor                | Anritsu      | MA2411B    | 0917070      | 300MHz~40GHz            | Jan. 06, 2021    | Jan. 02, 2022~<br>Jun. 14, 2022 | Jan. 05, 2022 | Conducted (TH01-KS)   |
| Pulse Power Sensor                | Anritsu      | MA2411B    | 0917070      | 300MHz~40GHz            | Jan. 05, 2022    |                                 | Jan. 04, 2023 | Conducted (TH01-KS)   |
| Power Meter                       | Anritsu      | ML2495A    | 1005002      | 50MHz Bandwidth         | Jan. 06, 2021    | Jan. 02, 2022~<br>Jun. 14, 2022 | Jan. 05, 2022 | Conducted (TH01-KS)   |
| Power Meter                       | Anritsu      | ML2495A    | 1005002      | 50MHz Bandwidth         | Jan. 05, 2022    |                                 | Jan. 04, 2023 | Conducted (TH01-KS)   |
| EMI Test Receiver                 | Keysight     | N9038A     | MY56400004   | 3Hz~8.5GHz; Max 30dBm   | Oct. 16, 2021    | Jun. 24, 2022                   | Oct. 15, 2022 | Radiation (03CH06-KS) |
| EXA Spectrum Analyzer             | Keysight     | N9010B     | MY60242126   | 10Hz~44GHz              | Oct. 26, 2021    | Jun. 24, 2022                   | Oct. 25, 2022 | Radiation (03CH06-KS) |
| Loop Antenna                      | R&S          | HFH2-Z2    | 100321       | 9kHz~30MHz              | Oct. 30, 2021    | Jun. 24, 2022                   | Oct. 29, 2022 | Radiation (03CH06-KS) |
| Bilog Antenna                     | TeseQ        | CBL6111D   | 49921        | 30MHz~1GHz              | May 24, 2022     | Jun. 24, 2022                   | May 23, 2023  | Radiation (03CH06-KS) |
| Double Ridge Horn Antenna         | ETS-Lindgren | 3117       | 00240138     | 1GHz~18GHz              | Jul. 19, 2021    | Jun. 24, 2022                   | Jul. 18, 2022 | Radiation (03CH06-KS) |
| Amplifier                         | SONOMA       | 310N       | 380827       | 9KHz ~1GHZ              | Jul. 30, 2021    | Jun. 24, 2022                   | Jul. 29, 2022 | Radiation (03CH06-KS) |
| Amplifier                         | MITEQ        | EM18G40GGA | 060728       | 18~40GHz                | Jan. 05, 2022    | Jun. 24, 2022                   | Jan. 04, 2023 | Radiation (03CH06-KS) |
| Amplifier                         | Keysight     | 83017A     | MY53270319   | 500MHz~26.5GHz          | Oct. 14, 2021    | Jun. 24, 2022                   | Oct. 13, 2022 | Radiation (03CH06-KS) |
| AC Power Source                   | Chroma       | 61601      | F104090004   | N/A                     | NCR              | Jun. 24, 2022                   | NCR           | Radiation (03CH06-KS) |
| Turn Table                        | ChamPro      | EM 1000-T  | 060762-T     | 0~360 degree            | NCR              | Jun. 24, 2022                   | NCR           | Radiation (03CH06-KS) |
| Antenna Mast                      | ChamPro      | EM 1000-A  | 060762-A     | 1 m~4 m                 | NCR              | Jun. 24, 2022                   | NCR           | Radiation (03CH06-KS) |
| EMI Receiver                      | R&S          | ESCI7      | 100768       | 9kHz~7GHz;              | Apr. 20, 2022    | Jun. 11, 2022                   | Apr. 19, 2023 | Conduction (CO01-KS)  |
| AC LISN (for auxiliary equipment) | MessTec      | AN3016     | 060103       | 9kHz~30MHz              | Oct. 14, 2021    | Jun. 11, 2022                   | Oct. 13, 2022 | Conduction (CO01-KS)  |
| AC LISN                           | MessTec      | AN3016     | 060105       | 9kHz~30MHz              | Apr. 20, 2022    | Jun. 11, 2022                   | Apr. 19, 2023 | Conduction (CO01-KS)  |
| AC Power Source                   | Chroma       | 61602      | ABP000000811 | AC 0V~300V, 45Hz~1000Hz | Oct. 14, 2021    | Jun. 11, 2022                   | Oct. 13, 2022 | Conduction (CO01-KS)  |

NCR: No Calibration Required

## 5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

### Uncertainty of Conducted Measurement

| Test Item                        | Uncertainty   |
|----------------------------------|---------------|
| Conducted Power                  | $\pm 0.56$ dB |
| Conducted Emissions              | $\pm 0.92$ dB |
| Occupied Channel Bandwidth       | $\pm 0.03$ %  |
| Conducted Power Spectral Density | $\pm 0.54$ dB |

### Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

|                                                                         |        |
|-------------------------------------------------------------------------|--------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 2.94dB |
|-------------------------------------------------------------------------|--------|

### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.0dB |
|-------------------------------------------------------------------------|-------|

### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.0dB |
|-------------------------------------------------------------------------|-------|



## Appendix A. Conducted Test Results

|                |                    |                    |       |    |
|----------------|--------------------|--------------------|-------|----|
| Test Engineer: | Alan He            | Temperature:       | 20~26 | °C |
| Test Date:     | 2022/1/2~2022/6/14 | Relative Humidity: | 40~51 | %  |

**LoRa-DTS-Spreading Factor 5**

**TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| Mod. | Channel | Freq.<br>(MHz) | 99%<br>Occupied<br>BW<br>(MHz) | 6dB BW<br>(MHz) | 6dB BW<br>Limit<br>(MHz) | Pass/Fail |
|------|---------|----------------|--------------------------------|-----------------|--------------------------|-----------|
| SF5  | 1       | 902.5Mhz       | 0.518                          | 0.596           | 0.50                     | Pass      |
| SF5  | 16      | 914.5Mhz       | 0.538                          | 0.605           | 0.50                     | Pass      |
| SF5  | 31      | 926.5Mhz       | 0.533                          | 0.593           | 0.50                     | Pass      |

**TEST RESULTS DATA**  
**Average Power Table**

| Mod. | Channel | Freq.<br>(MHz) | Duty<br>Factor<br>(dB) | Average<br>Conducted<br>Power<br>(dBm) |
|------|---------|----------------|------------------------|----------------------------------------|
| SF5  | 1       | 902.5Mhz       | 0.22                   | 19.97                                  |
| SF5  | 16      | 914.5Mhz       | 0.22                   | 19.93                                  |
| SF5  | 31      | 926.5Mhz       | 0.22                   | 19.80                                  |

**TEST RESULTS DATA**  
**Peak Power Density**

| Mod. | Channel | Freq.<br>(MHz) | Peak PSD<br>(dBm<br>/100kHz) | Peak PSD<br>(dBm<br>/3kHz) | DG<br>(dBi) | Peak PSD<br>Limit<br>(dBm<br>/3kHz) | Pass/Fail |
|------|---------|----------------|------------------------------|----------------------------|-------------|-------------------------------------|-----------|
| SF5  | 1       | 902.5Mhz       | 19.66                        | 6.22                       | 0.95        | 8.00                                | Pass      |
| SF5  | 16      | 914.5Mhz       | 19.75                        | 6.02                       | 0.95        | 8.00                                | Pass      |
| SF5  | 31      | 926.5Mhz       | 19.65                        | 6.47                       | 0.95        | 8.00                                | Pass      |

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 30dBc limit.

**LoRa-DTS-Spreading Factor 7****TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| Mod. | Channel | Freq.<br>(MHz) | 99%<br>Occupied<br>BW<br>(MHz) | 6dB BW<br>(MHz) | 6dB BW<br>Limit<br>(MHz) | Pass/Fail |
|------|---------|----------------|--------------------------------|-----------------|--------------------------|-----------|
| SF7  | 1       | 902.5Mhz       | 0.530                          | 0.622           | 0.50                     | Pass      |
| SF7  | 16      | 914.5Mhz       | 0.533                          | 0.622           | 0.50                     | Pass      |
| SF7  | 31      | 926.5Mhz       | 0.521                          | 0.622           | 0.50                     | Pass      |

**TEST RESULTS DATA**  
**Average Power Table**

| Mod. | Channel | Freq.<br>(MHz) | Duty<br>Factor<br>(dB) | Average<br>Conducted<br>Power<br>(dBm) |
|------|---------|----------------|------------------------|----------------------------------------|
| SF7  | 1       | 902.5Mhz       | 0.04                   | 21.29                                  |
| SF7  | 16      | 914.5Mhz       | 0.04                   | 21.34                                  |
| SF7  | 31      | 926.5Mhz       | 0.04                   | 21.25                                  |

**TEST RESULTS DATA**  
**Peak Power Density**

| Mod. | Channel | Freq.<br>(MHz) | Peak PSD<br>(dBm<br>/100kHz) | Peak PSD<br>(dBm<br>/3kHz) | DG<br>(dBi) | Peak PSD<br>Limit<br>(dBm<br>/3kHz) | Pass/Fail |
|------|---------|----------------|------------------------------|----------------------------|-------------|-------------------------------------|-----------|
| SF7  | 1       | 902.5Mhz       | 21.58                        | 2.17                       | 0.95        | 8.00                                | Pass      |
| SF7  | 16      | 914.5Mhz       | 21.56                        | 1.90                       | 0.95        | 8.00                                | Pass      |
| SF7  | 31      | 926.5Mhz       | 21.60                        | 2.19                       | 0.95        | 8.00                                | Pass      |

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.

**LoRa-DTS-Spreading Factor 8****TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| Mod. | Channel | Freq.<br>(MHz) | 99%<br>Occupied<br>BW<br>(MHz) | 6dB BW<br>(MHz) | 6dB BW<br>Limit<br>(MHz) | Pass/Fail |
|------|---------|----------------|--------------------------------|-----------------|--------------------------|-----------|
| SF8  | 1       | 902.5Mhz       | 0.527                          | 0.631           | 0.50                     | Pass      |
| SF8  | 16      | 914.5Mhz       | 0.535                          | 0.634           | 0.50                     | Pass      |
| SF8  | 31      | 926.5Mhz       | 0.527                          | 0.631           | 0.50                     | Pass      |

**TEST RESULTS DATA**  
**Average Power Table**

| Mod. | Channel | Freq.<br>(MHz) | Duty<br>Factor<br>(dB) | Average<br>Conducted<br>Power<br>(dBm) |
|------|---------|----------------|------------------------|----------------------------------------|
| SF8  | 1       | 902.5Mhz       | 0.19                   | 21.35                                  |
| SF8  | 16      | 914.5Mhz       | 0.19                   | 21.37                                  |
| SF8  | 31      | 926.5Mhz       | 0.19                   | 21.36                                  |

**TEST RESULTS DATA**  
**Peak Power Density**

| Mod. | Channel | Freq.<br>(MHz) | Peak PSD<br>(dBm<br>/100kHz) | Peak PSD<br>(dBm<br>/3kHz) | DG<br>(dBi) | Peak PSD<br>Limit<br>(dBm<br>/3kHz) | Pass/Fail |
|------|---------|----------------|------------------------------|----------------------------|-------------|-------------------------------------|-----------|
| SF8  | 1       | 902.5Mhz       | 21.59                        | 1.33                       | 0.95        | 8.00                                | Pass      |
| SF8  | 16      | 914.5Mhz       | 21.59                        | 1.06                       | 0.95        | 8.00                                | Pass      |
| SF8  | 31      | 926.5Mhz       | 21.64                        | 1.37                       | 0.95        | 8.00                                | Pass      |

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.

**LoRa-DTS-Spreading Factor 9****TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| Mod. | Channel | Freq.<br>(MHz) | 99%<br>Occupied<br>BW<br>(MHz) | 6dB BW<br>(MHz) | 6dB BW<br>Limit<br>(MHz) | Pass/Fail |
|------|---------|----------------|--------------------------------|-----------------|--------------------------|-----------|
| SF9  | 1       | 902.5Mhz       | 0.533                          | 0.634           | 0.50                     | Pass      |
| SF9  | 16      | 914.5Mhz       | 0.538                          | 0.634           | 0.50                     | Pass      |
| SF9  | 31      | 926.5Mhz       | 0.533                          | 0.634           | 0.50                     | Pass      |

**TEST RESULTS DATA**  
**Average Power Table**

| Mod. | Channel | Freq.<br>(MHz) | Duty<br>Factor<br>(dB) | Average<br>Conducted<br>Power<br>(dBm) |
|------|---------|----------------|------------------------|----------------------------------------|
| SF9  | 1       | 902.5Mhz       | 0.21                   | 21.26                                  |
| SF9  | 16      | 914.5Mhz       | 0.21                   | 21.31                                  |
| SF9  | 31      | 926.5Mhz       | 0.21                   | 21.29                                  |

**TEST RESULTS DATA**  
**Peak Power Density**

| Mod. | Channel | Freq.<br>(MHz) | Peak PSD<br>(dBm<br>/100kHz) | Peak PSD<br>(dBm<br>/3kHz) | DG<br>(dBi) | Peak PSD<br>Limit<br>(dBm<br>/3kHz) | Pass/Fail |
|------|---------|----------------|------------------------------|----------------------------|-------------|-------------------------------------|-----------|
| SF9  | 1       | 902.5Mhz       | 21.58                        | 1.03                       | 0.95        | 8.00                                | Pass      |
| SF9  | 16      | 914.5Mhz       | 21.58                        | 0.91                       | 0.95        | 8.00                                | Pass      |
| SF9  | 31      | 926.5Mhz       | 21.57                        | 1.05                       | 0.95        | 8.00                                | Pass      |

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.

**LoRa-DTS-Spreading Factor 10****TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| Mod. | Channel | Freq.<br>(MHz) | 99%<br>Occupied<br>BW<br>(MHz) | 6dB BW<br>(MHz) | 6dB BW<br>Limit<br>(MHz) | Pass/Fail |
|------|---------|----------------|--------------------------------|-----------------|--------------------------|-----------|
| SF10 | 1       | 902.5Mhz       | 0.535                          | 0.640           | 0.50                     | Pass      |
| SF10 | 16      | 914.5Mhz       | 0.538                          | 0.640           | 0.50                     | Pass      |
| SF10 | 31      | 926.5Mhz       | 0.535                          | 0.640           | 0.50                     | Pass      |

**TEST RESULTS DATA**  
**Average Power Table**

| Mod. | Channel | Freq.<br>(MHz) | Duty<br>Factor<br>(dB) | Average<br>Conducted<br>Power<br>(dBm) |
|------|---------|----------------|------------------------|----------------------------------------|
| SF10 | 1       | 902.5Mhz       | 0.22                   | 21.28                                  |
| SF10 | 16      | 914.5Mhz       | 0.22                   | 21.33                                  |
| SF10 | 31      | 926.5Mhz       | 0.22                   | 21.31                                  |

**TEST RESULTS DATA**  
**Peak Power Density**

| Mod. | Channel | Freq.<br>(MHz) | Peak PSD<br>(dBm<br>/100kHz) | Peak PSD<br>(dBm<br>/3kHz) | DG<br>(dBi) | Peak PSD<br>Limit<br>(dBm<br>/3kHz) | Pass/Fail |
|------|---------|----------------|------------------------------|----------------------------|-------------|-------------------------------------|-----------|
| SF10 | 1       | 902.5Mhz       | 21.54                        | 0.95                       | 0.95        | 8.00                                | Pass      |
| SF10 | 16      | 914.5Mhz       | 21.53                        | 0.67                       | 0.95        | 8.00                                | Pass      |
| SF10 | 31      | 926.5Mhz       | 21.56                        | 0.96                       | 0.95        | 8.00                                | Pass      |

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.

**LoRa-DTS-Spreading Factor 11****TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| Mod. | Channel | Freq.<br>(MHz) | 99%<br>Occupied<br>BW<br>(MHz) | 6dB BW<br>(MHz) | 6dB BW<br>Limit<br>(MHz) | Pass/Fail |
|------|---------|----------------|--------------------------------|-----------------|--------------------------|-----------|
| SF11 | 1       | 902.5Mhz       | 0.533                          | 0.640           | 0.50                     | Pass      |
| SF11 | 16      | 914.5Mhz       | 0.538                          | 0.640           | 0.50                     | Pass      |
| SF11 | 31      | 926.5Mhz       | 0.538                          | 0.640           | 0.50                     | Pass      |

**TEST RESULTS DATA**  
**Average Power Table**

| Mod. | Channel | Freq.<br>(MHz) | Duty<br>Factor<br>(dB) | Average<br>Conducted<br>Power<br>(dBm) |
|------|---------|----------------|------------------------|----------------------------------------|
| SF11 | 1       | 902.5Mhz       | 0.21                   | 21.33                                  |
| SF11 | 16      | 914.5Mhz       | 0.21                   | 21.31                                  |
| SF11 | 31      | 926.5Mhz       | 0.21                   | 21.26                                  |

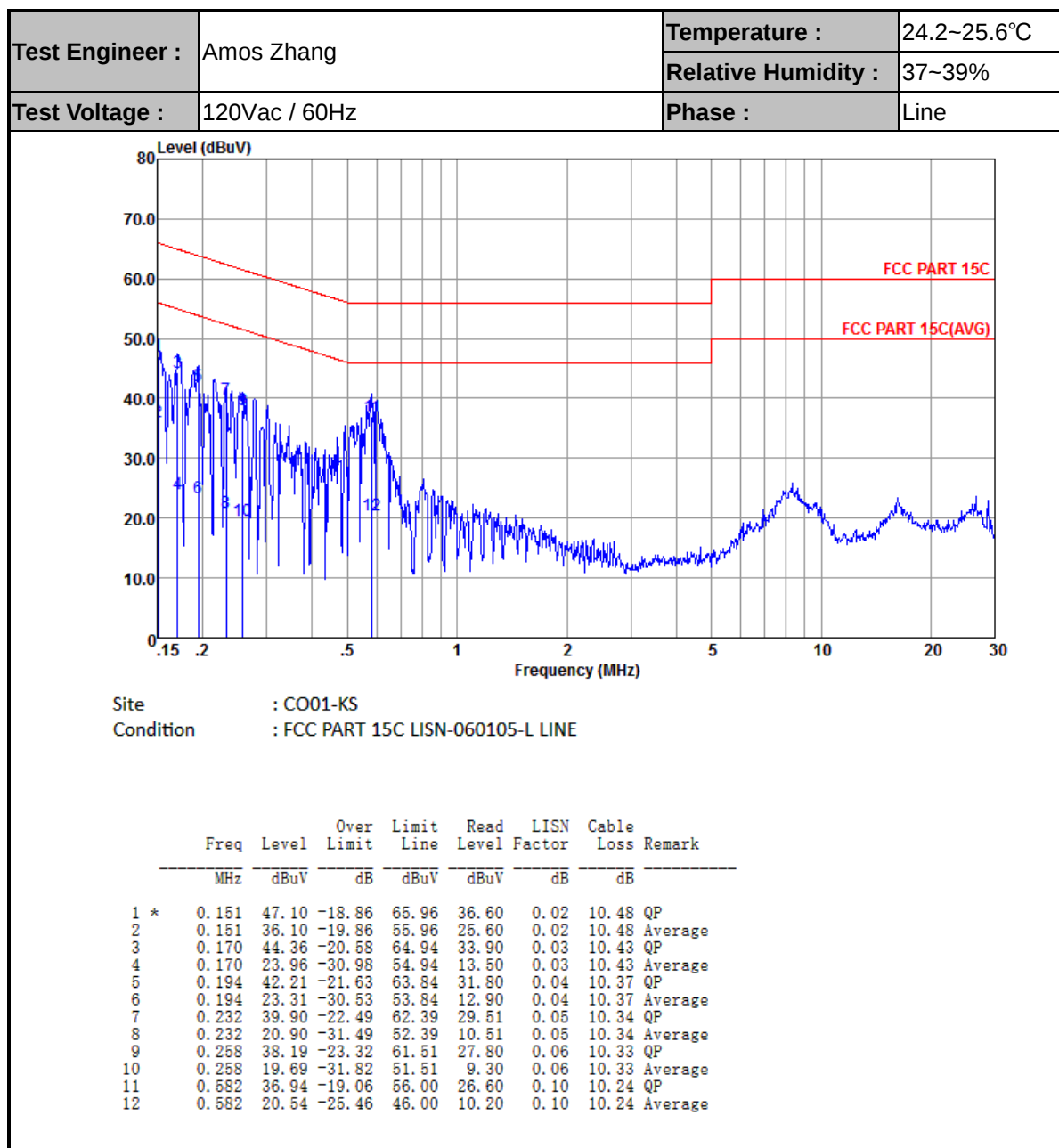
**TEST RESULTS DATA**  
**Peak Power Density**

| Mod. | Channel | Freq.<br>(MHz) | Peak PSD<br>(dBm<br>/100kHz) | Peak PSD<br>(dBm<br>/3kHz) | DG<br>(dBi) | Peak PSD<br>Limit<br>(dBm<br>/3kHz) | Pass/Fail |
|------|---------|----------------|------------------------------|----------------------------|-------------|-------------------------------------|-----------|
| SF11 | 1       | 902.5Mhz       | 21.52                        | 0.75                       | 0.95        | 8.00                                | Pass      |
| SF11 | 16      | 914.5Mhz       | 21.52                        | 0.56                       | 0.95        | 8.00                                | Pass      |
| SF11 | 31      | 926.5Mhz       | 21.55                        | 0.98                       | 0.95        | 8.00                                | Pass      |

Note: PSD (dBm/ 100kHz) is a reference level used for Conducted Band Edges and Conducted Spurious Emission 20dBc limit.

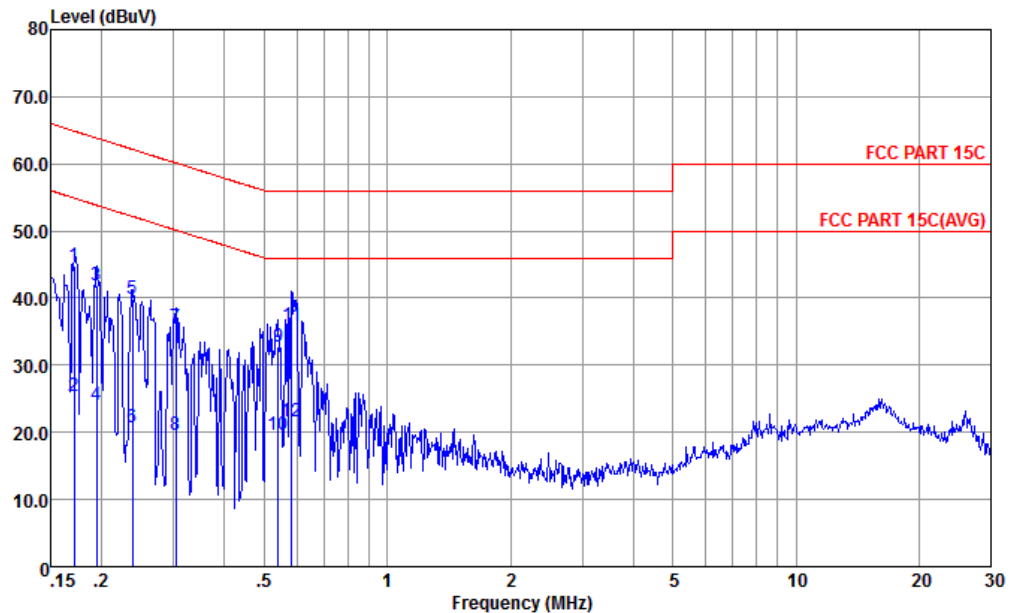


## Appendix B. AC Conducted Emission Test Results





|                        |               |                            |            |
|------------------------|---------------|----------------------------|------------|
| <b>Test Engineer :</b> | Amos Zhang    | <b>Temperature :</b>       | 24.2~25.6℃ |
|                        |               | <b>Relative Humidity :</b> | 37~39%     |
| <b>Test Voltage :</b>  | 120Vac / 60Hz | <b>Phase :</b>             | Neutral    |



Site : CO01-KS  
Condition : FCC PART 15C LISN-060105-N NEUTRAL

|      | Freq  | Level | Over   | Limit | Read  | LISN   | Cable | Remark  |
|------|-------|-------|--------|-------|-------|--------|-------|---------|
|      | MHz   | dBuV  | Limit  | Line  | Level | Factor | Loss  |         |
|      |       |       | dB     | dBuV  | dBuV  | dB     | dB    |         |
| 1    | 0.171 | 44.73 | -20.17 | 64.90 | 34.19 | 0.11   | 10.43 | QP      |
| 2    | 0.171 | 25.33 | -29.57 | 54.90 | 14.79 | 0.11   | 10.43 | Average |
| 3    | 0.194 | 41.98 | -21.86 | 63.84 | 31.51 | 0.10   | 10.37 | QP      |
| 4    | 0.194 | 24.08 | -29.76 | 53.84 | 13.61 | 0.10   | 10.37 | Average |
| 5    | 0.238 | 39.94 | -22.23 | 62.17 | 29.50 | 0.10   | 10.34 | QP      |
| 6    | 0.238 | 20.74 | -31.43 | 52.17 | 10.30 | 0.10   | 10.34 | Average |
| 7    | 0.303 | 35.61 | -24.54 | 60.15 | 25.20 | 0.10   | 10.31 | QP      |
| 8    | 0.303 | 19.71 | -30.44 | 50.15 | 9.30  | 0.10   | 10.31 | Average |
| 9    | 0.541 | 32.85 | -23.15 | 56.00 | 22.50 | 0.11   | 10.24 | QP      |
| 10   | 0.541 | 19.65 | -26.35 | 46.00 | 9.30  | 0.11   | 10.24 | Average |
| 11 * | 0.582 | 35.95 | -20.05 | 56.00 | 25.60 | 0.11   | 10.24 | QP      |
| 12   | 0.582 | 21.55 | -24.45 | 46.00 | 11.20 | 0.11   | 10.24 | Average |

Note:

1. Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



## Appendix C. Radiated Spurious Emission

902~928MHz

LORA DTS SF=5 (Band Edge @ 3m)

|               | Note | Frequency<br>( MHz )                                                                                                                                 | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 902.5MHz      |      | 903                                                                                                                                                  | 114.44              | -                       | -                           | 112.26                    | 29.21                         | 4.39                    | 31.42                      | 100                  | 180                     | P                       | H               |
|               |      | 960.23                                                                                                                                               | 36.55               | -17.45                  | 54                          | 32.56                     | 30.92                         | 4.53                    | 31.46                      | 100                  | 180                     | P                       | H               |
|               |      | 902.03                                                                                                                                               | 115.58              | -                       | -                           | 113.44                    | 29.17                         | 4.39                    | 31.42                      | 110                  | 54                      | P                       | V               |
|               |      | 981.57                                                                                                                                               | 41.27               | -12.73                  | 54                          | 36.72                     | 30.75                         | 4.58                    | 30.78                      | 110                  | 54                      | P                       | V               |
| 914.5MHz      |      | 914.64                                                                                                                                               | 114.33              | -                       | -                           | 111.77                    | 29.66                         | 4.42                    | 31.52                      | 120                  | 141                     | P                       | H               |
|               |      | 960.23                                                                                                                                               | 37.96               | -16.04                  | 54                          | 33.97                     | 30.92                         | 4.53                    | 31.46                      | 100                  | 360                     | P                       | H               |
|               |      | 914.64                                                                                                                                               | 115.88              | -                       | -                           | 113.32                    | 29.66                         | 4.42                    | 31.52                      | 184                  | 110                     | P                       | V               |
|               |      | 960.23                                                                                                                                               | 38.47               | -15.53                  | 54                          | 34.48                     | 30.92                         | 4.53                    | 31.46                      | 300                  | 121                     | P                       | V               |
| 926.5MHz      |      | 926.28                                                                                                                                               | 115.66              | -                       | -                           | 112.71                    | 30.11                         | 4.45                    | 31.61                      | 100                  | 180                     | P                       | H               |
|               |      | 960.23                                                                                                                                               | 39.2                | -14.8                   | 54                          | 35.21                     | 30.92                         | 4.53                    | 31.46                      | 100                  | 180                     | P                       | H               |
|               |      | 926.28                                                                                                                                               | 114.97              | -                       | -                           | 112.02                    | 30.11                         | 4.45                    | 31.61                      | 120                  | 180                     | P                       | V               |
|               |      | 960.23                                                                                                                                               | 40.07               | -13.93                  | 54                          | 36.08                     | 30.92                         | 4.53                    | 31.46                      | 120                  | 180                     | P                       | V               |
| <b>Remark</b> |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## LORA DTS SF=5 (Harmonic @ 3m)

|          | Note                                                                                                                                                 | Frequency | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|          |                                                                                                                                                      | ( MHz )   | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz |                                                                                                                                                      | 1801      | 41.71      | -42.73        | 84.44         | 66.86         | 30.7              | 5.72          | 61.57            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2710      | 41.72      | -32.28        | 74            | 63.84         | 32.33             | 7.07          | 61.52            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1805      | 43.6       | -41.98        | 85.58         | 68.75         | 30.7              | 5.72          | 61.57            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2710      | 42.4       | -31.6         | 74            | 64.52         | 32.33             | 7.07          | 61.52            | 100        | 0            | P            | V       |
| 914.5MHz |                                                                                                                                                      | 1828      | 42.1       | -42.23        | 84.33         | 67.07         | 30.77             | 5.77          | 61.51            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2746      | 41.29      | -32.71        | 74            | 63.44         | 32.3              | 7.11          | 61.56            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1828      | 42.05      | -43.83        | 85.88         | 67.02         | 30.77             | 5.77          | 61.51            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2746      | 41.76      | -32.24        | 74            | 63.91         | 32.3              | 7.11          | 61.56            | 100        | 0            | P            | V       |
| 926.5MHz |                                                                                                                                                      | 1855      | 40.82      | -44.84        | 85.66         | 65.7          | 30.8              | 5.79          | 61.47            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2782      | 40.96      | -33.04        | 74            | 63.17         | 32.23             | 7.16          | 61.6             | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1855      | 41.41      | -43.56        | 84.97         | 66.29         | 30.8              | 5.79          | 61.47            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2782      | 39.41      | -34.59        | 74            | 61.62         | 32.23             | 7.16          | 61.6             | 100        | 0            | P            | V       |
| Remark   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |           |            |               |               |               |                   |               |                  |            |              |              |         |



**LORA DTS SF=7 (Band Edge @ 3m)**

|                 | Note | Frequency                                                                                                                                            | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-----------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|------------|----------------|------------|---------------|---------|-----------|-----------|---------|
|                 |      | ( MHz )                                                                                                                                              | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )     | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| <b>902.5MHz</b> |      | 903                                                                                                                                                  | 115.82     | -          | -          | 113.64     | 29.21          | 4.39       | 31.42         | 150     | 160       | P         | H       |
|                 |      | 960.23                                                                                                                                               | 38.35      | -15.65     | 54         | 34.36      | 30.92          | 4.53       | 31.46         | 150     | 160       | P         | H       |
|                 |      | 903                                                                                                                                                  | 115.83     | -          | -          | 113.65     | 29.21          | 4.39       | 31.42         | 200     | 180       | P         | V       |
|                 |      | 960.23                                                                                                                                               | 39.35      | -14.65     | 54         | 35.36      | 30.92          | 4.53       | 31.46         | 200     | 180       | P         | V       |
| <b>914.5MHz</b> |      | 914.64                                                                                                                                               | 115.52     | -          | -          | 112.96     | 29.66          | 4.42       | 31.52         | 100     | 360       | P         | H       |
|                 |      | 960.23                                                                                                                                               | 39.18      | -14.82     | 54         | 35.19      | 30.92          | 4.53       | 31.46         | 100     | 360       | P         | H       |
|                 |      | 914.64                                                                                                                                               | 115.91     | -          | -          | 113.35     | 29.66          | 4.42       | 31.52         | 300     | 0         | P         | V       |
|                 |      | 960.23                                                                                                                                               | 42.44      | -11.56     | 54         | 38.45      | 30.92          | 4.53       | 31.46         | 300     | 0         | P         | V       |
| <b>926.5MHz</b> |      | 926.28                                                                                                                                               | 115.68     | -          | -          | 112.73     | 30.11          | 4.45       | 31.61         | 100     | 180       | P         | H       |
|                 |      | 960.23                                                                                                                                               | 40.31      | -13.69     | 54         | 36.32      | 30.92          | 4.53       | 31.46         | 100     | 180       | P         | H       |
|                 |      | 926.28                                                                                                                                               | 116.14     | -          | -          | 113.19     | 30.11          | 4.45       | 31.61         | 150     | 360       | P         | V       |
|                 |      | 985.45                                                                                                                                               | 44.03      | -9.97      | 54         | 39.38      | 30.72          | 4.59       | 30.66         | 150     | 360       | P         | V       |
| <b>Remark</b>   |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |            |            |            |            |                |            |               |         |           |           |         |



## LORA DTS SF=7 (Harmonic @ 3m)

|          | Note                                                                                                                                                 | Frequency | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|          |                                                                                                                                                      | ( MHz )   | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz |                                                                                                                                                      | 1801      | 42.93      | -42.89        | 85.82         | 68.08         | 30.7              | 5.72          | 61.57            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2710      | 41.8       | -32.2         | 74            | 63.92         | 32.33             | 7.07          | 61.52            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1801      | 43.59      | -42.24        | 85.83         | 68.74         | 30.7              | 5.72          | 61.57            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2710      | 41.91      | -32.09        | 74            | 64.03         | 32.33             | 7.07          | 61.52            | 100        | 0            | P            | V       |
| 914.5MHz |                                                                                                                                                      | 1828      | 41.73      | -43.79        | 85.52         | 66.7          | 30.77             | 5.77          | 61.51            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2746      | 40.8       | -33.2         | 74            | 62.95         | 32.3              | 7.11          | 61.56            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1828      | 43.22      | -42.69        | 85.91         | 68.19         | 30.77             | 5.77          | 61.51            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2746      | 42.5       | -31.5         | 74            | 64.65         | 32.3              | 7.11          | 61.56            | 100        | 0            | P            | V       |
| 926.5MHz |                                                                                                                                                      | 1855      | 42.16      | -43.52        | 85.68         | 67.04         | 30.8              | 5.79          | 61.47            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2782      | 39.64      | -34.36        | 74            | 61.85         | 32.23             | 7.16          | 61.6             | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1855      | 41.76      | -44.38        | 86.14         | 66.64         | 30.8              | 5.79          | 61.47            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2782      | 39.94      | -34.06        | 74            | 62.15         | 32.23             | 7.16          | 61.6             | 100        | 0            | P            | V       |
| Remark   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |           |            |               |               |               |                   |               |                  |            |              |              |         |



## LORA DTS SF=8 (Band Edge @ 3m)

|               | Note | Frequency                                                                                                                                            | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|               |      | ( MHz )                                                                                                                                              | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz      |      | 902.03                                                                                                                                               | 115.6      | -             | -             | 113.46        | 29.17             | 4.39          | 31.42            | 121        | 10           | P            | H       |
|               |      | 960.23                                                                                                                                               | 38.97      | -15.03        | 54            | 34.98         | 30.92             | 4.53          | 31.46            | 121        | 10           | P            | H       |
|               |      | 902.03                                                                                                                                               | 115.74     | -             | -             | 113.6         | 29.17             | 4.39          | 31.42            | 120        | 180          | P            | V       |
|               |      | 960.23                                                                                                                                               | 40.85      | -13.15        | 54            | 36.86         | 30.92             | 4.53          | 31.46            | 120        | 180          | P            | V       |
| 914.5MHz      |      | 914.64                                                                                                                                               | 115.42     | -             | -             | 112.86        | 29.66             | 4.42          | 31.52            | 100        | 360          | P            | H       |
|               |      | 979.63                                                                                                                                               | 40.57      | -13.43        | 54            | 36.09         | 30.76             | 4.57          | 30.85            | 100        | 360          | P            | H       |
|               |      | 914.64                                                                                                                                               | 109.59     | -             | -             | 107.03        | 29.66             | 4.42          | 31.52            | 200        | 0            | P            | V       |
|               |      | 972.84                                                                                                                                               | 40.09      | -13.91        | 54            | 35.77         | 30.82             | 4.56          | 31.06            | 200        | 0            | P            | V       |
| 926.5MHz      |      | 926.28                                                                                                                                               | 115.55     | -             | -             | 112.6         | 30.11             | 4.45          | 31.61            | 100        | 180          | P            | H       |
|               |      | 986.42                                                                                                                                               | 40.52      | -13.48        | 54            | 35.85         | 30.71             | 4.59          | 30.63            | 100        | 180          | P            | H       |
|               |      | 926.28                                                                                                                                               | 116.05     | -             | -             | 113.1         | 30.11             | 4.45          | 31.61            | 150        | 180          | P            | V       |
|               |      | 968.96                                                                                                                                               | 43.71      | -10.29        | 54            | 39.49         | 30.85             | 4.55          | 31.18            | 150        | 180          | P            | V       |
| <b>Remark</b> |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |            |               |               |               |                   |               |                  |            |              |              |         |



## LORA DTS SF=8 (Harmonic @ 3m)

|          | Note                                                                                                                                                 | Frequency | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|          |                                                                                                                                                      | ( MHz )   | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz |                                                                                                                                                      | 1801      | 42.09      | -43.51        | 85.6          | 67.24         | 30.7              | 5.72          | 61.57            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2710      | 41.38      | -32.62        | 74            | 63.5          | 32.33             | 7.07          | 61.52            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1801      | 43.58      | -42.16        | 85.74         | 68.73         | 30.7              | 5.72          | 61.57            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2710      | 42.27      | -31.73        | 74            | 64.39         | 32.33             | 7.07          | 61.52            | 100        | 0            | P            | V       |
| 914.5MHz |                                                                                                                                                      | 1829      | 41.44      | -43.98        | 85.42         | 66.41         | 30.77             | 5.77          | 61.51            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2746      | 41.78      | -32.22        | 74            | 63.93         | 32.3              | 7.11          | 61.56            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1828      | 41.4       | -38.19        | 79.59         | 66.37         | 30.77             | 5.77          | 61.51            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2746      | 42.83      | -31.17        | 74            | 64.98         | 32.3              | 7.11          | 61.56            | 100        | 0            | P            | V       |
| 926.5MHz |                                                                                                                                                      | 1855      | 41.19      | -44.36        | 85.55         | 66.07         | 30.8              | 5.79          | 61.47            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2779.5    | 39.87      | -34.13        | 74            | 62.08         | 32.23             | 7.16          | 61.6             | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1853      | 40.47      | -45.58        | 86.05         | 65.35         | 30.8              | 5.79          | 61.47            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2782      | 39.58      | -34.42        | 74            | 61.79         | 32.23             | 7.16          | 61.6             | 100        | 0            | P            | V       |
| Remark   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |           |            |               |               |               |                   |               |                  |            |              |              |         |



LORA DTS SF=9 (Band Edge @ 3m)

|          | Note | Frequency                                                                                                                                            | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|----------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|          |      | ( MHz )                                                                                                                                              | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz |      | 902.03                                                                                                                                               | 115.41     | -             | -             | 113.27        | 29.17             | 4.39          | 31.42            | 100        | 360          | P            | H       |
|          |      | 960.23                                                                                                                                               | 37.98      | -16.02        | 54            | 33.99         | 30.92             | 4.53          | 31.46            | 100        | 360          | P            | H       |
|          |      | 903                                                                                                                                                  | 115.21     | -             | -             | 113.03        | 29.21             | 4.39          | 31.42            | 300        | 0            | P            | V       |
|          |      | 960.23                                                                                                                                               | 40.42      | -13.58        | 54            | 36.43         | 30.92             | 4.53          | 31.46            | 300        | 0            | P            | V       |
| 914.5MHz |      | 914.64                                                                                                                                               | 115.56     | -             | -             | 113           | 29.66             | 4.42          | 31.52            | 100        | 120          | P            | H       |
|          |      | 984.48                                                                                                                                               | 39.86      | -14.14        | 54            | 35.24         | 30.72             | 4.59          | 30.69            | 100        | 120          | P            | H       |
|          |      | 914.64                                                                                                                                               | 115.51     | -             | -             | 112.95        | 29.66             | 4.42          | 31.52            | 180        | 200          | P            | V       |
|          |      | 984.48                                                                                                                                               | 43.32      | -10.68        | 54            | 38.7          | 30.72             | 4.59          | 30.69            | 180        | 200          | P            | V       |
| 926.5MHz |      | 926.28                                                                                                                                               | 115.14     | -             | -             | 112.19        | 30.11             | 4.45          | 31.61            | 100        | 0            | P            | H       |
|          |      | 960.23                                                                                                                                               | 39.18      | -14.82        | 54            | 35.19         | 30.92             | 4.53          | 31.46            | 100        | 0            | P            | H       |
|          |      | 926.28                                                                                                                                               | 115.96     | -             | -             | 113.01        | 30.11             | 4.45          | 31.61            | 100        | 260          | P            | V       |
|          |      | 960.23                                                                                                                                               | 40.18      | -13.82        | 54            | 36.19         | 30.92             | 4.53          | 31.46            | 100        | 260          | P            | V       |
| Remark   |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |            |               |               |               |                   |               |                  |            |              |              |         |



## LORA DTS SF=9 (Harmonic @ 3m)

|          | Note                                                                                                                                                 | Frequency | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|          |                                                                                                                                                      | ( MHz )   | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz |                                                                                                                                                      | 1801      | 41.43      | -43.98        | 85.41         | 66.58         | 30.7              | 5.72          | 61.57            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2710      | 42         | -32           | 74            | 64.12         | 32.33             | 7.07          | 61.52            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1801      | 41.85      | -43.36        | 85.21         | 67            | 30.7              | 5.72          | 61.57            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2710      | 41.96      | -32.04        | 74            | 64.08         | 32.33             | 7.07          | 61.52            | 100        | 0            | P            | V       |
| 914.5MHz |                                                                                                                                                      | 1828      | 42.08      | -43.48        | 85.56         | 67.05         | 30.77             | 5.77          | 61.51            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2746      | 42.03      | -31.97        | 74            | 64.18         | 32.3              | 7.11          | 61.56            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1828      | 41.15      | -44.36        | 85.51         | 66.12         | 30.77             | 5.77          | 61.51            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2746      | 41.71      | -32.29        | 74            | 63.86         | 32.3              | 7.11          | 61.56            | 100        | 0            | P            | V       |
| 926.5MHz |                                                                                                                                                      | 1855      | 41.44      | -43.7         | 85.14         | 66.32         | 30.8              | 5.79          | 61.47            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2782      | 40.06      | -33.94        | 74            | 62.27         | 32.23             | 7.16          | 61.6             | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1855      | 39.94      | -46.02        | 85.96         | 64.82         | 30.8              | 5.79          | 61.47            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2782      | 40.18      | -33.82        | 74            | 62.39         | 32.23             | 7.16          | 61.6             | 100        | 0            | P            | V       |
| Remark   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |           |            |               |               |               |                   |               |                  |            |              |              |         |



LORA DTS SF=10 (Band Edge @ 3m)

|               | Note | Frequency                                                                                                                                            | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|               |      | ( MHz )                                                                                                                                              | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz      |      | 903                                                                                                                                                  | 115.8      | -             | -             | 113.62        | 29.21             | 4.39          | 31.42            | 100        | 155          | P            | H       |
|               |      | 960.23                                                                                                                                               | 39.69      | -14.31        | 54            | 35.7          | 30.92             | 4.53          | 31.46            | 100        | 155          | P            | H       |
|               |      | 903                                                                                                                                                  | 115.16     | -             | -             | 112.98        | 29.21             | 4.39          | 31.42            | 100        | 180          | P            | V       |
|               |      | 970.9                                                                                                                                                | 42.35      | -11.65        | 54            | 38.08         | 30.83             | 4.56          | 31.12            | 100        | 180          | P            | V       |
| 914.5MHz      |      | 914.64                                                                                                                                               | 115.6      | -             | -             | 113.04        | 29.66             | 4.42          | 31.52            | 300        | 120          | P            | H       |
|               |      | 960.23                                                                                                                                               | 40.38      | -13.62        | 54            | 36.39         | 30.92             | 4.53          | 31.46            | 300        | 120          | P            | H       |
|               |      | 914.64                                                                                                                                               | 115.62     | -             | -             | 113.06        | 29.66             | 4.42          | 31.52            | 150        | 0            | P            | V       |
|               |      | 960.23                                                                                                                                               | 39.89      | -14.11        | 54            | 35.9          | 30.92             | 4.53          | 31.46            | 150        | 0            | P            | V       |
| 926.5MHz      |      | 926.28                                                                                                                                               | 115.37     | -             | -             | 112.42        | 30.11             | 4.45          | 31.61            | 100        | 0            | P            | H       |
|               |      | 960.23                                                                                                                                               | 39.67      | -14.33        | 54            | 35.68         | 30.92             | 4.53          | 31.46            | 100        | 0            | P            | H       |
|               |      | 926.28                                                                                                                                               | 115.86     | -             | -             | 112.91        | 30.11             | 4.45          | 31.61            | 100        | 0            | P            | V       |
|               |      | 960.23                                                                                                                                               | 42.42      | -11.58        | 54            | 38.43         | 30.92             | 4.53          | 31.46            | 100        | 0            | P            | V       |
| <b>Remark</b> |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |            |               |               |               |                   |               |                  |            |              |              |         |



## LORA DTS SF=10 (Harmonic @ 3m)

|          | Note                                                                                                                                                 | Frequency | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|          |                                                                                                                                                      | ( MHz )   | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz |                                                                                                                                                      | 1801      | 41.45      | -44.35        | 85.8          | 66.6          | 30.7              | 5.72          | 61.57            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2710      | 42.67      | -31.33        | 74            | 64.79         | 32.33             | 7.07          | 61.52            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1801      | 40.99      | -44.17        | 85.16         | 66.14         | 30.7              | 5.72          | 61.57            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2710      | 43.02      | -30.98        | 74            | 65.14         | 32.33             | 7.07          | 61.52            | 100        | 0            | P            | V       |
| 914.5MHz |                                                                                                                                                      | 1828      | 41.75      | -43.85        | 85.6          | 66.72         | 30.77             | 5.77          | 61.51            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2746      | 41.36      | -32.64        | 74            | 63.51         | 32.3              | 7.11          | 61.56            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1828      | 41.02      | -44.59        | 85.61         | 65.99         | 30.77             | 5.77          | 61.51            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2746      | 41.53      | -32.47        | 74            | 63.68         | 32.3              | 7.11          | 61.56            | 100        | 0            | P            | V       |
| 926.5MHz |                                                                                                                                                      | 1855      | 42.4       | -42.97        | 85.37         | 67.28         | 30.8              | 5.79          | 61.47            | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 2779.5    | 40.37      | -33.63        | 74            | 62.58         | 32.23             | 7.16          | 61.6             | 300        | 0            | P            | H       |
|          |                                                                                                                                                      | 1853      | 41.42      | -43.94        | 85.36         | 66.3          | 30.8              | 5.79          | 61.47            | 100        | 0            | P            | V       |
|          |                                                                                                                                                      | 2782      | 39.63      | -34.37        | 74            | 61.84         | 32.23             | 7.16          | 61.6             | 100        | 0            | P            | V       |
| Remark   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |           |            |               |               |               |                   |               |                  |            |              |              |         |



## LORA DTS SF=11 (Band Edge @ 3m)

|               | Note | Frequency                                                                                                                                            | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|---------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|               |      | ( MHz )                                                                                                                                              | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| 902.5MHz      |      | 903                                                                                                                                                  | 115.64     | -             | -             | 113.46        | 29.21             | 4.39          | 31.42            | 120        | 140          | P            | H       |
|               |      | 975.75                                                                                                                                               | 39.58      | -14.42        | 54            | 35.19         | 30.79             | 4.57          | 30.97            | 120        | 140          | P            | H       |
|               |      | 902.03                                                                                                                                               | 115.59     | -             | -             | 113.45        | 29.17             | 4.39          | 31.42            | 100        | 18           | P            | V       |
|               |      | 990.3                                                                                                                                                | 41.65      | -12.35        | 54            | 36.88         | 30.68             | 4.6           | 30.51            | 100        | 18           | P            | V       |
| 914.5MHz      |      | 914.64                                                                                                                                               | 115.03     | -             | -             | 112.47        | 29.66             | 4.42          | 31.52            | 300        | 0            | P            | H       |
|               |      | 984.48                                                                                                                                               | 40.73      | -13.27        | 54            | 36.11         | 30.72             | 4.59          | 30.69            | 300        | 0            | P            | H       |
|               |      | 914.64                                                                                                                                               | 115.45     | -             | -             | 112.89        | 29.66             | 4.42          | 31.52            | 150        | 180          | P            | V       |
|               |      | 977.69                                                                                                                                               | 43.05      | -10.95        | 54            | 38.61         | 30.78             | 4.57          | 30.91            | 150        | 180          | P            | V       |
| 926.5MHz      |      | 926.28                                                                                                                                               | 114.57     | -             | -             | 111.62        | 30.11             | 4.45          | 31.61            | 100        | 360          | P            | H       |
|               |      | 979.63                                                                                                                                               | 40.42      | -13.58        | 54            | 35.94         | 30.76             | 4.57          | 30.85            | 100        | 360          | P            | H       |
|               |      | 926.28                                                                                                                                               | 115.6      | -             | -             | 112.65        | 30.11             | 4.45          | 31.61            | 300        | 0            | P            | V       |
|               |      | 979.63                                                                                                                                               | 42.93      | -11.07        | 54            | 38.45         | 30.76             | 4.57          | 30.85            | 300        | 0            | P            | V       |
| <b>Remark</b> |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |            |               |               |               |                   |               |                  |            |              |              |         |



**LORA DTS SF=11 (Harmonic @ 3m)**

|                 | Note | Frequency                                                                                                                                            | Level      | Over<br>Limit | Limit<br>Line | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Ant<br>Pos | Table<br>Pos | Peak<br>Avg. | Pol.    |
|-----------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|---------------|---------------|-------------------|---------------|------------------|------------|--------------|--------------|---------|
|                 |      | ( MHz )                                                                                                                                              | ( dBμV/m ) | ( dB )        | ( dBμV/m )    | ( dBμV )      | ( dB/m )          | ( dB )        | ( dB )           | ( cm )     | ( deg )      | ( P/A )      | ( H/V ) |
| <b>902.5MHz</b> |      | 1801                                                                                                                                                 | 42.03      | -43.61        | 85.64         | 67.18         | 30.7              | 5.72          | 61.57            | 300        | 0            | P            | H       |
|                 |      | 2710                                                                                                                                                 | 42.39      | -31.61        | 74            | 64.51         | 32.33             | 7.07          | 61.52            | 300        | 0            | P            | H       |
|                 |      | 1801                                                                                                                                                 | 42.04      | -43.55        | 85.59         | 67.19         | 30.7              | 5.72          | 61.57            | 100        | 0            | P            | V       |
|                 |      | 2710                                                                                                                                                 | 42.07      | -31.93        | 74            | 64.19         | 32.33             | 7.07          | 61.52            | 100        | 0            | P            | V       |
| <b>914.5MHz</b> |      | 1828                                                                                                                                                 | 41.31      | -43.72        | 85.03         | 66.28         | 30.77             | 5.77          | 61.51            | 300        | 0            | P            | H       |
|                 |      | 2746                                                                                                                                                 | 41.33      | -32.67        | 74            | 63.48         | 32.3              | 7.11          | 61.56            | 300        | 0            | P            | H       |
|                 |      | 1828                                                                                                                                                 | 41.38      | -44.07        | 85.45         | 66.35         | 30.77             | 5.77          | 61.51            | 100        | 0            | P            | V       |
|                 |      | 2746                                                                                                                                                 | 42.26      | -31.74        | 74            | 64.41         | 32.3              | 7.11          | 61.56            | 100        | 0            | P            | V       |
| <b>926.5MHz</b> |      | 1855                                                                                                                                                 | 42.18      | -42.39        | 84.57         | 67.06         | 30.8              | 5.79          | 61.47            | 300        | 0            | P            | H       |
|                 |      | 2782                                                                                                                                                 | 39.41      | -34.59        | 74            | 61.62         | 32.23             | 7.16          | 61.6             | 300        | 0            | P            | H       |
|                 |      | 1855                                                                                                                                                 | 41.78      | -43.82        | 85.6          | 66.66         | 30.8              | 5.79          | 61.47            | 100        | 0            | P            | V       |
|                 |      | 2782                                                                                                                                                 | 39.81      | -34.19        | 74            | 62.02         | 32.23             | 7.16          | 61.6             | 100        | 0            | P            | V       |
| <b>Remark</b>   |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. Non-restricted band limit is 100kHz-PSD down 30dB. |            |               |               |               |                   |               |                  |            |              |              |         |



Note symbol

|     |                                                                                                                                                          |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| *   | <b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| !   | Test result is <b>over limit</b> line.                                                                                                                   |
| P/A | <b>Peak</b> or <b>Average</b>                                                                                                                            |
| H/V | <b>H</b> orizontal or <b>V</b> ertical                                                                                                                   |



A calculation example for radiated spurious emission is shown as below:

| BLE                     | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| BLE<br>CH 00<br>2402MHz |      | 2390                 | 55.45               | -18.55                  | 74                          | 54.51                     | 32.22                         | 4.58                   | 35.86                      | 103                  | 308                     | P                       | H               |
|                         |      | 2390                 | 43.54               | -10.46                  | 54                          | 42.6                      | 32.22                         | 4.58                   | 35.86                      | 103                  | 308                     | A                       | H               |

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)

2. Level(dBμV/m) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

#### For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

#### For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.