

# TEST REPORT

**Applicant:** FLYSKY RC MODEL TECHNOLOGY CO., LTD

**Address of Applicant:** West building3, Huangjianyuan Ind, Park QIAOLI North Gate  
Changping Town, Dongguan, China

**Manufacturer:** ShenZhen FLYSKY Technology Co.,Ltd

**Address of Manufacturer:** ADD 16F, Huafeng Building, No. 6006 Shennan Road, Futian  
District, Shenzhen, Guangdong, China

**Factory:** Dongguan Flysky RC Model technology Co.,Ltd

**Address of Factory:** West building 3, HuangjinyuanInd Park, QIAOLI North Gate,  
Changping Town, Dongguan, China

**Equipment Under Test (EUT)**

Product Name: Digital propotional radio control system

Model No.: FS-MG41, FS-MG4

Trade Mark: FLYSKY

**FCC ID:** N4ZMG400

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247

**Date of sample receipt:** April 23, 2021

**Date of Test:** April 23, 2021-June 04, 2021

**Date of report issued:** June 04, 2021

**Test Result :** PASS \*

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

Authorized Signature:

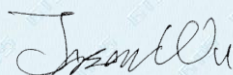
Robinson Luo  
Laboratory Manager

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## 2 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | June 04, 2021 | Original    |
|             |               |             |
|             |               |             |
|             |               |             |
|             |               |             |

Prepared By:

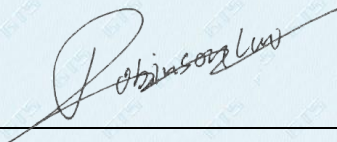


Date:

June 04, 2021

Project Engineer

Check By:



Date:

June 04, 2021

Reviewer

## 3 Contents

Page

|       |                                             |    |
|-------|---------------------------------------------|----|
| 1     | COVER PAGE .....                            | 1  |
| 2     | VERSION .....                               | 2  |
| 3     | CONTENTS .....                              | 3  |
| 4     | TEST SUMMARY .....                          | 4  |
| 4.1   | MEASUREMENT UNCERTAINTY .....               | 4  |
| 5     | GENERAL INFORMATION .....                   | 5  |
| 5.1   | GENERAL DESCRIPTION OF EUT .....            | 5  |
| 5.2   | TEST MODE .....                             | 7  |
| 5.3   | TEST FACILITY .....                         | 7  |
| 5.4   | TEST LOCATION .....                         | 7  |
| 5.5   | DESCRIPTION OF SUPPORT UNITS .....          | 7  |
| 5.6   | DEVIATION FROM STANDARDS.....               | 7  |
| 5.7   | ABNORMALITIES FROM STANDARD CONDITIONS..... | 7  |
| 5.8   | ADDITIONAL INSTRUCTIONS.....                | 7  |
| 6     | TEST INSTRUMENTS LIST .....                 | 8  |
| 7     | TEST RESULTS AND MEASUREMENT DATA .....     | 10 |
| 7.1   | ANTENNA REQUIREMENT.....                    | 10 |
| 7.2   | CONDUCTED PEAK OUTPUT POWER.....            | 11 |
| 7.3   | 20dB EMISSION BANDWIDTH .....               | 13 |
| 7.4   | CARRIER FREQUENCIES SEPARATION.....         | 15 |
| 7.5   | HOPPING CHANNEL NUMBER .....                | 17 |
| 7.6   | DWELL TIME .....                            | 18 |
| 7.7   | BAND EDGE .....                             | 22 |
| 7.7.1 | Conducted Emission Method .....             | 22 |
| 7.7.2 | Radiated Emission Method .....              | 24 |
| 7.8   | SPURIOUS EMISSION .....                     | 29 |
| 7.8.1 | Conducted Emission Method .....             | 29 |
| 7.8.2 | Radiated Emission Method .....              | 31 |
| 8     | TEST SETUP PHOTO .....                      | 46 |
| 9     | EUT CONSTRUCTIONAL DETAILS.....             | 46 |

## 4 Test Summary

| Test Item                               | Section           | Result |
|-----------------------------------------|-------------------|--------|
| Antenna Requirement                     | 15.203/15.247 (c) | Pass   |
| AC Power Line Conducted Emission        | 15.207            | N/A    |
| Conducted Peak Output Power             | 15.247 (b)(1)     | Pass   |
| 20dB Occupied Bandwidth                 | 15.247 (a)(1)     | Pass   |
| Carrier Frequencies Separation          | 15.247 (a)(1)     | Pass   |
| Hopping Channel Number                  | 15.247 (a)(1)     | Pass   |
| Dwell Time                              | 15.247 (a)(1)     | Pass   |
| Pseudorandom Frequency Hopping Sequence | 15.247(b)(4)      | Pass   |
| Radiated Emission                       | 15.205/15.209     | Pass   |
| Band Edge                               | 15.247(d)         | Pass   |

Pass: The EUT complies with the essential requirements in the standard.

Remark : Test according to ANSI C63.10:2013.

### 4.1 Measurement Uncertainty

| Test Item                        | Frequency Range | Measurement Uncertainty | Notes |
|----------------------------------|-----------------|-------------------------|-------|
| Radiated Emission                | 30MHz-200MHz    | 3.8039dB                | (1)   |
| Radiated Emission                | 200MHz-1GHz     | 3.9679dB                | (1)   |
| Radiated Emission                | 1GHz-18GHz      | 4.29dB                  | (1)   |
| Radiated Emission                | 18GHz-40GHz     | 3.30dB                  | (1)   |
| AC Power Line Conducted Emission | 0.15MHz ~ 30MHz | 3.44dB                  | (1)   |

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

## 5 General Information

### 5.1 General Description of EUT

|                                                                                                                                                                                                                              |                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Product Name:                                                                                                                                                                                                                | Digital propotional radio control system |
| Model No.:                                                                                                                                                                                                                   | FS-MG41, FS-MG4                          |
| Test Model No:                                                                                                                                                                                                               | FS-MG41                                  |
| Remark:The difference between the two models appears in the red dial switch and dual color light, the main function of the red dial switch is the conversion between the modes. Double - color light is a return indication. |                                          |
| Serial No.:                                                                                                                                                                                                                  | N/A                                      |
| Hardware version:                                                                                                                                                                                                            | FS-MG4 -V1.2                             |
| Software version:                                                                                                                                                                                                            | FS-MG41 1.0.6                            |
| Test sample(s) ID:                                                                                                                                                                                                           | GTS202104000240-1                        |
| Sample(s) Status                                                                                                                                                                                                             | Engineer sample                          |
| Operation Frequency:                                                                                                                                                                                                         | 2406MHz~2472MHz                          |
| Channel numbers:                                                                                                                                                                                                             | 133                                      |
| Modulation technology:                                                                                                                                                                                                       | DSSS                                     |
| Antenna Type:                                                                                                                                                                                                                | PCB Antenna                              |
| Antenna gain:                                                                                                                                                                                                                | 1dBi                                     |
| Power supply:                                                                                                                                                                                                                | DC 6V(4*1.5V Size"AA" Battery)           |

Remark: The system works in the frequency range of 2406MHz to 2472MHz. This band has been divided to 133 independent channels. Each radio system uses 20 different channels; the minimum channel separation is  $\geq 3$  MHz. By using various switch-on times, hopping scheme and channel frequencies, the system can guarantee a jamming free radio transmission. The channel list is below.

The test frequencies are below:

| Channel             | Frequency |
|---------------------|-----------|
| The lowest channel  | 2406MHz   |
| The middle channel  | 2440MHz   |
| The Highest channel | 2472MHz   |

| Operation Frequency each of channel |                 |         |                 |         |                 |         |                 |
|-------------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| Channel                             | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 1                                   | 2406.0          | 39      | 2425.0          | 77      | 2444.0          | 120     | 2465.5          |
| 2                                   | 2406.5          | 40      | 2425.5          | 78      | 2444.5          | 121     | 2466.0          |
| 3                                   | 2407.0          | 41      | 2426.0          | 79      | 2445.0          | 122     | 2466.5          |
| 4                                   | 2407.5          | 42      | 2426.5          | 80      | 2445.5          | 123     | 2467.0          |
| 5                                   | 2408.0          | 43      | 2427.0          | 81      | 2446.0          | 124     | 2467.5          |
| 6                                   | 2408.5          | 44      | 2427.5          | 82      | 2446.5          | 125     | 2468.0          |
| 7                                   | 2409.0          | 45      | 2428.0          | 83      | 2447.0          | 126     | 2468.5          |
| 8                                   | 2409.5          | 46      | 2428.5          | 84      | 2447.5          | 127     | 2469.0          |
| 9                                   | 2410.0          | 47      | 2429.0          | 85      | 2448.0          | 128     | 2469.5          |
| 10                                  | 2410.5          | 48      | 2429.5          | 86      | 2448.5          | 129     | 2470.0          |
| 11                                  | 2411.0          | 49      | 2430.0          | 87      | 2449.0          | 130     | 2470.5          |
| 12                                  | 2411.5          | 50      | 2430.5          | 88      | 2449.5          | 131     | 2471.0          |
| 13                                  | 2412.0          | 51      | 2431.0          | 89      | 2450.0          | 132     | 2471.5          |
| 14                                  | 2412.5          | 52      | 2431.5          | 90      | 2450.5          | 133     | 2472.0          |
| 15                                  | 2413.0          | 53      | 2432.0          | 91      | 2451.0          |         |                 |
| 16                                  | 2413.5          | 54      | 2432.5          | 92      | 2451.5          |         |                 |
| 17                                  | 2414.0          | 55      | 2433.0          | 93      | 2452.0          |         |                 |
| 18                                  | 2414.5          | 56      | 2433.5          | 94      | 2452.5          |         |                 |
| 19                                  | 2415.0          | 57      | 2434.0          | 95      | 2453.0          |         |                 |
| 20                                  | 2415.5          | 58      | 2434.5          | 96      | 2453.5          |         |                 |
| 21                                  | 2416.0          | 59      | 2435.0          | 97      | 2454.0          |         |                 |
| 22                                  | 2416.5          | 60      | 2435.5          | 98      | 2454.5          |         |                 |
| 23                                  | 2417.0          | 61      | 2436.0          | 99      | 2455.0          |         |                 |
| 24                                  | 2417.5          | 62      | 2436.5          | 100     | 2455.5          |         |                 |
| 25                                  | 2418.0          | 63      | 2437.0          | 101     | 2456.0          |         |                 |
| 26                                  | 2418.5          | 64      | 2437.5          | 102     | 2456.5          |         |                 |
| 27                                  | 2419.0          | 65      | 2438.0          | 103     | 2457.0          |         |                 |
| 28                                  | 2419.5          | 66      | 2438.5          | 104     | 2457.5          |         |                 |
| 29                                  | 2420.0          | 67      | 2439.0          | 105     | 2458.0          |         |                 |
| 30                                  | 2420.5          | 68      | 2439.5          | 106     | 2458.5          |         |                 |
| 31                                  | 2421.0          | 69      | 2440.0          | 107     | 2459.0          |         |                 |
| 32                                  | 2421.5          | 70      | 2440.5          | 108     | 2459.5          |         |                 |
| 33                                  | 2422.0          | 71      | 2441.0          | 109     | 2460.0          |         |                 |
| 34                                  | 2422.5          | 72      | 2441.5          | 110     | 2460.5          |         |                 |
| 35                                  | 2423.0          | 73      | 2442.0          | 111     | 2461.0          |         |                 |
| 36                                  | 2423.5          | 74      | 2442.5          | 112     | 2461.5          |         |                 |
| 37                                  | 2424.0          | 75      | 2443.0          | 113     | 2462.0          |         |                 |
| 38                                  | 2424.5          | 76      | 2443.5          | 114     | 2462.5          |         |                 |

## 5.2 Test mode

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Transmitting mode                            | Keep the EUT in transmitting mode. |
| Remark: New battery is used during all test. |                                    |

## 5.3 Test Facility

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The test facility is recognized, certified, or accredited by the following organizations:</p> <ul style="list-style-type: none"> <li>● <b>FCC —Registration No.: 381383</b><br/>Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383.</li> <li>● <b>IC —Registration No.: 9079A</b><br/>The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A</li> <li>● <b>NVLAP (LAB CODE:600179-0)</b><br/>Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0</li> </ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 5.4 Test Location

|                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All other tests were performed at:                                                                                                                                                                                                                            |
| <p>Global United Technology Services Co., Ltd.<br/>Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102<br/>Tel: 0755-27798480<br/>Fax: 0755-27798960</p> |

## 5.5 Description of Support Units

| Manufacturer | Description | Model | Serial Number |
|--------------|-------------|-------|---------------|
| None.        |             |       |               |

## 5.6 Deviation from Standards

|       |
|-------|
| None. |
|-------|

## 5.7 Abnormalities from Standard Conditions

|       |
|-------|
| None. |
|-------|

## 5.8 Additional Instructions

|                                              |
|----------------------------------------------|
| Software (Used for test) from client         |
| Built-in by manufacturer, power set default. |

## 6 Test Instruments list

| Radiated Emission: |                                     |                                |                             |               |                     |                         |
|--------------------|-------------------------------------|--------------------------------|-----------------------------|---------------|---------------------|-------------------------|
| Item               | Test Equipment                      | Manufacturer                   | Model No.                   | Inventory No. | Cal.Date (mm-dd-yy) | Cal.Due date (mm-dd-yy) |
| 1                  | 3m Semi- Anechoic Chamber           | ZhongYu Electron               | 9.2(L)*6.2(W)* 6.4(H)       | GTS250        | July. 02 2020       | July. 01 2025           |
| 2                  | Control Room                        | ZhongYu Electron               | 6.2(L)*2.5(W)* 2.4(H)       | GTS251        | N/A                 | N/A                     |
| 3                  | EMI Test Receiver                   | Rohde & Schwarz                | ESU26                       | GTS203        | June. 25 2020       | June. 24 2021           |
| 4                  | BiConiLog Antenna                   | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB9163                    | GTS214        | June. 25 2020       | June. 24 2021           |
| 5                  | Double -ridged waveguide horn       | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA 9120 D                 | GTS208        | June. 25 2020       | June. 24 2021           |
| 6                  | Horn Antenna                        | ETS-LINDGREN                   | 3160                        | GTS217        | June. 25 2020       | June. 24 2021           |
| 7                  | EMI Test Software                   | AUDIX                          | E3                          | N/A           | N/A                 | N/A                     |
| 8                  | Coaxial Cable                       | GTS                            | N/A                         | GTS213        | June. 25 2020       | June. 24 2021           |
| 9                  | Coaxial Cable                       | GTS                            | N/A                         | GTS211        | June. 25 2020       | June. 24 2021           |
| 10                 | Coaxial cable                       | GTS                            | N/A                         | GTS210        | June. 25 2020       | June. 24 2021           |
| 11                 | Coaxial Cable                       | GTS                            | N/A                         | GTS212        | June. 25 2020       | June. 24 2021           |
| 12                 | Amplifier(100kHz-3GHz)              | HP                             | 8347A                       | GTS204        | June. 25 2020       | June. 24 2021           |
| 13                 | Amplifier(2GHz-20GHz)               | HP                             | 84722A                      | GTS206        | June. 25 2020       | June. 24 2021           |
| 14                 | Amplifier (18-26GHz)                | Rohde & Schwarz                | AFS33-18002<br>650-30-8P-44 | GTS218        | June. 25 2020       | June. 24 2021           |
| 15                 | Band filter                         | Amindeon                       | 82346                       | GTS219        | June. 25 2020       | June. 24 2021           |
| 16                 | Power Meter                         | Anritsu                        | ML2495A                     | GTS540        | June. 25 2020       | June. 24 2021           |
| 17                 | Power Sensor                        | Anritsu                        | MA2411B                     | GTS541        | June. 25 2020       | June. 24 2021           |
| 18                 | Wideband Radio Communication Tester | Rohde & Schwarz                | CMW500                      | GTS575        | June. 25 2020       | June. 24 2021           |
| 19                 | Splitter                            | Agilent                        | 11636B                      | GTS237        | June. 25 2020       | June. 24 2021           |
| 20                 | Loop Antenna                        | ZHINAN                         | ZN30900A                    | GTS534        | June. 25 2020       | June. 24 2021           |
| 21                 | Breitband hornantenne               | SCHWARZBECK                    | BBHA 9170                   | GTS579        | Oct. 18 2020        | Oct. 17 2021            |
| 22                 | Amplifier                           | TDK                            | PA-02-02                    | GTS574        | Oct. 18 2020        | Oct. 17 2021            |
| 23                 | Amplifier                           | TDK                            | PA-02-03                    | GTS576        | Oct. 18 2020        | Oct. 17 2021            |
| 24                 | PSA Series Spectrum Analyzer        | Rohde & Schwarz                | FSP                         | GTS578        | June. 25 2020       | June. 24 2021           |

| RF Conducted Test: |                                                |              |                  |            |                        |                            |
|--------------------|------------------------------------------------|--------------|------------------|------------|------------------------|----------------------------|
| Item               | Test Equipment                                 | Manufacturer | Model No.        | Serial No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |
| 1                  | MXA Signal Analyzer                            | Agilent      | N9020A           | GTS566     | June. 25 2020          | June. 24 2021              |
| 2                  | EMI Test Receiver                              | R&S          | ESCI 7           | GTS552     | June. 25 2020          | June. 24 2021              |
| 3                  | Spectrum Analyzer                              | Agilent      | E4440A           | GTS533     | June. 25 2020          | June. 24 2021              |
| 4                  | MXG vector Signal Generator                    | Agilent      | N5182A           | GTS567     | June. 25 2020          | June. 24 2021              |
| 5                  | ESG Analog Signal Generator                    | Agilent      | E4428C           | GTS568     | June. 25 2020          | June. 24 2021              |
| 6                  | USB RF Power Sensor                            | DARE         | RPR3006W         | GTS569     | June. 25 2020          | June. 24 2021              |
| 7                  | RF Switch Box                                  | Shongyi      | RFSW3003328      | GTS571     | June. 25 2020          | June. 24 2021              |
| 8                  | Programmable Constant Temp & Humi Test Chamber | WEWON        | WHTH-150L-40-880 | GTS572     | June. 25 2020          | June. 24 2021              |

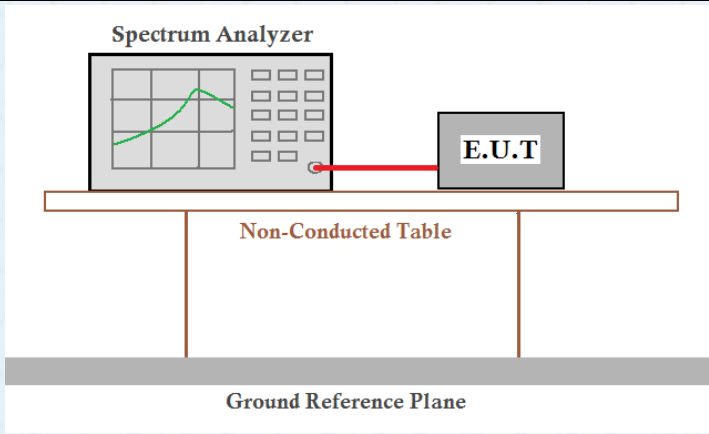
| General used equipment: |                                 |              |           |               |                        |                            |
|-------------------------|---------------------------------|--------------|-----------|---------------|------------------------|----------------------------|
| Item                    | Test Equipment                  | Manufacturer | Model No. | Inventory No. | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |
| 1                       | Humidity/ Temperature Indicator | KTJ          | TA328     | GTS243        | June. 25 2020          | June. 24 2021              |
| 2                       | Barometer                       | ChangChun    | DYM3      | GTS255        | June. 25 2020          | June. 24 2021              |

## 7 Test results and Measurement Data

### 7.1 Antenna requirement

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>Standard requirement:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            | FCC Part15 C Section 15.203 /247(c) |
| <b>15.203 requirement:</b><br><p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> |                                     |
| <b>15.247(c) (1)(i) requirement:</b><br><p>(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.</p>                                                                                |                                     |
| <b>EUT Antenna:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                     |
| <p><i>The antenna is PCB antenna, the best case gain of the antenna is 1dBi, reference to the appendix II for details.</i></p>                                                                                                                                                                                                                                                                                                                                                          |                                     |

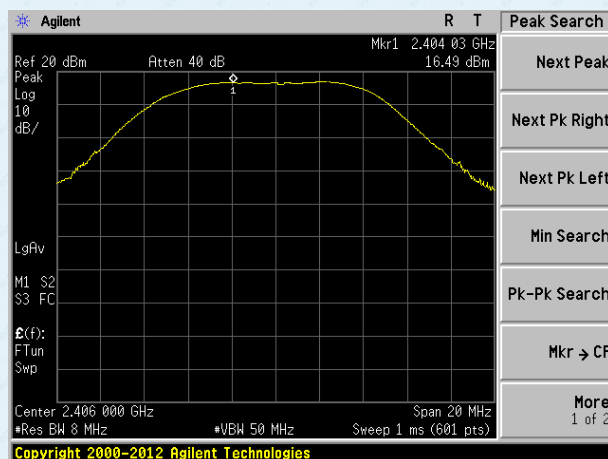
## 7.2 Conducted Peak Output Power

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (b)(1)                                                 |
| Test Method:      | ANSI C63.10:2013                                                                   |
| Limit:            | 20.97dBm                                                                           |
| Test setup:       |  |
| Test Instruments: | Refer to section 6.0 for details                                                   |
| Test mode:        | Refer to section 5.2 for details                                                   |
| Test results:     | Pass                                                                               |

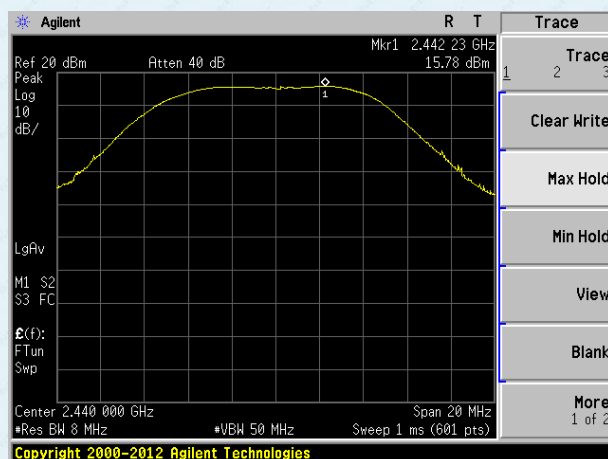
### Measurement Data

| Test channel | Peak Output Power (dBm) | Limit (dBm) | Result |
|--------------|-------------------------|-------------|--------|
| Lowest       | 16.49                   | 20.97       | Pass   |
| Middle       | 15.78                   |             | Pass   |
| Highest      | 14.78                   |             | Pass   |

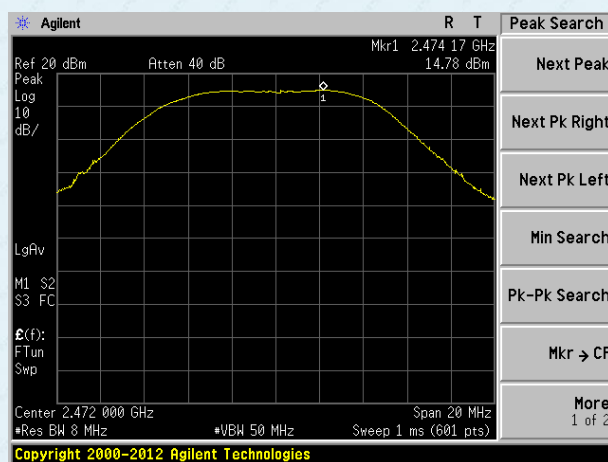
Test plot as follows:



Lowest channel

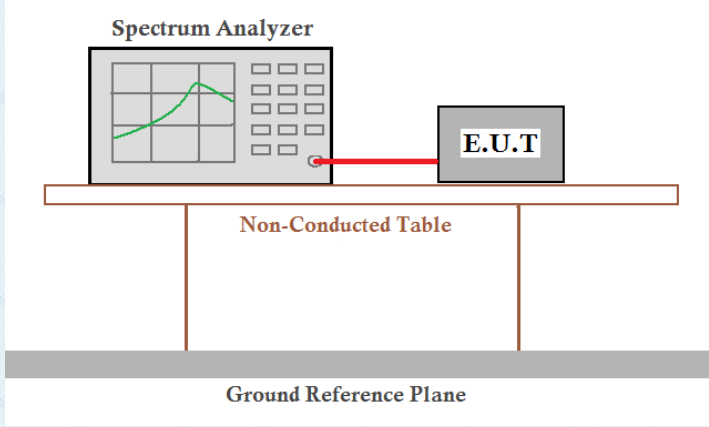


Middle channel



Highest channel

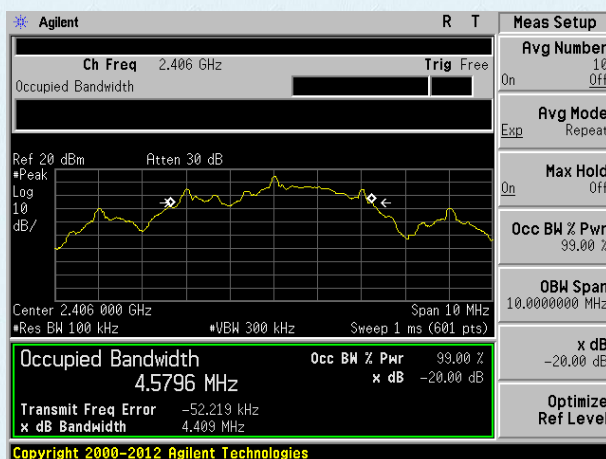
## 7.3 20dB Emission Bandwidth

|                   |                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (a)(1)                                                                                                                                                                                                                                                                                                                       |
| Test Method:      | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                         |
| Limit:            | N/A                                                                                                                                                                                                                                                                                                                                                      |
| Test setup:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.</p> |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                         |
| Test mode:        | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                         |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                     |

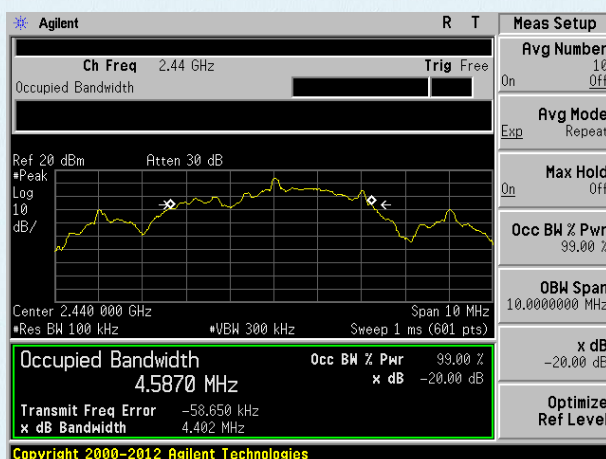
### Measurement Data

| Test channel | 20dB Emission Bandwidth (MHz) | Result |
|--------------|-------------------------------|--------|
| Lowest       | 4.409                         | Pass   |
| Middle       | 4.402                         |        |
| Highest      | 4.397                         |        |

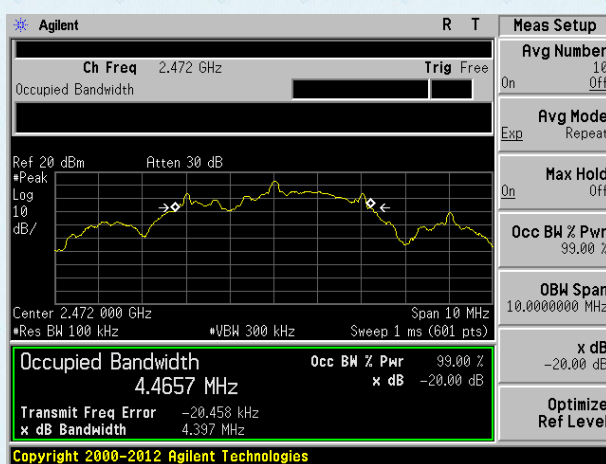
Test plot as follows:



Lowest channel

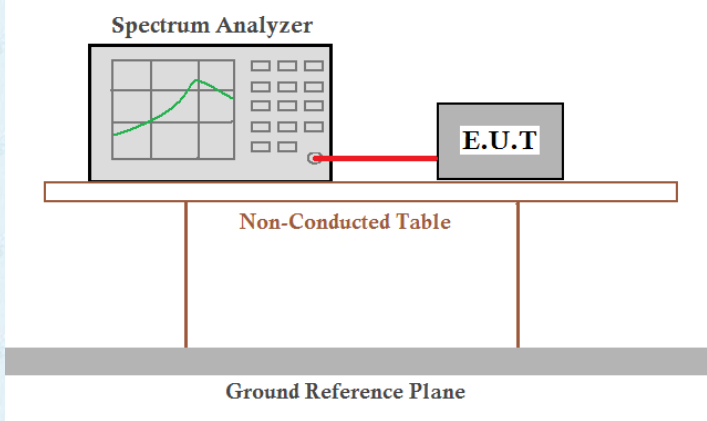


Middle channel



Highest channel

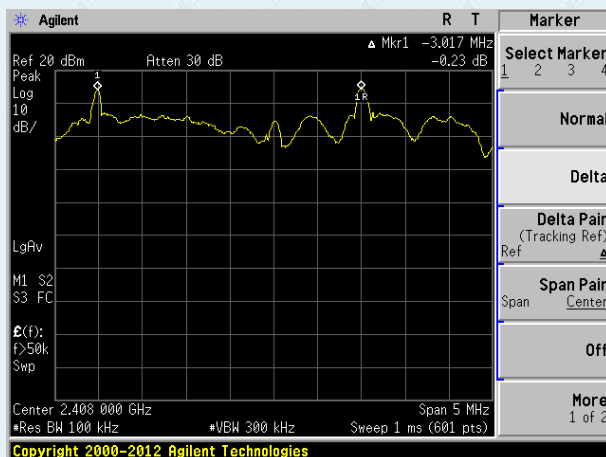
## 7.4 Carrier Frequencies Separation

|                   |                                                                                                                                                                                                                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (a)(1)                                                                                                                                                                                                                                                                                                                         |
| Test Method:      | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                           |
| Receiver setup:   | RBW=100KHz, VBW=300KHz, detector=Peak                                                                                                                                                                                                                                                                                                                      |
| Limit:            | 0.025MHz or 2/3 of the 20dB bandwidth (whichever is greater)                                                                                                                                                                                                                                                                                               |
| Test setup:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.</p> |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                           |
| Test mode:        | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                           |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                       |

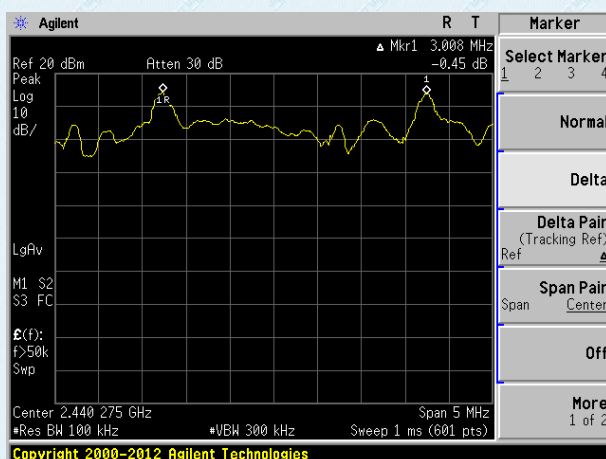
### Measurement Data

| Test channel | Carrier Frequencies Separation (kHz) | Limit (kHz) | Result |
|--------------|--------------------------------------|-------------|--------|
| Lowest       | 3017                                 | 2939        | Pass   |
| Middle       | 3008                                 | 2935        | Pass   |
| Highest      | 3008                                 | 2931        | Pass   |

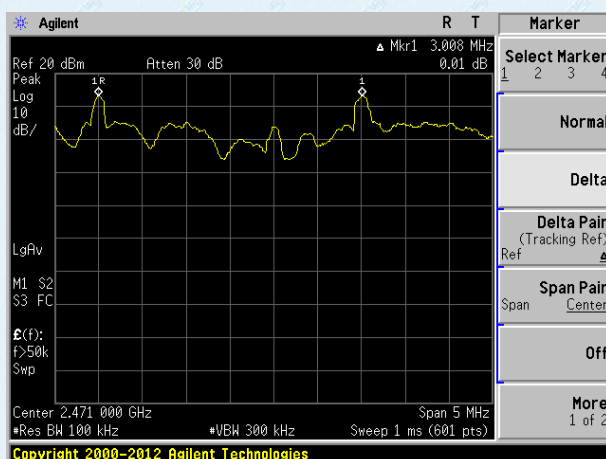
Test plot as follows:



Lowest channel

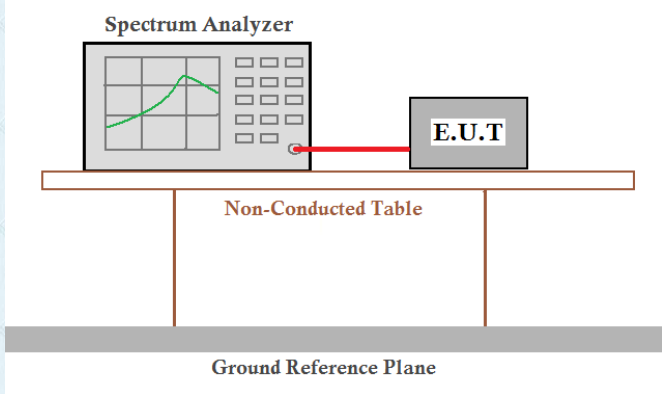


Middle channel



Highest channel

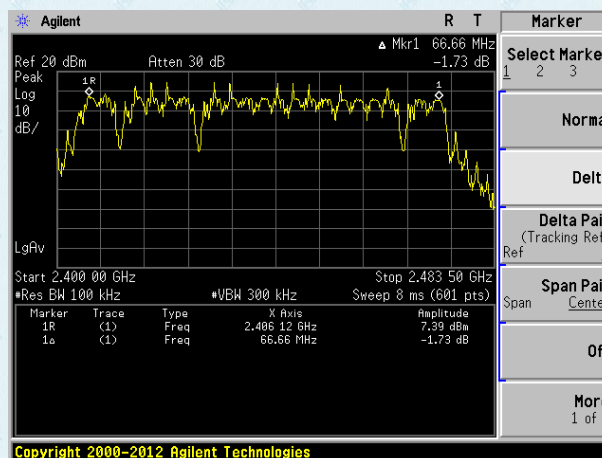
## 7.5 Hopping Channel Number

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (a)(1)                                                 |
| Test Method:      | ANSI C63.10:2013                                                                   |
| Receiver setup:   | RBW=100kHz, VBW=300kHz, Frequency range=2400MHz-2483.5MHz, Detector=Peak           |
| Limit:            | 15 channels                                                                        |
| Test setup:       |  |
| Test Instruments: | Refer to section 6.0 for details                                                   |
| Test mode:        | Refer to section 5.2 for details                                                   |
| Test results:     | Pass                                                                               |

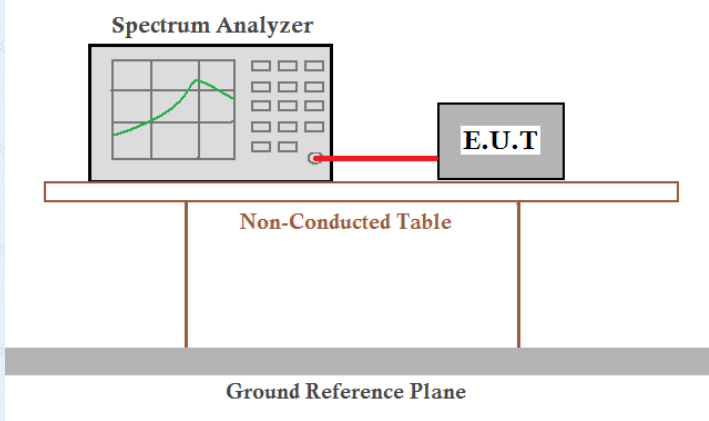
### Measurement Data:

| Hopping channel numbers | Limit | Result |
|-------------------------|-------|--------|
| 20                      | 15    | Pass   |

### Test plot as follows:



## 7.6 Dwell Time

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (a)(1)                                                 |
| Test Method:      | ANSI C63.10:2013                                                                   |
| Receiver setup:   | RBW=1MHz, VBW=1MHz, Span=0Hz, Detector=Peak                                        |
| Limit:            | 0.4 Second                                                                         |
| Test setup:       |  |
| Test Instruments: | Refer to section 6.0 for details                                                   |
| Test mode:        | Refer to section 5.2 for details                                                   |
| Test results:     | Pass                                                                               |

### Measurement Data

| Frequency(MHz) | Ton (ms) | Dwell time(ms) | Limit(ms) | Result |
|----------------|----------|----------------|-----------|--------|
| 2406           | 3.3      | 237.6          | 400       | Pass   |
| 2440           | 3.217    | 231.62         | 400       | Pass   |
| 2472           | 3.283    | 236.376        | 400       | Pass   |

The formula as below:

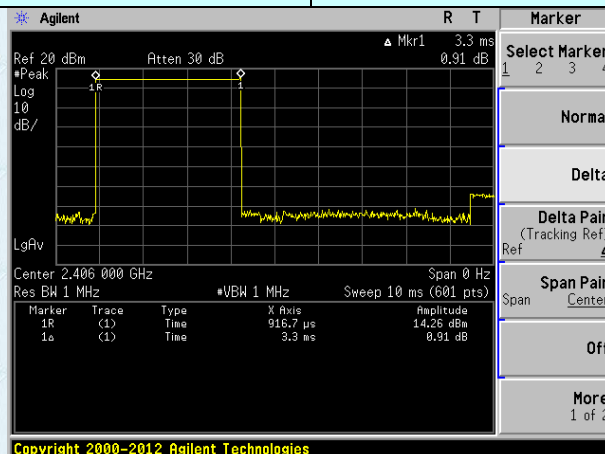
2406MHz: Dwell time = Ton \* Ton times in 1s \* 0.4s \* channel numbers=3.3ms\*9\*0.4\*20=237.6ms

2440MHz: Dwell time = Ton \* Ton times in 1s \* 0.4s \* channel numbers=3.217ms\*9\*0.4\*20=231.624ms

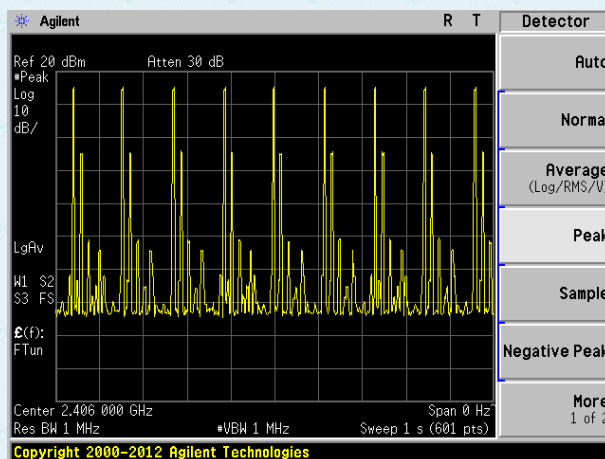
2472MHz: Dwell time = Ton \* Ton times in 1s \* 0.4s \* channel numbers=3.283ms\*9\*0.4\*20=236.376ms

Test plot as follows:

|            |         |
|------------|---------|
| Frequency: | 2406MHz |
|------------|---------|

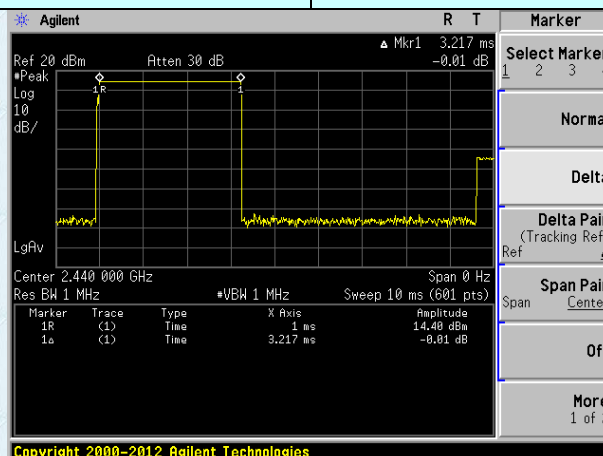


Ton

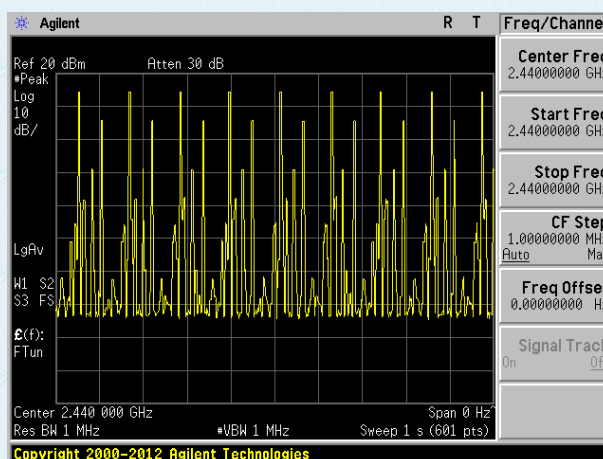


Ton times in 1s

|            |         |
|------------|---------|
| Frequency: | 2440MHz |
|------------|---------|

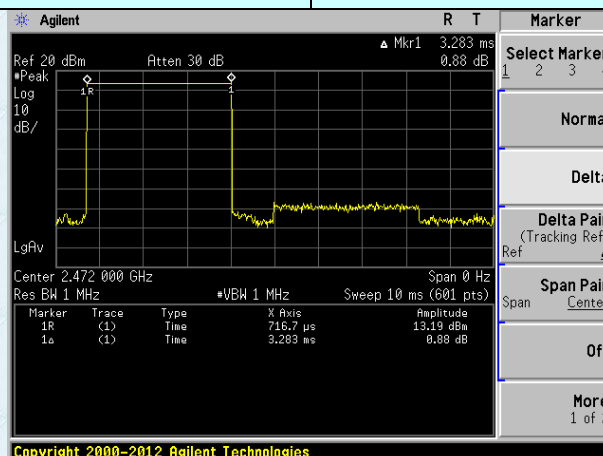


Ton

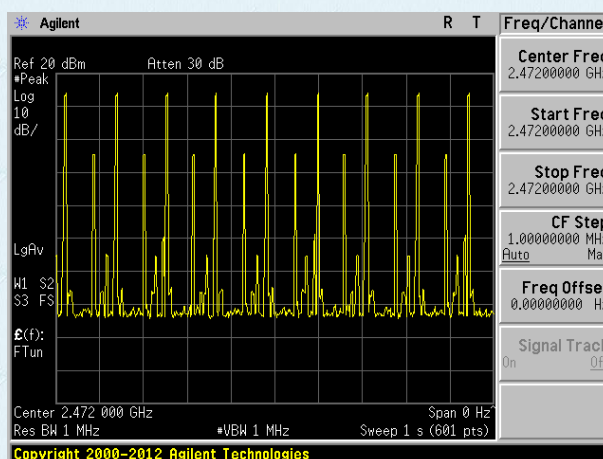


Ton times in 1s

|            |         |
|------------|---------|
| Frequency: | 2472MHz |
|------------|---------|



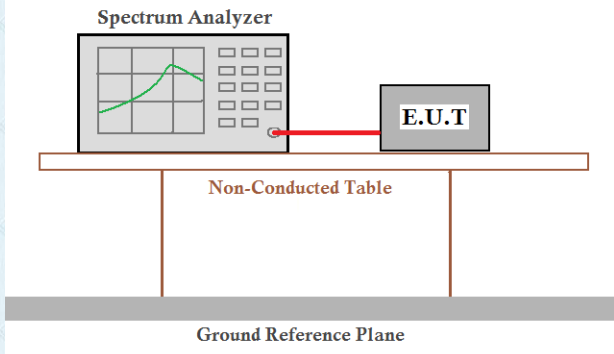
Ton



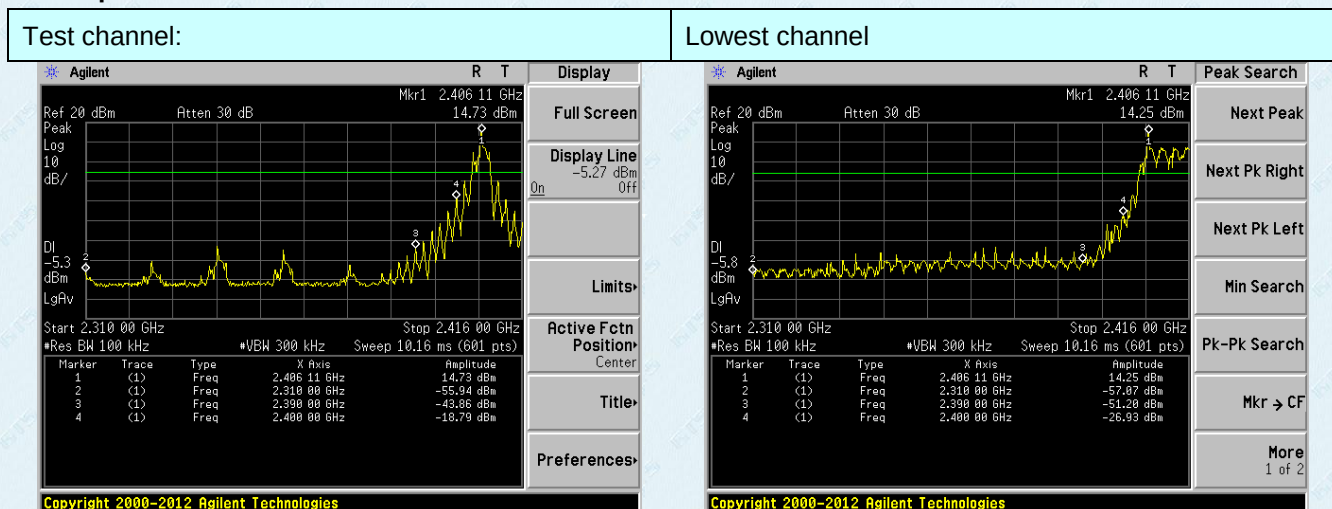
Ton times in 1s

## 7.7 Band Edge

### 7.7.1 Conducted Emission Method

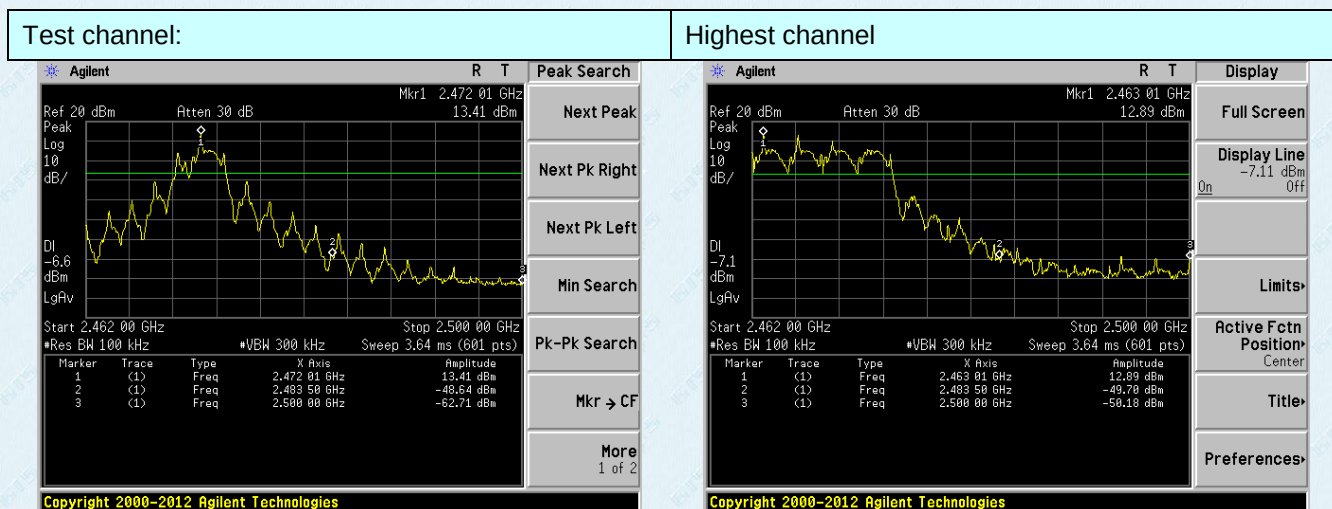
|                   |                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                         |
| Test Method:      | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                                                        |
| Receiver setup:   | RBW=100kHz, VBW=300kHz, Detector=Peak                                                                                                                                                                                                                                                                                                                                                   |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Test setup:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.</p>                             |
| Test Instruments: | Refer to section6.0 for details                                                                                                                                                                                                                                                                                                                                                         |
| Test mode:        | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                                                        |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                    |

Test plot as follows:



No-hopping mode

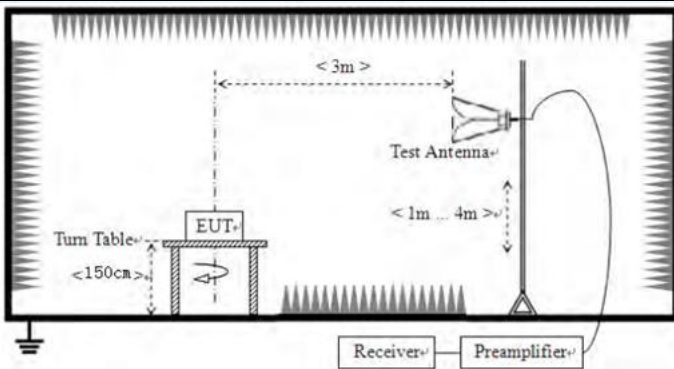
Hopping mode



No-hopping mode

Hopping mode

## 7.7.2 Radiated Emission Method

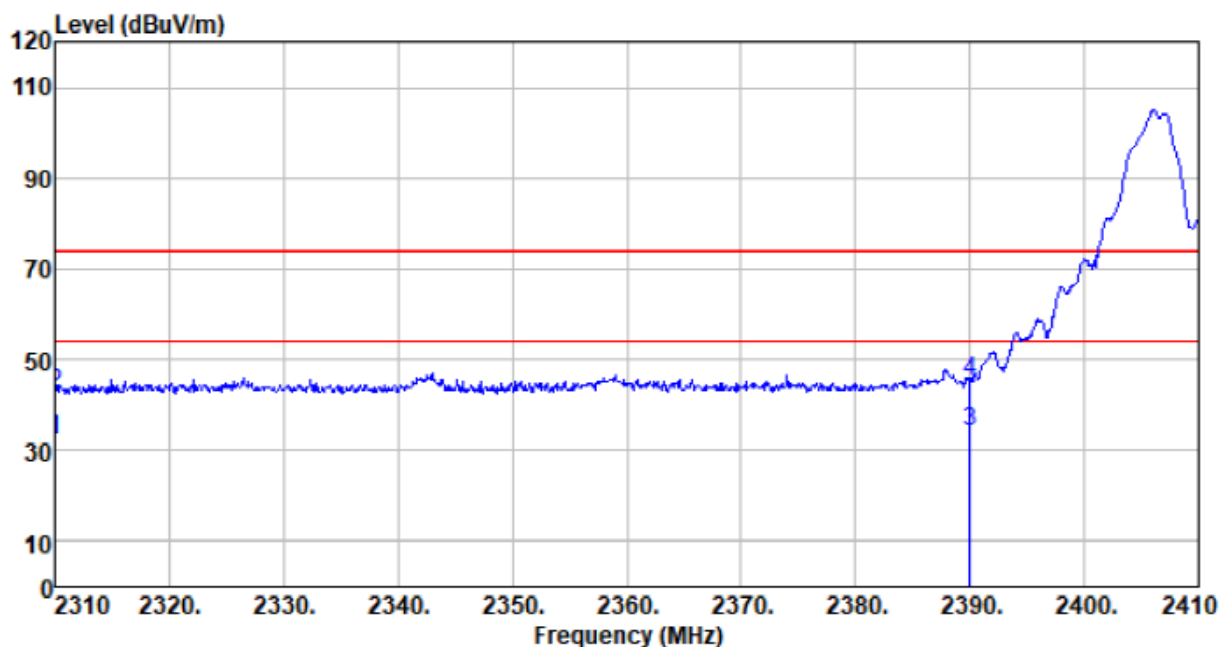
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |         |                    |         |               |  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|--------------------|---------|---------------|--|
| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |         |                    |         |               |  |
| Test Method:          | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |         |                    |         |               |  |
| Test Frequency Range: | All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |         |                    |         |               |  |
| Test site:            | Measurement Distance: 3m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |         |                    |         |               |  |
| Receiver setup:       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Detector |         | RBW                | VBW     | Remark        |  |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Peak     |         | 1MHz               | 3MHz    | Peak Value    |  |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Peak     |         | 1MHz               | 10Hz    | Average Value |  |
| Limit:                | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |         | Limit (dBuV/m @3m) |         | Remark        |  |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |         | 54.00              |         | Average Value |  |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |         | 74.00              |         | Peak Value    |  |
| Test setup:           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |         |                    |         |               |  |
| Test Procedure:       | <ol style="list-style-type: none"><li>1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li><li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li><li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li><li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li><li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li><li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li></ol> |          |         |                    |         |               |  |
| Test Instruments:     | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |         |                    |         |               |  |
| Test mode:            | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |         |                    |         |               |  |
| Temp. / Hum.          | Temp.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 25 °C    | Humid.: | 52%                | Press.: | 1 012mbar     |  |
| Test results:         | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |         |                    |         |               |  |

## Measurement Data

Remark:

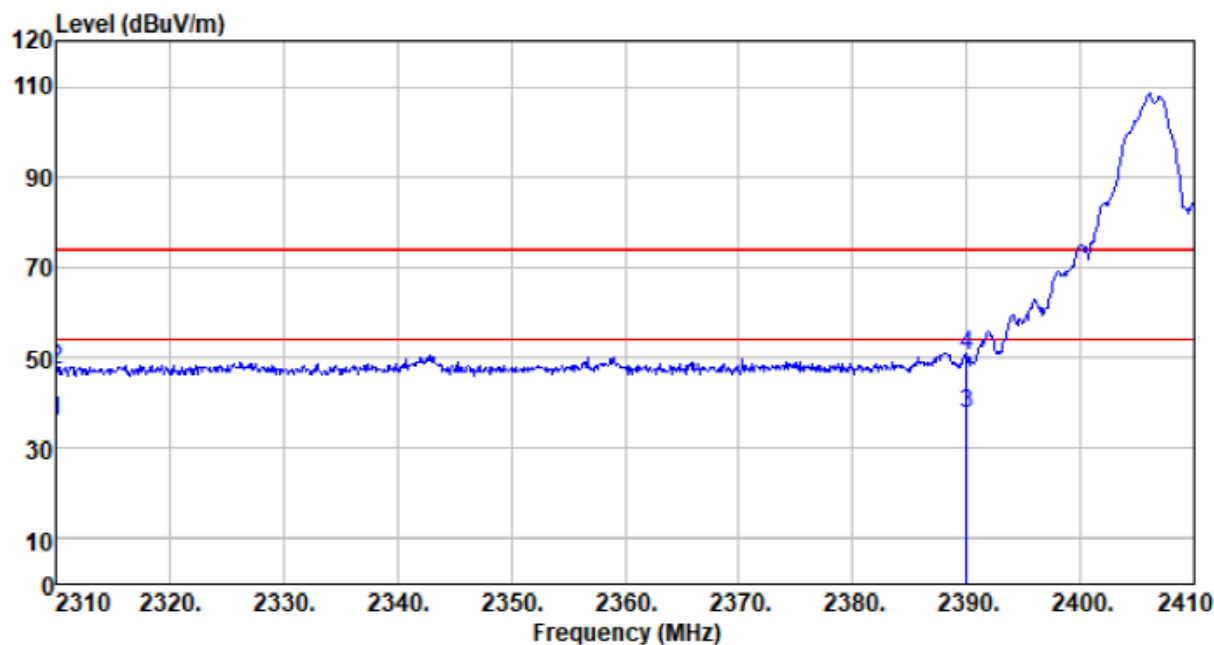
1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

|               |        |               |            |
|---------------|--------|---------------|------------|
| Test channel: | Lowest | Polarization: | Horizontal |
|---------------|--------|---------------|------------|



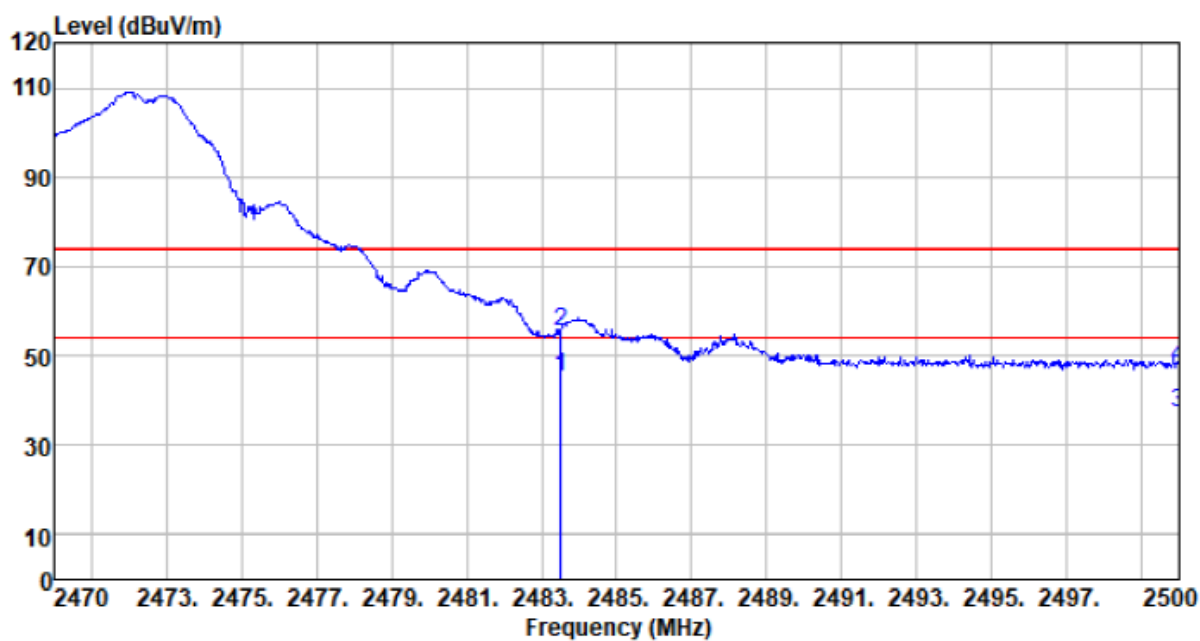
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark  |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|---------|
| 2310.000    | 32.73                    | 27.14                     | 2.81                | 30.43                  | 32.25           | 54.00                    | -21.75              | Average |
| 2310.000    | 43.10                    | 27.14                     | 2.81                | 30.43                  | 42.62           | 74.00                    | -31.38              | Peak    |
| 2390.000    | 34.01                    | 27.37                     | 2.91                | 30.24                  | 34.05           | 54.00                    | -19.95              | Average |
| 2390.000    | 45.02                    | 27.37                     | 2.91                | 30.24                  | 45.06           | 74.00                    | -28.94              | Peak    |

|               |        |               |          |
|---------------|--------|---------------|----------|
| Test channel: | Lowest | Polarization: | Vertical |
|---------------|--------|---------------|----------|



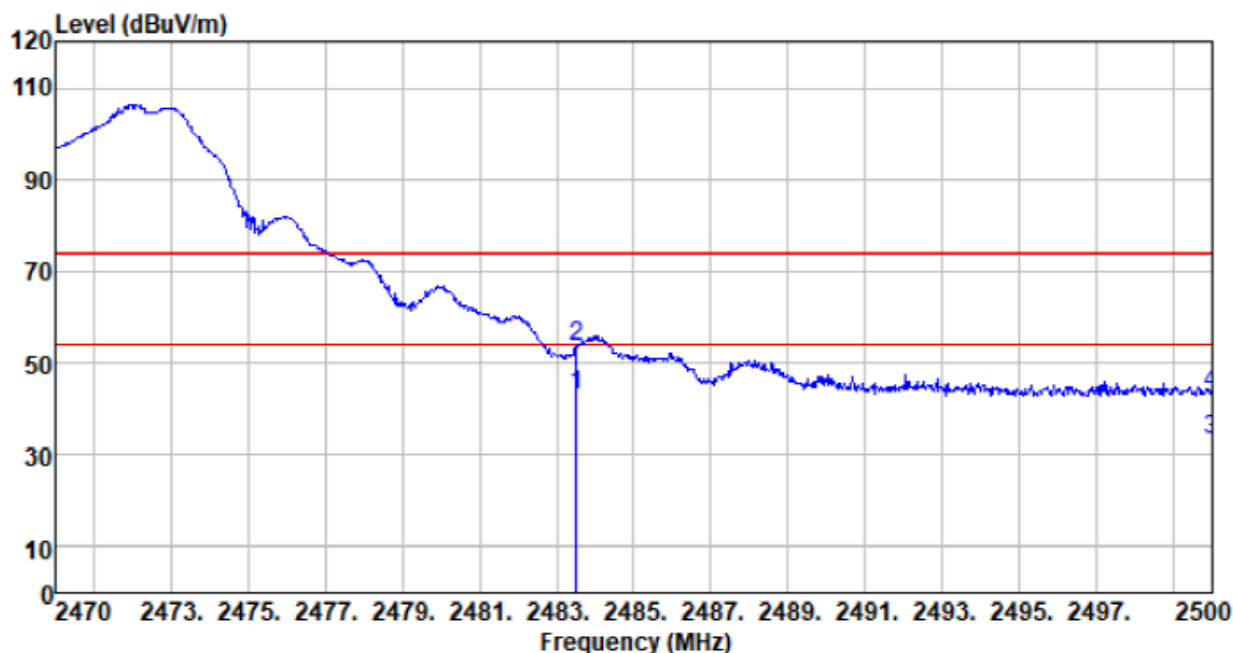
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark  |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|---------|
| 2310.000    | 36.53                    | 27.14                     | 2.81                | 30.43                  | 36.05           | 54.00                    | -17.95              | Average |
| 2310.000    | 48.00                    | 27.14                     | 2.81                | 30.43                  | 47.52           | 74.00                    | -26.48              | Peak    |
| 2390.000    | 37.69                    | 27.37                     | 2.91                | 30.24                  | 37.73           | 54.00                    | -16.27              | Average |
| 2390.000    | 50.46                    | 27.37                     | 2.91                | 30.24                  | 50.50           | 74.00                    | -23.50              | Peak    |

|               |         |               |            |
|---------------|---------|---------------|------------|
| Test channel: | Highest | Polarization: | Horizontal |
|---------------|---------|---------------|------------|



| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark  |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|---------|
| 2483.500    | 44.83                    | 27.66                     | 2.99                | 30.12                  | 45.36           | 54.00                    | -8.64               | Average |
| 2483.500    | 54.83                    | 27.66                     | 2.99                | 30.12                  | 55.36           | 74.00                    | -18.64              | Peak    |
| 2500.000    | 36.50                    | 27.70                     | 3.01                | 30.13                  | 37.08           | 54.00                    | -16.92              | Average |
| 2500.000    | 47.02                    | 27.70                     | 3.01                | 30.13                  | 47.60           | 74.00                    | -26.40              | Peak    |

|               |         |               |          |
|---------------|---------|---------------|----------|
| Test channel: | Highest | Polarization: | Vertical |
|---------------|---------|---------------|----------|



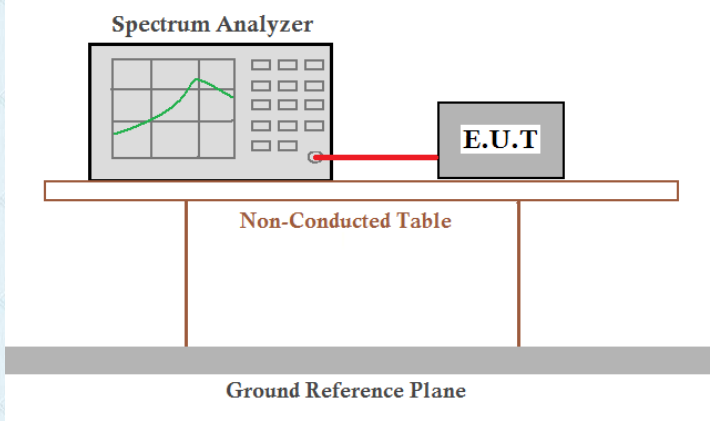
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark  |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|---------|
| 2483.500    | 42.33                    | 27.66                     | 2.99                | 30.12                  | 42.86           | 54.00                    | -11.14              | Average |
| 2483.500    | 52.91                    | 27.66                     | 2.99                | 30.12                  | 53.44           | 74.00                    | -20.56              | Peak    |
| 2500.000    | 32.50                    | 27.70                     | 3.01                | 30.13                  | 33.08           | 54.00                    | -20.92              | Average |
| 2500.000    | 42.87                    | 27.70                     | 3.01                | 30.13                  | 43.45           | 74.00                    | -30.55              | Peak    |

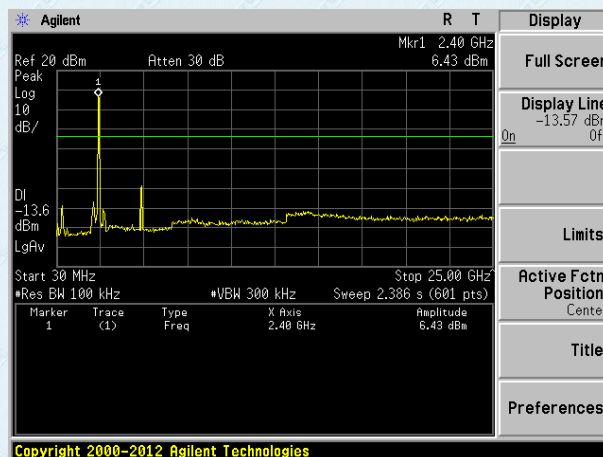
**Remark:**

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

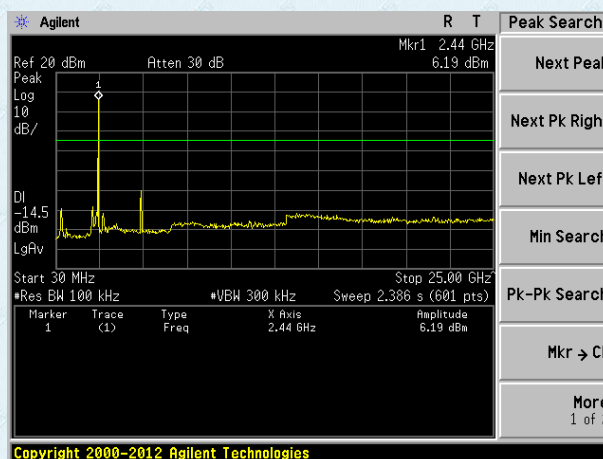
## 7.8 Spurious Emission

### 7.8.1 Conducted Emission Method

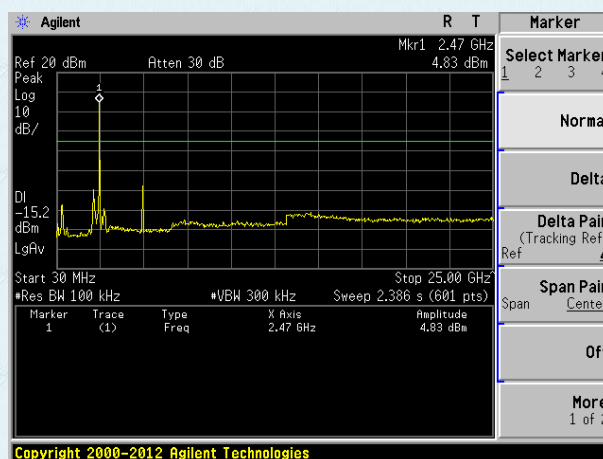
|                   |                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                         |
| Test Method:      | ANSI C63.10:2013                                                                                                                                                                                                                                                                                                                                                                        |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Test setup:       |  <p>The diagram illustrates the test setup for conducted emission measurement. A Spectrum Analyzer is connected via a red cable to an E.U.T (Equipment Under Test). Both are placed on a Non-Conducted Table, which sits on a Ground Reference Plane.</p>                                            |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                                                        |
| Test mode:        | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                                                        |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                    |



Lowest channel:30MHz~25GHz

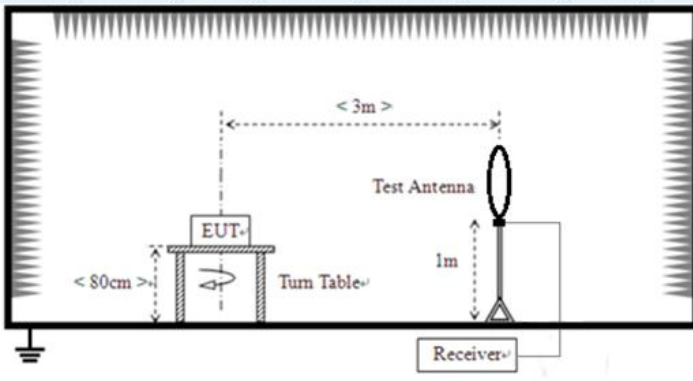


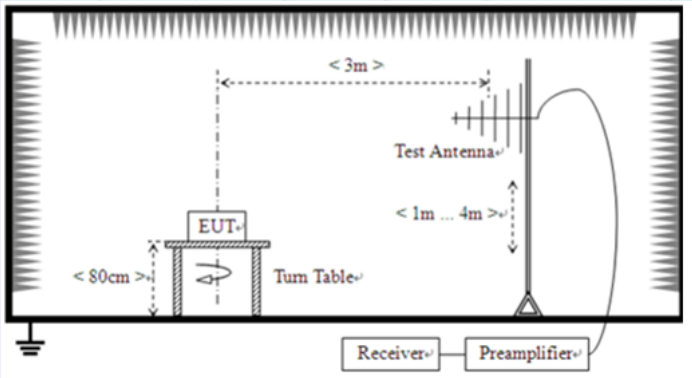
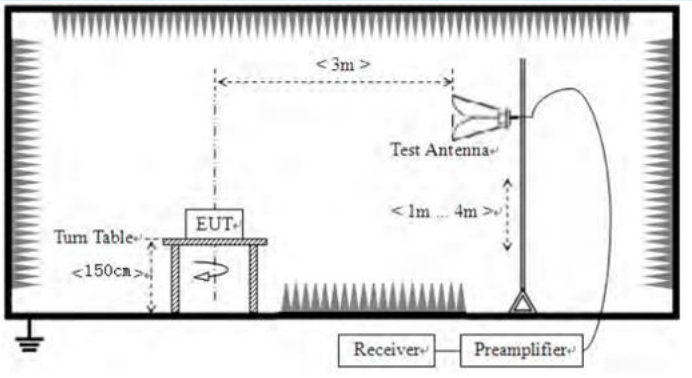
Middle channel: 30MHz~25GHz



Highest channel: 30MHz~25GHz

## 7.8.2 Radiated Emission Method

|                                |                                                                                                 |              |          |                      |            |
|--------------------------------|-------------------------------------------------------------------------------------------------|--------------|----------|----------------------|------------|
| Test Requirement:              | FCC Part15 C Section 15.209                                                                     |              |          |                      |            |
| Test Method:                   | ANSI C63.10:2013                                                                                |              |          |                      |            |
| Test Frequency Range:          | 9kHz to 25GHz                                                                                   |              |          |                      |            |
| Test site:                     | Measurement Distance: 3m                                                                        |              |          |                      |            |
| Receiver setup:                | Frequency                                                                                       | Detector     | RBW      | VBW                  | Value      |
|                                | 9KHz-150KHz                                                                                     | Quasi-peak   | 200Hz    | 600Hz                | Quasi-peak |
|                                | 150KHz-30MHz                                                                                    | Quasi-peak   | 9KHz     | 30KHz                | Quasi-peak |
|                                | 30MHz-1GHz                                                                                      | Quasi-peak   | 120KHz   | 300KHz               | Quasi-peak |
|                                | Above 1GHz                                                                                      | Peak         | 1MHz     | 3MHz                 | Peak       |
| Peak                           |                                                                                                 | 1MHz         | 10Hz     | Average              |            |
| Limit:<br>(Spurious Emissions) | Frequency                                                                                       | Limit (uV/m) | Value    | Measurement Distance |            |
|                                | 0.009MHz-0.490MHz                                                                               | 2400/F(KHz)  | PK,AV,QP | 300m                 |            |
|                                | 0.490MHz-1.705MHz                                                                               | 24000/F(KHz) | QP       | 30m                  |            |
|                                | 1.705MHz-30MHz                                                                                  | 30           | QP       | 30m                  |            |
|                                | 30MHz-88MHz                                                                                     | 100          | QP       | 3m                   |            |
|                                | 88MHz-216MHz                                                                                    | 150          | QP       |                      |            |
|                                | 216MHz-960MHz                                                                                   | 200          | QP       |                      |            |
|                                | 960MHz-1GHz                                                                                     | 500          | QP       |                      |            |
|                                | Above 1GHz                                                                                      | 500          | Average  |                      |            |
| 5000                           |                                                                                                 | Peak         |          |                      |            |
| Test setup:                    | Below 30MHz                                                                                     |              |          |                      |            |
|                                | <div></div> |              |          |                      |            |
| Below 1GHz                     |                                                                                                 |              |          |                      |            |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |       |         |           |         |           |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------|---------|-----------|---------|-----------|
|                   |  <p>Above 1GHz</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |       |         |           |         |           |
| Test Procedure:   | <ol style="list-style-type: none"><li>1. The EUT was placed on the top of a rotating table (0.8 meters for below 1GHz and 1.5meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li><li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li><li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li><li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li><li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li><li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li></ol> |         |       |         |           |         |           |
| Test Instruments: | Refer to section 5.8 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |       |         |           |         |           |
| Test mode:        | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |       |         |           |         |           |
| Temp. / Hum.      | <table><tr><td>Temp.:</td><td>25 °C</td><td>Humid.:</td><td>52%</td><td>Press.:</td><td>1 012mbar</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Temp.:  | 25 °C | Humid.: | 52%       | Press.: | 1 012mbar |
| Temp.:            | 25 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Humid.: | 52%   | Press.: | 1 012mbar |         |           |

Test results:

Pass

**Remark:**

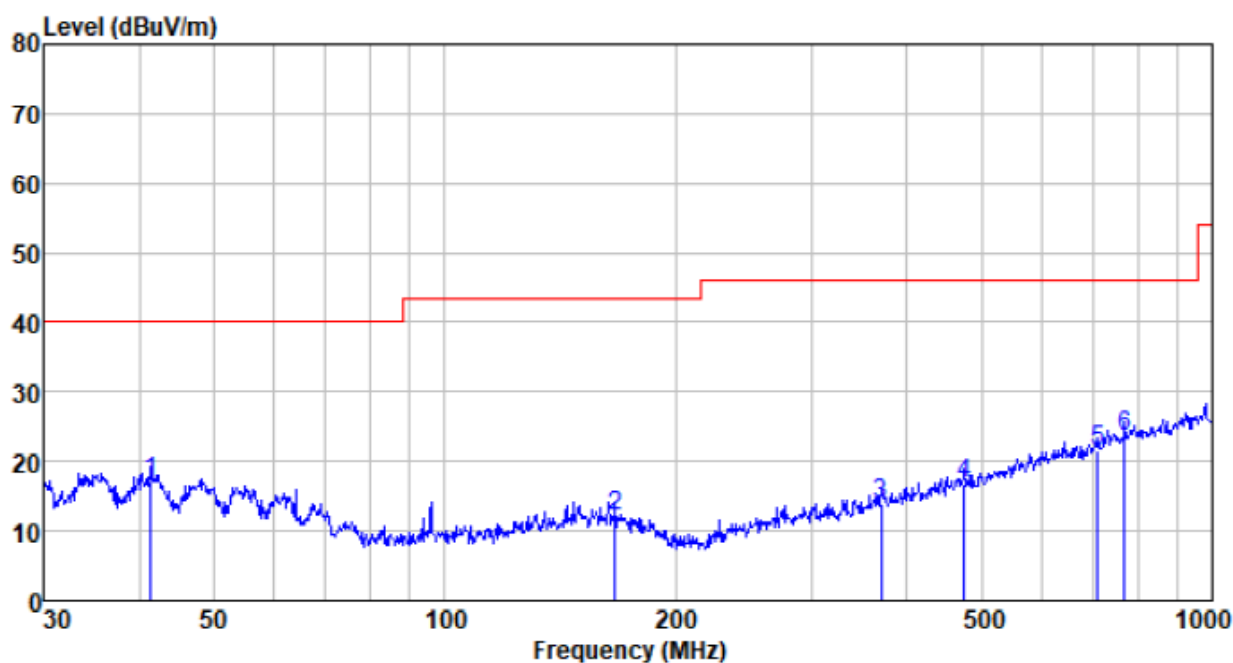
1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

**Measurement data:****■ Below 30MHz**

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

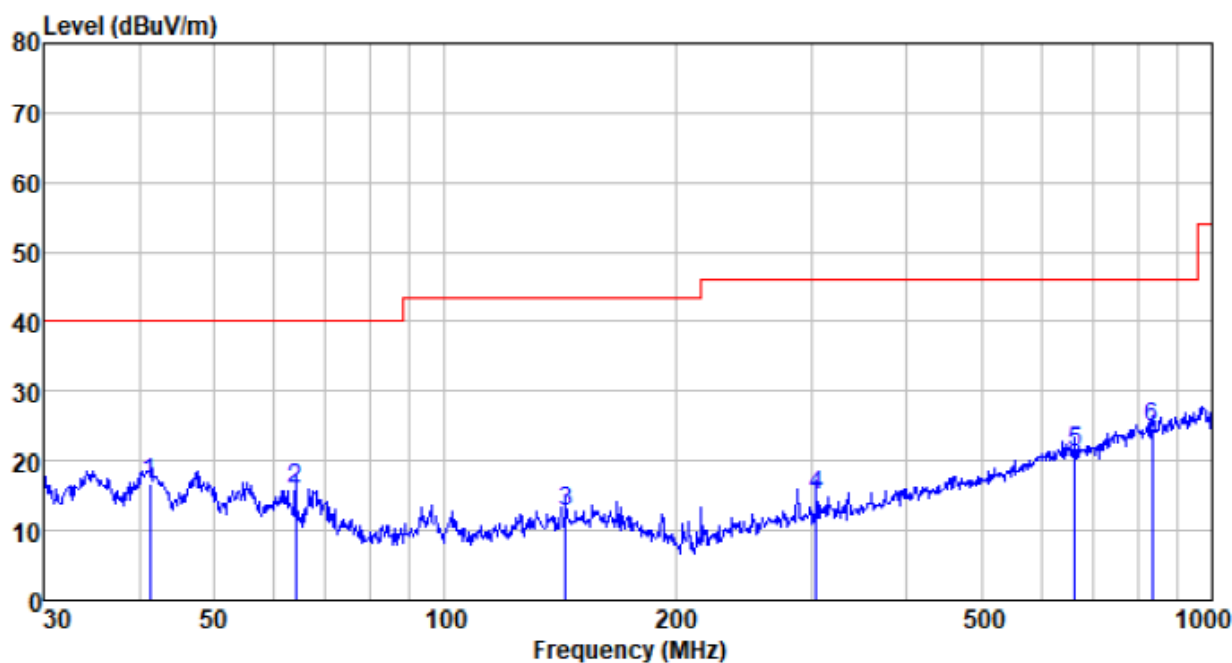
■ 30MHz ~ 1GHz

|               |        |               |            |
|---------------|--------|---------------|------------|
| Test channel: | Lowest | Polarization: | Horizontal |
|---------------|--------|---------------|------------|



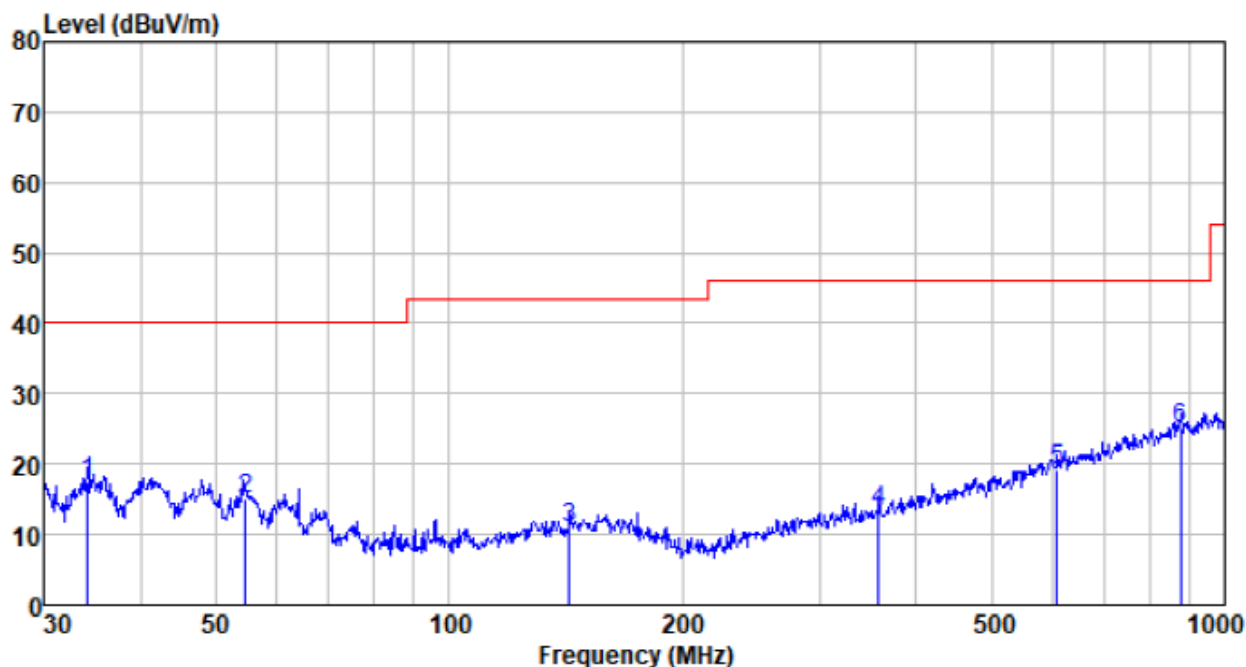
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 41.422      | 39.10                    | 13.17                     | 0.68                | 35.75                  | 17.20           | 40.00                    | -22.80              | QP     |
| 166.651     | 35.10                    | 12.55                     | 1.67                | 37.17                  | 12.15           | 43.50                    | -31.35              | QP     |
| 370.702     | 34.53                    | 14.08                     | 2.72                | 37.49                  | 13.84           | 46.00                    | -32.16              | QP     |
| 475.499     | 34.80                    | 16.32                     | 3.21                | 37.51                  | 16.82           | 46.00                    | -29.18              | QP     |
| 709.182     | 34.36                    | 20.60                     | 4.12                | 37.63                  | 21.45           | 46.00                    | -24.55              | QP     |
| 768.748     | 35.07                    | 21.81                     | 4.35                | 37.62                  | 23.61           | 46.00                    | -22.39              | QP     |

|               |        |               |          |
|---------------|--------|---------------|----------|
| Test channel: | Lowest | Polarization: | Vertical |
|---------------|--------|---------------|----------|



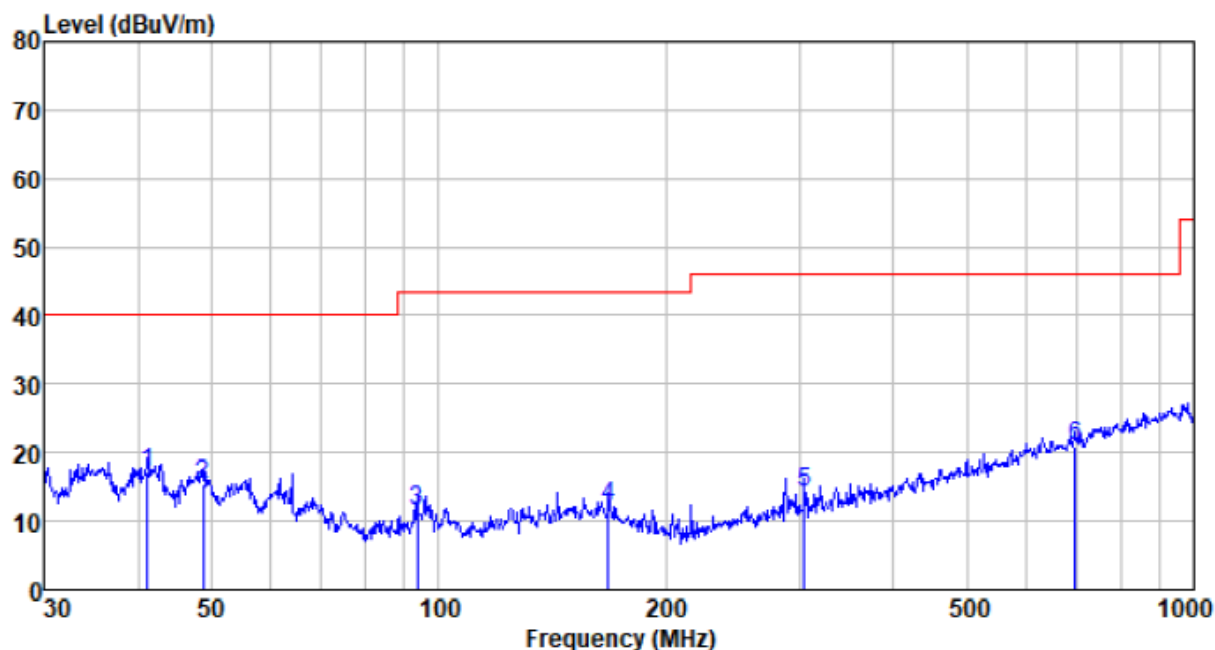
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 41.277      | 38.80                    | 13.18                     | 0.68                | 35.74                  | 16.92           | 40.00                    | -23.08              | QP     |
| 63.983      | 39.80                    | 11.63                     | 0.89                | 36.37                  | 15.95           | 40.00                    | -24.05              | QP     |
| 143.830     | 36.02                    | 12.32                     | 1.53                | 37.04                  | 12.83           | 43.50                    | -30.67              | QP     |
| 304.610     | 37.63                    | 12.53                     | 2.38                | 37.43                  | 15.11           | 46.00                    | -30.89              | QP     |
| 663.473     | 34.90                    | 20.03                     | 3.96                | 37.60                  | 21.29           | 46.00                    | -24.71              | QP     |
| 836.244     | 35.18                    | 22.49                     | 4.60                | 37.61                  | 24.66           | 46.00                    | -21.34              | QP     |

|               |        |               |            |
|---------------|--------|---------------|------------|
| Test channel: | Middle | Polarization: | Horizontal |
|---------------|--------|---------------|------------|



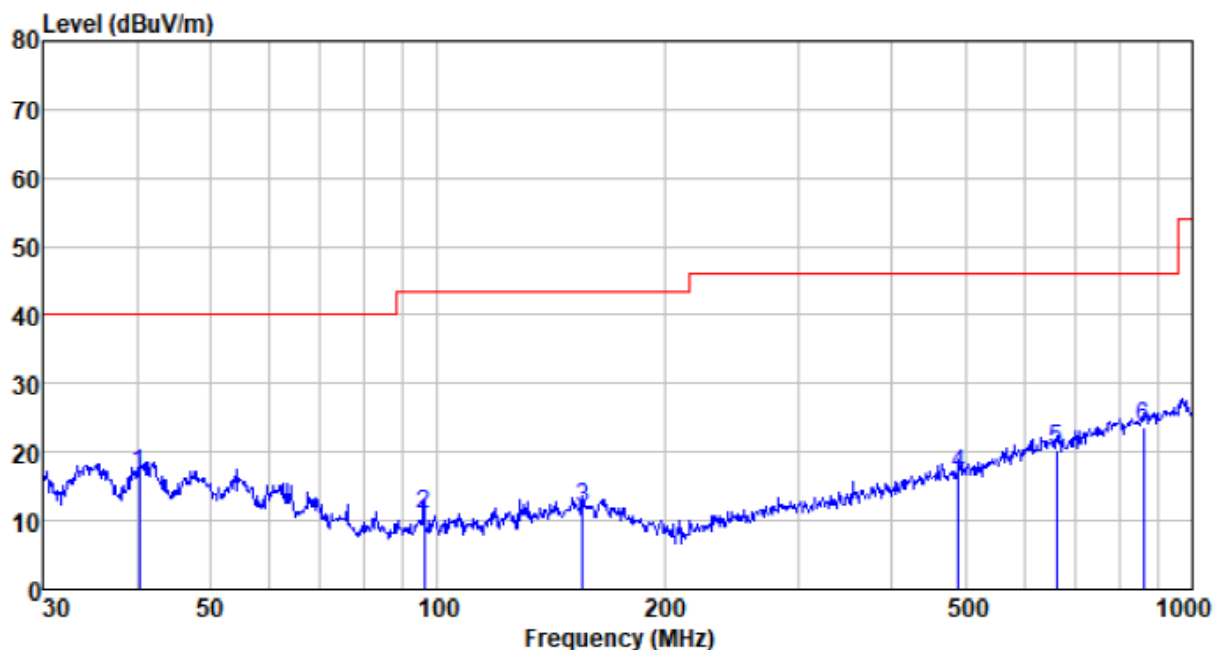
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 34.156      | 39.69                    | 12.44                     | 0.60                | 35.30                  | 17.43           | 40.00                    | -22.57              | QP     |
| 54.643      | 38.02                    | 12.58                     | 0.81                | 36.25                  | 15.16           | 40.00                    | -24.84              | QP     |
| 142.824     | 34.16                    | 12.24                     | 1.52                | 37.03                  | 10.89           | 43.50                    | -32.61              | QP     |
| 357.929     | 34.48                    | 13.75                     | 2.66                | 37.48                  | 13.41           | 46.00                    | -32.59              | QP     |
| 607.787     | 33.63                    | 19.38                     | 3.75                | 37.55                  | 19.21           | 46.00                    | -26.79              | QP     |
| 878.322     | 35.06                    | 22.79                     | 4.77                | 37.60                  | 25.02           | 46.00                    | -20.98              | QP     |

|               |        |               |          |
|---------------|--------|---------------|----------|
| Test channel: | Middle | Polarization: | Vertical |
|---------------|--------|---------------|----------|



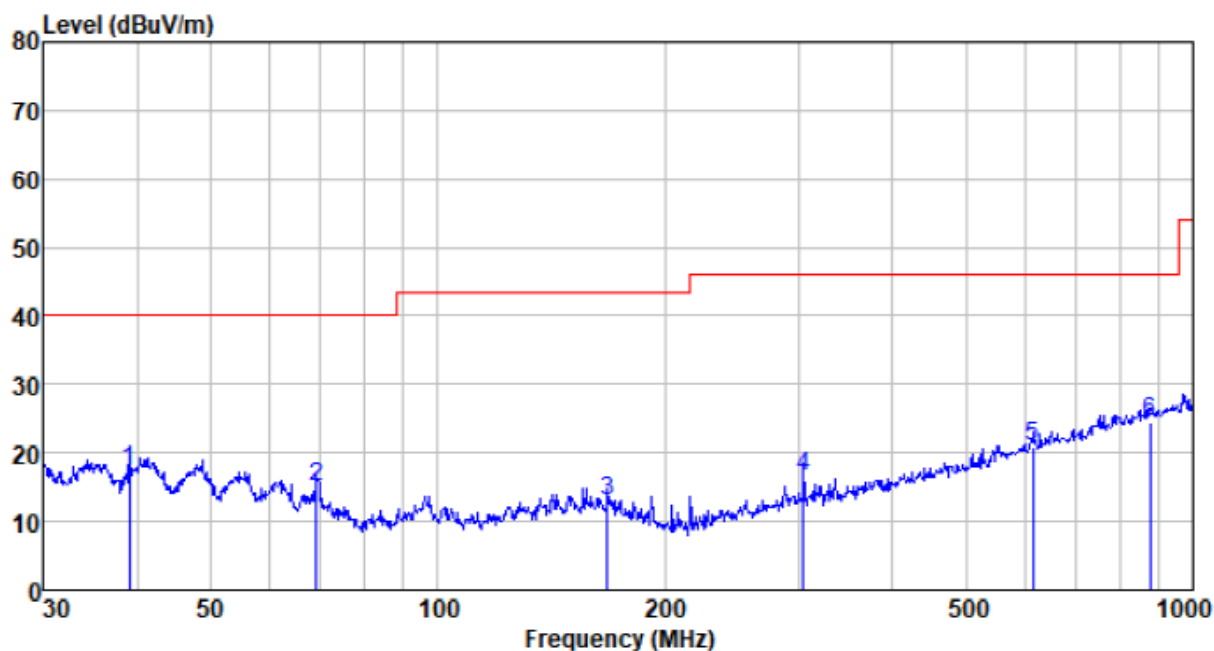
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 41.132      | 38.96                    | 13.19                     | 0.67                | 35.73                  | 17.09           | 40.00                    | -22.91              | QP     |
| 48.672      | 37.78                    | 13.02                     | 0.76                | 36.12                  | 15.44           | 40.00                    | -24.56              | QP     |
| 93.768      | 38.31                    | 8.69                      | 1.14                | 36.67                  | 11.47           | 43.50                    | -32.03              | QP     |
| 167.824     | 35.22                    | 12.52                     | 1.67                | 37.18                  | 12.23           | 43.50                    | -31.27              | QP     |
| 304.610     | 36.82                    | 12.53                     | 2.38                | 37.43                  | 14.30           | 46.00                    | -31.70              | QP     |
| 696.857     | 34.30                    | 20.35                     | 4.08                | 37.63                  | 21.10           | 46.00                    | -24.90              | QP     |

|               |         |               |            |
|---------------|---------|---------------|------------|
| Test channel: | Highest | Polarization: | Horizontal |
|---------------|---------|---------------|------------|



| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 40.276      | 38.59                    | 13.24                     | 0.66                | 35.68                  | 16.81           | 40.00                    | -23.19              | QP     |
| 96.099      | 37.74                    | 8.85                      | 1.16                | 36.69                  | 11.06           | 43.50                    | -32.44              | QP     |
| 155.910     | 34.42                    | 12.78                     | 1.60                | 37.11                  | 11.69           | 43.50                    | -31.81              | QP     |
| 490.745     | 34.54                    | 16.51                     | 3.26                | 37.51                  | 16.80           | 46.00                    | -29.20              | QP     |
| 661.151     | 34.06                    | 20.01                     | 3.95                | 37.60                  | 20.42           | 46.00                    | -25.58              | QP     |
| 860.035     | 33.83                    | 22.66                     | 4.69                | 37.61                  | 23.57           | 46.00                    | -22.43              | QP     |

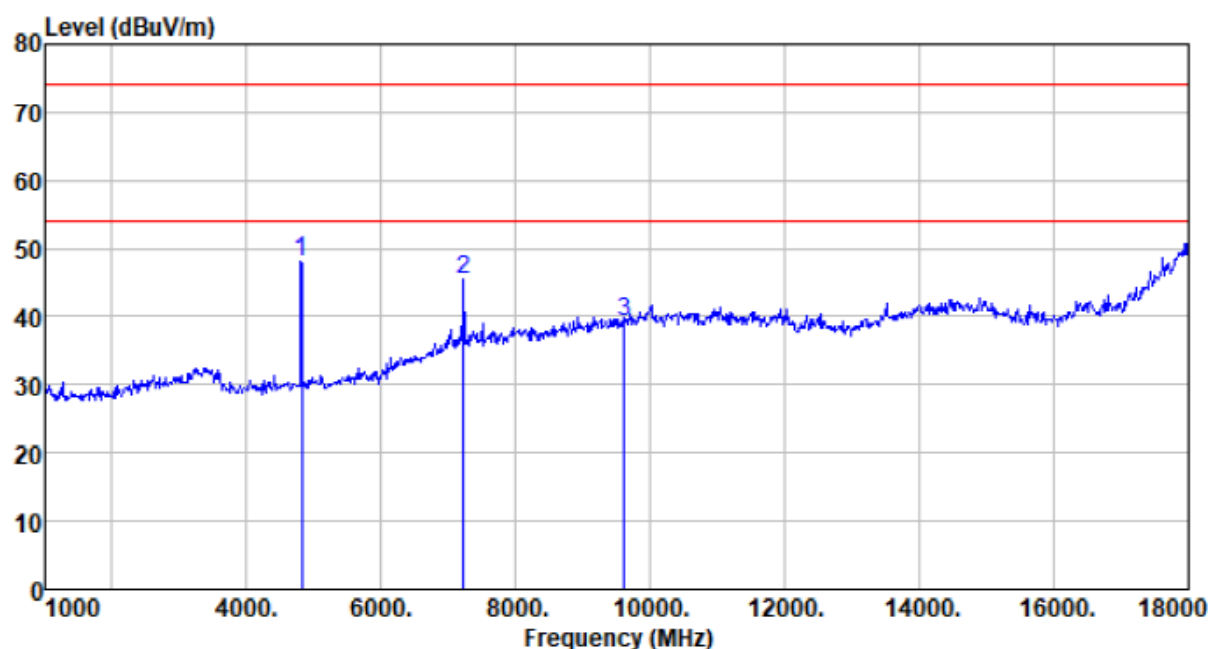
|               |         |               |          |
|---------------|---------|---------------|----------|
| Test channel: | Highest | Polarization: | Vertical |
|---------------|---------|---------------|----------|



| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 39.024      | 39.27                    | 13.11                     | 0.65                | 35.61                  | 17.42           | 40.00                    | -22.58              | QP     |
| 69.114      | 39.68                    | 10.75                     | 0.93                | 36.43                  | 14.93           | 40.00                    | -25.07              | QP     |
| 167.824     | 35.85                    | 12.52                     | 1.67                | 37.18                  | 12.86           | 43.50                    | -30.64              | QP     |
| 304.610     | 39.16                    | 12.53                     | 2.38                | 37.43                  | 16.64           | 46.00                    | -29.36              | QP     |
| 614.214     | 35.29                    | 19.50                     | 3.77                | 37.55                  | 21.01           | 46.00                    | -24.99              | QP     |
| 878.322     | 34.61                    | 22.79                     | 4.77                | 37.60                  | 24.57           | 46.00                    | -21.43              | QP     |

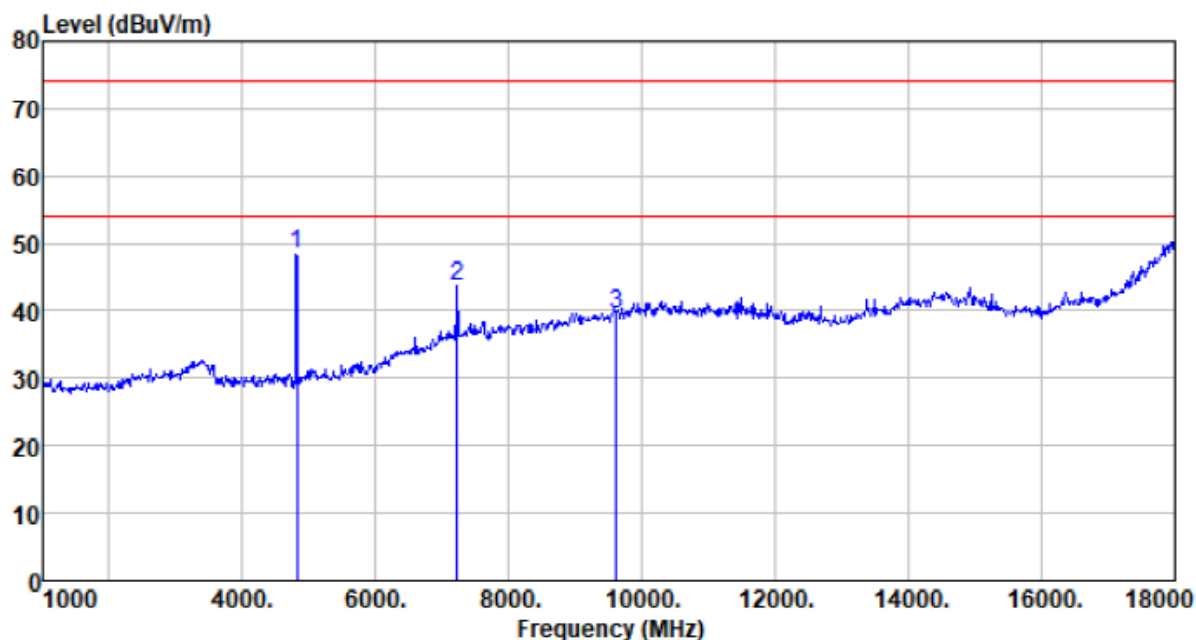
■ Above 1GHz

|               |        |               |            |
|---------------|--------|---------------|------------|
| Test channel: | Lowest | Polarization: | Horizontal |
|---------------|--------|---------------|------------|



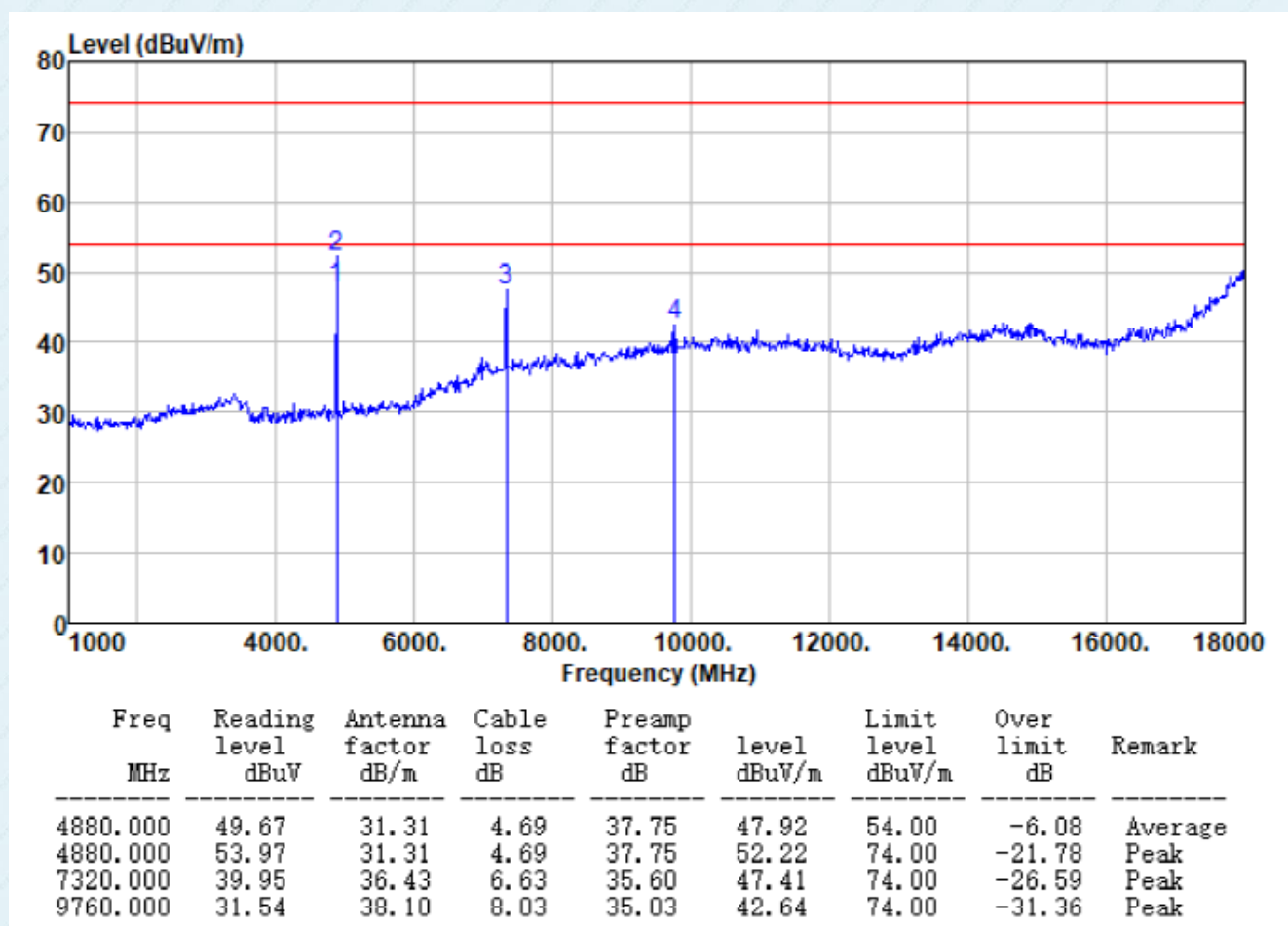
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 4812.000    | 49.95                    | 31.22                     | 4.61                | 37.73                  | 48.05           | 74.00                    | -25.95              | Peak   |
| 7216.000    | 38.32                    | 36.20                     | 6.50                | 35.63                  | 45.39           | 74.00                    | -28.61              | Peak   |
| 9618.000    | 28.34                    | 37.93                     | 7.98                | 34.94                  | 39.31           | 74.00                    | -34.69              | Peak   |

|               |        |               |          |
|---------------|--------|---------------|----------|
| Test channel: | Lowest | Polarization: | Vertical |
|---------------|--------|---------------|----------|

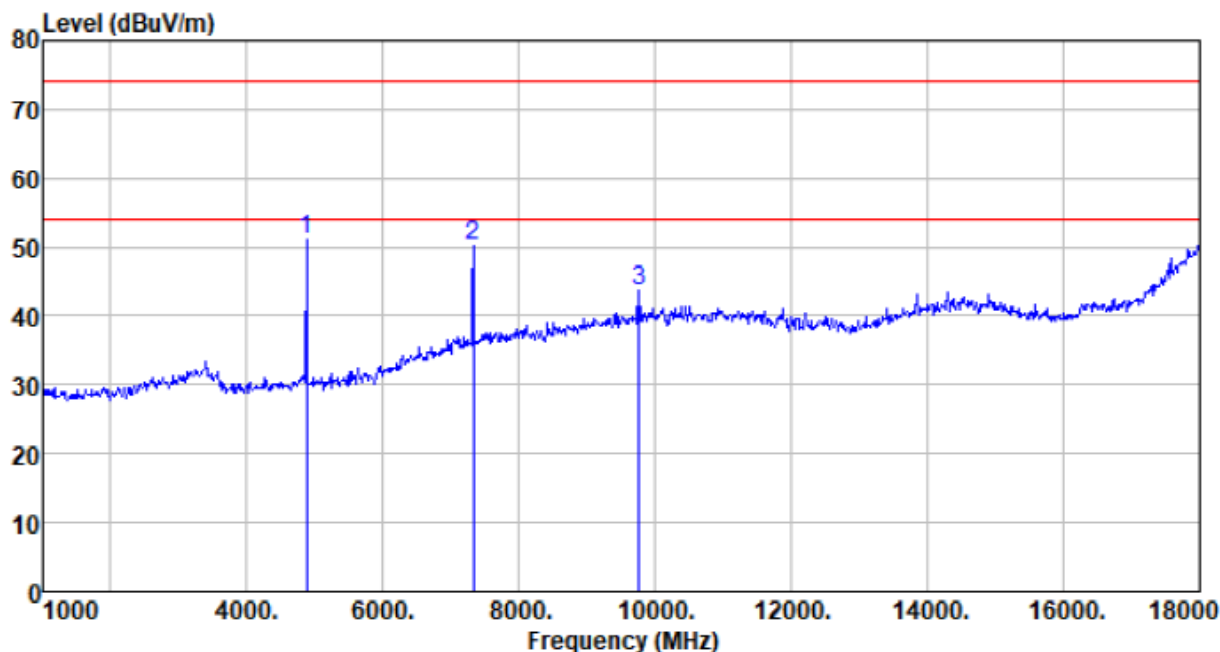


| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 4812.000    | 50.31                    | 31.22                     | 4.61                | 37.73                  | 48.41           | 74.00                    | -25.59              | Peak   |
| 7216.000    | 36.77                    | 36.20                     | 6.50                | 35.63                  | 43.84           | 74.00                    | -30.16              | Peak   |
| 9618.000    | 28.59                    | 37.93                     | 7.98                | 34.94                  | 39.56           | 74.00                    | -34.44              | Peak   |

|               |        |               |            |
|---------------|--------|---------------|------------|
| Test channel: | Middle | Polarization: | Horizontal |
|---------------|--------|---------------|------------|

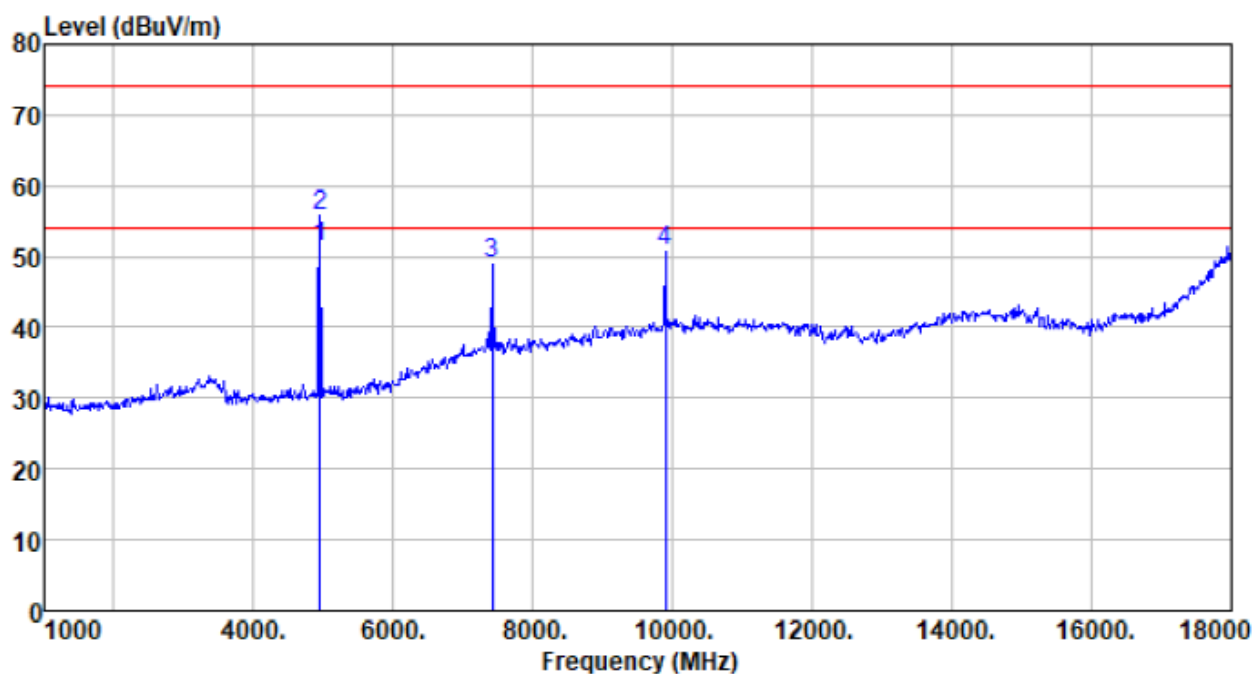


|               |        |               |          |
|---------------|--------|---------------|----------|
| Test channel: | Middle | Polarization: | Vertical |
|---------------|--------|---------------|----------|



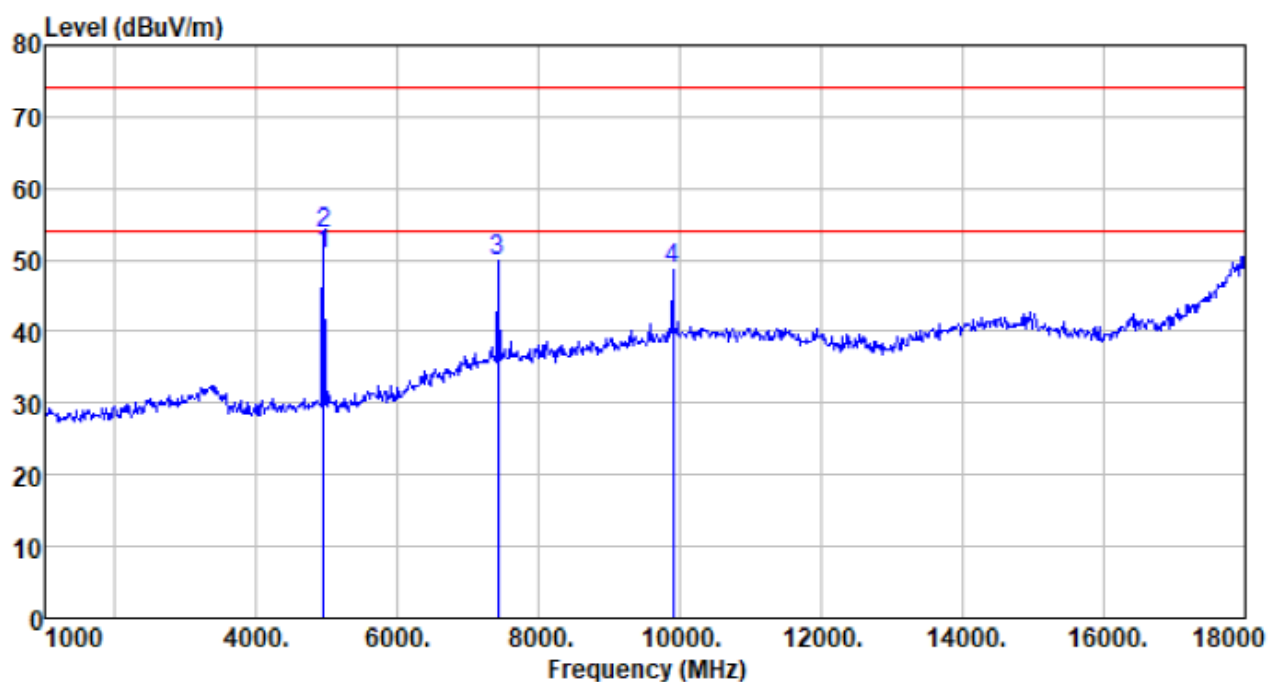
| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|--------|
| 4880.000    | 52.87                    | 31.31                     | 4.69                | 37.75                  | 51.12           | 74.00                    | -22.88              | Peak   |
| 7320.000    | 42.80                    | 36.43                     | 6.63                | 35.60                  | 50.26           | 74.00                    | -23.74              | Peak   |
| 9760.000    | 32.48                    | 38.10                     | 8.03                | 35.03                  | 43.58           | 74.00                    | -30.42              | Peak   |

|               |         |               |            |
|---------------|---------|---------------|------------|
| Test channel: | Highest | Polarization: | Horizontal |
|---------------|---------|---------------|------------|



| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark  |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|---------|
| 4948.000    | 53.03                    | 31.41                     | 4.77                | 37.78                  | 51.43           | 54.00                    | -2.57               | Average |
| 4948.000    | 57.42                    | 31.41                     | 4.77                | 37.78                  | 55.82           | 74.00                    | -18.18              | Peak    |
| 7420.000    | 41.13                    | 36.62                     | 6.75                | 35.57                  | 48.93           | 74.00                    | -25.07              | Peak    |
| 9896.000    | 39.48                    | 38.27                     | 8.08                | 35.12                  | 50.71           | 74.00                    | -23.29              | Peak    |

|               |         |               |          |
|---------------|---------|---------------|----------|
| Test channel: | Highest | Polarization: | Vertical |
|---------------|---------|---------------|----------|



| Freq<br>MHz | Reading<br>level<br>dBuV | Antenna<br>factor<br>dB/m | Cable<br>loss<br>dB | Preamp<br>factor<br>dB | level<br>dBuV/m | Limit<br>level<br>dBuV/m | Over<br>limit<br>dB | Remark  |
|-------------|--------------------------|---------------------------|---------------------|------------------------|-----------------|--------------------------|---------------------|---------|
| 4948.000    | 52.40                    | 31.41                     | 4.77                | 37.78                  | 50.80           | 54.00                    | -3.20               | Average |
| 4948.000    | 55.42                    | 31.41                     | 4.77                | 37.78                  | 53.82           | 74.00                    | -20.18              | Peak    |
| 7420.000    | 42.06                    | 36.62                     | 6.75                | 35.57                  | 49.86           | 74.00                    | -24.14              | Peak    |
| 9896.000    | 37.41                    | 38.27                     | 8.08                | 35.12                  | 48.64           | 74.00                    | -25.36              | Peak    |

#### Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. No emission found in frequency above 18GHz.

## 8 Test Setup Photo

Reference to the **appendix I** for details.

## 9 EUT Constructional Details

Reference to the **appendix II** for details.

---End---