

# FCC CERTIFICATION TEST REPORT

|                                                                                                                                                                                                                                                   |                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>                                                                                                                                                                                                                                 | Guangzhou City Baiyun District Jianggao Feiyang Electric Appliance Factory                                                    |
| <b>Address:</b>                                                                                                                                                                                                                                   | Feiyang industrial Zone, The Sixth Economy Co-Operative Society, Changgang Village, Jianggao Town, Baiyun District, Guangzhou |
| <b>Manufacturer:</b>                                                                                                                                                                                                                              | Guangzhou City Baiyun District Jianggao Feiyang Electric Appliance Factory                                                    |
| <b>Address:</b>                                                                                                                                                                                                                                   | Feiyang industrial Zone, The Sixth Economy Co-Operative Society, Changgang Village, Jianggao Town, Baiyun District, Guangzhou |
| <b>Product Description:</b>                                                                                                                                                                                                                       | Bluetooth speaker                                                                                                             |
| <b>Brand Name:</b>                                                                                                                                                                                                                                | FEIYANG                                                                                                                       |
| <b>Tested Model:</b>                                                                                                                                                                                                                              | FG208-16                                                                                                                      |
| <b>FCC ID:</b>                                                                                                                                                                                                                                    | 2A8VSFG208-16                                                                                                                 |
| <b>Report No.:</b>                                                                                                                                                                                                                                | JCF220826003-001                                                                                                              |
| <b>Received Date:</b>                                                                                                                                                                                                                             | Aug. 26, 2022                                                                                                                 |
| <b>Tested Date:</b>                                                                                                                                                                                                                               | Aug. 26, 2022~Oct. 11, 2022                                                                                                   |
| <b>Issued Date:</b>                                                                                                                                                                                                                               | Oct. 12, 2022                                                                                                                 |
| <b>Test Standards:</b>                                                                                                                                                                                                                            | FCC Rules and Regulations Part 15 Subpart C,                                                                                  |
| <b>Test Procedure :</b>                                                                                                                                                                                                                           | ANSI C63.10: 2013                                                                                                             |
| <b>Test Result:</b>                                                                                                                                                                                                                               | Pass                                                                                                                          |
| <b>Prepared By:</b><br><br><u>Roger/Engineer</u><br><br>Date: Oct. 12, 2022 |                                                                                                                               |
| <b>Reviewed By:</b><br><br><u>Jone Lv/Engineer</u><br>Date: Oct. 12, 2022                                                                                      |                                                                                                                               |
| <b>Approved By:</b><br><br><u>Talent Zhang/Engineer</u><br>Date: Oct. 12, 2022                                                                                 |                                                                                                                               |

Note: The test results in this report apply exclusively to the tested model / sample. Without written approval of Guangzhou Jingce Testing Technology Co., Ltd. the test report shall not be reproduced except in full.

**Report Revise Record**

| Report Version | Revise Time | Issued Date   | Valid Version   | Notes |
|----------------|-------------|---------------|-----------------|-------|
| V1.0           | /           | Oct. 12, 2022 | Original Report | /     |

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## 1. Test Report Declare

|                                |                                                                                                                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>              | Guangzhou City Baiyun District Jianggao Feiyang Electric Appliance Factory                                                                                                                                        |
| <b>Address:</b>                | Feiyang industrial Zone, The Sixth Economy Co-Operative Society, Changgang Village, Jianggao Town, Baiyun District, Guangzhou                                                                                     |
| <b>Manufacturer:</b>           | Guangzhou City Baiyun District Jianggao Feiyang Electric Appliance Factory                                                                                                                                        |
| <b>Address:</b>                | Feiyang industrial Zone, The Sixth Economy Co-Operative Society, Changgang Village, Jianggao Town, Baiyun District, Guangzhou                                                                                     |
| <b>Product Name:</b>           | Bluetooth speaker                                                                                                                                                                                                 |
| <b>Brand Name:</b>             | FEIYANG                                                                                                                                                                                                           |
| <b>Model Name:</b>             | FG208-16, FG208-18                                                                                                                                                                                                |
| <b>Difference Description:</b> | There are two kinds of products from same factory in this report,though the appearance looks different,but the main PCB,software,hardware versions,electrical diagram and circuit schematics inside are the same. |

### We Declare:

The equipment described above is tested by Guangzhou Jingce Testing Technology Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained this test report and Guangzhou Jingce Testing Technology Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

## 2. Summary of Test Results

| Summary of Test Results |                                           |                                            |             |
|-------------------------|-------------------------------------------|--------------------------------------------|-------------|
| Clause                  | Test Items                                | FCC Rules                                  | Test Result |
| 1                       | 20 dB Bandwidth                           | FCC 15.247 (a) (1)                         | Pass        |
| 2                       | Conducted Output Power                    | FCC 15.247 (b) (1)                         | Pass        |
| 3                       | Carrier Hopping Channel Separation        | FCC 15.247 (a) (1)                         | Pass        |
| 4                       | Number of Hopping Frequency               | 15.247 (a) (1) III                         | Pass        |
| 5                       | Time of Occupancy (Dwell Time)            | 15.247 (a) (1) III                         | Pass        |
| 6                       | Conducted Band edge                       | FCC 15.247 (d)                             | Pass        |
| 7                       | Radiated Band edge and Spurious           | FCC 15.247 (d)<br>FCC 15.209<br>FCC 15.205 | Pass        |
| 8                       | Conducted Emission Test For AC Power Port | FCC 15.207                                 | Pass        |
| 9                       | Antenna Requirement                       | FCC 15.203                                 | Pass        |

## 3. Test Laboratory

Guangzhou Jingce Testing Technology Co., Ltd.

Add.: No.192, Kezhu Road, Huangpu District, Guangzhou, Guangdong, China

Association for Laboratory Accreditation(A2LA). Certificate Number: 6594.01

FCC Designation Number:CN1331. Test Firm Registration Number: 360543

IC Test Firm Registration Number: 28796

Conformity Assessment Body identifier: CN0138

## 4. Equipment Under Test

### 4.1. Description of EUT

|                                  |                                     |
|----------------------------------|-------------------------------------|
| <b>EUT Name:</b>                 | Bluetooth speaker                   |
| <b>Model Number:</b>             | FG208-16                            |
| <b>EUT Function Description:</b> | Please reference user's manual      |
| <b>Power Supply:</b>             | DC 12V from Battery<br>AC 100V~240V |
| <b>Hardware Version:</b>         | NA                                  |
| <b>Software Version:</b>         | NA                                  |
| <b>Radio Specification:</b>      | Bluetooth V5.0                      |
| <b>Operation Frequency:</b>      | 2402 MHz - 2480 MHz                 |
| <b>Modulation:</b>               | GFSK, $\pi/4$ -DQPSK, 8DPSK         |
| <b>Data Rate:</b>                | 1Mbps, 2Mbps, 3Mbps                 |
| <b>Antenna Type:</b>             | PCB Antenna, 3.38 dBi               |

Note 1: EUT is the ab. of equipment under test.

Note 2: The antenna gain is declared by the customer and the laboratory is not responsible for the accuracy of the antenna gain.

### 4.2. Channel List

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| 0       | 2402            | 20      | 2422            | 40      | 2442            | 60      | 2462            |
| 1       | 2403            | 21      | 2423            | 41      | 2443            | 61      | 2463            |
| 2       | 2404            | 22      | 2424            | 42      | 2444            | 62      | 2464            |
| 3       | 2405            | 23      | 2425            | 43      | 2445            | 63      | 2465            |
| 4       | 2406            | 24      | 2426            | 44      | 2446            | 64      | 2466            |
| 5       | 2407            | 25      | 2427            | 45      | 2447            | 65      | 2467            |
| 6       | 2408            | 26      | 2428            | 46      | 2448            | 66      | 2468            |
| 7       | 2409            | 27      | 2429            | 47      | 2449            | 67      | 2469            |
| 8       | 2410            | 28      | 2430            | 48      | 2450            | 68      | 2470            |
| 9       | 2411            | 29      | 2431            | 49      | 2451            | 69      | 2471            |
| 10      | 2412            | 30      | 2432            | 50      | 2452            | 70      | 2472            |
| 11      | 2413            | 31      | 2433            | 51      | 2453            | 71      | 2473            |
| 12      | 2414            | 32      | 2434            | 52      | 2454            | 72      | 2474            |
| 13      | 2415            | 33      | 2435            | 53      | 2455            | 73      | 2475            |
| 14      | 2416            | 34      | 2436            | 54      | 2456            | 74      | 2476            |
| 15      | 2417            | 35      | 2437            | 55      | 2457            | 75      | 2477            |
| 16      | 2418            | 36      | 2438            | 56      | 2458            | 76      | 2478            |
| 17      | 2419            | 37      | 2439            | 57      | 2459            | 77      | 2479            |
| 18      | 2420            | 38      | 2440            | 58      | 2460            | 78      | 2480            |
| 19      | 2421            | 39      | 2441            | 59      | 2461            | /       | /               |

#### 4.3. Packet Type Configuration

| Test Mode      | Packet Type | Setting(Packet Length) |
|----------------|-------------|------------------------|
| GFSK           | DH1         | 27                     |
|                | DH3         | 183                    |
|                | DH5         | 339                    |
| $\pi/4$ -DQPSK | 2-DH1       | 54                     |
|                | 2-DH3       | 367                    |
|                | 2-DH5       | 679                    |
| 8DPSK          | 3-DH1       | 83                     |
|                | 3-DH3       | 552                    |
|                | 3-DH5       | 1021                   |

#### 4.4. Test Channel Configuration

| Tested mode, channel, information  |             |                 |
|------------------------------------|-------------|-----------------|
| Mode                               | Channel     | Frequency (MHz) |
| GFSK hopping on Tx mode            | CH0 to CH78 | 2402 to 2480    |
| $\pi/4$ -DQPSK hopping on Tx mode  | CH0 to CH78 | 2402 to 2480    |
| 8DPSK hopping on Tx mode           | CH0 to CH78 | 2402 to 2480    |
| GFSK hopping off Tx mode           | LCH: CH0    | 2402            |
|                                    | MCH: CH39   | 2441            |
|                                    | HCH: CH78   | 2480            |
| $\pi/4$ -DQPSK hopping off Tx mode | LCH: CH0    | 2402            |
|                                    | MCH: CH39   | 2441            |
|                                    | HCH: CH78   | 2480            |
| 8DPSK hopping off Tx mode          | LCH: CH0    | 2402            |
|                                    | MCH: CH39   | 2441            |
|                                    | HCH: CH78   | 2480            |

#### 4.5. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

|                    |            |
|--------------------|------------|
| Temperature range: | 21-25 °C   |
| Humidity range:    | 40-75%     |
| Pressure range:    | 86-106 kPa |

#### 4.6. The Worse Case Power Setting Parameter

| The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band |                         |                             |       |       |
|--------------------------------------------------------------------|-------------------------|-----------------------------|-------|-------|
| Test Software                                                      |                         | Frequency Tool_v0.2.8       |       |       |
| Modulation Type                                                    | Transmit Antenna Number | Test Software Setting Value |       |       |
|                                                                    |                         | CH 0                        | CH 39 | CH 78 |
| GFSK                                                               | 1                       | 2                           | 2     | 2     |
| $\pi/4$ -DQPSK                                                     | 1                       | 2                           | 2     | 2     |
| 8DPSK                                                              | 1                       | 2                           | 2     | 2     |

#### 4.7. Description of Available Antennas

| Test Mode      | Transmit and Receive Mode                    | Description                                              |
|----------------|----------------------------------------------|----------------------------------------------------------|
| GFSK           | <input checked="" type="checkbox"/> 1TX, 1RX | Antenna 1 can be used as transmitting/receiving antenna. |
| $\pi/4$ -DQPSK | <input checked="" type="checkbox"/> 1TX, 1RX | Antenna 1 can be used as transmitting/receiving antenna. |
| 8DPSK          | <input checked="" type="checkbox"/> 1TX, 1RX | Antenna 1 can be used as transmitting/receiving antenna. |

### 5. Description of Test Setup

#### 5.1. Accessory

| Description of Accessories | Manufacturer | Model Number | Description | Remark |
|----------------------------|--------------|--------------|-------------|--------|
| AC Line                    | Applicant    | /            | Unshielded  | 1.1m   |

#### 5.2. Support Equipment

| Equipment | Brand Name | Model Name | P/N |
|-----------|------------|------------|-----|
| PC        | Lenovo     | T480       | /   |

#### 5.3. Test Setup

The EUT can work in engineering mode.

#### 5.4. Setup Diagram for Tests



## 6. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Test Item                                                                                                                                        | Uncertainty |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| AC Power Conduction emission                                                                                                                     | 1.37 dB     |
| All Radiated emissions                                                                                                                           | 5.4dB       |
| Conducted emissions                                                                                                                              | 3.09 dB     |
| Occupied Channel Bandwidth                                                                                                                       | 1.1%        |
| Conducted Output power                                                                                                                           | 0.82dB      |
| Power Spectral Density                                                                                                                           | 0.82dB      |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k = 2. |             |

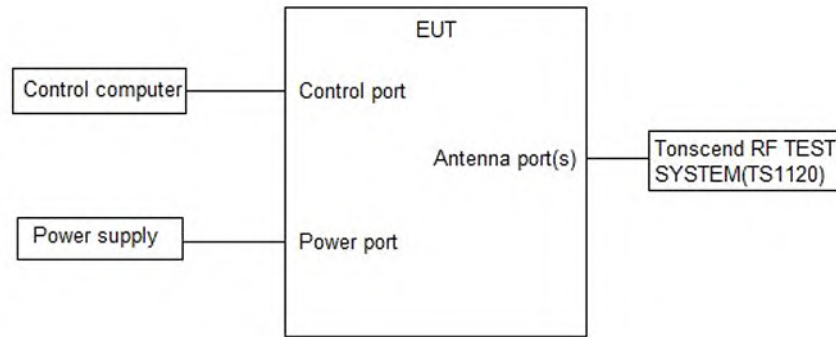
## 7. Measuring Instrument and Software Used

| TS Test System                      |                            |              |             |             |             |             |
|-------------------------------------|----------------------------|--------------|-------------|-------------|-------------|-------------|
| Used                                | Equipment                  | Manufacturer | Model No.   | Serial No.  | Last Cal.   | Due. Date   |
| <input checked="" type="checkbox"/> | Spectrum Analyzer          | Keysight     | N9030B      | MY56320512  | Jul.25,2022 | Jul.24,2023 |
| <input checked="" type="checkbox"/> | Vector Signal Generator    | Keysight     | N5182B      | MY57300334  | Dec.03,2021 | Dec.02,2022 |
| <input checked="" type="checkbox"/> | Signal Generator           | Keysight     | N5171B      | MY57280639  | Dec.03,2021 | Dec.02,2022 |
| <input checked="" type="checkbox"/> | DC POWER                   | Keysight     | E342A       | MY59020356  | Jul.25,2022 | Jul.24,2023 |
| <input checked="" type="checkbox"/> | Incubator thermometer      | GWS          | EL-02JA     | 21107288    | Nov.05,2021 | Nov.04,2022 |
| <input checked="" type="checkbox"/> | Control unit(Power sensor) | Tonscend     | JS0806-2    | /           | Jul.25,2022 | Jul.24,2023 |
| Software                            |                            |              |             |             |             |             |
| Used                                | Description                | Manufacturer | Name        |             | Version     |             |
| <input checked="" type="checkbox"/> | Test software              | TS+          | JS1120-3    |             | V3.2.11     |             |
| RSE Test System                     |                            |              |             |             |             |             |
| Used                                | Equipment                  | Manufacturer | Model No.   | Serial No.  | Last Cal.   | Due. Date   |
| <input checked="" type="checkbox"/> | EMI Receiver               | R&S          | ESW         | 101685      | Jul.24,2022 | Jul.23,2023 |
| <input checked="" type="checkbox"/> | Bilog Antenna              | Schwarzbeck  | VULB 9163   | 01416       | Feb.22,2022 | Feb.21,2023 |
| <input checked="" type="checkbox"/> | Horn Antenna 1             | Schwarzbeck  | BBHA 9120 D | 02411       | May.30,2022 | May.29,2023 |
| <input checked="" type="checkbox"/> | Horn Antenna 2             | ETS          | 3116C       | 00217677    | Sep.19,2022 | Sep.18,2023 |
| <input checked="" type="checkbox"/> | Signal Pre-Amplifier       | Tonscend     | TAP01018050 | AP21C806122 | Aug.08,2022 | Aug.07,2023 |
| <input checked="" type="checkbox"/> | Signal Pre-Amplifier       | Tonscend     | TAP9K3G32   | AP20K806104 | Aug.08,2022 | Aug.07,2023 |
| <input checked="" type="checkbox"/> | Signal Pre-Amplifier       | ETS          | 3116C-PA    | 00217677    | Sep.02,2022 | Sep.01,2023 |

|                                           |                                     |              |           |            |             |             |
|-------------------------------------------|-------------------------------------|--------------|-----------|------------|-------------|-------------|
| <input checked="" type="checkbox"/>       | Wideband radio communication tester | R&S          | CMW500    | 163478     | Jul.25,2022 | Jul.24,2023 |
| <input checked="" type="checkbox"/>       | 3m Fully-anechoic Chamber           | ETS          | RFD-100   | /          | Apr.24,2021 | Apr.23,2024 |
| Software                                  |                                     |              |           |            |             |             |
| Used                                      | Description                         | Manufacturer | Name      |            | Version     |             |
| <input checked="" type="checkbox"/>       | Test software                       | TS+          | TS+       |            | V3.0.0.4    |             |
| Conducted Emission Test For AC Power Port |                                     |              |           |            |             |             |
| Used                                      | Equipment                           | Manufacturer | Model No. | Serial No. | Last Cal.   | Due. Date   |
| <input checked="" type="checkbox"/>       | LISN                                | R&S          | ENV216    | 102154     | Jul.24,2022 | Jul.23,2023 |
| <input checked="" type="checkbox"/>       | EMI Receiver                        | R&S          | ESR3      | 102509     | Jul.24,2022 | Jul.23,2023 |
| Software                                  |                                     |              |           |            |             |             |
| Used                                      | Description                         | Manufacturer | Name      |            | Version     |             |
| <input checked="" type="checkbox"/>       | Test software                       | EZ           | EZ-EMC    |            | EMEC-3A1    |             |
| Other Instrument                          |                                     |              |           |            |             |             |
| Used                                      | Equipment                           | Manufacturer | Model No. | Serial No. | Last Cal.   | Due. Date   |
| <input checked="" type="checkbox"/>       | Temperature & Humidity              | Temperature  | HTC-1     | /          | Jan.24,2022 | Jan.23,2023 |

## 8. On Time and Duty Cycle

### 8.1. Block diagram of test setup



### 8.2. Limits

None; for reporting purposes only

### 8.3. Results

| Test Mode | Ant. | Freq. (MHz) | ON Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Factor(dB) |
|-----------|------|-------------|--------------|-------------|----------------|-----------------------|
| DH5       | Ant1 | 2402        | 2.89         | 3.75        | 77.07          | 1.13                  |
|           |      | 2441        | 2.89         | 3.75        | 77.07          | 1.13                  |
|           |      | 2480        | 2.89         | 3.75        | 77.07          | 1.13                  |
| 2DH5      | Ant1 | 2402        | 2.89         | 3.75        | 77.07          | 1.13                  |
|           |      | 2441        | 2.89         | 3.75        | 77.07          | 1.13                  |
|           |      | 2480        | 2.88         | 3.75        | 76.80          | 1.15                  |
| 3DH5      | Ant1 | 2402        | 2.89         | 3.75        | 77.07          | 1.13                  |
|           |      | 2441        | 2.89         | 3.75        | 77.07          | 1.13                  |
|           |      | 2480        | 2.89         | 3.75        | 77.07          | 1.13                  |

Note: Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

## 8.4. Original test data





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480



3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



## 9. 20 dB Occupied Bandwidth

### 9.1. Block diagram of test setup

Same as section 8.1

### 9.2. Limit

| CFR 47 FCC Part15 (15.247) Subpart C |                          |       |                       |
|--------------------------------------|--------------------------|-------|-----------------------|
| Section                              | Test Item                | Limit | Frequency Range (MHz) |
| CFR 47 FCC 15.247 (a) (1)            | 20 dB Occupied Bandwidth | N/A   | 2400-2483.5           |

### 9.3. Test Procedure

Connect the UUT to the spectrum analyser and use the following settings:

|                  |                                                                 |
|------------------|-----------------------------------------------------------------|
| Center Frequency | The center frequency of the channel under test                  |
| Detector         | Peak                                                            |
| RBW              | For 20 dB Occupied Bandwidth: 1 % to 5 % of the 20 dB bandwidth |
| VBW              | For 20 dB Occupied Bandwidth: approximately 3×RBW               |
| Span             | approximately 2 to 3 times the 20 dB bandwidth                  |
| Trace            | Max hold                                                        |
| Sweep            | Auto couple                                                     |

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB and 99 % relative to the maximum level measured in the fundamental emission.

### 9.4. Results

20 dB Occupied Bandwidth:

| Test Mode | Ant. | Freq. (MHz) | 20db EBW (MHz) | FL (MHz) | FH (MHz) |
|-----------|------|-------------|----------------|----------|----------|
| DH5       | Ant1 | 2402        | 0.939          | 2401.505 | 2402.444 |
|           |      | 2441        | 1.029          | 2440.487 | 2441.516 |
|           |      | 2480        | 0.957          | 2479.511 | 2480.468 |
| 2DH5      | Ant1 | 2402        | 1.284          | 2401.373 | 2402.657 |
|           |      | 2441        | 1.317          | 2440.346 | 2441.663 |
|           |      | 2480        | 1.266          | 2479.370 | 2480.636 |
| 3DH5      | Ant1 | 2402        | 1.284          | 2401.352 | 2402.636 |
|           |      | 2441        | 1.317          | 2440.343 | 2441.660 |
|           |      | 2480        | 1.290          | 2479.340 | 2480.630 |

## 9.5. Original test data

20 dB Occupied Bandwidth:





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480



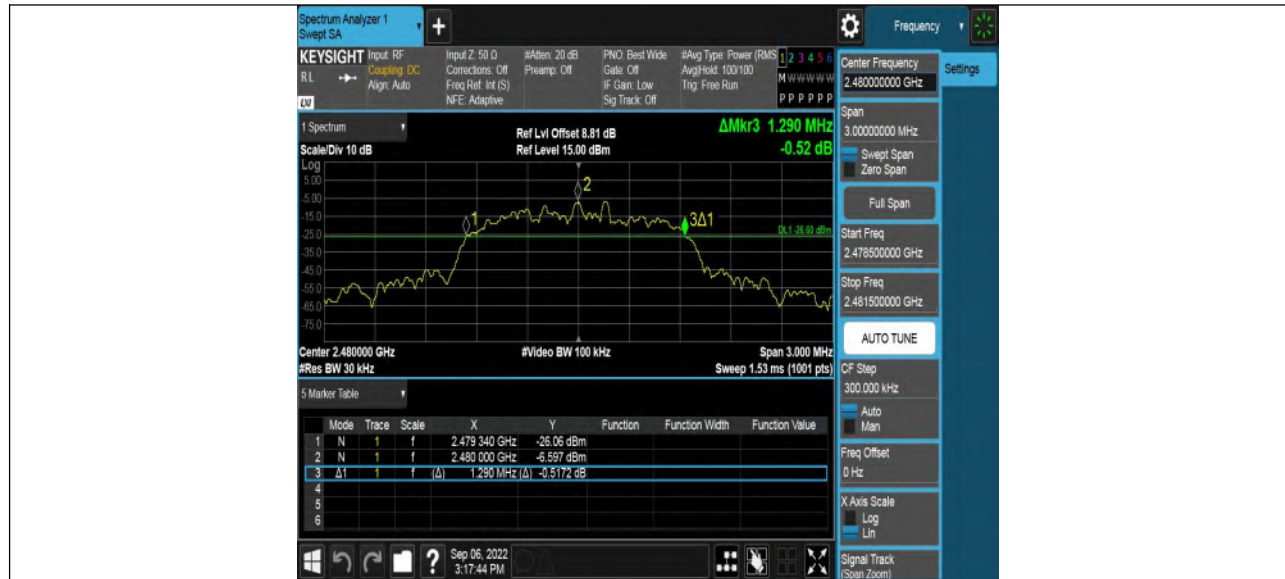
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



## 10. Conducted Output Power

### 10.1. Block diagram of test setup

Same as section 8.1

### 10.2. Limits

| CFR 47 FCC Part15 (15.247) , Subpart C |                                   |                                                                                                                                                                                                                                                                                           |                       |
|----------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Section                                | Test Item                         | Limit                                                                                                                                                                                                                                                                                     | Frequency Range (MHz) |
| CFR 47 FCC<br>15.247 (b) (1)           | Peak<br>Conducted<br>Output Power | Hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel:<br>1 watt or 30dBm;<br>Hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel : 125 mW or 21dBm | 2400-2483.5           |

### 10.3. Test Procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

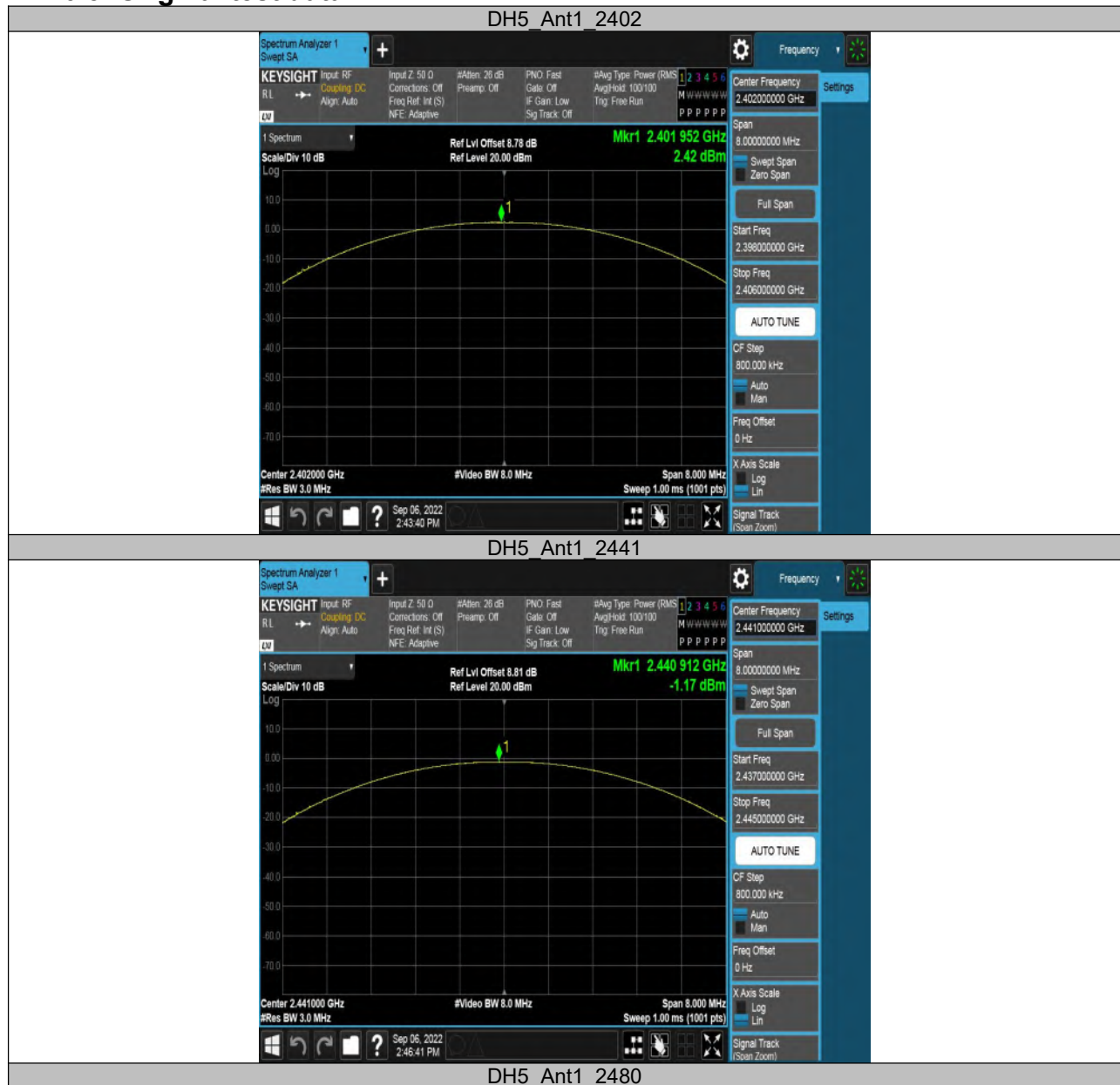
(2) Measure the maximum output power of EUT by spectrum analyzer with PK detector and RBW=3 MHz (above 20 dB bandwidth of measured signal), VBW=8 MHz

Note: The attenuator loss was inputted into spectrum analyzer as amplitude offset.

### 10.4. Results

| Test Mode | Ant. | Freq. (MHz) | Conducted Peak Power (dBm) | Conducted Limit (dBm) | Verdict |
|-----------|------|-------------|----------------------------|-----------------------|---------|
| DH5       | Ant1 | 2402        | 2.42                       | ≤20.97                | PASS    |
|           |      | 2441        | -1.17                      | ≤20.97                | PASS    |
|           |      | 2480        | -3.34                      | ≤20.97                | PASS    |
| 2DH5      | Ant1 | 2402        | 2.18                       | ≤20.97                | PASS    |
|           |      | 2441        | -1.38                      | ≤20.97                | PASS    |
|           |      | 2480        | -3.49                      | ≤20.97                | PASS    |
| 3DH5      | Ant1 | 2402        | 2.06                       | ≤20.97                | PASS    |
|           |      | 2441        | -1.75                      | ≤20.97                | PASS    |
|           |      | 2480        | -3.54                      | ≤20.97                | PASS    |

## 10.5. Original test data





2DH5 Ant1 2402



2DH5 Ant1 2441



2DH5 Ant1 2480



3DH5 Ant1 2402



3DH5 Ant1 2441



3DH5 Ant1 2480



## 11. Carrier Hopping Channel Separation

### 11.1. Block diagram of test setup

Same as section 8.1

### 11.2. Limits

| CFR 47 FCC Part15 (15.247) , Subpart C |                                    |                                                                                                                                                                                                                                                                                                                                                                                                         |                       |
|----------------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Section                                | Test Item                          | Limit                                                                                                                                                                                                                                                                                                                                                                                                   | Frequency Range (MHz) |
| CFR 47 FCC 15.247 (a) (1)              | Carrier Hopping Channel Separation | Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.<br>Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel. | 2400-2483.5           |

### 11.3. Test Procedure

Connect the UUT to the spectrum Analyzer and use the following settings:

|                  |                                                                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Center Frequency | The center frequency of the channel under test                                                                                                   |
| Span             | wide enough to capture the peaks of two adjacent channels                                                                                        |
| Detector         | Peak                                                                                                                                             |
| RBW              | Start with the RBW set to approximately 30 % of the channel spacing; adjust as necessary to best identify the center of each individual channel. |
| VBW              | ≥ RBW                                                                                                                                            |
| Trace            | Max hold                                                                                                                                         |
| Sweep time       | Auto couple                                                                                                                                      |

Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

Compliance of an EUT with the appropriate regulatory limit shall be determined.

A plot of the data shall be included in the test report.

### 11.4. Results

| Test Mode | Ant. | Freq. (MHz) | Result (MHz) | Limit (MHz) | Verdict |
|-----------|------|-------------|--------------|-------------|---------|
| DH5       | Ant1 | Hop         | 1.354        | ≥1.029      | PASS    |
| 2DH5      | Ant1 | Hop         | 1.024        | ≥0.878      | PASS    |
| 3DH5      | Ant1 | Hop         | 0.98         | ≥0.878      | PASS    |

## 11.5. Original test data





## 12. Number of Hopping Frequency

### 12.1. Block diagram of test setup

Same as section 8.1

### 12.2. Limits

| CFR 47 FCC Part15 (15.247), Subpart C |                             |                              |
|---------------------------------------|-----------------------------|------------------------------|
| Section                               | Test Item                   | Limit                        |
| CFR 47 15.247 (a) (1) III             | Number of Hopping Frequency | at least 15 hopping channels |

### 12.3. Test Procedure

Connect the EUT to the spectrum Analyzer and use the following settings:

|            |                                                                                                                                                 |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Detector   | Peak                                                                                                                                            |
| RBW        | To identify clearly the individual channels, set the RBW to less than 30 % of the channel spacing or the 20 dB bandwidth, whichever is smaller. |
| VBW        | ≥RBW                                                                                                                                            |
| Span       | The frequency band of operation                                                                                                                 |
| Trace      | Max hold                                                                                                                                        |
| Sweep time | Auto couple                                                                                                                                     |

Set EUT to transmit maximum output power and switch on frequency hopping function. then set enough count time (larger than 5000 times) to get all the hopping frequency channel displayed on the screen of spectrum analyzer.

Count the quantity of peaks to get the number of hopping channels.

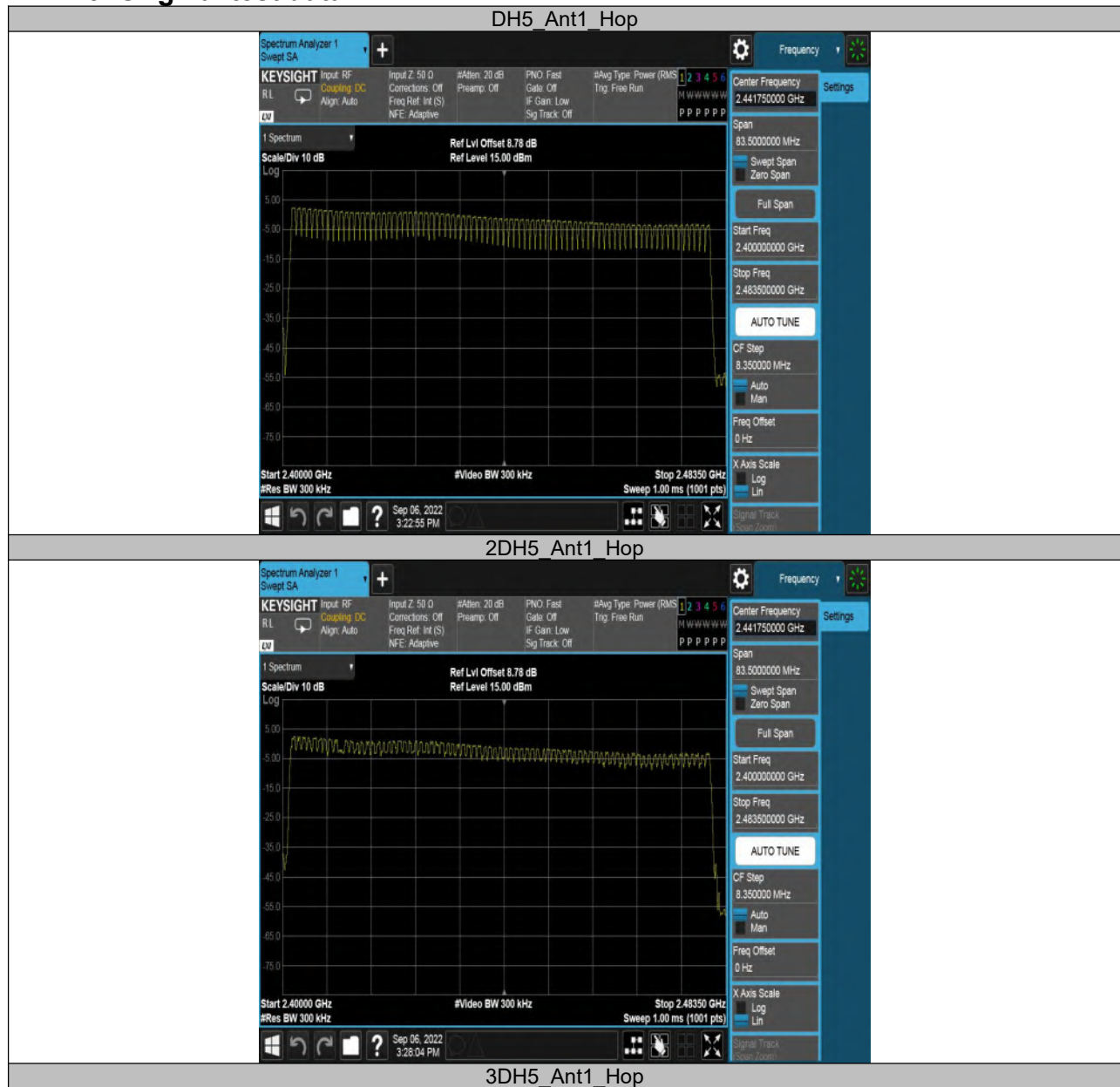
FHSS Mode: 79 Channels observed.

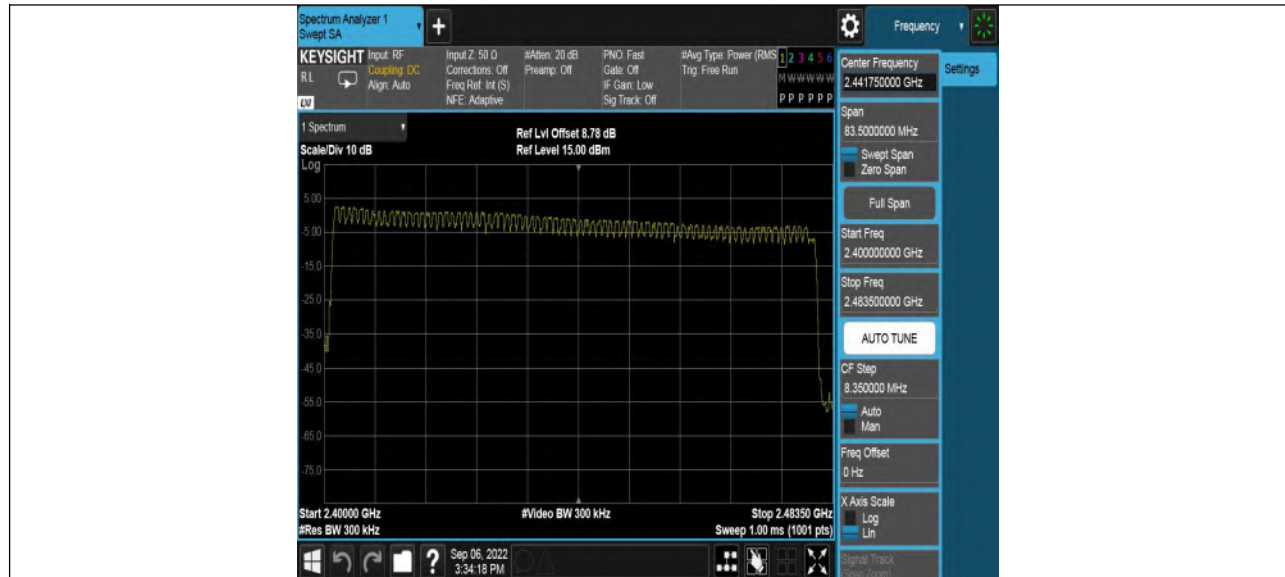
AFHSS Mode: 20 Channels declared.

### 12.4. Results

| Test Mode | Ant. | Freq. (MHz) | Result (Num) | Limit (Num) | Verdict |
|-----------|------|-------------|--------------|-------------|---------|
| DH5       | Ant1 | Hop         | 79           | ≥15         | PASS    |
| 2DH5      | Ant1 | Hop         | 79           | ≥15         | PASS    |
| 3DH5      | Ant1 | Hop         | 79           | ≥15         | PASS    |

## 12.5. Original test data





### 13. Time of Occupancy (Dwell Time)

#### 13.1. Block diagram of test setup

Same as section 8.1

#### 13.2. Limits

| CFR 47 FCC Part15 (15.247), Subpart C |                                |                                                                                                                                                                           |
|---------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Section                               | Test Item                      | Limit                                                                                                                                                                     |
| CFR 47 15.247 (a) (1) III             | Time of Occupancy (Dwell Time) | The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds, multiplied by the number of hopping channels employed. |

#### 13.3. Test Procedure

Connect the UUT to the spectrum Analyzer and use the following settings:

|                  |                                                                   |
|------------------|-------------------------------------------------------------------|
| Center Frequency | The center frequency of the channel under test                    |
| Detector         | Average                                                           |
| RBW              | 1 MHz                                                             |
| VBW              | ≥ RBW                                                             |
| Span             | zero span                                                         |
| Trace            | Clear Write                                                       |
| Sweep time       | As necessary to capture the entire dwell time per hopping channel |

Connect the UUT to the spectrum Analyzer and use the following settings:

- The transmitter output (antenna port) was connected to the spectrum analyzer
- Set RBW of spectrum analyzer to 1 MHz and VBW to 3 MHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Sweep Time is more than once pulse time.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.

f. Measure the maximum time duration of one single pulse.

g. Set the EUT for DH5, DH3 and DH1 packet transmitting.

h. Measure the maximum time duration of one single pulse.

A Period Time = (channel number)\*0.4

For FHSS Mode (79 Channel):

DH1 Time Slot: Reading \* (1600/2)\*31.6/(channel number)

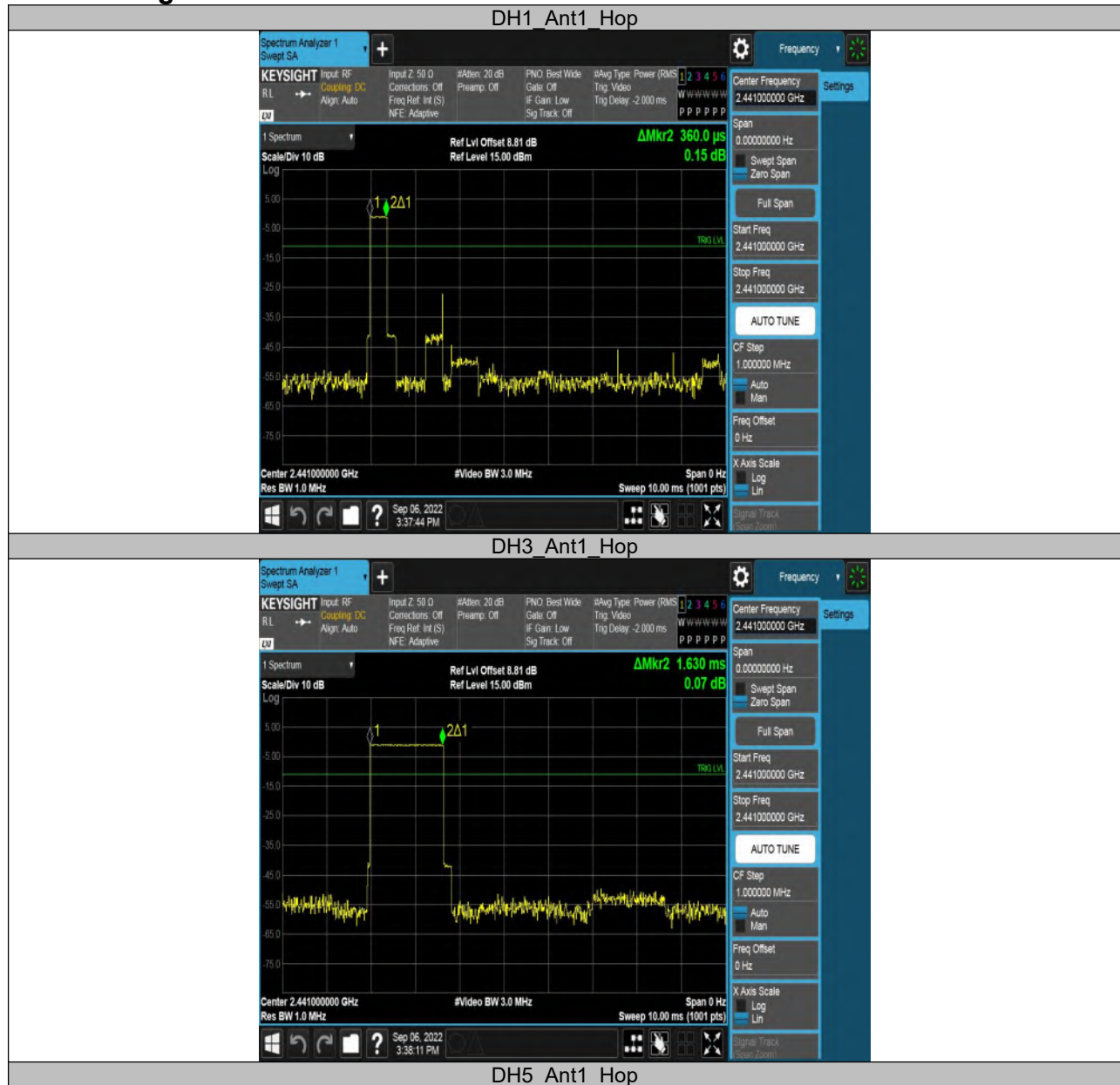
DH3 Time Slot: Reading \* (1600/4)\*31.6/(channel number)

DH5 Time Slot: Reading \* (1600/6)\*31.6/(channel number)

**13.4. Results**

| Test Mode | Ant. | Freq.<br>(MHz) | Burst Width<br>(ms) | Total Hops<br>(Num) | Result<br>(s) | Limit<br>(s) | Verdict |
|-----------|------|----------------|---------------------|---------------------|---------------|--------------|---------|
| DH1       | Ant1 | Hop            | 0.36                | 320                 | 0.115         | ≤0.4         | PASS    |
| DH3       | Ant1 | Hop            | 1.63                | 160                 | 0.261         | ≤0.4         | PASS    |
| DH5       | Ant1 | Hop            | 2.87                | 106.67              | 0.306         | ≤0.4         | PASS    |
| 2DH1      | Ant1 | Hop            | 0.36                | 320                 | 0.115         | ≤0.4         | PASS    |
| 2DH3      | Ant1 | Hop            | 1.62                | 160                 | 0.259         | ≤0.4         | PASS    |
| 2DH5      | Ant1 | Hop            | 2.86                | 106.67              | 0.305         | ≤0.4         | PASS    |
| 3DH1      | Ant1 | Hop            | 0.36                | 320                 | 0.115         | ≤0.4         | PASS    |
| 3DH3      | Ant1 | Hop            | 1.62                | 160                 | 0.259         | ≤0.4         | PASS    |
| 3DH5      | Ant1 | Hop            | 2.87                | 106.67              | 0.306         | ≤0.4         | PASS    |

### 13.5. Original test data





2DH1 Ant1 Hop



2DH3 Ant1 Hop



2DH5 Ant1 Hop





## 14. Conducted Spurious Emission

### 14.1. Block diagram of test setup

Same as section 8.1

### 14.2. Limits

| CFR 47 FCC Part15 (15.247), Subpart C |                             |                                                                                                                         |
|---------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Section                               | Test Item                   | Limit                                                                                                                   |
| CFR 47 FCC §15.247 (d)                | Conducted Spurious Emission | at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power |

### 14.3. Test Procedure

Please refer to the ANSI C63.10 section 6.10.

For Band edge use the following settings:

|            |                                                          |
|------------|----------------------------------------------------------|
| Detector   | Peak                                                     |
| RBW        | 100 kHz                                                  |
| VBW        | 300 kHz                                                  |
| Span       | wide enough to fully capture the emission being measured |
| Trace      | Max hold                                                 |
| Sweep time | Auto couple.                                             |

For Spurious Emission use the following settings:

|            |                                                          |
|------------|----------------------------------------------------------|
| Detector   | Peak                                                     |
| RBW        | 100 kHz                                                  |
| VBW        | 300 kHz                                                  |
| Span       | wide enough to fully capture the emission being measured |
| Trace      | Max hold                                                 |
| Sweep time | Auto couple.                                             |

Use the peak marker function to determine the maximum amplitude level.

**14.4. Results**

Band edge:

| Test Mode | Ant. | Ch Name | Freq. (MHz) | Ref Level (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-----------|------|---------|-------------|-----------------|--------------|-------------|---------|
| DH5       | Ant1 | Low     | 2402        | 2.22            | -38.8        | ≤-17.78     | PASS    |
|           |      | High    | 2480        | -3.56           | -58.68       | ≤-23.56     | PASS    |
|           |      | Low     | Hop_2402    | 1.88            | -43.23       | ≤-18.12     | PASS    |
|           |      | High    | Hop_2480    | -3.23           | -50.2        | ≤-23.23     | PASS    |
| 2DH5      | Ant1 | Low     | 2402        | 1.81            | -39.31       | ≤-18.19     | PASS    |
|           |      | High    | 2480        | -3.67           | -60.72       | ≤-23.67     | PASS    |
|           |      | Low     | Hop_2402    | 0.90            | -43.47       | ≤-19.1      | PASS    |
|           |      | High    | Hop_2480    | -3.33           | -49.65       | ≤-23.33     | PASS    |
| 3DH5      | Ant1 | Low     | 2402        | 1.84            | -40.07       | ≤-18.16     | PASS    |
|           |      | High    | 2480        | -3.71           | -59.5        | ≤-23.71     | PASS    |
|           |      | Low     | Hop_2402    | 2.56            | -43.05       | ≤-17.44     | PASS    |
|           |      | High    | Hop_2480    | -3.17           | -49.98       | ≤-23.17     | PASS    |

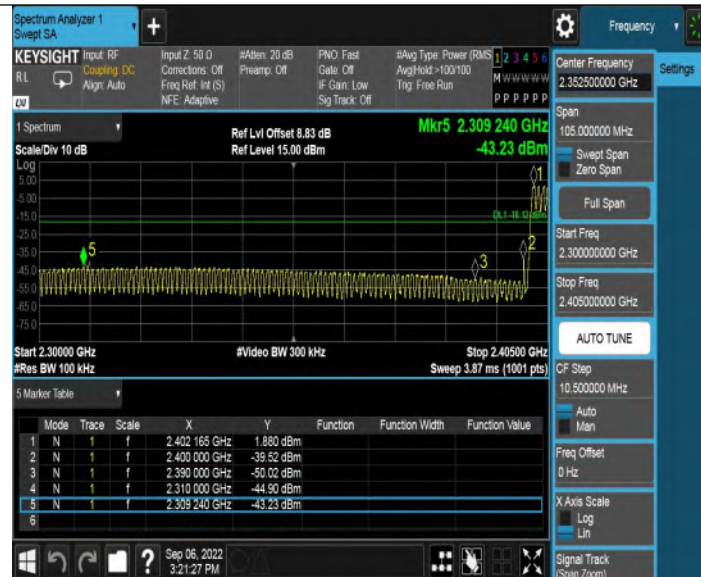
Spurious Emission:

| Test Mode | Ant. | Freq. (MHz) | Freq Range (MHz) | Ref Level (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-----------|------|-------------|------------------|-----------------|--------------|-------------|---------|
| DH5       | Ant1 | 2402        | 30~1000          | 2.22            | -51.01       | ≤-17.78     | PASS    |
|           |      |             | 1000~26500       | 2.22            | -27.2        | ≤-17.78     | PASS    |
|           |      | 2441        | 30~1000          | -1.35           | -51.96       | ≤-21.35     | PASS    |
|           |      |             | 1000~26500       | -1.35           | -33.73       | ≤-21.35     | PASS    |
|           |      | 2480        | 30~1000          | -3.56           | -54.79       | ≤-23.56     | PASS    |
|           |      |             | 1000~26500       | -3.56           | -38.12       | ≤-23.56     | PASS    |
| 2DH5      | Ant1 | 2402        | 30~1000          | 1.81            | -54.82       | ≤-18.19     | PASS    |
|           |      |             | 1000~26500       | 1.81            | -31.43       | ≤-18.19     | PASS    |
|           |      | 2441        | 30~1000          | -1.72           | -54.29       | ≤-21.72     | PASS    |
|           |      |             | 1000~26500       | -1.72           | -39.36       | ≤-21.72     | PASS    |
|           |      | 2480        | 30~1000          | -3.67           | -54.44       | ≤-23.67     | PASS    |
|           |      |             | 1000~26500       | -3.67           | -43.05       | ≤-23.67     | PASS    |
| 3DH5      | Ant1 | 2402        | 30~1000          | 1.84            | -53.49       | ≤-18.16     | PASS    |
|           |      |             | 1000~26500       | 1.84            | -34.69       | ≤-18.16     | PASS    |
|           |      | 2441        | 30~1000          | -2.33           | -53.83       | ≤-22.33     | PASS    |
|           |      |             | 1000~26500       | -2.33           | -32.79       | ≤-22.33     | PASS    |
|           |      | 2480        | 30~1000          | -3.71           | -54.12       | ≤-23.71     | PASS    |
|           |      |             | 1000~26500       | -3.71           | -39.94       | ≤-23.71     | PASS    |

## 14.5. Original test data

Band edge:

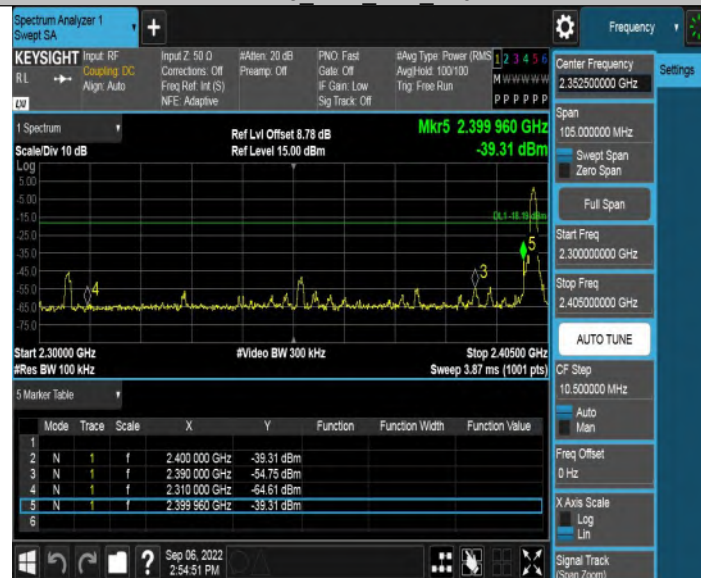




DH5 Ant1 High Hop 2480



2DH5 Ant1 Low 2402



2DH5 Ant1 High 2480



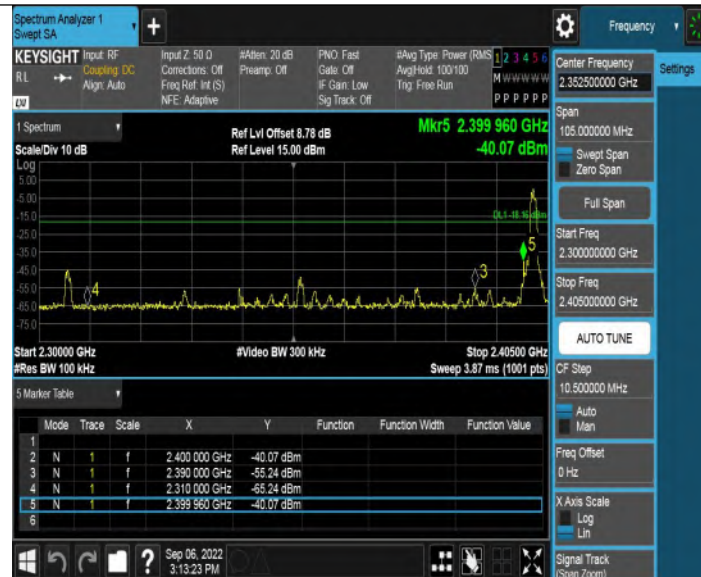
2DH5 Ant1 Low Hop 2402



2DH5 Ant1 High Hop 2480



3DH5 Ant1 Low 2402



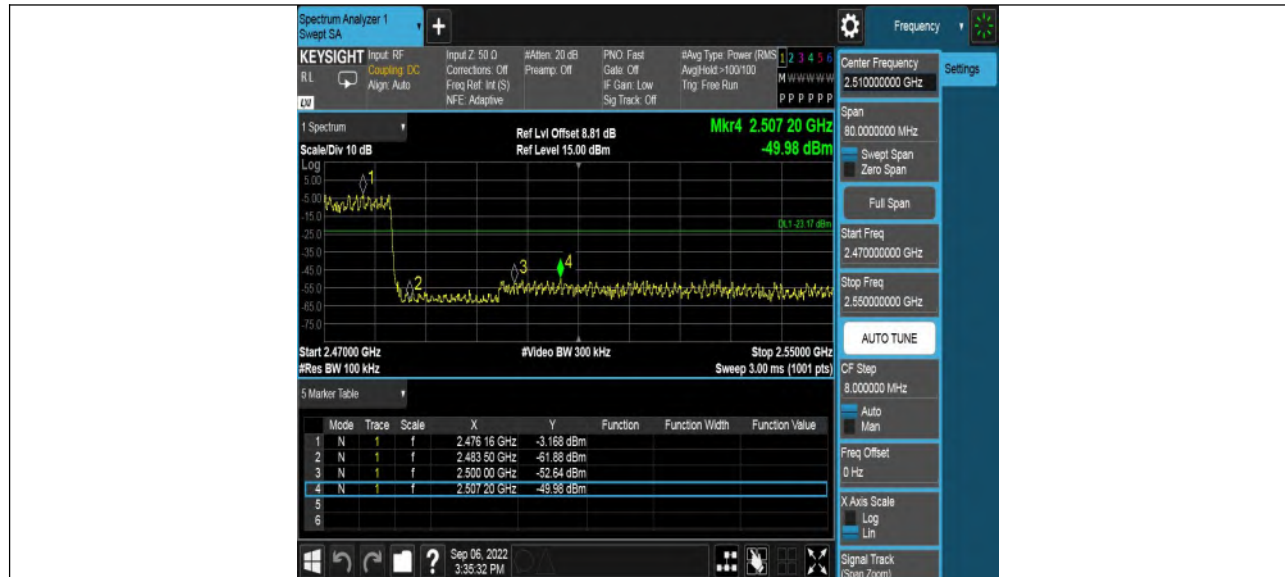
3DH5 Ant1 High 2480



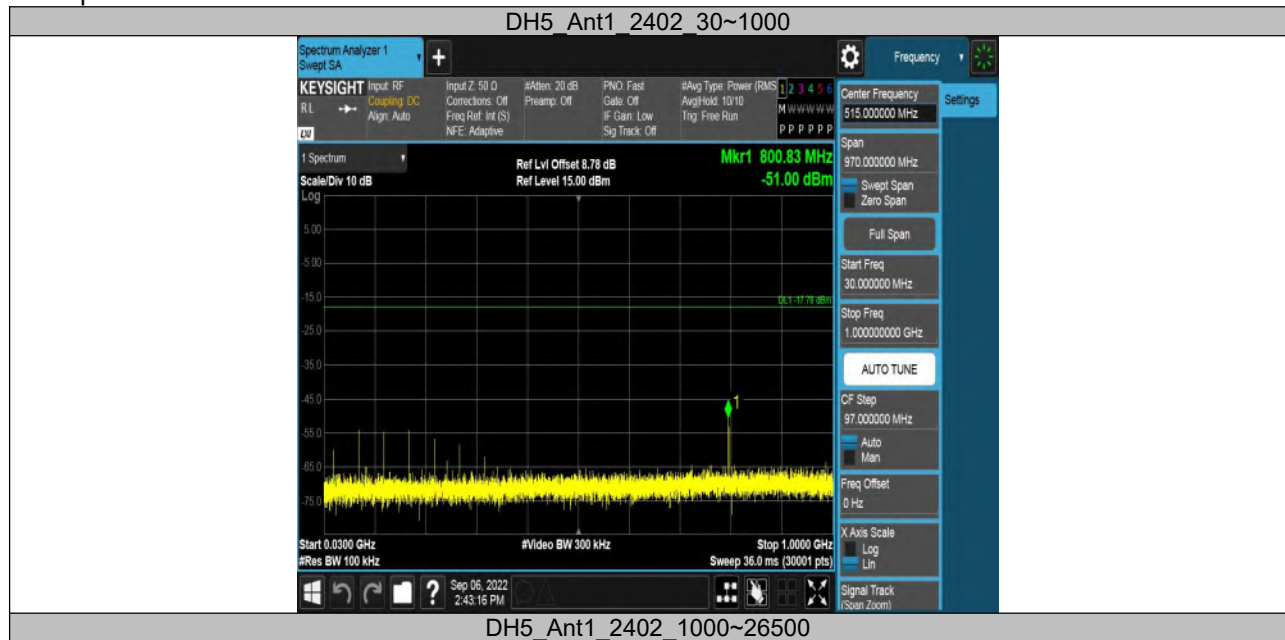
3DH5 Ant1 Low Hop 2402



3DH5 Ant1 High Hop 2480



Spurious Emission:





DH5 Ant1 2441 30~1000



DH5 Ant1 2441 1000~26500



DH5 Ant1 2480 30~1000





2DH5\_Ant1\_2441\_30~1000



2DH5\_Ant1\_2441\_1000~26500



2DH5\_Ant1\_2480\_30~1000





3DH5\_Ant1\_2441\_30~1000



3DH5\_Ant1\_2441\_1000~26500



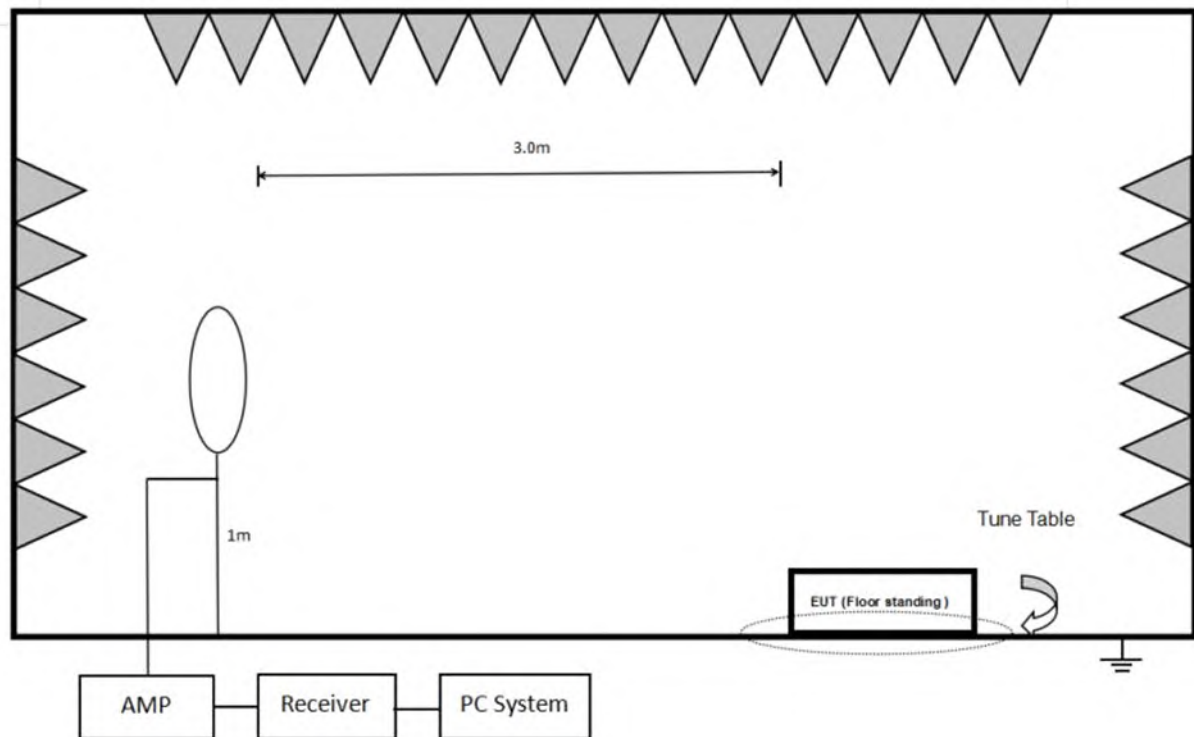
3DH5\_Ant1\_2480\_30~1000



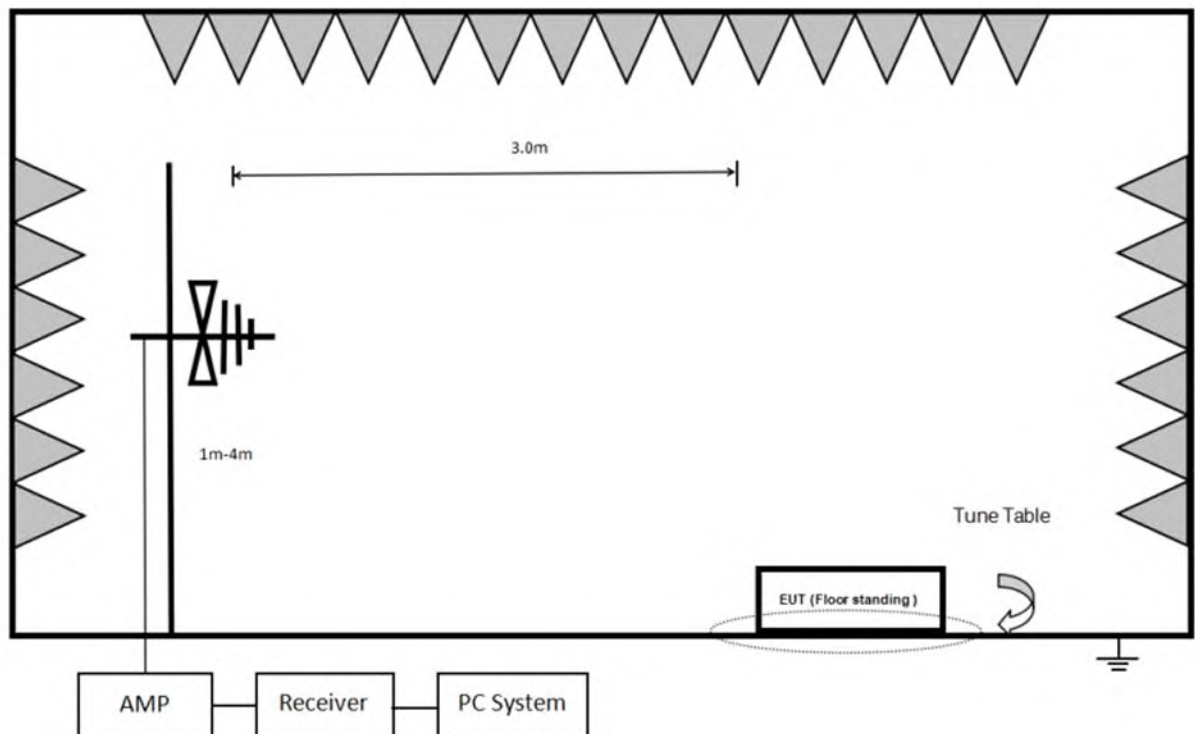
## 15. Radiated Emission

### 15.1. Block diagram of test setup

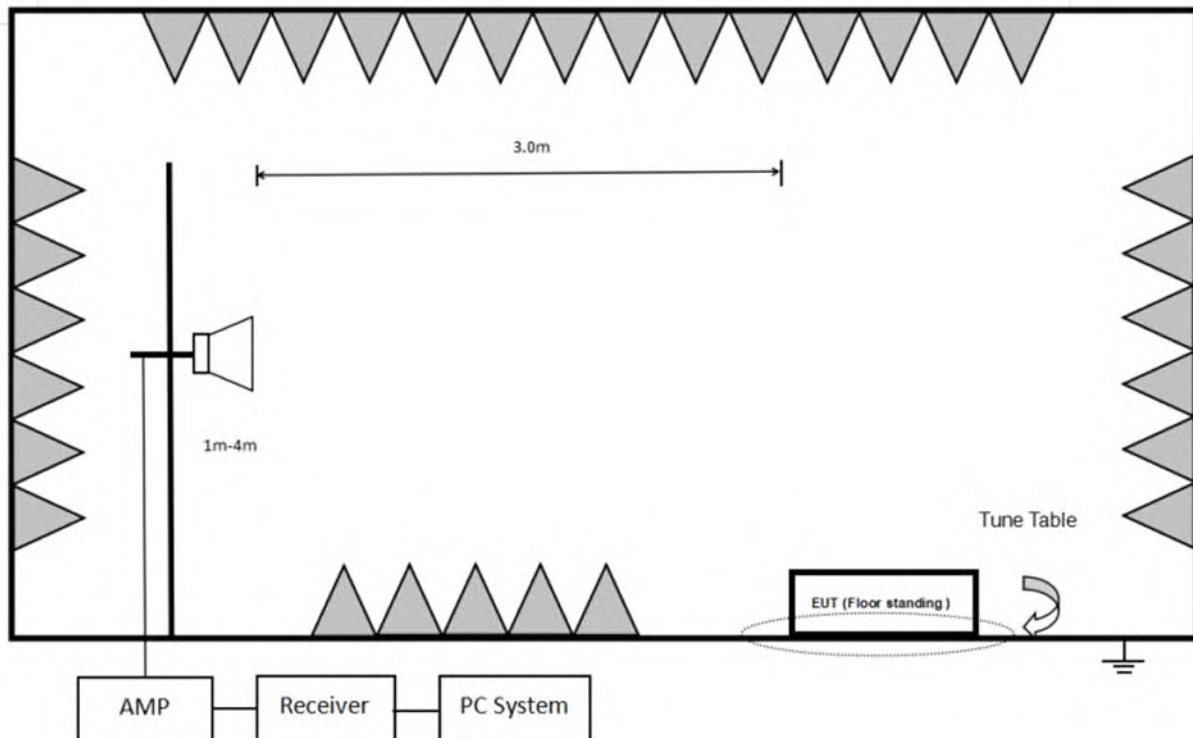
In 3m Anechoic Chamber, test setup diagram for 9kHz - 30MHz:



In 3m Anechoic Chamber, test setup diagram for 30 MHz - 1 GHz:



In 3m Anechoic Chamber, test setup diagram for frequency above 1 GHz:



Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

## 15.2. Limit

(1) FCC 15.205 Restricted frequency band

| MHz                      | MHz                 | MHz           | GHz              |
|--------------------------|---------------------|---------------|------------------|
| 0.090-0.110              | 16.42-16.423        | 399.9-410     | 4.5-5.15         |
| <sup>1</sup> 0.495-0.505 | 16.69475-16.69525   | 608-614       | 5.35-5.46        |
| 2.1735-2.1905            | 16.80425-16.80475   | 960-1240      | 7.25-7.75        |
| 4.125-4.128              | 25.5-25.67          | 1300-1427     | 8.025-8.5        |
| 4.1772&4.17775           | 37.5-38.25          | 1435-1626.5   | 9.0-9.2          |
| 4.2072&4.20775           | 73-74.6             | 1645.5-1646.5 | 9.3-9.5          |
| 6.215-6.218              | 74.8-75.2           | 1660-1710     | 10.6-12.7        |
| 6.26775-6.26825          | 108-121.94          | 1718.8-1722.2 | 13.25-13.4       |
| 6.31175-6.31225          | 123-138             | 2200-2300     | 14.47-14.5       |
| 8.291-8.294              | 149.9-150.05        | 2310-2390     | 15.35-16.2       |
| 8.362-8.366              | 156.52475-156.52525 | 2483.5-2500   | 17.7-21.4        |
| 8.37625-8.38675          | 156.7-156.9         | 2690-2900     | 22.01-23.12      |
| 8.41425-8.41475          | 162.0125-167.17     | 3260-3267     | 23.6-24.0        |
| 12.29-12.293             | 167.72-173.2        | 3332-3339     | 31.2-31.8        |
| 12.51975-12.52025        | 240-285             | 3345.8-3358   | 36.43-36.5       |
| 12.57675-12.57725        | 322-335.4           | 3600-4400     | ( <sup>2</sup> ) |
| 13.36-13.41              |                     |               |                  |

<sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

<sup>2</sup>Above 38.6

## (2) FCC 15.209 Limit.

| Frequency<br>MHz | Distance<br>Meters | Field Strengths Limit                                                                             |                                   |
|------------------|--------------------|---------------------------------------------------------------------------------------------------|-----------------------------------|
|                  |                    | $\mu\text{V}/\text{m}$                                                                            | $\text{dB}(\mu\text{V})/\text{m}$ |
| 0.009 ~ 0.490    | 300                | $2400/F(\text{kHz})$                                                                              | $67.6-20\log(F)$                  |
| 0.490 ~ 1.705    | 30                 | $24000/F(\text{kHz})$                                                                             | $87.6-20\log(F)$                  |
| 1.705 ~ 30.0     | 30                 | 30                                                                                                | 29.54                             |
| 30 ~ 88          | 3                  | 100                                                                                               | 40.0                              |
| 88 ~ 216         | 3                  | 150                                                                                               | 43.5                              |
| 216~960          | 3                  | 200                                                                                               | 46.0                              |
| 960~1000         | 3                  | 500                                                                                               | 54.0                              |
| Above 1000       | 3                  | 74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak)<br>54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average) |                                   |

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.

About Restricted bands of operation please refer to FCC § 15.205 (a),

### 15.3. Test Procedure

Below 30 MHz:

The setting of the spectrum Analyzer

|       |                                                                  |
|-------|------------------------------------------------------------------|
| RBW   | 200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz) |
| VBW   | 200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz) |
| Sweep | Auto                                                             |
| Trace | Max hold                                                         |

1. The testing follows the guidelines in ANSI C63.10-2013
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT and all cables shall be insulated, if required, from the ground plane by up to 12mm of insulating material.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of 1 meter height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

Below 1 GHz and above 30 MHz:

The setting of the spectrum Analyzer

|       |          |
|-------|----------|
| RBW   | 120 kHz  |
| VBW   | 300 kHz  |
| Sweep | Auto     |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT and all cables shall be insulated, if required, from the ground plane by up to 12mm of insulating material.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Above 1 GHz:

|          |                                |
|----------|--------------------------------|
| RBW      | 1 MHz                          |
| VBW      | PEAK: 3 MHz<br>AVG: see note 6 |
| Sweep    | Auto                           |
| Detector | Peak                           |
| Trace    | Max hold                       |

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT and all cables shall be insulated, if required, from the ground plane by up to 12mm of insulating material.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for AVG measurements. For the Duty Cycle please refer to clause 7.1.On Time And Duty Cycle.

7. Restriction band: Investigated frequency range from 2310 MHz to 2410 MHz and 2470MHz to 2500 MHz.

All restriction band should comply with 15.209, other emission should be at least 20 dB below the fundamental.

Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note 2: The EUT does not support simultaneous transmission.

Note 3: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

## **15.4. Results**

Pass. (See below detailed test result)

All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limits.

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz, so the final test was performed with frequency range from 30 MHz to 26 GHz and recorded in below.

Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in GFSK mode.

Note3: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

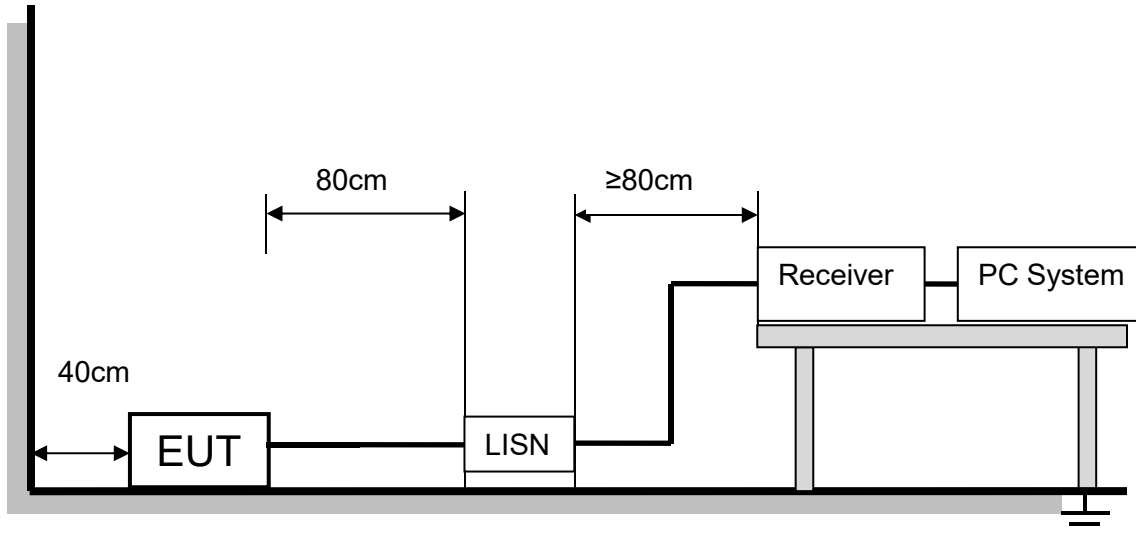
## **15.5. Original test data**

Below 1 GHz and above 30 MHz test data Refer to appendix A

Above 1 GHz test data Refer to appendix B

## 16. AC Power Line Conducted Emissions

### 16.1. Block diagram of test setup



The EUT and all cables shall be insulated, if required, from the ground plane by up to 12mm of insulating material. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

### 16.2. Limits

Please refer to CFR 47 FCC § 15.207 (a).

| Frequency (MHz) | Quasi-peak | Average   |
|-----------------|------------|-----------|
| 0.15 -0.5       | 66 - 56 *  | 56 - 46 * |
| 0.50 -5.0       | 56.00      | 46.00     |
| 5.0 -30.0       | 60.00      | 50.00     |

Note 1: \* Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

### 16.3. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

#### **16.4. Test result**

Pass. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded worse case.

#### **16.5. Original test data**

Refer to appendix C

## 17. Antenna Requirements

### 17.1. Limits

Please refer to FCC § 15.203

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 shall be considered sufficient to comply with the provisions of this section. 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.

Please refer to FCC § 15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 17.2. Result

The antenna used for this product is PCB antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 3.38 dBi

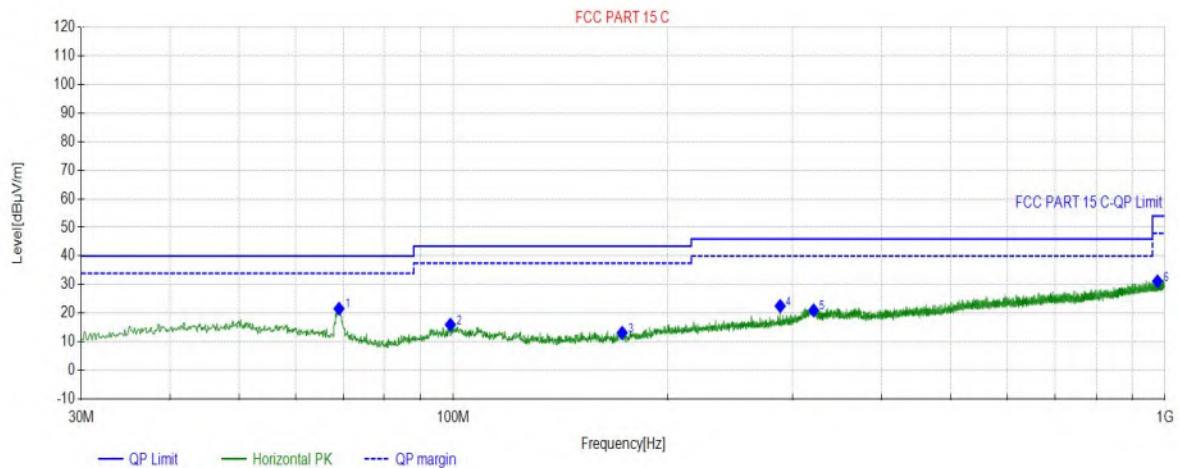
## APPENDIX A – Radiated Emission Below 1GHz Test Data

### Test Report

| Project Information |                   |              |        |
|---------------------|-------------------|--------------|--------|
| EUT:                | Bluetooth speaker | Environment: |        |
| Model:              | FG208-16          | SN:          |        |
| Mode:               | DH5_2402          | Voltage:     | DC 12V |
| Customer:           |                   | Engineer:    | Roger  |
| Remark:             | Power set : 2     |              |        |
| Test Standard:      |                   |              |        |

Start of Test: 2022-10-10 15:06:02

#### Test Graph



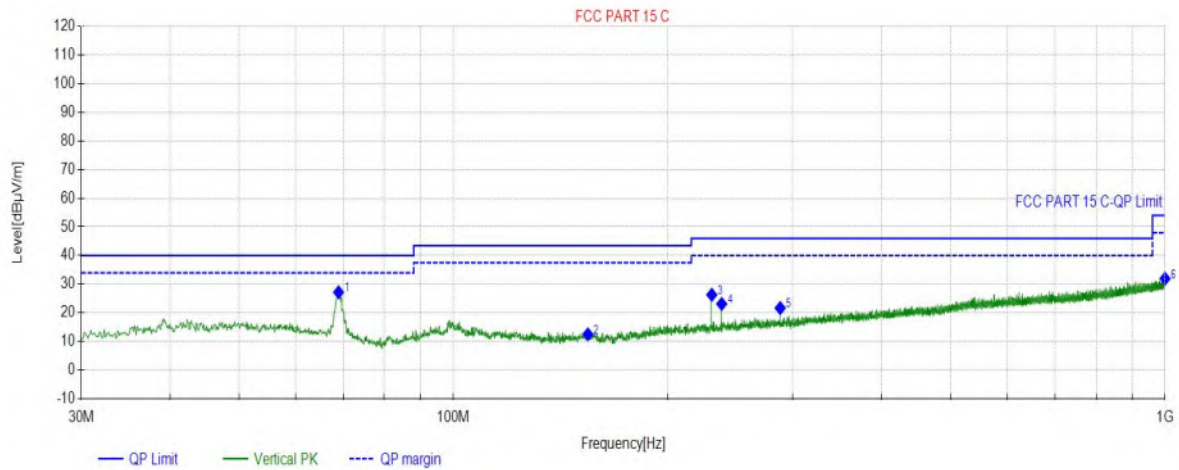
| Final Data List |             |             |                   |                   |                |             |           |            |
|-----------------|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| NO.             | Freq. (MHz) | Factor (dB) | QP Value (dBμV/m) | QP Limit (dBμV/m) | QP Margin (dB) | Height (cm) | Angle (°) | Polarity   |
| 1               | 69.0949     | -25.01      | 21.59             | 40.00             | 18.41          | 100         | 27        | Horizontal |
| 2               | 99.0709     | -22.96      | 16.01             | 43.50             | 27.49          | 100         | 207       | Horizontal |
| 3               | 172.7013    | -24.67      | 13.20             | 43.50             | 30.30          | 100         | 360       | Horizontal |
| 4               | 287.9488    | -20.34      | 22.54             | 46.00             | 23.46          | 100         | 154       | Horizontal |
| 5               | 320.8351    | -19.53      | 21.02             | 46.00             | 24.98          | 100         | 164       | Horizontal |
| 6               | 976.0386    | -6.50       | 31.15             | 54.00             | 22.85          | 100         | 328       | Horizontal |

# Test Report

| Project Information |                   |              |        |
|---------------------|-------------------|--------------|--------|
| EUT:                | Bluetooth speaker | Environment: |        |
| Model:              | FG208-16          | SN:          |        |
| Mode:               | DH5_2402          | Voltage:     | DC 12V |
| Customer:           |                   | Engineer:    | Roger  |
| Remark:             | Power set : 2     |              |        |
| Test Standard:      |                   |              |        |

Start of Test: 2022-10-10 15:06:46

## Test Graph



## Final Data List

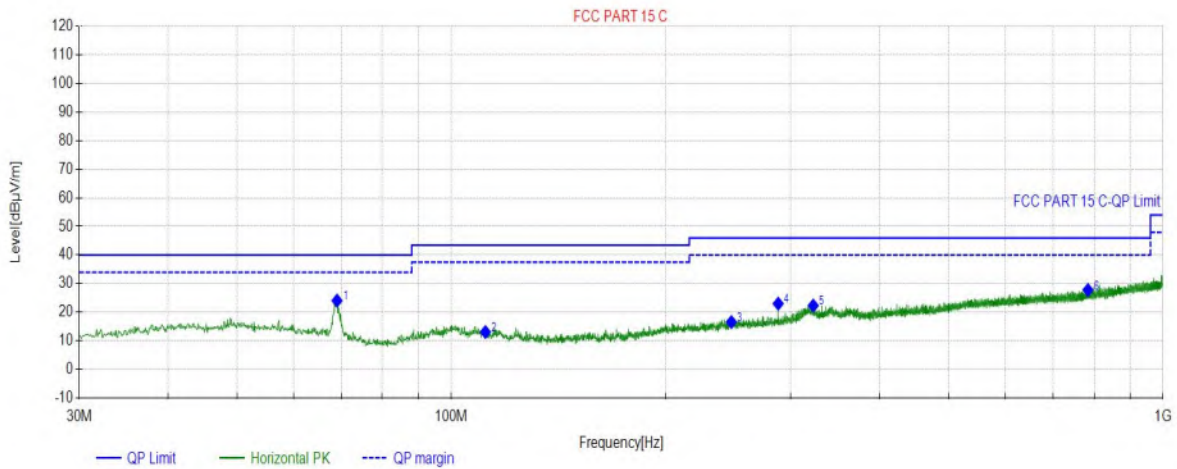
| NO. | Freq. (MHz) | Factor (dB) | QP Value (dBμV/m) | QP Limit (dBμV/m) | QP Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 68.9979     | -24.98      | 27.18             | 40.00             | 12.82          | 100         | 148       | Vertical |
| 2   | 154.5605    | -25.63      | 12.53             | 43.50             | 30.97          | 100         | 243       | Vertical |
| 3   | 230.8101    | -21.78      | 26.30             | 46.00             | 19.70          | 100         | 120       | Vertical |
| 4   | 238.2798    | -21.34      | 23.13             | 46.00             | 22.87          | 100         | 86        | Vertical |
| 5   | 287.9488    | -20.34      | 21.68             | 46.00             | 24.32          | 100         | 186       | Vertical |
| 6   | 999.9030    | -6.14       | 31.93             | 54.00             | 22.07          | 100         | 158       | Vertical |

# Test Report

| Project Information |                   |              |        |
|---------------------|-------------------|--------------|--------|
| EUT:                | Bluetooth speaker | Environment: |        |
| Model:              | FG208-16          | SN:          |        |
| Mode:               | DH5_2441          | Voltage:     | DC 12V |
| Customer:           |                   | Engineer:    | Roger  |
| Remark:             | Power set : 2     |              |        |
| Test Standard:      |                   |              |        |

Start of Test: 2022-10-10 15:07:55

## Test Graph



## Final Data List

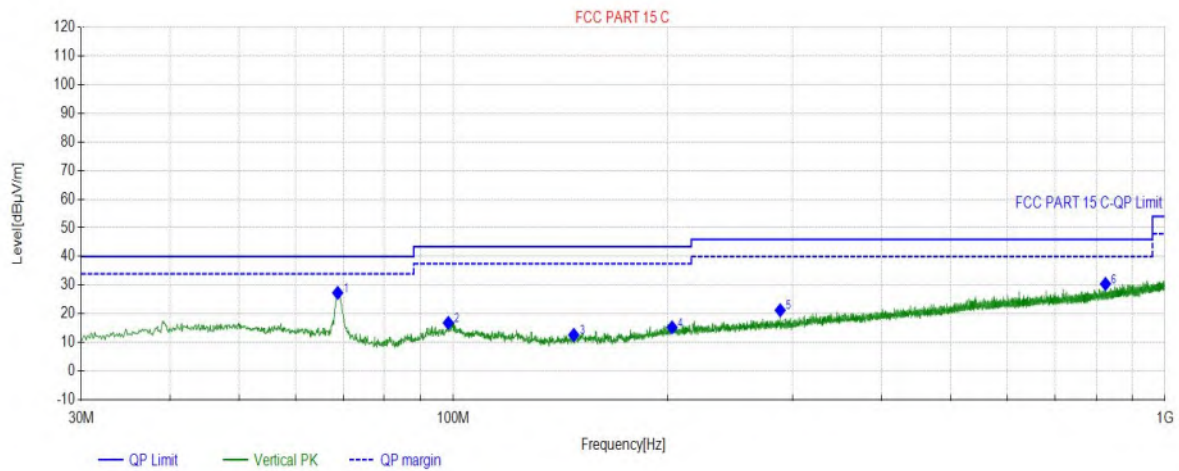
| NO. | Freq. (MHz) | Factor (dB) | QP Value (dBμV/m) | QP Limit (dBμV/m) | QP Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 69.0949     | -25.01      | 24.07             | 40.00             | 15.93          | 100         | 27        | Horizontal |
| 2   | 111.6822    | -23.74      | 13.10             | 43.50             | 30.40          | 100         | 136       | Horizontal |
| 3   | 247.4958    | -21.17      | 16.58             | 46.00             | 29.42          | 100         | 359       | Horizontal |
| 4   | 287.9488    | -20.34      | 23.01             | 46.00             | 22.99          | 100         | 94        | Horizontal |
| 5   | 322.4842    | -19.48      | 22.35             | 46.00             | 23.65          | 100         | 94        | Horizontal |
| 6   | 784.3474    | -10.07      | 27.79             | 46.00             | 18.21          | 100         | 252       | Horizontal |

# Test Report

| Project Information |                   |              |        |
|---------------------|-------------------|--------------|--------|
| EUT:                | Bluetooth speaker | Environment: |        |
| Model:              | FG208-16          | SN:          |        |
| Mode:               | DH5_2441          | Voltage:     | DC 12V |
| Customer:           |                   | Engineer:    | Roger  |
| Remark:             | Power set : 2     |              |        |
| Test Standard:      |                   |              |        |

Start of Test: 2022-10-10 15:08:39

## Test Graph



## Final Data List

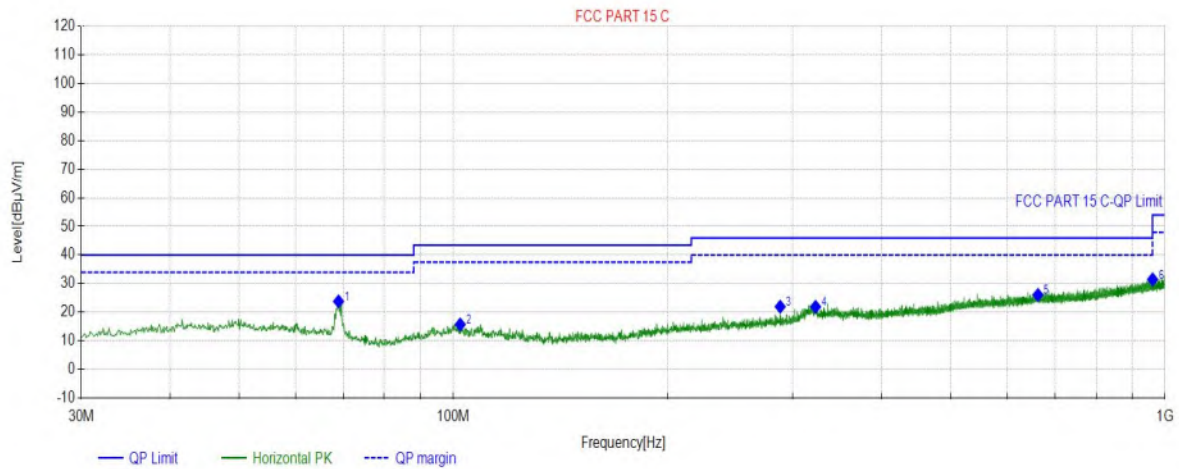
| NO. | Freq. (MHz) | Factor (dB) | QP Value (dBμV/m) | QP Limit (dBμV/m) | QP Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 68.8039     | -24.93      | 27.33             | 40.00             | 12.67          | 100         | 200       | Vertical |
| 2   | 98.3918     | -23.11      | 16.85             | 43.50             | 26.65          | 100         | 204       | Vertical |
| 3   | 147.6728    | -26.02      | 12.67             | 43.50             | 30.83          | 100         | 0         | Vertical |
| 4   | 202.9683    | -22.90      | 15.28             | 43.50             | 28.22          | 100         | 64        | Vertical |
| 5   | 287.9488    | -20.34      | 21.26             | 46.00             | 24.74          | 100         | 191       | Vertical |
| 6   | 824.8005    | -9.29       | 30.46             | 46.00             | 15.54          | 100         | 191       | Vertical |

# Test Report

| Project Information |                   |              |        |
|---------------------|-------------------|--------------|--------|
| EUT:                | Bluetooth speaker | Environment: |        |
| Model:              | FG208-16          | SN:          |        |
| Mode:               | DH5_2480          | Voltage:     | DC 12V |
| Customer:           |                   | Engineer:    | Roger  |
| Remark:             | Power set : 2     |              |        |
| Test Standard:      |                   |              |        |

Start of Test: 2022-10-10 15:10:03

## Test Graph



## Final Data List

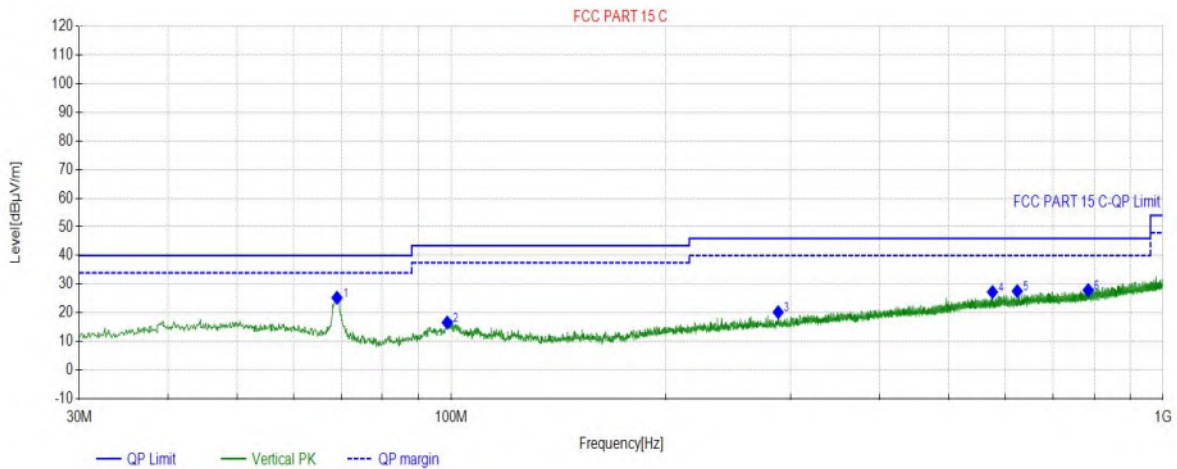
| NO. | Freq. (MHz) | Factor (dB) | QP Value (dBμV/m) | QP Limit (dBμV/m) | QP Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 68.9979     | -24.98      | 23.81             | 40.00             | 16.19          | 100         | 27        | Horizontal |
| 2   | 102.2722    | -22.94      | 15.74             | 43.50             | 27.76          | 100         | 106       | Horizontal |
| 3   | 287.9488    | -20.34      | 21.97             | 46.00             | 24.03          | 100         | 96        | Horizontal |
| 4   | 322.8723    | -19.47      | 21.92             | 46.00             | 24.08          | 100         | 137       | Horizontal |
| 5   | 662.8913    | -11.52      | 26.07             | 46.00             | 19.93          | 100         | 114       | Horizontal |
| 6   | 960.7111    | -6.53       | 31.48             | 54.00             | 22.52          | 100         | 304       | Horizontal |

# Test Report

| Project Information |                   |              |        |
|---------------------|-------------------|--------------|--------|
| EUT:                | Bluetooth speaker | Environment: |        |
| Model:              | FG208-16          | SN:          |        |
| Mode:               | DH5_2480          | Voltage:     | DC 12V |
| Customer:           |                   | Engineer:    | Roger  |
| Remark:             | Power set : 2     |              |        |
| Test Standard:      |                   |              |        |

Start of Test: 2022-10-10 15:10:47

## Test Graph



| Final Data List |             |             |                   |                   |                |             |           |          |
|-----------------|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| NO.             | Freq. (MHz) | Factor (dB) | QP Value (dBμV/m) | QP Limit (dBμV/m) | QP Margin (dB) | Height (cm) | Angle (°) | Polarity |
| 1               | 69.0949     | -25.01      | 25.29             | 40.00             | 14.71          | 100         | 224       | Vertical |
| 2               | 98.6829     | -23.04      | 16.64             | 43.50             | 26.86          | 100         | 169       | Vertical |
| 3               | 287.9488    | -20.34      | 20.24             | 46.00             | 25.76          | 100         | 126       | Vertical |
| 4               | 575.9706    | -13.02      | 27.28             | 46.00             | 18.72          | 100         | 232       | Vertical |
| 5               | 623.9904    | -12.14      | 27.57             | 46.00             | 18.43          | 100         | 242       | Vertical |
| 6               | 785.0265    | -10.06      | 27.95             | 46.00             | 18.05          | 100         | 108       | Vertical |

## APPENDIX B – Radiated Emission Above 1GHz Test Data

### Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2402      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:12:36

#### Test Graph



#### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2162.1162   | 6.09        | 47.05             | 74.00             | 26.95          | 150         | 229       | Horizontal |
| 2   | 2257.9258   | 6.08        | 47.68             | 74.00             | 26.32          | 150         | 248       | Horizontal |
| 3   | 3199.5200   | -16.04      | 43.18             | 74.00             | 30.82          | 150         | 247       | Horizontal |
| 4   | 4803.1803   | -10.14      | 44.14             | 74.00             | 29.86          | 150         | 260       | Horizontal |
| 5   | 11778.8779  | 4.45        | 44.32             | 74.00             | 29.68          | 150         | 101       | Horizontal |
| 6   | 17773.4773  | 13.82       | 51.55             | 74.00             | 22.45          | 150         | 101       | Horizontal |

#### AV Final Data List

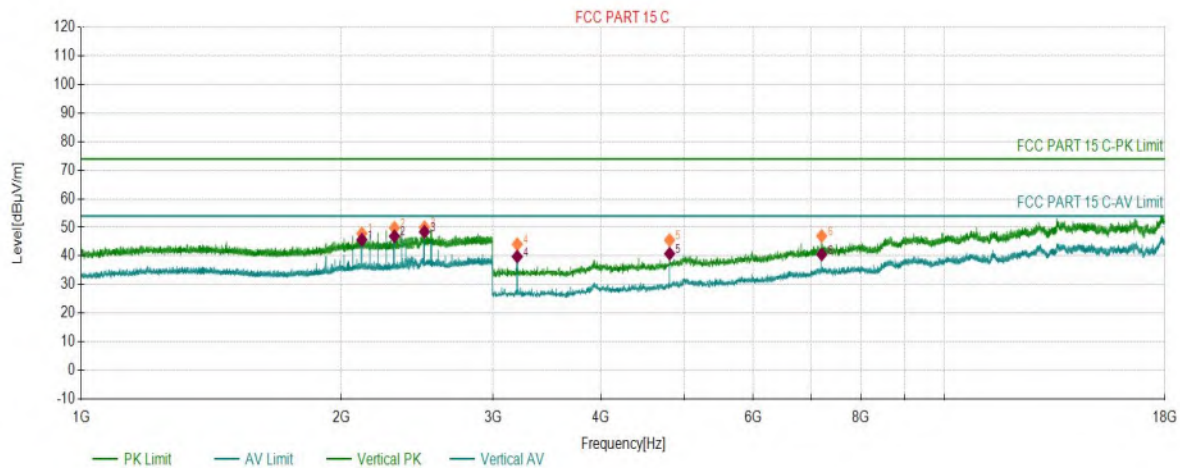
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2162.1162   | 6.09        | 42.22             | 54.00             | 11.78          | 150         | 229       | Horizontal |
| 2   | 2257.9258   | 6.08        | 45.49             | 54.00             | 8.51           | 150         | 248       | Horizontal |
| 3   | 3199.5200   | -16.04      | 36.16             | 54.00             | 17.84          | 150         | 247       | Horizontal |
| 4   | 4803.1803   | -10.14      | 40.76             | 54.00             | 13.24          | 150         | 260       | Horizontal |
| 5   | 11778.8779  | 4.45        | 40.15             | 54.00             | 13.85          | 150         | 101       | Horizontal |
| 6   | 17773.4773  | 13.82       | 45.00             | 54.00             | 9.00           | 150         | 101       | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2402      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:14:15

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2114.1114   | 6.21        | 47.89             | 74.00             | 26.11          | 150         | 247       | Vertical |
| 2   | 2306.1306   | 6.17        | 49.89             | 74.00             | 24.11          | 150         | 187       | Vertical |
| 3   | 2498.1498   | 7.23        | 50.06             | 74.00             | 23.94          | 150         | 217       | Vertical |
| 4   | 3199.5200   | -16.04      | 44.14             | 74.00             | 29.86          | 150         | 234       | Vertical |
| 5   | 4803.1803   | -10.14      | 45.57             | 74.00             | 28.43          | 150         | 2         | Vertical |
| 6   | 7204.9205   | -1.63       | 47.02             | 74.00             | 26.98          | 150         | 277       | Vertical |

### AV Final Data List

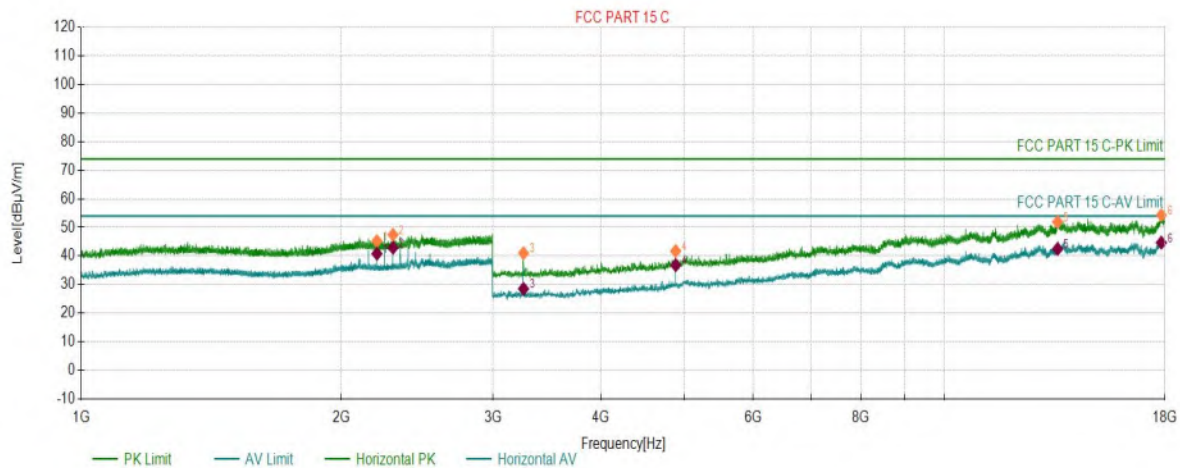
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2114.1114   | 6.21        | 45.68             | 54.00             | 8.32           | 150         | 247       | Vertical |
| 2   | 2306.1306   | 6.17        | 46.91             | 54.00             | 7.09           | 150         | 187       | Vertical |
| 3   | 2498.1498   | 7.23        | 48.45             | 54.00             | 5.55           | 150         | 217       | Vertical |
| 4   | 3199.5200   | -16.04      | 39.81             | 54.00             | 14.19          | 150         | 234       | Vertical |
| 5   | 4803.1803   | -10.14      | 40.81             | 54.00             | 13.19          | 150         | 2         | Vertical |
| 6   | 7204.9205   | -1.63       | 40.57             | 54.00             | 13.43          | 150         | 277       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2441      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:26:53

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2200.7201   | 6.00        | 45.21             | 74.00             | 28.79          | 150         | 311       | Horizontal |
| 2   | 2297.1297   | 6.14        | 47.45             | 74.00             | 26.55          | 150         | 229       | Horizontal |
| 3   | 3253.5254   | -15.99      | 41.02             | 74.00             | 32.98          | 150         | 219       | Horizontal |
| 4   | 4881.1881   | -9.49       | 41.75             | 74.00             | 32.25          | 150         | 207       | Horizontal |
| 5   | 13516.0516  | 10.59       | 51.94             | 74.00             | 22.06          | 150         | 244       | Horizontal |
| 6   | 17822.9823  | 14.30       | 54.30             | 74.00             | 19.70          | 150         | 188       | Horizontal |

### AV Final Data List

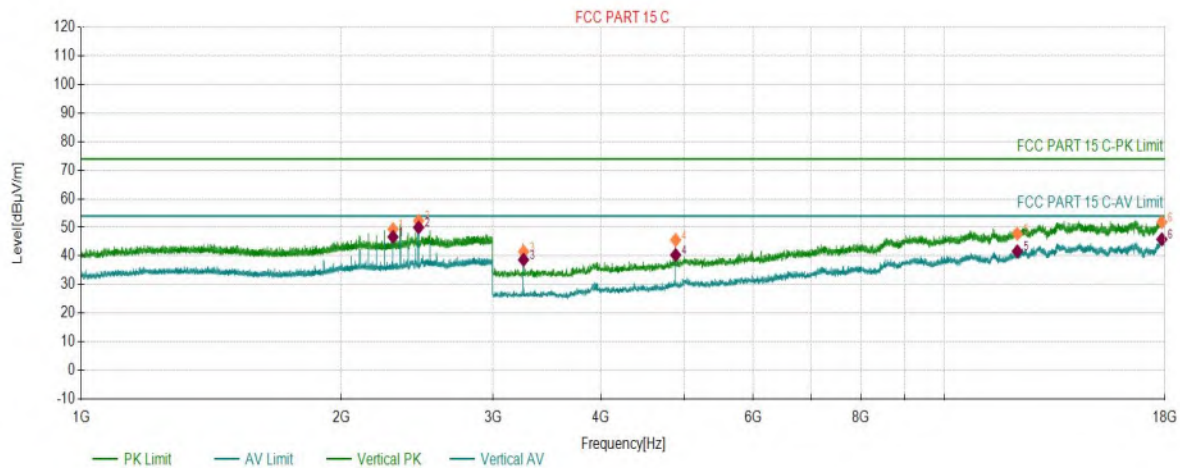
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2200.7201   | 6.00        | 40.81             | 54.00             | 13.19          | 150         | 311       | Horizontal |
| 2   | 2297.1297   | 6.14        | 42.91             | 54.00             | 11.09          | 150         | 229       | Horizontal |
| 3   | 3253.5254   | -15.99      | 28.54             | 54.00             | 25.46          | 150         | 219       | Horizontal |
| 4   | 4881.1881   | -9.49       | 36.82             | 54.00             | 17.18          | 150         | 207       | Horizontal |
| 5   | 13516.0516  | 10.59       | 42.50             | 54.00             | 11.50          | 150         | 244       | Horizontal |
| 6   | 17822.9823  | 14.30       | 44.69             | 54.00             | 9.31           | 150         | 188       | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2441      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:28:29

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2297.1297   | 6.14        | 49.38             | 74.00             | 24.62          | 150         | 234       | Vertical |
| 2   | 2459.5460   | 7.53        | 52.34             | 74.00             | 21.66          | 150         | 330       | Vertical |
| 3   | 3253.5254   | -15.99      | 41.55             | 74.00             | 32.45          | 150         | 232       | Vertical |
| 4   | 4881.1881   | -9.49       | 45.59             | 74.00             | 28.41          | 150         | 358       | Vertical |
| 5   | 12138.9139  | 6.27        | 47.78             | 74.00             | 26.22          | 150         | 34        | Vertical |
| 6   | 17846.9847  | 14.47       | 51.86             | 74.00             | 22.14          | 150         | 265       | Vertical |

### AV Final Data List

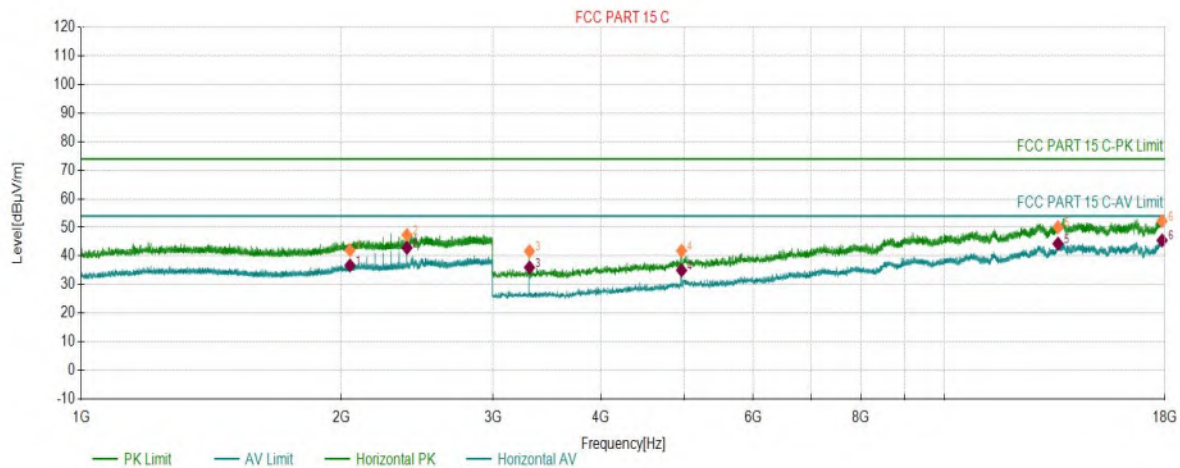
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2297.1297   | 6.14        | 46.69             | 54.00             | 7.31           | 150         | 234       | Vertical |
| 2   | 2459.5460   | 7.53        | 50.01             | 54.00             | 3.99           | 150         | 330       | Vertical |
| 3   | 3253.5254   | -15.99      | 38.71             | 54.00             | 15.29          | 150         | 232       | Vertical |
| 4   | 4881.1881   | -9.49       | 40.36             | 54.00             | 13.64          | 150         | 358       | Vertical |
| 5   | 12138.9139  | 6.27        | 41.68             | 54.00             | 12.32          | 150         | 34        | Vertical |
| 6   | 17846.9847  | 14.47       | 45.85             | 54.00             | 8.15           | 150         | 265       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2480      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:32:32

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2048.1048   | 5.65        | 42.02             | 74.00             | 31.98          | 150         | 108       | Horizontal |
| 2   | 2384.1384   | 6.62        | 47.35             | 74.00             | 26.65          | 150         | 179       | Horizontal |
| 3   | 3306.0306   | -15.93      | 41.70             | 74.00             | 32.30          | 150         | 197       | Horizontal |
| 4   | 4959.1959   | -8.84       | 41.86             | 74.00             | 32.14          | 150         | 267       | Horizontal |
| 5   | 13529.5530  | 10.56       | 50.10             | 74.00             | 23.90          | 150         | 287       | Horizontal |
| 6   | 17857.4857  | 14.54       | 52.25             | 74.00             | 21.75          | 150         | 274       | Horizontal |

### AV Final Data List

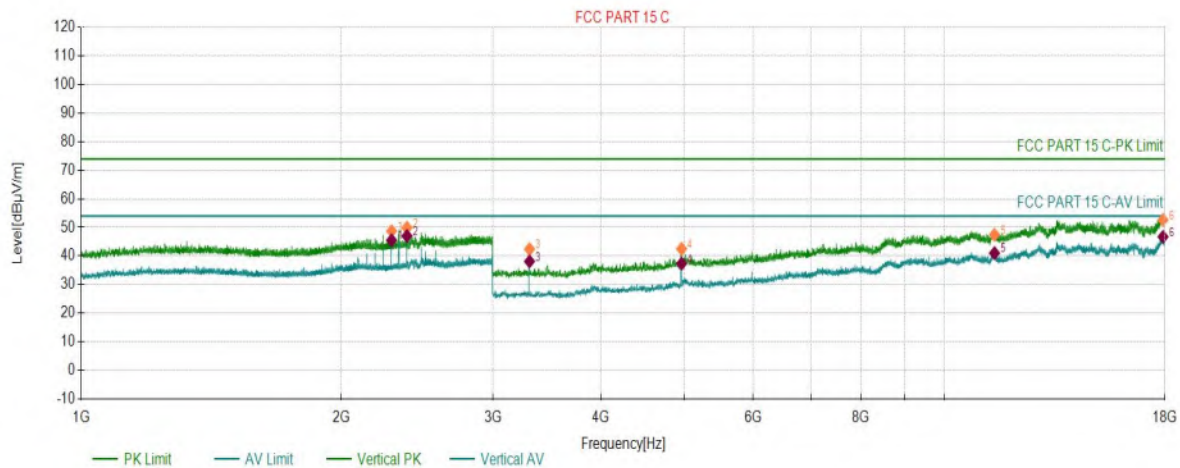
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2048.1048   | 5.65        | 36.73             | 54.00             | 17.27          | 150         | 108       | Horizontal |
| 2   | 2384.1384   | 6.62        | 42.84             | 54.00             | 11.16          | 150         | 179       | Horizontal |
| 3   | 3306.0306   | -15.93      | 36.02             | 54.00             | 17.98          | 150         | 197       | Horizontal |
| 4   | 4959.1959   | -8.84       | 34.99             | 54.00             | 19.01          | 150         | 267       | Horizontal |
| 5   | 13529.5530  | 10.56       | 44.32             | 54.00             | 9.68           | 150         | 287       | Horizontal |
| 6   | 17857.4857  | 14.54       | 45.44             | 54.00             | 8.56           | 150         | 274       | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2480      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:43:32

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2288.3288   | 6.12        | 48.72             | 74.00             | 25.28          | 150         | 190       | Vertical |
| 2   | 2384.1384   | 6.62        | 49.89             | 74.00             | 24.11          | 150         | 185       | Vertical |
| 3   | 3306.0306   | -15.93      | 42.42             | 74.00             | 31.58          | 150         | 38        | Vertical |
| 4   | 4959.1959   | -8.84       | 42.53             | 74.00             | 31.47          | 150         | 5         | Vertical |
| 5   | 11423.3423  | 5.90        | 47.44             | 74.00             | 26.56          | 150         | 141       | Vertical |
| 6   | 17903.9904  | 14.83       | 52.66             | 74.00             | 21.34          | 150         | 52        | Vertical |

### AV Final Data List

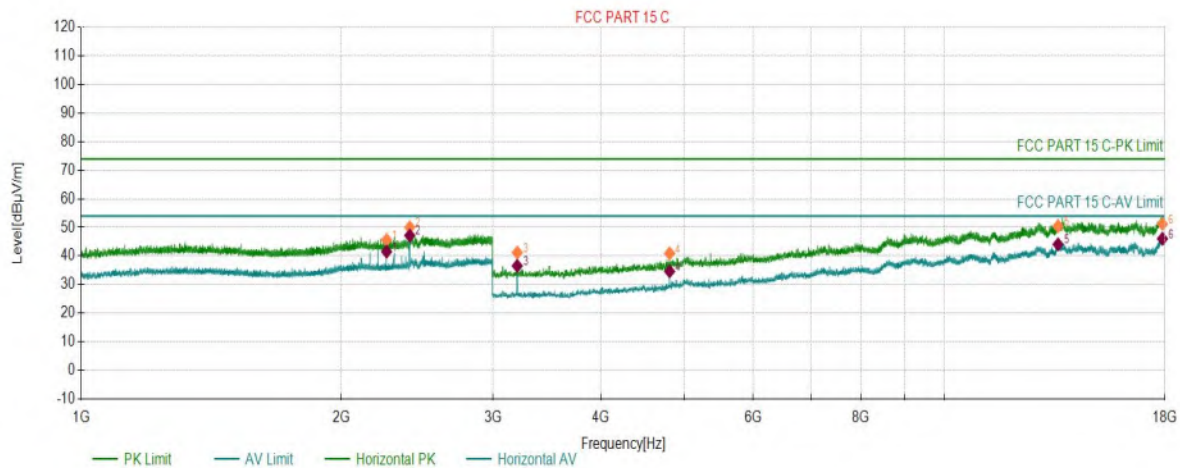
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2288.3288   | 6.12        | 45.49             | 54.00             | 8.51           | 150         | 190       | Vertical |
| 2   | 2384.1384   | 6.62        | 46.99             | 54.00             | 7.01           | 150         | 185       | Vertical |
| 3   | 3306.0306   | -15.93      | 38.13             | 54.00             | 15.87          | 150         | 38        | Vertical |
| 4   | 4959.1959   | -8.84       | 37.37             | 54.00             | 16.63          | 150         | 5         | Vertical |
| 5   | 11423.3423  | 5.90        | 41.02             | 54.00             | 12.98          | 150         | 141       | Vertical |
| 6   | 17903.9904  | 14.83       | 46.73             | 54.00             | 7.27           | 150         | 52        | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:48:19

## Test Graph



## PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2258.1258   | 6.08        | 45.63             | 74.00             | 28.37          | 150         | 236       | Horizontal |
| 2   | 2402.1402   | 7.13        | 50.06             | 74.00             | 23.94          | 150         | 179       | Horizontal |
| 3   | 3199.5200   | -16.04      | 41.22             | 74.00             | 32.78          | 150         | 255       | Horizontal |
| 4   | 4803.1803   | -10.14      | 40.92             | 74.00             | 33.08          | 150         | 274       | Horizontal |
| 5   | 13532.5533  | 10.56       | 50.43             | 74.00             | 23.57          | 150         | 4         | Horizontal |
| 6   | 17876.9877  | 14.68       | 51.22             | 74.00             | 22.78          | 150         | 218       | Horizontal |

## AV Final Data List

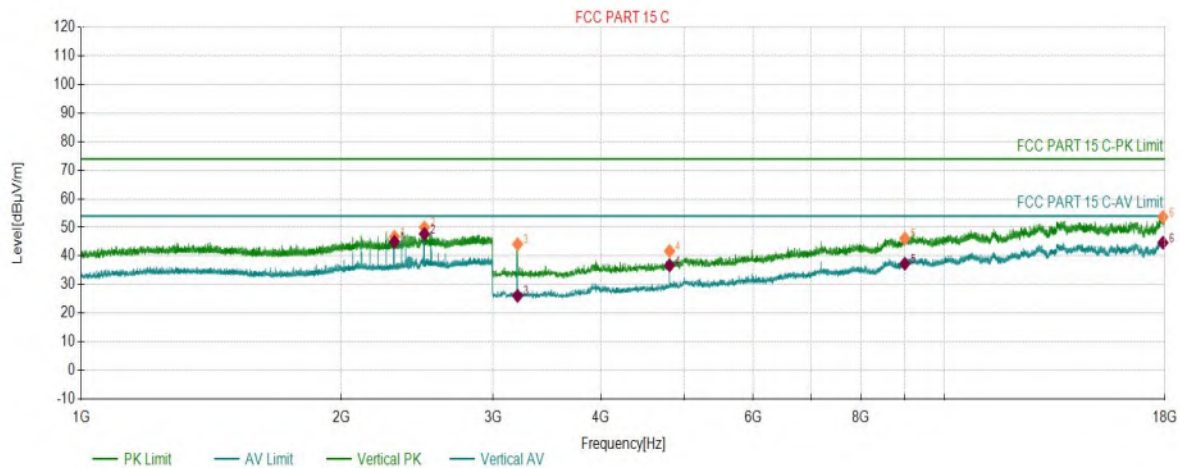
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2258.1258   | 6.08        | 41.54             | 54.00             | 12.46          | 150         | 236       | Horizontal |
| 2   | 2402.1402   | 7.13        | 47.18             | 54.00             | 6.82           | 150         | 179       | Horizontal |
| 3   | 3199.5200   | -16.04      | 36.57             | 54.00             | 17.43          | 150         | 255       | Horizontal |
| 4   | 4803.1803   | -10.14      | 34.65             | 54.00             | 19.35          | 150         | 274       | Horizontal |
| 5   | 13532.5533  | 10.56       | 44.09             | 54.00             | 9.91           | 150         | 4         | Horizontal |
| 6   | 17876.9877  | 14.68       | 46.05             | 54.00             | 7.95           | 150         | 218       | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:49:55

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2306.1306   | 6.17        | 46.77             | 74.00             | 27.23          | 150         | 234       | Vertical |
| 2   | 2497.9498   | 7.21        | 49.98             | 74.00             | 24.02          | 150         | 222       | Vertical |
| 3   | 3202.5203   | -16.04      | 44.16             | 74.00             | 29.84          | 150         | 37        | Vertical |
| 4   | 4803.1803   | -10.14      | 41.75             | 74.00             | 32.25          | 150         | 220       | Vertical |
| 5   | 8993.0993   | 2.68        | 46.18             | 74.00             | 27.82          | 150         | 334       | Vertical |
| 6   | 17899.4899  | 14.85       | 53.68             | 74.00             | 20.32          | 150         | 0         | Vertical |

### AV Final Data List

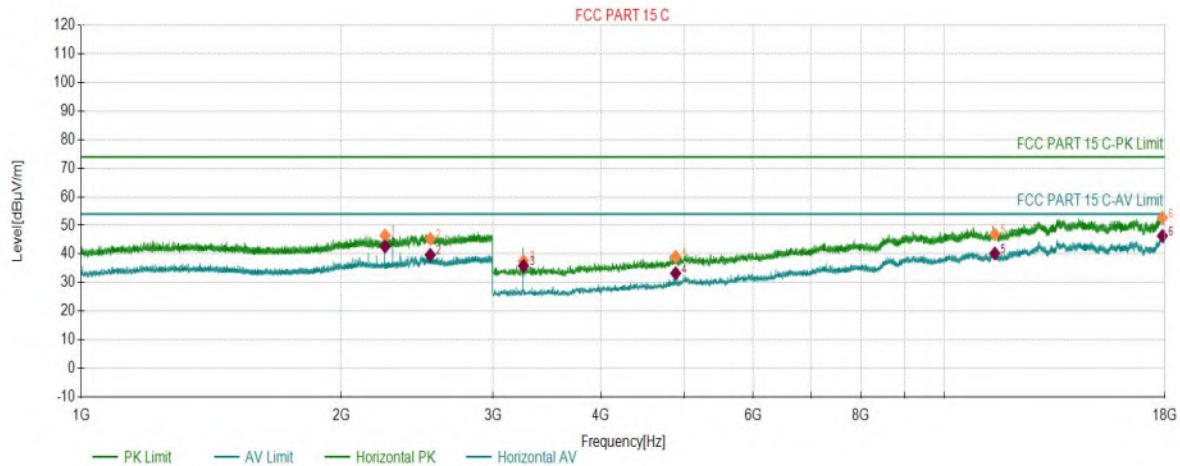
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2306.1306   | 6.17        | 45.02             | 54.00             | 8.98           | 150         | 234       | Vertical |
| 2   | 2497.9498   | 7.21        | 47.75             | 54.00             | 6.25           | 150         | 222       | Vertical |
| 3   | 3202.5203   | -16.04      | 26.07             | 54.00             | 27.93          | 150         | 37        | Vertical |
| 4   | 4803.1803   | -10.14      | 36.73             | 54.00             | 17.27          | 150         | 220       | Vertical |
| 5   | 8993.0993   | 2.68        | 37.33             | 54.00             | 16.67          | 150         | 334       | Vertical |
| 6   | 17899.4899  | 14.85       | 44.66             | 54.00             | 9.34           | 150         | 0         | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2441     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:00:02

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2249.1249   | 6.07        | 46.49             | 74.00             | 27.51          | 150         | 236       | Horizontal |
| 2   | 2536.9537   | 7.65        | 45.32             | 74.00             | 28.68          | 150         | 319       | Horizontal |
| 3   | 3253.5254   | -15.99      | 37.55             | 74.00             | 36.45          | 150         | 257       | Horizontal |
| 4   | 4881.1881   | -9.49       | 39.03             | 74.00             | 34.97          | 150         | 149       | Horizontal |
| 5   | 11432.3432  | 5.84        | 46.85             | 74.00             | 27.15          | 150         | 21        | Horizontal |
| 6   | 17875.4875  | 14.67       | 52.65             | 74.00             | 21.35          | 150         | 92        | Horizontal |

### AV Final Data List

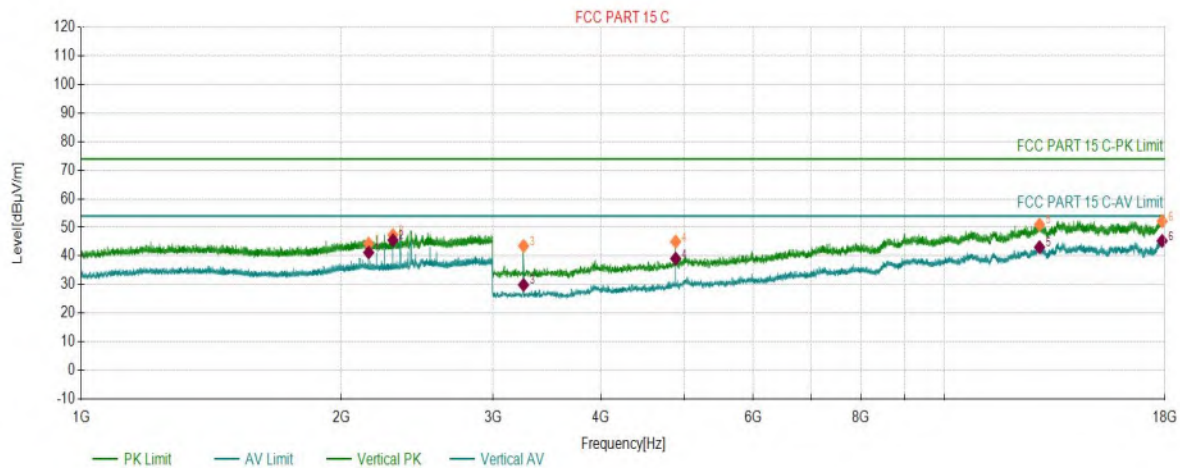
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2249.1249   | 6.07        | 42.63             | 54.00             | 11.37          | 150         | 236       | Horizontal |
| 2   | 2536.9537   | 7.65        | 39.72             | 54.00             | 14.28          | 150         | 319       | Horizontal |
| 3   | 3253.5254   | -15.99      | 35.90             | 54.00             | 18.10          | 150         | 257       | Horizontal |
| 4   | 4881.1881   | -9.49       | 33.27             | 54.00             | 20.73          | 150         | 149       | Horizontal |
| 5   | 11432.3432  | 5.84        | 40.21             | 54.00             | 13.79          | 150         | 21        | Horizontal |
| 6   | 17875.4875  | 14.67       | 46.35             | 54.00             | 7.65           | 150         | 92        | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2441     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:01:41

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2152.9153   | 6.12        | 44.35             | 74.00             | 29.65          | 150         | 332       | Vertical |
| 2   | 2296.7297   | 6.14        | 47.36             | 74.00             | 26.64          | 150         | 192       | Vertical |
| 3   | 3253.5254   | -15.99      | 43.54             | 74.00             | 30.46          | 150         | 231       | Vertical |
| 4   | 4881.1881   | -9.49       | 45.04             | 74.00             | 28.96          | 150         | 7         | Vertical |
| 5   | 12881.4881  | 9.48        | 50.99             | 74.00             | 23.01          | 150         | 199       | Vertical |
| 6   | 17860.4860  | 14.57       | 52.17             | 74.00             | 21.83          | 150         | 30        | Vertical |

### AV Final Data List

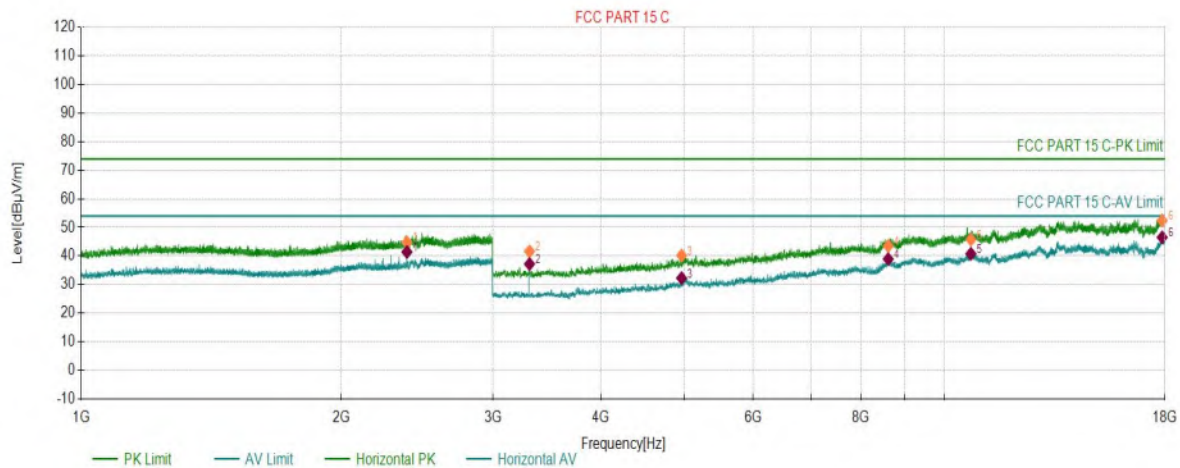
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2152.9153   | 6.12        | 41.23             | 54.00             | 12.77          | 150         | 332       | Vertical |
| 2   | 2296.7297   | 6.14        | 45.54             | 54.00             | 8.46           | 150         | 192       | Vertical |
| 3   | 3253.5254   | -15.99      | 29.93             | 54.00             | 24.07          | 150         | 231       | Vertical |
| 4   | 4881.1881   | -9.49       | 39.13             | 54.00             | 14.87          | 150         | 7         | Vertical |
| 5   | 12881.4881  | 9.48        | 43.08             | 54.00             | 10.92          | 150         | 199       | Vertical |
| 6   | 17860.4860  | 14.57       | 45.30             | 54.00             | 8.70           | 150         | 30        | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:04:22

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2384.1384   | 6.62        | 44.80             | 74.00             | 29.20          | 150         | 183       | Horizontal |
| 2   | 3306.0306   | -15.93      | 41.65             | 74.00             | 32.35          | 150         | 192       | Horizontal |
| 3   | 4959.1959   | -8.84       | 40.21             | 74.00             | 33.79          | 150         | 262       | Horizontal |
| 4   | 8603.0603   | 2.22        | 43.51             | 74.00             | 30.49          | 150         | 86        | Horizontal |
| 5   | 10725.7726  | 5.44        | 45.74             | 74.00             | 28.26          | 150         | 318       | Horizontal |
| 6   | 17863.4863  | 14.59       | 52.37             | 74.00             | 21.63          | 150         | 318       | Horizontal |

### AV Final Data List

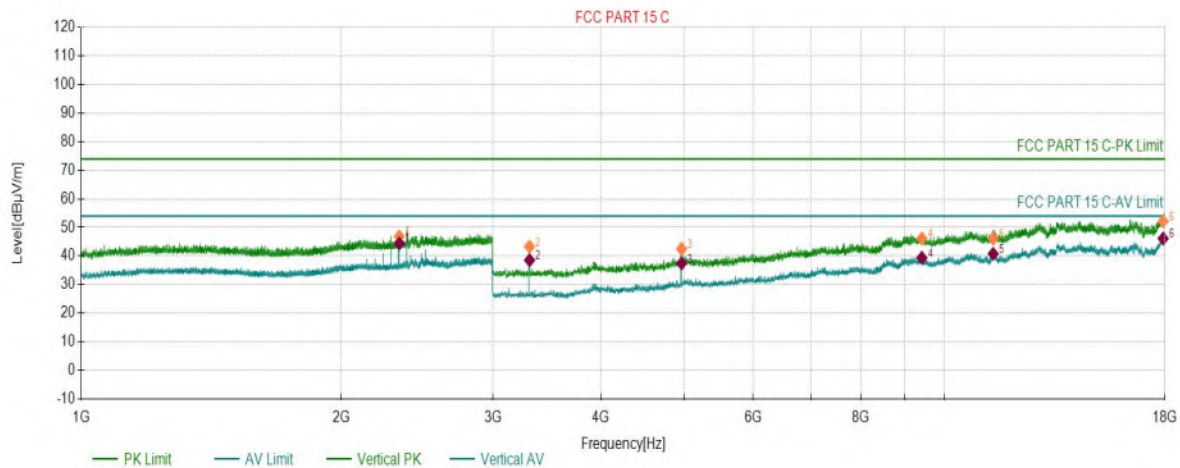
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2384.1384   | 6.62        | 41.43             | 54.00             | 12.57          | 150         | 183       | Horizontal |
| 2   | 3306.0306   | -15.93      | 37.23             | 54.00             | 16.77          | 150         | 192       | Horizontal |
| 3   | 4959.1959   | -8.84       | 32.28             | 54.00             | 21.72          | 150         | 262       | Horizontal |
| 4   | 8603.0603   | 2.22        | 38.97             | 54.00             | 15.03          | 150         | 86        | Horizontal |
| 5   | 10725.7726  | 5.44        | 40.79             | 54.00             | 13.21          | 150         | 318       | Horizontal |
| 6   | 17863.4863  | 14.59       | 46.55             | 54.00             | 7.45           | 150         | 318       | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:05:59

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2335.9336   | 6.34        | 46.88             | 74.00             | 27.12          | 150         | 360       | Vertical |
| 2   | 3306.0306   | -15.93      | 43.30             | 74.00             | 30.70          | 150         | 35        | Vertical |
| 3   | 4959.1959   | -8.84       | 42.51             | 74.00             | 31.49          | 150         | 0         | Vertical |
| 4   | 9411.6412   | 3.91        | 46.12             | 74.00             | 27.88          | 150         | 29        | Vertical |
| 5   | 11384.3384  | 5.84        | 46.11             | 74.00             | 27.89          | 150         | 343       | Vertical |
| 6   | 17909.9910  | 14.80       | 52.13             | 74.00             | 21.87          | 150         | 1         | Vertical |

### AV Final Data List

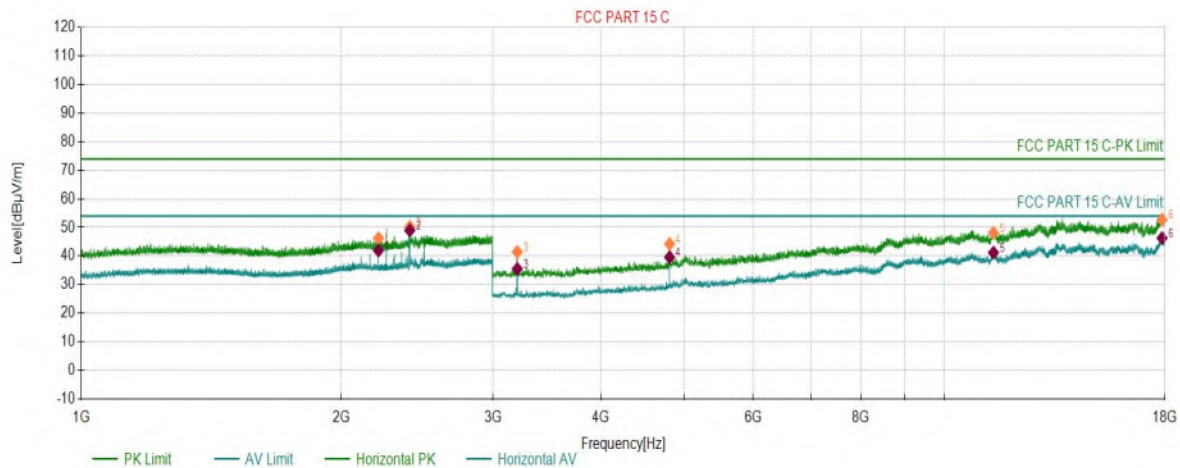
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2335.9336   | 6.34        | 44.41             | 54.00             | 9.59           | 150         | 360       | Vertical |
| 2   | 3306.0306   | -15.93      | 38.55             | 54.00             | 15.45          | 150         | 35        | Vertical |
| 3   | 4959.1959   | -8.84       | 37.46             | 54.00             | 16.54          | 150         | 0         | Vertical |
| 4   | 9411.6412   | 3.91        | 39.40             | 54.00             | 14.60          | 150         | 29        | Vertical |
| 5   | 11384.3384  | 5.84        | 40.78             | 54.00             | 13.22          | 150         | 343       | Vertical |
| 6   | 17909.9910  | 14.80       | 46.13             | 54.00             | 7.87           | 150         | 1         | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:17:11

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2209.9210   | 6.01        | 46.20             | 74.00             | 27.80          | 150         | 256       | Horizontal |
| 2   | 2402.3402   | 7.14        | 50.21             | 74.00             | 23.79          | 150         | 178       | Horizontal |
| 3   | 3199.5200   | -16.04      | 41.45             | 74.00             | 32.55          | 150         | 8         | Horizontal |
| 4   | 4803.1803   | -10.14      | 44.24             | 74.00             | 29.76          | 150         | 277       | Horizontal |
| 5   | 11393.3393  | 5.97        | 48.09             | 74.00             | 25.91          | 150         | 254       | Horizontal |
| 6   | 17858.9859  | 14.55       | 52.74             | 74.00             | 21.26          | 150         | 125       | Horizontal |

### AV Final Data List

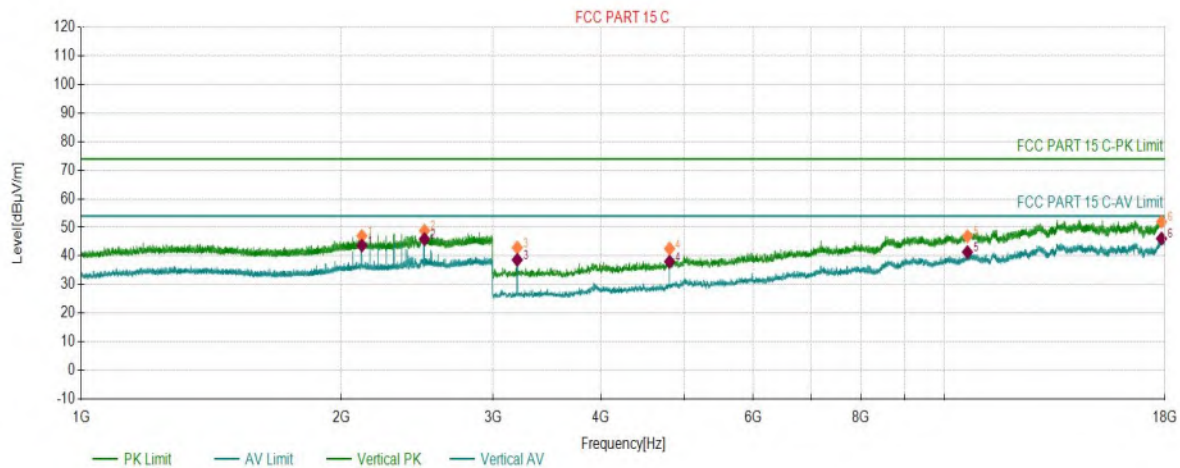
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2209.9210   | 6.01        | 41.95             | 54.00             | 12.05          | 150         | 256       | Horizontal |
| 2   | 2402.3402   | 7.14        | 48.95             | 54.00             | 5.05           | 150         | 178       | Horizontal |
| 3   | 3199.5200   | -16.04      | 35.51             | 54.00             | 18.49          | 150         | 8         | Horizontal |
| 4   | 4803.1803   | -10.14      | 39.58             | 54.00             | 14.42          | 150         | 277       | Horizontal |
| 5   | 11393.3393  | 5.97        | 41.19             | 54.00             | 12.81          | 150         | 254       | Horizontal |
| 6   | 17858.9859  | 14.55       | 46.28             | 54.00             | 7.72           | 150         | 125       | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:18:53

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2114.1114   | 6.21        | 47.03             | 74.00             | 26.97          | 150         | 242       | Vertical |
| 2   | 2498.1498   | 7.23        | 48.88             | 74.00             | 25.12          | 150         | 36        | Vertical |
| 3   | 3199.5200   | -16.04      | 42.97             | 74.00             | 31.03          | 150         | 229       | Vertical |
| 4   | 4803.1803   | -10.14      | 42.56             | 74.00             | 31.44          | 150         | 358       | Vertical |
| 5   | 10628.2628  | 5.05        | 46.93             | 74.00             | 27.07          | 150         | 285       | Vertical |
| 6   | 17830.4830  | 14.35       | 51.99             | 74.00             | 22.01          | 150         | 260       | Vertical |

### AV Final Data List

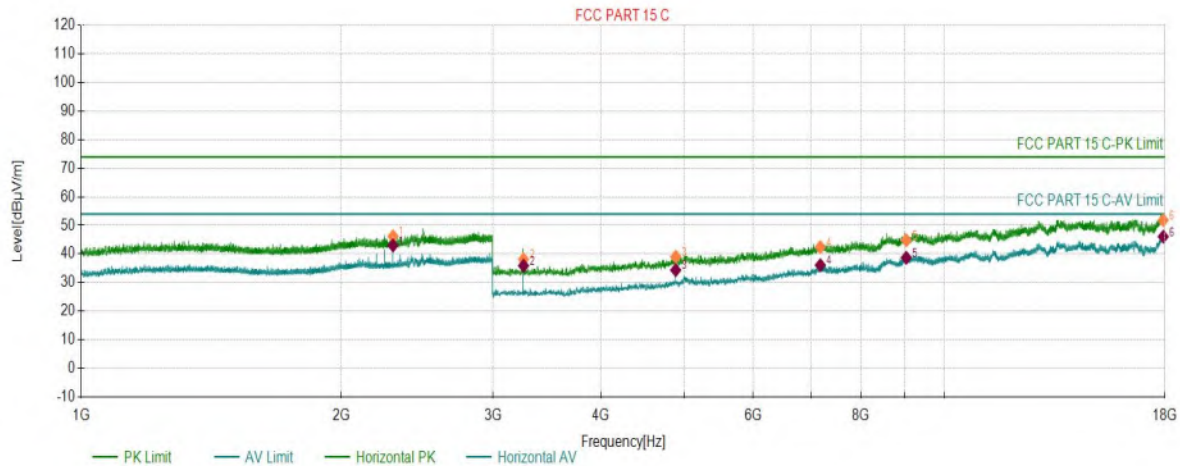
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2114.1114   | 6.21        | 43.68             | 54.00             | 10.32          | 150         | 242       | Vertical |
| 2   | 2498.1498   | 7.23        | 45.95             | 54.00             | 8.05           | 150         | 36        | Vertical |
| 3   | 3199.5200   | -16.04      | 38.68             | 54.00             | 15.32          | 150         | 229       | Vertical |
| 4   | 4803.1803   | -10.14      | 38.05             | 54.00             | 15.95          | 150         | 358       | Vertical |
| 5   | 10628.2628  | 5.05        | 41.40             | 54.00             | 12.60          | 150         | 285       | Vertical |
| 6   | 17830.4830  | 14.35       | 46.12             | 54.00             | 7.88           | 150         | 260       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2441     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:23:25

## Test Graph



### PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2297.1297   | 6.14        | 46.23             | 74.00             | 27.77          | 150         | 244       | Horizontal |
| 2   | 3253.5254   | -15.99      | 38.17             | 74.00             | 35.83          | 150         | 256       | Horizontal |
| 3   | 4881.1881   | -9.49       | 39.07             | 74.00             | 34.93          | 150         | 141       | Horizontal |
| 4   | 7179.4179   | -1.70       | 42.45             | 74.00             | 31.55          | 150         | 79        | Horizontal |
| 5   | 9027.6028   | 2.58        | 44.80             | 74.00             | 29.20          | 150         | 98        | Horizontal |
| 6   | 17912.9913  | 14.79       | 51.81             | 74.00             | 22.19          | 150         | 20        | Horizontal |

### AV Final Data List

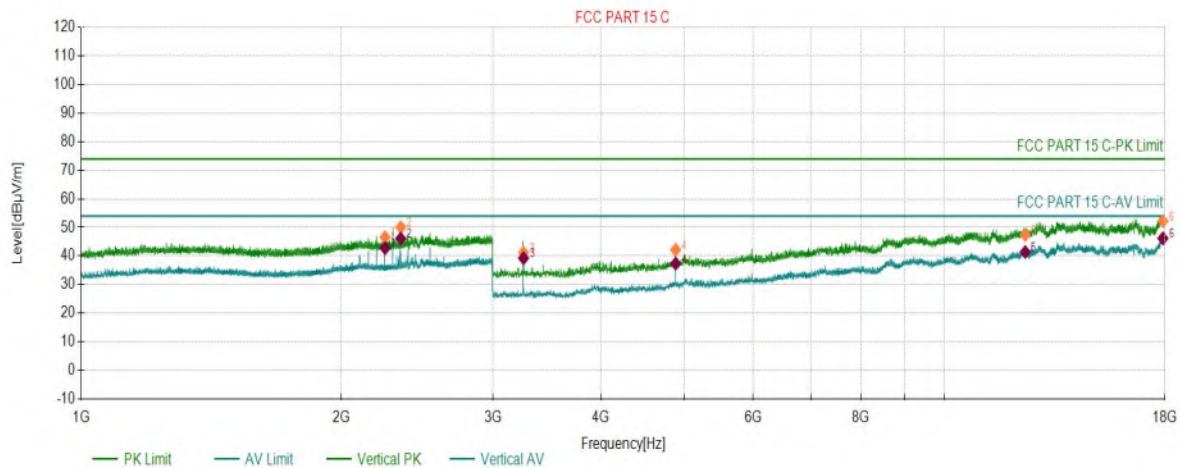
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2297.1297   | 6.14        | 43.00             | 54.00             | 11.00          | 150         | 244       | Horizontal |
| 2   | 3253.5254   | -15.99      | 35.93             | 54.00             | 18.07          | 150         | 256       | Horizontal |
| 3   | 4881.1881   | -9.49       | 34.40             | 54.00             | 19.60          | 150         | 141       | Horizontal |
| 4   | 7179.4179   | -1.70       | 36.14             | 54.00             | 17.86          | 150         | 79        | Horizontal |
| 5   | 9027.6028   | 2.58        | 38.70             | 54.00             | 15.30          | 150         | 98        | Horizontal |
| 6   | 17912.9913  | 14.79       | 46.10             | 54.00             | 7.90           | 150         | 20        | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2441     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:25:07

## Test Graph



## PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2249.1249   | 6.07        | 46.56             | 74.00             | 27.44          | 150         | 230       | Vertical |
| 2   | 2345.1345   | 6.39        | 50.08             | 74.00             | 23.92          | 150         | 360       | Vertical |
| 3   | 3253.5254   | -15.99      | 41.24             | 74.00             | 32.76          | 150         | 234       | Vertical |
| 4   | 4881.1881   | -9.49       | 42.23             | 74.00             | 31.77          | 150         | 197       | Vertical |
| 5   | 12396.9397  | 6.98        | 47.45             | 74.00             | 26.55          | 150         | 80        | Vertical |
| 6   | 17899.4899  | 14.85       | 52.25             | 74.00             | 21.75          | 150         | 289       | Vertical |

## AV Final Data List

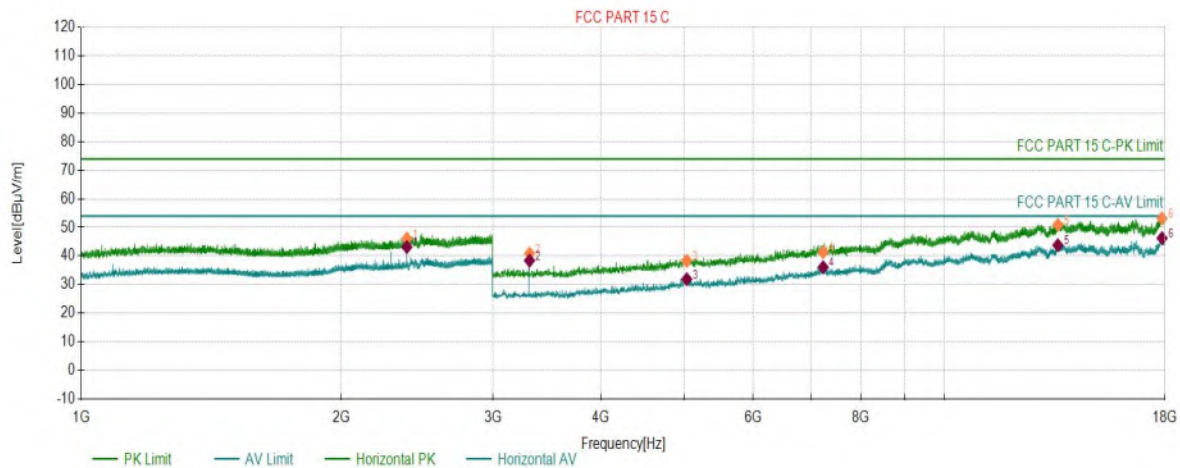
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 2249.1249   | 6.07        | 42.76             | 54.00             | 11.24          | 150         | 230       | Vertical |
| 2   | 2345.1345   | 6.39        | 46.12             | 54.00             | 7.88           | 150         | 360       | Vertical |
| 3   | 3253.5254   | -15.99      | 39.25             | 54.00             | 14.75          | 150         | 234       | Vertical |
| 4   | 4881.1881   | -9.49       | 37.40             | 54.00             | 16.60          | 150         | 197       | Vertical |
| 5   | 12396.9397  | 6.98        | 41.44             | 54.00             | 12.56          | 150         | 80        | Vertical |
| 6   | 17899.4899  | 14.85       | 46.19             | 54.00             | 7.81           | 150         | 289       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:27:56

## Test Graph



## PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2383.7384   | 6.62        | 46.11             | 74.00             | 27.89          | 150         | 186       | Horizontal |
| 2   | 3306.0306   | -15.93      | 40.87             | 74.00             | 33.13          | 150         | 195       | Horizontal |
| 3   | 5028.2028   | -8.44       | 38.34             | 74.00             | 35.66          | 150         | 74        | Horizontal |
| 4   | 7233.4233   | -1.52       | 41.37             | 74.00             | 32.63          | 150         | 50        | Horizontal |
| 5   | 13526.5527  | 10.57       | 50.87             | 74.00             | 23.13          | 150         | 244       | Horizontal |
| 6   | 17858.9859  | 14.55       | 53.18             | 74.00             | 20.82          | 150         | 338       | Horizontal |

## AV Final Data List

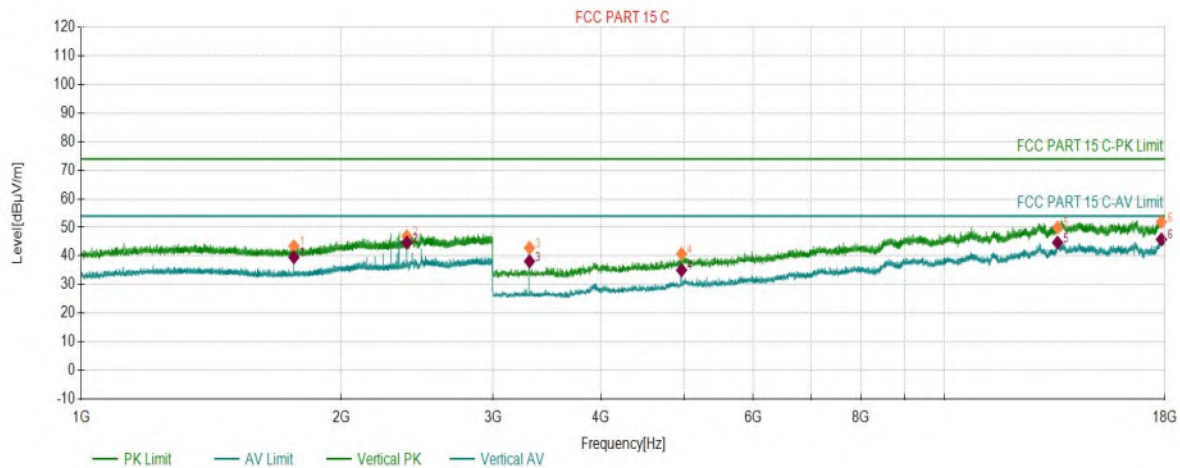
| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity   |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|------------|
| 1   | 2383.7384   | 6.62        | 43.15             | 54.00             | 10.85          | 150         | 186       | Horizontal |
| 2   | 3306.0306   | -15.93      | 38.44             | 54.00             | 15.56          | 150         | 195       | Horizontal |
| 3   | 5028.2028   | -8.44       | 31.92             | 54.00             | 22.08          | 150         | 74        | Horizontal |
| 4   | 7233.4233   | -1.52       | 36.11             | 54.00             | 17.89          | 150         | 50        | Horizontal |
| 5   | 13526.5527  | 10.57       | 43.79             | 54.00             | 10.21          | 150         | 244       | Horizontal |
| 6   | 17858.9859  | 14.55       | 46.27             | 54.00             | 7.73           | 150         | 338       | Horizontal |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:29:39

## Test Graph



## PK Final Data List

| NO. | Freq. (MHz) | Factor (dB) | PK Value (dBμV/m) | PK Limit (dBμV/m) | PK Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 1763.4763   | 3.31        | 43.45             | 74.00             | 30.55          | 150         | 162       | Vertical |
| 2   | 2383.7384   | 6.62        | 46.95             | 74.00             | 27.05          | 150         | 357       | Vertical |
| 3   | 3306.0306   | -15.93      | 42.85             | 74.00             | 31.15          | 150         | 38        | Vertical |
| 4   | 4959.1959   | -8.84       | 40.79             | 74.00             | 33.21          | 150         | 170       | Vertical |
| 5   | 13514.5515  | 10.60       | 50.00             | 74.00             | 24.00          | 150         | 88        | Vertical |
| 6   | 17825.9826  | 14.32       | 51.87             | 74.00             | 22.13          | 150         | 13        | Vertical |

## AV Final Data List

| NO. | Freq. (MHz) | Factor (dB) | AV Value (dBμV/m) | AV Limit (dBμV/m) | AV Margin (dB) | Height (cm) | Angle (°) | Polarity |
|-----|-------------|-------------|-------------------|-------------------|----------------|-------------|-----------|----------|
| 1   | 1763.4763   | 3.31        | 39.58             | 54.00             | 14.42          | 150         | 162       | Vertical |
| 2   | 2383.7384   | 6.62        | 44.71             | 54.00             | 9.29           | 150         | 357       | Vertical |
| 3   | 3306.0306   | -15.93      | 38.15             | 54.00             | 15.85          | 150         | 38        | Vertical |
| 4   | 4959.1959   | -8.84       | 35.07             | 54.00             | 18.93          | 150         | 170       | Vertical |
| 5   | 13514.5515  | 10.60       | 44.70             | 54.00             | 9.30           | 150         | 88        | Vertical |
| 6   | 17825.9826  | 14.32       | 45.81             | 54.00             | 8.19           | 150         | 13        | Vertical |

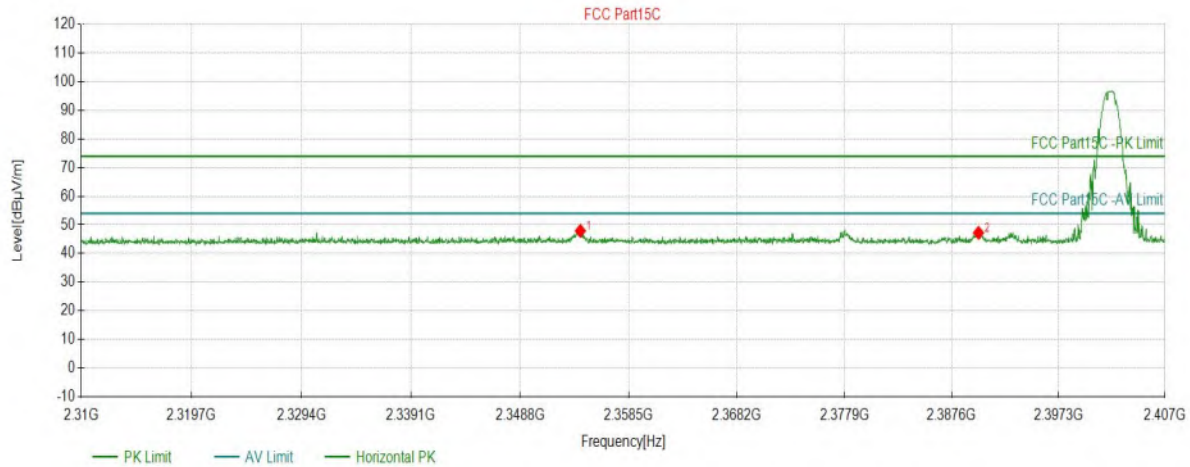
## Restriction Band Emission

## Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2402      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:22:15

## Test Graph



## Suspected Data List

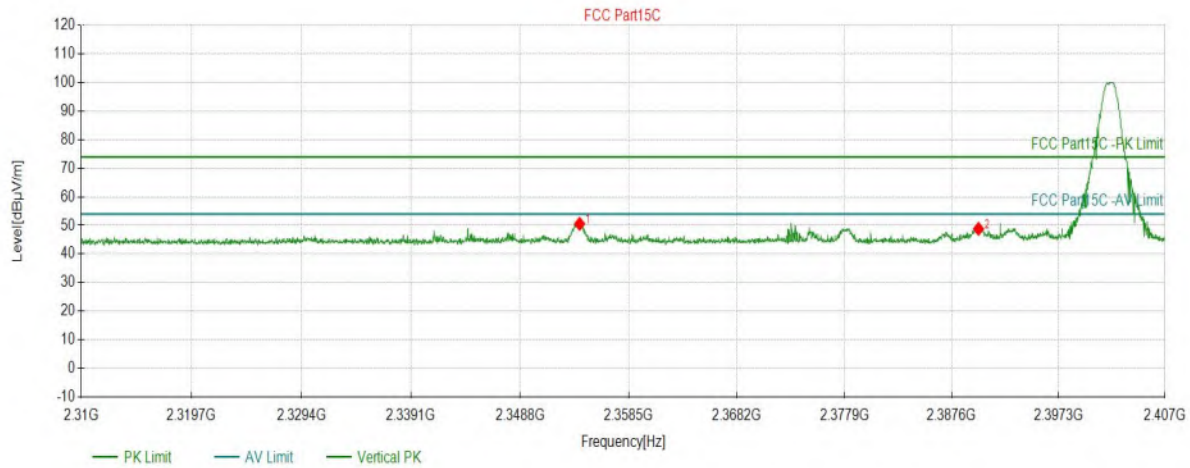
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2354.1821   | 47.91          | 6.39        | 74.00          | 26.09       | 150         | 152       | PK       | Horizont |
| 2   | 2390.0193   | 47.21          | 6.47        | 74.00          | 26.79       | 150         | 175       | PK       | Horizont |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2402      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:24:58

## Test Graph



## Suspected Data List

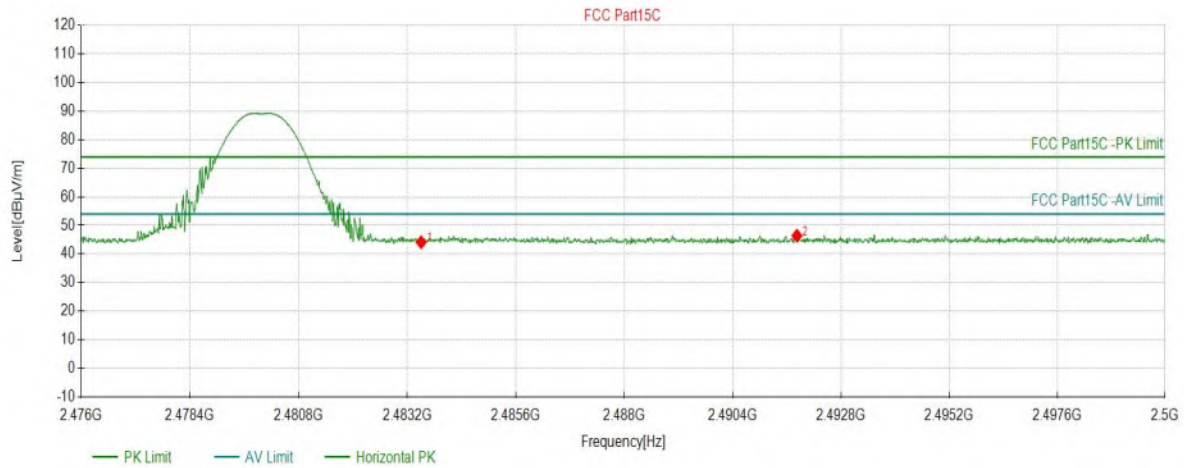
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2354.1174   | 50.57          | 6.39        | 74.00          | 23.43       | 150         | 181       | PK       | Vertical |
| 2   | 2390.0193   | 48.81          | 6.47        | 74.00          | 25.19       | 150         | 215       | PK       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2480      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:40:58

## Test Graph



## Suspected Data List

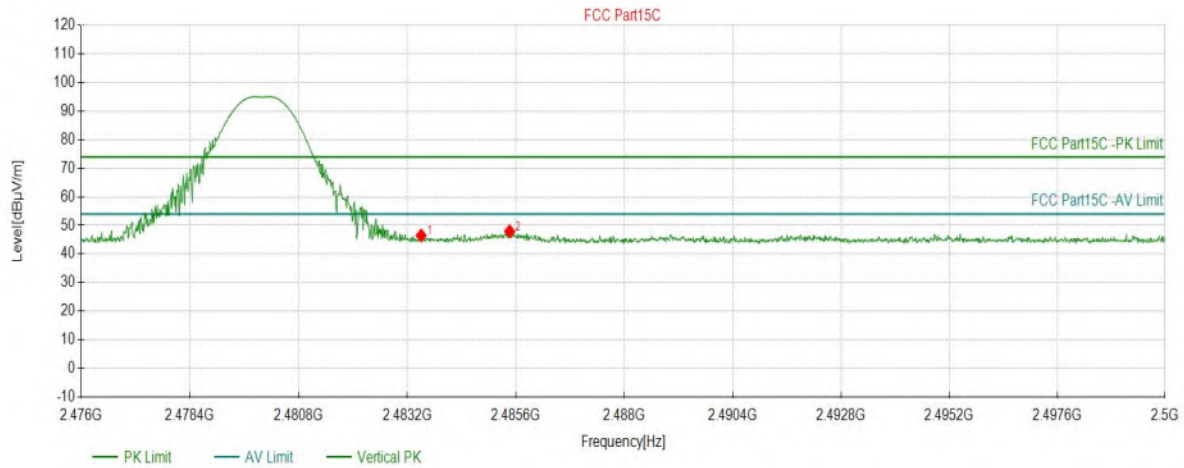
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2483.5038   | 44.14          | 7.09        | 74.00          | 29.86       | 150         | 43        | PK       | Horizont |
| 2   | 2491.8239   | 46.43          | 7.15        | 74.00          | 27.57       | 150         | 294       | PK       | Horizont |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | DH5_2480      | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:41:35

## Test Graph



## Suspected Data List

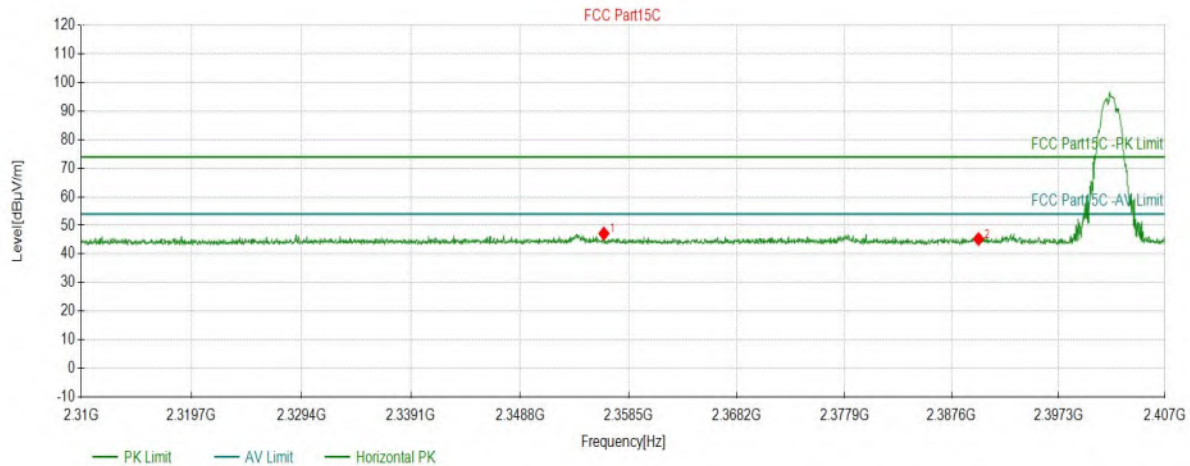
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2483.5038   | 46.49          | 7.09        | 74.00          | 27.51       | 150         | 9         | PK       | Vertical |
| 2   | 2485.4607   | 47.95          | 7.11        | 74.00          | 26.05       | 150         | 223       | PK       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:57:39

## Test Graph



## Suspected Data List

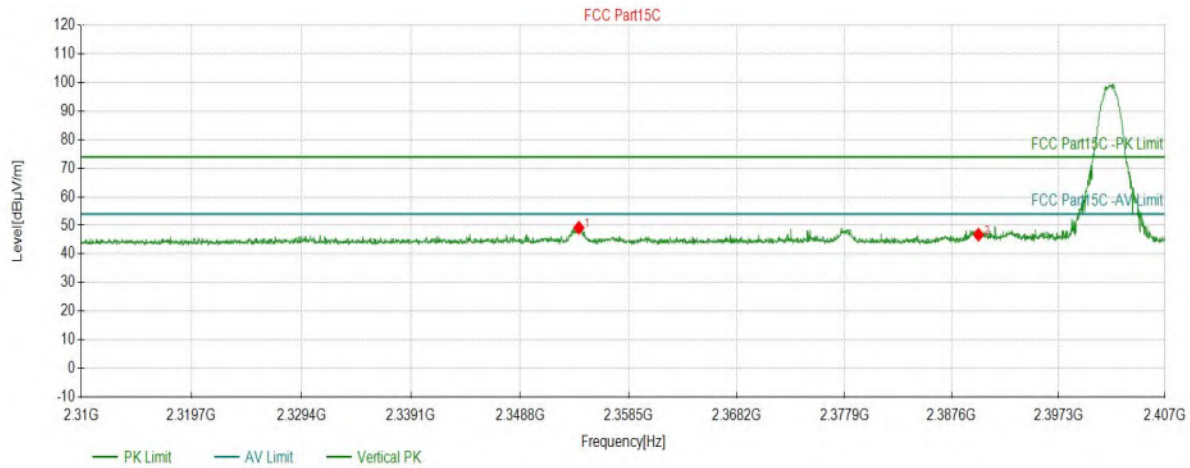
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2356.2844   | 47.16          | 6.39        | 74.00          | 26.84       | 150         | 166       | PK       | Horizont |
| 2   | 2390.0193   | 45.28          | 6.47        | 74.00          | 28.72       | 150         | 185       | PK       | Horizont |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 09:58:26

## Test Graph



## Suspected Data List

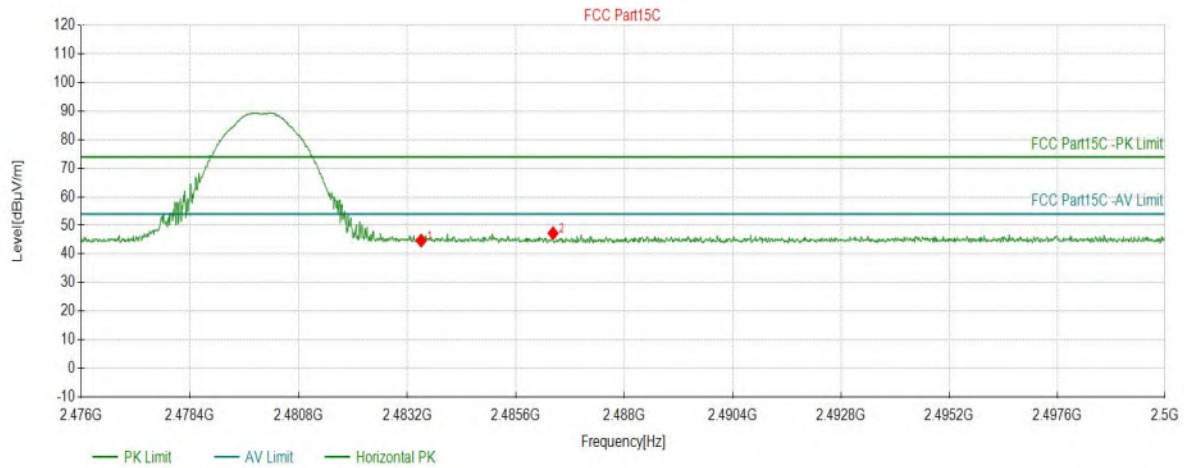
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2354.0527   | 49.17          | 6.39        | 74.00          | 24.83       | 150         | 254       | PK       | Vertical |
| 2   | 2390.0193   | 46.77          | 6.47        | 74.00          | 27.23       | 150         | 163       | PK       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:07:55

## Test Graph



## Suspected Data List

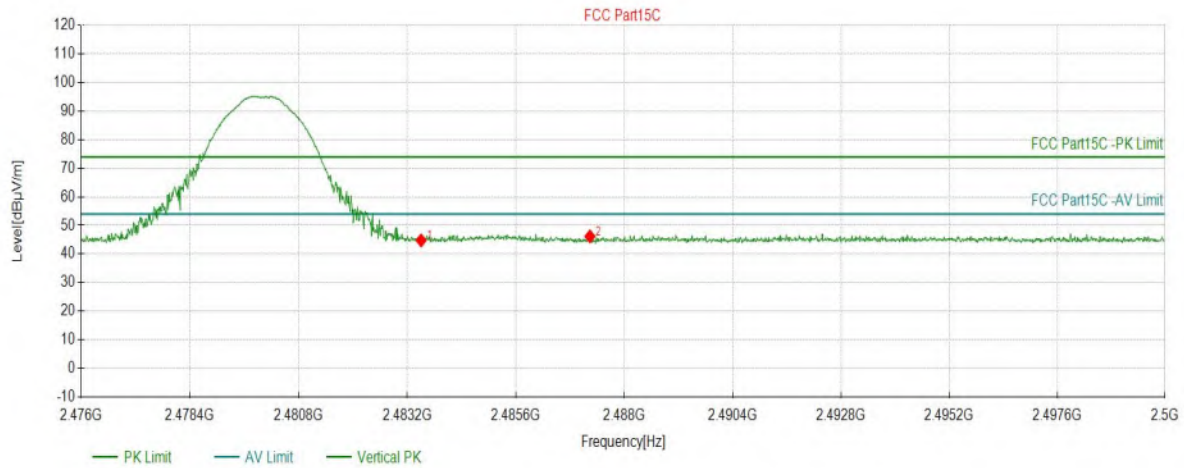
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2483.5038   | 44.71          | 7.09        | 74.00          | 29.29       | 150         | 81        | PK       | Horizont |
| 2   | 2486.4212   | 47.28          | 7.11        | 74.00          | 26.72       | 150         | 205       | PK       | Horizont |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 2DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:08:49

## Test Graph



## Suspected Data List

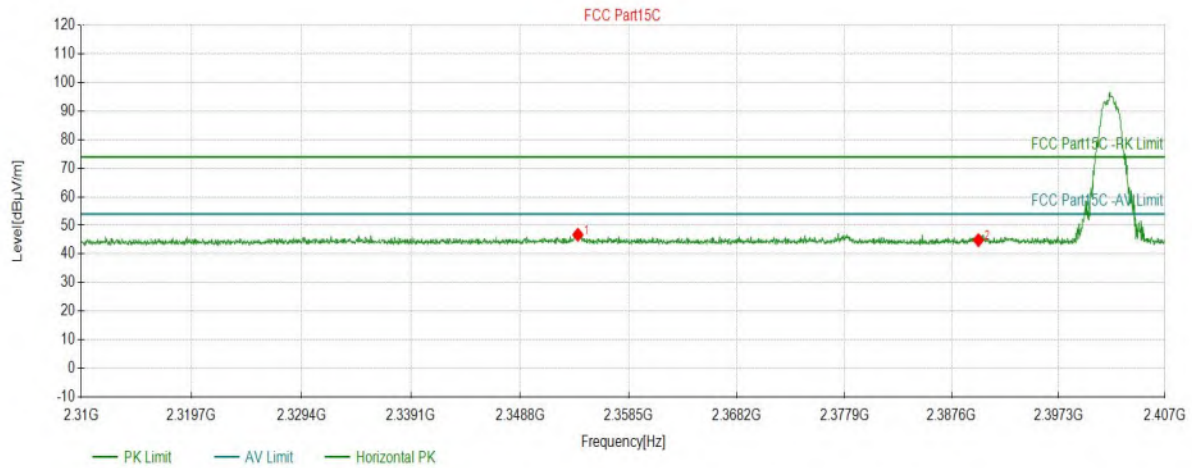
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2483.5038   | 44.77          | 7.09        | 74.00          | 29.23       | 150         | 44        | PK       | Vertical |
| 2   | 2487.2376   | 46.17          | 7.12        | 74.00          | 27.83       | 150         | 256       | PK       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:15:21

## Test Graph



## Suspected Data List

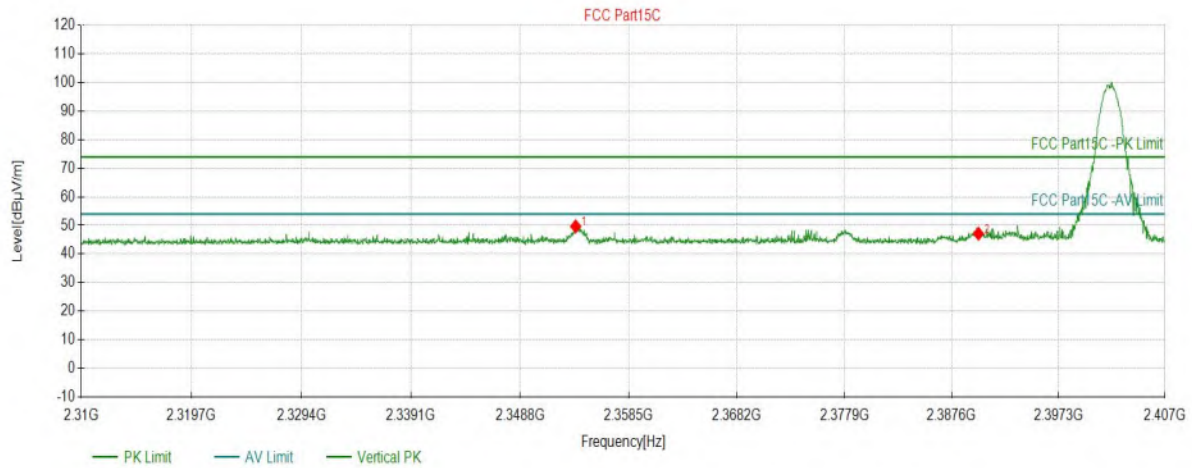
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2353.9557   | 46.76          | 6.39        | 74.00          | 27.24       | 150         | 152       | PK       | Horizont |
| 2   | 2390.0193   | 44.86          | 6.47        | 74.00          | 29.14       | 150         | 179       | PK       | Horizont |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2402     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:16:07

## Test Graph



## Suspected Data List

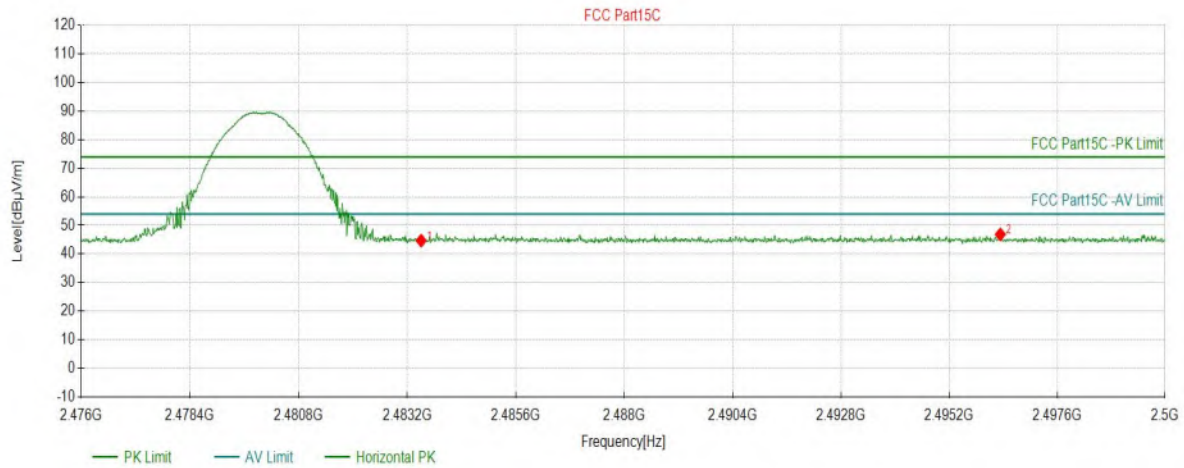
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2353.7616   | 49.66          | 6.39        | 74.00          | 24.34       | 150         | 258       | PK       | Vertical |
| 2   | 2390.0193   | 47.11          | 6.47        | 74.00          | 26.89       | 150         | 174       | PK       | Vertical |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:32:05

## Test Graph



## Suspected Data List

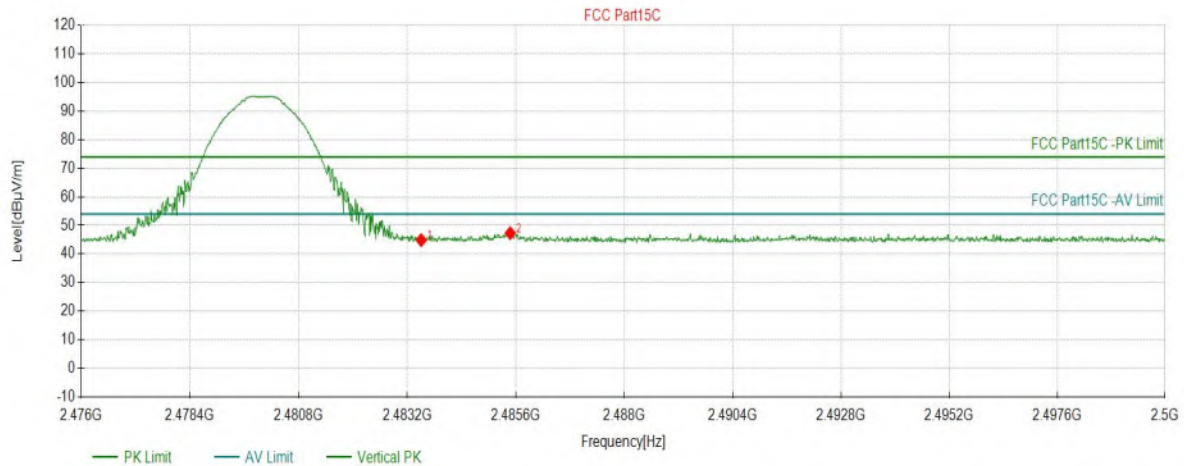
| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2483.5038   | 44.69          | 7.09        | 74.00          | 29.31       | 150         | 46        | PK       | Horizont |
| 2   | 2496.3382   | 46.88          | 7.18        | 74.00          | 27.12       | 150         | 4         | PK       | Horizont |

# Test Report

| Project Information |               |           |                   |
|---------------------|---------------|-----------|-------------------|
| Customer:           |               | EUT:      | Bluetooth speaker |
| Model:              | FG208-16      | SN:       |                   |
| Mode:               | 3DH5_2480     | Voltage:  | DC 12V            |
| Environment:        |               | Engineer: | Roger             |
| Remark:             | Power set : 2 |           |                   |
| Test Standard:      |               |           |                   |

Start of Test: 2022-10-10 10:33:01

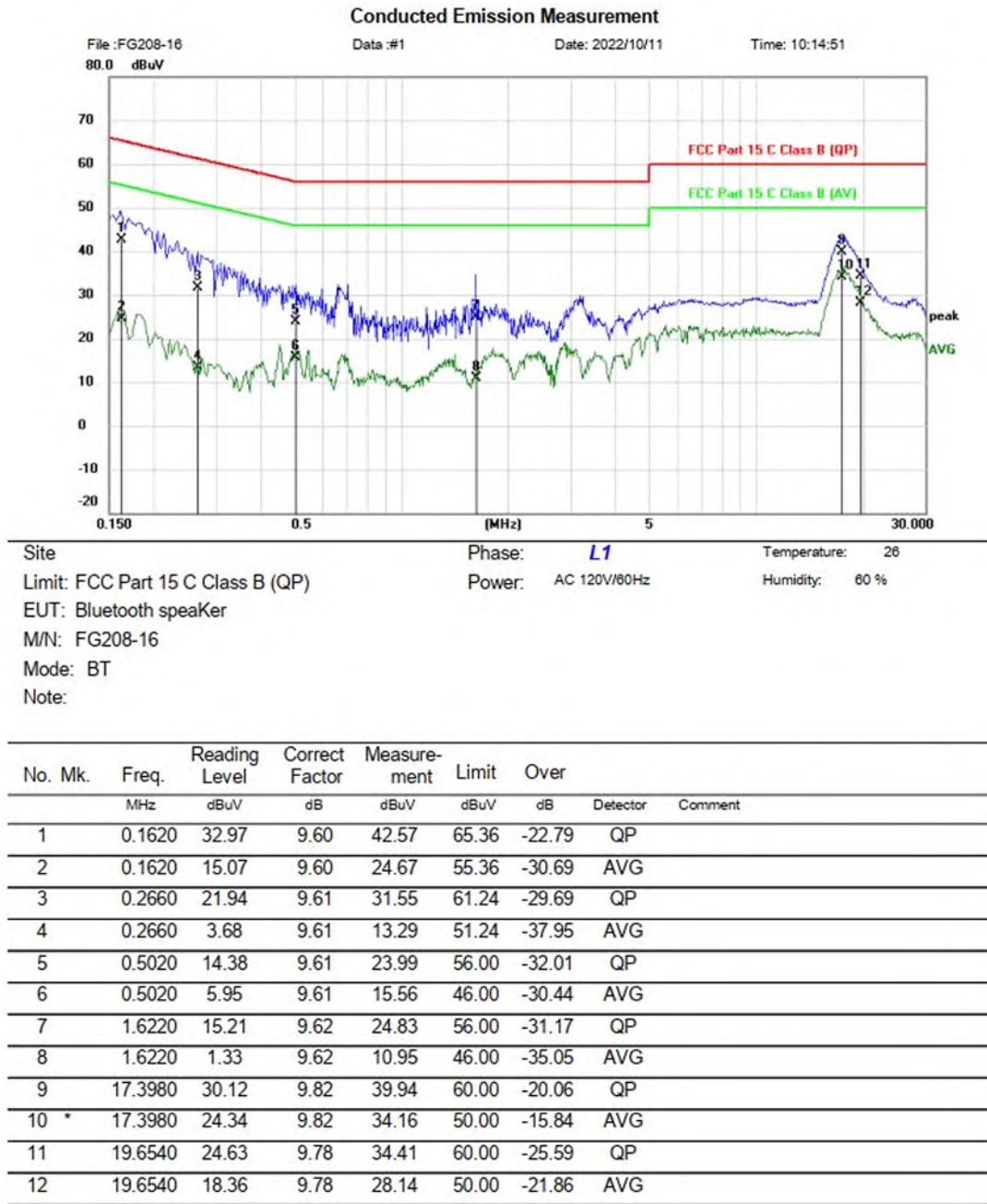
## Test Graph



## Suspected Data List

| NO. | Freq. (MHz) | Level (dBμV/m) | Factor (dB) | Limit (dBμV/m) | Margin (dB) | Height (cm) | Angle (°) | Detector | Polarity |
|-----|-------------|----------------|-------------|----------------|-------------|-------------|-----------|----------|----------|
| 1   | 2483.5038   | 44.88          | 7.09        | 74.00          | 29.12       | 150         | 268       | PK       | Vertical |
| 2   | 2485.4727   | 47.30          | 7.11        | 74.00          | 26.70       | 150         | 208       | PK       | Vertical |

## APPENDIX C – AC Power Line Conducted Emission Test Data



## Conducted Emission Measurement

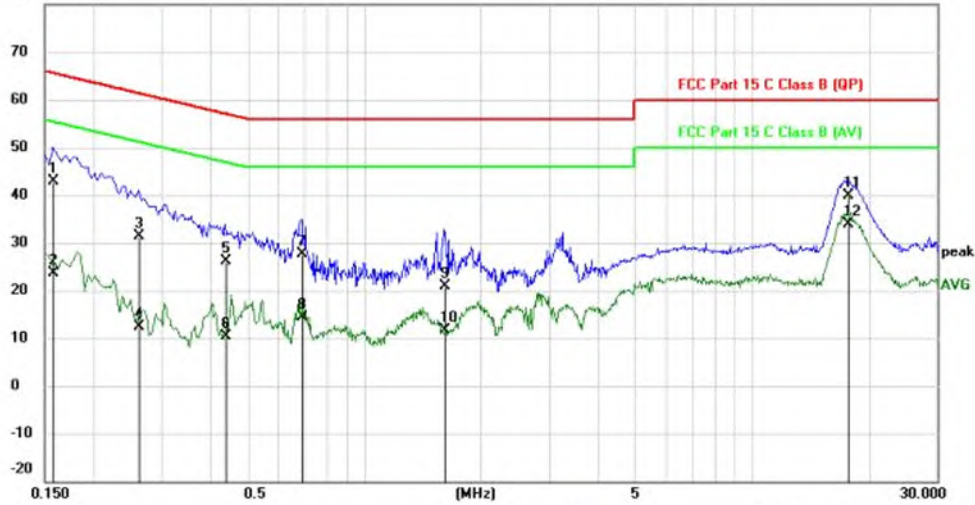
File :FG208-16

Data :#2

Date: 2022/10/11

Time: 10:20:40

80.0 dBuV



Site

Phase: **N**

Temperature: 26

Limit: FCC Part 15 C Class B (QP)

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Bluetooth speaker

M/N: FG208-16

Mode: BT

Note:

| No. Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector | Comment |
|---------|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1       | 0.1580       | 33.21                    | 9.59                    | 42.80                    | 65.57         | -22.77     | QP       |         |
| 2       | 0.1580       | 14.15                    | 9.59                    | 23.74                    | 55.57         | -31.83     | AVG      |         |
| 3       | 0.2620       | 21.77                    | 9.59                    | 31.36                    | 61.37         | -30.01     | QP       |         |
| 4       | 0.2620       | 2.73                     | 9.59                    | 12.32                    | 51.37         | -39.05     | AVG      |         |
| 5       | 0.4380       | 16.45                    | 9.60                    | 26.05                    | 57.10         | -31.05     | QP       |         |
| 6       | 0.4380       | 0.78                     | 9.60                    | 10.38                    | 47.10         | -36.72     | AVG      |         |
| 7       | 0.6900       | 17.97                    | 9.60                    | 27.57                    | 56.00         | -28.43     | QP       |         |
| 8       | 0.6900       | 4.76                     | 9.60                    | 14.36                    | 46.00         | -31.64     | AVG      |         |
| 9       | 1.6100       | 11.37                    | 9.61                    | 20.98                    | 56.00         | -35.02     | QP       |         |
| 10      | 1.6100       | 1.97                     | 9.61                    | 11.58                    | 46.00         | -34.42     | AVG      |         |
| 11      | 17.7300      | 30.03                    | 9.95                    | 39.98                    | 60.00         | -20.02     | QP       |         |
| 12 *    | 17.7300      | 24.05                    | 9.95                    | 34.00                    | 50.00         | -16.00     | AVG      |         |

END OF REPORT