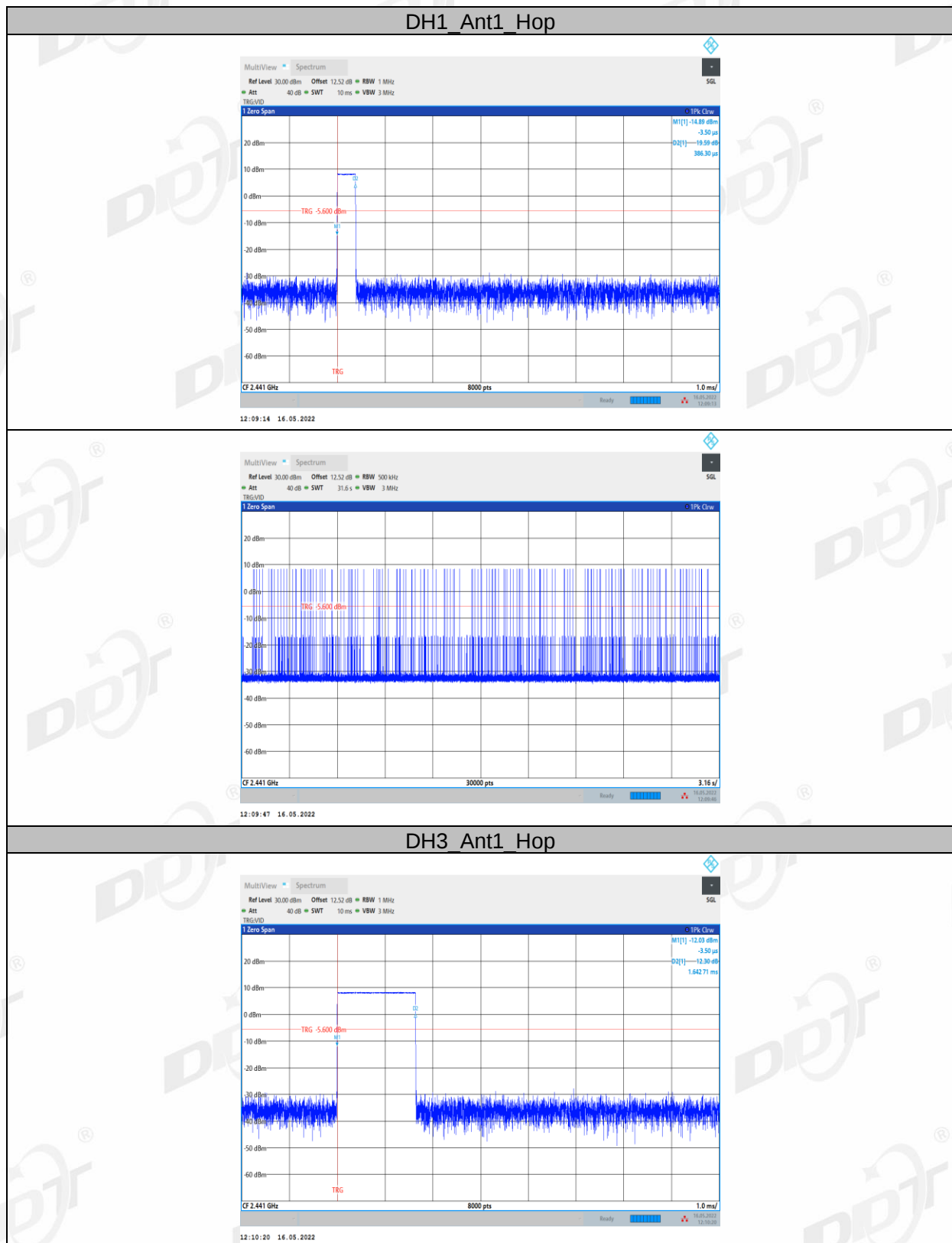
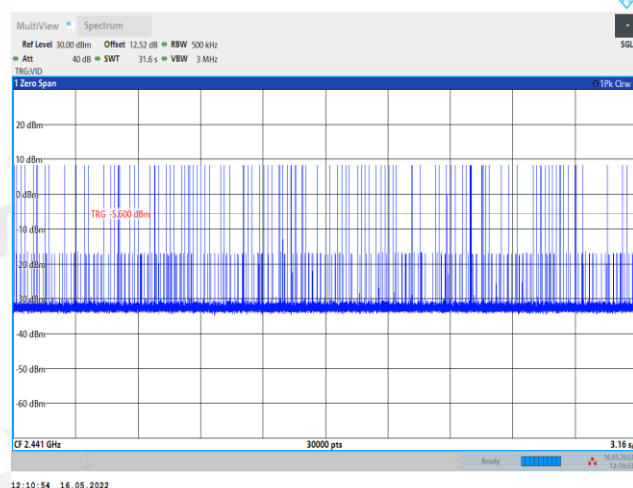




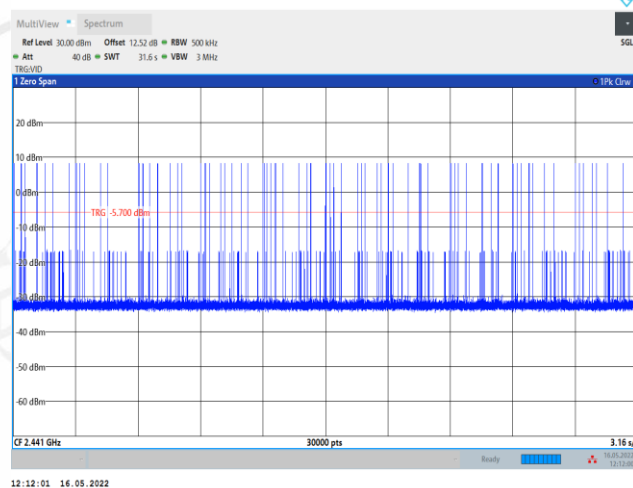
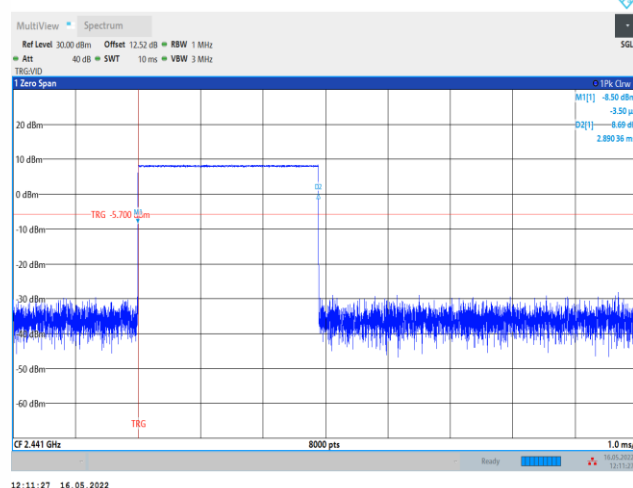


Right side:

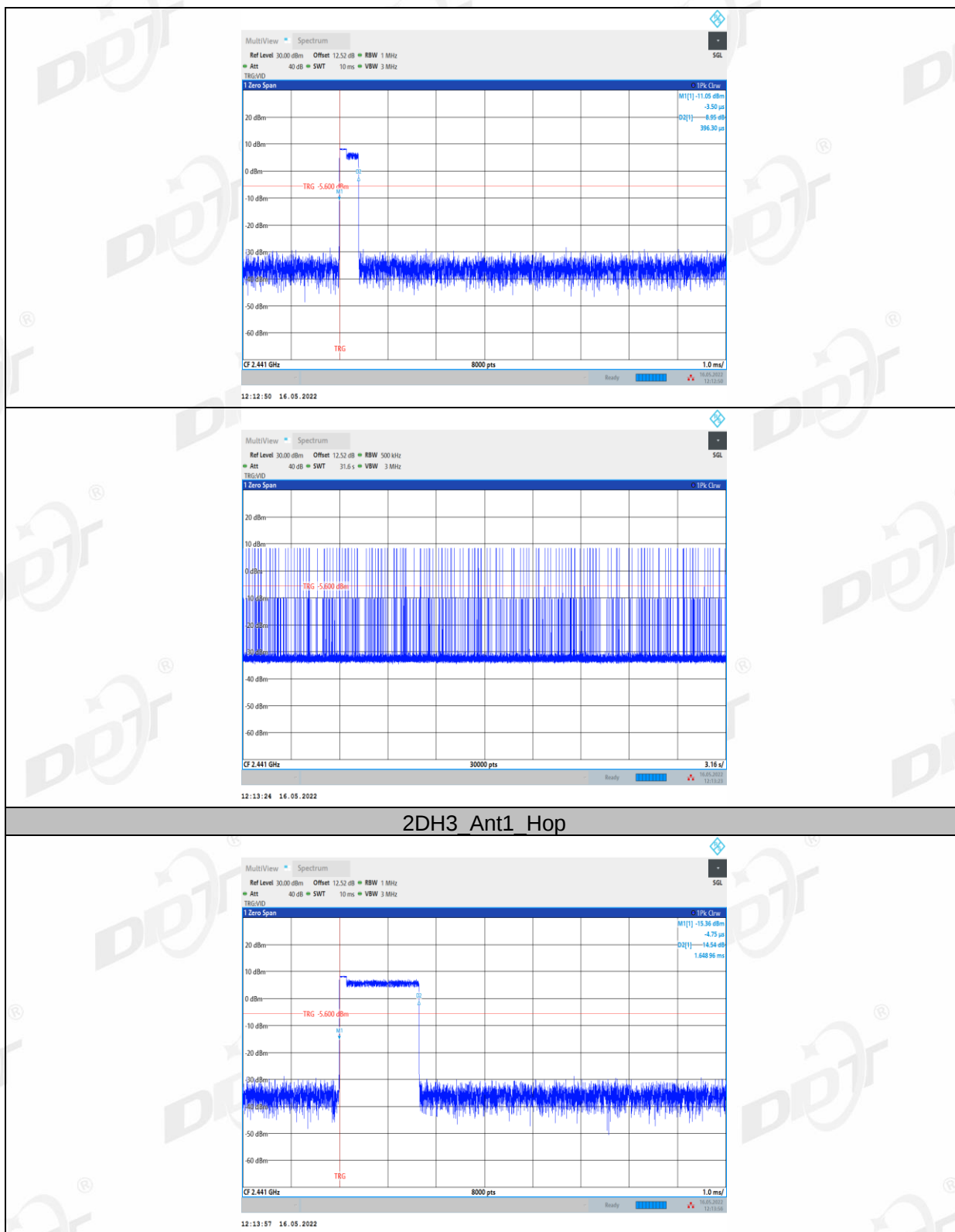


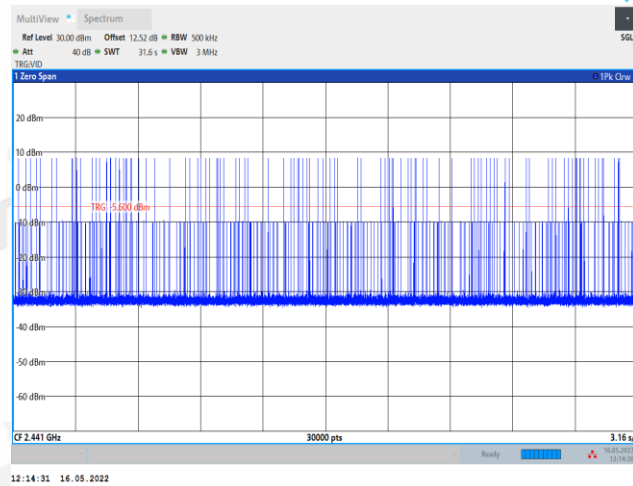


DH5\_Ant1\_Hop

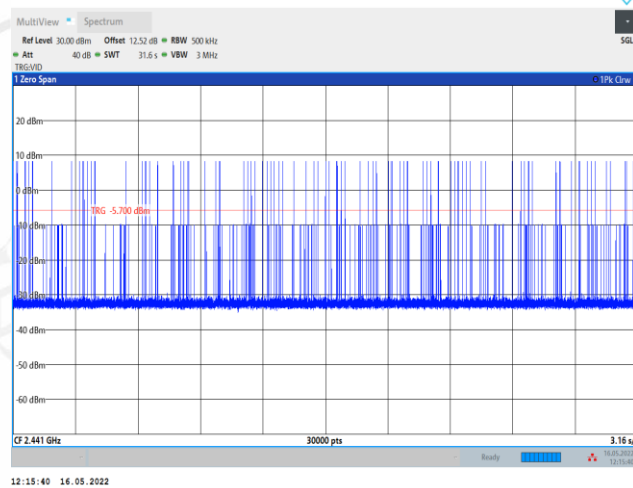
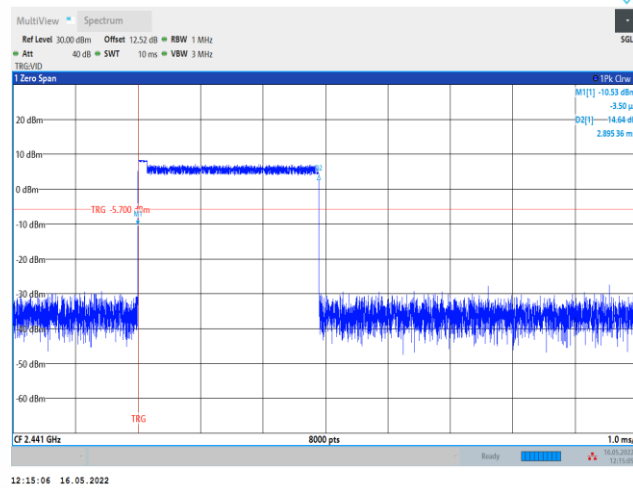


2DH1\_Ant1\_Hop



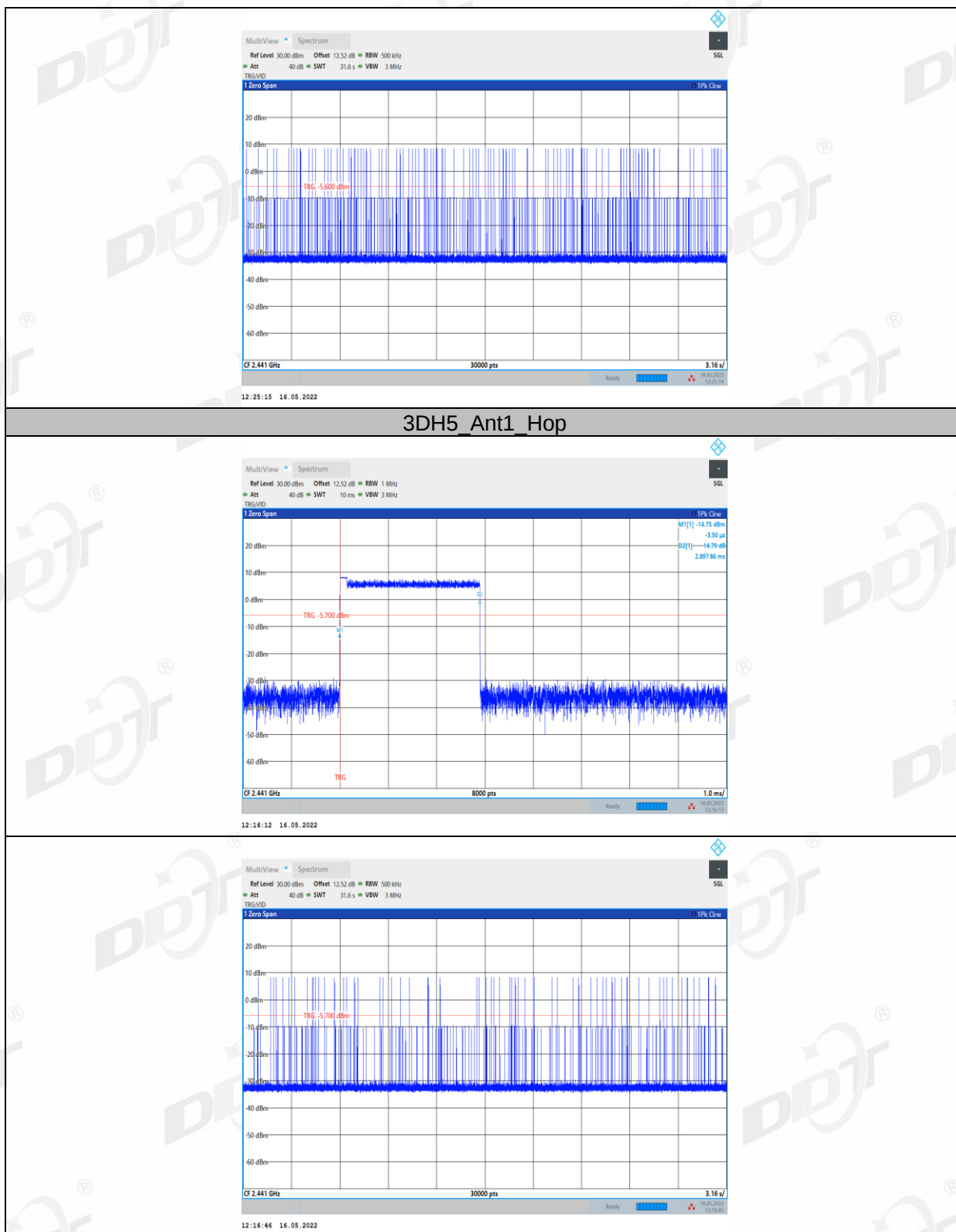


2DH5\_Ant1\_Hop



3DH1\_Ant1\_Hop





## 9. Band Edge Compliance (Conducted Method)

### 9.1. Block diagram of test setup

Same as section 4.1

### 9.2. Limit

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

### 9.3. Test procedure

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

(2) Establish a reference level by using the following procedure:

|                |                                          |
|----------------|------------------------------------------|
| RBW:           | 100 kHz                                  |
| VBW:           | 300 kHz                                  |
| Span           | Encompass frequency range to be measured |
| Detector Mode: | Peak                                     |
| Sweep time:    | auto                                     |
| Trace mode     | Max hold                                 |

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

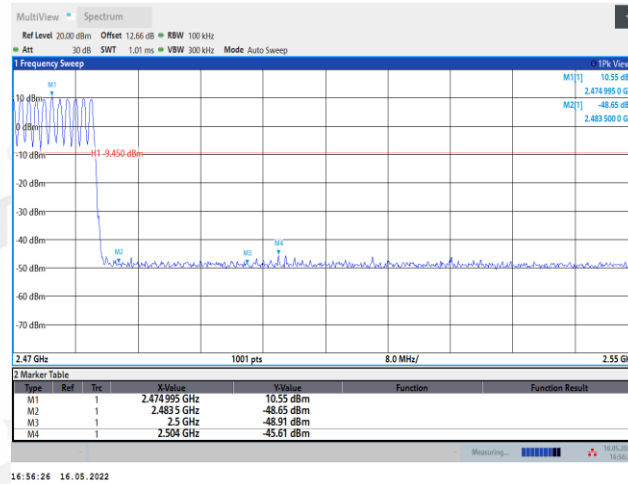
### 9.4. Test result

| Mode           | Freq. (MHz)      | Verdict |
|----------------|------------------|---------|
| GFSK           | Hopping off 2402 | Pass    |
|                | Hopping off 2480 | Pass    |
|                | Hopping on       | Pass    |
| $\pi/4$ -DQPSK | Hopping off 2402 | Pass    |
|                | Hopping off 2480 | Pass    |
|                | Hopping on       | Pass    |
| 8DPSK          | Hopping off 2402 | Pass    |
|                | Hopping off 2480 | Pass    |
|                | Hopping on       | Pass    |

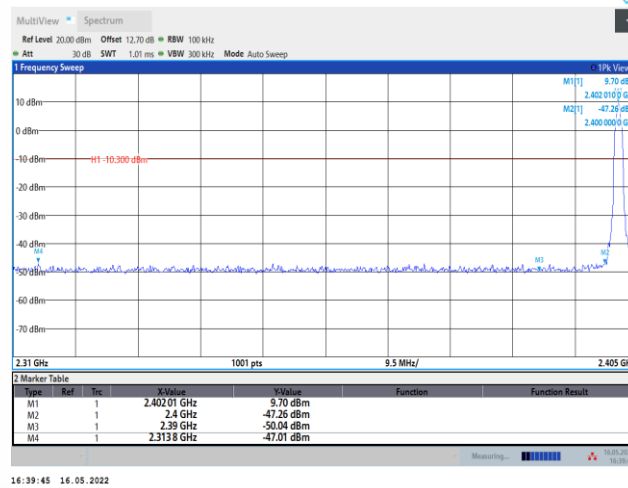
## 9.5. Original test data

Left side:

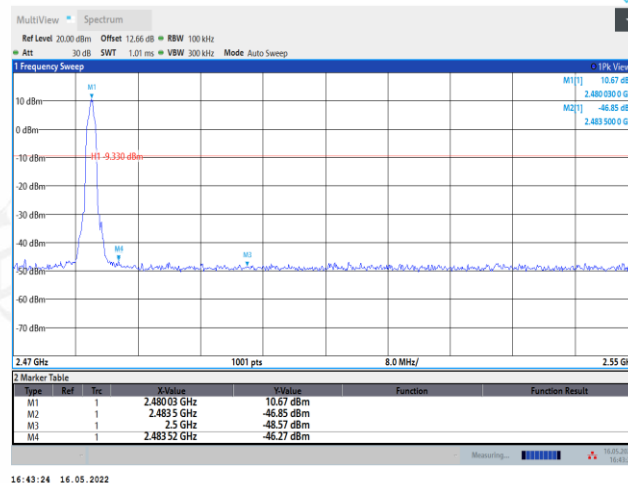




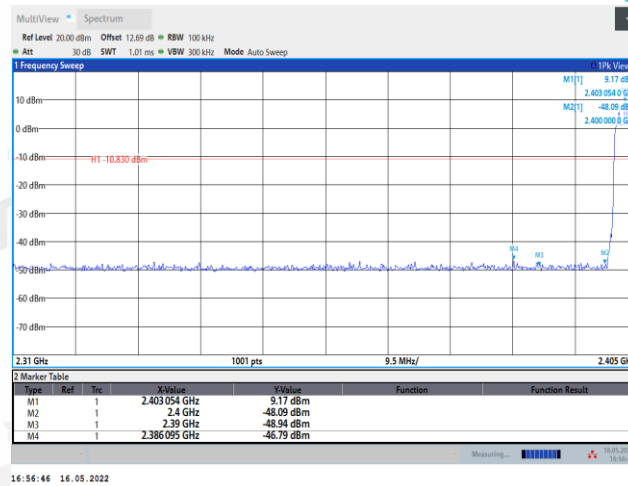
2DH5\_Ant1\_Low\_2402



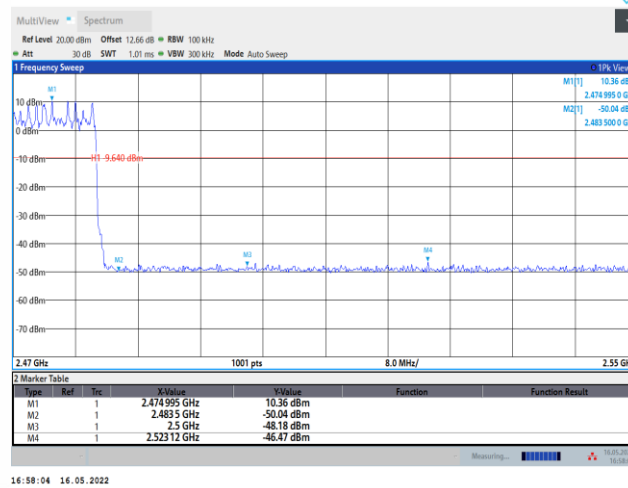
2DH5\_Ant1\_High\_2480



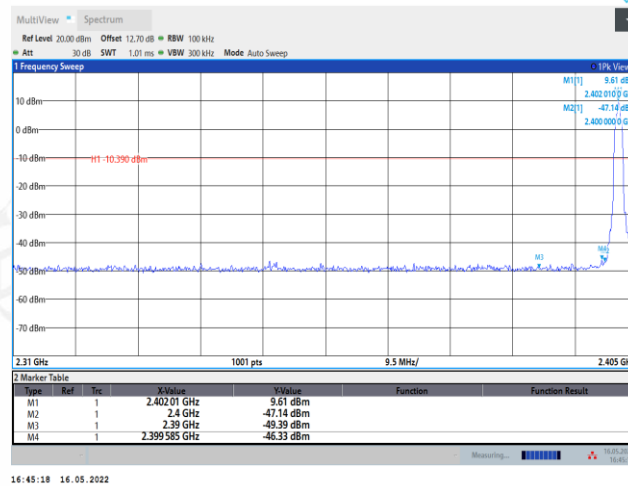
2DH5\_Ant1\_Low\_Hop\_2402



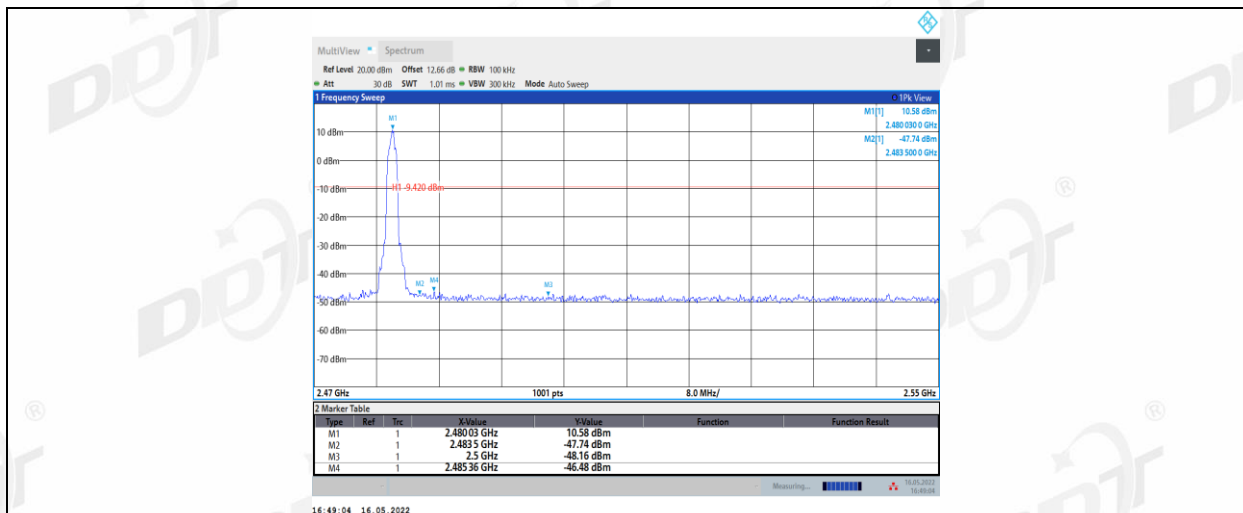
## 2DH5\_Ant1\_High\_Hop\_2480



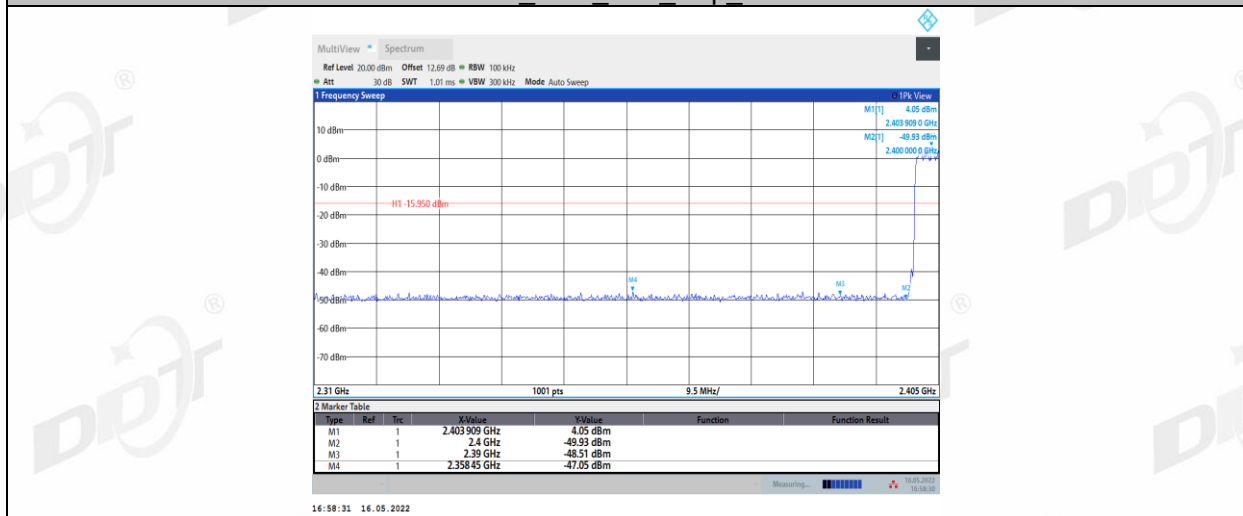
## 3DH5\_Ant1\_Low\_2402



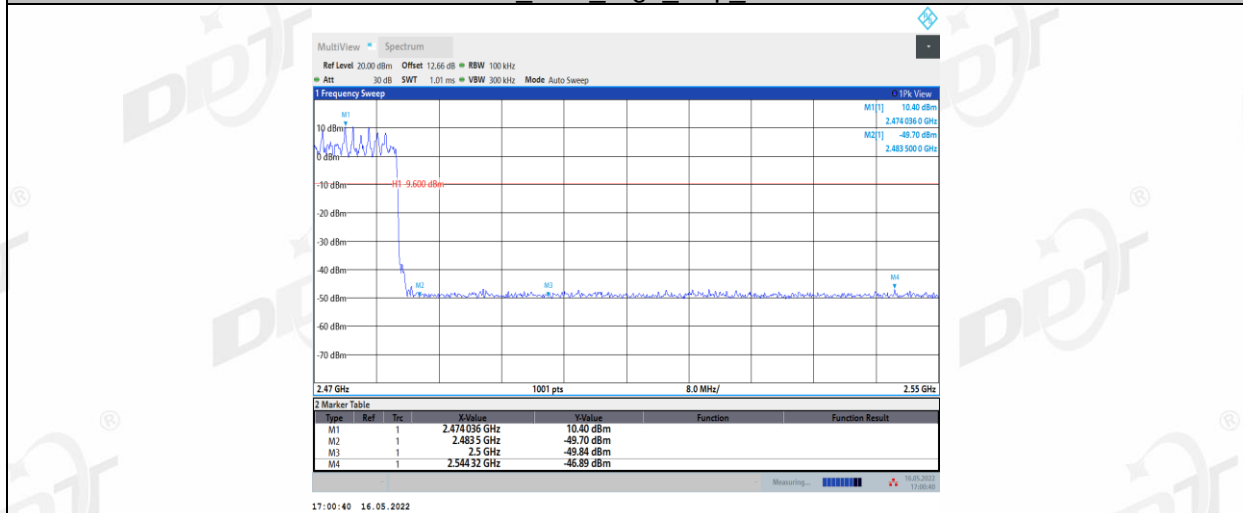
## 3DH5\_Ant1\_High\_2480



## 3DH5\_Ant1\_Low\_Hop\_2402

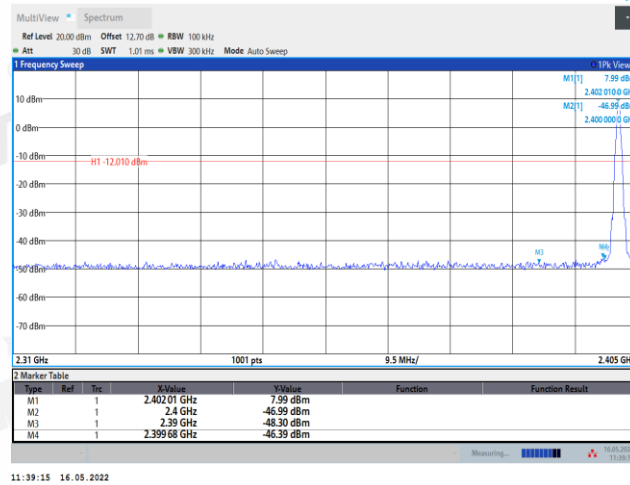


## 3DH5\_Ant1\_High\_Hop\_2480

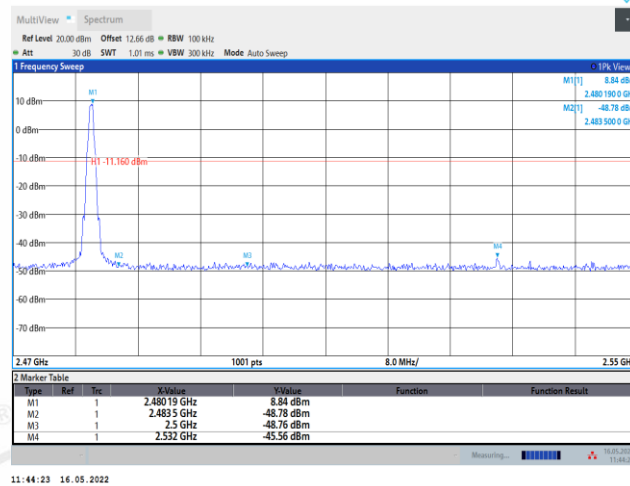


Right side:

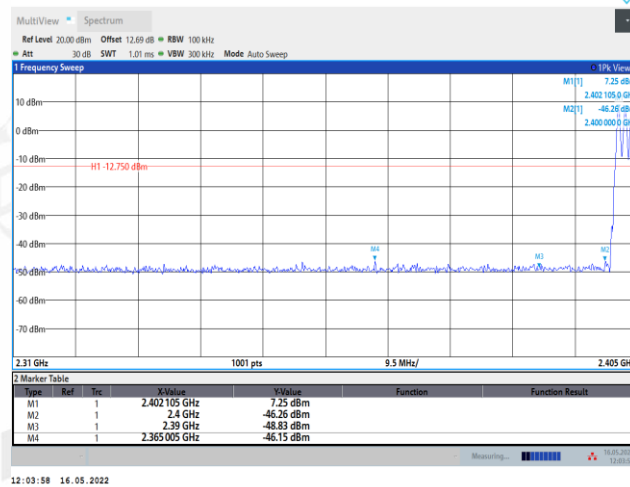
## DH5\_Ant1\_Low\_2402



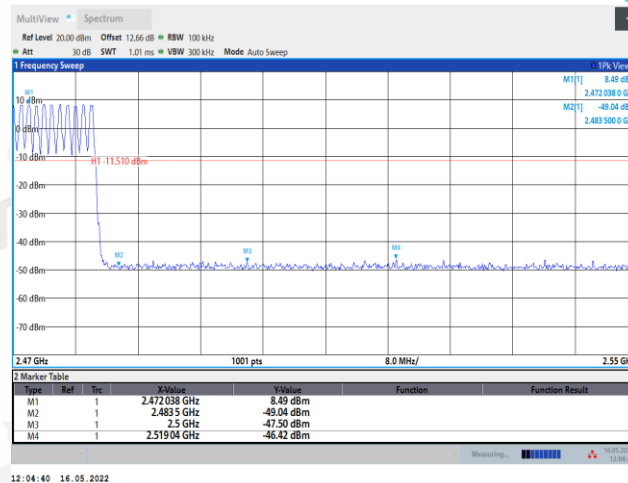
## DH5\_Ant1\_High\_2480



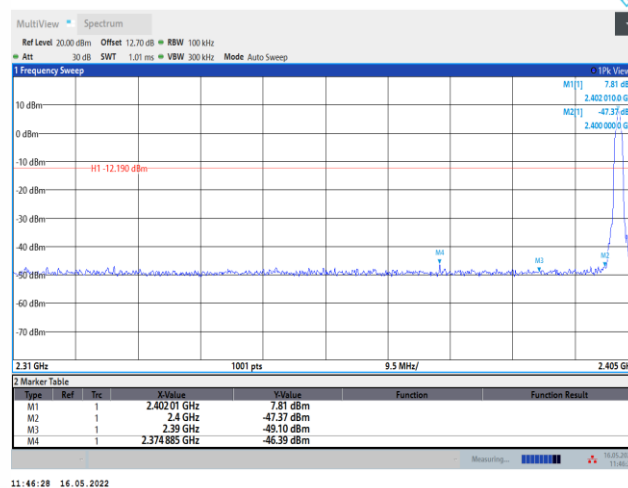
## DH5\_Ant1\_Low\_Hop\_2402



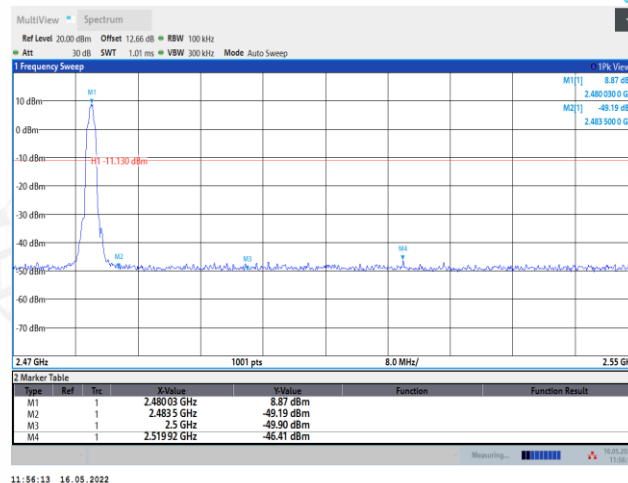
## DH5\_Ant1\_High\_Hop\_2480



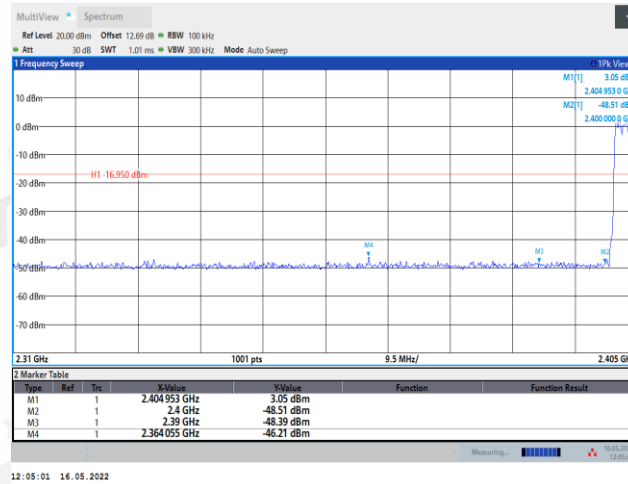
## 2DH5\_Ant1\_Low\_2402



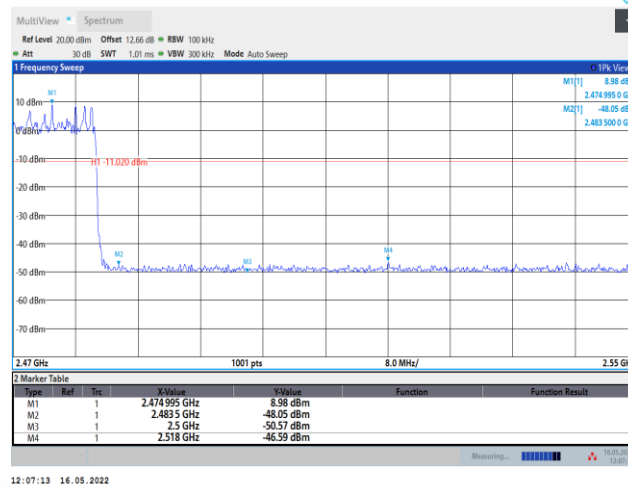
## 2DH5\_Ant1\_High\_2480



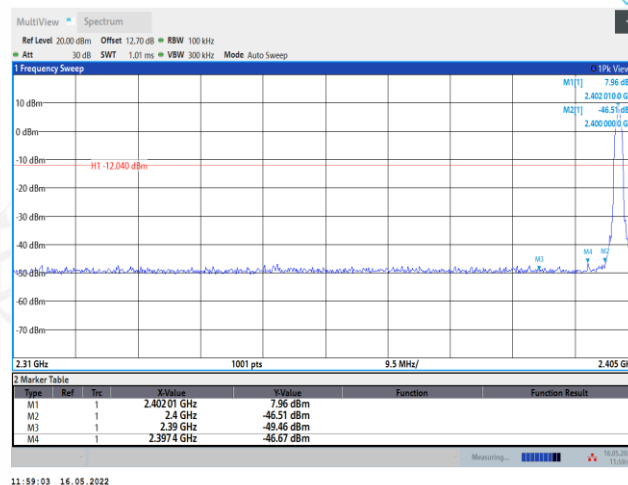
## 2DH5\_Ant1\_Low\_Hop\_2402



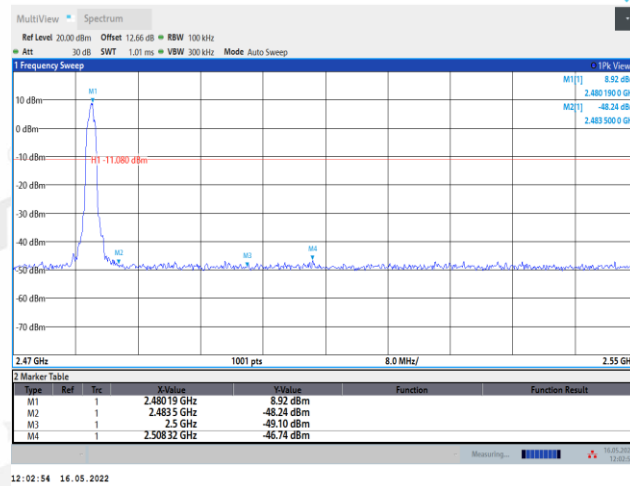
## 2DH5\_Ant1\_High\_Hop\_2480



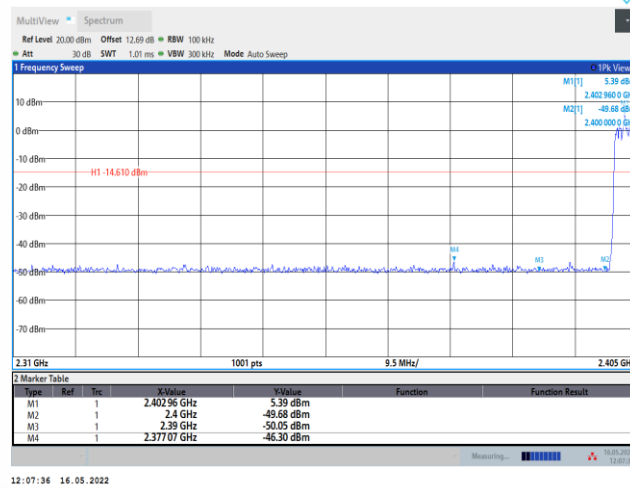
## 3DH5\_Ant1\_Low\_2402



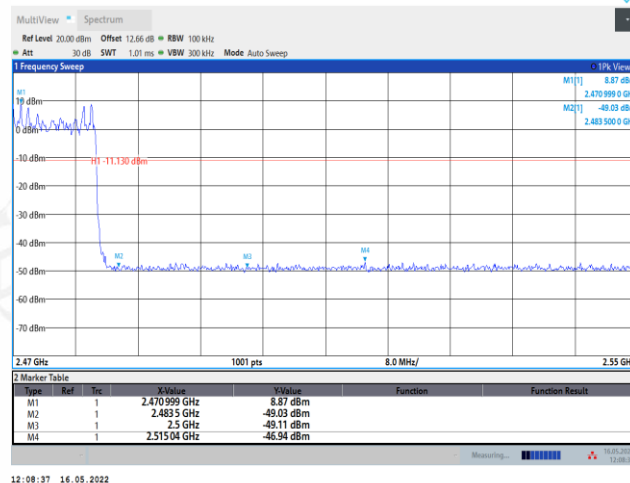
## 3DH5\_Ant1\_High\_2480



## 3DH5\_Ant1\_Low\_Hop\_2402



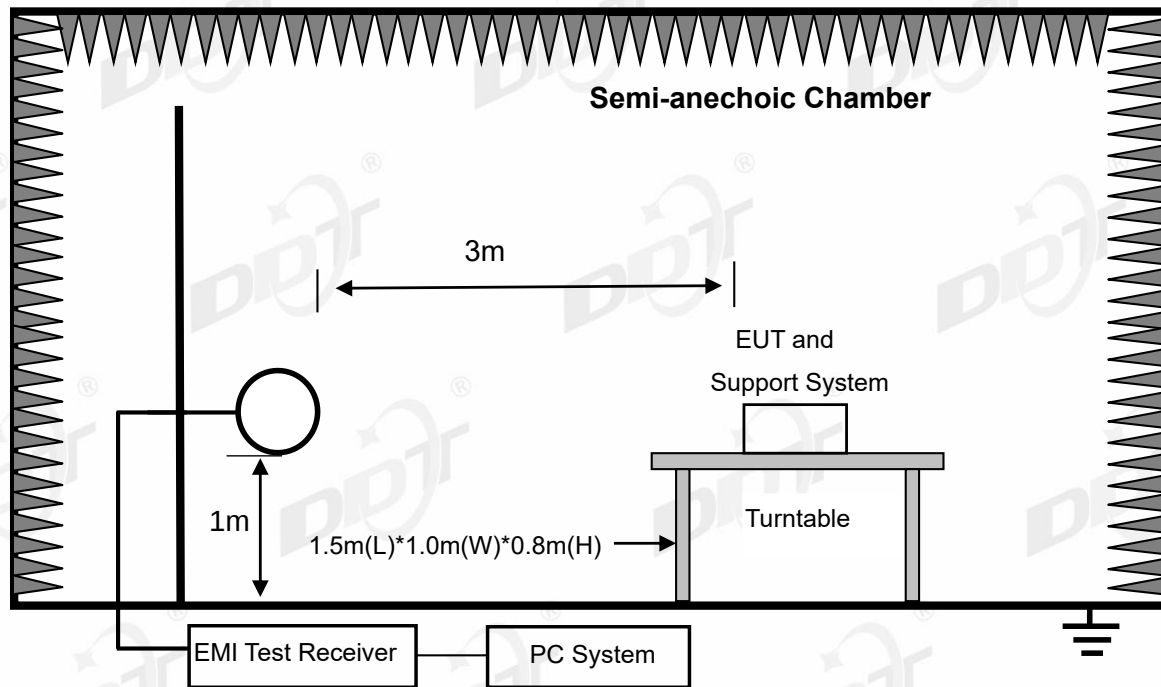
## 3DH5\_Ant1\_High\_Hop\_2480



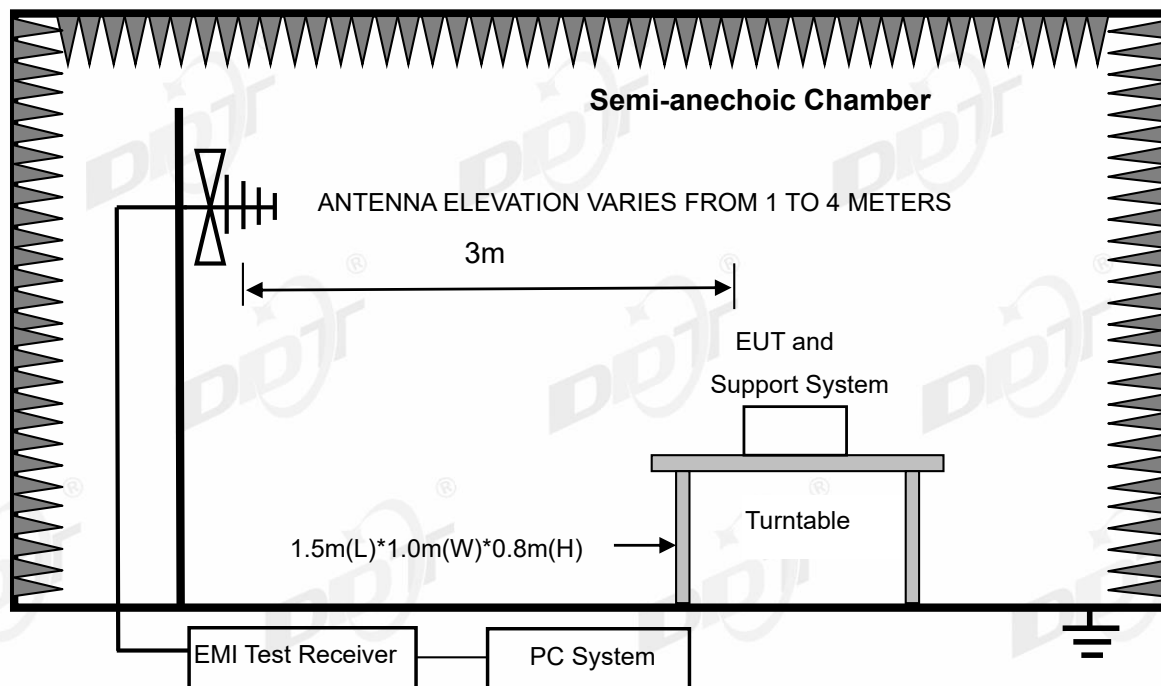
## 10. Radiated Emission

### 10.1. Block diagram of test setup

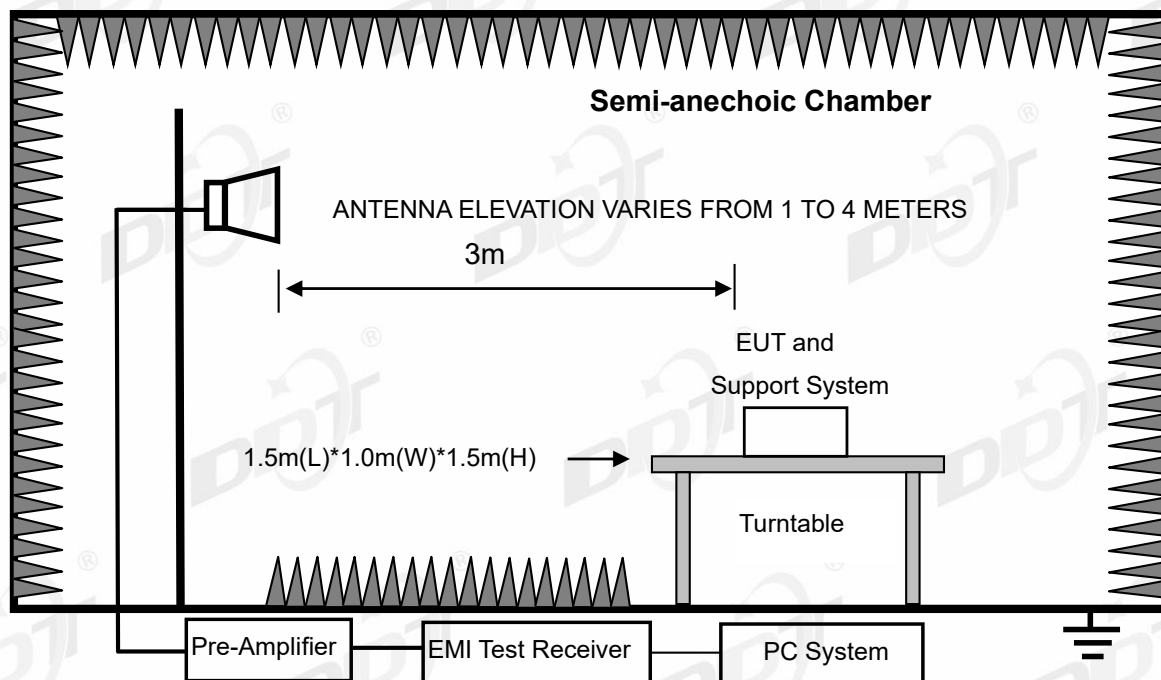
In 3 m Anechoic Chamber, test setup diagram for 9 kHz - 30 MHz:



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



In 3 m 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.

## 10.2. 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

## RSS-Gen section 8.10 Restricted frequency bands\*

| MHz             | MHz                 | MHz           | GHz         |
|-----------------|---------------------|---------------|-------------|
| 0.090-0.110     | 12.51975-12.52025   | 240-285       | 3.5-4.4     |
| 0.495-0.505     | 12.57675-12.57725   | 322-335.4     | 4.5-5.15    |
| 2.1735-2.1905   | 13.36-13.41         | 399.9-410     | 5.35-5.46   |
| 3.020-3.026     | 16.42-16.423        | 608-614       | 7.25-7.75   |
| 4.125-4.128     | 16.69475-16.69525   | 960-1427      | 8.025-8.5   |
| 4.1772&4.17775  | 16.80425-16.80475   | 1435-1626.5   | 9.0-9.2     |
| 4.2072&4.20775  | 25.5-25.67          | 1645.5-1646.5 | 9.3-9.5     |
| 5.677-5.683     | 37.5-38.25          | 1660-1710     | 10.6-12.7   |
| 6.215-6.218     | 73-74.6             | 1718.8-1722.2 | 13.25-13.4  |
| 6.26775-6.26825 | 74.8-75.2           | 2200-2300     | 14.47-14.5  |
| 6.31175-6.31225 | 108-138             | 2310-2390     | 15.35-16.2  |
| 8.291-8.294     | 149.9-150.05        | 2483.5-2500   | 17.7-21.4   |
| 8.362-8.366     | 156.52475-156.52525 | 2655-2900     | 22.01-23.12 |
| 8.37625-8.38675 | 156.7-156.9         | 3260-3267     | 23.6-24.0   |
| 8.41425-8.41475 | 162.0125-167.17     | 3332-3339     | 31.2-31.8   |
| 12.29-12.293    | 167.72-173.2        | 3345.8-3358   | 36.43-36.5  |
|                 |                     |               | Above 38.6  |

\* Certain frequency bands listed in table and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

## (2) FCC 15.209 Limit &amp; RSS-Gen section 8.9 Limit

| FREQUENCY<br>MHz | DISTANCE<br>Meters | FIELD STRENGTHS LIMIT                           |               |
|------------------|--------------------|-------------------------------------------------|---------------|
|                  |                    | μV/m                                            | dB(μV)/m      |
| 0.009 ~ 0.490    | 300                | 2400/F(kHz)                                     | 67.6-20log(F) |
| 0.490 ~ 1.705    | 30                 | 24000/F(kHz)                                    | 87.6-20log(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 dB(μV)/m (Peak)<br>54.0 dB(μV)/m (Average) |               |

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz and above 1000 MHz, radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30 MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3m}(\text{dB}\mu\text{V}/\text{m}) = \text{Limit}_{30m}(\text{dB}\mu\text{V}/\text{m}) + 40\text{Log}(30m/3m)$$

## (3) Limit for this EUT

The emissions appearing within 15.205 restricted frequency bands shall not exceed the limits

shown in 15.209, and the emissions appearing within RSS-Gen section 8.10 Restricted frequency bands shall not exceed the limits shown in RSS-Gen section 8.9, all the other emissions shall be at least 20 dB below the fundamental emissions or comply with 15.209 limits and RSS-Gen section 8.9 limits.

### 10.3. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1G and 150 cm above the ground plane inside a fully-anechoic chamber for above 1G.
- (2) Test antenna was located 3 m from the EUT on an adjustable mast, and the antenna used as below table.

| Test frequency range | Test antenna used                              | Test antenna distance |
|----------------------|------------------------------------------------|-----------------------|
| 9 kHz - 30 MHz       | Active Loop antenna                            | 3 m                   |
| 30 MHz - 1 GHz       | Trilog Broadband Antenna                       | 3 m                   |
| 1 GHz - 18 GHz       | Double Ridged Horn Antenna<br>(1 GHz - 18 GHz) | 3 m                   |
| 18 GHz - 40 GHz      | Horn Antenna<br>(18 GHz - 40 GHz)              | 1 m                   |

According ANSI C63.10:2013 clause 6.4.4.2 and 6.5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also is positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. For measurement above 30 MHz, the trilog Broadband Antenna or Horn Antenna was located 3 m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

- (3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 25 GHz:

- (a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1 m above ground.)

- (b) Change work frequency or channel of device if practicable.

- (c) Change modulation type of device if practicable.

- (d) Change power supply range from 85% to 115% of the rated supply voltage

- (e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 25 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18 GHz to 25 GHz, so below

final test was performed with frequency range from 9 kHz to 18 GHz.

- (4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.
- (5) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz, for emissions from 9 kHz - 90 kHz, 110 kHz - 490 kHz and above 1 GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.
- (6) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW.

| Frequency band   | RBW     |
|------------------|---------|
| 9 kHz - 150 kHz  | 200 Hz  |
| 150 kHz - 30 MHz | 9 kHz   |
| 30 MHz - 1 GHz   | 120 kHz |

- (7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3 MHz for Peak measure; According ANSI C63.10:2013 clause 4.1.4.2.2 procedure for average measure.
- (8) X axis, Y axis, Z axis are tested, and worse setup X axis is reported.

#### 10.4. Test result

Pass. (See below detailed test result)

All the emissions except fundamental emission from 9 kHz to 25 GHz were comply with 15.209 limits and RSS-Gen section 8.9 limits.

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz and 18 GHz to 25 GHz, so the final test was performed with frequency range from 30 MHz to 18 GHz and recorded in below.

Note2: 30 MHz ~ 25 GHz: (Scan with GFSK,  $\pi/4$ -DQPSK and 8DPSK, the worst case is Left side  $\pi/4$ -DQPSK Mode)

Note3: 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 Left side  $\pi/4$ -DQPSK, Tx 2480 MHz mode.

Note4: For emissions above 1 GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

## Radiated Emission test (below 1 GHz)

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC BELOW 1G.EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

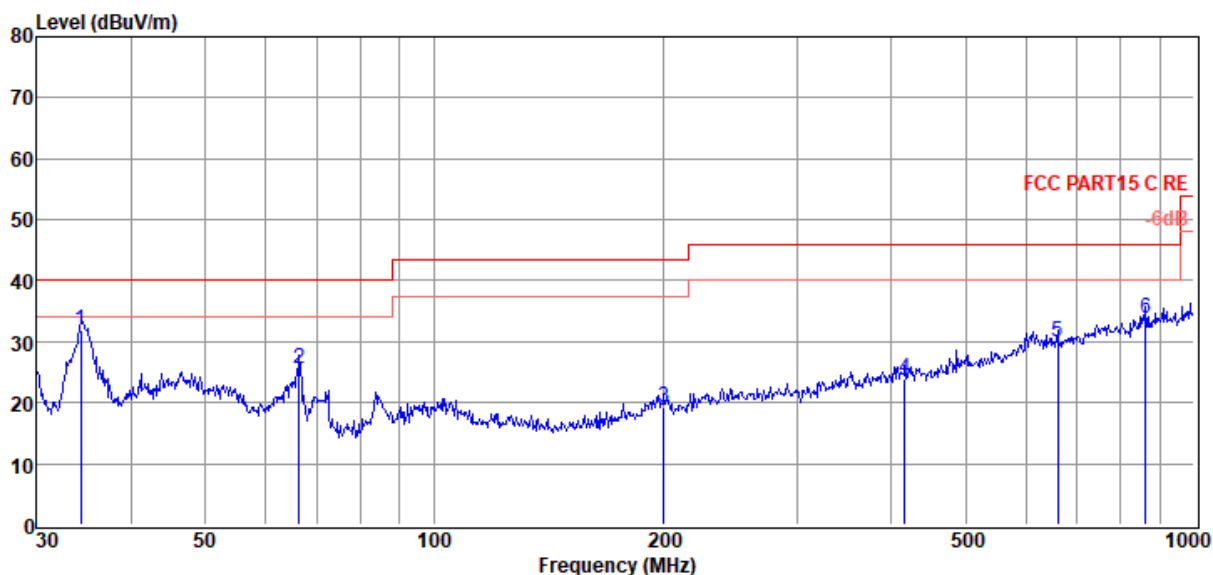
Test Mode : Tx mode

Condition : Temp:24.2°C,Humi:65.3%,Press:100.1kPa Antenna/Distance : 2021 VLUB 9163 3#/3m/VERTICAL

Memo :

Data:

1



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 34.28          | 19.43                   | 8.80                        | 3.58                | 31.81                       | 40.00                     | -8.19                 | QP       | VERTICAL     |
| 2              | 66.50          | 12.65                   | 9.25                        | 3.80                | 25.70                       | 40.00                     | -14.30                | QP       | VERTICAL     |
| 3              | 200.69         | 3.13                    | 11.75                       | 4.45                | 19.33                       | 43.50                     | -24.17                | QP       | VERTICAL     |
| 4              | 416.18         | 2.93                    | 15.90                       | 5.21                | 24.04                       | 46.00                     | -21.96                | QP       | VERTICAL     |
| 5              | 661.15         | 5.05                    | 19.02                       | 5.89                | 29.96                       | 46.00                     | -16.04                | QP       | VERTICAL     |
| 6              | 863.06         | 5.96                    | 21.40                       | 6.38                | 33.74                       | 46.00                     | -12.26                | QP       | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC BELOW 1G.EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

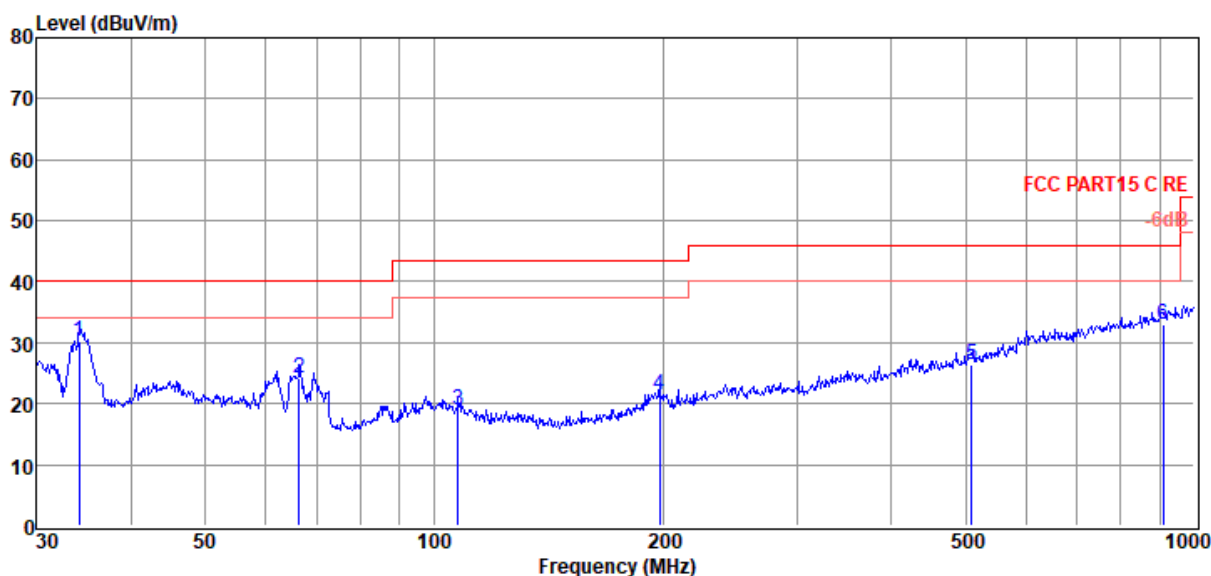
Test Mode : Tx mode

Condition : Temp:24.2°C,Humi:65.3%,Press:100.1kPa

Antenna/Distance : 2021 VLUB 9163 3#/3m/HORIZONTAL

Memo :

Data:  
2



| Item<br>(Mark) | Freq.<br>(MHz) | Read Level<br>(dBμV) | Antenna Factor<br>(dB/m) | Cable Loss<br>dB | Result Level<br>(dBμV/m) | Limit Line<br>(dBμV/m) | Over Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|----------------------|--------------------------|------------------|--------------------------|------------------------|--------------------|----------|--------------|
| 1              | 34.16          | 17.97                | 8.80                     | 3.58             | 30.35                    | 40.00                  | -9.65              | QP       | HORIZONTAL   |
| 2              | 66.50          | 11.21                | 9.25                     | 3.80             | 24.26                    | 40.00                  | -15.74             | QP       | HORIZONTAL   |
| 3              | 107.51         | 4.27                 | 10.65                    | 4.03             | 18.95                    | 43.50                  | -24.55             | QP       | HORIZONTAL   |
| 4              | 197.89         | 5.13                 | 11.89                    | 4.44             | 21.46                    | 43.50                  | -22.04             | QP       | HORIZONTAL   |
| 5              | 510.04         | 3.84                 | 17.10                    | 5.50             | 26.44                    | 46.00                  | -19.56             | QP       | HORIZONTAL   |
| 6              | 909.67         | 4.16                 | 22.29                    | 6.50             | 32.95                    | 46.00                  | -13.05             | QP       | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

## Radiated Emission test (above 1 GHz)

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

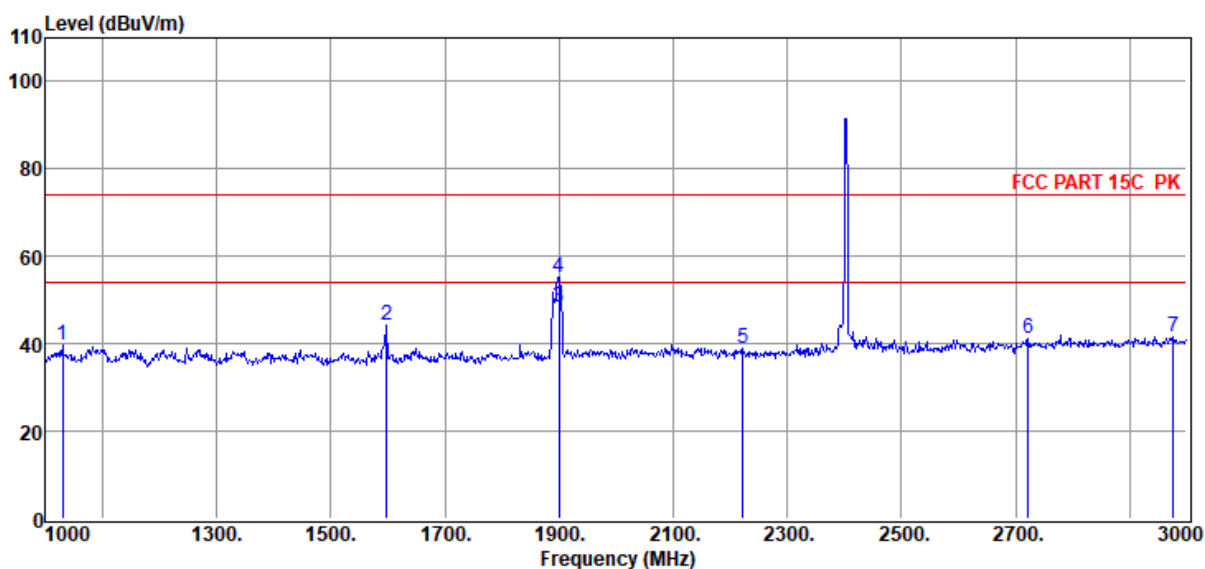
Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

Antenna/Distance : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : DH5 2402

Data: 1



Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

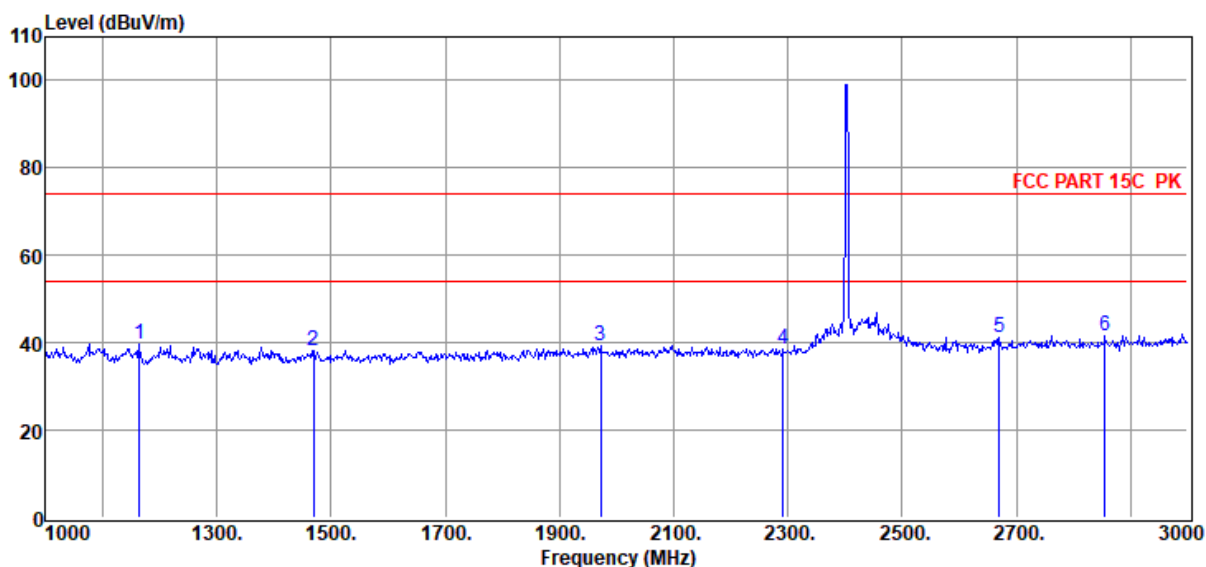
Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

Antenna/Distance : 2021 BBHA 9120D  
3#/3m/HORIZONTAL

Memo : DH5 2402

Data: 2



Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

**Test Date** : 2022-05-17

**Tested By** : Kennys Zhang

**EUT** : BLUETOOTH HEADSET

**Model Number** : WAVE BUDS

**Power Supply** : Battery

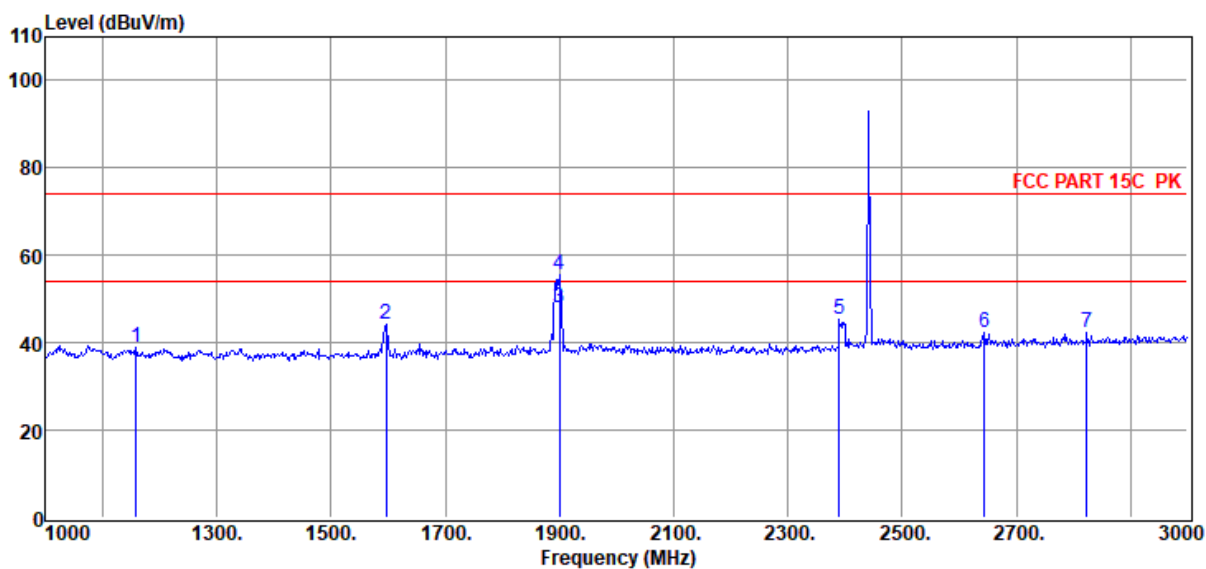
**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

**Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

**Memo** : DH5 2441

Data: 5



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 1158.00        | 49.77                   | 25.47                       | 38.14               | 1.19                | 0.53                   | 38.82                       | 74.00                     | -35.18                | Peak     | VERTICAL     |
| 2              | 1596.00        | 55.31                   | 25.65                       | 38.79               | 1.42                | 0.61                   | 44.20                       | 74.00                     | -29.80                | Peak     | VERTICAL     |
| 3              | 1900.00        | 58.64                   | 26.44                       | 39.25               | 1.56                | 0.66                   | 48.05                       | 54.00                     | -5.95                 | Average  | VERTICAL     |
| 4              | 1900.00        | 66.16                   | 26.44                       | 39.25               | 1.56                | 0.66                   | 55.57                       | 74.00                     | -18.43                | Peak     | VERTICAL     |
| 5              | 2390.00        | 55.21                   | 27.40                       | 39.60               | 1.71                | 0.72                   | 45.44                       | 74.00                     | -28.56                | Peak     | VERTICAL     |
| 6              | 2644.00        | 51.24                   | 28.15                       | 39.72               | 1.78                | 0.75                   | 42.20                       | 74.00                     | -31.80                | Peak     | VERTICAL     |
| 7              | 2824.00        | 50.82                   | 28.83                       | 39.81               | 1.82                | 0.77                   | 42.43                       | 74.00                     | -31.57                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

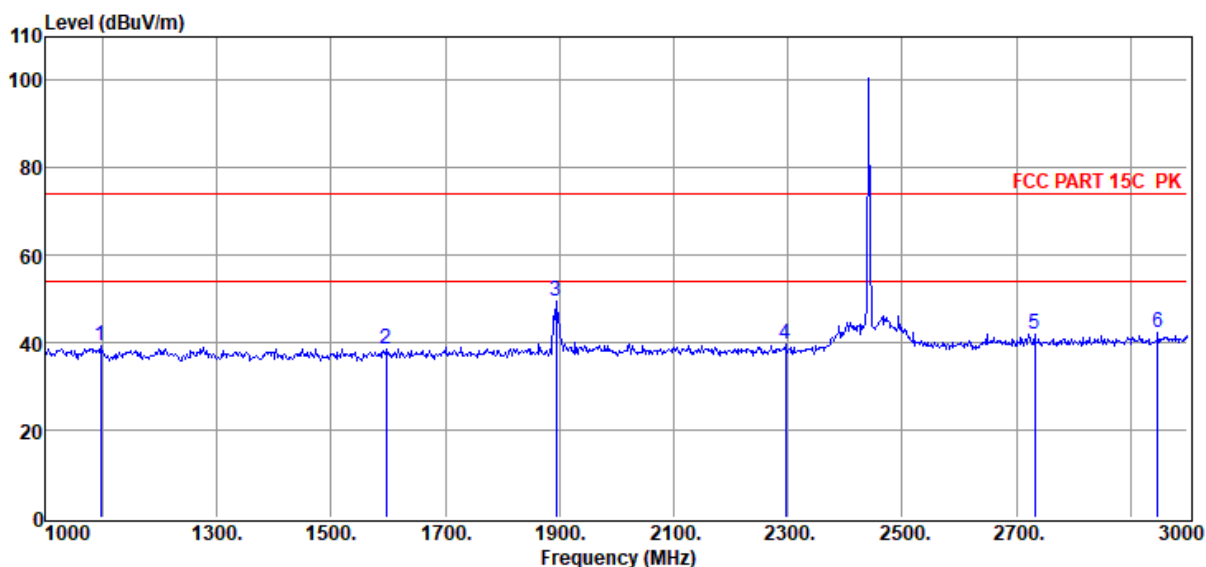
Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

Antenna/Distance : 2021 BBHA 9120D  
3#/3m/HORIZONTAL

Memo : DH5 2441

Data: 6



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 1096.00        | 50.13                   | 25.48                       | 38.04               | 1.15                | 0.52                   | 39.24                       | 74.00                     | -34.76                | Peak     | HORIZONTAL   |
| 2              | 1596.00        | 49.74                   | 25.65                       | 38.79               | 1.42                | 0.61                   | 38.63                       | 74.00                     | -35.37                | Peak     | HORIZONTAL   |
| 3              | 1894.00        | 60.03                   | 26.42                       | 39.24               | 1.55                | 0.66                   | 49.42                       | 74.00                     | -24.58                | Peak     | HORIZONTAL   |
| 4              | 2296.00        | 49.52                   | 27.23                       | 39.55               | 1.68                | 0.71                   | 39.59                       | 74.00                     | -34.41                | Peak     | HORIZONTAL   |
| 5              | 2732.00        | 50.78                   | 28.48                       | 39.77               | 1.80                | 0.76                   | 42.05                       | 74.00                     | -31.95                | Peak     | HORIZONTAL   |
| 6              | 2948.00        | 50.23                   | 29.30                       | 39.87               | 1.86                | 0.78                   | 42.30                       | 74.00                     | -31.70                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

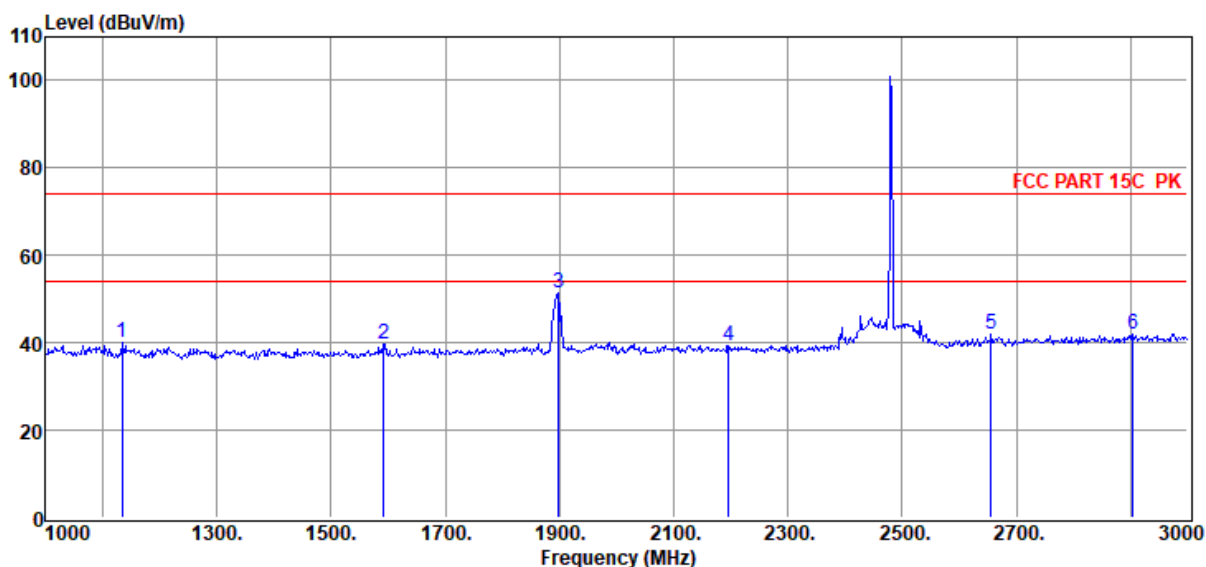
Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

Antenna/Distance : 2021 BBHA 9120D  
3#/3m/HORIZONTAL

Memo : DH5 2480

Data: 7



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBuV/m) | Limit<br>Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 1134.00        | 51.11                   | 25.47                       | 38.10               | 1.18                | 0.52                   | 40.18                       | 74.00                     | -33.82                | Peak     | HORIZONTAL   |
| 2              | 1592.00        | 50.98                   | 25.64                       | 38.79               | 1.42                | 0.61                   | 39.86                       | 74.00                     | -34.14                | Peak     | HORIZONTAL   |
| 3              | 1898.00        | 61.84                   | 26.43                       | 39.25               | 1.56                | 0.66                   | 51.24                       | 74.00                     | -22.76                | Peak     | HORIZONTAL   |
| 4              | 2196.00        | 49.58                   | 27.05                       | 39.50               | 1.65                | 0.70                   | 39.48                       | 74.00                     | -34.52                | Peak     | HORIZONTAL   |
| 5              | 2656.00        | 50.92                   | 28.19                       | 39.73               | 1.78                | 0.75                   | 41.91                       | 74.00                     | -32.09                | Peak     | HORIZONTAL   |
| 6              | 2904.00        | 50.06                   | 29.14                       | 39.85               | 1.85                | 0.78                   | 41.98                       | 74.00                     | -32.02                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

**Test Date** : 2022-05-17

**Tested By** : Kennys Zhang

**EUT** : BLUETOOTH HEADSET

**Model Number** : WAVE BUDS

**Power Supply** : Battery

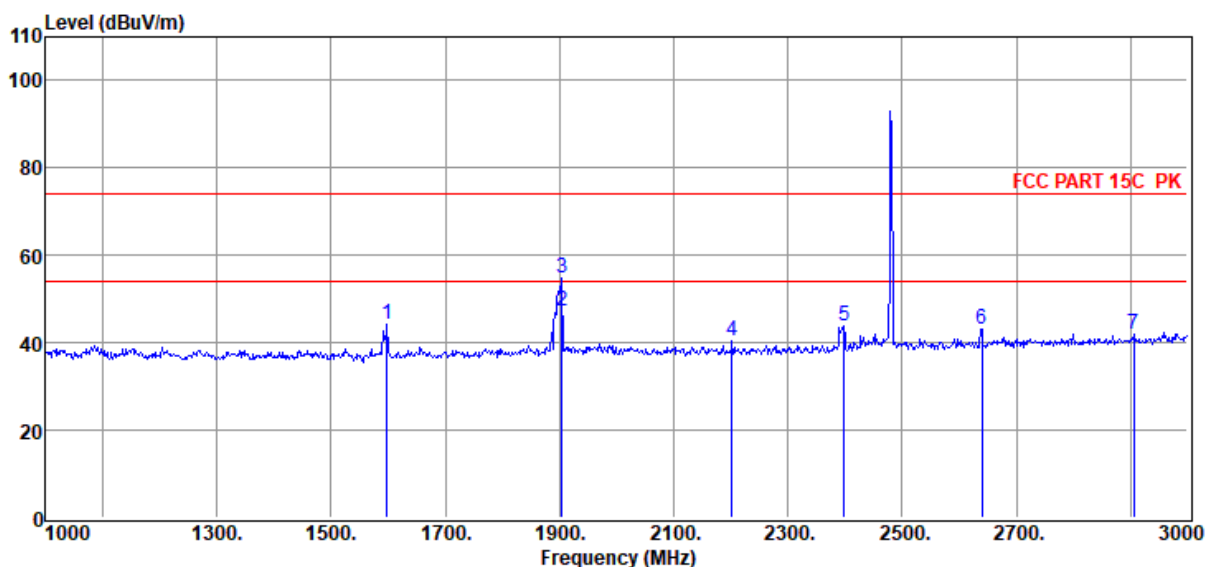
**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

**Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

**Memo** : DH5 2480

Data: 8



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBuV/m) | Limit<br>Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 1598.00        | 55.29                   | 25.65                       | 38.80               | 1.42                | 0.61                   | 44.17                       | 74.00                     | -29.83                | Peak     | VERTICAL     |
| 2              | 1904.00        | 57.94                   | 26.45                       | 39.26               | 1.56                | 0.66                   | 47.35                       | 54.00                     | -6.65                 | Average  | VERTICAL     |
| 3              | 1904.00        | 65.57                   | 26.45                       | 39.26               | 1.56                | 0.66                   | 54.98                       | 74.00                     | -19.02                | Peak     | VERTICAL     |
| 4              | 2202.00        | 50.49                   | 27.06                       | 39.50               | 1.66                | 0.70                   | 40.41                       | 74.00                     | -33.59                | Peak     | VERTICAL     |
| 5              | 2398.00        | 53.53                   | 27.42                       | 39.60               | 1.71                | 0.72                   | 43.78                       | 74.00                     | -30.22                | Peak     | VERTICAL     |
| 6              | 2640.00        | 52.14                   | 28.13                       | 39.72               | 1.78                | 0.75                   | 43.08                       | 74.00                     | -30.92                | Peak     | VERTICAL     |
| 7              | 2906.00        | 50.13                   | 29.14                       | 39.85               | 1.85                | 0.78                   | 42.05                       | 74.00                     | -31.95                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

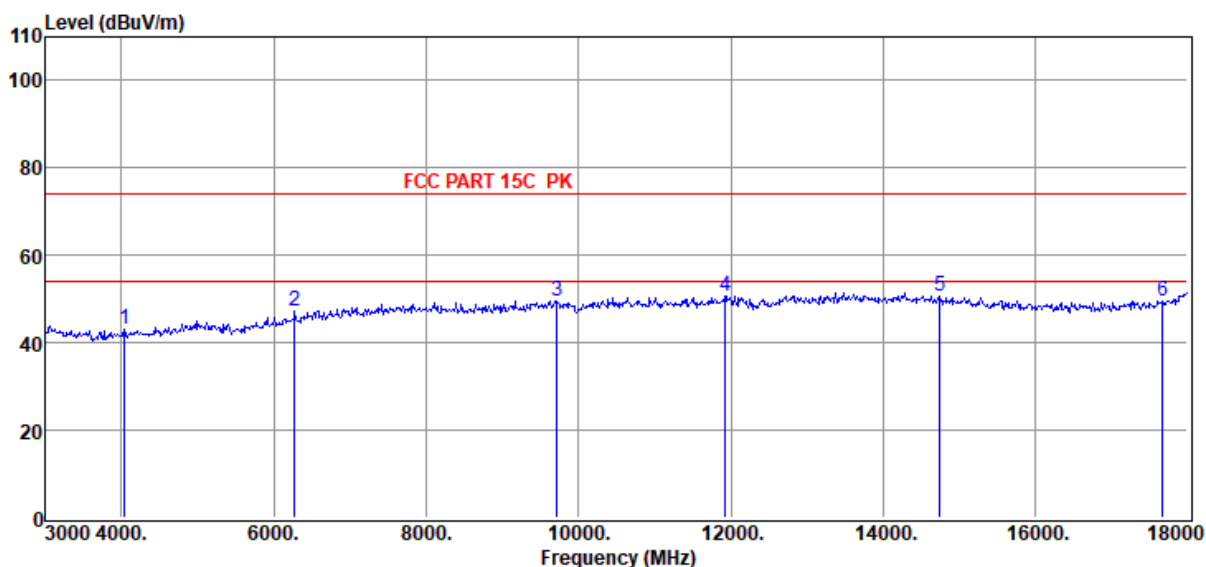
Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

Antenna/Distance : 2021 BBHA 9120D  
3#/3m/HORIZONTAL

Memo : DH5 2402

Data: 19



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBuV/m) | Limit<br>Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 4035.00        | 48.07                   | 31.13                       | 40.21               | 2.13                | 2.05                   | 43.17                       | 74.00                     | -30.83                | Peak     | HORIZONTAL   |
| 2              | 6270.00        | 46.96                   | 34.65                       | 40.28               | 3.16                | 2.65                   | 47.14                       | 74.00                     | -26.86                | Peak     | HORIZONTAL   |
| 3              | 9720.00        | 45.37                   | 38.57                       | 40.40               | 3.64                | 2.40                   | 49.58                       | 74.00                     | -24.42                | Peak     | HORIZONTAL   |
| 4              | 11925.00       | 45.34                   | 39.17                       | 40.11               | 4.04                | 2.40                   | 50.84                       | 74.00                     | -23.16                | Peak     | HORIZONTAL   |
| 5              | 14745.00       | 43.56                   | 39.70                       | 39.63               | 4.41                | 2.69                   | 50.73                       | 74.00                     | -23.27                | Peak     | HORIZONTAL   |
| 6              | 17670.00       | 41.03                   | 40.45                       | 40.50               | 4.87                | 3.70                   | 49.55                       | 74.00                     | -24.45                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

**Test Date** : 2022-05-17

**Tested By** : Kennys Zhang

**EUT** : BLUETOOTH HEADSET

**Model Number** : WAVE BUDS

**Power Supply** : Battery

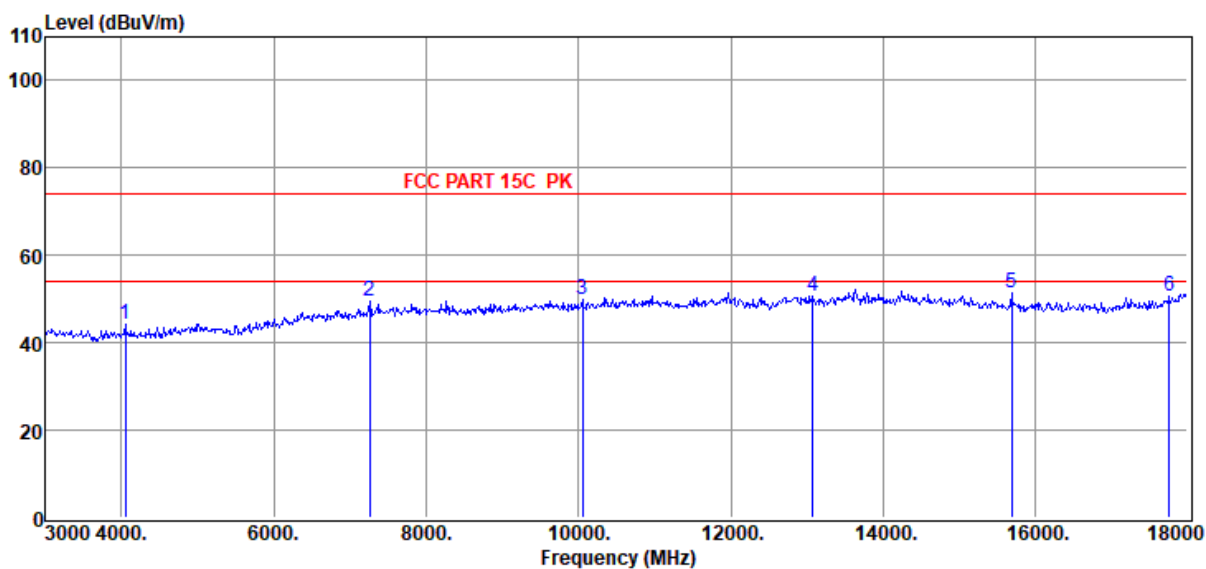
**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

**Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

**Memo** : DH5 2402

Data: 20



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 4050.00        | 49.21                   | 31.14                       | 40.21               | 2.13                | 2.05                   | 44.32                       | 74.00                     | -29.68                | Peak     | VERTICAL     |
| 2              | 7260.00        | 47.61                   | 36.21                       | 39.73               | 3.08                | 2.27                   | 49.44                       | 74.00                     | -24.56                | Peak     | VERTICAL     |
| 3              | 10050.00       | 45.77                   | 38.46                       | 40.58               | 3.67                | 2.47                   | 49.79                       | 74.00                     | -24.21                | Peak     | VERTICAL     |
| 4              | 13080.00       | 44.14                   | 39.66                       | 40.34               | 4.33                | 2.96                   | 50.75                       | 74.00                     | -23.25                | Peak     | VERTICAL     |
| 5              | 15690.00       | 45.10                   | 38.46                       | 39.81               | 4.58                | 2.96                   | 51.29                       | 74.00                     | -22.71                | Peak     | VERTICAL     |
| 6              | 17760.00       | 41.46                   | 41.01                       | 40.56               | 4.89                | 3.72                   | 50.52                       | 74.00                     | -23.48                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

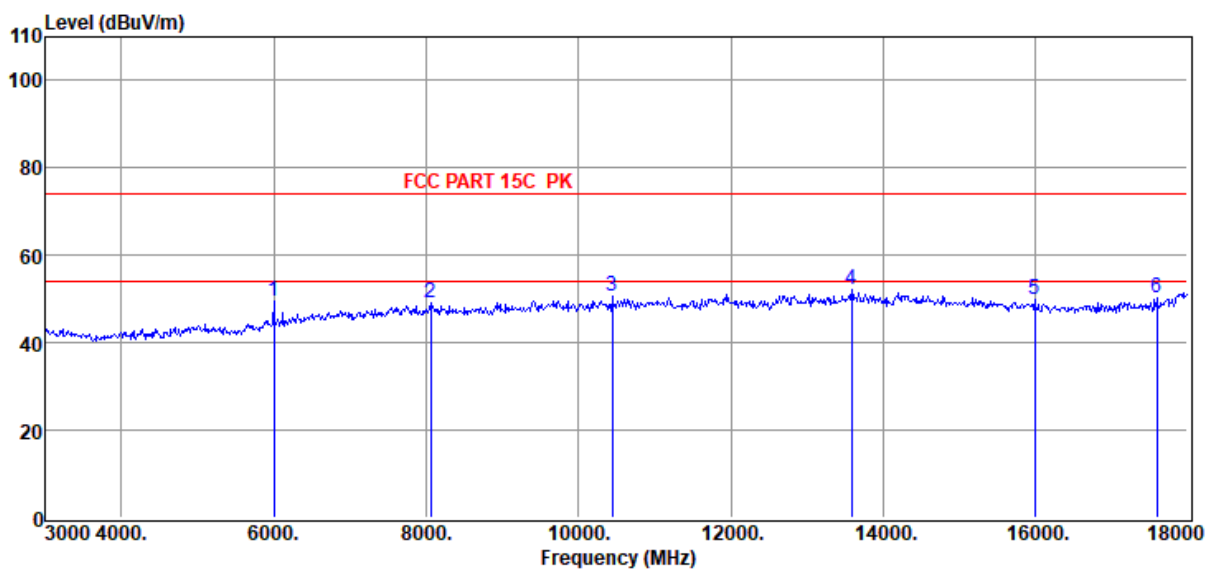
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 3#  
**Test Date** : 2022-05-17  
**EUT** : BLUETOOTH HEADSET  
**Power Supply** : Battery  
**Condition** : Temp:24.5°C,Humi:66.5%,Press:100.1kPa  
**Memo** : DH5 2441

**D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE**  
**BUDSVIBE BUDS\FCC ABOVE 1G .EM6**  
**Tested By** : Kennys Zhang  
**Model Number** : WAVE BUDS  
**Test Mode** : Tx mode  
**Antenna/Distance** : 2021 BBHA 9120D 3#/3m/VERTICAL

Data: 21



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 6000.00        | 50.07                   | 34.00                       | 40.50               | 3.03                | 2.80                   | 49.40                       | 74.00                     | -24.60                | Peak     | VERTICAL     |
| 2              | 8055.00        | 46.34                   | 37.09                       | 39.81               | 3.19                | 2.27                   | 49.08                       | 74.00                     | -24.92                | Peak     | VERTICAL     |
| 3              | 10440.00       | 45.89                   | 38.93                       | 40.42               | 3.67                | 2.44                   | 50.51                       | 74.00                     | -23.49                | Peak     | VERTICAL     |
| 4              | 13590.00       | 45.09                   | 39.98                       | 39.99               | 4.09                | 2.92                   | 52.09                       | 74.00                     | -21.91                | Peak     | VERTICAL     |
| 5              | 15990.00       | 44.29                   | 37.92                       | 39.90               | 4.60                | 3.11                   | 50.02                       | 74.00                     | -23.98                | Peak     | VERTICAL     |
| 6              | 17595.00       | 42.38                   | 39.99                       | 40.46               | 4.85                | 3.68                   | 50.44                       | 74.00                     | -23.56                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

**Test Date** : 2022-05-17

**Tested By** : Kennys Zhang

**EUT** : BLUETOOTH HEADSET

**Model Number** : WAVE BUDS

**Power Supply** : Battery

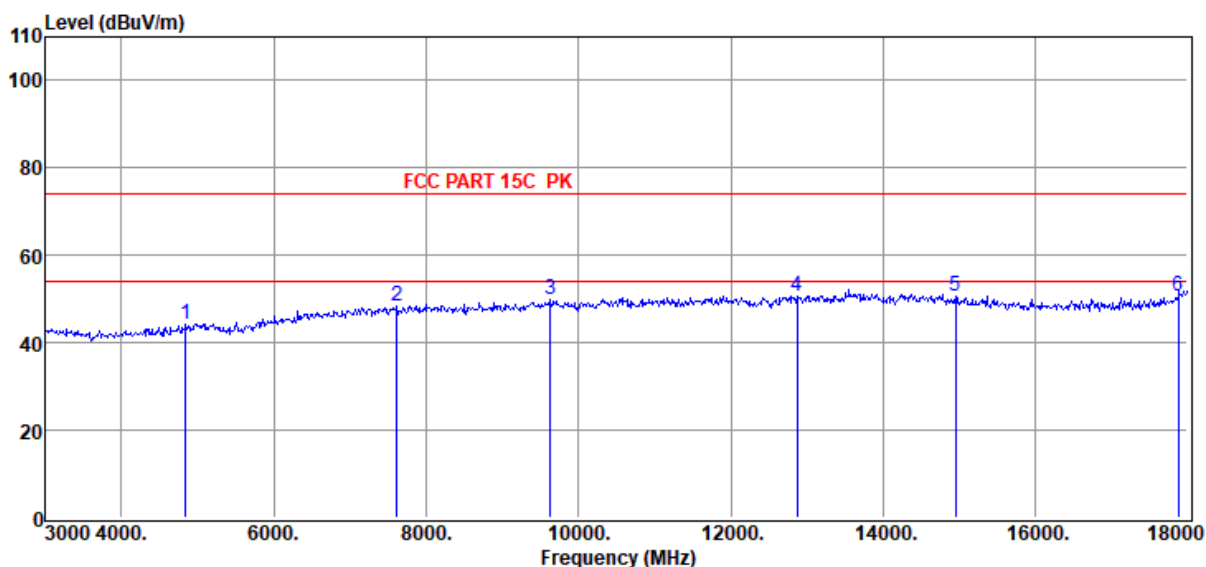
**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

**Antenna/Distance** : 2021 BBHA 9120D  
3#/3m/HORIZONTAL

**Memo** : DH5 2441

Data: 22



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 4845.00        | 47.50                   | 32.60                       | 40.37               | 2.48                | 2.17                   | 44.38                       | 74.00                     | -29.62                | Peak     | HORIZONTAL   |
| 2              | 7620.00        | 46.14                   | 36.54                       | 39.76               | 3.15                | 2.27                   | 48.34                       | 74.00                     | -25.66                | Peak     | HORIZONTAL   |
| 3              | 9630.00        | 45.47                   | 38.62                       | 40.34               | 3.63                | 2.37                   | 49.75                       | 74.00                     | -24.25                | Peak     | HORIZONTAL   |
| 4              | 12870.00       | 44.53                   | 39.44                       | 40.36               | 4.22                | 2.89                   | 50.72                       | 74.00                     | -23.28                | Peak     | HORIZONTAL   |
| 5              | 14955.00       | 43.53                   | 39.54                       | 39.60               | 4.46                | 2.63                   | 50.56                       | 74.00                     | -23.44                | Peak     | HORIZONTAL   |
| 6              | 17880.00       | 40.93                   | 41.76                       | 40.63               | 4.93                | 3.76                   | 50.75                       | 74.00                     | -23.25                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

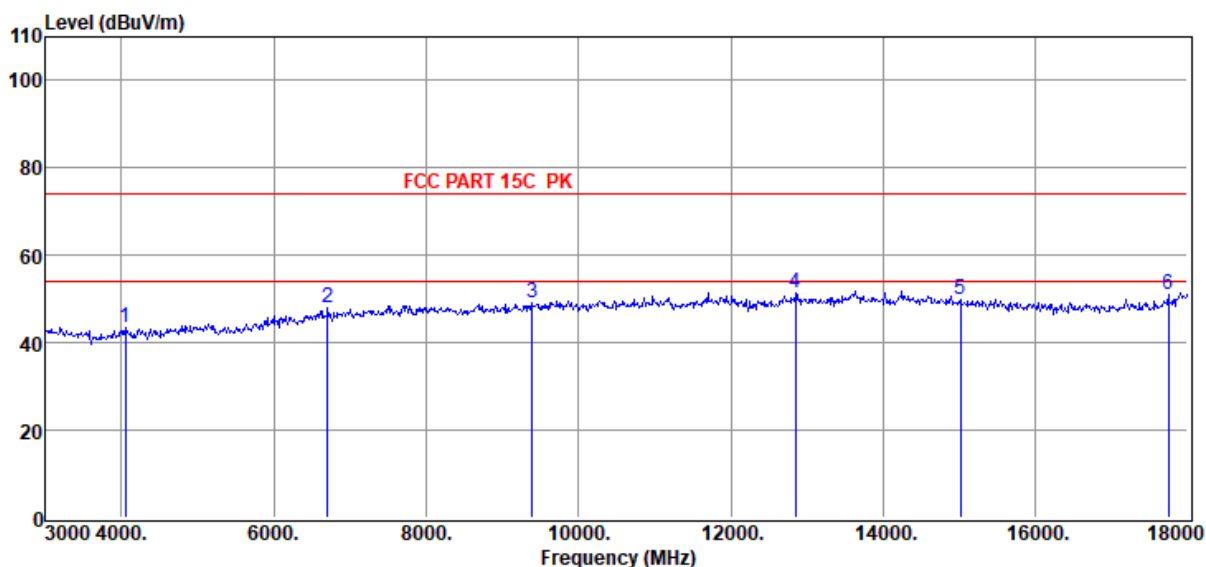
Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

Antenna/Distance : 2021 BBHA 9120D  
3#/3m/HORIZONTAL

Memo : DH5 2480

Data: 23



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBuV/m) | Limit<br>Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 4050.00        | 48.29                   | 31.14                       | 40.21               | 2.13                | 2.05                   | 43.40                       | 74.00                     | -30.60                | Peak     | HORIZONTAL   |
| 2              | 6705.00        | 46.79                   | 35.53                       | 39.94               | 3.17                | 2.42                   | 47.97                       | 74.00                     | -26.03                | Peak     | HORIZONTAL   |
| 3              | 9390.00        | 44.94                   | 38.61                       | 40.17               | 3.56                | 2.30                   | 49.24                       | 74.00                     | -24.76                | Peak     | HORIZONTAL   |
| 4              | 12855.00       | 45.33                   | 39.43                       | 40.36               | 4.20                | 2.88                   | 51.48                       | 74.00                     | -22.52                | Peak     | HORIZONTAL   |
| 5              | 15015.00       | 42.88                   | 39.48                       | 39.60               | 4.47                | 2.63                   | 49.86                       | 74.00                     | -24.14                | Peak     | HORIZONTAL   |
| 6              | 17745.00       | 42.12                   | 40.92                       | 40.55               | 4.89                | 3.72                   | 51.10                       | 74.00                     | -22.90                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 3#

D:\E3 6.111\2022 Report Data\Q22050910-2E WAVE  
BUDSVIBE BUDS\FCC ABOVE 1G .EM6

Test Date : 2022-05-17

Tested By : Kennys Zhang

EUT : BLUETOOTH HEADSET

Model Number : WAVE BUDS

Power Supply : Battery

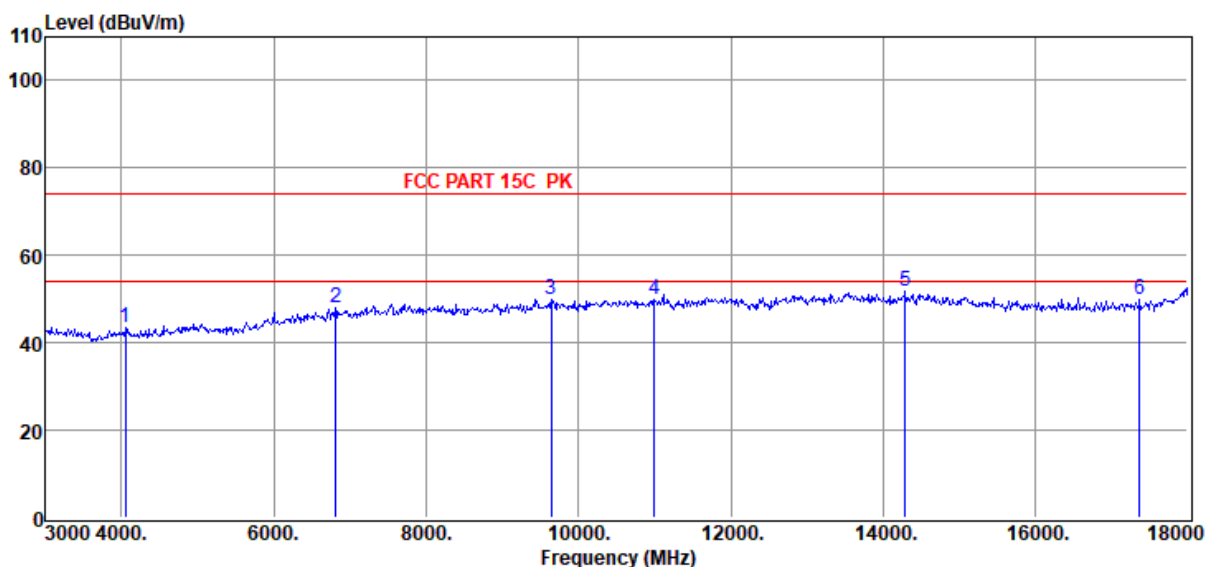
Test Mode : Tx mode

Condition : Temp:24.5°C,Humi:66.5%,Press:100.1kPa

Antenna/Distance : 2021 BBHA 9120D 3#/3m/VERTICAL

Memo : DH5 2480

Data: 24



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Filter<br>Factor<br>dB | Result<br>Level<br>(dBuV/m) | Limit<br>Line<br>(dBuV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|------------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 4050.00        | 48.45                   | 31.14                       | 40.21               | 2.13                | 2.05                   | 43.56                       | 74.00                     | -30.44                | Peak     | VERTICAL     |
| 2              | 6810.00        | 46.81                   | 35.70                       | 39.85               | 3.12                | 2.36                   | 48.14                       | 74.00                     | -25.86                | Peak     | VERTICAL     |
| 3              | 9645.00        | 45.69                   | 38.61                       | 40.35               | 3.63                | 2.37                   | 49.95                       | 74.00                     | -24.05                | Peak     | VERTICAL     |
| 4              | 10995.00       | 44.59                   | 39.30                       | 40.20               | 3.80                | 2.38                   | 49.87                       | 74.00                     | -24.13                | Peak     | VERTICAL     |
| 5              | 14295.00       | 44.44                   | 39.90                       | 39.67               | 4.42                | 2.82                   | 51.91                       | 74.00                     | -22.09                | Peak     | VERTICAL     |
| 6              | 17370.00       | 42.67                   | 39.17                       | 40.32               | 4.79                | 3.61                   | 49.92                       | 74.00                     | -24.08                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## 11. RF Conducted Spurious Emissions

### 11.1. Block diagram of test setup

Same as section 4.1

### 11.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

### 11.3. Test procedure

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

(2) Establish a reference level by using the following procedure:

|                  |                                                               |
|------------------|---------------------------------------------------------------|
| Center frequency | Test frequency                                                |
| RBW:             | 100 kHz                                                       |
| VBW:             | 300 kHz                                                       |
| Span             | Wide enough to capture the peak level of the in-band emission |
| Detector Mode:   | Peak                                                          |
| Sweep time:      | auto                                                          |
| Trace mode       | Max hold                                                      |

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

(4) Set the spectrum analyzer as follows:

|                              |                                          |
|------------------------------|------------------------------------------|
| RBW:                         | 100 kHz                                  |
| VBW:                         | 300 kHz                                  |
| Span                         | Encompass frequency range to be measured |
| Number of measurement points | $\geq \text{span}/\text{RBW}$            |
| Detector Mode:               | Peak                                     |
| Sweep time:                  | auto                                     |
| Trace mode                   | Max hold                                 |

(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

**11.4. Test result**

Left side:

| Mode           | Freq. (MHz)      | Verdict |
|----------------|------------------|---------|
| GFSK           | Hopping off 2402 | Pass    |
|                | Hopping off 2441 | Pass    |
|                | Hopping off 2480 | Pass    |
| $\pi/4$ -DQPSK | Hopping off 2402 | Pass    |
|                | Hopping off 2441 | Pass    |
|                | Hopping off 2480 | Pass    |
| 8DPSK          | Hopping off 2402 | Pass    |
|                | Hopping off 2441 | Pass    |
|                | Hopping off 2480 | Pass    |

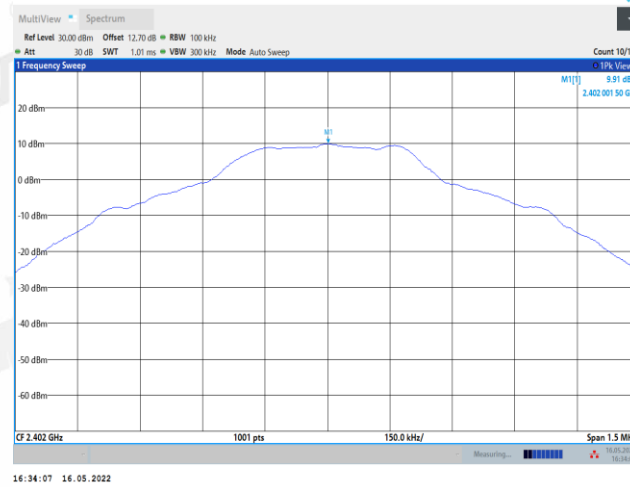
Right side:

| Mode           | Freq. (MHz)      | Verdict |
|----------------|------------------|---------|
| GFSK           | Hopping off 2402 | Pass    |
|                | Hopping off 2441 | Pass    |
|                | Hopping off 2480 | Pass    |
| $\pi/4$ -DQPSK | Hopping off 2402 | Pass    |
|                | Hopping off 2441 | Pass    |
|                | Hopping off 2480 | Pass    |
| 8DPSK          | Hopping off 2402 | Pass    |
|                | Hopping off 2441 | Pass    |
|                | Hopping off 2480 | Pass    |

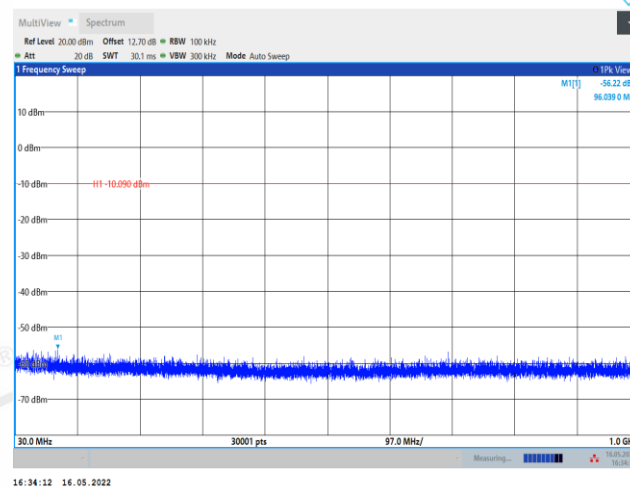
## 11.5. Original test data

Left side:

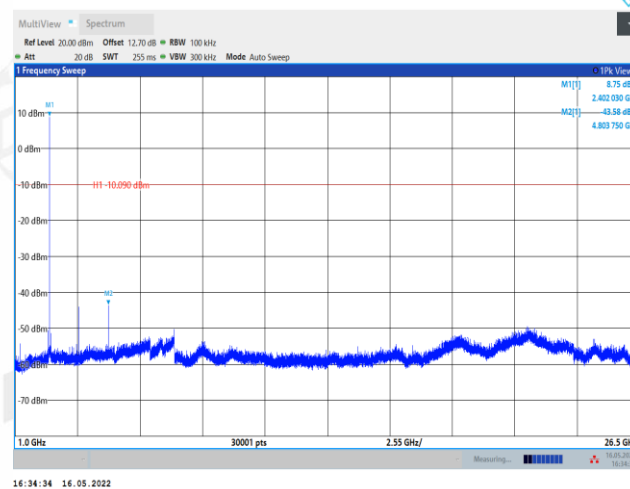
DH5\_Ant1\_2402\_0~Reference



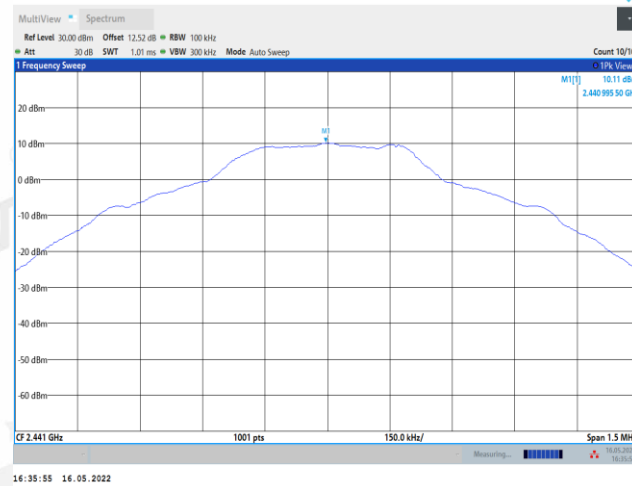
DH5\_Ant1\_2402\_30~1000



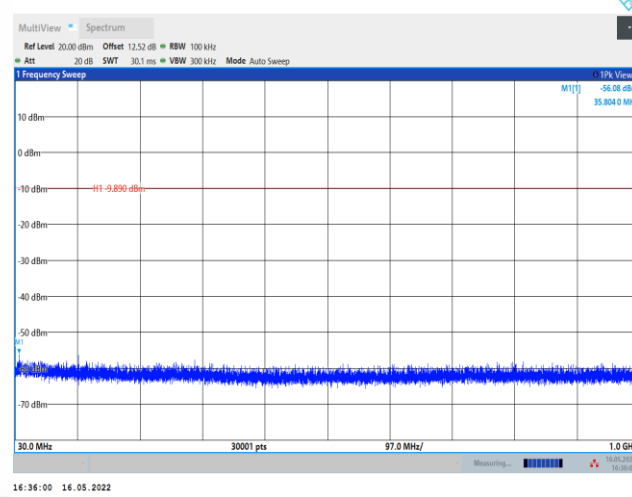
DH5\_Ant1\_2402\_1000~26500



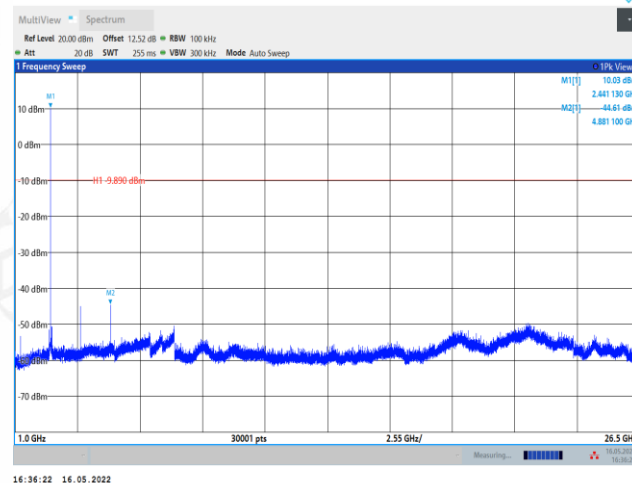
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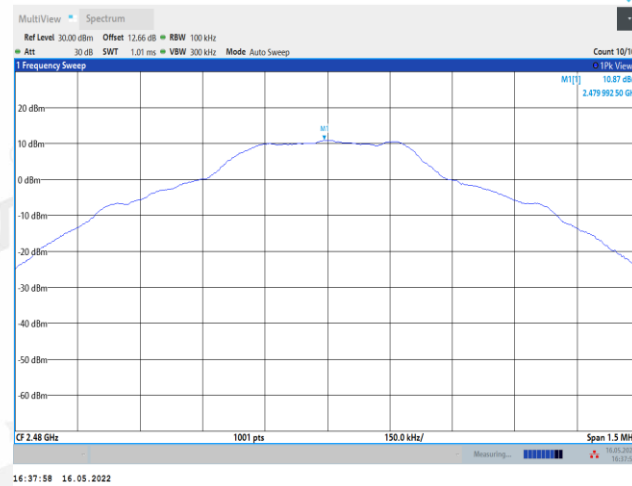
DH5\_Ant1\_2441\_30~1000



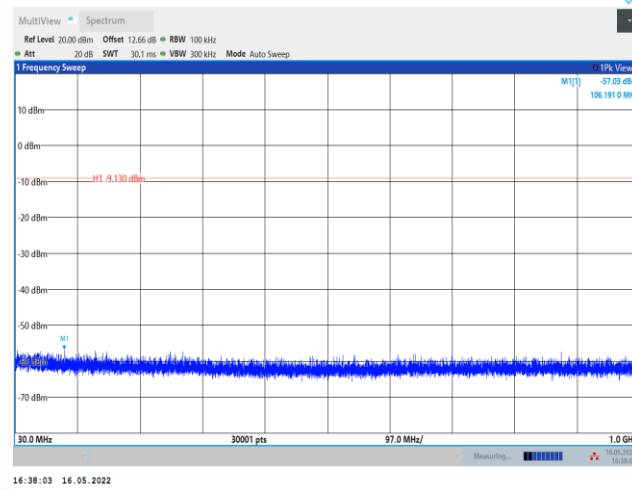
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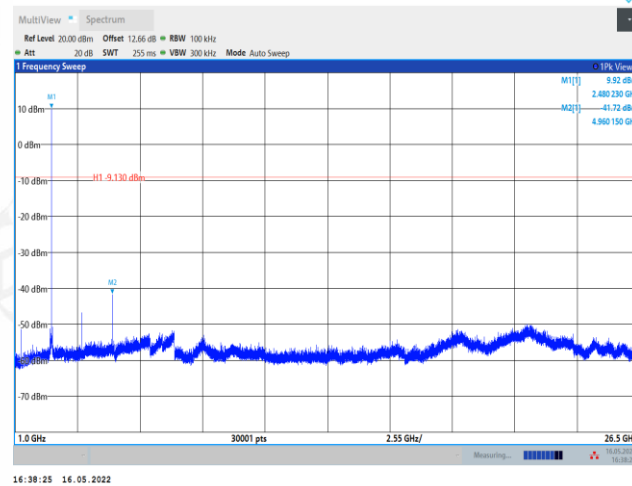
DH5\_Ant1\_2480\_0~Reference



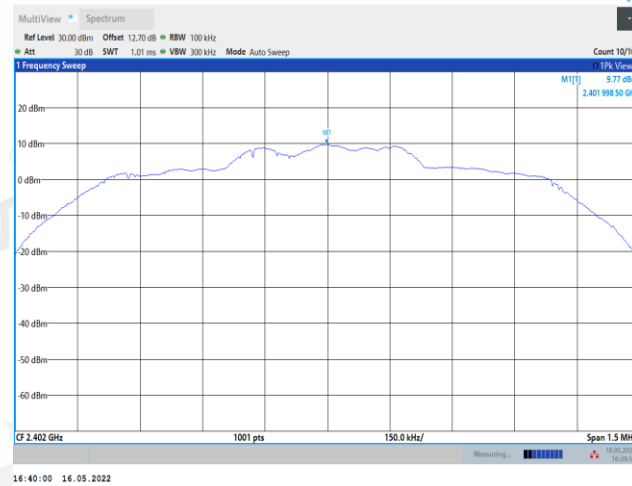
DH5\_Ant1\_2480\_30~1000



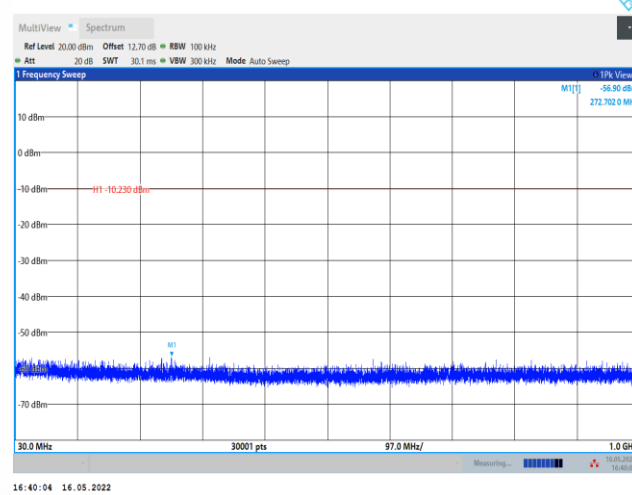
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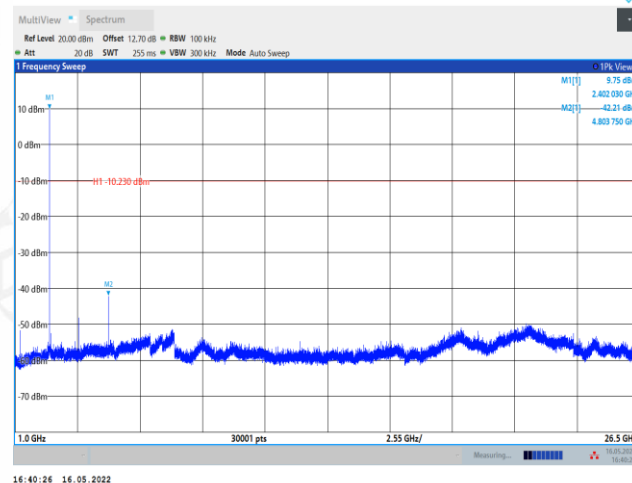
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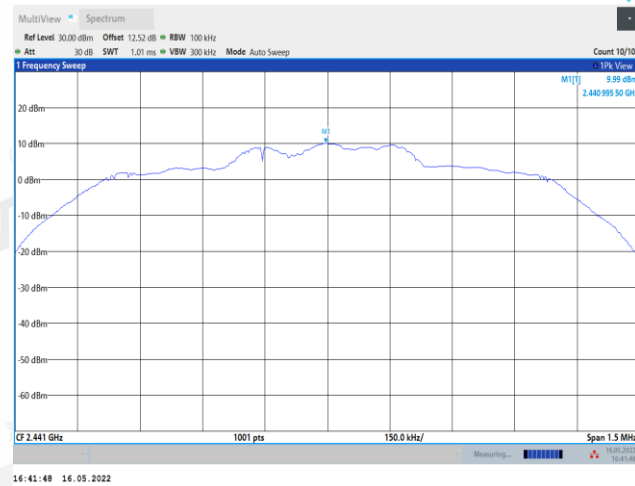
2DH5\_Ant1\_2402\_30~1000



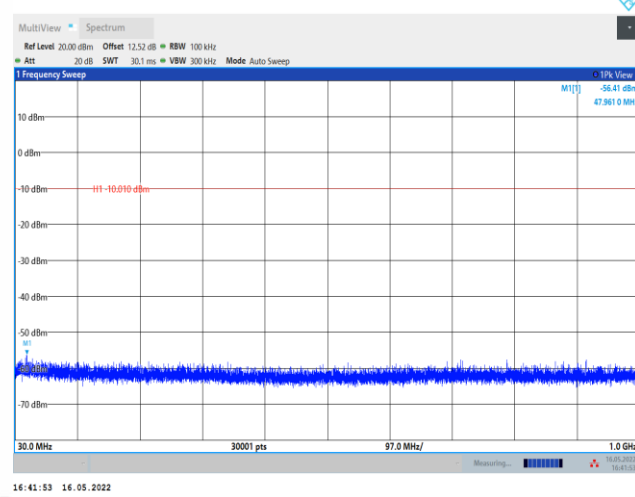
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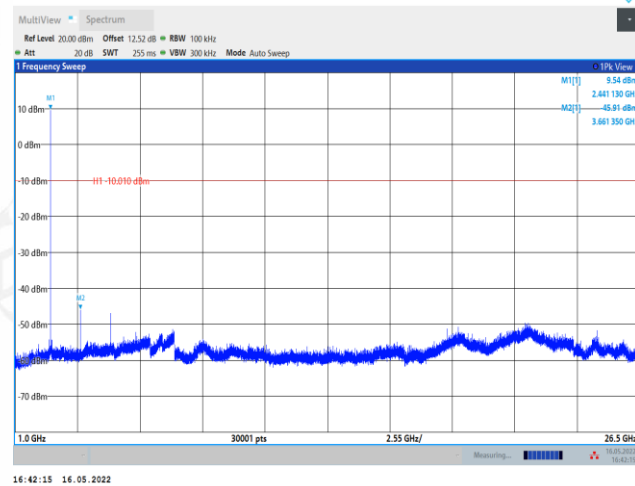
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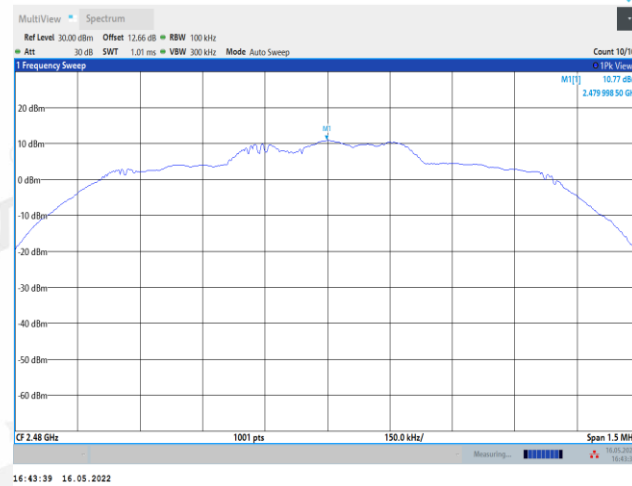
2DH5\_Ant1\_2441\_30~1000



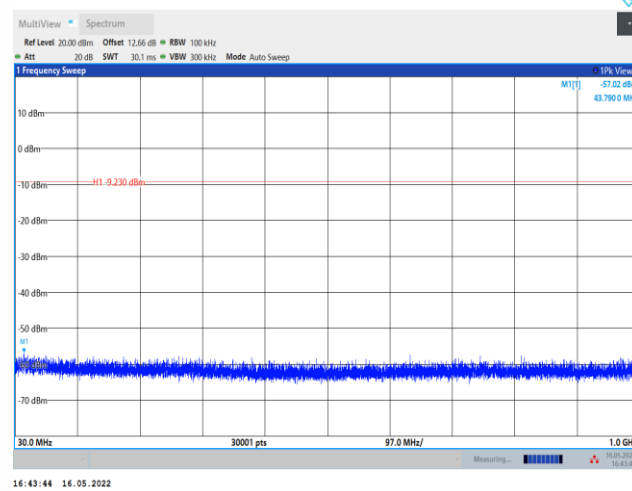
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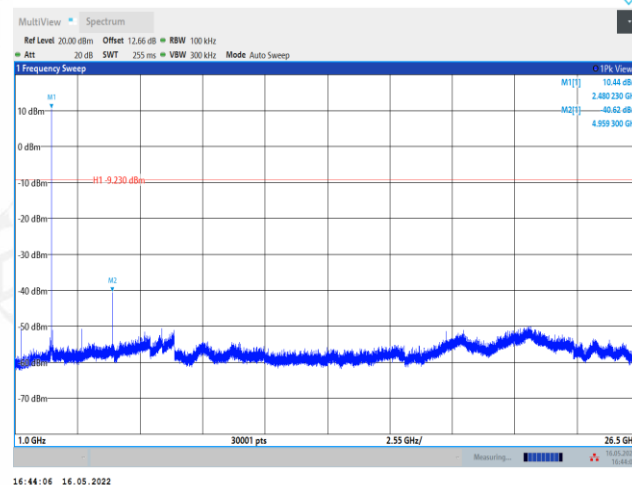
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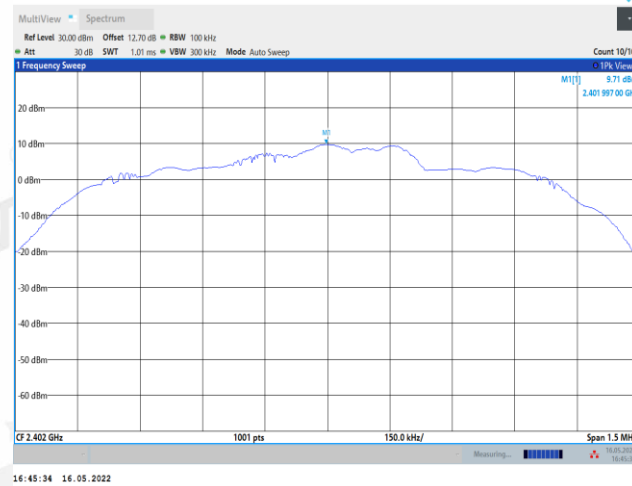
2DH5\_Ant1\_2480\_30~1000



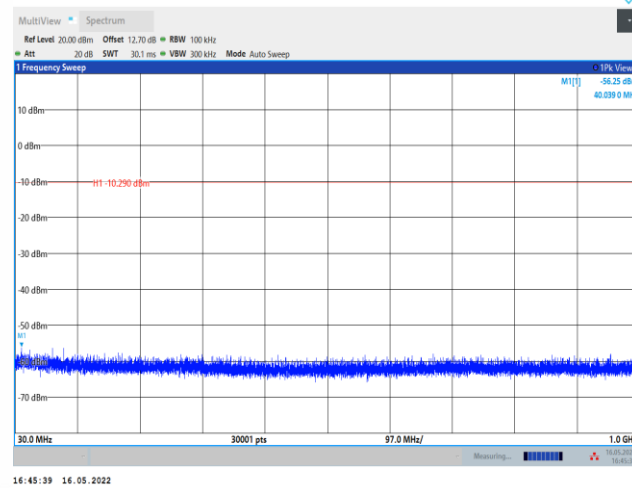
2DH5\_Ant1\_2480\_1000~26500



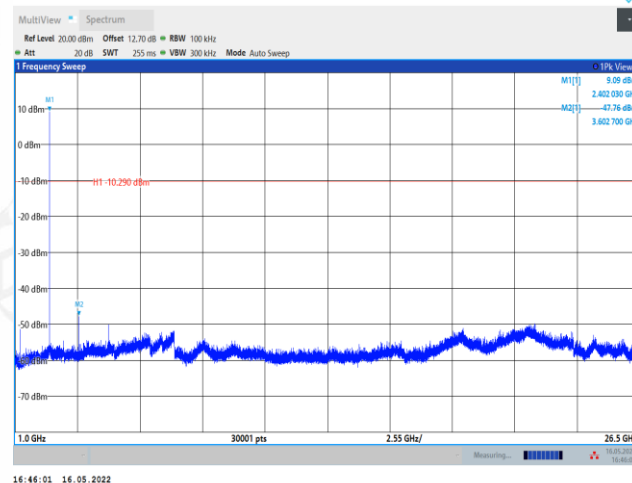
3DH5\_Ant1\_2402\_0~Reference



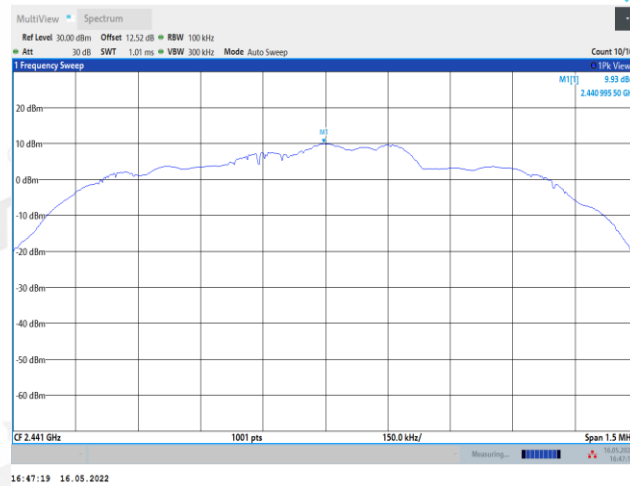
3DH5\_Ant1\_2402\_30~1000



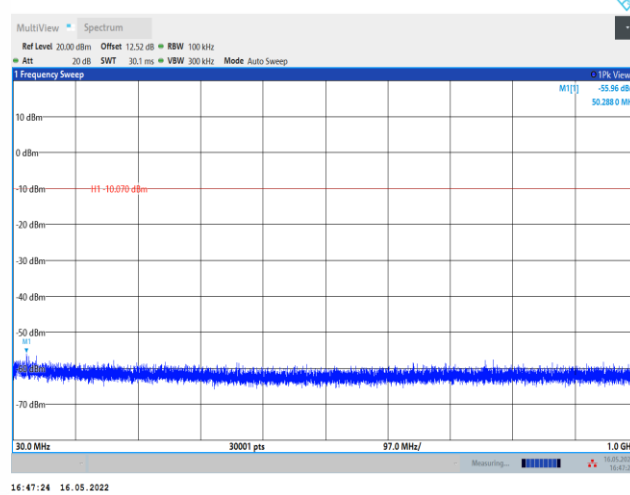
3DH5\_Ant1\_2402\_1000~26500



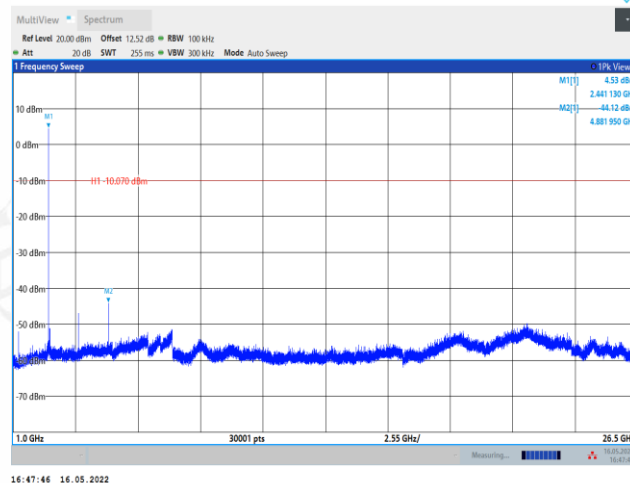
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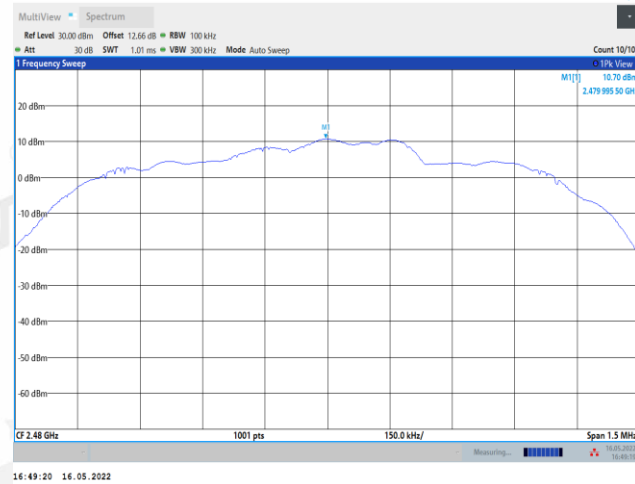
3DH5\_Ant1\_2441\_30~1000



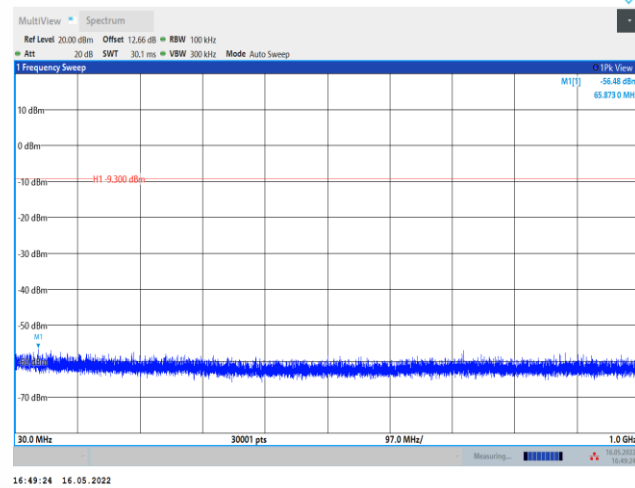
3DH5\_Ant1\_2441\_1000~26500



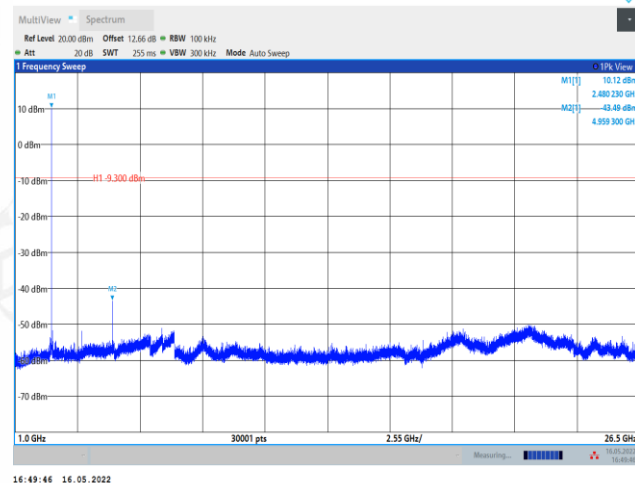
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3DH5\_Ant1\_2480\_30~1000

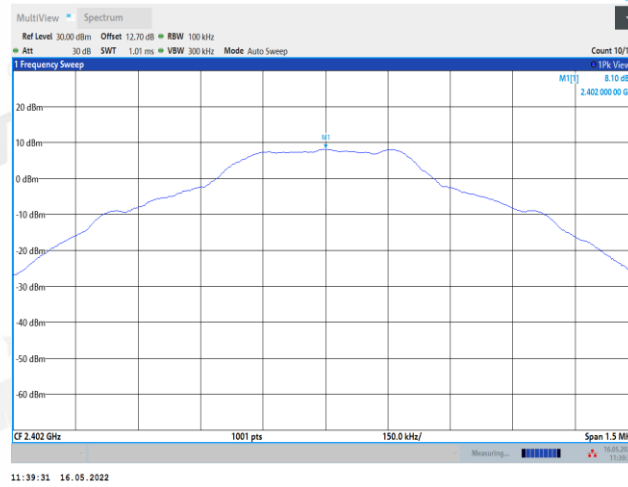


3DH5\_Ant1\_2480\_1000~26500

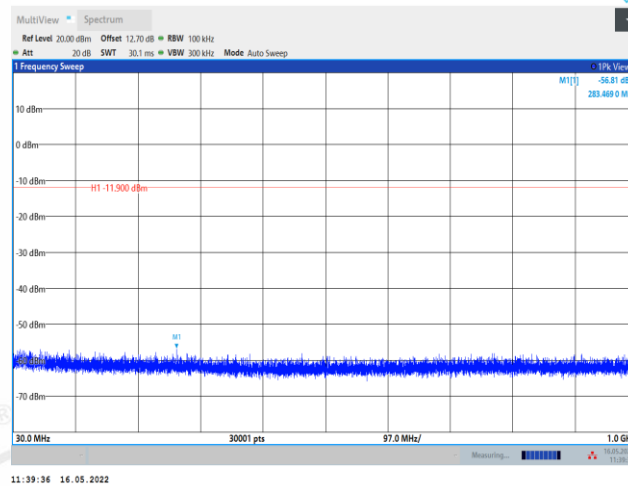


Right side:

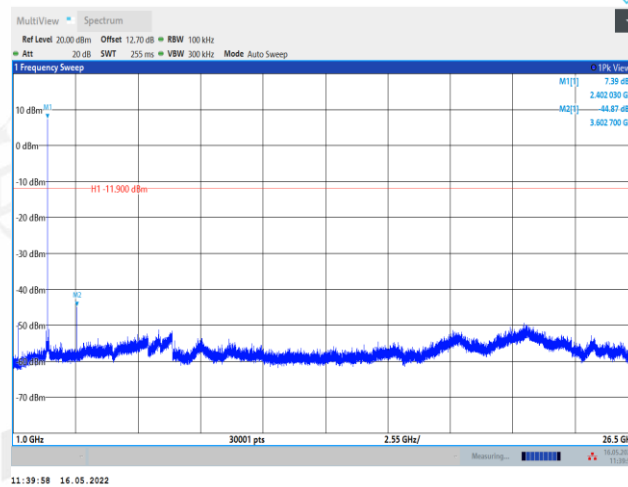
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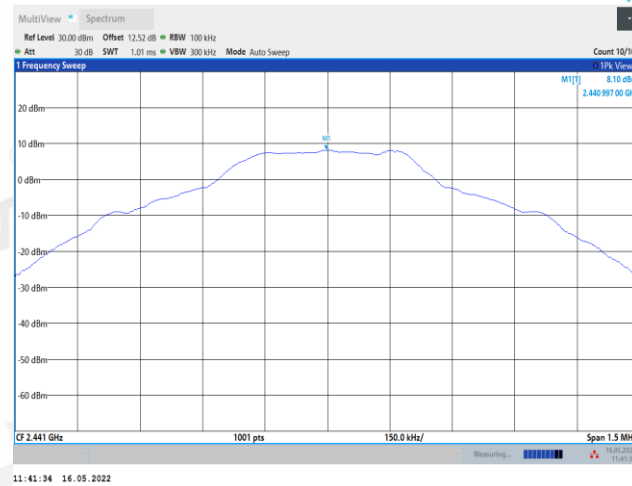
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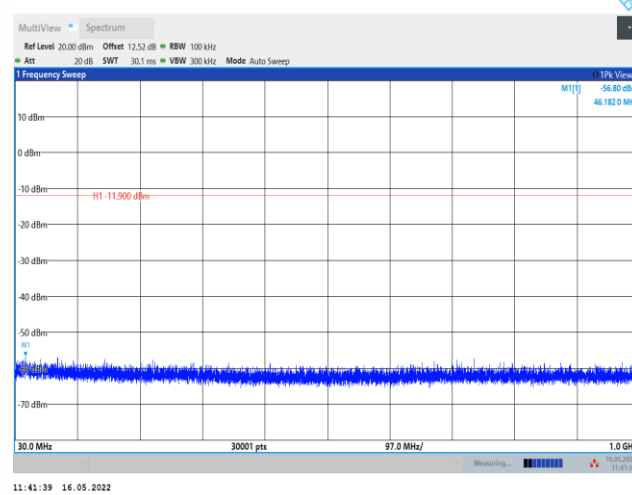
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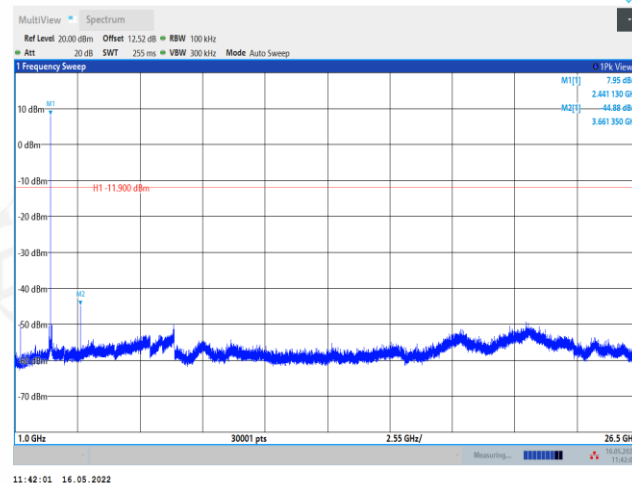
## DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



DH5\_Ant1\_2441\_1000~26500



DH5\_Ant1\_2480\_0~Reference