

# MEASUREMENT REPORT

## FCC PART 15.247 Bluetooth

Report No.: S202305185940E07

Issue Date: 07-19-2023

**Applicant:** ADDASOUND DENMARK A/S  
**Address:** Skalhuse 5, DK-9240 Nibe, Denmark  
**FCC ID:** 2AHSPINSPIRE16PRO  
**Product:** Bluetooth headset  
**Model No.:** INSPIRE16PRO  
**FCC Classification:** FCC Part 15 Spread Spectrum Transmitter (DSS)  
**FCC Rule Part(s):** Part 15 Subpart C (15.247)  
**Test Procedure(s):** ANSI C63.10-2013, KDB 558074 D01v05r02  
**Result:** Pass  
**Item Receipt Date:** May 19, 2023  
**Test Date:** Jul 1~ Jul 6, 2023

Compiled By



(Amos Xia)

Senior Test Engineer

Approved By



(Line Chen)

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The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.4-2014. Test results reported herein relate only to the item(s) tested. The test report shall not be reproduced except in full without the written approval of Fangguang Inspection & Testing Co., Ltd. Wuxi Branch

The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

### Revision History

Report No.	Version	Description	Issue Date
S202305185940E07	Rev. 01	/	07-19-2023

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## §2.1033 General Information

<b>Applicant:</b>	ADDASOUND DENMARK A/S
<b>Applicant Address:</b>	Skalhuse 5, DK-9240 Nibe, Denmark
<b>Manufacturer:</b>	ADDASOUND DENMARK A/S
<b>Manufacturer Address:</b>	Skalhuse 5, DK-9240 Nibe, Denmark
<b>Test Site:</b>	Fangguang Inspection & Testing Co., Ltd.
<b>LAB ID:</b>	CN5037
<b>Test Site Address:</b>	G9 Building, China Sensor Network International Innovation Park No.200, Linghu Avenue Wuxi, Jiangsu 214000 China
<b>FCC Rule Part(s):</b>	Part 15 Subpart C (15.247)
<b>FCC ID:</b>	2AHSPINSPIRE16PRO
<b>Test Device Serial No.:</b>	S/N.: INS169104001 <input type="checkbox"/> Production <input checked="" type="checkbox"/> Pre-Production <input type="checkbox"/> Engineering
<b>FCC Classification:</b>	FCC Part 15 Spread Spectrum Transmitter (DSS)

## **1. INTRODUCTION**

### **1.1. Scope**

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

### **1.2. FANGGUANG Test Location**

These measurement tests were performed at the Fangguang Inspection and testing Co.,LTD located at 200 Linghu Avenue, Xinwu District, Wuxi City. The detailed description of the measurement facility was found to be in compliance with the requirements of ANSI C63.4-2014.

## 2. PRODUCT INFORMATION

### 2.1. Equipment Description

Product Name:	Bluetooth headset
Model Name:	INSPIRE16PRO
Trade Mark:	 ADDASOUND/艾德声/ADDA
Input Voltage Range:	Battery: 3.7V
Bluetooth Version:	5.2

### 2.2. Product Specification Subjective to this Standard

Operating Frequency:	2402~2480MHz
Channel Number:	79
Type of modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Data Rate:	1Mbps(GFSK), 2Mbps( $\pi/4$ DQPSK), 3Mbps (8DPSK)
Antenna Type:	Integral Antenna
Antenna Gain:	2 dBi

The equipment under test (EUT) is the **Bluetooth headset**. The test data contained in this report pertains only to the emissions due to the EUT's Bluetooth transmitter.

- 15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.
- 15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate its channels selection/ hopping sequence with other frequency hopping systems for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters.
- 15.247(h): The EUT employs Adaptive Frequency Hopping (AFH) which identifies sources of interference namely devices operating in 802.11 WLAN and excludes them from the list of available channels. The process of re-mapping reduces the number of test channels from 79 channels to a minimum number of 20 channels.



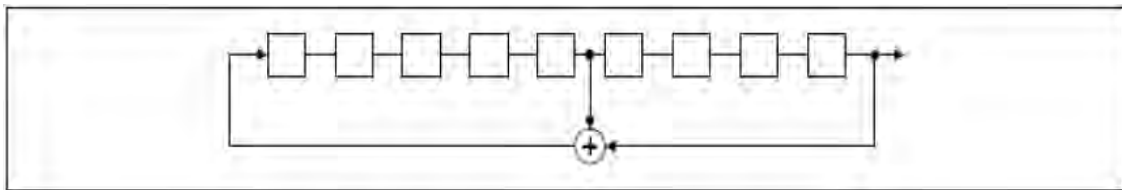
### 2.3. Operation Frequency / Channel List

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz
03	2405 MHz	04	2406 MHz	05	2407 MHz
06	2408 MHz	07	2409 MHz	08	2410 MHz
09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz
15	2417 MHz	16	2418 MHz	17	2419 MHz
18	2420 MHz	19	2421 MHz	20	2422 MHz
21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz
27	2429 MHz	28	2430 MHz	29	2431 MHz
30	2432 MHz	31	2433 MHz	32	2434 MHz
33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz
39	2441 MHz	40	2442 MHz	41	2443 MHz
42	2444 MHz	43	2445 MHz	44	2446 MHz
45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz
51	2453 MHz	52	2454 MHz	53	2455 MHz
54	2456 MHz	55	2457 MHz	56	2458 MHz
57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz
63	2465 MHz	64	2466 MHz	65	2467 MHz
66	2468 MHz	67	2469 MHz	68	2470 MHz
69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz
75	2477 MHz	76	2478 MHz	77	2479 MHz
78	2480 MHz	-	-	-	-

## 2.4. Pseudorandom Frequency Hopping Sequence

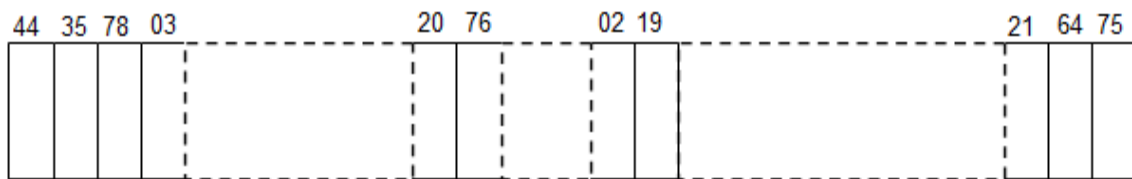
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9<sup>th</sup> stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONES; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence:  $2^9 - 1 = 511$  bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:



Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their Corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

## 2.5. Device Capabilities

This device contains the following capabilities:Bluetooth (5.1)

**Note:** The maximum achievable duty cycle was determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 8MHz. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Test Mode	Duty Cycle
DH5	77.07%
2DH5	77.13%
3DH5	75.73%

## 2.6. Description of Test Software

The test utility software used during testing was “BlueTest3”, the version was v 3.3.6, and the emission setting value is the software default value.

## 2.7. Test Configuration

The EUT was tested per the guidance of ANSI C63.10-2013. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

## 2.8. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

## 2.9. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.

## 2.10. Calculation with all conversion and correction factors used

For AC Line Conducted Emissions Test:

Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

For Radiated Emissions Below 1GHz Test:

Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

For Radiated Emissions Above 1GHz Test:

Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB).

### 3. DESCRIPTION of TEST

#### 3.1. Evaluation Procedure

The measurement procedures described in the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the “Filing were used in the measurement of the EUT.

**Deviation from measurement procedure.....None**

#### 3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 9'x4'x4' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions were used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

### 3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. The turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions. According to 3dB Beamwidth of horn antenna, the horn antenna should be always directed to the EUT when rising height.

## 4. ANTENNA REQUIREMENTS

### **Excerpt from §15.203 of the FCC Rules/Regulations:**

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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.”

- Use a unique coupling to the intentional radiator.

## 5. TEST EQUIPMENT CALIBRATION DATE

### Conducted Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR3	FWXGJC-2016-181	1 year	2024/03/14
Two-Line V-Network	R&S	ENV 216	FWXGJC-2016-182	1 year	2024/05/14
Thermohygrometer	Yuhuaze	HTC-1	FWXDA-2016-385	1 year	2024/03/21

### Radiated Emission

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Loop Antenna	Schwarzbeck	FMZB 1519B	FWXGJC-2018-015	3 year	2024/08/13
Bi-Log Antenna	R&S	HL562E	FWXGJC-2016-267-06	1 year	2024/03/10
Broadband Horn Antenna	R&S	HF907	FWXGJC-2016-267-07	1 year	2024/03/02
Broadband Horn Antenna	Schwarzbeck	BBHA9170	FWXGJC-2018-016	3 year	2024/06/04
EMI Receiver	R&S	ESR26	FWXGJC-2016-267-01	1 year	2023/11/08
Pre-Amplifier	R&S	SCU-18D	FWXGJC-2016-267-05	1 year	2023/11/17
Pre-Amplifier	R&S	EMC184055 SE	FWXGJC-2018-018	3 year	2025/04/13
Thermohygrometer	Yuhuaze	HTC-1	FWXDA-2016-386	1 year	2023/11/21
Anechoic Chamber	Aimuke	EMCCT-3	FWXGJC-2016-270	3 year	2025/06/07

### Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	Keysight	N9010B	FWXGJC-2018-010	1 year	2024/03/13
RF Control Unit	Toncend	JS0806-2	FWXGJC-2018-013	1 year	2024/05/14
Thermohygrometer	Yuhuaze	HTC-1	FWXDA-2016-385	1 year	2024/03/21

Test Software	Manufacturer	Version	Asset No.	Function
EMI Test Software	tonscend	V2.5.0.0	FWXWA-2018-004	Emission Test
RF Test Software	Tonscend	3.2.22	/	/

## 6. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$ .

AC Conducted Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 2.05dB
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 30MHz-1GHz: 3.06dB 1GHz-12.75GHz: 4.13dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 30MHz-1GHz: 1.00 dB 1GHz-26.5GHz: 1.30 dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 0.60dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 0.80dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2Uc(y)$ ): 0.20MHz



## 7. TEST RESULT

### 7.1. Summary

FCC Part Section(s)	IC Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(a)(1)	RSS-247 [5.1]	20dB Bandwidth	N/A	Conducted	PASS	Section 7.2
15.247(b)(1)	RSS-247 [5.4(b)]	Peak Transmitter Output Power	<0.125 Watt if > 75 non- overlapping channels used		PASS	Section 7.3
15.247(a)(1)	RSS-247 [5.1]	Channel Separation	> 2/3 of 20 dB BW for systems with Output Power < 125mW		PASS	Section 7.4
15.247(a)(1)(i) ii)	RSS-247 [5.1]	Number of Channels	> 15 Channels		PASS	Section 7.5
15.247(a)(1)(i) ii)	RSS-247 [5.1]	Time of Occupancy	< 0.4 sec in 31.6 sec period		PASS	Section 7.6
15.247(d)	RSS-247 [5.5]	Band Edge / out-of-Band Emissions	Conducted $\geq$ 20dBc		PASS	Section 7.7 Section 7.8
15.205, 15.209	RSS-247 [5.5]	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	PASS	Section 7.9 Section 7.10
15.207	RSS-Gen [8.8]	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	PASS	Section 7.11

#### Notes:

- 1) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 2) All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.

## 7.2. 20dB Bandwidth Measurement

### 7.2.1.Test Limit

N/A

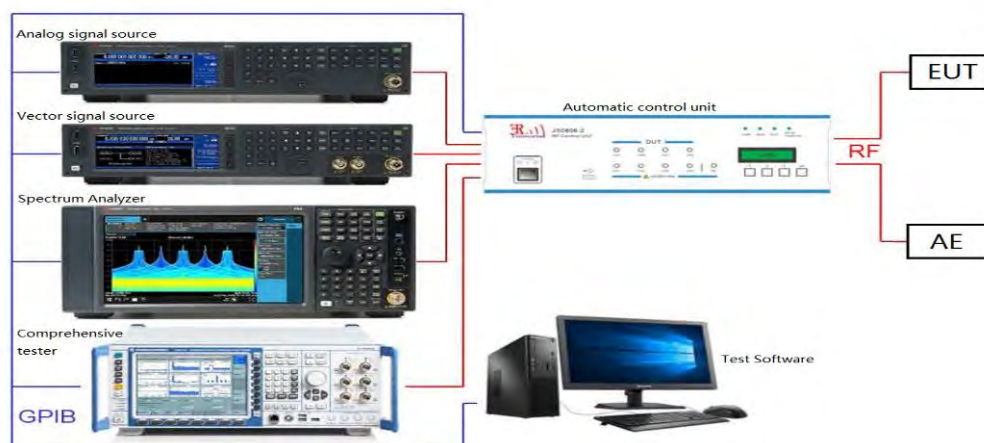
### 7.2.2.Test Procedure used

ANSI C63.10-2013 - Section 6.9.2

### 7.2.3.Test Setting

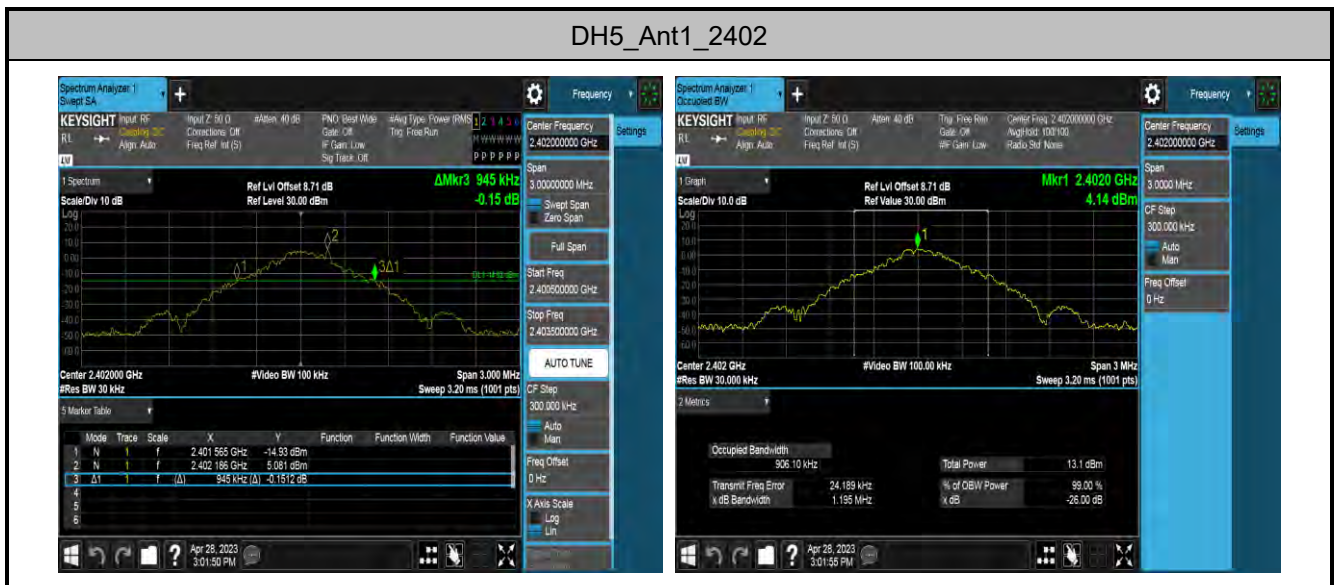
1. Set RBW  $\geq 1\%$  to 5% of the 20dB bandwidth
2. VBW = approximately three times RBW
3. Span = approximately 2 to 5 times the 20dB bandwidth, centered on a hopping channel
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace to stabilize
8. Measure the maximum width 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 relative to the maximum level measured in the fundamental emission.

### 7.2.4.Test Setup



### 7.2.5. Test Result

Test Mode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	99% BW (MHz)	Verdict
DH5	Ant1	2402	0.945	2401.565	2402.510	0.90610	PASS
		2441	0.981	2440.535	2441.516	0.86286	PASS
		2480	1.038	2479.508	2480.546	0.88924	PASS
2DH5	Ant1	2402	1.359	2401.346	2402.705	1.2219	PASS
		2441	1.344	2440.352	2441.696	1.2041	PASS
		2480	1.353	2479.340	2480.693	1.2096	PASS
3DH5	Ant1	2402	1.302	2401.382	2402.684	1.2073	PASS
		2441	1.302	2440.379	2441.681	1.2096	PASS
		2480	1.326	2479.355	2480.681	1.2148	PASS



## DH5\_Ant1\_2441



## DH5\_Ant1\_2480





## 2DH5\_Ant1\_2402



## 2DH5\_Ant1\_2441



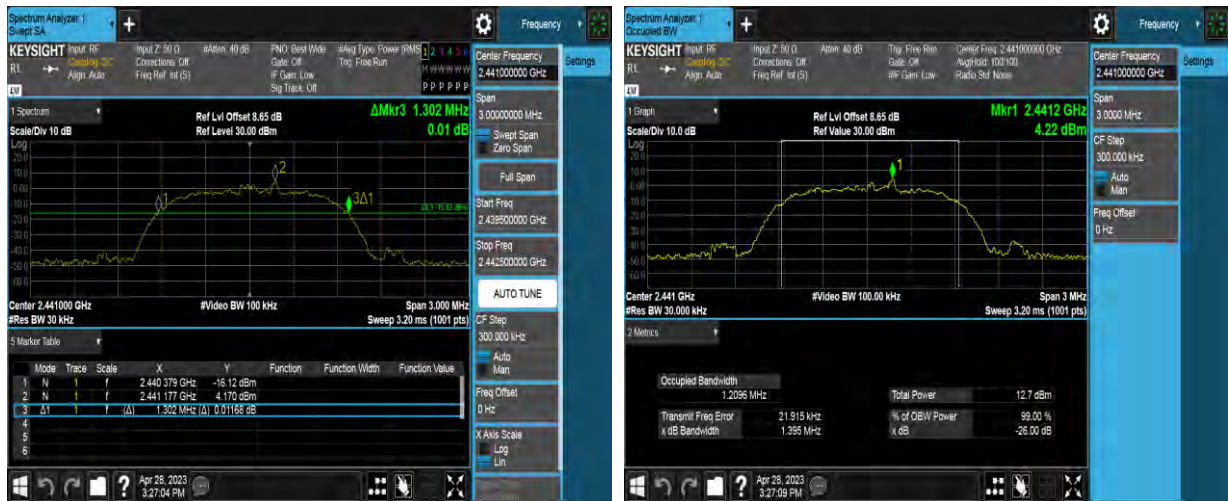
## 2DH5\_Ant1\_2480



## 3DH5\_Ant1\_2402



### 3DH5\_Ant1\_2441



### 3DH5\_Ant1\_2480





### **7.3. Output Power Measurement**

#### **7.3.1. Test Limit**

The maximum out power permissible output power is 1 Watt for frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts. And for antenna gain greater than 6dBi the limit shall reduce by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **7.3.2. Test Procedure Used**

ANSI C63.10-2013 - Section 7.8.5

#### **7.3.3. Test Setting**

1. Set RBW  $\geq$  the 20 dB bandwidth of the emission being measured.
2. VBW  $\geq$  RBW
3. Span = approximately five times the 20dB bandwidth, centered on a hopping channel
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace to stabilize, Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power (don't forget added the external attenuation and cable loss)



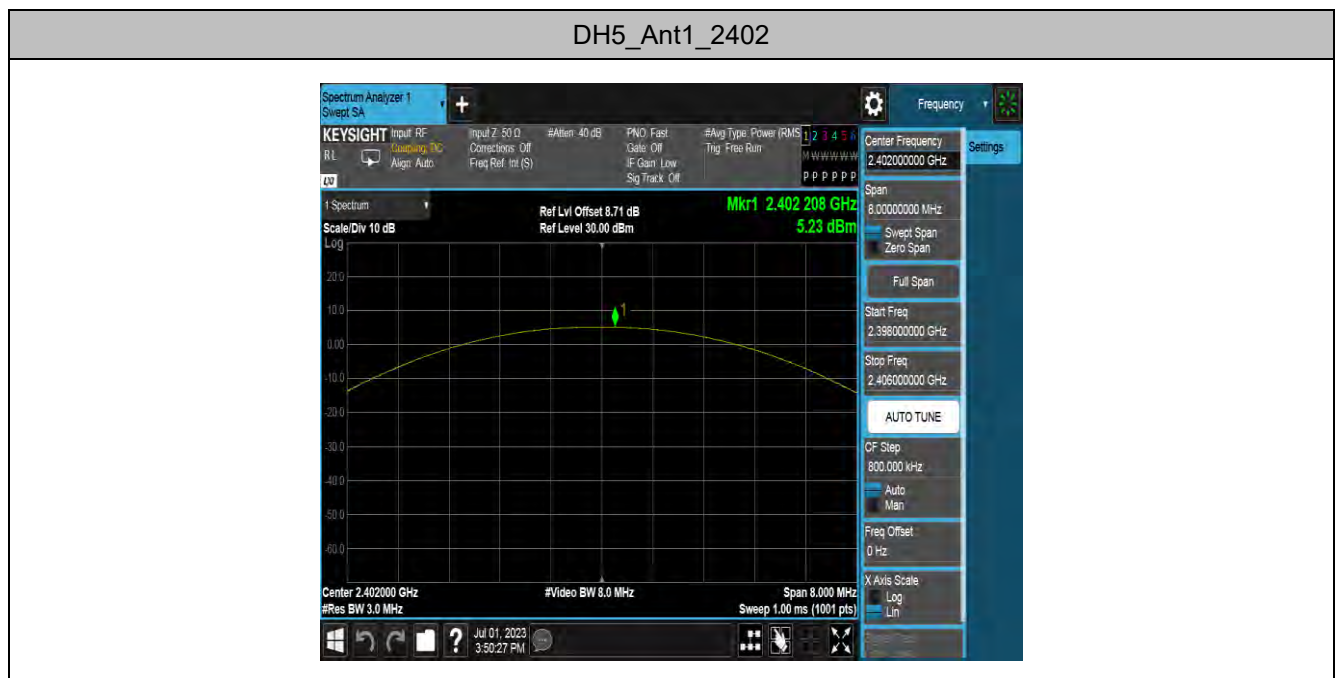
### 7.3.4. Test Setup



### 7.3.5.Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	5.23	≤20.97	PASS
		2441	5.01	≤20.97	PASS
		2480	3.65	≤20.97	PASS
2DH5	Ant1	2402	5.19	≤20.97	PASS
		2441	5.04	≤20.97	PASS
		2480	3.97	≤20.97	PASS
3DH5	Ant1	2402	5.27	≤20.97	PASS
		2441	5.03	≤20.97	PASS
		2480	3.60	≤20.97	PASS

### Test Graphs



### DH5\_Ant1\_2441



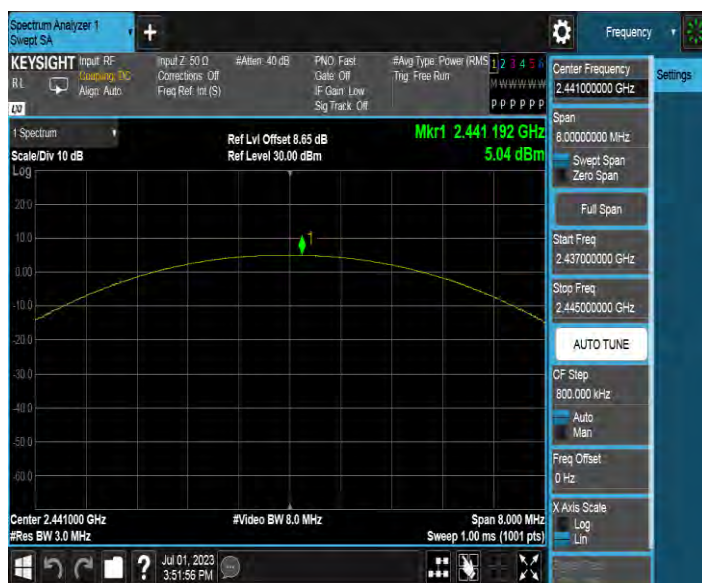
### DH5\_Ant1\_2480



## 2DH5\_Ant1\_2402



## 2DH5\_Ant1\_2441



## 2DH5\_Ant1\_2480



## 3DH5\_Ant1\_2402





## 3DH5\_Ant1\_2441



## 3DH5\_Ant1\_2480



## **7.4. Carrier Frequency Separation Measurement**

### **7.4.1. Test Limit**

For BDR Mode, the minimum permissible channel separation for this system is the value of the 20dB BW. For EDR Mode, the minimum permissible channel separation for this system is 2/3 the value of the 20dB BW.

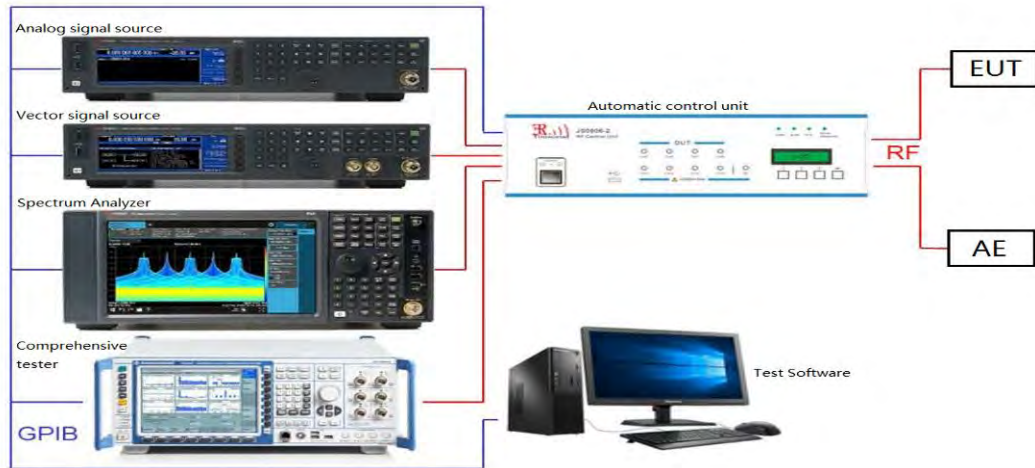
### **7.4.2. Test Procedure Used**

ANSI C63.10-2013 - Section 7.8.2

### **7.4.3. Test Setting**

1. Span = wide enough to capture the peaks of two adjacent channels.
2. Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
3. VBW  $\geq$  RBW
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allowed the trace to stabilize
8. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

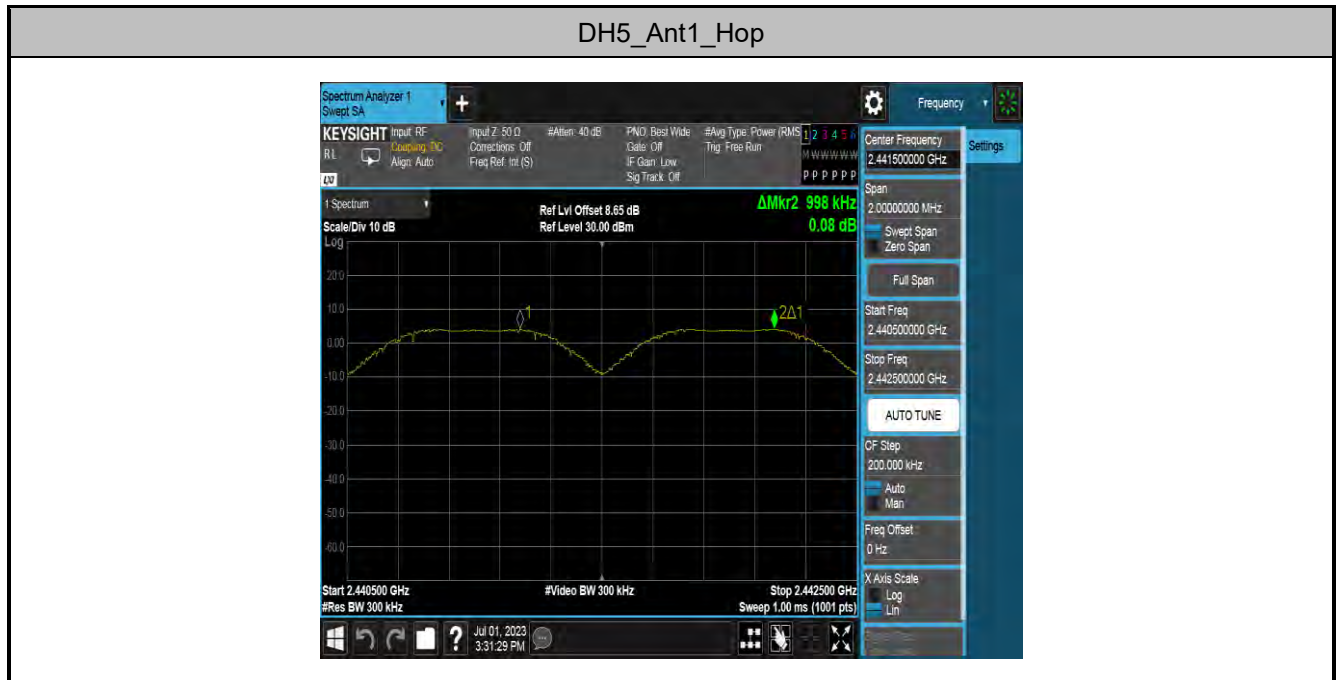
#### 7.4.4. Test Setup





### 7.4.5. Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	0.998	$\geq 0.692$	PASS
2DH5	Ant1	Hop	1.000	$\geq 0.906$	PASS
3DH5	Ant1	Hop	1.320	$\geq 0.884$	PASS



### 2DH5\_Ant1\_Hop



### 3DH5\_Ant1\_Hop



## 7.5. Number of Hopping Channels Measurement

### 7.5.1. Test Limit

This frequency hopping system must employ a minimum of 15 hopping channels.

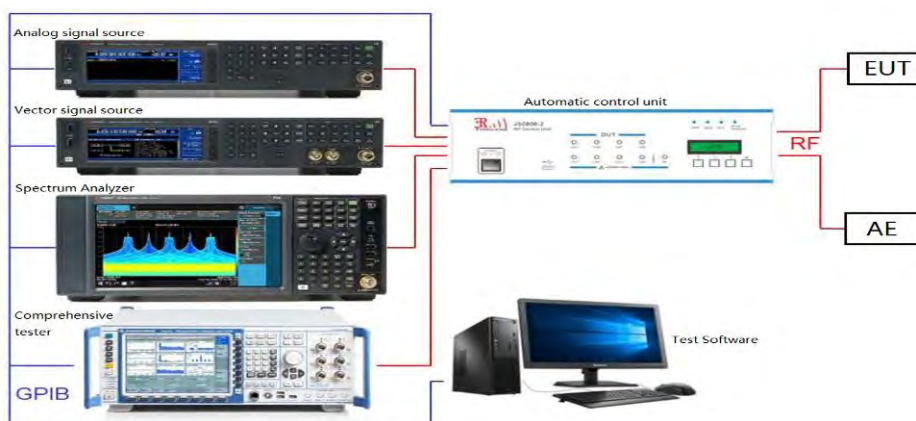
### 7.5.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.3

### 7.5.3. Test Setting

1. Span = the frequency band of operation. Depending on the number of channels the device supports, it may be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
2. 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.
3.  $VBW \geq RBW$
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allow the trace to stabilize

### 7.5.4. Test Setup



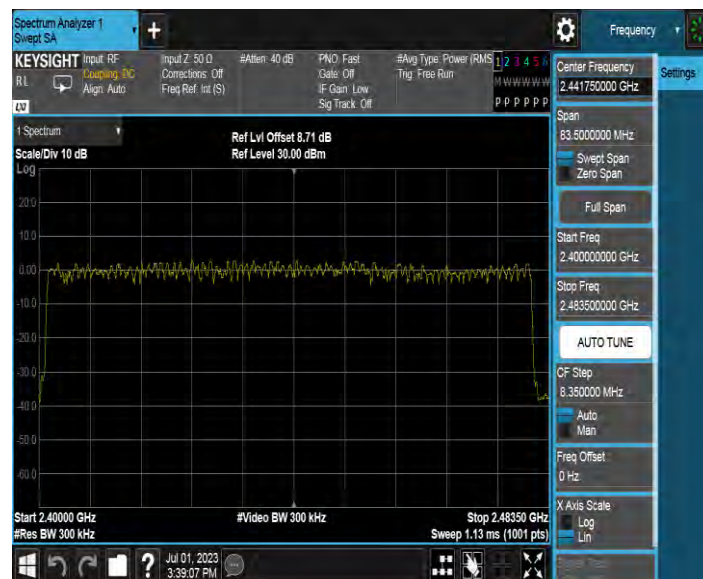
### 7.5.5.Test Result

Test Mode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	$\geq 15$	PASS
2DH5	Ant1	Hop	79	$\geq 15$	PASS
3DH5	Ant1	Hop	79	$\geq 15$	PASS

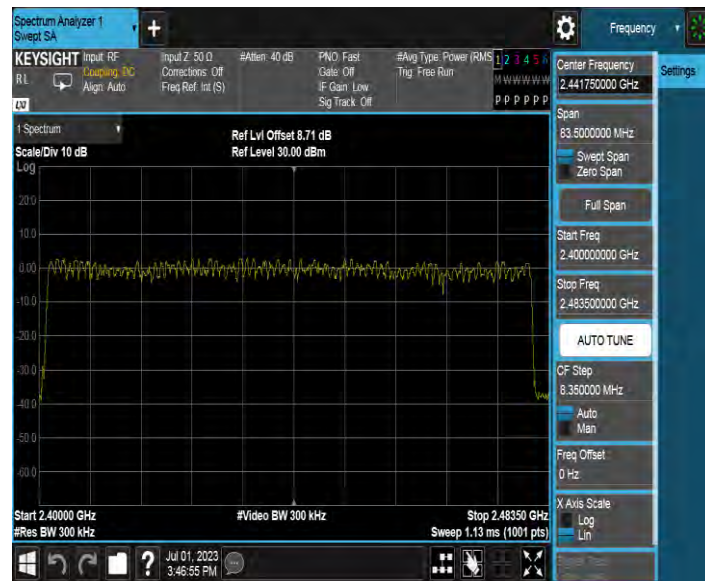
#### DH5\_Ant1\_Hop



#### 2DH5\_Ant1\_Hop



### 3DH5\_Ant1\_Hop



## **7.6. Time of Occupancy Measurement**

### **7.6.1. Test Limit**

The maximum permissible time of occupancy is 400ms within a period of 400ms multiplied by the number of hopping channels employed.

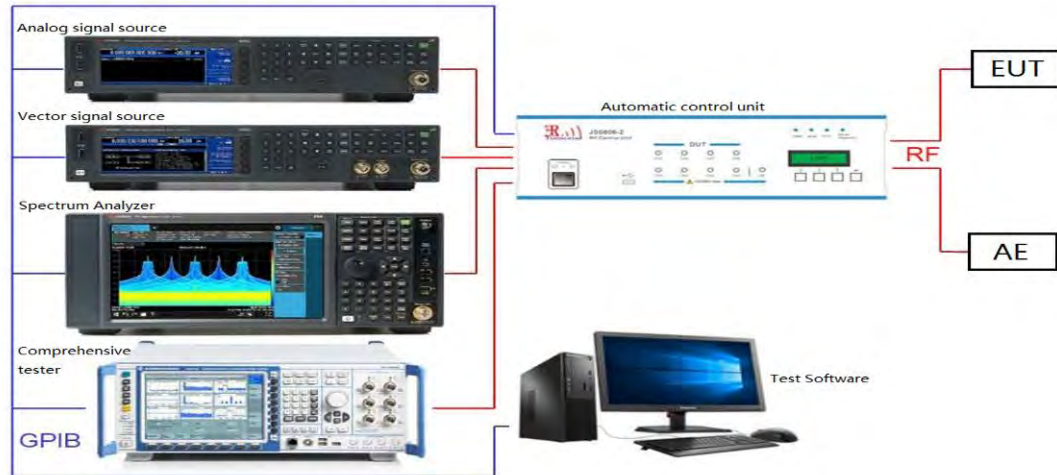
### **7.6.2. Test Procedure Used**

ANSI C63.10-2013 - Section 7.8.4

### **7.6.3. Test Setting**

1. Span = zero span, centered on a hopping channel.
2. RBW shall be  $\leq$  channel spacing and where possible RBW should be set  $\gg 1 / T$ , where T is the expected dwell time per channel.
3. VBW  $\geq$  RBW
4. Sweep time = as necessary to capture the entire dwell time per hopping channel
5. Detector = Peak
6. Trace mode = max hold
7. Use the marker-delta function to determine the transmit time per hop. If this value varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation in transmit time. An oscilloscope may be used instead of a spectrum analyzer. The EUT shall show compliance with the appropriate regulatory limit for the number of hopping channels. A plot of the data shall be included in the test report.

### 7.6.4. Test Setup





**7.6.5.Test Result**

Test Mode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.581	320	0.186	<=0.4	PASS
DH3	Ant1	Hop	1.832	160	0.293	<=0.4	PASS
DH5	Ant1	Hop	2.873	106.67	0.306	<=0.4	PASS
2DH1	Ant1	Hop	0.581	320	0.186	<=0.4	PASS
2DH3	Ant1	Hop	1.517	160	0.243	<=0.4	PASS
2DH5	Ant1	Hop	1.517	106.67	0.162	<=0.4	PASS
3DH1	Ant1	Hop	0.580	320	0.186	<=0.4	PASS
3DH3	Ant1	Hop	1.060	160	0.170	<=0.4	PASS
3DH5	Ant1	Hop	1.059	106.67	0.113	<=0.4	PASS



### DH1\_Ant1\_Hop



### DH3\_Ant1\_Hop



### DH5\_Ant1\_Hop



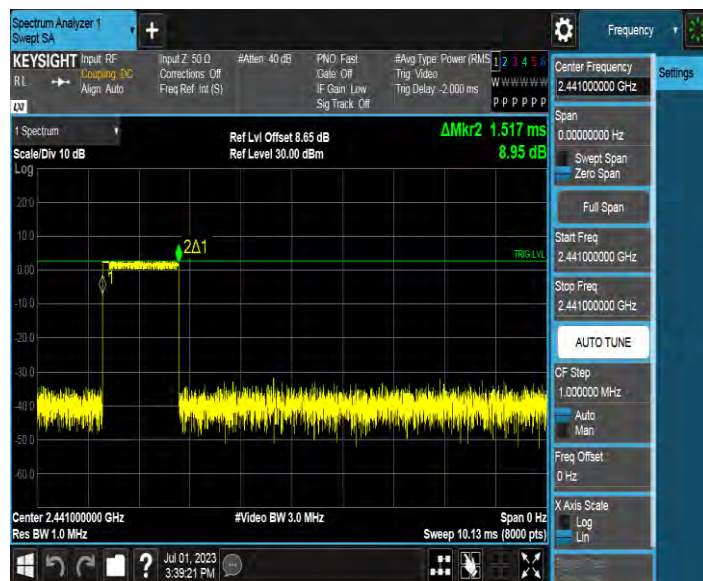
### 2DH1\_Ant1\_Hop



## 2DH3\_Ant1\_Hop



## 2DH5\_Ant1\_Hop



### 3DH1\_Ant1\_Hop



### 3DH3\_Ant1\_Hop





## 3DH5\_Ant1\_Hop



## **7.7. Band-edge Compliance Measurement**

### **7.7.1. Test Limit**

The maximum permissible emission level is 20dBc. Any emissions were lying outside of the emission bandwidth and in authorized band edges to a field strength limit specified in Section 15.209 of the Title 47 CFR.

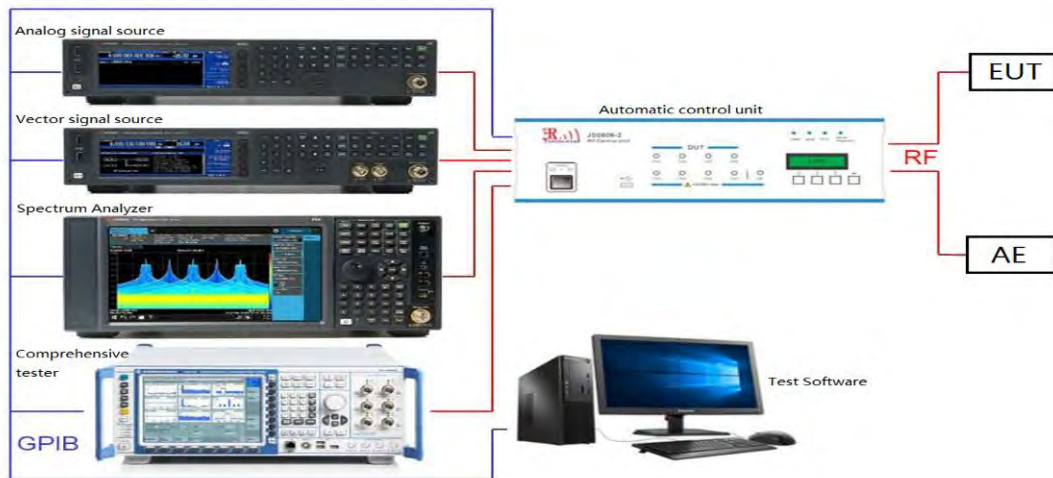
### **7.7.2. Test Procedure Used**

ANSI C63.10-2013 - Section 6.10.4

### **7.7.3. Test Setting**

1. Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize
8. Allow the trace to stabilize. Set the marker on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission.

### 7.7.4. Test Setup



### 7.7.5.Test Result

Test Mode	Antenna	Ch Name	Channel	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.97	-42.84	≤-15.03	PASS
		High	2480	3.50	-45.62	≤-16.5	PASS
		Low	Hop_2402	2.41	-50.18	≤-17.59	PASS
		High	Hop_2480	3.15	-50.01	≤-16.85	PASS
2DH5	Ant1	Low	2402	5.01	-43.96	≤-14.99	PASS
		High	2480	3.37	-46.02	≤-16.63	PASS
		Low	Hop_2402	0.89	-50.54	≤-19.11	PASS
		High	Hop_2480	0.81	-50.18	≤-19.2	PASS
3DH5	Ant1	Low	2402	5.05	-42.81	≤-14.95	PASS
		High	2480	3.47	-45.79	≤-16.53	PASS
		Low	Hop_2402	1.62	-50.19	≤-18.39	PASS
		High	Hop_2480	-0.48	-50.28	≤-20.48	PASS



## Test Graphs

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





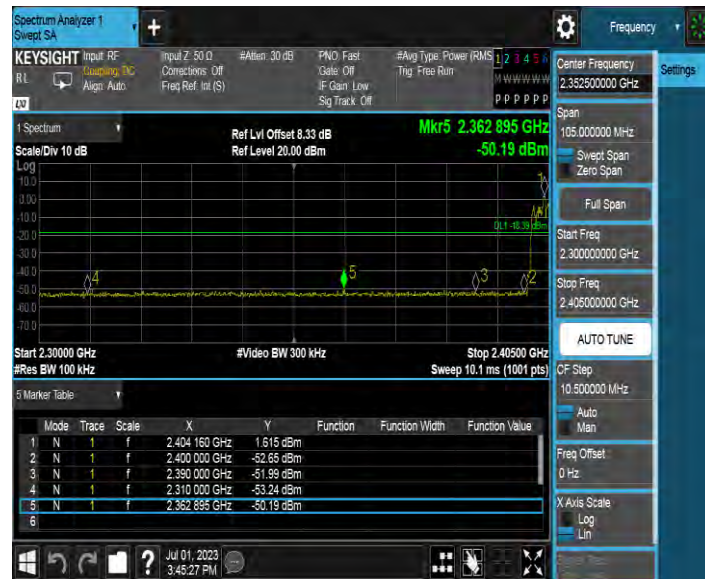
### 3DH5\_Ant1\_Low\_2402



### 3DH5\_Ant1\_High\_2480



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



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



## **7.8. Conducted Spurious Emissions Measurement**

### **7.8.1. Test Limit**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

### **7.8.2. Test Procedure Used**

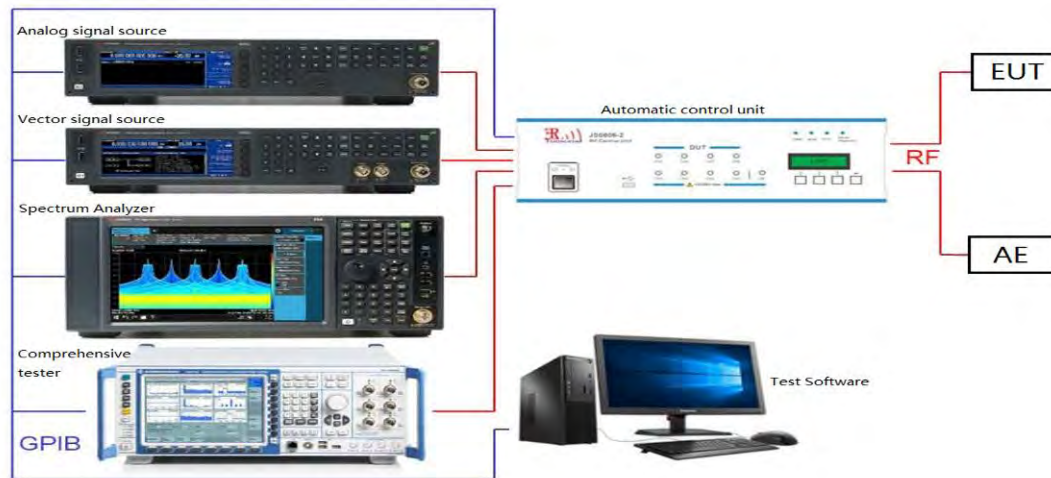
ANSI C63.10-2013 - Section 7.8.8

### **7.8.3. Test Setting**

1. Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic.  
Typically, several plots are required to cover this entire span.
2. RBW = 100 KHz
3. VBW  $\geq$  RBW
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize
8. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this section.



## 7.8.4.Test Setup



### 7.8.5.Test Result

Test Mode	Antenna	Channel	Freq Range [MHz]	Ref Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	4.99	4.99	---	PASS
			30~1000	4.99	-61.51	≤-15.01	PASS
			1000~26500	4.99	-52.81	≤-15.01	PASS
		2441	Reference	4.84	4.84	---	PASS
			30~1000	4.84	-60.75	≤-15.16	PASS
			1000~26500	4.84	-52.41	≤-15.16	PASS
		2480	Reference	3.43	3.43	---	PASS
			30~1000	3.43	-61.56	≤-16.57	PASS
			1000~26500	3.43	-51.44	≤-16.57	PASS
2DH5	Ant1	2402	Reference	4.95	4.95	---	PASS
			30~1000	4.95	-60.75	≤-15.05	PASS
			1000~26500	4.95	-52.09	≤-15.05	PASS
		2441	Reference	4.83	4.83	---	PASS
			30~1000	4.83	-61.43	≤-15.17	PASS
			1000~26500	4.83	-42.4	≤-15.17	PASS
		2480	Reference	3.36	3.36	---	PASS
			30~1000	3.36	-61.81	≤-16.64	PASS
			1000~26500	3.36	-52.52	≤-16.64	PASS
3DH5	Ant1	2402	Reference	5.05	5.05	---	PASS
			30~1000	5.05	-61.43	≤-14.95	PASS
			1000~26500	5.05	-52.09	≤-14.95	PASS
		2441	Reference	4.84	4.84	---	PASS
			30~1000	4.84	-61.71	≤-15.16	PASS
			1000~26500	4.84	-52.28	≤-15.16	PASS
		2480	Reference	3.47	3.47	---	PASS
			30~1000	3.47	-60.9	≤-16.53	PASS
			1000~26500	3.47	-52.24	≤-16.53	PASS

## Test Graphs

DH5\_Ant1\_2402\_0~Reference



DH5\_Ant1\_2402\_30~1000



### DH5\_Ant1\_2402\_1000~26500



### DH5\_Ant1\_2441\_0~Reference



### DH5\_Ant1\_2441\_30~1000



### DH5\_Ant1\_2441\_1000~26500





### DH5\_Ant1\_2480\_0~Reference



### DH5\_Ant1\_2480\_30~1000



### DH5\_Ant1\_2480\_1000~26500



### 2DH5\_Ant1\_2402\_0~Reference





## 2DH5\_Ant1\_2402\_30~1000



## 2DH5\_Ant1\_2402\_1000~26500



## 2DH5\_Ant1\_2441\_0~Reference



## 2DH5\_Ant1\_2441\_30~1000



## 2DH5\_Ant1\_2441\_1000~26500



## 2DH5\_Ant1\_2480\_0~Reference



## 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



## 3DH5\_Ant1\_2441\_0~Reference



## 3DH5\_Ant1\_2441\_30~1000



## 3DH5\_Ant1\_2441\_1000~26500





## 3DH5\_Ant1\_2480\_0~Reference



## 3DH5\_Ant1\_2480\_30~1000



## 3DH5\_Ant1\_2480\_1000~26500



## 7.9. Radiated Spurious Emission Measurement

### 7.9.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

### 7.9.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

### 7.9.3. Test Setting

#### **Quasi-Peak Measurements below 1GHz**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

**Table 1 - RBW as a function of frequency**

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

#### **Peak Measurements above 1GHz**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

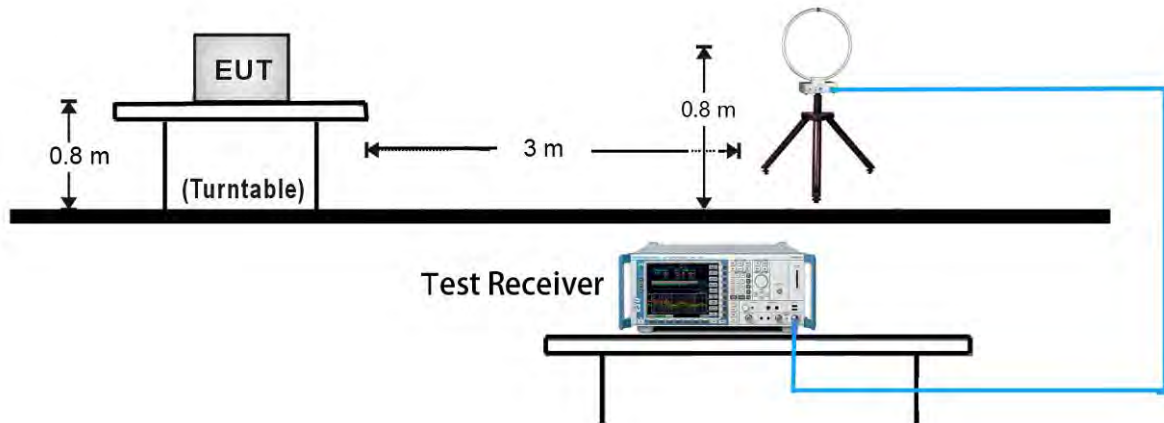
#### **Average Measurements above 1GHz (Method VB)**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set VBW = 10 Hz.  
If the EUT duty cycle is  $< 98\%$ , set  $VBW \geq 1/T$ . T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto

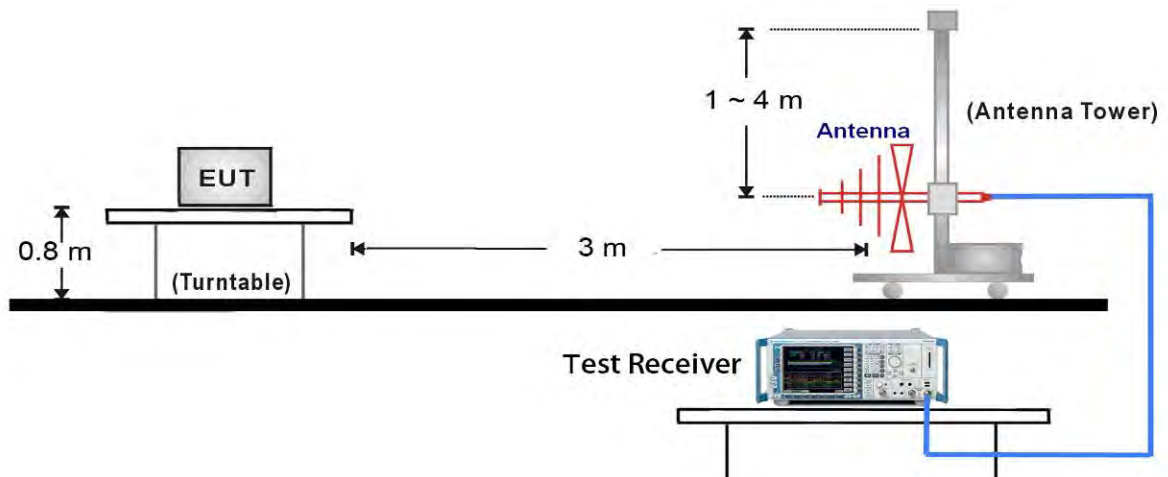
6. Trace mode = max hold
7. Trace was allowed to stabilize

#### 7.9.4. Test Setup

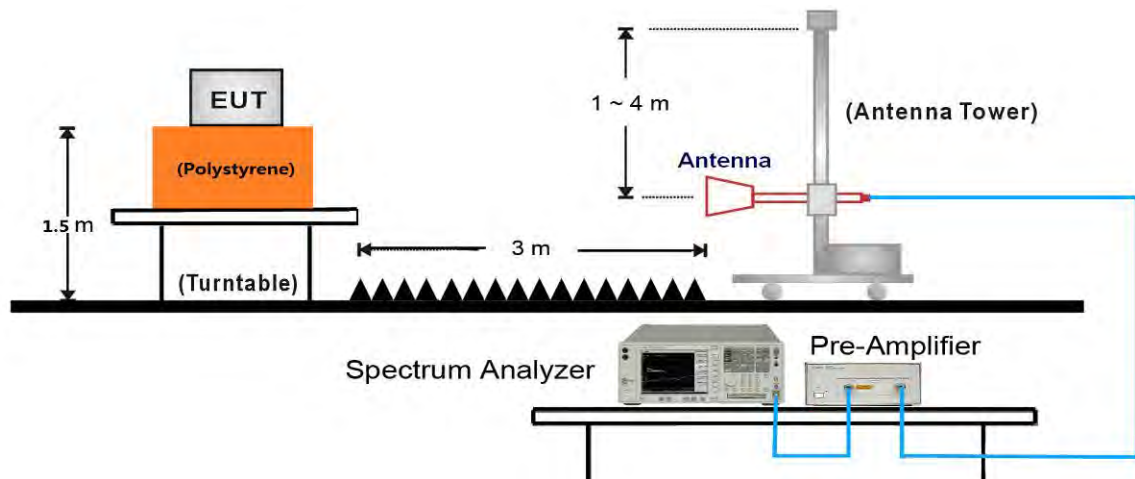
##### 9kHz ~ 30MHz Test Setup:



##### 30MHz ~ 1GHz Test Setup:



##### 1GHz ~ 26.5GHz Test Setup:



### 7.9.5.Test Result

Test Mode:	DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	00	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
3600.0000	39.70	4.01	74.00	34.30	Peak	Horizontal
4700.0000	42.20	6.97	74.00	31.80	Peak	Horizontal
5735.0000	44.50	10.17	74.00	29.50	Peak	Horizontal
6885.0000	46.51	14.06	74.00	27.49	Peak	Horizontal
3580.0000	40.36	3.93	74.00	33.64	Peak	Vertical
4240.0000	41.68	5.82	74.00	32.32	Peak	Vertical
5315.0000	44.23	8.87	74.00	29.77	Peak	Vertical
7040.0000	47.91	14.16	74.00	26.09	Peak	Vertical



Test Mode:	DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	39	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dB $\mu$ V/m)	Factor (dB)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
3435.0000	40.66	3.73	74.00	33.34	Peak	Horizontal
4865.0000	42.56	7.16	74.00	31.44	Peak	Horizontal
6045.0000	45.29	10.94	74.00	28.71	Peak	Horizontal
7315.0000	50.59	14.84	74.00	23.41	Peak	Horizontal
3400.0000	39.79	3.64	74.00	34.21	Peak	Vertical
3900.0000	40.87	4.73	74.00	33.13	Peak	Vertical
5300.0000	44.06	8.83	74.00	29.94	Peak	Vertical
7050.0000	49.56	14.16	74.00	24.44	Peak	Vertical

Test Mode:	DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	78	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dB $\mu$ V/m)	Factor (dB)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
3350.0000	39.48	3.71	74.00	34.52	Peak	Horizontal
4935.0000	42.15	7.30	74.00	31.85	Peak	Horizontal
5805.0000	45.46	10.23	74.00	28.54	Peak	Horizontal
6850.0000	47.57	13.90	74.00	26.43	Peak	Horizontal
3340.0000	39.73	3.69	74.00	34.27	Peak	Vertical
4545.0000	43.02	7.08	74.00	30.98	Peak	Vertical
5620.0000	44.29	9.96	74.00	29.71	Peak	Vertical
6135.0000	45.50	11.31	74.00	28.50	Peak	Vertical

Test Mode:	2DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	00	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dB $\mu$ V/m)	Factor (dB)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
3360.0000	39.83	3.69	74.00	34.17	Peak	Horizontal
4445.0000	42.29	6.61	74.00	31.71	Peak	Horizontal
5470.0000	44.08	9.93	74.00	29.92	Peak	Horizontal
6920.0000	49.28	14.08	74.00	24.72	Peak	Horizontal
3400.0000	39.69	3.64	74.00	34.31	Peak	Vertical
3990.0000	40.79	5.09	74.00	33.21	Peak	Vertical
4665.0000	43.01	6.90	74.00	30.99	Peak	Vertical
6270.0000	46.08	11.68	74.00	27.92	Peak	Vertical

Test Mode:	2DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	39	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dB $\mu$ V/m)	Factor (dB)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
3655.0000	39.81	4.09	74.00	34.19	Peak	Horizontal
4380.0000	41.68	6.34	74.00	32.32	Peak	Horizontal
4800.0000	42.82	7.11	74.00	31.18	Peak	Horizontal
5660.0000	44.32	9.99	74.00	29.68	Peak	Horizontal
3620.0000	39.77	4.04	74.00	34.23	Peak	Vertical
4240.0000	41.95	5.82	74.00	32.05	Peak	Vertical
5590.0000	44.63	9.91	74.00	29.37	Peak	Vertical
6750.0000	46.47	13.13	74.00	27.53	Peak	Vertical

Test Mode:	2DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	78	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
3615.0000	40.09	4.03	74.00	33.91	Peak	Horizontal
4280.0000	42.20	5.93	74.00	31.80	Peak	Horizontal
4940.0000	42.44	7.30	74.00	31.56	Peak	Horizontal
5660.0000	45.21	9.99	74.00	28.79	Peak	Horizontal
3405.0000	39.62	3.65	74.00	34.38	Peak	Vertical
3975.0000	40.72	5.02	74.00	33.28	Peak	Vertical
4540.0000	42.92	7.07	74.00	31.08	Peak	Vertical
5665.0000	44.97	10.00	74.00	29.03	Peak	Vertical

Test Mode:	3DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	00	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dB $\mu$ V/m)	Factor (dB)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
3480.0000	39.55	3.71	74.00	34.45	Peak	Horizontal
3965.0000	40.31	4.97	74.00	33.69	Peak	Horizontal
4370.0000	42.31	6.34	74.00	31.69	Peak	Horizontal
5235.0000	43.71	8.67	74.00	30.29	Peak	Horizontal
3700.0000	39.53	4.13	74.00	34.47	Peak	Vertical
4420.0000	42.29	6.46	74.00	31.71	Peak	Vertical
5550.0000	44.53	9.77	74.00	29.47	Peak	Vertical
6105.0000	46.13	11.08	74.00	27.87	Peak	Vertical



Test Mode:	3DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	39	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dB $\mu$ V/m)	Factor (dB)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
3290.0000	40.02	3.69	74.00	33.98	Peak	Horizontal
4010.0000	40.61	5.15	74.00	33.39	Peak	Horizontal
4500.0000	42.70	6.98	74.00	31.30	Peak	Horizontal
5320.0000	44.73	8.88	74.00	29.27	Peak	Horizontal
3410.0000	40.82	3.67	74.00	33.18	Peak	Vertical
4445.0000	42.60	6.61	74.00	31.40	Peak	Vertical
5560.0000	44.73	9.81	74.00	29.27	Peak	Vertical
6845.0000	47.34	13.85	74.00	26.66	Peak	Vertical

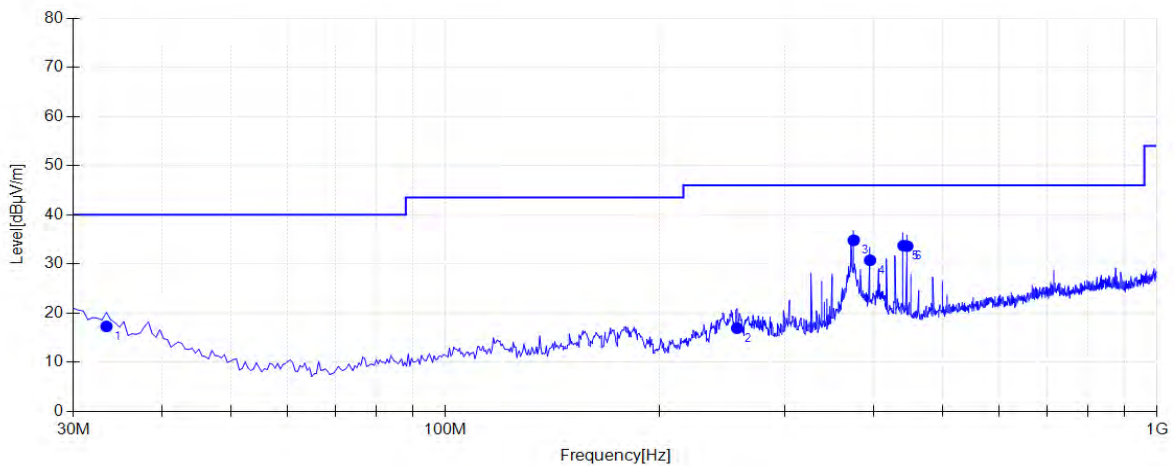
Test Mode:	3DH5 - Ant 1	Test Date:	2023-07-06
Test Channel:	78	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. This is the worst case of Radiated Emission for 1-18GHz.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
3355.0000	39.59	3.70	74.00	34.41	Peak	Horizontal
3890.0000	40.90	4.72	74.00	33.10	Peak	Horizontal
5000.0000	42.39	7.66	74.00	31.61	Peak	Horizontal
5770.0000	44.54	10.22	74.00	29.46	Peak	Horizontal
3000.0000	37.13	4.20	74.00	36.87	Peak	Vertical
3325.0000	39.45	3.68	74.00	34.55	Peak	Vertical
4160.0000	42.06	5.48	74.00	31.94	Peak	Vertical
4830.0000	42.55	7.10	74.00	31.45	Peak	Vertical

### The Worst Case of Radiated Emission below 1GHz:

EUT:	Bluetooth headset	Polarity:	Horizontal
Model:	INSPIRE16PRO	SN:	INS169104001
Mode:	Transmit by 3DH5 at Channel 00	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia

### Test Graph

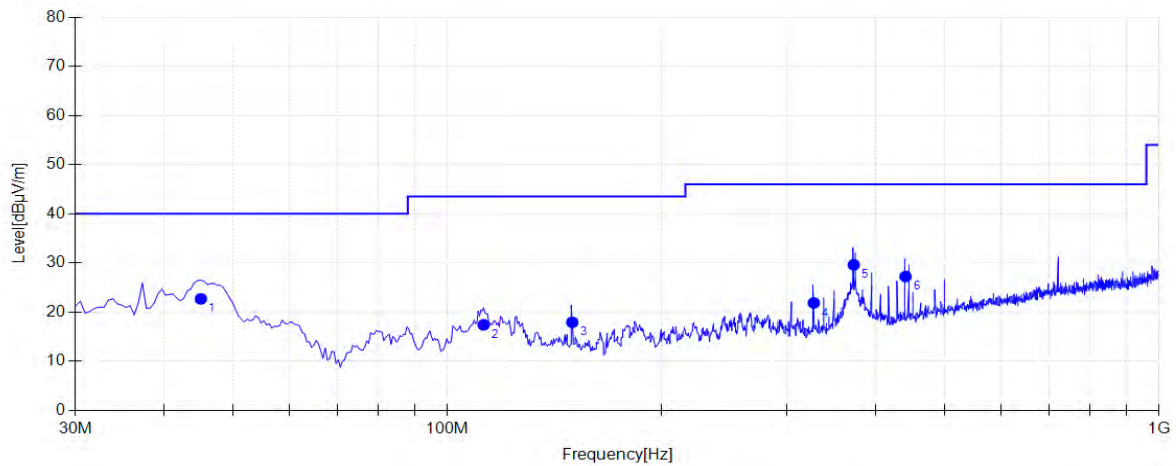


Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.3950	17.99	17.30	40.00	22.70	100	157	Horizontal
2	256.980	11.88	16.93	46.00	29.07	100	207	Horizontal
3	374.835	15.33	34.83	46.00	11.17	100	336	Horizontal
4	395.205	15.66	30.76	46.00	15.24	100	1	Horizontal
5	440.310	17.24	33.72	46.00	12.28	100	356	Horizontal
6	445.645	17.44	33.61	46.00	12.39	100	350	Horizontal

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

EUT:	Bluetooth headset	Polarity:	Vertical
Model:	INSPIRE16PRO	SN:	INS169104001
Mode:	Transmit by 3DH5 at Channel 00	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia

### 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	45.0350	12.06	22.70	40.00	17.30	100	148	Vertical
2	112.450	11.50	17.43	43.50	26.07	100	354	Vertical
3	149.795	10.84	17.93	43.50	25.57	200	46	Vertical
4	327.305	14.39	21.88	46.00	24.12	200	227	Vertical
5	372.410	15.29	29.63	46.00	16.37	200	206	Vertical
6	440.310	17.24	27.23	46.00	18.77	200	206	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

## 7.10. Radiated Restricted Band Edge Measurement

### For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (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	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 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 - 156.525	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	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

#### 7.10.1.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

#### 7.10.2.Test Setting

##### Peak Field Strength Measurements

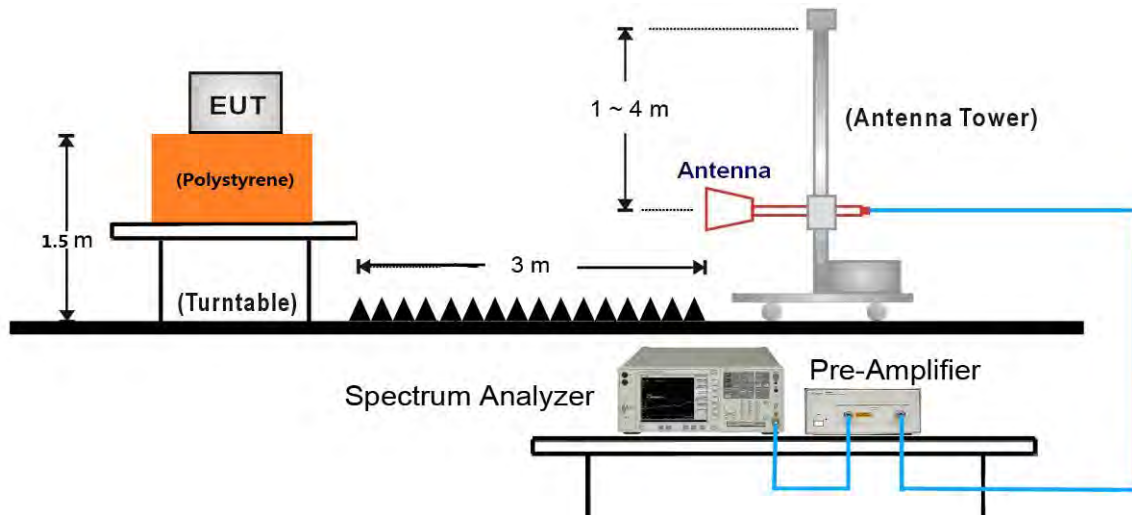
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize



### **Average Measurements above 1GHz (Method VB)**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set VBW = 10 Hz.  
If the EUT duty cycle is  $< 98\%$ , set VBW  $\geq 1/T$ . T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

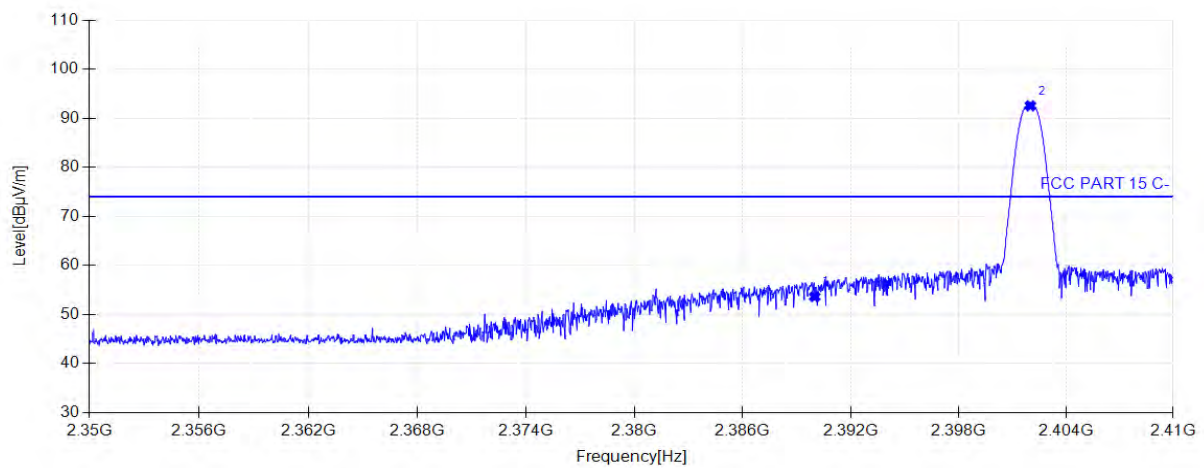
#### **7.10.3.Test Setup**



#### 7.10.4.Test Result

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

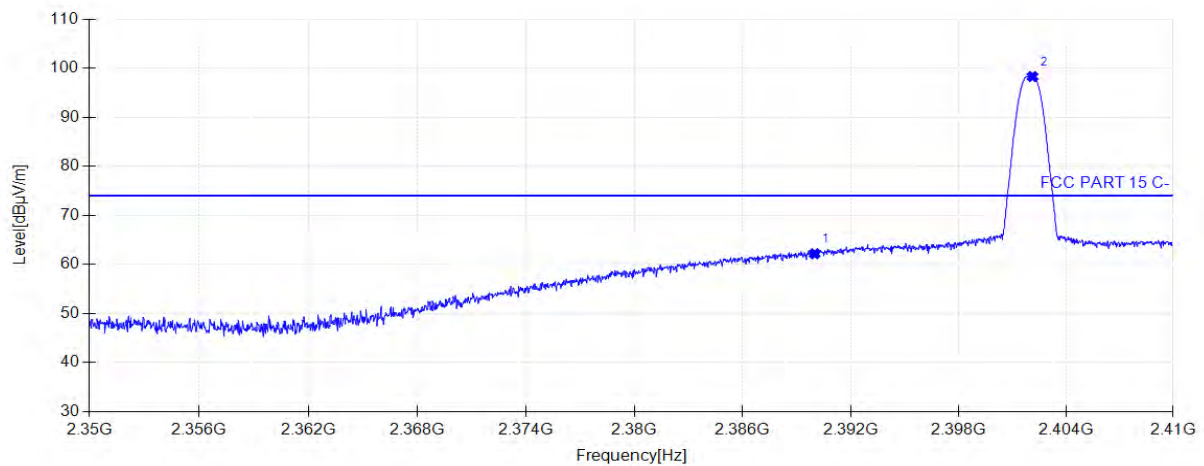
#### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	53.63	32.74	74.00	20.37	160	152	Horizontal
2	2402.02	92.53	32.80	74.00	-18.53	160	90	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

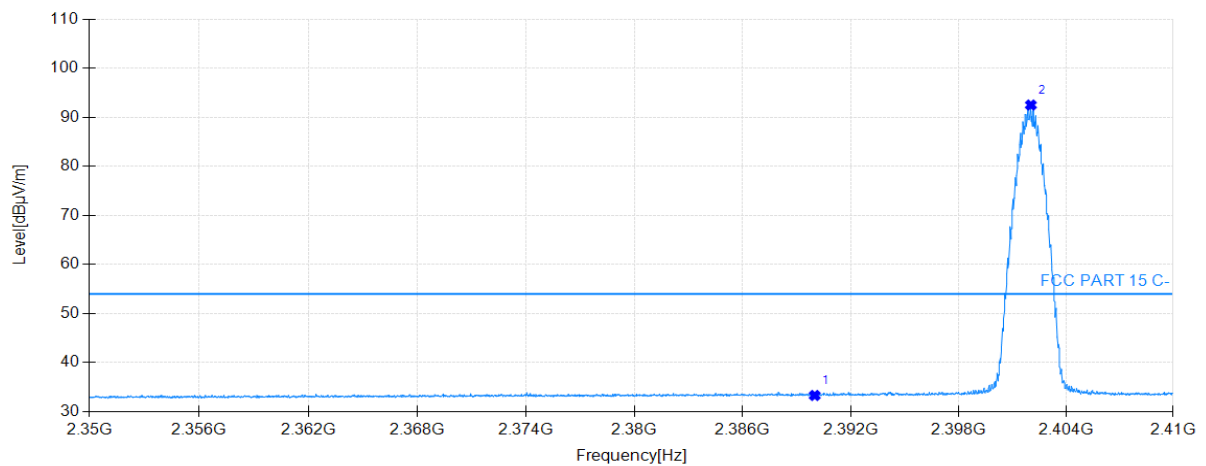
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	62.17	32.74	74.00	11.83	160	358	Vertical
2	2402.14	98.27	32.81	74.00	-24.27	160	338	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

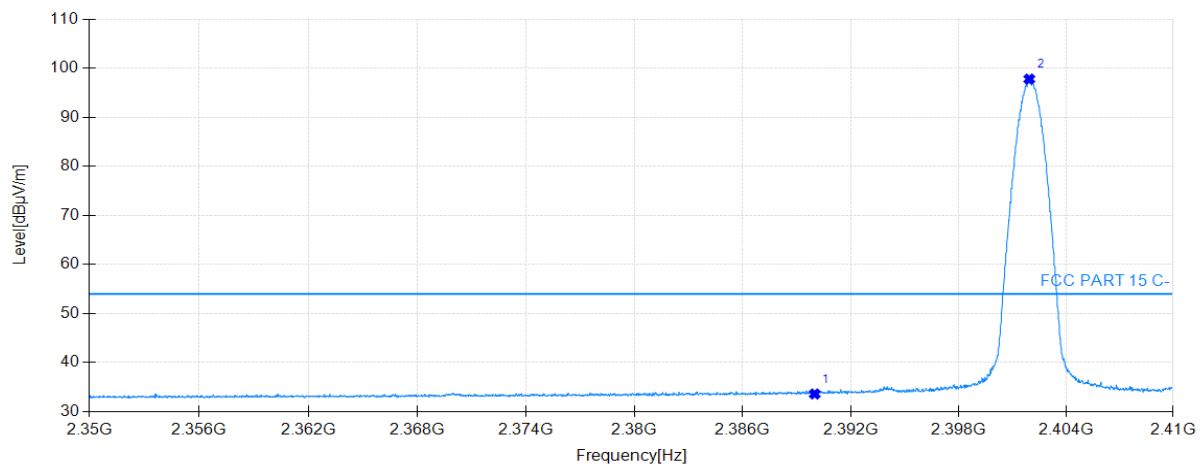
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	33.30	32.74	54.00	20.70	160	22	Horizontal
2	2402.05	92.48	32.80	54.00	-38.48	160	91	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2402MHz		

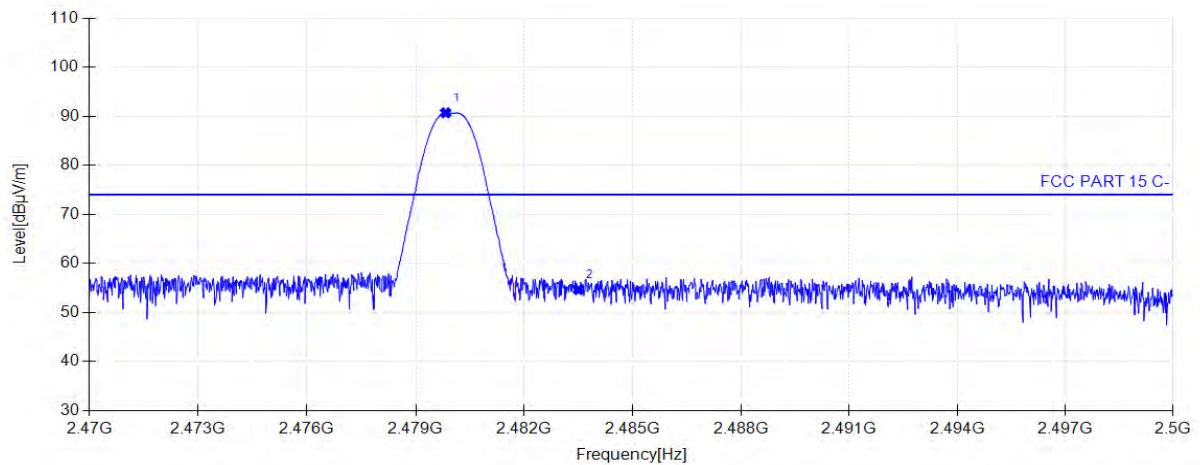
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	33.60	32.74	54.00	20.40	160	30	Vertical
2	2401.96	97.77	32.80	54.00	-43.77	160	338	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

## Test Graph

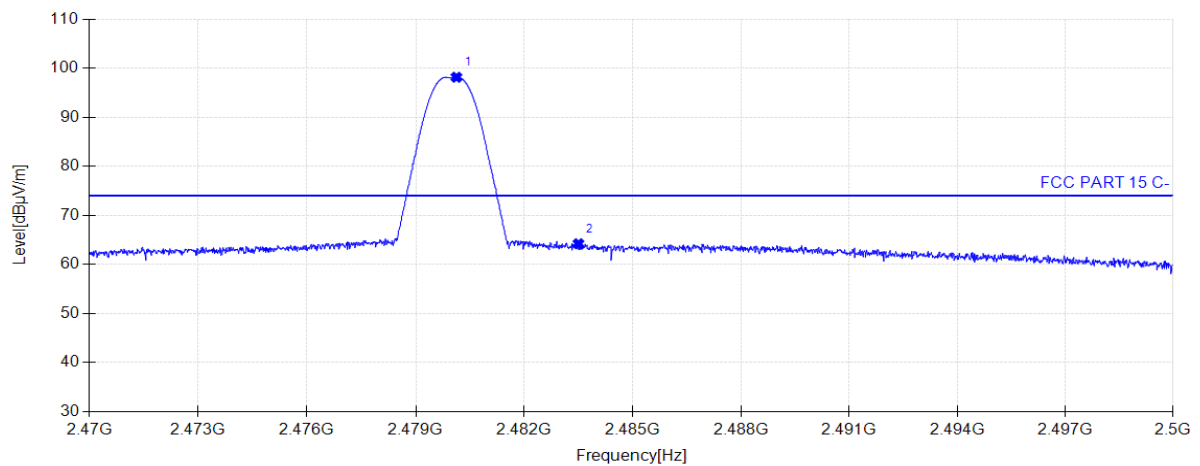


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.82	90.68	33.21	74.00	-16.68	160	124	Horizontal
2	2483.50	54.65	33.23	74.00	19.35	160	118	Horizontal



Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

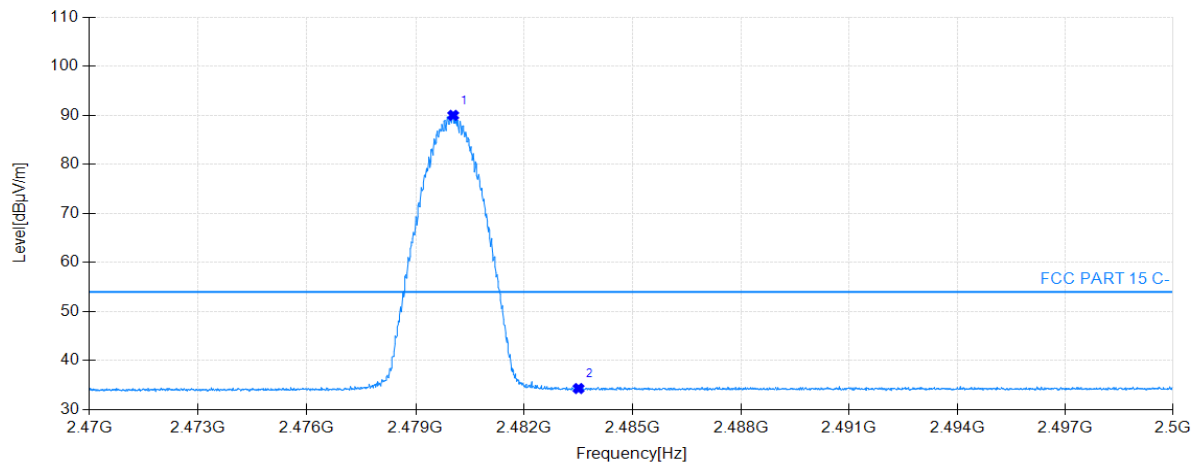
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.12	98.14	33.22	74.00	-24.14	160	38	Vertical
2	2483.50	64.22	33.23	74.00	9.78	160	349	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

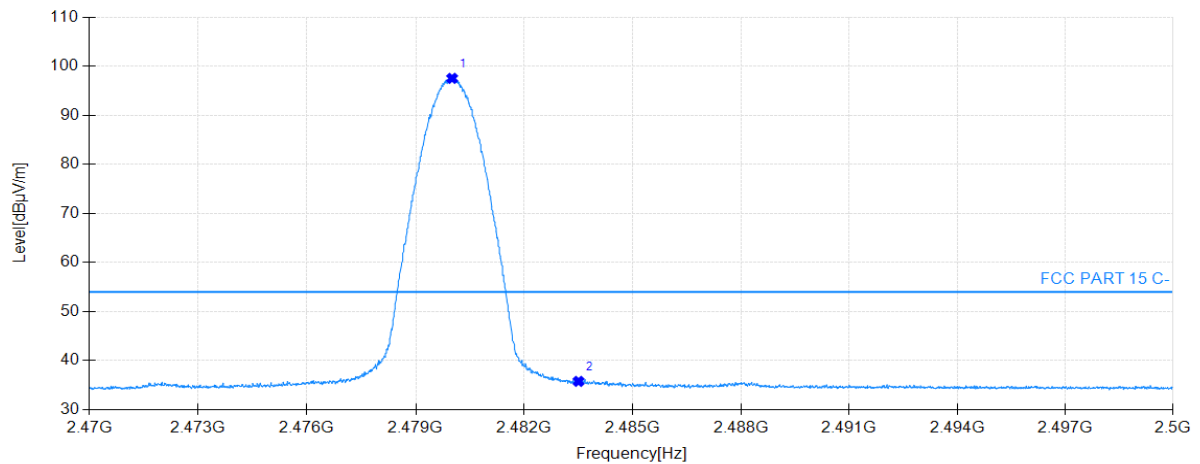
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.03	89.97	33.21	54.00	-35.97	160	120	Horizontal
2	2483.50	34.31	33.23	54.00	19.69	160	345	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by DH5 at Channel 2480MHz		

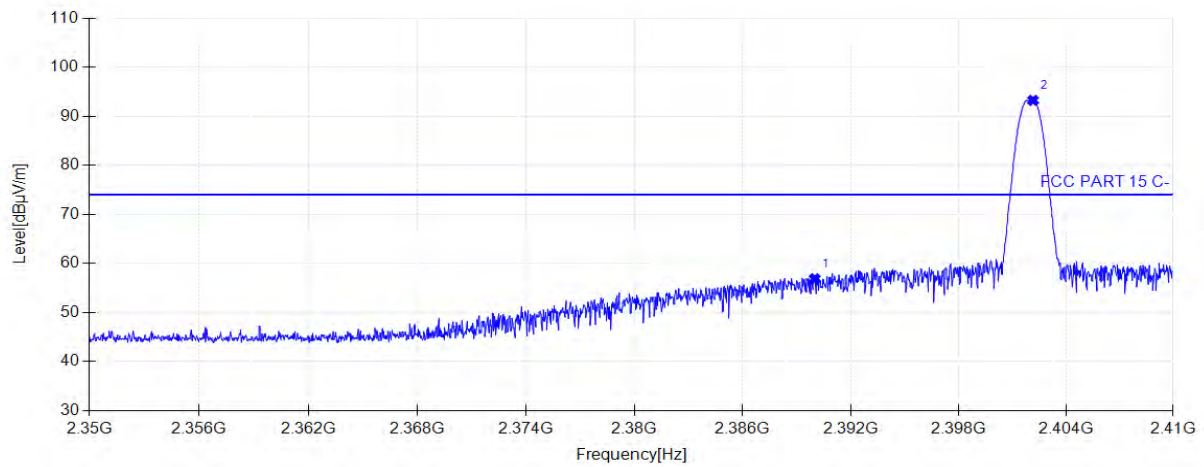
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.00	97.51	33.21	54.00	-43.51	160	349	Vertical
2	2483.50	35.76	33.23	54.00	18.24	160	3	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

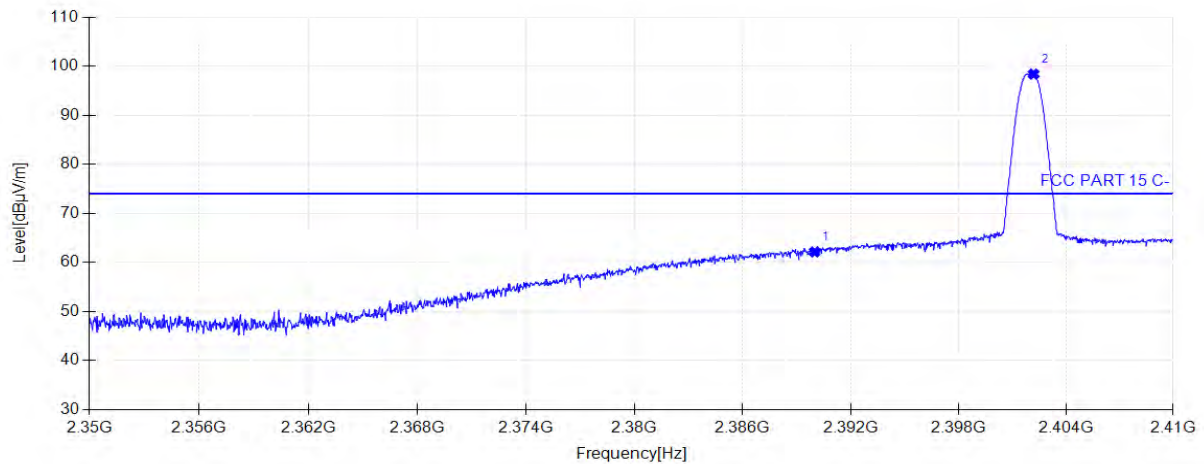
## Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	56.88	32.74	74.00	17.12	160	131	Horizontal
2	2402.17	93.23	32.81	74.00	-19.23	160	90	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

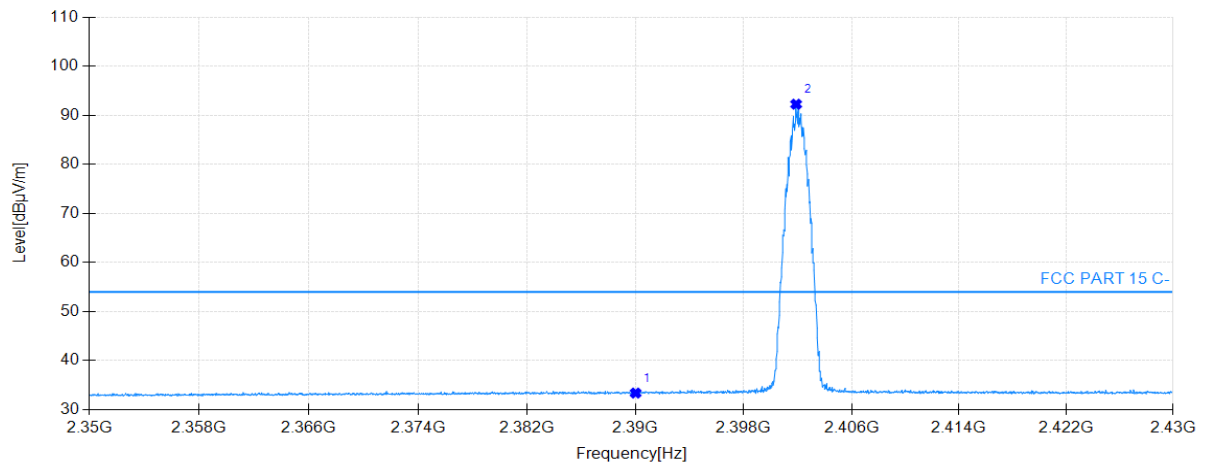
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	62.15	32.74	74.00	11.85	160	4	Vertical
2	2402.20	98.38	32.81	74.00	-24.38	160	338	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

### Test Graph

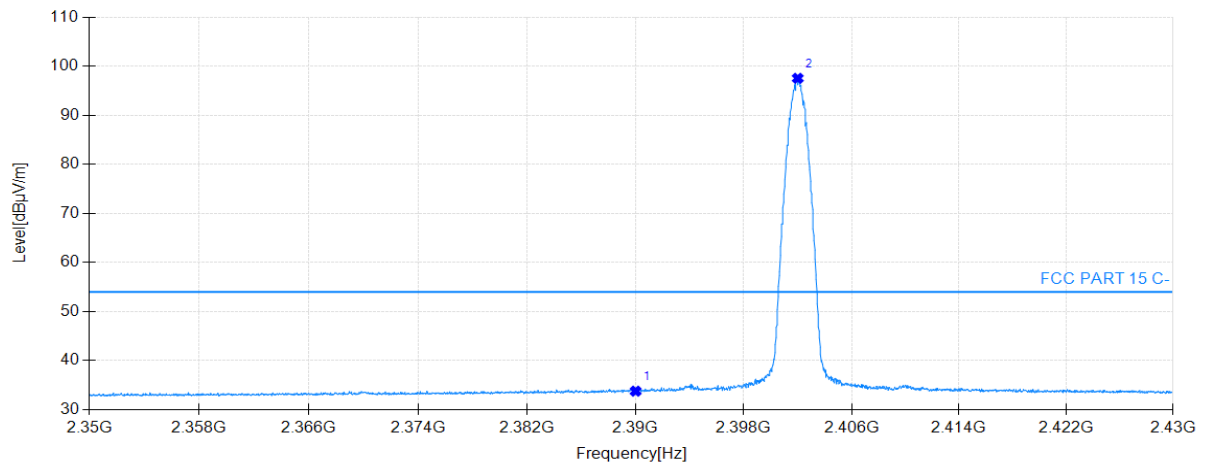


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	33.38	32.74	54.00	20.62	160	154	Horizontal
2	2401.88	92.24	32.80	54.00	-38.24	160	92	Horizontal



Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2402MHz		

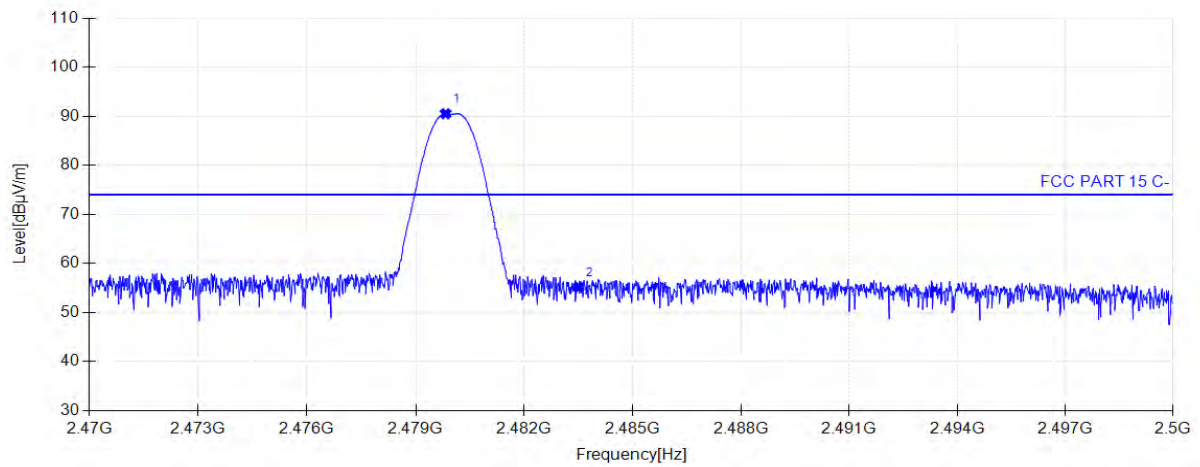
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	33.77	32.74	54.00	20.23	160	97	Vertical
2	2402.00	97.52	32.80	54.00	-43.52	160	342	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

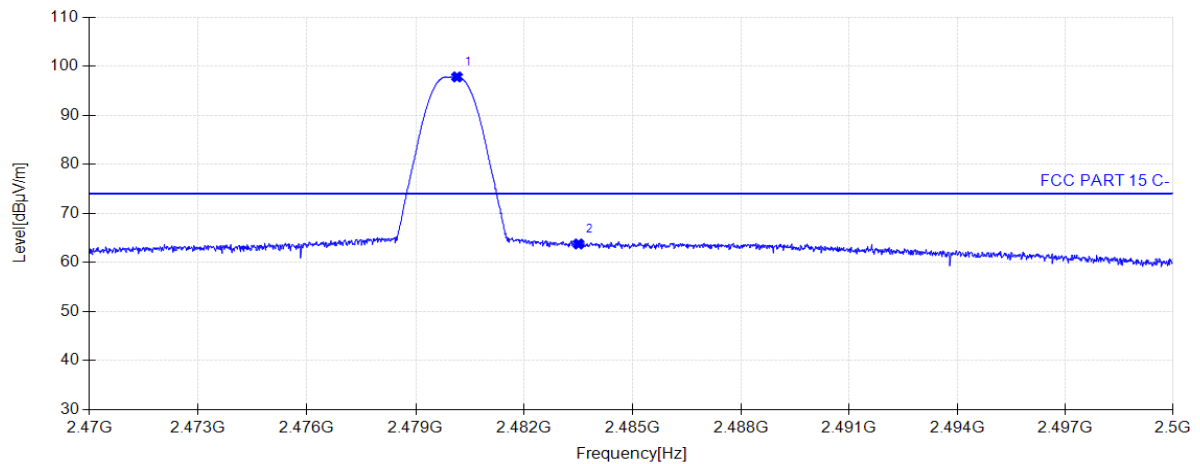
## Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.82	90.50	33.21	74.00	-16.50	160	124	Horizontal
2	2483.50	55.18	33.23	74.00	18.82	160	70	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

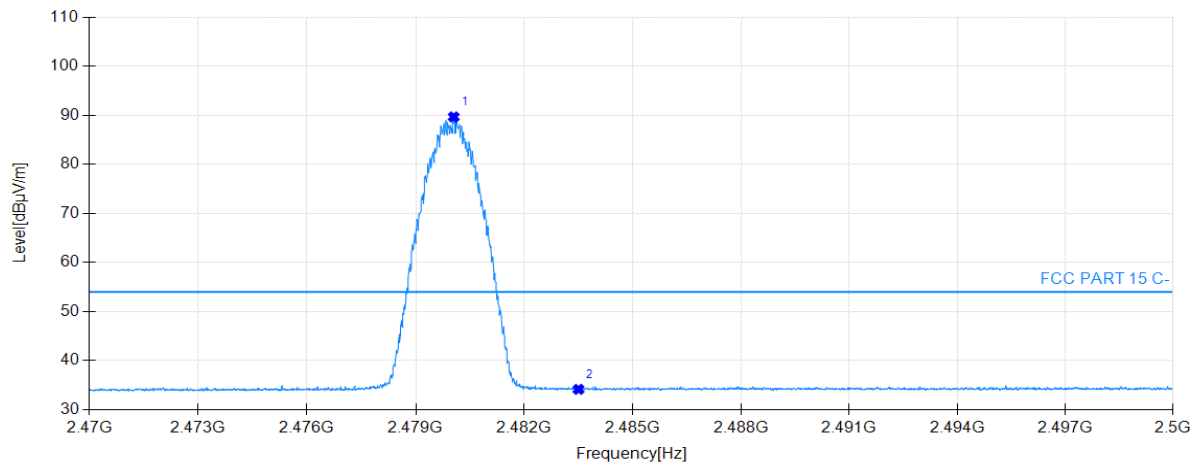
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.14	97.80	33.22	74.00	-23.80	160	37	Vertical
2	2483.50	63.76	33.23	74.00	10.24	160	78	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

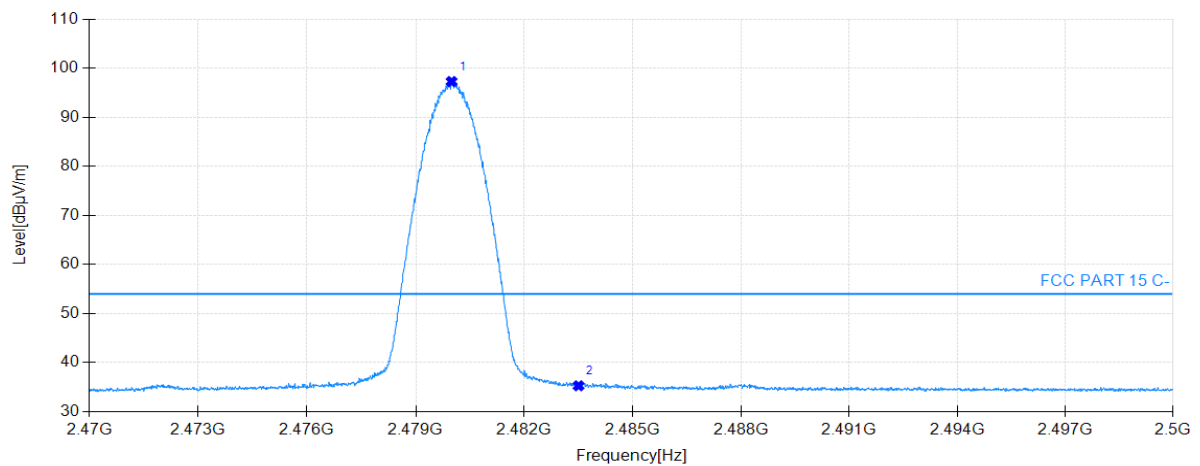
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.05	89.65	33.22	54.00	-35.65	160	124	Horizontal
2	2483.50	34.14	33.23	54.00	19.86	160	117	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 2DH5 at Channel 2480MHz		

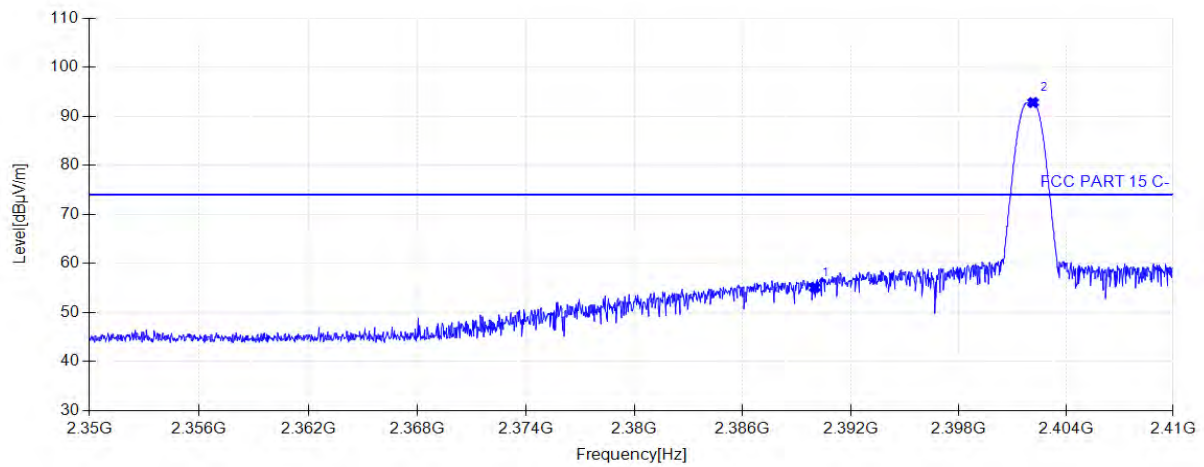
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.99	97.27	33.21	54.00	-43.27	160	349	Vertical
2	2483.50	35.27	33.23	54.00	18.73	160	63	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

## Test Graph

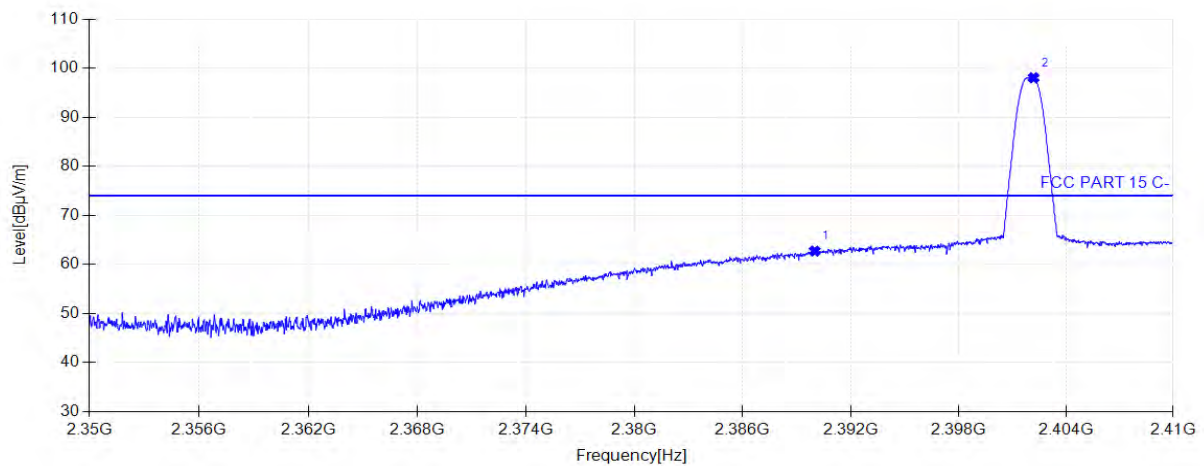


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	55.09	32.74	74.00	18.91	160	104	Horizontal
2	2402.17	92.79	32.81	74.00	-18.79	160	83	Horizontal



Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

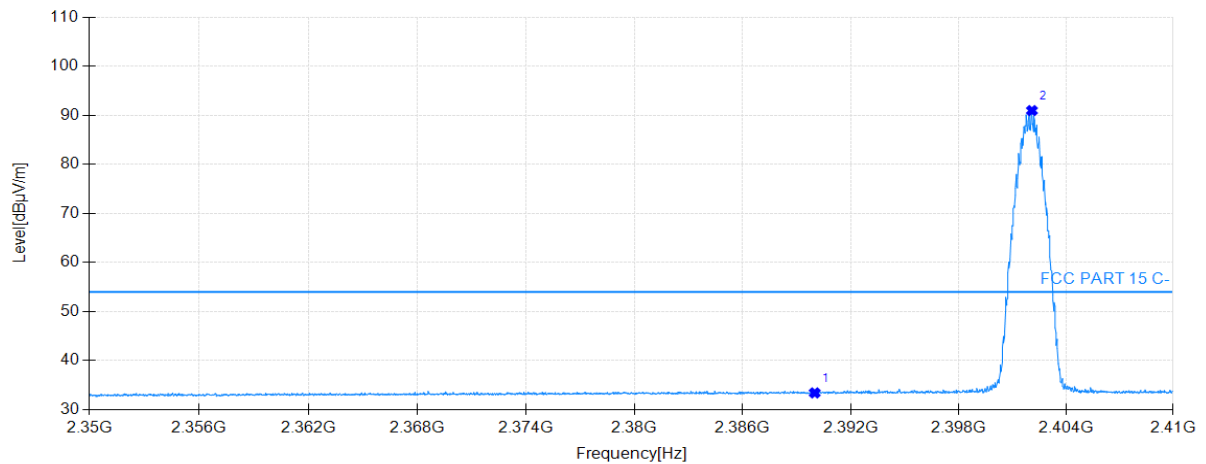
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	62.72	32.74	74.00	11.28	160	332	Vertical
2	2402.20	98.04	32.81	74.00	-24.04	160	332	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

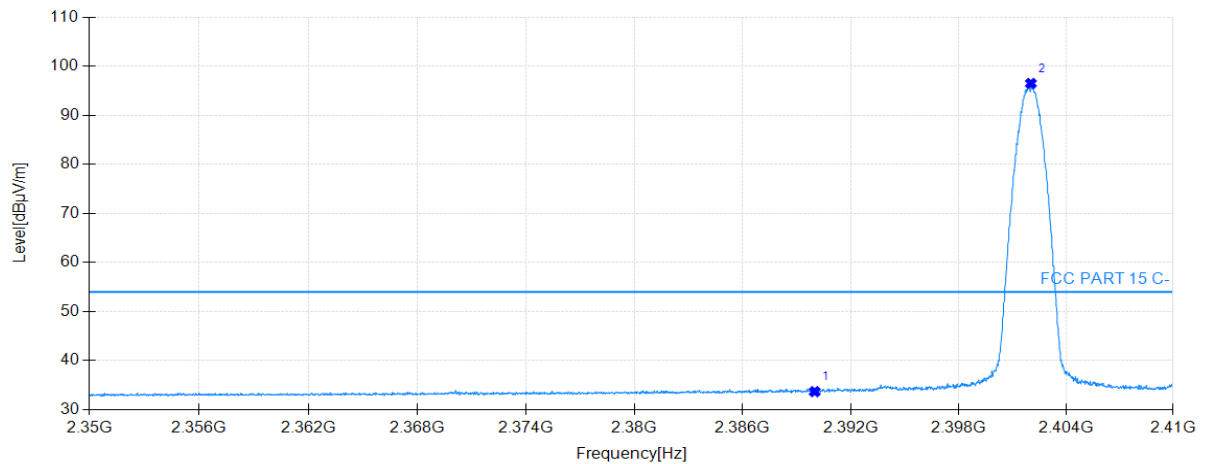
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	33.41	32.74	54.00	20.59	160	42	Horizontal
2	2402.11	90.94	32.81	54.00	-36.94	160	84	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		

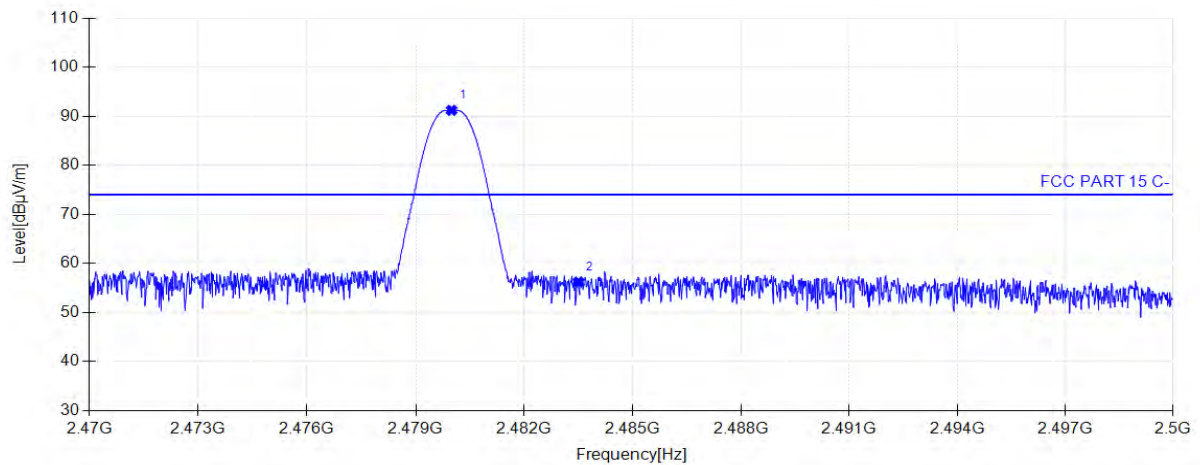
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	33.67	32.74	54.00	20.33	160	344	Vertical
2	2402.05	96.48	32.80	54.00	-42.48	160	359	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

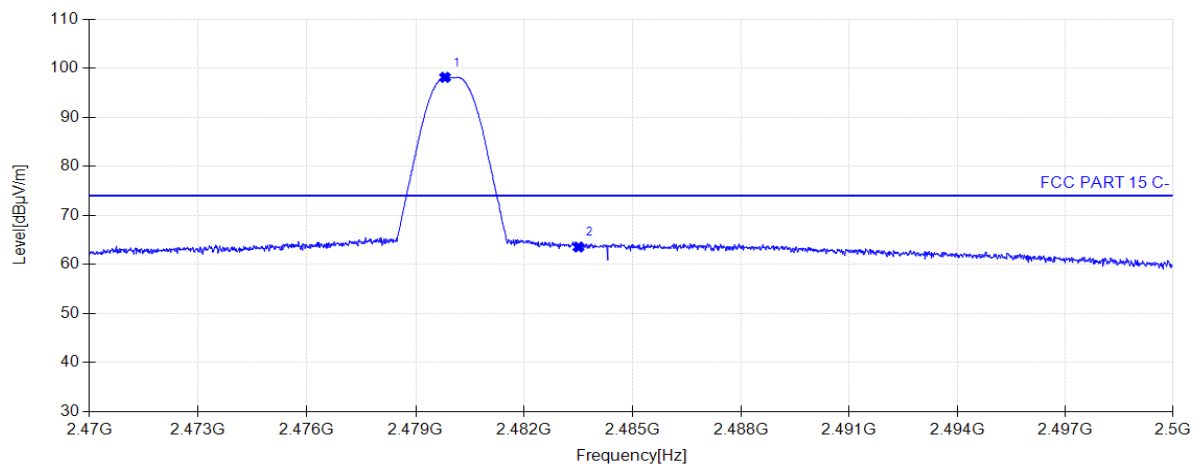
## Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.99	91.21	33.21	74.00	-17.21	160	120	Horizontal
2	2483.50	56.22	33.23	74.00	17.78	160	120	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

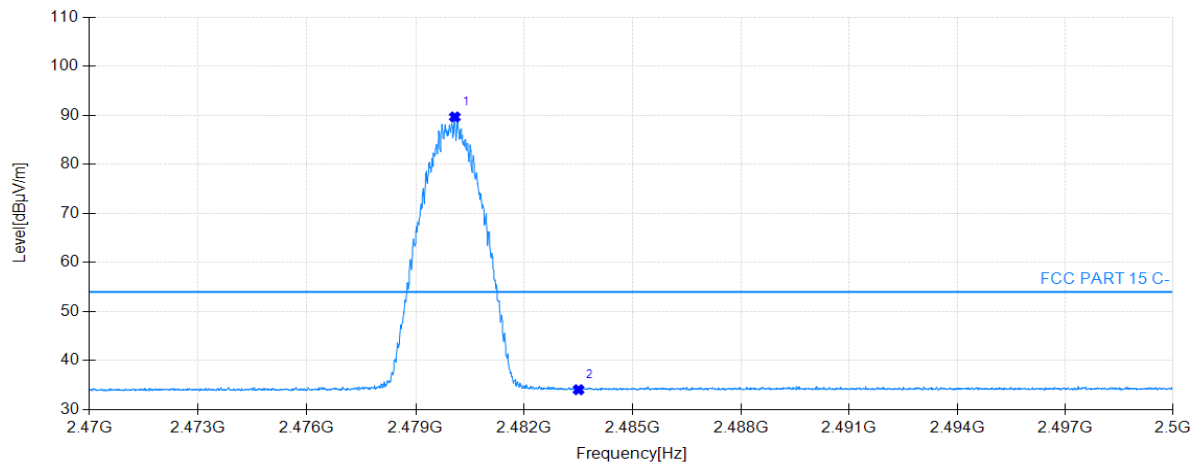
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.81	98.12	33.21	74.00	-24.12	160	10	Vertical
2	2483.50	63.55	33.23	74.00	10.45	160	58	Vertical

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

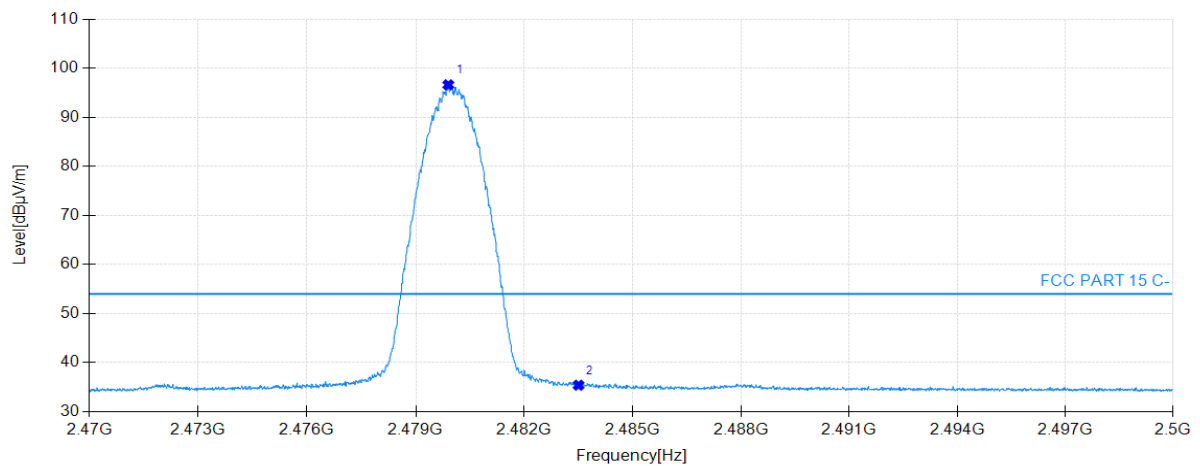
### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.08	89.64	33.22	54.00	-35.64	160	124	Horizontal
2	2483.50	34.06	33.23	54.00	19.94	160	146	Horizontal

Project Information			
EUT:	Bluetooth headset	Model:	INSPIRE16PRO
SN:	INS169104001	Voltage:	DC 3.7V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2480MHz		

### Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.90	96.60	33.21	54.00	-42.60	160	9	Vertical
2	2483.50	35.39	33.23	54.00	18.61	160	3	Vertical

Note: The pre-test has been carried out for the 2310-2390mhz band, and the value in the 2310-2350mhz band is 20dB lower than the limit value, so the section of 2310-2350mhz is not reflected in the report.



## 7.11.AC Conducted Emissions Measurement

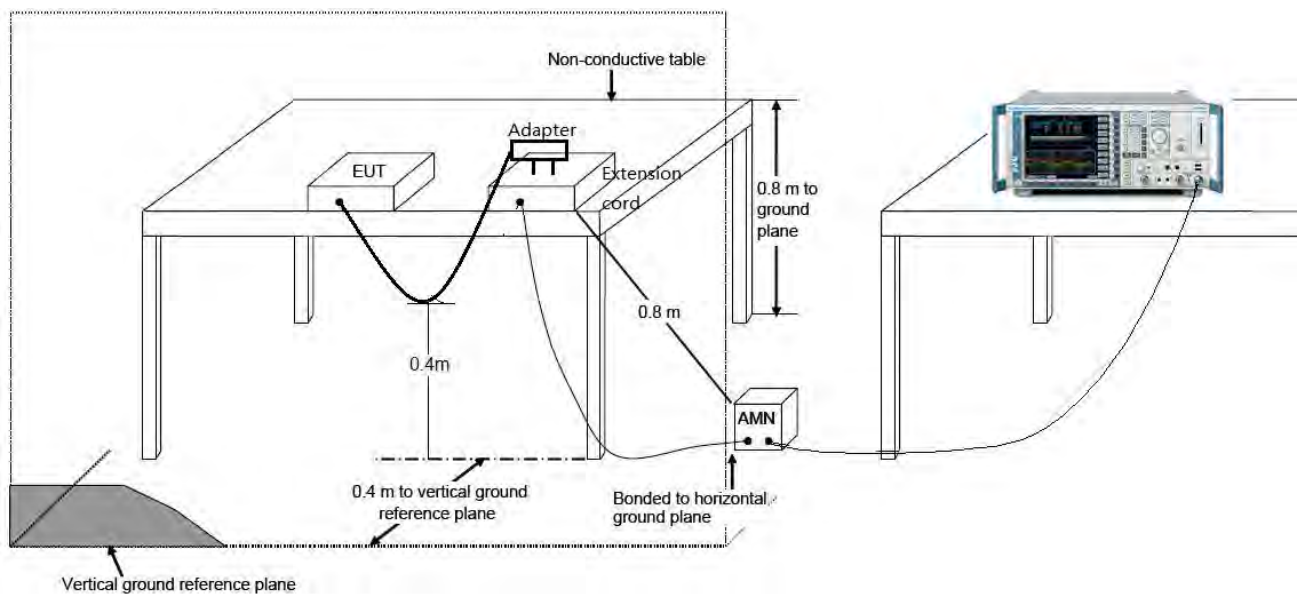
### 7.11.1.Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBμV)	Average (dBμV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

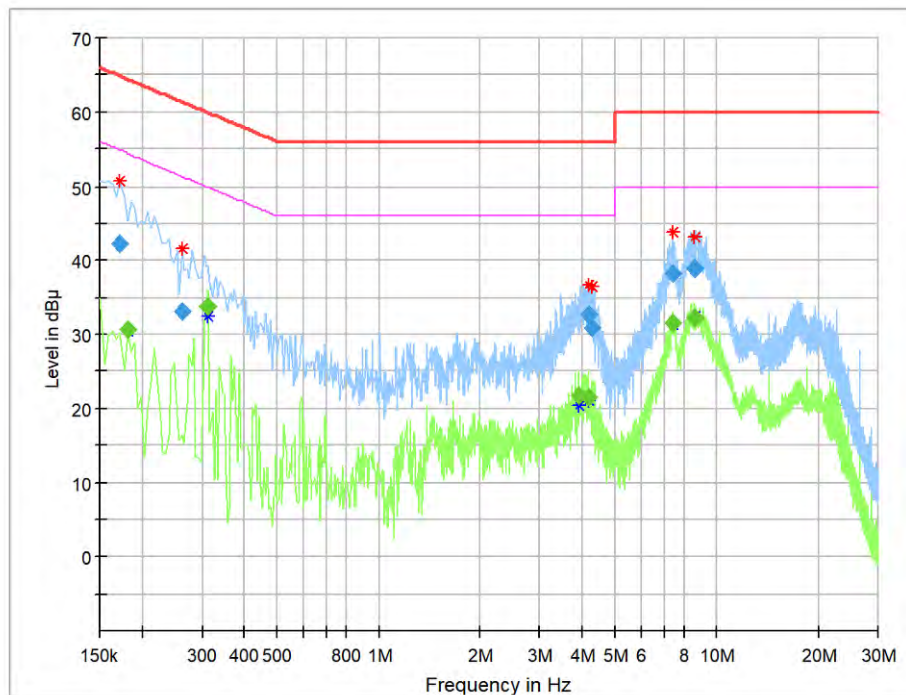
### 7.11.2.Test Setup



### 7.11.3.Test Result

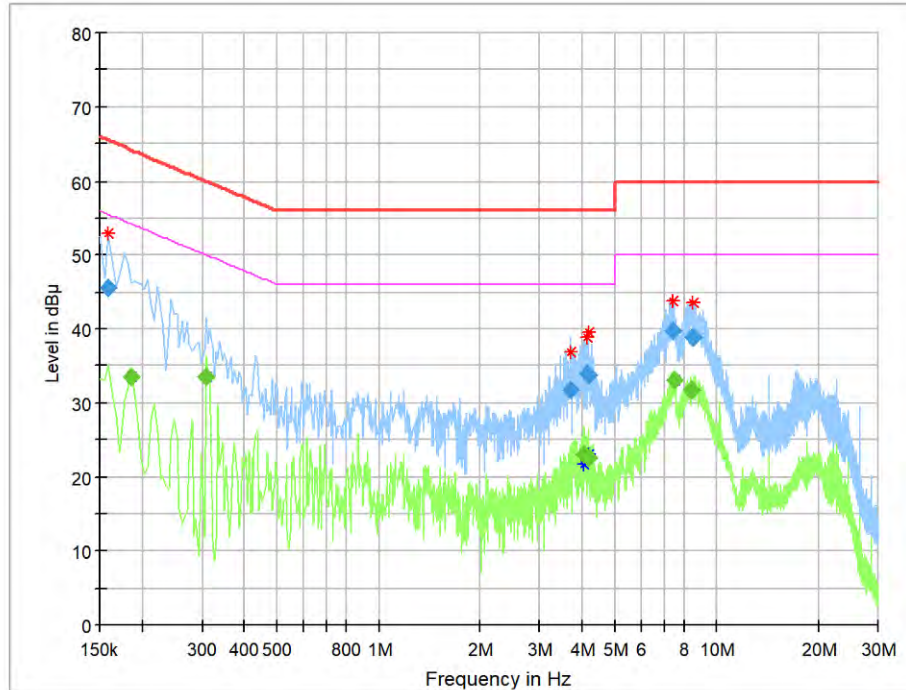
#### The worst case of Conducted Emissions:

EUT:	Bluetooth headset	Polarity:	LINE
Model:	INSPIRE16PRO	Voltage:	AC120V/60Hz
Environment:	Temp: 22℃; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.172500	42.26	---	64.84	22.58	100.0	9.000	L1	ON	9.6
0.181500	---	30.68	54.42	23.73	100.0	9.000	L1	ON	9.6
0.262500	33.08	---	61.35	28.28	100.0	9.000	L1	ON	9.6
0.312000	---	33.79	49.92	16.13	100.0	9.000	L1	ON	9.6
3.912000	---	21.70	46.00	24.30	100.0	9.000	L1	ON	9.6
4.177500	32.71	---	56.00	23.29	100.0	9.000	L1	ON	9.7
4.177500	---	21.42	46.00	24.58	100.0	9.000	L1	ON	9.7
4.308000	30.99	---	56.00	25.01	100.0	9.000	L1	ON	9.7
7.431000	38.35	---	60.00	21.65	100.0	9.000	L1	ON	9.7
7.471500	---	31.57	50.00	18.43	100.0	9.000	L1	ON	9.7
8.601000	---	32.20	50.00	17.80	100.0	9.000	L1	ON	9.7
8.637000	38.86	---	60.00	21.14	100.0	9.000	L1	ON	9.7

EUT:	Bluetooth headset	Polarity:	NEUTRAL
Model:	INSPIRE16PRO	Voltage:	AC120V/60Hz
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit by 3DH5 at Channel 2402MHz		



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.159000	45.60	---	65.52	19.91	100.0	9.000	N	ON	9.6
0.186000	---	33.42	54.21	20.79	100.0	9.000	N	ON	9.6
0.307500	---	33.59	50.04	16.45	100.0	9.000	N	ON	9.6
3.705000	31.67	---	56.00	24.33	100.0	9.000	N	ON	9.6
4.069500	---	22.99	46.00	23.01	100.0	9.000	N	ON	9.7
4.128000	33.98	---	56.00	22.02	100.0	9.000	N	ON	9.7
4.168500	33.64	---	56.00	22.36	100.0	9.000	N	ON	9.7
4.168500	---	22.62	46.00	23.38	100.0	9.000	N	ON	9.7
7.467000	39.69	---	60.00	20.31	100.0	9.000	N	ON	9.7
7.516500	---	33.04	50.00	16.96	100.0	9.000	N	ON	9.7
8.425500	---	31.80	50.00	18.20	100.0	9.000	N	ON	9.7
8.484000	38.78	---	60.00	21.22	100.0	9.000	N	ON	9.7

## 8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Bluetooth headset** is in compliance with Part 15C of the FCC Rules.

\_\_\_\_\_ The End \_\_\_\_\_