RF TEST REPORT

Report No.:	SET2021-16814
Product Name:	Fixed Android UHF Reader
Model No. :	URA4
FCC ID:	2AC6AURA4
Applicant:	Shenzhen Chainway Information Technology Co., Ltd.
Address：	9F Building 2, Daqian Industrial Park, District 67, XingDong Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong, China.
Dates of Testing:	02/04/2021 - 12/14/2021
Issued by:	CCIC Southern Testing Co., Ltd.
Lab Location:	Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China. **Tel:** 86 755 26627338 **Fax:** 86 755 26627238

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Test Report

Product Name.....:	Fixed Android UHF Reader
Brand Name.....:	CHAINWAY
Trade Name.....:	CHAINWAY
Applicant.....:	Shenzhen Chainway Information Technology Co., Ltd.
Applicant Address.....:	9F Building 2, Daqian Industrial Park, District 67, XingDong Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong, China.
Manufacturer.....:	Shenzhen Chainway Information Technology Co., Ltd.
Manufacturer Address .....:	9F Building 2, Daqian Industrial Park, District 67, XingDong Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong, China.
Test Standards.....:	47 CFR Part 15 Subpart C ANSI C63.10-2013
Test Result .....:	PASS

Tested by .....: 2021.12.17

Sun, Test Engineer

Reviewed by .....: 2021.12.17

Chris You, Senior Engineer

Approved by .....: 2021.12.17

Shuangwen Zhang, Manager

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Change History		
Issue	Date	Reason for change
1.0	2021.12.17	First edition

1. General Information

1.1. EUT Description

EUT Type	Fixed Android UHF Reader
Model No.	URA4
Frequency Range	2402MHz~2480MHz
Channel Number	79
Bit Rate of Transmitter	1/2/3Mbps
Modulation Type	GFSK, π/4-DQPSK, 8DPSK
Antenna Type	External Antenna
Antenna Gain	1.52dBi
Power supply	DC 12V from Adapter

Note 1: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

Note 2: a. When power on, the EUT will scan the whole frequency until aConnection command from the other BT devices.

b. When receiving the signal from the other BT devices, The EUT transmit aresponse signal.

c. The other devices receive the response signal and recognize it, then send aconnection command to establish the connection.

d. After the connection establish successfully, the data transmission is beginning.At the same time, the both devices will shift frequencies in synchronization per asame pseudo randomly ordered list of hopping frequencies, the hopping rate is1600 times per second.

e. The bandwidth of the receiver, which is set to a fixed width by the software.

Note 3: Bluetooth signal has 9 packages 1DH1, 1DH3, 1DH5, 2DH1, 2DH3, 2DH5, 3DH1, 3DH3, 3DH5, DH5 package is largest, we are testing DH5 in the document.

1.2. Test Standards and Results

The objective of the report is to perform testing according to FCC Certification:

No.	Identity	Document Title
1	47 CFR Part 15 Subpart C	Radio Frequency Devices
2	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section in CFR 47	Description	Result
1	15.203	Antenna Requirement	PASS
2	15.247 (a)(1)(iii)	Number of Hopping Frequency	PASS
3	15.247 (b)(1)	Peak Output Power	PASS
4	15.247 (a)(1)	20dB Occupied Bandwidth	PASS
5	15.247 (a)(1)	Carrier Frequency Separation	PASS
6	15.247 (a)(1)(iii)	Time of Occupancy (Dwell time)	PASS
7	15.247(d)	Conducted Spurious Emission	PASS
8	15.247(d)	Conducted Band Edge	PASS
9	15.207	AC Power Line Conducted Emission	PASS
10	15.205 15.209 15.247(c)	Radiated Band Edges and Spurious Emission	PASS

The tests of Conducted Emission and Radiated Emission were performed according to the method of measurements prescribed in ANSI C63.10-2013.

These RF tests were performed according to the method of measurements prescribed in KDB 558074D01 v05r02.

1.3. Frequency Hopping System Requirements

1.3.1. Standard Applicable

According to FCC Part 15.247(a)(1), The system shall hop to channel frequencies that are selected at the systemhopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equallyon the average by each transmitter. The system receivers shall have input bandwidths that match the hoppingchannel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with thetransmitted signals.

(g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels duringeach transmission. However, the system, consisting of both the transmitter and the receiver, must be designed tocomply with all of the regulations in this section should the transmitter be presented with a continuous data (orinformation) stream. In addition, a system employing short transmission bursts must comply with the definition ofa frequency hopping system and must distribute its transmissions over the minimum number of hopping channelsspecified in this section.

(h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the systemto recognize other users within the spectrum band so that it individually andindependently chooses and adapts itshopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems inany other manner for the express purpose of avoiding the simultaneous occupancy of individual hoppingfrequencies by multiple transmitters is not permitted.

1.3.2. Frequency Hopping System

This transmitter device is frequency hopping device, and complies with FCC part 15.247 rule.

This device uses Bluetooth radio which operates in 2400-2483.5 MHz band. Bluetooth uses a radio technologycalled frequency-hopping spread spectrum, which chops up the data being sent and transmits chunks of it on up to79 bands (1 MHz each; centred from 2402 to 2480 MHz) in the range 2,400-2,483.5 MHz. The transmitterswitches hop frequencies 1,600 times per second to assure a high degree of data security. All Bluetooth devicesparticipating in a given piconet are synchronized to the frequency-hopping channel for the piconet. The frequencyhopping sequence is determined by the master's device address and the phase of the hopping sequence (thefrequency to hop at a specific time) is determined by the master's internal clock. Therefore, all slaves in a piconetmust know the master's device address and must synchronize their clocks with the master's clock.

Adaptive Frequency Hopping (AFH) was introduced in the Bluetooth specification to provide an effective way fora Bluetooth radio to counteract normal interference. AFH identifies "bad" channels, where either other wirelessdevices are interfering with the Bluetooth signal or the Bluetooth signal is interfering with another device. TheAFH-enabled Bluetooth device will then communicate with other devices within its piconet to share details of anyidentified bad channels. The devices will then switch to alternative available "good" channels, away from theareas of interference, thus having no impact on the bandwidth used.

This device was tested with a bluetooth system receiver to check that the device maintained hopping synchronization, and the device complied with these requirements for ANSI C63.10-2013 and FCC Part 15.247 rule.

Carrier Frequency and channel List:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	20	2422MHz	40	2442MHz	60	2462MHz
1	2403MHz	21	2423MHz	41	2443MHz	61	2463MHz
2	2404MHz	22	2424MHz	42	2444MHz	62	2464MHz
3	2405MHz	23	2425MHz	43	2445MHz	63	2465MHz
4	2406MHz	24	2426MHz	44	2446MHz	64	2466MHz
5	2407MHz	25	2427MHz	45	2447MHz	65	2467MHz
…	…	…	…	…	…	…	…
15	2417MHz	35	2437MHz	55	2457MHz	75	2477MHz
16	2418MHz	36	2438MHz	56	2458MHz	76	2478MHz
17	2419MHz	37	2439MHz	57	2459MHz	77	2479MHz
18	2420MHz	38	2440MHz	58	2460MHz	78	2480MHz
19	2421MHz	39	2441MHz	59	2461MHz		

Note 1: F(MHz)=2402+1*n (0<=n<=78).

Note 2: Channel 0, 39 &78 selected for GFSK, π/4-DQPSK and 8DPSK as Lowest, Middle and Highest Channel.

1.4. Table for Supporting Units

No.	Equipment	Brand Name	Model Name	Manufacturer	Serial No.	Note
1	Notebook	DELL	PP11L	DELL	H5914A03	FCC DOC

1.5. Facilities and Accreditations

1.5.1. Facilities

CNAS-Lab Code: L1659

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

FCC-Registration No.: CN1283

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a re port filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until April 19th, 2023.

ISED Registration: 11185A-1

CAB identifier: CN0064

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engi neering Bureau of Industry Canada for the performance of radiated measurements with Registrati on No. 11185A-1 on Aug. 04, 2016, valid time is until April 19th, 2023.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.5.2. Test Environment Conditions

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

Temperature (℃):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86KPa-106KPa

2. Test Requirement

2.1. Antenna requirement

2.1.1. Applicable Standard

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

And according to FCC 47 CFR Section 15.247(c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

2.1.2. Antenna Information

Antenna General Information:

No.	EUT	Ant. Type	Operating frequency range	Ant. Gain
1	Fixed Android UHF Reade	External	2402-2480MHz	1.52dBi

2.1.3. Result: comply

The EUT has a unique antenna connector (reverse SMA connector). Please refer to the EUT internal photos.

2.2. Number of Hopping Frequency

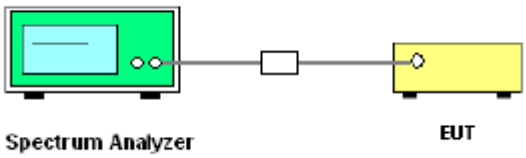
2.2.1. Limit of Number of Hopping Frequency

Frequency hopping systems operating in the 2400MHz to 2483.5MHz bands shall use at least 15 hopping frequencies.

2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.2.3. Test Setup



2.2.4. Test Procedure

1. The testing follows ANSI C63.10-2013 Clause 7.8.3
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
   The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Enable the EUT hopping function.
5. Use the following spectrum analyzer settings: Span = the frequency band of operation;
   Set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth,
   Whichever is smaller. VBW≥RBW, Trace = max hold, Sweep=auto, Detector function=peak.
6. The number of hopping frequency used is defined as the number of total channel.
7. Record the measurement data derived from spectrum analyzer.

2.2.5. Test Results of Number of Hopping Frequency

Please refer to Appendix A for detail

2.3. Peak Output Power

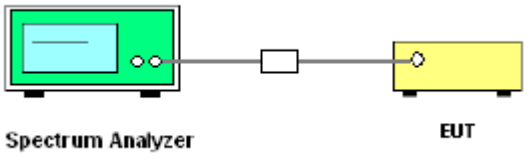
2.3.1. Limit of Peak Output Power

For FHSs operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W

2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.3.3. Test Setup



2.3.4. Test Procedures

1. The testing follows ANSI C63.10-2013 Clause 7.8.5
2. The RF output of EUT was connected to Spectrum analyzer by RF cable and attenuator. The pathloss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power with cable loss and record the results in the test report.
5. Measure and record the results in the test report.

2.3.5. Test Result of Output Power

Please refer to Appendix A for detail

2.4. 20dB Bandwidth

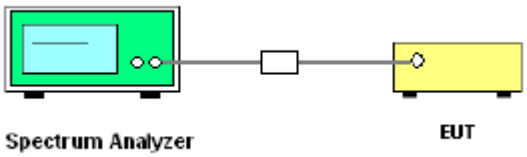
2.4.1. Definition

According to FCC §15.247(a)(1), the 20dB bandwidth is known as the 99% emission bandwidth, or 20dB bandwidth (10*log1% = 20dB) taking the total RF output power.

2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.4.3. Test Setup



2.4.4. Test Procedure

1. The testing follows ANSI C63.10-2013 Clause 6.9.2

2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

3. Set to the maximum power setting and enable the EUT transmit continuously.

4. Use the following spectrum analyzer settings for 20dB

   Span = approximately 2 to 5 times the OBW, centered on a hopping channel;

   RBW≥1% to 5% of the OBW; VBW shall be approximately three times RBW;

   Sweep = auto; Detector function = peak; Trace = max hold.

5. Measure and record the results in the test report.

2.4.5. Test Results

Please refer to Appendix A for detail

2.5. Carried Frequency Separation

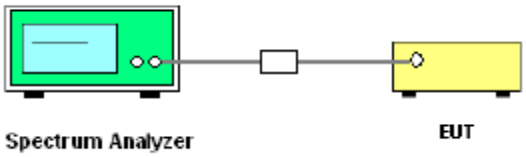
2.5.1. Limit of Carried Frequency Separation

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater.

2.5.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.5.3. Test Setup



2.5.4. Test Procedure

1. The testing follows ANSI C63.10-2013 Clause 7.8.2.

2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

3. Set to the maximum power setting and enable the EUT transmit continuously.

4. Enable the EUT hopping function.

5. Use the following spectrum analyzer settings:

Span = wide enough to capture the peaks of two adjacent channels; RBW: Start with the RBW set to approximately 30% of the channel spacing;

6. Measure and record the results in the test report.

2.5.5. Test Results of Carried Frequency Separation

Please refer to Appendix A for detail

2.6. Dwell time

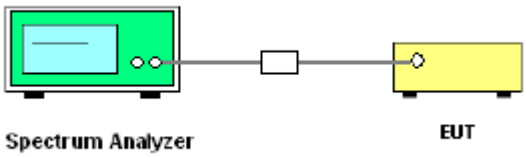
2.6.1. Limit of Dwell Time

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

2.6.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup



2.6.4. Test Procedure

1. The testing follows ANSI C63.10-2013 Clause 7.8.4.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Enable the EUT hopping function.
5. Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel; RBW shall be ≤ channel spacing and where possible RBW should be set >> 1 / T, where T is the expected dwell time per channel; VBW≥RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold.
6. Measure and record the results in the test report.

2.6.5. Test Results of Dwell Time

Please refer to Appendix A for detail

2.7. Conducted Spurious Emissions

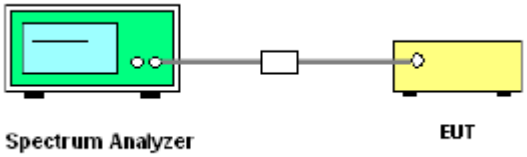
2.7.1. Limit of Spurious Emission

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

2.7.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.7.3. Test Setup



2.7.4. Test Procedure

1. The testing follows the guidelines in Spurious RF Conducted Emissions of ANSI C63.10-2013 Clause 7.8.8.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. Thepath loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs mustbe at least 20 dB down from the highest emission level within the authorized band as measuredwith a 100 kHz RBW.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

2.7.5. Test Results of Conducted Spurious Emissions

Please refer to Appendix A for detail

2.8. Conducted Band Edge

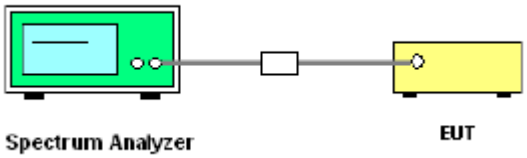
2.8.1. Limit of Band Edges

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

2.8.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.8.3. Test Setup



2.8.1. Test Procedure

1. The testing follows the guidelines in Band-edge Compliance of RF Conducted Emissions of ANSI C63.10-2013 Clause 7.8.6.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Set RBW = 100kHz (≥1% span=10MHz), VBW = 300kHz (≥RBW). Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW.
4. Enable hopping function of the EUT and then repeat step 2. and 3.
5. Measure and record the results in the test report.

2.8.2. Test Results of Conducted Band Edge

Please refer to Appendix A for detail

2.9. AC Power Line Conducted Emission

2.9.1. Limit of AC Power Line Conducted Emission

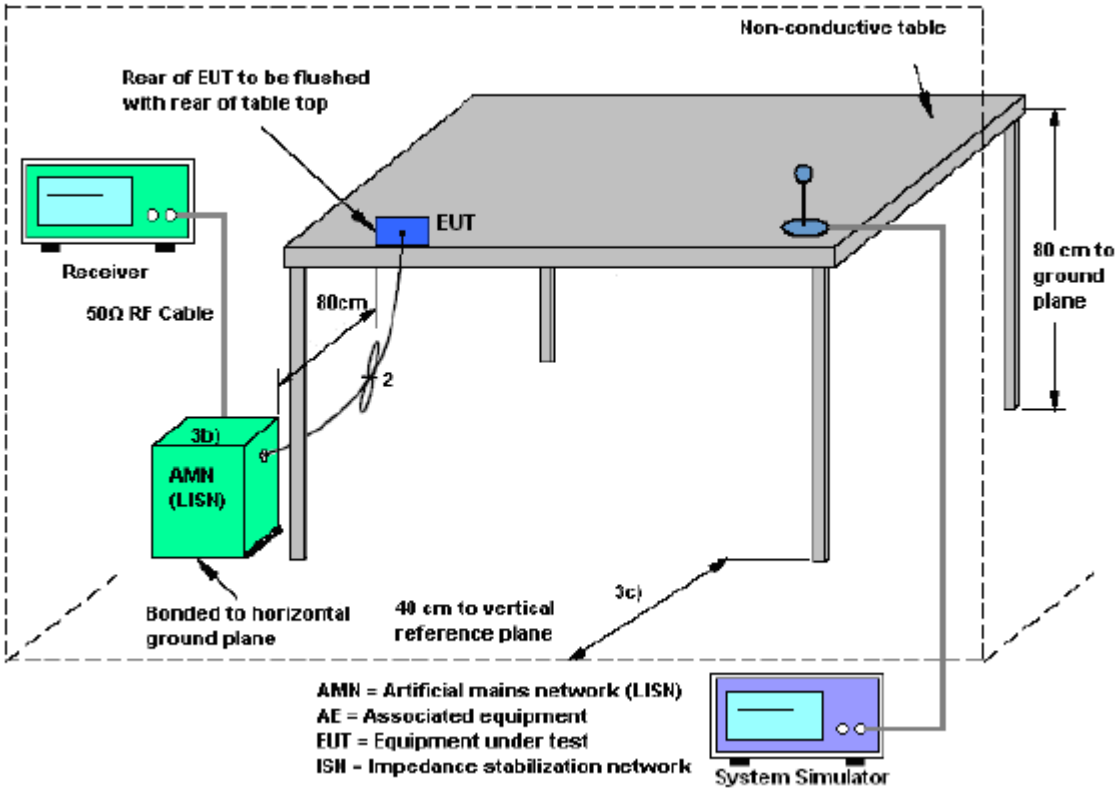
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

2.9.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.9.3. Test Setup

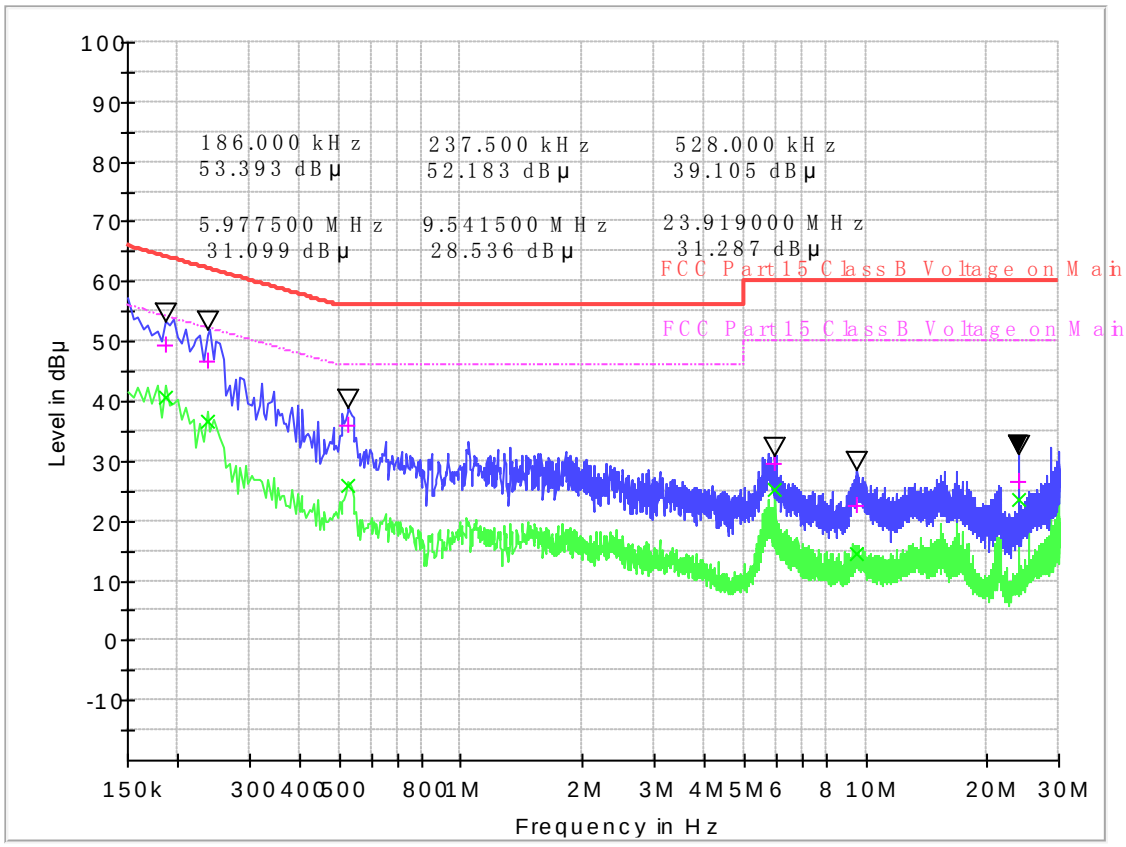


2.9.4. Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 micrometry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

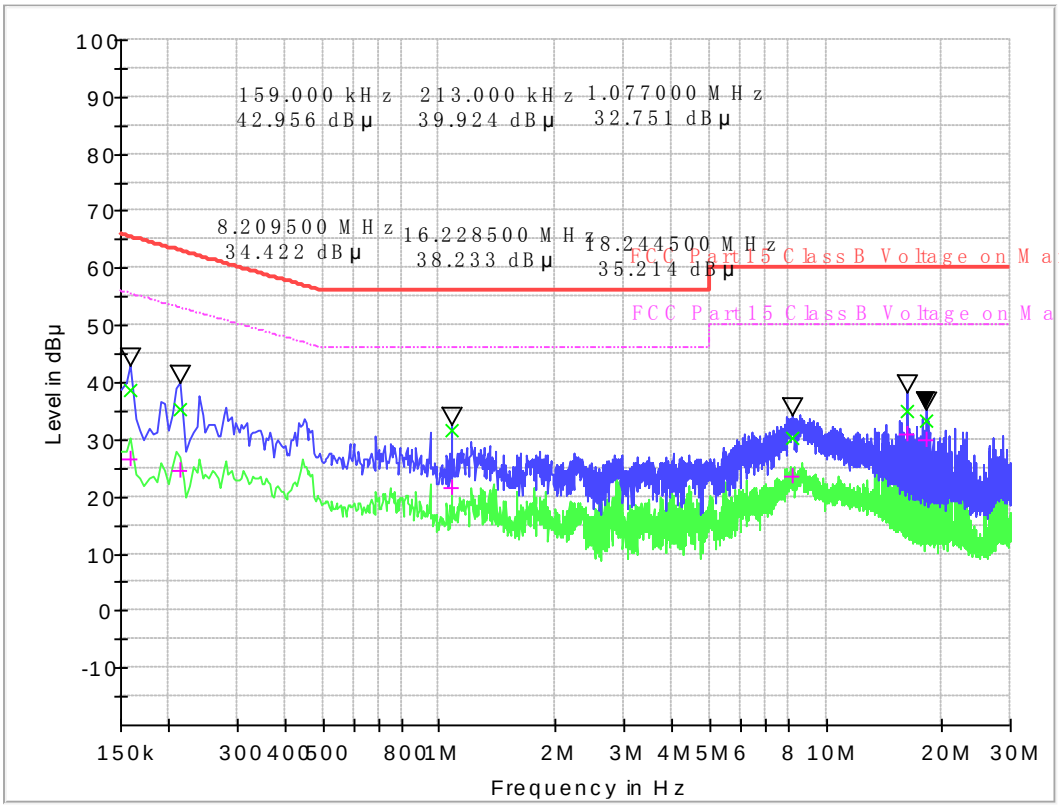
2.9.3. Test Results of Conducted Emission

The EUT configuration of the emission tests is Bluetooth Link + USB Cable (Charging from Adapter)



(Plot A: L Phase)

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dBµV)
0.186000	49.39	40.74	0.2	10.2	14.82	64.2	13.47	54.2
0.235500	46.58	36.65	0.2	10.2	15.67	62.3	15.60	52.3
0.528000	36.05	25.91	0.2	10.2	19.95	56.0	20.09	46.0
5.977500	29.54	25.17	0.5	10.5	30.46	60.0	24.83	50.0
9.541500	22.45	14.53	0.5	10.5	37.55	60.0	35.47	50.0
23.919000	26.66	23.69	0.5	10.5	33.34	60.0	26.31	50.0



(Plot B: N Phase)

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dBµV)
0.159000	38.72	26.44	0.2	10.2	26.80	65.5	29.08	55.5
0.213000	35.25	24.46	0.2	10.2	27.84	63.1	28.63	53.1
1.077000	31.58	21.41	0.2	10.2	24.42	56.0	24.59	46.0
8.209500	30.17	23.44	0.5	10.5	29.83	60.0	26.56	50.0
16.228500	34.88	31.02	0.5	10.5	25.12	60.0	18.98	50.0
18.244500	33.16	29.89	0.5	10.5	26.84	60.0	20.11	50.0

Test Result: PASS

Note: Correction factor=Cabel loss+ attenuation factor

attenuation factor=10dB

2.10. Radiated Band Edges and Spurious Emission

2.10.1. Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spuriousmust be at least 20 dB below the highest emission level within the authorized band. In addition,radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209limits as below.

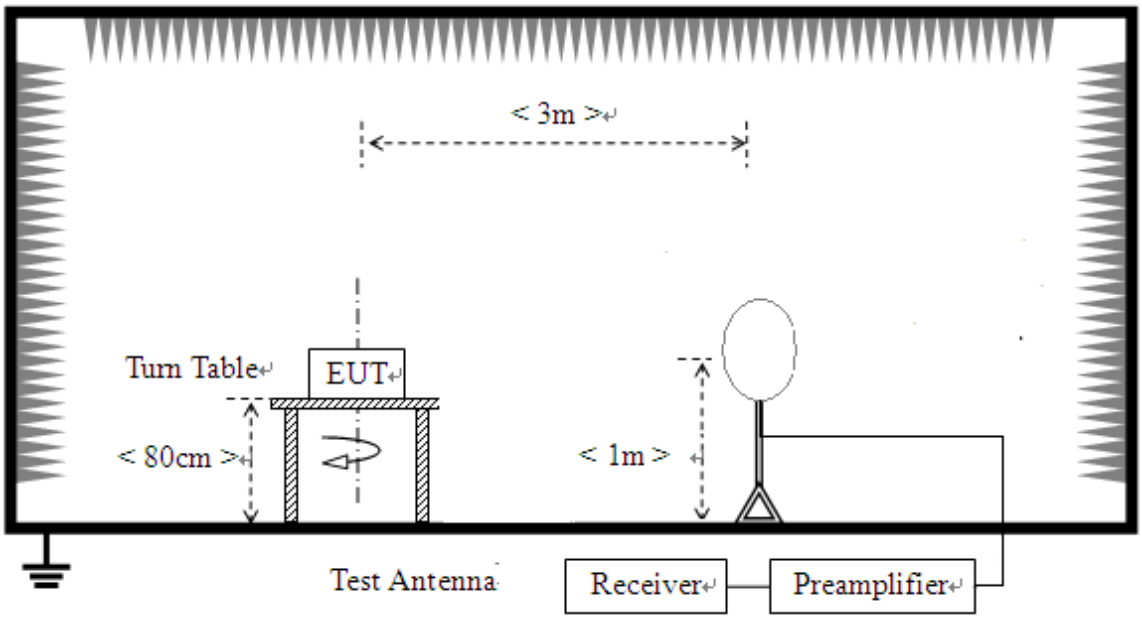
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

2.10.2. Measuring Instruments

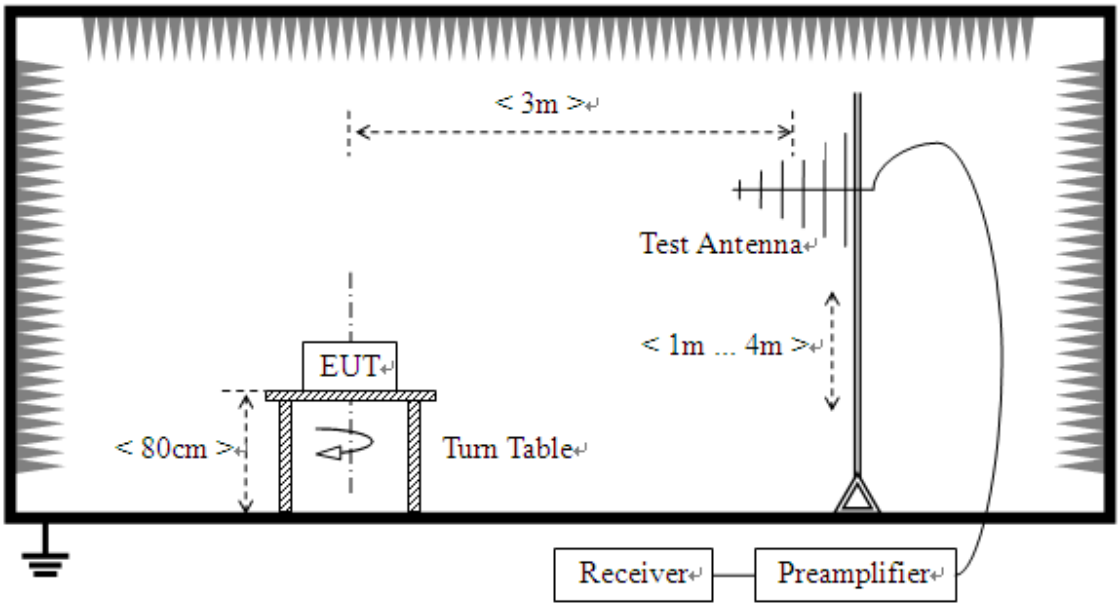
The measuring equipment is listed in the section 3 of this test report.

2.10.3. Test Setup

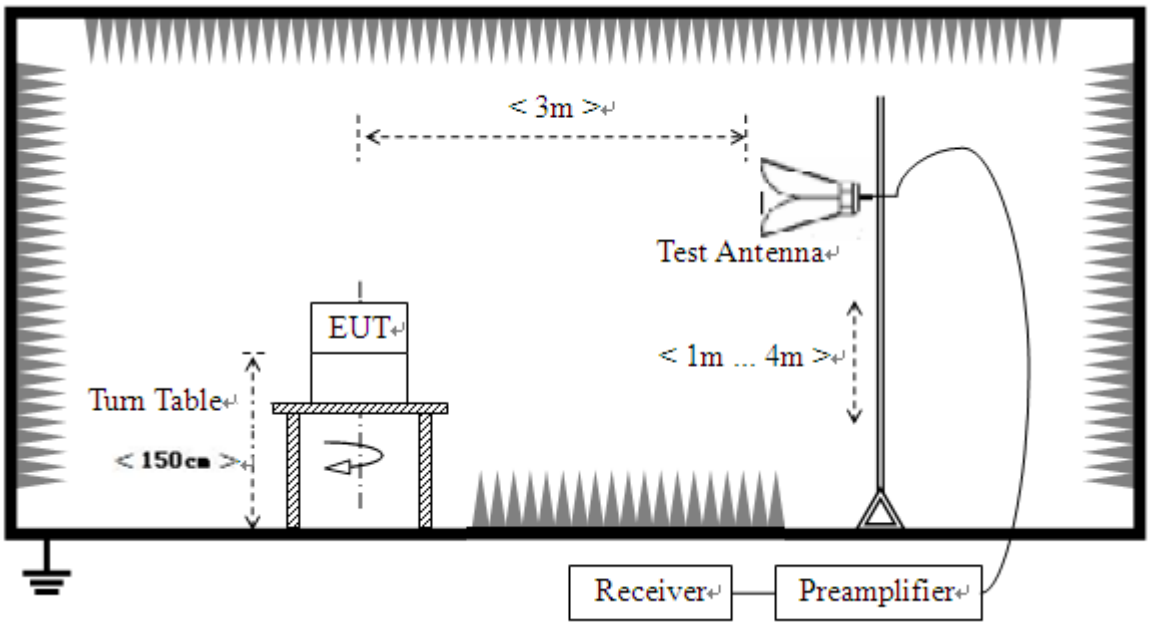
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



2.10.4. Test Procedure

1. The EUT was placed on a turntable 0.8m below 1GHz and 1.5m above 1GHz above ground.

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

3. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.

4. Set to the maximum power setting and enable the EUT transmit continuously.

5. Use the following spectrum analyzer settings:

(1) Span shall wide enough to fully capture the emission being measured;

(2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz ; VBW≥RBW; Sweep = auto;Detector function = peak; Trace = max hold for peak

(3) For average measurement: use duty cycle correction factor method per 15.35(c).

Duty cycle = On time/100 milliseconds

On time = $N_1*L_1+N_2*L_2+...+N_{n-1}*LN_{n-1}+Nn*Ln$

Where N_1 is number of type 1 pulses, L1 is length of type 1 pulses, etc.

Average Emission Level = Peak Emission Level + 20*log(Duty cycle)

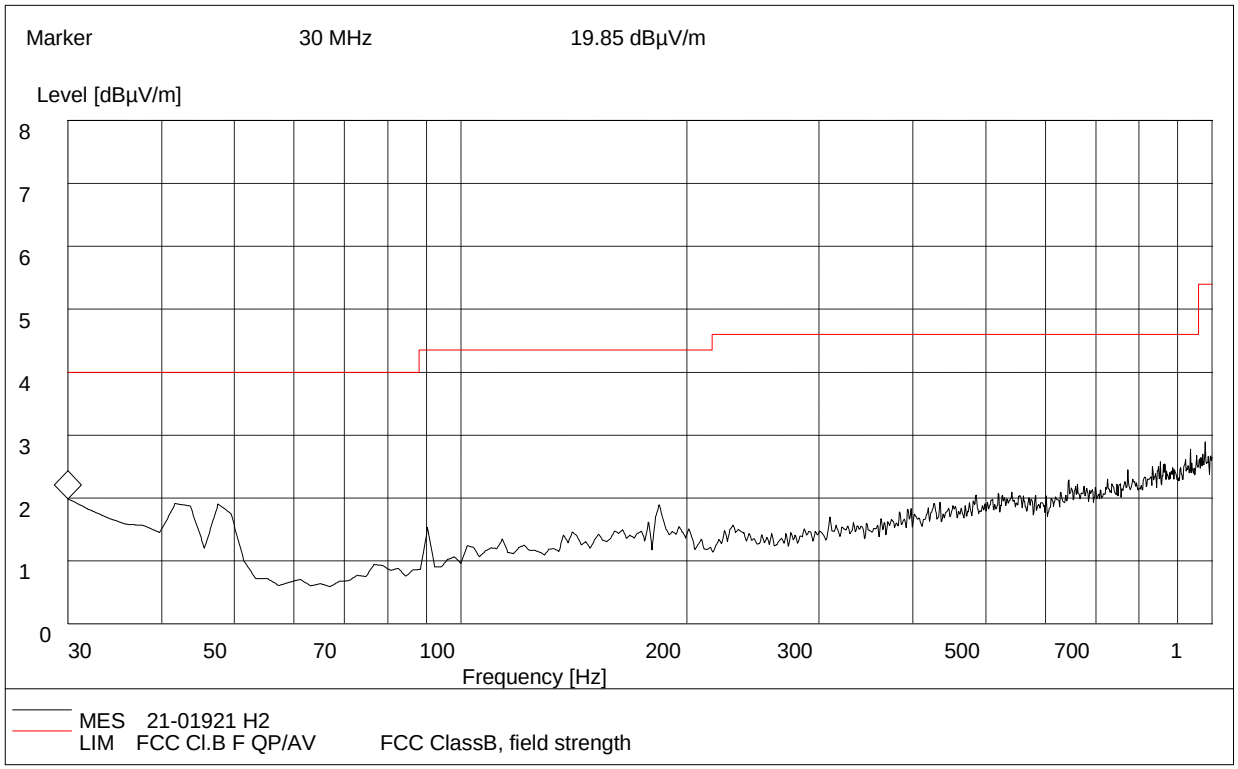
6. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

2.10.5. Test Results of Radiated Band Edge and Spurious Emission

For 9 KHz to 30MHz

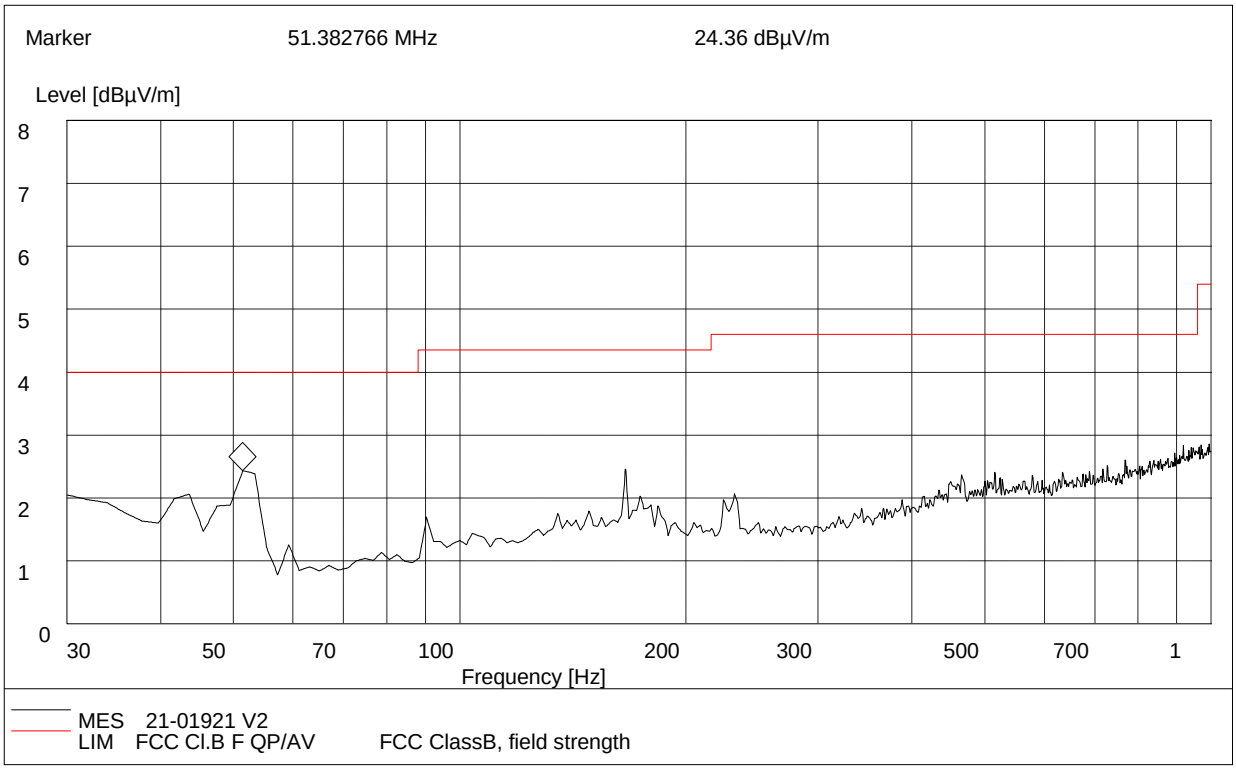
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

For 30MHz to 1000MHz



(Plot A: 30MHz to 1GHz, Antenna Horizontal)

Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Corr. Factor (dB/m)	Antenna height (cm)	Limit (dBµV/m)	Margin	Antenna	Verdict
30.00000	18.66	120.000	19.30	100.0	40.0	21.34	Horizontal	Pass
41.60000	18.56	120.000	14.00	100.0	40.0	21.44	Horizontal	Pass
140.080000	14.23	120.000	12.60	100.0	43.5	29.27	Horizontal	Pass
183.560000	18.41	120.000	11.00	100.0	43.5	25.09	Horizontal	Pass
644.260000	21.56	120.000	21.80	100.0	46.0	24.44	Horizontal	Pass
934.500000	26.50	120.000	25.80	100.0	46.0	19.50	Horizontal	Pass



(Plot B: 30MHz to 1GHz, Antenna Vertical)

Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Corr. Factor (dB/m)	Antenna height (cm)	Limit (dBµV/m)	Margin	Antenna	Verdict
30.000000	20.02	120.000	19.30	100.0	40.0	19.98	Vertical	Pass
51.350000	23.51	120.000	8.60	100.0	40.0	16.49	Vertical	Pass
166.280000	23.61	120.000	12.50	100.0	43.5	19.89	Vertical	Pass
172.650000	20.03	120.000	11.90	100.0	43.5	23.47	Vertical	Pass
465.820000	21.30	120.000	18.90	100.0	46.0	24.70	Vertical	Pass
768.620000	25.10	120.000	22.10	100.0	46.0	20.90	Vertical	Pass

For 1GHz to 25GHz

GFSK_2402MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2390.00	47.73	74.00	-26.27	1.50	170	46.43	1.30	Horizontal	Peak
2390.00	36.63	54.00	-17.37	1.50	170	35.33	1.30	Horizontal	Average
4804.00	48.50	74.00	-25.50	1.50	170	42.10	6.40	Horizontal	Peak
4804.00	38.77	54.00	-15.23	1.50	170	32.37	6.40	Horizontal	Average
7206.00	52.13	74.00	-21.87	1.50	170	42.83	9.30	Horizontal	Peak
7206.00	42.20	54.00	-11.80	1.50	170	32.90	9.30	Horizontal	Average
2390.00	45.23	74.00	-28.77	1.70	250	43.93	1.30	Vertical	Peak
2390.00	35.36	54.00	-18.64	1.70	250	34.06	1.30	Vertical	Average
4804.00	48.88	74.00	-25.12	1.70	250	42.48	6.40	Vertical	Peak
4804.00	39.61	54.00	-14.39	1.70	250	33.21	6.40	Vertical	Average
7206.00	51.10	74.00	-22.90	1.70	250	41.80	9.30	Vertical	Peak
7206.00	41.89	54.00	-12.11	1.70	250	32.59	9.30	Vertical	Average
GFSK_2441MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
4882.00	48.39	74.00	-25.61	1.50	170	41.99	6.40	Horizontal	Peak
4882.00	39.25	54.00	-14.75	1.50	170	32.85	6.40	Horizontal	Average
7323.00	50.98	74.00	-23.02	1.50	170	41.58	9.40	Horizontal	Peak
7323.00	41.46	54.00	-12.54	1.50	170	32.06	9.40	Horizontal	Average
4882.00	49.97	74.00	-24.03	1.70	250	43.57	6.40	Vertical	Peak
4882.00	39.32	54.00	-14.68	1.70	250	32.92	6.40	Vertical	Average
7323.00	50.29	74.00	-23.71	1.70	250	40.89	9.40	Vertical	Peak
7323.00	41.30	54.00	-12.70	1.70	250	31.90	9.40	Vertical	Average

Remark:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)

3. Margin value = Emission Level – Limit value

4.The emission levels of other frequencies are very lower than the limit and not show in test report.

GFSK_2480MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2483.50	46.31	74.00	-27.69	1.50	170	43.71	2.60	Horizontal	Peak
2483.50	36.77	54.00	-17.23	1.50	170	34.17	2.60	Horizontal	Average
4960.00	47.98	74.00	-26.02	1.50	170	41.28	6.70	Horizontal	Peak
4960.00	38.89	54.00	-15.11	1.50	170	32.19	6.70	Horizontal	Average
7440.00	51.26	74.00	-22.74	1.50	170	41.76	9.50	Horizontal	Peak
7440.00	42.71	54.00	-11.29	1.50	170	33.21	9.50	Horizontal	Average
2483.50	45.81	74.00	-28.19	1.70	250	43.21	2.60	Vertical	Peak
2483.50	36.82	54.00	-17.18	1.70	250	34.22	2.60	Vertical	Average
4960.00	49.57	74.00	-24.43	1.70	250	42.87	6.70	Vertical	Peak
4960.00	39.91	54.00	-14.09	1.70	250	33.21	6.70	Vertical	Average
7440.00	51.69	74.00	-22.31	1.70	250	42.19	9.50	Vertical	Peak
7440.00	42.55	54.00	-11.45	1.70	250	33.05	9.50	Vertical	Average

Remark:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)

3. Margin value = Emission Level – Limit value

4.The emission levels of other frequencies are very lower than the limit and not show in test report.

π/4-DQPSK _2402MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2390.00	47.34	74.00	-26.66	1.50	170	46.04	1.30	Horizontal	Peak
2390.00	36.70	54.00	-17.30	1.50	170	35.40	1.30	Horizontal	Average
4804.00	48.46	74.00	-25.54	1.50	170	42.06	6.40	Horizontal	Peak
4804.00	39.05	54.00	-14.95	1.50	170	32.65	6.40	Horizontal	Average
7206.00	52.44	74.00	-21.56	1.50	170	43.14	9.30	Horizontal	Peak
7206.00	41.88	54.00	-12.12	1.50	170	32.58	9.30	Horizontal	Average
2390.00	44.79	74.00	-29.21	1.70	250	43.49	1.30	Vertical	Peak
2390.00	35.53	54.00	-18.47	1.70	250	34.23	1.30	Vertical	Average
4804.00	49.26	74.00	-24.74	1.70	250	42.86	6.40	Vertical	Peak
4804.00	39.42	54.00	-14.58	1.70	250	33.02	6.40	Vertical	Average
7206.00	50.89	74.00	-23.11	1.70	250	41.59	9.30	Vertical	Peak
7206.00	41.45	54.00	-12.55	1.70	250	32.15	9.30	Vertical	Average
π/4-DQPSK _2441MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
4882.00	48.02	74.00	-25.98	1.50	170	41.62	6.40	Horizontal	Peak
4882.00	39.42	54.00	-14.58	1.50	170	33.02	6.40	Horizontal	Average
7323.00	51.06	74.00	-22.94	1.50	170	41.66	9.40	Horizontal	Peak
7323.00	41.66	54.00	-12.34	1.50	170	32.26	9.40	Horizontal	Average
4882.00	49.73	74.00	-24.27	1.70	250	43.33	6.40	Vertical	Peak
4882.00	39.66	54.00	-14.34	1.70	250	33.26	6.40	Vertical	Average
7323.00	50.15	74.00	-23.85	1.70	250	40.75	9.40	Vertical	Peak
7323.00	41.59	54.00	-12.41	1.70	250	32.19	9.40	Vertical	Average

Remark:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)

3. Margin value = Emission Level – Limit value

4.The emission levels of other frequencies are very lower than the limit and not show in test report.

π/4-DQPSK _2480MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2483.50	46.77	74.00	-27.23	1.50	170	44.17	2.60	Horizontal	Peak
2483.50	37.24	54.00	-16.76	1.50	170	34.64	2.60	Horizontal	Average
4960.00	47.91	74.00	-26.09	1.50	170	41.21	6.70	Horizontal	Peak
4960.00	39.07	54.00	-14.93	1.50	170	32.37	6.70	Horizontal	Average
7440.00	51.16	74.00	-22.84	1.50	170	41.66	9.50	Horizontal	Peak
7440.00	42.42	54.00	-11.58	1.50	170	32.92	9.50	Horizontal	Average
2483.50	46.10	74.00	-27.90	1.70	250	43.50	2.60	Vertical	Peak
2483.50	36.67	54.00	-17.33	1.70	250	34.07	2.60	Vertical	Average
4960.00	49.73	74.00	-24.27	1.70	250	43.03	6.70	Vertical	Peak
4960.00	39.81	54.00	-14.19	1.70	250	33.11	6.70	Vertical	Average
7440.00	51.89	74.00	-22.11	1.70	250	42.39	9.50	Vertical	Peak
7440.00	42.60	54.00	-11.40	1.70	250	33.10	9.50	Vertical	Average

Remark:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)

3. Margin value = Emission Level – Limit value

4.The emission levels of other frequencies are very lower than the limit and not show in test report.

8DPSK _2402MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2390.00	47.50	74.00	-26.50	1.50	170	46.20	1.30	Horizontal	Peak
2390.00	36.20	54.00	-17.80	1.50	170	34.90	1.30	Horizontal	Average
4804.00	48.56	74.00	-25.44	1.50	170	42.16	6.40	Horizontal	Peak
4804.00	39.10	54.00	-14.90	1.50	170	32.70	6.40	Horizontal	Average
7206.00	52.12	74.00	-21.88	1.50	170	42.82	9.30	Horizontal	Peak
7206.00	41.70	54.00	-12.30	1.50	170	32.40	9.30	Horizontal	Average
2390.00	44.93	74.00	-29.07	1.70	250	43.63	1.30	Vertical	Peak
2390.00	35.93	54.00	-18.07	1.70	250	34.63	1.30	Vertical	Average
4804.00	49.38	74.00	-24.62	1.70	250	42.98	6.40	Vertical	Peak
4804.00	39.85	54.00	-14.15	1.70	250	33.45	6.40	Vertical	Average
7206.00	50.62	74.00	-23.38	1.70	250	41.32	9.30	Vertical	Peak
7206.00	41.87	54.00	-12.13	1.70	250	32.57	9.30	Vertical	Average
8DPSK _2441MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
4882.00	48.17	74.00	-25.83	1.50	170	41.77	6.40	Horizontal	Peak
4882.00	38.94	54.00	-15.06	1.50	170	32.54	6.40	Horizontal	Average
7323.00	50.96	74.00	-23.04	1.50	170	41.56	9.40	Horizontal	Peak
7323.00	41.68	54.00	-12.32	1.50	170	32.28	9.40	Horizontal	Average
4882.00	50.14	74.00	-23.86	1.70	250	43.74	6.40	Vertical	Peak
4882.00	39.49	54.00	-14.51	1.70	250	33.09	6.40	Vertical	Average
7323.00	49.96	74.00	-24.04	1.70	250	40.56	9.40	Vertical	Peak
7323.00	41.68	54.00	-12.32	1.70	250	32.28	9.40	Vertical	Average

Remark:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)

3. Margin value = Emission Level – Limit value

4.The emission levels of other frequencies are very lower than the limit and not show in test report.

8DPSK _2480MHz									
Frequency (MHz)	Emssion Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)	Polarity	Detector
2483.50	46.46	74.00	-27.54	1.50	170	43.86	2.60	Horizontal	Peak
2483.50	36.28	54.00	-17.72	1.50	170	33.68	2.60	Horizontal	Average
4960.00	48.36	74.00	-25.64	1.50	170	41.66	6.70	Horizontal	Peak
4960.00	38.41	54.00	-15.59	1.50	170	31.71	6.70	Horizontal	Average
7440.00	51.65	74.00	-22.35	1.50	170	42.15	9.50	Horizontal	Peak
7440.00	42.80	54.00	-11.20	1.50	170	33.30	9.50	Horizontal	Average
2483.50	46.28	74.00	-27.72	1.70	250	43.68	2.60	Vertical	Peak
2483.50	36.65	54.00	-17.35	1.70	250	34.05	2.60	Vertical	Average
4960.00	49.26	74.00	-24.74	1.70	250	42.56	6.70	Vertical	Peak
4960.00	39.76	54.00	-14.24	1.70	250	33.06	6.70	Vertical	Average
7440.00	51.31	74.00	-22.69	1.70	250	41.81	9.50	Vertical	Peak
7440.00	42.35	54.00	-11.65	1.70	250	32.85	9.50	Vertical	Average

Remark:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) - Pre-Amplifier Factor(dB)

3. Margin value = Emission Level – Limit value

4.The emission levels of other frequencies are very lower than the limit and not show in test report.

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI TEST RECEIVER	KEYSIGHT	N9038A	A141202036	2021.04.26	2022.04.25
2	Power Meter	R&S	NRP-Z31	102872	2021.04.26	2022.04.25
3	TURNTABLE	ETS	2088	2149	N/A	N/A
4	ANTENNA MAST	ETS	2075	2346	N/A	N/A
5	EMI TEST Software	R&S	ESK1	N/A	N/A	N/A
6	Horn antenna (18GHz~26.5GHz)	AR	AT4003A	325306	2020.09.16	2022.09.15
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2021.01.26	2022.01.25
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2021.01.26	2022.01.25
9	High pass filter	Compliance Direction systems	BSU-6	34202	2021.11.09	2022.11.08
10	Horn Antenna	R&S	HF906	A0304225	2019.04.17	2022.04.16
11	Horn Antenna	R&S	ESIB7	A0501375	2020.06.24	2022.06.22
12	ULTRA-BROADBAND ANTENNA	SCHWARZBECK	VULB9160	A0805560	2019.05.24	2022.05.23
13	Passive Loop Antenna	R&S	HFH2-Z2	100047	2019.04.26	2022.04.25
14	Temperature chamber	TABAI	PS-232	A8708054	2021.09.24	2022.09.23
15	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2021.04.26	2022.04.25
16	Power Supply	R&S	ESIB26	A0304218	2021.01.04	2022.01.03
17	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2021.08.11	2022.08.10
18	Test software	ECIT	Eagle	V2.0	N/A	N/A

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150KHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.8dB

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	3.91dB

Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.5dB

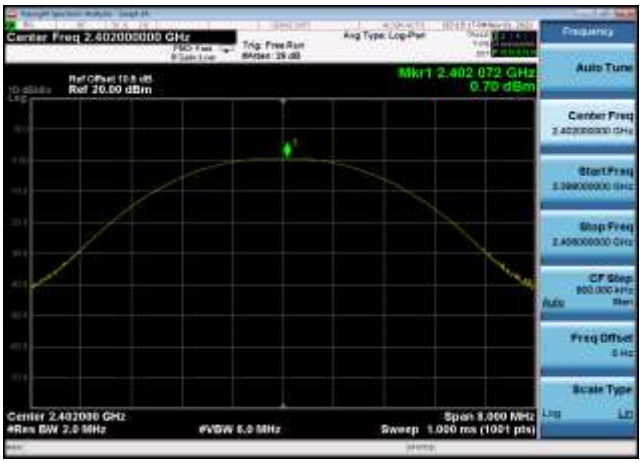
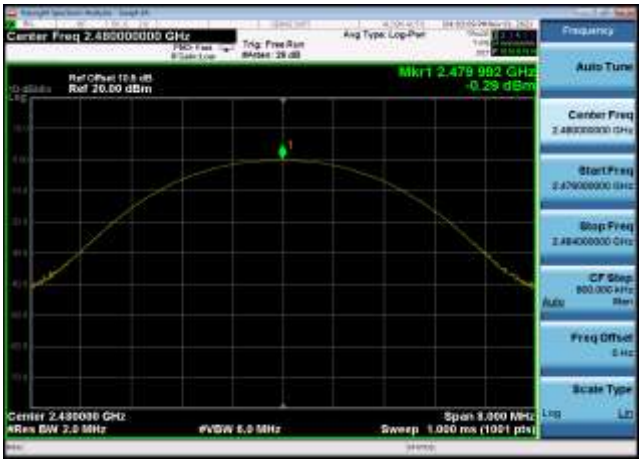
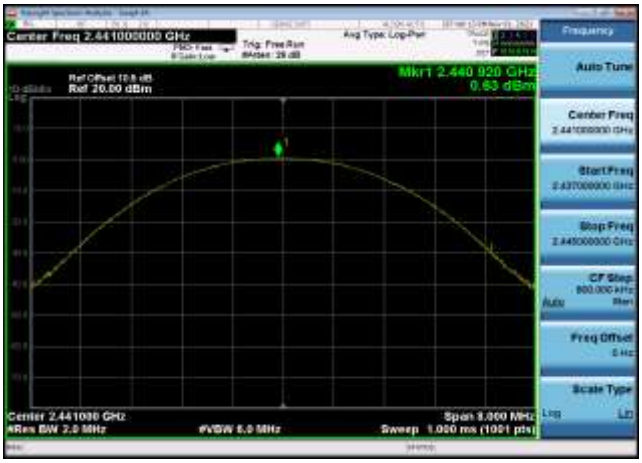
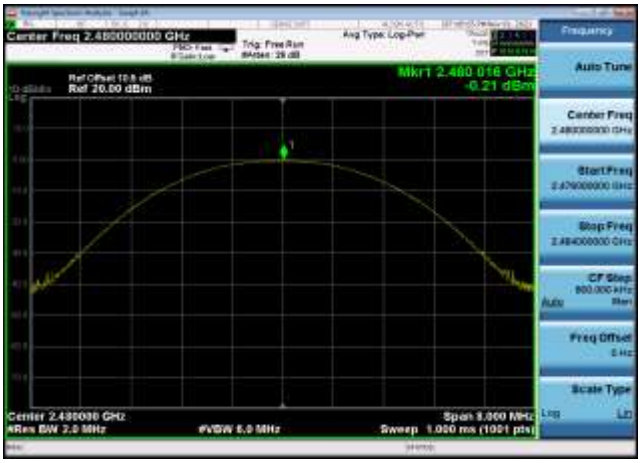
Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

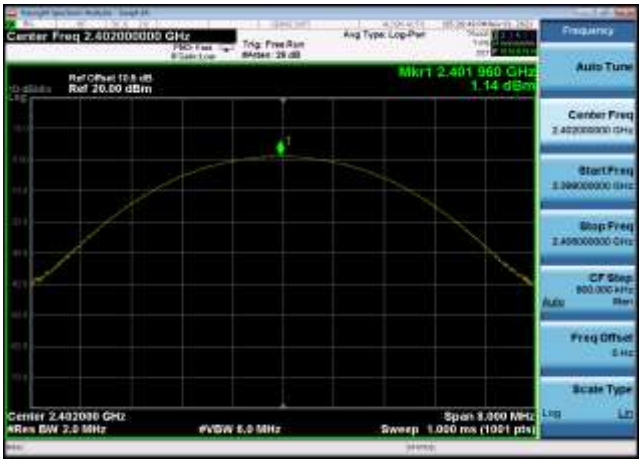
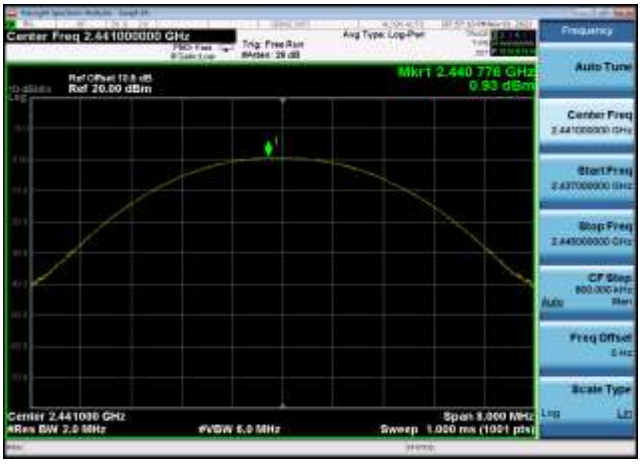
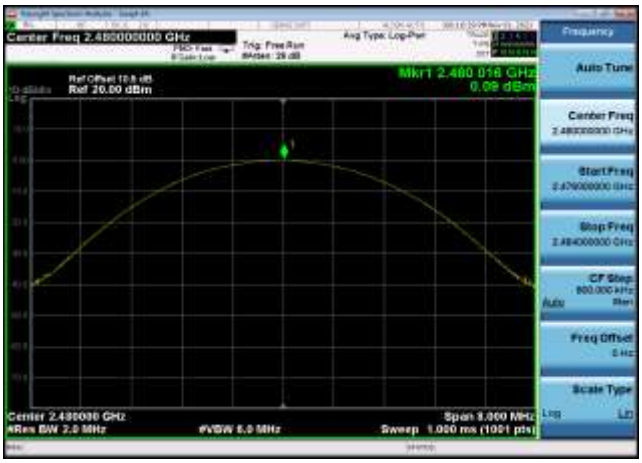
Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.9dB

Appendix A

RF Output Power
Test Result and Data

BT Maximum Output Power					
Mode	Test Frequency	Packet Type	Power(dBm)	Limit(dBm)	Result
GFSK	2402	DH5	0.70	30	Pass
GFSK	2441	DH5	0.78	30	Pass
GFSK	2480	DH5	-0.29	30	Pass
π/4-DQPSK	2402	2DH5	0.87	21	Pass
π/4-DQPSK	2441	2DH5	0.63	21	Pass
π/4-DQPSK	2480	2DH5	-0.21	21	Pass
8DPSK	2402	3DH5	1.14	21	Pass
8DPSK	2441	3DH5	0.93	21	Pass
8DPSK	2480	3DH5	0.09	21	Pass

Output Power：GFSK,2402MHz,DH5	Output Power：GFSK,2441MHz,DH5
	
Output Power：GFSK,2480MHz,DH5	Output Power：DQPSK,2402MHz,2DH5
	
Output Power：DQPSK,2441MHz,2DH5	Output Power：DQPSK,2480MHz,2DH5
	

Output Power：8DPSK,2402MHz,3DH5	Output Power：8DPSK,2441MHz,3DH5
	
Output Power：8DPSK,2480MHz,3DH5	
	

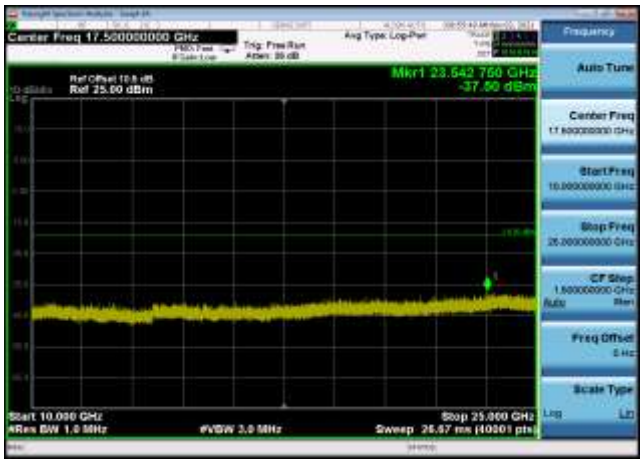
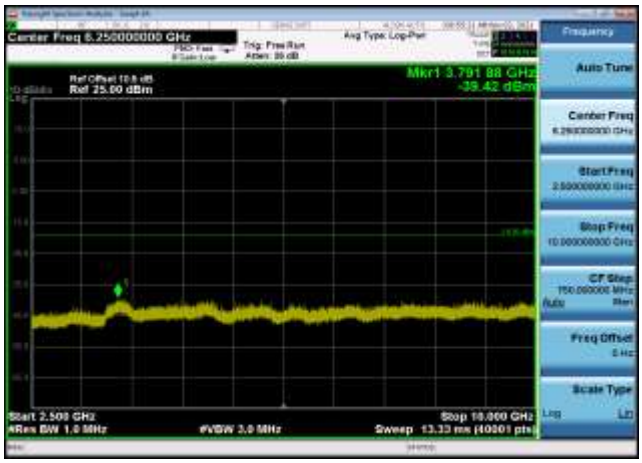
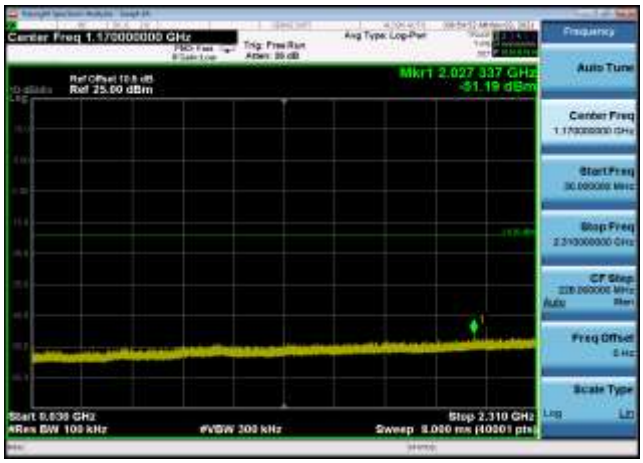
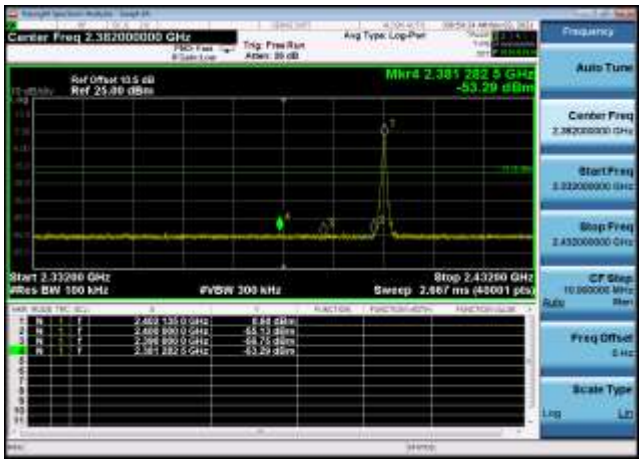
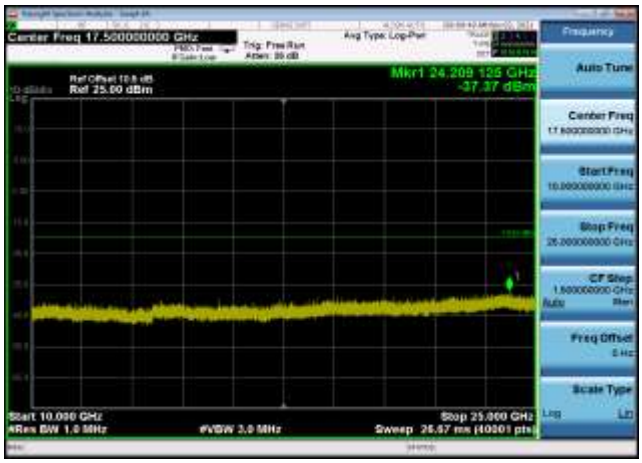
20dB Bandwidth
Test Result and Data

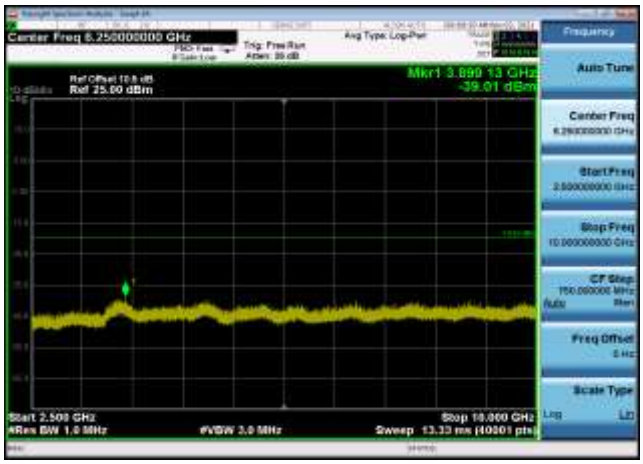
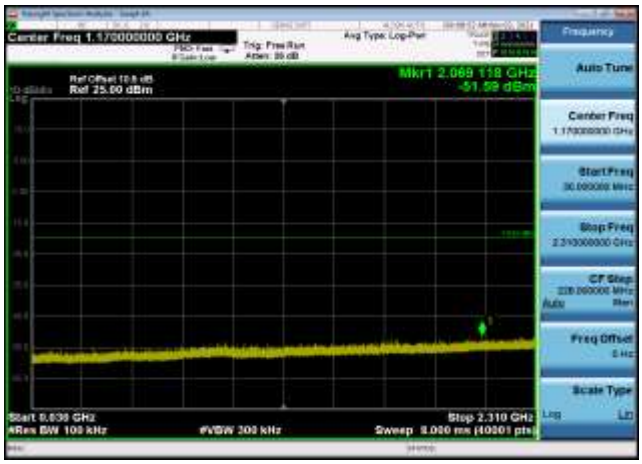
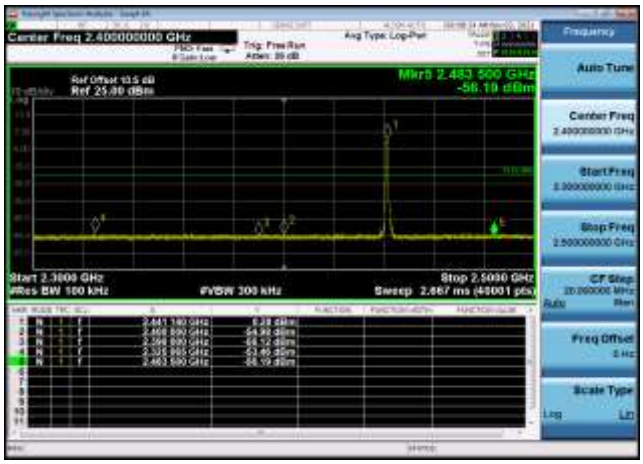
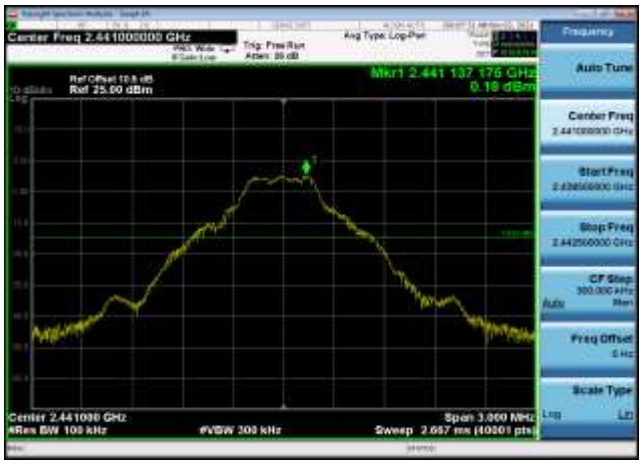
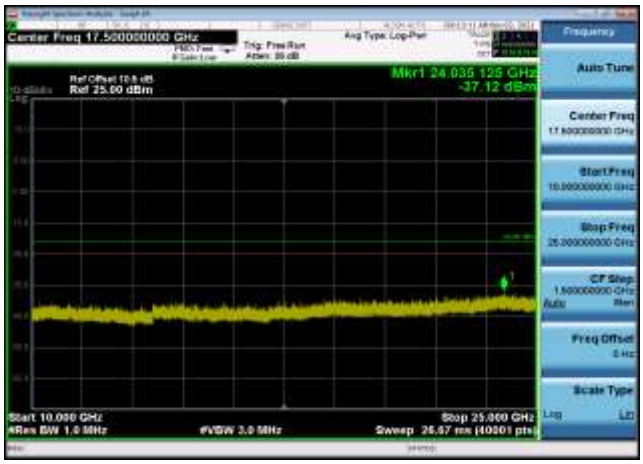
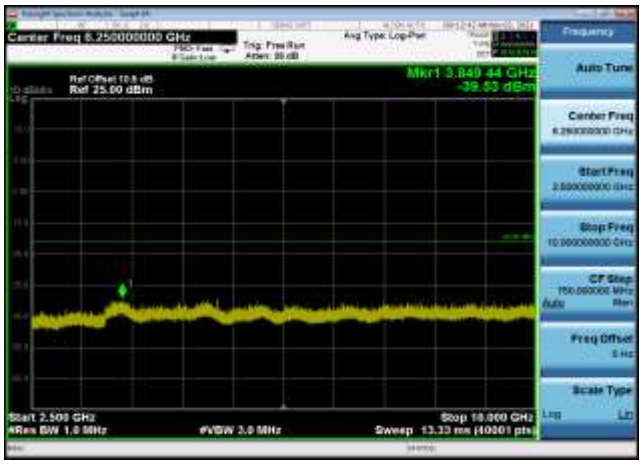
BT Occupied 20dB Bandwidth				
Mode	Test Frequency	Packet Type	-20dB Bandwidth (kHz)	Result
GFSK	2402	DH5	949.973	Pass
GFSK	2441	DH5	952.715	Pass
GFSK	2480	DH5	950.4	Pass
π/4-DQPSK	2402	2DH5	1281.733	Pass
π/4-DQPSK	2441	2DH5	1283.312	Pass
π/4-DQPSK	2480	2DH5	1286.615	Pass
8DPSK	2402	3DH5	1284.642	Pass
8DPSK	2441	3DH5	1284.382	Pass
8DPSK	2480	3DH5	1283.926	Pass

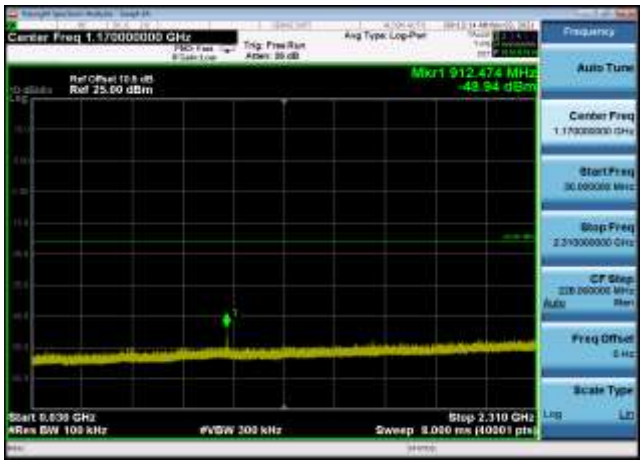
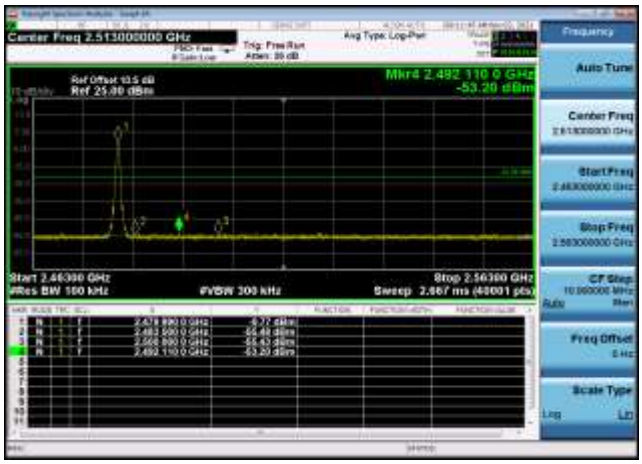
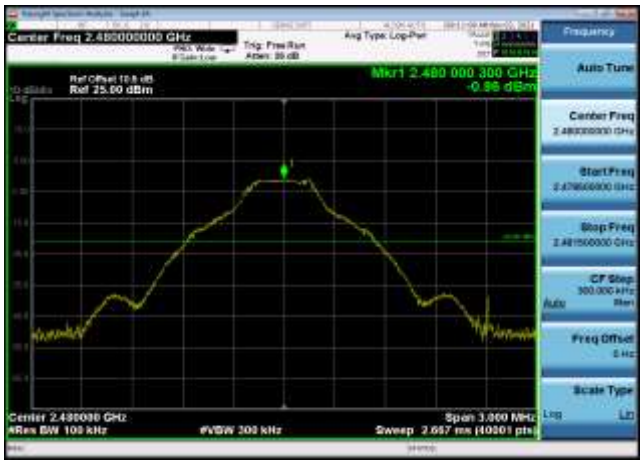
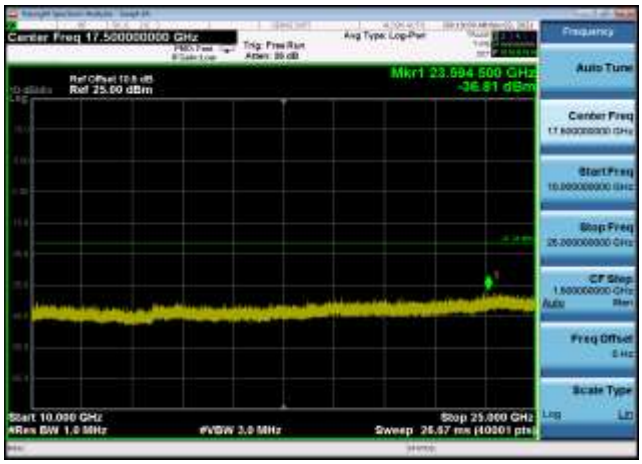
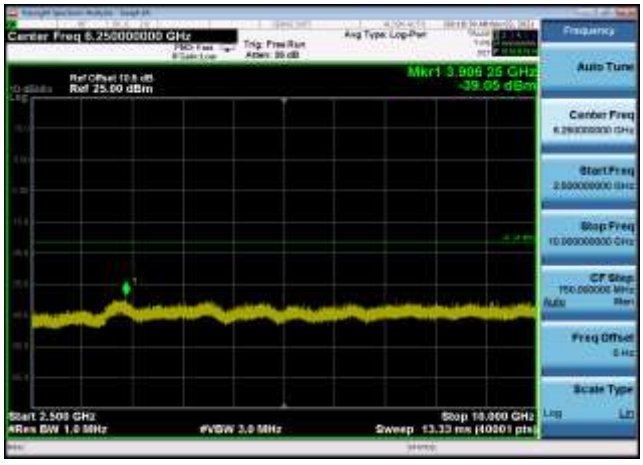
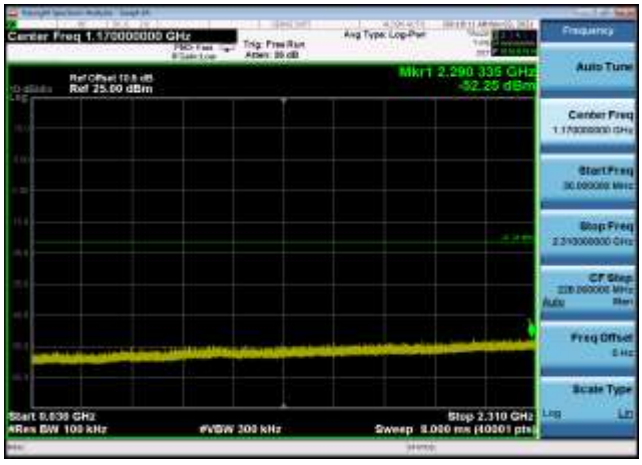
20dB Bandwidth：GFSK,2402MHz,DH5	20dB Bandwidth：GFSK,2441MHz,DH5
	
20dB Bandwidth：GFSK,2480MHz,DH5	20dB Bandwidth：DQPSK,2402MHz,2DH5
	
20dB Bandwidth：DQPSK,2441MHz,2DH5	20dB Bandwidth：DQPSK,2480MHz,2DH5
	

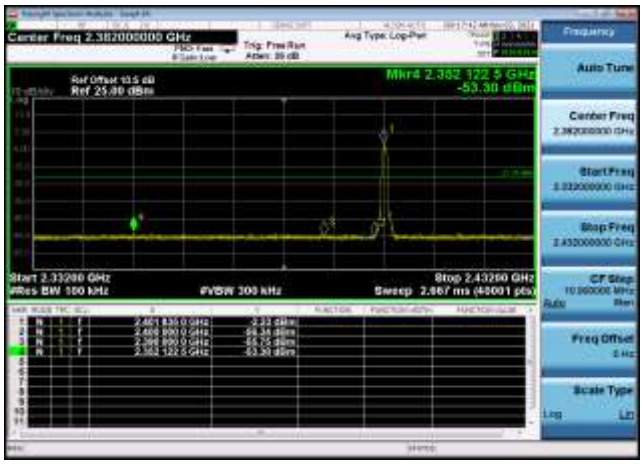
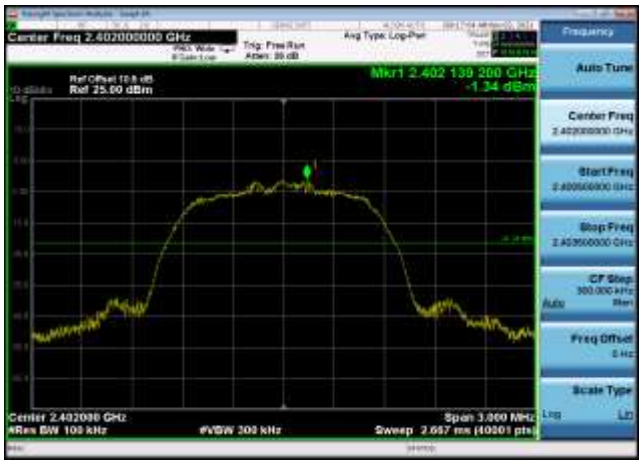
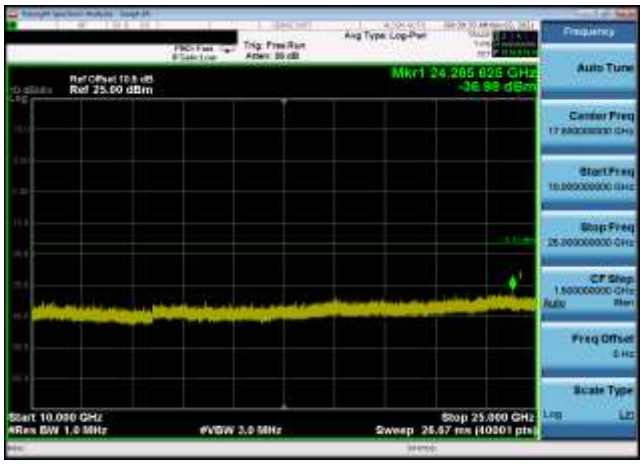
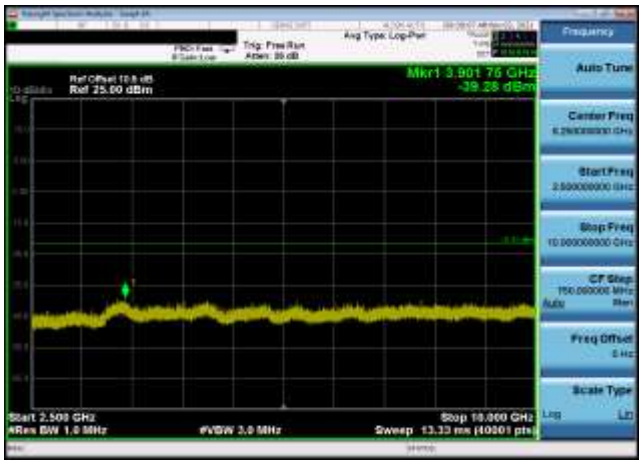
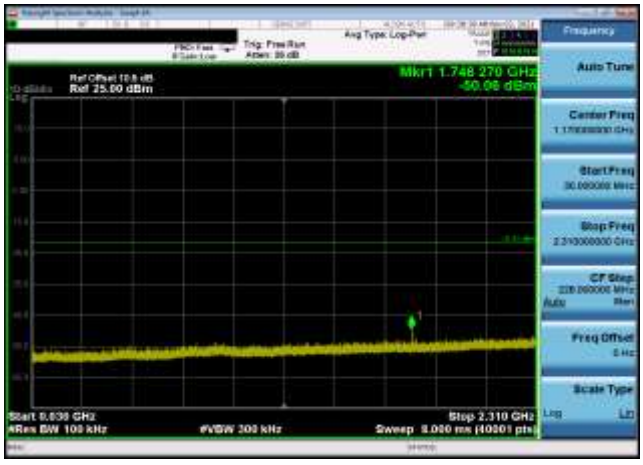
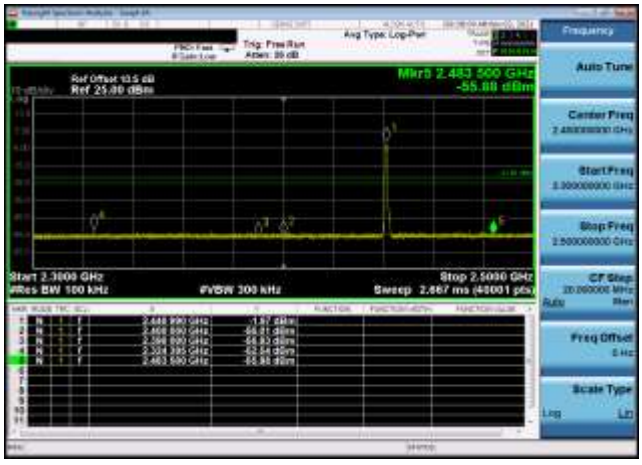
20dB Bandwidth：8DPSK,2402MHz,3DH5	20dB Bandwidth：8DPSK,2441MHz,3DH5
	
20dB Bandwidth：8DPSK,2480MHz,3DH5	
	

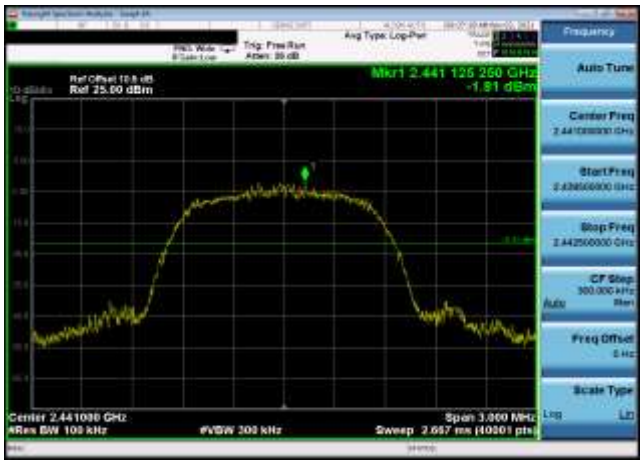
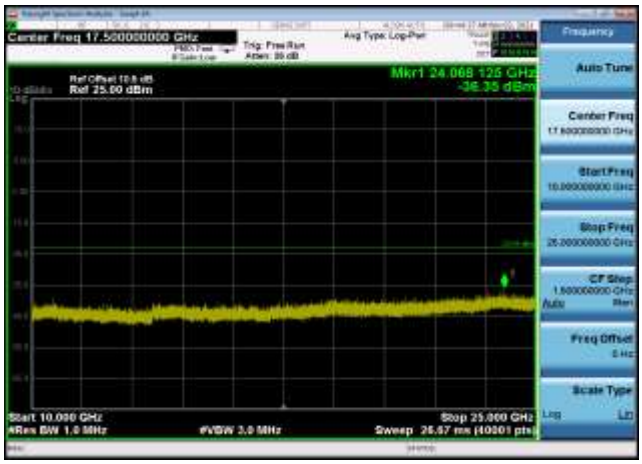
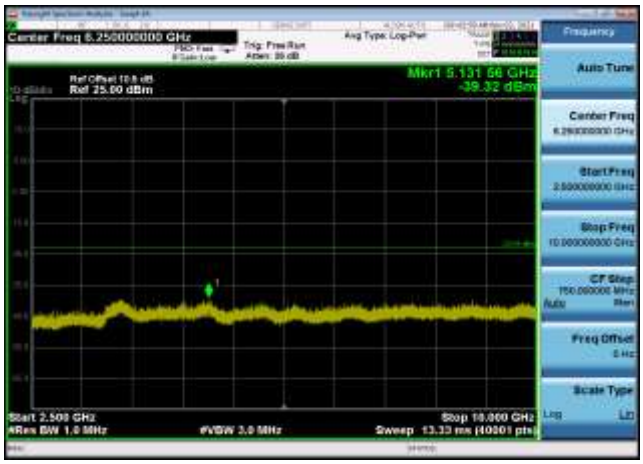
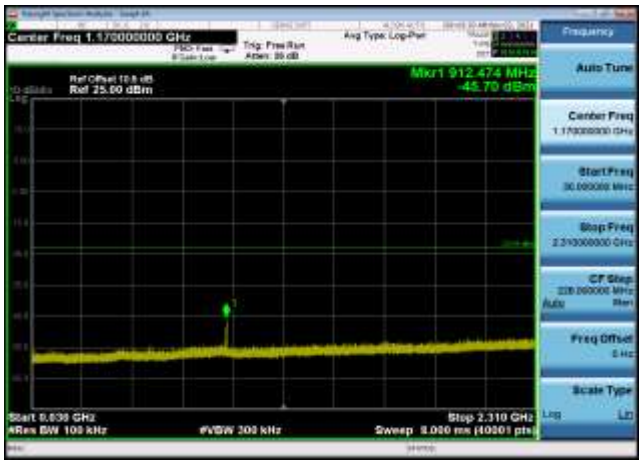
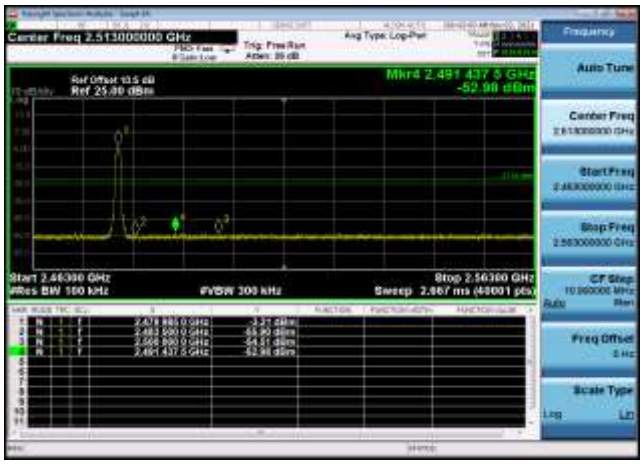
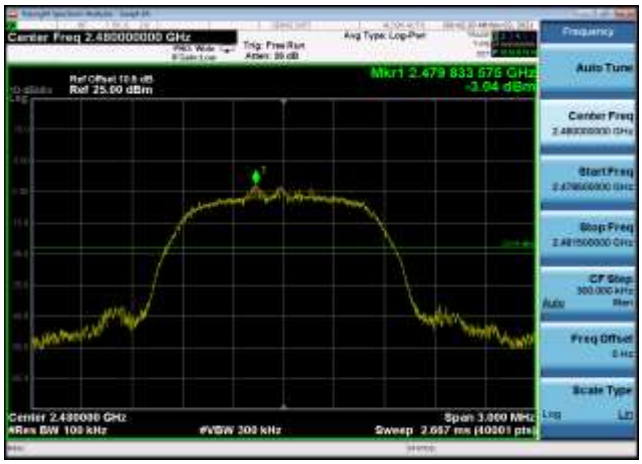
Transmitter Spurious Emission and Bandedge
Test Result and Data

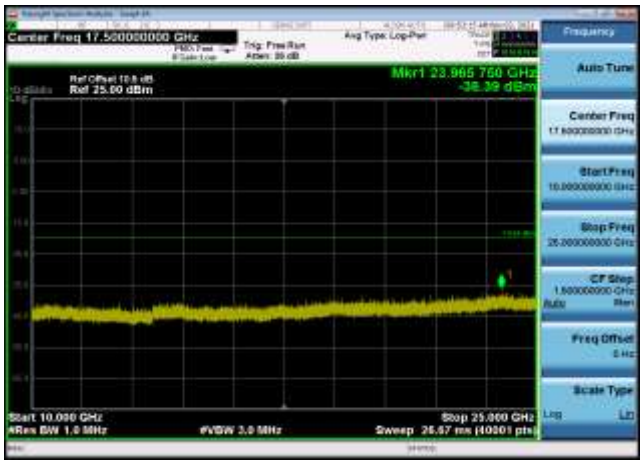
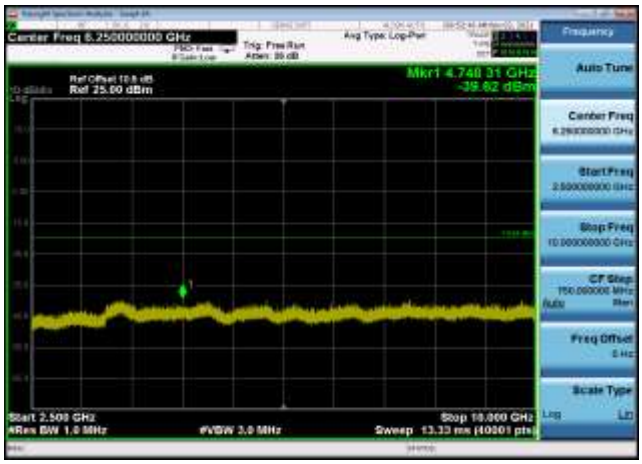
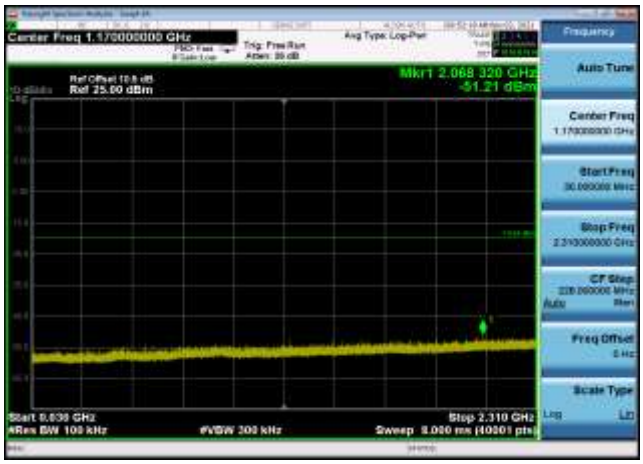
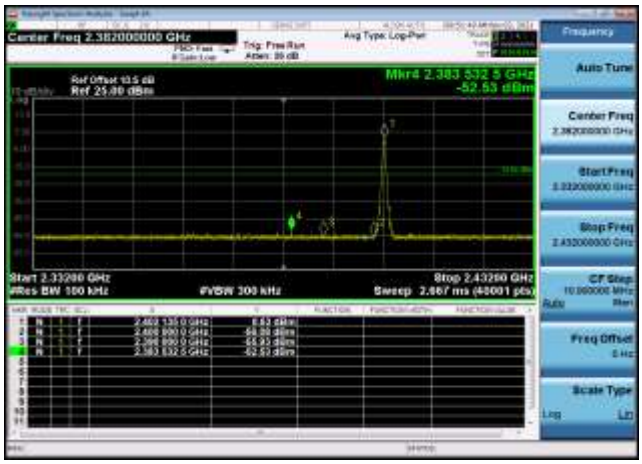
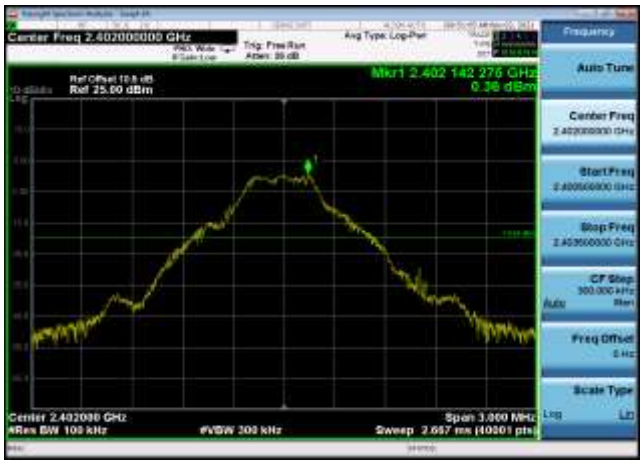
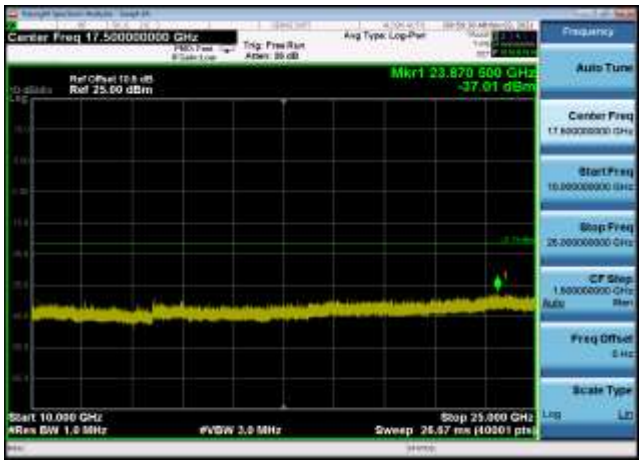
Conducted Emission：GFSK,2402,DH5 ,10000MHz~25000MHz	Conducted Emission：GFSK,2402,DH5 ,2500MHz~10000MHz
	
Conducted Emission：GFSK,2402,DH5 ,30MHz~2310MHz	Conducted Emission：GFSK,2402,DH5 ,Band Edge HoppingOFF
	
Conducted Emission：GFSK,2402,DH5 ,Reference Level	Conducted Emission：GFSK,2441,DH5 ,10000MHz~25000MHz
	

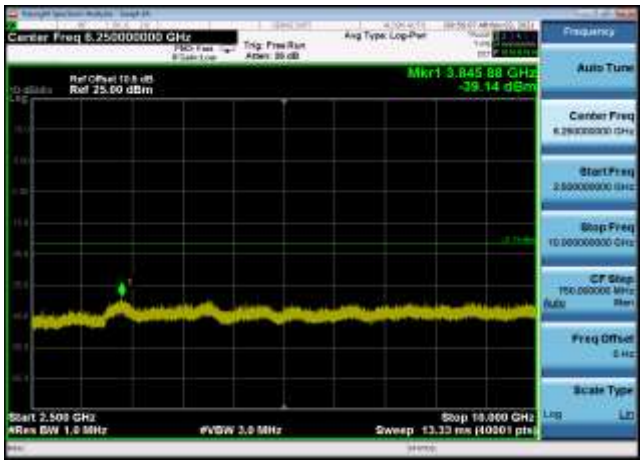
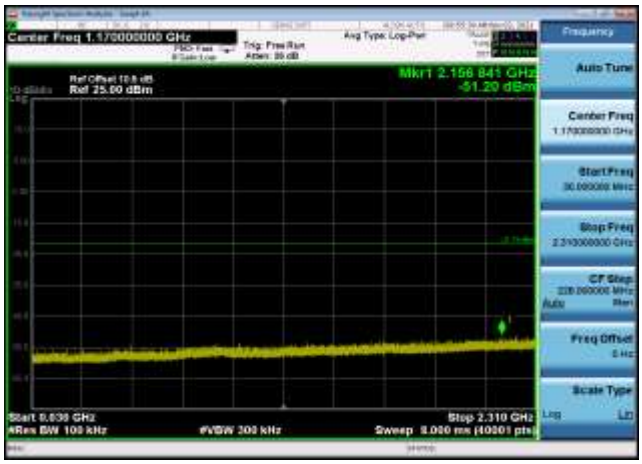
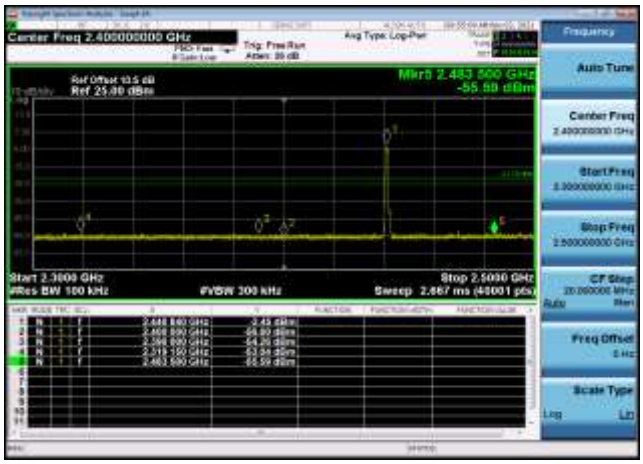
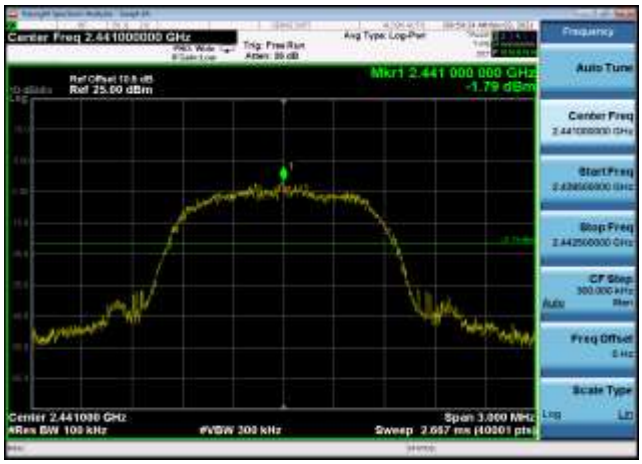
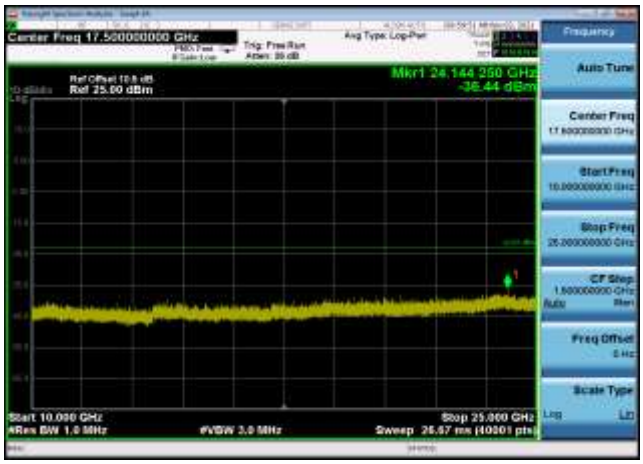
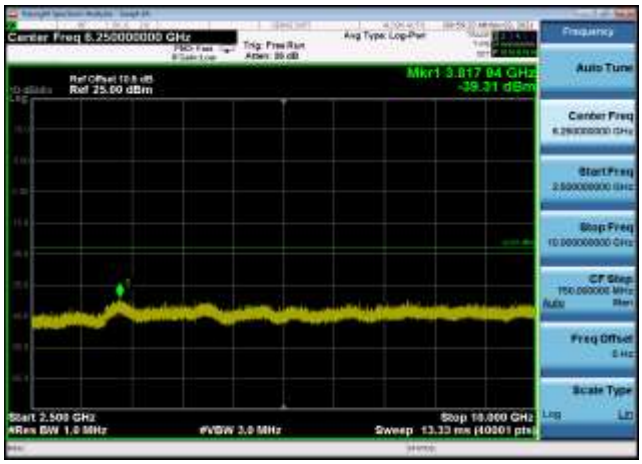
Conducted Emission：GFSK,2441,DH5 ,2500MHz~10000MHz	Conducted Emission：GFSK,2441,DH5 ,30MHz~2310MHz
	
Conducted Emission：GFSK,2441,DH5 ,Band Edge HoppingOFF	Conducted Emission：GFSK,2441,DH5 ,Reference Level
	
Conducted Emission：GFSK,2480,DH5 ,10000MHz~25000MHz	Conducted Emission：GFSK,2480,DH5 ,2500MHz~10000MHz
	

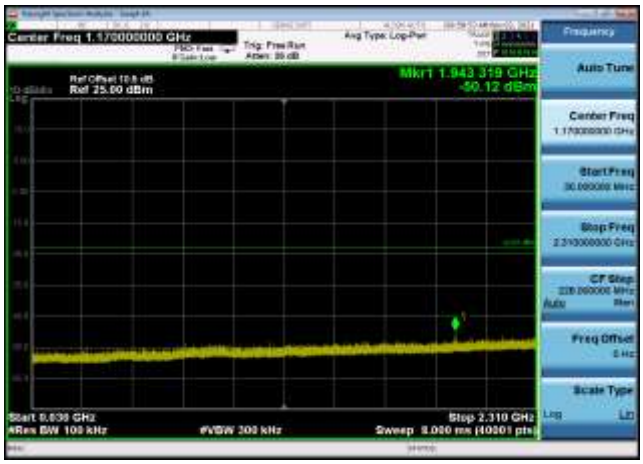
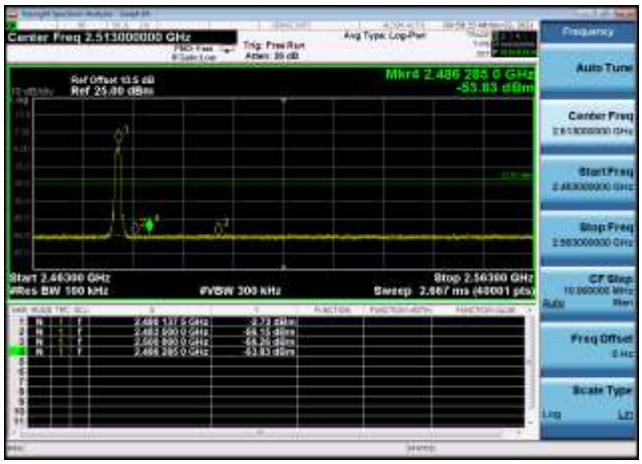
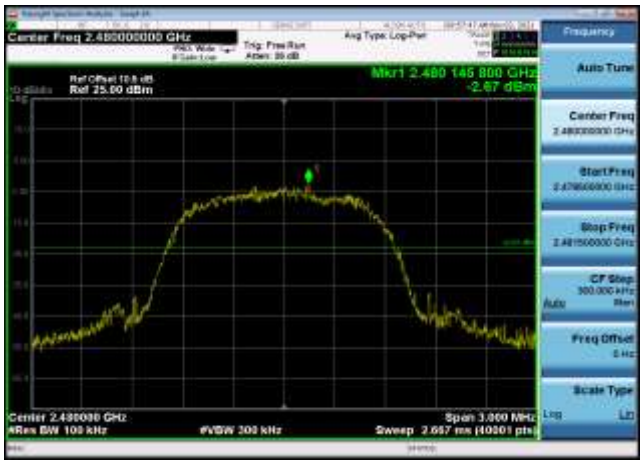
Conducted Emission：GFSK,2480,DH5 ,30MHz~2310MHz	Conducted Emission：GFSK,2480,DH5 ,Band Edge HoppingOFF
	
Conducted Emission：GFSK,2480,DH5 ,Reference Level	Conducted Emission：DQPSK,2402,2DH5 ,10000MHz~25000MHz
	
Conducted Emission：DQPSK,2402,2DH5 ,2500MHz~10000MHz	Conducted Emission：DQPSK,2402,2DH5 ,30MHz~2310MHz
	

Conducted Emission：DQPSK,2402,2DH5 ,Band Edge HoppingOFF	Conducted Emission：DQPSK,2402,2DH5 ,Reference Level
	
Conducted Emission：DQPSK,2441,2DH5 ,10000MHz~25000MHz	Conducted Emission：DQPSK,2441,2DH5 ,2500MHz~10000MHz
	
Conducted Emission：DQPSK,2441,2DH5 ,30MHz~2310MHz	Conducted Emission：DQPSK,2441,2DH5 ,Band Edge HoppingOFF
	

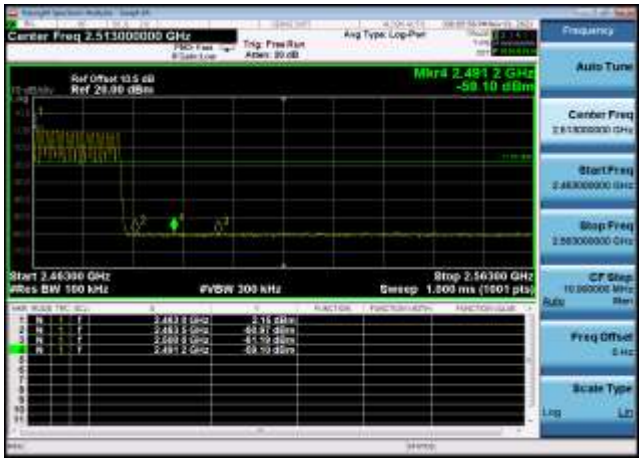
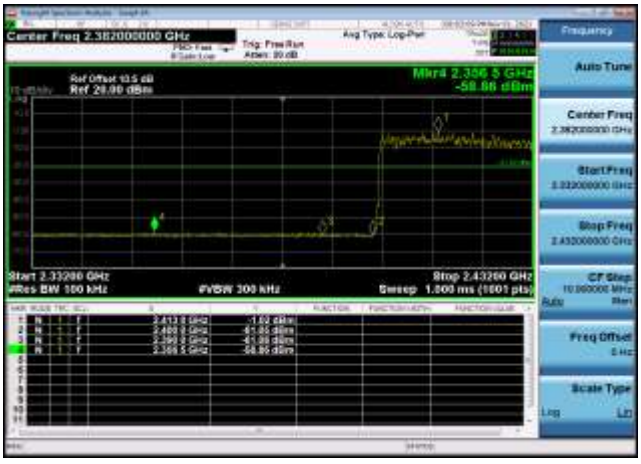
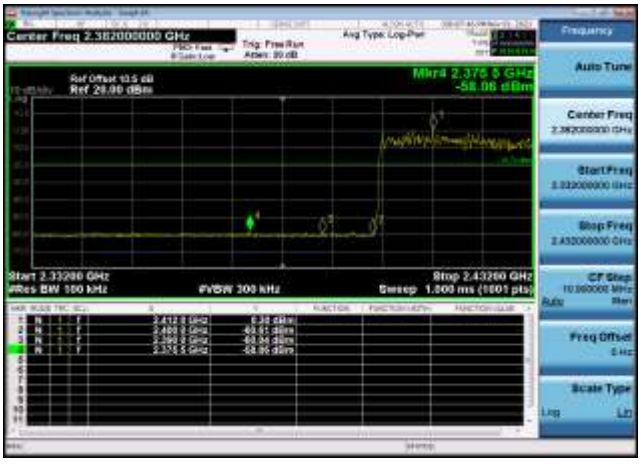
Conducted Emission：DQPSK,2441,2DH5 ,Reference Level	Conducted Emission：DQPSK,2480,2DH5 ,10000MHz~25000MHz
	
Conducted Emission：DQPSK,2480,2DH5 ,2500MHz~10000MHz	Conducted Emission：DQPSK,2480,2DH5 ,30MHz~2310MHz
	
Conducted Emission：DQPSK,2480,2DH5 ,Band Edge HoppingOFF	Conducted Emission：DQPSK,2480,2DH5 ,Reference Level
	

Conducted Emission：8DPSK,2402,3DH5 ,10000MHz~25000MHz	Conducted Emission：8DPSK,2402,3DH5 ,2500MHz~10000MHz
	
Conducted Emission：8DPSK,2402,3DH5 ,30MHz~2310MHz	Conducted Emission：8DPSK,2402,3DH5 ,Band Edge HoppingOFF
	
Conducted Emission：8DPSK,2402,3DH5 ,Reference Level	Conducted Emission：8DPSK,2441,3DH5 ,10000MHz~25000MHz
	

Conducted Emission：8DPSK,2441,3DH5 ,2500MHz~10000MHz	Conducted Emission：8DPSK,2441,3DH5 ,30MHz~2310MHz
	
Conducted Emission：8DPSK,2441,3DH5 ,Band Edge HoppingOFF	Conducted Emission：8DPSK,2441,3DH5 ,Reference Level
	
Conducted Emission：8DPSK,2480,3DH5 ,10000MHz~25000MHz	Conducted Emission：8DPSK,2480,3DH5 ,2500MHz~10000MHz
	

Conducted Emission：8DPSK,2480,3DH5 ,30MHz~2310MHz	Conducted Emission：8DPSK,2480,3DH5 ,Band Edge HoppingOFF
	
Conducted Emission：8DPSK,2480,3DH5 ,Reference Level	
	

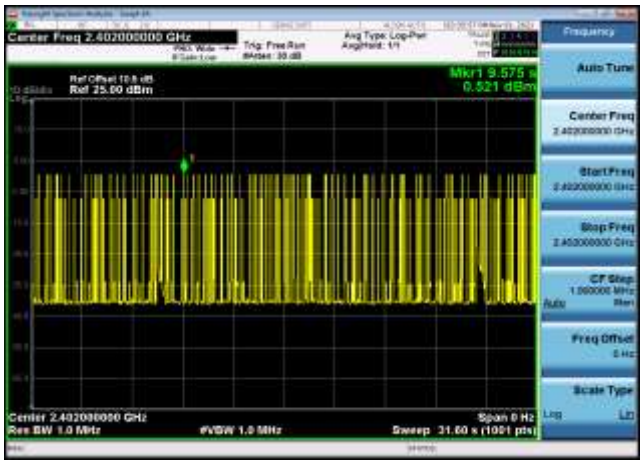
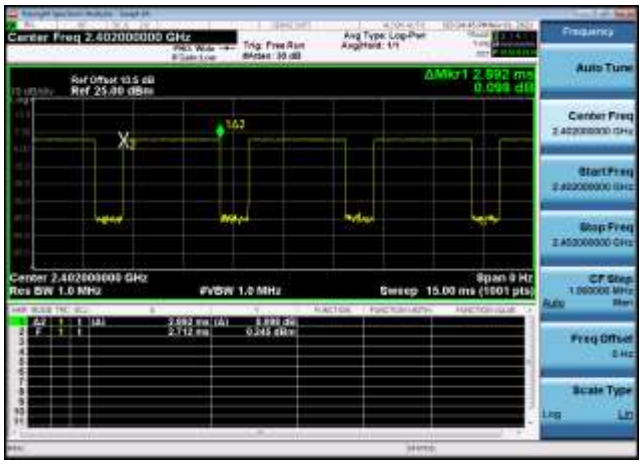
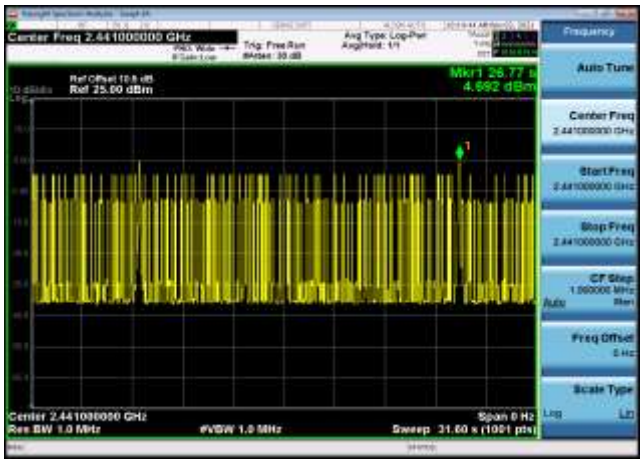
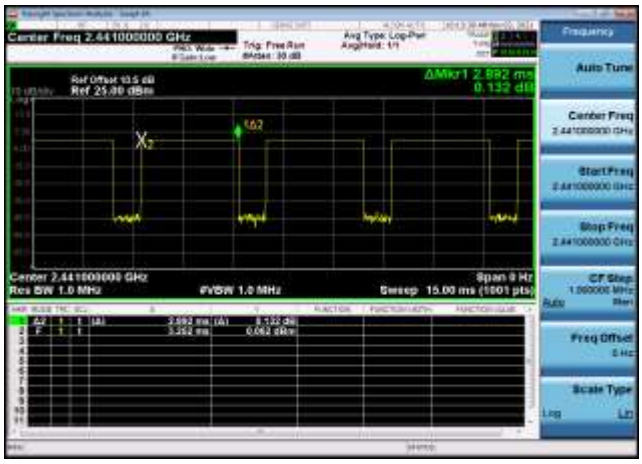
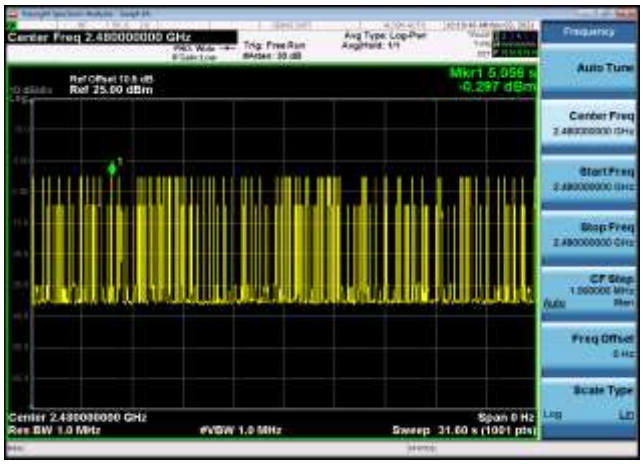
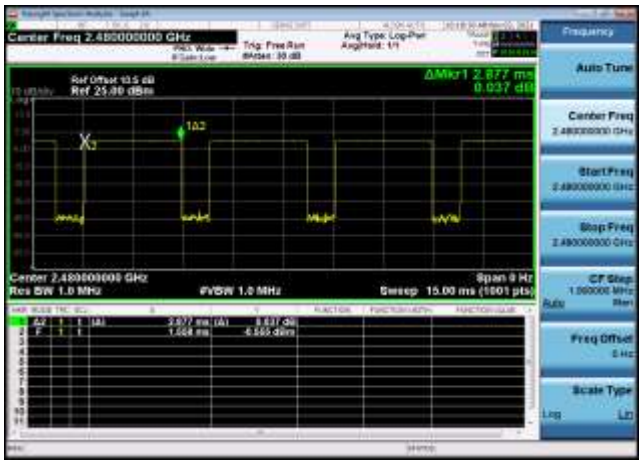
Hopping On Mode

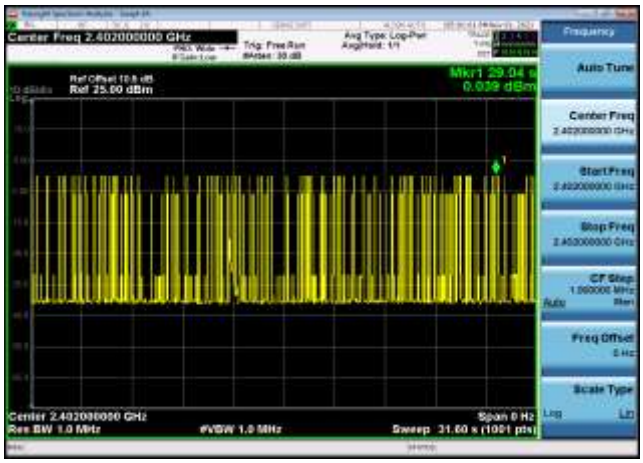
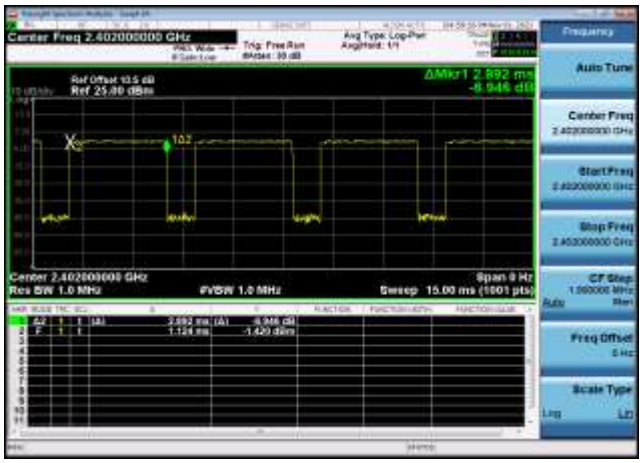
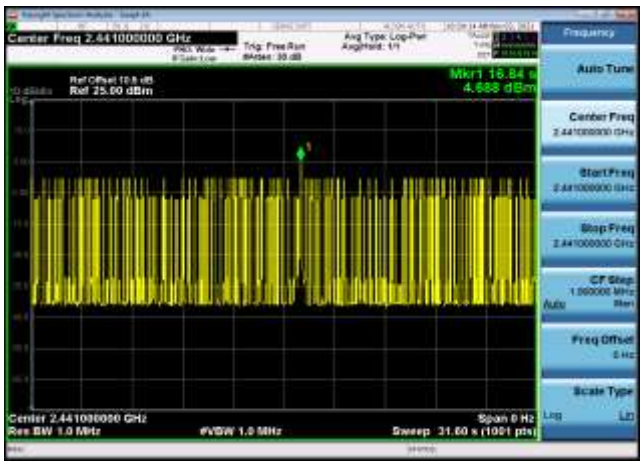
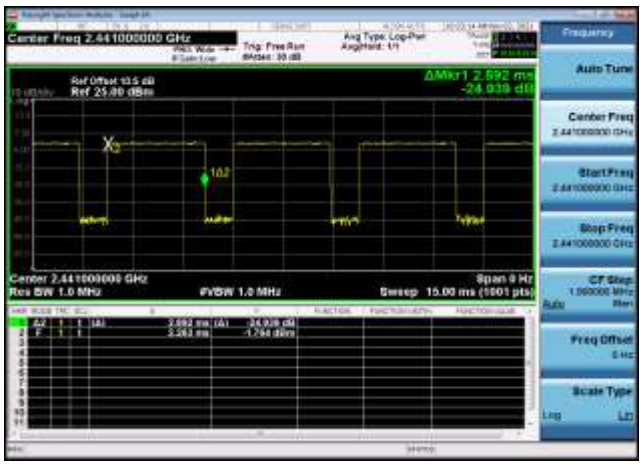
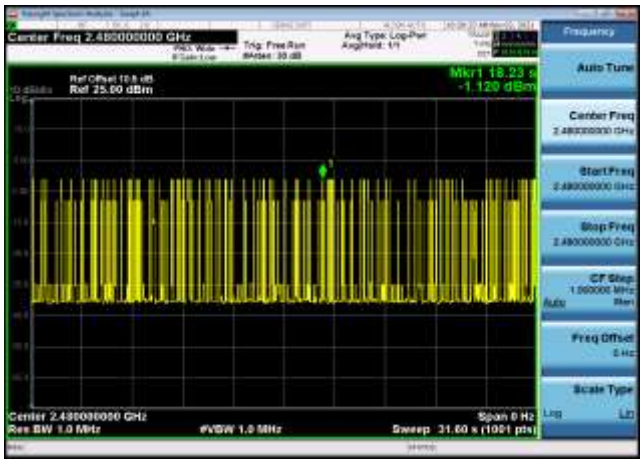
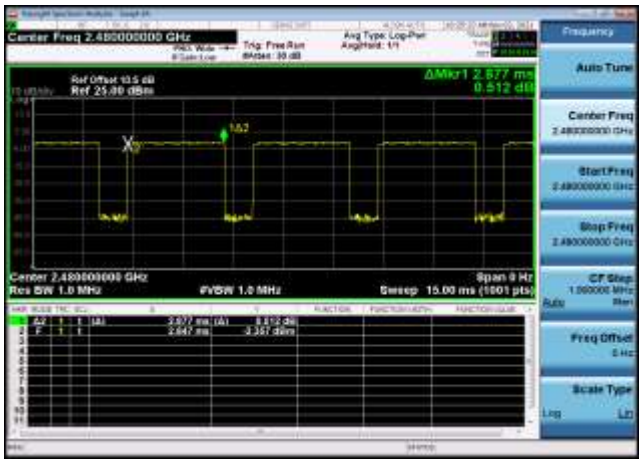
Conducted Emission：GFSK,2402,DH5 ,Band Edge	Conducted Emission：GFSK,2480,DH5 ,Band Edge
	
Conducted Emission：DQPSK,2402,2DH5 ,Band Edge	Conducted Emission：DQPSK,2480,2DH5 ,Band Edge
	
Conducted Emission：8DPSK,2402,3DH5 ,Band Edge	Conducted Emission：8DPSK,2480,3DH5 ,Band Edge
	

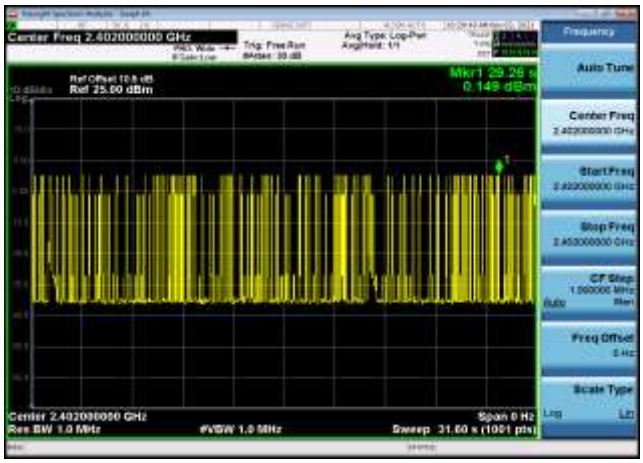
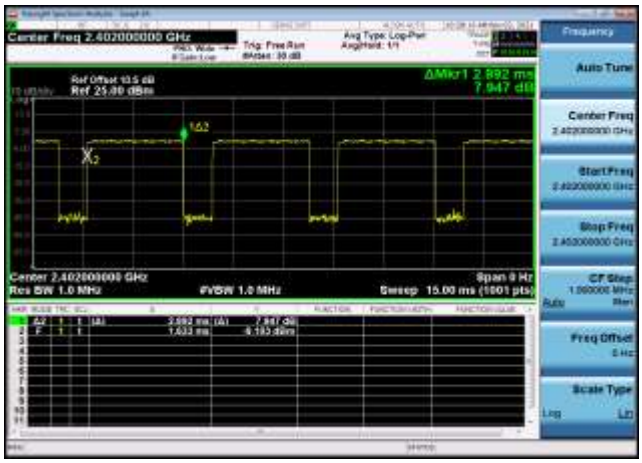
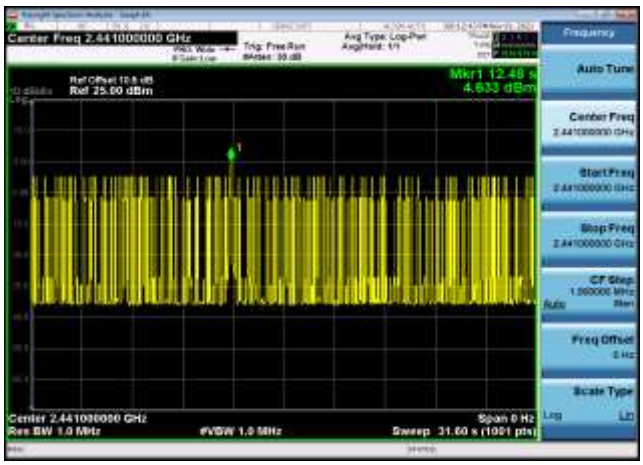
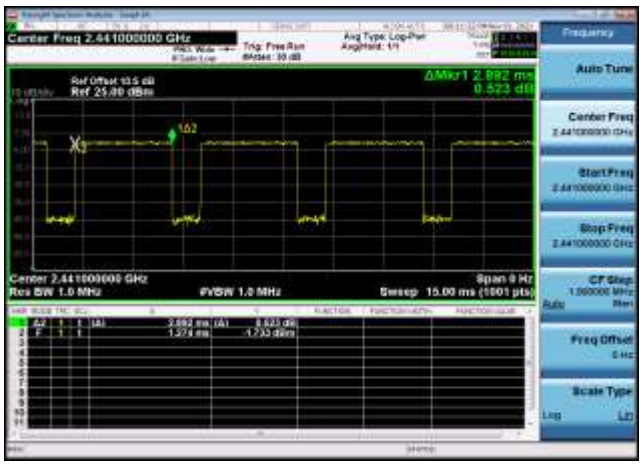
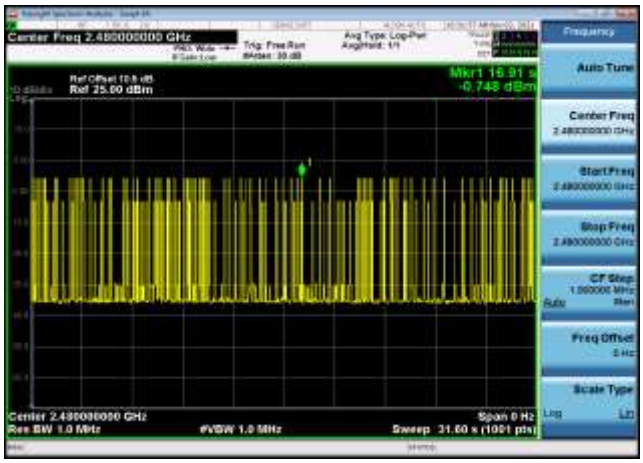
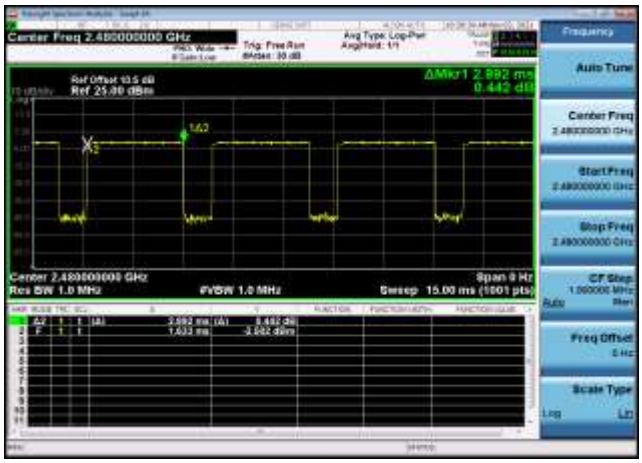
Dwell Time

Test Result and Data

BT Dwell Time						
Mode	Test Frequency	Packet Type	Transmission Time(ms)	Number	Dwell Time(ms)	Result
GFSK	2402	DH5	2.89	96	277.44	Pass
GFSK	2441	DH5	2.88	83	239.04	Pass
GFSK	2480	DH5	2.89	92	265.88	Pass
π/4-DQPSK	2402	2DH5	2.89	88	254.12	Pass
π/4-DQPSK	2441	2DH5	2.89	92	265.88	Pass
π/4-DQPSK	2480	2DH5	2.89	102	294.78	Pass
8DPSK	2402	3DH5	2.88	100	288	Pass
8DPSK	2441	3DH5	2.91	94	273.54	Pass
8DPSK	2480	3DH5	2.91	88	256.08	Pass

GFSK,2402,DH5,Transmission Number	GFSK,2402,DH5,Transmission Time
	
GFSK,2441,DH5,Transmission Number	GFSK,2441,DH5,Transmission Time
	
GFSK,2480,DH5,Transmission Number	GFSK,2480,DH5,Transmission Time
	

DQPSK,2402,2DH5,Transmission Number	DQPSK,2402,2DH5,Transmission Time
	
DQPSK,2441,2DH5,Transmission Number	DQPSK,2441,2DH5,Transmission Time
	
DQPSK,2480,2DH5,Transmission Number	DQPSK,2480,2DH5,Transmission Time
	

8DPSK,2402,3DH5,Transmission Number	8DPSK,2402,3DH5,Transmission Time
	
8DPSK,2441,3DH5,Transmission Number	8DPSK,2441,3DH5,Transmission Time
	
8DPSK,2480,3DH5,Transmission Number	8DPSK,2480,3DH5,Transmission Time
	

CarrierFrequencySeparation

Test Result and Data

BT Carrier Frequency Separation						
Mode	Test Frequency	Packet Type	Range (MHz~MHz)	Separation (KHz)	Limit (KHz)	Result
GFSK	Hopping	DH5	2401.5MHz~2403.5MHz	999	⩾949.973	Pass
GFSK	Hopping	DH5	2440.5MHz~2442.5MHz	1001	⩾952.715	Pass
GFSK	Hopping	DH5	2478.5MHz~2480.5MHz	1003	⩾950.400	Pass
π/4-DQPSK	Hopping	2DH5	2401.5MHz~2403.5MHz	999	⩾854.489	Pass
π/4-DQPSK	Hopping	2DH5	2440.5MHz~2442.5MHz	999	⩾855.541	Pass
π/4-DQPSK	Hopping	2DH5	2478.5MHz~2480.5MHz	983.02	⩾857.743	Pass
8DPSK	Hopping	3DH5	2401.5MHz~2403.5MHz	1010.99	⩾856.428	Pass
8DPSK	Hopping	3DH5	2440.5MHz~2442.5MHz	1432.57	⩾856.255	Pass
8DPSK	Hopping	3DH5	2478.5MHz~2480.5MHz	999	⩾855.951	Pass

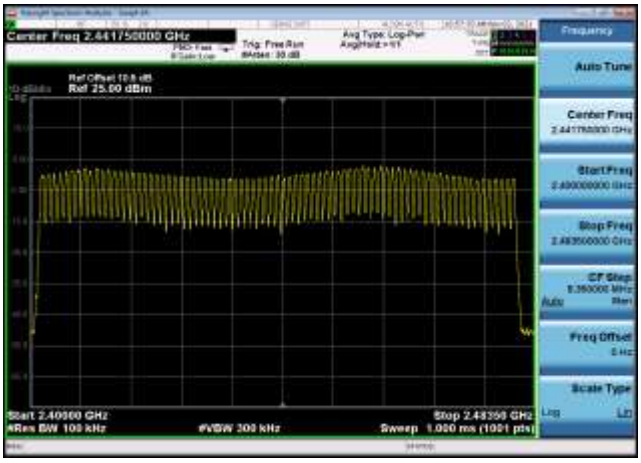
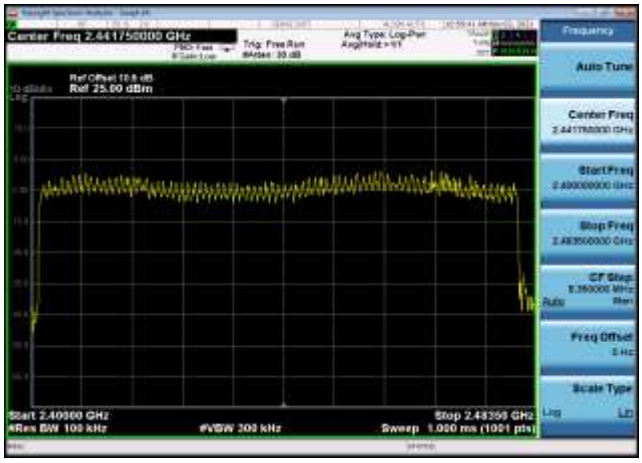
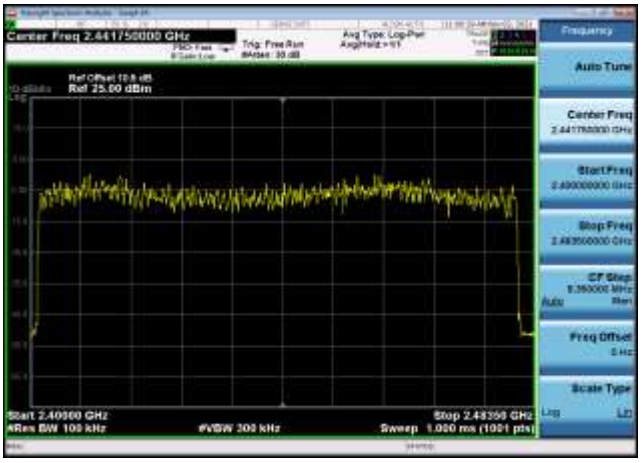
GFSK,HoppingDH5,2401.5~2403.5	GFSK,HoppingDH5,2440.5~2442.5
	
GFSK,HoppingDH5,2478.5~2480.5	DQPSK,Hopping2DH5,2401.5~2403.5
	
DQPSK,Hopping2DH5,2440.5~2442.5	DQPSK,Hopping2DH5,2478.5~2480.5
	

8DPSK,Hopping3DH5,2401.5~2403.5	8DPSK,Hopping3DH5,2440.5~2442.5
	
8DPSK,Hopping3DH5,2478.5~2480.5	
	

Hopping Channel Numbers

Test Result and Data

BT Number Of Hopping Channels					
Mode	Test Frequency	Packet Type	Test Range(MHz~MHz)	Limit	Result
GFSK	Hopping	DH5	2400~2483.5	⩾15	Pass
pi/4DQPSK	Hopping	2DH5	2400~2483.5	⩾15	Pass
8DPSK	Hopping	3DH5	2400~2483.5	⩾15	Pass

Number Of Hopping Channels：GFSK ,HoppingMhz,DH5__2400~2483.5	Number Of Hopping Channels：DQPSK ,HoppingMhz,2DH5__2400~2483.5
	
Number Of Hopping Channels：8DPSK ,HoppingMhz,3DH5__2400~2483.5	
	

** END OF REPORT **