



JAPAN RADIO TEST REPORT

Client Information:

Applicant: Shenzhen Lichuan Trade Co., Ltd.
Applicant add.: 1St Floor, ICT Apartment, 607 Blon Road, Wuhe Community, Putian Street, Longgang District, Shenzhen
Manufacturer: Shenzhen Lichuan Trade Co., Ltd.
Manufacturer add.: 1St Floor, ICT Apartment, 607 Blon Road, Wuhe Community, Putian Street, Longgang District, Shenzhen
Brand Name: N/A

Product Information:

Product Name: Bluetooth Foldable Keyboard
Model No.: B201
Derivative model No.: B202, B203, B204, B205, B206, B207, B208, B209, B210
Test Date: May 08 to May 13, 2026 Issue Date: May 13, 2026
Test Standard: Item 19 of Article 2 Paragraph 1

Test Result: PASS

Shenzhen iTC Product Testing Co., Ltd.

Issued by: Add.: 103, Building 1 South, Dayang Industrial Zone, Lougang Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China

This device described above has been tested by iTC, and the test results show that the equipment under test (EUT) is in compliance with the ARIB STD T-66 requirements. And it is applicable only to the tested sample identified in the report.

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Tested by Max Zhuang

Reviewed by Apple Huang

Approved by John Liu



This test report may be reproduced in full only
Test result presented in this test report is applicable to the tested sample only



Report Revision History			
Report No.	Report Version	Description	Issue Date
26ITC0508076W	NONE	Original	May 13, 2026

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Summary of Test Result

Item	Description of Test	Result
1	Frequency Tolerance Measurement	Pass
2	Occupied Bandwidth and Spread-spectrum Bandwidth	Pass
3	Tx Unwanted Emission Measurement	Pass
4	Antenna Power Tolerance	Pass
5	Rx Unwanted Emission Measurement	Pass
6	Transmission Antenna Gain (EIRP Antenna Power)	N/A*
7	Transmission Radiation Angle Width (3dB Beamwidth)	N/A*
8	Radio Interference Prevention Capability	Pass
9	Carrier Sense	N/A*

*Not applicable.

1 General description

1.1 Feature of Equipment Under Test (EUT)

Product name:	Bluetooth Foldable Keyboard
Model name:	B201,B202,B203,B204,B205,B206,B207,B208,B209,B210
Model Difference:	All models covered in this report are the same with each other, except for different model No. and colour for trading purpose.
Tx/Rx frequency range:	Tx/Rx: 2402MHz~2480MHz
Modulation Type:	GFSK
Channel numbers:	40
Channel separation:	2MHz
Antenna Type:	PCB antenna
Antenna gain:	2.34dBi(declare by applicant)
Power supply:	DC3.7V from battery or DC5.0V from adapter AC100V/60Hz
Test Voltage :	DC5.0V

1.2 Operation Channel List

Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz
1	2404MHz	11	2424MHz	21	2444MHz
---	---	---	---	---	---
8	2418MHz	18	2438MHz	38	2478MHz
9	2420MHz	19	2440MHz	39	2480MHz

1.3 Test Frequency Channel

Low	2402MHz
Middle	2440MHz
High	2480MHz

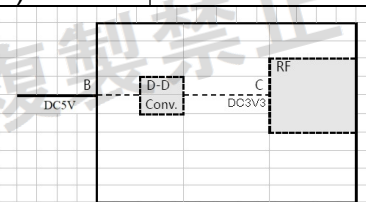
1.4 EUT Operation Test Setup

During testing, EUT provided by the manufacture to the Tx operation followed the test requirement. The EUT is configured to transmit continuously at the maximum power. EUT has been set for a fixed transmit frequency at the maximum power,when power on it will Continuous launch.

The BLE module was tested while in a continuous transmitter/receiver mode. The EUT was tuned to a low, middle, and high channel for all tests. For all test case pre/scans were completed in all Modes to determine worst case levels.

Power Supply Voltage Fluctuation Test

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
Input DC power	5.0V	5.4V	4.5V
Voltage Variation (%)	3.3V	3.3V	3.3V



The EUT has the input voltage to the circuit of RF unit complies with output voltage limitation ($\pm 1\%$) against input voltage fluctuation ($\pm 10\%$). So, all measurements were conducted at only rated voltage DC 3.3V

Test below:
1: The fluctuation of C point is under $\pm 1\%$, when input voltage from B point to the test equipment is fluctuated by $\pm 10\%$.
2: The fluctuation of C point is under $\pm 1\%$, when input voltage from A point to the test equipment is fluctuated by $\pm 10\%$.

Note:

Voltage Variation (%)

= (Output high or Low Voltage - Output Normal Voltage) / Output Normal Voltage * 100

1.5 Environmental Conditions

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

- Temperature: 20°C~30°C
- Humidity: 30%~70%
- Atmospheric pressure: 98kPa~101kPa

1.6 Measurement Uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %, $U=2 \times U_c(y)$

Parameter	Uncertainty Criterion	Measurement Uncertainty
Occupied Channel Bandwidth	$\pm 5\%$	0.4%
RF output power, conducted	$\pm 1.5\text{dB}$	$\pm 1.13\text{dB}$
Power Spectral Density, conducted	$\pm 3\text{dB}$	$\pm 2.35\text{dB}$
Unwanted Emissions, conducted	$\pm 3\text{dB}$	$\pm 2.39\text{dB}$
All emissions, radiated	$\pm 6\text{dB}$	$\pm 5.04\text{dB}$
Temperature	$\pm 3^\circ\text{C}$	$\pm 0.8^\circ\text{C}$
Supply voltages	$\pm 3\%$	$\pm 1\%$
Time	$\pm 5\%$	$\pm 1\%$



2 Testing Site

Test site information	
Lab performing tests	Shenzhen iTC Product Testing Co., Ltd.
Lab Address	103, Building 1 South, Dayang Industrial Zone, Lougang Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86)-0755-33138690
Fax:	(86)-0755-23071003



3 List of test equipment

Equipment	Manufacturer	Model	Serial No.	Calibration Date	Calibration Due
Spectrum analyzer	Keysight	N9020A	MY54101721	2025/10/23	2026/10/22
Power Meter	R&S	NRVS	100696	2025/10/23	2026/10/22
DC Power Supply	LongWei(HK)	LW6010KD	011089883	2025/10/23	2026/10/22
Calibration by the calibration agencies listed in the table correspond to paragraph 4 (i) (c) of Article 24-2 in the Radio Law". Guangzhou Lisai Metrology & Test co.,Ltd.					
The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).					

4 Test Result

4.1 Frequency Tolerance Measurement

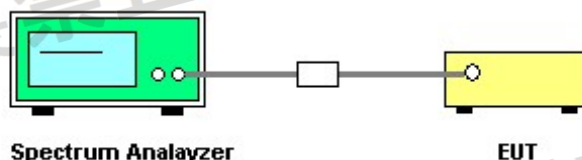
4.1.1 Limits

Item	Limits
Frequency Tolerance	±50ppm

4.1.2 Test Procedures

- Frequency accuracy of SA shall be less than 10% of limits tolerance (5ppm)
- Setting of SA is following as: RB: 10kHz / VB: 10kHz / SPAN: 3MHz / Sweep time: Auto / Detect mode: Positive peak / Trace mode: Max hold.
- The frequency tolerance test case is directly measured using spectrum analyzer. Then the frequency error formula is $(f-f_c)/f_c \times 10^6$ ppm and the limit is less than ±50ppm.

4.1.3 Test Setup



4.1.4 Test Deviation

There is no deviation with the original standard.

4.1.5 EUT Operation During Test

The EUT was programmed to be in continuously transmitting (un-modulated) mode.

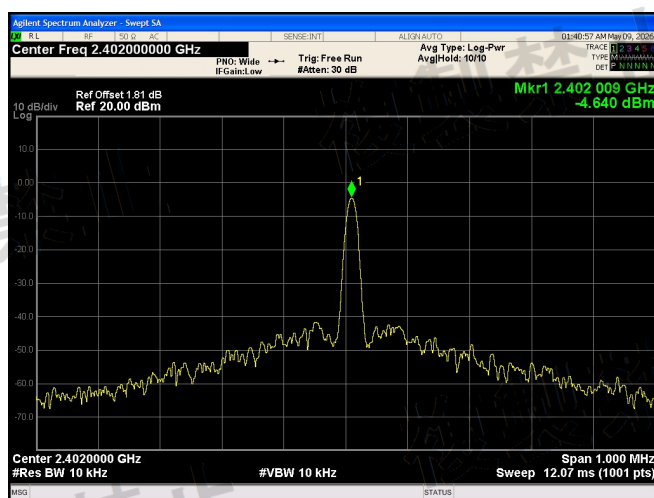
4.1.6 Test Result

Test conditions		Low (fc: 2402MHz)	Middle (fc: 2440 MHz)	High (fc: 2480MHz)	Limit	Result
Vlot.(DC)	Temp.					
5.0V	25℃	2402.009MHz	2440.009MHz	2480.010MHz	≤ 50ppm	PASS
		3.75ppm	3.69ppm	4.03ppm		

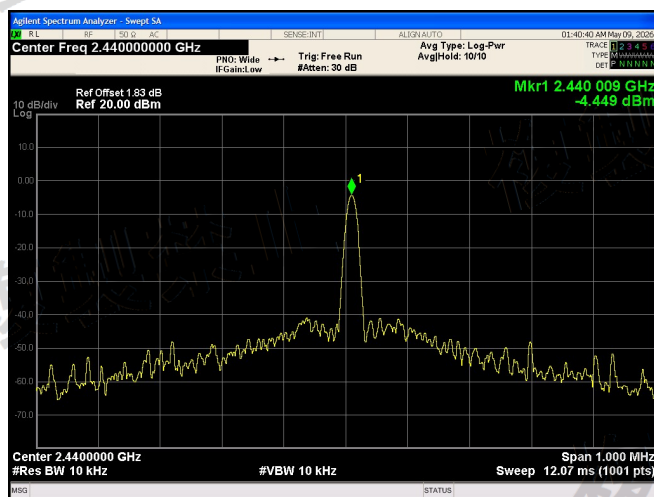
Test plots of normal input voltage mode as bellow:



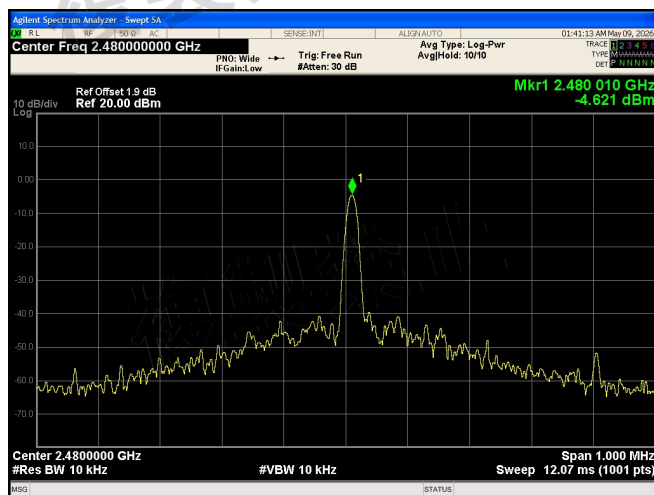
f_c : 2402MHz



f_c : 2440MHz



f_c : 2480MHz



4.2 Occupied Bandwidth & Spread-spectrum Bandwidth

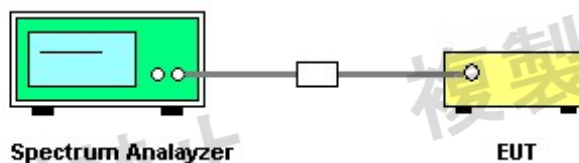
4.2.1 Limits

Item	Limits
Occupied Bandwidth:	FH: 83.5MHz; FH + DS: 83.5MHz; FH + OFDM: 83.5MHz; OFDM, DS: 26MHz
Spreading Bandwidth:	500 kHz or more
Spread Factor	≥ 5

4.2.2 Test Procedures

1. Setting of SA is following as: RB: 300kHz / VB: 300kHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold.
2. EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device). SA set to 99% of occupied bandwidth to measure occupied bandwidth.
3. SA set to 90% of occupied bandwidth to measure Spread Spectrum Bandwidth.
4. Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.
5. Spread Spectrum Factor limit is greater than 5.

4.2.3 Test Setup



4.2.4 Test Deviation

There is no deviation with the original standard.

4.2.5 EUT Operation During Test

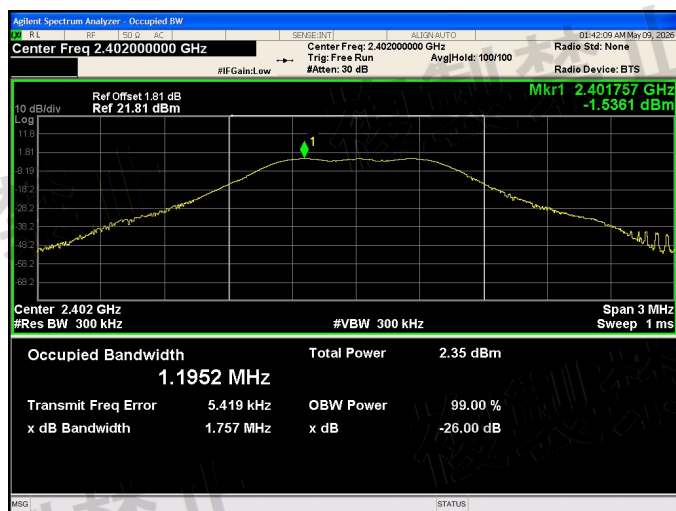
The EUT was programmed to be in continuously transmitting mode.

4.2.6 Test Result

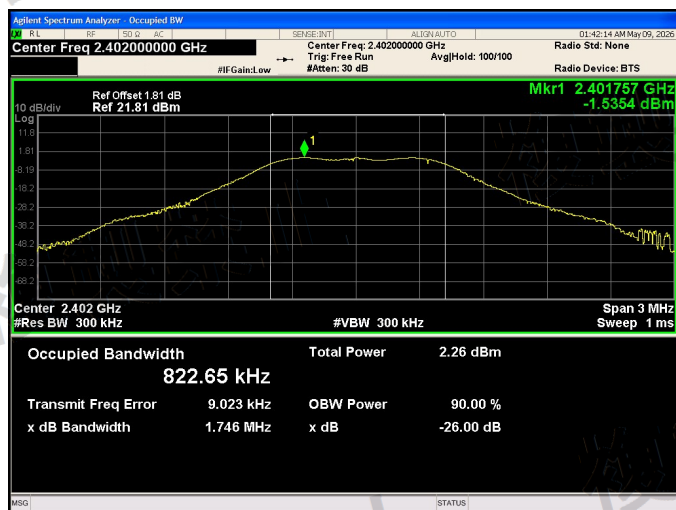
Test Conditions		Channel (MHz)	Occupied Bandwidth (MHz)	Limits	Result
Vlot.(DC)	Temp.				
5.0V	25℃	2402	1.1952	OBW <=26MHz	PASS
		2440	1.2013		
		2480	1.1998		

Test Conditions		Channel (MHz)	90%Spread bandwidth MHz	Limits	Result
Vlot.(DC)	Temp.				
5.0V	25℃	2402	0.8226	≥ 500 kHz	PASS
		2440	0.8225		
		2480	0.8174		

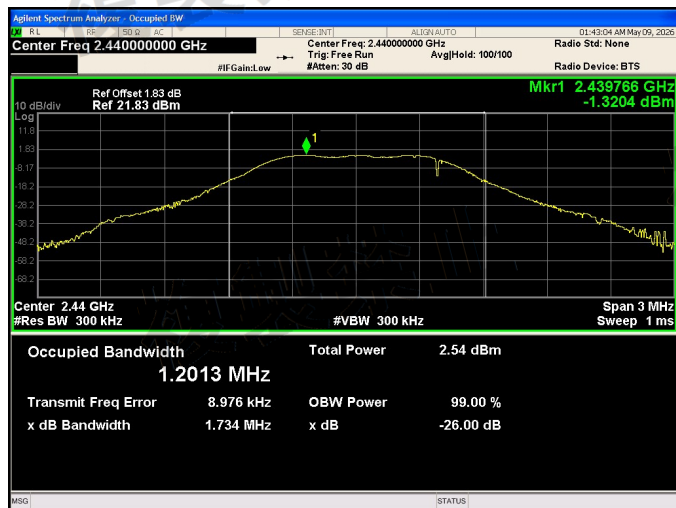
CH: 2402MHz, Occupied Bandwidth



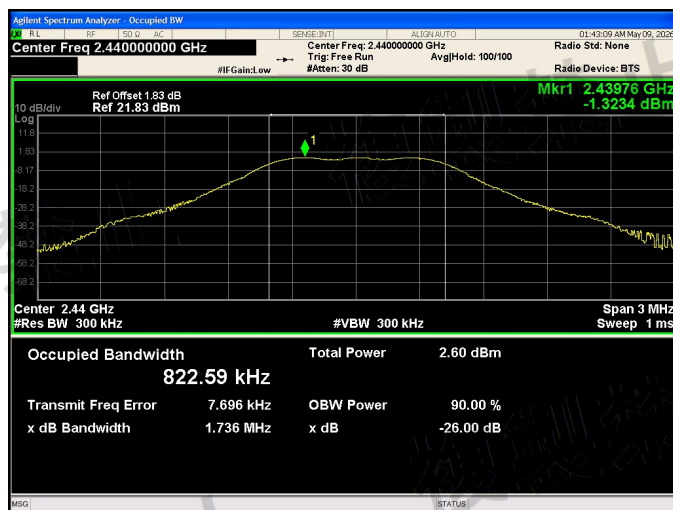
CH: 2402MHz, Spread Bandwidth



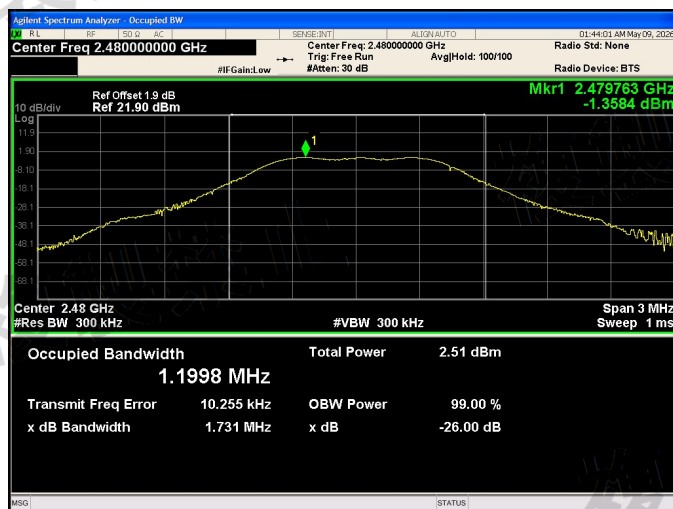
CH: 2440MHz, Occupied Bandwidth



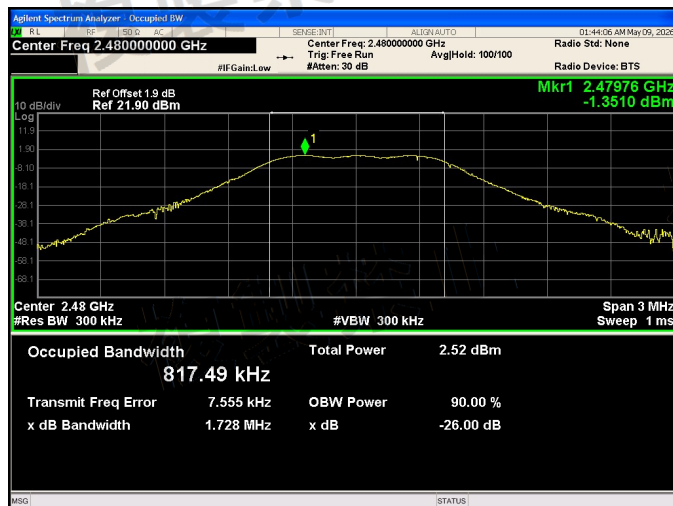
CH: 2440MHz, Spread Bandwidth



CH: 2480MHz, Occupied Bandwidth



CH: 2480MHz, Spread Bandwidth



4.3 Tx Unwanted Emission Measurement

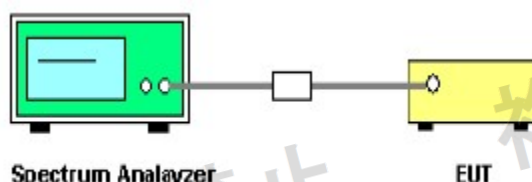
4.3.1 Limits

Item	Limits
TX Spurious Emission	(1) Below 2387 MHz: 2.5 μ W (2) 2387 to 2400 MHz: 25 μ W (3) 2483.5 through 2496.5 MHz: 25 μ W (4) Over 2496.5 MHz: 2.5 μ W

4.3.2 Test Procedures

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as: Below 1GHz RB: 100KHz / VB: 100KHz; Above 1GHz RB: 1MHz / VB: 1MHz / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold.
3. Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 0.25 μ W for RBW is 100KHz.
4. Setting of SA is following as 1000MHz and stop frequency 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5 μ W.
5. SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 μ W.
6. SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25 μ W
7. SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5 μ W
8. If the result value is over the requirement, take total sum of 1MHz band centered at the spur frequency like ACLP measurement as result value.

4.3.3 Test Setup



4.3.4 Test Deviation

There is no deviation with the original standard.

4.3.5 EUT Operation During Test

The EUT was programmed to be in continuously transmitting mode.

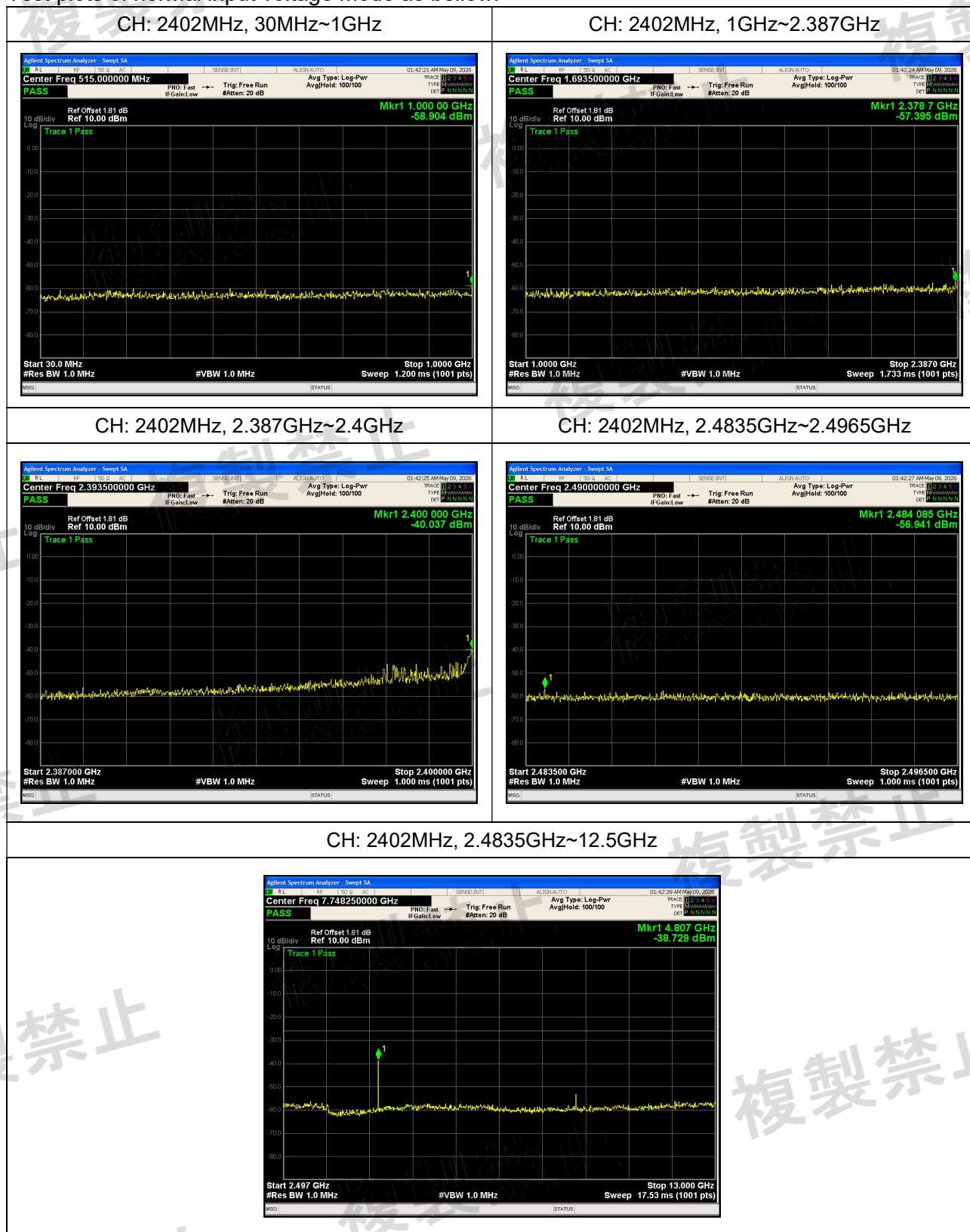
4.3.6 Test Result



CH: 2402MHz					
Test conditions		Measurement Frequency Range	Result (dBm)	Limit (dBm)	Result
Vlot.(DC)	Temp.				
5.0V	25℃	30MHz~1GHz	-58.90	-26	Pass
		1GHz~2.387GHz	-57.39	-26	
		2.387GHz~2.4GHz	-40.03	-16	
		2483.5GHz~2.4965GHz	-56.94	-16	
		2.4965GHz~12.5GHz	-38.72	-26	
CH: 2440MHz					
5.0V	25℃	30MHz~1GHz	-59.73	-26	Pass
		1GHz~2.387GHz	-57.43	-26	
		2.387GHz~2.4GHz	-56.86	-16	
		2483.5GHz~2.4965GHz	-56.23	-16	
		2.4965GHz~12.5GHz	-38.30	-26	
CH: 2480MHz					
5.0V	25℃	30MHz~1GHz	-59.46	-26	Pass
		1GHz~2.387GHz	-57.83	-26	
		2.387GHz~2.4GHz	-57.29	-16	
		2483.5GHz~2.4965GHz	-45.87	-16	
		2.4965GHz~12.5GHz	-38.13	-26	

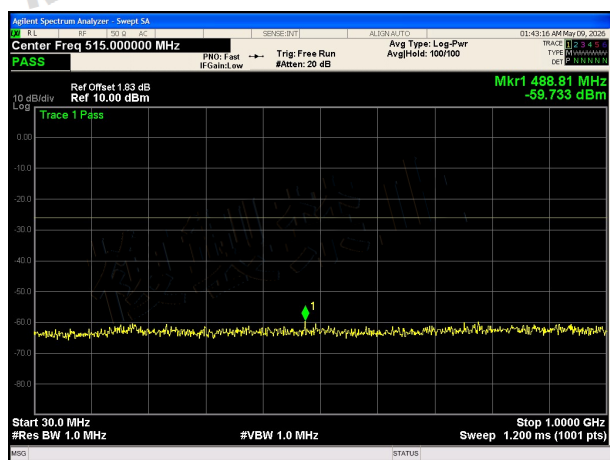


Test plots of normal input voltage mode as bellow:

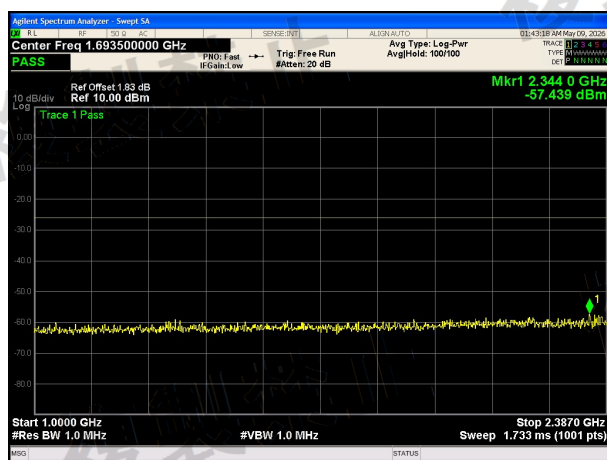




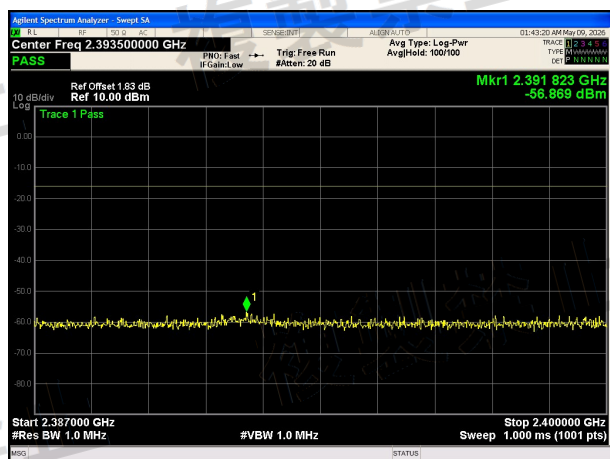
CH: 2440MHz, 30MHz~1GHz



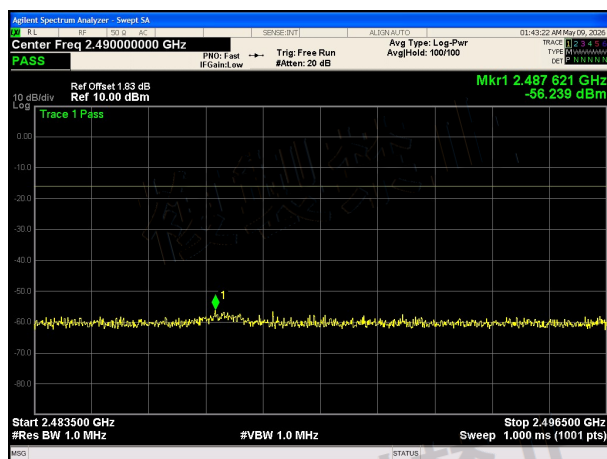
CH: 2440MHz, 1GHz~2.387GHz



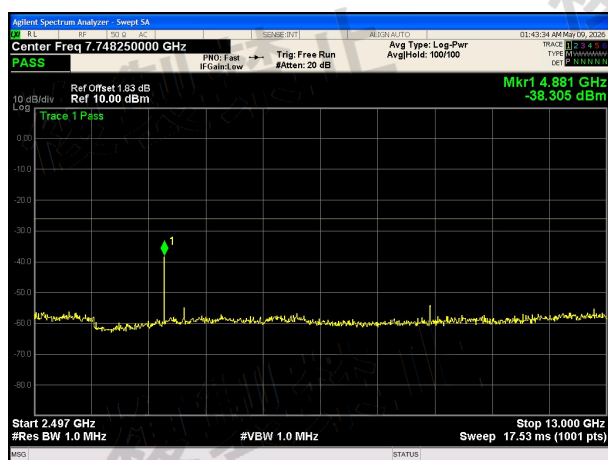
CH: 2440MHz, 2.387GHz~2.4GHz



CH: 2440MHz, 2.4835GHz~2.4965GHz

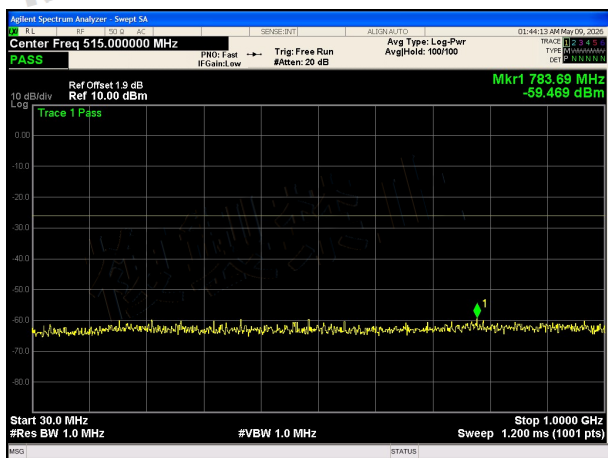


CH: 2440MHz, 2.4835GHz~12.5GHz

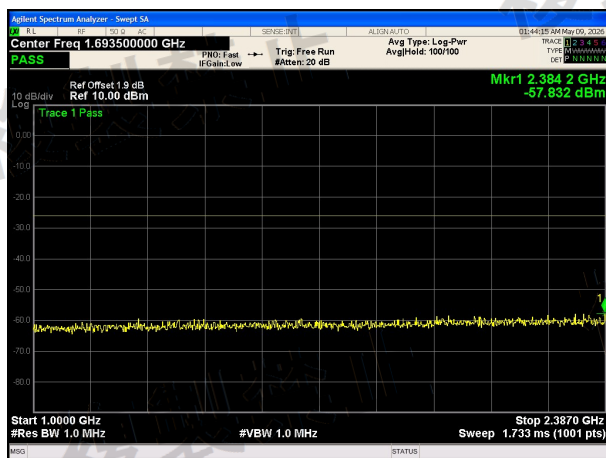




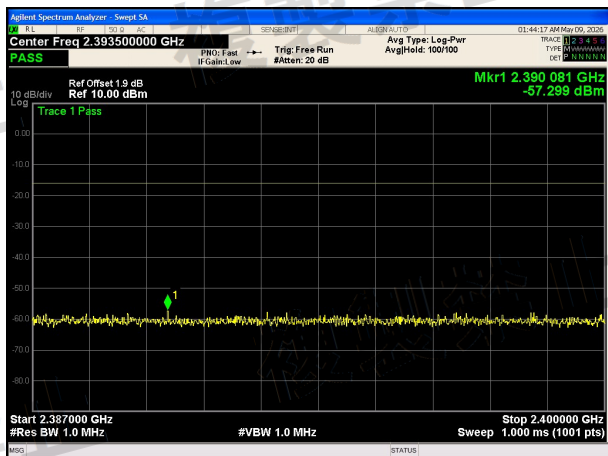
CH: 2480MHz, 30MHz~1GHz



CH: 2480MHz, 1GHz~2.387GHz



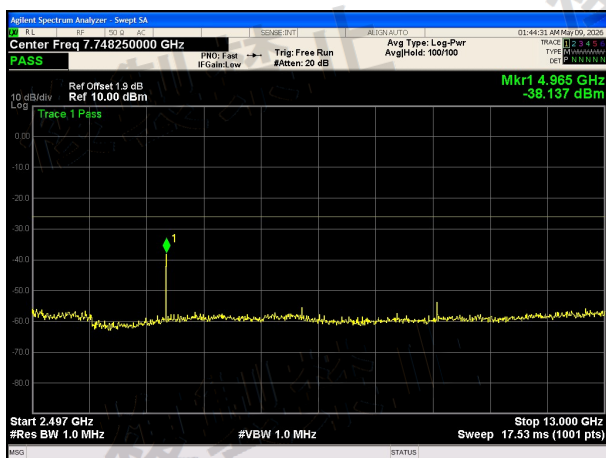
CH: 2480MHz, 2.387GHz~2.4GHz



CH: 2480MHz, 2.4835GHz~2.4965GHz



CH: 2480MHz, 2.4835GHz~12.5GHz



4.4 Antenna Power Tolerance

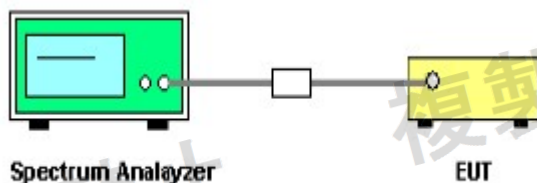
4.4.1 Limit

Item	Limits
Antenna Power Density	(1) FH, FH+DS, FH+OFDM 3mW/MHz (used in the range of 2427 - 2470.75 MHz) Occupied Bandwidth 38MHz: 5mW/MHz (2) OFDM, DS other than (1) 10mW/MHz (3) Other than (1) & (2) 10mW
Antenna Power Tolerance	+20%, -80%

4.4.2 Test Procedures

- Setting of SA is following as: RBW: 1MHz / VB: 1MHz / Sweep time: Auto / Detect mode: Positive peak / Trace mode: Max hold. Find the peak value point of the power envelope
- Setting of SA is following as: Center frequency: Searched frequency by the procedure 1 / RBW: 1MHz / VB: 1MHz / Sweep time: Auto / Detect mode: Positive peak / Trace mode: Max hold / Span: zero. Find the peak value of the power envelope

4.4.3 Test Setup



4.4.4 Test Deviation

There is no deviation with the original standard.

4.4.5 EUT Operation During Test

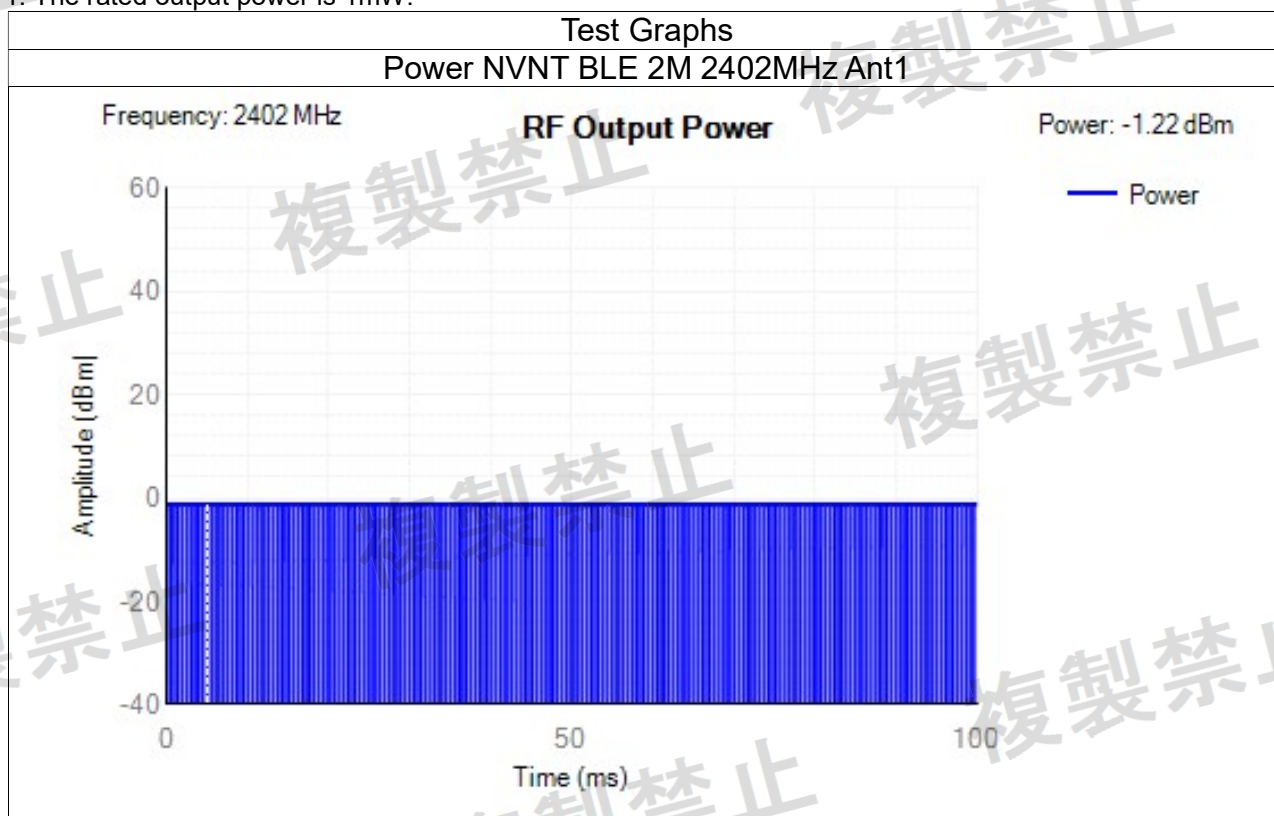
The EUT was programmed to be in continuously transmitting mode.

4.4.6 Test Result

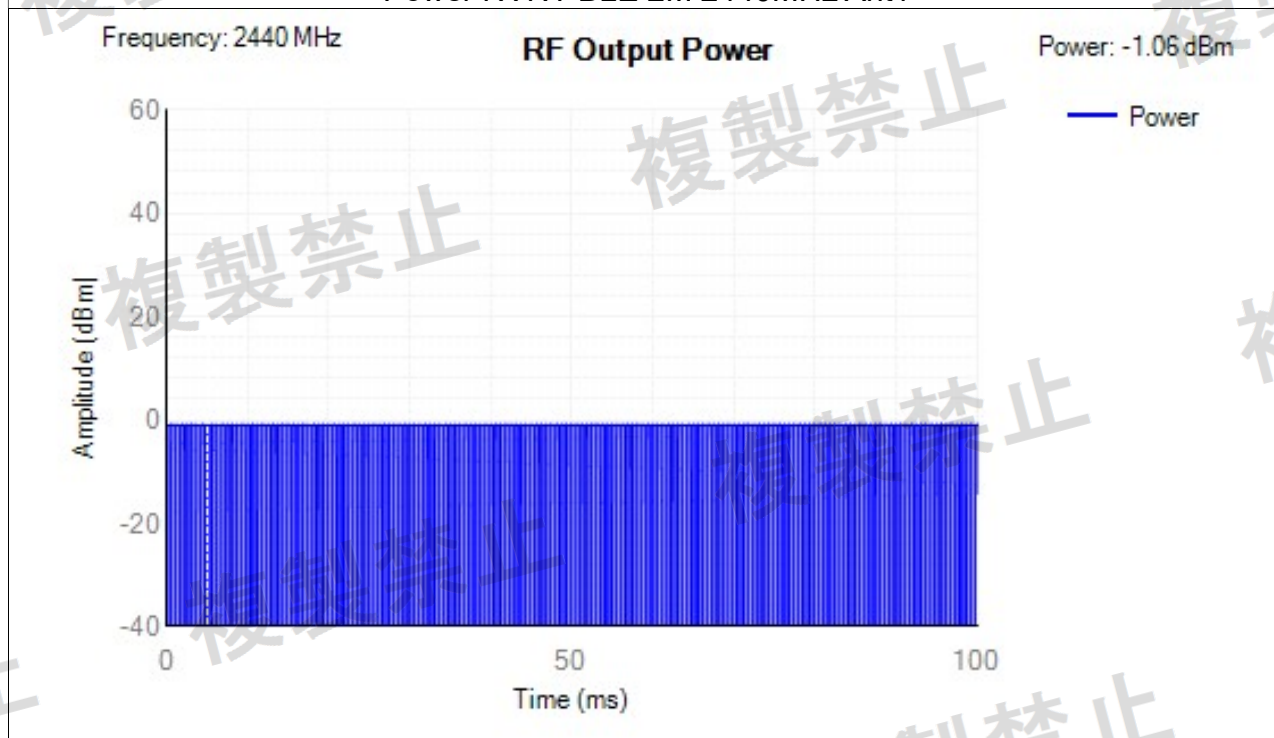
Test condition		Channel (MHz)	Antenna power (dBm)	Antenna power (mW)	Limit of antenna power	Antenna power tolerance (%)	Limit of antenna power tolerance (%)
Volt. (DC)	Temp.						
5.0V	25°C	2402	-1.22	0.755	10mW	-24.5	+20% ~ -80%
5.0V	25°C	2440	-1.06	0.783		-21.7	
5.0V	25°C	2480	-1.1	0.776		-22.4	

Note:

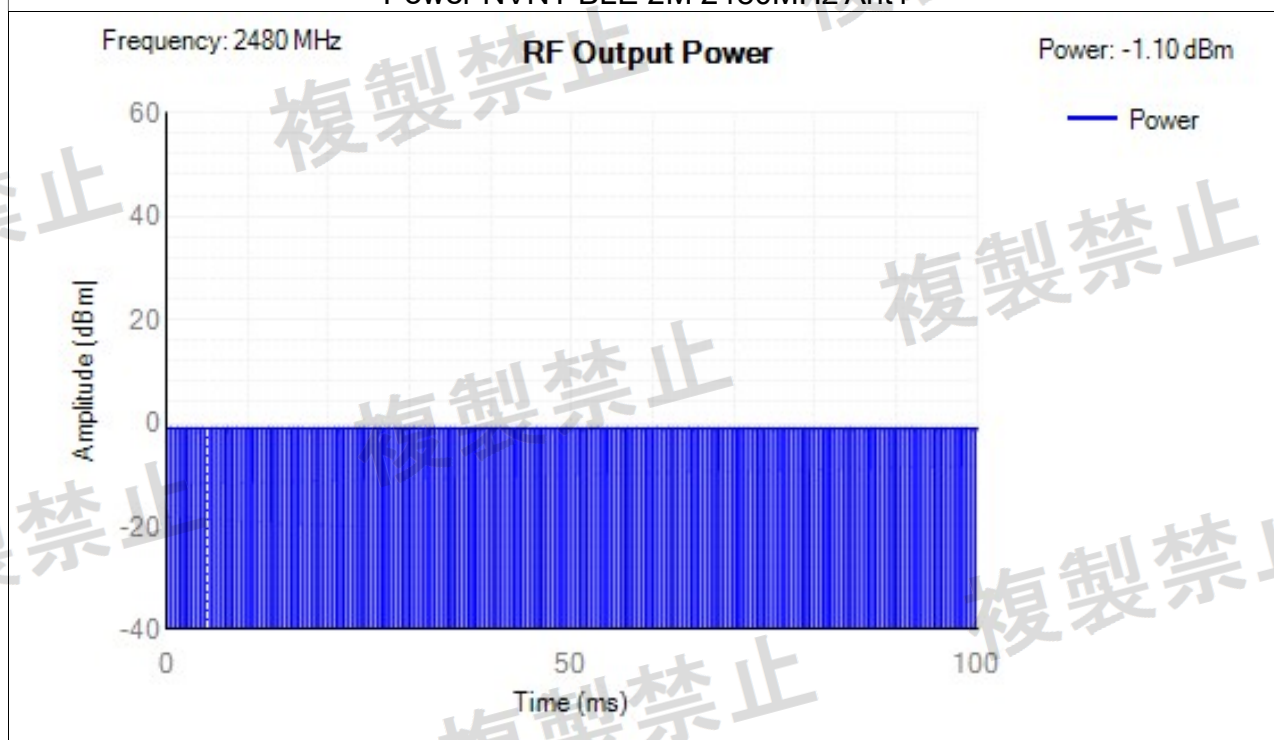
1. The rated output power is 1mW.



Power NVNT BLE 2M 2440MHz Ant1



Power NVNT BLE 2M 2480MHz Ant1





EIRP Power

Condition	Mode	Frequency (MHz)	Antenna	Antenna Power (mW)	Antenna Power (dBm)	Gain (dBi)	EIRP Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 2M	2402	Ant1	0.975	-0.11	2.34	2.23	10	Pass
NVNT	BLE 2M	2440	Ant1	1.153	0.62	2.34	2.96	10	Pass
NVNT	BLE 2M	2480	Ant1	1.164	0.66	2.34	3.00	10	Pass

4.5 Rx Unwanted Emission Measurement

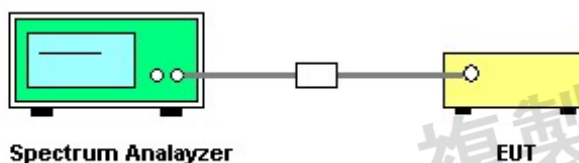
4.5.1 Limit

Item	Limits
RX Spurious Emission:	(1) Below 1 GHz: 4 nW (2) 1 GHz or higher: 20 nW

4.5.2 Test Procedures

1. EUT have the continuous reception mode and fixed only one channelize.
2. SA set RBW: 100KHz and VBW: 100KHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW.
3. SA set RBW: 1MHz and VBW: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 12500MHz. Search to mark peak reading value + cable loss shall be less than 20nW.
4. If power level of lower emissions is more than 1/10 of limit (.0.4nW for $f < 1\text{GHz}$, 2nW for $f \geq 1\text{GHz}$), all those are to be indicated in the 2nd and 3rd lines, if others are 1/10 or less more of the limit, no necessary to be indicated.

4.5.3 Test Setup



4.5.4 Test Deviation

There is no deviation with the original standard.

4.5.5 EUT Operation During Test

The EUT was programmed to be in continuously reception mode.

4.5.6 Test Result

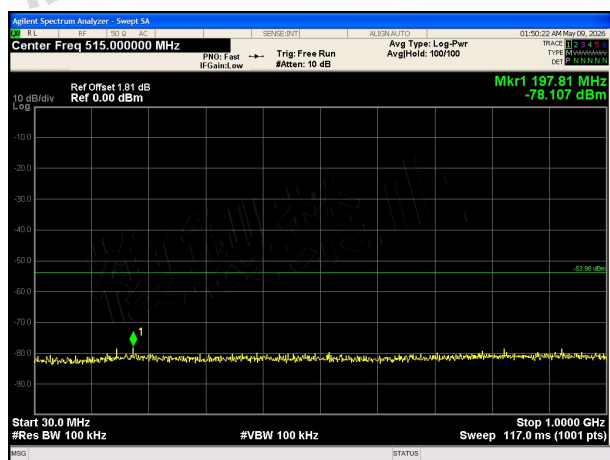


Test condition		Channel	Measurement Frequency Range	Measurement (dBm)	Limit (dBm)	Result
Volt.(DC)	Temp.					
5.0V	25℃	2402MHz	30MHz~1GHz	-78.11	-54	Pass
			1GHz~12.5GHz	-66.72	-47	
5.0V	25℃	2440MHz	30MHz~1GHz	-78.29	-54	
			1GHz~12.5GHz	-66.20	-47	
5.0V	25℃	2480MHz	30MHz~1GHz	-79.01	-54	
			1GHz~12.5GHz	-65.27	-47	

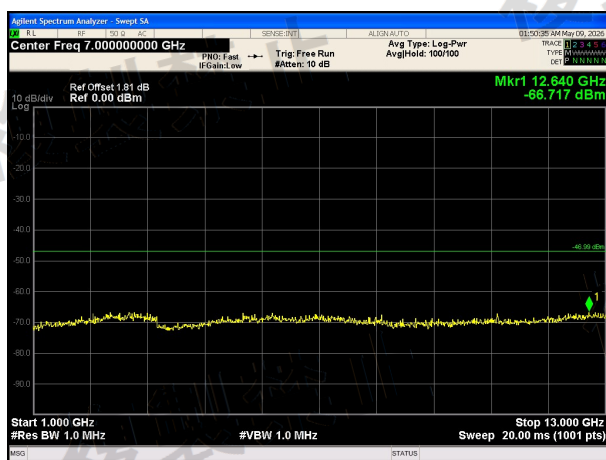
Test plots of normal input voltage mode as bellow:



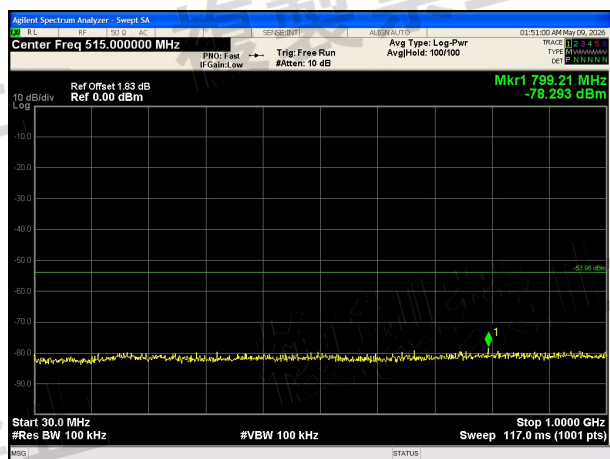
CH: 2402MHz, 30MHz~1GHz



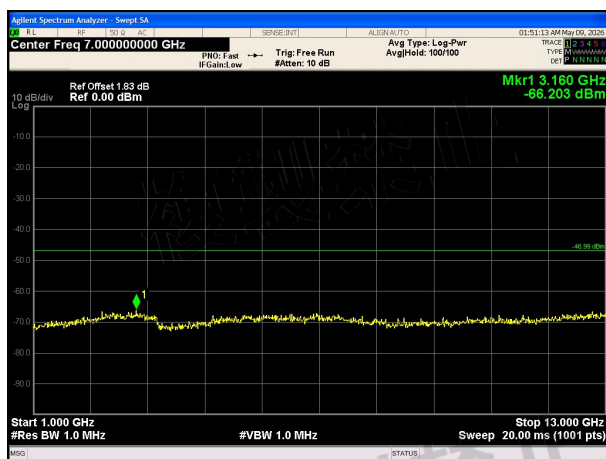
CH: 2402MHz, 1GHz~12.5GHz



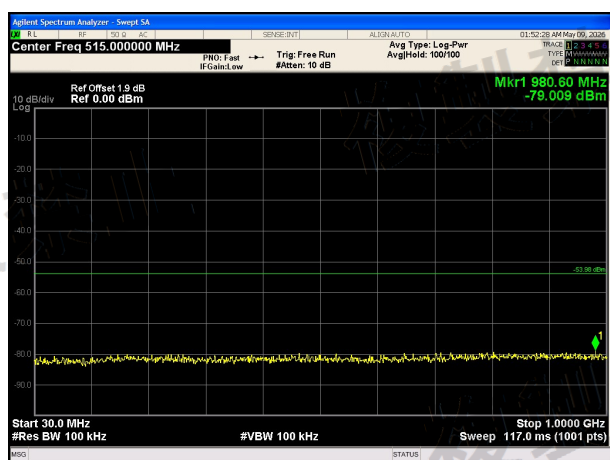
CH: 2440MHz, 30MHz~1GHz



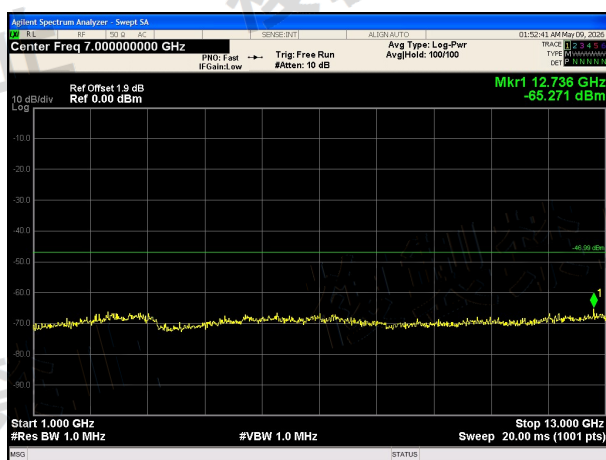
CH: 2440MHz, 1GHz~12.5GHz



CH: 2480MHz, 30MHz~1GHz



CH: 2480MHz, 1GHz~12.5GHz



4.6 Radio Interference Prevention Capability Measurement

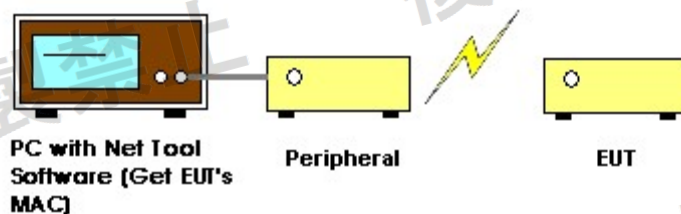
4.6.1 Limit

Product shall have the function of automatic transmission and reception of identification sign.

4.6.2 Test Procedures

1. In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes form EUT. b. Check the transmitted identification codes with the demodulator.
2. In the case of receiving the identification code: a. Transmit the predetermined identification codes form the counterpart. b. Check if communication is normal. c. Transmit the signals other than predetermined ID codes form the counterpart. d. check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

4.6.3 Test Setup



4.6.4 Test Deviation

There is no deviation with the original standard.

4.6.5 EUT Operation During Test

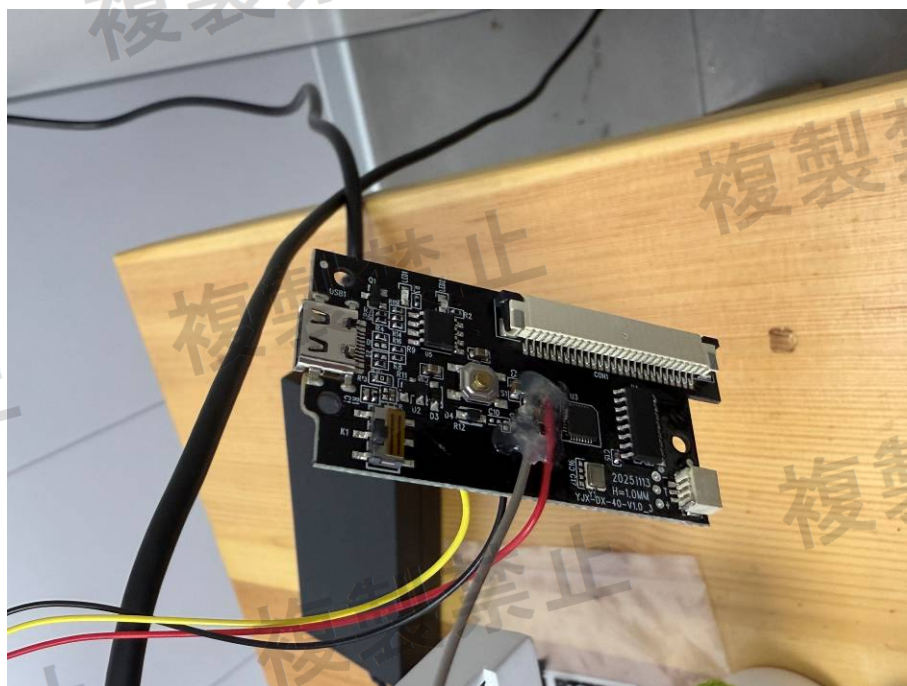
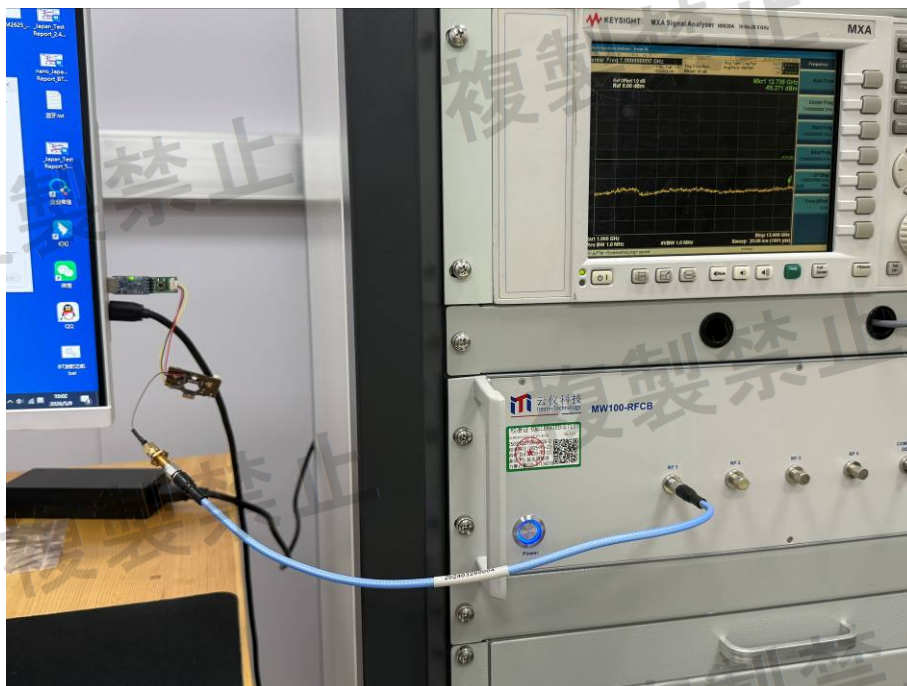
The EUT was programmed to be in normal transmitting mode.

4.6.6 Test Result

Pass. The interference prevention function of EUT is good.

MAC address:	A4:CA:A0:7D:35:81
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Photographs of the Test Setup





Photographs of the EUT

Reference to the **appendix II_External photos** and **appendix II_Internal photos** for details.

----END OF REPORT----