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Report No.: SZEM180600543001  
Page: 1 of 38

## TEST REPORT

**Application No.:** SZEM1806005430CR  
**Applicant:** Infinitus Value Co., Ltd.  
**Address of Applicant:** Isago 2-8-1-503, Kawasaki-ku, Kawasaki-shi, Kanagawa, Japan. Post code 210-0006  
**Manufacturer:** JOINT CHINESE LIMITED  
**Address of Manufacturer:** Workshop 4 & 6, Huafeng Technology Park, Guangtian Road, 3rd Industrial Zone, Luotian Community, Yanluo Street, Bao'an District, Shenzhen City, Guangdong Province, China  
**Factory:** JOINT CHINESE LIMITED  
**Address of Factory:** Workshop 4 & 6, Huafeng Technology Park, Guangtian Road, 3rd Industrial Zone, Luotian Community, Yanluo Street, Bao'an District, Shenzhen City, Guangdong Province, China  
**Equipment Under Test (EUT):**  
**EUT Name:** Smart Tracking Toothbrush  
**Model No.:** IVHB01W, IVHB01B ♣  
♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.  
**Trade Mark:** InfinitusValue  
**Standard(s) :** MIC Item 19 of Article 2 Paragraph 1  
**Date of Receipt:** 2018-06-25(for original report SZEM180600543101)  
**Date of Test:** 2018-06-26 to 2018-07-10(for original report SZEM180600543101)  
**Date of Issue:** 2018-07-12(for original report SZEM180600543101)  
2018-07-12(for new report SZEM180600543001)

<b>Test Result:</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu  
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2018-07-12		Original

Authorized for issue by:			
			
		Leo Li /Project Engineer	
			
		Eric Fu /Reviewer	

## 2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	MIC Item 19 of Article 2 Paragraph 1	N/A	MIC Item 19 of Article 2 Paragraph 1	Pass
Interference prevention capability	MIC Item 19 of Article 2 Paragraph 1	MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
RF accessibility	MIC Item 19 of Article 2 Paragraph 1	N/A	MIC Item 19 of Article 2 Paragraph 1	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Frequency Error	MIC Item 19 of Article 2 Paragraph 1	MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Occupied Bandwidth(99%)	MIC Item 19 of Article 2 Paragraph 1	MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Antenna Power	MIC Item 19 of Article 2 Paragraph 1	MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Spurious emission Intensity	MIC Item 19 of Article 2 Paragraph 1	MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass
Limit of secondary radiated emissions	MIC Item 19 of Article 2 Paragraph 1	MIC Notice No.88 Appendix No.43	MIC Item 19 of Article 2 Paragraph 1	Pass

### Remark:

Original model No. in report SZEM180600543101: 1741

The model 1741 was only tested in report SZEM180600543101.

New model No. in report SZEM180600543001: IVHB01W, IVHB01B

This report was an additional report copied from the report SZEM180600543101, just added the trade mark, changed the information of applicant, product name and model No.. Since the electrical circuit design, layout, components used and internal wiring for the model in this report was exactly the same as the model in the original report SZEM180600543101, with only difference on model name and shell color.

Therefore original data were kept in this report.

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## 4 General Information

### 4.1 Details of E.U.T.

Power supply:	DC 5V from charger input AC 100V/50Hz Lithium Ion Battery: 3.7V 800mAh rechargeable battery which charged by USB port
Test voltage:	DC 3.7V
Cable:	DC cable of charger: 85cm unshielded
Number of Channels	40
Operation Frequency	2402MHz to 2480MHz
Modulation Type	GFSK
Channel Spacing	2MHz
Antenna Type	PCB Antenna
Antenna Gain	-2.44dBi

### 4.2 Test Conditions

**Power Supply** Lithium Ion Battery: 3.7V 800mAh (Charge by charger)

The RF unit is supplied DC3.3V. The fluctuation of input voltage to the circuit of RF unit of test equipment is under  $\pm 1\%$ , when input voltage from DC3.7V to the test equipment is fluctuated by  $\pm 10\%$ , So, all measurement has been conducted by only rated voltage.

The measurement result of the voltage fluctuation at RF circuit when DC3.7V  $\pm 10\%$ .

DC Input	DC3V3
4.07V	3.32V
3.70V	3.30V
3.33V	3.28V

**Temperature:** 0 -45.0 °C

**Humidity:** 45-85 % RH

**Atmospheric Pressure:** 1000 -1010 mbar

Note:

VN: Normal Voltage

TN: Normal Temperature

TL: Low Extreme Test Temperature

TH: High Extreme Test Temperature

**Test**

**Frequencies:** If the EUT can be set to 3 or more different (carrier) frequencies in 1 allocated band, testing shall be performed using the Lowest, Middle and the Highest frequency (L, M and H). If there are 2 or fewer frequencies, testing shall be performed with the available frequencies.



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz	30	2462MHz
1	2404MHz	11	2424MHz	21	2444MHz	31	2464MHz
2	2406MHz	12	2426MHz	22	2446MHz	32	2466MHz
3	2408MHz	13	2428MHz	23	2448MHz	33	2468MHz
4	2410MHz	14	2430MHz	24	2450MHz	34	2470MHz
5	2412MHz	15	2432MHz	25	2452MHz	35	2472MHz
6	2414MHz	16	2434MHz	26	2454MHz	36	2474MHz
7	2416MHz	17	2436MHz	27	2456MHz	37	2476MHz
8	2418MHz	18	2438MHz	28	2458MHz	38	2478MHz
9	2420MHz	19	2440MHz	29	2460MHz	39	2480MHz

Test frequencies are the lowest channel: 0 channel (2402 MHz), middle channel: 19 channel (2440 MHz) and highest channel: 39 channel (2480 MHz).

#### 4.3 Description of Support Units

The EUT has been tested as an independent unit.

#### 4.4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power	$\pm 0.75\text{dB}$
5	RF power density	$\pm 2.84\text{dB}$
6	Conducted Spurious emissions	$\pm 0.75\text{dB}$
7	RF Radiated power	$\pm 4.5\text{dB}$ (below 1GHz)
		$\pm 4.8\text{dB}$ (above 1GHz)
8	Radiated Spurious emission test	$\pm 4.5\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (Above 1GHz)
9	Temperature test	$\pm 1^{\circ}\text{C}$
10	Humidity test	$\pm 3\%$
11	Supply voltages	$\pm 1.5\%$
12	Time	$\pm 3\%$



#### **4.5 Test Location**

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.  
518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

#### **4.6 Test Facility**

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

#### **4.7 Deviation from Standards**

None

#### **4.8 Abnormalities from Standard Conditions**

None

## 5 Equipment List

MIC Test Equipment List						
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Calibration body	Classification
Humi/ Temp Indicator	HYGRO	ZJ1-2B	SEL0033	2017-10-12	CEPREI	(c)
Spectrum Analyzer	Rohde & Schwarz	FSP	SEL0154	2017-10-17	CEPREI	(c)
Barometer	ChangChun	DYM3	SEL0088	2018-04-11	CEPREI	(c)
DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2017-10-09	CEPREI	(c)
Multi Meter	Fluke	15B	SEL250	2018-04-11	CEPREI	(c)

Remark:

- (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.
- (b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992) .
- (c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- (d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to (c).

From JRL Article 24-2, paragraph 4, Item 2

**Notice: Calibration duration for above equipments is 1 year.**

## 6 Radio Spectrum Technical Requirement

### 6.1 Antenna Requirement

#### 6.1.1 Test Requirement:

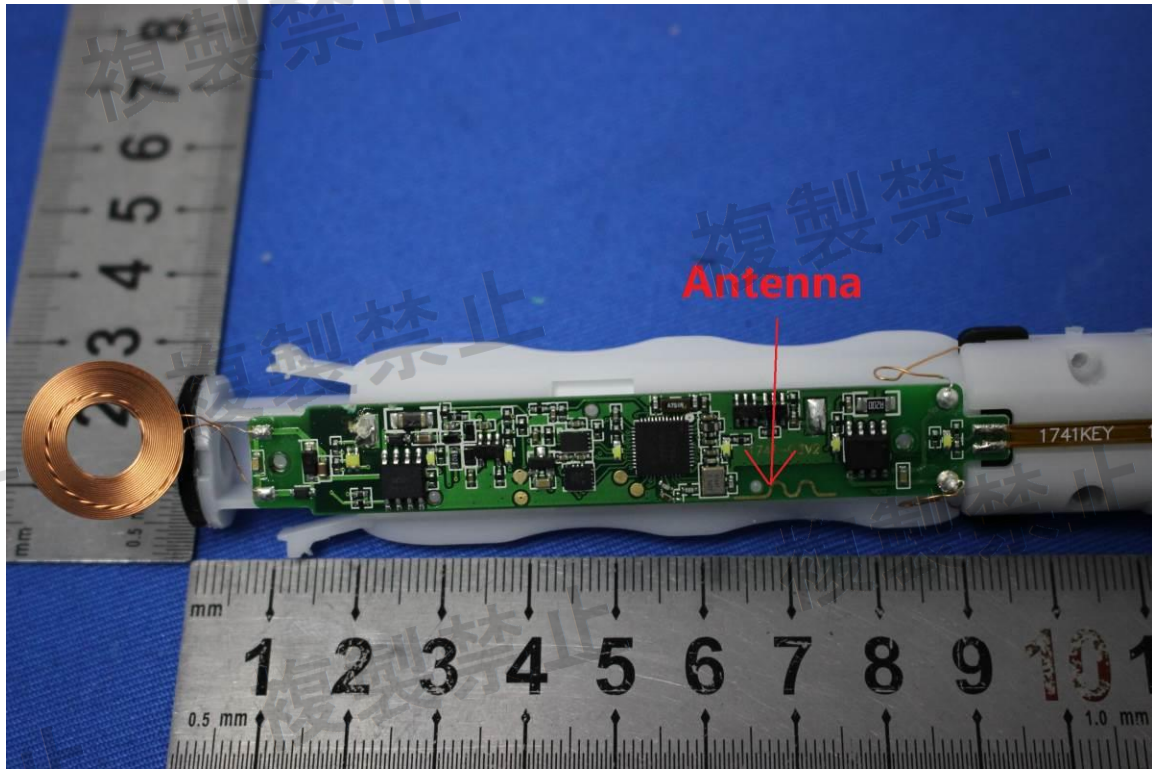
MIC Item 19 of Article 2 Paragraph 1

#### 6.1.2 Conclusion

Standard requirement:

Applicable for equipment with an antenna terminal, including testing terminals. If an antenna connector is available, all relevant tests will be carried out conducted. If not, tests will be carried out in an anechoic room or with a suitable test-fixture.

EUT Details:



The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -2.44dBi.

Result:

An antenna connector is available, all relevant tests will be carried out conducted.



## 6.2 Interference prevention capability

### 6.2.1 Test Requirement:

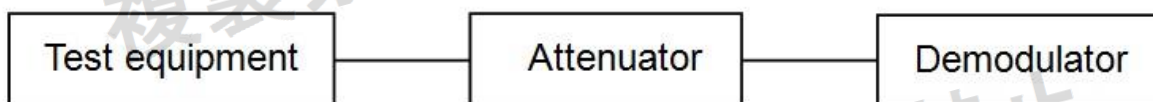
MIC Item 19 of Article 2 Paragraph 1

Limit:

Article 2, Item (19) Notice 88 Appendix 43, 44, 45

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.

### 6.2.2 Test Setup Diagram



### 6.2.3 Conclusion

Standard Requirement:

- 1) Measurement system diagram as shown above and test equipment keep transmitting identification code.
- 2) Condition of measuring instrument
  - (1) Demodulator must be able to demodulate the transmitting signal emitted by test equipment and to indicate the identification code.
- 3) Condition of test equipment The mode of normal use.
- 4) Measuring operation procedure
  - (1) When test equipment has the function to transmit identification code automatically:
    - A) Transmit the predetermined identification code from test equipment.
    - B) Confirm the transmitted identification code by demodulator.

EUT Details:

F5:08:B5:22:02:E6

The unit does meet the requirements (Good).



### 6.3 RF accessibility

#### 6.3.1 Test Requirement:

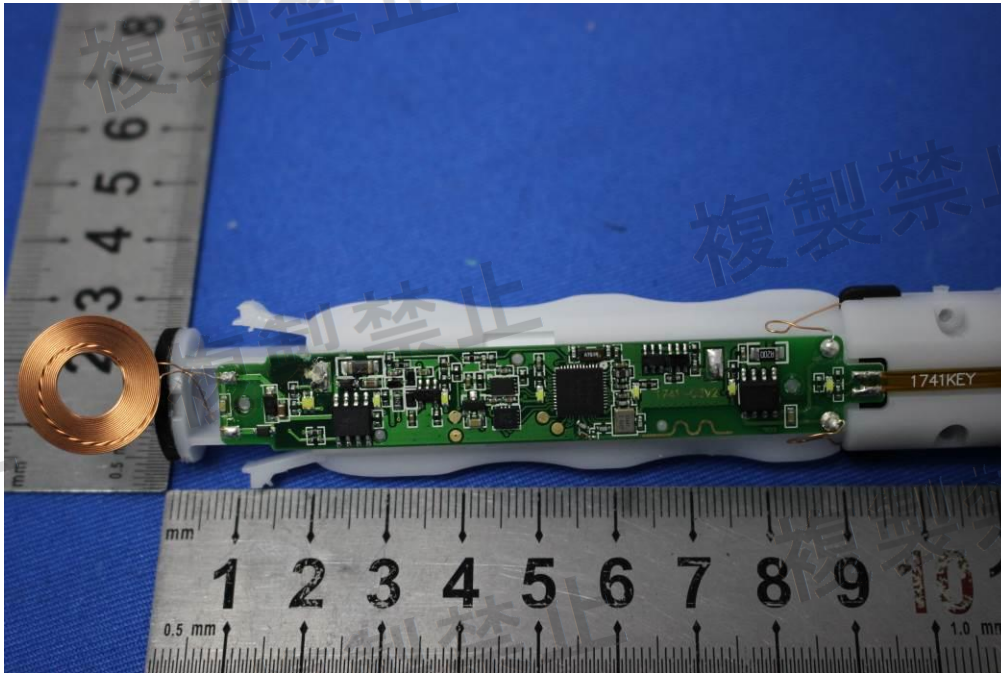
MIC Item 19 of Article 2 Paragraph 1

#### 6.3.2 Conclusion

Standard Requirement:

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.

EUT Details:



RF and Modulation parts are mounted on PCB with surface mount technology, and there is no any adjustable parts on PCB or adjustable parts are not exposed.

## 7 Radio Spectrum Matter Test Results

### 7.1 Frequency Error

Test Requirement MIC Item 19 of Article 2 Paragraph 1  
Test Method: MIC Notice No.88 Appendix No.43  
Limit: Tolerance of frequency:  $\pm 50\text{E-6}$

#### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.8 °C Humidity: 42.6 % RH Atmospheric Pressure: 1010 mbar

Test mode a:TX mode\_Keep the EUT in continuously transmitting mode with GFSK modulation

#### 7.1.2 Measurement Procedure and Data

##### 1. Test Conditions:

Spectrum Analyzer is used for measurement.

##### 2. EUT conditions:

Modulation/Spread/Hopping OFF, CW Tx

##### 3. Spectrum Analyzer conditions:

Frequency: Test Frequency

Span 1MHz

RBW 10 kHz (Modulation OFF),

VBW 10 kHz (Modulation OFF),

Sweep Time Auto

Detector mode Positive peak

Indication mode Max hold

Alternative method:

Frequency: Test Frequency

Span 2 times channel bandwidth

RBW 100 kHz (Modulation ON),

VBW 100 kHz (Modulation ON),

Sweep Time Auto

Detector mode Positive peak

Indication mode Max hold

The detailed test data see: Appendix MIC19-2

## 7.2 Occupied Bandwidth(99%)

Test Requirement	MIC Item 19 of Article 2 Paragraph 1
Test Method:	MIC Notice No.88 Appendix No.43
Limit:	FH: 83.5MHz or less FH + DS: 83.5MHz or less FH + OFDM: 83.5MHz or less OFDM: 38MHz or less Others: 26MHz or less

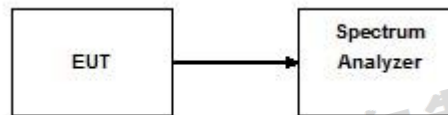
### 7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.8 °C Humidity: 42.6 % RH Atmospheric Pressure: 1010 mbar

Test mode a:TX mode\_Keep the EUT in continuously transmitting mode with GFSK modulation

### 7.2.2 Test Setup Diagram



### 7.2.3 Measurement Procedure and Data

#### 1. Test Conditions:

Spectrum Analyzer is used for measurement.

#### 2. EUT conditions:

Modulation/Spread/Hopping ON, Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

#### 3. Spectrum Analyzer conditions:

Frequency: Test Frequency

Span 83.5 MHz (FHSS); 40/60 MHz (OFDM; DSSS); 2-5 times OBW (Others)

RBW 1 MHz (FHSS); 300kHz (OFDM; DSSS); 3% OBW (Others)

VBW 1 MHz (FHSS); 300kHz (OFDM; DSSS); 3 times RBW (Others)

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

OBW 99%

The detailed test data see: Appendix MIC19-2

### 7.3 Antenna Power

Test Requirement

Test Method:

Limit:

MIC Item 19 of Article 2 Paragraph 1

MIC Notice No.88 Appendix No.43

Designated value

- (1) FH, FH+DS, FH+OFDM: 3mW/MHz  
(used in the range of 2427 - 2470.75 MHz)
  - (2) OFDM, DS other than (1) 10mW/MHz
  - (3) Other than (1) & (2) 10mW
  - (4) OFDM OBW 26 - 38MHz: 5mW/MHz
- Tolerance: +20%, -80%

#### 7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.8 °C Humidity: 42.6 % RH Atmospheric Pressure: 1010 mbar

Test mode a: TX mode\_Keep the EUT in continuously transmitting mode with GFSK modulation

#### 7.3.2 Test Setup Diagram



#### 7.3.3 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON, Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Frequency: Test Frequency

Span 25 MHz(FHSS); 40/60 MHz (OFDM; DSSS); Enough to capture the emission (Others)

RBW 1 MHz (FHSS; OFDM; DSSS); More than OBW (Others)

VBW 1 MHz (FHSS; OFDM; DSSS); More than RBW (Others)

Sweep Time Auto

detector mode RMS

Indication mode Max hold

The detailed test data see: Appendix MIC19-2



## 7.4 Spurious emission Intensity

Test Requirement MIC Item 19 of Article 2 Paragraph 1

Test Method: MIC Notice No.88 Appendix No.43

Limit:

- (1) Below 2387 MHz : 2.5 $\mu$ W/MHz
- (2) 2387 to 2400 MHz : 25 $\mu$ W/MHz
- (3) 2483.5 through 2496.5 MHz : 25 $\mu$ W/MHz
- (4) Over 2496.5 MHz : 2.5 $\mu$ W/MHz

### 7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.8 °C Humidity: 42.6 % RH Atmospheric Pressure: 1010 mbar

Test mode a:TX mode\_Keep the EUT in continuously transmitting mode with GFSK modulation

### 7.4.2 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON, , Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 13 GHz by peak mode.

Step 2

IF the value measured by Step1 is 2 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30 MHz – 2400 MHz , 2483.5 MHz –13 GHz

RBW 1 MHz

VBW 1 MHz

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

RBW 1 MHz

VBW 1 MHz

Sweep Time Auto

detector mode Sample

Indication mode Max hold

The detailed test data see: Appendix MIC19-2

## 7.5 Limit of secondary radiated emissions

Test Requirement	MIC Item 19 of Article 2 Paragraph 1
Test Method:	MIC Notice No.88 Appendix No.43
Limit:	(1) Below 1 GHz : 4 nW or less (2) 1 GHz and over : 20 nW or less

### 7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23.8 °C Humidity: 42.6 % RH Atmospheric Pressure: 1010 mbar

Test mode a:TX mode\_Keep the EUT in continuously transmitting mode with GFSK modulation

### 7.5.2 Measurement Procedure and Data

#### 1. Test Conditions:

Spectrum Analyzer is used for measurement.

#### 2. EUT conditions:

Modulation/Spread/Hopping ON

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

#### 3. Spectrum Analyzer conditions:

##### Step 1

All spurious are measured from 30 MHz to 13 GHz by peak mode.

##### Step 2

IF the value measured by Step1 is 2 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30 MHz – 2400 MHz , 2483.5 MHz –13 GHz

RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

Span 0 Hz

RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

VBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)

Sweep Time Auto

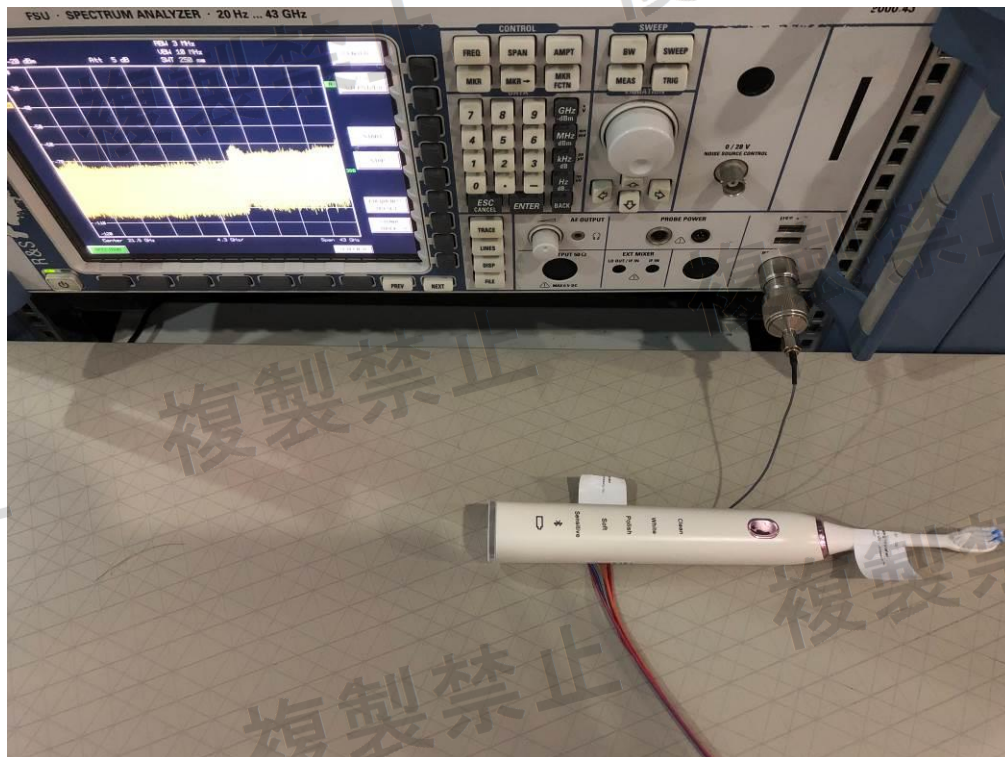
detector mode Sample

Indication mode Max hold

The detailed test data see: Appendix MIC19-2

## 8 Photographs

Setup photo



**8.1 EUT Constructional Details (EUT Photos)**

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1806005430CR.



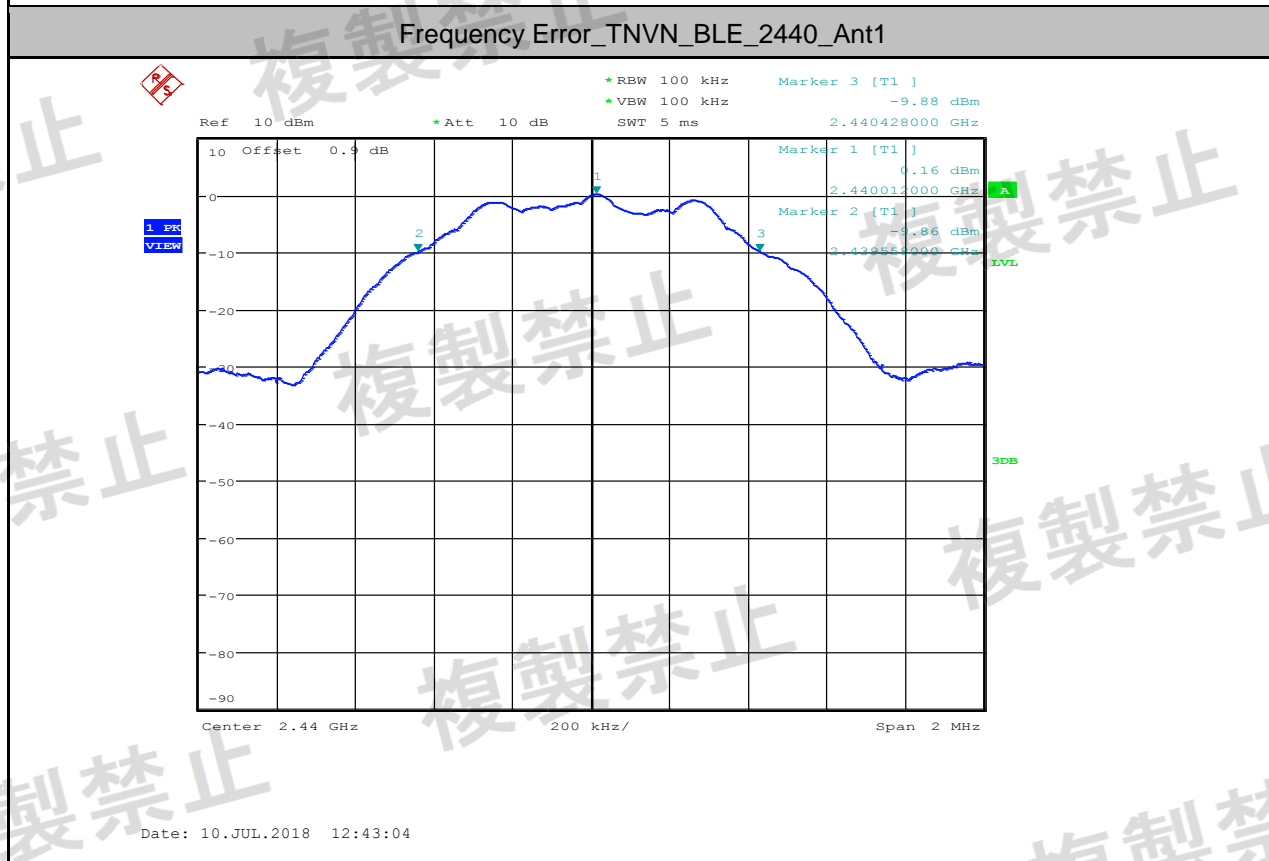
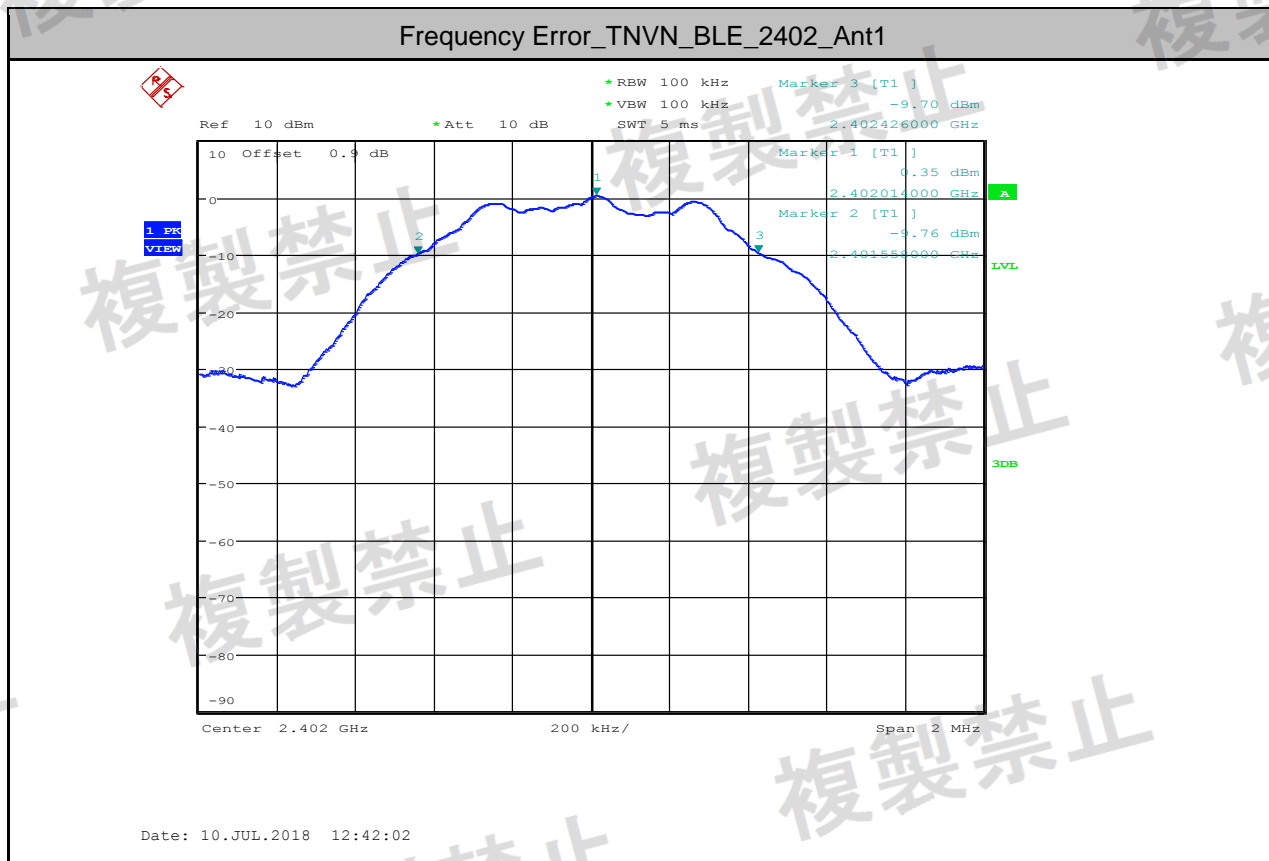


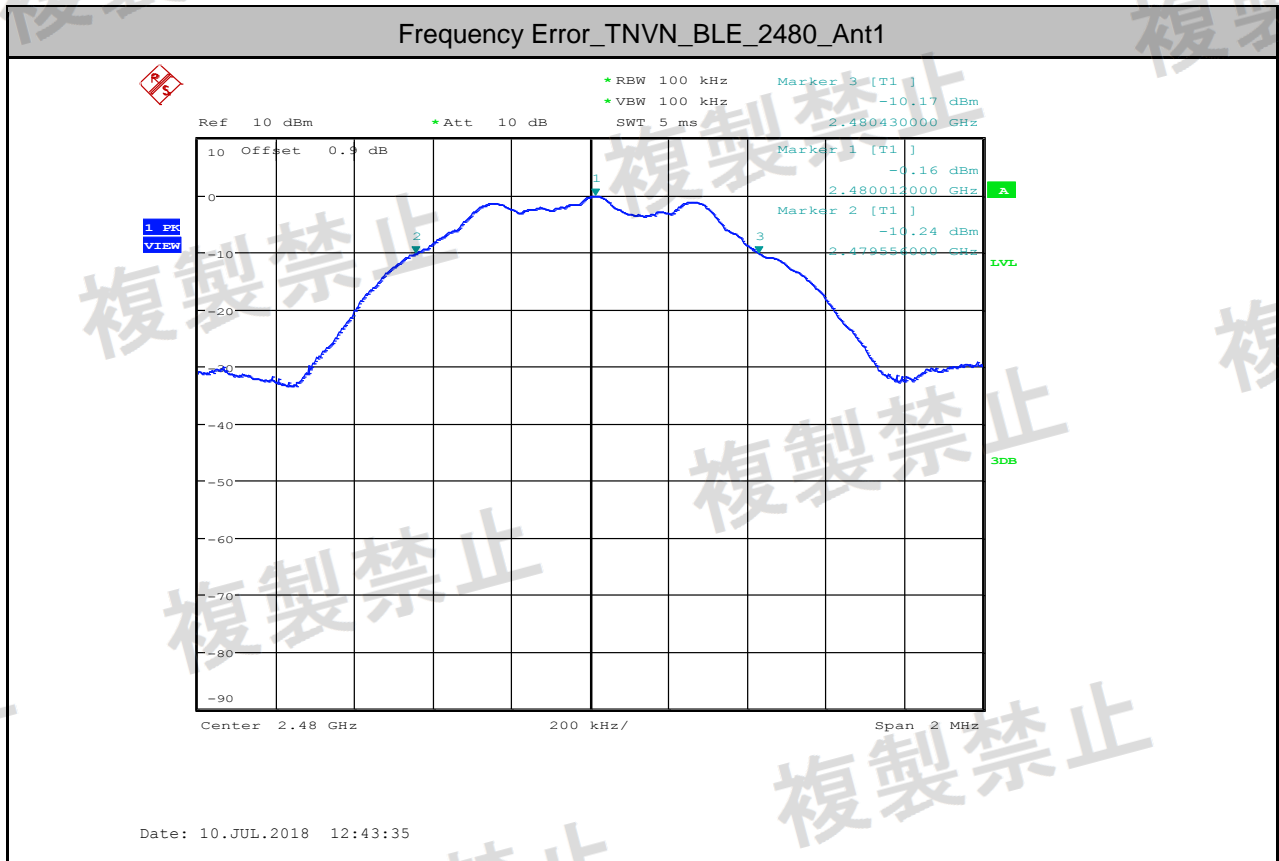
## 9 Appendix

### 9.1 Appendix MIC19-2

#### 1.Frequency Error

Test Condition	Test Mode	Test Channel	Ant	Result [MHz]	Result [PPM]	Limit [PPM]	Verdict
TNVN	BLE	2402	Ant1	2401.992	-3.33	$\leq \pm 50$	PASS
TNVN	BLE	2440	Ant1	2439.993	-2.87	$\leq \pm 50$	PASS
TNVN	BLE	2480	Ant1	2479.993	-2.82	$\leq \pm 50$	PASS

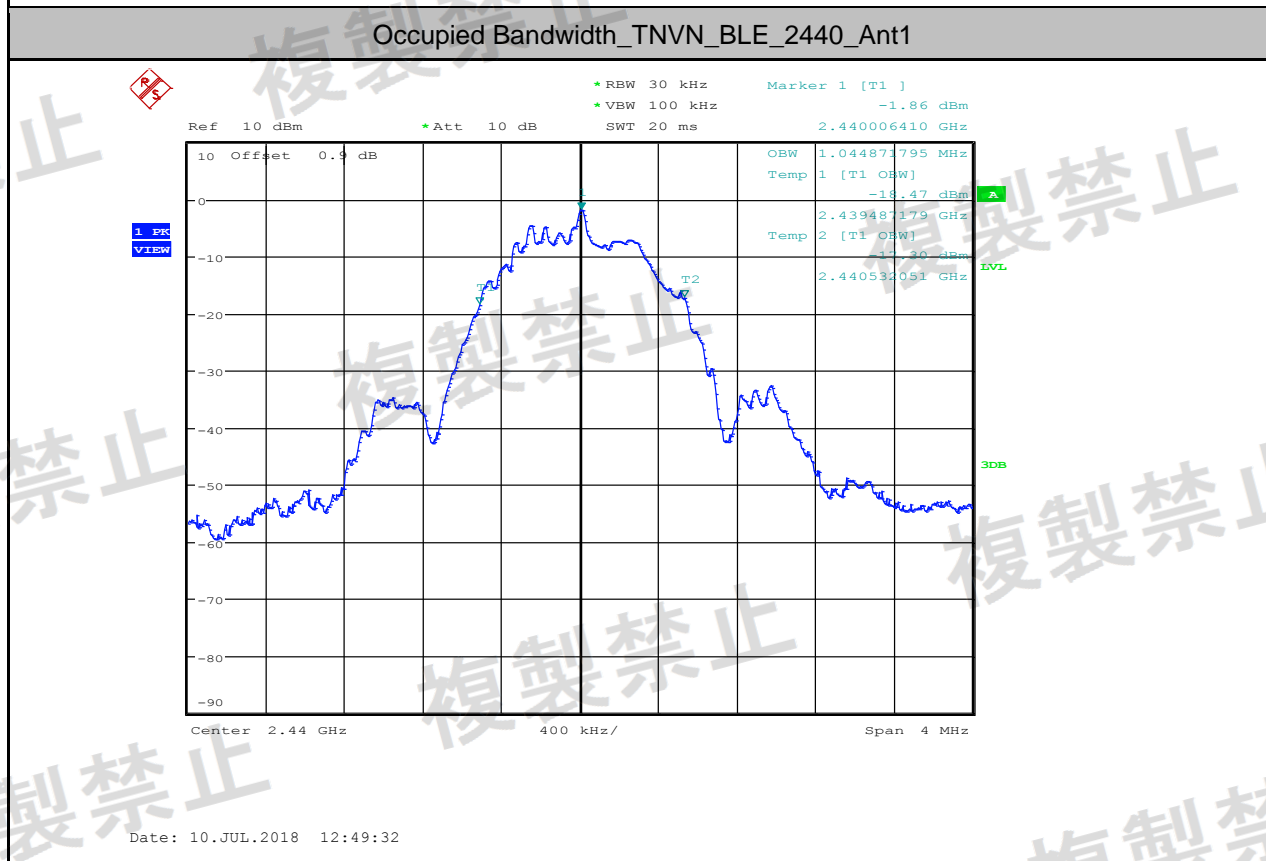
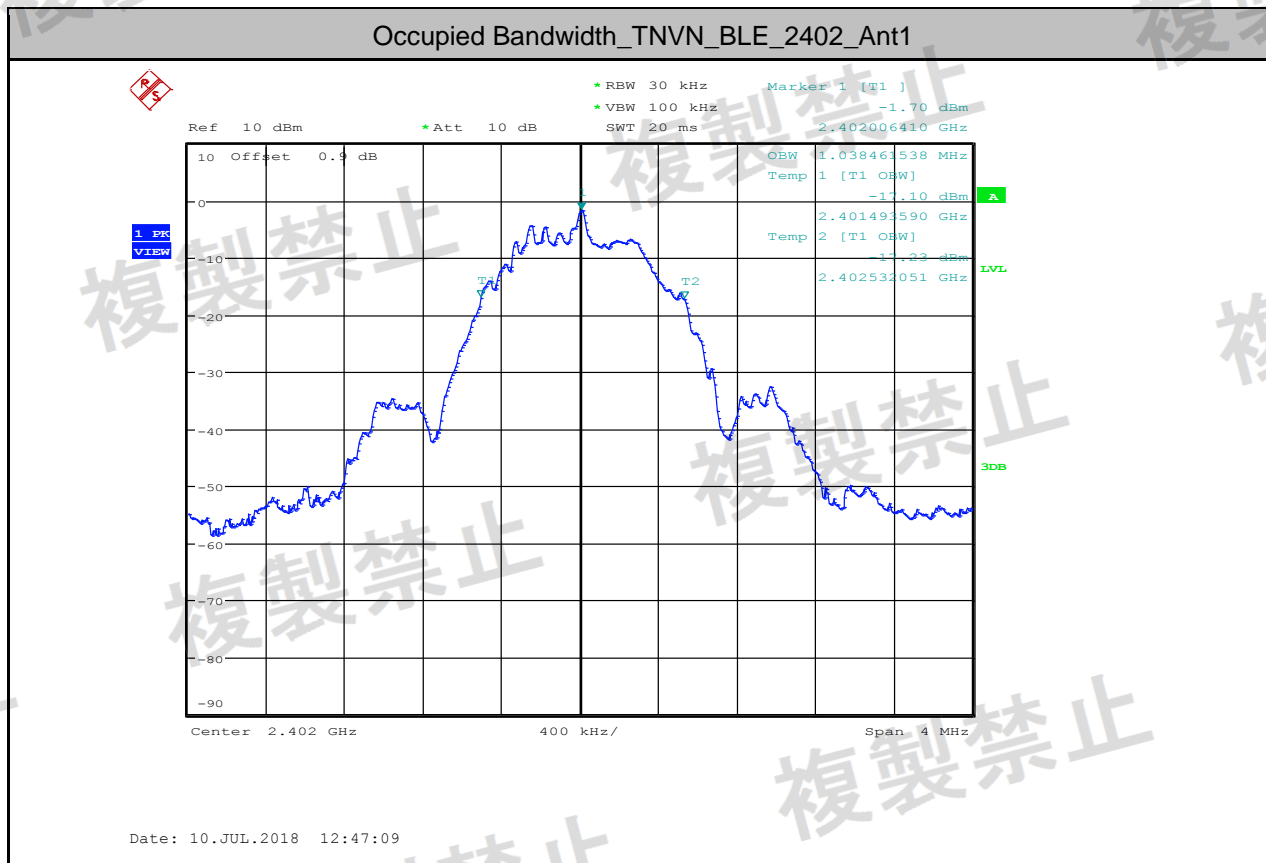


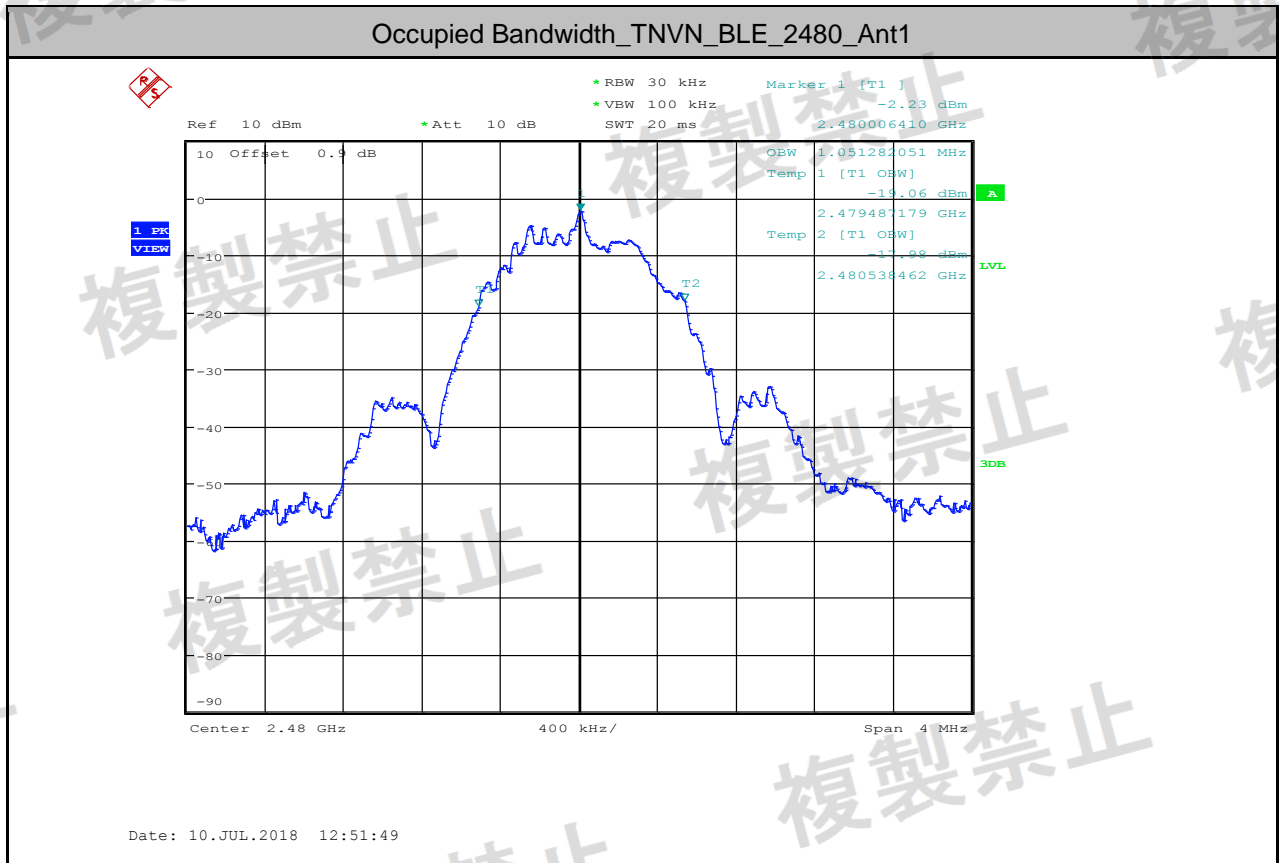


## 2.Occupied Bandwidth (99%)

Test Condition	Test Mode	Test Channel	Ant	Test Result [MHz]	Limit [MHz]	Verdict
TNVN	BLE	2402	Ant1	1.038	<=26	PASS
TNVN	BLE	2440	Ant1	1.045	<=26	PASS
TNVN	BLE	2480	Ant1	1.051	<=26	PASS

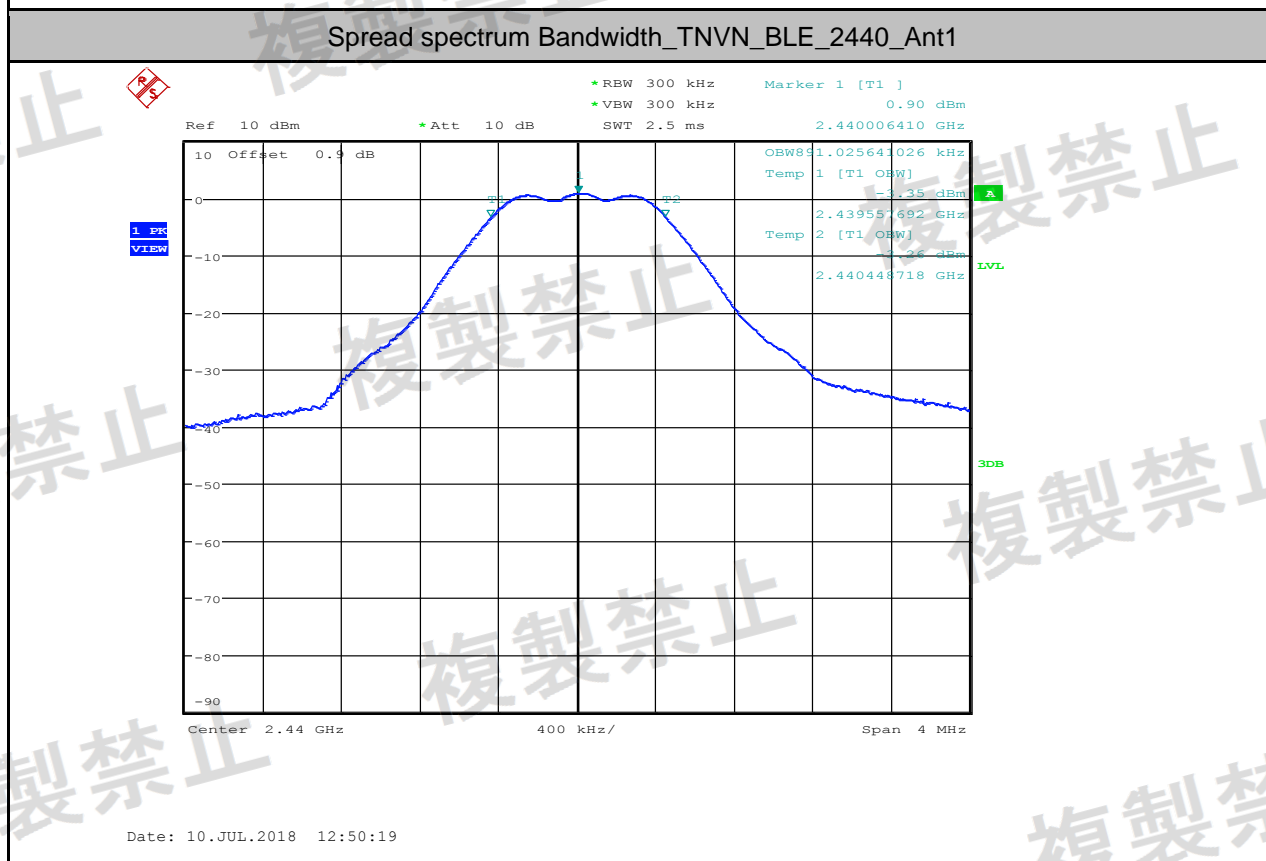
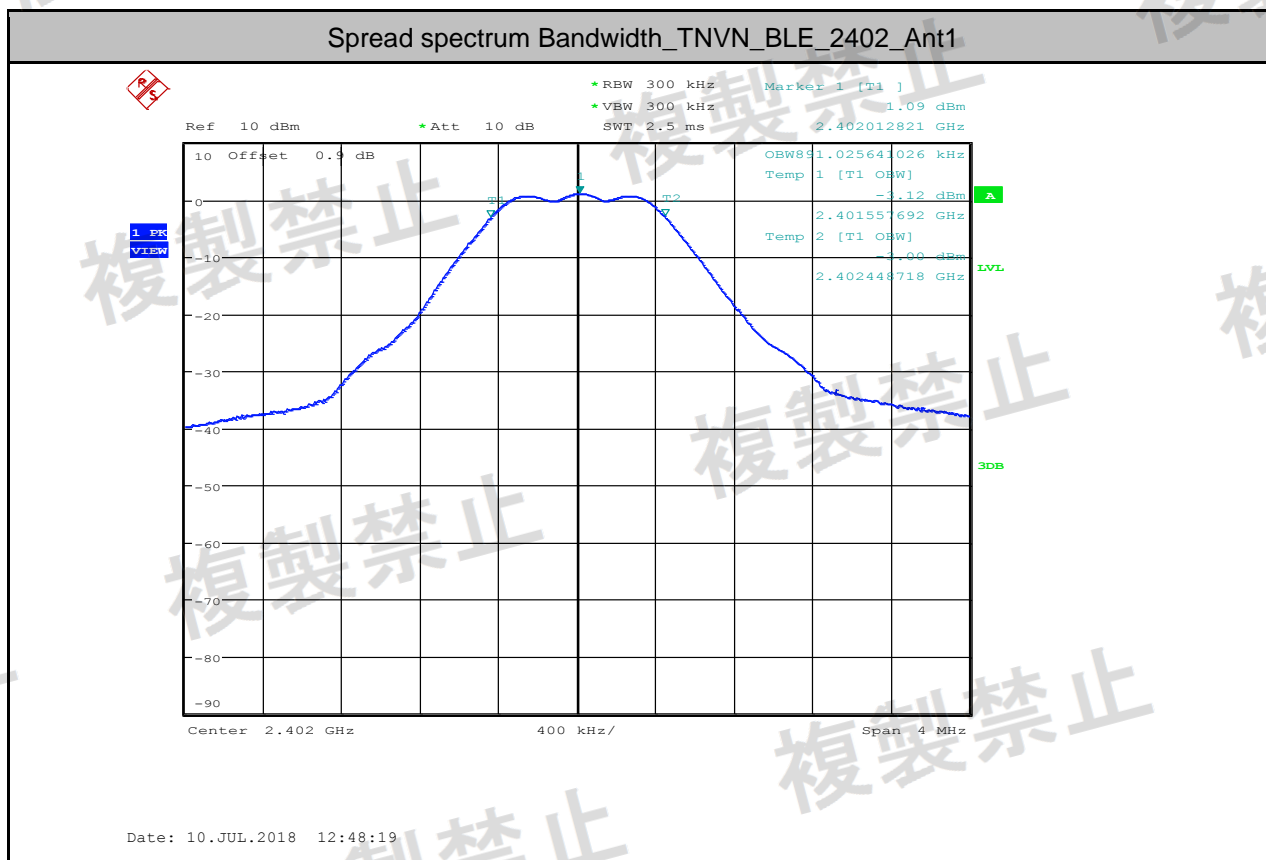




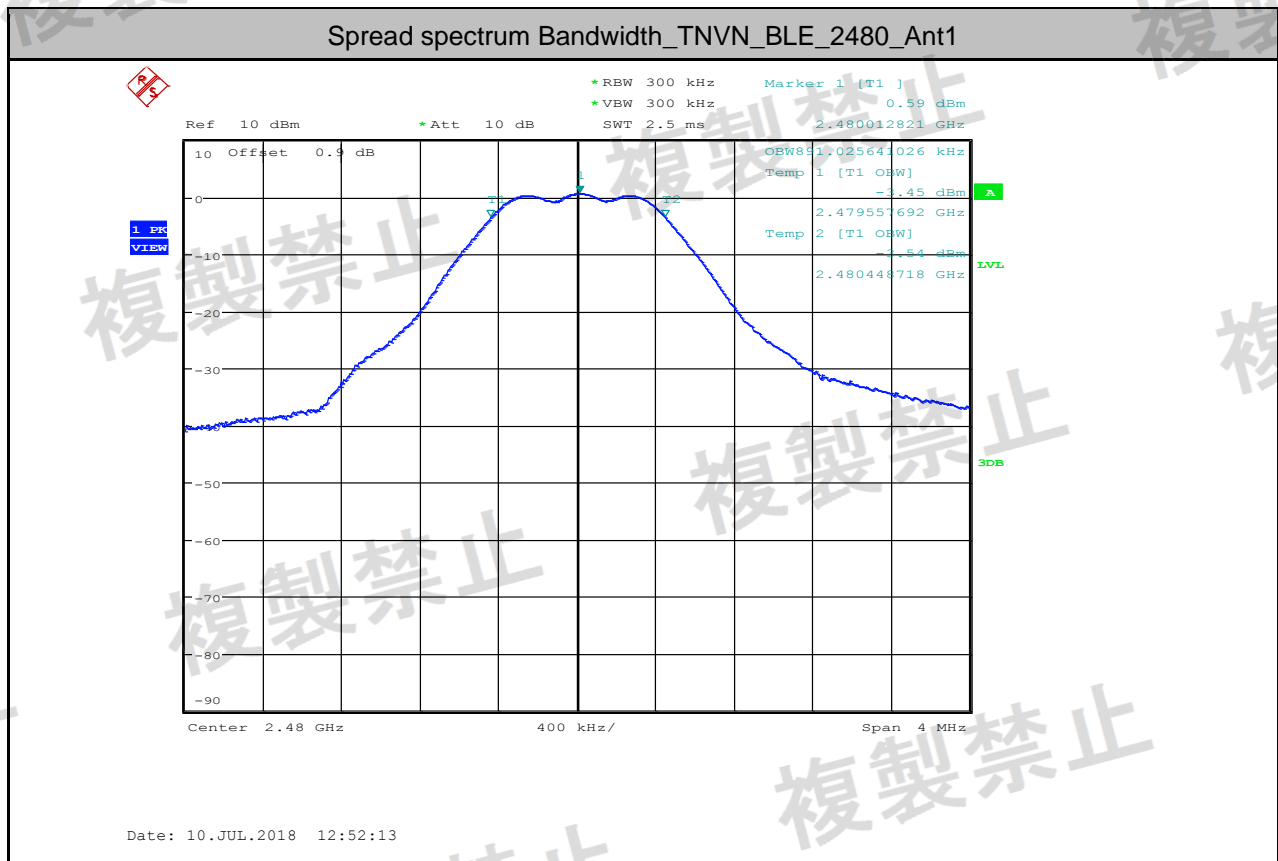


## 3. Spread spectrum Bandwidth (90%)

Test Condition	Test Mode	Test Channel	Ant	Test Result [MHz]	Limit [MHz]	Verdict
TNVN	BLE	2402	Ant1	0.891	0.5	PASS
TNVN	BLE	2440	Ant1	0.891	0.5	PASS
TNVN	BLE	2480	Ant1	0.891	0.5	PASS

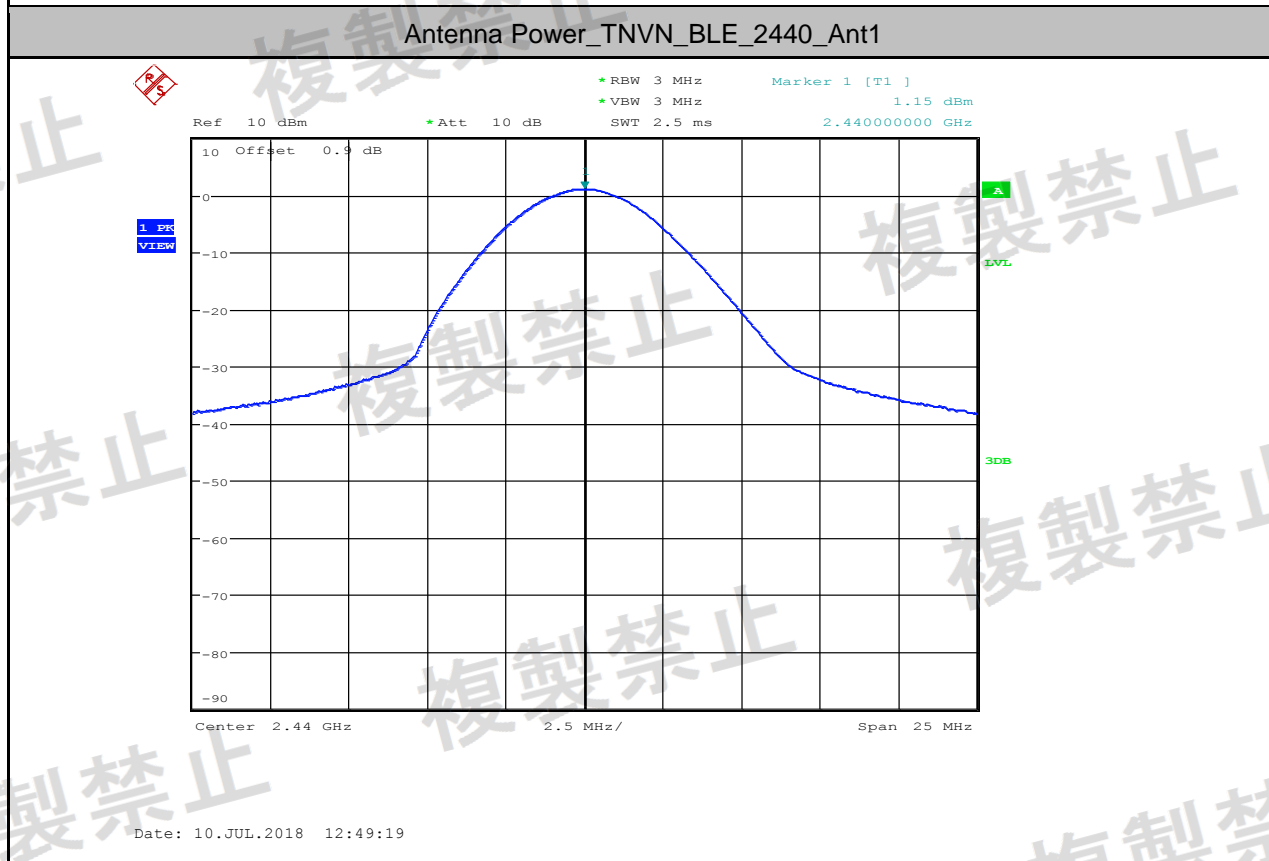
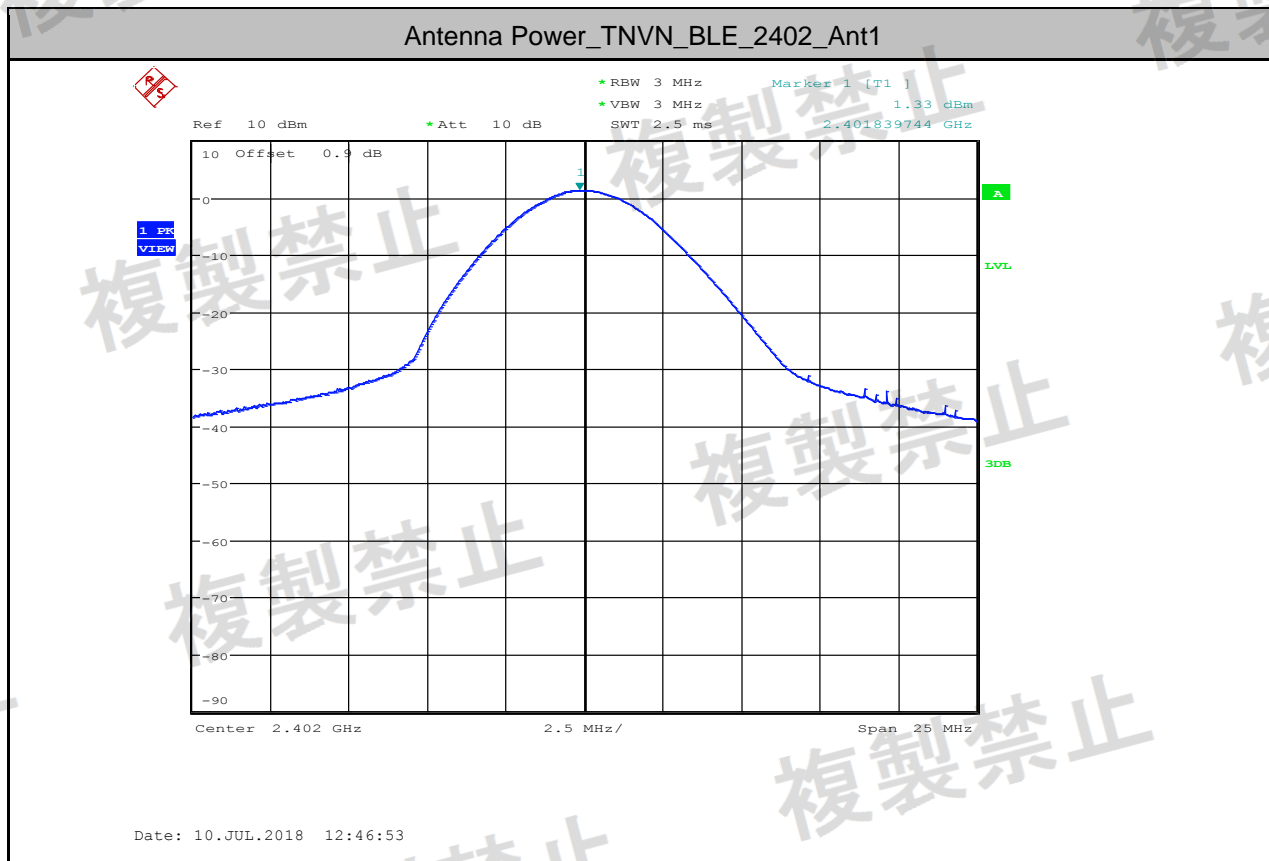


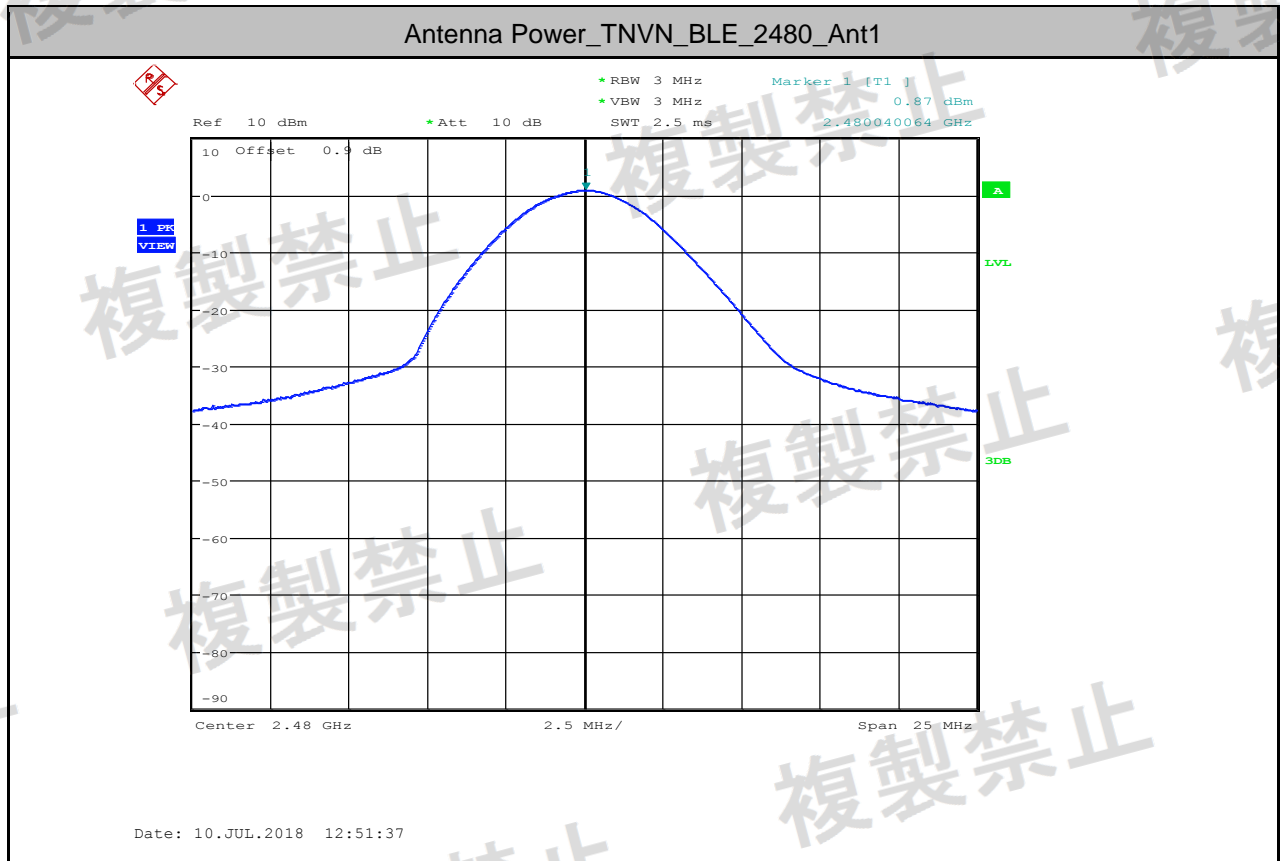




## 4. Antenna Power

Test Condition	Test Mode	Test Channel	Ant	Power[mW]	Limit[mW]	Normal Power [mW]	Tolerance[%]	Limit [%]	Verdict
TNVN	BLE	2402	Ant1	1.358	10	1.5	-9.467	-80 to +20	PASS
TNVN	BLE	2440	Ant1	1.303	10	1.5	-13.133	-80 to +20	PASS
TNVN	BLE	2480	Ant1	1.222	10	1.5	-18.533	-80 to +20	PASS



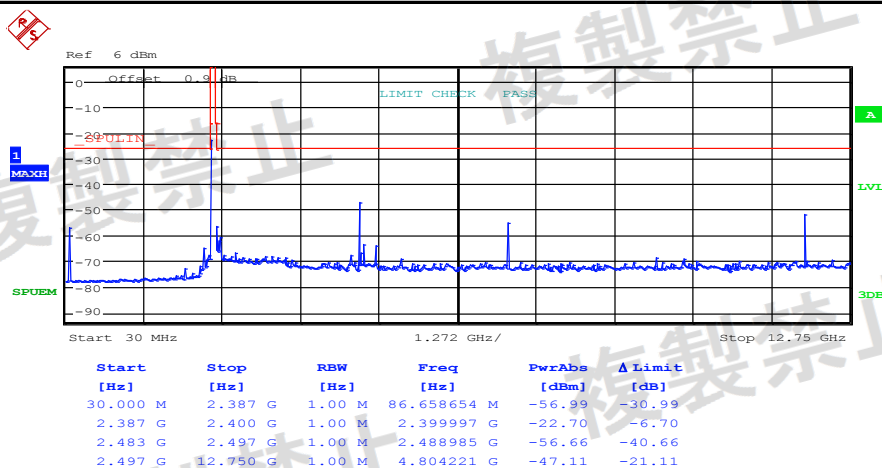




## 5. Spurious Emissions of Tx

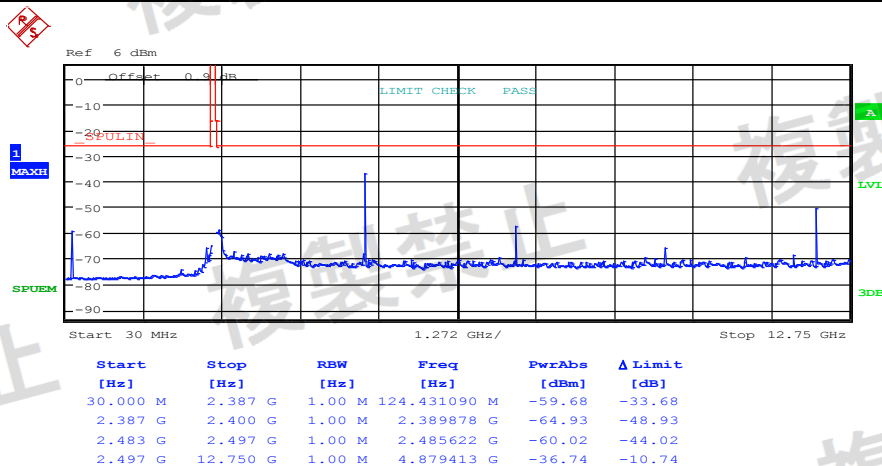
Test Mode	Test Channel	StartFre[MHz]	StopFre[MHz]	Max.Fre[MHz]	Max.Level[μW]	Limit [μW]	Verdict
BLE	2402	30	2387	86.66	0.0020	2.5	PASS
BLE	2402	2387	2400	2400.00	5.3703	25	PASS
BLE	2402	2483.5	2496.5	2488.99	0.0022	25	PASS
BLE	2402	2496.5	13000	4804.22	0.0195	2.5	PASS
BLE	2440	30	2387	124.43	0.0011	2.5	PASS
BLE	2440	2387	2400	2389.88	0.0003	25	PASS
BLE	2440	2483.5	2496.5	2485.62	0.0010	25	PASS
BLE	2440	2496.5	13000	4879.41	0.2118	2.5	PASS
BLE	2480	30	2387	165.98	0.0010	2.5	PASS
BLE	2480	2387	2400	2388.38	0.0005	25	PASS
BLE	2480	2483.5	2496.5	2483.51	0.6223	25	PASS
BLE	2480	2496.5	13000	4959.39	0.0227	2.5	PASS

### Spurious Emissions of Tx\_TNVN\_BLE\_2402\_Ant1



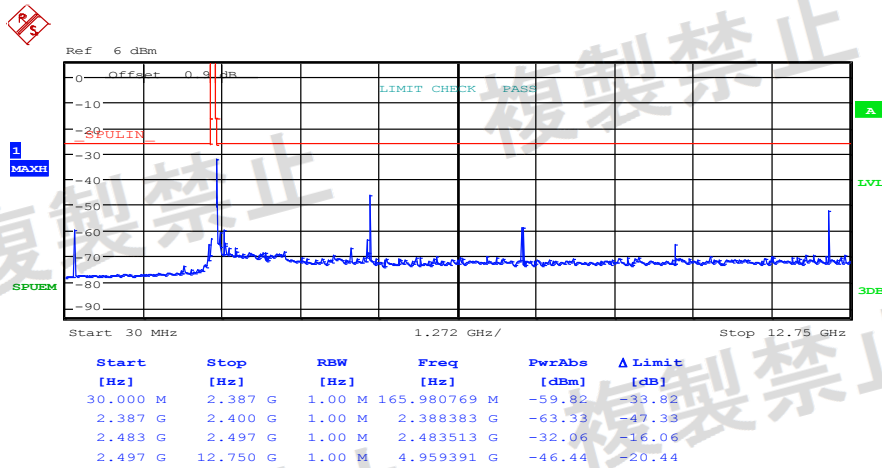
Date: 10.JUL.2018 12:48:36

### Spurious Emissions of Tx\_TNVN\_BLE\_2440\_Ant1



Date: 10.JUL.2018 12:50:36

Spurious Emissions of Tx\_TNVN\_BLE\_2480\_Ant1



Date: 10.JUL.2018 12:52:30

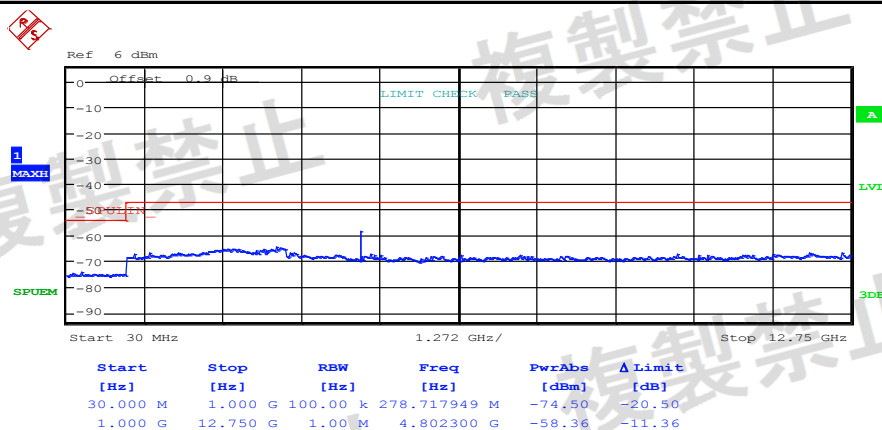


6.Spurious Emissions of Rx

Test Mode	Test Channel	StartFre[MHz]	StopFre[MHz]	Max.Fre[MHz]	Max.Level[nW]	Limit [nW]	Verdict
BLE	2402	1000	13000	4802.30	1.459	20	PASS
BLE	2402	30	1000	278.72	0.035	4	PASS
BLE	2440	1000	13000	4878.67	1.384	20	PASS
BLE	2440	30	1000	309.81	0.033	4	PASS
BLE	2480	1000	13000	4958.58	1.726	20	PASS
BLE	2480	30	1000	507.23	0.037	4	PASS

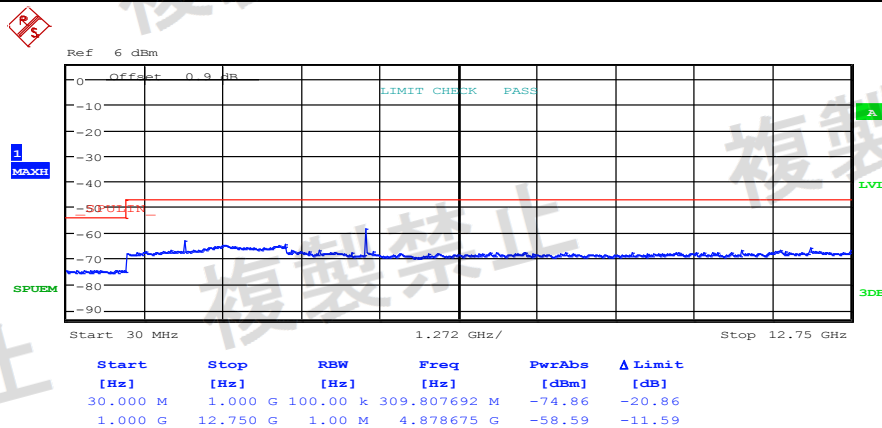


### Spurious Emissions of Rx\_TNVN\_BLE\_2402\_Ant1

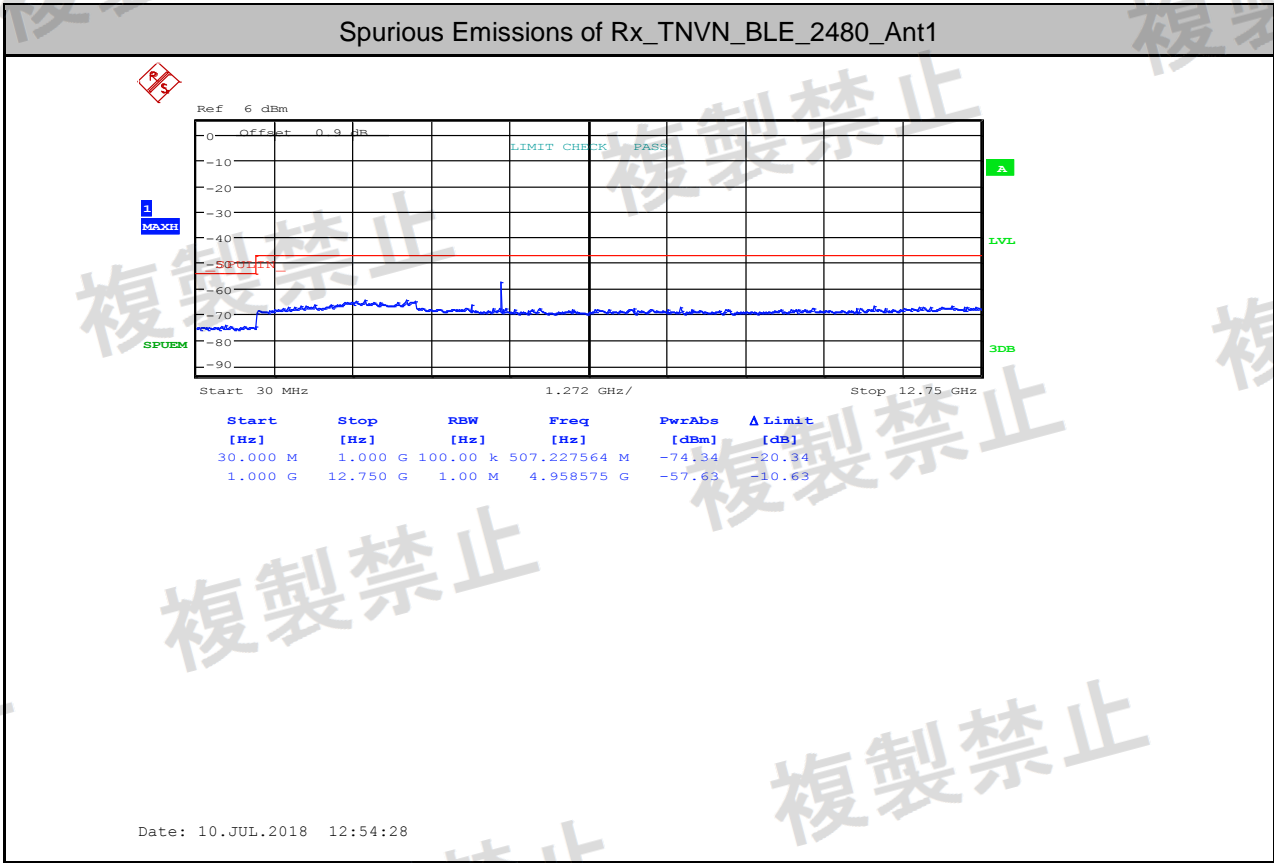


Date: 10.JUL.2018 12:53:03

### Spurious Emissions of Rx\_TNVN\_BLE\_2440\_Ant1



Date: 10.JUL.2018 12:54:03



- End of the Report -