

# TEST REPORT

Report No. .... : KS2211S5001E01  
FCC ID ..... : 2AXAVWF2002302  
Applicant ..... : Shenzhen Teslong Technology Co.,Ltd.  
Address ..... : 2nd Floor, Block 4, Jinhuaifa Industrial Park, East of Donghuan 2 avenue,  
Longhua, Shenzhen  
Manufacturer ..... : Shenzhen Teslong Technology Co.,Ltd.  
Address ..... : 2nd Floor, Block 4, Jinhuaifa Industrial Park, East of Donghuan 2 avenue,  
Longhua, Shenzhen  
Product Name ..... : Digital Borescope  
Model/Type reference ..... : WF200  
Standard ..... : 47 CFR Part 15.247  
Date of Receipt ..... : November 17, 2022  
Date of Test Date ..... : November 17, 2022 to January 4, 2023  
Date of issue ..... : January 4, 2023  
**Test result ..... : Pass**

Prepared by:  
( Printed name + Signature )    Pai Zheng



Approved by:  
( Printed name + Signature )    Sky Dong



**Testing Laboratory Name . : KSIGN(Guangdong) Testing Co., Ltd.**

Address ..... : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial  
Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong,  
China

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# 1. TEST SUMMARY

## 1.1. Test Standards

The tests were performed according to following standards:

**47 CFR Part 15.247:** Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

## 1.2. Report Version

Revised No.	Date of issue	Description
01	January 4, 2023	Original

### 1.3. Test Description

Test Item	Standard	Requirement	Result
Antenna requirement	47 CFR Part 15.247	Part 15.203	Pass
Conducted Emission at AC power line	47 CFR Part 15.247	47 CFR 15.207(a)	Pass
Occupied Bandwidth	47 CFR Part 15.247	47 CFR 15.247(a)(2)	Pass
Maximum Conducted Output Power	47 CFR Part 15.247	47 CFR 15.247(b)(3)	Pass
Power Spectral Density	47 CFR Part 15.247	47 CFR 15.247(e)	Pass
Conducted Spurious Emission	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Band edge emissions (Radiated)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Raidated Spurious Emission (below 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass
Raidated Spurious Emission (above 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d)	Pass

## 1.4. Test Facility

### **KSIGN(Guangdong) Testing Co., Ltd.**

West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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

#### **CNAS-Lab Code: L13261**

KSIGN(Guangdong) Testing Co., Ltd. has been assessed and proved to be in Compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

#### **A2LA-Lab Cert. No.: 5457.01**

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing

#### **ISED#: 25693 CAB identifier.: CN0096**

KSIGN(Guangdong) Testing Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

#### **FCC-Registration No.: 294912 Designation Number: CN1328**

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

## 1.5. Measurement Uncertainty

Test Items	Measurement Uncertainty
Conducted Emission (150k-30MHz)	$\pm 3.34\text{dB}$
Output Power, Conducted	$\pm 1.4\text{dB}$
PSD, Conducted	$\pm 1.0\text{dB}$
Spurious Emissions, Conducted	$\pm 3.3\text{dB}$
RSE (1-18GHz)	$\pm 4.68\text{dB}$
RSE (30-1000MHz)	$\pm 5.7\text{dB}$
RSE (18-40GHz)	$\pm 5.18\text{dB}$

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

## 2. GENERAL INFORMATION

### 2.1. General Description Of EUT

Test Sample Number:	1-1(Normal Sample), 1-2(Engineering Sample)
Product Name:	Digital Borescope
Model / Type reference:	WF200
Power Supply:	DC 3.7V from battery or DC 5.0V from adapter
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz;
Number of Channels:	802.11b/g, 802.11n(HT20): 11 Channels;
Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK); 802.11g: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n(HT20): OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type:	FPC
Antenna Gain:	3.80dBi

### 2.2. Accessory Equipment Information

The EUT was tested as an independent device.

### 2.3. Description of Test Modes

No.	Title	Description of Mode
Test Mode1	802.11b mode	Keep the EUT in 802.11b transmitting mode.
Test Mode2	802.11g mode	Keep the EUT in 802.11g transmitting mode.
Test Mode3	802.11n(HT20) mode	Keep the EUT in 802.11n(HT20) transmitting mode.

## 2.4. Measurement Instruments List

Conducted Emission at AC power line				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
LISN	R&S	ENV432	1326.6105.02	2023-03-04
EMI Test Receiver	R&S	ESR	102524	2023-03-04
Manual RF Switch	JS TOYO	/	MSW-01/002	2023-03-04
ISN CAT6	Schwarzbeck	CAT5 8158	227	2023-03-04
Color Signal Generator	Philips	PM5418	672926	2023-03-04
Power Absorbing Clamp	R&S	MDS-21	100925	2023-03-26

Occupied Bandwidth				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2023-03-04
Audio Analyzer	R&S	UPL16	100001	2023-03-04
Shielding box	Gxiong	GX-5915A	2201113	2023-04-23
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-187	09203403	2023-03-04
Band Stop Filter	COM-MW Technology Co., Ltd	ZBSF6-C820-920-188	09203401	2023-03-04
Splitter	COM-MW Technology Co., Ltd	ZPD-M1-8-2103	09203407	2023-03-04
Coaxial Cable	BEBES	A40-2.92M2.92F-4.5M	1907021	2023-03-04
Hygrothermograph	Anymetre	JB913	/	2023-03-07
Climate Chamber	Angul	AGNH80L	1903042120	2023-03-04
Spectrum Analyzer	HP	8593E	3831U02087	2023-03-04
Dual Output DC Power Supply	Agilent	E3646A	MY40009992	2023-03-04
RF Control Unit	Tonscend	JS0806-2	/	2023-03-04
Analog Signal Generator	HP	83752A	3344A00337	2023-03-04
Vector Signal Generator	Agilent	N5182A	MY50142520	2023-03-04
Wideband Radio Communication Tester	R&S	CMW500	157282	2023-03-04
Spectrum Analyzer	R&S	FSV40-N	101798	2023-03-04

Maximum Conducted Output Power				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2023-03-04
Audio Analyzer	R&S	UPL16	100001	2023-03-04
Shielding box	Gxiong	GX-5915A	2201113	2023-04-23
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-187	09203403	2023-03-04
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Splitter	COM-MW Technology Co., Ltd	ZPD-M1-8-2103	09203407	2023-03-04
Coaxial Cable	BEBES	A40-2.92M2.92F-4.5M	1907021	2023-03-04

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Hygrothermograph	Anymetre	JB913	/	2023-03-07
Climate Chamber	Angul	AGNH80L	1903042120	2023-03-04
Spectrum Analyzer	HP	8593E	3831U02087	2023-03-04
Dual Output DC Power Supply	Agilent	E3646A	MY40009992	2023-03-04
RF Control Unit	Tonscend	JS0806-2	/	2023-03-04
Analog Signal Generator	HP	83752A	3344A00337	2023-03-04
Vector Signal Generator	Agilent	N5182A	MY50142520	2023-03-04
Wideband Radio Communication Tester	R&S	CMW500	157282	2023-03-04
Spectrum Analyzer	R&S	FSV40-N	101798	2023-03-04

Power Spectral Density				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2023-03-04
Audio Analyzer	R&S	UPL16	100001	2023-03-04
Shielding box	Gxiong	GX-5915A	2201113	2023-04-23
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-187	09203403	2023-03-04
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Spectrum Analyzer	R&S	FSV40-N	101798	2023-03-04

Emissions in non-restricted frequency bands				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Wideband Radio Communication Tester	R&S	CMU200	115297	2023-03-04
Audio Analyzer	R&S	UPL16	100001	2023-03-04
Shielding box	Gxiong	GX-5915A	2201113	2023-04-23
High Pass Filter	COM-MW Technology Co., Ltd	ZHPF-M1.2-9G-187	09203403	2023-03-04
Band Stop Filter	COM-MW Technology Co., Ltd	ZBSF6-C820-920-188	09203401	2023-03-04
Splitter	COM-MW Technology Co., Ltd	ZPD-M1-8-2103	09203407	2023-03-04

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Coaxial Cable	BEBES	A40-2.92M2.92F-4.5M	1907021	2023-03-04
Hygrothermograph	Anymetre	JB913	/	2023-03-07
Climate Chamber	Angul	AGNH80L	1903042120	2023-03-04
Spectrum Analyzer	HP	8593E	3831U02087	2023-03-04
Dual Output DC Power Supply	Agilent	E3646A	MY40009992	2023-03-04
RF Control Unit	Tonscend	JS0806-2	/	2023-03-04
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Vector Signal Generator	Agilent	N5182A	MY50142520	2023-03-04
Wideband Radio Communication Tester	R&S	CMW500	157282	2023-03-04
Spectrum Analyzer	R&S	FSV40-N	101798	2023-03-04

Band edge emissions (Radiated)				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	1230	2023-04-12
Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	2023-03-04
Color Signal Generator	Philips	PM5418	672926	2023-03-04
Broadcast Television Signal Generator	R&S	SFE100	141038	2023-03-04
Analog Signal Generator	Agilent	8648A	3847M00445	2023-03-04
EMI Test Receiver	R&S	ESR	102525	2023-03-04
Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	2023-03-29
Pre-Amplifier	EMCI	EMC051835SE	980662	2023-03-04
Spectrum Analyzer	Keysight	N9020A	MY46471971	2023-03-04
Loop Antenna	Beijin ZHINAN	ZN30900C	18050	2023-03-05

Emissions in restricted frequency bands (below 1GHz)				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	1230	2023-04-12
Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	2023-03-04
Color Signal Generator	Philips	PM5418	672926	2023-03-04
Broadcast Television Signal Generator	R&S	SFE100	141038	2023-03-04
Analog Signal Generator	Agilent	8648A	3847M00445	2023-03-04
EMI Test Receiver	R&S	ESR	102525	2023-03-04
Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	2023-03-29
Pre-Amplifier	EMCI	EMC051835SE	980662	2023-03-04
Spectrum Analyzer	Keysight	N9020A	MY46471971	2023-03-04
Loop Antenna	Beijin ZHINAN	ZN30900C	18050	2023-03-05

Emissions in restricted frequency bands (above 1GHz)				
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until

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Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	1230	2023-04-12
Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	2023-03-04
Color Signal Generator	Philips	PM5418	672926	2023-03-04
Broadcast Television Signal Generator	R&S	SFE100	141038	2023-03-04
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EMI Test Receiver	R&S	ESR	102525	2023-03-04
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Pre-Amplifier	EMCI	EMC051835SE	980662	2023-03-04
Spectrum Analyzer	Keysight	N9020A	MY46471971	2023-03-04
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### 3. Evaluation Results (Evaluation)

#### 3.1. Antenna requirement

Test Requirement:	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.
Conclusion:	The antenna gain is 2dBi, the directional gain of the antenna less than 6dBi. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used. Antenna structure please refer to the EUT internal photographs antenna photo.

### 4. Radio Spectrum Matter Test Results (RF)

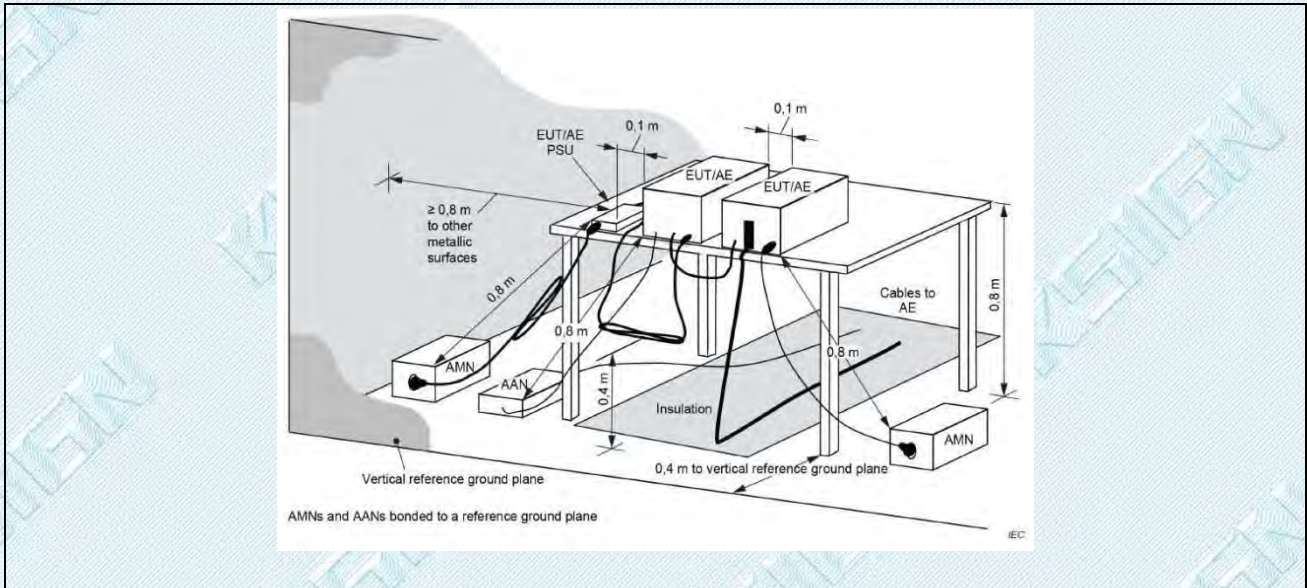
#### 4.1. Conducted Emission at AC power line

Test Requirement:	Except as shown in paragraphs (b)and (c)of this section, for an intentional radiator 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, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).		
Test Limit:	Frequency of emission (MHz)	Conducted limit (dBμV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
	*Decreases with the logarithm of the frequency.		
Test Method:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

##### 4.1.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.8 °C
Humidity:	54.4 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1

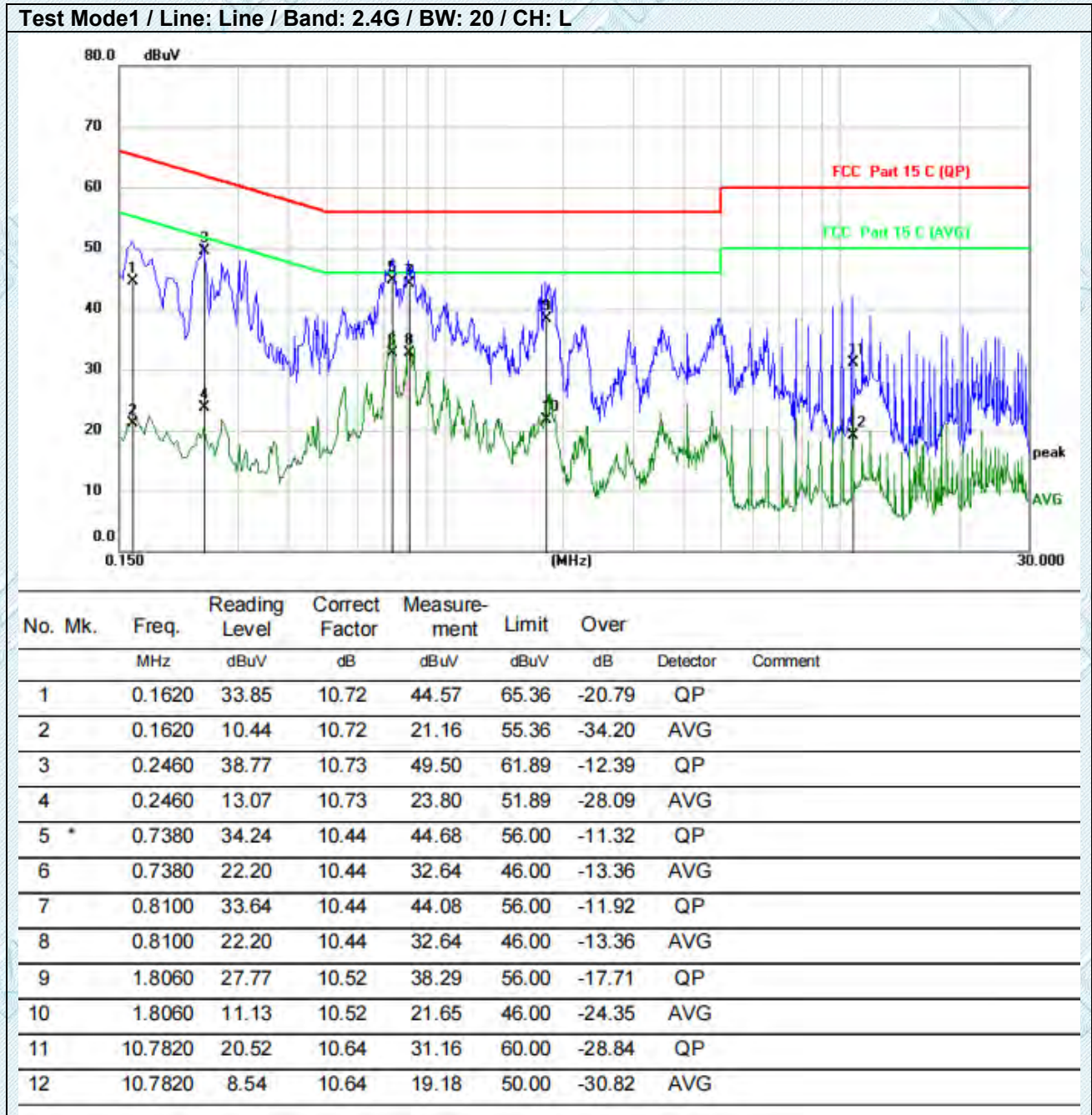
**4.1.2. Test Setup Diagram:**



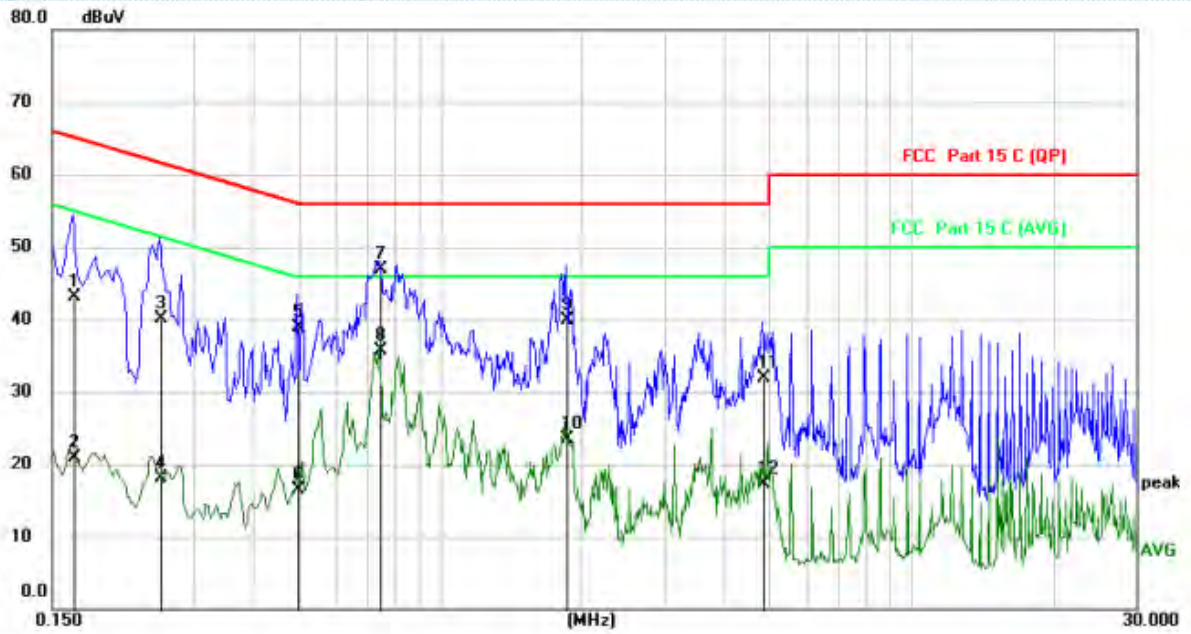
### 4.1.3. Test Data:

Remarks:

- 1.Pre-scan 802.11b/g/n(HT20) modulation, and found the 802.11b modulation 2412MHz which it is worse case, so only show the test data for worse case.
- 2.Measurement = Reading Level+ Correct Factor
- 3.Over = Measurement -Limit



Test Mode1 / Line: Neutral / Band: 2.4G / BW: 20 / CH: L



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.1660	32.29	10.72	43.01	65.16	-22.15	QP	
2	0.1660	10.27	10.72	20.99	55.16	-34.17	AVG	
3	0.2540	29.37	10.69	40.06	61.63	-21.57	QP	
4	0.2540	7.38	10.69	18.07	51.63	-33.56	AVG	
5	0.4980	28.37	10.52	38.89	56.03	-17.14	QP	
6	0.4980	5.97	10.52	16.49	46.03	-29.54	AVG	
7 *	0.7460	36.52	10.43	46.95	56.00	-9.05	QP	
8	0.7460	25.37	10.43	35.80	46.00	-10.20	AVG	
9	1.8500	29.33	10.54	39.87	56.00	-16.13	QP	
10	1.8500	13.06	10.54	23.60	46.00	-22.40	AVG	
11	4.8420	21.20	10.62	31.82	56.00	-24.18	QP	
12	4.8420	6.75	10.62	17.37	46.00	-28.63	AVG	

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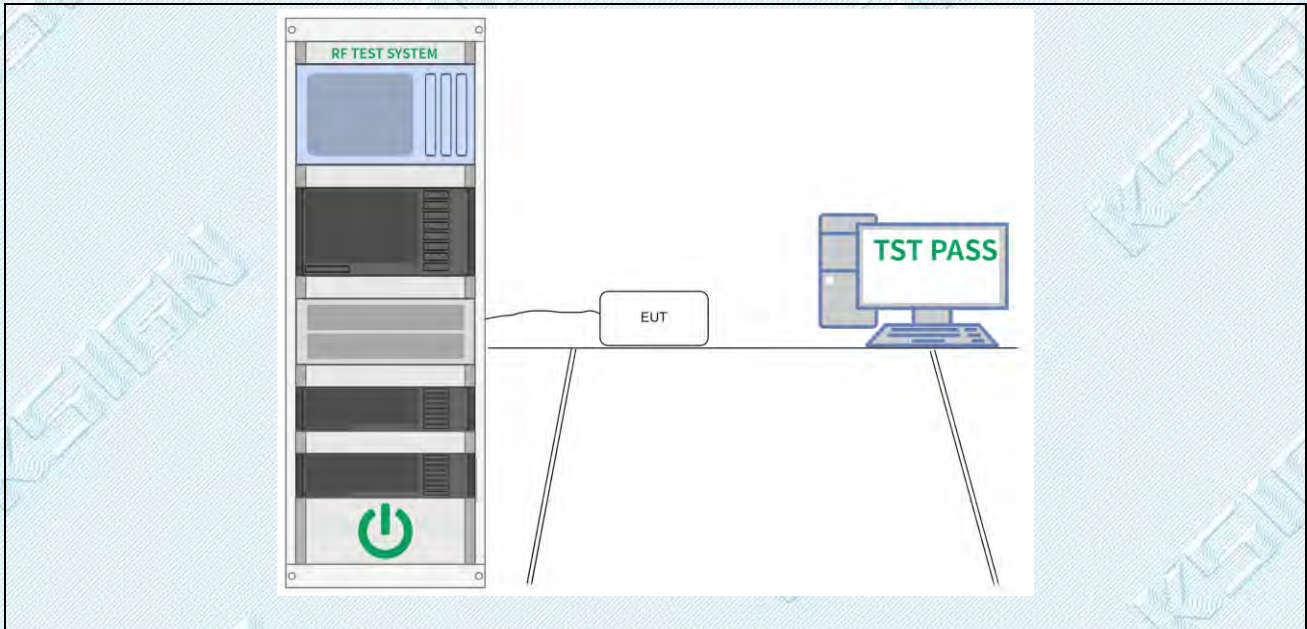
## 4.2. Occupied Bandwidth

Test Requirement:	Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Limit:	Section (a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	DTS bandwidth
Procedure:	<ul style="list-style-type: none"> <li>a) Set RBW = 100 kHz.</li> <li>b) Set the VBW <math>\geq</math> [3 × RBW].</li> <li>c) Detector = peak.</li> <li>d) Trace mode = max hold.</li> <li>e) Sweep = auto couple.</li> <li>f) Allow the trace to stabilize.</li> <li>g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.</li> </ul>

### 4.2.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.7 °C
Humidity:	53 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

### 4.2.2. Test Setup Diagram:



### 4.2.3. Test Data:

Please Refer to Appendix for Details.



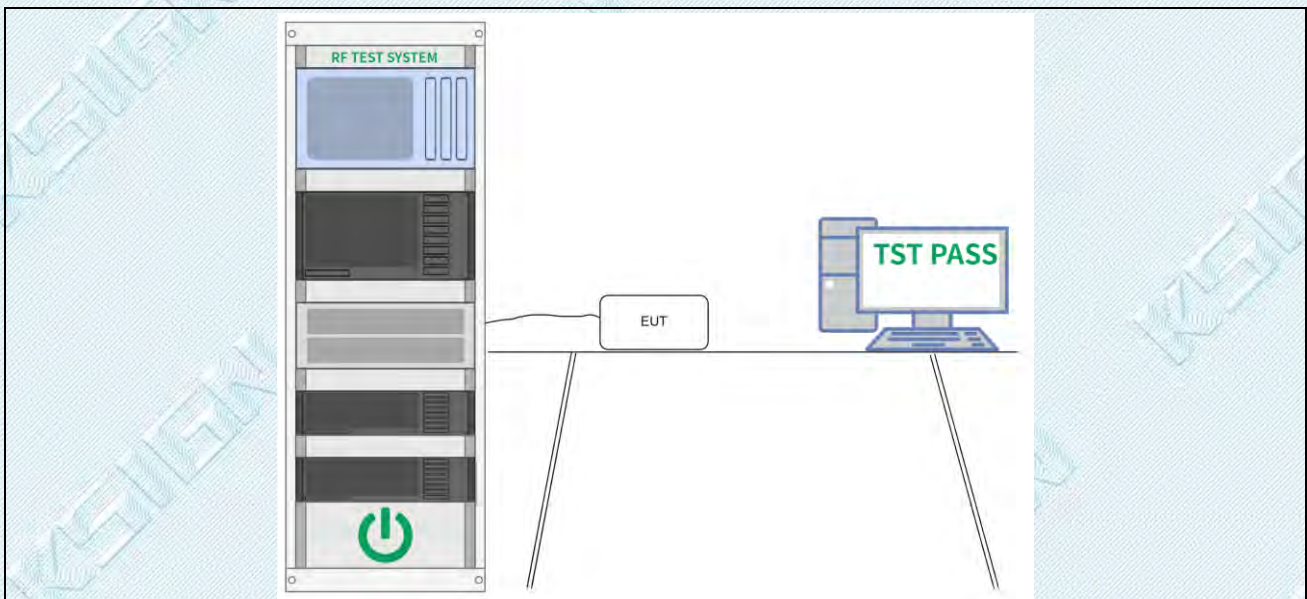
### 4.3. Maximum Conducted Output Power

Test Requirement:	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Limit:	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	Maximum peak conducted output power
Procedure:	ANSI C63.10-2013, section 11.9.1 Maximum peak conducted output power

#### 4.3.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.7 °C
Humidity:	53 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

#### 4.3.2. Test Setup Diagram:



---

#### 4.3.3. Test Data:

Please Refer to Appendix for Details.

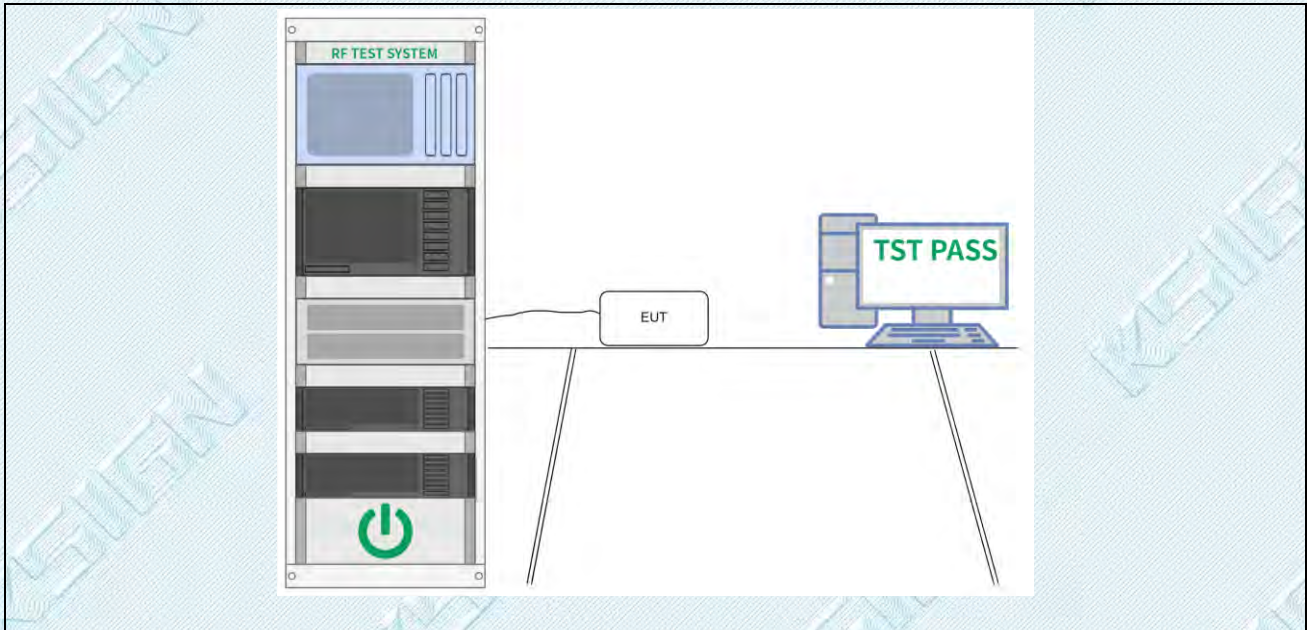
### 4.4. Power Spectral Density

Test Requirement:	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Limit:	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	Maximum power spectral density level in the fundamental emission

#### 4.4.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.7 °C
Humidity:	53 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

#### 4.4.2. Test Setup Diagram:



#### 4.4.3. Test Data:

Please Refer to Appendix for Details.

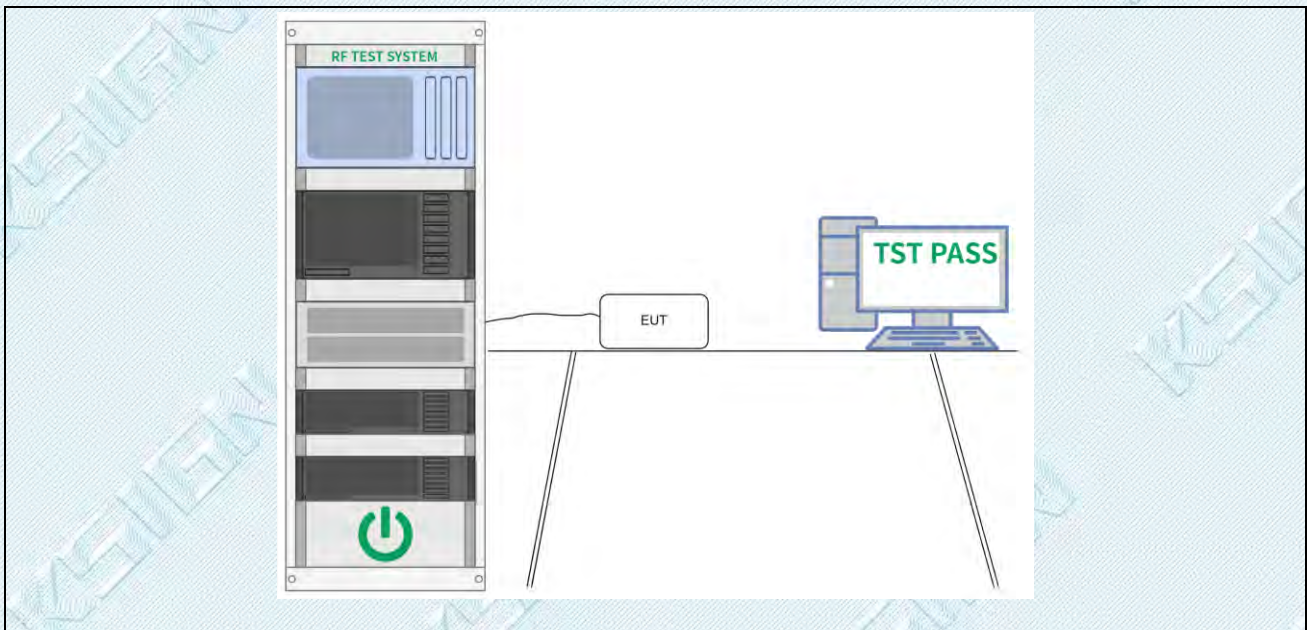
### 4.5. Band edge emissions (Radiated)

Test Requirement:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method:	Emissions in nonrestricted frequency bands
Procedure:	ANSI C63.10-2013 Section 11.11.1, Section 11.11.2, Section 11.11.3

#### 4.5.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.7 °C
Humidity:	53 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

#### 4.5.2. Test Setup Diagram:



#### 4.5.3. Test Data:

Please Refer to Appendix for Details.

#### 4.6. Band edge emissions (Radiated)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	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
	** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.		
Test Method:	Radiated emissions tests		
Procedure:	ANSI C63.10-2013 section 6.6.4		

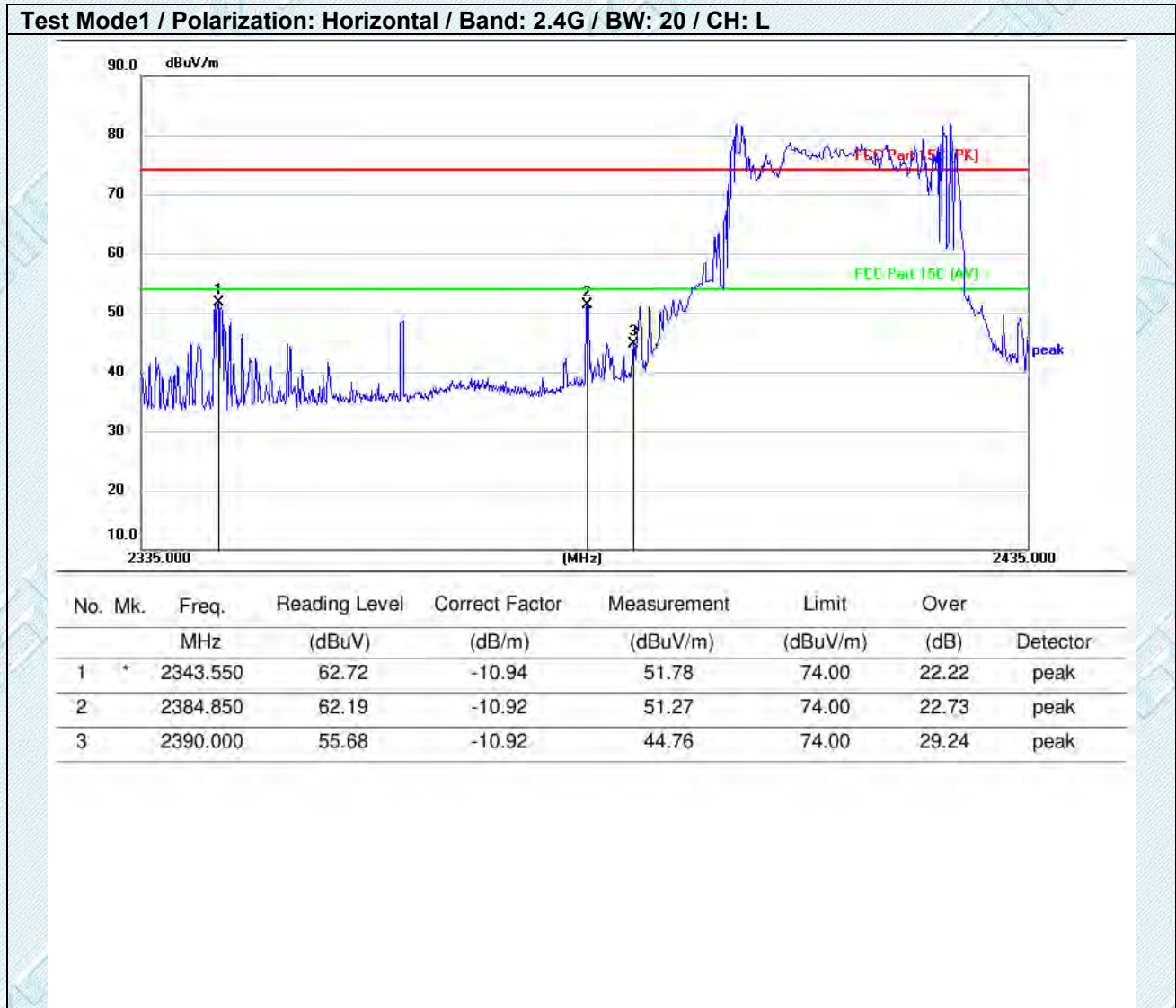
##### 4.6.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.3 °C
Humidity:	50.5 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

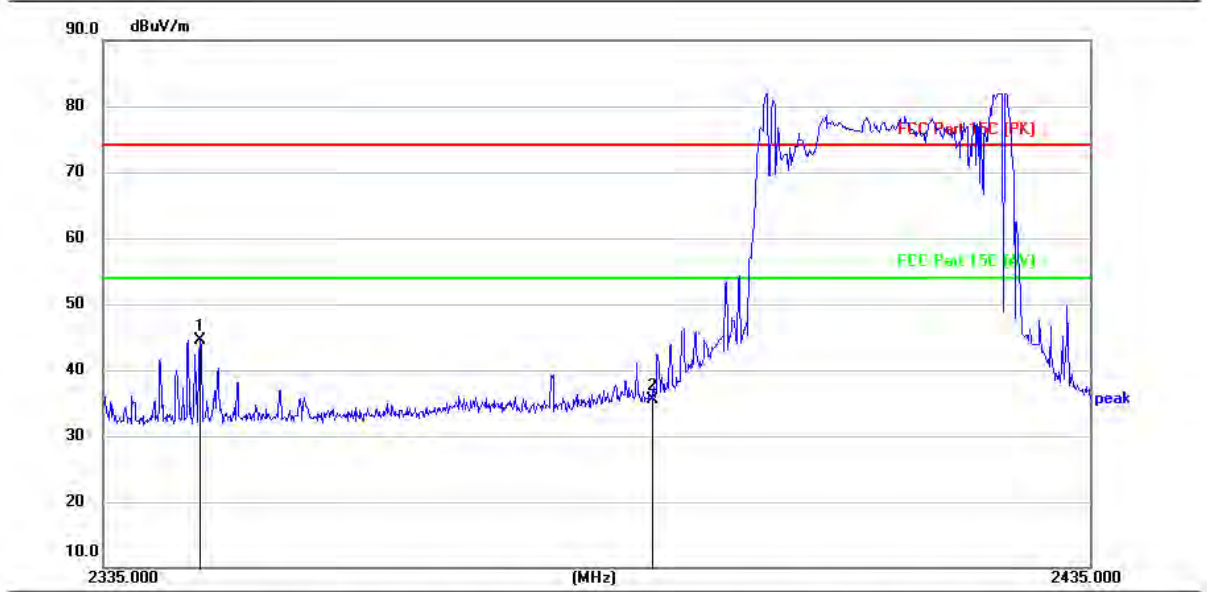
### 4.6.2. Test Data:

**Note:**

1. Measurement = Reading level + Correct Factor  
 Correct Factor=Antenna Factor + Cable Loss - Preamplifier Factor
2. Pre-scan 802.11b, 802.11g and 802.11n(HT20) mode, and found the 802.11n(HT20) mode which it is worse case, so only show the test data for worse case.
3. Since the peak value is less than the limit of the AVG value, there is no AVG data.



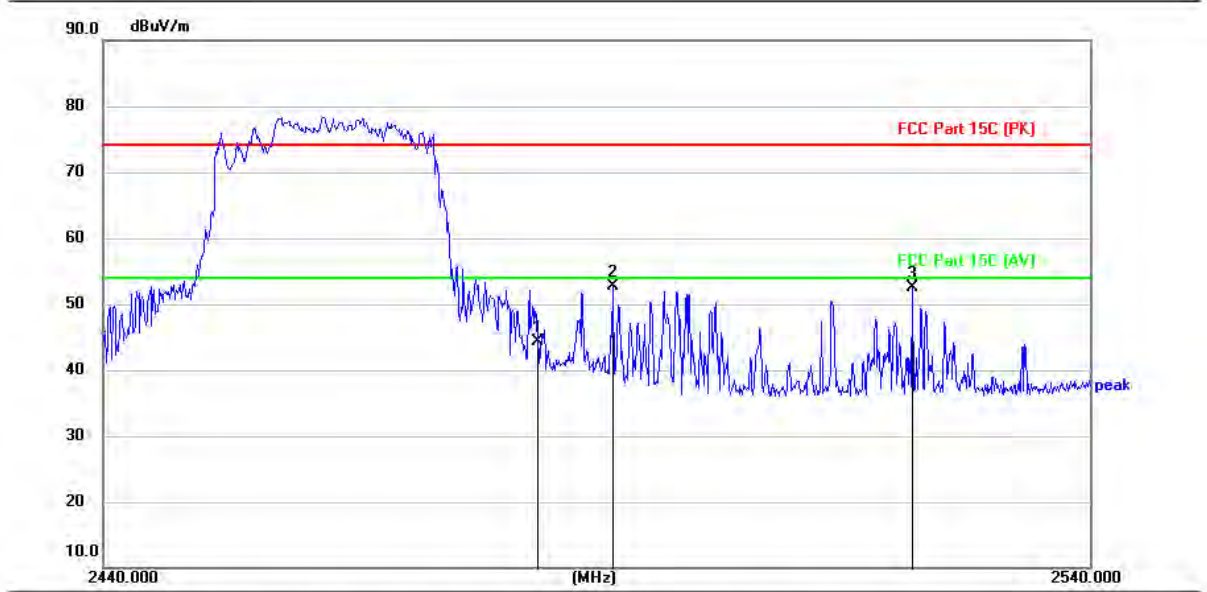
**Test Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: L**



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1	*	2344.670	55.48	-10.93	44.55	74.00	29.45	peak
2		2390.000	46.45	-10.92	35.53	74.00	38.47	peak

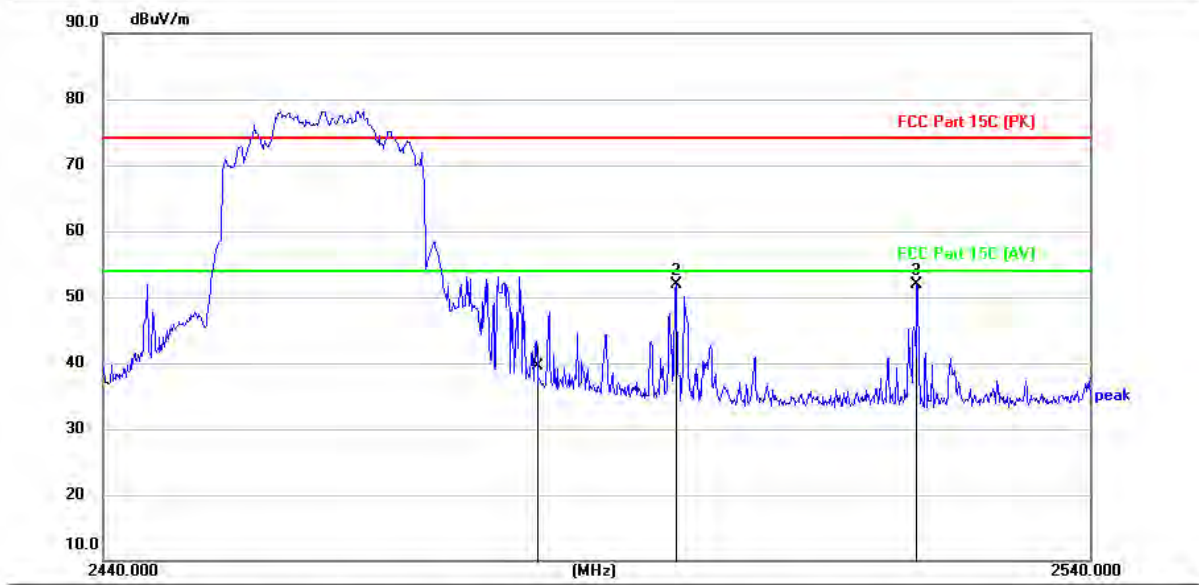


Test Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: H



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		2483.500	55.21	-10.88	44.33	74.00	29.67	peak
2	*	2491.190	63.64	-10.89	52.75	74.00	21.25	peak
3		2521.790	63.32	-10.87	52.45	74.00	21.55	peak

Test Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: H



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		2483.500	50.48	-10.88	39.60	74.00	34.40	peak
2	*	2497.610	62.84	-10.88	51.96	74.00	22.04	peak
3		2522.270	62.75	-10.87	51.88	74.00	22.12	peak

### 4.7. Raidated Spurious Emission (below 1GHz)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	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
	** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.		
Test Method:	Radiated emissions tests		
Procedure:	ANSI C63.10-2013 section 6.6.4		

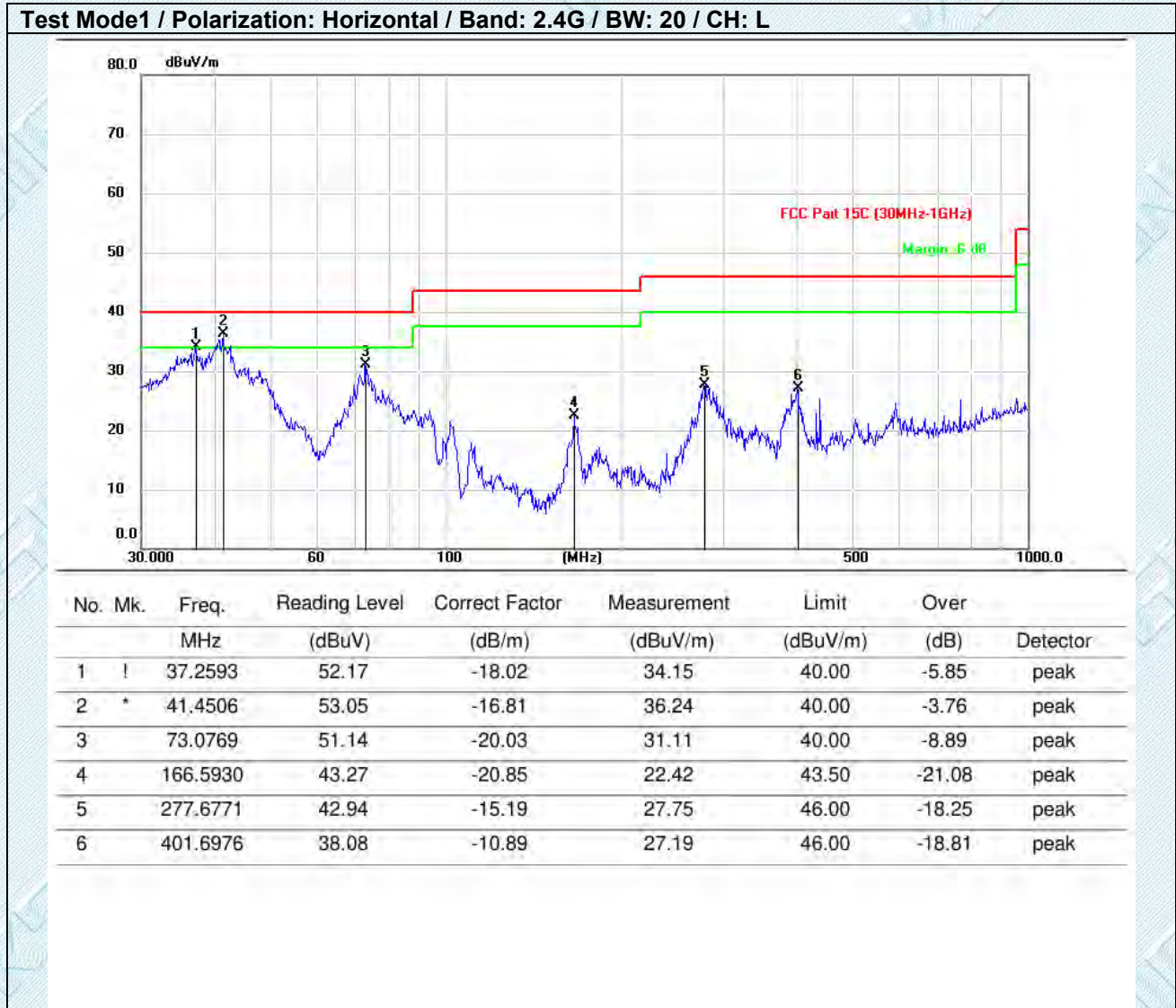
#### 4.7.1. E.U.T. Operation:

Operating Environment:	
Temperature:	24.3 °C
Humidity:	50.5 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

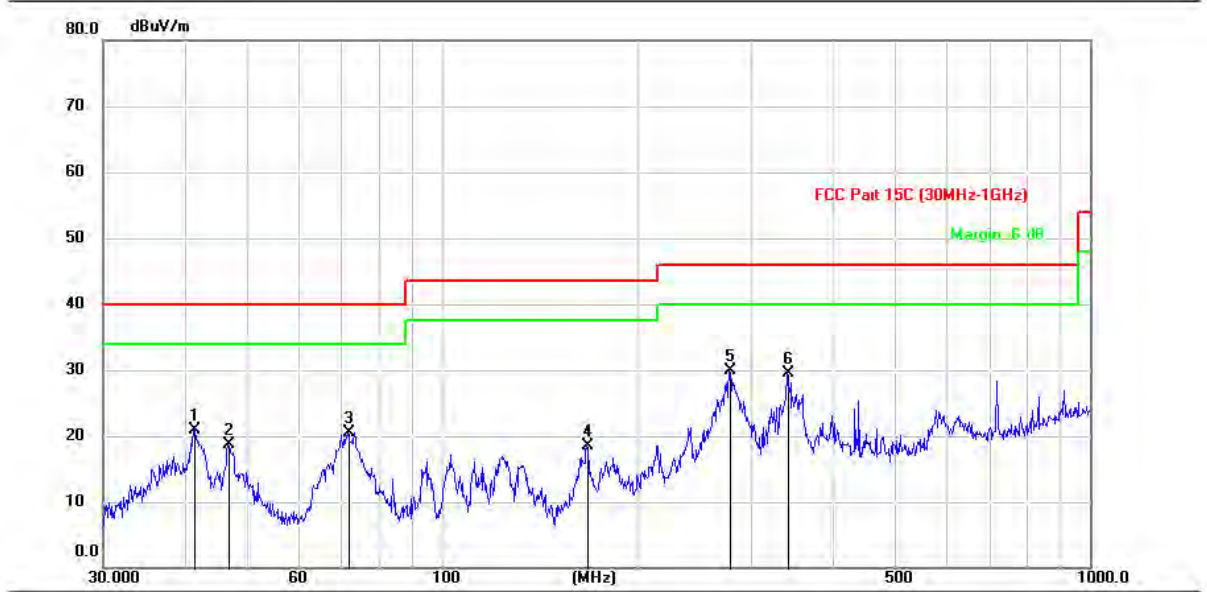
### 4.7.2. Test Data:

Note:

- 1) Measurement = Reading level + Correct Factor  
Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2) From 9 KHz~30 MHz,the amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 3) Pre-scan 802.11b/g/n(HT20) modulation, and found the 802.11b modulation which it is worse case for 2412MHz channel which it is worse case for below 1GHz, so only show the test data for worse case.



**Test Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: L**



No. Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1	41.3490	37.82	-16.83	20.99	40.00	-19.01	peak
2	46.7155	34.56	-15.92	18.64	40.00	-21.36	peak
3	71.9075	40.48	-19.90	20.58	40.00	-19.42	peak
4	167.2954	39.38	-20.78	18.60	43.50	-24.90	peak
5 *	277.4825	45.15	-15.20	29.95	46.00	-16.05	peak
6	341.0207	42.42	-12.92	29.50	46.00	-16.50	peak

### 4.8. Raidated Spurious Emission (above 1GHz)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	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
	** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.		
Test Method:	Radiated emissions tests		
Procedure:	ANSI C63.10-2013 section 6.6.4		

#### 4.8.1. E.U.T. Operation:

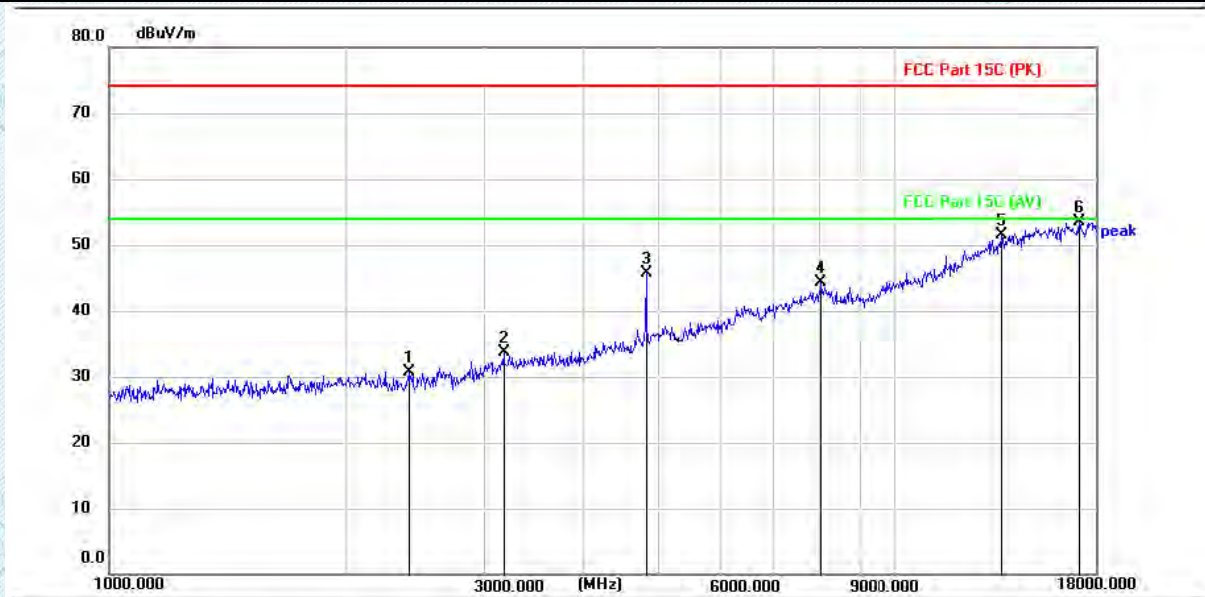
Operating Environment:	
Temperature:	24.3 °C
Humidity:	50.5 %
Atmospheric Pressure:	102 kPa
Final test mode:	Test Mode1, Test Mode2, Test Mode3

### 4.8.2. Test Data:

Note:

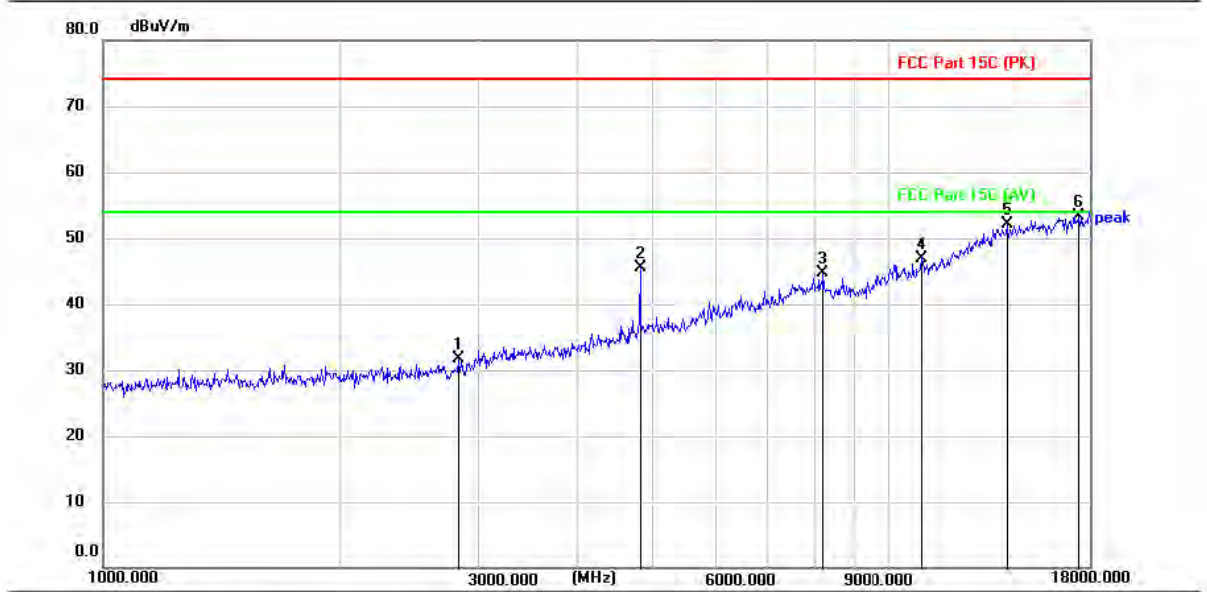
- 1) Measurement = Reading level + Correct Factor  
Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2) From 18GHz~25GHz,the amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 3) Pre-scan 802.11b/g/n(HT20) modulation, and found the 802.11b modulation which it is worse case for above 1GHz, so only show the test data for worse case.
- 4) Since the peak value is less than the limit of the AVG value, there is no AVG data.

**Test Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: L**



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		2419.500	41.59	-10.91	30.68	74.00	43.32	peak
2		3184.500	43.97	-10.26	33.71	74.00	40.29	peak
3		4823.300	51.49	-5.87	45.62	74.00	28.38	peak
4		8044.800	42.22	2.06	44.28	74.00	29.72	peak
5		13710.900	40.66	10.87	51.53	74.00	22.47	peak
6	*	17173.800	40.33	13.16	53.49	74.00	20.51	peak

Test Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: L



No. Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1	2839.400	42.41	-10.68	31.73	74.00	42.27	peak
2	4823.300	51.42	-5.87	45.55	74.00	28.45	peak
3	8238.600	42.61	2.00	44.61	74.00	29.39	peak
4	11024.900	41.11	5.75	46.86	74.00	27.14	peak
5	14146.100	41.06	11.03	52.09	74.00	21.91	peak
6 *	17444.100	39.88	13.36	53.24	74.00	20.76	peak

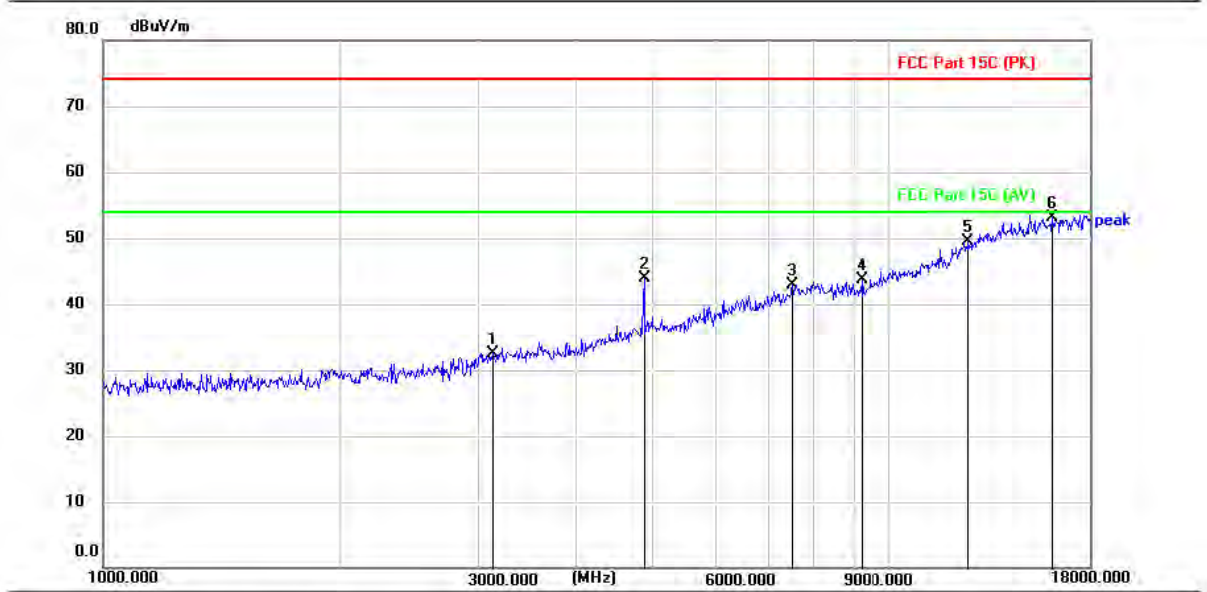
TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdkesign.cn Web: www.gdkesign.com



**Test Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: M**



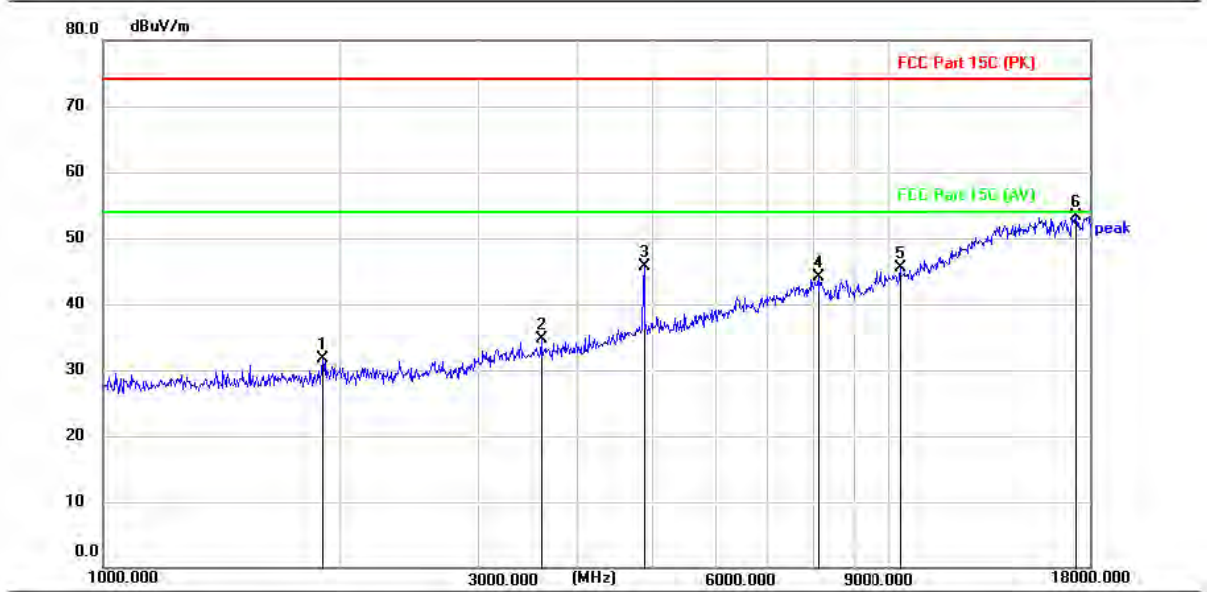
No. Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1	3135.200	42.80	-10.34	32.46	74.00	41.54	peak
2	4874.300	49.67	-5.74	43.93	74.00	30.07	peak
3	7529.700	42.01	0.89	42.90	74.00	31.10	peak
4	9238.200	41.31	2.36	43.67	74.00	30.33	peak
5	12636.500	40.36	9.24	49.60	74.00	24.40	peak
6 *	16169.100	40.18	13.02	53.20	74.00	20.80	peak

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdkesign.cn Web: www.gdkesign.com

Test Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: M



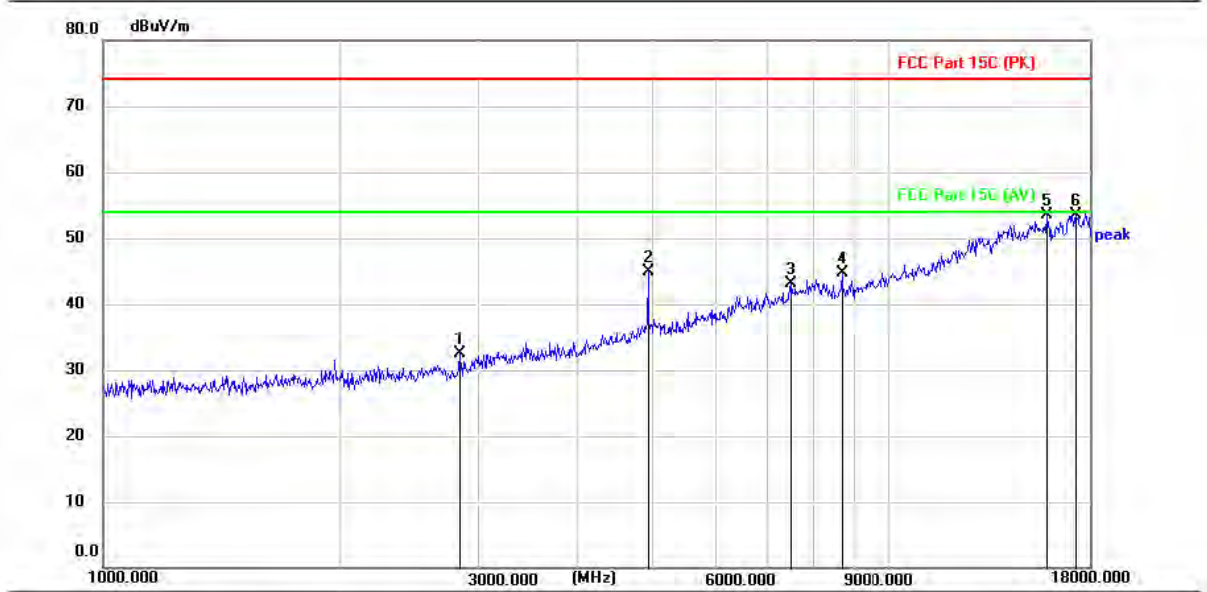
No. Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1	1904.400	42.81	-11.14	31.67	74.00	42.33	peak
2	3609.500	44.08	-9.41	34.67	74.00	39.33	peak
3	4874.300	51.51	-5.74	45.77	74.00	28.23	peak
4	8126.400	41.97	2.05	44.02	74.00	29.98	peak
5	10339.800	40.89	4.64	45.53	74.00	28.47	peak
6 *	17289.400	39.97	13.24	53.21	74.00	20.79	peak

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdksign.cn Web: www.gdksign.com

Test Mode1 / Polarization: Horizontal / Band: 2.4G / BW: 20 / CH: H



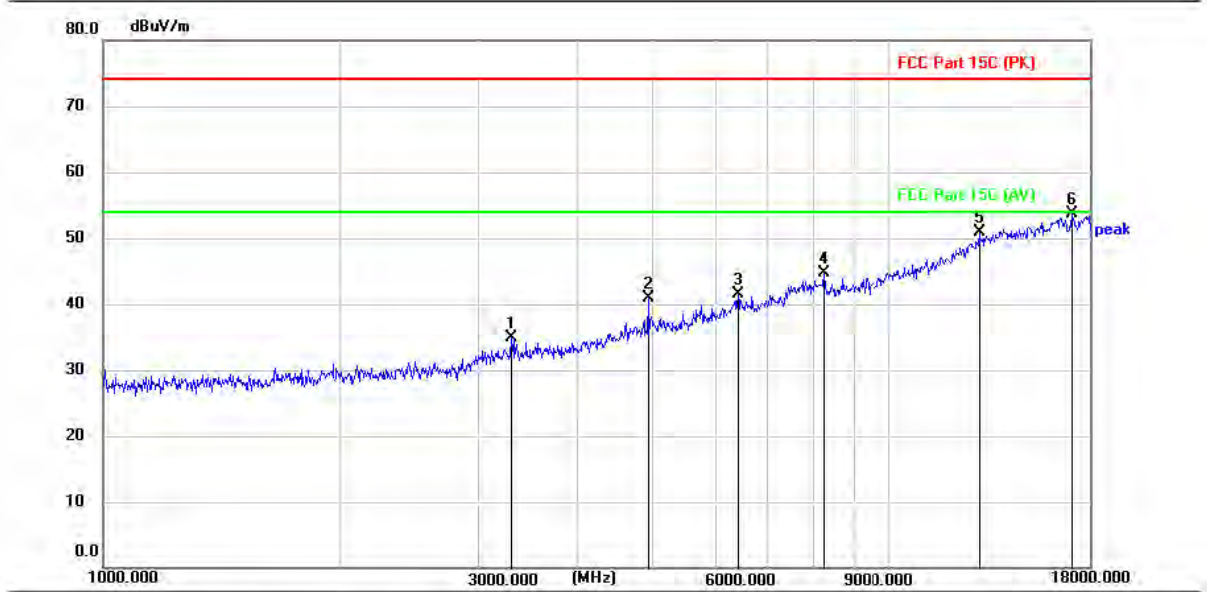
No. Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1	2849.600	43.12	-10.67	32.45	74.00	41.55	peak
2	4944.000	50.34	-5.53	44.81	74.00	29.19	peak
3	7500.800	42.26	0.82	43.08	74.00	30.92	peak
4	8701.000	42.78	1.89	44.67	74.00	29.33	peak
5 *	15895.400	41.02	12.50	53.52	74.00	20.48	peak
6	17291.100	40.22	13.25	53.47	74.00	20.53	peak

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdksign.cn Web: www.gdksign.com

**Test Mode1 / Polarization: Vertical / Band: 2.4G / BW: 20 / CH: H**



No. Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1	3313.700	44.83	-10.01	34.82	74.00	39.18	peak
2	4944.000	46.42	-5.53	40.89	74.00	33.11	peak
3	6429.800	43.76	-2.34	41.42	74.00	32.58	peak
4	8264.100	42.62	2.01	44.63	74.00	29.37	peak
5	13036.000	41.00	9.98	50.98	74.00	23.02	peak
6 *	17088.800	40.64	13.09	53.73	74.00	20.27	peak

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

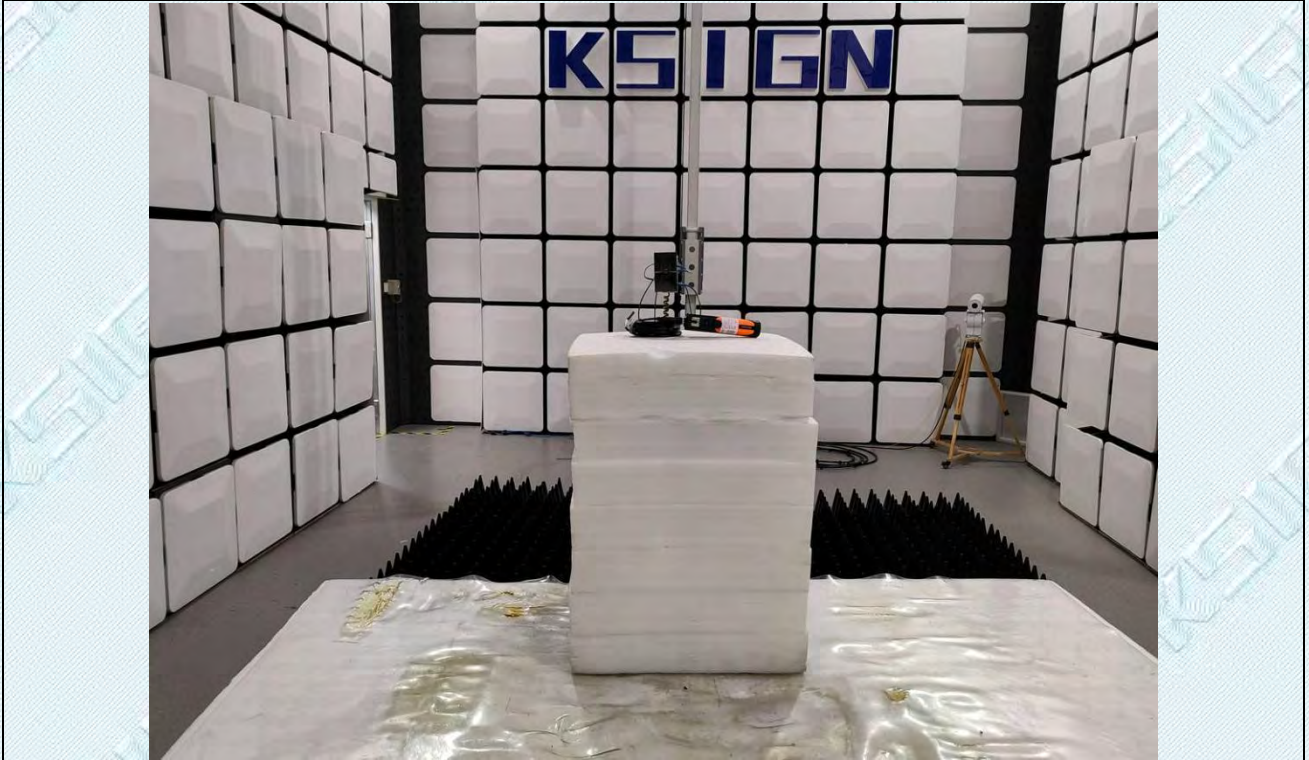
Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdkesign.cn Web: www.gdkesign.com

## 5. EUT TEST PHOTOS

Emissions in restricted frequency bands (below 1GHz)



Emissions in restricted frequency bands (above 1GHz)



**Conducted Emission**



TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdksign.cn Web: www.gdksign.com

## 6. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

Refer to Appendix - Photographs of EUT Constructional Details for KS2211S5001E.

# Appendix



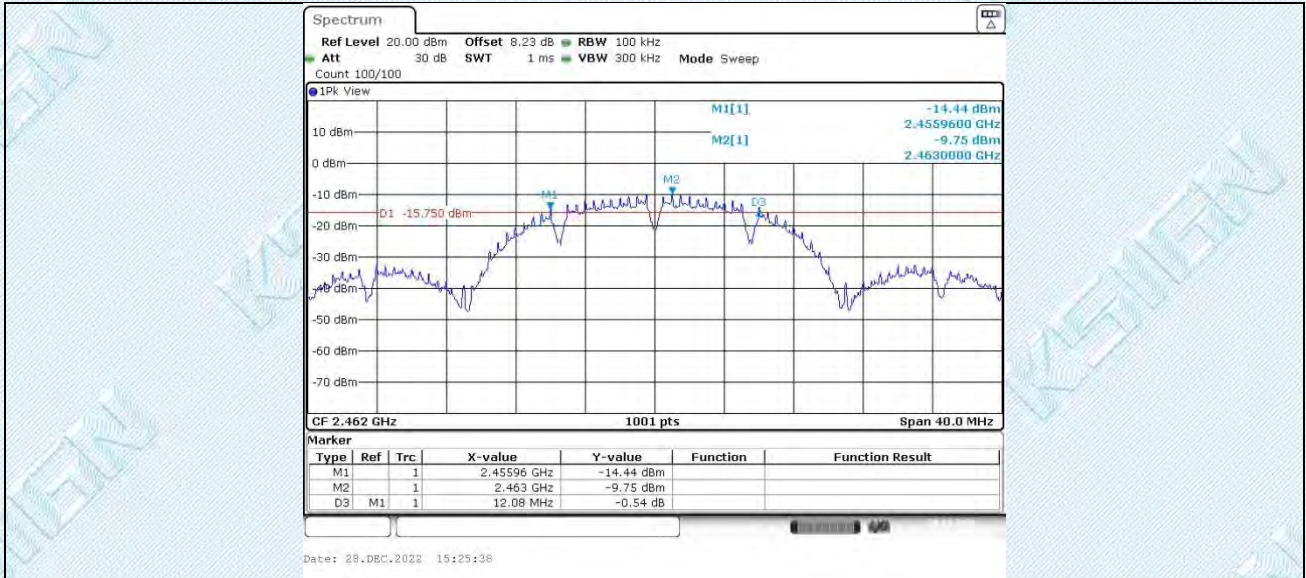
## 6.1. Appendix A: DTS Bandwidth

### 6.1.1. Test Result

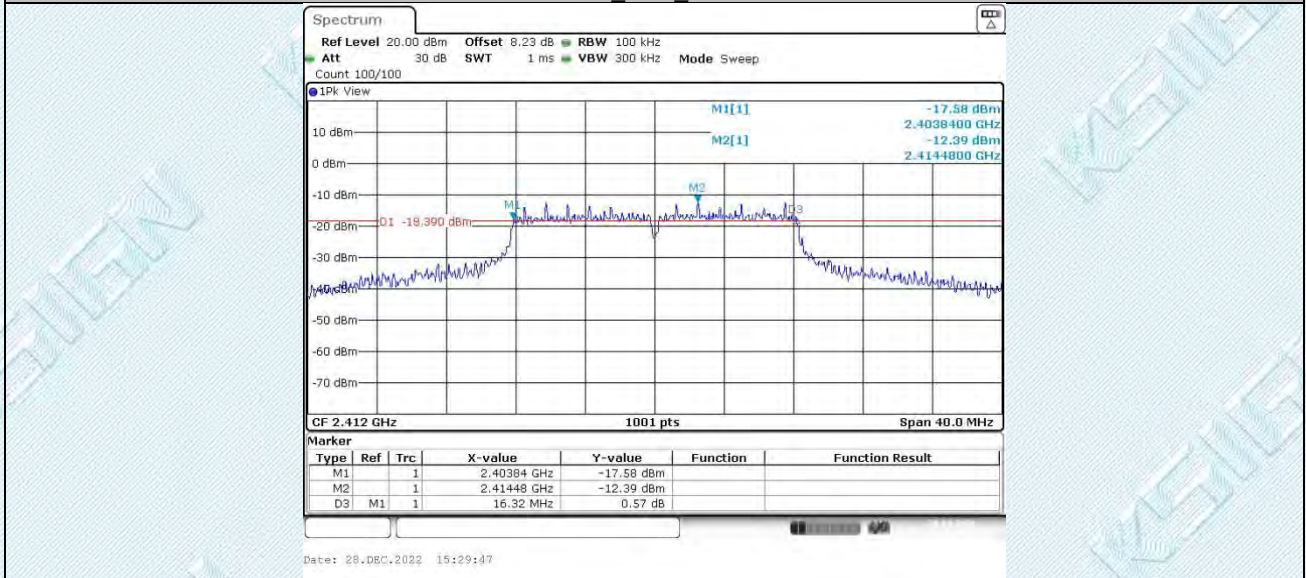
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.04	2405.48	2418.52	0.5	PASS
		2437	12.56	2430.96	2443.52	0.5	PASS
		2462	12.08	2455.96	2468.04	0.5	PASS
11G	Ant1	2412	16.32	2403.84	2420.16	0.5	PASS
		2437	16.36	2428.80	2445.16	0.5	PASS
		2462	16.32	2453.84	2470.16	0.5	PASS
11N20SISO	Ant1	2412	17.60	2403.20	2420.80	0.5	PASS
		2437	17.60	2428.20	2445.80	0.5	PASS
		2462	17.56	2453.20	2470.76	0.5	PASS

### 6.1.2. Test Graphs

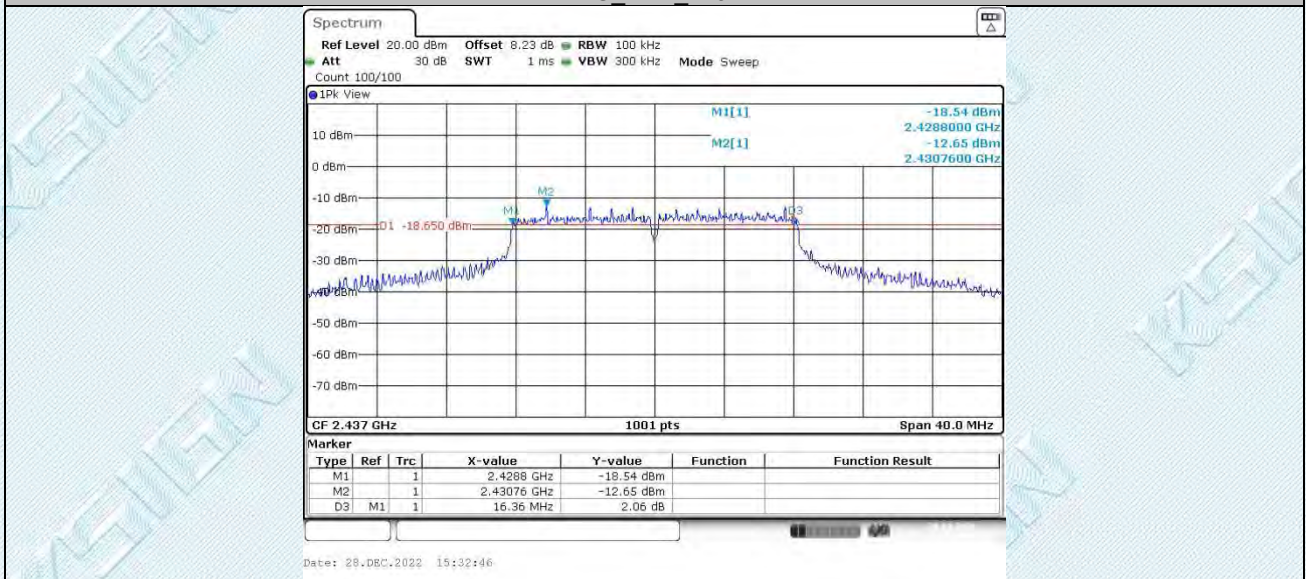




11G Ant1\_2412



11G Ant1\_2437

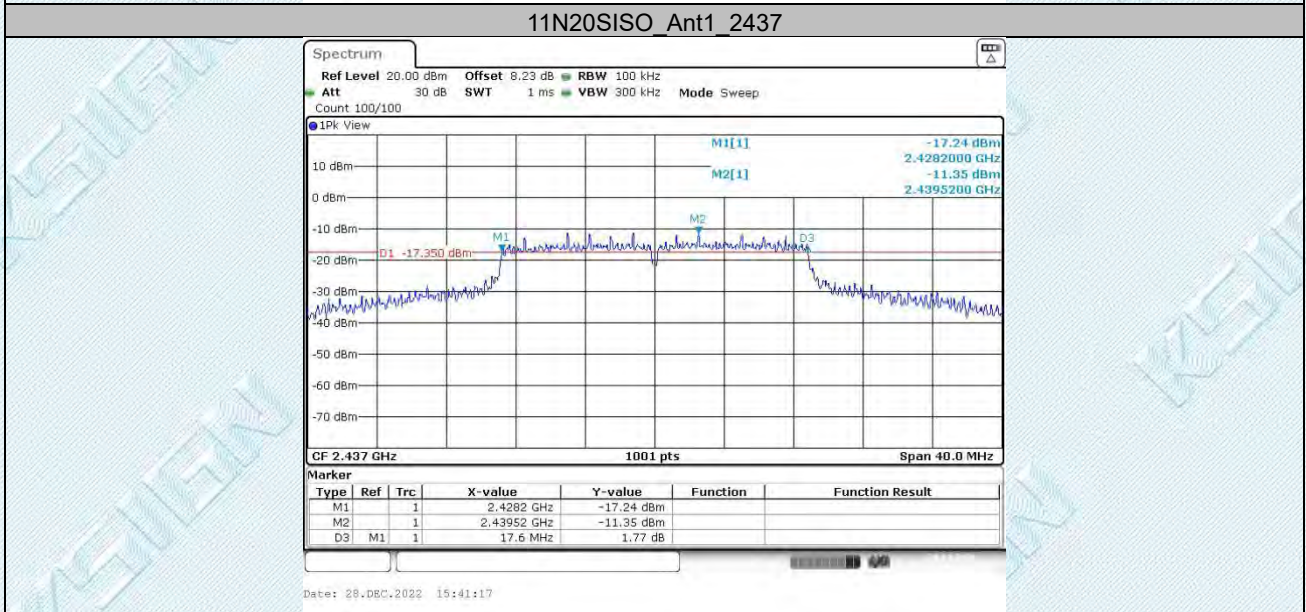
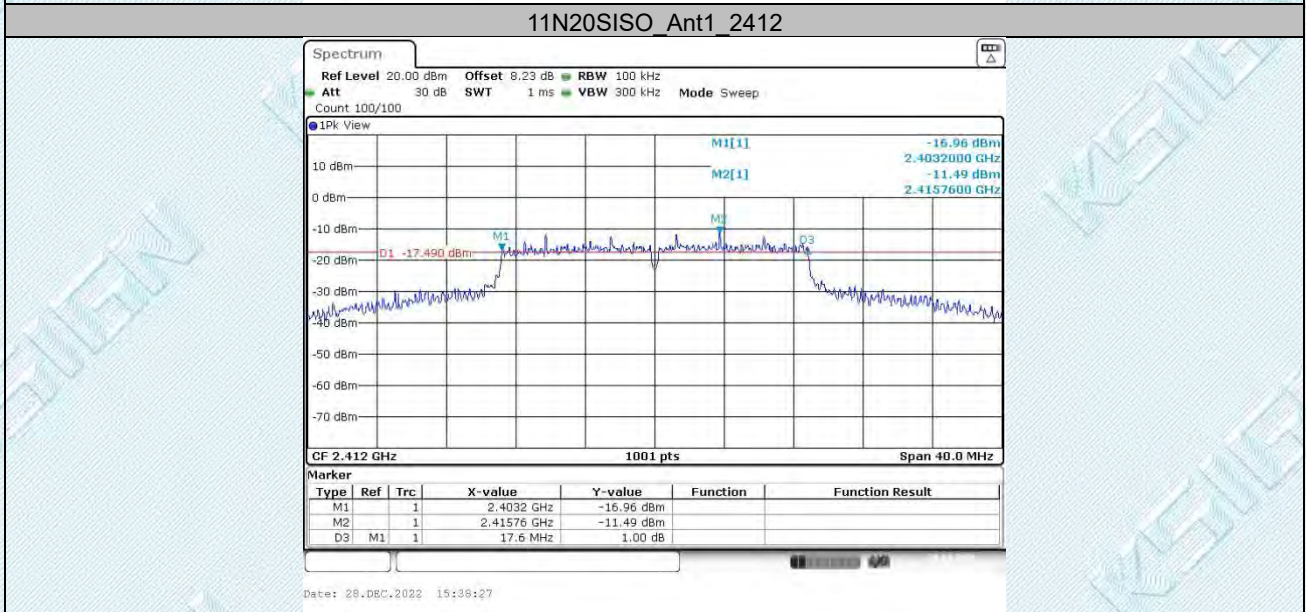
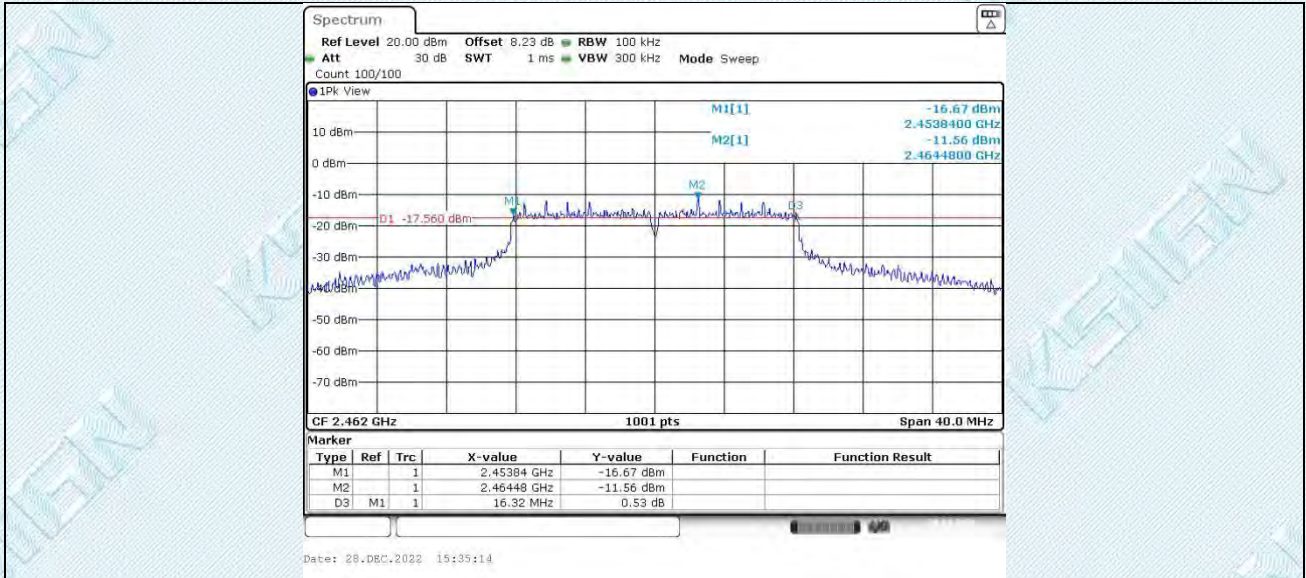


11G Ant1\_2462

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdksign.cn Web: www.gdksign.com

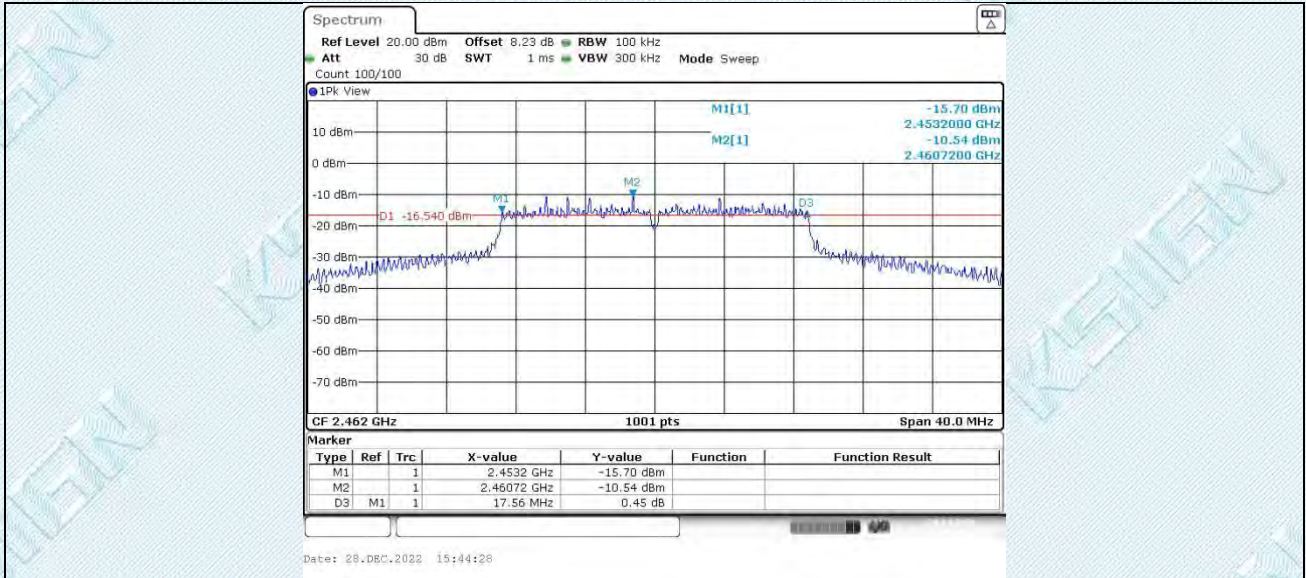


**11N20SISO\_Ant1\_2462**

TRF EMC\_R1

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TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdksign.cn Web: www.gdksign.com

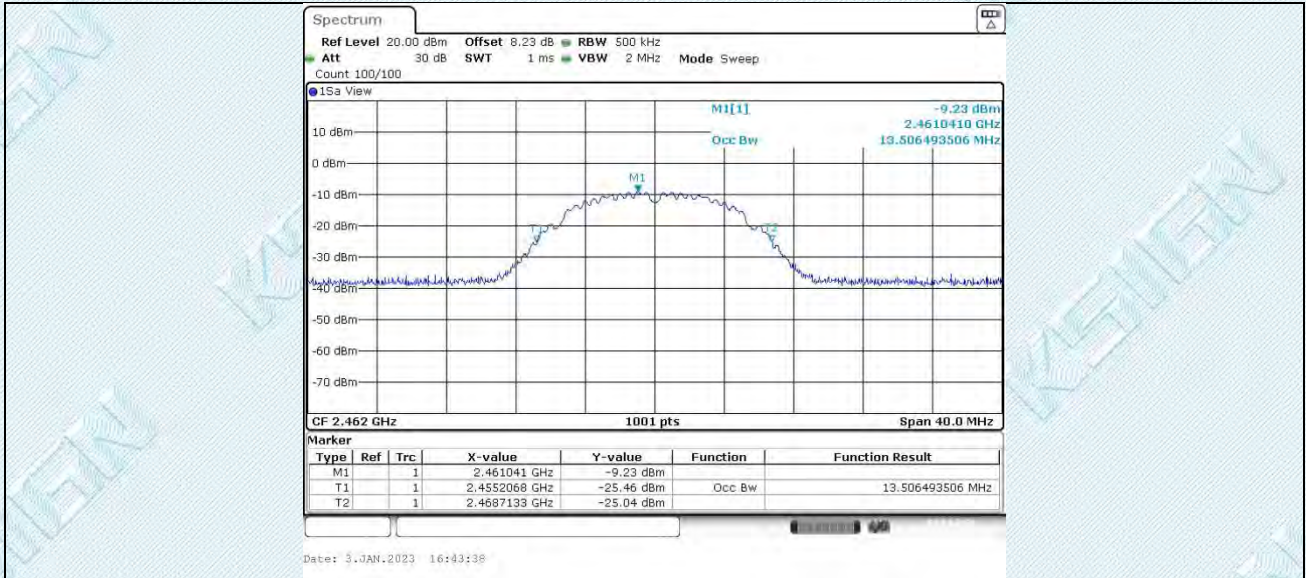
## 6.2. Appendix B: Occupied Channel Bandwidth

### 6.2.1. Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.747	2405.566	2418.314	---	PASS
		2437	13.506	2430.207	2443.713	---	PASS
		2462	13.506	2455.207	2468.713	---	PASS
11G	Ant1	2412	17.662	2403.129	2420.791	---	PASS
		2437	17.622	2428.129	2445.751	---	PASS
		2462	17.702	2453.089	2470.791	---	PASS
11N20SISO	Ant1	2412	18.302	2402.809	2421.111	---	PASS
		2437	18.342	2427.769	2446.111	---	PASS
		2462	18.342	2452.769	2471.111	---	PASS

### 6.2.2. Test Graphs

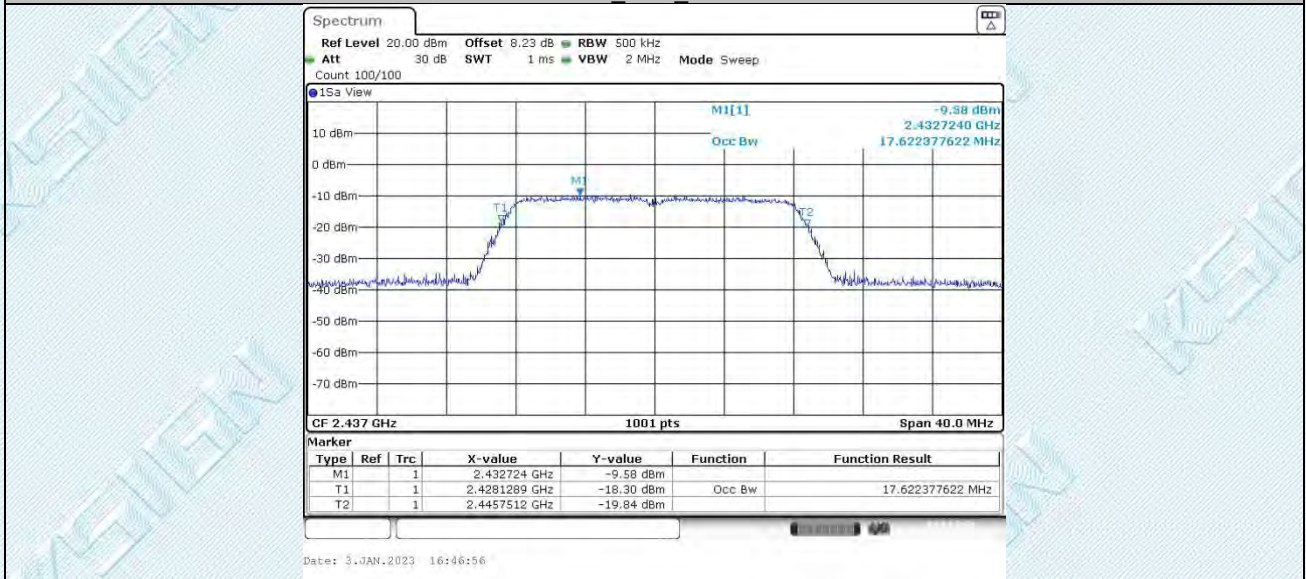




11G Ant1\_2412



11G Ant1\_2437



11G Ant1\_2462

TRF EMC\_R1

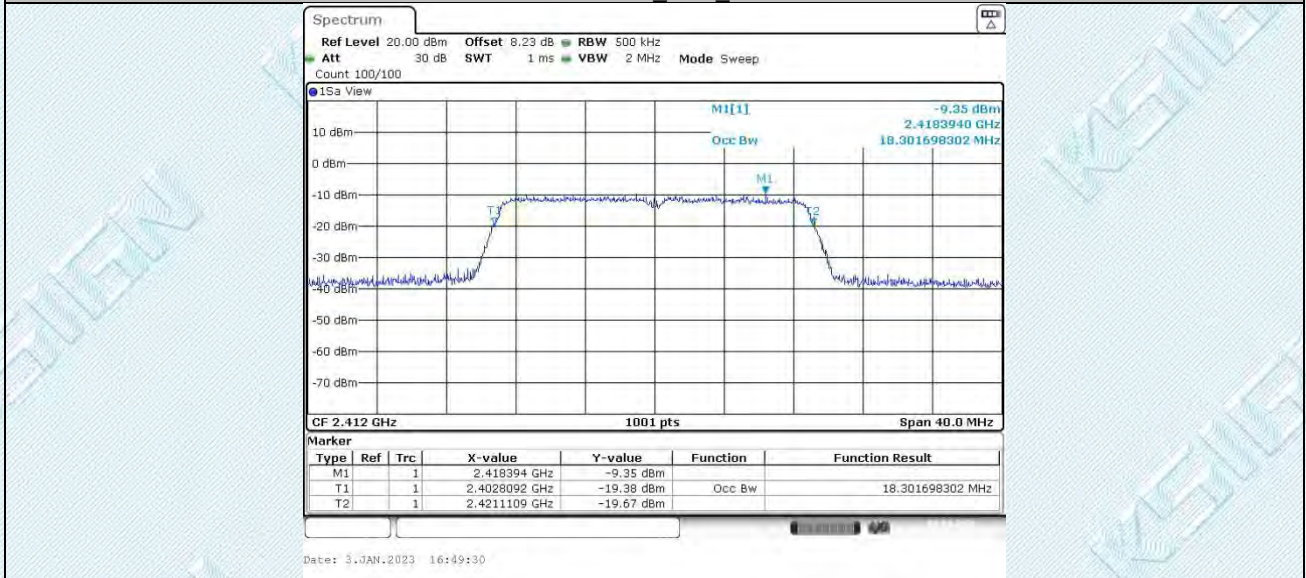
Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail: info@gdksign.cn Web: www.gdksign.com

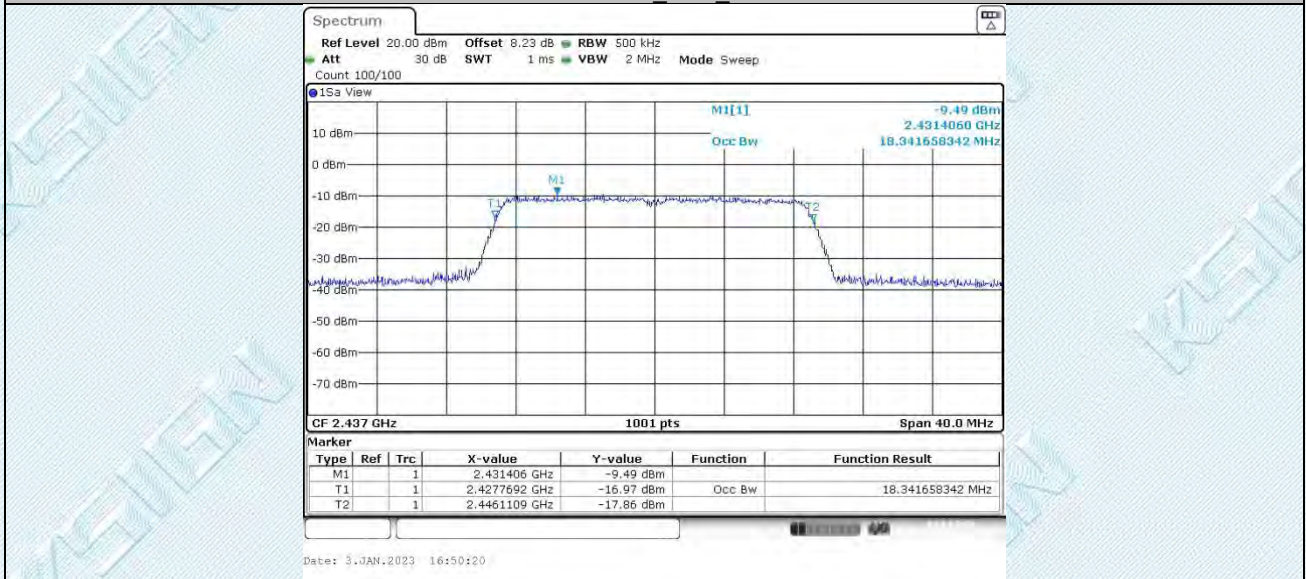




11N20SISO Ant1\_2412



11N20SISO Ant1\_2437

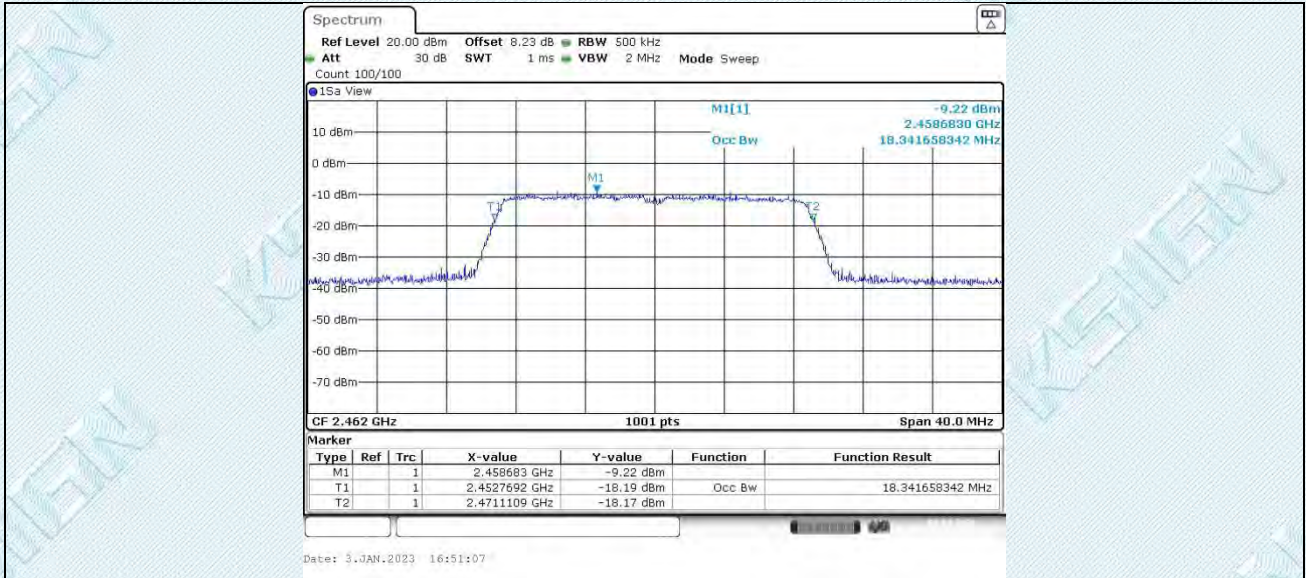


11N20SISO Ant1\_2462

TRF EMC\_R1

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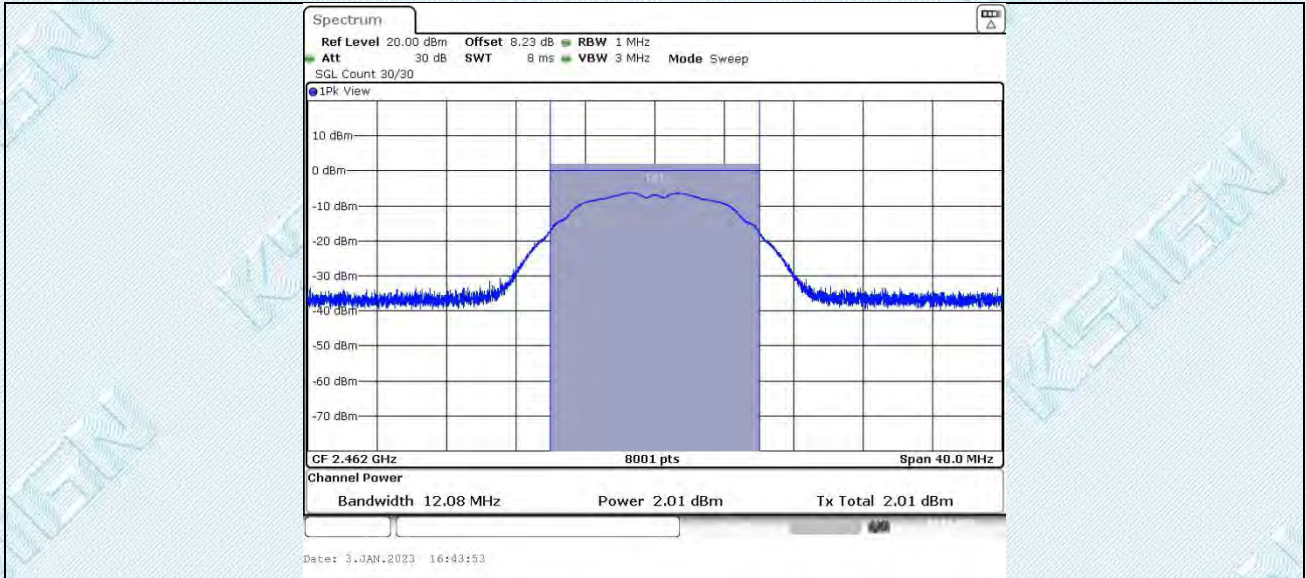
### 6.3. Appendix C: Maximum conducted output power

#### 6.3.1. Test Result Peak

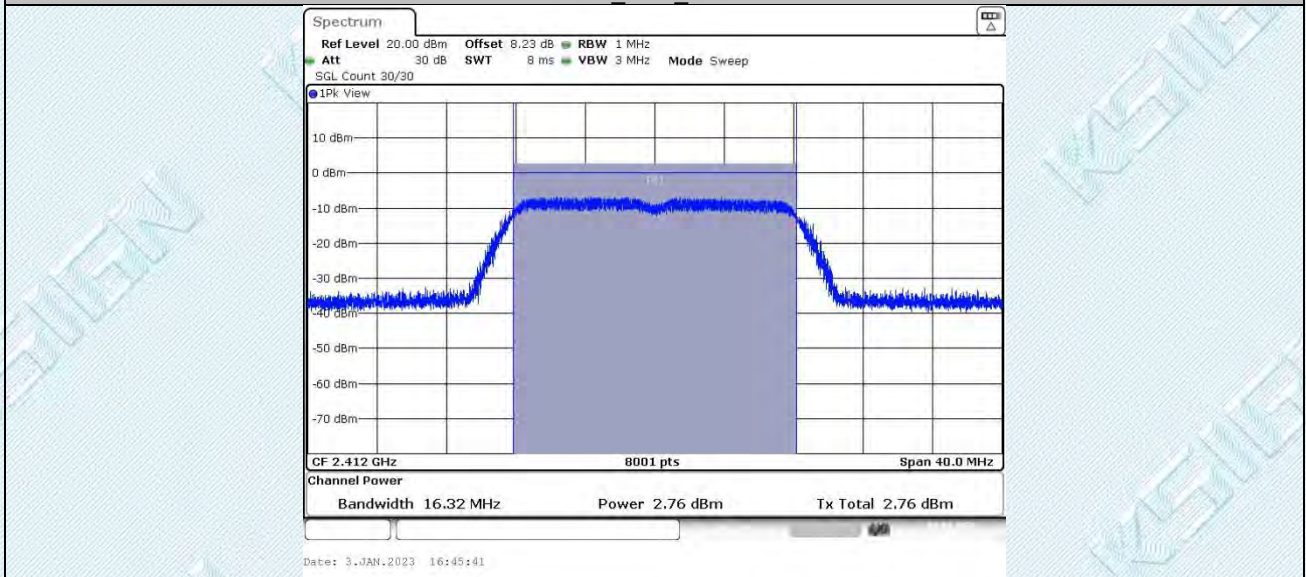
TestMode	Antenna	Frequency[MHz]	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	2.03	≤30.00	PASS
		2437	1.87	≤30.00	PASS
		2462	2.01	≤30.00	PASS
11G	Ant1	2412	2.76	≤30.00	PASS
		2437	1.93	≤30.00	PASS
		2462	2.59	≤30.00	PASS
11N20SISO	Ant1	2412	2.27	≤30.00	PASS
		2437	2.19	≤30.00	PASS
		2462	2.69	≤30.00	PASS

### 6.3.2. Test Graphs Peak

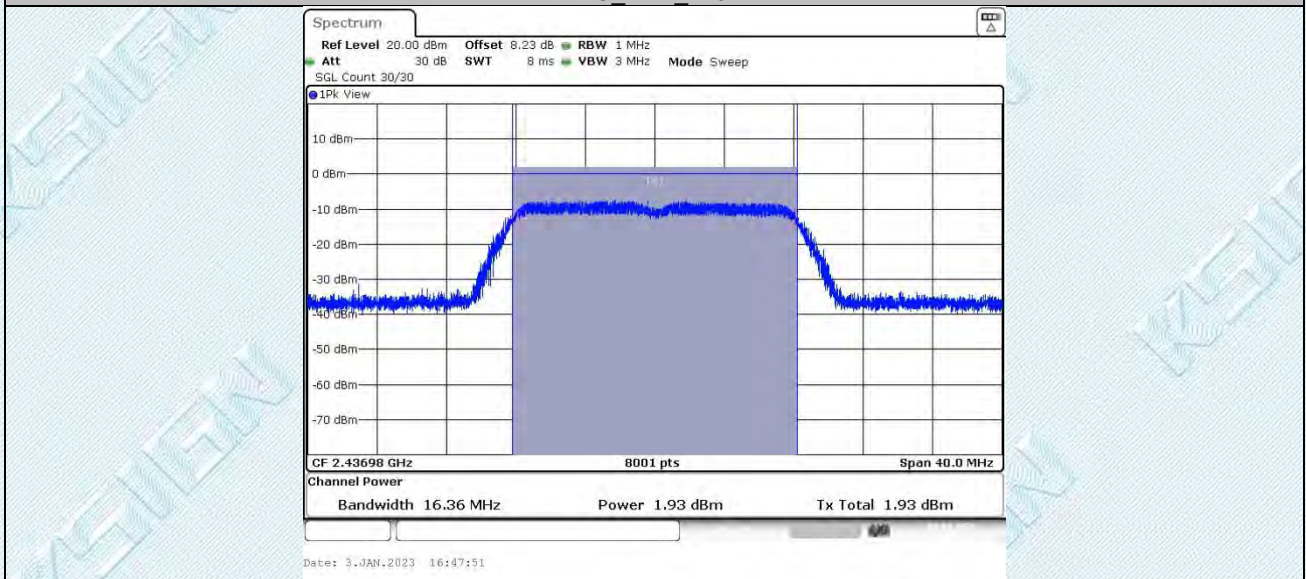




11G Ant1\_2412



11G Ant1\_2437

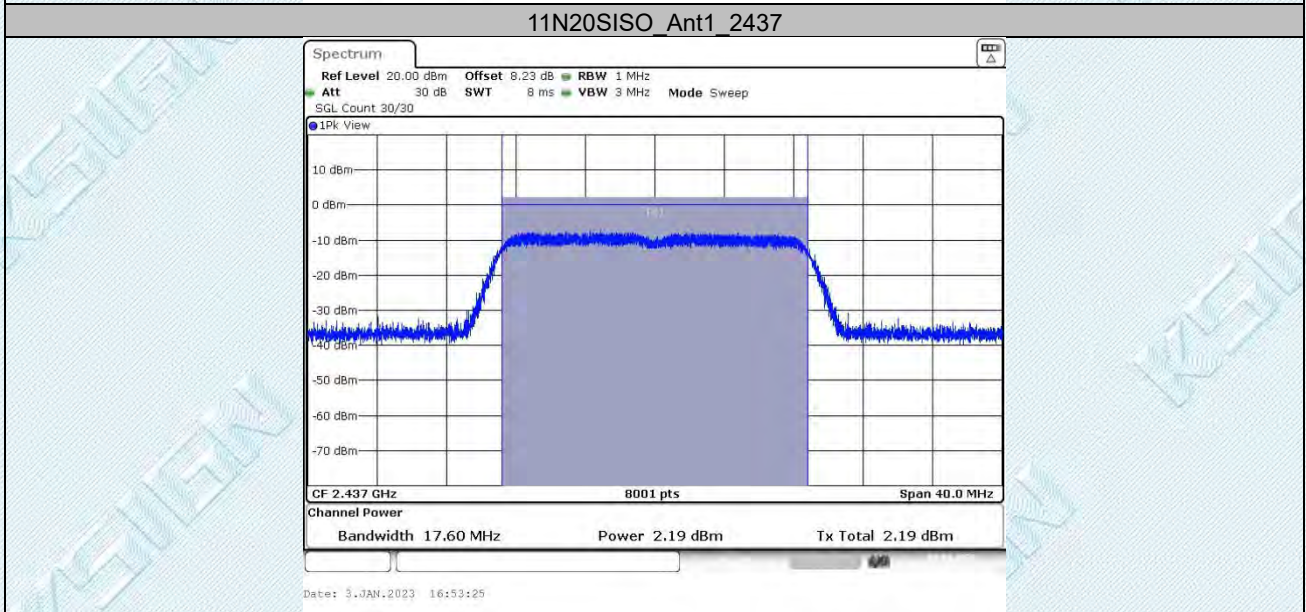
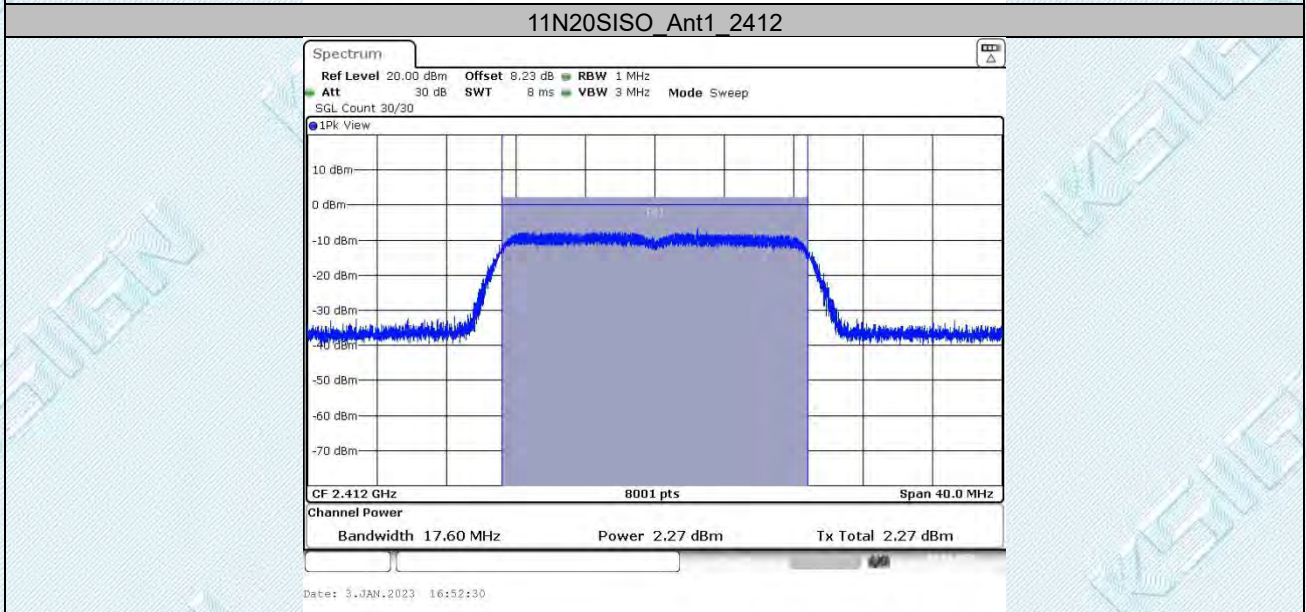
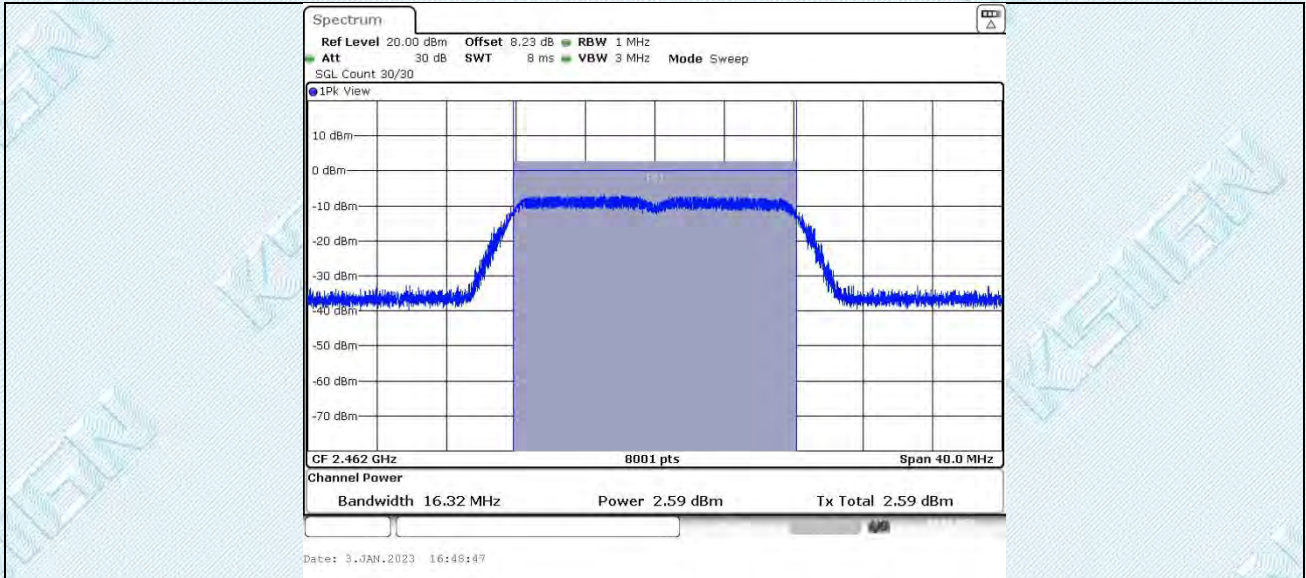


11G Ant1\_2462

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

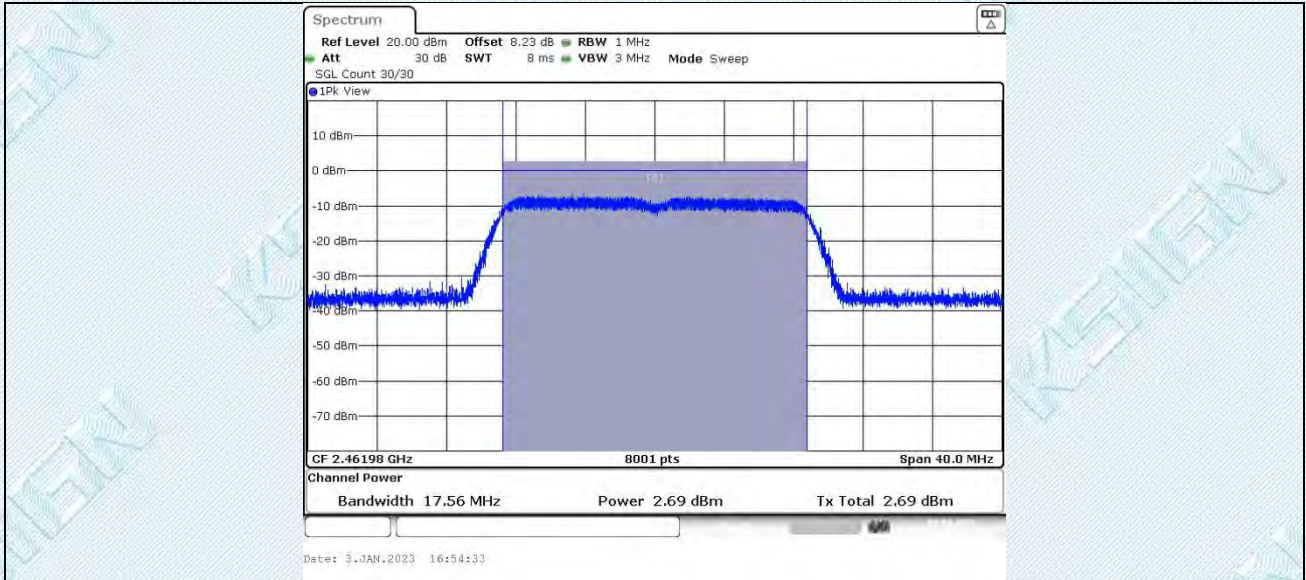
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## 6.4. Appendix D: Maximum power spectral density

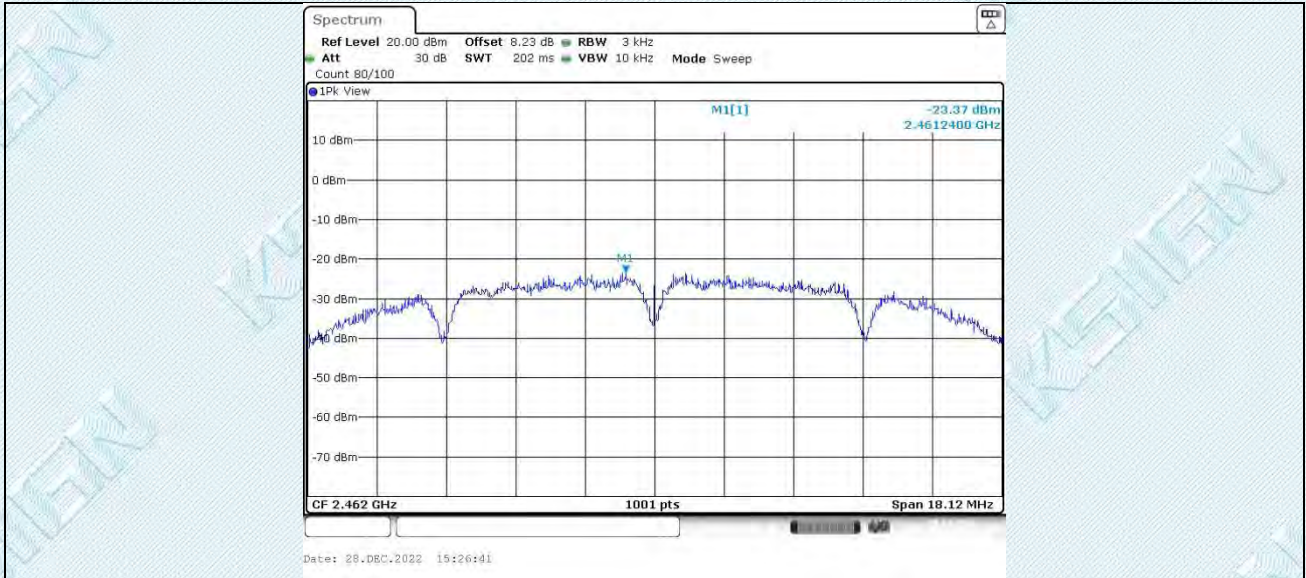
### 6.4.1. Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-23.66	≤8.00	PASS
		2437	-22.30	≤8.00	PASS
		2462	-23.37	≤8.00	PASS
11G	Ant1	2412	-26.07	≤8.00	PASS
		2437	-26.16	≤8.00	PASS
		2462	-25.66	≤8.00	PASS
11N20SISO	Ant1	2412	-24.68	≤8.00	PASS
		2437	-25.00	≤8.00	PASS
		2462	-25.35	≤8.00	PASS

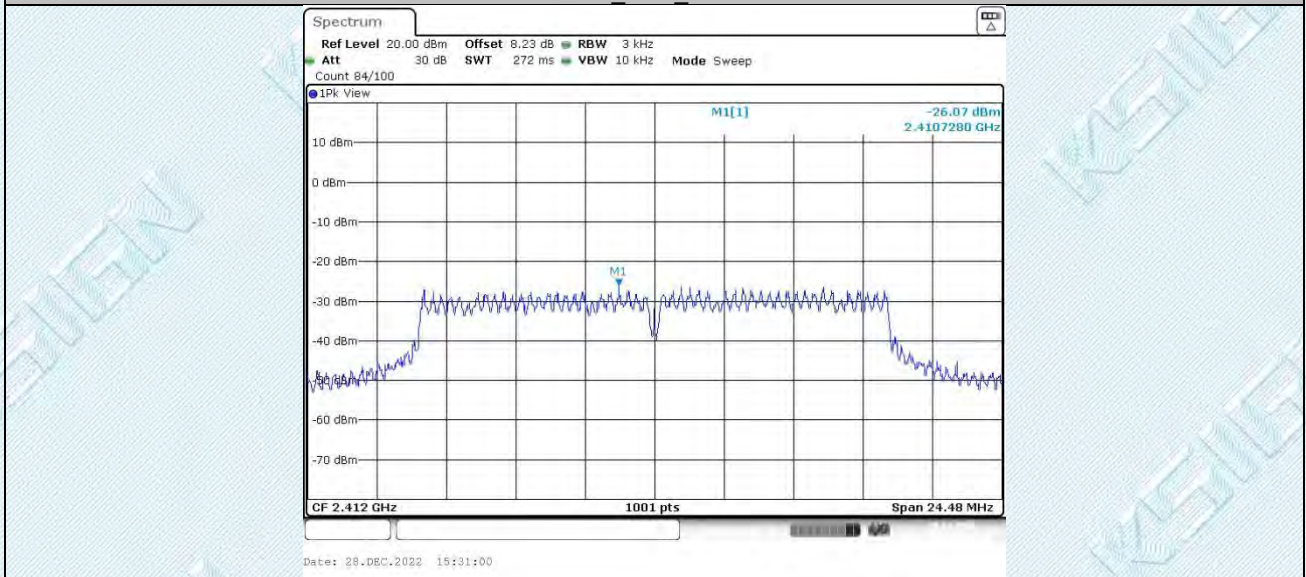


### 6.4.2. Test Graphs

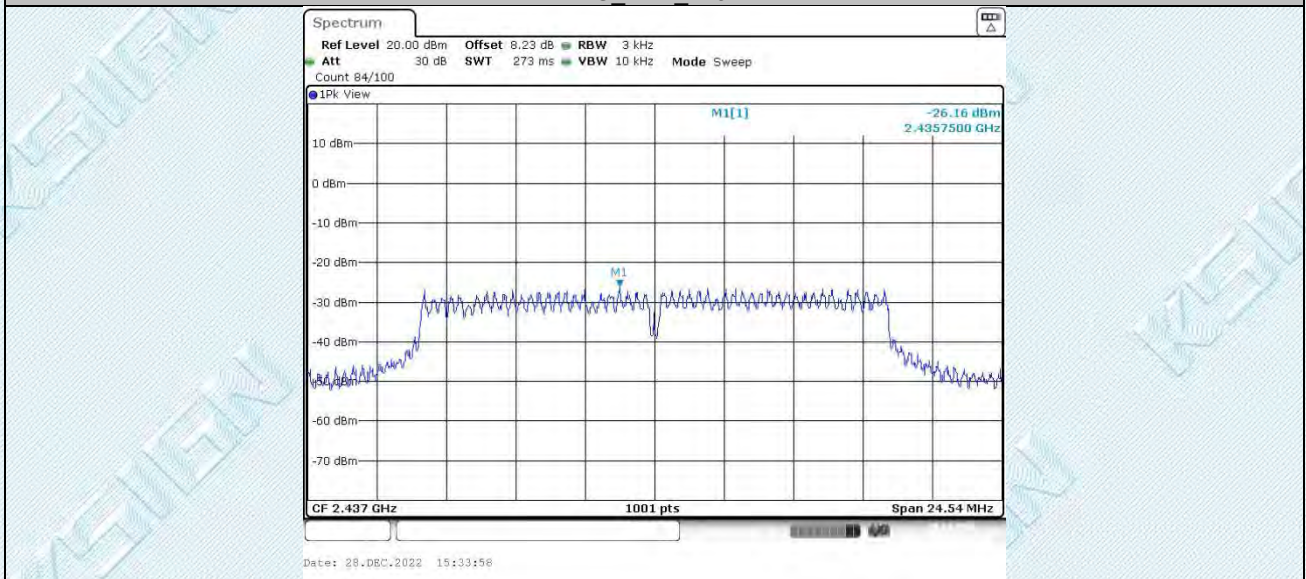




11G Ant1\_2412



11G Ant1\_2437

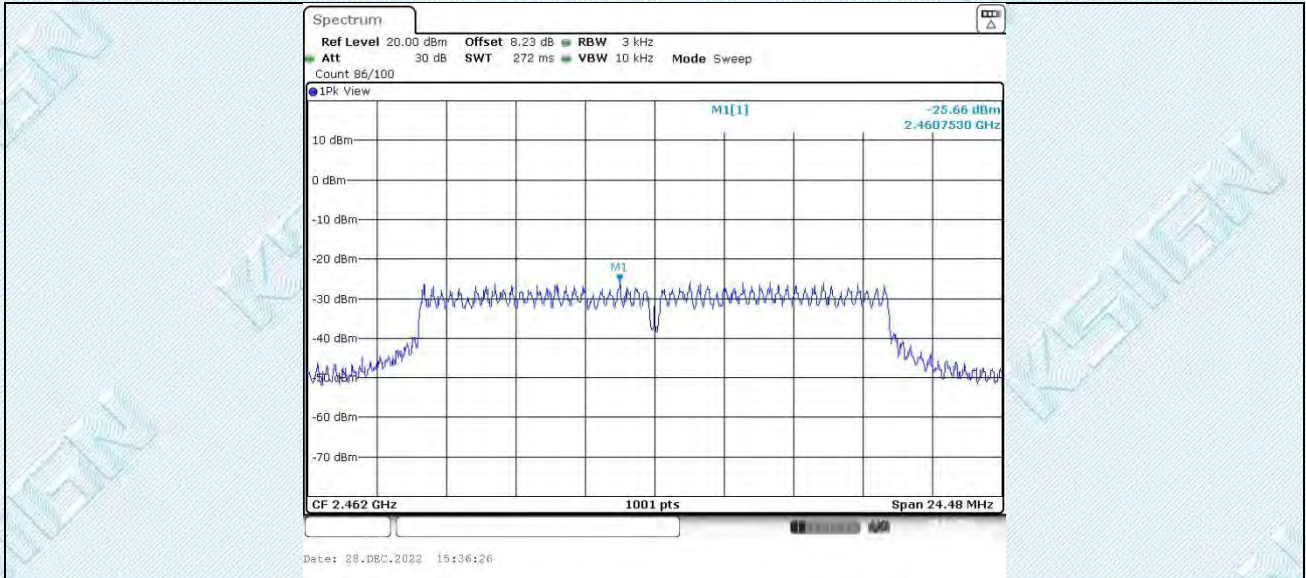


11G Ant1\_2462

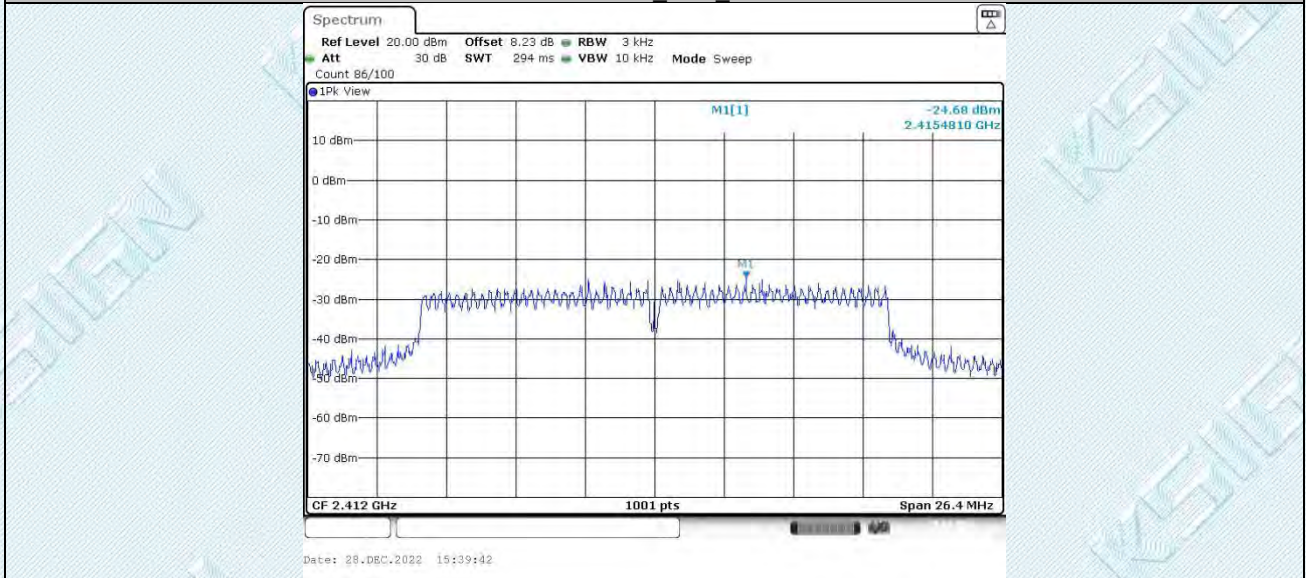
TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

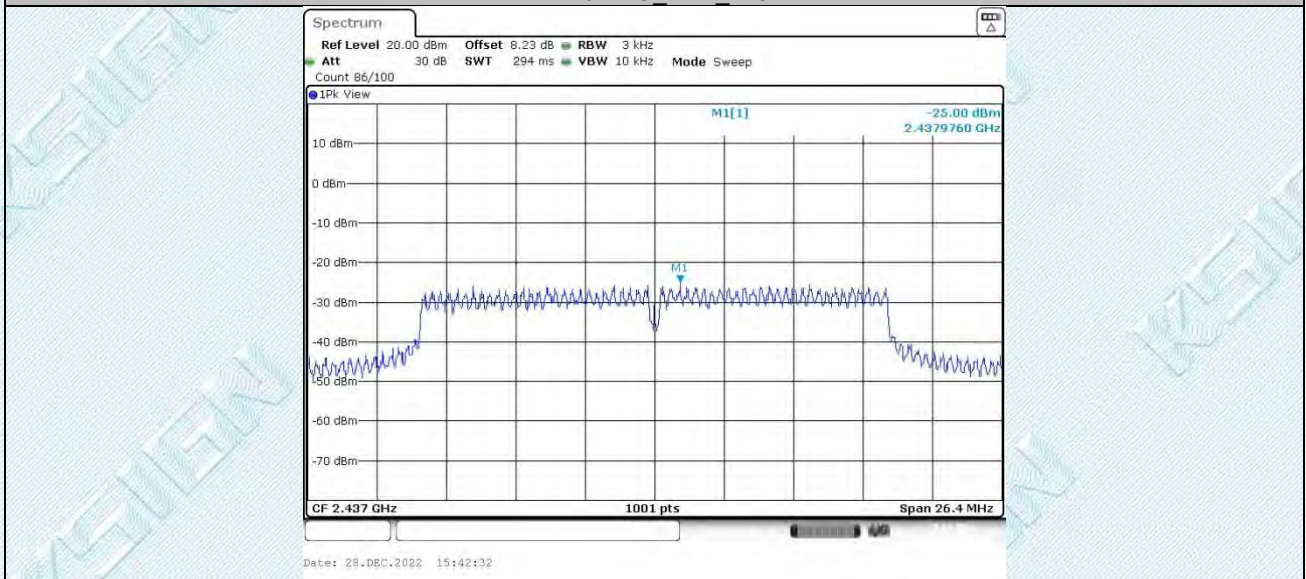
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11N20SISO\_Ant1\_2412



11N20SISO\_Ant1\_2437

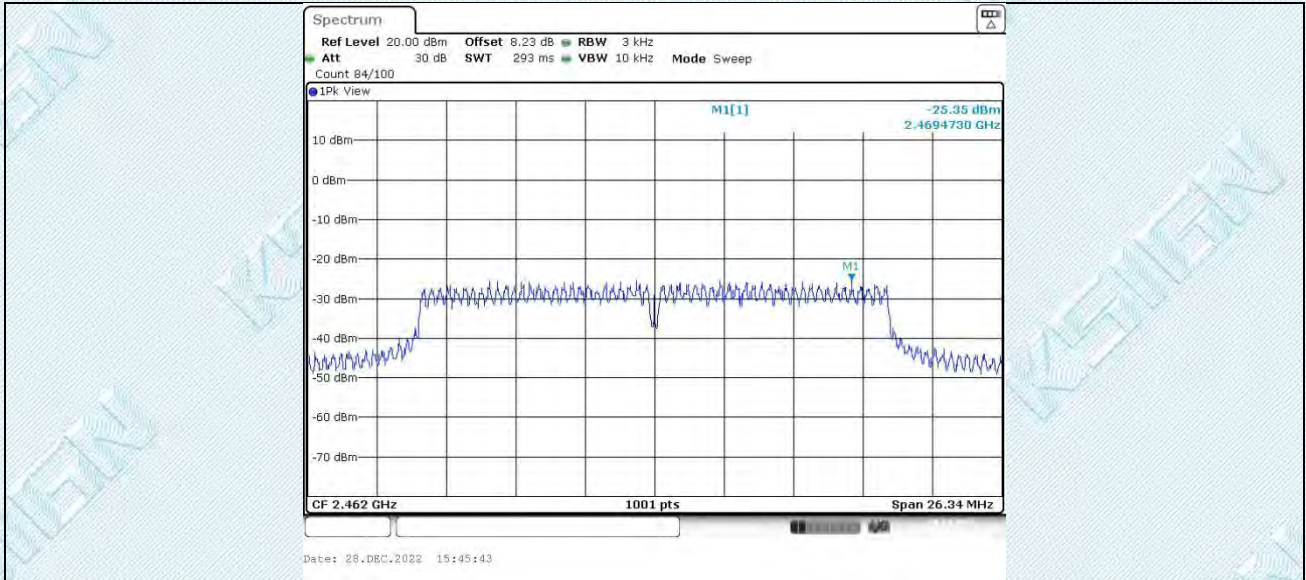


11N20SISO\_Ant1\_2462

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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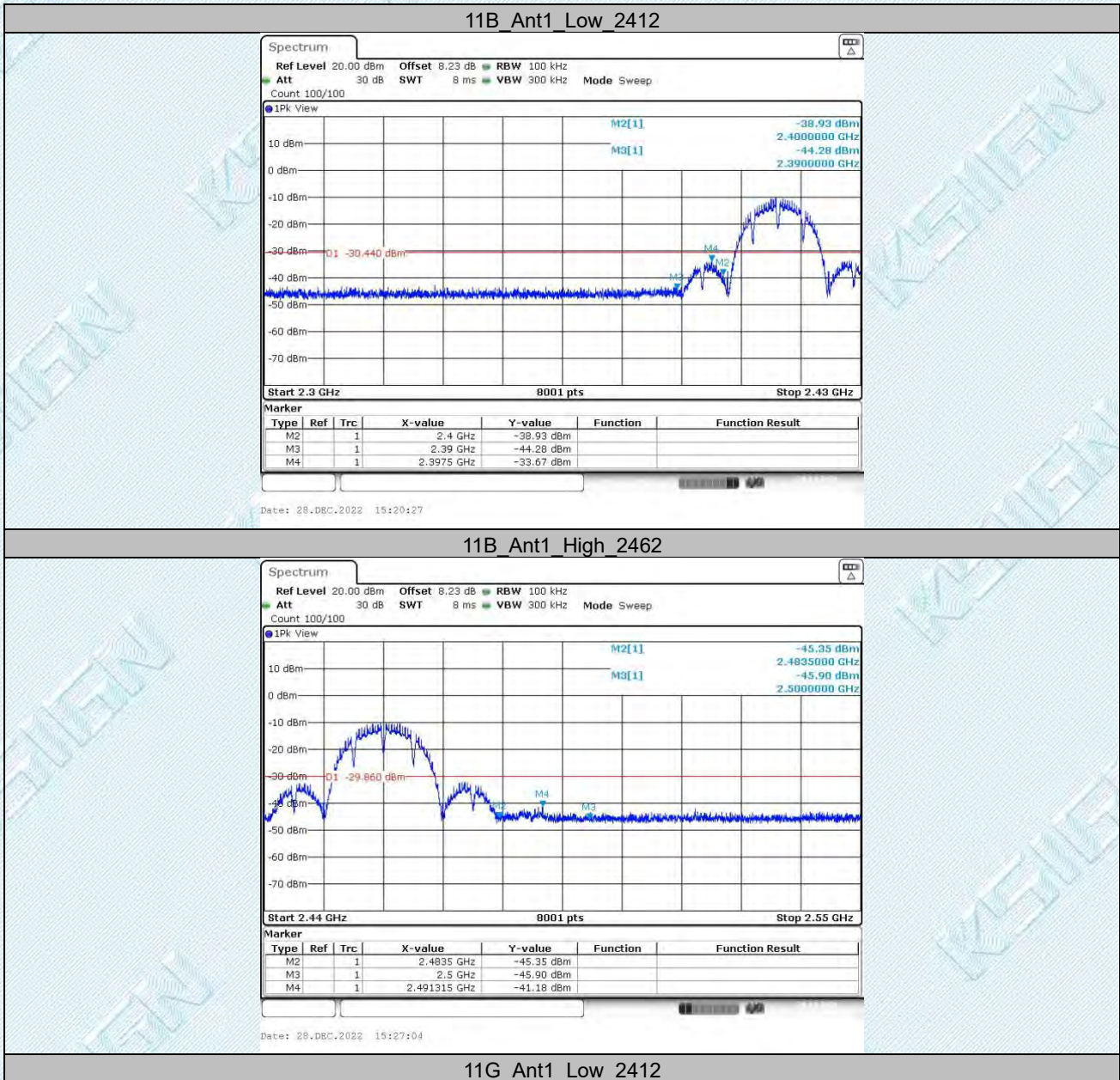


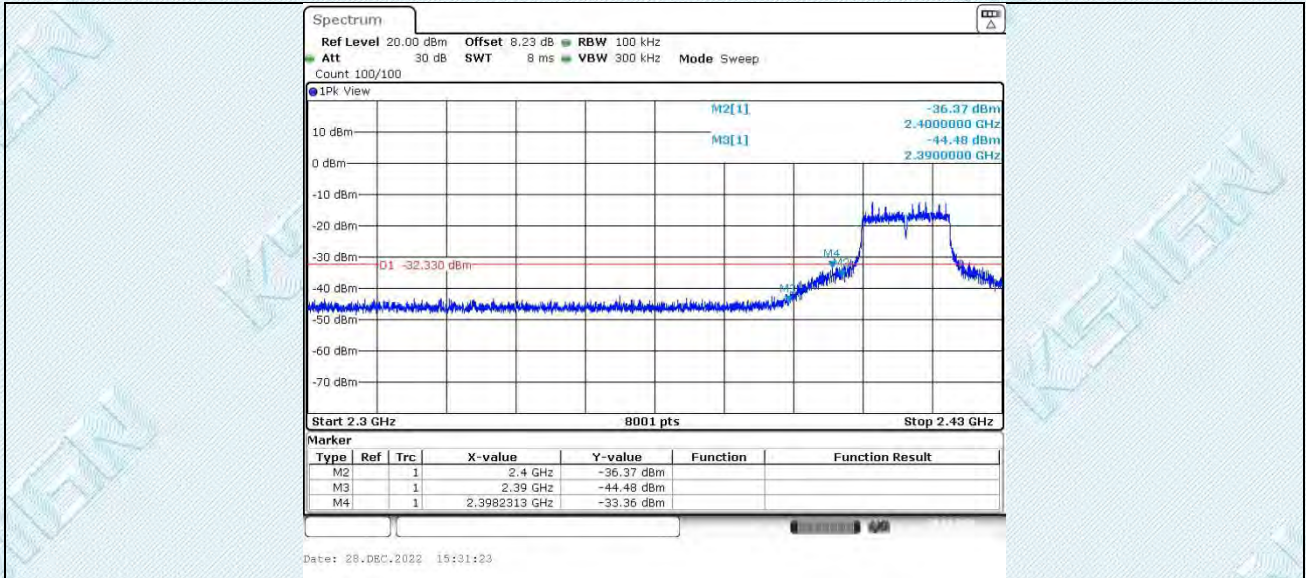
## 6.5. Appendix E: Band edge measurements

### 6.5.1. Test Result

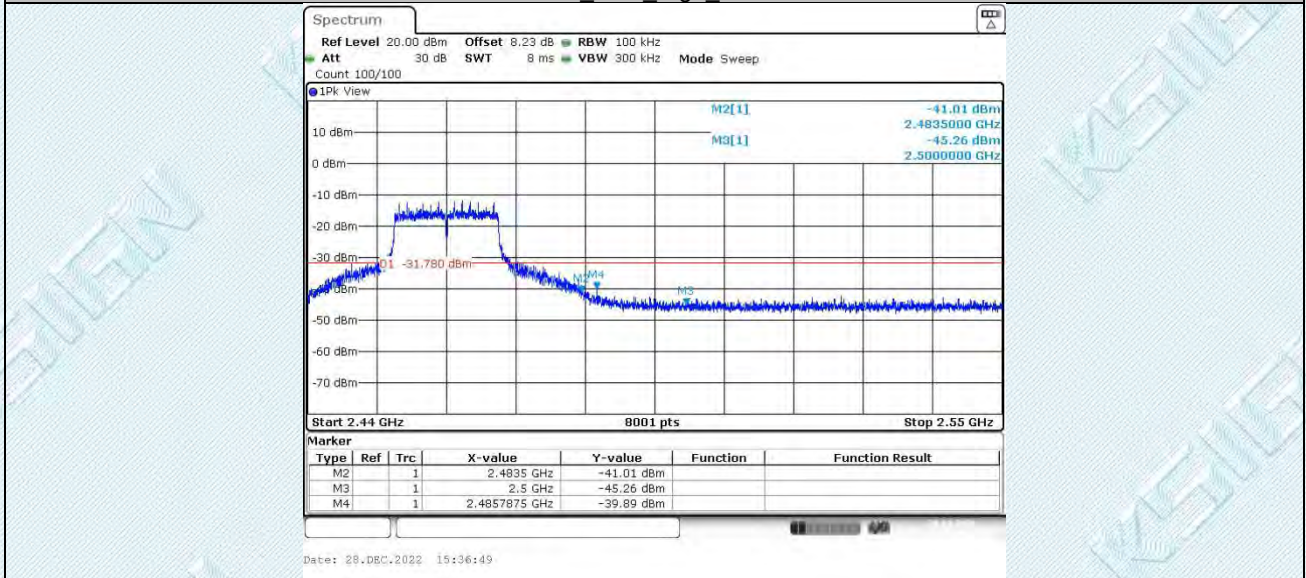
TestMode	Antenna	ChName	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	-10.44	-33.67	$\leq -30.44$	PASS
		High	2462	-9.86	-41.18	$\leq -29.86$	PASS
11G	Ant1	Low	2412	-12.33	-33.36	$\leq -32.33$	PASS
		High	2462	-11.78	-39.89	$\leq -31.78$	PASS
11N20SISO	Ant1	Low	2412	-10.98	-40.97	$\leq -30.98$	PASS
		High	2462	-10.52	-36.97	$\leq -30.52$	PASS

### 6.5.2. Test Graphs

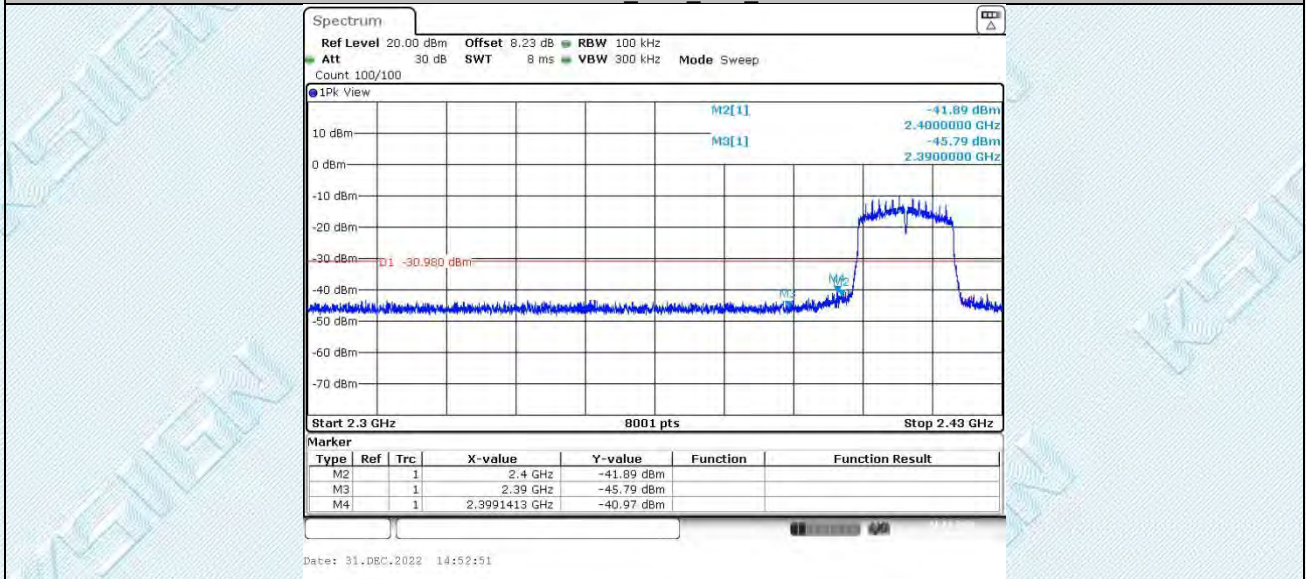




11G Ant1 High 2462



11N20SISO Ant1 Low 2412

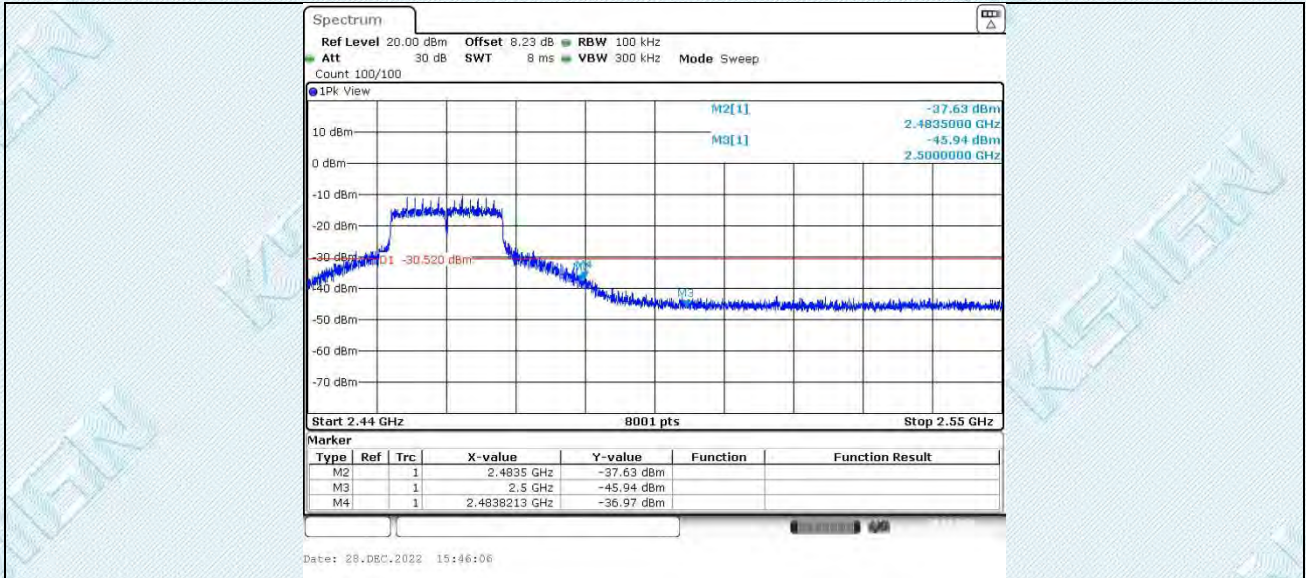


11N20SISO Ant1 High 2462

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

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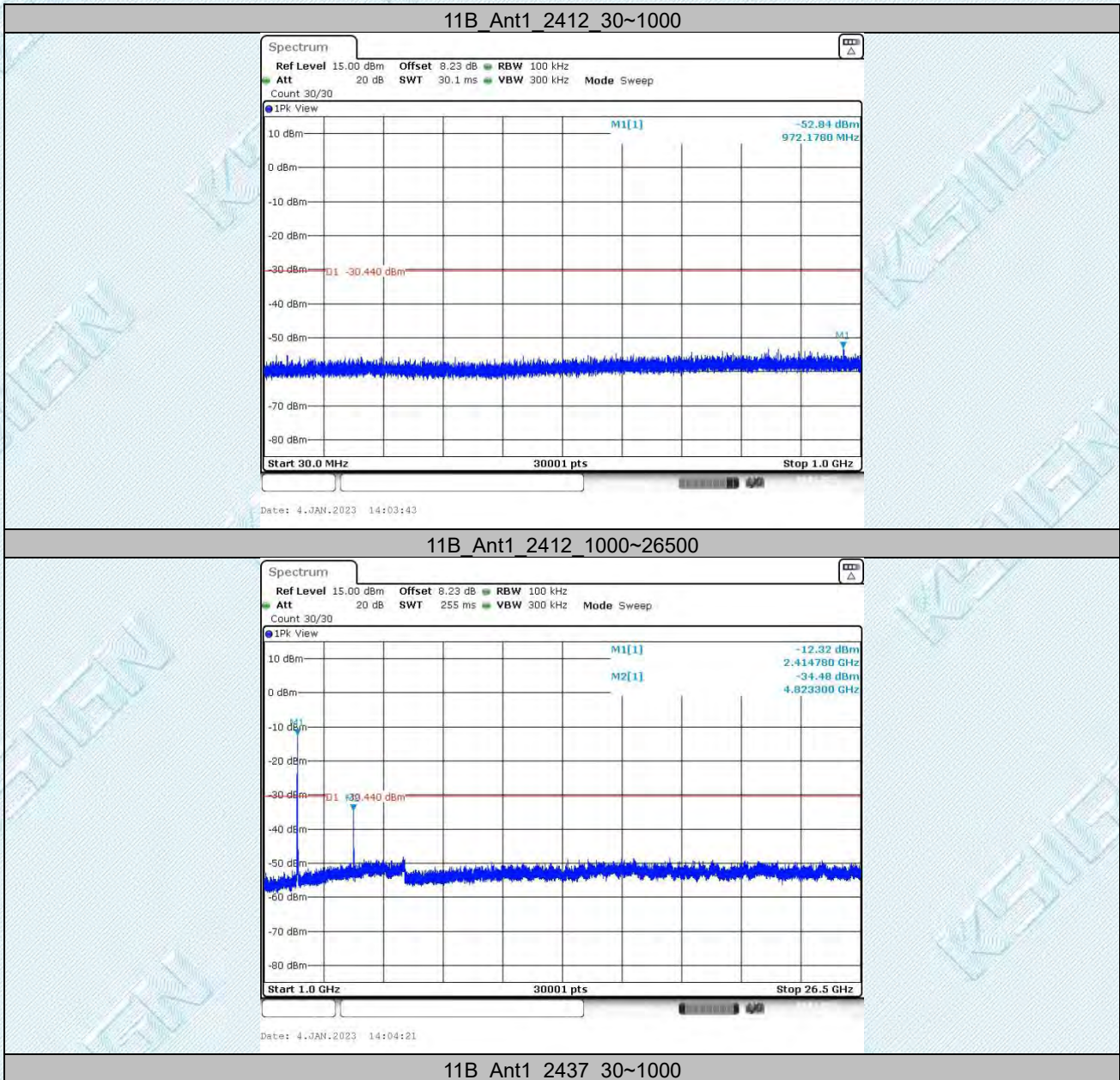


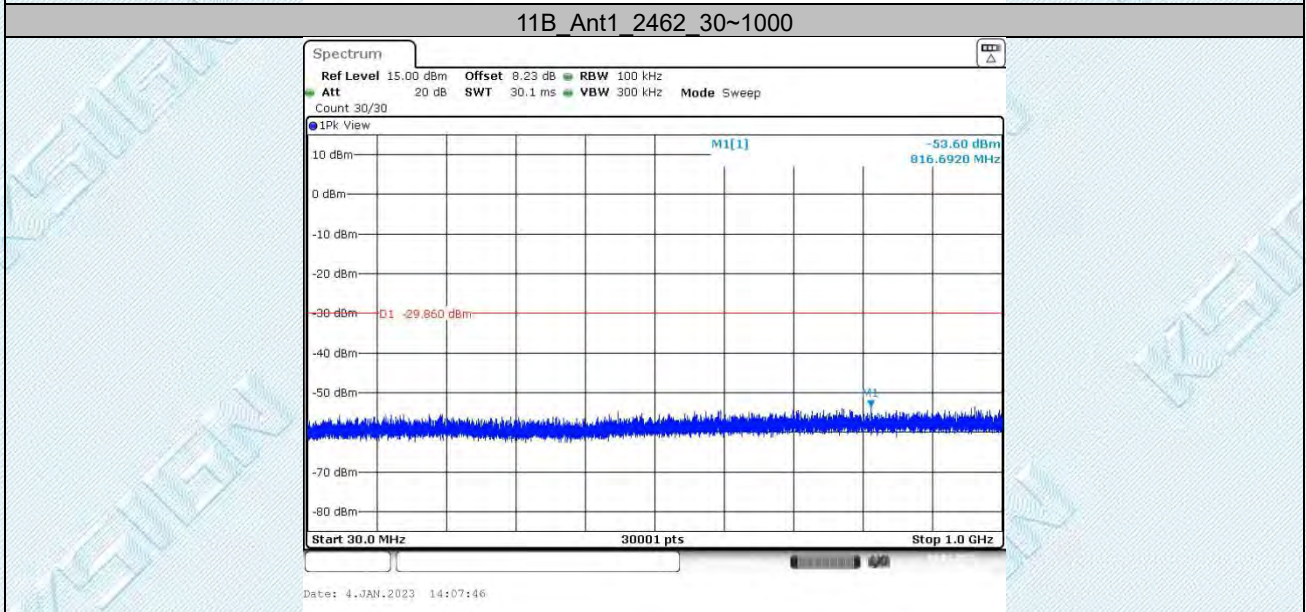
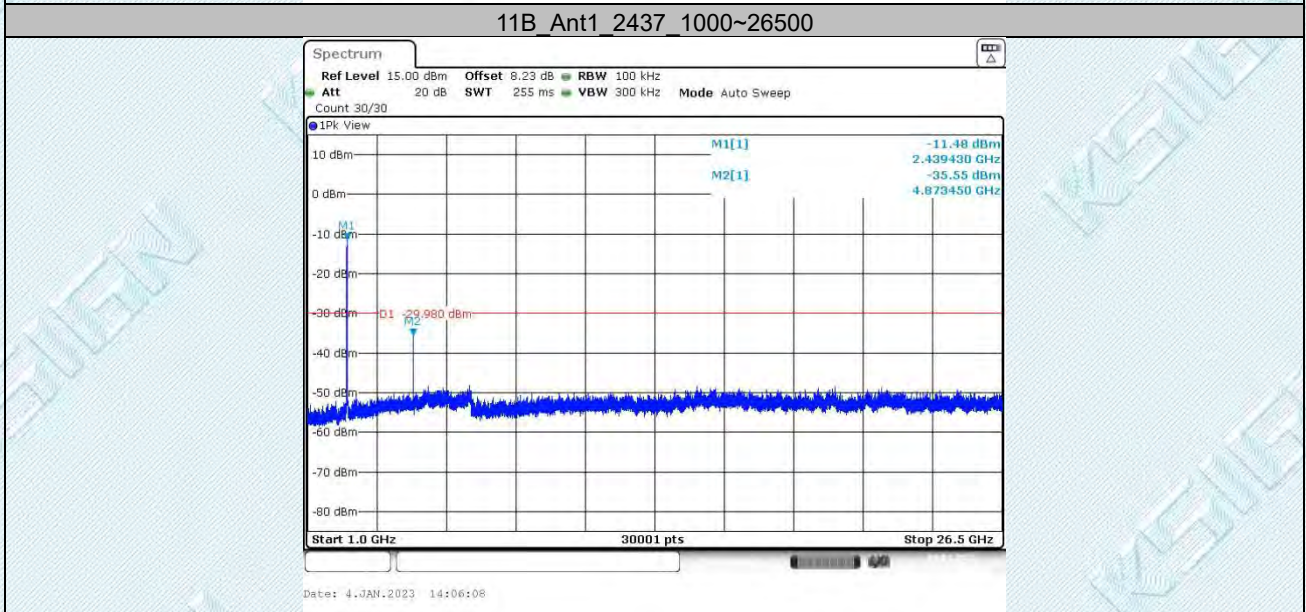
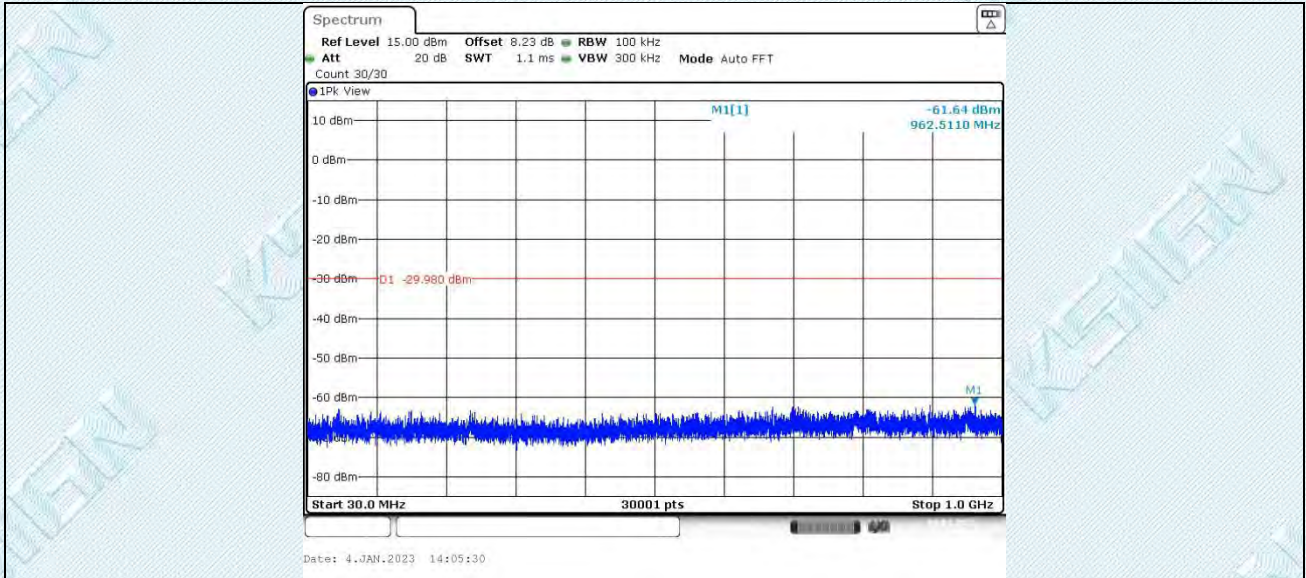
## 6.6. Appendix F: Conducted Spurious Emission

### 6.6.1. Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	-10.44	-52.84	≤-30.44	PASS
			1000~26500	-10.44	-34.48	≤-30.44	PASS
		2437	30~1000	-9.98	-61.64	≤-29.98	PASS
			1000~26500	-9.98	-35.55	≤-29.98	PASS
		2462	30~1000	-9.86	-53.6	≤-29.86	PASS
			1000~26500	-9.86	-35.54	≤-29.86	PASS
11G	Ant1	2412	30~1000	-12.33	-52.87	≤-32.33	PASS
			1000~26500	-12.33	-44.78	≤-32.33	PASS
		2437	30~1000	-12.35	-61.05	≤-32.35	PASS
			1000~26500	-12.35	-45.99	≤-32.35	PASS
		2462	30~1000	-11.78	-53.8	≤-31.78	PASS
			1000~26500	-11.78	-45.21	≤-31.78	PASS
11N20SISO	Ant1	2412	30~1000	-10.98	-52.73	≤-30.98	PASS
			1000~26500	-10.98	-43.68	≤-30.98	PASS
		2437	30~1000	-10.83	-53.29	≤-30.83	PASS
			1000~26500	-10.83	-48.23	≤-30.83	PASS
		2462	30~1000	-10.52	-53.98	≤-30.52	PASS
			1000~26500	-10.52	-46.15	≤-30.52	PASS

### 6.6.2. Test Graphs

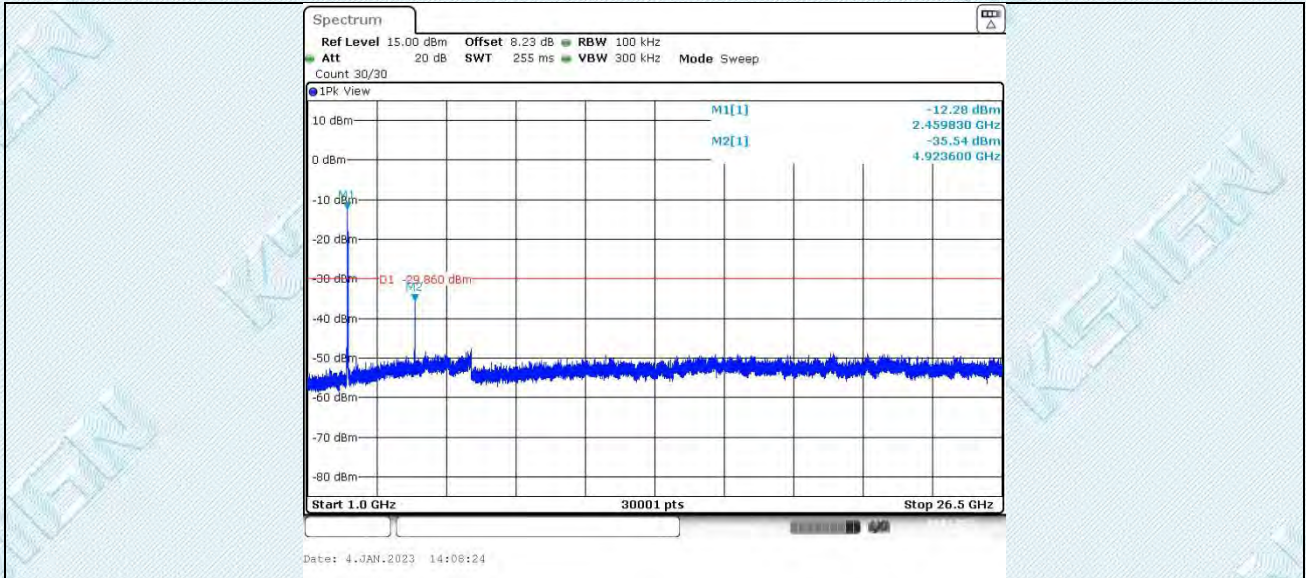




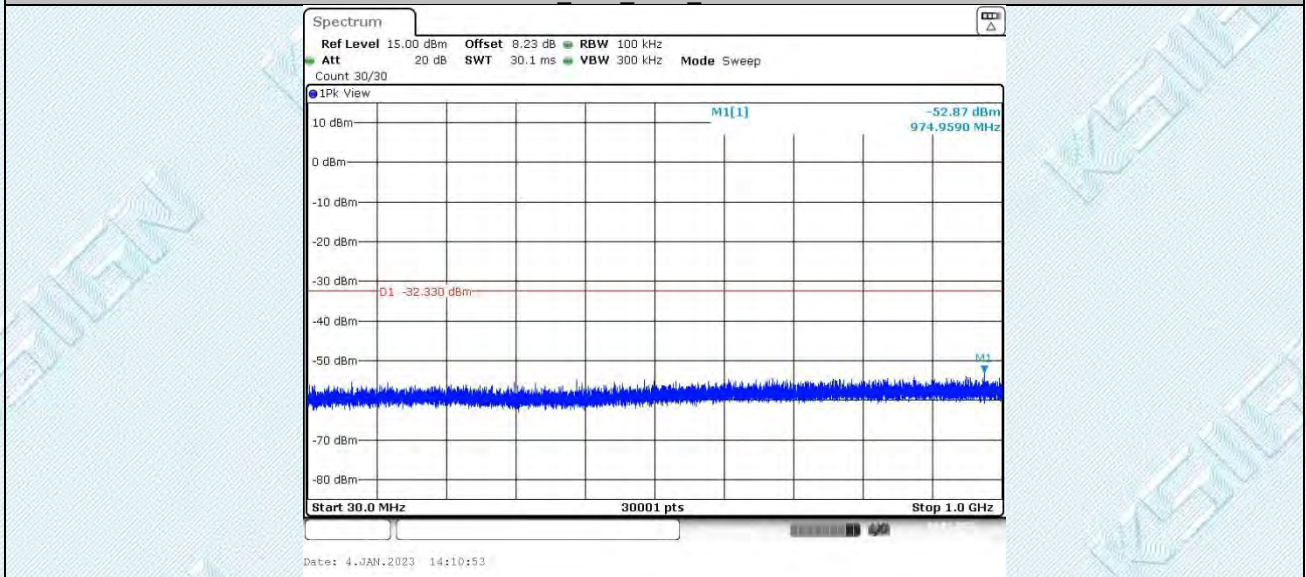
TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

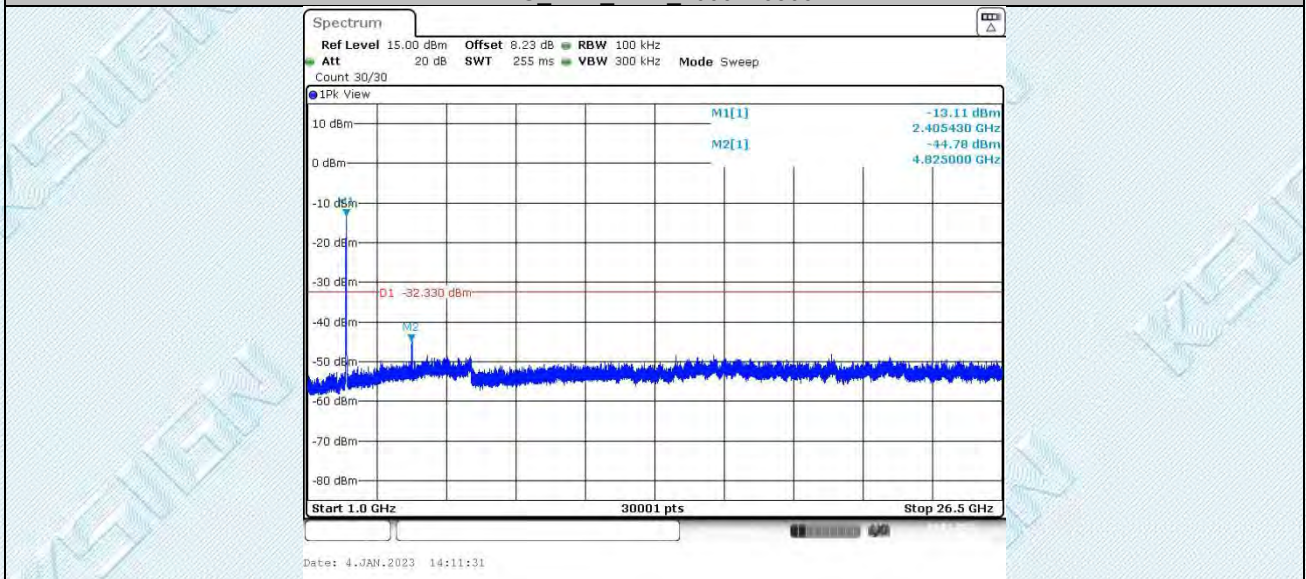
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11G Ant1\_2412\_30~1000



11G Ant1\_2412\_1000~26500

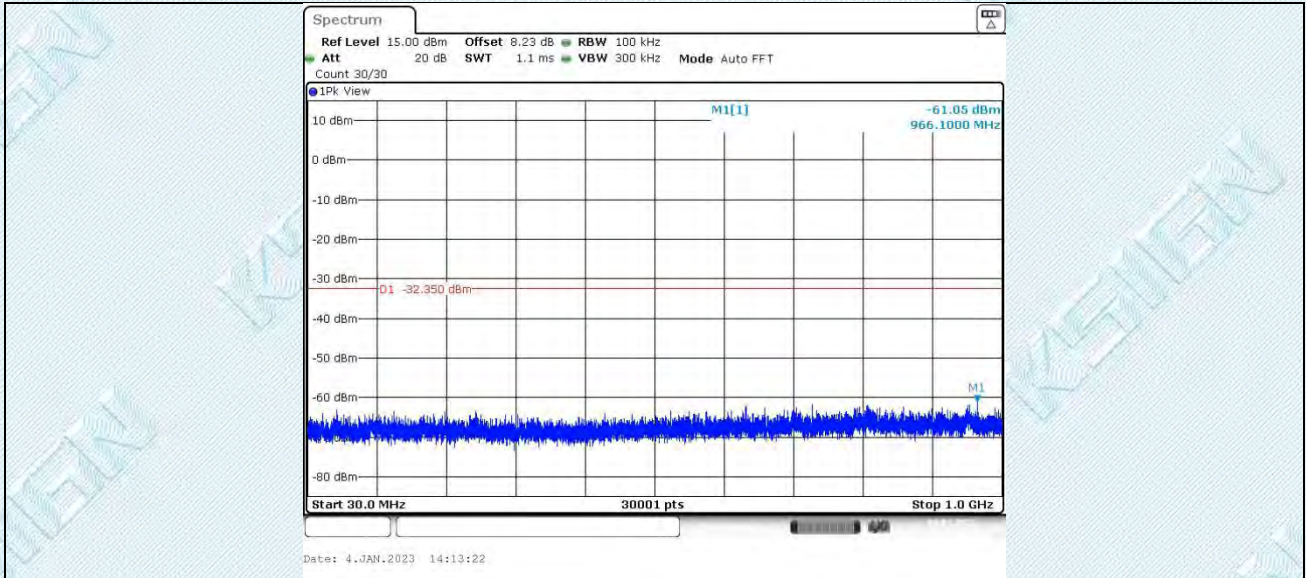


11G Ant1\_2437\_30~1000

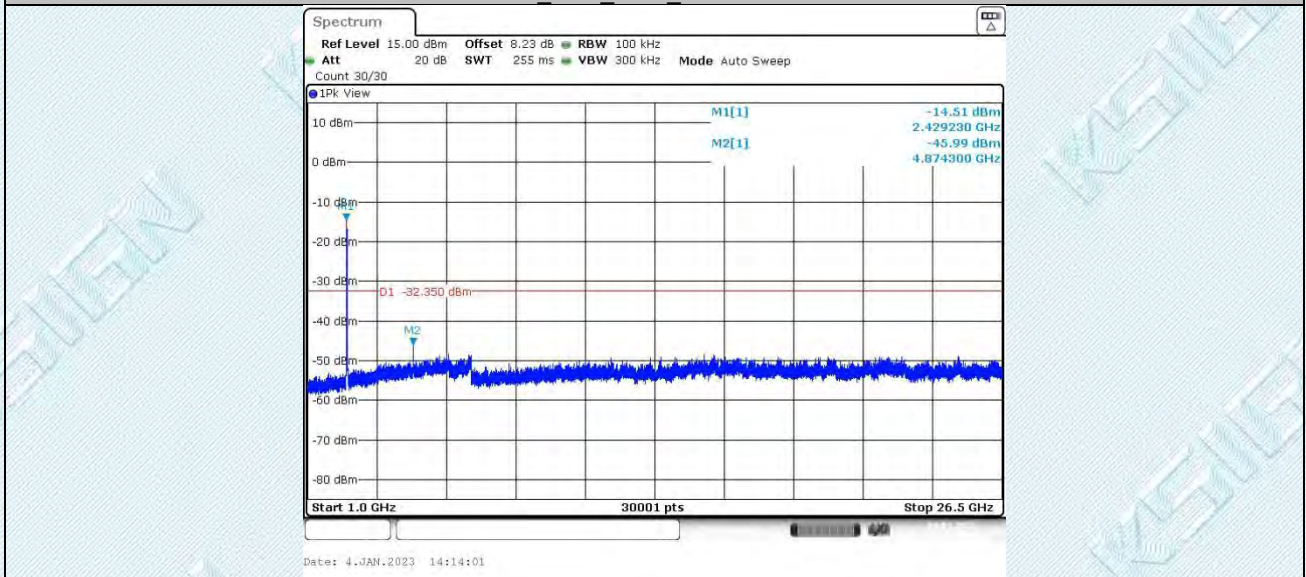
TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

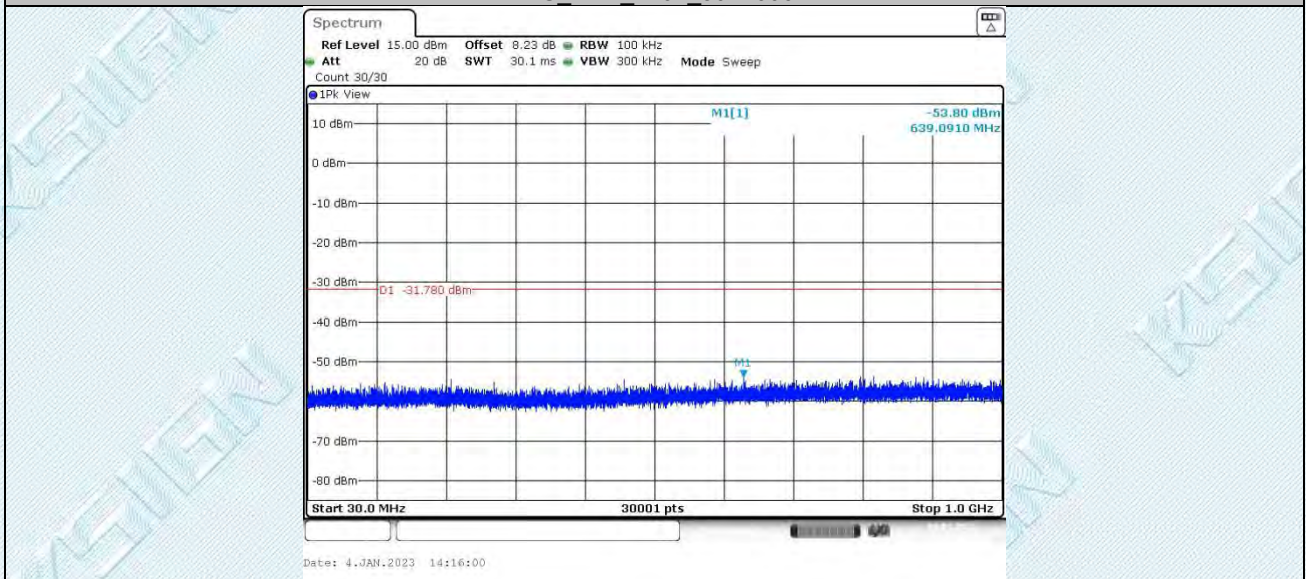
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11G\_Ant1\_2437\_1000~26500



11G\_Ant1\_2462\_30~1000

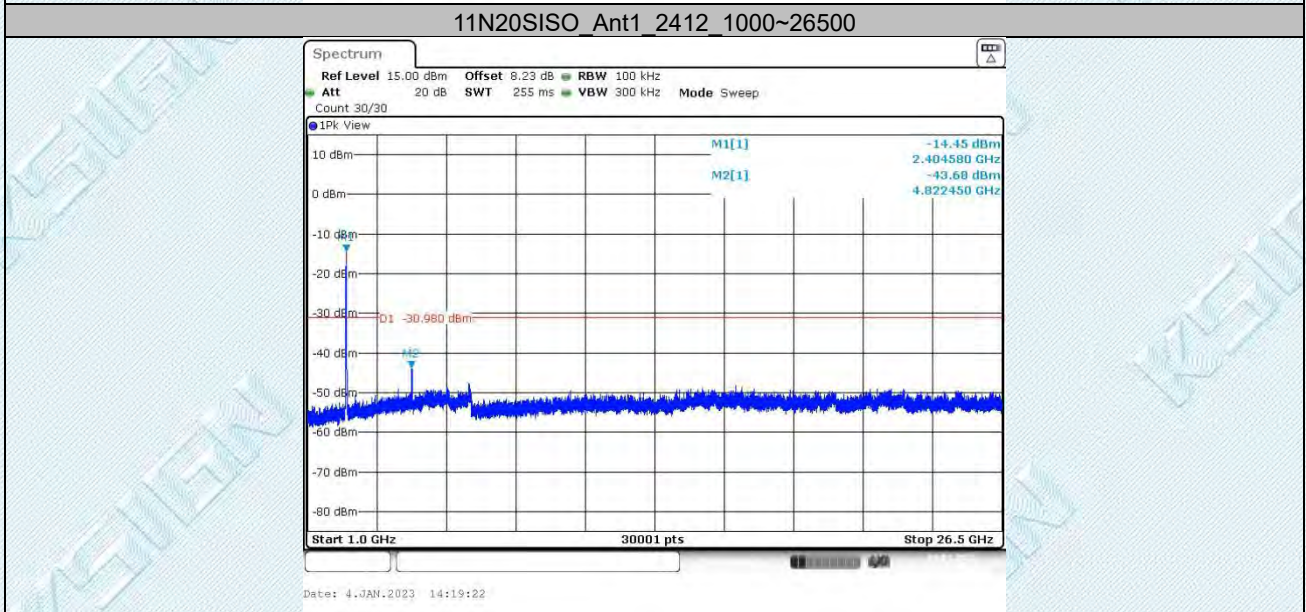
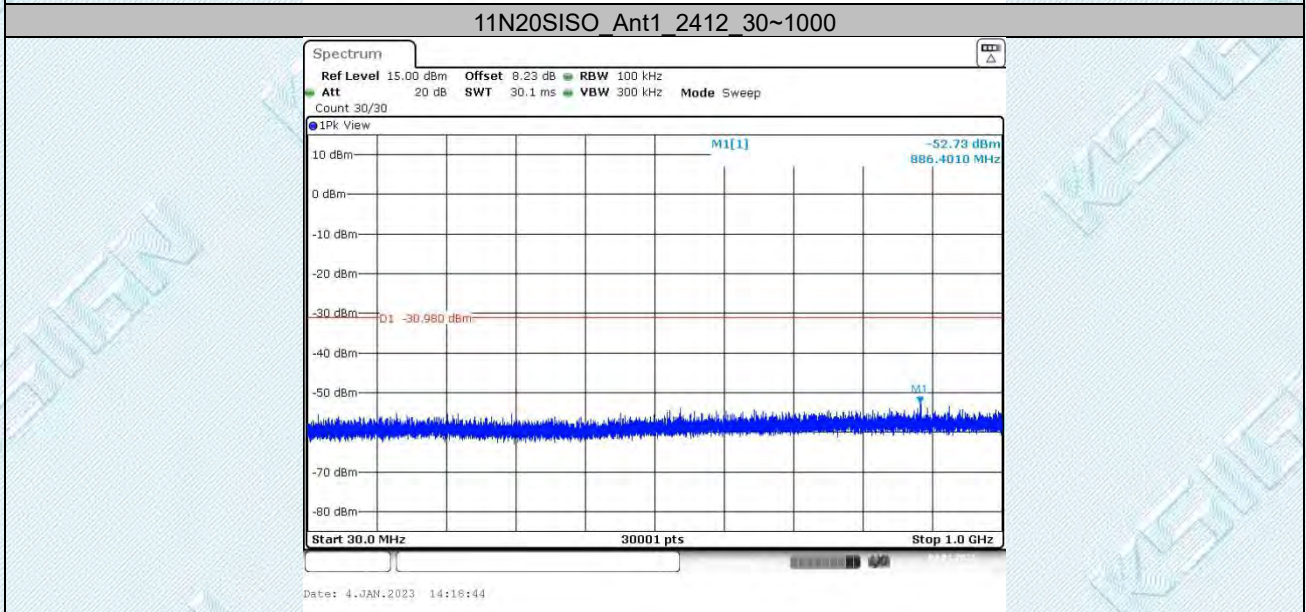
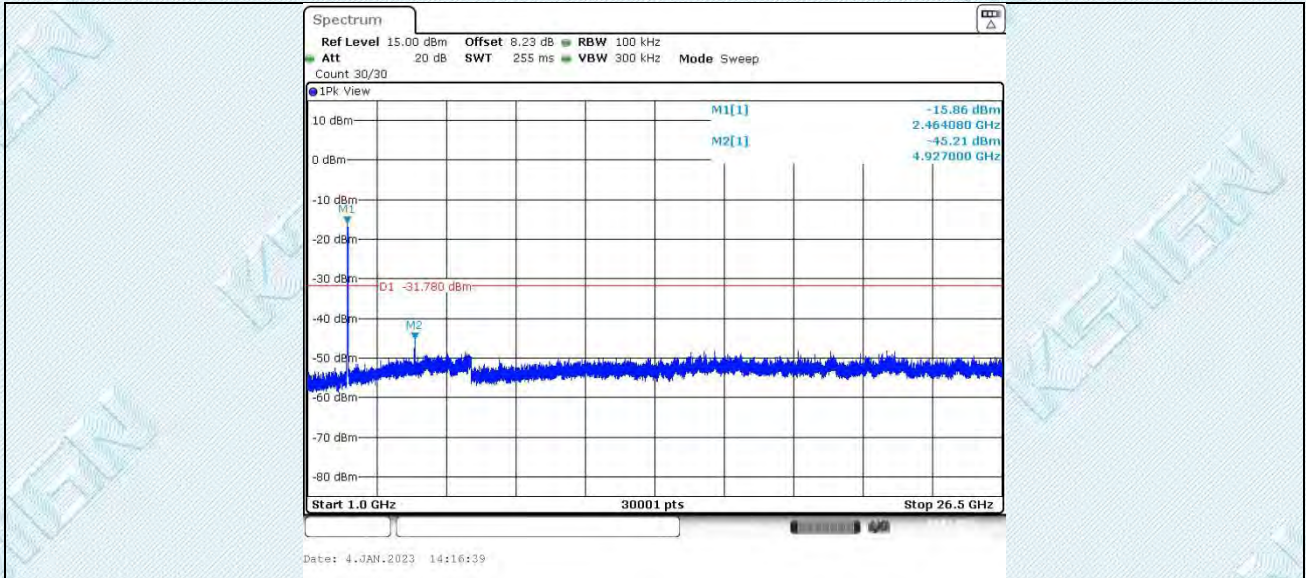


11G\_Ant1\_2462\_1000~26500

TRF EMC\_R1

Add: West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

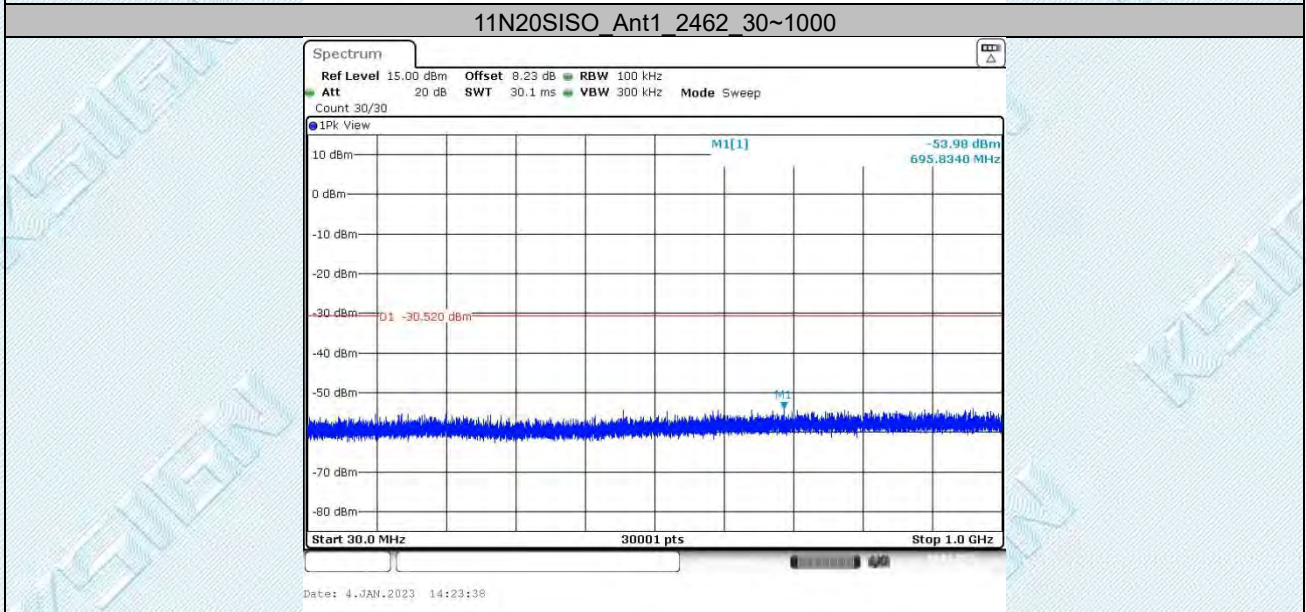
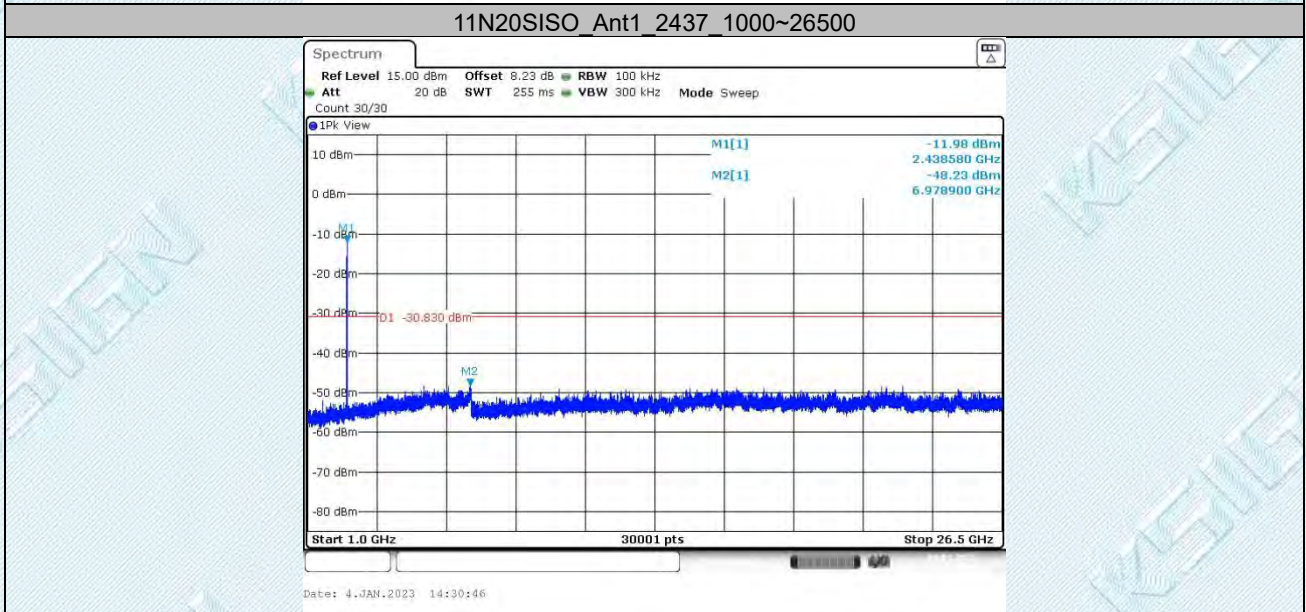
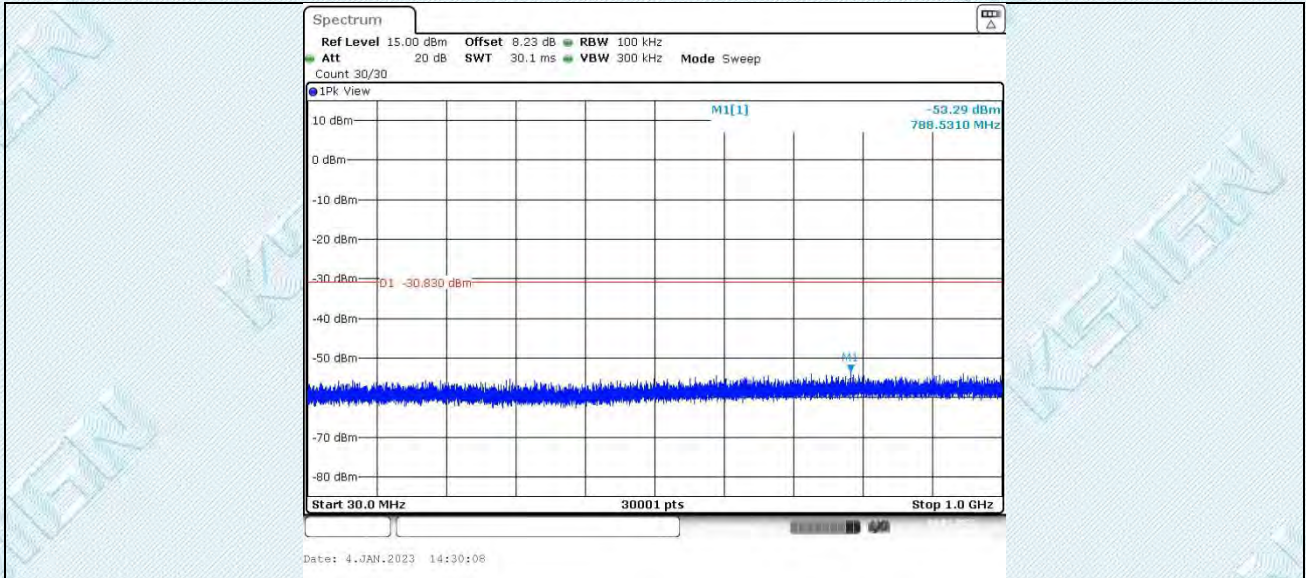
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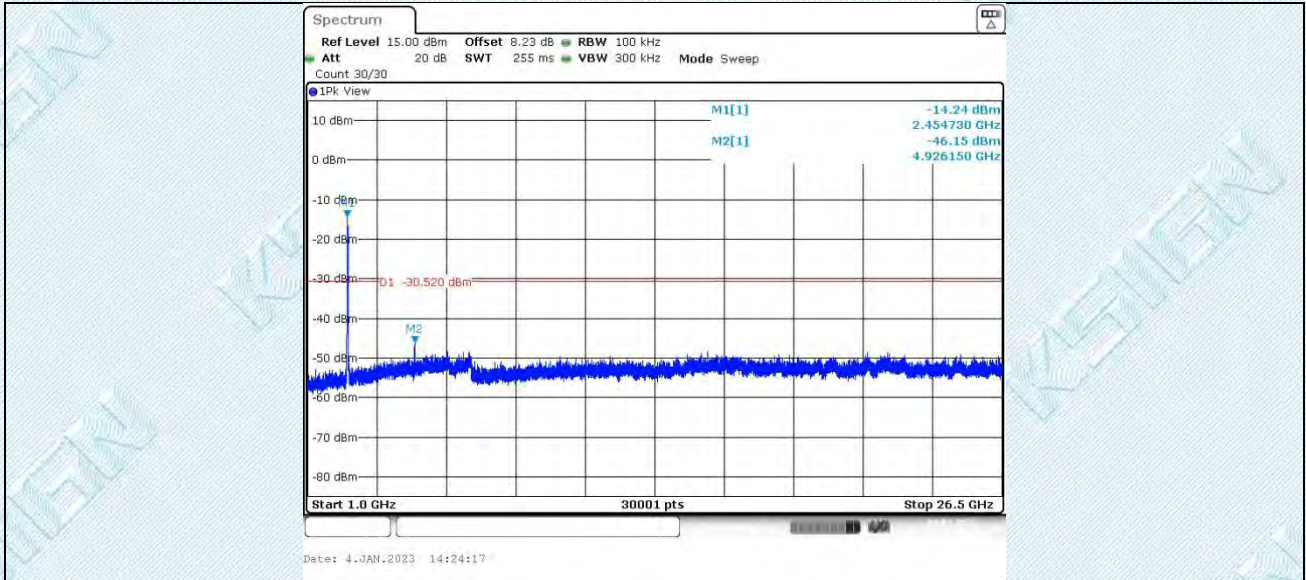
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--THE END--