

RADIO TEST REPORT

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Report No.:STS2204193W02

Issued for

Shenzhen Xingchang Technology Co. Ltd

9th Floor, Building A, Jianyu Second Industrial Zone, Nanchang, Gushu 1st Road, Baoan District, Shenzhen.China

Product Name:	wireless live lavalier microphone
Brand Name:	今期品
Model Name:	V1 double version
Series Model:	N/A
FCC ID:	2A5ZJ-V1
Test Standard:	FCC Part 15.247

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APPROVA

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TEST RESULT CERTIFICATION

Applicant's Name:	Shenzhen Xingchang Technology Co. Ltd
Address:	9th Floor, Building A, Jianyu Second Industrial Zone, Nanchang, Gushu 1st Road, Baoan District, Shenzhen.China
Manufacturer's Name:	Shenzhen Xingchang Technology Co. Ltd
Address:	9th Floor, Building A, Jianyu Second Industrial Zone, Nanchang, Gushu 1st Road, Baoan District, Shenzhen.China
Product Description	
Product Name:	wireless live lavalier microphone
Brand Name:	今里唱
Model Name:	V1 double version
Series Model:	N/A
Test Standards:	FCC Part15.247
Test Procedure:	ANSI C63.10-2013

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test	
Date of receipt of test item:	05 May 2022
Date (s) of performance of tests:	05 May 2022 ~ 24 May 2022
Date of Issue:	24 May 2022
Test Result:	Pass

Testing Engineer

(Chris Chen)

Technical Manager

(Sean she)



Authorized Signatory :

hover

(Bovey Yang)

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Revision History

Rev.	Issue Date			Contents
00	24 May 2022	24 May 2022 STS2204193W02		Initial Issue



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: KDB 558074 D01 15.247 Meas Guidance v05r02.

	FCC Part 15.247,Subpart C						
Standard Section	Judgment	Remark					
15.207	Conducted Emission	PASS					
15.247 (a)(2)	6dB Bandwidth	PASS					
15.247 (b)(3)	Output Power	PASS					
15.209	Radiated Spurious Emission	PASS					
15.247 (d)	Conducted Spurious & Band Edge Emission	PASS					
15.247 (e)	Power Spectral Density	PASS					
15.205	Restricted bands of operation	PASS					
Part 15.247(d)/ Part 15.209(a)	Band Edge Emission	PASS					
15.203	Antenna Requirement	PASS					

NOTE:

(1) 'N/A' denotes test is not applicable in this Test Report.

(2) All tests are according to ANSI C63.10-2013.

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1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China FCC test Firm Registration Number: 625569 IC test Firm Registration Number: 12108A A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	RF output power, conducted	±0.87dB
2	Unwanted Emissions, conducted	±2.895dB
3	All emissions, radiated 9K-30MHz	±3.80dB
4	All emissions, radiated 30M-1GHz	±4.09dB
5	All emissions, radiated 1G-6GHz	±4.92dB
6	All emissions, radiated>6G	±5.49dB
7	Conducted Emission (9KHz-30MHz)	±2.73dB

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2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	wireless live lavalie	r microphone	
Trade Name	今日間		
Model Name	V1 double version		
Series Model	N/A		
Model Difference	N/A		
	The EUT is a wirele	ss live lavalier microphone	
	Operation Frequency:	2404~2480 MHz	
	Modulation Type:	GFSK	
Product Description	Number Of Channel:	Please refer to the Note 2.	
	Antenna Designation:	Please refer to the Note 3.	
	Antenna Gain (dBi)	2dBi	
Channel List	Please refer to the Note 2.		
Rating	Input: DC 5V 0.5A		
Battery	Rated Voltage:3.7V Charge Limit Voltage:4.2V Capacity: 60mAh		
Hardware version number	V1TX-V1.0		
Software version number	XC-VOG-V2-V0102_crc		
Connecting I/O Port(s)	Please refer to the I	Note 1.	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.

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	Channel List							
Channel Frequency (MHz) Channel Frequency (MHz) Channel Frequency (MHz) Channel Channel (MHz)							Channel	Frequenc y (MHz)
	01	2404	02	2444	03	2480		

^{3.}

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	品語	V1 double version	Ceramic	N/A	2dBi	2.4G ANT

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.

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2.2 DESCRIPTION OF THE TEST MODES

For conducted test items and radiated spurious emissions

Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively.

Worst Mode	Description	Data/Modulation
Mode 1	TX CH01(2404MHz)	1 Mbps/GFSK
Mode 2	TX CH02(2444MHz)	1 Mbps/GFSK
Mode 3	TX CH03(2480MHz)	1 Mbps/GFSK

Note:

(1) We tested for all available U.S. voltage and frequencies (For 120V, 50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V/ 60Hz is shown in the report.

(2) The battery is fully-charged during the radiated and RF conducted test.

For AC Conducted Emission

	Test Case
AC Conducted Emission	Mode 4 : Keeping BT TX

2.3 TEST SOFTWARE AND POWER LEVEL

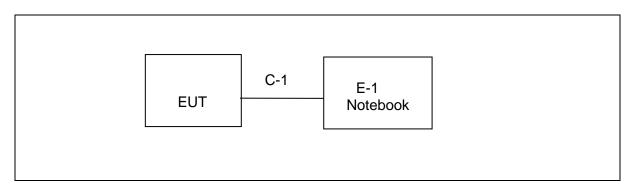
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

RF Function	Туре	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
Other SRD	2.4G	GFSK	2	Default	CX622-682

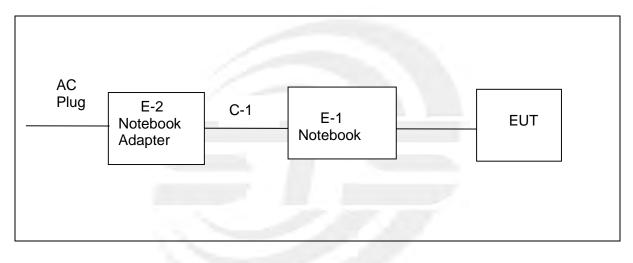


2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



Conducted Emission Test



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2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

	Necessary accessories							
Item	Equipment	Mfr/Brand Model/Type No. Length		Note				
N/A	N/A	N/A	N/A	N/A	N/A			

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
E-2	Notebook Adapter	LENOVO	ADLX45DLC3A	N/A	N/A
E-1	Notebook	LENOVO	Think Pad E470	N/A	N/A
C-1	USB Cable	N/A	N/A	150cm	NO

Note:

- (1) For detachable type I/O cable should be specified the length in cm in ^CLength₂ column.
- (2) "YES" is means "with core"; "NO" is means "without core".



2.6 EQUIPMENTS LIST

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until		
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29		
Signal Analyzer	R&S	FSV 40-N	101823	2021.09.30	2022.09.29		
Active loop Antenna	ZHINAN	ZN30900C	16035	2021.04.11	2023.04.10		
Bilog Antenna	TESEQ	CBL6111D	34678	2020.10.12	2022.10.11		
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2021.10.11	2023.10.10		
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2020.10.12	2022.10.11		
Pre-Amplifier (0.1M-3GHz)	EM	EM330	060665	2021.10.08	2022.10.07		
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2021.09.30	2022.09.29		
Pre-Amplifier (18G-40GHz)	SKET	LNPA-1840-50	SK2018101801	2021.09.28	2022.09.27		
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08		
Turn table	EM	SC100_1	60531	N/A	N/A		
Antenna mast	EM	SC100	N/A	N/A	N/A		
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)					

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29	
LISN	R&S	ENV216	101242	2021.09.30	2022.09.29	
LISN	EMCO	3810/2NM	23625	2021.09.30	2022.09.29	
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08	
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 CE)				

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RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	
Power Sensor			MY55520005	2021.09.30	2022.09.29	
	Kovoight	U2021XA	MY55520006	2021.09.30	2022.09.29	
	Keysight	MY56120038 MY56280002	2021.09.30	2022.09.29		
			MY56280002	2021.09.30	2022.09.29	
Signal Analyzer	Agilent	N9020A	MY51110105	2022.03.01	2023.02.28	
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08	
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)				



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3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

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.

	Conducted Emission limit (dBuV)		
FREQUENCY (MHz)	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	
0.50 -5.0	56.00	46.00	
5.0 -30.0	60.00	50.00	

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

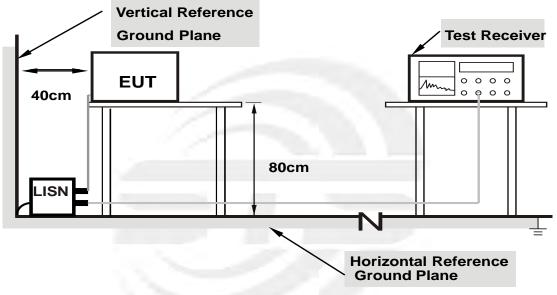
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.2 TEST PROCEDURE

- a. The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN is at least 80 cm from the nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.3 TEST SETUP



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support units.

3.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



3.5 TEST RESULTS

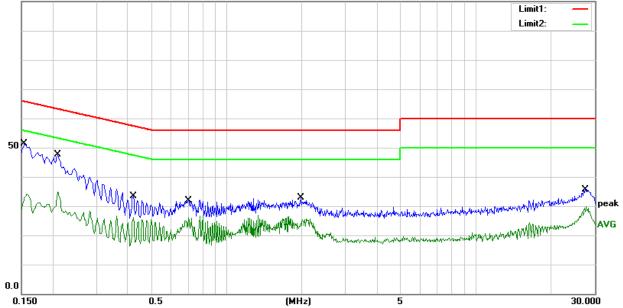
Temperature:	25.2(C)	Relative Humidity:	49%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 4		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(d B)	(dBuV)	(dBuV)	(dB)	
1	0.1540	31.02	20.33	51.35	65.78	-14.43	QP
2	0.1540	13.75	20.33	34.08	55.78	-21.70	AVG
3	0.2100	27.27	20.35	47.62	63.21	-15.59	QP
4	0.2100	14.53	20.35	34.88	53.21	-18.33	AVG
5	0.4220	12.84	20.54	33.38	57.41	-24.03	QP
6	0.4220	5.60	20.54	26.14	47.41	-21.27	AVG
7	0.7020	11.55	20.35	31.90	56.00	-24.10	QP
8	0.7020	5.89	20.35	26.24	46.00	-19.76	AVG
9	1.9860	12.58	20.30	32.88	56.00	-23.12	QP
10	1.9860	5.38	20.30	25.68	46.00	-20.32	AVG
11	27.4260	12.76	22.76	35.52	60.00	-24.48	QP
12	27.4260	7.04	22.76	29.80	50.00	-20.20	AVG

Remark:

- 1. All readings are Quasi-Peak and Average values
- 2. Margin = Result (Result = Reading + Factor)–Limit
- 3. Factor=LISN factor+Cable loss+Limiter (10dB)

100.0 dBuV



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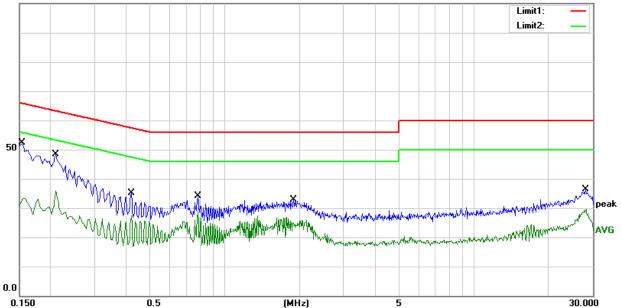
Temperature:	25.2(C)	Relative Humidity:	49%RH
Test Voltage:	AC 120V/60Hz	Phase:	Ν
Test Mode:	Mode 4		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(d B)	(dBuV)	(dBuV)	(dB)	
1	0.1540	32.07	20.30	52.37	65.78	-13.41	QP
2	0.1540	13.09	20.30	33.39	55.78	-22.39	AVG
3	0.2100	27.82	20.44	48.26	63.21	-14.95	QP
4	0.2100	15.44	20.44	35.88	53.21	-17.33	AVG
5	0.4220	14.52	20.55	35.07	57.41	-22.34	QP
6	0.4220	6.88	20.55	27.43	47.41	-19.98	AVG
7	0.7820	13.71	20.35	34.06	56.00	-21.94	QP
8	0.7820	8.51	20.35	28.86	46.00	-17.14	AVG
9	1.8940	12.52	20.38	32.90	56.00	-23.10	QP
10	1.8940	5.55	20.38	25.93	46.00	-20.07	AVG
11	28.1060	13.45	23.00	36.45	60.00	-23.55	QP
12	28.1060	6.51	23.00	29.51	50.00	-20.49	AVG

Remark:

- 1. All readings are Quasi-Peak and Average values
- 2. Margin = Result (Result = Reading + Factor)-Limit
- 3. Factor=LISN factor+Cable loss+Limiter (10dB)

100.0 dBuV



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4. RADIATED EMISSION MEASUREMENT

4.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (Frequency Range 9kHz-1000MHz)

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

	(dBuV/m) (at 3M)		
FREQUENCY (MHz)	PEAK	AVERAGE	
Above 1000	74	54	

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

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For Radiated Emission

Spectrum Parameter	Setting		
Attenuation	Auto		
Detector	Peak/QP/AV		
Start Frequency	9 KHz/150KHz(Peak/QP/AV)		
Stop Frequency	150KHz/30MHz(Peak/QP/AV)		
	200Hz (From 9kHz to 0.15MHz)/		
RB / VB (emission in restricted	9KHz (From 0.15MHz to 30MHz);		
band)	200Hz (From 9kHz to 0.15MHz)/		
	9KHz (From 0.15MHz to 30MHz)		

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP
Start Frequency	30 MHz(Peak/QP)
Stop Frequency	1000 MHz (Peak/QP)
RB / VB (emission in restricted band)	120 KHz / 300 KHz

Spectrum Parameter	Setting		
Attenuation	Auto		
Detector	Peak/AV		
Start Frequency	1000 MHz(Peak/AV)		
Stop Frequency	10th carrier hamonic(Peak/AV)		
RB / VB (emission in restricted	1 MHz / 3 MHz(Peak)		
band)	1 MHz/1/T MHz(AVG)		

For Restricted band

Spectrum Parameter	Setting		
Detector	Peak/AV		
Stort/Stop Eroguopov	Lower Band Edge: 2310 to 2410 MHz		
Start/Stop Frequency	Upper Band Edge: 2475 to 2500 MHz		
	1 MHz / 3 MHz(Peak)		
RB / VB	1 MHz/1/T MHz(AVG)		

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Receiver Parameter	Setting
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

4.2 TEST PROCEDURE

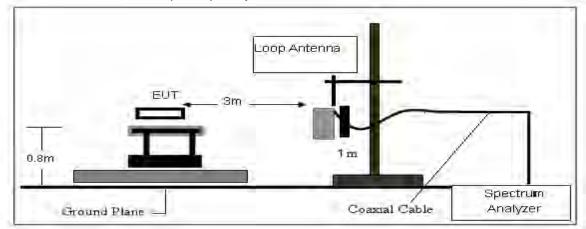
- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- c. The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and QuasiPeak detector mode will be re-measured.
- e. If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

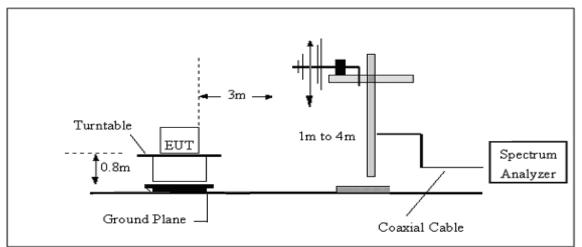


4.3 TEST SETUP

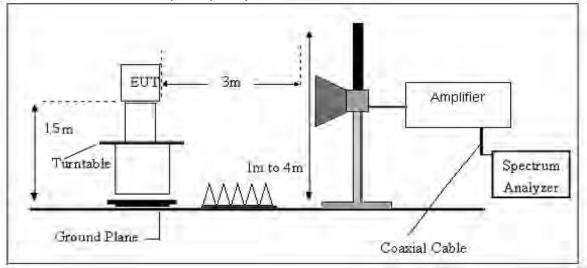
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



4.4 EUT OPERATING CONDITIONS Please refer to section 3.4 of this report.



4.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AGWhere FS = Field Strength CL = Cable Attenuation Factor (Cable Loss) RA = Reading Amplitude AG = Amplifier Gain AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

Factor=AF+CL-AG





4.6 TEST RESULTS

(Between 9KHz - 30 MHz)

Temperature:	23.1(C)	Relative Humidtity:	60%RH
Test Voltage:	DC 3.7V	Polarization:	
Test Mode:	TX Mode		

Freq.	Reading Limit Margin		Margin	State	
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F	
				PASS	
				PASS	

Note:

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

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.





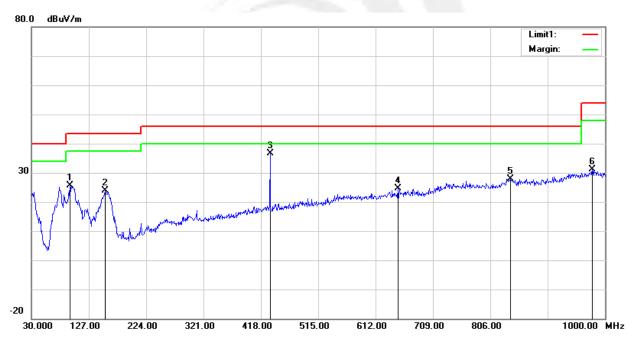
(30MHz -1000MHz)

Temperature:	23.1(C)	Relative Humidity:	60%RH		
Test Voltage:	DC 3.7V	Phase:	Horizontal		
Test Mode:	Mode 1/2/3 (Mode 2 worst mode)				

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	94.9900	46.42	-20.78	25.64	43.50	-17.86	peak
2	154.1600	42.49	-18.60	23.89	43.50	-19.61	peak
3	433.5200	46.66	-10.13	36.53	46.00	-9.47	peak
4	649.8300	29.43	-4.90	24.53	46.00	-21.47	peak
5	839.9500	28.10	-0.34	27.76	46.00	-18.24	peak
6	978.6600	28.58	2.58	31.16	54.00	-22.84	peak

Remark:

- 1. Margin = Result (Result = Reading + Factor)-Limit
- 2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





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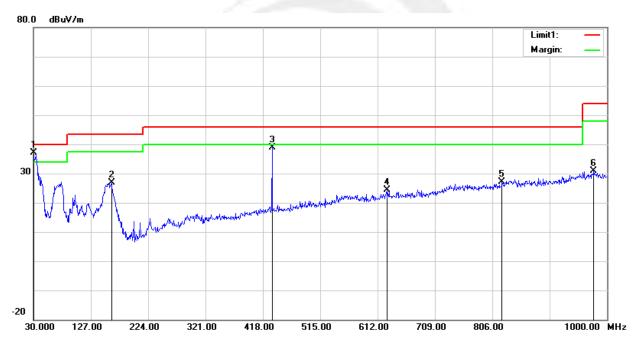
Temperature:	23.1(C)	Relative Humidity:	60%RH		
Test Voltage:	DC 3.7V	Phase:	Vertical		
Test Mode:	Mode 1/2/3 (Mode 2 worst mode)				

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	50.02	-12.85	37.17	40.00	-2.83	peak
2	161.9200	45.93	-19.01	26.92	43.50	-16.58	peak
3	433.5200	48.94	-10.13	38.81	46.00	-7.19	peak
4	627.5200	29.65	-5.15	24.50	46.00	-21.50	peak
5	822.4900	28.85	-1.66	27.19	46.00	-18.81	peak
6	977.6900	28.40	2.52	30.92	54.00	-23.08	peak

Remark:

1. Margin = Result (Result = Reading + Factor)-Limit

2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



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(1GHz-25GHz) Spurious emission Requirements

GFSK

Comment	Detector	Margin	Limits	Emission Level	Corrected Factor	Antenna Factor	Loss	Amplifier	Meter Reading	Frequency
	Туре	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(dB/m)	(dB)	(dB)	(dBµV)	(MHz)
				2404 MHz)	nannel (GFSK/2	Low Ch				
Vertical	PK	-22.60	74.00	51.40	-9.80	28.20	6.70	44.70	61.20	3264.66
Vertical	AV	-13.62	54.00	40.38	-9.80	28.20	6.70	44.70	50.18	3264.66
Horizontal	PK	-21.96	74.00	52.04	-9.80	28.20	6.70	44.70	61.84	3264.70
Horizontal	AV	-12.61	54.00	41.39	-9.80	28.20	6.70	44.70	51.19	3264.70
Vertical	PK	-18.22	74.00	55.78	-3.56	31.60	9.04	44.20	59.34	4804.39
Vertical	AV	-7.05	54.00	46.95	-3.56	31.60	9.04	44.20	50.51	4804.39
Horizontal	PK	-19.14	74.00	54.86	-3.56	31.60	9.04	44.20	58.42	4804.58
Horizontal	AV	-7.19	54.00	46.81	-3.56	31.60	9.04	44.20	50.37	4804.58
Vertical	PK	-27.29	74.00	46.71	-2.34	32.00	9.86	44.20	49.05	5359.67
Vertical	AV	-16.26	54.00	37.74	-2.34	32.00	9.86	44.20	40.08	5359.67
Horizontal	PK	-28.41	74.00	45.59	-2.34	32.00	9.86	44.20	47.93	5359.62
Horizontal	AV	-17.99	54.00	36.01	-2.34	32.00	9.86	44.20	38.35	5359.62
Vertical	PK	-16.86	74.00	57.14	3.40	35.50	11.40	43.50	53.74	7205.93
Vertical	AV	-5.86	54.00	48.14	3.40	35.50	11.40	43.50	44.74	7205.93
Horizontal	PK	-16.07	74.00	57.93	3.40	35.50	11.40	43.50	54.53	7205.89
Horizontal	AV	-7.12	54.00	46.88	3.40	35.50	11.40	43.50	43.48	7205.89
				/2444 MHz)	hannel (GFSK	Middle C				
Vertical	PK	-21.72	74.00	52.28	-9.80	28.20	6.70	44.70	62.08	3263.22
Vertical	AV	-13.65	54.00	40.35	-9.80	28.20	6.70	44.70	50.15	3263.22
Horizontal	PK	-21.88	74.00	52.12	-9.80	28.20	6.70	44.70	61.92	3263.17
Horizontal	AV	-13.80	54.00	40.20	-9.80	28.20	6.70	44.70	50.00	3263.17
Vertical	PK	-18.84	74.00	55.16	-3.56	31.60	9.04	44.20	58.72	4879.88
Vertical	AV	-8.37	54.00	45.63	-3.56	31.60	9.04	44.20	49.19	4879.88
Horizontal	PK	-19.25	74.00	54.75	-3.56	31.60	9.04	44.20	58.31	4879.97
Horizontal	AV	-8.46	54.00	45.54	-3.56	31.60	9.04	44.20	49.10	4879.97
Vertical	PK	-27.19	74.00	46.81	-2.34	32.00	9.86	44.20	49.15	5357.18
Vertical	AV	-17.02	54.00	36.98	-2.34	32.00	9.86	44.20	39.32	5357.18
Horizontal	PK	-29.25	74.00	44.75	-2.34	32.00	9.86	44.20	47.09	5357.39
Horizontal	AV	-17.90	54.00	36.10	-2.34	32.00	9.86	44.20	38.44	5357.08
Vertical	PK	-16.68	74.00	57.32	3.40	35.50	11.40	43.50	53.92	7320.85
Vertical	AV	-5.87	54.00	48.13	3.40	35.50	11.40	43.50	44.73	7320.85
Horizontal	PK	-16.26	74.00	57.74	3.40	35.50	11.40	43.50	54.34	7320.53
Horizontal	AV	-5.66	54.00	48.34	3.40	35.50	11.40	43.50	44.94	7320.53



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				High Char	nnel (GFSK/	2480 MHz)				
3264.63	60.86	44.70	6.70	28.20	-9.80	51.06	74.00	-22.94	PK	Vertical
3264.63	50.99	44.70	6.70	28.20	-9.80	41.19	54.00	-12.81	AV	Vertical
3264.85	61.91	44.70	6.70	28.20	-9.80	52.11	74.00	-21.89	PK	Horizontal
3264.85	50.22	44.70	6.70	28.20	-9.80	40.42	54.00	-13.58	AV	Horizontal
4960.55	58.94	44.20	9.04	31.60	-3.56	55.38	74.00	-18.62	PK	Vertical
4960.55	50.29	44.20	9.04	31.60	-3.56	46.73	54.00	-7.27	AV	Vertical
4960.50	59.39	44.20	9.04	31.60	-3.56	55.83	74.00	-18.17	PK	Horizontal
4960.50	49.60	44.20	9.04	31.60	-3.56	46.04	54.00	-7.96	AV	Horizontal
5359.87	48.74	44.20	9.86	32.00	-2.34	46.40	74.00	-27.60	PK	Vertical
5359.87	39.42	44.20	9.86	32.00	-2.34	37.08	54.00	-16.92	AV	Vertical
5359.75	47.61	44.20	9.86	32.00	-2.34	45.27	74.00	-28.73	PK	Horizontal
5359.75	39.32	44.20	9.86	32.00	-2.34	36.98	54.00	-17.02	AV	Horizontal
7439.72	54.27	43.50	11.40	35.50	3.40	57.67	74.00	-16.33	PK	Vertical
7439.72	43.68	43.50	11.40	35.50	3.40	47.08	54.00	-6.92	AV	Vertical
7439.89	53.53	43.50	11.40	35.50	3.40	56.93	74.00	-17.07	PK	Horizontal
7439.89	44.62	43.50	11.40	35.50	3.40	48.02	54.00	-5.98	AV	Horizontal

Note:

1) Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Emission Level = Reading + Factor

2) The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.

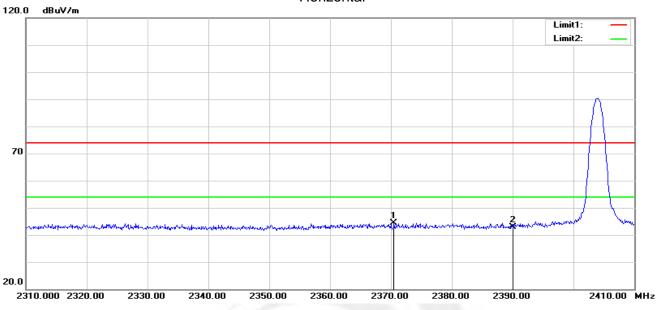




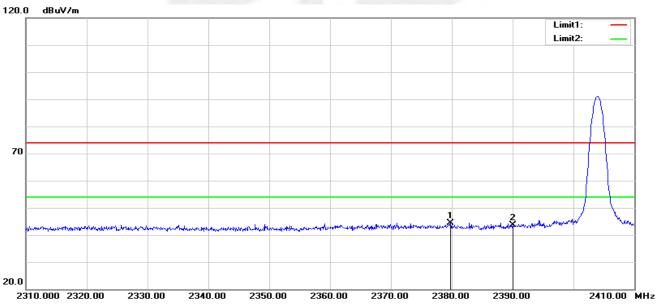
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4.6 TEST RESULTS (Restricted Bands Requirements)

GFSK-Low Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2370.500	40.38	4.05	44.43	74.00	-29.57	peak
2	2390.000	38.55	4.34	42.89	74.00	-31.11	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2379.800	40.25	4.19	44.44	74.00	-29.56	peak
2	2390.000	39.32	4.34	43.66	74.00	-30.34	peak

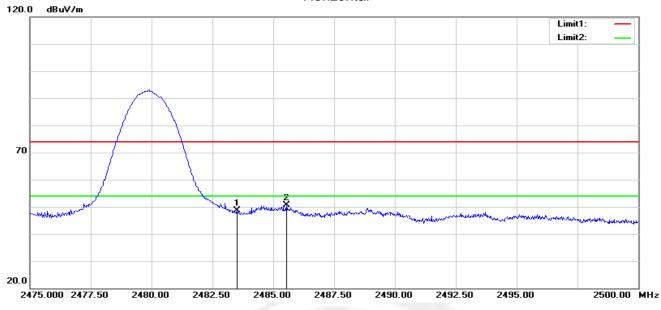
Vertical



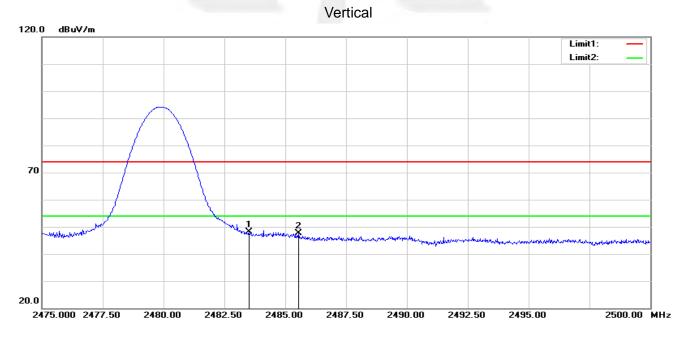
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GFSK-High Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	44.08	4.60	48.68	74.00	-25.32	peak
2	2485.550	46.01	4.61	50.62	74.00	-23.38	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	43.58	4.60	48.18	74.00	-25.82	peak
2	2485.550	43.01	4.61	47.62	74.00	-26.38	peak



5. CONDUCTED SPURIOUS & BAND EDGE EMISSION

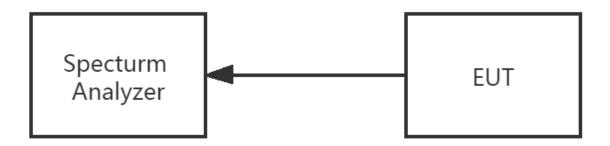
5.1 LIMIT

According to FCC section 15.247(d), in any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.2 TEST PROCEDURE

Spectrum Parameter	Setting			
Detector	Peak			
Start/Stop Frequency	30 MHz to 10th carrier harmonic			
RB / VB (emission in restricted band)	100 KHz/300 KHz			
Trace-Mode:	Max hold			
For Band edge				
Spectrum Parameter	Setting			
Detector	Peak			
	Lower Band Edge: 2300 – 2407 MHz			
Start/Stop Frequency	Upper Band Edge: 2475 – 2500 MHz			
RB / VB (emission in restricted band)	100 KHz/300 KHz			

5.3 TEST SETUP



The EUT is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna termina is 50 Ohm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth(RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

5.4 EUT OPERATION CONDITIONS Please refer to section 3.4 of this report.

Trace-Mode:

5.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.

Shenzhen STS Test Services Co., Ltd.

A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China Tel: +86-755 3688 6288 Fax:+86-755 3688 6277 Http://www.stsapp.com E-mail: sts@stsapp.com

Max hold



6. POWER SPECTRAL DENSITY TEST

6.1 LIMIT

FCC Part 15.247,Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247(e)	Power Spectral Density	≤8 dBm (RBW≥3KHz)	2400-2483.5	PASS	

6.2 TEST PROCEDURE

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times the DTS channel bandwidth.
- 3. Set the RBW to: 100 kHz \ge RBW \ge 3 kHz.
- 4. Set the VBW \geq 3 x RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.3 TEST SETUP



6.4 EUT OPERATION CONDITIONS Please refer to section 3.4 of this report.

6.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



7. BANDWIDTH TEST

7.1 LIMIT

FCC Part 15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

7.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW \geq 3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be \geq 6 dB.

7.3 TEST SETUP



7.4 EUT OPERATION CONDITIONS Please refer to section 3.4 of this report.

7.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



8. PEAK OUTPUT POWER TEST

8.1 LIMIT

FCC Part 15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

8.2 TEST PROCEDURE

One of the following procedures may be used to determine the maximum peak conducted output power of a DTS EUT.

 $RBW \ge DTS$ bandwidth

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

a) Set the RBW \geq DTS bandwidth.

b) Set VBW \geq [3 × RBW].

c) Set span \geq [3 × RBW].

d) Sweep time = auto couple.

e) Detector = peak.

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

h) Use peak marker function to determine the peak amplitude level.

Integrated band power method:

The following procedure can be used when the maximum available RBW of the instrument is less than the

DTS bandwidth:

a) Set the RBW = 1 MHz.

b) Set the VBW \geq [3 × RBW].

c) Set the span \geq [1.5 × DTS bandwidth].

d) Detector = peak.

e) Sweep time = auto couple.

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

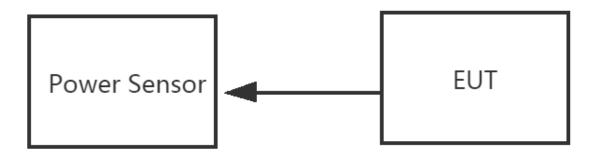
h) Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.



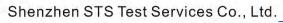
8.3 TEST SETUP



8.4 EUT OPERATION CONDITIONS Please refer to section 3.4 of this report.

8.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.





9. ANTENNA REQUIREMENT

9.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

9.2 EUT ANTENNA

The EUT antenna is Ceramic Antenna. It comply with the standard requirement.



Shenzhen STS Test Services Co., Ltd.



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APPENDIX 1-TEST DATA

1. Duty Cycle

Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	2.4G	2404	5.62	9.41	2.18
NVNT	2.4G	2444	5.62	9.5	2.18
NVNT	2.4G	2480	5.65	9.48	2.16



Shenzhen STS Test Services Co., Ltd.



		,	Te: Cycle N	st Grapł VNT 2.4	ns G 2404M	MHz		
A <mark>gilent Spect</mark> K <mark>/</mark> R L	<mark>rum Analyzer - Swept</mark> RF 50 Ω 4		SENSE:PU	JLSE	ALIGNAUTO		06:55	:00 PM May 17, 202
Center F	req 2.404000	PN		rig: Free Run Atten: 30 dB	Avg T	ype: Log-Pwr		TRACE 1 2 3 4 5 TYPE WWWWW DET P N N N N
10 dB/div	Ref Offset 0.5 dl Ref 20.00 dB							l 7.743 m 24.88 dBn
10.0					,			
0.00					•		r 4	
-10.0		<u> </u>						
-20.0								
-40.0								
	and a statistication of the state in the state					And the second of the second o		Terrer Street and the second
-60.0 	an paraka ku ana ang ang ang ang ang ang ang ang ang		Alasta (Margarita)	energinen seise vie	and as not a family should be a	in the later of the first state of the		معراديم فيليكم والمتلاك ومت
	.404000000 GH;	7						Span 0 H
Res BW '		£	#VBW 3.	.0 MHz		Swee	p 30.00 m	s (10001 pts
MKR MODE T	1 t	× 7.743 ms	-24.88 dBm		FUNCTION WIDTH		FUNCTION VALUE	
2 N 3 N	1 t 1 t	15.45 ms 15.91 ms	-3.88 dBm -1.95 dBm	1 1				
4 5								
6 7 8								
9 10								
11								
ISG					STATU	IS		
ISG		Duty	Cycle N	VNT 2.4				
gilent Spectr	rum Analyzer - Swept	SA	Cycle N		G 2444N		02:00	
A <mark>gilent Spect</mark> i Ø RL	rum Analyzer - Swept RF 50 Ω A Freq 2.4440000	SA AC OOO GHz	SENSE:PL	JLSE	G 2444		07:08	:52 PM May 17, 202 TRACE 1 2 3 4 5
A <mark>gilent Spect</mark> i Ø RL	RF 50Ω /	SA AC DOO GHz PN	SENSE:PL		G 2444	MHz		52 PM May 17, 202 TRACE 1 2 3 4 5 TYPE WWWWWW DET P N N N N
gilent Spectr RL Center F 10 dB/div	RF 50Ω /	SA AC DOO GHz IFGa B	SENSE:PL 0: Fast ↔ Tr	JLSE	G 2444	MHz	Mkr1	52 PM May 17, 202 TRACE 1 2 3 4 5 TYPE WWWWW DET P N N N 3.882 m
agilent Spectr 9 RL Center F	RF 50 Ω A	SA AC DOO GHz IFGa B	SENSE:PL	JLSE	G 2444	MHz	Mkr1	52 PM May 17, 202 TRACE 1 2 3 4 5 TYPE WWWWW DET P N N N 3.882 m
Center F	RF 50 Ω A	SA AC DOO GHz IFGa B	SENSE:PL 0: Fast ↔ Tr	JLSE	G 2444	MHz	Mkr1	52 PM May 17, 202 TRACE 1 2 3 4 5 TYPE WWWWW DET P N N N 3.882 m
glient Spect RL Center F -09 10.0 -00 -00	RF 50 Ω A	SA AC DOO GHz IFGa B	SENSE:PL 0: Fast \rightarrow Tr ain:Low #A	JLSE	G 2444	MHz	Mkr1	52 PM May 17, 202 TRACE 1 2 3 4 5 TYPE WWWWW DET P N N N 3.882 m
Center F	RF 50 Ω A	SA AC DOO GHz IFGa B	SENSE:PL 0: Fast \rightarrow Tr ain:Low #A	JLSE	G 2444	MHz	Mkr1	52 PM May 17, 202 TRACE 1 2 3 4 5 TYPE WWWWWW DET P N N N 3.882 m
glient Spectr RL Center F 10 dB/div - 0g - 0 0.00 - 10.0 - 20.0	RF 50 Ω A	SA AC DOO GHz IFGa B	SENSE:PL 0: Fast \rightarrow Tr ain:Low #A	JLSE	G 2444	MHz	Mkr1	52 PM May 17, 202 TRACE 1 2 3 4 5 TYPE WWWWW DET P N N N 3.882 m
gllent Spect a RL Center F 10 dB/div 0g 10.0 0.00 10.0 .000 <td< td=""><td>REF 50 Q 4</td><td>SA AC PN PN PN PN PN PN PN PN PN PN</td><td>SENSE:PL</td><td>ISE ig: Free Run tten: 30 dB</td><td></td><td>ype: Log-Pwr</td><td></td><td>52 PM May 17, 202 TRACE 12 3 4 5 TYPE WWWWWW DET P N N N N 13.882 ms 10.61 dBn</td></td<>	REF 50 Q 4	SA AC PN PN PN PN PN PN PN PN PN PN	SENSE:PL	ISE ig: Free Run tten: 30 dB		ype: Log-Pwr		52 PM May 17, 202 TRACE 12 3 4 5 TYPE WWWWWW DET P N N N N 13.882 ms 10.61 dBn
gllent Spect RL Center F 10 dB/div 0g 10.0 0.00 .00	REF 50 Q 4	SA AC PN: IFG: B S: M IFG: AC PN: IFG: AC PN: AC PN: A	SENSE:PL	ISE ig: Free Run tten: 30 dB		ype: Log-Pwr		52 PM May 17, 202 TRACE 12 3 4 5 TYPE WWWWWW DET P N N N N 13.882 ms 10.61 dBn
glent Spect R L Center F 20 dB/div 40 dB/div	Ref Offset 0.5 dl Ref 20.00 dB	SA AC PN: IFG: B m - - - - - - - - - - - - - - - - - -	SENSE:PL	ISE ig: Free Run tten: 30 dB		ype: Log-Pwr		
glent Spect R L Center F 20 dB/div 40 dB/div	Ref Offset 0.5 dl Ref 20.00 dB	SA AC PN: IFG: B m - - - - - - - - - - - - - - - - - -	SENSE:PL	JJE		ype: Log-Pwr		52 PM May 17, 202 TRACE 12 3 4 5 TYPE WWWWWW DET P N N N N 13.882 ms 10.61 dBn
glient Spect RL Center F 10 dB/div 00 d	Ref Offset 0.5 dl Ref 20.00 dB	SA AC PN PN IFG: B m AC PN PN FG: PN FG: AC PN FG: PN FG: AC PN FG: FG: PN FG: FG: FG: FG: FG: FG: FG: FG:	SENSE:PL O: Fast \rightarrow Tr ain:Low 3 3 3 3 4 4 4 4 4 4 4 4	1.5E		ype: Log-Pwr		52 PM May 17, 202 TRACE 123 4 5 TYPE 123 4
Image: second	Ref Offset 0.5 dl Ref 20.00 dB	SA AC PN: IFG: B m - - - - - - - - - - - - - - - - - -	SENSE:PU O: Fast \rightarrow Tr ain:Low #A	USE rig: Free Run tten: 30 dB rid(nt d) de politi politicity de politicity politicity de politicity politi		ype: Log-Pwr	Mkr 	52 PM May 17, 202 TRACE 123 4 5 TYPE 123 4
gilent Spect Center F Og Og <thog< th=""> Og</thog<>	Ref Offset 0.5 dl Ref 20.00 dB Ref 20.00 dB	SA AC PN PN IFG B m AC PN IFG B m Z X 3.882 ms 11.60 ms	SENSE:PC 0: Fast Tr ain:Low ## 	USE rig: Free Run tten: 30 dB rid(nt d) de politi politicity de politicity politicity de politicity politi		ype: Log-Pwr	Mkr 	52 PM May 17, 202 TRACE 123 4 5 TYPE 123 4
Image: second	Ref Offset 0.5 dl Ref 20.00 dB Ref 20.00 dB	SA AC PN PN IFG B m AC PN IFG B m Z X 3.882 ms 11.60 ms	SENSE:PC 0: Fast Tr ain:Low ## 	USE rig: Free Run tten: 30 dB rid(nt d) de politi politicity de politicity politicity de politicity politi		ype: Log-Pwr	Mkr 	52 PM May 17, 202 TRACE 123 4 5 TYPE 123 4
Image: second	Ref Offset 0.5 dl Ref 20.00 dB Ref 20.00 dB	SA AC PN PN IFG B m AC PN IFG B m Z X 3.882 ms 11.60 ms	SENSE:PC 0: Fast Tr ain:Low ## 	USE rig: Free Run tten: 30 dB rid(nt d) de politi politicity de politicity politicity de politicity politi		ype: Log-Pwr	Mkr 	52 PM May 17, 200 TRACE 1 3 4 5 TYPE 1 3 4 5 TYPE P NNNN 1 3.882 m 10.61 dBn 1
gitent Spect Center F Center F 10.0 0.0 <th0.0<< td=""><td>Ref Offset 0.5 dl Ref 20.00 dB Ref 20.00 dB</td><td>SA AC PN PN IFG B m AC PN IFG B m Z X 3.882 ms 11.60 ms</td><td>SENSE:PC 0: Fast Tr ain:Low ## </td><td>USE rig: Free Run tten: 30 dB rid(nt d) de politi politicity de politicity politicity de politicity politi</td><td></td><td>ype: Log-Pwr</td><td>Mkr </td><td>52 PM May 17, 200 TRACE 1 3 4 5 TYPE 1 3 4 5 TYPE P NNNN 1 3.882 m 10.61 dBn 1</td></th0.0<<>	Ref Offset 0.5 dl Ref 20.00 dB Ref 20.00 dB	SA AC PN PN IFG B m AC PN IFG B m Z X 3.882 ms 11.60 ms	SENSE:PC 0: Fast Tr ain:Low ## 	USE rig: Free Run tten: 30 dB rid(nt d) de politi politicity de politicity politicity de politicity politi		ype: Log-Pwr	Mkr 	52 PM May 17, 200 TRACE 1 3 4 5 TYPE 1 3 4 5 TYPE P NNNN 1 3.882 m 10.61 dBn 1



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Duty Cycle NVNT 2.4G 2480MHz

Agilent Spectr	um Analyzer - Swept S RF 50 Ω AG		SENS	E:PULSE	AL	IGNAUTO		07:22:	18 PM May 17, 2022
Center Fr	req 2.4800000	Р	NO: Fast 🔸	Trig: Free #Atten: 30		Avg Typ	e: Log-Pwr		TRACE 1 2 3 4 5 6 TYPE WWWWWWW DET P N N N N
10 dB/div	Ref Offset 0.5 dB Ref 20.00 dBn							Mkr1	2.412 ms •1.58 dBm
Log 10.0	<u> </u>								
0.00						ru -		r	• -
-10.0			3						
-20.0									
-40.0									
-50.0							and the state of the	liter and a straight	11 Captor Including
-60.0 <mark>- 1⁴¹⁴¹1141</mark>	lil <mark>i. Biz biz dike alis aji aji biy</mark>	e haadhathadhalagaaqaan	and the second	ka hai dhatai ta	li yyrianida feffili e yyr	ali da apala at	ya ni mat, alia hiti, hitak awa k M	a takili i jarahati i	a klassia ba a shata
-70.0									
Center 2.4 Res BW 1	180000000 GHz .0 MHz		#VBW	/ 3.0 MHz	:		Sweep	30.00 ms	Span 0 Hz (10001 pts)
MKR MODE TE	RC SCL	× 2.412 ms	Y -1.58 d		ICTION FUNC	TION WIDTH	F	UNCTION VALUE	^
2 N 1 3 N 1	t	10.13 ms 10.59 ms	-1.58 d -24.57 d -17.67 d	Bm					
4 5		10.05 1113	-17.07 4	5111					
6 7									
8 9									
10 11									~
K MSG						STATUS			>



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2. Maximum Average Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2404	-9.52	9.41	-0.11	<=30	Pass
NVNT	2.4G	2444	-8.82	9.5	0.68	<=30	Pass
NVNT	2.4G	2480	-9.65	9.48	-0.17	<=30	Pass



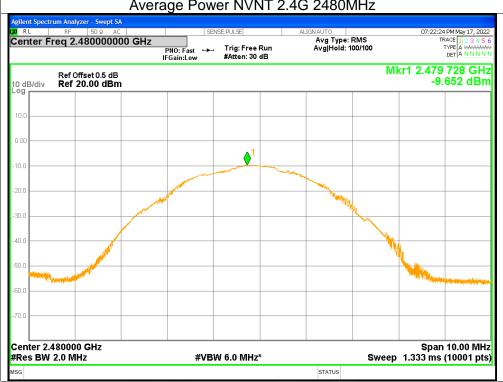
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	۸.	Iorogo Dour	Fest Graphs		
vilent Speet	AN rum Analyzer - Swept SA	verage Pow	erinvint 2.4	4G 2404MHz	
RL	RF 50 Ω AC		SE:PULSE	ALIGNAUTO	06:52:56 PM May 17, 202
enter F	req 2.404000000 GI	PNO: Fast +++	Trig: Free Run	Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE A WWWW DET A N N N N
		IFGain:Low	#Atten: 30 dB		Mkr1 2.403 720 GH
0 dB/div	Ref Offset 0.5 dB Ref 20.00 dBm				-9.524 dBr
^{og}					
10.0					
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0.0		سر الم			
		North Contraction			
20.0		august a start and a start a st		and a second sec	
30.0	/				
10.0					
10.0					
50.0					
50.0					
0.0					
	404000 GHz 2.0 MHz	#\/R\/	V 6.0 MHz*	Sw	Span 10.00 MH eep 1.333 ms (10001 pt
G	2.0 19112	# • D •	V 0.0 IVITI2	STATUS	cep 1.555 m3 (10001 pt
	Δ	erade Pow	er NV/NT 2	4G 2444MHz	
vilent Speet		renage i en			
anancohaci	rum Analyzer - Swept SA				
RL	RF 50 Ω AC		SE:PULSE	ALIGNAUTO Avg Type: RMS	07:08:58 PM May 17, 202 TRACE 1 2 3 4 5
RL			SE:PULSE	ALIGNAUTO	TRACE 1 2 3 4 5
RL	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWW DET A N N N Mkr1 2.443 763 GH
enter F	RF 50Ω AC Treq 2.444000000 Gi	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
enter F	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWW DET A N N N Mkr1 2.443 763 GH
enter F	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
OdB/div	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
C dB/div	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
RL	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
RL Provide O dB/div 0 0.00 0 0.00 0	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
RL enter F 0 dB/div 0 g 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
RL enter F 0 dB/div 0 g 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	07:08:58 PM May 17, 202 TRACE [1:2:3:4:5 TYPACE [1:3:4:5 TYPACE [1:3
RL enter F 0 dB/div 00 000 000 000 000 000 000 000	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWW DET A N N N Mkr1 2.443 763 GH
RL Image: Content of the second	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWW DET A N N N Mkr1 2.443 763 GH
RL enter F 0 dB/div 29 0.00 0.00 0.00 0.00 0.00	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
RL enter F 0 dB/div 0 0	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
RL enter F 0 dB/div og 10.0 .000	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWW DET A N N N Mkr1 2.443 763 GH
RL enter F 0 dB/div og 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 12345 TYPE A WWWM DET A NNNN Mkr1 2.443 763 GH
RL enter F 0 dB/div 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	RF 50 Q AC Ireq 2.444000000 Gi Ref Offset 0.5 dB Ref 20.00 dBm	Hz PNO: Fast ↔	Trig: Free Run	ALIGNAUTO Avg Type: RMS	TRACE 23 4 5 TYPE 4 MMMM Det A MMMM -8.825 dBr
RL enter F 0 dB/div 0 d 0 d0	RF 50 Ω AC req 2.444000000 Gi Ref Offset 0.5 dB	Z PNO: Fast →→ IFGain:Low	Trig: Free Run	ALIGNAUTO Avg Type: RMS Avg Hold: 100/100	TRACE 12345 TYPE A WWWW DET A N N N Mkr1 2.443 763 GH



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Average Power NVNT 2.4G 2480MHz

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3. Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2404	1.3	0	1.3	<=30	Pass
NVNT	2.4G	2444	1.48	0	1.48	<=30	Pass
NVNT	2.4G	2480	1.11	0	1.11	<=30	Pass



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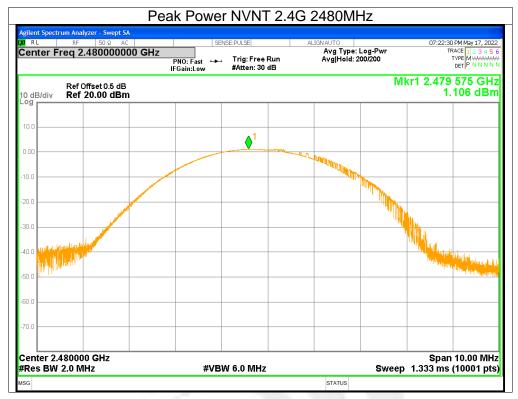


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Per lent Spectrum Analyzer - Swept SA	ak Power NVNT 2.4	IG 2404MHz	
RL RF 50Ω AC	SENSE:PULSE	ALIGNAUTO	06:52:48 PM May 17, 20
enter Freq 2.404000000 GHz	PNO: Fast +++ Trig: Free Run IFGain:Low #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 1000/1000	TRACE 1 2 3 4 TYPE MWWW DET P N N N
Ref Offset 0.5 dB	iroailtEuw #ntten. ov vD	Mki	1 2.403 607 GH
dB/div Ref 20.00 dBm			1.303 dB
.0	1		
0			
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.0			
		' <u>`</u>	
			C. Market Market
0			
.0			
nter 2.404000 GHz es BW 2.0 MHz			Span 10.00 MI
	#VBW 6.0 MHz	Sweep	1.333 ms (10001 p
	#VBW 6.0 MHz	Sweep Status	1.333 ms (10001 pi
	#VBW 6.0 MHz ak Power NVNT 2.4	STATUS	1.333 ms (10001 pi
Pe-	ak Power NVNT 2.4	status IG 2444MHz	
Pe. ent Spectrum Analyzer - Swept SA RL RF 50 Q AC	ak Power NVNT 2.4	STATUS	07:08:35 PM May 17, 20 TRACE] 2 3 4 4 TYPE M WWWW
Pe. ent Spectrum Analyzer - Swept SA RL RF 50 Q AC	ak Power NVNT 2.4	STATUS IG 2444MHz Alignauto Avg Type: Log-Pwr Avg Hold: 100/100	07:08:35 PM May 17, 20 TRACE 12.3.4 TYPE MWWWW DET P N N N
Pe. ent Spectrum Analyzer - Swept SA RL RF 50 Q AC inter Freq 2.4440000000 GHz Ref Offset 0.5 dB Ref Offset 0.5 dB Ref 20.00 dBm	ak Power NVNT 2.4	STATUS IG 2444MHz Alignauto Avg Type: Log-Pwr Avg Hold: 100/100	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWW DET P N N N 1 2.443 749 GH
Pe. ent Spectrum Analyzer - Swept SA RL RF 50 Q AC inter Freq 2.4440000000 GHz Ref Offset 0.5 dB Ref Offset 0.5 dB Ref 20.00 dBm	ak Power NVNT 2.4	STATUS IG 2444MHz Alignauto Avg Type: Log-Pwr Avg Hold: 100/100	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWW DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS IG 2444MHz Alignauto Avg Type: Log-Pwr Avg Hold: 100/100	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWW DET P N N N 1 2.443 749 GH
Pe.	ak Power NVNT 2.4	STATUS IG 2444MHz ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mkt	07:08:35 PM May 17, 20
Pe. Int Spectrum Analyzer - Swept SA RL RF 500 AC Enter Freq 2.4440000000 GHz dB/div Ref Offset 0.5 dB Ref 00ffset 0.5 dB	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe. Period Contract	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mkt	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Period Pe	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Period Pe	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Period	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS IG 2444MHz ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 100/100 Mki	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH
Pe.	Ak Power NVNT 2.4	STATUS	07:08:35 PM May 17, 20 TRACE 11 2 3 4 TYPE MWWWM DET P N N N 1 2.443 749 GH



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4. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2404	0.643	>=0.5	Pass
NVNT	2.4G	2444	0.671	>=0.5	Pass
NVNT	2.4G	2480	0.633	>=0.5	Pass



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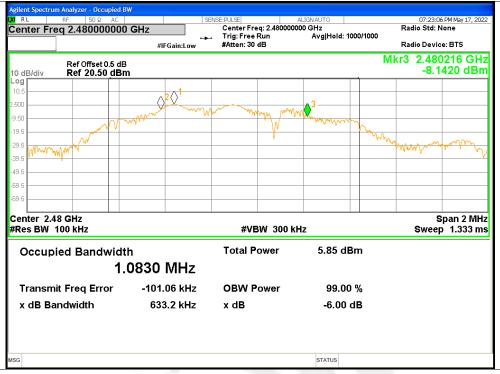


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-6dB Bandwidth NVNT 2.4G 2480MHz





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5. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	2.4G	2404	1.049
NVNT	2.4G	2444	1.063
NVNT	2.4G	2480	1.045



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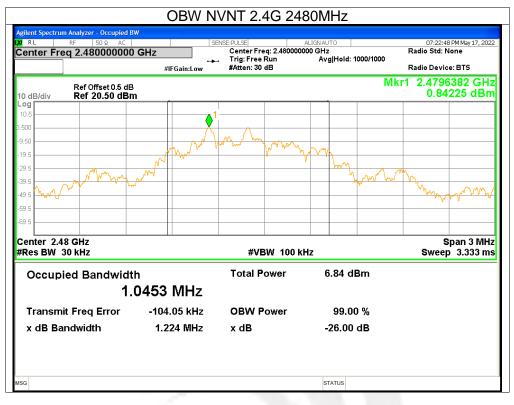
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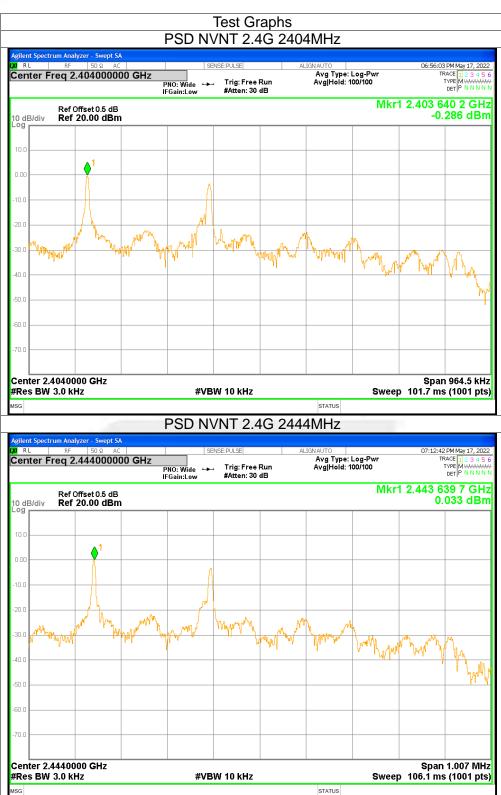
6. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	2.4G	2404	-0.29	0	-0.29	<=8	Pass
NVNT	2.4G	2444	0.03	0	0.03	<=8	Pass
NVNT	2.4G	2480	-0.89	0	-0.89	<=8	Pass



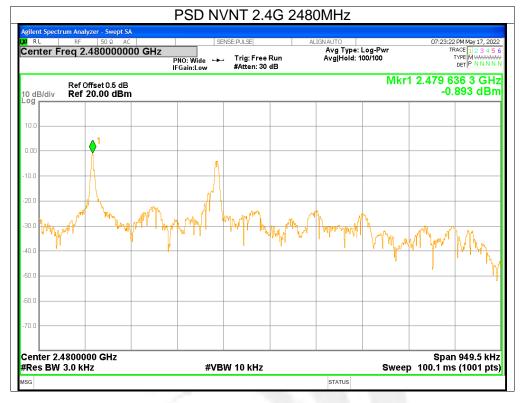
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7. Band Edge

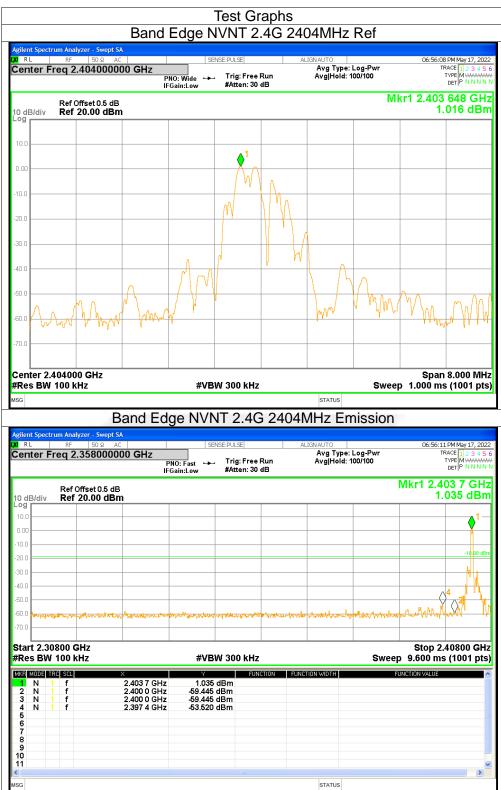
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2404	-54.54	<=-20	Pass
NVNT	2.4G	2480	-52.39	<=-20	Pass



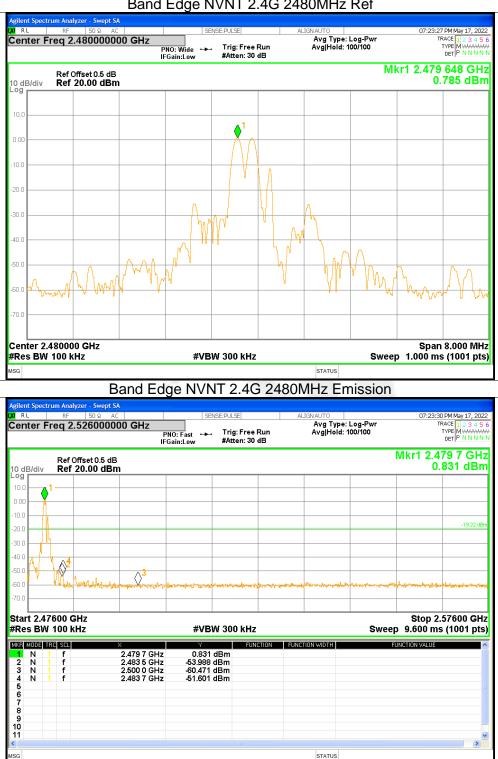
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Band Edge NVNT 2.4G 2480MHz Ref

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8. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2404	-45.35	<=-20	Pass
NVNT	2.4G	2444	-42.82	<=-20	Pass
NVNT	2.4G	2480	-46.57	<=-20	Pass



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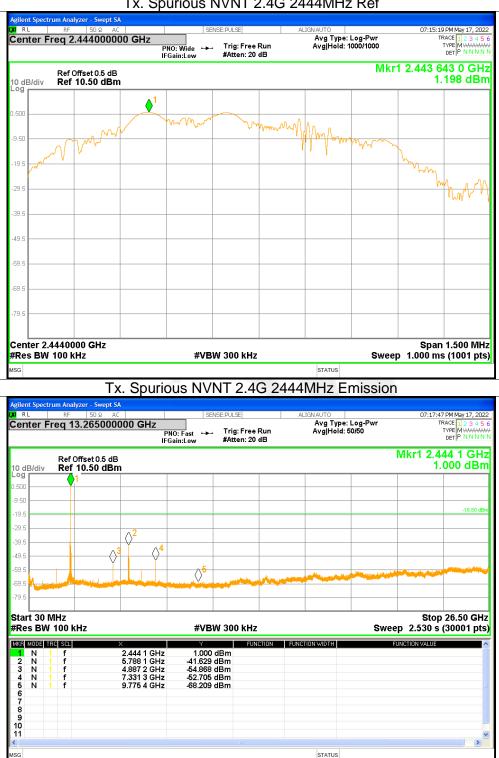


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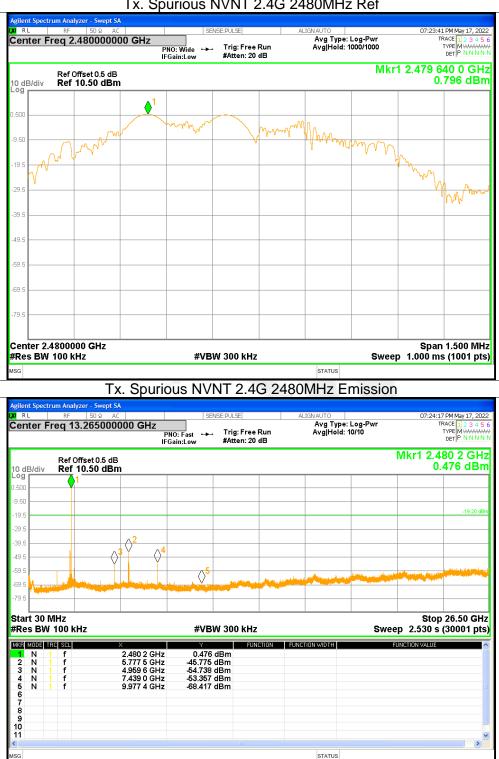
RL RF 50Ω AC Senter Freq 2.40400000		CENICE	:PULSE	ALIGNAUTO	07:05:04 PM May 17, 20
	IO GHZ	IO:Wide ↔	Trig: Free Run #Atten: 20 dB	Avg Type: Log-Pwr Avg Hold: 1000/1000	TRACE 1 2 3 4 5
Ref Offset 0.5 dB 0 dB/div Ref 10.50 dBm				Γ	Nkr1 2.403 641 5 GH 1.092 dBı
og	∮ ¹				
.500		rmm	Monn	An .	
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19.5				<u>ч</u>	Mhine m
29.5					· · · · · · · · · · · · · · · · · · ·
39.5					
49.5					
59.5					
69.5					
79.5					
center 2.4040000 GHz					On on 4 500 Mil
Res BW 100 kHz		#VBW	300 kHz	S	Span 1.500 MH weep 1.000 ms (1001 pt
sg				STATUS	-
gilent Spectrum Analyzer - Swept SA	•	ous NVN	1 2.4G 24	04MHz Emiss	ion
RL RF 50 Ω AC Center Freq 13.2650000		SENSE	:PULSE	ALIGNAUTO Avg Type: Log-Pwr	07:07:31 PM May 17, 20 TRACE 1 2 3 4 5 TYPE MWWWW
	Р		Trig: Free Run #Atten: 20 dB	Avg Hold: 50/50	
					Mkr1 2.403 5 GH 0.967 dBr
Ref Offset 0.5 dB					
10 dB/div Ref 10.50 dBm					
0 dB/div Ref 10.50 dBm 0 g 0 g 0 g 1 0 soo					.18.91.65
0 dB/div Ref 10.50 dBm .99 .500 9.50 9.50					-18.91 dE
0 dB/div Ref 10.50 dBm 9 9 9.50 9	2^{2} 4^{4}				-18,91 de
0 dB/div Ref 10.50 dBm 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2^{4}				-18.91 dE
0 dB/div Ref 10.50 dBm 9 50 9.50		Ç ⁵			
0 dB/div Ref 10.50 dBm 9 50 9 50 19 5 29 5 39 5 49 5 59 5 59 5 59 5 50 50 5 50 50 50 50 50 50 50 50 500		¢ ⁵			
0 dB/div Ref 10.50 dBm 9 50 19 5 29 5 39 5 49 5 59 5 50 50 5 50 50 5 50 5		5 	300 kHz		Stop 26.50 GH
0 dB/div Ref 10.50 dBm 9 dB/div Ref 10.50 dBm 9 50 9 50		Y	FUNCTION		Stop 26.50 GH
0 dB/div Ref 10.50 dBm 9 dB/div Ref 10.50 dBm 9 db 1 9 db 1	2.403 5 GHz 5.786 3 GHz 4.954 3 GHz	0.967 dE -44.266 dE -67.022 dE	FUNCTION Im Im		Stop 26.50 GH ;weep 2.530 s (30001 pt
0 dB/div Ref 10.50 dBm 9 50 9 50	2.403 5 GHz	0.967 dE -44.266 dE	FUNCTION Sm Sm Sm Sm		Stop 26.50 GH ;weep 2.530 s (30001 pt
ID dB/div Ref 10.50 dBm 09 1 09 1 99.50 1 19.50 1 19.50 1 19.50 1 19.50 1 19.50 1 19.50 1 19.50 1 22.5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 6 1 79.6 1 5 1 5 1 5 1 7 1 7 1 6 1	2.403 5 GHz 5.786 3 GHz 4.964 3 GHz 7.211 3 GHz	0.967 dE -44.266 dE -67.022 dE -48.073 dE	FUNCTION Sm Sm Sm Sm		Stop 26.50 GH ;weep 2.530 s (30001 pt
O dB/div Ref 10.50 dBm 09 1 9.50 1 9.50 1 19.5 1 29.5 1 39.5 1 39.5 1 39.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 59.5 1 50.5 1 51.5 1 52.5 1 53.5 1 5 1 6 1 70.5 1 50.5 1 50.5 1 50.5 1 50.5 1	2.403 5 GHz 5.786 3 GHz 4.964 3 GHz 7.211 3 GHz	0.967 dE -44.266 dE -67.022 dE -48.073 dE	FUNCTION Sm Sm Sm Sm		Stop 26.50 GH ;weep 2.530 s (30001 pt
ID dB/div Ref 10.50 dBm 09 1 09 1 99.50 1 19.50 1 19.50 1 19.50 1 19.50 1 19.50 1 19.50 1 19.50 1 22.5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 6 1 79.6 1 5 1 5 1 5 1 7 1 7 1 6 1	2.403 5 GHz 5.786 3 GHz 4.964 3 GHz 7.211 3 GHz	0.967 dE -44.266 dE -67.022 dE -48.073 dE	FUNCTION Sm Sm Sm Sm		Stop 26.50 GH ;weep 2.530 s (30001 pt



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APPENDIX 2- EUT TEST PHOTO

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

* * * * * END OF THE REPORT * * * *



Shenzhen STS Test Services Co., Ltd.