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RADIO TEST REPORT

Report No: STS1603034F01

Issued for

Shenzhen spring model electronics co .ltd

Floor4,Bid1,Longwangmiao Industrial Park,Fuyong Town,Bao
An District,ShenZhen,518103 China

Product Name:	Small fly rods
Brand Name:	N/A
Model Name:	A3102
Series Model:	N/A
FCC ID:	2AHPX- A3102
Test Standard:	FCC Part 15.247

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TEST RESULT CERTIFICATION

Applicant's name: Shenzhen spring model electronics co .ltd
Address.....: Floor4,Bid1,Longwangmiao Industrial Park,Fuyong Town,Bao An District,ShenZhen,518103 China

Manufacture's Name.....: Shenzhen spring model electronics co .ltd
Address.....: Floor4,Bid1,Longwangmiao Industrial Park,Fuyong Town,Bao An District,ShenZhen,518103 China

Product description

Product name: Small fly rods

Model and/or type reference .: A3102

Series Model.....: N/A

Standards: FCC Part15.247

Test procedure..... ANSI C63.10-2013 and ANSI C63.4-2014

This device described above has been tested by STS, and 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 (s) of performance of tests.....: 08 Mar. 2016 ~23 Mar. 2016

Date of Issue.....: 24 Mar. 2016

Test Result.....: **Pass**

Testing Engineer :

(Jin Ming)

Technical Manager :

(Vita Li)

Authorized Signatory :

(Bovey Yang)





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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	--	--
15.247 (a)(2)	6dB Bandwidth	PASS	--
15.247 (b)(3)	Output Power	PASS	Reference KDB 558074 d05 v02. /9.1.2&9.2.3
15.247 (c)	Radiated Spurious Emission	PASS	--
15.247 (d)	Conducted Spurious & Band Edge Emission	PASS	--
15.247 (e)	Power Spectral Density	PASS	--
15.205	Band Edge Emission	PASS	--
15.203	Antenna Requirement	PASS	--

NOTE:

(1) "--" denotes test is not applicable in this Test Report

(2) all tests are according to ANSI C63.10-2013 and ANSI C63.4-2014

1.1 TEST FACTORY

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F., Building B, Zhuoke Science Park, No.190,Chongqing Road,
Fuyong Street, Bao'an District, Shenzhen, Guangdong,China

CNAS Registration No.: L7649;

FCC Registration No.: 842334; IC Registration No.: 12108A-1



1.2 MEASUREMENT UNCERTAINTY

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 %**.

No.	Item	Uncertainty
1	Conducted Emission (9KHz-150KHz)	$\pm 2.88\text{dB}$
2	Conducted Emission (150KHz-30MHz)	$\pm 2.67\text{dB}$
3	RF power,conducted	$\pm 0.70\text{dB}$
4	Spurious emissions,conducted	$\pm 1.19\text{dB}$
5	All emissions,radiated(<30M) (9KHz-30MHz)	$\pm 2.45\text{dB}$
6	All emissions,radiated(<1G) 30MHz-200MHz	$\pm 2.83\text{dB}$
7	All emissions,radiated(<1G) 200MHz-1000MHz	$\pm 2.94\text{dB}$
8	All emissions,radiated(>1G)	$\pm 3.03\text{dB}$
9	Temperature	$\pm 0.5^{\circ}\text{C}$
10	Humidity	$\pm 2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Small fly rods	
Trade Name	N/A	
Model Name	A3102	
Series Model	N/A	
Model Difference	N/A	
Product Description	The EUT is a Small fly rods	
	Operation Frequency:	2404~2474 MHz
	Modulation Type:	GFSK
	Number Of Channel	71
	Antenna Designation:	Please see Note 3.
	Antenna Gain (dBi)	2 dBi
	Duty Cycle	>98%
Channel List	Please refer to the Note 2.	
Power Supply:	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity :400mAh	
Hardware version number	V1.0	
Software versioning number	V1.2	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note:

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



2.

Channel	Frequency (MHz)
00	2404
01	2405
02	2406
03	2407
.....
33	2437
34	2438
35	2439
36	2440
.....
65	2469
66	2470
67	2471
68	2472
69	2473
70	2474

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
A	N/A	A3102	built-in Antenna	N/A	2	ANT



2.2 DESCRIPTION OF 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..

Pretest Mode	Description	Data/Modulation
Mode 1	TX CH00(2404MHz)	1 MHz/GFSK
Mode 2	TX CH35(2439MHz)	1 MHz/GFSK
Mode 3	TX CH70(2474MHz)	1 MHz/GFSK

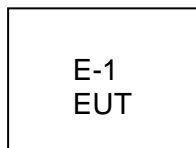
Note: new battery is used during all test





2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test





2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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.

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
E-1	Small fly rods	N/A	A3102	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Spectrum Analyzer	Agilent	E4407B	MY50140340	2015.10.25	2016.10.24
Test Receiver	R&S	ESCI	101427	2015.10.25	2016.10.24
Bilog Antenna	TESEQ	CBL6111D	34678	2015.11.25	2016.11.24
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1343	2016.03.06	2017.03.05
Horn Antenna	Schwarzbeck	BBHA 9170	9170-0741	2016.03.06	2017.03.05
50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2015.06.06	2016.06.05
PreAmplifier	Agilent	8449B	60538	2015.10.25	2016.10.24
Loop Antenna	ARA	PLA-1030/B	1029	2015.06.08	2016.06.07
Preamplifier	Agilent	8449B	60538	2015.11.05	2016.11.05
Low frequency cable	EM	R01	N/A	N/A	N/A
High frequency cable	SCHWARZBECK	AK9515H	SN-96286/96287	N/A	N/A

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
EMI Test Receiver	R&S	ESPI	102086	2015.11.20	2016.11.19
LISN	R&S	ENV216	101242	2015.10.25	2016.10.24
LISN	EMCO	3810/2NM	000-23625	2015.10.25	2016.10.24
Conduction Cable	EM	C01	N/A	N/A	N/A

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
USB RF power sensor	DARE	RPR3006W	15I00041SNO03	2015.10.25	2016.10.24
Spectrum Analyzer	Agilent	E4407B	MY50140340	2015.10.25	2016.10.24
Signal Analyzer	Agilent	N9020A	MY49100060	2015.11.18	2016.11.17



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

operating frequency band. In case the emission fall within the restricted band specified on Part 15.247&207(a) limit in the table below has to be followed.

FREQUENCY (MHz)	Conducted Emission limit (dBuV)	
	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

- a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 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 at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Vertical Reference Ground Plane

40cm

EUT

80cm

LISN

Test Receiver

Horizontal Reference Ground Plane

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

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.

Note: The built-in battery, do not apply



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 Part 15. 205(a)&209(a) limit in the table below has to be followed.

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

Frequencies (MHz)	Field Strength (micorvolts/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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class C (dBuV/m) (at 3M)	
	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).

For Radiated Emission

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

For Band edge

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 2300 to 2430 MHz Upper Band Edge: 2450 to 2500 MHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz, AV=1 MHz /10 Hz



Receiver Parameter	Setting
Attenuation	Auto
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

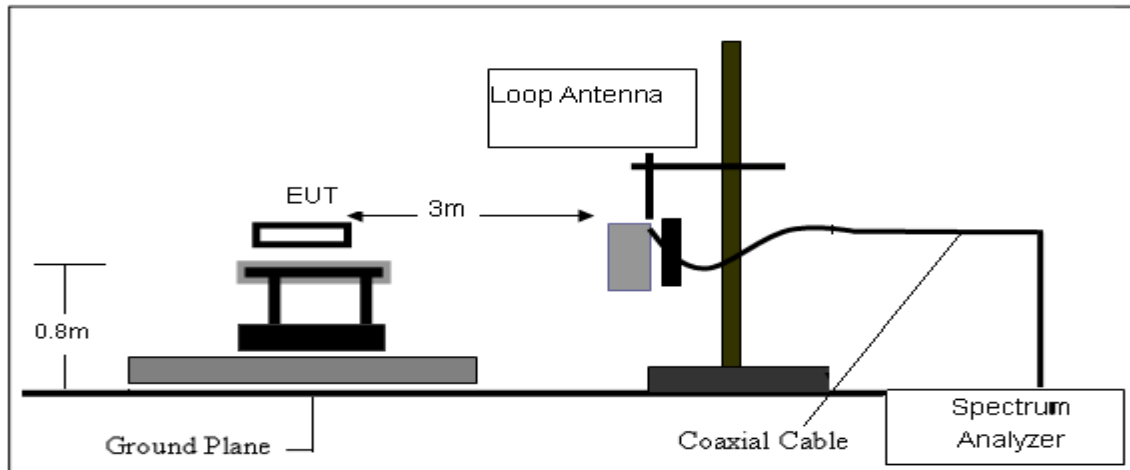
- The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters(above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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 polarizations of the antenna are set to make the measurement
- 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 then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

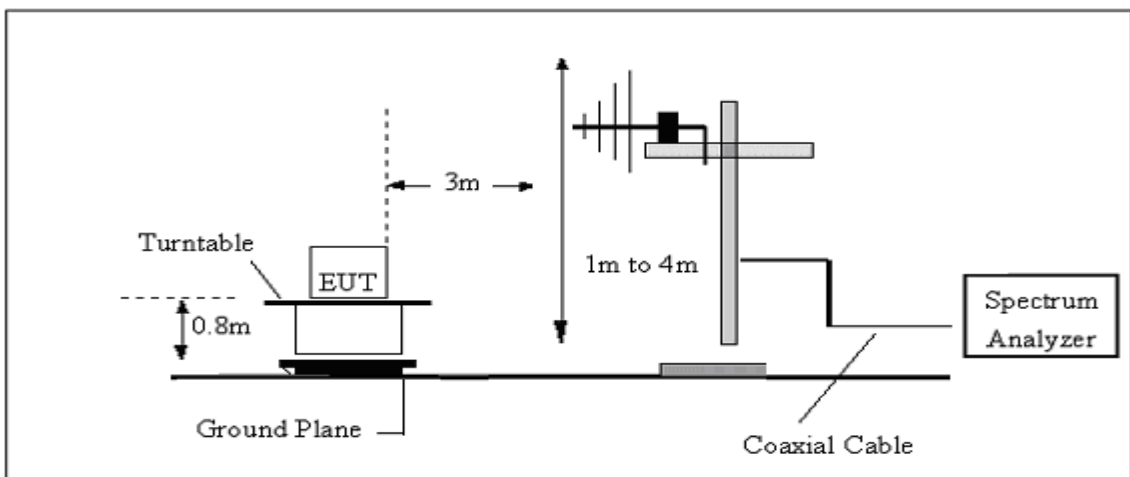
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

4.3 TEST SETUP

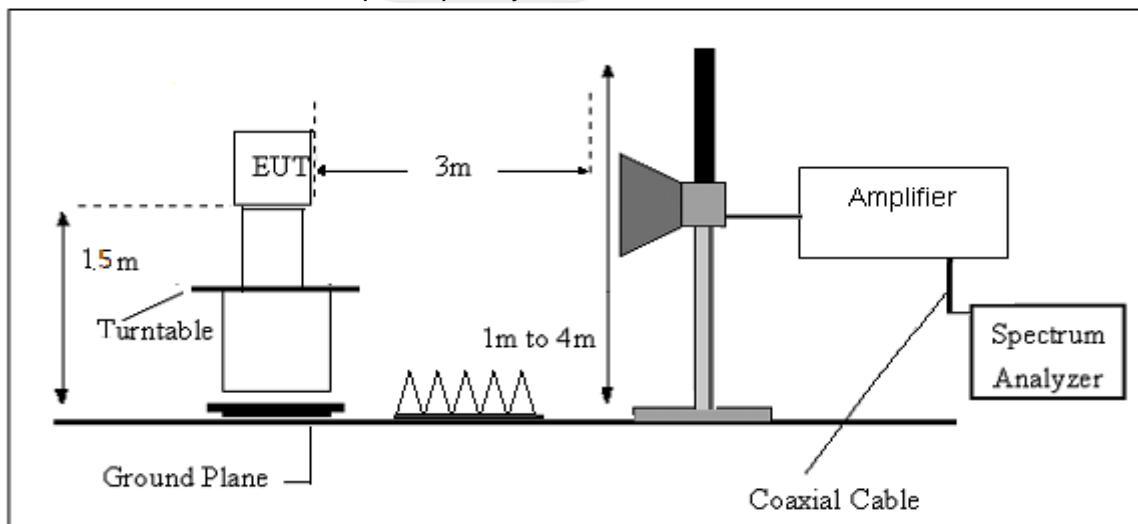
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



4.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.



4.5 TEST RESULTS

(Between 9KHz – 30 MHz)

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Mode:	TX Mode
Test Voltage:	3.7V from Battery		

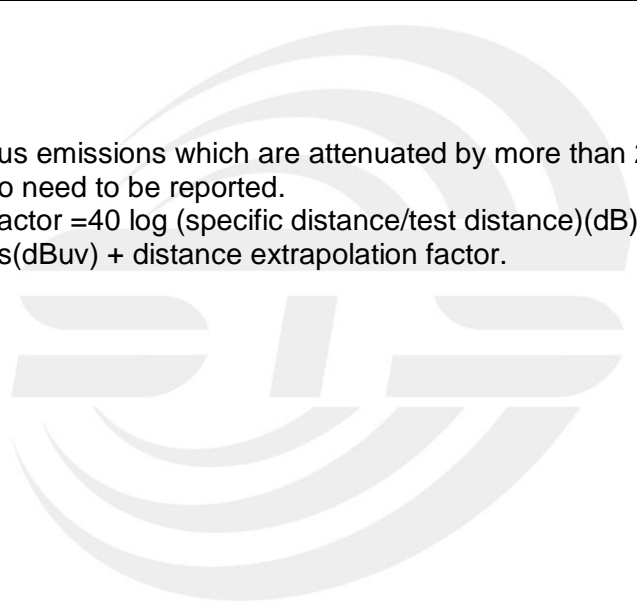
Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

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 = $40 \log (\text{specific distance/test distance})$ (dB);

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





(30MHz -1000MHz)

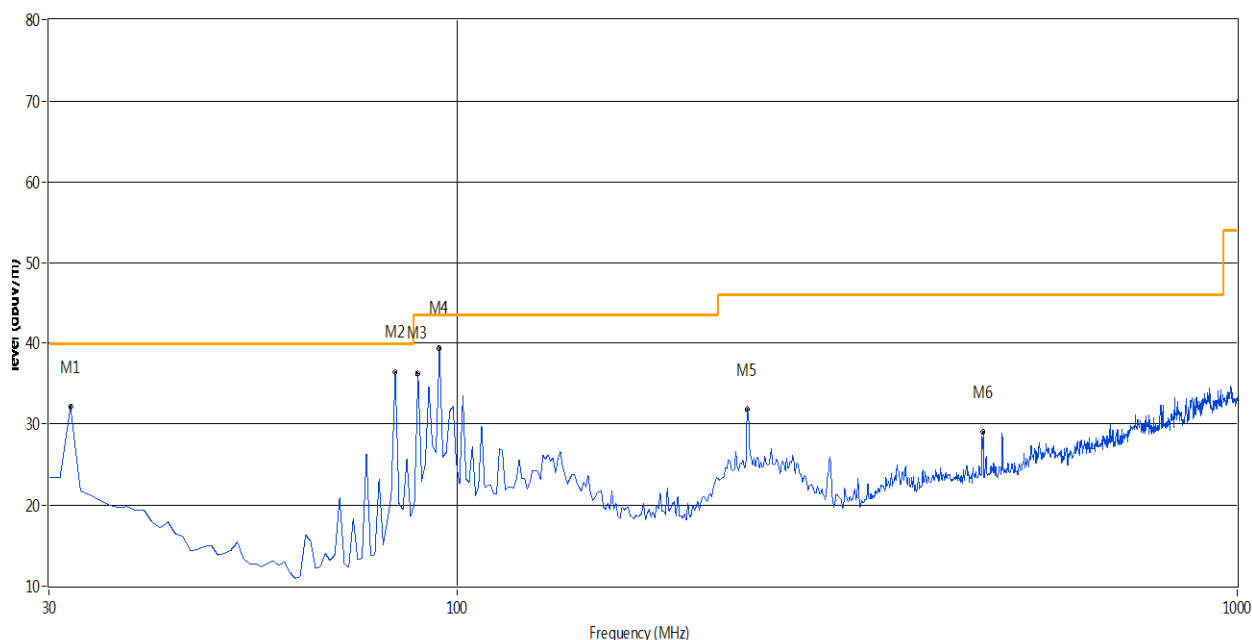
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	Horizontal
Test Voltage:	3.7V from Battery	Test Mode:	(Mode 1-1M worst mode)

No.	Frequency (MHz)	Factor (dB)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	31.94	-16.34	32.17	40.00	-7.83	QP
2	83.30	-25.41	36.50	40.00	-3.50	QP
3	89.11	-24.57	36.30	43.50	-7.20	QP
4	94.93	-23.85	39.44	43.50	-4.06	QP
5	235.43	-22.37	31.86	46.00	-14.14	QP
6	531.94	-16.34	28.17	46.00	-17.83	QP

Remark:

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

RE_EN Test Case_FCC 15 B 30MHz-1GHz





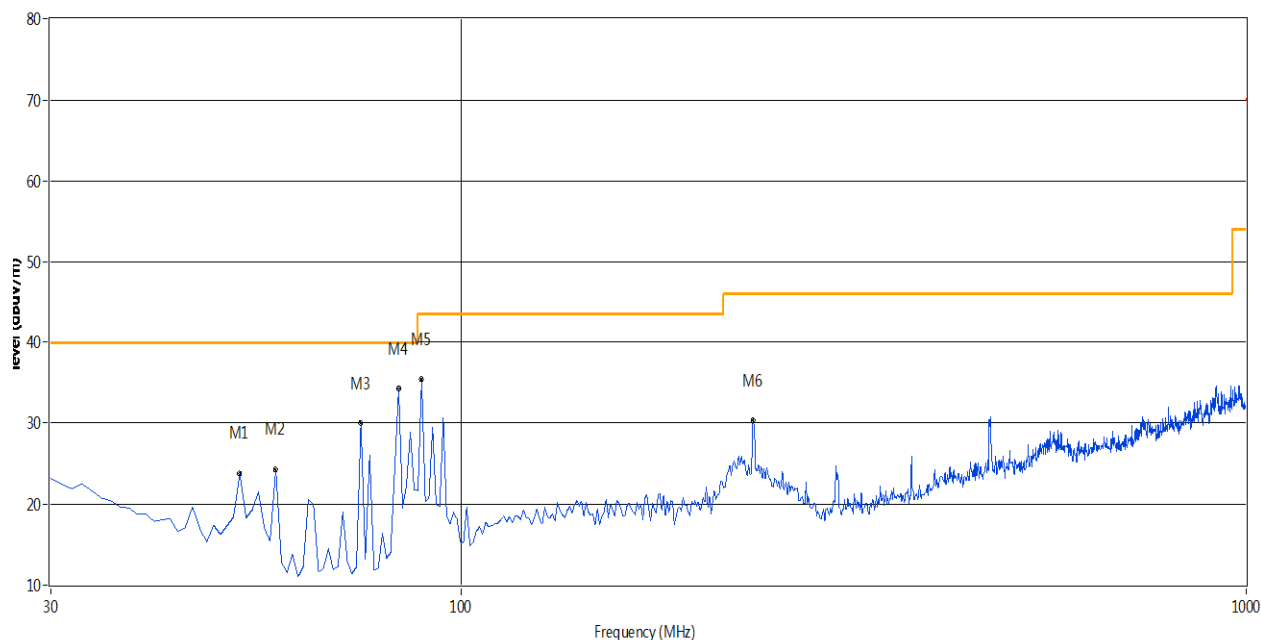
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	Vertical
Test Voltage:	3.7V from Battery	Test Mode:	(Mode 1-1M worst mode)

No.	Frequency (MHz)	Factor (dB)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	52.29	-26.86	23.80	40.00	-16.20	QP
2	58.10	-28.36	24.37	40.00	-15.63	QP
3	74.58	-26.90	30.09	40.00	-9.91	QP
4	83.30	-25.41	34.27	40.00	-5.73	QP
5	89.11	-24.57	35.45	43.50	-8.05	QP
6	235.43	-22.37	30.35	46.00	-15.65	QP

Remark:

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

RE_EN Test Case_FCC 15 B 30MHz-1GHz





(1GHz-25GHz)

EUT :	Small fly rods	Model Name :	A3102
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V

Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBμV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
Low Channel (GFSK/2404 MHz)							
4808.20	67.14	-3.58	63.56	74	-10.44	PK	Vertical
4808.21	48.05	-3.58	44.47	54	-9.53	AV	Vertical
7212.14	63.03	-0.8	62.23	74	-11.77	PK	Vertical
7212.12	42.41	-0.8	41.61	54	-12.39	AV	Vertical
4808.20	63.05	-3.58	59.47	74	-14.53	PK	Horizontal
4808.22	45.12	-3.58	41.54	54	-12.46	AV	Horizontal
Mid Channel (GFSK/2439 MHz)							
4878.08	66.04	-3.56	62.48	74	-11.52	PK	Vertical
4878.06	50.06	-3.56	46.50	54	-7.50	AV	Vertical
7317.22	61.97	-0.78	61.19	74	-12.81	PK	Vertical
7317.21	45.11	-0.78	44.33	54	-9.67	AV	Vertical
4878.17	62.28	-3.56	58.72	74	-15.28	PK	Horizontal
4878.15	46.06	-3.56	42.50	54	-11.50	AV	Horizontal
High Channel (GFSK/2474 MHz)							
4948.26	62.07	-3.54	58.53	74	-15.47	PK	Vertical
4948.31	46.31	-3.54	42.77	54	-11.23	AV	Vertical
7422.32	62.13	-0.75	61.38	74	-12.62	PK	Vertical
7422.31	46.34	-0.75	45.59	54	-8.41	AV	Vertical
4948.26	62.11	-3.54	58.57	74	-15.43	PK	Horizontal
4948.31	46.27	-3.54	42.73	54	-11.27	AV	Horizontal
Remark: 1. Factor = Antenna Factor + Cable Loss – Pre-amplifier. Emission Level = Meter Reading + Factor Margin = Limit - Emission Level							



4.6 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

Frequency (MHz)	Reading (dBUV)	Factor (dB)	Emission Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Comment
GFSK							
2400.0	69.14	-12.99	56.15	74	-17.85	PK	Vertical
2400.0	55.00	-12.99	42.01	54	-11.99	AV	Vertical
2400.0	70.26	-12.99	57.27	74	-16.73	PK	Horizontal
2400.0	54.13	-12.99	41.14	54	-12.86	AV	Horizontal
2483.5	71.05	-12.78	58.27	74	-15.73	PK	Vertical
2483.5	54.02	-12.78	41.24	54	-12.76	AV	Vertical
2483.5	71.09	-12.78	58.31	74	-15.69	PK	Horizontal
2483.5	54.11	-12.78	41.33	54	-12.67	AV	Horizontal
Remark: 1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.							
Low measurement frequencies is range from 2310 to 2400 MHz, high measurement frequencies is range from 2483.5 to 2500 MHz. Only show the worst point data of the emissions in the frequency 2310-2400 MHz and 2483.5-2500 MHz.							

5. CONDUCTED SPURIOUS & BAND EDGE EMISSION

5.1 REQUIREMENT

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.

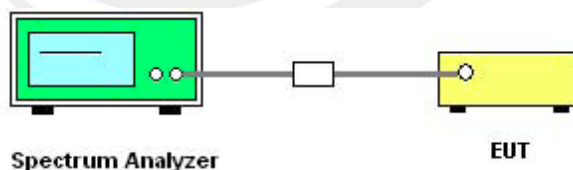
5.2 TEST PROCEDURE

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
Start/Stop Frequency	Lower Band Edge: 2310 – 2404 MHz Upper Band Edge: 2478 – 2500 MHz
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

5.3 TEST SETUP



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal 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

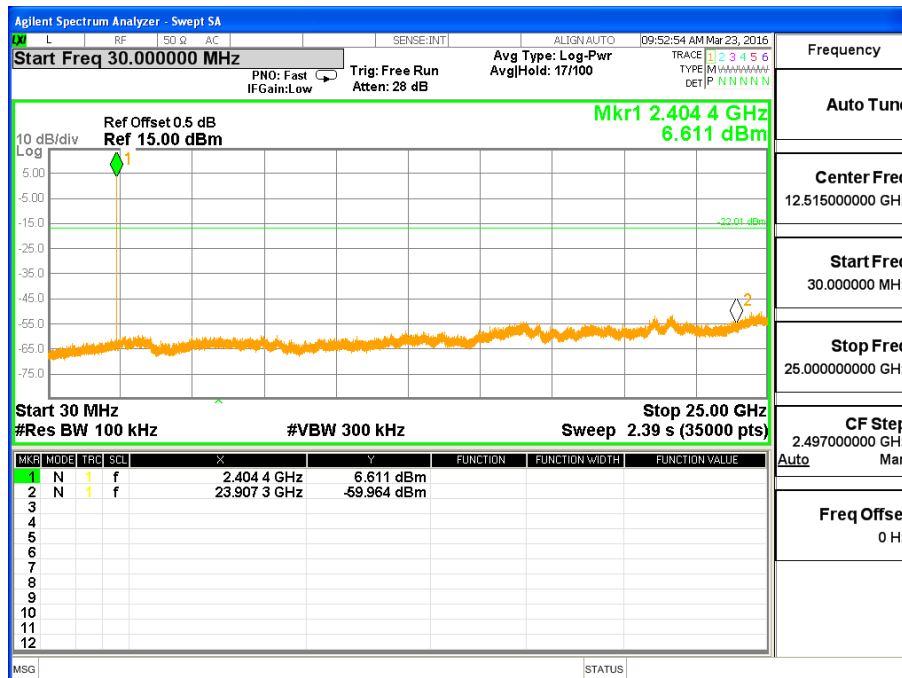
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.



5.5 TEST RESULTS

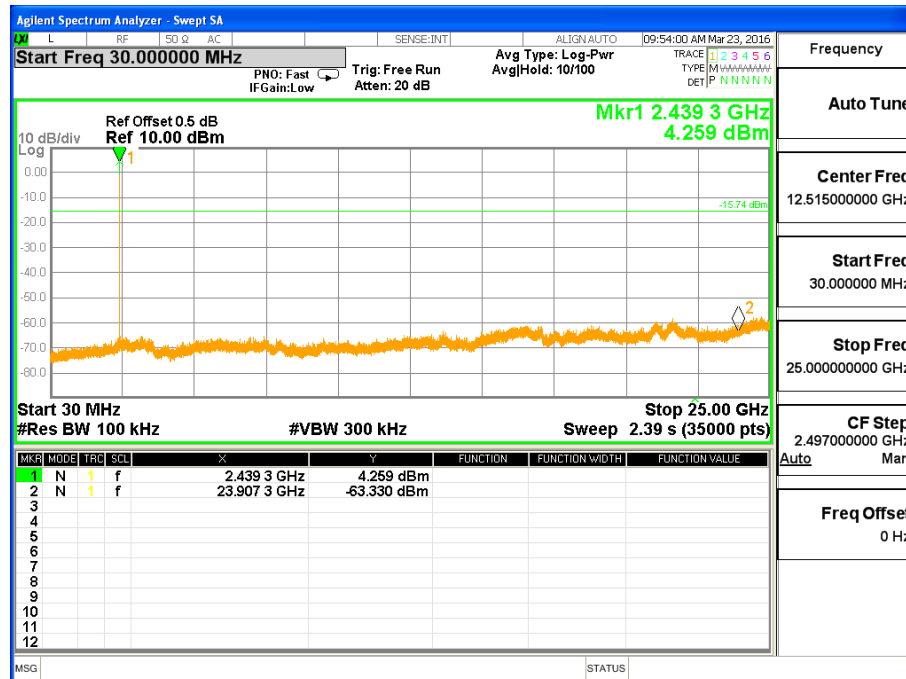
Temperature :	25 °C	Relative Humidity :	50%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX Mode /CH00, CH35, CH70		

TX CH 00

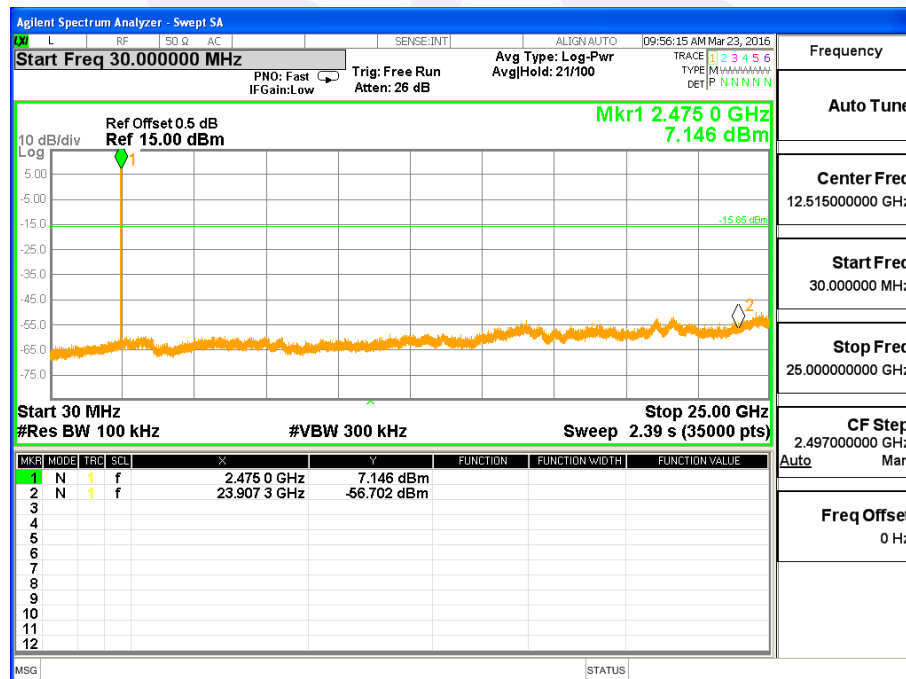




TX CH 35



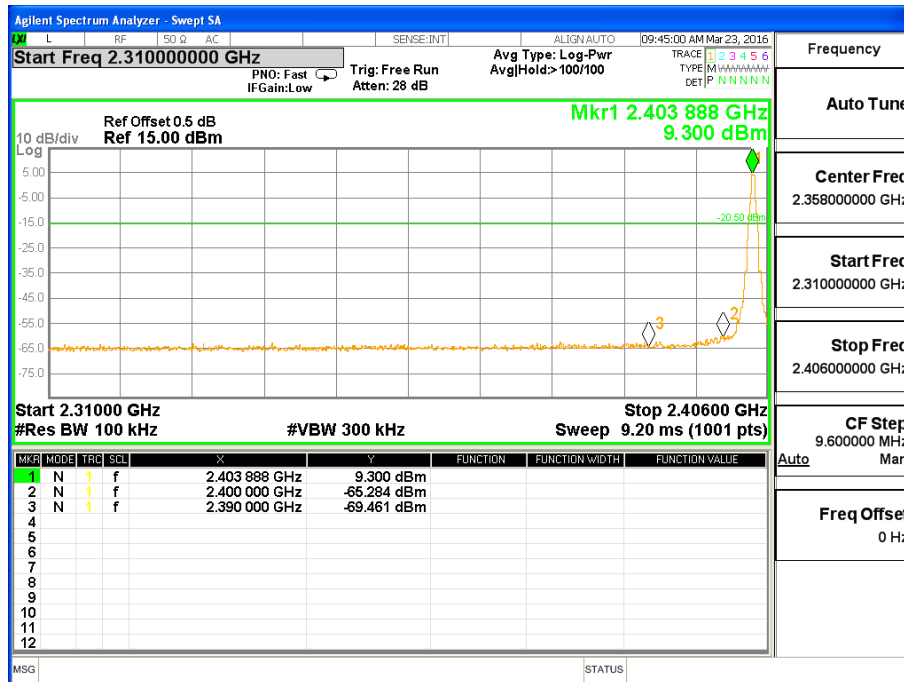
TX CH 70



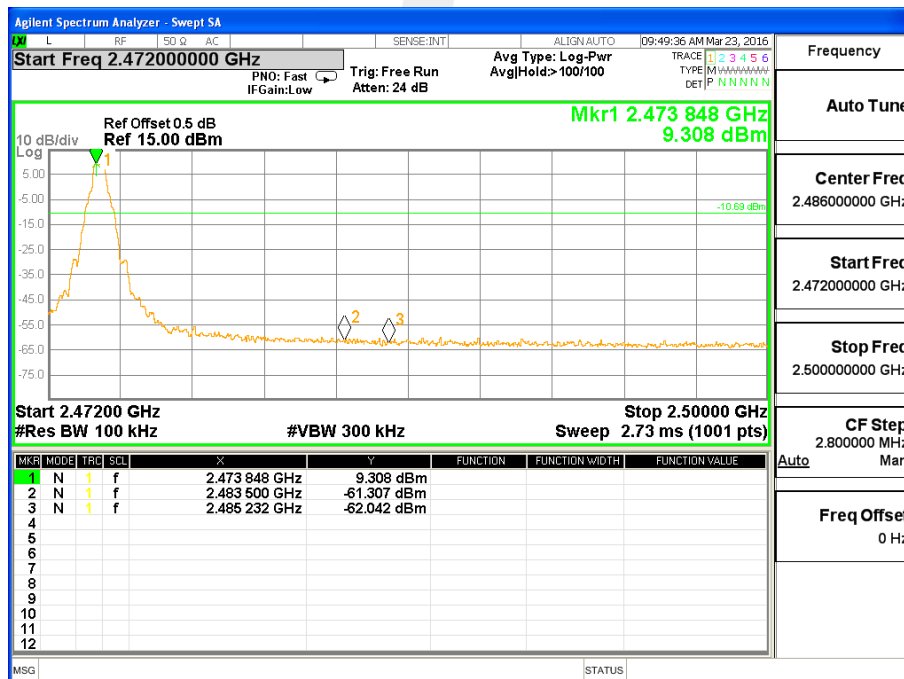


For Band edge

TX CH 00



TX CH 70





6. POWER SPECTRAL DENSITY TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (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 ≥ RBW ≥ 3 kHz.
4. Set the VBW ≥ 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

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

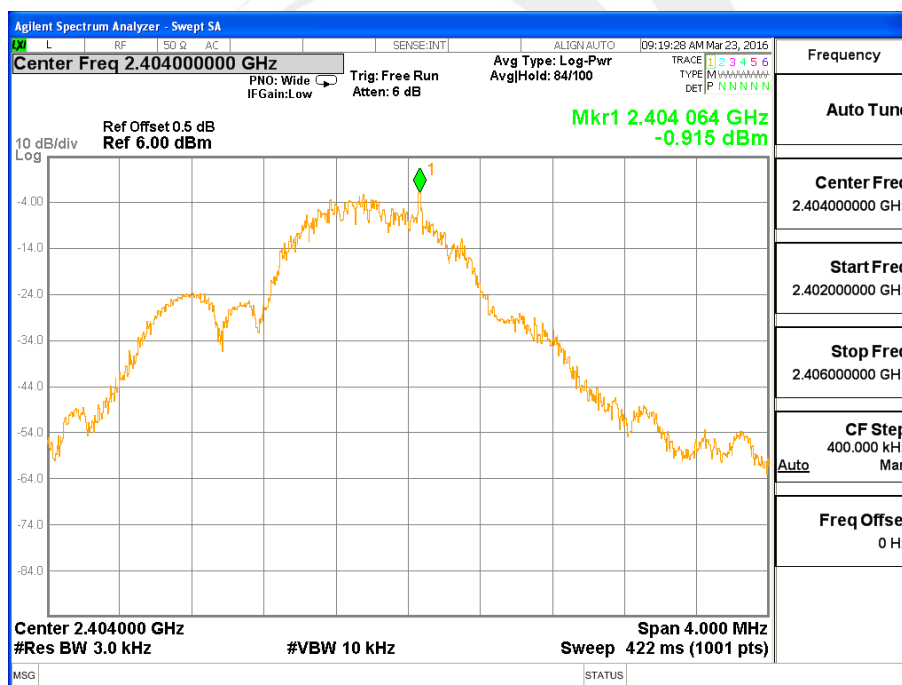


6.5 TEST RESULTS

Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1015 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX Mode /CH00, CH35, CH70		

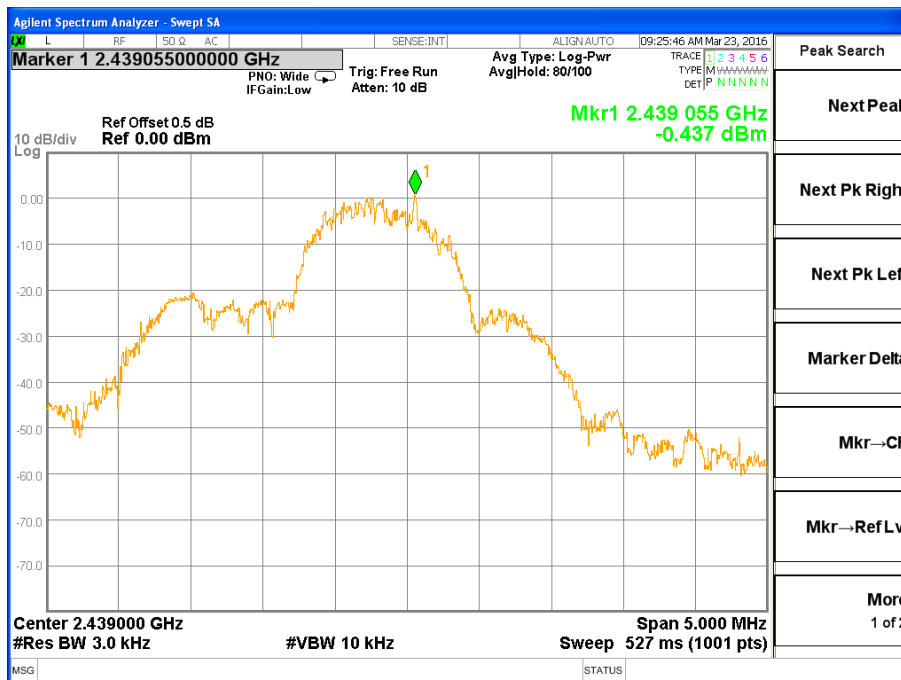
Frequency	Power Density (dBm/3kHz)	Limit (dBm)	Result
2404 MHz	-0.915	<8	PASS
2439 MHz	-0.437	<8	PASS
2474 MHz	-0.977	<8	PASS

TX CH00

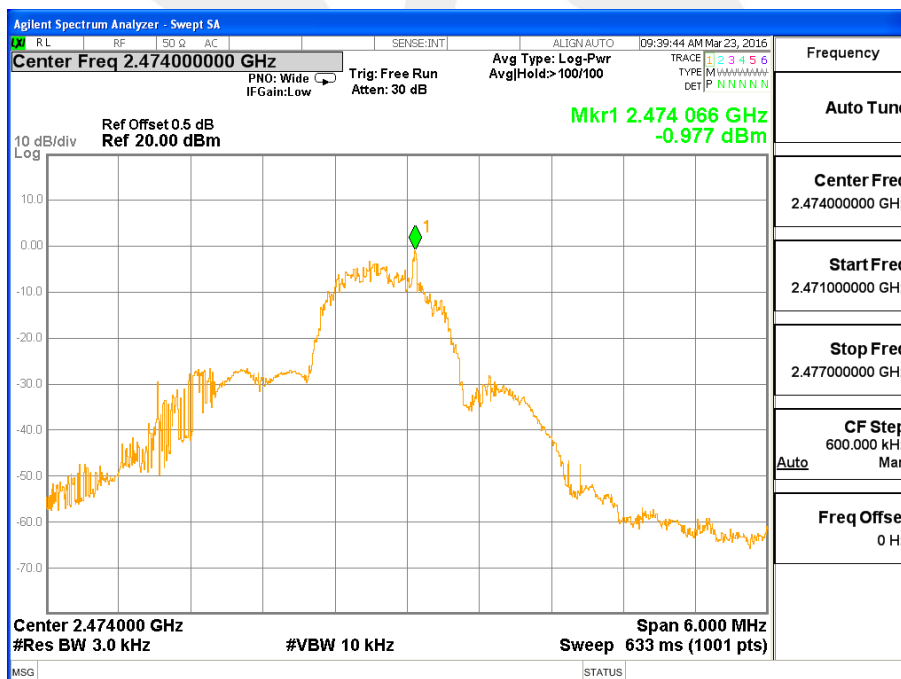




TX CH35



TX CH70





7. BANDWIDTH TEST

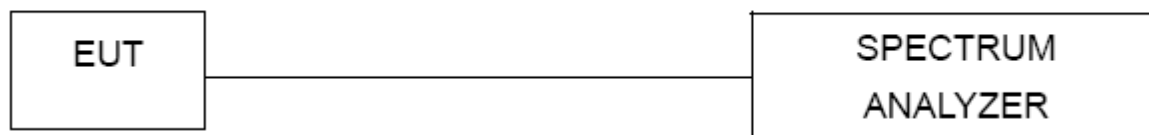
7.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (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 $\geq 3\text{RBW}$, 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 ≥ 6 dB.

7.3 TEST SETUP



7.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

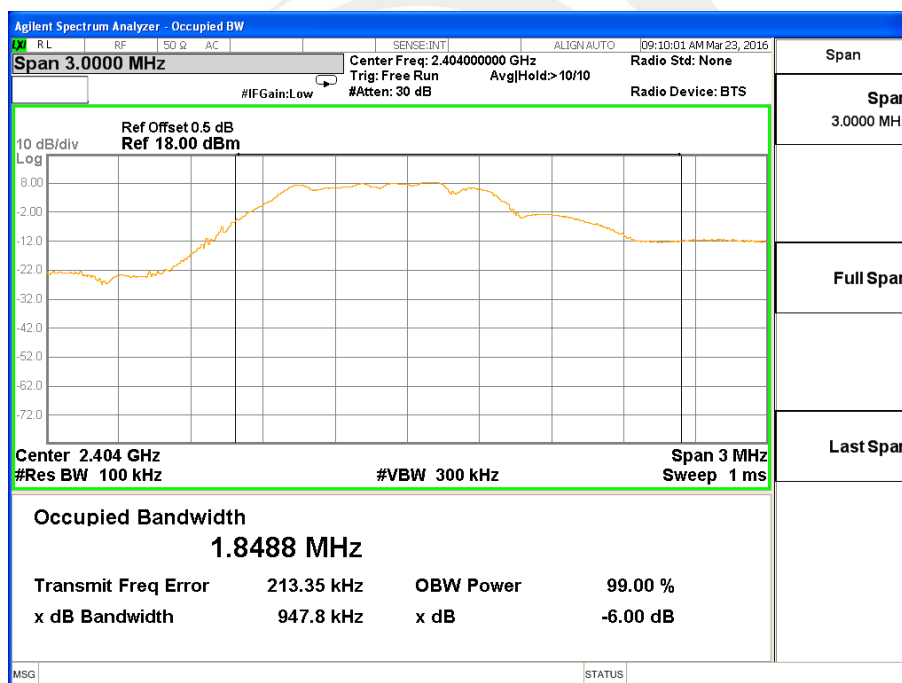


7.5 TEST RESULTS

Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX Mode /CH00, CH35, CH70		

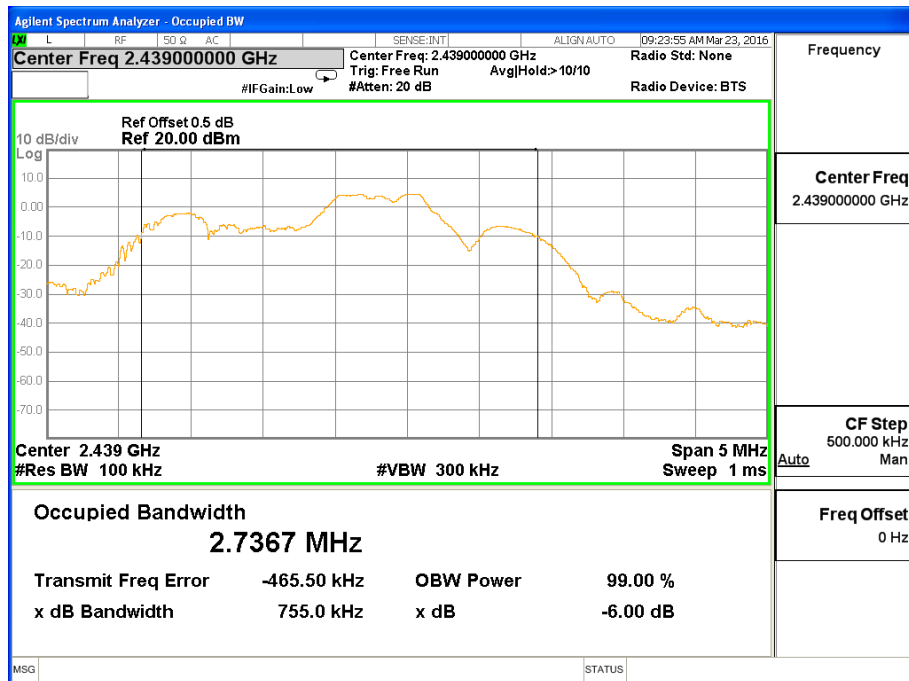
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result
2404 MHz	0.948	>=500KHz	PASS
2439 MHz	0.755	>=500KHz	PASS
2474 MHz	2.027	>=500KHz	PASS

TX CH 00

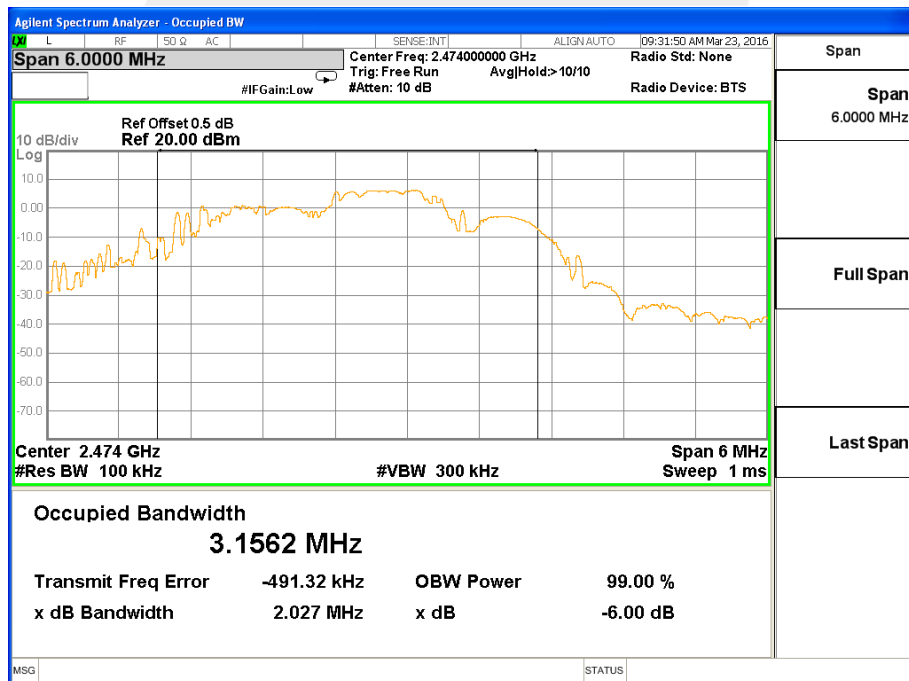




TX CH 35



TX CH 70





8. PEAK OUTPUT POWER TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (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

- a. The EUT was directly connected to the Power Sensor&PC

8.3 TEST SETUP



8.4 EUT OPERATION CONDITIONS

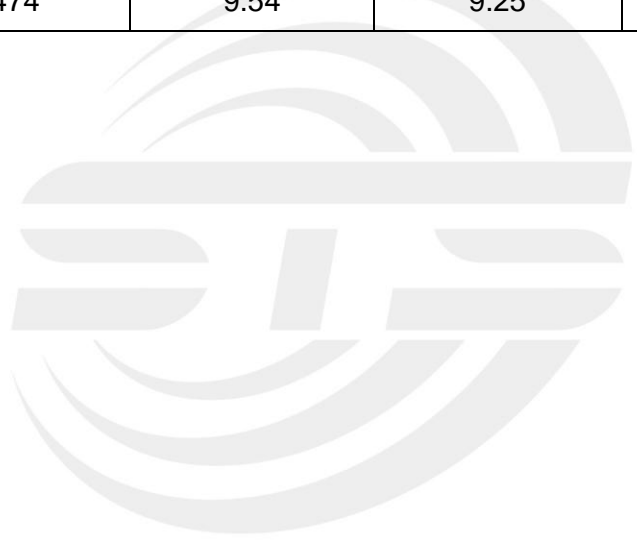
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.



8.5 TEST RESULTS

Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX Mode /CH00, CH35, CH70		

TX Mode				
Test Channe	Frequency	Conducted Output Power		LIMIT
	(MHz)	Peak (dBm)	AVG (dBm)	dBm
CH00	2404	9.63	9.12	30
CH35	2439	9.52	9.20	30
CH70	2474	9.54	9.25	30





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

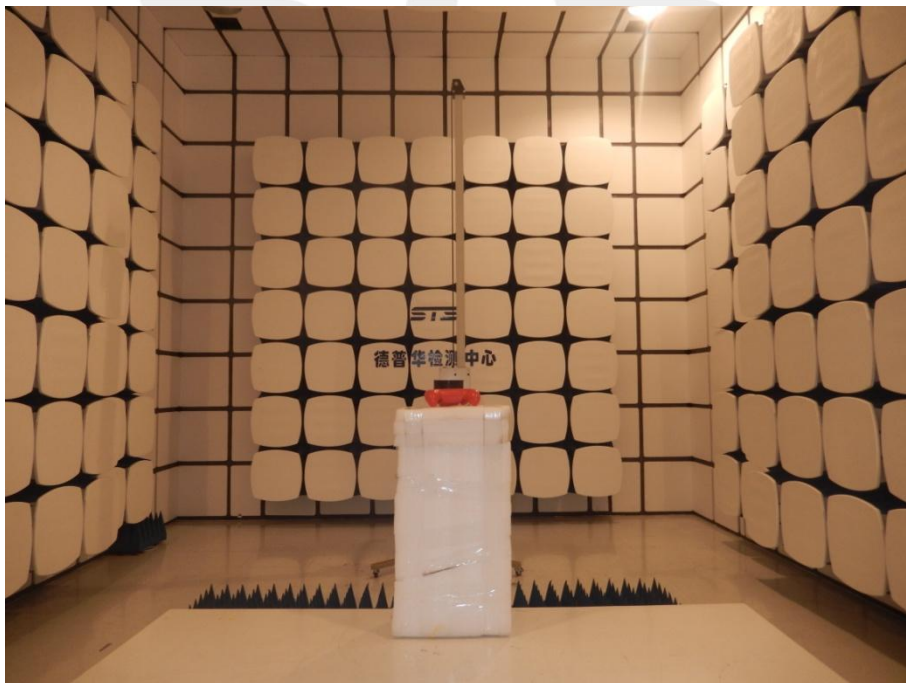
The EUT antenna is built-in Antenna. It comply with the standard requirement.





10. EUT TEST PHOTO

Radiated Measurement Photos



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