Report No: GTSE12070078501

FCC REPORT

Applicant:	Shenzhen Tesuda model technology Co., LTD
Address of Applicant:	Minrui Industrial Park, Jiuwei Community, Xixiang sub-district, Bao'an District, Shenzhen City, Guangdong, China

Equipment Under Test (EUT)

Product Name:	2.4GHz Transmitter
Model No.:	T80300A, T3920A
FCC ID:	Z25123638
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.249:2010
Date of sample receipt:	July 14, 2012
Date of Test:	July 18-19, 2012
Date of report issued:	July 19, 2012
Test Result :	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Robinson Lo
Laboratory Manager

2 Version

Version No.	Date	Description
00	*July 19, 2012*	*Original*

Prepared By: Oscar. Li ***Date:*** *July 19, 2012*

Project Engineer

Check By: Hans. Hu ***Date:*** *July 19, 2012*

Reviewer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	N/A
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Pass: The EUT complies with the essential requirements in the standard.

N/A: not applicable.

5 General Information

5.1 Client Information

Applicant:	Shenzhen Tesuda model technology Co., LTD
Address of Applicant:	Minrui Industrial Park, Jiuwei Community, Xixiang sub-district, Bao'an District, Shenzhen City, Guangdong, China
Manufacturer:	Shenzhen Tesuda model technology Co., LTD
Address of Manufacturer:	Minrui Industrial Park, Jiuwei Community, Xixiang sub-district, Bao'an District, Shenzhen City, Guangdong, China
Factory:	Shenzhen Tesuda model technology Co., LTD
Address of factory :	Minrui Industrial Park, Jiuwei Community, Xixiang sub-district, Bao'an District, Shenzhen City, Guangdong, China

5.2 General Description of E.U.T.

Product Name:	2.4GHz Transmitter
Model No.:	T80300A, T3920A
Operation Frequency:	2407.8MHz~2470.8MHz
Modulation technology:	GFSK
Antenna Type:	Integral
Antenna gain:	2dBi
Power supply:	DC 12.0V(8*1.5V ("AA" Size battery))
Remark:	Only the model No. T80300A was tested. T80300A and T3920A are identical in the same PCB layout, interior structure and electrical circuits. The only difference is the model name for commercial purpose.

5.3 Test mode

Transmitting mode	Keep transmitting mode.

Per-test mode.

We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:

Axis	X	Y	Z
Field Strength(dBuV/m)	93.14	99.87	95.68

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”:

Y axis (see the test setup photo)

5.4 Description of Support Units

None.

5.5 Test Facility

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

● **FCC —Registration No.: 600491**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission.

The acceptance letter from the FCC is maintained in out files. Registration 600491, July 20, 2010.

● **Industry Canada (IC)**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

5.6 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.
Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China
Tel: 0755-27798480
Fax: 0755-27798960

5.7 Other Information Requested by the Customer

None.

5.8 Test Instruments list

Radiated Emission:						
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Date (mm-dd-yy)**	**Cal.Due date (mm-dd-yy)**
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 30 2011	Mar. 29 2013
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 03 2012	Jul. 02 2013
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 25 2012	Feb. 24 2013
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 29 2012	June 28 2013
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2011	Mar. 29 2013
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	Mar. 31 2012	Mar. 30 2013
9	Coaxial Cable	GTS	N/A	GTS211	Mar. 31 2012	Mar. 30 2013
10	Coaxial cable	GTS	N/A	GTS210	Mar. 31 2012	Mar. 30 2013
11	Coaxial Cable	GTS	N/A	GTS212	Mar. 31 2012	Mar. 30 2013
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 03 2012	Jul. 02 2013
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 03 2012	Jul. 02 2013
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 29 2012	June 28 2013
15	Band filter	Amindeon	82346	GTS219	Mar. 31 2012	Mar. 30 2013

6 Test results and Measurement Data

6.1 Antenna requirement:

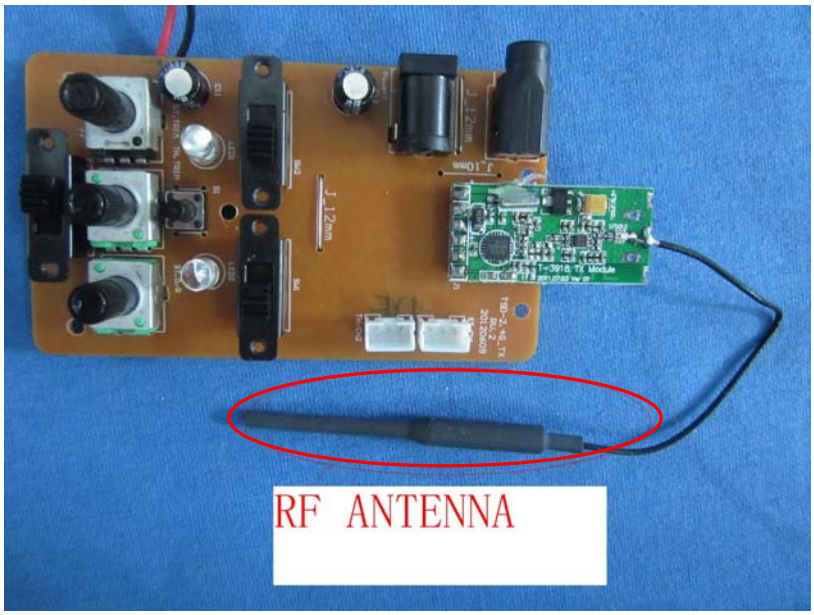
Standard requirement:	FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

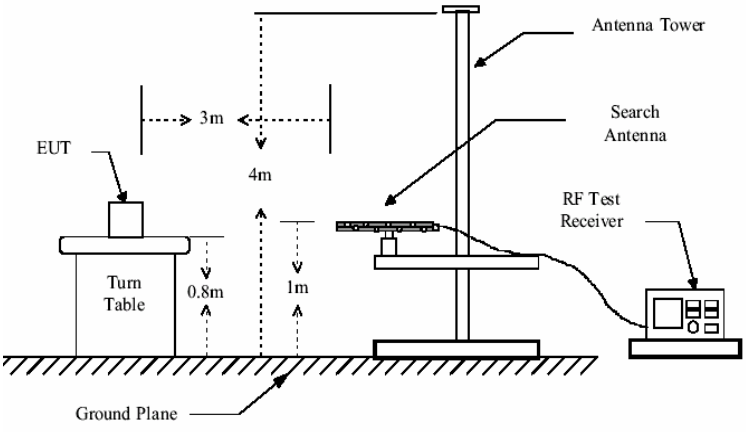
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

E.U.T Antenna:

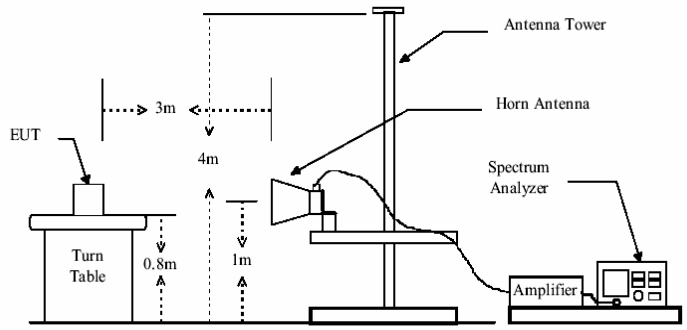
The antenna is Integral antenna, the best case gain of the antenna is 2dBi



6.2 Radiated Emission Method

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.4:2003</td></tr>
<tr><td>Test Frequency Range:</td><td>30MHz to 25GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(Field strength of the fundamental signal)</td><td>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td rowspan="2">2400MHz-2483.5MHz</td><td>94.00</td><td>Average Value</td></tr>
<tr><td>114.00</td><td>Peak Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(Spurious Emissions)</td><td>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td>30MHz-88MHz</td><td>40.00</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.50</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.00</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.00</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>54.00</td><td>Average Value</td></tr>
<tr><td>74.00</td><td>Peak Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:
(band edge)</td><td>Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.</td></tr>
<tr><td>Test setup:</td><td>Below 1GHz
 

Above 1GHz</td></tr>
</table>

	
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Transmitting mode
Test results:	Pass

Measurement data:

6.2.1 Field Strength of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2407.80	92.91	27.57	5.40	30.12	95.76	114.00	-18.24	Horizontal
2407.80	94.77	27.57	5.40	30.12	97.62	114.00	-16.38	Vertical
2437.80	89.22	27.48	5.43	30.06	92.07	114.00	-21.93	Horizontal
2437.80	96.58	27.48	5.43	30.06	99.43	114.00	-14.57	Vertical
2470.80	90.31	27.50	5.46	29.99	93.28	114.00	-20.72	Horizontal
2470.80	96.90	27.50	5.46	29.99	99.87	114.00	-14.13	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2407.80	68.59	27.57	5.40	30.12	71.44	94.00	-22.56	Horizontal
2407.80	71.34	27.57	5.40	30.12	74.19	94.00	-19.81	Vertical
2437.80	67.21	27.48	5.43	30.06	70.06	94.00	-23.94	Horizontal
2437.80	70.24	27.48	5.43	30.06	73.09	94.00	-20.91	Vertical
2470.80	66.64	27.50	5.46	29.99	69.61	94.00	-24.39	Horizontal
2470.80	69.67	27.50	5.46	29.99	72.64	94.00	-21.36	Vertical

According to the follow transmitter output power (P_t) formula:

$P_t=(E \times d)^2/(30 \times g_t)$

P_t =transmitter output power in watts

g_t =numeric gain of the transmitting antenna (unitless)

E=electric field strength in V/m

d= measurement distance in meters (m).

According to the above test data, Emax=99.87dBuV/m=0.0985V/m, d=3m, g_t=1.58

$P_t =(E \times d)^2/(30 \times g_t)= (0.0985 \times 3)^2/(30 \times 1.58)=0.00184W$

6.2.2 Spurious emissions

■ Below 1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
36.24	33.90	15.45	0.14	32.16	17.33	40.00	-22.67	Vertical
50.15	34.81	14.91	0.18	31.99	17.91	40.00	-22.09	Vertical
90.15	33.44	13.07	0.22	31.75	14.98	43.50	-28.52	Vertical
156.57	35.25	11.99	0.36	32.01	15.59	43.50	-27.91	Vertical
279.26	36.13	12.05	0.60	32.29	16.49	46.00	-29.51	Vertical
630.15	34.10	19.06	1.23	31.43	22.96	46.00	-23.04	Vertical
36.67	41.13	11.64	0.14	32.20	20.71	40.00	-19.29	Horizontal
52.34	41.56	14.84	0.18	32.01	24.57	40.00	-15.43	Horizontal
97.58	40.58	11.93	0.22	31.71	21.02	43.50	-22.48	Horizontal
133.24	39.25	13.43	0.31	31.86	21.13	43.50	-22.37	Horizontal
350.36	42.55	13.82	0.73	32.31	24.79	46.00	-21.21	Horizontal
720.14	41.91	23.25	1.38	31.69	34.85	46.00	-11.15	Horizontal

■ Above 1GHz

Test channel:	Lowest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4815.60	32.90	32.11	4.44	24.03	45.42	74.00	-28.58	Vertical
7223.40	31.66	36.48	6.04	26.32	47.86	74.00	-26.14	Vertical
9631.20	34.02	38.34	7.64	25.31	54.69	74.00	-19.31	Vertical
12039.00	*					74.00		Vertical
14446.80	*					74.00		Vertical
4815.60	30.90	32.14	4.44	24.03	43.45	74.00	-30.55	Horizontal
7223.40	29.75	36.51	6.04	26.32	45.98	74.00	-28.02	Horizontal
9631.20	32.31	38.37	7.64	25.31	53.01	74.00	-20.99	Horizontal
12039.00	*					74.00		Horizontal
14446.80	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4815.60	22.93	32.11	4.44	24.03	35.45	54.00	-18.55	Vertical
7223.40	20.30	36.48	6.04	26.32	36.50	54.00	-17.50	Vertical
9631.20	21.06	38.34	7.64	25.31	41.73	54.00	-12.27	Vertical
12039.00	*					54.00		Vertical
14446.80	*					54.00		Vertical
4815.60	20.33	32.14	4.44	24.03	32.88	54.00	-21.12	Horizontal
7223.40	18.29	36.51	6.04	26.32	34.52	54.00	-19.48	Horizontal
9631.20	19.35	38.37	7.64	25.31	40.05	54.00	-13.95	Horizontal
12039.00	*					54.00		Horizontal
14446.80	*					54.00		Horizontal

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

Test channel:	Middle channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4875.60	33.36	32.19	4.49	23.96	46.08	74.00	-27.92	Vertical
7313.40	32.10	36.74	6.12	26.64	48.32	74.00	-25.68	Vertical
9751.20	32.80	38.68	7.72	25.22	53.98	74.00	-20.02	Vertical
12189.00	*					74.00		Vertical
14626.80	*					74.00		Vertical
4875.60	30.76	32.22	4.49	23.96	43.51	74.00	-30.49	Horizontal
7313.40	30.39	36.77	6.12	26.64	46.64	74.00	-27.36	Horizontal
9751.20	31.19	38.71	7.72	25.22	52.40	74.00	-21.60	Horizontal
12189.00	*					74.00		Horizontal
14626.80	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4875.60	22.17	32.19	4.49	23.96	34.89	54.00	-19.11	Vertical
7313.40	22.21	36.74	6.12	26.64	38.43	54.00	-15.57	Vertical
9751.20	20.29	38.68	7.72	25.22	41.47	54.00	-12.53	Vertical
12189.00	*					54.00		Vertical
14626.80	*					54.00		Vertical
4875.60	19.87	32.22	4.49	23.96	32.62	54.00	-21.38	Horizontal
7313.40	20.40	36.77	6.12	26.64	36.65	54.00	-17.35	Horizontal
9751.20	18.78	38.71	7.72	25.22	39.99	54.00	-14.01	Horizontal
12189.00	*					54.00		Horizontal
14626.80	*					54.00		Horizontal

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

Test channel:	Highest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4941.60	32.82	32.24	4.54	23.89	45.71	74.00	-28.29	Vertical
7412.40	30.65	36.89	6.19	26.89	46.84	74.00	-27.16	Vertical
9883.20	32.65	39.38	7.85	25.07	54.81	74.00	-19.19	Vertical
12354.00	*					74.00		Vertical
14824.80	*					74.00		Vertical
4941.60	30.83	32.27	4.54	23.89	43.75	74.00	-30.25	Horizontal
7412.40	28.84	36.92	6.19	26.89	45.06	74.00	-28.94	Horizontal
9883.20	30.74	39.41	7.85	25.07	52.93	74.00	-21.07	Horizontal
12354.00	*					74.00		Horizontal
14824.80	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4941.60	21.05	32.24	4.54	23.89	33.94	54.00	-20.06	Vertical
7412.40	18.10	36.89	6.19	26.89	34.29	54.00	-19.71	Vertical
9883.20	20.09	39.38	7.85	25.07	42.25	54.00	-11.75	Vertical
12354.00	*					54.00		Vertical
14824.80	*					54.00		Vertical
4941.60	18.96	32.27	4.54	23.89	31.88	54.00	-22.12	Horizontal
7412.40	16.49	36.92	6.19	26.89	32.71	54.00	-21.29	Horizontal
9883.20	18.38	39.41	7.85	25.07	40.57	54.00	-13.43	Horizontal
12354.00	*					54.00		Horizontal
14824.80	*					54.00		Horizontal

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *"*", means this data is the too weak instrument of signal is unable to test.*

6.2.3 Bandedge emissions

Test channel:	Lowest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	48.26	27.82	5.38	30.18	51.28	74.00	-22.72	Horizontal
2400.00	55.22	27.89	5.39	30.18	58.32	74.00	-15.68	Horizontal
2390.00	53.56	27.59	5.38	30.18	56.35	74.00	-17.65	Vertical
2400.00	60.32	27.58	5.39	30.18	63.11	74.00	-10.89	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.00	26.84	27.83	5.38	30.18	29.87	54.00	-24.13	Horizontal
2400.00	32.88	27.89	5.39	30.18	35.98	54.00	-18.02	Horizontal
2390.00	33.14	27.59	5.38	30.18	35.93	54.00	-18.07	Vertical
2400.00	38.98	27.58	5.39	30.18	41.77	54.00	-12.23	Vertical

Test channel:	Highest channel

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.52	57.52	27.79	5.47	29.93	60.85	74.00	-13.15	Horizontal
2500.00	50.86	27.82	5.49	29.93	54.24	74.00	-19.76	Horizontal
2483.52	62.72	27.53	5.47	29.93	65.79	74.00	-8.21	Vertical
2500.00	55.86	27.55	5.49	29.93	58.97	74.00	-15.03	Vertical

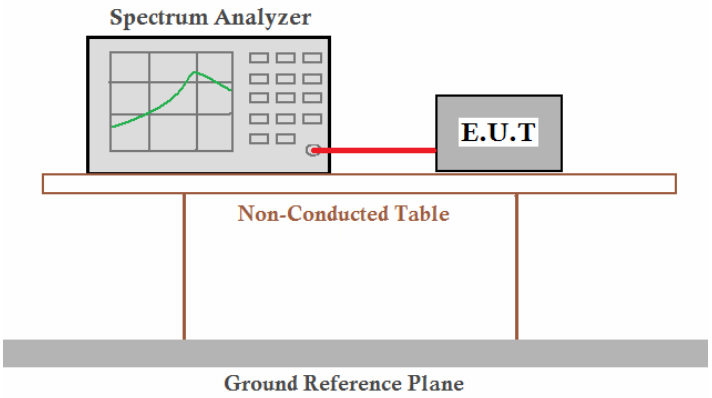
Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.52	35.83	27.79	5.47	29.93	39.16	54.00	-14.84	Horizontal
2500.00	29.24	27.80	5.49	29.93	32.60	54.00	-21.40	Horizontal
2483.52	42.23	27.53	5.47	29.93	45.30	54.00	-8.70	Vertical
2500.00	35.84	27.55	5.49	29.93	38.95	54.00	-15.05	Vertical

Remark:

1. Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

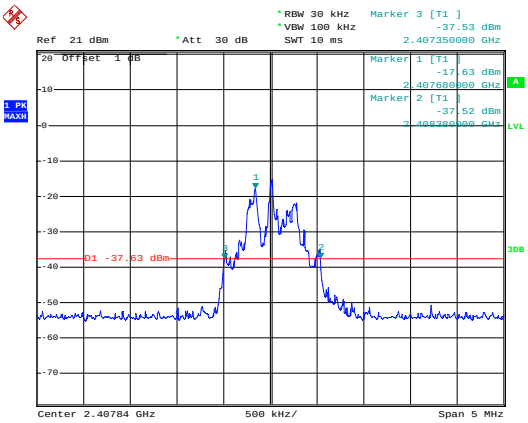
6.3 20dB Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2003
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	
Test Instruments:	Refer to section 5.8 for details
Test mode:	Transmitting mode
Test results:	Pass

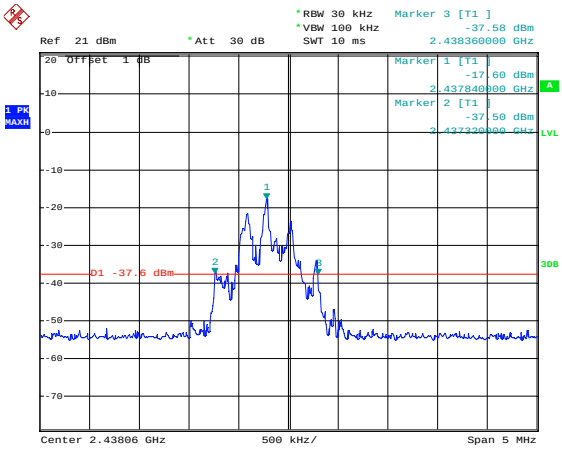
Measurement Data

Test channel	20dB bandwidth(MHz)	Result
Lowest	1.030	Pass
Middle	1.040	Pass
Highest	1.050	Pass

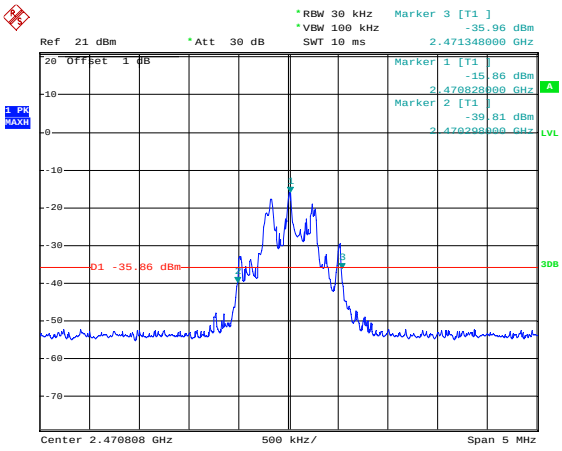
Test plot as follows:



Lowest channel



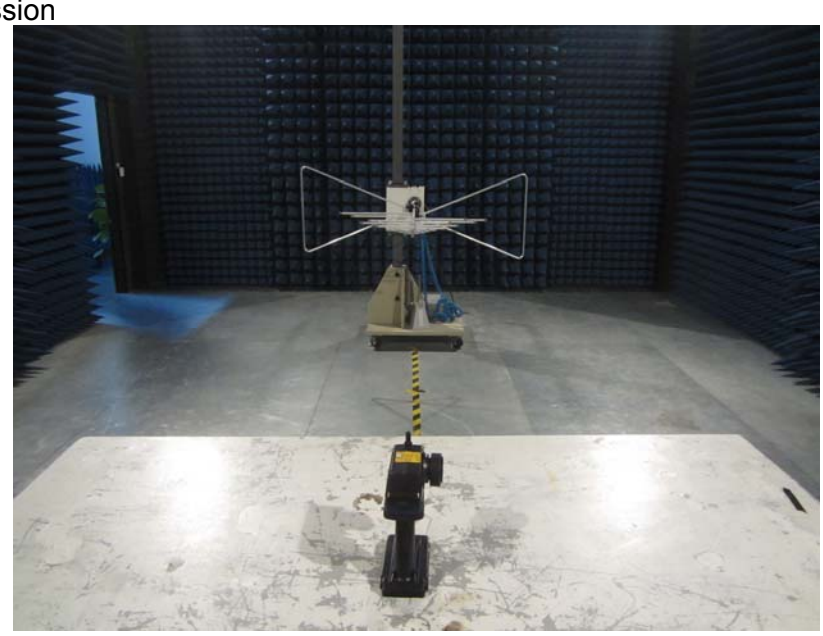
Middle channel

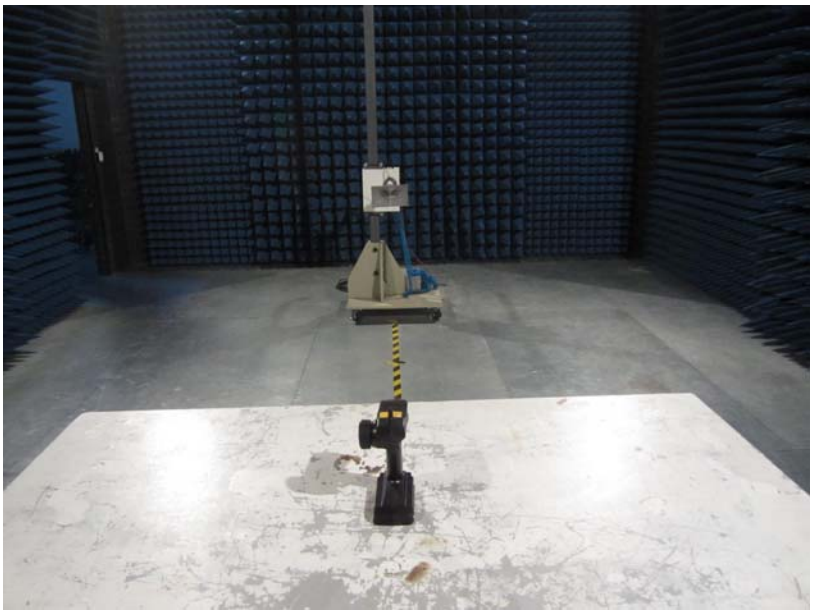


Highest channel

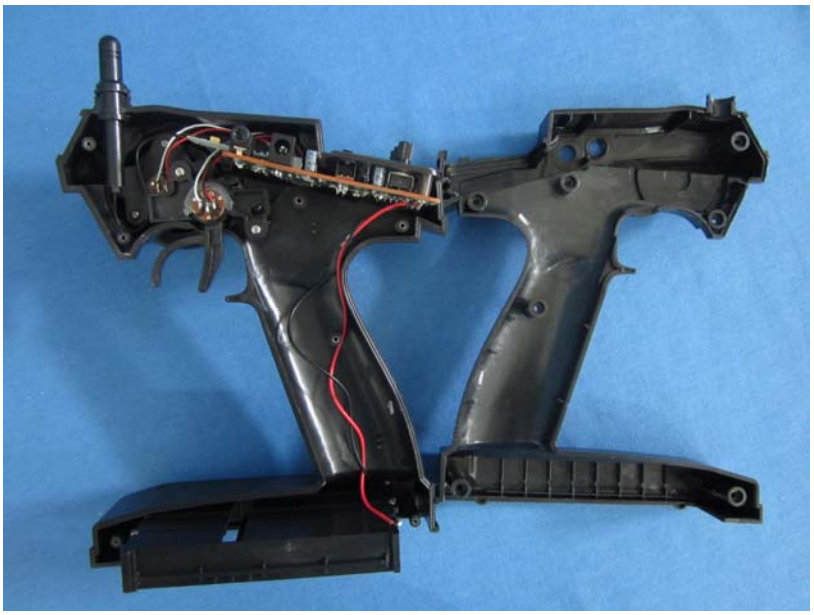
7 Test Setup Photo

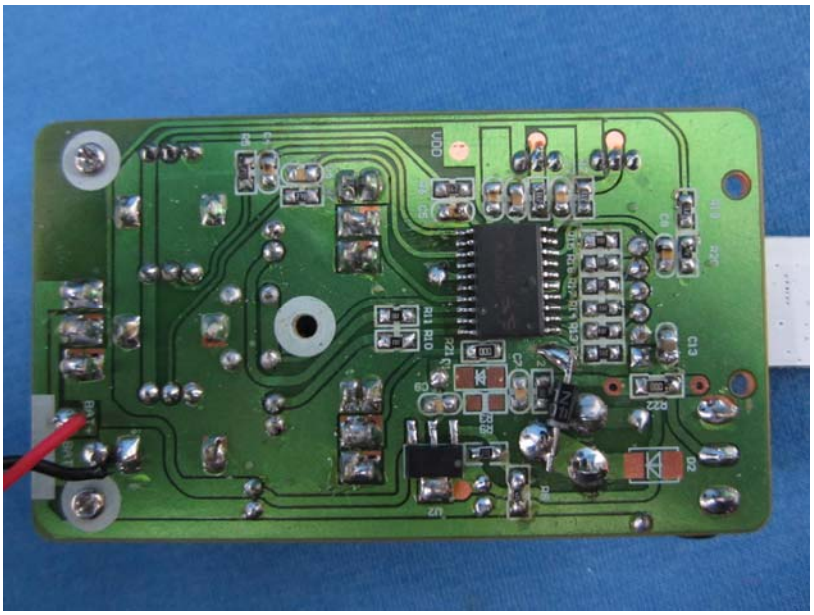
Radiated Emission

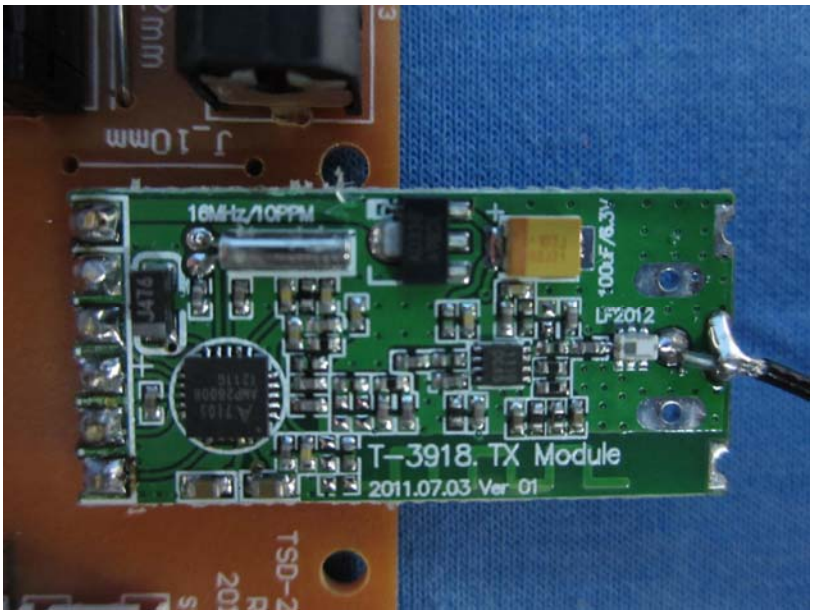


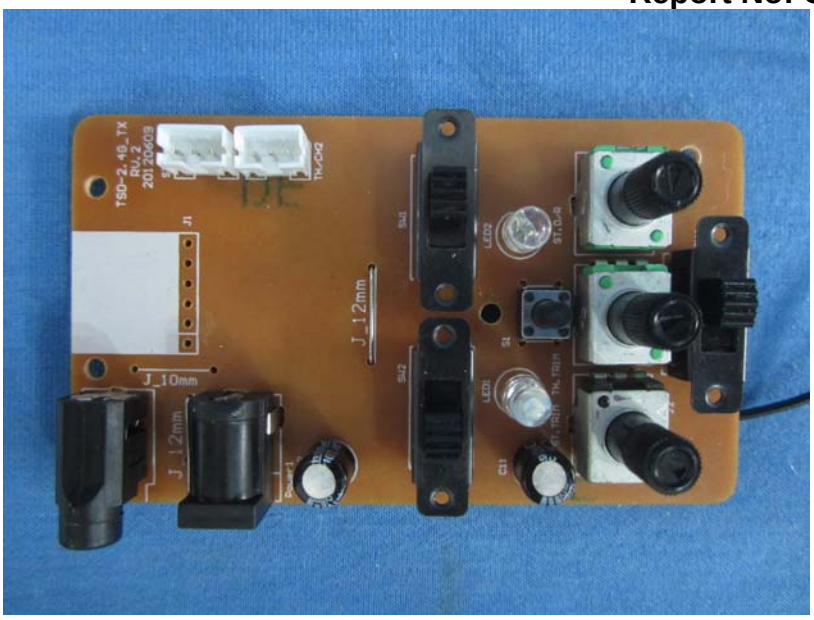


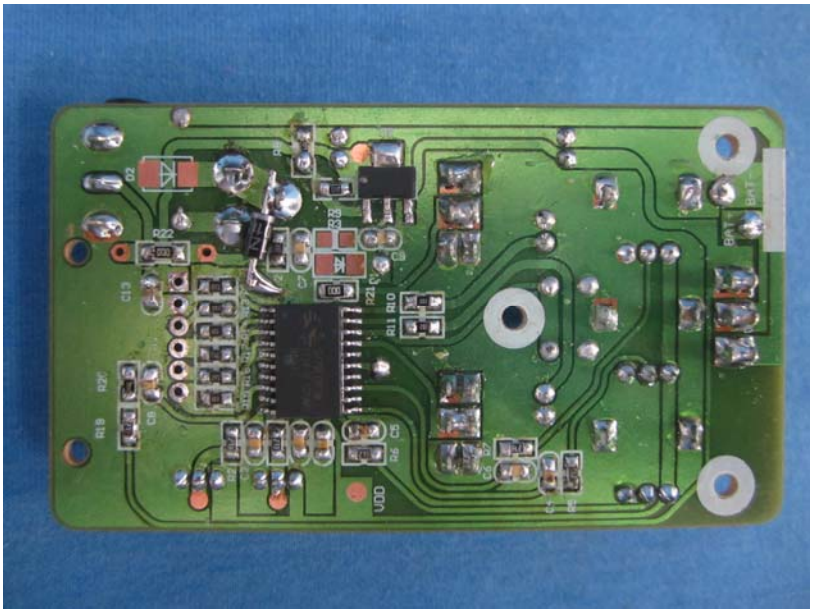
8 EUT Constructional Details

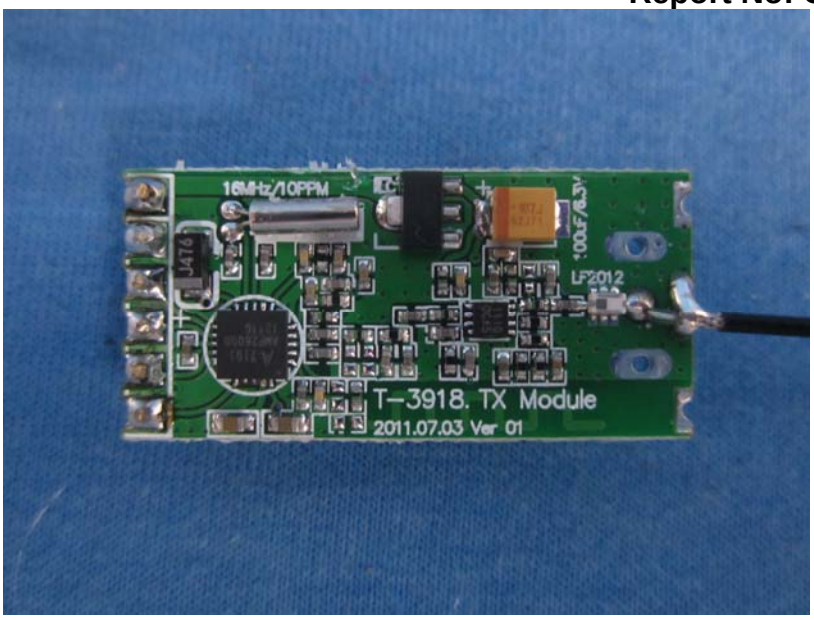


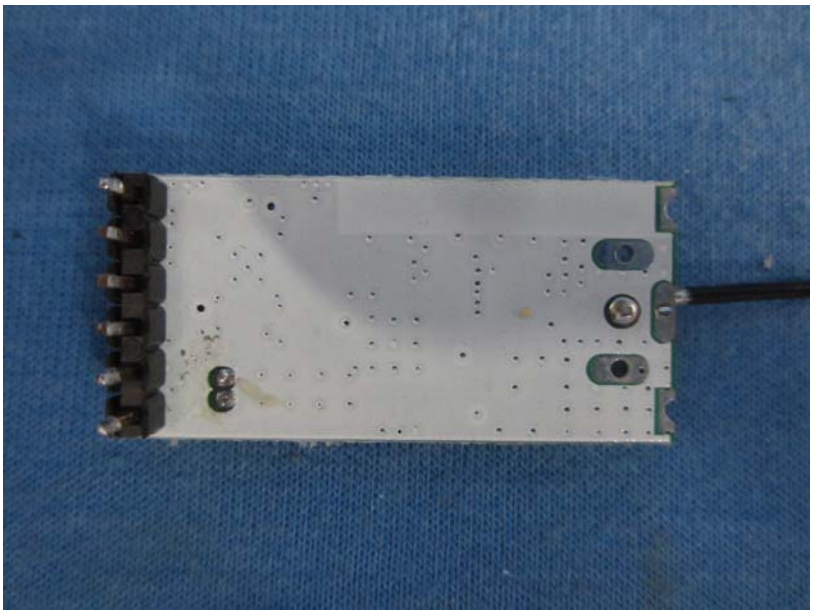



16MHz/10PPM
T-3918. TX Module
2011.07.03 Ver 01


J_12mm
J_10mm
J_12mm







------End------