

# TEST REPORT

**FCC ID** : SXYRCL-TX58  
**Applicant** : CEI Conrad Electronic International (HK) Limited  
**Address** : 18/F, Tower 2, Nina Tower, 8 Yeung Uk Road, Tsuen Wan. N.T.  
**Manufacturer** : The same as above  
**Address** : The same as above

**Equipment Under Test (EUT) :**

Product Name : 5.8GHz Video TX module  
Model No. : RCL-TX58  
**Rules** : FCC CFR47 Part 15 Section 15.249: 2010,  
**Date of Test** : April 10~30, 2013  
**Date of Issue** : May 13, 2013

<b>Test Result</b>	<b>: PASS*</b>
Remark: * The sample described above has been tested to be in compliance with the requirements of the rules listed above. The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.	

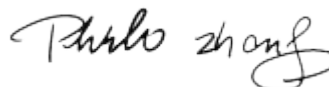
PERPARED BY:  
**Waltek Services (Shenzhen) Co., Ltd.**  
1/F, Fukangtai Building, West of Baima Road., Songgang Street, Bao'an District,  
Shenzhen, China  
Tel: +86-755-83551033 Fax: +86-755-83552400

Compiled by:



Zero Zhou / Project Engineer

Approved by:



Philo Zhong / Manager

## 2 Test Summary

Test Items	Test Requirement	Result
Restricted Band	15.205	PASS
20dB Bandwidth	15.215(c)	PASS
Duty Cycle	15.35(c)	PASS
Conducted Emissions	15.207	PASS
Radiated Emissions	15.205(a)	PASS
	15.209	
	15.249(a)	
Antenna Requirement	15.203	PASS

### 3 Contents

	Page
<b>1 COVER PAGE .....</b>	<b>1</b>
<b>2 TEST SUMMARY .....</b>	<b>2</b>
<b>3 CONTENTS .....</b>	<b>3</b>
<b>4 GENERAL INFORMATION.....</b>	<b>5</b>
4.1 GENERAL DESCRIPTION OF E.U.T. ....	5
4.2 DETAILS OF E.U.T. ....	5
4.3 DESCRIPTION OF SUPPORT UNITS .....	5
4.4 TEST FACILITY.....	6
4.5 TEST LOCATION .....	6
4.6 GENERAL CONDITION .....	6
4.6.1 <i>Environmental condition of test site</i> .....	6
4.6.2 <i>Test Mode</i> .....	6
<b>5 EQUIPMENT USED DURING TEST .....</b>	<b>7</b>
5.1 EQUIPMENTS LIST .....	7
5.2 MEASUREMENT UNCERTAINTY .....	8
5.3 TEST EQUIPMENT CALIBRATION.....	8
<b>6 CONDUCTED EMISSION TEST .....</b>	<b>9</b>
6.1 E.U.T. OPERATION .....	9
6.2 EUT SETUP.....	9
6.3 CONDUCTED EMISSION TEST RESULT .....	10
<b>7 RADIATION EMISSION TEST .....</b>	<b>12</b>
7.1 EUT OPERATION: .....	12
7.2 TEST SETUP .....	13
7.3 SPECTRUM ANALYZER SETUP .....	14
7.4 TEST PROCEDURE .....	15
7.5 CORRECTED AMPLITUDE & MARGIN CALCULATION .....	15
7.6 RADIATED EMISSIONS TEST RESULT .....	15
7.7 RADIATED EMISSION DATA .....	16
<b>8 20DB BANDWIDTH .....</b>	<b>24</b>
8.1 TEST PROCEDURE .....	24
8.2 TEST RESULT .....	24
<b>9 DUTY CYCLE.....</b>	<b>26</b>
9.1 TEST RESULT .....	26
<b>10 RESTRICTED BAND .....</b>	<b>27</b>
10.1 TEST RESULT .....	27
<b>11 ANTENNA REQUIREMENT .....</b>	<b>28</b>
<b>12 PHOTOGRAPHS OF TESTING .....</b>	<b>29</b>
12.1 CONDUCTED EMISSIONS.....	29
12.2 RADIATION EMISSION FROM BELOW 30MHZ.....	29
12.3 RADIATION EMISSION FROM 30MHZ-1GHZ .....	30
12.4 RADIATION EMISSION FROM ABOVE 1GHZ.....	30

**13 PHOTOGRAPHS - CONSTRUCTIONAL DETAILS .....31**

13.1 EUT - APPEARANCE VIEW.....31

13.2 EUT - OPEN VIEW .....34

13.3 PCB - VIEW.....35

## 4 General Information

### 4.1 General Description of E.U.T.

<b>Product Name</b>	: 5.8GHz Video TX module
<b>Model No.</b>	: RCL-TX58
<b>Type of Modulation</b>	: FM
<b>Frequency Range</b>	: 5.73,5.80 and 5.86GHz
<b>Oscillator</b>	: 8MHz
<b>Antenna Gain</b>	: 3dBi
<b>Antenna installation</b>	: Integrated Antenna

### 4.2 Details of E.U.T.

<b>Technical Data</b>	: DC 4.3-6.2V, 1W
<b>Adapter manufacturer</b>	: N/A
<b>M/N</b>	: N/A

### 4.3 Description of Support Units

<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Series No.</b>
Computer	Acer	Aspire AG1720	1300148096
LCD	MAG	EV527	WI1W061001477
Keyboard	Shuangfeiyan	KB-3	-
Mouse	shuangfeiyan	OP-220	-
Notebook	IBM	2672-39C	99-8D3W4

#### 4.4 Test Facility

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

- **FCC – Registration No.: 880581**

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 880581, May 26, 2011.

- **IC – Registration No.:7760A**

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, July 12, 2012.

#### 4.5 Test Location

All Emissions tests were performed at:-  
1/F, Fukangtai Building, West Baima Rd., Songgang Street, Baoan District, Shenzhen  
518105, Guangdong, China.

#### 4.6 General condition

Ambient Condition: 25.5 °C 58 %RH

##### 4.6.1 Environmental condition of test site

For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery.

The follow condition is applicable

Test Voltage	Input voltage
Rated voltage-15%	DC 4.25V
normal	DC 5.0V
Rated voltage+15%	DC 5.75V

The follow condition is not applicable.

Test voltage	Test Voltage
Rated voltage	New Battery

##### 4.6.2 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

Test mode	Lower channel	Middle channel	Upper channel
Transmitting	5.73MHz	5.8MHz	5.86MHz

## 5 Equipment Used during Test

### 5.1 Equipments List

<b>Conducted Emissions</b>						
<b>Item</b>	<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Last Calibration Date</b>	<b>Calibration Due Date</b>
1.	EMI Test Receiver	R&S	ESCI	101178	Aug. 13,2012	Aug. 13,2013
2.	LISN	R&S	ENV216	101215	Aug. 13,2012	Aug. 13,2013
3.	Cable	HUBER+SUHNER	CBL2-NN-3M	2230300	Aug.14,2012	Aug. 14,2013
<b>3m Semi-anechoic Chamber for Radiation Emissions</b>						
<b>Item</b>	<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Last Calibration Date</b>	<b>Calibration Due Date</b>
1.	EMC Analyzer	Agilent	E7405A	MY45114943	Aug. 13,2012	Aug. 13,2013
2.	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	Aug. 13,2012	Aug. 13,2013
3.	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	Aug. 13,2012	Aug. 13,2013
4.	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	Aug. 13,2012	Aug. 13,2013
5.	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	399	Aug. 13,2012	Aug. 13,2013
6.	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Feb .23,2013	Feb .23,2014
7.	Broadband Preamplifier	SCHWARZBECK	BBV 9718	9718-148	Aug. 13,2012	Aug. 13,2013
8.	10m Coaxial Cable with N- plug	SCHWARZBECK	AK 9515 H	-	Aug. 13,2012	Aug. 13,2013
9.	10m 50 Ohm Coaxial Cable with N-plug	SCHWARZBECK	AK 9513	-	Aug. 13,2012	Aug. 13,2013
10.	Spectrum Analyzer	ROHDE & SCHWARZ	FSL6	-	Sep.21,2012	Sep.20,2013
11.	Double Ridge Guide Horn Antenna	A.H. System	SAS-574	-	Sep.21,2012	Sep.20,2013
12.	Broadband Preamplifier	A.H. System	PAM-1840	-	Sep.21,2012	Sep.20,2013

## 5.2 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-6}$
RF Power	$\pm 1.0$ dB
RF Power Density	$\pm 2.2$ dB
Radiated Spurious Emissions test	$\pm 5.03$ dB (30M~1000MHz)
	$\pm 4.74$ dB (1000M~18000MHz)
	$\pm 5.12$ dB (18000M~40000MHz)
Conducted Spurious Emissions test	$\pm 3.64$ dB (AC mains 150KHz~30MHz)

## 5.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.



## 6 Conducted Emission Test

Test Requirement:	FCC Part15 Paragraph 15.207
Test Method:	ANSI C63.4
Frequency Range:	150kHz to 30MHz
Class:	Class B
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth) Quasi-Peak & Average if maximised peak within 6dB of Average
Limit	66-56 dB $\mu$ V between 0.15MHz & 0.5MHz 56 dB $\mu$ V between 0.5MHz & 5MHz 60 dB $\mu$ V between 5MHz & 30MHz

### 6.1 E.U.T. Operation

#### Operating Environment:

Temperature:	25.5 °C
Humidity:	51 % RH
Atmospheric Pressure:	1012 mbar

#### EUT Operation:

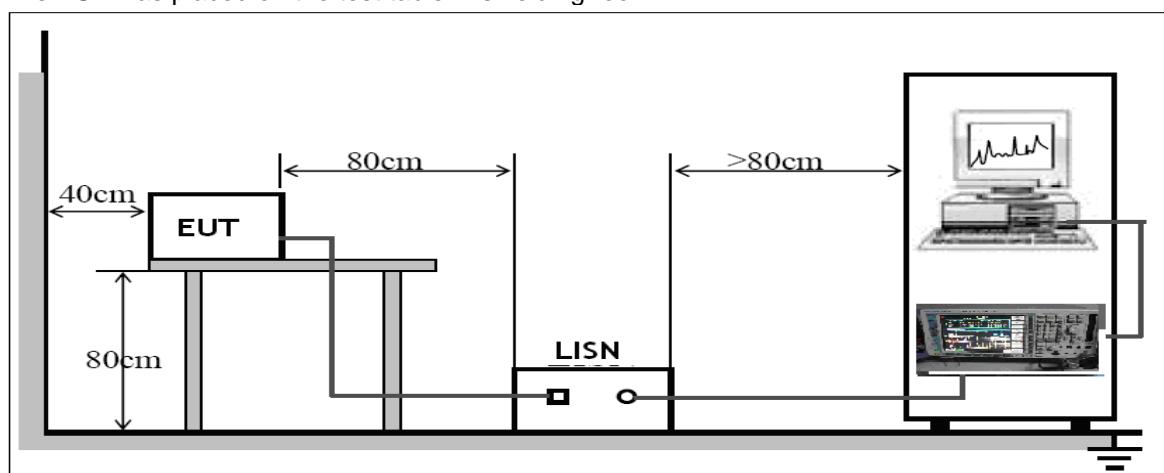
The test was performed in TX mode, the test data were shown in the report.

The EUT was tested according to ANSI C63.4:2003. The frequency spectrum from 150kHz to 30MHz was investigated.

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

### 6.2 EUT Setup

The EUT was placed on the test table in shielding room.

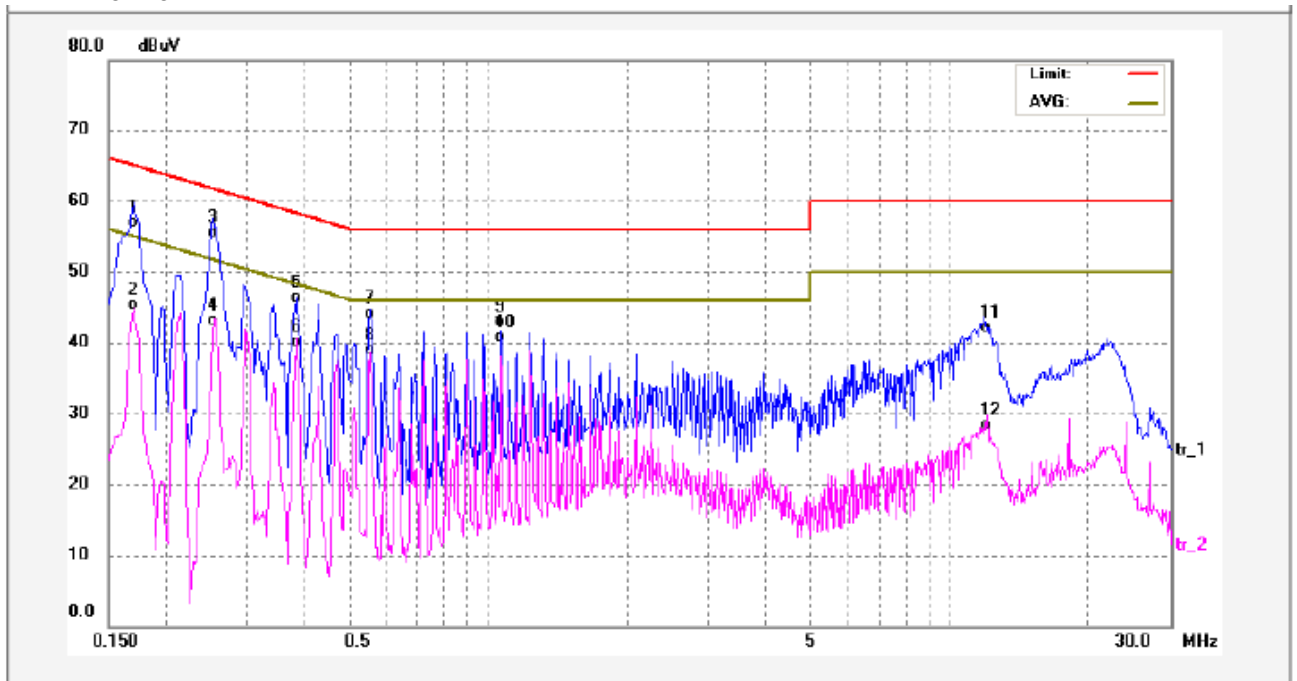


### 6.3 Conducted Emission Test Result

An initial pre-scan was performed on the live and neutral lines.

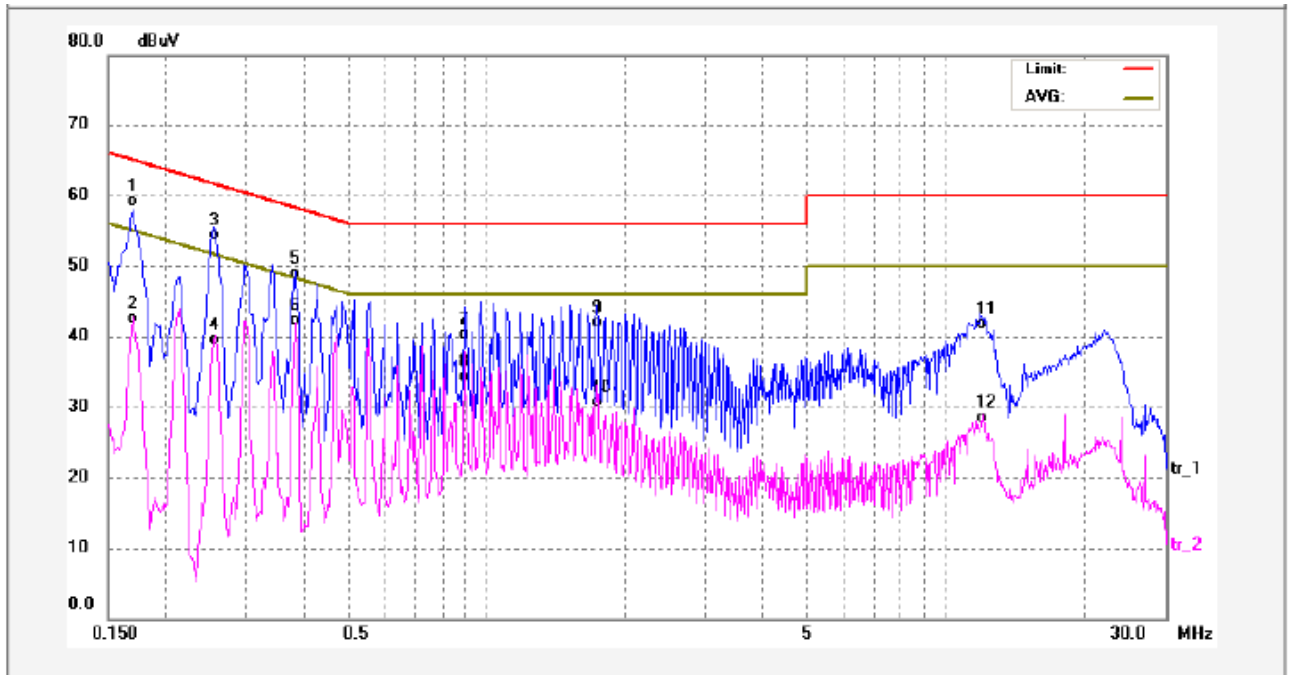
Test mode:TX powered by PC(the worst data)

Live line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1700	44.83	11.22	56.05	64.96	-8.91	QP	
2	0.1700	33.25	11.22	44.47	54.96	-10.49	AVG	
3	0.2521	43.40	11.30	54.70	61.68	-6.98	QP	
4	0.2521	30.93	11.30	42.23	51.68	-9.45	AVG	
5	0.3820	34.16	11.31	45.47	58.23	-12.76	QP	
6	0.3820	27.94	11.31	39.25	48.23	-8.98	AVG	
7	0.5540	31.91	11.32	43.23	56.00	-12.77	QP	
8	0.5540	26.82	11.32	38.14	46.00	-7.86	AVG	
9	1.0620	30.85	11.18	42.03	56.00	-13.97	QP	
10	1.0620	28.70	11.18	39.88	46.00	-6.12	AVG	
11	11.9180	29.94	11.37	41.31	60.00	-18.69	QP	
12	11.9180	16.21	11.37	27.58	50.00	-22.42	AVG	

Neutral line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1700	47.18	11.22	58.40	64.96	-6.56	QP	
2	0.1700	30.53	11.22	41.75	54.96	-13.21	AVG	
3	0.2540	42.21	11.30	53.51	61.62	-8.11	QP	
4	0.2540	27.32	11.30	38.62	51.62	-13.00	AVG	
5	0.3820	36.81	11.31	48.12	58.23	-10.11	QP	
6	0.3820	30.24	11.31	41.55	48.23	-6.68	AVG	
7	0.8980	28.20	11.23	39.43	56.00	-16.57	QP	
8	0.8980	22.19	11.23	33.42	46.00	-12.58	AVG	
9	1.7420	29.83	11.19	41.02	56.00	-14.98	QP	
10	1.7420	18.77	11.19	29.96	46.00	-16.04	AVG	
11	11.9140	29.61	11.37	40.98	60.00	-19.02	QP	
12	11.9140	16.30	11.37	27.67	50.00	-22.33	AVG	

## 7 Radiation Emission Test

Test Requirement: FCC Part15 Paragraph 15.249  
 Test Method: ANSI 63.4  
 Measurement Distance: 3m  
 Detector: Peak for pre-scan (120kHz resolution bandwidth)  
 Quasi-Peak if maximised peak within 6dB of limit  
 Test Result: PASS

15.249(a)Limit:

Fundamental frequency	Field strength of fundamental		Field strength of harmonics	
	mV/m	dBuV/m	uV/m	dBuV/m
902-928 MHz	50	94	500	54
2400-2483.5 MHz	50	94	500	54
5725-5875 MHz	50	94	500	54
24.0-24.25 GHz	250	108	2500	68

15.209 Limit:

Frequency(MHZ)	Distance(m)	Field strength	
		uV/m	dBuV/m
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

**Note:** RF Voltage(dBuV)=20 log<sub>10</sub> RF Voltage(uV)

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 §15.209, whichever is the lesser attenuation.

### 7.1 EUT Operation:

#### Operating Environment:

Temperature: 25.5 °C  
 Humidity: 51 % RH  
 Atmospheric Pressure: 1011 mbar

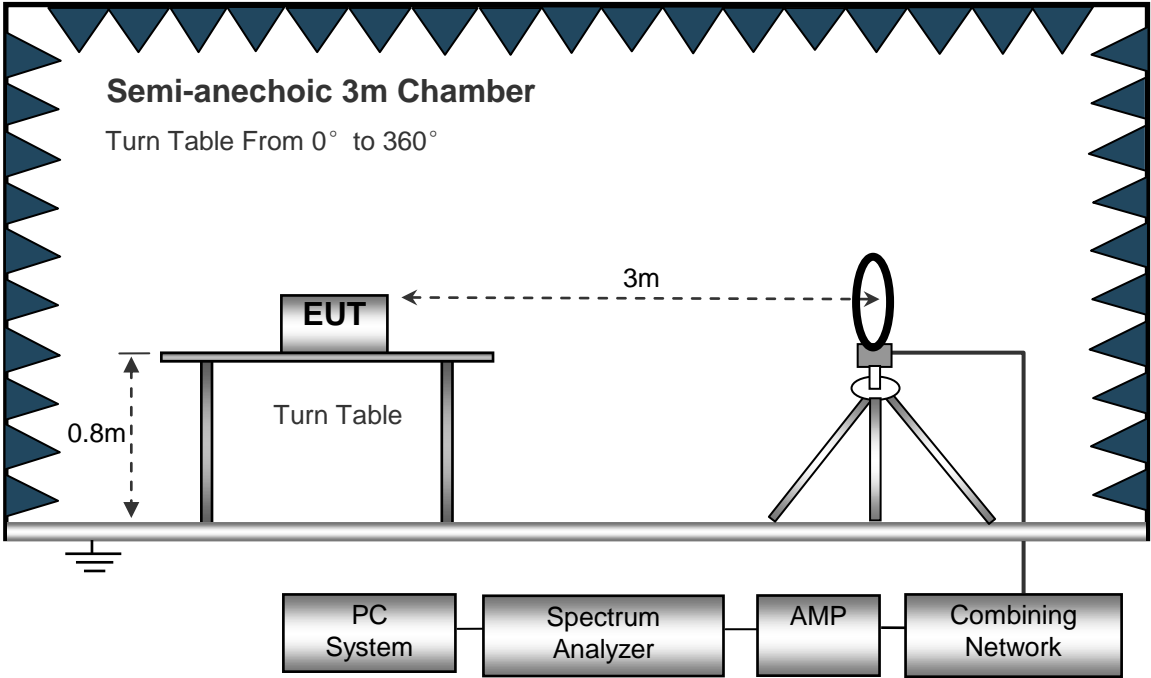
#### Operation Mode:

The EUT was tested in normal mode. The worst data were shown as follow.

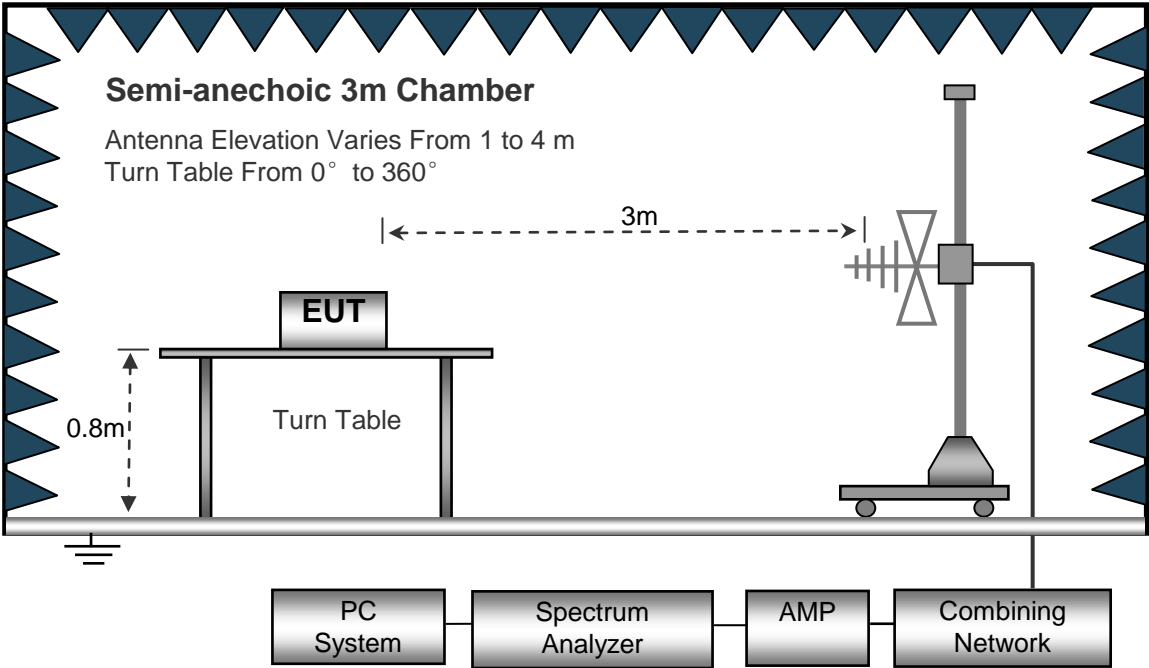
### 7.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4: 2003.

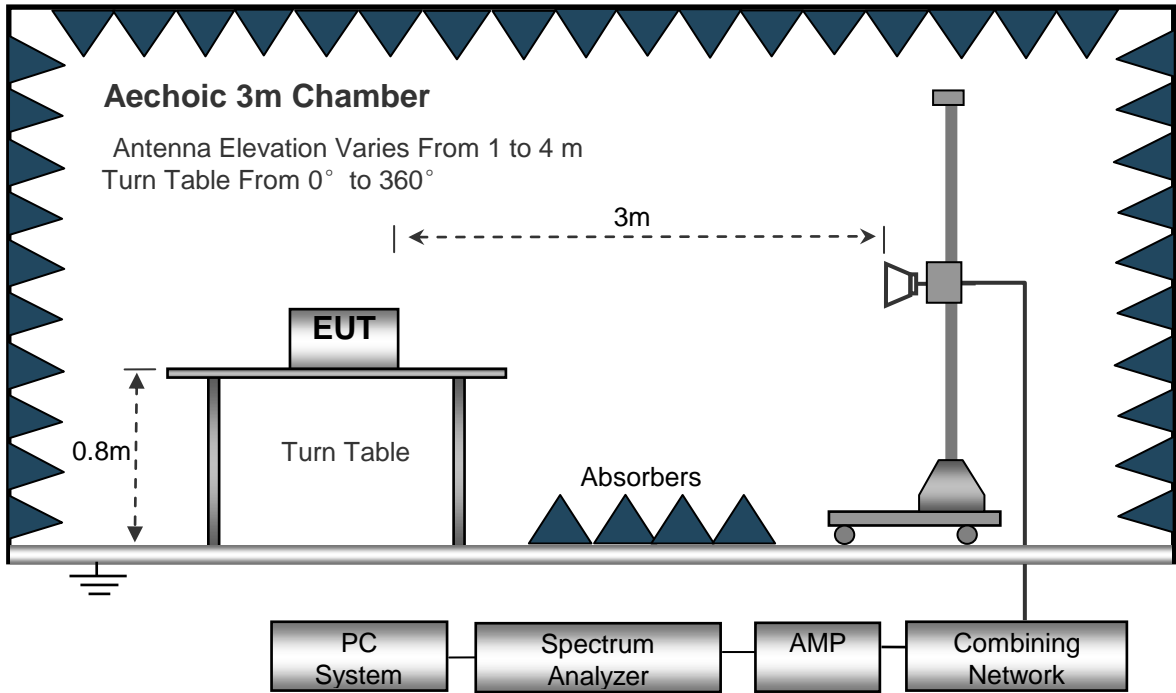
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz.



**7.3 Spectrum Analyzer Setup**

According to FCC Part15 Rules, the system was tested from 8MHz to 40GHz.

Below 30MHz

- Sweep Speed .....Auto
- IF Bandwidth .....10KHz
- Video Bandwidth.....10KHz
- Resolution Bandwidth.....10KHz

30MHz ~ 1GHz

- Sweep Speed .....Auto
- IF Bandwidth .....120 KHz
- Video Bandwidth.....100KHz
- Quasi-Peak Adapter Bandwidth .....120 KHz
- Quasi-Peak Adapter Mode .....Normal
- Resolution Bandwidth.....100KHz

Above 1GHz

- Sweep Speed .....Auto
- IF Bandwidth .....120 KHz
- Video Bandwidth.....3MHz
- Quasi-Peak Adapter Bandwidth .....120 KHz
- Quasi-Peak Adapter Mode .....Normal
- Resolution Bandwidth.....1MHz

## 7.4 Test Procedure

1. The DC source(PC) was used in the equipment under test for radiated emissions test.
2. This is a handheld device, The radiation emission should be tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position.  
So the data shown was the X position only.
3. Maximizing procedure was performed on the six (6) highest emissions to ensure EUT is compliant with all installation combinations.
4. All data was recorded in the peak and average detection mode.
5. The EUT was under working mode during the final qualification test and the configuration was used to represent the worst case results.

## 7.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB $\mu$ V means the emission is 7dB $\mu$ V below the maximum limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Class B Limit}$$

## 7.6 Radiated Emissions Test Result

Formula of conversion factors: the field strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB $\mu$ V/m) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the presselector was accounted for in the spectrum analyser meter reading.

Example:

Freq(MHz) Meter Reading + ACF = FS

33            20dB $\mu$ V + 10.36dB = 30.36dB $\mu$ V/m @3m

### 7.7 Radiated Emission Data

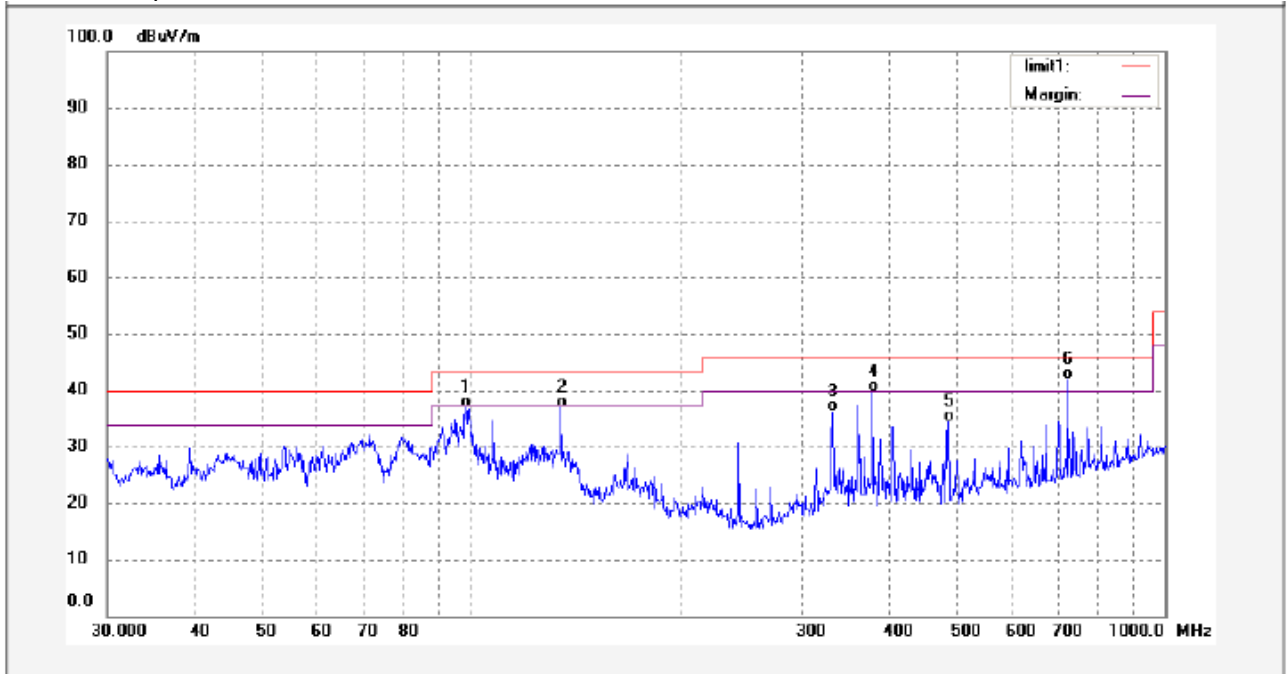
Test Frequency: Below 30MHz

Remarks: All emissions were more than 20 dB below the limit and therefore not reported.

Test Frequency: 30MHz ~ 1000MHz

Test Mode:TX powered by PC(The worst data)

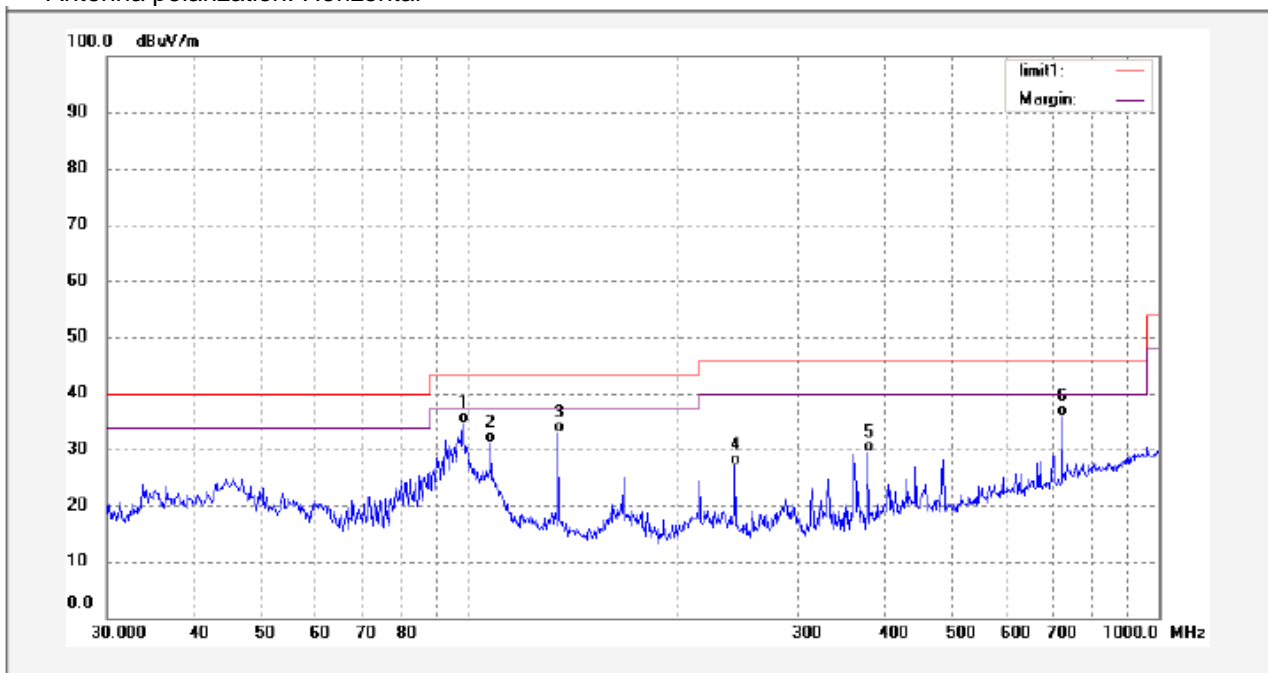
Antenna polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	98.1419	61.53	-24.58	36.95	43.50	-6.55	QP	
2	135.0319	58.75	-21.92	36.83	43.50	-6.67	QP	
3	332.5187	54.78	-18.70	36.08	46.00	-9.92	QP	
4	378.5843	57.06	-17.36	39.70	46.00	-6.30	QP	
5	487.3151	49.15	-14.65	34.50	46.00	-11.50	QP	
6	724.2611	50.94	-9.11	41.83	46.00	-4.17	QP	



Antenna polarization: Horizontal

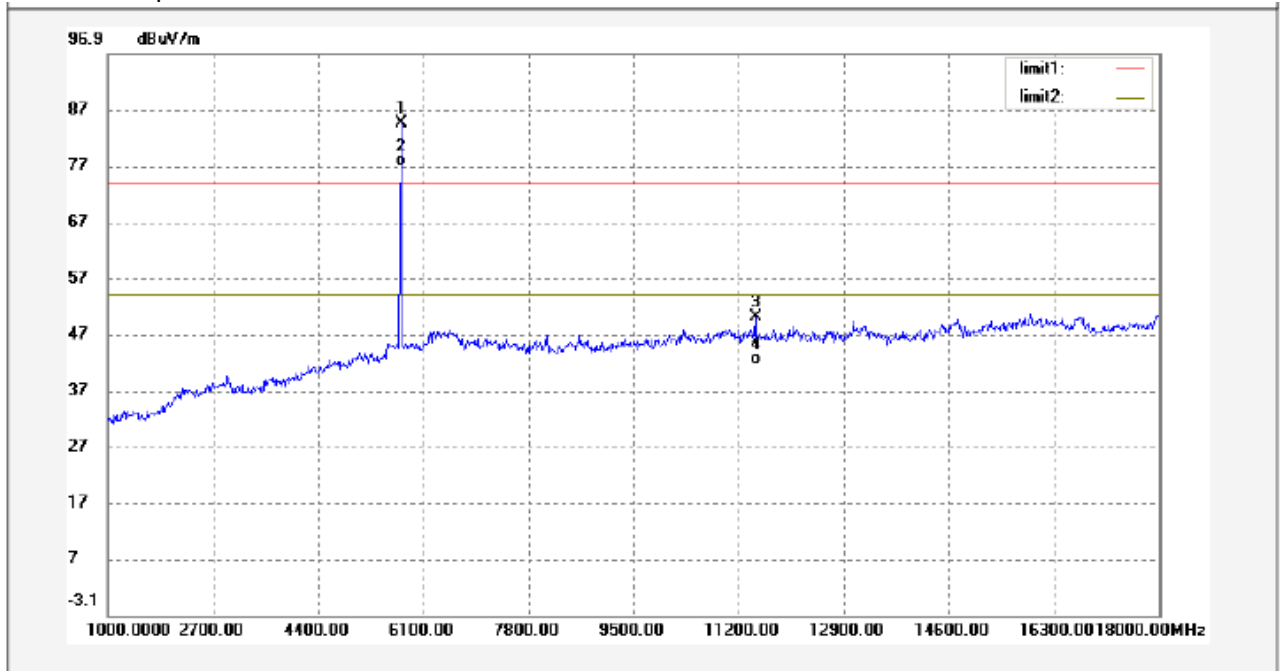


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	98.1419	59.52	-24.82	34.70	43.50	-8.80	QP	
2	107.8877	55.07	-23.99	31.08	43.50	-12.42	QP	
3	135.0319	54.58	-21.72	32.86	43.50	-10.64	QP	
4	243.3772	48.91	-21.76	27.15	46.00	-18.85	QP	
5	378.5843	46.77	-17.37	29.40	46.00	-16.60	QP	
6	724.2611	44.93	-9.04	35.89	46.00	-10.11	QP	

**1GHz~18GHz**

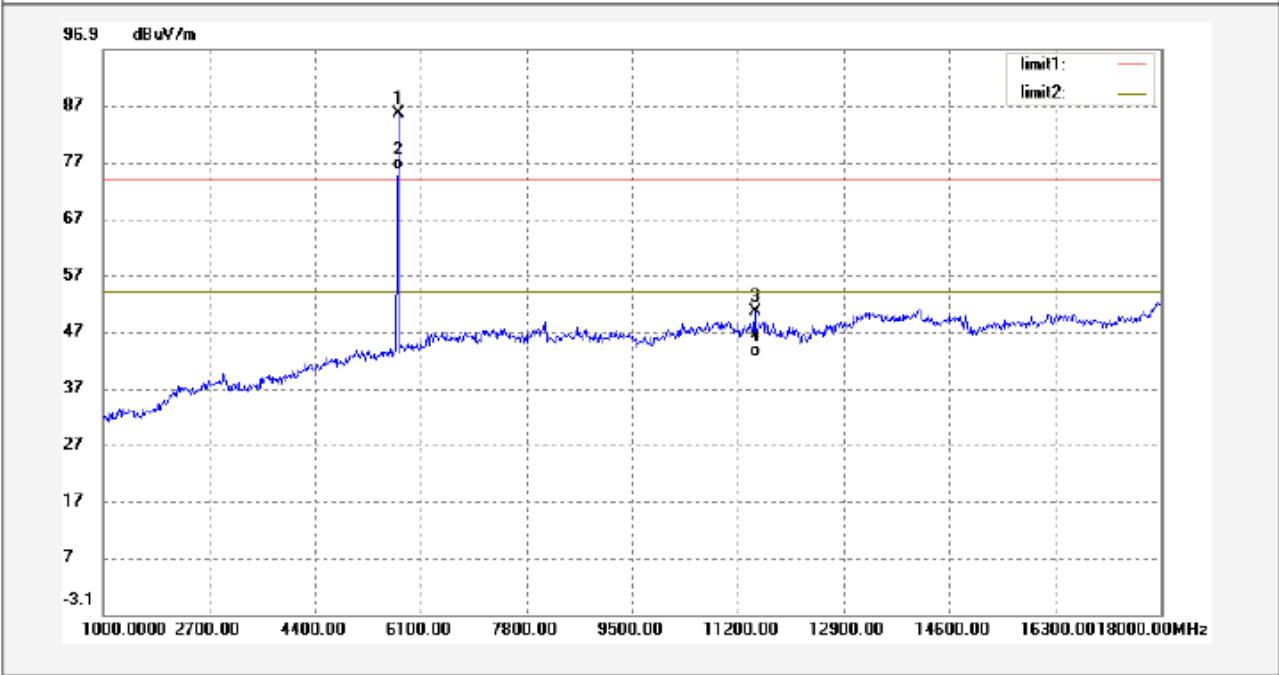
Test Channel: 5.73GHz

Antenna polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	5730.000	86.21	-1.56	84.65	114.00	-29.35	peak	
2	5730.000	78.23	-1.56	76.67	94.00	-17.33	AVG	
3	11460.000	38.70	11.34	50.04	74.00	-23.96	peak	
4	11460.000	30.25	11.34	41.59	54.00	-12.41	AVG	

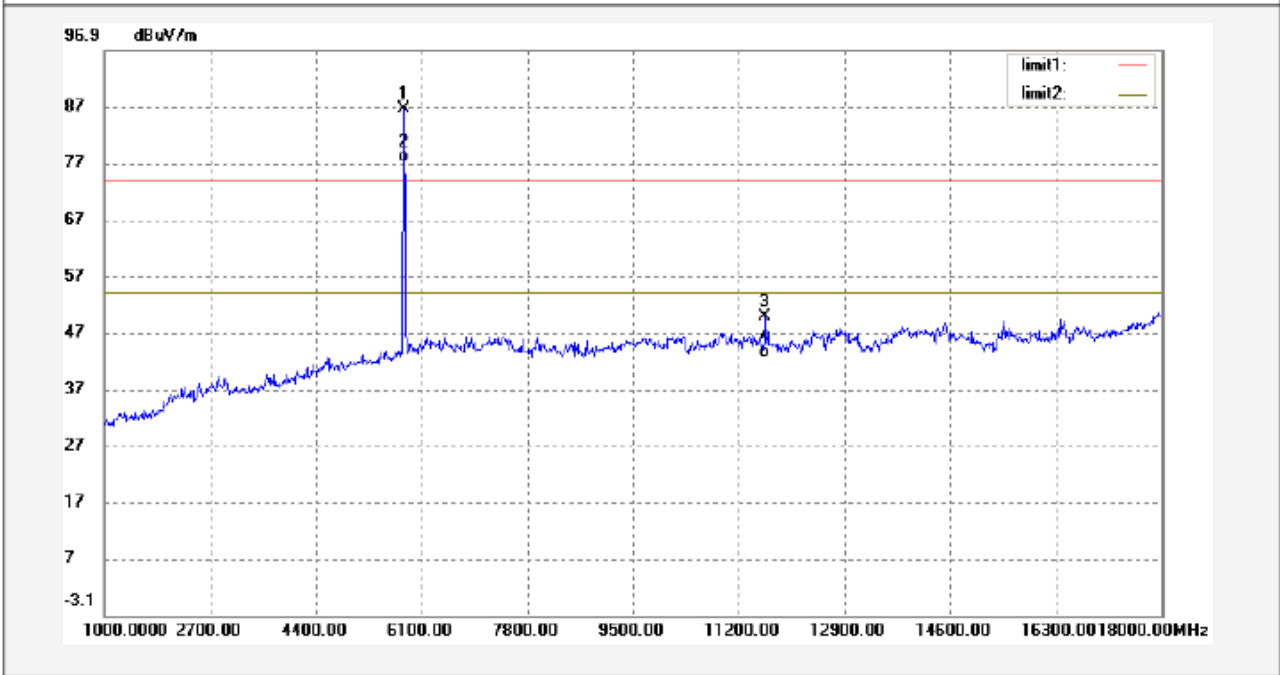
Antenna polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	5730.000	87.21	-1.56	85.65	114.00	-28.35	peak	
2	5730.000	77.00	-1.56	75.44	94.00	-18.56	AVG	
3	11460.000	39.20	11.34	50.54	74.00	-23.46	peak	
4	11460.000	31.24	11.34	42.58	54.00	-11.42	AVG	

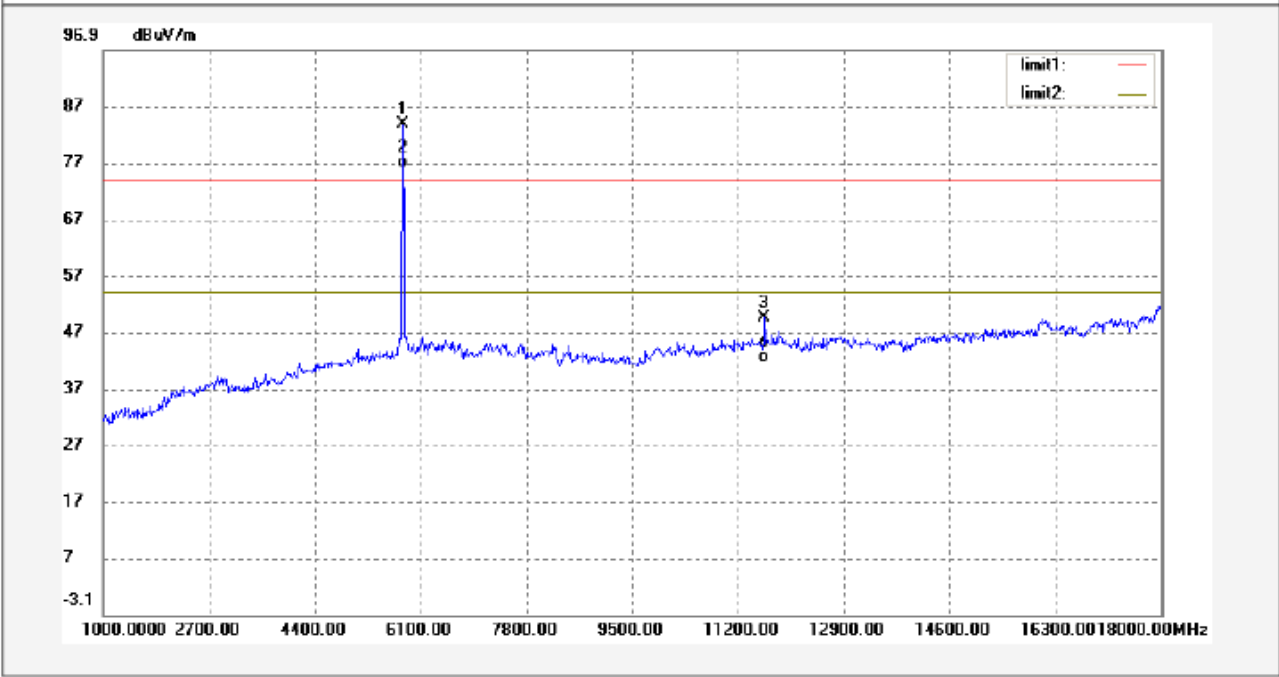
Test Channel: 5.80GHz

Antenna polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	5800.000	87.65	-1.24	86.41	114.00	-27.59	peak	
2	5800.000	78.23	-1.24	76.99	94.00	-17.01	AVG	
3	11600.000	38.47	11.32	49.79	74.00	-24.21	peak	
4	11600.000	31.24	11.32	42.56	54.00	-11.44	AVG	

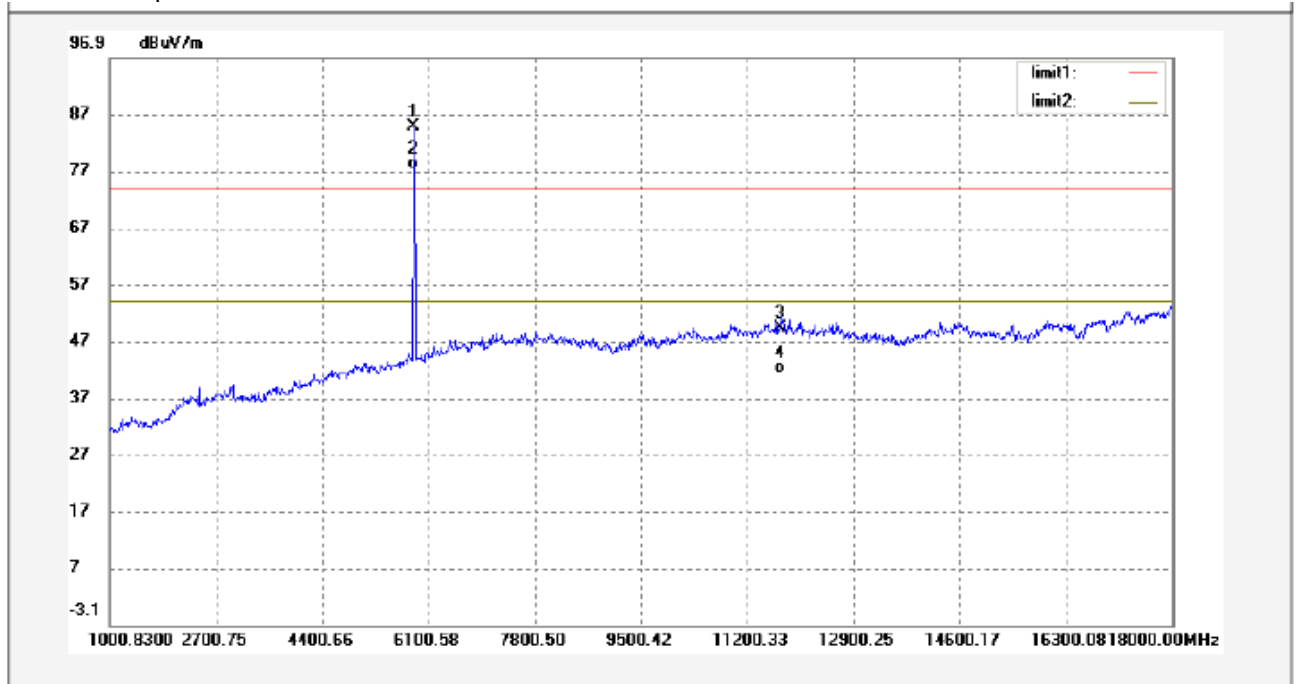
Antenna polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	5800.000	85.10	-1.24	83.86	114.00	-30.14	peak	
2	5800.000	77.20	-1.24	75.96	94.00	-18.04	AVG	
3	11600.000	38.32	11.32	49.64	74.00	-24.36	peak	
4	11600.000	30.25	11.32	41.57	54.00	-12.43	AVG	

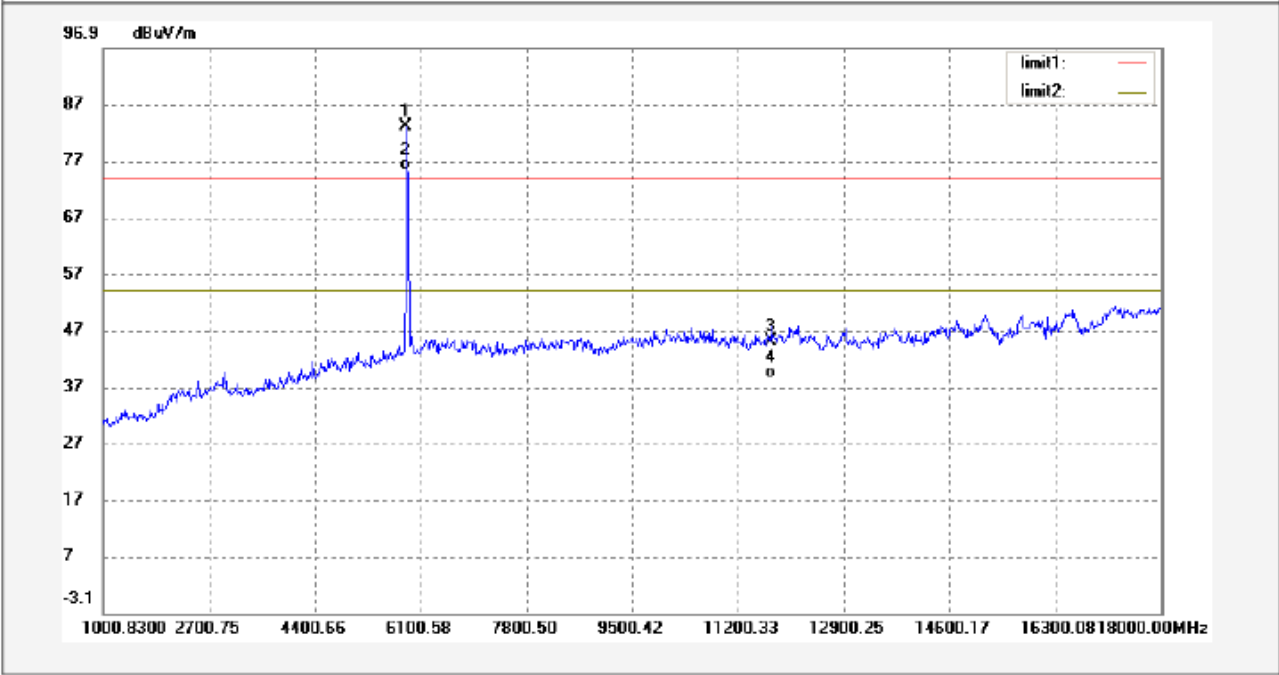
Test Channel: 5.86GHz

Antenna polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	5860.000	85.78	-0.98	84.80	114.00	-29.20	peak	
2	5860.000	78.26	-0.98	77.28	94.00	-16.72	AVG	
3	11720.000	38.32	11.03	49.35	74.00	-24.65	peak	
4	11720.000	30.24	11.03	41.27	54.00	-12.73	AVG	

Antenna polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	5860.000	84.08	-0.98	83.10	114.00	-30.90	peak	
2	5860.000	76.25	-0.98	75.27	94.00	-18.73	AVG	
3	11720.000	34.11	11.03	45.14	74.00	-28.86	peak	
4	11720.000	27.56	11.03	38.59	54.00	-15.41	AVG	

**Test Frequency :Above 18GHz**

After pretest,we found no higher emission than background level, the data does not been shown in the test report.

## 8 20dB Bandwidth

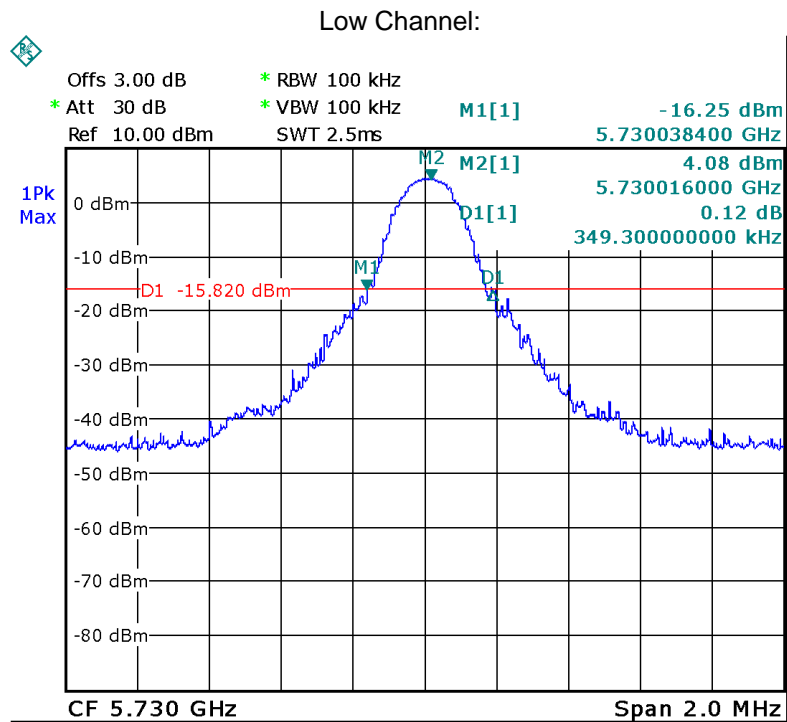
Test Requirement:	FCC Part15.215(c)
Test Method:	ANSI C63.4
Test mode:	Transmitting
Test Result:	PASS

### 8.1 Test Procedure

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. The bandwidth of the fundamental frequency was measure by spectrum analyser with 100KHz RBW and 100KHz VBW.

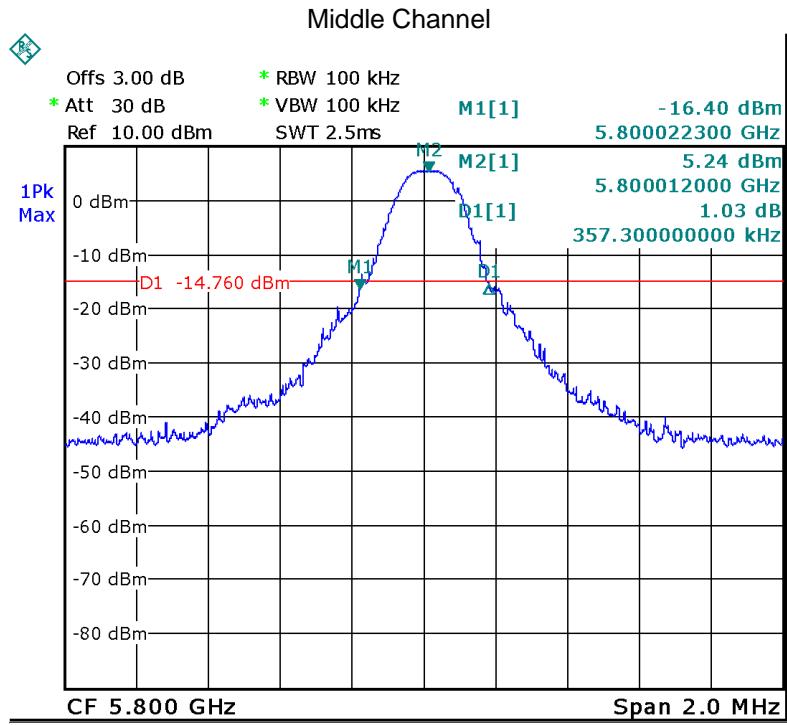
### 8.2 Test Result

Please refer the graph as below:

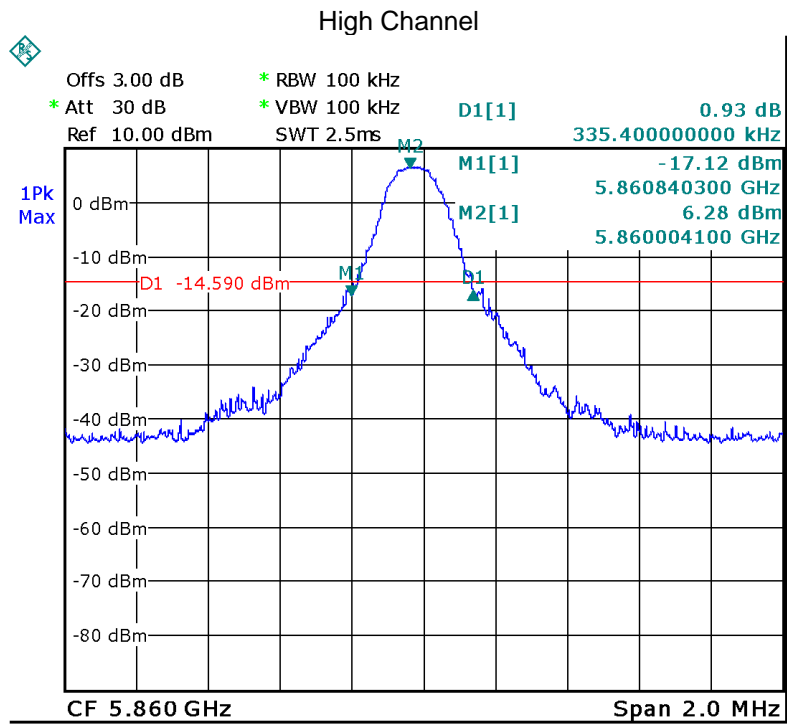


Date: 27.APR.2013 20:29:22





Date: 27.APR.2013 20:27:57



Date: 27.APR.2013 20:24:34

## **9 Duty Cycle**

Test Requirement: FCC Part 15.35(c)

Test Mothed: ANSI C63.4:2003

### **9.1 Test Result**

The duty cycle is 100%.

## 10 Restricted band

Test Requirement: Radiated emissions which fall in the restricted bands. as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) and 15.205(c).

### 10.1 Test Result

The Operation frequency 5.8GHz which is located on the center band.

## 11 Antenna Requirement

According to the FCC Part 15 Paragraph 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

## 12 Photographs of Testing

### 12.1 Conducted Emissions

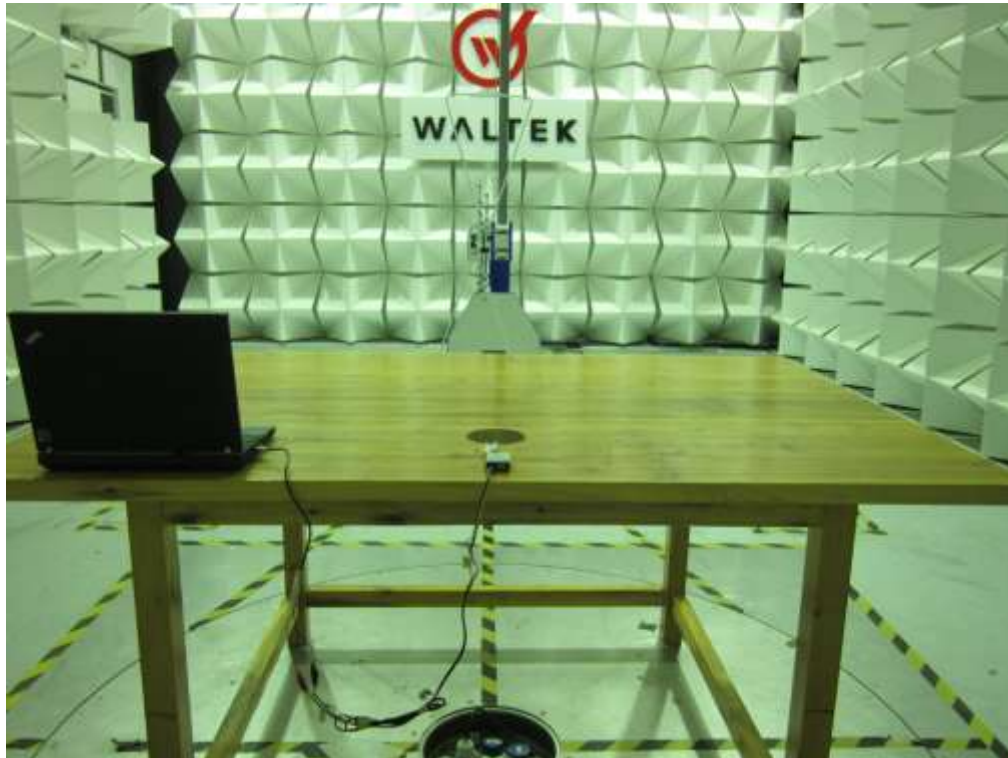
PC is only used for power supply, can not for data transmitting



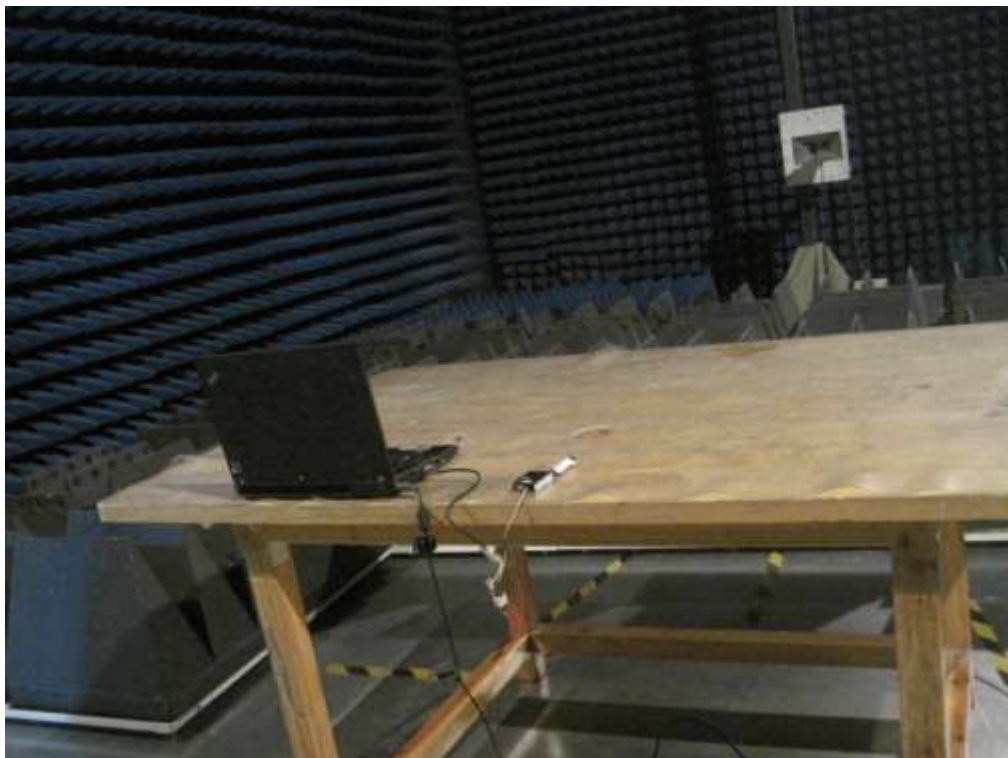
### 12.2 Radiation Emission From Below 30MHz



### 12.3 Radiation Emission From 30MHz-1GHz



### 12.4 Radiation Emission From Above 1GHz



### 13 Photographs - Constructional Details

#### 13.1 EUT - Appearance View







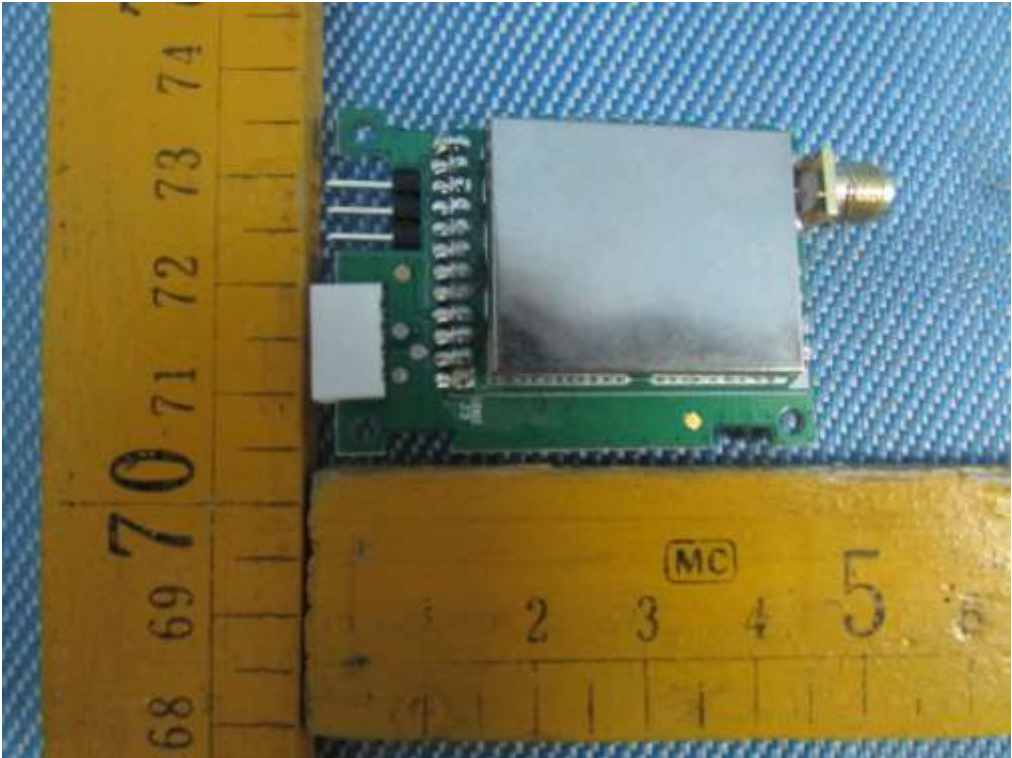
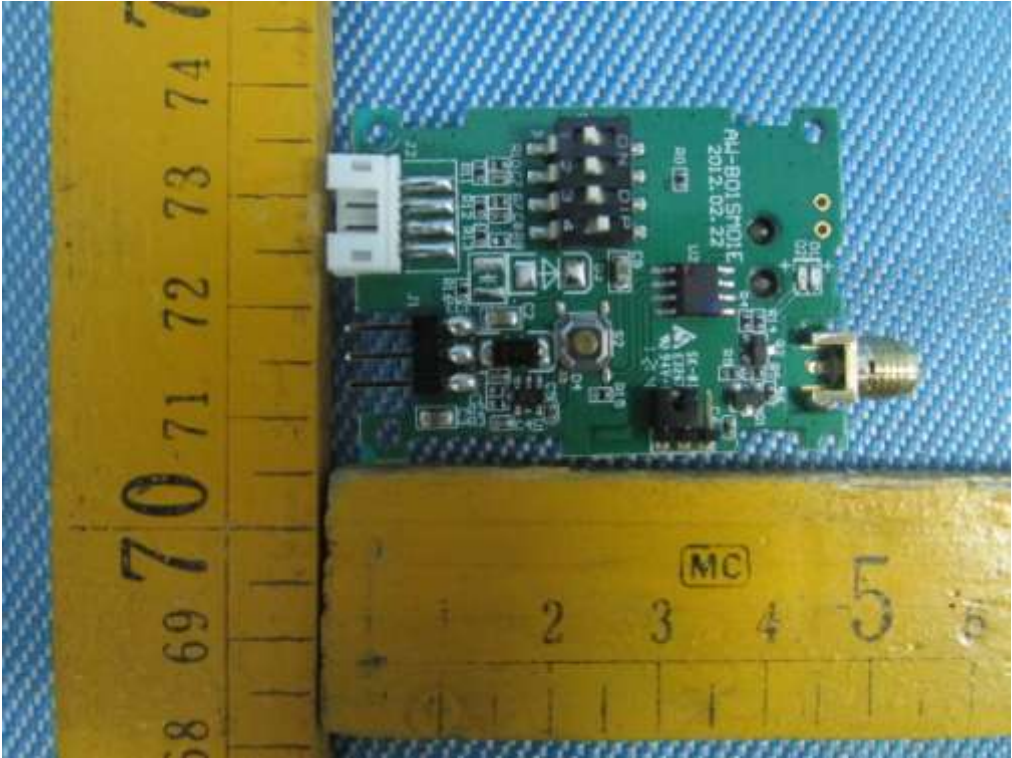


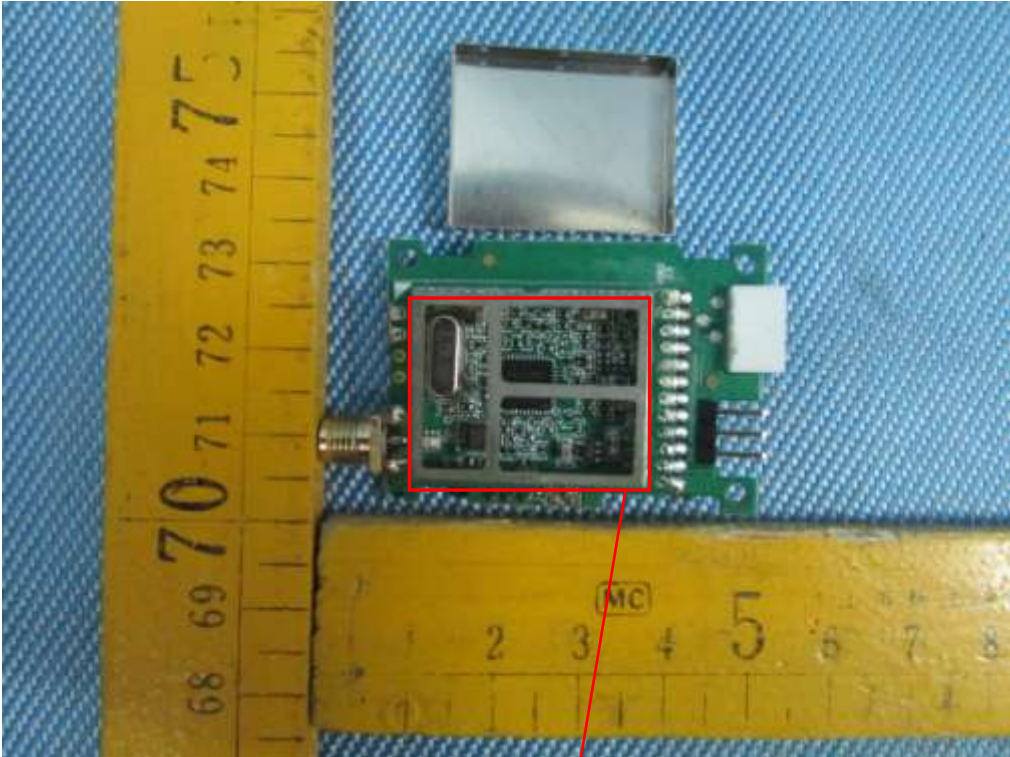


**13.2 EUT - Open View**



13.3 PCB - View





RF Module

==END==