



FCC TEST REPORT

Report No: STS1601026F01

Issued for

Xian Aerospace Huaxun Technology Co.,LTD

3rd floor, Huihao International Building, No.58 of Technology
3rd road, Xian City,China

Product Name:	RFID Transmitter
Brand Name:	 西安航天华迅科技有限公司 Xi'an Aerospace Huaxun Technology Co.,Ltd.
Model No.:	HX-5208
Series Model:	N/A
FCC ID:	2AGY5-HX52081
Test Standard:	FCC Part 15.231

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Shenzhen STS Test Services Co., Ltd.
1/F, Building B, Zhuoke Science Park, Chongqing Road, Fuyong, Baoan District,
Shenzhen, China



**TEST RESULT CERTIFICATION****Applicant's name :**

Xian Aerospace Huaxun Technology Co.,LTD

Address :

3rd floor, Huihao International Building, No.58 of Technology 3rd road, Xian City,China

Manufacture's Name :

Shenzhen Shouxin Tongda Technology Co.,Ltd

Address :

Rm.1301-1305A,Fujian Building, Caitian road, Futian District, Shenzhen, Guangdong, China

Product description

Product name :

RFID Transmitter

Brand name :



西安航天华讯科技有限公司

Model and/or type reference :

HX-5208

Standards :

FCC Part 15.231

Test procedure :

ANSI C63.10-2013

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 of performance of tests 10 Jan. 2016 ~19 Jan . 2016

Date of Issue :

20 Jan . 2016

Test Result :

Pass

Testing Engineer :

(Tony Liu)

Technical Manager :

(Vita Li)



Authorized Signatory :

(Bovey Yang)



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**Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	20 Jan . 2016	STS1601026F01	ALL	Initial Issue





1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.231) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.205(a)/15.209/ 15.231.(b)	Radiated Spurious Emission	PASS	
15.231(a)(2)/ 15.231(b)(2)	Transmission requirement	PASS	
15.231(C)	20 dB Bandwidth	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 C63.4-2014 and ANSI C63.10-2013



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 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	Conducted Emission (9KHz-150KHz)	± 2.88 dB
2	Conducted Emission (150KHz-30MHz)	± 2.67 dB
3	RF power,conducted	± 0.70 dB
4	Spurious emissions,conducted	± 1.19 dB
5	All emissions,radiated(<1G) 30MHz-200MHz	± 2.83 dB
6	All emissions,radiated(<1G) 200MHz-1000MHz	± 2.94 dB
7	All emissions,radiated(>1G)	± 3.03 dB
8	Temperature	$\pm 0.5^{\circ}\text{C}$
9	Humidity	$\pm 2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	RFID Transmitter
Trade Name	 西安航天华讯科技有限公司 Xi'an Aerospace Huaxun Technology Co.,Ltd.
Model Name	HX-5208
Series Model	N/A
Model Difference	N/A
Channel List	Please refer to the Note 2.
Frequency band	433MHz
Modulation Type:	FSK
Battery	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity :3050mAh
Adapter	Input: AC100-240V, 0.3A, 50/60 Hz Output: DC 5V, 2.0A
Hardware version number	--
Software versioning number	--
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 List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	433				

3. Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	 西安航天华讯科技有限公司 Xi'an Aerospace Huaxun Technology Co.,Ltd.	HX-5208	Dipole	NA	-1	Antenna

The EUT antenna is Dipole Antenna. No antenna other than that furnished by the responsible party shall be used with the device.





2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	TX Mode

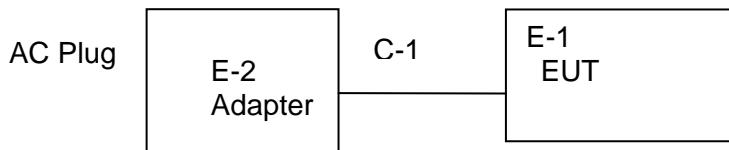
For Conducted Emission	
Final Test Mode	Description
Mode 1	TX Mode

For Radiated Emission	
Final Test Mode	Description
Mode 1	TX Mode

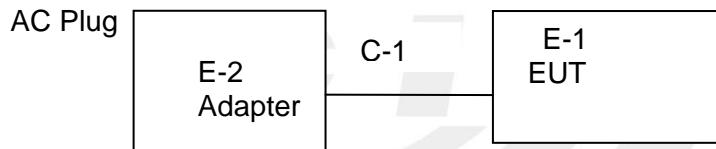
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters

Conducted Emission Test



Radiated Spurious Emission Test





2.4 DESCRIPTION OF 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.

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
E-1	RFID Transmitter	 西安航天华讯科技有限公司 Xian Aerospace HuaXun Technology Co., Ltd.	HX-5208	N/A	EUT
E-2	Adapter	BDD	UT-102C-5010	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note
C-1	unshielded	NO	102cm	N/A

Note:

- (1) FCC DOC approved.



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(1201)	9120D-1343	2015.03.06	2016.03.05
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
USB RF power sensor	DARE	RPR3006W	15I00041SNO03	2015.10.25	2016.10.24

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



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 15.231.207(a) limit in the table below has to be followed.

FREQUENCY (MHz)	Class B (dBuV)		Standard
	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	56.00	46.00	CISPR
5.0 -30.0	60.00	50.00	CISPR

0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

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.

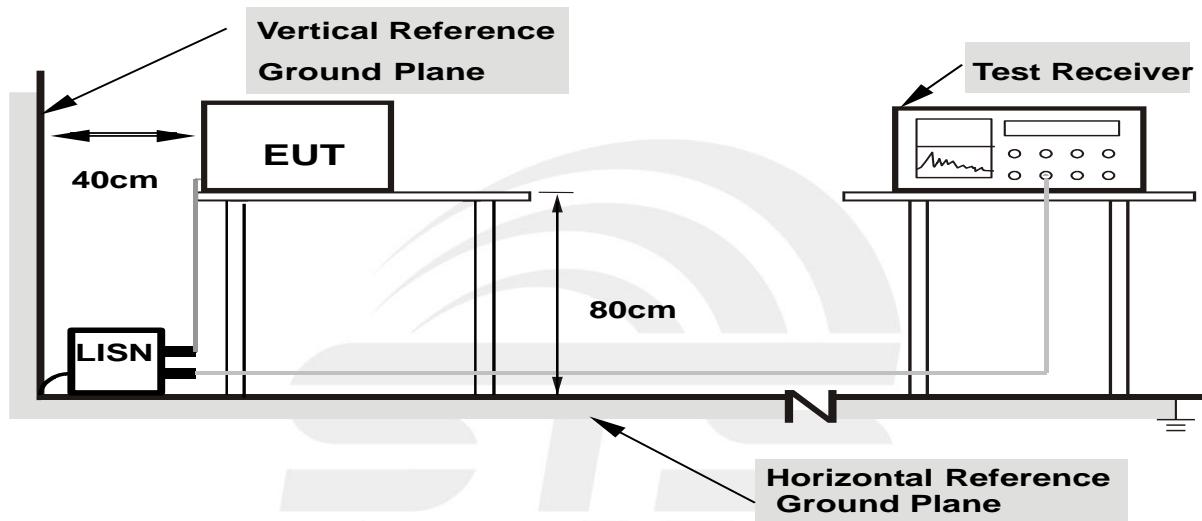
The following table is the setting of the receiver

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

3.1.2 TEST PROCEDURE

- 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.

3.1.3 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

3.1.4 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.

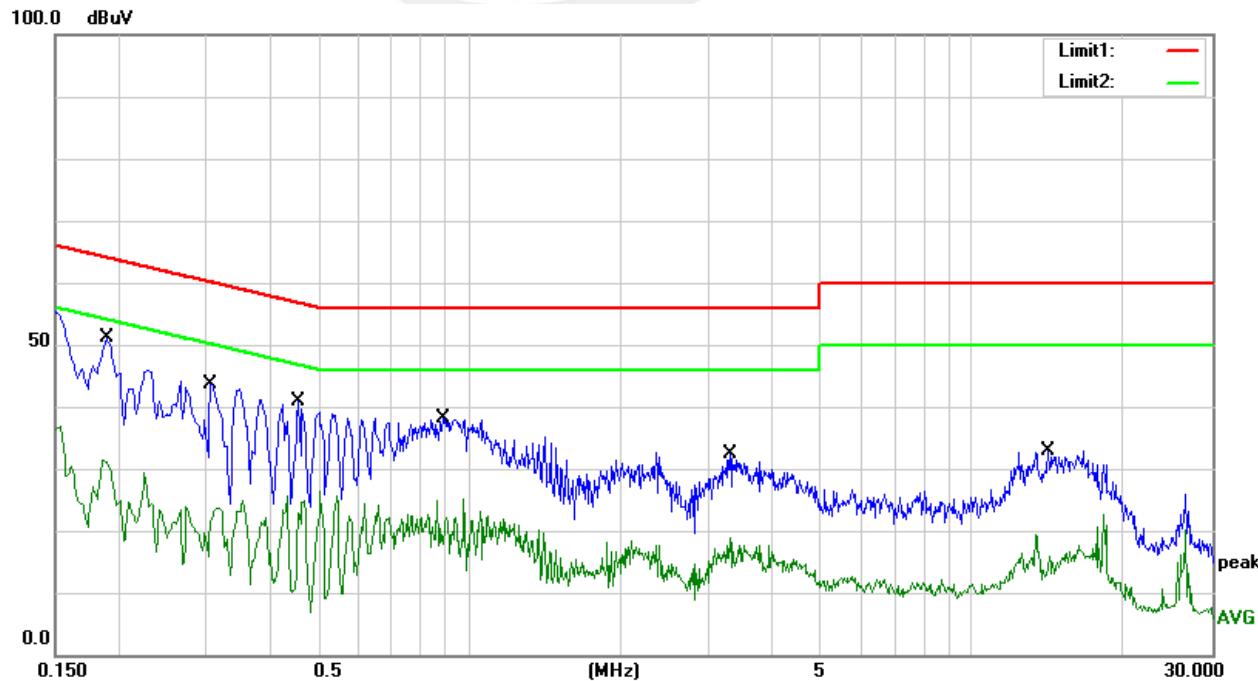
3.1.5 TEST RESULTS

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase:	L
Test Voltage:	DC 5V from adaptr AC 120V/60Hz	Test Mode:	Mode 1

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.1900	41.05	10.00	51.05	64.04	-12.99	QP
2	0.1900	21.36	10.00	31.36	54.04	-22.68	AVG
3	0.3060	33.80	9.92	43.72	60.08	-16.36	QP
4	0.3060	14.10	9.92	24.02	50.08	-26.06	AVG
5	0.4580	30.74	10.03	40.77	56.73	-15.96	QP
6	0.4580	16.34	10.03	26.37	46.73	-20.36	AVG
7	0.8860	28.20	9.94	38.14	56.00	-17.86	QP
8	0.8860	15.20	9.94	25.14	46.00	-20.86	AVG
9	3.2940	22.37	10.08	32.45	56.00	-23.55	QP
10	3.2940	8.89	10.08	18.97	46.00	-27.03	AVG
11	14.1500	22.44	10.32	32.76	60.00	-27.24	QP
12	14.1500	8.99	10.32	19.31	50.00	-30.69	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. N/A means All Data have pass Limit



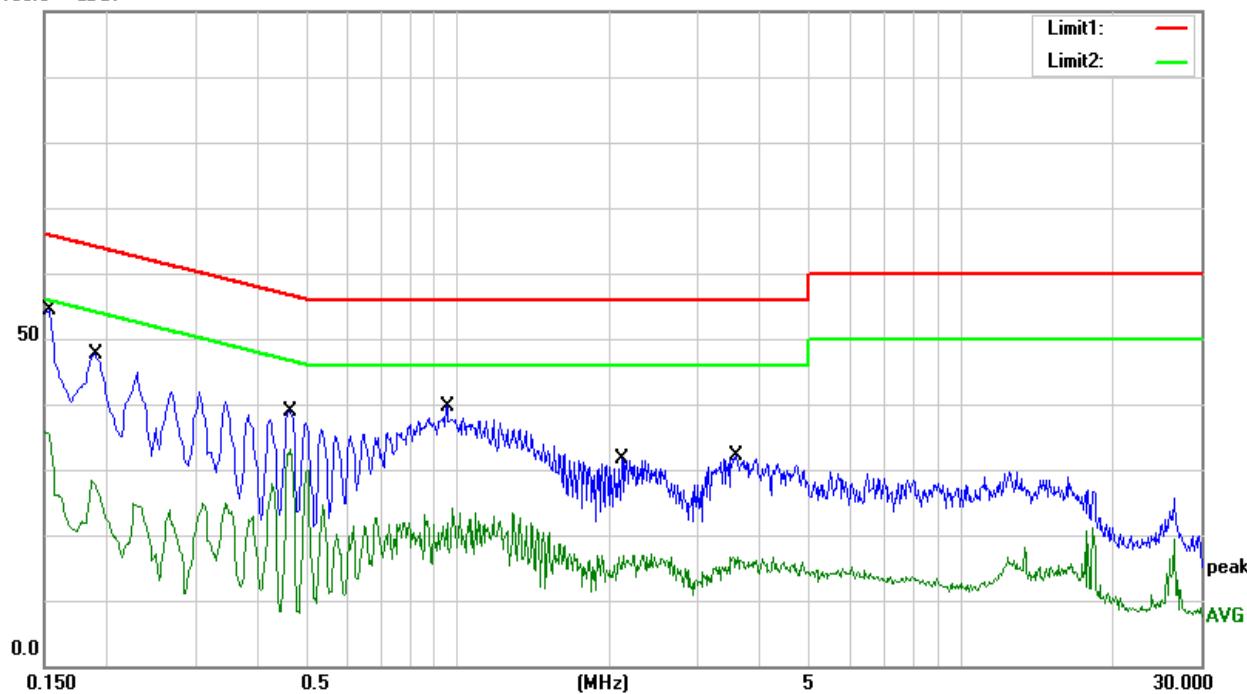
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase:	N
Test Voltage:	DC 5V from adaptr AC 120V/60Hz	Test Mode:	Mode 1

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.1540	43.59	10.72	54.31	65.78	-11.47	QP
2	0.1540	25.07	10.72	35.79	55.78	-19.99	AVG
3	0.1900	37.64	10.00	47.64	64.04	-16.40	QP
4	0.1900	18.29	10.00	28.29	54.04	-25.75	AVG
5	0.4620	29.03	9.94	38.97	56.66	-17.69	QP
6	0.4620	23.20	9.94	33.14	46.66	-13.52	AVG
7	0.9500	29.66	10.00	39.66	56.00	-16.34	QP
8	0.9500	14.09	10.00	24.09	46.00	-21.91	AVG
9	2.1180	21.74	10.00	31.74	56.00	-24.26	QP
10	2.1180	8.63	10.00	18.63	46.00	-27.37	AVG
11	3.5660	21.96	10.18	32.14	56.00	-23.86	QP
12	3.5660	6.52	10.18	16.70	46.00	-29.30	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. N/A means All Data have pass Limit

100.0 dBuV





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

20dBc 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), then the Part 15.209(a) and Part 15.231(b) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 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
30~40.66	100	3
40.70~70	100	3

Fundamental frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	¹ 1,250 to 3,750	¹ 125 to 375
174-260	3,750	375
260-470	¹ 3,750 to 12,500	¹ 375 to 1,250
Above 470	12,500	1,250

(1) For the band 260-470MHz uV/m at 3meters = $41.6667(F) - 7083.3333$; Where F is the frequency in MHz

(2) 2.433MHz limit = $41.6667 * 433 - 7083.3333 = 10958.35$ uV/m = 80.79dBuV/m

(3) §15.231(b)(2) the provisions in §15.35 for averaging pulsed emissions and for limiting peak emissions apply. Further, compliance with the provisions of §15.205 shall be demonstrated using the measurement instrumentation specified in that section.

(4) §15.35(b) the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (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) Emission level (dBuV/m)= $20\log$ Emission level (uV/m).

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



Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
	150kHz~30MHz / RB 9kHz for QP
	30MHz~1000MHz / RB 100kHz for PK
	Above 1GHz / RB 1MHz VB 1M for PK

3.2.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations 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 then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit,
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

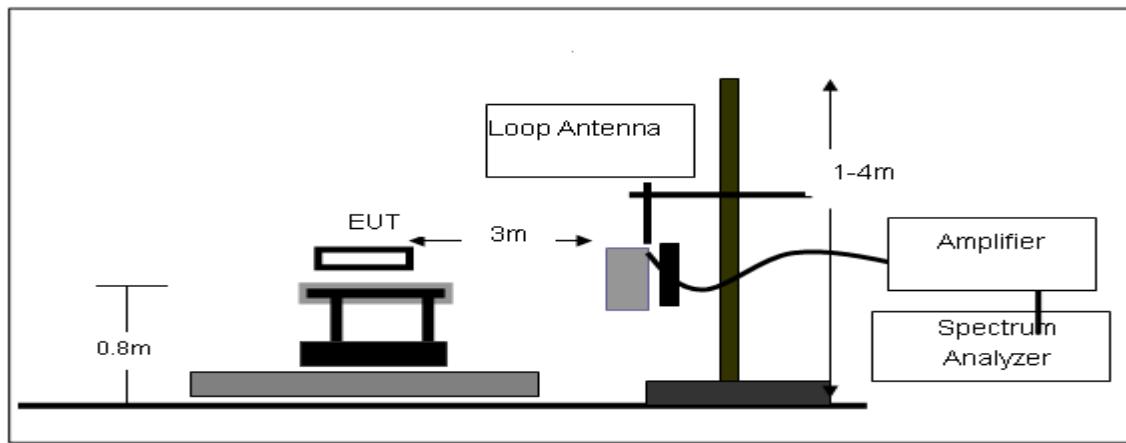
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

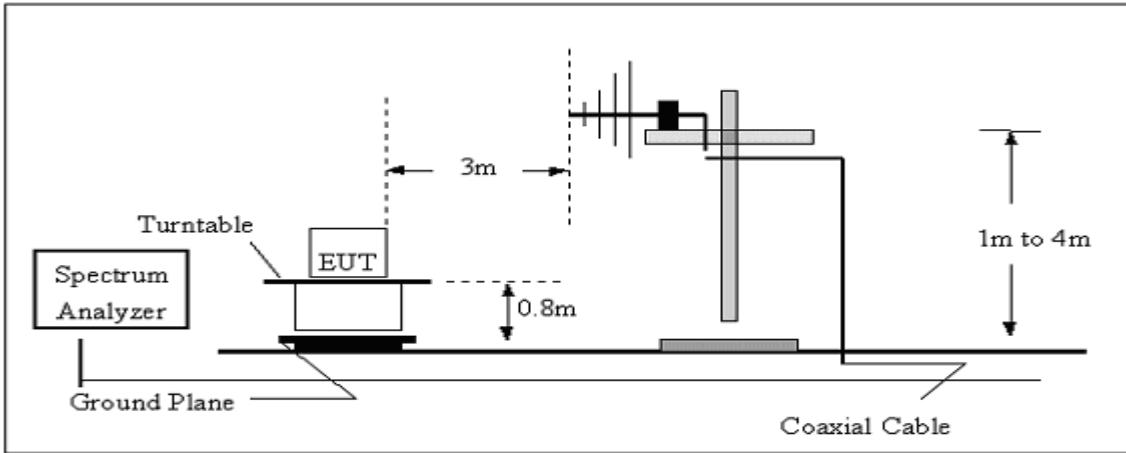
No deviation

3.2.4 TEST SETUP

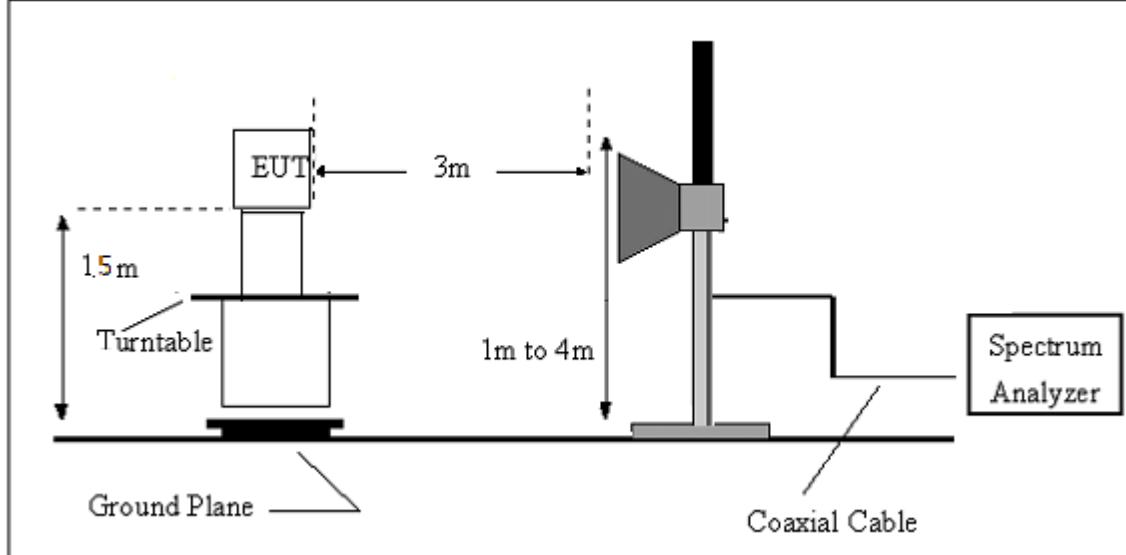
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.2.5 EUT OPERATING CONDITIONS

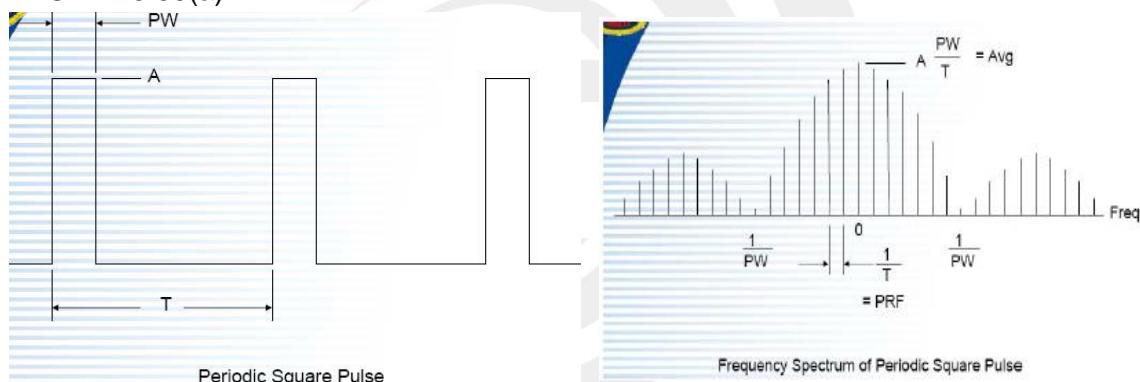
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 TEST RESULTS

INTRODUCTION TO PDCF

reference: (§15.35 Measurement detector functions and bandwidths.)

- a. Part 15 of the FCC Rules provides for the operation of low power communication devices without an individual license (e.g., intrusion detectors, pulsed water tank level gauges, etc.), subject to certain requirements. Some of these devices use extremely narrow pulses to generate wideband emissions, which are measured to determine compliance with the rules. These measurements are typically performed with a receiver or spectrum analyzer. Depending on a number of factors (e.g., resolution bandwidth, pulsed width, etc.), the spectrum analyzer may not always display the true peak value of the measured emission. This effect, called "pulse desensitization," relates to the capabilities of the measuring instrument. For the measurement and reporting of the true peak of pulsed emissions, it may be necessary to apply a "pulse desensitization correction factor" (PDCF) to the measured value, pursuant to 47 CFR 15.35(a).



If using spectrum analyzer to measure pulse signal , it have to make sure the RBW use is at least $2/PW$.

•When RBW is less than $2/PW$, you are able to measure the true peak level of the pulse signal. If this is the case , PDCF is required to compensate to determine true peak value.

Pulse desensitization:

$PW = 16000\text{usec}$, $Period = 53000\text{usec}$, $Level = A$

$RBW > 2/PW = 0.1K$,

Not: $2 / PW < RBW$, first don't need

- b. For the actual test, please refer to the ANSI C63.10, Annex C
refer to section 5 for more detail



Below 30 MHz

Temperature :	23 °C	Relative Humidity :	50%
Pressure :	1010 hPa	Polarization :	---
Test Voltage :	DC 5V from adaptr AC 120V/60Hz		
Test Mode :	--		

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State
--	--	--	--	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 = $40 \log (\text{specific distance}/\text{test distance})$ (dB);

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



Between 30MHz – 5000 MHz

Temperature :	23 °C	Relative Humidity :	50%
Pressure :	1010 hPa	Polarization :	Horizontal/vertical
Test Voltage :	DC 5V from adaptr AC 120V/60Hz		
Test Mode :	TX Mode		

Frequency (MHz)	meter reading (dB μ V/M)	Detector (PK/QP/Av)	Turn table Angle (Degree)	RX Antenna		corrected Factor (dB)	corrected amplitude (dB μ V/m)	limit (dB μ V/m)	margin (dB)
				Height (m)	Polar (H/V)				
433	61.33	PK	182	1.5	H	18.79	80.14	100.79	-20.65
433	61.25	PK	332	1.5	V	18.79	80.06	100.79	-20.73
866	24.62	PK	330	2.4	H	36.32	60.96	80.79	-19.83
866	24.32	PK	331	2.0	V	36.32	60.66	80.79	-20.13
1299	63.90	PK	269	2.3	H	-17.90	46.02	74	-27.98
1299	64.23	PK	309	2.3	V	-17.90	46.35	74	-27.65
1732	62.36	PK	171	1.8	H	-14.20	48.18	74	-25.82
1732	62.69	PK	193	2.0	V	-14.20	48.51	74	-25.49
2165	59.93	PK	104	1.8	H	-12.3	47.65	74	-26.35
2165	59.96	PK	151	2.1	V	-12.3	47.68	74	-26.32

NOTE:

Above 1.5GHz The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

AV = Peak +20Log10(duty cycle) =PK+(-10.40) [refer to section 5 for more detail]

Frequency (MHz)	PK Reading (dB μ V/M)	Turn table Angle (Degree)	RX Antenna		Duty cycle Factor (dB)	AVG (dB μ V/m)	limit (dB μ V/m)	margin (dB)
			Height (m)	Polar (H/V)				
433	80.14	324	2.0	H	-10.40	69.74	80.79	-11.05
433	80.06	214	2.3	V	-10.40	69.66	80.79	-11.13
866	60.96	284	2.3	H	-10.40	50.56	60.79	-10.23
866	60.66	141	1.5	V	-10.40	50.26	60.79	-10.53
1299	46.02	315	2.1	H	-10.40	35.62	54	-18.38
1299	46.35	354	2.4	V	-10.40	35.95	54	-18.05
1732	48.18	287	2.3	H	-10.40	37.78	54	-16.22
1732	48.51	292	1.6	V	-10.40	38.11	54	-15.89
2165	47.65	135	2.3	H	-10.40	37.25	54	-16.75
2165	47.68	141	2.5	V	-10.40	37.28	54	-16.72

4. BANDWIDTH TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.231) , Subpart C

Section	Test Item	Limit	Frequency Range (MHz)	Result
15.231(C)	20 Bandwidth	The 20dB bandwidth of the emissions shall not exceed 0.25% of the center frequency	433	PASS

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth
RB	10 kHz (20dB Bandwidth)
VB	30 kHz (20dB Bandwidth)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

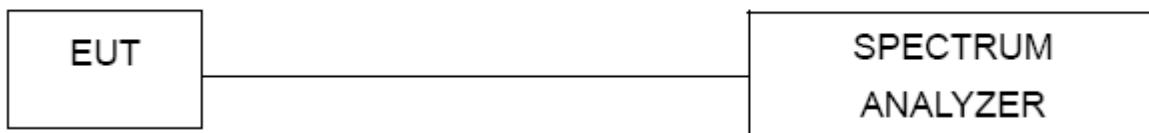
4.2 TEST REQUIREMENTS

1. The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

4.3 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 10KHz, VBW=30KHz, Sweep time = Auto.

4.4 TEST SETUP



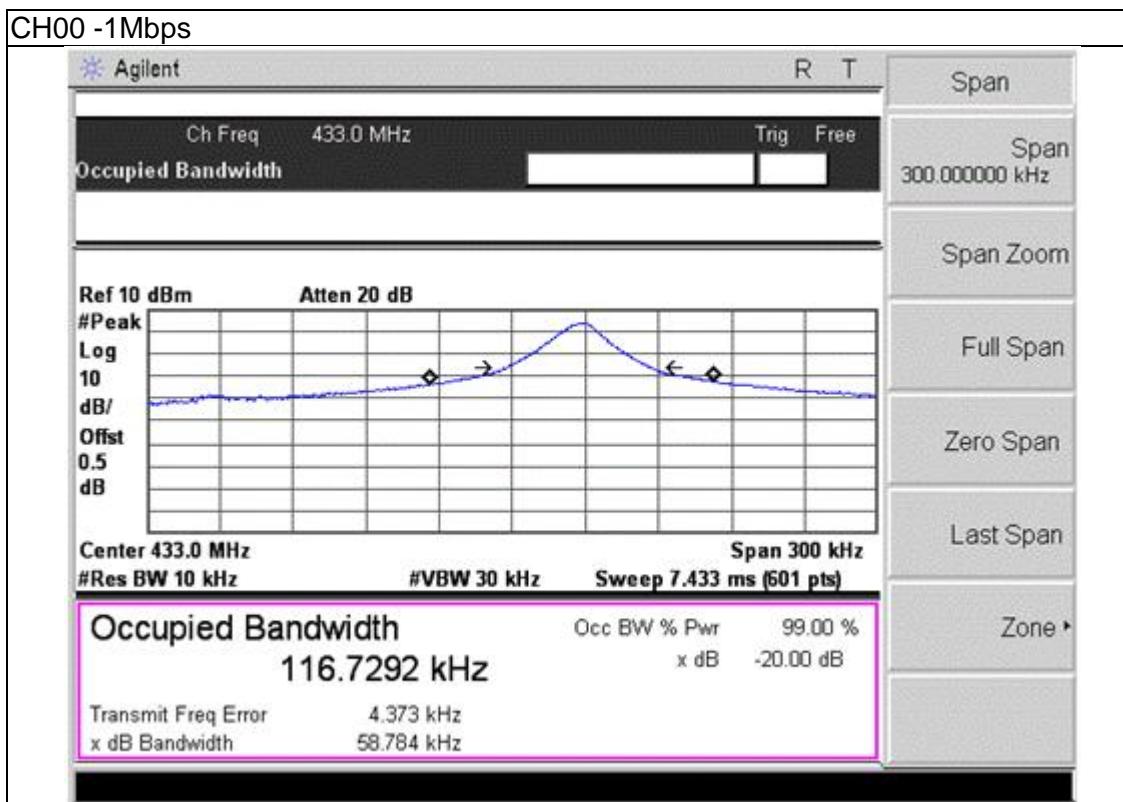
4.5 EUT OPERATION CONDITIONS

TX mode.

4.6 TEST RESULTS

Temperature :	25 °C	Relative Humidity :	50%
Pressure :	1012 hPa	Test Voltage :	DC 5V from adaptr AC 120V/60Hz
Test Mode :	TX Mode		

Frequency	20dB Bandwidth(kHz)	Limit(kHz)	Result
433.MHz	58.784	1082.5	PASS





5. PERIODIC OPERATION

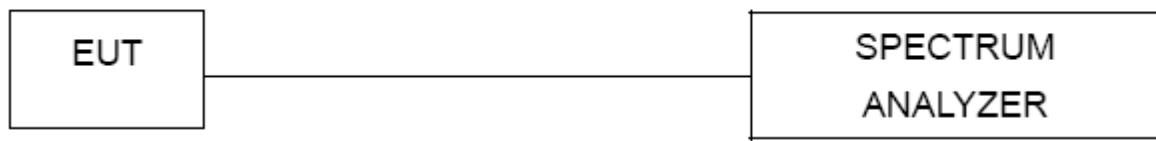
5.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

The Duty Cycle Was Determined By The Following Equation: To Calculate The Actual Field Intensity, The Duty Cycle Correction Factor In Decibel Is Needed For Later Use And Can Be Obtained From Following Conversion

Duty Cycle(%)=Total On Interval In A Complete Pulse Train/ Length Of A Complete Pulse Train * %
Duty Cycle Correction Factor(Db)=20 * Log10(Duty Cycle(%))

5.2 TEST SETUP



5.3 EUT OPERATION CONDITIONS

TX mode.

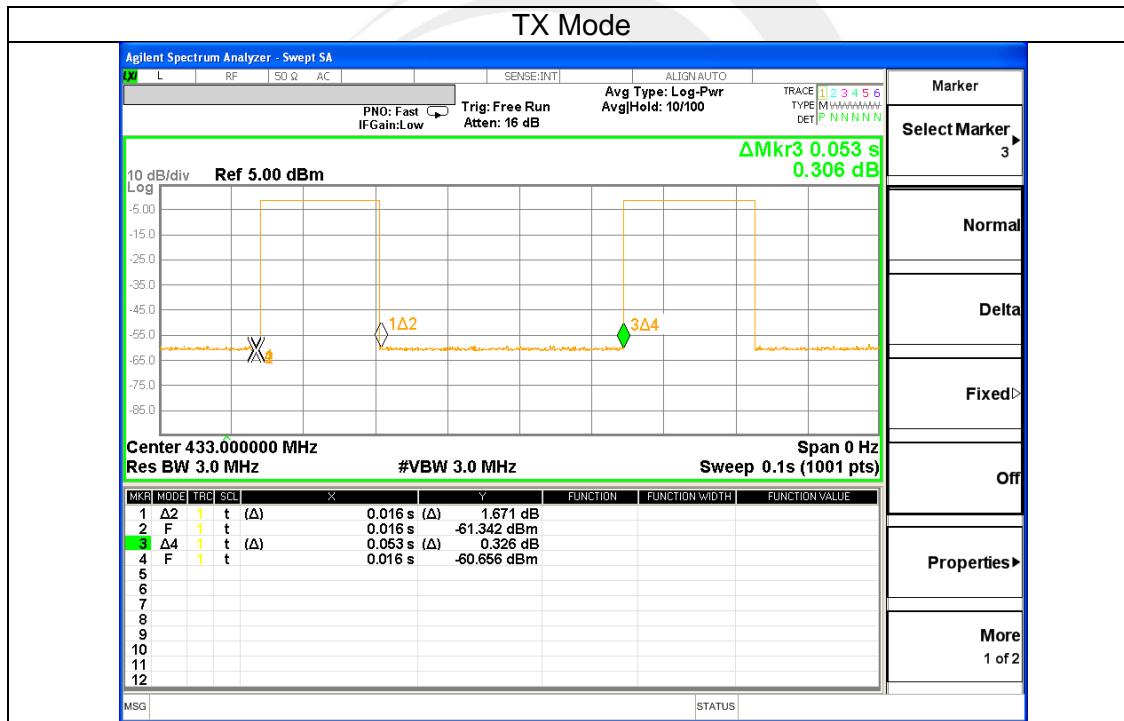
5.4 TEST RESULTS

Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 5V from adaptr AC 120V/60Hz
Test Mode :	TX Mode		

FCC Part15 (15.231(a))	
Total On interval in a complete pulse train(ms)	16
Length of a complete pulse train(ms)	53
Duty Cycle(%)	30.19%
Duty Cycle Correction Factor(dB)	-10.40

Refer to the duty cycle plot (as below), This device meets the FCC requirement. Length of a complete pulse train

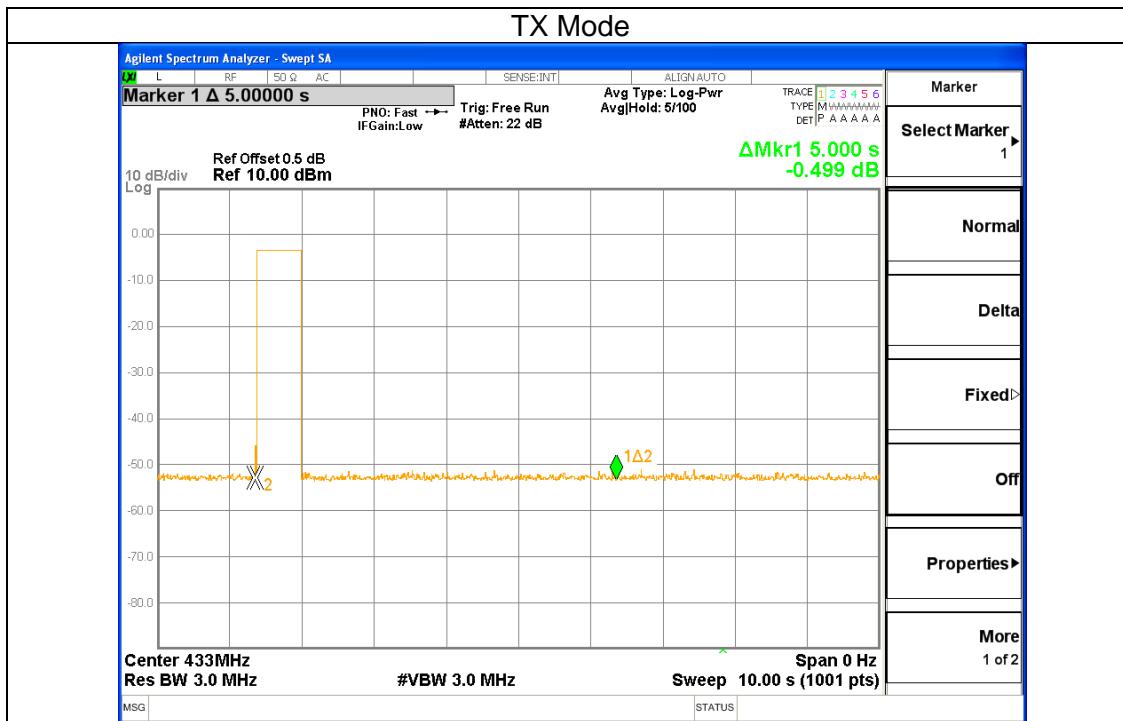
Remark:FCC part15.35(c) required that a complete pulse train is more than 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.



Note:

(1)Refer to the plot (As Below),We find a transmitter activated automatically shall cease transmission within 5 seconds after activation.

(2)The EUT is comply with FCC PART 15 clause 15.231(a)(2). automatically working mode are pre-tested.and only the worst result is reported.





6. ANTENNA REQUIREMENT

6.1 STANDARD 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 to the intentional radiator shall be considered sufficient to comply with the provisions of this section. This product use a permanent Dipole printed antenna, fulfill the requirement of this section

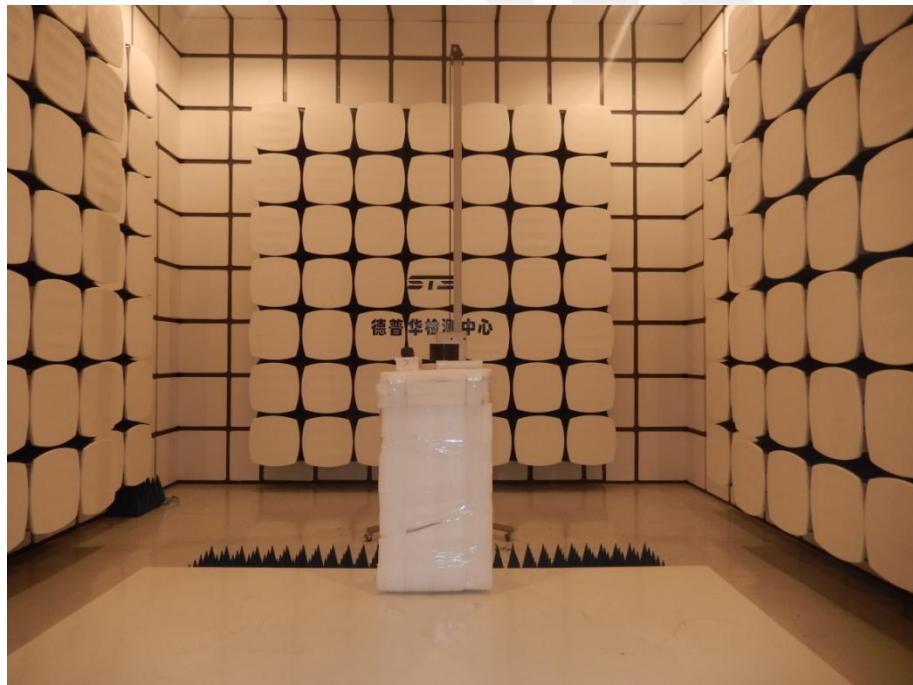
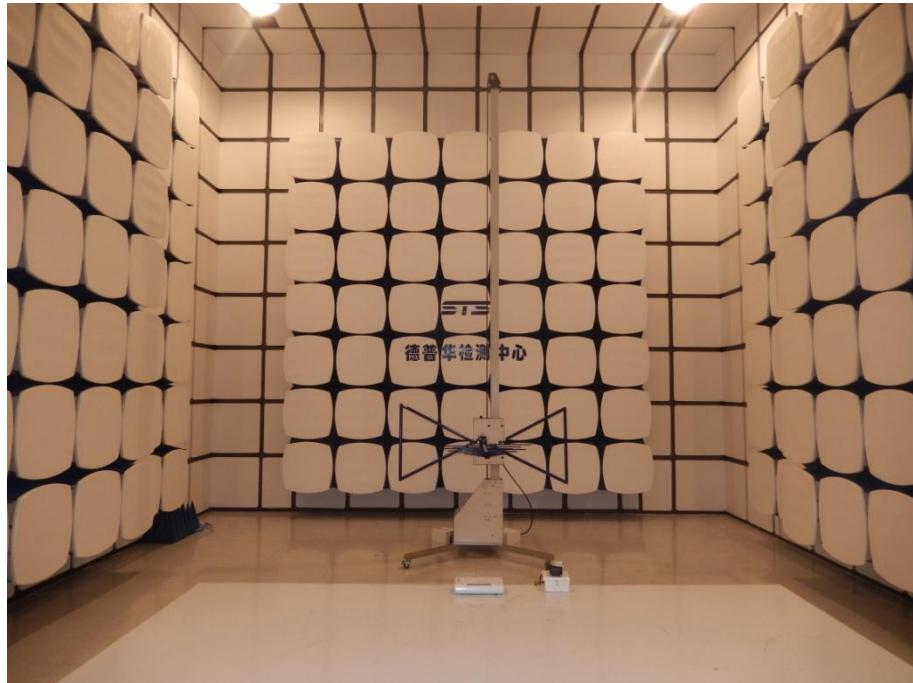
6.2 EUT ANTENNA

The EUT antenna is Dipole Antenna. It conforms to the standard requirements.



APPENDIX- PHOTOS OF TEST SETUP

Radiated Measurement Photos





Conduction Measurement Photos



*** END OF THE REPORT ***

