ECMG
Worldwide Certification Solutions
EMC Compliance Management Group

FCC CERTIFICATION RADIO MEASUREMENT TECHNICAL REPORT

On Model Name : RF Transmitter

Model Number : H999

Trademark : JIMEI 吉美

FCC ID : VI7H999

Prepared for
ZHANGZHOU JIMEI ELECTRONIC CO.,LTD

According to FCC PART 15, Subpart C (15.231)

Test Report #:	*PSZ-0707-0436-FCCID*
Prepared by:	*Jawen Yin*
Reviewed by:	*Ivan Wen*
QC Manager:	*Paul Chen*

Test Report Released by: Paul J. Chen — *Paul Chen*

2007 , Aug 26 — *Date*

Test Location

Tests performed in a Certified ANSI Semi-Anechoic Chamber and Shielded Room.

Test Site Location: *Shenzhen Academy of Metrology and Quality inspection*

Longzhu Road, Nanshan District, Shenzhen, Guangdong,China

Tel : *86-755-26941617*

Fax : *86-755-26941615*

FCC Registration Number: *274801*

List of Attached Files

Exhibit Type	File Description	File Name
Test Report	Test Report	VI7H999_ Test report.pdf
Operational Description	Technical Description	VI7H999_operation description.pdf
External Photos	External Photos	VI7H999_External Photos
Internal Photos	Internal Photos	VI7H999_Internal Photos
Block Diagram	Block Diagram	VI7H999_Block Diagram.pdf
Schematics	Circuit Diagram for receiver	VI7H999_Schematics_console.pdf
Schematics	Circuit Diagram for transmitter	VI7H999_Shematics_sensor.pdf
Label&Location	Label Artwork and Location	VI7H999_Label & Location.pdf
User Manual	User Manual	VI7H999_User Manual.pdf
Test setup photos	Test setup photos	VI7H999_Test Setup Photos.pdf

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This test report relates to the abovementioned equipment under test (EUT). Without the permission of ECMG Worldwide Certification Solution, Inc. this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark on this or similar products. The manufacturer has sole responsibility of continued compliance of the device.

Statement of Measurement Uncertainty

The data and results referenced in the document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error. Furthermore, component and process variability of devices similar to that tested may result in additional deviation.

Administrative Data

Test Sample : RF Transmitter

Model Number : H999

Model Tested : H999

Trade Mark : JIMEI 吉美

Date Tested : 2007, July 28 to Aug 20

Applicant : ZHANGZHOU JIMEI ELECTRONIC CO., LTD

Colum 1 Rd., Lantian Industrial District, Zhangzhou , Fujian

Telephone : 86-0596-2172601

Fax : 86-0596-2172770

Manufacturer : ZHANGZHOU JIMEI ELECTRONIC CO., LTD

Colum 1 Rd., Lantian Industrial District, Zhangzhou , Fujian

EUT Description

ZHANGZHOU JIMEI ELECTRONIC CO., LTD . Model number H999 is a RF Transmitter , it's for transmit the RF temperature and humidity.

Parameter:

Frequcy Range : 433.9-434.2MHz

Distance of transmit : 30m

Power supply : 3 V DC(AAA X 2battery)

Test Summary

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations , X.Y.Z axis ,CH1 channel was selected for the final test .

The Electromagnetic Compatibility requirements on EUT for this test are stated below. All results listed in this report relate exclusively to this above-mentioned model as the Equipment Under Test. This report confers no approval or endorsement upon any other component, host or subsystem used in the test set-up.

EMC Test Items (*Reference FCC Part 15.231)*			
Specification	***Description***	***Test Results***	***Remark***
FCC Part 15.203	*Antenna Requirement*	*Compliance*	*Attachment 1*
FCC Part 15.205	*Restricted Band of Operation*	*Compliance*	*Attachment 2*
FCC Part 15.207	*Conducted Limits*	*Test is not applicable, because EUT only employ battery power for operation.*	
FCC Part 15.209	*Radiated Emission Limits*	*Compliance*	*Attachment 3*
FCC Part 15.231 (e)	*Operation Mode*	*Compliance*	*Attachment 2*
FCC Part 15.231 (e)	*Field Strength of Fundamental and Spurious Emissions*	*Compliance*	*Attachment 3*
FCC Part 15.231 (c)	*Bandwidth*	*Compliance*	*Attachment 4*

Test Mode Justification

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

EUT Exercise Software

The device is not programmable and does not use software.

Equipment Modification

Any modifications installed previous to testing by ZHANGZHOU JIMEI ELECTRONIC CO., LTD . will be incorporated in each production model sold or leased in United States.

There were no modifications installed at transmitter by Manufaturer.

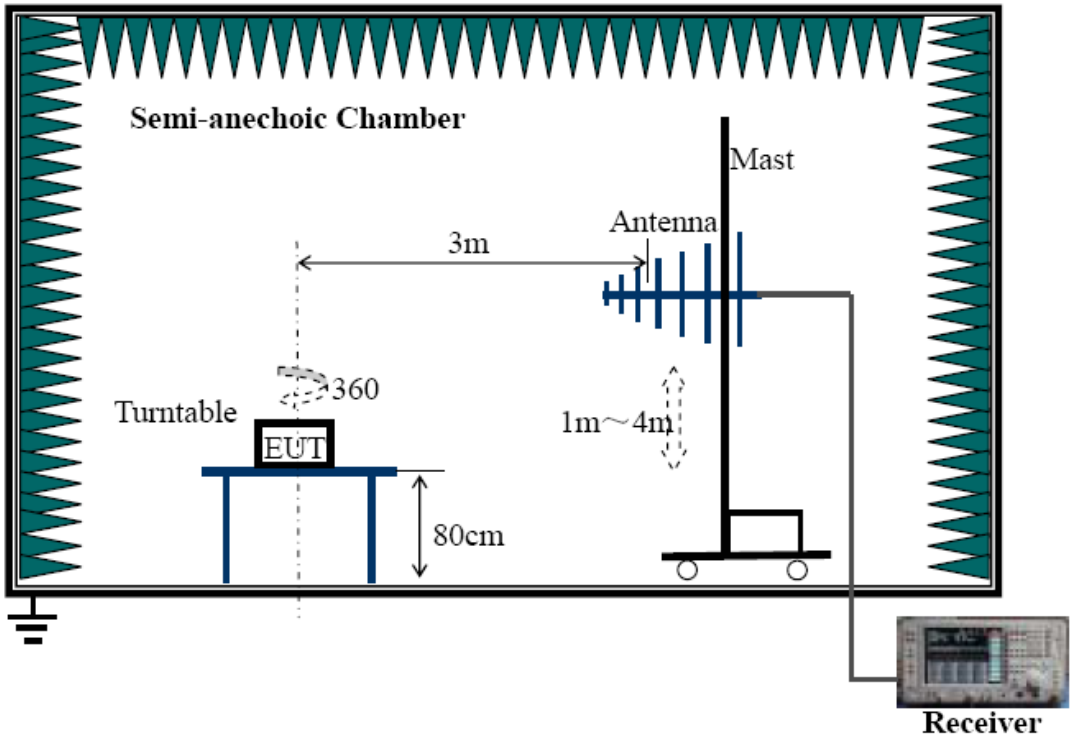
Test System Details

EUT	
Model Number:	H999
Model Tested:	H999
Trademark::	JIMEI 吉美
Serial Number:	Engineering Sample
Input Voltage:	3V DC (AAA X 2Batteries)
Description:	RF Transmitter
Manufacturer:	ZHANGZHOU JIMEI ELECTRONIC CO., LTD .

Support Equipment				
Description	**Model Number**	**Serial Number**	**Manufacturer**	**Power Cable Description (Meters)**
None				

Cable Description
None

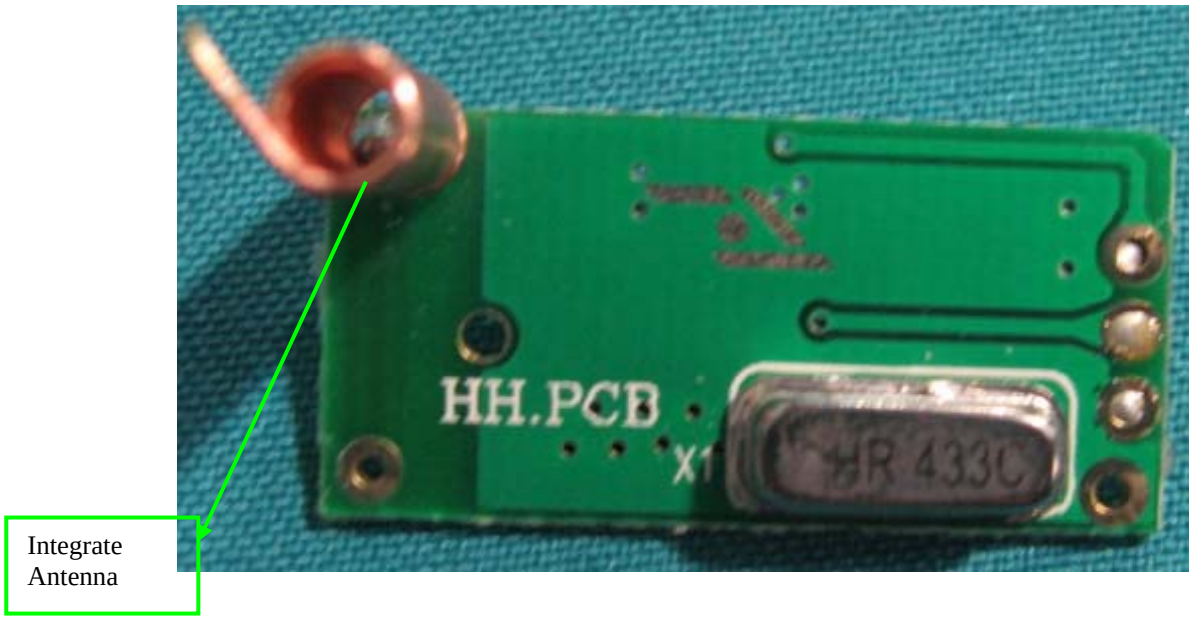
Configuration of Tested System



Attachment 1 – Antenna Requirement

CLIENT:	ZHANGZHOU JIMEI ELECTRONIC CO., LTD .	**TEST STANDARD:**	FCC Part 15.203
MODEL TESTED:	H999	**PRODUCT:**	RF Transmitter
SERIAL NO.:	Engineering Sample	**EUT DESIGNATION:**	RF Equipment
TEMPERATURE:	21°C	**HUMIDITY:**	55%RH
ATM PRESSURE:	101.8 kPa	**GROUNDING:**	No Grounding
TESTED BY:	Jawen Yin	**DATE OF TEST:**	2007, July 28
SETUP METHOD:	N/A		
ANTENNA REQUIREMENT:	An intentional radiator shall be designed to ensure that no antenna other than 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. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.		
TEST VOLTAGE:	DC 3V (AAA X 2 Batteries)		
TEST STATUS:	Normal Operation As Usual		
RESULTS:	The EUT meets the Antenna requirement. The test results relate only to the equipment under test provided by client.		
CHANGES OR MODIFICATIONS:	There were some modifications installed by ECMG Worldwide Certification Solution, Inc. (China) test personnel. Please refer to the equipment modification of page 5.		
M. UNCERTAINTY:	N/A		

FCC Section	FCC Rules	Conclusion
15.203	Described how the EUT complies with the requirement that either its antenna is permanently attached, or that it employs a unique antenna connector, for every antenna proposed for use with the EUT. The exception is in those cases where EUT must be professionally installed. In order to demonstrate that professional installation is required, the following 3 points must be addressed: ● The application (or intended use) of the EUT ● The installation requirements of the EUT ● The method by which the EUT will be marketed	The RF transmitter uses an integrate antenna without connector, Please refer to the following picture..



Integrate Antenna without Connector View

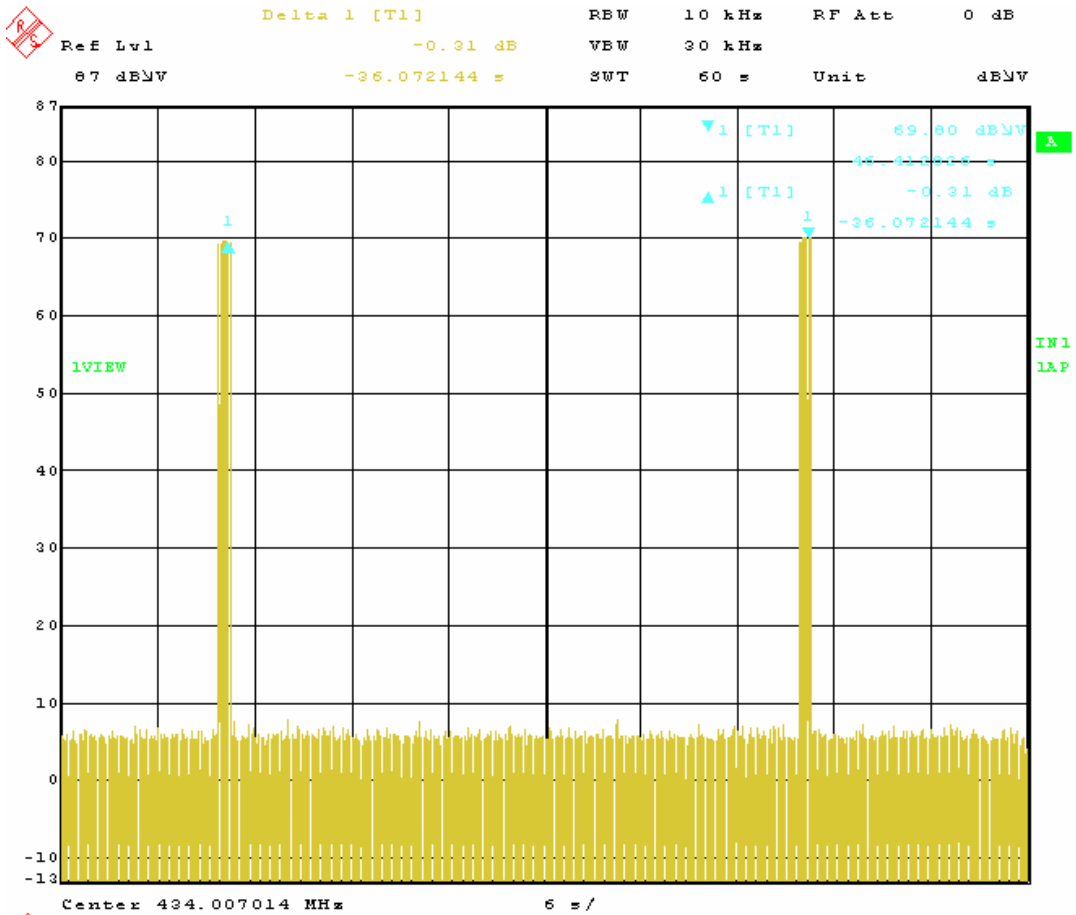
Attachment 2 – Operation Mode

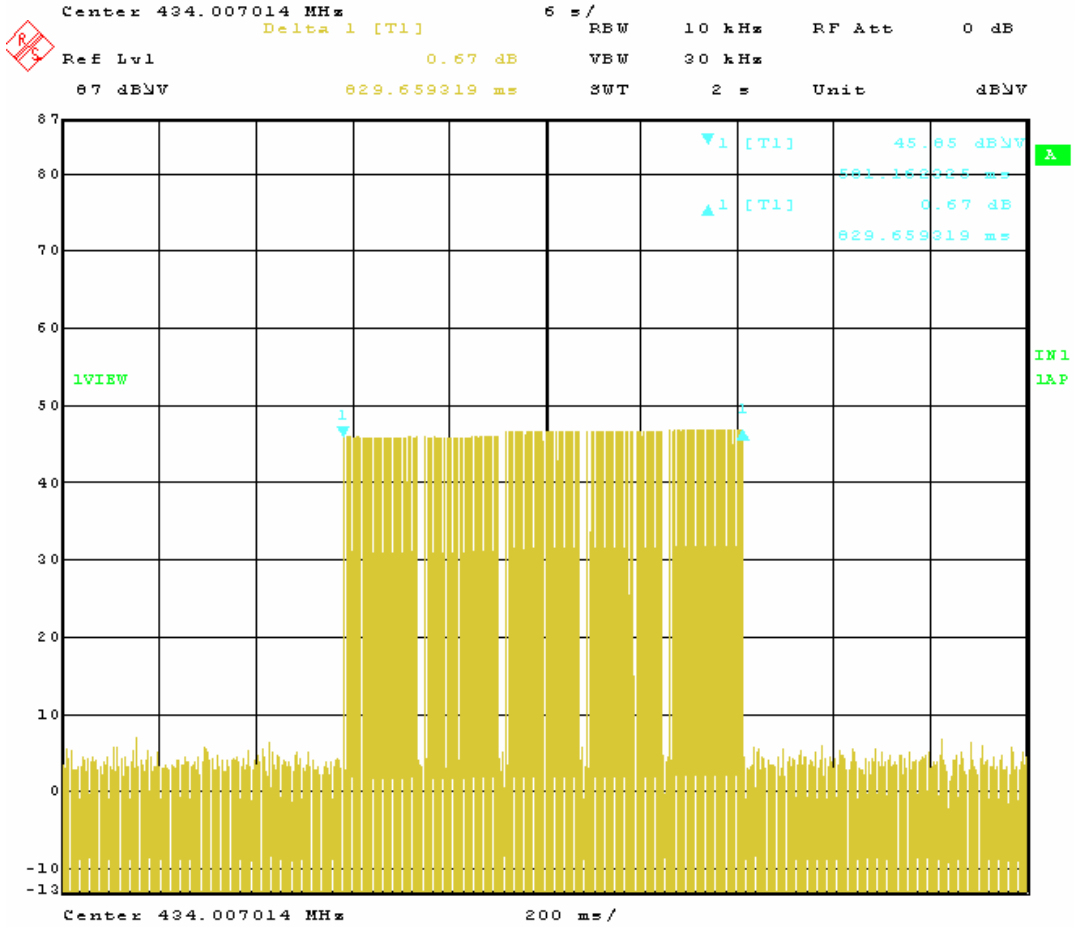
CLIENT:	ZHANGZHOU JIMEI ELECTRONIC CO., LTD .	**TEST STANDARD:**	FCC Part 15.231 (e)
MODEL TESTED:	H999	**PRODUCT:**	RF Transmitter
SERIAL NO.:	Engineering Sample	**EUT DESIGNATION:**	RF Equipment
TEMPERATURE:	21°C	**HUMIDITY:**	55%RH
ATM PRESSURE:	101.8 kPa	**GROUNDING:**	No Grounding
TESTED BY:	Jawen Yin	**DATE OF TEST:**	2007, Aug 20
SETUP METHOD:	N/A		
OPERATION MODE REQUIREMENT:	(1) A manually operated transmitter shall employ a switch that will automatically the transmitter within not more than 5 seconds of being released. (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation. (3) Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used on security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour. (4) Intentional radiators which are employed for radio control purposes during emergencies involving fire, security, and safety of life, when activated to signal an alarm, may operate during the pendency of the alarm condition (5) In addition, devices operated under the provisions of this paragraph shall be provided with a means for automatically limiting operation so that the duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.		
TEST VOLTAGE:	3V DC(CR 2302 Battery)		
TEST STATUS:	Normal Operation As Usual		
RESULTS:	The EUT meets the operation mode requirement. The test results relate only to the equipment under test provided by client.		
CHANGES OR MODIFICATIONS:	There were no modifications installed by EMC Compliance Management Group (China) test personnel.		
M. UNCERTAINTY:	N/A		

FCC Section	FCC Rules	Conclusion
15.231 (e)	devices operated under the provisions of this paragraph shall be provided with a means for automatically limiting operation so that the duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.	This device is a automatic transmissions at a periodic rate . and that meet the operation mode description of 15.231(e), Please refer to the following data.

Operated Frequency	Duration of each transmission (s)	Limit (s)	Result
434MHz	0.83	1	Pass

Operated Frequency	Silent period (s)	Limits 1 (s)	Limits 2 (s)	Result
434MHz	36.07-0.83 = 35.24	> {30 * 0.83 = 24.90}	> 10	Pass


Delta 1 [T1]
RBW 10 kHz
RF Att 0 dB
Ref Lvl
-0.31 dB
VBW 30 kHz
87 dBµV
-36.072144 s
SWT 60 s
Unit dBµV
1 [T1] 69.80 dBµV
1 [T1] -0.31 dB
-36.072144 s
1VIEW
IN1
1AP
Center 434.007014 MHz
6 s/


Delta 1 [T1]
RBW 10 kHz
RF Att 0 dB
Ref Lvl
0.67 dB
VBW 30 kHz
87 dBµV
829.659319 ms
SWT 2 s
Unit dBµV
1 [T1] 45.85 dBµV
1 [T1] 0.67 dB
829.659319 ms
1VIEW
IN1
1AP
Center 434.007014 MHz
200 ms/

Attachment 3 – Radiated Emission Measurement

CLIENT:	ZHANGZHOU JIMEI ELECTRONIC CO., LTD .	**TEST STANDARD:**	FCC Part 15.209 FCC Part 15.231(e)
MODEL TESTED:	H999	**PRODUCT:**	RF Transmitter
SERIAL NO.:	Engineering Sample	**EUT DESIGNATION:**	RF Equipment
TEMPERATURE:	21°C	**HUMIDITY:**	55%RH
ATM PRESSURE:	101.8 kPa	**GROUNDING:**	No Grounding
TESTED BY:	Jawen Yin	**DATE OF TEST:**	2007,July 30
TEST REFERENCE:	FCC Part 15.209 , FCC Part 15.231(e) , ANSI C63.4: 2003, CISPR 16-1: 2002		
TEST PROCEDURE:	a. The EUT was placed on a rotatable table with 0.8 meters above ground. b. The EUT was set 3 meters from the interference-receiving antenna, which was mounted on the top of a variable height antenna tower. c. The antenna was varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna were set to make measurement. d. For each suspected emission the EUT was arranged to its worst case and then change the antenna tower height (from 1m to 4m) and turn table (from 0 degree to 360 degree) to find the maximum reading. e. If the emission level of the EUT in peak mode was 20 dB lower than the specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be tested using the quasi-peak method in about six maximal points and the results will be reported. f. Broadband antenna (Calibrated antenna) was used as receiving antenna below 1000MHz. Horn antenna were used as receiving antenna above 1000MHz. g. The bandwidth is 120 kHz below 1000 MHz, and 1 MHZ above 1000 MHz Explanation of the Correction Factor are given as follows: FS= RA + AF + CF - AG Where: FS = Field Strength RA = Receiver Amplitude AF = Antenna Factor CF = Cable Attenuation Factor AG = Amplifier Gain		
TESTED RANGE:	30MHz to 5000MHz		
TEST VOLTAGE:	DC 3V (AAA X 2 Batteries)		
TEST STATUS:	Keep Tx in continuous transmission mode, modulated		
RESULTS:	The EUT meets the requirements of test reference for Radiated Emissions The test results relate only to the equipment under test provided by client.		
CHANGES OR MODIFICATIONS:	There were some modifications installed by ECMG Worldwide Certification Solution, Inc. (China) test personnel. Please refer to the equipment modification of page 5.		
M. UNCERTAINTY:	Freq. ± 2x10-7 x Center Freq., Amp ± 2.6 dB		

Section 15.205 Restricted bands of operation:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

[1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2] Above 38.6

The fundermental is not in a restricted band, and the fundamental & spurious emission in the restricted bands comply with the general emission limits of 15.209.

Field strength limits of 15.209:

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Other Frequency (MHz)	***Field strength***	
	(uV/meter)	***dB uV/meter***
30-88	*100*	*40.0*
88-216	*150*	*43.5*
216-960	*200*	*46.0*
Above 960	*500*	*54.0*

Note:

1. *Field Strength (dBuV/m)=20log Field Strength (uV/m).*
2. *In the emission tables above,the tighter limit applies at the band edge*

15.231 (e) Fundamental and Harmonics emission limits:

In addition to the provisions of section 15.205,the field strength of emissions from intentional radiators operated under this section shall not exceed the following :

Fundamental Frequency(MHz)	*Field Strength of Fundamental (microvolts/meter)*	*Field Strength of Spurious Emission (microvolts/meter)*
40.66-40.70	*1,000*	*100*
70-130	*500*	*50*
130-174	*500 to 1,500***	*50 to 150***
174-260	*1,500*	*150*
260-470	*1,500 to 5,000***	*150 to 500***
Above 470	*5,000*	*500*

*** linear interpolations*

Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows:

for the band 130-174 MHz,
uV/m at 3 meters = 22.72727(F) -2454.545;

for the band 260-470 MHz,
uV/m at 3 meters =16.6667(F) -2833.3333.

The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

The above field strength limis are specified at a distance of 3 meter, The tighter limits apply at the band edges.

In the above table , based on the average value of the measure emissions

According to the operation frequency of EUT ,the limits should be :

Fundamental Frequency(MHz)	*Field Strength of Fundamental*		*Field Strength of Spurious*	
	(uV/m at 3m)	*(dBuV/m at 3m)*	*(uV/m at 3m)*	*(dBuV/m at 3m)*
434MHz	*4,400*	*72.87*	*440*	*52.87*

Fundamental and spurious emission data :

Peak value

Polarization	Frequency (MHz)	Read Level dB(μV)	Factor (dB)	Field Strength dB(μV/m)	Limit dB(μV/m)	Over Limit dB(μV/m)
Horizontal	434.01	57.95	16.32	74.27	92.87	-18.60
Horizontal	868.02	28.04	22.21	50.25	72.87	-22.62
Horizontal	*1302.03	15.28	25.30	40.58	74.00	-33.42
Horizontal	1736.04	10.70	27.10	37.80	72.87	-35.07
Horizontal	2170.05	8.40	28.60	37.00	72.87	-35.87
Horizontal	2604.06	6.29	29.80	36.09	72.87	-36.78
Vertical	434.01	52.71	16.32	69.03	92.87	-23.84
Vertical	868.02	21.76	22.21	43.97	72.87	-28.90
Vertical	*1302.03	15.60	25.30	40.90	74.00	-33.10
Vertical	1736.04	10.89	27.10	37.99	72.87	-34.88
Vertical	2170.05	8.01	28.60	36.61	72.87	-36.26
Vertical	2604.06	6.12	29.80	35.92	72.87	-36.95

Average value

Polarization	Frequency (MHz)	Read Level dB(μV)	Factor (dB)	Duty cycle Correction Factor (dB)	Field Strength dB(μV/m)	Limit dB(μV/m)	Over Limit dB(μV/m)
Horizontal	434.01	57.95	16.32	-19.62	54.65	72.87	-18.22
Horizontal	868.02	28.04	22.21	-19.62	30.63	52.87	-22.24
Horizontal	*1302.03	15.28	25.30	-19.62	20.96	54.00	-33.04
Horizontal	1736.04	10.70	27.10	-19.62	18.18	52.87	-34.69
Horizontal	2170.05	8.40	28.60	-19.62	17.38	52.87	-35.49
Horizontal	2604.06	6.29	29.80	-19.62	16.47	52.87	-36.40
Vertical	434.01	52.71	16.32	-19.62	49.41	72.87	-23.46
Vertical	868.02	21.76	22.21	-19.62	24.35	52.87	-28.52
Vertical	*1302.03	15.60	25.30	-19.62	21.28	54.00	-32.72
Vertical	1736.04	10.89	27.10	-19.62	18.28	52.87	-34.59
Vertical	2170.05	8.01	28.60	-19.62	16.99	52.87	-35.88
Vertical	2604.06	6.12	29.80	-19.62	16.30	52.87	-36.57

The other emission data :

All reading bellow 1GHz are Quasi-peak,above are average value.

Polarization	Frequency (MHz)	Read Level dB(μV)	Factor (dB)	Field Strength dB(μV/m)	Limit dB(μV/m)	Over Limit dB(μV/m)
Vertical	74.62	10.96	8.69	19.65	40.0	-20.35
Vertical	104.69	7.49	8.64	16.13	43.5	-27.37
Vertical	438.37	3.38	16.97	20.35	46.0	-25.63
Horizontal	30.02	4.44	13.61	18.05	40.0	-21.95
Horizontal	72.68	5.68	8.69	14.37	40.0	-25.63
Horizontal	105.66	4.31	7.75	12.06	43.5	-31.44

Remark :

1. *The frequency range was scanned from 30MHz to 4.5GHz, all emissions not recorded were very low against the limit.*

2. *According to FCC 15.35(b),maximum permitted peak field strength is 20dB above the maximum permitted average emission limit.*

3. *Field Strength=Read Level + Factor + Duty Cycle Correction Factor Factor = Antenna Factor + Cable Loss - Preamp Factor*

4. *"*" means emission within the restricted band of part 15.205, the corresponding limit as per 15.209*

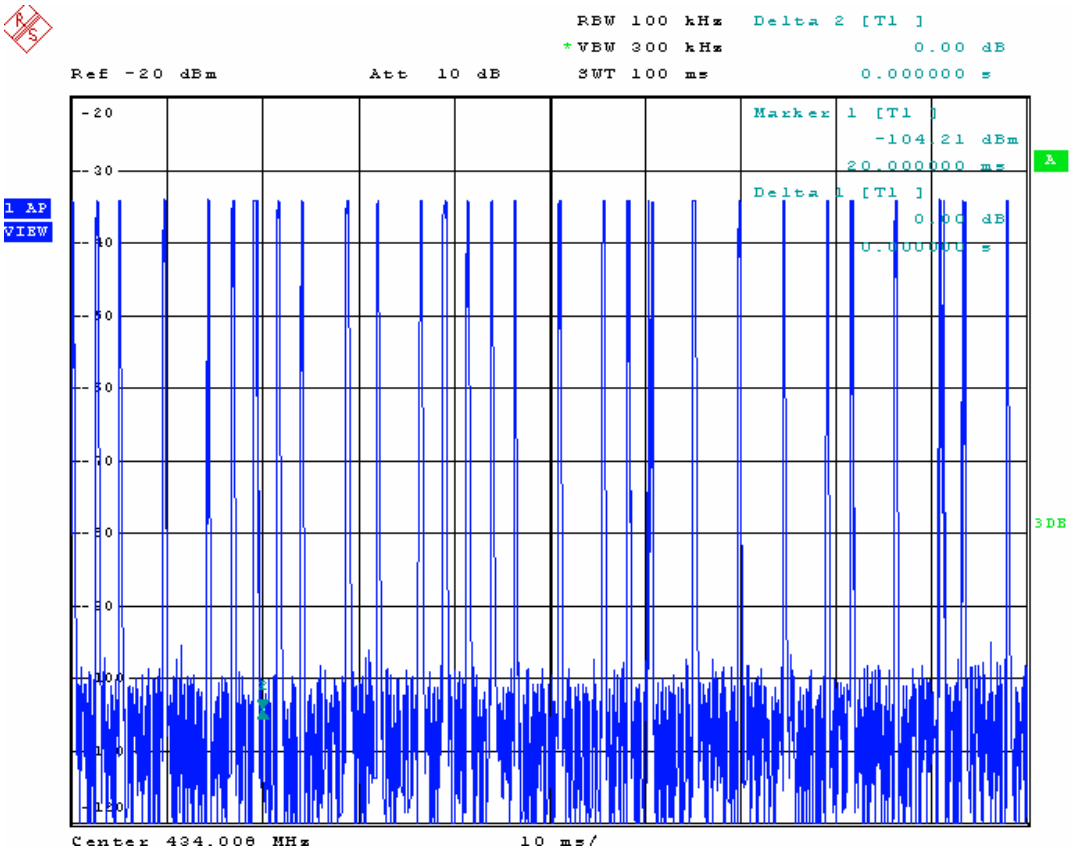
5. *Duty Cycle Correction Factor is calculated by averaging the sum of the pulse train. Correction factor is measured as follows:*

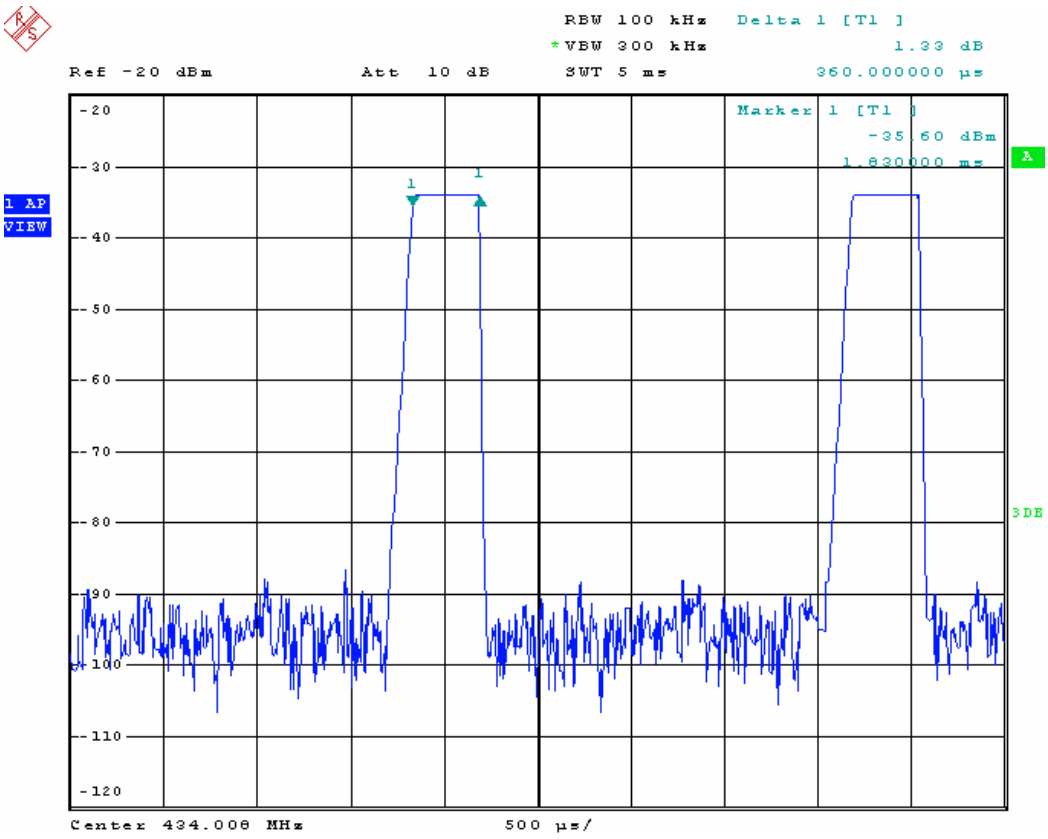
   Keep the EUT in continuous transmission mode (modulated), and set the spectrum to the fundamental frequency and set the span width to 0 Hz. Then connect a storage oscilloscope to the video output of the spectrum that is used to detect the pulse train. Adjust the oscilloscope settings to observe the pulse train and determine the number and width of the pulses, as well as the period of the train.

   Duty Cycle Correction Factor in 0.1s at its maximum value

   =20log(duty cycle)
   =20log(T_{ontime}/T_{period} or100ms)
   *=20log(29*0.36ms/100ms)*
   =20log(10.44/100)
   =-19.62

   please refer to the following test graph:

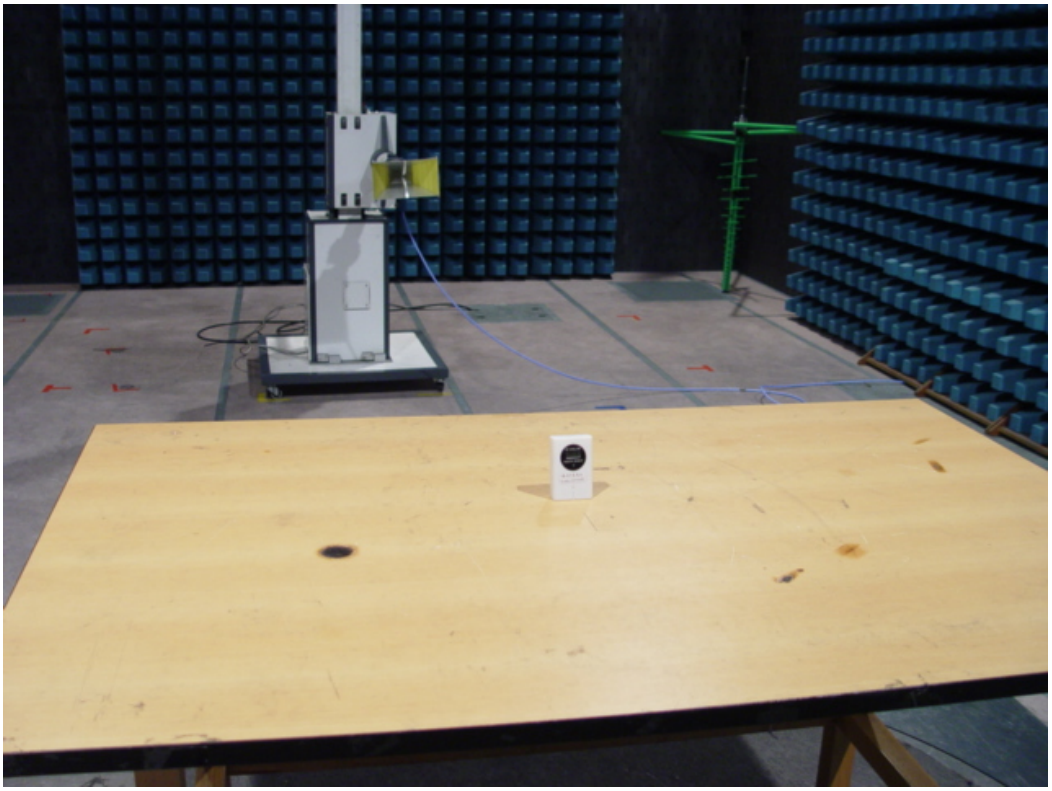

RBW 100 kHz
*VBW 300 kHz
SWT 100 ms
Delta 2 [T1]
0.00 dB
0.000000 s
Ref -20 dBm
Att 10 dB
Marker 1 [T1]
-104.21 dBm
20.000000 ms
Delta 1 [T1]
1 AP
VIEW
3DB
Center 434.008 MHz
10 ms/


RBW 100 kHz
*VBW 300 kHz
SWT 5 ms
Delta 1 [T1]
1.33 dB
360.000000 µs
Ref -20 dBm
Att 10 dB
Marker 1 [T1]
-35.60 dBm
1.830000 ms
1 AP
VIEW
3DB
Center 434.008 MHz
500 µs/

Test equipments list :

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde&Scwarz	ES 126	SB3436	01/25/07	01/25/08
Bilog Antenna	Chase	CBL6112B	SB3440	01/25/07	01/25/08
Horn Antenna	Rohde&Scwarz	HF 906	SB3434	01/25/07	01/25/08
Anechoic Chamber	Albatross Projects	9X6X6	SB 3450	03/21/06	03/21/08
Note: All testing were performed using internationally recognized standards. All test instruments were calibrated.					

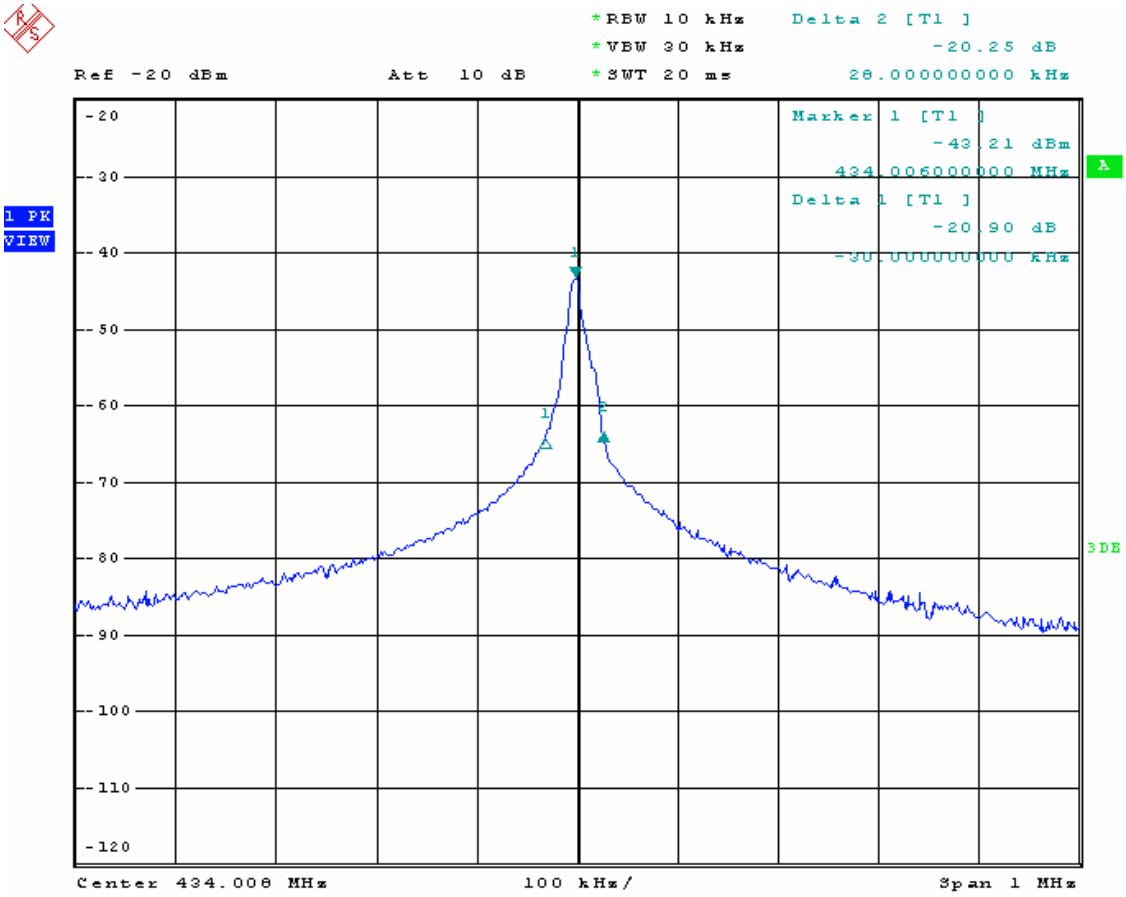
Radiated Emissions Test Set-up:



Attachment 4 – Bandwidth Measurement

CLIENT:	ZHANGZHOU JIMEI ELECTRONIC CO., LTD	**TEST STANDARD:**	FCC Part 15.231 (c)
MODEL TESTED:	H999	**PRODUCT:**	RF Transmitter
SERIAL NO.:	Engineering Sample	**EUT DESIGNATION:**	RF Equipment
TEMPERATURE:	21°C	**HUMIDITY:**	55%RH
ATM PRESSURE:	101.8 kPa	**GROUNDING:**	No Grounding
TESTED BY:	Jawen Yin	**DATE OF TEST:**	2007, july 31

SETUP METHOD:	ANSI C63.4 - 2003
BANDWIDTH REQUIREMENT:	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.
TEST PROCEDURE:	The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used since a peak or, peak hold, may produce a wider bandwidth than actual. The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded. The span between the two recorded frequencies is the occupied bandwidth. Bandwidth limit= 0.25% X 434MHz= 1.085MHz
TEST VOLTAGE:	DC 3V (AAA X 2 Batteries)
TEST STATUS:	Keep Tx in continuous transmission mode, modulated
RESULTS:	The EUT meets the bandwidth requirement. The test results relate only to the equipment under test provided by client.
CHANGES OR MODIFICATIONS:	There were some modifications installed by ECMG Worldwide Certification Solution, Inc. (China) test personnel. Please refer to the equipment modification of page 5.
UNCERTAINTY:	Freq. $\pm$ 2x10^{-7} x Center Freq., Amp $\pm$ 2.6 dB



Test Data :

Frequency (MHz)			*Bandwidth Limit (MHz) (Fcenter x 0.25%)*	*Test Result (MHz) (Fend-Fstart)*	*Conclusion*
Start	*Center*	*End*			
433.976	*434.006*	*434.034*	*1.085*	*0.058*	*Compliance*

Test Equipment List :

Test Equipment	Manufacturer	Model	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde&Scwarz	ES 126	SB3436	01/25/07	01/25/08
Bilog Antenna	Chase	CBL6112B	SB3440	01/25/07	01/25/08
Anechoic Chamber	Albatross Projects	9X6X6	SB 3450	03/21/06	03/21/08
Note: All testing were performed using internationally recognized standards. All test instruments were calibrated.					

Bandwidth Test Set-up: