



Report No.: SZ11100091E02



FCC TEST REPORT

Issued to

Goodbetterbest Limited

For

EX-05 MILITARY STYLE HEADSET CRISP&DEEP WIRED STEREO HEADPHONES

Model Name: EX5UNI-11
Trade Name: N/A
FCC ID: VS9-5U11
Brand Name: Gioteck
Standard: 47 CFR Part 15 Subpart B
Test date: October 30, 2011 – November 8, 2011
Issue date: November 30, 2011



Shenzhen Morlab Communications Technology Co., Ltd.

Tested by Xiao Xiong
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Date 2011.11.30

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Date 2011.11.30



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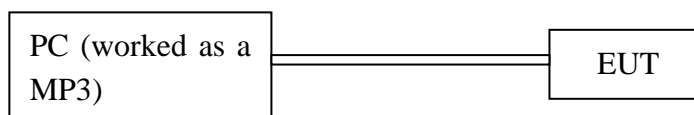
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| Change History | | |
|----------------|-------------------|-------------------|
| Issue | Date | Reason for change |
| 1.0 | November 30, 2011 | First edition |
| | | |
| | | |

1. GENERAL INFORMATION

1.1 EUT Description

EUT Type..... Headset
Serial No. (n.a., marked #1 by test site)
Hardware Version N/A
Software Version..... N/A
Applicant..... Goodbetterbest Limited
Suites 103-107 Devonshire Business Centre Works Road Letchworth
Herts SG6 1GJ United Kingdom
Manufacturer..... Goodbetterbest Limited
Suites 103-107 Devonshire Business Centre Works Road Letchworth
Herts SG6 1GJ United Kingdom
Test Sample Sketch.....



NOTE:

1. The EUT is a Headset. During the measurement, the EUT was connected with a PC via the USB port all the time.
2. Please refer to ANNEX A for the photographs of the EUT. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart B:

| No. | Identity | Document Title |
|-----|-------------------------------------|-------------------------|
| 1 | 47 CFR Part 15 (10-1-09 Edition) | Radio Frequency Devices |

Test detailed items/section required by FCC rules and results are as below:

| No. | Section | Description | Result |
|-----|---------|-------------------|--------|
| 2 | 15.109 | Radiated Emission | PASS |

NOTE: The tests were performed according to the method of measurements prescribed in ANSI C63.4 2009.

1.3 Facilities and Accreditations

1.3.1 Facilities

Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L3572.

All measurement facilities used to collect the measurement data are located at 3/F, Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen, 518055 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22; the FCC registration number is 741109.

1.3.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

| | |
|-----------------------------|----------|
| Temperature (°C): | 15 - 35 |
| Relative Humidity (%): | 30 - 60 |
| Atmospheric Pressure (kPa): | 86 - 106 |

1.3.3 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

| | |
|------------------------------------|--------------------|
| Uncertainty of Conducted Emission: | $\pm 1.8\text{dB}$ |
| Uncertainty of Radiated Emission: | $\pm 3.1\text{dB}$ |

2. TEST CONDITIONS SETTING

2.1 Test Mode

During the measurement, the EUT was connected with a PC all the time. The PC was playing music as a mp3 normally, the voice input function of the EUT via the Flexible Rubber Mic Boom was active too.

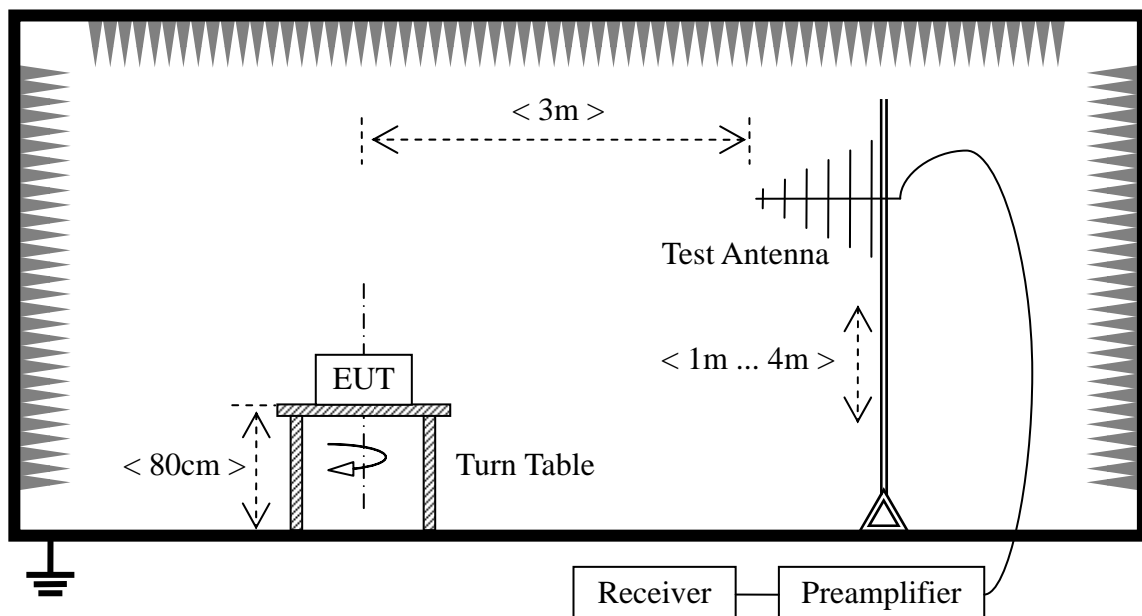
2.2 Test Setup and Equipments List

2.2.1 Radiated Emission

A. Test Procedure

- 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.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

B. Test Setup:



The test is performed in a 3m Semi-Anechoic Chamber; the antenna factor, cable loss and so on of the site (factors) is calculated to correct the reading. The EUT is placed on a 0.8m high insulating Turn

Table, and keeps 3m away from the Test Antenna, which is mounted on a variable-height antenna master tower.

C. Equipments List:

| Description | Manufacturer | Model | Serial No. | Cal. Date |
|-------------------------|--------------|------------|------------|-----------|
| Receiver | Agilent | E7405A | US44210471 | 2011.05 |
| Semi-Anechoic Chamber | Albatross | 9m*6m*6m | (n.a.) | 2011.05 |
| Test Antenna - Bi-Log | Schwarzbeck | VULB 9163 | 9163-274 | 2011.05 |
| Test Antenna - Horn | Schwarzbeck | BBHA 9120C | 9120C-384 | 2011.05 |
| Test Antenna - Monopole | Schwarzbeck | VAMP 9243 | 9243236 | 2011.05 |
| Personal Computer | IBM | IBM_T20 | (n.a) | (n.a.) |

3. 47 CFR PART 15B REQUIREMENTS

3.1 Radiated Emission

3.1.1 Requirement

According to FCC section 15.109, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Frequency range (MHz) | Field Strength | | Field Strength Limitation at 3m Measurement Dist | |
|-----------------------|----------------------|------|--|----------------------------------|
| | $\mu\text{V/m}$ | Dist | ($\mu\text{V/m}$) | (dBuV/m) |
| 0.009 - 0.490 | $2400/F(\text{KHz})$ | 300m | $10000 * 2400/F(\text{KHz})$ | $20\log 2400/F(\text{KHz}) + 80$ |
| 0.490 - 1.705 | $2400/F(\text{KHz})$ | 30m | $100 * 2400/F(\text{KHz})$ | $20\log 2400/F(\text{KHz}) + 40$ |
| 1.705 - 30.00 | 30 | 30m | $100 * 30$ | $20\log 30 + 40$ |
| 30.0 - 88.0 | 100 | 3m | 100 | $20\log 100$ |
| 88.0 - 216.0 | 150 | 3m | 150 | $20\log 150$ |
| 216.0 - 960.0 | 200 | 3m | 200 | $20\log 200$ |
| Above 960.0 | 500 | 3m | 500 | $20\log 500$ |

As shown in FCC section 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

Note:

- 1) The tighter limit shall apply at the boundary between two frequency range.
- 2) Limitation expressed in dBuV/m is calculated by $20\log \text{Emission Level}(\mu\text{V/m})$.
- 3) If measurement is made at 3m distance, then F.S Limitation at 3m distance is adjusted by using the formula of $Ld1 = Ld2 * (d2/d1)^2$.

Example:

F.S Limit at 30m distance is $30\mu\text{V/m}$, then F.S Limitation at 3m distance is adjusted as

$$Ld1 = L1 = 30\mu\text{V/m} * (10)^2 = 100 * 30\mu\text{V/m}$$

3.1.2 Test Description

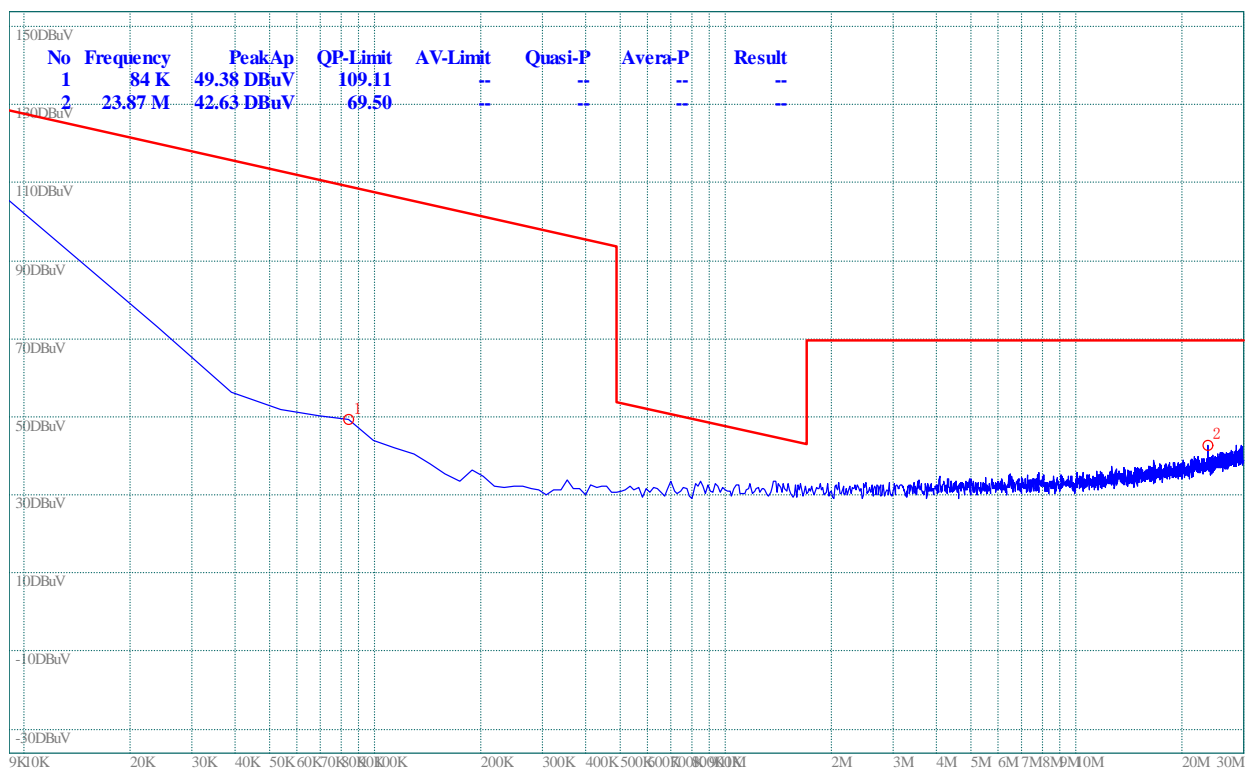
See section 2.2.1 of this report.

3.1.3 Test Result

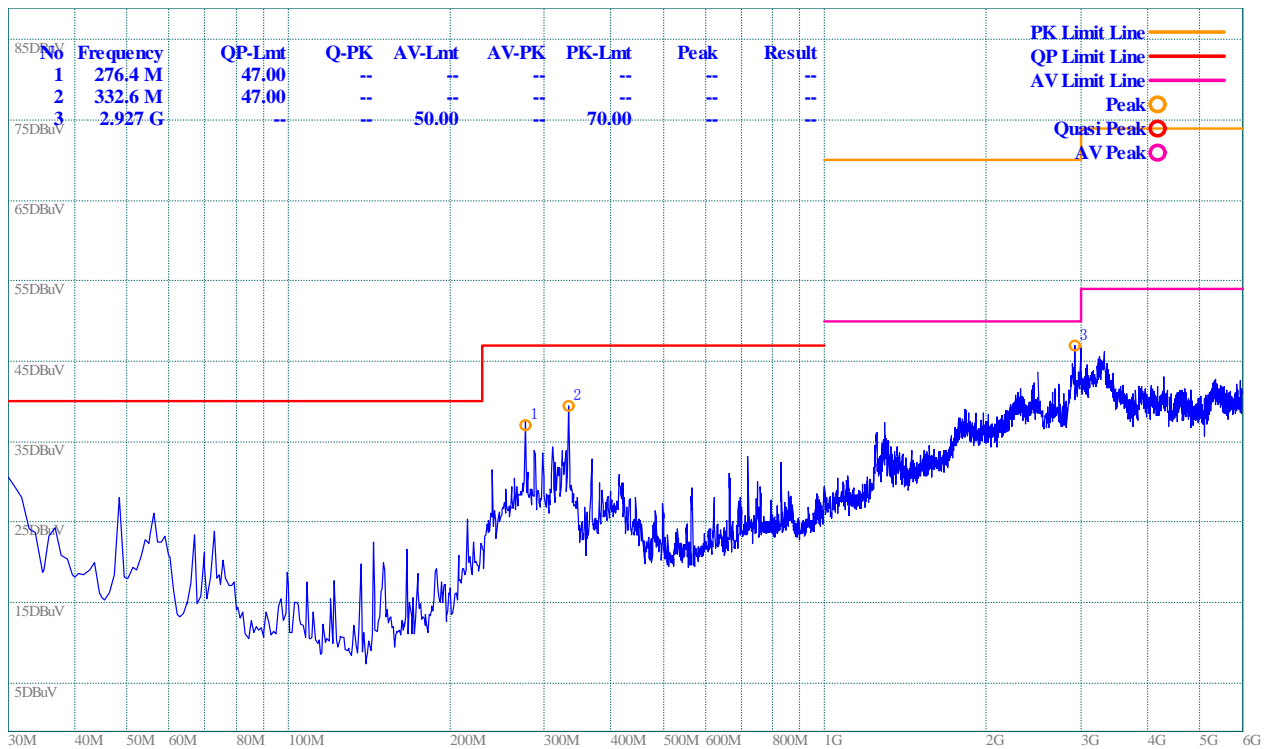
The maximum radiated emission is searched using PK, QP and AV detectors; the emission levels more than the limits, and that have narrow margins from the limits will be re-measured with AV and QP detectors. Both the vertical and the horizontal polarizations of the Test Antenna are considered to perform the tests. All test modes are considered, refer to recorded points and plots below.

3.1.3.1 Test Mode

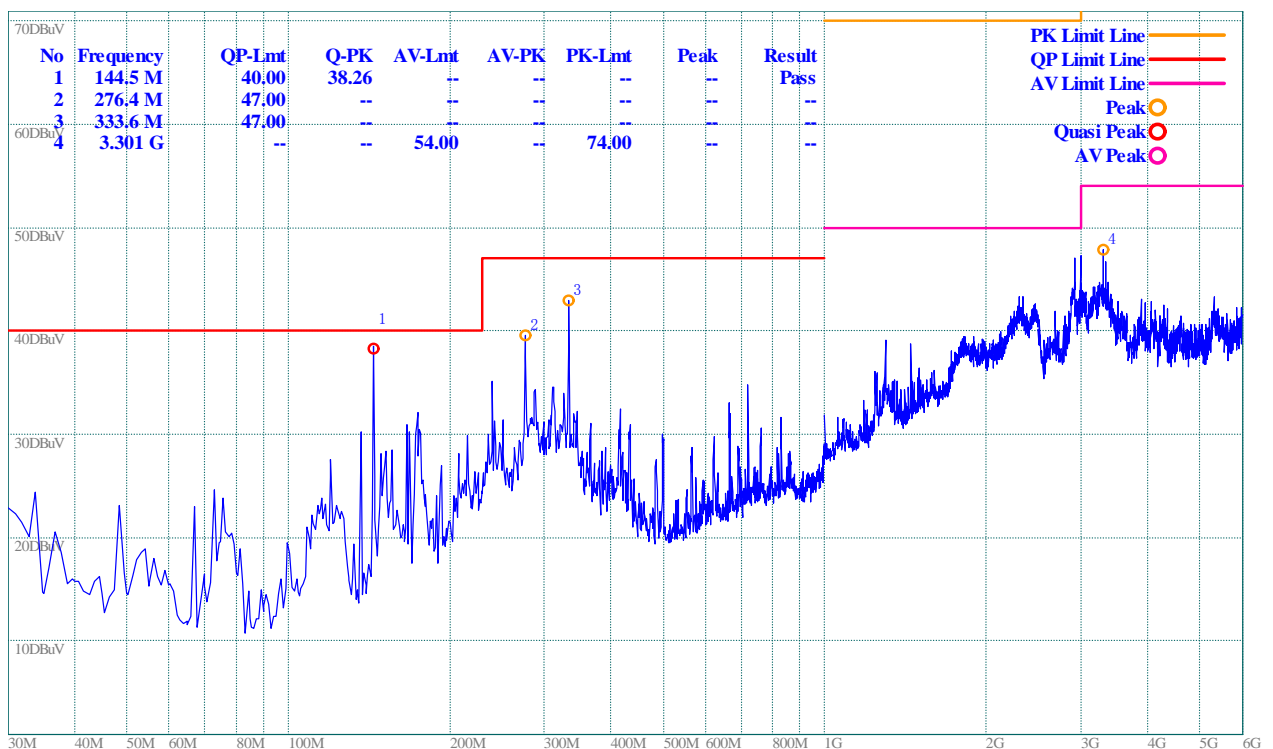
A. Test Plots and Suspicious Points:



(Plot A: 9K – 30M)



(Plot B: 30M – 6G, Test Antenna Vertical)



(Plot C: 30M – 6G, Test Antenna Horizontal)

Test Result :PASS

ANNEX A Photos of the EUT

1. Appearance of the EUT:

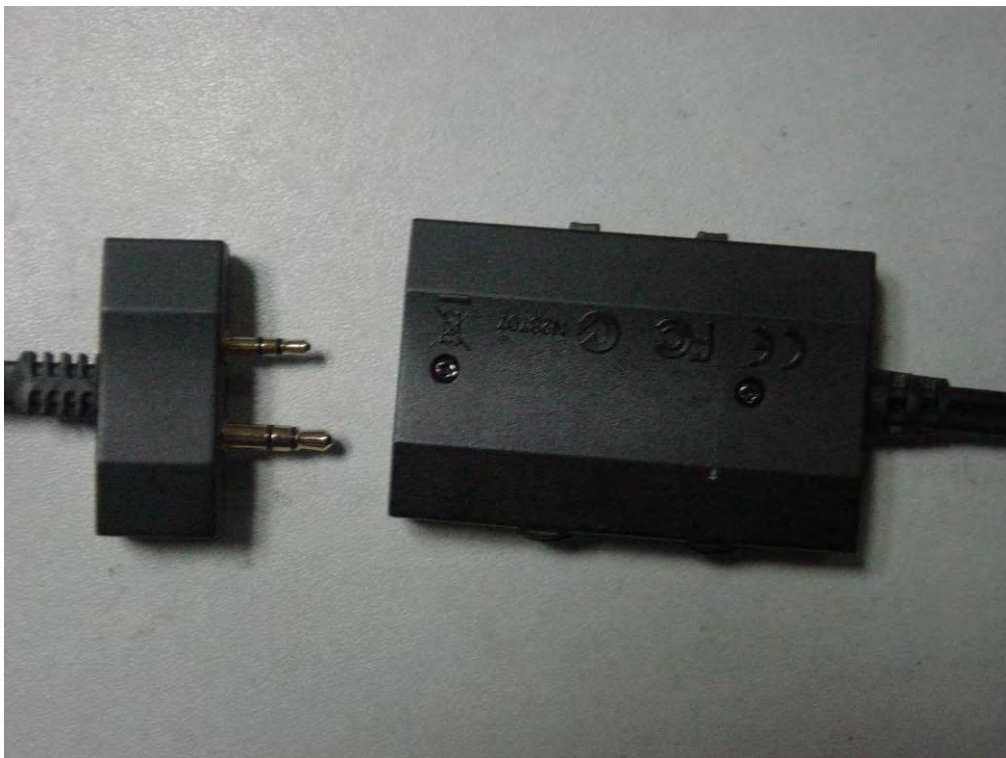


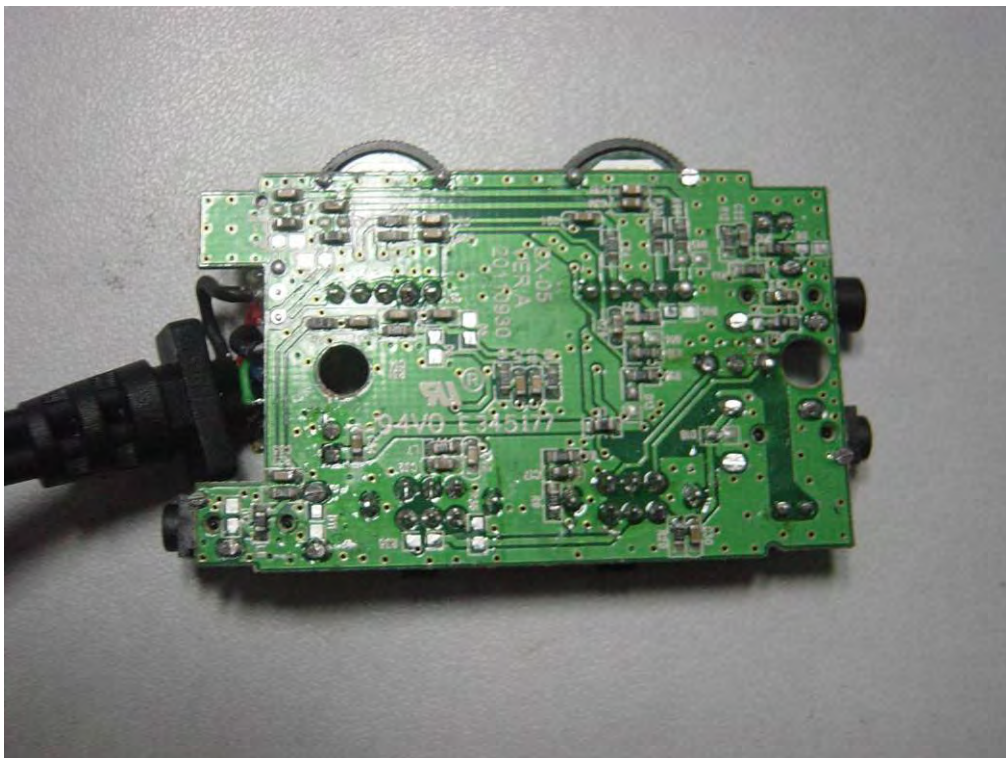
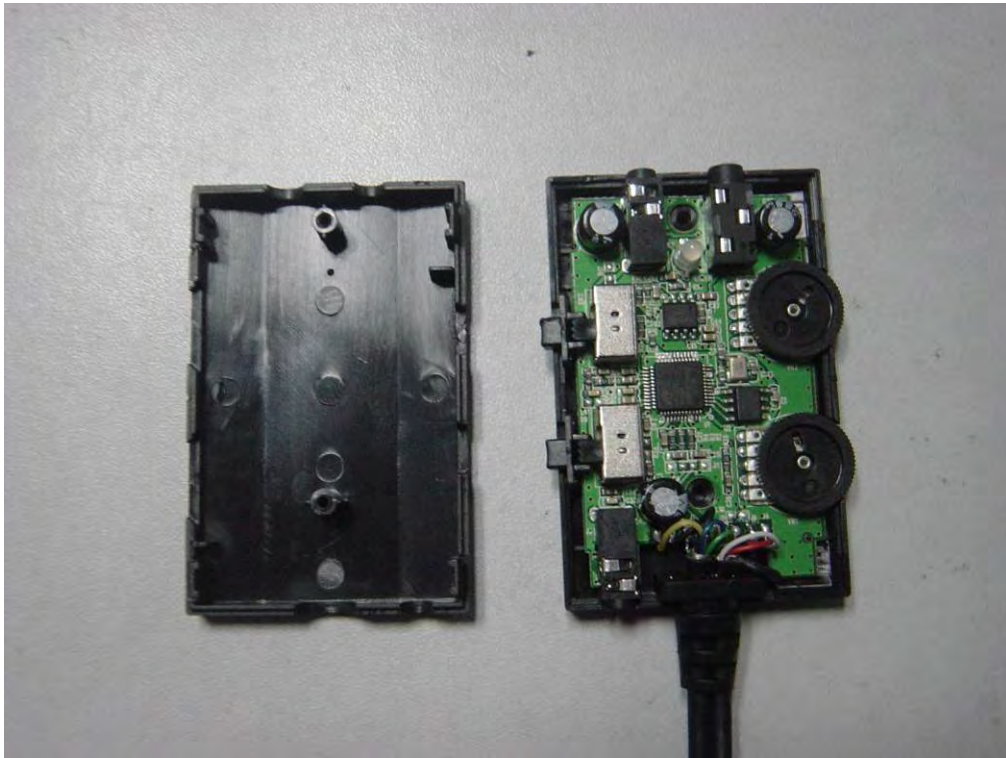




2. Inside of the EUT:







ANNEX B Photos of Test Setup

1. Radiated Field Strength Measurement



**** END OF REPORT ****