

## **ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT INTENTIONAL RADIATOR CERTIFICATION**

**Product Name** : Hide & Seek Safari Jr. Assortment-Elephant, Monkey, Lion  
**Model Number** : RR720(721/722/723)-Transmitter(Tx)  
**Trade Name** : N/A  
**FCC ID** : XWVRR720TX  
**Report Number** : SZEE091110275318-1  
**Date** : Nov. 30, 2009

Standards	Results
<input checked="" type="checkbox"/> 47 CFR FCC Part 15 Subpart C 15.235	PASS

Prepared for:  
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*N/A means not applicable.*

## 1. CERTIFICATION INFORMATION

**Applicant & Address:** Toys Treasure  
Pucheng South Road, Luzhi Town, Wuzhong zone, Suzhou,  
China

**Manufacturer & Address:** Toys Treasure  
Pucheng South Road, Luzhi Town, Wuzhong zone, Suzhou,  
China

**Type of Test:** FCC Part 15 (Certification)

**FCC ID:** XWVRR720TX

**Equipment Under Test:** Hide & Seek Safari Jr. Assortment-Elephant, Monkey, Lion

**Model Name:** RR720(721/722/723)-Transmitter(Tx)

**Test Model:** 722

**Trade Name:** N/A

**Serial Number:** Not Applicable

**Technical Data:** DC 9V

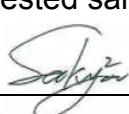
**Date of test:** Nov. 11, 2009 to Nov. 30, 2009

**Condition of Test Sample:** Normal

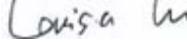
The above equipment was tested by Centre Testing International for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, Subpart C and the measurement procedure according to ANSI C63.4.

The test results of this report relate only to the tested sample identified in this report.

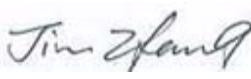
Prepared by :

  
Saky Yan

Reviewed by :

  
Louisa Lu

Approved by :

  
Jim Zhang  
Manager

Date : Nov. 30, 2009

## 2. TEST SUMMARY

Clause	Test Item	Result
1	Radiated Emission	PASS
2	Bandedge Emission	PASS
3	20dB Bandwidth	PASS

## 3. PRODUCT INFORMATION

Items	Description
Rating	DC 9V
Intentional Transceiver	Intentional Transmitter
Modulation	FSK
Operated Frequency	49.860MHz

There are 3 models, and all the models are the same except the outer shape and color. The test model is 722, and all the results are applicable to the others.

## 4. TEST EQUIPMENT LIST

Equipment	Manufacturer	Model Number	Serial Number	Due Date
Spectrum Analyzer	Agilent	E440A	MY46185649	08/25/2010
Biconilog Antenna	A.H.System	SAS-521-2	487	06/05/2010
Horn Antenna	ETS-LINDGREN	3117	00057407	06/27/2010
Microwave Preamplifier	Agilent	8449B	3008A02425	06/19/2011

## 5. Radiated Emissions Measurement

### 5.1. LIMITS

(1) The field strength of any emission within this band shall not exceed 10,000 microvolts/meter at 3 meters.

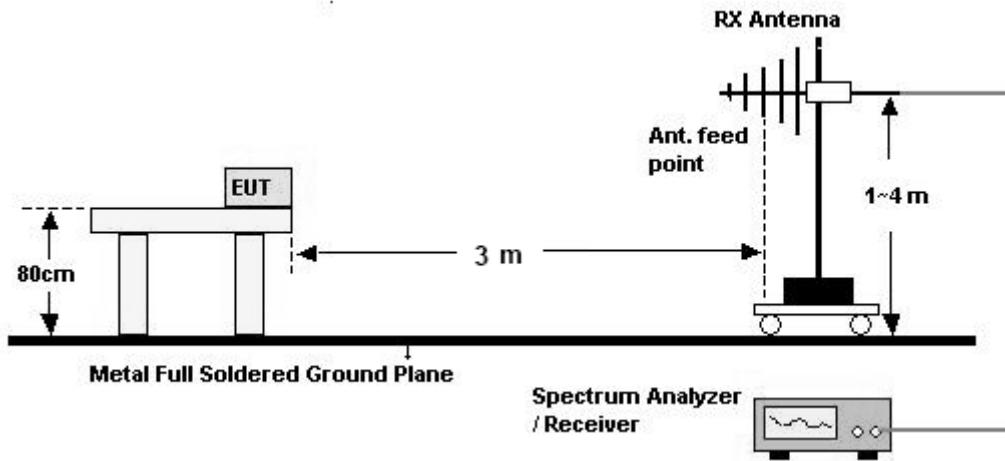
(2) The field strength of any emissions, which appear outside of operating frequency band and restricted band specified on 15.209, shall not exceed the general radiated emission limits as below.

Frequency (MHz)	Field strength ( $\mu$ V/m)	Distance (m)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**Note:** the tighter limit applies at the band edges.

### 5.2. BLOCK DIAGRAM OF TEST SETUP

For radiated emissions from 30 - 1000MHz



### 5.3. TEST PROCEDURE

- The EUT was placed on the top of a turntable 0.8 meters above the ground in the chamber, 3 meters away from the antenna (wideband antenna), which was mounted on the top of a variable-height antenna tower. The maximum values of the field strength are recorded by adjusting the polarizations of the test antenna and rotating the turntable.
- 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 turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test frequency analyzer system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

### 5.4. TEST RESULT

Pass

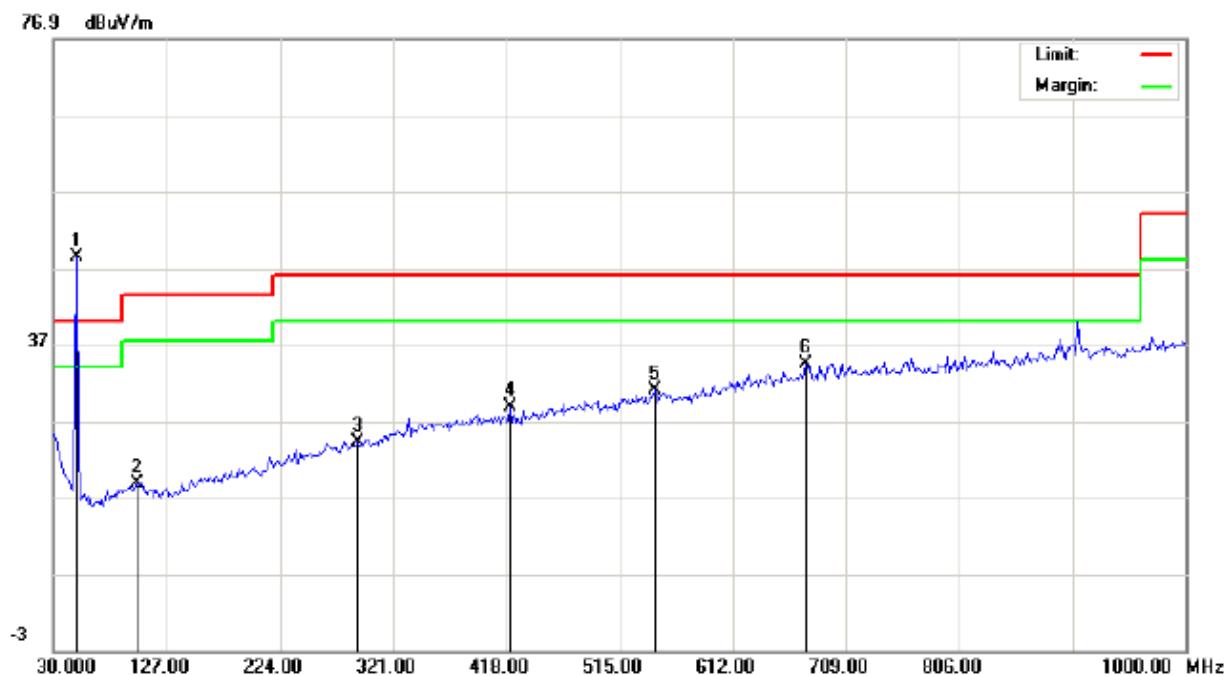
**EUT** : Hide & Seek Safari Jr. Assortment-Monkey      **Voltage** : DC 4.5V  
**M/N** : 722      **Temperature** : 26°C  
**Mode** : NORMAL      **Humidity** : 60%

Test Results-(Measurement Distance: 3m)							
Frequency	Reading Level - peak	Factor	Measurement - Peak	Limit - AV	Limit - QP	Antenna	Result
(kHz)	(dB $\mu$ V/m)	(dB)	(dB $\mu$ V/m)	(dB $\mu$ V/m)	(dB $\mu$ V/m)	(H/V)	(P/F)
49.8580*	39.15	9.26	48.41	80	---	H	P
101.1333	8.42	10.35	18.77	---	43.5	H	P
290.2833	8.71	15.43	24.14	---	46	H	P
421.2333	10.23	18.51	28.74	---	46	H	P
545.7166	9.57	21.36	30.93	---	46	H	P
675.0500	10.38	23.98	34.36	---	46	H	P
<hr/>							
49.8580*	56.67	9.26	65.93	80	---	V	P
99.5167	11.17	10.40	21.57	---	43.5	V	P
207.8333	8.84	12.28	21.12	---	43.5	V	P
367.8833	9.46	17.93	27.39	---	46	V	P
398.6000	10.55	18.37	28.92	---	46	V	P
623.3167	9.72	23.19	32.91	---	46	V	P

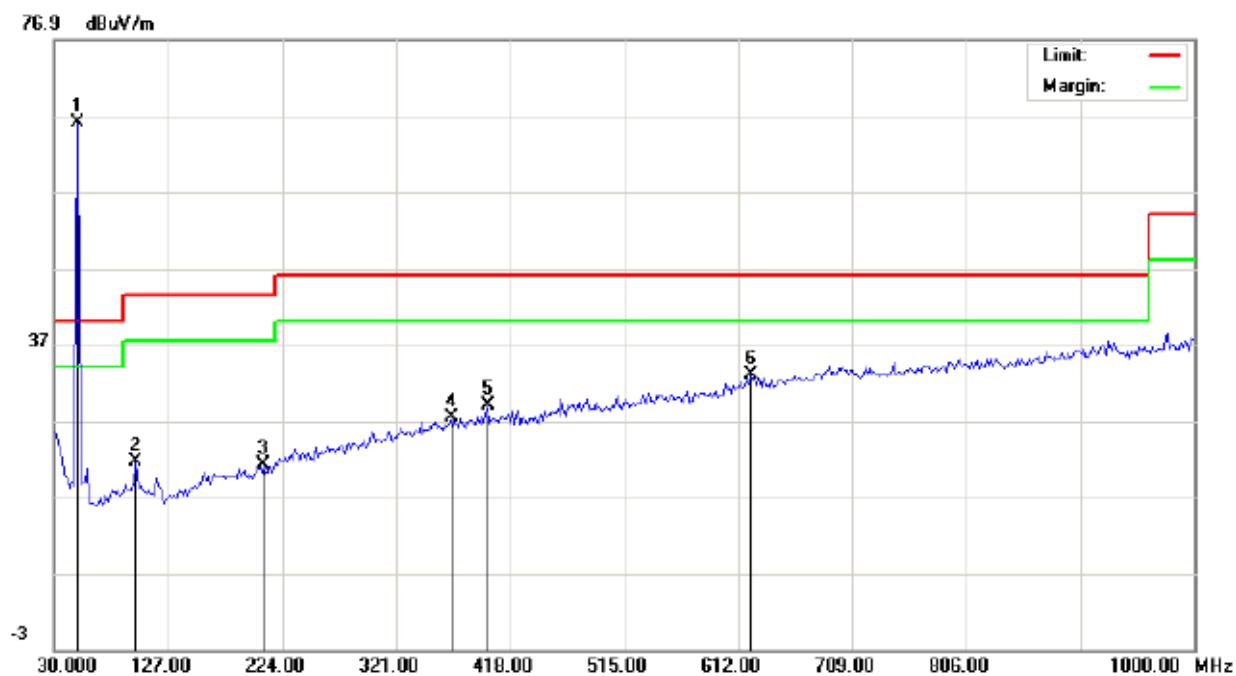
\*: fundamental frequency

## 5.5. TEST GRAPHS

H:



V:

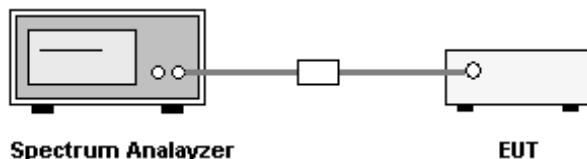


## 6. BAND EDGE EMISSION MEASUREMENT

### 6.1. LIMITS

The field strength of any emissions appearing between the band edges and up to 10 kHz above and below the band edges shall be attenuated at least 26 dB below the level of the unmodulated carrier.

### 6.2. BLOCK DIAGRAM OF TEST SETUP



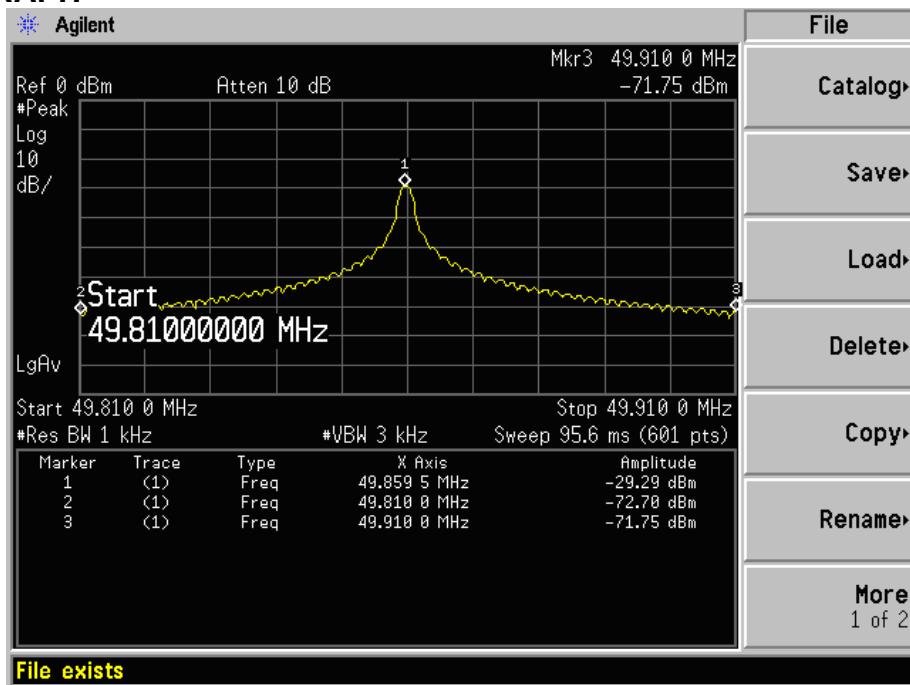
### 6.3. TEST PROCEDURE

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set spectrum analyzer's RBW and VBW to applicable value with Peak in Max Hold.
3. Record the emission drops at the band-edge relative to the highest fundamental emission level.
4. Use the marker-delta method to determine band-edge compliance as required.

### 6.4. TEST RESULT

Pass

### 6.5. TEST GRAPH

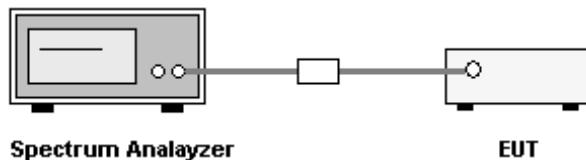


## 7. 20DB BANDWIDTH MEASUREMENT

### 7.1. LIMITS

No limits

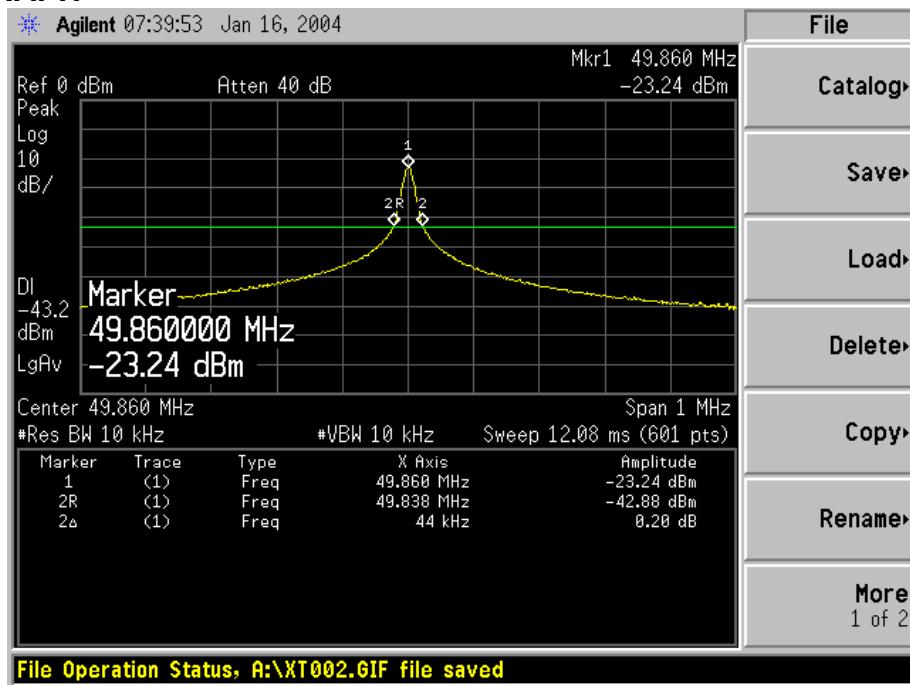
### 7.2. BLOCK DIAGRAM OF TEST SETUP



### 7.3. TEST PROCEDURE

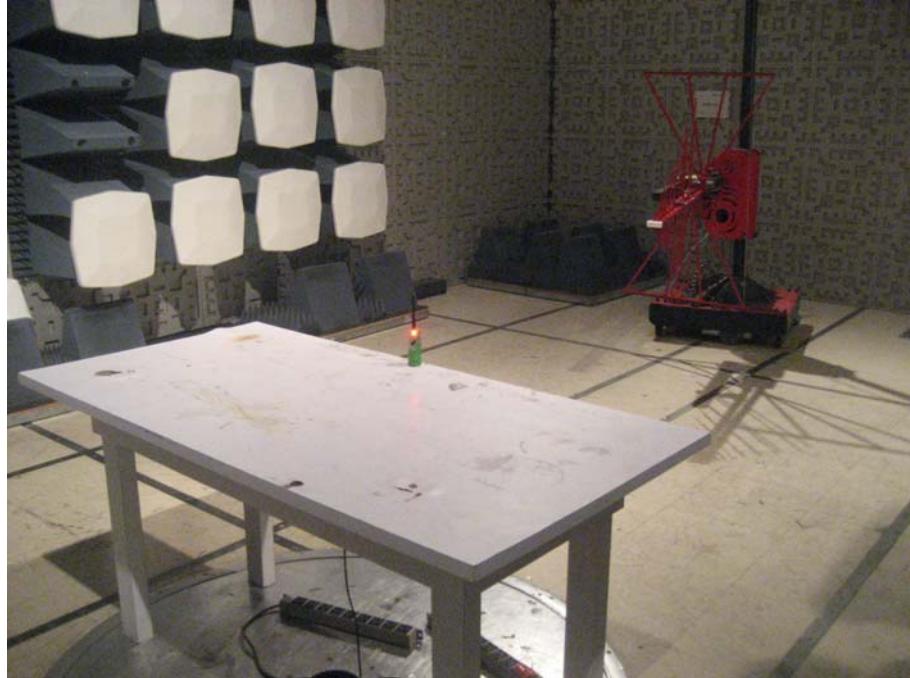
1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set spectrum analyzer's RBW and VBW to applicable value with Peak in Max Hold.
3. A PEAK output reading was taken, a DISPLAY line was drawn 20 dB lower than PEAK level.
4. The 20dB bandwidth was determined from where the channel output spectrum intersected the display line.

### 7.4. TEST GRAPH



## APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

### TEST SETUP OF RADIATED EMISSION (30MHz-1GHz)



## APPENDIX 2 EXTERNAL PHOTOGRAPHS OF EUT



Front View of EUT



Rear View of EUT



View of EUT-1(The model: 722)



View of EUT-2(The model: 722)



View of EUT-3(The model: 723)



View of EUT-4(The model: 723)



View of EUT-5(The model: 721)

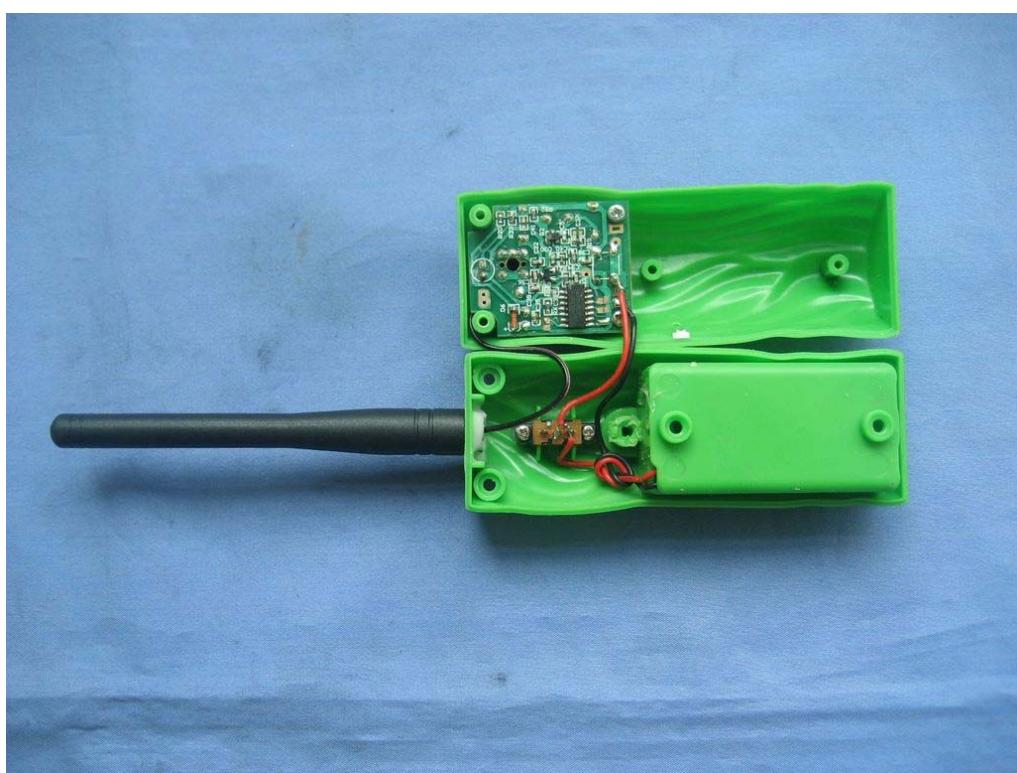


View of EUT-6(The model: 721)

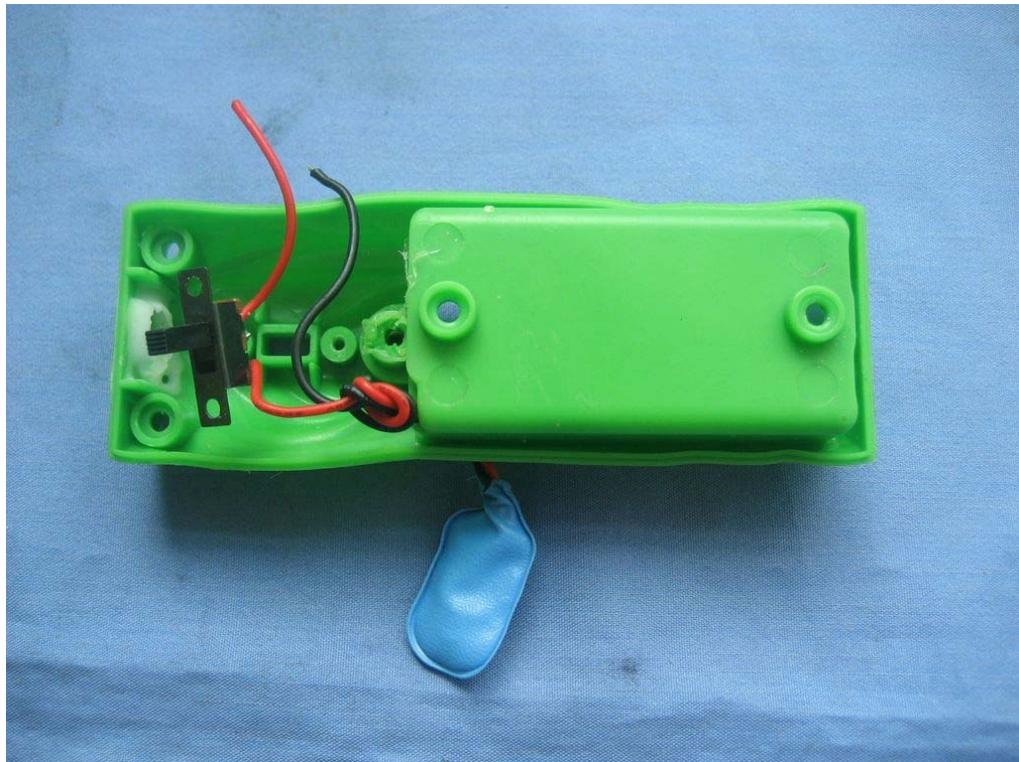
### APPENDIX 3 INTERNAL PHOTOGRAPHS OF EUT



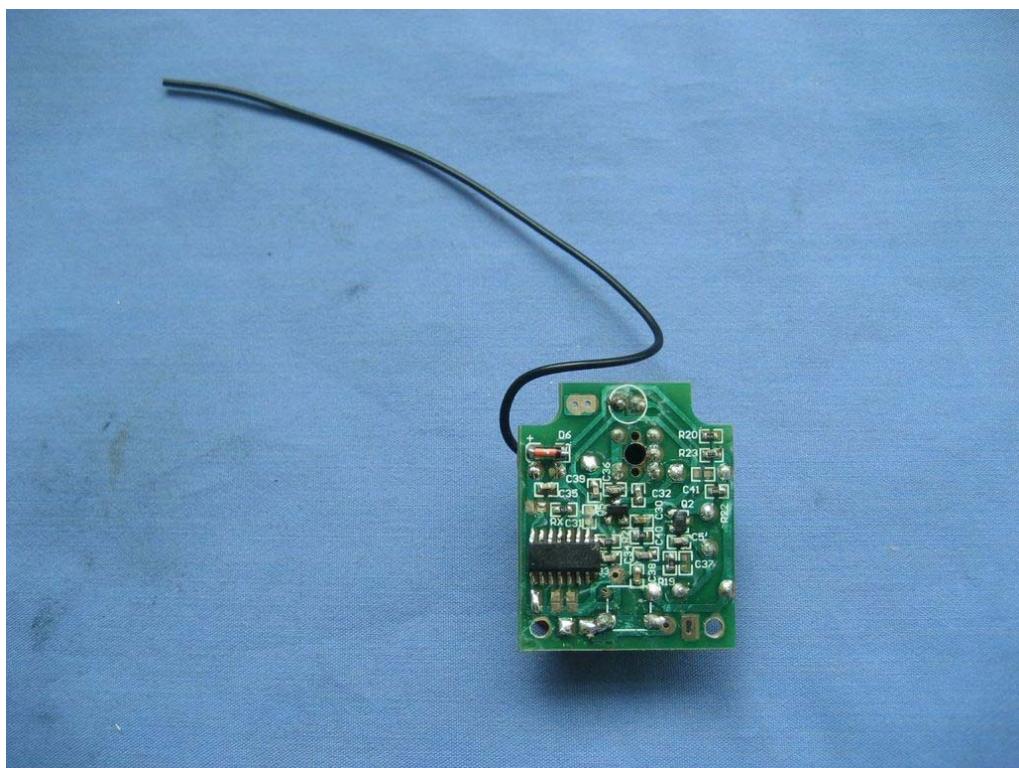
Uncovered View of EUT-1



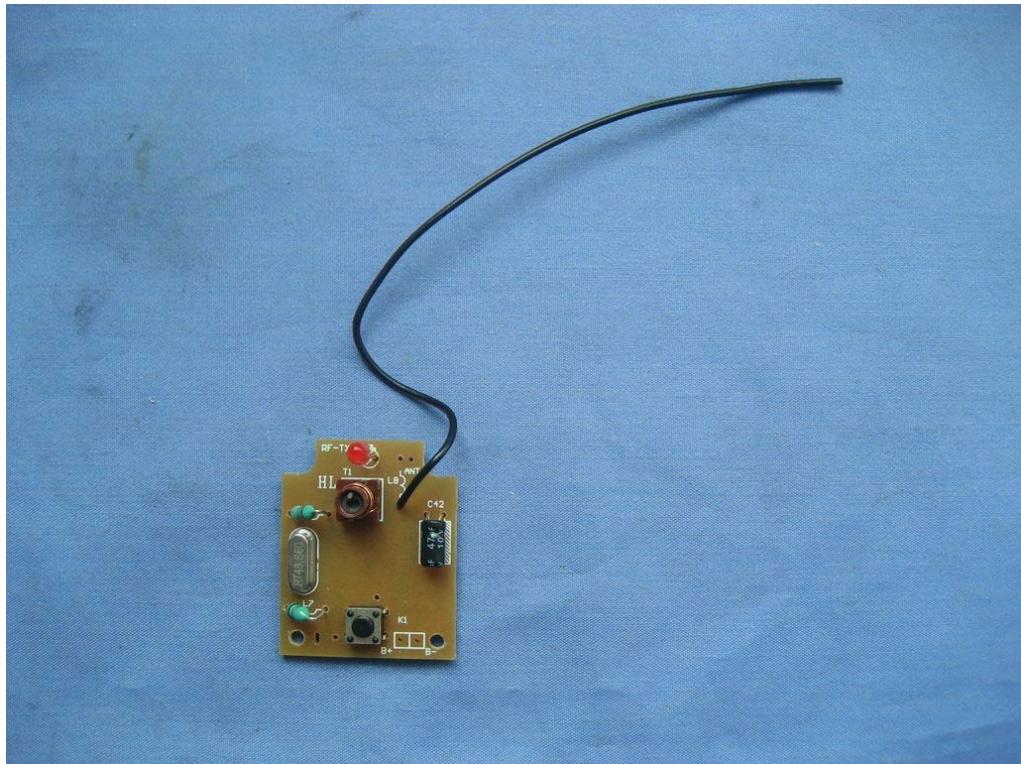
Uncovered View of EUT-2



Uncovered View of EUT-3



Back view of PCB1



Front view of PCB1

----- End of report -----