ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION

Product Name	:	R/C Toys
Model Number	:	1:10
Trade Name	:	XQ
FCC ID	:	W2MXQTOYSTX72
Report Number	:	SZEE100630420232-1
Date	:	Jul. 13, 2010

Standards	Results
☒ 47 CFR FCC Part 15 Subpart C 15.235	PASS

Prepared for:

XQ arts toys CO.,LTD,
Laimei Industrial Distriet, Chenhai,
Shantou City, Guangdong Province, China
TEL:+86-754-8551 3333-2121
FAX: +86-754-8551 1888

Prepared by:

CENTRE TESTING INTERNATIONAL CORPORATION
Building C, Hongwei Industrial Zone, Baoan 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

TABLE OF CONTENTS

N/A means not applicable.

1. CERTIFICATION INFORMATION

Applicant & Address:	XQ arts toys CO.,LTD, Laimei Industrial Distriet, Chenhai, Shantou City, Guangdong Province, China
Manufacturer & Address:	XQ arts toys CO.,LTD, Laimei Industrial Distriet, Chenhai, Shantou City, Guangdong Province, China
Type of Test:	FCC Part 15 (Certification)
FCC ID:	W2MXQTOYSTX72
Equipment Under Test:	R/C Toys
Model Name:	1:10
Trade Name:	XQ
Serial Number:	Not Applicable
Technical Data:	DC 9V
Date of test:	Jun. 30, 2010 to Jul. 12, 2010
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 C63.4-2009.
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 :   _____
                           Lily Yan
                           Supervisor

Date   :   _____
                           Jul. 13, 2010

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

4. TEST EQUIPMENT LIST

Equipment	Manufacturer	Model Number	Serial Number	Due Date
3M Chamber & Accessory Equipment	ETS-LINDGREN	FACT-3	3510	10/16/2011
Spectrum Analyzer	Agilent	E4440A	MY46185649	04/09/2011
Biconilog Antenna	ETS-LINGREN	3142C	00044562	07/31/2011
Multi device Controller	ETS-LINGREN	2090	00057230	08/25/2010
Receiver	R&S	ESCI	100435	08/25/2010

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 removed by more than 10KHz from the band edges shall not exceed the general radiated emission limits in section 15.209.

Frequency (MHz)	Field strength (mV/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
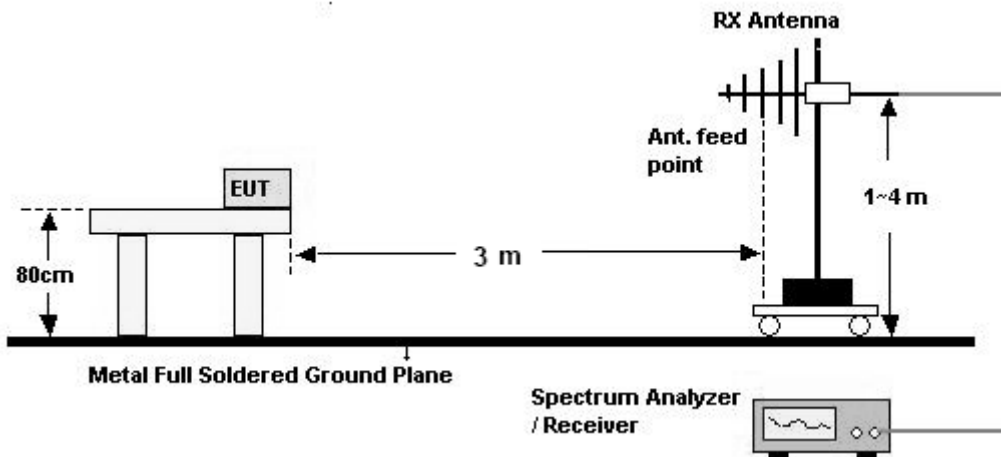
5.3. TEST PROCEDURE

a. 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.

b. 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.

c. The test frequency analyzer system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

5.4. TEST RESULT

Pass

EUT : R/C Toys
M/N : 1:10
**Mode** : NORMAL

Voltage : DC 9V
Temperature : 23℃
Humidity : 60%

| Test Results-(Measurement Distance: 3m)							
Frequency	Reading Level - peak	Factor	Measurement - Peak	Limit - AV	Limit - QP	Antenna	Result
(kHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV/m)	(dBμV/m)	(H/V)	(P/F)
49.8612*	50.44	9.26	59.70	80	---	H	P
101.7800	14.90	10.30	25.20	---	43.5	H	P
173.5600	15.29	11.41	26.70	---	43.5	H	P
350.1000	15.54	17.60	33.14	---	46	H	P
536.3400	15.16	21.11	36.27	---	46	H	P
679.9000	15.11	24.13	39.24	---	46	H	P
49.8612*	69.13	9.26	78.39	80	---	V	P
99.8399	19.80	10.41	30.21	---	43.5	V	P
242.2200	19.29	14.11	33.40	---	46	V	P
385.0200	14.62	18.19	32.81	---	46	V	P
474.2600	15.30	20.07	35.37	---	46	V	P
633.3400	15.69	23.28	38.97	---	46	V	P

*: fundamental frequency

5.5. TEST GRAPHS

H:
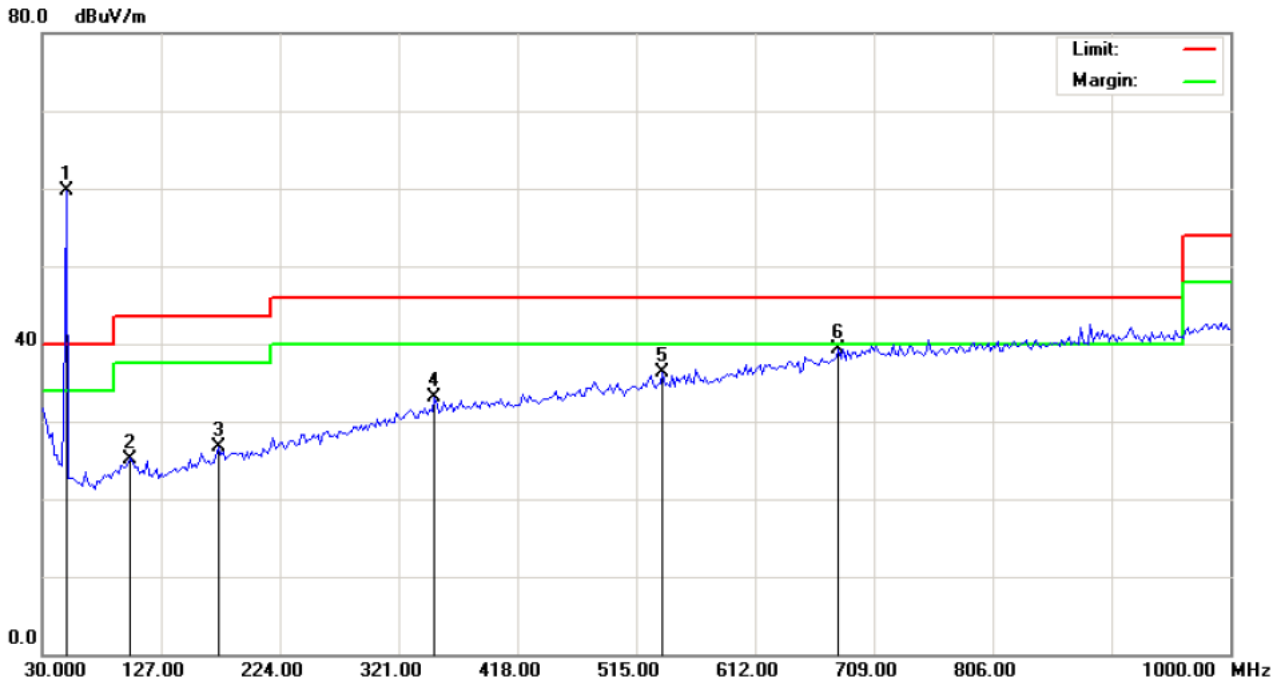
V:
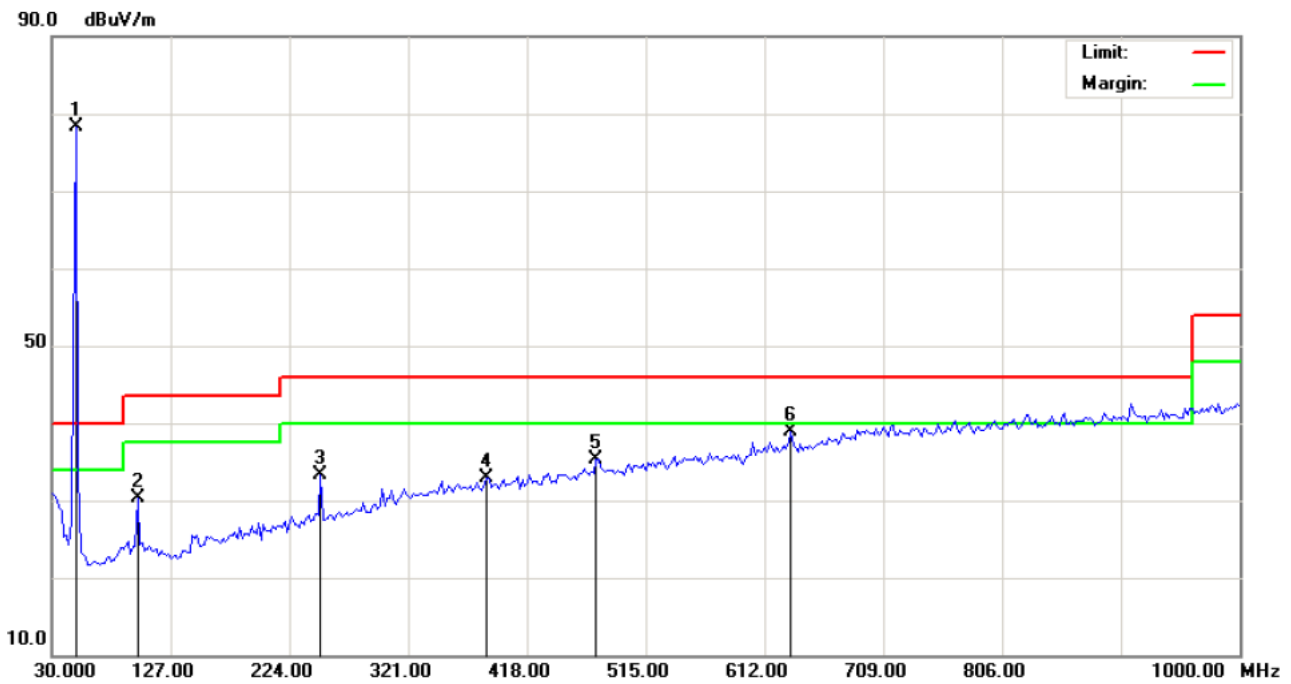
6. BAND EDGE EMISSION MEASUREMENT

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 or to the general limits in section 15.209.
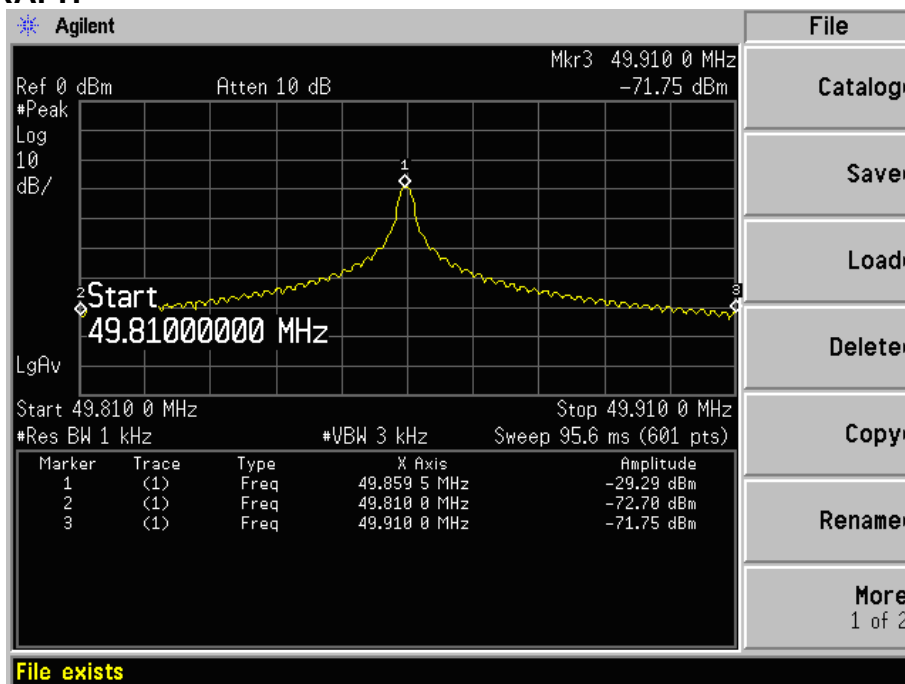
6.2. BLOCK DIAGRAM OF TEST SETUP

Spectrum Analayzer   EUT
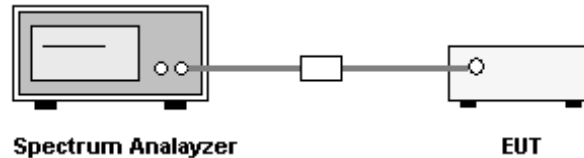
6.3. TEST PROCEDURE

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.

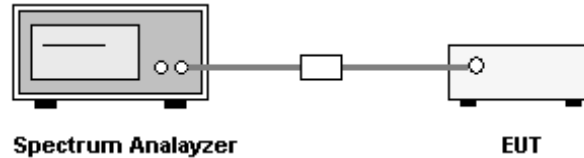## 6.4. TEST RESULT

Pass

6.5. TEST GRAPH

# 7. 20DB BANDWIDTH MEASUREMENT

7.1. LIMITS
No limits

7.2. BLOCK DIAGRAM OF TEST SETUP

Spectrum Analyzer   EUT

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
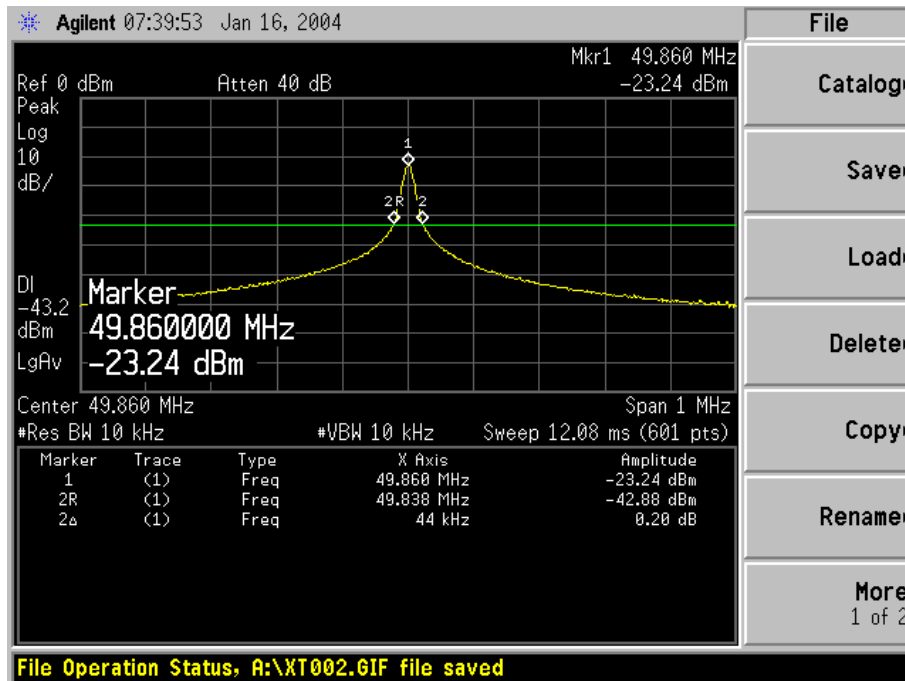
APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

TEST SETUP OF RADIATED EMISSION (30MHz-1GHz)
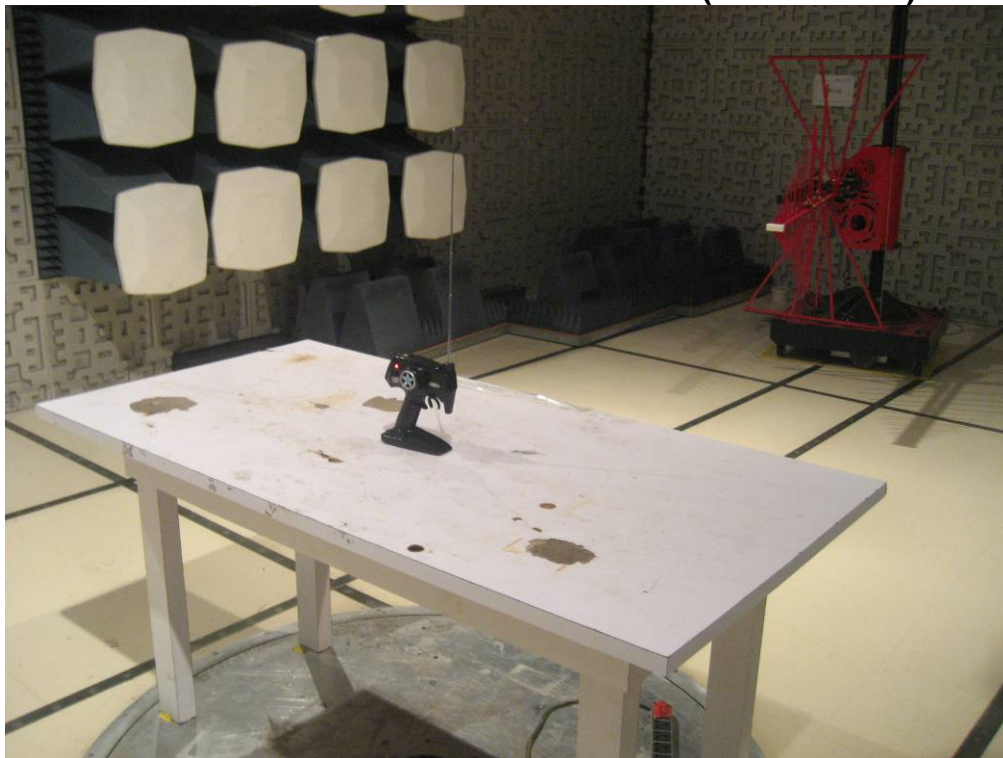
APPENDIX 2 EXTERNAL PHOTOGRAPHS OF EUT

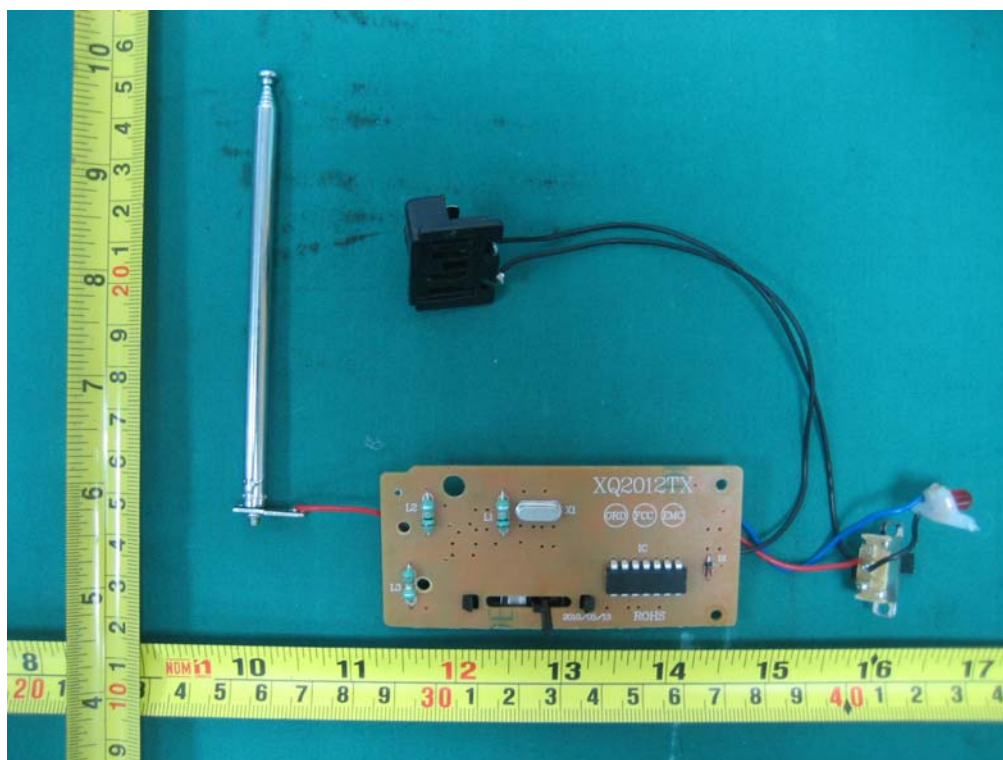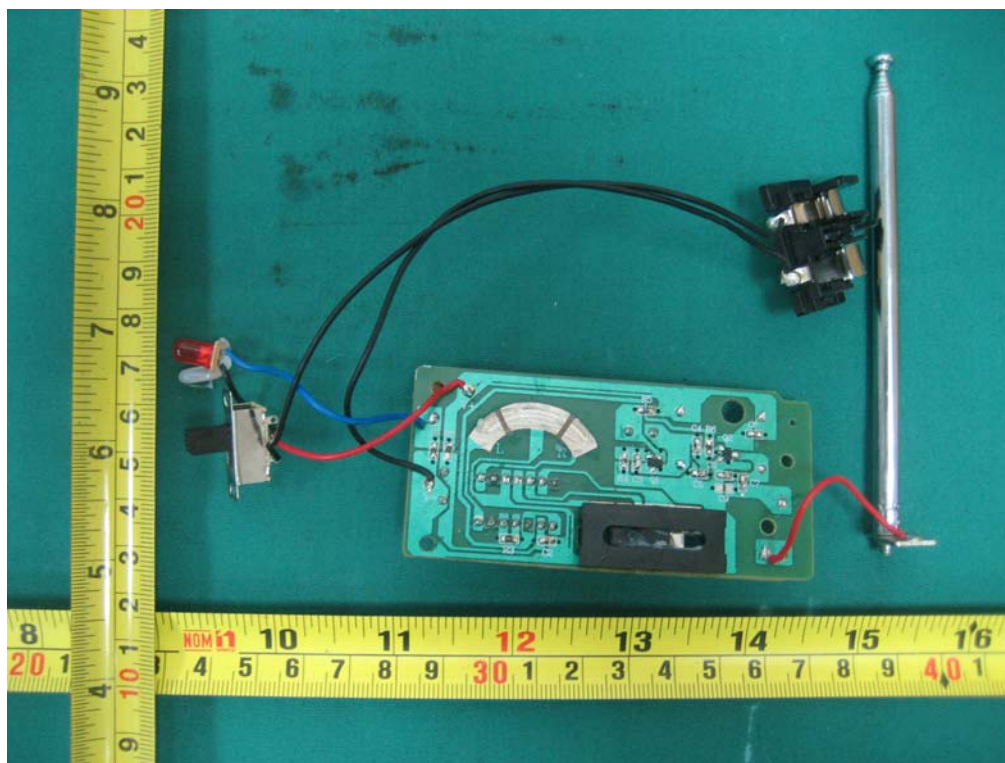
Front View of EUT

Rear View of EUT

APPENDIX 3 INTERNAL PHOTOGRAPHS OF EUT

Uncovered View of EUT-1

Uncovered View of EUT-2

Uncovered View of EUT-3

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