APPLICATION FOR CERTIFICATION
On Behalf of

ZHANXIANG TECHNOLOGY(HUI ZHOU)CO.,LTD

Flat Panel TV Bracket

Model Number: ZX-C23AG

FCC ID: V26ZX-C23AG

Prepared for : ZHANXIANG TECHNOLOGY(HUI ZHOU)CO.,LTD
XIALIAO VILLAGE, LONGQIAO ROAD, LONGXI
TOWN, BOLUO COUNTY, HUIZHOU CITY, CHINA

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
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Report Number	:	ACS-F08460
Date of Test	:	Nov.20~23, 2008
Date of Report	:	Jan.08, 2009

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TEST REPORT CERTIFICATION

Applicant	:	ZHANXIANG TECHNOLOGY(HUI ZHOU)CO.,LTD
Manufacturer	:	ZHANXIANG TECHNOLOGY(HUI ZHOU)CO.,LTD
EUT Description	:	Flat Panel TV Bracket
FCC ID	:	V26ZX-C23AG
		(2) MODEL NO. : ZX-C23AG
		(B) POWER SUPPLY. : DC 24V
		(C) TEST VOLTAGE : DC 24V Adapter Input AC 120V/60Hz

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2007, ANSI C63.4-2003

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits for radiated and conducted emissions. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test : Nov.20~ 23, 2008

Prepared by : Edie Huang
Edie Huang / Assistant

Reviewer : Jamy Yu
Jamy Yu / Senior Engineer

AUDIX® 信華科技(深圳)有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: Ken Lu 09'

Approved & Authorized Signer :
Ken Lu / Deputy Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION			
Description of Test Item	**Standard**	**Limits**	**Results**
Power Line Conducted Emission Test	FCC Part 15: 2007 ANSI C63.4: 2003	Class B	PASS
Radiated Emission Test	FCC Part 15: 2007 ANSI C63.4: 2003	Class B	PASS

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Description	:	Flat Panel TV Bracket (Note: This equipment contains a 433.92MHz super-regenerative receiver)
Model Number	:	ZX-C23AG
FCC ID	:	V26ZX-C23AG
Applicant	:	ZHANXIANG TECHNOLOGY(HUI ZHOU)CO.,LTD XIALIAO VILLAGE, LONGQIAO ROAD, LONGXI TOWN, BOLUO COUNTY, HUIZHOU CITY, CHINA
Manufacturer	:	ZHANXIANG TECHNOLOGY(HUI ZHOU)CO.,LTD XIALIAO VILLAGE, LONGQIAO ROAD, LONGXI TOWN, BOLUO COUNTY, HUIZHOU CITY, CHINA
Power Adapter	:	Manufacturer: Ktec M/N: KSAFK2400300T1M2 Cable: Unshielded, Detachabled, 4m (with one core)
Remote Control	:	Manufacturer: ZHANXIANG TECHNOLOGY(HUI ZHOU)CO.,LTD
Date of Test	:	Nov.20~23, 2008
Date of Receipt	:	Nov.20, 2008
Sample Type	:	Prototype production
Remark	:	The base insert holes of post assembly is for power input, TV signal input, Video and Audio signal input. The top insert holes of post assembly is only to connect the terminal of power input, TV signal input, Video and Audio signal input of TV. So they are transferred for convenience and direct connection.

2.2.Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Jun. 13, 2006 File on Federal Communication Commission Registration Number: 90454
3m & 10m Anechoic Chamber	:	Jan. 31, 2007 File on Federal Communication Commission Registration Number: 794232
EMC Lab.	:	Accredited by DATech, German Registration Number: DAT-P-091/99-01 Dec. 20, 2007 Accredited by NVLAP, USA NVLAP Code: 200372-0 Apr.01, 2008

2.3.Measurement Uncertainty(95% confidence levels, k=2)

No.	Item	MU	Remark
1	Uncertainty for Conducted Emission Test	2.02dB	
2	Uncertainty for Radiation Emission test in 3m chamber	3.44 dB	Polarize: V
		3.96 dB	Polarize: H
3	Uncertainty for Radiation Emission test in 10m chamber	3.86dB	Distance: 10m Polarize: V
		4.18dB	Distance: 10m Polarize: H
		4.02dB	Distance: 3m Polarize: V
		4.36dB	Distance: 3m Polarize: H

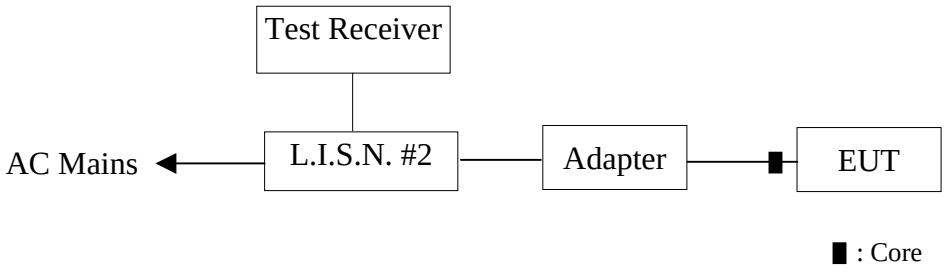
3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100842	Oct.24, 08	1 Year
2.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	May 10,08	1 Year
3.	Terminator	Hubersuhner	50Ω	No. 2	May 10,08	1 Year
4.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	Nov.10, 08	1/2 Year
5.	Coaxial Switch	Anritsu	MP59B	M55367	Nov.01, 08	1/2 Year
6.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	Nov.10, 08	1/2 Year

3.2.Block Diagram of Test Setup

3.2.1.Block diagram of connection between the EUT and simulators



(EUT: Flat Panel TV Bracket)

3.3.Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4.Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1.Flat Panel TV Bracket (EUT)

Model Number : ZX-C23AG
Serial Number : N/A

3.4.2.Support Equipment : As Tested Supporting System Detail, in Section 2.2.

3.5.Operating Condition of EUT

3.5.1.Setup the EUT and simulator as shown as Section 3.2.

3.5.2.Turned on the power of all equipment.

3.5.3.Let the EUT worked in test mode (Running) and measured it.

3.6.Test Procedure

The EUT was placed on the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. #2). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2003 on conducted Emission test.

The bandwidth of the R&S Test Receiver ESCI was set at 10kHz.

The frequency range from 150kHz to 30MHz was checked using a peak detector.

The all reading of measurement was with the Quasi-Peak detector and Average detector. (Remark: If the Average limit is met when using a Quasi-Peak detector, the Average detector is unnecessary)

EUT: Flat Panel TV Bracket Model No. : ZX-C23AG

Test Date: Nov.23, 2008 Temperature: 23℃ Humidity: 54%

The details of test modes are as follow:

No.	Test Mode	Reference Test Data No.	
		VA	VB
1.	Running	#1	#2

3.7.Power Line Conducted Emission Test Results

PASSED

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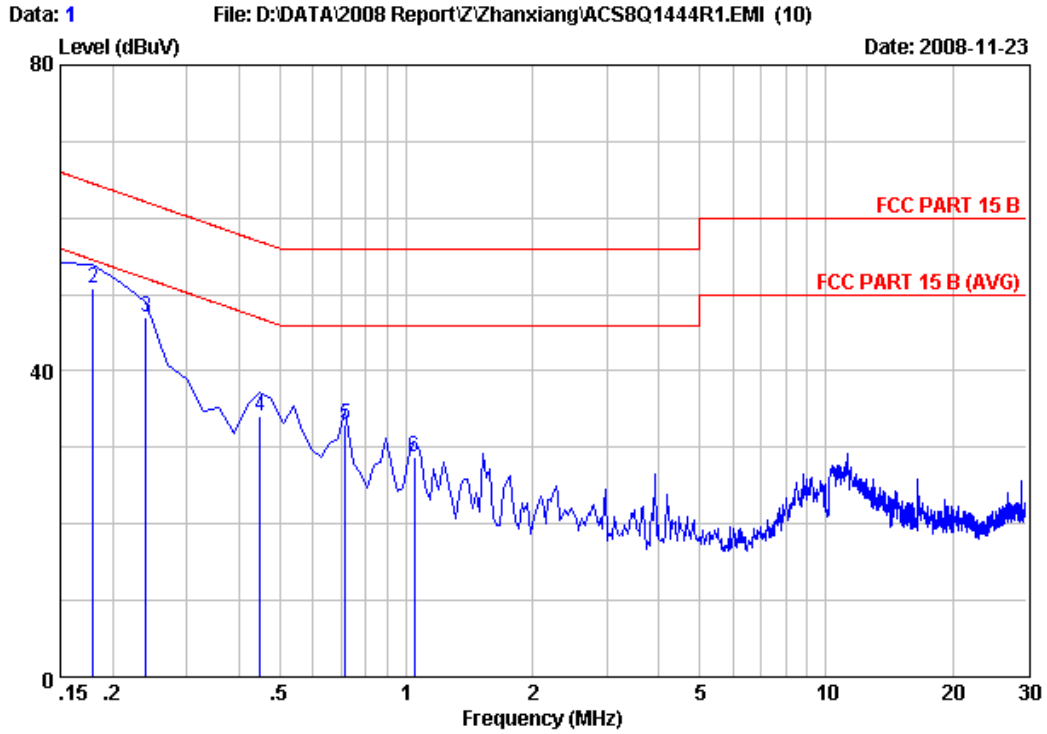

Site no :Audix No.1 Conduction Data no :1
Dis./Ant. :-- KNW407 1# VA LISN phase:
Limit :FCC PART 15 B
Env./Ins. :Temp:23'C Humi:54% ESCI Engineer :MARK
EUT :Flat Panel TV Bracket M/N:ZX-C23AG
Power Rating :DC 24V Adapter Input AC 120V/60Hz
Test Mode :Running
Memo :

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15	0.26	9.67	42.26	52.19	66.00	13.81	QP
2	0.18	0.29	9.82	40.73	50.84	64.49	13.65	QP
3	0.24	0.28	9.90	36.89	47.07	62.11	15.04	QP
4	0.45	0.21	9.87	24.11	34.19	56.90	22.71	QP
5	0.72	0.19	9.88	22.90	32.97	56.00	23.03	QP
6	1.05	0.10	9.89	18.76	28.75	56.00	27.25	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

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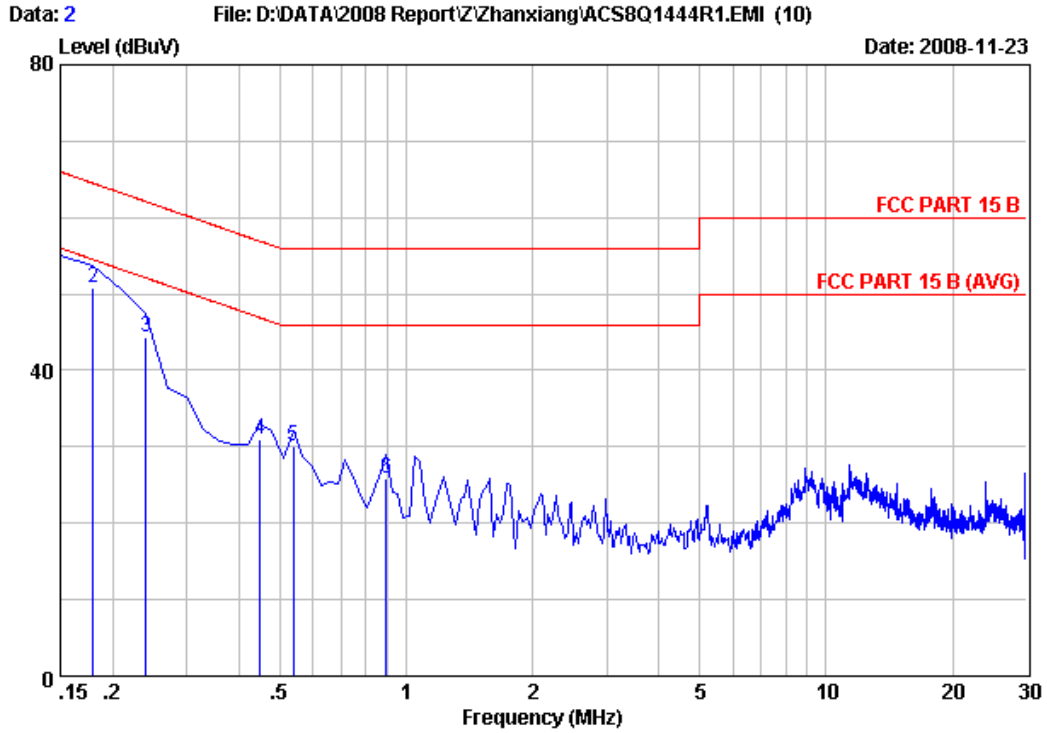


Site no :Audix No.1 Conduction Data no :2
Dis./Ant. :-- KNW407 1# VB LISN phase:
Limit :FCC PART 15 B
Env./Ins. :Temp:23'C Humi:54% ESCI Engineer :MARK
EUT :Flat Panel TV Bracket M/N:ZX-C23AG
Power Rating :DC 24V Adapter Input AC 120V/60Hz
Test Mode :Running
Memo :

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15	0.24	9.67	42.10	52.01	66.00	13.99	QP
2	0.18	0.15	9.82	40.82	50.79	64.49	13.70	QP
3	0.24	0.12	9.90	34.37	44.39	62.11	17.72	QP
4	0.45	0.19	9.87	20.98	31.04	56.90	25.86	QP
5	0.54	0.18	9.87	20.08	30.13	56.00	25.87	QP
6	0.90	0.10	9.88	15.94	25.92	56.00	30.08	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1.Test Equipment

The following test equipments are used during the radiated emission test:

4.1.1.For frequency range 30MHz~1000MHz (At Anechoic Chamber)

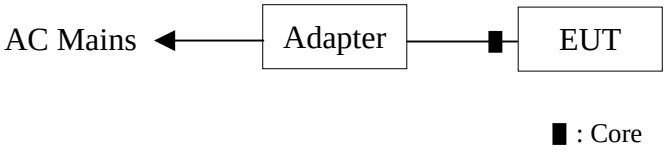
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Jun.09,08	1/2 Year
2.	EMI Spectrum	Agilent	E7403A	MY42000106	May 10, 08	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May 10, 08	1 Year
4.	Amplifier	HP	8447D	2648A04738	Nov.04, 08	1/2 Year
5.	Bilog Antenna	Schaffner	CBL6112D	25237	Feb.21, 08	1 Year
6.	RF Cable	JINGCHENG	JBY400	3# Chamber No.1	Nov.01, 08	1/2 Year
7.	RF Cable	JINGCHENG	JBY400	3# Chamber No.2	Nov.01, 08	1/2 Year
8.	RF Cable	JINGCHENG	JBY400	3# Chamber No.3	Nov.01, 08	1/2 Year
9.	Coaxial Switch	Anritsu	MP59B	M73989	Nov.01, 08	1/2 Year

4.1.2.For frequency range Above 1000MHz (At Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May,10, 08	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	May, 27, 08	1.5 Year
3.	Horn Antenna	EMCO	3116	00060088	May 27, 08	1Year
4.	Amplifier	Agilent	8449B	3008A02495	Nov.06.08	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX 102	28620/2	May.28, 08	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX 102	271471/4	May.28, 08	1 Year
7.	RF Cable	Hubersuhner	SUCOFLEX 102	29086/2	May.28, 08	1 Year

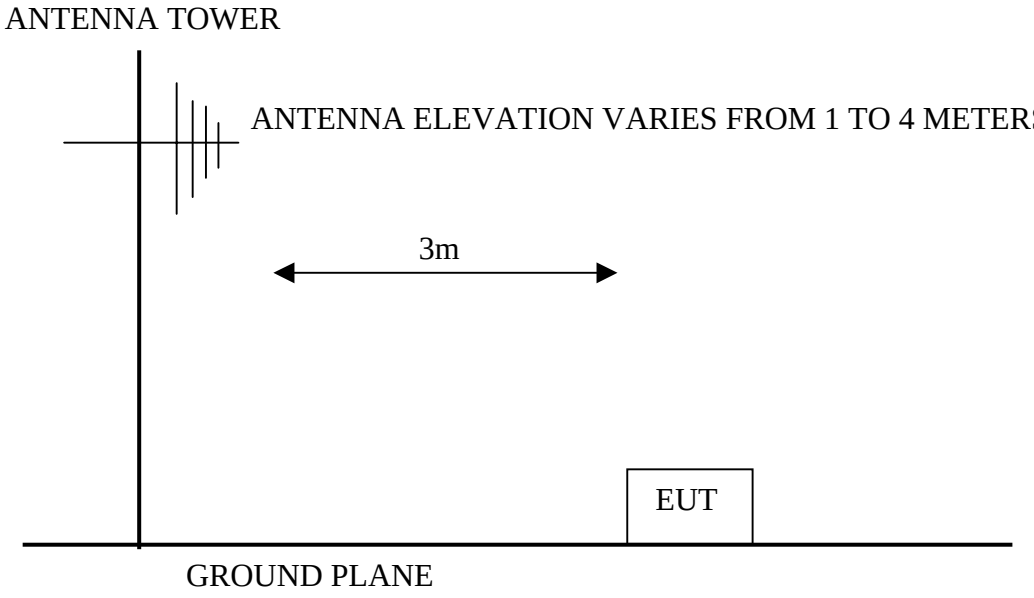
4.2.Block Diagram of Test Setup

4.2.1. Block diagram of connection between the EUT and simulators

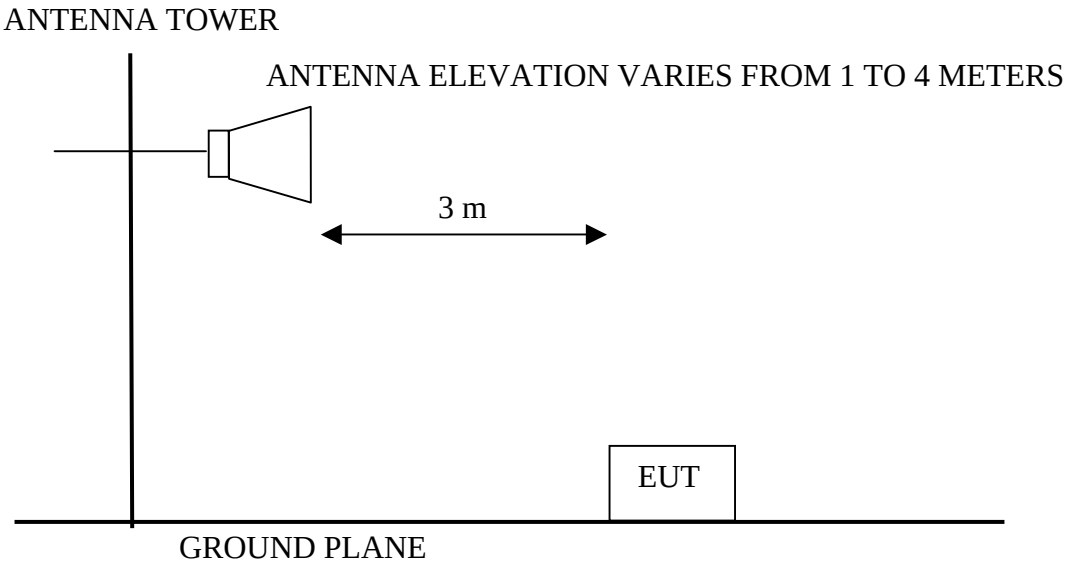


(EUT: Flat Panel TV Bracket)

4.2.2.In Anechoic Chamber



4.2.3.In Anechoic (3m) Chamber Test Setup Diagram for 1-5GHz



4.3.Radiated Emission Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark： (1) Emission level dBμV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) The emissions above 1GHz should comply with average limit and peak limit.

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4.1. Flat Panel TV Bracket (EUT)

Model Number	:	ZX-C23AG
Serial Number	:	N/A

4.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.2.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turned on the power of all equipment.

4.5.3. Let the EUT worked in test mode (Running) and measured it.

4.6. Test Procedure

The EUT was placed on the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2003 on Radiated Emission test.

A Signal Generator was set to the test sample operating Frequency (433.92MHz). An un-Modulated continuous wave (CW) signal was radiated at the Super-regenerative Receiver operating frequency to cohere the characteristic broadband emission from the receiver.

The bandwidth setting on the test receiver (R&S TEST RECEIVER ESVS10) is 120 kHz.

The resolution bandwidth of the Agilent Spectrum Analyzer E4407B was set at 1MHz. (For above 1GHz)

The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values.

The frequency range from 1GHz to 5GHz was checked with peak detector.

Finally, selected operating situations at Anechoic Chamber measurement, all the test results are listed in section 4.7.

4.7. Radiated Emission Measurement Result

PASSED. (All emissions not reported below are too low against the prescribed limits.)

EUT: Flat Panel TV Bracket Model No. : ZX-C23AG

For frequency range 30MHz~1000MHz

The EUT with the following test modes were tested and selected (mode 1) to read Q.P values, all the test results listed in next pages.

No.	Test Mode	Reference Test Data No.	
		Horizontal	Vertical
1.	**Running**	**#1**	**#2**

For frequency range 1GHz~5GHz

The EUT with below test mode 1 was measured within Anechoic Chamber and the test results listed in next pages

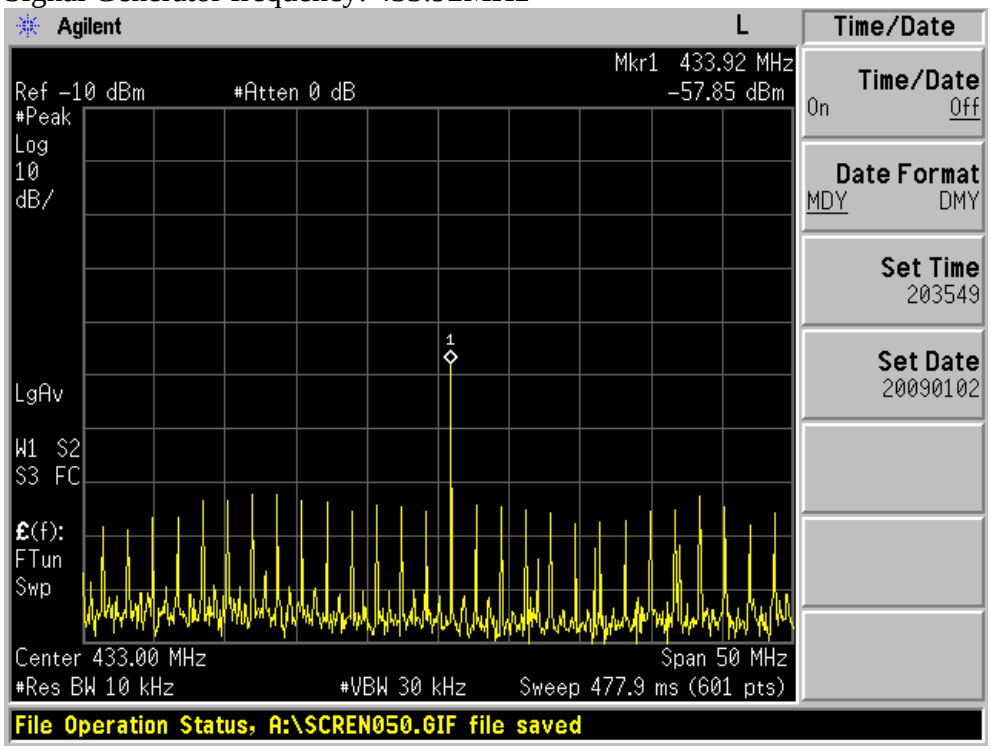
All the PK emissions were comply with average limit, So the average level were deemed to comply with average limit

Test Date: Nov.20, 2008 Temperature: 23℃ Humidity: 54%

No.	Test Mode	Reference Test Data No.	
		Horizontal	Vertical
1.	**Running**	**#6**	**#5**

Super-regenerative Receiver stabilization plot:

Signal Generator frequency: 433.92MHz



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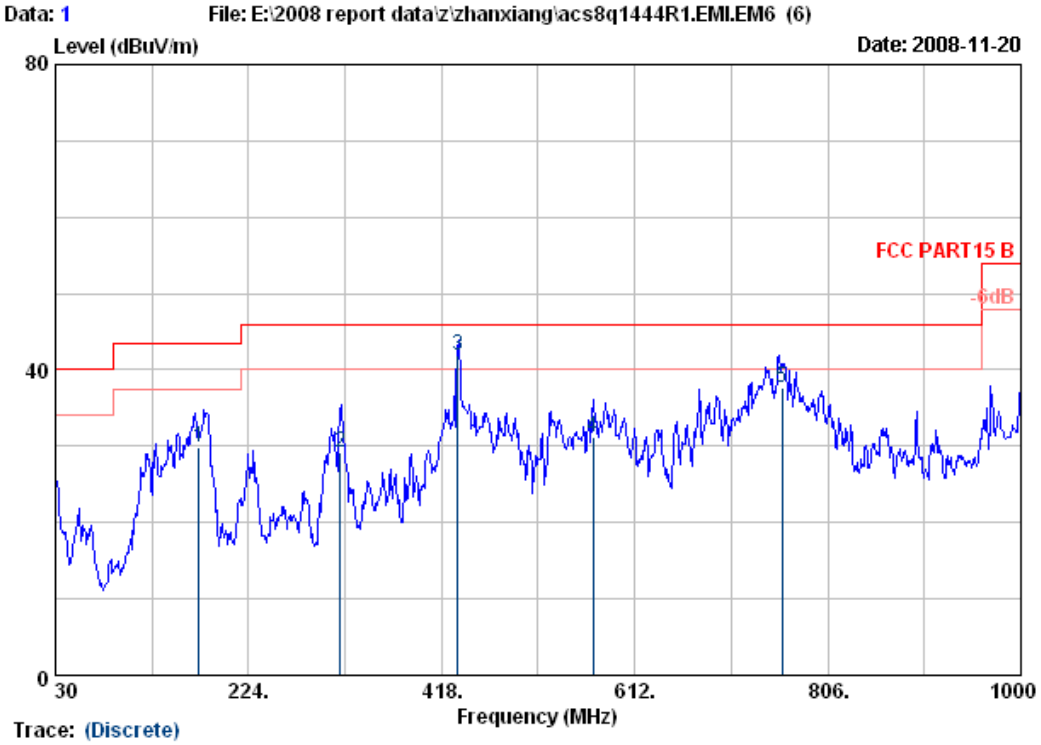


```
Site no.      : 3# Chamber                Data no.   : 1
Dis. / Ant.   : 3m   CBL6112D             Ant. pol.  : HORIZONTAL
Limit         : FCC PART15 B
Env. / Ins.   : 29.5*C/55%   ESVS 20      Engineer   : Leidy
EUT           : Flat Panel TV Bracket  M/N:ZX-C23AG
Power Rating  : DC 12V Adaptor Input AC 120V/60Hz
Test mode     : Running
Memo          :
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	174.530	9.53	1.27	19.01	29.81	43.50	13.69	QP
2	316.150	13.90	1.62	13.68	29.20	46.00	16.80	QP
3	433.920	0.00	0.00	41.97	41.97	46.00	4.03	QP
4	570.290	18.61	2.18	10.36	31.15	46.00	14.85	QP
5	760.410	19.48	2.38	15.89	37.75	46.00	8.25	QP

Remarks:
1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reportec
3. **The worst emission was detected at 433.920 MHz with corrected signal level of 48.97dBμV/m (Limit is 46.00dBμV/m) when the antenna was at horizontal polarization and at 1m high and the turntable was at 330°.**
4. **0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.**

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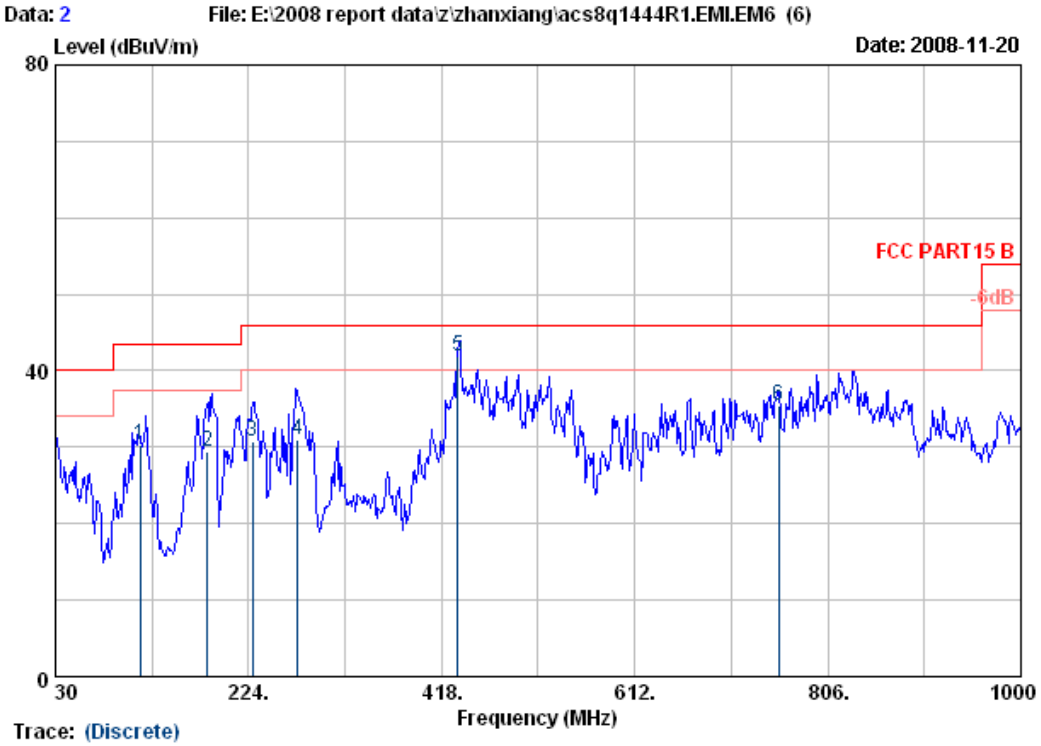

Site no. : 3# Chamber Data no. : 2
Dis. / Ant. : 3m CBL6112D Ant. pol. : VERTICAL
Limit : FCC PART15 B
Env. / Ins. : 29.5*C/55% ESVS 20 Engineer : Leidy
EUT : Flat Panel TV Bracket M/N:ZX-C23AG
Power Rating : DC 12V Adaptor Input AC 120V/60Hz
Test mode : Running
Memo :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	115.360	12.00	1.07	17.32	30.39	43.50	13.11	QP
2	182.290	9.45	1.30	18.74	29.49	43.50	14.01	QP
3	227.880	9.91	1.40	19.37	30.68	46.00	15.32	QP
4	273.470	13.09	1.51	16.39	30.99	46.00	15.01	QP
5	433.920	0.00	0.00	41.81	41.81	46.00	4.19	QP
6	756.530	19.46	2.42	13.46	35.34	46.00	10.66	QP

Remarks:
1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported

3. The worst emission was detected at 433.920 MHz with corrected signal level of 48.81dBμV/m (Limit is 46.00dBμV/m) when the antenna was at vertical polarization and at 1m high and the turntable was at 150°.

4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

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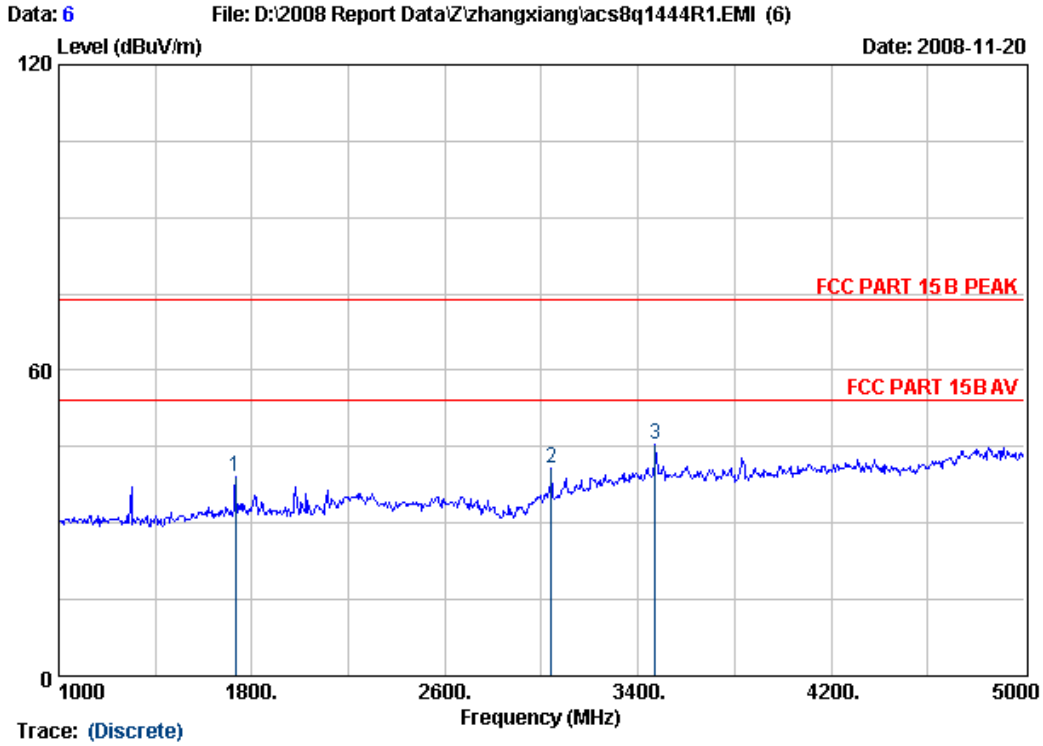

Site no. : 3# Chamber Data no. : 6
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15B PEAK
Env. / Ins. : 23*C/54% Engineer : Leidy
EUT : Flat Panel TV Bracket M/N:ZX-C23AG
Power Rating : DC 24V Adapter Input AC 120V/60Hz
Test Mode : Running

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	1732.00	26.63	5.23	42.90	39.21	74.00	34.79	Peak
2	3040.00	31.09	7.18	37.37	40.65	74.00	33.35	Peak
3	3472.00	32.28	7.80	40.31	45.53	74.00	28.47	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

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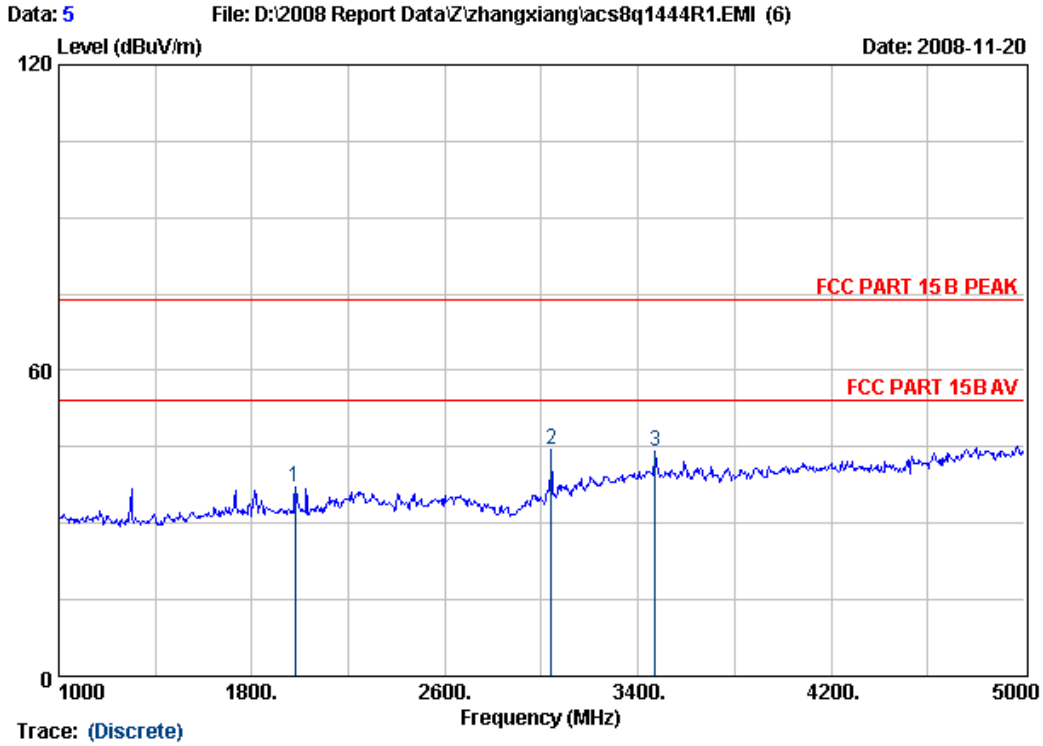


Site no. : 3# Chamber Data no. : 5
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15B PEAK
Env. / Ins. : 23*C/54% Engineer : Leidy
EUT : Flat Panel TV Bracket M/N:ZX-C23AG
Power Rating : DC 24V Adapter Input AC 120V/60Hz
Test Mode : Running

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	1980.00	27.97	5.66	38.79	37.10	74.00	36.90	Peak
2	3040.00	31.09	7.18	41.13	44.41	74.00	29.59	Peak
3	3472.00	32.28	7.80	39.07	44.29	74.00	29.71	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

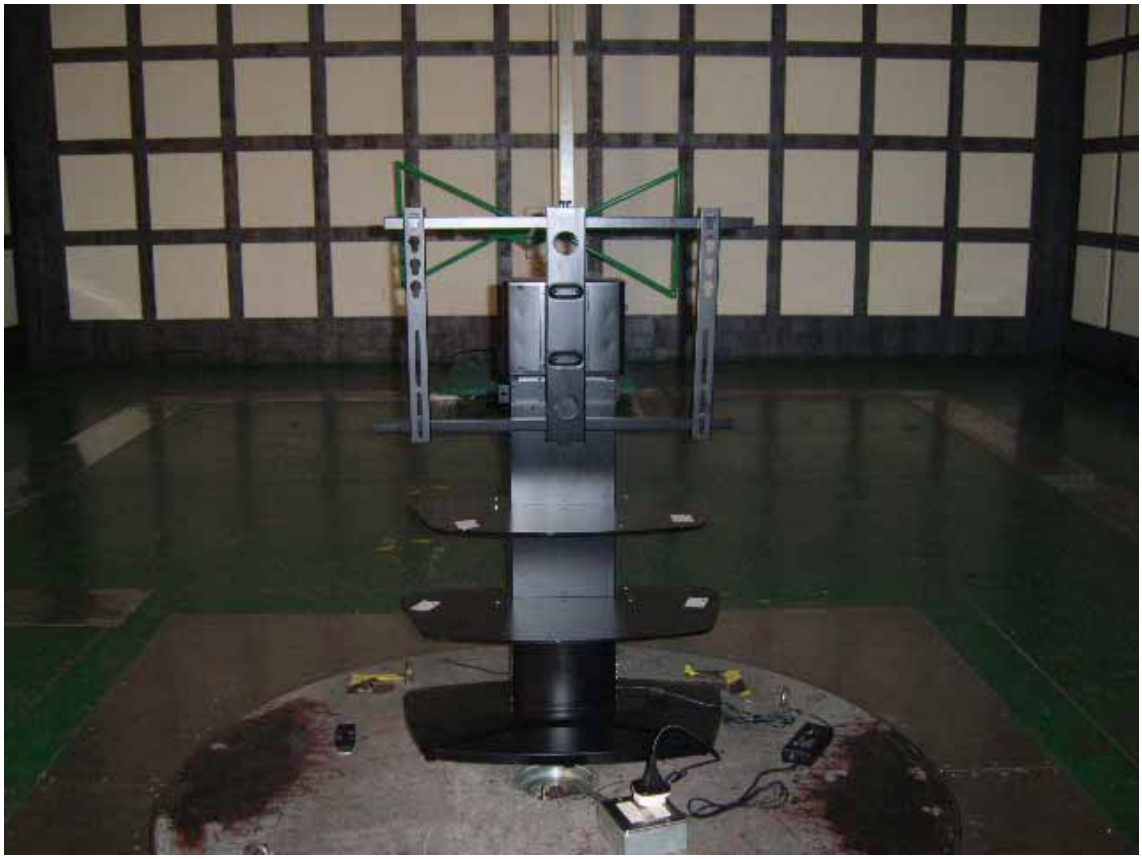
5. DEVIATION TO TEST SPECIFICATIONS

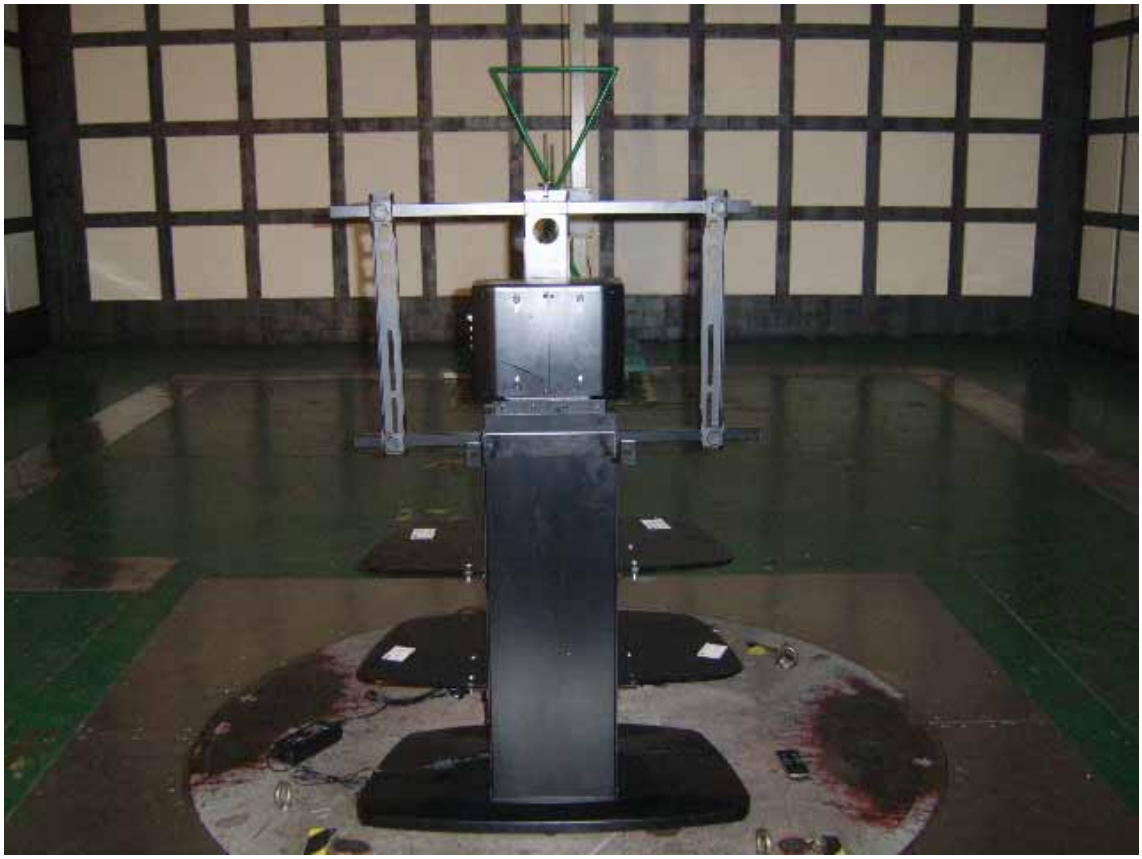
[NONE]

6. PHOTOGRAPH OF TEST

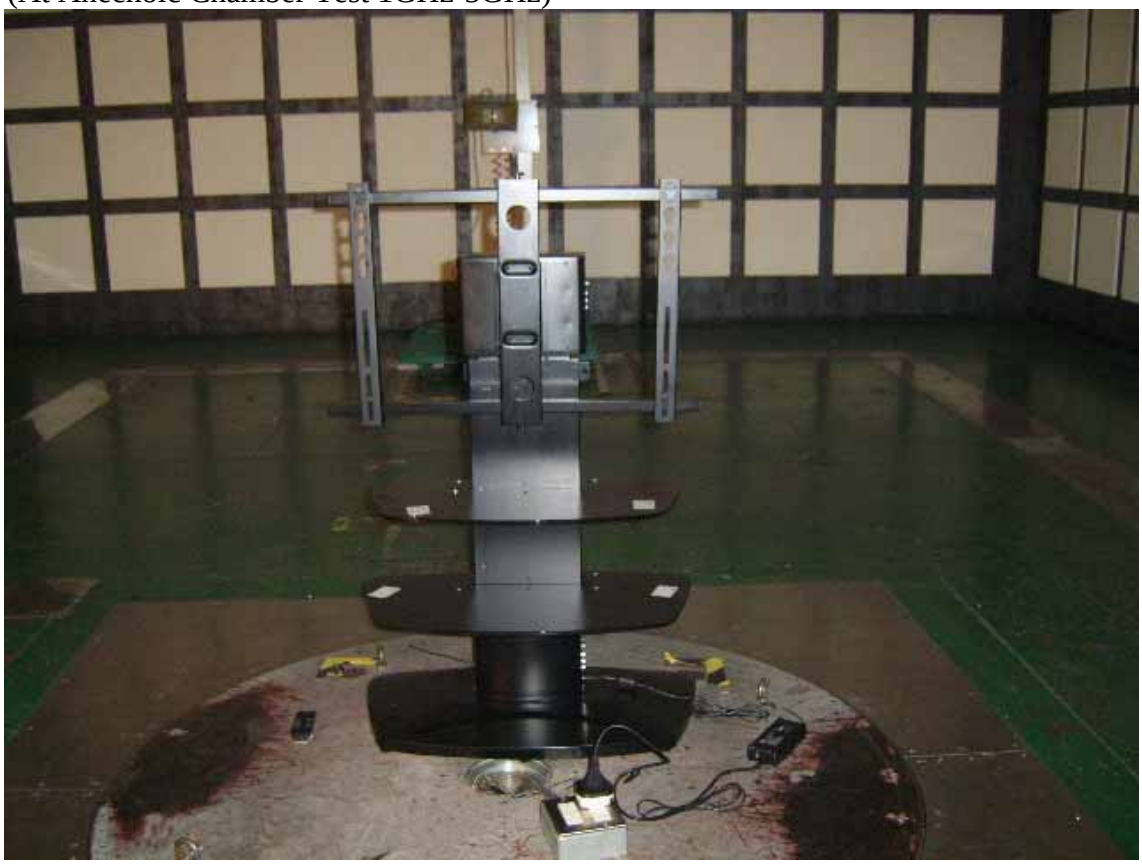
6.1.Photos of Power Line Conducted Emission Test

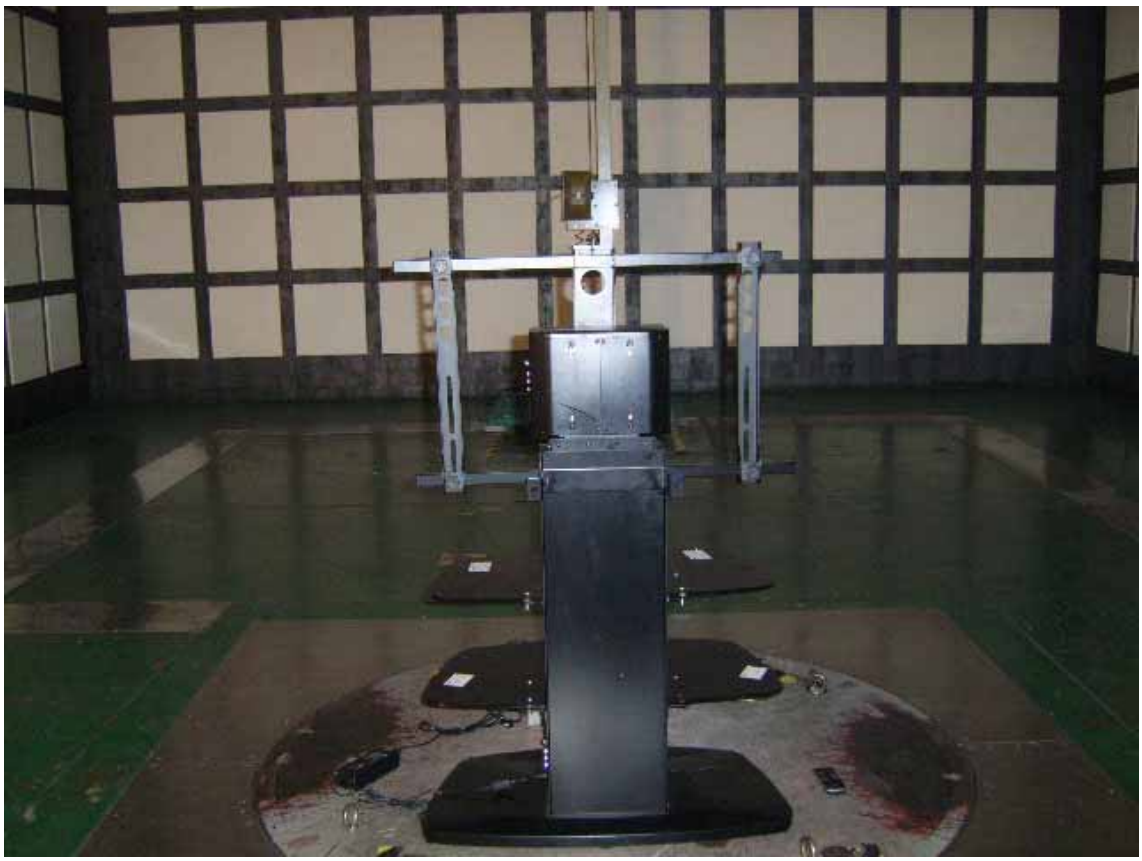
6.2.Photos of Radiated Emission Test (In Anechoic Chamber)





(At Anechoic Chamber Test 1GHz-5GHz)





7. PHOTOGRAPH OF EUT

Figure 1
General Appearance of the EUT

Figure 2
General Appearance of the EUT

Figure 3
General Appearance of the EUT

Figure 4
Inside of the EUT

Figure 5
Inside of the EUT

Figure 6
Inside of the EUT

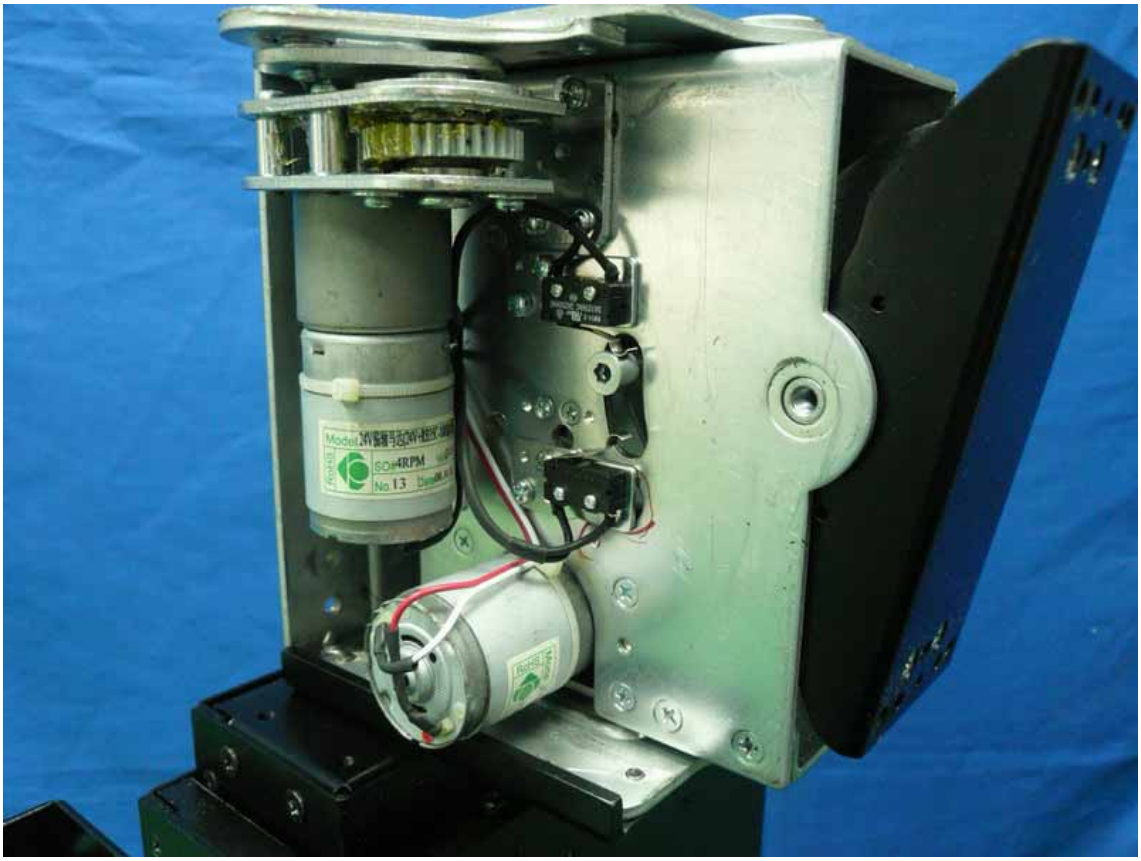


Figure 7
Inside of the EUT

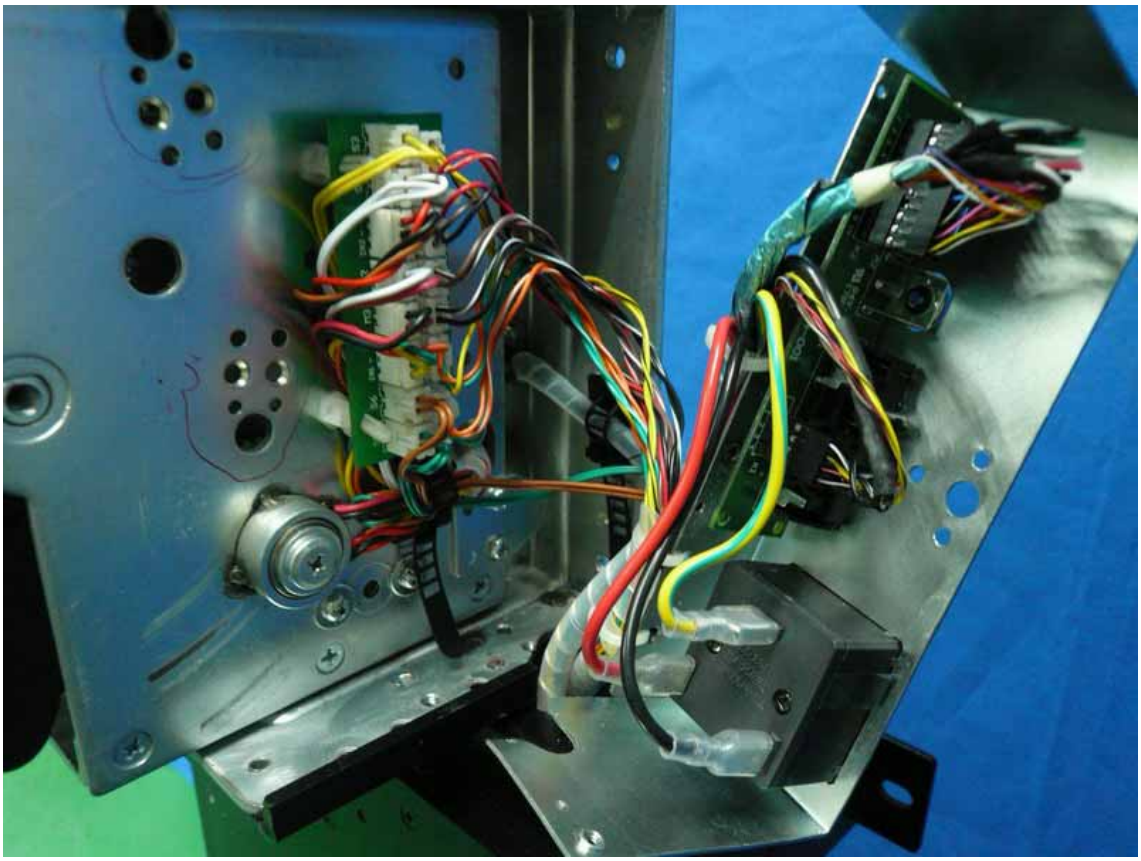


Figure 8
Inside of the EUT

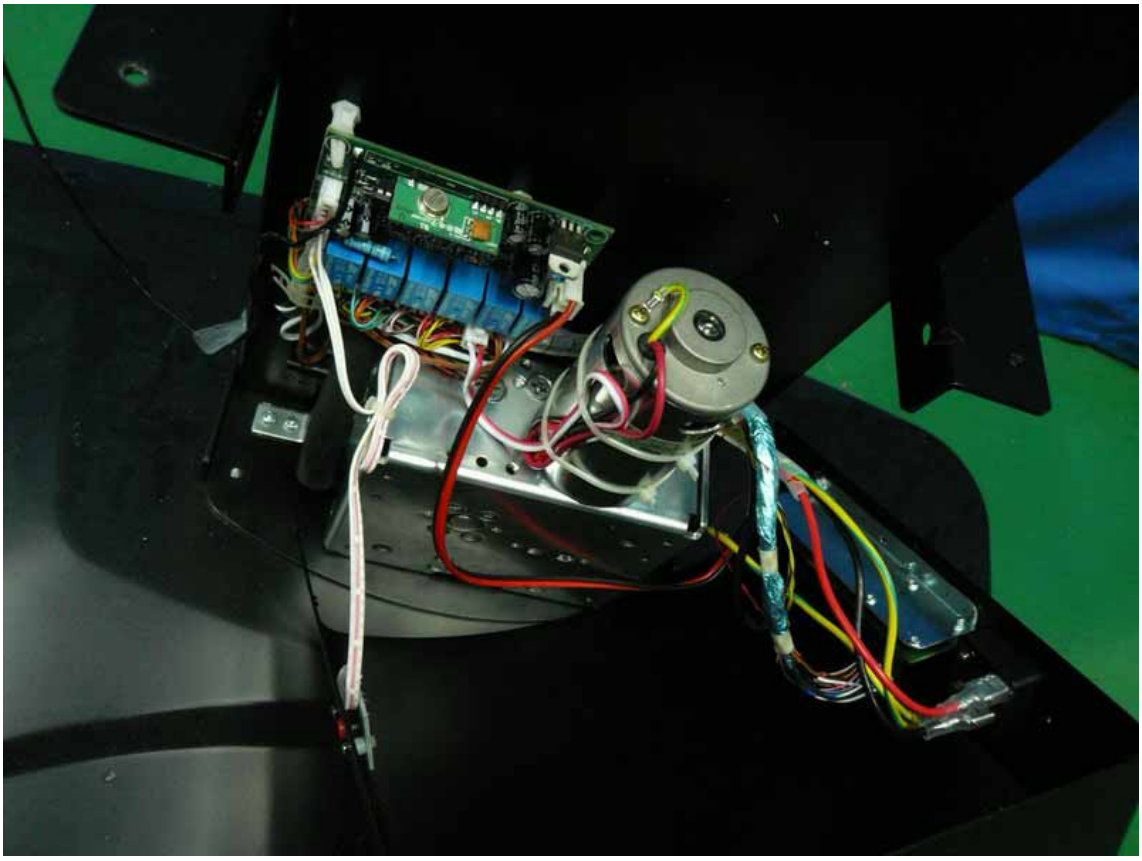


Figure 9
Inside of the EUT

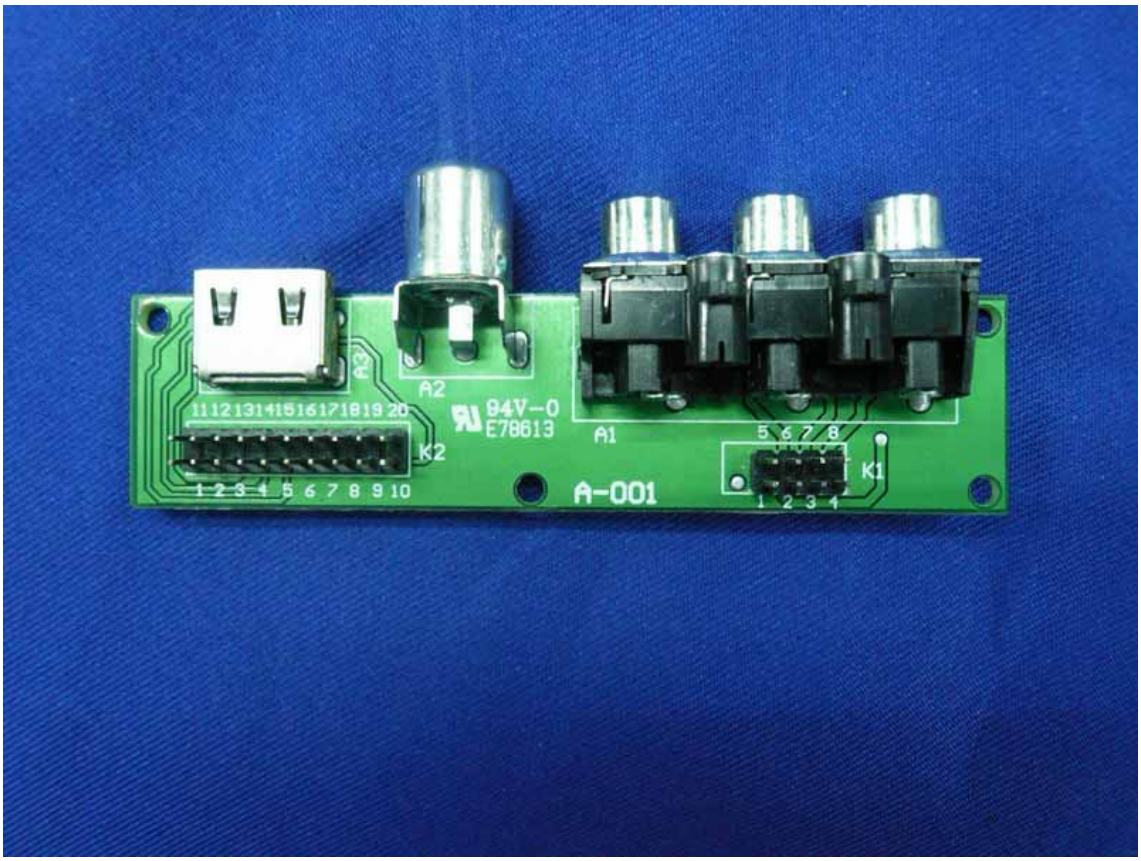


Figure 10
Inside of the EUT

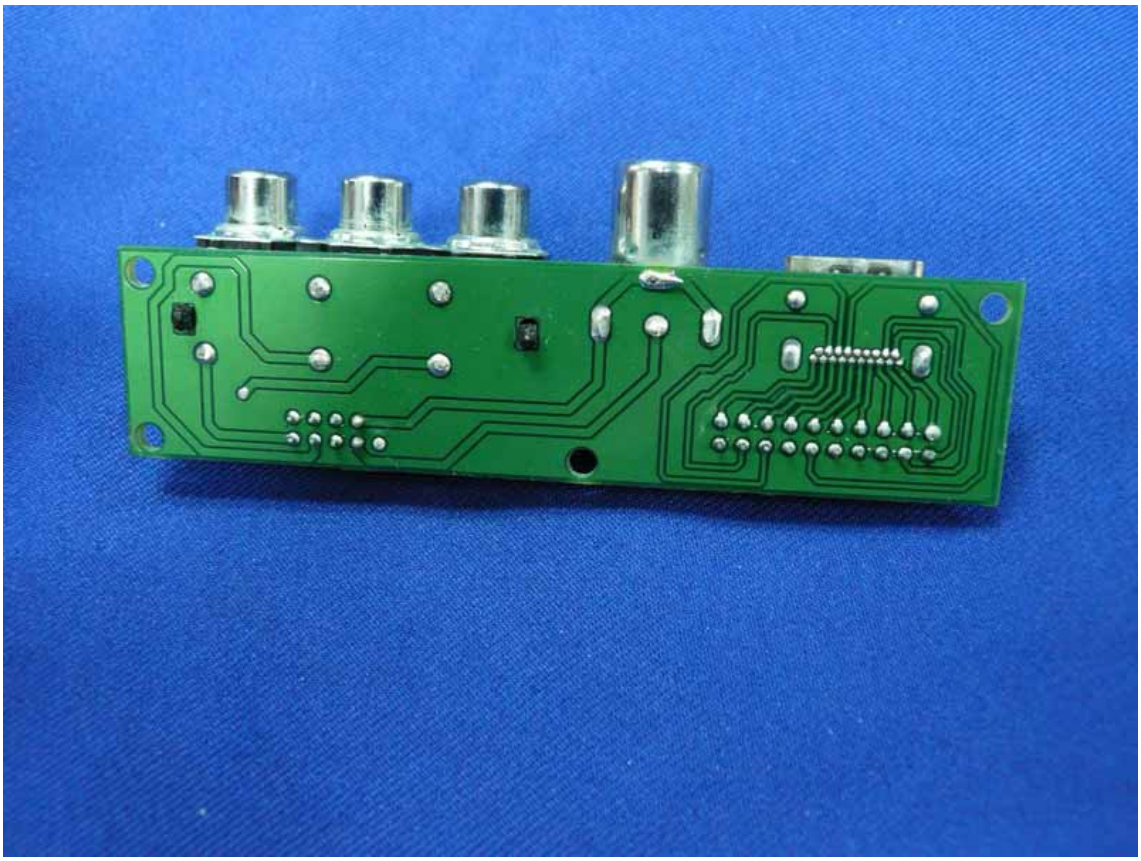


Figure 11
Inside of the EUT

Figure 12
Inside of the EUT

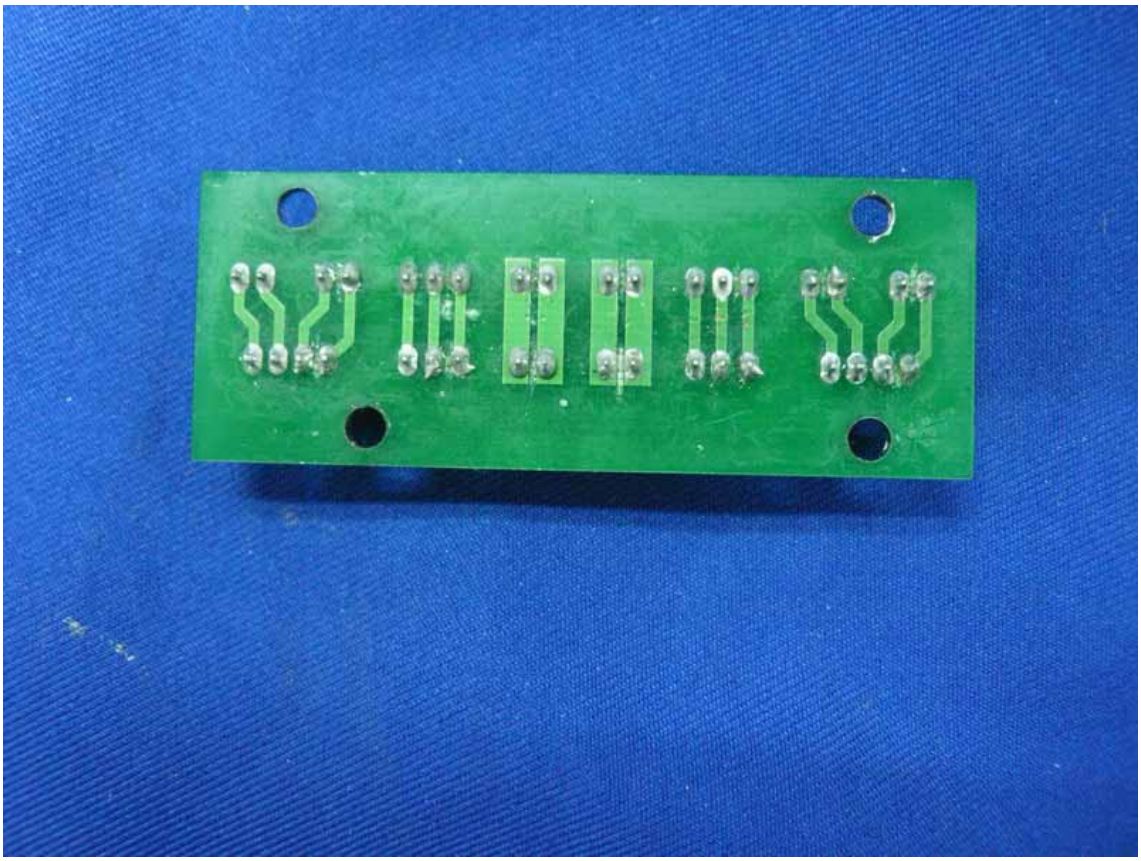


Figure 13
Inside of the EUT

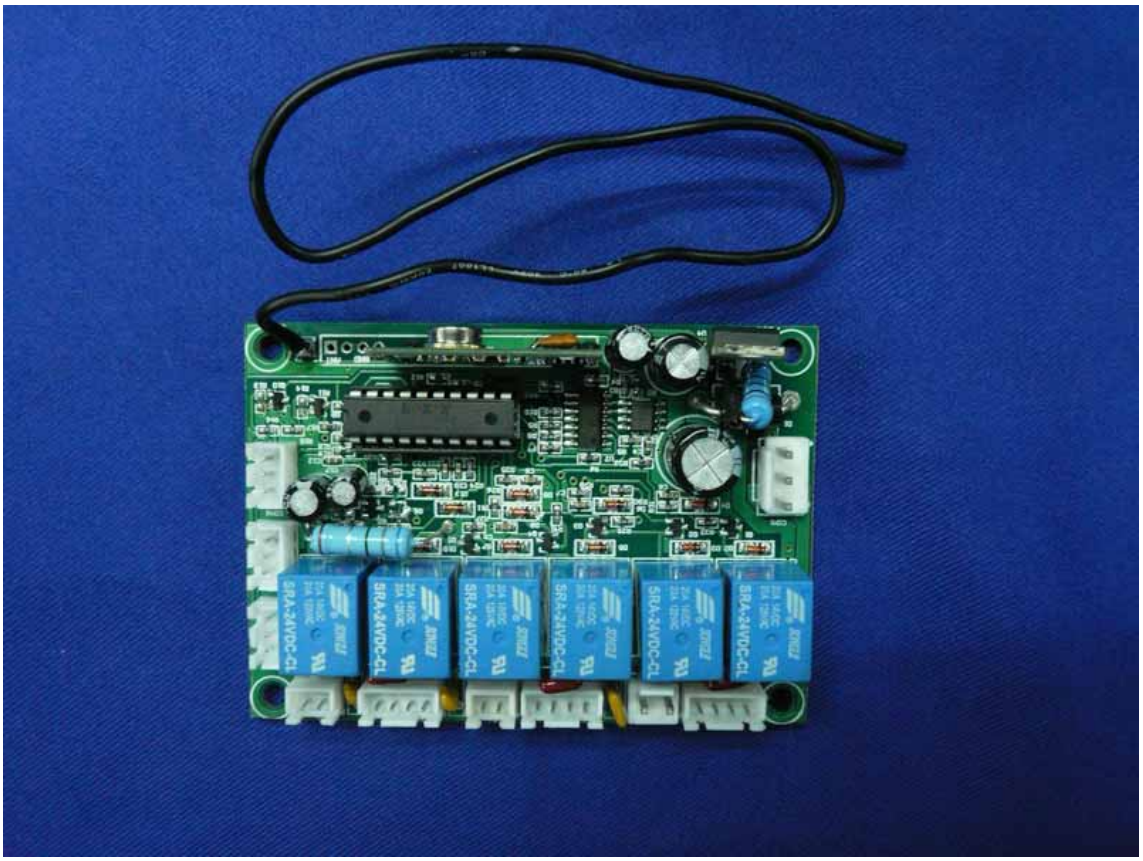


Figure 14
Inside of the EUT

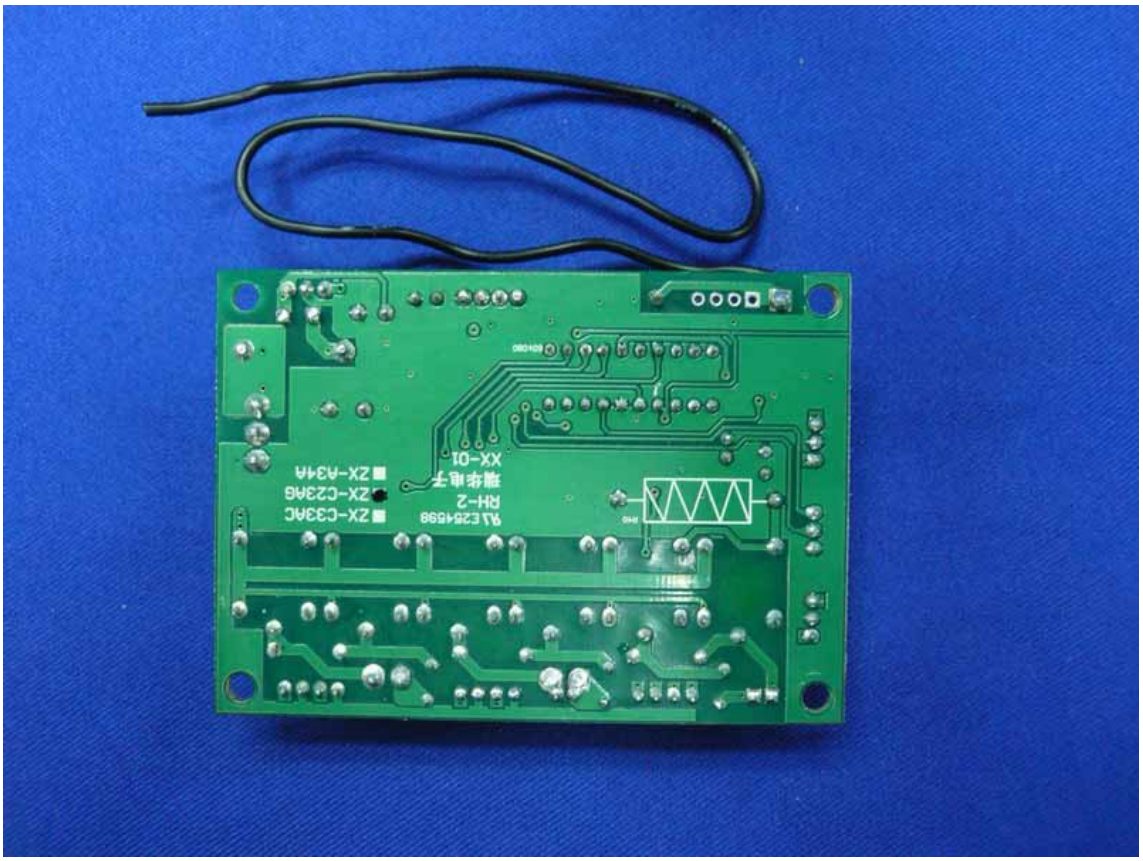


Figure 15
Inside of the EUT

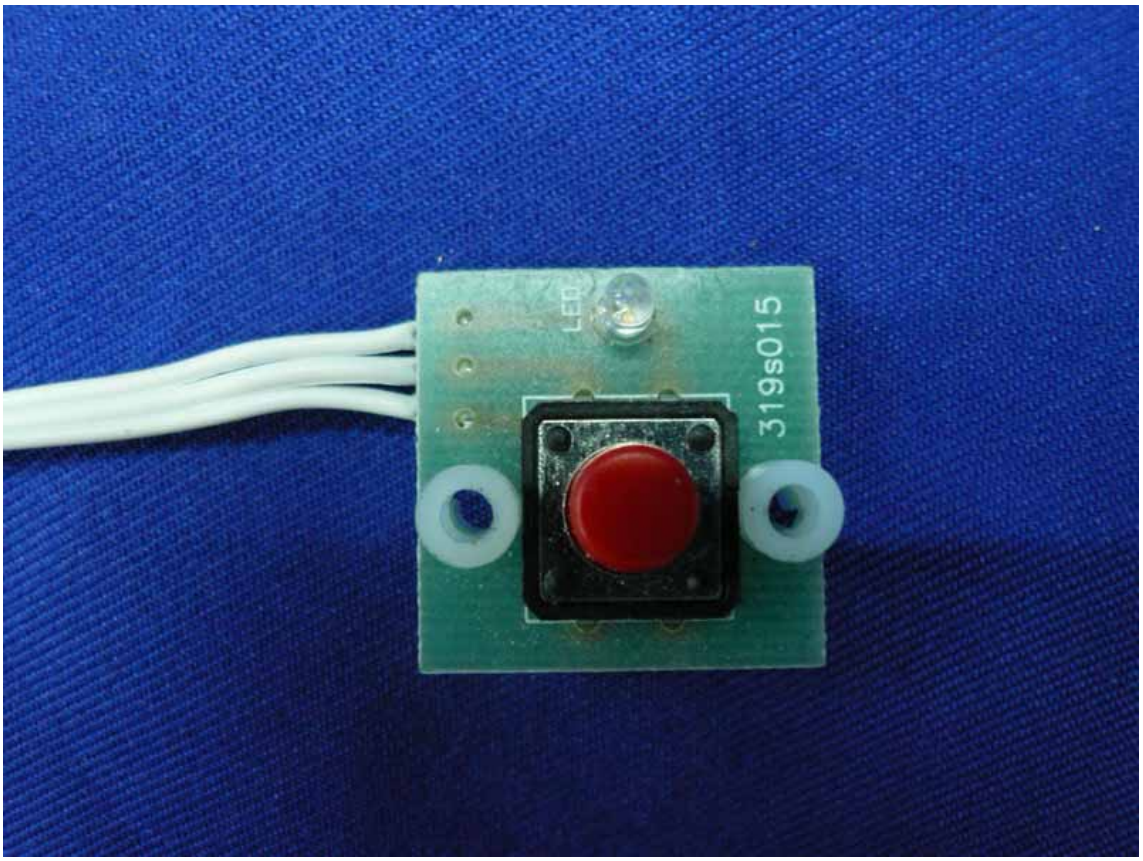


Figure 16
Inside of the EUT

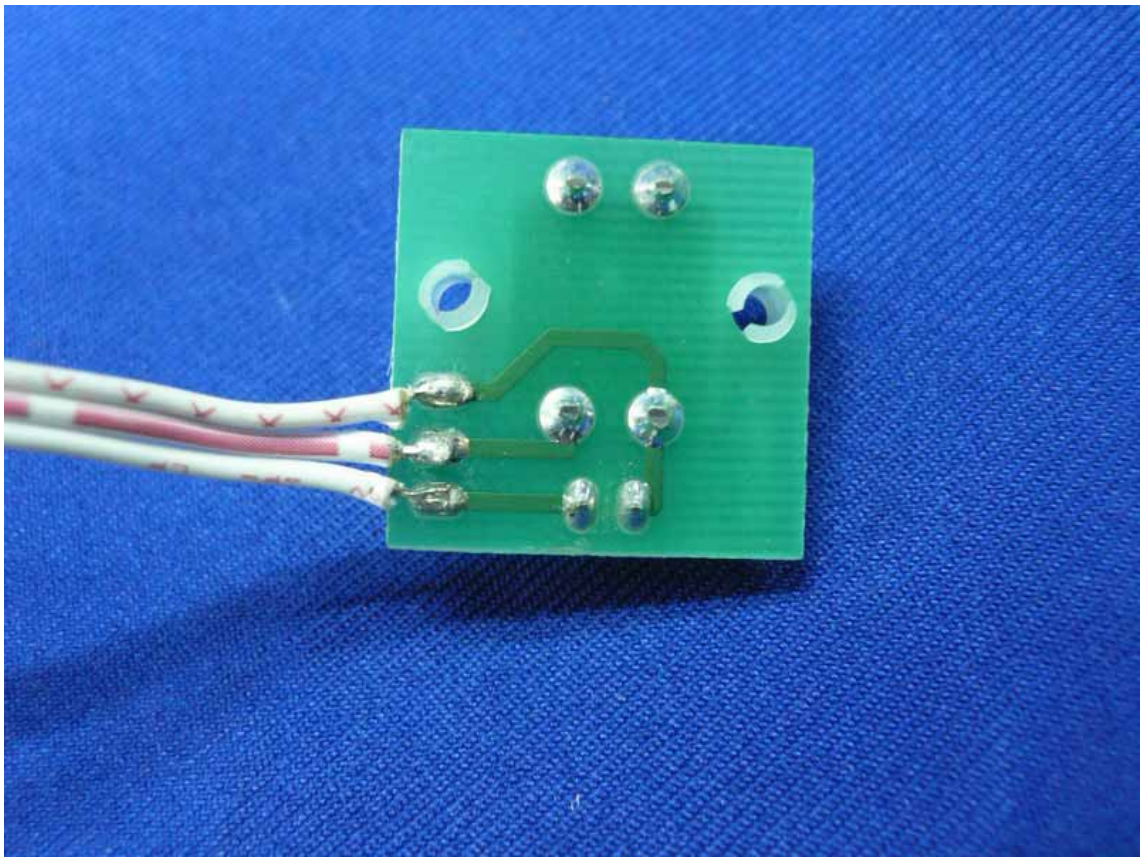


Figure 17
Power Adapter

Figure 18
Power Adapter

Figure 19
Remote Control