FCC TEST REPORT

FCC ID NO. : SJ8NR204AD

Applicant : **RDI Technology (Shenzhen) Co., Ltd.**
Building C1 Xingtang Industrial Park, East Baishixia, Fuyong, Baoan, Shenzhen, P.R.C.

Equipment Under Test (EUT) :

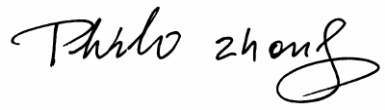
Product Name : Stock Electronics Receiver

Model No. : NR204AD

Standards : FCC Part 15 SUBPART B

Date of Test : June 16, 2008

Test Engineer : **Nunu Deng**

Reviewed By : 

PERPARED BY:
Waltek Services (Shenzhen) Co., Ltd.
8C,West Tower, Aidi Building, No.5003 Binhe Rd, Futian District, Shenzhen518045, Guangdong, China.
Tel: 86-755-83551033
Fax: 86-755-83552400

2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 5GHz)	FCC PART 15, SUBPART B: 2003	ANSI C63.4: 2003	Class B	PASS
Conducted Emission (150KHz to 30MHz)	FCC PART 15, SUBPART B: 2003	ANSI C63.4: 2003	Class B	PASS

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4 General Information

4.1 Client Information

Applicant:	**RDI Technology (Shenzhen) Co., Ltd.**
Address of Applicant:	Building C1 Xingtang Industrial Park, East Baishixia, Fuyong, Baoan, Shenzhen, P.R.C.
Manufacturer:	RDI Technology (Shenzhen) Co., Ltd.
Address of Manufacturer:	Building C1 Xingtang Industrial Park, East Baishixia, Fuyong, Baoan, Shenzhen, P.R.C.

4.2 General Description of E.U.T.

Product Name:	Stock Electronics Receiver
Model No.:	NR204AD

4.3 Details of E.U.T.

Power Supply:	120V AC /50Hz

4.4 Description of Support Units

Compliance test was performed test in ON mode .

The customer requested FCC tests for a Stock Electronics Receiver.

The standard used was FCC Part 15.107 & Part15.109, SUBPART B, CLASS B (2003)

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC – Registration No.: 994117**

  SEM Test Compliance Service Co., Ltd. has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 994117, May 11, 2008. compliance

4.6 Test Location

All Emissions testswere performed at:-

SEM Test Compliance Service Co., Ltd. at 3/F., Jinbao Commerce Bldg., Xin'an Fanshen Rd., Bao'an District, Shenzhen, 518101, China

5 Equipment Used during Test

Items	Equipments	Manufacture	Model	Serial No.	Last Cal.	Cal. Interval
1	EMI Test Receiver	ROHDE&SCHWARZ	ESPI	101206	2008/1/25	1 year
2	Spectrum Analyzer	Agilent	E4402B	US41192821	2008/1/25	1 year
3	L.I.S.N.	SCHWARZBECK	NSLK8126	8126-224	2008/1/25	1 year
4	L.I.S.N.	EMCO	3825/2	11967C	2008/1/25	1 year
5	RF LIMITER	Agilent	11867A	MY42241685	2008/1/25	1 year
6	Spectrum Analyzer	ROHDE&SCHWARZ	FSEA20	DE25181	2008/1/25	1 year
7	Test Receiver	ROHDE&SCHWARZ	ESVB	825471/005	2008/1/25	1 year
8	Amplifier	Agilent	8447F	3113A06717	2008/1/25	1 year
9	RF Switch	EM	EMSW18	SW060023	2008/1/25	1 year
10	Positioning Controller	C&C	CC-C-1F	N/A	2008/1/25	1 year
11	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2008/1/25	1 year
12	Horn Antenna	SCHWARZBECK	BBHA9120D	665	2008/1/25	1 year
13	Coaxial Cable	SCHWARZBECK	AK9513	9513-10	2008/1/25	1 year

5.1 Conduction Emissions, 0.15MHz to 30MHz

Test Requirement:	FCC Part 15.107
Test Method:	ANSI C63.4: 2003
Test Date:	June 16, 2008
Frequency Range:	150kHz to 30MHz
Class:	Class B
Limit:	66-56 dBμV/m between 0.15MHz & 0.5MHz
	56 dBμV/m between 0.5MHz & 5MHz
	60 dBμV/m between 5MHz & 30MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)
	Quasi-Peak & Average if maximised peak within 6dB of Average Limit

5.1.1 E.U.T. Operation

Operating Environment:

Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1012 mbar

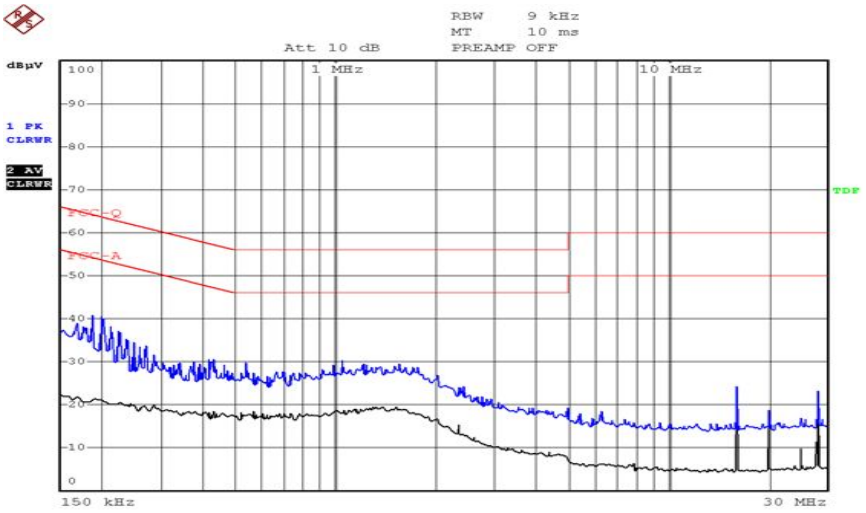
EUT Operation :

Compliance test was performed test in ON mode.

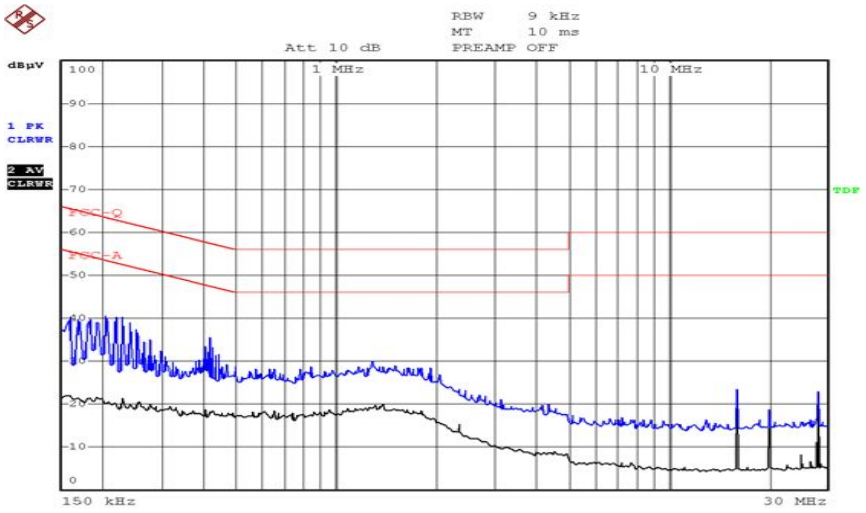
The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

5.1.2 Measurement Result

Live Line



Neutral Line



5.1.3 Measurement Data

Freq. MHz	Line	QP Reading dBuV	Limit dBuV	Margin dB	AV Reading dBuV	Limit dBuV	Margin dB
0.19	Live	37.00	64.04	27.07	23.80	56.44	32.64
0.35	Live	35.46	59.00	23.54	20.09	49.85	29.76
0.65	Neutral	37.18	54.00	16.82	21.63	44.00	22.37
1.89	Neutral	31.50	54.00	22.50	18.59	44.00	25.41

5.2 Radiated Emissions, 30MHz to 5GHz

Test Requirement:	FCC Part 15.109
Test Method:	ANSI C63.4: 2003
Test Date:	June 6, 2008
Frequency Range:	30MHz to 5GHz
Measurement Distance:	3m
Class:	Class B
Limit:	40.0 dBμV/m between 30MHz & 88MHz
	43.5 dBμV/m between 88MHz & 216MHz
	46.0 dBμV/m between 216MHz & 960MHz
	54.0 dBμV/m zbove 960MHz
Detector:	Peak for pre-scan (120kHz resolution bandwidth)
	Quasi-Peak if maximised peak within 6dB of limit

5.2.1 E.U.T Operation

Operating Environment:

Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1012 mbar

EUT Operation :

Compliance test was performed test in ON mode.

5.2.2 EUT Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4: 2003, The specification used in this report was the FCC Part 15.109 Class B limits.

5.2.3 Spectrum Analyzer Setup

According to FCC Part 15 B Rules, the system was tested to 5000 MHz.

Start Frequency.....30 MHz
Stop Frequency .....5000 MHz
Sweep Speed Auto
IF Bandwidth..... 1 MHz
Video Bandwidth.....1 MHz
Quasi-Peak Adapter Bandwidth .....120 kHz
Quasi-Peak Adapter Mode.....Normal
Resolution Bandwidth 1MHz

5.2.4 Test procedure

For the radiated emissions test, since the EUT does have a power source, there was connection to AC outlets.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT is compliant with all installation combinations.

All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dBμV of specification limits), and are distinguished with a "**Qp**" in the data table.
The EUT was under normal mode during the final qualification test and the configuration was used to represent the worst case results.

The EUT receives an external signal at its operating frequency by transmitter.
ANSI STANDARD C63.4-2003 12.1.1.2 OTHER TYPES OF RECEIVERS: A typical signal or an unmodulated CW signal at the operating frequency of the EUT shall be supplied to the EUT for all measurements. Such a signal may be supplied by either a signal generator and an antenna in close proximity to the EUT or directly conducted into the antenna terminals of the EUT. The signal level shall be sufficient to the local oscillator of the EUT.

5.2.5 Summary of Test Results

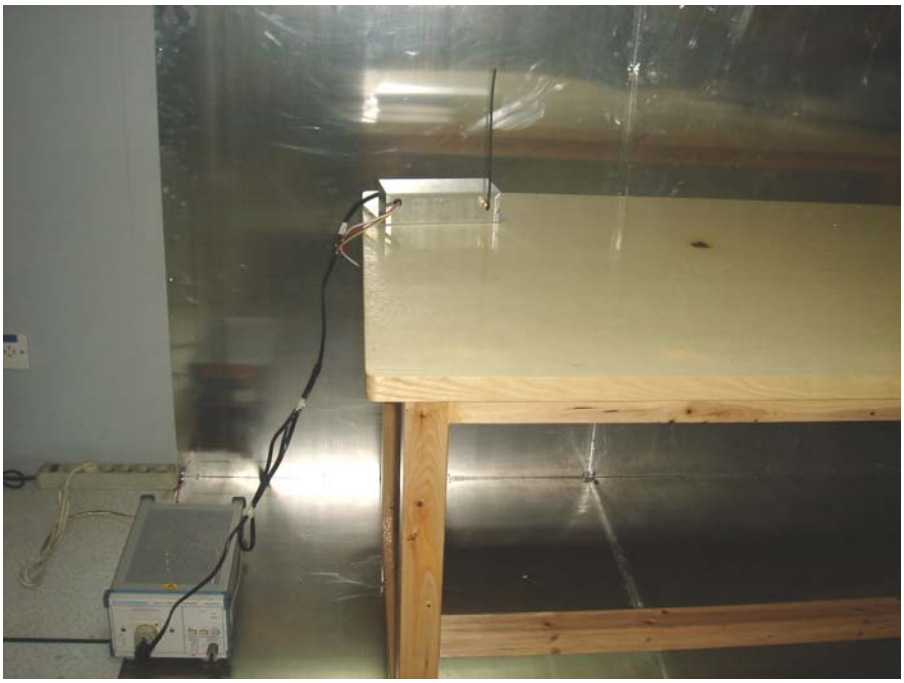
According to the data in section 5.2.6, the EUT complied with the FCC Part 15.109 Class B standards.
The test results: PASS.

5.2.6 Radiatied Emissions Test Data

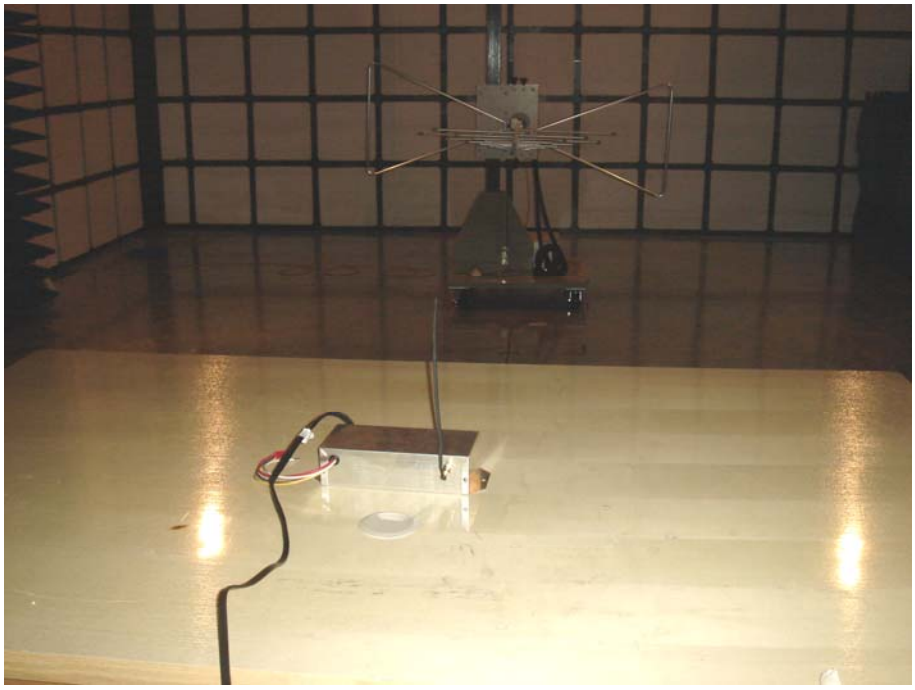
Frequency (MHz)	Antenna Polarization	Emission Level (dBuV/m)	FCC 15 Subpart B Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Turntable Angle (°C)
256.83	Horizontal	22.51	46.0	23.49	1.5	120
482.34	Horizontal	23.64	46.0	22.36	1.0	60
865.71	Horizontal	22.78	46.0	23.22	1.5	45
1023.48	Horizontal	24.19	54.0	29.81	1.8	50
1667.26	Horizonta	24.33	54.0	29.67	1.6	70
288.23	Vertical	23.65	46.0	22.35	2.0	180
493.46	Vertical	24.76	46.0	21.24	1.0	90
877.24	Vertical	23.95	46.0	22.05	1.5	90
1124.52	Vertical	22.48	54.0	31.52	1.6	80
1578.66	Vertical	23.78	54.0	30.22	1.5	90

6 Photographs - Test Setup

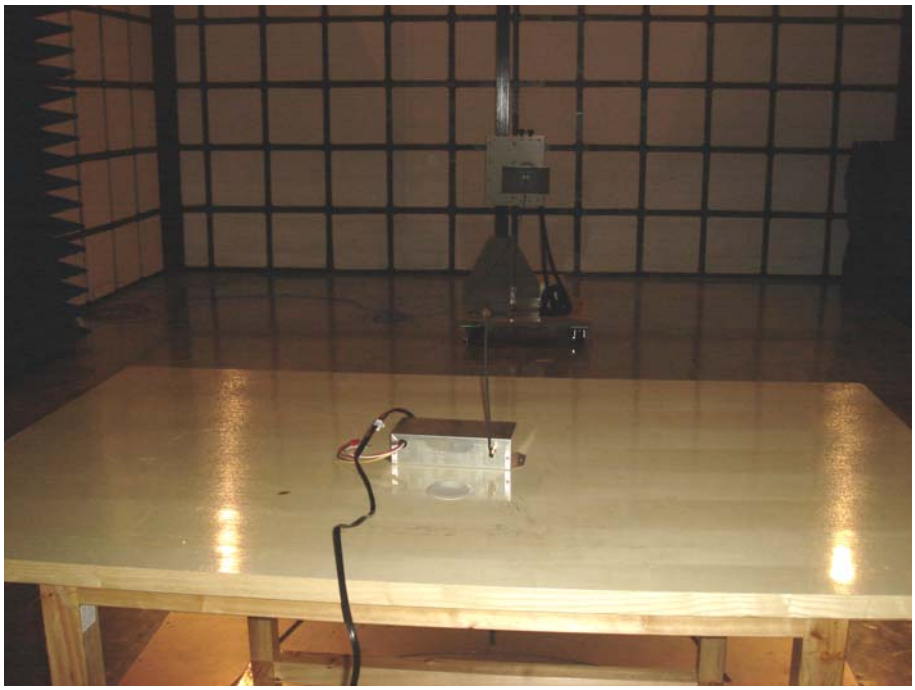
6.1.1 Conduction Emissions Test Setup



6.1.2 Radiated Emissions Test Setup For 30MHz-1000MHz

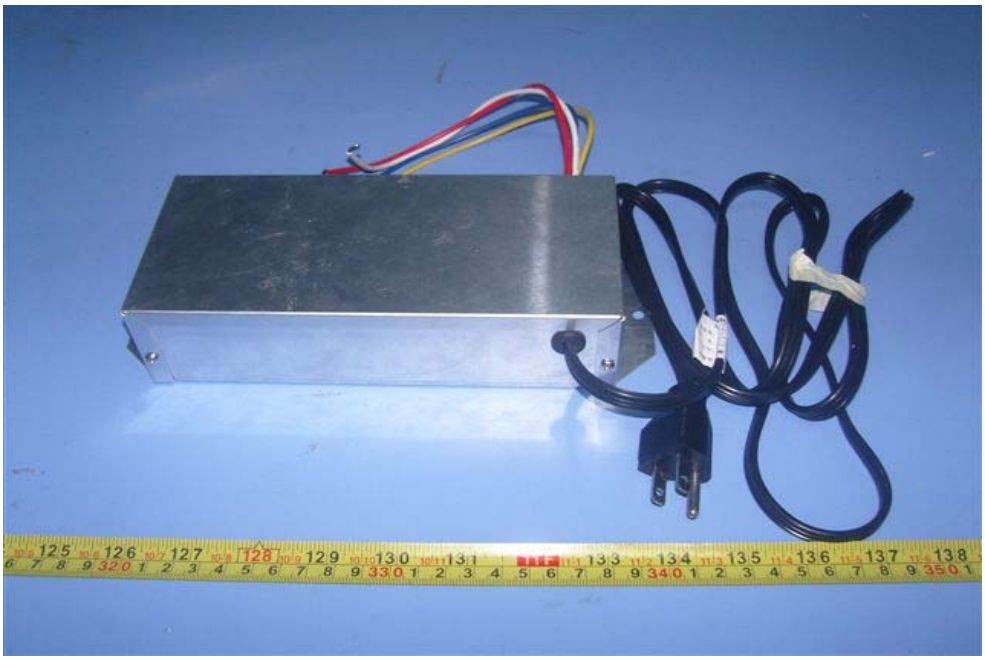


6.1.3 Radiated Emissions Test Setup For 1GHz-5GHz

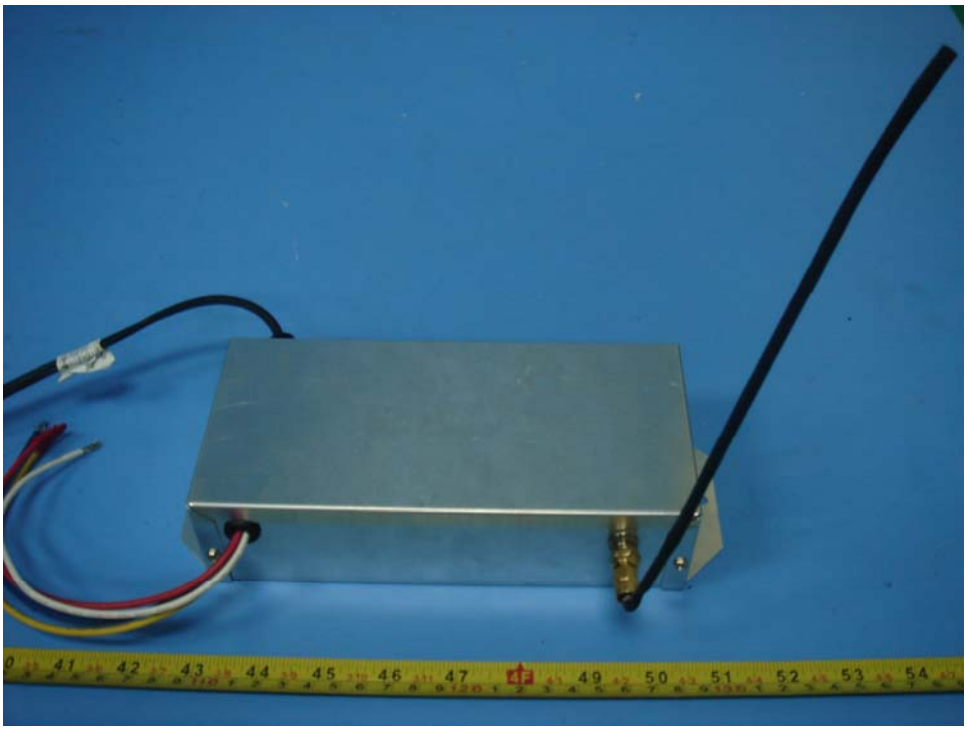


7 Photographs - Constructional Details

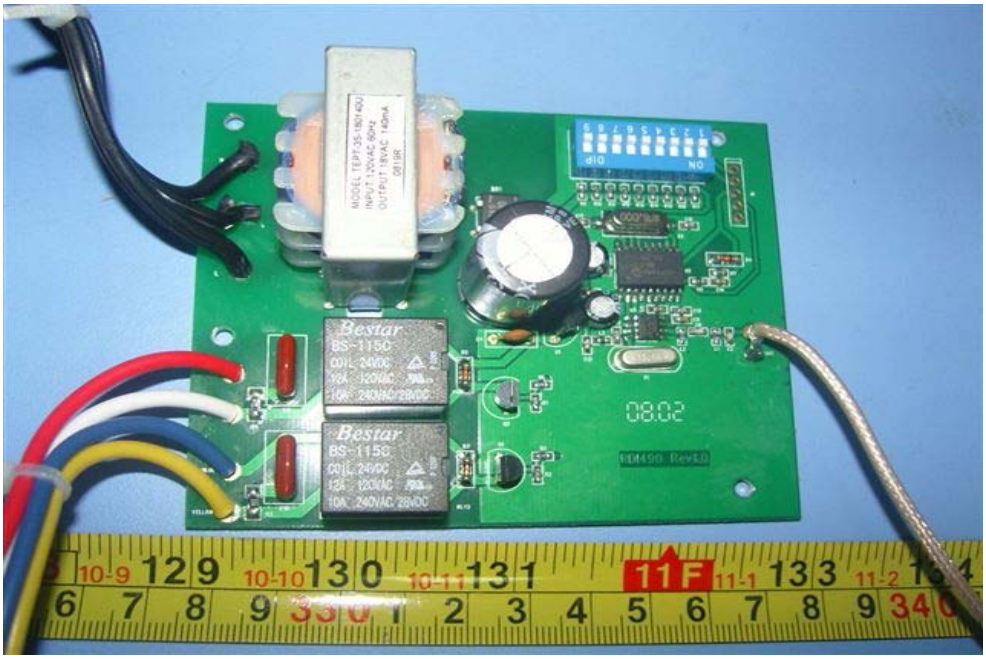
7.1.1 EUT - Front View



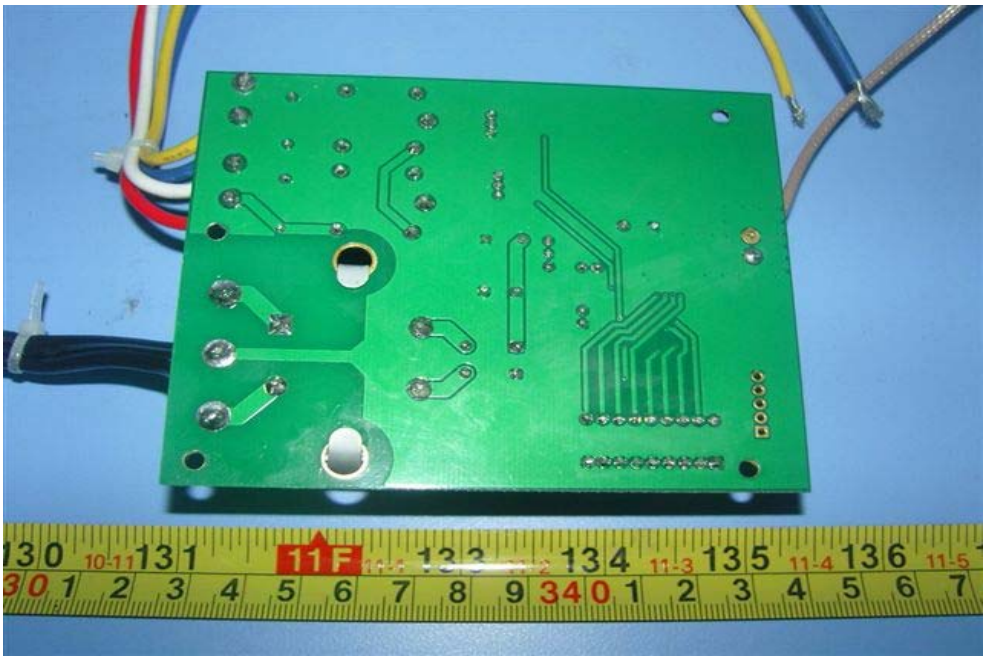
7.1.2 EUT - Back View



7.1.3 PCB - Front View



7.1.4 PCB - Back View



8 FCC ID Label

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.

The Label must not be a stick-on paper. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Proposed Label Location on EUT

EUT Top View/ proposed FCC Mark Location