



卓時檢測  
TIMEWAY TESTING LABORATORY



ISO/IEC17025 Accredited Lab.

Report No: FCC 0909147-02

File reference No: 2009-09-10

Applicant: Craftmade International, Inc

Product: Wireless Door Chime

Brand Name: Craftmade

Model No: MECH-WL

Test Standards: FCC Part 15 Subpart B: 2008

Test result: It is herewith confirmed and found to comply with the requirements set up by ANSI C63.4&FCC Part 15 regulations for the evaluation of electromagnetic compatibility

Approved By

*Jack Chung*

Jack Chung

Manager

Dated: Sep 12, 2009

**Results appearing herein relate only to the sample tested**

**The technical reports is issued errors and omissions exempt and is subject to withdrawal at**

**SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD**

East 5/Block 4, Anhua Industrial Zone, No.8, Tairan Rd. Chegongmiao, FuTian District, Shenzhen, CHINA.

Tel (755) 83448688 Fax (755) 83442996



### **Special Statement:**

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

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

#### **CNAS-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

#### **FCC-Registration No.: 899988**

The EMC Laboratory 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 No.: 899988.

#### **IC- Registration No.: IC5205A-01**

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: 5205A-01.

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Test Report Conclusion  
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## 1.0 General Details

### 1.1 Test Lab Details

Name : SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD  
Address: East 5/Block 4, Anhua Industrial Zone, No.8,Tairan Rd. CheGongMiao, FuTian District, Shenzhen, CHINA.  
Telephone: (755) 83448688  
Fax: (755) 83442996

### 1.2 Applicant Details

Applicant: Craftmade International, Inc  
Address: 650 s. Royal Lane Suit 100 P.O. Box 1037 Coppell, Texas, 75019, United States  
Telephone: (972) 393-3800  
Fax: (972) 304-3755

### 1.3 Description of EUT

Product: Wireless Door Chime  
Manufacturer: National State Industries Limited  
Address: Wulian Industrial Park, Fenggang Town, Dongguan, Guangdong, 523695, China  
Brand Name: Craftmade  
Additional Brand PRIME, Home Impressions  
name:  
Model Number: MECH-WL  
Additional Model Number: N/A  
Rating: Input: DC 6V Powered by 4pcs batteries

### 1.4 Submitted Sample(s): 1 Samples

### 1.5 Test Duration: 2009-07-24to 2009-09-10

### 1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB  
Radiated Emissions Uncertainty =4.7dB

### 1.7 Test Engineer

The sample tested by

A handwritten signature in cursive script that reads 'Terry Tang'.

Print Name: Terry Tang

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## 2.0 List of Measurement Equipment

### 2.1 Conducted Emission Test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESCS30	830245/009	RS	2009.2.23	1 Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
LISN	NTFM8132	8132137	SCHWARZBECK	2009.2.24	1 Year
LISN	NTFM8134	8134109	SCHWARZBECK	2009.2.24	1 Year
LISN	NTFM8136	8136102	SCHWARZBECK	2009.2.24	1 Year

### 2.2 Radiated electromagnetic disturbance test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESCS30	830245/009	RS	2009.2.23	1 Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer(with Tracking Generator)	MS2661C	MT72089	ANRITSU	2009.2.23	1 Year
Amplifier	MH648A	M20494	ANRITSU	2009.2.24	1 Year
Bilog Antenna	CBL6101C	2576	CHASE	2009.2.23	1 Year

## 3.0 Technical Details

### 3.1 Investigations Requested

Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

### 3.2 Test Standards

**FCC Part 15 Subpart B: 2008**

## 4.0 Conducted Power line Test

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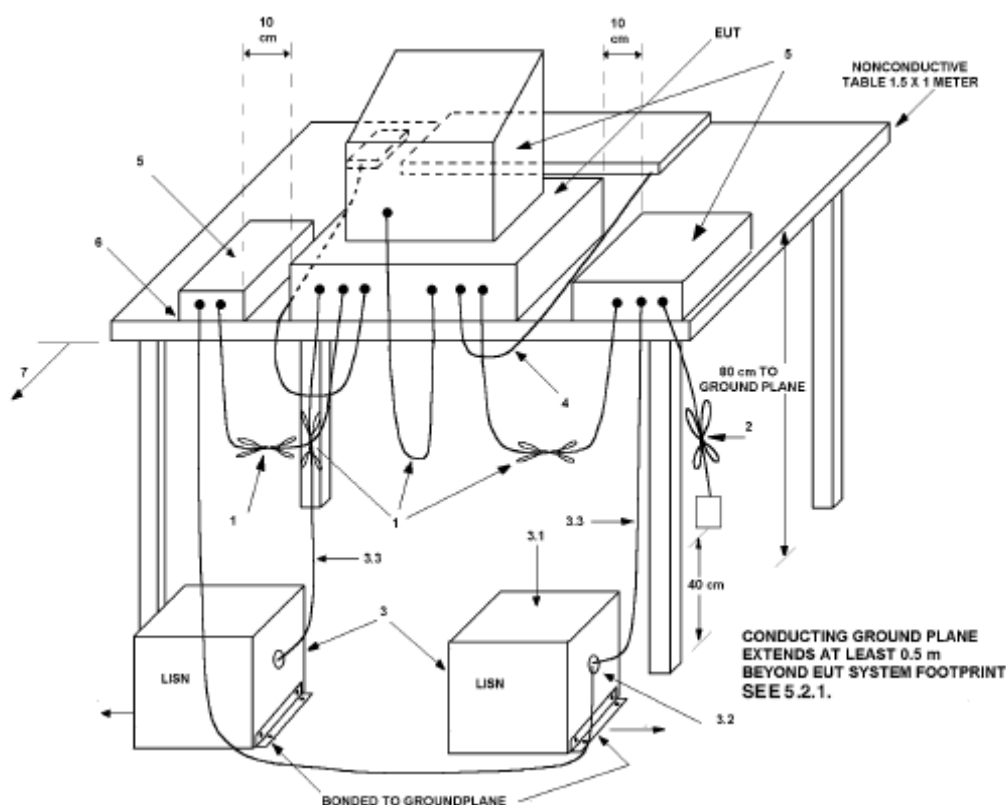
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```

graph LR
    TR[Test Receiver] --- LISN[L. I. S. N]
    LISN --- AC[AC Mains]
    LISN --- EUT[EUT]
    EUT --- Load[load]
  
```

## 4.2 Test Method and test Procedure

### Block diagram of Test setup



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Frequency(MHz)	Class A Limits dB( $\mu$ V)		Class B Limits dB( $\mu$ V)	
	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
0.15 ~ 0.50	79.00	66.00	66.00~56.00*	56.00~46.00*
0.50 ~ 5.00	73.00	60.00	56.00	46.00
5.00 ~ 30.00	73.00	60.00	60.00	50.00

- Notes: 1. \*decreasing linearly with logarithm of frequency.  
2. The tighter limit shall apply at the transition frequencies

#### 4.4 Test Results

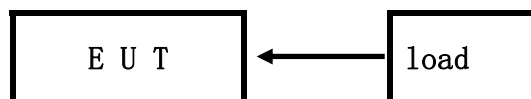
The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

**Note: Due to DC operation, this test item not applicable**



## 5.0 Radiated Disturbance Test

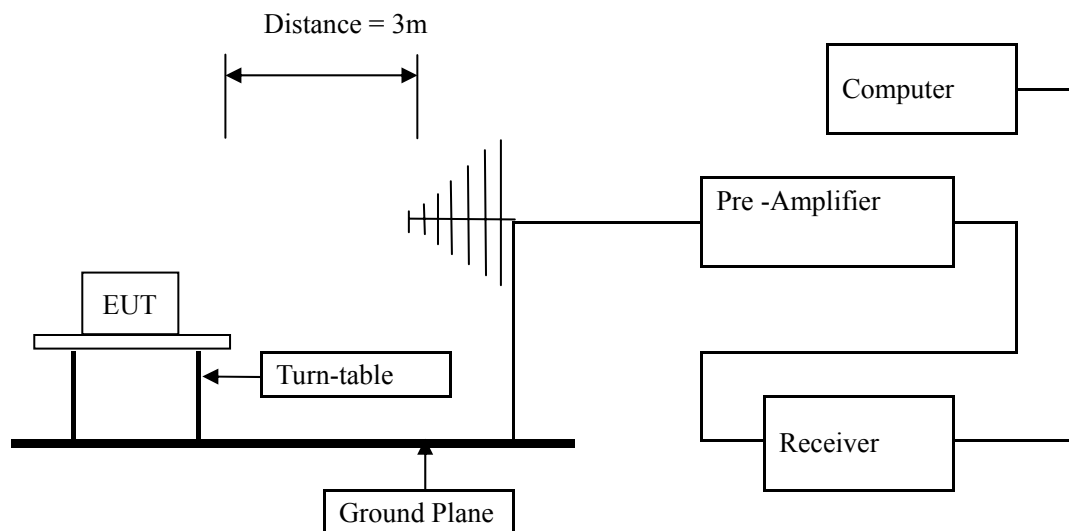
### 5.1 Schematics of the test



### 5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2003, The frequency spectrum from 30MHz to 1GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak 0values with a resolution bandwidth of 120KHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.

#### Block diagram of Test setup

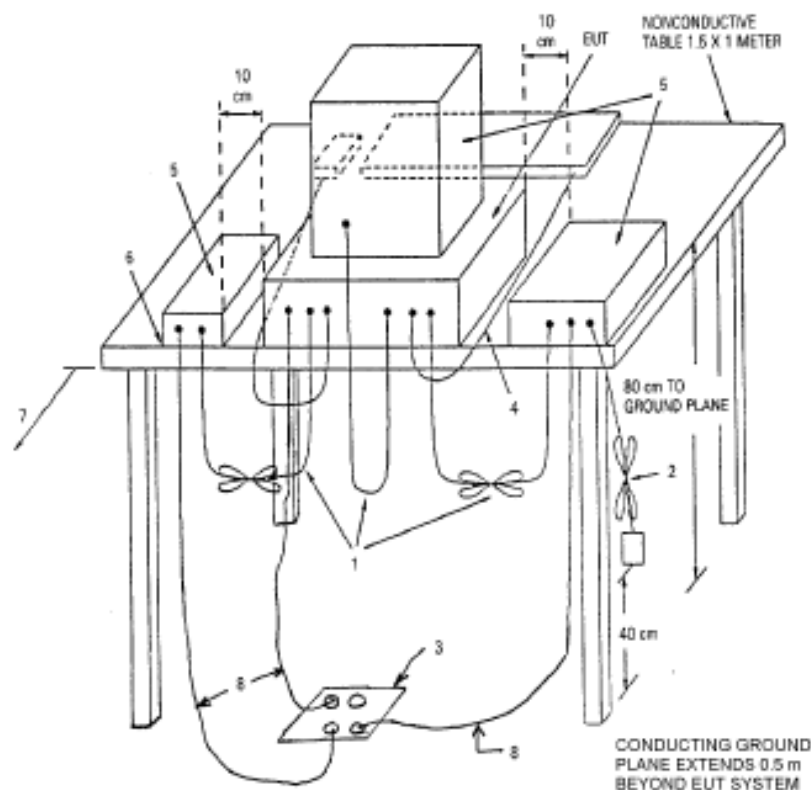


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### 5.3 Radiated Emission Limit

Frequency Range (MHz)	Distance (m)	Field strength (dB $\mu$ V/m)
30-88	3	40.00
88-216	3	43.50
216-960	3	46.00
Above 960	3	54.00

Note: The lower limit shall apply at the transition frequencies

## 5.4 Test result

The frequency spectrum from 30MHz to 1GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.

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**A: Radiated Disturbance In Horizontal (30MHz----1000MHz)**

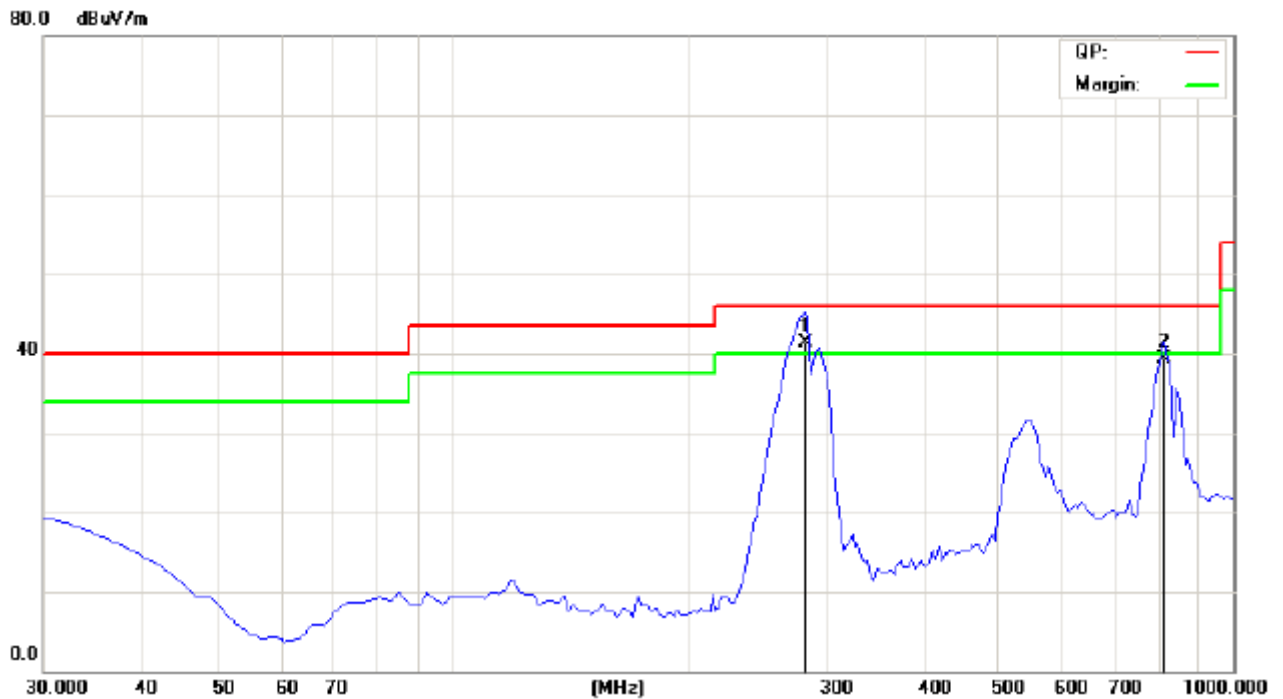
EUT set Condition: Normal operation model

Level: Class B

Results: PASS

Please refer to following diagram for individual

Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
281.180	41.28	H	46.00
814.822	39.33	H	46.00

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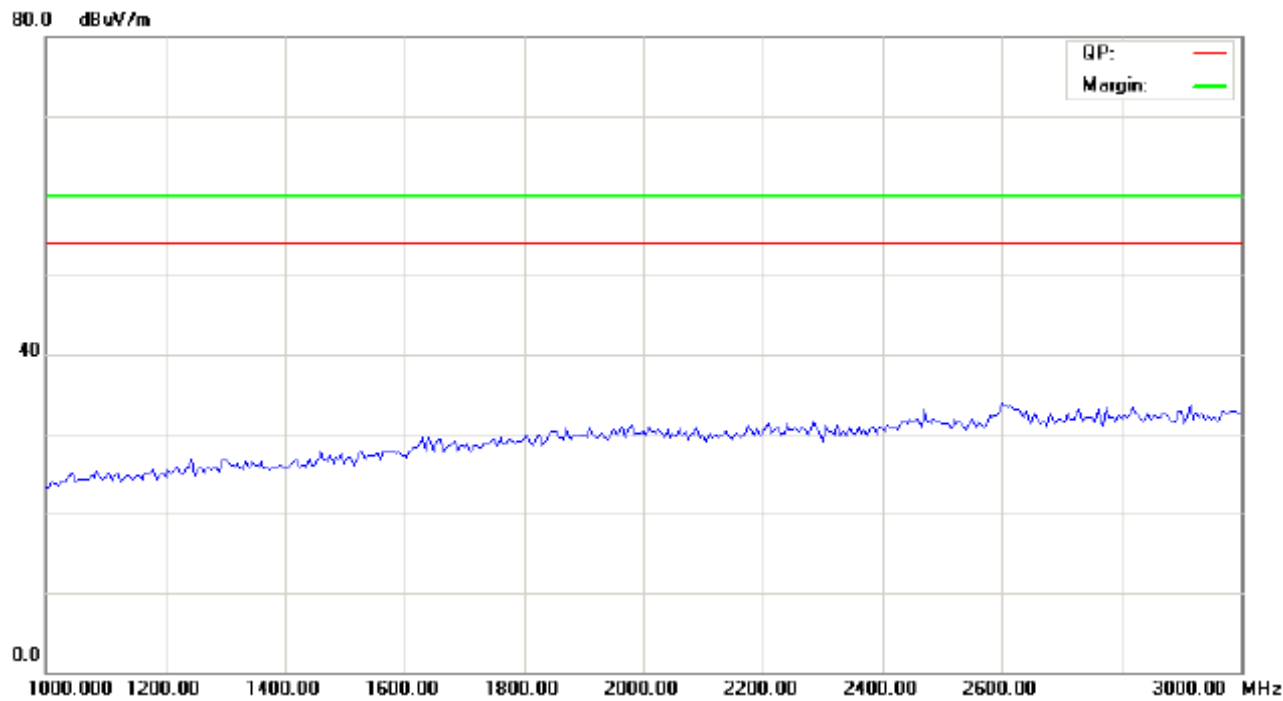
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**A1: Radiated Disturbance In Horizontal (1000MHz----2000MHz)**

EUT set Condition: Normal operation model  
Level: Class B  
Results: PASS

Please refer to following diagram for individual  
Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
--	--	H	54 (AV) /74 (PK)
--	--	H	54 (AV) /74 (PK)

Note: From 1GHz to 2GHz, the emission level was below 10dB under the Limit at least.



**B: Radiated Disturbance In Vertical (30MHz---1000MHz)**

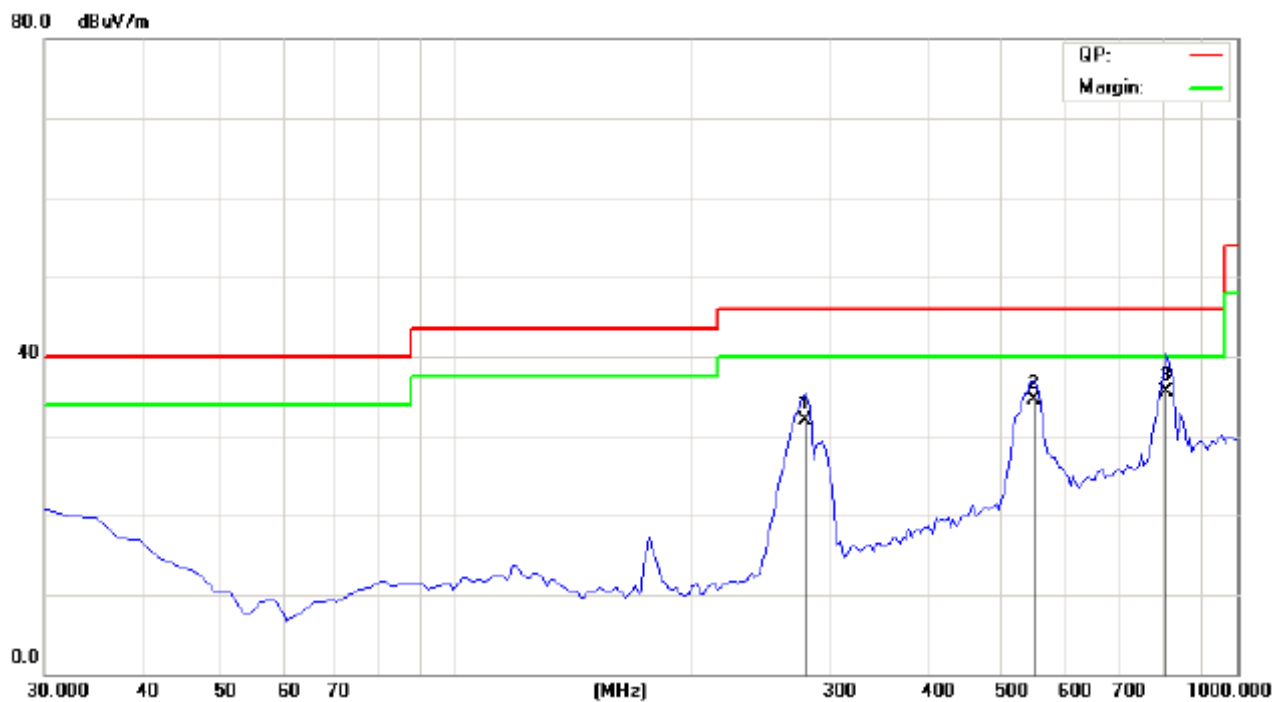
EUT set Condition: Normal operation model

Level: Class B

Results: PASS

Please refer to following diagram for individual

Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
280.360	31.94	V	46.00
550.780	34.55	V	46.00
810.100	35.53	V	46.00

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**B1: Radiated Disturbance In Vertical (1000MHz---2000MHz)**

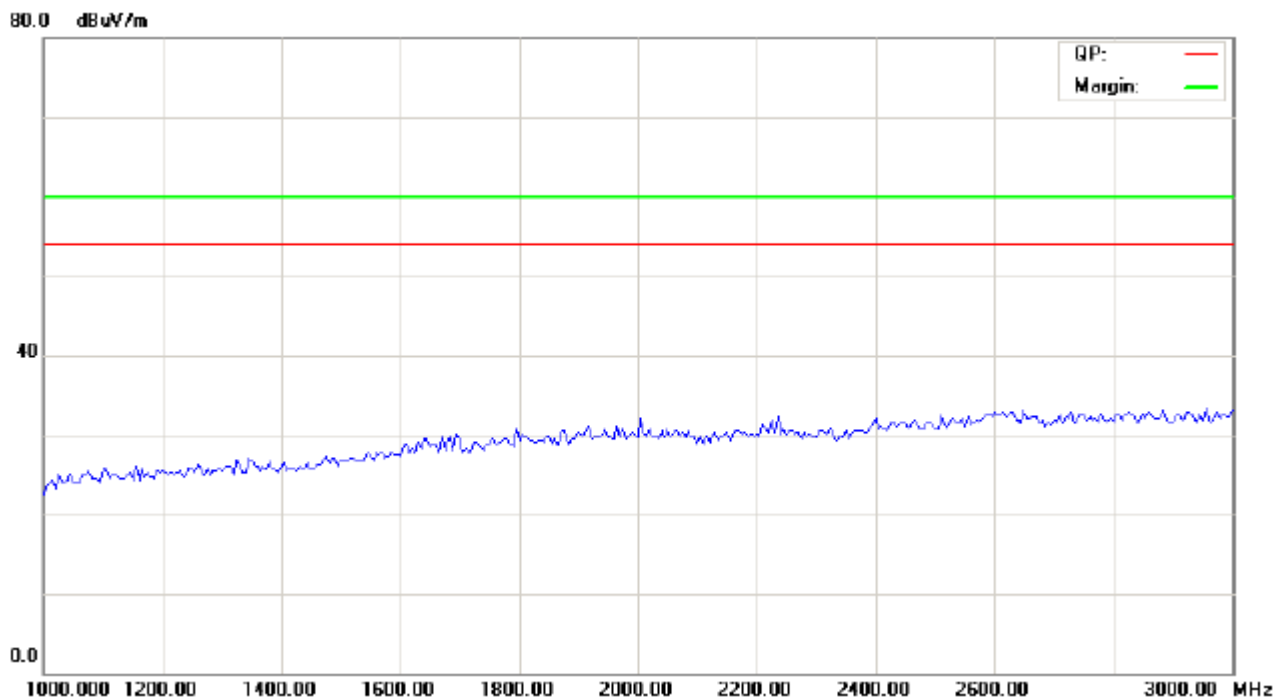
EUT set Condition: Normal operation model

Level: Class B

Results: PASS

Please refer to following diagram for individual

Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
--	--	V	54 (AV) /74 (PK)
--	--	V	54 (AV) /74 (PK)

**Note: for the emission test, A 300.5 MHz CW signal was injected (radiated) from a nearby signal generator using a rod antenna**

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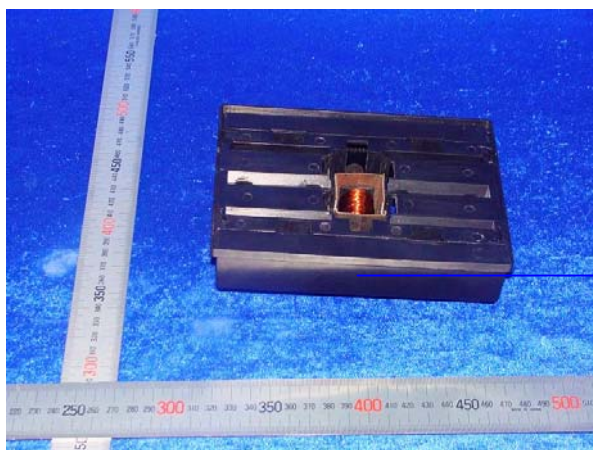
## 6.0 FCC ID Label

**FCC ID: XEJ -CRAFTMD200906**

**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 label. 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.

### Mark Location:



FCC ID Label Location

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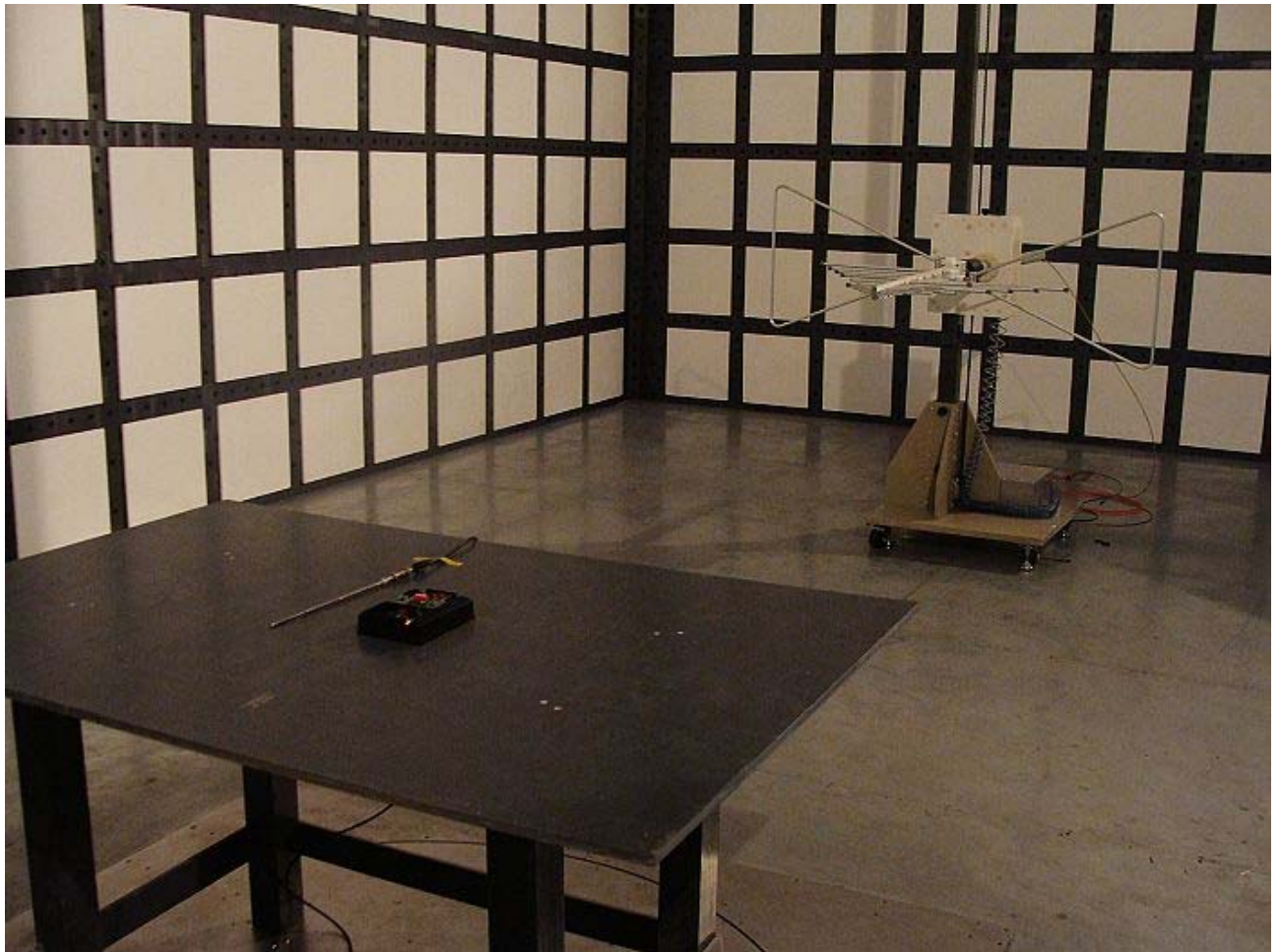
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## 7.0 Photo of testing

7.1 Conducted test View—N/A

7.2 Radiated emission test view--



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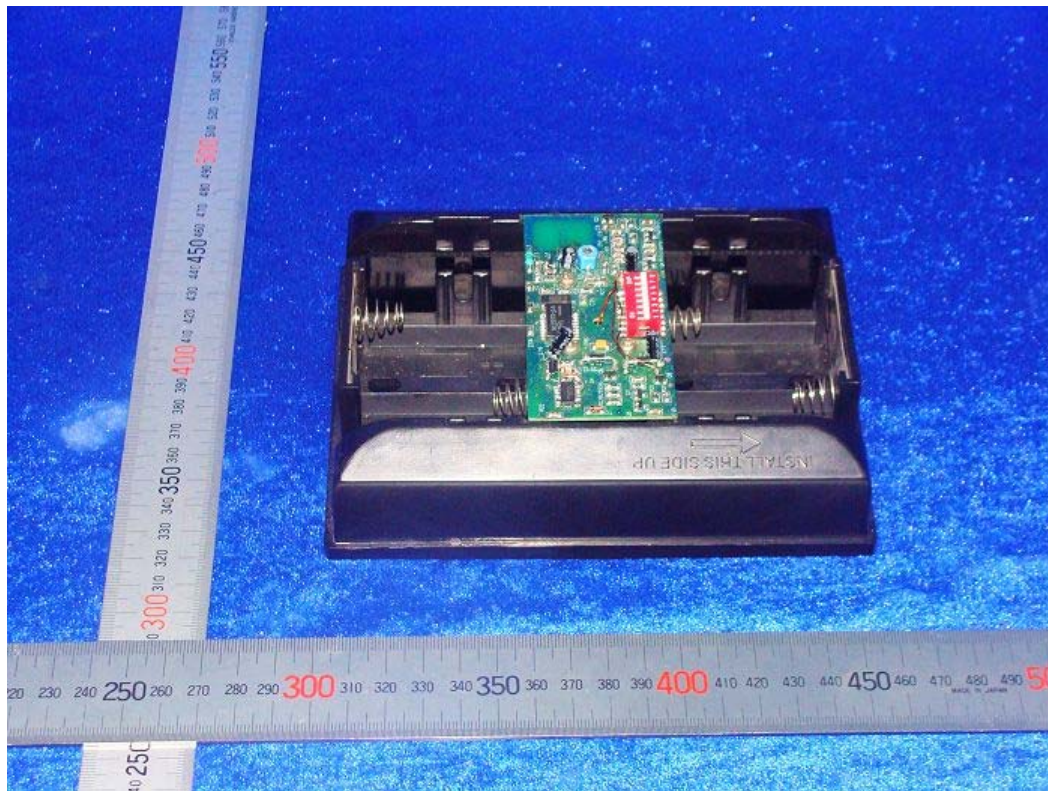
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### 7.3 Photo for the EUT

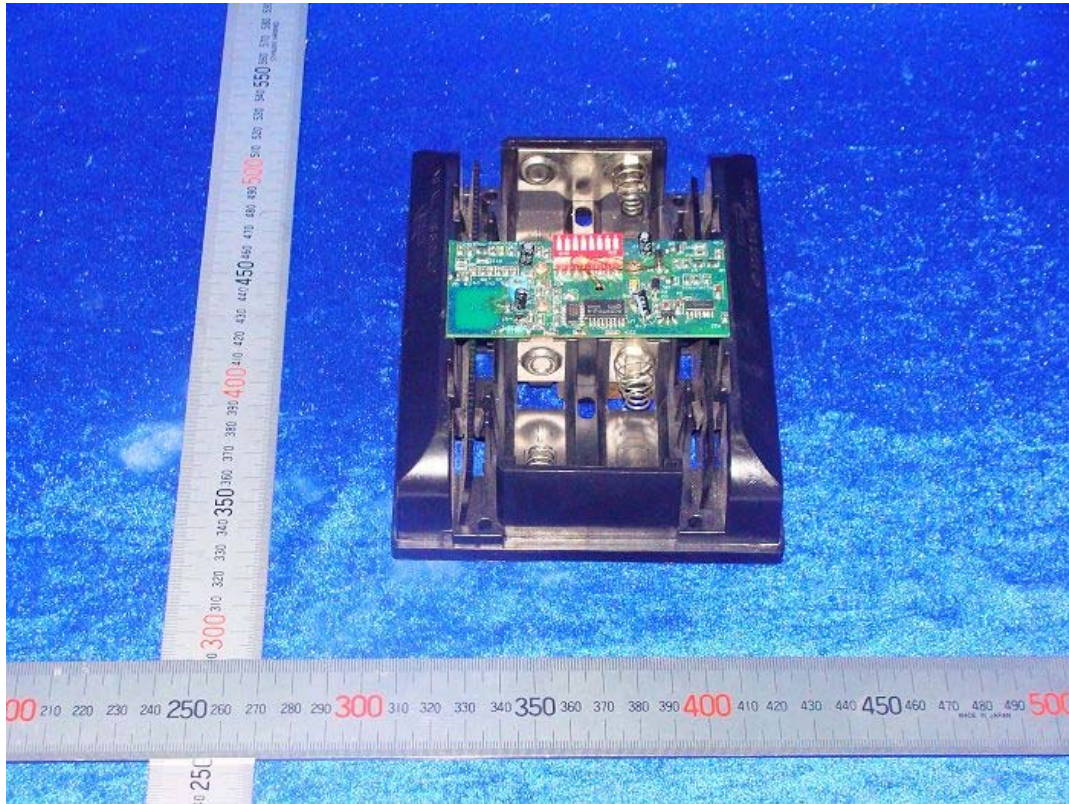


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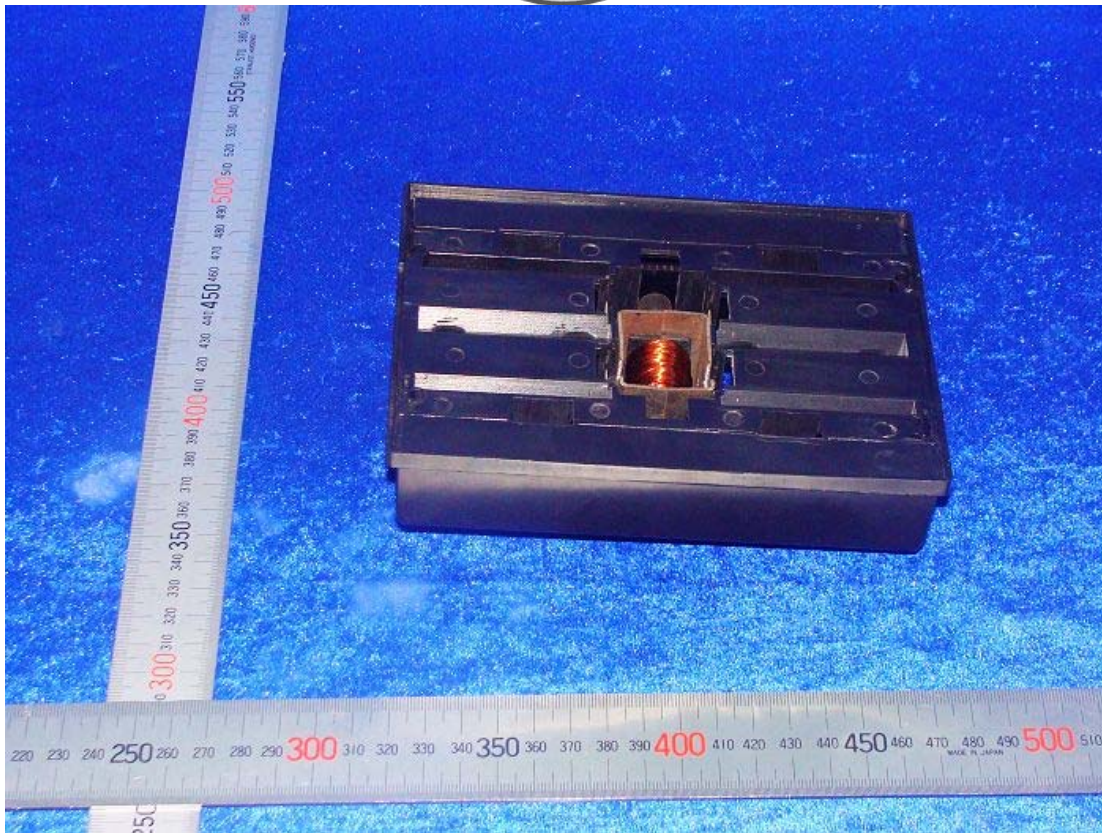




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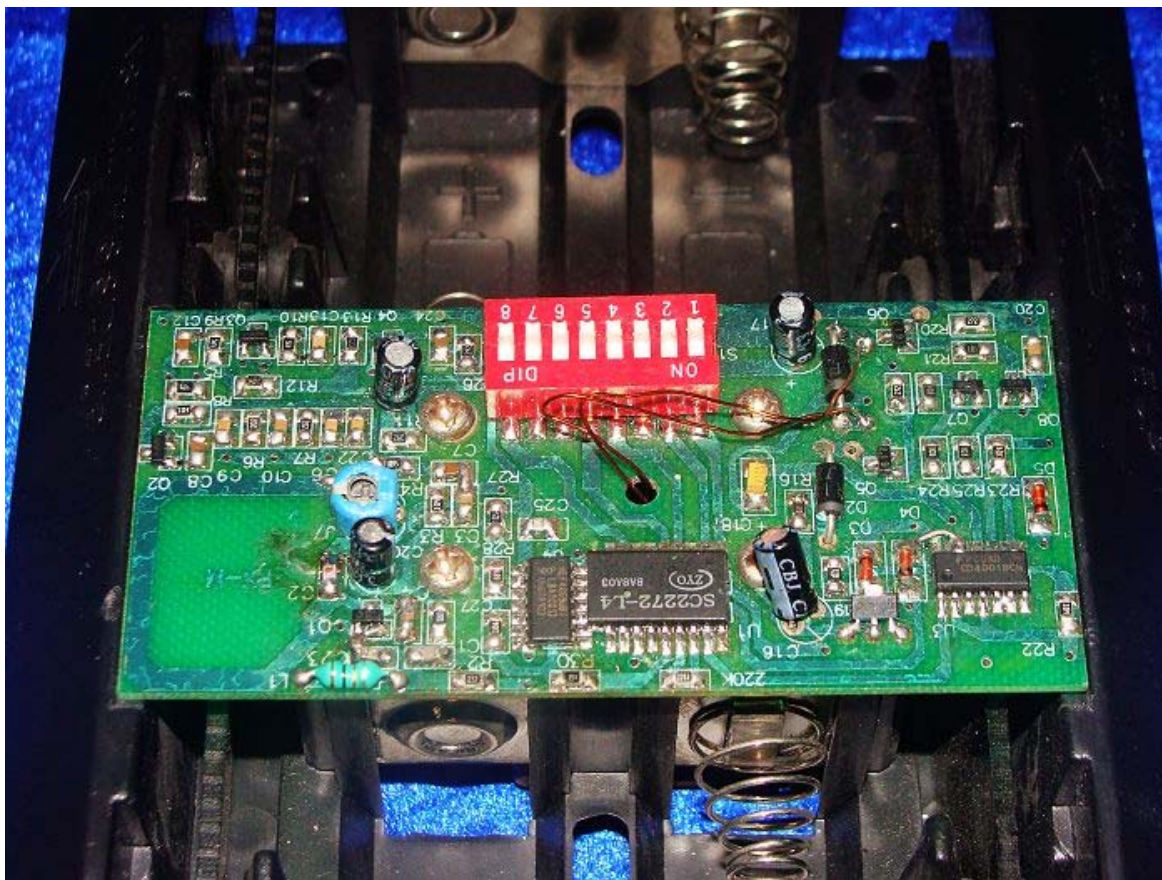


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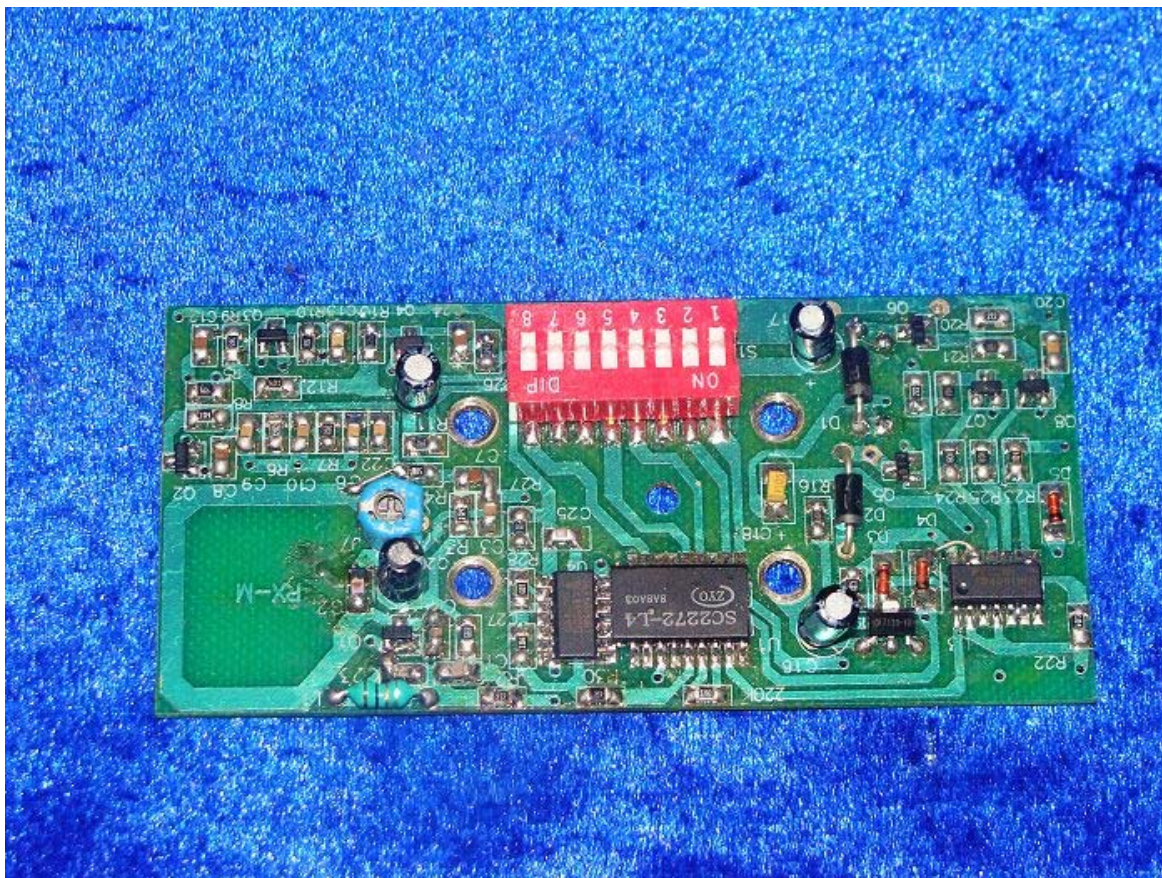




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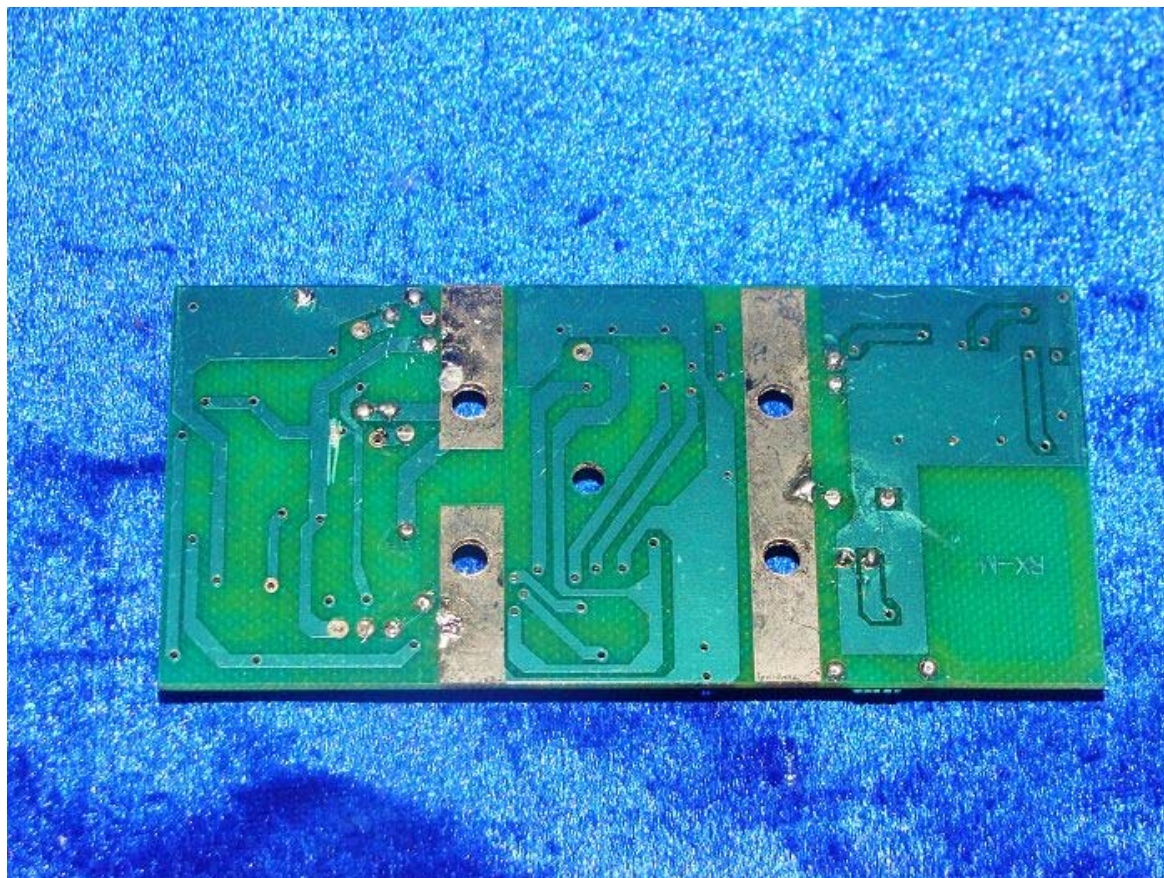


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**-End of the report-**

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