



Report No: FCC1704128 File reference No: 2017-04-26

Applicant: King of Fans, Inc.

Product: 52" Trieste

Model No: 52-TV

Trademark: Hampton Bay

Test Standards: FCC Part 15 Subpart B: 2016

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: April 26, 2017

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 TESTING LABORATORIES

Room 512-519, 5/F., East Tower, Building 4, Anhua Industrial Zone, Futian District, Shenzhen, Guangdong, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com

Report No: FCC1704128 Page 2 of 30

Date: 2017-04-26



## **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-02**

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-02.

Page 3 of 30

Report No: FCC1704128

Date: 2017-04-26



# **Test Report Conclusion**

#### Content

1.0	General Details	4
1.1	Test Lab Details	4
1.2	Applicant Details	4
1.3	Description of EUT	4
1.4	Test Uncertainty.	4
1.5	Submitted Sample	4
1.6	Test Duration.	4
2.0	List of Measurement Equipment	5
2.1	Conducted Emission Test.	5
2.2	Radiated electromagnetic disturbance test.	5
2.3	Auxiliary Equipment	5
3.0	Technical Details.	6
3.1	Investigations Requested.	6
3.2	Test Standards.	6
4.0	Power line Conducted Emission Test	7
5.0	Radiated Disturbance Test	11
6.0	FCC Label	18
7.0	Photo of testing	10

Date: 2017-04-26



## Page 4 of 30

#### 1.0 **General Details**

1.1 Test Lab Details

> Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Room 512-519,5/F., East Tower, Building 4, Anhua Industrial Zone,

Futian District, Shenzhen, Guangdong China

(755) 83448688 Telephone: (755) 83442996 Fax:

Site on File with the Federal Communications Commission – United Sates

Registration Number: 899988

For 3m & 10 m OATS

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: 5205A-02

For 3m & 10 m OATS

1.2 **Applicant Details** 

> Applicant: King of Fans, Inc.

Address: 1951 N.W. 22nd Street, Fort Lauderdale, FL33311, USA

Telephone: 954-484-7500 Fax: 954-784-7602

1.3 Description of EUT

> Product: 52" Trieste

Manufacturer: Chienluen Industries (zhongshan) Ltd..

Address: Da Che Industrial Area, Nanlang Town, Zhongshan, Guangdong China

528451

Brand Name: Hampton Bay

Mode Number: 52-TV

Rating: Input 120V, 60Hz, w/o light 0.5A 60W, w/light 0.7A 79W

Rx Frequency: 303.78MHz Submitted Sample: 1 Samples

Test Duration: 2017-04-19 to 2017-04-26 1.5

1.6 **Test Uncertainty** 

1.4

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

1.7 Test Engineer

Terry lang The sample tested by

Print Name: Terry Tong

The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES, reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Report No: FCC1704128 Page 5 of 30

Date: 2017-04-26



## 2.0 List of Measurement Equipment

### 2.1 Conducted Emission Test

				Calibration	Calibration
Name	Model No.	Serial No.	Manufacturer	Date	Cycle
EMI Test Receiver	ESH3	860905/006	RS	2016.06.11	1Year
Spectrum Analyzer	ESA-L1500A	US37451154	НР	2016.06.11	1Year
PULSE LIMITER	ESH3-Z2	100281	RS	2016.06.11	1Year
LISN	ESH3-Z5	100294	RS	2016.06.11	1Year
LISN	ESH3-Z5	100253	RS	2016.06.11	1Year

## 2.2 Radiated electromagnetic disturbance test

				Calibration	Calibration
Name	Model No.	Serial No.	Manufacturer	Date	Cycle
EMI Test Receiver	ESI26	838786/013	RS	2016.08.22	1Year
Amplifier	8447D	2727A05017	НР	2016.06.11	1Year
Bilog Antenna	VULB9163	9163/340	Schwarebeck	2016.06.11	1Year
Horn Antenna	BBHA 9120D	9120D-631	RS	2016.08.24	1Year
Pre-Amplifier	EM30265		EM	2016.08.05	1Year

## 2.3 Auxiliary Equipment

Name	Model No.	Serial No.	Manufacturer	Date	Cycle
				Calibration	Calibration

Report No: FCC1704128 Page 6 of 30



## 3.0 Technical Details

Date: 2017-04-26

3.1 Investigations Requested
Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

3.2 Test Standards

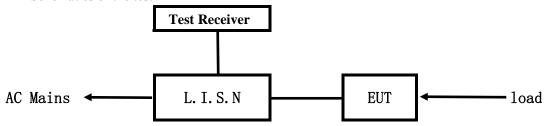
FCC Part 15 Subpart B: 2016

Date: 2017-04-26



### 4.0 Conducted Power line Test

### 4.1 Schematics of the test



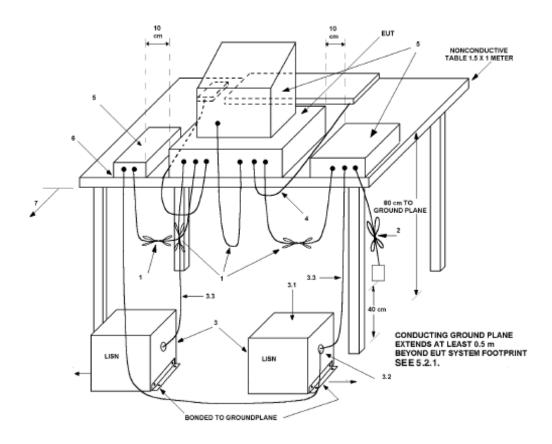
**EUT: Equipment Under Test** 

#### 4.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2014. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2014. Cables and peripherals were moved to find the maximum emission levels for each frequency.

Actual Working Voltage and Frequency: 120V~, 60Hz

Block diagram of Test setup



The report refers only to the sample tested and does not apply to the bulk.

Report No: FCC1704128 Page 8 of 30

Date: 2017-04-26



## 4.3 Power line conducted Emission Limit

Eraguanay (MHz)	Class A Li	mits dB(μV)	Class B Limits dB(µV)		
Frequency(MHz)	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	
$5.00 \sim 30.00$	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.

Date: 2017-04-26



## A: Conducted Emission on Live Terminal (150kHz to 30MHz)

**EUT Operating Environment** 

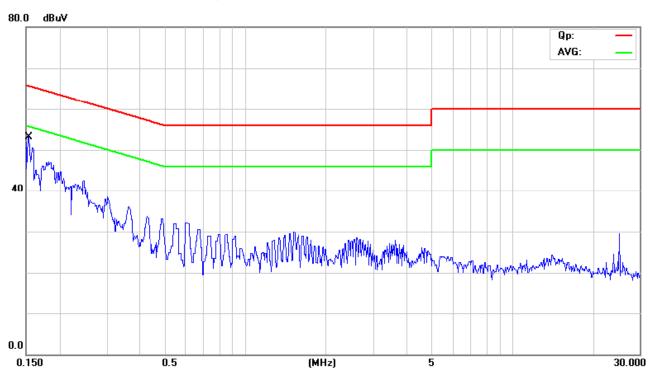
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Receiving Mode** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1533	34.60	9.84	44.44	65.82	-21.38	QP	
2	0.1533	-3.50	9.84	6.34	55.82	-49.48	AVG	

Date: 2017-04-26



## B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

**EUT Operating Environment** 

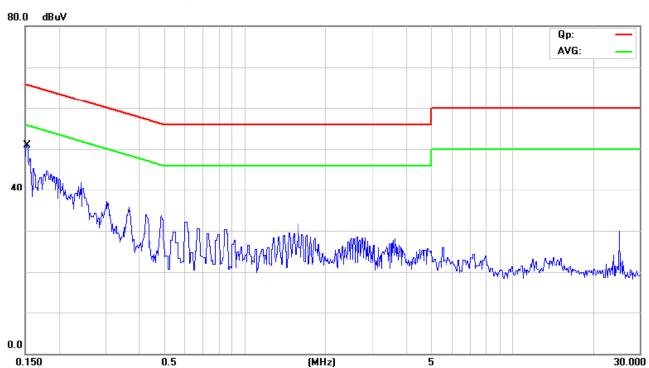
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Receiving Mode** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1520	33.00	9.84	42.84	65.89	-23.05	QP	
2	0.1520	-4.60	9.84	5.24	55.89	-50.65	AVG	

Page 11 of 30

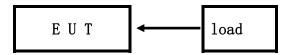
Report No: FCC1704128

Date: 2017-04-26



#### 5.0 Radiated Disturbance Test

#### 5.1 Schematics of the test

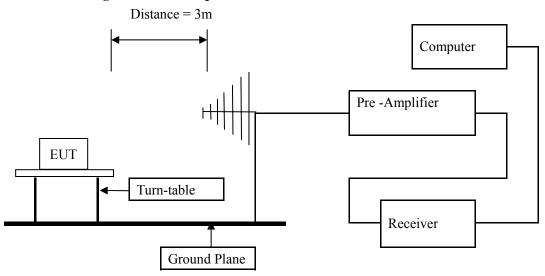


### 5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2014; The frequency spectrum from 30MHz to 5GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. For measurement above 1GHz, peak values with RBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK

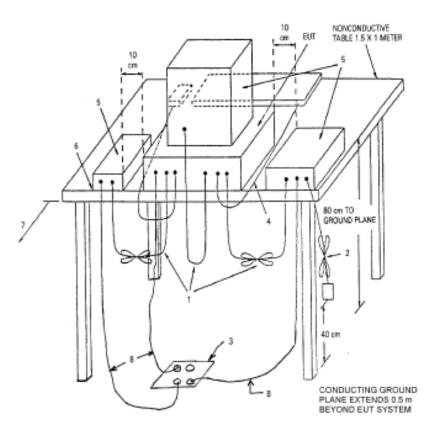
Actual Working Voltage and Frequency: 120V~, 60Hz

## **Block diagram of Test setup**



Date: 2017-04-26





#### 5.3 Radiated Emission Limit

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

Note: 1. The lower limit shall apply at the transition frequencies

2. This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.

### 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. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK. Measurements were made at 3 meters.

Report No: FCC1704128 Page 13 of 30

Date: 2017-04-26



#### Test result

### General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal/ In Vertical (30MHz----1000MHz)

**EUT set Condition: Receiving Mode** 

**Results:** Pass

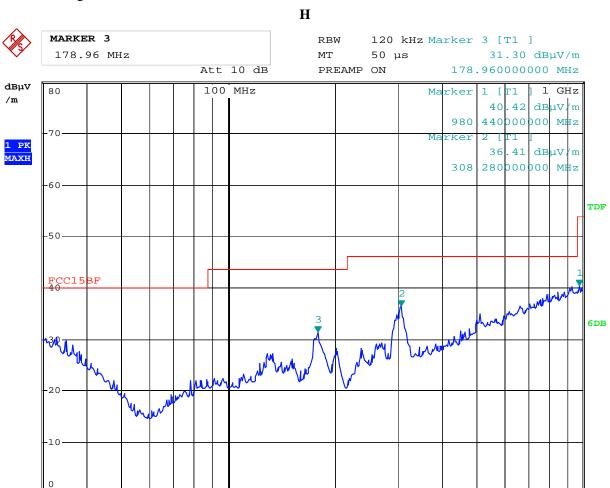
Frequency (MHz)	Level@3m (dB \u03bc V/m)	Antenna Polarity	Limit@3m (dB \( \mu \)V/m)
178.960	31.30	Н	43.50
980.440	40.42	Н	54.00
308.280	36.41	Н	46.00
987.360	39.72	V	54.00
30.080	31.05	V	40.00
179.800	28.05	V	43.50

Report No: FCC1704128 Page 14 of 30

Date: 2017-04-26



## Test Figure:



1 GHz

Date: 25.APR.2017 11:52:26

30 MHz

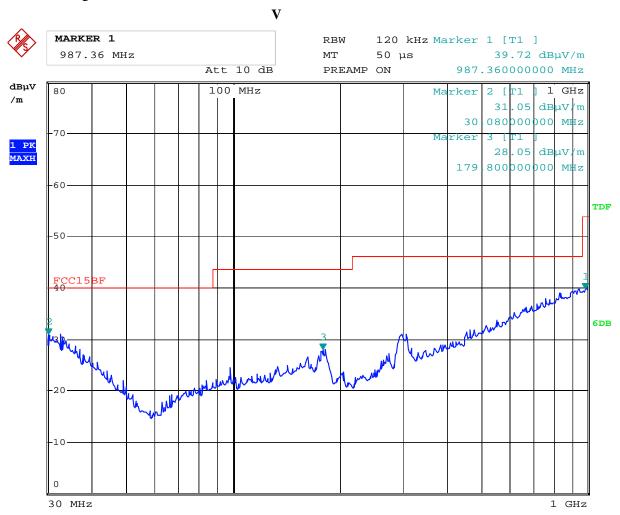
Page 15 of 30

Report No: FCC1704128

Date: 2017-04-26



## Test Figure:



Date: 25.APR.2017 11:48:59

Date: 2017-04-26



## Radiated Disturbance (1000MHz----5000MHz)

**EUT Operating Environment** 

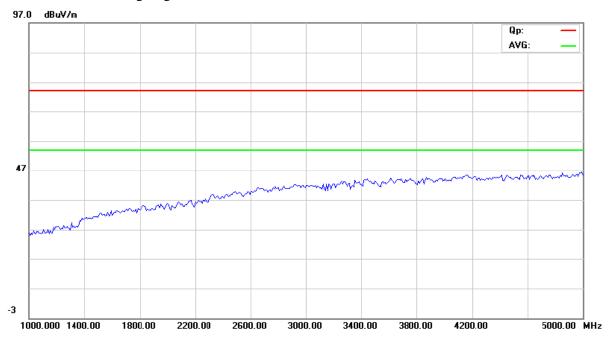
Temperature:25℃ Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Receiving Mode** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m ( $dB\mu V/m$ )
	-	Н	54(AV)

Note: PK scan result curve is lower than AV limit

Report No: FCC1704128 Page 17 of 30

Date: 2017-04-26



## Radiated Disturbance (1000MHz----5000MHz)

## **EUT Operating Environment**

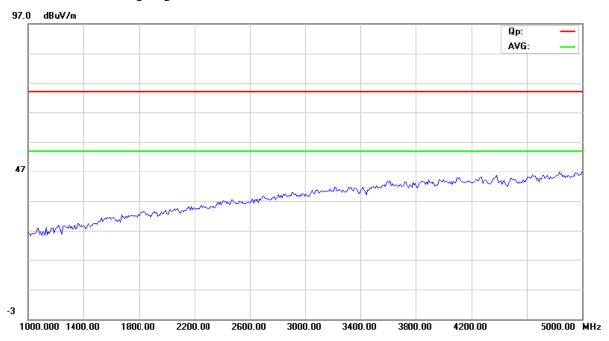
Temperature:25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Receiving Mode** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBµV/m)	Antenna Polarity	$Limit@3m (dB\mu V/m)$
		V	54(AV)

Note: PK scan result curve is lower than AV limit

Report No: FCC1704128 Page 18 of 30

Date: 2017-04-26



#### 6.0 FCC Label

#### FCC ID:RGB-52TVR-1

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.



**Label Location** 

Report No: FCC1704128 Page 19 of 30

Date: 2017-04-26



7.0 Photo of testing

7.1 Conducted test View--



Date: 2017-04-26



#### 7.2 Radiated emission test view--





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Date: 2017-04-26



## Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Date: 2017-04-26



## Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Date: 2017-04-26



### Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Page 24 of 30

Report No: FCC1704128

Date: 2017-04-26



## Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Date: 2017-04-26



### Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Page 26 of 30

Report No: FCC1704128

Date: 2017-04-26



### Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

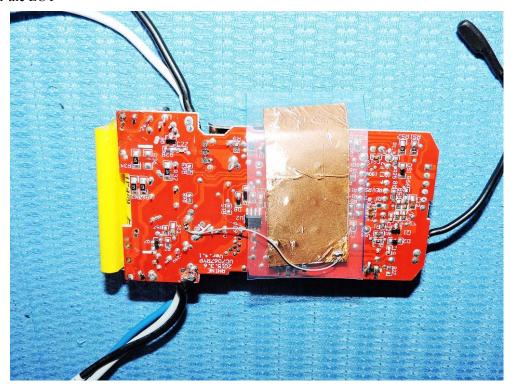
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

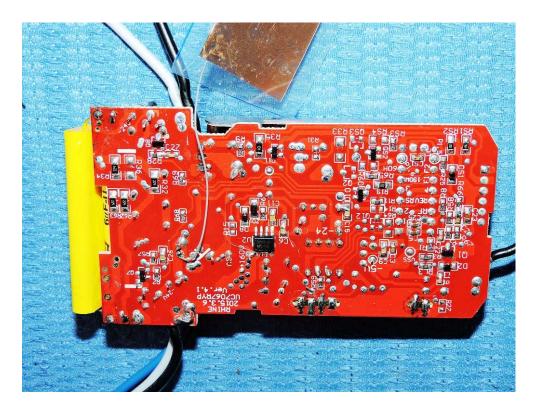
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Date: 2017-04-26



## Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES.

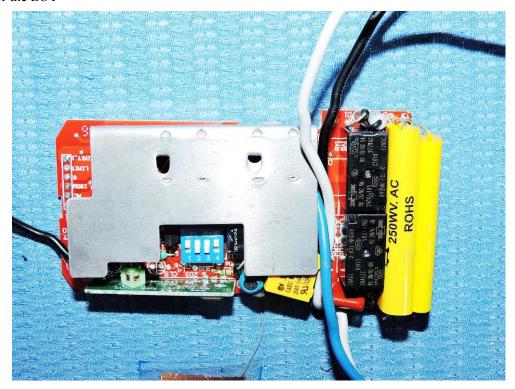
will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

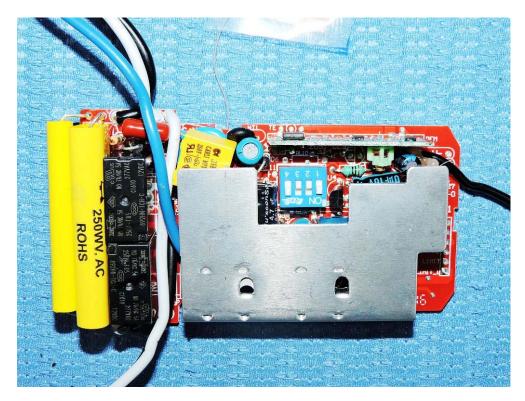
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Date: 2017-04-26



## Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

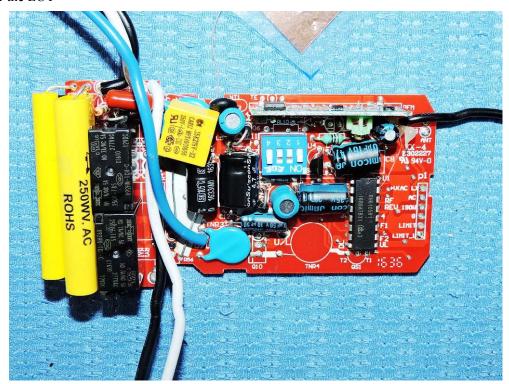
This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

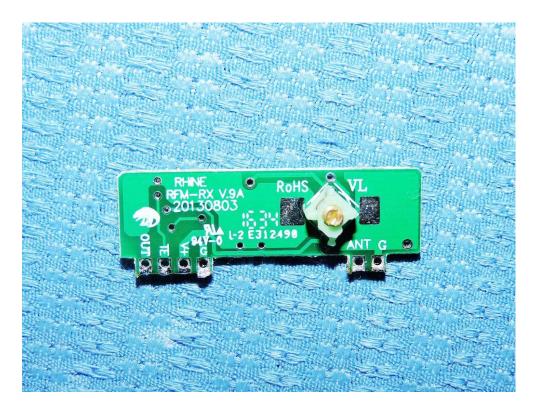
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Date: 2017-04-26



## Photo for the EUT





The report refers only to the sample tested and does not apply to the bulk.

This report is issued in confidence to the client and it will be strictly treated as such by the SHENZHEN TIMEWAY TESTING LABORATORIES. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the SHENZHEN TIMEWAY TESTING LABORATORIES. to his customer. Supplier or others persons directly concerned. SHENZHEN TIMEWAY TESTING LABORATORIES. will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

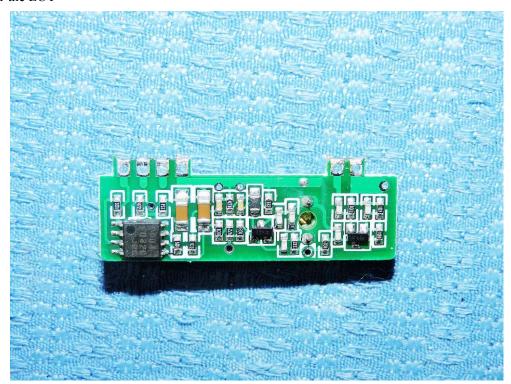
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Report No: FCC1704128 Page 30 of 30

Date: 2017-04-26



## Photo for the EUT



-End of the report-