



Report No: FCC 1604207 File reference No: 2016-05-03

Applicant: KOREX TECHNOLOGY CO., LTD.

Product: WIFI WATER KETTLE

Model No: AM-K01,AM-K02,AM-K03,AM-K04

Trademark: AIMOX

Test Standards: FCC Part 15.247

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10, FCC Part 15 Subpart C, Paragraph 15.247 regulations for the evaluation of

electromagnetic compatibility

Approved By

# Jack Chung

Jack Chung

Manager

Dated: May 03, 2016

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.: FCC1604207 Page 2 of 75

Date: 2016-05-03



# **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 CNAL. This approval result is accepted by MRA of APLAC.

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

### **CNAL-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 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 75

Report No.: FCC1604207

Date: 2016-05-03



# **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	Submitted Sample	5
1.5	Test Duration.	5
1.6	Test Uncertainty.	5
1.7	Test By	5
2.0	List of Measurement Equipment	6
3.0	Technical Details	8
3.1	Summary of Test Results.	8
3.2	Test Standards.	8
4.0	EUT Modification.	8
5.0	Power Line Conducted Emission Test.	9
5.1	Schematics of the Test.	9
5.2	Test Method and Test Procedure.	9
5.3	Configuration of the EUT.	9
5.4	EUT Operating Condition.	10
5.5	Conducted Emission Limit.	10
5.6	Test Result.	10
6.0	Radiated Emission test.	15
6.1	Test Method and Test Procedure.	15
6.2	Configuration of the EUT	15
6.3	EUT Operation Condition.	15
5.4	Radiated Emission Limit.	16
7.0	6dB and Bandwidth Measurement.	34
8.0	Maximum Output Power	42
9.0	Power Spectral Density Measurement.	44
10.0	Out of Band Measurement.	56
11.0	Antenna Requirement.	63
12.0	FCC ID/IC Label.	64
13.0	Photo of Test Setup and EUT View.	65

Report No.: FCC1604207

Date: 2016-05-03



Page 4 of 75

### 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

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

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: KOREX TECHNOLOGY CO., LTD.

Address: RM 406, SHUGUANG BUILDING, NO.12, KEJISOUTH 12 ROAD, YUEHAI STREET,

NANSHAN DISTRICT, SHENZHEN, CHINA

Telephone: 86-755-82048307 Fax: 86-755-82048309

### 1.3 Description of EUT

Product: WIFI WATER KETTLE

Manufacturer: KOREX TECHNOLOGY CO.,LTD.

Address: Quanbao Industrial zone, Shiyan Town, Baoan District, Shenzhen, China

Brand Name: AIMOX Model Number: AM-K01

Additional Model Number: AM-K02, AM-K03, AM-K04

Type of Modulation IEEE 802.11b : DSSS (CCK, QPSK, DBPSK)

IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)

Frequency range IEEE802.11b/g: 2412-2462MHz

Channel Spacing 5MHz for IEEE 802.11b/g

Air Data Rate IEEE 802.11b : 11, 5.5, 2, 1 Mbps

IEEE 802.11g: 54, 48,36, 24, 18, 12, 9, 6 Mbps

Frequency Selection By software

Channel Number IEEE 802.11b/g: 11 Channels

Antenna: PCB Antenna and the maximum Gain of this antenna is 0dBi;

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.: FCC1604207 Page 5 of 75

Date: 2016-05-03



Submitted Sample: 2 Samples

1.5 Test Duration 2016-04-25 to 2016-04-30

The sample tested by

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

Terry lang Test Engineer 1.7

Print Name: Terry Tang

Page 6 of 75

Report No.: FCC1604207

Date: 2016-05-03



2.0 Test Equipments					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2015-08-22	2016-08-21
TWO Line-V-NETW	R&S	EZH3-Z5	100294	2015-08-22	2016-08-21
TWO Line-V-NETW	R&S	EZH3-Z5	100253	2015-08-22	2016-08-21
Ultra Broadband ANT	R&S	HL562	100157	2015-08-23	2016-08-22
ESDV Test Receiver	R&S	ESDV	100008	2015-08-22	2016-08-21
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2015-08-22	2016-08-21
System Controller	CT	SC100	-		
Printer	EPSON	РНОТО ЕХЗ	CFNH234850		
Computer	IBM	8434	1S8434KCE99BLXLO*	-	-
Loop Antenna	EMCO	6502	00042960	2015-08-23	2016-08-22
ESPI Test Receiver	R&S	ESI26	838786/013	2015-08-22	2016-08-21
3m OATS			N/A	2015-08-24	2016-08-23
Horn Antenna	R&S	BBHA 9170	BBHA9170265	2015-08-24	2016-08-23
Horn Antenna	R&S	BBHA 9120D	9120D-631	2015-08-24	2016-08-23
Power meter	Anritsu	ML2487A	6K00003613	2015-08-22	2016-08-21
Power sensor	Anritsu	MA2491A	32263	2015-08-22	2016-08-21
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2015-08-23	2016-08-21
LISN	AFJ	LS16C	10010947251	2015-08-22	2016-08-21
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2015-08-23	2016-08-22
9*6*6 Anechoic			N/A	2015-08-24	2016-08-23
EMI Test Receiver	RS	ESCS30	100139	2015-08-22	2016-08-21

Report No.: FCC1604207 Page 7 of 75

Date: 2016-05-03



### 3. DESCRIPTION OF TEST MODES

### IEEE 802.11b, 802.11g mode

The EUT had been tested under operating condition. There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2412
Middle	2437
High	2462

IEEE 802.11b mode: 11Mbps data rate (worst case) was chosen for full testing. IEEE 802.11g mode: 54Mbps data rate (worst case) was chosen for full testing.

The worst-case data rates are determined according to the description above, based on the investigations by measuring the PSD and average power across all the data rates, bandwidths, modulations and spatial stream modes.

Page 8 of 75

Report No.: FCC1604207

Date: 2016-05-03



### 3.0 **Technical Details**

### 3.1 **Summary of test results**

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107 & 15.207	<b>Conducted Emission Test</b>	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	PASS	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	PASS	Complies
FCC Part 15, Paragraph 15.109,15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	PASS	Complies
FCC Part 15, Paragraph 15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Complies
FCC Part 15, Paragraph 15.247(d)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	PASS	Complies

### 3.2 **Test Standards**

FCC Part 15 Subpart & Subpart C, Paragraph 15.247 and ANSI C63.4:2014 AND ANSI C63.10:2013

### 4.0 **EUT Modification**

No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

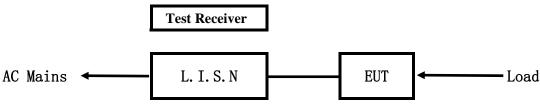
Report No.: FCC1604207

Date: 2016-05-03



### 5.0 Power Line Conducted Emission Test

### 5.1 Schematics of the test

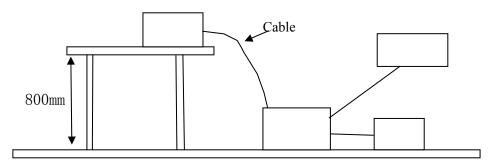


**EUT: Equipment Under Test** 

### 5.2 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.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



### 5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.4-2014. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

### A. EUT

Device	Manufacturer	Model	FCC ID
WIFI WATER	KOREX TECHNOLOGY	AM-K01,AM-K02,AM-K03,	241160 414102
KETTLE	CO.,LTD.	AM-K04	2AH6O-AMK02

### B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

### C. Peripherals

Device	Manufacturer	Model	FCC ID/DOC	Cable

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.: FCC1604207 Page 10 of 75

Date: 2016-05-03



# 5.4 EUT Operating Condition

Operating condition is according to ANSI C63.4-2014.

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

# 5.5 Power line conducted Emission Limit according to Paragraph 15.207 and 15.107

8 8 1							
Frequency	Class A Lim	its (dB µ V)	Class B Limits (dB µ V)				
(MHz)	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level			
$0.15 \sim 0.50$	79.0	66.0	66.0~56.0*	56.0~46.0*			
$0.50 \sim 5.00$	73.0	60.0	56.0	46.0			
5.00 ~ 30.00	73.0	60.0	60.0	50.0			
	(MHz) $0.15 \sim 0.50$ $0.50 \sim 5.00$	(MHz)       Quasi-peak Level $0.15 \sim 0.50$ $79.0$ $0.50 \sim 5.00$ $73.0$	(MHz)         Quasi-peak Level         Average Level $0.15 \sim 0.50$ 79.0         66.0 $0.50 \sim 5.00$ 73.0         60.0	(MHz)         Quasi-peak Level         Average Level         Quasi-peak Level $0.15 \sim 0.50$ 79.0         66.0         66.0 $\sim 56.0$ * $0.50 \sim 5.00$ 73.0         60.0         56.0			

Notes:

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

### 5.6 Test Results

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

Report No.: FCC1604207 Page 11 of 75

Date: 2016-05-03



### 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: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: PASS** 

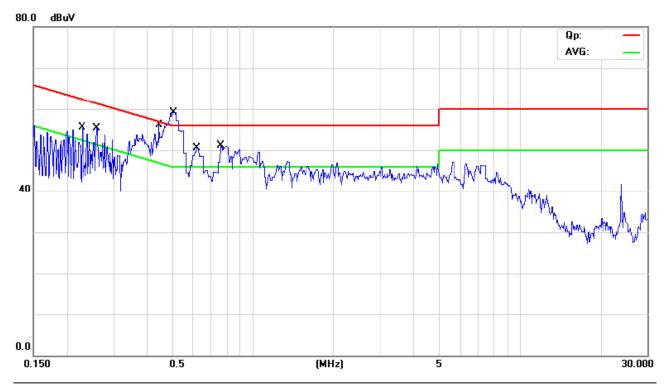
Please refer to following diagram for individual

Page 12 of 75

Report No.: FCC1604207

Date: 2016-05-03





No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.5084	42.10	11.38	53.48	56.00	-2.52	QP	
2	0.5084	32.00	11.38	43.38	46.00	-2.62	AVG	
3	0.4434	37.60	11.31	48.91	57.00	-8.09	QP	
4	0.4434	25.60	11.31	36.91	47.00	-10.09	AVG	
5	0.2282	31.50	11.08	42.58	62.51	-19.93	QP	
6	0.2282	16.30	11.08	27.38	52.51	-25.13	AVG	
7	0.2590	32.80	11.12	43.92	61.46	-17.54	QP	
8	0.2590	19.00	11.12	30.12	51.46	-21.34	AVG	
9	0.6190	35.00	11.50	46.50	56.00	-9.50	QP	
10	0.6190	22.90	11.50	34.40	46.00	-11.60	AVG	
11	0.7544	34.70	11.64	46.34	56.00	-9.66	QP	
12	0.7544	22.80	11.64	34.44	46.00	-11.56	AVG	

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

This report released 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.: FCC1604207 Page 13 of 75

Date: 2016-05-03



### 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: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: Pass** 

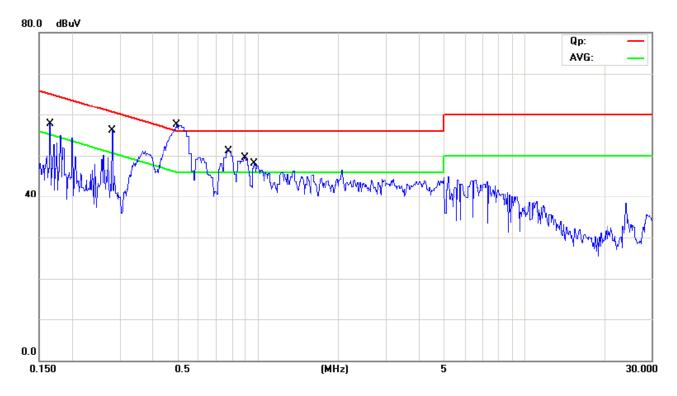
Please refer to following diagram for individual

Page 14 of 75

Report No.: FCC1604207

Date: 2016-05-03





No. M	lk. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBu∨	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.4927	42.40	11.36	53.76	56.12	-2.36	QP	
2	0.4927	31.10	11.36	42.46	46.12	-3.66	AVG	
3	0.2815	32.10	11.14	43.24	60.77	-17.53	QP	
4	0.2815	15.50	11.14	26.64	50.77	-24.13	AVG	
5	0.1640	31.20	11.01	42.21	65.26	-23.05	QP	
6	0.1640	14.00	11.01	25.01	55.26	-30.25	AVG	
7	0.7790	35.80	11.67	47.47	56.00	-8.53	QP	
8	0.7790	24.30	11.67	35.97	46.00	-10.03	AVG	
9	0.8890	34.80	11.78	46.58	56.00	-9.42	QP	
10	0.8890	21.70	11.78	33.48	46.00	-12.52	AVG	
11	0.9680	31.30	11.87	43.17	56.00	-12.83	QP	
12	0.9680	18.50	11.87	30.37	46.00	-15.63	AVG	

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. 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.: FCC1604207 Page 15 of 75

Date: 2016-05-03



### **6** Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10–2013. The radiated test was performed at Timeway Laboratory. This site is on file with the FCC laboratory division, Registration No.899988
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10–2013.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=1MHz VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector. Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is 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 dB of specification limit), and are distinguished with a "QP" in the data table.
- (6) The antenna polarization: Vertical polarization and Horizontal polarization.

# Block diagram of Test setup Distance = 3m Computer Pre –Amplifier Furn-table Receiver

- 6.2 Configuration of The EUT

  Same as section 5.3 of this report
- 6.3 EUT Operating Condition
  Same as section 5.4 of this report.

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

Report No.: FCC1604207 Page 16 of 75

Date: 2016-05-03



### 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

### Frequencies in restricted band are complied to limit on Paragraph 15.209 and 15.109

Frequency Range (MHz)	Distance (m)	Field strength (dB µ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the higher limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT

Page 17 of 75 Report No.: FCC1604207

Date: 2016-05-03



### Test result

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

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

EUT set Condition: **Keep Transmitting** 

**Results:** Pass

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \( \mu \) V/m)
239.480	28.24 (PK)	Н	46.00
941.560	41.07 (PK)	Н	46.00
55.240	31.96 (PK)	Н	40.00
30.400	30.82 (PK)	Н	40.00
120.040	31.75 (PK)	V	43.50
50.160	36.90 (QP)	V	40.00
993.360	39.86 (PK)	V	54.00
37.000	32.79 (PK)	V	40.00

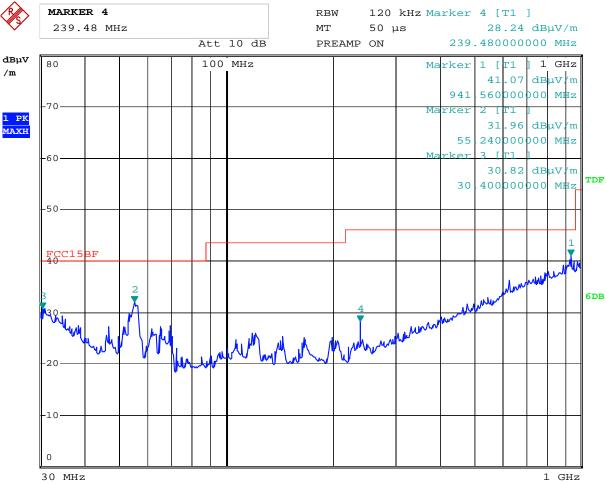
Report No.: FCC1604207 Page 18 of 75

Date: 2016-05-03



### Test Figure:

H



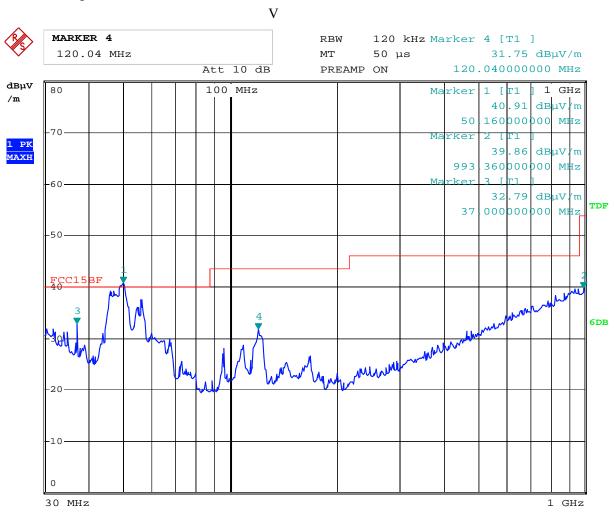
Page 19 of 75

Report No.: FCC1604207

Date: 2016-05-03



### Test Figure:



Note: Scanning with PK detector.

Report No.: FCC1604207 Page 20 of 75

Date: 2016-05-03



# Operation Mode: Transmitting under CH01 for 11g at 54Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \u03b4 V/m)
4824.00	49.28 (PK)	Н	74(Peak)/ 54(AV)
4824.00	49.32 (PK)	V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16884		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 54Mbps

Report No.: FCC1604207 Page 21 of 75

Date: 2016-05-03



### Operation Mode: Transmitting under CH06 for 11g at 54Mbps

	0	0 1	
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \( \mu \)V/m)
4874.00	52.20 (PK)	V	74(Peak)/ 54(AV)
4874.00	52.65 (PK)	Н	74(Peak)/ 54(AV)
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622	4622 H/V		74(Peak)/ 54(AV)
17059	H/V		74(Peak)/ 54(AV)
19496	96 H/V		74(Peak)/ 54(AV)
21933	H/V		74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

3. For 802.11g mode 54 Mbps

### Operation Mode: Transmitting under CH11 for 11g at 54Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Limit@3m (dB \u03bc V/m)	
4924	49.58 (PK)	Н	74(Peak)/ 54(AV)
4924	49.64 (PK)	V	74(Peak)/ 54(AV)
7368		H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310	12310 H/		74(Peak)/ 54(AV)
14772	14772		74(Peak)/ 54(AV)
17234	H/V		74(Peak)/ 54(AV)
19696	H/V		74(Peak)/ 54(AV)
22158	H/V		74(Peak)/ 54(AV)
24620	) H/V		74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode at 54 Mbps

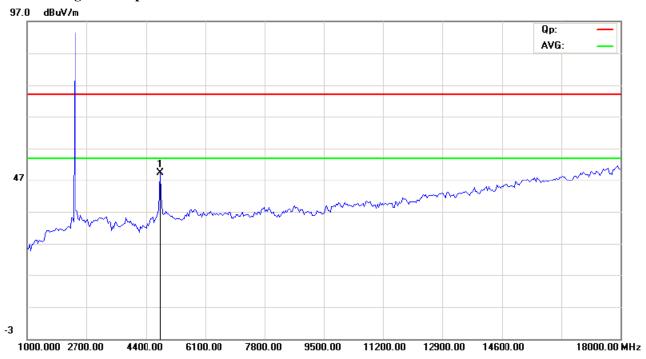
Report No.: FCC1604207

Date: 2016-05-03

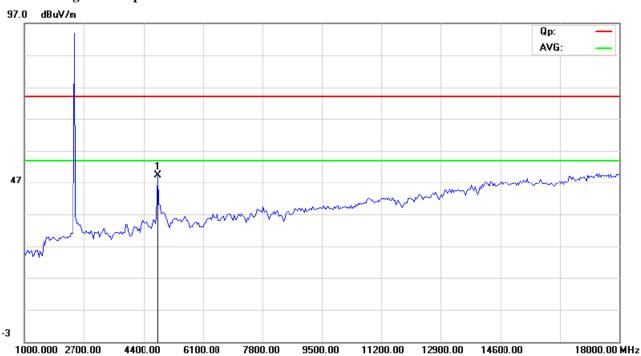


Please refer to the following test plots for details:

### CH01 for 11g at 54Mbps: Horizontal



### CH01 for 11g at 54Mbps: Vertical



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

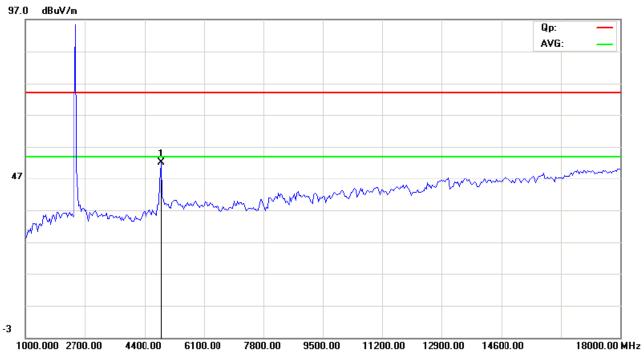
Page 23 of 75

Report No.: FCC1604207

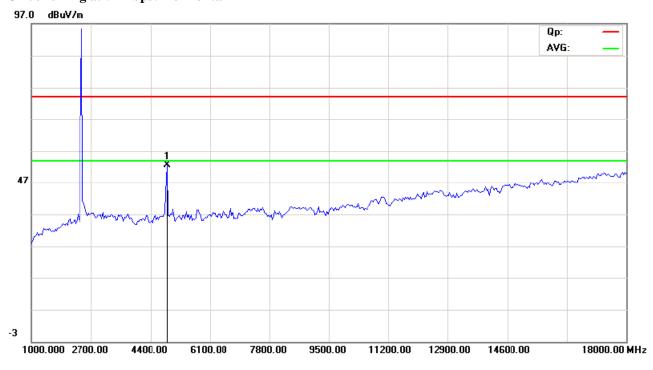
Date: 2016-05-03



# CH06 for 11g at 54Mbps: Vertical



### CH06 for 11g at 54Mbps: Horizontal



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

This 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.

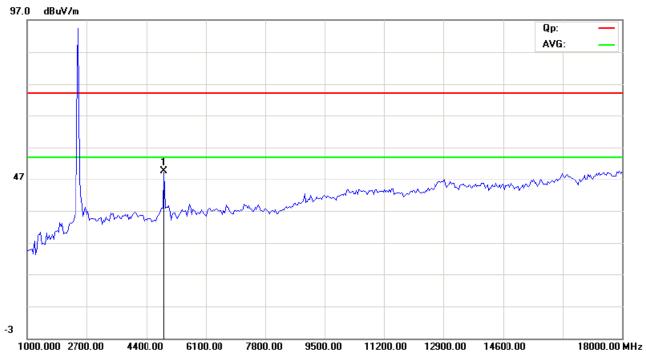
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Report No.: FCC1604207

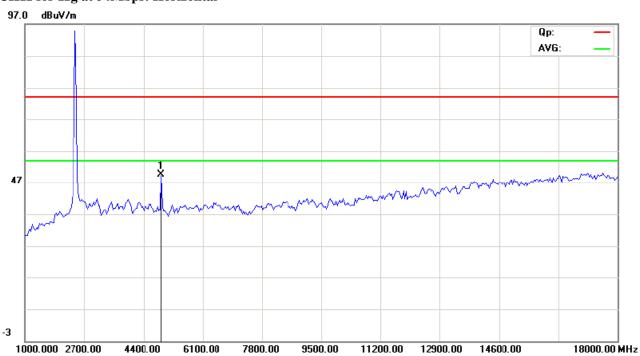
Date: 2016-05-03



### CH11 for 11g at 54Mbps: Vertical



### CH11 for 11g at 54Mbps: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

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.: FCC1604207 Page 25 of 75

Date: 2016-05-03



### Operation Mode: Transmitting under CH01 for 11b at 11Mbps

	0		
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4824.00	50.82 (PK)	Н	74(Peak)/ 54(AV)
4824.00	50.59 (PK)	V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060	12060		74(Peak)/ 54(AV)
14472	72 H/V		74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296	19296		74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

3. For 802.11b mode 11Mbps

### Operation Mode: Transmitting under CH06 for 11b at 11Mbps

Frequency (MHz)	ency (MHz) Level@3m (dB \( \mu \) V/m) A		Limit@3m (dB $\mu$ V/m)
4874.00	50.51 (PK)	Н	74(Peak)/ 54(AV)
4874.00	50.58 (PK)	V	74(Peak)/ 54(AV)
7311.00	ı	H/V	74(Peak)/ 54(AV)
9748.00	1	H/V	74(Peak)/ 54(AV)
12185	H/V		74(Peak)/ 54(AV)
14622	22 H/V		74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496	1	H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode 11Mbps

Report No.: FCC1604207 Page 26 of 75

Date: 2016-05-03



### Operation Mode: Transmitting under CH11 for 11b at 11Mbps

	0		
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4924	52.29 (PK)	Н	74(Peak)/ 54(AV)
4924	52.13 (PK)	V	74(Peak)/ 54(AV)
7368		H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310	12310		74(Peak)/ 54(AV)
14772	4772 H/V		74(Peak)/ 54(AV)
17234	H/V		74(Peak)/ 54(AV)
19696	596 H/V		74(Peak)/ 54(AV)
22158		H/V	74(Peak)/ 54(AV)
24620		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

3. For 802.11b mode at 11Mbps

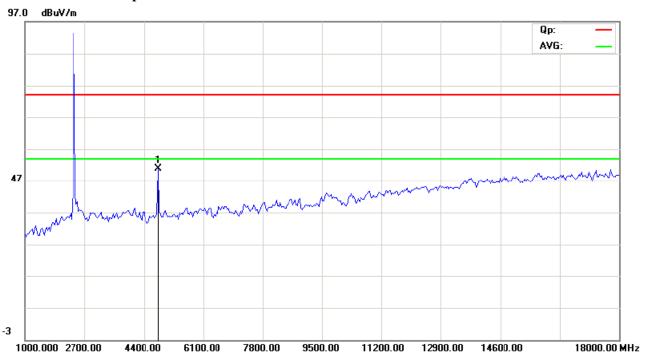
Report No.: FCC1604207

Date: 2016-05-03

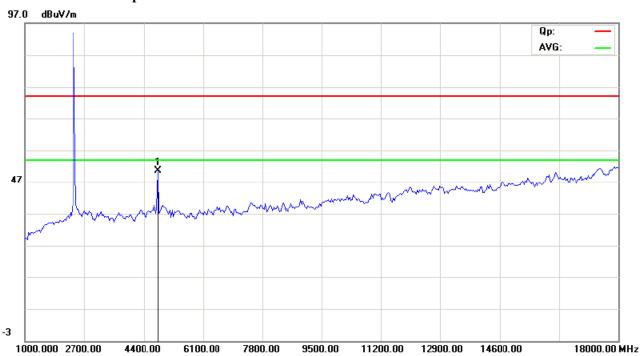


Please refer to the following test plots for details:

### CH01 for 11b at 11Mbps: Horizontal



### CH01 for 11b at 11Mbps: Vertical



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.

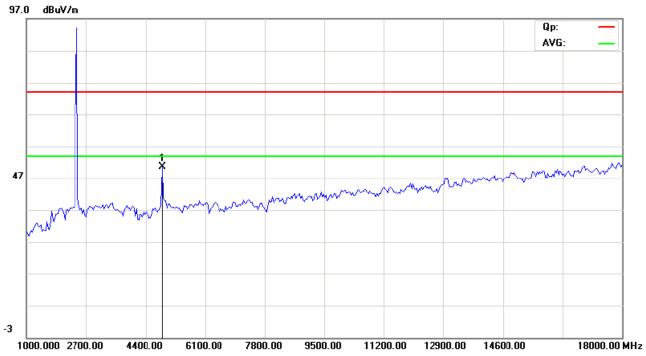
Page 28 of 75

Report No.: FCC1604207

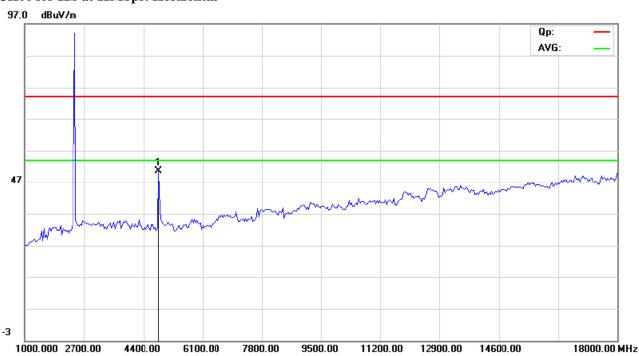
Date: 2016-05-03



# CH06 for 11b at 11Mbps: Vertical



### CH06 for 11b at 11Mbps: Horizontal



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

This 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.

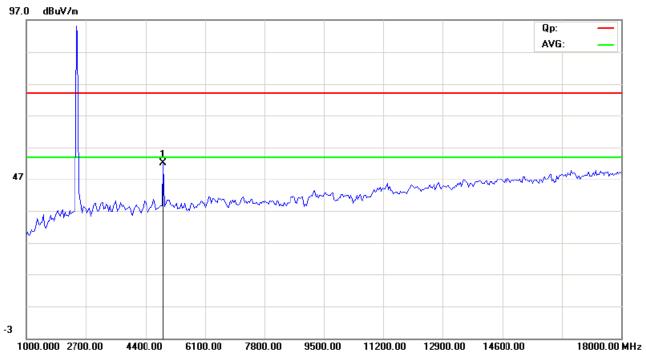
In the event of the improper use of the report. The SHENZHEN TIMEWAY TESTING LABORATORIES. reserves the rights to withdraw it and to

Report No.: FCC1604207

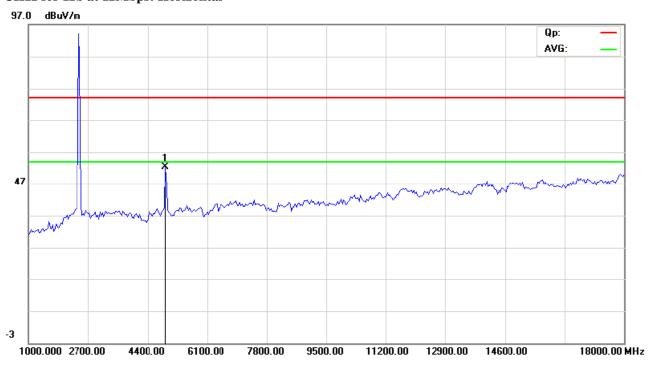
Date: 2016-05-03



### CH11 for 11b at 11Mbps: Vertical



### CH11 for 11b at 11Mbps: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

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

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.

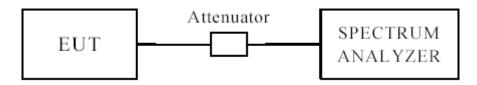
Report No.: FCC1604207 Page 30 of 75

Date: 2016-05-03



# 7.0 6dB Bandwidth Measurement

### 7.1 Test Setup



### 7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500 kHz

### 7.3 Test Procedure

- 1. Set resolution bandwidth (RBW) = 100 kHz
- 2. Set the video bandwidth (VBW)  $\geq$  3 x RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 7.4 Test Result

Page 31 of 75 Report No.: FCC1604207

Date: 2016-05-03



### 6dB Occupied Bandwidth

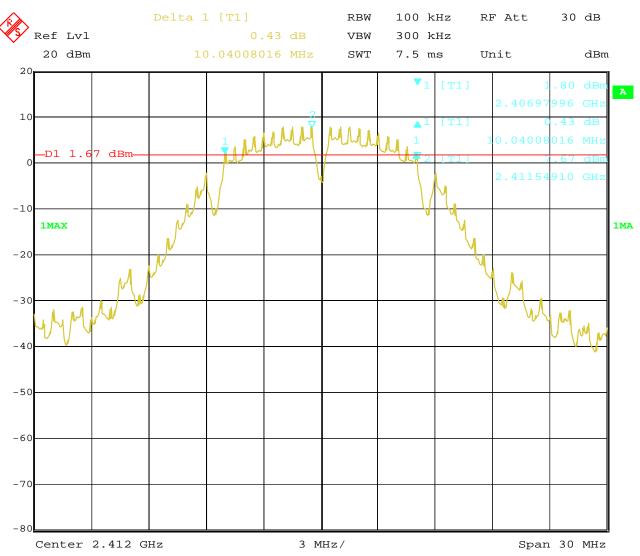
EUT	T WIFI WATER KETTLE Model AM-K01,A		AM-K01,AM-	01,AM-K02,AM-K03,AM-K04				
Mode		802.11b			Input Voltage		e 120V~	
Temperat	Temperature 24 deg. C, Humidity 56% RH		5% RH					
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)	6 dl	B Bandwidth (MHz)	M	Iinimum Limit (MHz)	Pass/ Fail
1		2412	1		10.04		0.5	Pass
6		2437	1		10.04		0.5	Pass
11		2462	1		10.04		0.5	Pass
1		2412	11		9.98		0.5	Pass
6		2437	11		9.98		0.5	Pass
11		2462	11		9.98		0.5	Pass

Report No.: FCC1604207 Page 32 of 75

Date: 2016-05-03



# 1. 802.11b at 1Mbps of CH01

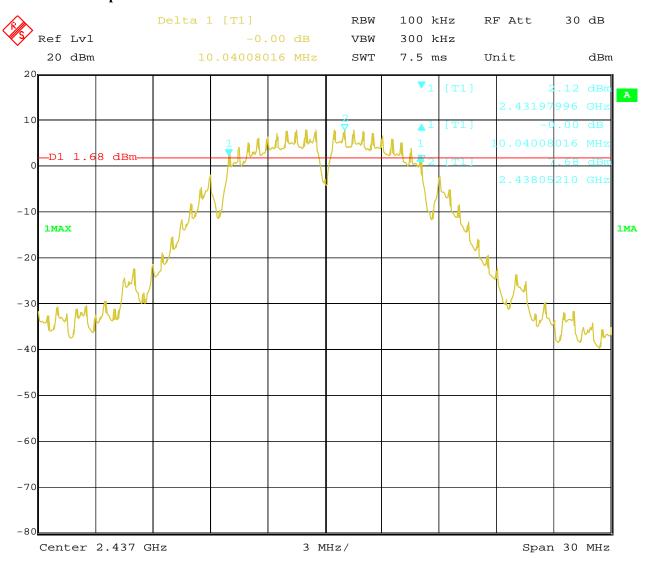


Report No.: FCC1604207 Page 33 of 75

Date: 2016-05-03



### 2. 802.11b at 1Mbps of CH06

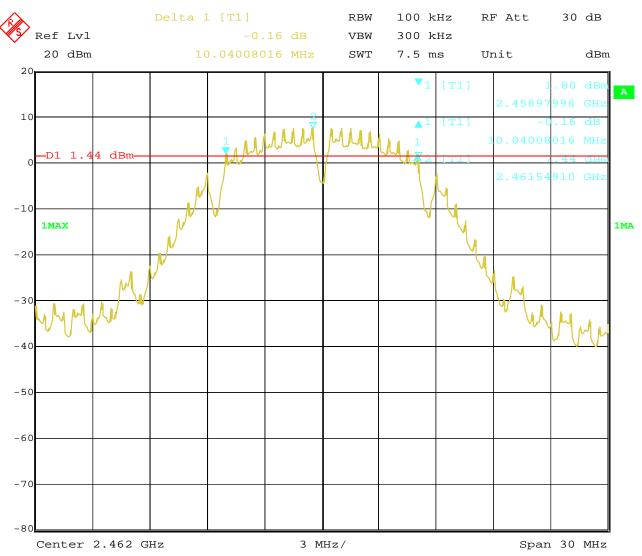


Report No.: FCC1604207 Page 34 of 75

Date: 2016-05-03



# 3. 802.11b at 1Mbps of CH11

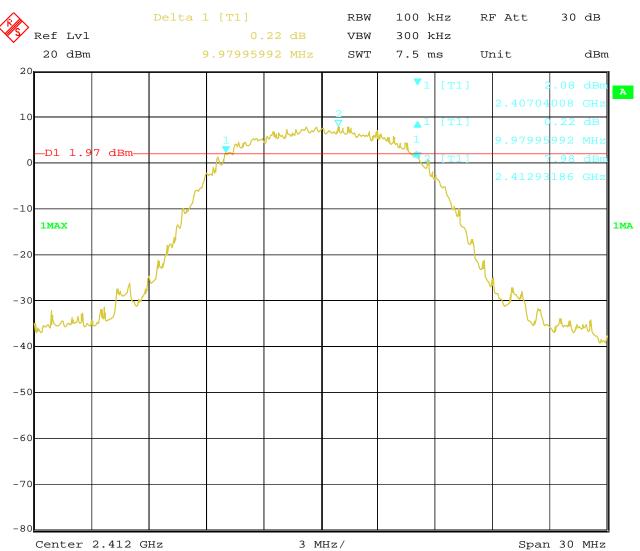


Report No.: FCC1604207 Page 35 of 75

Date: 2016-05-03



# 4. 802.11b at 11Mbps of CH01

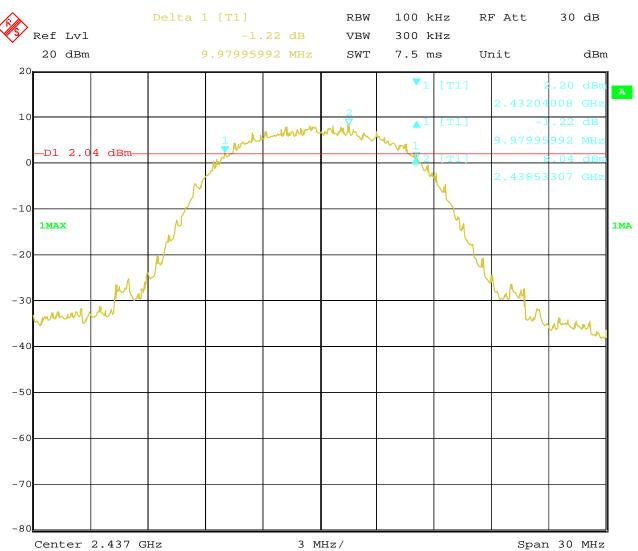


Page 36 of 75 Report No.: FCC1604207

Date: 2016-05-03



# 5. 802.11b at 11Mbps of CH06

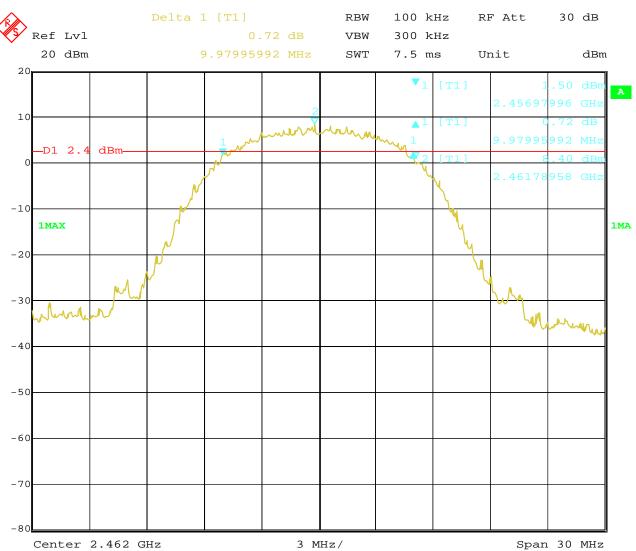


Report No.: FCC1604207 Page 37 of 75

Date: 2016-05-03



## 6. 802.11b at 11Mbps of CH11



Page 38 of 75 Report No.: FCC1604207

Date: 2016-05-03



### 6dB Occupied Bandwidth

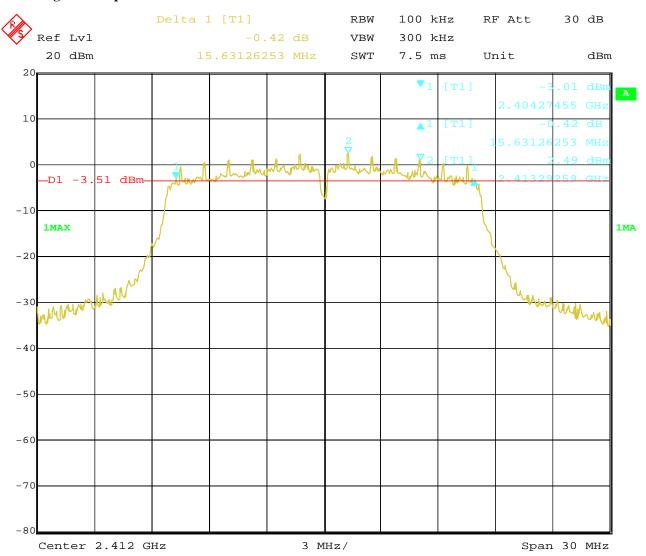
EUT		WIFI WAT	ER KETTI	LE	Model		AM-K01,AM-K02,AM-K03,AM-K04		
Mode		80	2.11g		Input Voltage			120V~	
Temperati	ure	24 0	deg. C,		Humidity			56% RH	
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)	6 dI	Bandwidth (MHz)	M	linimum Limit (MHz)	Pass/ Fail	
1		2412	54		15.63		0.5	Pass	
6		2437	54		15.63		0.5	Pass	
11		2462	54		15.63		0.5	Pass	

Report No.: FCC1604207 Page 39 of 75

Date: 2016-05-03



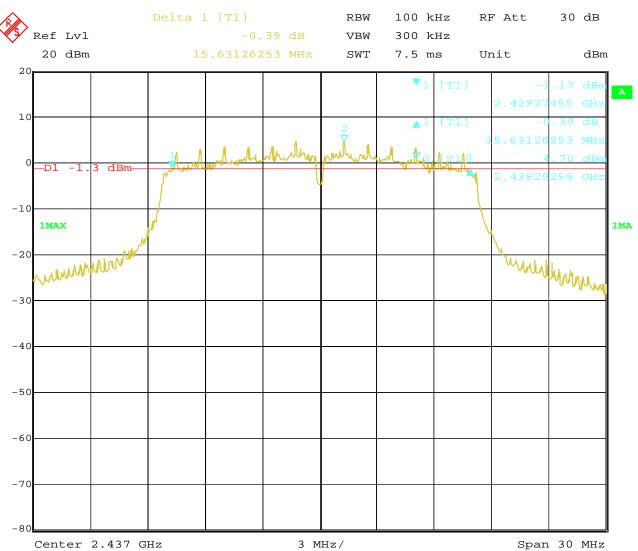
#### **Test Plots:**



Report No.: FCC1604207 Page 40 of 75

Date: 2016-05-03

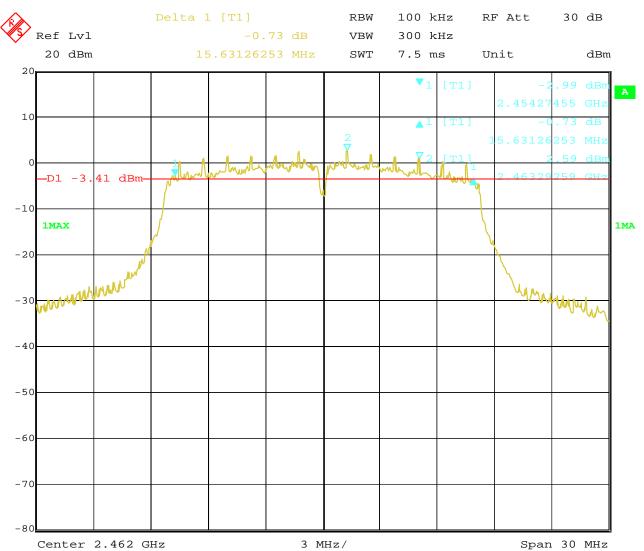




Report No.: FCC1604207 Page 41 of 75

Date: 2016-05-03





Report No.: FCC1604207

Date: 2016-05-03



Page 42 of 75

## 8. Maximum Output Power

### 8.1 Test Setup



### 8.2 Limits of Maximum Output Power

The Maximum Output Power Measurement is 30dBm.

#### **8.3 Test Procedure**

The RF power output was measured with a Power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate centre frequency.

Note: the Peak power were measured.

Date: 2016-05-03



#### **8.4Test Results**

EUT		WIFI WATER K	ETTLE	Model		AM-K01,A	M-K02,AM-K03,AM-K04
Mode		802.11b	2.11b Input Voltage		120V~		
Temperati	ure	24 deg. C	,	Humidity	1		56% RH
Channel	Cha	annel Frequency (MHz)	(	ower Output dBm)		wer Limit Pass/ Fail (dBm)	
	11Mbps						
1		2412	2	22.87		30	Pass
6		2437	2	22.19		30	Pass
11		2462	2	22.30		30	Pass
				1Mbps			
1		2412	19.15			30	Pass
6		2437	19.39			30	Pass
11		2462	-	18.98		30	Pass

Note: 1. The result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

2. The worse case was recorded

EUT		WIFI WATER KI	ETTLE	E Model		AM-K01,AM-K02,AM-K03,AM-K04	
Mode		802.11g		Input Voltage		120V~	
Temperat	ure	24 deg. C,		Humidity		56% RH	
Channel	Cha	annel Frequency (MHz)	Max. Power Output (dBm) Peak		P	ower Limit (dBm)	Pass/ Fail
1		2412		20.53		30	Pass
6		2437	22.23			30	Pass
11		2462		20.61		30	Pass

Note: 1. At finial test to get the worst-case emission at 54Mbps for CH01, CH06 and CH11

- 2. The result basic equation calculation as follow:
  - Max. Power Output = Power Reading + Cable loss + Attenuator
- 3. The worse case was recorded

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

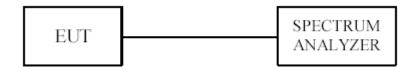
Report No.: FCC1604207 Page 44 of 75

Date: 2016-05-03



## 9. Power Spectral Density Measurement

### 9.1 Test Setup



#### 9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

#### 9.3 Test Procedure

- 1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
- 2. Set the RBW = 10 kHz.
- 3. Set the VBW  $\geq$  30 kHz.
- 4. Set the span to 1.5 times the DTS channel bandwidth.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode =  $\max$  hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
- 11. The resulting peak PSD level must be  $\leq 8$  dBm.

Page 45 of 75 Report No.: FCC1604207

Date: 2016-05-03



### 9.4Test Result

EUT	EUT WIFI WATER KETTLE Model		Model	AM-K01,AM		M-K02,AM-K03,AM-K04	
Mode		802.11b 11M	bps	Input Voltage		120V~	
Temperat	ure	24 deg. C.	,	Humidity		56% RH	
Channel	Cha	annel Frequency (MHz)		l RF Power Max wel (dBm)		imum Limit Pass/ Fail (dBm)	
				11Mbps			
1		2412		-1.68		8	Pass
6		2437		-2.18		8	Pass
11		2462		-1.99		8	Pass

EUT	EUT WIFI WATER KETTLE M		Model	Model		AM-K01,AM-K02,AM-K03,AM-K04		
Mode		802.11b 1Mt	ops	Input Voltage			120V~	
Temperat	ure	24 deg. C.	,	Humidity	Humidity		56% RH	
Channel	Cha	annel Frequency	Fina	l RF Power	Max	kimum Limit	Pass/ Fail	
Chamilei		(MHz)	Leve	el in (dBm)		(dBm)		
				1Mbps				
1		2412		-2.06		8	Pass	
6		2437	-2.42		8		Pass	
11		2462		-1.91		8	Pass	

Page 46 of 75 Report No.: FCC1604207

Date: 2016-05-03



EUT	EUT WIFI WATER KETTLE Model		AN	AM-K01,AM-K02,AM-K03,AM-K04				
Mode		802.11g 54M	[bps	Input Voltage	е	120V~		
Temperati	ure	24 deg. C	,	Humidity	Humidity 5		56% RH	
Channel	Cha	annel Frequency (MHz)	2 111441	Final RF Power Level in (dBm)		num Limit lBm)	Pass/ Fail	
				54Mbps				
1		2412		-7.09		8	Pass	
6		2437	-4.86			8	Pass	
11		2462		-6.06		8	Pass	

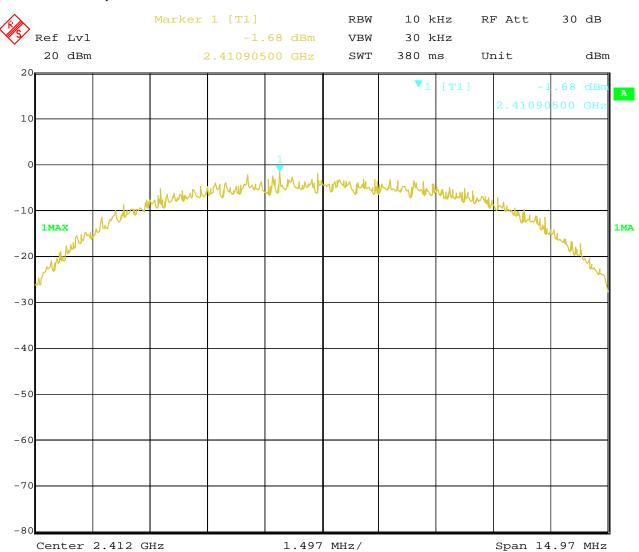
Report No.: FCC1604207 Page 47 of 75

Date: 2016-05-03



### 9.5 Photo of Power Spectral Density Measurement

1.802.11b at 11Mbps of CH01

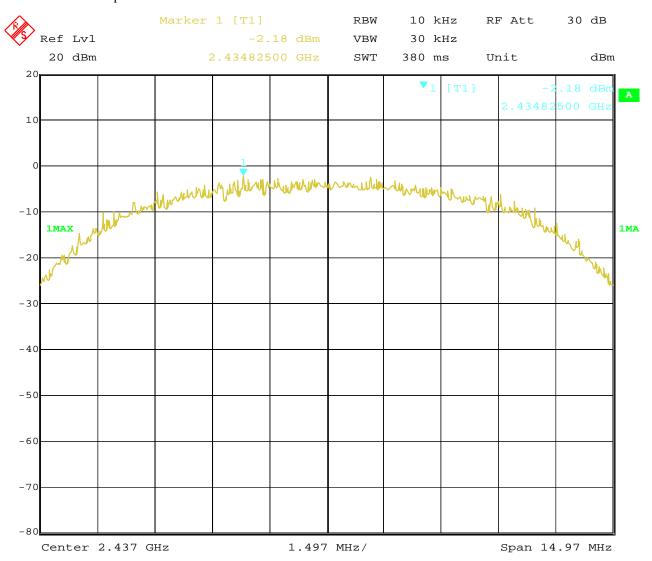


Report No.: FCC1604207 Page 48 of 75

Date: 2016-05-03



## 2. 802.11b at 11Mbps at CH06

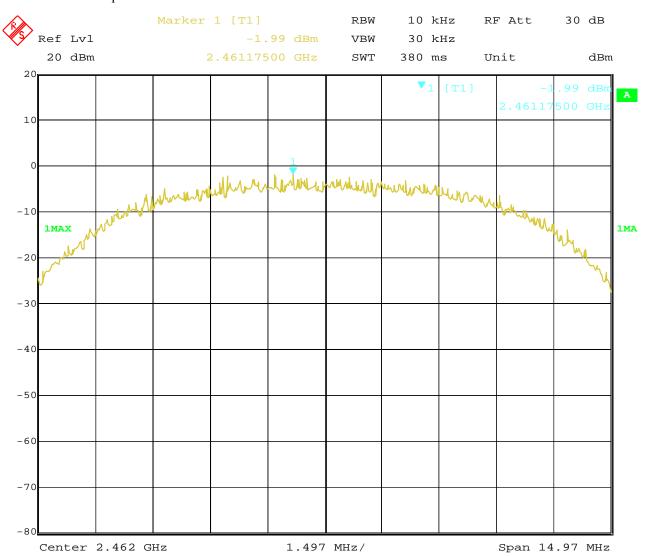


Report No.: FCC1604207 Page 49 of 75

Date: 2016-05-03



## 3. 802.11b at 11Mbps of CH11

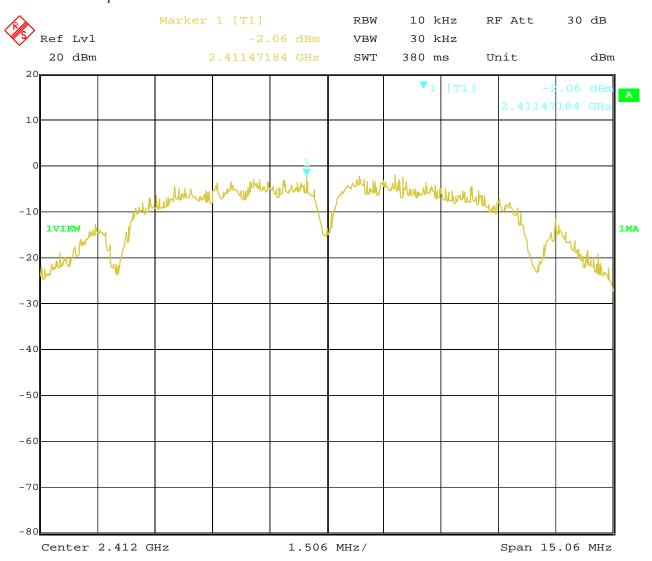


Page 50 of 75 Report No.: FCC1604207

Date: 2016-05-03



### 4. 802.11b at 1Mbps of CH1

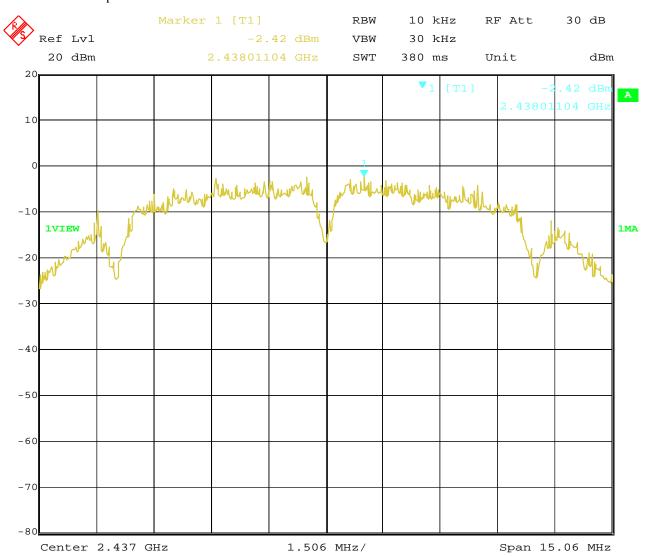


Page 51 of 75 Report No.: FCC1604207

Date: 2016-05-03



### 5. 802.11b at 1Mbps of CH6

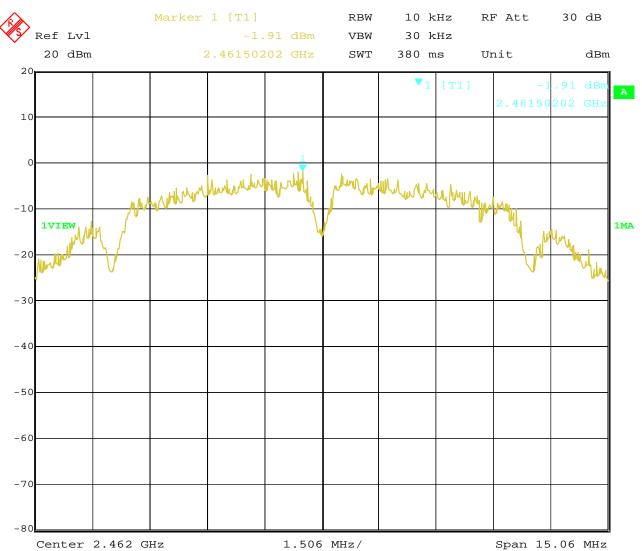


Report No.: FCC1604207 Page 52 of 75

Date: 2016-05-03



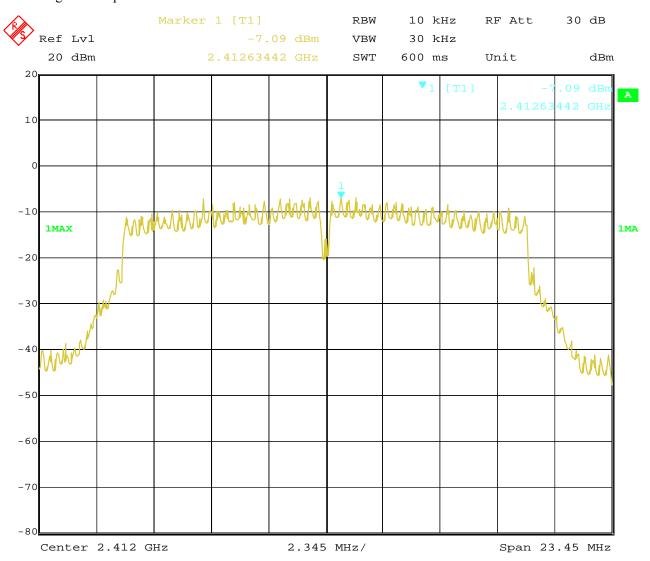
# 6. 802.11b at 1Mbps of CH11



Report No.: FCC1604207 Page 53 of 75

Date: 2016-05-03

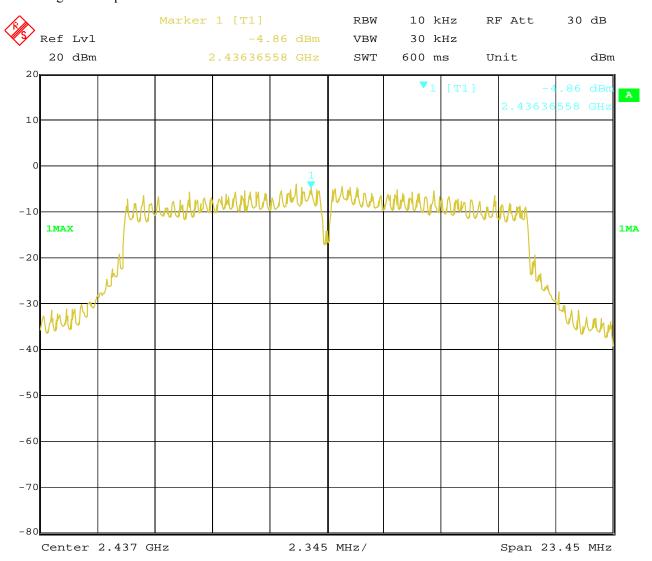




Report No.: FCC1604207 Page 54 of 75

Date: 2016-05-03

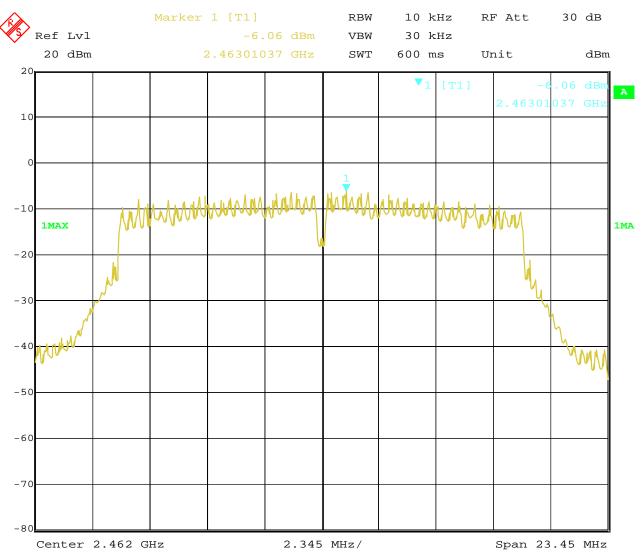




Page 55 of 75 Report No.: FCC1604207

Date: 2016-05-03



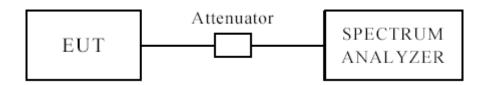


Report No.: FCC1604207 Page 56 of 75

Date: 2016-05-03



## 10 Out of Band Measurement 10.1 Test Setup for band edge



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

#### 10.2 Limits of Out of Band Emissions Measurement

- 1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
- 2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

#### **10.3 Test Procedure**

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of radiated emission test.( Peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=1MHz and RMS detector)

For bandage test, the spectrum set as follows: RBW=100, VBW=300 kHz. A conducted measurement used

#### 10.4 Test Result

Please see next pages

Note:. For band-edge measurement, the frequency from 30MHz-25GHz was tested. And It met the FCC rule.

Page 57 of 75

Report No.: FCC1604207

Date: 2016-05-03



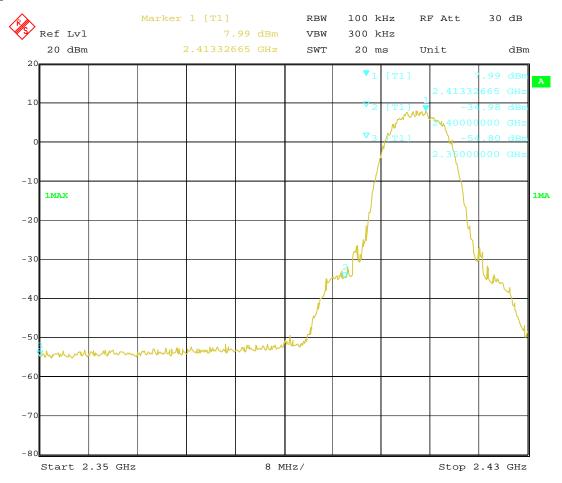
### For 802.11b mode

CH01 at 11Mbps

10.4 Band-edge and Restricted band Measurement

EUT	WIFI WATER KETTLE		Model	AM-K01,AM-K02,AM-K03,AM-K04
Mode	Keeping	Transmitting	Input Voltage	120V~
Temperature	24 (	deg. C,	Humidity	56% RH
Test Result:	]	Pass	Detector	PK
2400	PK (dBµV/m)	69.7	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)	42.6	Limit	54(dBμV/m)
2390	PK (dBµV/m)	50.2	Limit	74(dBμV/m)
	AV (dBμV/m)		Lillit	54(dBμV/m)

## **Test Figure:**



Note: The Max. FS in Restrict Band are measured in conventional method.

Page 58 of 75

Report No.: FCC1604207

Date: 2016-05-03

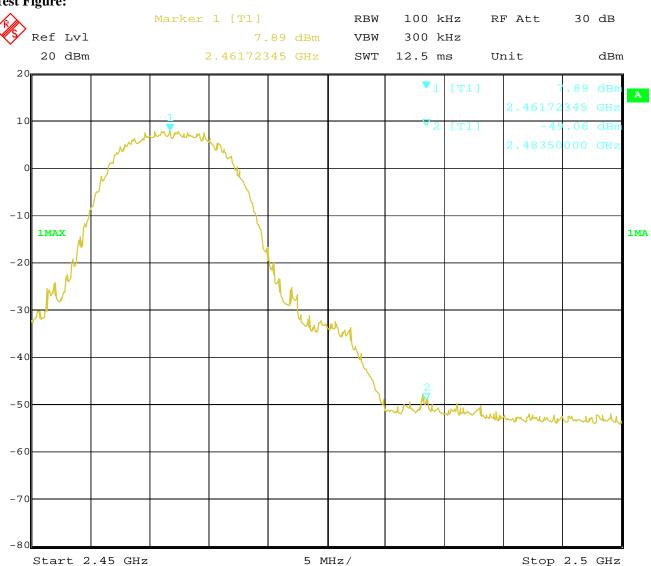


### CH11 at 11Mbps

#### **10.4** Band-edge and Restricted band Measurement

<u> </u>						
EUT	WIFI WATER KETTLE		WIFI WATER KETTLE		Model	AM-K01,AM-K02,AM-K03,AM-K04
Mode	Keeping	g Transmitting	Input Voltage	120V~		
Temperature	24 deg. C,		Humidity	56% RH		
Test Result:		Pass	Detector	PK		
2483.5	PK (dBµV/m)	55.2	T 114	$74(dB\mu V/m)$		
	AV (dBμV/m)	36.4	Limit	54(dBμV/m)		

### **Test Figure:**



Note: The Max. FS in Restrict Band are measured in conventional method.

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 59 of 75

Report No.: FCC1604207

Date: 2016-05-03



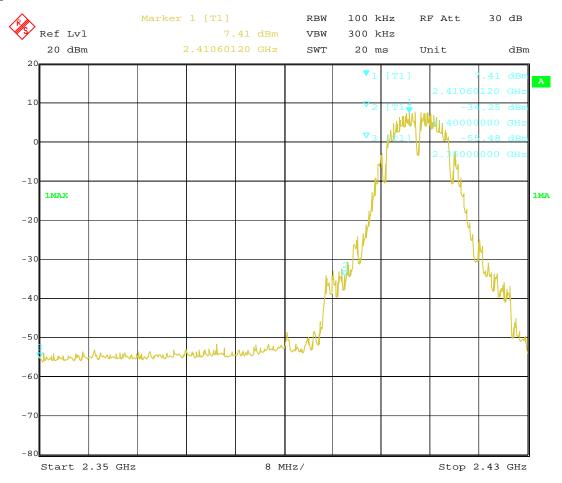
### For 802.11b mode

CH01 at 1Mbps

10.4 Band-edge and Restricted band Measurement

EUT	WIFI WATER KETTLE		Model	AM-K01,AM-K02,AM-K03,AM-K04
Mode	Keeping	Transmitting	Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	I	Pass	Detector	PK
2400	PK (dBμV/m)	69.3	Limit	74(dBμV/m)
	AV (dBμV/m)	41.5	Limit	54(dBµV/m)
2390	PK (dBµV/m)	49.6	Limit	74(dBμV/m)
	AV (dBμV/m)		Lillit	54(dBμV/m)

## **Test Figure:**



Note: The Max. FS in Restrict Band are measured in conventional method.

Page 60 of 75

Report No.: FCC1604207

Date: 2016-05-03

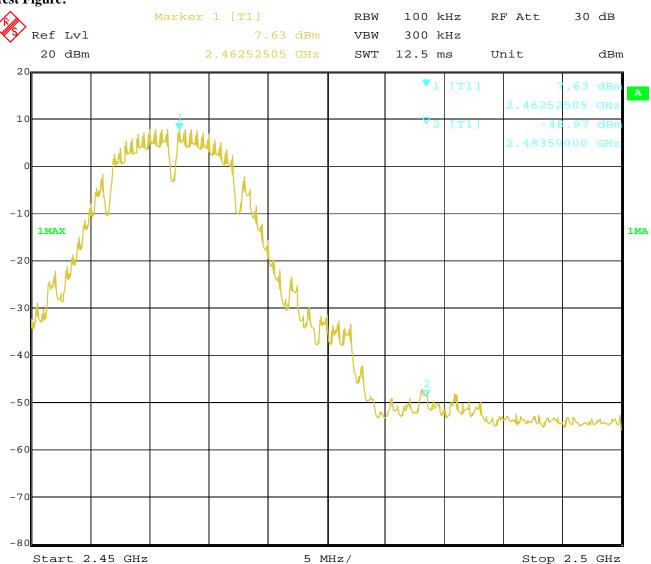


### CH11 at 1Mbps

#### **10.4** Band-edge and Restricted band Measurement

<u> </u>				
EUT	WIFI WATER KETTLE		Model	AM-K01,AM-K02,AM-K03,AM-K04
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:		Pass	Detector	PK
2483.5	PK (dBµV/m)	56.1	T in it	$74(dB\mu V/m)$
	AV (dBμV/m)	37.3	Limit	54(dBμV/m)

### **Test Figure:**



Note: The Max. FS in Restrict Band are measured in conventional method.

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 61 of 75

Report No.: FCC1604207

Date: 2016-05-03



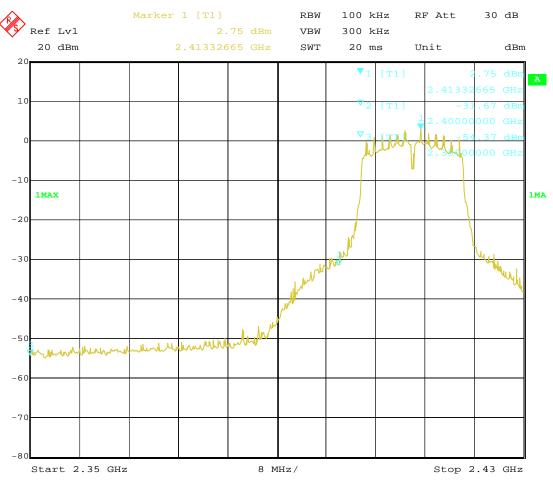
## For 802.11g mode

CH01 at 54Mbps

10.4 Band-edge and Restricted band Measurement

EUT	WIFI WATER KETTLE		Model	AM-K01,AM-K02,AM-K03,AM-K04
Mode	Keeping	Transmitting	Input Voltage	120V~
Temperature	24	deg. C,	Humidity	56% RH
Test Result:	]	Pass	Detector	PK
2400	PK (dBµV/m)	70.6	T ::4	$74(dB\mu V/m)$
	AV (dBμV/m)	51.8	Limit	54(dBμV/m)
2390	PK (dBµV/m)	59.3	Limit	74(dBμV/m)
	AV (dBμV/m)	31.5	Lillit	54(dBµV/m)

## **Test Figure:**



Note: The Max. FS in Restrict Band are measured in conventional method.

Page 62 of 75

Report No.: FCC1604207

Date: 2016-05-03

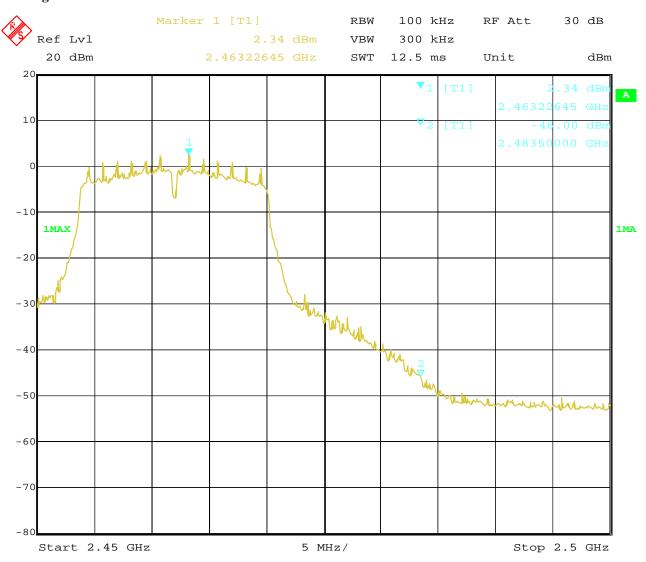


### CH11 at 54Mbps

#### **10.4** Band-edge and Restricted band Measurement

EUT	WIFI WATER KETTLE		Model		AM-K01,AM-K02,AM-K03,AM-K04	
Mode	Keeping Transmitting		Input Voltage		120V~	
Temperature	24 deg. C,		Humidity		56% RH	
Test Result:		Pass	Detec	ctor	PK	
2483.5	PK (dBµV/m)	58.8	T 1 14	$74(dB\mu V/m)$ $54(dB\mu V/m)$		
	AV (dBμV/m)	39.7	Limit			

### **Test Figure:**



Note: The Max. FS in Restrict Band are measured in conventional method.

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.: FCC1604207

Date: 2016-05-03



Page 63 of 75

## 11.0 Antenna Requirement

### 11.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

#### 11.2 Antenna Connected construction

PCB antenna used. The maximum Gain of the antennas is 0dBi.

Report No.: FCC1604207 Page 64 of 75

Date: 2016-05-03



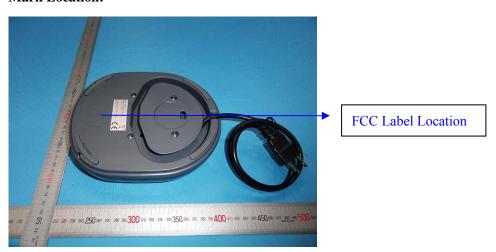
#### 12.0 FCC ID Label

### FCC ID: 2AH6O-AMK02

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:**



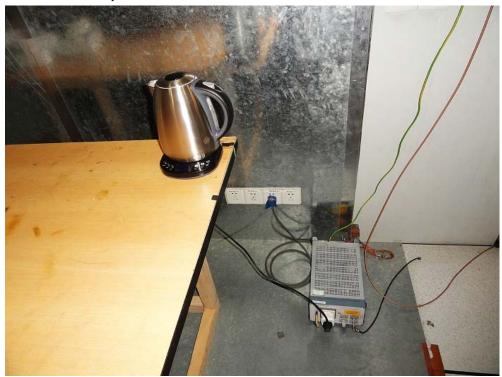
Page 65 of 75 Report No.: FCC1604207

Date: 2016-05-03



#### 13.0 **Photo of testing**

Conducted Emission Test Setup:



Page 66 of 75

Report No.: FCC1604207

Date: 2016-05-03



## Radiated Emission Test Setup:





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.: FCC1604207

Date: 2016-05-03



## Photographs - EUT

#### Outside 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.

Page 68 of 75

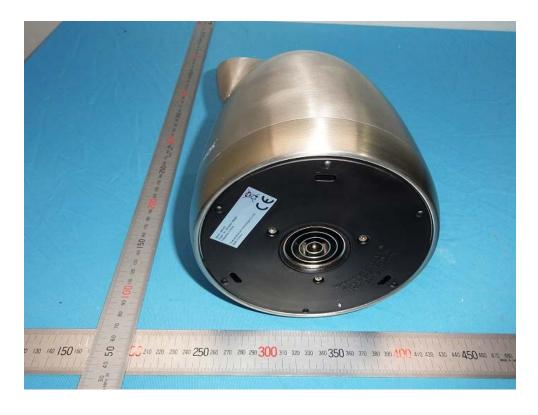
Report No.: FCC1604207

Date: 2016-05-03



Outside 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.

Page 69 of 75

Report No.: FCC1604207

Date: 2016-05-03



Outside 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.

Page 70 of 75

Report No.: FCC1604207

Date: 2016-05-03



Outside 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.

Page 71 of 75

Report No.: FCC1604207

Date: 2016-05-03



Inside 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.

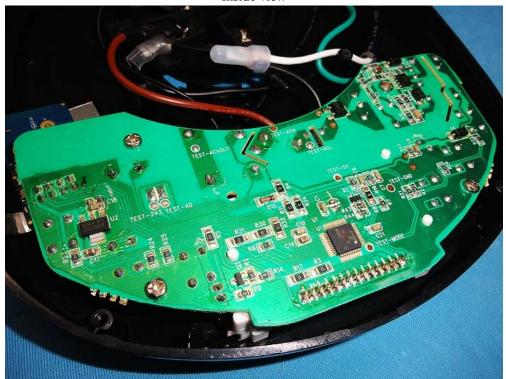
Page 72 of 75

Report No.: FCC1604207

Date: 2016-05-03



Inside 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.

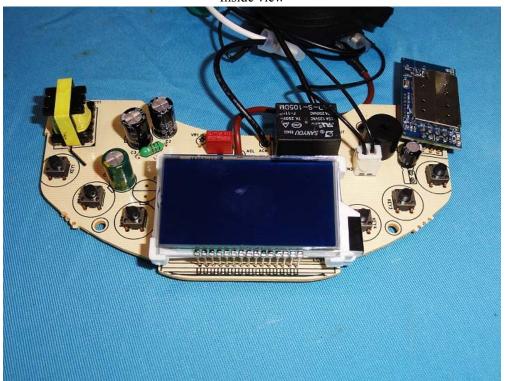
Page 73 of 75

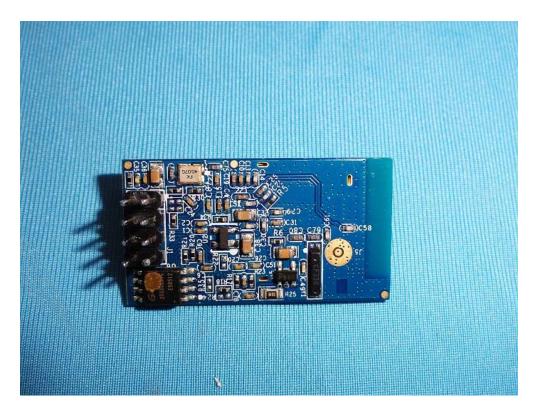
Report No.: FCC1604207

Date: 2016-05-03



Inside 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.

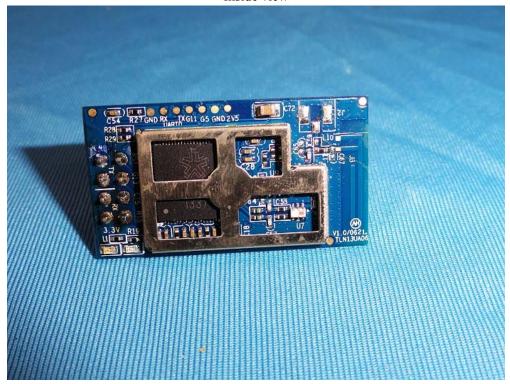
Page 74 of 75

Report No.: FCC1604207

Date: 2016-05-03



Inside 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.

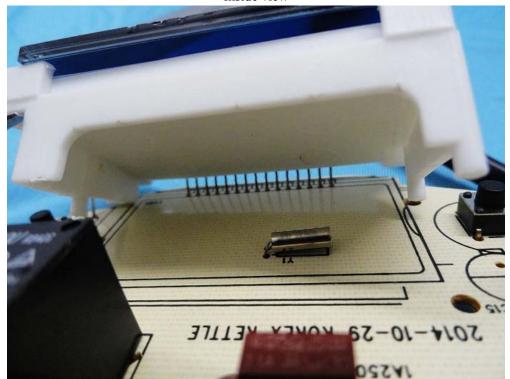
Page 75 of 75

Report No.: FCC1604207

Date: 2016-05-03



Inside view





**End of the report** 

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.