



## FCC TEST REPORT

ShenZhen XUNWEIJIA Technology Development LTD

Wireless microphone Receiver

Test Model: K037B

Additional Model No.: K035, K037, K030, K025

Prepared for : ShenZhen XUNWEIJIA Technology Development LTD  
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Date of receipt of test sample : December 15, 2020  
Number of tested samples : 1  
Serial number : Prototype  
Date of Test : December 15, 2020 ~ December 16, 2020  
Date of Report : December 18, 2020





## FCC TEST REPORT

### FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4 -2014

**Report Reference No. .... : LCS201201172AE**

Date Of Issue ..... : December 18, 2020

**Testing Laboratory Name..... : Shenzhen LCS Compliance Testing Laboratory Ltd.**

Address..... : 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park  
Yabianxueziwei, Shajing Street, Baoan District, Shenzhen,  
518000, China

Testing Location/ Procedure.... : Full application of Harmonised standards  Partial application of Harmonised standards   
Other standard testing method

**Applicant's Name..... : ShenZhen XUNWEIJIA Technology Development LTD**

Address..... : Room1103A, Jinhua building, Gaofeng road, Dalang,  
longhua new district, Baoan, Shenzhen, China

#### Test Specification

Standard..... : FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4 -2014

Test Report Form No..... : LCSEMC-1.0

TRF Originator..... : Shenzhen LCS Compliance Testing Laboratory Ltd.

Master TRF..... : Dated 2011-03

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**Test Item Description..... : Wireless microphone Receiver**

Trade Mark..... : FIFINE

Test Model..... : K037B

Ratings..... : Input: DC3V by battery 2\*AAA

**Result ..... : Positive**

**Compiled by:**

*Jack Liu*

**Supervised by:**

*Jin Wang*

**Approved by:**

*Gavin Liang*

Jack Liu/ Administrators

Jin Wang/ Technique principal

Gavin Liang/ Manager



# FCC -- TEST REPORT

Test Report No. : LCS201201172AE	<u>December 18, 2020</u> Date of issue
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Test Model..... : K037B

EUT..... : Wireless microphone Receiver

**Applicant..... : ShenZhen XUNWEIJIA Technology Development LTD**

Address..... : Room1103A, Jinhua building, Gaofeng road, Dalang, longhua new district, Baoan, Shenzhen, China

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**Manufacturer..... : ShenZhen XUNWEIJIA Technology Development LTD**

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**Factory..... : ShenZhen XUNWEIJIA Technology Development LTD**

Address..... : Room1103A, Jinhua building, Gaofeng road, Dalang, longhua new district, Baoan, Shenzhen, China

Telephone..... : /

Fax..... : /

**Test Result** according to the standards on page 6: **Positive**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.



## Revision History

Revision	Issue Date	Revisions	Revised By
000	December 18, 2020	Initial Issue	Gavin Liang



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## 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

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

EMISSION			
Description of Test Item	Standard	Limits	Results
Conducted disturbance at mains terminals	FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4 -2014	Class B	N/A
Radiated disturbance	FCC 47 CFR Part 15 Subpart B, Class B, ANSI C63.4 -2014	Class B	PASS

N/A is an abbreviation for Not Applicable.

Test mode:		
Mode	USB	Record



## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

EUT : Wireless microphone Receiver

Trade Mark : FIFINE

Test Model : K037B

Additional Model : K035, K037, K030, K025  
Note:For example, the wireless microphone model is called 1,2,3,4,5,6....  
A receiver has only one K037B, the wireless microphone model 1 and receiver are used and shipped together and new model name is A, microphone model 2 and receiver are used the new model is B, microphone model 3 and receiver, are used the new model is the C.....

Model Declaration : PCB board, structure and internal of these model(s) are the same, So no additional models were tested

Power Supply : Input: DC3V by battery 2\*AAA

EUT Clock Frequency :  $\leq 108\text{MHz}$

### 2.2. Support Equipment List

Name	Manufacturers	M/N	S/N
--	--	--	--

### 2.3. Description of Test Facility

Site Description  
EMC Lab. : NVLAP Accreditation Code is 600167-0.  
FCC Designation Number is CN5024.  
CAB identifier is CN0071.  
CNAS Registration Number is L4595.



## 2.4. Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

## 2.5. Measurement Uncertainty

Test	Parameters	Expanded Uncertainty ( $U_{lab}$ )	Expanded Uncertainty ( $U_{cispr}$ )
Conducted Emission	Level accuracy (9kHz to 150kHz) (150kHz to 30MHz)	$\pm 2.63$ dB $\pm 2.35$ dB	$\pm 3.8$ dB $\pm 3.4$ dB
Power Disturbance	Level accuracy (30MHz to 300MHz)	$\pm 2.90$ dB	$\pm 4.5$ dB
Electromagnetic Radiated Emission (3-loop)	Level accuracy (9kHz to 30MHz)	$\pm 3.60$ dB	$\pm 3.3$ dB
Radiated Emission	Level accuracy (9kHz to 30MHz)	$\pm 3.68$ dB	N/A
Radiated Emission	Level accuracy (30MHz to 1000MHz)	$\pm 3.48$ dB	$\pm 5.3$ dB
Radiated Emission	Level accuracy (above 1000MHz)	$\pm 3.90$ dB	$\pm 5.2$ dB
Mains Harmonic	Voltage	$\pm 0.510\%$	N/A
Voltage Fluctuations & Flicker	Voltage	$\pm 0.510\%$	N/A

- (1) Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus.
- (2) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

### 3. TEST RESULTS

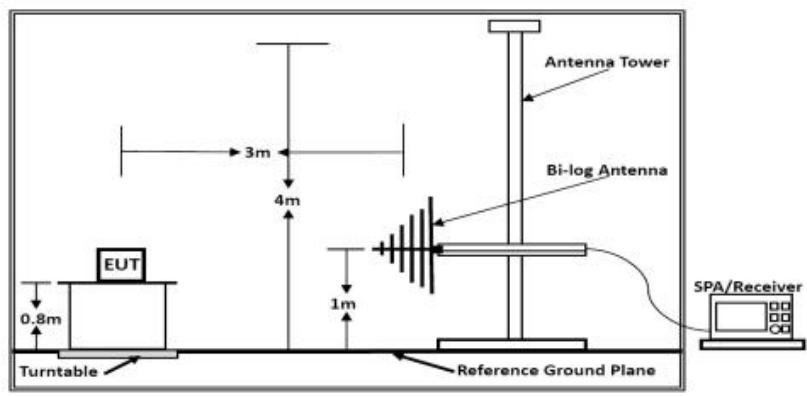
#### 3.1. Radiated Emission Measurement

##### 3.1.1. Test Equipment

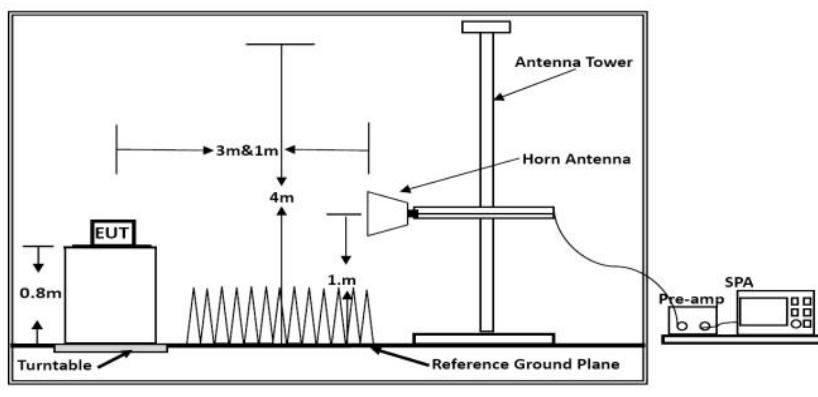
The following test equipments are used during the radiated emission measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Software	EZ	EZ-EMC	/	N/A	N/A
2	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2018-07-26	2021-07-25
3	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2018-07-02	2021-07-01
4	EMI Test Receiver	R&S	ESR 7	101181	2020-06-22	2021-06-21
5	Broadband Preamplifier	/	BP-01M18G	P190501	2020-06-22	2021-06-21

##### 3.1.2. Block Diagram of Test Setup



Below 1GHz



Above 1GHz

### 3.1.3. Radiated Emission Limit (Class B)

#### Limits for Radiated Disturbance Below 1GHz

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu$ V/m	dB( $\mu$ V)/m
30 ~ 88	3	100	40
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46
960 ~ 1000	3	500	54

Remark: (1) Emission level (dB) $\mu$ V = 20 log Emission level  $\mu$ V/m  
(2) The smaller limit shall apply at the cross point between two frequency bands.  
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

#### Limits for Radiated Emission Above 1GHz

Frequency (MHz)	Distance (Meters)	Peak Limit (dB $\mu$ V/m)	Average Limit (dB $\mu$ V/m)
Above 1000	3	74	54

\*\*\*Note: The lower limit applies at the transition frequency.

### 3.1.4. EUT Configuration on Measurement

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

### 3.1.5. Operating Condition of EUT

3.5.1. Setup the EUT as shown in Section 3.2.

3.5.2. Let the EUT work in test Mode (Mode 1) and measure it.

### 3.1.6. Test Procedure

EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level.

Broadband antenna (calibrated by-log antenna) is used as receiving antenna.

Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission measurement.

The bandwidth of the EMI test receiver is set at 120kHz, 300kHz.

The frequency range from 30MHz to 1000MHz is checked.

The frequency range from 1GHz to the frequency which about 5th carrier harmonic or 6GHz is checked.

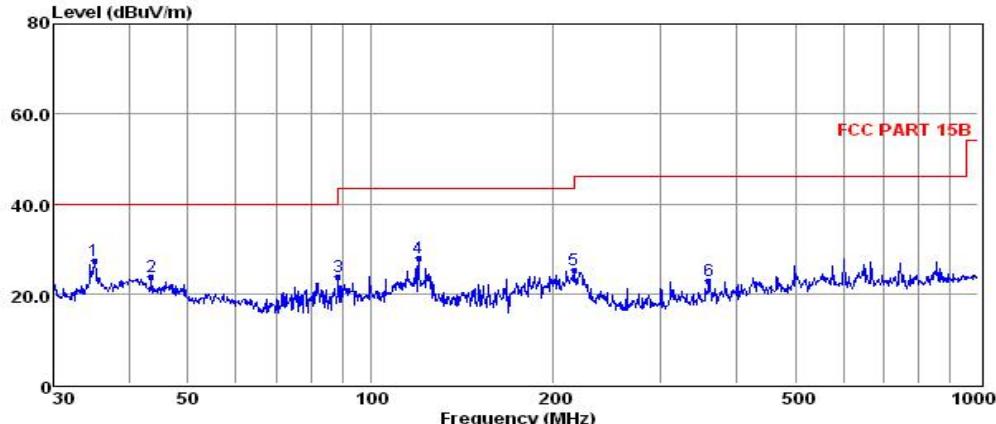
### 3.1.7. Test Results

**PASS.**

The test result please refer to the next page.



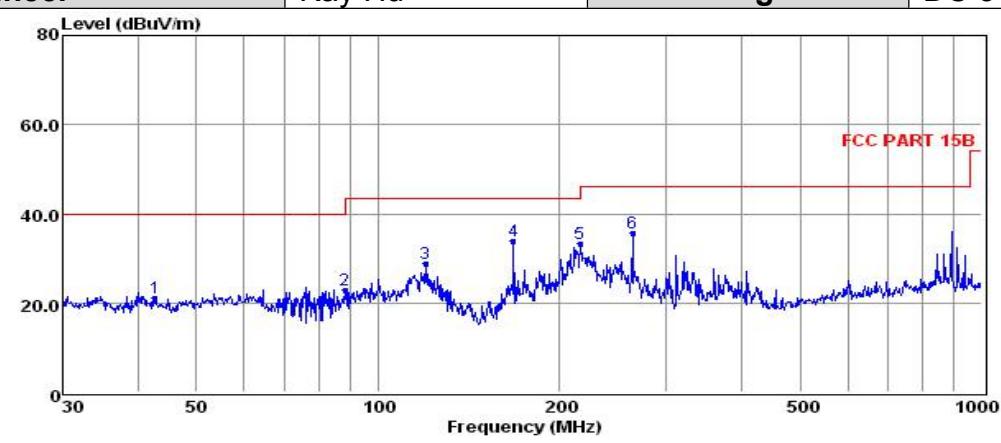
<b>Test Model</b>	K037B	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	22.6°C, 53.6% RH	<b>Detector Function</b>	Quasi-peak
<b>Pol</b>	Vertical	<b>Distance</b>	3m
<b>Test Engineer</b>	Kay Hu	<b>Test Voltage</b>	DC 3V



Freq	Reading	CabLos	Antfac	Measured		Limit	Over	Remark
				MHz	dBuV	dB	dB/m	
1	35.00	14.74	0.41	12.30	27.45	40.00	-12.55	QP
2	43.51	9.81	0.41	13.56	23.78	40.00	-16.22	QP
3	88.34	11.62	0.68	11.37	23.67	43.50	-19.83	QP
4	119.86	16.89	0.64	10.51	28.04	43.50	-15.46	QP
5	216.02	13.32	0.88	11.07	25.27	46.00	-20.73	QP
6	360.45	7.27	1.18	14.43	22.88	46.00	-23.12	QP

Note: 1. All readings are Quasi-peak values.  
 2. Measured= Reading + Antenna Factor + Cable Loss  
 3. The emission that are 20db below the official limit are not reported

<b>Test Model</b>	K037B	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	22.6°C, 53.6% RH	<b>Detector Function</b>	Quasi-peak
<b>Pol</b>	Horizontal	<b>Distance</b>	3m
<b>Test Engineer</b>	Kay Hu	<b>Test Voltage</b>	DC 3V



Freq	Reading	CabLos	Antfac	Measured		Limit	Over	Remark
				MHz	dBuV	dB	dB/m	
1	42.75	6.95	0.50	13.56	21.01	40.00	-18.99	QP
2	88.03	11.03	0.68	11.27	22.98	43.50	-20.52	QP
3	119.86	17.78	0.64	10.51	28.93	43.50	-14.57	QP
4	167.82	24.17	0.77	8.90	33.84	43.50	-9.66	QP
5	216.02	21.22	0.88	11.07	33.17	46.00	-12.83	QP
6	263.82	22.43	1.03	12.17	35.63	46.00	-10.37	QP

Note: 1. All readings are Quasi-peak values.  
 2. Measured= Reading + Antenna Factor + Cable Loss  
 3. The emission that are 20db below the official limit are not reported

**Note: Pre-Scan all mode, Thus record worse case mode result in this report.**



## 4. PHOTOGRAPHS OF TEST SETUP

Please refer to separated files Appendix A for Test Setup Photographs

## 5. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Please refer to separated files Appendix B for External Photos of EUT

Please refer to separated files Appendix C for Internal Photos of EUT



-----THE END OF TEST REPORT-----