

# OTA TEST REPORT

**Applicant**      Shenzhen Feixun Lianke Electronics Co., Ltd

**Product**          White Rubber stick 2.4G antenna

**Issue Date**        March 13, 2023

Shenzhen Fu Bang Wireless Technology Co., Ltd. tested the above equipment in accordance with the requirements in **ANTI/IEEE Std 149-2008**. The test results show that the equipment tested is capable of demonstrating compliance with the Requirements as documented in this report.

**Prepared by:**    Lunkang Yan

**Approved by:**    Dan Liu

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Shenzhen*

# 1. Test Laboratory

## 1.1 Notes of the Test report

This report shall not be reproduced in full or partial. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of applicable standards stated above.

## 1.2 Test facility

**GTS1800** Microwave Anechoic Chamber : testing frequency ranges from 600MHz to 6GHz .

## 1.3 Testing Location

Company: Shenzhen Fu Bang Wireless Technology Co., Ltd

Address: Room 302, Lianjian Industry Part, Huarong road, Longhua District,  
Shenzhen, P.R. China

Contact: lunkang Yan

Telephone: 13760182610

E-mail: 646363118@qq.com

## 1.4 Laboratory Environment

Temperature	Min.= 19℃, Max.=25℃	
Relative humidity	Min.=40%, Max.=72%	
Shield effect	0.6-7GHz	>100dB
Ground resistance	<0.5 Ω	

## 2. General Description of Equipment under Test

### 2.1 Applicant and Manufacturer information

<b>Applicant Name</b>	Shenzhen Feixun Lianke Electronics Co., Ltd
<b>Applicant address</b>	5th floor, Building 2, Dawokou Factory, Jiuwei Community, Hangcheng Street, Bao'an District, Shenzhen
<b>Manufacturer Name</b>	Shenzhen Feixun Lianke Electronics Co., Ltd
<b>Manufacturer address</b>	5th floor, Building 2, Dawokou Factory, Jiuwei Community, Hangcheng Street, Bao'an District, Shenzhen

### 2.2 General information

EUT Description	
Product Name	AH WiFi Extender
Model	White Rubber stick 2.4G antenna
HW Version	V1.0
SW Version	100
Antenna Type	White Rubber stick
Antenna Manufacturer	Shenzhen Feixun Lianke Electronics Co., Ltd
Test Frequency	2400MHz-2500.GHz

### 2.3 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test Method: **ANSI/IEEE Std 149-2008**

## 3. Test Conditions

### 3.1 Test Configuration

The method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test (EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 1m.

### 3.2 Test Measurement

**Spherical coordinate system**

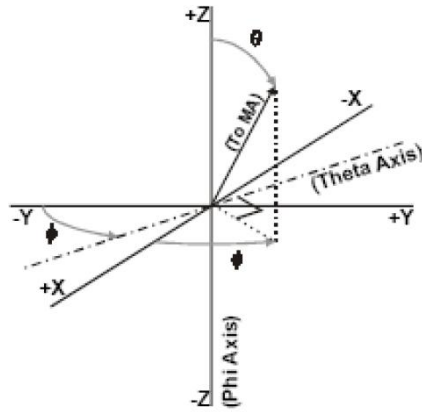
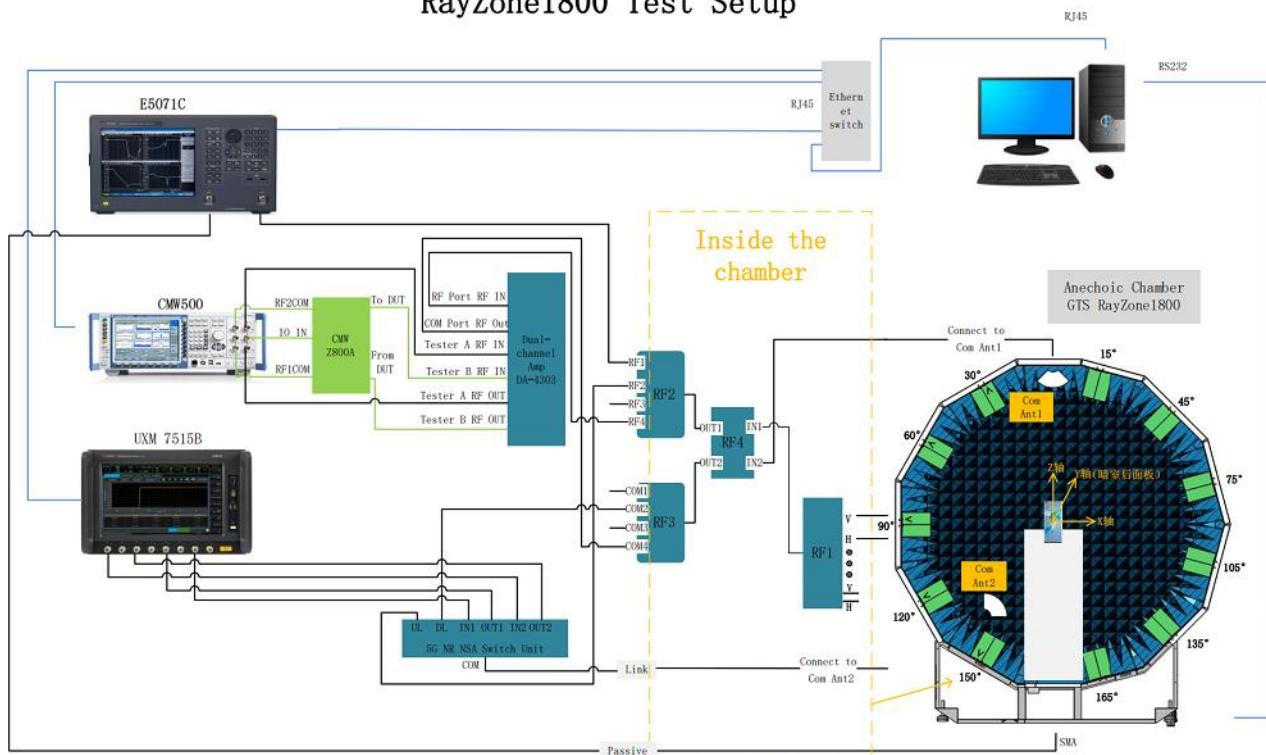


Figure 1 Test coordinate system

Note: Theta is from 0-180degree. Phi is from EUT and record the Date, the step of rotation is 15 degree.

### Test Setup

#### RayZone1800 Test Setup



## 4. Test Results

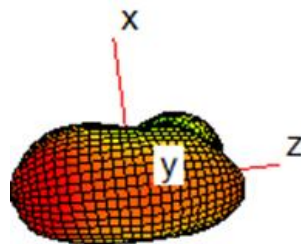
### 4.1 White Rubber stick 2.4G antenna Gain and Efficiency

Model	Test State	Frequency (MHz)	Efficiency (%)	Gain (dBi)	Frequency (MHz)	Efficiency (%)	Gain (dBi)	Note
	Free Space	2400	58.3	3.52				
		2410	62.15	3.86				
		2420	61.13	4.01				
		2430	70.1	3.94				
		2440	68.78	3.87				
		2450	74.11	4.07				
		2460	71.25	3.95				
		2470	74.1	3.58				
		2480	70.69	3.95				
		2490	70.64	4.03				
		2500	71.21	4.13				

## 5. Equipment List

Type of Equipment	Manufacture	Model Number
Network Analyzer	Key sight	E5071C
Switch control System	GTS	RayZone1800
Software	GTS	MaxSign 100 Patten Measurement software

### ANNEX A 3-D Patten Plots



2400MHz

## ANNEX B: The EUT Appearance and Test Configuration

### B.1 EUT Appearance



### B.2 Test Configuration

