

# Antenna sample

## admission letter

### The Main Antenna Sample Confirmation

Customer Name					
Project Name	The ANT wire antenna	Date	2023-2-23		
Material Number	2.4G antenna (white)	Notes	Electronic wire		
Frequency Range	Bluetooth 2.4G (2400 MHz–2500 MHz)				
Designed By	RF Engineer	Structural Enginer			
Checked By	Engineering Manager				
Customer Confirmation <i>Client's Approval</i>					

design unit:

Address: Chenghai, Guangdong, China

## 1 The wire internal material

main material	range of application	remarks
Clear PVC-adhesive material	Outside of the wire is used	environmental protection
copper wire	Lead conductor copper diameter of 0.14	environmental protection
Environmental tin	The wire is covered with tin	environmental protection

## 2 Product performance

Specifications and dimensions

name of a part	scope of application	wire length	Wire color	surface
2.4G antenna (white)	The wire on the board	35MM	white	No surface damage, scratch Traces, oil stains and other defects

## 3 Wire performance

order number	project	standard
1	withstand voltage	60V
2	Current resistance	1500MA
3	contact resistance	30m Q MAX
4	insulation resistance	1000m Q MIX
5	pulling	0.9 Kg
6	temperature resistance	80 Degrees

## 4. Reliability test

order number	project	standard	test method
1	Excluding 16P and ROHS	The 16 components were less than 0.1%	Third-party authoritative testing agency (such as: SGS)

## 5 The shelf life

6 months after the delivery

## **6 Notes for use**

Note: The temperature should not exceed 80°C, and the current should not be above 1. 5A.

## 7 Illustration



Note: 2.4G antenna specification is 7 core 0.14 copper diameter bare copper wire outer wire diameter 1.3MM wire, white, length of 35MM, wire head peeling 3MM tin. Meet the environmental protection standards: EU EN 71 (19E), ROHS, PAHS, 6P ~ 16P, Europe and America CPSIA , HR 4040.

## 8 Appendix

### Product Specification

#### A .Electrical Characteristics

**Frequency 2400MHz ~2500MHz**

**VSWR <3.0**

**Efficiency >30%**

**Impedance 50 Ohm**

**Polarization Line**

**Gain 0DBi**

#### B .Material & Mechanical Characteristics

**Material of Radiator Cu**

**Cable Type 1.0 19P in white**

**Connector Type : NO**

**D imension**

**C .Environmental**

**Operation Temperature - 30 °C ~ + 80 °C**

**Storage Temperature - 30 °C ~ + 85 °C**

### Test Equipment & Conditions

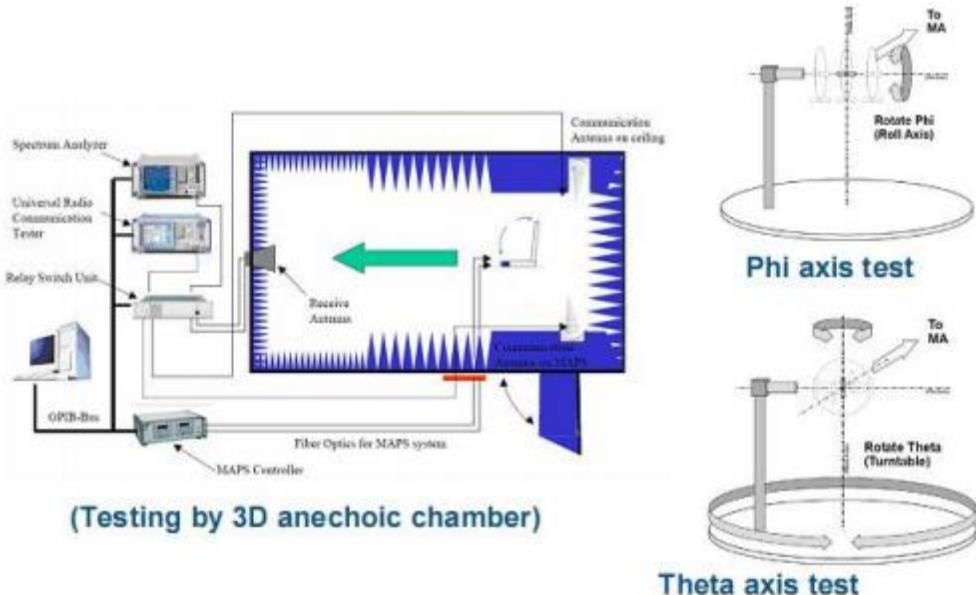
**1 . Network Analyzers :**

**Agilent 8753D 5071B**

**2 . Communications Test Set :**

Agilent E 5515C

### 3 . 3D Chamber Test System Efficiency & Gain



### Efficiency & Gain

2.40	-0.00
.4402	-0.11
2.48	-0.13

### Radiation Pattern

