

RoHS

Compliance

CUSTOMER

PART NO

REV.

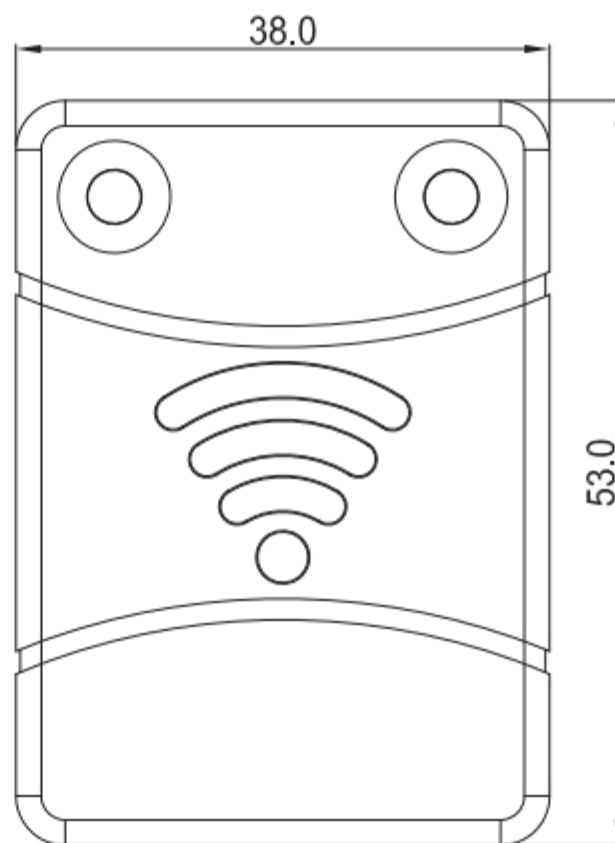
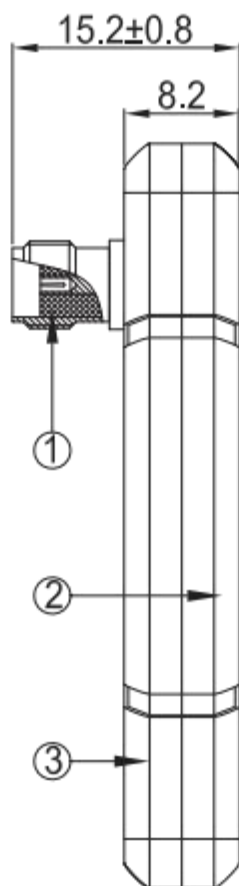


DESCRIPTION

首次发行

DATE

2017.07.25



|    |               |             |          |               |      |
|----|---------------|-------------|----------|---------------|------|
| 3  | Lower Cabinet | 53.0*38.0mm | ABS      | PAL100XXA.P01 | 1    |
| 2  | Top Cabinet   | 53.0*38.0mm | ABS      | PAL100XXA.P01 | 1    |
| 1  | SMA Female    | Au Plated   | Cu       | CON100XXA.P01 | 1    |
| NO | PART NAME     | DESCRIPTION | Material | Part Number   | Q.TY |

PART NAME: RF Antenna

PART NO.: YJ006A.100009.A01

DATE: 2017-07-25

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance

陈国强

文雪

陈兴成

UNITS: mm

X.X ±0.50

SCALE: 1/1

X.XX±0.15

REVISION: A

X° ±3°

天线规格

Antenna Specification

| Electrical Properties |                            |
|-----------------------|----------------------------|
| Frequency             | 824-960MHz<br>1710-2690MHz |
| Impedance             | 50 Ohm Nominal             |
| V.S.W.R               | See Page 6                 |
| Return Loss           | See Page 6                 |
| Radiation             | Omni-directional           |
| Gain (Peak)           | See Page 9 ~ 11            |
| Polarization          | Linear                     |
| Connector             | SMA Female                 |
| Physical Properties   |                            |
| Antenna Material      | ABS                        |
| Cable Type            | None                       |
| Operating Temp.       | -10 ~ +60。 C               |
| Storage Temp.         | -10 ~ +70。 C               |
| Cable Color           | Black                      |



天线规格

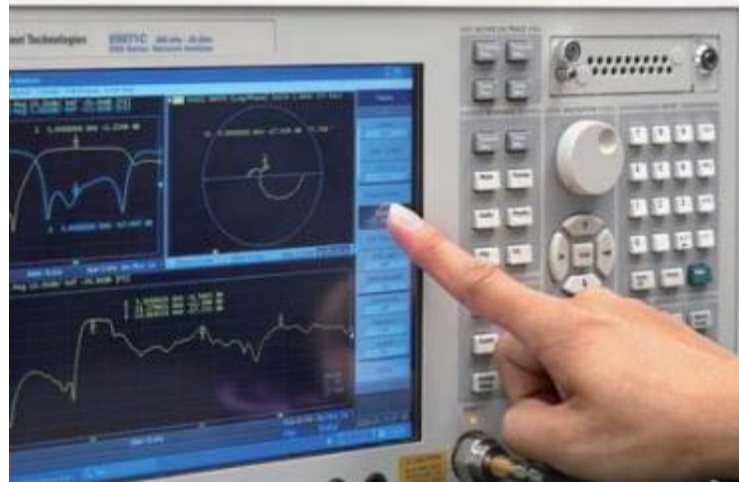
Antenna Specification

| Electrical Properties |                            |
|-----------------------|----------------------------|
| Frequency             | 2.4-2.5GHz<br>5.15-5.85GHz |
| Impedance             | 50 Ohm Nominal             |
| V.S.W.R               | See Page 7                 |
| Return Loss           | See Page 7                 |
| Radiation             | Omni-directional           |
| Gain (Peak)           | See Page 12~13             |
| Polarization          | Linear                     |
| Connector             | SMA Female                 |
| Physical Properties   |                            |
| Antenna Material      | ABS                        |
| Cable Type            | None                       |
| Operating Temp.       | -10 ~ +60。 C               |
| Storage Temp.         | -10 ~ +70。 C               |
| Cable Color           | Black                      |

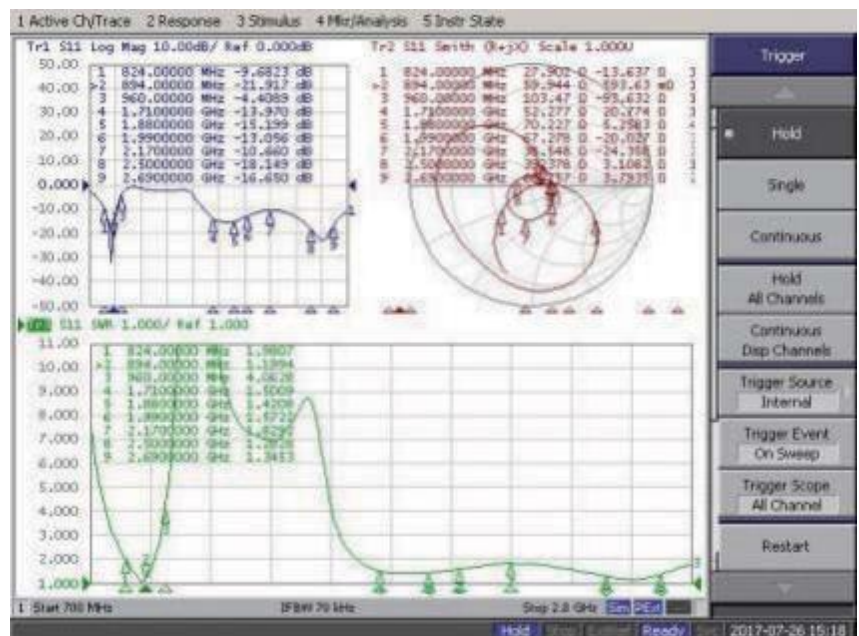


# Antenna Performance Test

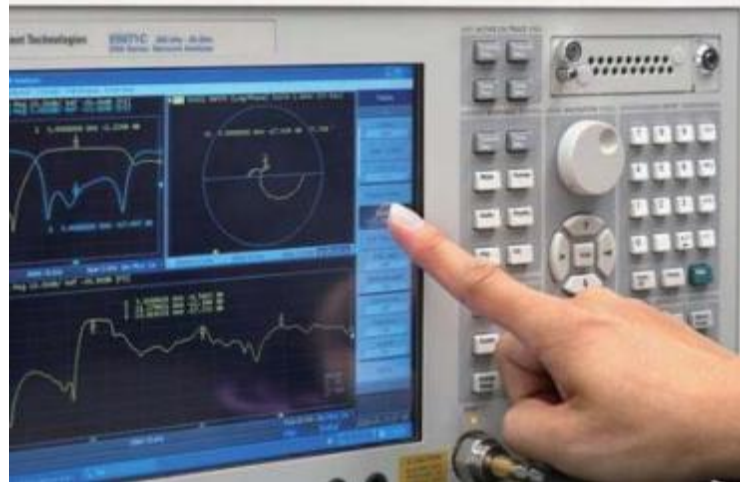
*Agilent  
E5071B*



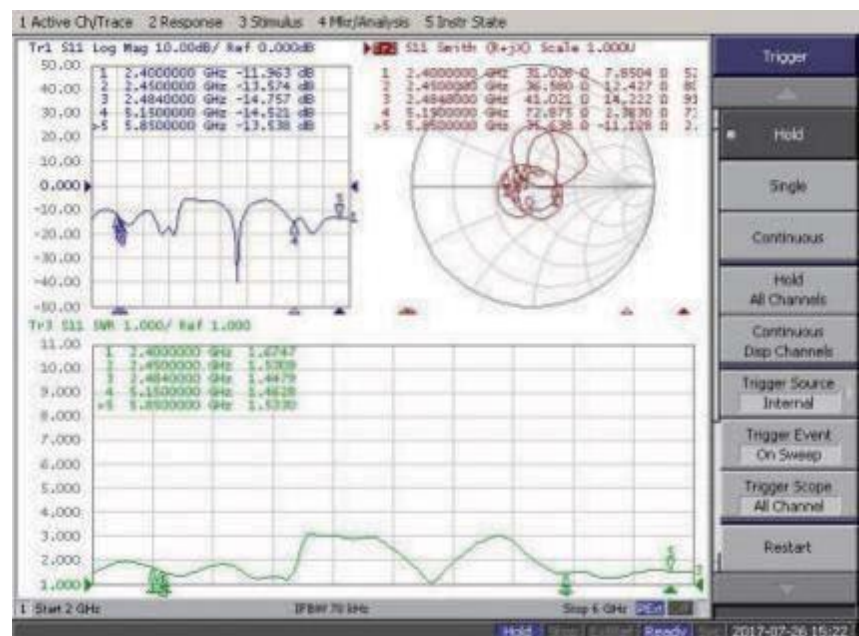
*S  
Parameter  
Test//  
4G*



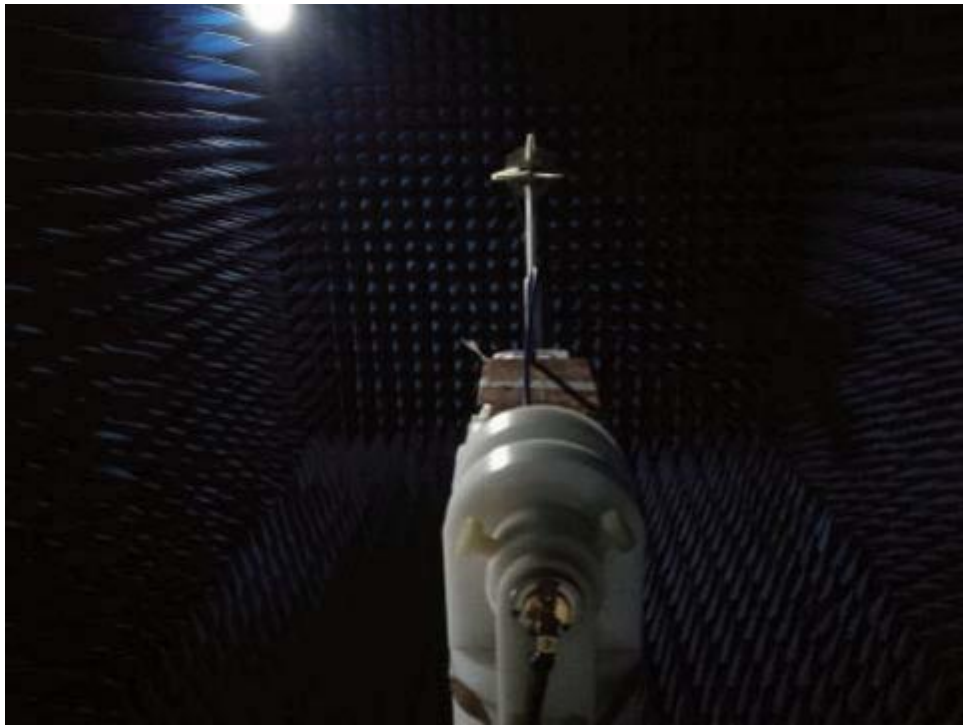
# Agilent E5071B



## S Parameter Test// WiFi



## *Antenna Passive Test*



passive Test For LTE

| Freq<br>(MHz) | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
|---------------|-------------|--------------|---------------|
| 820           | 32.0        | -5.0         | -2.6          |
| 830           | 33.4        | -4.8         | -2.7          |
| 840           | 36.1        | -4.4         | -2.3          |
| 850           | 37.4        | -4.3         | -2.1          |
| 860           | 37.6        | -4.3         | -1.8          |
| 870           | 38.8        | -4.1         | -1.4          |
| 880           | 40.1        | -4.0         | -1.0          |
| 890           | 41.1        | -3.9         | -0.8          |
| 900           | 43.3        | -3.6         | -0.6          |
| 910           | 45.1        | -3.5         | -0.6          |
| 920           | 45.1        | -3.5         | -0.8          |
| 930           | 43.5        | -3.6         | -0.8          |
| 940           | 38.4        | -4.2         | -1.1          |
| 950           | 32.6        | -4.9         | -1.7          |
| 960           | 25.0        | -6.0         | -3.1          |

| passive Test For LTE |             |              |               |
|----------------------|-------------|--------------|---------------|
| Freq<br>(MHz)        | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
| 1700                 | 44.8        | -3.5         | -0.2          |
| 1740                 | 43.5        | -3.6         | -0.4          |
| 1780                 | 42.9        | -3.7         | -0.5          |
| 1820                 | 42.1        | -3.8         | -1.1          |
| 1860                 | 42.1        | -3.8         | -1.0          |
| 1900                 | 42.9        | -3.7         | -1.0          |
| 1940                 | 40.1        | -4.0         | -1.4          |
| 1980                 | 40.8        | -3.9         | -1.4          |
| 2020                 | 38.3        | -4.2         | -2.1          |
| 2060                 | 36.5        | -4.4         | -2.2          |
| 2100                 | 37.1        | -4.3         | -2.0          |
| 2140                 | 35.8        | -4.5         | -1.6          |
| 2180                 | 36.1        | -4.4         | -0.8          |

| passive Test For LTE |             |              |               |
|----------------------|-------------|--------------|---------------|
| Freq<br>(MHz)        | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
| 2300                 | 39.3        | -4.1         | 0.5           |
| 2340                 | 38.8        | -4.1         | 0.3           |
| 2380                 | 39.8        | -4.0         | -0.1          |
| 2420                 | 41.7        | -3.8         | 0.0           |
| 2460                 | 41.2        | -3.9         | 0.3           |
| 2500                 | 40.7        | -3.9         | 0.6           |
| 2540                 | 40.5        | -3.9         | 0.9           |
| 2580                 | 39.8        | -4.0         | 1.0           |
| 2620                 | 38.1        | -4.2         | 0.9           |
| 2660                 | 41.6        | -3.8         | 1.2           |
| 2700                 | 35.0        | -4.6         | 0.2           |

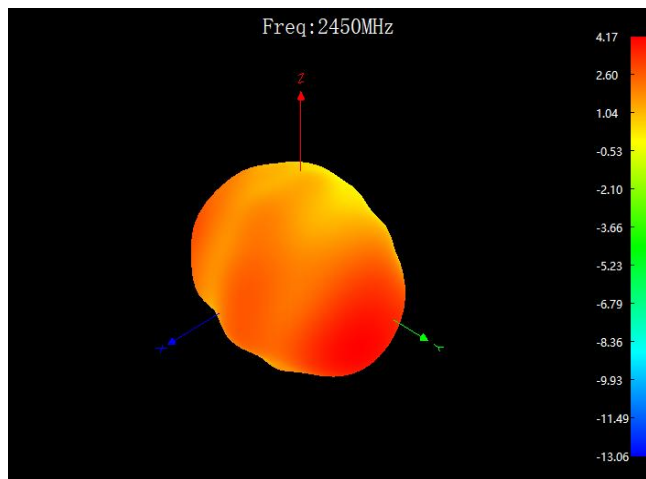
| passive Test For wiFi (2.4G) |             |              |               |
|------------------------------|-------------|--------------|---------------|
| Freq<br>(MHz)                | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
| 2400                         | 41.1        | -3.9         | 0.0           |
| 2410                         | 41.2        | -3.9         | 0.0           |
| 2420                         | 41.3        | -3.8         | 0.0           |
| 2430                         | 41.0        | -3.9         | 0.1           |
| 2440                         | 41.9        | -3.8         | 0.2           |
| 2450                         | 41.9        | -3.8         | 0.3           |
| 2460                         | 40.9        | -3.9         | 0.2           |
| 2470                         | 40.8        | -3.9         | 0.2           |
| 2480                         | 40.0        | -4.0         | 0.2           |
| 2490                         | 39.7        | -4.0         | 0.4           |
| 2500                         | 40.5        | -3.9         | 0.6           |

| passive Test For W,F, (5.8G) |             |              |               |
|------------------------------|-------------|--------------|---------------|
| Freq<br>(MHz)                | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
| 5150                         | 31.6        | -5.0         | 0.0           |
| 5200                         | 31.9        | -5.0         | 0.2           |
| 5250                         | 34.0        | -4.7         | -0.5          |
| 5300                         | 35.0        | -4.6         | -0.6          |
| 5350                         | 32.9        | -4.8         | -1.0          |
| 5400                         | 35.6        | -4.5         | -0.8          |
| 5450                         | 36.7        | -4.4         | -0.7          |
| 5500                         | 36.5        | -4.4         | -0.7          |
| 5550                         | 36.7        | -4.4         | -0.5          |
| 5600                         | 35.0        | -4.6         | -0.5          |
| 5650                         | 38.3        | -4.2         | 0.3           |
| 5700                         | 35.9        | -4.4         | 0.5           |
| 5750                         | 36.8        | -4.3         | 0.1           |
| 5800                         | 36.1        | -4.4         | -0.1          |
| 5850                         | 37.8        | -4.2         | 0.5           |

*Antenna Profile*

|                                             |                                                                                     |
|---------------------------------------------|-------------------------------------------------------------------------------------|
| <p><i>Antenna<br/>4G<br/>&amp; WiFi</i></p> |  |
|---------------------------------------------|-------------------------------------------------------------------------------------|

2.4G 3D



5.8G 3D

