

## **Antenna data sheet**

### **Quick Reference Data**

|                            |                                    |
|----------------------------|------------------------------------|
|                            | Antenna module on the system board |
| Frequenc Range             | 2400 ~ 2500MHz                     |
| Ant. Port Input Pwr. (dBm) | 0 (Typ. BT class 2 output power)   |
| Tot. Rad. Pwr. (dBm)       | -1.2 (Input pwr – loss pwr)        |
| Peak EIRP(dBm)             | 1.2                                |
| Directivity (dBi)          | 1 (all direction antenna)          |
| Efficiency (dB)            | 6 0.2 %                            |
| Gain (dBi)                 | 1.9 (Peak Gain XZ-plane)           |
| Maximum Power (dBm)        | 1.7 (XY-plane)                     |
| Minimum Power (dBm)        | -4(XY-plane)                       |
| Avg. Power (dBm)           | -0.5(XY-plane)                     |
| Input Impedence(ohm)       | 50                                 |
| Polarization Type          | Vertical & Horizontal              |
| V . S .W . R               | < 1.4                              |

All the technical data and information contained herein are subject to change without prior notice

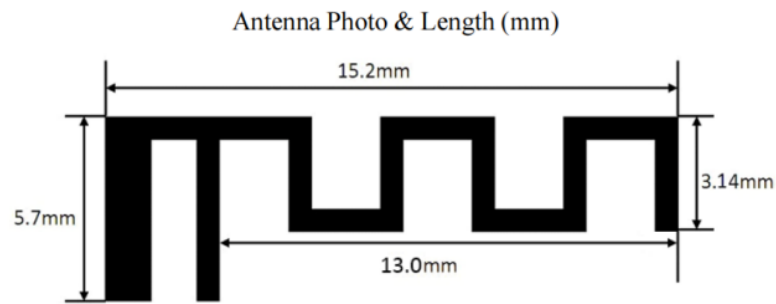
Manufacturer : SHENZHEN SHIXINZHONGXN TECHNOLOGY. CO., LTD

Address : 215, No. 142, Songyu Road, Hongxing Community, Songgang Street  
Baoan District, Shenzhen

Antenna Name : 2.4G antenna

Antenna Type : PCB antenna

## Antenna Layout & module on the system board

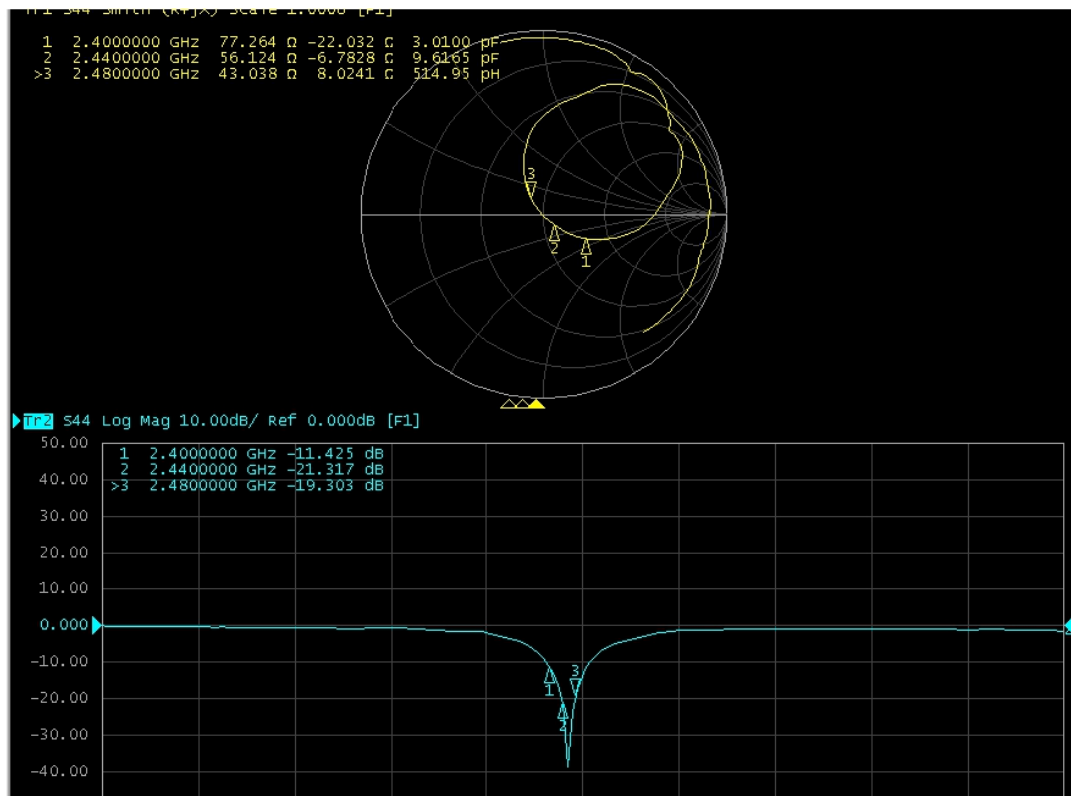


## Antenna Gain

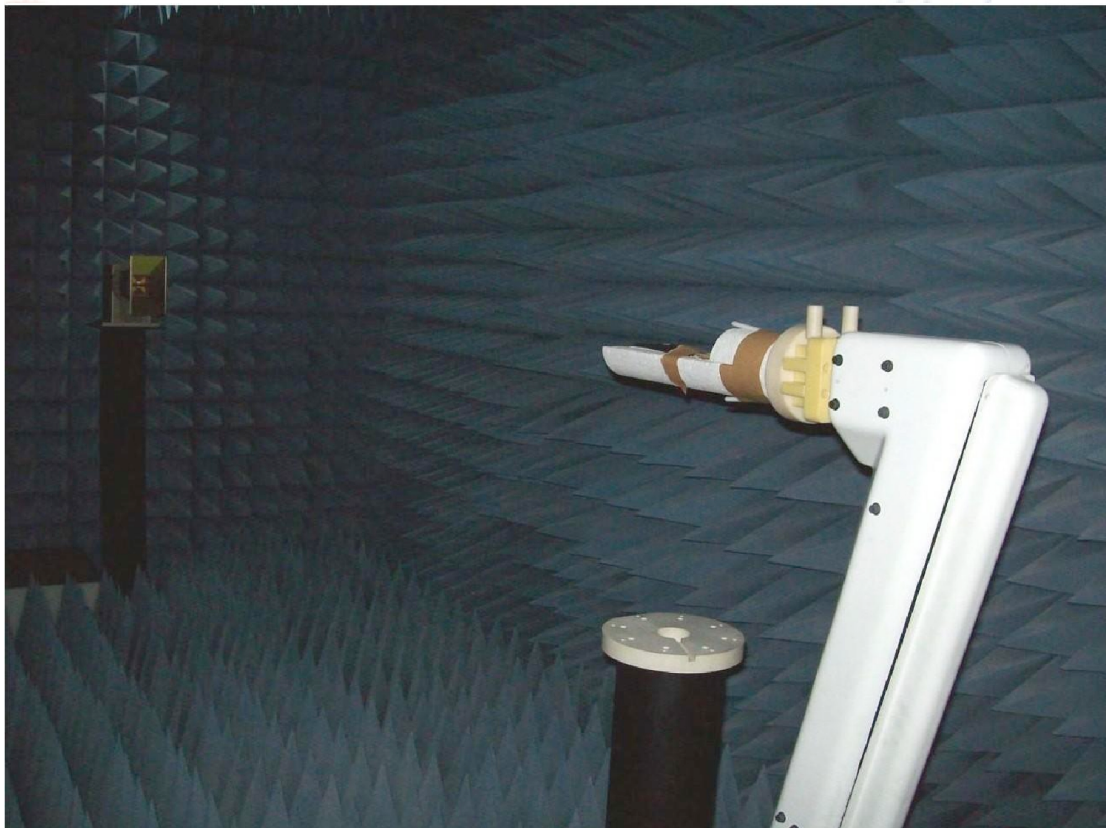
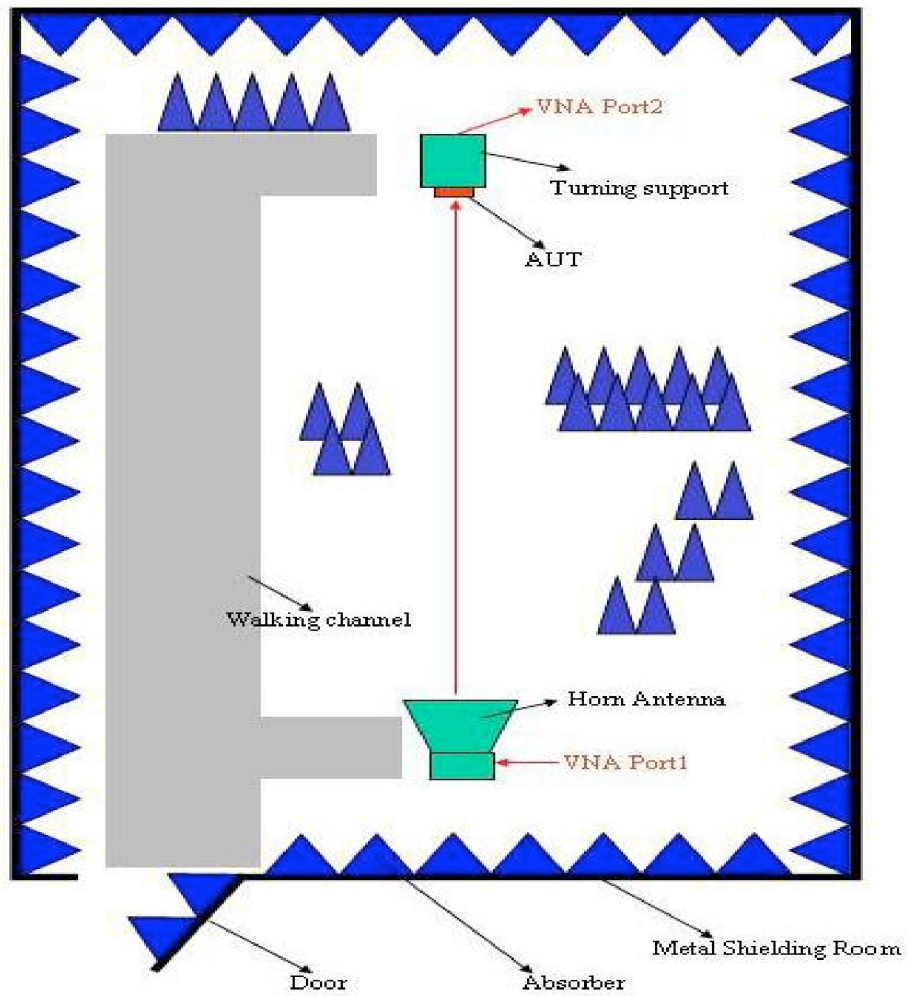
Gain Table

| Unit in dBi @2.44GHz | XY-plane |      | XZ-plane |      | YZ-plane |      | Efficiency |
|----------------------|----------|------|----------|------|----------|------|------------|
|                      | Peak     | Avg. | Peak     | Avg. | Peak     | Avg. |            |
| Module Board         | 1.2      | -0.5 | 1.9      | -3.6 | 1.1      | -3.0 | 60.2 %     |

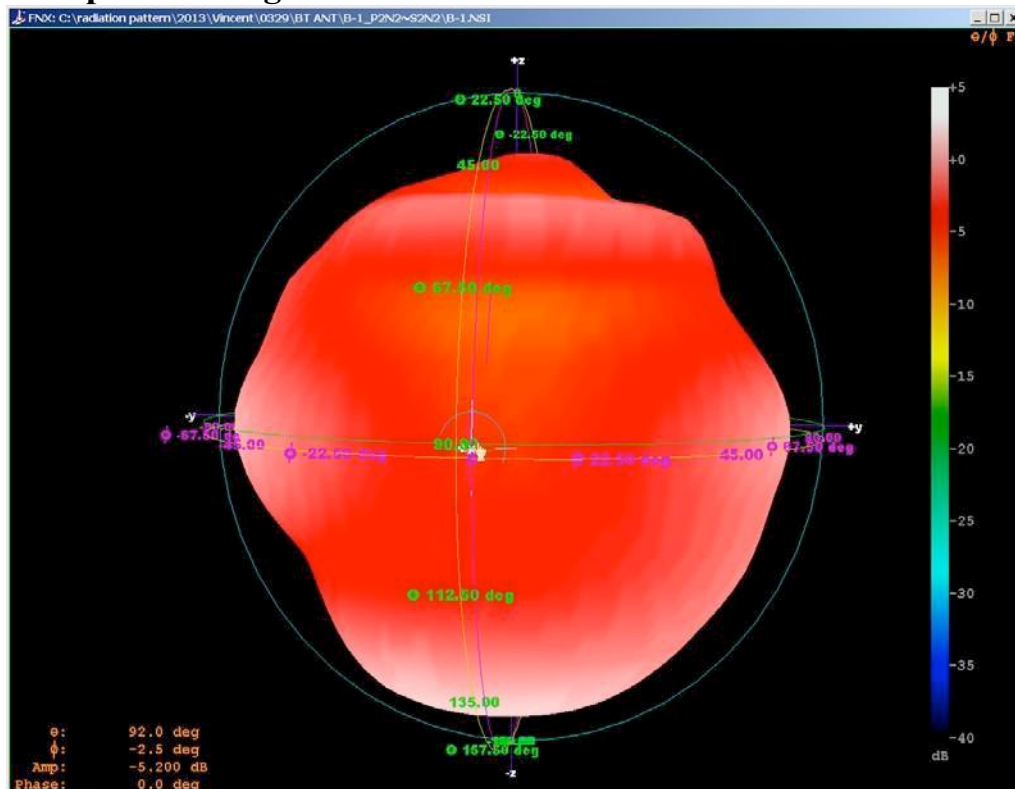
## Return Loss



## The Environment of Antenna Radiation Pattern

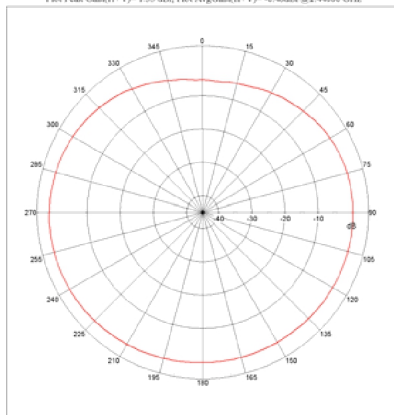


## 3D radiation pattern diagram



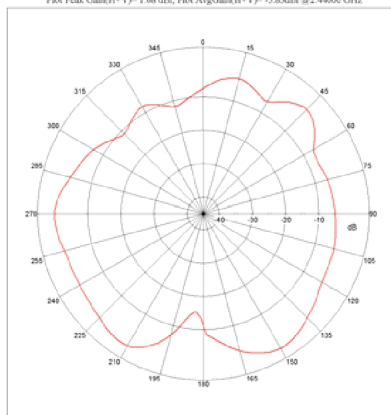
## XY-plane

Far-field Power Distribution(H+V) on X-Y Plane  
Plot Peak Gain(H+V)= 1.35 dB; Plot AvgGain(H+V)= -0.48dB @2.44000 GHz



## XZ-plane

Far-field Power Distribution(H+V) on X-Z Plane  
Plot Peak Gain(H+V)= 1.68 dB; Plot AvgGain(H+V)= -3.83dB @2.44000 GHz



## YZ-plane

Far-field Power Distribution(H+V) on Y-Z Plane  
Plot Peak Gain(H+V)= 1.11 dB; Plot AvgGain(H+V)= -2.99dB @2.44000 GHz

