

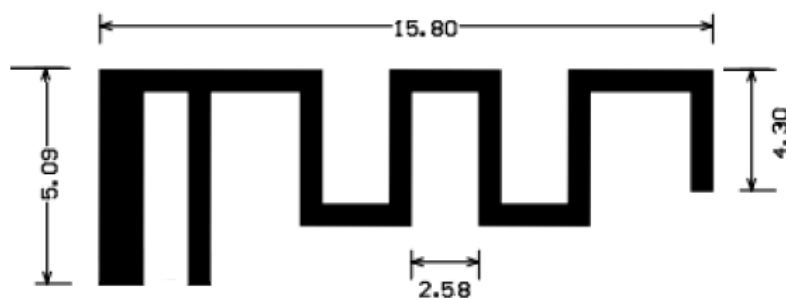
## **Product specification**

### **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)             | 3 dBm                              |  |
| Directivity (dBi)          | 1 (all direction antenna)          |  |
| Efficiency (dB)            | 60.2 %                             |  |
| Gain (dBi)                 | 1.64 dBi                           |  |
| Maximum Power (dBm)        | 0 (XY-plane)                       |  |
| Minimum Power (dBm)        | -4(XY-plane)                       |  |
| Avg. Power (dBm)           | -0.5(XY-plane)                     |  |
| Input Impendence(ohm)      | 50                                 |  |
| Polarization Type          | V ertical & Horizontal             |  |
| V . S .W . R               | < 1.4                              |  |

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

### **Antenna Layout & module on the system board**



Manufacturer: Hangzhou Doodle Information Technology Co., LTD  
Adress:Room 301, Building 1, Huace Center, Xihu District, Hangzhou , Zhejiang

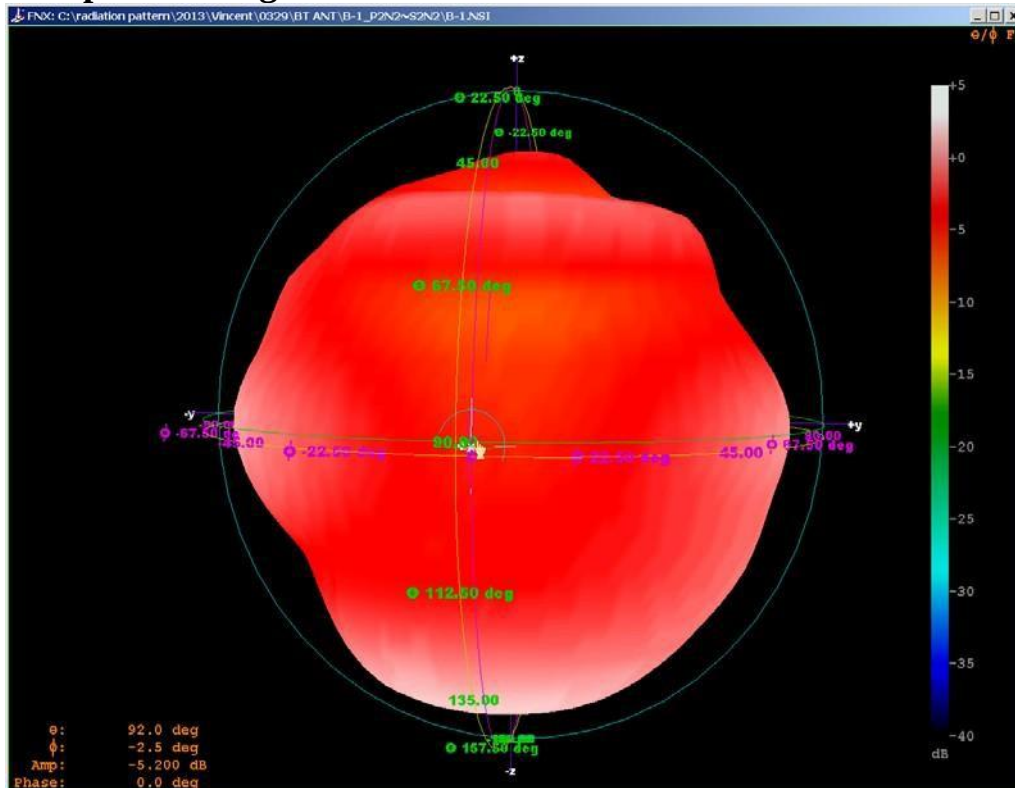
Return Loss



## The Environment of Antenna Radiation Pattern

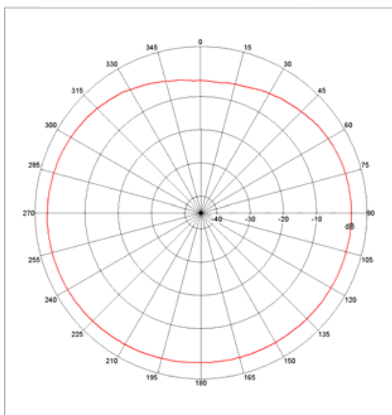


### 3D radiation pattern diagram



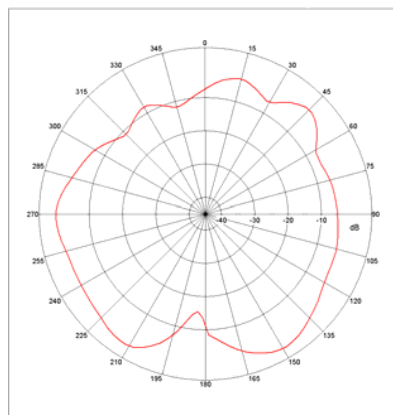
### 2400 MHz

Far-field Power Distribution(H+V) on X-Y Plane



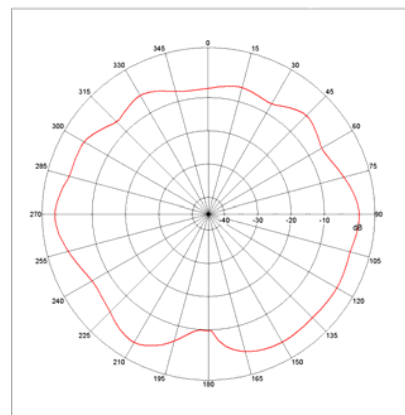
### 2450 MHz

Far-field Power Distribution(H+V) on X-Z Plane



### 2500 MHz

Far-field Power Distribution(H+V) on Y-Z Plane



### Antenna Gain

#### Gain Table

| Unit in dBi @2.44GHz | XY-plane |       | XZ-plane |       | YZ-plane |       | Efficiency |
|----------------------|----------|-------|----------|-------|----------|-------|------------|
|                      | Peak     | Avg.  | Peak     | Avg.  | Peak     | Avg.  |            |
| Module Board         | 1.64     | -0.56 | -0.18    | -2.61 | -0.11    | -3.05 | 6 0.2 %    |