

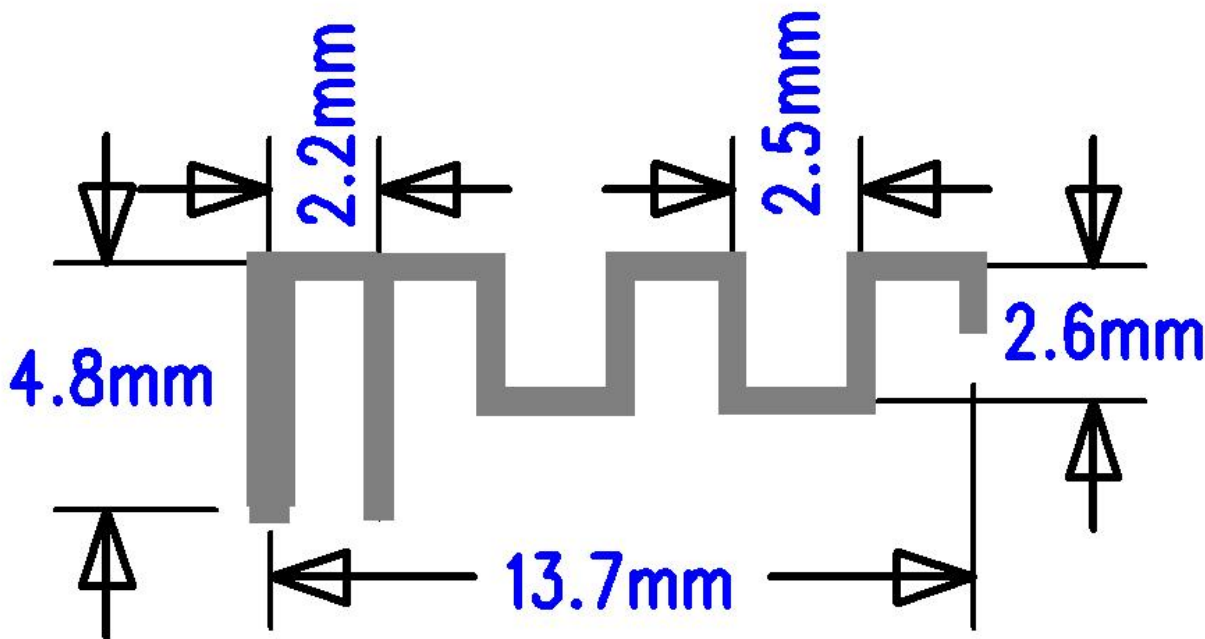
8 QINSHI RD QINSHI INDUSTRIAL PARK SANZAO TOWN  
JINW AN DIST  
ZHUHAI,GUANGDONG 519040 CHINA

F-type Bluetooth antenna specification

1. Antenna introduction

The Bluetooth antenna is directly used on the PCB board.

2. antenna shape



3. Antenna parameters

The Bluetooth antenna operates at 2400-2500MHz, and resonates in this band. The following table shows the main parameters of the antenna.

| Bluetooth built-in antenna |                 |
|----------------------------|-----------------|
| Frequency (MHz)            | 2400 ~ 2500 MHz |
| VSWR                       | ≤ 1.92          |
| Impedance                  | 50 Ohm Nominal  |
| Return Loss                | -10 dB Max      |

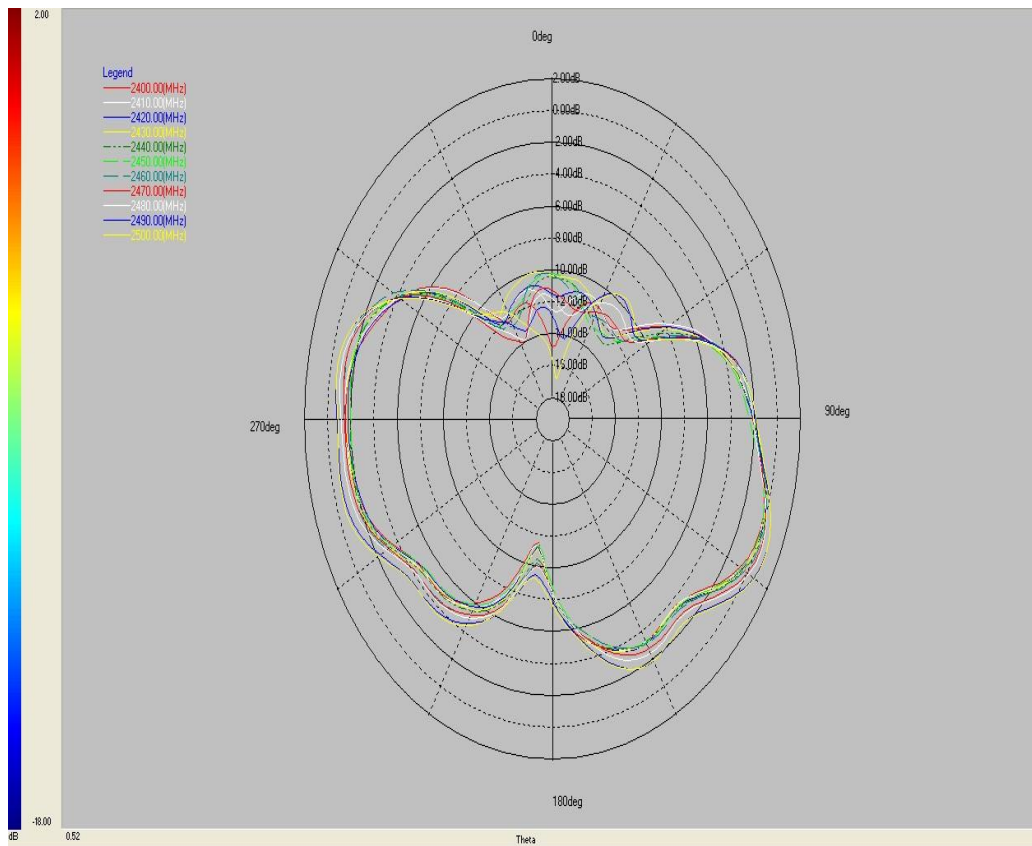
|                |                  |
|----------------|------------------|
| Radiation      | Omni-directional |
| Gain (Peak)    | 1.08443dBI       |
| Polarization   | Linear, Vertical |
| Admitted Power | 2W               |
| Connector      | Tin              |
|                |                  |
|                |                  |

#### 4. Antenna gain detection report

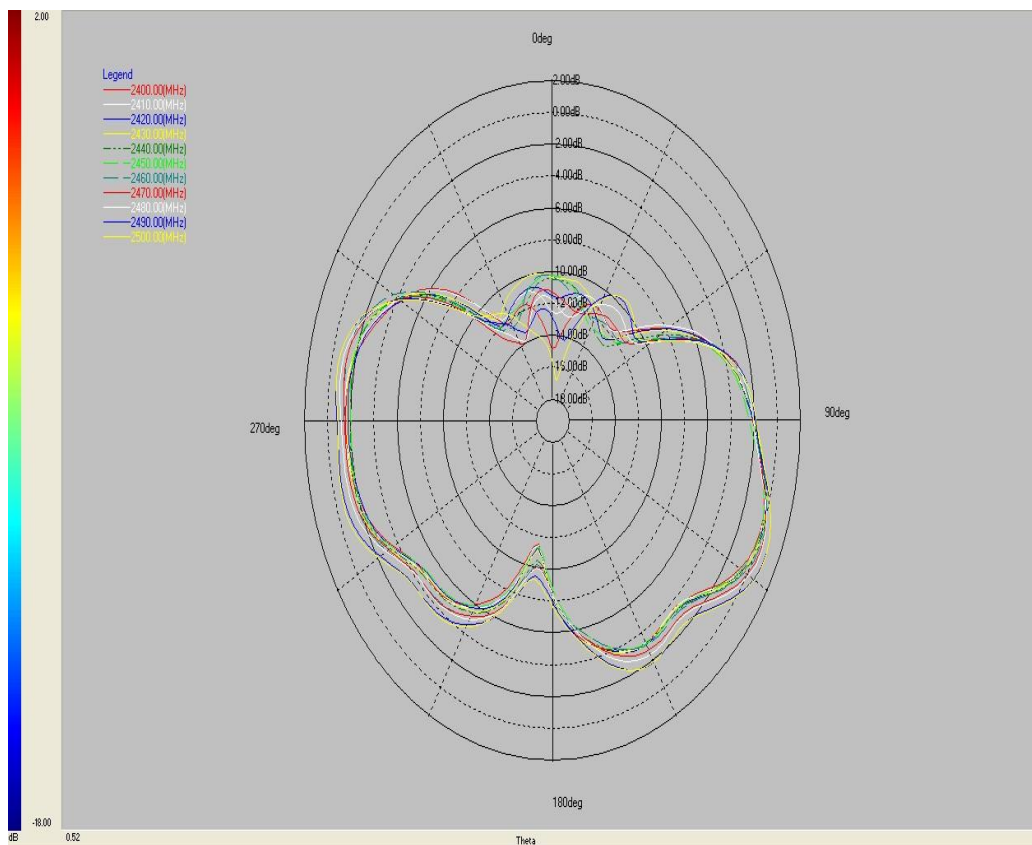
|                    |      |               |              |
|--------------------|------|---------------|--------------|
| Spectrum Detector: | PK   | Test Date :   | June 8, 2013 |
| Test By:           | Andy | Temperature : | 28°C         |
| Test Result:       | PASS | Humidity :    | 55 %         |
| Modulation:        | GFSK |               |              |

| Frequency VNA (MHz) | E Total. dBI |
|---------------------|--------------|
| 2400MHz             | 0.0403503    |
| 2410MHz             | 0.0886264    |
| 2420MHz             | 0.267381     |
| 2430MHz             | 0.193012     |
| 2440MHz             | 0.26366      |
| 2450MHz             | 0.0723139    |
| 2460MHz             | 0.36895      |
| 2470MHz             | 0.551525     |
| 2480MHz             | 0.640702     |
| 2490MHz             | 1.05232      |
| 2500MHz             | 1.08443      |
|                     |              |
|                     |              |

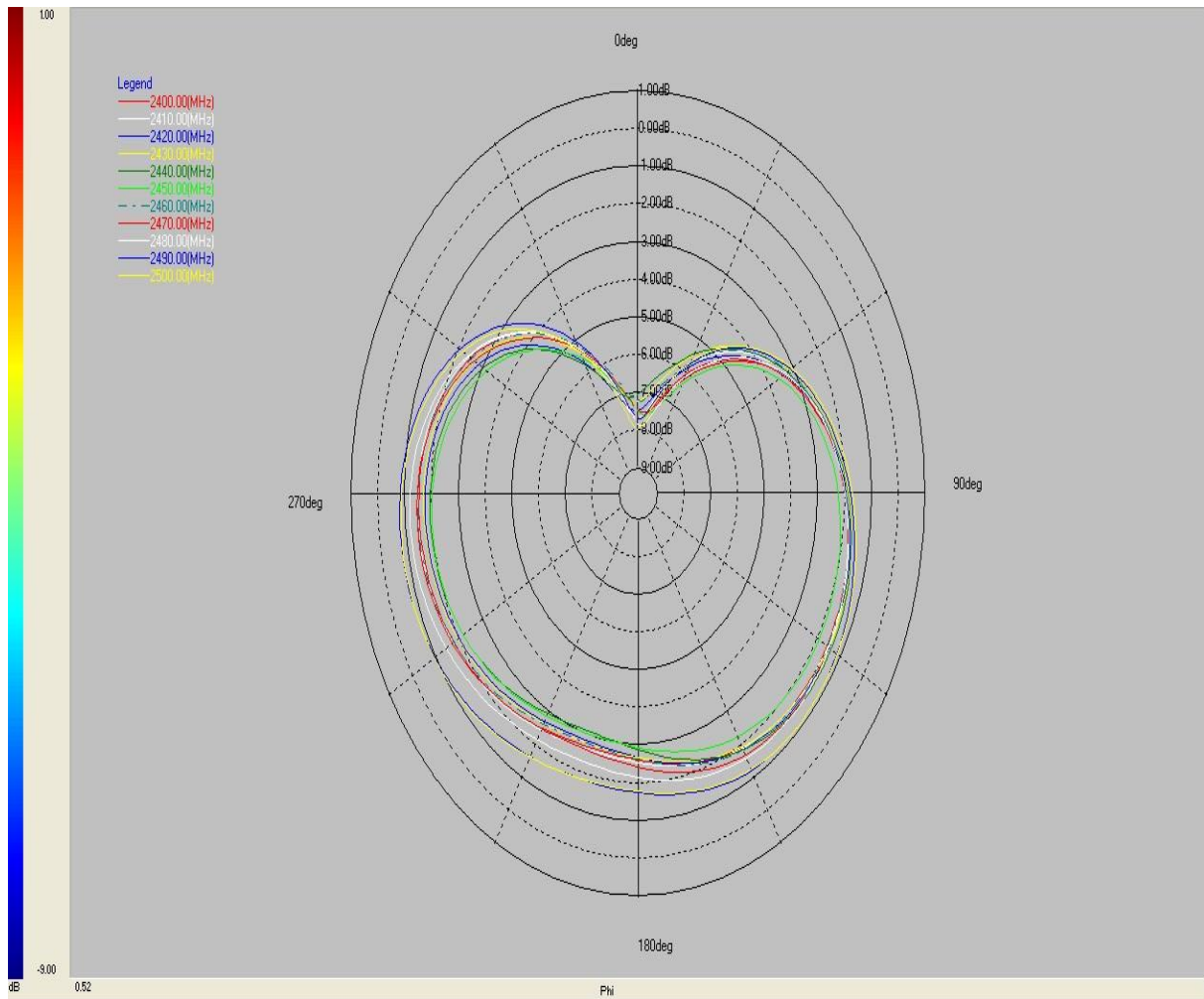
## Direction map:



PHI 0 度

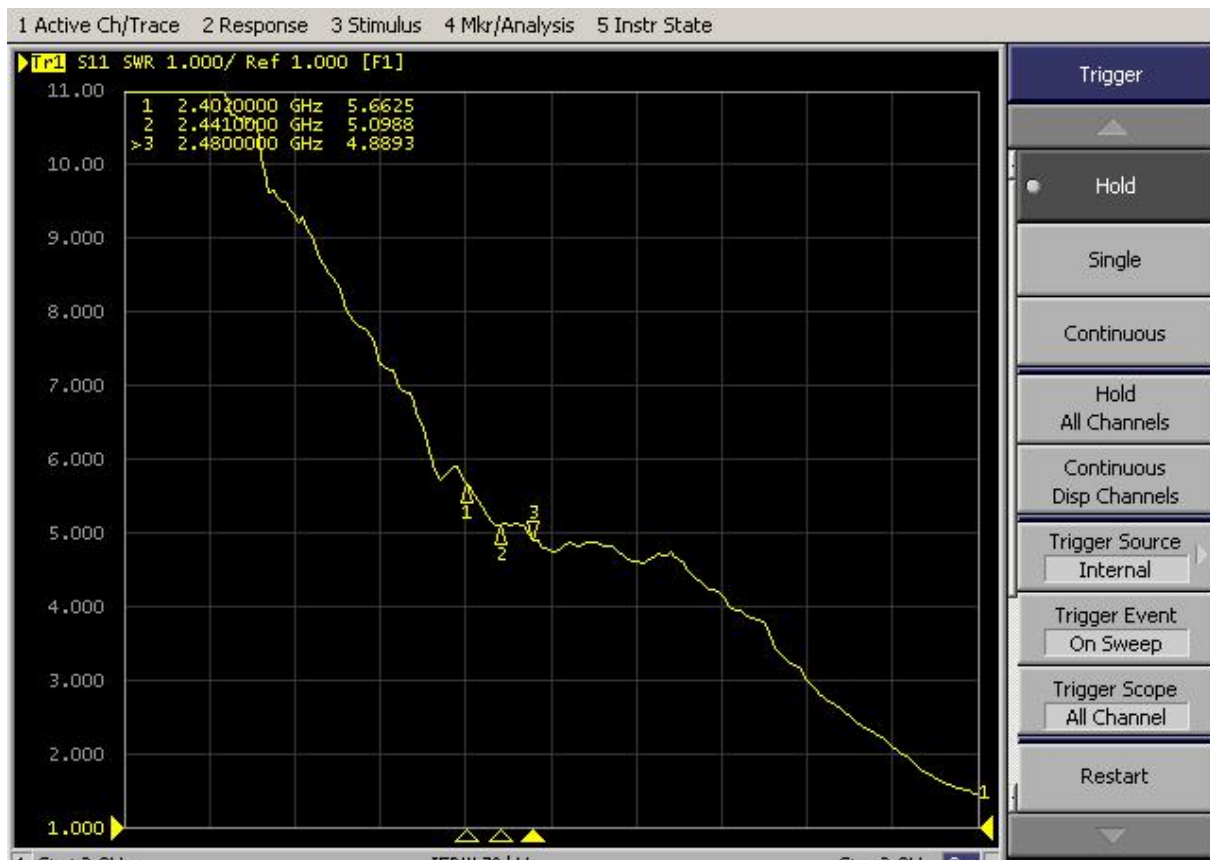


PHI 90 度



THETA 90 度

## Standing wave ratio chart:



### Product Description

The EUT is a short range, lower power, Splash designed as a Device. It is designed by way of utilizing the GFSK, 1/4PI-DQPSK and 8DPSK modulation achieves the system operating.

A major technical descriptions of EUT is described as following:

- A). Operation Frequency: 2400-2500MHz
- B). Modulation: GFSK, 1/4PI-DQPSK, 8DPSK
- C). Number of Channel: 79
- D). Channel space: 1MHz
- E). RF Output power: 0.44dbm
- F). BIT Rate of Transmission: 1Mbps, 2Mbps, 3Mbps
- G). Antenna Type: PCB antenna
- H). Antenna **GAIN: 1.08443 dBI**