

# Antenna Specification

## Specifications

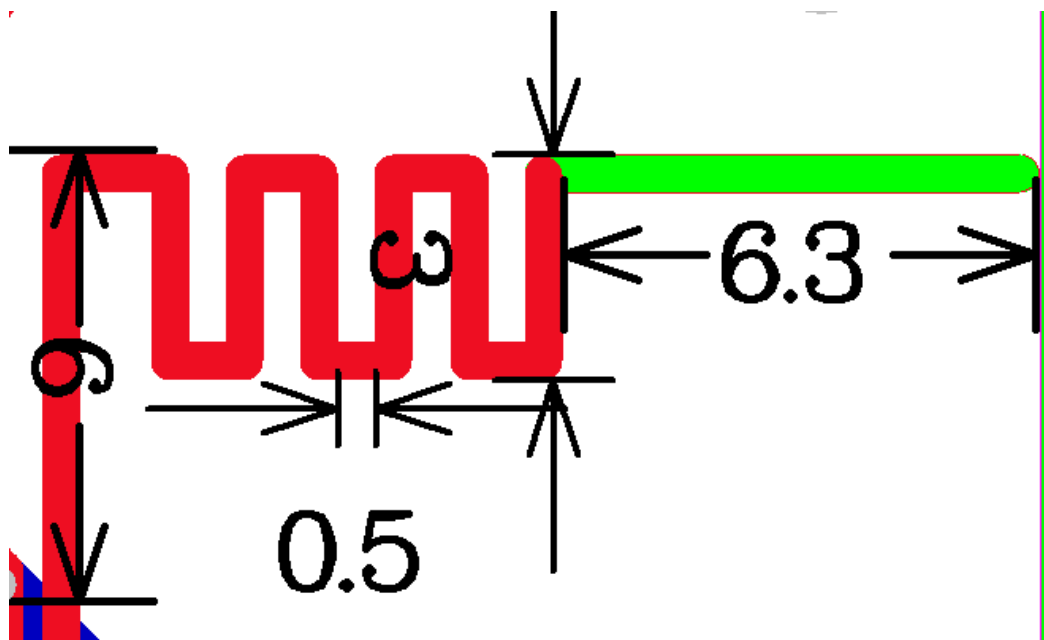
### Summary

| ITEM                 | SPEC.            |           |
|----------------------|------------------|-----------|
| Model Name           | IBM 2.4 GHz      |           |
| Center Frequency     | 2402 MHz         | -2.10 dBi |
|                      | 2441 MHz         | -1.78 dBi |
|                      | 2480 MHz         | -1.52 dBi |
| MAX. GAIN            | -1.52dBi         |           |
| Polarization         | Horizontal       |           |
| Azimuth Beam Pattern | Omni-directional |           |
| Impedance            | 50 $\Omega$      |           |
| Antenna Length       | 34.6mm           |           |
| Antenna Type         | PCB Antenna      |           |

Manufacturer : Shenzhen Boyi Chuang Technology Co., Ltd.

Address: 4th Floor, Building A, Area A, Huafeng First Science and Technology Park, Sanwei, Xixiang Street, Bao'an District, Shenzhen City, Guangdong Province, China

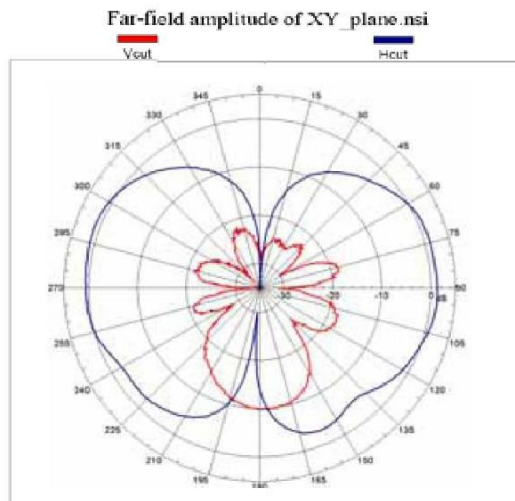
### Antenna Photo & Length (mm)



## 1. Main antenna : 2402 MHz

### 1.1 Horizontal

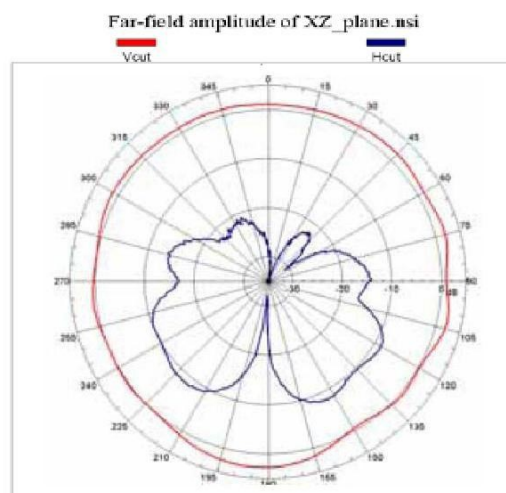
#### ◆XY-plane



|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -2.93     | -7.60     |
| V cut | -6.85     | -8.27     |
| Total | -2.10     | -5.33     |

### 1.2 Vertical

#### ◆XZ-plane

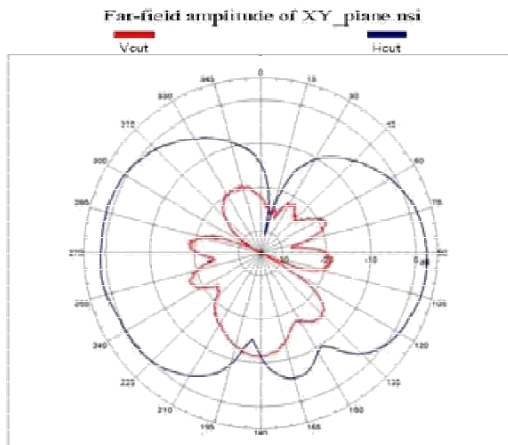


|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -5.83     | -13.44    |
| V cut | -7.04     | -9.47     |
| Total | -5.02     | -7.25     |

## 2. Main antenna : 2441 MHz

### 2.1 Horizontal

## ◆XY-plane

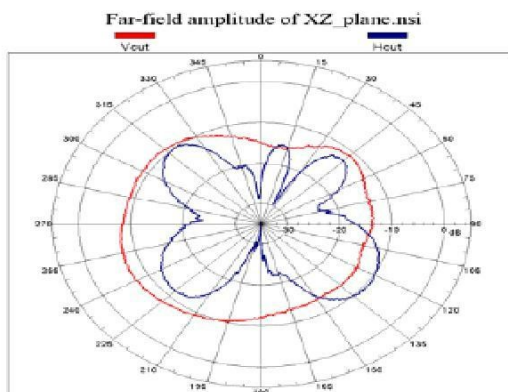


Unit : dBi

|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -2.36     | -7.43     |
| V cut | -11.01    | -13.04    |
| Total | -1.78     | -8.05     |

## 2.2 Vertica

### ◆XZ-plane

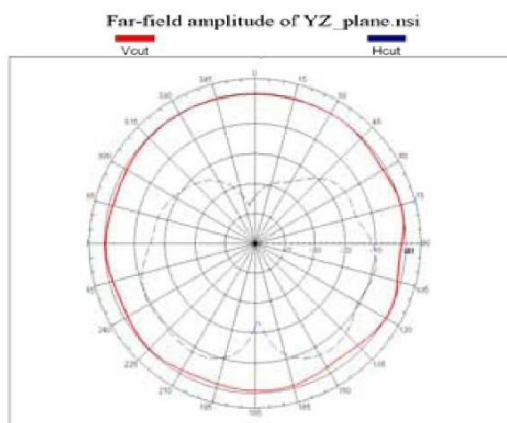


|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -7.85     | -14.39    |
| V cut | -7.02     | -12.30    |
| Total | -5.80     | -8.78     |

## 3. Main antenna : 2480 MHz

### 3.1 Horizontal

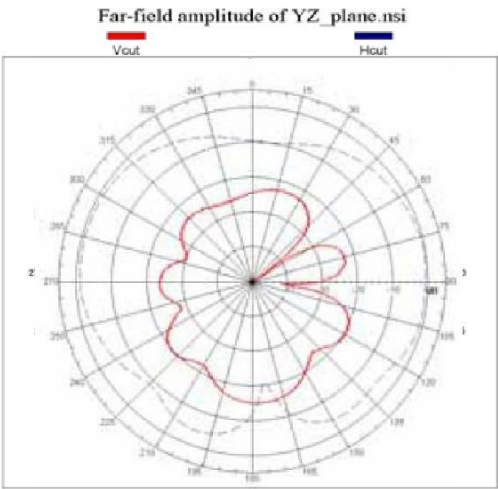
### ◆YZ-plane



|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -4.74     | -10.75    |
| V cut | -6.47     | -11.05    |
| Total | -1.52     | -7.49     |

3.2 Vertical

◆YZ-plane



|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -5.75     | -9.75     |
| V cut | -12.47    | -16.23    |
| Total | -4.52     | -8.72     |

4. Result

| Center Frequency |   | Maximum Ant Gain |  |
|------------------|---|------------------|--|
| 2402MHz          | H | -2.10 dBi        |  |
|                  | V | -5.02 dBi        |  |
| 2441 MHz         | H | -1.78 dBi        |  |
|                  | V | -5.80 dBi        |  |
| 2480 MHz         | H | -1.52 dBi        |  |
|                  | V | -4.52 dBi        |  |