

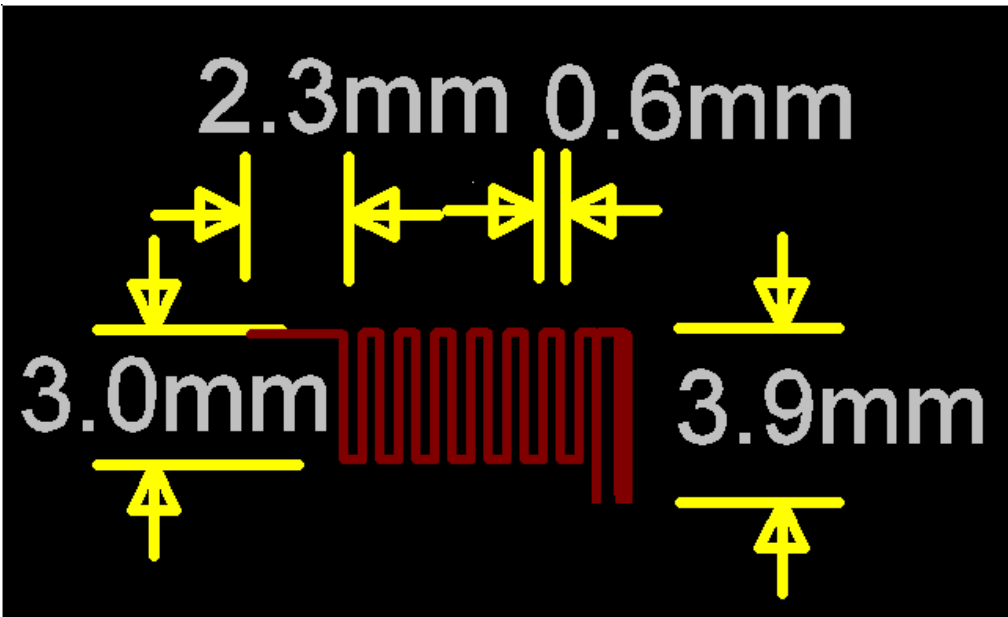
# Antenna Specification

## Specifications

### Summary

| ITEM                 | SPEC.            |           |
|----------------------|------------------|-----------|
| Model Name           | IBM 2.4 GHz      |           |
| Center Frequency     | 2402MHz          | -3.04 dBi |
|                      | 2441MHz          | -2.89 dBi |
|                      | 2480MHz          | -3.99 dBi |
| MAX. GAIN            | -2.89 dBi        |           |
| Polarization         | Horizontal       |           |
| Azimuth Beam Pattern | Omni-directional |           |
| Impedance            | 50 $\Omega$      |           |
| Antenna Length       | 13.1mm           |           |

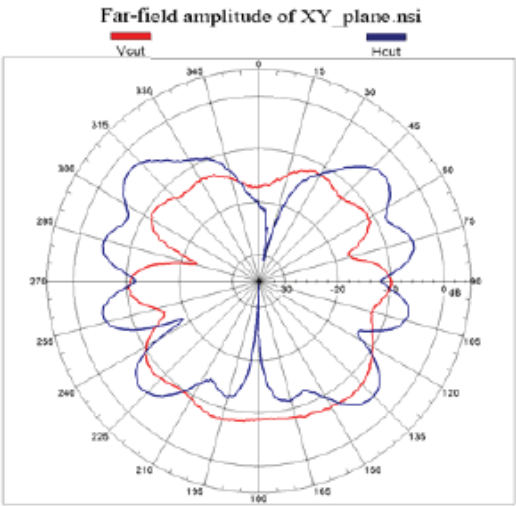
Antenna Photo & Length (mm)



1.  
Main antenna : 2402 MHz

1.1 Horizontal

◆XY-plane

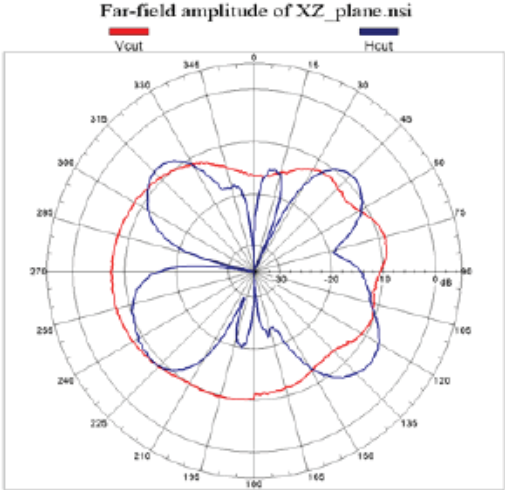


Unit : dBi

|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -3.04     | -8.82     |
| V cut | -7.19     | -11.29    |
| Total | -2.52     | -6.53     |

1.2 Vertical

◆XZ-plane

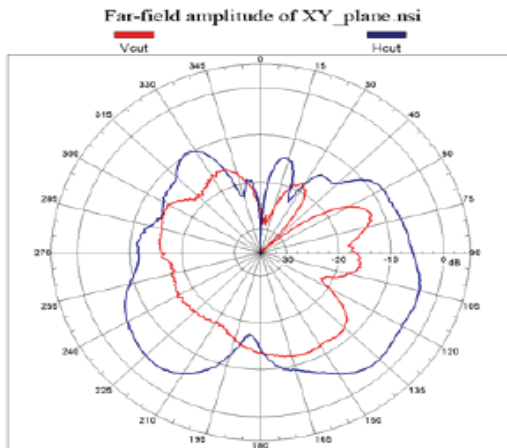


|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -6.44     | -13.24    |
| V cut | -7.34     | -10.57    |
| Total | -5.38     | -8.35     |

1.  
Main antenna : 2441 MHz

2.1 Horizontal

## ◆XY-plane



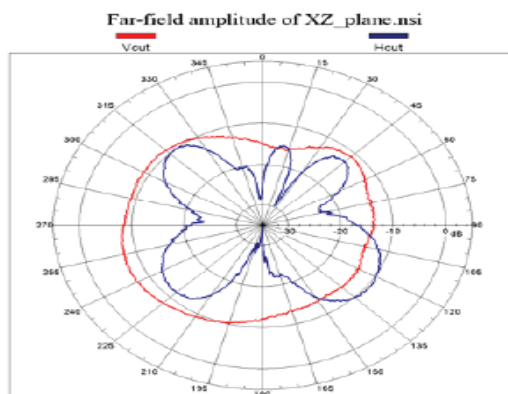
Unit : dBi

|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -2.89     | -8.89     |
| V cut | -11.81    | -16.63    |
| Total | -2.39     | -8.05     |

## 2.2

Vertica

## ◆XZ-plane

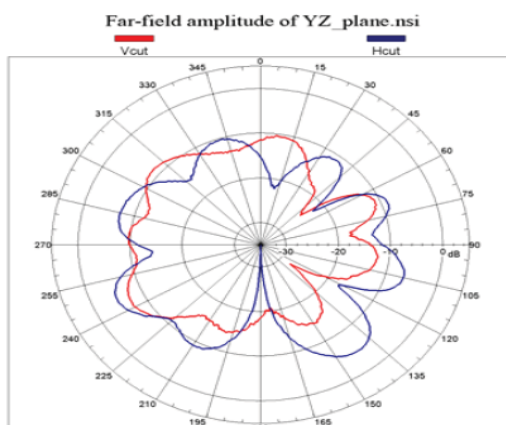


|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -9.56     | -15.85    |
| V cut | -7.29     | -11.21    |
| Total | -6.27     | -9.66     |

## 3. Main antenna : 2480 MHz

### 3.1 Horizontal

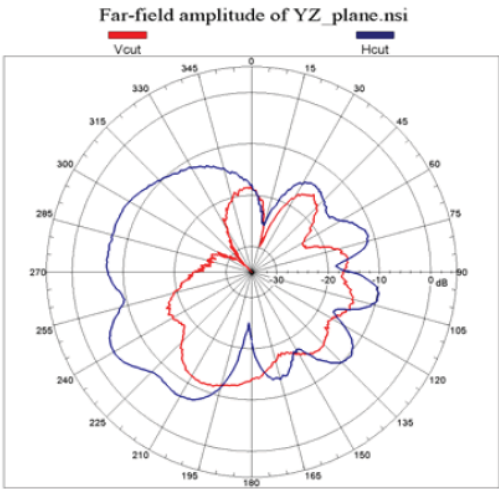
## ◆YZ-plane



|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -4.74     | -10.75    |
| V cut | -7.09     | -13.11    |
| Total | -2.95     | -8.49     |

### 3.2 Vertical

#### ◆YZ-plane



|       | Peak gain | Avg. gain |
|-------|-----------|-----------|
| H cut | -3.99     | -11.25    |
| V cut | -11.31    | -18.08    |
| Total | -3.79     | -10.11    |

### 4. Result

| Center Frequency | Maximum Ant Gain |           |
|------------------|------------------|-----------|
| 2402MHz          | H                | -3.04 dBi |
|                  | V                | -6.44 dBi |
| 2441MHz          | H                | -2.89 dBi |
|                  | V                | -9.56 dBi |
| 2480 MHz         | H                | -4.74 dBi |
|                  | V                | -3.99 dBi |