

## Product specification

### Quick Reference Date

|                            |                                    |  |
|----------------------------|------------------------------------|--|
|                            | 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)                 | 0 (Avg Gain XY-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          | V ertical & H orizontal            |  |
| 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



### Antenna Gain

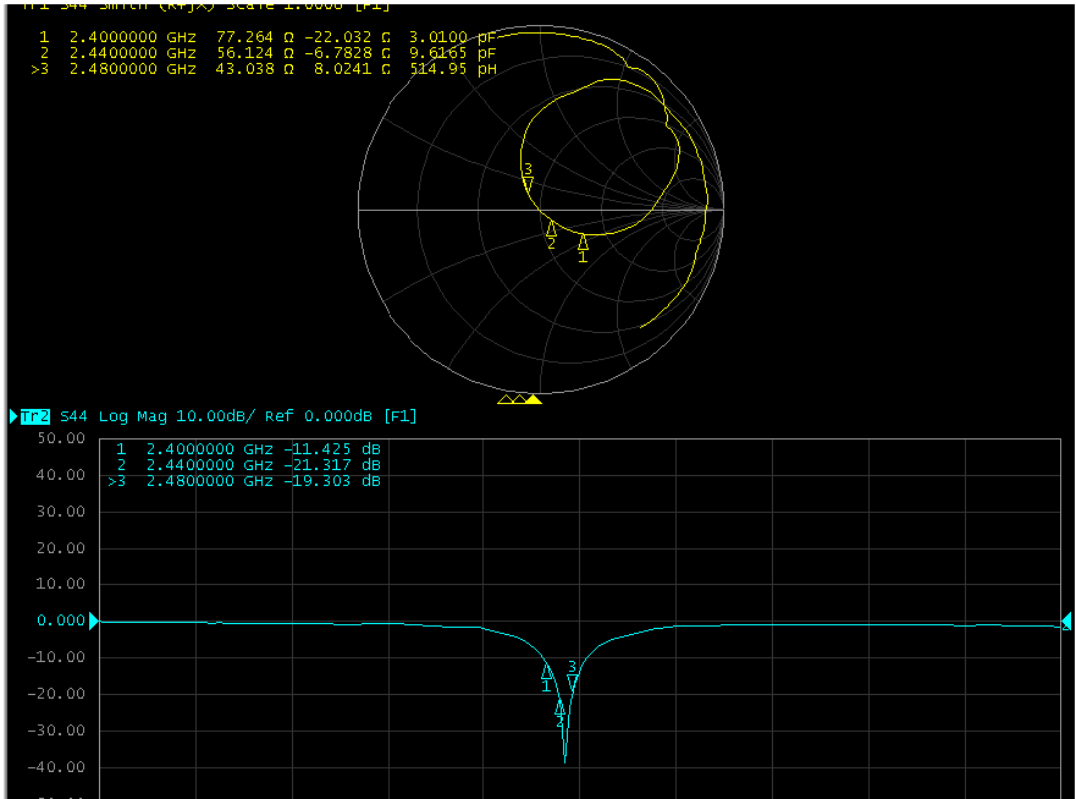
#### Gain Table

| Unit in dBi @2.40GHz | XY-plane |      | XZ-plane |      | YZ-plane |      | Efficiency |
|----------------------|----------|------|----------|------|----------|------|------------|
|                      | Peak     | Avg. | Peak     | Avg. | Peak     | Avg. |            |
| Module Board         | -1.8     | -0.7 | -1.6     | -3.3 | -1.0     | -2.8 | 57.4 %     |

| Unit in dBi @2.44GHz | XY-plane |      | XZ-plane |      | YZ-plane |      | Efficiency |
|----------------------|----------|------|----------|------|----------|------|------------|
|                      | Peak     | Avg. | Peak     | Avg. | Peak     | Avg. |            |
| Module Board         | 0.0      | -0.5 | -0.9     | -3.6 | -0.1     | -3.0 | 60.2 %     |

| Unit in dBi @2.48GHz | XY-plane |      | XZ-plane |      | YZ-plane |      | Efficiency |
|----------------------|----------|------|----------|------|----------|------|------------|
|                      | Peak     | Avg. | Peak     | Avg. | Peak     | Avg. |            |
| Module Board         | -1.1     | -0.2 | -0.2     | -3.8 | -0.4     | -3.3 | 59.6%      |

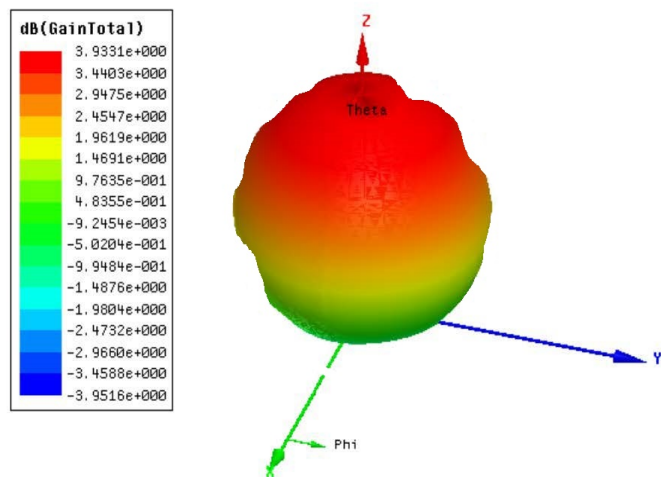
### Return Loss



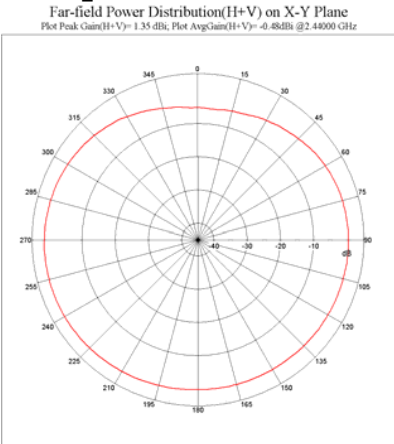
## The Environment of Antenna Radiation Pattern



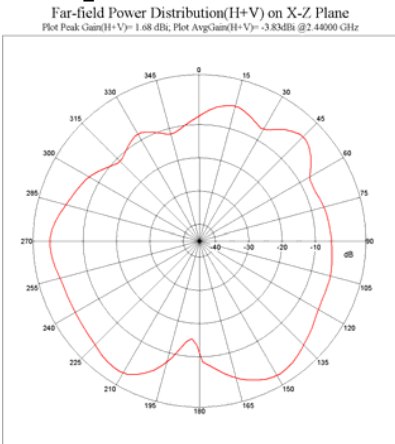
# 3D radiation pattern diagram



## XY-plane



## XZ-plane



## YZ-plane

