

## Product specification

### Quick Reference Date

|                            |                                    |  |
|----------------------------|------------------------------------|--|
|                            | Antenna module on the system board |  |
| Frequenc Range             | 2400 ~ 2500GHz                     |  |
| 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)            | 60.2 %                             |  |
| Gain (dBi)                 | 1.68                               |  |
| Maximum Power (dBm)        | 1.68(XZ-plane)                     |  |
| Minimum Power (dBm )       | -3.83(XZ-plane)                    |  |
| Avg. Power (dBm)           | -0.48(XY-plane)                    |  |
| Input Impedence(ohm)       | 50                                 |  |
| Polarization Type          | Vertical & 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

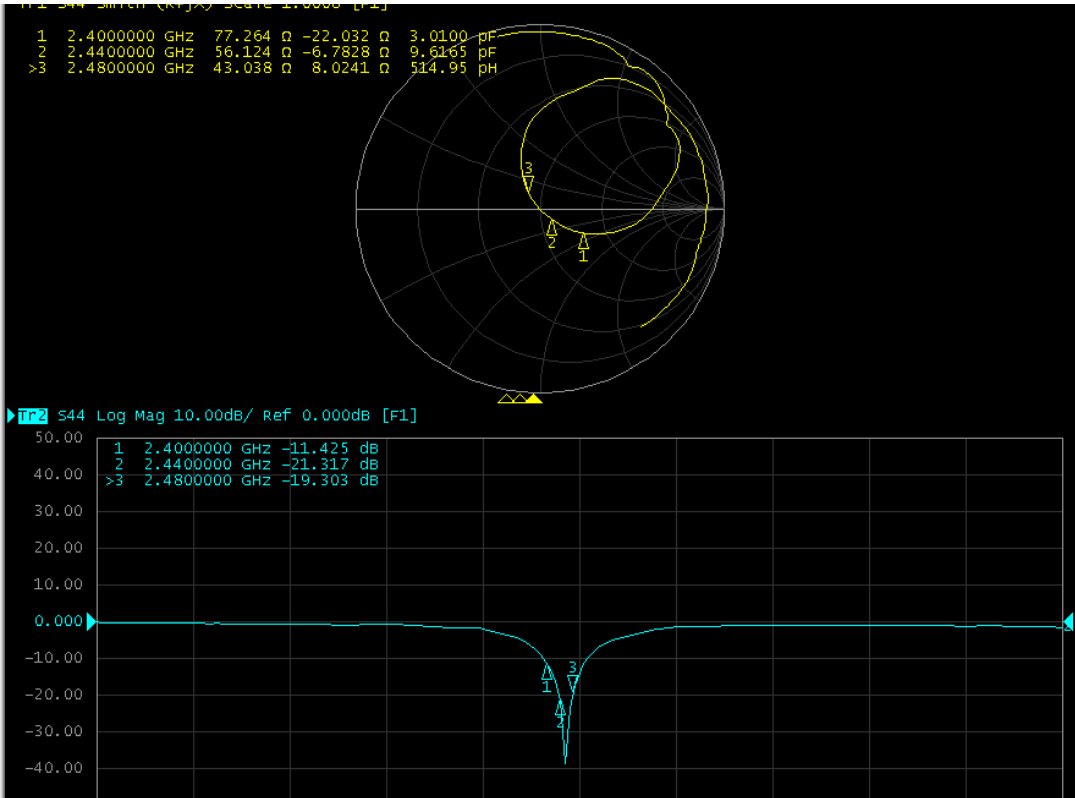


### Antenna Gain

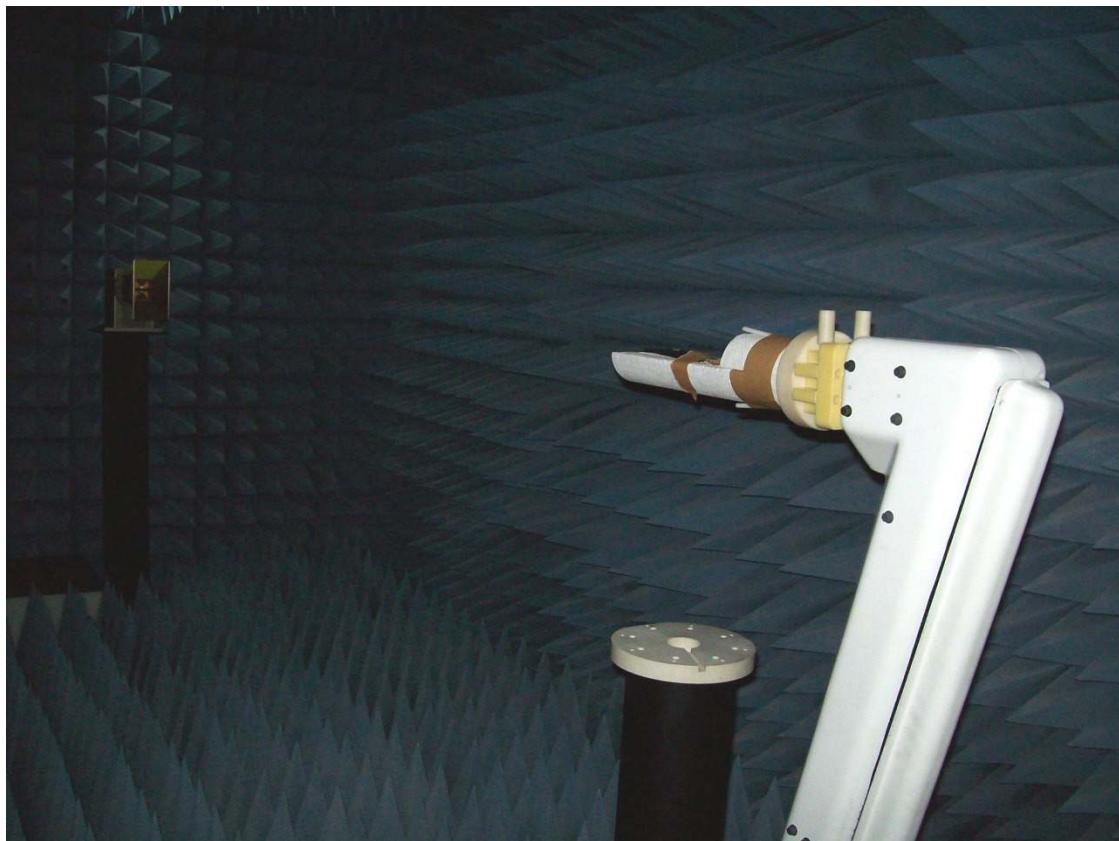
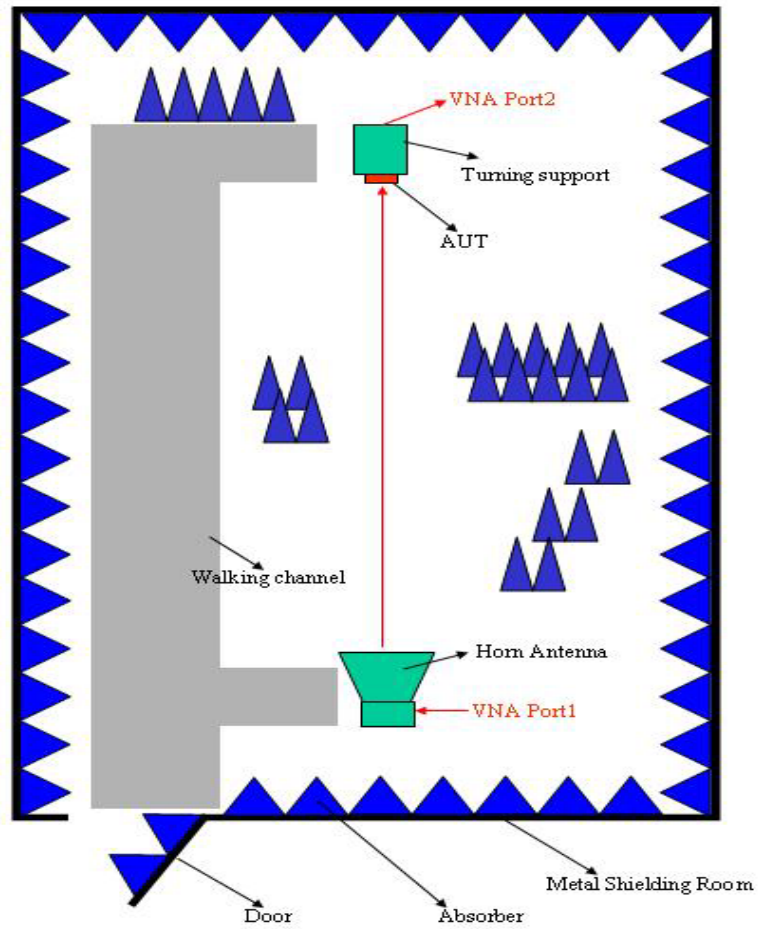
Gain Table

| Unit in dBi @2.44GHz | XY-plane |       | XZ-plane |       | YZ-plane |       | Efficiency |
|----------------------|----------|-------|----------|-------|----------|-------|------------|
|                      | Peak     | Avg.  | Peak     | Avg.  | Peak     | Avg.  |            |
| Module Board         | 1.35     | -0.48 | 1.68     | -3.83 | 1.11     | -2.99 | 60.2 %     |

Return Loss



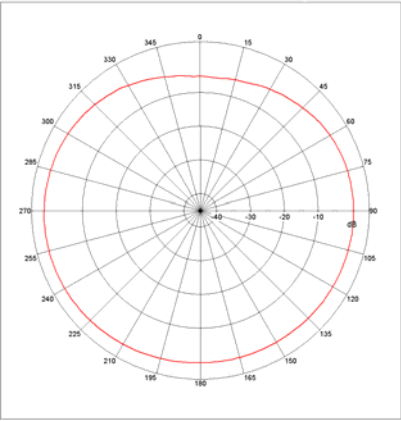
## The Environment of Antenna Radiation Pattern



3D radiation pattern diagram

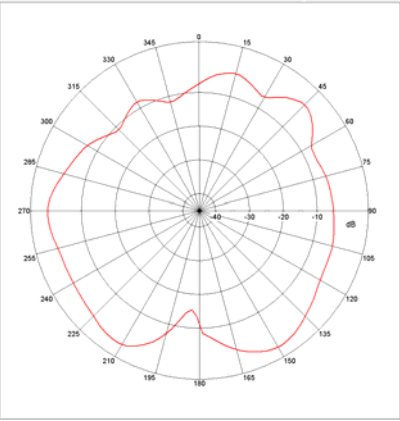
XY-plane

Far-field Power Distribution(H+V) on X-Y Plane  
Plot Peak Gain(H+V)= 1.35 dBi, Plot AvgGain(H+V)= -0.48dBi @2.44000 GHz



XZ-plane

Far-field Power Distribution(H+V) on X-Z Plane  
Plot Peak Gain(H+V)= 1.68 dBi, Plot AvgGain(H+V)= -3.83dBi @2.44000 GHz



YZ-plane

Far-field Power Distribution(H+V) on Y-Z Plane  
Plot Peak Gain(H+V)= 1.11 dBi, Plot AvgGain(H+V)= -2.99dBi @2.44000 GHz

