

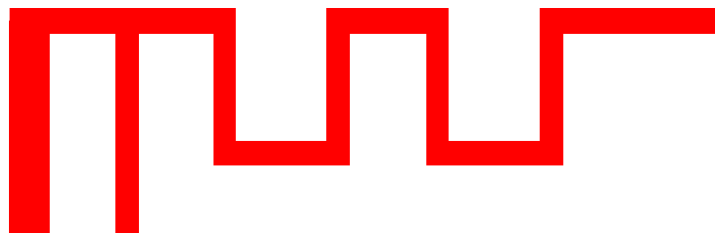
# Product specification

Quick Reference Date

|                          |                                    |  |
|--------------------------|------------------------------------|--|
|                          | Antenna module on the system board |  |
| Frequency                | 2.45GHz*                           |  |
| Ant.Port Input Pwr.(dBm) | 0(Typ.BT class 2 output power)     |  |
| Tot.Rad.Pwr.(dBm)        | -2.3(Input pwr-loss pwr)           |  |
| Peak EIRP(dBm)           | 1.3                                |  |
| Directivity(dBi)         | 1 (all direction antenna)          |  |
| Efficiency(dB)           | -2.3(58.5%)                        |  |
| Gain(dBi)                | 1.3(Peak Gain XY-plane)            |  |
| Maximum Power(dBm)       | 1.3(XY-plane)                      |  |
| Maximum Power(dBm)       | -4(XY-plane)                       |  |
| Avg.Power(dBm)           | -0.5(XY-plane)                     |  |
| Max/Min Ratio(dB)        | 5.3(XY-plane)                      |  |
| Max/Avg Ratio(dB)        | 1.8(XY-plane)                      |  |
| Min/Avg Ratio(dB)        | -3.5(XY-plane)                     |  |
| Average Gain(dB)         | -0.5(Avg Gain XY-plane)            |  |

All the technical data and information contained herein are subject to change without prior notice

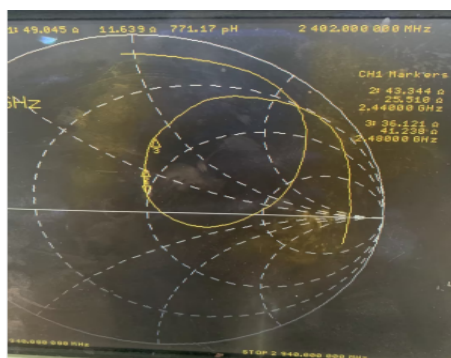
Antenna Layout & module on the system board

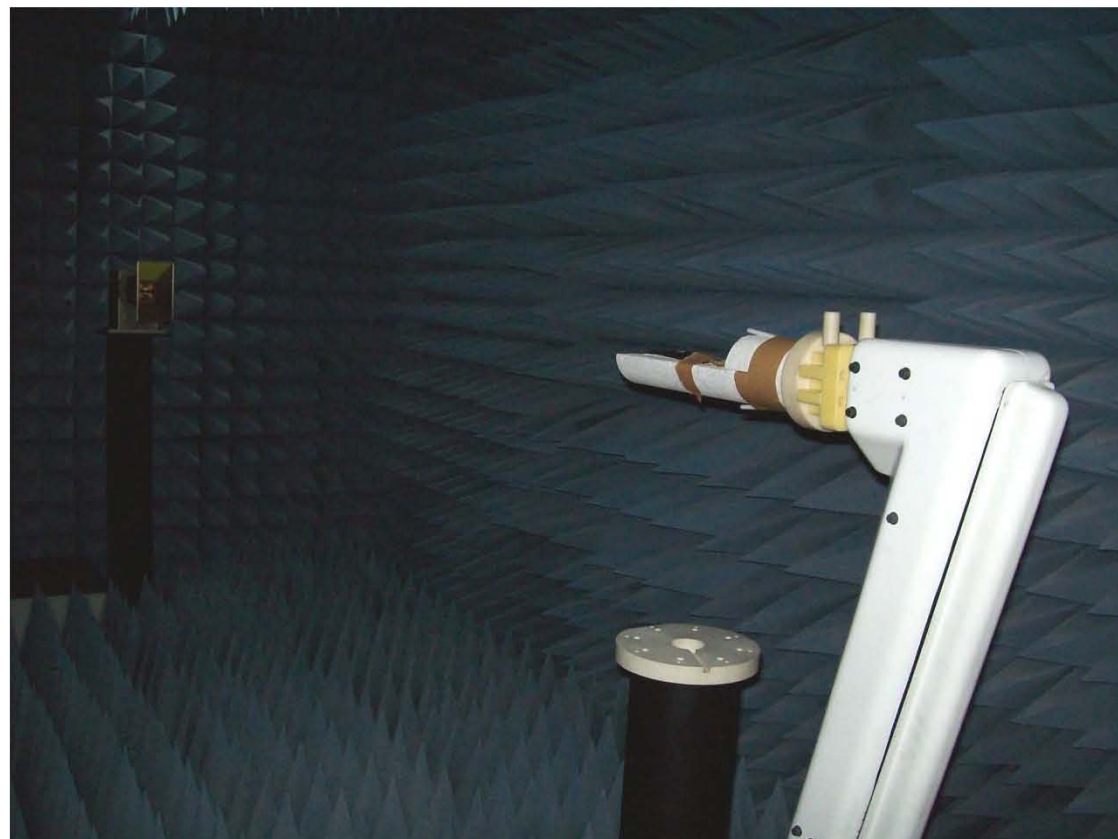
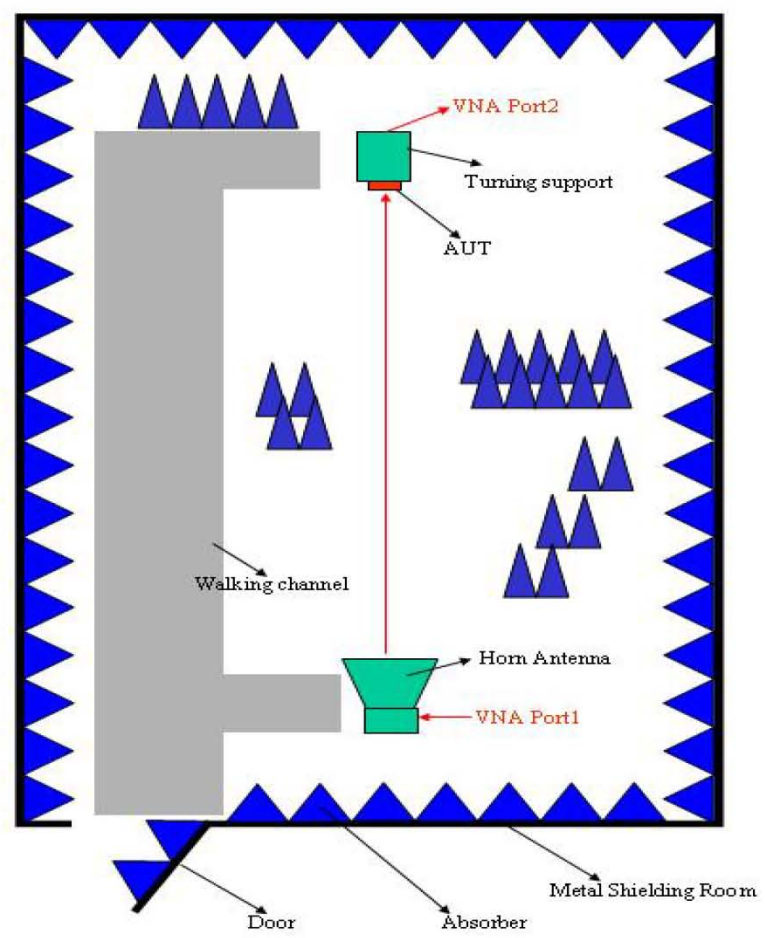


Antenna Gain

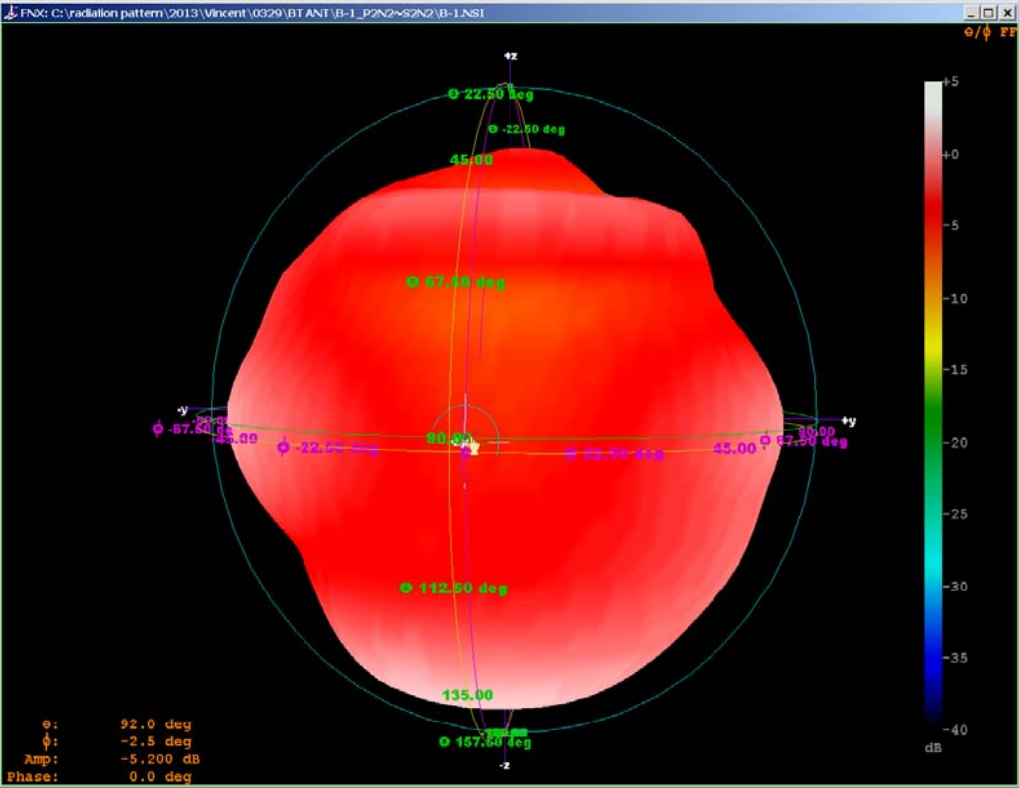
Gain Table

| Unit in dBi @ 2.44GHz | XY-plane |      | XZ-plane |      | YZ-plane |      | Efficiency |
|-----------------------|----------|------|----------|------|----------|------|------------|
|                       | Peak     | Avg. | Peak     | Avg  | Peak     | Avg  |            |
| Module Board          | 1.3      | -0.5 | 1.3      | -3.8 | 1.1      | -3.0 | 58.5%      |

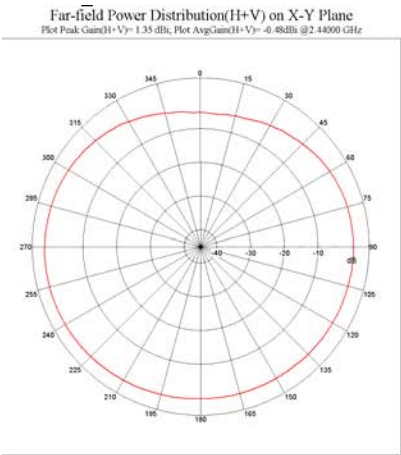




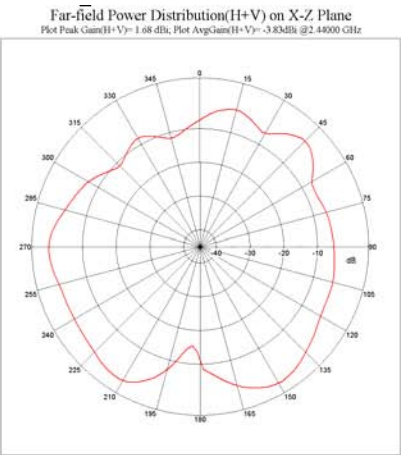
The Environment of Antenna Radiation Pattern



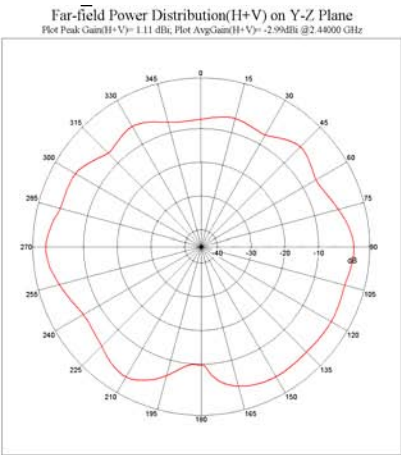
3D radiation pattern diagram



XY-plane



XZ-plane



YZ-plane