

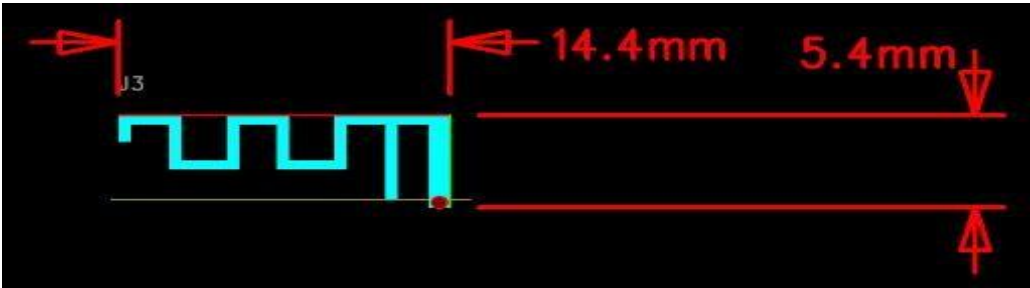
Product specification

Quick Reference Date

	Antenna module on the system board	
Antenna type	PCB	
Frequency	2.45GHz*1	
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)	2.81(Peak Gain XY-plane	
Maximum Power (dBm)	3 (XY-plane)-	
Minimum 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

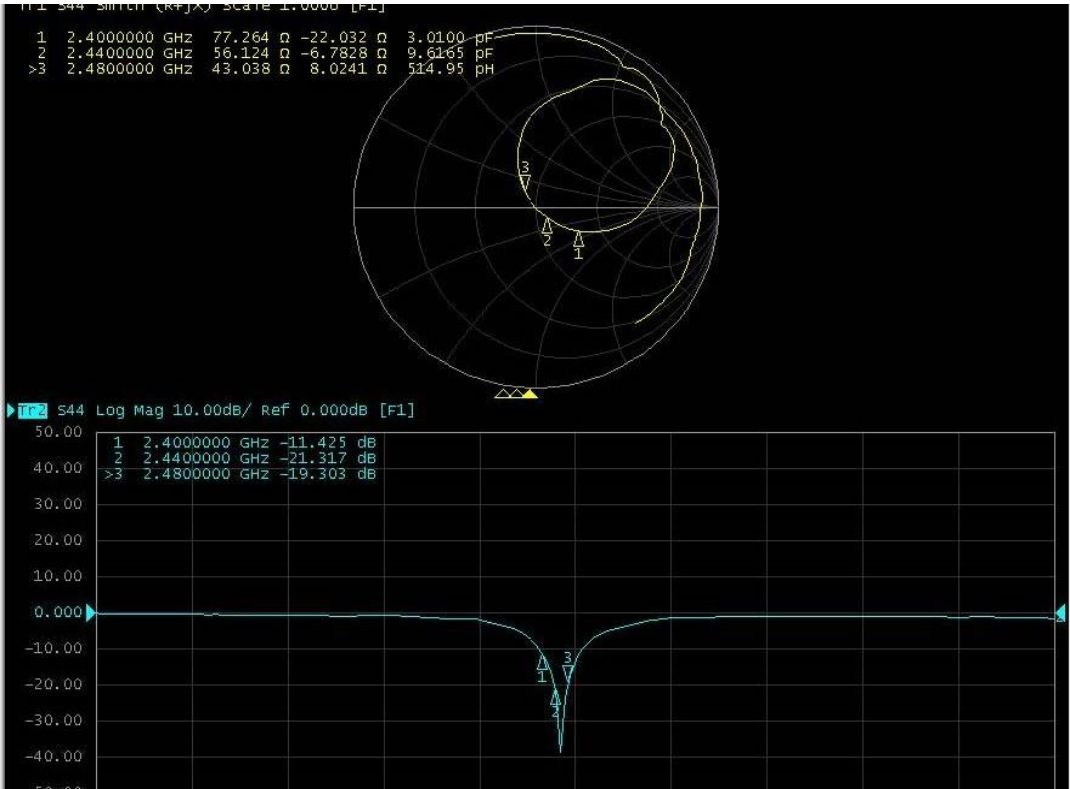


Gain

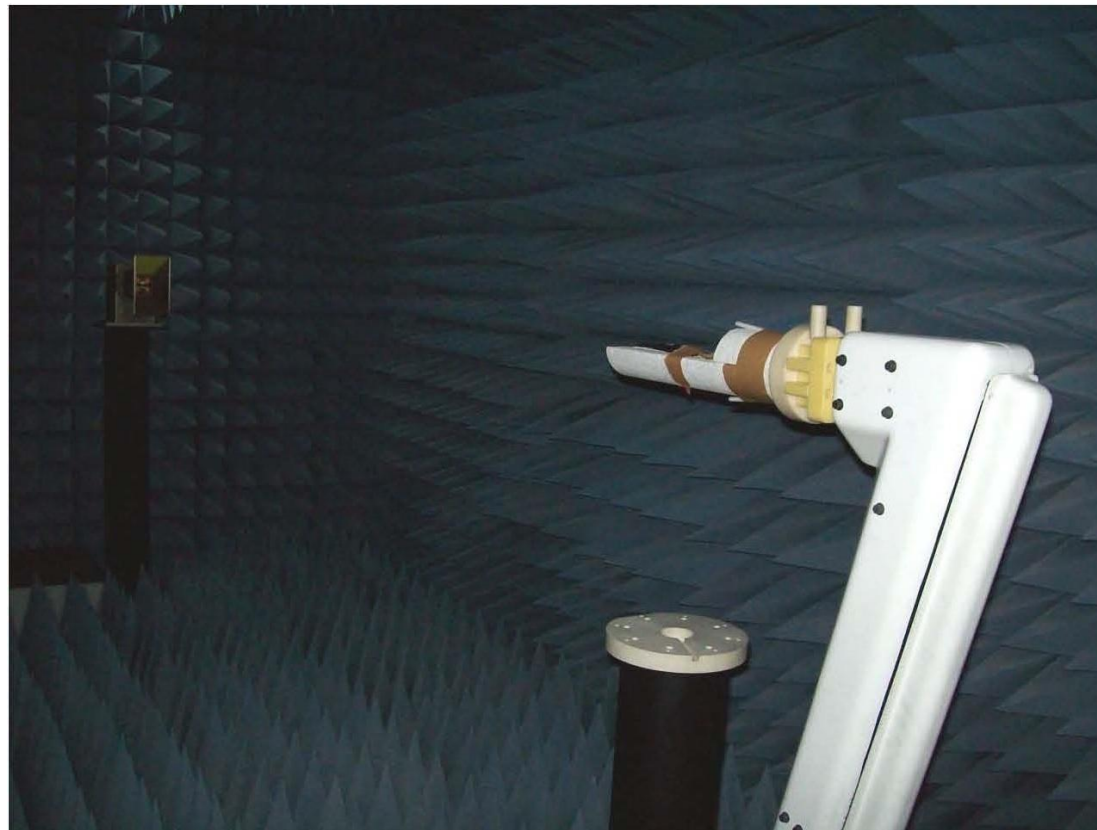
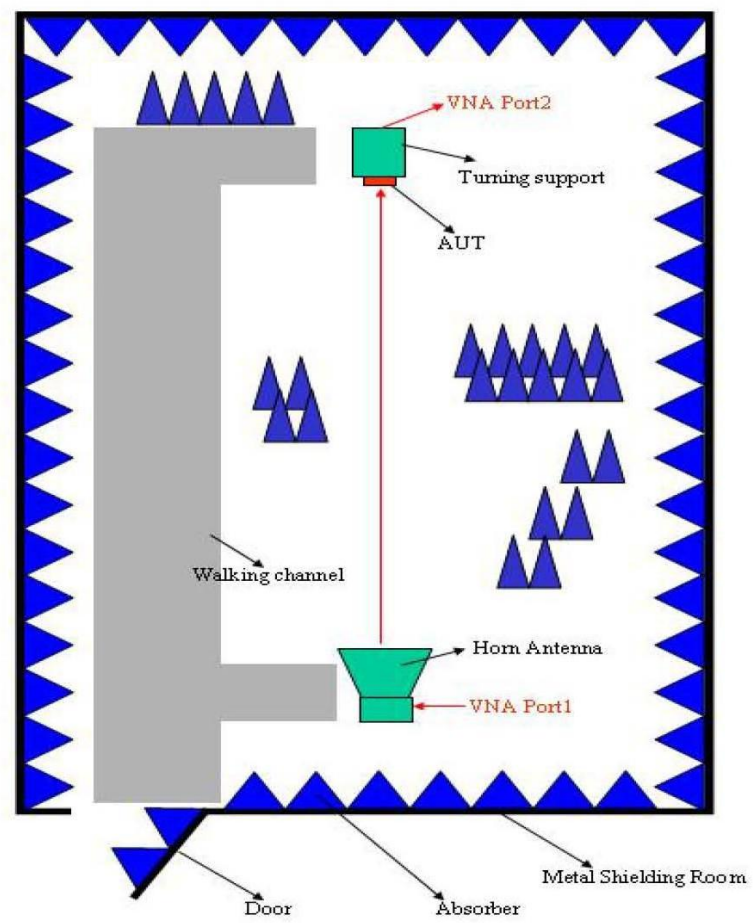
Frequency	Gain (dBi)
2400MHz	2.81
2410MHz	2.74
2420MHz	2.70
2430MHz	2.73
2440MHz	1.01
2450MHz	1.26
2460MHz	1.50
2470MHz	1.49
2480MHz	1.42
2490MHz	0.36
2500MHz	0.33

Return Loss/VSWR/Input Impedance

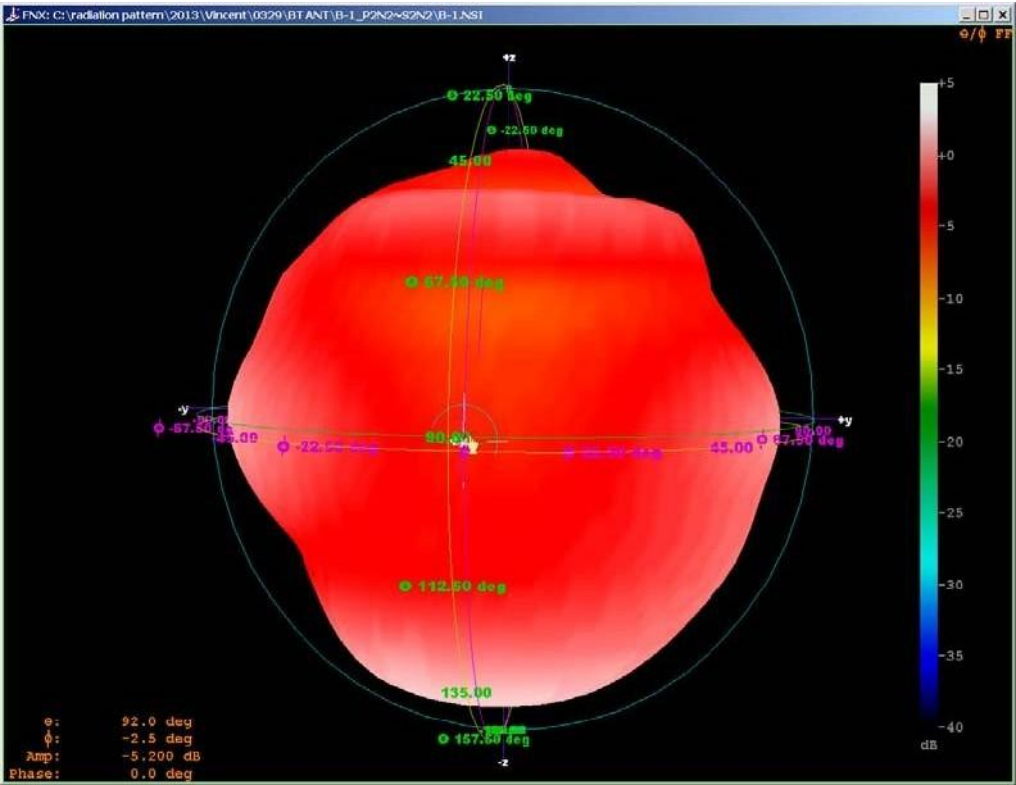
Frequency	Return Loss (dB)	VSWR	Input Impedance( Ω )
2400MHz	-7.23	2.53	25.37
2400MHz	-6.47	2.80	17.99
2450MHz	-6.22	2.90	17.18
2480MHz	-5.18	3.44	15.55
2500MHz	-4.56	3.89	15.48



Return Loss

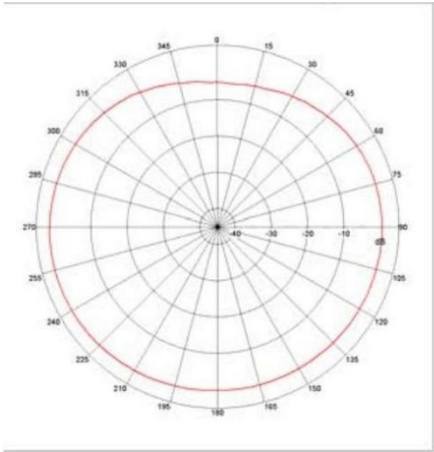


The Environment of Antenna Radiation Pattern



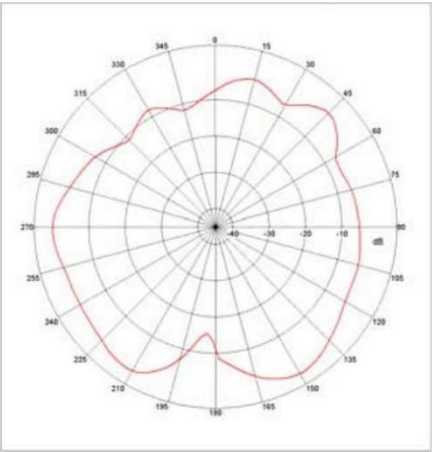
3D radiation pattern diagram

Far-field power Distribution(H+V)on Y-X Plane  
Plot peak Gain(H+V)=135dbi;plot AvgGain(H+V)=-0dbi@2.44000GHz



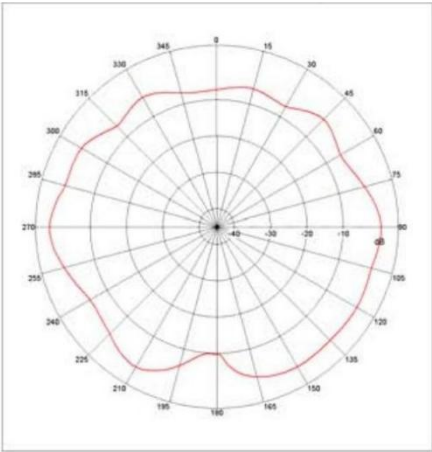
XY-plane

Far-field power Distribution(H+V)on X-Z Plane  
Plot peak Gain(H+V)=1.68dbi;plot AvgGain(H+V)=-3.83dbi@2.44000GHz



XZ-plane

Far-field power Distribution(H+V)on Y-Z Plane  
Plot peak Gain(H+V)=1.11dbi;plot AvgGain(H+V)=-2.99dbi@2.44000GHz



YZ-plane