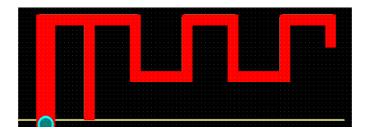
Product specification

Quick Reference Date

	Antenna module on the system board		
Model number	N69		
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)		
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)		

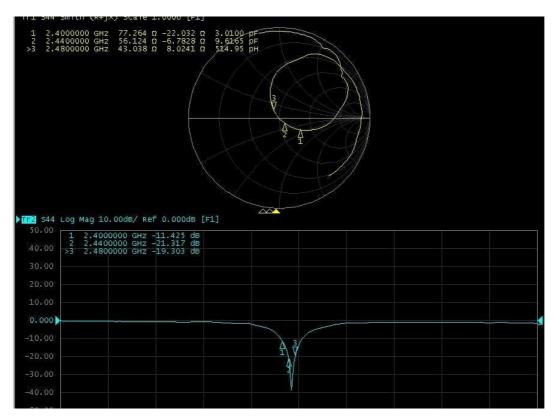
All the technical data and information contained herein are subject to change without prior notice

Antenna Layout & module on the system board

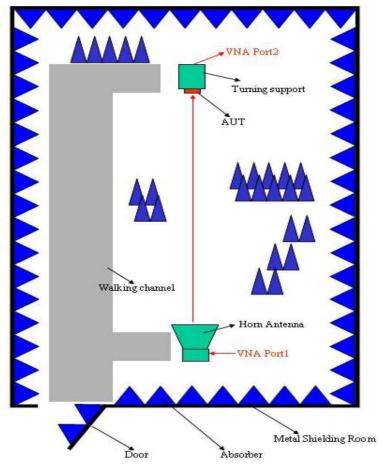


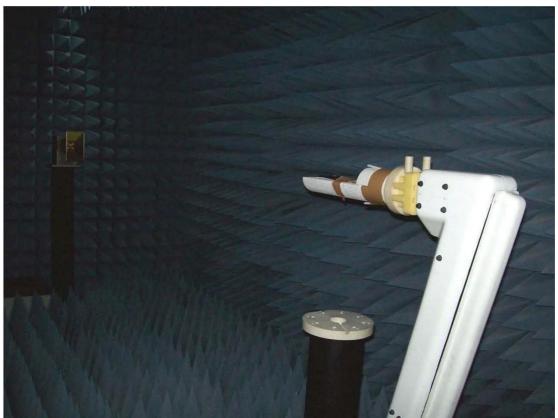
Antenna Gain Gain Table

Unit in dBi @2.44GHz	XY-plane		XZ-plane		YZ-plane		Efficiency
	Peak	Avg.	Peak	Avg.	Peak	Avg.	
Module Board	1.3	-0.5	1.7	-3.8	1.1	-3.0	58.5%

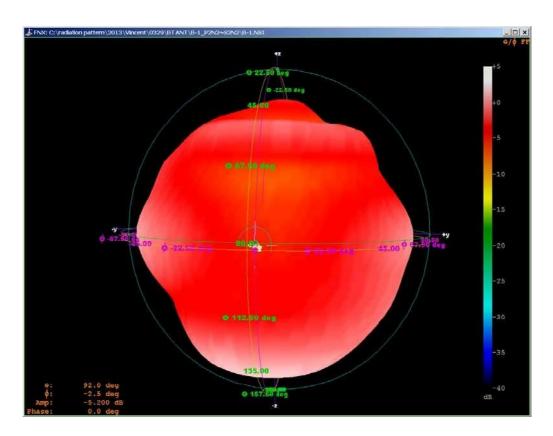


Return Loss

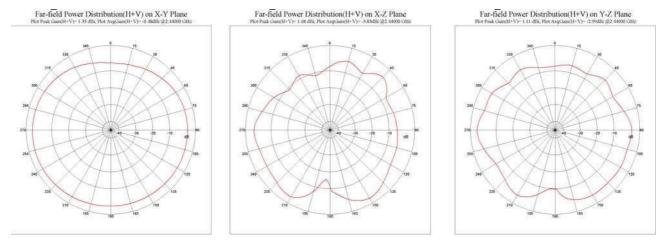




The Environment of Antenna Radiation Pattern



3D radiation pattern diagram



XY-plane XZ-plane YZ-plane