

Product specification

Manufacturer:

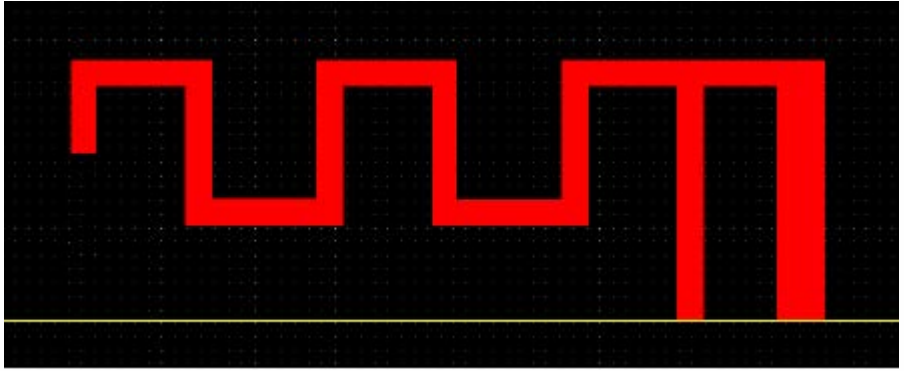
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Quick Reference Date	Antenna module on the system board	
Antenna type	PCB	
Frequency	2.4GHz-2.5GHz	
Ant. Port Input Pwr. (dBm)	0 (Typ. BT class 2 output power)	
Tot. Rad. Pwr. (dBm)	-2.3 (Input pwr – loss pwr)	
Peak EIRP(dBm)	1.7	
Directivity (dBi)	1 (all direction antenna)	
Efficiency (dB)	-2.3 (58.5%)	
Gain (dBi)	1.7 (Peak Gain XY-plane)	
Maximum Power (dBm)	1.3 (XY-plane)	
Minimum Power (dBm)	-4.5(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

Unit in dBi @2.44GHz	XY-plane		XZ-plane		YZ-plane		Efficiency
	Peak	Avg.	Peak	Avg.	Peak	Avg.	
Module Board	1.3	-0.4	1.7	-3.7	1.1	-3.0	58.5%

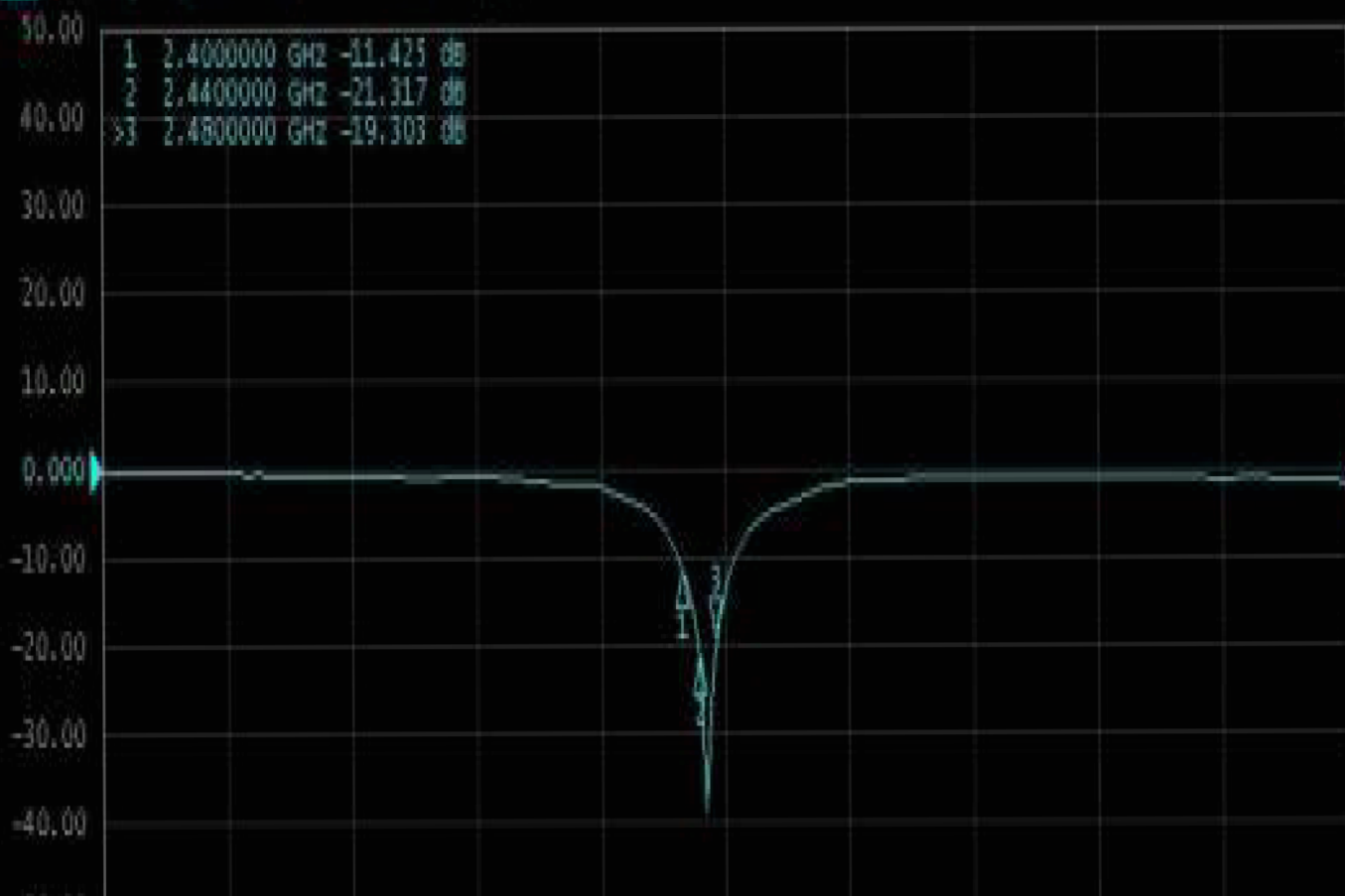
#1 S44 Smith (XF)X Scale 1.0000 [F1]

1	2.4000000 GHz	77.264 Ω	-22.032 Ω	3.0100 pF
2	2.4400000 GHz	56.124 Ω	-6.7828 Ω	9.6365 pF
>3	2.4800000 GHz	43.038 Ω	8.0241 Ω	514.95 pH

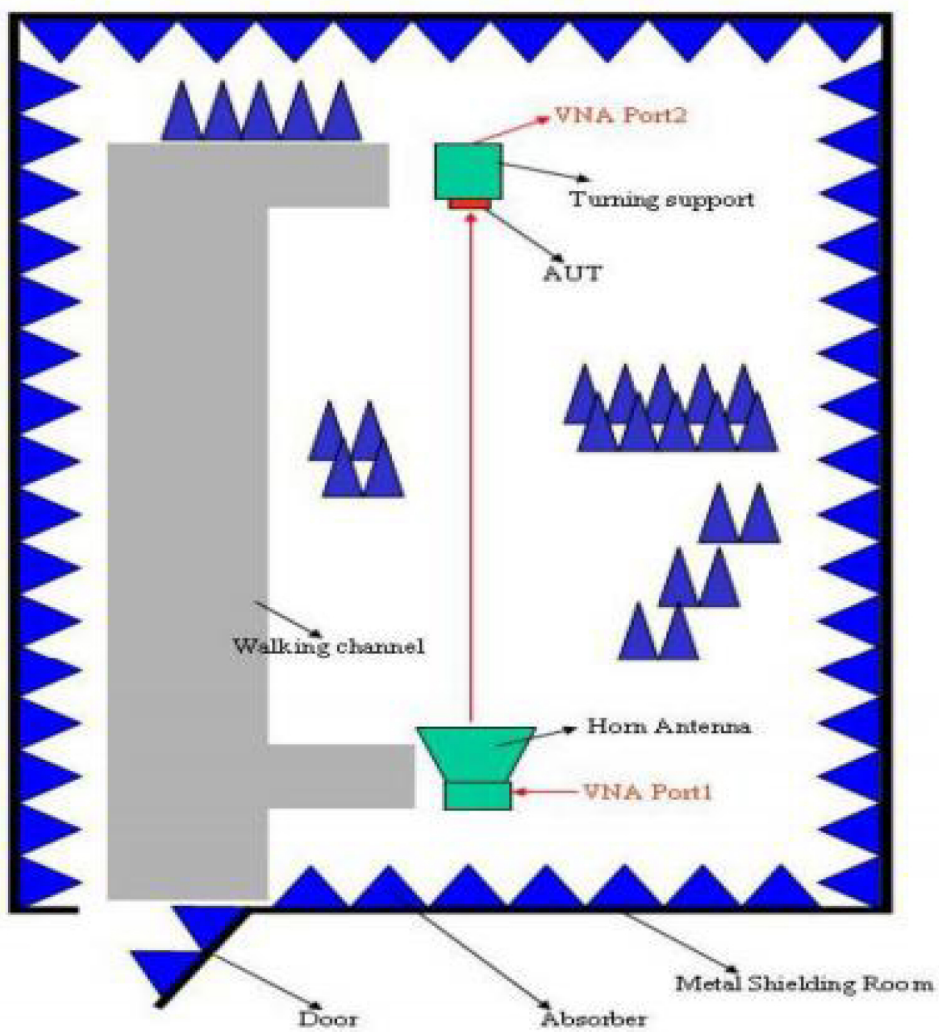


#2 S44 Log Mag 10.00dB/ Ref 0.000dB [F1]

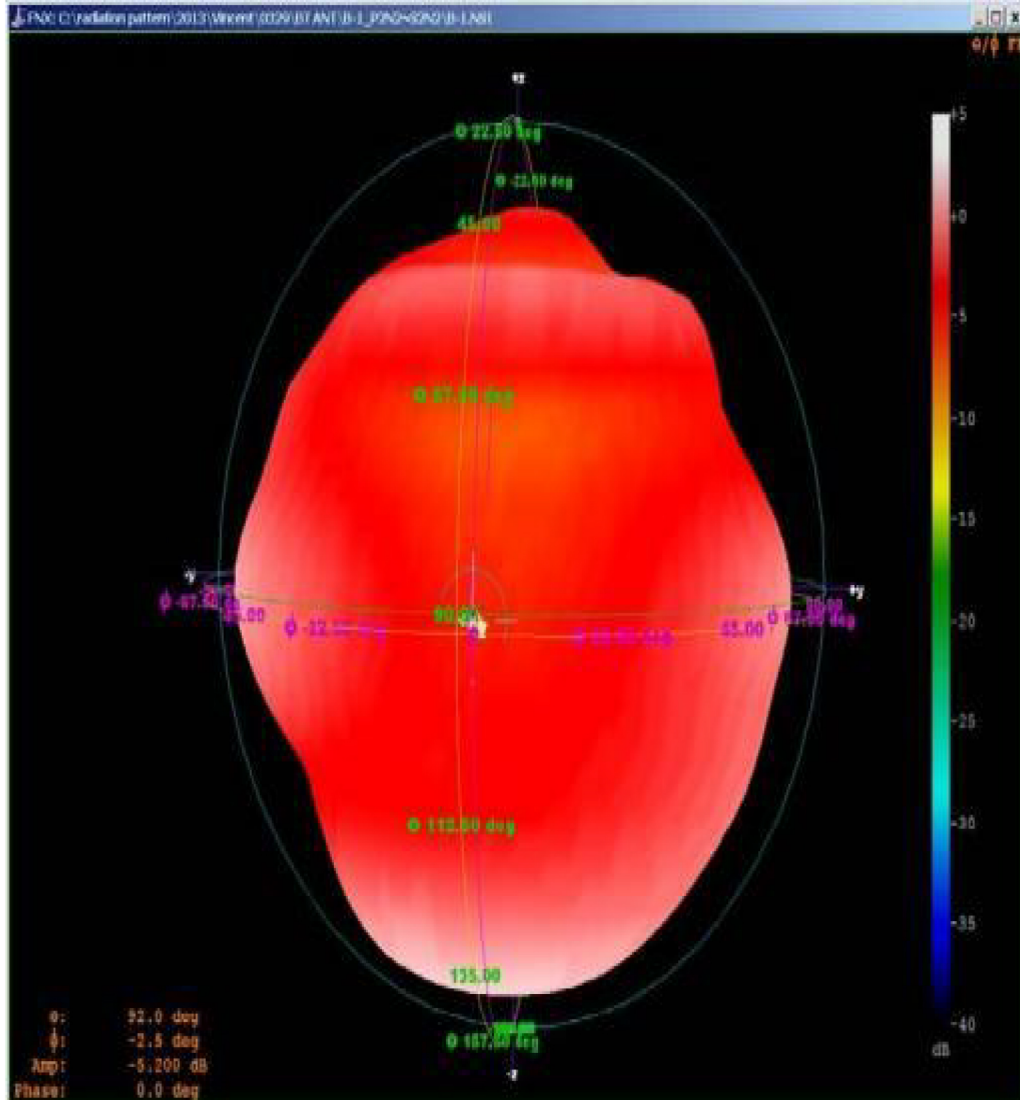
1	2.4000000 GHz	-11.425 dB
2	2.4400000 GHz	-21.317 dB
>3	2.4800000 GHz	-19.303 dB



Return Loss



The Environment of Antenna Radiation Pattern

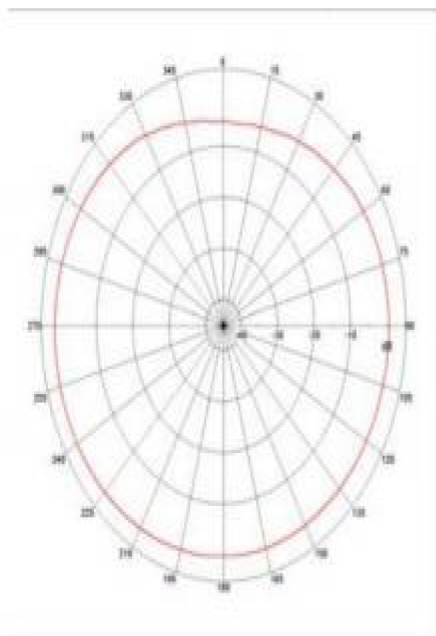


3D radiation pattern diagram

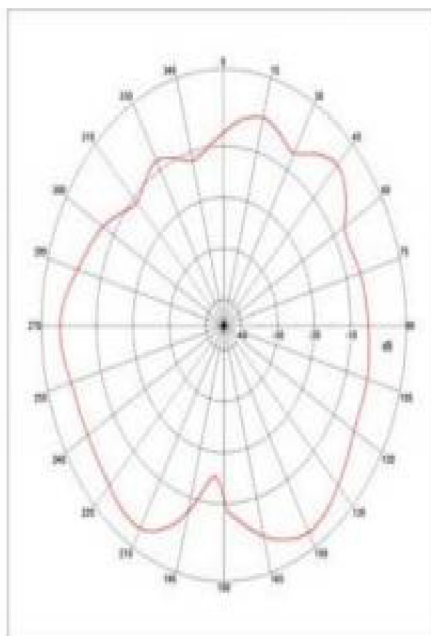
Far-field power Distribution(H+V) on Y-X Plane
 Plot peak Gain(H+V)=135dbi;plot AvgGain(H+V)=-0dbi@2.44000GHz

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

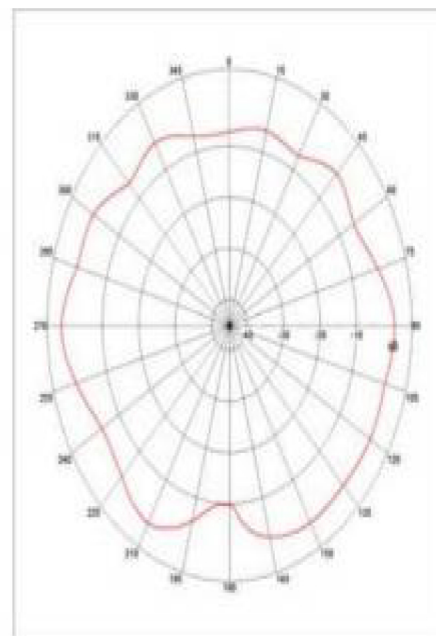
Far-field power Distribution(H+V) on Y-Z Plane
 Plot peak Gain(H+V)=1.11dbi;plot AvgGain(H+V)=-2.99dbi@2.44000GHz



XY-plane



XZ-plane



YZ-plane