

Product specification

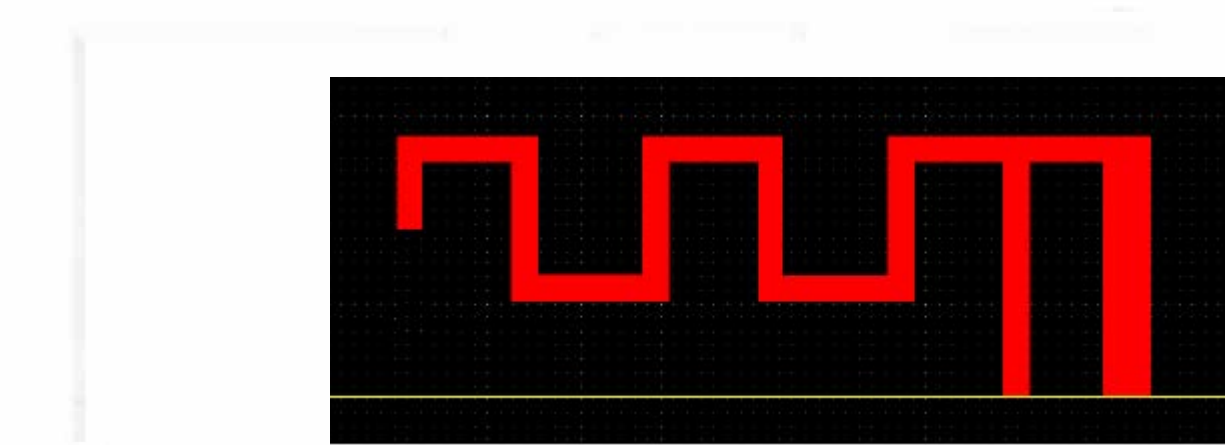
Manufacturer:

SHENZHEN PINSHENG INDUSTRIAL CO., LTD
4th Floor, Pengzhou Industrial Park Office Building, No. 158 Fuyuan 1st Road, Zhancheng Community, Fuhai Street, Bao'an District, Shenzhen

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%

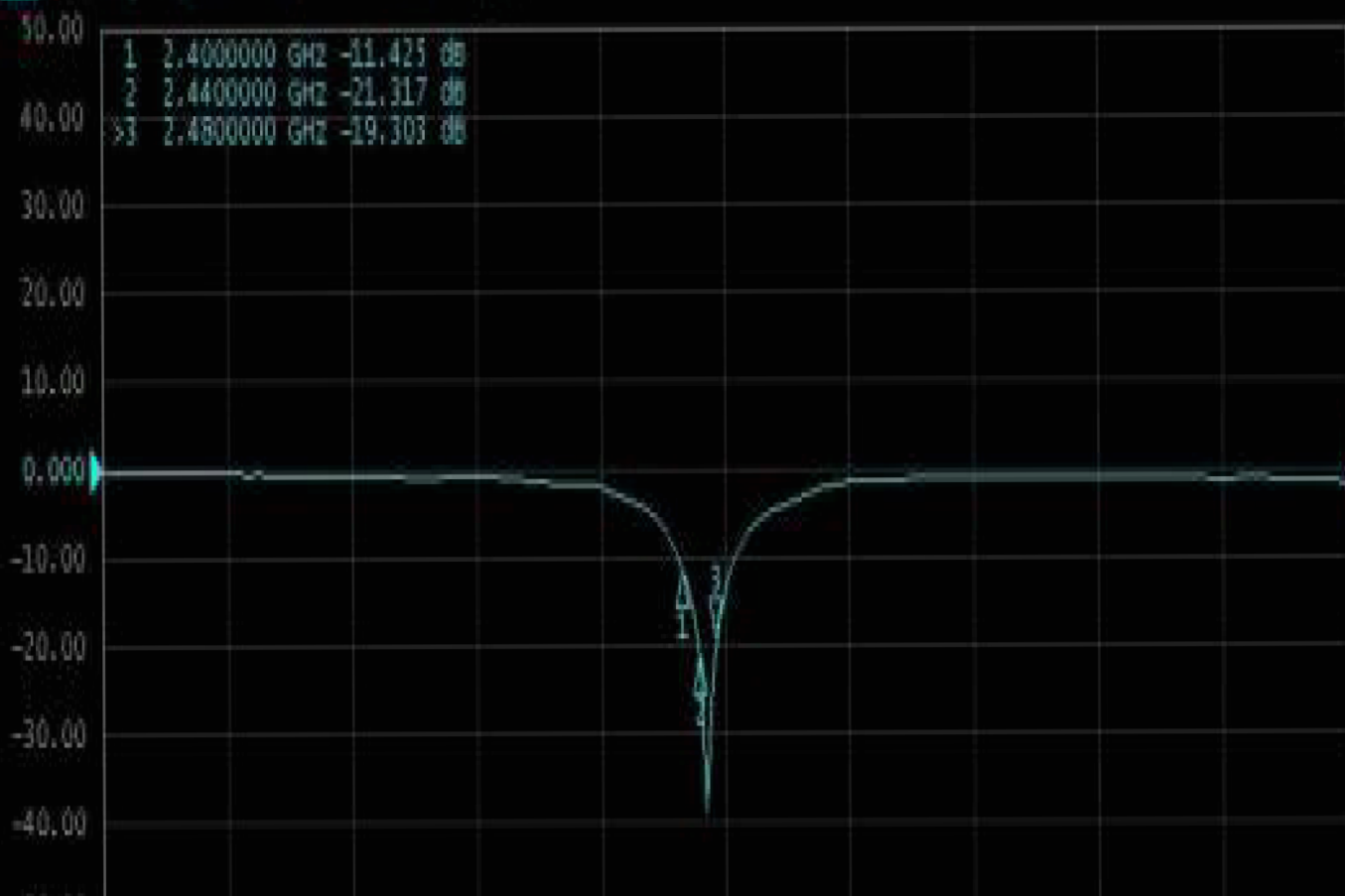
#1 S44 Smith (XF)X Scale 1.0000 [F1]

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

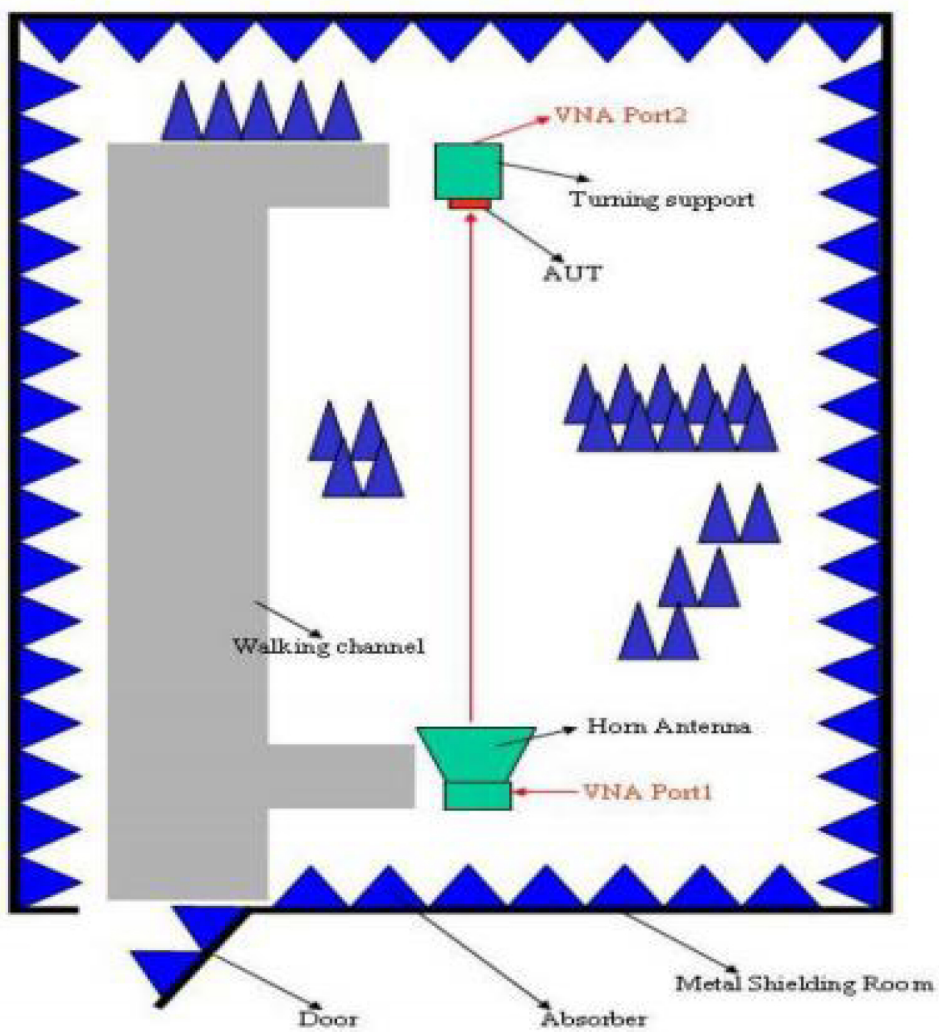


#2 S44 Log Mag 10.00dB/ Ref 0.000dB [F1]

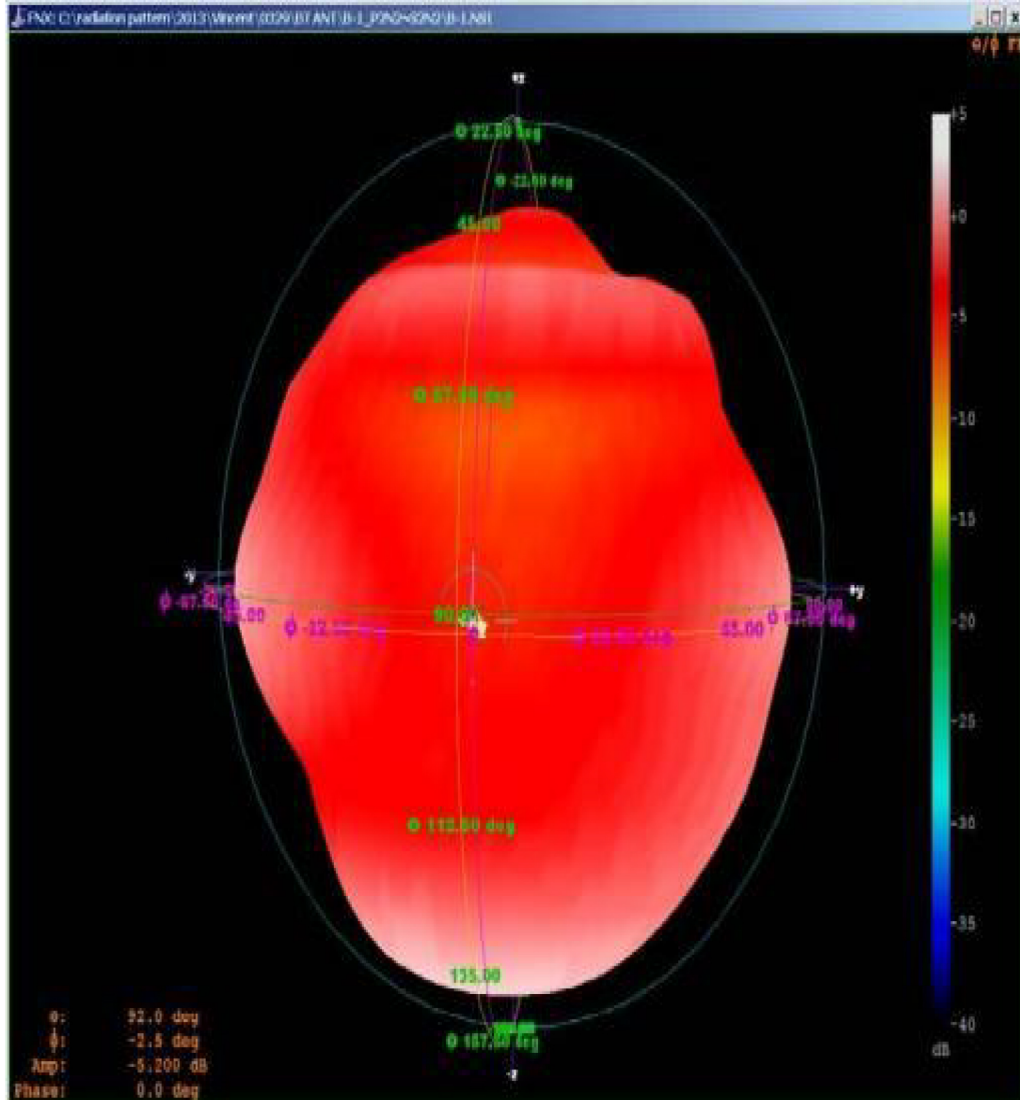
1	2.4000000 GHz	-11.425 dB
2	2.4400000 GHz	-21.317 dB
>3	2.4800000 GHz	-19.303 dB



Return Loss



The Environment of Antenna Radiation Pattern

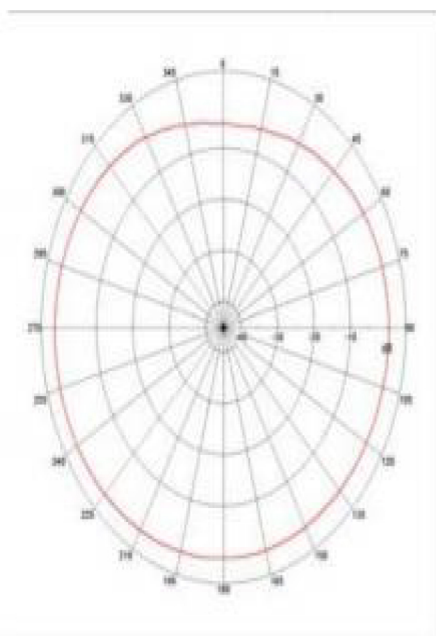


3D radiation pattern diagram

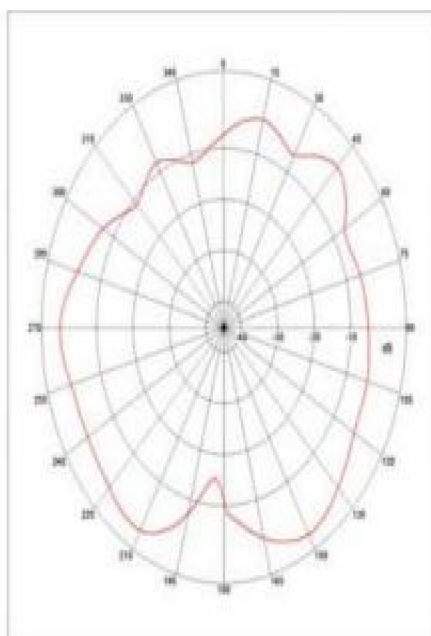
Far-field power Distribution(H+V) on Y-X Plane
Plot peak Gain(H+V)=135dbi;plot AvgGain(H+V)=-0dbi@2.44000GHz

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

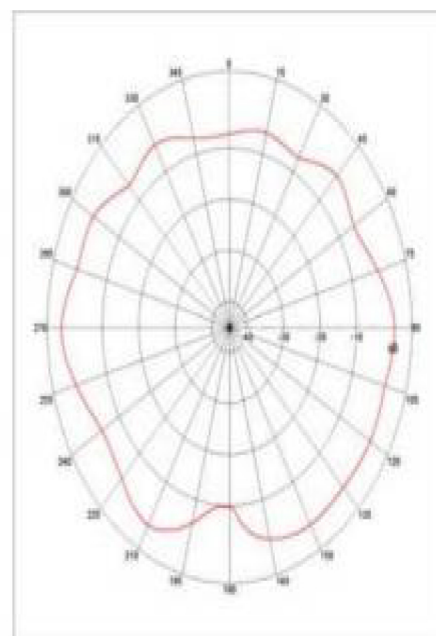
Far-field power Distribution(H+V) on Y-Z Plane
Plot peak Gain(H+V)=1.11dbi;plot AvgGain(H+V)=-2.99dbi@2.44000GHz



XY-plane



XZ-plane



YZ-plane