

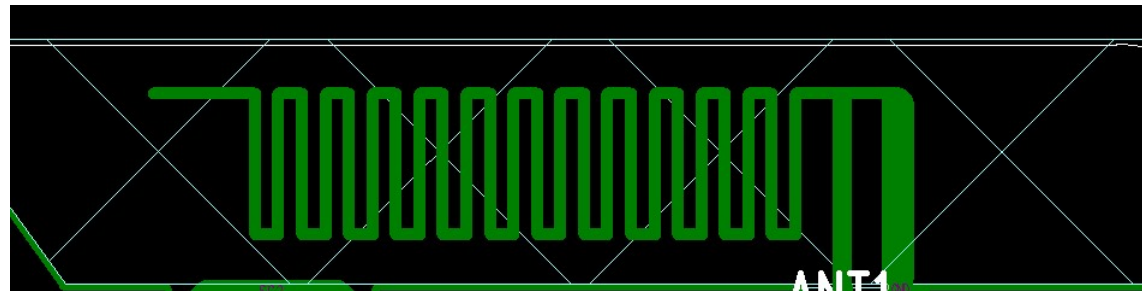


Smart Hula Hoop Antenna Report

深 圳 市 研 兴 科 技 有 限 公 司

● Gain and Efficiency

Antenna type PCB antenna



Antenna specification L x W = 9mm x 2mm

● Gain and Efficiency

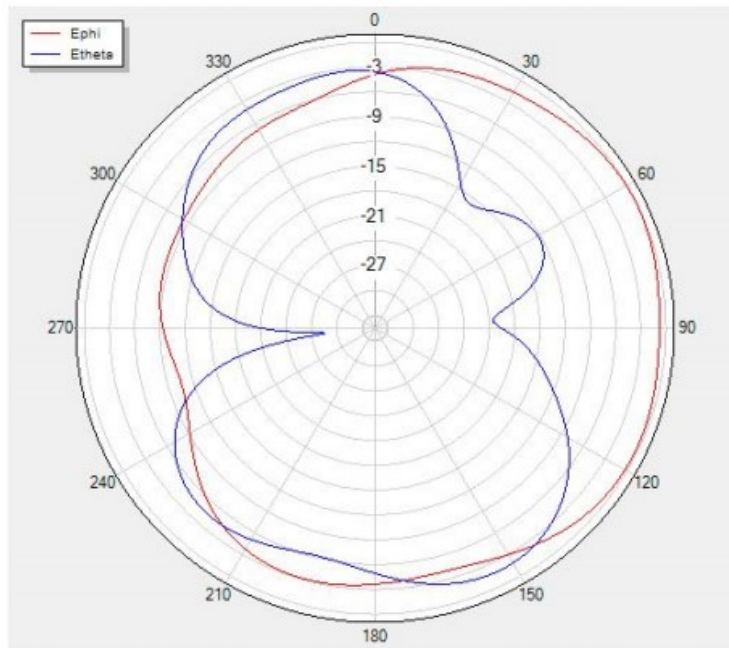
Built-in Bluetooth antenna	
Frequency(MHz)	2402 ~ 2480 MHz
VSWR	≤ 1.8
Impedance	50 Ohm Nominal
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	-1dBi
Polarization	Linear, Vertical
Admitted Power	4dbm
Connector	Tin

● Gain and Efficiency

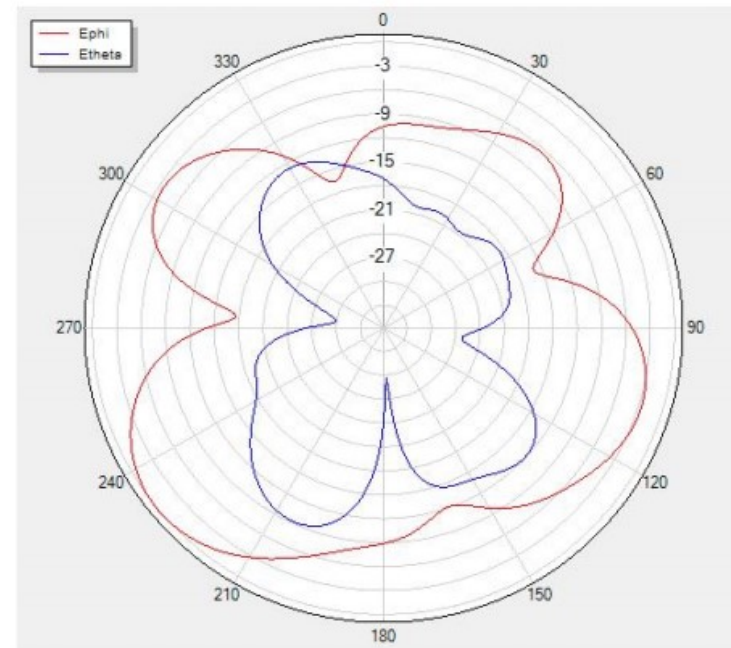
Gain&Efficiency 增益和效率			
frequency 频率 (MHz)	gain 增益(dBi)	mingain 最小增益 (dBi)	efficiency 效率 (%)
2400	-1	-20.1	7.38%
2410	-1.18	-20.25	7.39%
2420	-1.34	-20.39	7.39%
2430	-1.51	-20.59	7.39%
2440	-1.68	-20.88	7.35%
2450	-1.86	-21.01	7.37%
2460	-1.99	-21.17	7.36%
2470	-2.15	-21.26	7.38%
2480	-2.24	-21.42	7.36%
2490	-2.30	-21.59	7.33%
2500	-2.32	-21.68	7.31%

● Antenna 2D orientation diagram

Theta=90 freq=2400MHz

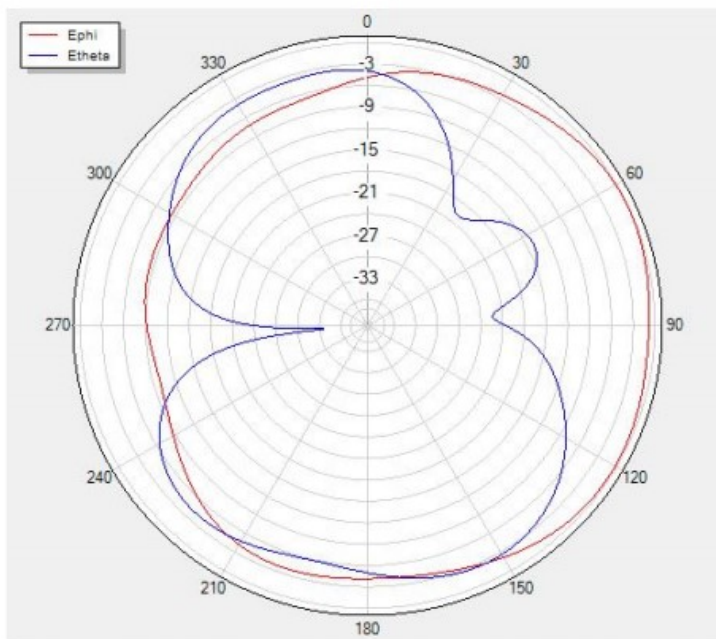


Phi=90 freq=2400MHz

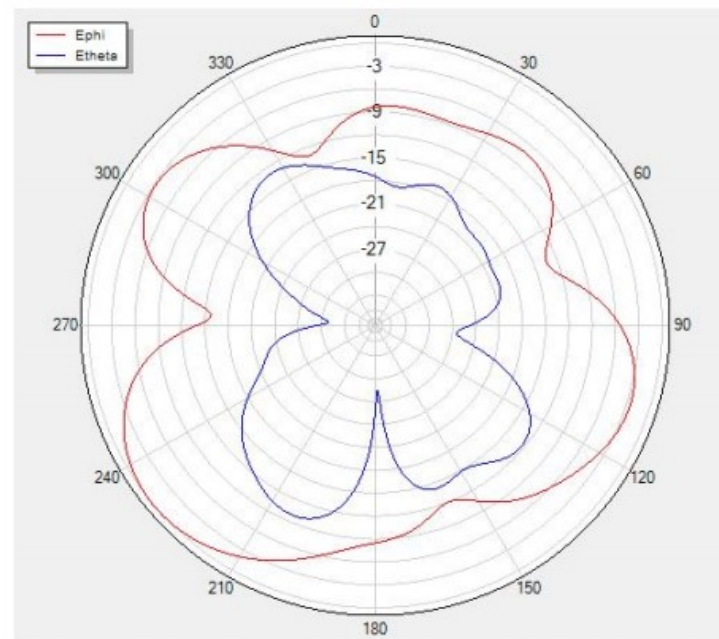


● Antenna 2D orientation diagram

Theta=90 freq=2450MHz

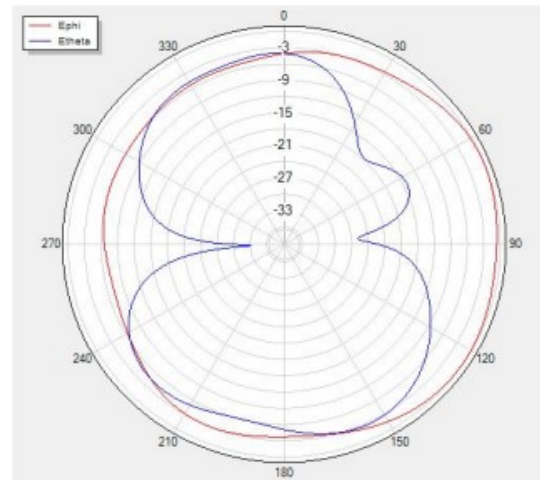


Phi=90 freq=2450MHz

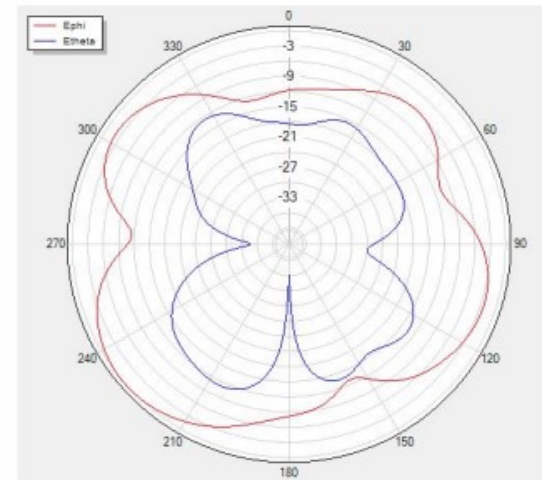


● Antenna 2D orientation diagram

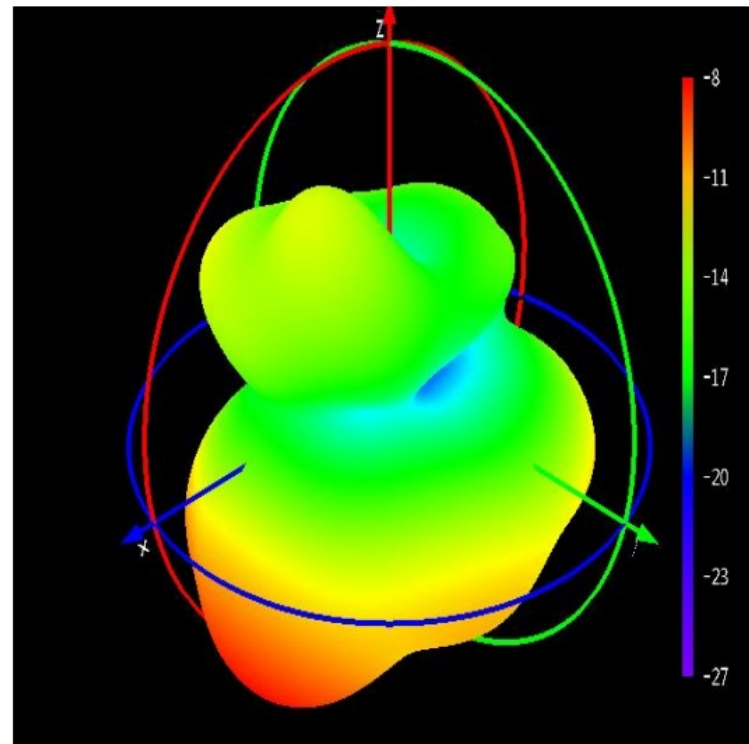
Theta=90 freq=2500MHz



Phi=90 freq=2500MHz

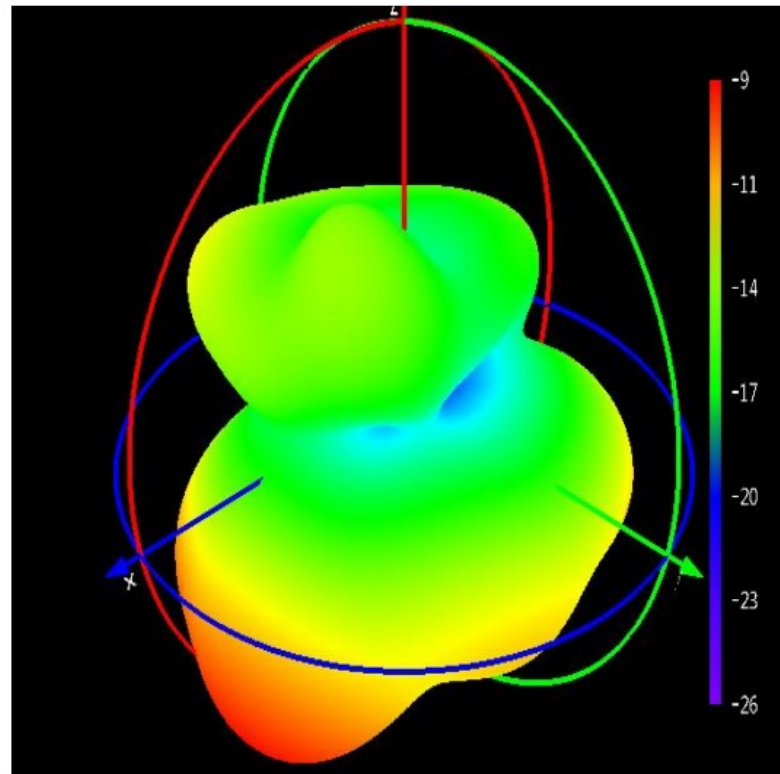


● Antenna 3D orientation diagram



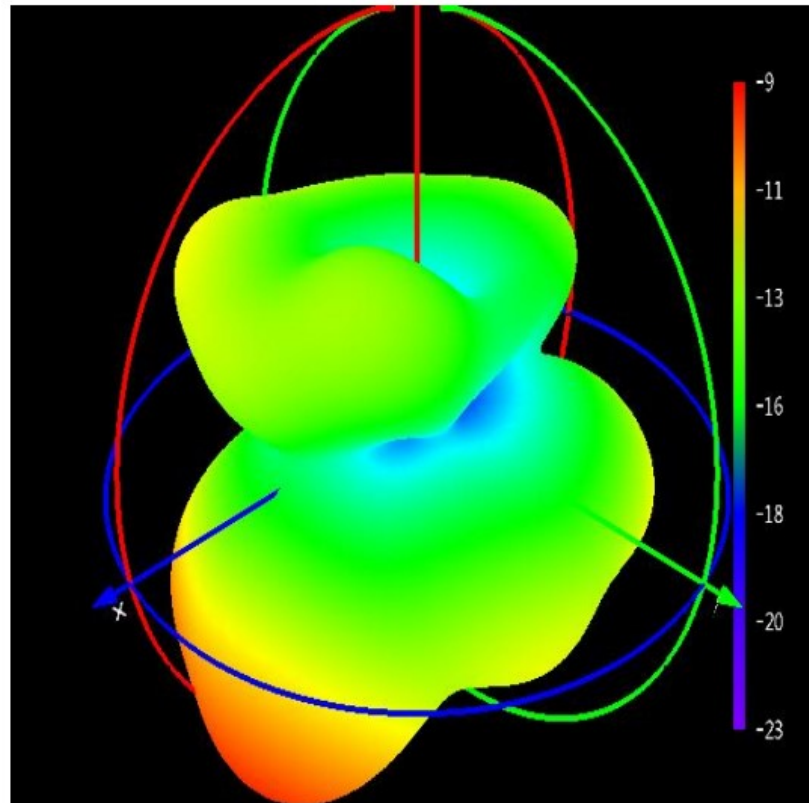
2400MHz

● Antenna 3D orientation diagram



2450MHz

● Antenna 3D orientation diagram



2500MHz