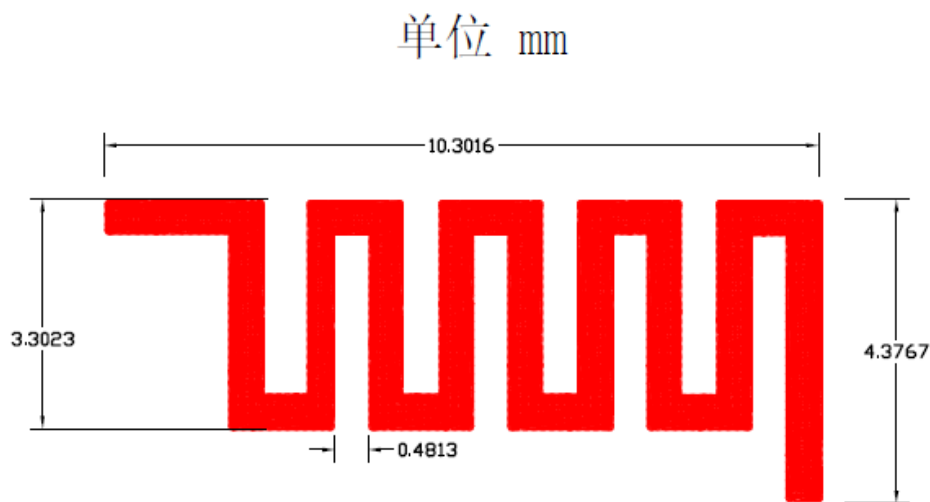

Antenna specification

1、Antenna introduction

The Bluetooth module antenna is directly used on the PCB.

2、Antenna shape



3、Antenna parameter

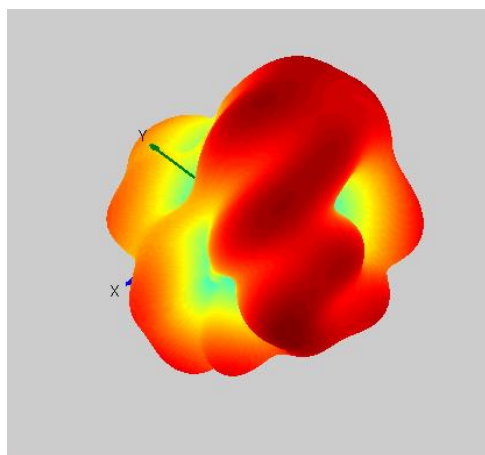
The Bluetooth antenna operates at 2402-2480 MHz and generates resonance in this band. The table below shows the main parameters of the antenna.

Frequency (MHz)	2402 ~ 2480 MHz
VSWR	≤ 2.0
Impedance	50 Ohm Nominal
Gain (Peak)	2.1dBi

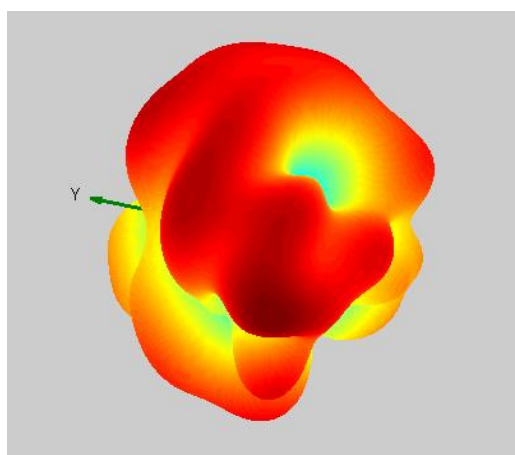
4、Antenna gain report

Gain&Efficiency							
frequency	gain	mingain	efficiency	efficiency	lowerhemisphere	Upper	
(MHz)	(dBi)	(dBi)	(dBi)	(%)	gain	Avg	Theta0°~180°
2400	-0.23	-24.73	-5.85	25.98	-0.23	-7.05	-6.71
2410	0.21	-24.63	-5.52	28.03	0.21	-6.75	-6.36
2420	0.3	-25.53	-5.62	27.40	0.3	-6.84	-6.41
2430	1.33	-25	-5.09	30.94	1.33	-6.58	-5.87
2440	2	-23.22	-4.45	35.92	2	-5.82	-5.19
2450	2.1	-20.76	-4.2	38.02	2.1	-5.48	-4.94
2460	1.76	-21.85	-4.39	36.35	1.76	-5.53	-5.1
2470	1.66	-21.72	-4.29	37.25	1.66	-5.33	-4.96
2480	1.11	-25.08	-4.62	34.55	1.11	-5.61	-5.27
2490	1.04	-29.25	-4.52	35.30	1.04	-5.52	-5.17
2500	0.74	-31.22	-4.78	33.30	0.74	-5.81	-5.41

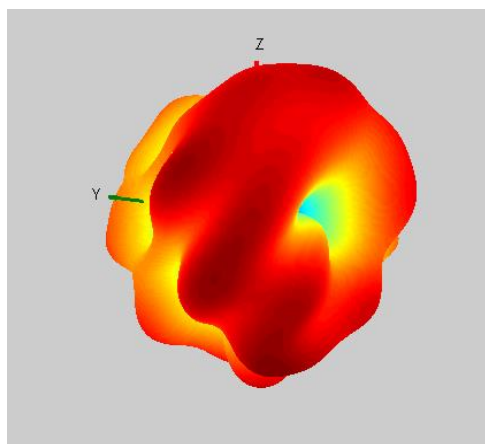
2.4G



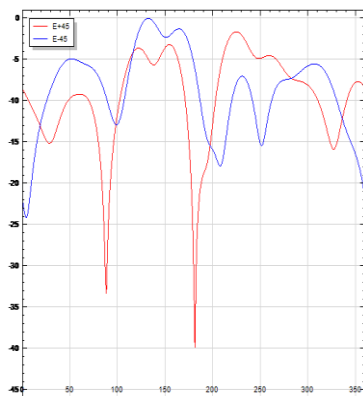
2.44G



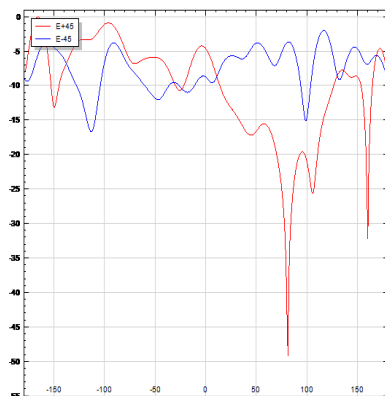
2.48G



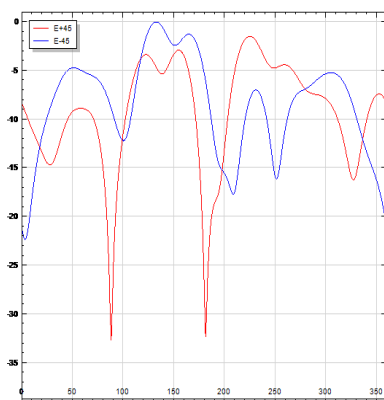
H Theta=90 freq=2400MHz



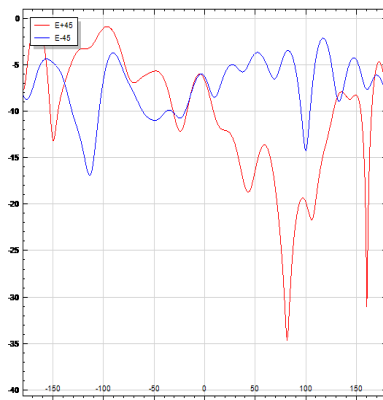
V Phi=90 freq=2400MHz



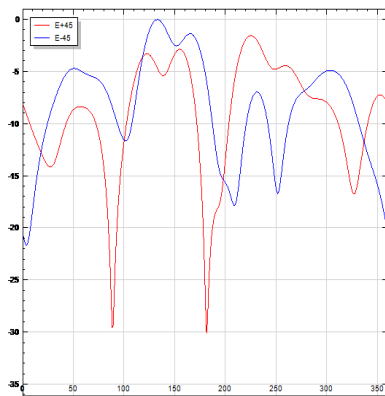
H Theta=90 freq=2410MHz



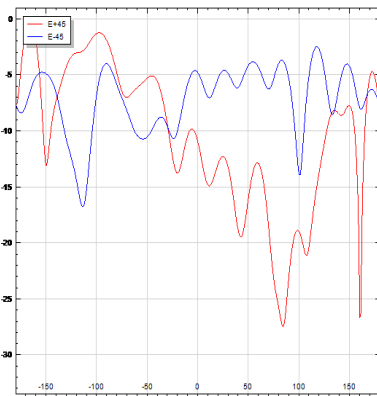
V Phi=90 freq=2410MHz



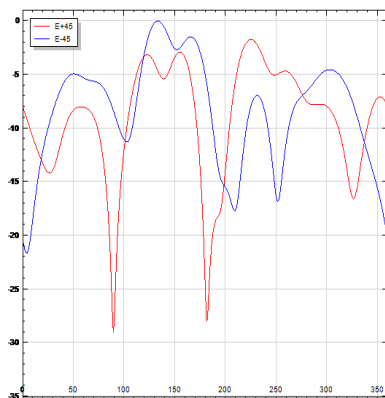
H Theta=90 freq=2420MHz



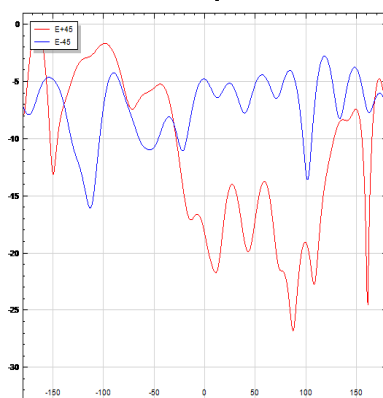
V Phi=90 freq=2420MHz



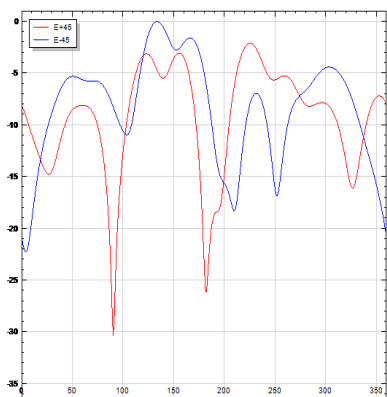
H Theta=90 freq=2430MHz



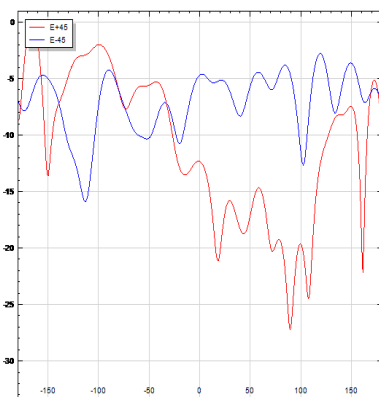
V Phi=90 freq=2430MHz



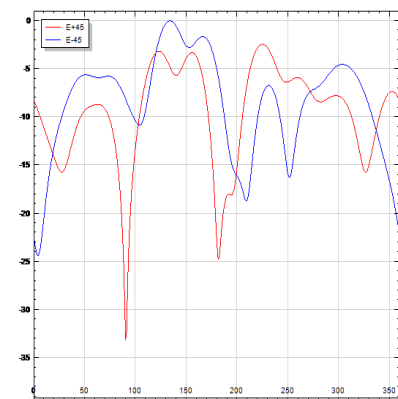
H Theta=90 freq=2440MHz



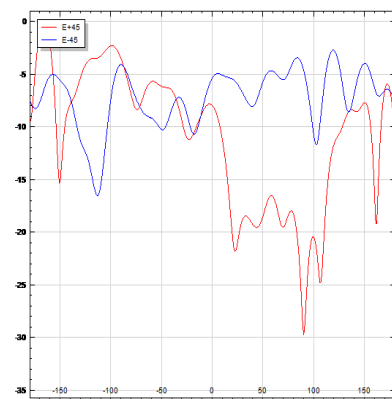
V Phi=90 freq=2440MHz



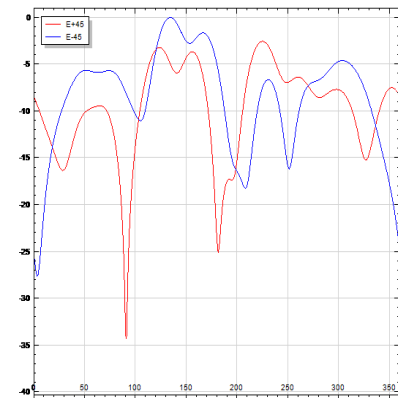
H Theta=90 freq=2450MHz



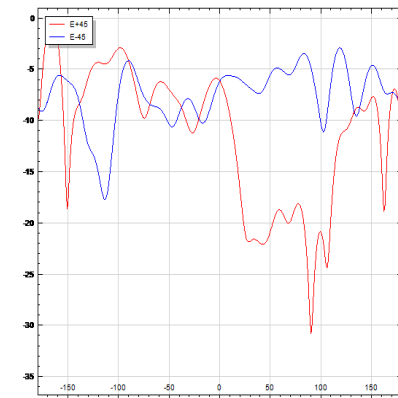
V Phi=90 freq=2450MHz



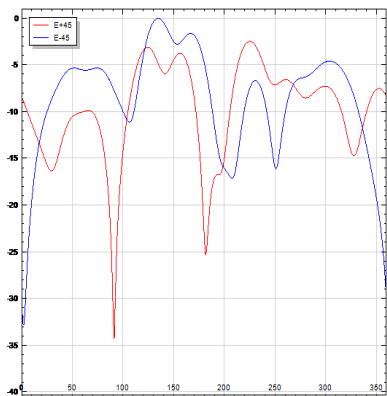
H Theta=90 freq=2460MHz



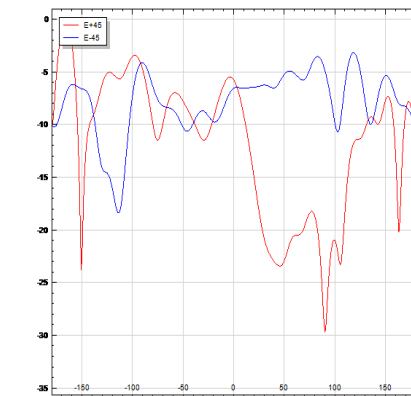
V Phi=90 freq=2460MHz



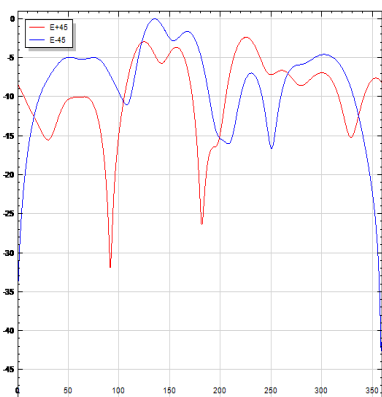
H Theta=90 freq=2470MHz



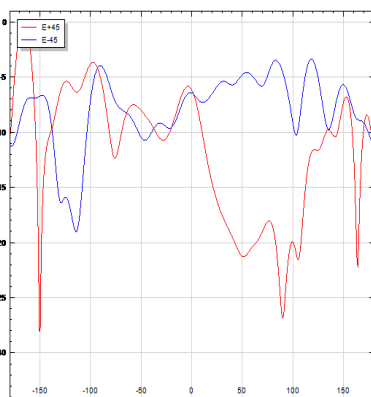
V Phi=90 freq=2470MHz



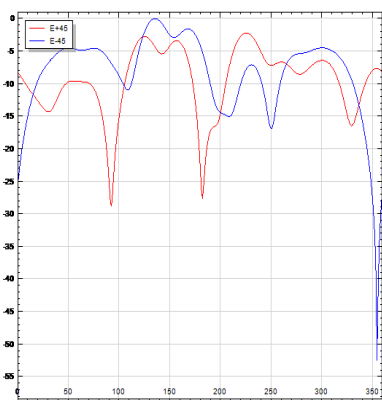
H Theta=90 freq=2480MHz



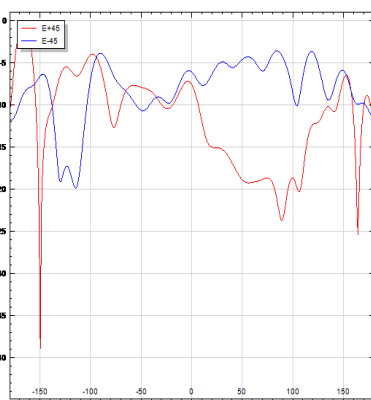
V Phi=90 freq=2480MHz



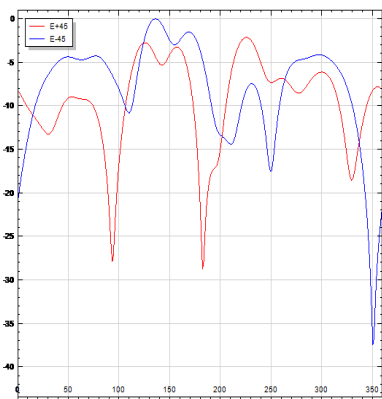
H Theta=90 freq=2490MHz



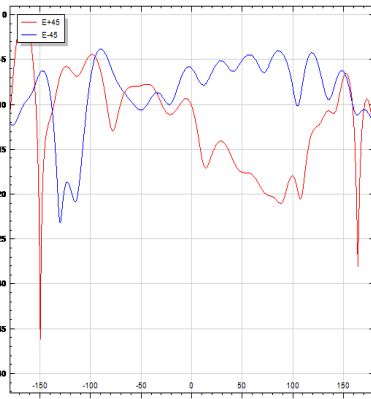
V Phi=90 freq=2490MHz



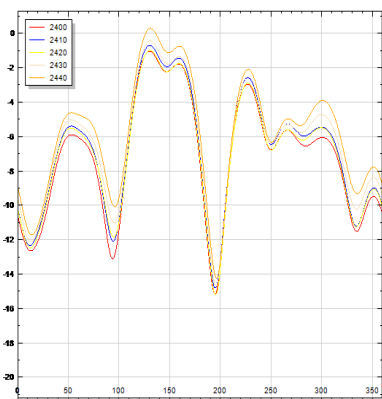
H Theta=90 freq=2500MHz



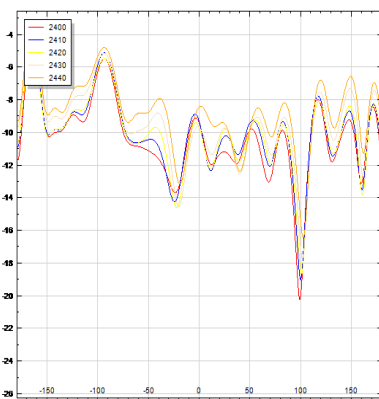
V Phi=90 freq=2500MHz



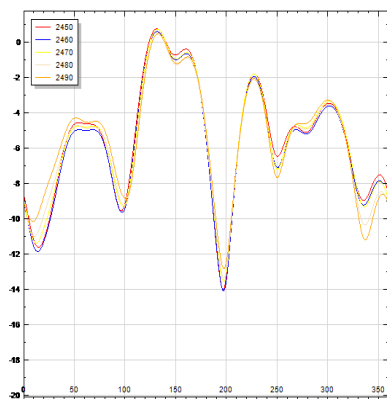
H Theta=90



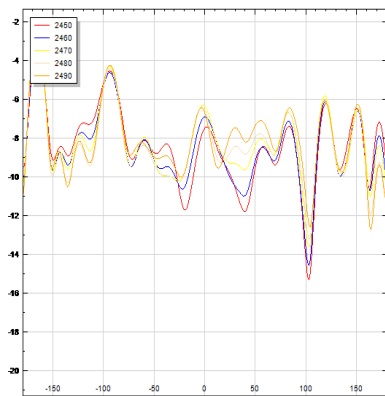
V Phi=90



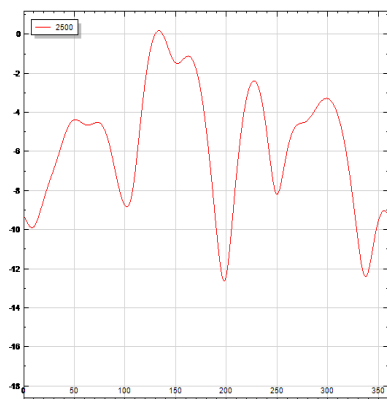
H Theta=90



V Phi=90



H Theta=90



V Phi=90

