

Antenna specification

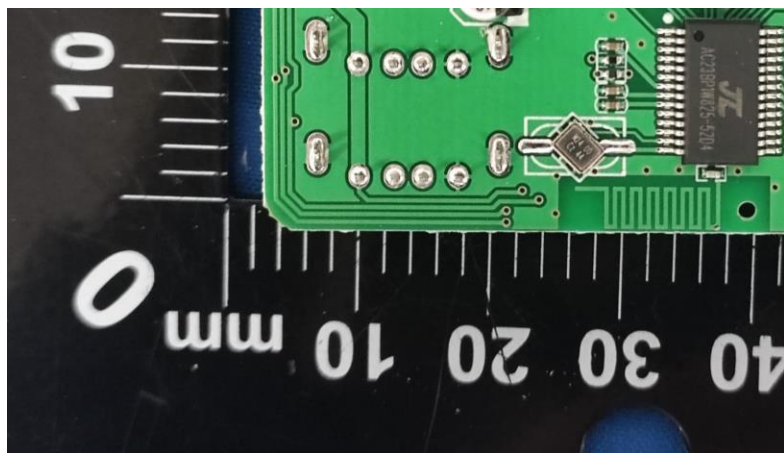
1、Antenna introduction

The Bluetooth module antenna is directly used on the PCB.

Manufacturer: Lenze Design Inc

Address: 7th Floor, Ching Po Building, Shenzhen Special Zone Press Group, Futian District, Shenzhen

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.

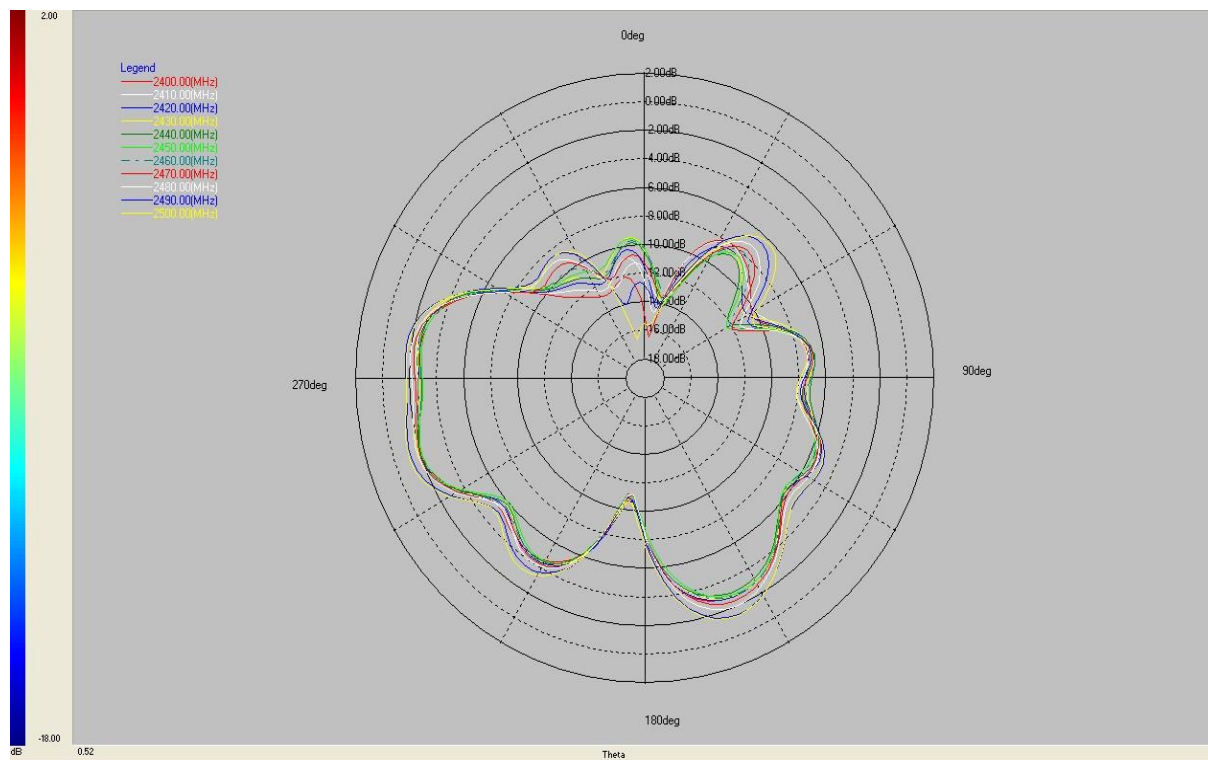
Frequency(MHz)	2402 ~ 2480 MHz
VSWR	≤ 1.95
Impedance	50 Ohm Nominal
Return Loss	-15 dB Max
Radiation	Omni-directional
Gain (Peak)	0.64dBi
Polarization	Linear, Vertical
Admitted Power	1MW
Connector	Tin

4、Antenna gain report

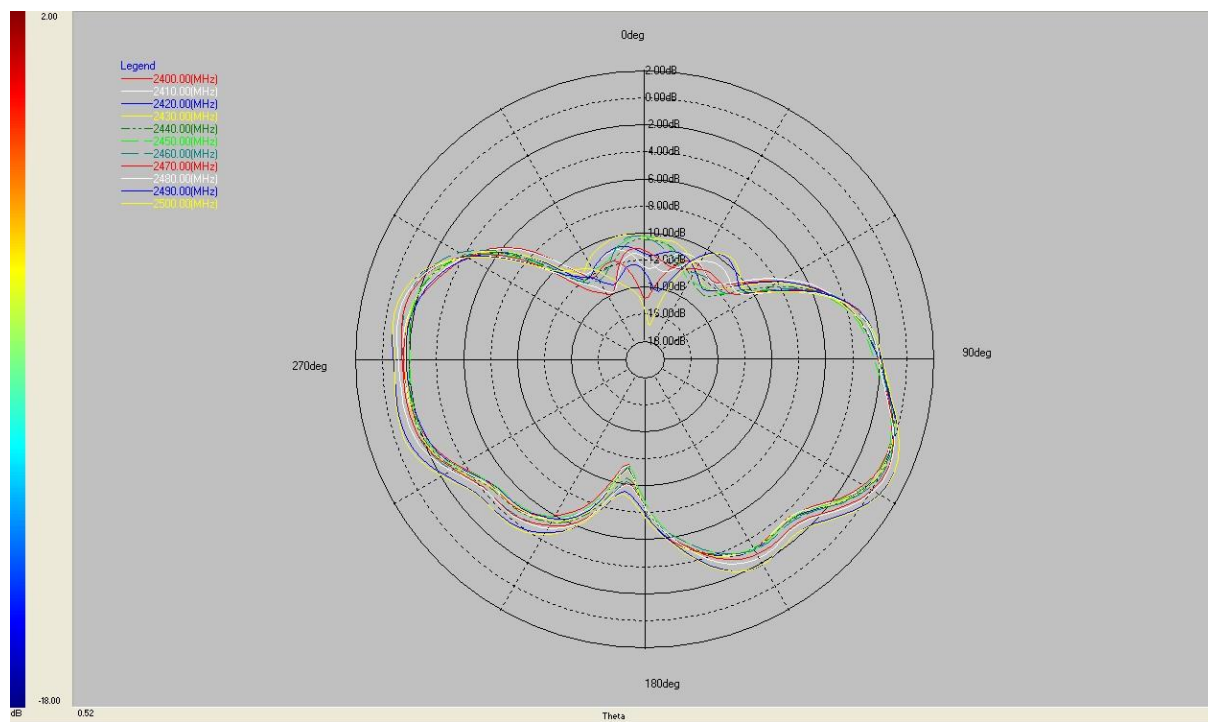
Spectrum Detector: PK Test Date : Feb 18, 2019
Test By: Mark Temperature : 25℃
Test Result: PASS Humidity : 52 %
Modulation: GFSK

Frequency Separation Separation Limit (MHz)	VNA Read	E Total. dB(dBi)
2400MHz		0.0403503
2410MHz		0.0886264
2420MHz		0.267381
2430MHz		0.193012
2440MHz		0.26366
2450MHz		0.0723139
2460MHz		0.36895
2470MHz		0.551525
2480MHz		0.640702
2490MHz		1.05232
2500MHz		1.08443

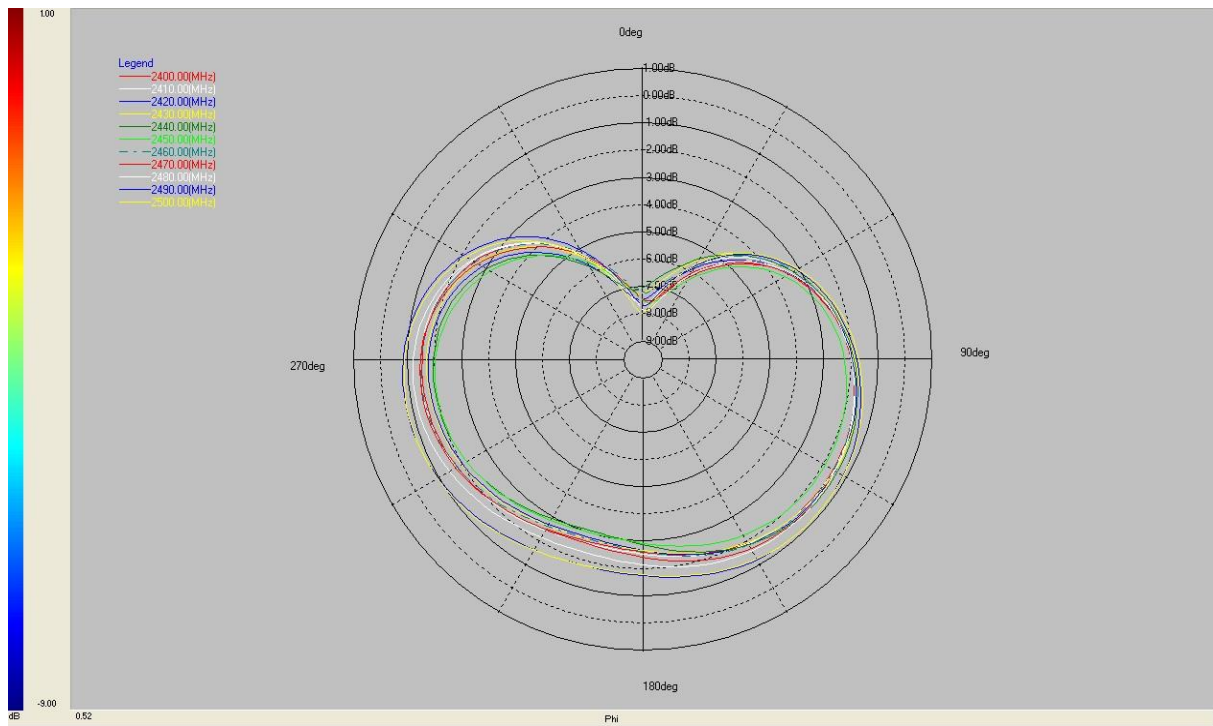
Direction map:



$\text{PHI } 0^\circ$



$\text{PHI } 90^\circ$



THETA 90°