

Bluetooth antenna

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Corporate name: DongGuan NIA Acoustic Technology Co.,Ltd

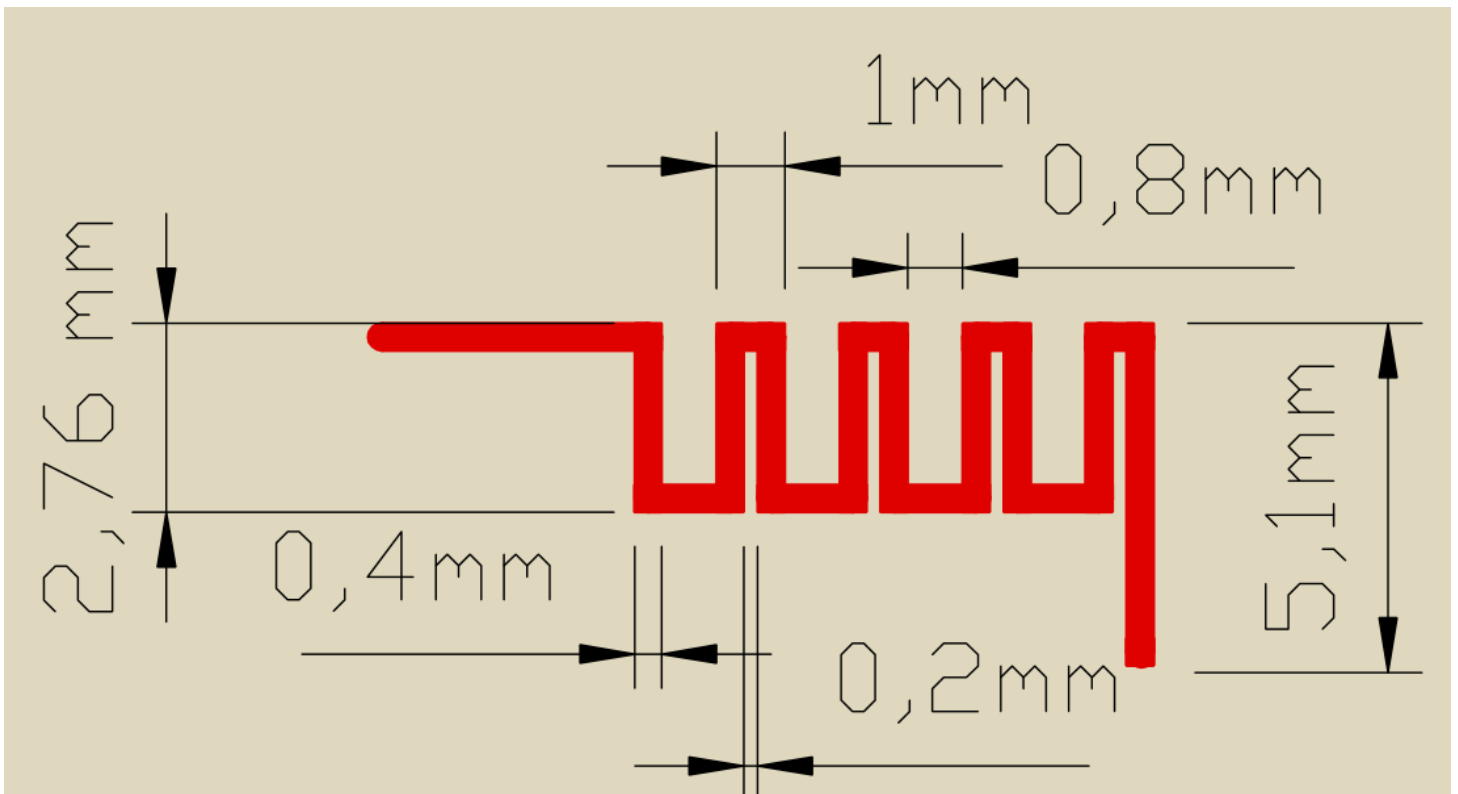
一、Antenna Introduction

Our company's Bluetooth antenna is directly made on the PCB board, and the antenna is made of copper foil with tin spraying process. The thickness of the copper foil is: H/HOZ, The board is made of FR-4 material with a thickness of 1.0mm,

二、Antenna appearance

1.dimension : 13*4.4mm

2.Physical picture:



三、Antenna parameters

The working frequency of Bluetooth antenna is between 2402-2480MHz, where resonance occurs. The following table shows the main parameters of the antenna.

Bluetooth built-in antenna	
Frequency (MHz)	2402 ~ 2480 MHz
VSWR	≤ 1.92
Impedance	50 Ohm Nominal
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	-0.347 dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

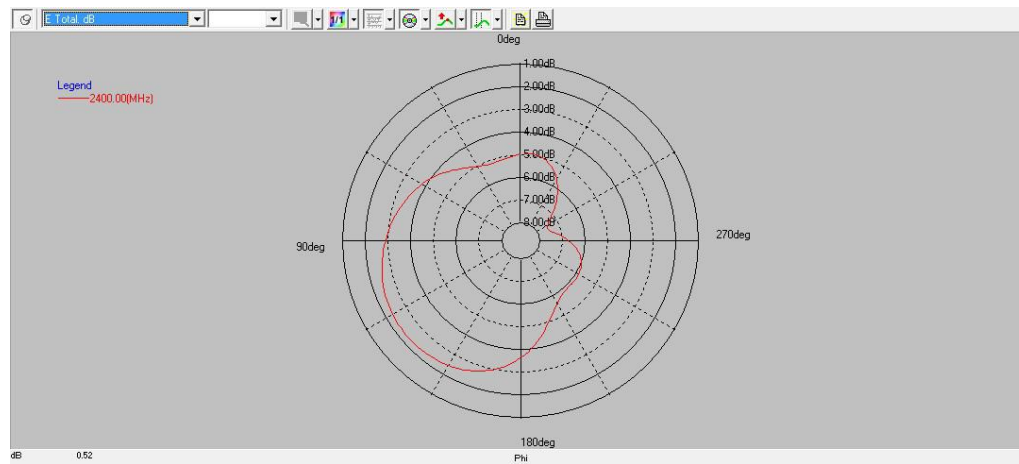
四、Antenna gain detection report

Spectrum Detector:	PK	Test Date :	June 8, 2013
Test By:	Andy	Temperature :	28°C
Test Result:	PASS	Humidity :	55 %
Modulation:	GFSK		

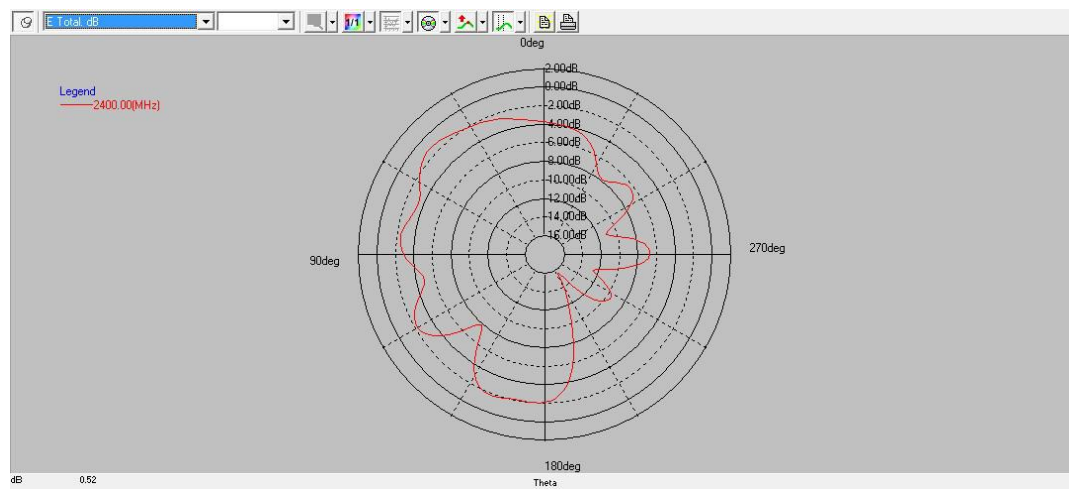
Maximum gain value

Frequency VNA (MHz)	E Total. dB(dB)
2400MHz	-0.347483
2410MHz	-0.502625
2420MHz	-0.772879
2430MHz	-0.955555
2440MHz	-1.23072
2450MHz	-1.94066
2460MHz	-1.90725
2470MHz	-2.01968
2480MHz	-2.30721
2490MHz	-2.28333
2500MHz	-2.8728

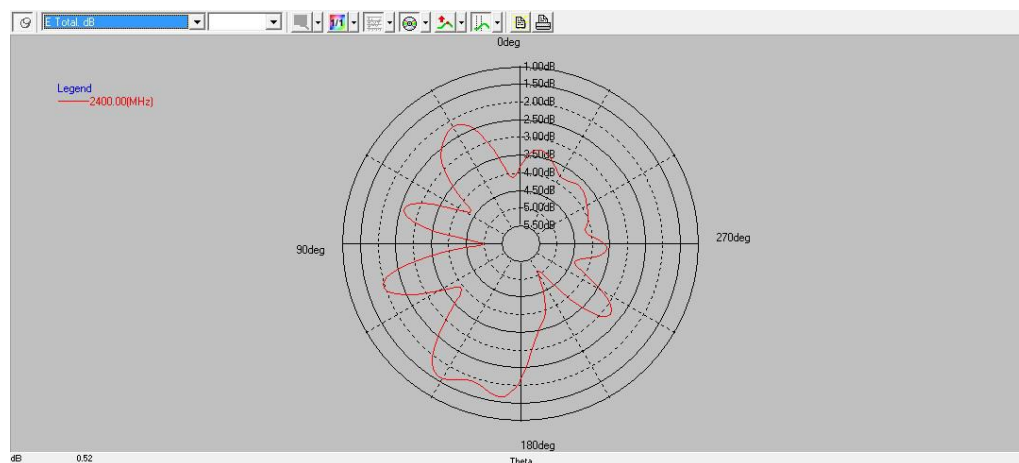
direction diagram:



PHI 0 度



PHI 90 度



THETA 90 度

Standing wave ratio diagram:

