

Bluetooth antenna specification sheet

Date: 2022.11.18

Manufacturer: Shenzhen Lenodell Technology Co., Ltd.

Address: 5th Floor, Building B, Wentao Industrial Park, Yongxin

Street, Yingrenshi Community, Shiyan Street, Bao'an

District, Shenzhen, China

Test Model: M9 Max

1. Introduction to Antennas

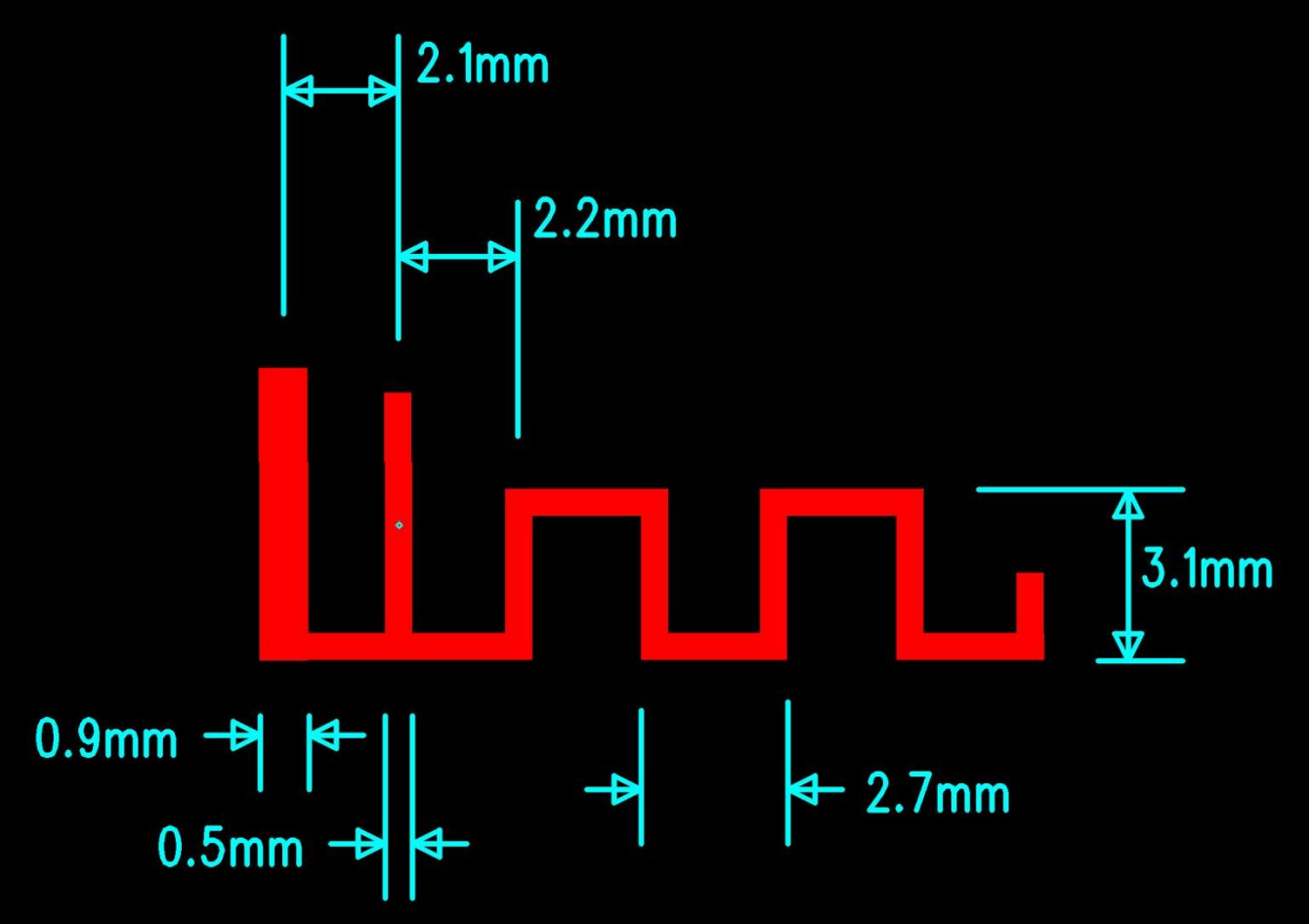
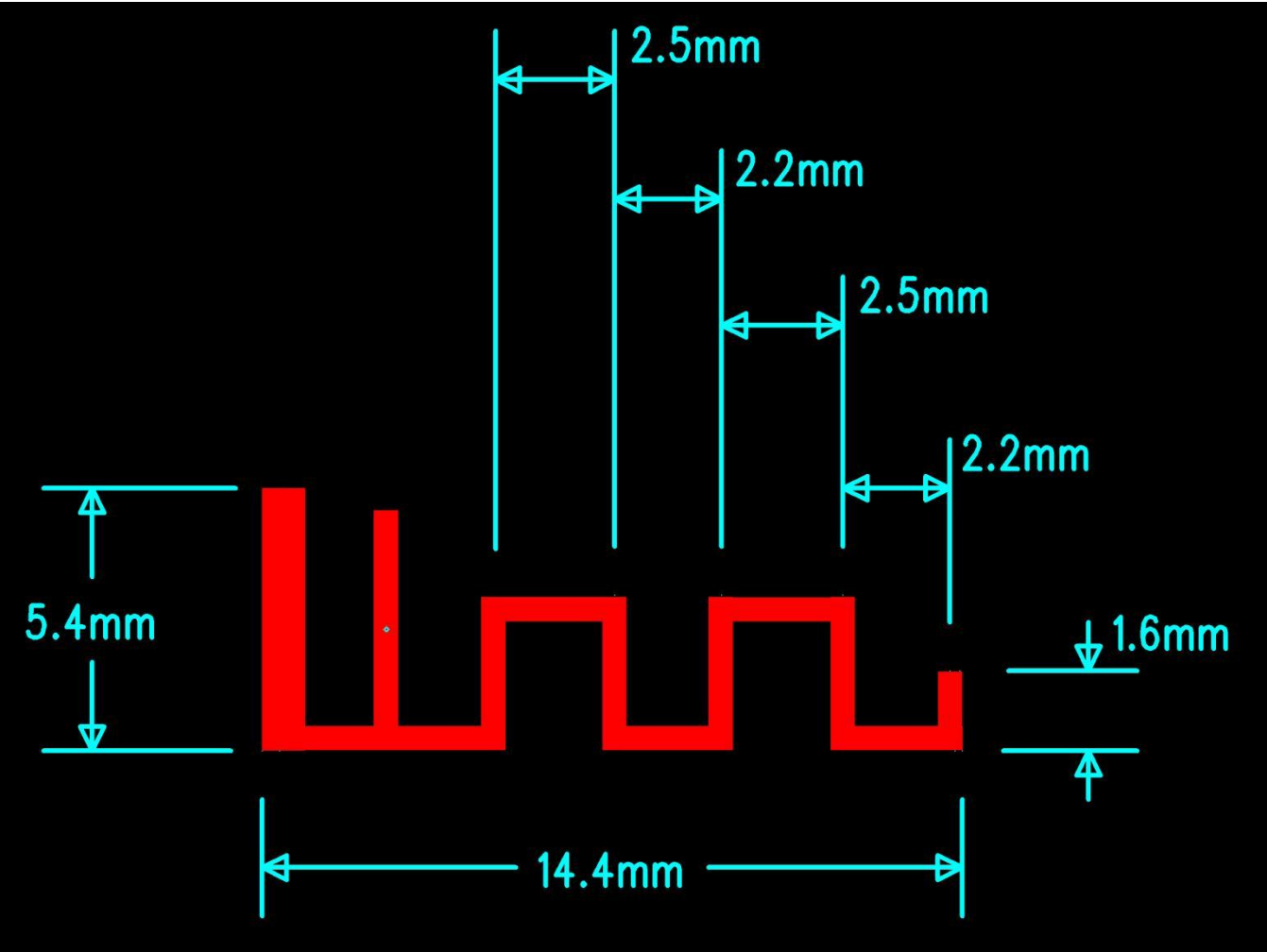
The Bluetooth antenna is directly made on the PCB board by the on-board method. The antenna is made of copper foil with tin spraying process. The thickness of the copper foil is 10Z, and the board is made of FR-4 material with a thickness of 1.6mm

2. Antenna shape

1. Physical picture



2.Dimension drawing: 14.5mm * 5.4mm



3. Antenna parameters

The operating frequency of Bluetooth is between 2402 and 2480MHz, and resonance occurs in this frequency band.

The following table shows the main parameters of the antenna:

Built-in Bluetooth antenna	
Frequency (MHz)	2402 ~ 2500 MHz
VSWR	≤ 1.92
Impedance	50 Ohm Nominal
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	0.5 dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

4. Antenna gain detection report

Spectrum Detector: PK

Test Date : June 8, 2013

Test By: Andy

Temperature : 28°C

Test Result: PASS

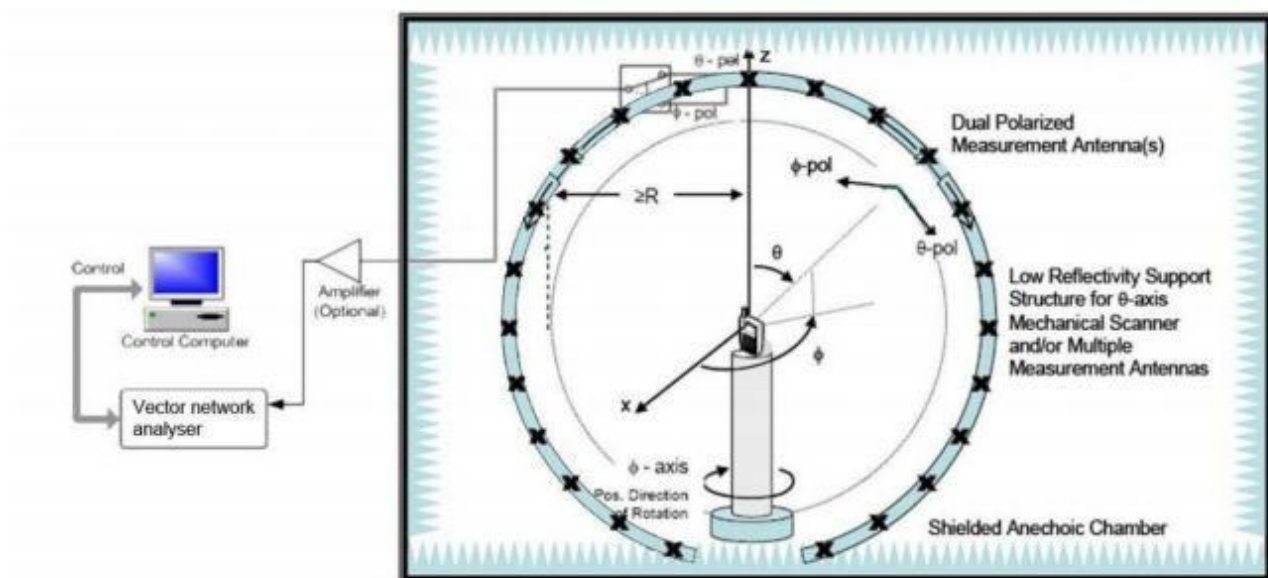
Humidity : 55 %

Modulation: GFSK

Maximum gain value:

Frequency VNA : (MHz)	E Total. dB(dB)
2400MHz	-0.41
2410MHz	-0.18
2420MHz	0.34
2430MHz	0.51
2440MHz	0.38
2450MHz	-0.01
2460MHz	-0.06
2470MHz	-0.42
2480MHz	-0.74
2490MHz	-0.85
2500MHz	-1.13

5. Test Setup:



6. 2D Radiation Pattern

