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BT Antenna Product Approval

2.4G PCB ANT

一、Antenna Introduction

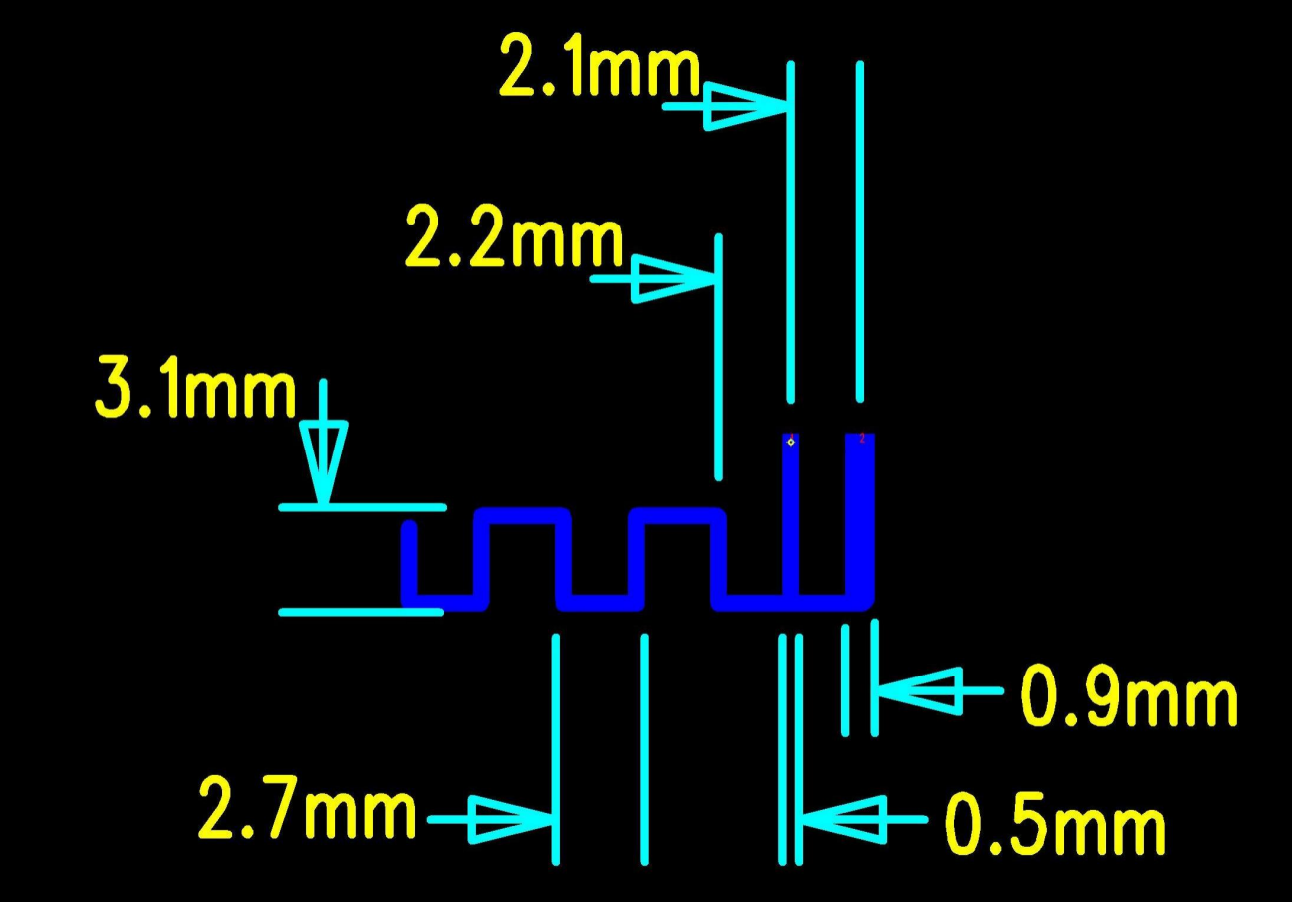
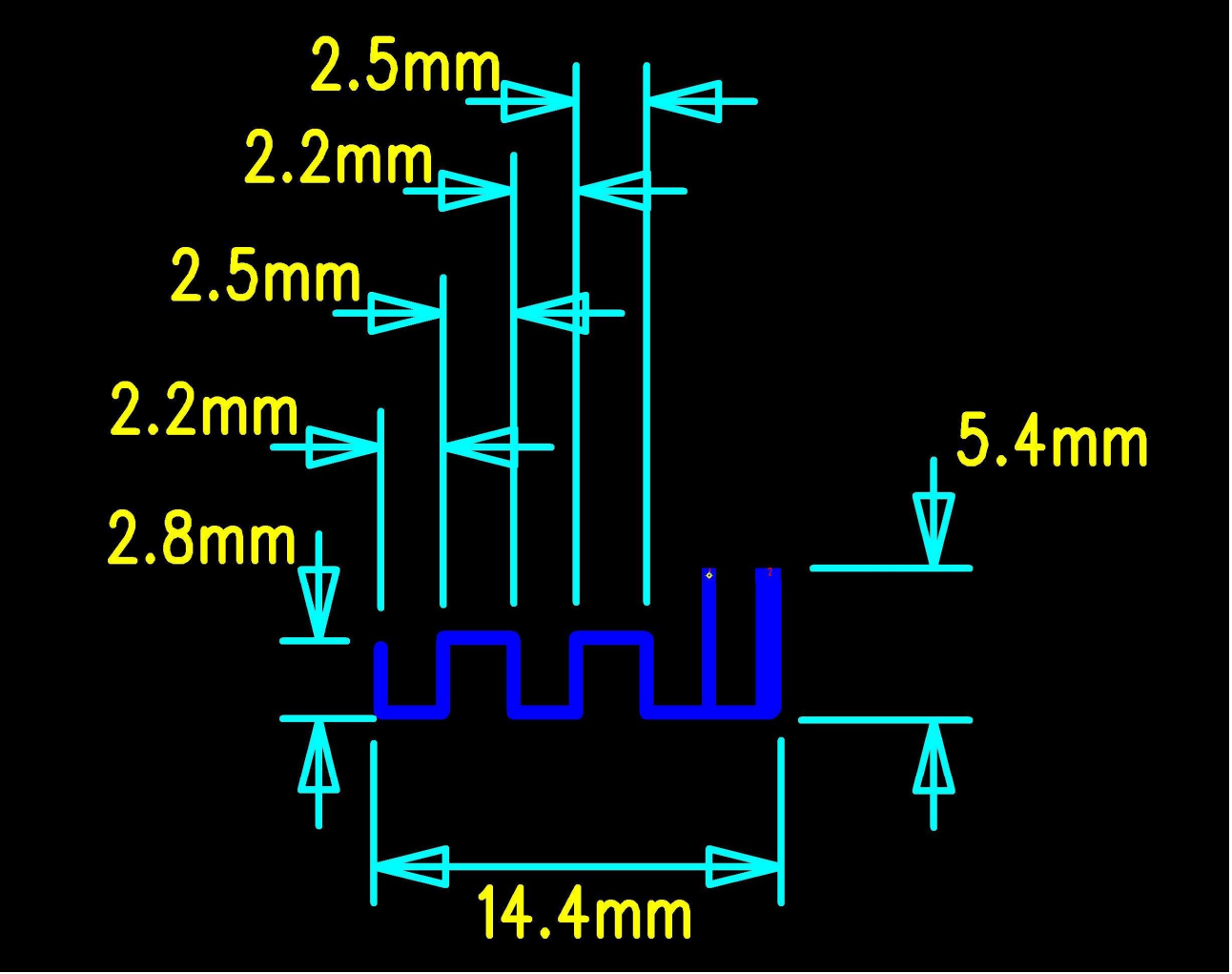
The Bluetooth antenna adopts an on-board approach directly mounted on the PCB board. The antenna is made using copper foil and tin-spraying technology, with a copper foil thickness of 1OZ. The board material is FR-4 with a thickness of 1.6mm

二、Antenna Dimension

1、Physical



2、Dimension: 14.5mm * 5.4mm



三、Antenna Parameters

Bluetooth operates at a frequency of 2402-2480MHz, where resonance occurs.

The table below presents the main parameters of the antenna:

Bluetooth built-in antenna	
Frequency (MHz)	2402 ~ 2500 MHz
VSWR	≤ 1.92
Impedance	50 Ohm Nominal
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	0.51dBi
Polarization	Linear, Vertical
Admitted Power	2W
Model	2.4G PCB ANT

四、Antenna Gain

Spectrum Detector: PK

Test Date : June 8, 2013

Test By: Andy

Temperature : 28°C

Test Result: PASS

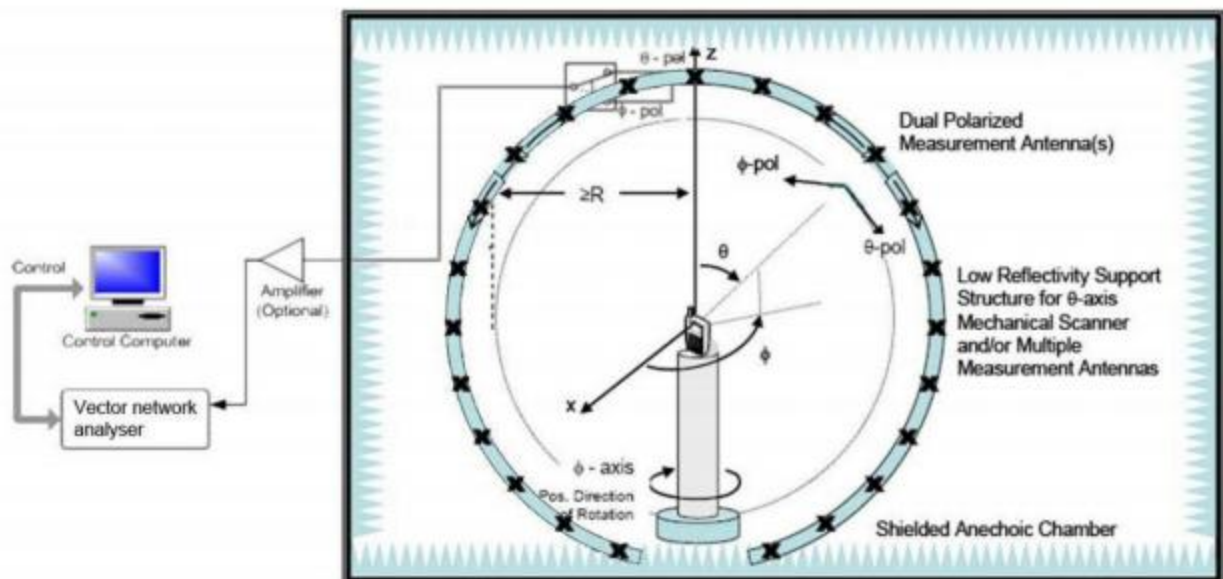
Humidity : 55 %

Modulation: GFSK

Maximum gain

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

五、Test Setup:



六、2D Radiation Pattern

