

Bluetooth antenna specification

BT Antenna Product Approval

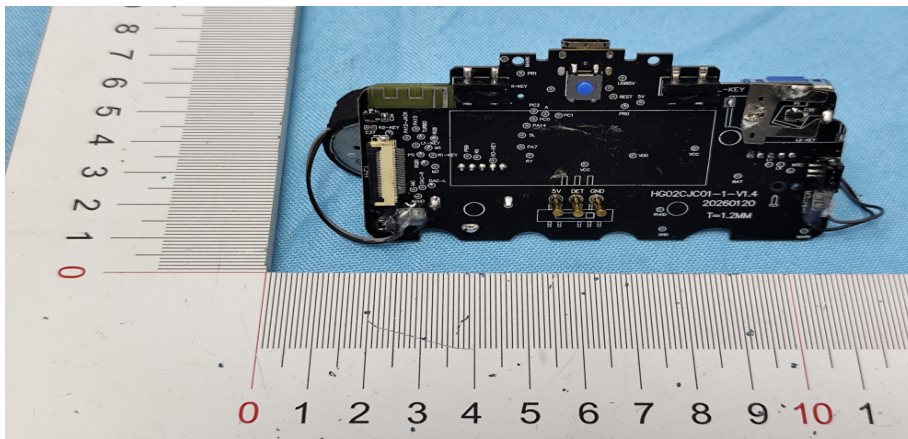
Date: 2022.11.18

1. Introduction to Antennas

Our company's Bluetooth antenna is directly mounted on the PCB board. The antenna features a copper foil with a 10 oz thickness and a tin-plated finish, using FR-4 material with a 1.6mm thickness.

II. Antenna Shape

1、 Picture of Real Products



Targetever (GuangDong) Technology Co.Ltd.
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III. Antenna Parameters

The working frequency of Bluetooth is 2402-2480MHz, and resonance is generated in this frequency band.

The table below shows the main antenna parameters:

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)	-0.347 dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

IV. Antenna Gain Measurement Report

Spectrum Detector: PK

Test Date : June 8, 2013

Test By: Andy

Temperature : 28°C

Test Result: PASS

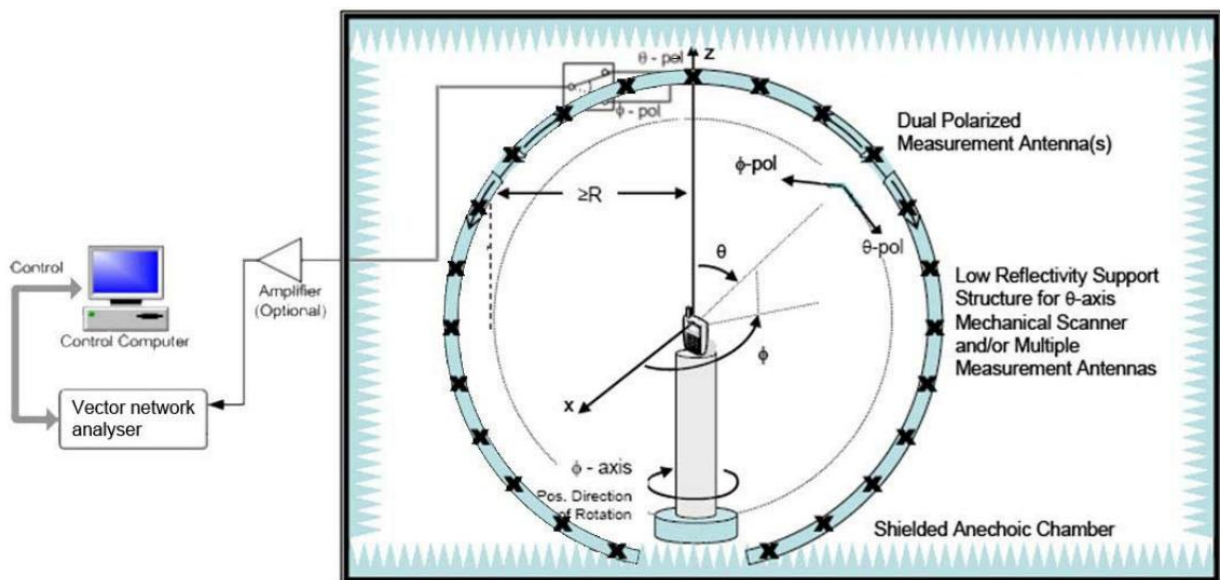
Humidity : 55 %

Modulation: GFSK

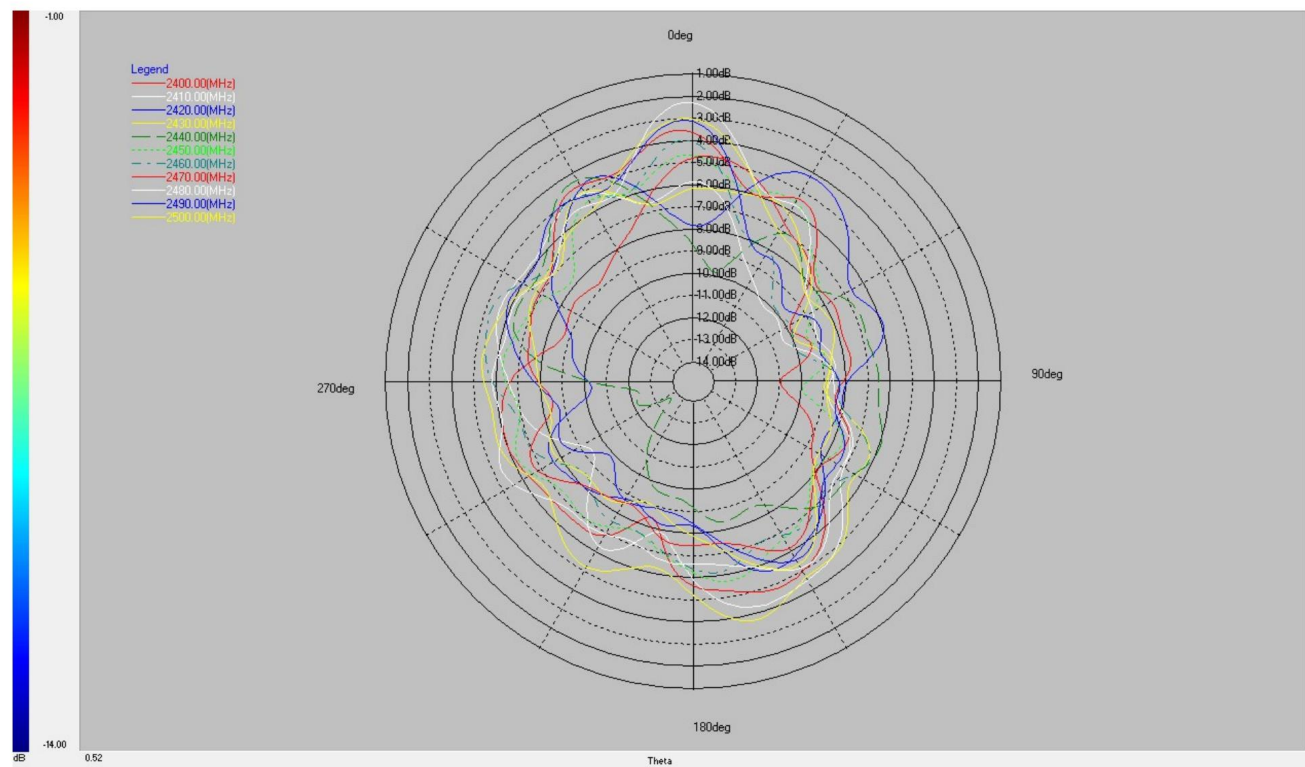
Maximum gain value:

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

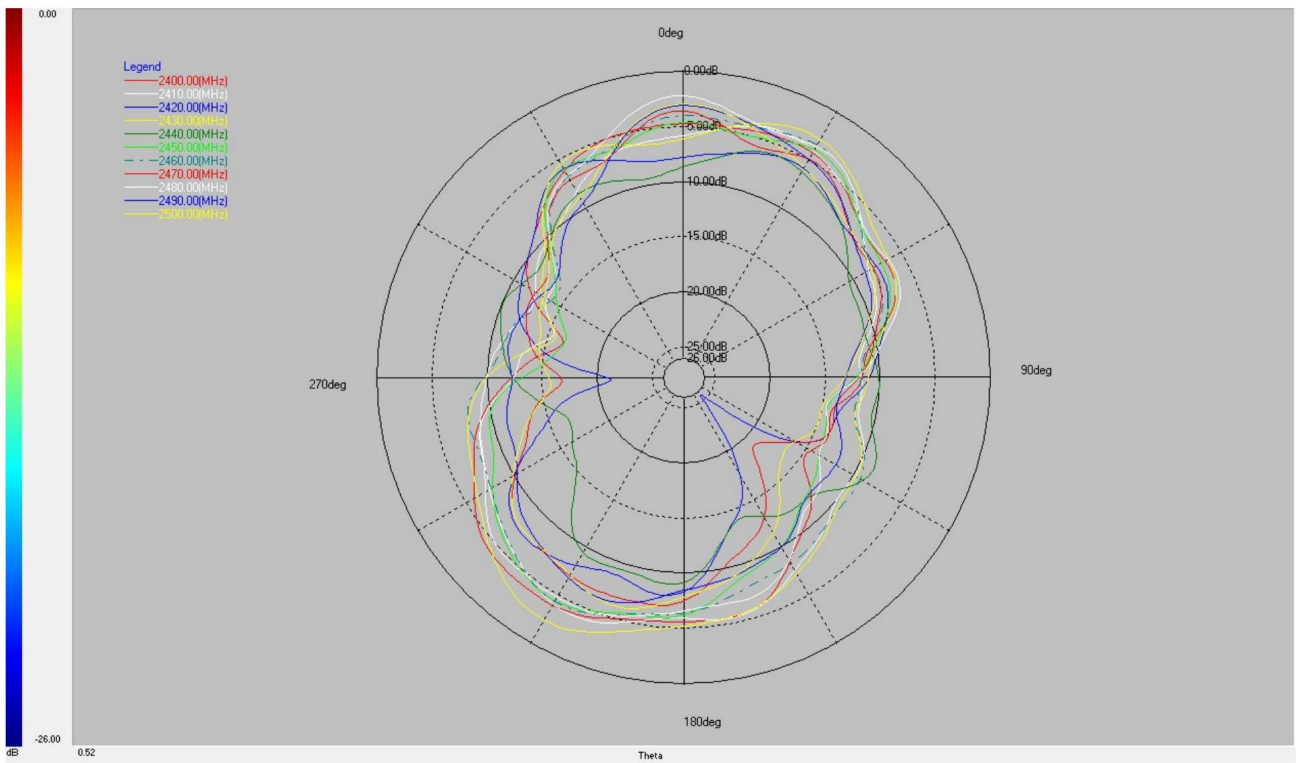
5 、 TestSetup:



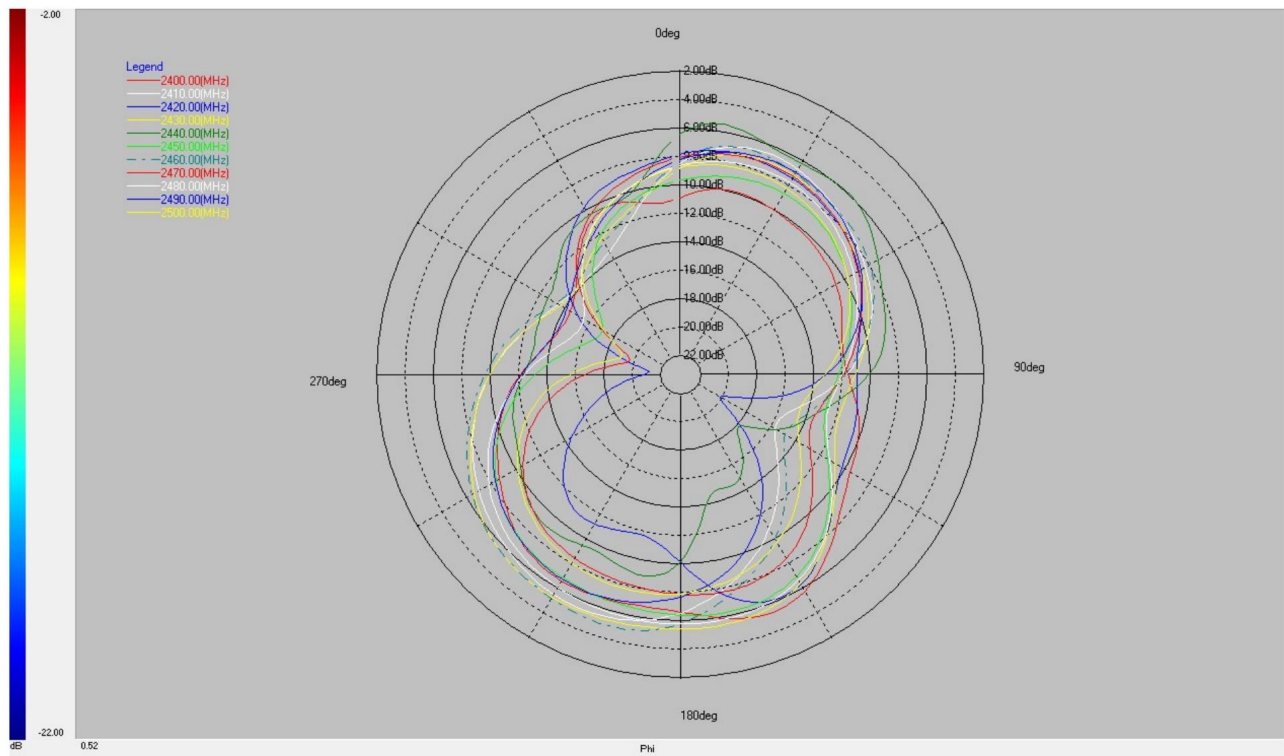
VI. 2D Radiation Pattern



PHI 0 degree

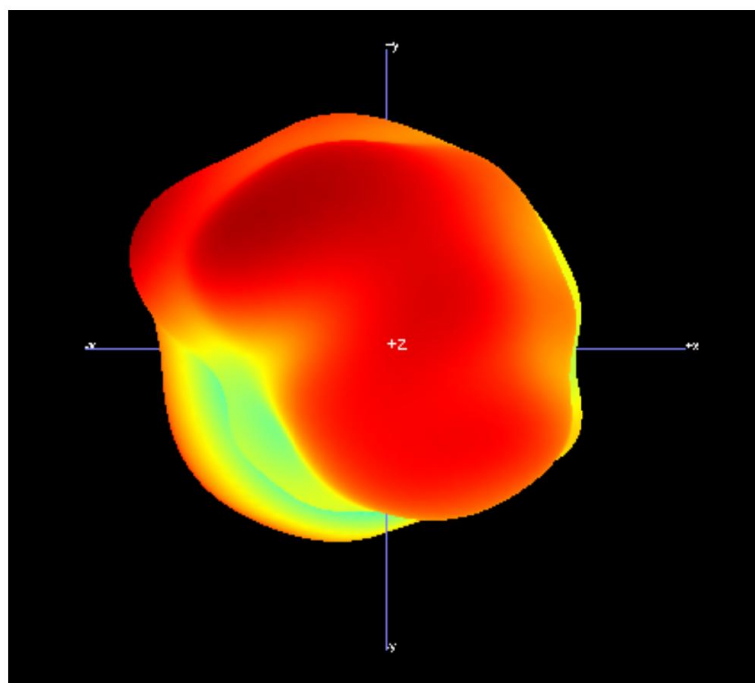


PHI 90 degrees



THETA 90 degrees

7.3D Radiation Pattern:



2400MHz