

Shenzhen Yuanli Digital Technology Co., Ltd

address: 303, Building A, Phase II, Dong'an Hongji Science and Technology Park, Dalang Sanhe Road,
Longhua New District, Shenzhen
phone:86-189-4834-5862

Bluetooth Antenna Sample Confirmation Letter BT Antenna Product Approval

time: 2023-6-8

1、 Antenna Introduction

Our Bluetooth antenna is directly mounted on a PCB board. The antenna is made of copper poled and tin sprayed technology, with a copper foil thickness of H/HOZ and a FR-4 material with a thickness of 1.6mm,

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2. Antenna shape

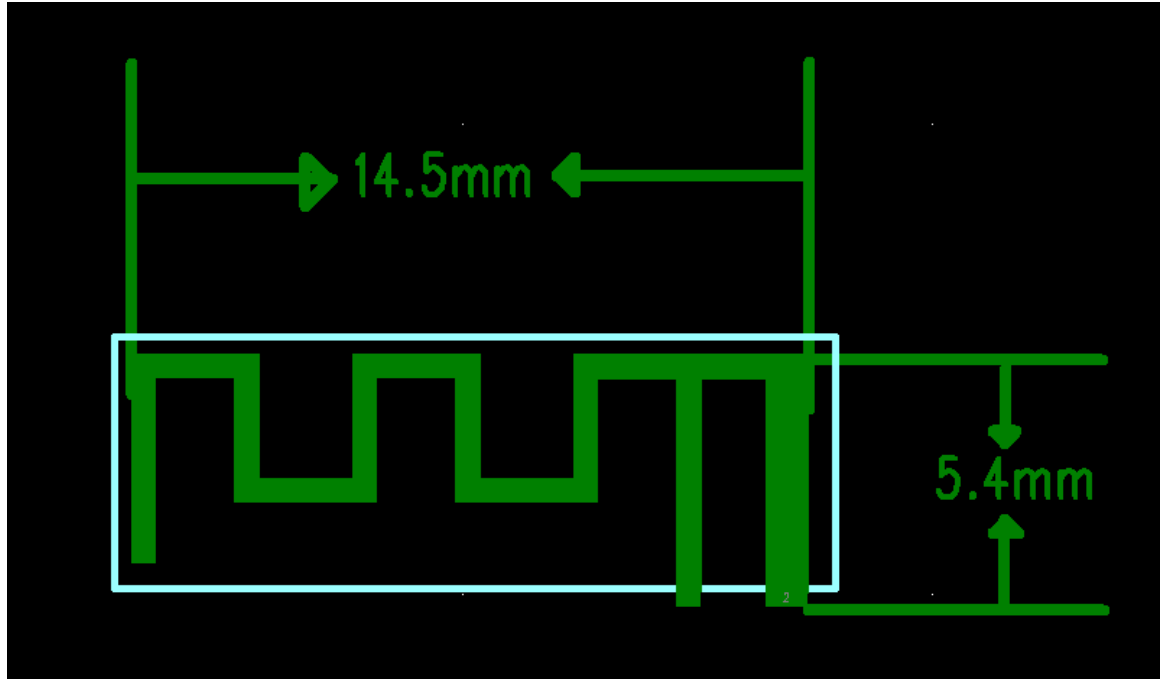


1. Dimensional drawing :

9.85*2.85*0.5mm

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3、 Antenna parameters

The operating frequency of Bluetooth antenna is 2402-2480MHz, which generates resonance in this frequency band. The following table shows the main parameters of the antenna.

Product Name: Bluetooth built-in antenna	
Frequency (MHz)	2402 ~ 2480 MHz
Product model	ATS2819
Antenna Type	PCB antenna
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

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4、 Antenna gain detection report

Spectrum Detector: PK Test Date : June 8, 2023

Test By: Andy Temperature : 28°C

Test Result: PASS Humidity : 55 %

Modulation: GFSK

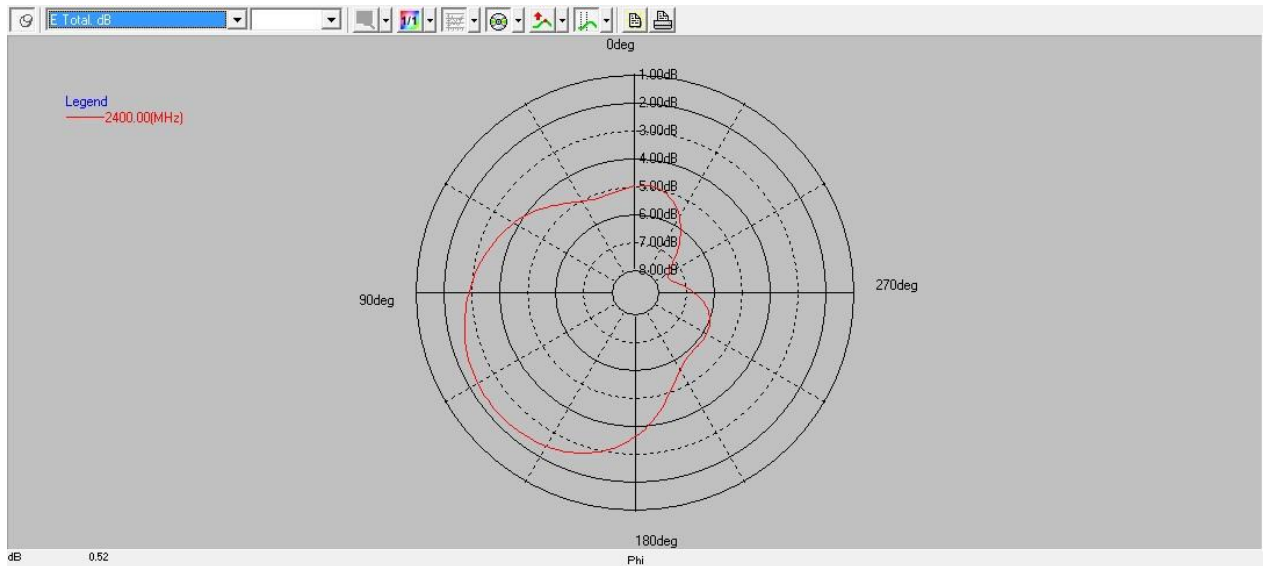
Maximum gain value

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

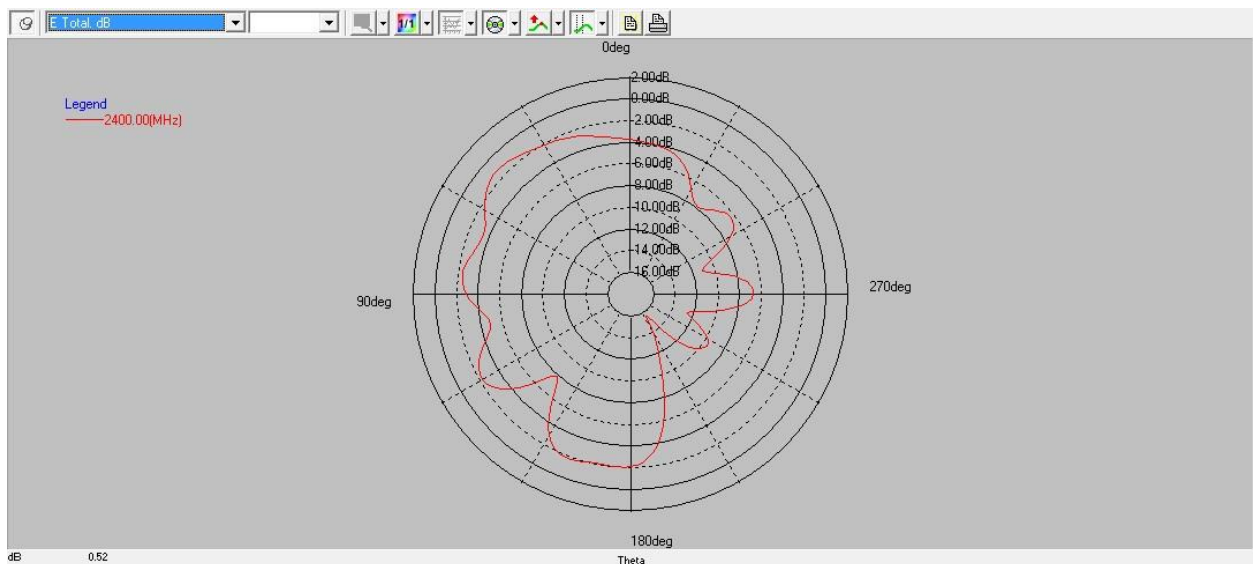
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Directional diagram:



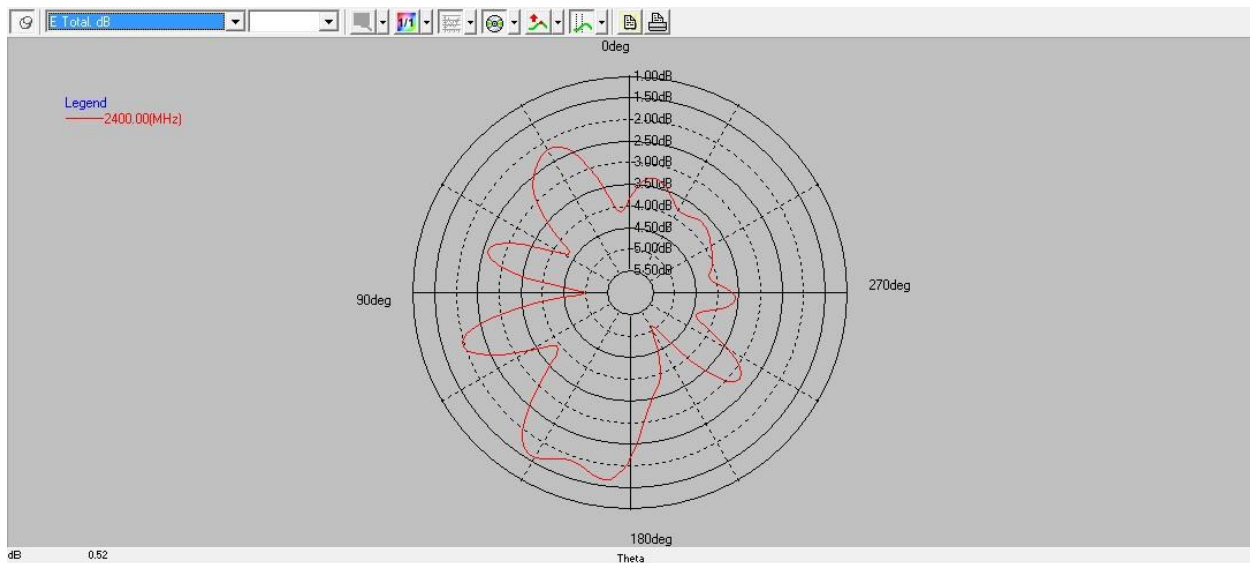
PHI 0 degrees



PHI 90 degrees

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THETA 90 degrees

Standing wave ratio diagram:

