

GSOU Technology(Shen Zhen)Co., LTD

Address: 18B, Block B, First World Plaza, Hongli West Road, Futian, Shenzhen

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GSOU Technology(Shen Zhen)Co., LTD

GR-20 BT Antenna Product Approval

Date: 2025-03-20

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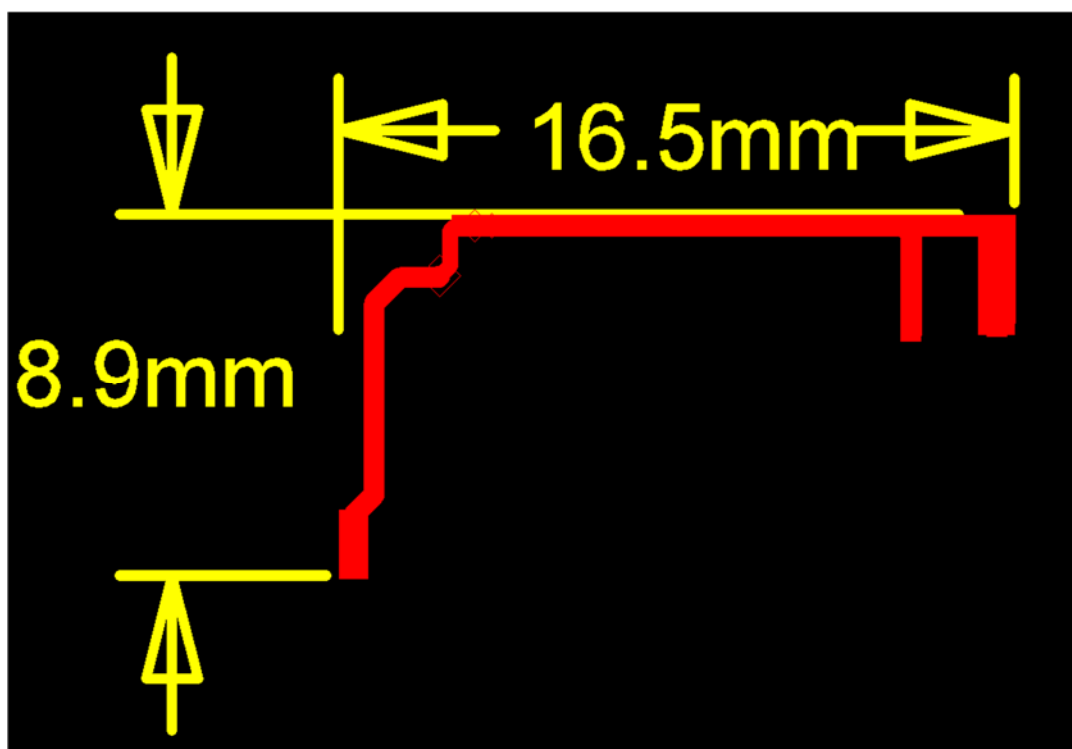
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tian, Shenzhen**

1、Antenna Introduction

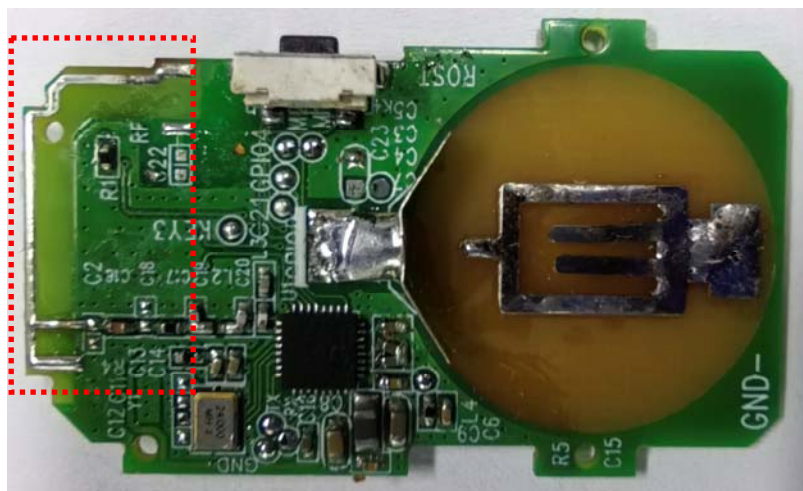
Our Bluetooth antenna is directly used on the PCB board. The antenna is copper-pole tin spraying process. The copper foil thickness is: H/H0Z, and the board is FR-4 thickness 1.0mm material.

2、Antenna shape

2.1 Dimension drawing: 16.5*8.9mm



2.2 Real objects:



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3、Antenna parameters

The Bluetooth antenna operates at 2402-2480MHz, and resonance is generated in this frequency band. The following table is the main parameters of the antenna

Built-in Bluetooth antenna	
Frequency (MHz)	2402 ~ 2480 MHz
VSWR	≤ 2.89
Impedance	50 Ohm Nominal
Radiation	Omni-directional
Gain (Peak)	3.51dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

4、Antenna Gain Detection Report

Spectrum Detector:

PK

Test Date :

Mar.15, 2025

Test By:

Andy

Temperature:

28°C

Test Result:

PASS

Humidity :

55 %

Modulation:

GFSK

4.1 MAX Gain

Frequency (MHz)	Gain(dBi)
2400	3.03
2410	3.02
2420	3.13
2430	3.07
2440	3.29
2450	3.44
2460	3.51
2470	3.49
2480	3.34
2490	3.26
2500	3.27

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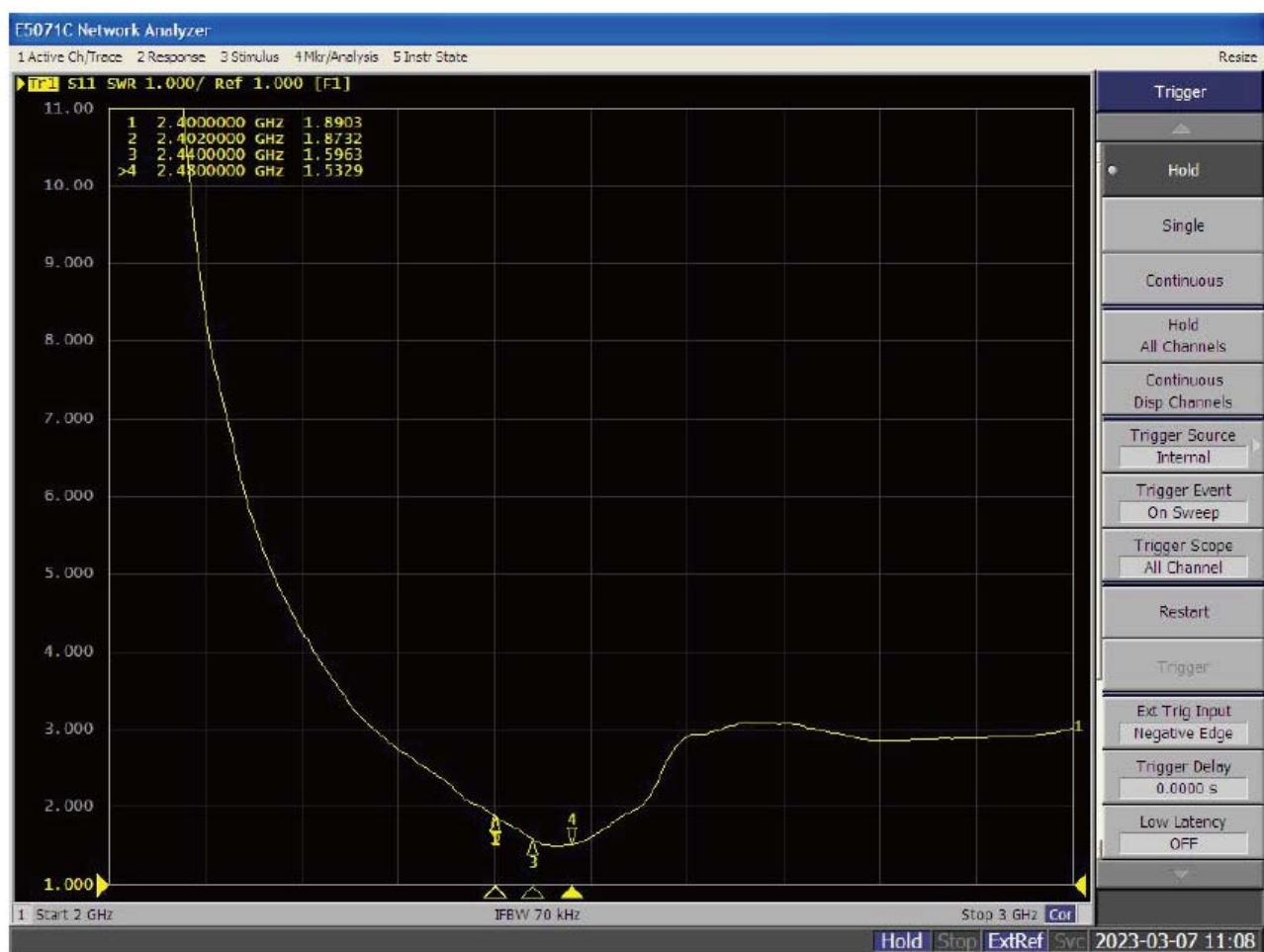
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4.2 Standing-wave ratio

Frequency (MHz)	VSWR
2400	1.89
2440	1.59
2480	1.53



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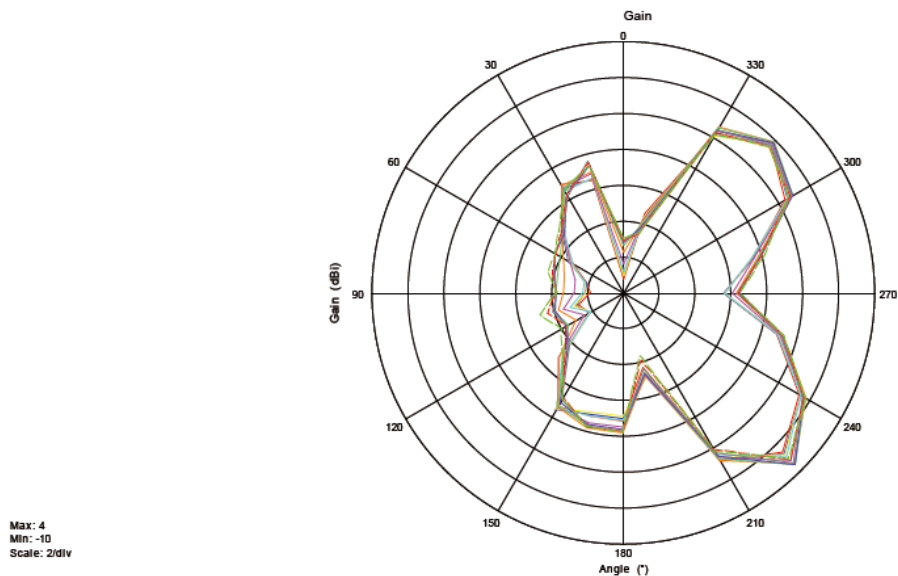
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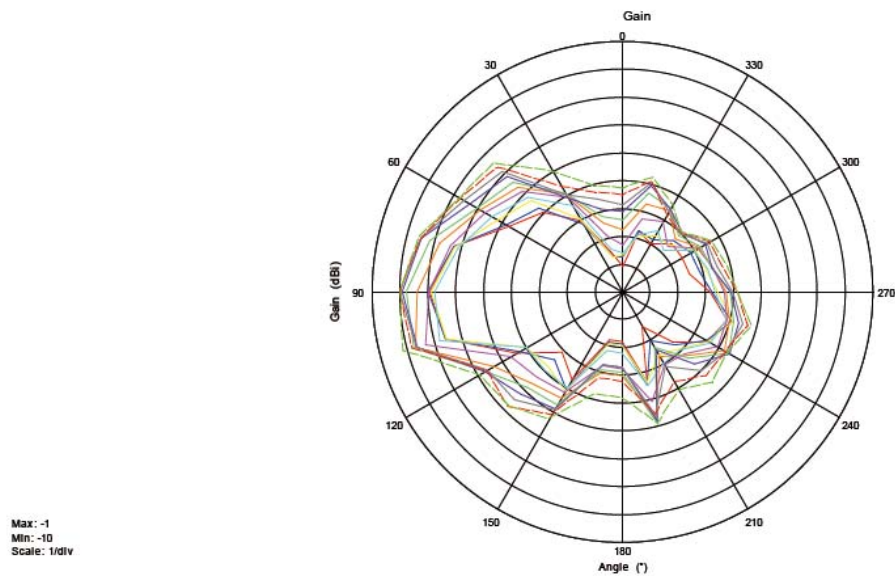
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4.3 Direction Diagram

1. 2D Radiation Pattern



Phi=0°



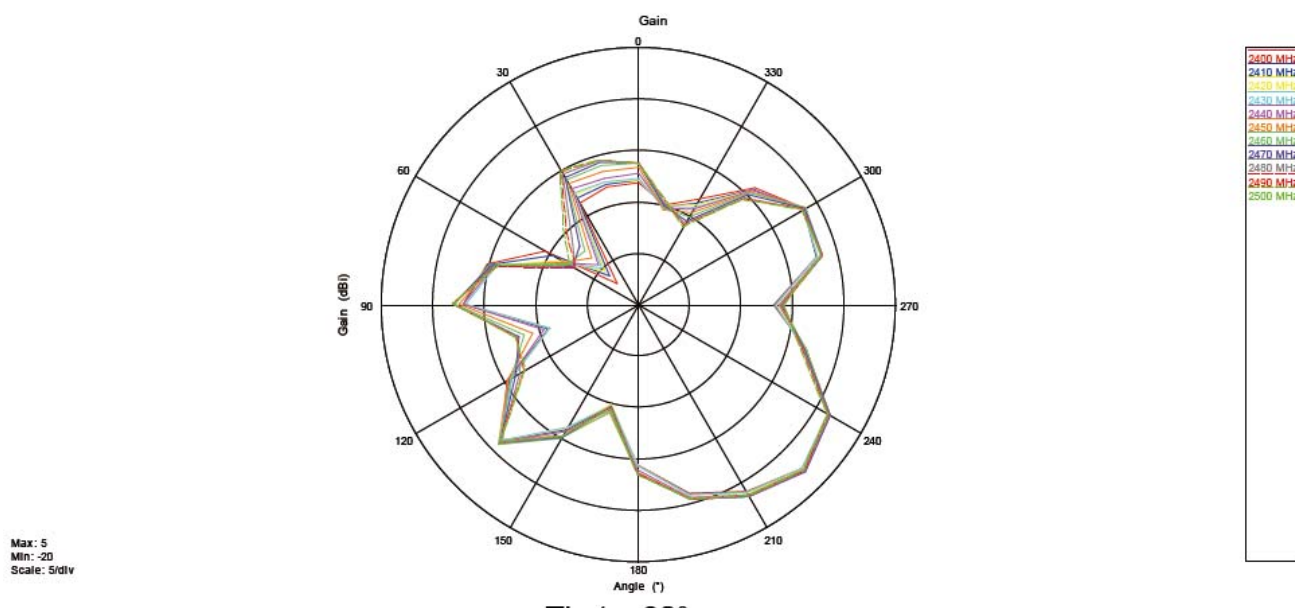
Phi=90°

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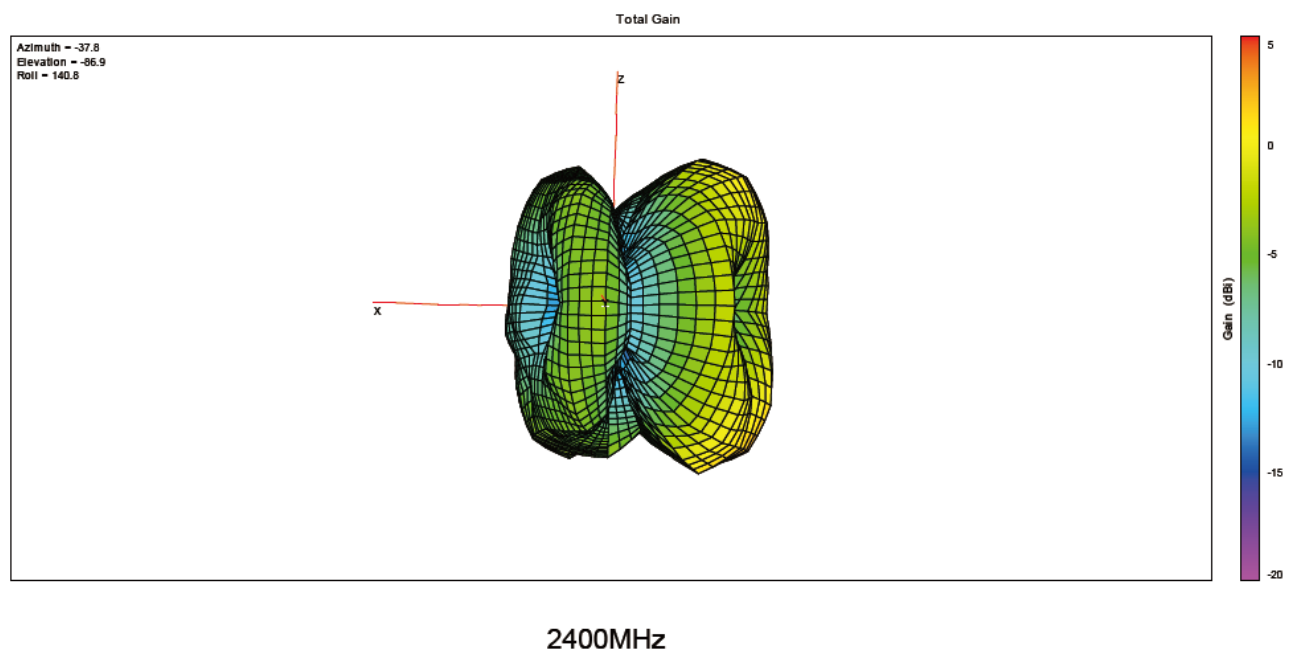
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2. 3D Radiation Pattern

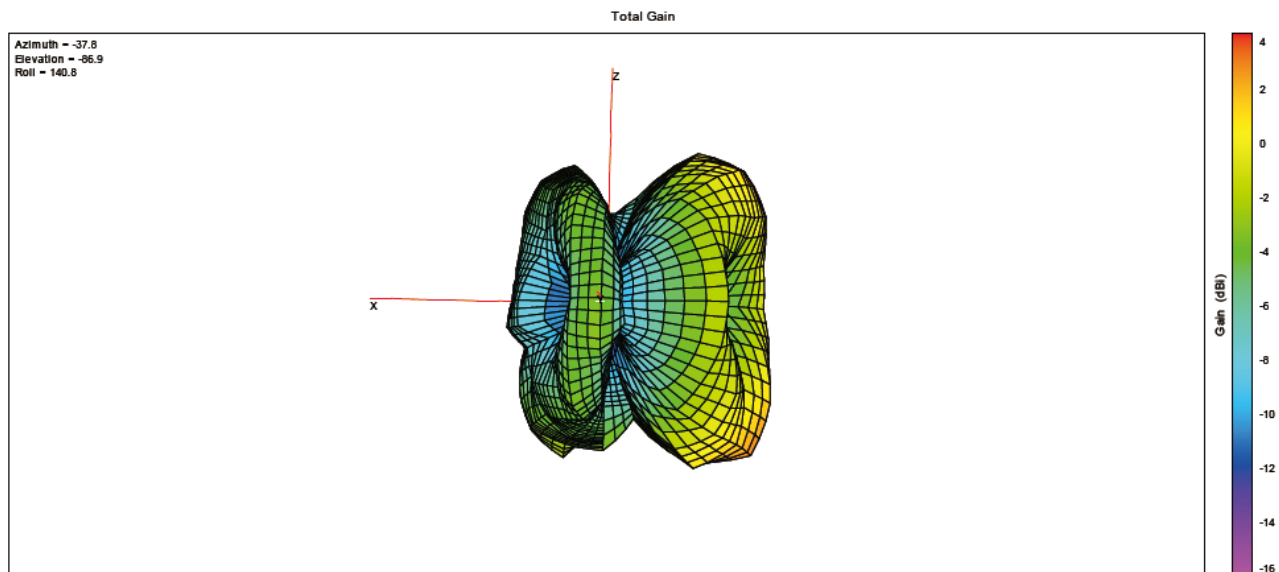


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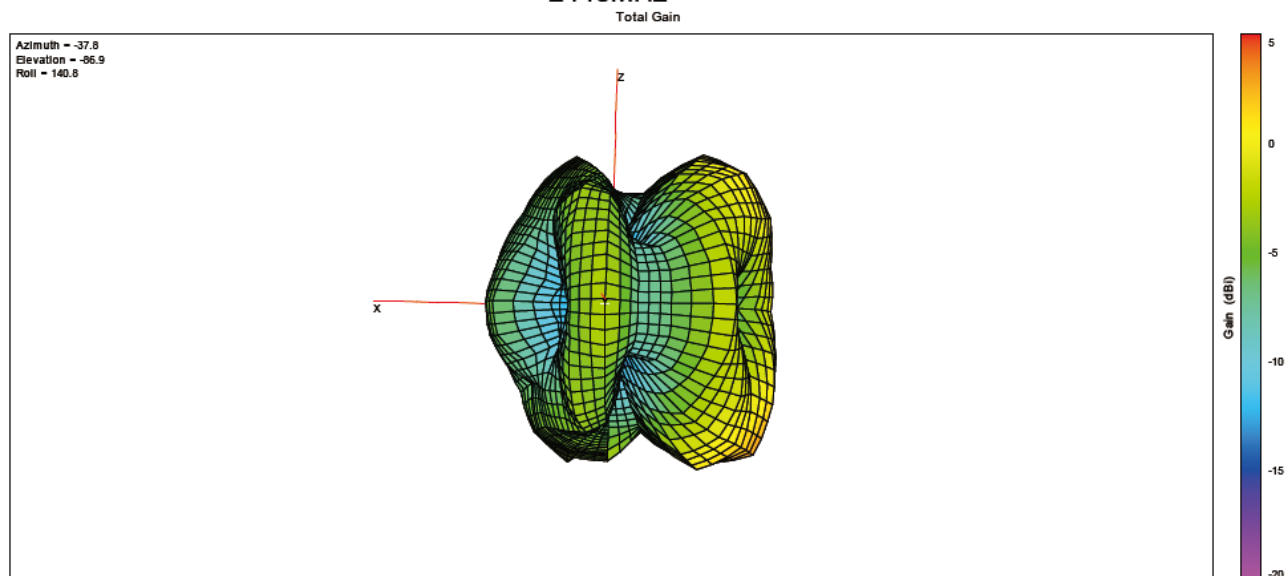
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2440MHz



2480MHz