

Dongzhen Electronics Co. , Ltd

Antenna Specification for Approval

Customer Name: _____

Address: _____

Product Name: _____ 2.4G antenna _____

Part NO. : _____ 19*0.12*1.35*80mm _____

Write By: _____ Mr. zhou _____

Issued Date: _____ 2023-11-9 _____

customer:

R&D Dept	Business Dept	Approved By

supplier

R&D Dept	Engineer Dept	Approval

The technical drawing shows a 2.4GANT antenna. It consists of a main body with a length of 80mm and a width of 3.0mm. A small circular feature at the bottom right has a diameter of $\phi 1.3$. The drawing is oriented vertically on the page.

PART TITLE		MATERIAL		UNIT IN		SCALE		VER.	
2.4GANT		19x0.12x1.35x80mm		mm		5:1		01	
PART NO.		DRAWING		DATE		CHECKING		SUPPLIER CFM	
19x0.12x1.35x80mm		Mr. Zhou		2023/11/09				CFM	

requirement:

1, Those marked with tolerance are important dimensions, and those without tolerance shall be ± 0.15 .

Product Specification

A. Electrical Characteristics

Frequency 2400MHz ~2500MHz

VSWR <3.0

Efficiency >23.89%

Impedance 50 Ohm

Polarization Line

Gain 0.59DBi

B. Material & Mechanical Characteristics

Material of Radiator Cu

Cable Type 1.3

Connector Type : NO

Dimension

C. Environmental

Operation Temperature - 30 °C ~ + 80 °C

Storage Temperature - 30 °C ~ + 85 °C

Test Equipment & Conditions

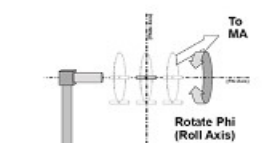
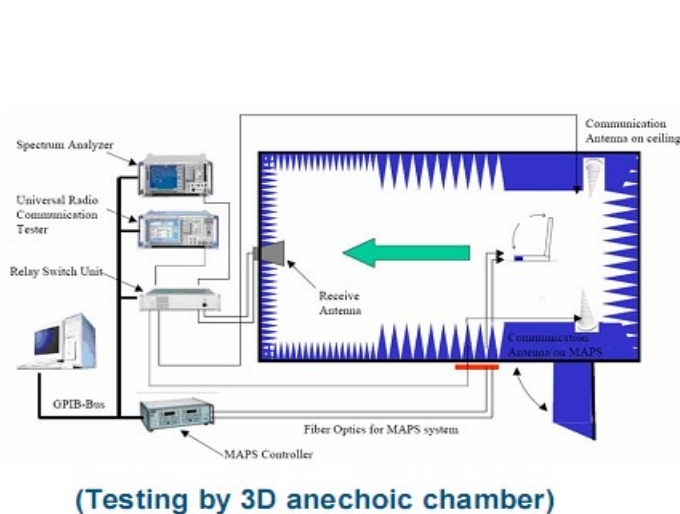
1. Network Analyzers :

Agilent 8753D 5071B

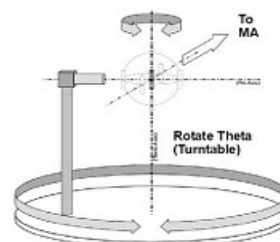
2. Communications Test Set:

Agilent E5515C

3. 3D Chamber Test System

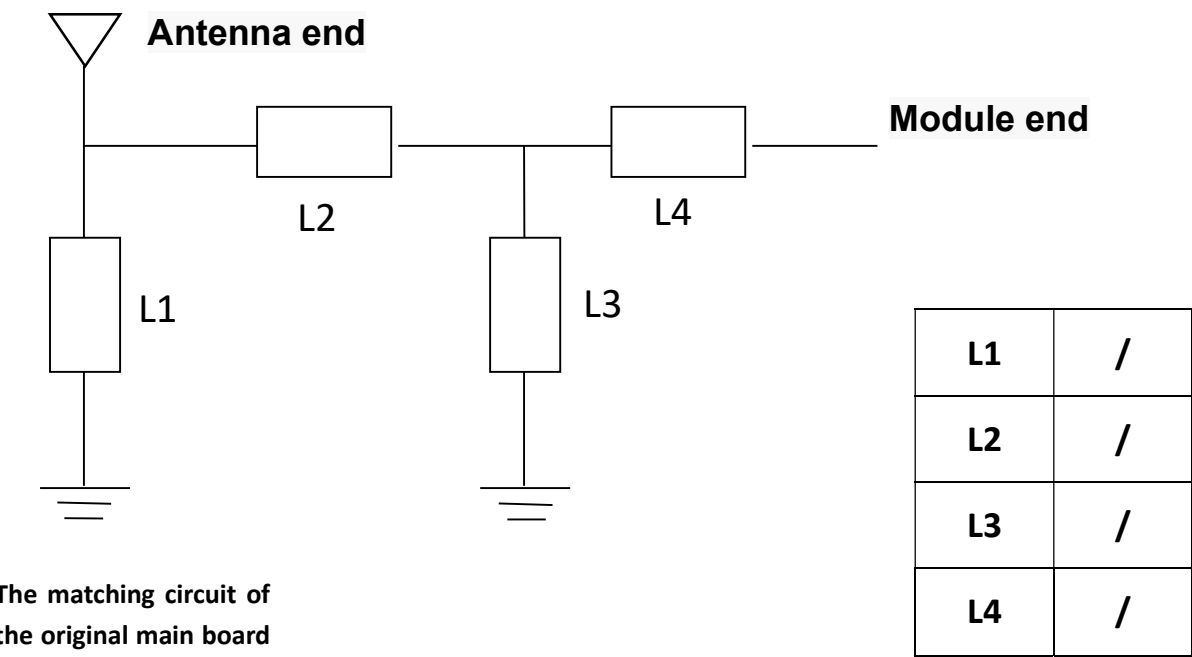


Phi axis test



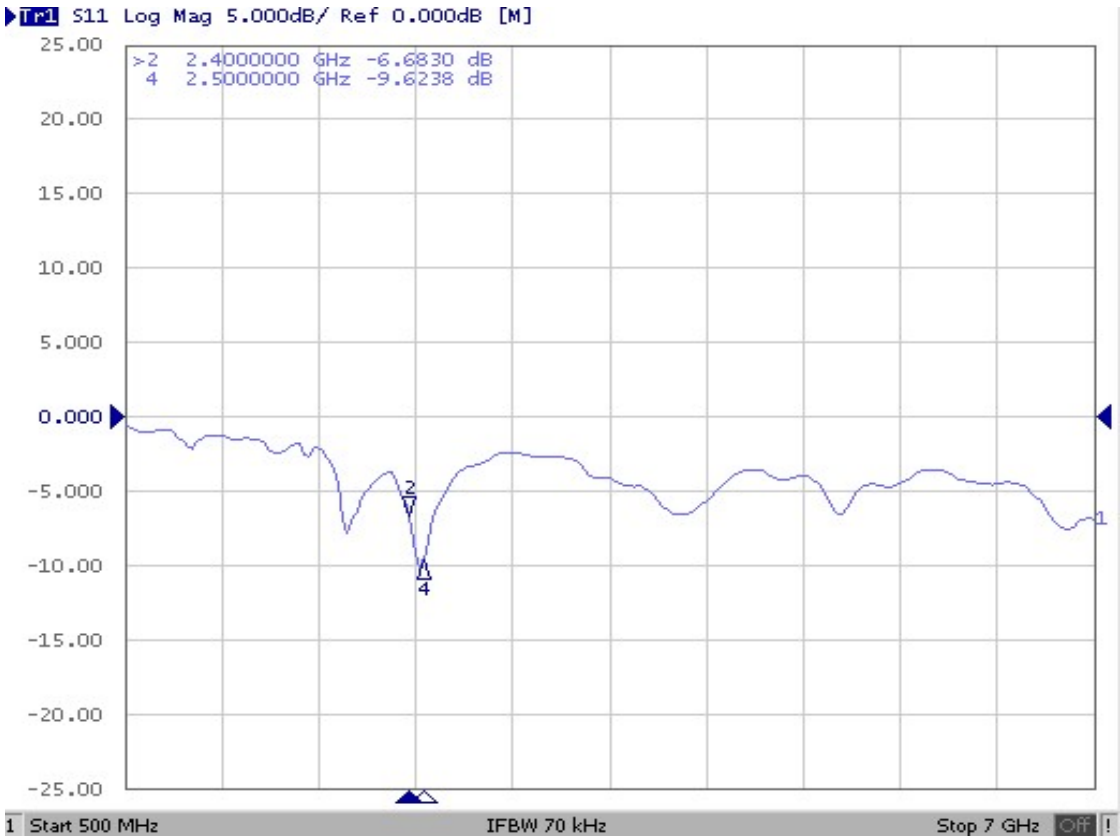
Theta axis test

Matching circuit



The matching circuit of the original main board

Return Loss

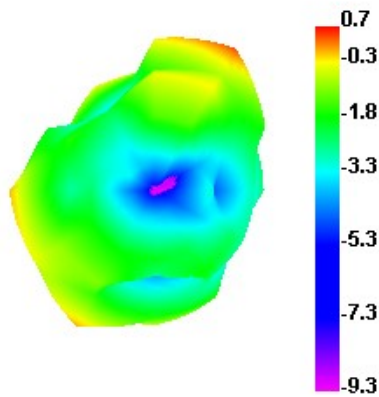


Effiency &Gain

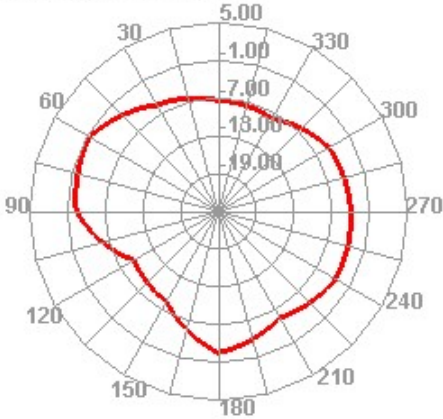
Freq (MHz)	Effi (%)	Gain (dBi)
2400	23.66	0.47
2410	23.19	0.38
2420	23.03	0.49
2430	22.41	0.42
2440	21.67	0.45
2450	20.24	0.52
2460	20.61	0.51
2470	21.41	0.59
2480	23.89	0.56
2490	26.46	0.53
2500	25.73	0.46

Radiation Pattern:

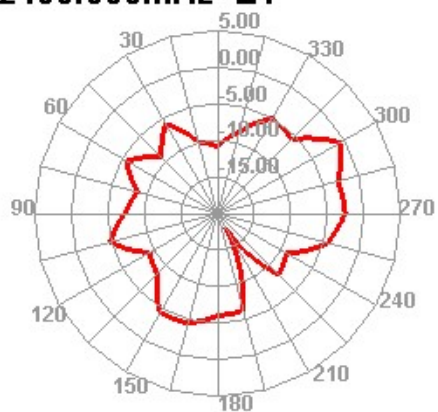
2400.000MHz



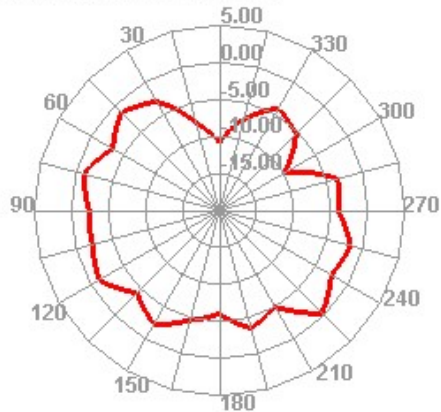
2400.000MHz H



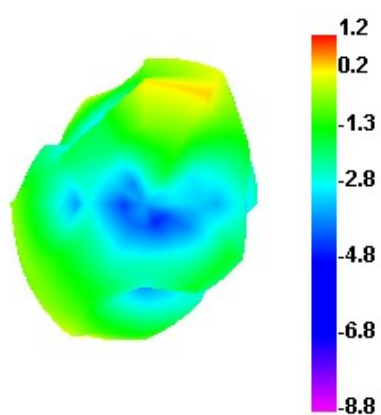
2400.000MHz E1



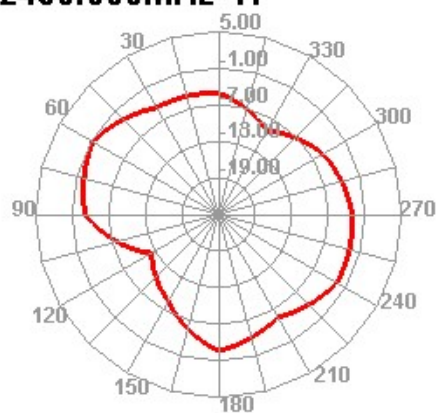
2400.000MHz E2



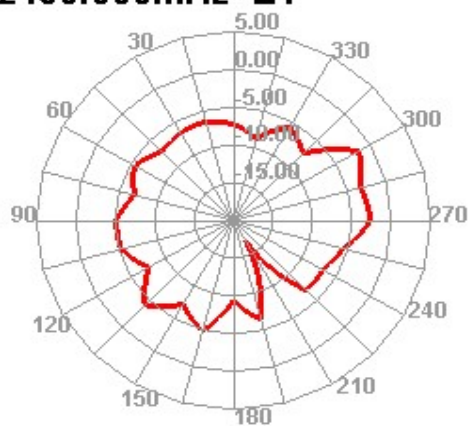
2450.000MHz



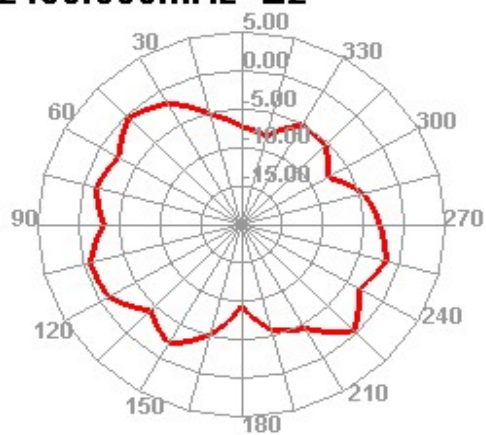
2450.000MHz H



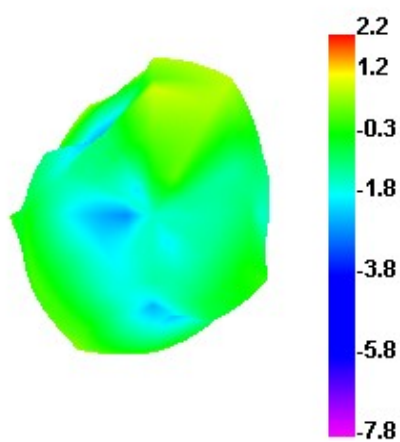
2450.000MHz E1



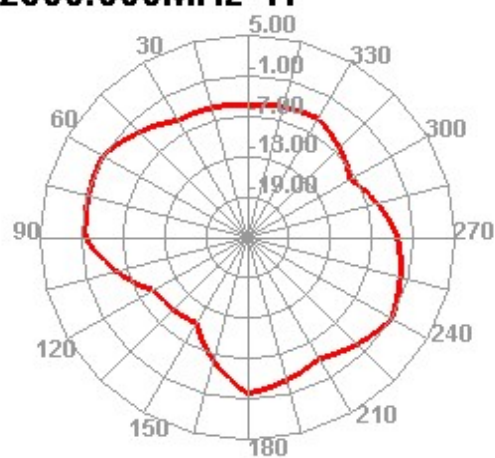
2450.000MHz E2



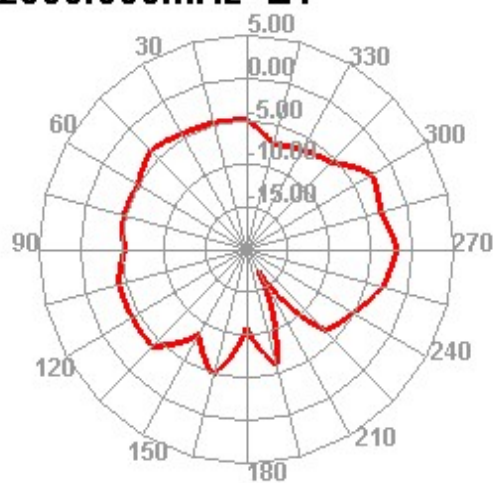
2500.000MHz



2500.000MHz H



2500.000MHz E1



2500.000MHz E2

