

Meander Inverted F Antenna

Specification

Product Name: BT-ANT-MIFA_01

Description: Meander Inverted F Antenna

Revision: V1.0

Written by: Hu Mingbo

Checked by: _____

Data: 2025-9-12

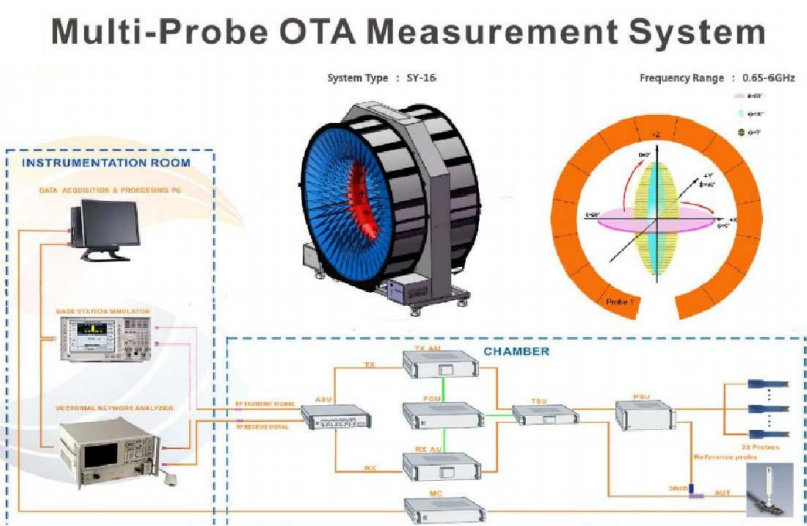
Date	Version	Aother	Changements
2025-9-12	V1.0	Mingbo Hu	Initial version

1. Test Procedure

1.1 Test Procedure

Put the antenna into the anechoic chamber, connect the antenna to the VNA and start measurement.

1.2 Test Setup

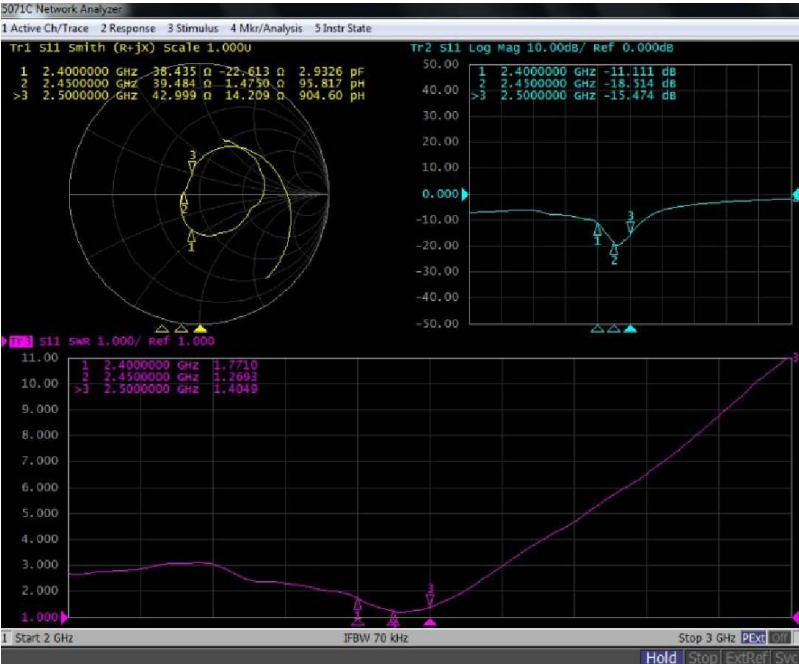


2. Test Data

2.1. Characteristics.

No.	Name	Specification
1	Frequency range	2400MHz~ 2500MHz
2	Impedence	50 ohm
3	Material	FR-4

2.2. S11parameters



2.3. VSWR

No.	Frequency(MHz)	VSWR
1	2400	1.76
2	2450	1.28
3	2500	1.41

2.4. Gain

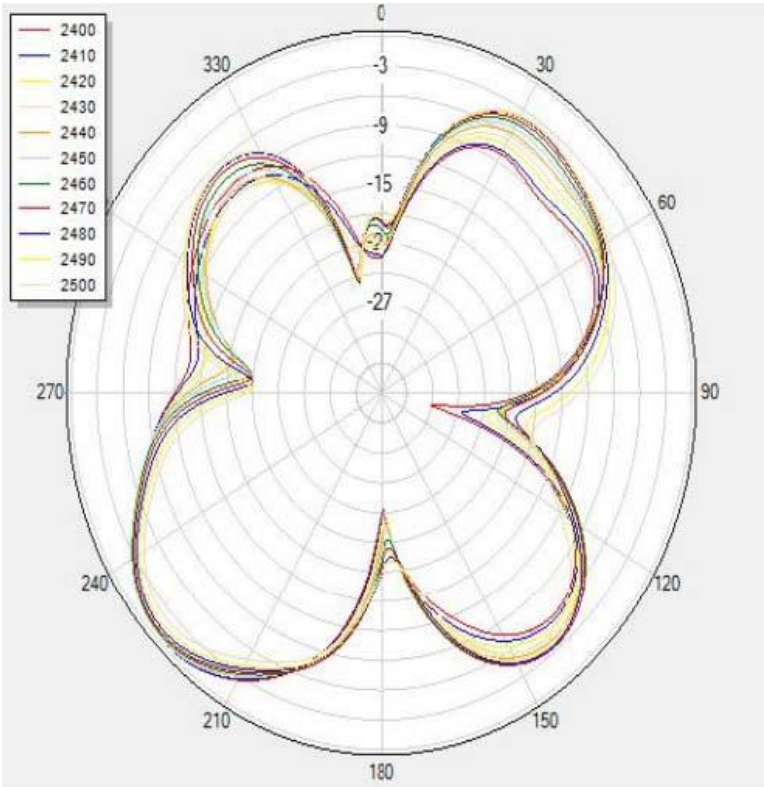
No.	Frequency(MHz)	Gain(dBi)
1	2400	-0.23
2	2450	-0.25
3	2500	-2.01

2.5. Efficiency

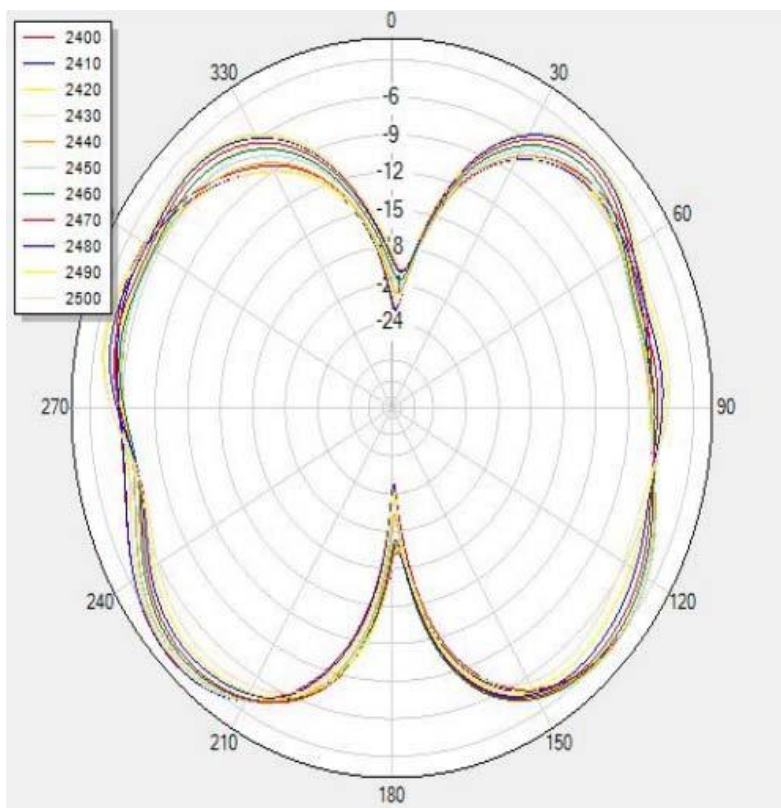
No.	Frequency(MHz)	Efficiency(%)
1	2400	23.9
2	2450	24.5
3	2500	24.1

2.4. Radiation Pattern

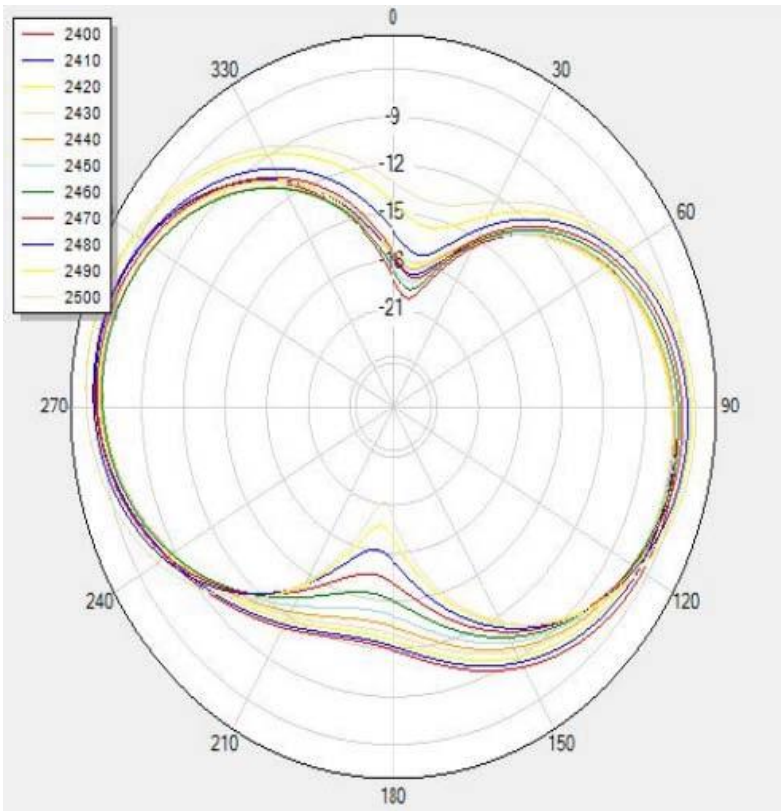
2.4.1 X-Z Plane V PHI=0



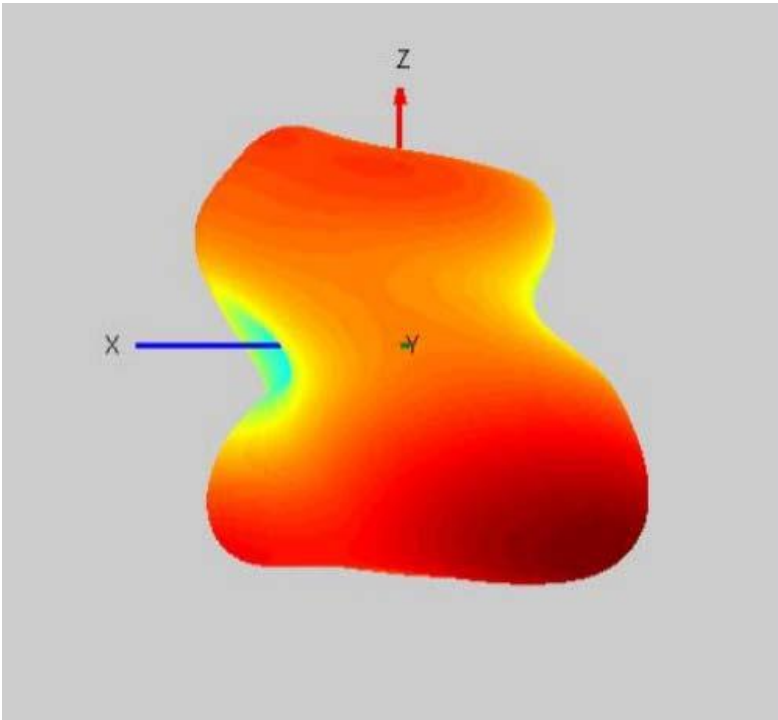
2.4.2 Y-Z Plane V PHI=90



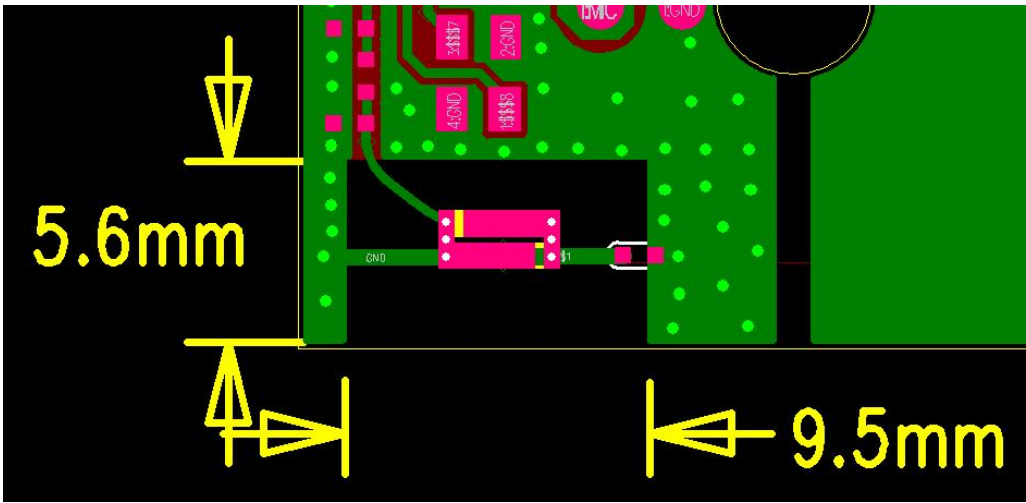
2.4.3 Y-X Plane H PHI=90



2.4.4 3D Radiation Pattern at 2.45GHz



3. Construction



4. Recommended operating and storing conditions.

No.	Item	Conditions
1	Operating Temperature	-40℃ ~ +85℃
2	Storage Temperature	-40℃ ~ +90℃

5.Applications

This Meander line antenna specification could be suitable for the following modules:

- 1. BT-MC89-JK1
- 2. BT-MC89-JKx