

## LGSWCAX71 Antenna



## Catalogue

- ☐ Test site, equipment, test method
- ☐ Module physical picture
- ☐ Matching spec
- ☐ Test environment
- ☐ Antenna passive data

## Test site, equipment, test method

Site: GSD technology, ATS300L darkroom, No.6, Qiaoguang Road, Chenjiang Street, Zhongkai High-tech Zone, Huizhou City, Guangdong Province, China

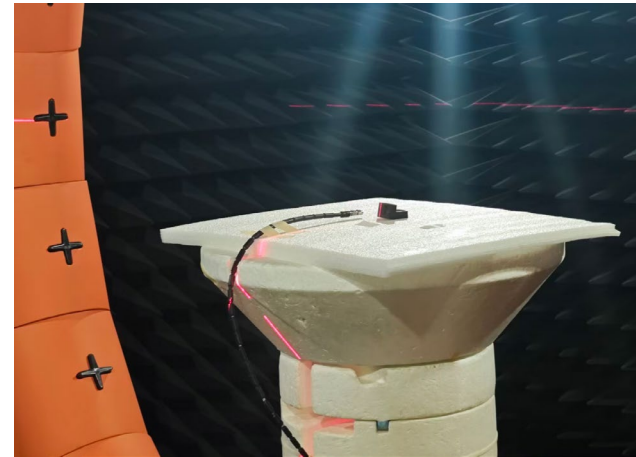
Experimental software: TAsuite , Version: 3.9.0

## Table of experimental equipment

| Test instrument  | Manufacturer    | Type    | Series No. | calibration date |
|------------------|-----------------|---------|------------|------------------|
| Network analyzer | Keysight        | E5071C  | MY46528193 | 2026-04-29       |
| Network analyzer | Rohde & Schwarz | CMW500  | 169113     | 2026-06-04       |
| OTA test system  | XINGHANGWULIAN  | ATS300L | XH241102   | 2026-01-06       |

## Test setup photo

### 1. Antenna s11, s12 parameters testing:

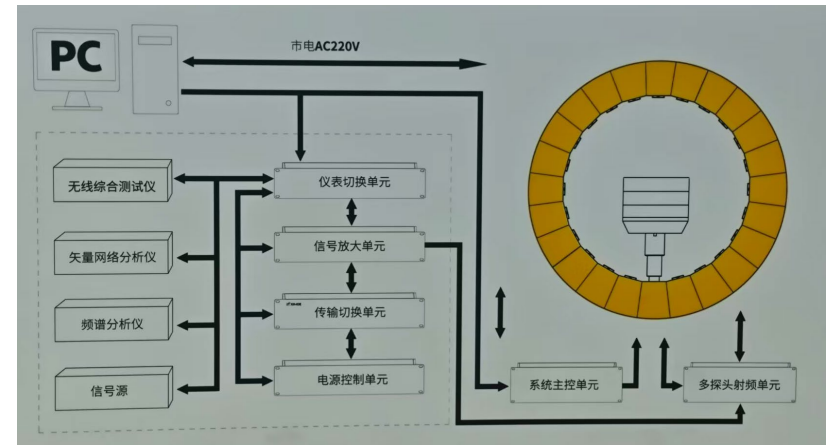
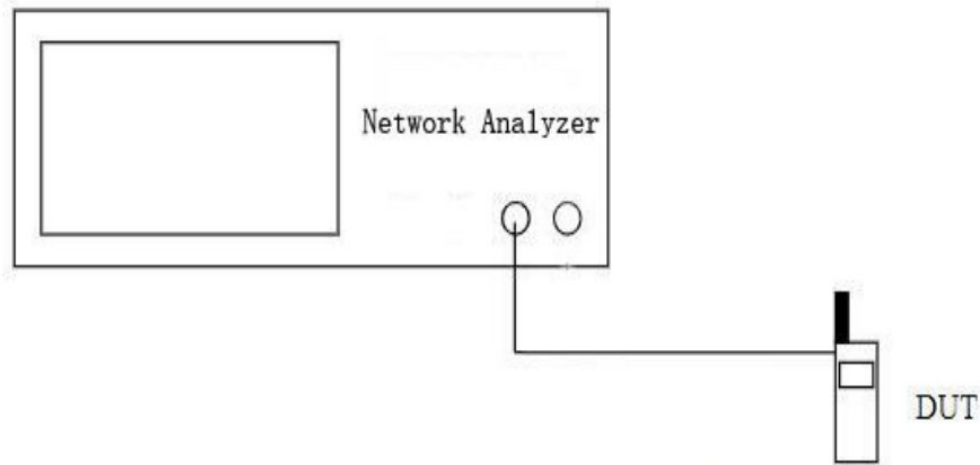


Tester: Fan Hai Tao

test date: 2026-06-15

## Test program

1. Antenna s11, s12 parameters testing:
2. Antenna efficiency, gain and pattern test:



# Module physical picture



WF1

WF0

BT0

# ANT



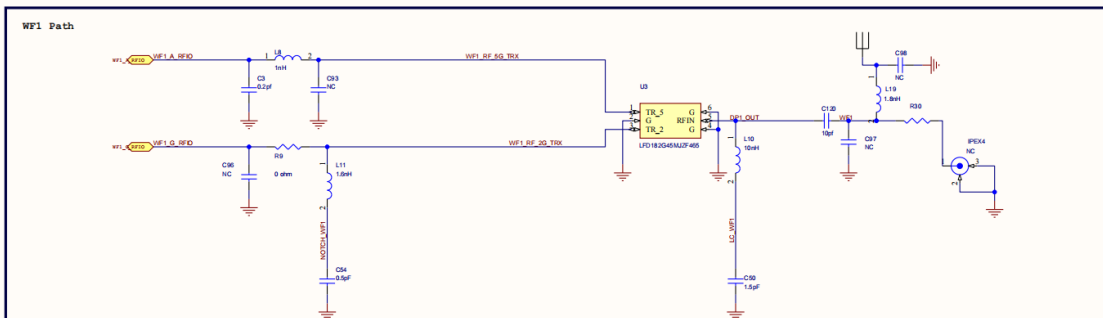
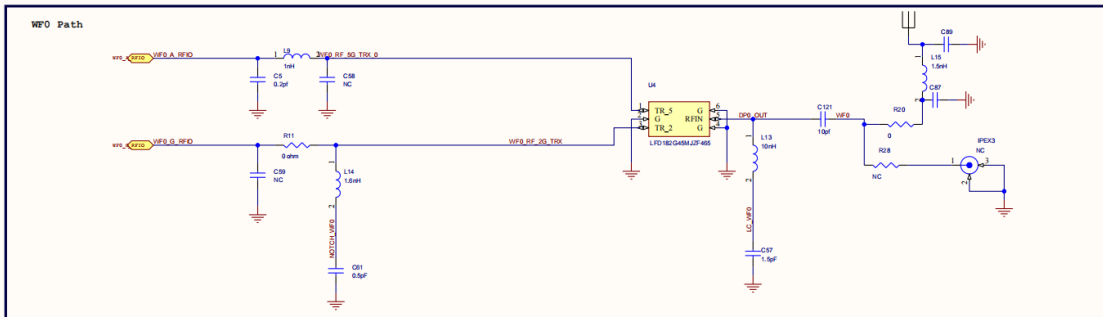
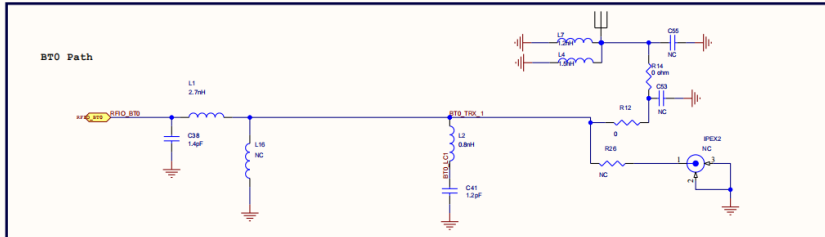
WF1

WF0

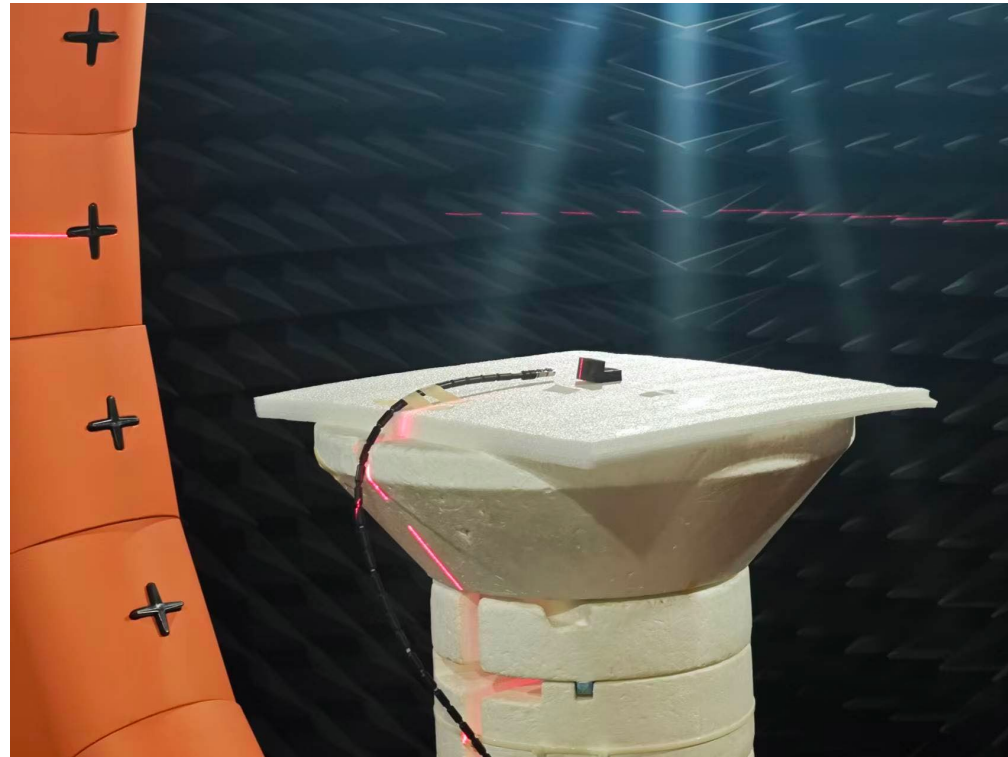
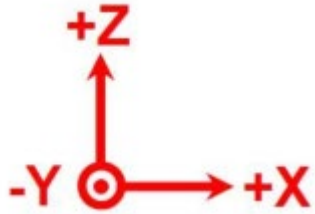
BT0

| ANT | ANT type           | model         | Vendor |
|-----|--------------------|---------------|--------|
| WF0 | PIFA antenna/metal | WXT3L/21.5    | GSD    |
| WF1 | PIFA antenna/metal | WXT3L/20.8    | GSD    |
| BT0 | PIFA antenna/metal | WXT3L/BT/26.6 | GSD    |

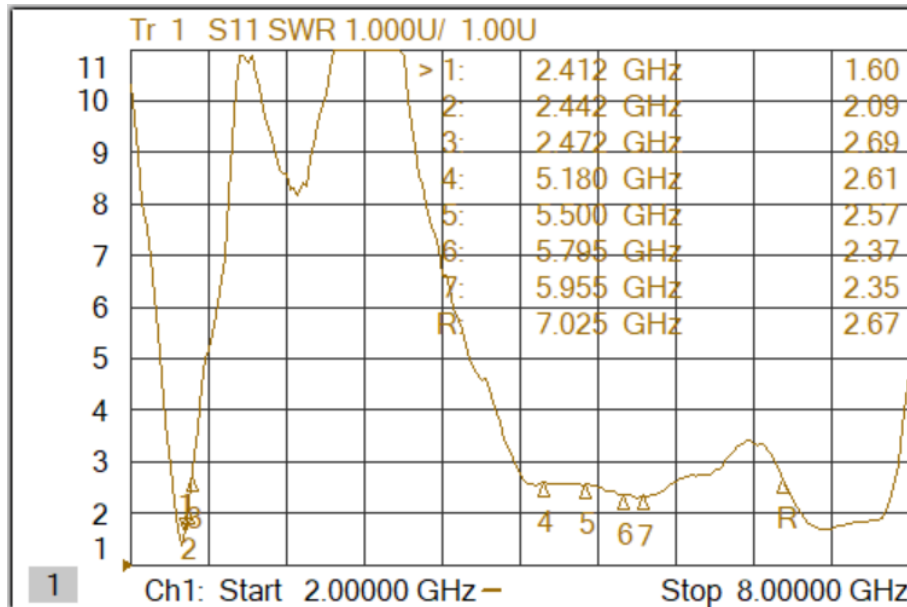
# Matching spec



# Test environment



# WFO-S11

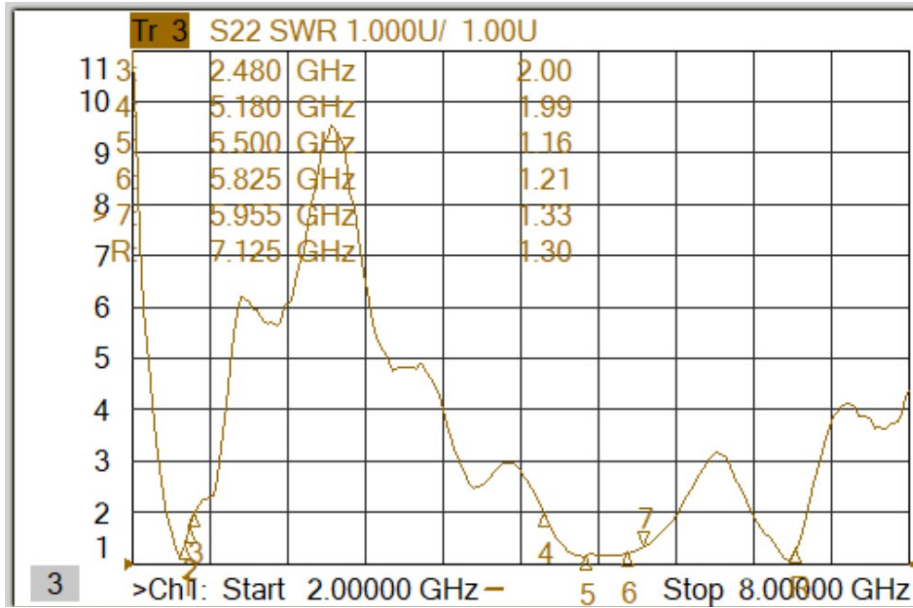


# WFO-Efficiency/Peak Gain

| #1  | Frequency | Efficiency | Peak Gain |
|-----|-----------|------------|-----------|
|     | Mhz       | %          | dB        |
| WFO | 2400      | 41.7       | 1.74      |
|     | 2440      | 40.8       | 1.62      |
|     | 2450      | 41.5       | 1.5       |
|     | 2470      | 39.36      | 1.15      |
|     | 2480      | 39.85      | 1.27      |
|     | 5190      | 40.86      | 0.98      |
|     | 5250      | 41.7       | 1.36      |
|     | 5350      | 42.31      | 1.63      |
|     | 5470      | 41.64      | 1.37      |
|     | 5510      | 36.46      | 1.65      |
|     | 5750      | 39.06      | 1.78      |
|     | 5850      | 40.1       | 1.74      |

| #1  | Frequency | Efficiency | Peak Gain |
|-----|-----------|------------|-----------|
|     | Mhz       | %          | dB        |
| WFO | 5955      | 35.16      | 1.65      |
|     | 5995      | 31.7       | 1.28      |
|     | 6135      | 41.5       | 2.01      |
|     | 6275      | 31         | 1.02      |
|     | 6415      | 31.33      | 0.85      |
|     | 6535      | 41.8       | 2.14      |
|     | 6635      | 32.14      | 0.57      |
|     | 6735      | 36.69      | 1.89      |
|     | 6875      | 38.46      | 2.03      |
|     | 6995      | 39.45      | 2.17      |
|     | 7115      | 30.97      | 0.82      |

# WF1-S22

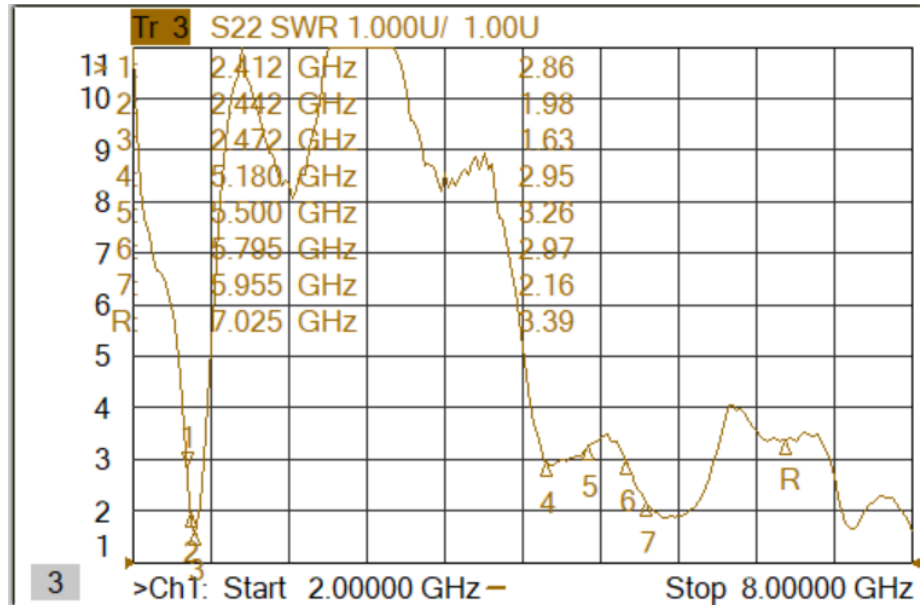


# WF1-Efficiency/Peak Gain

| #1  | Frequency | Efficiency | Peak Gain |
|-----|-----------|------------|-----------|
|     | Mhz       | %          | dB        |
| WF1 | 2400      | 40.45      | 1.45      |
|     | 2440      | 42.21      | 2.03      |
|     | 2450      | 38.85      | 1.65      |
|     | 2470      | 36.15      | 1.51      |
|     | 2480      | 37.35      | 1.84      |
|     | 5190      | 33.88      | -0.68     |
|     | 5250      | 39.63      | 0.59      |
|     | 5350      | 40.27      | 1         |
|     | 5470      | 35.65      | 0.18      |
|     | 5510      | 32.99      | 0.66      |
|     | 5750      | 38.25      | 1.21      |
|     | 5850      | 40.15      | 1.59      |

| #1  | Frequency | Efficiency | Peak Gain |
|-----|-----------|------------|-----------|
|     | Mhz       | %          | dB        |
| WF1 | 5955      | 32.91      | 1.23      |
|     | 5995      | 35.78      | 1.41      |
|     | 6135      | 38.9       | 1.6       |
|     | 6275      | 37.24      | 0.87      |
|     | 6415      | 38.82      | 1.45      |
|     | 6535      | 40.55      | 1.73      |
|     | 6635      | 33.5       | 1.28      |
|     | 6735      | 30.34      | 1.52      |
|     | 6875      | 28.8       | 0.25      |
|     | 6995      | 30.15      | 0.75      |
|     | 7115      | 32.86      | 0.54      |

# BT0-S11

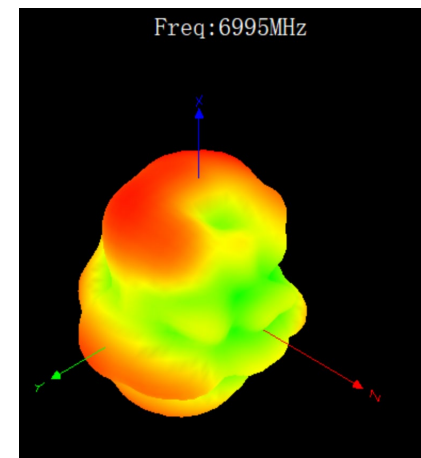
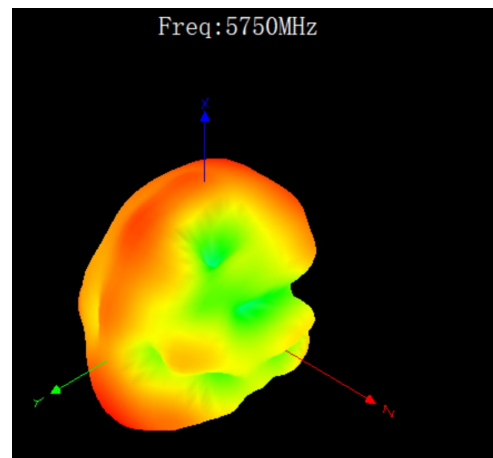
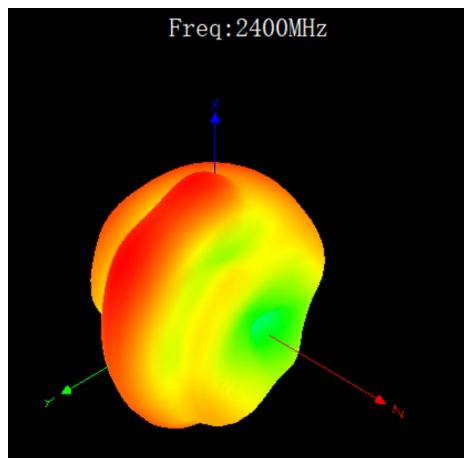
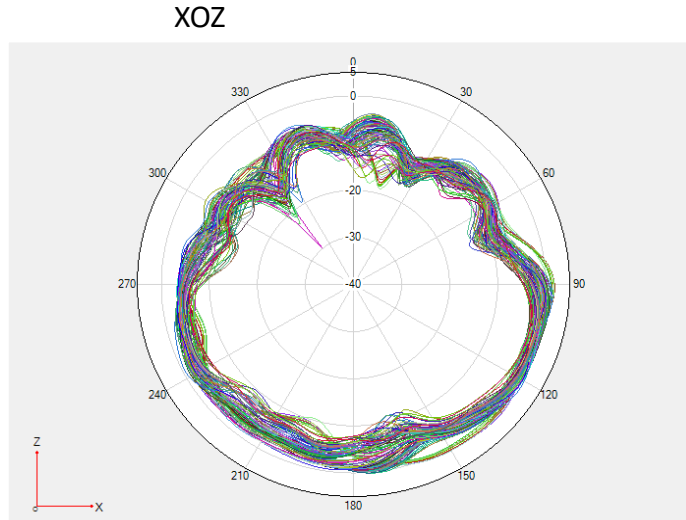


# BT0-Efficiency/Peak Gain

| #1  | Frequency | Efficiency | Peak Gain |
|-----|-----------|------------|-----------|
|     | Mhz       | %          | dB        |
| BT0 | 2400      | 21.4       | -0.19     |
|     | 2420      | 23.7       | 0.35      |
|     | 2440      | 24.1       | 0.92      |
|     | 2460      | 22.5       | 0.28      |
|     | 2480      | 20.8       | -0.11     |

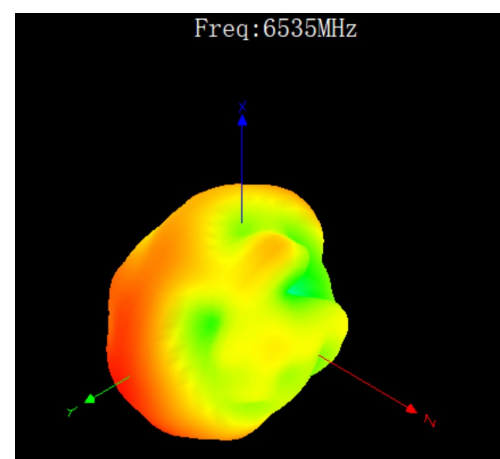
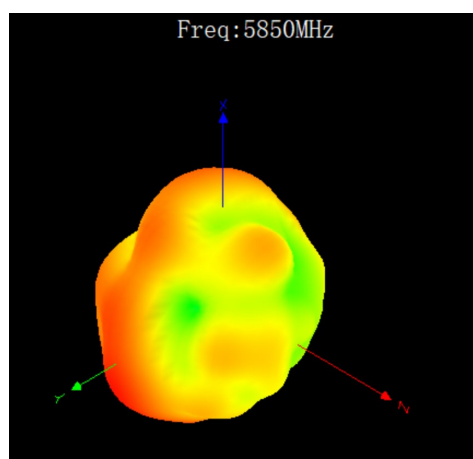
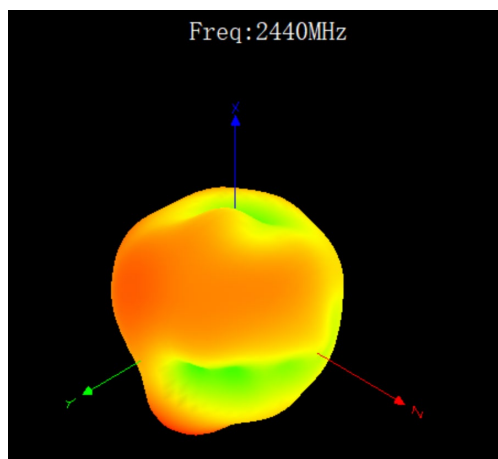
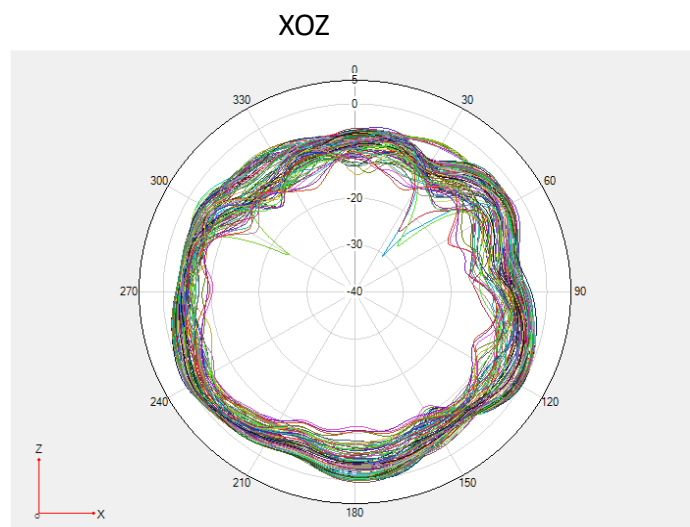
# Radiation Pattern-WF0

WF0

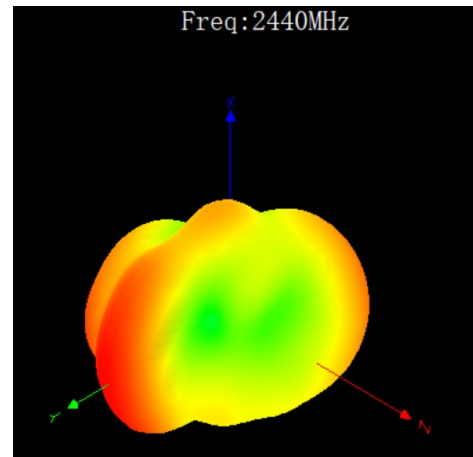
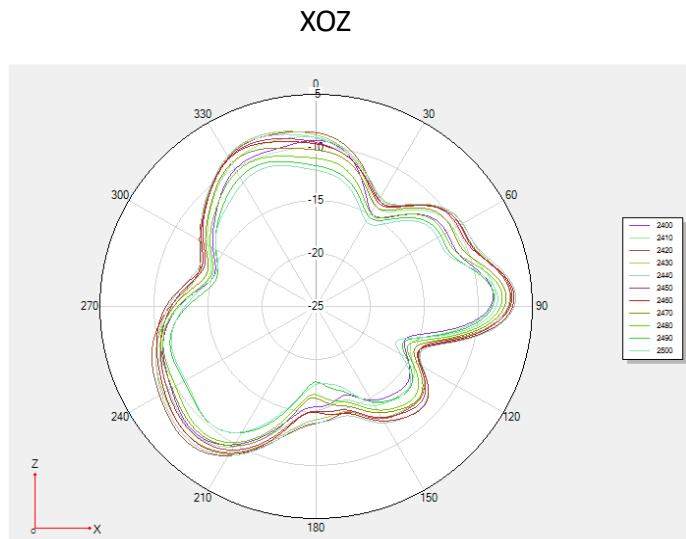


# Radiation Pattern-WF1

WF1



# Radiation Pattern-BT0



Thanks