



# Antenna Part Specification

|                       |                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------|
| Project name:         | A526                                                                                          |
| Manufacturer:         | Shenzhen Cicent Communication Technology Co., Ltd.                                            |
| Manufacturer address: | 505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china |
| Antenna type:         | BT antenna                                                                                    |
| Version:              | V1.0                                                                                          |
| Date:                 | 2024.09.12                                                                                    |



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| Change record         |                   |                 |         |
|-----------------------|-------------------|-----------------|---------|
| Compile / change date | Reason for change | Changed content | Version |
| 2024.09.12            | First edition     | First edition   | V1.0    |
|                       |                   |                 |         |
|                       |                   |                 |         |

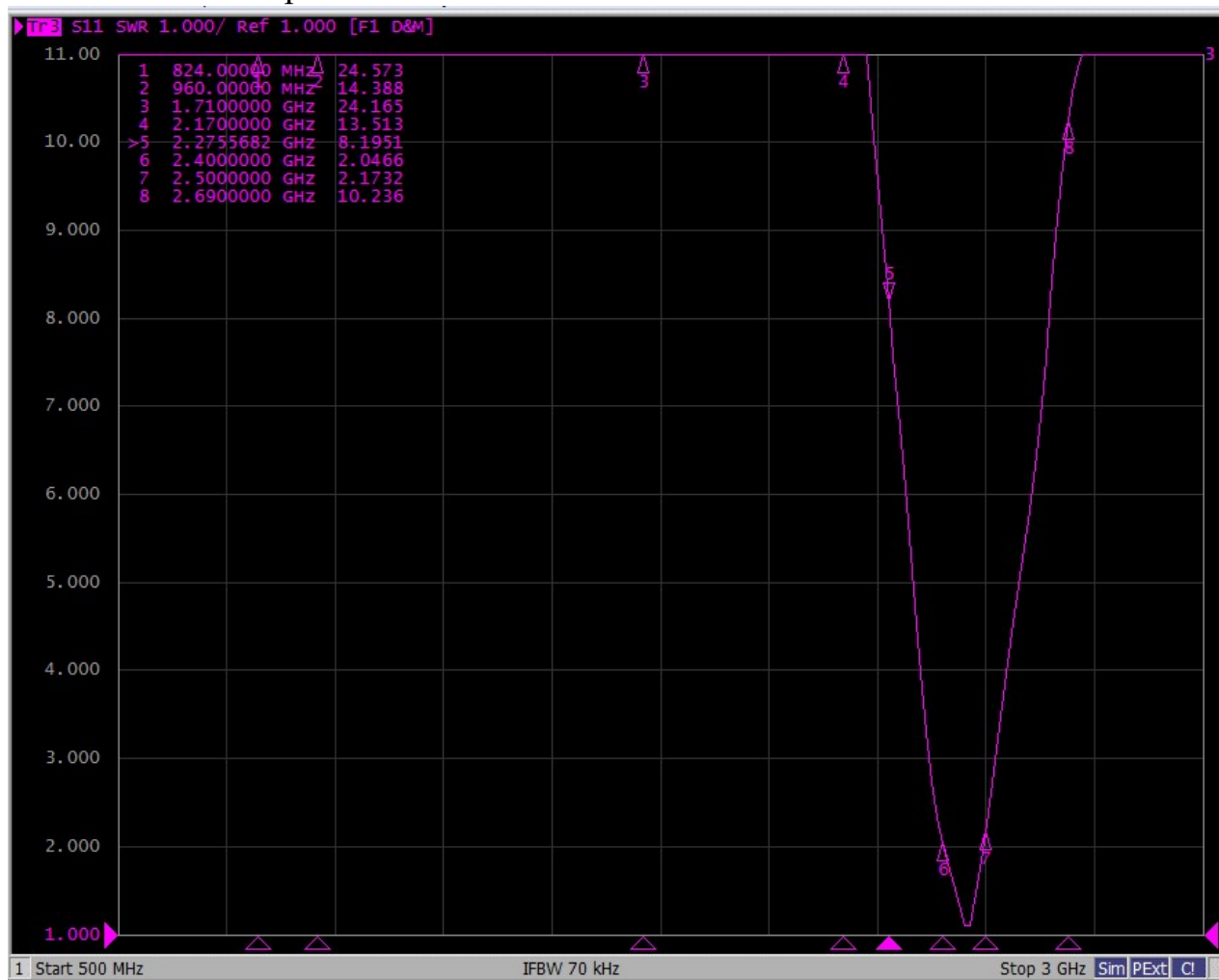


I: The report of passive data



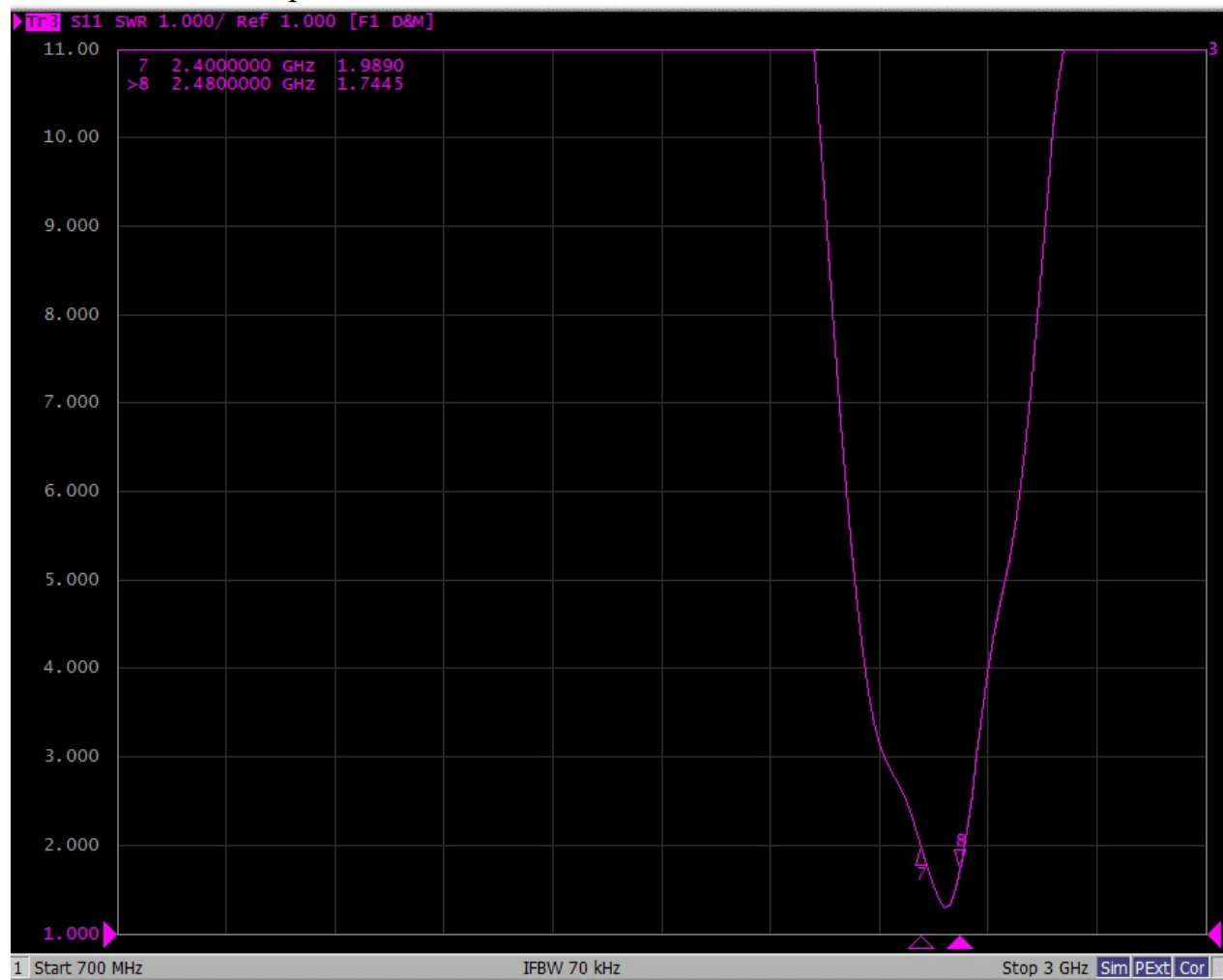
Angilent E5071C

L-BT antenna S11 parameter





R-BT antenna S11 parameter





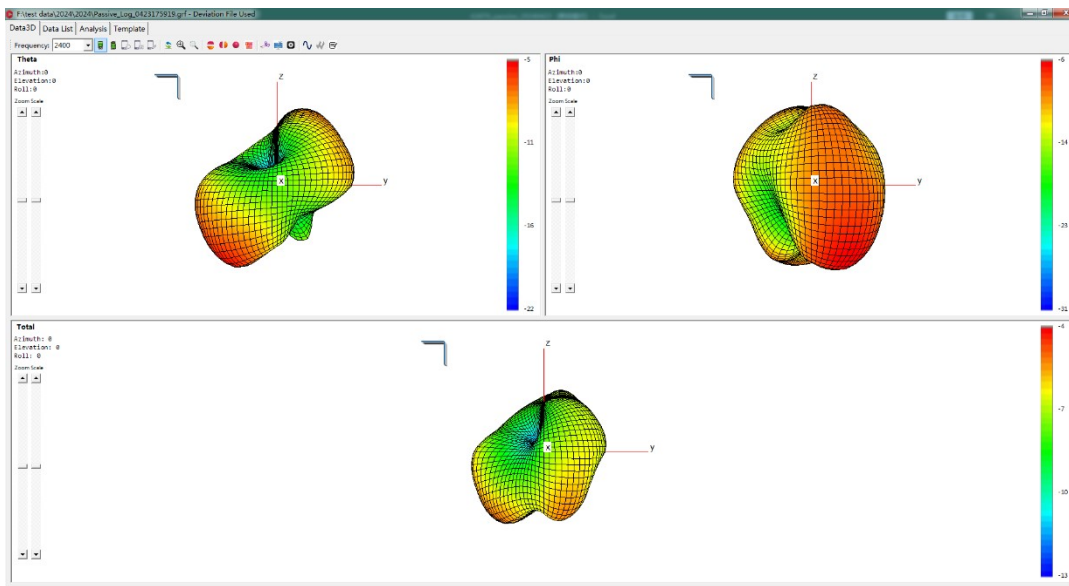
Efficiency:

| L                  |            |                  |                |
|--------------------|------------|------------------|----------------|
| Frequency<br>(MHz) | Gain (dBi) | Efficiency (dB ) | Efficiency (%) |
| 2400               | -4.86      | -7.14            | 19.34          |
| 2410               | -4.52      | -6.85            | 20.66          |
| 2420               | -4.34      | -6.66            | 21.60          |
| 2430               | -4.29      | -6.71            | 21.33          |
| 2440               | -4.45      | -6.91            | 20.38          |
| 2450               | -4.40      | -6.89            | 20.44          |
| 2460               | -4.63      | -7.17            | 19.20          |
| 2470               | -4.51      | -7.12            | 19.40          |
| 2480               | -4.54      | -7.10            | 19.50          |
| 2490               | -5.03      | -7.59            | 17.40          |
| 2500               | -5.41      | -8.05            | 15.68          |
| average value      | -4.6       | -7.1             | 19.5           |

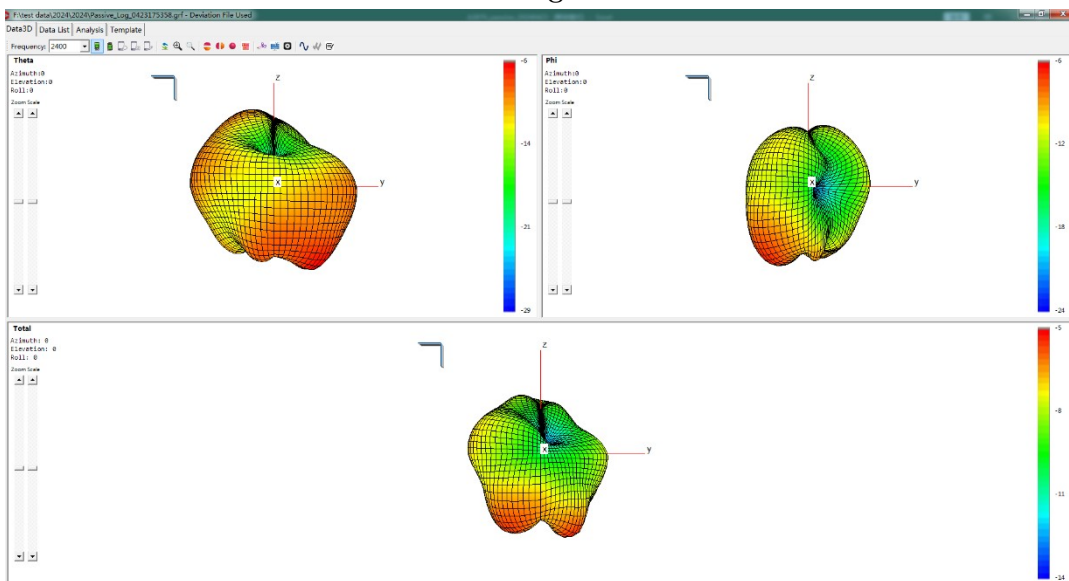
| R                  |            |                  |                |
|--------------------|------------|------------------|----------------|
| Frequency<br>(MHz) | Gain (dBi) | Efficiency (dB ) | Efficiency (%) |
| 2400               | -5.47      | -8.20            | 15.14          |
| 2410               | -4.91      | -7.62            | 17.32          |
| 2420               | -4.50      | -7.09            | 19.55          |
| 2430               | -4.09      | -6.83            | 20.73          |
| 2440               | -3.83      | -6.69            | 21.43          |
| 2450               | -3.47      | -6.41            | 22.84          |
| 2460               | -3.33      | -6.44            | 22.71          |
| 2470               | -3.07      | -6.25            | 23.69          |
| 2480               | -2.91      | -6.16            | 24.21          |
| 2490               | -3.18      | -6.55            | 22.11          |
| 2500               | -3.50      | -6.96            | 20.14          |
| average value      | -3.8       | -6.8             | 20.9           |



## L-Passive 3D directional diagram of BT antenna unit: dBi



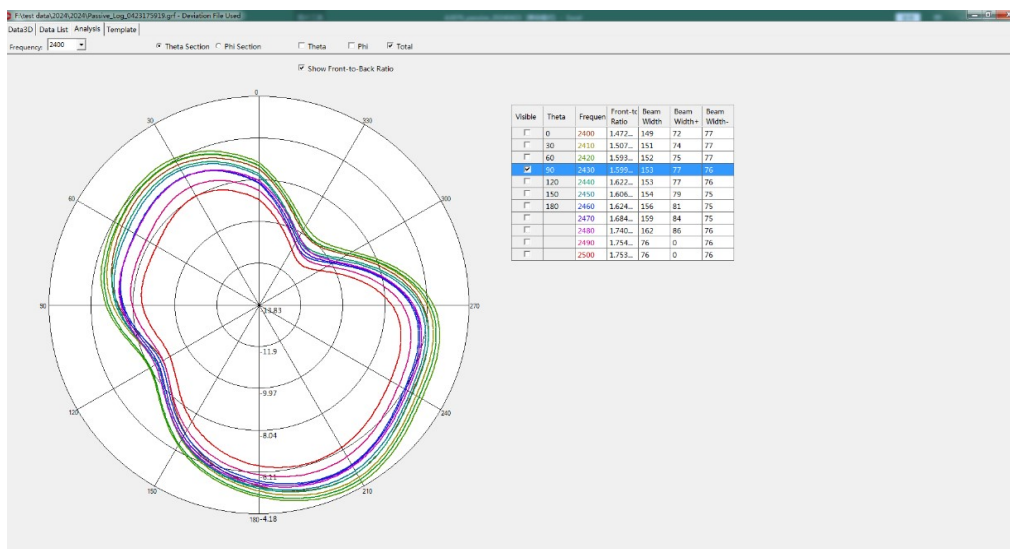
## R- Passive 3D directional diagram of BT antenna unit: dBi



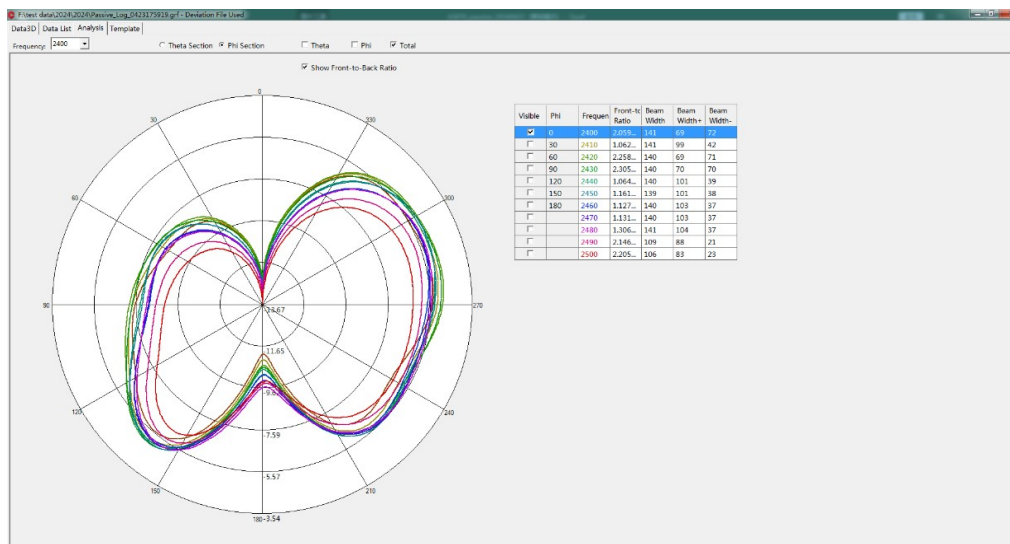


L-Passive 2D directional pattern of BT antenna:

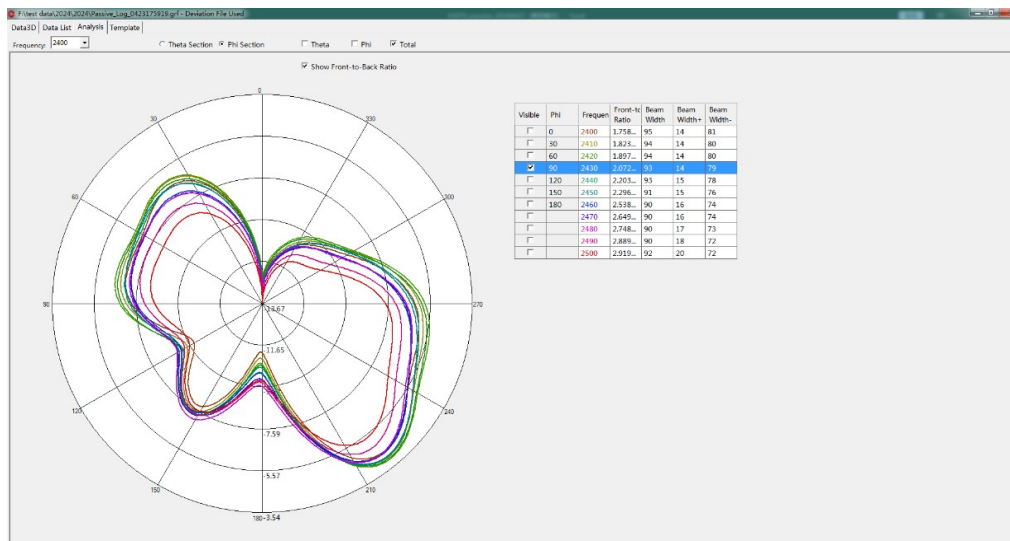
Theta=90° unit: dBi



Phi=0° unit: dBi



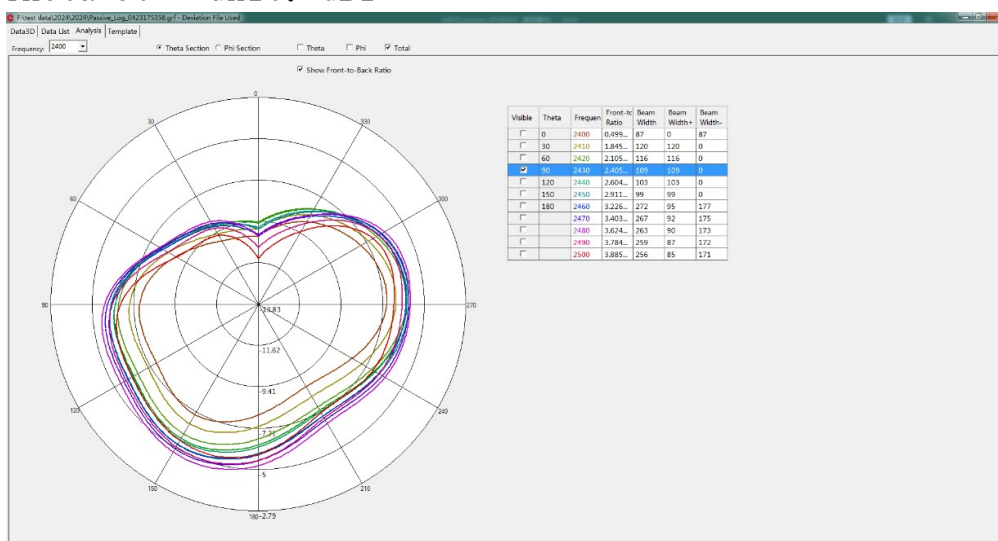
Phi=90° unit: dBi



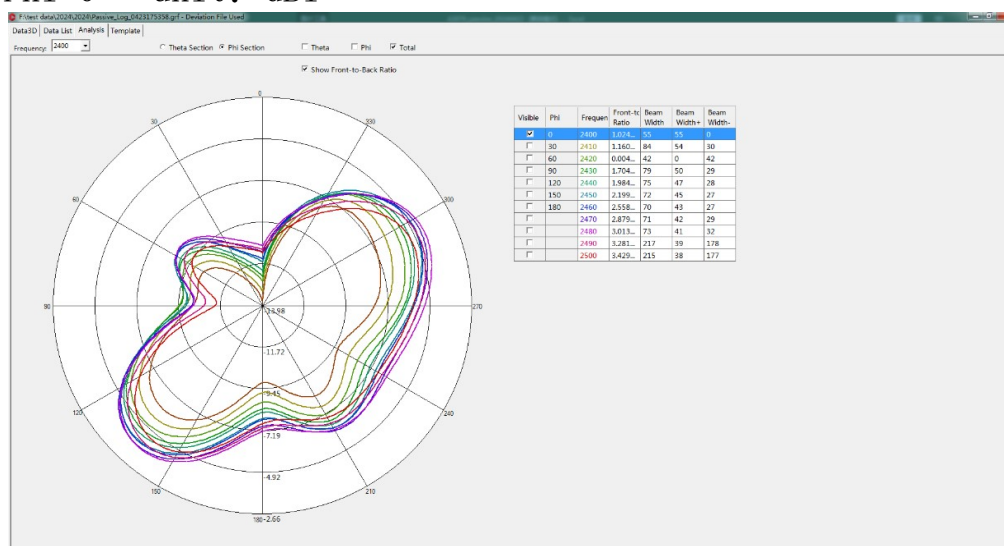


R-Passive 2D directional pattern of BT antenna:

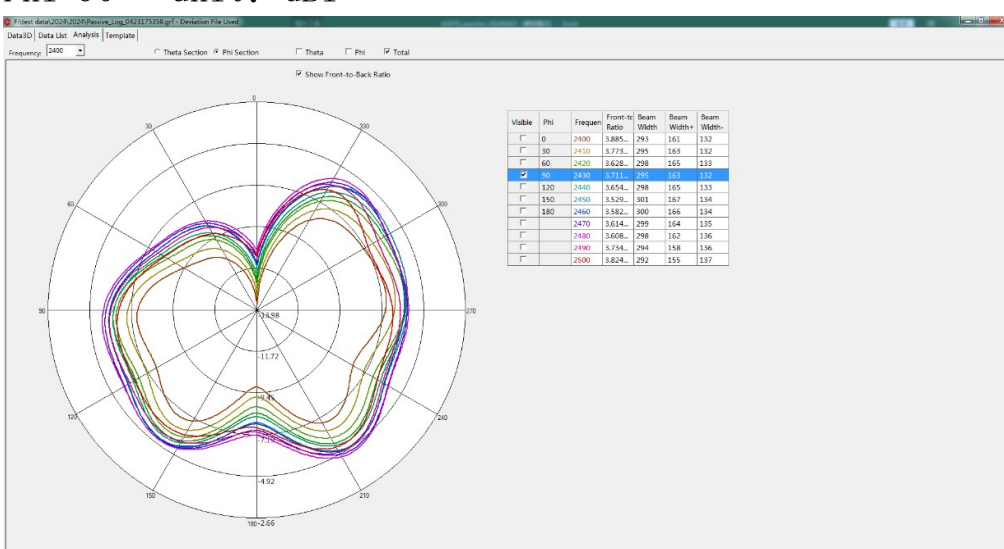
Theta=90° unit: dBi



Phi=0° unit: dBi



Phi=90° unit: dBi





## II: 3D Active test report of antenna

| BT | Channel | TRP (dBm) | TIS (dBm) |
|----|---------|-----------|-----------|
| L  | CH 0    | 1.7       | -89.0     |
|    | CH 39   | 2.6       | -90.8     |
|    | CH 78   | 2.5       | -90.8     |

| BT | Channel | TRP (dBm) | TIS (dBm) |
|----|---------|-----------|-----------|
| R  | CH 0    | 2.8       | -89.5     |
|    | CH 39   | 2.2       | -90.0     |
|    | CH 78   | 1.5       | -89.0     |



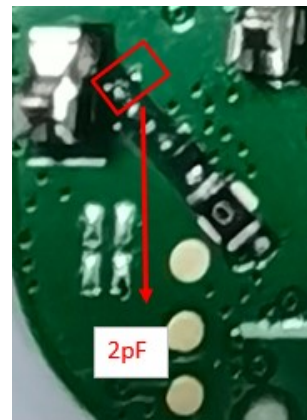
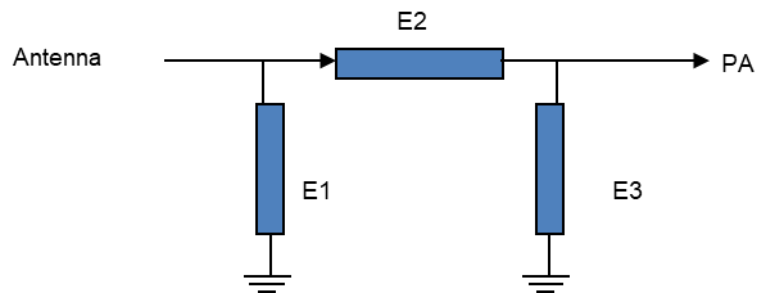
OTA Standard Chamber



### III: Matching circuit

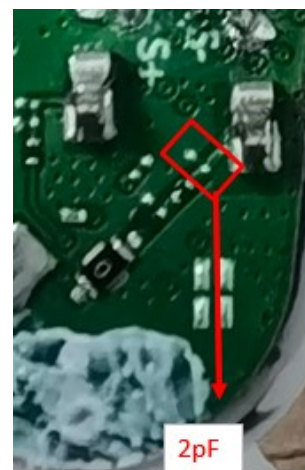
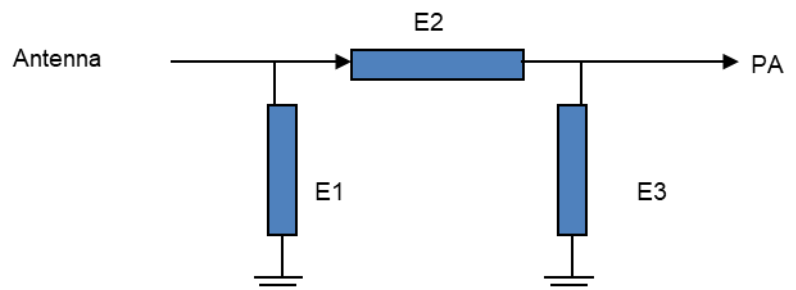
Left ear matching circuit:

| Element  | Value |
|----------|-------|
| E1(0201) | 2pF   |
| E2(0201) | 0Ω    |
| E3(0201) | N/A   |



Right ear matching circuit:

| Element  | Value |
|----------|-------|
| E1(0201) | 2pF   |
| E2(0201) | 0Ω    |
| E3(0201) | N/A   |





IV: Structure file

