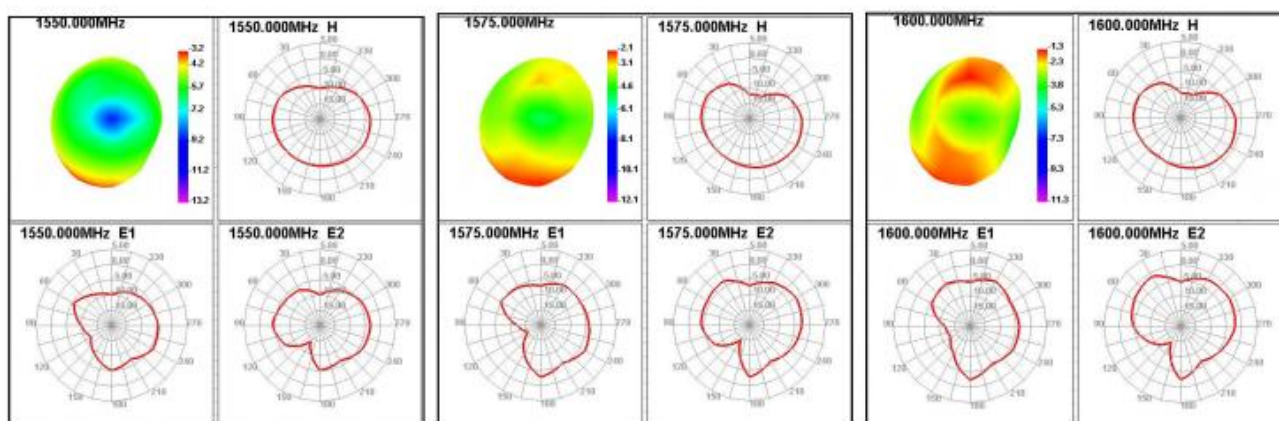


### GPS 无源测试数据:

| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|
| 1550          | 28.56       | -3.24         |
| 1555          | 28.86       | -3.19         |
| 1560          | 27.41       | -2.73         |
| 1565          | 28.19       | -2.61         |
| 1570          | 30.43       | -2.25         |
| 1575          | 31.28       | -2.11         |
| 1580          | 30.01       | -2.23         |
| 1585          | 32.69       | -1.79         |
| 1590          | 34.77       | -1.43         |
| 1595          | 33.05       | -1.52         |
| 1600          | 34.15       | -1.27         |

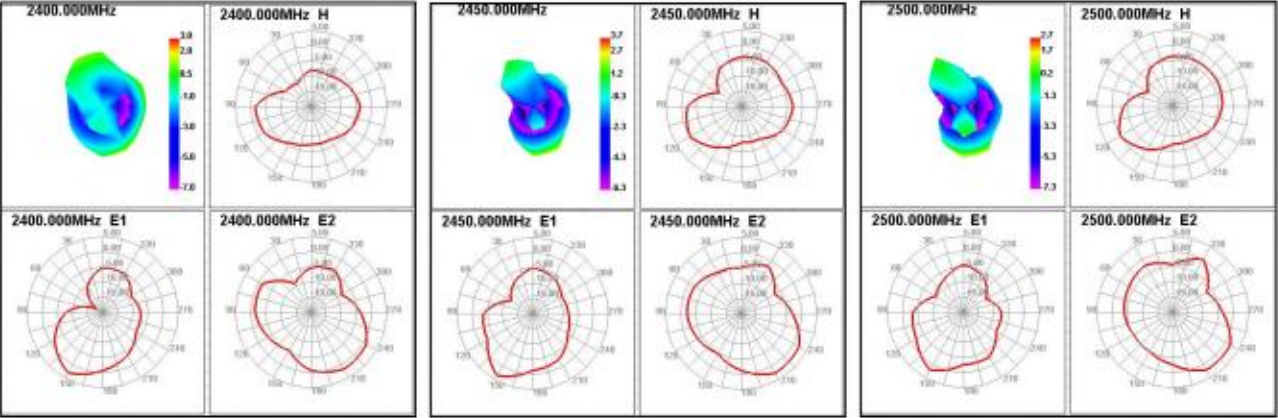
### 天线苹果图:



蓝牙无源测试数据:

| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|
| 2400          | 48.59       | 3             |
| 2410          | 46.51       | 3.39          |
| 2420          | 48.34       | 3.52          |
| 2430          | 48.39       | 3.45          |
| 2440          | 52.31       | 3.77          |
| 2450          | 52.53       | 3.67          |
| 2460          | 53.17       | 3.64          |
| 2470          | 49.86       | 3.23          |
| 2480          | 51.78       | 3.3           |
| 2490          | 48.11       | 2.76          |
| 2500          | 49.87       | 2.72          |

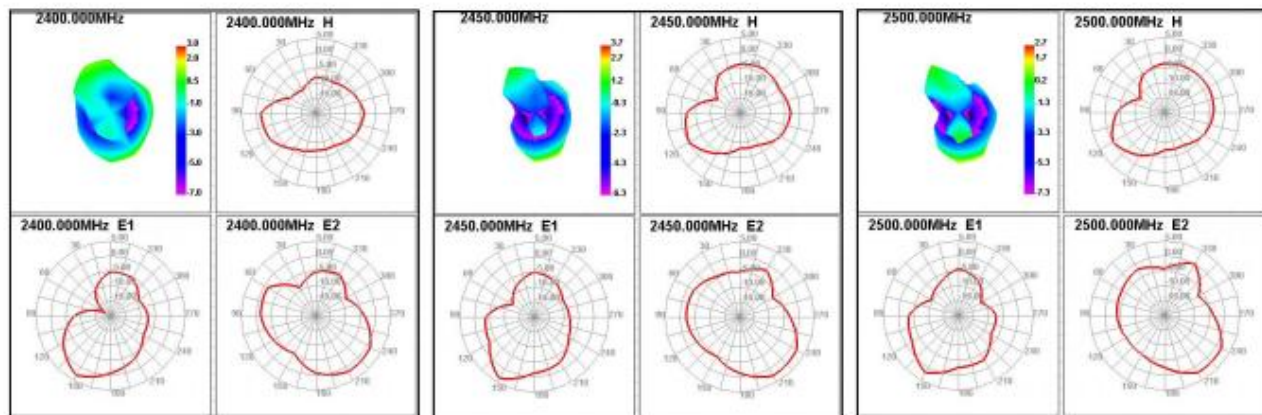
天线苹果图:



## WiFi 无源测试数据:

| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|
| 2400          | 48.59       | 3             |
| 2410          | 46.51       | 3.39          |
| 2420          | 48.34       | 3.52          |
| 2430          | 48.39       | 3.45          |
| 2440          | 52.31       | 3.77          |
| 2450          | 52.53       | 3.67          |
| 2460          | 53.17       | 3.64          |
| 2470          | 49.86       | 3.23          |
| 2480          | 51.78       | 3.3           |
| 2490          | 48.11       | 2.76          |
| 2500          | 49.87       | 2.72          |

## 天线苹果图:



| 信道CH<br>测试值 |     | LTEB3 |       |        | LTEB5 |       |        |
|-------------|-----|-------|-------|--------|-------|-------|--------|
|             |     | 19300 | 19575 | 19850  | 20450 | 20525 | 20600  |
| 10M         | TRP | 16.78 | 17.75 | 18.66  | 15.05 | 15.51 | 15.72  |
|             | TIS |       |       | -88.85 |       |       | -82.12 |

| 信道CH<br>测试值 |     | LTEB7 |       |        | LTEB8 |       |        |
|-------------|-----|-------|-------|--------|-------|-------|--------|
|             |     | 20800 | 21100 | 21400  | 21500 | 21625 | 21750  |
| 20M         | TRP | 19.5  | 18.25 | 17.33  | 17.02 | 16.78 | 16.25  |
|             | TIS |       |       | -87.02 |       |       | -82.36 |

| 信道CH<br>测试值 |     | LTEB20 |       |        | LTEB34 |       |        |
|-------------|-----|--------|-------|--------|--------|-------|--------|
|             |     | 24200  | 24300 | 24400  | 36250  | 36275 | 36300  |
| 20M         | TRP | 14.96  | 16.10 | 17.28  | 16.04  | 15.99 | 15.95  |
|             | TIS |        |       | -82.27 |        |       | -89.31 |

| 信道CH<br>测试值 |     | LTEB38 |       |        | LTEB39 |       |        |
|-------------|-----|--------|-------|--------|--------|-------|--------|
|             |     | 37850  | 38000 | 38150  | 38750  | 39150 | 39550  |
| 20M         | TRP | 17.32  | 16.78 | 16.54  | 17.54  | 17.35 | 17.03  |
|             | TIS |        |       | -88.77 |        |       | -88.88 |

| 信道CH<br>测试值 |     | LTEB40 |       |        | LTEB41 |       |        |
|-------------|-----|--------|-------|--------|--------|-------|--------|
|             |     | 38750  | 39150 | 39550  | 40340  | 40840 | 41140  |
| 20M         | TRP | 17.56  | 18.20 | 18.77  | 18.61  | 17.42 | 16.12  |
|             | TIS |        |       | -89.44 |        |       | -88.59 |



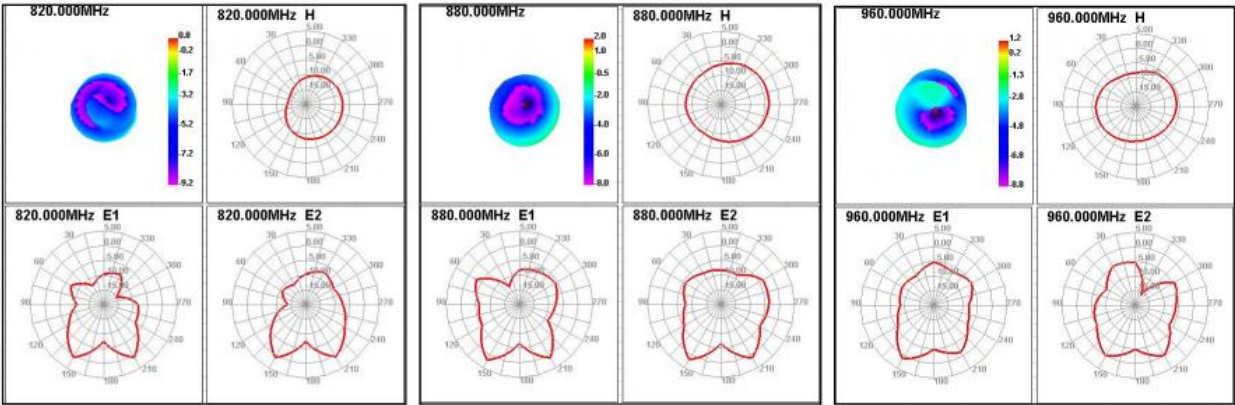
LTE 无源测试数据:

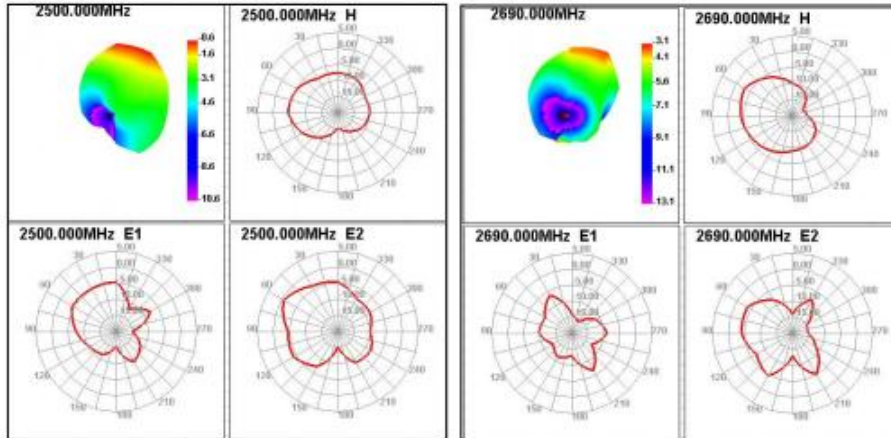
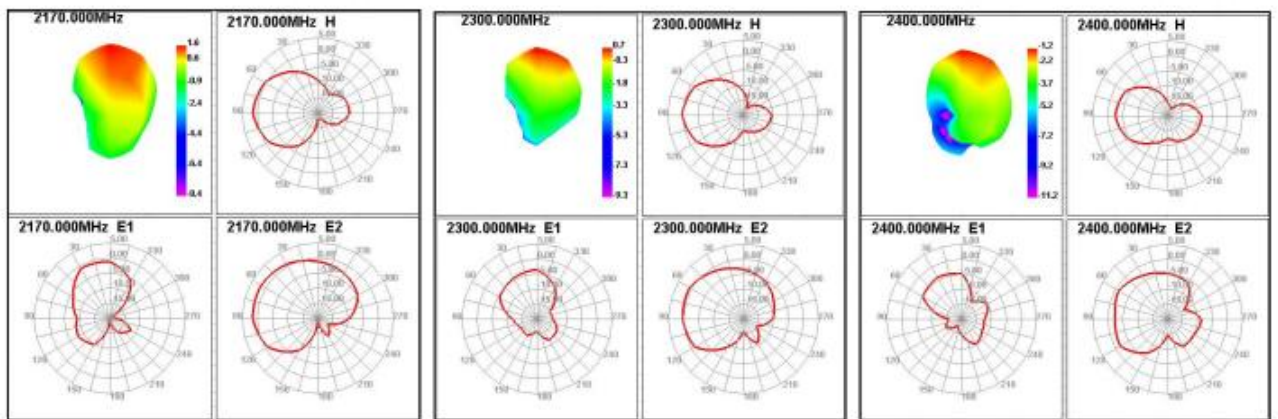
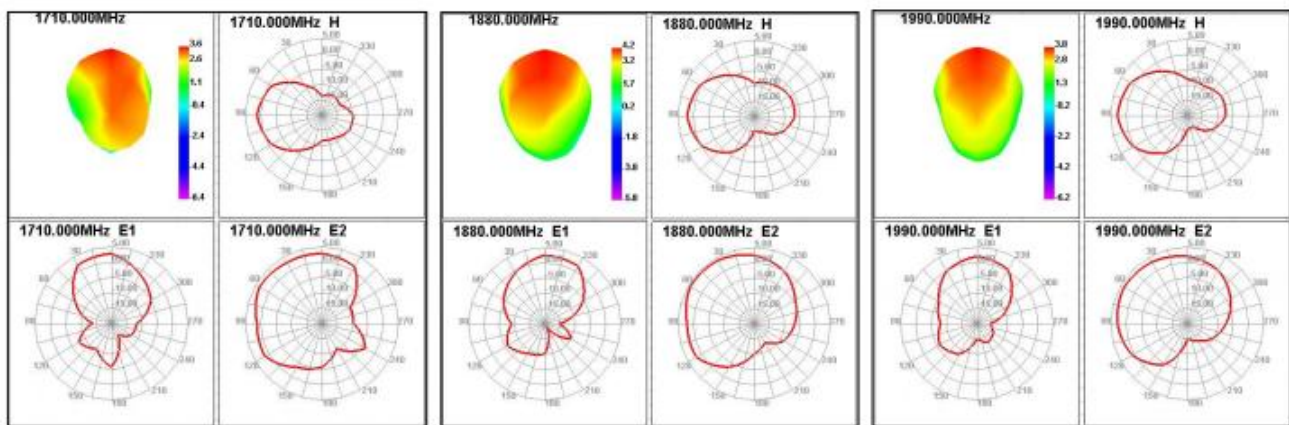
| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) | Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) | Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|---------------|-------------|---------------|---------------|-------------|---------------|
| 820           | 27.48       | 0.77          | 1700          | 30.24       | 2.89          | 1990          | 36.35       | 1.77          |
| 830           | 27.55       | 0.38          | 1710          | 34.54       | 2.61          | 2000          | 38.13       | 1.97          |
| 840           | 29.12       | 0.23          | 1720          | 38.93       | 1.05          | 2010          | 37.09       | 1.91          |
| 850           | 31.39       | 0.44          | 1730          | 43.43       | 1.63          | 2020          | 38.68       | 1.01          |
| 860           | 34.81       | 0.91          | 1740          | 38.36       | 1.21          | 2030          | 41.33       | 1.21          |
| 870           | 38.09       | 1.46          | 1750          | 37.63       | 0.95          | 2040          | 40.69       | 1.11          |
| 880           | 35.84       | 1.97          | 1760          | 37.82       | 1.21          | 2050          | 42.94       | 1.29          |
| 890           | 35.51       | 2.23          | 1770          | 36.17       | 1.89          | 2060          | 40.25       | 1.08          |
| 900           | 35.99       | 2.35          | 1780          | 29.28       | 1.14          | 2070          | 36.62       | 1.77          |
| 910           | 35.44       | 2.15          | 1790          | 35.42       | 1.82          | 2080          | 36.13       | 1.76          |
| 920           | 33.56       | 1.92          | 1800          | 37.23       | 1.98          | 2090          | 32.36       | 1.42          |
| 930           | 38.34       | 1.38          | 1810          | 37.13       | 1.02          | 2100          | 30.62       | 1.26          |
| 940           | 36.26       | 1.25          | 1820          | 38.32       | 0.06          | 2110          | 37.17       | 1.89          |
| 950           | 34.29       | 1.27          | 1830          | 39.87       | 0.11          | 2120          | 44.24       | 1.55          |
| 960           | 31.62       | 1.19          | 1840          | 40.76       | 1.24          | 2130          | 45.96       | 1.66          |
|               |             |               | 1850          | 39.02       | 1.13          | 2140          | 38.14       | 1.87          |
|               |             |               | 1860          | 38.14       | 1.03          | 2150          | 42.83       | 1.39          |
|               |             |               | 1870          | 36.67       | 3.83          | 2160          | 39.35       | 1.08          |
|               |             |               | 1880          | 41.92       | 1.25          | 2170          | 35.58       | 1.64          |
|               |             |               | 1890          | 39.57       | 1.05          | 2180          | 32.75       | 1.31          |
|               |             |               | 1900          | 42.46       | 1.26          | 2190          | 29.41       | 0.89          |
|               |             |               | 1910          | 38.61       | 1.93          | 2200          | 33.13       | 1.54          |
|               |             |               | 1920          | 40.17       | 1.04          | 2210          | 31.21       | 1.31          |
|               |             |               | 1930          | 41.23       | 1.14          | 2220          | 29.88       | 1.12          |
|               |             |               | 1940          | 37.77       | 1.83          | 2230          | 28.89       | 1.06          |
|               |             |               | 1950          | 40.59       | 1.01          | 2240          | 29.67       | 1.24          |
|               |             |               | 1960          | 35.74       | 1.62          | 2250          | 27.95       | 1.04          |
|               |             |               | 1970          | 35.32       | 1.57          | 2260          | 29.26       | 0.28          |
|               |             |               | 1980          | 34.04       | 1.54          | 2270          | 36.77       | 0.88          |

| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) | Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|---------------|-------------|---------------|
| 2280          | 34.93       | 0.59          | 2570          | 31.07       | 0.84          |
| 2290          | 31.52       | 0.04          | 2580          | 30.62       | 0.77          |
| 2300          | 35.64       | 0.73          | 2590          | 31.41       | 0.94          |
| 2310          | 31.61       | 0.04          | 2600          | 30.32       | 0.55          |
| 2320          | 33.21       | 0.18          | 2610          | 32.29       | 0.72          |
| 2330          | 30.82       | 0.42          | 2620          | 39.25       | 0.25          |
| 2340          | 30.35       | 0.62          | 2630          | 39.25       | 0.67          |
| 2350          | 35.38       | 0.24          | 2640          | 39.71       | 0.95          |
| 2360          | 39.17       | 1.12          | 2650          | 35.29       | 1.48          |
| 2370          | 32.79       | 0.51          | 2660          | 36.59       | 1.52          |
| 2380          | 38.72       | 1.51          | 2670          | 35.17       | 1.05          |
| 2390          | 38.01       | 1.79          | 2680          | 34.08       | 1.38          |
| 2400          | 30.72       | 1.19          | 2690          | 34.91       | 1.06          |
| 2410          | 37.62       | 1.85          |               |             |               |
| 2420          | 39.43       | 1.37          |               |             |               |
| 2430          | 39.88       | 1.16          |               |             |               |
| 2440          | 39.08       | 1.23          |               |             |               |
| 2450          | 37.92       | 1.48          |               |             |               |
| 2460          | 39.52       | 1.07          |               |             |               |
| 2470          | 37.99       | 1.46          |               |             |               |
| 2480          | 39.72       | 1.03          |               |             |               |
| 2490          | 38.32       | 1.37          |               |             |               |
| 2500          | 30.89       | 0.61          |               |             |               |

天线苹果图:

天线苹果图:

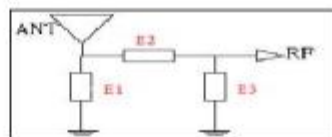






## 2. 天线匹配 (原天线匹配)

| 主天线 | E1    | E2   | E3  |
|-----|-------|------|-----|
|     | 0.5PP | 0 欧姆 | N/A |



### 1. 测试结果:

| 信道 CH<br>测试值 | GSM850 |       |        | EGSM900 |       |        |
|--------------|--------|-------|--------|---------|-------|--------|
|              | 1      | 62    | 124    | 1       | 62    | 124    |
| TRP          | 22.16  | 23.10 | 24.28  | 24.41   | 25.63 | 25.72  |
| TIS          |        |       | -99.25 |         |       | -99.36 |

| 信道 CH<br>测试值 | DCS1800 |       |         | PCS1900 |       |         |
|--------------|---------|-------|---------|---------|-------|---------|
|              | 512     | 698   | 885     | 512     | 698   | 885     |
| TRP          | 22.25   | 22.37 | 23.75   | 23.42   | 22.34 | 22.20   |
| TIS          |         |       | -100.10 |         |       | -100.42 |

| 信道 CH<br>测试值 | WCDMA850 |       |        | WCDMA900 |       |        |
|--------------|----------|-------|--------|----------|-------|--------|
|              | 4132     | 4185  | 4233   | 2937     | 3012  | 3088   |
| TRP          | 15.63    | 15.75 | 16.75  | 15.47    | 16.36 | 16.63  |
| TIS          |          |       | -99.36 |          |       | -99.10 |

| 信道 CH<br>测试值 | WCDMA1900 |       |         | WCDMA2100 |       |         |
|--------------|-----------|-------|---------|-----------|-------|---------|
|              | 9262      | 9400  | 9538    | 10562     | 10700 | 10838   |
| TRP          | 19.45     | 18.54 | 18.23   | 17.54     | 17.10 | 16.35   |
| TIS          |           |       | -100.63 |           |       | -100.31 |

| 信道 CH<br>测试值 | LTEB1 |       |        | LTEB2 |       |        |
|--------------|-------|-------|--------|-------|-------|--------|
|              | 18100 | 18300 | 18500  | 18650 | 18900 | 19150  |
| 10M TRP      | 17.8  | 17.20 | 16.21  | 19.38 | 18.78 | 18.39  |
| TIS          |       |       | -89.15 |       |       | -89.32 |