

ANT Manufacturers: ANWEI commnuication Equipment Co.,Ltd  
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 Huaning Road, Dalang Street, Longhua District, Shenzhen City, Guangdong Province

# Antenna specifications

|                     |                                                                                  |                       |                                                                                                                                                                       |
|---------------------|----------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 客户<br>Customer      | Youmi                                                                            | 规格型号<br>Specs         | PG2311GBA                                                                                                                                                             |
| 安威料号<br>Part Number | G6 4G-MAIN-AW<br>G6 4G-DIV-AW<br>G6 4G-2.4GWIFI/GPS/5GWIFI-AW<br>G6 5G-NFC/FM-AW | 频 段<br>Frequency Band | GSMB8/B2/B3/B5<br>WCDMA:B1/B2/B4/B8/B5/B6<br>LTE:1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28/66/71/34/38/39/40/41<br>BT&2.5G WIFI:2400~2483.5MHZ<br>5G WIFI:5100~5800MHZ |
| 颜 色<br>Color        | black                                                                            | 版 本<br>Edition        | REV:A0                                                                                                                                                                |
| 销 售<br>Salesperson  | Mr.Xie                                                                           | 设 计<br>Design         | WUXI                                                                                                                                                                  |
| 结 构<br>Structure    | QIN YUN LIN                                                                      |                       |                                                                                                                                                                       |
| 日 期<br>Date         | 2023.12.5                                                                        |                       |                                                                                                                                                                       |

客户确认 Customer confirmation:

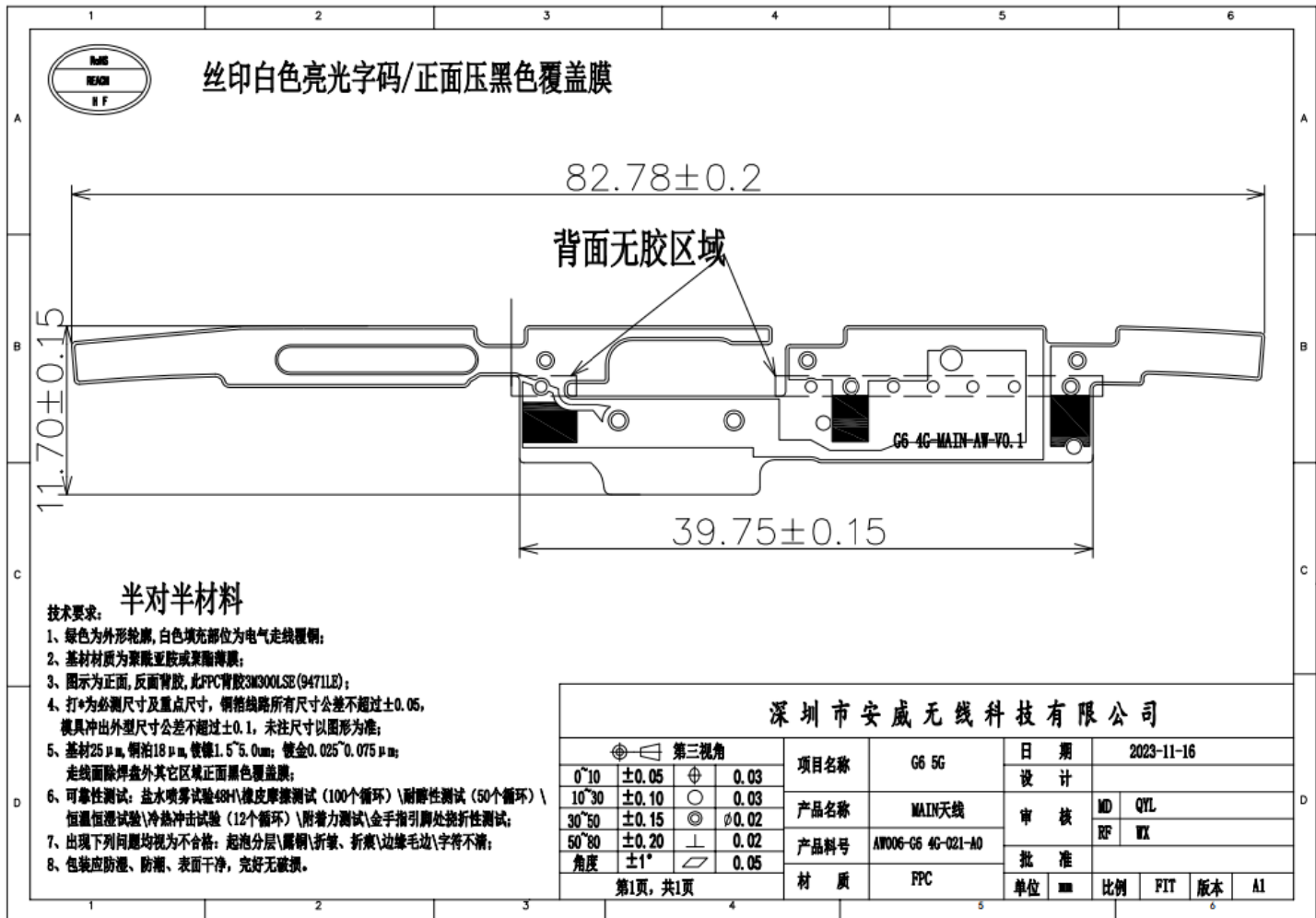
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1. Product specifications

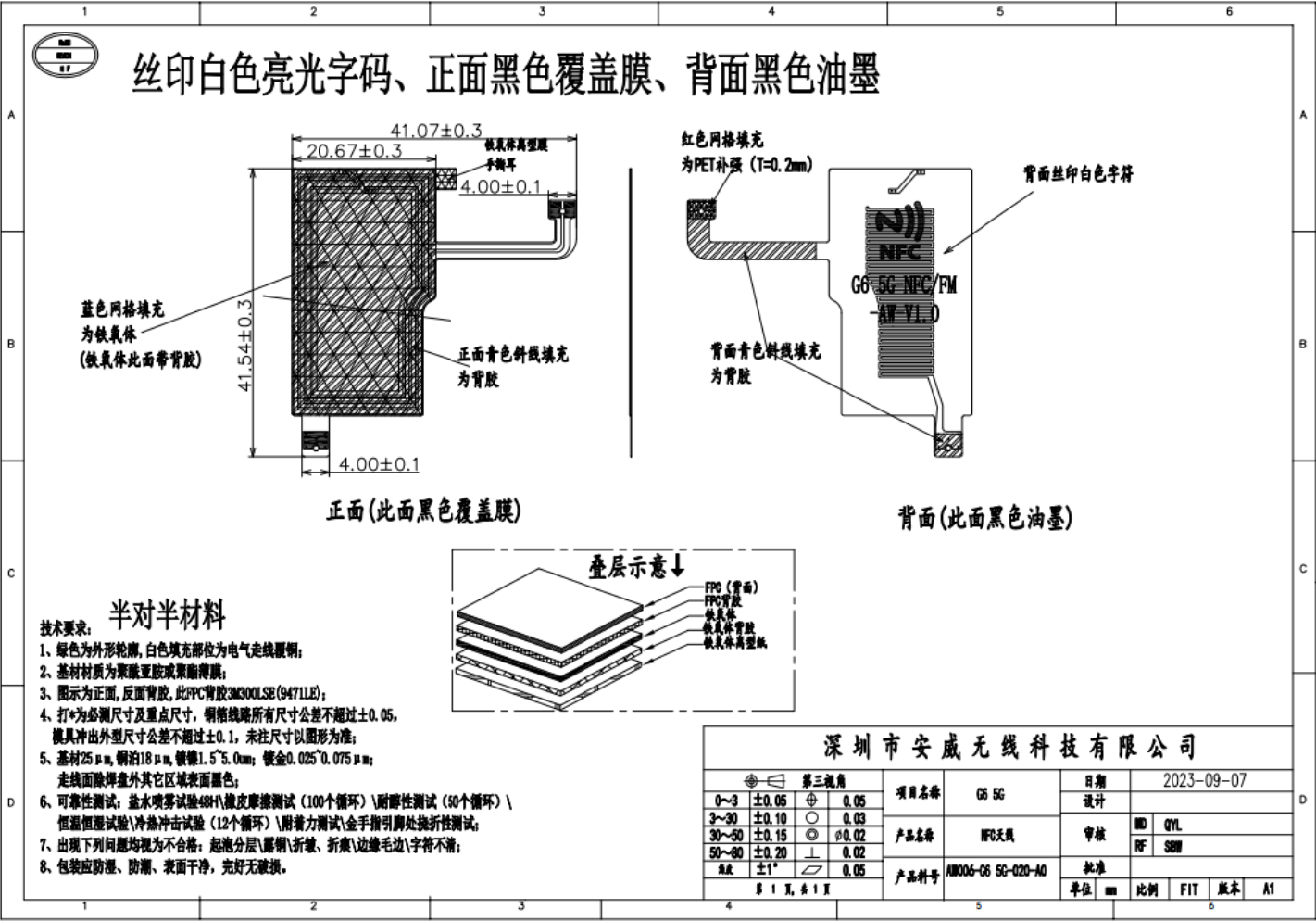
The report mainly provides parameter testing of PG2311GBA antenna performance. The PG2311GBA antenna is a 4G antenna. (As shown below)

MAIN ANT









## 2. Electrical performance

### (1.) Specifications and standards

The working frequency band of antenna is 699~960MHZ, 1710~2700MHZ, and resonates in this frequency band

Antenna structure: FPC

## 3. Parameter testing

### (1.) Test settings

The sequential connections of the VSWR test device are:

E5071B Network Analyzer → 50 ohm coaxial cable → 110mm long copper tube → Test Fixture

Handling of test fixtures:

Use a hard cable to lead out the SMA-J connector from the 50 ohm test point of the antenna on the mobile phone PCB, connect it to a copper tube covered with a choke, and then connect it to other devices in turn.

## 4. Settings for active testing

The active test device connections in sequence are:

Agilent8960 → 50 ohm coaxial cable → Satimo SG16 test system → Mobile phone to be tested

### (1.) test site

AW microwave anechoic chamber: The test frequency range is 400MHz-6GHz, the quiet zone range is 40cm circumference, and the reflectivity is less than -90 dB.

### (2.) Test Results

The maximum radiated power and maximum receiving sensitivity reflect the maximum power radiation value and best receiving performance of the antenna in the entire radiation space. TRP and TIS reflect the average radiated power and average receiving sensitivity of the antenna, that is, they reflect the overall receiving performance of the antenna.

The following are the mobile phone antenna active test results:

## 主天线暗室数据

| GSM 850  | 128 | 24.67 |         |  | W 1 | LOW    | 18.75 |        |  |
|----------|-----|-------|---------|--|-----|--------|-------|--------|--|
|          | 190 | 24.76 |         |  |     | medium | 18.16 |        |  |
|          | 251 | 25.03 | -102.3  |  |     | high   | 18.55 | -102.2 |  |
| GSM 900  | 1   | 24.79 |         |  | W 2 | LOW    | 16.68 |        |  |
|          | 62  | 24.55 |         |  |     | medium | 17.14 |        |  |
|          | 124 | 25.02 | -100.41 |  |     | high   | 17.63 | -103.0 |  |
| DCS 1800 | 512 | 24.01 |         |  | W 4 | LOW    | 17.5  |        |  |
|          | 698 | 24.12 |         |  |     | medium | 17.29 |        |  |
|          | 885 | 24.1  | -102    |  |     | high   | 18.12 | -103.3 |  |
| PCS 1900 | 512 | 24.63 |         |  | W 5 | LOW    | 15.01 |        |  |
|          | 661 | 25.19 |         |  |     | medium | 15.18 |        |  |
|          | 810 | 25.12 | -100    |  |     | high   | 15.15 | -101   |  |
|          |     |       |         |  | W 6 | LOW    | 15.36 |        |  |
|          |     |       |         |  |     | medium | 15.58 |        |  |
|          |     |       |         |  |     | high   | 15.62 | -102.2 |  |
|          |     |       |         |  | W 8 | LOW    | 15.08 |        |  |
|          |     |       |         |  |     | medium | 15.44 |        |  |
|          |     |       |         |  |     | high   | 15.95 | -101.2 |  |

|         | Channel | TRP (dBm) | TIS (dBm) |          |        |       |        |         |        |       | Channel | TRP (dBm) | TIS (dBm) |
|---------|---------|-----------|-----------|----------|--------|-------|--------|---------|--------|-------|---------|-----------|-----------|
| FDD B1  | LOW     | 18.72     |           | FDD B17  | LOW    | 15.5  |        | FDD B13 | LOW    |       |         |           |           |
|         | medium  | 18.11     |           |          | medium | 15.12 |        |         | medium | 15.04 | -88.0   |           |           |
|         | high    | 18.41     | -89.2     |          | high   | 15.38 | -88.2  |         | high   |       |         |           |           |
| FDD B2  | LOW     | 18.65     |           | FDD B18  | LOW    | 15.24 |        | FDD B66 | LOW    | 17.13 |         |           |           |
|         | medium  | 18.98     |           |          | medium | 15.09 |        |         | medium | 17.11 |         |           |           |
|         | high    | 18.19     | -90.4     |          | high   | 15.35 | -90.24 |         | high   | 17.21 | -90.3   |           |           |
| FDD B3  | LOW     | 18.04     |           | FDD B19  | LOW    | 15.25 |        | FDD B71 | LOW    | 14.42 |         |           |           |
|         | medium  | 17.84     |           |          | medium | 15.12 |        |         | medium | 14.67 |         |           |           |
|         | high    | 17.7      | -90.4     |          | high   | 15.14 | -90    |         | high   | 14.1  | -90.12  |           |           |
| FDD B4  | LOW     | 18.42     |           | FDD B20  | LOW    | 15.49 |        | TDD B34 | LOW    | 17.8  |         |           |           |
|         | medium  | 17.55     |           |          | medium | 15.44 |        |         | medium | 18.61 |         |           |           |
|         | high    | 18.41     | -90.2     |          | high   | 15.01 | -90    |         | high   | 17.7  | -89.2   |           |           |
| FDD B5  | LOW     | 16.12     |           | FDD B25  | LOW    | 17.95 |        | TDD B38 | LOW    | 17.53 |         |           |           |
|         | medium  | 16.06     |           |          | medium | 17.21 |        |         | medium | 17.85 |         |           |           |
|         | high    | 16.62     | -89.6     |          | high   | 17.72 | -89    |         | high   | 16.06 | -88     |           |           |
| FDD B7  | LOW     | 18.29     |           | FDD B26  | LOW    | 15.03 |        | TDD B39 | LOW    | 17.11 |         |           |           |
|         | medium  | 18.37     |           |          | medium | 15.3  |        |         | medium | 17.54 |         |           |           |
|         | high    | 18.71     | -90.4     |          | high   | 15.27 | -89    |         | high   | 17.58 | -88     |           |           |
| FDD B8  | LOW     | 16.17     |           | FDD B28A | LOW    | 15.6  |        | TDD B40 | LOW    | 18.5  |         |           |           |
|         | medium  | 16.32     |           |          | medium | 15.47 |        |         | medium | 18.54 |         |           |           |
|         | high    | 16.39     | -88.3     |          | high   | 15.76 | -89    |         | high   | 18.29 | -89.2   |           |           |
| FDD B12 | LOW     | 15.14     |           | FDD B28B | LOW    | 15.04 |        | TDD B41 | LOW    |       |         |           |           |
|         | medium  | 15.72     |           |          | medium | 15.12 |        |         | medium | 17.05 | -87.1   |           |           |
|         | high    | 15.12     | -88.1     |          | high   | 15.27 | -89    |         | high   |       |         |           |           |

## Main antenna:

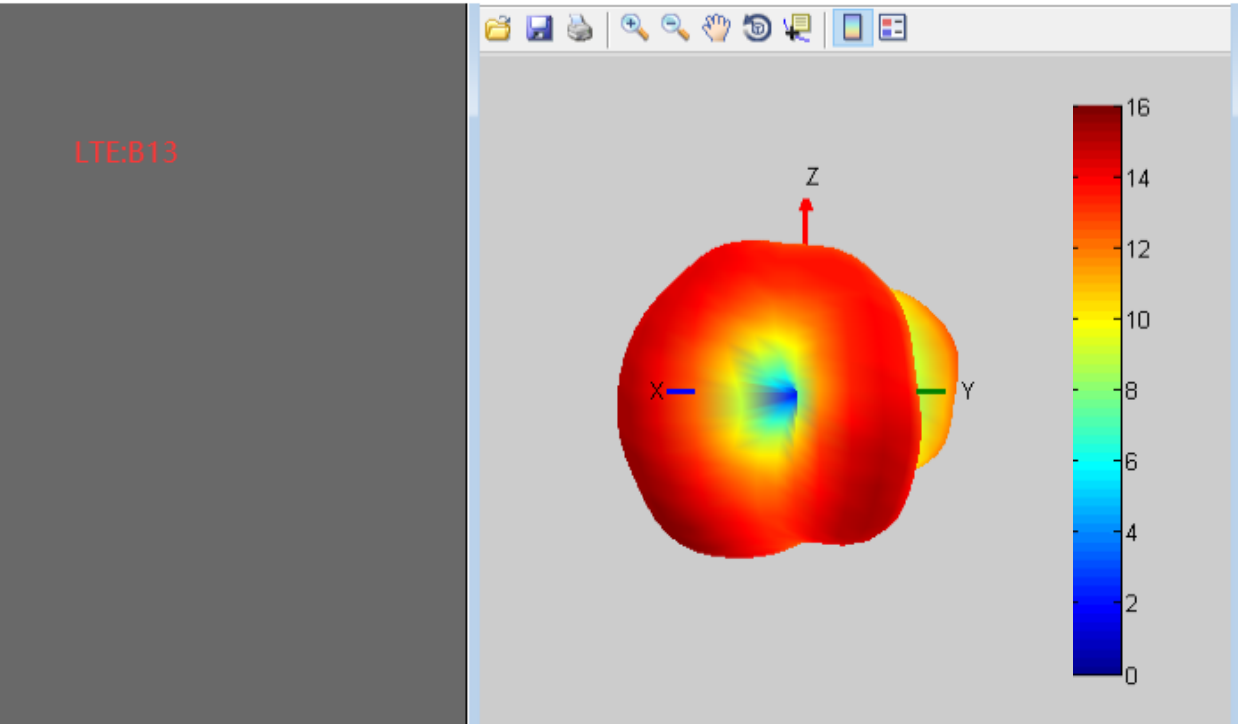
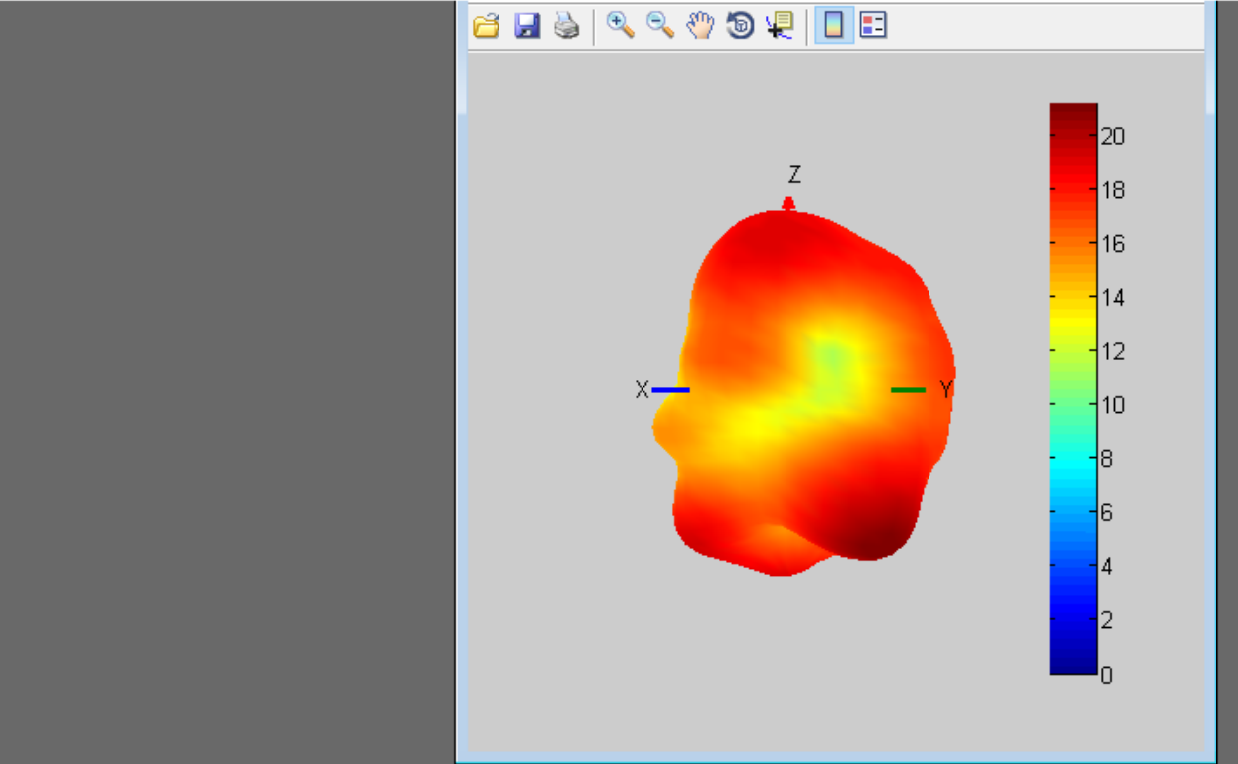
工作频段(Working frequency band): 699~960MHZ, 1710~2700MHZ

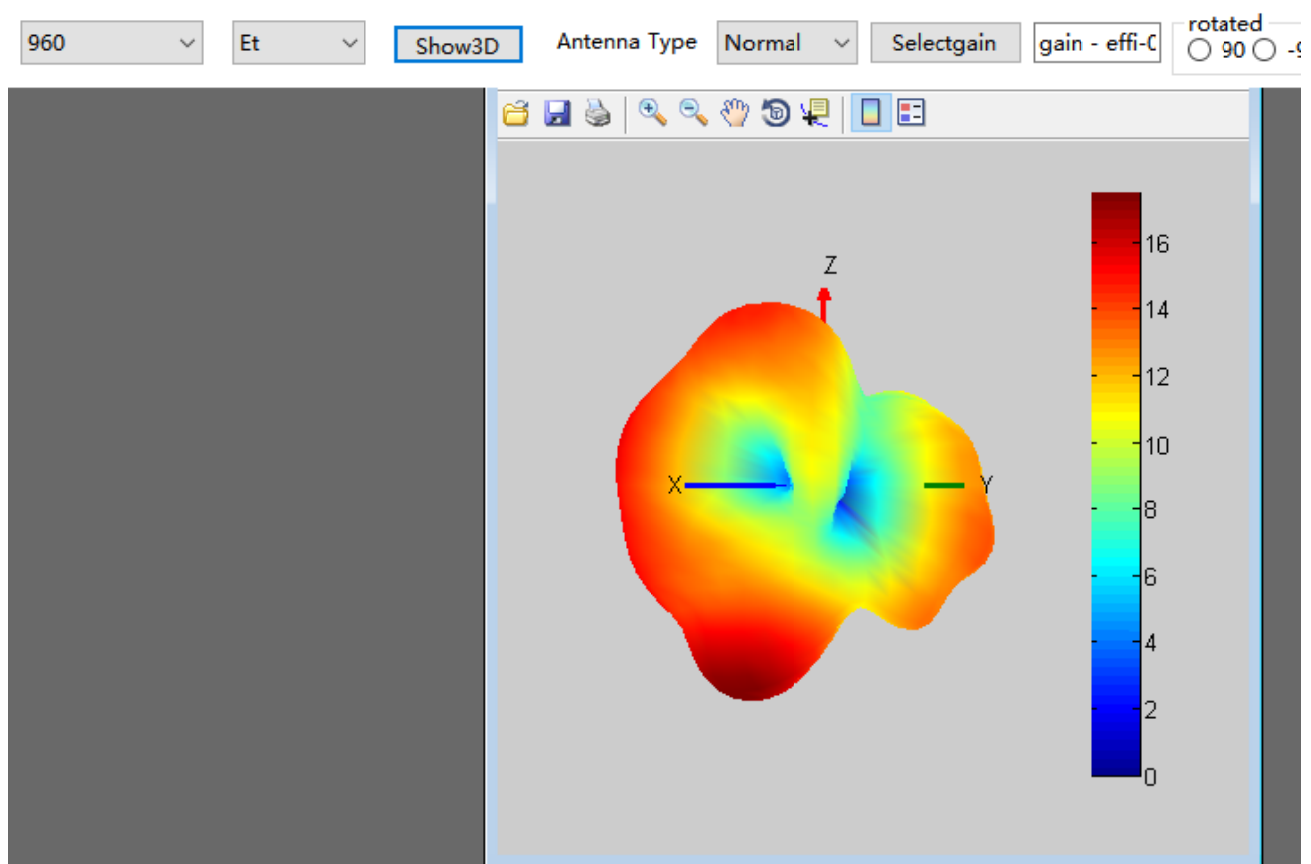
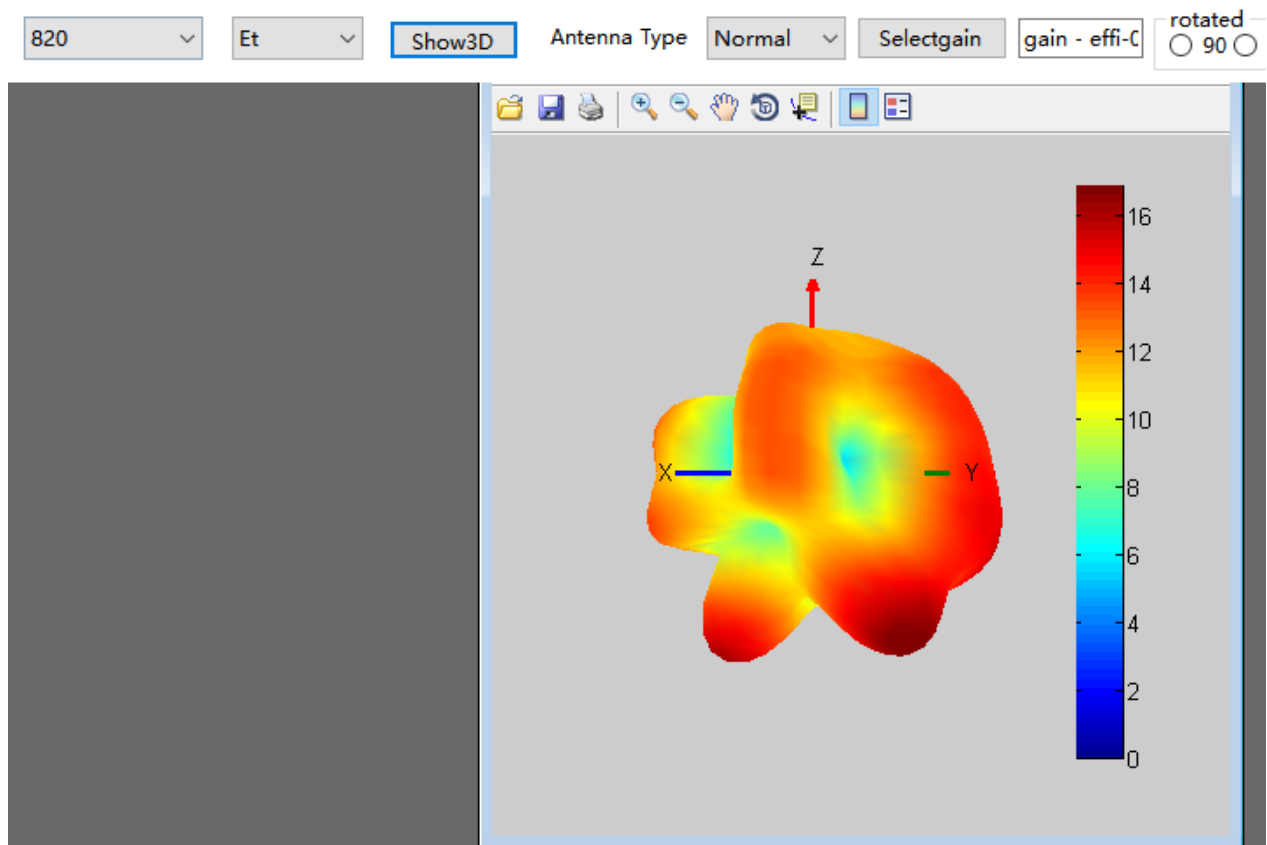
|         |                                                                |
|---------|----------------------------------------------------------------|
| 2G      | 2/3/5/8                                                        |
| 3G      | 1/2/4/5/6/8<br>CDMA:BC0/BC10/BC1                               |
| 4G      | B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28/66/71/34/38/39/40/41 |
| BT/WIFI | 2. 4G+5G                                                       |
| GPS     | 1575.42MHz                                                     |

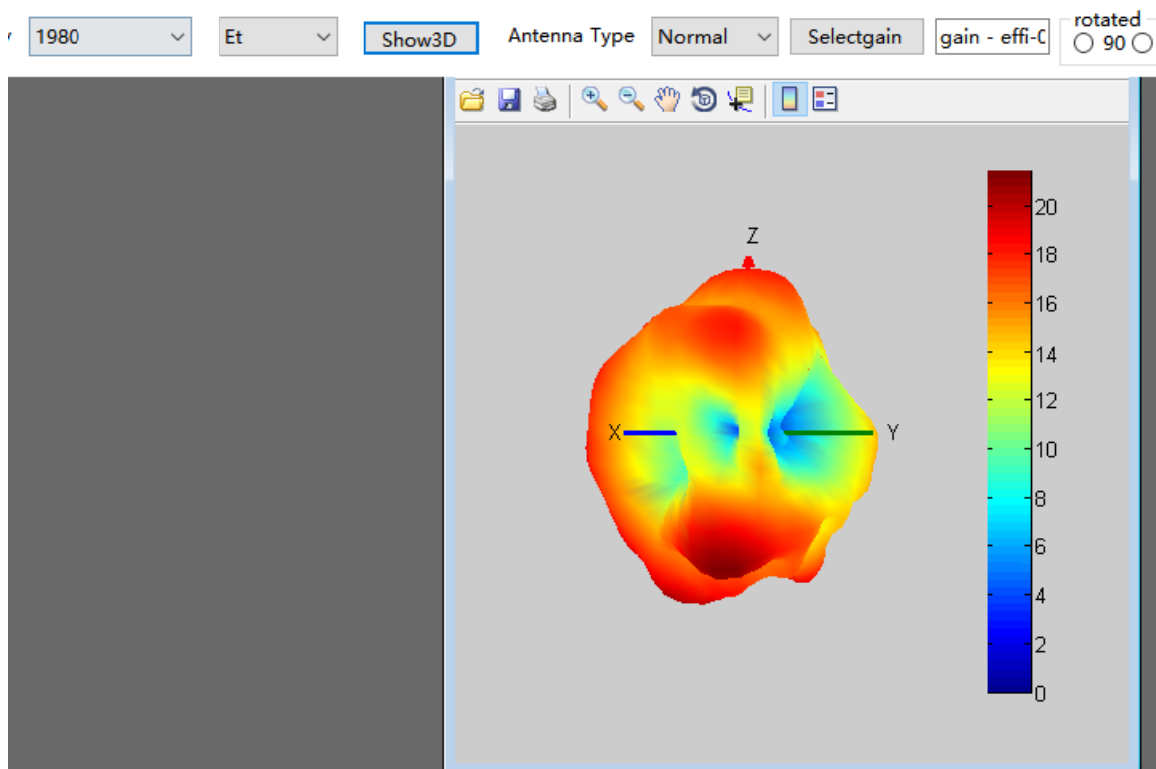
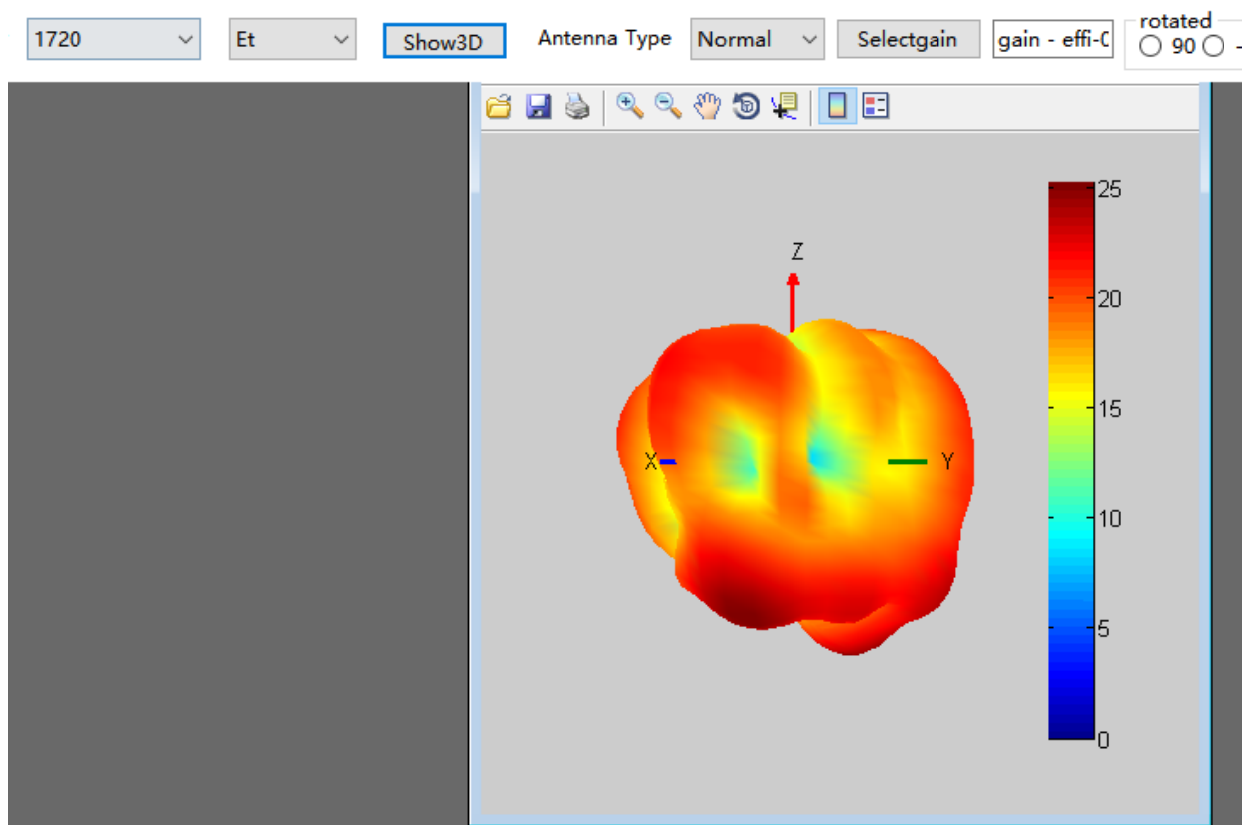


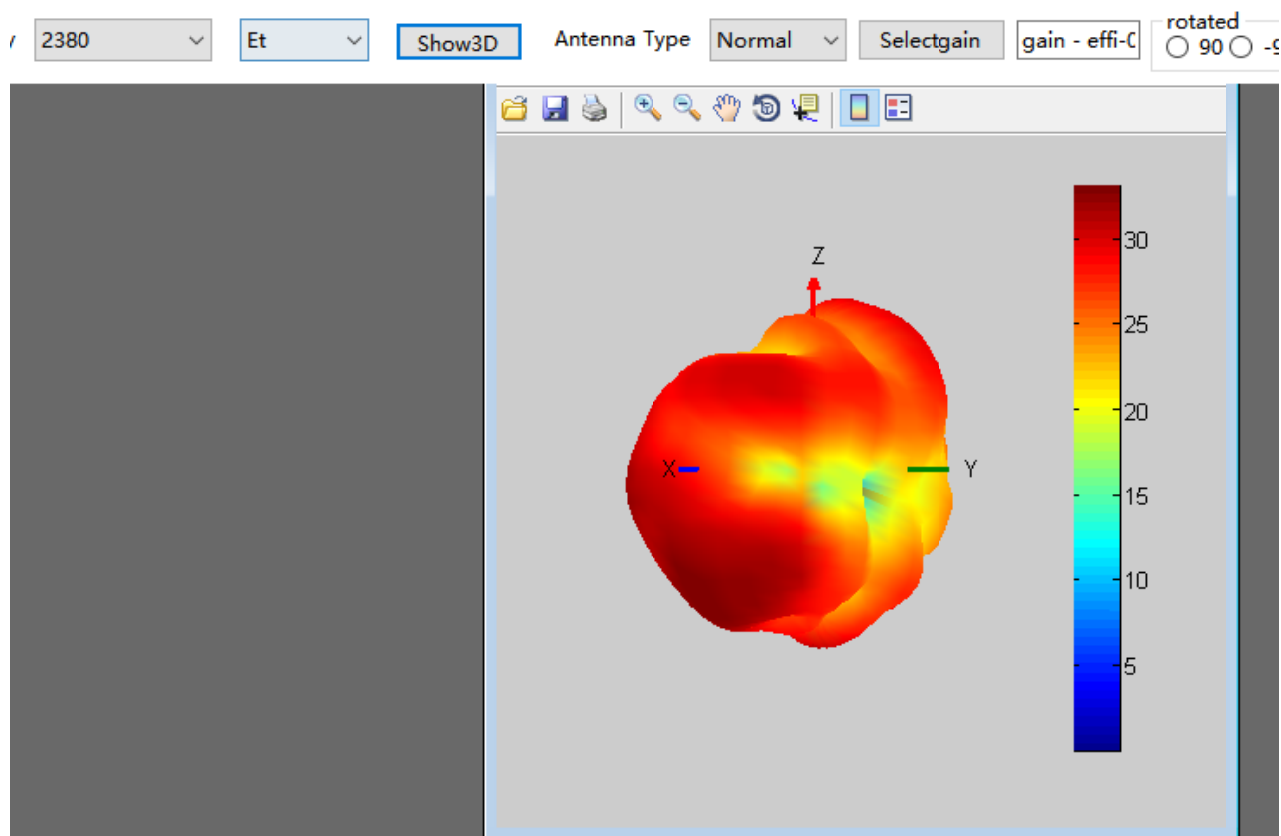
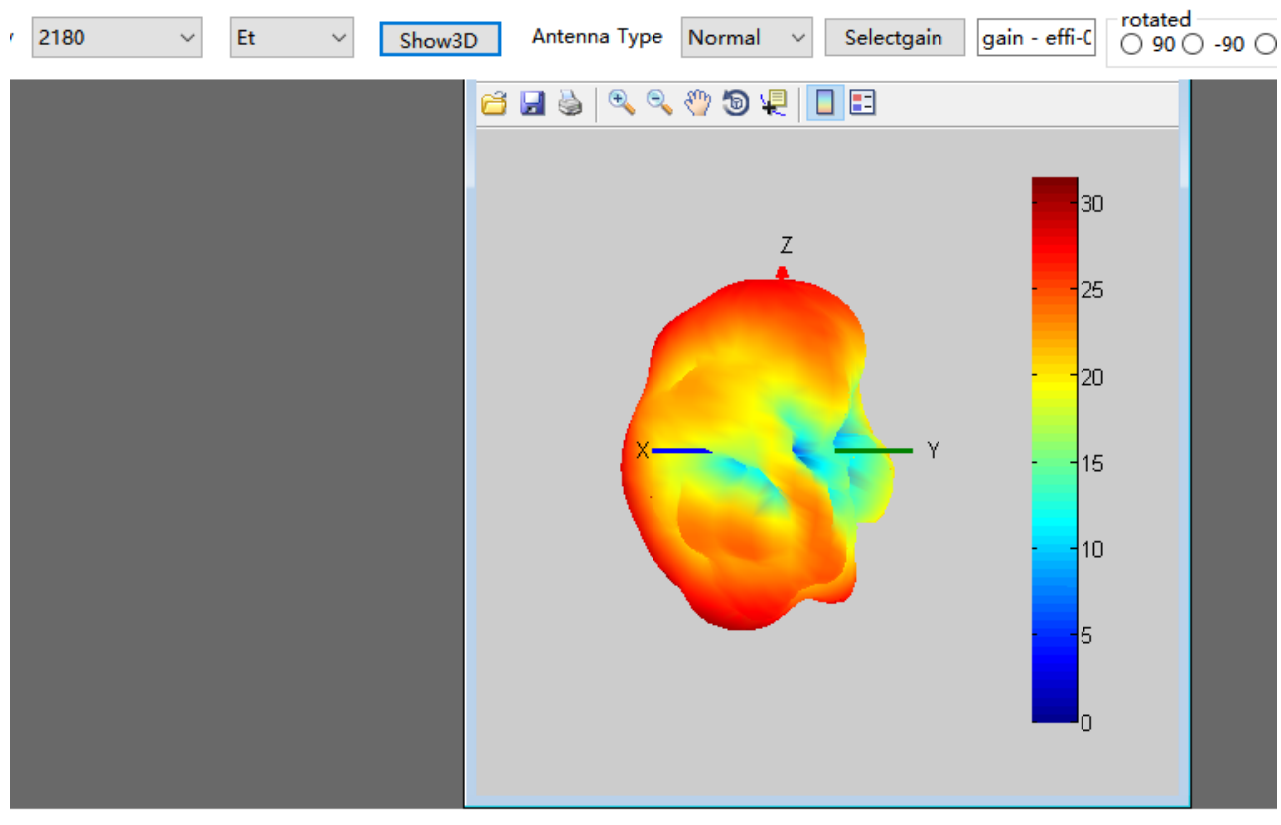
| 频段 Band                                            | Gain 增益 (dBi) |
|----------------------------------------------------|---------------|
| LTE:B12/17/28 NR:N28                               | -4.55         |
| LTE:B13                                            | -3.69         |
| LTE:B71                                            | -5.03         |
| CDMA:BC0/BC10 GSM850,WCDMA-B5/6,LTE-B5/18/19/20/26 | -4.02         |
| GSM900,WCDMA-B8,LTE-B8                             | -3.85         |
| DCS1800,WCDMA-B4 ,LTE-B3/4/66                      | 1.2           |
| PCS1900,WCDMA-B2,LTE-B39/25/2                      | 1.15          |
| CDMA:BC1 WCDMA-B1,LTE-B1/B34                       | 0.68          |
| LTE-B7/B38/B41                                     | 0.47          |
| LTE-B40                                            | 1.46          |
| GPS                                                | 1.5           |
| 2.4G WIFI/BT                                       | 1.1           |
| 5G WIFI                                            | 0.55          |
| NFC                                                | 0.98          |
| FM                                                 | 1.02          |

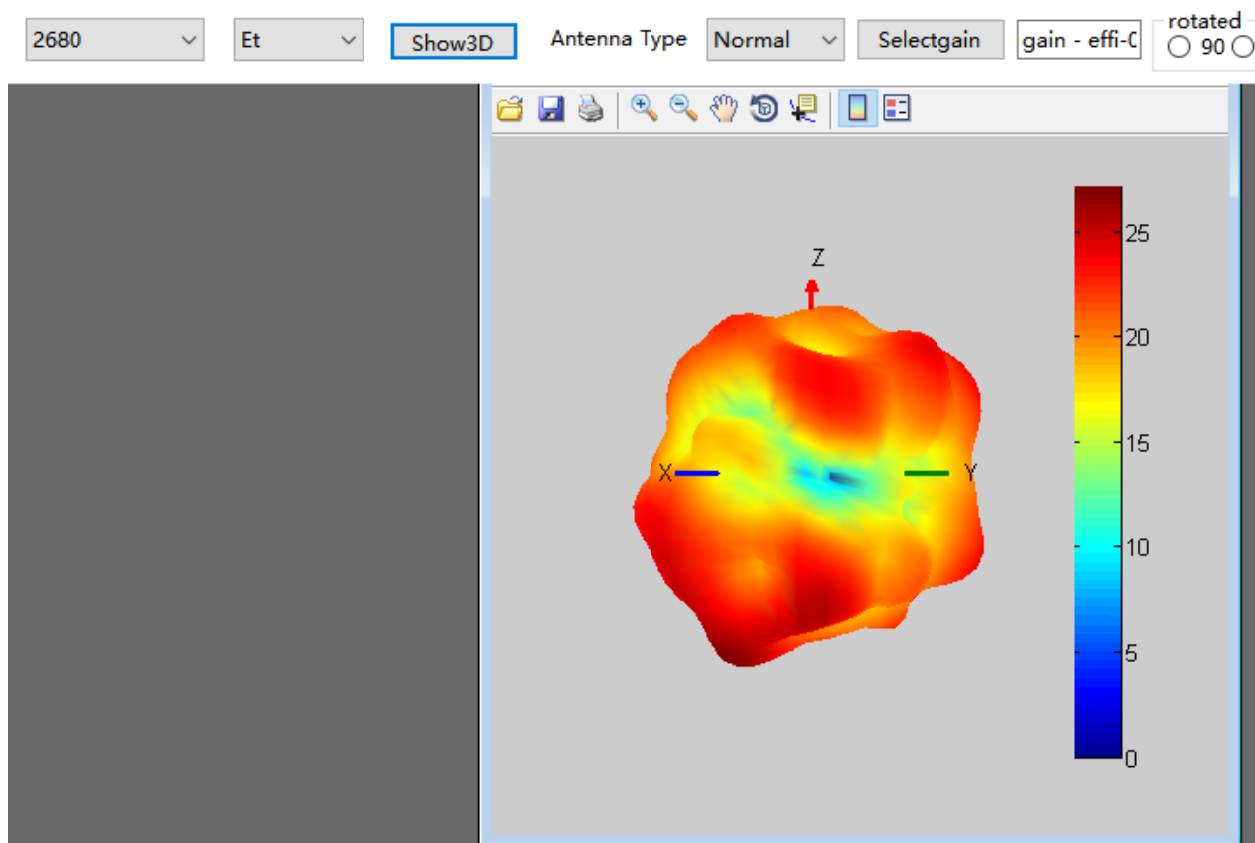
720    Et    Show3D    Antenna Type    Normal    Selectgain    gain - effi-C    rotated 90





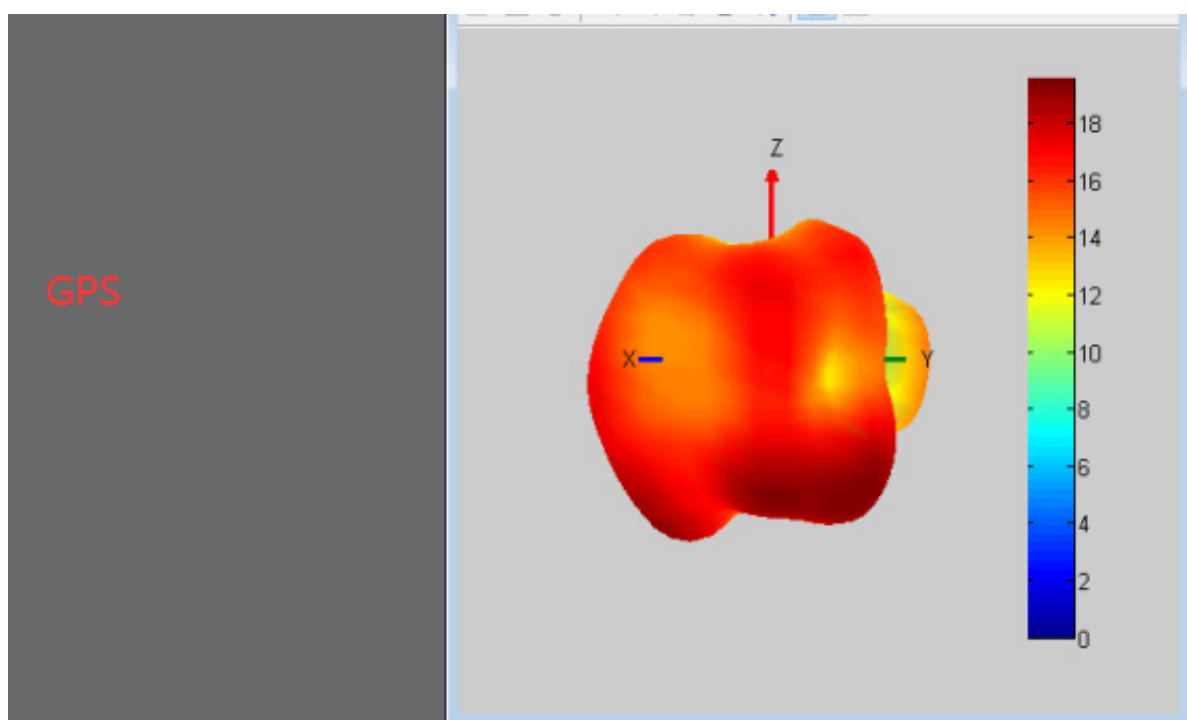




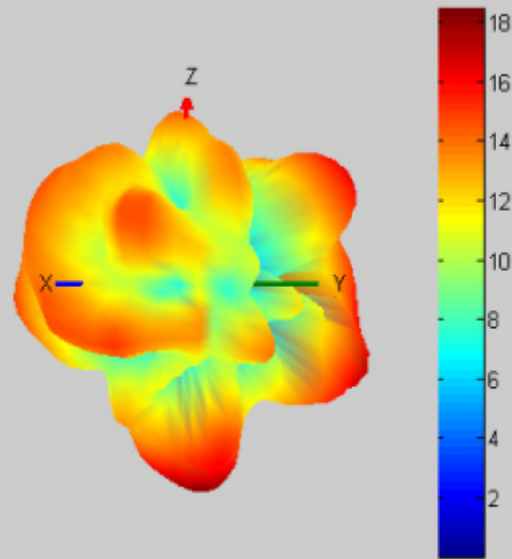


## GPS/WIFI/BT:

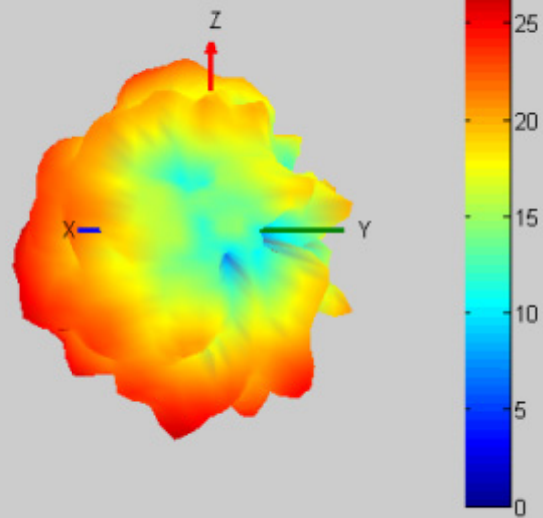
工作频段(Working frequency band): 1560~1580MHZ, 2400~2500MHZ,5180~8525MHZ



2.4WIFI



5G WIFI



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