

## Measurement of Antenna for 06 Project

Manufacture: SHENZHEN TENDA TECHNOLOGY CO., LTD.

### 1. Antenna Appearance:



### 2. Electrical performance test results at normal temperature

**5G Antenna**

| No | Test Item       | Unit | Demand Performance | Test Result |       | Judgement |
|----|-----------------|------|--------------------|-------------|-------|-----------|
| 1  | Frequency Range | MHz  | 5150-5850          | 5150-5850   |       | OK        |
| 2  | Gain            | dBi  | 15                 | 5150        | 15.80 | OK        |
|    |                 |      |                    | 5250        | 16.08 | OK        |
|    |                 |      |                    | 5350        | 16.04 | OK        |
|    |                 |      |                    | 5450        | 16.06 | OK        |
|    |                 |      |                    | 5500        | 15.86 | OK        |
|    |                 |      |                    | 5650        | 15.65 | OK        |
|    |                 |      |                    | 5750        | 15.25 | OK        |
|    |                 |      |                    | 5850        | 15.11 | OK        |
| 3  | Return loss     | dB   | $\leq -10$         | 5150        | -14.4 | OK        |
|    |                 |      |                    | 5500        | -21.2 | OK        |
|    |                 |      |                    | 5850        | -18.5 | OK        |

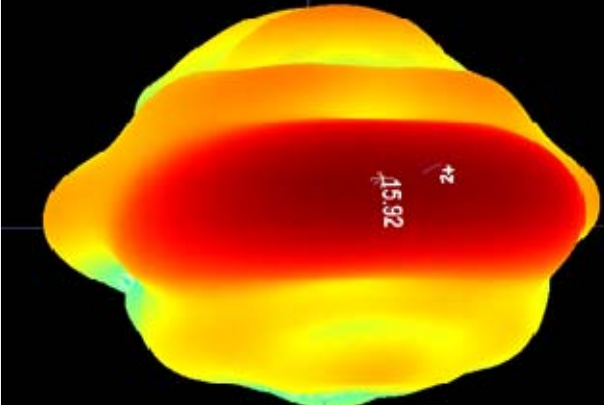
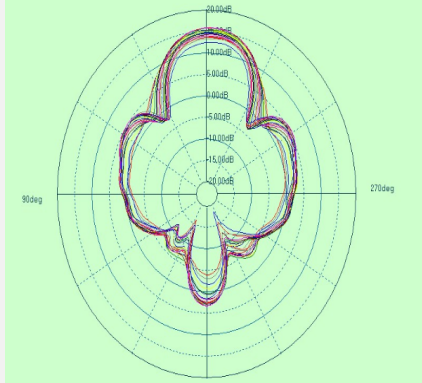
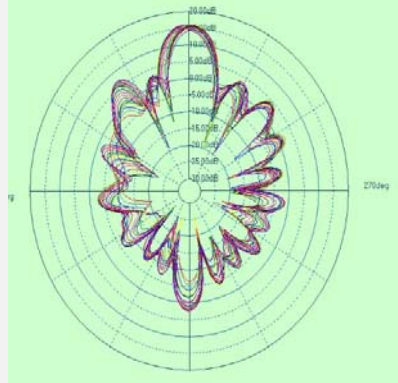
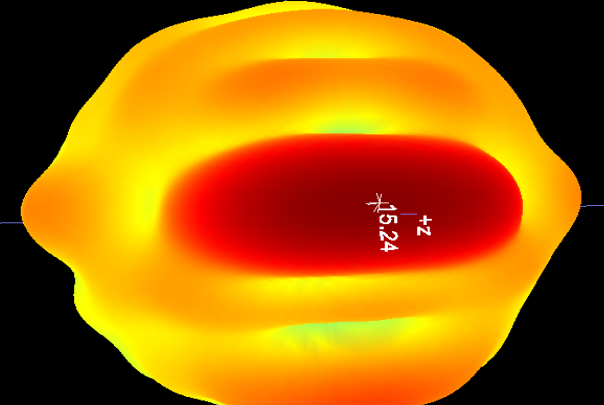
### Directional diagram

| EUT       |                 |               |
|-----------|-----------------|---------------|
| Remark    |                 |               |
| Frequency | E Total. dB(dB) | Efficiency( ) |
| 5150MHz,1 | 15.80,1         | 102%,1        |
| 5200MHz,1 | 15.92,1         | 102%,1        |
| 5250MHz,1 | 16.08,1         | 100%,1        |
| 5300MHz,1 | 16.15,1         | 101%,1        |
| 5350MHz,1 | 16.04,1         | 98%,1         |
| 5400MHz,1 | 16.03,1         | 98%,1         |
| 5450MHz,1 | 16.06,1         | 98%,1         |
| 5500MHz,1 | 15.86,1         | 92%,1         |
| 5550MHz,1 | 15.89,1         | 94%,1         |
| 5600MHz,1 | 15.81,1         | 94%,1         |
| 5650MHz,1 | 15.65,1         | 92%,1         |
| 5700MHz,1 | 15.53,1         | 94%,1         |
| 5750MHz,1 | 15.25,1         | 92%,1         |
| 5800MHz,1 | 15.24,1         | 91%,1         |
| 5850MHz,1 | 15.11,1         | 93%,1         |

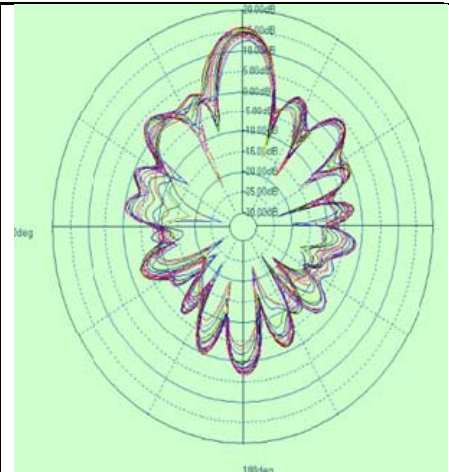
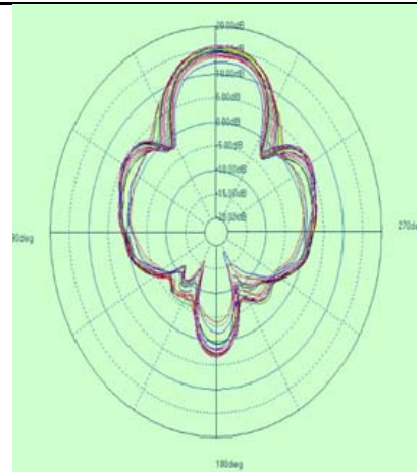
For 5150-5250MHz for 30degrees from the horizon

| Frequency | Gain | Efficiency |
|-----------|------|------------|
| 5150MHz   | 7.1  | 98%        |
| 5200MHz   | 8    | 98%        |
| 5250MHz   | 7.9  | 98%        |

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3D Radiation patterns at 5250 MHz |                                                                                                                                                                                                                                                                                                                                                                                                                         |  A 3D surface plot of the radiation pattern at 5250 MHz. The pattern is roughly oval-shaped, elongated along the horizontal axis. The color scale ranges from blue (low gain) to red (high gain). A peak value of 15.92 dB is indicated on the right side of the main lobe. A coordinate system with x and y axes is shown.                    |
|                                   | H PLANE                                                                                                                                                                                                                                                                                                                                                                                                                 | V PLANE                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2D Radiation patterns at 5250 MHz |  A 2D polar plot of the radiation pattern in the H-plane at 5250 MHz. The plot shows a main lobe centered at 0 degrees with a peak gain of 15.92 dB. The gain decreases as the angle increases, with side lobes visible. The plot is overlaid on a grid with concentric circles representing gain levels and radial lines for angles. |  A 2D polar plot of the radiation pattern in the V-plane at 5250 MHz. The plot shows a main lobe centered at 0 degrees with a peak gain of 15.92 dB. The pattern is more complex than the H-plane, showing multiple side lobes. The plot is overlaid on a grid with concentric circles representing gain levels and radial lines for angles. |
| 3D Radiation patterns at 5800 MHz |                                                                                                                                                                                                                                                                                                                                                                                                                         |  A 3D surface plot of the radiation pattern at 5800 MHz. The pattern is roughly oval-shaped, elongated along the horizontal axis. The color scale ranges from blue (low gain) to red (high gain). A peak value of 15.24 dB is indicated on the right side of the main lobe. A coordinate system with x and y axes is shown.                  |
|                                   | H PLANE                                                                                                                                                                                                                                                                                                                                                                                                                 | V PLANE                                                                                                                                                                                                                                                                                                                                                                                                                          |

2D Radiation patterns  
at 5800 MHz



## Return loss test

