



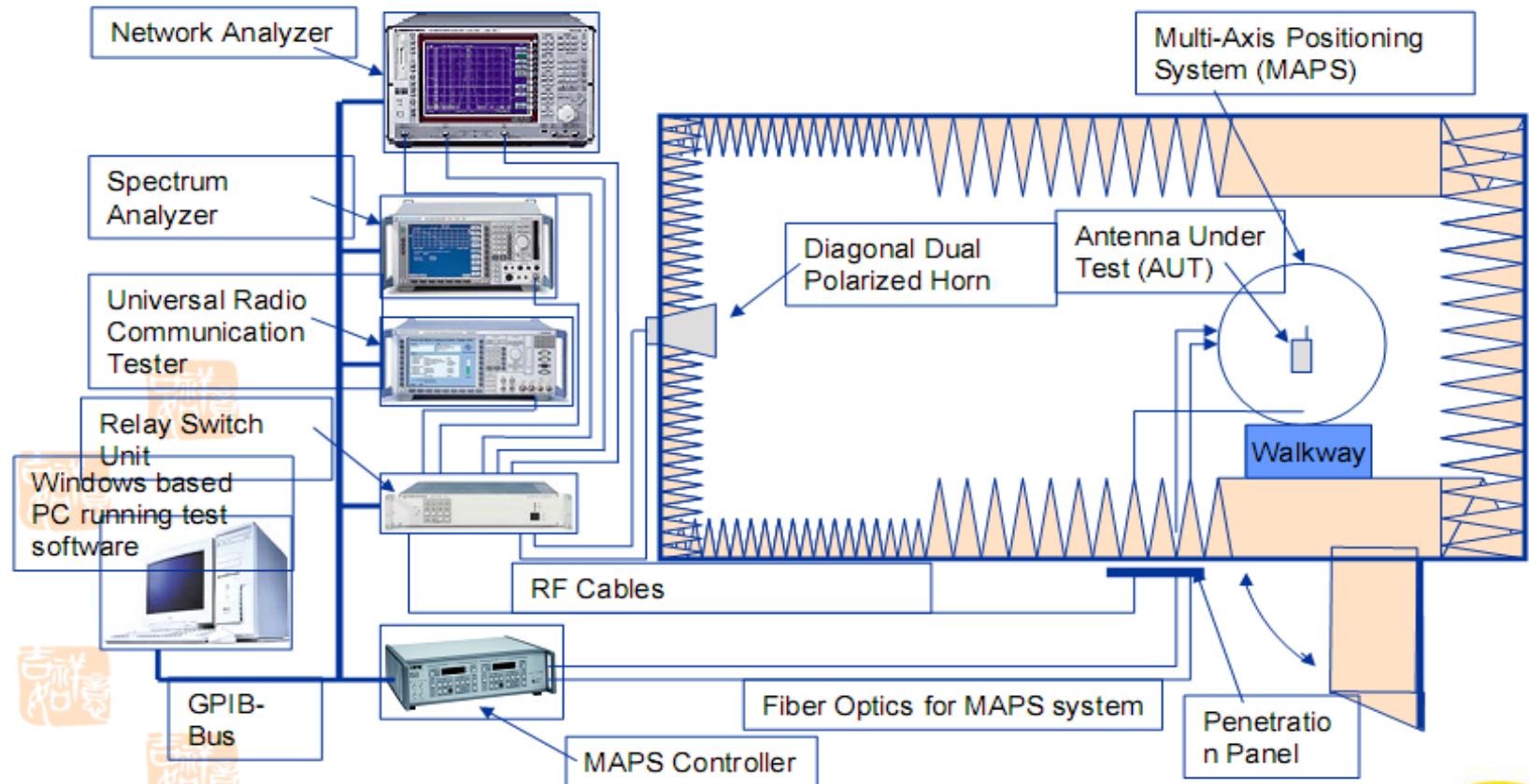
DONGGUAN TENGXIANG ELECTRONICS CO., LTD.

## 2. 4G/5G Antenna Testing Parameters

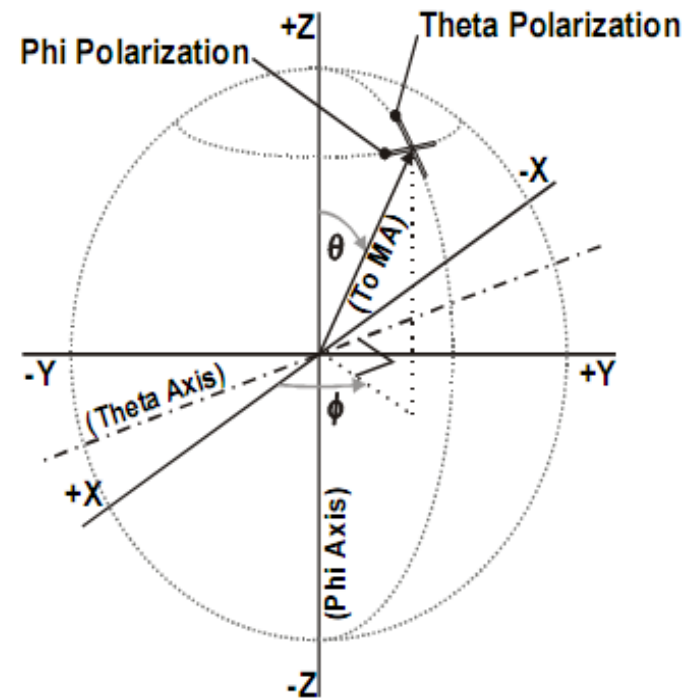
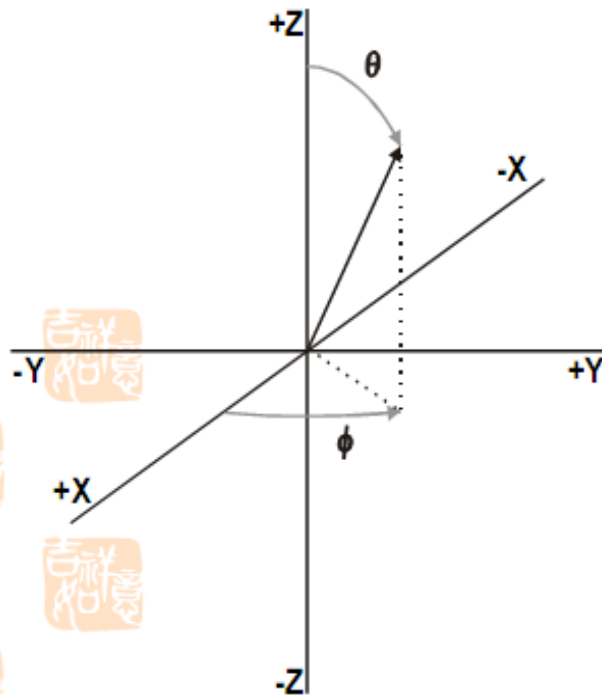
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- Customers:
- Antenna Specification:  
2400-2500MHz  
5150-5850MHz
- Versions:V1.0
- Prepare by:Wang Yan
- Approve by:Wei Jia

# 1. CTIA OTA Test System

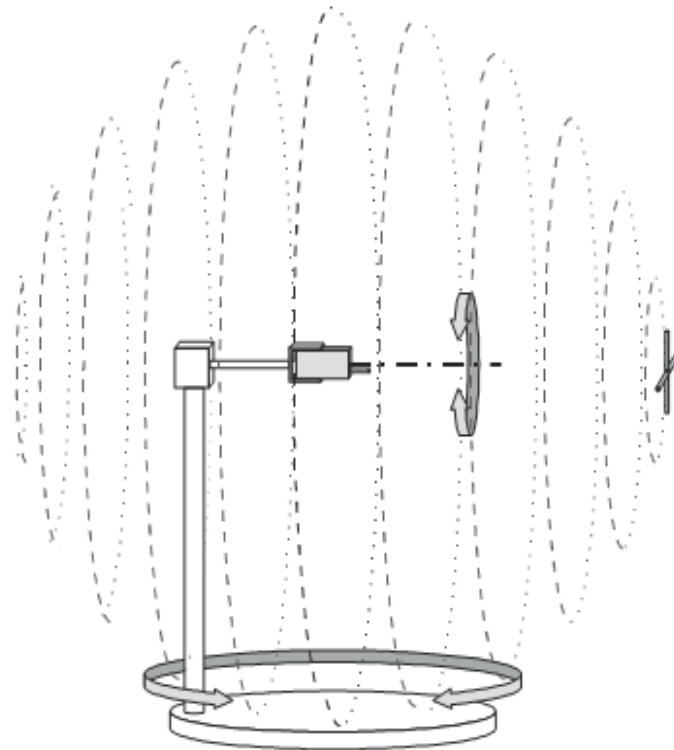
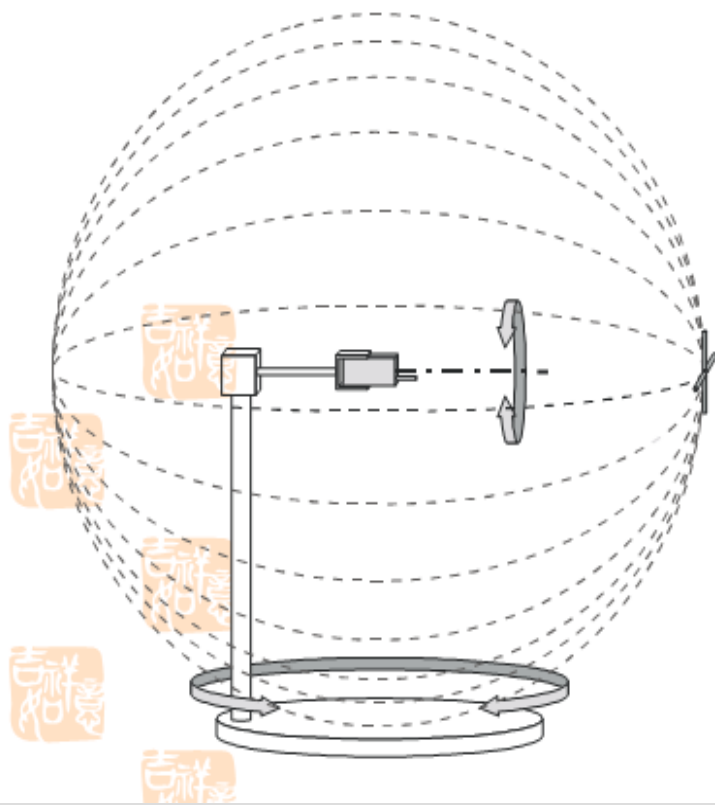


# 1.1 Test Coordinates



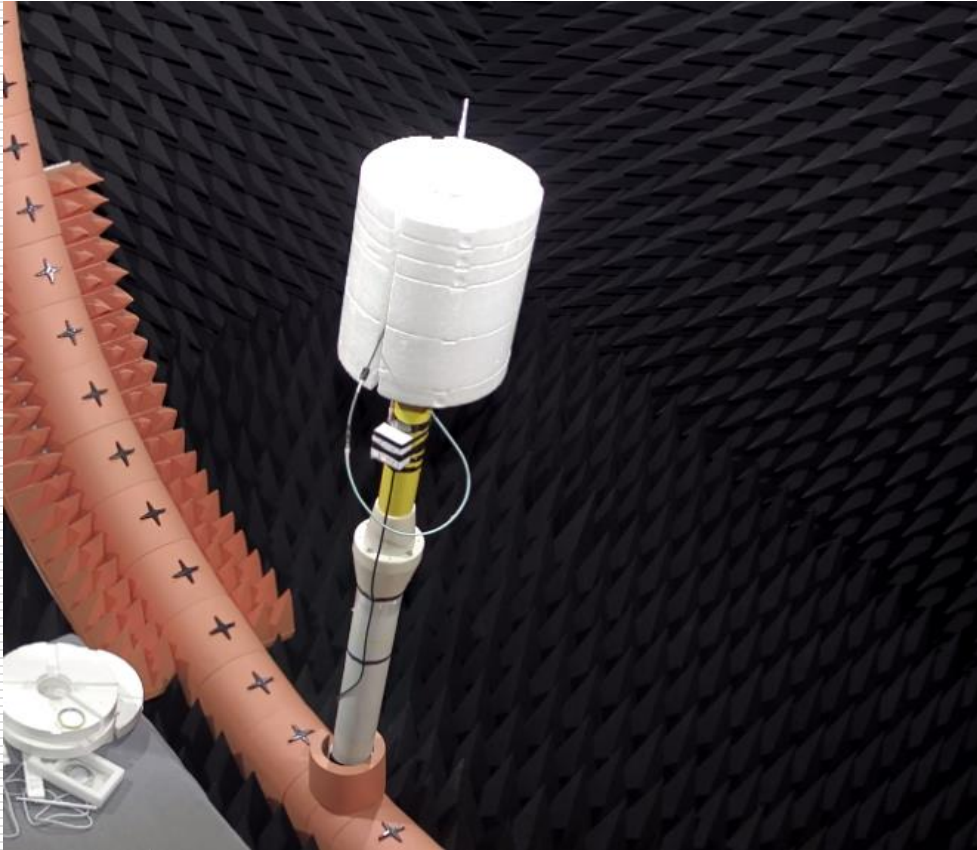
## 1.2 Turntable

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# 1.3 ETS Test System In TengXiang

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Size: 7m\*3m\*3m

Electromagnetic Shield:  $\geq 100$ dB

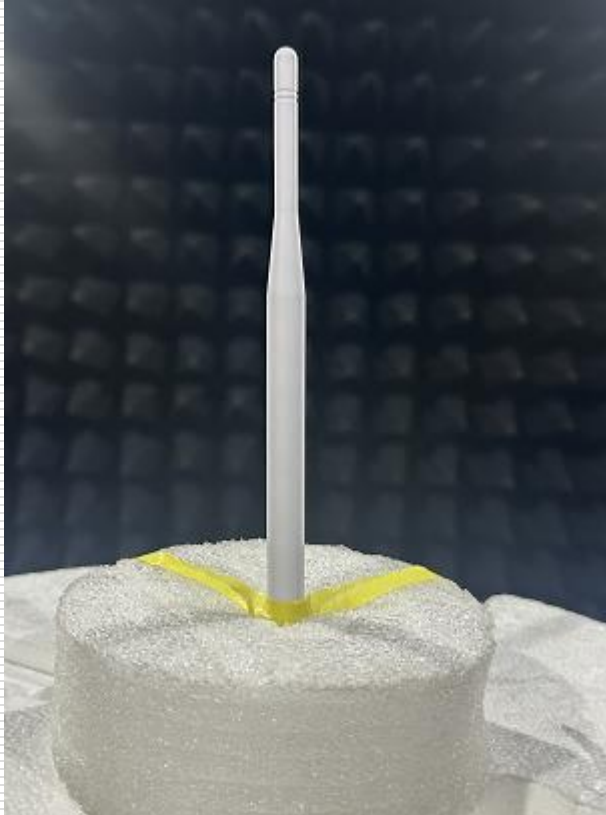
Test Tolerance :  $\pm 0.5$ dB

Test Project:

- 700MHz-6GHz Passive Test
  - 2G/3G/4G OTA Test
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## 2. Testing Picture

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### 3. Testing Data

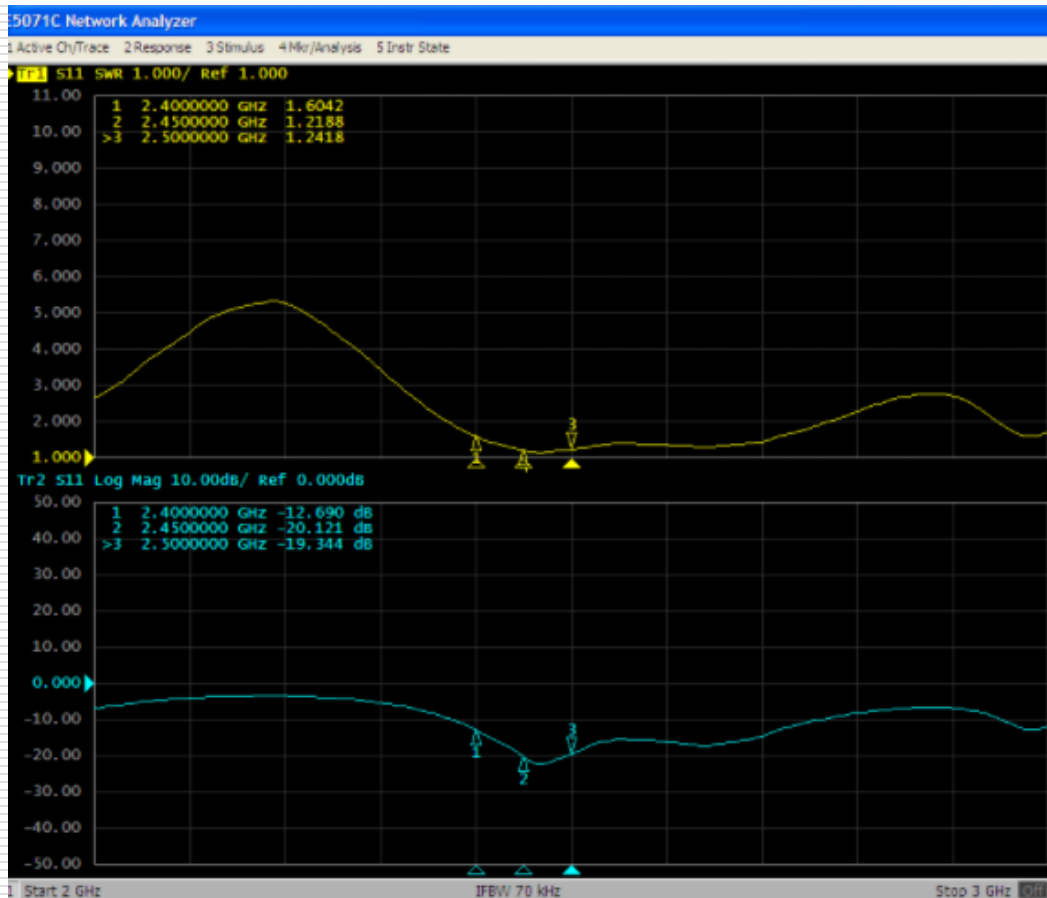
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| Frequency ID    | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 |
| Gain (dBi)      | 6.50   | 6.47   | 6.55   | 6.40   | 6.59   | 6.68   | 6.57   | 6.47   | 6.39   | 6.44   | 6.38   |
| Efficiency (%)  | 72.30  | 73.24  | 72.78  | 76.66  | 75.74  | 78.91  | 76.54  | 74.78  | 74.92  | 76.68  | 72.88  |

| Frequency ID    | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 5150.0 | 5200.0 | 5250.0 | 5300.0 | 5350.0 | 5400.0 | 5450.0 | 5500.0 | 5550.0 | 5600.0 | 5650.0 | 5700.0 | 5750.0 | 5800.0 | 5850.0 |
| Gain (dBi)      | 6.47   | 6.55   | 6.68   | 6.59   | 6.33   | 6.50   | 6.48   | 6.56   | 6.83   | 6.54   | 6.49   | 6.40   | 6.35   | 6.59   | 6.42   |
| Efficiency (%)  | 72.88  | 75.47  | 75.14  | 73.27  | 74.88  | 75.88  | 77.41  | 79.67  | 78.83  | 77.27  | 76.47  | 75.44  | 75.11  | 73.82  | 73.99  |

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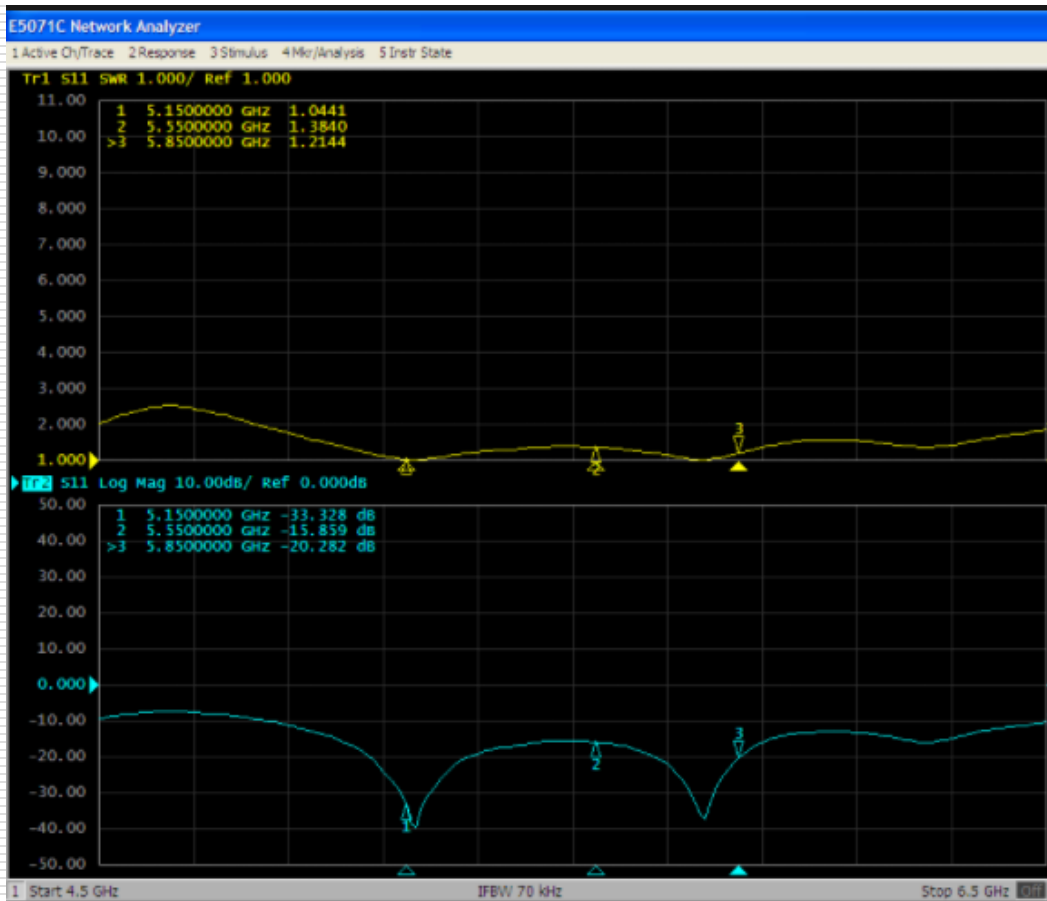
## 3.1.1 VSWR Test



2.4G

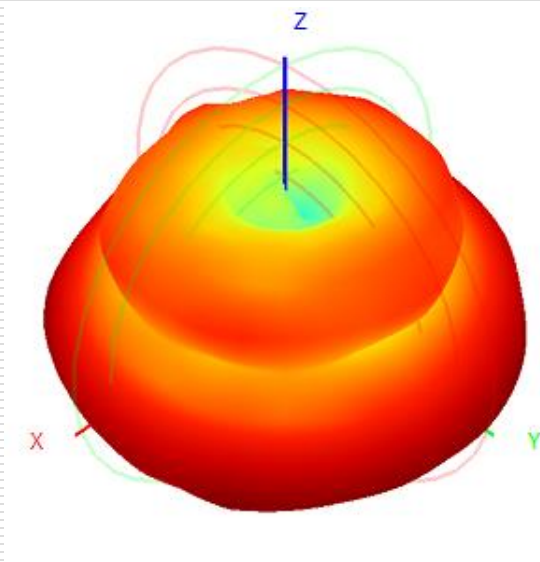
## 3.1.1 VSWR Test

5G

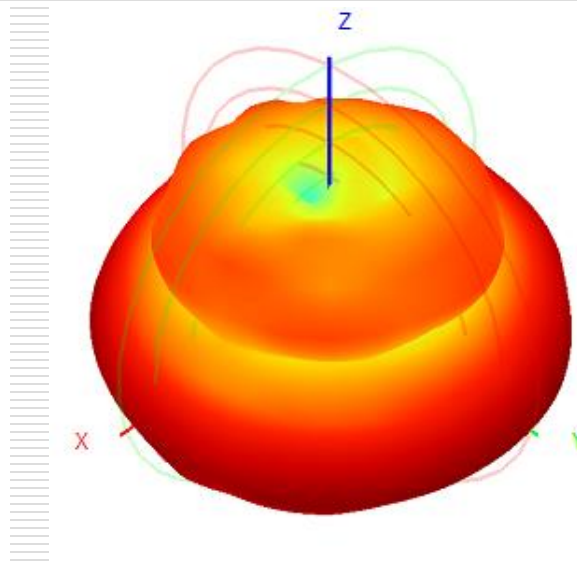


## 3. 2. 1 3D\_Radiation Pattern

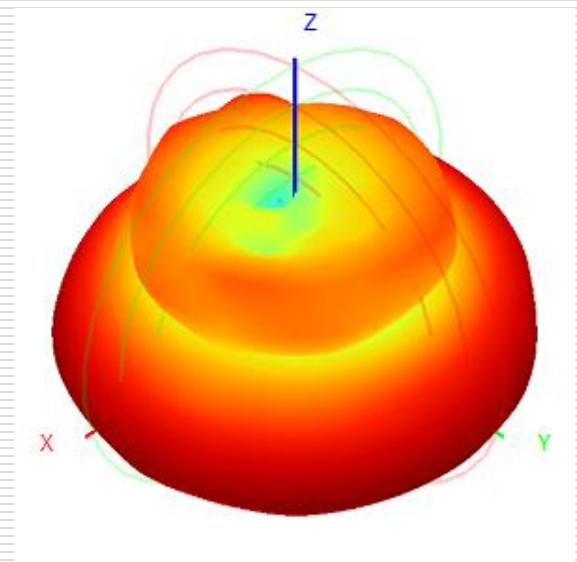
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2400MHz

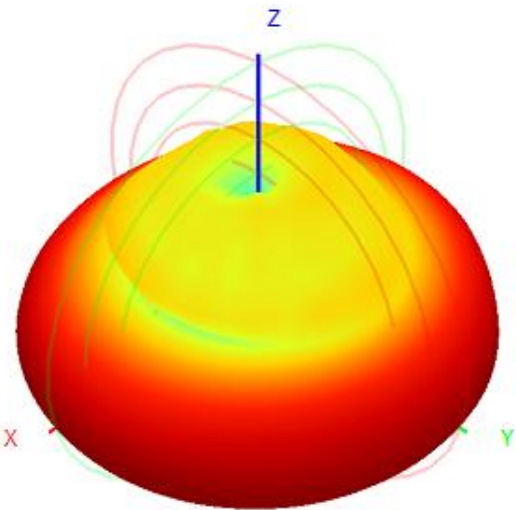


2450MHz

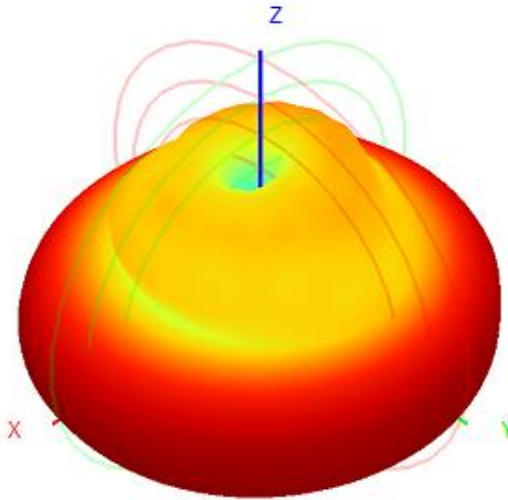


2500MHz

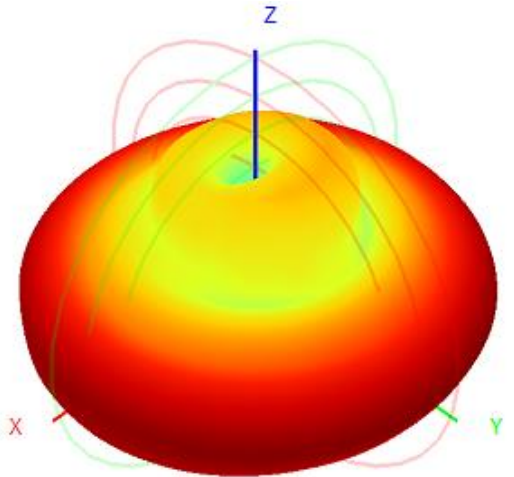
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5150MHz



5500MHz



5850MHz

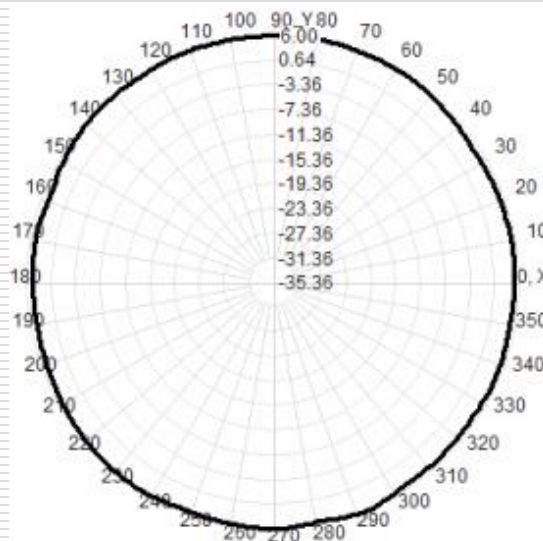
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## 3. 2. 2 2D\_Radiation Pattern

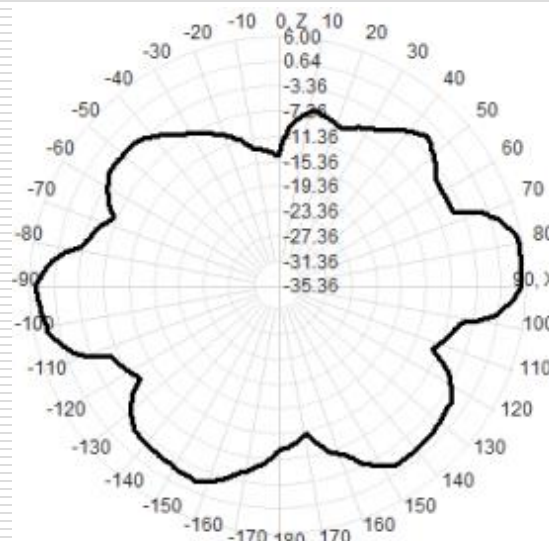
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2450MHz

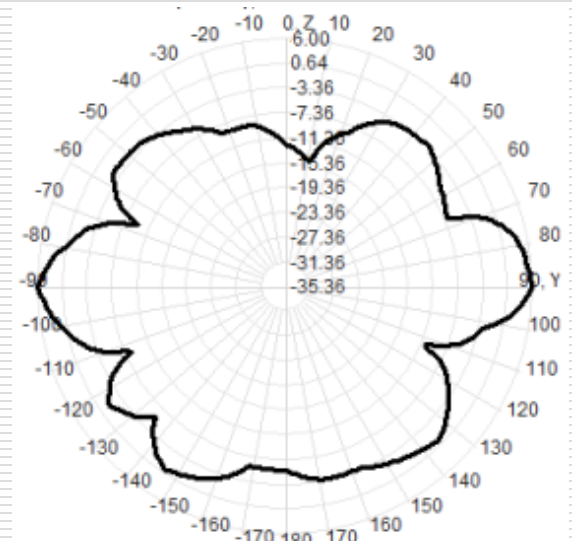
XY\_Plane



XZ\_Plane



YZ\_Plane

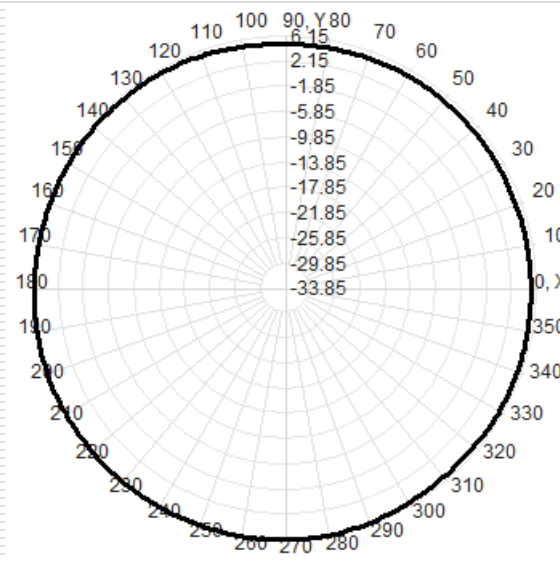


## 3. 2. 2 2D\_Radiation Pattern

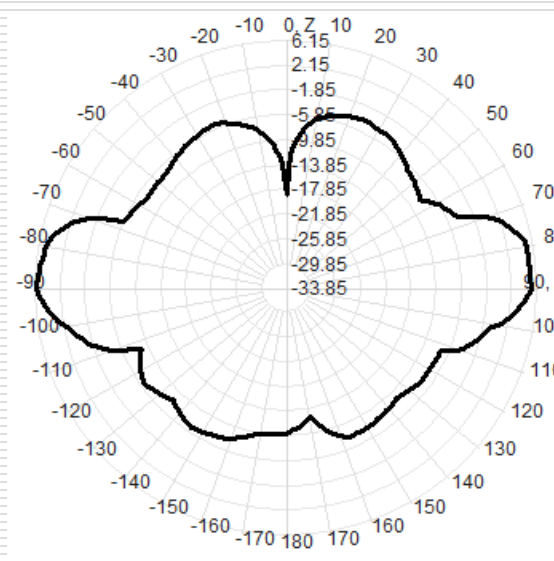
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5500MHz

XY\_Plane



XZ\_Plane



YZ\_Plane

