

# Test Report Prepared for Godox Project

**Author** Ken

**Date** 2024.5.10

**Client Information**

|                    |                                                                                                                                          |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Client             | 神牛(Godox)                                                                                                                                |
| Engineer of Client |                                                                                                                                          |
| Project Name       |                                                                                                                                          |
| Project Stage      | <input type="checkbox"/> Evaluation <input checked="" type="checkbox"/> EVT<br><input type="checkbox"/> DVT <input type="checkbox"/> PVT |
| Antenna Type       | Chip antenna                                                                                                                             |
| Antenna Band       | 2400~2500MHz                                                                                                                             |
| Antenna Engineer   | Ken                                                                                                                                      |

**Tuning Note**

| Version | Date      | Revision Description | Designer |
|---------|-----------|----------------------|----------|
| 01      | 2024/5/10 | Version 1            | Ken      |
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**Antenna Info**

| Product name | Material | Dimension     | Feed-In Location | PIN Length |
|--------------|----------|---------------|------------------|------------|
| PCAK0000-10  | /        | 5.0×2.0×1.0mm | /                | /          |

### 1.Test Content :

BT Antenna in pattern measurement

### 2.Test Item :

Efficiency 、 Radiation Pattern 、 Total Gain 、 Average Gain

### 3.Test Setting :

Network Analyzer : Agilent E5071C

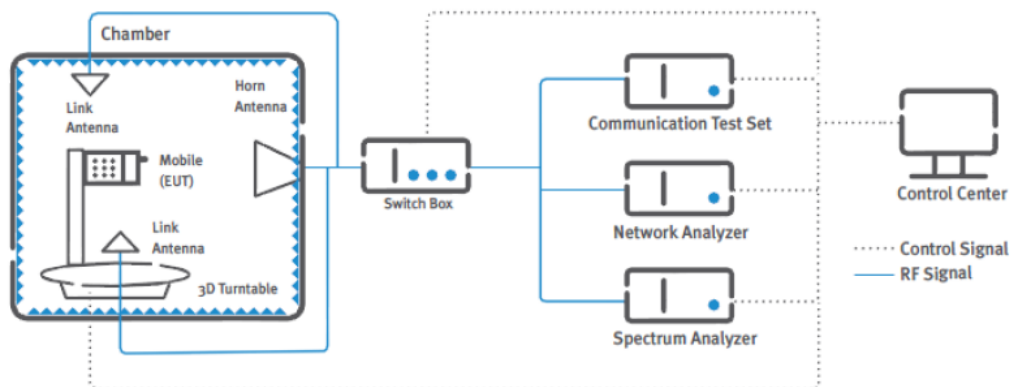
Source Antenna : Dual Polarization Horn Antenna

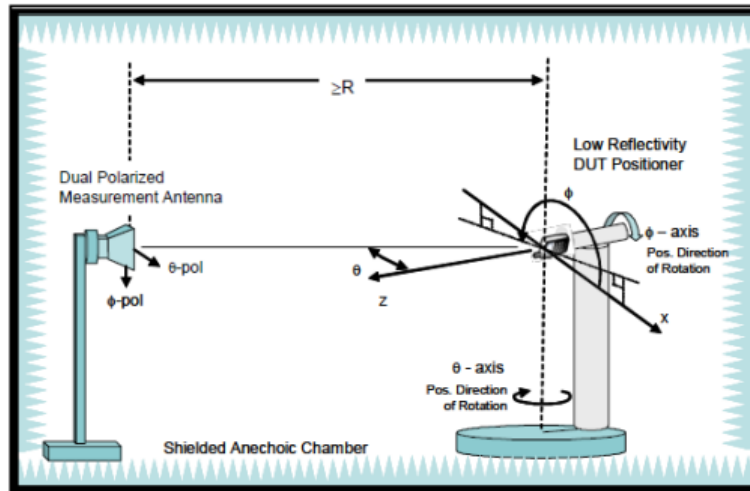
Test Frequency : 2400~2500MHz

### 4.Test Environment :

Room temperature : 22℃ Humidity : 31%

### 5.Test Schematic Drawing of Setting :



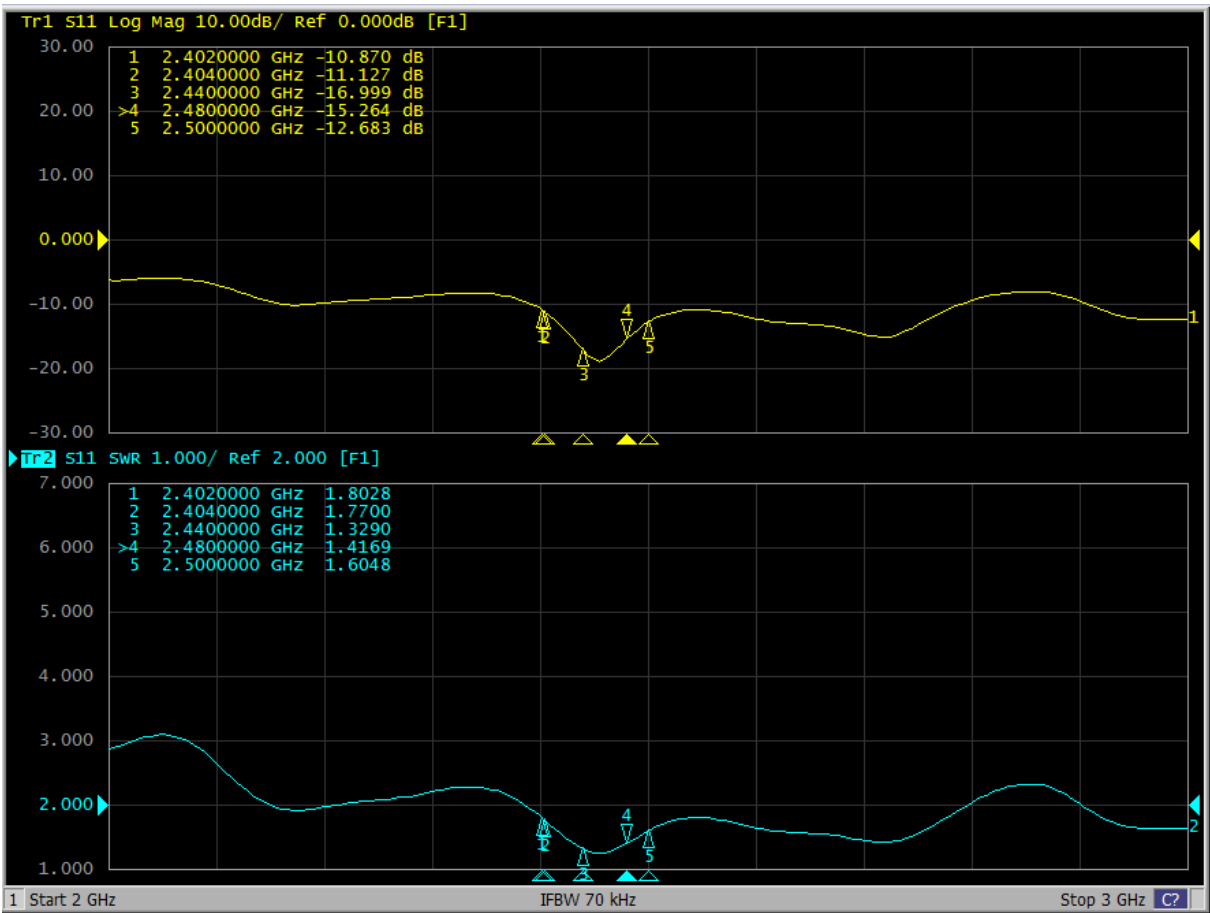


## 6. Test Data

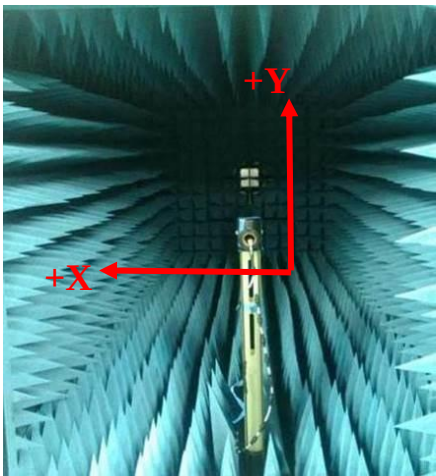
### Environment



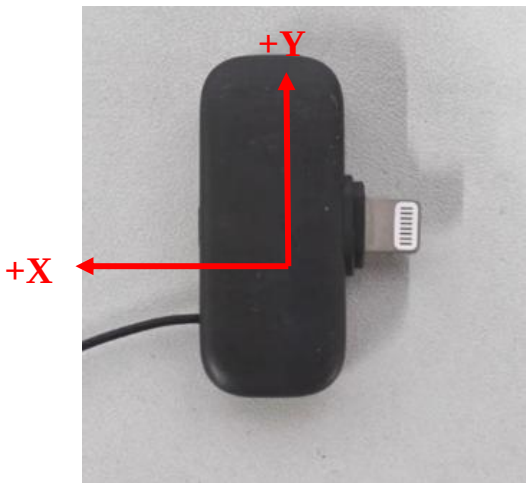
### Antenna S11 Return Loss Measurement



Coordinate

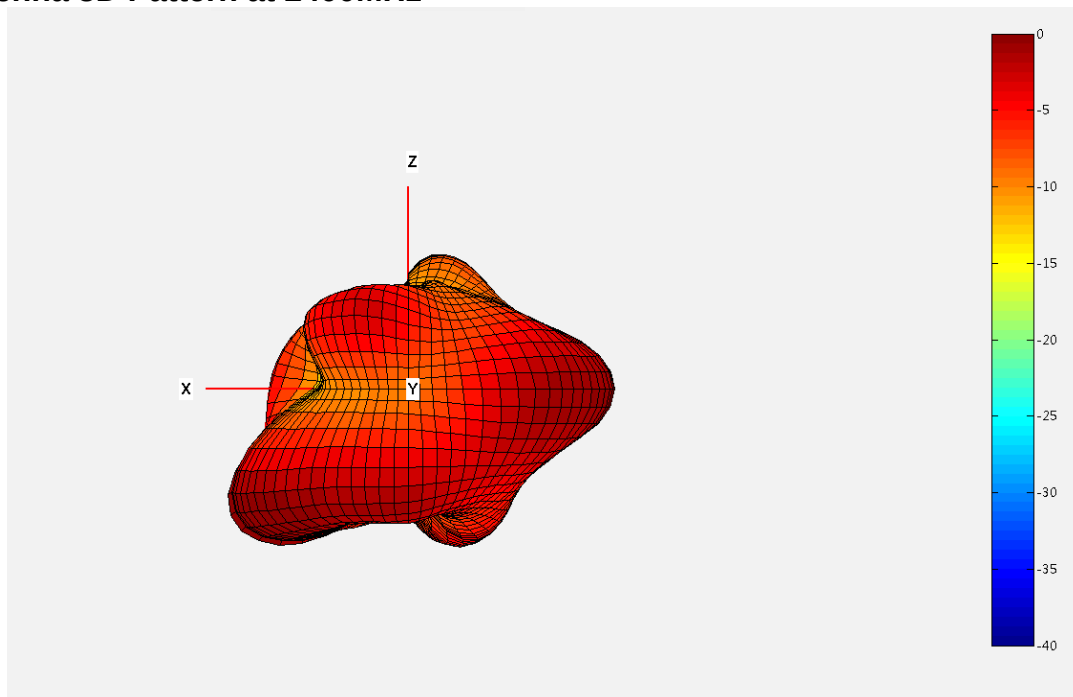


Chamber coordinate

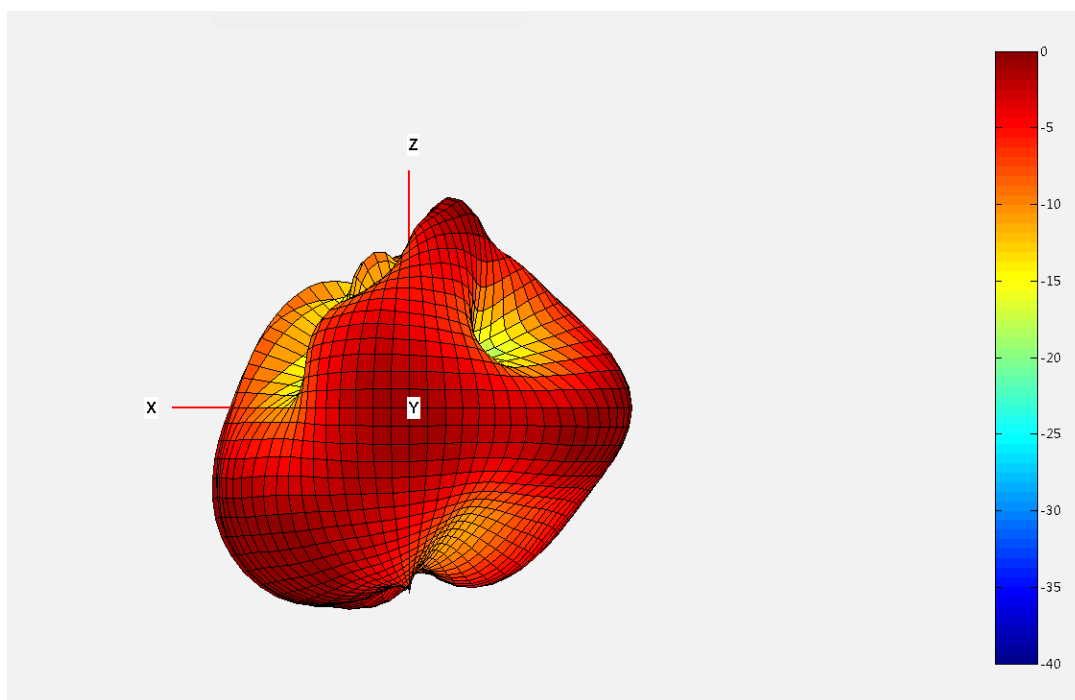


Antenna mounted on chamber coordinate

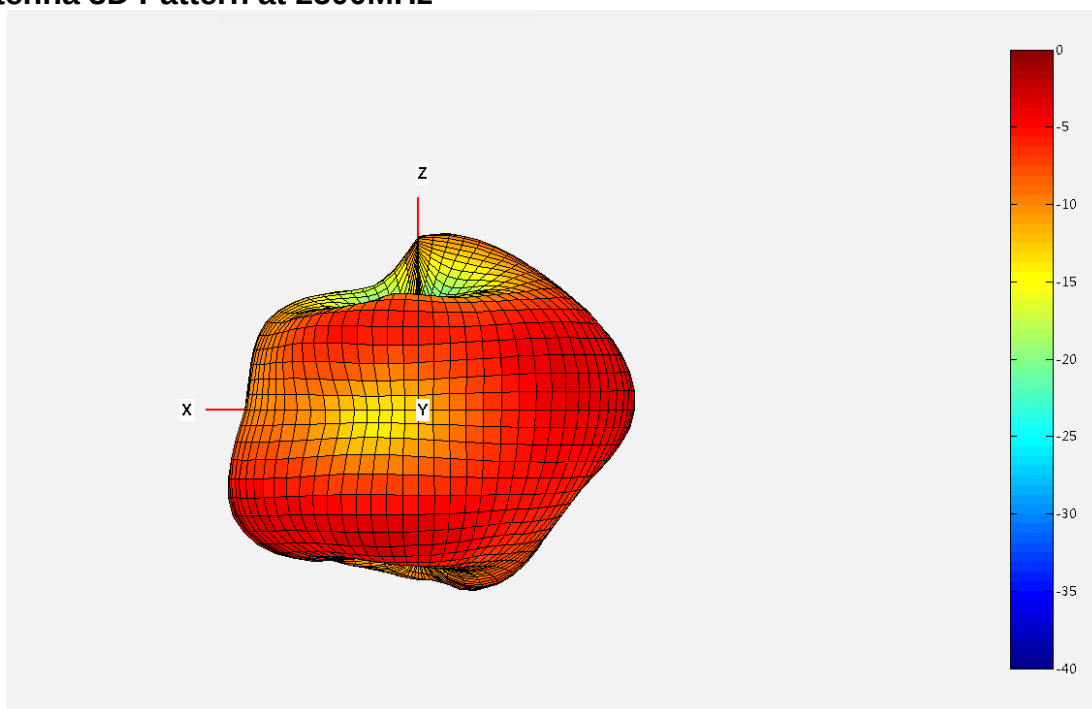
**Radiation Pattern**  
**Antenna 3D Pattern at 2400MHz**



**Antenna 3D Pattern at 2450MHz**



**Antenna 3D Pattern at 2500MHz**



## Measurements summary

| Frequency | Efficiency (dB) | Efficiency (%) | Gain (dBi) |
|-----------|-----------------|----------------|------------|
| 2402MHz   | -4.13           | 38.64          | -0.29      |
| 2404MHz   | -3.92           | 40.55          | -0.24      |
| 2440MHz   | -3.73           | 42.36          | -0.22      |
| 2441MHz   | -3.75           | 42.17          | -0.22      |
| 2472MHz   | -3.9            | 40.74          | -0.26      |
| 2480MHz   | -3.89           | 40.83          | -0.33      |

Chip antenna **15.0\*2.0\*1.0 mm/2400-2500MHz**

