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**Shenzhen Dasan Communication Co., Ltd.**

***BC109 Antenna Evaluating Report***

**Prepared By: MoLinhua**

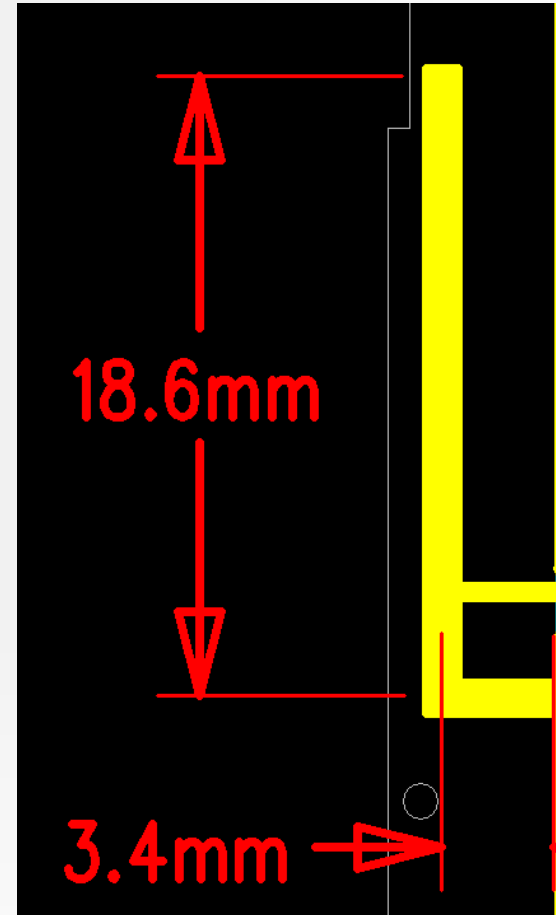
**Date of Report: 2024-5-16**

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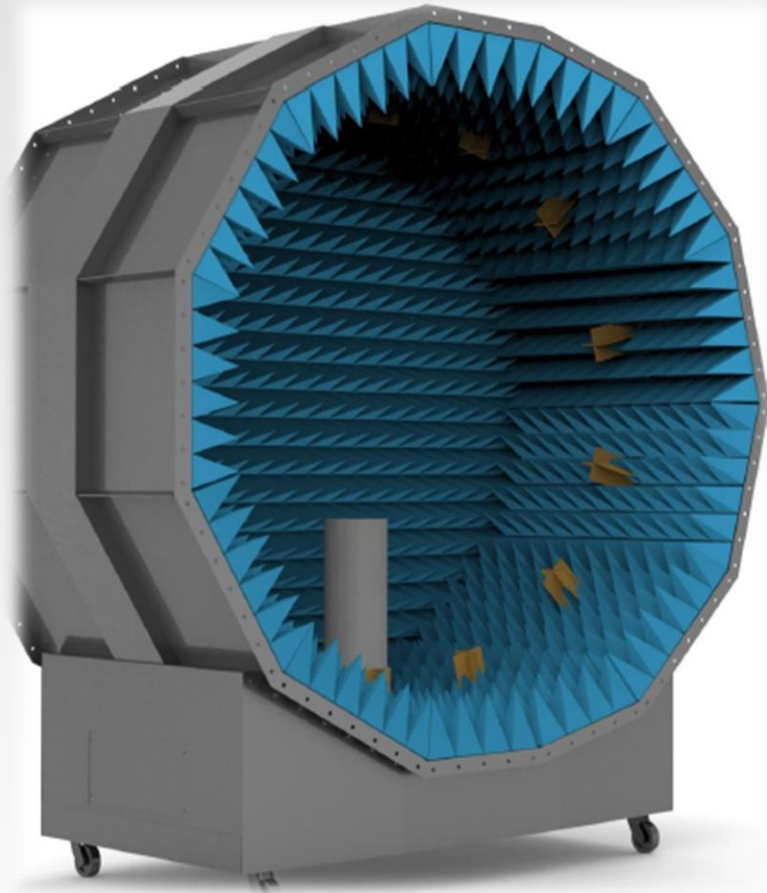
| Date      | Rev | Description                  |
|-----------|-----|------------------------------|
| 2024-5-16 | 01  | TEST Ant Efficiency and Gain |
|           |     |                              |
|           |     |                              |

# Manufacturer & DIM

- Manufacturer:  
Shenzhen Xinzhide Technology Co., Ltd.
- Model : BC109 ANT
- Gain : -2.83dBi
- DIM: PCB antenna



# Equipment



- Chamber : GTS Rayzone1800
- Network Analyzer : Agilent E5071C
- WIFI Comprehensive test instrument : Anritsu MT8860
- GPS Signal source : Agilent E4438C

# Fixture Environment

## Antenna Frequency Band

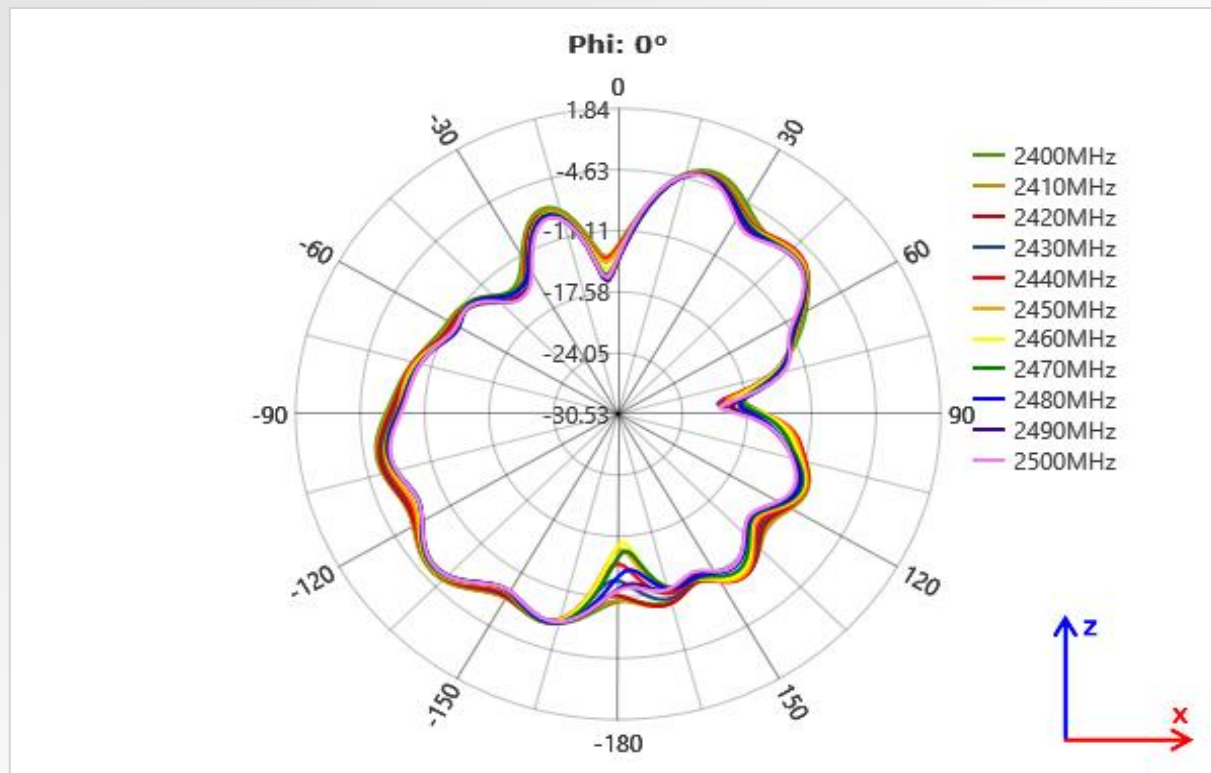
| RF System | Band | RF System | Band |
|-----------|------|-----------|------|
| GSM       | -    | WIFI / BT | 2.4G |
| WCDMA     | -    | GNSS      | -    |
| TD-SCDMA  | -    | FM        | -    |
| CDMA      | -    | Others    | -    |
| FDD LTE   |      |           |      |
| TDD LTE   |      |           |      |

# Ant TEST

| Frequency(MHz) | Gain(dBi) | Efficiency(dB) | Efficiency(%) |
|----------------|-----------|----------------|---------------|
| 2400           | -2.83     | -7.23          | 18.93         |
| 2410           | -2.85     | -7.29          | 18.65         |
| 2420           | -2.83     | -7.37          | 18.33         |
| 2430           | -2.91     | -7.51          | 17.75         |
| 2440           | -3        | -7.61          | 17.34         |
| 2450           | -3.1      | -7.84          | 16.45         |
| 2460           | -3.19     | -7.98          | 15.93         |
| 2470           | -3.34     | -8.04          | 15.72         |
| 2480           | -3.44     | -8.16          | 15.27         |
| 2490           | -3.44     | -8.19          | 15.15         |
| 2500           | -3.56     | -8.22          | 15.05         |

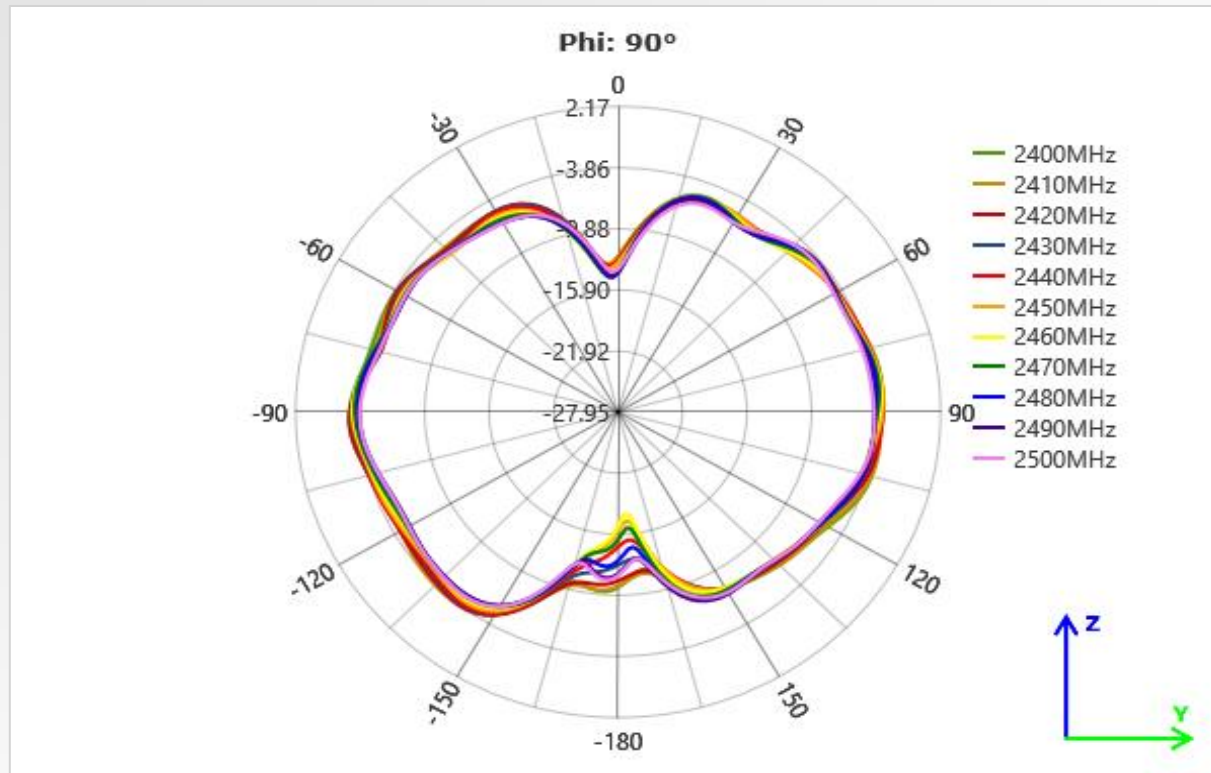
# Ant TEST

E1 Plant (Unit: dBi)



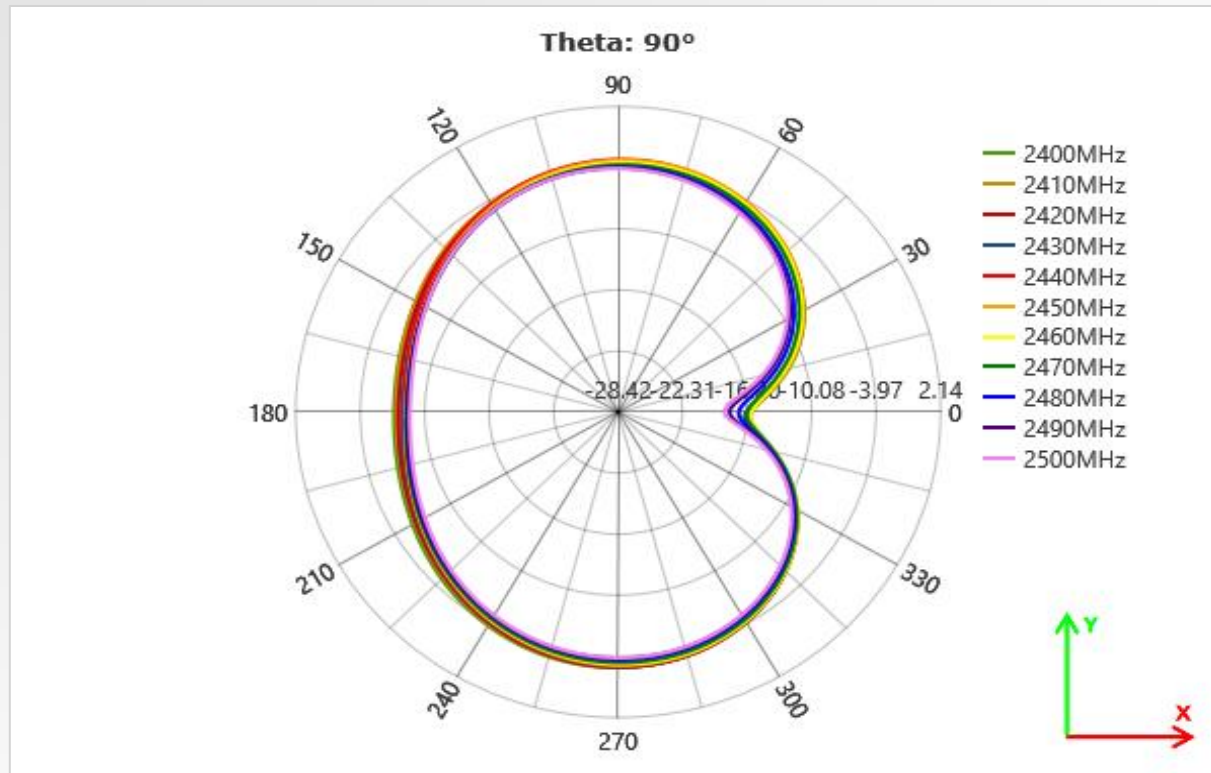
# Ant TEST

E2 Plant (Unit: dBi)



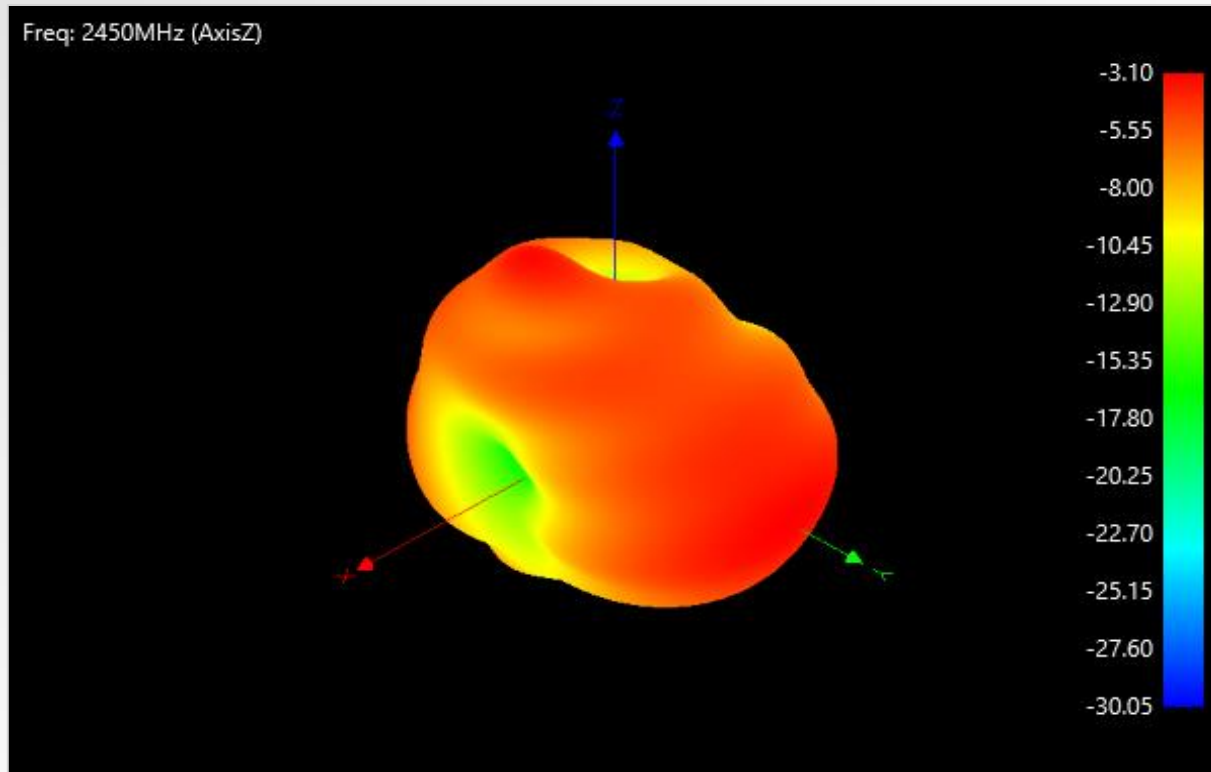
# Ant TEST

H plant (Unit: dBi)



# Ant TEST

3D Radiation (Unit: dBi)



# Thank You



**Shenzhen Dasan Communication Co.. Ltd.**

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