



深圳市星源创科技有限公司

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

Address: 1819 Huasheng Zhihui Building, South of Xinsha Road,  
Ganggang Community, Shajing Street, Bao'an District, Shenzhen

# 天线测试报告

Antenna Test Report

*TC: 英众/Yingzhong*

*MN: DNN215-140H-XD*

*RF: 戴进平/jinpingdai*

*MD: 黄清清/qingqinghuang*

*MP: 19918388579*

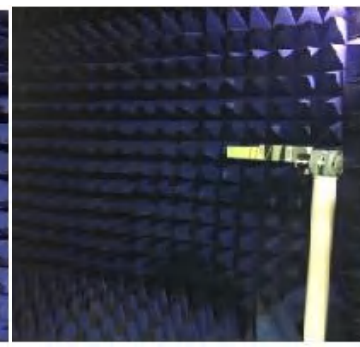
*Date: 2022. 11. 10*

*REV :V1. 0*

## 测试环境

### Test environment

|                      | 测试项目/Test project                           | 测试设备/Test equipment                                      |
|----------------------|---------------------------------------------|----------------------------------------------------------|
| S参数<br>(S-parameter) | 1. 电压驻波比 (VSWR)<br>2. 回波损耗 (Rrtun Loss)     | 网络分析仪: Agilent8753ES                                     |
| 2. 有源测试<br>(Active)  | 1. 发射功率 (TRP)<br>2. 接收灵敏度 (TIS)<br>3. 屏灭/屏亮 | 1. 暗室: 5*3*3m (3D) Chamber<br>2. 综测仪: Agilent8960 CMW500 |
| 3. 无源测试<br>(Passive) | 1. 天线增益 (Gain)<br>2. 天线效率 (Efficiency)      | 1. 暗室: 5*3*3m (3D) Chamber<br>2. 网络分析仪: Agilent 8753ES   |





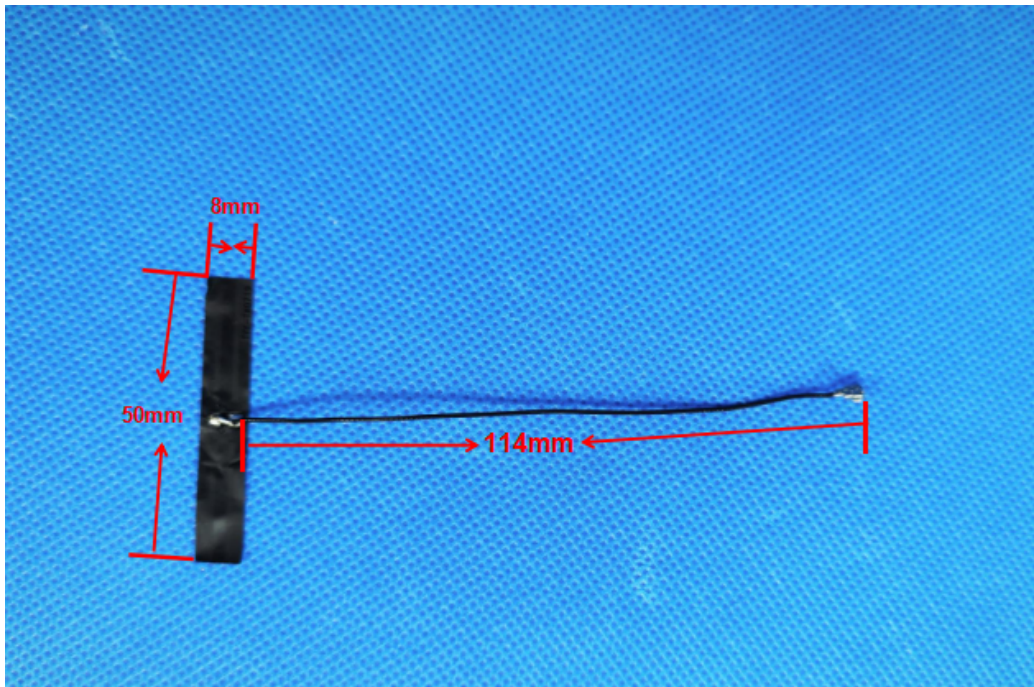
深圳市星源创科技有限公司

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

天线尺寸

Antenna S size

ANT



无源测试数据

Passive test data

ANT S11-VSWR&Return Loss



| Frequency (MHZ)  | 2400   | 2450   | 2483   |  |
|------------------|--------|--------|--------|--|
| VSWR             | 1.31   | 1.79   | 1.19   |  |
| Return Loss (DB) | -17.55 | -11.21 | -21.21 |  |





无源测试数据

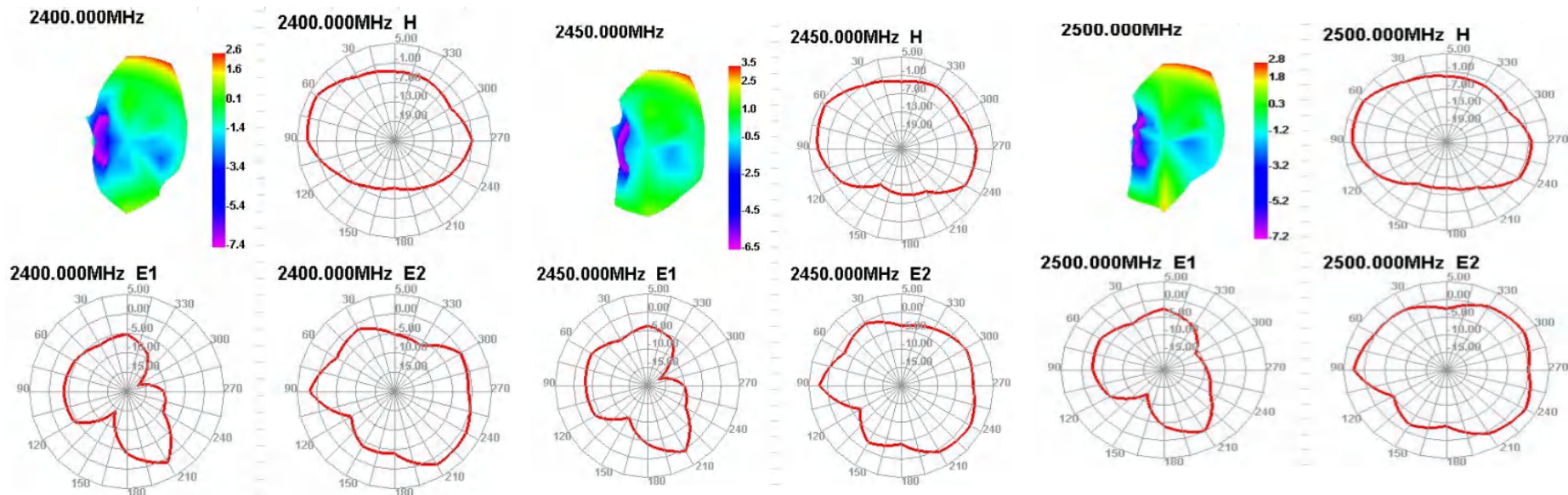
Passive test data

ANT GAIN&Efficiency-WIFI2.4G

| Passive Test For WIFI2.4 |             |              |               |               |            |            |             |             |
|--------------------------|-------------|--------------|---------------|---------------|------------|------------|-------------|-------------|
| Freq<br>(MHz)            | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) | Gain<br>(dBd) | UHS<br>(%) | DHS<br>(%) | Max<br>(dB) | Min<br>(dB) |
| 2400                     | 46.42       | -3.33        | 2.64          | 0.49          | 19.243     | 27.18      | 2.64        | -16.88      |
| 2410                     | 47.87       | -3.2         | 2.86          | 0.71          | 20.007     | 27.86      | 2.86        | -15.05      |
| 2420                     | 48.47       | -3.15        | 3.02          | 0.87          | 20.582     | 27.89      | 3.02        | -14.4       |
| 2430                     | 48.47       | -3.14        | 3.05          | 0.9           | 20.91      | 27.564     | 3.05        | -14.67      |
| 2440                     | 51.82       | -2.86        | 3.3           | 1.15          | 22.874     | 28.942     | 3.3         | -15.59      |
| 2450                     | 55.15       | -2.58        | 3.51          | 1.36          | 25.016     | 30.133     | 3.51        | -16.47      |
| 2460                     | 54.55       | -2.63        | 3.41          | 1.26          | 25.293     | 29.255     | 3.41        | -16.02      |
| 2470                     | 55.73       | -2.54        | 3.41          | 1.26          | 26.356     | 29.378     | 3.41        | -14.35      |
| 2480                     | 59.24       | -2.27        | 3.42          | 1.27          | 28.368     | 30.873     | 3.42        | -13.48      |
| 2490                     | 60.79       | -2.16        | 3.27          | 1.12          | 29.366     | 31.428     | 3.27        | -12.26      |
| 2500                     | 58.63       | -2.32        | 2.8           | 0.65          | 28.661     | 29.964     | 2.8         | -12.2       |

无源测试数据  
Passive test data

ANT Direction of figure(2.4G)





深圳市星源创科技有限公司

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

有源测试数据  
Active test data

| 802.11b | Frequency | TRP         |       | TIS         |        |
|---------|-----------|-------------|-------|-------------|--------|
|         | 2412      | CH1 11Mbps  | 11.06 | CH1 11Mbps  | -79.41 |
|         | 2437      | CH6 11Mbps  | 12.06 | CH6 11Mbps  | -79.19 |
|         | 2467      | CH11 11Mbps | 11.38 | CH11 11Mbps | -78.66 |
|         |           |             |       |             |        |
|         |           |             |       |             |        |
|         |           |             |       |             |        |
|         |           |             |       |             |        |