

# Antena Test Report



顺达成科技

专业的4G/3G/GPS/WIFI等天线方案设计及供应商



客户名称：芯图

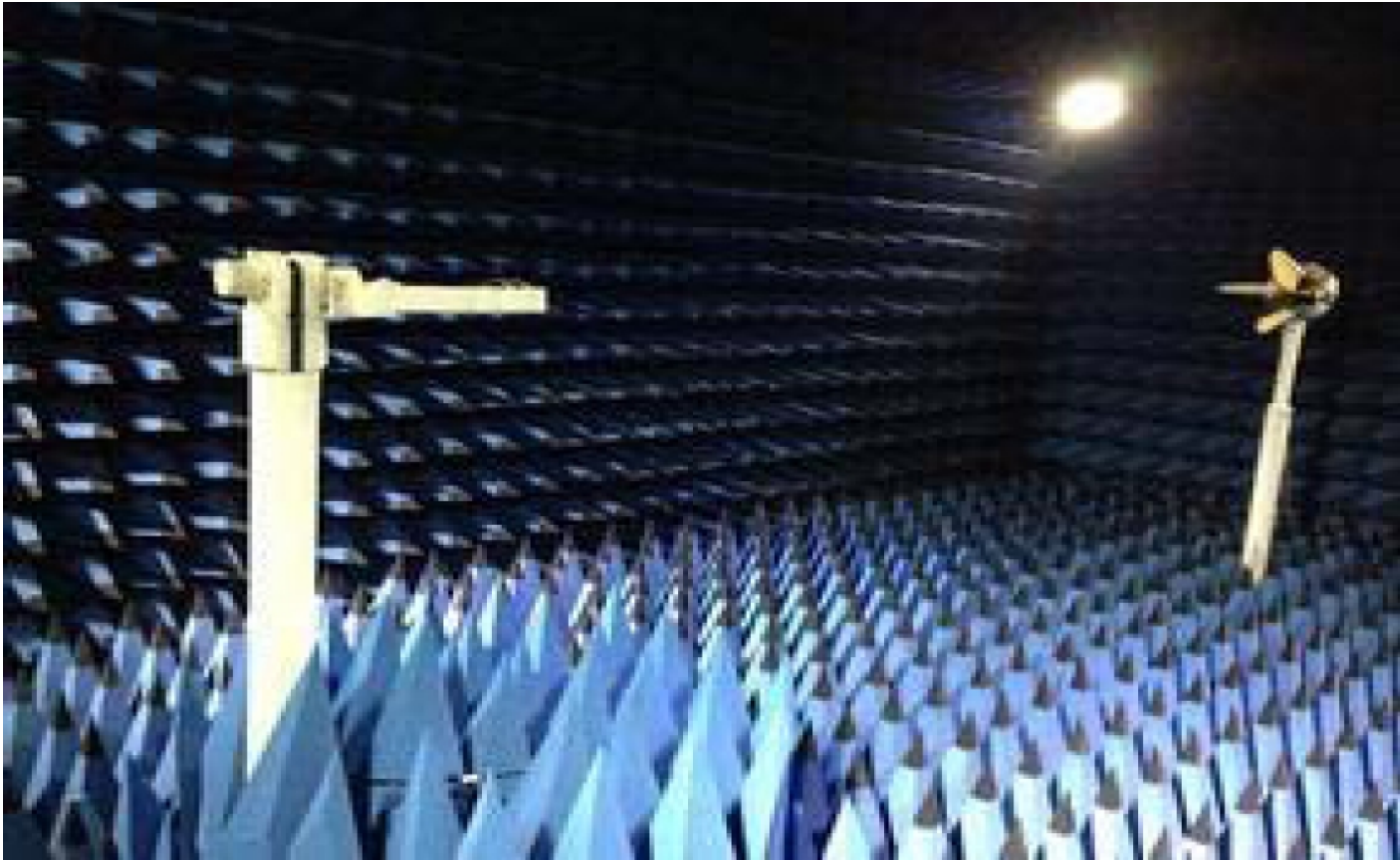
项目名称：M2701/Q2701W

频段：WIFI2.4G/5.8G/BT

版本：A

制作日期：2023-8-7

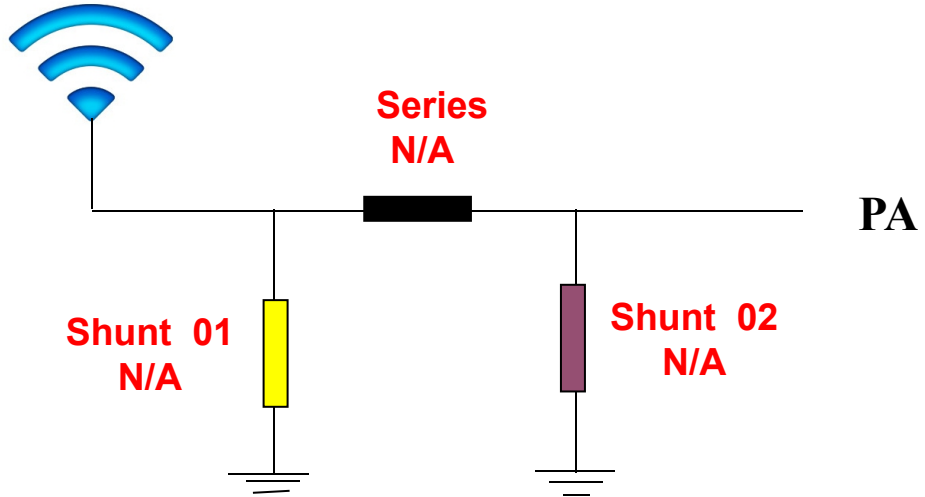
Manufacturer: Shenzhen Shun reach technology Co., LTD  
Address: 401 Xinfu Industrial Park, Zhongqing Road, Heping Community, Fuhai Street, Baoan District, Shenzhen



# ***Contents***

- 1: Antenna Overview & Dimension
- 2: The test project
  - 2.1 Antenna Matching Network
  - 2.2 VSWR
  - 2.3 Gain & Efficiency
  - 2.4 3D Date
  - 2.5 The Free Space 3D Date/The Free Space 2D Date
- 3 : Ground processing

Antenna



| Location | Description |
|----------|-------------|
| Shunt 01 | N/A         |
| Series   | N/A         |
| Shunt 02 | N/A         |

# S11 SWR /Smith/ Log Mag



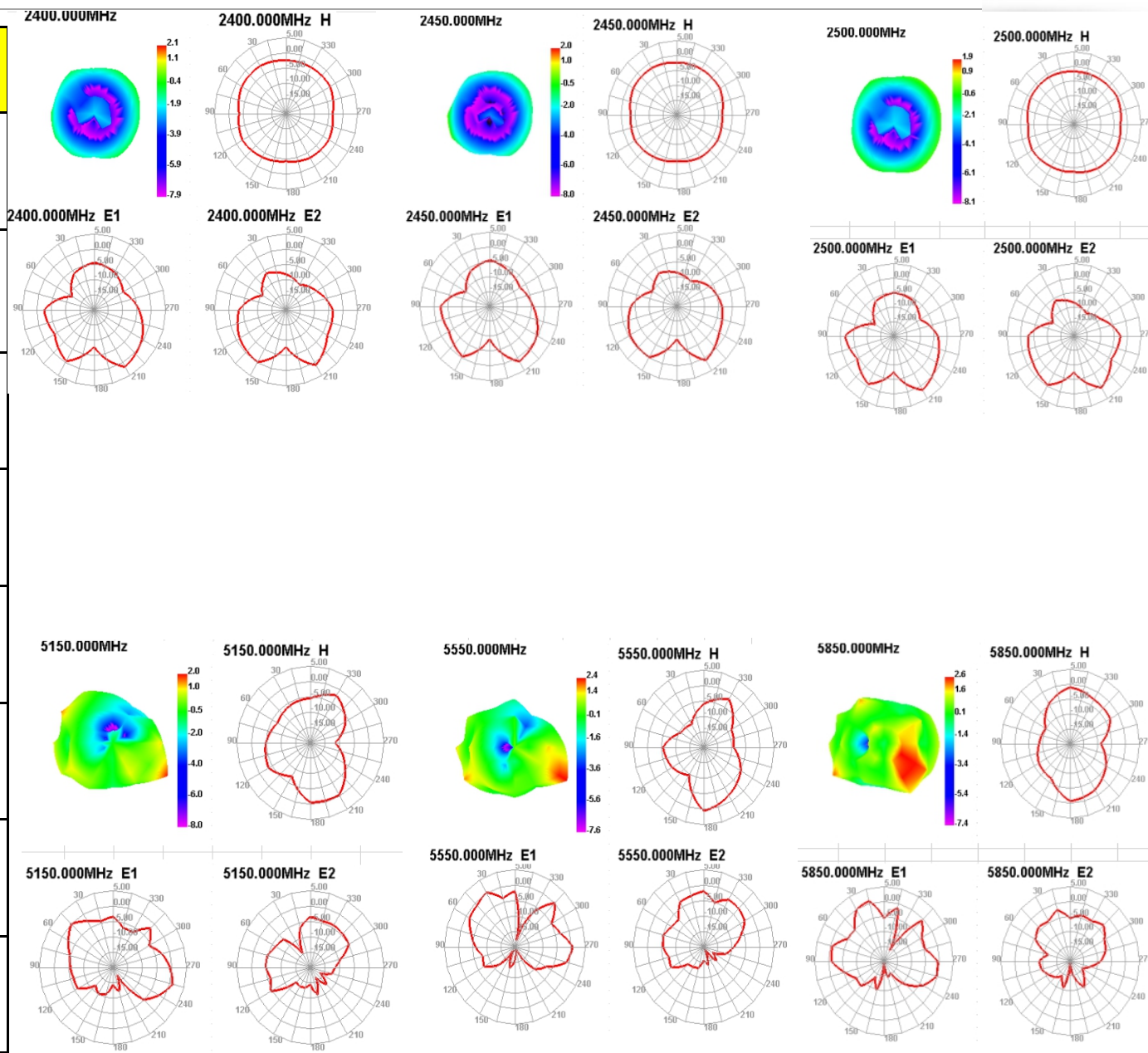
| 频率 (MHZ) | 2400 | 2450 | 2500 | 5150 | 5300 | 5500 | 5700 | 5850 |
|----------|------|------|------|------|------|------|------|------|
| 驻波比      | 1.53 | 1.27 | 1.04 | 1.29 | 1.29 | 1.82 | 1.71 | 1.32 |

| 频率 (MHZ) | 2400   | 2450   | 2500   | 5150   | 5300   | 5500   | 5700   | 5850   |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 阻抗       | 32.6 Ω | 39.3 Ω | 48.2 Ω | 64.1 Ω | 52.9 Ω | 24.1 Ω | 31.1 Ω | 40.2 Ω |

| 频率 (MHZ) | 2400  | 2450  | 2500 | 5150  | 5300  | 5500  | 5700  | 5850  |
|----------|-------|-------|------|-------|-------|-------|-------|-------|
| 回损       | -13.4 | -18.4 | -24  | -17.6 | -17.9 | -9.14 | -11.5 | -17.1 |

# 增益&效率

| Frequency (MHz) | Efficiency (%) | Peak GAIN (dBi) |
|-----------------|----------------|-----------------|
| 2400            | 51.8           | 2.13            |
| 2450            | 52.3           | 1.98            |
| 2500            | 51.68          | 1.91            |
| 5150            | 48.73          | 1.88            |
| 5350            | 48.17          | 2.16            |
| 5500            | 47.59          | 2.36            |
| 5750            | 46.08          | 1.94            |
| 5850            | 47.72          | 2.57            |



# WIFI OTA Data

|         |                     |        |        |
|---------|---------------------|--------|--------|
| 2.4G    | 802.11b, (2.4G) 11M |        |        |
| Channel | CH1                 | CH6    | CH11   |
| TRP     | 16.04               | 15.71  | 15.65  |
| TIS     | -80.42              | -80.58 | -80.76 |

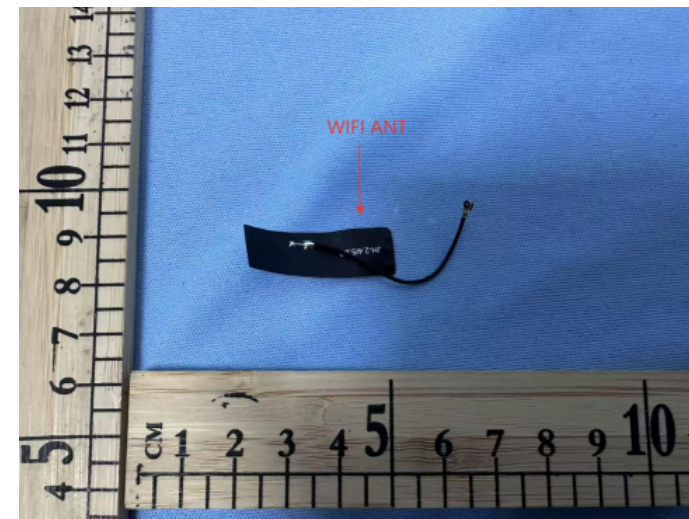
|         |                     |        |        |
|---------|---------------------|--------|--------|
| 5.8G    | 802.11A, (5.8G) 54M |        |        |
| Channel | CH36                | CH60   | CH161  |
| TRP     | 11.14               | 11.22  | 10.92  |
| TIS     | -71.3               | -71.27 | -70.81 |

# 主板传导数据

|      |                     |     |      |
|------|---------------------|-----|------|
| 2.4G | 802.11b, (2.4G) 11M |     |      |
| 信道   | CH1                 | CH6 | CH11 |
| 功率   | 18                  | 18  | 18   |
| 灵敏度  |                     |     | -87  |

|         |                     |      |       |
|---------|---------------------|------|-------|
| 5.8G    | 802.11A, (5.8G) 54M |      |       |
| Channel | CH36                | CH60 | CH161 |
| TRP     | 14                  | 14   | 13.5  |
| TIS     |                     |      | -75   |

# 天线安装位置图



WiFi天线



Thanks