

# SPECIFICATION

## SHEET FOR APPROVAL

|                |                            |  |
|----------------|----------------------------|--|
| CUSTOMER(客户名称) | GSD                        |  |
| CS P/N(客户机种)   |                            |  |
| PART NAME(品名)  | WIFI Antenna               |  |
| FREQUENCY(频率)  | 2400-2500MHz 5150-5850 MHz |  |
| GSD NO.(物料编号)  | WC0D                       |  |
| DATE(日期)       | 2016-06-25                 |  |

|          |          |
|----------|----------|
| CUSTOMER |          |
| CHECKE   | APPROVAL |
|          |          |

Remark(备注):

Sign(客户确认签字盖章): \_\_\_\_\_

|        |       |          |
|--------|-------|----------|
| DESIGN | CHECK | APPROVAL |
|        | 邹一麟   | 赵烽       |

惠州高盛达科技有限公司

HUIZHOU GAOSHENGDA TECHNOLOGY CO.,LTD

# ANTENNA SPECIFICATION

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|    |       |   |     |
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|    |       |   |     |

# ANTENNA SPECIFICATION

## 1. General Description

|      |   |
|------|---|
| Dbi  | Decibel relative isotropic antenna      |
| Tx   | Transmit frequency                      |
| Rx   | Receive frequency                       |
| VSWR | Voltage Standing Wave Ratio             |
| GSM  | Global Service for Mobile communication |
| DCS  | Digital Communication System            |
| PCS  | Personal Communication System           |
| PHS  | Personal Handy-phone System             |
| SAR  | Specific Absorption Rate                |
| PCB  | Printed Circuit Board                   |

## 2. Electrical Specifications

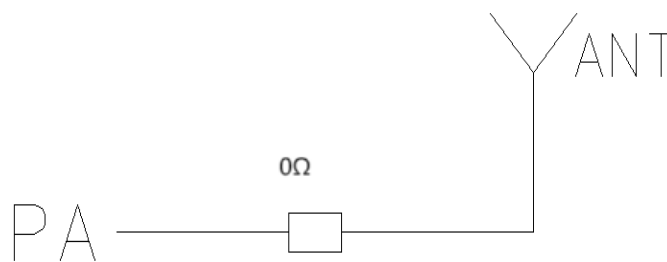
### 2-1 Set-up

#### 2-1-1 Frequency Band

| Frequency Band   | Frequency           |
|------------------|---------------------|
| <b>WIFI 2.4G</b> | <b>2400-2500MHZ</b> |
| <b>WIFI 5G</b>   | <b>5150-5850MHZ</b> |

#### 2-1-2 Impedance

Nominal Impedance(including matching circuit) : **50 ohms**



#### 2-1-3 Matching Requirements

The matching circuit on the PCB of the handset is according to Figure 1. Optimum matching circuit is highly dependent on the handset and thus.

Final matching circuit layout and values will be defined when handset is available.

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## 2-1-4 VSWR And GAIN

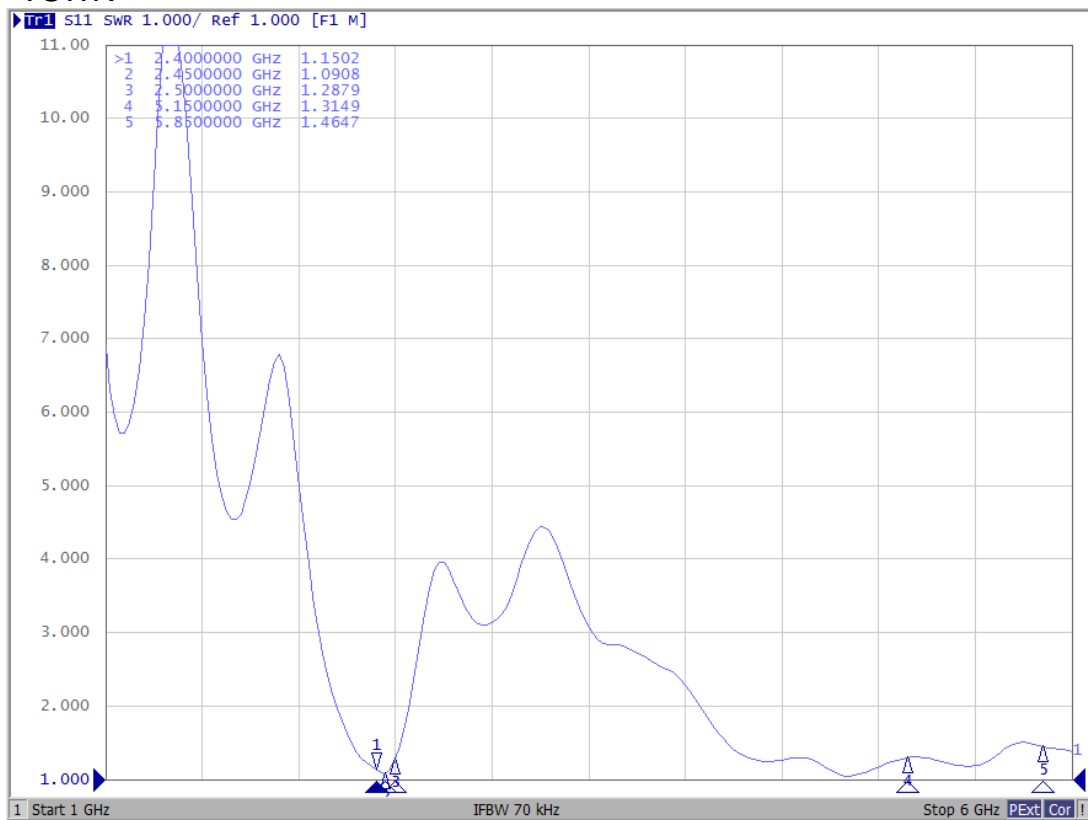
| VSWR       |           | GAIN       |           |
|------------|-----------|------------|-----------|
| Freq. Band | OPEN SPEC | Band Freq. | OPEN SPEC |
| 2400MHz    | ≦2.0      | 2400MHz    | ≧-1.0dBi  |
| 2500MHz    | ≦2.0      | 2500MHz    | ≧-1.0dBi  |
| 5150MHz    | ≦2.0      | 5150MHz    | ≧-1.0dBi  |
| 5850MHz    | ≦2.0      | 5850MHz    | ≧-1.0dBi  |

※Measuring a 50 Ω test jig is connected to a network analyzer to measure the VSWR.

※※All test value is done in customer approval fixture.

## 2-2 Test Data

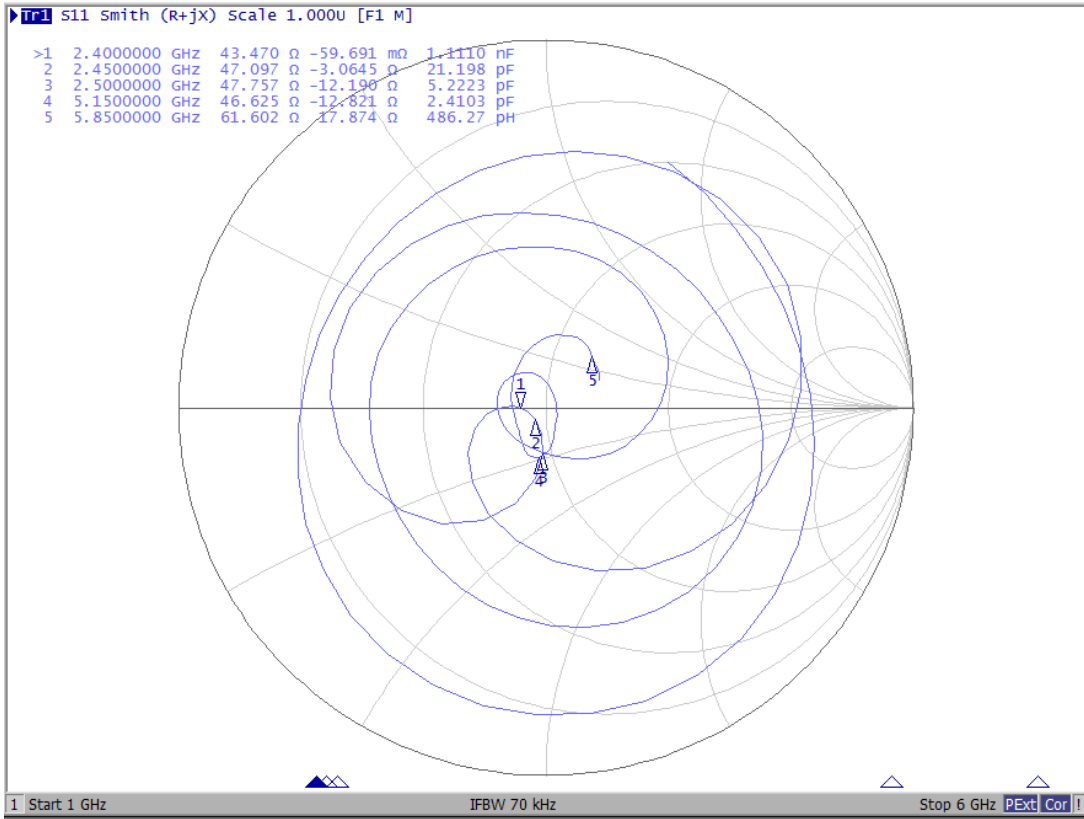
### 2-2-1 VSWR



|                            |                    |
|----------------------------|--------------------|
| Model No:WC0D              | File:              |
| GSD NO:WC0D Antenna        | Note:              |
| Sample No:yes              | <b>WIFI2.4G/5G</b> |
| Test Condition: Free Space |                    |

# ANTENNA SPECIFICATION

## 2-2-2 Smith Chart



## 2-2-3 GAIN Efficiency

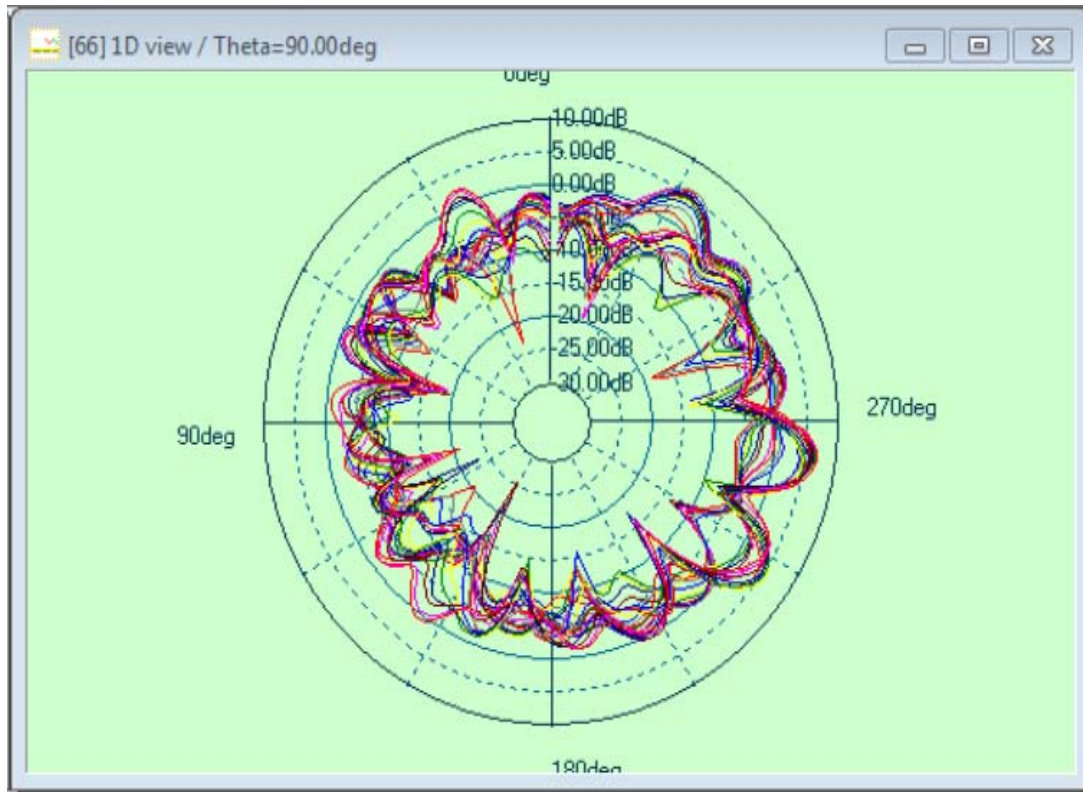
WIFI Gain:

|                  | WIFI  |       |       |       |       |
|------------------|-------|-------|-------|-------|-------|
| Frequency (MHz)  | 2400  | 2450  | 2500  | 5150  | 5850  |
| Gain             | 1.42  | 1.72  | 1.65  | 2.34  | 2.57  |
| Efficiency (dBi) | (44%) | (48%) | (45%) | (61%) | (66%) |

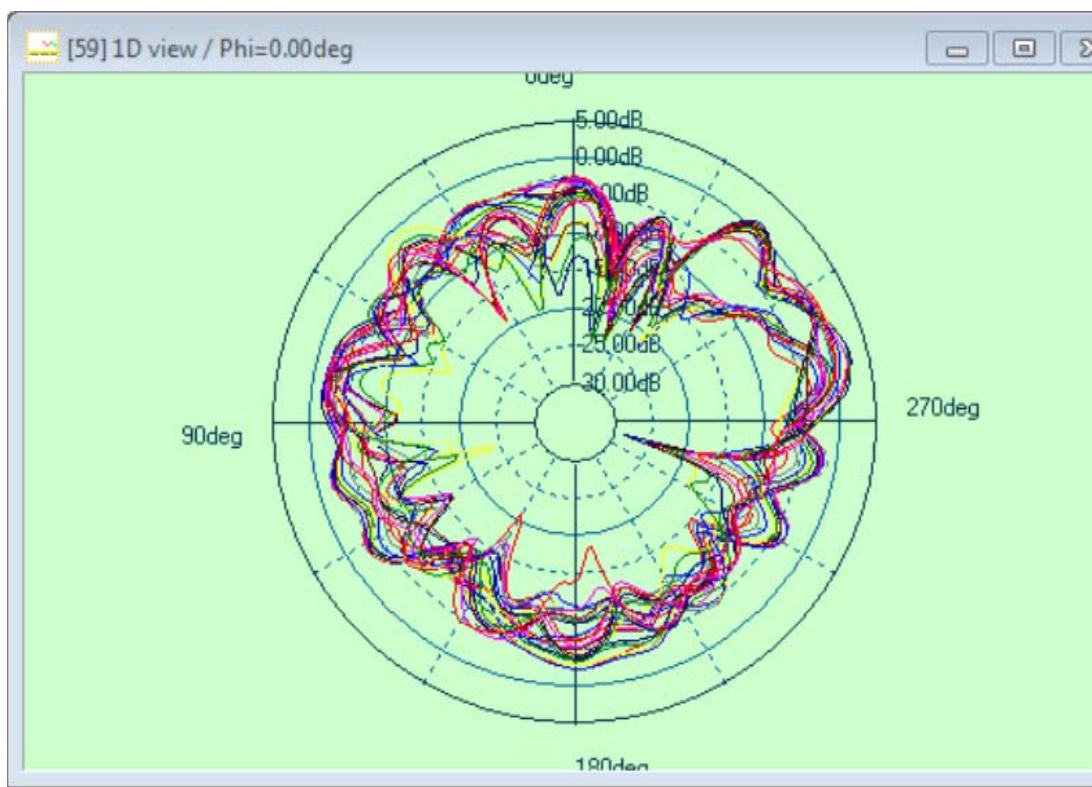
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## 2-2-4 The direction of figure

*H*

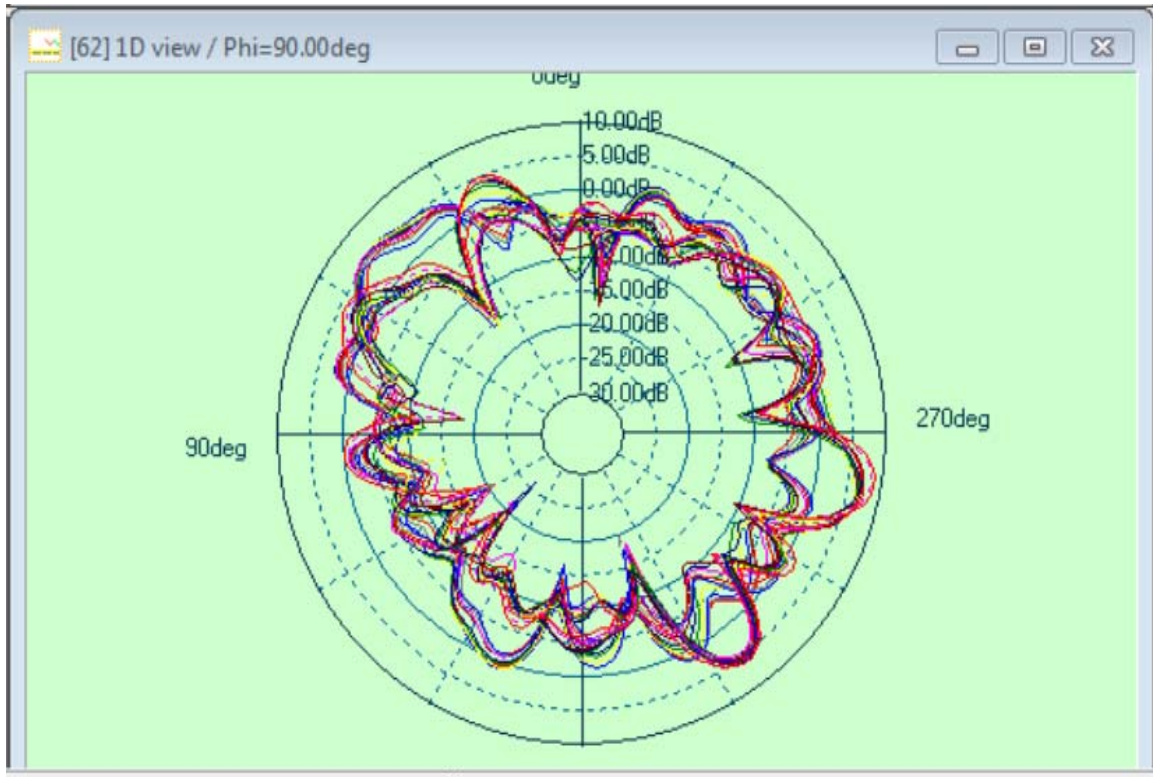


*E1*

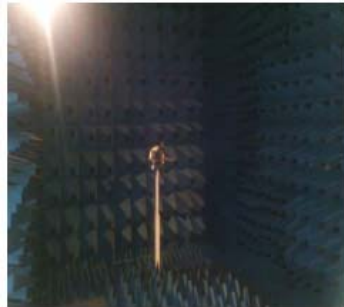


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## E2



### 2-2-5 Testing equipment



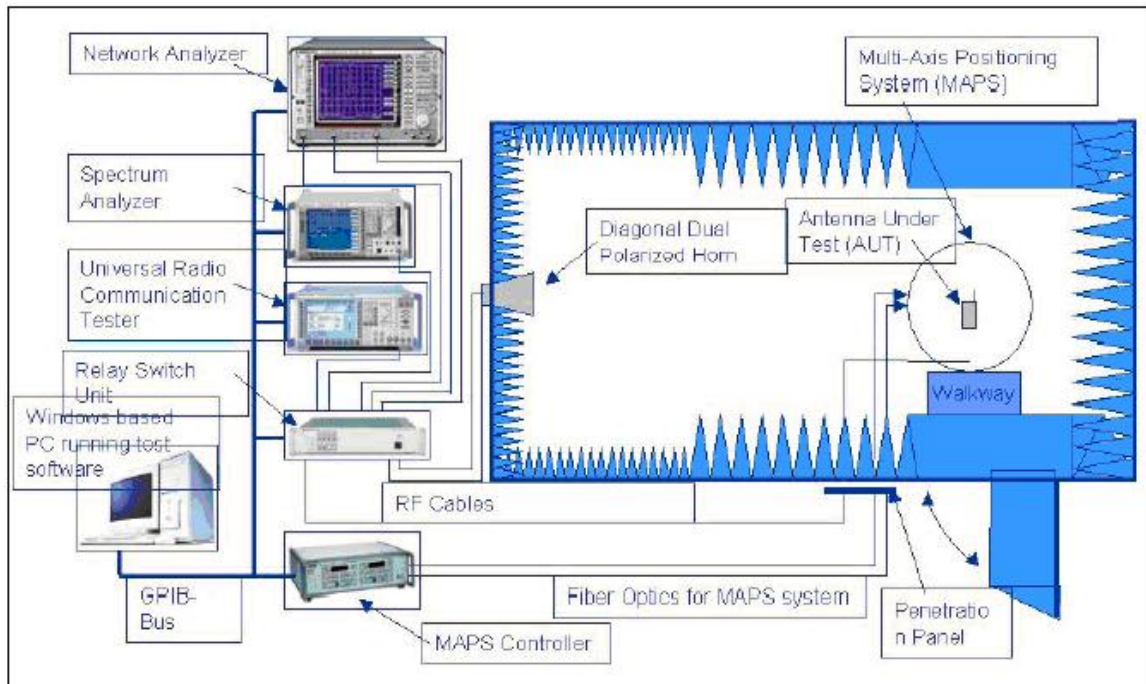
The company has the most advanced French Satimo SG24 OTA test system 1 set, EST OTA standard test system 2 sets, Bluetest reverberation darkroom 1 set, MicroPross NFC test system 1 set, which can quickly and stably provide customers with accurate test reports. Fully meet the CITA standards, support GSM/CDMA/WCDMA/TD/LTE/WIFI/BT/GPS/MIMO active passive test and so on various formats.

The MicroPross NFC system can meet the test requirements of individual operators, perform fast performance tests on NFC devices, and output formal certification test reports





# ANTENNA SPECIFICATION





# ANTENNA SPECIFICATION

## **3. Mechanical Specification**

### **3-1 Mechanical Configuration**

#### **3-1-1 Mechanical Configuration( WIFI2.4G/5G)**

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GSD P/N : WC0D

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|    |  |    |  |    |  |    |  |    |  |    |  |
|----|--|----|--|----|--|----|--|----|--|----|--|
| 版本 |  | 说明 |  | 审核 |  | 日期 |  | 批准 |  | 日期 |  |
|    |  |    |  |    |  |    |  |    |  |    |  |

**备注:**

1. 角度尺寸模具设计时依图纸尺寸作参照, 样品及量产实配即可;
2. 打\*为严格控制尺寸 (IQC必测等级A) ;
3. 字符说明 (采用宋体, 要求字迹清晰, 弹片无变形) ;
4. 产品不能有油污、毛刺、利边、缺料、变形、压印过深等不良;
5. 需通过48小时盐雾测试;
6. 包装时需用吸塑盒摆放整齐, 运输过程中产品不能挤压碰撞等;
7. 未经过ZTX公司确认, 材料不能随意更改;

|         |       |     |    |             |              |
|---------|-------|-----|----|-------------|--------------|
| 未注明公差   |       | 比例  | 版本 | 比例          | 比例           |
| 5-10D   | ±0.08 | 龙秋霖 | AL | 1:1         | 800003       |
| 5-10    | ±0.10 | 封装  | 材料 | SS304       | Pin:3mm (线材) |
| 10-35   | ±0.12 | 审核  | 图号 | WC0D (WiFi) | 1/1          |
| 35-50   | ±0.15 | 批准  | 图名 | ZTX-QR-029  |              |
| 50-100  | ±0.18 |     | 图号 |             |              |
| 100 00E | ±0.20 |     | 图名 |             |              |

**中天迅通信技术有限公司**

## 3-1-2 Mechanical Configuration(天线组件)

