

# 东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

## 承 认 书

Specification For Approval

Customer:

客户名称

Customer P/N:

客户料号

QZ-HL006

QC P/N:

群创料号

Description :

规格描述

WIFI PIFA Antenna 0.81mm Back Cable L=49mm+IPEX (4)

Address: Room 303, Building 1, No. 1, Xinfu Road, Shangjiaopu, Chang'an Town,  
Dongguan City, Guangdong Province

Version: 1.0

# 东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

Product Number:QZ-HL006

Product Name: Antenna

## Index:

- 1. Specification
- 2. Antenna - S Parameter Test Data
- 3. Antenna - Radiation Pattern Test Data
- 4. Mechanical and Packing Drawing

## Revision History

| Revision | Date       | Change Notification | Description |
|----------|------------|---------------------|-------------|
| 1.0      | 2025.10.28 | 1.0                 |             |
|          |            |                     |             |
|          |            |                     |             |
|          |            |                     |             |
|          |            |                     |             |
|          |            |                     |             |

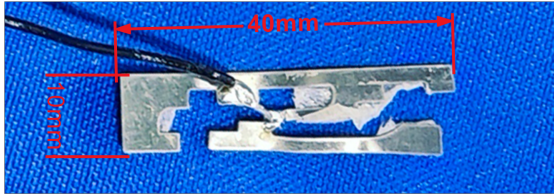
# 东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

**Product Number:QZ-HL006**

**Product Name: Antenna**

## 1. Specification

|                                                                                    |                                   |
|------------------------------------------------------------------------------------|-----------------------------------|
| <b>Sample Photo</b>                                                                |                                   |
|  |                                   |
| <b>A. Electrical Characteristics</b>                                               |                                   |
| <b>Frequency</b>                                                                   | <b>2400-2500 MHz/5150-5850MHz</b> |
| <b>S.W.R.</b>                                                                      | Reference waveform                |
| <b>Antenna Gain</b>                                                                | <b>-1.05dBi /0.04dBi</b>          |
| <b>Polarization</b>                                                                | <b>Linear</b>                     |
| <b>Impedance</b>                                                                   | <b>50 Ohm</b>                     |
| <b>B. Material &amp; Mechanical Characteristics</b>                                |                                   |
| <b>Cable Type</b>                                                                  | <b>OD0.81mm ,Black</b>            |
| <b>Connector Type</b>                                                              | <b>I-PEX (4)</b>                  |
| <b>C. Environmental</b>                                                            |                                   |
| <b>Storage Temperature</b>                                                         | <b>- 40°C ~ +80 °C</b>            |
| <b>Operation Temperature</b>                                                       | <b>- 40°C ~ +80 °C</b>            |

# 东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

Product Number:QZ-HL006

Product Name: Antenna

## 2. Characteristics and Reliability Test

| Test Items |                | Test Condition and Procedure                                               | Requirements                                                   | Result |
|------------|----------------|----------------------------------------------------------------------------|----------------------------------------------------------------|--------|
| 1          | V.S.W.R.       | Set DUT on Network Analyzer; make individual calibration to test           | Directive DUT specification                                    | PASS   |
| 2          | Insertion Loss | Set DUT on Network Analyzer; make individual calibration to test           | Directive DUT specification                                    | PASS   |
| 3          | Antenna Gain   | Set DUT on Antenna Chamber; make individual calibration to test            | Directive DUT specification                                    | PASS   |
| 4          | Solderability  | GB / T2423.28-2005<br>Temp: $260 \pm 5^{\circ}$ C;Duration: 5 seconds      | Tin evenly on full                                             | PASS   |
| 5          | Pull Test      | Holding with individual specification; force applied to axis of terminal . | 1. Directive DUT specification<br>2. Frequency Tol. $\leq 5\%$ | PASS   |
| 6          | Dimension      | Inspection of dimension, color, material, package, surface process.        | Directive DUT specification                                    | PASS   |
| 7          | RoHS           | With Reference to IEC 62321:2008 with flow chart<br>参考 IEC 62321           | Directive RoHS 2015/863/EU                                     | PASS   |

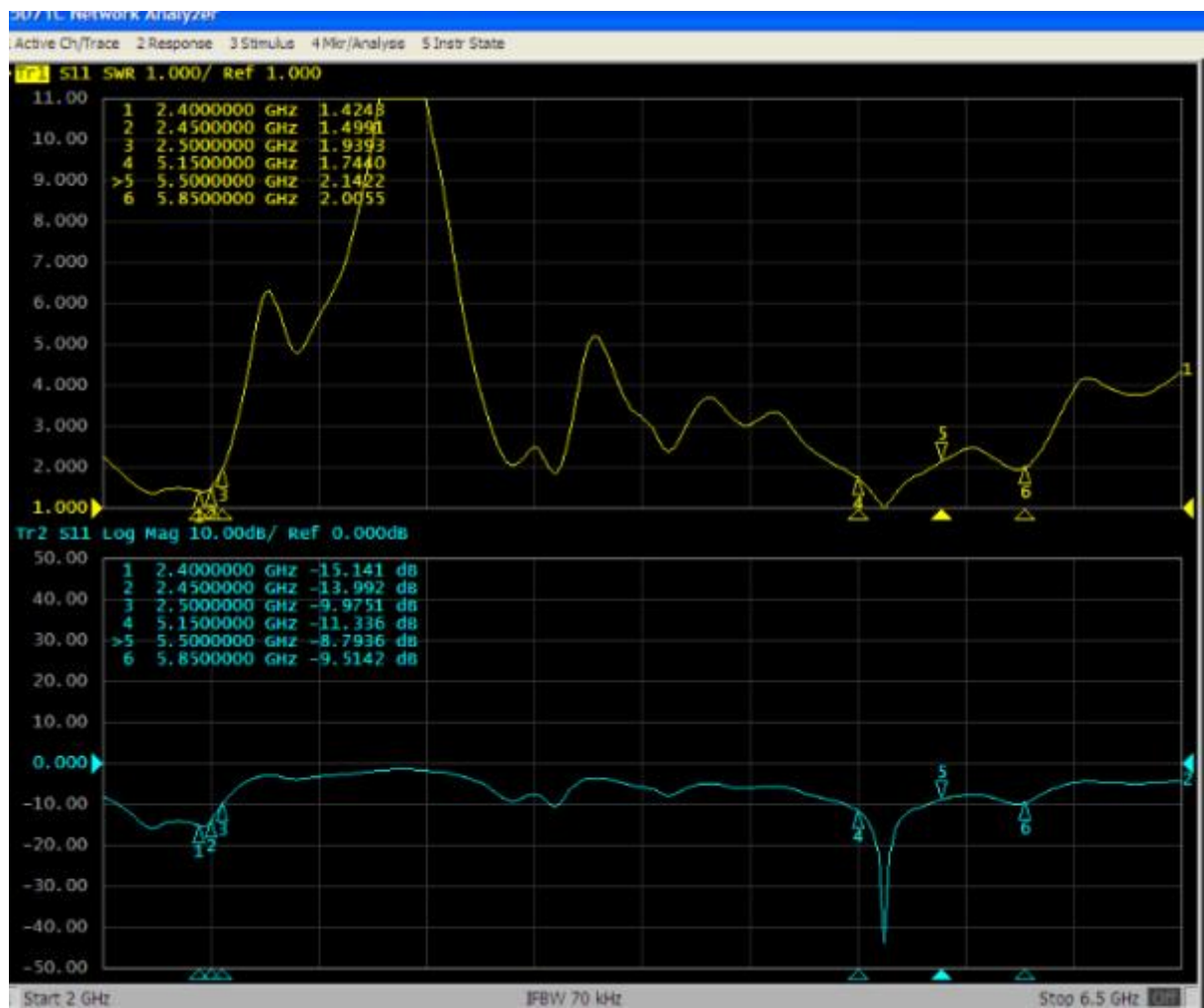
# 东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

Product Number:QZ-HL006

Product Name: Antenna

## 3. Antenna - S Parameter Test Data



## 4. Antenna - Radiation Pattern Test Data

| Frequency ID    | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     | 21     | 22     | 23     | 24     | 25     | 26     |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz) | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 | 5150.0 | 5200.0 | 5250.0 | 5300.0 | 5350.0 | 5400.0 | 5450.0 | 5500.0 | 5550.0 | 5600.0 | 5650.0 | 5700.0 | 5750.0 | 5800.0 | 5850.0 |
| Gain (dBi)      | -1.97  | -1.66  | -1.59  | -1.76  | -1.42  | -1.15  | -1.05  | -1.16  | -1.48  | -1.42  | -1.22  | -1.04  | -1.42  | -1.19  | -0.44  | -0.09  | -1.08  | -0.36  | 0.01   | 0.04   | -0.80  | -1.37  | -1.12  | -0.46  | -0.91  | -1.08  |
| Efficiency (%)  | 12.76  | 13.54  | 14.32  | 14.78  | 15.39  | 16.36  | 16.77  | 17.45  | 17.58  | 17.65  | 17.93  | 19.15  | 16.82  | 16.02  | 16.77  | 17.18  | 17.97  | 17.61  | 20.32  | 19.62  | 18.98  | 18.30  | 17.14  | 18.32  | 18.93  | 18.83  |

# 东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

Product Number:QZ-HL006

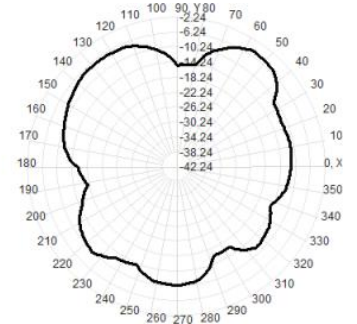
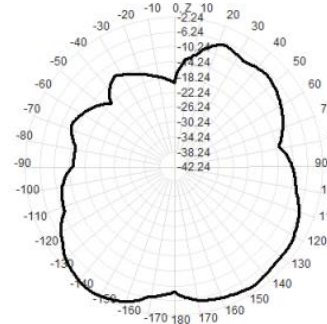
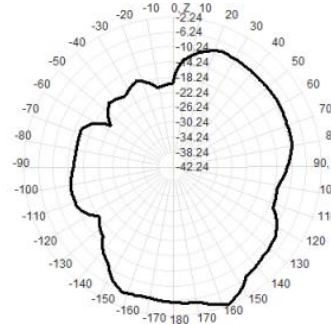
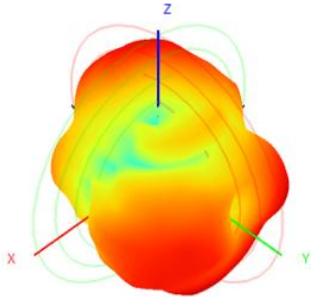
Product Name: Antenna

XZ

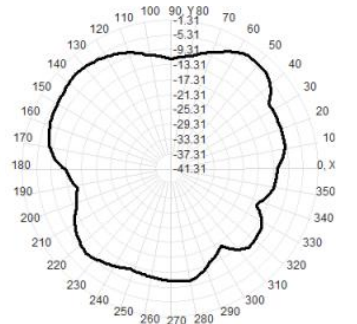
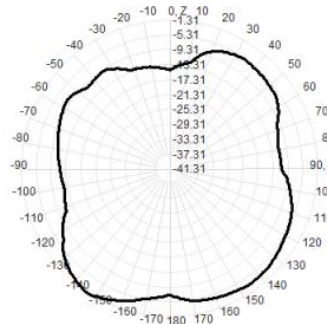
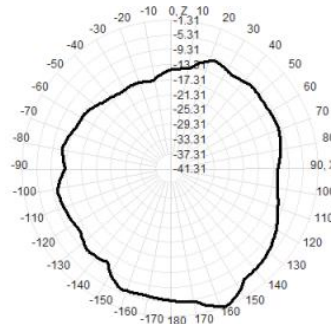
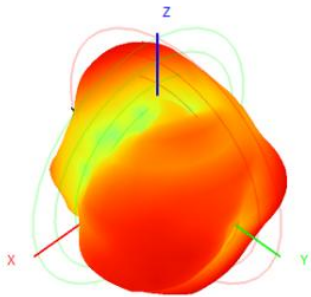
YZ

XY

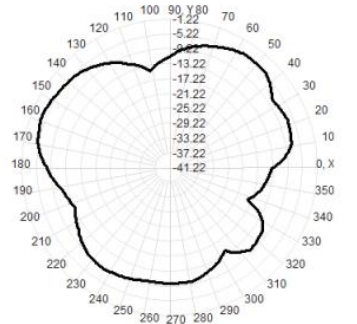
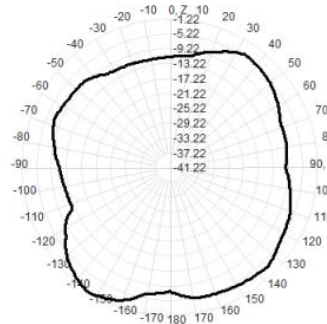
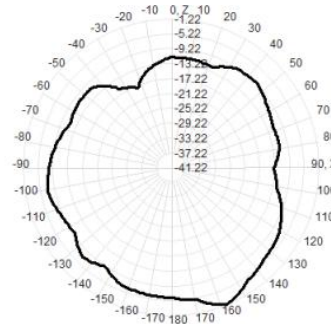
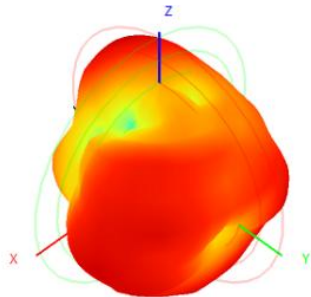
2400MHz



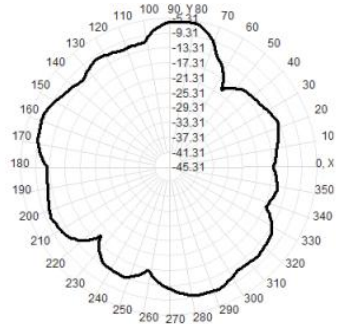
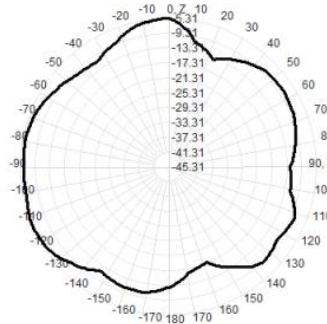
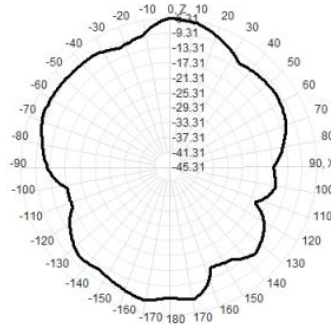
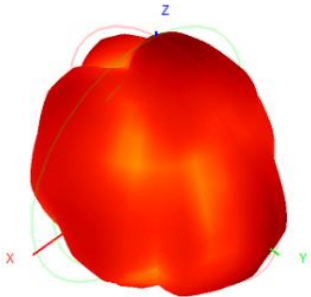
2450MHz



2500MHz



5150MHz



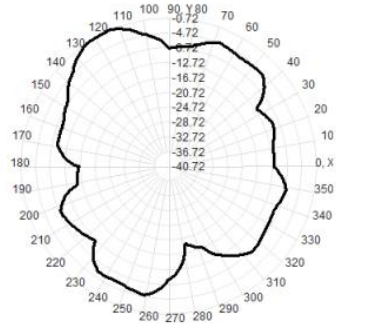
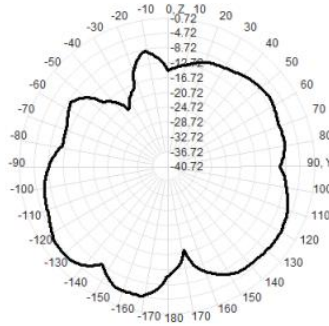
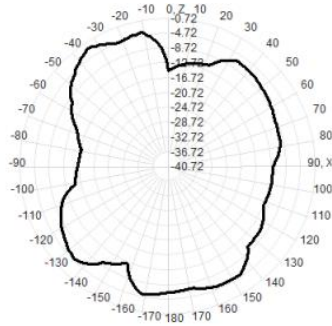
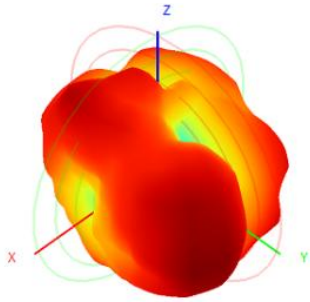
# 东莞市群创通信技术有限公司

Dongguan QunChuang Communication Technology Co.,Ltd.

**Product Number:QZ-HL006**

**Product Name: Antenna**

**5550MHz**



**5850MHz**

