



深圳市华创翔科技有限公司

SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

产品规格书

PRODUCT SPECIFICATION SHEET

Customer: 湘凡科技

Product Name: 2.4GHz Antenna 音频控制器

Product code: HCX-TX-DZCM672

Customer code: CM672

Sample date: 2024-3-13

HCX Confirm:

| Approval | Quality | Engineer | Signature |
|----------|---------|----------|-----------|
| David | Henry | lisa | |

Customer Confirm:

| Approval | Quality | Engineer | Signature |
|----------|---------|----------|-----------|
| | | | |

Confirm result: PASS NG Others



深圳市华创翔科技有限公司

SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

SPECIFICATION ITEM

| Item | Description |
|--------|------------------|
| 1..... | SPEC |
| 2..... | SPEC ITEM |
| 3..... | Engineer drawing |
| 4..... | Performance |



深圳市华创翔科技有限公司

SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

RF Antenna Cable Assembly

Specification

1. Electrical Properties

- 1.1 Frequency Range.....2.4GHz-2.5GHz
- 1.2 Impedance.....50Ω Nominal
- 1.3 VSWR.....1.92:1MAX
- 1.4 Return Loss.....-14dB Max
- 1.5 Gain(peak).....3.75dBi
- 1.6 Cable loss.....0.02dBi Max
- 1.7 Polarization.....Linear Vertical
- 1.8 Conn.....N/A

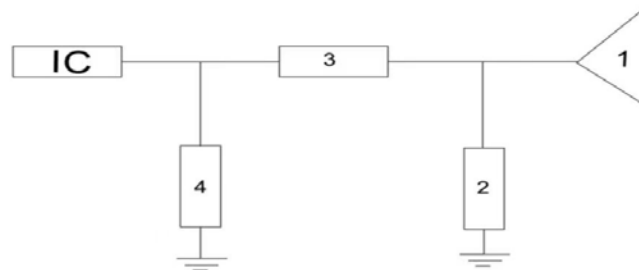
2. Physical Properties:

- 2.1 Antenna Material.....Cu
- 2.2 Operating Temp.....-20°C- +65°C
- 2.3 Storage Temp.....-30°C- +75°C

深圳市华创翔科技有限公司

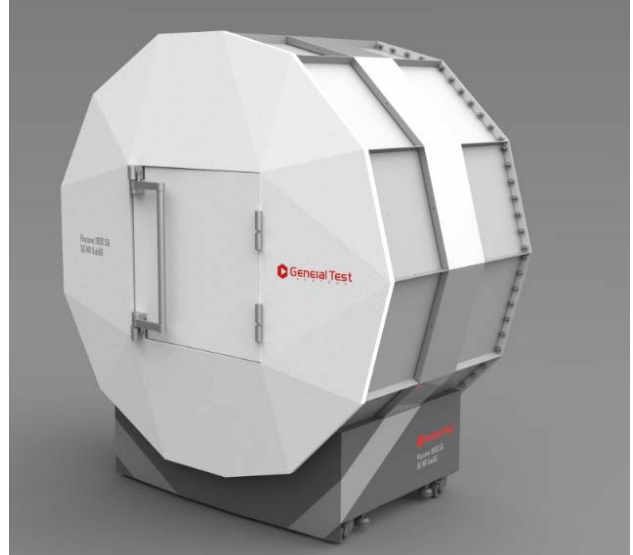
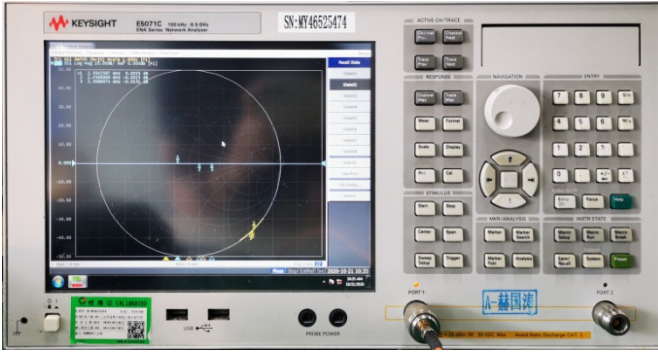
SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

FPC Antenna Test equipment
SPEC:2.4GHz Design Antenna

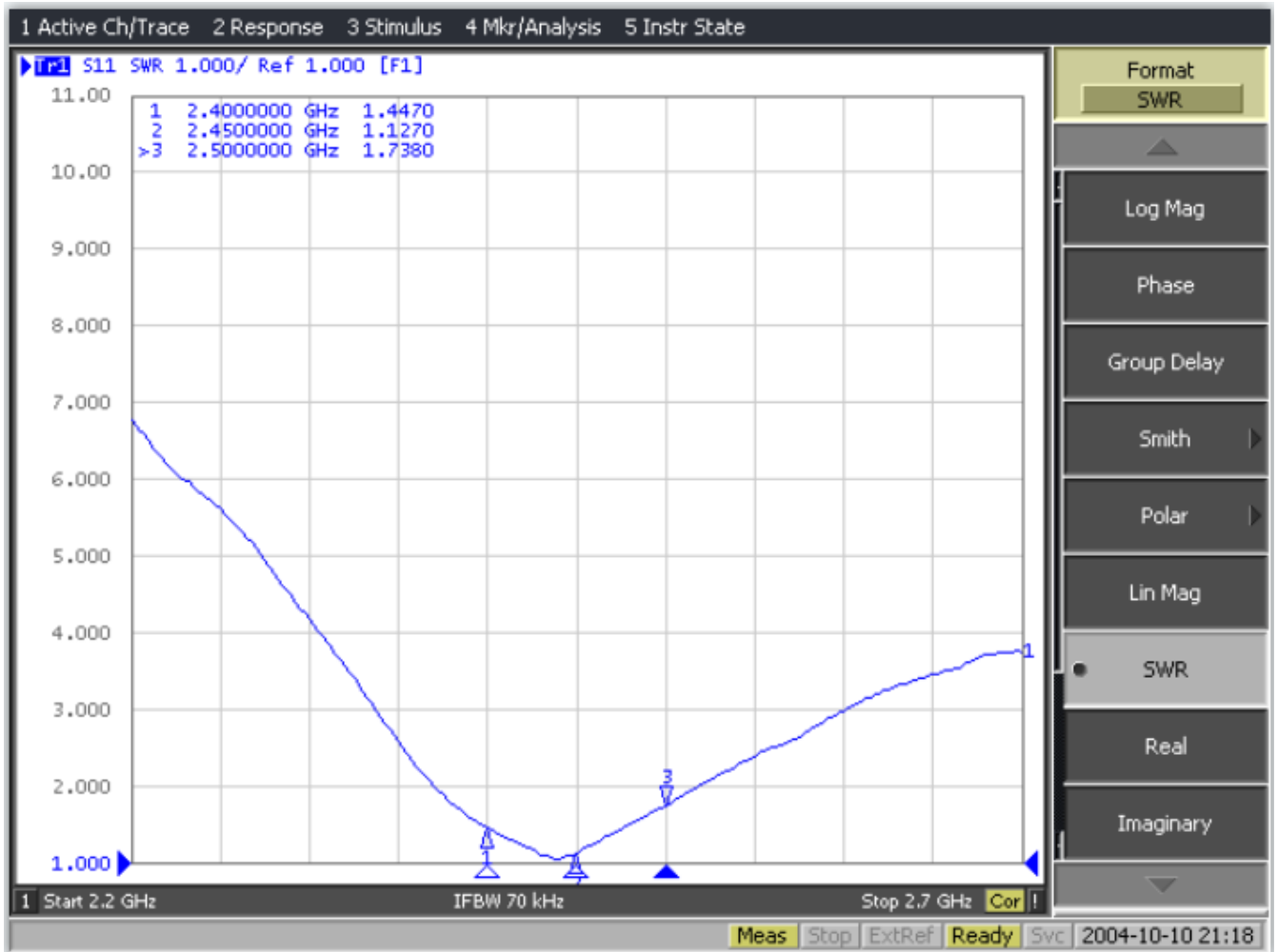


3 号位置：串 1.5nh

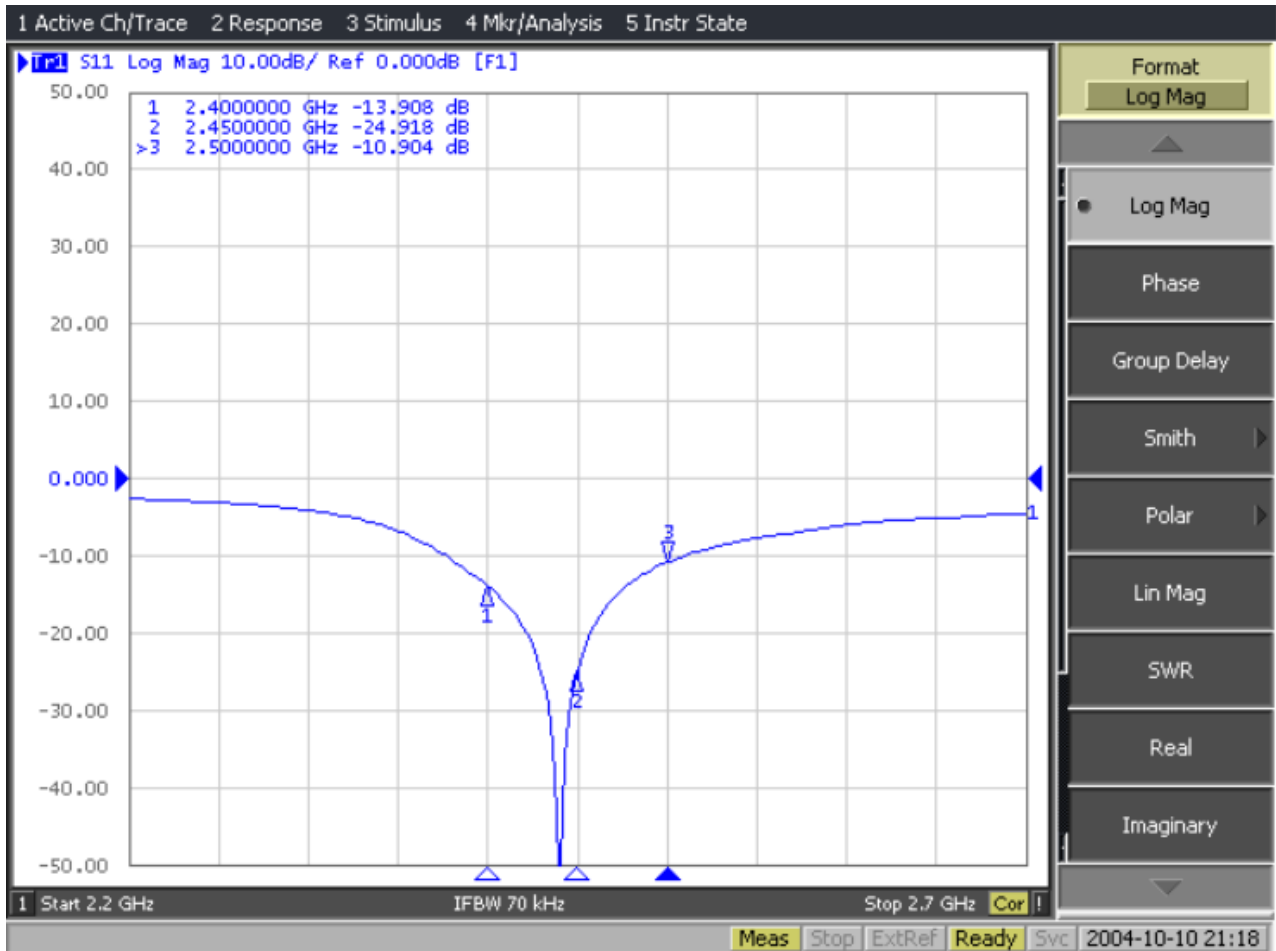
Antenna 实验室设备部份图片:



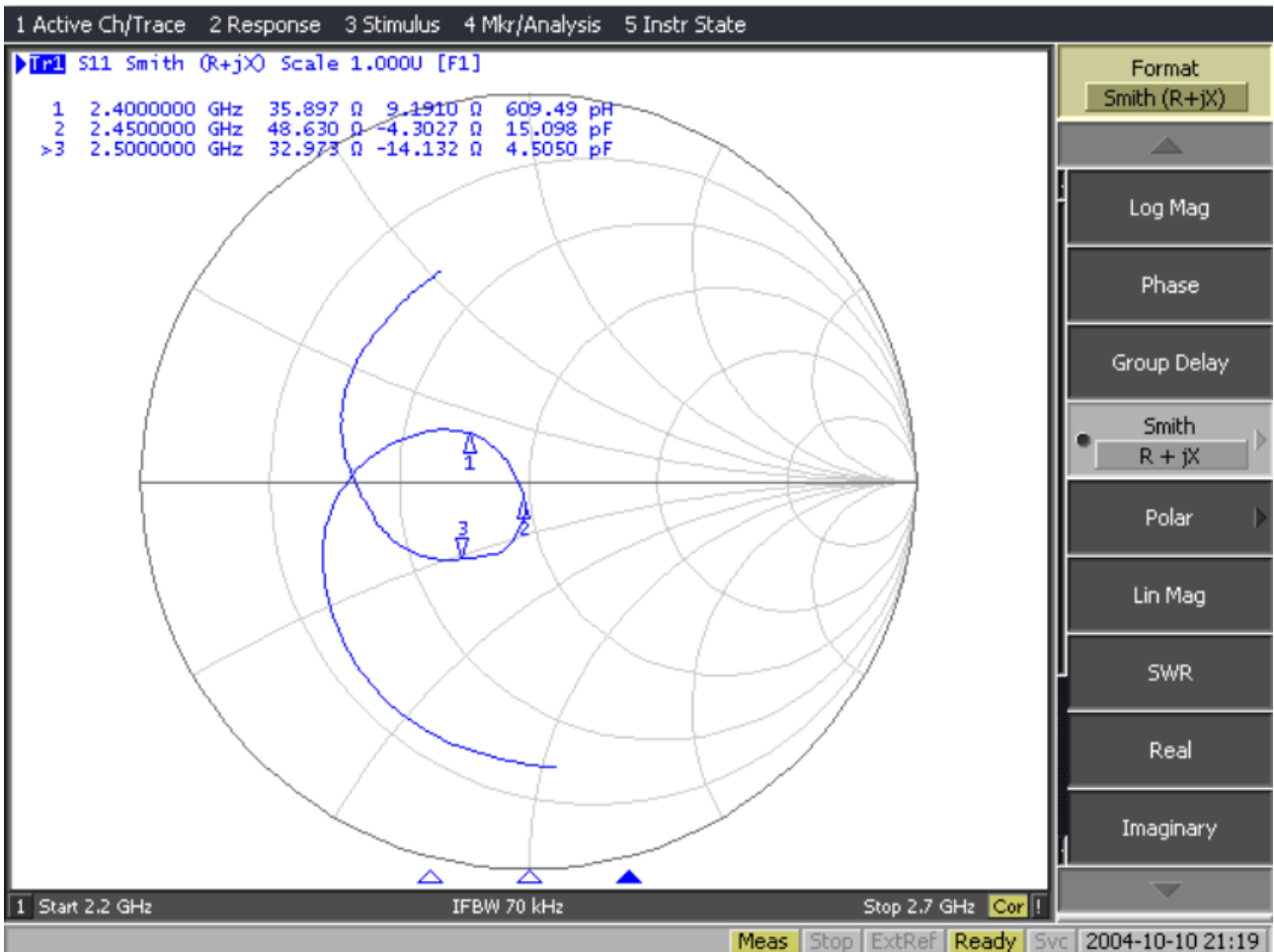
1.0 驻波比V.S.W.R



2.0 回波损耗 Log mag



3.0 史密斯图 Smith



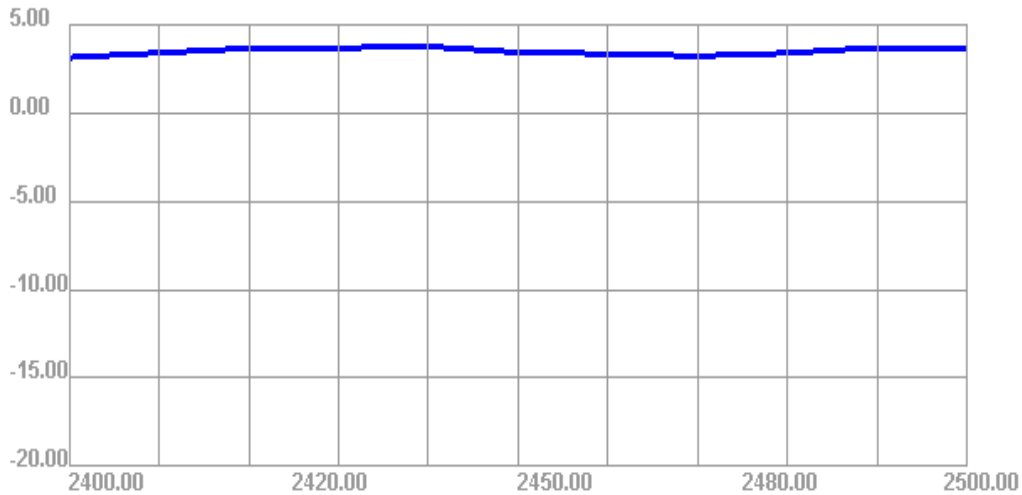
深圳市华创翔科技有限公司

SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

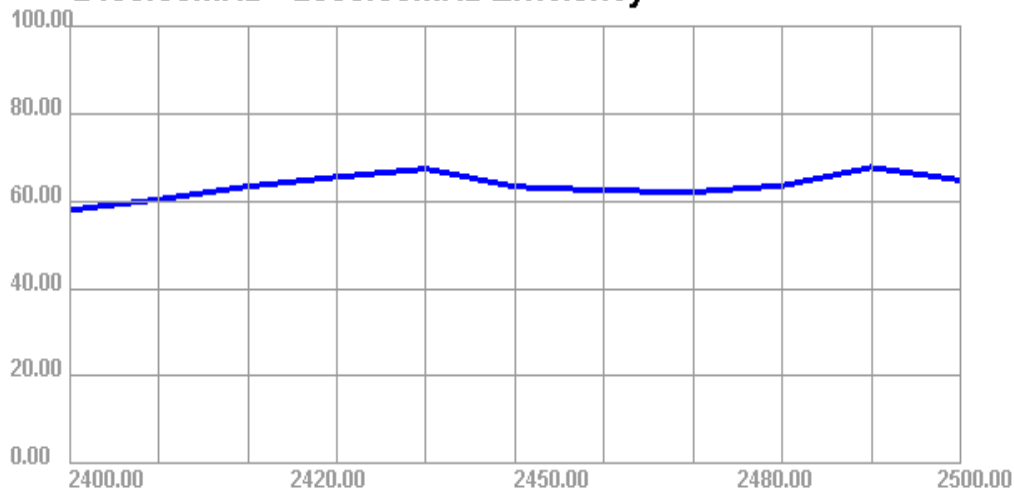
2.4Ghz Performance data:

| Passive Test For WIFI2.4 | | | | | | | | | | |
|--------------------------|----------|-----------|------------|------------|---------|---------|----------|----------|------------------|-----------------|
| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | UHS (%) | DHS (%) | Max (dB) | Min (dB) | irectivity (dBi) | Beamwidth (3dB) |
| 2400 | 57.94 | -2.37 | 3.13 | 0.98 | 20.049 | 37.891 | 3.13 | -13.85 | 5.5 | 0 |
| 2410 | 60.38 | -2.19 | 3.4 | 1.25 | 20.446 | 39.931 | 3.4 | -14.73 | 5.59 | 0 |
| 2420 | 63.37 | -1.98 | 3.66 | 1.51 | 21.073 | 42.297 | 3.66 | -14.31 | 5.64 | 0 |
| 2430 | 65.5 | -1.84 | 3.68 | 1.53 | 21.654 | 43.848 | 3.68 | -15.27 | 5.52 | 0 |
| 2440 | 67.37 | -1.72 | 3.75 | 1.6 | 22.297 | 45.069 | 3.75 | -17.35 | 5.47 | 0 |
| 2450 | 63.3 | -1.99 | 3.43 | 1.28 | 21.205 | 42.094 | 3.43 | -20.54 | 5.42 | 0 |
| 2460 | 62.43 | -2.05 | 3.34 | 1.19 | 21.272 | 41.154 | 3.34 | -27.17 | 5.39 | 0 |
| 2470 | 62.1 | -2.07 | 3.22 | 1.07 | 21.559 | 40.539 | 3.22 | -29.35 | 5.29 | 0 |
| 2480 | 63.53 | -1.97 | 3.39 | 1.24 | 22.311 | 41.219 | 3.39 | -22.69 | 5.36 | 0 |
| 2490 | 67.7 | -1.69 | 3.7 | 1.55 | 23.899 | 43.798 | 3.7 | -18.25 | 5.39 | 0 |
| 2500 | 64.75 | -1.89 | 3.61 | 1.46 | 22.903 | 41.844 | 3.61 | -16.65 | 5.5 | 0 |

2400.00MHz - 2500.00MHz Gain



2400.00MHz - 2500.00MHz Efficiency



深圳市华创翔科技有限公司

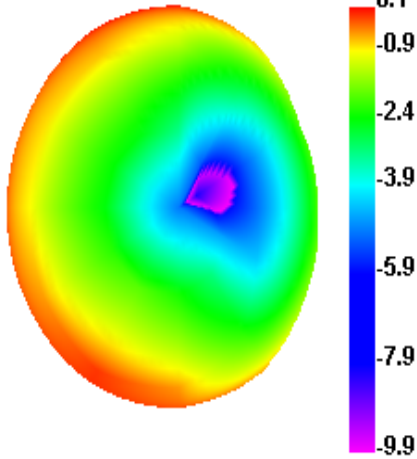
SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

Frequency:2.40GHz

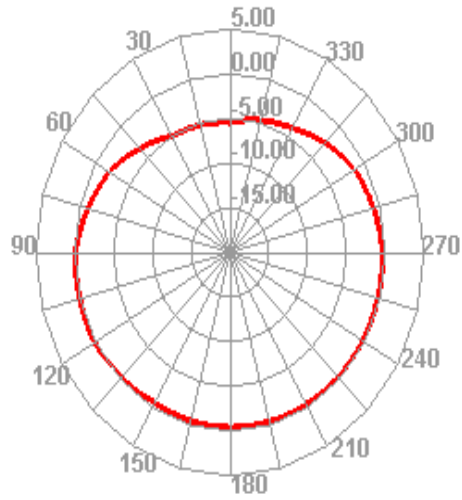
Peak Gain:3.13dBi

Efficiency:57.94%

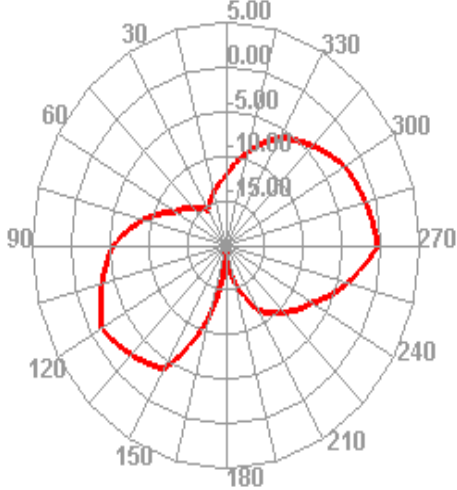
2400.000MHz



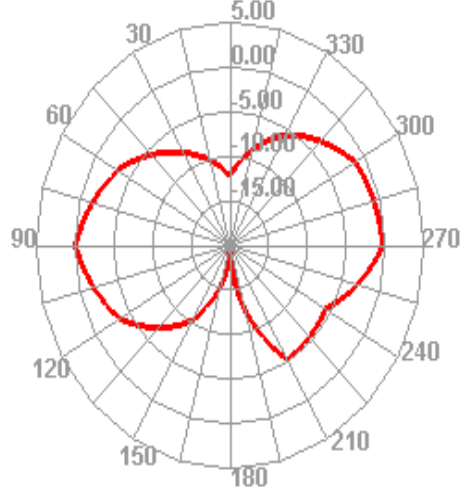
2400.000MHz H



2400.000MHz E1



2400.000MHz E2



深圳市华创翔科技有限公司

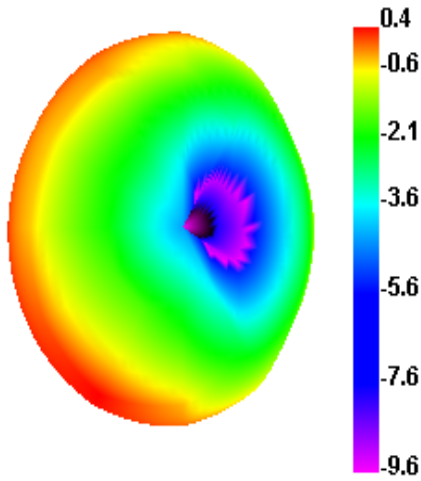
SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

Frequency:2.45GHz

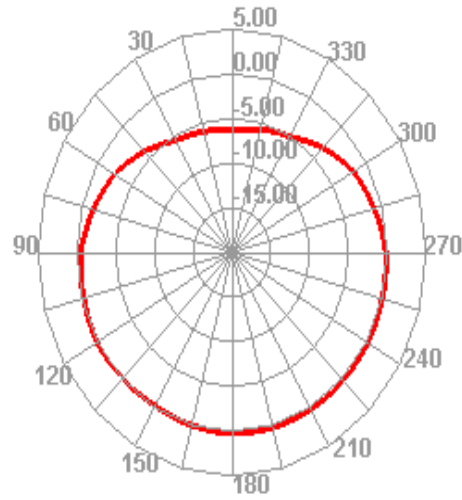
Peak Gain:3.43dBi

Efficiency:63.30%

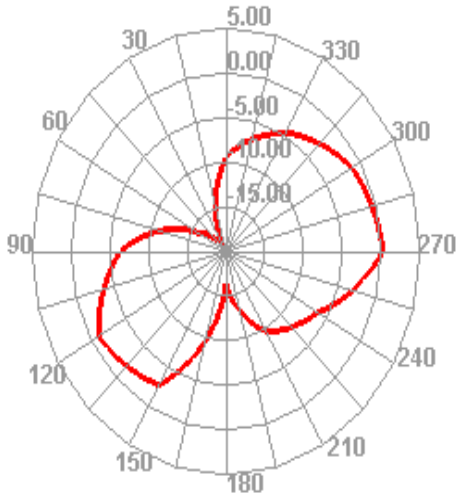
2450.000MHz



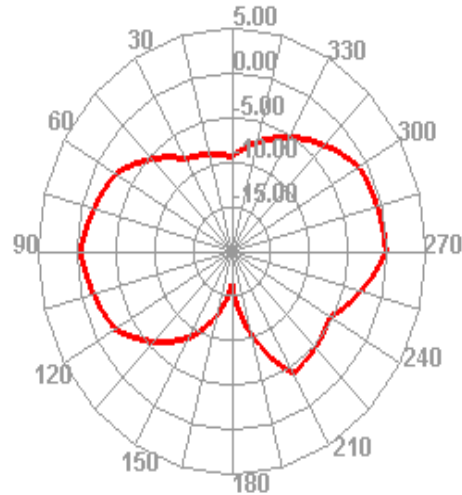
2450.000MHz H



2450.000MHz E1



2450.000MHz E2



深圳市华创翔科技有限公司

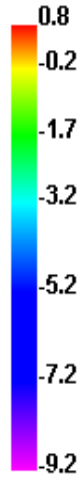
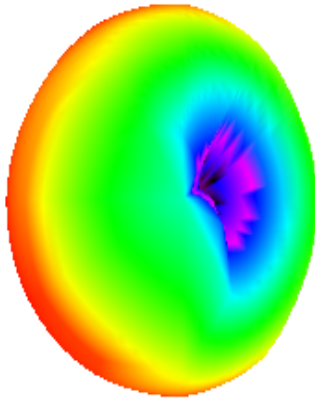
SHEN ZHEN WACOSUN TECHNOLOGY CO, LTD

Frequency:2.50GHz

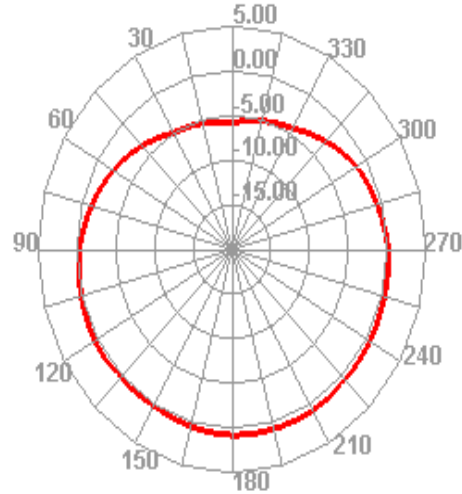
Peak Gain:3.61dBi

Efficiency:64.75%

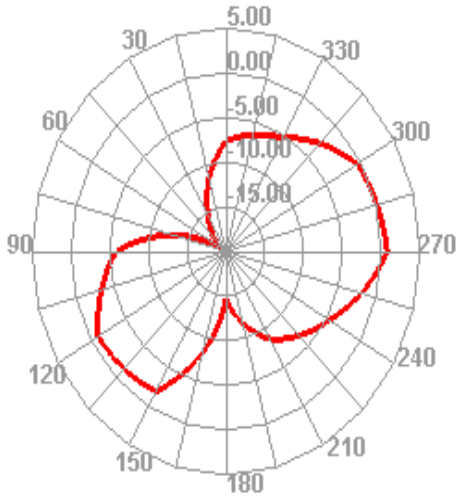
2500.000MHz



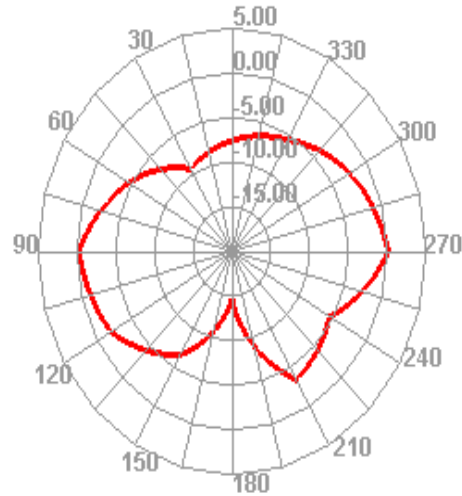
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



工程师建议：综合以上数据，天线满足性能需求，可量产！

~~报告结束~~

~~The end~~