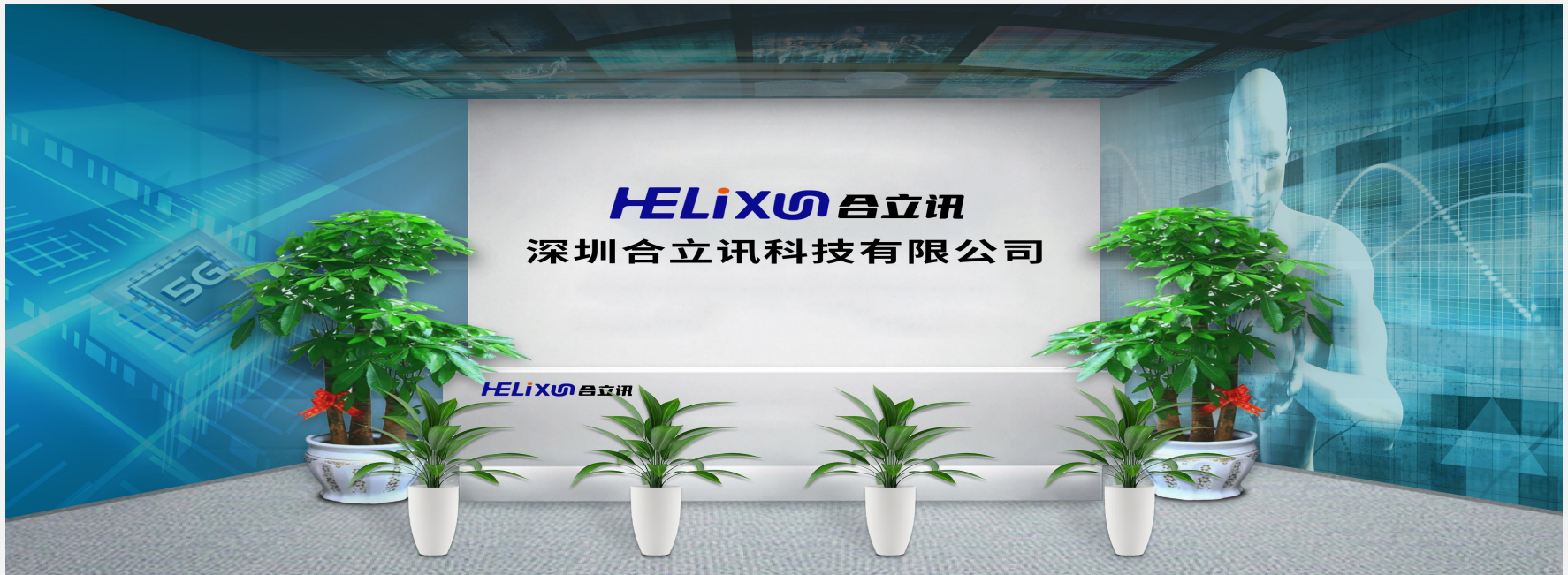


# Antenna Test Report



|                  |                                      |
|------------------|--------------------------------------|
| Customer         | Shenzhen Changyin Electronic Co.,Ltd |
| Project          | Rob antenna                          |
| Antenna Revision | A0                                   |
| Prepared by      | 15993920520                          |
| Checked by       | 17279710721                          |
| Date:            | 2023. 06. 21                         |

## ***Purpose***

This report is to measure the performance of antenna for rob antenna

The antenna operating frequency at 820-960MHz All test data are showed as below.

### ***Content***

1. est system
- 2.Product Overview Dimension
3. Test Result
  - 3.1 S11 Parameter
  - 3.2 Gain & Efficiency
  - 3.3 2D Pattern

## 1. Test System

| Sequence Number   | Test Item         | equipment                     |
|-------------------|-------------------|-------------------------------|
| S parameter       | VSWR              | Agilent 5071C & Agilent 5071B |
| OTA Test          | TRP&TIS           | Agilent 8960 & CMW500 STIMO   |
| Gain & Efficiency | Gain & Efficiency | SATIMO<br>Agilent 5071C       |



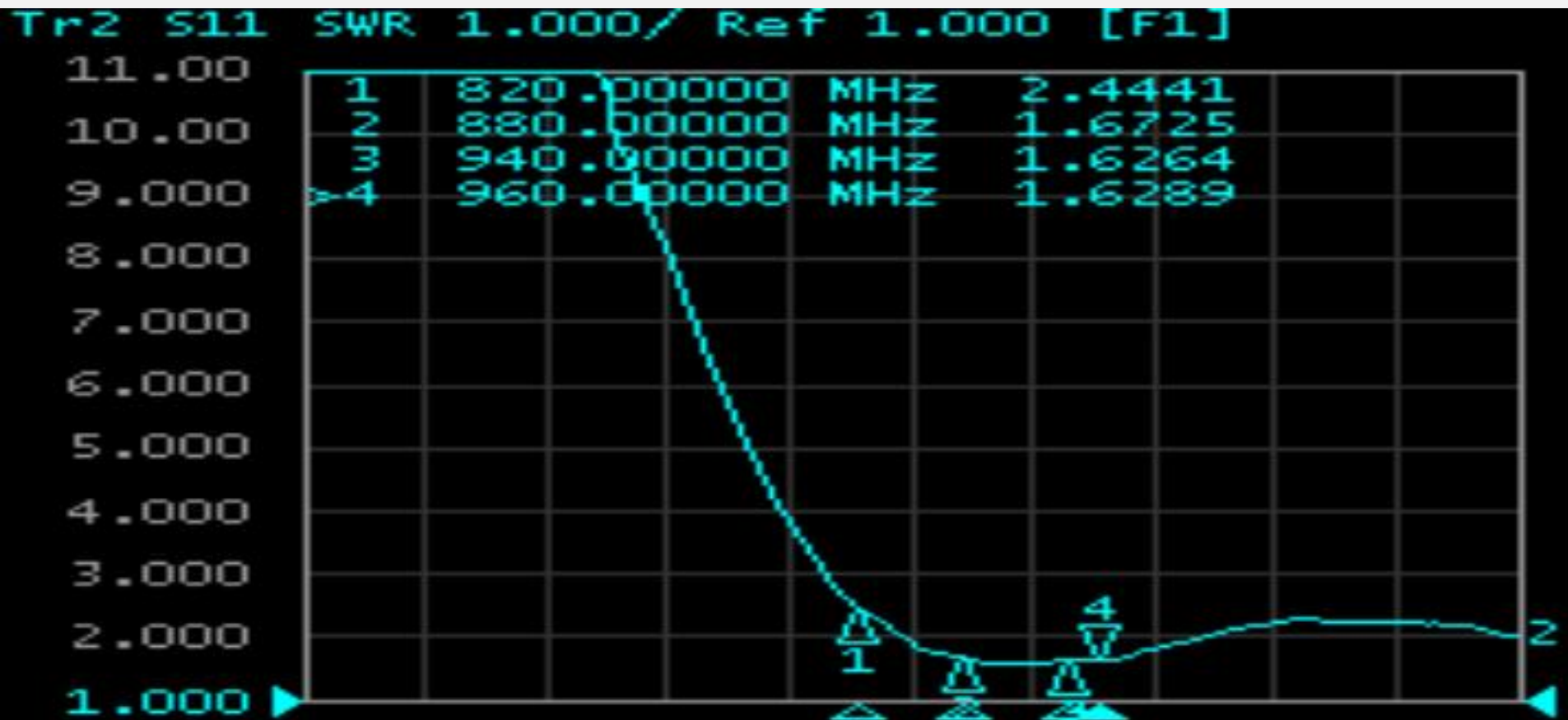
## ***2.Product Overview & Dimension***

Leighth: 19.5cm



## 3.Test Result

### 3.1 S11 Parameter-VSWR



|                    |      |      |      |      |
|--------------------|------|------|------|------|
| requeency<br>(MHz) | 820  | 880  | 940  | 960  |
| VSWR               | 2.44 | 1.67 | 1.62 | 1.62 |

## 3. Test Result

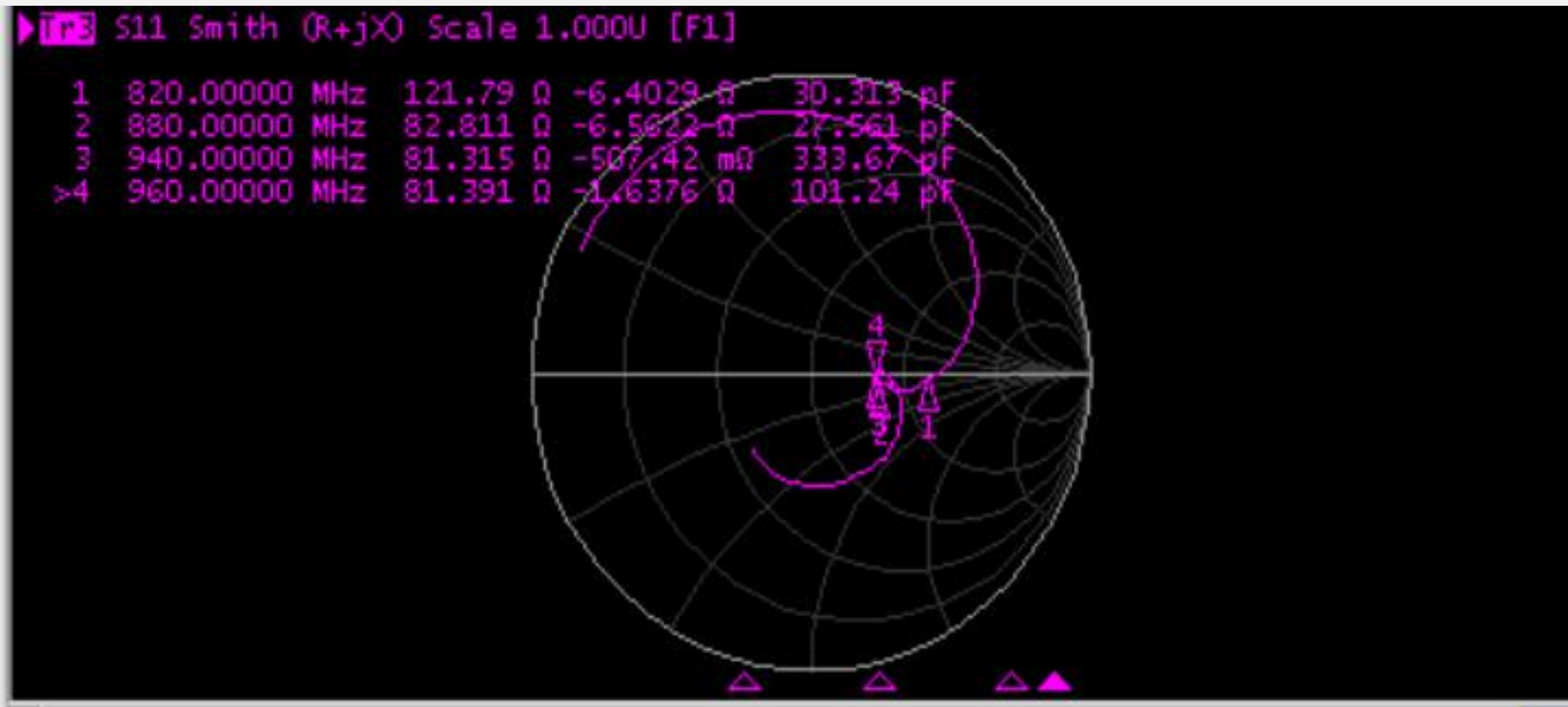
### 3.1 S11 Parameter-Log Mag



|                 |       |        |        |        |
|-----------------|-------|--------|--------|--------|
| Frequency (MHz) | 820   | 880    | 940    | 960    |
| Log Mag         | -7.55 | -11.98 | -12.45 | -12.42 |

## 3.Test Result

### 3.1 S11 Parameter-Smith



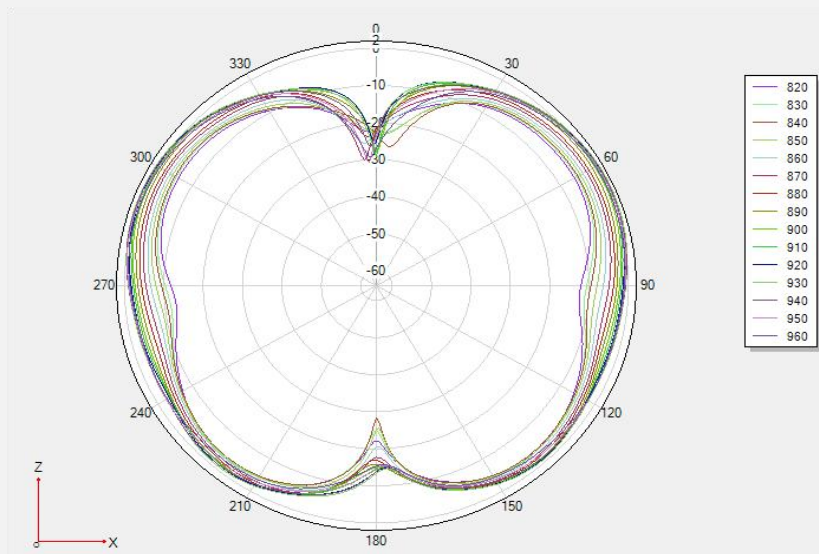
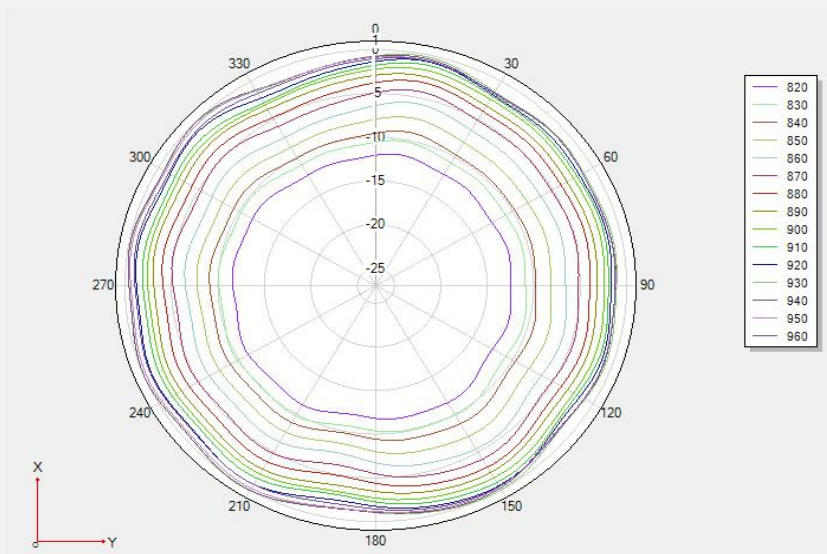
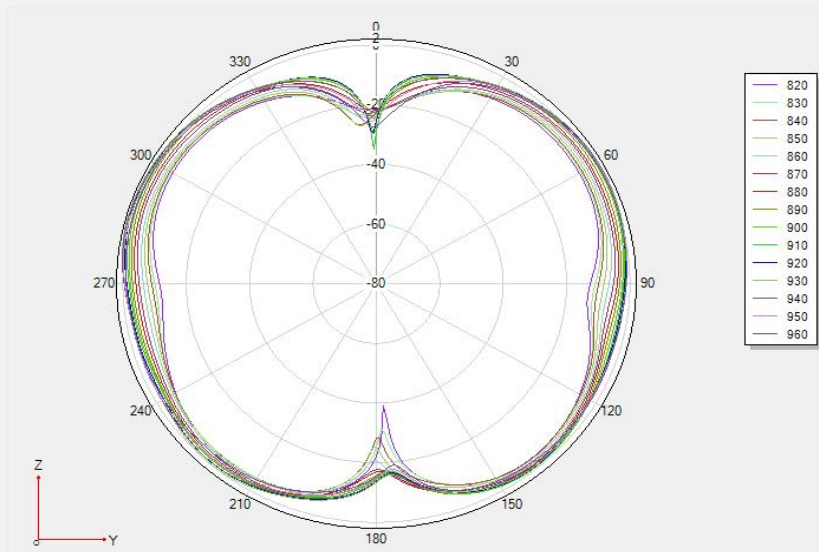
| Frequency (MHz) | 820    | 880   | 940   | 960   |
|-----------------|--------|-------|-------|-------|
| Smith(Ω)        | 121.79 | 82.81 | 81.31 | 81.39 |

### 3.Test Result 3.2 Gain & Efficiency——ANT

| Frequency (MHz) | Efficiency (%) | Max GAIN (dBi) |
|-----------------|----------------|----------------|
| 820             | 25.52          | -1.93          |
| 830             | 25.14          | -1.84          |
| 840             | 28.53          | -1.11          |
| 850             | 29.64          | -2.41          |
| 860             | 31.19          | -1.47          |
| 870             | 36.98          | -0.83          |
| 880             | 44.06          | -0.54          |
| 890             | 50.12          | -0.11          |
| 900             | 56.36          | 0.58           |
| 910             | 60.81          | 0.99           |
| 920             | 66.07          | 1.31           |
| 930             | 64.29          | 1.86           |
| 940             | 64.28          | 1.61           |
| 950             | 64.31          | 1.12           |
| 960             | 63.45          | 0.81           |

## 3. Test Result

### 3.3 2D Pattern — ANT





**Manufacturer :**

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Gongle Community, Xixiang Street, Bao'an District, Shenzhen

*Thank you!*