



上海增信电子有限公司  
Signal Plus Technology Co., Ltd.

规格承认书  
SPECIFICATION FOR APPROVAL

日期  
DATE: 2023.04.07

版本  
REV.: C

客户  
CUSTOMER: DAVO LINK

客户料号  
CUSTOMER P/N:

品名  
PART NAME: Internal PCB FR4 Ant, 2.4G&5G 1.37 low loss black cable 120mm  
with RF CONN for DVW-632

供方料号  
SUPPLIER P/N: 6307F00020

送样日期Date: 送样数量Q'TY: Pcs

| 客户确认CUSTOMER APPROVED BY |                  |                   |
|--------------------------|------------------|-------------------|
| 核准<br>Approved by        | 审核<br>Checked by | 拟制<br>Prepared by |
|                          |                  |                   |

| 供方确认SUPPLIER SIGNATURE |                  |                   |
|------------------------|------------------|-------------------|
| 核准<br>Approved by      | 审核<br>Checked by | 拟制<br>Prepared by |
| Jack                   |                  | andy              |

ZX-QT-RD-0011-A1

Add:上海市徐汇区桂箐路69号30栋605室 Tel:021-54266190 Fax:021-54266191

# Specification

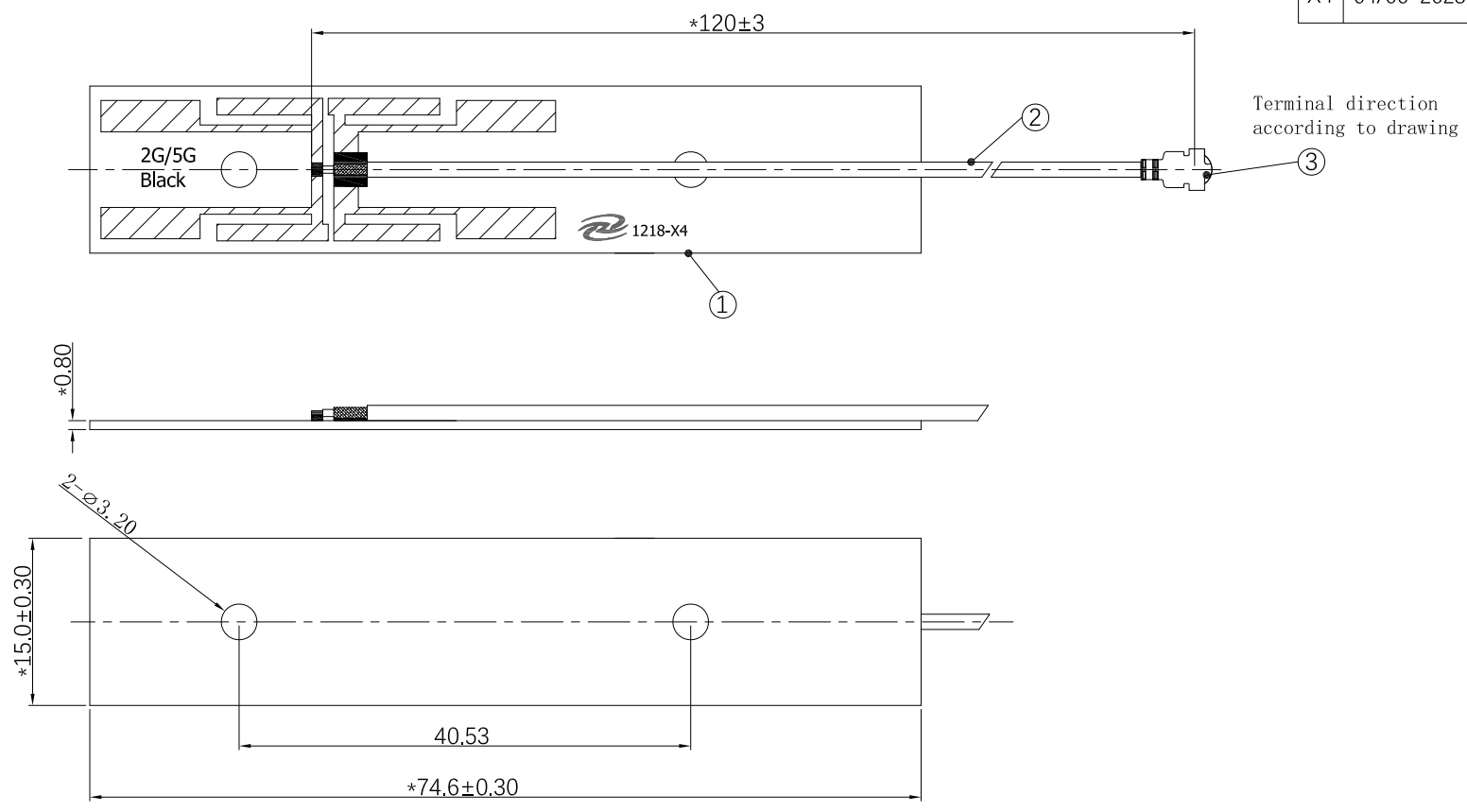
## 1. Electrical Properties :

- 1.1 Frequency Range.....2400~2500MHz & 5150~5850MHz
- 1.2 Impedance ..... 50  $\Omega$
- 1.3 VSWR .....  $\leq 1.8$
- 1.5 Gain ..... 5dBi @ 2400~2500MHz  
6dBi @ 5150~5850MHz

## 2. Physical Properties :

- 2.1 Cable..... RF 1.37
- 2.2 Connector ..... IPEX compatible
- 2.3 Operating Temp. .... -20°C ~ +65°C
- 2.4 Storage Temp. .... -30°C ~ +75°C

| REV | DATE       | DESCRIPTION                               |
|-----|------------|---|
| X1  | 03/06-2023 | New Issue                                 |
| X2  | 03/15-2023 | Correct electrical performance parameters |
| X3  | 03/30-2023 | Change the length of the PCB antenna      |
| X4  | 04/06-2023 | Correct electrical performance parameters |



- 1.ELECTRICAL PROPERTIES:
- 1.1 Frequency Range.....2.4~2.5GHz/5.15~5.85GHz
  - 1.2 Impedance.....50 Ohm Nominal
  - 1.3 VSWR.....1.8(Max)(with housing)
  - 1.4 Gain.....5.0dBi@2400~2500MHz  
6.0dBi@5150~5850MHz
- 2.These Products are in conformity with ROHS 2.0
- 3.With"\*"Is Important Dimension.

| NO | DESCRIPTION   | Q'TY | REMARK                       |
|----|---------------|------|------------------------------|
| 3  | Connector     | 1    | IPEX compatible              |
| 2  | 2.4G&5G Cable | 1    | 1.37 Low Loss Black Cable    |
| 1  | PCB           | 1    | FR4, single panel, Black oil |

CUSTOMER'S SINGATURE

|      |      |             |
|------|------|-------------|
| XXX. | ±2.0 | APPROVED    |
| XX.  | ±1.0 |             |
| X.   | ±0.5 | CHECKED     |
| .X   | ±0.3 |             |
| .XX  | ±0.2 | DRAWING yzq |
| ⊕    |      |             |

|                                  |      |            |
|----------------------------------|------|------------|
| CUSTOMER:                        |      |            |
| PART NO:                         |      |            |
| PART NAME: PCB Antenna (DVW-632) |      |            |
| Z&X P/NO: 6307F00020             |      |            |
| REV                              | UNIT | FILE:      |
| x4                               | mm   | SHEET: 1/1 |

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## Antenna Test Report

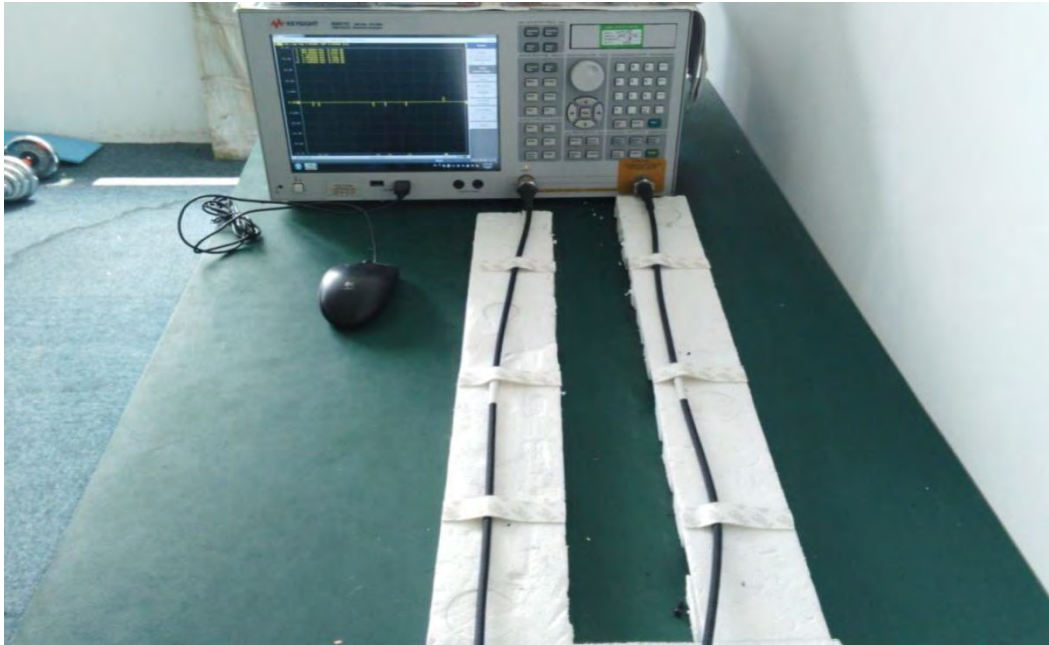
DVW-632

## 1. RF Fixture Experiment

### 1.1 Test Setup

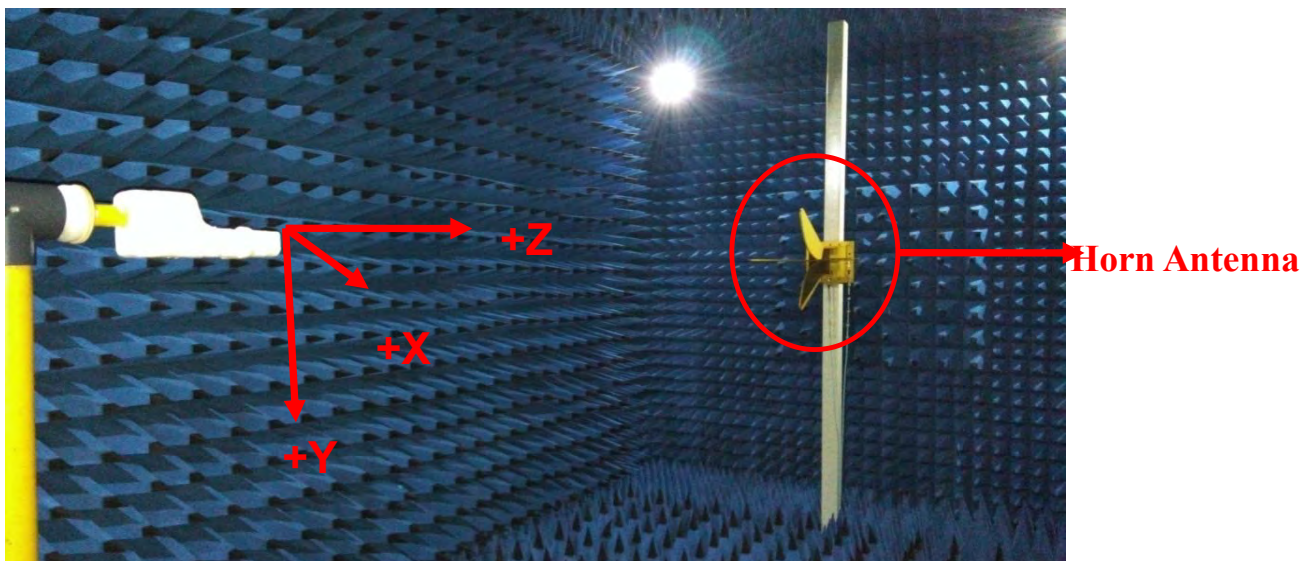
#### 1.1.1 VNA Test Setup

VSWR and Return Loss measurements ( $S_{11}$ ) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

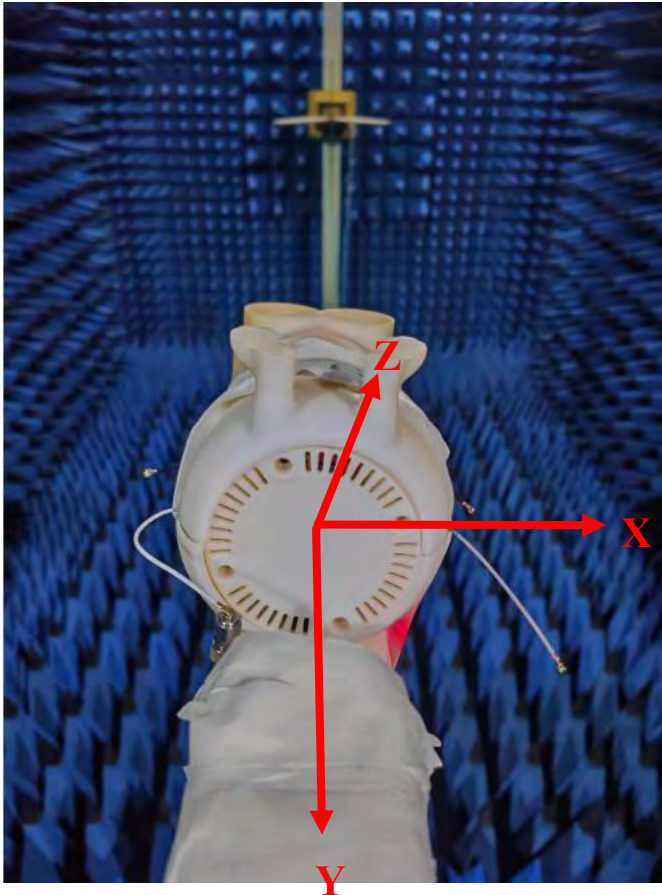


#### 1.1.2 Anechoic Chamber Test Setup

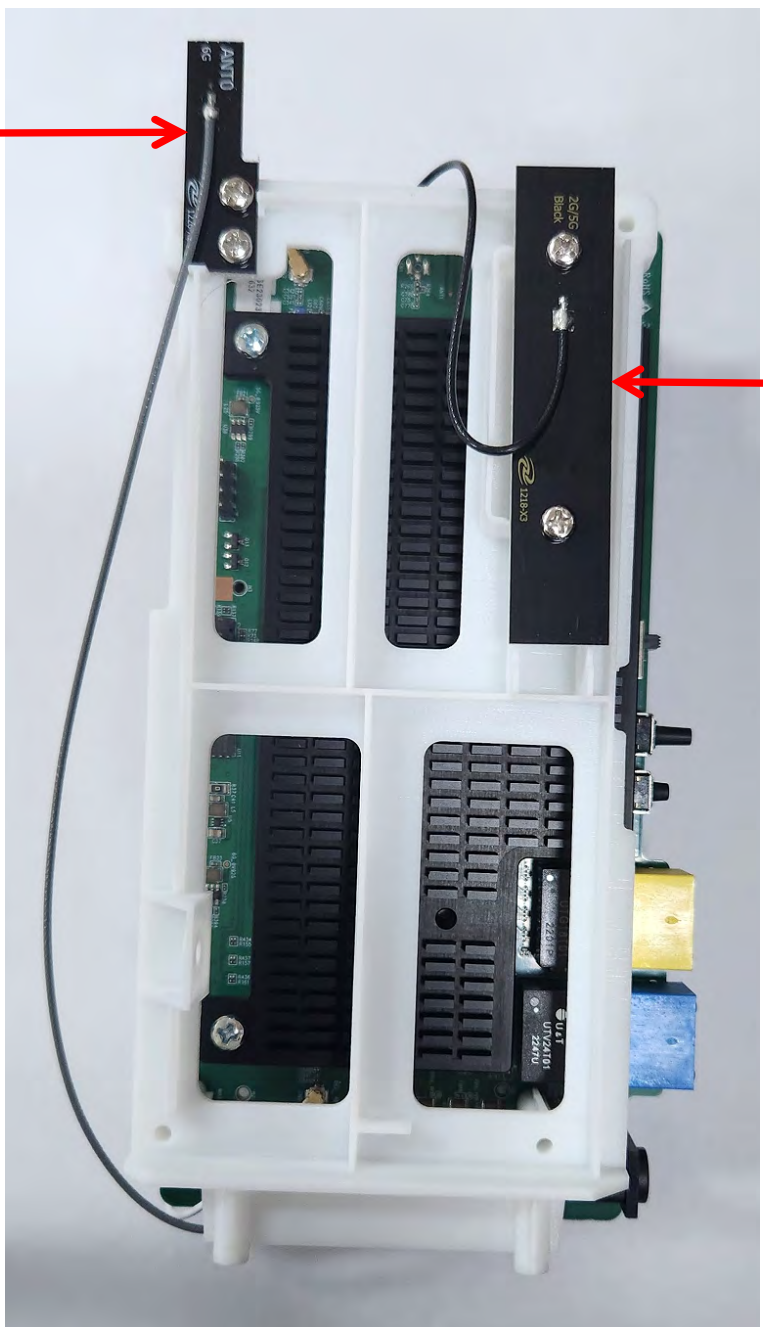
The gain of the antenna was measured in the anechoic chamber. The chamber provides less than  $-30$  dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m\*4m\*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



2. Antenna Solution



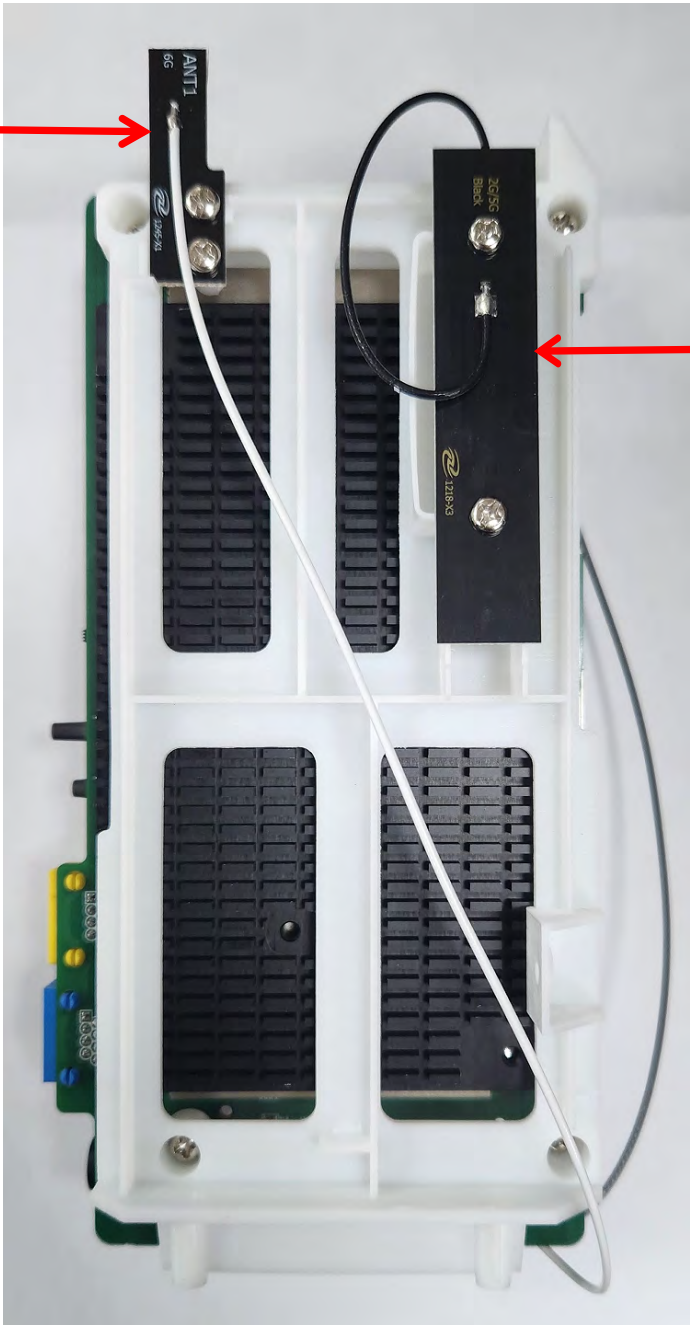
Ant0 6G  
240mm Cable



Ant1 2&5G  
120mm Cable



Ant1 6G  
250mm Cable



Ant0 2&5G  
120mm Cable



## Data Preview

### Ant0-2&5G 120mm Cable

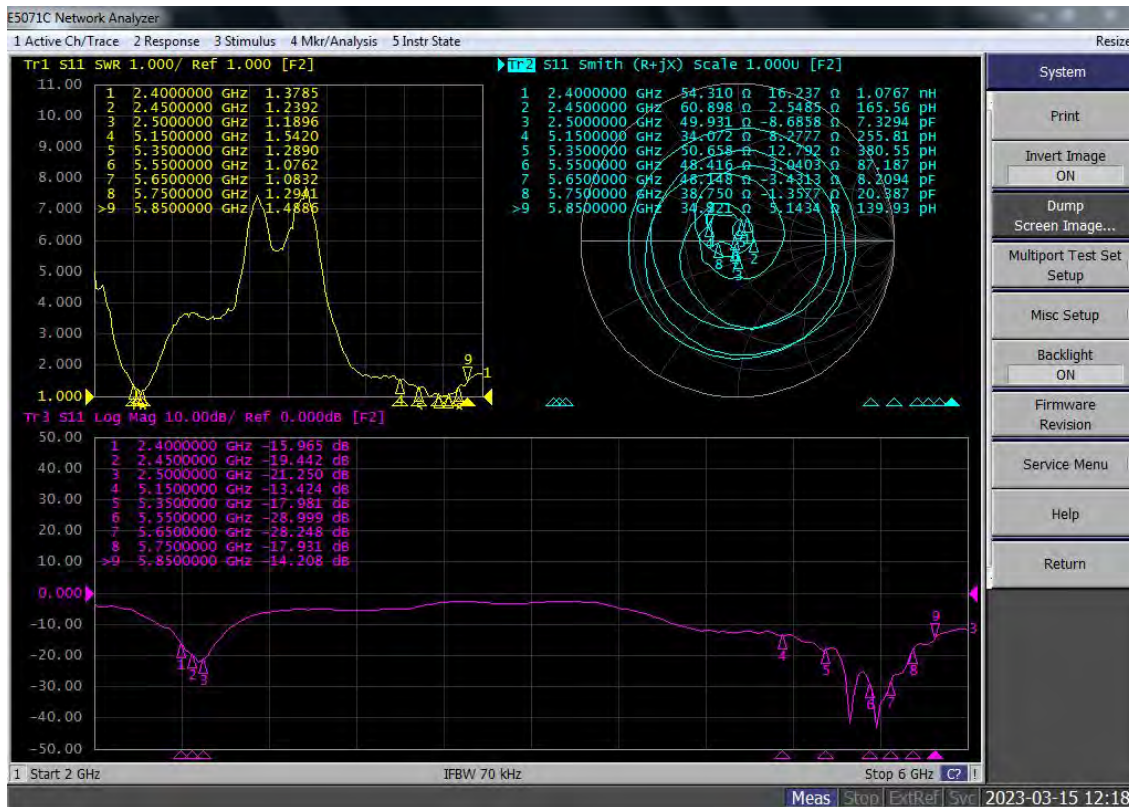
| Freq.(MHz) | 2400  | 2450  | 2500  | 5150  | 5350  | 5550  | 5650  | 5750  | 5850  |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| VSWR       | 1.38  | 1.24  | 1.19  | 1.54  | 1.29  | 1.08  | 1.08  | 1.29  | 1.49  |
| Gain(dBi)  | 5.84  | 5.96  | 5.91  | 5.76  | 6.17  | 6.55  | 6.14  | 6.58  | 6.42  |
| Eff. (%)   | 76.20 | 78.70 | 78.30 | 78.50 | 77.80 | 75.90 | 70.80 | 74.10 | 75.60 |

### Ant1-2&5G 120mm Cable

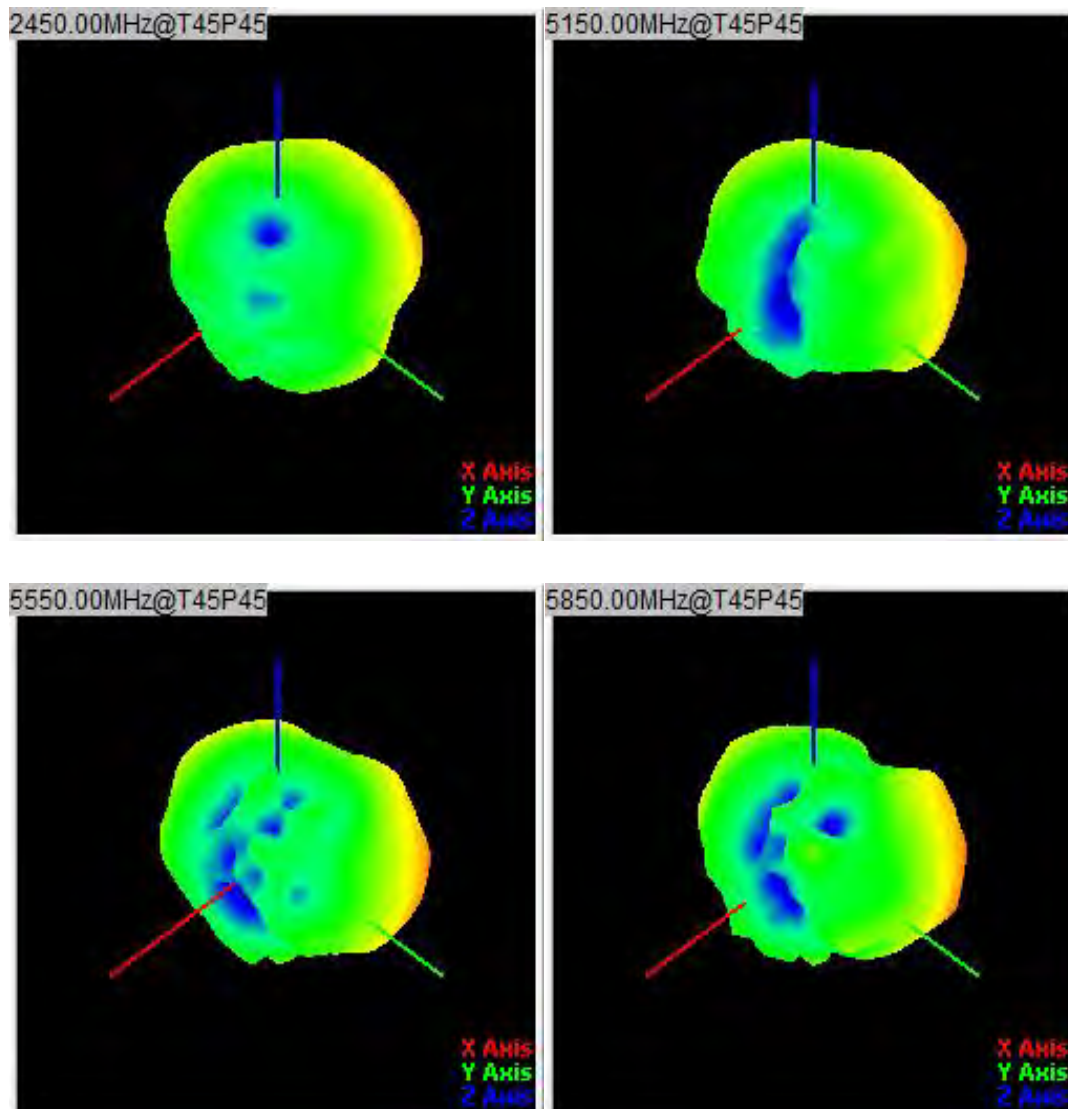
| Freq.(MHz) | 2400  | 2450  | 2500  | 5150  | 5350  | 5550  | 5650  | 5750  | 5850  |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| VSWR       | 1.14  | 1.05  | 1.26  | 1.73  | 1.23  | 1.18  | 1.14  | 1.25  | 1.14  |
| Gain(dBi)  | 5.78  | 5.92  | 5.86  | 6.43  | 6.63  | 6.67  | 6.00  | 6.36  | 6.55  |
| Eff. (%)   | 77.00 | 79.30 | 80.60 | 79.00 | 79.30 | 76.70 | 70.50 | 74.80 | 79.00 |

## S11:

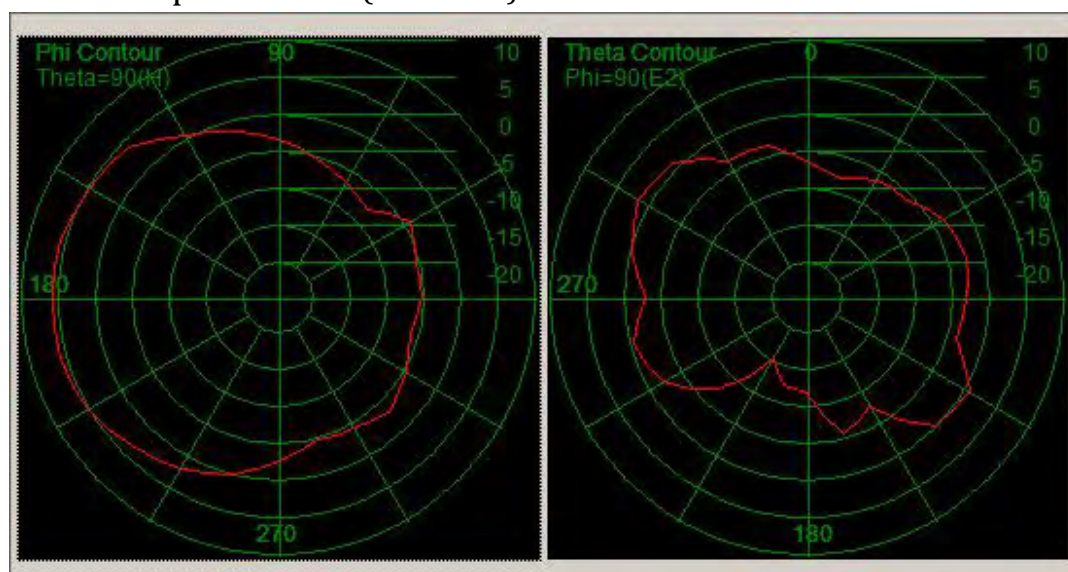
### Ant0-2&5G 120mm Cable



## Radiation patterns:3D

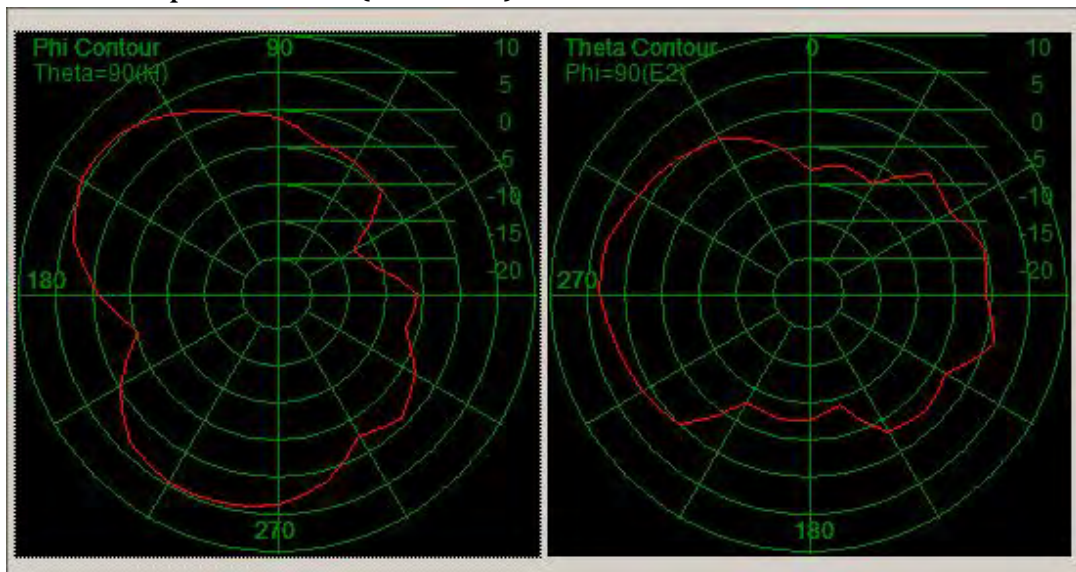


## Radiation patterns:2D(2450MHz)

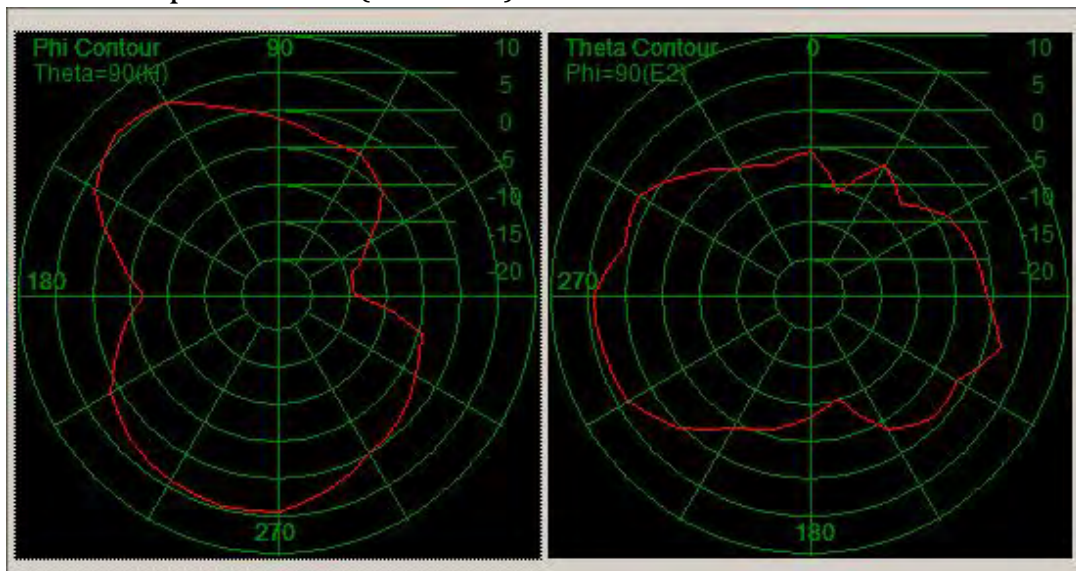




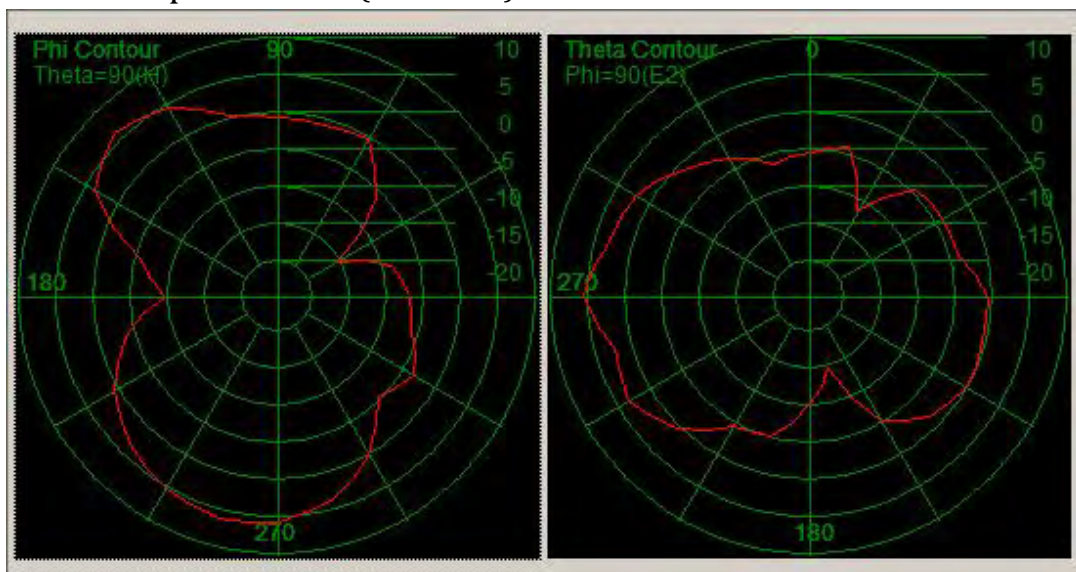
Radiation patterns:2D(5150MHz)



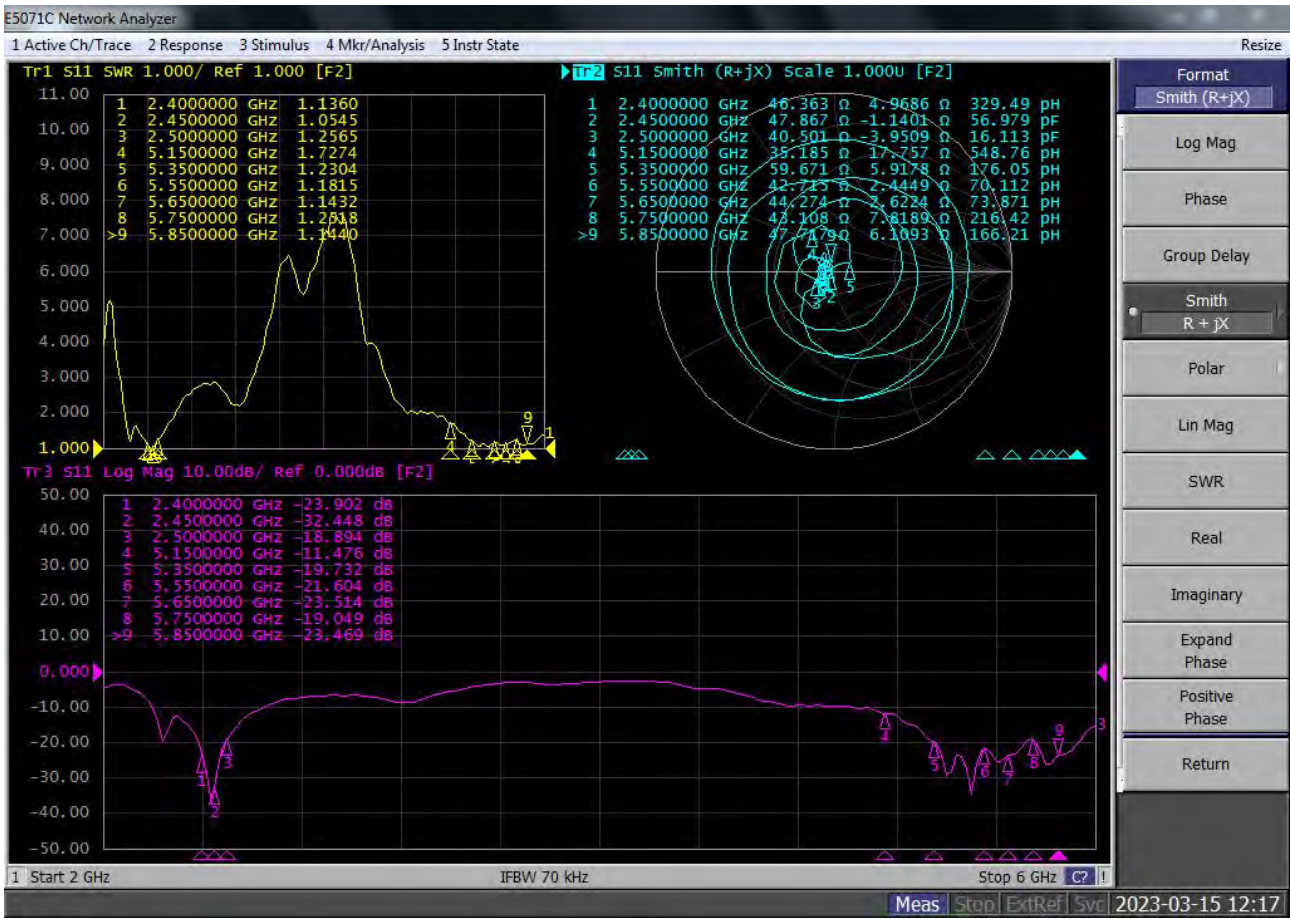
Radiation patterns:2D(5550MHz)



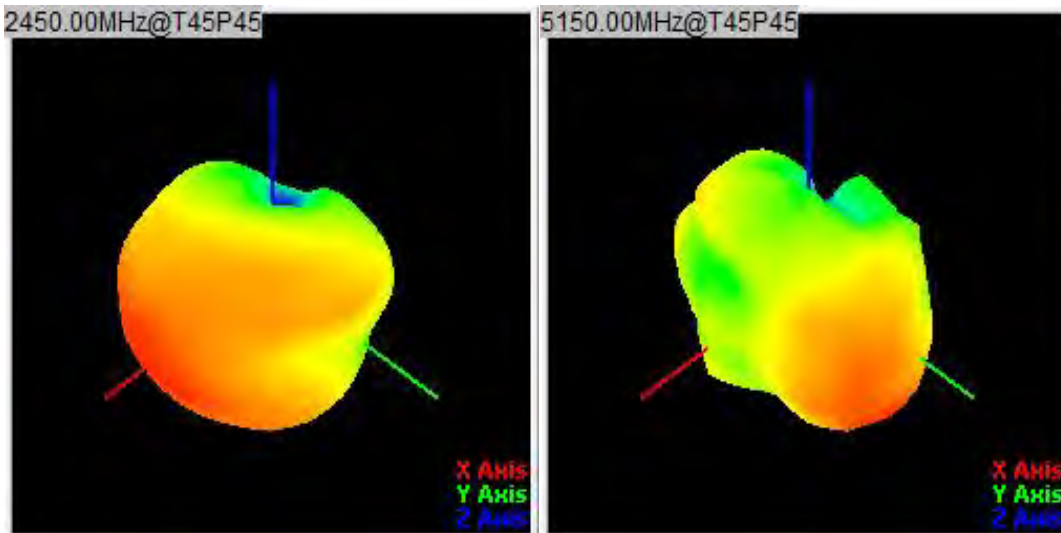
Radiation patterns:2D(5850MHz)



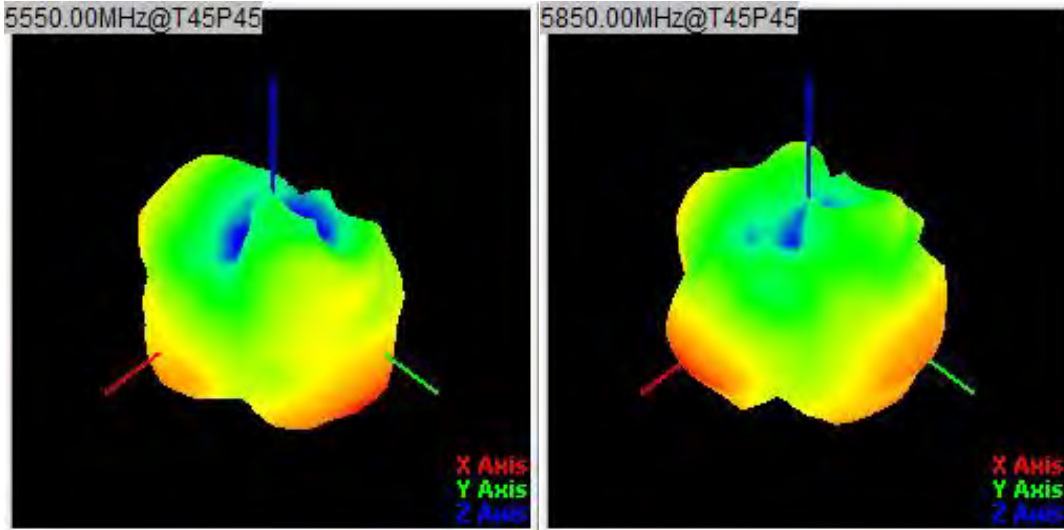
S11 :  
Ant1-2&5G 120mm Cable



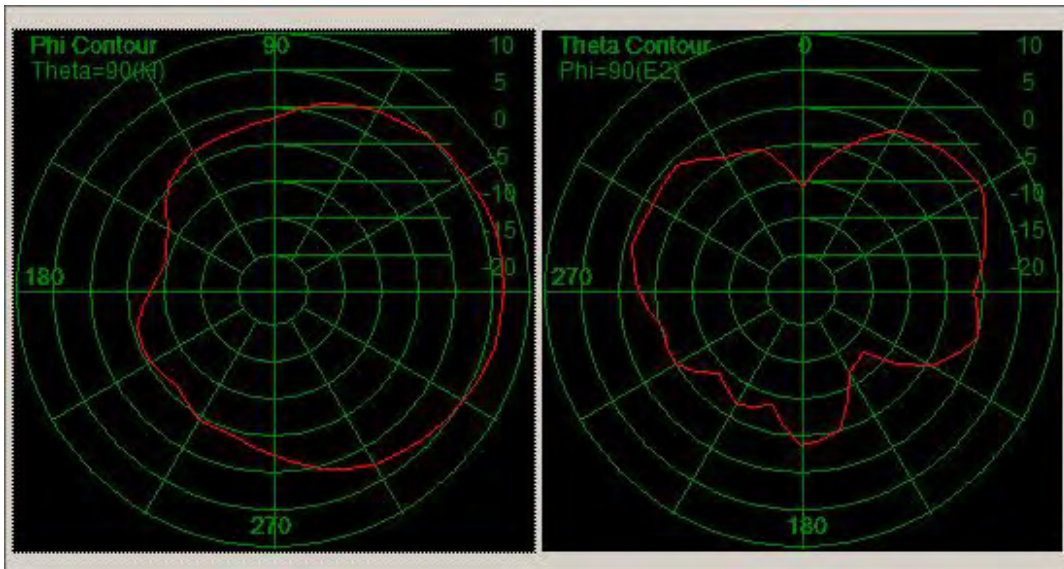
Radiation patterns:3D



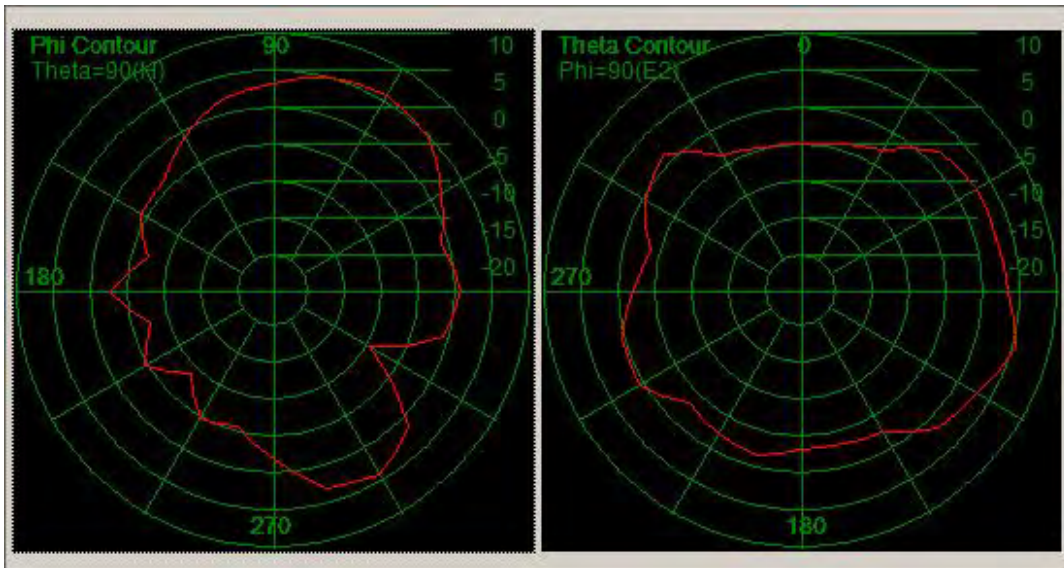




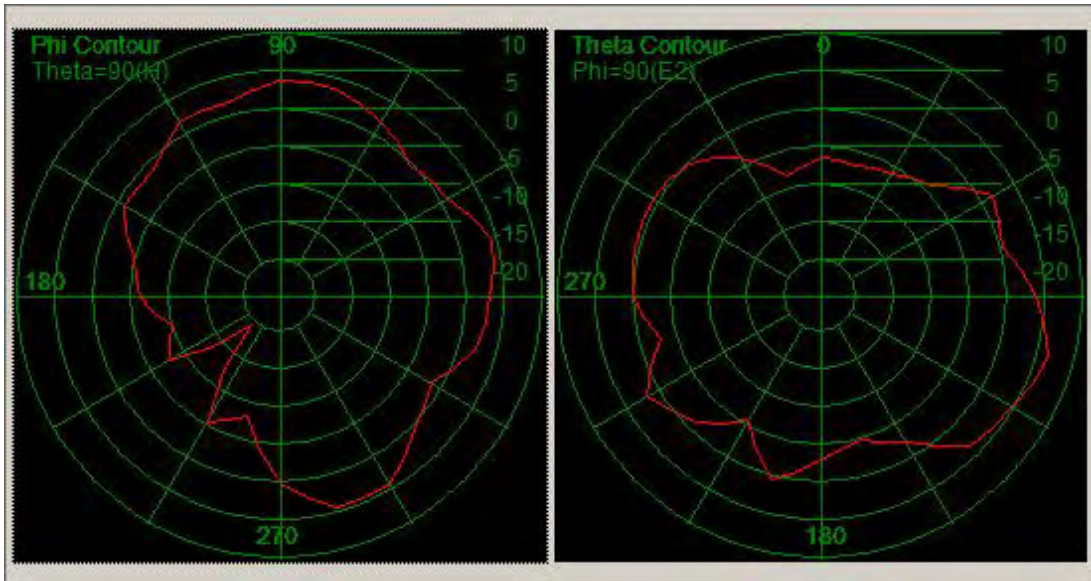
Radiation patterns:2D(2450MHz)



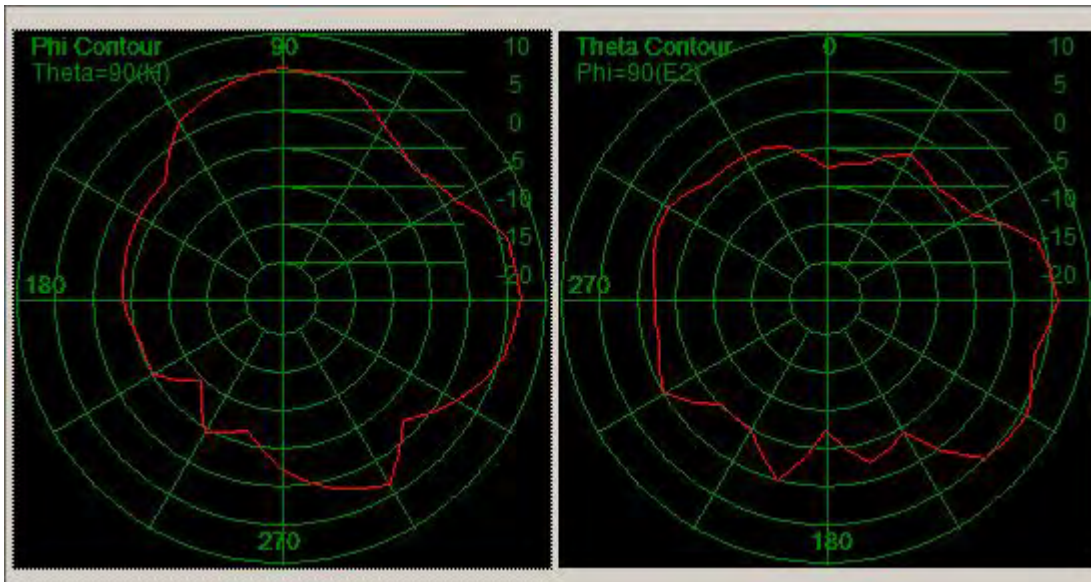
Radiation patterns:2D(5150MHz)



Radiation patterns:2D(5550MHz)



Radiation patterns:2D(5850MHz)





## S21-2&5G0,1



## S21-2&5G0,6G0



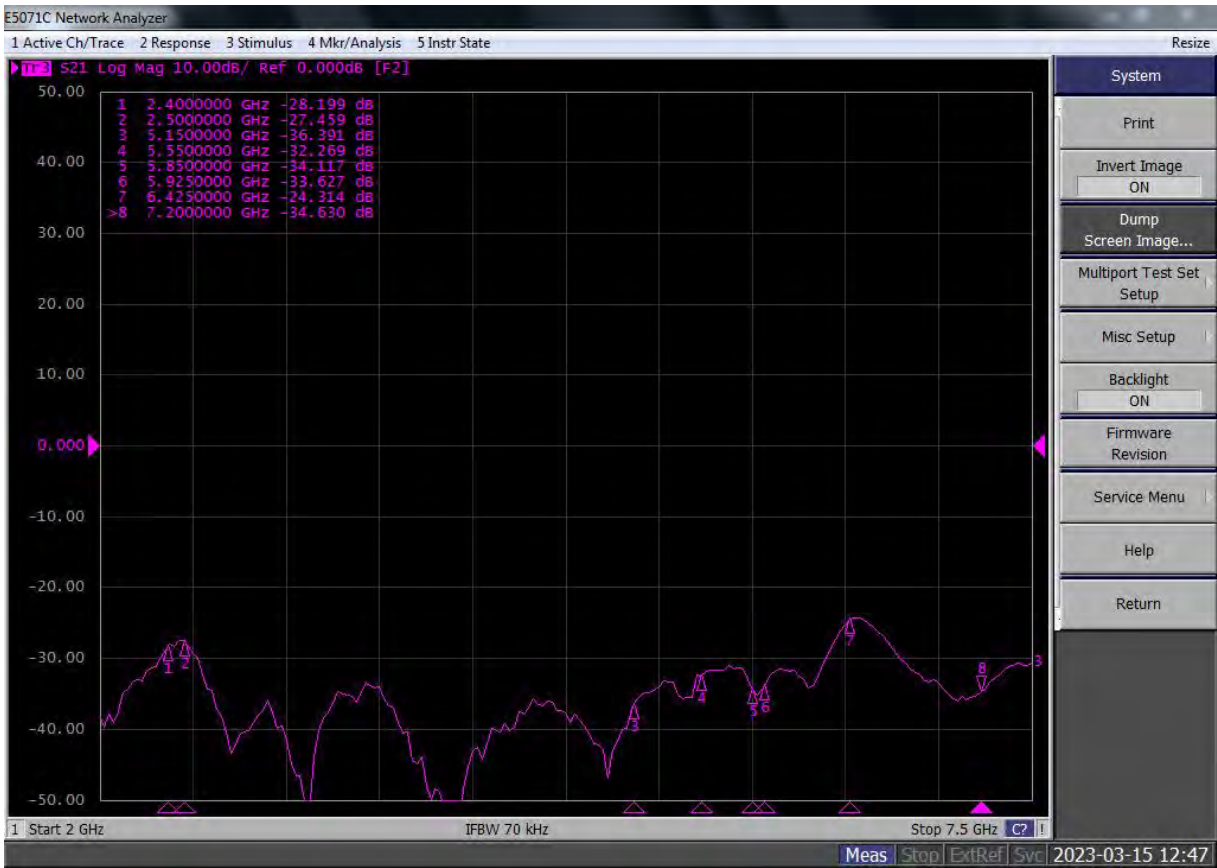
## S21-2&5G0,6G1



## S21-2&5G1,6G0



# S21-2&5G1,6G1



# Signal Plus Technology Co.,Ltd.

## FAI full size inspection report

No:QIP230304

| Customer Name | Davo Link  |             |             | Product Name    | PCB Antenna |       |       |       | Date     | April 04, 2023 |  |              |           |         |
|---------------|------------|-------------|-------------|-----------------|-------------|-------|-------|-------|----------|----------------|--|--------------|-----------|---------|
| Customer P/I  | /          |             |             | Signal Plus P/N | 6307F00020  |       |       |       | Material | /              |  |              |           |         |
| NO.           | Size       | tolerance   |             | Sample number   |             |       |       |       |          |                |  | Measure Tool | Judgement |         |
|               |            | Upper limit | Lower limit | 1               | 2           | 3     | 4     | 5     |          |                |  |              |           |         |
| 1             | 74.6.0±0.3 | 74.9        | 74.3        | 74.56           | 64.63       | 74.68 | 74.66 | 74.57 |          |                |  |              | a         | ■OK □NG |
| 2             | 3.20±0.03  | 3.23        | 3.17        | 3.21            | 3.21        | 3.2   | 3.21  | 3.21  |          |                |  |              | a         | ■OK □NG |
| 3             | 40.53±0.2  | 40.73       | 40.33       | 40.52           | 40.51       | 40.51 | 40.52 | 40.51 |          |                |  |              | a         | ■OK □NG |
| 4             | 15.0±0.3   | 15.3        | 14.7        | 15.01           | 15.02       | 15.03 | 15.02 | 15.02 |          |                |  |              | a         | ■OK □NG |
| 5             | 0.80±0.03  | 0.83        | 0.77        | 0.81            | 0.81        | 0.8   | 0.82  | 0.81  |          |                |  |              | a         | ■OK □NG |
| 6             | 120±3      | 123         | 117         | 121.2           | 121.4       | 120.8 | 120.6 | 121.5 |          |                |  |              | I         | ■OK □NG |
| Remark:       |            |             |             |                 |             |       |       |       |          |                |  |              |           |         |

※Measuring tools: A.Vernier caliper B.Quadratic element C.Depth gauge D.Tool microscope E.Thickness gauge F.micrometer G.torsion meter H.Drawing test machine I. Steel rule

Approved: 唐剑剑

Prepared : 王莲

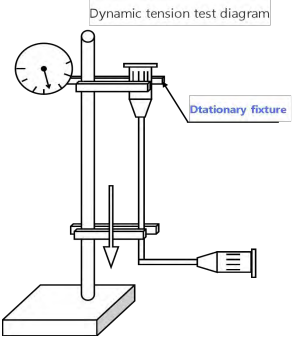
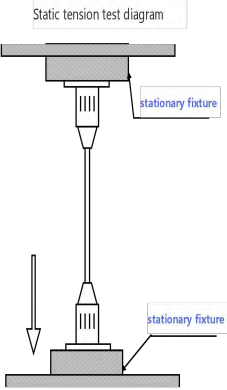
Review: 韦颖

# Signal Plus Technology Co,Ltd.

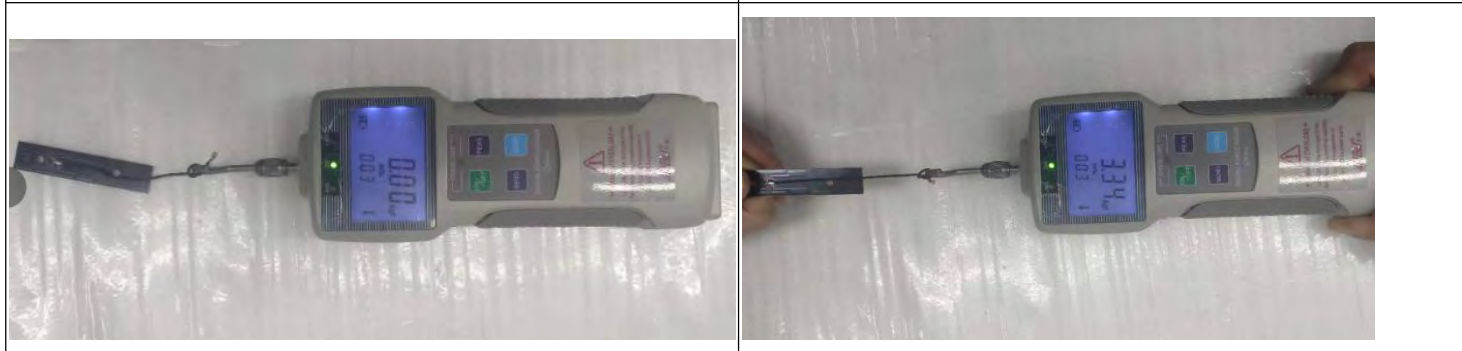
## Reliability Test Report

Report No.:20230325001

|               |                    |              |                            |
|---------------|--------------------|--------------|----------------------------|
| Customer Name | Davo Link          | Test Date    | 25 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna        | Sample Q'TY  | 5PCS                       |
| Part No.      | 6307F00020         | Edition      | /                          |
| Test Purpose  | Verify Pad Tension | Test Purpose | /                          |

|   |   |  |
|---|---|--|
| <p>Test Item : Tension Test Place: laboratory</p> <p>Test Standard : <u>Reference AQA-SIP-C5036-009</u></p> <p>Test SPEC</p> <p style="padding-left: 40px;">Pad Tension <math>\cong</math> 2.0 kgf</p> <p>Equipment : <u>Tension Testing Machine ZP-200</u></p> <p>Conclusion Due Date : <u>16<sup>th</sup> Feb, 2024</u></p> | <p>Test status diagram:</p>  |  |
|---|---|--|

|                    |                   |
|--------------------|-------------------|
| Sample before test | Sample after test |
|--------------------|-------------------|



Test Result:

| Sample | Sample1 | Sample2 | Sample3 | Sample4 | Sample5 |
|--------|---------|---------|---------|---------|---------|
|--------|---------|---------|---------|---------|---------|

Appearance :

|                                  |      |      |      |      |      |
|----------------------------------|------|------|------|------|------|
| Connector Tension $\cong$ 1.0kgf | 3.34 | 3.25 | 3.21 | 3.05 | 3.13 |
|----------------------------------|------|------|------|------|------|

Judgement : OK

Mark : The pull is far beyond the standard pull

Approved :唐剑剑

Review : 王莲

Prepared: 李敬

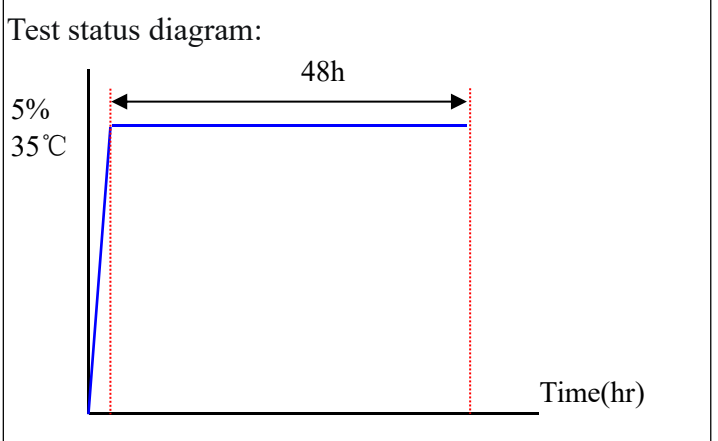


**Reliability Test Report**

Report No.: 20230325012

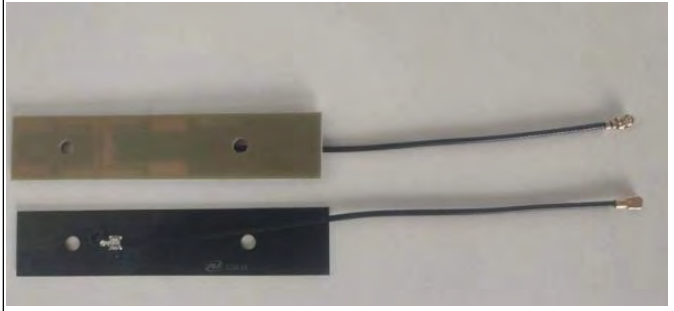
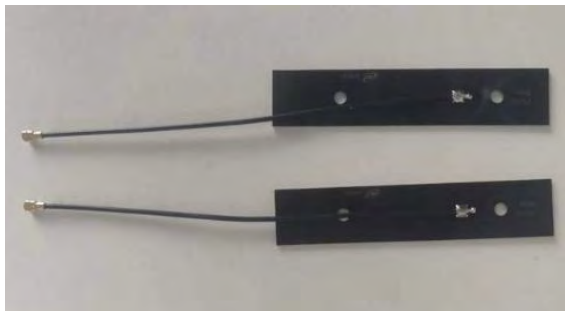
|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 23-25 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 2PCS                          |
| Part No.      | 6307F00020        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Test Purpose | /                             |

Test Item: salt spray test Place: laboratory  
 Test Standard: GB/T 2423.17  
 Test Time: 48H  
 Test SPEC: Temperate 35°C Salt-liquor thickness: 5%  
 Equipment: Salt spray tester  
 Conclusion Due Date : 16th April, 2023



Sample before test

sample after test



**Test Result**

| Sample    | Sample1 | Sample2 |  |  |  |  |  |  |  |
|-----------|---------|---------|--|--|--|--|--|--|--|
| Come away | OK      | OK      |  |  |  |  |  |  |  |
| Oxidation | OK      | OK      |  |  |  |  |  |  |  |
| VSWR      | OK      | OK      |  |  |  |  |  |  |  |

Judgement: OK

Remark:

Approved : 唐剑剑

Prepared : 王莲

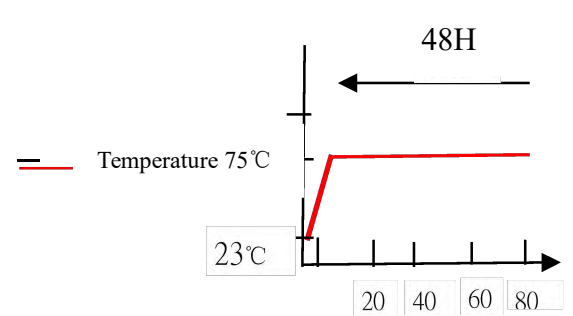
Review: 庞会芳





**Reliability Test Report**

Report No.: HT230324004

|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 22-24 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 3PCS                          |
| Part No.      | 6307F00020        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Batch number | NA                            |

|   |  |
|---|--|
| <p>Test Item: high temperature test Place: laboratory<br/> Test Standard: <u>GB/T 2423.3</u><br/> Test Time: 48H<br/> Test SPEC: Temperate <u>75°C</u><br/> Equipment: High temperature and high humidity testing machine</p> | <p>Test status diagram:</p>  |
|---|--|

|   |  |
|---|--|
| Sample before test  | sample after test  |
|  |  |

|             |         |         |          |  |  |  |  |  |  |
|-------------|---------|---------|----------|--|--|--|--|--|--|
| Test Result |         |         |          |  |  |  |  |  |  |
| Sample      | Sample1 | Sample2 | Sample 3 |  |  |  |  |  |  |
| Variation   | ok      | ok      | ok       |  |  |  |  |  |  |
| Come Away   | ok      | ok      | ok       |  |  |  |  |  |  |
| Crack       | ok      | ok      | ok       |  |  |  |  |  |  |

Judgement: OK

Remark:

Approved : 唐剑剑

Prepared : 王莲

Review: 李敬

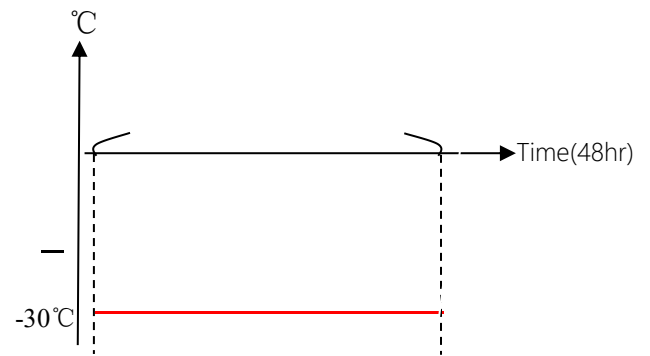
**Reliability Test Report**

Report No.: LT230326004

|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 24-26 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 3PCS                          |
| Part No.      | 6307F00020        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Batch number | NA                            |

Test Item: low temperature test Place: laboratory  
 Test Standard: GB/T 2423.1  
 Test Time: 48H  
 Test SPEC: Temperate -30°C  
 Equipment: TEMP&HUMI chamber

Test status diagram:



Sample before test

sample after test



Test Result

| Sample     | Sample1 | Sample2 | Sample 3 |  |  |  |  |  |  |
|------------|---------|---------|----------|--|--|--|--|--|--|
| Variation  | ok      | ok      | ok       |  |  |  |  |  |  |
| Aberration | ok      | ok      | ok       |  |  |  |  |  |  |
| Crack      | ok      | ok      | ok       |  |  |  |  |  |  |

Judgement: OK

Remark:

Approved : 唐剑剑

Prepared : 王莲

Review: 李敬

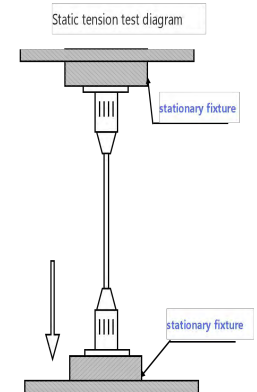
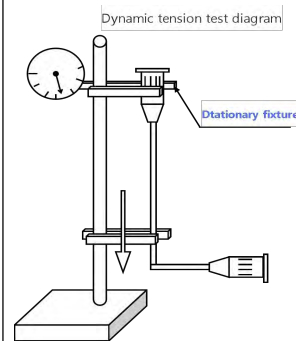
**Reliability Test Report**

Report No.:20230325005

|               |                          |              |                            |
|---------------|--------------------------|--------------|----------------------------|
| Customer Name | Davo Link                | Test Date    | 25 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna              | Sample Q'TY  | 5PCS                       |
| Part No.      | 6307F00020               | Edition      | /                          |
| Test Purpose  | Verify Connector Tension | Test Purpose | /                          |

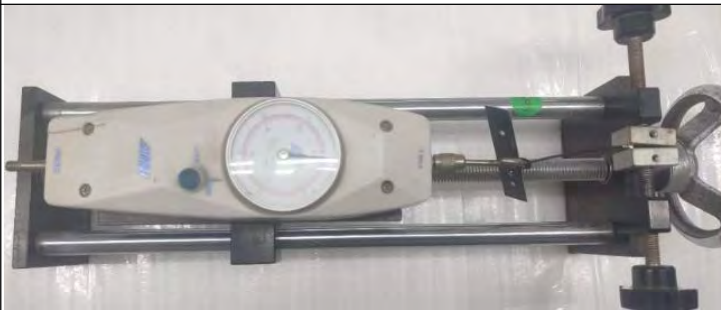
Test Item : Tension Test Place: laboratory  
 Test Standard : Reference AQA-SIP-C5036-009  
 Test SPEC  
 Connector Tension  $\cong$  1.0 kgf  
 Equipment : Tension Testing Machine NK-300  
 Conclusion Due Date : 2024.02.16

## Test status diagram:



Sample before test

Sample after test



## Test Result:

| Sample                           | Sample1 | Sample2 | Sample3 | Sample4 | Sample5 |
|----------------------------------|---------|---------|---------|---------|---------|
| Appearance :                     |         |         |         |         |         |
| Connector Tension $\cong$ 1.0kgf | 3.2     | 2.7     | 3.1     | 3.0     | 3.3     |

Judgement : OK

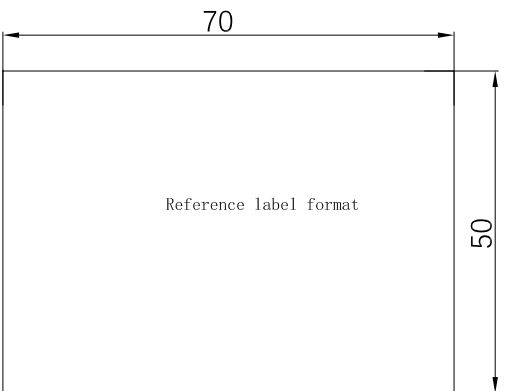
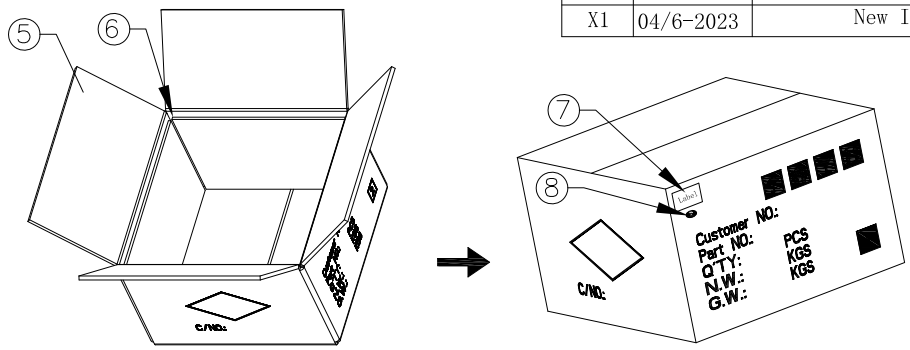
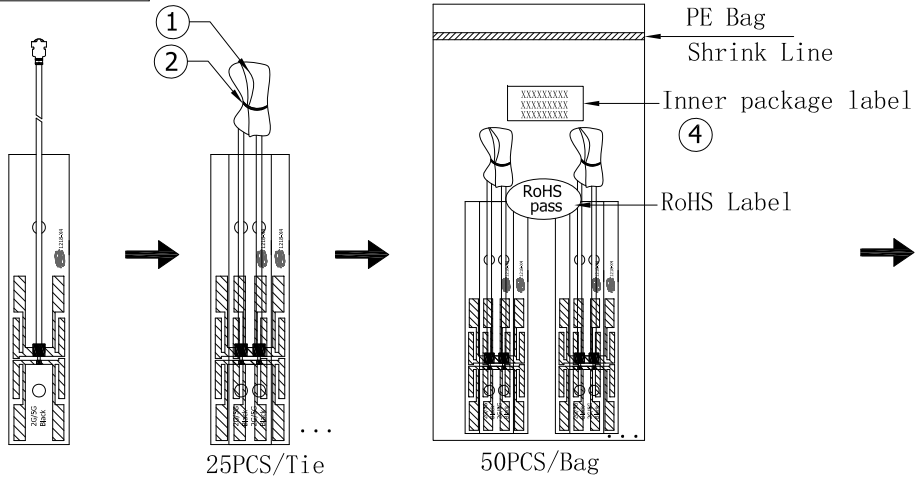
Mark : The pull is far beyond the standard pull

Approved :唐剑剑

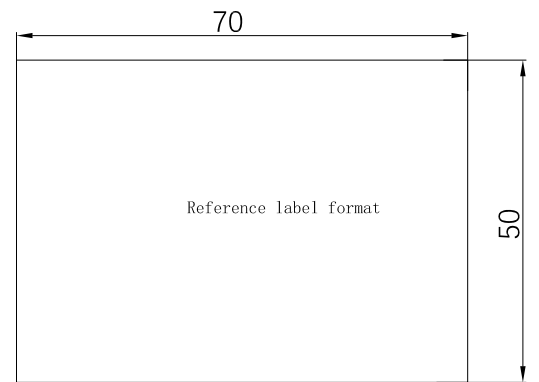
Review : 王莲

Prepared: 王丹

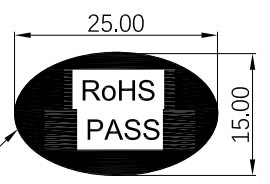
| REV | DATE      | DESCRIPTION |
|-----|-----------|-------------|
| X1  | 04/6-2023 | New Issue   |



Description of the label on the outer package



Instructions on the label of the inner package



Attach the label to the upper right corner of the carton

Customer NO.: \_\_\_\_\_

Part NO.: \_\_\_\_\_

Q'TY: 2000 PCS

N.W.: Net weight KGS

G.W.: Rough weight KGS

Fill in the terminal customer material number by hand

Fill in the customer material number by hand

Fill in the actual number of boxes by hand

Fill in the actual net weight of the container by hand

Fill in the actual gross weight of the container by hand

| 12 | CYP-92035015014-A | Label (white base copper paper not polished)35(L)*10(W)mm<br>Strong viscous whiskers                     | 1/2000  |        |
|----|-------------------|--|---------|--------|
| 11 | CYP-92040020046-A | Label printing black lettering (paper color changes with month)<br>40(L)*20(W)mm Strong viscous whiskers | 1/2000  |        |
| 10 | CYP-9100013035-A  | Partition paper (brown and yellow)310*55*6.0mm   | 6/2000  |        |
| 9  | CYP-9100013031-A  | Partition paper (brown and yellow)312*312*4.0mm  | 3/2000  |        |
| 8  | CYP-92025015006-A | Label (glossy copper paper)25(L)*15(W)mm Strong viscous whiskers<br>Black print (RoHS PASS)              | 41/2000 |        |
| 7  | CYP-92070050018-A | Label (white base copper paper not polished)70(L)*50(W)mm<br>Strong viscous whiskers                     | 1/2000  |        |
| 6  | CYP-9100013034-A  | Partition paper (brown and yellow)1240*55*6.0mm  | 3/2000  |        |
| 5  | CYP-9100012009-A  | carton(AB type ) Brown paper320*320*200mm Blue Print (Box 1)   | 1/2000  |        |
| 4  | CYP-92070050018-A | Label(Copper paper with white backing is not polished)70(L)*50(W)mm<br>Strong viscous whiskers           | 1/50    |        |
| 3  | CYP-9000050010-A  | PE Bag 110(W)*280(L)*0.05mm(with holes)  | 1/50    |        |
| 2  | CYP-9100014006-A  | Rubber band $\phi$ 18(inside)* $\phi$ 20(outside)*1.5(thickness)mm White                                 | 1/25    |        |
| 1  | CYP-9100010001-A  | EPE 70*70*0.5mm White  | 1/25    |        |
| NO | PART NAME         | DESCRIPTION  | Q' TY   | REMARK |

|      |           |          |
|------|-----------|----------|
| XXX. | $\pm 2.0$ | APPROVED |
| XX.  | $\pm 1.0$ |          |
| X.   | $\pm 0.5$ | CHECKED  |
| .X   | $\pm 0.2$ |          |
| .XX  | $\pm 0.1$ | DRAWING  |
|      |           |          |

|                             |      |       |      |        |       |  |
|-----------------------------|------|-------|------|--------|-------|--|
| CUSTOMER:                   |      |       |      |        |       |  |
| PART NO:                    |      |       |      |        |       |  |
| PART NAME: Built-in Antenna |      |       |      |        |       |  |
| Z&X P/NO: 6307F00020        |      |       |      |        |       |  |
| REV                         | UNIT | Scale | Size | Page   | FILE: |  |
| X1                          | mm   | 1/1   | A 4  | 1 OF 1 |       |  |

上海增信电子有限公司  
Signal Plus Technology Co., Ltd.



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Signal Plus Technology Co., Ltd.

规格承认书  
SPECIFICATION FOR APPROVAL

日期  
DATE: 2023.04.07

版本  
REV.: C

客户  
CUSTOMER: DAVO LINK

客户料号  
CUSTOMER P/N:

品名  
PART NAME: Internal PCB Teflon Ant, 6G-ANTO 1.37 low loss Gray cable 240mm  
with RF CONN for DVW-632

供方料号  
SUPPLIER P/N: 6307F00012

送样日期Date: 送样数量Q'TY: Pcs

| 客户确认CUSTOMER APPROVED BY |                  |                   |
|--------------------------|------------------|-------------------|
| 核准<br>Approved by        | 审核<br>Checked by | 拟制<br>Prepared by |
|                          |                  |                   |

| 供方确认SUPPLIER SIGNATURE |                  |                   |
|------------------------|------------------|-------------------|
| 核准<br>Approved by      | 审核<br>Checked by | 拟制<br>Prepared by |
| Jack                   |                  | andy              |

ZX-QT-RD-0011-A1

Add:上海市徐汇区桂箐路69号30栋605室 Tel:021-54266190 Fax:021-54266191

# Specification

## 1. Electrical Properties :

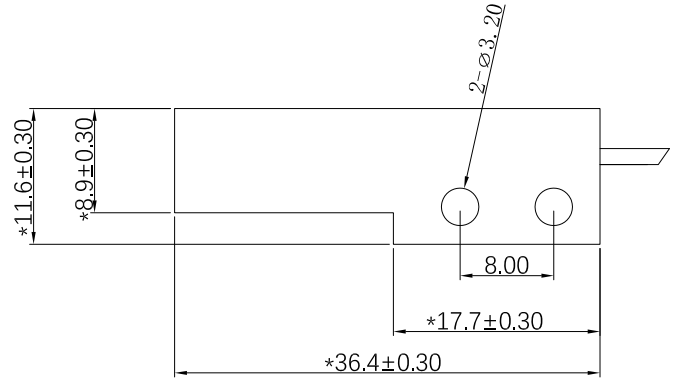
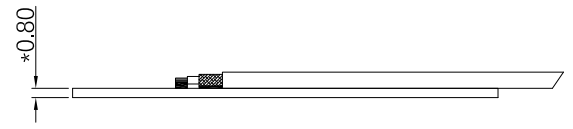
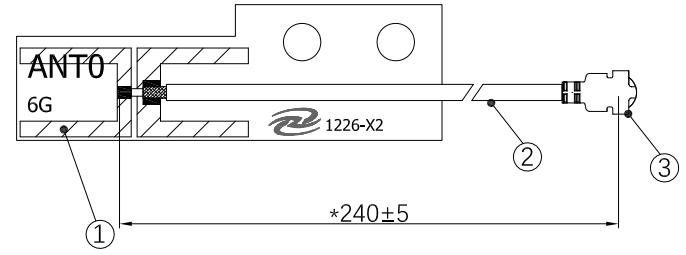
- 1.1 Frequency Range.....5925~7125MHz
- 1.2 Impedance ..... 50  $\Omega$
- 1.3 VSWR .....  $\leq 1.8$
- 1.5 Gain ..... 5dBi

## 2. Physical Properties :

- 2.1 Cable..... RF 1.37
- 2.2 Connector ..... IPEX compatible
- 2.3 Operating Temp. .... -20°C ~ +65°C
- 2.4 Storage Temp. .... -30°C ~ +75°C



| REV | DATE       | DESCRIPTION                                     |
|-----|------------|---|
| X1  | 01/07-2023 | New Issue                                       |
| X2  | 02/13-2023 | Optimization of antenna and Change Cable length |
| X3  | 03/06-2023 | Modifying the frequency band configuratio       |
| X4  | 03/15-2023 | Correct electrical performance parameters       |
| X5  | 03/22-2023 | Change Cable length and color                   |
| X6  | 04/06-2023 | Correct electrical performance parameters       |



1.ELECTRICAL PROPERTIES:  
 1.1 Frequency Range.....5.925-7.125GHz  
 1.2 Impedance.....50 Ohm Nominal  
 1.3 VSWR.....1.8(Max)(with housing)  
 1.4 Gain.....5.0dBi  
 2.These Products are in conformity with ROHS 2.0  
 3.With"\*"Is Important Dimension.

| NO | DESCRIPTION | Q'TY | REMARK   |
|----|-------------|------|--|
| 3  | Connector   | 1    | IPEX compatible                                |
| 2  | 6G Cable    | 1    | 1.37 Low Loss Gray Cable                       |
| 1  | PCB         | 1    | Teflon PCB, single panel, Black oil 501-1-1226 |

|                      |           |             |                                       |      |            |
|----------------------|-----------|-------------|---------------------------------------|------|------------|
| CUSTOMER'S SINGATURE | XXX. ±2.0 | APPROVED    | CUSTOMER:                             |      |            |
|                      | XX. ±1.0  |             | PART NO:                              |      |            |
|                      | X. ±0.5   | CHECKED     | PART NAME: PCB Antenna (DVW-632 ANTO) |      |            |
|                      | .X ±0.3   |             | Z&X P/NO: 6307F00012                  |      |            |
|                      | .XX ±0.2  | DRAWING yzq | REV                                   | UNIT | FILE:      |
|                      | ⊕         |             | X6                                    | mm   | SHEET: 1/1 |

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Signal Plus Technology Co., Ltd.



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**Signal Plus Technology Co., Ltd.**

## Antenna Test Report

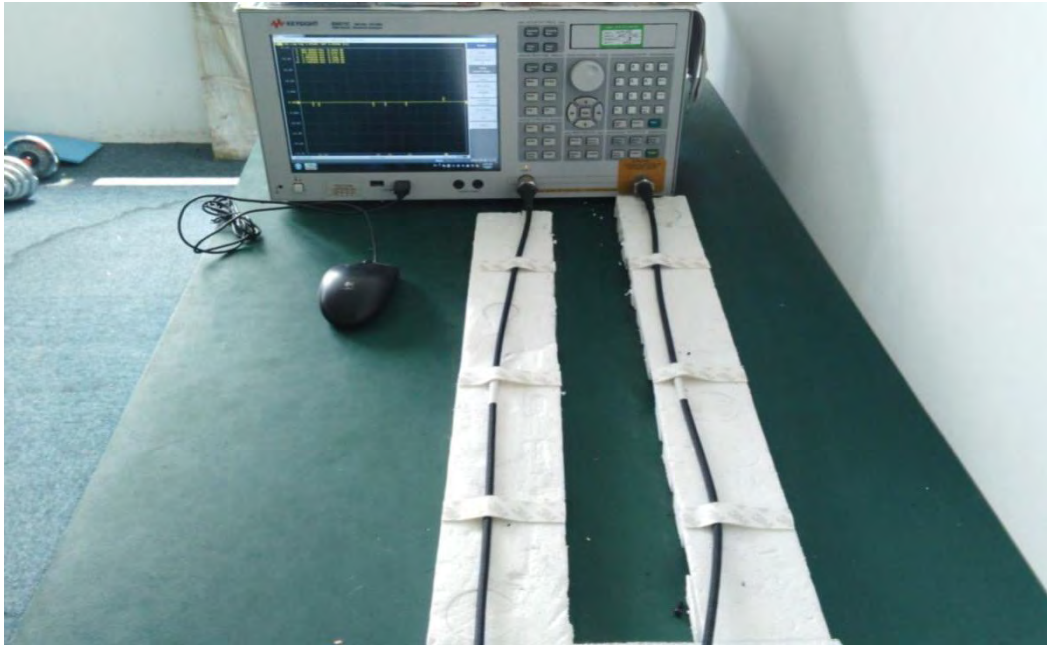
DVW-632

## 1. RF Fixture Experiment

### 1.1 Test Setup

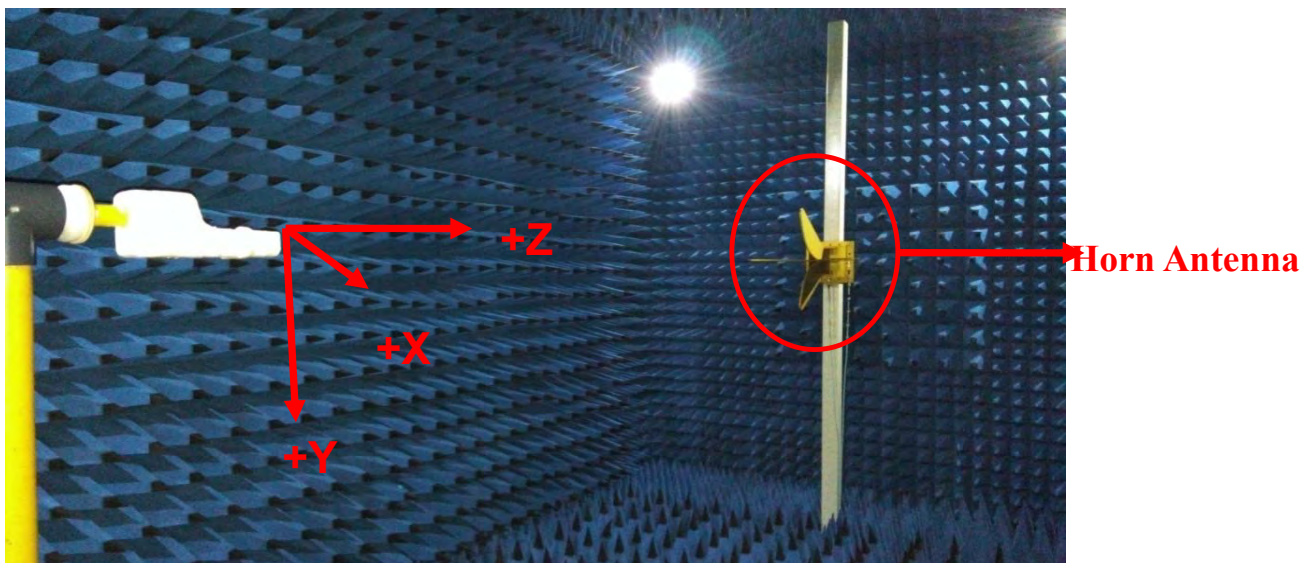
#### 1.1.1 VNA Test Setup

VSWR and Return Loss measurements ( $S_{11}$ ) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

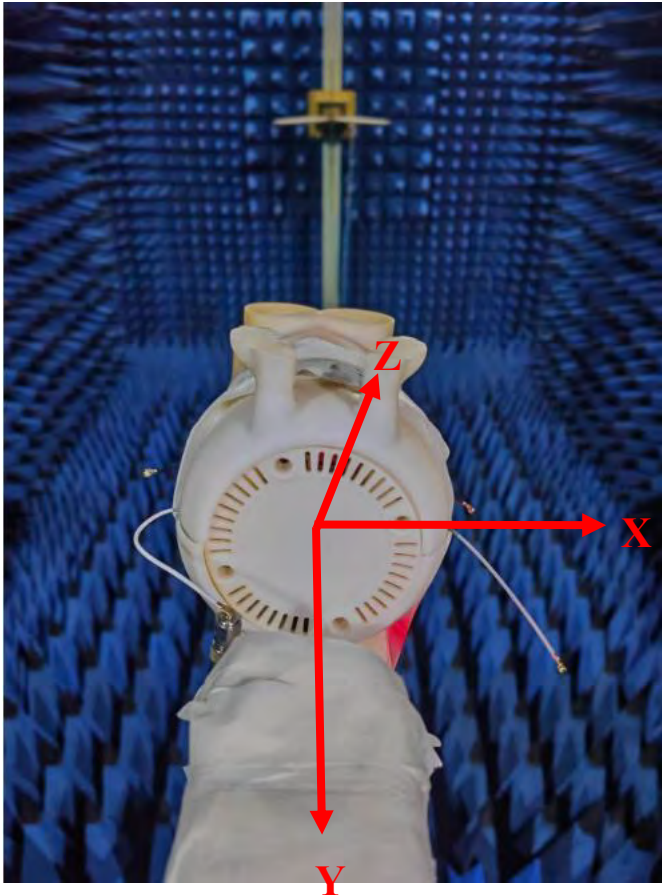


#### 1.1.2 Anechoic Chamber Test Setup

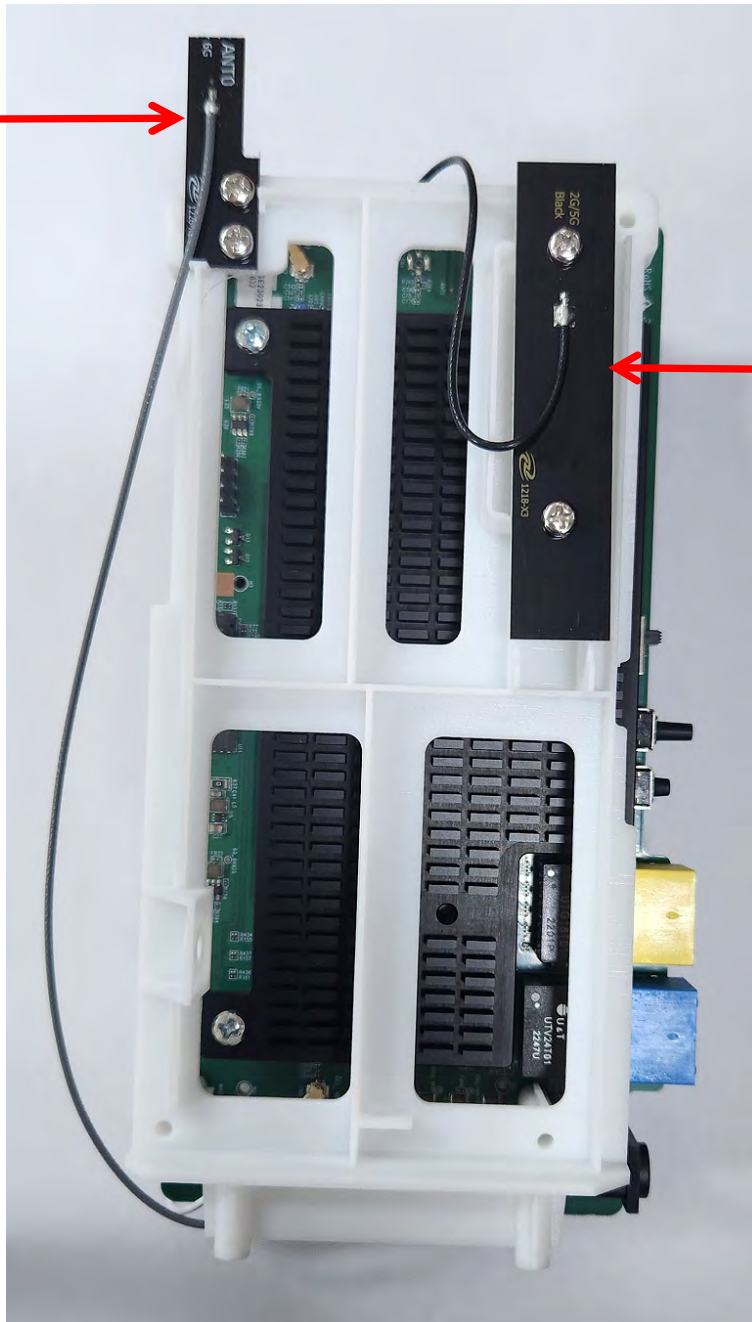
The gain of the antenna was measured in the anechoic chamber. The chamber provides less than  $-30$  dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m\*4m\*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



2. Antenna Solution



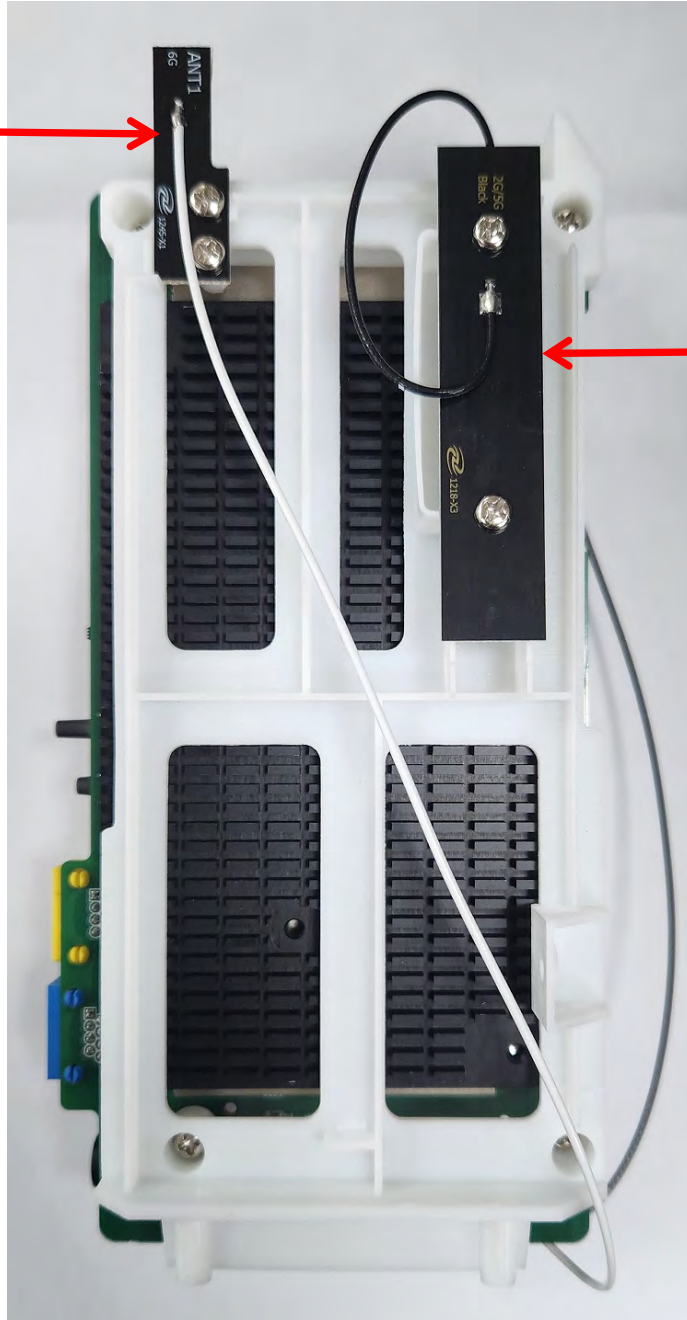
Ant0 6G  
240mm Cable



Ant1 2&5G  
120mm Cable



Ant1 6G  
250mm Cable



Ant0 2&5G  
120mm Cable

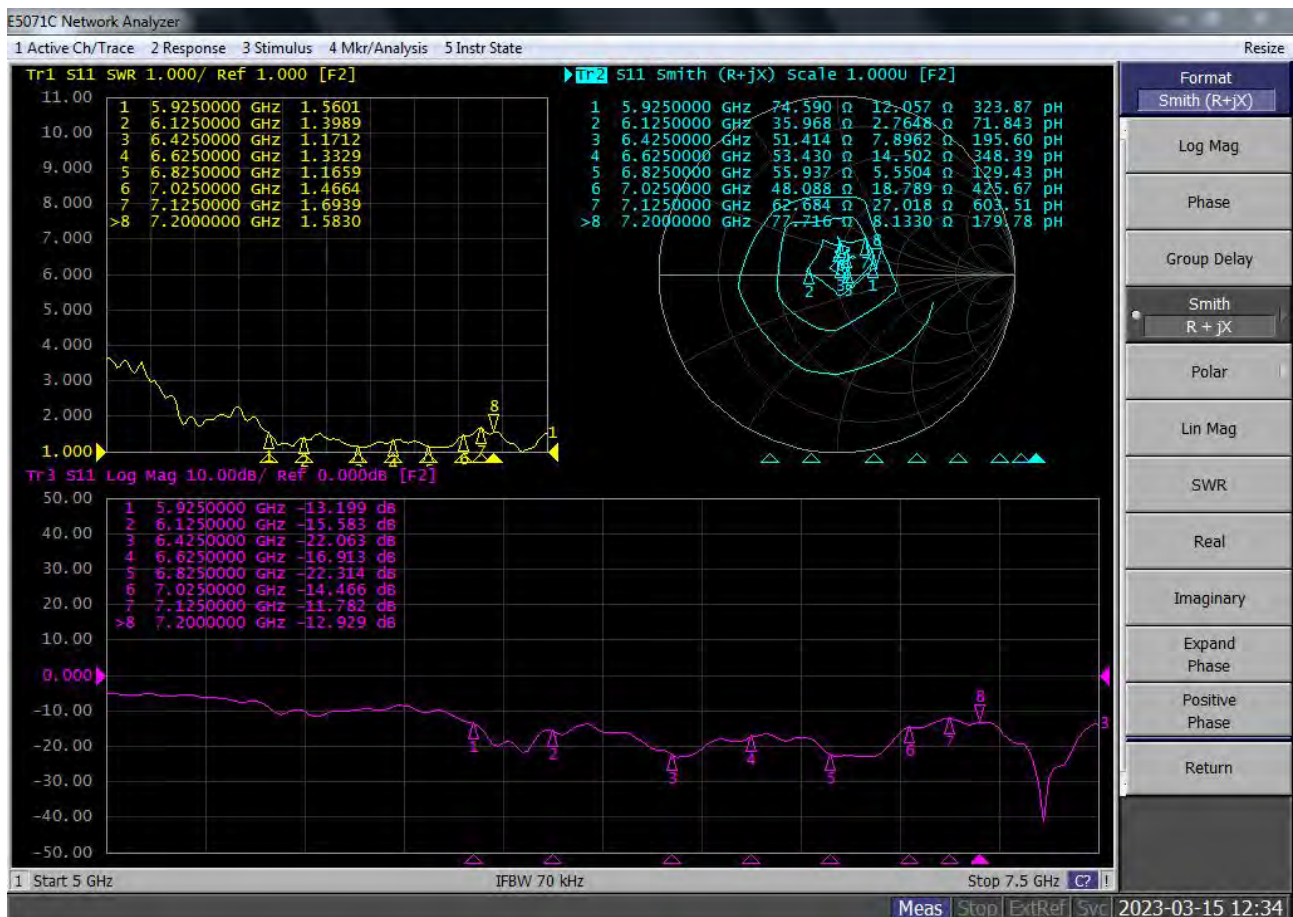
# Data Preview

## Ant0-6G 240mm Cable

| Freq.(MHz) | 5925  | 6125  | 6425  | 6625  | 6825  | 7025  | 7125  | 7200  |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|
| VSWR       | 1.56  | 1.40  | 1.17  | 1.33  | 1.17  | 1.47  | 1.69  | 1.58  |
| Gain(dBi)  | 5.03  | 5.19  | 5.09  | 5.73  | 5.83  | 5.13  | 5.01  | 5.25  |
| Eff. (%)   | 68.20 | 66.50 | 75.50 | 80.40 | 80.50 | 67.70 | 68.60 | 74.40 |

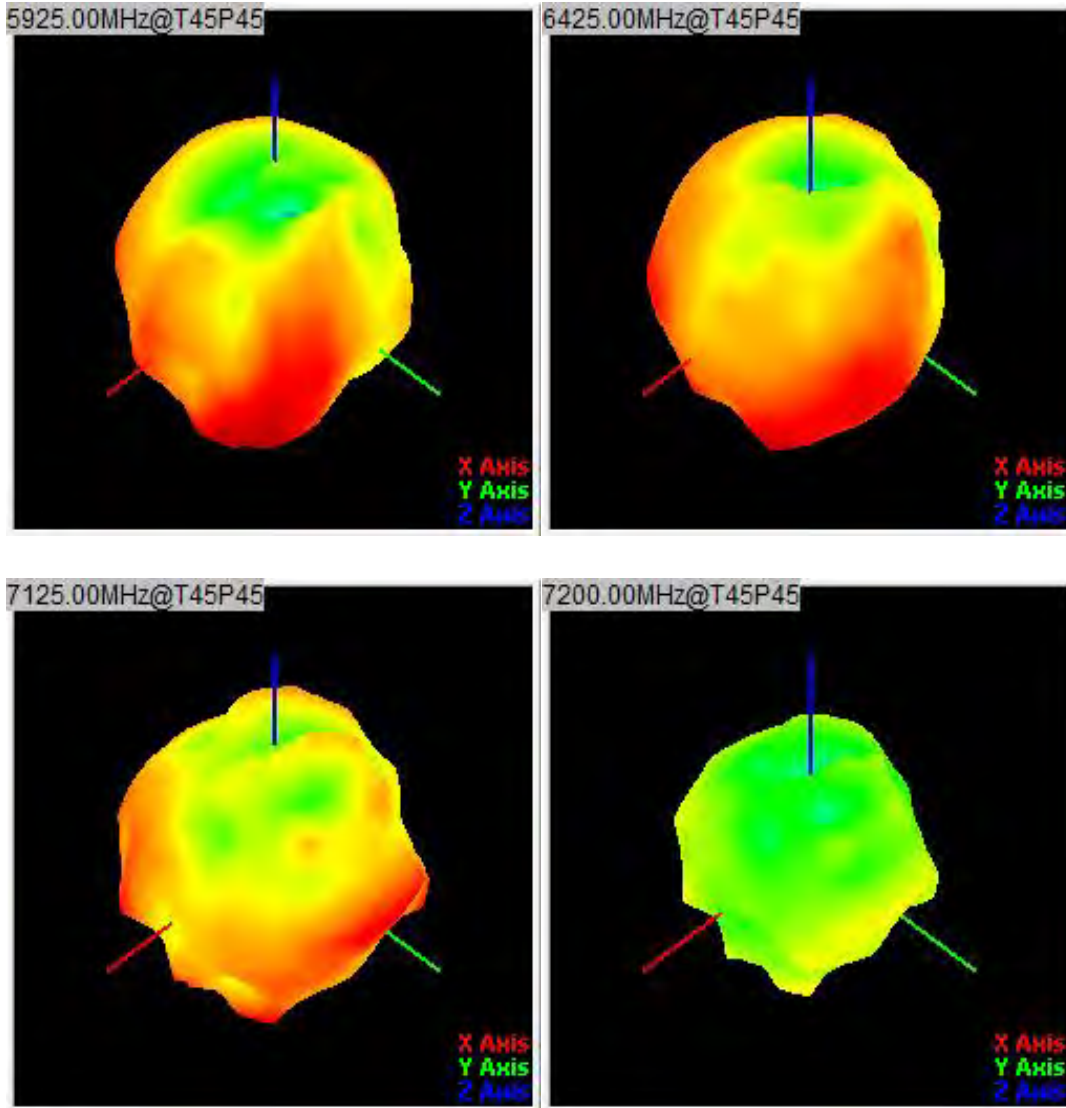
## S11:

## Ant0-6G 240mm Cable

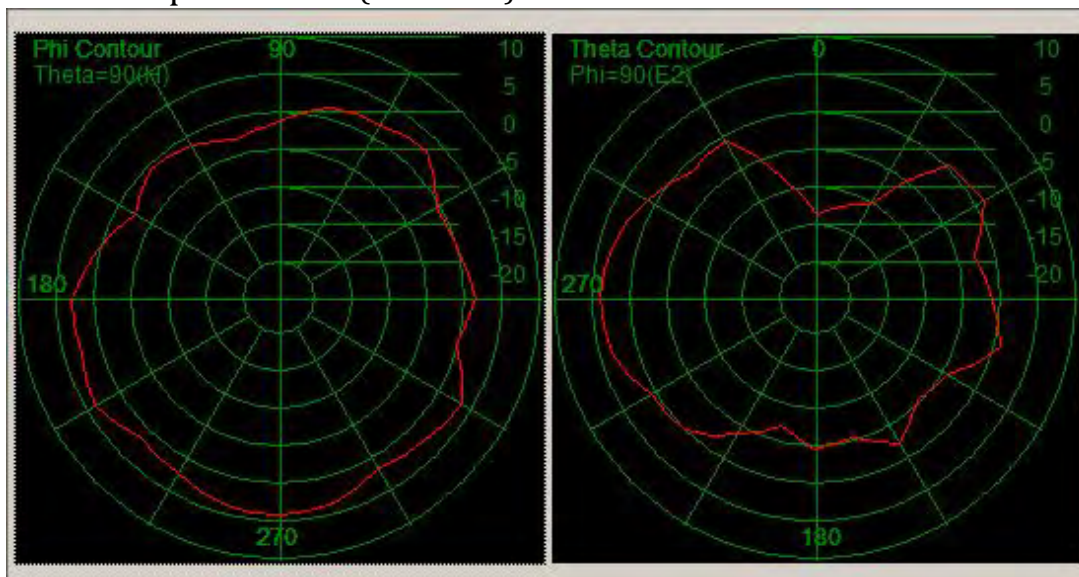




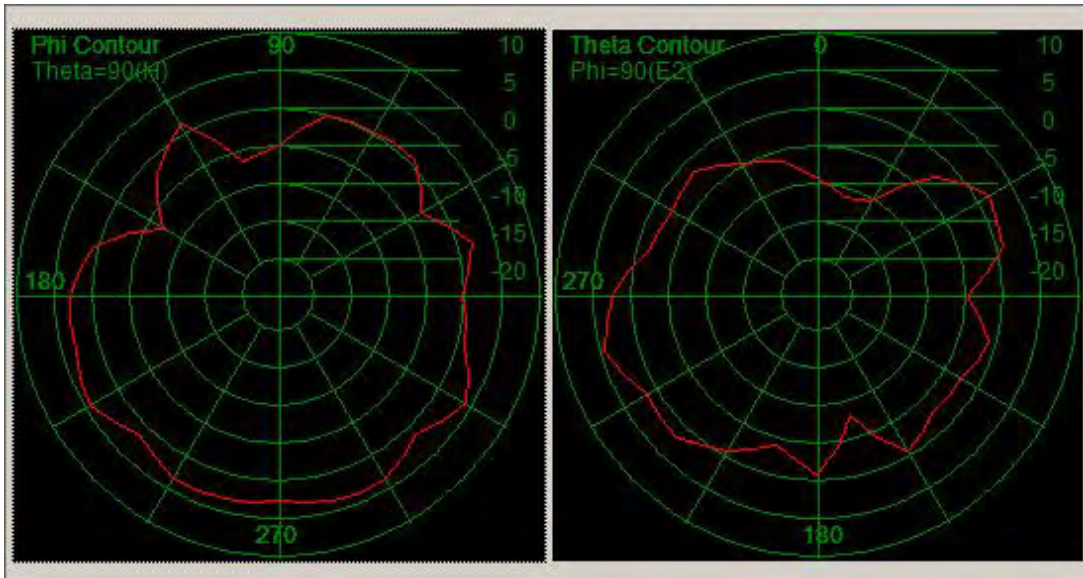
### Radiation patterns:3D



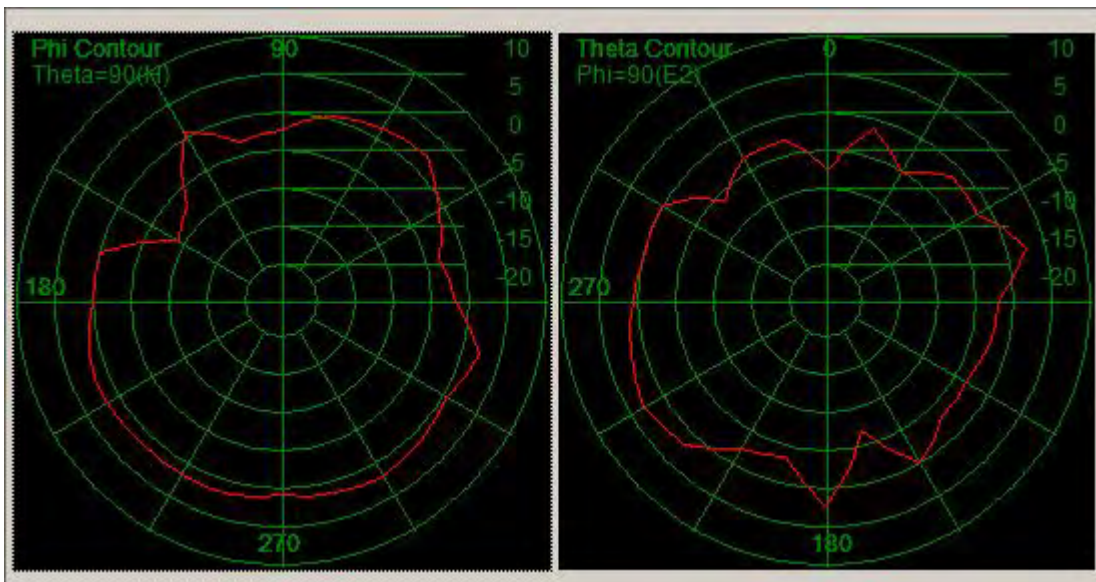
### Radiation patterns:2D(5925MHz)



Radiation patterns:2D(6425MHz)



Radiation patterns:2D(7125MHz)



## S21-2&5G0,6G0



## S21-2&5G1,6G0





# S21-6G0,6G1



# Signal Plus Technology Co,Ltd.

## FAI full size inspection report

No:QIP230301

| Customer Name | Davo Link |             |             | Product Name    | PCB Antenna |       |       |       | Date     | 25th Mar, 2023 |  |              |           |         |
|---------------|-----------|-------------|-------------|-----------------|-------------|-------|-------|-------|----------|----------------|--|--------------|-----------|---------|
| Customer P/I  | /         |             |             | Signal Plus P/N | 6307F00012  |       |       |       | Material | /              |  |              |           |         |
| NO.           | Size      | tolerance   |             | Sample number   |             |       |       |       |          |                |  | Measure Tool | Judgement |         |
|               |           | Upper limit | Lower limit | 1               | 2           | 3     | 4     | 5     |          |                |  |              |           |         |
| 1             | 36.4±0.3  | 36.70       | 36.10       | 36.38           | 36.41       | 36.39 | 36.39 | 36.40 |          |                |  |              | a         | ■OK □NG |
| 2             | 17.7±0.3  | 18.00       | 17.40       | 17.68           | 17.68       | 17.69 | 17.69 | 17.69 |          |                |  |              | a         | ■OK □NG |
| 3             | 8.9±0.3   | 9.20        | 8.60        | 8.92            | 8.93        | 8.92  | 8.91  | 8.92  |          |                |  |              | a         | ■OK □NG |
| 4             | 11.6±0.3  | 11.90       | 11.30       | 11.62           | 11.63       | 11.62 | 11.62 | 11.63 |          |                |  |              | a         | ■OK □NG |
| 5             | 0.80±0.03 | 0.83        | 0.77        | 0.81            | 0.82        | 0.81  | 0.81  | 0.82  |          |                |  |              | a         | ■OK □NG |
| 6             | 185.0±5   | 190.0       | 180.6       | 185.2           | 185.7       | 186.1 | 186.3 | 185.4 |          |                |  |              | I         | ■OK □NG |
| Remark:       |           |             |             |                 |             |       |       |       |          |                |  |              |           |         |

※Measuring tools: A.Vernier caliper B.Quadratic element C.Depth gauge D.Tool microscope E.Thickness gauge F.micrometer G.torsion meter H.Drawing test machine I. Steel rule

Approved: 唐剑剑

Prepared : 王莲

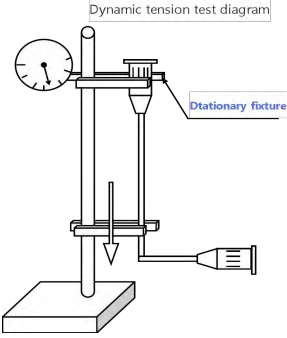
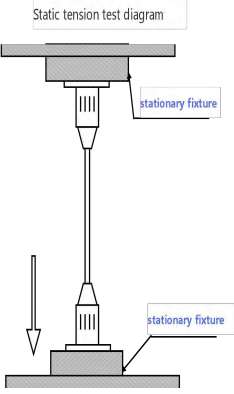


Review: 庞会芳



# Signal Plus Technology Co,Ltd.

## Reliability Test Report

Report No.:20230325002

|   |                    |  |                            |         |         |
|---|--------------------|--|----------------------------|---------|---------|
| Customer Name   | Davo Link          | Test Date  | 25 <sup>th</sup> Mar, 2023 |         |         |
| Product Name  | PCB Antenna        | Sample Q'TY  | 5PCS                       |         |         |
| Part No.  | 6307F00012         | Edition  | /                          |         |         |
| Test Purpose  | Verify Pad Tension | Test Purpose   | /                          |         |         |
| <p>Test Item : Tension Test Place: laboratory</p> <p>Test Standard : <u>Reference AQA-SIP-C5036-009</u></p> <p>Test SPEC</p> <p style="text-align: center;">Pad Tension <math>\cong</math> 2.0 kgf</p> <p>Equipment : <u>Tension Testing Machine ZP-200</u></p> <p>Conclusion Due Date : <u>16<sup>th</sup> Feb, 2024</u></p> |                    | <p>Test status diagram:</p>   |                            |         |         |
| Sample before test  |                    | Sample after test  |                            |         |         |
|    |                    |    |                            |         |         |
| Test Result:  |                    |  |                            |         |         |
| Sample  | Sample1            | Sample2  | Sample3                    | Sample4 | Sample5 |
| Appearance :  |                    |  |                            |         |         |
| Connector Tension $\cong$ 1.0kgf  | 3.28               | 3.15   | 3.22                       | 3.25    | 3.18    |
| Judgement : OK  |                    |  |                            |         |         |
| Mark : The pull is far beyond the standard pull   |                    |  |                            |         |         |

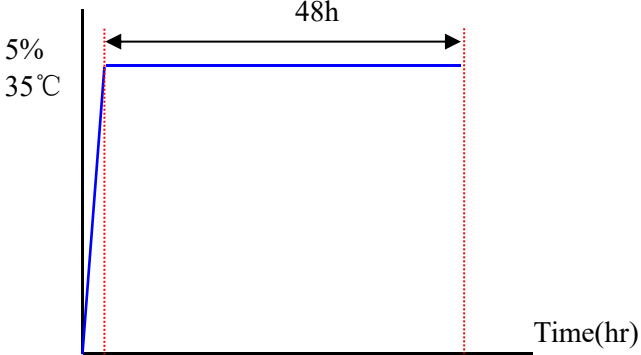
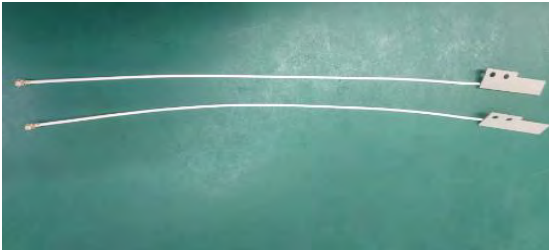
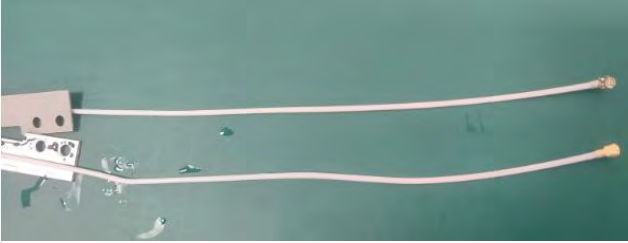
Approved :唐剑剑

Review : 王莲

Prepared: 李敬

## Reliability Test Report

Report No.: 20230325010

|  |                   |   |                               |  |  |  |  |  |  |
|--|-------------------|---|-------------------------------|--|--|--|--|--|--|
| Customer Name  | Davo Link         | Test Date   | 23-25 <sup>th</sup> Mar, 2023 |  |  |  |  |  |  |
| Product Name   | PCB Antenna       | Sample Q'TY   | 2PCS                          |  |  |  |  |  |  |
| Part No.   | 6307F00012        | Edition   | /                             |  |  |  |  |  |  |
| Test Purpose   | Verify Appearance | Test Purpose  | /                             |  |  |  |  |  |  |
| Test Item: salt spray test Place: laboratory<br>Test Standard: <u>GB/T 2423.17</u><br>Test Time: <u>48H</u><br>Test SPEC: Temperate <u>35°C</u> Salt-liquor thickness: <u>5%</u><br>Equipment: Salt spray tester<br>Conclusion Due Date : 16th April, 2023 |                   | Test status diagram:<br> |                               |  |  |  |  |  |  |
| Sample before test   |                   | sample after test   |                               |  |  |  |  |  |  |
|    |                   |                         |                               |  |  |  |  |  |  |
| Test Result  |                   |   |                               |  |  |  |  |  |  |
| Sample   | Sample1           | Sample2   |                               |  |  |  |  |  |  |
| Come away  | OK                | OK  |                               |  |  |  |  |  |  |
| Oxidation  | OK                | OK  |                               |  |  |  |  |  |  |
| VSWR   | OK                | OK  |                               |  |  |  |  |  |  |
| Judgement: OK  |                   |   |                               |  |  |  |  |  |  |
| Remark:  |                   |   |                               |  |  |  |  |  |  |

Approved : 唐剑剑

Prepared : 王莲

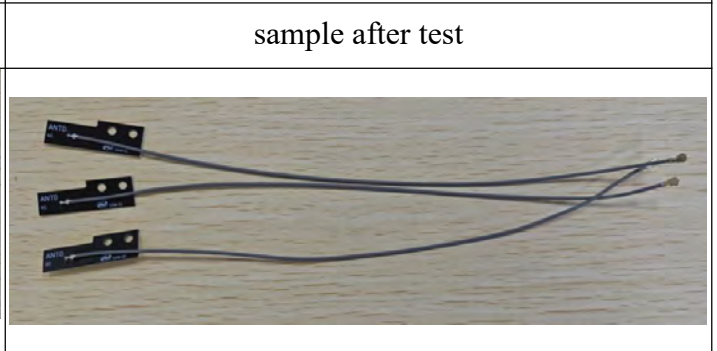
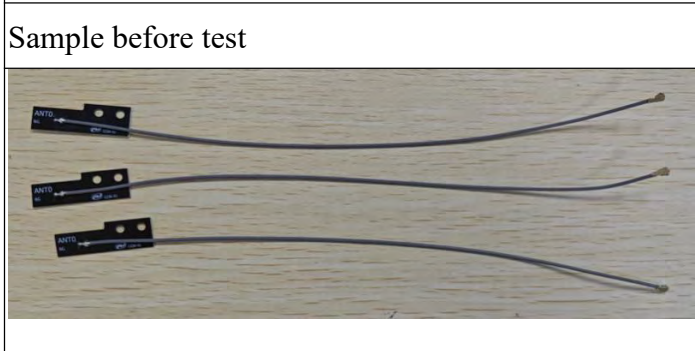
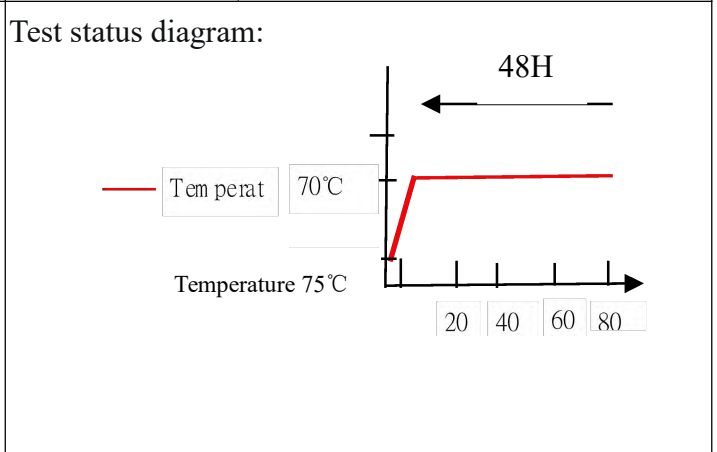
Review: 庞会芳

**Reliability Test Report**

Report No.: :HT230324001

|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 22-24 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 3PCS                          |
| Part No.      | 6307F00012        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Batch number | NA                            |

Test Item: high temperature test Place: laboratory  
 Test Standard: GB/T 2423.3  
 Test Time: 48H  
 Test SPEC: Temperate 75°C  
 Equipment: High temperature and high humidity testing machine



**Test Result**

| Sample    | Sample1 | Sample2 | Sample 3 |  |  |  |  |  |  |
|-----------|---------|---------|----------|--|--|--|--|--|--|
| Variation | ok      | ok      | ok       |  |  |  |  |  |  |
| Come Away | ok      | ok      | ok       |  |  |  |  |  |  |
| Crack     | ok      | ok      | ok       |  |  |  |  |  |  |

**Judgement: OK**

Remark:

Approved : 唐剑剑

Prepared : 王莲

Review: 李敬

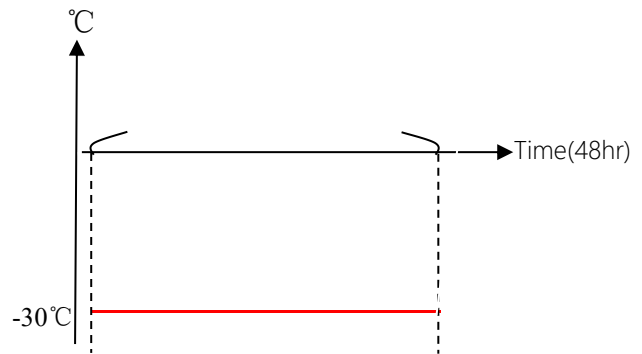
**Reliability Test Report**

Report No.: :LT230326001

|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 24-26 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 3PCS                          |
| Part No.      | 6307F00012        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Batch number | NA                            |

Test Item: low temperature test Place: laboratory  
 Test Standard: GB/T 2423.1  
 Test Time: 48H  
 Test SPEC: Temperate -30°C  
 Equipment: TEMP&HUMI chamber  
 Conclusion Due Date : 16th April, 2023

Test status diagram:



Sample before test

sample after test



Test Result

| Sample     | Sample1 | Sample2 | Sample 3 |  |  |  |  |  |  |
|------------|---------|---------|----------|--|--|--|--|--|--|
| Variation  | ok      | ok      | ok       |  |  |  |  |  |  |
| Aberration | ok      | ok      | ok       |  |  |  |  |  |  |
| Crack      | ok      | ok      | ok       |  |  |  |  |  |  |

Judgement: OK

Remark:

Approved : 唐剑剑

Prepared : 王莲

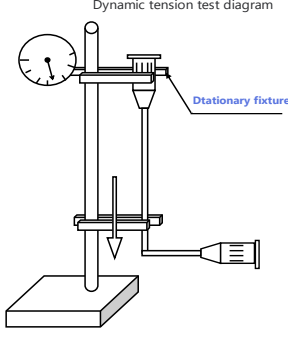
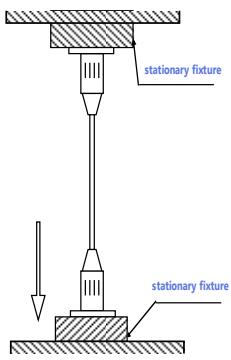
Review: 李敬

# Signal Plus Technology Co.,Ltd.

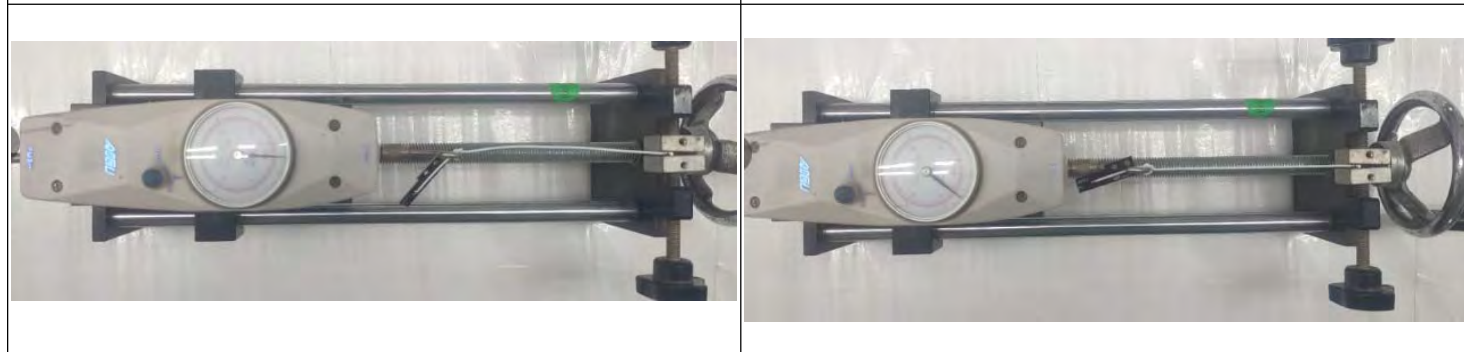
## Reliability Test Report

Report No.:20230325007

|               |                          |              |                            |
|---------------|--------------------------|--------------|----------------------------|
| Customer Name | Davo Link                | Test Date    | 25 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna              | Sample Q'TY  | 5PCS                       |
| Part No.      | 6307F00012               | Edition      | /                          |
| Test Purpose  | Verify Connector Tension | Test Purpose | /                          |

|   |  |
|---|--|
| <p>Test Item : Tension Test Place: laboratory</p> <p>Test Standard : <u>Reference AQA-SIP-C5036-009</u></p> <p>Test SPEC</p> <p style="padding-left: 40px;">Connector Tension <math>\cong</math> <u>1.0 kgf</u></p> <p>Equipment : <u>Tension Testing Machine NK-300</u></p> <p>Conclusion Due Date : <u>2024.02.16</u></p> | <p>Test status diagram:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Dynamic tension test diagram</p>  </div> <div style="text-align: center;"> <p>Static tension test diagram</p>  </div> </div> |
|---|--|

|                    |                   |
|--------------------|-------------------|
| Sample before test | Sample after test |
|--------------------|-------------------|



**Test Result:**

| Sample | Sample1 | Sample2 | Sample3 | Sample4 | Sample5 |
|--------|---------|---------|---------|---------|---------|
|--------|---------|---------|---------|---------|---------|

|                                  |     |     |     |     |     |
|----------------------------------|-----|-----|-----|-----|-----|
| <b>Appearance :</b>              |     |     |     |     |     |
| Connector Tension $\cong$ 1.0kgf | 3.0 | 3.0 | 3.2 | 3.0 | 3.0 |

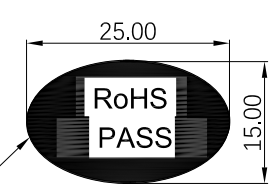
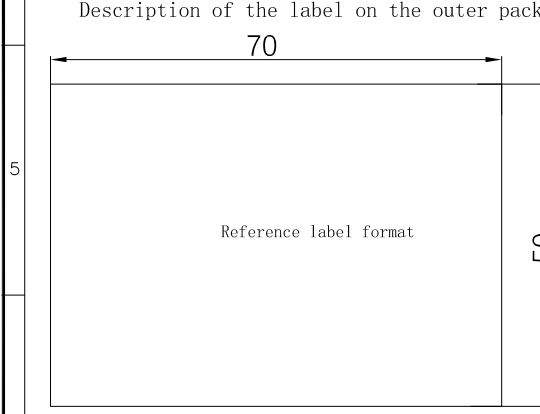
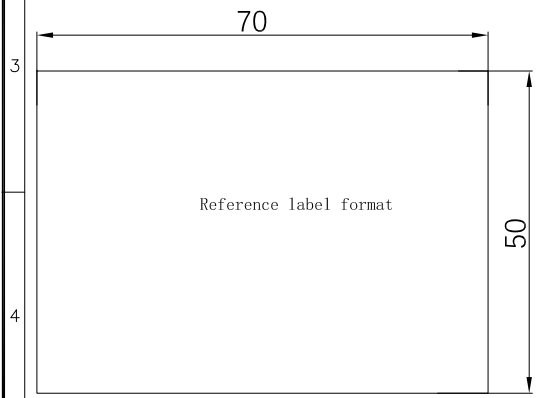
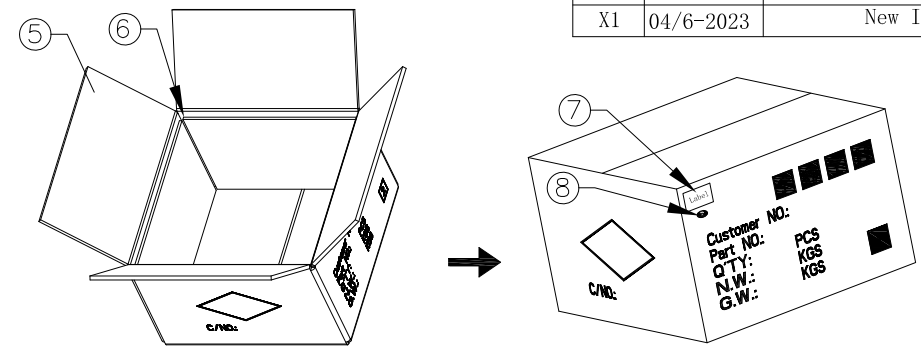
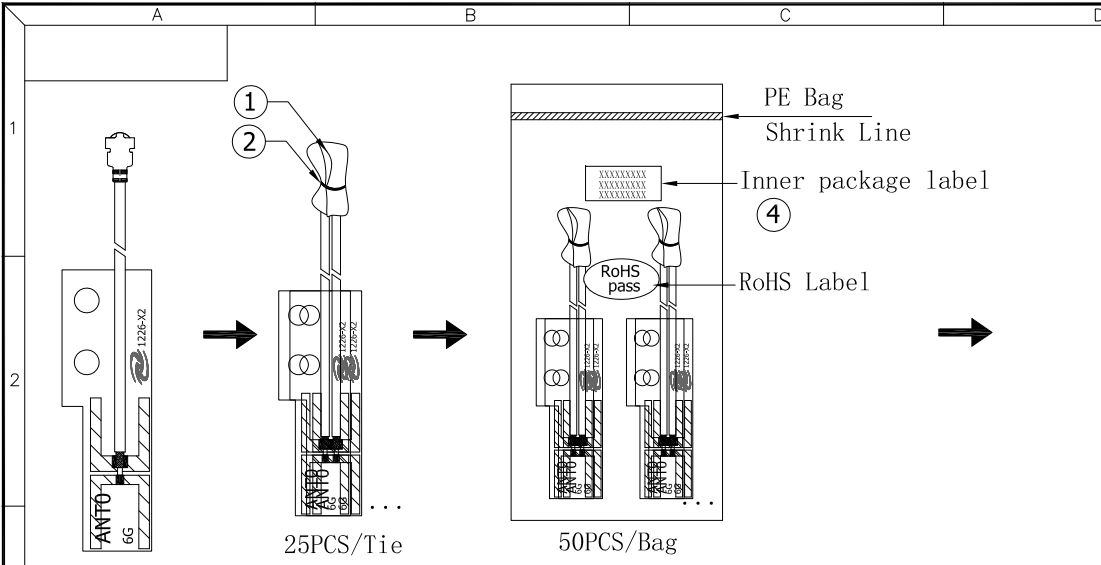
**Judgement : OK**

**Mark :** The pull is far beyond the standard pull

|               |             |              |
|---------------|-------------|--------------|
| Approved :唐剑剑 | Review : 王莲 | Prepared: 王丹 |
|---------------|-------------|--------------|



| REV | DATE      | DESCRIPTION |
|-----|-----------|-------------|
| X1  | 04/6-2023 | New Issue   |



Customer NO.: \_\_\_\_\_  
Part NO.: \_\_\_\_\_  
Q'TY: 2000 PCS  
N.W.: Net weight KGS  
G.W.: Rough weight KGS

| 12 | CYP-92035015014-A | Label (white base copper paper not polished)35(L)*10(W)mm<br>Strong viscous whiskers                     | 1/2000  |        |
|----|-------------------|--|---------|--------|
| 11 | CYP-92040020046-A | Label printing black lettering (paper color changes with month)<br>40(L)*20(W)mm Strong viscous whiskers | 1/2000  |        |
| 10 | CYP-9100013035-A  | Partition paper (brown and yellow)310*55*6.0mm   | 6/2000  |        |
| 9  | CYP-9100013031-A  | Partition paper (brown and yellow)312*312*4.0mm  | 3/2000  |        |
| 8  | CYP-92025015006-A | Label (glossy copper paper)25(L)*15(W)mm Strong viscous whiskers<br>Black print (RoHS PASS)              | 41/2000 |        |
| 7  | CYP-92070050018-A | Label (white base copper paper not polished)70(L)*50(W)mm<br>Strong viscous whiskers                     | 1/2000  |        |
| 6  | CYP-9100013034-A  | Partition paper (brown and yellow)1240*55*6.0mm  | 3/2000  |        |
| 5  | CYP-9100012009-A  | carton(AB type ) Brown paper320*320*200mm Blue Print (Box 1)   | 1/2000  |        |
| 4  | CYP-92070050018-A | Label(Copper paper with white backing is not polished)70(L)*50(W)mm<br>Strong viscous whiskers           | 1/50    |        |
| 3  | CYP-9000050010-A  | PE Bag 110(W)*280(L)*0.05mm(with holes)  | 1/50    |        |
| 2  | CYP-9100014006-A  | Rubber band $\phi$ 18(inside)* $\phi$ 20(outside)*1.5(thickness)mm White                                 | 1/25    |        |
| 1  | CYP-9100010001-A  | EPE 70*70*0.5mm White  | 1/25    |        |
| NO | PART NAME         | DESCRIPTION  | Q' TY   | REMARK |

|             |           |          |
|-------------|-----------|----------|
| XXX.        | $\pm 2.0$ | APPROVED |
| XX.         | $\pm 1.0$ |          |
| X.          | $\pm 0.5$ | CHECKED  |
| .X          | $\pm 0.2$ |          |
| .XX         | $\pm 0.1$ | DRAWING  |
| $\oplus$    |           |          |
| $\triangle$ |           |          |

|                             |      |       |      |        |       |  |
|-----------------------------|------|-------|------|--------|-------|--|
| CUSTOMER:                   |      |       |      |        |       |  |
| PART NO:                    |      |       |      |        |       |  |
| PART NAME: Built-in Antenna |      |       |      |        |       |  |
| Z&X P/NO: 6307F00012        |      |       |      |        |       |  |
| REV                         | UNIT | Scale | Size | Page   | FILE: |  |
| X1                          | mm   | 1/1   | A 4  | 1 OF 1 |       |  |

上海增信电子有限公司  
Signal Plus Technology Co., Ltd.

Attach the label to the upper right corner of the carton



**上海增信电子有限公司**  
Signal Plus Technology Co., Ltd.

**规格承认书**  
SPECIFICATION FOR APPROVAL

日期  
DATE: 2023.04.07

版本  
REV.: B

客户  
CUSTOMER: DAVO LINK

客户料号  
CUSTOMER P/N: \_\_\_\_\_

品名  
PART NAME: Internal PCB Teflon Ant, 6G-ANT1 1.37 low loss white cable 250mm  
with RF CONN for DVW-632

供方料号  
SUPPLIER P/N: 6307F00013

送样日期Date: \_\_\_\_\_ 送样数量Q'TY: \_\_\_\_\_ Pcs

| 客户确认CUSTOMER APPROVED BY |                  |                   |
|--------------------------|------------------|-------------------|
| 核准<br>Approved by        | 审核<br>Checked by | 拟制<br>Prepared by |
|                          |                  |                   |

| 供方确认SUPPLIER SIGNATURE |                  |                   |
|------------------------|------------------|-------------------|
| 核准<br>Approved by      | 审核<br>Checked by | 拟制<br>Prepared by |
| Jack                   |                  | andy              |

ZX-QT-RD-0011-A1

Add:上海市徐汇区桂箐路69号30栋605室 Tel:021-54266190 Fax:021-54266191

# Specification

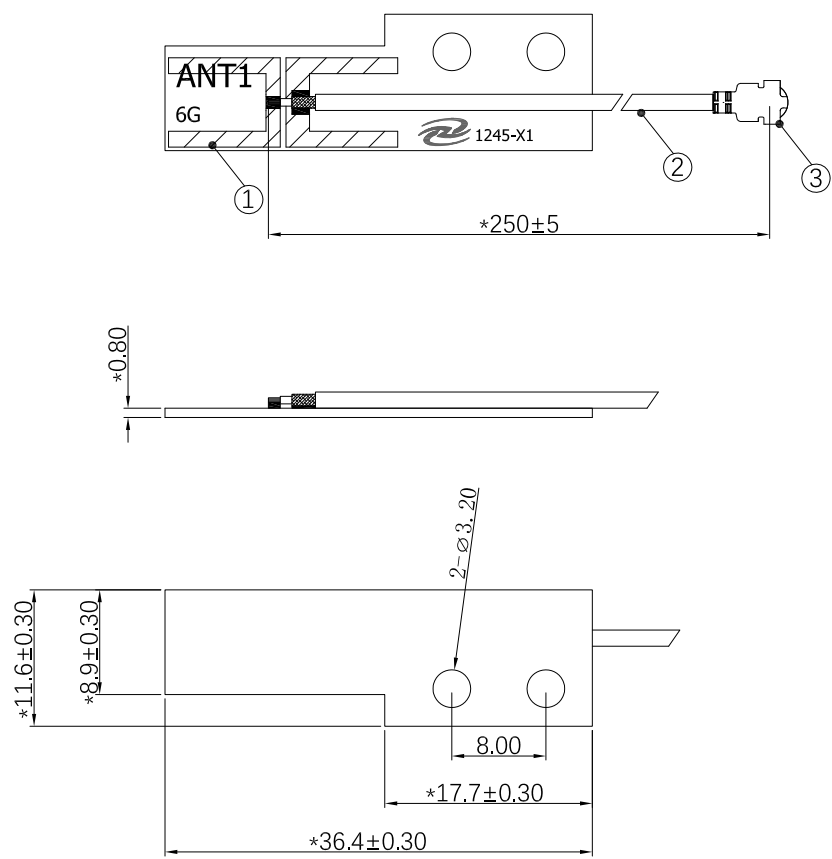
## 1. Electrical Properties :

- 1.1 Frequency Range.....5925~7125MHz
- 1.2 Impedance ..... 50  $\Omega$
- 1.3 VSWR .....  $\leq 1.8$
- 1.5 Gain ..... 6dBi

## 2. Physical Properties :

- 2.1 Cable..... RF 1.37
- 2.2 Connector ..... IPEX compatible
- 2.3 Operating Temp. .... -20 $^{\circ}$ C ~ +65 $^{\circ}$ C
- 2.4 Storage Temp. .... -30 $^{\circ}$ C ~ +75 $^{\circ}$ C

| REV | DATE       | DESCRIPTION                                     |
|-----|------------|---|
| X1  | 01/07-2023 | New Issue                                       |
| X2  | 02/13-2023 | Optimization of antenna and Change Cable length |
| X3  | 03/06-2023 | Modifying the frequency band configuratio       |
| X4  | 03/15-2023 | Correct electrical performance parameters       |
| X5  | 04/06-2023 | Correct electrical performance parameters       |



- 1.ELECTRICAL PROPERTIES:
- 1.1 Frequency Range.....5.925-7.125GHz
  - 1.2 Impedance.....50 Ohm Nominal
  - 1.3 VSWR.....1.8(Max)(with housing)
  - 1.4 Gain.....6.0dBi
- 2.These Products are in conformity with ROHS 2.0
- 3.With"\*"Is Important Dimension.

| NO | DESCRIPTION | Q'TY | REMARK   |
|----|-------------|------|--|
| 3  | Connector   | 1    | IPEX compatible                                |
| 2  | 6G Cable    | 1    | 1.37 Low Loss White Cable                      |
| 1  | PCB         | 1    | Teflon PCB, single panel, Black oil 501-1-1245 |

CUSTOMER'S SINGATURE

|      |      |             |                                       |      |            |
|------|------|-------------|---------------------------------------|------|------------|
| XXX. | ±2.0 | APPROVED    | CUSTOMER:                             |      |            |
| XX.  | ±1.0 |             | PART NO:                              |      |            |
| X.   | ±0.5 | CHECKED     | PART NAME: PCB Antenna (DVW-632 ANT1) |      |            |
| .X   | ±0.3 |             | Z&X P/NO: 6307F00013                  |      |            |
| .XX  | ±0.2 | DRAWING yzq | REV                                   | UNIT | FILE:      |
| ⊕    |      |             | x5                                    | mm   | SHEET: 1/1 |





**上海增信电子有限公司**  
**Signal Plus Technology Co., Ltd.**

## Antenna Test Report

DVW-632

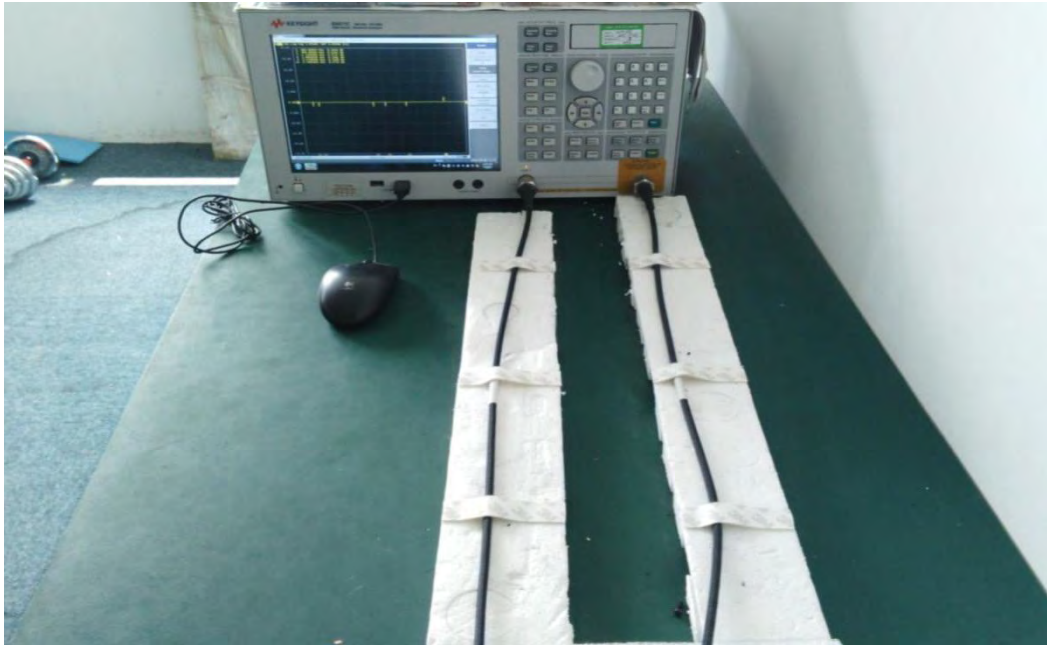


## 1. RF Fixture Experiment

### 1.1 Test Setup

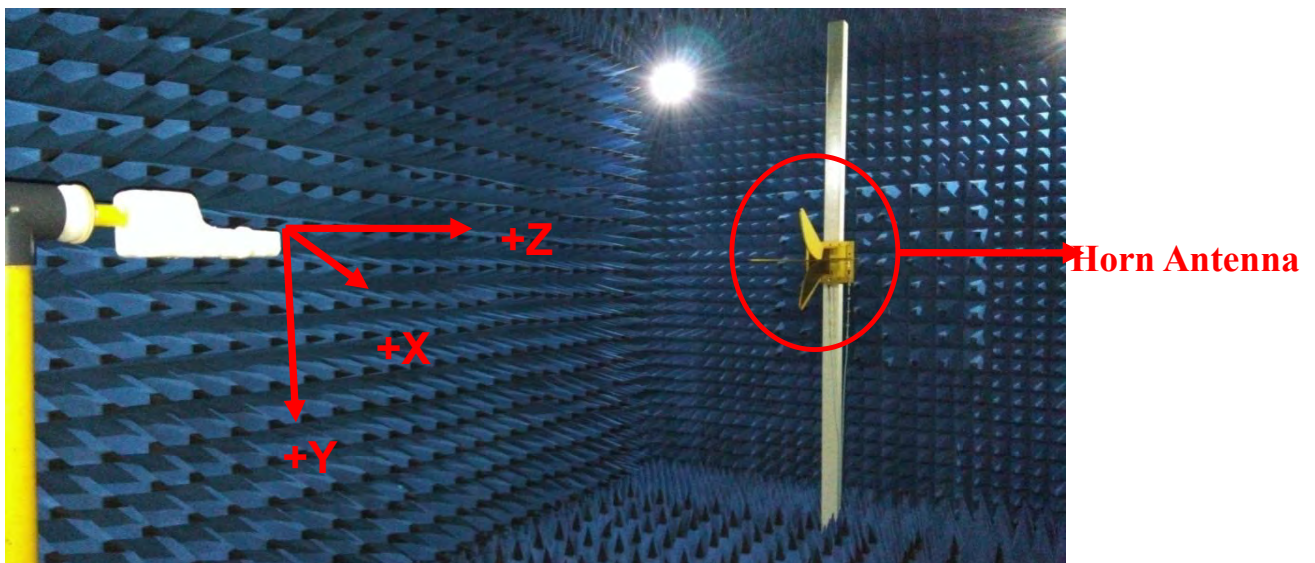
#### 1.1.1 VNA Test Setup

VSWR and Return Loss measurements ( $S_{11}$ ) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

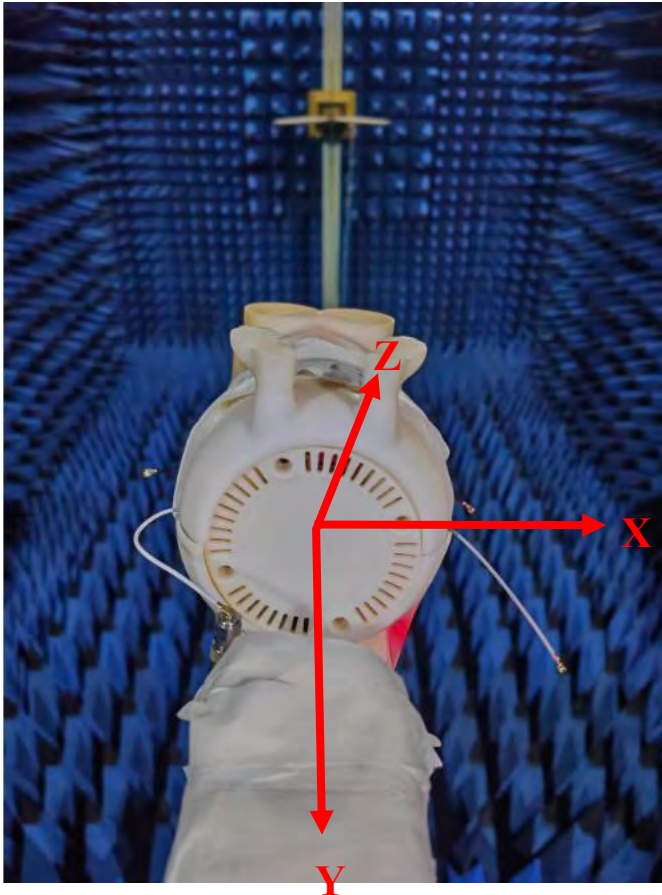


#### 1.1.2 Anechoic Chamber Test Setup

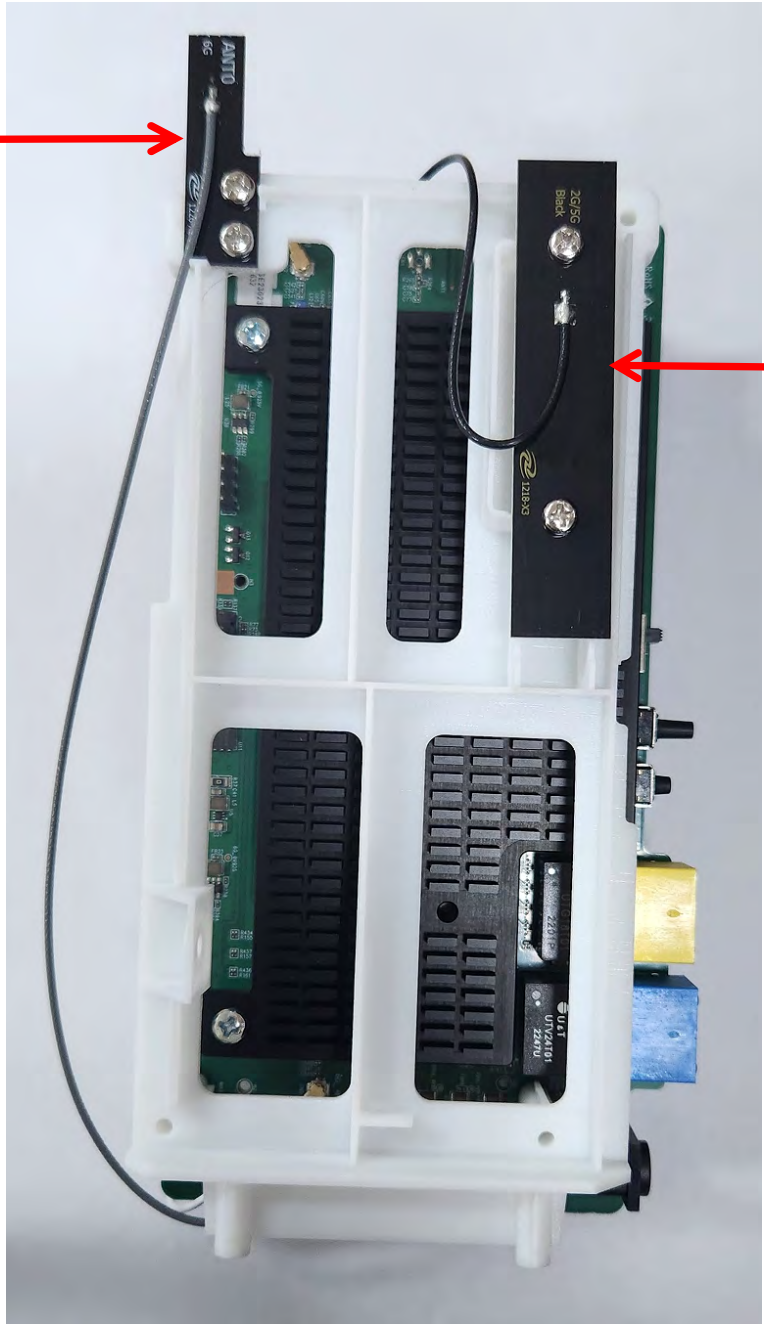
The gain of the antenna was measured in the anechoic chamber. The chamber provides less than  $-30$  dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m\*4m\*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



2. Antenna Solution

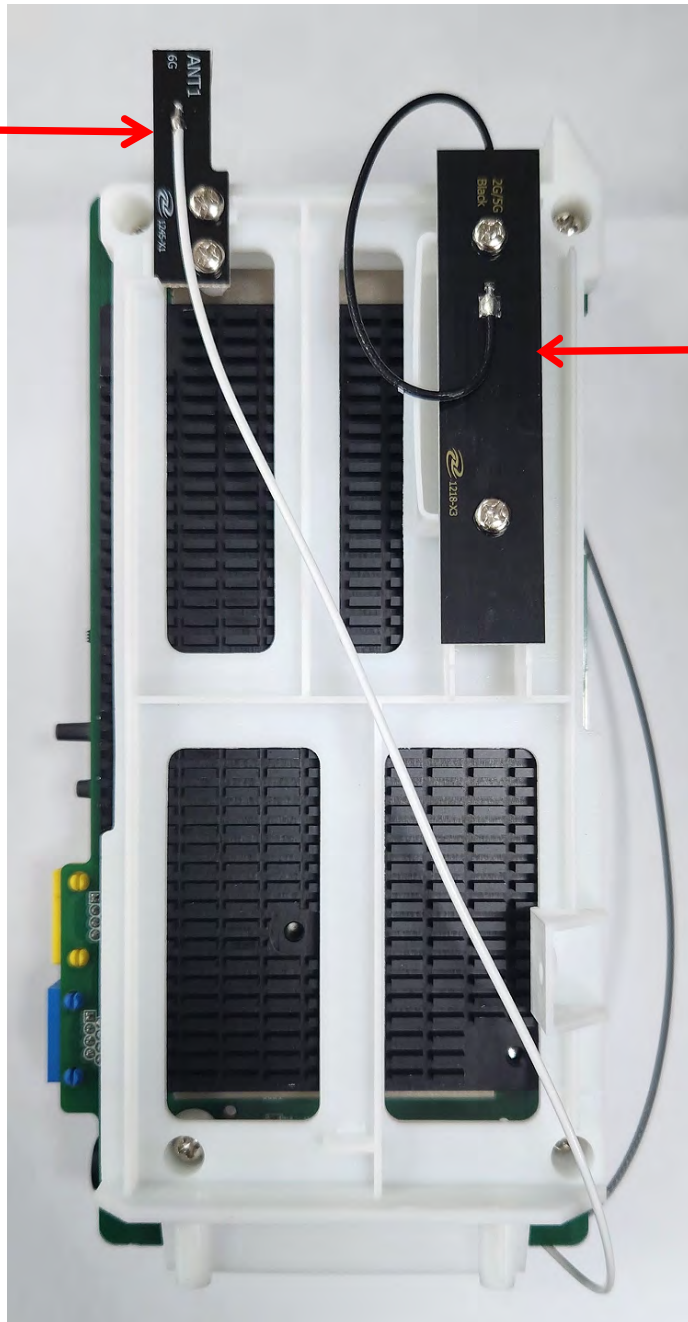


Ant0 6G  
240mm Cable



Ant1 2&5G  
120mm Cable

Ant1 6G  
250mm Cable



Ant0 2&5G  
120mm Cable



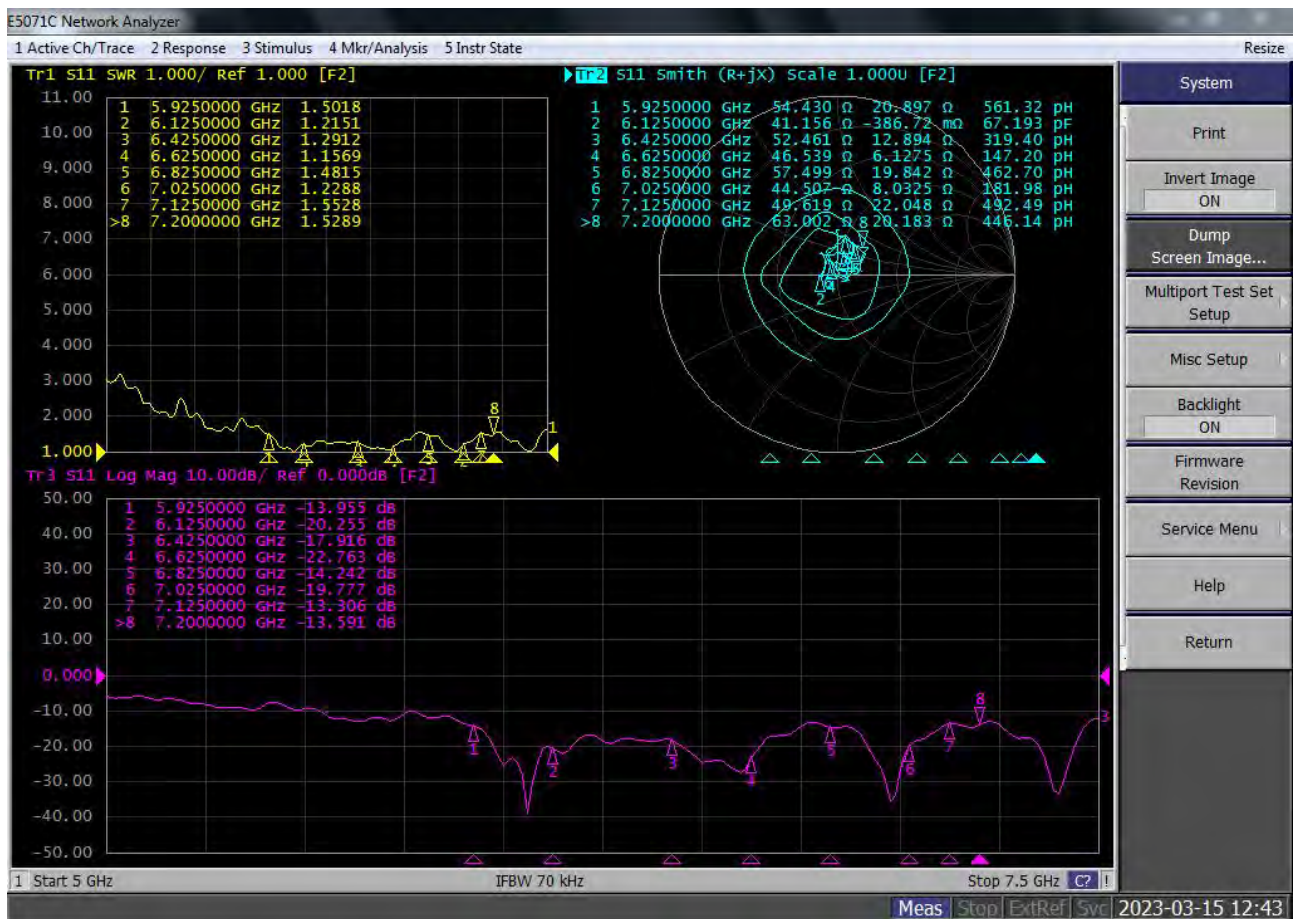
# Data Preview

## Ant1-6G 250mm Cable

| Freq.(MHz) | 5925  | 6125  | 6425  | 6625  | 6825  | 7025  | 7125  | 7200  |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|
| VSWR       | 1.50  | 1.22  | 1.29  | 1.16  | 1.48  | 1.23  | 1.55  | 1.53  |
| Gain(dBi)  | 5.17  | 5.19  | 5.76  | 6.34  | 6.59  | 5.72  | 5.27  | 5.91  |
| Eff. (%)   | 65.90 | 63.00 | 67.80 | 77.00 | 75.00 | 64.30 | 63.60 | 63.60 |

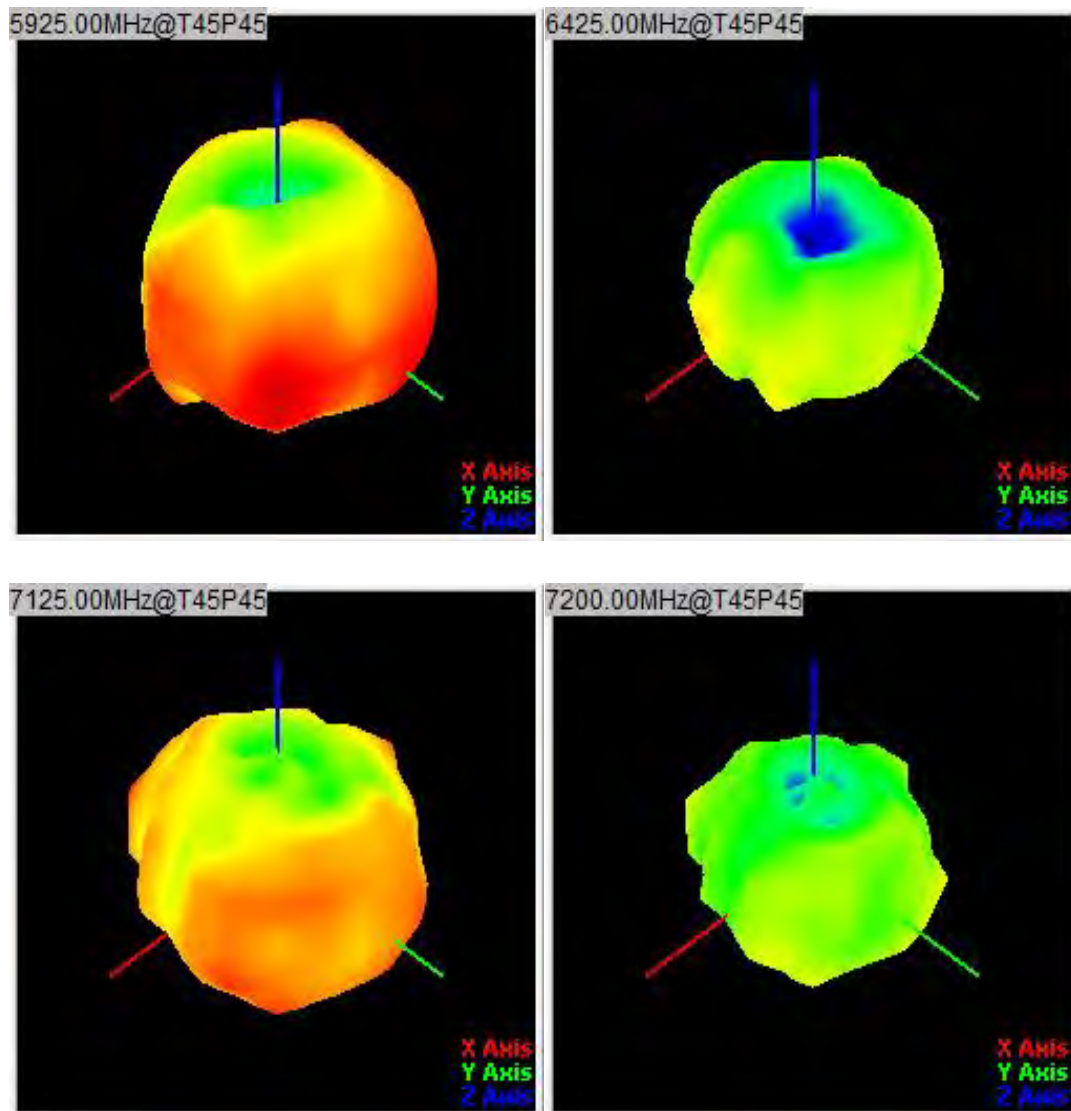
## S11:

## Ant1-6G 250mm Cable

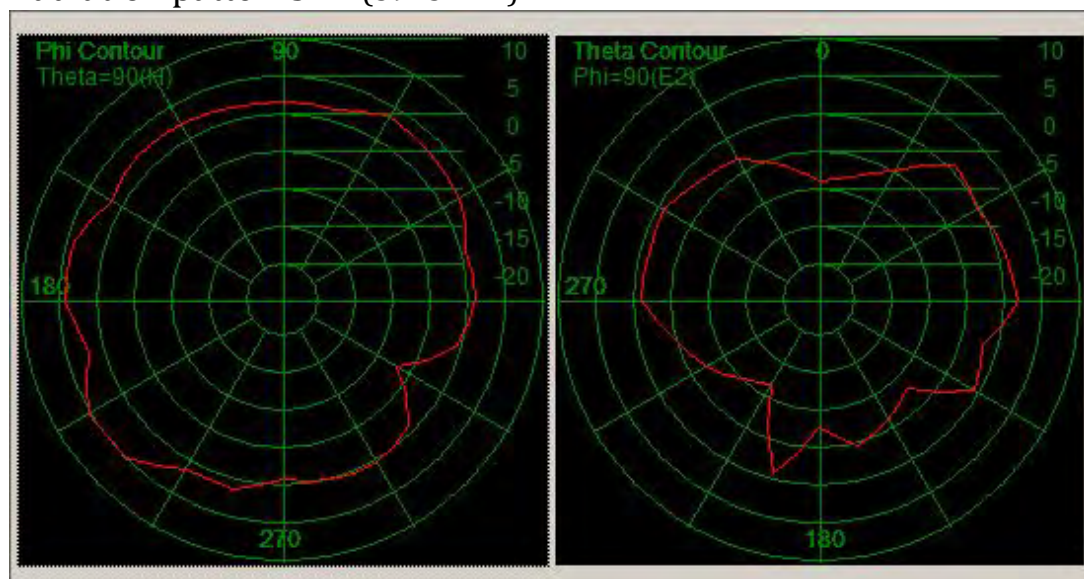




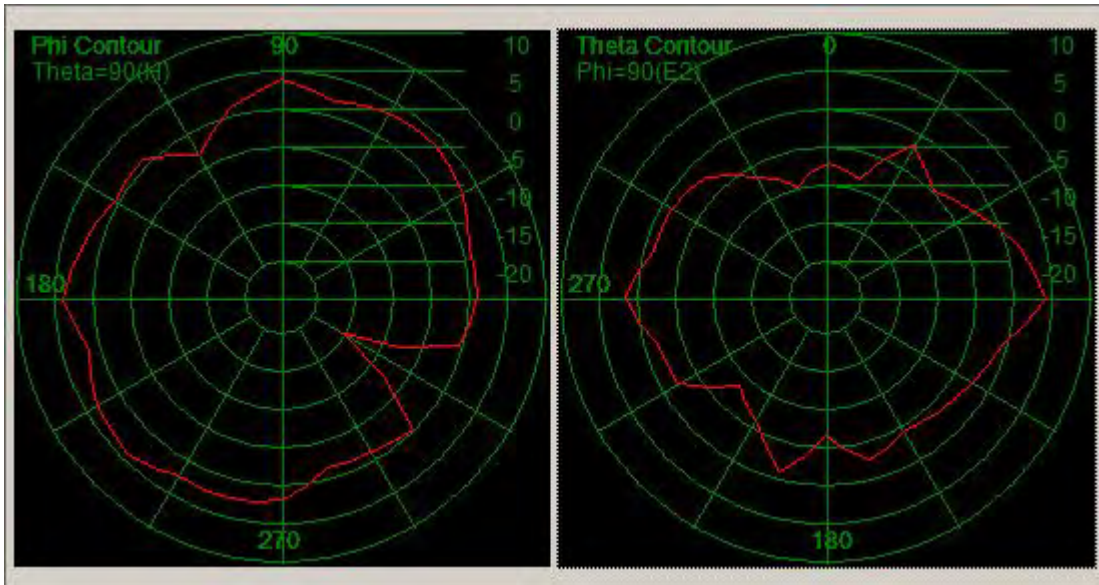
## Radiation patterns:3D



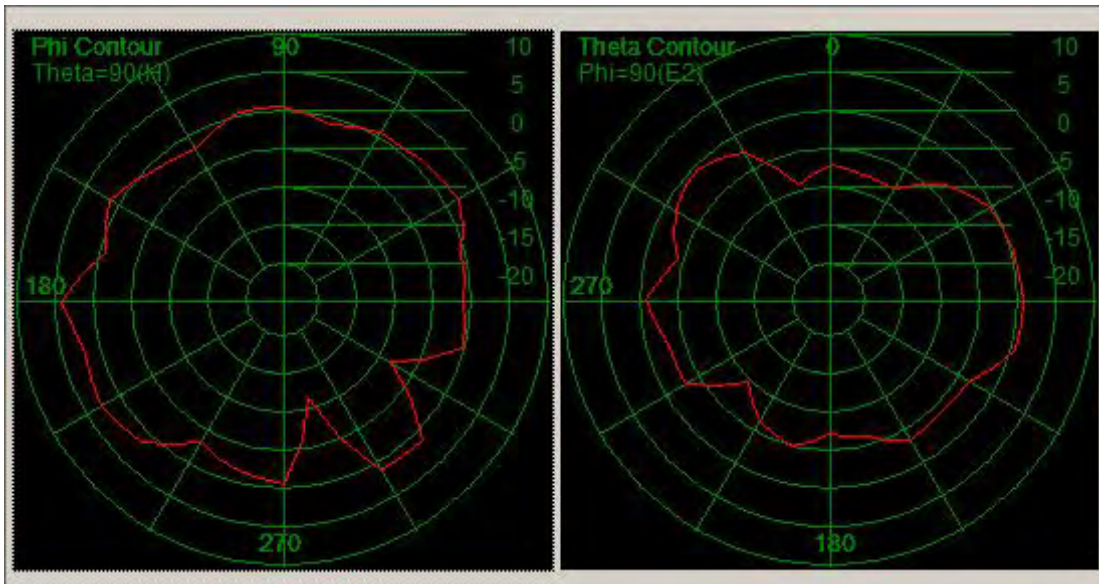
## Radiation patterns:2D(5925MHz)



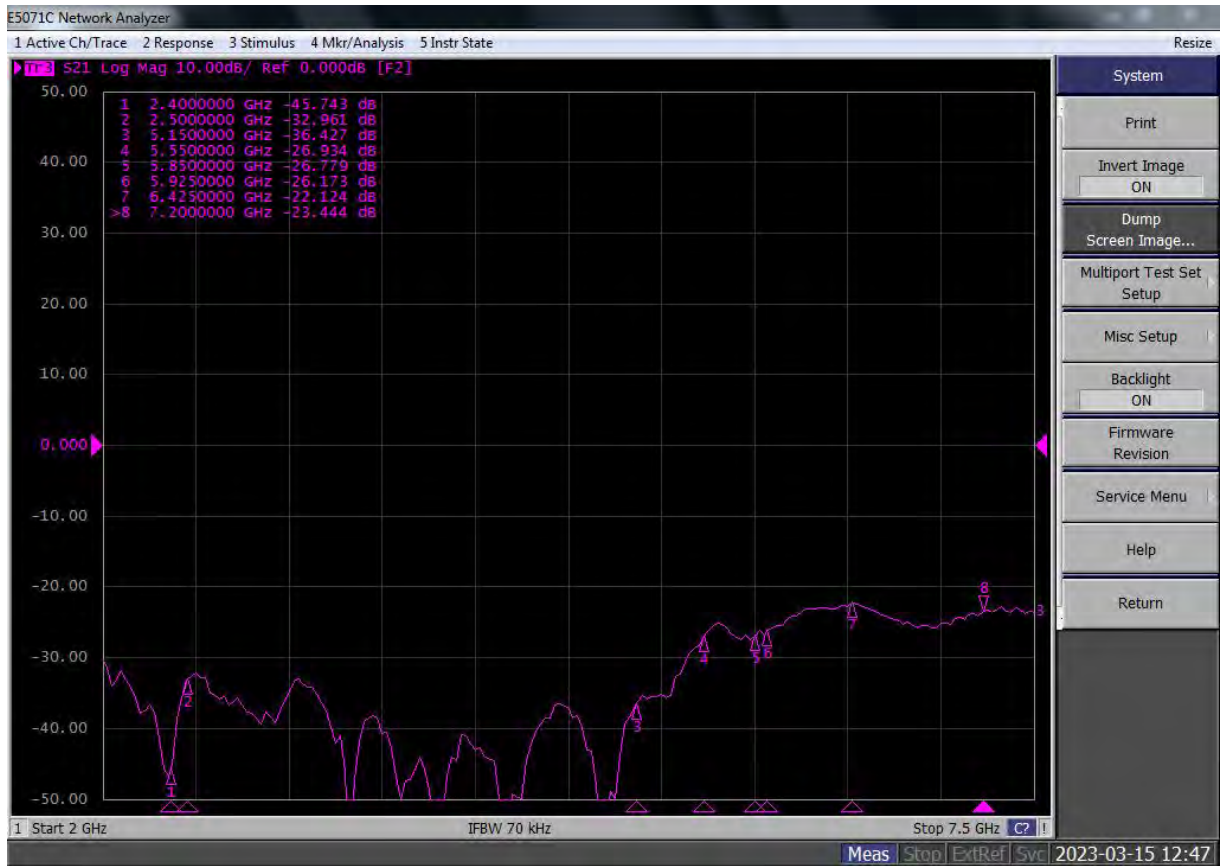
Radiation patterns:2D(6425MHz)



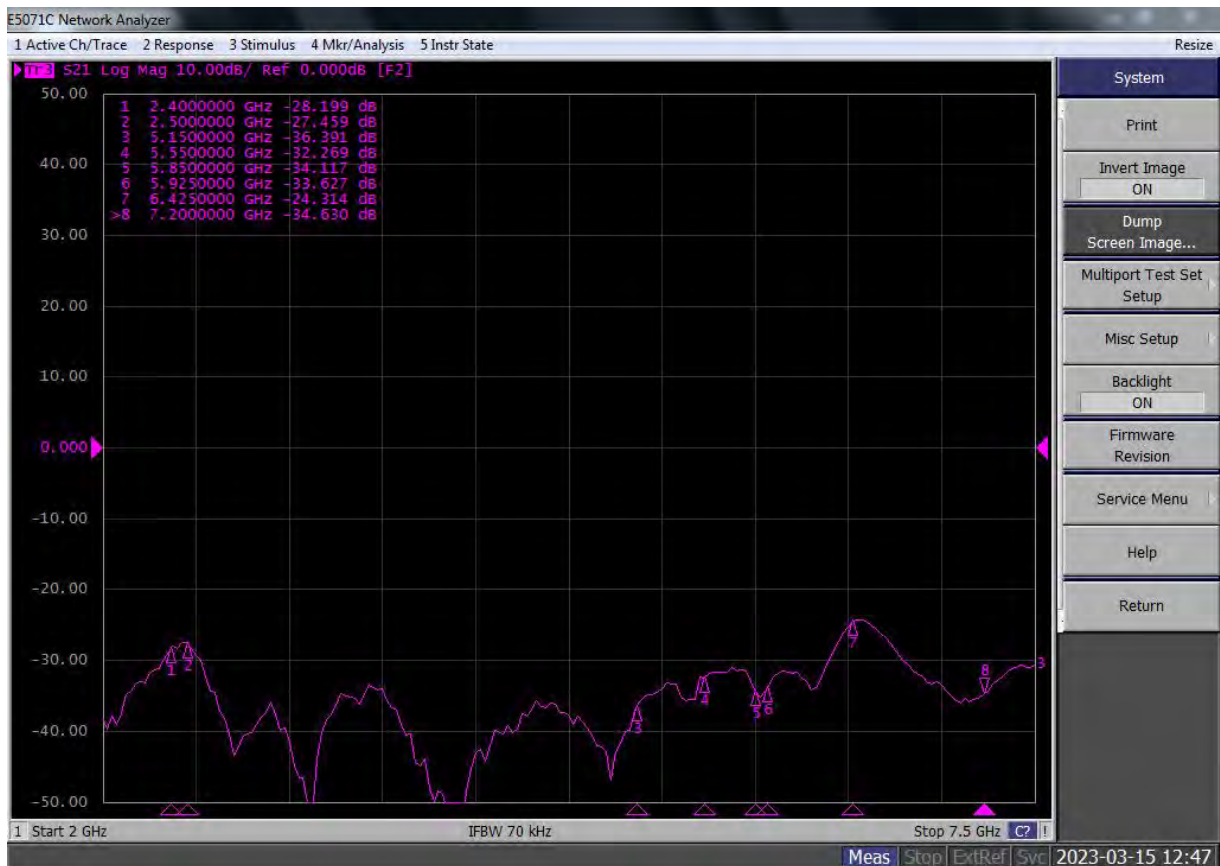
Radiation patterns:2D(7125MHz)



## S21-2&5G0,6G1



## S21-2&5G1,6G1





# S21-6G0,6G1



# Signal Plus Technology Co.,Ltd.

FAI full size inspection report

No:QIP230302

| Customer Name | Davo Link |             |             | Product Name    | PCB Antenna |       |       |       | Date     | 25th Mar, 2023 |  |              |           |         |
|---------------|-----------|-------------|-------------|-----------------|-------------|-------|-------|-------|----------|----------------|--|--------------|-----------|---------|
| Customer P/I  | /         |             |             | Signal Plus P/N | 6307F00013  |       |       |       | Material | /              |  |              |           |         |
| NO.           | Size      | tolerance   |             | Sample number   |             |       |       |       |          |                |  | Measure Tool | Judgement |         |
|               |           | Upper limit | Lower limit | 1               | 2           | 3     | 4     | 5     |          |                |  |              |           |         |
| 1             | 36.4±0.3  | 36.7        | 36.1        | 36.38           | 36.38       | 36.37 | 36.38 | 36.39 |          |                |  |              | a         | ■OK □NG |
| 2             | 17.7±0.3  | 18          | 17.4        | 17.69           | 17.68       | 17.69 | 17.68 | 17.69 |          |                |  |              | a         | ■OK □NG |
| 3             | 8.9±0.3   | 9.2         | 8.6         | 8.9             | 8.91        | 8.91  | 8.89  | 8.9   |          |                |  |              | a         | ■OK □NG |
| 4             | 11.6±0.3  | 11.9        | 11.3        | 11.58           | 11.57       | 11.57 | 11.56 | 11.57 |          |                |  |              | a         | ■OK □NG |
| 5             | 0.80±0.03 | 0.83        | 0.77        | 0.81            | 0.81        | 0.82  | 0.81  | 0.81  |          |                |  |              | a         | ■OK □NG |
| 6             | 250.0±5   | 255         | 245         | 251.2           | 250.5       | 251.3 | 250.8 | 251.1 |          |                |  |              | I         | ■OK □NG |
| Remark:       |           |             |             |                 |             |       |       |       |          |                |  |              |           |         |

※Measuring tools: A.Vernier caliper B.Quadratic element C.Depth gauge D.Tool microscope E.Thickness gauge F.micrometer G.torsion meter H.Drawing test machine I. Steel rule

Approved: 唐剑剑

Prepared : 王莲

Review: 韦颖

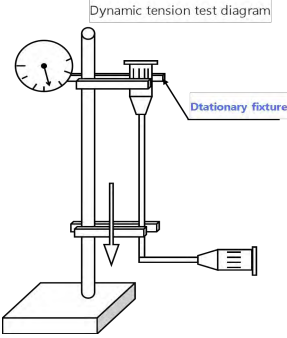
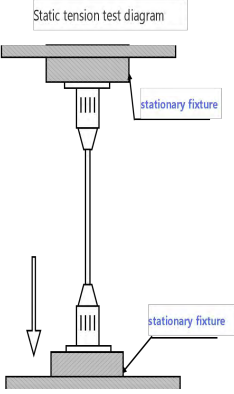


# Signal Plus Technology Co,Ltd.

## Reliability Test Report

Report No.:20230325003

|               |                    |              |                            |
|---------------|--------------------|--------------|----------------------------|
| Customer Name | Davo Link          | Test Date    | 25 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna        | Sample Q'TY  | 5PCS                       |
| Part No.      | 6307F00013         | Edition      | /                          |
| Test Purpose  | Verify Pad Tension | Test Purpose | /                          |

|   |  |
|---|--|
| <p>Test Item : Tension Test Place: laboratory</p> <p>Test Standard : <u>Reference AQA-SIP-C5036-009</u></p> <p>Test SPEC</p> <p style="text-align: center;">Pad Tension <math>\cong</math> 2.0 kgf</p> <p>Equipment : <u>Tension Testing Machine ZP-200</u></p> <p>Conclusion Due Date : <u>16<sup>th</sup> Feb, 2024</u></p> | <p>Test status diagram:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Dynamic tension test diagram</p> </div> <div style="text-align: center;">  <p>Static tension test diagram</p> </div> </div> |
|---|--|

|                    |                   |
|--------------------|-------------------|
| Sample before test | Sample after test |
|--------------------|-------------------|



**Test Result:**

| Sample | Sample1 | Sample2 | Sample3 | Sample4 | Sample5 |
|--------|---------|---------|---------|---------|---------|
|--------|---------|---------|---------|---------|---------|

**Appearance :**

| Connector Tension $\cong$ 1.0kgf | 3.21 | 3.10 | 3.27 | 3.04 | 3.14 |
|----------------------------------|------|------|------|------|------|
|----------------------------------|------|------|------|------|------|

Judgement : OK

Mark : The pull is far beyond the standard pull

Approved :唐剑剑

Review : 王莲

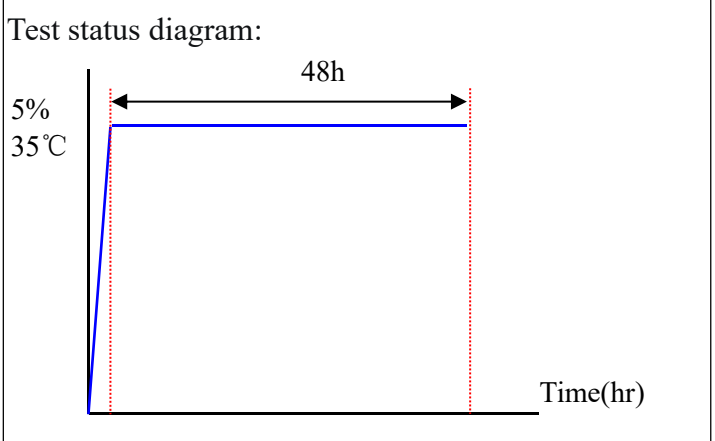
Prepared: 李敬

**Reliability Test Report**

Report No.: 20230325011

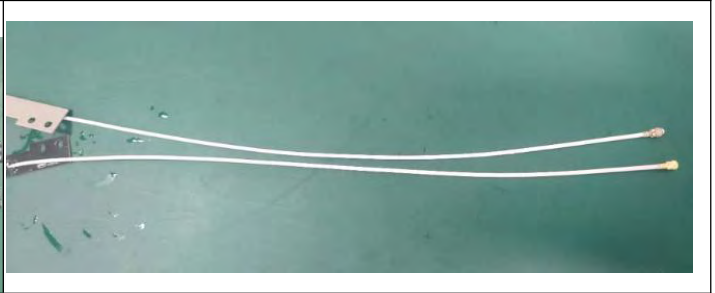
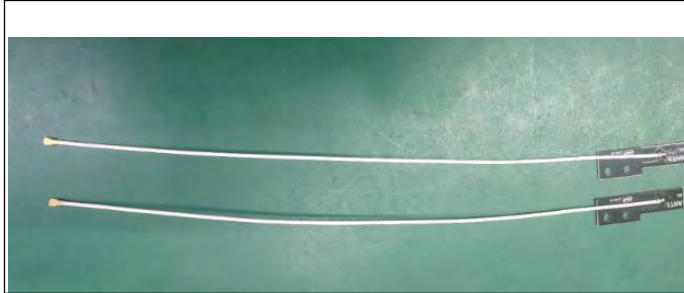
|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 23-25 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 2PCS                          |
| Part No.      | 6307F00013        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Test Purpose | /                             |

Test Item: salt spray test Place: laboratory  
 Test Standard: GB/T 2423.17  
 Test Time: 48H  
 Test SPEC: Temperate 35°C Salt-liquor thickness: 5%  
 Equipment: Salt spray tester  
 Conclusion Due Date : 16th April, 2023



Sample before test

sample after test



**Test Result**

| Sample    | Sample1 | Sample2 |  |  |  |  |  |  |  |  |
|-----------|---------|---------|--|--|--|--|--|--|--|--|
| Come away | OK      | OK      |  |  |  |  |  |  |  |  |
| Oxidation | OK      | OK      |  |  |  |  |  |  |  |  |
| VSWR      | OK      | OK      |  |  |  |  |  |  |  |  |

Judgement: OK

Remark:

Approved : 唐剑剑

Prepared : 王莲

Review: 庞会芳

**Reliability Test Report**

Report No.: HT230324002

|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 22-24 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 3PCS                          |
| Part No.      | 6307F00013        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Batch number | NA                            |

|   |                             |
|---|-----------------------------|
| <p>Test Item: high temperature test Place: laboratory<br/>                 Test Standard: <u>GB/T 2423.3</u><br/>                 Test Time: 48H<br/>                 Test SPEC: Temperate <u>75°C</u><br/>                 Equipment: High temperature and high humidity testing machine</p> | <p>Test status diagram:</p> |
|---|-----------------------------|

|                    |                   |
|--------------------|-------------------|
| Sample before test | sample after test |
|                    |                   |

|               |         |         |          |  |  |  |  |  |  |
|---------------|---------|---------|----------|--|--|--|--|--|--|
| Test Result   |         |         |          |  |  |  |  |  |  |
| Sample        | Sample1 | Sample2 | Sample 3 |  |  |  |  |  |  |
| Variation     | ok      | ok      | ok       |  |  |  |  |  |  |
| Come Away     | ok      | ok      | ok       |  |  |  |  |  |  |
| Crack         | ok      | ok      | ok       |  |  |  |  |  |  |
| Judgement: OK |         |         |          |  |  |  |  |  |  |

Remark:

Approved : 唐剑剑

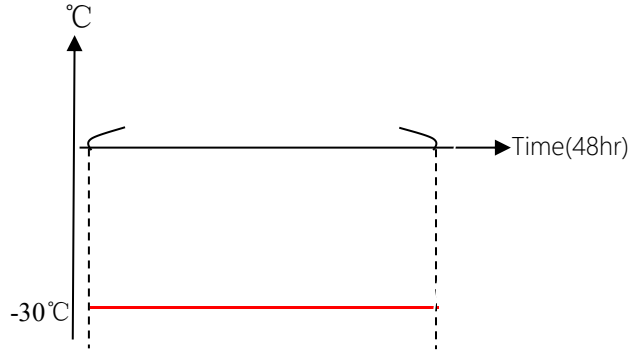
Prepared : 王莲



Review: 李敬

**Reliability Test Report**

Report No.: :LT230326002

|               |                   |              |                               |
|---------------|-------------------|--------------|-------------------------------|
| Customer Name | Davo Link         | Test Date    | 24-26 <sup>th</sup> Mar, 2023 |
| Product Name  | PCB Antenna       | Sample Q'TY  | 3PCS                          |
| Part No.      | 6307F00013        | Edition      | /                             |
| Test Purpose  | Verify Appearance | Batch number | NA                            |

|  |   |
|--|---|
| <p>Test Item: low temperature test Place: laboratory</p> <p>Test Standard: <u>GB/T 2423.1</u></p> <p>Test Time: 48H</p> <p>Test SPEC: Temperate <u>-30°C</u></p> <p>Equipment: TEMP&amp;HUMI chamber</p> | <p>Test status diagram:</p>  |
|--|---|

|   |  |
|---|--|
| Sample before test  | sample after test  |
|  |  |

|             |         |         |          |  |  |  |  |  |  |
|-------------|---------|---------|----------|--|--|--|--|--|--|
| Test Result |         |         |          |  |  |  |  |  |  |
| Sample      | Sample1 | Sample2 | Sample 3 |  |  |  |  |  |  |
| Variation   | ok      | ok      | ok       |  |  |  |  |  |  |
| Aberration  | ok      | ok      | ok       |  |  |  |  |  |  |
| Crack       | ok      | ok      | ok       |  |  |  |  |  |  |

Judgement: OK

Remark:

Approved : 唐剑剑

Prepared : 王莲

Review: 李敬

**Reliability Test Report**

Report No.:20230325006

| Customer Name   | Davo Link                | Test Date                | 25 <sup>th</sup> Mar, 2023 |         |         |
|---|--------------------------|--------------------------|----------------------------|---------|---------|
| Product Name  | PCB Antenna              | Sample Q'TY              | 5PCS                       |         |         |
| Part No.  | 6307F00013               | Edition                  | /                          |         |         |
| Test Purpose  | Verify Connector Tension | Test Purpose             | /                          |         |         |
| Test Item : Tension Test Place: laboratory<br>Test Standard : <u>Reference AQA-SIP-C5036-009</u><br>Test SPEC<br>Connector Tension $\cong$ <u>1.0 kgf</u><br>Equipment : <u>Tension Testing Machine NK-300</u><br>Conclusion Due Date : <u>2024.02.16</u> |                          | Test status diagram:<br> |                            |         |         |
| Sample before test  |                          | Sample after test        |                            |         |         |
|   |                          |                          |                            |         |         |
| Test Result:  |                          |                          |                            |         |         |
| Sample  | Sample1                  | Sample2                  | Sample3                    | Sample4 | Sample5 |
| Appearance :  |                          |                          |                            |         |         |
| Connector Tension $\cong$ 1.0kgf  | 3.1                      | 3.3                      | 2.9                        | 3.1     | 3.3     |
| Judgement : OK  |                          |                          |                            |         |         |
| Mark : The pull is far beyond the standard pull   |                          |                          |                            |         |         |

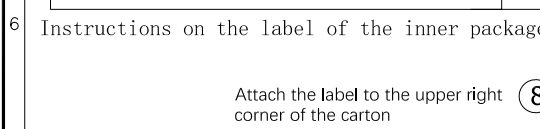
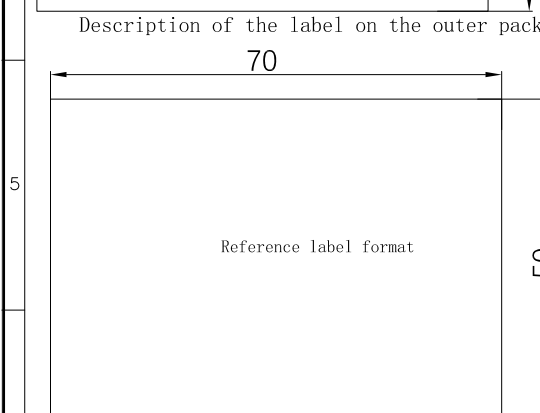
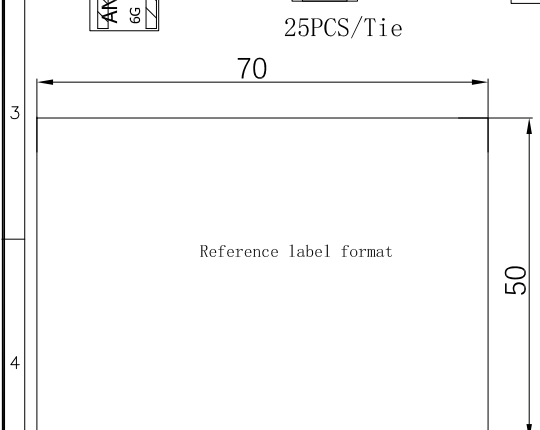
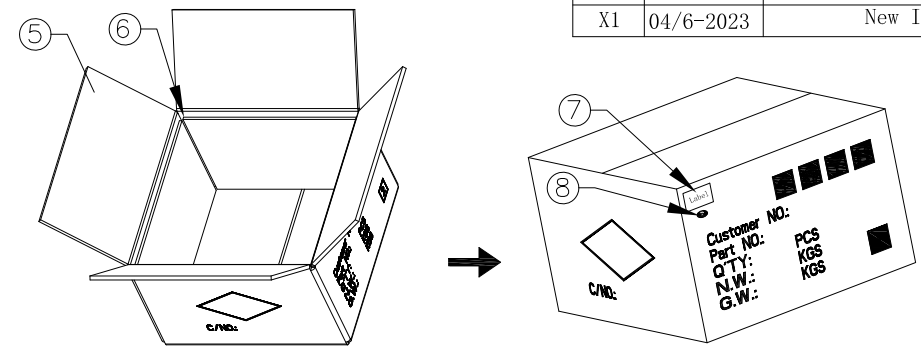
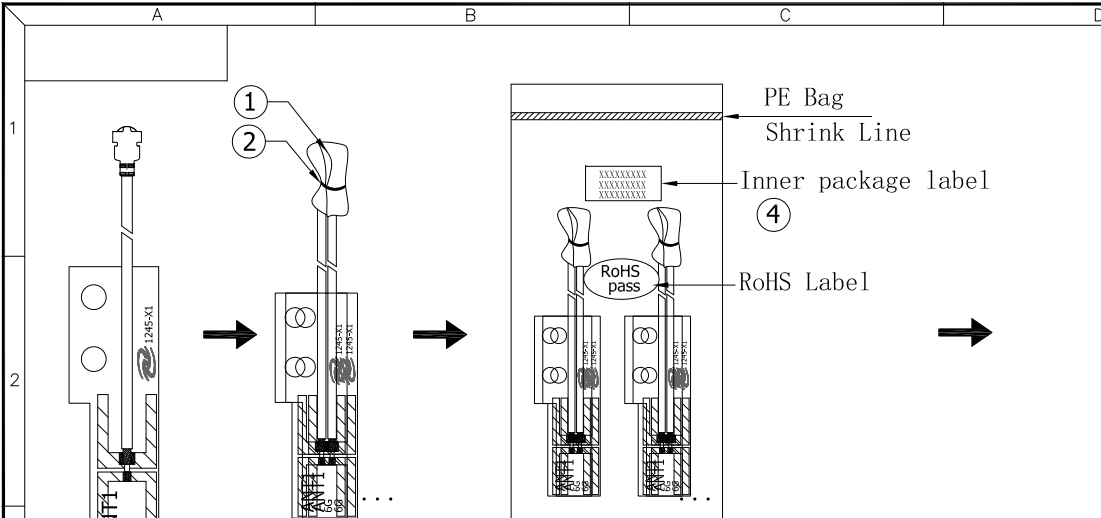
Approved :唐剑剑

Review : 王莲

Prepared: 王丹



| REV | DATE      | DESCRIPTION |
|-----|-----------|-------------|
| X1  | 04/6-2023 | New Issue   |



Customer NO.: \_\_\_\_\_  
Part NO.: \_\_\_\_\_  
Q'TY.: 2000 PCS  
N.W.: Net weight KGS  
G.W.: Rough weight KGS

Fill in the terminal customer material number by hand  
Fill in the customer material number by hand  
Fill in the actual number of boxes by hand  
Fill in the actual net weight of the container by hand  
Fill in the actual gross weight of the container by hand

| 12 | CYP-92035015014-A | Label (white base copper paper not polished)35(L)*10(W)mm<br>Strong viscous whiskers                     | 1/2000  |        |
|----|-------------------|--|---------|--------|
| 11 | CYP-92040020046-A | Label printing black lettering (paper color changes with month)<br>40(L)*20(W)mm Strong viscous whiskers | 1/2000  |        |
| 10 | CYP-9100013035-A  | Partition paper (brown and yellow)310*55*6.0mm   | 6/2000  |        |
| 9  | CYP-9100013031-A  | Partition paper (brown and yellow)312*312*4.0mm  | 3/2000  |        |
| 8  | CYP-92025015006-A | Label (glossy copper paper)25(L)*15(W)mm Strong viscous whiskers<br>Black print (RoHS PASS)              | 41/2000 |        |
| 7  | CYP-92070050018-A | Label (white base copper paper not polished)70(L)*50(W)mm<br>Strong viscous whiskers                     | 1/2000  |        |
| 6  | CYP-9100013034-A  | Partition paper (brown and yellow)1240*55*6.0mm  | 3/2000  |        |
| 5  | CYP-9100012009-A  | carton(AB type ) Brown paper320*320*200mm Blue Print (Box 1)   | 1/2000  |        |
| 4  | CYP-92070050018-A | Label(Copper paper with white backing is not polished)70(L)*50(W)mm<br>Strong viscous whiskers           | 1/50    |        |
| 3  | CYP-9000050010-A  | PE Bag 110(W)*280(L)*0.05mm(with holes)  | 1/50    |        |
| 2  | CYP-9100014006-A  | Rubber band φ 18(inside)*φ 20(outside)*1.5(thickness)mm White  | 1/25    |        |
| 1  | CYP-9100010001-A  | EPE 70*70*0.5mm White  | 1/25    |        |
| NO | PART NAME         | DESCRIPTION  | Q' TY   | REMARK |

|      |      |          |
|------|------|----------|
| XXX. | ±2.0 | APPROVED |
| XX.  | ±1.0 |          |
| X.   | ±0.5 | CHECKED  |
| .X   | ±0.2 |          |
| .XX  | ±0.1 | DRAWING  |
| ⊕    |      |          |
| ⊖    |      |          |

|                             |      |       |      |        |       |  |
|-----------------------------|------|-------|------|--------|-------|--|
| CUSTOMER:                   |      |       |      |        |       |  |
| PART NO:                    |      |       |      |        |       |  |
| PART NAME: Built-in Antenna |      |       |      |        |       |  |
| Z&X P/NO: 6307F00013        |      |       |      |        |       |  |
| REV                         | UNIT | Scale | Size | Page   | FILE: |  |
| X1                          | mm   | 1/1   | A 4  | 1 OF 1 |       |  |

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