

TC1 规格承认书

|                      |                                                                    |
|----------------------|--------------------------------------------------------------------|
| 客户名称 / Customer      | INSTA360                                                           |
| 客户料号 / Customer P/N. | QA.A001301                                                         |
| 供应商 / Supplier       | 深圳市中天迅通信科技股份有限公司<br>Shenzhen ZTX Communication Technology Co., Ltd |
| 供方料号 / Supplier P/N. | 2.00005667                                                         |
| 时间 / Time            | 25-Nov-22                                                          |
| 版本 / Version         | A2                                                                 |

|                   |                     |                  |                     |
|-------------------|---------------------|------------------|---------------------|
| 供应商会签<br>Approval |                     |                  |                     |
| 批准<br>Approval    | 品质承认<br>QA Approval | 工程承认<br>Approval | 研发承认<br>RD Approval |
| GUOHUA ZOU        | ZHAO ZHANG          | LIPING LIU       | JINPING GU          |

|                           |                     |                     |                      |
|---------------------------|---------------------|---------------------|----------------------|
| 客户承认<br>Customer Approval |                     |                     |                      |
| 批准<br>Approval            | 品质承认<br>QA Approval | 研发承认<br>RD Approval | 采购承认<br>PUR Approval |
|                           |                     |                     |                      |

注：会签必须手工签字确认；

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# Process Capability index Evaluation report

| Customer name :INSTA360 Product Model Number:TC1 (T03E) CHARGE BOX ANTENNA |                                                                                            |      |        |                 |        |         |         |         |         | Approved by  | Checked by: | Name of operator:                                                                                                                                                                                                                                                                                                                          |          |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------|--------|-----------------|--------|---------|---------|---------|---------|--------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Product type :FPC+ coaxial line Date :2022/9/1                             |                                                                                            |      |        |                 |        |         |         |         |         | Xiaohua Deng | Ailing Yi   | Lihua Li                                                                                                                                                                                                                                                                                                                                   |          |
| spec                                                                       | 25.00                                                                                      |      | 8.30   |                 | 22.56  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            | Comments |
| (NO)                                                                       | 1.00                                                                                       | 1.00 | 0.15   | 0.15            | 0.15   | 0.15    |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 1                                                                          | 25.00                                                                                      |      | 8.28   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 2                                                                          | 25.00                                                                                      |      | 8.29   |                 | 22.52  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 3                                                                          | 25.00                                                                                      |      | 8.31   |                 | 22.49  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 4                                                                          | 24.50                                                                                      |      | 8.32   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 5                                                                          | 25.00                                                                                      |      | 8.30   |                 | 22.50  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 6                                                                          | 25.00                                                                                      |      | 8.32   |                 | 22.49  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 7                                                                          | 24.50                                                                                      |      | 8.33   |                 | 22.53  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 8                                                                          | 25.00                                                                                      |      | 8.31   |                 | 22.53  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 9                                                                          | 25.00                                                                                      |      | 8.30   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 10                                                                         | 25.00                                                                                      |      | 8.28   |                 | 22.53  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 11                                                                         | 25.00                                                                                      |      | 8.33   |                 | 22.48  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 12                                                                         | 25.00                                                                                      |      | 8.33   |                 | 22.49  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 13                                                                         | 25.00                                                                                      |      | 8.31   |                 | 22.52  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 14                                                                         | 25.50                                                                                      |      | 8.31   |                 | 22.54  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 15                                                                         | 25.00                                                                                      |      | 8.33   |                 | 22.52  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 16                                                                         | 25.00                                                                                      |      | 8.29   |                 | 22.57  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 17                                                                         | 25.00                                                                                      |      | 8.32   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 18                                                                         | 25.00                                                                                      |      | 8.27   |                 | 22.49  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 19                                                                         | 25.00                                                                                      |      | 8.32   |                 | 22.53  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 20                                                                         | 25.00                                                                                      |      | 8.33   |                 | 22.47  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 21                                                                         | 25.00                                                                                      |      | 8.31   |                 | 22.52  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 22                                                                         | 25.50                                                                                      |      | 8.29   |                 | 22.48  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 23                                                                         | 25.00                                                                                      |      | 8.33   |                 | 22.53  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 24                                                                         | 25.00                                                                                      |      | 8.30   |                 | 22.52  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 25                                                                         | 25.00                                                                                      |      | 8.32   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 26                                                                         | 25.00                                                                                      |      | 8.28   |                 | 22.53  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 27                                                                         | 25.50                                                                                      |      | 8.33   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 28                                                                         | 25.00                                                                                      |      | 8.32   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 29                                                                         | 25.00                                                                                      |      | 8.31   |                 | 22.53  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 30                                                                         | 25.00                                                                                      |      | 8.33   |                 | 22.49  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 31                                                                         | 25.00                                                                                      |      | 8.27   |                 | 22.51  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| 32                                                                         | 25.00                                                                                      |      | 8.31   |                 | 22.47  |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |
| MAX                                                                        | 25.50                                                                                      |      | 8.33   |                 | 22.57  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00         | 0.00        | 1. Batch production can be carried out if the CPK value is "satisfied", but inspection needs to be strengthened. 2. When CPK values are "very satisfied", sampling inspection can be carried out during mass production. 3. If one of the CPK values fails to meet the requirement of "meet", the reasons should be analyzed and improved. |          |
| MIN                                                                        | 24.5                                                                                       |      | 8.27   |                 | 22.47  | 0       | 0       | 0       | 0       | 0            | 0           |                                                                                                                                                                                                                                                                                                                                            |          |
| X                                                                          | 25.02                                                                                      |      | 8.31   |                 | 22.51  | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0!      | #DIV/0!     |                                                                                                                                                                                                                                                                                                                                            |          |
| M                                                                          | 26.00                                                                                      |      | 8.45   |                 | 22.71  | 0.00    | 0.00    | 0.00    | 0.00    | 0.00         | 0.00        |                                                                                                                                                                                                                                                                                                                                            |          |
| CP                                                                         | 1.665                                                                                      |      | 2.636  |                 | 2.283  | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0!      | #DIV/0!     |                                                                                                                                                                                                                                                                                                                                            |          |
| SN-1                                                                       | 0.200                                                                                      |      | 0.019  |                 | 0.022  | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0!      | #DIV/0!     |                                                                                                                                                                                                                                                                                                                                            |          |
| K                                                                          | 0.0156                                                                                     |      | 0.0583 |                 | 0.3273 | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0!      | #DIV/0!     |                                                                                                                                                                                                                                                                                                                                            |          |
| CPK/determine                                                              | 1.639                                                                                      | meet | 2.483  | Be very content | 1.535  | meet    | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0!      | #DIV/0!     | #DIV/0!                                                                                                                                                                                                                                                                                                                                    | #DIV/0!  |
| Total judgment                                                             | The CPK value is "very satisfied" with the production conditions and can be mass produced. |      |        |                 |        |         |         |         |         |              |             |                                                                                                                                                                                                                                                                                                                                            |          |

## FAI test report

|                                                                                                                                                                                                        |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------------------------------------|------------------|-------------------|-----------------------|----------------------------------|-------|--------|-------|----------------------------|-------|-------|-------|-------|-----------|------|
| Customer name                                                                                                                                                                                          |      | INSTA360                                       |                  | Name of Product   |                       | TC1 (T03E)<br>CHARGE BOX ANTENNA |       | number |       | 10                         |       |       |       |       |           |      |
| Material of product                                                                                                                                                                                    |      | FPC+ acetate tape +<br>coaxial line + terminal |                  | Color of material |                       | black                            |       | date   |       | 2022/9/1                   |       |       |       |       |           |      |
| Product Type: <input checked="" type="checkbox"/> New Appearance <input type="checkbox"/> Changed Appearance <input type="checkbox"/> Mass Production <input type="checkbox"/> Trial production sample |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| NO                                                                                                                                                                                                     | type | Specifications and Dimensions                  | Tolerance on top | Down tolerance    | Measured size         |                                  |       |        |       |                            |       |       |       |       | determine | note |
|                                                                                                                                                                                                        |      |                                                |                  |                   | 1                     | 2                                | 3     | 4      | 5     | 6                          | 7     | 8     | 9     | 10    |           |      |
| 1                                                                                                                                                                                                      | *    | 25.00                                          | 1                | 1                 | 25.00                 | 26.00                            | 26.00 | 25.00  | 25.00 | 26.00                      | 25.00 | 25.00 | 25.00 | 26.00 | OK        |      |
| 2                                                                                                                                                                                                      |      | 0.81                                           | 0.05             | 0.05              | 0.81                  | 0.82                             | 0.81  | 0.81   | 0.82  | 0.81                       | 0.81  | 0.82  | 0.81  | 0.81  | OK        |      |
| 3                                                                                                                                                                                                      | *    | 8.30                                           | 0.15             | 0.15              | 8.37                  | 8.40                             | 8.35  | 8.36   | 8.37  | 8.35                       | 8.36  | 8.37  | 8.35  | 8.36  | OK        |      |
| 4                                                                                                                                                                                                      |      | 7.20                                           | 0.15             | 0.15              | 7.22                  | 7.25                             | 7.30  | 7.27   | 7.26  | 7.25                       | 7.26  | 7.25  | 7.24  | 7.25  | OK        |      |
| 5                                                                                                                                                                                                      |      | 5.21                                           | 0.15             | 0.15              | 5.28                  | 5.26                             | 5.24  | 5.20   | 5.21  | 5.23                       | 5.24  | 5.22  | 5.27  | 5.25  | OK        |      |
| 6                                                                                                                                                                                                      | *    | 22.56                                          | 0.15             | 0.15              | 22.55                 | 22.60                            | 22.61 | 22.58  | 22.57 | 22.55                      | 22.58 | 22.57 | 22.57 | 22.56 | OK        |      |
| 7                                                                                                                                                                                                      |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 8                                                                                                                                                                                                      |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 9                                                                                                                                                                                                      |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 10                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 11                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 12                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 13                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 14                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 15                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 16                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 17                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 18                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 19                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 20                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 21                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 22                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 23                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 24                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| 25                                                                                                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| appearance: OK                                                                                                                                                                                         |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| other:/OK                                                                                                                                                                                              |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| Total judgment: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NG                                                                                                                     |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |
| Approved by: Xiaohua Deng                                                                                                                                                                              |      |                                                |                  |                   | Checked by: Ailing Yi |                                  |       |        |       | Name of operator: Lihua Li |       |       |       |       |           |      |
| note:                                                                                                                                                                                                  |      |                                                |                  |                   |                       |                                  |       |        |       |                            |       |       |       |       |           |      |

| 测试报告(Test Report)            |                                                 |                           |                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                         |                                 |                                                                                                                                                                                                                                                                         |
|------------------------------|-------------------------------------------------|---------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 样品名称<br>(Product name)       | CHARGE BOX ANTENNA                              | 样品型号<br>(Part Model)      | TC1 (T03E)                                                          | 环境温度<br>(Ambient temperature)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20±5℃                                                                                                                   | 测试日期<br>(Date of test)          | 2022/10/10                                                                                                                                                                                                                                                              |
| 样品数量<br>(Specimens quantity) | 12PCS                                           | 客户料号<br>(Customer number) | QAA001301                                                           | 相对湿度<br>(Relative humidity)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50-60%RH                                                                                                                | 委托单位<br>(Client/Dept)           | Quality Department                                                                                                                                                                                                                                                      |
| 测试原因<br>(Test reasons)       | ■新型号/材料验证<br>New model/material verification    |                           |                                                                     | 测试依据<br>(Test documentation)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ■天线可靠性检验基准书<br>■Reference book for antenna reliability inspection                                                       |                                 |                                                                                                                                                                                                                                                                         |
| 序号<br>(NO)                   | 测试项目<br>(Test project)                          | 样品数<br>(Samples Qty.)     | 测试仪器<br>(Test equipment)                                            | 测试条件与要求<br>(Test condition and note)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 测试结果<br>(Test result)                                                                                                   | 结论<br>(Conclude)<br>(Pass/Fail) | 样品图片/实测值<br>Sample picture/measured value                                                                                                                                                                                                                               |
| 1                            | Salt spray test                                 | 3                         | Salt spray testing machine                                          | Conditions:<br>1. Place the product in the test chamber at 30 ° ±5 °<br>2. Adjust the parameters of the test chamber: NaCl (no water); Concentration 5%±1%; pH value: 6.5 ~ 7.2; Laboratory temperature: 32-38℃; Compressed air pressure :1.0±0.01 (KG/M2) spray volume :1.0 ~ 2.0ML/80CM2/H. Relative humidity :85%±2%; Test product placement Angle :30 degrees +/-10 degrees<br>3. The storage time is 48 hours.<br>4. After cleaning, place in room temperature for 2 hours for observation<br>Requirements: plating (coating) layer without falling off, foaming, corrosion, oxidation and other adverse phenomena; The surface of the product shall not have rust spots and other undesirable phenomena | No coating shedding and oxidation occurred.                                                                             | Pass                            | <br><br>       |
| 2                            | High temperature test                           | 3                         | High and low temperature alternating humidity and heat test chamber | 1. Put the sample into a high temperature environment of 85 °C for 48 hours and take it out<br>2. Store at room temperature for 2 hours.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | After the test, the product has no deformation, no discoloration, no falling off, and the electrical function is intact | Pass                            | <br><br>    |
| 3                            | Low temperature test                            | 3                         | Low temperature refrigerator                                        | 1. Put the sample into a low temperature -40 °C environment for 48 hours and take it out<br>2. Store at room temperature for 2 hours.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | After the test, the product has no deformation, no discoloration, no falling off, and the electrical function is intact | Pass                            | <br><br> |
| 4                            | High temperature and high humidity storage test | 3                         | High and low temperature alternating humidity and heat test chamber | 1. Sample 3pcs<br>2. Put the test sample in the test chamber (temperature 70±2℃, humidity 90% ~ 95%RH), and take it out for inspection after 48H.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | After the test, the product has no deformation, no discoloration, no falling off, and the electrical function is intact | Pass                            | <br><br> |

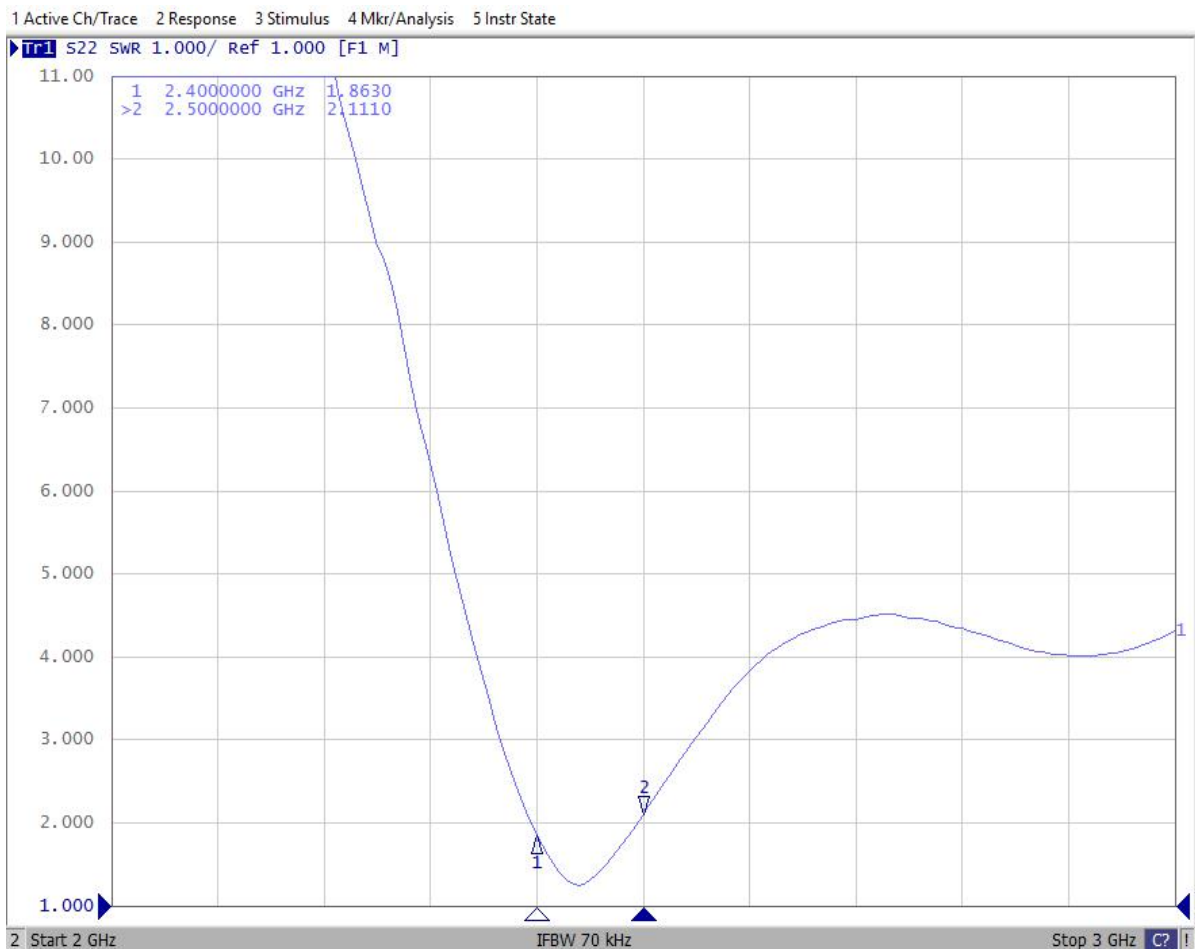
备注(Comments):
 核准(Approved by): 邓孝华
 审核(Checked by): 易爱玲
 测试(Name of operator): 李丽华

表单编号: ZTX-QR-QA-076 版本: A1

| 测试报告(Test Report)            |                        |                                              |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              |                                 |                                                                                      |                    |
|------------------------------|------------------------|----------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------|--------------------|
| 样品名称<br>(Product name)       | CHARGE BOX ANTENNA     |                                              | 样品型号<br>(Part Model)      | TC1 (T03E)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 环境温度<br>(Ambient temperature)                | 20±5℃                           | 测试日期<br>(Date of test)                                                               | 2022/10/10         |
| 样品数里<br>(Specimens quantity) | 3PCS                   |                                              | 客户料号<br>(Customer number) | QAA001301                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 相对温度<br>(Relative humidity)                  | 50-60%RH                        | 委托单位<br>(Client/Dept)                                                                | Quality Department |
| 测试原因<br>(Test reasons)       |                        | ■新型号/材料验证<br>New model/material verification |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 测试依据<br>(Test documentation)                 |                                 | ■天线可靠性检验基准书<br>■Reference book for antenna reliability inspection                    |                    |
| 序号<br>(NO)                   | 测试项目<br>(Test project) | 样品数<br>(Samples Qty.)                        | 测试仪器<br>(Test equipment)  | 测试条件与要求<br>(Test condition and note)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 测试结果<br>(Test result)                        | 结论<br>(Conclude)<br>(Pass/Fail) | 样品图片/实测值<br>Sample picture/measured value                                            |                    |
| 1                            | Hundred cell test      | 3                                            | Hundred check knife       | With 100 grid knife in the test sample surface ≥10m square meters of the place to draw 10×10 (100)1mm×1mm small grid, each line should be deep and the bottom of the ink layer; Brush the test area five times in each diagonal direction with a brush to clean up the debris; Firmly stick the small grid under test with 3M600 glue, and wipe the tape with a rubber to increase the contact area and strength between the tape and the tested area; Grab one end of the tape with your hand and pull it off quickly at 90 degrees. Coating shedding area ≤5% is qualified, such as > 5% is not qualified | The coating did not fall off after the test. | Pass                            |  |                    |
| 备注(Comments):                |                        |                                              |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              |                                 |                                                                                      |                    |
| 核准(Approved by): 邓孝华         |                        |                                              | 审核(Checked by): 易爱玲       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              | 测试(Name of operator): 李丽华       |                                                                                      |                    |

表单编号: ZTX-QR-QA-076 版本: A1

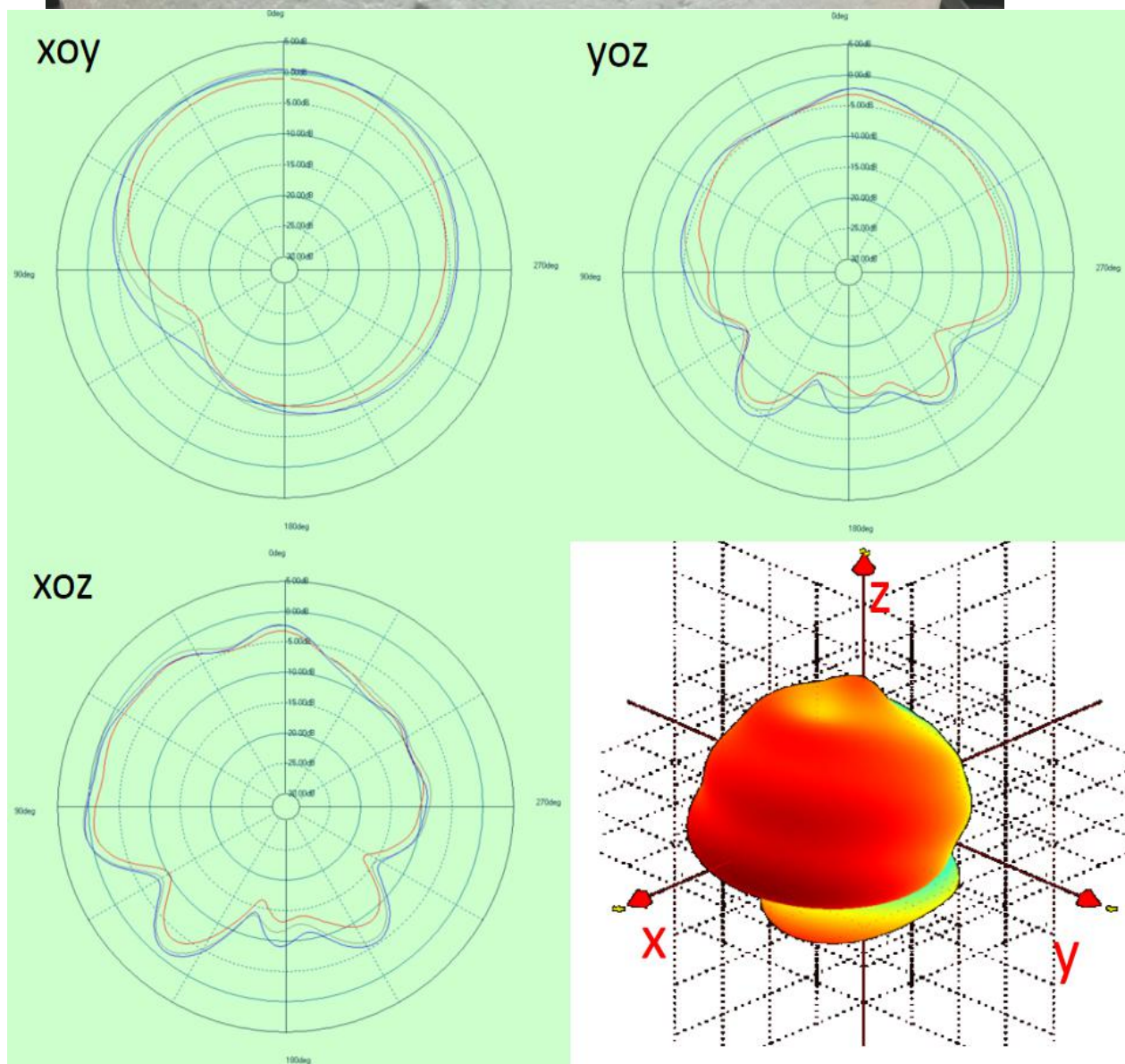
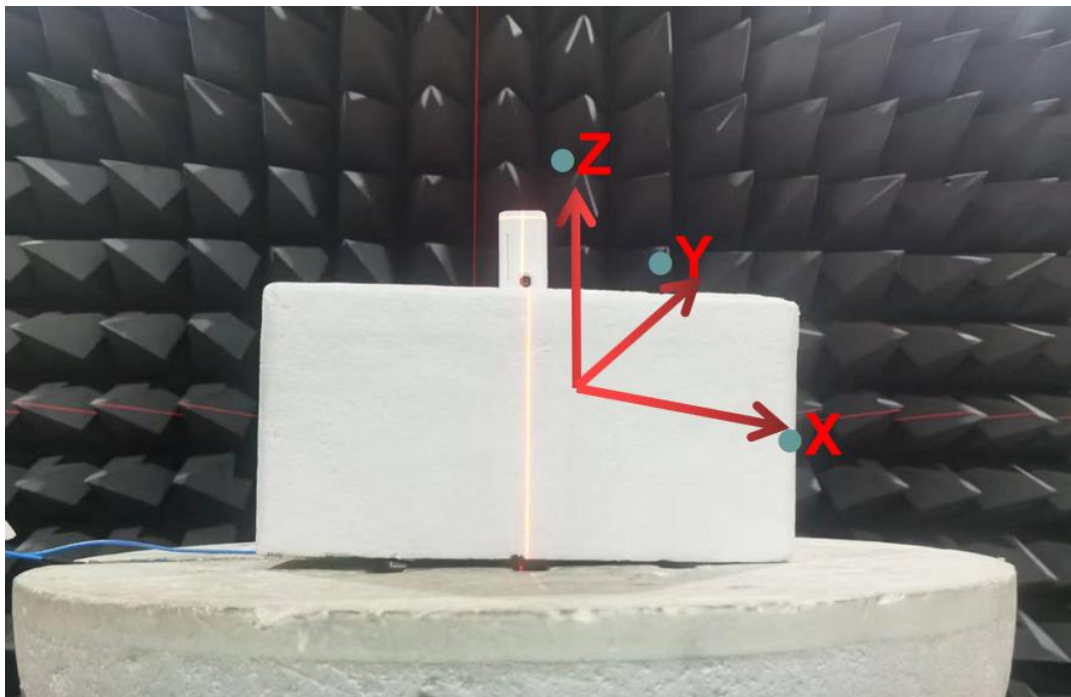
## VSWR



No-source test data

| Frequency | Efficiency | Efficiency . dB | Gain . dB |
|-----------|------------|-----------------|-----------|
| 2400MHz   | 38%        | -4.22           | 0.85      |
| 2410MHz   | 40%        | -3.95           | 0.93      |
| 2420MHz   | 39%        | -4.12           | 0.99      |
| 2430MHz   | 40%        | -4.03           | 0.92      |
| 2440MHz   | 41%        | -3.85           | 1.09      |
| 2450MHz   | 40%        | -3.95           | 1.32      |
| 2460MHz   | 41%        | -3.84           | 1.33      |
| 2470MHz   | 42%        | -3.75           | 1.36      |
| 2480MHz   | 42%        | -3.82           | 1.28      |
| 2490MHz   | 42%        | -3.74           | 1.31      |
| 2500MHz   | 39%        | -4.08           | 1.03      |

## 2D/3D Radiation Pattern Results



antenna position



## QC engineering drawing

|                  |                   |                         |                    |                       |               |              |           |               |
|------------------|-------------------|-------------------------|--------------------|-----------------------|---------------|--------------|-----------|---------------|
| Product number   | general           | To formulate department | Quality department | Disposal measures for | ZTX-QD-SP-082 | approval     | audit     | To formulate  |
| The product name | Coaxial line +FPC | Set the date            | 2022/11/15         | Release date          | 2022/11/15    | Xiaohua Deng | ailing yi | dengshan yang |

| NO. | process                                                                             | The name of the process   | The key working | Control method                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                   |                                                                       |                                               |                                       |                                                                               |          | Operating standards                                                                                                                                                        | Equipment and tooling                                                                                                                         | Exception handling                                                                                                                                                                                                                                                                                            | Disposal measures for nonconformance            |
|-----|-------------------------------------------------------------------------------------|---------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
|     |                                                                                     |                           |                 | Main control item                                                                                                                                                                                                            | Description of criteria                                                                                                                                                                                                                                                                                                                                           | Check the method                                                      | Measuring tool                                | The tester                            | record                                                                        | Save the |                                                                                                                                                                            |                                                                                                                                               |                                                                                                                                                                                                                                                                                                               |                                                 |
| 1   |    | Receive the goods         |                 | 1. Material label check of delivery note<br>2. Quantity<br>3. Check product packaging method                                                                                                                                 | 1. The quantity/material number/product name of the PURCHASE order shall be consistent with the delivery note and the physical object<br>2. The incoming material is not damaged and short<br>3. Confirm that the packing method of materials meets the requirements                                                                                              | 100% inspection                                                       | Visual/electronic scale                       | warehouse keeper                      | <: Incoming acceptance list & GT;                                             | 3 year   | <: Product handling, storage, packaging and delivery control procedures & GT;<br><: Storage work guidelines & GT; , <: Supplier packaging requirements specification & GT; | Trolley, turnover box, electronic scale                                                                                                       | 1. If the quantity/material number/product name of the purchase order is inconsistent with the delivery note and material object, report the abnormality to the purchase and reject the material.<br>2. Short/damaged incoming materials, keep the site and take photos, report abnormal to purchase          | Return of the goods                             |
| 2   |    | Incoming inspection       |                 | 1. Key dimensions or parameters specified in drawings or inspection instructions<br>2. Acceptance criteria: Major AQL=0.4, minor AQL= 1.03.<br>Reliability test: high and low temperature/salt spray test / Hundred Bar test | 1. Material material/size should be consistent with the drawing<br>2. Appearance must conform to incoming inspection benchmark<br>3. Meet the requirements of drawing approval test                                                                                                                                                                               | 1. Appearance AQL= MA:1.0/MI:0.4. Size: 10PCS<br>3. Reliability: 3PCS | Visual/secondary optical measuring instrument | IQC                                   | <: Incoming acceptance list & GT;                                             | 3 year   | <: Incoming material inspection control procedure & GT; , <: Nonconformity control procedure & GT; , <: Incoming inspection Standard & GT;                                 | secondary optical measuring instrument/Hundred Bar test/salt mist machine/high and low temperature alternate humid heat experimental box, etc | Organize MRB to judge and reject the defective batches that are controversial, have unclear impact or are in urgent need of production. 2. Issue <: to the supplier in case of serious shortage in continuous delivery; Supplier corrective and preventive Action Improvement Report & GT;                    | Quarantine/return/select ion/spec ial selection |
| 3   |  | Put in storage            |                 | 1. The account corresponds with the real thing<br>2. The materials meet the 5S standard                                                                                                                                      | 1. The warehouse shall check and store the qualified materials inspected by IQC<br>2. Check unqualified products and put them into the warehouse, and inform the purchaser to arrange return<br>3. Arrange and place the materials on corresponding shelves or areas, and do a good job. Material transceiver card & GT; Incoming and outgoing account management | 100% inspection                                                       | Visual/electronic scale                       | warehouse keeper                      | <: Purchase order & GT; <: Returns a single & gt;                             | 3 year   | <: Product handling, storage, packaging and delivery control procedures & GT;<br><: Warehouse Work Guidelines & GT; <: Nonconformity control procedure & GT;               | Trolley, turnover box, electronic scale                                                                                                       | Find material shortage/damage, keep the site and take photos, report abnormal supervisor and inform IQC/ purchase to the site for investigation                                                                                                                                                               | Return of the goods                             |
| 4   |  | Distribution of materials |                 | 1. Prepare materials<br>2. Check materials<br>3. Supporting materials                                                                                                                                                        | 1. Prepare materials required by work order 2 hours in advance according to production plan;<br>2. The material object, the material number of the material sheet, the name of the product, the specification, the quantity are consistent/the material is not damaged;<br>3. After receiving materials, check whether the materials are in uniform               | N/A                                                                   | Visual/electronic scale                       | warehouse keeper/Monitor of the class | <: Shipment schedule & GT; <: Material requisition & gt;                      | 3 year   | <: Production control operation procedure & GT; <: Product handling, storage, packaging and delivery control procedures & GT; <: Material list & GT;                       | Trolley, turnover box, electronic scale                                                                                                       | 1. Work order is short of material, reply <: Shipment schedule & GT; 2. Check with the warehouse keeper in time if incorrect or short materials are found when ordering materials. If there is any difference between the two parties, contact the respective supervisor to solve it.                         | Back to the warehouse                           |
| 5   |  | Production preparation    |                 | 1. Data preparation<br>2. Production tools preparation<br>3. Spot inspection/calibration of tools and instruments<br>4. Hanging at SOP station<br>5. Making the first piece                                                  | 1. Have standard documents such as SOP prepared before production;<br>2. Whether the corresponding products are equipped with treatment tools;<br>3. Equipment maintenance spot inspection<br>4. Place the material at the station corresponding to SOP before it goes online<br>5. Meet the requirements of specifications, drawings and SOP                     | the first piece                                                       | Visual/testing tools/network analyzer         | Clerk/Monitor of the class/PE/IPQC    | <: Machine maintenance inspection list & GT; <: First Inspection Report & GT; | 3 year   | <: Monitoring and measuring device control procedures & GT; , <: Production control operation procedure & GT; , SOP, drawing                                               | secondary optical measuring instrument                                                                                                        | 1. If the material does not correspond to the material required by the production model, check with the warehouse keeper in time to see if it is consistent with the BOM, and ask engineering personnel for confirmation; 2. Confirm with engineering personnel and correct immediately if the SOP version or | Confirm, change                                 |

|                    |                 |                                                   |   |                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                   |                                  |                             |                                                                                                           |         |                                                                                                                                                                                     |                                                        |                                       |        |
|--------------------|-----------------|---------------------------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------|--------|
| 6                  | Automate wire   | Strip the cable/hit the terminal/test/dip the tin | ▲ | 1. Material confirmation<br>2. Strip wire size<br>3. Notch<br>4. Performance<br>5. Tin immersion<br>6. Terminal appearance/reliability | 1. The material model must be consistent with the BOM and drawings. 2. The stripping size of the wire shall be consistent with the drawing. 3. The skin/insulation layer of the wire shall be completely cut without burr. The cut of the core wire is bent 90 degrees twice without fracture. 4. 300W high voltage on-off test. Immersion tin twice in 5. 2-4 seconds. The insulation layer/core should be full and bright. 6. The scratch of the terminal must not expose the base material or have burrs. The second grip of the terminal should grasp the outer cortex, the tension between the terminal and the wire. 9. 8N, the integrated pulling force of terminal and board end <math>\leq 5N</math> | First inspection 3PCS/100% self-inspection, inspection (appearance 20PCS/2H, reliability 1PCS/2H) | visual                           | Operator/IPQC               | <math>\leq</math> First inspection report <math>\leq</math> IPQC spot inspection report <math>\leq</math> |         | <math>\leq</math> Process inspection control Procedure <math>\leq</math> , related model SOP, drawings                                                                              | Tin stove/wire stripper/terminal machine/tension meter | Stop production and adjust parameters | rework |
| 7                  | Welding coaxial | welding                                           | ▲ | 1. Solder 2. Appearance<br>3. Terminal orientation                                                                                     | 1. The welding points should be smooth, and there should be no pointed points, virtual welding, and the height of the solder joint should be consistent with the drawing 2. Do not stain, conductive cloth do not burn/stick tin                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | First inspection 3PCS/100% self-inspection, inspection (appearance 20PCS/2H, reliability 1PCS/2H) | Visual/silicone                  | Operator/IPQC               | <math>\leq</math> First inspection report <math>\leq</math> IPQC spot inspection report <math>\leq</math> | 3 years | <math>\leq</math> Process inspection control Procedure <math>\leq</math> , related model SOP                                                                                        | Soldering iron                                         | Stop production                       | rework |
| 8                  | laminating      | Stick on auxiliary material                       |   | 1. Apply acetic acid cloth<br>2. Mounting position 2. Maintain pressure                                                                | 1. Do not warp or leak the paste.<br>2. Stick to the positioning line according to the requirements of the drawing<br>3. Pressure holding time with fingers after fitting :2S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | First inspection 3PCS/100% self-inspection, inspection (appearance 20PCS/2H, reliability 1PCS/2H) | Visual/silicone                  | Operator/IPQC               | <math>\leq</math> First inspection report <math>\leq</math> IPQC spot inspection report <math>\leq</math> | 3 years | <math>\leq</math> Process inspection control Procedure <math>\leq</math> , related model SOP                                                                                        | tweezers                                               | Stop production                       | rework |
| 9                  | Test            | Test                                              | ▲ | 1. Consistency test                                                                                                                    | It is consistent with the research and development sample test                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 100% inspection                                                                                   | Testing and moulding tool        | FQC                         | <math>\leq</math> FQC inspection report <math>\leq</math>                                                 | 3 years | SOP and test reference book for each model                                                                                                                                          | Testing and moulding tool                              | Stop production                       | rework |
| 10                 | Inspection      | inspection                                        | ▲ | 1. Appearance inspection<br>2. Performance/reliability                                                                                 | 1. Refer to product SOP/inspection reference book                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 100% inspection                                                                                   | Eye/shake                        | FQC                         | <math>\leq</math> FQC inspection report <math>\leq</math>                                                 | 3 years | SOP and test reference book for each model                                                                                                                                          | Caliper/straightedge / Testing                         | Stop production                       | rework |
| 11                 | packaging       | packaging                                         |   | 1. Quantity checking<br>2. Packing method                                                                                              | 1. The quantity is consistent with the label<br>2. Meet SOP requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 100% inspection                                                                                   | visual                           | operator                    | <math>\leq</math> Daily production report <math>\leq</math>                                               | 3 years | <math>\leq</math> Packaging specification <math>\leq</math> , related model SOP                                                                                                     | Heat sealing machine / Scale of                        | Stop production                       | rework |
| 12                 | Put in storage  | Put in storage                                    |   | 1: Quantity<br>2: Packing                                                                                                              | 1. The quantity is consistent with the actual product<br>2. Packing and warehousing as required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 100% inspection                                                                                   | visual                           | Store clerk/storekeeper     | <math>\leq</math> Warehousing order <math>\leq</math>                                                     | 3 years | <math>\leq</math> Product handling, storage, packaging and delivery control procedures <math>\leq</math> , <math>\leq</math> Process inspection control Procedure <math>\leq</math> | Trolley/t turnover box/electronic scale                | Stop storage                          | rework |
| 13                 | OQC inspection  | OQC inspection                                    |   | 1. Appearance<br>2. Packaging/label                                                                                                    | 1. Consistent with the sample<br>2. Consistent with the drawing requirements<br>3. Shipment packing method meets customer's requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1. Appearance AQL= MA:1.0/MI:0.4<br>2. Size: 10PCS                                                | Visual/caliper/quadratic element | QA                          | <math>\leq</math> Shipment report <math>\leq</math>                                                       | 3 years | <math>\leq</math> Final inspection control procedure <math>\leq</math> , <math>\leq</math> Nonconformity control procedures <math>\leq</math>                                       | Caliper/straightedge / Testing and moulding            | Stop shipping                         | rework |
| 14                 | shipment        | shipment                                          |   | 1: Quantity<br>2: Packing                                                                                                              | 1. The quantity is consistent with the actual product<br>2. Packing and warehousing as required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 100% inspection                                                                                   | visual                           | Store clerk/storekeeper     | <math>\leq</math> Order of Shipment <math>\leq</math>                                                     | 3 years | <math>\leq</math> Product handling, storage, packaging and delivery control procedures <math>\leq</math> , <math>\leq</math> Process inspection control Procedure <math>\leq</math> | Trolley/t turnover box/electronic scale                | Stop shipping                         | rework |
| Legend Description |                 | Start of process                                  | □ | Inspection and determination                                                                                                           | ◇                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Production process                                                                                | □                                | Material transport turnover | ⇒                                                                                                         | In/out  | ▽                                                                                                                                                                                   |                                                        |                                       |        |

| Thetitle                                                                                                                                                                                                                                                                                                                                     |                                      | FPC+ copper axis SIP                                     |             | Document number                                                                                                                                                                                                                                                                                                                                                                        |              | ZTX-QD-SP-025                                                                                                                     |               |                                   |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------|-----------------|
| Department of Formulation                                                                                                                                                                                                                                                                                                                    |                                      | Quality Department                                       |             | Date of establishment                                                                                                                                                                                                                                                                                                                                                                  |              | 2021/11/15                                                                                                                        |               | version                           | A3              |
| I. Inspection basis:<br><br>1. Specifications and limit samples recognized by the customer<br>2. Engineering drawing file/acknowledgement letter/sample<br>3. Appearance inspection standard of parts                                                                                                                                        |                                      |                                                          |             | Ii. Sampling level:<br><br>According to the need, the sampling number can be divided into special sampling and GB/T2828.1-2012 sampling level.<br><br>a. According to the normal inspection, the appearance sampling shall adopt the single scheme of GB/T2828.1-2012 sampling level (II level).<br><br>b. N=10 and C=0 shall be used for size sampling according to normal inspection |              |                                                                                                                                   |               |                                   |                 |
|                                                                                                                                                                                                                                                                                                                                              |                                      |                                                          |             |                                                                                                                                                                                                                                                                                                                                                                                        |              |                                                                                                                                   |               |                                   |                 |
| Iii. Inspection Conditions:<br><br>1. Lighting & vision: lighting degree ≥800Lux corrected visual acuity above 1.0<br>2. Visual time: Confirm defects within 10 seconds<br>3. Visual distance: the distance between the naked eye and the measured object is 30cm to 45cm<br>4. Visual Angle: within 30 to 45 degrees of the measured object |                                      |                                                          |             |                                                                                                                                                                                                                                                                                                                                                                                        |              |                                                                                                                                   |               |                                   |                 |
| Iv. Comparison table of defect codes                                                                                                                                                                                                                                                                                                         |                                      |                                                          |             |                                                                                                                                                                                                                                                                                                                                                                                        |              |                                                                                                                                   |               |                                   |                 |
| Name (unit)                                                                                                                                                                                                                                                                                                                                  |                                      | diameter (mm)                                            | length (mm) | area (mm2)                                                                                                                                                                                                                                                                                                                                                                             | number (pcs) | width (mm)                                                                                                                        | distance (mm) | Height and depth (mm)             |                 |
| code                                                                                                                                                                                                                                                                                                                                         |                                      | D                                                        | L           | S                                                                                                                                                                                                                                                                                                                                                                                      | N            | W                                                                                                                                 | DS            | H                                 |                 |
| Five, homework content:                                                                                                                                                                                                                                                                                                                      |                                      |                                                          |             |                                                                                                                                                                                                                                                                                                                                                                                        |              |                                                                                                                                   |               |                                   |                 |
| project                                                                                                                                                                                                                                                                                                                                      | Scope of inspection                  |                                                          |             |                                                                                                                                                                                                                                                                                                                                                                                        | level        | Criterion of judgment                                                                                                             |               | Tool of inspection                | Grade of defect |
| appearance                                                                                                                                                                                                                                                                                                                                   |                                      | The color difference                                     |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Not allowed/according to color limit sample                                                                                       |               | visual                            | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | The dirt                                                 |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | L≤3mm or W≤2mm and not visible to the naked eye at 30cm.                                                                          |               | visual                            | MI              |
| material                                                                                                                                                                                                                                                                                                                                     |                                      | The material is inconsistent with the sample and drawing |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Not allowed                                                                                                                       |               | Visual/material report inspection | MA              |
| a<br>p<br>p<br>e<br>a<br>r<br>a<br>n<br>c<br>e                                                                                                                                                                                                                                                                                               | F<br>P<br>C                          | The FPC surface is exposed to copper                     |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Not allowed                                                                                                                       |               | visual                            | MA              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Coating oxidation/corrosion                              |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Not allowed                                                                                                                       |               | Visual/Filinka                    | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Uneven cutting edge (extra material, missing material)   |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | L≤0.2mm, W≤0.1mm                                                                                                                  |               |                                   | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | A cut on Goldfinger                                      |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Not allowed                                                                                                                       |               | visual                            | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Granular, spotty defects                                 |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | S≤0.1mm, allow, S≤0.3mm, N≤2, DS≥30mm;                                                                                            |               | Visual/Filinka                    | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | The scratch                                              |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Scratch: W≤0.15mm, L≤3mm, N≤2<br>No bottom, does not affect the performance                                                       |               |                                   | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Poor screen printing                                     |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Screen printing content is consistent, clear does not affect the identification                                                   |               | visual                            | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | The back adhesive                                        |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | The back adhesive meets the requirements. The detached paper can not fall off naturally or adhere to each other                   |               |                                   | MI              |
|                                                                                                                                                                                                                                                                                                                                              | t<br>e<br>r<br>m<br>i<br>n<br>a<br>l | Defect, coating off                                      |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Not allowed                                                                                                                       |               | visual                            | MA              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Cup mouth deformation                                    |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Not allowed                                                                                                                       |               |                                   | MA              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Width of opening                                         |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | It is not allowed to exceed the cup diameter of the drawing                                                                       |               | caliper                           | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Indentation/scratch                                      |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | No underwood is allowed                                                                                                           |               | visual                            | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Batch of front                                           |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Do not affect the assembly, do not scratch hands, do not hurt hands (height ≤0.05mm)                                              |               | Visual/Filinka                    | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Direction of terminal                                    |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Consistent with the drawing requirements, internal control of deviation (≤100MM±30℃, ≤350MM±45℃, >350MM Out of control)           |               | visual                            | MI              |
|                                                                                                                                                                                                                                                                                                                                              | w<br>i<br>r<br>e                     | The terminal falls off after riveting                    |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Not allowed, the third gripper height (see the antenna terminal rivet height reference table), each batch of pull value qualified |               | CCD/ tension meter                | MA              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Outer skin damage                                        |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | Do not break the skin and expose the base material                                                                                |               | visual                            | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Hard line                                                |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            | L≤8mm                                                                                                                             |               | Visual/ruler                      | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Middle stripping confirmation                            |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Bend 90 degrees and pull the wire from one end to the other to check whether there is a middle strip                              |               | visual                            | MA              |
|                                                                                                                                                                                                                                                                                                                                              | w<br>e<br>l<br>d<br>i<br>n<br>g      | Virtual welding/fake welding                             |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Not allowed                                                                                                                       |               | visual                            | MA              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Tin residue/rosin                                        |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            |                                                                                                                                   |               |                                   | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Tip of solder joint                                      |             |                                                                                                                                                                                                                                                                                                                                                                                        | △            |                                                                                                                                   |               |                                   | MI              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Height of solder joint                                   |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | Solder joint height ≤1.7mm                                                                                                        |               | Visual/caliper                    | MA              |
|                                                                                                                                                                                                                                                                                                                                              |                                      | Cut wire core confirmation                               |             |                                                                                                                                                                                                                                                                                                                                                                                        | ▲            | After welding, bend at 60 degrees between the two solder joints, the wire core can not be broken, and the pad can not fall off    |               | visual                            | MA              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |                                                                                                                                                                                                                                                                                  |   |                                                                                                                                                                                                                                                                             |                                                                                                            |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----|
| size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | measurement                    | Length, width and thickness (dimensions not included in specifications)                                                                                                                                                                                                          | ▲ | It's not allowed. For the specific size, refer to the corresponding material number drawing, and measure the size according to the requirements                                                                                                                             | Quadratic element/micrometer/caliper, etc                                                                  | MA |
| performance                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | performance                    | Performance test                                                                                                                                                                                                                                                                 | ▲ | Test product VSWR according to frequency range specified by SOP                                                                                                                                                                                                             | RF radio frequency tester                                                                                  | CR |
| 包装<br>Packaging                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Package information compliance | 1. Confirm whether the ticket label and two-dimensional code of the product in the outer box are consistent with the material number of the delivery bill<br>2. Check whether the barcode on the label is blurred, damaged, or dirty<br>3. The outer box is damaged and deformed | △ | 1. Information such as material number/quantity must be consistent<br>2. The bar code is not allowed to have blurred print, damage, dirty, can not affect the scanning identification.<br>3. No puncture is allowed for damage, and the deformation degree is less than 3cm | Visual/scan gun                                                                                            | MI |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 数量<br>The number               | 1. Check whether the quantity of unpacked materials is consistent with that on the label<br>2. Each box misses weighing or misses pasting weighing barcode<br>3. The mantissa label is omitted                                                                                   | ▲ | 1. The actual quantity must be consistent with the label<br>2. Weigh according to SOP requirements, and attach the weighing bar code<br>3. Mantissa packaging and outer boxes should be labeled with mantissa                                                               | Visual/scan gun                                                                                            | MA |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Environmental protection Label | External box leakage paste corresponding ROHS label                                                                                                                                                                                                                              | △ | Not allowed                                                                                                                                                                                                                                                                 | visual                                                                                                     | MI |
| reliability                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Terminal tension               | 1, the terminal grip riveting height<br>2. Terminal tension                                                                                                                                                                                                                      |   | 1, (see antenna terminal riveting height reference table)<br>2, customer requirements, no requirements according to our standards (such as Φ1.13: tension :> 9.8 N)                                                                                                         | Tensile force meter                                                                                        | MA |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Terminal pulling force         | Terminal comprehensive pull out force                                                                                                                                                                                                                                            |   | ≥5N at the first time, ≥3N after 30 times                                                                                                                                                                                                                                   | Tensile force meter                                                                                        | MA |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Conventional reliability       | Salt spray test/hot and cold shock test/high temperature test/low temperature test, etc                                                                                                                                                                                          |   | According to customer requirements, if the customer does not require, according to our antenna reliability test base book, file number: ZTX-QD-SP-018 send test                                                                                                             | Salt spray testing machine/hot and cold impact test chamber/constant temperature and humidity test chamber | MA |
| Environmental protection                                                                                                                                                                                                                                                                                                                                                                                                                                                             | HSF                            | HSF compliance                                                                                                                                                                                                                                                                   | ▲ | 1. The environmental report shall meet the requirements of RoHS2.0 within the validity period or the material content<br>2, all packaging RoHS label is not clear or not allowed                                                                                            | spectrograph                                                                                               | CR |
| <p>Note: "▲" is the key feature; △ is an important feature</p> <p>1. Three minor defects accumulate to be a minor defect, and three minor defects accumulate to be a major defect.<br/>2, according to the customer's requirements on the appearance, can be appropriate to adjust the inspection standards to meet customer requirements.<br/>3. Key inspection items: bracket buckle, screw hole, motor assembly, horn assembly, camera assembly and other assembly positions.</p> |                                |                                                                                                                                                                                                                                                                                  |   |                                                                                                                                                                                                                                                                             |                                                                                                            |    |

| General settlement of trial production report |                        |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|-----------------------------------------------|------------------------|-------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------|-----------------------------|------------|----------|-------------------|----------------|-------------------|---|-------|----------|---|-------|
| Name of Product                               |                        | TC1               | Class don't                | FPC+Axis of symmetry                                                                                                                                                                                                                                                                                      | Name of Customer                                                           | INSTA360                         | Product Number              | 2.00005667 |          |                   |                |                   |   |       |          |   |       |
| Trial production quantity                     |                        | 2000              | Number of trial production | 1                                                                                                                                                                                                                                                                                                         | Ring is protected                                                          | /                                | Date of completion of trial | 2022/10/24 |          |                   |                |                   |   |       |          |   |       |
| DVT01                                         | process                | Number of inputs  | Number of good quality     | yield                                                                                                                                                                                                                                                                                                     | Analysis of defects                                                        | /                                | /                           | /          |          |                   |                |                   |   |       |          |   |       |
|                                               | incoming mat           | 2000              | 2000                       | 100.00%                                                                                                                                                                                                                                                                                                   |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | welding                | 2000              | 2000                       | 100.00%                                                                                                                                                                                                                                                                                                   |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | dispensing             | 2000              | 2000                       | 100.00%                                                                                                                                                                                                                                                                                                   |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | oints plat             | 2000              | 2000                       | 100.00%                                                                                                                                                                                                                                                                                                   |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | Test                   | 2000              | 2000                       | 100.00%                                                                                                                                                                                                                                                                                                   |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | appearance             | 2000              | 1997                       | 99.85%                                                                                                                                                                                                                                                                                                    | FPC copper leakage *2, FPC fold *1                                         |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | packaging              | 1997              | 1997                       | 100.00%                                                                                                                                                                                                                                                                                                   |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | Rate of direct passage |                   |                            | 99.85%                                                                                                                                                                                                                                                                                                    |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
| Top Five Bad                                  | Bad name               | Number of defects | Rate of defect             | <table border="1"> <caption>Top Five Bad Data</caption> <thead> <tr> <th>Bad Name</th> <th>Number of Defects</th> <th>Rate of Defect</th> </tr> </thead> <tbody> <tr> <td>Leakage of copper</td> <td>2</td> <td>0.10%</td> </tr> <tr> <td>FPC fold</td> <td>1</td> <td>0.05%</td> </tr> </tbody> </table> |                                                                            |                                  |                             |            | Bad Name | Number of Defects | Rate of Defect | Leakage of copper | 2 | 0.10% | FPC fold | 1 | 0.05% |
|                                               | Bad Name               | Number of Defects | Rate of Defect             |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | Leakage of copper      | 2                 | 0.10%                      |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | FPC fold               | 1                 | 0.05%                      |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | Leakage of copper      | 2                 | 0.10%                      |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
| FPC fold                                      | 1                      | 0.05%             |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               |                        |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               |                        |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
| Top 5 Bad Solutions                           | category               | Bad name          | Bad description            | Root cause                                                                                                                                                                                                                                                                                                | Improvement Measures                                                       | Time of completion               | Person in charge            |            |          |                   |                |                   |   |       |          |   |       |
|                                               | TOP 1                  | Leakage of copper | The FPC is leaking copper  | Copper leakage from incoming FPC                                                                                                                                                                                                                                                                          | Supplier incoming materials improved                                       | Before the next trial production | liu sun qiao                |            |          |                   |                |                   |   |       |          |   |       |
|                                               | TOP 2                  | fold              | FPC has creases            | The FPC was squeezed during the turnover                                                                                                                                                                                                                                                                  | 1. Elongate publicity material turnover related matters needing attention. | Before the next trial production | li da xi                    |            |          |                   |                |                   |   |       |          |   |       |
|                                               | TOP 3                  |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | TOP 4                  |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | TOP 5                  |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
|                                               | TOP 6                  |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
| note                                          |                        |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
| Trial production results                      |                        |                   |                            | <input checked="" type="checkbox"/> Qualified in trial production <input type="checkbox"/> The trial production is not                                                                                                                                                                                    |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |
| Creation/time: Arvin                          |                        |                   | Audit/Time: yang deng shan |                                                                                                                                                                                                                                                                                                           |                                                                            | Approval/Time:                   |                             |            |          |                   |                |                   |   |       |          |   |       |
| Form Number: ZTX-QR-RD-031 version: A2        |                        |                   |                            |                                                                                                                                                                                                                                                                                                           |                                                                            |                                  |                             |            |          |                   |                |                   |   |       |          |   |       |

TC1 (T03E)

CHARGE BOX ANTENNA








version

working time (S)

document number

instrument calibration and requirements:

AI

/

ZTX-QD-WI-ASSY-358

1. Test equipment must be grounded.  
 2. After reconnecting the interface or when the connection test is unstable, the instrument needs to be corrected.  
 3. When testing products, ensure that the antenna is su

Sampling bagging

Bagging and labelling

packing

Attach the outer box

sealing

Operation method & operation parameters (After self-check the operation of this process is qualified, it can be transferred to the next process)  
 1. Each 50pcs of products should be packed with open pocket staples, affixed with small labels, and filled with product name, material number, quantity, cycle and other information.  
 2. Independently packaged products. Put 10 bags into (330\*230mm) PE plastic bags and pack (500PCS) PE bags. Attach small labels and fill in product name, material number, quantity, cycle and other information.  
 3. Packing, carton size (45\*32.5\*21cm), cardboard spacings, put 20 bags per box, excluding the last number of each box (10000pcs), and attached a copy of inspection report.  
 4. The label shall be affixed to the upper right corner of the outer box. The content of the label shall be subject to customer's requirements.  
 5. The labeled boxes are sealed with adhesive paper in the shape of "work";

Operation protection requirements:

1. Operators need to wear finger covers to work (special)  
 2. Handle the tested products gently during the testing  
 3. When operating the test fixture, use it in strict ac

6S Requirements:

1. Keep the surface clean and clean, free of dust, water  
 2. Materials are neatly placed and clearly marked.

Note: 1. Customer material code and quantity are correct, label must be printed by machine 2. The contents of inner label, outer label, shipping report and delivery note should be consistent.

3. In case of trial production materials or changes, corresponding labels shall be affixed. The final number of boxes shall be affixed with the final number of labels, and the inspection report shall be attached

Material Name

Material code

specifications

The dosage

note

PE pocket opening

1.12.000030

240\*160\*0.05mm

50/bag

PE seal pocket

1.12.000029

330\*230\*mm

10/bag

The cardboard

1.13.000003

42\*30cm

2sheets/case

The cartons

1.12.000086

45\*32.5\*21cm

1/box

10000pcs/Box

version

Content of Revision

Date of Amendment

Person of revision

AI

First Edition Release

2022/11/4

To formulate

Arvin

audit

yi ao ling

dang fei fei

表单编号: ZTX-QR-RD-028

版本: A1

Raw Material Detection List  
原材料检测清单

| 序号 | 组成部件或零件Parts or Components | 材料名称或型号Style/Item NO.                       | Pb 铅 | Cd 镉 | Hg 汞 | Cr6+ 六价铬 | PBBs 多溴联苯 | PBDEs 多溴联苯醚 | 邻苯二甲酸二(2-乙基己)酯DEHP | 邻苯二甲酸二丁酯DBP | 邻苯二甲酸丁苄酯BBP | 邻苯二甲酸二异丁酯DIBP | Br | Cl  | 测试报告编号<br>Report NO.               | Test<br>Test Lab<br>测试机构名称 | 测试报告日期     | 测试报告有效期限   | RoHS Report<br>RoHS报告                                                                                                                                                          |
|----|----------------------------|---------------------------------------------|------|------|------|----------|-----------|-------------|--------------------|-------------|-------------|---------------|----|-----|------------------------------------|----------------------------|------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | FPC                        | base material                               | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | SHAEC2202460504                    | SGS                        | 2022/2/21  | 2023/2/20  |                                                                                             |
|    |                            | The Ink-based PS-800                        | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | 253 | ETR22705905                        | SGS                        | 2022/8/5   | 2023/8/4   | <br>     |
|    |                            | Text Ink ZSR-150                            | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | ETR22A01347M01                     | SGS                        | 2022/10/17 | 2023/8/5   | <br>     |
|    |                            | Ni                                          | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | A2210529607101003E                 | CTI                        | 2021/12/15 | 2022/12/14 |                                                                                             |
|    |                            | OSP                                         | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | SZXEC2200260402<br>SZXEC2200316202 | SGS                        | 2022/2/16  | 2023/2/15  | <br>     |
|    |                            | Desa 8854                                   | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | SHAEC2206380517                    | SGS                        | 2022/4/8   | 2023/2/16  | <br>     |
| 2  | cable                      | Coaxial line _<br>Tin-plated<br>copper wire | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | SHAEC2127051115                    | SGS                        | 2021/12/16 | 2023/2/17  | <br>CANEC21186352                                                                           |
|    |                            | Coaxial line _<br>Insulation FEP            | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | NGBML2200124301                    | SGS                        | 2022/1/27  | 2023/1/26  |                                                                                            |
|    |                            | Coaxis _<br>knitting                        | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | A2220186128101ER1                  | SGS                        | 2022/5/24  | 2023/5/23  | <br> |
|    |                            | Coaxial line _<br>sheath FEP                | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | SHAEC2200415801                    | SGS                        | 2022/1/15  | 2023/1/14  | <br> |
|    |                            | Coaxial _ Color<br>mother Gray              | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | SHAEC2203756813                    | SGS                        | 2022/3/9   | 2023/3/8   | <br> |
| 3  | IPEX 4                     | C5210                                       | 18.4 | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | ETR22803072M01                     | SGS                        | 2022/9/1   | 2023/8/31  |                                                                                           |
|    |                            | Ni                                          | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | 10545111 (2)                       | SGS                        | 2022/9/8   | 2023/9/7   |                                                                                           |
|    |                            | Au                                          | 17.5 | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | 10545111 (1)                       | SGS                        | 2022/9/8   | 2023/9/7   |                                                                                           |
|    |                            | PBT white                                   | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | ETR22801117                        | SGS                        | 2022/8/10  | 2023/8/9   | <br> |
| 4  | UV glue                    | AU-6021C                                    | ND   | ND   | ND   | ND       | ND        | ND          | ND                 | ND          | ND          | ND            | ND | ND  | CANML2212053501                    | SGS                        | 2022/6/20  | 2023/6/19  | <br> |