

# 天线样品承认书

## The Main Antenna Sample Confirmation

|                            |                                                 |       |                     |           |
|----------------------------|-------------------------------------------------|-------|---------------------|-----------|
| 客户名称<br>Customer           | 深圳慧源创新科技有限公司                                    |       |                     |           |
|                            | Shenzhen Huiyuan Innovation Technology Co., LTD |       |                     |           |
| 项目名称<br>Project Name       | 5G 天线                                           |       | 日期                  | 2024-8-24 |
|                            |                                                 |       | Date                |           |
| 物料编号<br>Project NO.        | SN1079                                          | 备注    | 铜管天线                |           |
|                            |                                                 | Notes |                     |           |
| 频段<br>Frequency Range      | WIFI5.8G（5150-5850MHz）                          |       |                     |           |
| 设计<br>Designed By          | RF Engineer                                     |       | Structural Engineer |           |
|                            | Zhang ping                                      |       |                     |           |
| 审核<br>Checked By           | Engineering Manager                             |       |                     |           |
|                            |                                                 |       |                     |           |
| 客户确认<br>Client' s Approval |                                                 |       |                     |           |

设计单位：司南微电子（深圳）有限公司  
Designer: SINAWELL Electronics(Shenzhen) Co., Ltd.

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## 1. 规格书概述 Specification overview

该规格书描述 5G 铜管天线的状况，其频段为 5.8G。

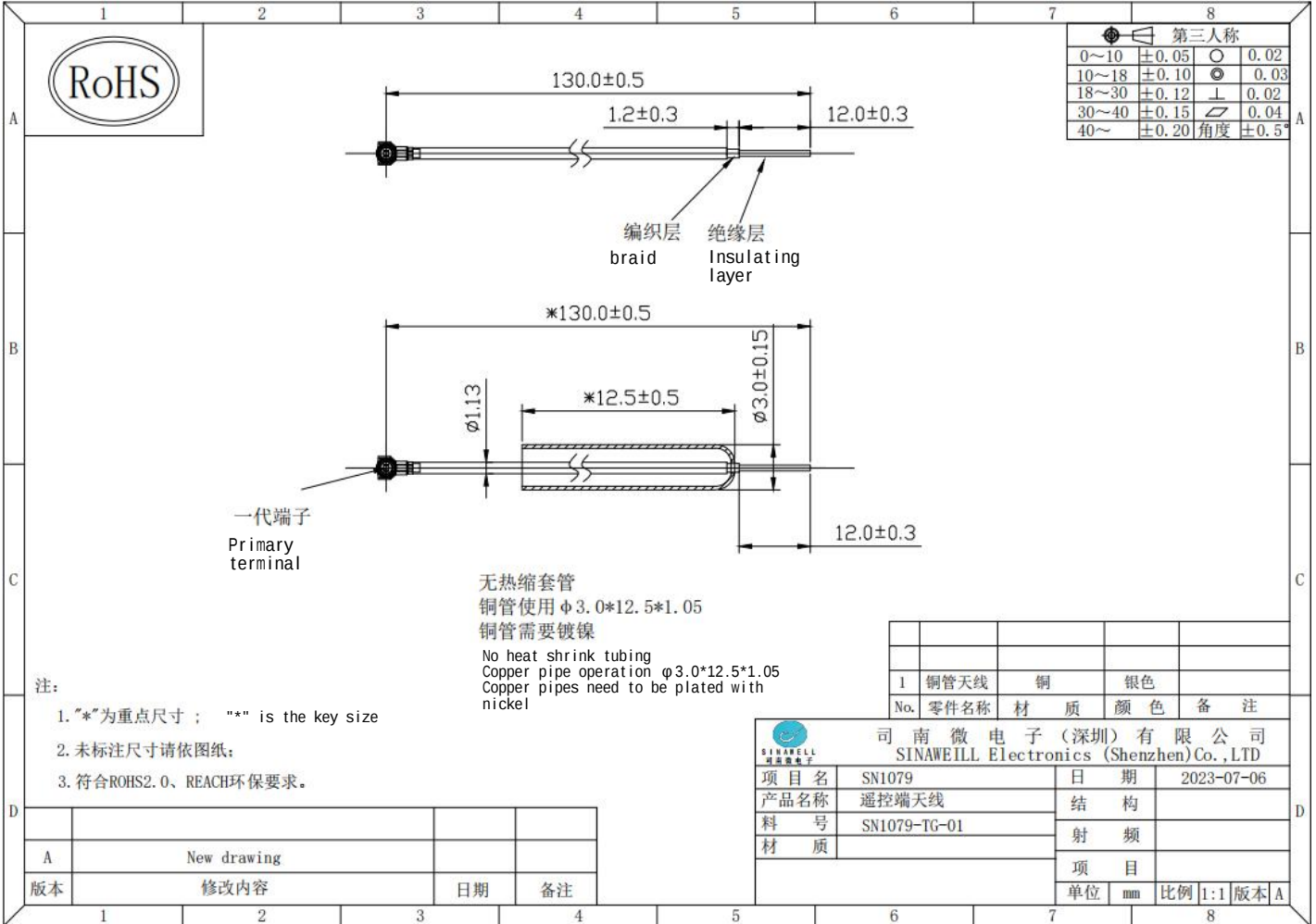
The specification describes the condition of 5G copper tube antennas, which have a frequency band of 5.8G.

## 2. 电性能 Electrical property

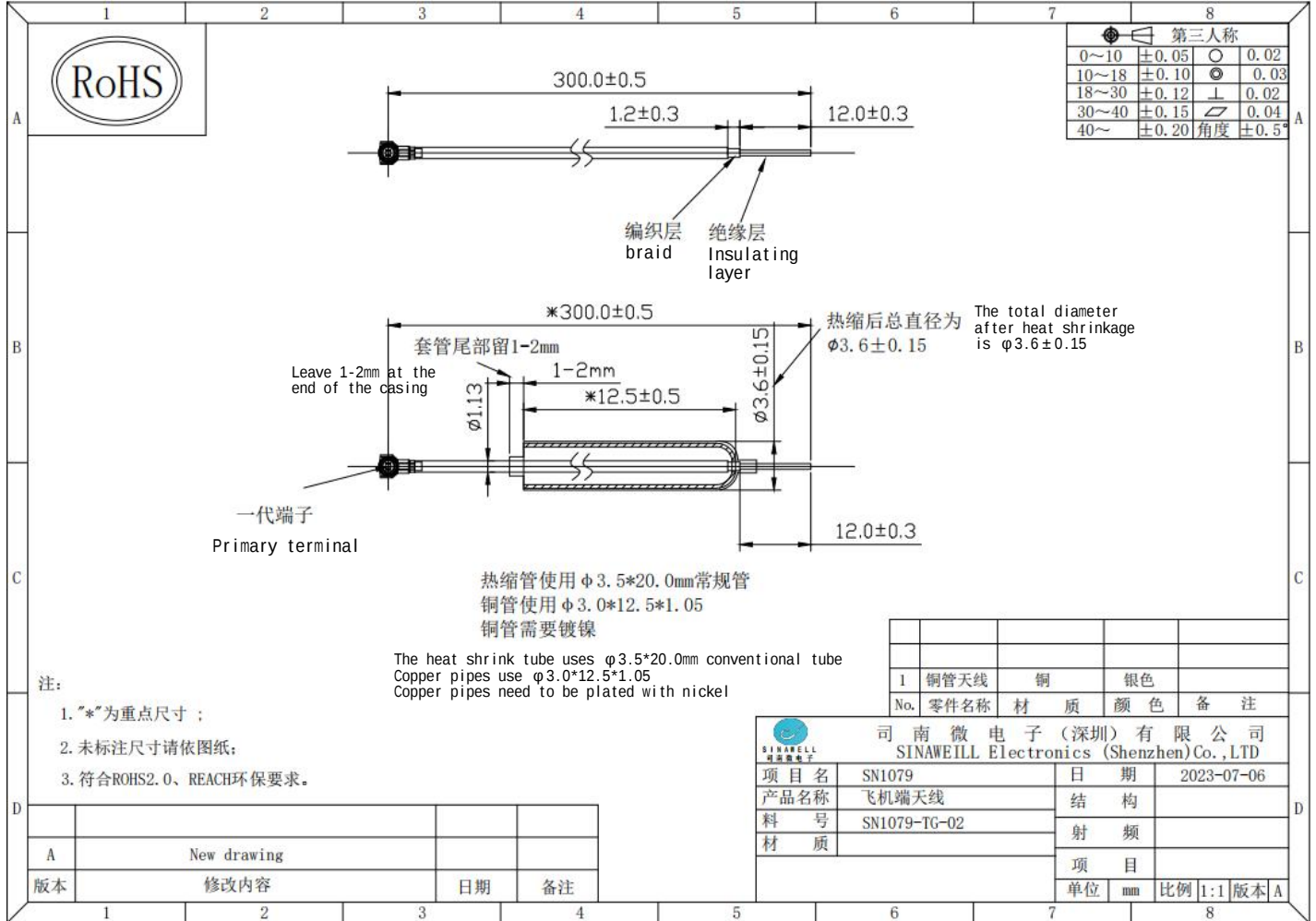
## 2.1. 天线频段 Antenna band

|                            | 5.8G         |
|----------------------------|--------------|
| Transmitting band<br>(MHz) | 5180-5850MHz |

# 天线图纸-遥控端 Antenna drawings - Remote control end

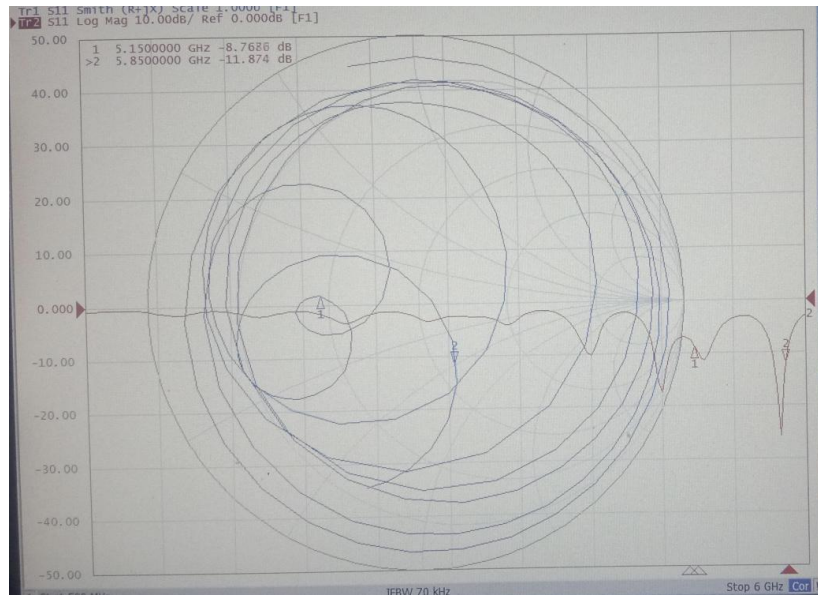


# 天线图纸-飞机端 Antenna drawings - Aircraft end

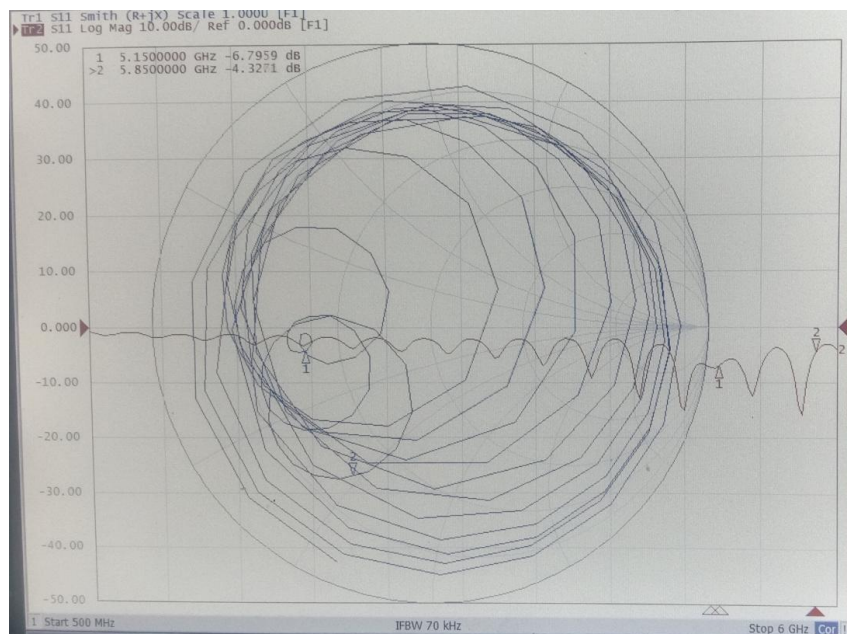


## 4.无源参数 Passive parameter

### S11 图-遥控端 S11 Figure - Remote control



### S11 图-飞机端 S11 Figure - Aircraft end

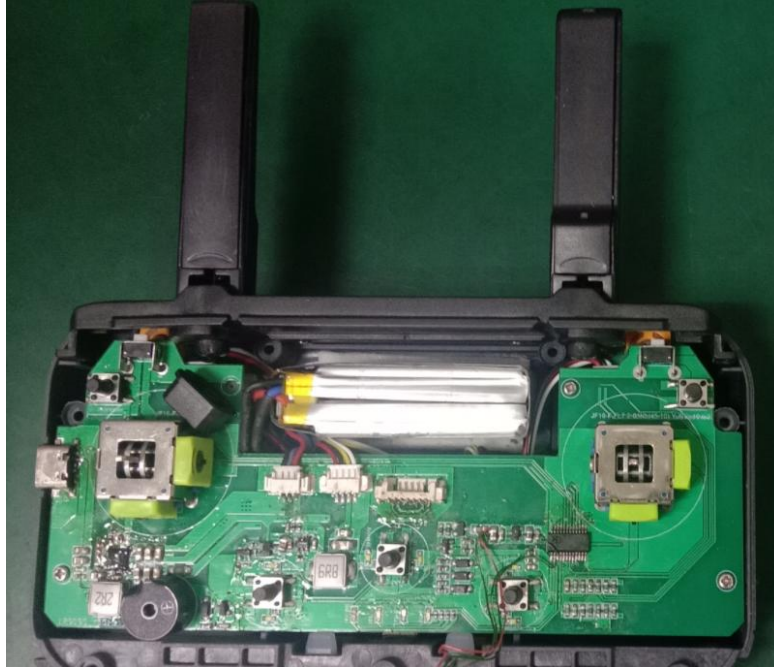


## 天线无源数据 Antenna passive data

| 飞机端 Aircraft terminal |             |              |               |
|-----------------------|-------------|--------------|---------------|
| Freq<br>(MHz)         | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
| 5150                  | 56.84       | -2.45        | 1.69          |
| 5175                  | 59.9        | -2.23        | 1.47          |
| 5200                  | 61.57       | -2.11        | 1.43          |
| 5225                  | 60.54       | -1.9         | 1.57          |
| 5250                  | 59.14       | -2.28        | 1.59          |
| 5275                  | 57.93       | -2.01        | 1.77          |
| 5300                  | 56.83       | -1.95        | 1.88          |
| 5325                  | 58.27       | -1.99        | 1.84          |
| 5350                  | 58.99       | -1.87        | 1.88          |
| 5375                  | 55.01       | -2.84        | 1.32          |
| 5400                  | 54.4        | -2.81        | 1.33          |
| 5425                  | 53.18       | -2.87        | 1.57          |
| 5450                  | 53.1        | -3.18        | 1.16          |
| 5475                  | 53.24       | -2.06        | 1.73          |
| 5500                  | 53.97       | -2.68        | 1.14          |
| 5525                  | 53.77       | -4.13        | 1.51          |
| 5550                  | 52.63       | -3.98        | 1.77          |
| 5575                  | 52.81       | -3.69        | 1.69          |
| 5600                  | 57.95       | -2.01        | 1.75          |
| 5625                  | 57.72       | -1.69        | 2             |
| 5650                  | 55.1        | -1.86        | 1.89          |
| 5675                  | 57.38       | -3.24        | 1.98          |
| 5700                  | 58.15       | -3.17        | 1.78          |
| 5725                  | 55.16       | -3           | 1.75          |
| 5750                  | 55.02       | -3.01        | 1.86          |
| 5775                  | 53.8        | -3.12        | 1.7           |
| 5800                  | 54.33       | -3.16        | 1.94          |
| 5825                  | 52.43       | -2.8         | 1.8           |
| 5850                  | 56.89       | -2.45        | 1.98          |

| 遥控端 Remote control terminal |             |              |               |
|-----------------------------|-------------|--------------|---------------|
| Freq<br>(MHz)               | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) |
| 5150                        | 58.54       | -1.91        | 1.55          |
| 5175                        | 59.72       | -2.24        | 1.55          |
| 5200                        | 60.63       | -1.7         | 1.69          |
| 5225                        | 60.32       | -1.59        | 1.78          |
| 5250                        | 58.83       | -1.32        | 1.88          |
| 5275                        | 58.93       | -1.31        | 1.88          |
| 5300                        | 57.83       | -1.95        | 1.88          |
| 5325                        | 58.42       | -1.65        | 1.78          |
| 5350                        | 60.13       | -1.54        | 1.75          |
| 5375                        | 55.78       | -1.5         | 1.75          |
| 5400                        | 53.4        | -2.81        | 1.33          |
| 5425                        | 54.45       | -1.11        | 2             |
| 5450                        | 55.13       | -1.48        | 1.76          |
| 5475                        | 56.57       | -2.11        | 1.43          |
| 5500                        | 55.9        | -2.23        | 1.47          |
| 5525                        | 53.27       | -1.99        | 1.84          |
| 5550                        | 53.14       | -2.28        | 1.59          |
| 5575                        | 54.42       | -2.64        | 1.36          |
| 5600                        | 56.69       | -2.46        | 1.83          |
| 5625                        | 55.2        | -2.99        | 1.45          |
| 5650                        | 53.16       | -2.74        | 1.54          |
| 5675                        | 57.05       | -3.27        | 1.84          |
| 5700                        | 58.55       | -3.14        | 1.82          |
| 5725                        | 56.14       | -3.18        | 1.8           |
| 5750                        | 56.33       | -3.07        | 1.7           |
| 5775                        | 52.93       | -2.01        | 1.77          |
| 5800                        | 52.01       | -2.84        | 1.32          |
| 5825                        | 55.35       | -1.85        | 1.88          |
| 5850                        | 56.84       | -2.45        | 1.69          |

天线图-遥控端 Sky chart - remote control end



天线图-飞机端 Sky chart - Aircraft end

