

R1天线规格书

Confirmation of products

| 客户名称 Customer | Shenzh | en Innioasis (| Γechnol | ogy Co., | Ltd |
|-------------------|------------------|----------------|---------|----------|------------|
| 项目名称 | D1 | 版本 | Λ 1 | 日期 | 2024 04 02 |
| Project Name | R1 | Version | A. 1 | Date | 2024-04-02 |
| 项目料号 | | 客户料号 | | | |
| Project NO. | 05. 13. 01. 0001 | Customer | | | |
| rroject No. | | NO. | | | |
| 频段 | 2400~2500MHz | 备注 | | 1 | 111 0 |
| Frequency Range | 2400 2300MHZ | Notes | vers1 | on numbe | er: V1.0 |
| 设计 | | | | | |
| Designed By | | | | | |
| 审核 | | | | | |
| Approved By | | | | | |
| 客户确认 | | | | | |
| Clients' Approval | | | | | |

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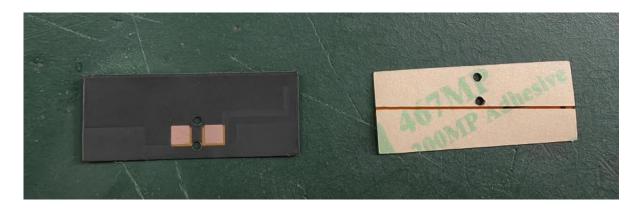
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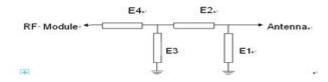


1. Specification

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ----R1 Picture 1 shows the antenna designed by LR.



2 Matching circuit diagram



| Element | Value |
|----------|-------|
| E1(0201) | |
| E2(0201) | o欧姆 |
| E3(0201) | |
| E4(0201) | o欧姆 |

3. VSWR Testing

3.1 Testing connection

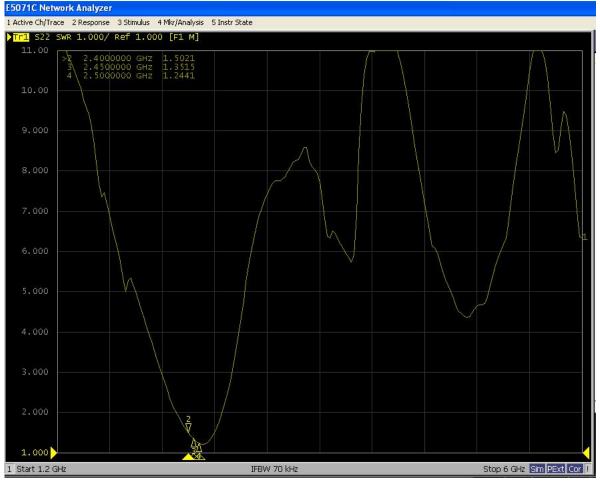
The VSWR testing devices are connected in sequence: Agilent5071C Network Analyzer →Testing Cable → Customer-providing Devices.

3.2 VSWR

The following table expresses the VSWR value of antenna's two edges of its frequency range. With regard to the relevant diagram of VSWR

| | R1 VS | SWR | |
|-----------------|-------|------|------|
| Frequency (MHz) | 2400 | 2450 | 2500 |
| VSWR | 1.50 | 1.35 | 1.24 |

3.3 Testing data



R1 antenna VSWR

4. Test the efficiency of the antenna Testing

4.1 Testing field

LR Microwave Anechoic Chamber: testing frequency ranges from 400MHz to 6GHz and the 40cm diameter spherical quite zone, the chamber provides less than -90dB reflectivity from 400MHz—6GHz.

4.2 Testing results

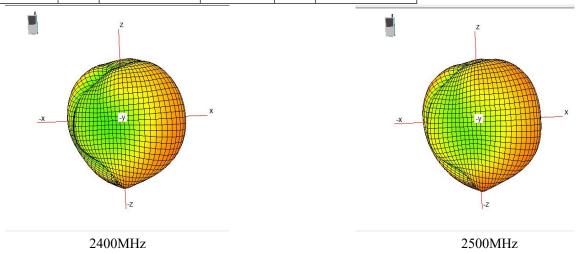
The following table indicates the testing results related to Power and Sensitivity in Microwave Anechoic Chamber, concerning the relative diagram.

以下 R1 天线无源测试数据:

| Freq(MHz) | Gain | Efficiency(%) | Freq(MHz) | Gain | Efficiency(%) |
|-----------|-------|---------------|-----------|-------|---------------|
| 2300 | 0.99 | 42.99 | 2460 | 2.16 | 56.95 |
| 2310 | 0.97 | 43. 57 | 2470 | 2.09 | 56. 74 |
| 2320 | 1.03 | 43.84 | 2480 | 2.25 | 57. 49 |
| 2330 | 1.23 | 45. 79 | 2490 | 2.38 | 57.60 |
| 2340 | 1.39 | 48.06 | 2500 | 2.39 | 57.87 |
| 2350 | 1.61 | 50.64 | 2510 | 2. 31 | 58.34 |
| 2360 | 1.88 | 53. 29 | 2520 | 2.45 | 59.07 |
| 2370 | 2.14 | 54.86 | 2530 | 2.48 | 59.38 |
| 2380 | 2.15 | 55. 42 | 2540 | 2.49 | 59.80 |
| 2390 | 2. 23 | 55. 14 | 2550 | 2.49 | 60.23 |
| 2400 | 2. 17 | 54. 78 | 2560 | 2.51 | 59. 27 |
| 2410 | 2.05 | 53. 47 | 2570 | 2.44 | 58.39 |

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| 2420 | 2.05 | 53. 74 | 2580 | 2.40 | 57. 64 |
|------|------|--------|------|-------|--------|
| 2430 | 2.01 | 54. 26 | 2590 | 2.42 | 57.85 |
| 2440 | 2.00 | 55. 37 | 2600 | 2. 34 | 56. 97 |
| 2450 | 2.02 | 55.86 | | | |

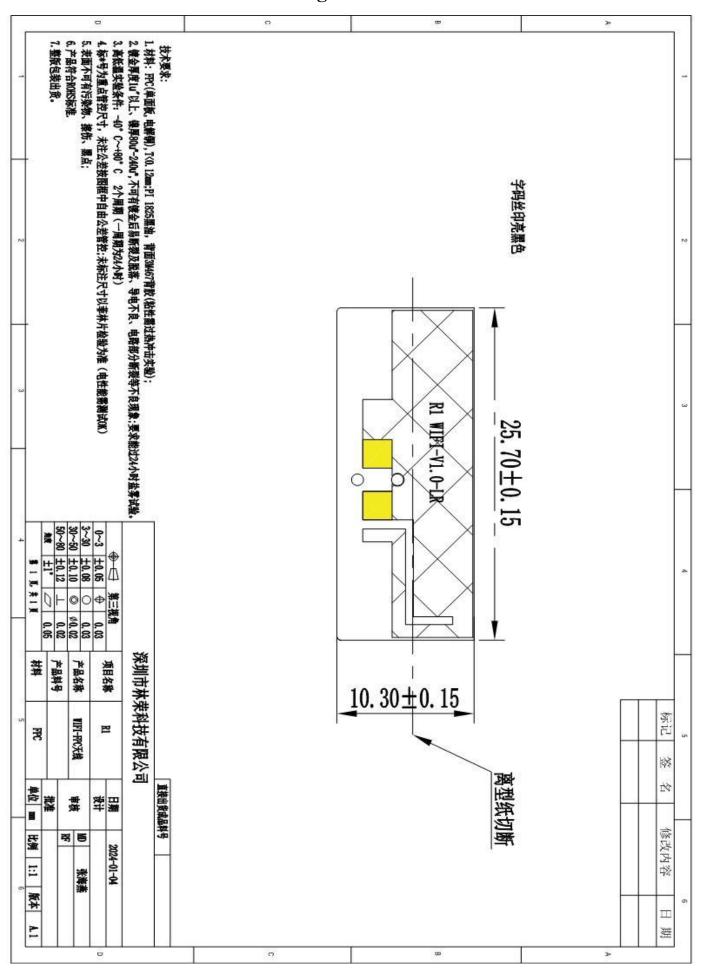


5. Environmental treatment

Original machine environment status



6. Mechanical Dimension Drawing





7. Mechanical Dimension Testing report

| Vendor(供应商) | | 材质名称 | FPC | | Part N | Part NO(料号) | 05 | 05.13.01.0001 | 001 | Tool Number | Cav. Number(大数) | er(5 | 9 | | | | C, | Unit(单位) | 1 | | Qu | ality(晶) | Quality(晶质签字) |
|-------------|--------------|----------|--------|------|----------|-------------|----------|--------------------------|--|-------------------------------|---------------------------|--------|----------|---------|------------------|-------------|------------|----------|----------|-------------------------|----------|----------|---------------------|
| 林荣科技 | 女 | 材质牌号 | 1 | | Part | Part Name | 9 | 101 DD | Ĥ | (養勢) | , | | | | SHOUL _ INTEREST | 3 | | " □ | Į. | 3 | | ų | カギ光 |
| | | | | | (44 | (零件名称) | 2 | VI WILL LLCX | 750 | 1 | Rev(版本) | | <u>2</u> | | T) | | | | | | 600 | 11 | 744 |
| 用抽 | · | 2024-4-2 | 4-2 | | MEA | SURED | DIMENS | MEASURED DIMENSION(实搬尺寸) | JR 4) | % TOLERANCE USED (公差使用百分比) | OLERANCE USED 公差使用百分比) | | | | ▫ | DISPOSITION | SITIS | ž | | | ACCI | EPTA | ACCEPTABLE VARIANCE |
| DIM. # | DRAWING ZONE | +10- | ٠10٢. | NOTE | t andwes | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 | SAMPLE 1 SAMPLE 2 SAMPLE 3 SAMPLE 4 SAMPLE 5 | UPPER | LOWER | 0%-25% | 25%-50% | 50%-75% | 75%-100% | 100%+ | Re-Measure | Accept | Fix Tool | Accept With Variance | NOISNAMO | | SION +TOL. |
| 1 25.70 | | 0.15 | (0.15) | | 25.74 | 25.72 | 25.77 | 25.68 | 25.70 | 47% | -13% | × | × | | 2.0 | - 8 | - 2 | | - 2 | 93 | 25.70 | 70 | 70 25.77 |
| 2 10.30 | | 0.15 | (0.15) | | 10.32 | 10.35 | 10.30 | 10.32 | 10.36 | 40% | 0% | | × | | 100 | 19.5 | | | 1 | | 10.30 | 0 | 0 10.36 |
| 3 以下空白 | | | | - 3 | | | | | | | | | | | | 93 | | | - 4 | | | | |
| 4 | - | | | | | | | | | | | | | | | | 3 3 | | | | | | |
| 5 | Н | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | 8 | | | | | | | | | 8 8 | | S 7 | | | s . | |
| 7 | | | | | | | | 0 5 | | | | | | | | | , | | | | | | |
| 8 | | | 8 | | | | | 0 5 | | | 7.0 | | | | | 8 | 8 -> | 2 | | | | ga . | en . |
| 9 | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | 2 | | Y . | 76 | | | |
| 11 | | | | 3 | | | | | | | | | | | | -1: | -ti | | | 5. | | | 5.15 |
| 12 | | | 2 | 33 | | 8 | | 60 | | | | | 8 | | | 6 | (3) | | Sign - | 3 | | à | |
| 13 | | | | | h- | | | | | | | | | | | 56 | | | | | | | |

I.DIMENSION, +TOL, -TOL, SAMPLEI, SAMPLE2, SAMPLE3 2.注意1中描述的内容输入时,请: 备注: 除了上述标注的填写内容外, 须输入的内容:

a. 在WTOLERANCEUSED(公差使用百分比比)中无论是UPPER还是LOWER>100%, 须:
(1) 检查输入数据是否输入错误;(2) 测量数据是否操作有误或是仅器测量不准确;(3) 测量时间是否不适宜;(4) 排除了(1)(2)(3) 外, 仍然>100%, 请设计师对每个尺寸的后面作出选择即从"Re-measure, Accepet, Re Tool, Accept Virance"中选一,若是选Accept with virance,必须完成后面的Dimension, +TOL,-TOL;
b. DIMENSION栏中的即尺寸前一栏中的DIM. #必须与图面上的一致;同时注意,在作Cpk的尺寸的尺寸编号与FMI全尺寸测量报告中的尺寸的编号必须是相同的,且Cpk尺寸必须被用符号标注,此标注导必须表示

的意思是指该尺寸为重点管控尺寸,要做Cpk! c.测量工具代号Measure No.: A=callipers(0.00) B=micrometer (0.000) C=Pin Guage (0.000) D=High Guage (0.000) E=CMM (0.000) F=Plug Guage (0.00) G=R Guage (0.0) I=Deep Guage



8. Packaging standard

包装说明:具体包装数量以实物为准,图片只显示包装的方式,并非此项目实物。

Packaging Description: the specific packaging quantity is subject to the physical object. The picture only shows the way of packaging, not the physical object of the project



天线用 PE 袋包装 The top cover board, with PE film packaging



防潮防水 PET 袋封装,放于纸箱内 Moistureproof waterproof PET bag packaging, Put in the cartons



纸箱用胶带封口 Carton sealing with duct tape



包装箱整箱外观() Cases appearance