

# 样品承认书

## Confirmation of products

客户名称 Customer	深圳市睿联技术股份有限公司				
项目名称 Project Name	SD8-N	版本 Version	A. 2	日期 Date	2023-11-24
项目料号 Project NO.	03.05.01.005	客户料号 Customer NO.	54.07.001.0110A		
频段 Frequency Range	2400~2500MHz 5100~5800MHz	备注 Notes	WIFI-1		
设计 Designed By					
审核 Approved By					
客户确认 Clients' Approval					

公司名称：深圳市林荣科技有限公司  
Designer: SHENZHEN LINRONG TECHNOLOGY CO., LTD

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# 1、 Specification

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ----SD8-N Picture 1 shows the antenna designed by LR.



## 2、 VSWR Testing

### 2.1 Testing connection

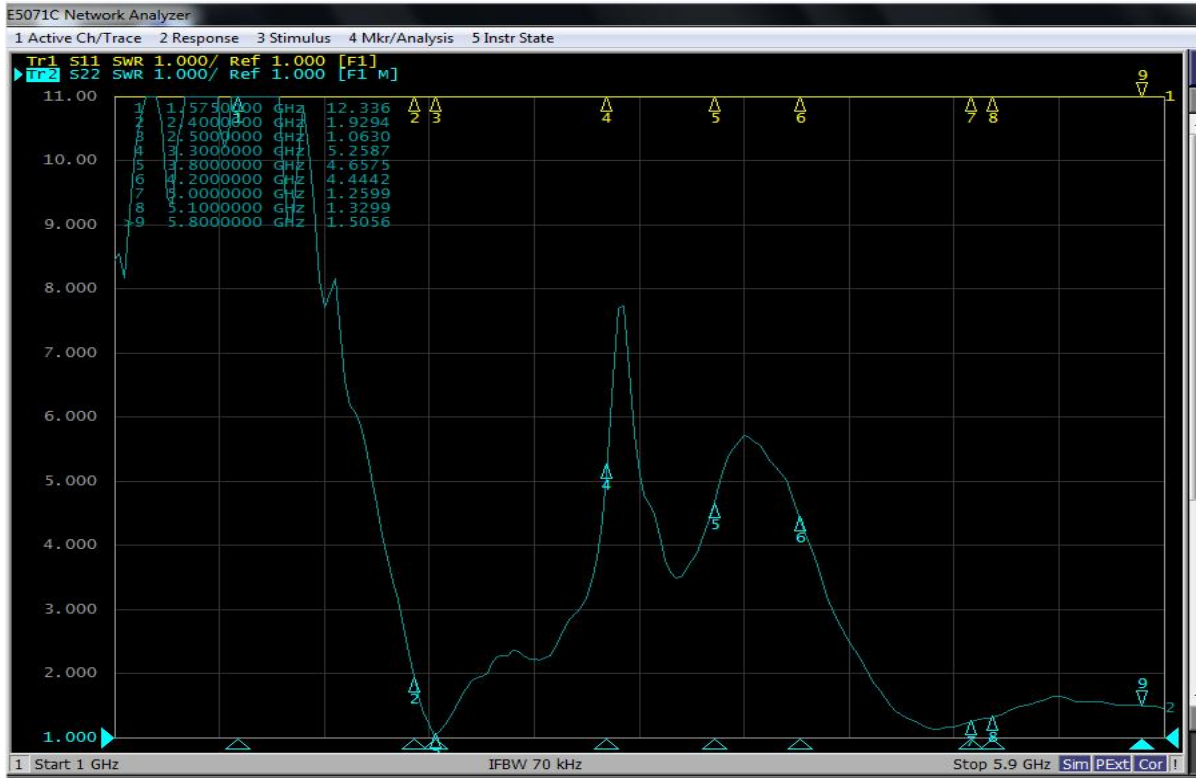
The **Return Loss** testing devices are connected in sequence: Agilent5071C Network Analyzer →Testing Cable → Customer-providing Devices.

### 2.2 VSWR

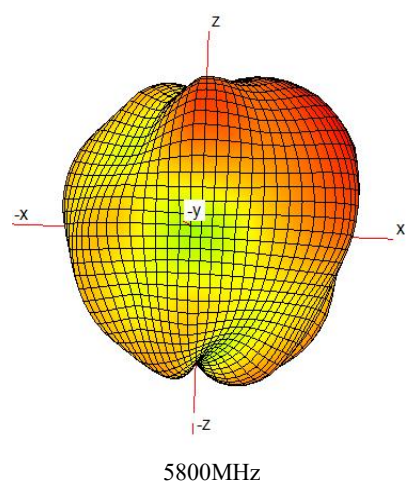
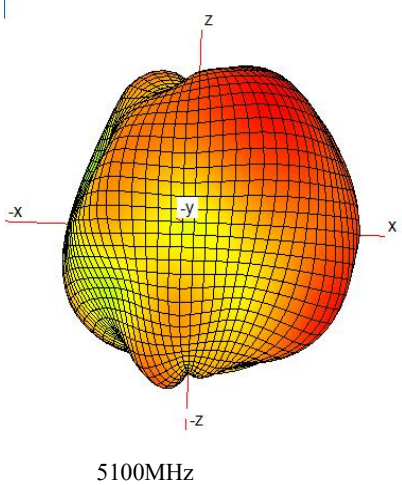
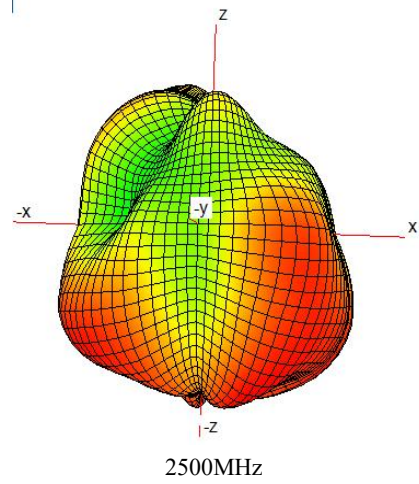
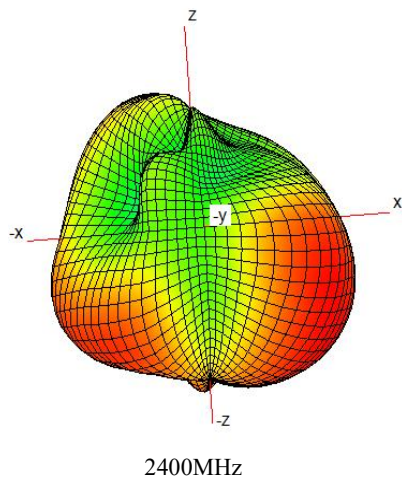
The following table expresses the VSWR value of antenna's two edges of its frequency range. With regard to the relevant diagram of VSWR

SD8-N WIFI VSWR				
<b>Frequency (MHz)</b>	2400	2500	5100	5800
<b>VSWR</b>	1.92	1.06	1.32	1.50

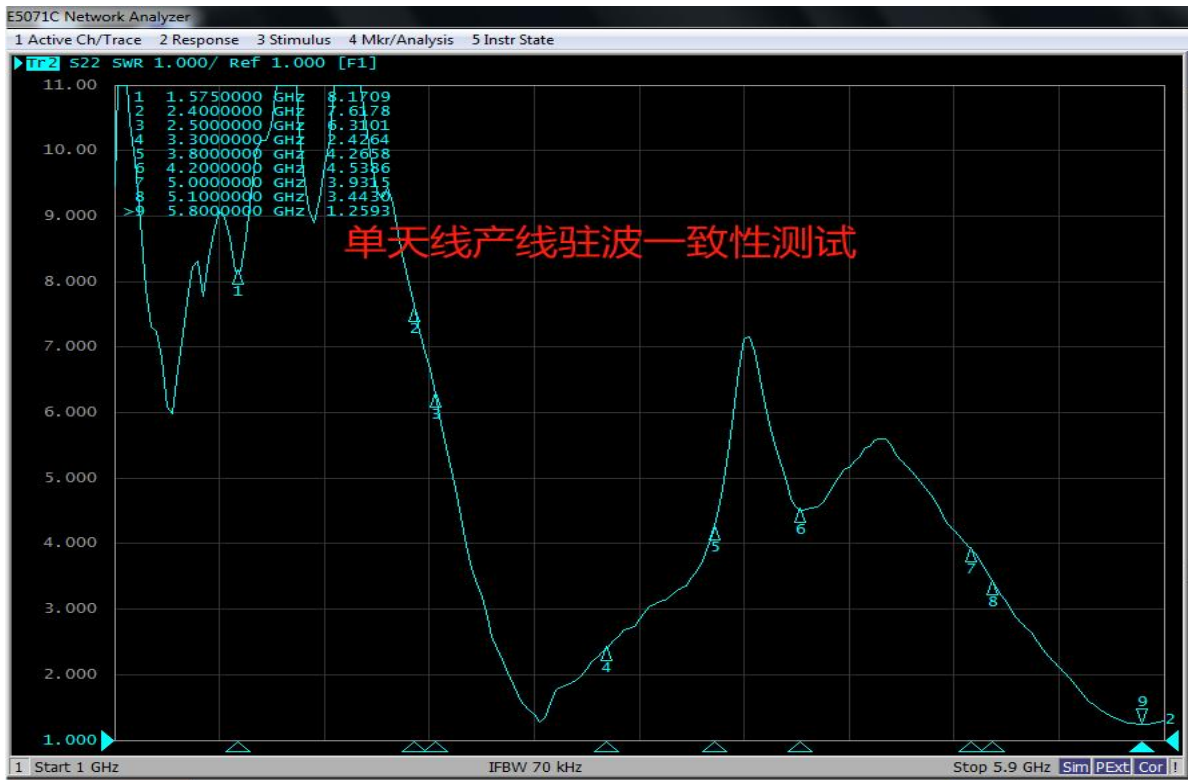
### 2.3 Testing data



2.4+5.8G WIFI antenna VSWR



## 2.4 Single antenna test VSWR



## 3、 Power、 Sensitivity Testing

### 3.1 Testing field

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

### 3.2 Testing results

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

### 3.3 Active testing.

#### SD8-N Antenna efficiency

Freq (MHz)	Gain	Efficiency (%)	Freq (MHz)	Gain	Efficiency (%)
2400	2.6	52.54	5360	3.9	60.95
2410	2.4	51.77	5380	3.5	61.92
2420	2.3	51.31	5400	3.6	60.05
2430	2.1	51.04	5420	3.3	60.67
2440	2.1	51.27	5440	3.3	63.77
2450	1.7	50.70	5460	3.3	62.60
2460	1.6	50.17	5480	3.4	63.78
2470	1.5	49.51	5500	2.9	60.49
2480	1.8	50.58	5520	3.0	59.45
2490	1.9	50.24	5540	3.1	62.26
2500	1.7	49.10	5560	3.0	64.16
5100	2.4	53.69	5580	3.4	65.44

5120	3.2	61.29	5600	3.0	62.98
5140	2.5	53.89	5620	3.3	62.91
5160	3.7	64.28	5640	3.3	62.75
5180	3.3	59.97	5660	2.9	63.83
5200	2.9	58.94	5680	3.3	63.93
5220	3.6	64.61	5700	3.1	63.03
5240	3.9	63.04	5720	3.7	64.92
5260	3.8	59.68	5740	3.3	58.10
5280	3.7	62.94	5760	3.9	60.78
5300	3.7	61.15	5780	3.8	62.27
5320	3.8	57.42	5800	3.9	61.98
5340	3.6	62.51			

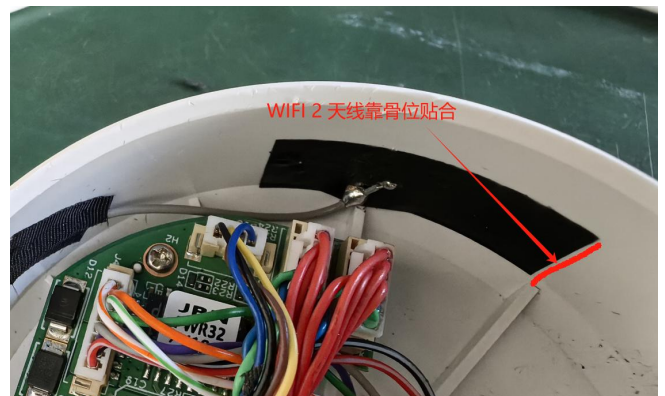
### SD8 Active data

WIFI 1+WIFI 2			
	chNO	TRP	TIS
11B-11M	1	18.62	
	6	19.05	
	11	20.1	-82.01
11A-54M	36	18.35	
	56	18.2	
	165	18.4	-73.05
11g-54M	1	17.52	
	6	17.64	
	11	17.78	-68.57

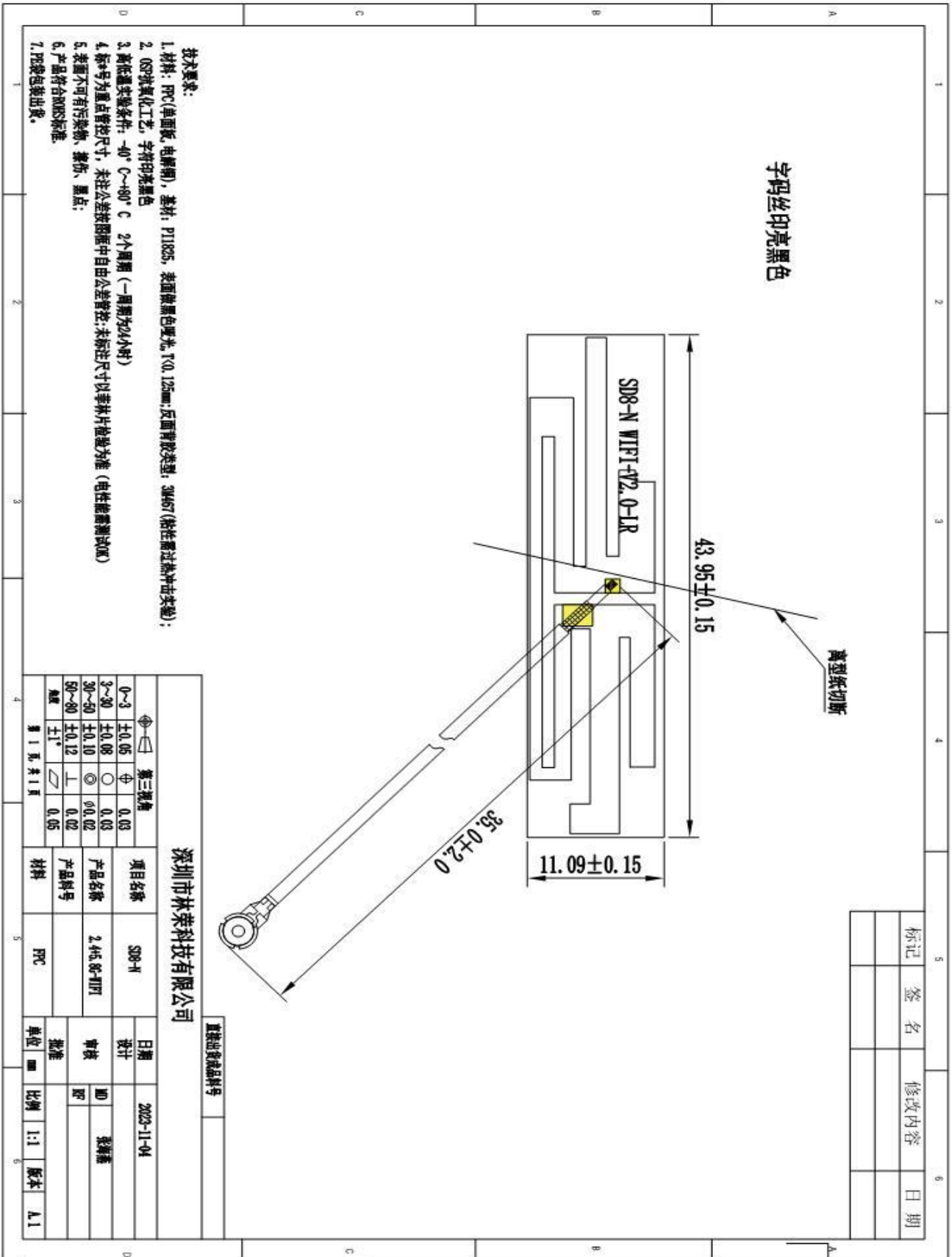
WIFI 1			
	chNO	TRP	TIS
11B-11M	1	16.21	
	6	16.19	
	11	16.51	-79.44
11A-54M	36	15.23	
	56	15.74	
	165	15.5	-73.91
11g-54M	1	15.07	
	6	16.65	
	11	16.53	-69.66

## 4、Environmental treatment

### Antenna mounting diagram



## 5、Mechanical Dimension Drawing



## 6. Mechanical Dimension Testing report

### 全尺寸测量报告

Vendor(供应商)		材质名称		PRC		Part NO(料号)		03.05.01.005		Tool Number (模号)		Cav. Number(穴数)		Unit(单位)		Quantity(品质数字)									
林荣科技		材质牌号		/		Part Name (零件名称)		WiFi天线		/		/		MILLIMETERS <input type="checkbox"/> INCHES		2118-240									
日期		2023-11-4		MEASURED DIMENSION(实测尺寸)		% TOLERANCE USED (公差使用百分比)		DISPOSITION		ACCEPTABLE VARIANCE															
DIM. #	DIMENSION	DRAWING ZONE	+TOL.	-TOL.	NOTE	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	DIMENSION	+TOL.	-TOL.	
1	35.00		2.00	(2.00)		35.00	36.00	34.00	35.00	35.00	50%	-50%	X	X	X								35.00	36.00	34.00
2	43.95		0.15	(0.15)		43.97	43.95	43.98	43.94	43.97	20%	-7%	X										43.95	43.98	43.94
3	11.09		0.15	(0.15)		11.10	11.12	11.09	11.07	11.11	20%	-13%	X										11.09	11.12	11.07
4	1.13		0.05	(0.05)		1.12	1.12	1.13	1.12	1.13	0%	-20%	X										1.13	1.13	1.12
6	以下空白																								
7																									
8																									
9																									
10																									
11																									
12																									
13																									

备注: 除了上述标注的填写内容外, 须输入的内容:

1. DIMENSION, +TOL., -TOL., SAMPLE1, SAMPLE2, SAMPLE3

2. 注意1中描述的内容输入时, 请:

a. 在5TOLERANCEUSED(公差使用百分比)中无论是UPPER还是LOWER)100%, 须:

(1) 检查输入数据是否输入错误;(2) 测量数据是否有误或是仪器测量不准确;(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,

Accept, Re Tool, Accept Variance"中选一, 若是选Accept with variance, 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Qpk的尺寸的编号与PMI全尺寸测量报告中的尺寸的编号必须是相同的, 且Qpk尺寸必须使用符号标注, 此标注号必须表示的

意思是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 Gauge(0.000) D=High Gauge(0.000) E=CMM(0.000) F=Plug Gauge(0.00) G=R Gauge(0.0) I=Deep Gauge

(0.000)



## 7. 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，放于纸箱或胶筐内

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