

## Antenna specification

#### Customer name: Shenzhen Guanglian Zhitong Technology Co., LTD product name: Antenna components \_\_\_\_\_ Customer Product Name: \$200 Product specification: Customer-supplied white shell (top cover: 73.54\*20.88\*5.50MM , Lower cover: 71.19\*17.10\*9.90MM); Coaxial line: 1.13 \* 119MM (coaxial line with terminal exposed line length of 76mm); PCB:54.00+10.00+0.8MM Welding line + assembly + ultrasonic wave 205-2043 material code: **Change Content CV:** Content before The changed content Change date edition order person liable page number change number editio princeps editio princeps 2021-9-6 1 R-A 7 Yuan Shujun The coaxial exposed line length was 2021-11-25 2 Revised version 1 R-B 10 Yuan Shujun changed to 22mm 3 Revised version 2 The coaxial exposed line length was 2022-4-26 R:C 10 Yuan Shujun changed to 76mm Name of supplier: Shenzhen Yusheng Communication Equipment Co., LTD Supplier address: 4A, Building 2, Nantaiyun Chuanggu, Guangming District, Shenzhen City

		(Signature of the	Supplier)	
Respo	onsible person / date	IQC/ date	Review / Date	Approval / Date
MD	He lei	Zhong Qiuhong	Chen Kehong	
R F	Jiang Fang bai			

The above signature must be signed with a pen and cover the company seal

Demander (customer) jug	dgment result: 🗌 qualified	🗆 unqualified	
Demander (customer) ac	knowledged (please return tl	ne entire acknowledged bo	okmark after confirmation)
Development & Design Engineer / Date	SQE Engineer / Date	Purchasing Leader / Date	Development Manager approval / Date



### 1. Purpose

Standardize the product specifications and test methods of mobile communication terminal

antenna produced by Shenzhen Yusheng Communication Equipment Co., Ltd. to avoid errors

caused by different test conditions and methods.

### 2. Overview of product categories and product models

2.1 class

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This mobile communication terminal antenna is: PCB antenna

#### 2.2 Product Model Overview

The main overview of this report is that\_\_\_Electrical results for the antenna designed by the S200.

This antenna design frequency band is:WIFI:2.4G/5G

### 3. Parameters and specifications

#### .13. Electrical performance parameters

Product ele	ectrical performance index
Operating frequency range	2400MHz-2500MHz:5150 MHz-5850 MHz
standing-wave ratio	2400MHz-2500MHz : < 1.5 5150MHz-5850 MHz < 2.3
antenna gain	2400MHz-2500MHz : 2.5 dBi - 4dBi 5150MHz-5850MHz : 2.5 dBi - 4dBi
radiation efficiency	2400MHz-2500MHz : > 40% 5150MHz-5850MHz : > 33%
impedance	50 ohm
Produc	t material description
coaxial cable	The cable wire + copper



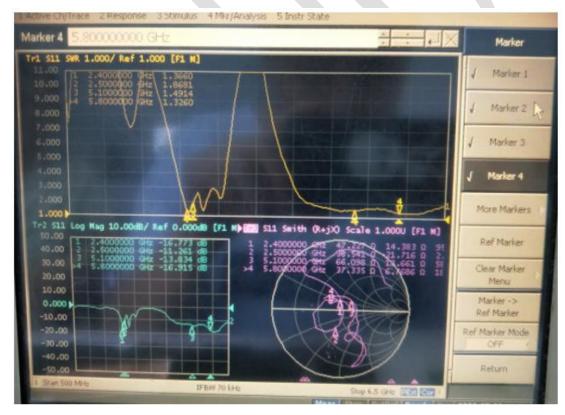
### 4. Test report

#### 4.1: Antenna passive data (efficiency)

Test Point ID	1	2	3	4	5	6	7	8	9	10	11
Freq. (MHz)	2400.0	2 <mark>410.</mark> 0	2420.0	2430.0	2 <mark>440.0</mark>	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	3.18	3.26	3.45	3.57	3.61	3.79	3.62	3.55	3.33	3.19	3.07
Efficiency (%)	59.6%	60.5%	61.7%	62.6%	63.4%	65.1%	63.5%	62.8%	62.4%	59. <b>1</b> %	58.8%

Test Point ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Freq. (MHz)	5100.0	5150.0	5200.0	5250.0	5300.0	535 <mark>0</mark> .0	5400.0	5450.0	5500.0	<mark>5550.0</mark>	5600.0	5650.0	5700.0	5750.0	5800.0
Gain (dBi)	3.82	<mark>3.94</mark>	4. <mark>1</mark> 2	<mark>4.1</mark> 8	4.39	3.81	3.87	<mark>3.7</mark> 8	<mark>3.5</mark> 3	3 <mark>.4</mark> 2	3.69	3.87	4 <mark>.1</mark> 2	<mark>4</mark> .08	4.25
Efficie ncy (%)	59.6%	60.7%	62.2%	63.1%	64.6%	61.7%	60.8%	60.5%	58.2%	57.1%	58.5%	61.6%	62.7%	63.8%	63.2%

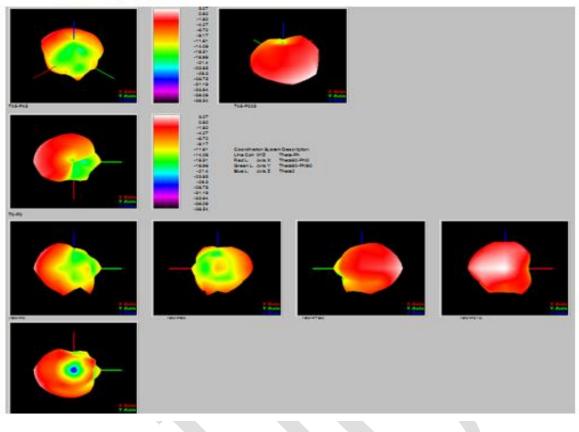
#### 4.2: Antenna passive (file LOGMAG + VSWR + SMITH)



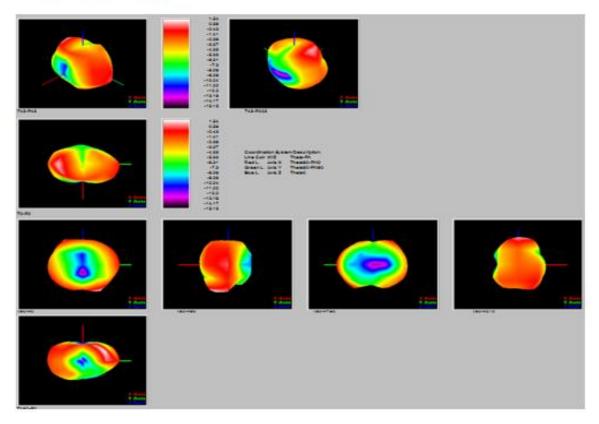


4.3: Antenna is passive (orientation diagram)

2.4GHz方向图

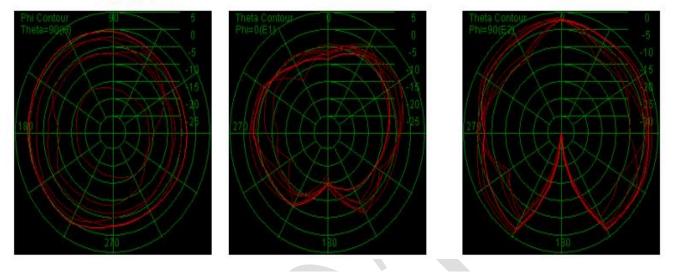


# 5GHz方向图

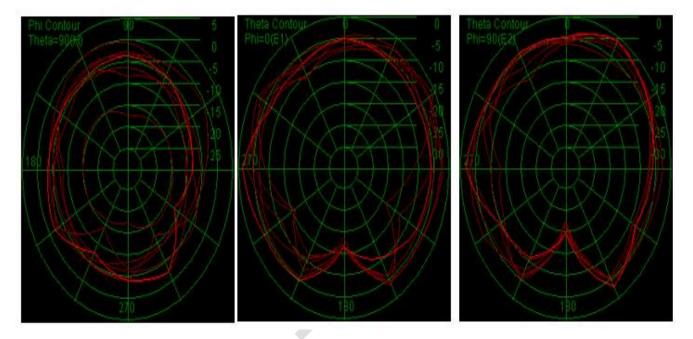




2.4GHz方向图

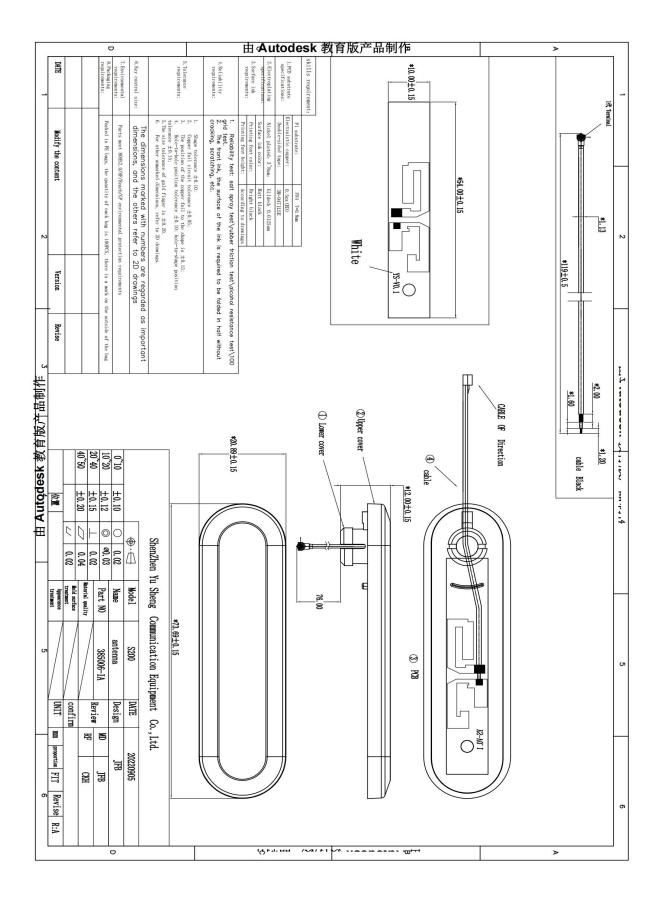


5GHz方向图





### 5. Structure size diagram





### 6.BOM Table (Bill of Materials)

### YUSHENG COMMUNICATION TECHNOLOGY CO., LTD.

### 385006(S200)-BOM

		Edition: R:B		clien	t381	Model: 385006	date: 202203	21		
NO	prat no	Name	Types of	version	specification	Material quality	unit	colour	Quantity	Craft
1	385006-IA	antenna	Z	R:B	73.54*20.88*12.00MM				PCS	1
1.1	385006-IA-01	PCB	Z	R: A	54.00*10.00*0.8MM	PCBT0.8MM	Tinning	Green	PCS	1
1.1.1	385006-IA-02	CABLE	Z	R:B	1.13*119MM	1.13 CABLE+1代 Terminal	Terminal Gilding	Black	PCS	1
1.2	385006-IA-03	Upper cover	Z	R: A	73.54*20.88*5.50MM	PC	Fine Lines	Black	PCS	1
1.3	385006-IA-04	Lower cover	Z	R: A	71.19*17.10*9.90MM	PC	Fine Lines	Black	PCS	1

确认:

审核:

制作: 冯继武

### 7. Packaging diagram

图			
2.内	包装整体摆	载照片或 2D	图
4	.外包装标签	图片或 2D 图	٤J
3		图片或 2D 图 )cm 宽10cm **********	
<b>9</b> 需方	外标签长10	)cm 宽10cm **********	
<b>メ</b> 二 二 二 、 二 、 、 、 、 、 、 、 、 、 、 、 、 、	外标签长10	)cm 宽10cm ********** 是晟通讯设备	• 有限公司
<b>9</b> 需方	外标签长10	) <b>cm 宽10cm</b> *********** 是晟通讯设备 ***********	↓ ◆ ◆有限公司
・ 一 二 二 二 二 二 二 二 二 二 二 二 二 二	<b>小标签长1(</b> 深圳市县	)cm 宽10cm ************************************	* *有限公司 *
<b>メ</b> 二 二 二 、 二 、 、 、 、 、 、 、 、 、 、 、 、 、	外标签长10	) <b>cm 宽10cm</b> *********** 是晟通讯设备 ***********	↓ ◆ ◆有限公司
	2. p	2.内包装整体排	2.内包装整体摆放照片或 20

(This diagram shows the packaging diagram of this project, subject to the mass production object)