

R811 Project Antenna Specification

Customer Name: 360

Customer name: R811 doorbell

Product name: WIFI antenna

FPC Antenna Product Specification:

Item Code: Item 231100292 (Kaymujin)

Change Content Resume:

Serial Number	Version	Status	Start and end date	Responsible Person	Page Number	Remarks
1	First Edition	First Edition	2023-11-13	Zhong Qihong	10	

Signed by the Supplier:

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MD				
RF				

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Judgment result of the demander: ☐ qualified ☐ unqualified			
Development Design Engineer/Date	SQE Engineer/Date	Purchaser/Date	Development Manager Approval/Date

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1. Overview

1.1 Scope of Application

This requirement specifies the antenna technical requirements and material requirements specifications for the **R811** product.

This requirement applies to the selection, testing and acceptance of the **R811** antenna.

1.2 basic project information

Antenna Name:	<u>R811 Doorbell</u>
Antenna frequency:	BT/WIFI:2.4G-2.5G
Antenna material:	FPC antenna

2. Technical index requirements

2.1 Test Items and Equipment Introduction

List	Test Item	Equipment
Active Test	TRP,TIS	Comprehensive tester, microwave darkroom

2.2 Active Reports

2.2.1 Test description

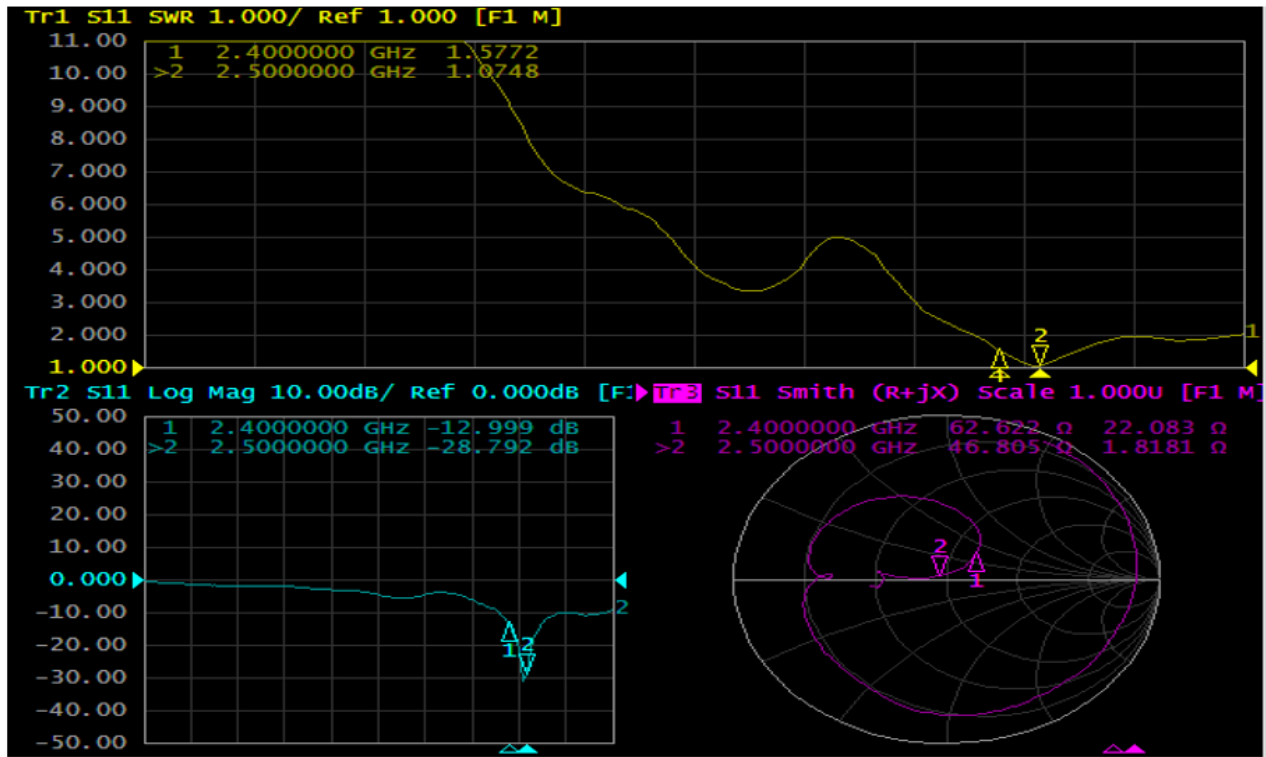
Test tools: Agilent8960 comprehensive tester, R & SCMW500, all-electric wave far-field ETS darkroom, high-precision positioning system and its controller and computer with automatic test program.

Test environment: temperature $22\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$, humidity $50\% \pm 15\%$

Test method: The DUT is fixed at the center of the turntable on the H plane, and is on the same horizontal line as the center of the horn antenna.

The positioning system enables the DUT to rotate on the entire spherical surface to meet the high-precision three-dimensional positioning. Each RF instrument, turntable controller and PC with automatic test software communicate through GPIB interface.

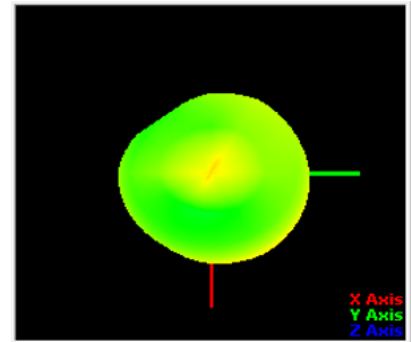
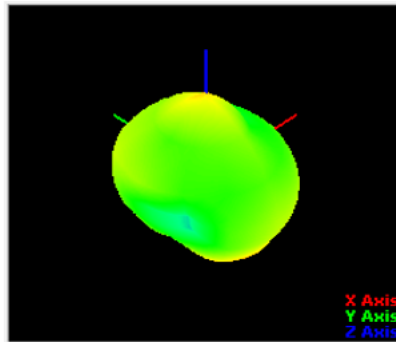
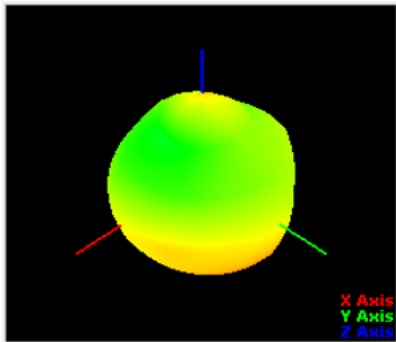
2.2.2WIFI/BT Antenna (Drawing LOGMAG + VSWR + SMITH)



2.2.3WIFI/BT-Antenna efficiency and gain

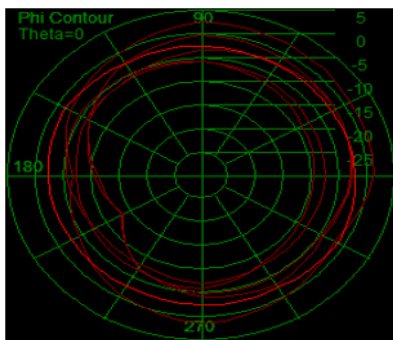
Passive Test For 2400MHz~2500MHz				
Freq	Effi	Effi	Gain	
(MHz)	(%)	(dB)	(dBi)	
2400	44.5 percent	-3.52	1.64	
2410	45.3 percent	-3.44	1.78	
2420	46.6 percent	-3.32	1.87	
2430	47.9 percent	-3.20	1.93	
2440	48.4 percent	-3.15	1.97	
2450	52.1 percent	-2.83	1.88	
2460	50.5 percent	-2.97	1.99	
2470	49.7 percent	-3.04	2.00	
2480	48.1 percent	-3.18	1.97	
2490	47.3 percent	-3.25	1.87	
2500	45.2 percent	-3.45	1.79	

2.2.4 Antenna Passive Parameters -2.4G Apple Chart

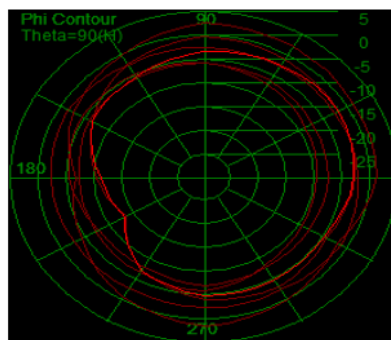


2.2.5 Antenna Passive Parameters -2.4G Pattern

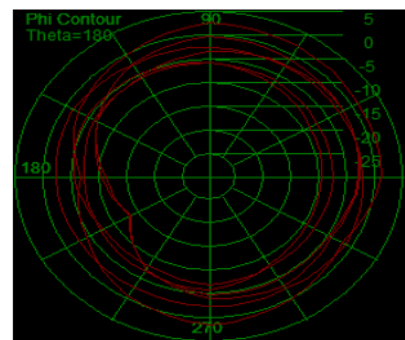
Theta=90 (Phi=270° 为正前方)



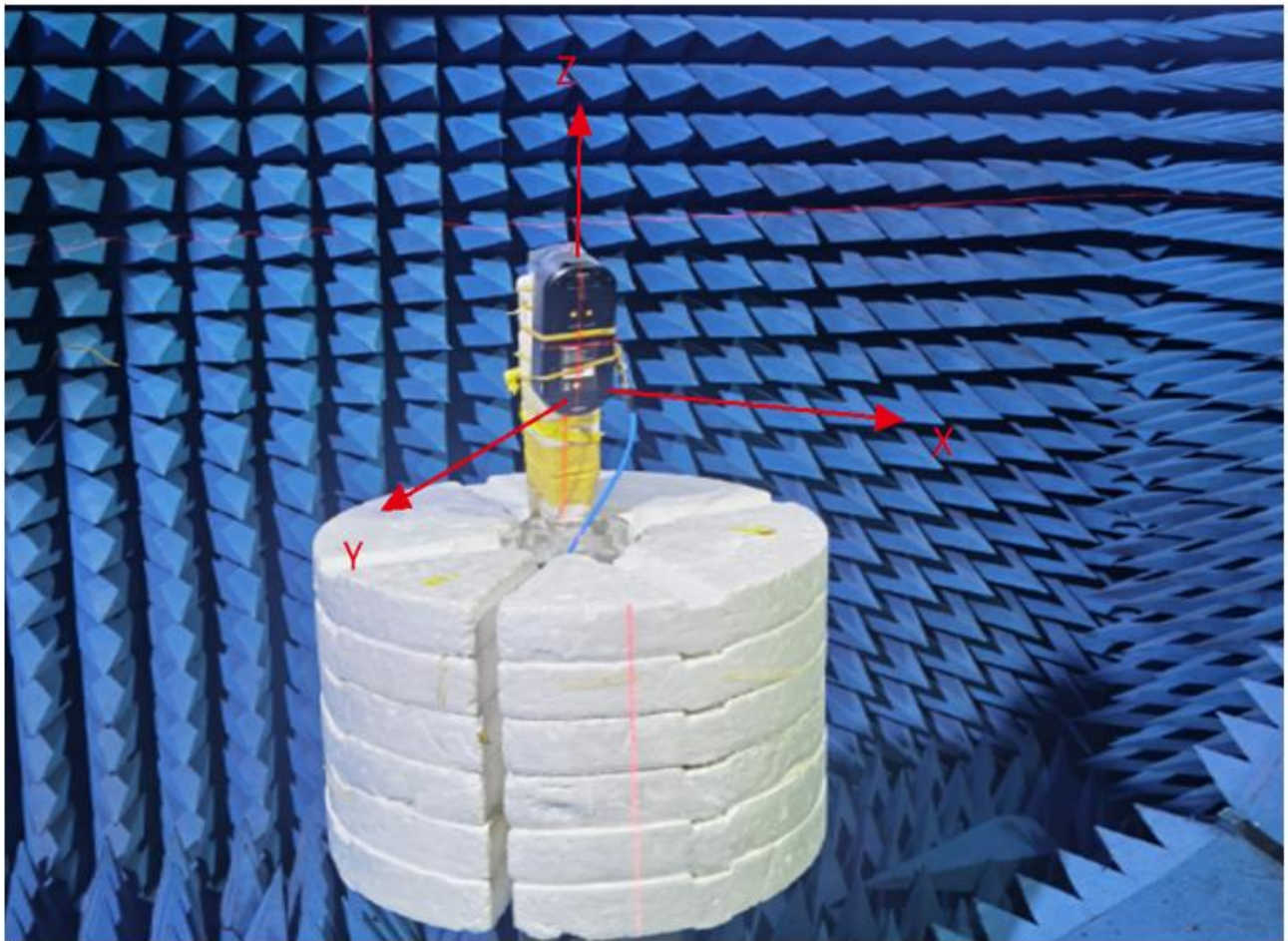
Phi=90°



Phi=180°



2.2.6 Test picture



2.3.0 Environmental treatment



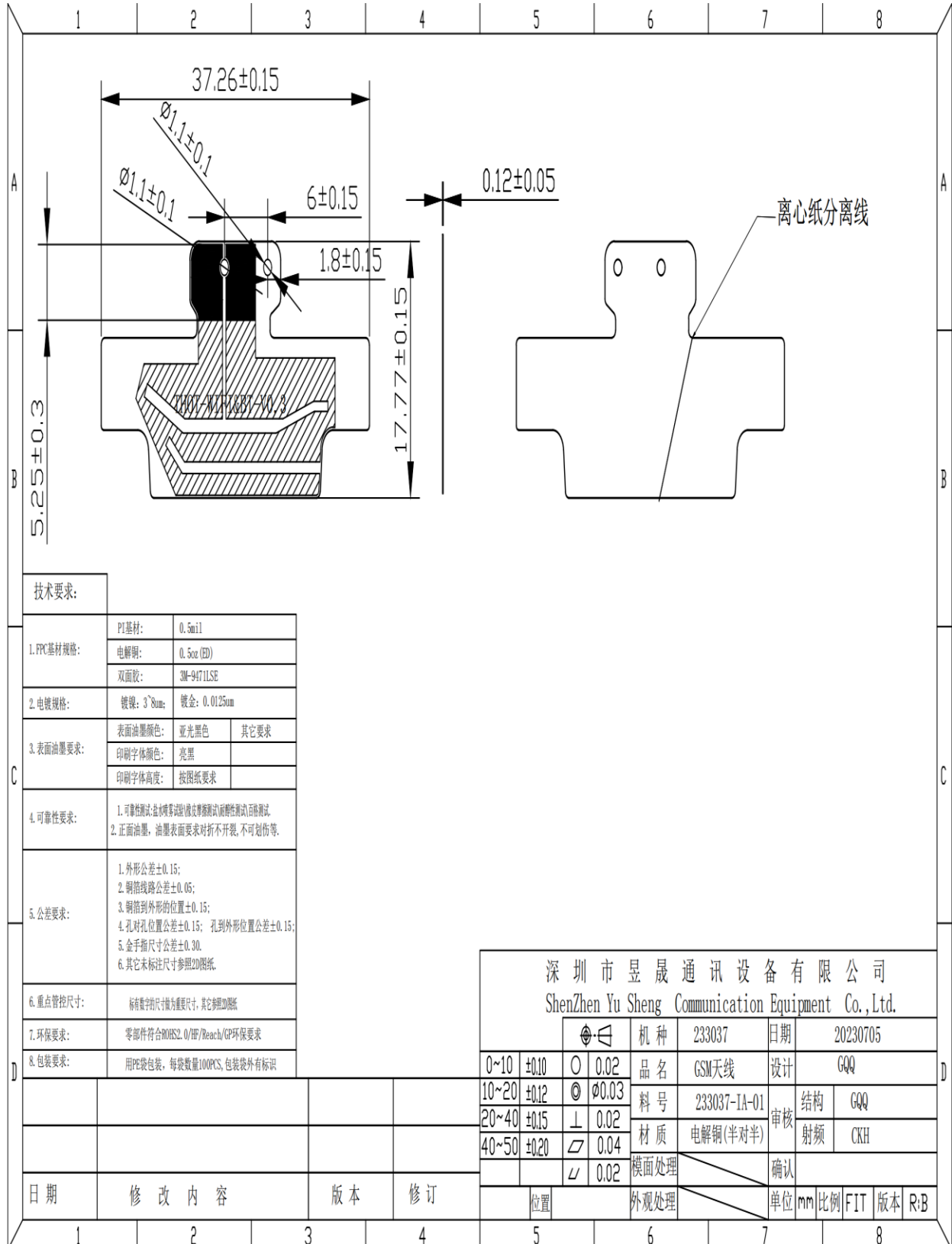
1、增加屏蔽罩可以让WIFI信号对PIR干扰降低



Shenzhen Yu Sheng communication equipment Co., LTD
4F 4A, Building 2, South Taiyun Chuanggu Park, Guangming Avenue, Guangming New
District, Shenzhen

3. Structural Drawings

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4.BOM

深圳市昱晟通讯设备有限公司

YUSHENG COMMUNICATION TECHNOLOGY CO.,LTD.

233037(R811)-BOM表

文件编号

版次: R:A

客户:233

机种: 233037(R811)

制订日期: 2023/07/05

项次	料 号	品 名	类型	版本	规格	材 质	表面处理	颜色	单位	数量	工 艺	备注
1	233037-IA	BT/WIFI天线	Z	R : A	37.26*17.77*0.12mm	电解铜 半对半	镀金	黑色	PCS	1	普通单面板	单PCS
1.1	233037-IA-01	BT/WIFI-FPC	B	R : A	37.26*17.77*0.12mm	电解铜 半对半	镀金	黑色	PCS	1	普通单面板	单PCS

类型: W.外购 B.半成品 Z.成品 C.客供 以上零部件符合ROHS2.0 HF Reach GP环保要求

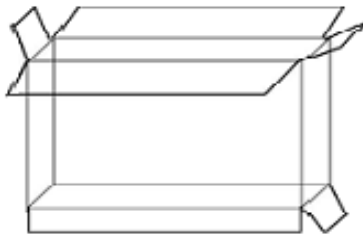
确认:

审核:

制作: 郭前钱



5. Packing drawing

Packing mode diagram														
Product Name	FPC antenna													
Item No.	233037													
Project Model	<u>R811 Doorbell</u>													
Packing Details	Carton Size 1: 270*260*200MM Carton Size 2: 260*200*200MM Carton Size 3: Depending on order quantity/volume													
	Packing method	Packing by order quantity												
	Total Packing	Packing by order quantity												
Labeling Requirements	Label size 1: Universal 100*100mm Label size 2: According to customer requirements	深圳市昱晟通讯设备有限公司 <table border="1"> <tr> <td>客户名称</td> <td>*****</td> </tr> <tr> <td>订单编号</td> <td>*****</td> </tr> <tr> <td>项目名称</td> <td>*****</td> </tr> <tr> <td>物料编码</td> <td>*****</td> </tr> <tr> <td>数 量</td> <td>****pcs</td> </tr> <tr> <td>出货日期</td> <td>****年**月**日</td> </tr> </table> 地址：深圳市光明新区光明大道南太云创谷园区2栋4楼4A	客户名称	*****	订单编号	*****	项目名称	*****	物料编码	*****	数 量	****pcs	出货日期	****年**月**日
	客户名称	*****												
订单编号	*****													
项目名称	*****													
物料编码	*****													
数 量	****pcs													
出货日期	****年**月**日													
Precautions 1. Due to the order quantity limit, the packing method of each item selects the box size according to the total order quantity or physical volume. 2. Storage temperature: normal temperature														



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4F 4A, Building 2, South Taiyun Chuanggu Park, Guangming Avenue, Guangming New District, Shenzhen

3. Preservation conditions: stored in a cool and dry place

(This figure is only a schematic diagram of packaging, which is subject to actual mass production.)

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