

SPECIFICATION FOR APPROVAL

Specification Model/Description: GWB FPC Antenna 0.81 Black Line L=145MM No IPEX

Material Code: F.P.W.0000033

Manufacturer Part Number: XESANT11B131073

Supplier: ShenZhen XinErSheng Technology Co.,Ltd

Part Type ☒ Standard (STANDARD) ☐ Special (Designated or SPECIAL)

Material Part Acceptance Item 'Implementation Standard (Reference Acceptance Checklist)			
Acknowledgment Items		Technical Confirmation Column / Time	
Whether the appearance meets the overall machine requirements	☐	ID Engineer:	
Confirm whether the electrical performance, pin definition, and power consumption meet the overall system requirements.	☐	Hardware Engineer:	
Confirm whether the materials meet the complete machine EMC/SAFETY/RF requirements	☐	EMC Engineer:	
Refer to the 'Material Approval Checklist' for confirmation of the organizational part.	☐	Structural Engineer:	
Confirm whether the driver and other components meet the overall machine requirements	☐	Drive Engineer:	
Thermal: Confirm whether it meets the requirements of the entire machine	☐	Thermal Engineer:	
Confirm whether it meets the whole machine BIOS/EC requirements	☐	SW Engineer:	
Confirm whether the whole machine meets system compatibility/reliability testing.	☐	DQA Systems Engineer:	
Environmental Review Record (Applicable to ROHS Directive)	☐	Environmental Engineer:	
Confirm the supplier's appearance inspection standards/key processes	☐	SQE Engineer:	
Confirm whether it meets the customer's requirements	☐	Project Manager:	
FAI full-size report, CPK report, packaging method (package), single unit reliability report, etc.	☐	CE Engineer:	
Sample attached ☒ R&D ☐ Quality ☐ Purchasing ☒ Supplier ☐ Customer ☒ Assembly plant			
Precautions for IQC Inspection:			
Version	Description of changes	Change Date	Reviser
A	First edition release		
Formulate		Review	



ShenZhen XinErSheng Technology Co.,Ltd

SPECIFICATION FOR APPROVAL

Customer name: M8786-863J-101MD

Product name: GWB FPC Antenna 0.81 Black Line L=145MM No IPEX

Customer Part Number: F.P.W.0000033

Manufacturers of Material: XESANT11B131073

Deliver quantity: 5PCS

Mark	Check	Examine and approve	Datelanded
Biao	Lisen	Amy	2025.06.14

That Customers:

Acknowledge	Check	Examine and approve	Datelanded

Admit that situation: ☒new product ☐ product shanges

Admit that project: ☐acknowledgement ☐soecimen 5PCS

Admit that conclusion: ☐reception ☐refuse

Company address: Floor 3, Building D, No.96 Lingxia Road, Fuyong Fenghuang
Fourth Industrial Zone, Baoan District, Shenzhen

Phone number: 0755-33881455

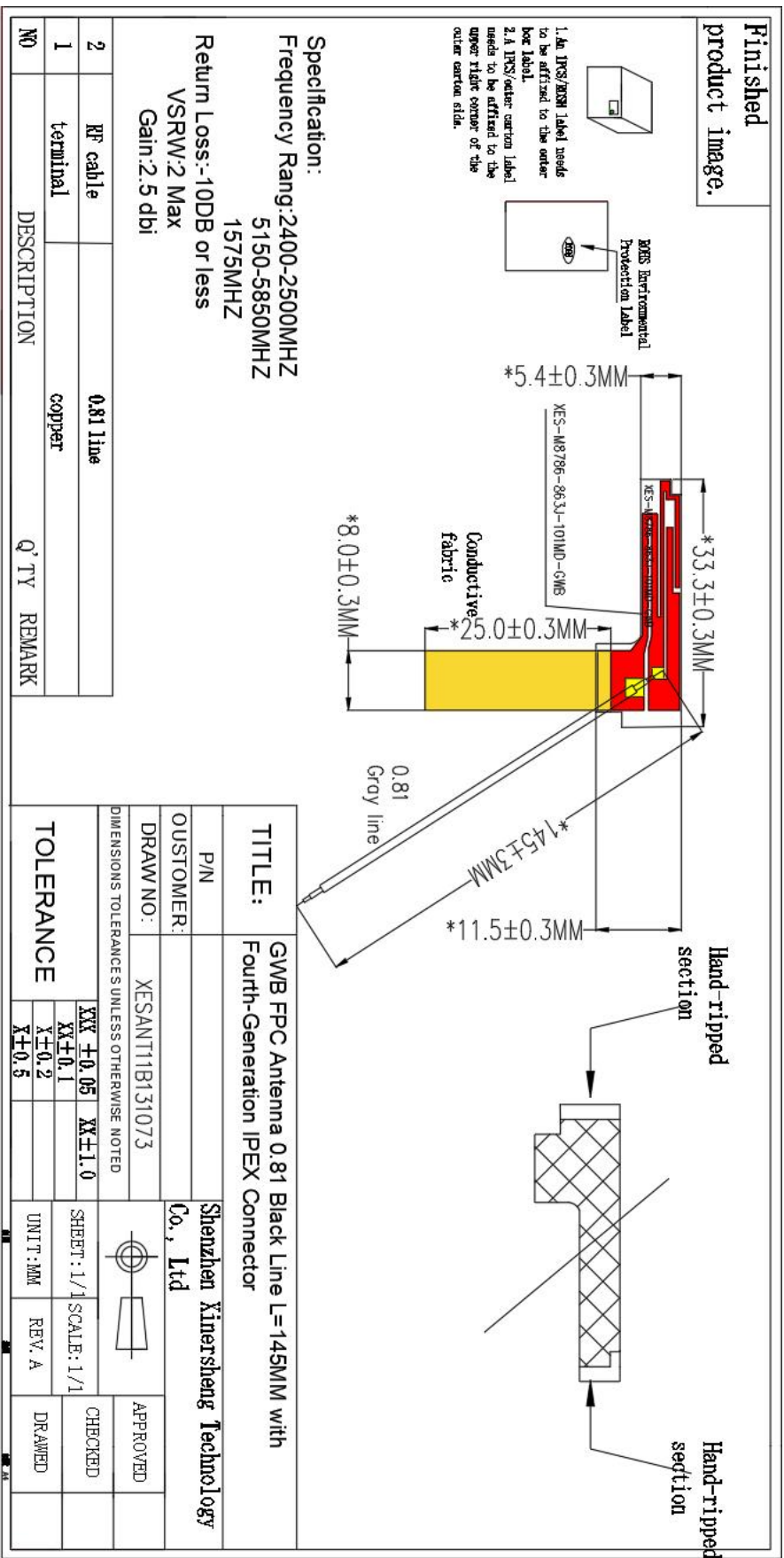
Fax NO.: 0755-33233276

Email: liqinghui@xinershengant.com

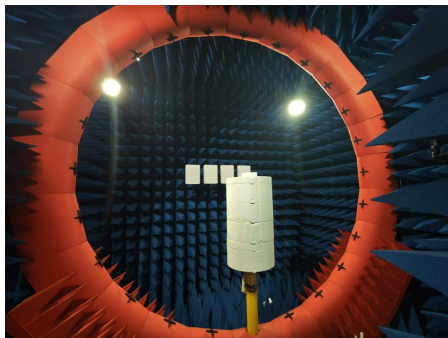
Main technical parameters of the product

Main technical specifications	
Frequency Range(MHZ)	2400-2500/5150-5850 /1575.42
Impedance(Ω)	50 ± 10
Peak Gain(dBi)	2 ± 1
ReTurnLoss(dB)	≤ -10
VSWR	≤ 2
Polarization	Linear Vertical
Connector Type	Ipex
Physical Properties	
Antenna Base	FPC
Operating Temp	$-20^{\circ}\text{C} - +60^{\circ}\text{C}$
Storage Temp	$-20^{\circ}\text{C} - +70^{\circ}\text{C}$

Product drawing



Test equipment



OTA testing system

Brand: Feitu

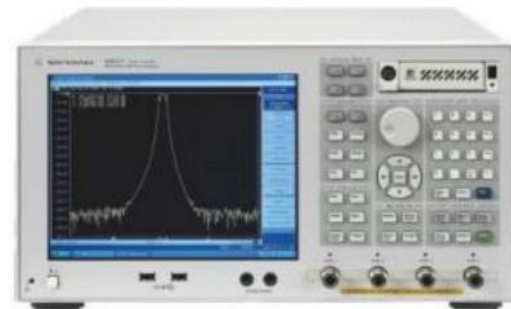
Frequency range: 400MHz-8.5GHz

Dimensions of the dark chamber: 4m x 4m x 4m

Number of probes: 24 (23 dual-polarized probes and 1 communication probe)

Functions: Passive and active testing; G network, C network, 2G/3G/4G.

WIFI, BT, and other standard TRP, TIS testing, and so on.



Model: 5071C

Brand: Agilent

Frequency range: 9KHz-8.5GHz

Function: Comprehensive passive testing of antennas, including 2G/3G/4G/BT/WIFI.



Model: 8960

Brand: Agilent

Frequency range: 292MHz-2700GHz

Function: Suitable for active testing of 2G/3G devices.



Model: CMW500

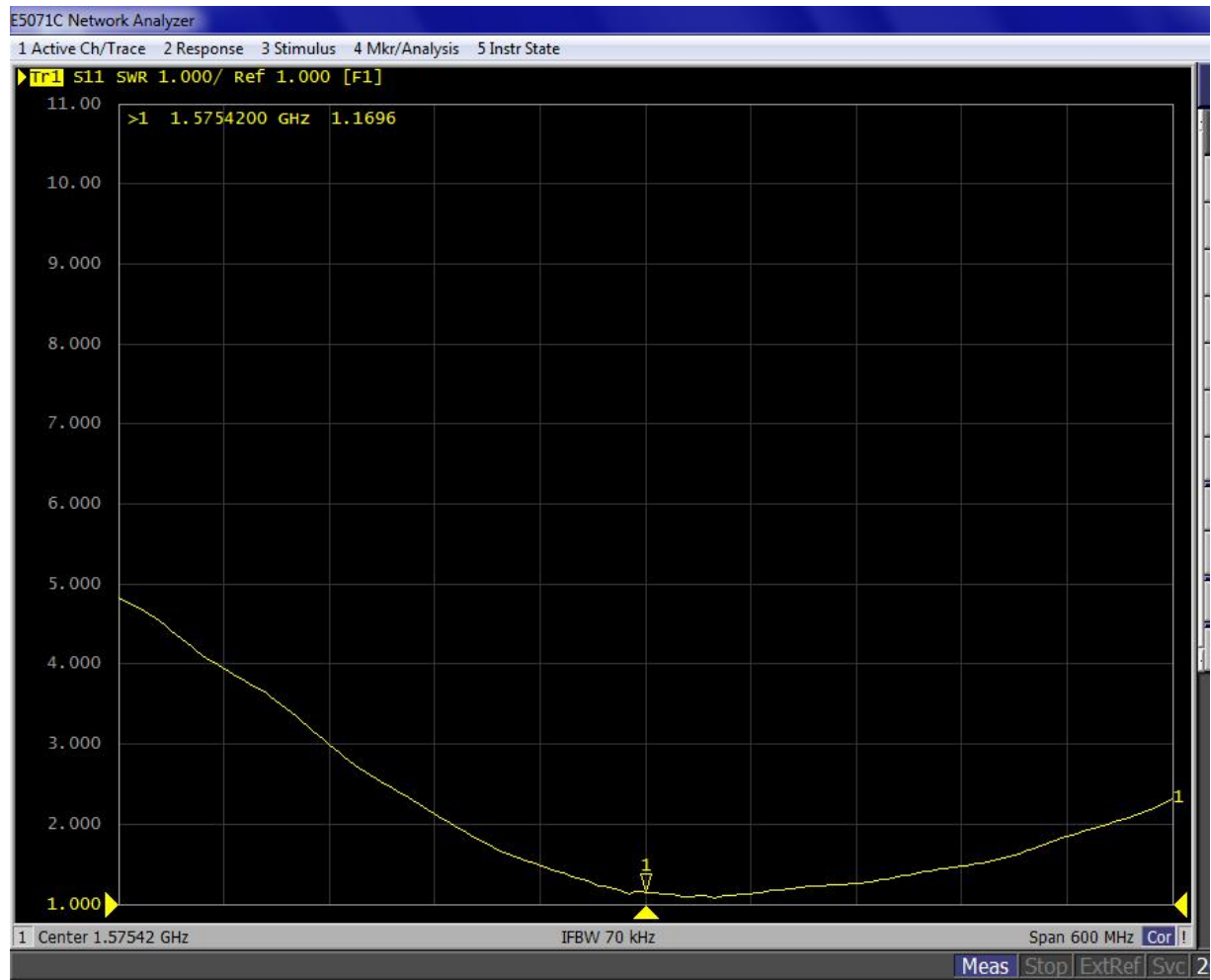
Brand: Rohde & Schwarz

Frequency range: 70KHz-6GHz

Function: Comprehensive active testing of antennas, including 2G/3G/4G/BT/WIFI/NB-Lot.

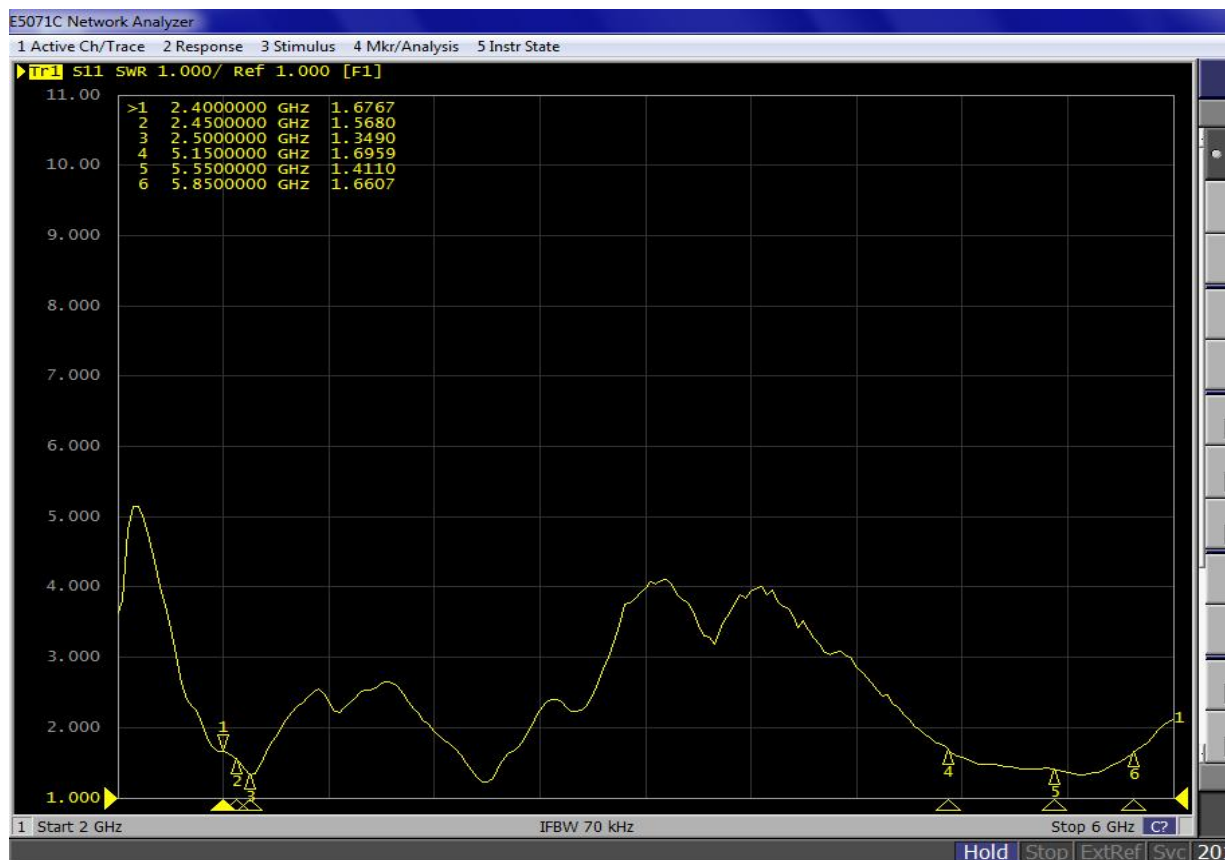
GPS Network analyzer test report

SWR

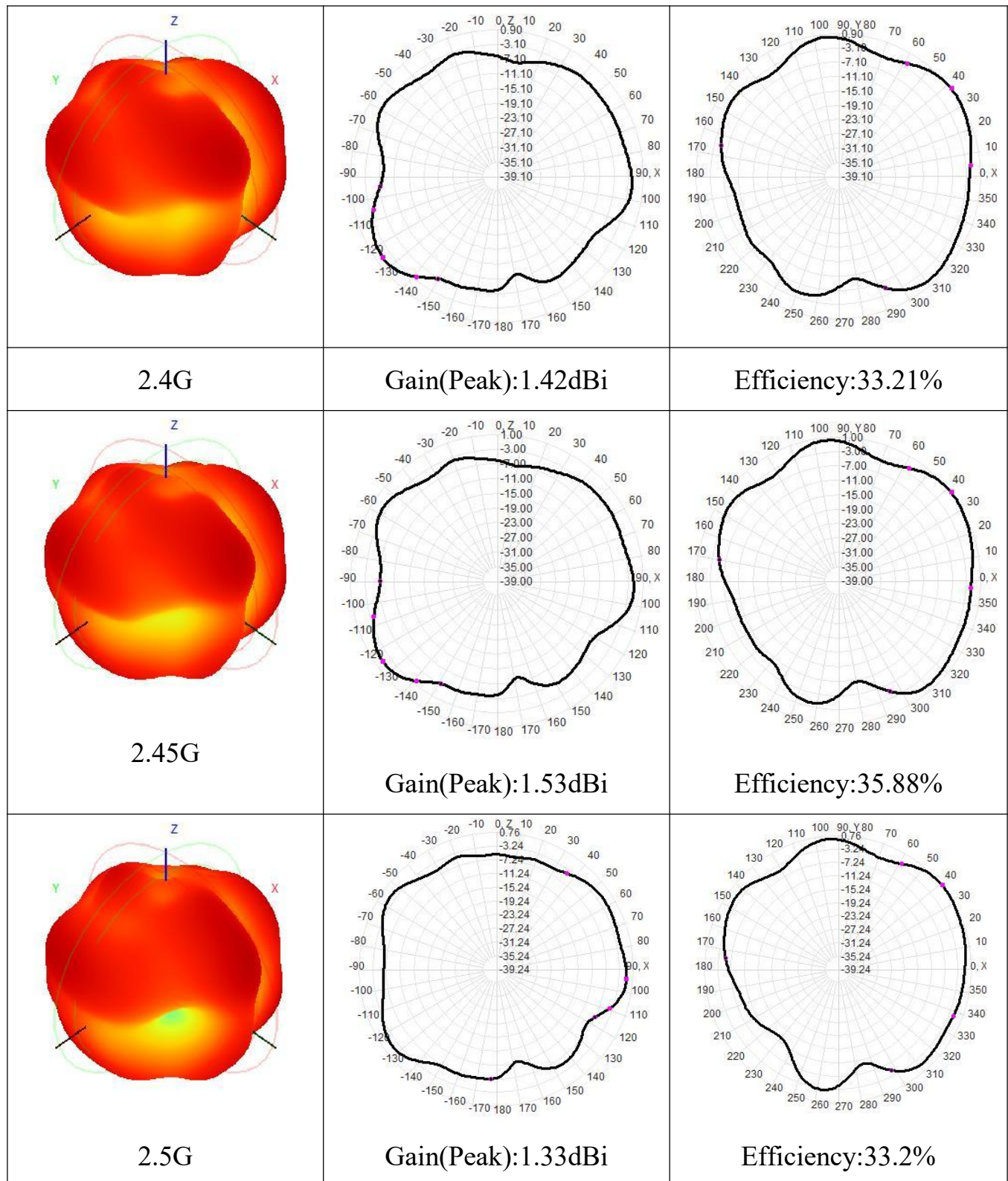


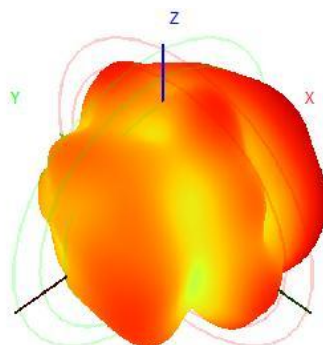
WIFI/Bluetooth Network analyzer test report

SWR

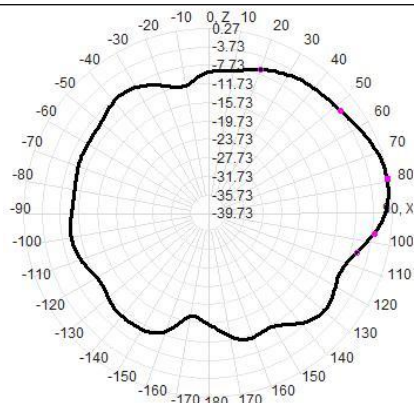


2D、3DRaditation Pattern

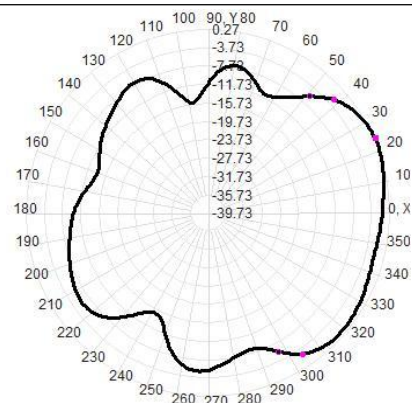




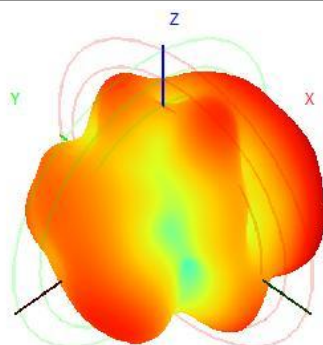
5.15G



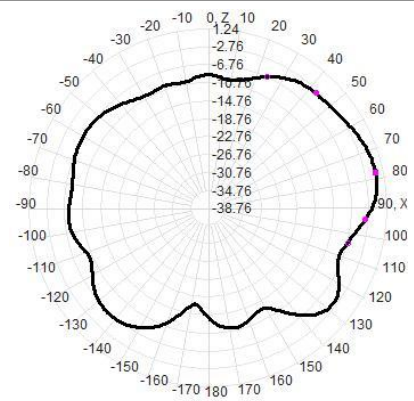
Gain(Peak):1.21dBi



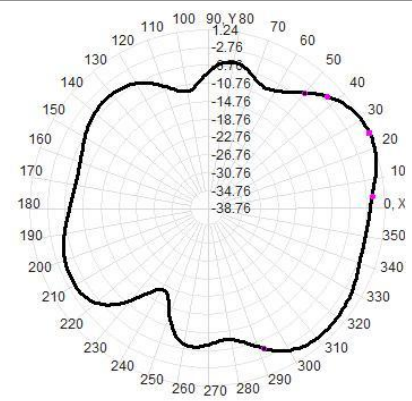
Efficiency:37.3%



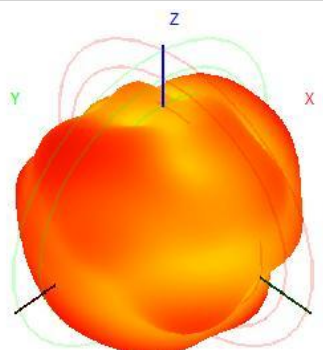
5.5G



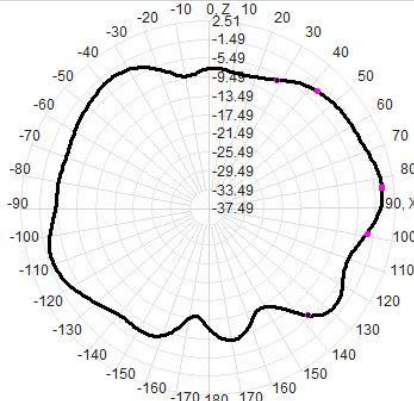
Gain(Peak):1.76dBi



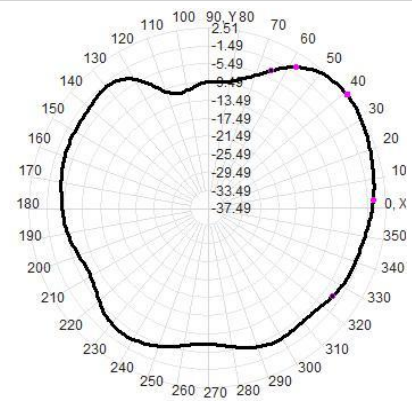
Efficiency:43.25%



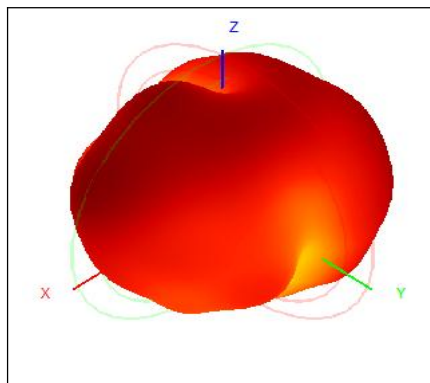
5.85G



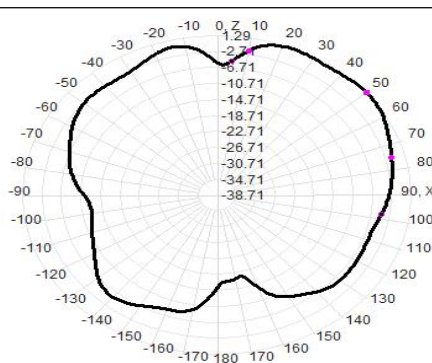
Gain(Peak):2.05dBi



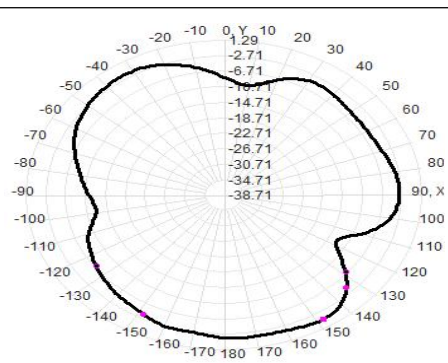
Efficiency:47.12%



1575.42M

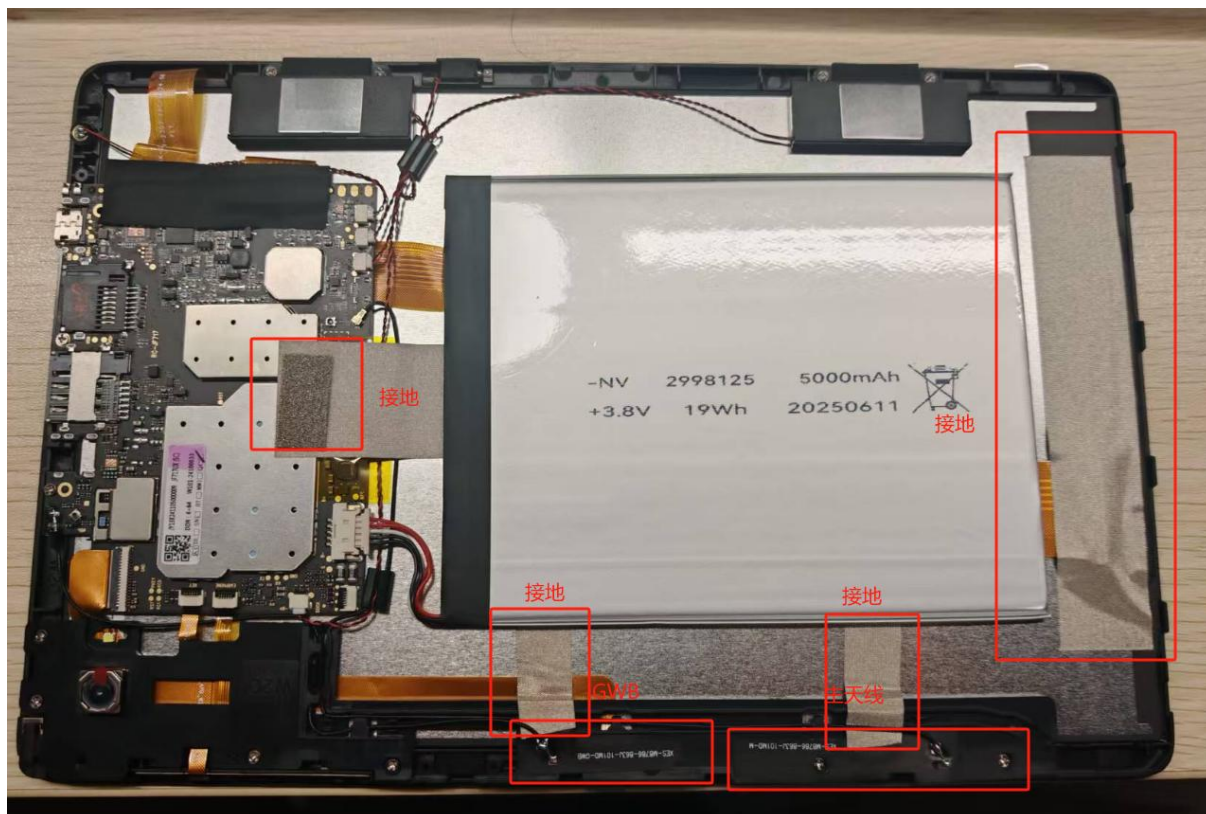


Gain(Peak):1.92dBi



Efficiency:38.7%

Assembly picture



OTA testing data

4G	B3	19250	16.32	B3		
		19575	17.47			
		19900	18.24		1900	-93.81
	B4	20000	15.14	B4		
		20175	15.73			
		20350	7.11		2350	-92.1
	B7	20800	19.62	B7		
		21100	19.18			
		21400	19.83		3400	-93.6

WIFI	Band		TRP	Band		TIS
	B-11	1	10.31	B-11	1	-77.57
		6	10.65		6	-77.52
		11	9.89		11	-77.32
	A-54	36	10.59	A-54	36	-73.54
		149	9.68		149	-71.52
		165	9.87		165	-72.64

Reliability testing report

1	SAIT SPRAY TEST	Saltwater spray test: in accordance with the standard GB1266-86. Distilled water: Single distillation PH6.5~7 Spray volume: 1.4me80cm ² /h Compressed air pressure: 1Kgf/cm ² Relative test angle: 98° Temperature: 45° to 47° Pressure-temperature: 35° Test duration: 48 hours
2	HEAT TEST	for 96 hours, after keep in normal condition for 30mim the to test.
3	HUMIDITY TEST	40+2℃ 90-95%RH for 96hours, after keep in normal condition for 30mim the to test.
4	COLD TEST	-20+2℃ for 96hours, after keep in normal condition for 30mim the to test.

All characteristic range is 30% of the initial value

There are no signs indicating any damage to the electrical performance of the device.

Product packaging specifications

Product name/Specifications

1、 Labeling Requirements

采购单号	*****
物料编码	*****
品名规格	*****
数量/单位	*****
备注	*****

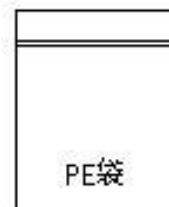
采购单号	*****
物料编码	*****
品名规格	*****
数量/单位	*****
备注	*****

2、 Packing requirements

Homework instructions:

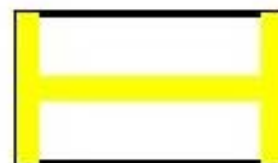
Inner packaging:

Product: 100 pieces per small bag

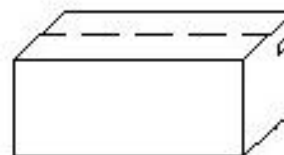


Exterior packaging:

Quantity determined based on actual quantity/box



纸箱



Precautions:

1. Is it necessary to add dividers or polyethylene foam;
2. Adhesion of labels, such as ROHS;