



Shenzhen XINHENG YANG Technology Co., Ltd

SPECIFICATION

Customer Name: _____

Product Model: _____ NMM-PFW01 _____

Customer P/N : _____

XINHENG YANG P/N: _____ ZJ. 03. D. 0238-NMM-PFW01 _____

SPECIFICATIONS: _____ 2400MHZ-2500MHZ _____

Production date: _____ 2023. 02. 27 _____

Sample Version: _____ V1. 0 _____

XINHENG YANG		
FICTION	DQE	R&D
Customer		
PUR	QC	R&D



Index

Cover	1
Index	2
Change history	3
The basic parameters	4
TestEquipment & Conditions	5
Test Report	6—8
RoHS/Bill of materials	9

R & D, production and sales of professional wireless terminal antenna



一、The basic parameters

A. Electrical Characteristics	
Frequency	2400MHZ~2500MHZ
VSWR	< 2.5
Avg Efficiency	>51%
Impedance	50 \pm 25 Ohm
Polarization	Linear
Peak Gain	2.4G:-2.68dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPC black
Cable Type	/
Connector Type	/
Dimension	/
C. Environmental	
Operation Temperature	- 20 °C ~ + 60 °C
Storage Temperature	- 30 °C ~ + 70 °C

二、Electrical Specification

Those specifications were specially defined for HESHIJIA-NMM-PFW01 model.

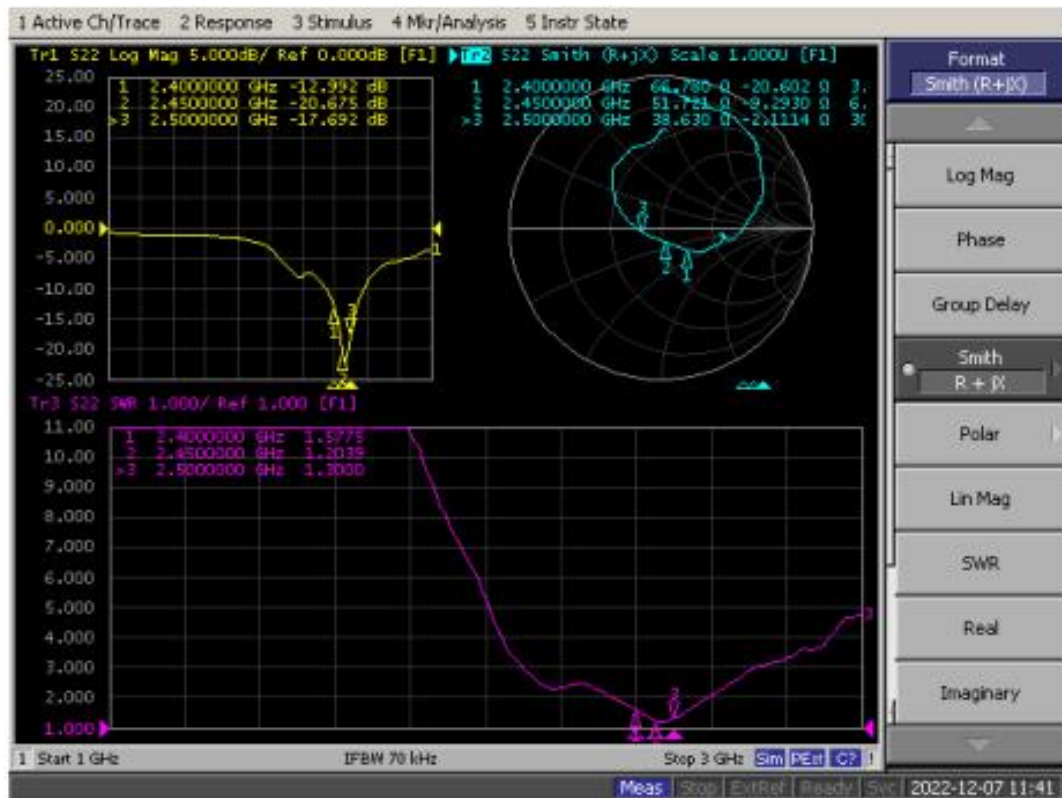
三、VSWR

1 Measuring Method

1.A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR

2.Keeping this jig away from metal at least 20cm

2 Measurement frequency points and VSWR value



四、Anechoic chamber

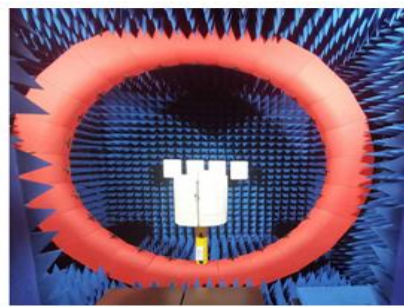
Introduction:

Microwave darkroom and no reflection chamber, absorbing short wave darkroom dark room. Microwave darkroom by electromagnetic shielding room, filtering and isolation, grounding device, the ventilation duct, indoor distribution system, monitoring system, ceiling wave material part. It is based on the wave absorbing material as the lining of the shield room, it can absorb the most of the electromagnetic energy into the six wall is a better simulation of the free space conditions.

The main working principle of microwave anechoic chamber is according to the electromagnetic wave in the medium from the low magnetic guide magnetic direction of propagation rules, absorbing materials to guide the electromagnetic wave using high permeability, through resonance, a substantial absorption of electromagnetic wave radiation energy, by coupling the electromagnetic energy into heat energy.

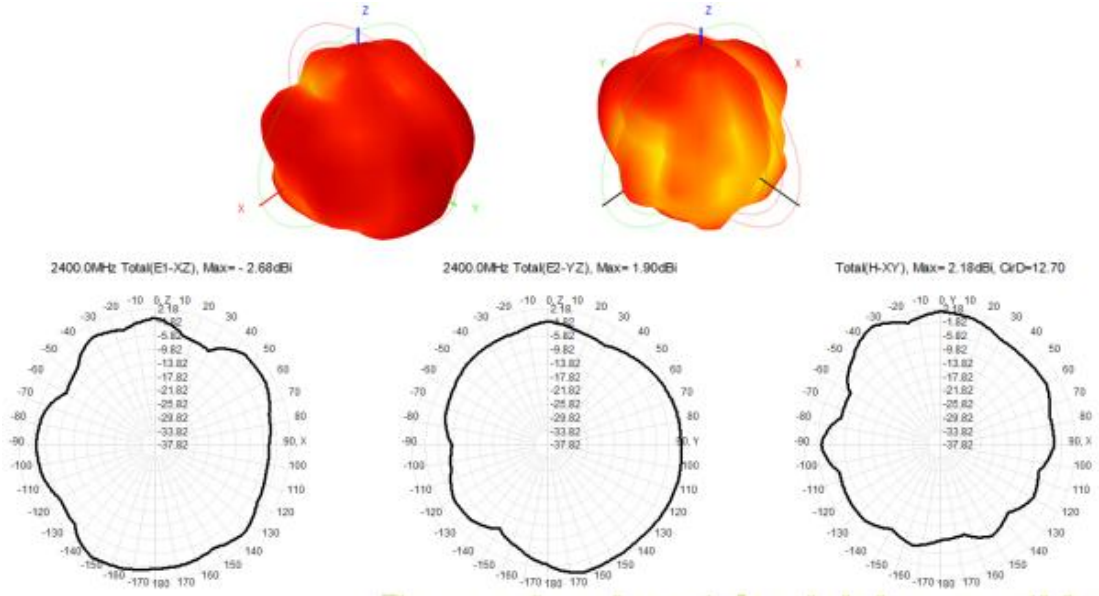
main performance :

Frequency range:400MHz ~ 6GHz ceiling reflected wave loss materials: 400MHz ~ 6GHz is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)



五、Gain table of Antenna

5.1 Gain table of Antenna:



5.2 Passive efficiency gain

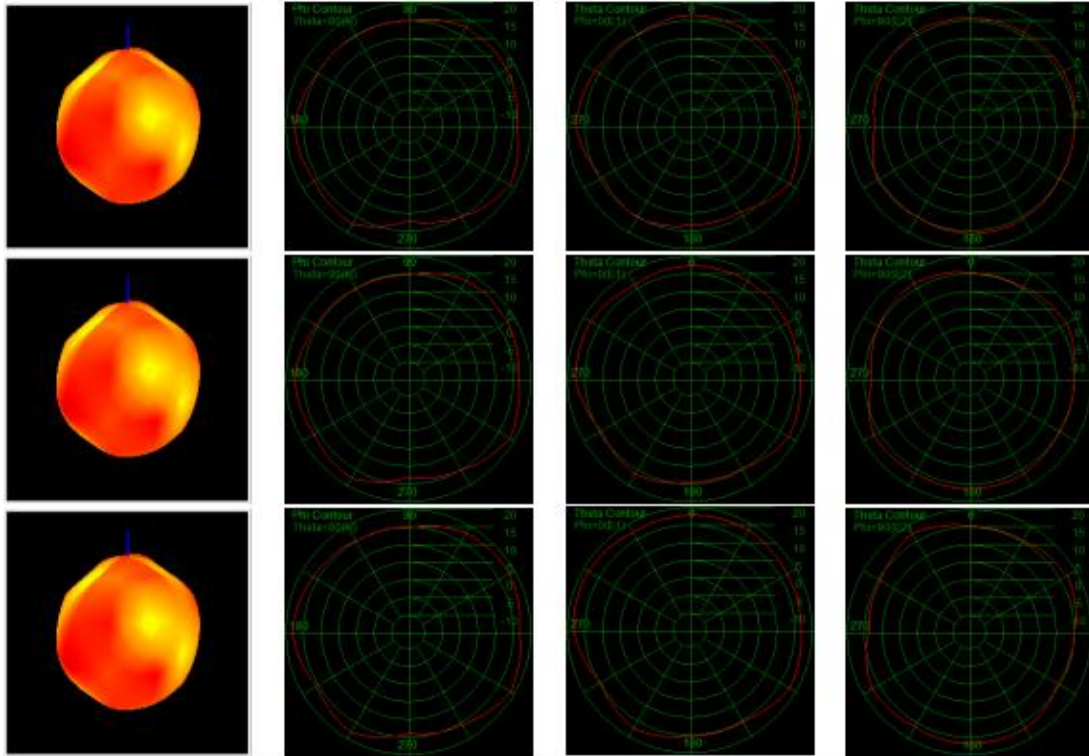
2400-2500MHz		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	53.18	2.68
2410	53.64	2.56
2420	53.93	2.45
2430	54.96	2.33
2440	53.81	2.25
2450	53.88	2.32
2460	52.10	2.36
2470	52.62	2.20
2480	52.71	2.09
2490	52.60	1.92
2500	52.25	1.83

5.3 OTA active

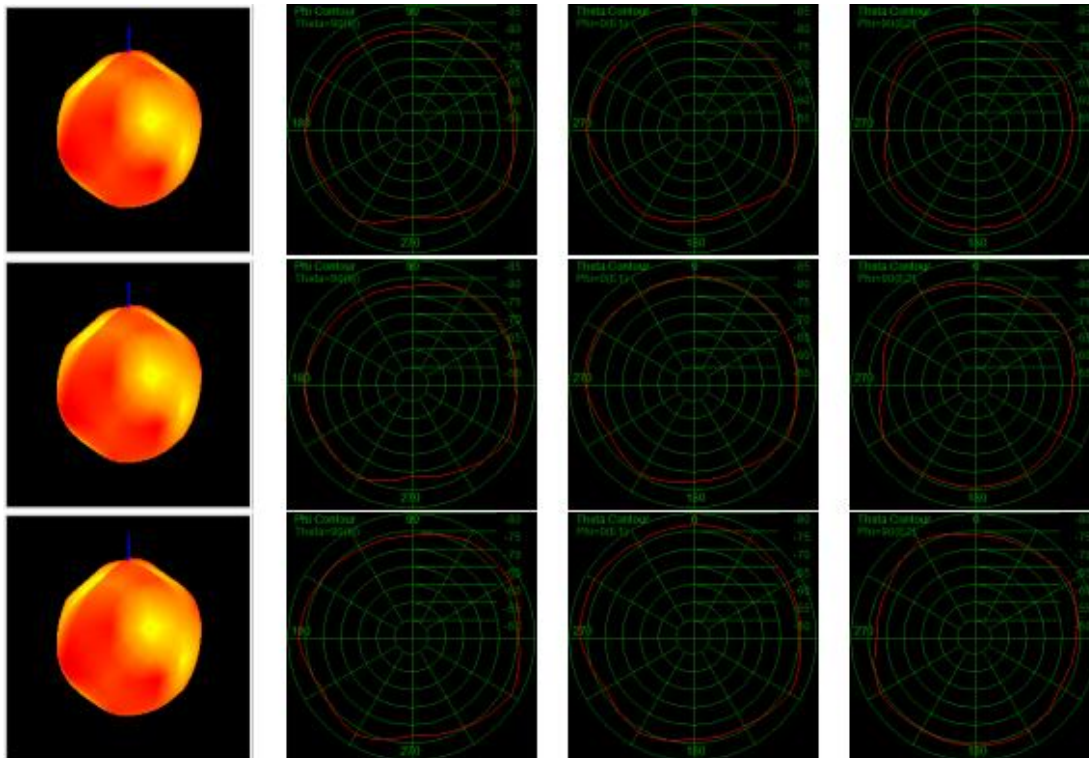
WiFi-B+G+N								
BAND								
	WIFI-11B			WIFI-54G		WIFI-N-MCS7		
	TRP	TIS		TRP	TIS			
1	15.81	-79.40	1	13.21	-72.17	1	13.22	-67.40
6	15.54	-79.38	6	13.41	-70.63	6	13.44	-66.43
11	15.74	-79.36	11	14.20	-73.53	11	14.20	-68.00

Active field pattern-WIFI-B

TRP

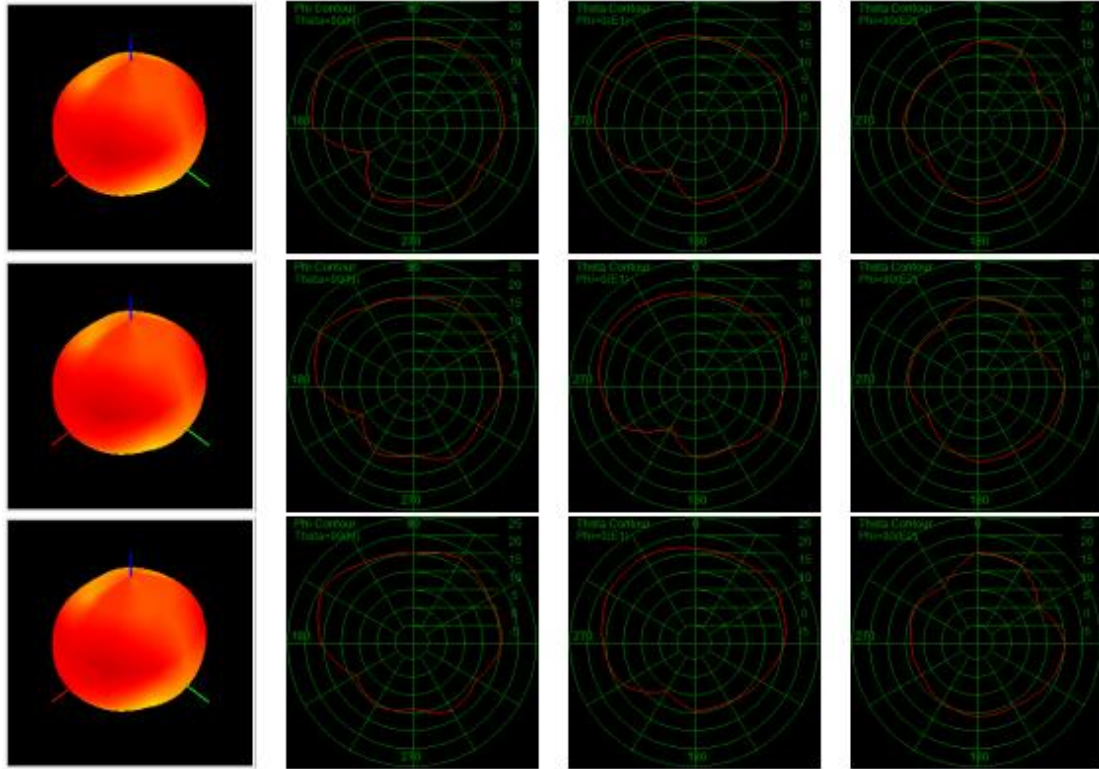


TIS

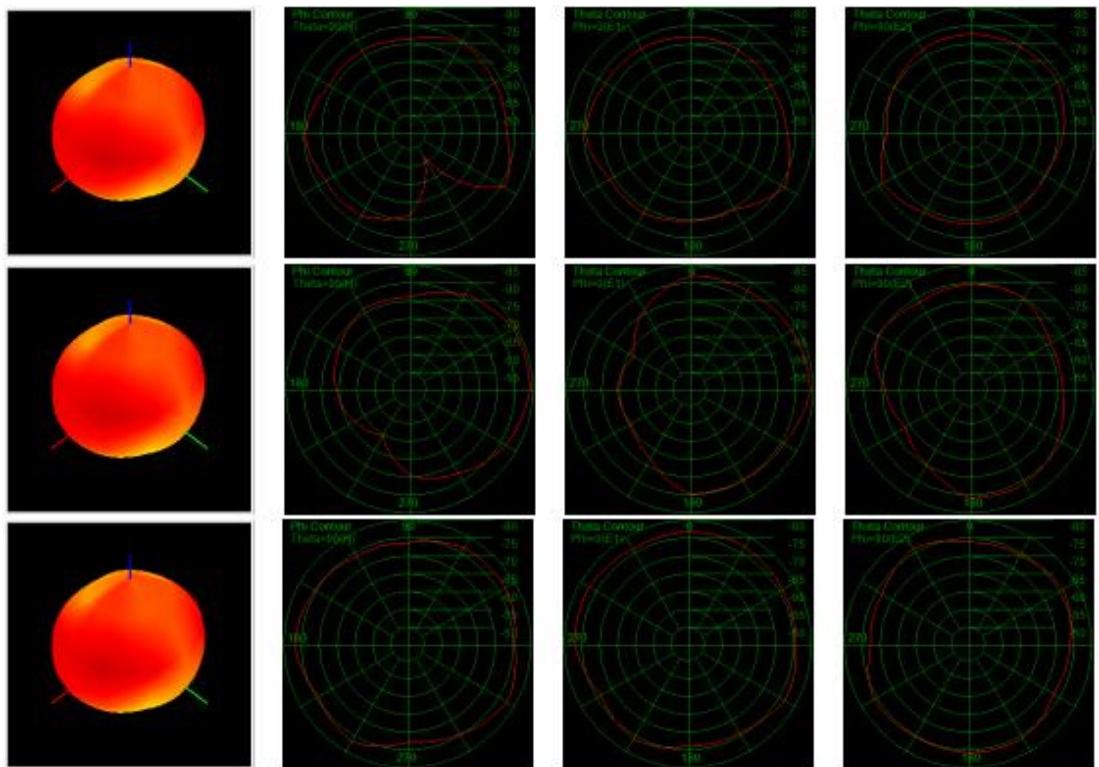


Active field pattern-WIFI-G

TRP

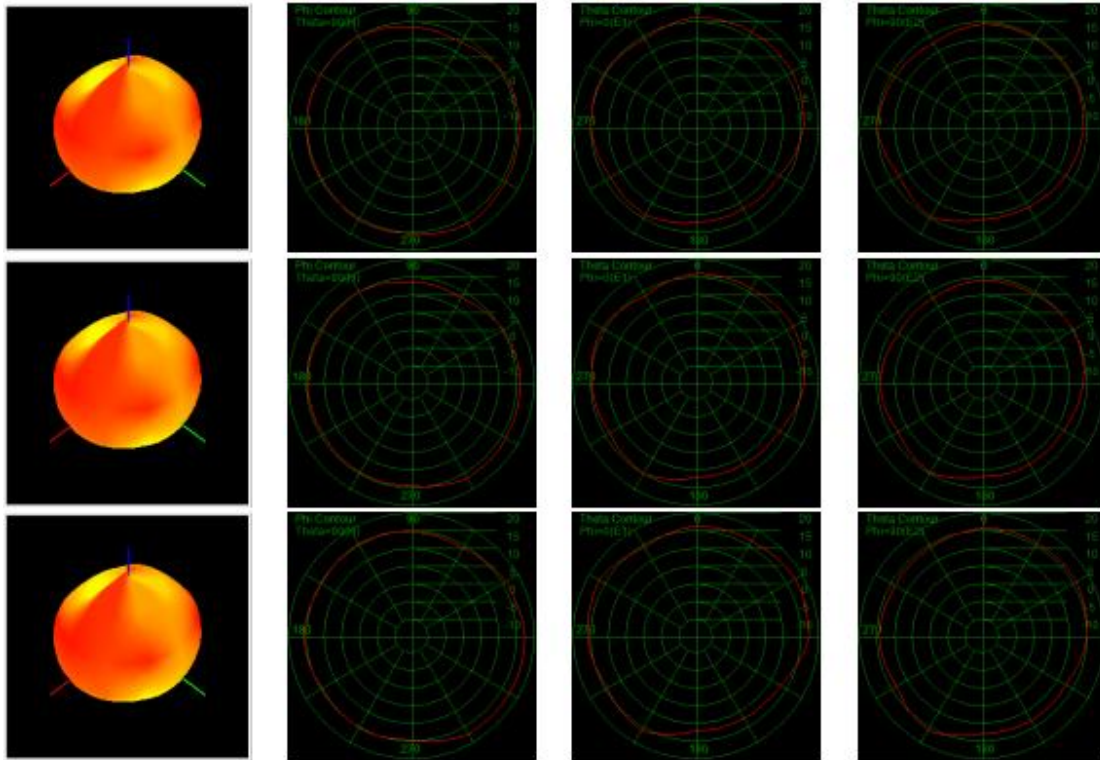


TIS

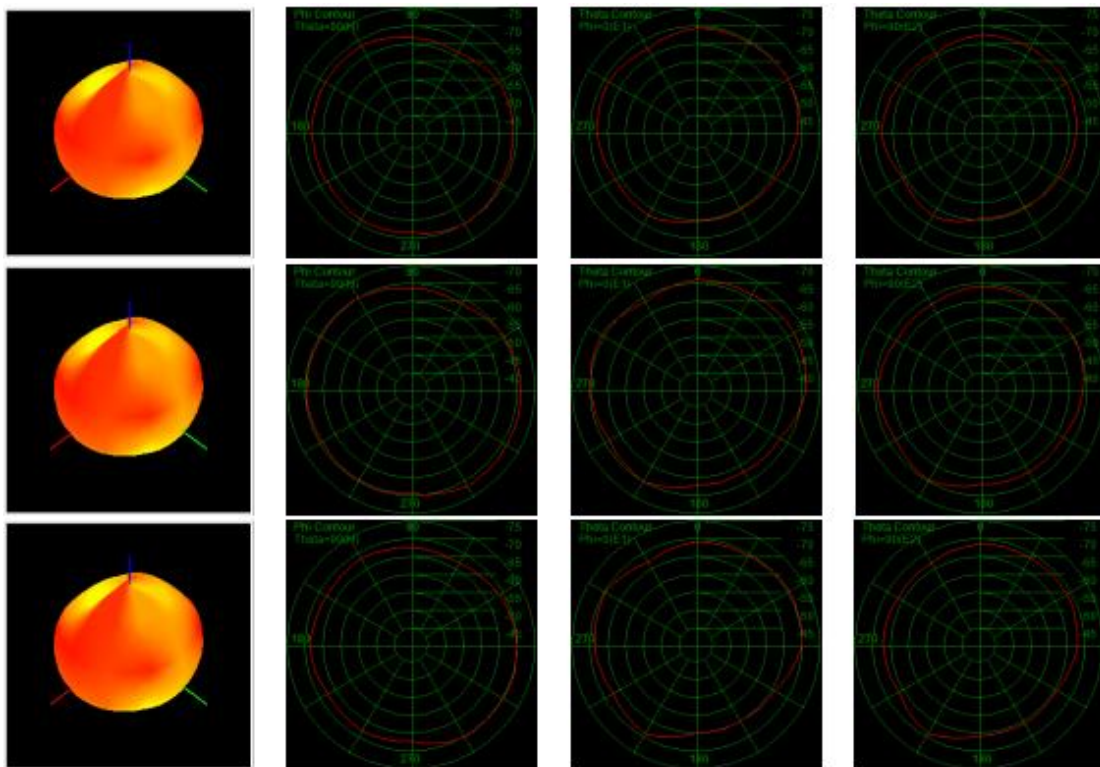


Active field pattern-WIFI-N

TRP



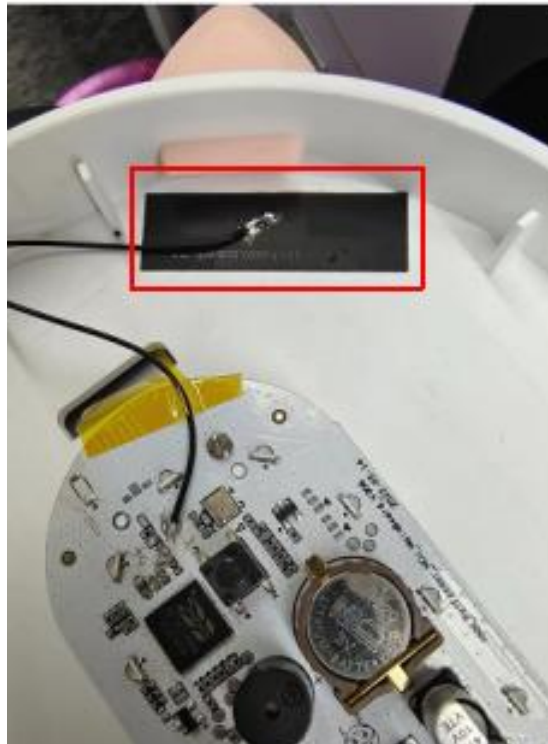
TIS



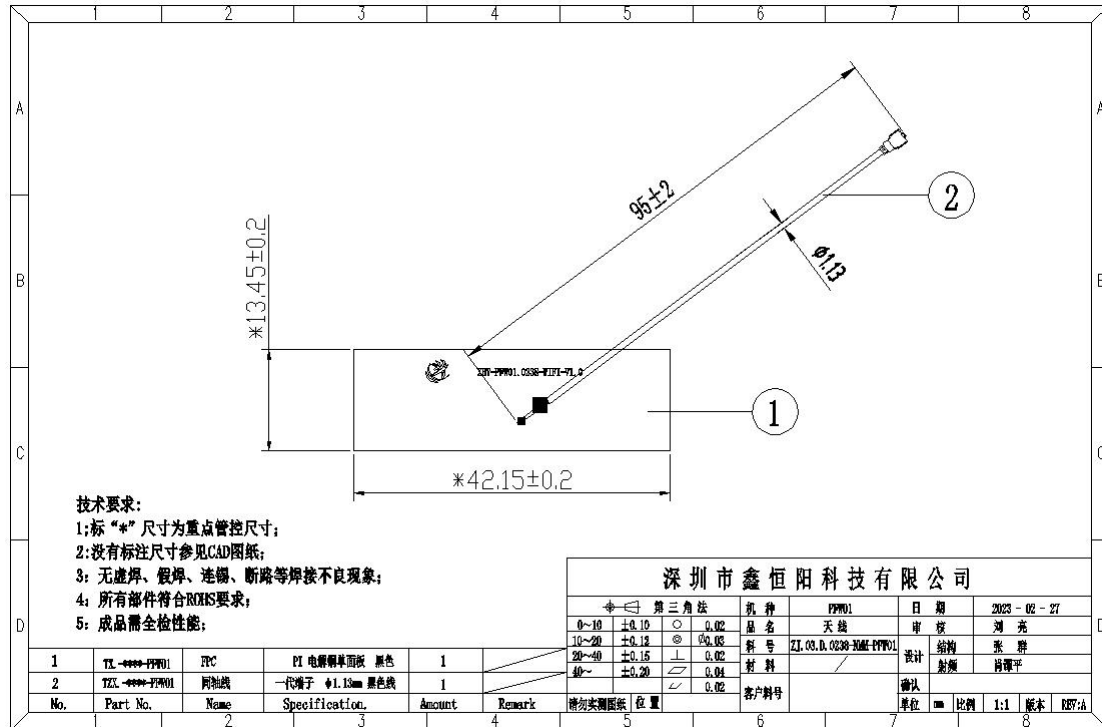
六、Machine Picture



七 , Antenna position



八、Antenna Dimensions



九、ROHS

Antenna ZJ.03.D.0238-NMM-PFW01 meets RoHS requirements.

十、Product packaging instructions

A. packing should meet the moistureproof, vibration, pressure and mildew proof, etc.

B. the smallest packing unit logo must have the manufacturer trademarks, product model, name, code and quantity.

C. in the attached packing list, certificate of approval, and the factory inspection report.

*****END*****