SPECIFICATION FOR APPROVAL

Customer Name: wangyuan

Product Model: WYA00DG

Customer P/N :

XINHENGYANG P/N: TZX.01.0282-WYA00DG, ZJ.03.0282-WYA00DG

SPECIFFCATIONS: 2.4G+5.8G

Product ion date: 2023.04.07

Sample Vers ion: V1.0

Number	Effective date	Change record
V1.0	2023.04.07	Initial release

ONE、The basic parameters

A. Electrical Characteristics	
Frequency	**2400MHZ~2500MHZ** **5150MHZ~5850MHZ**
VSWR	**< 2.2**
Avg Efficiency	**>52%**
Impedance	**50 ± 25 Ohm**
Polarization	**Linear**
Peak Gain	**2.4G:2.75dBi** **5.8G:4.85dBi**
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**

TWO、Electrical Specification

Those specifications were specially defined for 旺源 WYA00DG model.

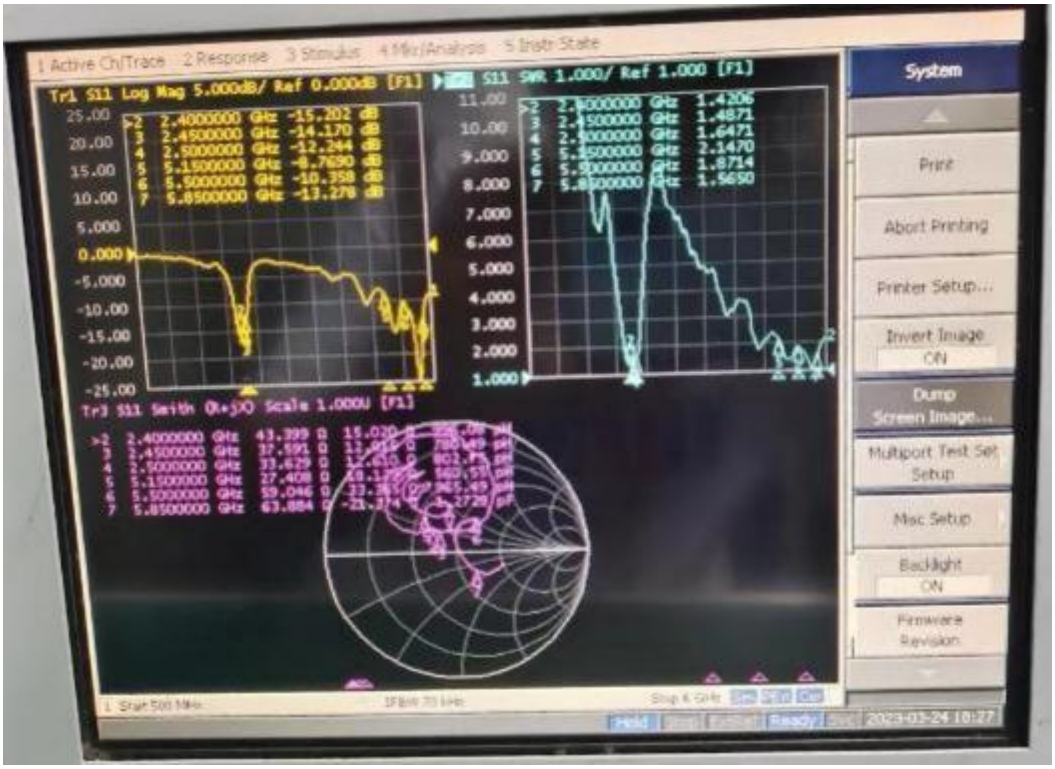
three、VSWR

1 Measuring Method

1.A 50Ω 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



four、 Anechoic chamber

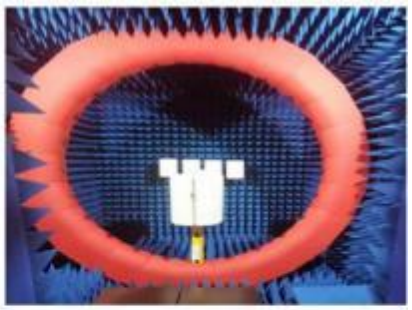
Introduction:

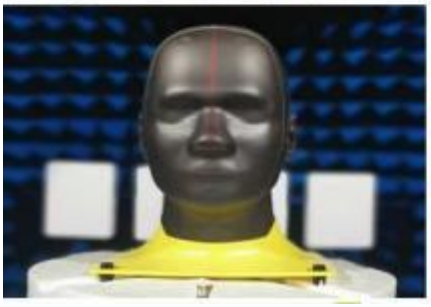
Microwave darkroom and no reflection chamber, absorbing short wave darkroom dark room. Microwave darkroom by electromagnetic shielding room, filtering and isolation, grounding device, the ventilation duct, indoor distribution system, monitoring system, ceiling wave material part. It is based on the wave 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 :

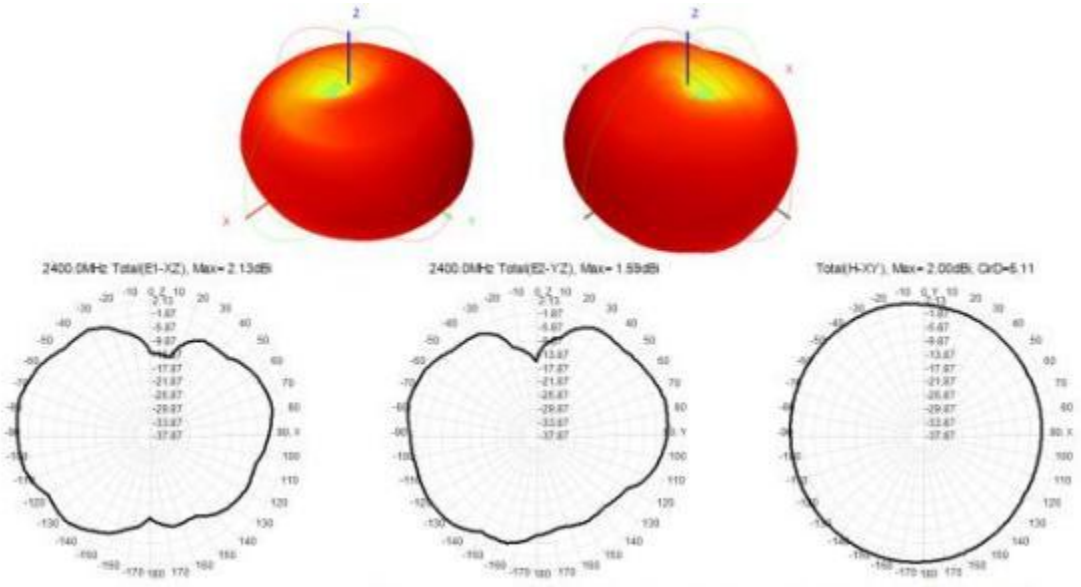
Frequency range:400MHz ~ 6GHz ceiling reflected wave loss materials: 400MHz ~ 6 GHz is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)



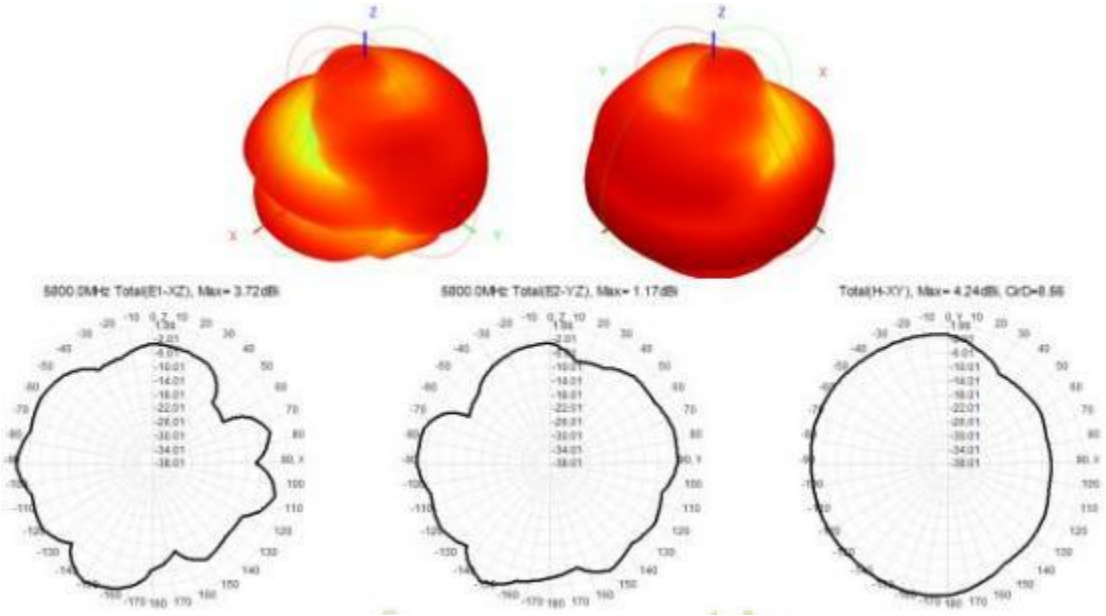


five、Gain table of Antenna

2.4G



5.8G



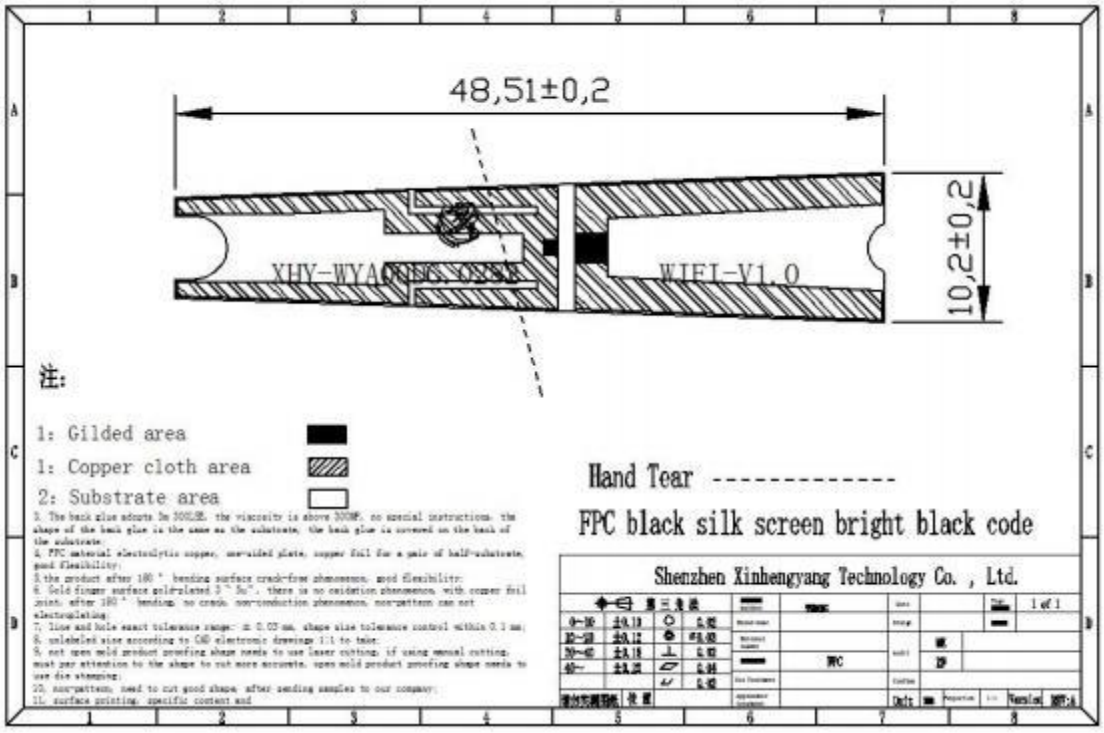
Passive efficiency gain

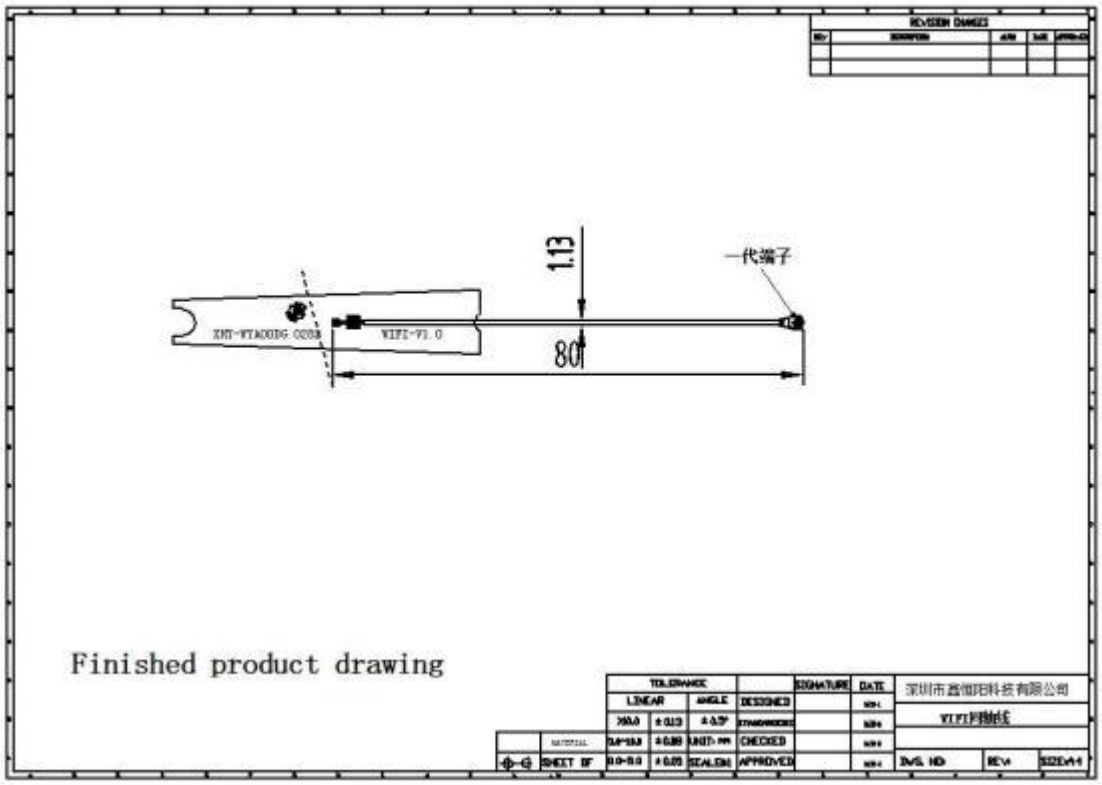
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	59.13	2.13	5200	59.02	2.72
2410	64.86	2.58	5250	79.45	3.69
2420	68.87	2.67	5300	74.51	4.85
2430	73.17	2.75	5350	64.75	3.61
2440	73.54	2.53	5400	72.43	3.83
2450	74.99	2.50	5450	75.20	4.01
2460	73.49	2.47	5500	63.34	3.41
2470	75.44	2.52	5550	72.08	4.67
2480	74.07	2.42	5600	79.48	4.43
2490	73.17	2.43	5650	77.23	3.18
2500	69.26	2.23	5700	71.28	3.31
5100	54.67	1.99	5750	77.20	4.63
5150	53.43	2.06	5800	76.70	3.72

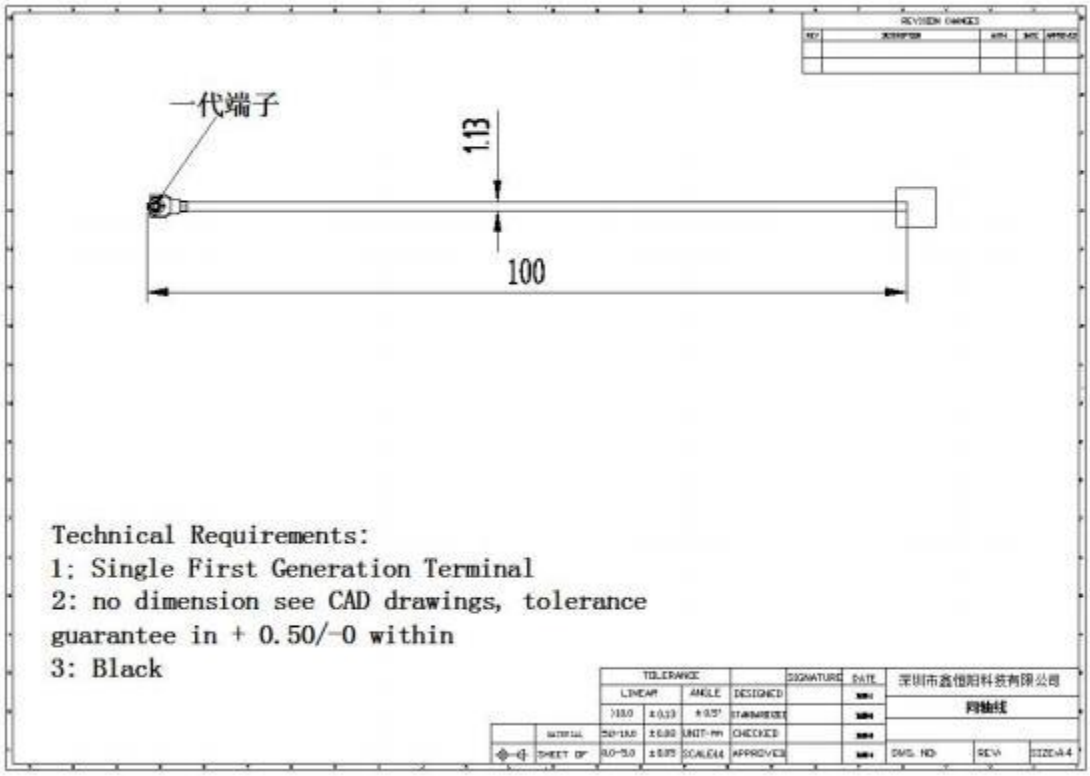
Six Machine Picture

seven、Antenna

eight、Antenna Dimensions






一代端子
1.13
100
Technical Requirements:
1: Single First Generation Terminal
2: no dimension see CAD drawings, tolerance
guarantee in + 0.50/-0 within
3: Black
深圳市鑫恒阳科技有限公司
同轴线

nine、ROHS

Antenna TZX.01.0282-WYA00DG，ZJ.03.0282-WYA00DG meets RoHS requirements.

Ten、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**********