

Antenna test report

1. Product features

Antenna Mode: **N14-1014-R0A**

Brand: **South Star**

Manufacture: **SHEN ZHEN SOUTHSTAR CO.,LTD**

Antenna type: **FPC antenna**

Antenna material: **soft PCB**

FrequencyRange: **2400-2500MHz**

Impedance: **50Ω**

Gain:2.47G: **2.62dBi (Max)**

Antenna size: **L35mmxW8mm**

2. Antenna position



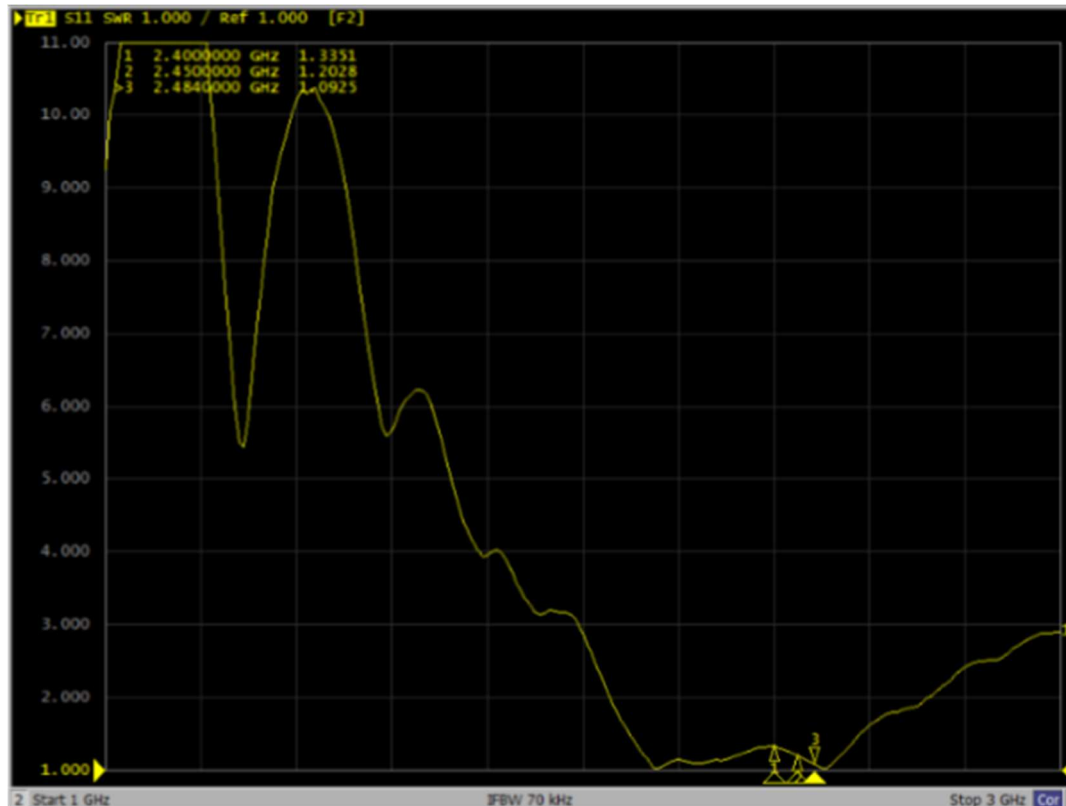
3. VSWR

3.1 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

Frequency(MHz)	2400	2450	2500
VSWR	1.33	1.20	1.09



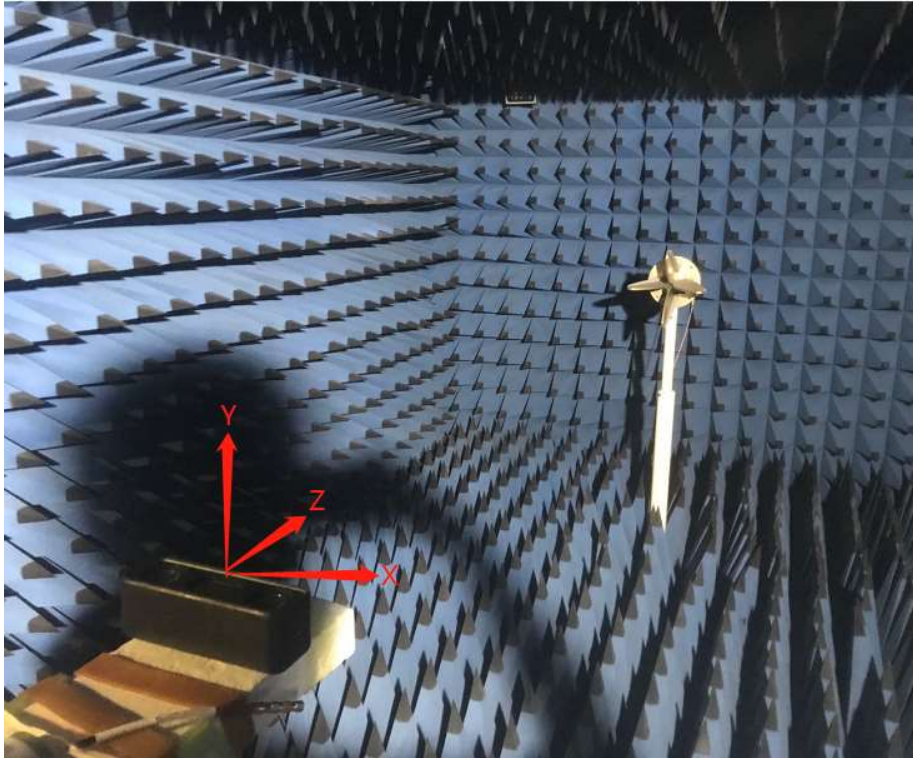
4. Anechoic chamber

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.

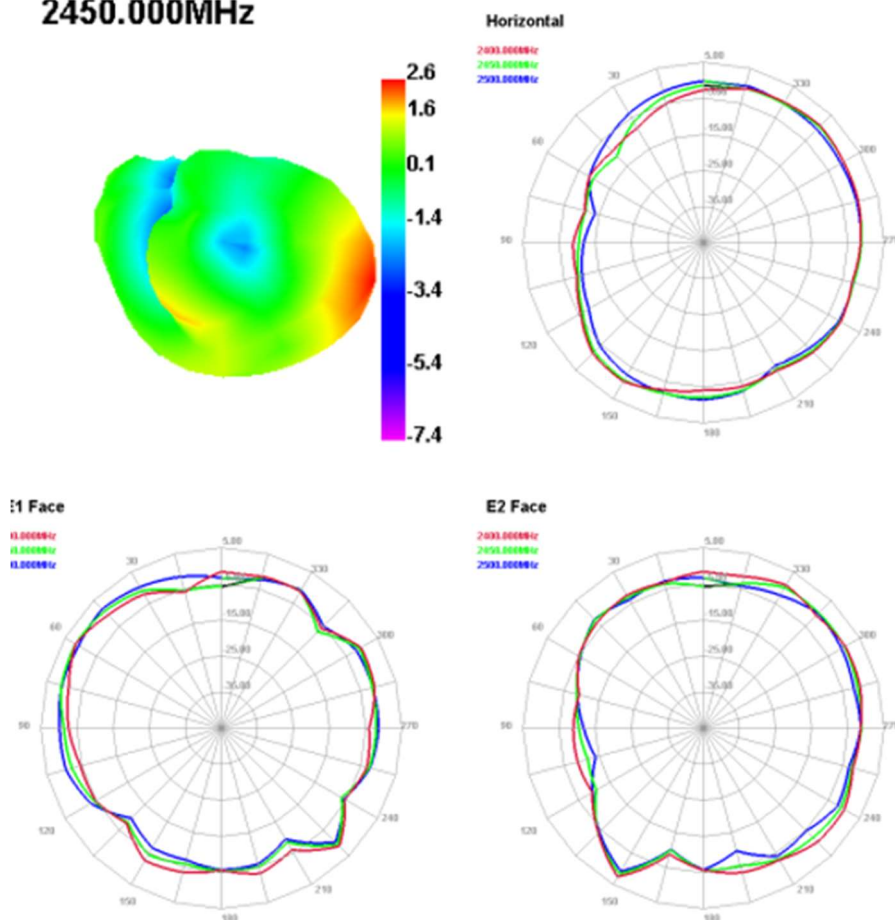
main performance :

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)



5. Antenna 3D&2D radiation diagram

2450.000MHz



6. Gain table of Antenna

Passive Test For WIFI-2.4G		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	56.19	2.56
2410	54.37	2.48
2420	53.04	2.55
2430	51.28	2.42
2440	50.29	2.34
2450	53.3	2.58
2460	50.94	2.25
2470	54.13	2.62
2480	53.62	2.6
2490	50.58	2.05
2500	51.74	2.28

7. Antenna Dimensions and pattern

