

	2501-R	
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Specification Approval Sheet

Vender Name	Shenzhen i-Top Technology Co., Ltd
Address	Room 605, Building 2 Gaoxinqi Industrail Park 2,Longchang Road,Bao'an District, Shenzhen City,China
Project Name	2501
Part Name	2501-R
Part Number	2501-R-V2.0
Part Version	V2.0
Part Spec.	

The materials meet the following environmental requirements:

☐ Banned and Monitored Substances Control Standard(Latest Edition)

☐ Halogen-free technical standard

Vender Confirm (Stamp)	Prepared by	Checked by	Approved by

Customer Approved (Stamp)	Sourcing	DQ	RD	Approved by

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一、The basic parameters:

A. Electrical Characteristics	
Frequency	2400MHZ~2500MHZ
VSWR	< 2.5
Avg Efficiency	>10%
Impedance	50 ± 25 Ohm
Polarization	Linear
Peak Gain	2.4G:-2.52dBi
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

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二、Electrical Specification :

Those specifications were specially defined for 2501-R model.

三、VSWR

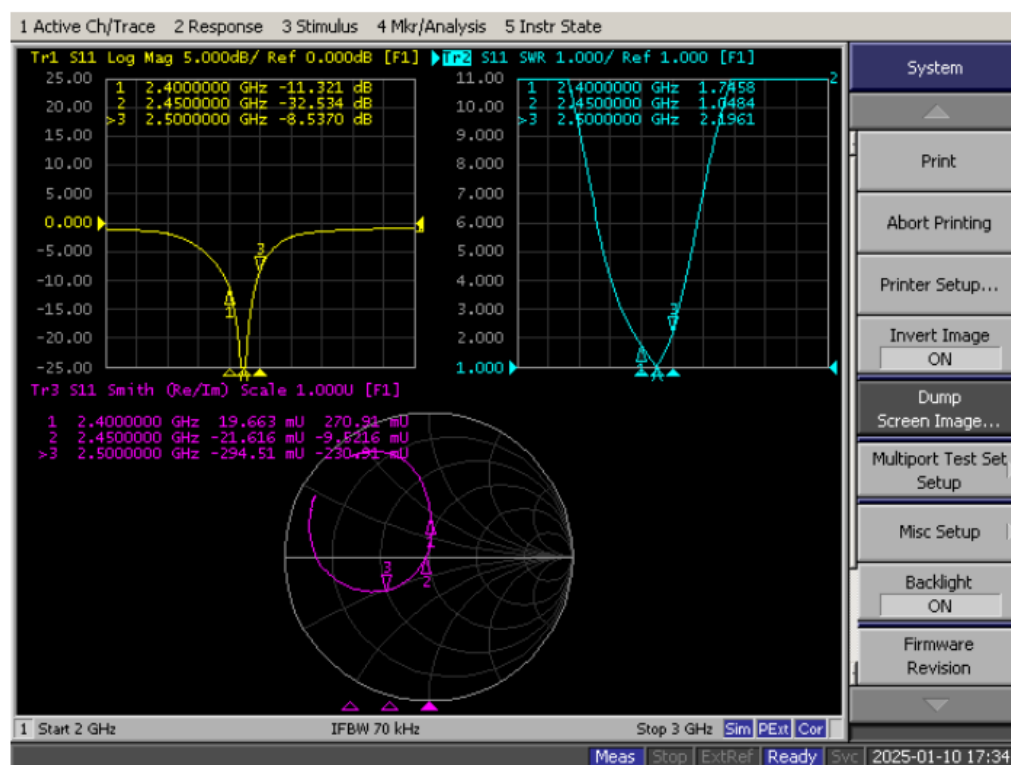
1 Measuring Method

1.A 50Ωcoaxial 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

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四、 Anechoic chamber

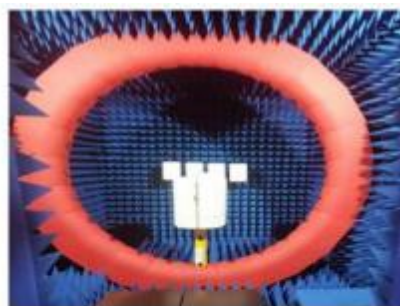
Introduction:

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 :

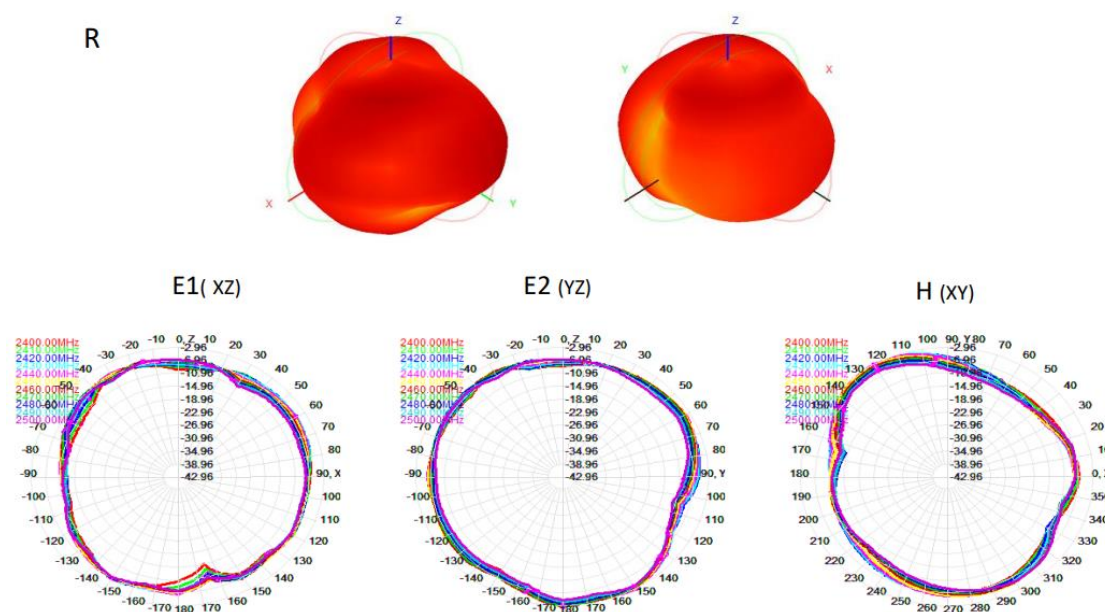
Frequency range:400MHz ~ 6GHz ceiling reflected wave loss materials: 400MHz ~ 6GHz is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)



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五、Gain table of Antenna

Passive field pattern diagram-R

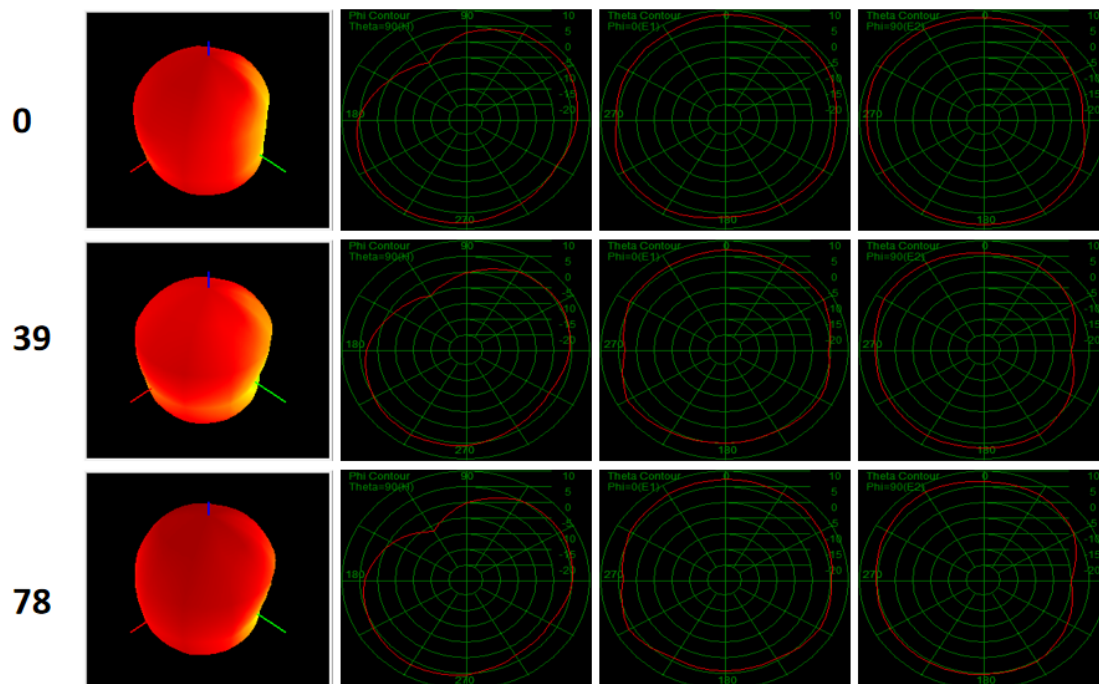


Passive efficiency gain-R

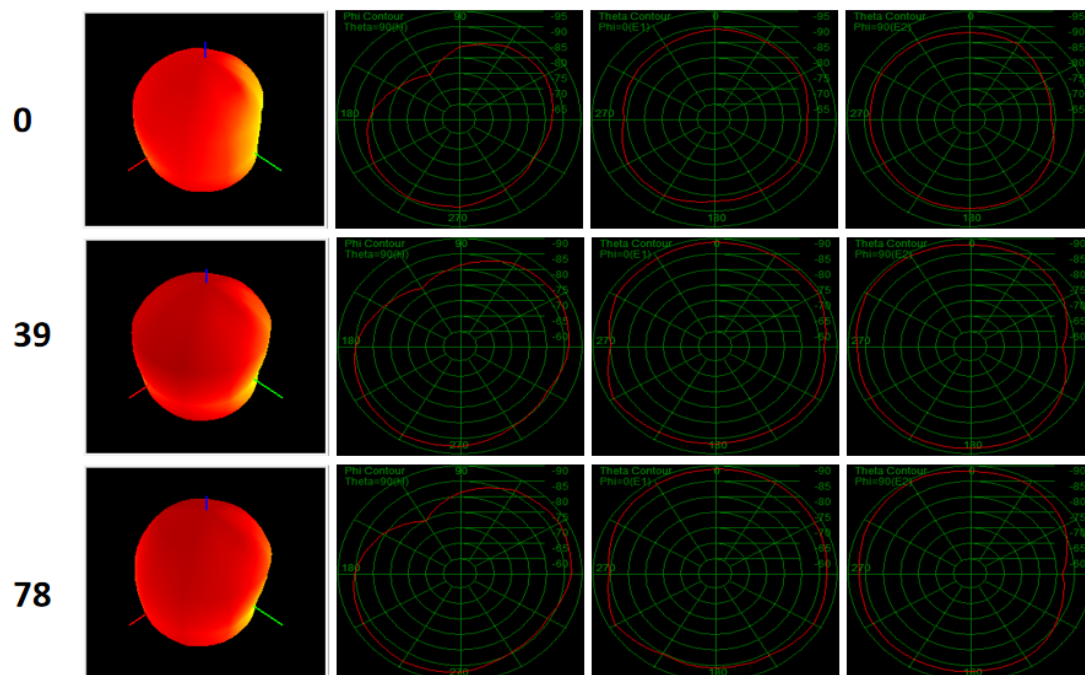
R		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	16.38	-3.11
2410	17.76	-2.82
2420	18.75	-2.68
2430	19.75	-2.52
2440	20.24	-2.56
2450	20.11	-2.85
2460	19.52	-3.11
2470	18.45	-3.45
2480	17.47	-3.78
2490	16.10	-3.87
2500	15.35	-3.82

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Active free space field pattern diagram -R - TRP

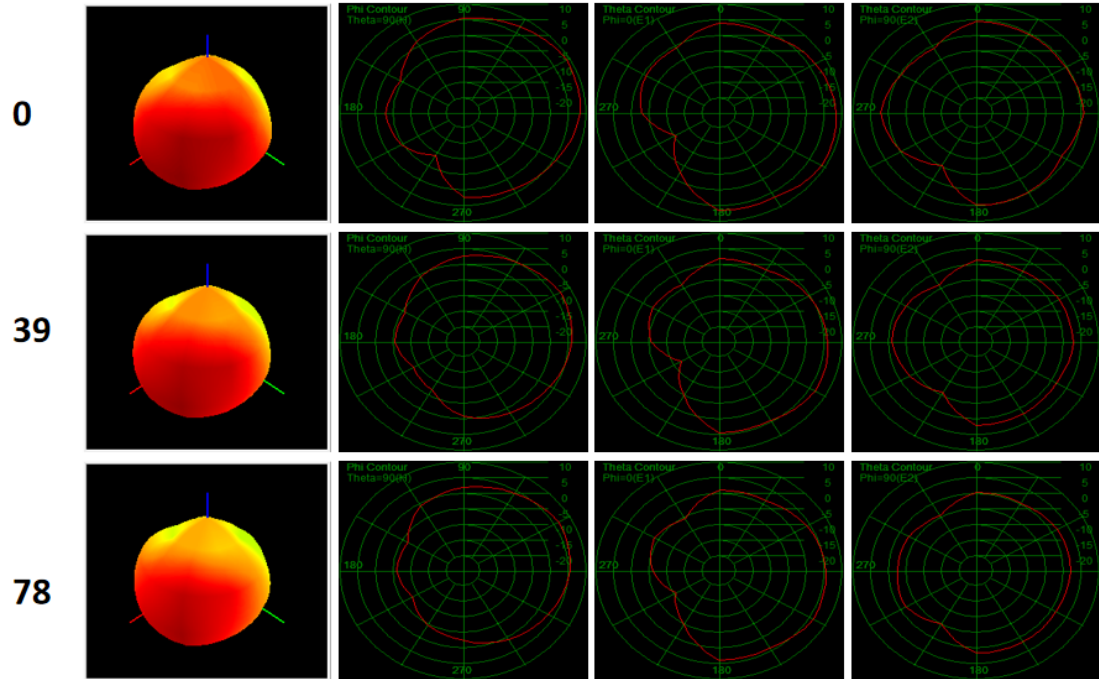


Active free space field pattern diagram -R - TIS

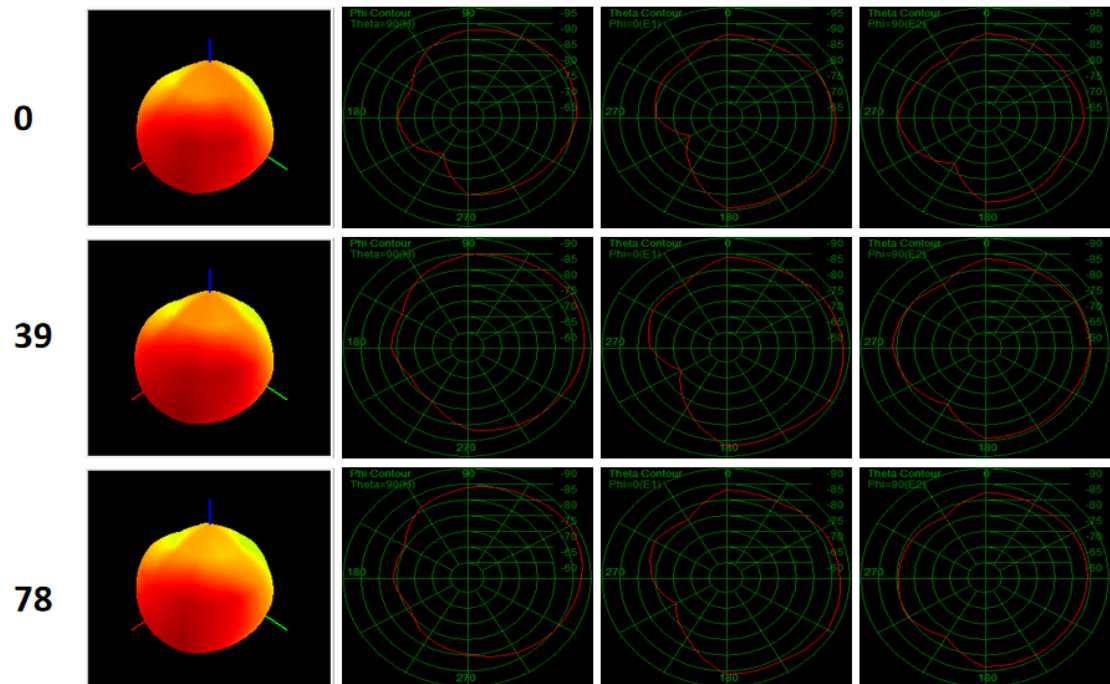


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Source field pattern diagram -R - TRP



Source field pattern diagram -R - TIS



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Free space			Head model space		
BAND	TRP (dBm)	TIS (dBm)	BAND	TRP (dBm)	TIS (dBm)
0	7.05	-87.44	0	3.58	-86.12
39	5.33	-87.14	39	1.33	-83.44
78	5.15	-86.78	78	0.82	-82.87

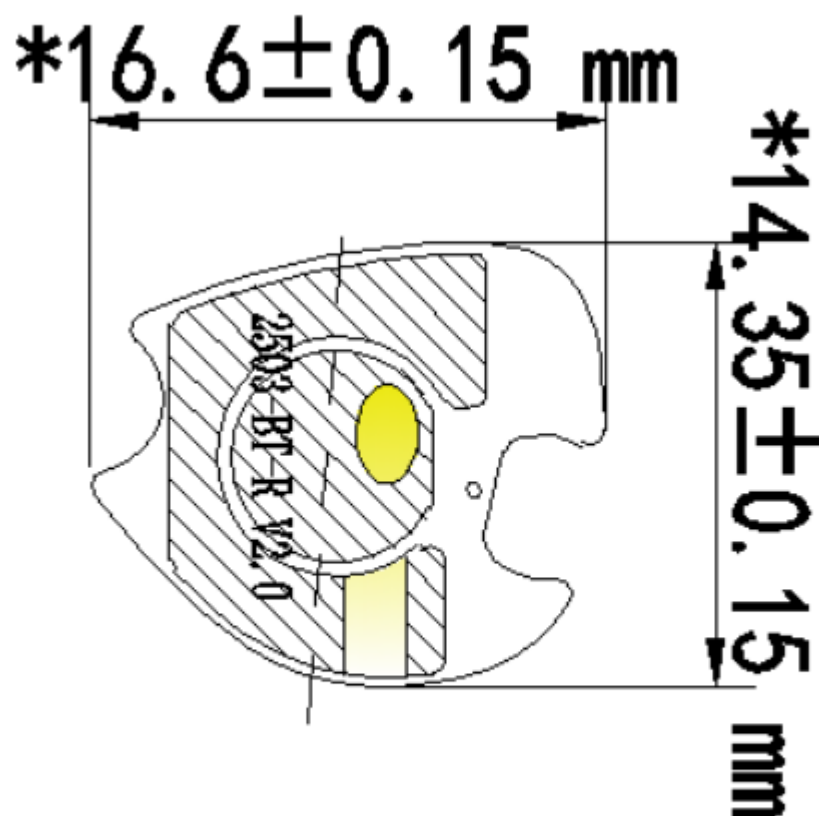
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六、 Machine



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七、Antenna Dimensions、



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八、 ROHS:

Antenna NZ. 01. 0000318 meets RoHS requirements.

九、 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*****