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	Document Number:

Specification For Approval

Customer Name: **Customer:**			
Supplier Name: **Customer:**	Suzhou Capsit Electronic Technology Co., Ltd. **Suzhou Capsit Electronic Technology Co., Ltd** **No. A1003, Building 135, Jinjun Garden, Chengnan Street , Wuzhong Economic Development Zone, Suzhou**		
Customer Part Number:		Supplier Part Number:	
Product Description:	**N2420-1.13 black L=125mm first-Terminals**	Matching model:	
Supplier acknowledgement (stamp):		Customer acknowledges (stamp):	
Produced by: Zhou Jingfeng	Structure: Zhou Jingfeng		
Audit:	**Date: 2025.03.21**		

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one,**Product images**

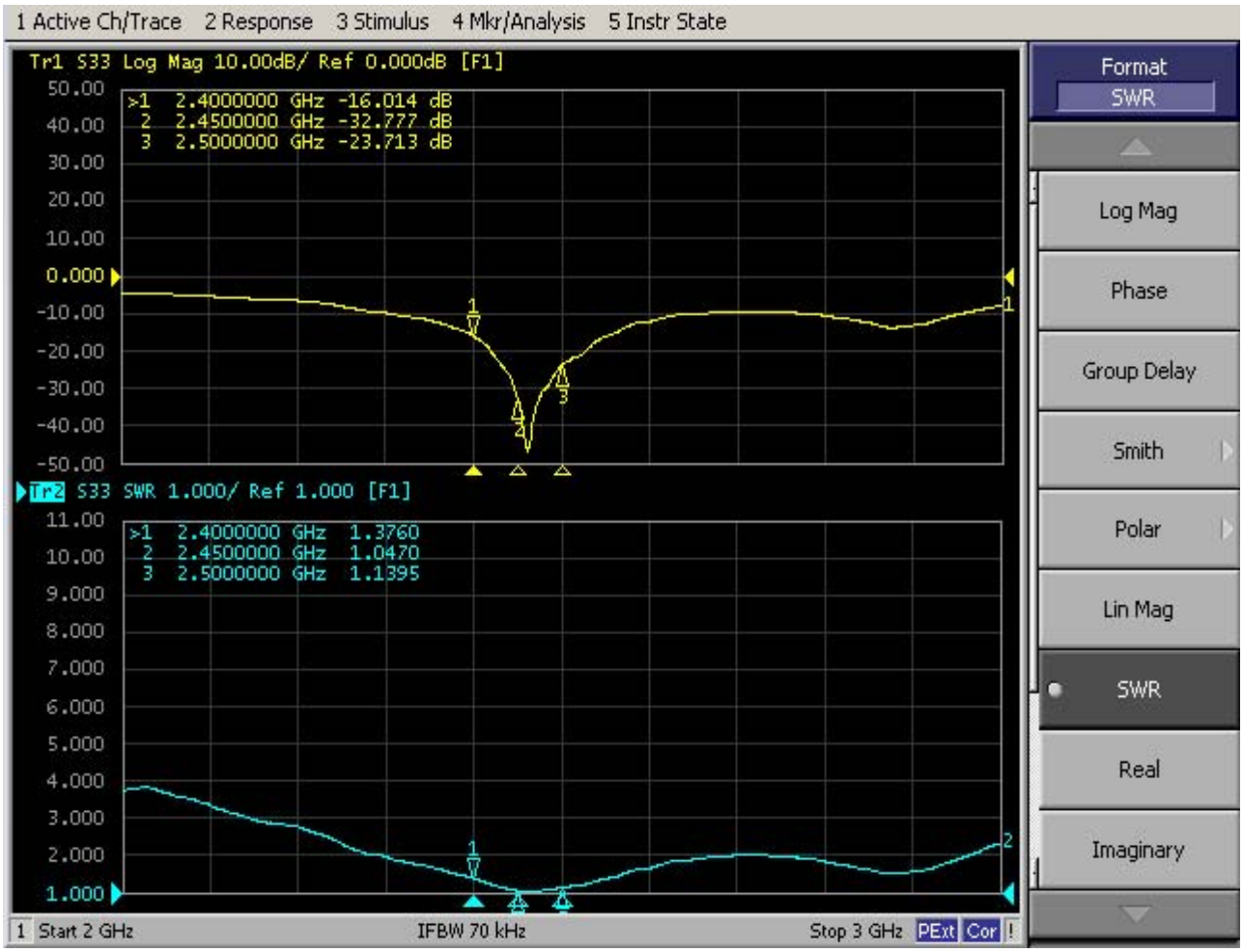
2. Product Parameters

Product test parameters			
Product Name(Name)	2.4G Internal antenna	**Product Model(Model Type)**	N2420-1.13 Black L= 125mm+first generation terminal
Electrical performance indicators(Electrical Specifications)			
Frequency Range (Frequency Range)	2400-2500Mhz	**Polarization mode (Polarization)**	vertical
Input Impedance(Impedance	50 Ω	**Radiation direction**	Omnidirectional
VSWR（VSWR)	≦2	**Power Capacity(Power**	50W
Gain(Gain)	2.66dBi	**Bandwidth (Bandwidth**	100MHz

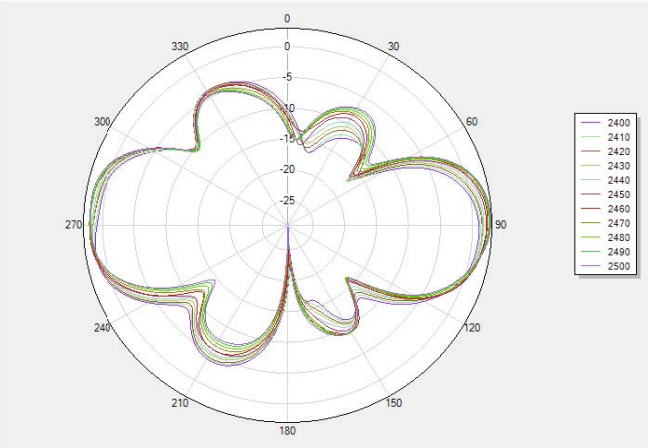
Mechanical indicators(Mechanical Specifications)			
size (Dimensions)	47±2MM	Antenna Color(Chassis Color)	black
even catch Device type Number (Connector)	First generation terminal	Lead length(Cable Length)	125MM±3MM
antennaMaterial (Chassis Material	PCB		
Operating temperature (Working Temperature)	- 40°C±85°C	Storage temperature (Limit Temperature)	- 40°C±85°C

three,S11 (VSWR,Return loss,Smith)data

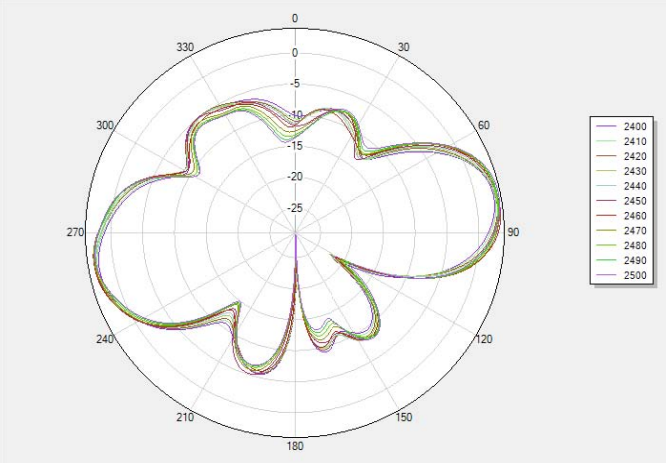
3.1 Network Analyzer Report



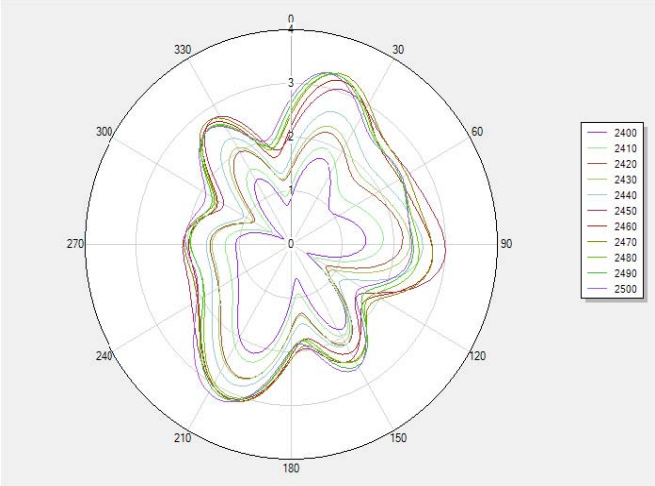
3.2 2D Direction Pattern



Phi 0°**C**2D

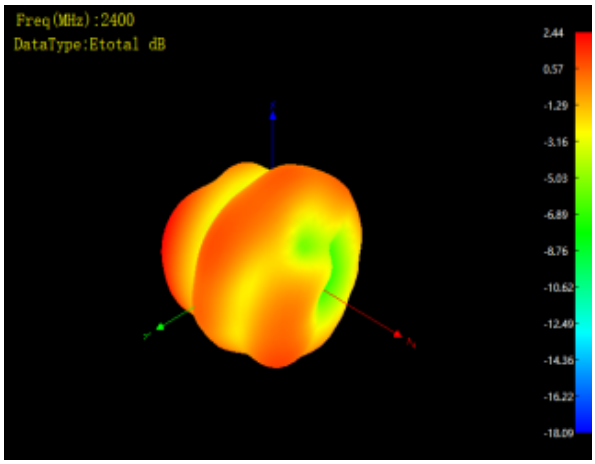


Phi 90°**C**2D

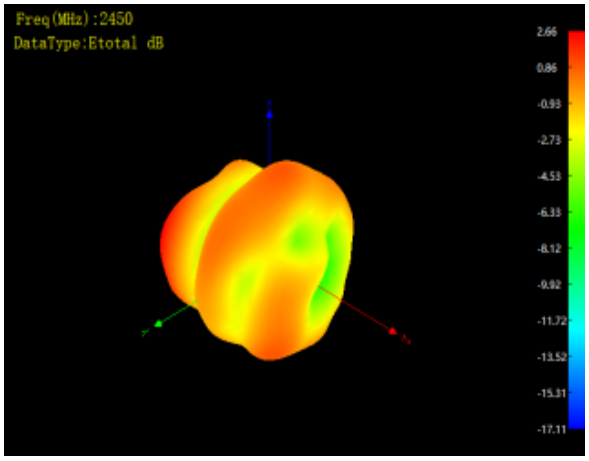


Theta 90°**C**2D

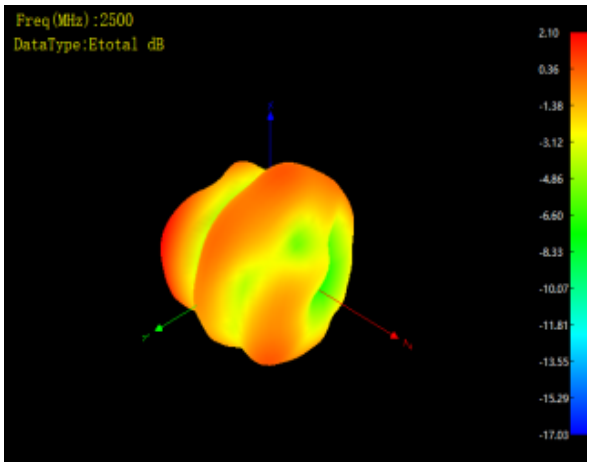
3.3 3D Direction Map



2400MHZ



2450MHZ

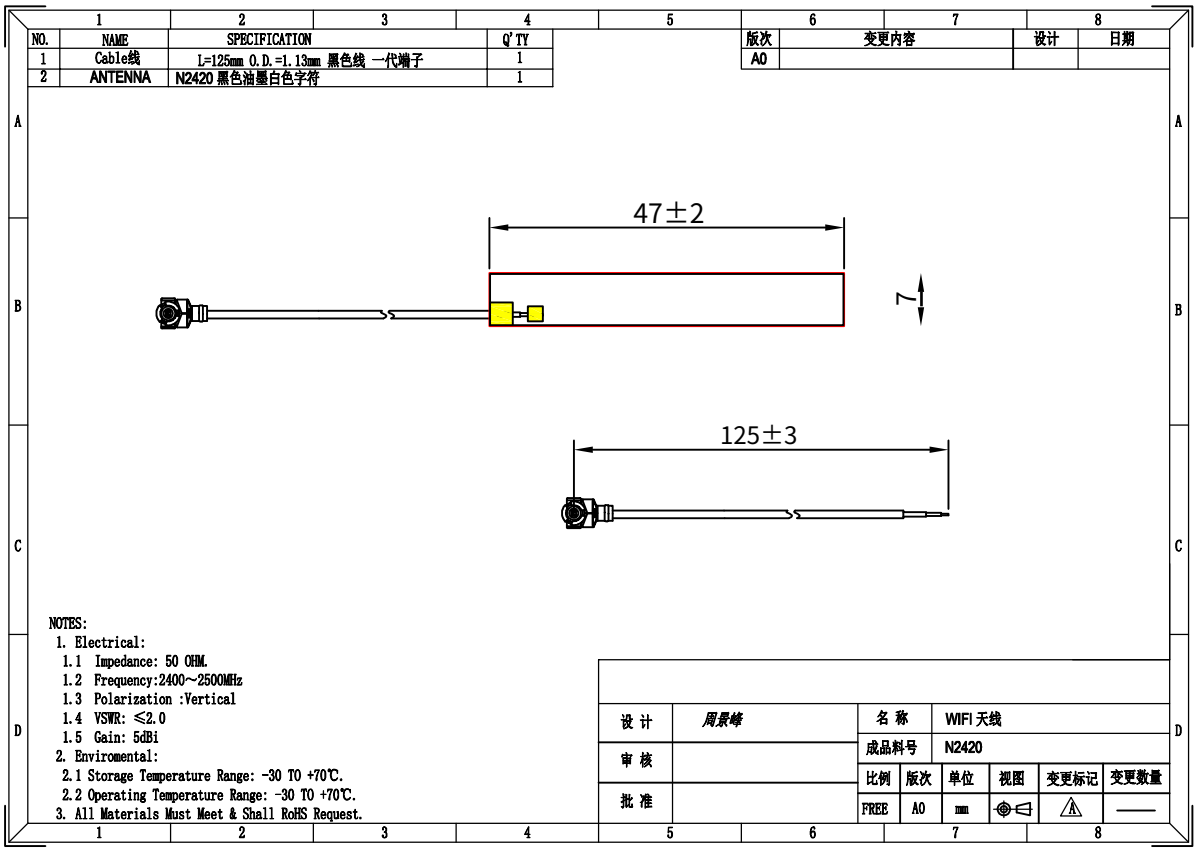


2500MHZ

4. Antenna efficiency and gain value

Frequenc	Gain(dBi)	Efficiency	Efficiency	Directivity	Bw(3dB)@	Bw(3dB)@	AR@Thet	UHPowerRatio(上半
2400	2.44	-1.91	64.42	4.36	31	30	22.44	0.45
2450	2.66	-2.47	56.62	5.15	31	28	22.44	0.44
2500	2.10	-2.89	51.4	5.04	33	27	41.78	0.43

5. Product size drawings



6. Environmental performance test

Storage environment	When not specified, the test temperature, humidity and air pressure are as follows: 1. Temperature is -30°C～+80°C 2.Relative humidity is 45%-85% 3. Air pressure is 86kpa-106kpa	Electrical and mechanical performance is normal
High and low temperature test	Cycle between 70°C and 40°C for 5 times, then 1-2H, check the appearance quality.	The dimensions should meet the requirements and should Satisfaction Mechanical and electrical performance
Resistant to constant humidity and heat test	Relative humidity: 95±3%, test temperature: 40°C. After 2 hours of continuous exposure, the electrical performance of the test sample is measured within 5 minutes after the test sample is taken out. 1-2 hours after the parts are removed, check the appearance quality	The dimensions should meet the requirements and should Satisfaction Mechanical and electrical performance
Vibration test	Frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, sweep cycle times: 30 times	Electrical and mechanical performance is normal
Drop test	1M high altitude free fall 3 times along mutually perpendicular axes	Electrical and mechanical performance is normal