



Shenzhen Yingjiachuang Electronic Technology Co.,

Ltd. <http://www.szsyjc.com>

APPROVAL SHEET

承认书

CUSTOMER NAME Customer name		
CUSTOMER P/N Customer Part Number		
PART NAME	2.4G black integrated antenna L=140MM	
P/N Part Number	YJC-6C140-B13	
APPROVAL REV.	A0	
DELIVERY DATE Sample delivery date	December 25, 2024	
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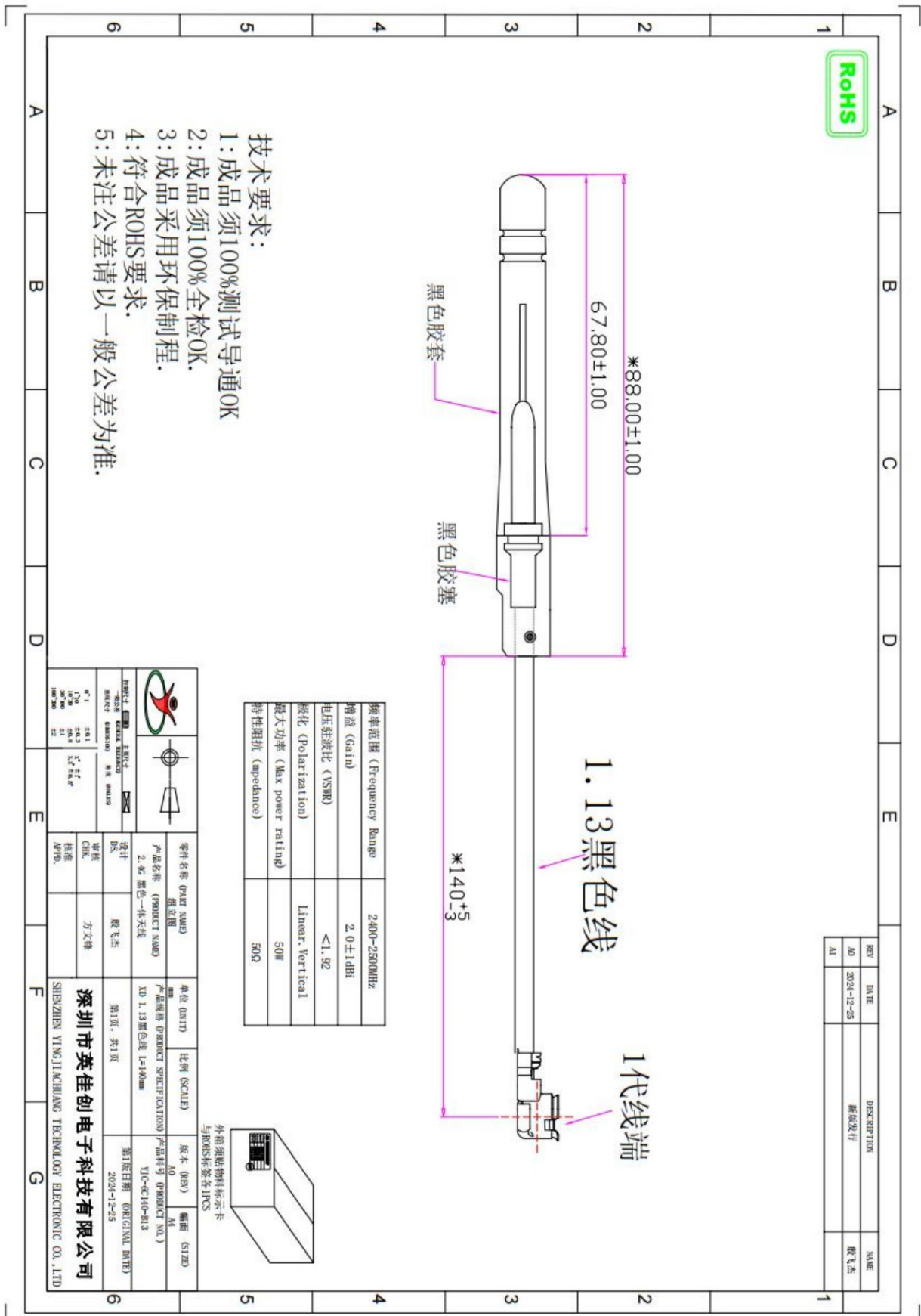
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Resume:

Version	Changes and reasons for changes	date	issued
A/0	First edition released	December 25, 2024	

Antenna plan:





Antenna technical parameters and environmental testing:

Electrical Specifications			
Electrical performance indicators			
Frequency range	2400-2500MHz		
VSWR	<1.92		
Input Impedance	50 Ω		
direction	Omnidirectional		
Gain	2.87dBi		
Mechanical indicators			
Antenna color	black		
Interface	XD		
Cable length	140mm		
Operating temperature	-20°C~+70°C		
Operating humidity	20%~80%		

Environmental performance test:

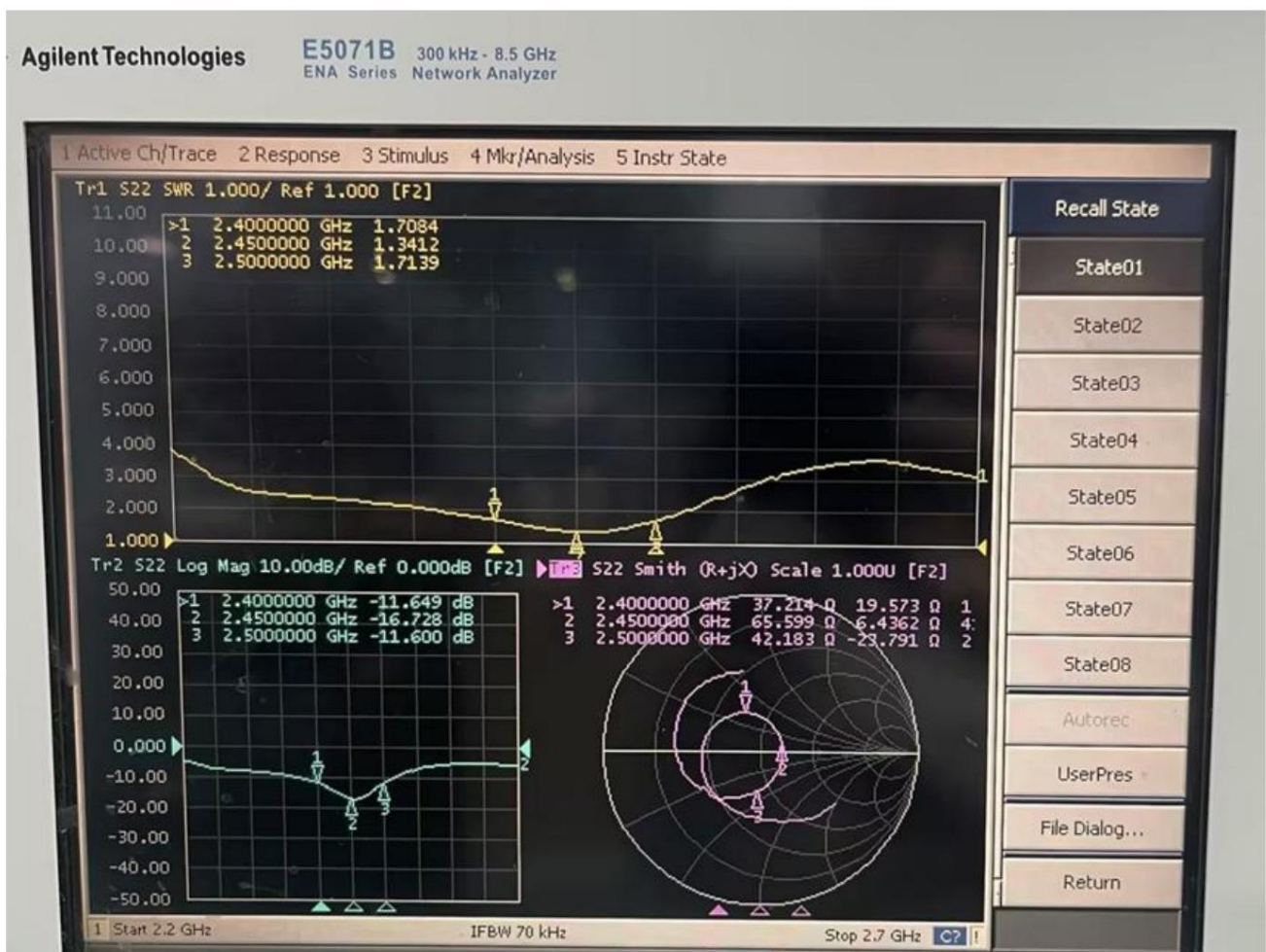
project	Test conditions	Specification
Storage environment	When not specified, the test temperature, humidity and air pressure are as follows: 1. Temperature: -30°C+80°C 2. Relative humidity is 45%-85% 3. Air pressure is 86kpa-106kpa	Electrical and mechanical performance is normal
High and low temperature test	Cycle between 70°C and -20°C for 5 times, then 1-2H, check the appearance quality.	The dimensions shall meet the requirements and shall satisfy the mechanical and electrical performance
Constant resistance Damp heat test	Relative humidity 95±3%, test temperature: 40°C. After 2 hours of continuous action, The electrical performance of the test sample shall be measured within 5 minutes after it is taken out. 1-2 hours after the parts are removed, check the appearance quality	The dimensions shall meet the requirements and shall satisfy the 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	Free fall 3 times in mutually perpendicular axis directions	Electrical and mechanical performance is normal



Antenna physical picture:



Antenna performance test chart:

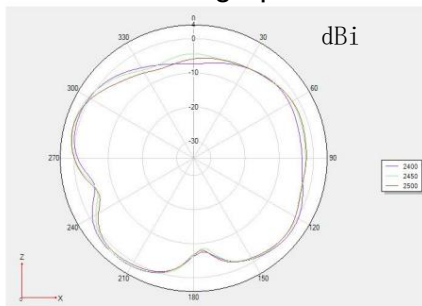




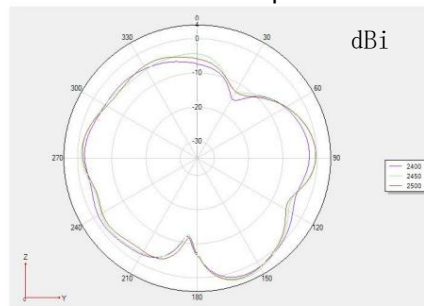
2D, 3D (2.4G) test data:

Frequency(MHz)	Efficiency (%)	Gain.(dBi)
2400MHz	66.99	1.93
2410MHz	65.92	2.08
2420MHz	66.68	2.28
2430MHz	67.3	2.49
2440MHz	66.22	2.72
2450MHz	65.46	2.87
2460MHz	63.68	2.71
2470MHz	66.07	2.87
2480MHz	64.42	2.83
2490MHz	62.23	2.54
2500MHz	61.66	2.58

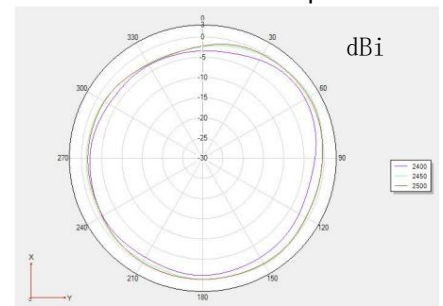
Phi 0 2D graph:



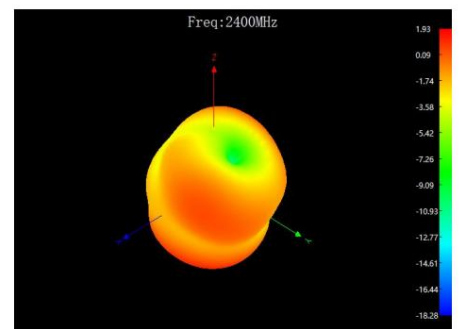
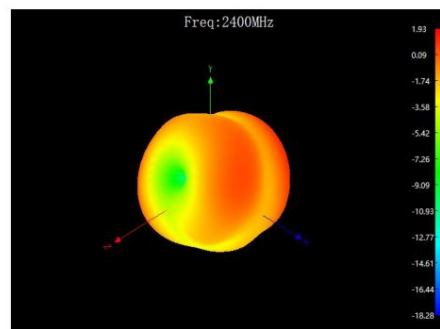
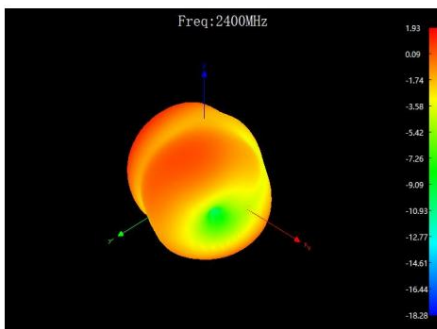
Phi 90 2D Graph



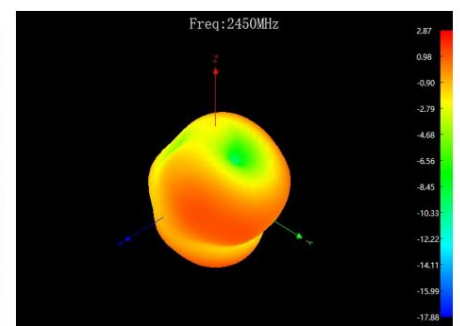
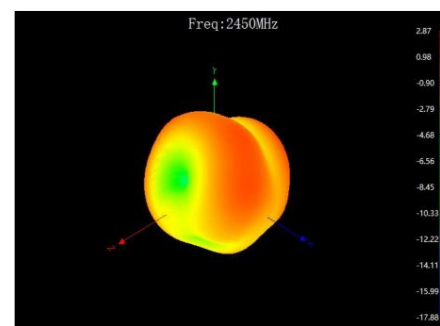
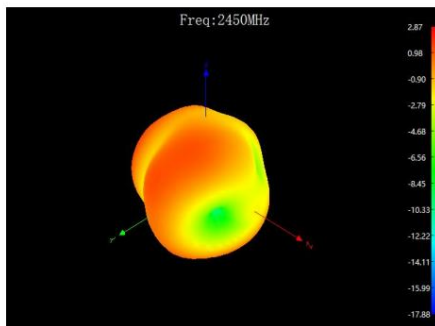
Theta 90 2D Graph



3D 2400:

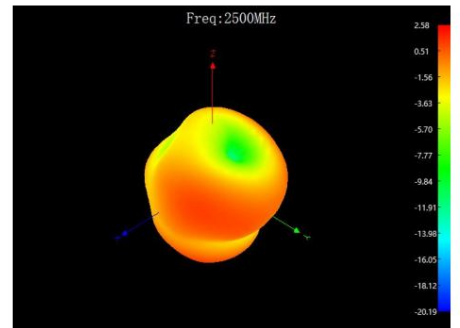
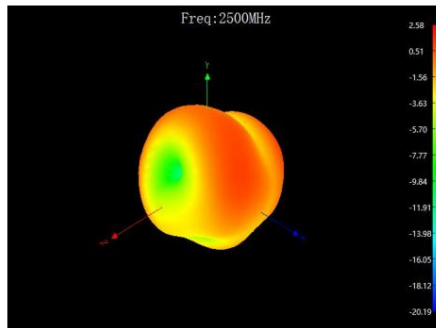
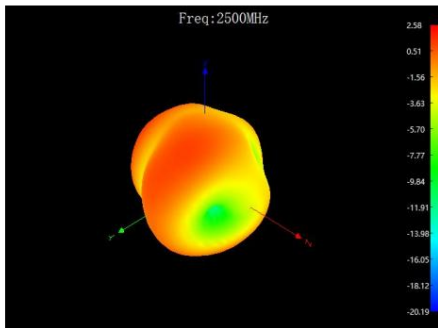


3D 2450:





3D 2500:





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ROHS Material Control Report											
This is to certify that the components, raw materials used in auxiliary materials, and additives used in the production process delivered to your company comply with the environmental protection requirements of the RoHS Directive on the Restriction of the Use of Hazardous Substances (RoHS Directive 2011/65/EC)											
The composition of the raw materials, packaging materials and additives used in the production process of components and auxiliary materials is reported as follows:											
Name of ingredients Component /Part Name	Composition Materials Material Composition	ICP Report Number ICP report #	Testing agency Test Org.	Testing time Test Date	Hazardous substance content (ppm)						Qualified? PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBB PBDE		PASS
Plastic parts	TPEE	A2240057268120001	SGS	24/03/13	ND	ND	ND	ND	ND	ND	PASS
	PC +PBT	A2240057268112001	CTI	24/03/05	ND	ND	ND	ND	ND	ND	PASS
Bullet Brass NGBE	C24002403414		SGS	24/05/14	ND	11	ND	ND	ND	ND	PASS
Wire	Teflon coaxial Cables	CANEC24002746206	SGS	24/02/23	ND	ND	ND	ND	ND	ND	PASS
Terminals	Phosphor bronze	CANEC24000977302	SGS	24/01/22	ND	6	ND	ND	ND	ND	PASS
	Gold plating A22400410234101001E		CTI	24/07/16	ND	ND	ND	ND	ND	ND	PASS
	Rubber core A2240126395101003E		CTI	24/03/16	ND	ND	ND	ND	ND	ND	PASS
Silicone plug silicone	CANEC23017729318		SGS	24/01/12	ND	ND	ND	ND	ND	ND	PASS