

Acknowledgement

Specification for Approval Customer:

Shenzhen Xinhuaifeng Technology Co., Ltd.

Product Name: Model V211 2.4-5.8G/WIFI Antenna

PRODUCT NAME:

Customer Document Number: CS2010-1 0.81-wire, single-ended second-generation L=65mm

CUSTOMER P/N:

REV:CS-01

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:		
DATE:	202601//10	

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1. Configuration



SATIMO Host Control Board and Multi-Probe Laboratory



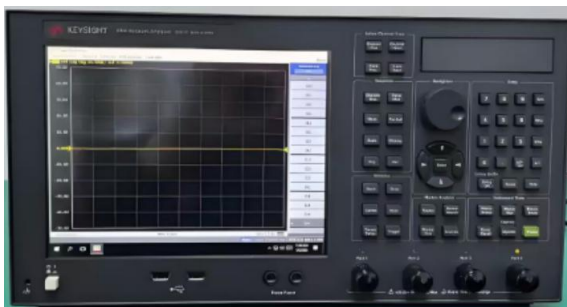
SATIMO host front side



SATMIMO side



Agilent8960



Nestech 5071B Network Analyzer



CMW500 tester

1. Antenna System

This is an IPEX-FPC antenna designed according to customer specifications, featuring a center frequency standing wave ratio ≤ 1.5 .

2. Matching Circuit

No changes needed

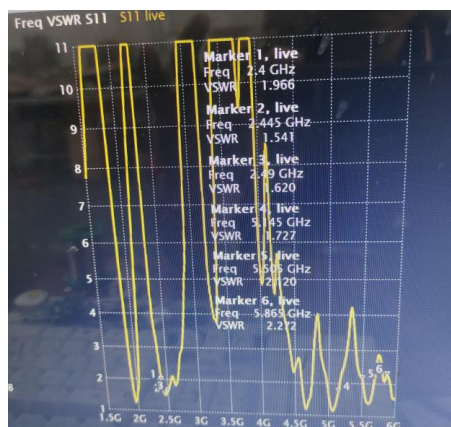
3. Final Product Image

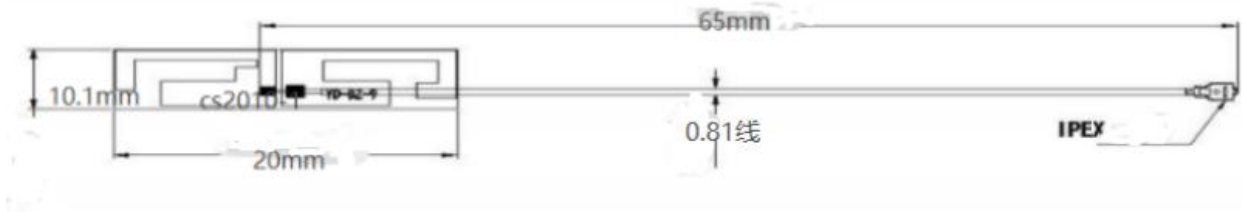
2-1. Assembly Drawing



Model V211 / 2.4G-5.8G

4. standing wave ratio: 2-4G-5.8G



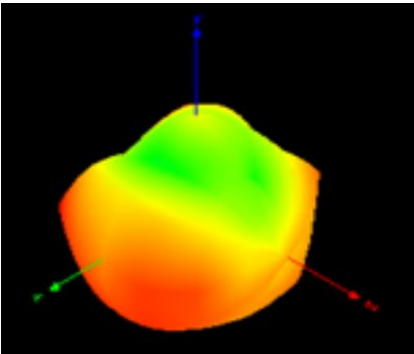
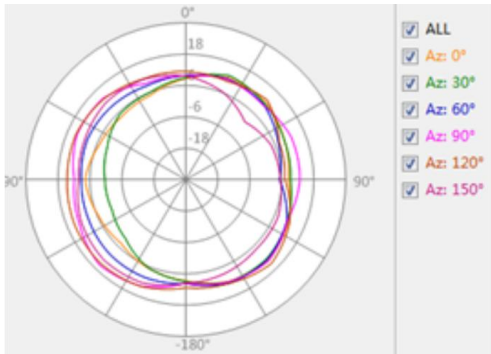


Antenna Size Diagram

5. Test Report

I. Passive Gain and Direction Pattern

Frequency /MHz Frequency	MaxGain/dBi: Maximum gain	Efficiency /% Antenna efficiency
2400	1.17	37.31
2450	1.25	38.24
2500	1.33	39.86
5180	1.42	38.86
5500	1.58	41.27
5825	1.63	42.18



6. Mechanical Property Testing

1	Sway Test Bending Test	Apply a load of 120 g to the wire end 30 cm from the connector, secure the connector, and perform a swing test with swings of 60 degrees left and right each. After 1,000 swings, evaluate the characteristics.	After 1,000 oscillations, no defects were observed in the tested characteristics, indicating no damage to the electrical performance.
2	Strength test	A 15-pound static load is applied at the bottom of the wire release end.	No phenomena indicate mechanical or electrical abnormalities.

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	STRENG TEST	Continue for one minute.	Damage to the device's performance.
3	PULLING FORCE Test	A tensile test was conducted between the tension gauge connector and the wire rod.	The maximum tensile strength is 0.5 kg, with no signs of electrical performance degradation observed.
4	Vibration Test (VIBRATION) TEST	Vibrate for 120 minutes along the X-axis at a vibration amplitude of 1.10 mm and frequency of 33.30 Hz/s, then for 120 minutes along the Y-axis, followed by 240 minutes along the Z-axis.	No phenomena indicate any damage to the electrical performance.

7. Endurance Test

1	Salt spray test SAIT SPRAY TEST	Saline spray test: conducted in accordance with the GB 1266-86 standard; distilled water: obtained through single distillation. PH6.5~7 Spray rate: 1.4 m³/80 cm²/h; Compressed air pressure Force: 1 Kgf/cm² Test relative angle: 98° Temperature: 45°-47° Pressure temperature: 35°C Test duration: 24 hours	All specification change ranges Set the initial value to 30%. The entire characteristic range is 30% of the initial value.
2	High Temperature Test (HEAT TEST)	The sample was stored at 85±2°C for 24 hours, followed by a 30-minute exposure to normal environmental conditions before testing. 85±2°C for 24 hours, after keep in normal condition for 30min the to test.	
3	Humid test	The sample was exposed to conditions of 40±2°C and 90-95% relative humidity (RH) for 24 hours, followed by a 30-minute placement in normal environmental conditions before testing.	
4	Moisture Test – Low Temperature Test COLD TEST	Store at -40±2°C for 24 hours, then transfer to normal conditions for 30 minutes before testing. -40±2°C for 96hours, after keep in normal condition for 30min the to test.	