

Antenna Specification

Supplier name	Shenzhen Hoogwell Communication Technology Co., Ltd.
Supplier address	Room 230 Zhihui Creative,No 2005,Shajing Xihuan Road,Baoan District ,Shenzhen,Guangdong
Product model	AAM06
Product Name	AAM06 BT Antenna FPC+0.81 L=150mm+I-Pex4+Sponge 120mm
Application	AAM06
Sample delivery time	2025-05-7
Customer material code	AUA.AAM0603
Supplier Project Contact	Mingqiu Liu
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Supplier confirmation	RF	MD	Quality	Audit
Customer confirmation	RF	MD	Quality	Audit

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Description:

1. The samples and the acknowledgment shall be made in quadruplicate respectively. Each sample shall be nailed on the top left corner of the acknowledgment cover and sealed with electrostatic bag (electronic material) or thick PP bag.

1. The report mainly provides test data of passive performance parameters of AAM06 BT antenna,

The frequency band of AH148 BT is 2.4-2.483GHz.

The antenna sample is shown in picture (1).



picture (1)

2 Electrical performance

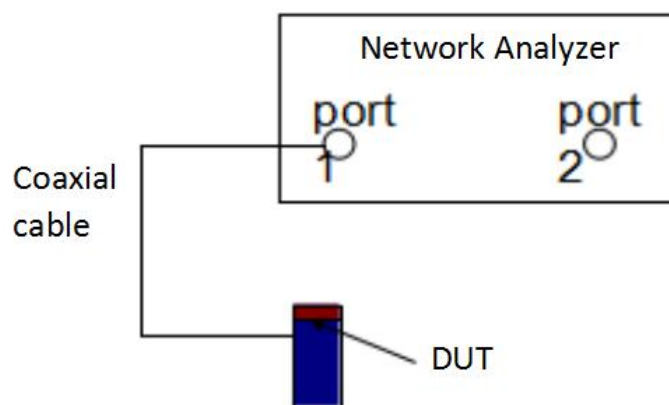
2-1 Specification

Frequency	2400-2483MHz
Gain MAX (dBi)	5.25 (10cm Cable test)
Efficiency (%)	≥ 30 , ≤ 60 (10cm Cable test)
S.W.R.	2400-2500MHz ≤ 3
Impedance (Ohm)	50 Ohm
Connector type	I-PEX 4
Polarization	Linear
Max input power	20W
Antenna color	Black
Cable type	low-loss 0.81cable

2-2 AAM06 BT Antenna Matching Circuit

3 Return Loss Test

3-1 Test setup



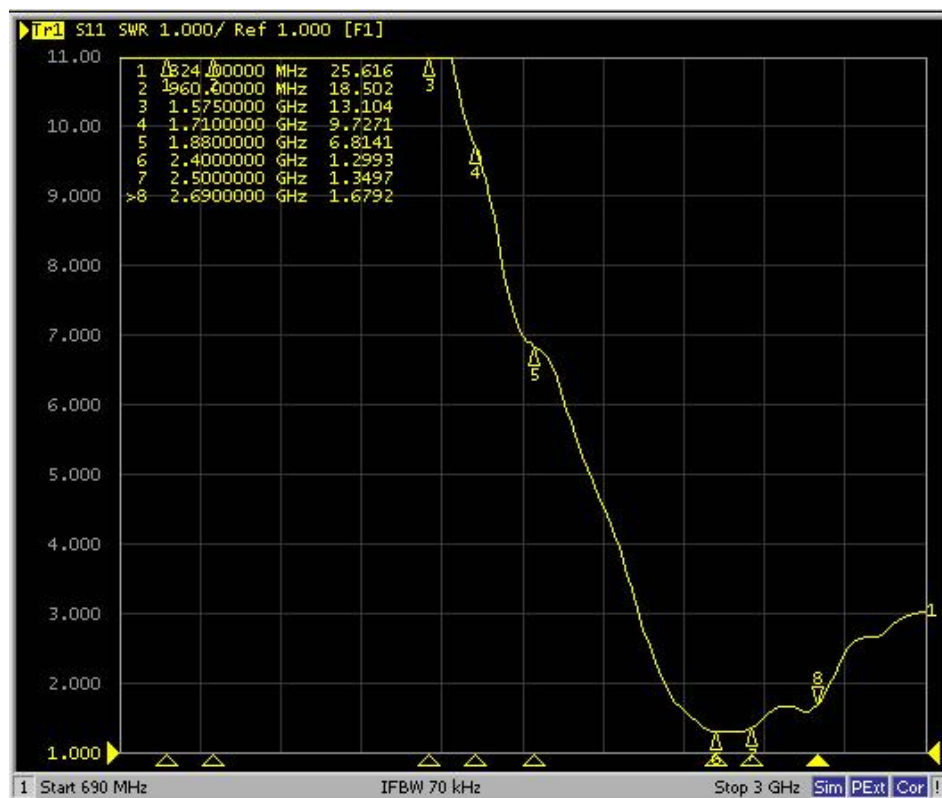
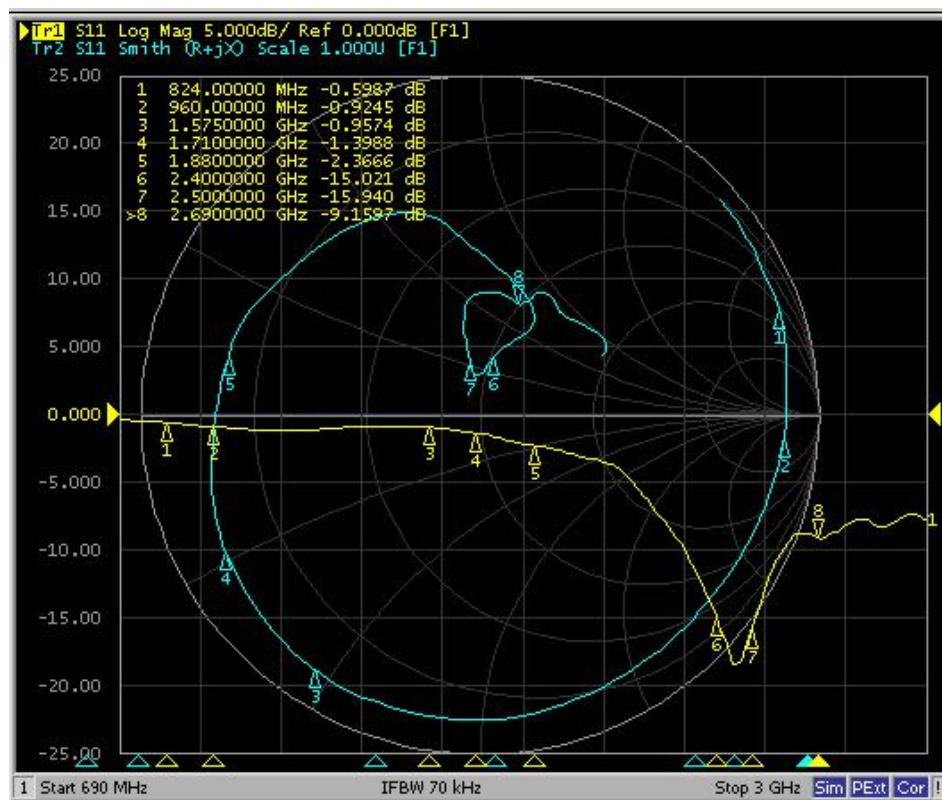
Return Loss Test Setup

3-2 Return Loss Test Data

As shown in the following table, the return loss test data of the edge frequency points of the BT antenna.

Band	Return Loss (dB)	
2400~2500MHz	2400	2485
Free space L	-15	-15.9

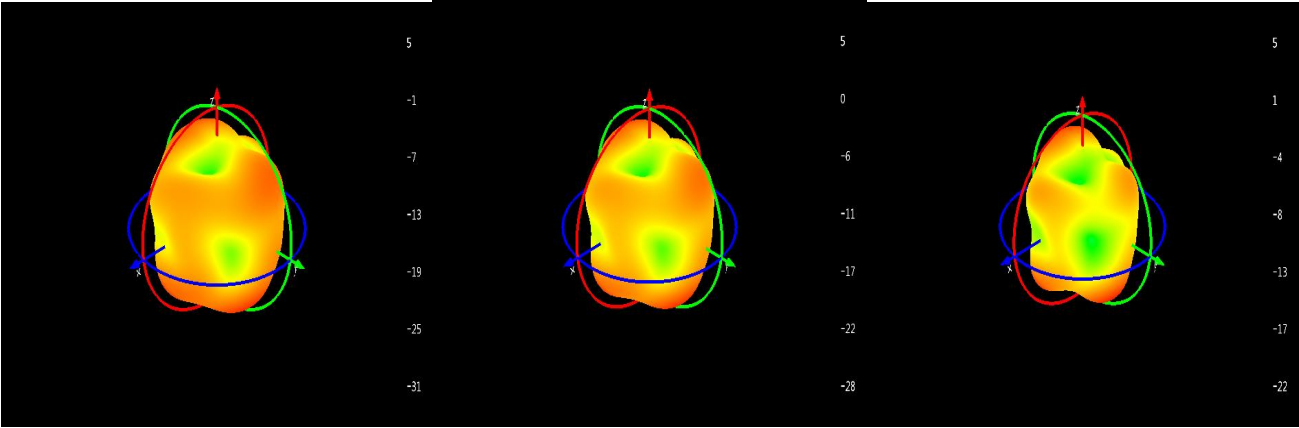
3-3 Return Loss



3-4 Passive Efficiency (freed Space)

frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
gain (dBi)	4.84	4.97	4.98	4.94	4.97	4.96	4.9	4.94	4.95	4.97	5.25
efficiency (%)	41.82	42.19	41.55	40.17	39.32	39.82	39.63	38.5	37.2	38.98	42.11

3-5 Polar Graphs

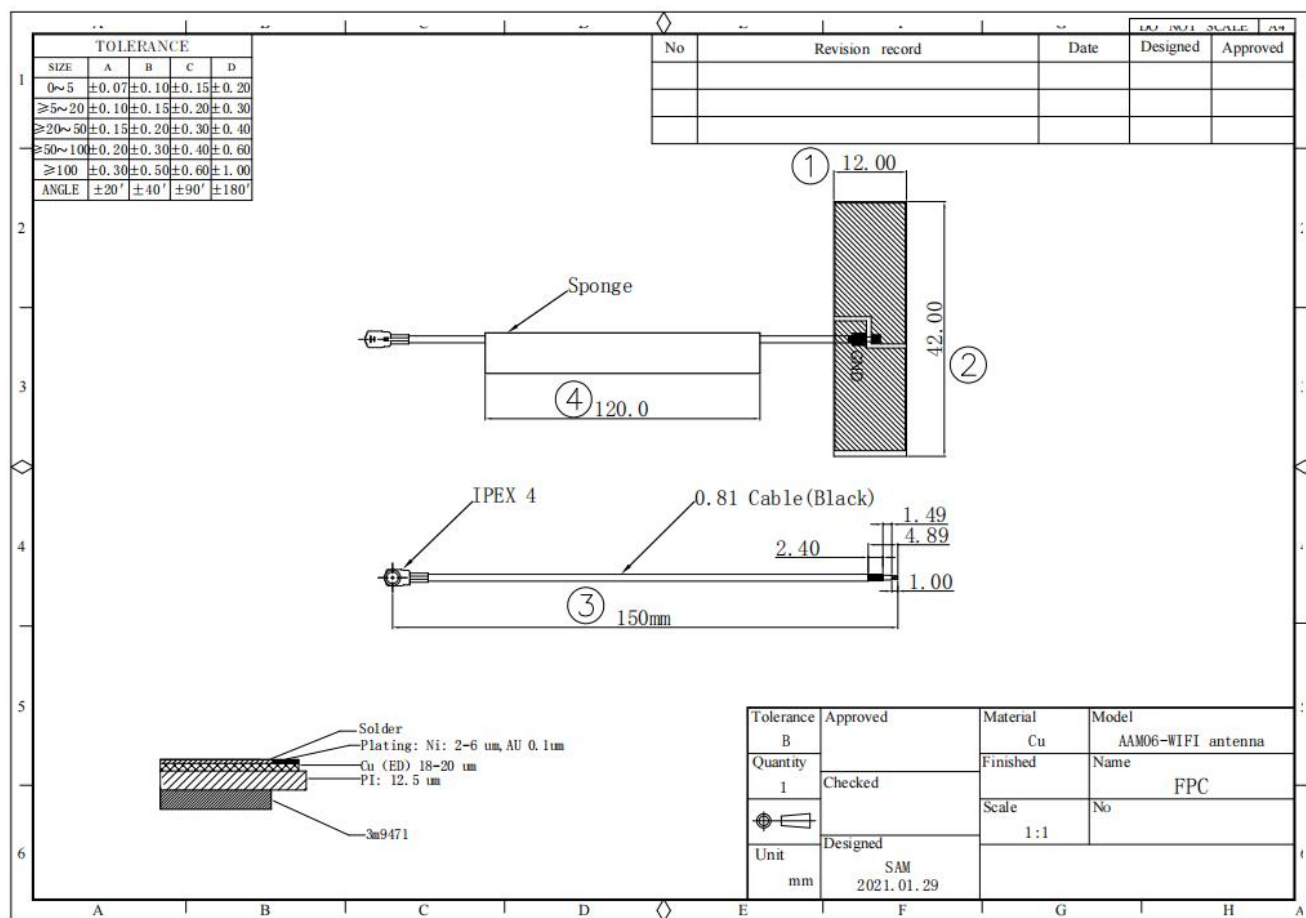


2420Mhz

2450Mhz

2480Mhz

4. Antenna Drawings



5.Appearance and Function Test Report

Item		Requirement	Results
Appearance	Date Code	☒ YYWW ☐ WWYY ☐ Other	☐ Acc ☐ Rej
Inspection	UL Indication		NA
	Visual Inspection	100% visual inspection and tally with customer specification.	☒ Acc ☐ Rej
Testing	FPC O/S Testing	100% visual inspection and no open/short is found.	☒ Acc ☐ Rej
	Insulation Resistance	1*108Ω or higher when DC500V	NA
	SolderabilityTest	No de-wetting or non-wetting is visible.	☐ Acc ☐ Rej
	AdhesionTest	No material shall be attached on the peeled tape.	☐ Acc ☐ Rej
	Au Coating Thk.	Au: 0.5-3 μ" Ni: 100-150 μ"	☒ Acc ☐ Rej
	Canned substances Confirm	Non-inclusion banned substances contained in products	☒ Acc ☐ Rej
	Heat-durability	Tin temperature: 280 ± 5 °C, immersion time: 10sec The base material / protective film shall be free of expansion, lifting, foaming and other phenomena	☒ Acc ☐ Rej
	Pulling test	0.5kg, 30sec, no electrical performance defect	☐ Acc ☐ Rej
	Bending test	R = 0.5mm, 180 ° , 10cyc, no electrical performance defect	NA

Num.	Profile tolerance	Requirement	Measured Data							Judge
1		12±0.3	12.03	12.05	12.03	12.06	12.05	12.04	12.06	√Acc□Rej
2		42±0.3	41.96	41.98	42.02	42.03	42.0	42.09	42.08	
3		150±5	15.12	151.5	151.2	151.3	151.7	151.5	151.6	
4		120±5	120.5	121.2	121.4	121.3	121.3	121.6	121.5	
5										
6										

7.Process flow chart

