

Production Name	Production Number	version
WIFI PCB antenna	AP477-2.4&5.8G-1I185-1.13	V1.0

1. Antenna characteristics

- ✧ Delicated outlook
- ✧ Small size
- ✧ Full-time job
- ✧ Low standing wave, anti-interference

2. Application of WIFI Antenna

- ✧ Mobile devices such as mobile phones, laptops, netbooks, etc.

3. WIFI Antenna Performance Parameters

Electrical Specifications		Mechanical properties	
Product name	WIFI Internal Antenna	Size	47×7mm
Frequency range	2400-2483MHz	Antenna material	PCB
Input impedance	50Ω	Connector	IPEX
V.S.W.R	≤2	Cable	RF 1.13
Gain	2-3dBi	Cable length	180mm
Polarization	Vertical	Operating Temp.	-40℃ ~ +80℃
Directionality	Omnidirectional	Storage Temp.	-45℃ ~ +85℃

4. RG-1.13 Line Specifications

4.1 SCOPE:

The specification covers FEP insulated High-Frequency coaxial cable for internal wiring of electronic equipment.

[UL STYLE 1354 80℃/30V]

USE: Internal wiring of Class 2 Circuits of Electronic Equipment

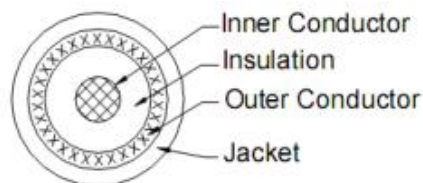
4.2 Construction

Item		Unit	Spec. Value
Inner Conductor	Material	---	Silver plated copper
	Contruction	No./mm	7/0.08
	Dia.(approx)	mm	0.24
Insulation	Material	---	FEP
	Nom. Thickness	mm	0.22
	Dia.(approx)	mm	0.68±0.05

	Color	---	Natural
Outer Conductor	Type	---	Braid
	Material	---	Silver plated copper
	Coverage	%	>93
	Dia.(approx)	mm	0.93
Jacket	Material	---	FEP
	Nom. Thickness	mm	0.10
	Color	---	Gray
	Dia.(approx)	mm	1.13+0.10/-0.06

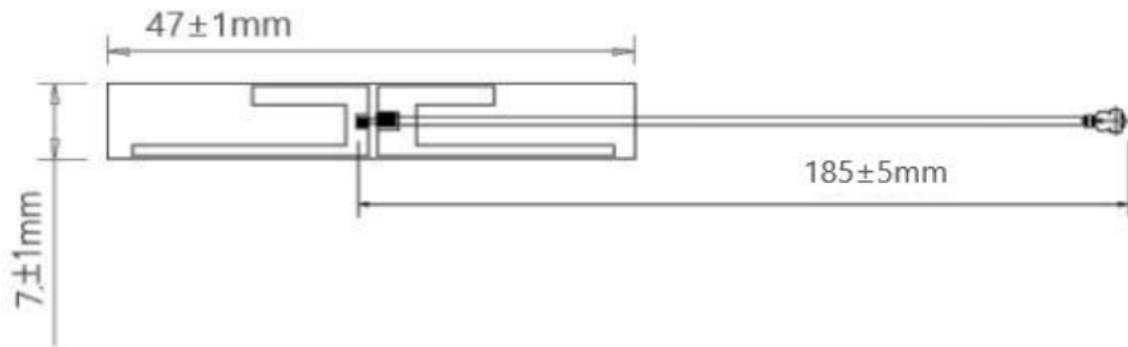
4.3 Characteristics

Test Item	Unit	Specified Value	Note
Appearance	-	Faultless in visible	-
Temperature rating	℃	150	-
Voltage Rating	V	250	-
Inner Conductor Resistance(at 20℃)	Ω/km	Max. 597	at 20℃
Insulation Resistance 1>(at 20℃)	MΩ-km	Min. 1500	at 20℃
Dielectirc strength		Delectirc core: No breakdown at AC 1.5KV for 0.15sec	Spark test
		Jacket: No breakdown at AC 1.5KV for 0.15sec	Spark test
		No breakdown at AC 500V for 1min	Outer conductor to inner conductor
Capacitance	pF/m	Nom. 98	At 1KHz
Characteristic impedance (at D-TDR)	Ω	50±2	TDR Method
Attenuation	dB/m	2.0	1.0GHz
		2.9	2.0GHz
		3.6	3.0GHz
		4.2	4.0GHz
		4.7	5.0GHz
		5.2	6.0GHz



Cross section of cable

5. Product Structure Drawings (mm)

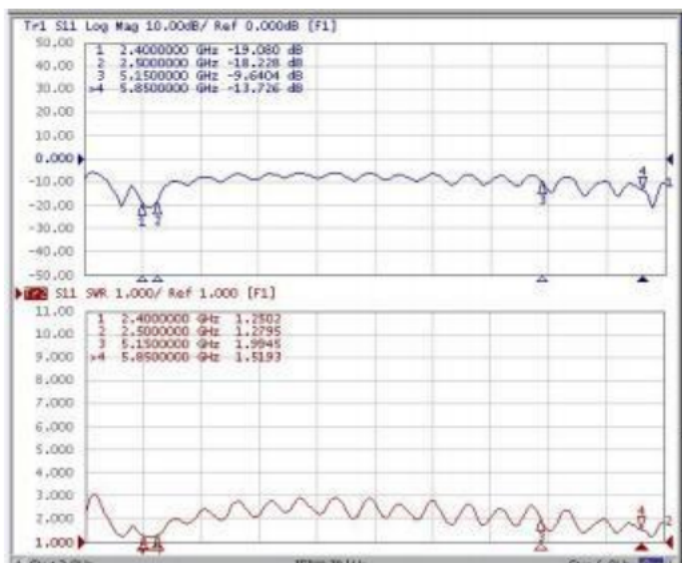


6. Gain efficiency test data

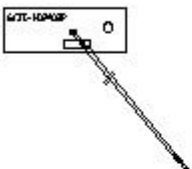
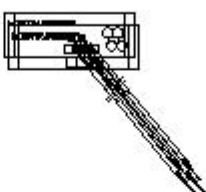
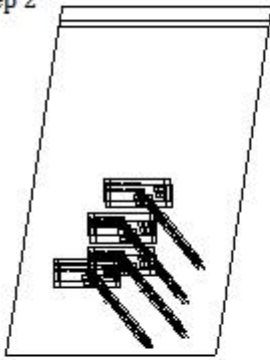
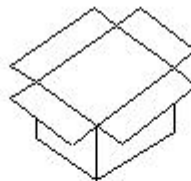
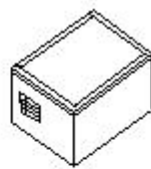
Passive Test for 2400-2500		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	58.35	1.61
2410	58.12	1.82
2420	55.78	1.65
2430	58.33	1.71
2440	62.35	1.01
2450	67.65	1.22
2460	67.18	1.32
2470	63.67	1.08
2480	65.95	1.28
2490	67.33	1.61
2500	65.33	1.72

Passive Test for 5150-5850		
Freq (MHz)	Effi (%)	Gain (dBi)
5150	46.07	1.19
5220	50.8	1.23
5290	48.63	1.75
5360	64.99	1.82
5430	53.68	1.80
5500	53.96	1.68
5570	52.06	1.78
5640	44.09	1.36
5710	49.17	1.35
5780	50.35	1.3
5850	51.14	1.42

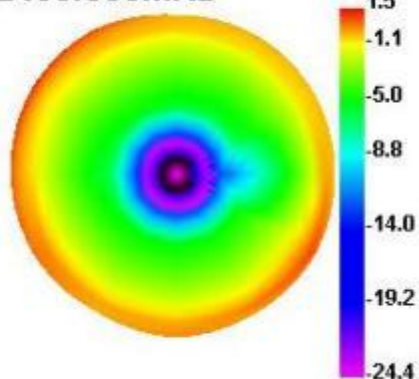
7. Standing Wave Ratio Test Pattern



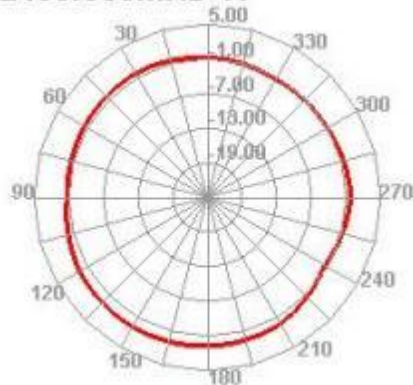
8. Package

 Finished Product	Step 1  Wrap the end of the girdling end with foam paper every 100pcs, then tie it with a rubber ring	
Step 2  10 ties each plastic bag (300 * 450mm), the quantity is 1000pcs; put the product with the apron (10 ties) into the plastic bag, put it neatly, seal it, and stick quantity label	Step 3  2 plastic bags per box 2000pcs per box	Step 4  Stick label on the outside of the box, seal

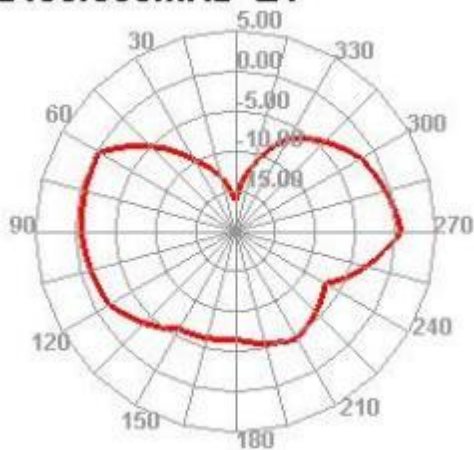
2400.000MHz



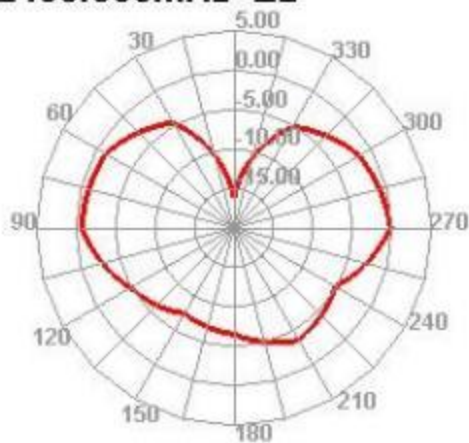
2400.000MHz H



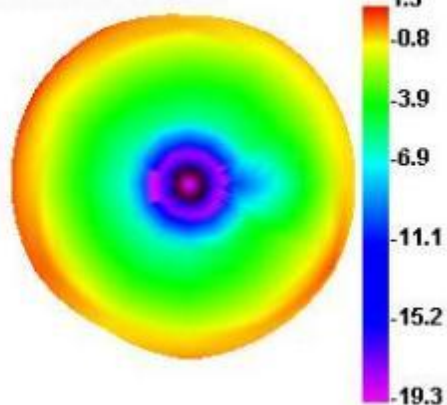
2400.000MHz E1



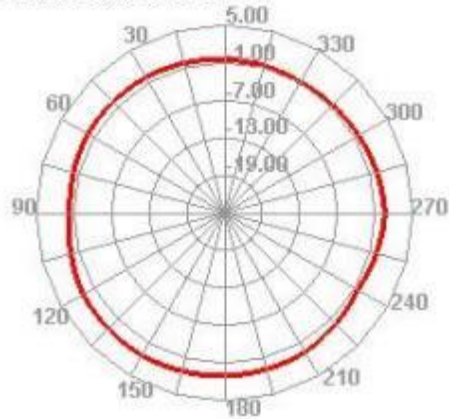
2400.000MHz E2



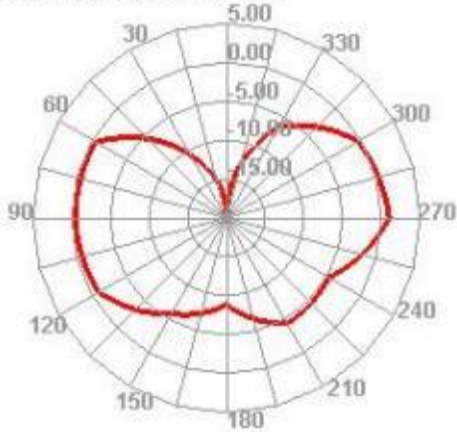
2450.000MHz



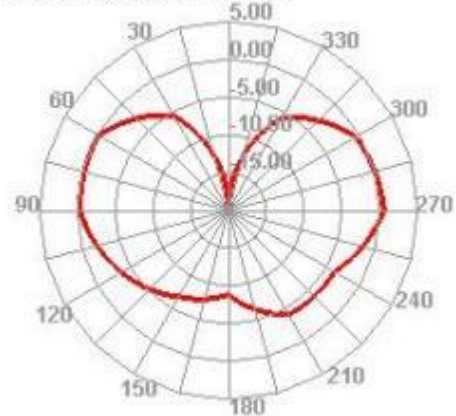
2450.000MHz H



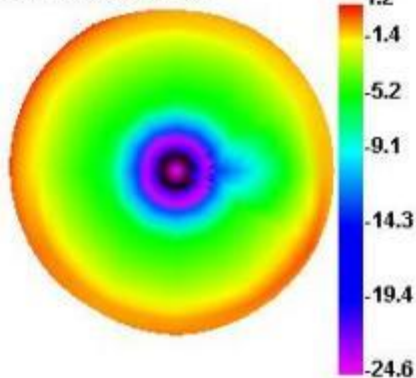
2450.000MHz E1



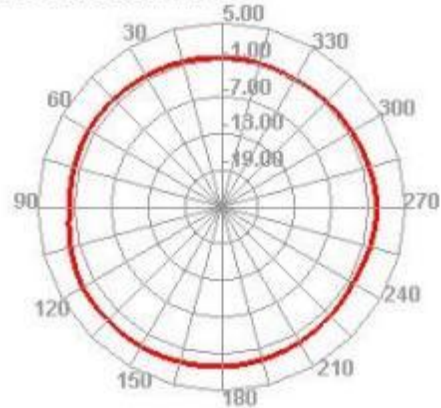
2450.000MHz E2



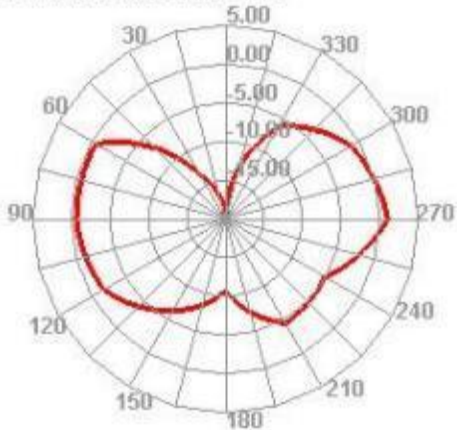
2500.000MHz



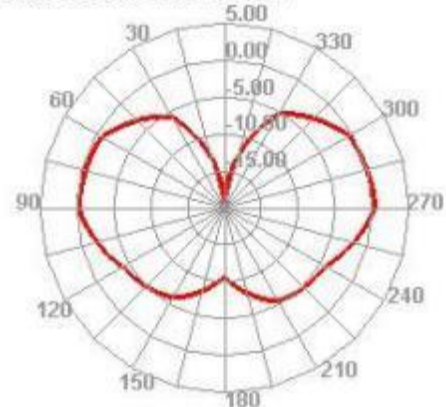
2500.000MHz H



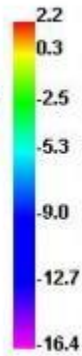
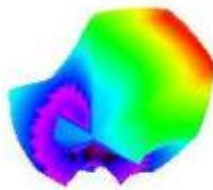
2500.000MHz E1



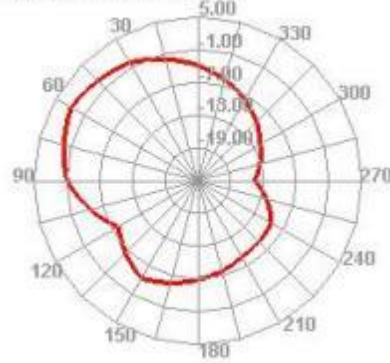
2500.000MHz E2



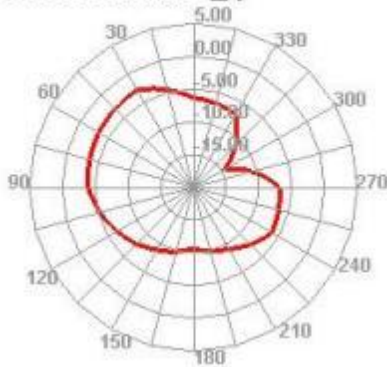
5150.000MHz



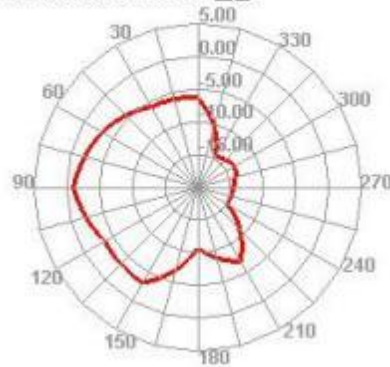
5150.000MHz H



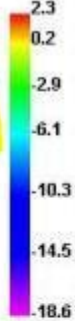
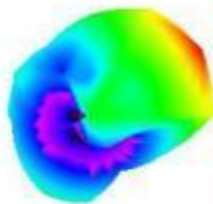
5150.000MHz E1



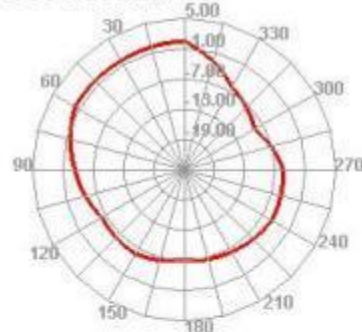
5150.000MHz E2



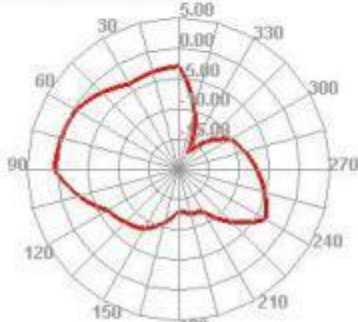
5850.000MHz



5850.000MHz H



5850.000MHz E1



5850.000MHz E2

