产品规格书
Product Specification

产品名称 Product Number	2.4G PCB built-in aerial	编号 Serial Number	2023090702
产品型号 Product Type	AP477-2.4G-1I185-1.13	版本号 Version Number	1.0
		物料编码 Materiel Number	

变更履历表
Description Record

序号 NO:	版本号 Version number	更改前描述 Description Before Modification	更改后描述 Description After Modification	日期 Date
1	1.0	/		2023.09.07

备注note：

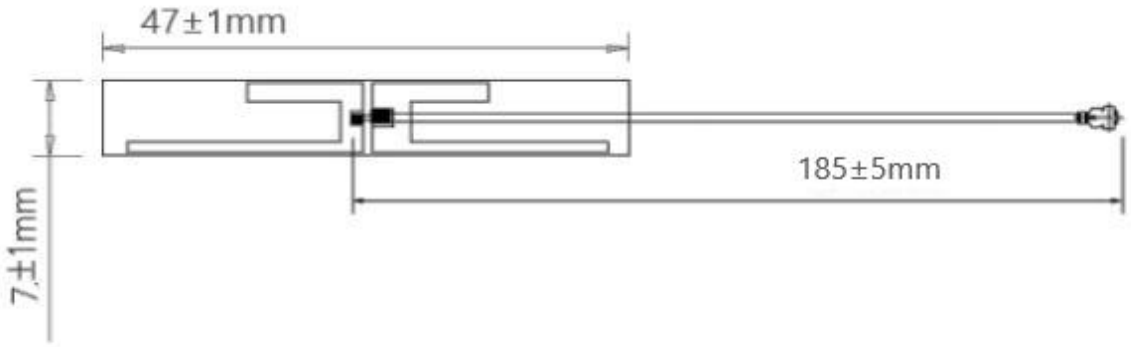
一、 产品介绍：Product introduction

- 外观 精美 Exquisite appearance
- 体积小 small volume
- 全天侯工作 All-weather work
- 低 驻 波 、 抗干 扰 Low standing wave, anti-interference

二、 天线技术参数：technical parameter

Design Specifications	Typical
Antenna form	2.4G PCB built-in aerial
工作频率(Working Frequency)	2400-2500
增益 (Gain)	>1.0dBi
天线效率(Antenna efficiency)	40%
电压驻波比(VSWR)	≤2.0
极化方式(Ploriaztion)	vertical
辐射方向(Radiation pattern)	omnidirection
馈电阻抗(Impedance)	50Ω
功率容量(Power Capacity)	3W
天线接口(Interface)	IPEX I
天线尺寸(Overal dimensions)	47*7mm
重量(Weight)	≤10g
工作温度(Operatin Temp)	-40℃~80℃
储存温度(Storing Temp)	-45℃~85℃

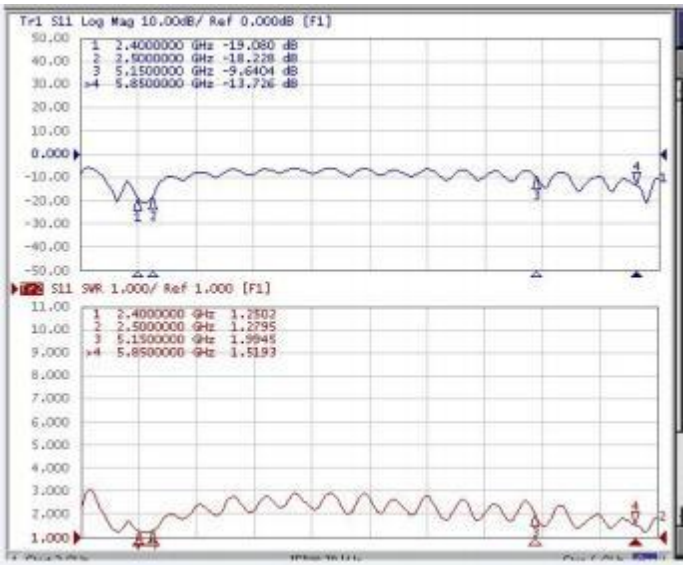
三、产品结构图纸(mm)：

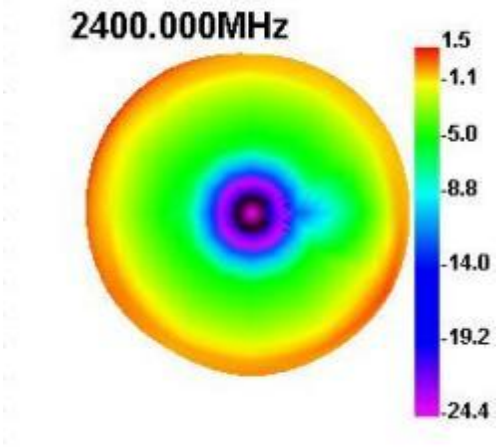


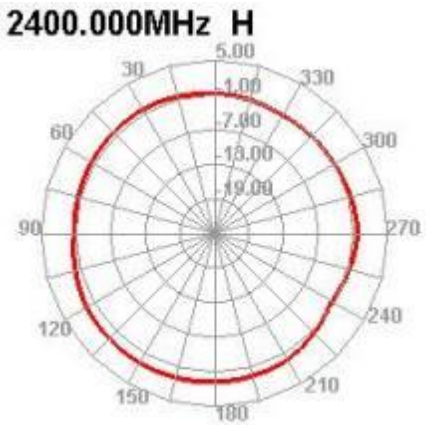
四、增益效率测试数据

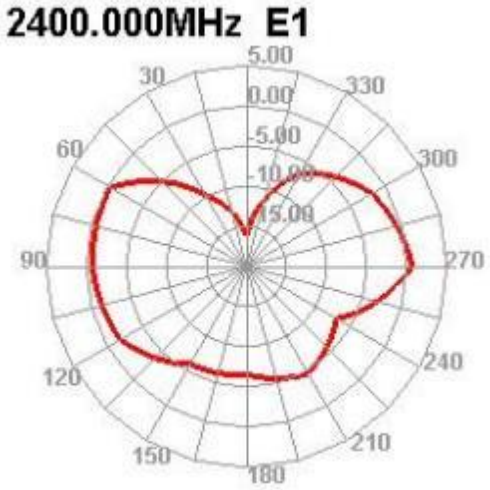
Passive Test for 2400-2500		
Freq (Mhz)	Effi (%)	Gain (dBi)
2400	58.35	1.61
2410	58.12	1.85
2420	55.78	1.65
2430	58.33	1.71
2440	62.35	1.01
2450	67.65	1.22
2460	67.18	1.32
2470	63.67	1.08
2480	65.95	1.28
2490	67.33	1.61
2500	65.33	1.72

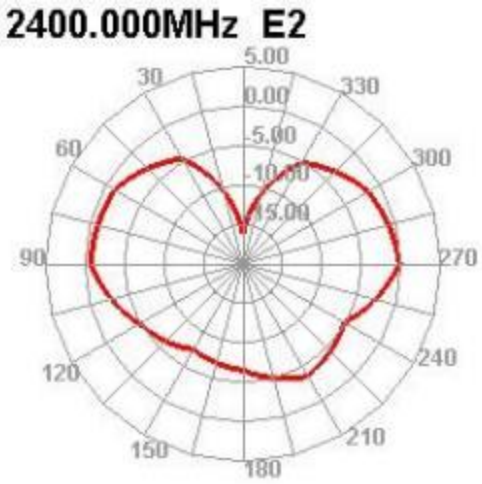
五、驻波比测试图

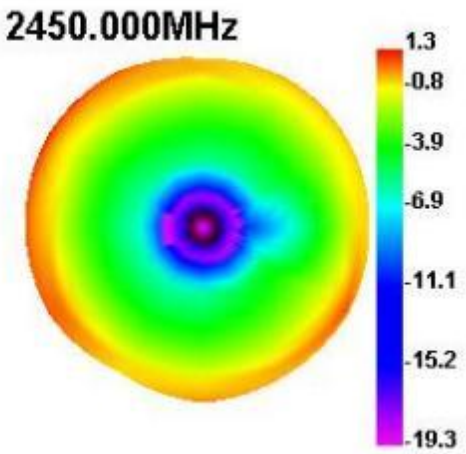


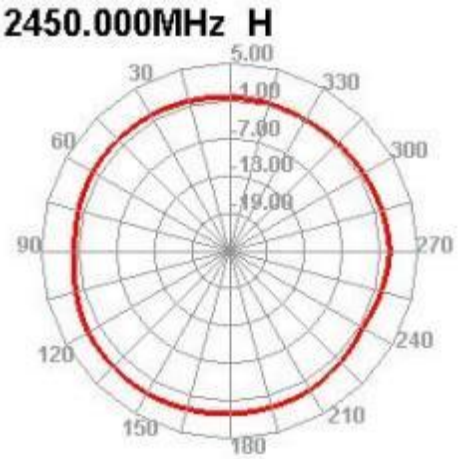

2400.000MHz
1.5
-1.1
-5.0
-8.8
-14.0
-19.2
-24.4


2400.000MHz H
5.00
-1.00
-7.00
-13.00
-19.00
30
330
60
300
90
270
120
240
150
210
180

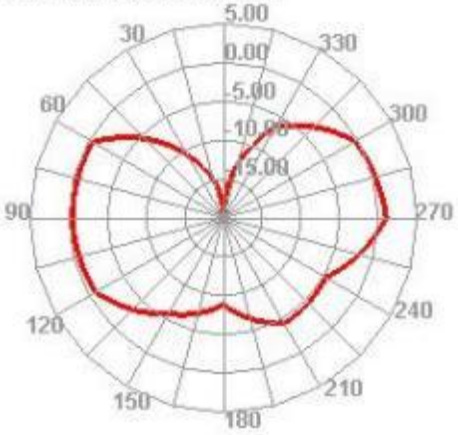

2400.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180


2400.000MHz E2
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180

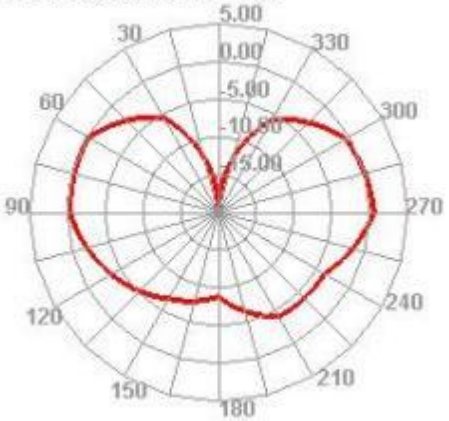

2450.000MHz
1.3
-0.8
-3.9
-6.9
-11.1
-15.2
-19.3


2450.000MHz H
5.00
-1.00
-7.00
-13.00
-19.00
30
330
60
300
90
270
120
240
150
210
180

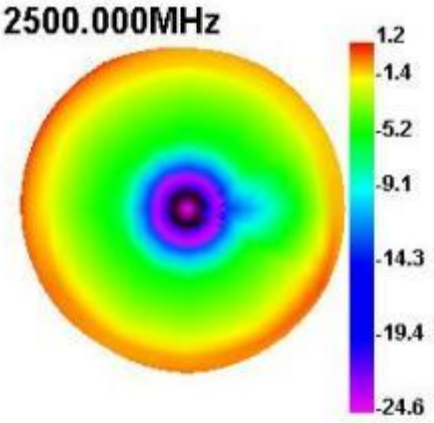
2450.000MHz E1



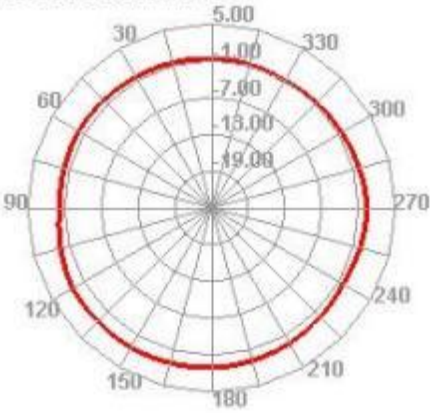
2450.000MHz E2



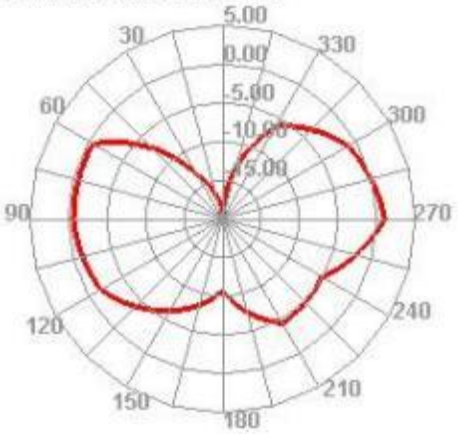
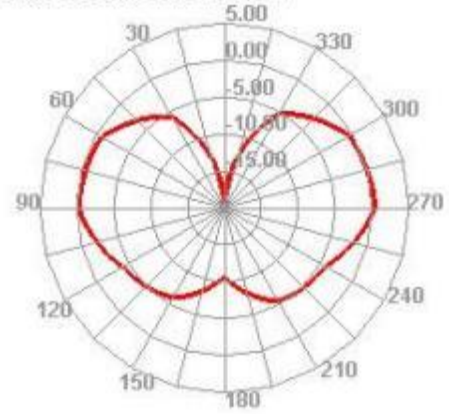
2500.000MHz



2500.000MHz H



2500.000MHz E1



2500.000MHz E2