

**Product : Internal Antenna**

**Model Name : WTATTRW2**

**Date : 2023.06.14**

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## 1. Manufacturer

- Kunshan Innwave Communication Technology Co.,Ltd
- Huizhou speed wireless technology co.,ltd.

## 2. Model Name

- Basic Model: WTATTRW2

## 3. Antenna Type

IFA

## 4. Electric Performance Data

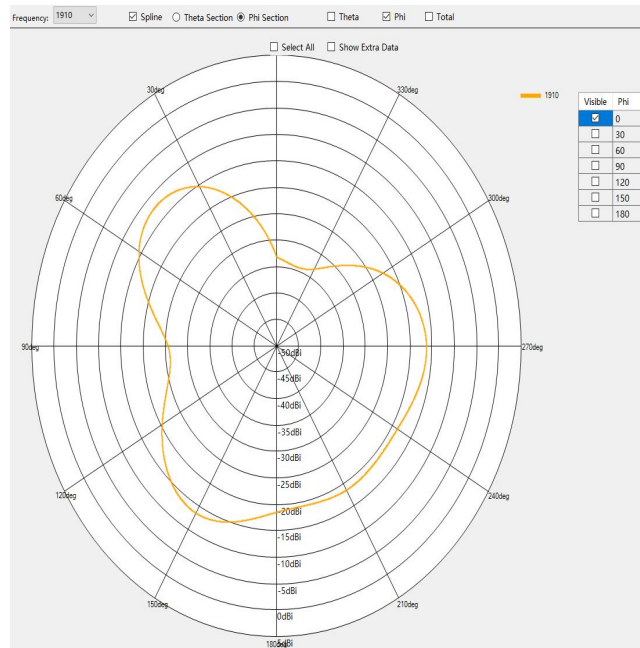
### 4.1 Specification Sheet

#### Electronic Specification

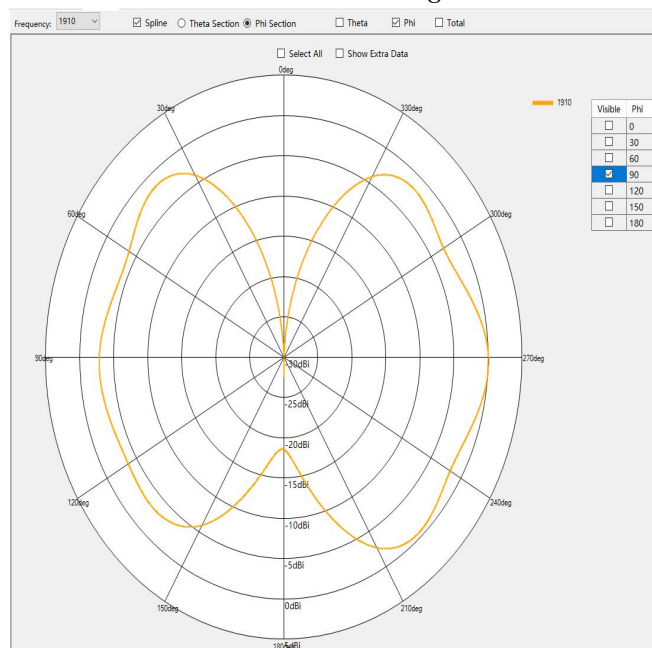
Band	Avg gain(dBi)	Max gain (dBi)	Type
WCDMA B1	0.5	1.5	FPC
WCDMA B2	1.2	1.5	FPC
WCDMA B4	1	2.1	FPC
WCDMA B5	-0.6	0.4	FPC
WCDMA B8	0.3	1.2	FPC
LTE B2	1.2	1.5	FPC
LTE B3	1.6	2.1	FPC
LTE B4	1	2.1	FPC
LTE B5	-0.6	0.4	FPC
LTE B7	-0.6	1	FPC
LTE B12	-1.7	-1	FPC
LTE B14	-1.1	-0.7	FPC
LTE B20	-0.8	-0.1	FPC
LTE B30	0.2	0.7	FPC
WiFi 2.4G	0.75	1.63	FPC
WiFi 5G	-0.8	0.2	FPC
BT	0.75	1.63	FPC
GPS	0.72	0.99	FPC

## 4.2 Antenna Pattern Drawing

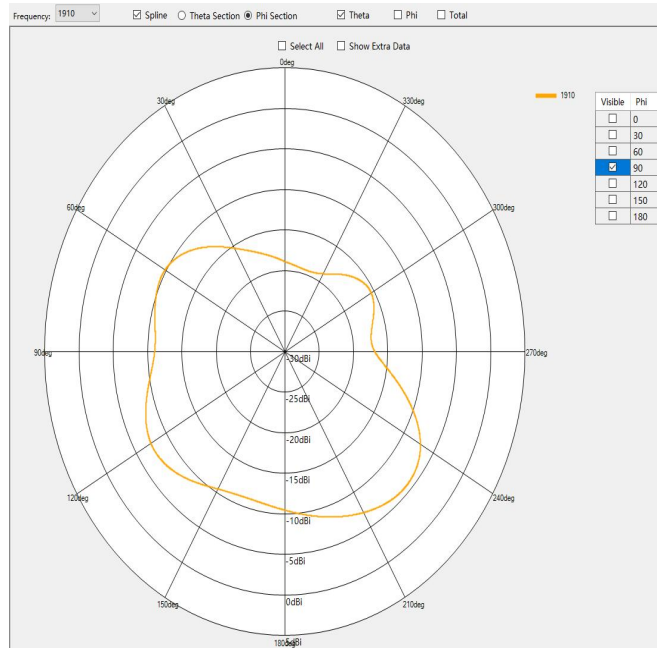
**B2**



Phi=0.00deg

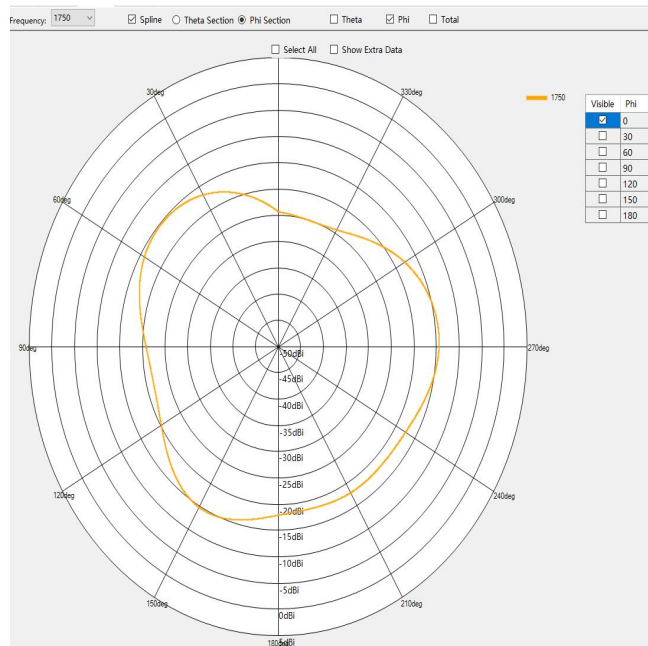


Phi=90.00deg

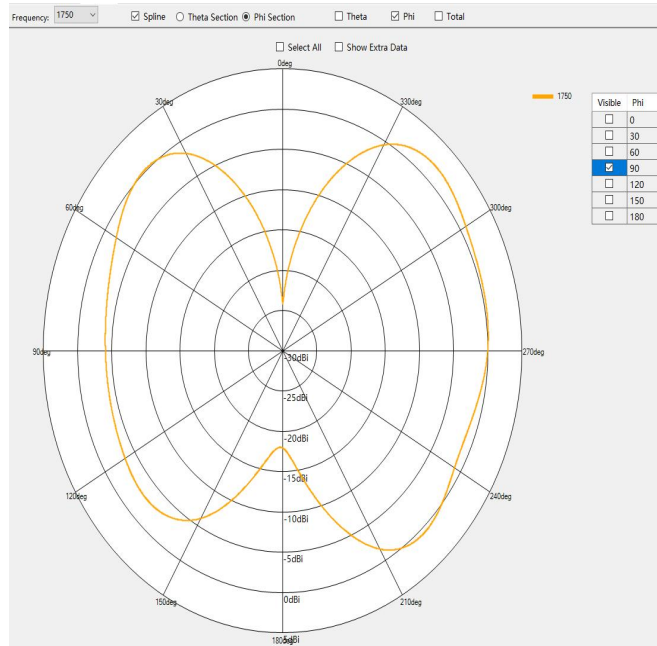


Theta=90.00deg

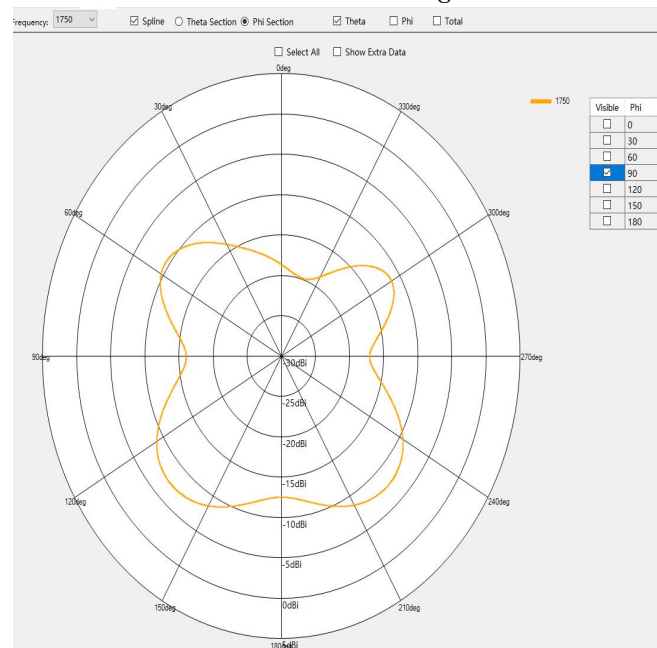
### B3



Phi=0.00deg

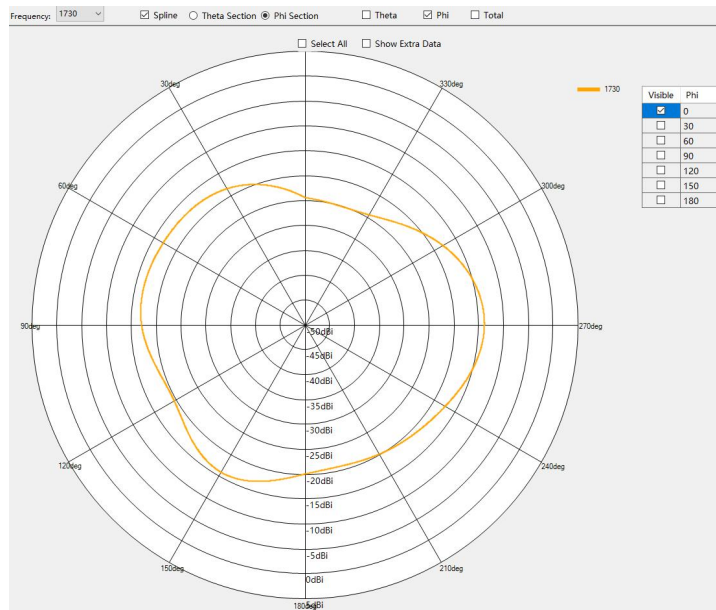


Phi=90.00deg

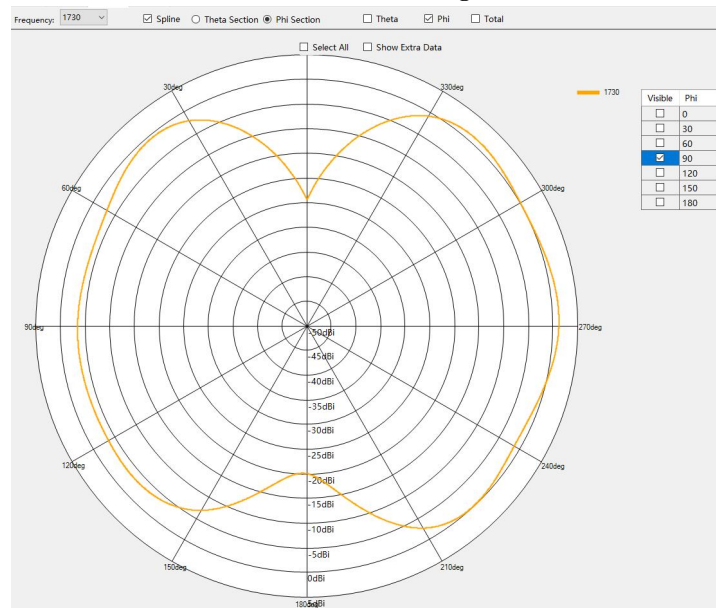


Theta=90.00deg

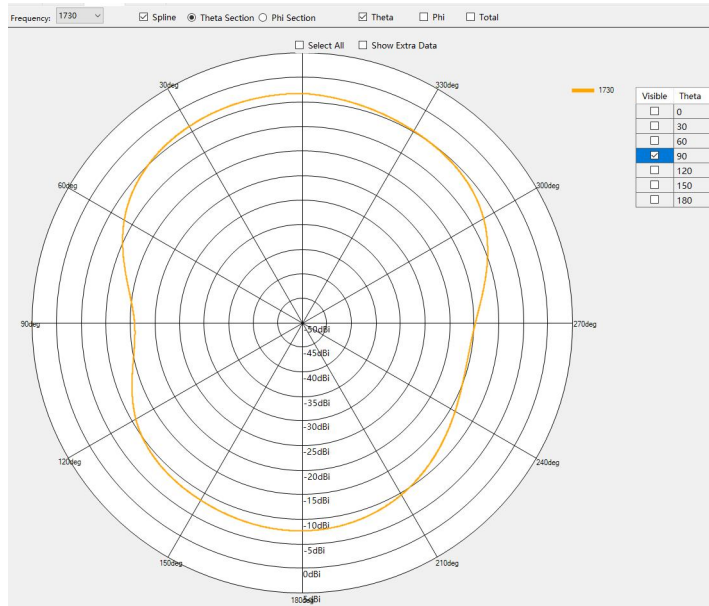
# B4



Phi=0.00deg

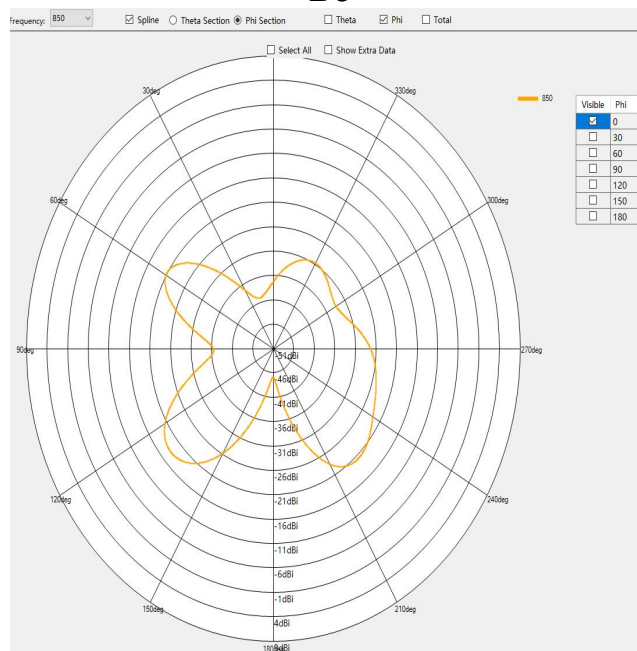


Phi=90.00deg



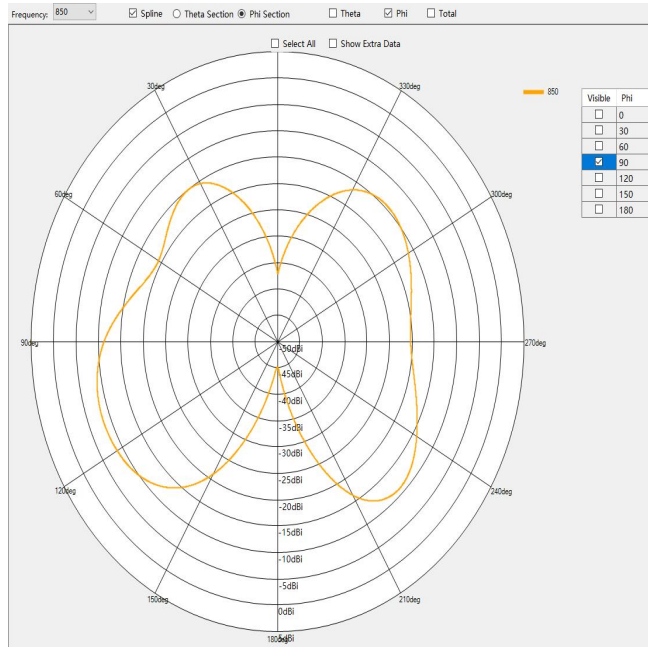
Theta=90.00deg

### B5

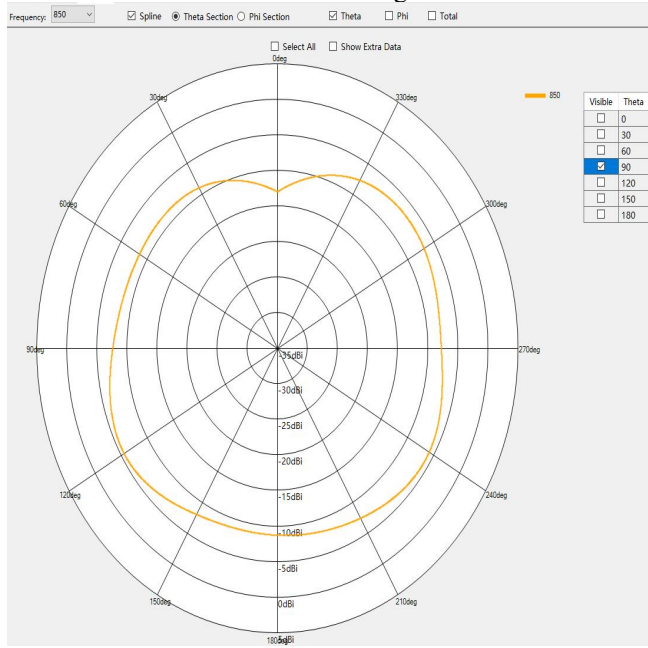


Phi=0.00deg



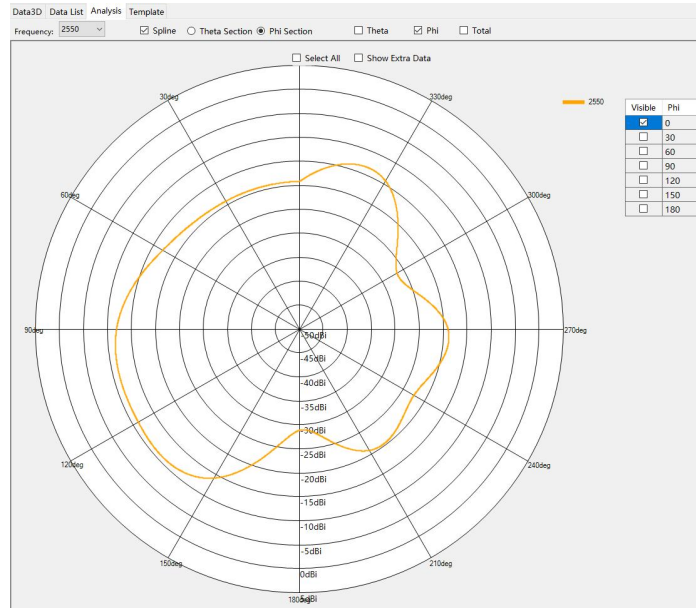


Phi=90.00deg

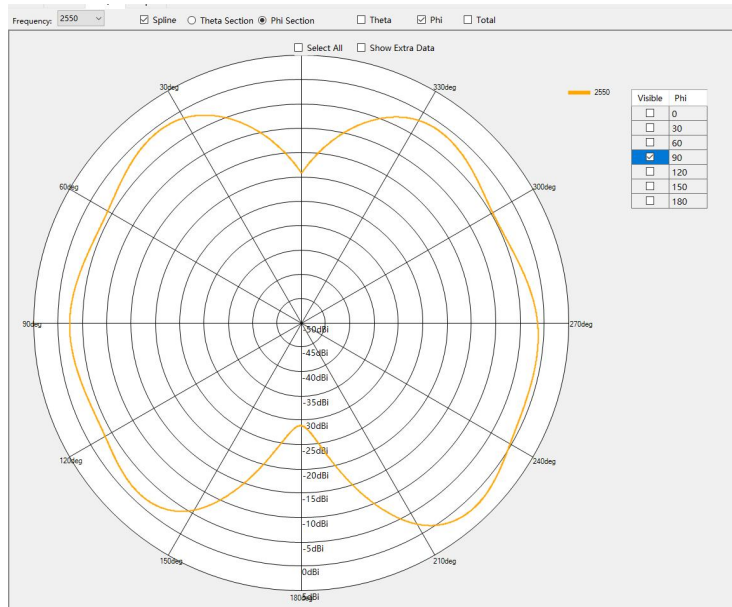


Theta=90.00deg

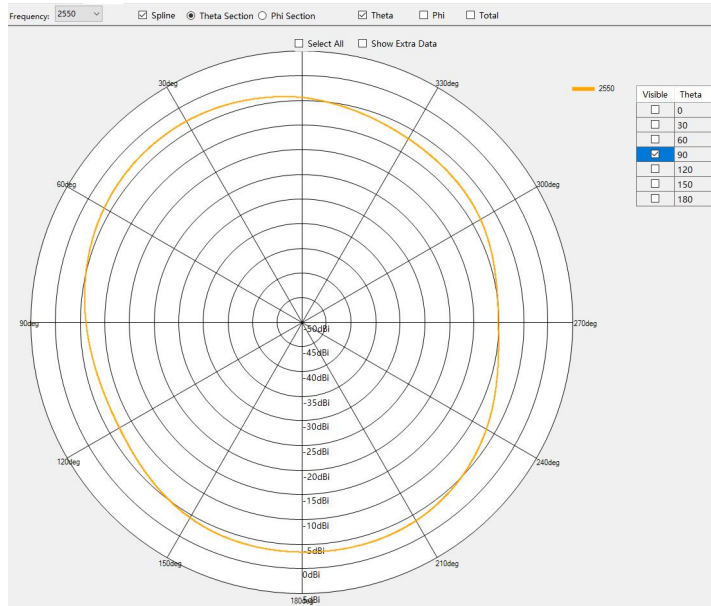
**B7**



Phi=0.00deg

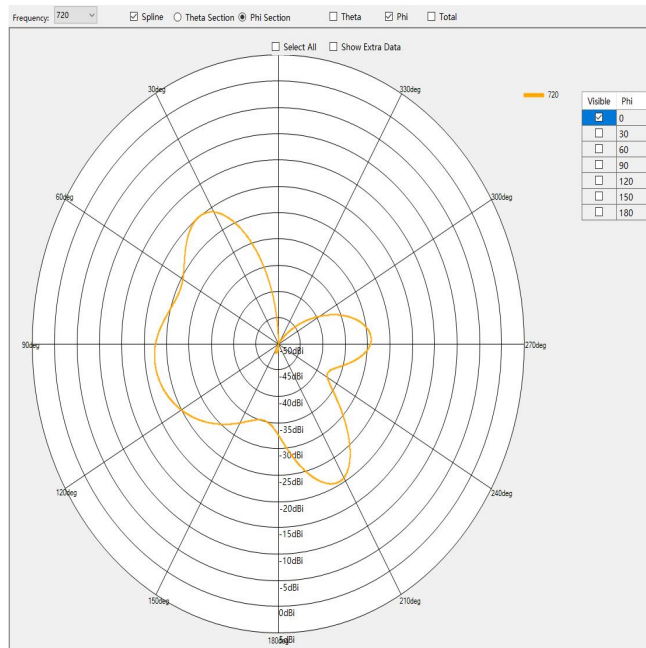


Phi=90.00deg

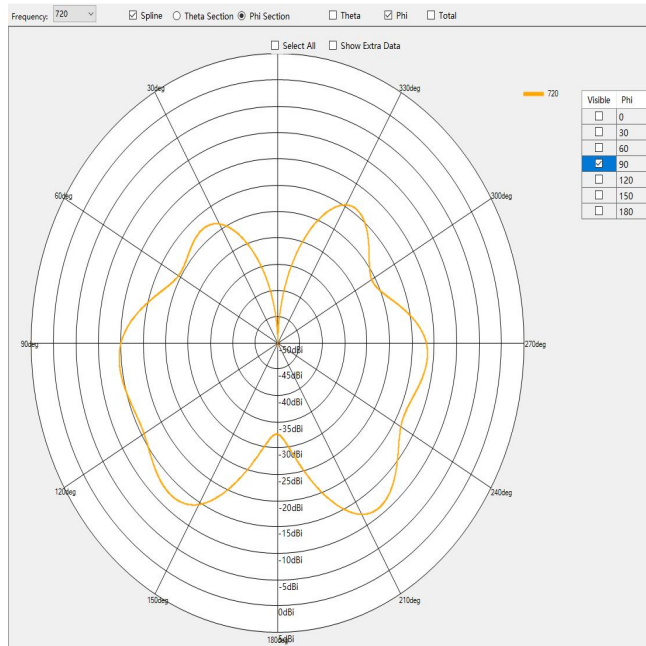


Theta=90.00deg

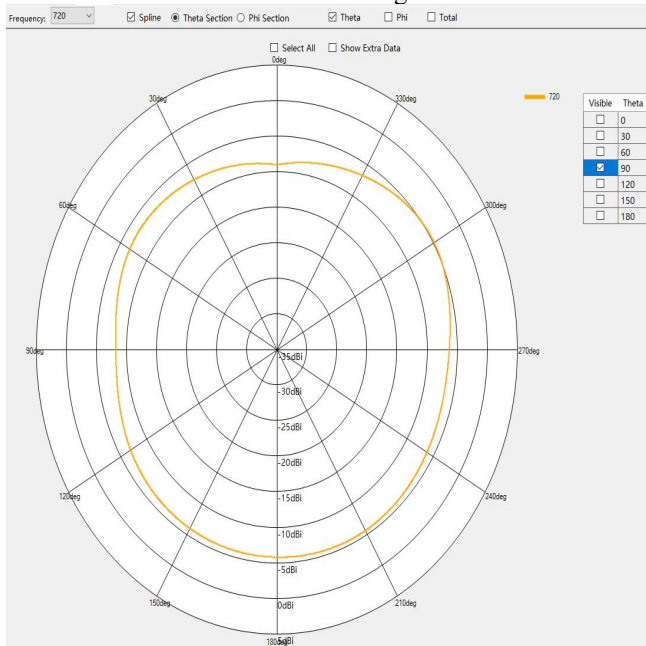
## B12



Phi=0.00deg

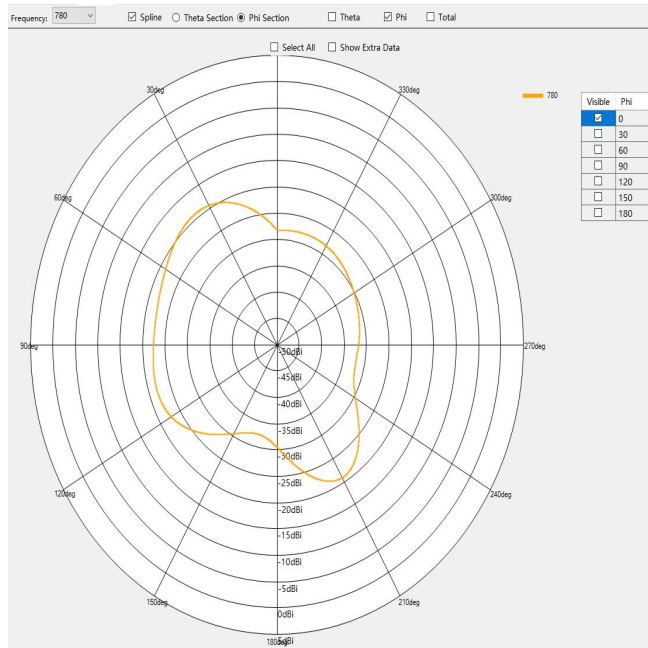


**Phi=90.00deg**

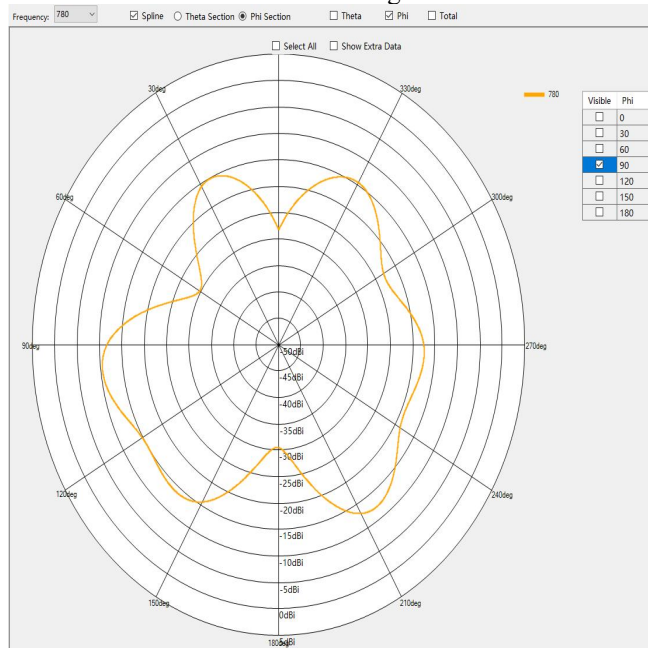


**Theta=90.00deg**

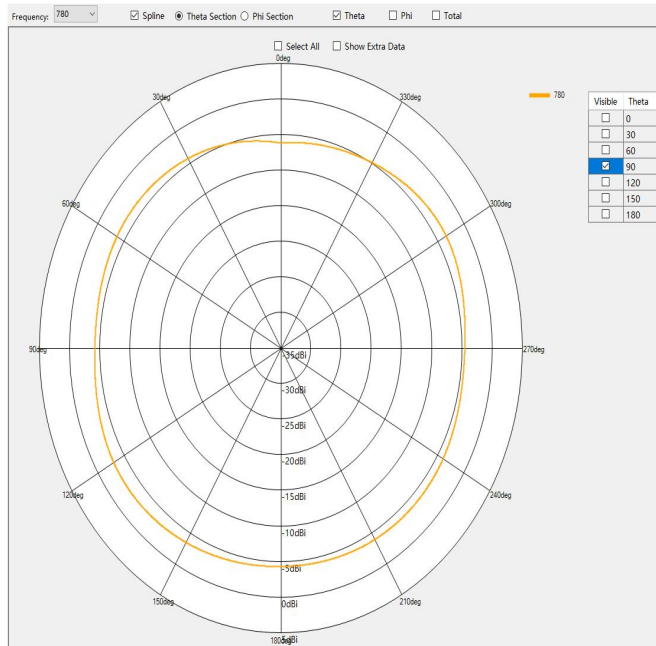
# B14



Phi=0.00deg

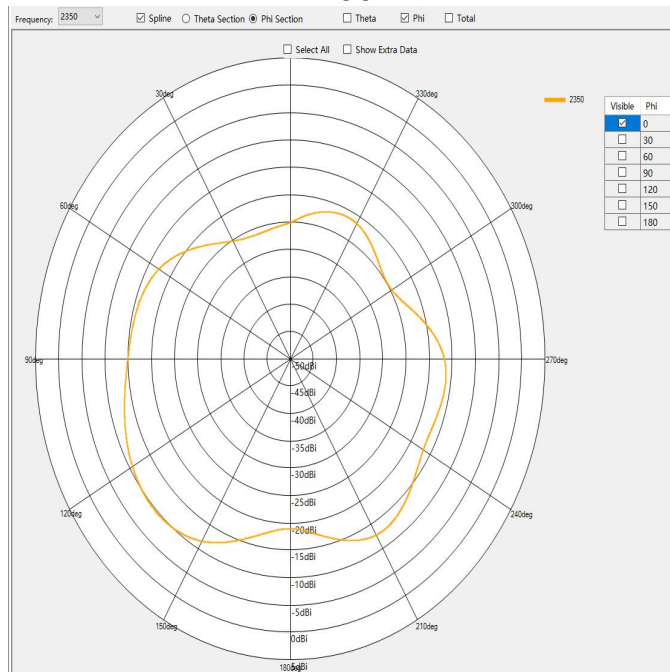


Phi=90.00deg

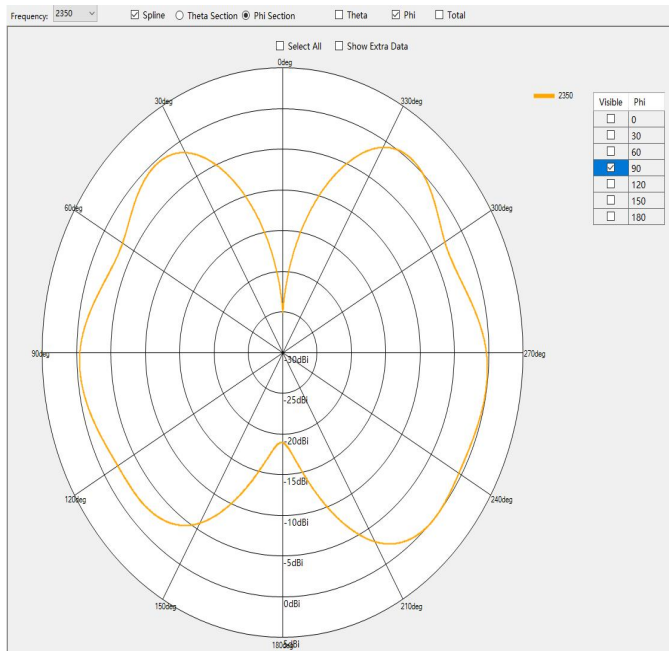


Theta=90.00deg

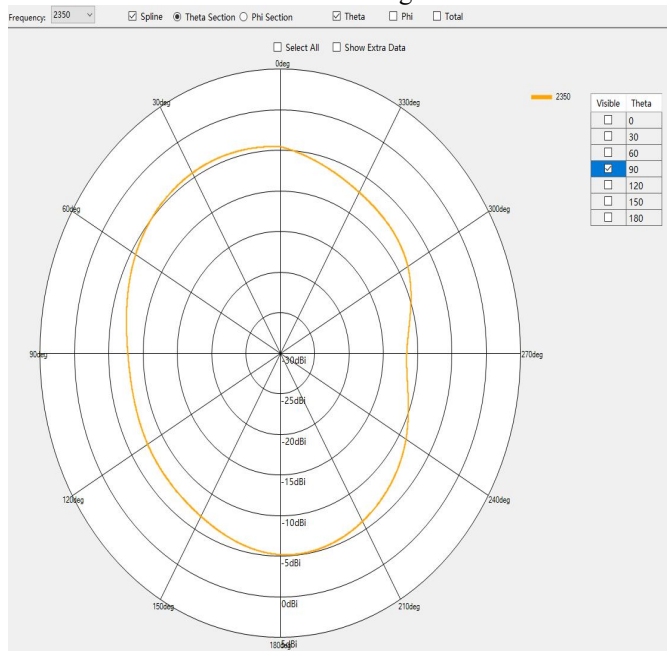
### B30



Phi=0.00deg

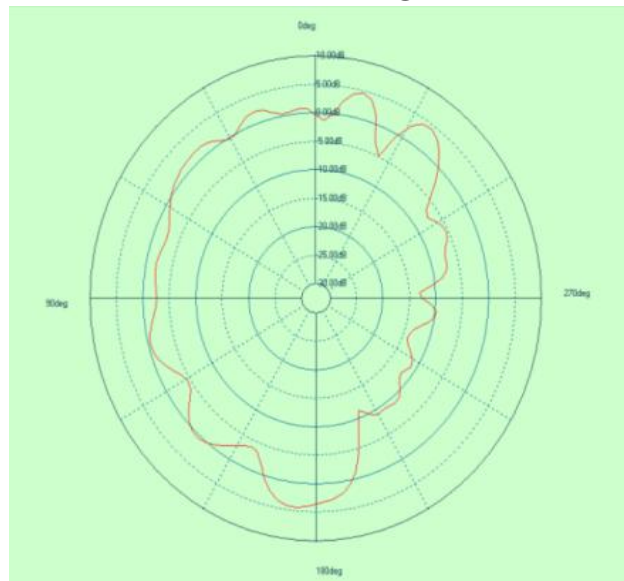


**Phi=90.00deg**

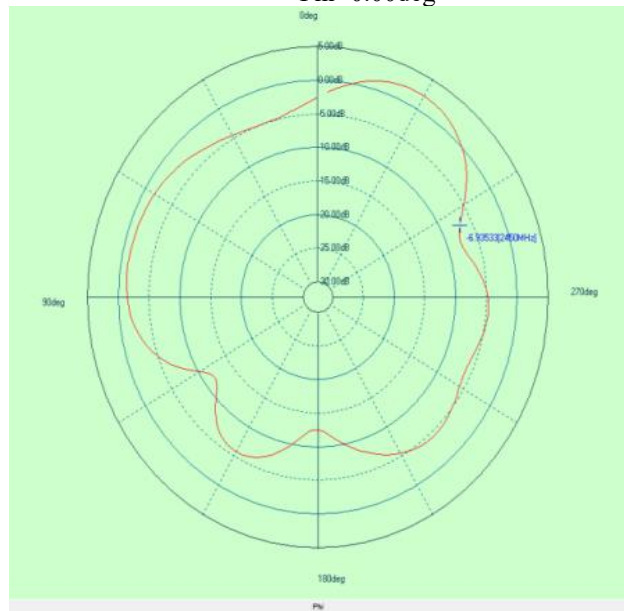


**Theta=90.00deg**

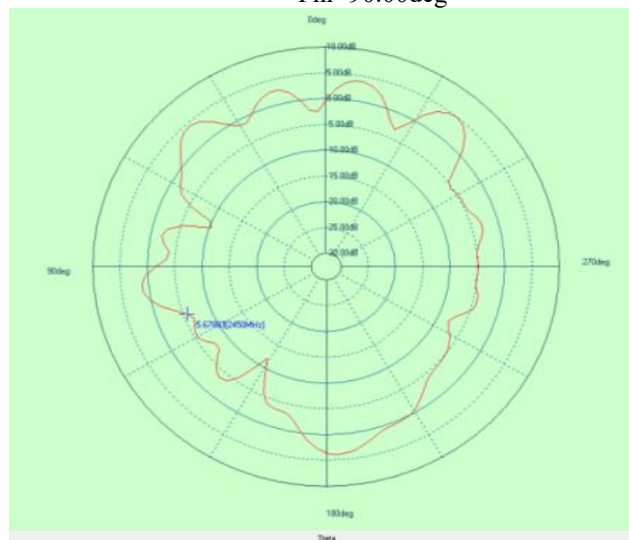
# WIFI 2.4G/BT



$\Phi = 0.00^\circ$



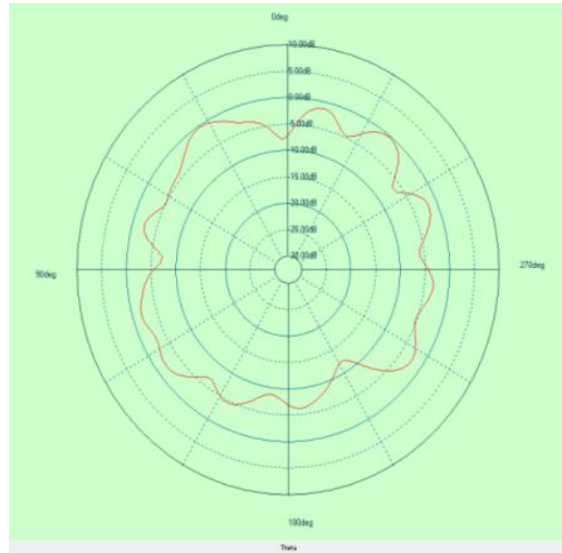
$\Phi = 90.00^\circ$



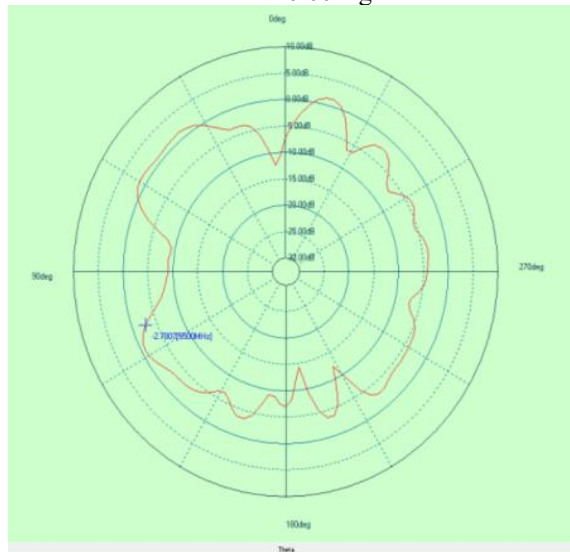


Theta=90.00deg

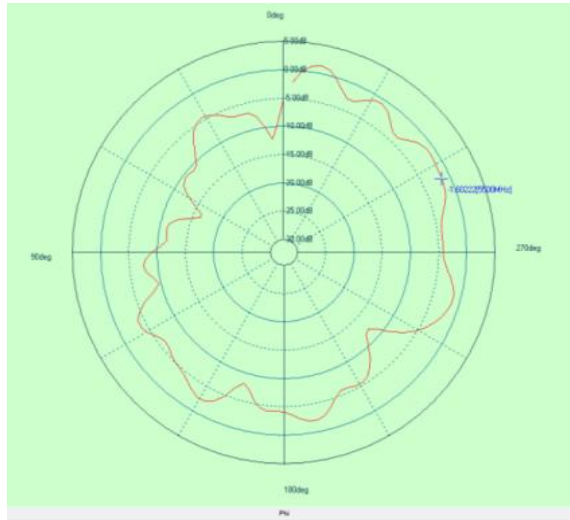
### WIFI 5G



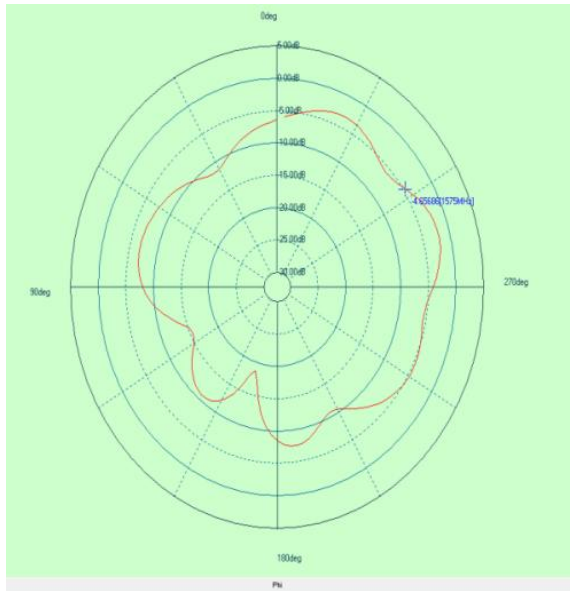
Phi=0.00deg



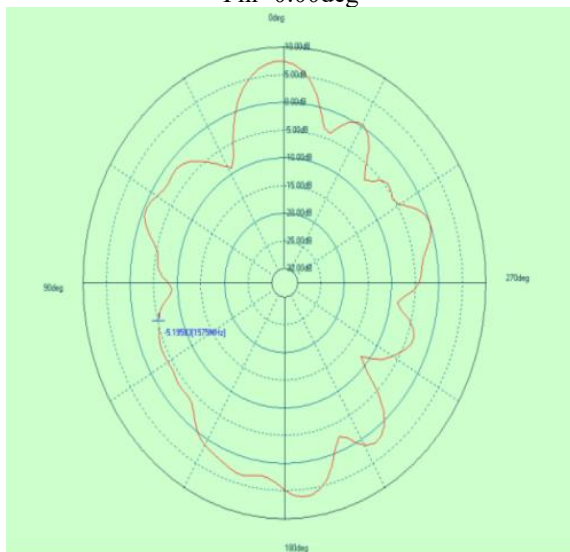
Phi=90.00deg



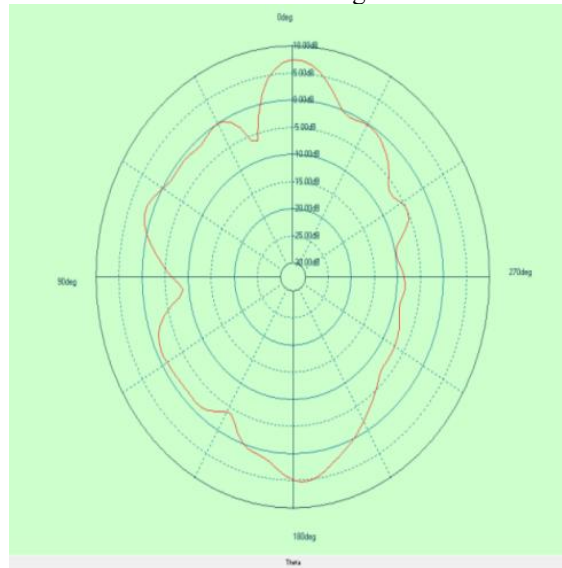
Theta=90.00deg  
**GPS**



Phi=0.00deg



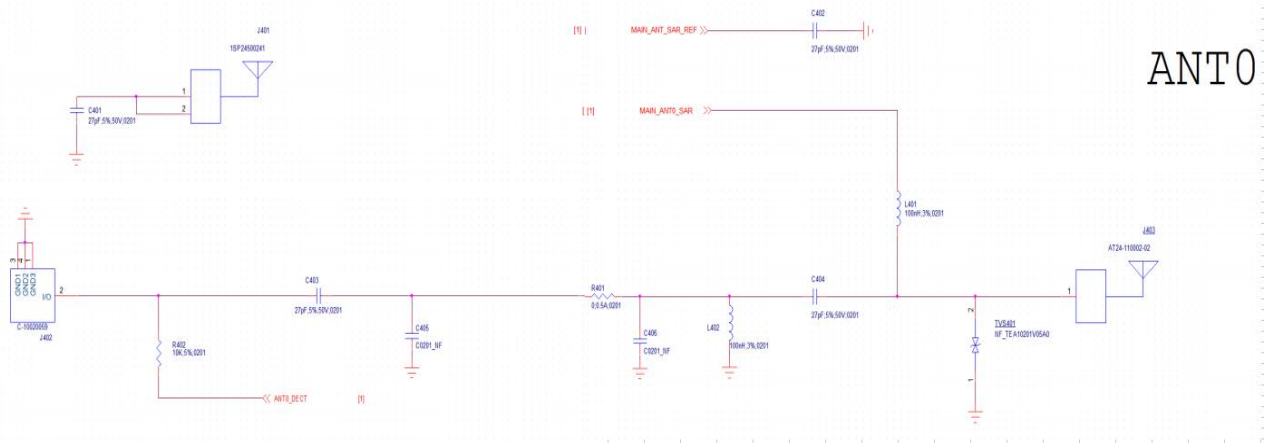
Phi=90.00deg

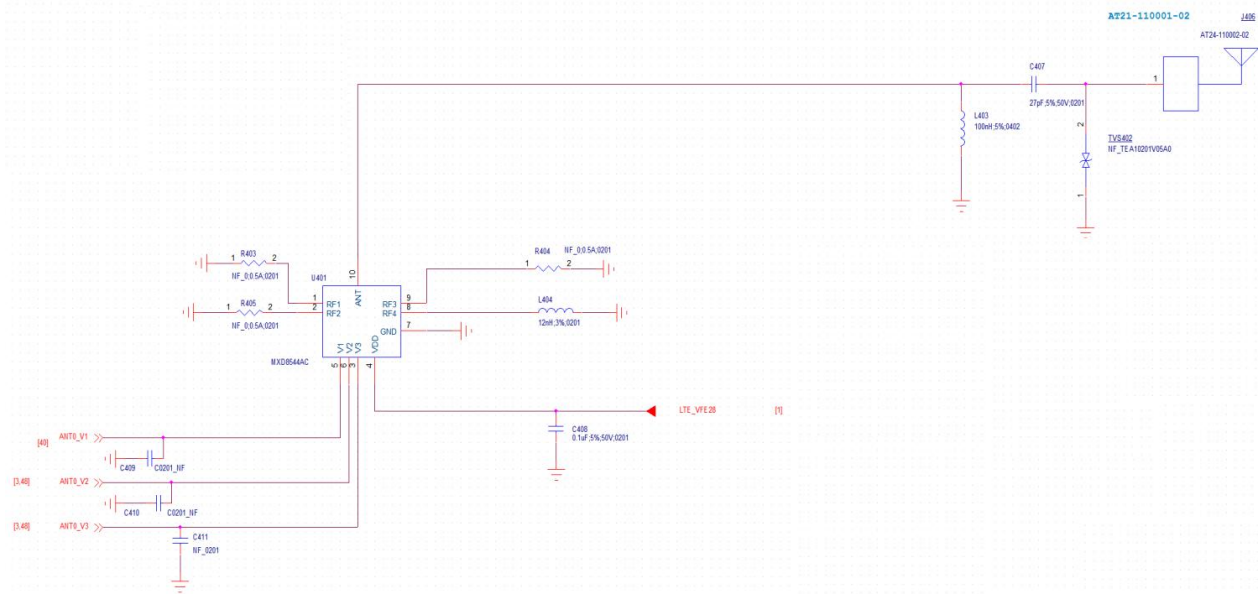


Theta=90.00deg

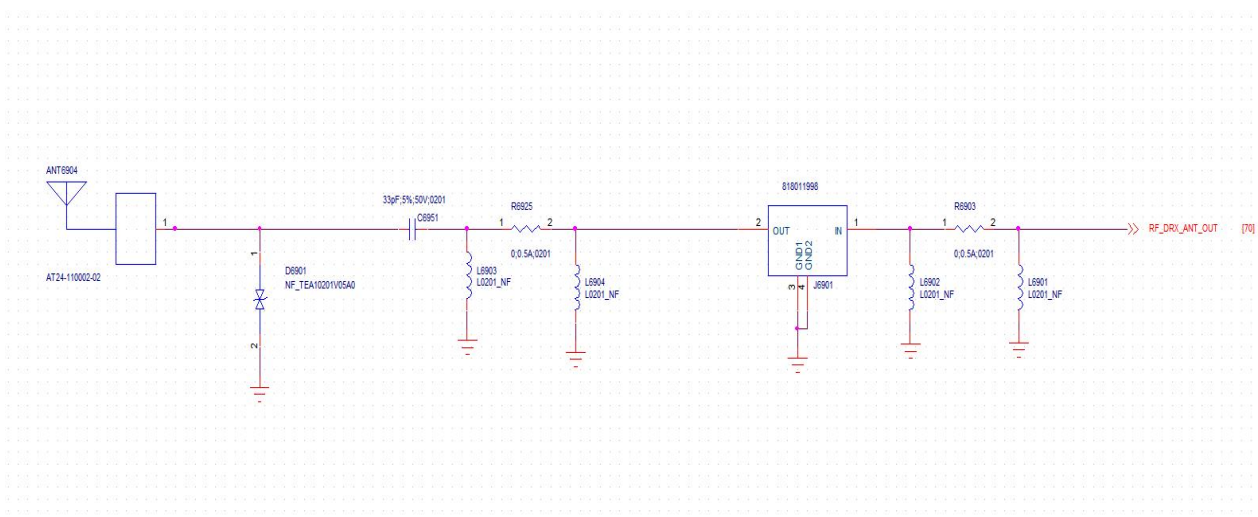
## 5. Matching circuit

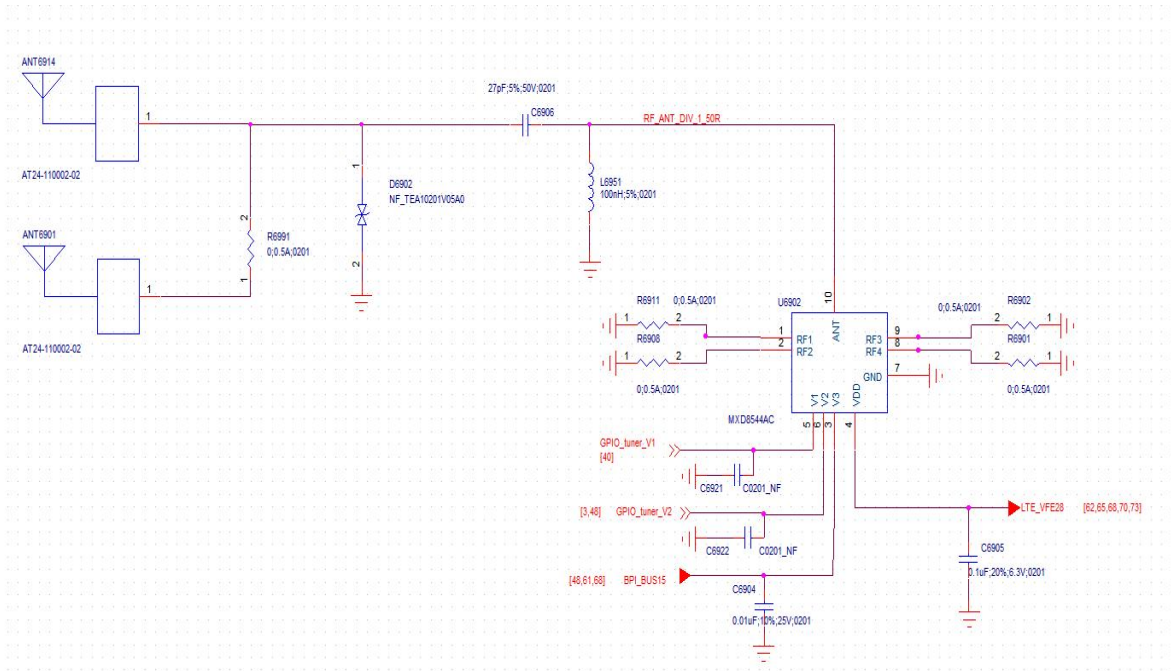
### 5.1 Main Antenna



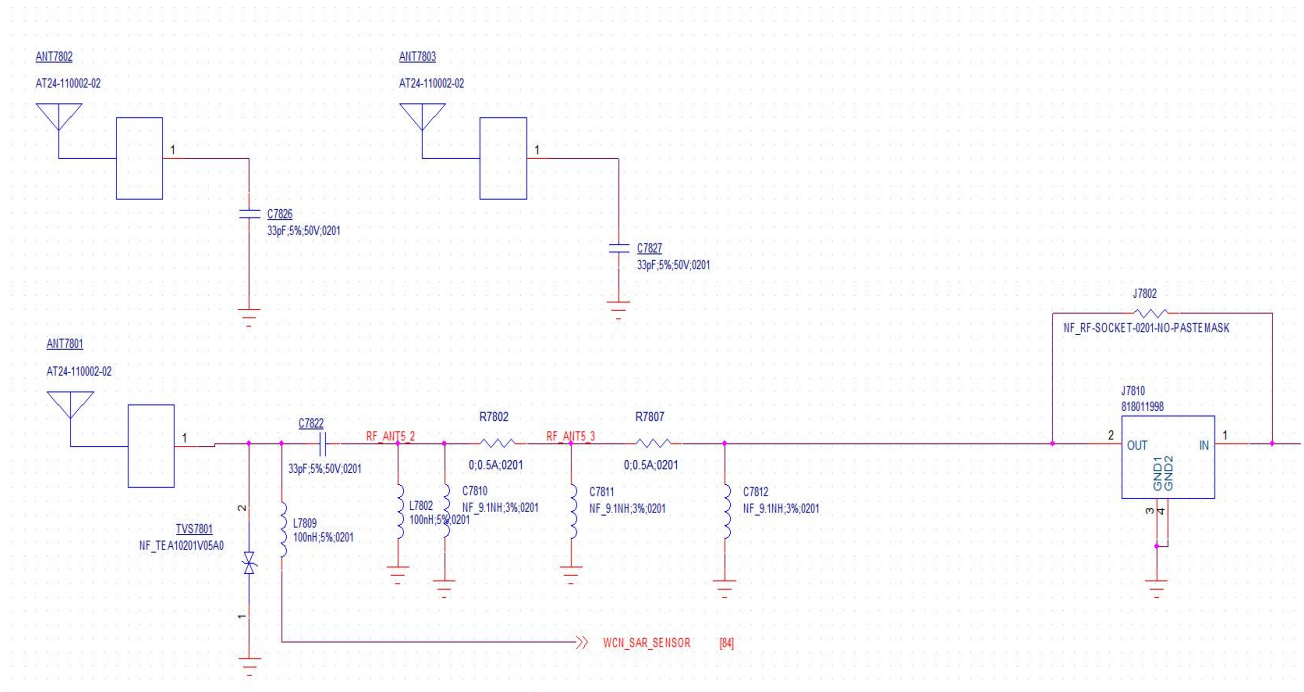


## 5.2 Div Antenna



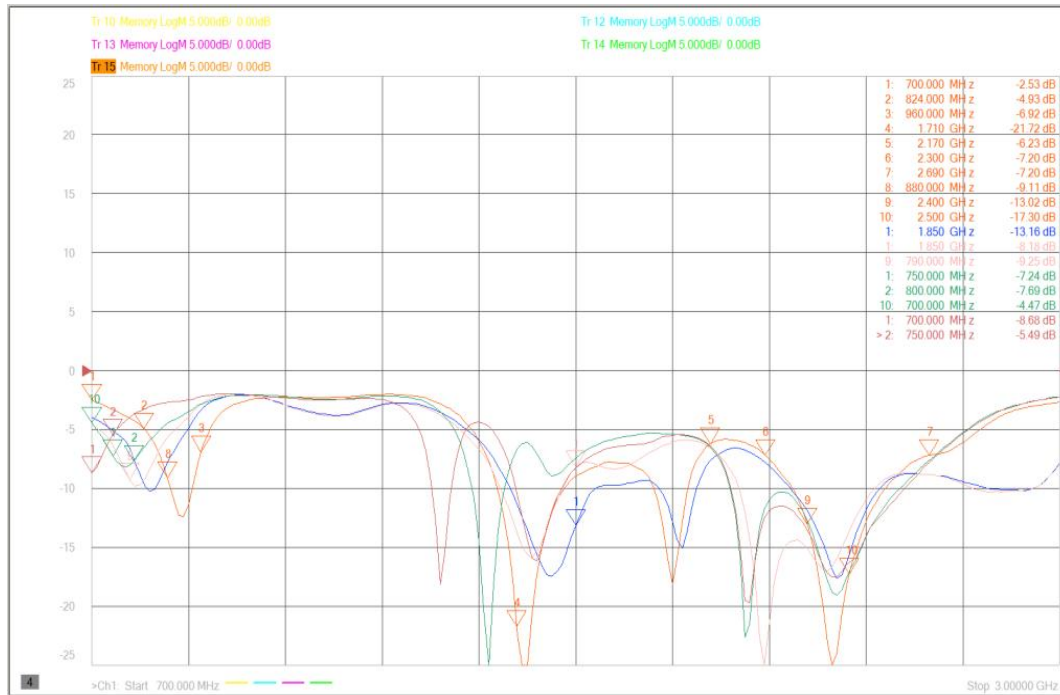


### 5.3 WiFi/GPS/BT Antenna

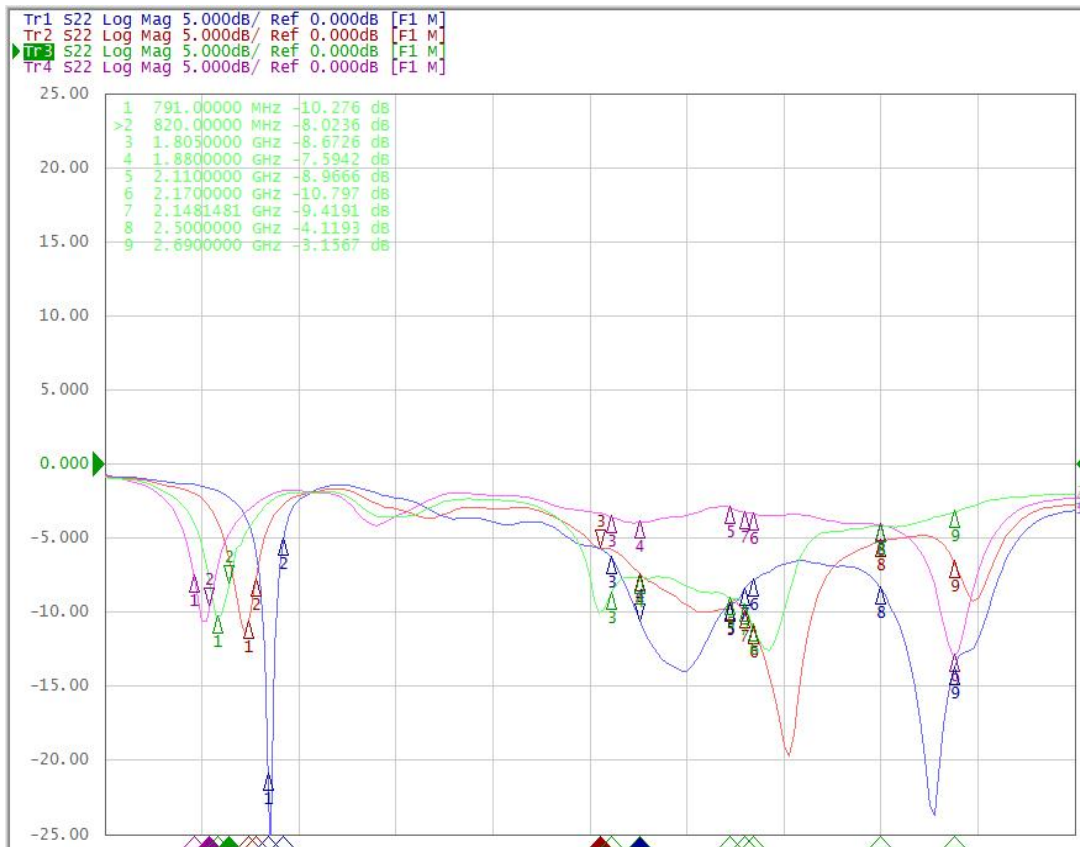


## 6. ElectricalGraph( Returnloss)

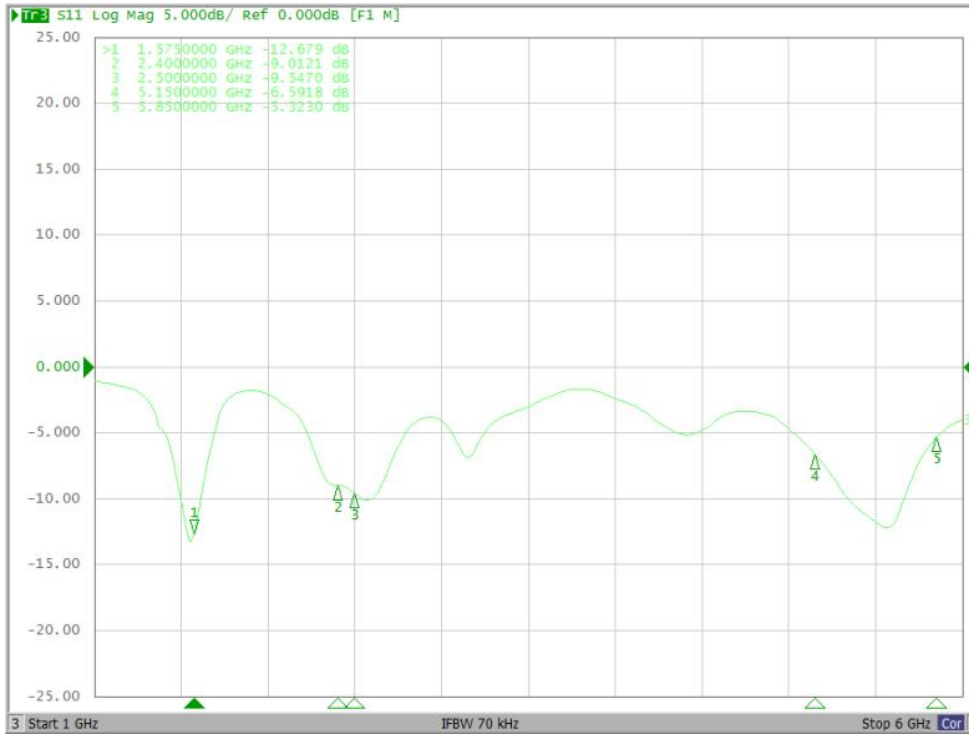
### 6.1 Main Antenna



### 6.2 DIV Antenna

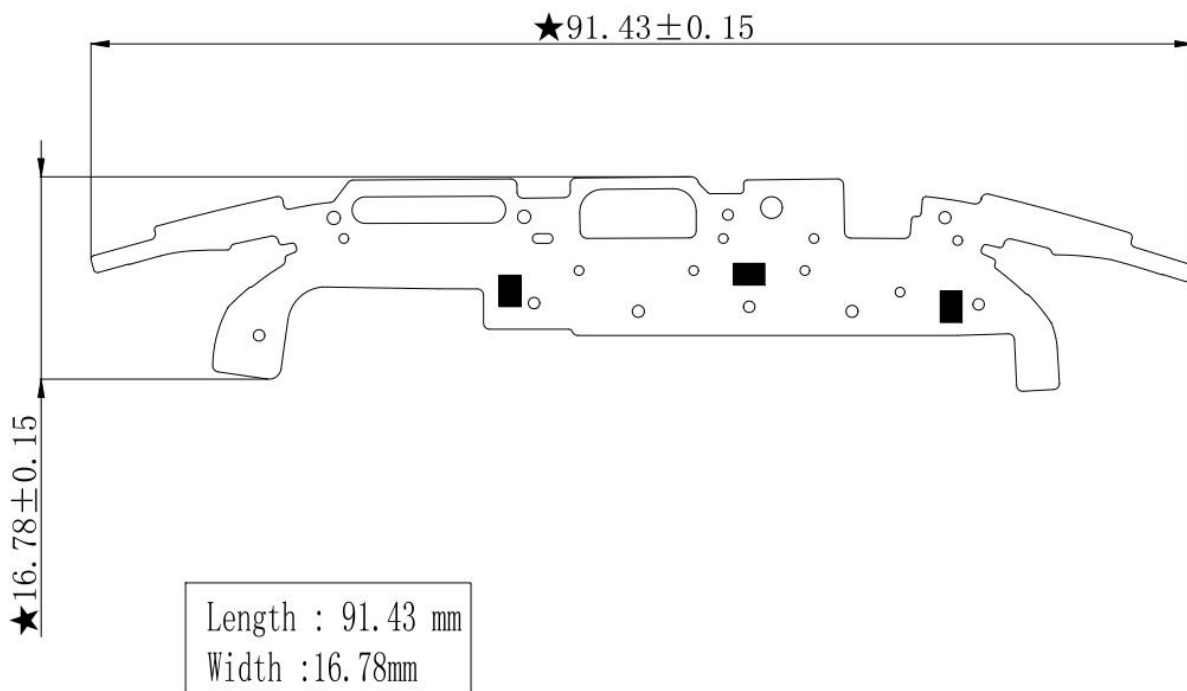


### 6.3 2.4G WIFI/GPS/BT Antenna

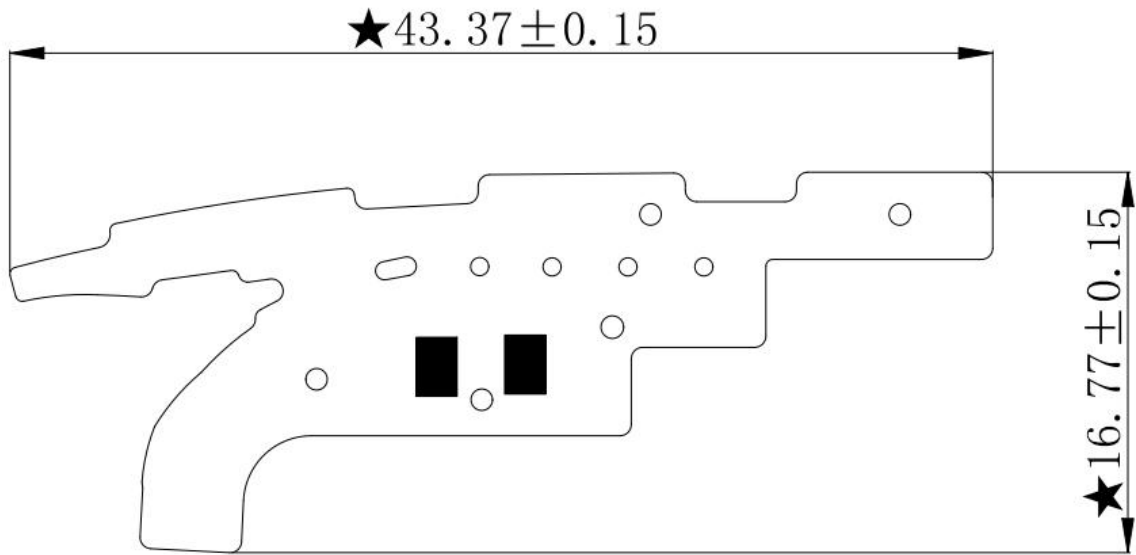


## 7. External Drawing

### 7.1 Main Antenna

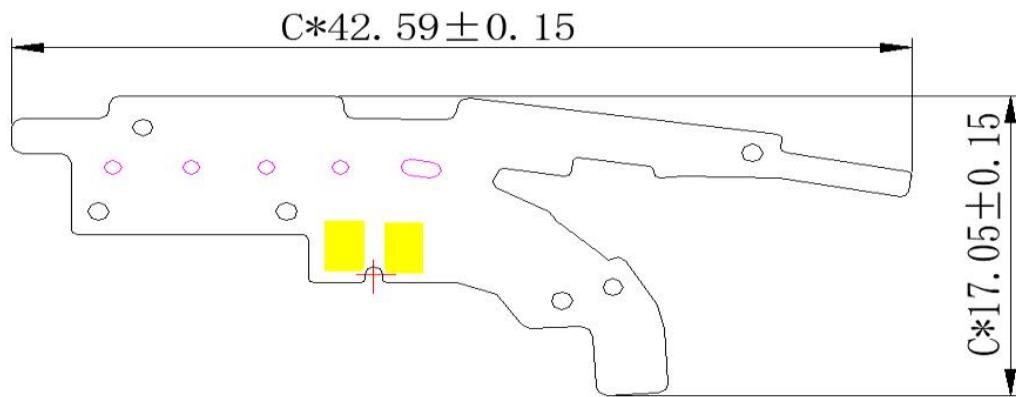


### 7.2 DIV Antenna



Length : 43.37 mm  
Width : 16.77mm

### 7.2 WIFI/GPS/BT Antenna



Length: 42.59mm  
Width: 17.05mm