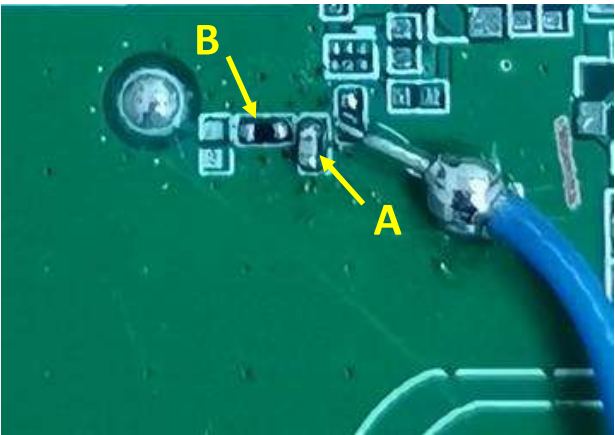
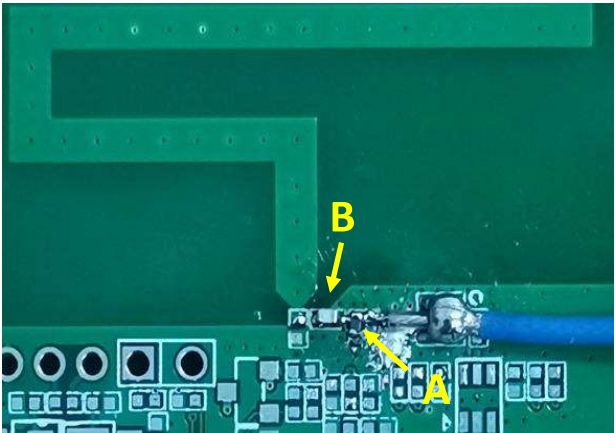
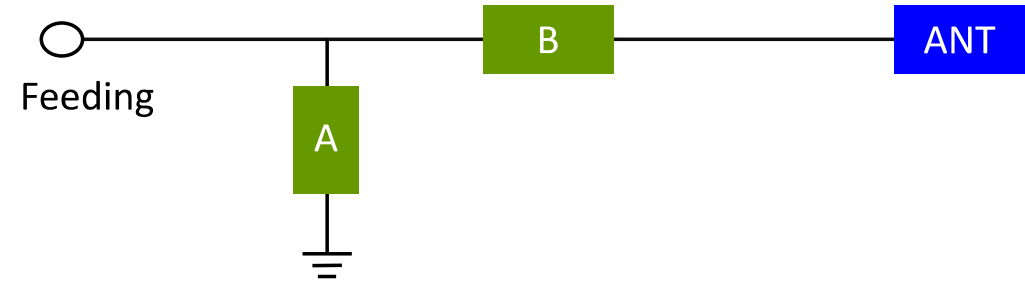


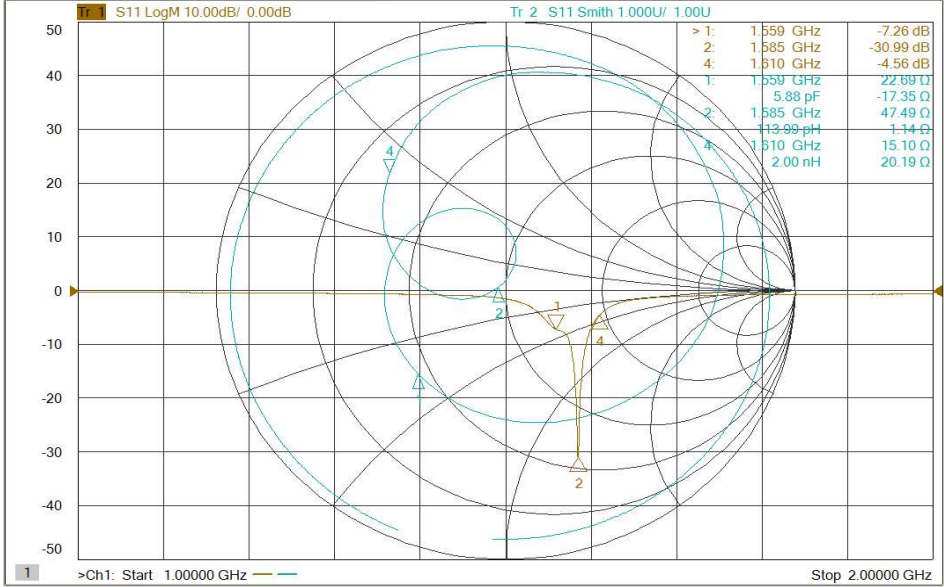
# Matching Circuit For LoRa & GNSS

	Component		Supplier	Value	PN
GNSS					
	A	Cap._0402	YAGEO	0.5pF	CQ0402BRNPO9BNR50
	B	Res._0402	Chilisin	0ohm	RC0402FR-070R



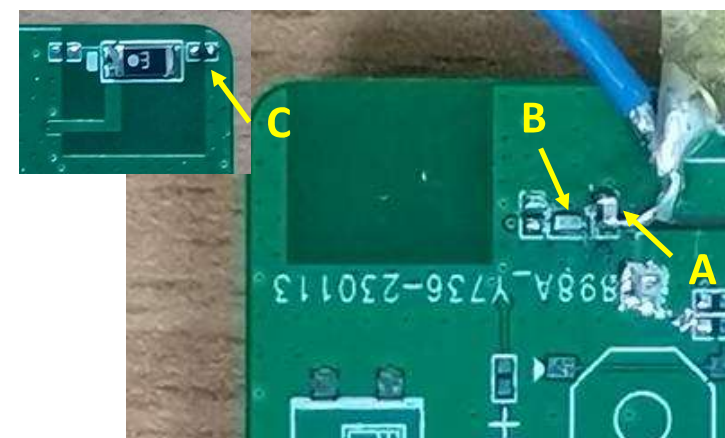
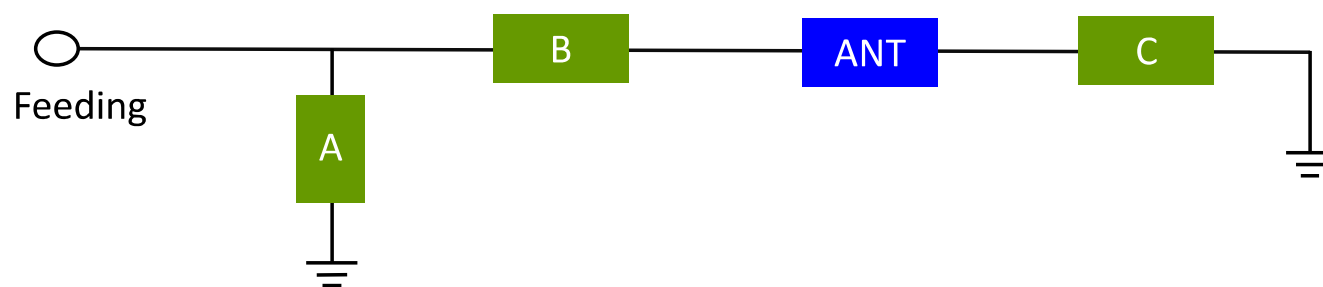
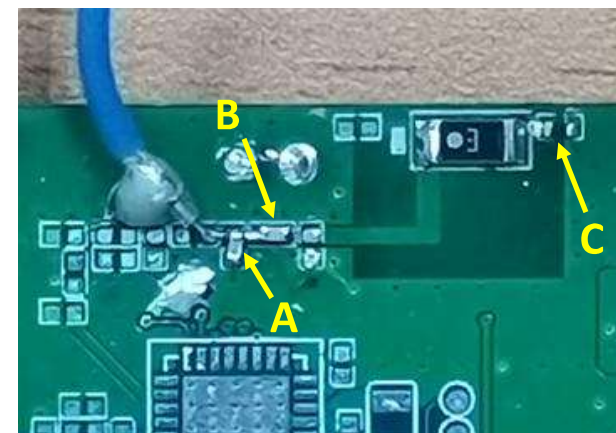
# Measurement Data

GNSS ANT			
Antenna	ANT2525B00FTGNSSS		
Frequency (MHz)	1559	1585	1610
R.L. (dB)	-7.26	-30.99	-4.56
Max. Gain (dBi)	2.01	2.60	2.58
Avg. Gain (dB)	-2.14	-1.43	-3.33
Efficiency (%)	61.12	71.93	46.46



# Matching Circuit For WIFI & BT

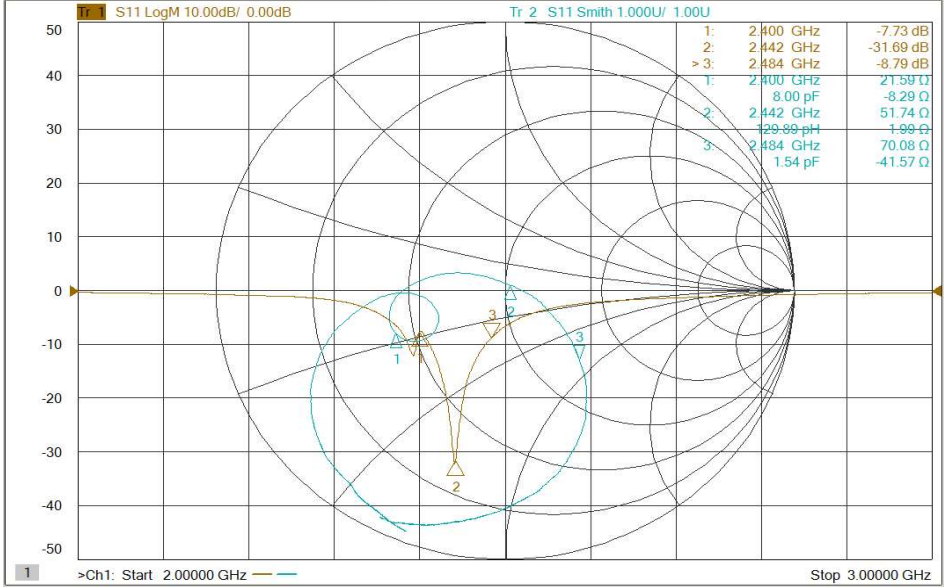
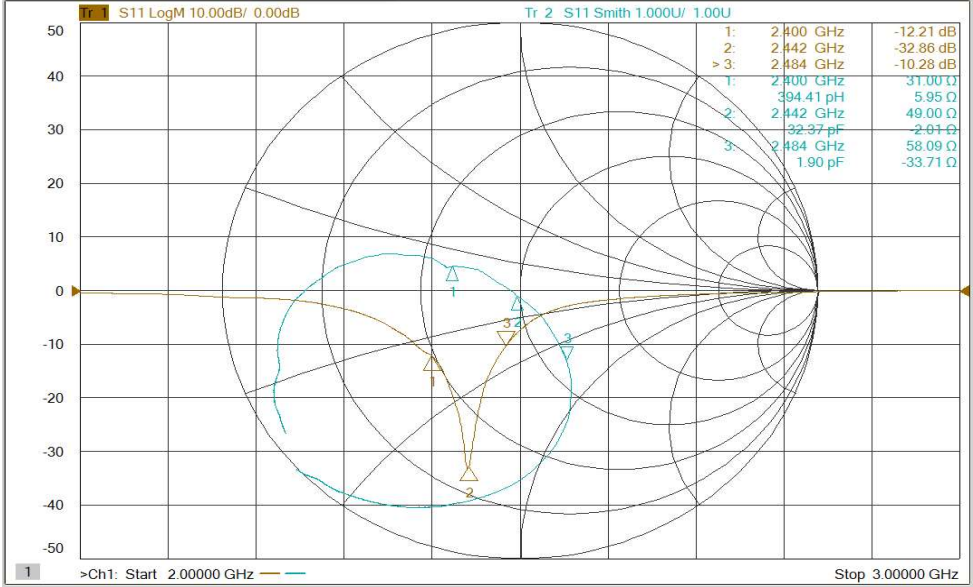
ANT	Component		Supplier	Value	PN
WIFI	A	Cap._0402	YAGEO	2.2pF	CQ0402BRNPO9BN2R2
	B	Cap._0402	YAGEO	10pF	CQ0402BRNPO9BN100
	C	Res._0402	Chilisin	0ohm	RC0402FR-070R
BT	A	Cap._0402	YAGEO	1.0pF	CQ0402BRNPO9BN1R0
	B	Cap._0402	YAGEO	1.2pF	CQ0402BRNPO9BN1R2
	D	Res._0402	Chilisin	0ohm	RC0402FR-070R



# Measurement Data

WIFI ANT			
Antenna	ANT3216A063R2400A		
Frequency (MHz)	2400	2442	2484
R.L. (dB)	-12.21	-32.86	-10.28
Max. Gain (dBi)	2.78	3.67	2.37
Avg. Gain (dB)	-2.42	-2.31	-3.20
Efficiency (%)	57.25	58.69	47.86

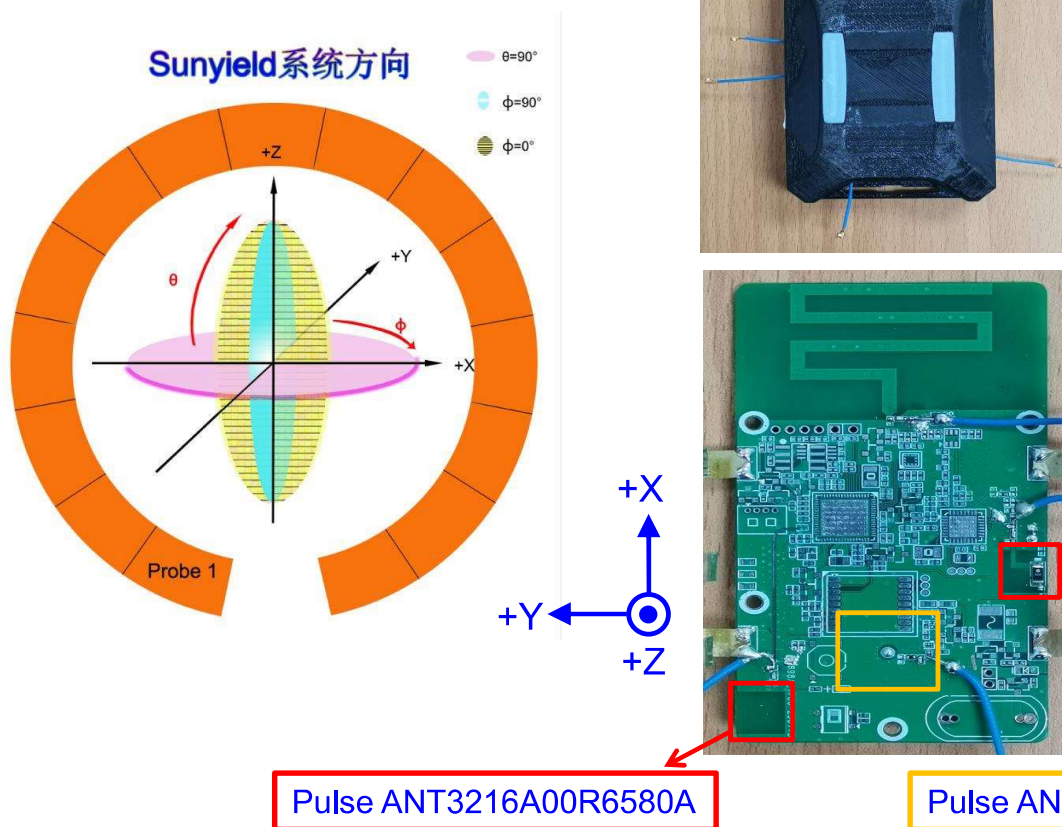
BT ANT			
Antenna	ANT3216A063R2400A		
Frequency (MHz)	2400	2442	2484
R.L. (dB)	-7.73	-31.69	-8.79
Max. Gain (dBi)	3.76	4.49	2.13
Avg. Gain (dB)	-3.49	-2.70	-3.93
Efficiency (%)	44.73	53.65	40.46



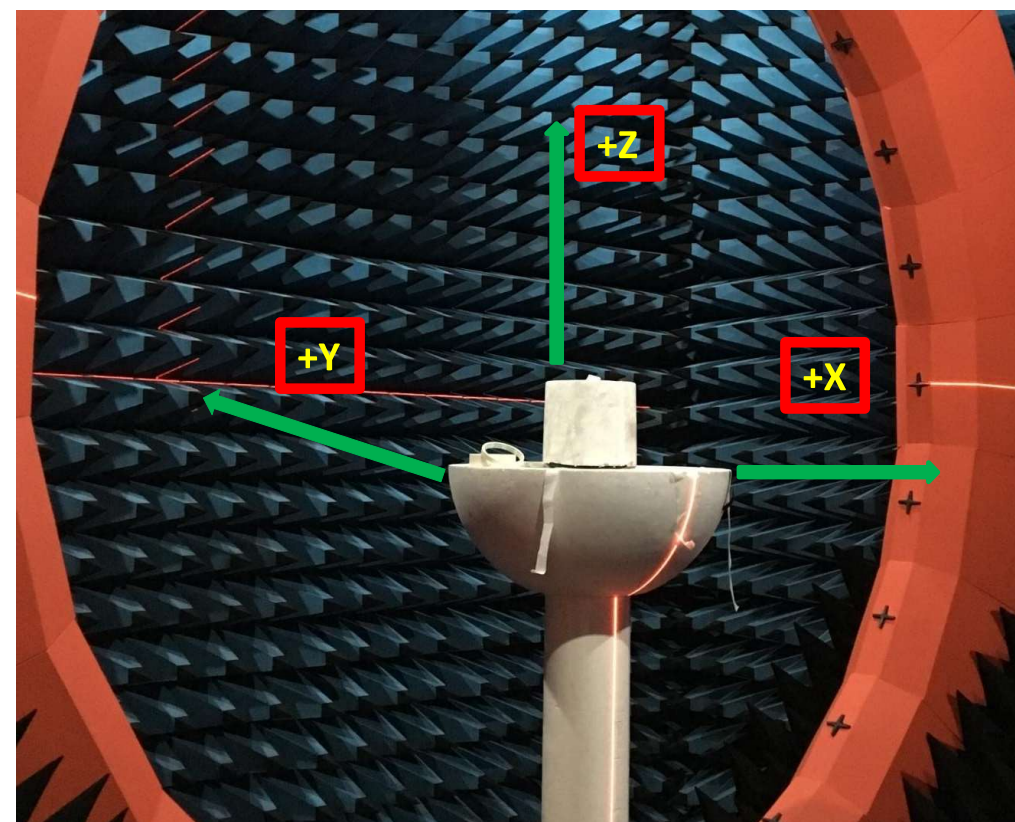


# Measurement Configuration

## [ Direction Definition ]



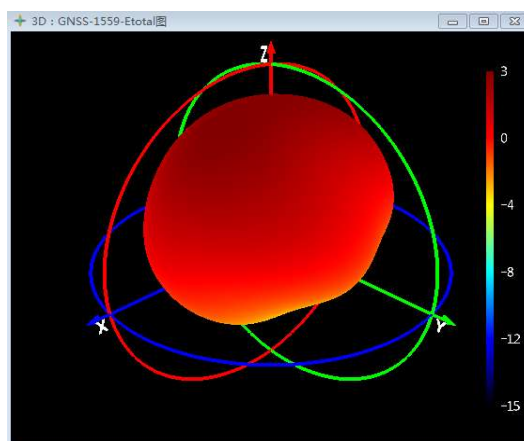
## [ Testing Environment ]



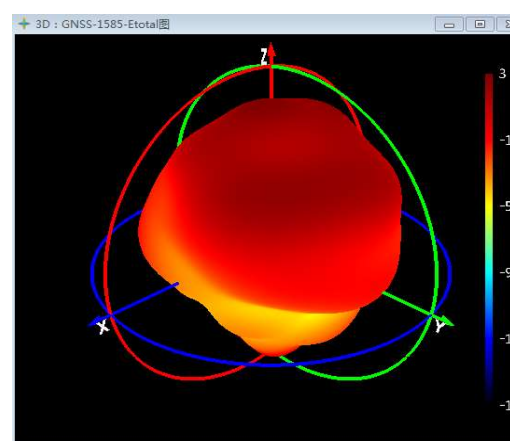
# Radiation Pattern (3D)

GNSS ANT

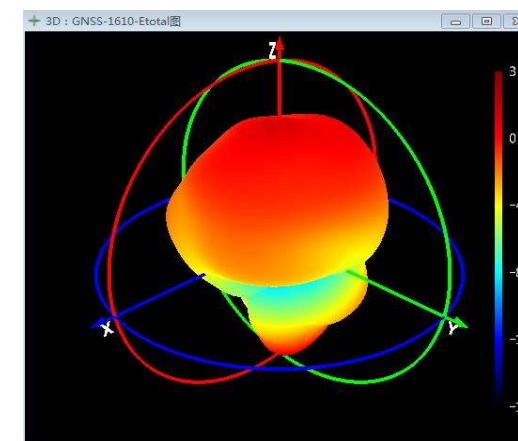
1559MHz



1585MHz



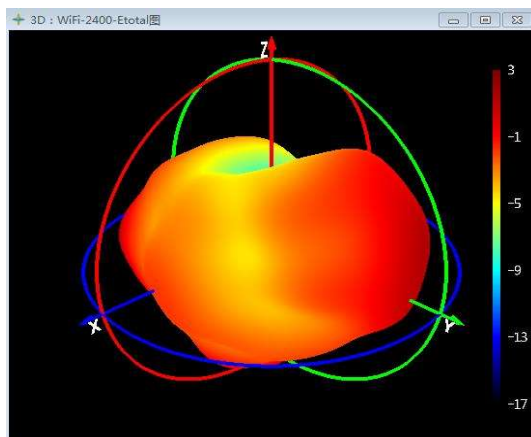
1610MHz



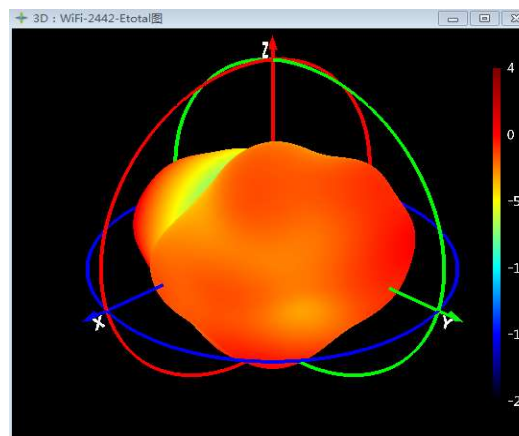
# Radiation Pattern (3D)

WIFI ANT

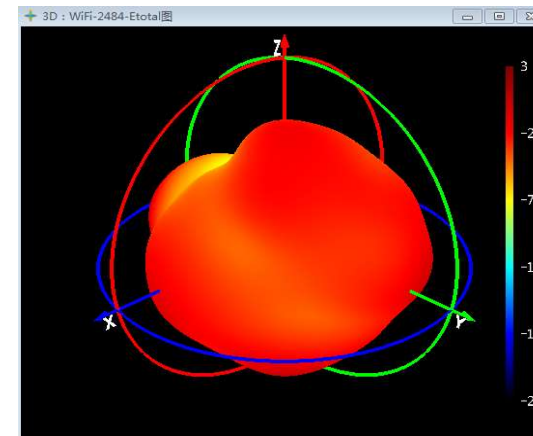
2400MHz



2442MHz

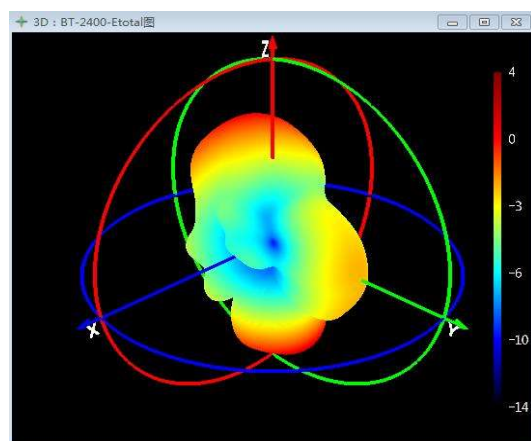


2484MHz

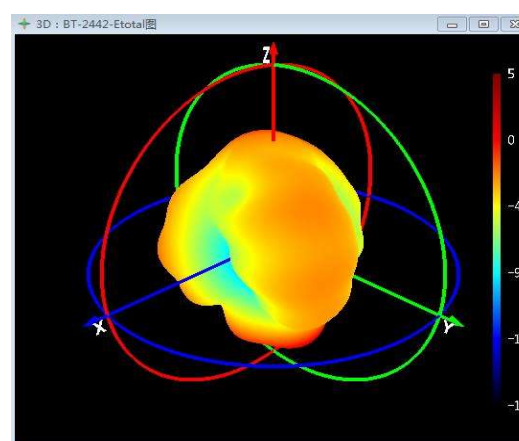


BT ANT

2400MHz



2442MHz



2484MHz

