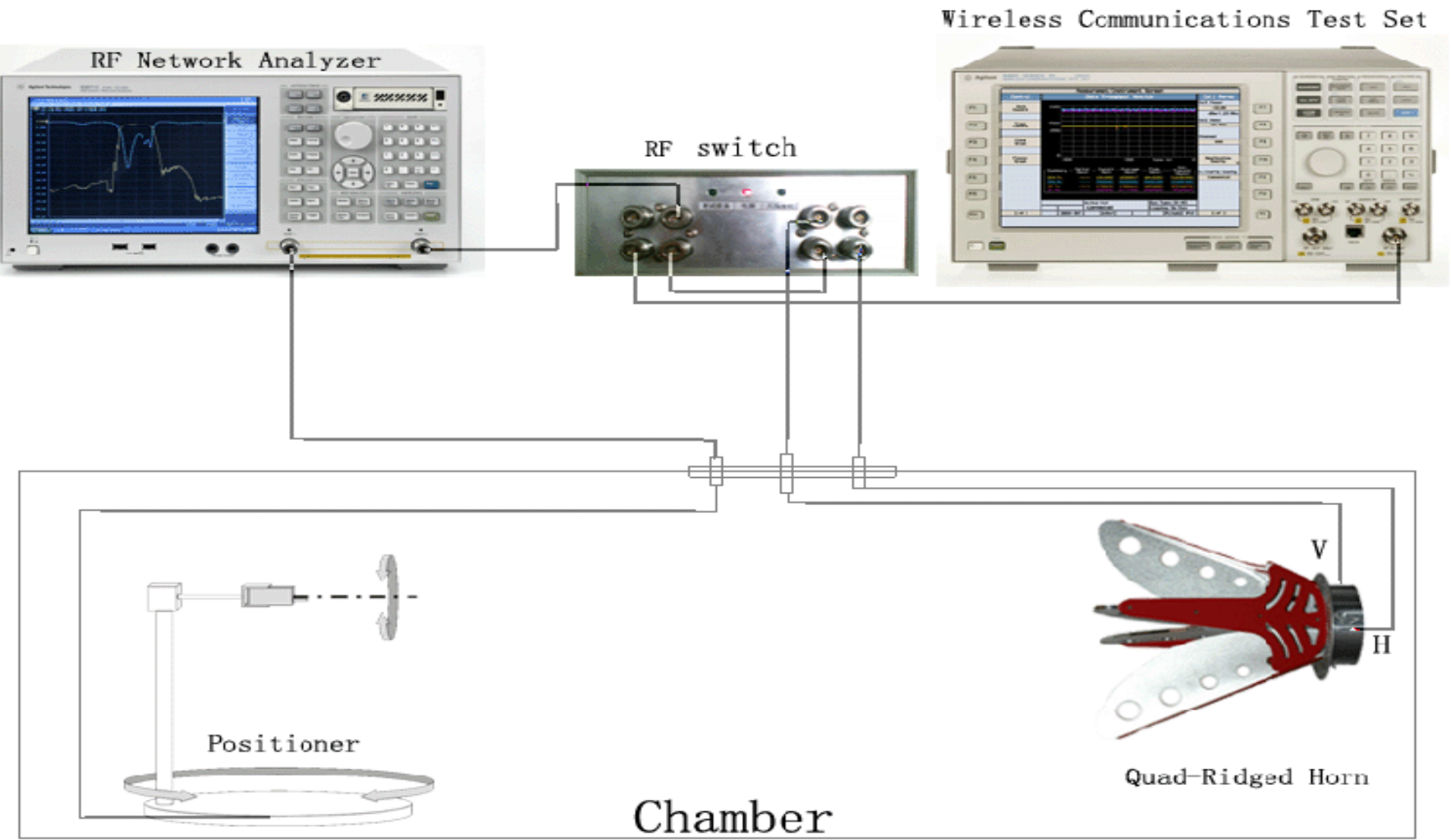


# Shenzhen ATN communication co.,Ltd

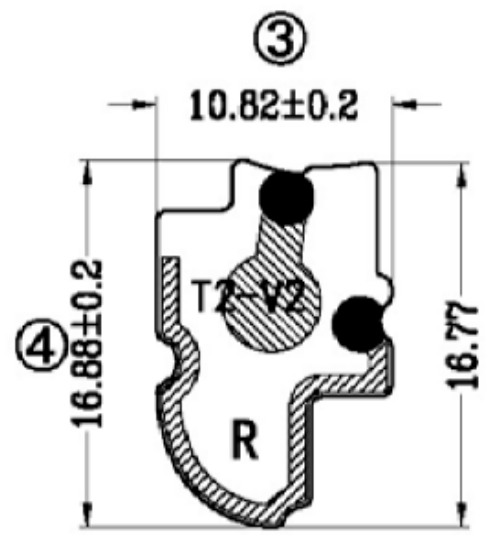
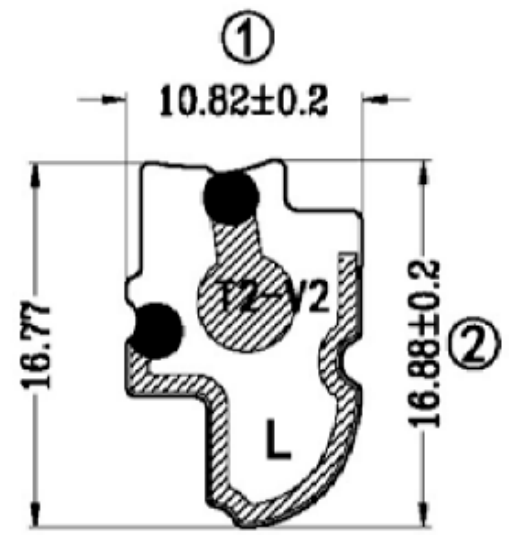
## Antenna test report

Customer:	lemai	Project name	T2-BES2600	date	2023.5.16
band	2.4G-2.48GHz				
Report version	V2				
Antenna type	FPC, monopole				

# Test system



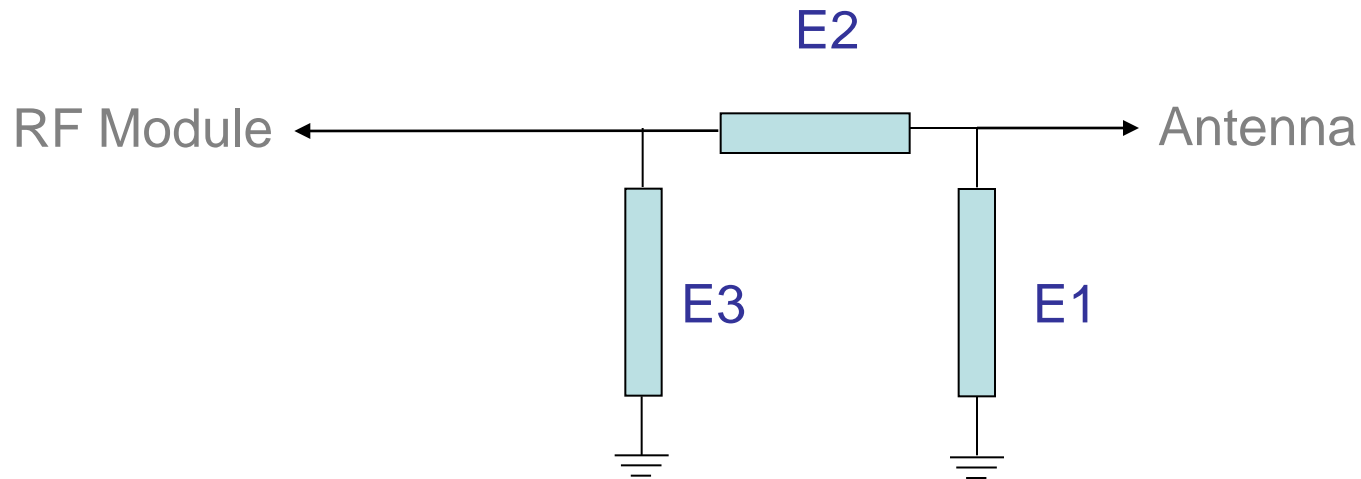
Antenna size



# Catalog

1. Match circuit
2. Passive test data
3. OTA data
4. Distance test

# 1. match circuit

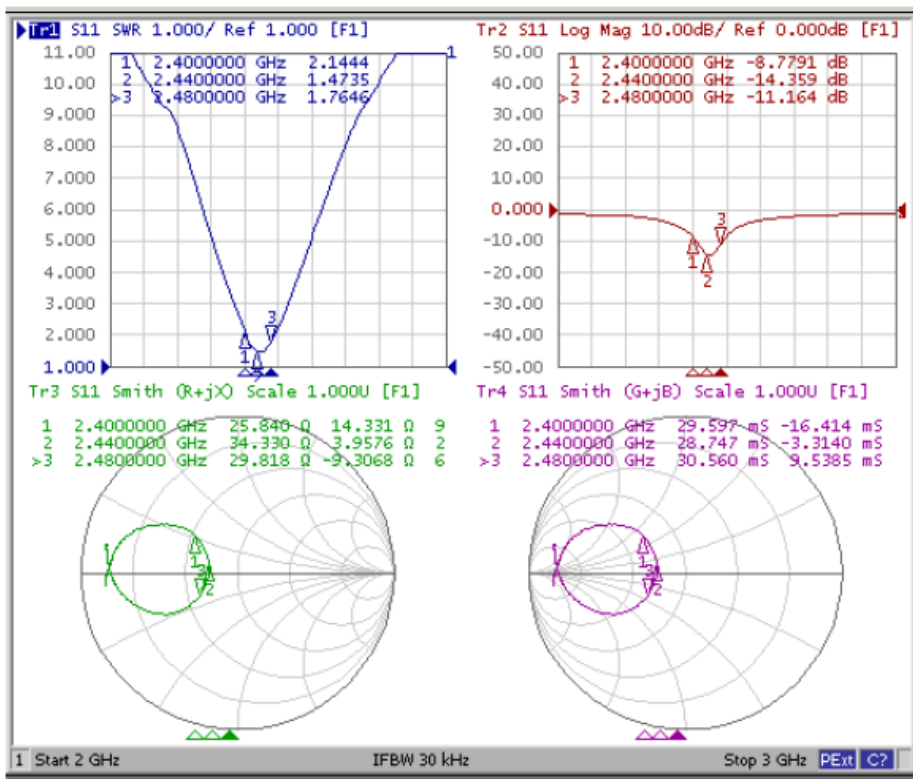


Element	Value
E1(0201)	2.2pF(GRM0335C1H2R2BA01D)
E2(0201)	0Ω
E3(0201)	NC

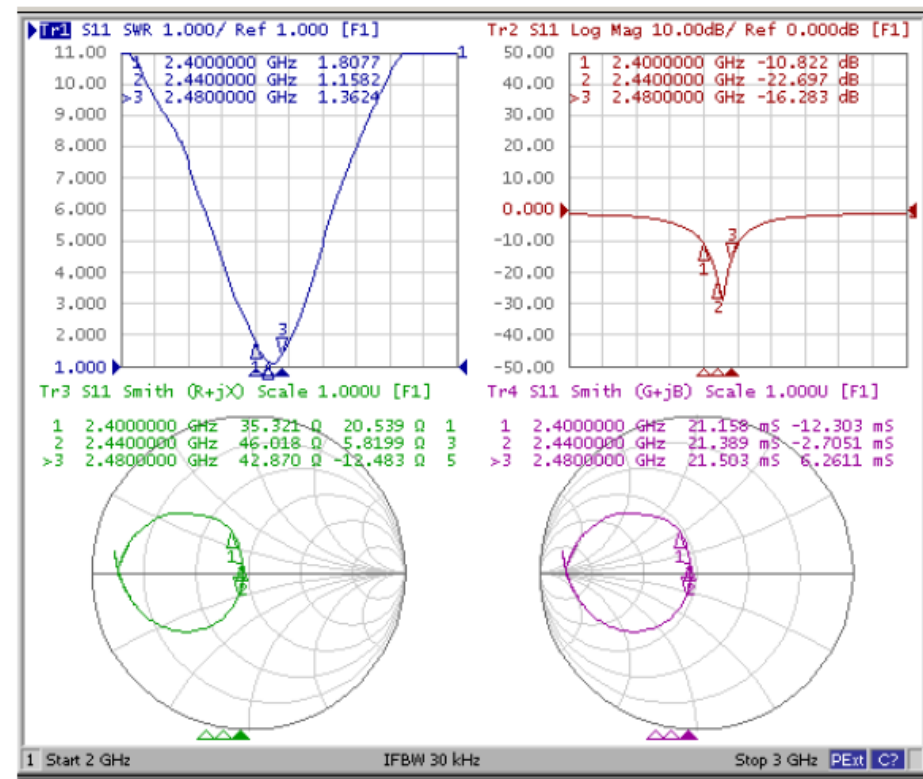
# 2. Passive data

## 2.1 S11 Parameter

L



R



## 2.2 Gain & Efficiency

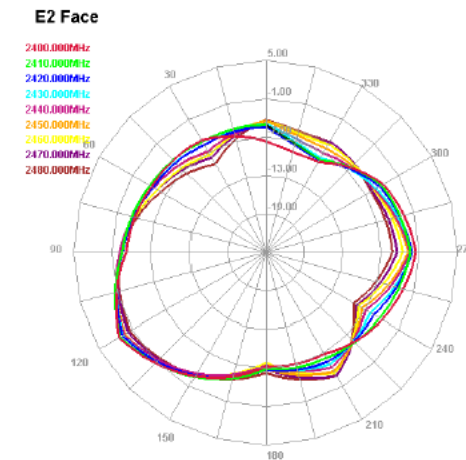
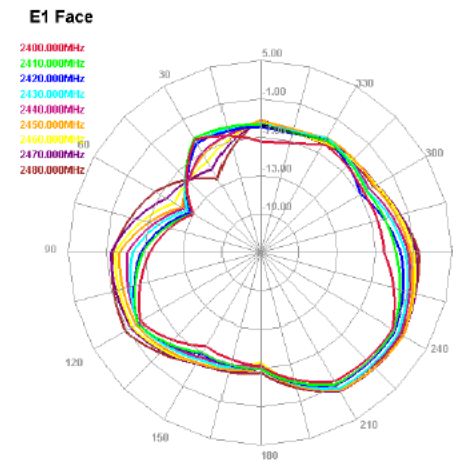
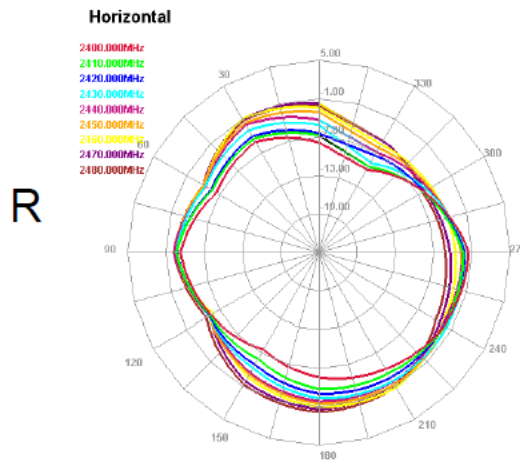
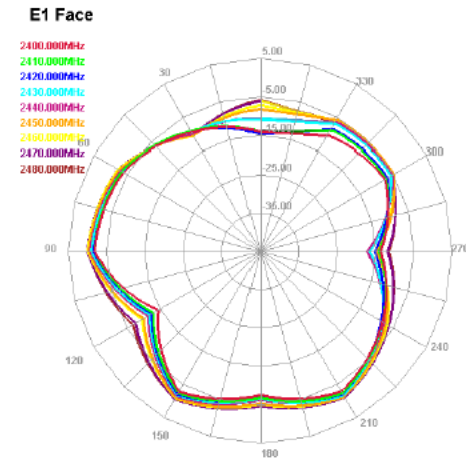
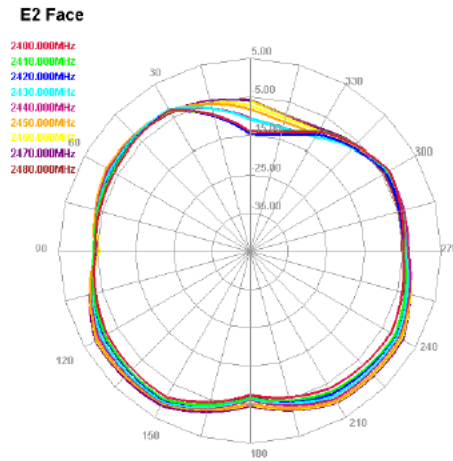
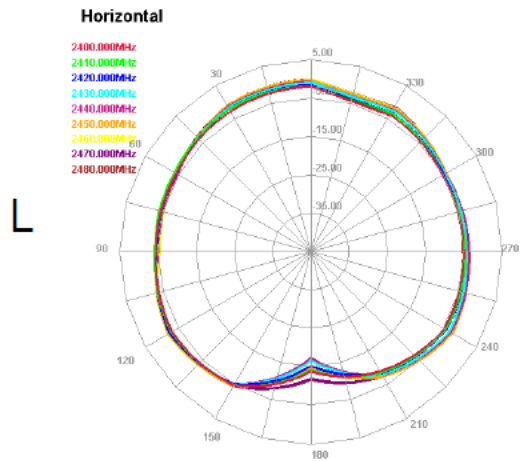
L

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	35.05	-4.55	-0.31
2410	39.08	-4.08	0.3
2420	39.62	-4.02	0.3
2430	44.18	-3.55	0.88
2440	47.11	-3.27	1.33
2450	52.6	-2.79	2.03
2460	54.36	-2.65	2.32
2470	55.89	-2.53	2.36
2480	53.95	-2.68	2.17

R

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	41.04	-3.87	1.39
2410	42.83	-3.68	1.27
2420	41.95	-3.77	0.79
2430	44.45	-3.52	1.35
2440	44.64	-3.5	1.5
2450	48.02	-3.19	2.07
2460	48.8	-3.12	2.04
2470	49.17	-3.08	2.07
2480	48.58	-3.14	1.79

## 2.1.3 Radiation pattern





## 3. OTA data

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR(L) Free space	0	8.9	-89.9
	39	9.5	-89.9
	78	9.3	-89.1

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR(R) Free space	0	8.4	-90.0
	39	9.7	-91.5
	78	10.8	-91.7

### 3. OTA data

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR(L) Head phantom	0	2.5	-82.9
	39	2.9	-83.1
	78	3.1	-82.7

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR(R) Head phantom	0	2.2	-84.0
	39	3.7	-85.0
	78	4.9	-84.7

## 4. Distance test

Mobile phone	SAMSUNG s8
Distance (360° )	15