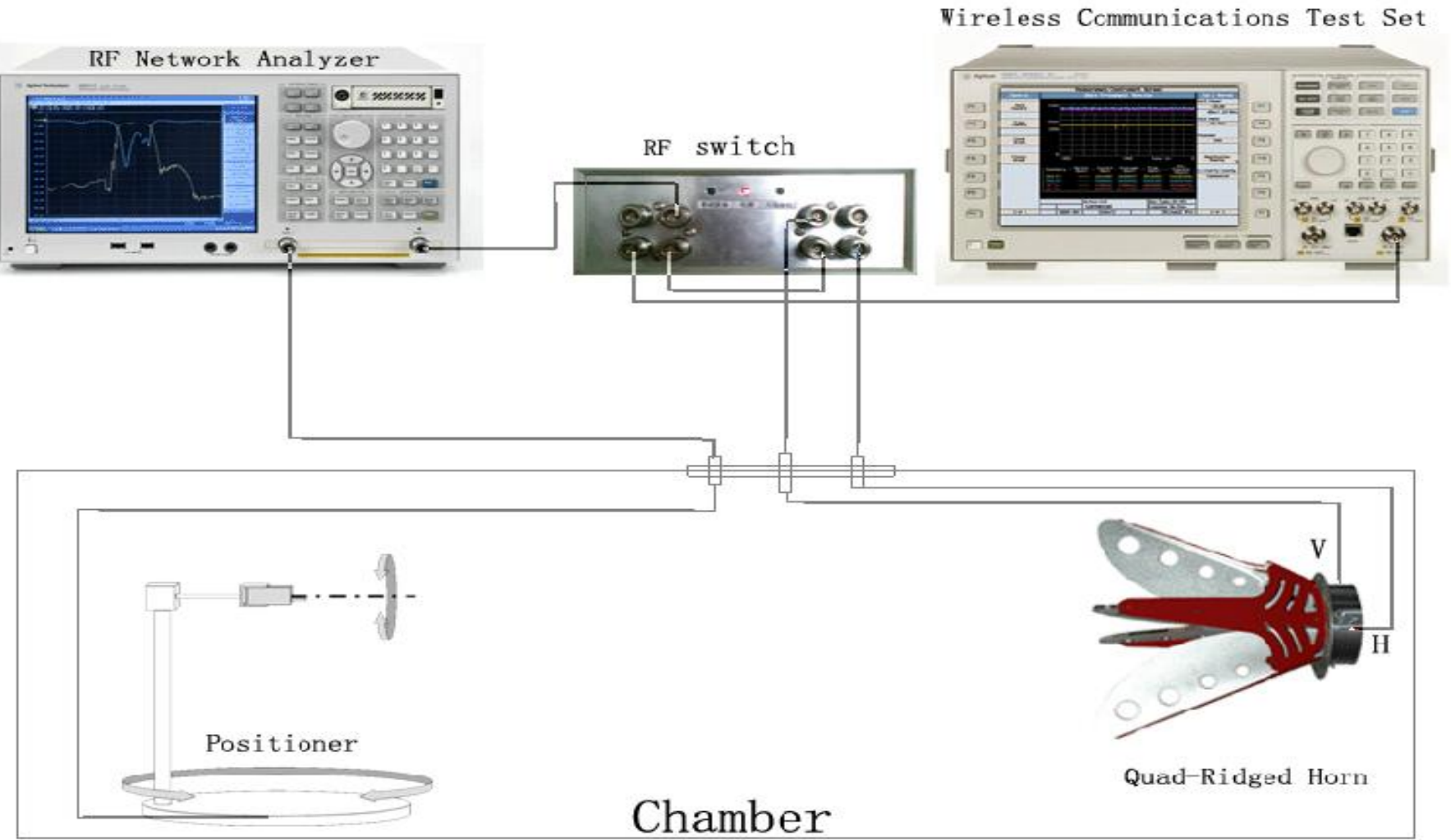


Shenzhen ATN commucation co.,Ltd

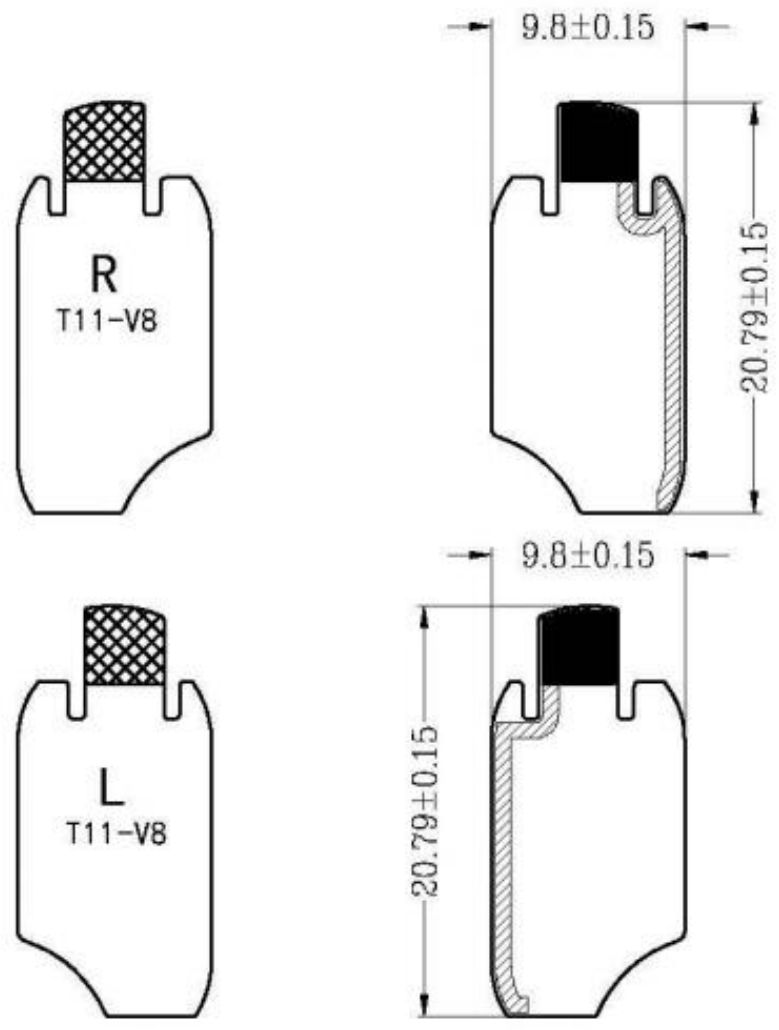
Antenna test report

Customer:	Ansheng	Project name	T11	date	Jan 22, 2024
band	2.4G-2.48GHz				
Report version	V5.0				
Antenna type	FPC, PIFA, antenna model:ATN1480				

Test system



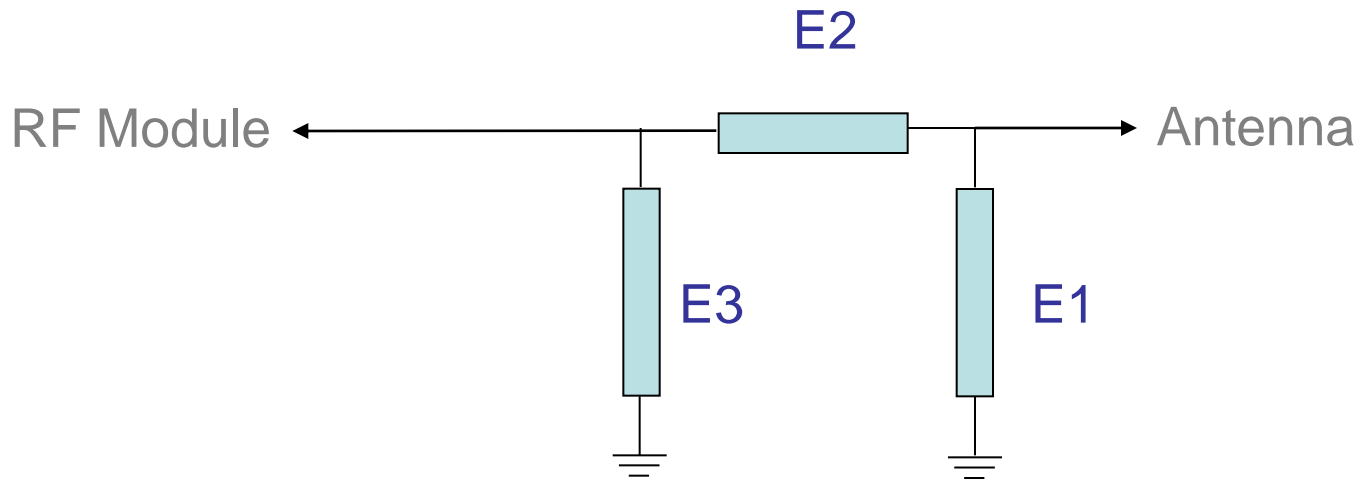
Antenna size(unit:mm)



Catalog

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

1. match circuit



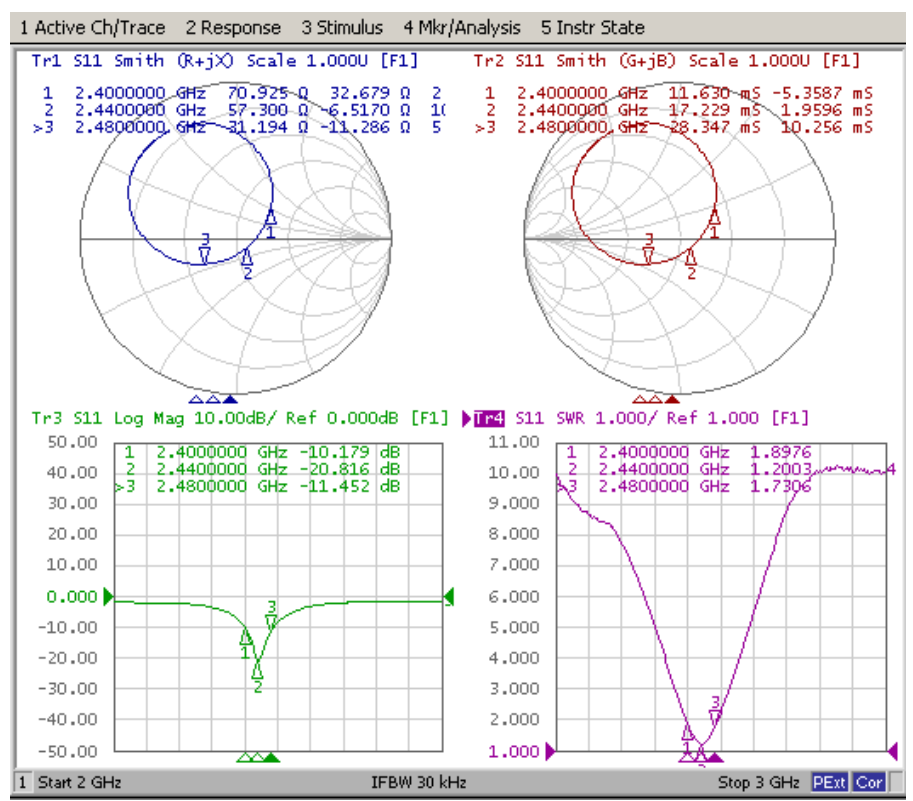
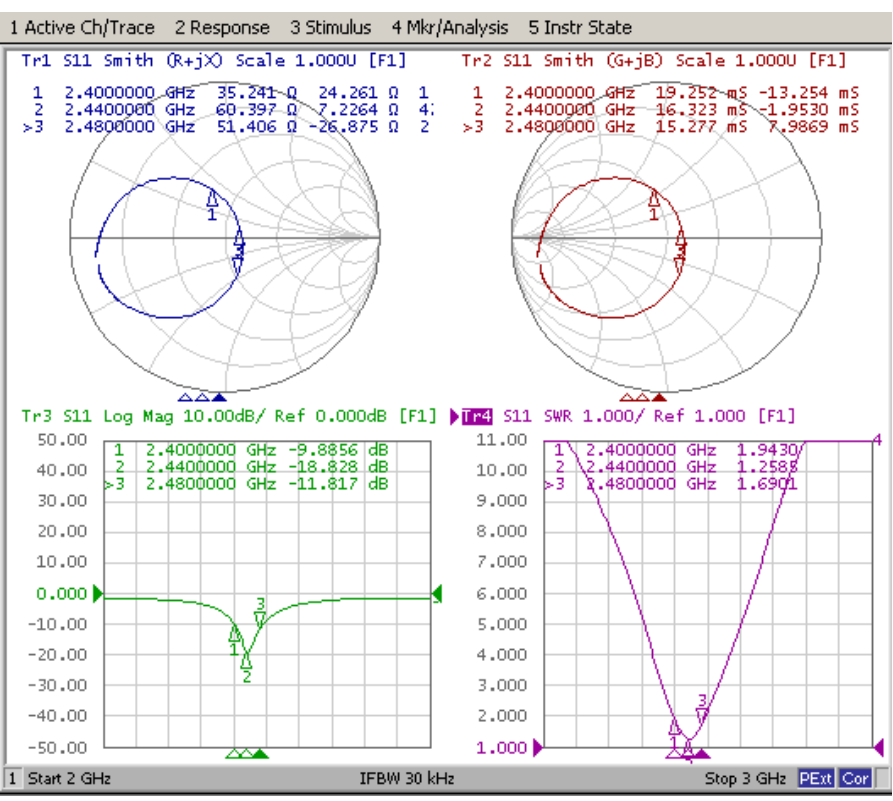
Element	Value
E1(0201)	1.5pF(GRM0335C1H1R5BA01D)
E2(0201)	0Ω
E3(0201)	NC

2. Passive data

2.1 S11 Parameter

L

R



2.2 Gain & Efficiency

L

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	25.88	-5.87	-0.83
2410	25.78	-5.89	-0.84
2420	25.99	-5.85	-0.91
2430	26	-5.85	-0.59
2440	23.85	-6.23	-0.52
2450	24.29	-6.15	-0.37
2460	22.28	-6.52	-0.6
2470	22.82	-6.42	-0.77
2480	21.6	-6.66	-1.33

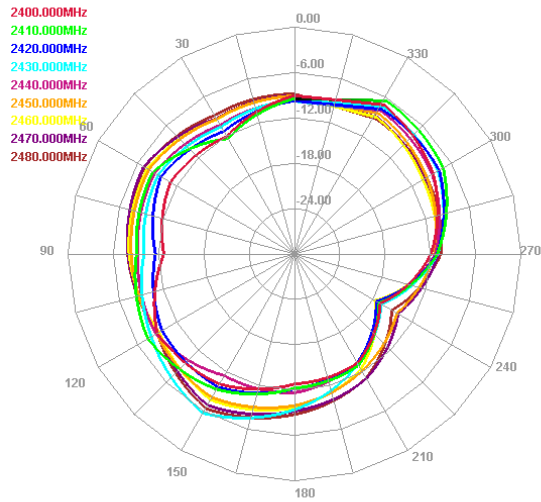
R

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	23.43	-6.3	-1.86
2410	22.71	-6.44	-1.91
2420	22.42	-6.49	-1.89
2430	22.77	-6.43	-1.75
2440	21.66	-6.64	-1.9
2450	22.22	-6.53	-1.71
2460	21.38	-6.7	-1.86
2470	21.64	-6.65	-1.8
2480	21.35	-6.71	-1.9

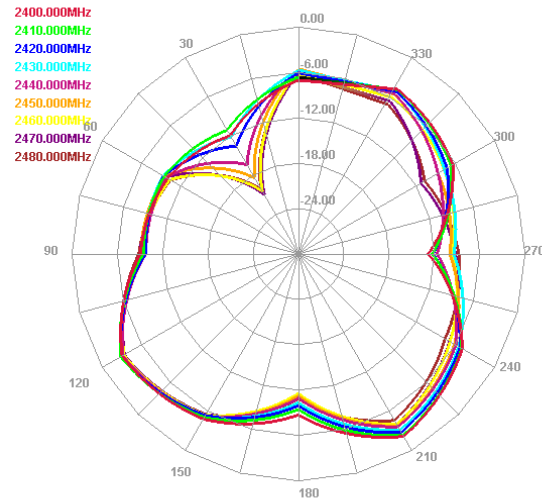
2.3 Radiation pattern (Gain unit: dBi)

L

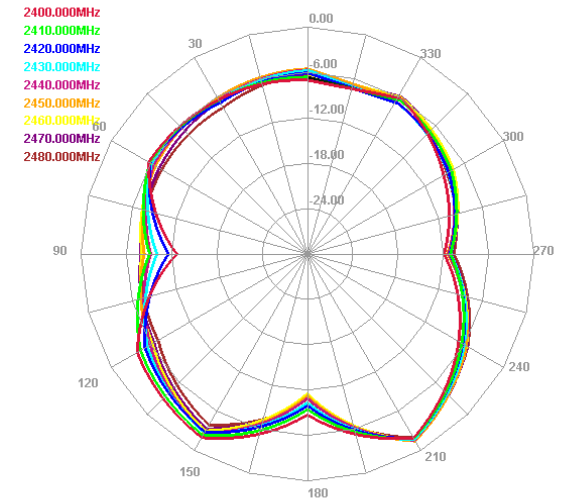
Horizontal



E1 Face

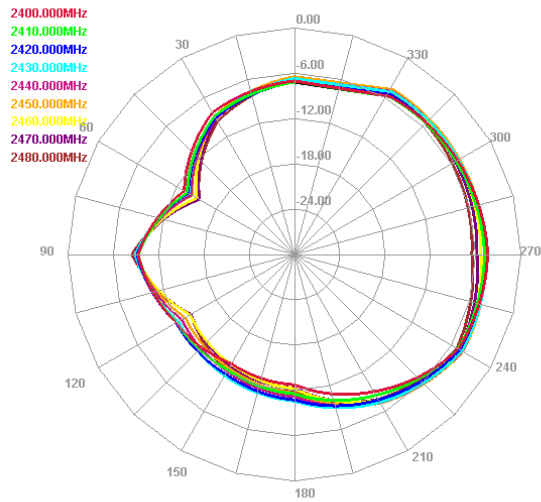


E2 Face

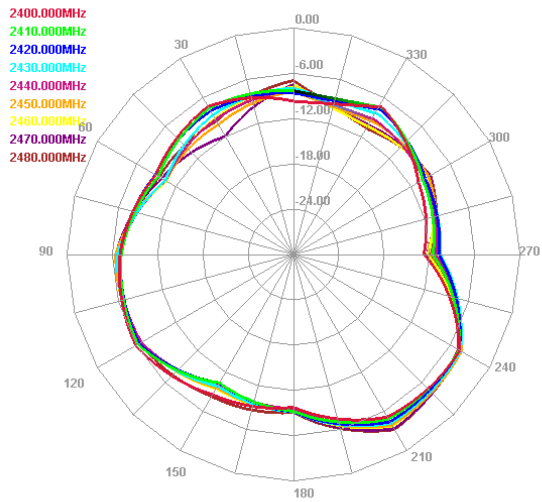


R

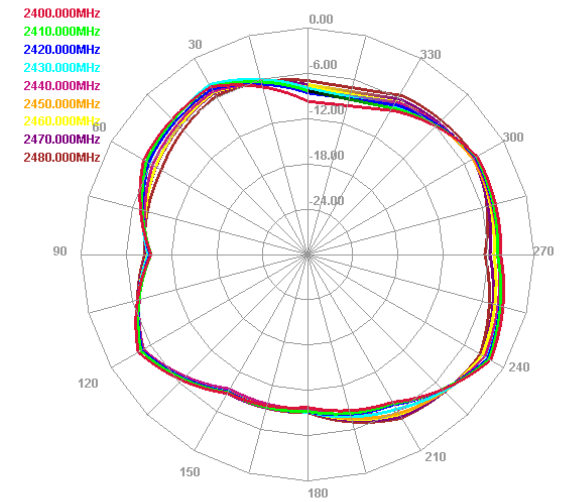
Horizontal



E1 Face



E2 Face



3. OTA data

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR (L)	0	3.1	-87.0
	39	4.7	-87.9
	78	5.2	-87.6

band	channel	TRP (dBm)	TIS (dBm)
Bluetooth BR (R)	0	3.3	-86.0
	39	4.2	-87.2
	78	3.6	-85.6

4. Distance test

Mobile phone	SAMSUNG S8
Distance (360°)	15m