

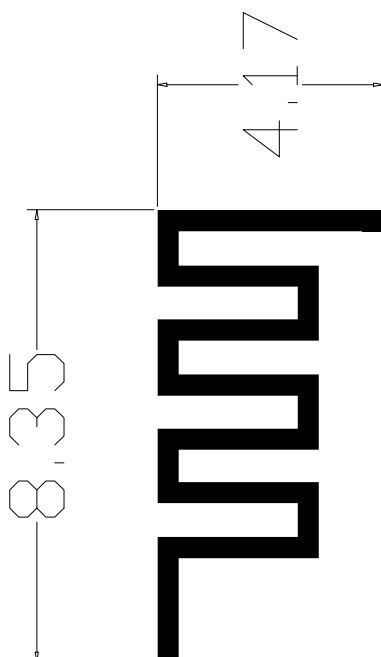
RT5013 ANTENNA TEST REPORT

ShenZhen Ankbit Electronics Limited
Room 401, Building B, Runfeng Industrial Park, No. 4197 Baoan Blvd.,
Xixiang St., Baoan Dist., Shenzhen, Guangdong, China

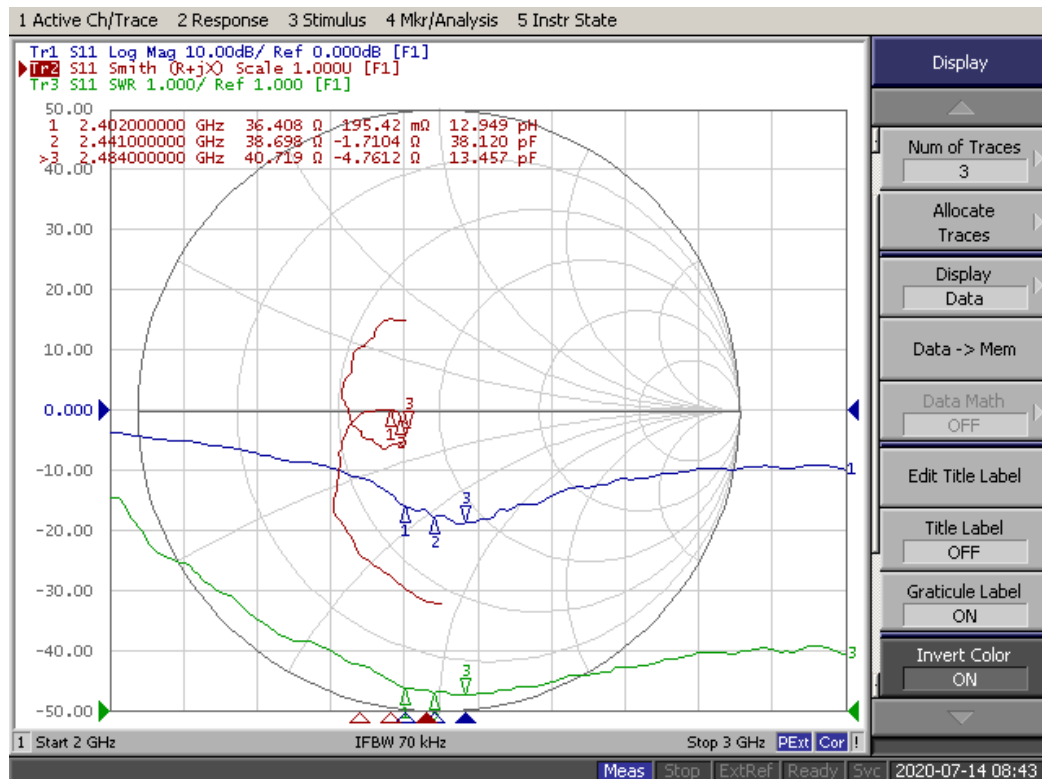
1. Electrical Characteristics

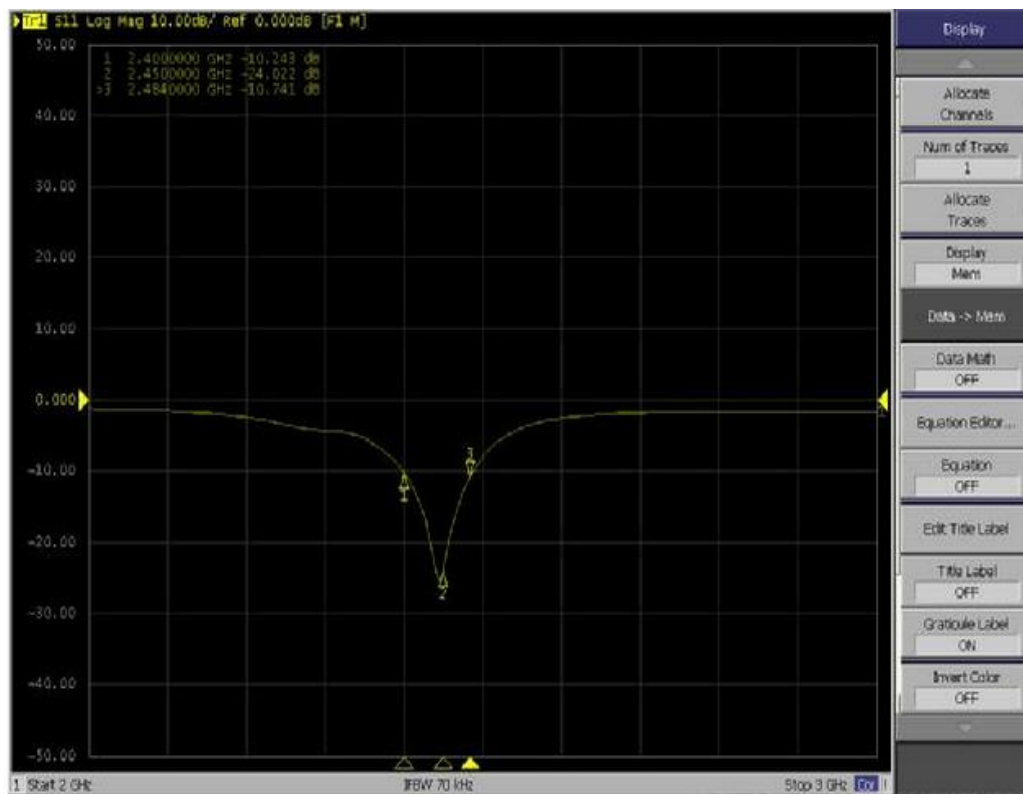
Item	Specification
Type	PCB Inverted-F Antenna
Central frequency	2.441 GHz
Bandwidth	78 MHz (Typical value)
Maximum Gain	2.52 dBi
Polarization	Linear
VSWR	2 max.
Azimuth Bandwidth	Omni-directional
Impedance	50Ω
Rated Power (max.)	2dBm
Maximum Input Power	10dBm
Operation Temperature	-40 ' C ~ +85 ' C

2. The suggestion of matching circuit

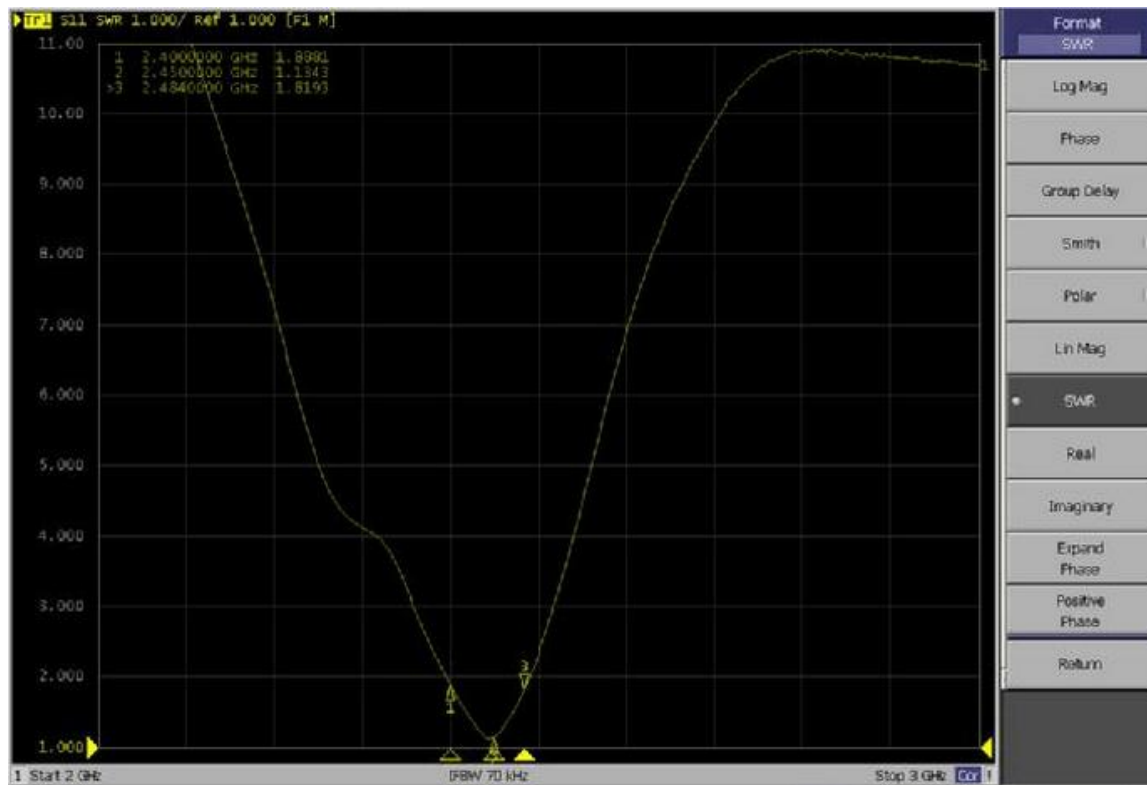


3. SWR & Smith chart





Frequency(GHz)	S11(dB)
2.402	-10.24
2.441	-24.02
2.480	-10.74



Frequency(GHz)	VSWR
2.402	1.88
2.441	1.13
2.480	1.81

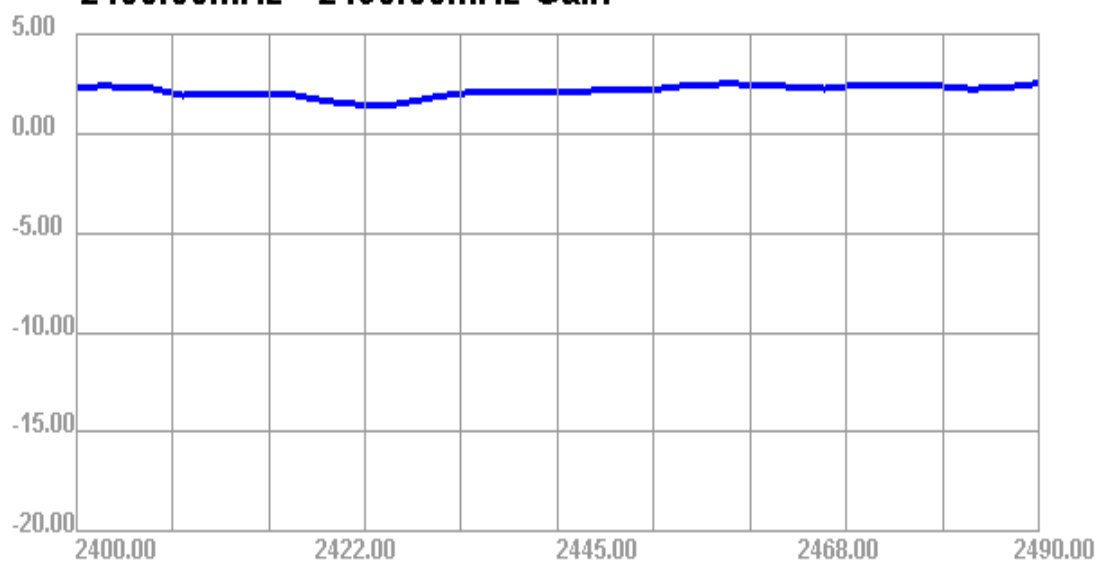
The reference:

Return Loss	-6.02dB	-7.36dB	-10dB	-13dB	-20dB
VSWR	3	2.5	1.92	1.576	1.22
Return Power Ratio	25%	18.37%	10%	5%	0.98%

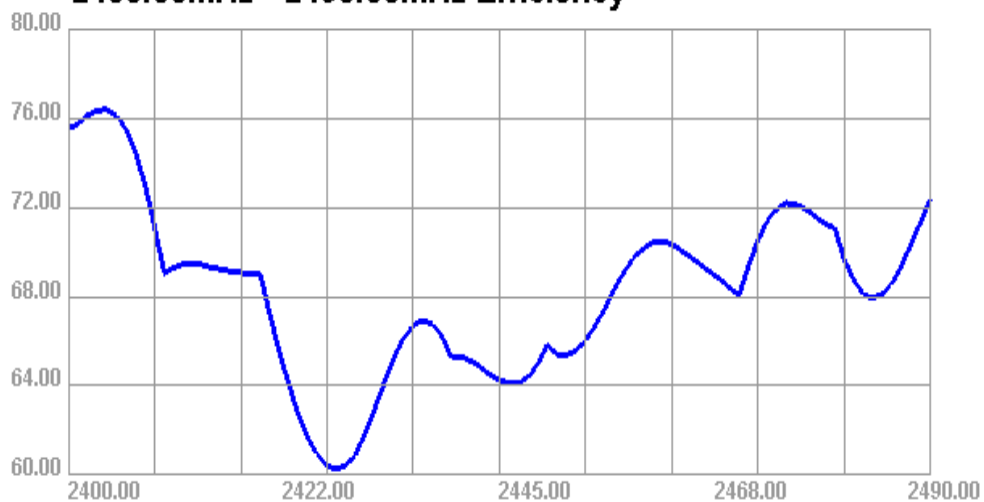
4. Gain & Efficiency:

Passive Test For BT										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)
2400	75.52	-1.22	2.36	0.21	32.188	43.335	2.36	-11.99	3.58	45
2410	69.05	-1.61	1.92	-0.23	29.32	39.729	1.92	-11.23	3.52	45
2420	69.04	-1.61	1.98	-0.17	29.191	39.852	1.98	-10.64	3.58	45
2430	60.93	-2.15	1.47	-0.68	25.77	35.164	1.47	-11.13	3.63	45
2440	65.24	-1.85	2.04	-0.11	27.779	37.463	2.04	-11.51	3.89	15
2450	65.84	-1.82	2.23	0.08	28.091	37.745	2.23	-12.25	4.05	45
2460	70.14	-1.54	2.47	0.32	29.886	40.252	2.47	-12.09	4.01	60
2470	68.04	-1.67	2.25	0.1	29.065	38.975	2.25	-12.07	3.92	45
2480	71.08	-1.48	2.4	0.25	30.396	40.681	2.4	-13.13	3.89	45
2490	72.42	-1.4	2.52	0.37	30.826	41.595	2.52	-13.89	3.92	45

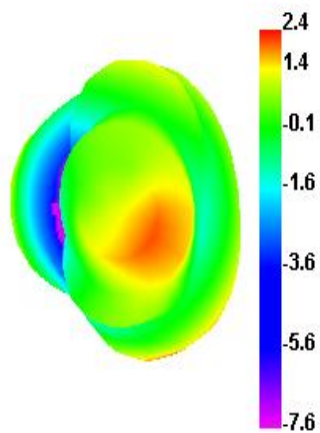
2400.00MHz - 2490.00MHz Gain



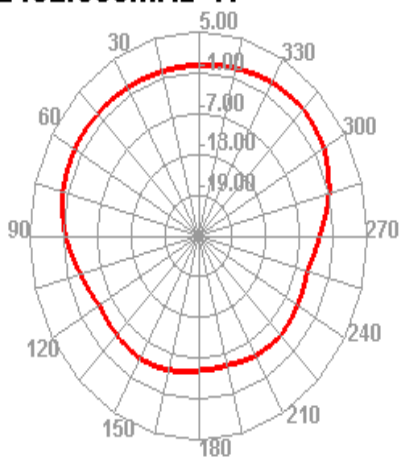
2400.00MHz - 2490.00MHz Efficiency



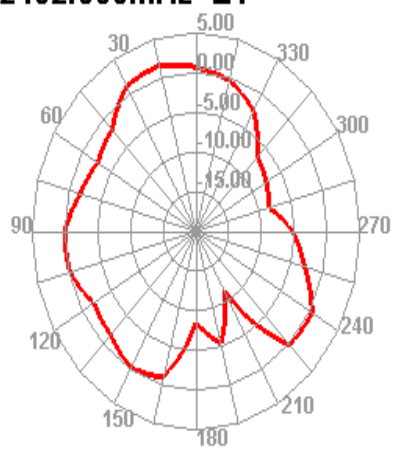
2402.000MHz



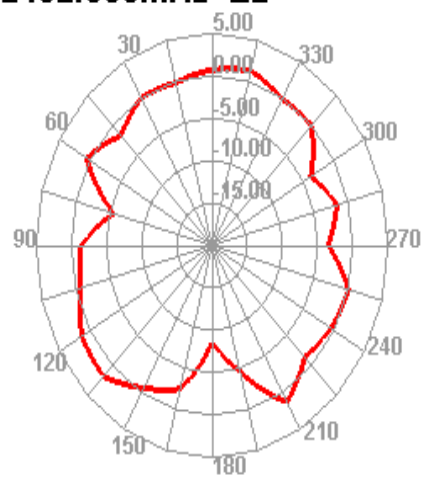
2402.000MHz H



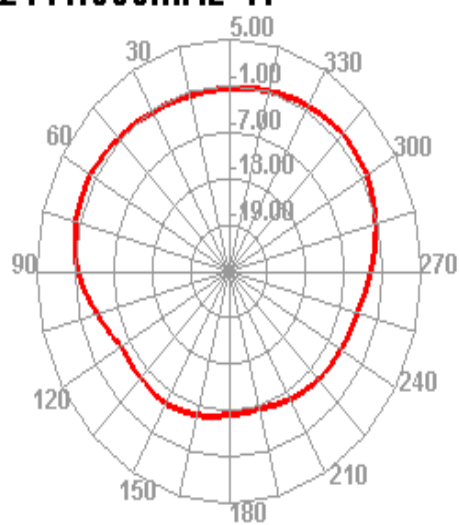
2402.000MHz E1



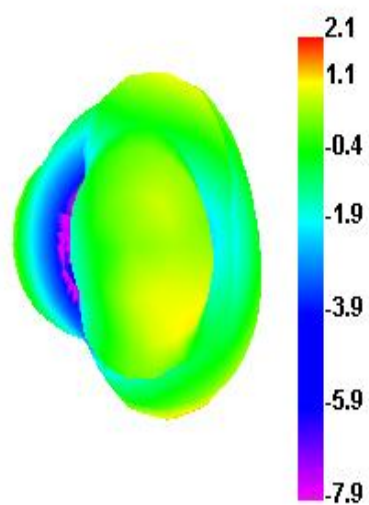
2402.000MHz E2



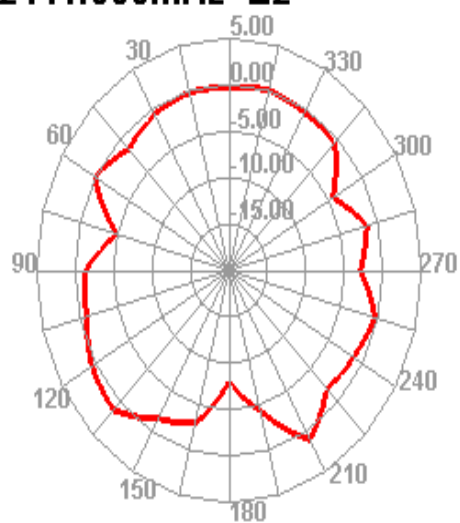
2441.000MHz H



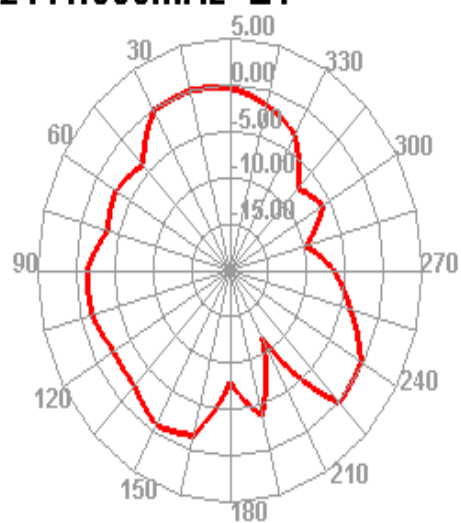
2441.000MHz



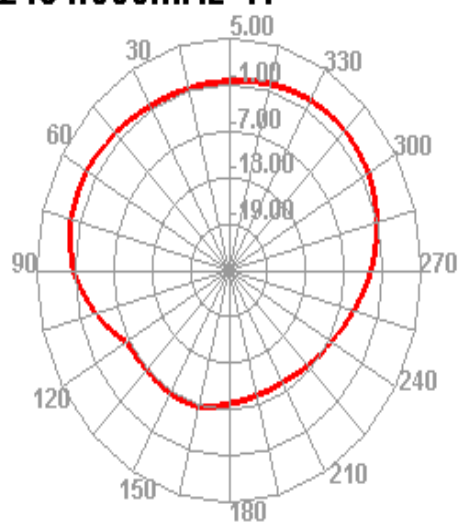
2441.000MHz E2



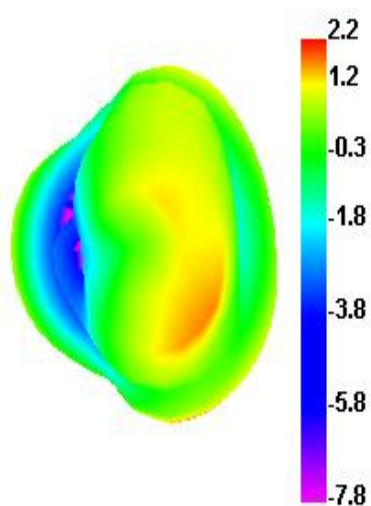
2441.000MHz E1



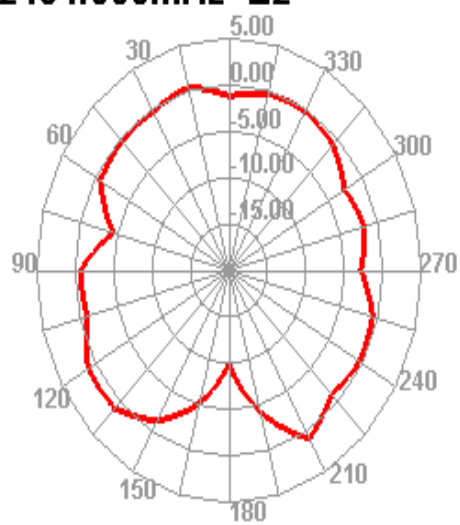
2484.000MHz H



2484.000MHz



2484.000MHz E2



2484.000MHz E1

