



Shenzhen DBT Telecommunication Technology CO.,LTD

Antenna Testing Report

Client: Guangdong Welland Technology Co., Ltd.

Project: KG2458ULB-D

Antenna standard: BT

1. Test Equipment

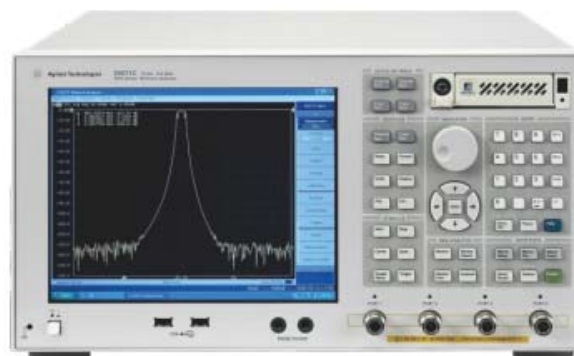


OTA-800

Brand: ETS 

Frequency range: 370MHz-8.5GHz

Features: passive、active test; G net、C net、2G/3G/4G, WIFI and BT, TRP、TIS test.



5071C

Brand: Agilent 

Frequency range: 9KHz-8.5GHz

Features: 2G/3G/4G/BT/WIFI antenna comprehensive passive test.



8960

Brand: Agilent

Frequency range: 292MHz-2700GHz

Features: 2G/3G active test.



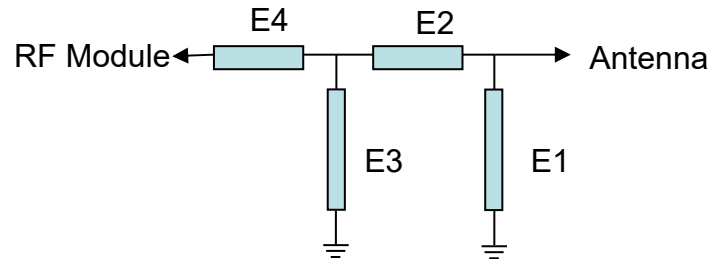
CMW500

Brand: Rohde & Schwarz

Frequency range: 70KHz-6GHz

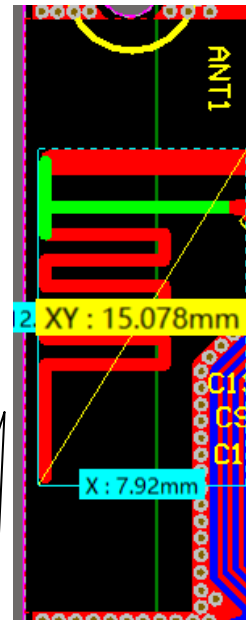
Features: 2G/3G/4G/BT/WIFI/NB-Lot antenna comprehensive passive test.

2. Matching circuit



Element	MAIN	GPS/WIFI /BT	AUX
E1(0402)	N/A		
E2(0402)	1.5pF		
E3(0402)	N/A		
E4(0402)	0R		

3. Antenna assembly position

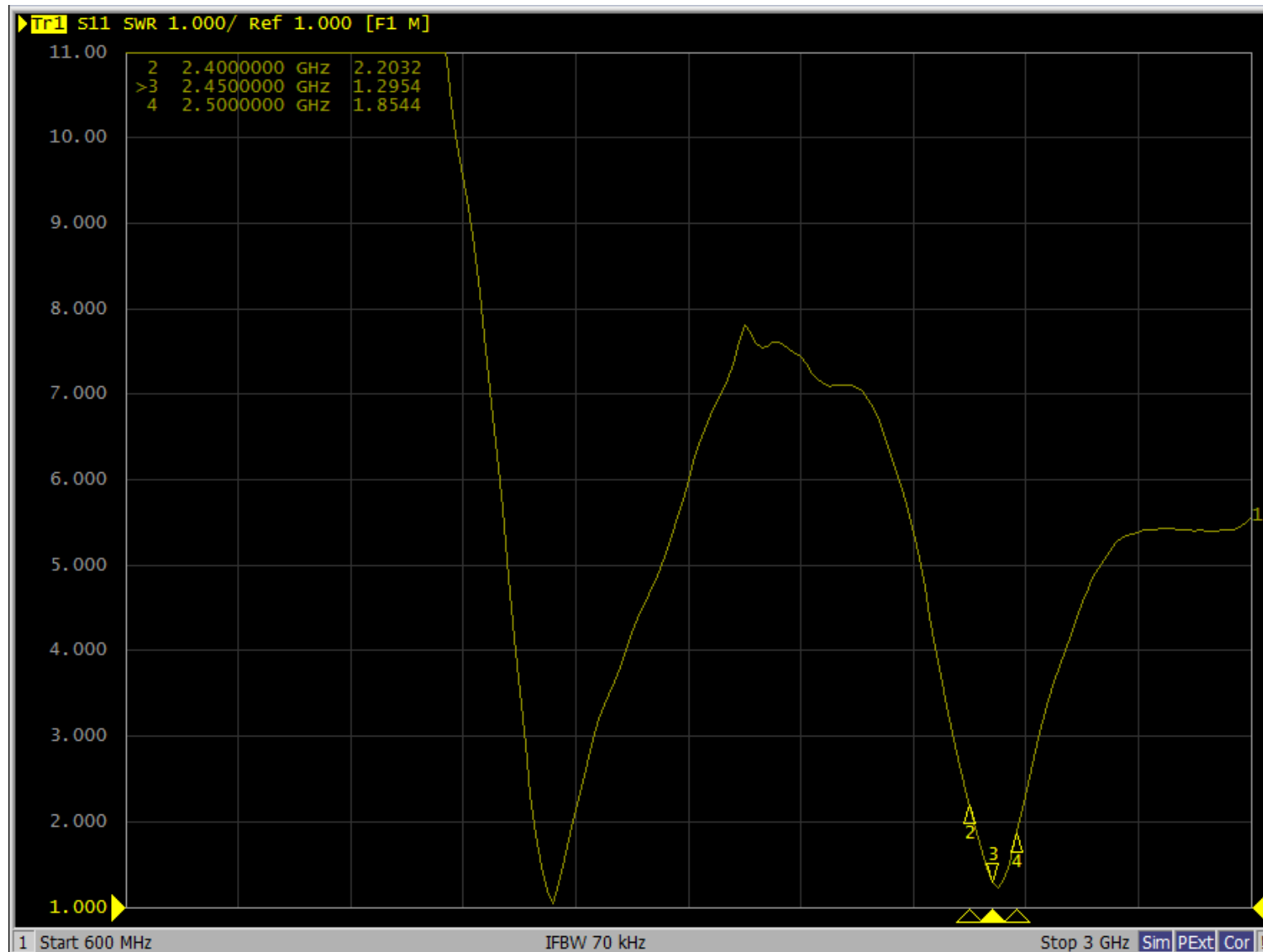


antenna position

4. Electrical Parameter

Electrical Parameter	
Frequency Range (MHz)	2400~2500
VSWR	≤ 3.0
Input Impedance(Ω)	50
Gain(dBi)	-0.61
Polarization($^{\circ}$)	vertical
Max power(W)	10
Antenna Type	PCB Antenna
Working Temperature($^{\circ}\text{C}$)	-40~+80

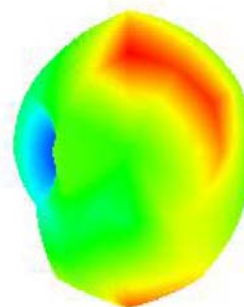
5. Antenna Passive Data



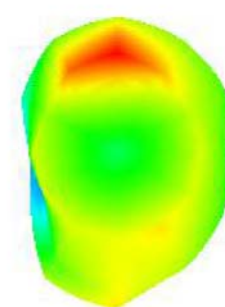
6. Antenna Gain/Efficiency/3D Apple Chart

Freq (MHz)	Effi (%)	Gain (dBi)
2400	21.6	-0.88
2410	22.36	-0.87
2420	22.7	-0.86
2430	23.45	-0.85
2440	23.42	-0.79
2450	24.18	-0.76
2460	23.63	-0.77
2470	23.21	-0.76
2480	24	-0.69
2490	24.73	-0.61
2500	25.42	-0.66

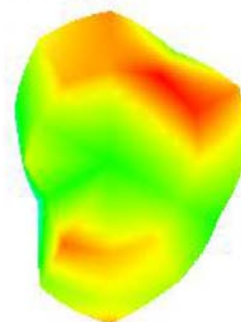
2400.000MHz



2450.000MHz

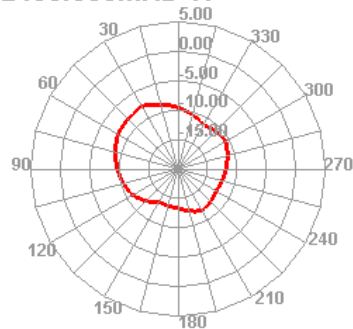


2500.000MHz

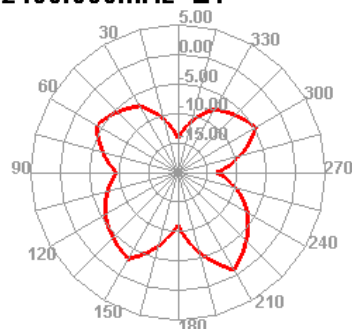


7. Antenna Direction Map

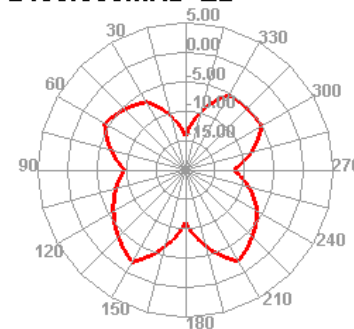
2400.000MHz H



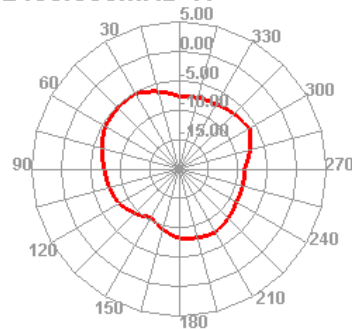
2400.000MHz E1



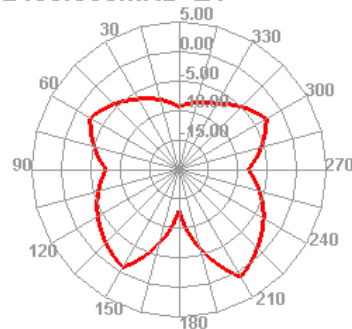
2400.000MHz E2



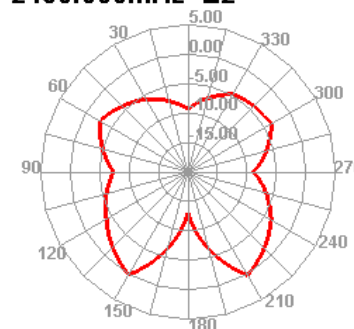
2450.000MHz H



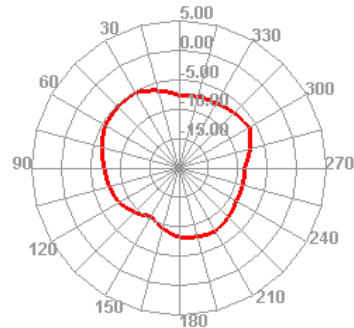
2450.000MHz E1



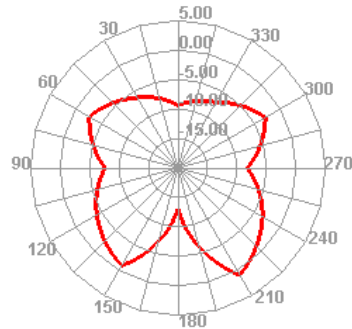
2450.000MHz E2



2450.000MHz H



2450.000MHz E1



2450.000MHz E2

