



Shenzhen DBT Telecommunication Technology CO.,LTD

Antenna Testing Report

Client: Guangdong Welland Technology Co., Ltd.

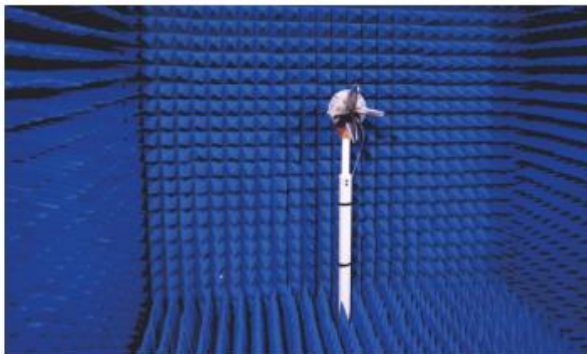
Project: KN2432LB

Antenna standard: BT

Manufacturer Address: Building 8, Nanshan Yungu,
Taoyuan Street, Nanshan District, Shenzhen, China

RF: 王志锋
TEL: 13823540870
TIME: 2019/11/09

1. Test Equipment

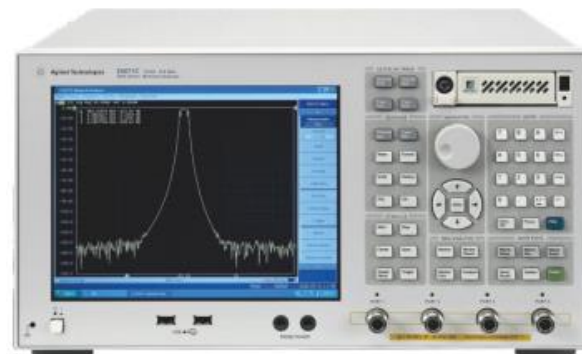


OTA-800

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.



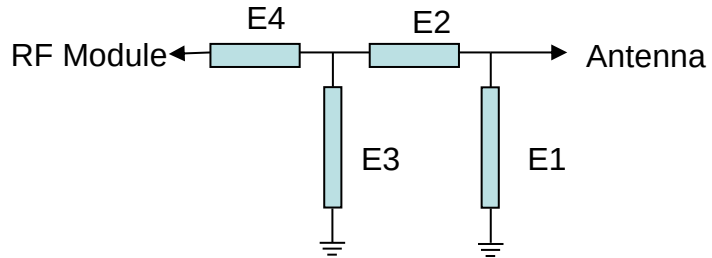
CMW500

Brand: Rohde & Schwarz

Frequency range: 70KHz-6GHz

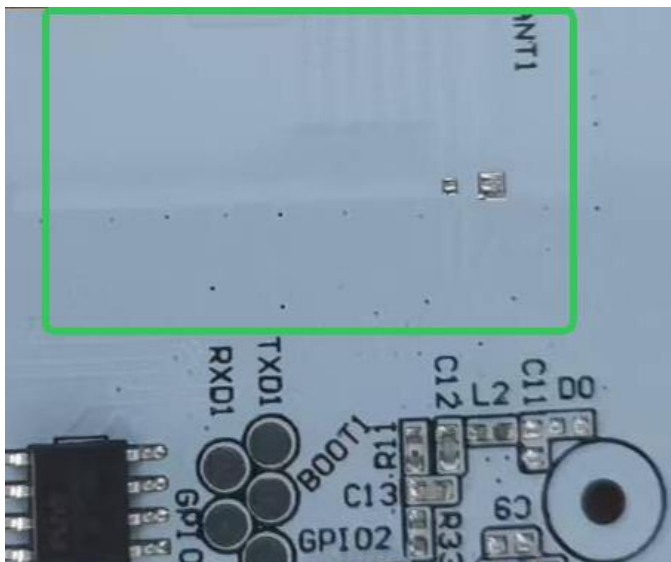
Features: 2G/3G/4G/BT/WIFI/NB-Lot antenna comprehensive passive test.

2. Matching circuit

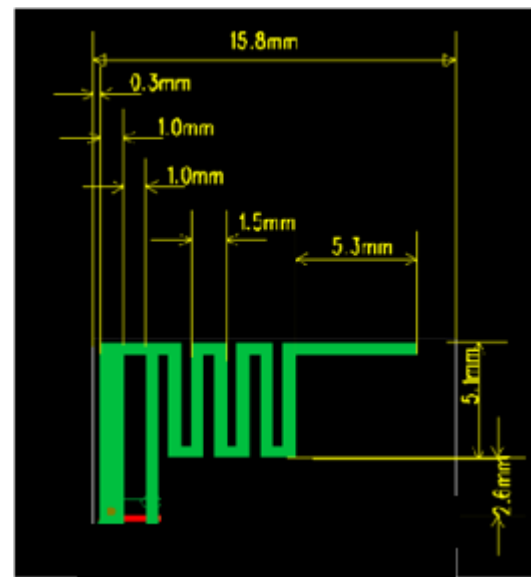


Element	MAIN	GPS/WIFI /BT	AUX
E1(0201)	N/A		
E2(0201)	3.3nF		
E3(0201)	1.5pF		
E4(0201)	0Ω		

3. Antenna assembly position



antenna position



antenna position

4.Electrical Parameter



Electrical Parameter	
Frequency Range (MHz)	2400~2500
VSWR	≤7.0
Input Impedance(Ω)	50
Gain(dBi)	0.88
Polarization(°)	vertical
Max power(W)	10
Antenna Type	PCB Antenna
Working Temperature(°C)	-40~+80

5. Antenna Passive Data

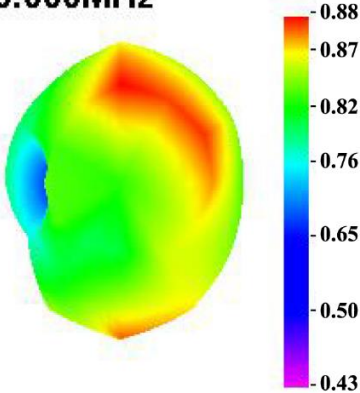


6.Antenna Gain/Efficiency/3D Apple Chart

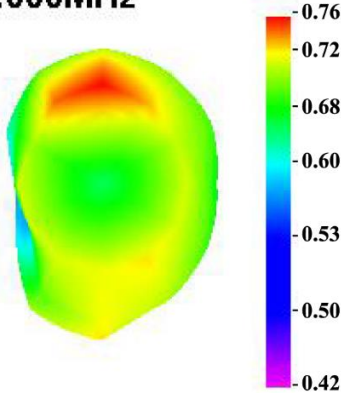


Freq (MHz)	Effi (%)	Gain (dBi)
2400	1.6	0.88
2410	1.36	0.87
2420	1.77	0.86
2430	1.45	0.85
2440	1.42	0.79
2450	1.18	0.76
2460	1.63	0.77
2470	1.01	0.76
2480	1	0.69
2490	0.73	0.61
2500	1.42	0.66

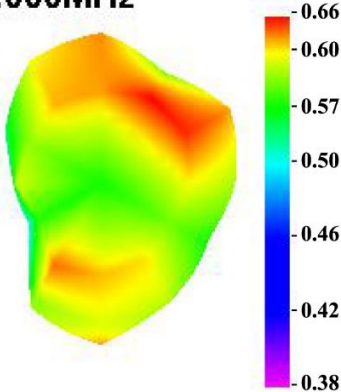
2400.000MHz



2450.000MHz



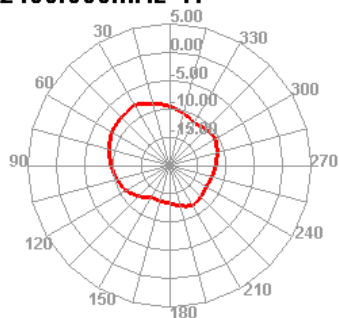
2500.000MHz



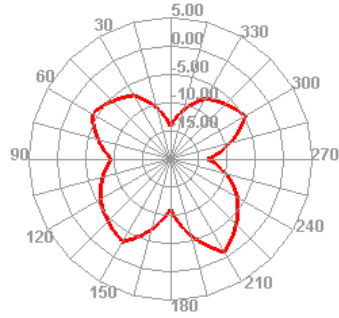
7.Antenna Direction Map



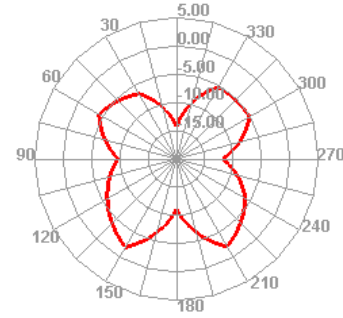
2400.000MHz H



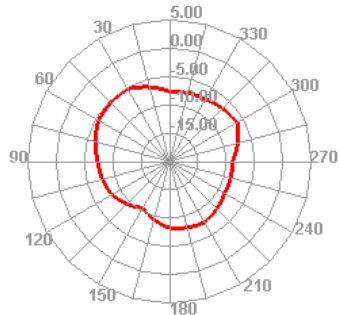
2400.000MHz E1



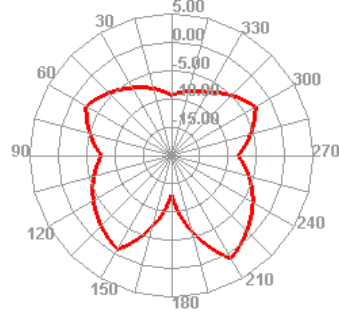
2400.000MHz E2



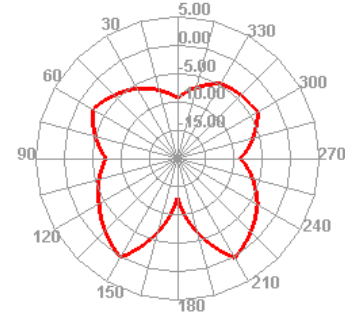
2450.000MHz H



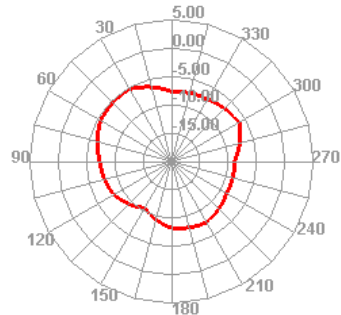
2450.000MHz E1



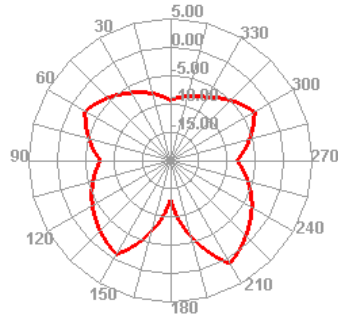
2450.000MHz E2



2450.000MHz H



2450.000MHz E1



2450.000MHz E2

