



Shenzhen DBT Telecommunication Technology CO.,LTD

Antenna Testing Report

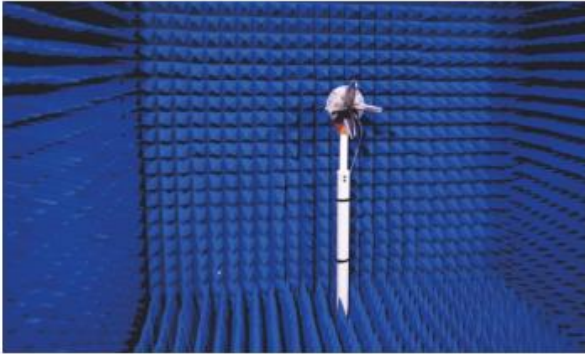
Client: Guangdong Welland Technology Co., Ltd.

Project: FG2016WB-B

Antenna standard: BT

Manufacture Address: 505, Building 8, Nanshan Yungu Phase II, Taoyuan Street, Nanshan District, Shenzhen City, Guangdong, China

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.

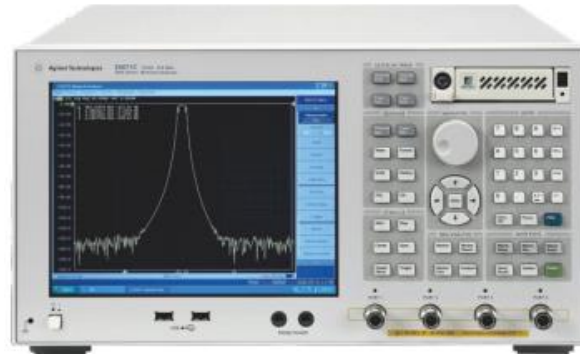


8960

Brand: Agilent

Frequency range: 292MHz-2700GHz

Features: 2G/3G active test.



5071C

Brand: Agilent ✓

Frequency range: 9KHz-8.5GHz

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



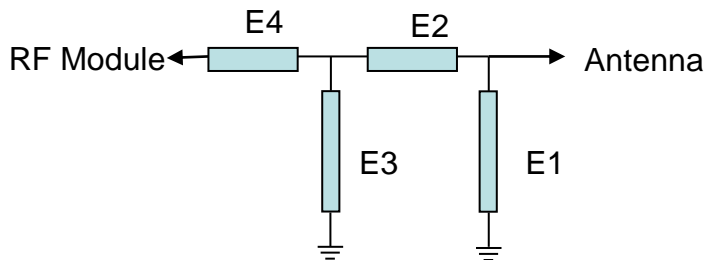
CMW500

Brand: Rohde & Schwarz

Frequency range: 70KHz-6GHz

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

2. Matching circuit

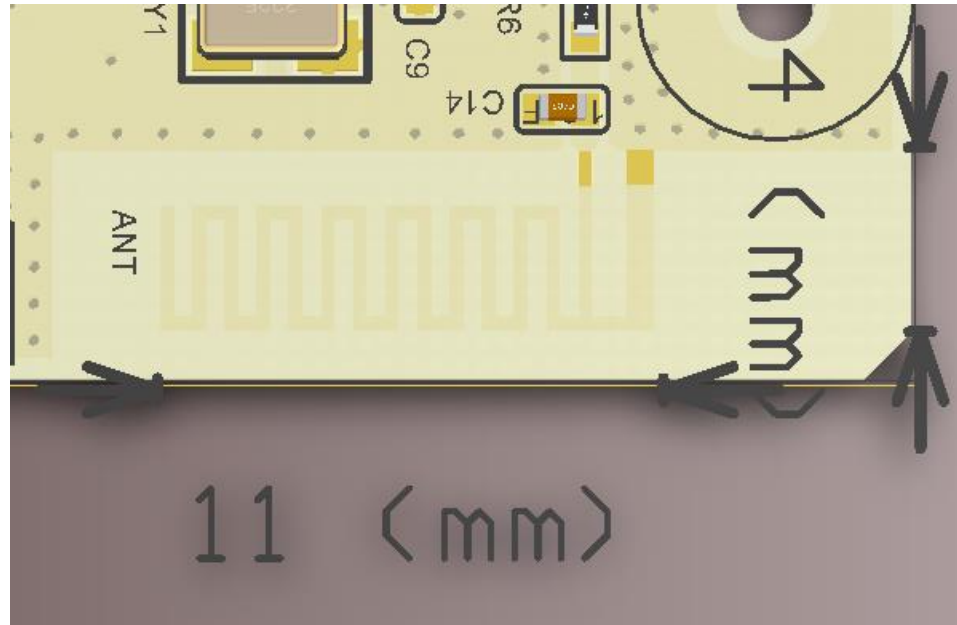


Element	MAIN	GPS/WIFI /BT	AUX
E1(0201)	N/A		
E2(0201)	10pF		
E3(0201)	1pF		
E4(0201)	N/A		

3. Antenna assembly position



antenna position



4. Electrical Parameter



Electrical Parameter	
Frequency Range (MHz)	2400~2500
VSWR	≤7.0
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

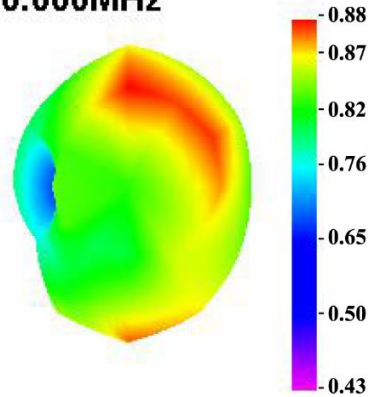


6. Antenna Gain/Efficiency/3D Apple Chart

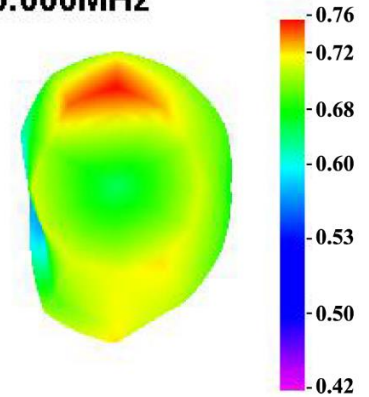


Freq (MHz)	Effi (%)	Gain (dBi)
2400	1.6	-0.89
2410	1.36	-0.87
2420	1.7	-0.86
2430	1.45	-0.85
2440	1.42	-0.79
2450	1.18	-0.78
2460	1.63	-0.77
2470	1.01	-0.76
2480	1	-0.69
2490	0.73	-0.61
2500	1.42	-0.67

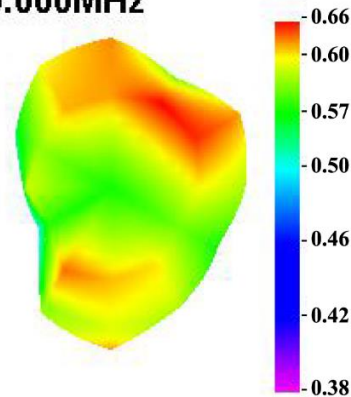
2400.000MHz



2450.000MHz

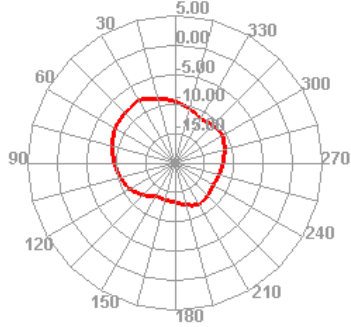


2500.000MHz

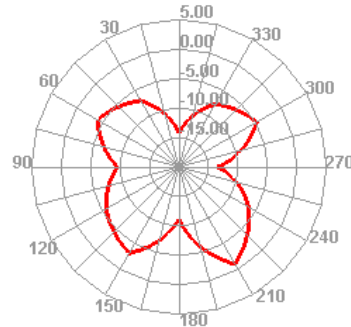


7. Antenna Direction Map

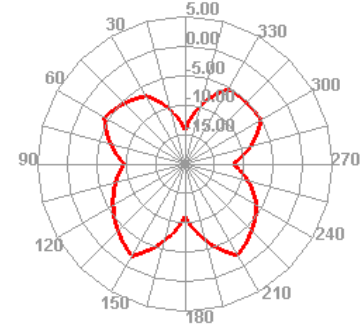
2400.000MHz H



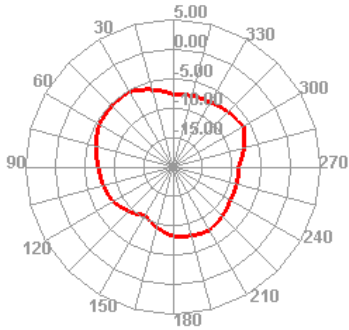
2400.000MHz E1



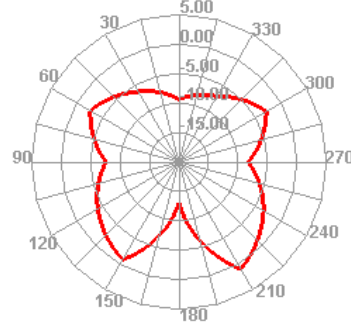
2400.000MHz E2



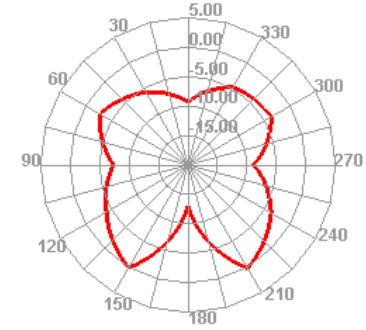
2450.000MHz H



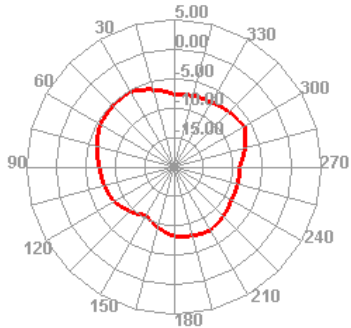
2450.000MHz E1



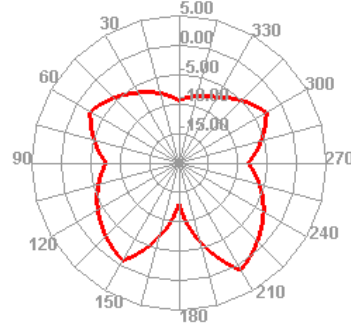
2450.000MHz E2



2450.000MHz H



2450.000MHz E1



2450.000MHz E2

