



# Shenzhen DBT Communications Equipment Co.,Ltd. Antenna Testing Report

Manufacturer: Shenzhen DBT Communications  
Equipment Co.,Ltd.

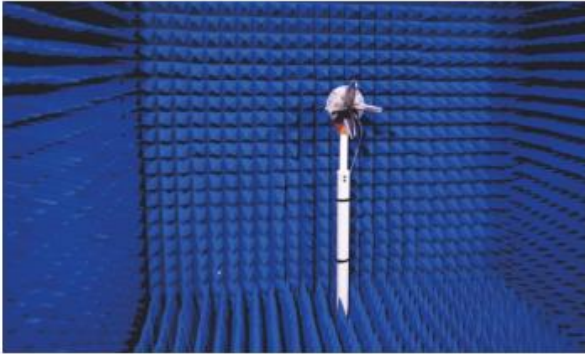
Address: No. 505, Building 8, Nanshan Yungu Phase  
II, Taoyuan Street, Nanshan District,  
Shenzhen,Guangdong, china

Client: Guangdong Welland Technology Co., Ltd.

Project: FG2317WB

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.

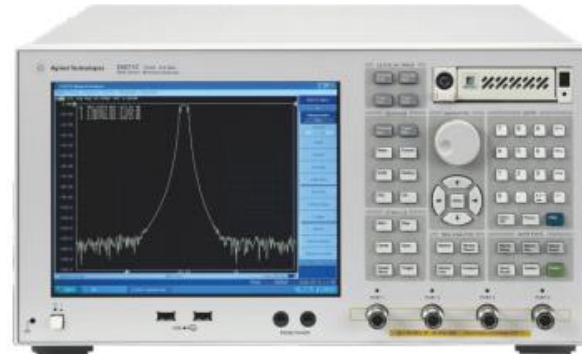


8960

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.



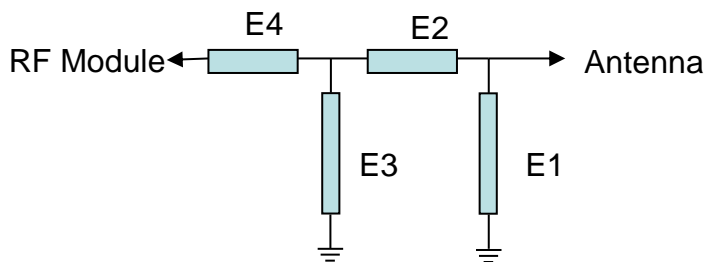
CMW500

Brand: Rohde & Schwarz

Frequency range: 70KHz-6GHz

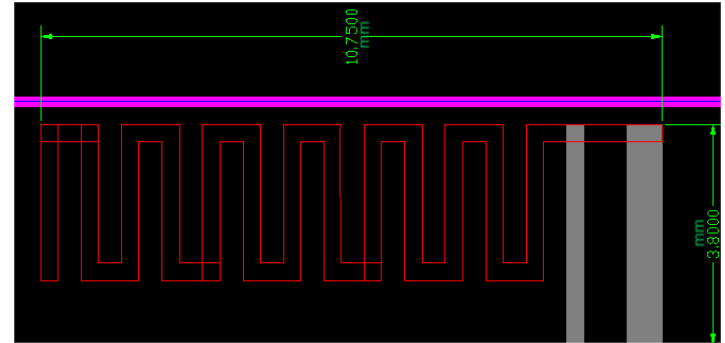
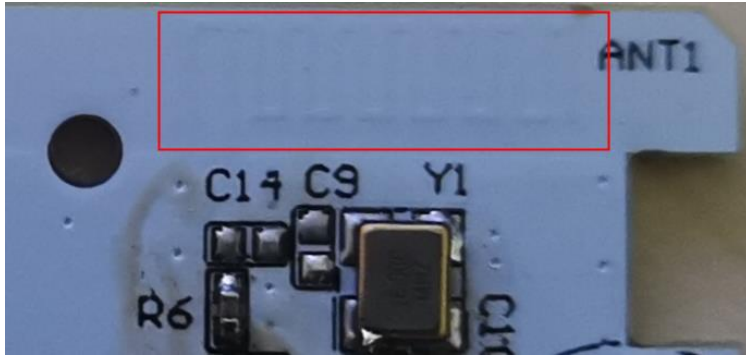
Features: 2G/3G/4G/BT/WIFI/NB-Lot antenna comprehensive passive test.

## 2. Matching circuit



Element	MAIN	GPS/WIFI /BT	AUX
E1(0201)	N/A		
E2(0201)	1.2pF		
E3(0201)	10pF		
E4(0201)	0Ω		

# 3. Antenna assembly position



# 4. Electrical Parameter



Electrical Parameter	
Frequency Range (MHz)	2400~2500
VSWR	≤7.0
Input Impedance( $\Omega$ )	50
Gain(dBi)	0.89
Polarization( $^{\circ}$ )	vertical
Max power(W)	10
Antenna Type	PCB Antenna
Working Temperature( $^{\circ}\text{C}$ )	-40~+80

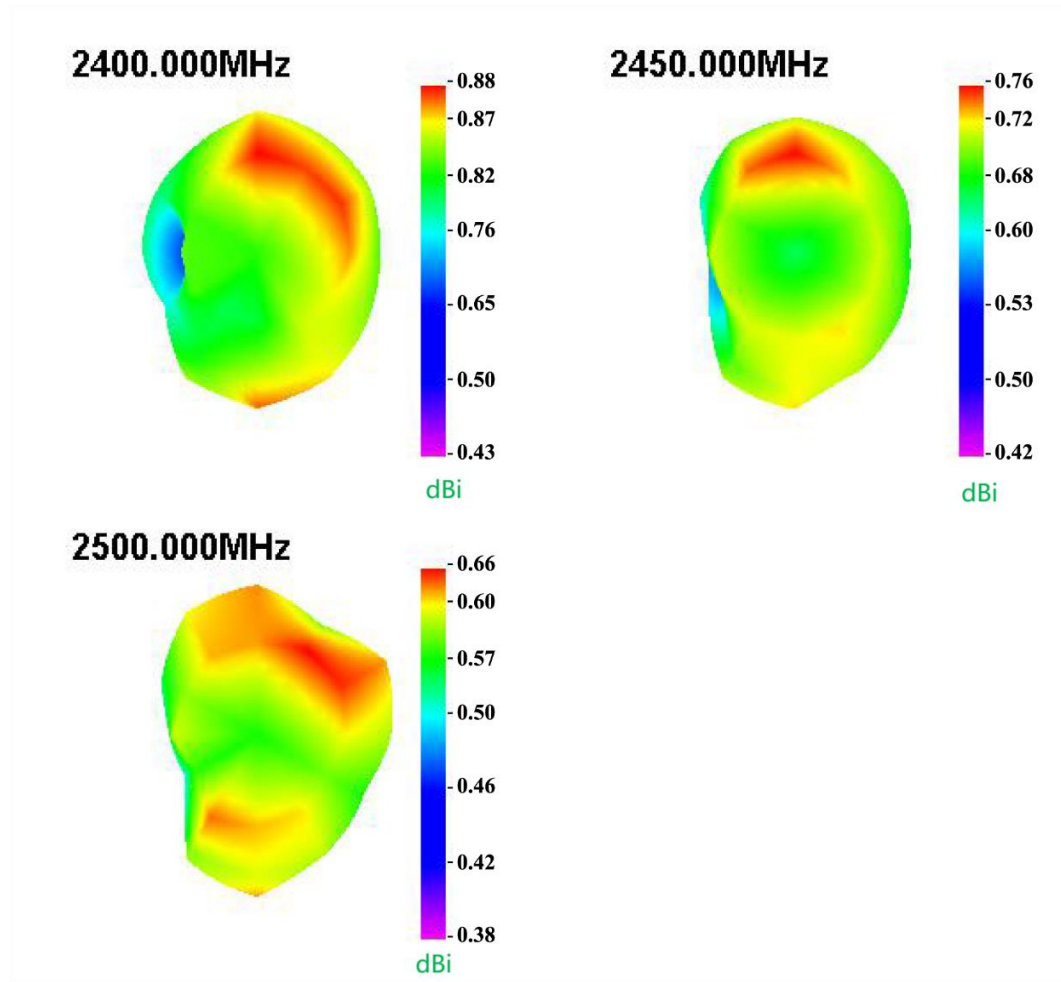
# 5. Antenna Passive Data



# 6. Antenna Gain/Efficiency/3D Apple Chart



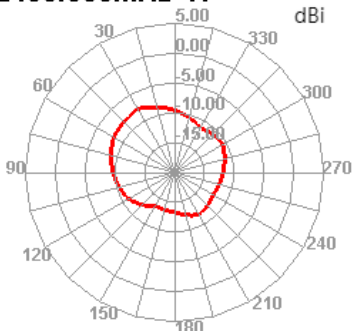
Freq (MHz)	Effi (%)	Gain (dBi)
2400	1.6	0.89
2410	1.36	0.87
2420	1.77	0.86
2430	1.45	0.85
2440	1.42	0.79
2450	1.18	0.78
2460	1.63	0.77
2470	1.01	0.76
2480	1	0.69
2490	0.73	0.61
2500	1.42	0.67



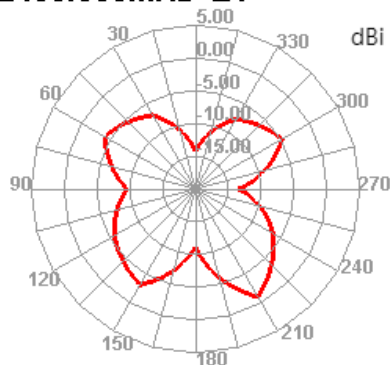
# 7. Antenna Direction Map



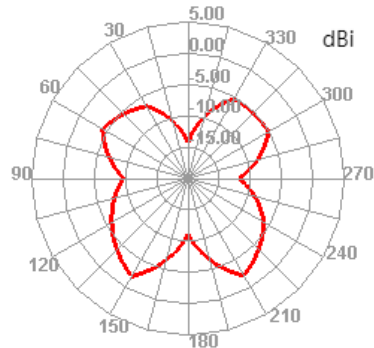
2400.000MHz H



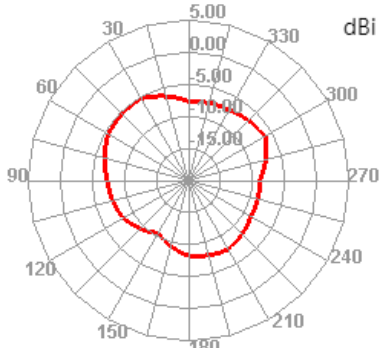
2400.000MHz E1



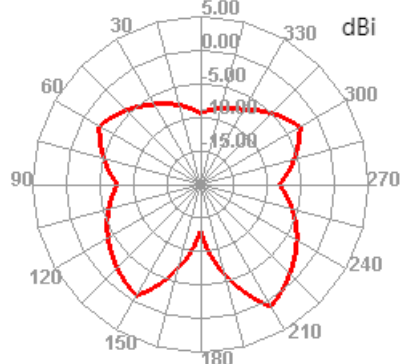
2400.000MHz E2



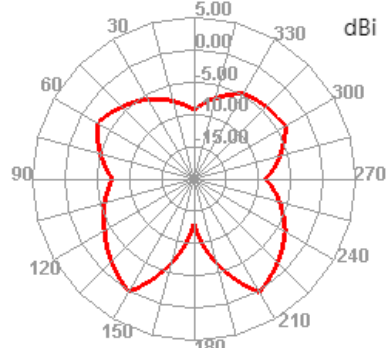
2450.000MHz H



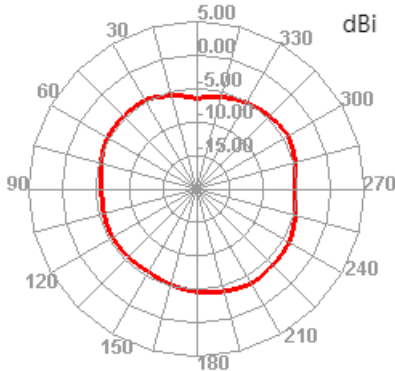
2450.000MHz E1



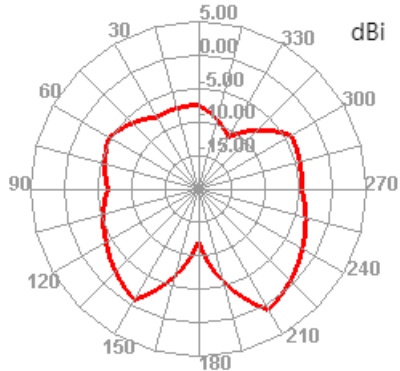
2450.000MHz E2



2500.000MHz H



2500.000MHz E1



2500.000MHz E2

