

L5710-32EA antenna test report

project :L5710-32EA

Antenna manufacturer:

ShenZhen

Xinyuantong

Technology Co.,Ltd.

Add: Room 608, Block

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Bantian Street,

Longgang District,

Shenzhen

(Flow the

Rhododendron Hotel)

engineer : x i a o

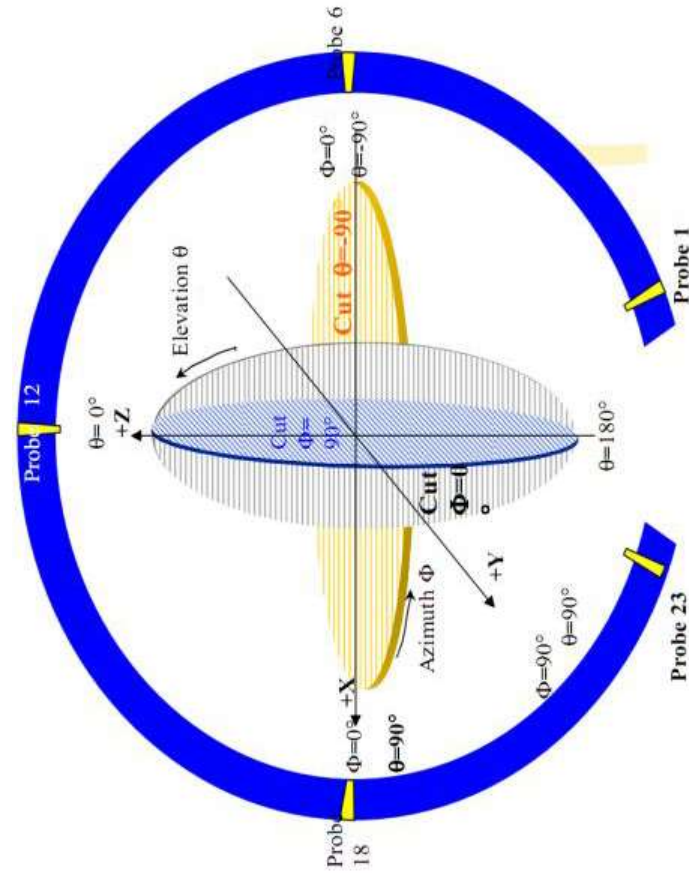
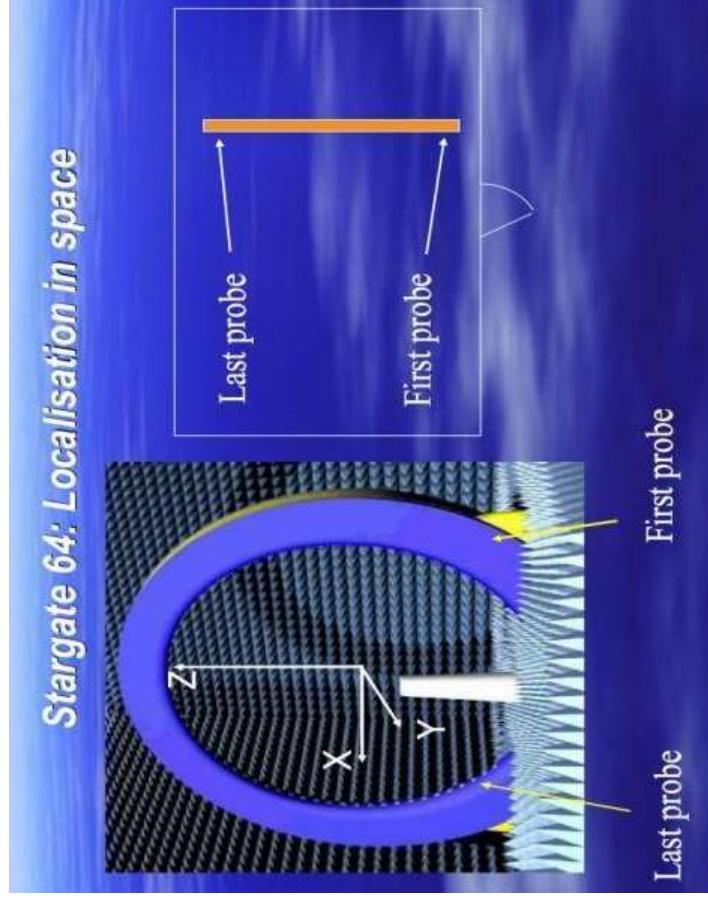
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date : 2023.08.29

Directory

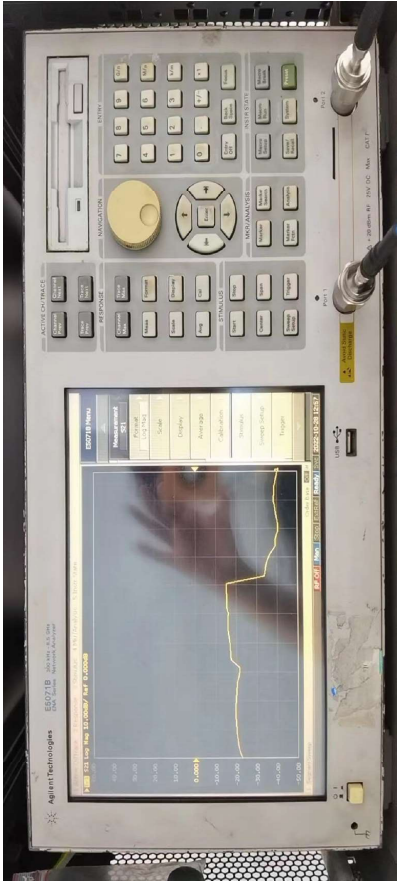
- Introduction to test equipment and test environment
- Test process introduction
- Introduction to Antenna Information
- Diagram of antenna test
- Antenna test data
 - Antenna passive data
 - Antenna active data

Coordinate identification diagram

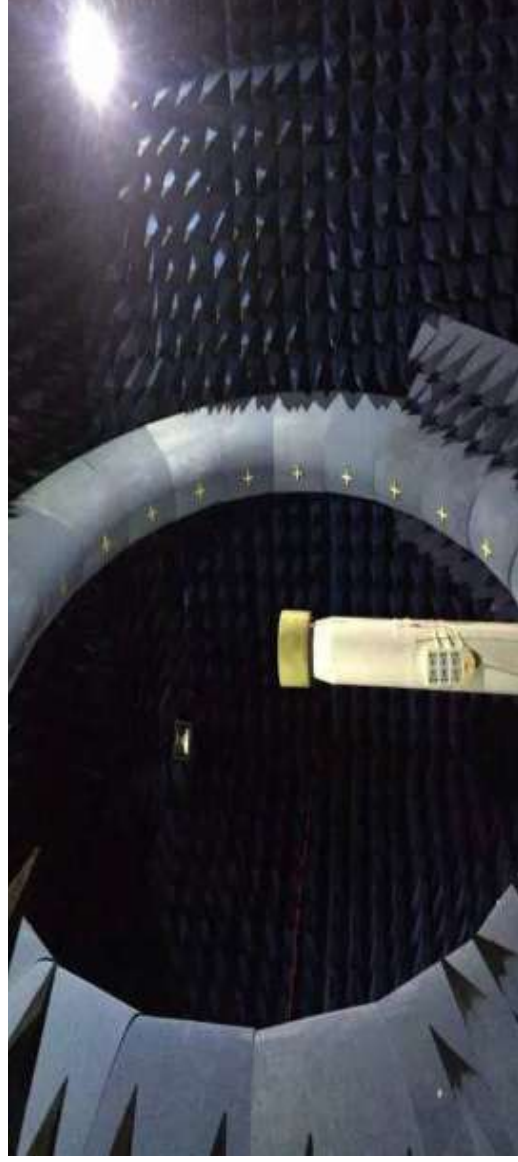


Laboratory test environment and equipment

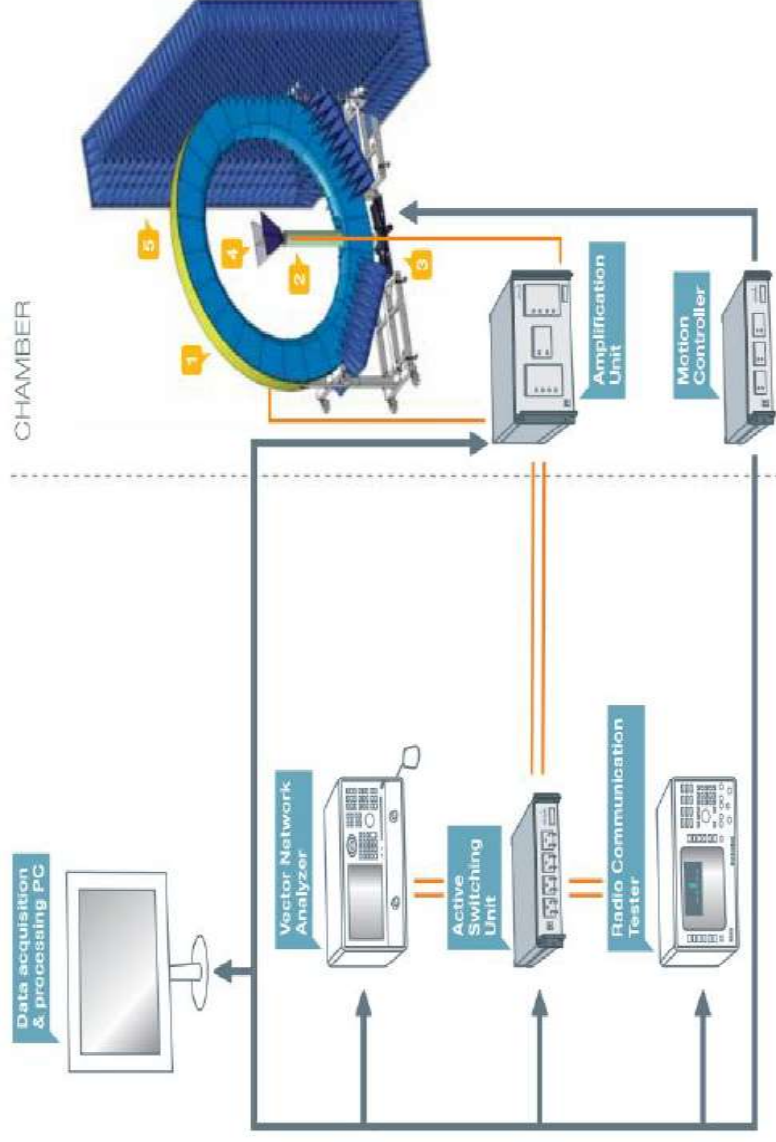
Test project	The device under test
S11, S12 , VSWR , LOSS	Network analyzer:E5071B
Efficiency, Gain 3D Radiation Pattern	ATS, Network analyzer:E5071B
TRP, TIS	ATS, CMW500, Agilent 8960



Laboratory test environment and equipment

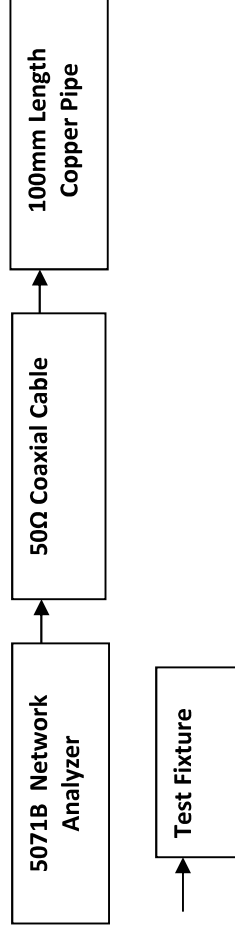


Test process introduction

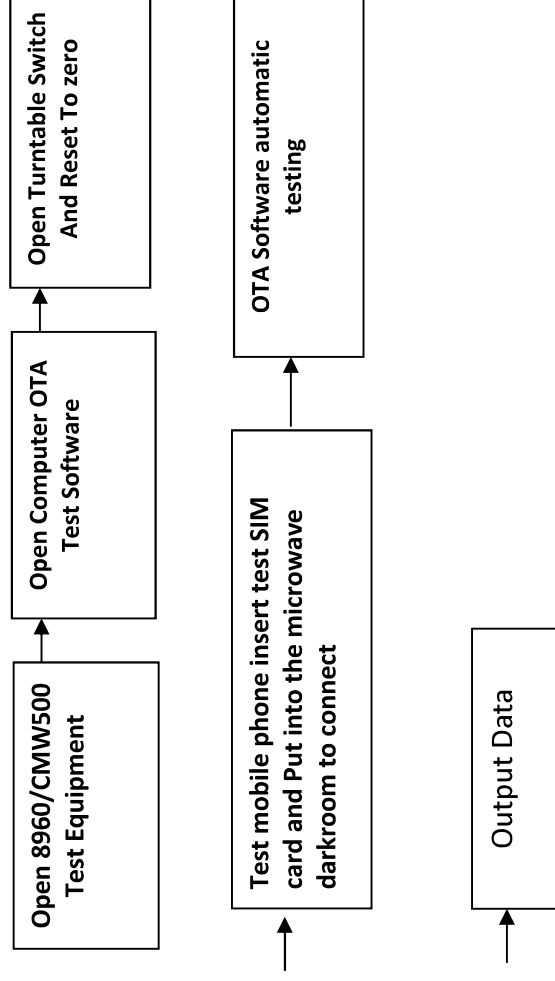


Test process introduction

Passive VSWR/RL Test Steps:



• Active TRP/TIS Test Step:



Introduction to Antenna Information

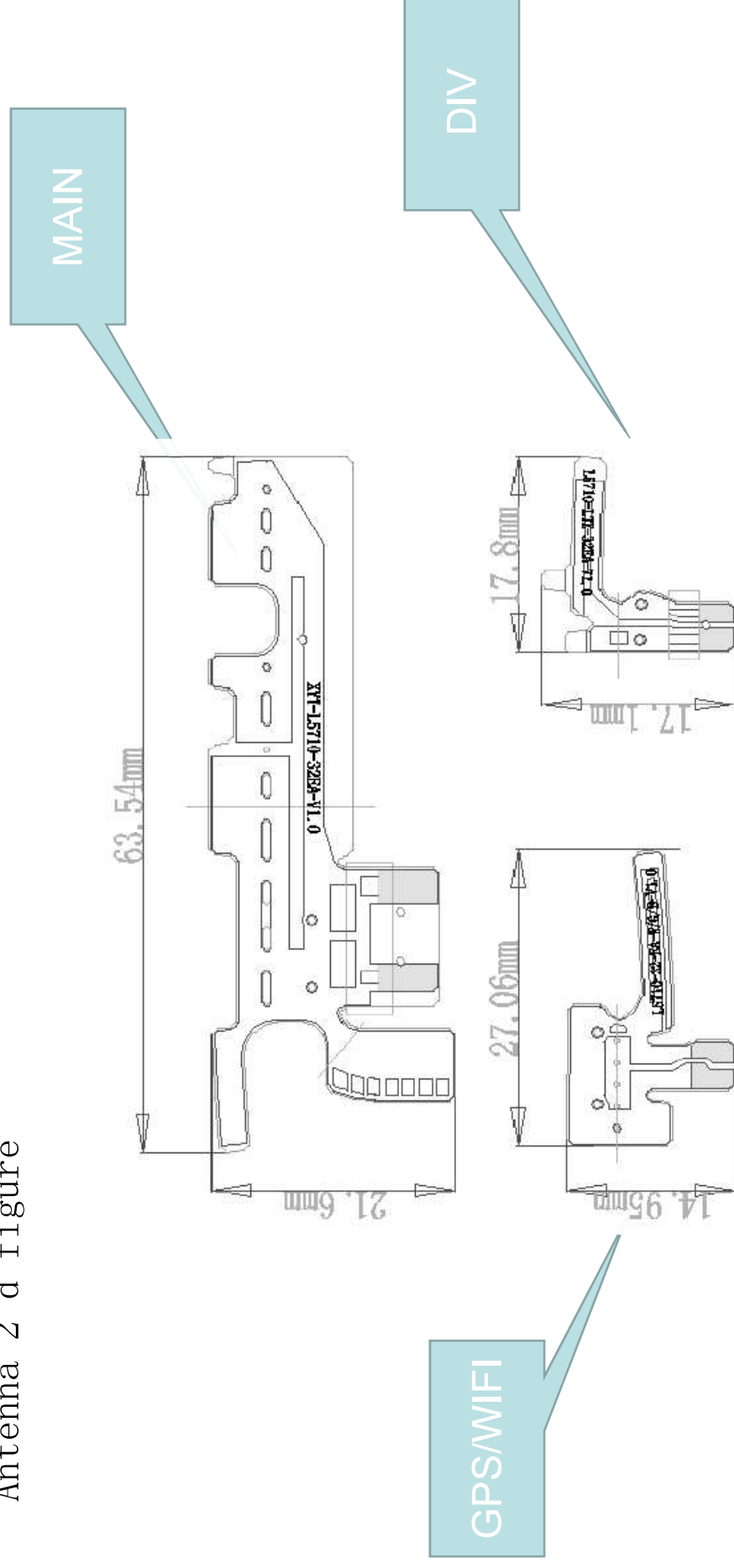
Antenna type and frequency band	MAIN ANTENNA:2G/3G4G DIV ANTENNA:2G/3G/4G GPS/WIFI ANTENNA:L1/2.4G
Antenna materia	FPCB

Antenna type (Model no)

Antenna type and frequency band	MAIN ANTENNA (PIFA) : 2G/3G/4G				
	25. 057301001				
	DIV ANTENNA (PIFA) : 2G/3G/4G				
	25. 057301003				
	GPS/WIFI/BT ANTENNA (PIFA) : L1/2. 4G/WIFI/BT				
	25. 057301002				

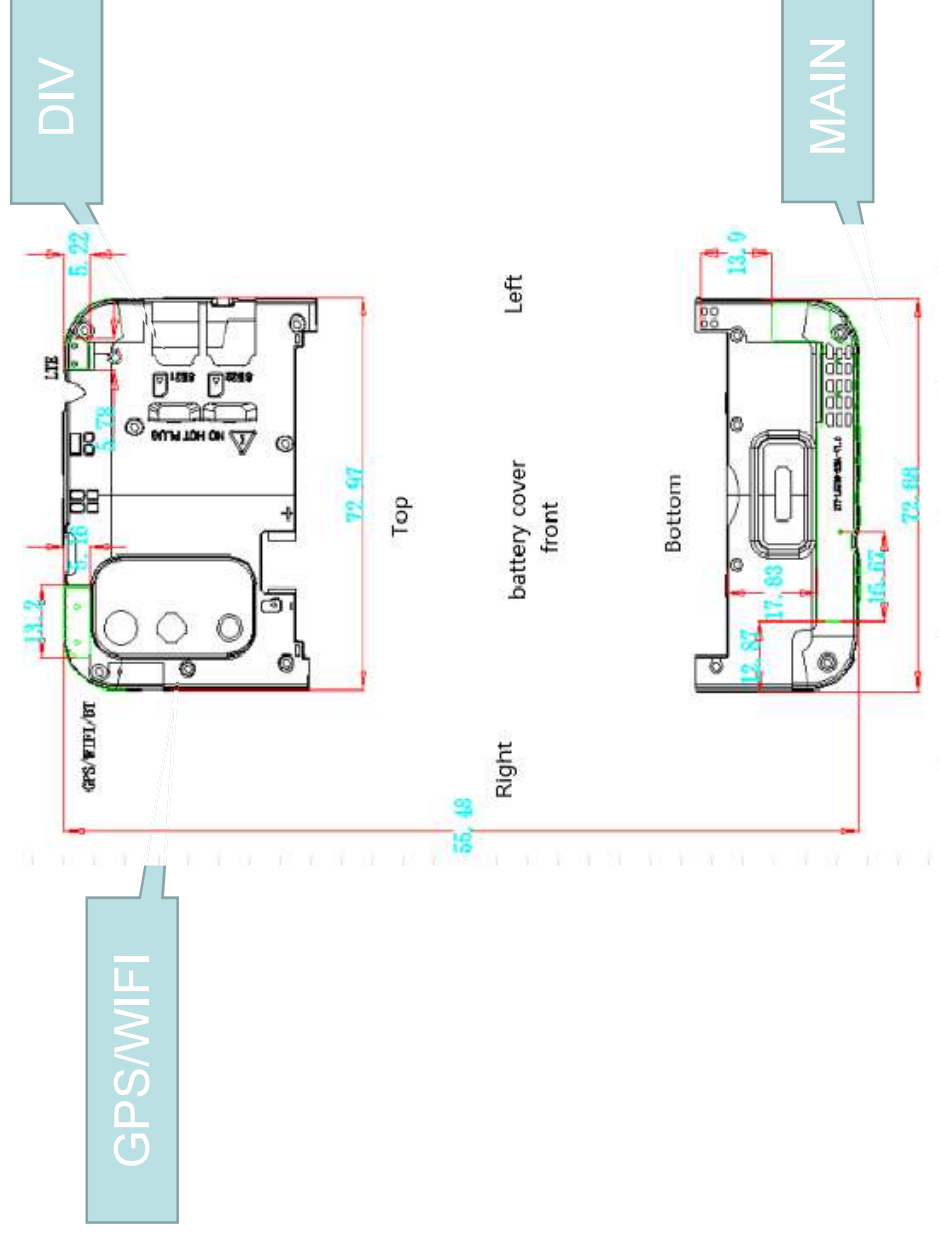
Introduction to Antenna Information

Antenna 2 d figure



Introduction to Antenna Information

Antenna 3d figure



Introduction to Antenna Information

Complete machine



Diagram of antenna test

Passive test

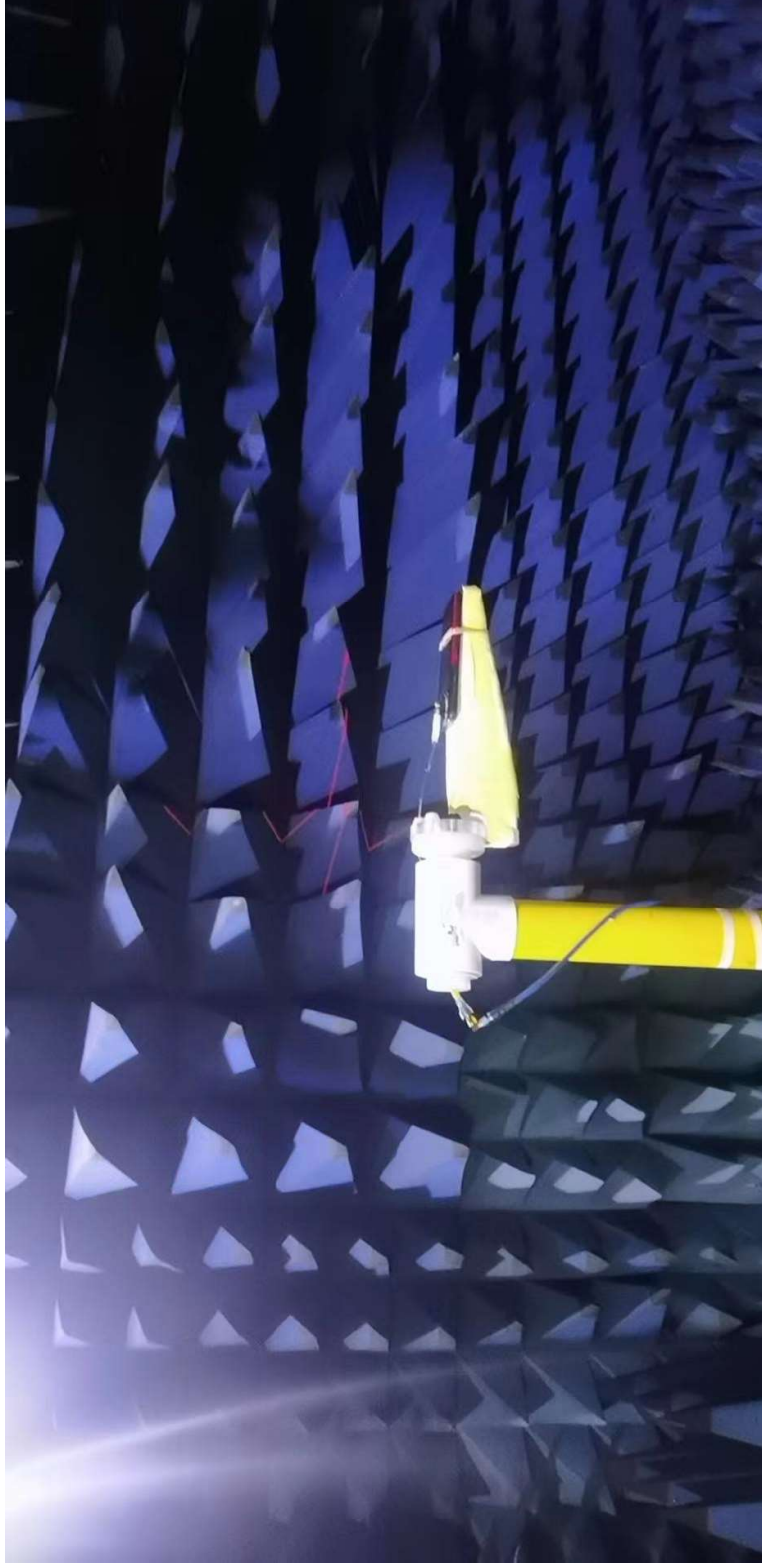


Diagram of antenna tes

Active test



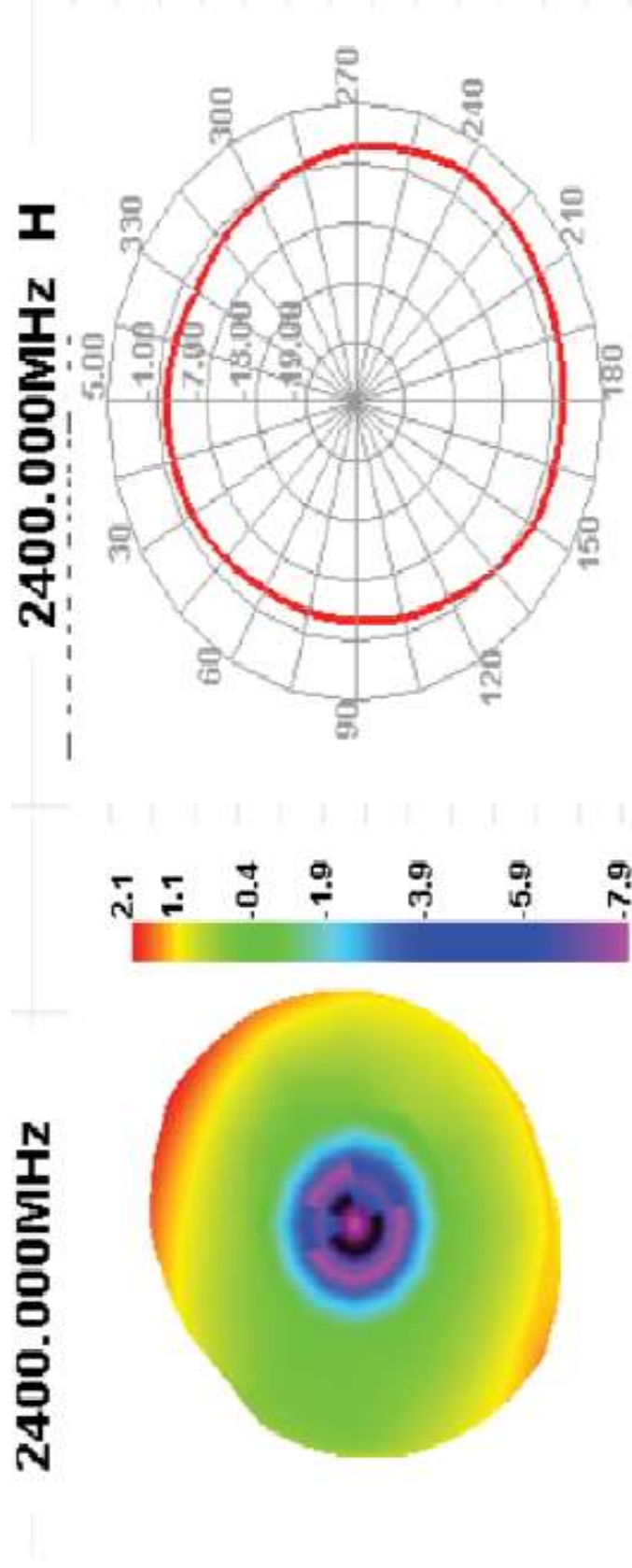
Antenna test data

Efficiency and gain

BAND	Effi (dB)	Gain (dBi)	Effi (%)
GSM850	-5.09	0.01	30.98%
GSM900	-5.48	1.88	38.31%
DCS1800	-4.07	-1.11	39.14%
PCS1900	-3.98	-1.09	39.99%
WCDMA2100	-4.91	-1.46	32.29%
WCDMA1900	-3.98	-1.09	39.99%
WCDMA1700	-4.07	-1.11	39.14%
WCDMA850	-5.08	0.01	30.88%
WCDMA900	-5.48	1.88	38.31%
BAND 2	-3.98	-1.09	39.99%
BAND 3	-3.98	-1.09	39.99%
BAND 4	-4.07	-1.11	39.14%
BAND 5	-5.09	0.01	30.98%
BAND 7	-3.46	0.74	45.13%
BAND 17	-6.77	-1.97	21.02%
BAND 28	-5.78	-0.79	28.43%
BAND 38	-4.35	0.54	37.61%
Bluetooth	-2.48	2.06	58.44%
WIFI-2.4G	-2.48	2.06	58.44%
CPS	-4.58	0.36	34.82%

Antenna test data

Passive 3D image of antenna (WIFI)



Antenna test data

Antenna active data

Mode	Band	TRP	TIS
GSM	GSM850	28.24	-103.67
	GSM900	28.36	-103.82
	DCS1800	26.31	-103.99
	PCS1900	25.57	-103.67
WCDMA	W850(B5)	18.92	-105.89
	W900(B8)	18.92	-105.89
	W1700(B4)	19.73	-104.77
	W1900(B2)	19.7	-104.92
	W2100(B1)	19.48	-105.98
LTE	B2	18.45	-93
	B3	18.87	-94.63
	B4	17.99	-94.23
	B5	18.15	-93
	B7	18.78	-94.82
	B17	17.47	-92.66
	B28A	18.04	-92.99
	B28B	18.42	-93.12
	B38	18.49	-91.05
WIFI	820.11b	12.37	
	820.11g	12.14	
	820.11n	12.3	
BT	BR	4.3	