

# L5710-32EA antenna test report

project : L5710-32EA  
Antenna manufacturer:  
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Technology Co.,Ltd.  
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engineer : x i a o  
l o n g  
date : 2023.08.29

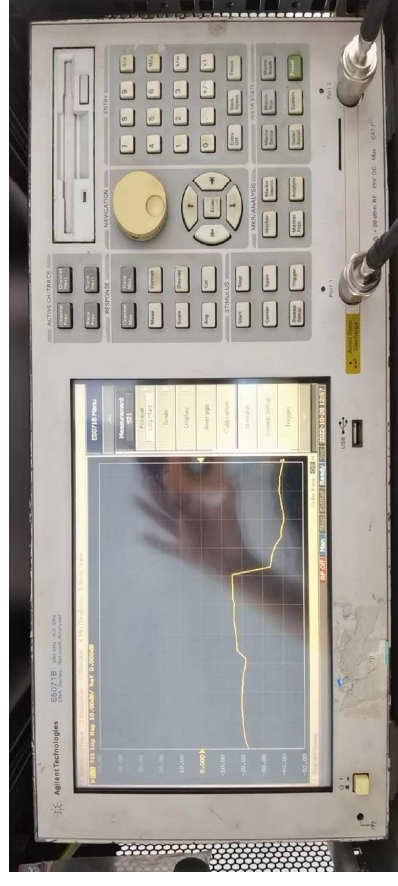
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# Laboratory test environment and equipment

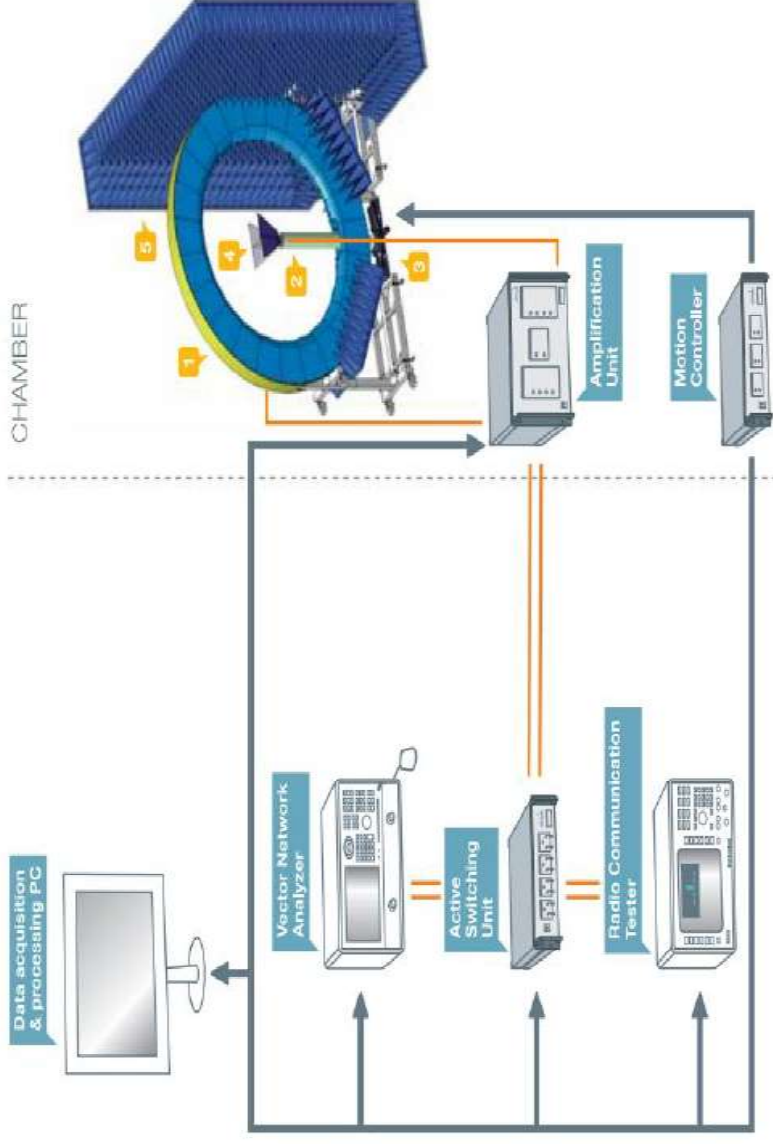
Test project	The device under test
S11, S12 , VSWR , LOSS	Network analyzer:E5071B
Efficiency, Gain 3D Radiation Pattern	ATS, Network analyzer:E5071B
TRP, TIS	ATS, CMW500, Agilent 8960



## Laboratory test environment and equipment

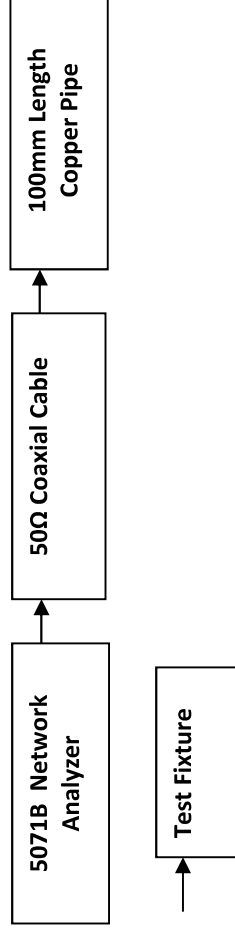


# Test process introduction

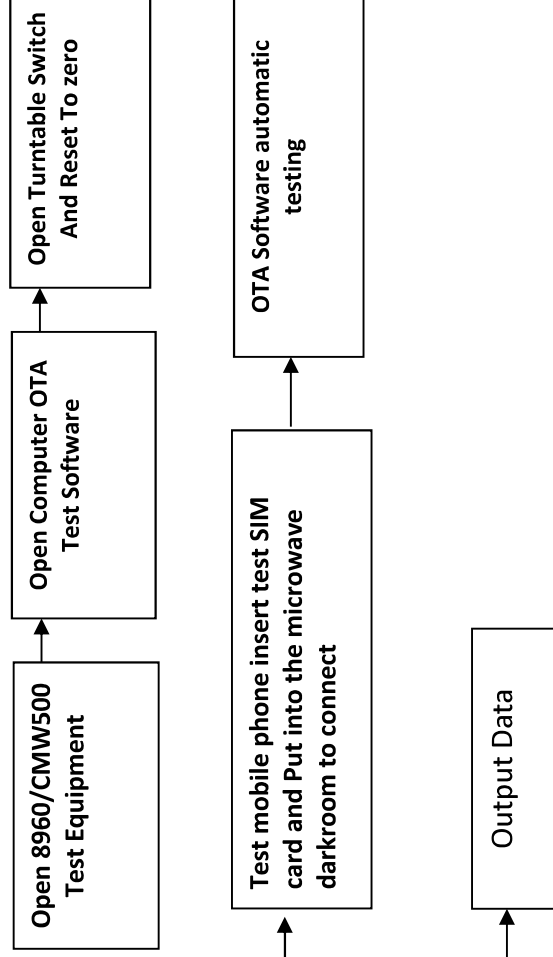


# Test process introduction

## Passive VSWR/RL Test Steps:



- Active TRP/TIS Test Step:



## Introduction to Antenna Information

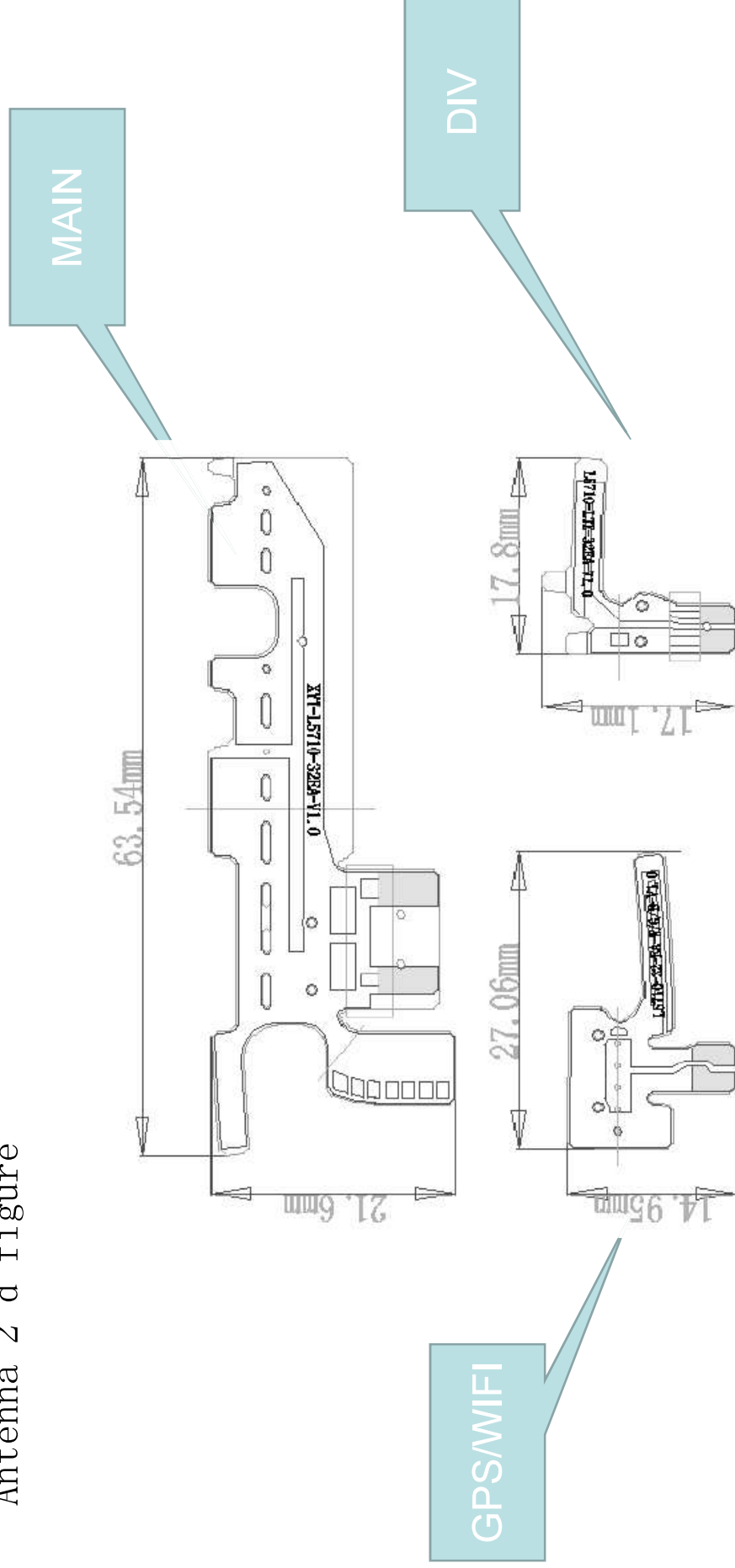
Antenna type and frequency band	MAIN ANTENNA:2G/3G4G DIV ANTENNA:2G/3G/4G GPS/WIFI ANTENNA:L1/2.4G
Antenna materia	FPCB





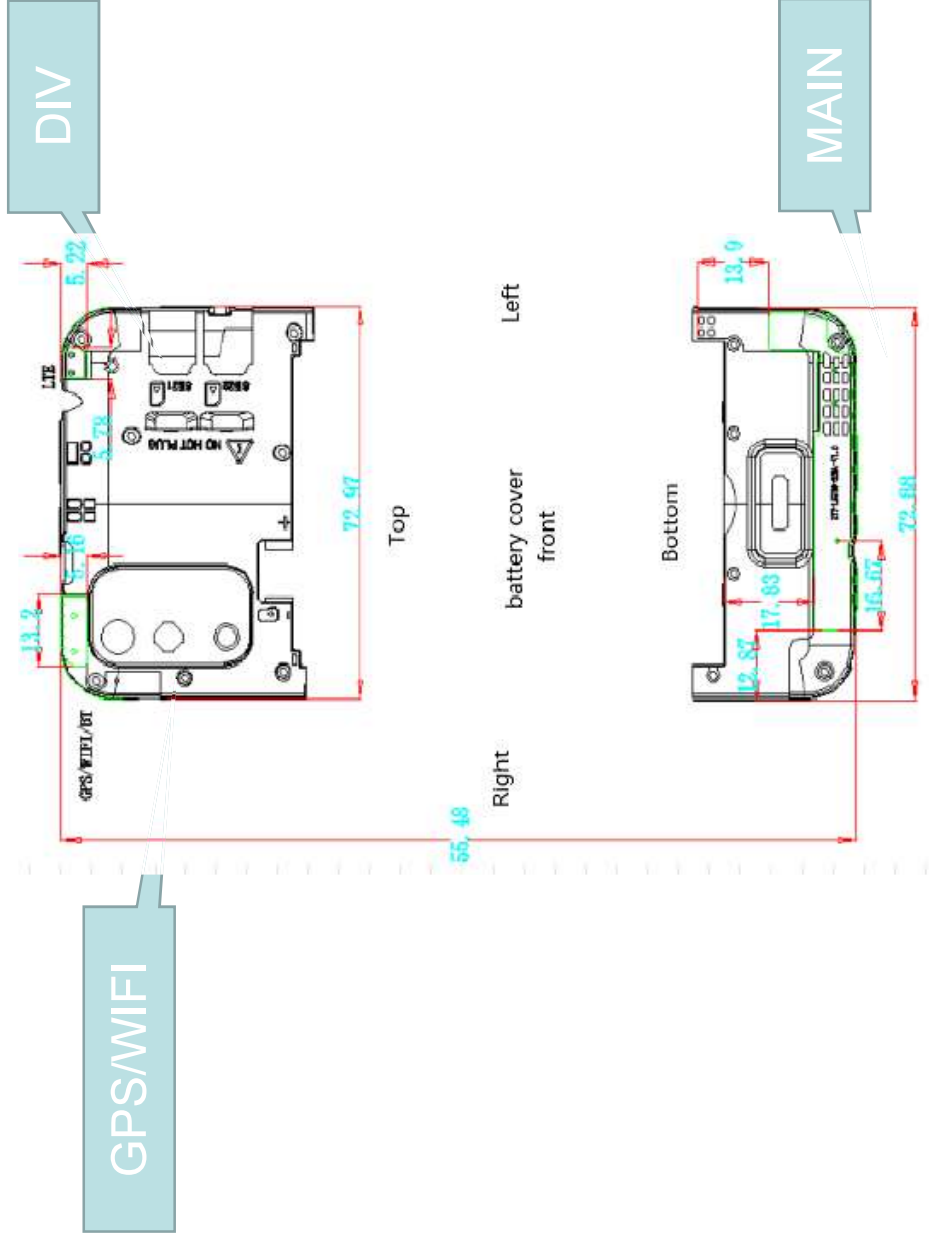
# Introduction to Antenna Information

Antenna 2 d figure



# Introduction to Antenna Information

Antenna 3d figure



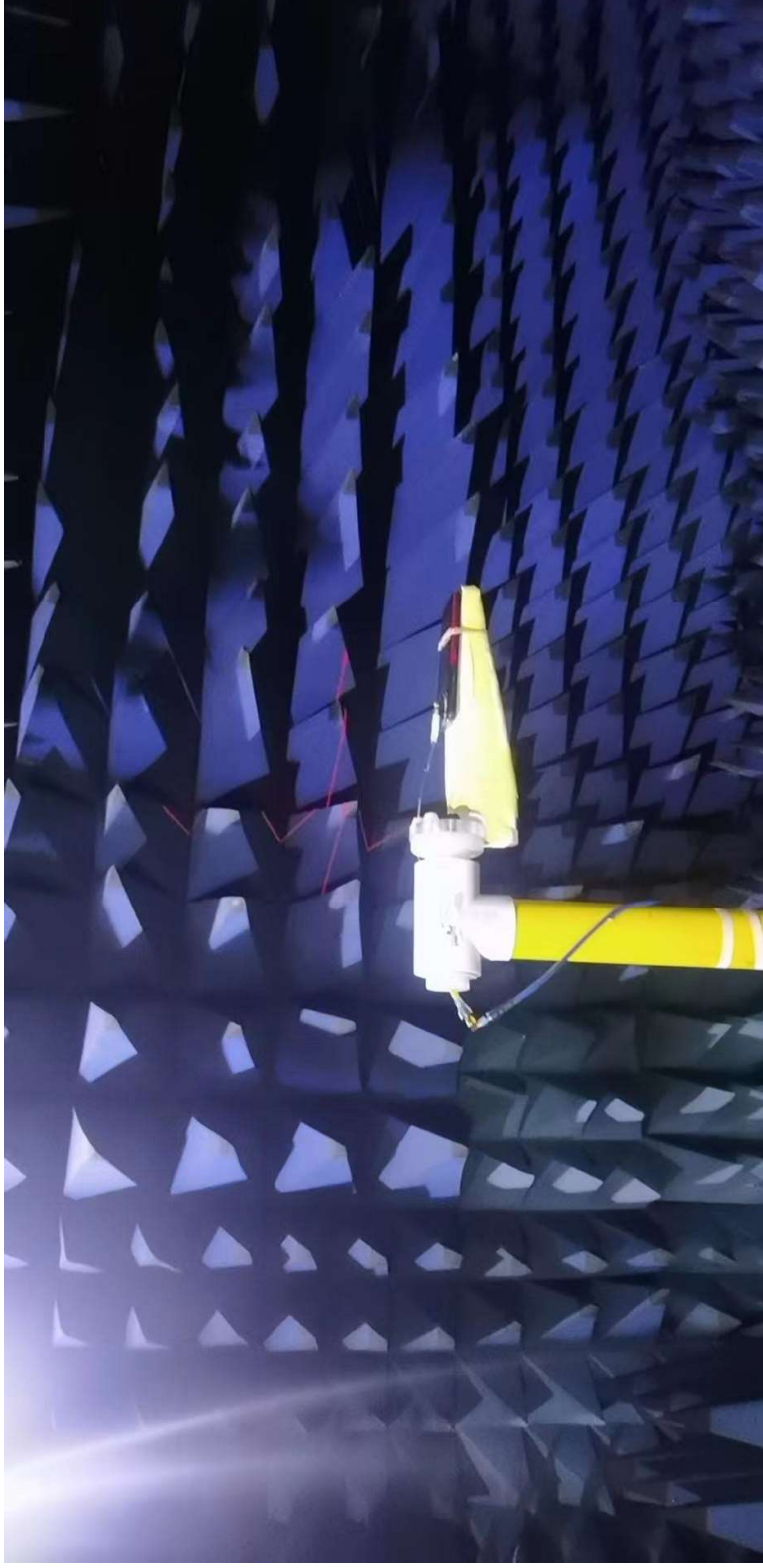
# Introduction to Antenna Information

Complete machine



## Diagram of antenna test

Passive test



## Diagram of antenna tes

Active test



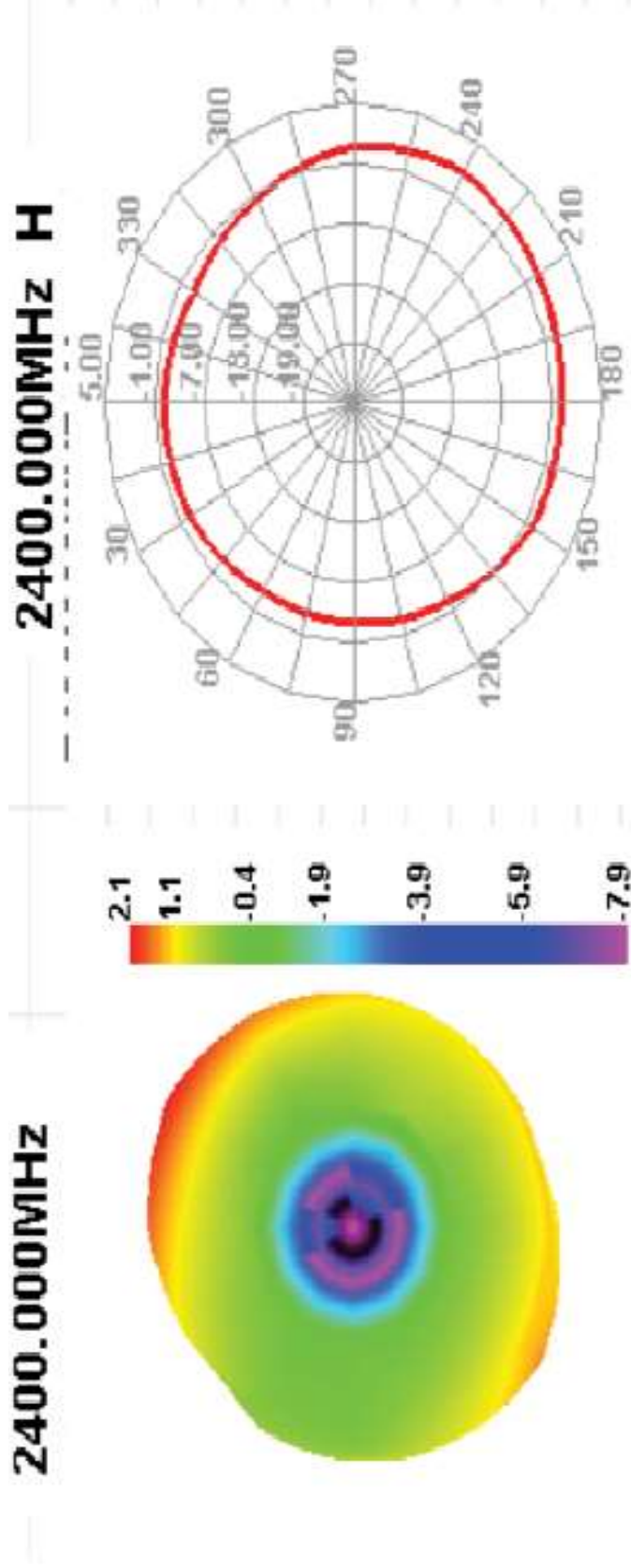
## Antenna test data

Efficiency and gain

BAND	Effi (dB)	Gain (dBi)	Effi (%)
GSM850	-5.09	0.01	30.98%
GSM900	-5.48	1.88	28.31%
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	28.31%
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	-4.25	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
	B2	18.45	-93
LTE	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	