

# Product Specification

Material name: E7168LC - BT/WIFI/GPS antenna FPC

KXHC code: 2FPC111231028-R1

Sample color: BLACK

Applicable model: E7168LC

Customer item No: \_\_\_\_\_

Standard sample      Limit sample

SUPPLIER: Shenzhen KeXinHuaCheng Technology Co., LTD

Structure	Project	Quality	Sale	Research and development	Sample delivery date

CUSTOMER: Shanghai Heyi

Department	Confirm	Date	State	Signature and seal
Structure:				
Test:				
project:				

Version number: V1.0

Address: 101, 201, Zhongkono Digital Technology Industrial Park, No. 7 Road, east of Guangming

# CATALOGUE

- 1、 INFORMATION AND PICTURES
  
- 2、 ELECTRICAL PERFORMANCE AND TESTREPORT
  
- 3、 ENGINEERING DRAWING

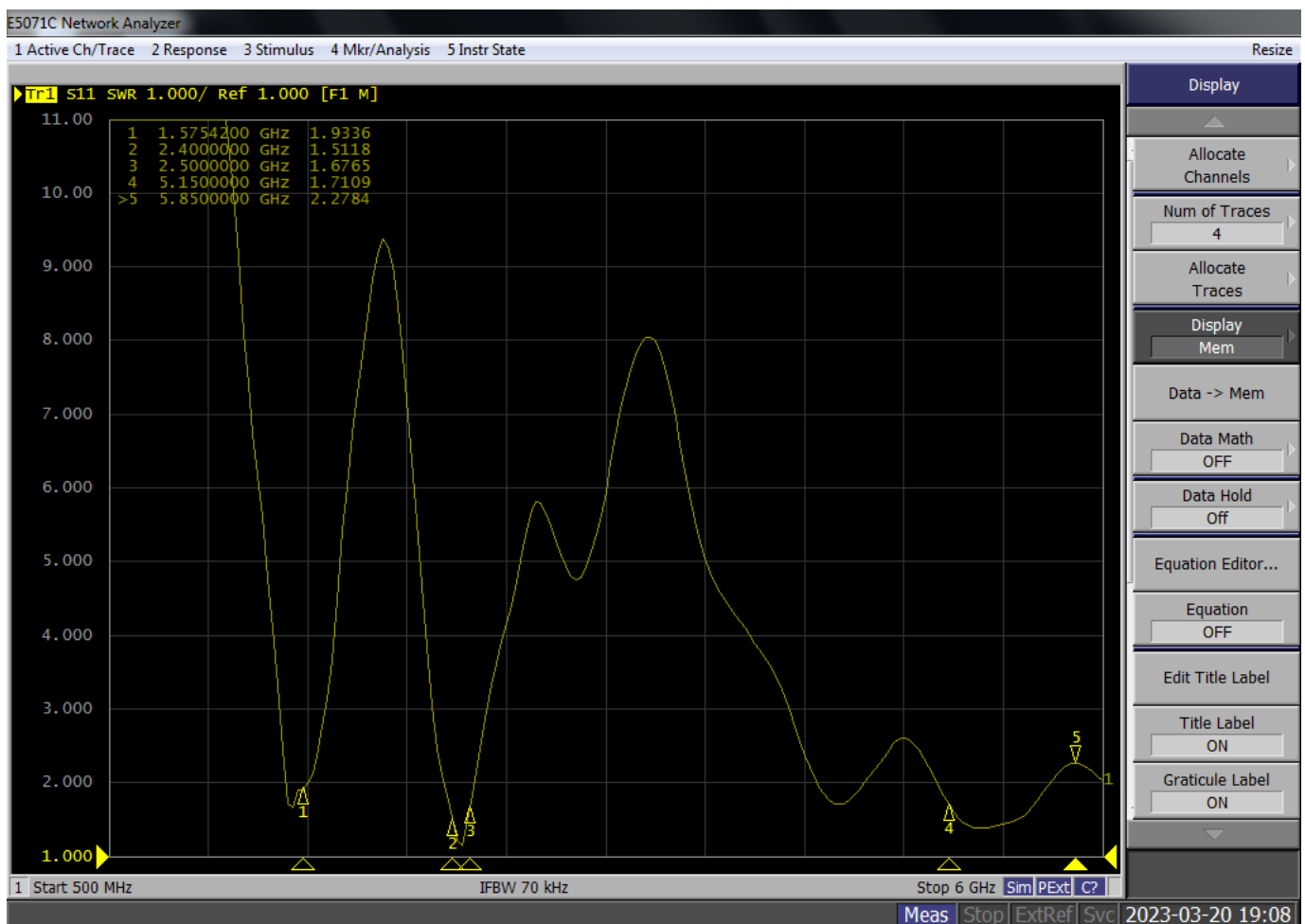
# 1、INFORMATION AND PICTURES

## 1.1 PICTURES



## 2、ELECTRICAL PERFORMANCE AND TESTREPORT

### 2.1 S11

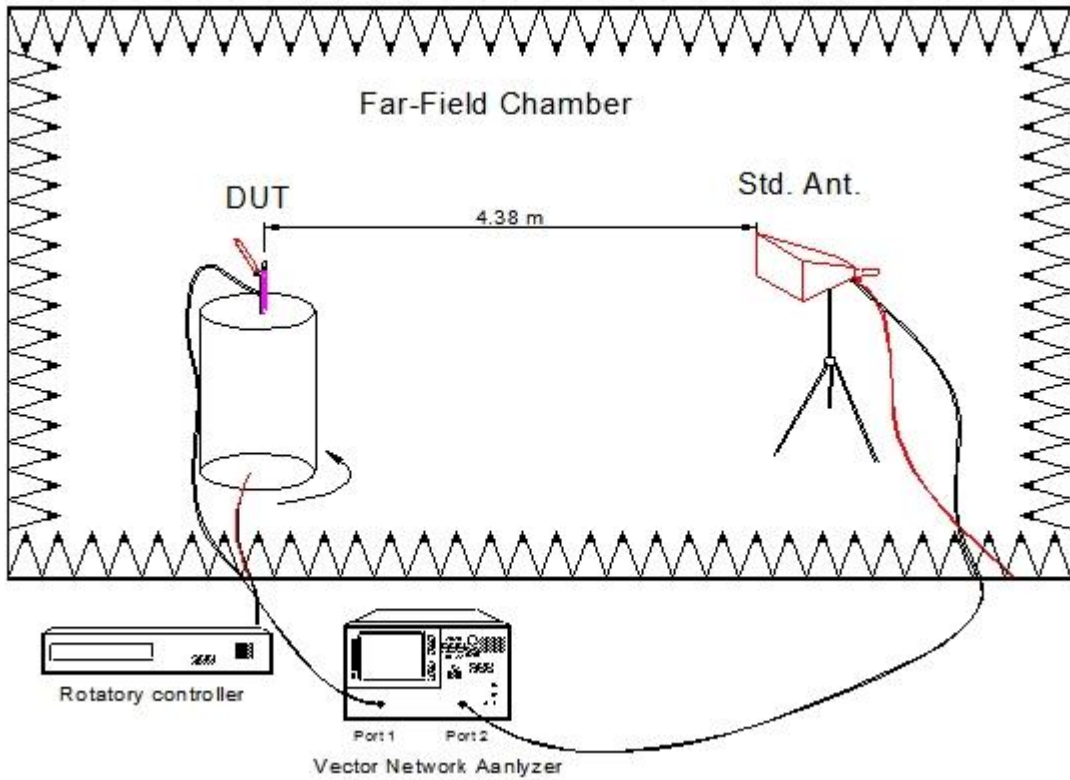


### 2.2 Measure and Chamber

#### 2-2-1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.

4. Using another standard gain horn antenna to calibrated those data



### 2-2-2 Chamber definition

1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

### 2.3 Passive test data

Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
1550	1.23	-3.59	44%
1555	1.60	-3.34	46%

1560	1.89	-3.27	47%
1565	2.00	-3.40	46%
1570	2.36	-3.25	47%
1575	2.67	-3.06	49%
1580	2.51	-3.19	48%
1585	2.55	-3.16	48%
1590	2.50	-3.17	48%
1595	2.22	-3.38	46%
1600	2.22	-3.29	47%
2400	0.58	-3.91	41%
2410	0.91	-3.75	42%
2420	1.47	-3.40	46%
2430	1.72	-3.36	46%
2440	1.76	-3.41	46%
2450	2.07	-3.20	48%
2460	2.27	-3.21	48%
2470	2.23	-3.40	46%
2480	2.27	-3.28	47%
2490	2.23	-3.39	46%
2500	1.92	-3.71	43%
5150	2.81	-4.93	32%

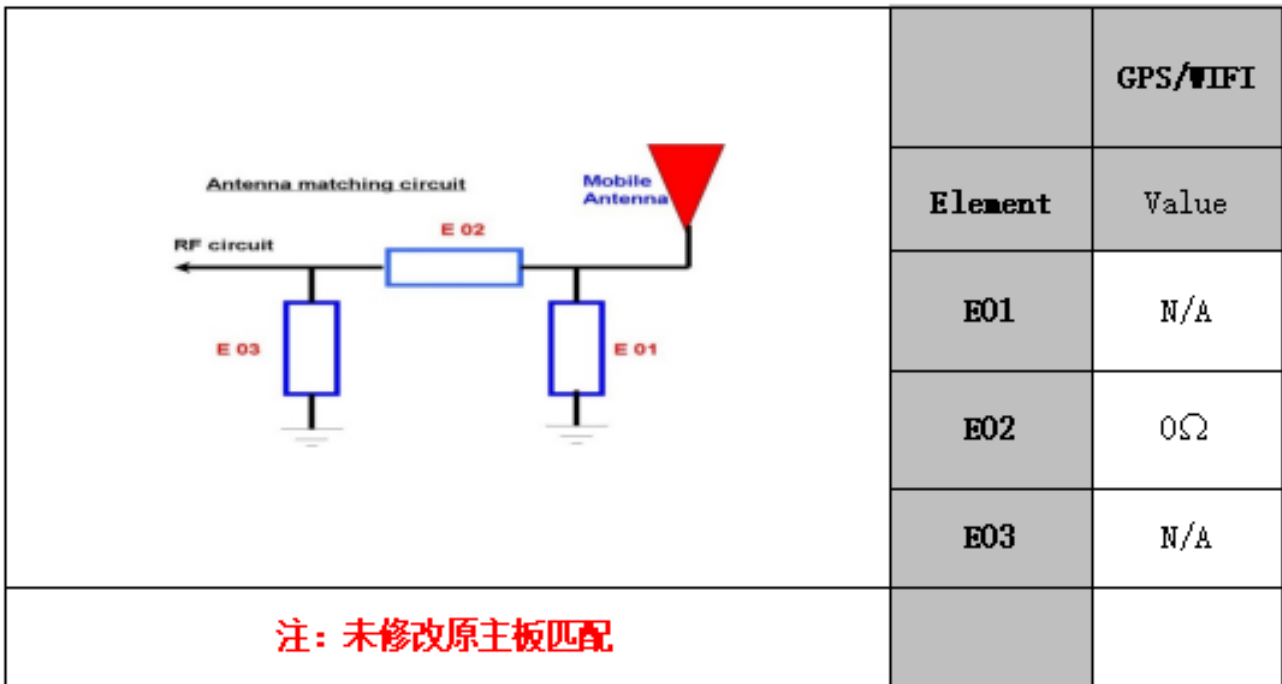
5200	2.98	-4.57	35%
5250	2.87	-4.80	33%
5300	2.52	-5.40	29%
5350	1.83	-5.87	26%
5400	1.72	-5.94	25%
5450	1.74	-6.23	24%
5500	2.05	-6.08	25%
5550	2.04	-5.88	26%
5600	2.52	-5.35	29%
5650	3.04	-4.77	33%
5700	2.62	-5.25	30%
5750	3.07	-4.60	35%
5800	3.62	-3.79	42%
5850	3.30	-4.71	34%

## 2.4 Active test data

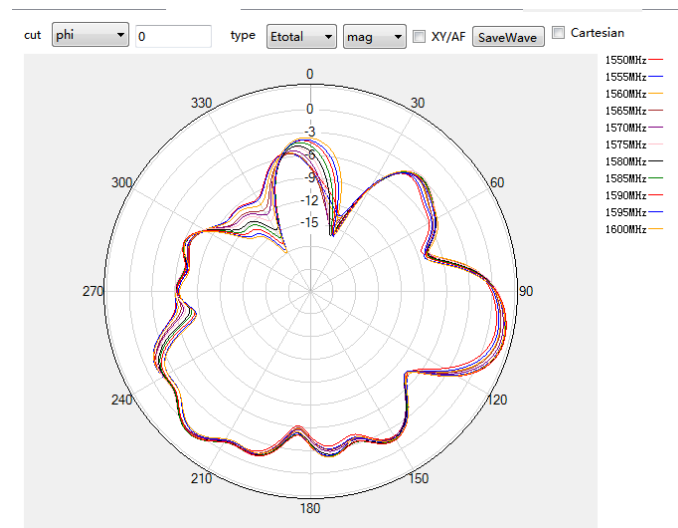
WIFI_B	1	14.03	
	6	14.71	
	13	14.98	-82.4
WIFI_A	36	12.74	
	64	12.34	
	165	12.73	-70.33
GPS	1575.42MHz		-143.23



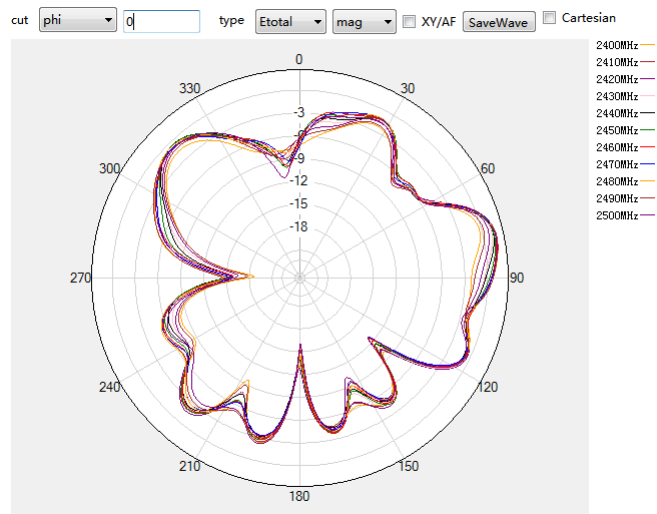
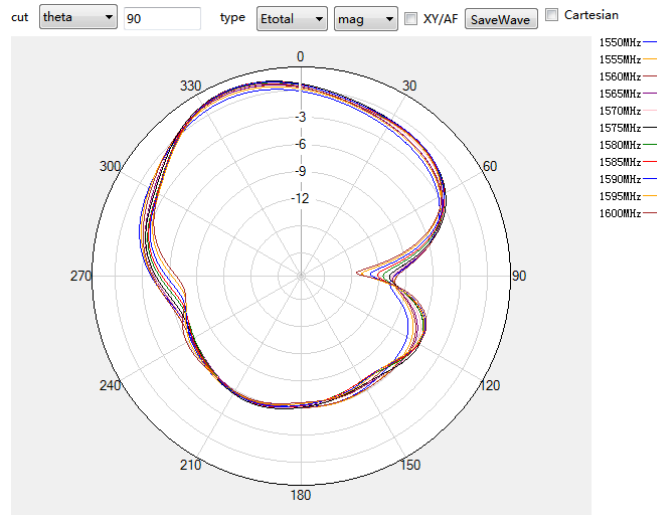
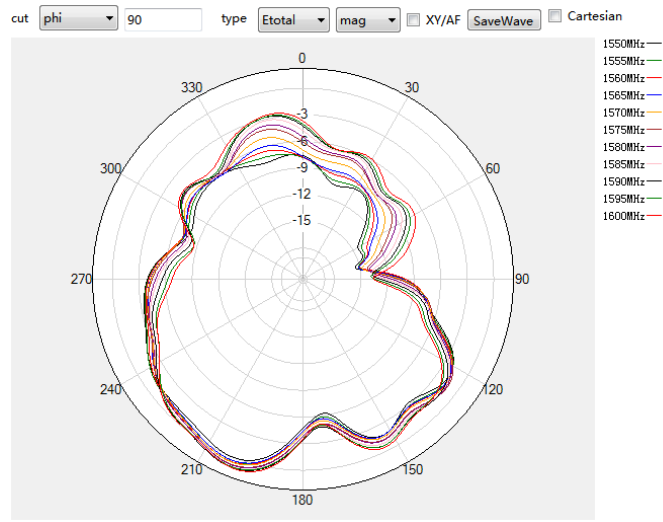
## 2.5 Match the circuit and switching logic

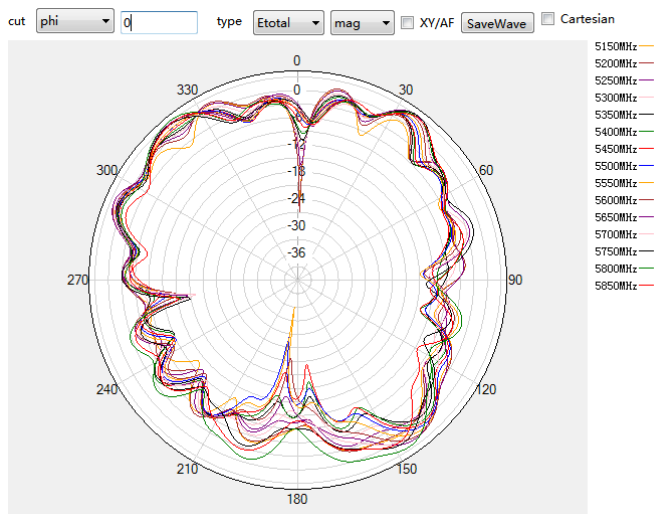
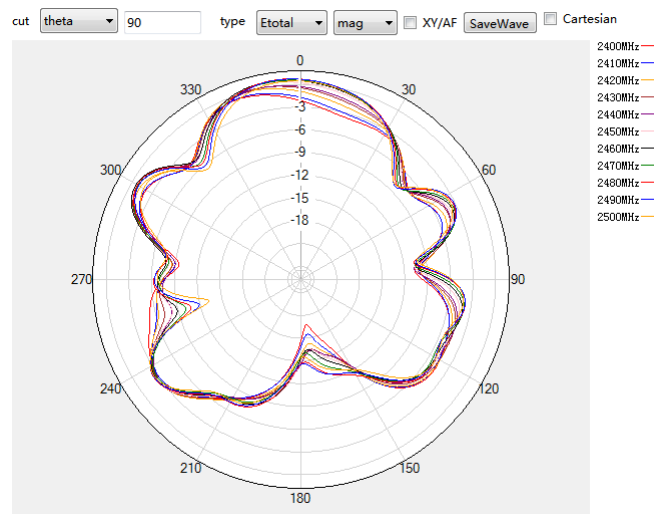
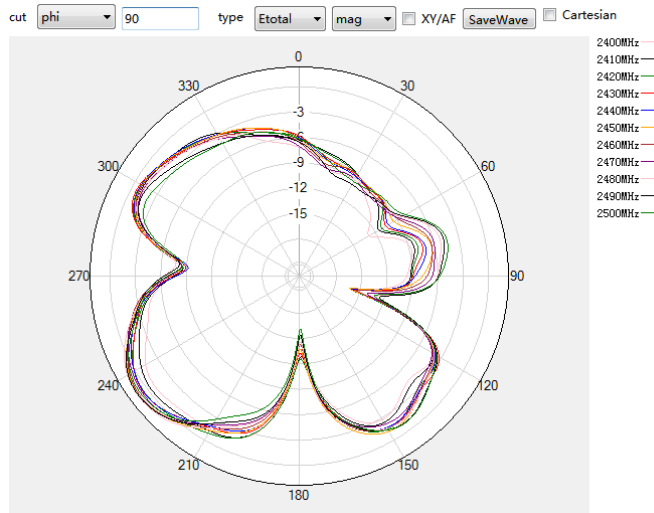


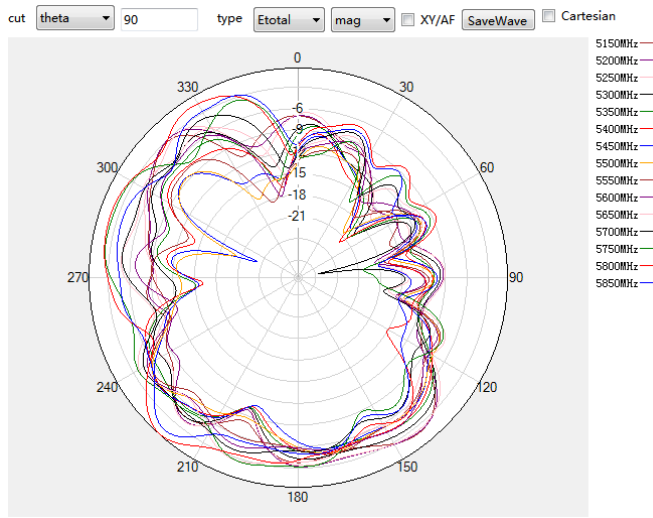
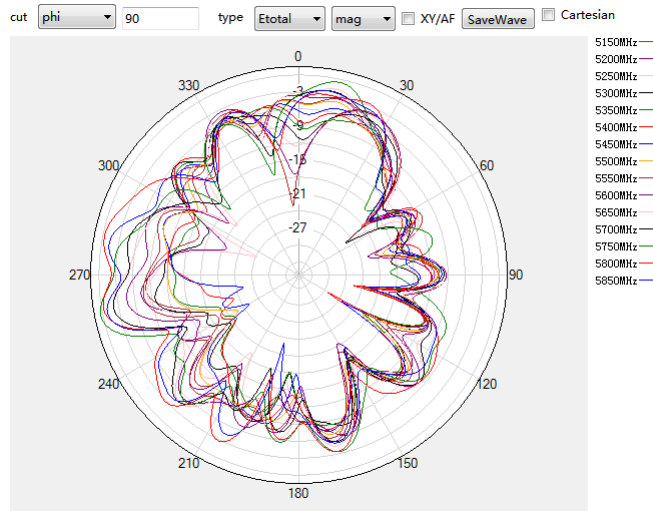
## 2.6 Typical free space radiation pattern











### 3、ENGINEERING DRAWING

