

Shenzhen Guangyuanfa Electronic Co., Ltd.

Antenna Test Report

Customer name		项目名称	
time	2024/1/27	报告版本	A1
Commissioning engineer		联系方式	15768707879

History

Version	Report Date	Revision Description	Prepared by
A1	2024. 1. 26	Antenna test report	

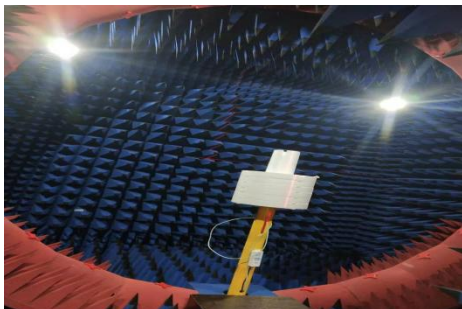
catalogue

- 1: Introduction to project debugging
- 2: Test device description
- 3: Matching circuit description
- 4: antenna OTA data
- 5: indicates the antenna position
- 6: Explain the item

Introduction to project debugging

Machine type				
Antenna type	FPC			
Frequency band and antenna material	Main antenna	Frequency band		material
		2G	/	/
		3G	/	
		LTE	/	
	Other antennas	diversity	/	/
		WIFI/BT	2400MHz-6000MHz	FPC
Performance requirement	Perform according to customer requirements			

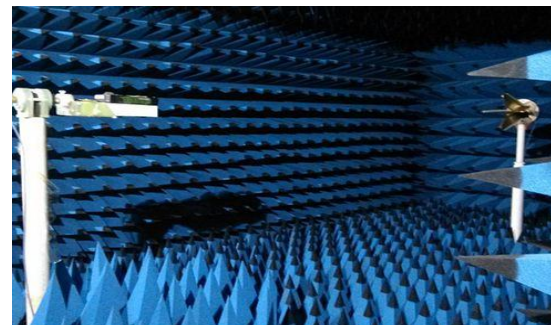
Test equipment description



24 probe microwave darkroom



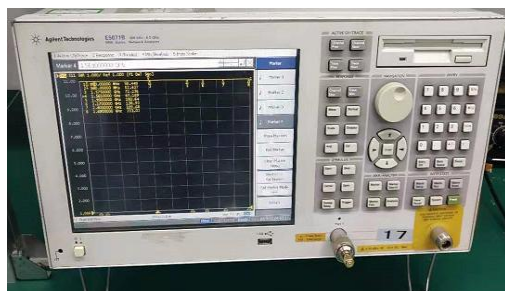
CMW500



7*4*3M ETS microwave darkroom



Agilent 8960



Agilent E5071B



High and low temperature test chamber



MT8820C

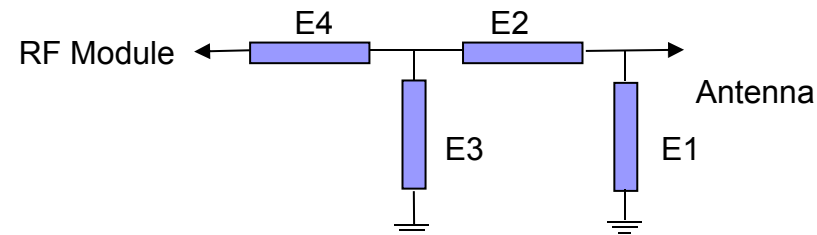


HP8753ES

Test system	Test environment	Active test	Passive testing
ETS darkroom 24 probe OTA darkroom	Temperature: 22°C±3°C Humidity: 50%±15%	Support 2G/3G/4G Support NB-IoT/CAT-M/BT/WIFI	700MHz——6G

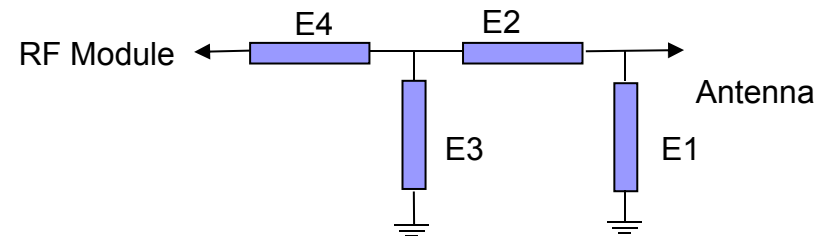
Matching circuit specification

Antenna matching is unchanged



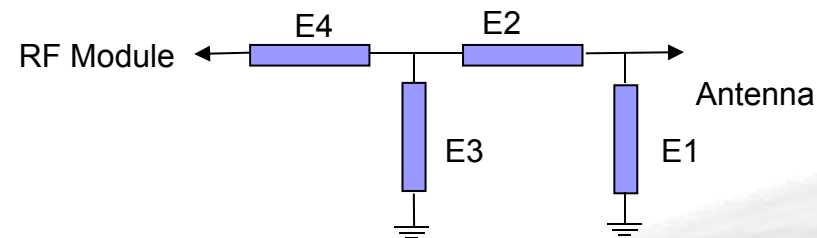
Main
antenna

Element	Value
E1 (0402)	N/A
E2 (0402)	0 ohm
E3 (0402)	N/A
E4 (0402)	0 ohm



GWB
antenna

Element	Value
E1 (0402)	N/A
E2 (0402)	0 ohm
E3 (0402)	N/A
E4 (0402)	0 ohm



DIV
antenna

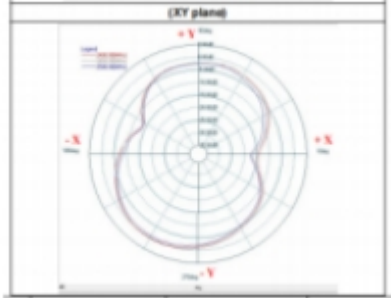
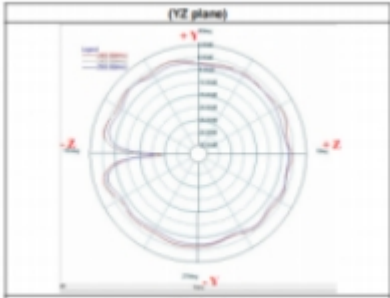
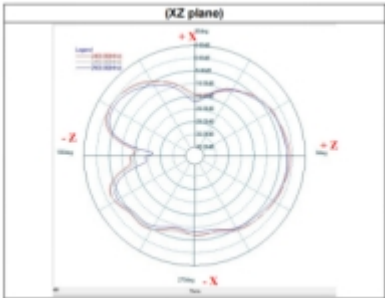
Element	Value
E1 (0402)	N/A
E2 (0402)	0 ohm
E3 (0402)	N/A
E4 (0402)	0 ohm

Unit 1

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.78	2.57	2.41	3.13	3.13	3.04	2.78	2.64	2.65	2.66	2.63
Efficiency (%)	41.26	40.08	39.42	44.30	43.70	42.21	40.41	40.11	42.21	41.81	42.86

Unit 2

Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.45	2.15	2.06	2.14	2.26	2.78	3.08	3.21	3.13	3.01	3.45
Efficiency (%)	40.00	41.32	41.08	40.53	40.39	41.18	41.37	41.75	41.45	40.79	40.95



Unit 1

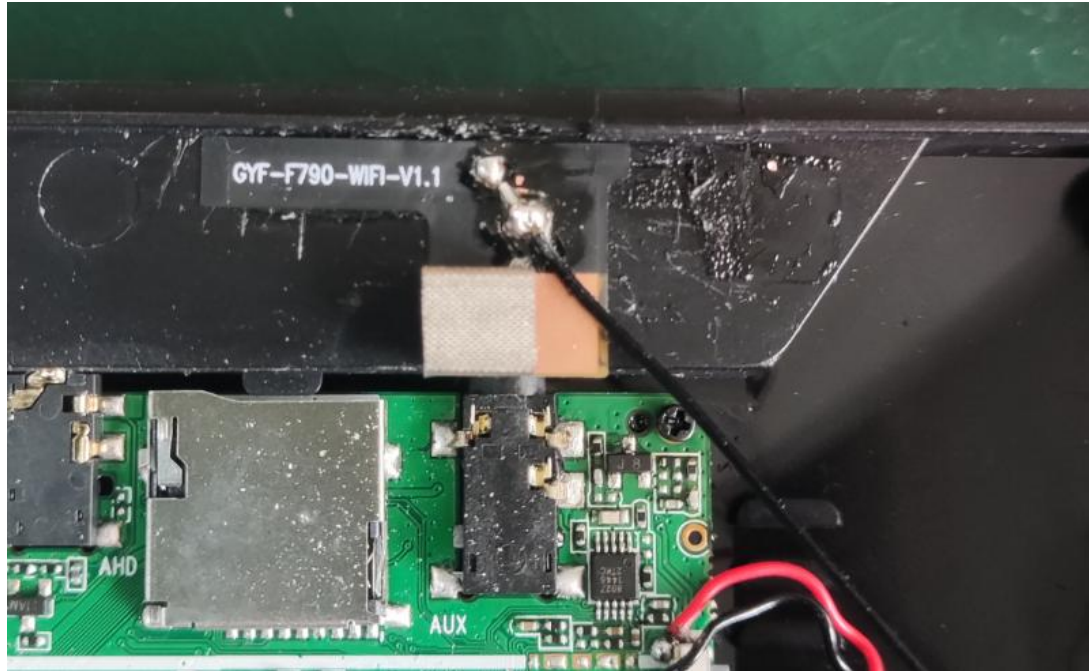
BAND	802.11a		
CH	36	60	161
TRP (dBm)	13.49	13.58	13.06
TIS (dBm)	-70.91	-70.86	-71.97

Unit 2

BAND	802.11a		
CH	36	60	161
TRP (dBm)	13.18	13.35	12.96
TIS (dBm)	-70.85	-70.28	-71.65

Antenna position

Unit 1



Unit 2





Thanks.