

Antena Test Report



专业的4G/3G/GPS/WIFI等天线方案设计及供应商

客户名称： 瑞格尔

项目名称： B2D

频段： WIFI2.4G/5.8G/BT

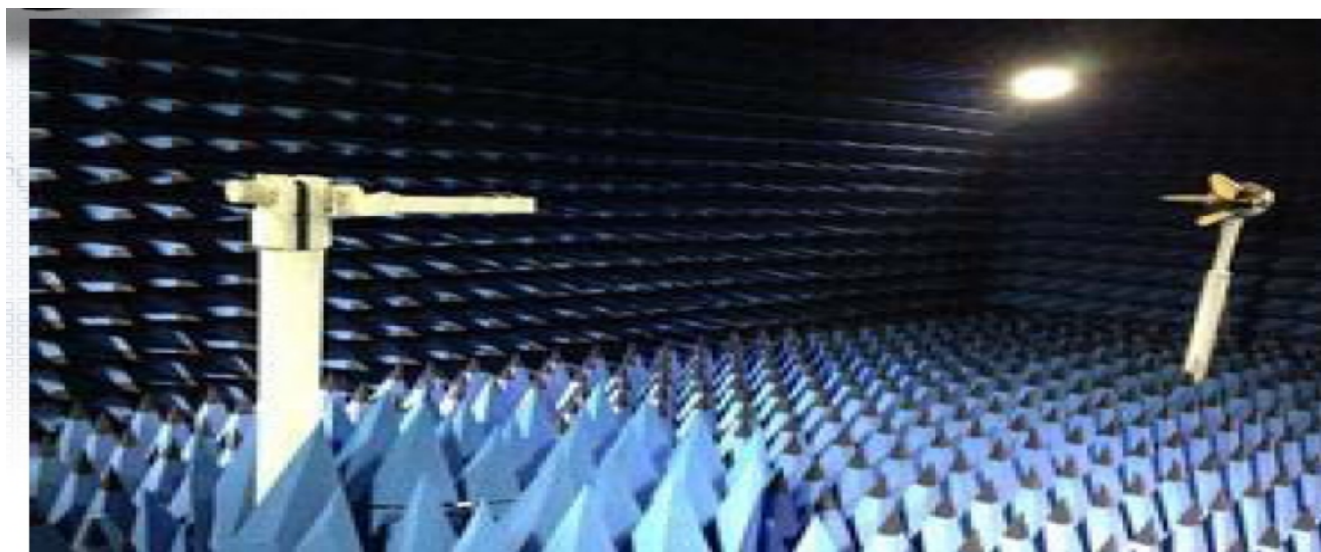
天线料号： [WF714B-1131L-100](#)

版本： A

制作日期： 2023-9-15

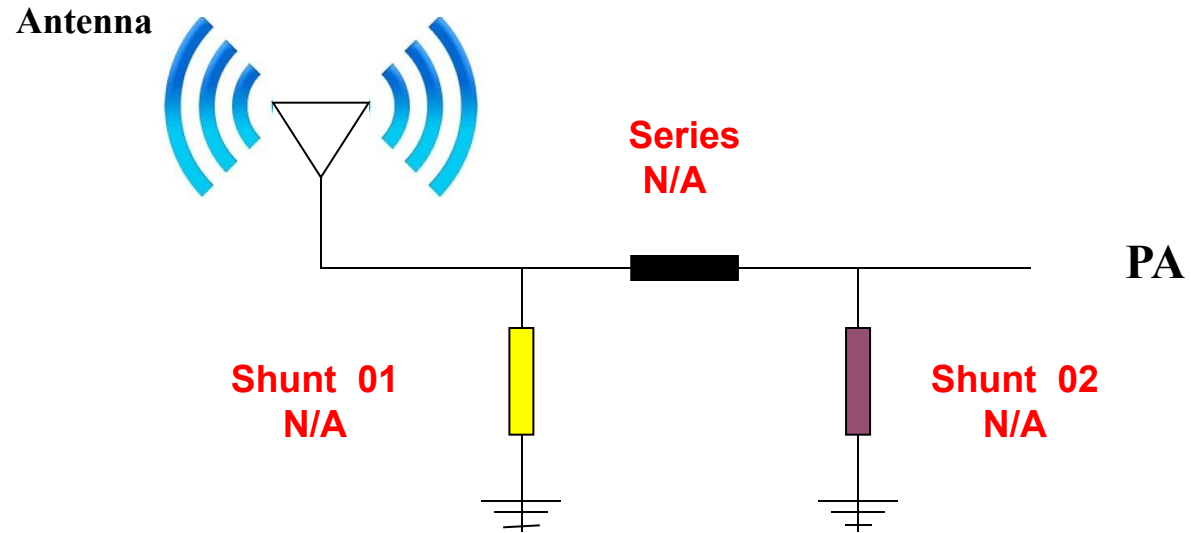
Test system

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



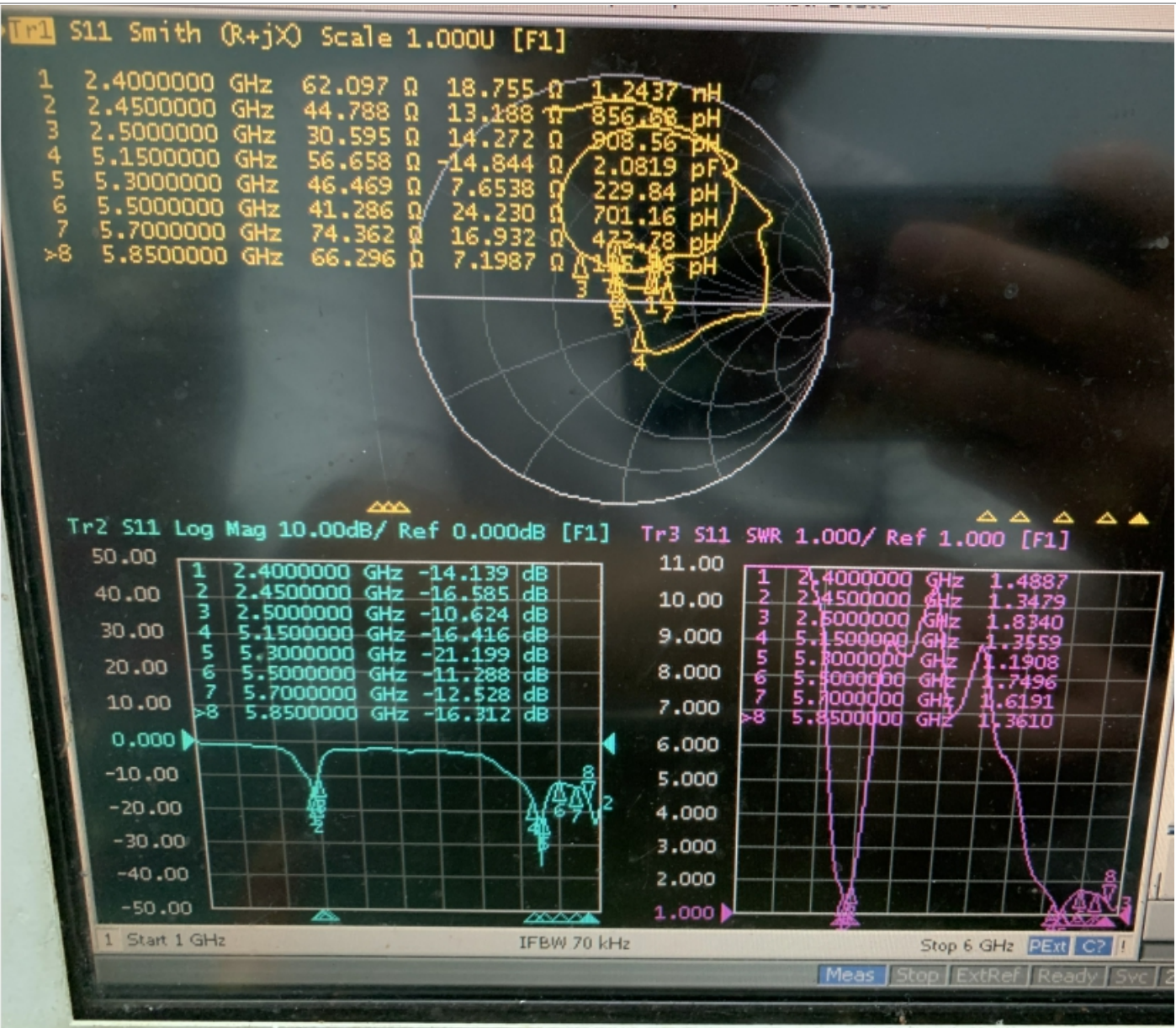
No modifications to the mainboard circuit

Antenna Matching Network



Location	Description	Vendor
Shunt 01	N/A	N/A
Series	N/A	N/A
Shunt 02	N/A	N/A

S11 SWR /Smith/ Log Mag--ANT 1

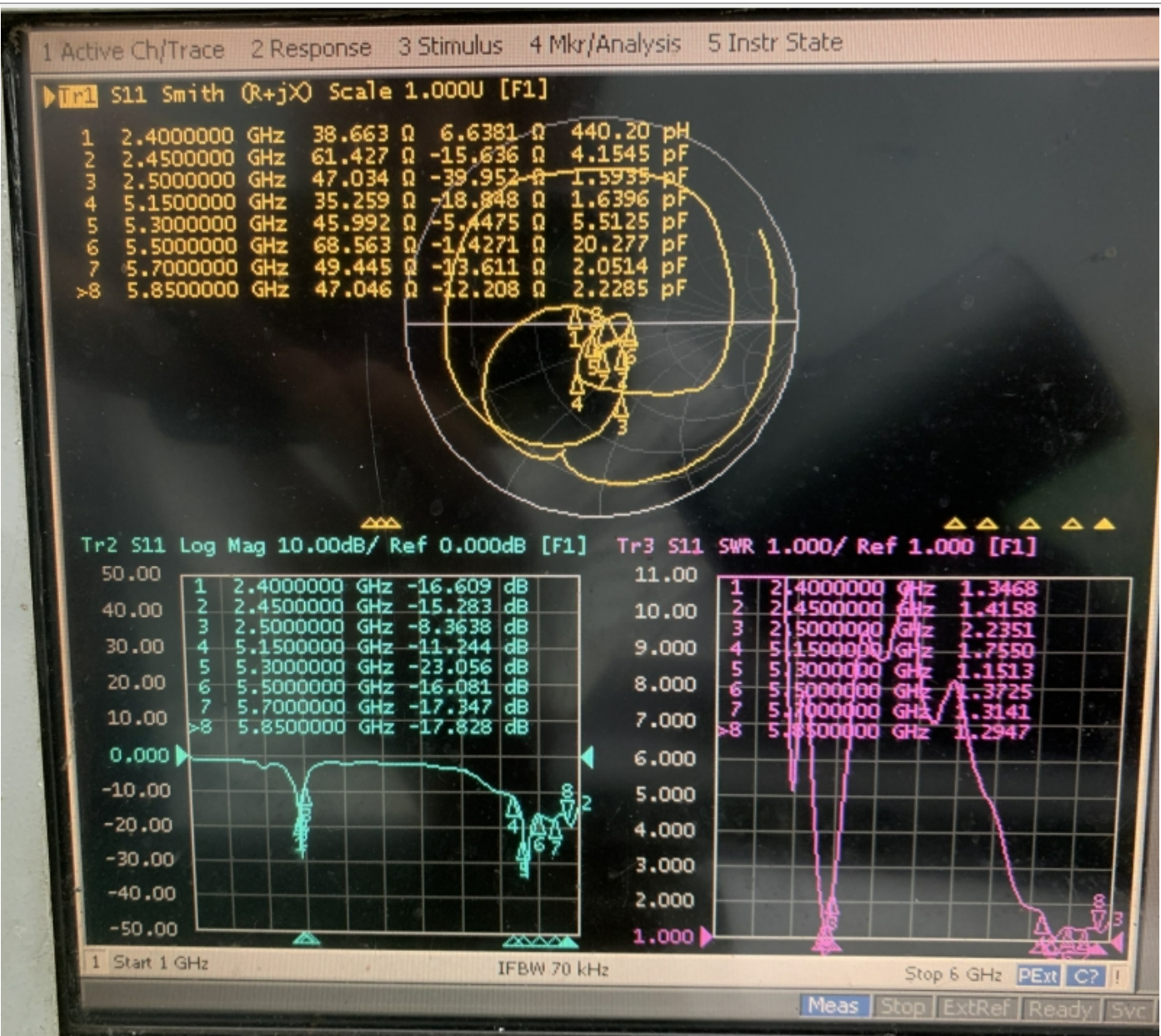


频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
驻波比	1.48	1.34	1.83	1.35	1.19	1.74	1.61	1.36

频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
阻抗	62 Ω	44.7 Ω	30.5 Ω	56.6 Ω	46.4 Ω	41.2 Ω	74.3 Ω	66.2 Ω

频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
回损	-14.1	-16.5	-10.6	-16.4	-21.1	-11.2	-12.5	-16.3

S11 SWR /Smith/ Log Mag--ANT 2



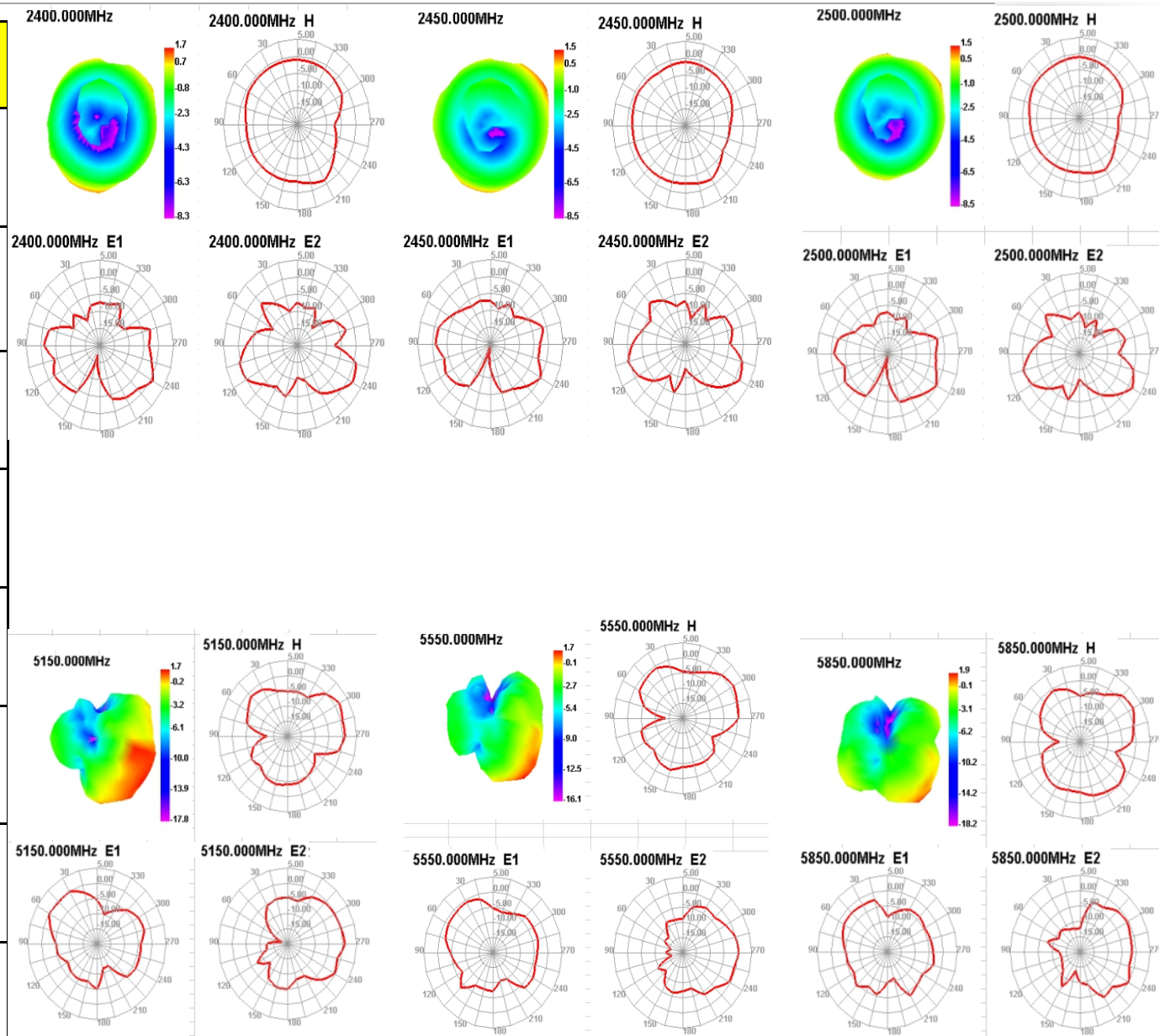
频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
驻波比	1.34	1.41	2.23	1.75	1.15	1.37	1.31	1.29

频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
阻抗	38.6 Ω	61.4	47 Ω	35.2 Ω	45.9 Ω	68.5 Ω	49.4 Ω	47 Ω

频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
回损	-16.6	-15.2	-9.36	-11.2	-23	-16	-17.3	-17.8

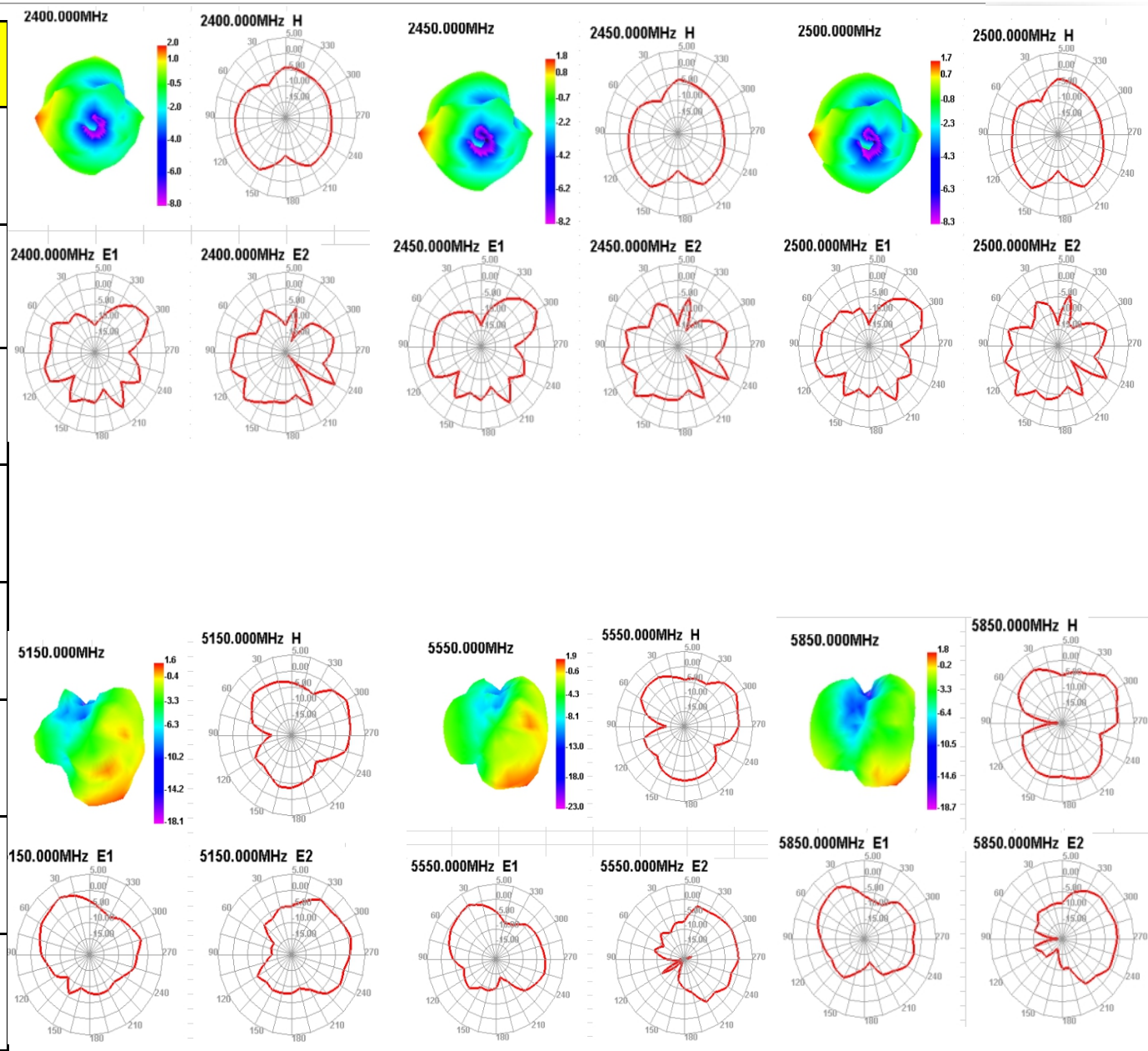
增益和效率-WIFI

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	48.41	1.74
2450	48.3	1.53
2500	49.75	1.51
5150	48.63	1.68
5350	48.14	1.72
5550	49.52	1.73
5750	49.47	1.78
5850	49.11	1.85



增益和效率-BT

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	46.53	1.95
2450	46.28	1.87
2500	46.7	1.66
5150	44.3	1.58
5350	45.41	1.67
5550	45.28	1.89
5750	45.61	1.76
5850	46.25	1.77



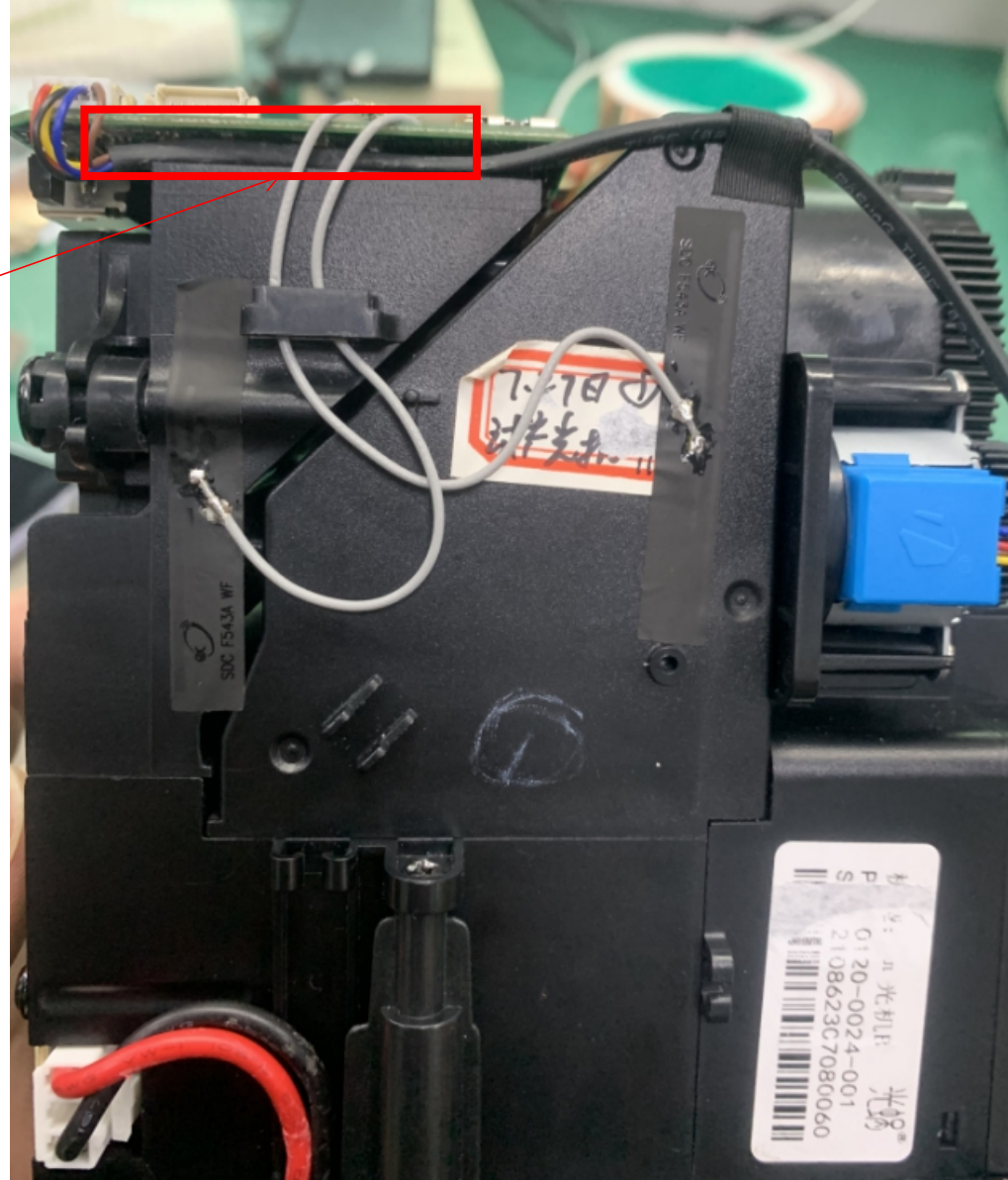
WIFI OTA Data

2.4G WIFI	TRP			TIS		
Channel	CH1	CH6	CH12	CH1	CH6	CH12
802.11 b , 11M	15.14	15.59	14.72	-79.65	-79.83	-80.12
802.11 g , 54M	14.76	15.15	14.65	-77.26	-77.26	-77.41
802.11 n , MCS7 (65M)	14.57	14.38	14.57	-66.31	-66.59	-63.87

5.8G WIFI	TRP			TIS		
Channel	CH36	CH60	CH165	CH36	CH161	CH165
802.11 A , 54M	9.4	9.23	10.5	-73.15	-73.41	-73.82
802.11 n , MCS7 (65M)	9.37	9.11	10.28	-71.36	-71.27	-71.91

Precautions

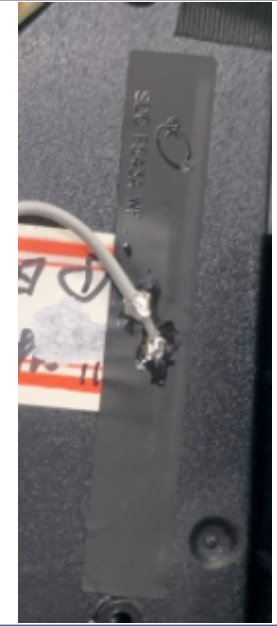
The motor power cord should be passed under the motherboard as much as possible.
Keep a certain distance from the antenna



Antenna location installation diagram

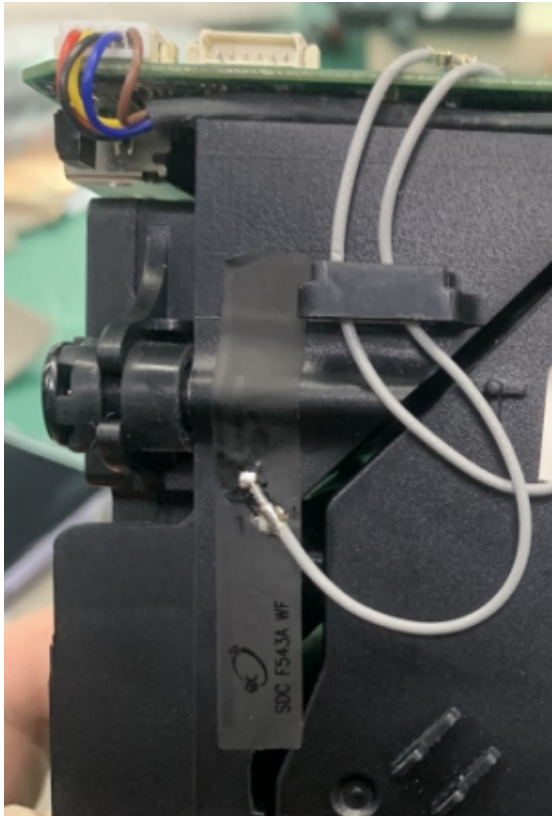


WiFi

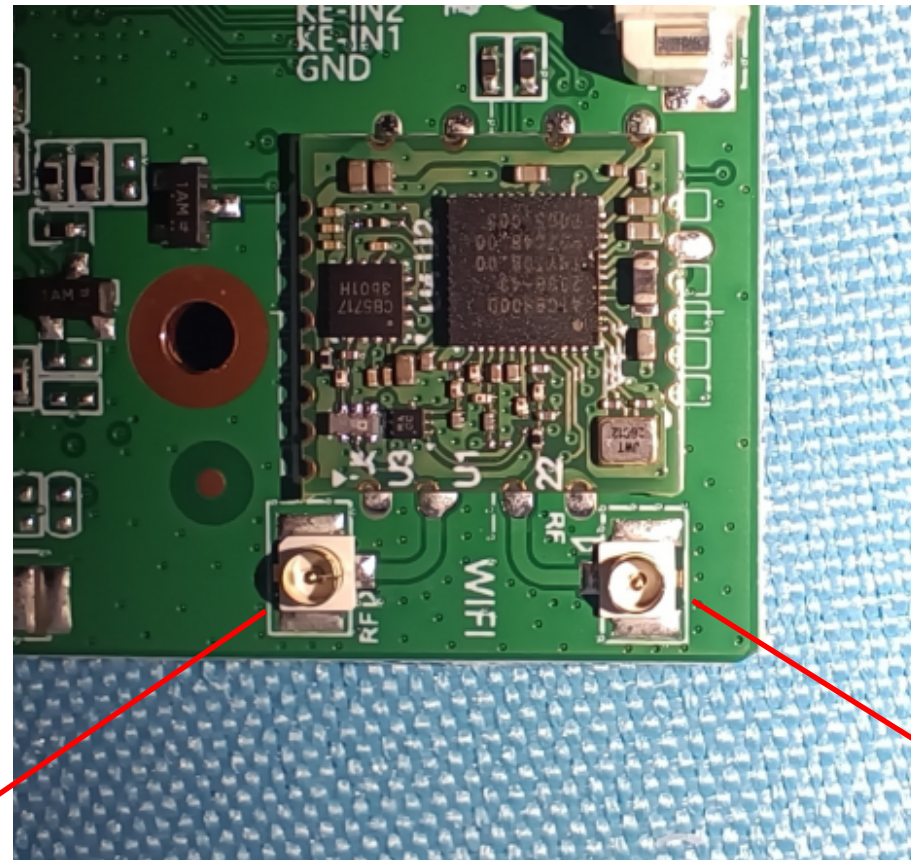


BT

Board end seat installation diagram



WiFi



BT

Thanks