

深圳市亿圣邦科技有限公司

Shenzhen Yishengbang Technology Co., Ltd. Antenna Test Report

Customer: 卓创

Project: N156MU3-AN168

Product: WIFI Antenna—FPC

Report date: 2024-2-20

Prepared by : 陈仕联

Checked by : Eason Huang

Approved by :

Purpose

This report is to measure the performance of SLK for Master Antenna on 卓创. All measure data are showed below.

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1. Product Overview

2. Test Result

2.1 WIFI MAIN/AUX Antenna VSWR

2.2 WIFI MAIN/AUX Antenna Gain/Efficiency/3D

DATA

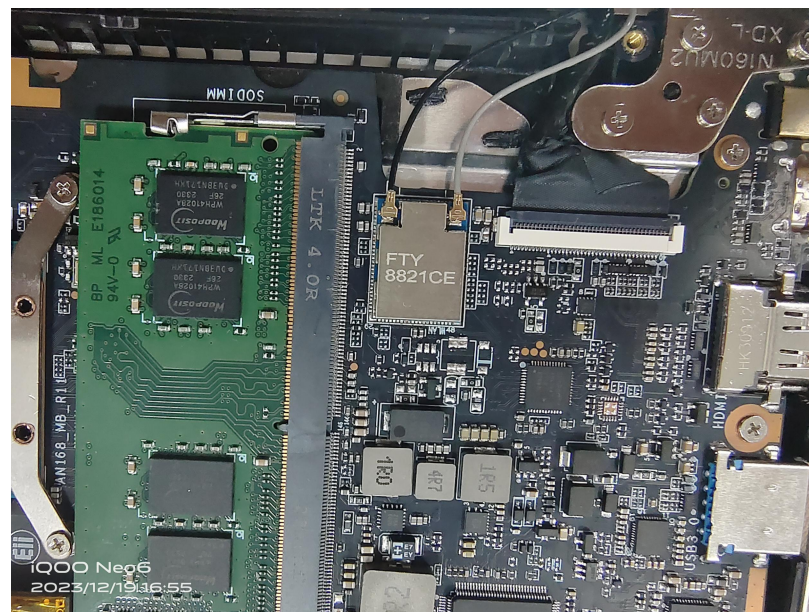
2.3 WIFI throughput test

3. Conclusions

1. Product Overview



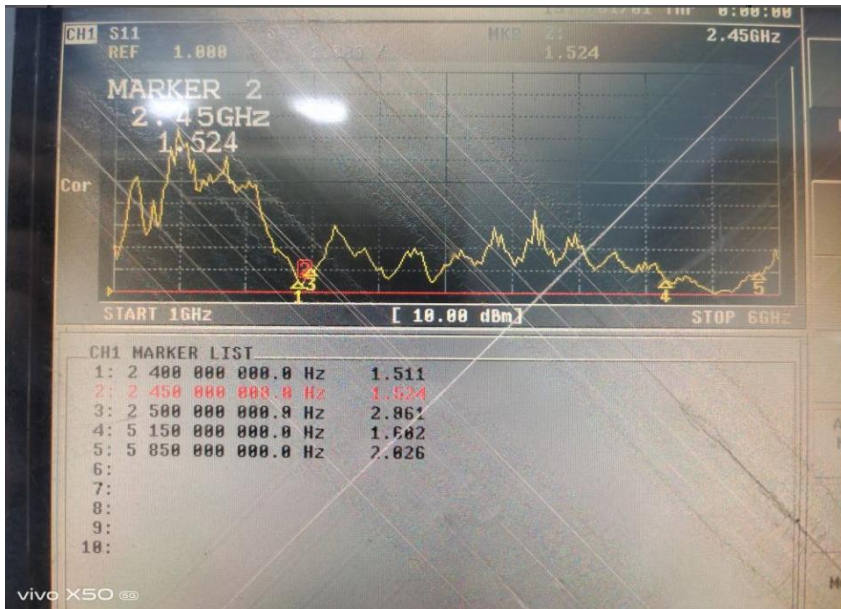
WIFI分集天线



WIFI主天线

2. Test Result

2.1 WIFI MAIN Antenna VSWR/S11



2. Test Result

2.1 WIFI AUX Antenna VSWR/S11



2. Test Result

2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA

Frequency(MHz)	Efficiency (%)	AverageGAIN(dB)	Peak GAIN (dBi)
2400	30.01	-5.23	0.51
2410	31.99	-4.95	1.04
2420	31.1	-5.07	-0.51
2430	33.54	-4.74	1.09
2440	31.86	-4.97	0.32
2450	33.37	-4.77	0.84
2460	32.63	-4.86	0.84
2470	32.73	-4.85	0.98
2480	33.94	-4.69	1.26
2490	34.54	-4.62	1.17
2500	33.67	-4.73	1.13
5150	37.8	-4.23	0.97
5350	36.82	-4.34	1.93
5550	41.95	-3.77	2.66
5750	35.31	-4.52	1.09
5850	34.77	-4.59	0.09

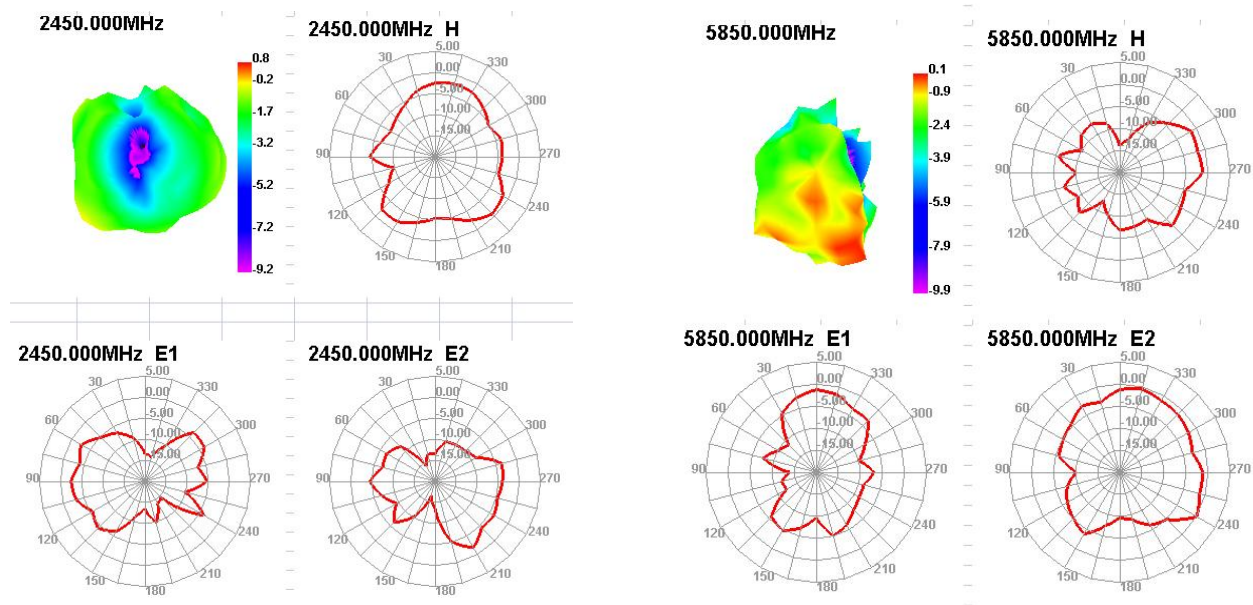
2. Test Result

2.2 WIFI AUX Antenna Gain/Efficiency/3D DATA

Frequency(MHz)	Efficiency (%)	Average Gain(dB)	Peak GAIN (dBi)
2400	34.06	-4.68	-0.64
2410	34.29	-4.65	-0.6
2420	35.23	-4.53	-0.32
2430	36.96	-4.32	0.02
2440	35.21	-4.53	0.01
2450	38.27	-4.17	0.5
2460	32.34	-4.9	-0.21
2470	35.3	-4.52	-0.02
2480	34.23	-4.66	-0.44
2490	36.74	-4.35	-0.49
2500	33	-4.82	-1.09
5150	30.62	-5.14	-0.59
5350	30.32	-5.18	0.49
5550	32.96	-4.82	0.56
5750	31.28	-5.05	-0.05
5850	29.56	-5.29	0.13

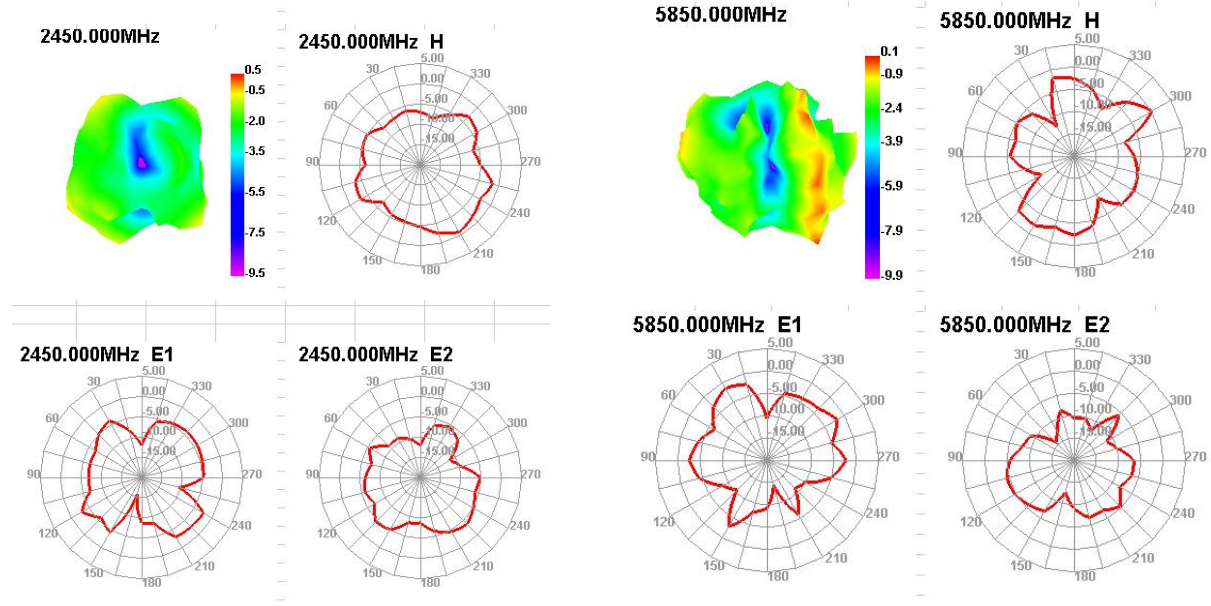
2. Test Result

2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA



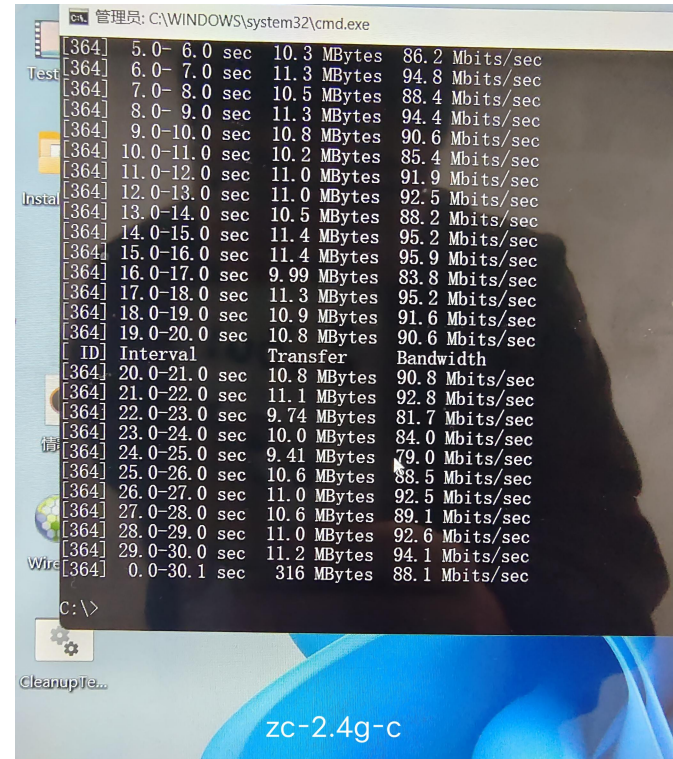
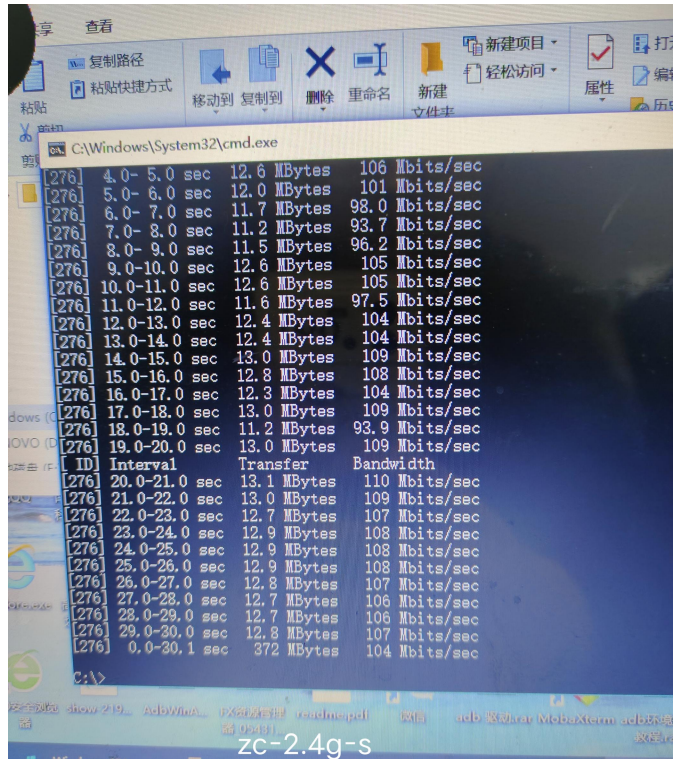
2. Test Result

2.2 WIFI AUX Antenna Gain/Efficiency/3D DATA



2. Test Result

2.3 WIFI throughput test



2.4G throughput test -10 m download

2.4G throughput test -10 m upload

2. Test Result

2.3 WIFI throughput test

```
C:\Windows\System32\cmd.exe
[276] 4.0- 5.0 sec 21.7 MBytes 182 Mbits/sec
[276] 5.0- 6.0 sec 22.4 MBytes 187 Mbits/sec
[276] 6.0- 7.0 sec 22.7 MBytes 191 Mbits/sec
[276] 7.0- 8.0 sec 20.9 MBytes 175 Mbits/sec
[276] 8.0- 9.0 sec 21.4 MBytes 180 Mbits/sec
[276] 9.0-10.0 sec 22.6 MBytes 189 Mbits/sec
[276] 10.0-11.0 sec 22.3 MBytes 187 Mbits/sec
[276] 11.0-12.0 sec 22.8 MBytes 191 Mbits/sec
[276] 12.0-13.0 sec 23.1 MBytes 193 Mbits/sec
[276] 13.0-14.0 sec 22.8 MBytes 191 Mbits/sec
[276] 14.0-15.0 sec 23.9 MBytes 201 Mbits/sec
[276] 15.0-16.0 sec 23.8 MBytes 200 Mbits/sec
[276] 16.0-17.0 sec 23.3 MBytes 195 Mbits/sec
[276] 17.0-18.0 sec 22.3 MBytes 187 Mbits/sec
[276] 18.0-19.0 sec 21.7 MBytes 182 Mbits/sec
[276] 19.0-20.0 sec 24.2 MBytes 203 Mbits/sec
[ ID] Interval Transfer Bandwidth
[276] 20.0-21.0 sec 22.4 MBytes 188 Mbits/sec
[276] 21.0-22.0 sec 23.4 MBytes 196 Mbits/sec
[276] 22.0-23.0 sec 19.8 MBytes 166 Mbits/sec
[276] 23.0-24.0 sec 24.2 MBytes 203 Mbits/sec
[276] 24.0-25.0 sec 22.5 MBytes 189 Mbits/sec
[276] 25.0-26.0 sec 22.3 MBytes 187 Mbits/sec
[276] 26.0-27.0 sec 20.4 MBytes 171 Mbits/sec
[276] 27.0-28.0 sec 22.7 MBytes 191 Mbits/sec
[276] 28.0-29.0 sec 22.4 MBytes 188 Mbits/sec
[276] 29.0-30.0 sec 21.4 MBytes 180 Mbits/sec
[276] 0.0-30.0 sec 658 MBytes 184 Mbits/sec
C:\>IPERF -c 192.168.1.8 -t 30 -i 1 -w 1m
zc-5.8g-s
```

5G throughput test -10 m download

```
管理员: C:\WINDOWS\system32\cmd.exe
[364] 5.0- 6.0 sec 20.3 MBytes 170 Mbits/sec
[364] 6.0- 7.0 sec 21.0 MBytes 176 Mbits/sec
[364] 7.0- 8.0 sec 21.1 MBytes 177 Mbits/sec
[364] 8.0- 9.0 sec 22.6 MBytes 190 Mbits/sec
[364] 9.0-10.0 sec 22.6 MBytes 190 Mbits/sec
[364] 10.0-11.0 sec 22.4 MBytes 188 Mbits/sec
[364] 11.0-12.0 sec 22.0 MBytes 184 Mbits/sec
[364] 12.0-13.0 sec 21.6 MBytes 182 Mbits/sec
[364] 13.0-14.0 sec 22.4 MBytes 187 Mbits/sec
[364] 14.0-15.0 sec 22.2 MBytes 186 Mbits/sec
[364] 15.0-16.0 sec 21.6 MBytes 182 Mbits/sec
[364] 16.0-17.0 sec 22.6 MBytes 190 Mbits/sec
[364] 17.0-18.0 sec 21.5 MBytes 181 Mbits/sec
[364] 18.0-19.0 sec 21.9 MBytes 184 Mbits/sec
[364] 19.0-20.0 sec 21.9 MBytes 184 Mbits/sec
[ ID] Interval Transfer Bandwidth
[364] 20.0-21.0 sec 22.5 MBytes 189 Mbits/sec
[364] 21.0-22.0 sec 21.6 MBytes 181 Mbits/sec
[364] 22.0-23.0 sec 22.4 MBytes 188 Mbits/sec
[364] 23.0-24.0 sec 22.7 MBytes 191 Mbits/sec
[364] 24.0-25.0 sec 22.5 MBytes 189 Mbits/sec
[364] 25.0-26.0 sec 21.4 MBytes 179 Mbits/sec
[364] 26.0-27.0 sec 21.4 MBytes 179 Mbits/sec
[364] 27.0-28.0 sec 21.8 MBytes 183 Mbits/sec
[364] 28.0-29.0 sec 21.6 MBytes 181 Mbits/sec
[364] 29.0-30.0 sec 22.0 MBytes 184 Mbits/sec
[364] 0.0-30.1 sec 648 MBytes 181 Mbits/sec
C:\>
```

5G throughput test -10 m upload

3. Dimension



Length 92mm and Width 9mm

4. Conclusions

Thank you