

深圳市亿圣邦科技有限公司

Shenzhen Yishengbang Technology Co., Ltd. Antenna Test Report

Customer: 昱科

Project: AM1636YD

Product: WIFI Antenna—FPC

Report date: 2025-05-21

Prepared by :胡雪文

Checked by : 黄震

Approved by :林美财

Purpose

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

Content

1. Product Overview

2. Test Result

2.1 WIFI MAIN Antenna VSWR

2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA

2.3 WIFI AUX Antenna VSWR

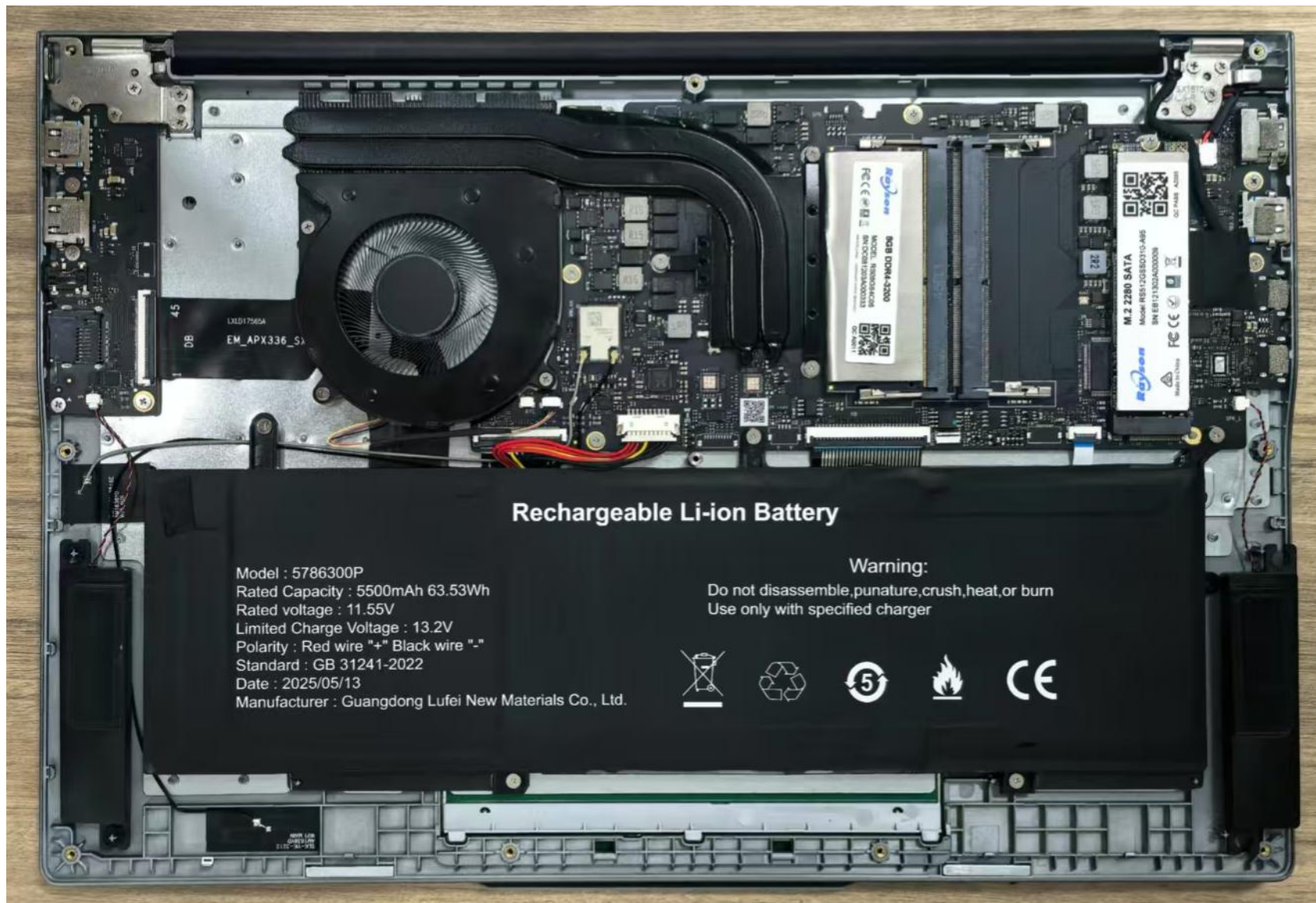
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

2.5 WIFI active test

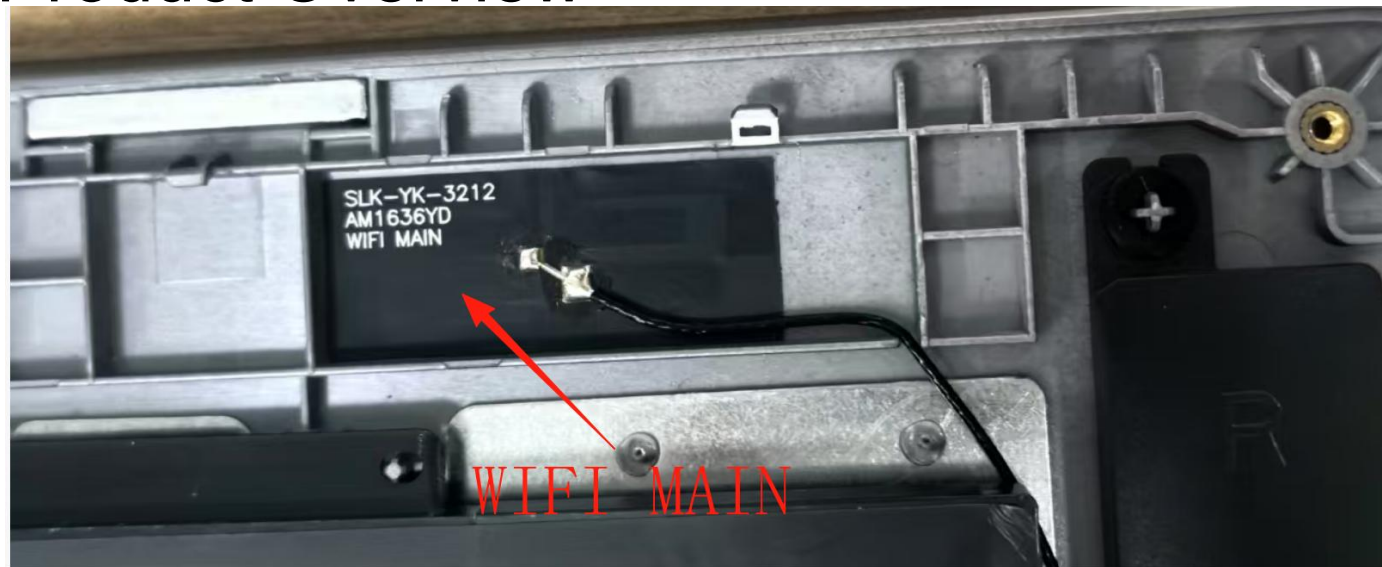
2.6 WIFI throughput test

3. Conclusions

1. Product Overview

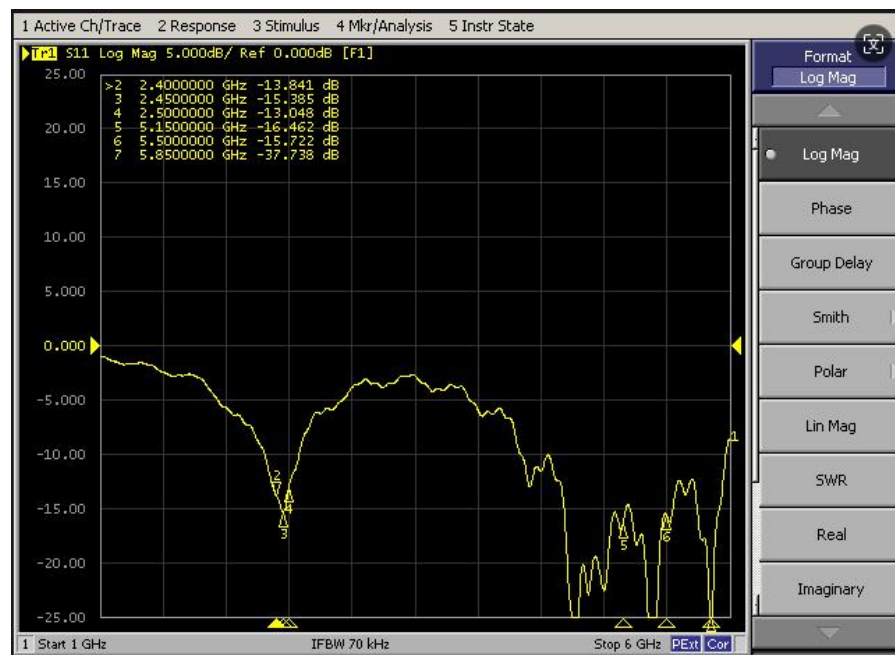
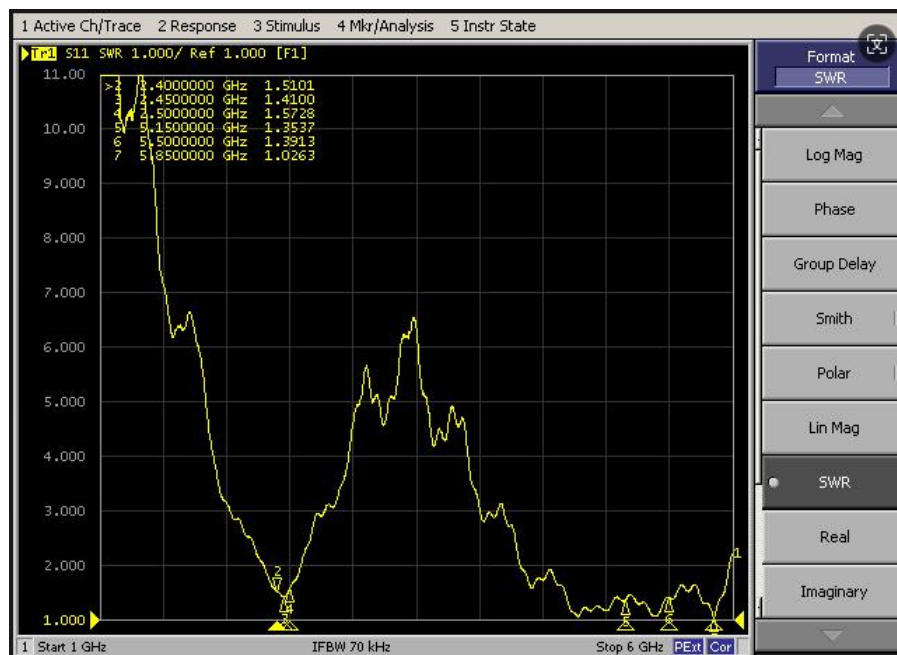


1. Product Overview



2. Test Result

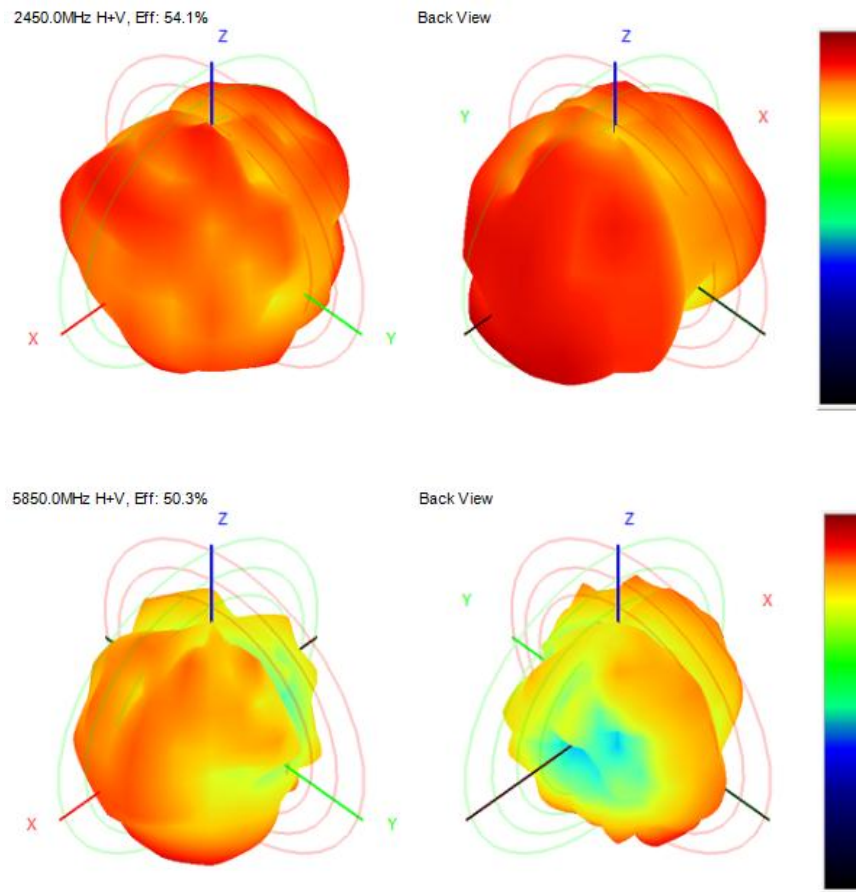
2.1 WIFI MAIN Antenna VSWR/S11



2. Test Result

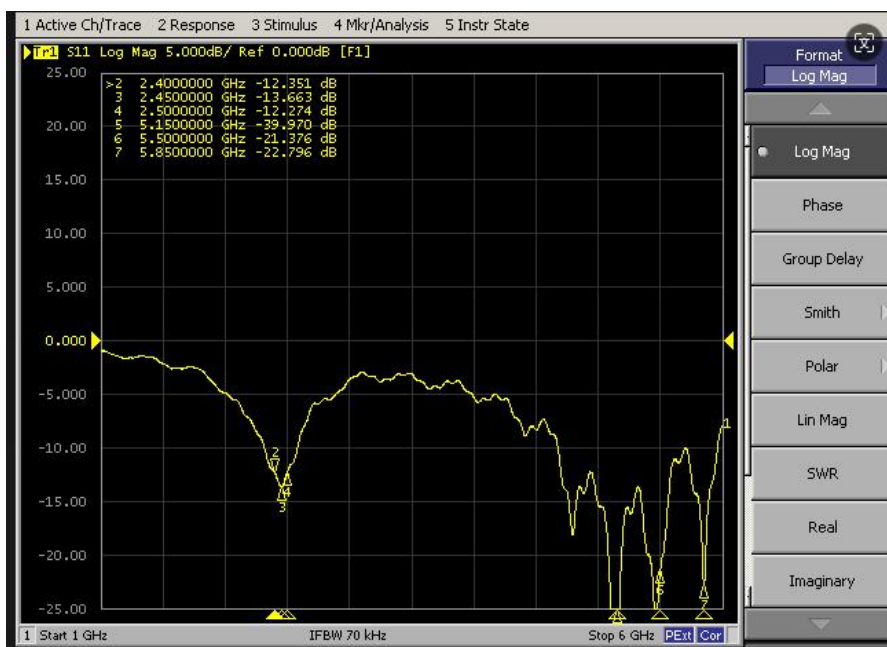
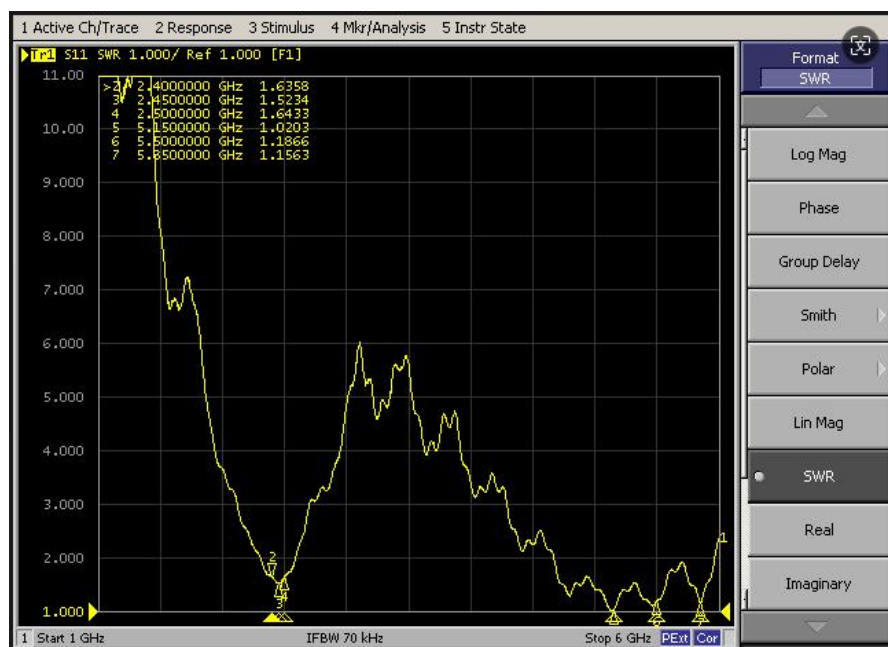
2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-2.64	1.25	54.41
2410	-2.62	1.23	54.70
2420	-2.44	1.42	57.00
2430	-2.46	1.35	56.70
2440	-2.53	1.41	55.82
2450	-2.67	1.13	54.09
2460	-2.60	1.29	54.99
2470	-2.83	1.93	52.17
2480	-2.73	1.05	53.31
2490	-2.61	1.32	54.88
2500	-2.68	1.83	54.00
5150	-2.99	2.70	50.27
5350	-3.01	2.92	50.05
5550	-2.67	2.07	54.09
5750	-2.83	2.06	52.13
5850	-2.99	2.04	50.26



2. Test Result

2.3 WIFI AUX Antenna VSWR/S11

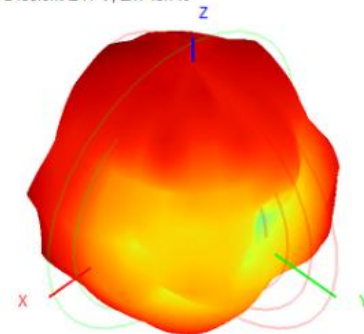


2. Test Result

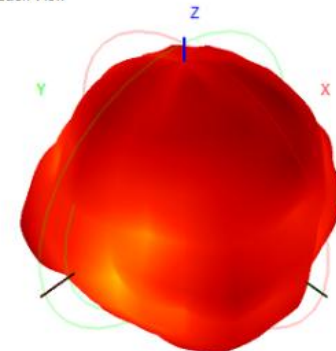
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-3.53	2.44	44.40
2410	-3.45	2.84	45.19
2420	-3.38	2.34	45.91
2430	-3.28	2.31	47.02
2440	-3.40	1.98	45.66
2450	-3.60	1.24	43.69
2460	-3.81	1.12	41.59
2470	-3.94	1.10	40.41
2480	-3.77	1.92	42.02
2490	-3.93	1.72	40.43
2500	-4.20	1.41	38.04
5150	-2.78	2.73	52.72
5350	-2.47	3.26	56.64
5550	-2.55	2.80	55.56
5750	-2.55	3.05	55.61
5850	-2.69	2.93	53.87

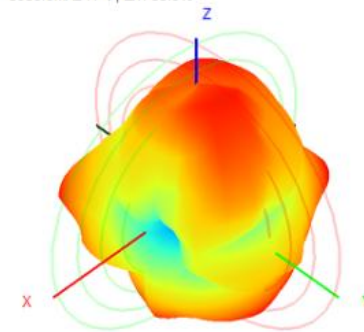
2450.0MHz H+V, Eff: 43.7%



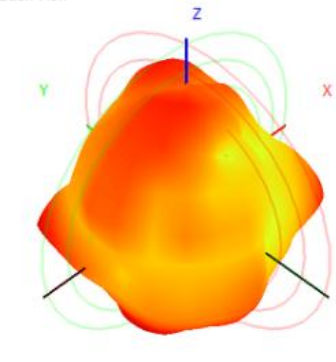
Back View



5850.0MHz H+V, Eff: 53.9%



Back View



2. Test Result

2.5 WIFI active test

WIFI有源测试			
频段	1	6	11
B-TRP-11Mbps	12.52	13.16	12.23
B-TIS-11Mbps	-82.22	-81.28	-82.19
G-TRP-54Mbps	12.05	13.49	11.77
G-TIS-54Mbps	-69.96	-71.45	-71.47
N-TRP-MCS7	11.37	12.76	11.78
N-TIS-MCS7	-66.11	-66.35	-66.84
频段	36	149	165
A-TRP-54Mbps	8.01	10.76	11.02
A-TIS-54Mbps	-68.61	-70.78	-70.18

2. Test Result

2.6 WIFI throughput test

(2.4G WiFi链接速率为150Mhz)

```
4] 8.00-9.00 sec 11.4 MBytes 96.0 Mbits/sec
4] 9.00-10.00 sec 11.0 MBytes 92.5 Mbits/sec
4] 10.00-11.00 sec 11.0 MBytes 92.1 Mbits/sec
4] 11.00-12.00 sec 11.5 MBytes 96.7 Mbits/sec
4] 12.00-13.00 sec 11.8 MBytes 98.7 Mbits/sec
4] 13.00-14.00 sec 11.7 MBytes 97.9 Mbits/sec
4] 14.00-15.00 sec 11.7 MBytes 98.0 Mbits/sec
4] 15.00-16.00 sec 11.5 MBytes 96.1 Mbits/sec
4] 16.00-17.00 sec 11.8 MBytes 99.1 Mbits/sec
4] 17.00-18.00 sec 10.4 MBytes 87.3 Mbits/sec
4] 18.00-19.00 sec 11.3 MBytes 94.7 Mbits/sec
4] 19.00-20.00 sec 10.8 MBytes 90.4 Mbits/sec
4] 20.00-21.00 sec 11.1 MBytes 92.8 Mbits/sec
4] 21.00-22.00 sec 10.8 MBytes 91.4 Mbits/sec
4] 22.00-23.00 sec 11.2 MBytes 94.3 Mbits/sec
4] 23.00-24.00 sec 10.9 MBytes 91.3 Mbits/sec
4] 24.00-25.00 sec 10.9 MBytes 91.7 Mbits/sec
4] 25.00-26.00 sec 11.4 MBytes 95.7 Mbits/sec
4] 26.00-27.00 sec 11.2 MBytes 93.9 Mbits/sec
4] 27.00-28.00 sec 9.61 MBytes 80.6 Mbits/sec
4] 28.00-29.00 sec 11.6 MBytes 97.0 Mbits/sec
4] 29.00-30.00 sec 11.7 MBytes 98.3 Mbits/sec
```

```
-----
[ ID] Interval      Transfer      Bandwidth
[ 4] 0.00-30.00 sec 327 MBytes 91.4 Mbits/sec
[ 4] 0.00-30.00 sec 327 MBytes 91.4 Mbits/sec
```

```
4] 8.00-9.00 sec 12.2 MBytes 103 Mbits/sec
4] 9.00-10.01 sec 14.5 MBytes 121 Mbits/sec
4] 10.01-11.01 sec 16.1 MBytes 135 Mbits/sec
4] 11.01-12.00 sec 12.1 MBytes 103 Mbits/sec
4] 12.00-13.01 sec 13.2 MBytes 110 Mbits/sec
4] 13.01-14.01 sec 14.5 MBytes 122 Mbits/sec
4] 14.01-15.00 sec 12.8 MBytes 107 Mbits/sec
4] 15.00-16.00 sec 12.5 MBytes 105 Mbits/sec
4] 16.00-17.01 sec 11.6 MBytes 96.9 Mbits/sec
4] 17.01-18.00 sec 12.5 MBytes 105 Mbits/sec
4] 18.00-19.00 sec 12.2 MBytes 103 Mbits/sec
4] 19.00-20.00 sec 12.6 MBytes 106 Mbits/sec
4] 20.00-21.01 sec 12.0 MBytes 100 Mbits/sec
4] 21.01-22.00 sec 11.6 MBytes 98.2 Mbits/sec
4] 22.00-23.00 sec 11.5 MBytes 96.6 Mbits/sec
4] 23.00-24.01 sec 12.1 MBytes 101 Mbits/sec
4] 24.01-25.00 sec 12.1 MBytes 102 Mbits/sec
4] 25.00-26.01 sec 12.2 MBytes 102 Mbits/sec
4] 26.01-27.00 sec 12.1 MBytes 102 Mbits/sec
4] 27.00-28.00 sec 12.1 MBytes 102 Mbits/sec
4] 28.00-29.00 sec 11.8 MBytes 98.4 Mbits/sec
4] 29.00-30.00 sec 12.2 MBytes 103 Mbits/sec
```

```
-----
ID] Interval      Transfer      Bandwidth
4] 0.00-30.00 sec 387 MBytes 108 Mbits/sec
4] 0.00-30.00 sec 387 MBytes 108 Mbits/sec
```

2.4G吞吐量 上传**89.5M**

2.4G吞吐量 下载**108M**

2. Test Result

2.6 WIFI throughput test (5G WiFi链接速率为433Mhz)

6]	28.00-29.00	sec	5.50 MBytes	46.1 Mbits/sec
8]	28.00-29.00	sec	5.50 MBytes	46.1 Mbits/sec
10]	28.00-29.00	sec	5.25 MBytes	44.0 Mbits/sec
12]	28.00-29.00	sec	5.29 MBytes	44.4 Mbits/sec
UM]	28.00-29.00	sec	27.3 MBytes	229 Mbits/sec

4]	29.00-30.00	sec	5.53 MBytes	46.4 Mbits/sec
6]	29.00-30.00	sec	5.62 MBytes	47.2 Mbits/sec
8]	29.00-30.00	sec	5.48 MBytes	45.9 Mbits/sec
10]	29.00-30.00	sec	5.38 MBytes	45.1 Mbits/sec
12]	29.00-30.00	sec	5.38 MBytes	45.1 Mbits/sec
UM]	29.00-30.00	sec	27.4 MBytes	230 Mbits/sec

ID]	Interval		Transfer	Bandwidth
4]	0.00-30.00	sec	171 MBytes	47.7 Mbits/sec
4]	0.00-30.00	sec	170 MBytes	47.7 Mbits/sec
6]	0.00-30.00	sec	169 MBytes	47.3 Mbits/sec
6]	0.00-30.00	sec	169 MBytes	47.3 Mbits/sec
8]	0.00-30.00	sec	167 MBytes	46.7 Mbits/sec
8]	0.00-30.00	sec	167 MBytes	46.7 Mbits/sec
10]	0.00-30.00	sec	166 MBytes	46.3 Mbits/sec
10]	0.00-30.00	sec	166 MBytes	46.3 Mbits/sec
12]	0.00-30.00	sec	161 MBytes	45.1 Mbits/sec
12]	0.00-30.00	sec	161 MBytes	45.1 Mbits/sec
UM]	0.00-30.00	sec	834 MBytes	233 Mbits/sec
UM]	0.00-30.00	sec	834 MBytes	233 Mbits/sec

8.00-9.00	sec	38.9 MBytes	326 Mbits/sec
9.00-10.00	sec	40.1 MBytes	337 Mbits/sec
10.00-11.01	sec	40.6 MBytes	338 Mbits/sec
11.01-12.01	sec	40.5 MBytes	340 Mbits/sec
12.01-13.00	sec	40.0 MBytes	338 Mbits/sec
13.00-14.02	sec	39.6 MBytes	328 Mbits/sec
14.02-15.00	sec	40.0 MBytes	340 Mbits/sec
15.00-16.00	sec	40.2 MBytes	338 Mbits/sec
16.00-17.01	sec	39.9 MBytes	330 Mbits/sec
17.01-18.00	sec	38.8 MBytes	329 Mbits/sec
18.00-19.00	sec	41.0 MBytes	344 Mbits/sec
19.00-20.00	sec	41.0 MBytes	344 Mbits/sec
20.00-21.00	sec	39.4 MBytes	330 Mbits/sec
21.00-22.00	sec	38.2 MBytes	321 Mbits/sec
22.00-23.00	sec	40.5 MBytes	340 Mbits/sec
23.00-24.00	sec	39.6 MBytes	332 Mbits/sec
24.00-25.00	sec	37.9 MBytes	317 Mbits/sec
25.00-26.01	sec	39.6 MBytes	330 Mbits/sec
26.01-27.00	sec	34.9 MBytes	295 Mbits/sec
27.00-28.01	sec	39.9 MBytes	332 Mbits/sec
28.01-29.01	sec	35.4 MBytes	296 Mbits/sec
29.01-30.00	sec	34.2 MBytes	290 Mbits/sec

ID]	Interval	Transfer	Bandwidth
4]	0.00-30.00	sec 1.12 GBytes	321 Mbits/sec
4]	0.00-30.00	sec 1.12 GBytes	321 Mbits/sec

5G吞吐量 上传**233M**

5G吞吐量 下载**321M**



3. Conclusions

Thank you