深圳市亿圣邦科技有限公司

Shenzhen Yishengbang Technology Co., Ltd.
Antenna Test Report

Customer:昱科

Project: AM1510YD

Product: WIFI Antenna—FPC

Report date: 2025-05-15

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Purpose

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

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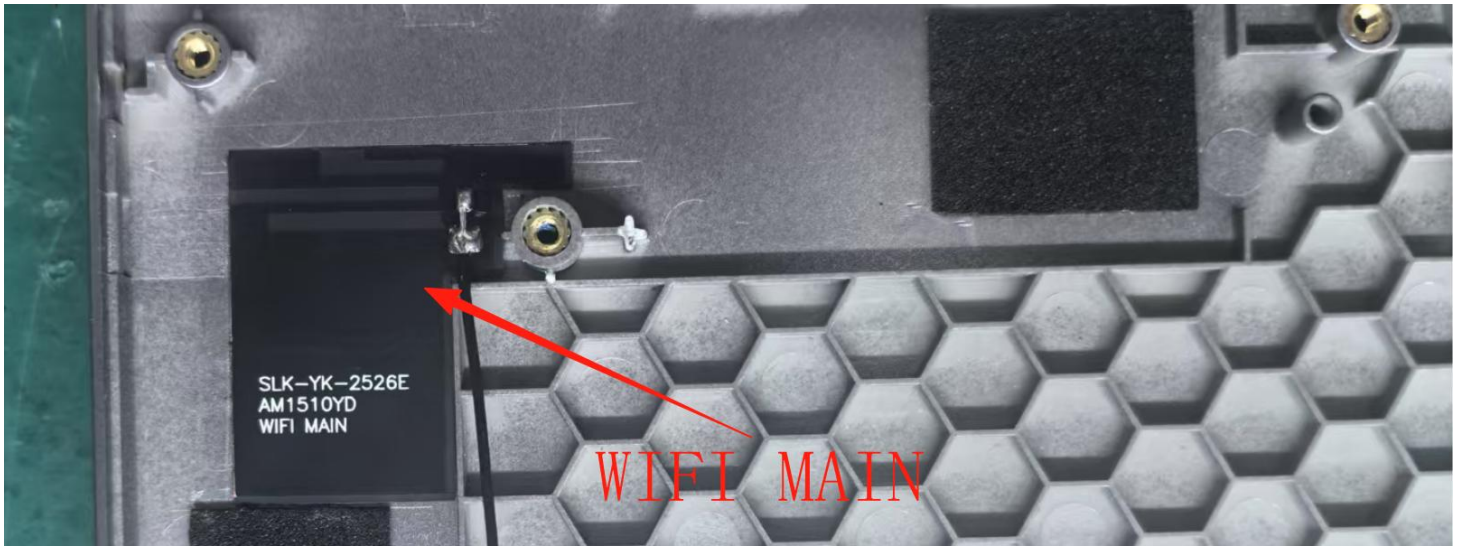
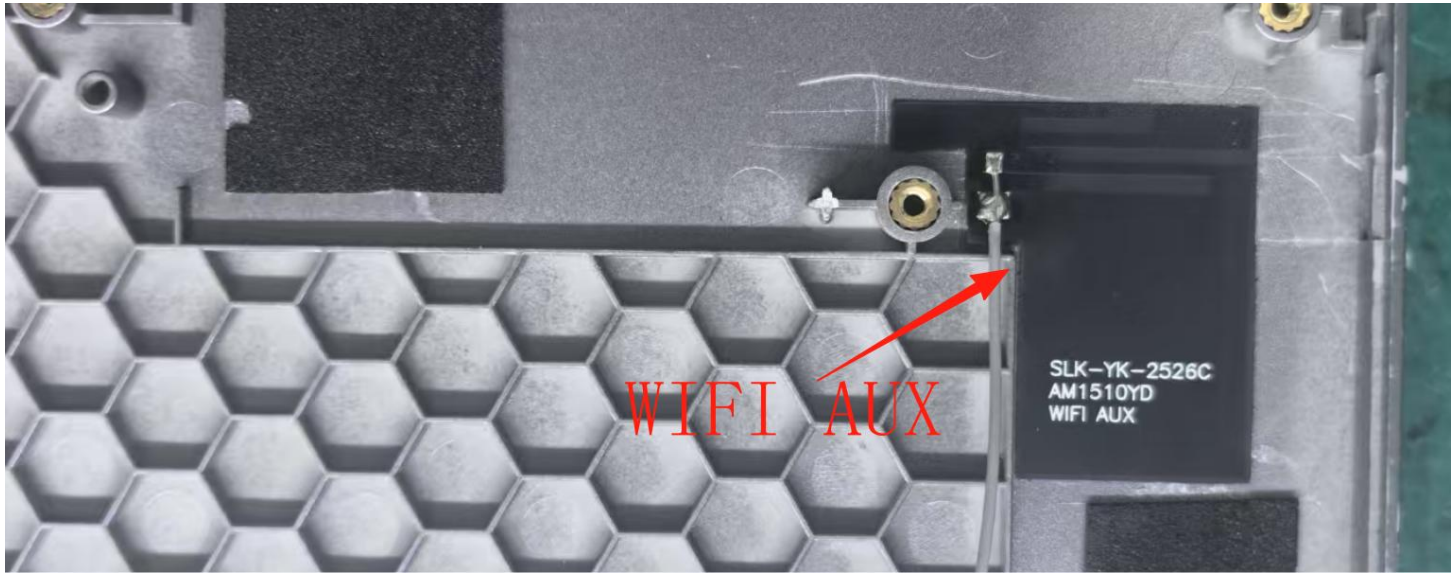
3. Conclusions

1. Product Overview

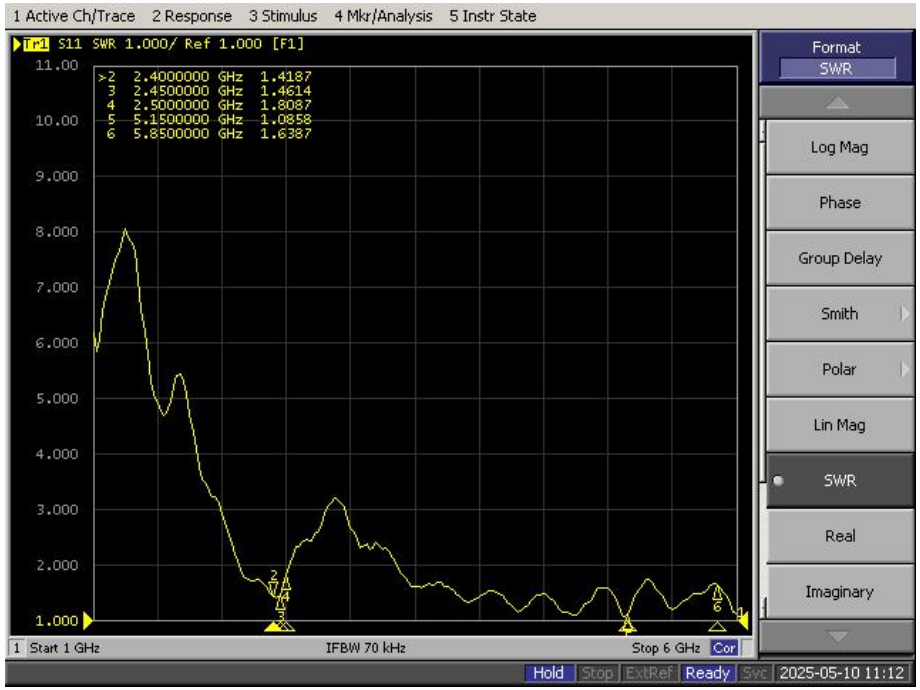
1. Product Overview

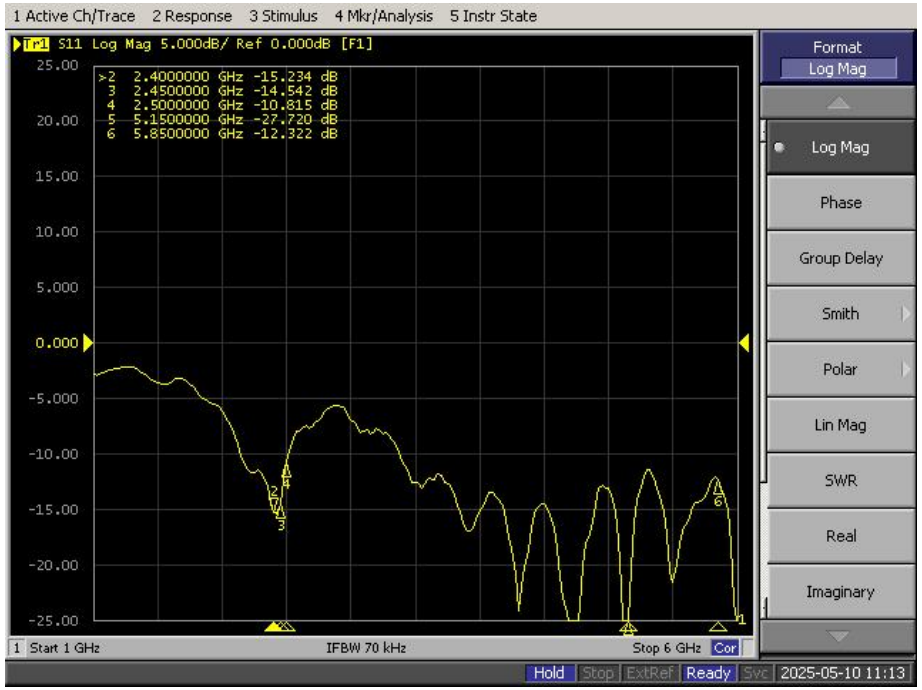




2. Test Result

2.1 WIFI MAIN Antenna VSWR/S11

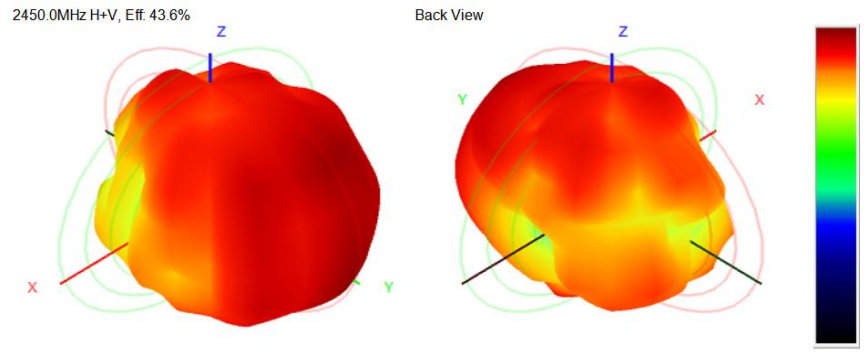


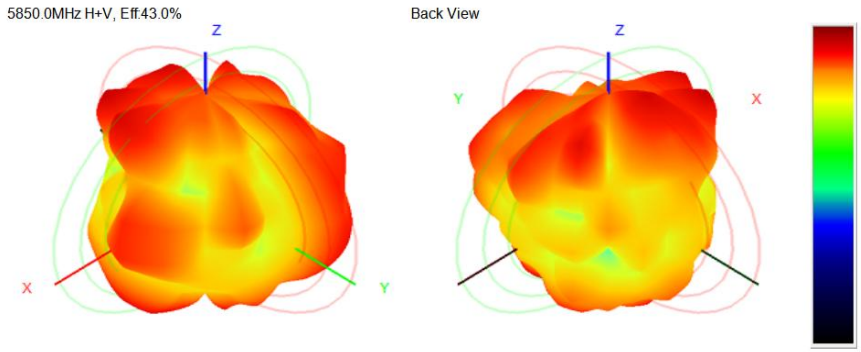


2. Test Result

2.2 WIFI Main Antenna Gain/Efficiency/3D DATA

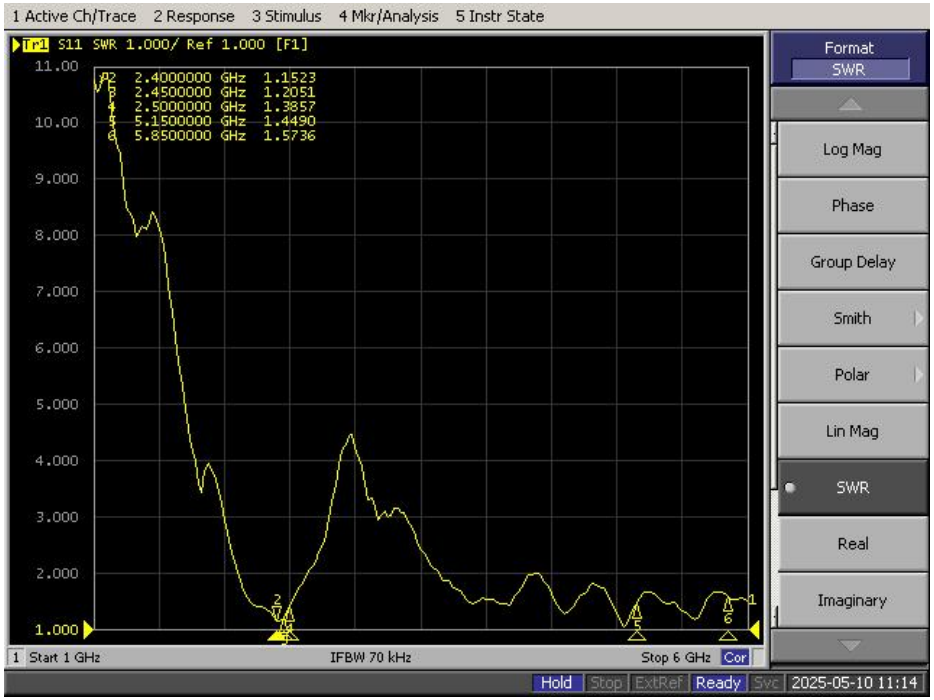
Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-3.73	1.55	42.40
2410	-3.50	1.72	44.68
2420	-3.45	1.52	45.21
2430	-3.43	1.65	45.35
2440	-3.68	1.13	42.82
2450	-3.60	1.69	43.62
2460	-3.44	1.69	45.32
2470	-3.68	1.46	42.83
2480	-3.60	1.50	43.64
2490	-3.61	1.31	43.53
2500	-3.58	1.63	43.81
5150	-3.26	2.99	47.20
5350	-3.33	2.67	46.44
5550	-3.47	2.66	44.93
5750	-3.58	2.25	43.80
5850	-3.66	2.05	43.02

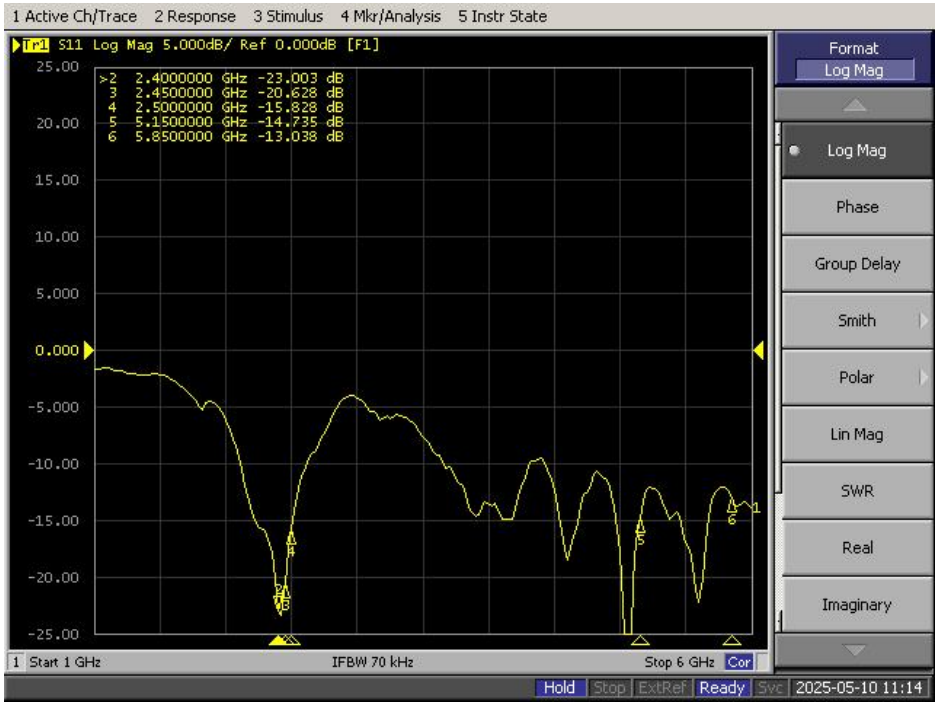




2. Test Result

2.3 WIFI AUX Antenna VSWR/S11

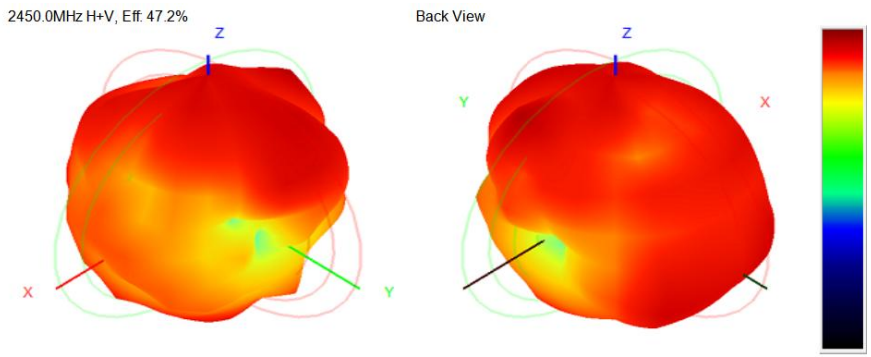


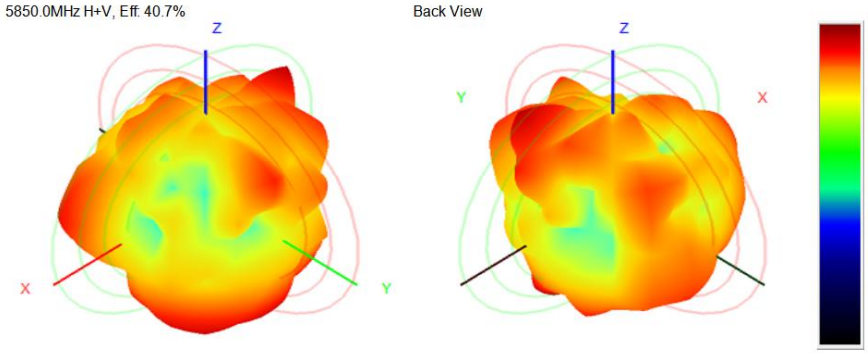


2. Test Result

2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-3.67	1.48	42.94
2410	-3.43	1.80	45.37
2420	-3.25	1.91	47.26
2430	-3.19	2.05	47.93
2440	-3.33	1.83	46.47
2450	-3.26	1.94	47.21
2460	-3.22	1.92	47.65
2470	-3.34	1.80	46.31
2480	-3.17	1.23	48.21
2490	-3.31	1.28	46.72
2500	-3.46	1.37	45.04
5150	-3.98	2.82	39.98
5350	-3.59	2.56	43.76
5550	-3.82	2.74	41.45
5750	-3.59	2.56	43.76
5850	-3.90	2.67	40.72





2. Test Result

2.5 WIFI active test

WIFI有源测试			
频段	1	6	11
B-TRP-11MBps	12.24	11.20	11.80
B-TIS-11MBps	-79.81	-80.33	-80.21
G-TRP-54MBps	12.38	13.14	10.77
G-TIS-54MBps	-69.27	-69.91	-69.62
N-TRP-MCS7	12.67	13.10	10.69
N-TIS-MCS7	-64.96	-65.89	-64.21
频段	36	149	165
A-TRP-54MBps	7.90	11.03	8.87
A-TIS-54MBps	-69.97	-71.66	-69.53

2. Test Result

2.6 WIFI throughput test (2.4G WiFi链接速率为150Mhz)

```
 6]  28.01-29.00  sec  2.00 MBytes  16.9 Mbits/sec
 8]  28.01-29.00  sec  2.62 MBytes  22.1 Mbits/sec
10]  28.01-29.00  sec  2.12 MBytes  17.9 Mbits/sec
12]  28.01-29.00  sec  2.25 MBytes  19.0 Mbits/sec
SUM]  28.01-29.00  sec  11.0 MBytes  92.8 Mbits/sec
- - - - - - - - - - - - - - - - - - - - - - - - -
 4]  29.00-30.01  sec  2.50 MBytes  20.9 Mbits/sec
 6]  29.00-30.01  sec  2.12 MBytes  17.7 Mbits/sec
 8]  29.00-30.01  sec  2.00 MBytes  16.7 Mbits/sec
10]  29.00-30.01  sec  2.38 MBytes  19.8 Mbits/sec
12]  29.00-30.01  sec  2.38 MBytes  19.8 Mbits/sec
[SUM]  29.00-30.01  sec  11.4 MBytes  95.0 Mbits/sec
- - - - - - - - - - - - - - - - - - - - - - - - -
[ ID] Interval           Transfer     Bandwidth
[  4]   0.00-30.01  sec  94.0 MBytes  26.3 Mbits/sec
[  4]   0.00-30.01  sec  94.0 MBytes  26.3 Mbits/sec
[  6]   0.00-30.01  sec  34.8 MBytes  9.71 Mbits/sec
[  6]   0.00-30.01  sec  34.7 MBytes  9.71 Mbits/sec
[  8]   0.00-30.01  sec  92.2 MBytes  25.8 Mbits/sec
[  8]   0.00-30.01  sec  92.2 MBytes  25.8 Mbits/sec
[ 10]   0.00-30.01  sec  34.1 MBytes  9.54 Mbits/sec
[ 10]   0.00-30.01  sec  34.1 MBytes  9.54 Mbits/sec
[ 12]   0.00-30.01  sec  65.0 MBytes  18.2 Mbits/sec
[ 12]   0.00-30.01  sec  65.0 MBytes  18.2 Mbits/sec
[SUM]   0.00-30.01  sec   320 MBytes  89.5 Mbits/sec
[SUM]   0.00-30.01  sec   320 MBytes  89.5 Mbits/sec
```

2.4G吞吐量 上传89.5M

```
 6]  28.00-29.00  sec  2.12 MBytes  17.8 Mbits/sec
 8]  28.00-29.00  sec  2.12 MBytes  17.8 Mbits/sec
10]  28.00-29.00  sec  2.12 MBytes  17.8 Mbits/sec
12]  28.00-29.00  sec  2.06 MBytes  17.3 Mbits/sec
[SUM]  28.00-29.00  sec  10.6 MBytes  88.6 Mbits/sec
- - - - - - - - - - - - - - - - - - - - - - - - -
 4]  29.00-30.00  sec  2.00 MBytes  16.7 Mbits/sec
 6]  29.00-30.00  sec  1.91 MBytes  16.0 Mbits/sec
 8]  29.00-30.00  sec  1.88 MBytes  15.7 Mbits/sec
10]  29.00-30.00  sec  1.88 MBytes  15.7 Mbits/sec
12]  29.00-30.00  sec  1.94 MBytes  16.2 Mbits/sec
[SUM]  29.00-30.00  sec  9.60 MBytes  80.4 Mbits/sec
- - - - - - - - - - - - - - - - - - - - - - - - -
[ ID] Interval           Transfer     Bandwidth
[  4]   0.00-30.00  sec  66.5 MBytes  18.6 Mbits/sec
[  4]   0.00-30.00  sec  66.4 MBytes  18.6 Mbits/sec
[  6]   0.00-30.00  sec  65.4 MBytes  18.3 Mbits/sec
[  6]   0.00-30.00  sec  65.4 MBytes  18.3 Mbits/sec
[  8]   0.00-30.00  sec  65.5 MBytes  18.3 Mbits/sec
[  8]   0.00-30.00  sec  65.4 MBytes  18.3 Mbits/sec
[ 10]   0.00-30.00  sec  64.8 MBytes  18.1 Mbits/sec
[ 10]   0.00-30.00  sec  64.6 MBytes  18.1 Mbits/sec
[ 12]   0.00-30.00  sec  61.4 MBytes  17.2 Mbits/sec
[ 12]   0.00-30.00  sec  61.2 MBytes  17.1 Mbits/sec
[SUM]   0.00-30.00  sec   324 MBytes  90.5 Mbits/sec
[SUM]   0.00-30.00  sec   323 MBytes  90.3 Mbits/sec
```

2.4G吞吐量 下载90.3M

2. Test Result

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

```
 8]  28.00-29.00  sec  6.62 MBytes  55.6 Mbits/sec
10]  28.00-29.00  sec  6.38 MBytes  53.5 Mbits/sec
12]  28.00-29.00  sec  6.33 MBytes  53.1 Mbits/sec
SUM]  28.00-29.00  sec  32.8 MBytes   275 Mbits/sec
- - - - - - - - - - - - - - - - - - - - - - - - -
 4]  29.00-30.00  sec  6.57 MBytes  55.1 Mbits/sec
 6]  29.00-30.00  sec  6.75 MBytes  56.5 Mbits/sec
 8]  29.00-30.00  sec  6.75 MBytes  56.5 Mbits/sec
10]  29.00-30.00  sec  6.38 MBytes  53.4 Mbits/sec
12]  29.00-30.00  sec  6.17 MBytes  51.7 Mbits/sec
[SUM]  29.00-30.00  sec  32.6 MBytes   273 Mbits/sec
- - - - - - - - - - - - - - - - - - - - - - - - -
[ ID] Interval           Transfer     Bandwidth
[  4]   0.00-30.00  sec   192 MBytes  53.6 Mbits/sec
[  4]   0.00-30.00  sec   192 MBytes  53.6 Mbits/sec
[  6]   0.00-30.00  sec   191 MBytes  53.4 Mbits/sec
[  6]   0.00-30.00  sec   191 MBytes  53.3 Mbits/sec
[  8]   0.00-30.00  sec   189 MBytes  52.8 Mbits/sec
[  8]   0.00-30.00  sec   188 MBytes  52.7 Mbits/sec
[ 10]   0.00-30.00  sec   186 MBytes  52.1 Mbits/sec
[ 10]   0.00-30.00  sec   186 MBytes  52.1 Mbits/sec
[ 12]   0.00-30.00  sec   181 MBytes  50.5 Mbits/sec
[ 12]   0.00-30.00  sec   180 MBytes  50.5 Mbits/sec
[SUM]   0.00-30.00  sec   938 MBytes   262 Mbits/sec
[SUM]   0.00-30.00  sec   938 MBytes   262 Mbits/sec
```

5G吞吐量 上传262M

```
4]   8.01-9.00   sec  38.6 MBytes   325 Mbits/sec
4]   9.00-10.00  sec  42.0 MBytes   352 Mbits/sec
4]  10.00-11.01  sec  40.1 MBytes   335 Mbits/sec
4]  11.01-12.00  sec  41.4 MBytes   350 Mbits/sec
4]  12.00-13.00  sec  41.8 MBytes   350 Mbits/sec
4]  13.00-14.01  sec  39.8 MBytes   332 Mbits/sec
4]  14.01-15.00  sec  41.0 MBytes   347 Mbits/sec
4]  15.00-16.00  sec  40.9 MBytes   342 Mbits/sec
4]  16.00-17.01  sec  41.1 MBytes   342 Mbits/sec
4]  17.01-18.01  sec  40.8 MBytes   343 Mbits/sec
4]  18.01-19.01  sec  40.2 MBytes   335 Mbits/sec
4]  19.01-20.01  sec  37.9 MBytes   320 Mbits/sec
4]  20.01-21.01  sec  40.4 MBytes   338 Mbits/sec
4]  21.01-22.00  sec  38.5 MBytes   325 Mbits/sec
4]  22.00-23.01  sec  39.2 MBytes   328 Mbits/sec
4]  23.01-24.01  sec  40.1 MBytes   337 Mbits/sec
4]  24.01-25.00  sec  40.9 MBytes   344 Mbits/sec
4]  25.00-26.00  sec  41.5 MBytes   348 Mbits/sec
4]  26.00-27.00  sec  40.2 MBytes   338 Mbits/sec
4]  27.00-28.00  sec  39.0 MBytes   326 Mbits/sec
4]  28.00-29.01  sec  37.9 MBytes   317 Mbits/sec
4]  29.01-30.00  sec  37.6 MBytes   317 Mbits/sec
- - - - - - - - - - - - - - - - - - - - - - - - -
[ ID] Interval           Transfer     Bandwidth
[  4]   0.00-30.00  sec  1.16 GBytes  332 Mbits/sec
[  4]   0.00-30.00  sec  1.16 GBytes  332 Mbits/sec
```

5G吞吐量 下载308M

3. Conclusions

Thank you