

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

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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.

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2. Test Result

2.1 WIFI MAIN Antenna VSWR

2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA

2.3 WIFI AUX Antenna VSWR

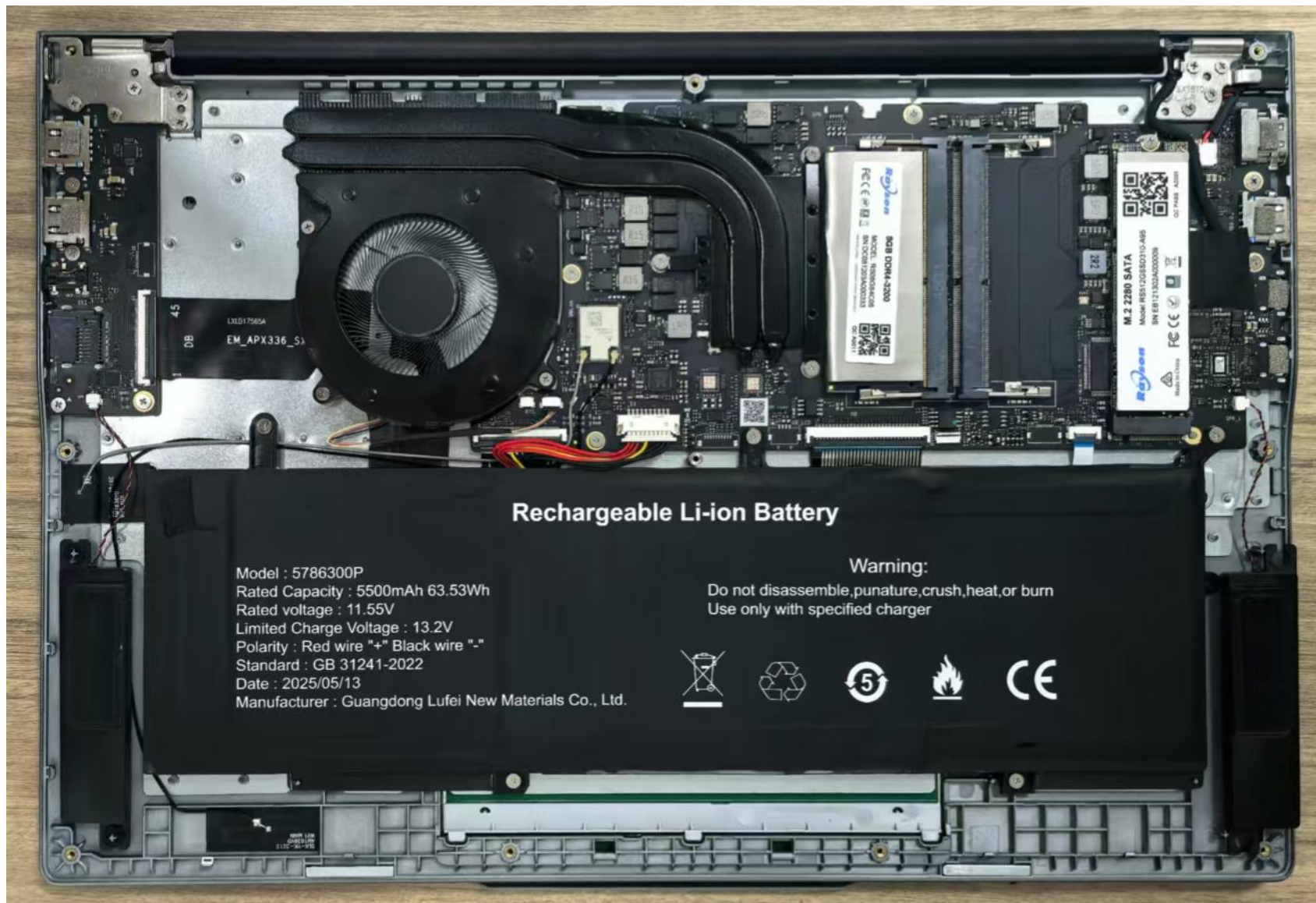
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

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1. Product Overview

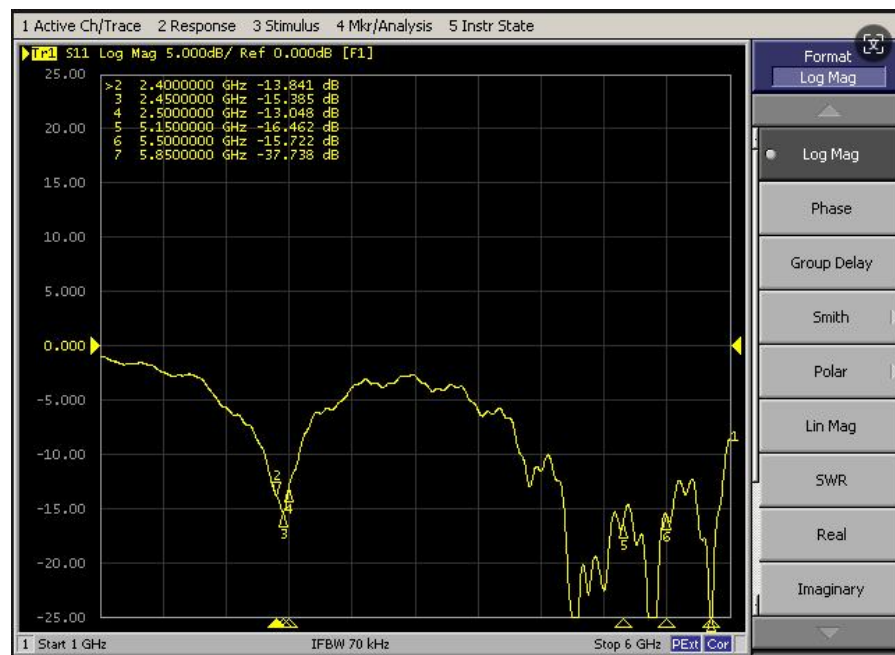
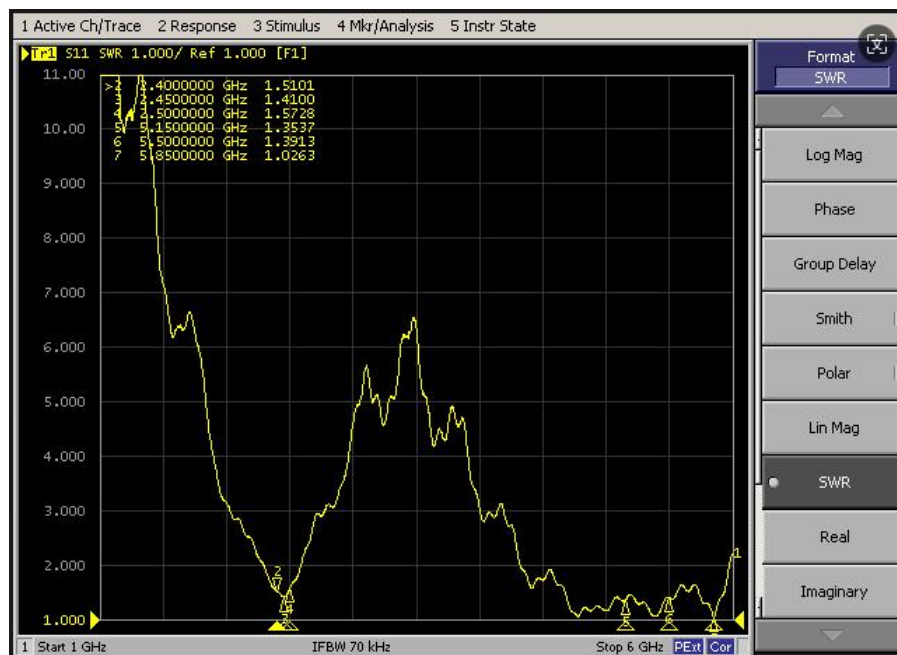


1. Product Overview



2. Test Result

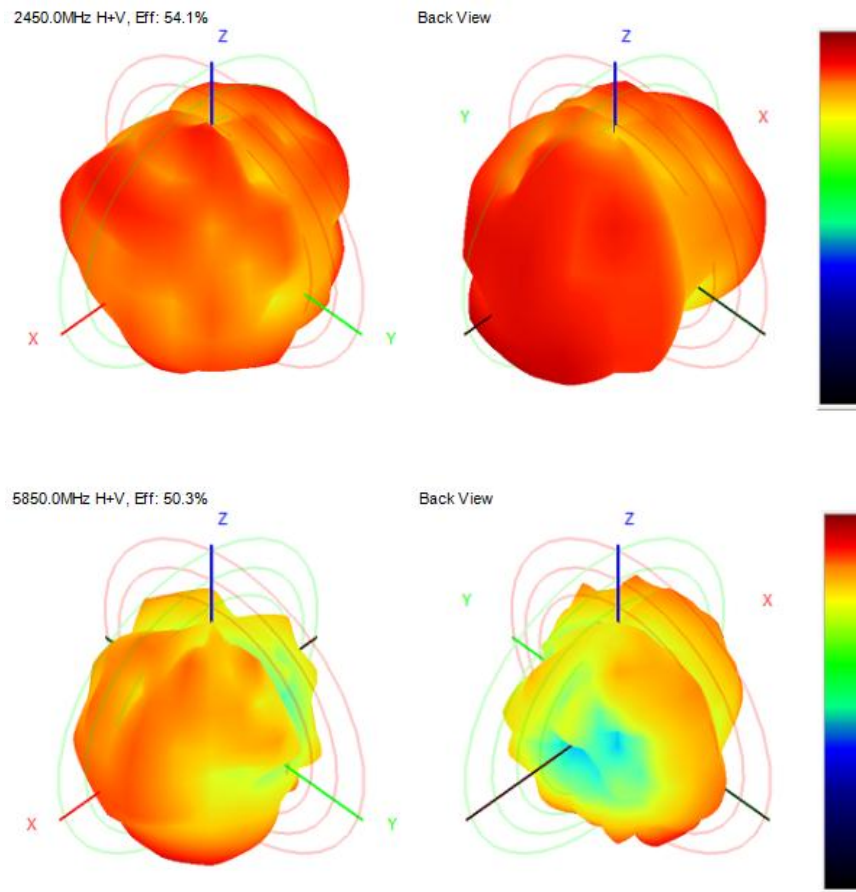
2.1 WIFI MAIN Antenna VSWR/S11



2. Test Result

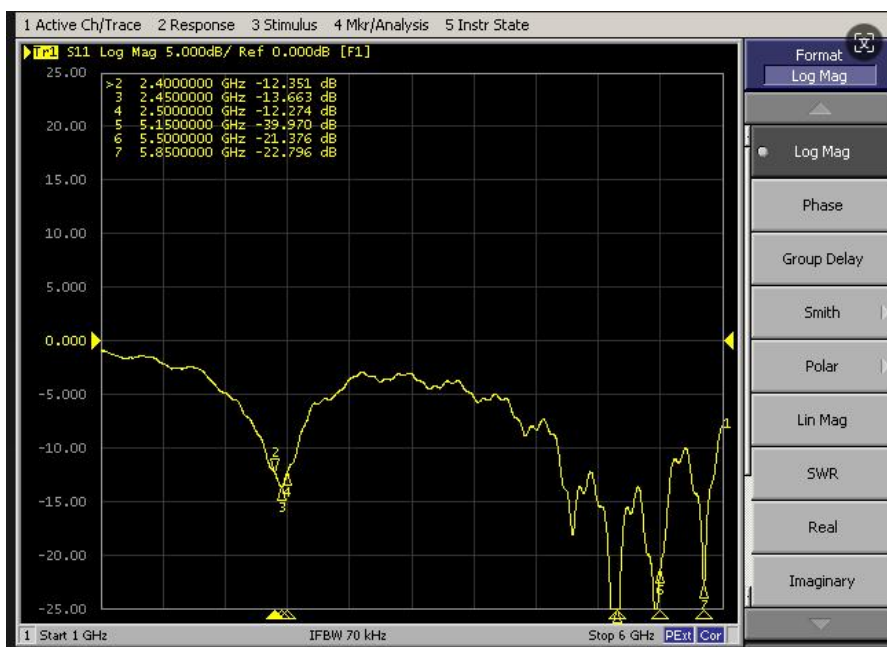
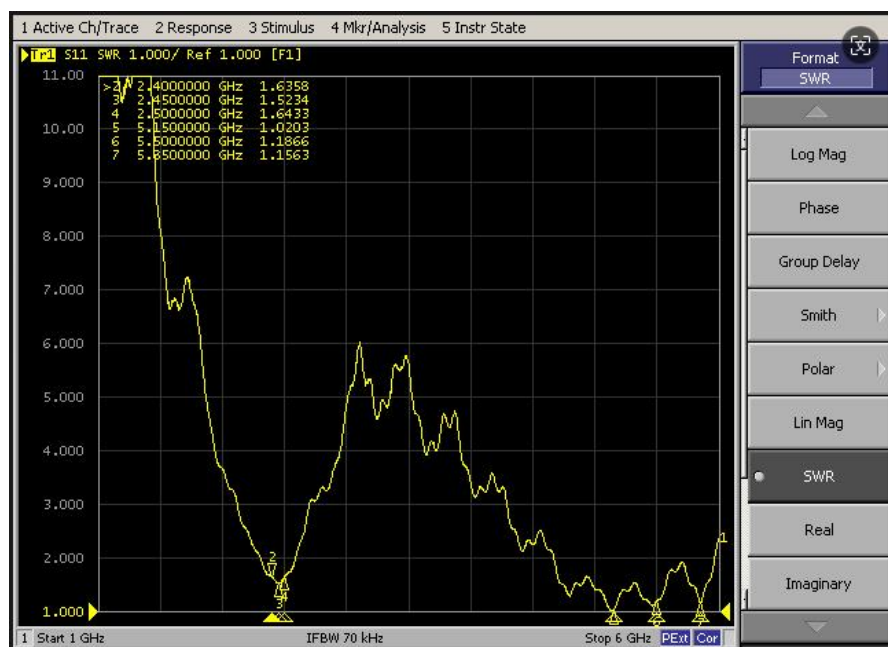
2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA

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

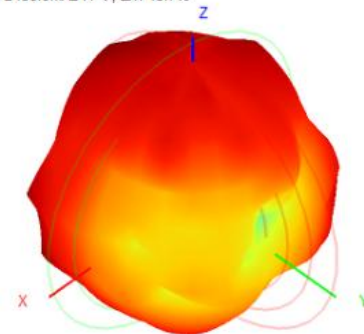


2. Test Result

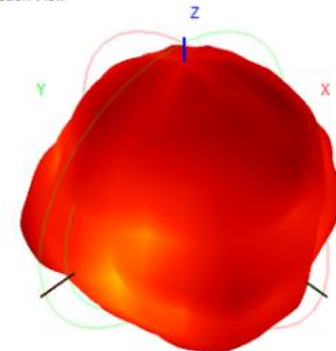
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

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

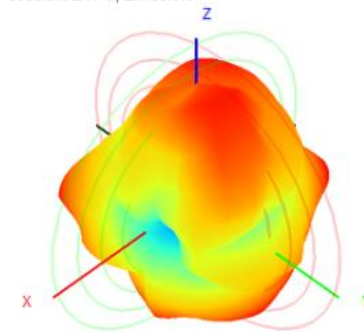
2450.0MHz H+V, Eff: 43.7%



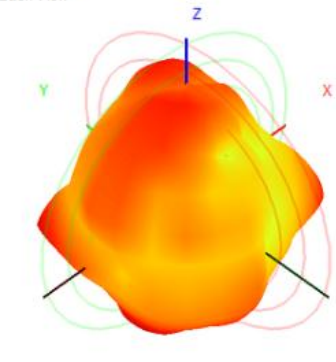
Back View



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
```

```
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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