

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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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

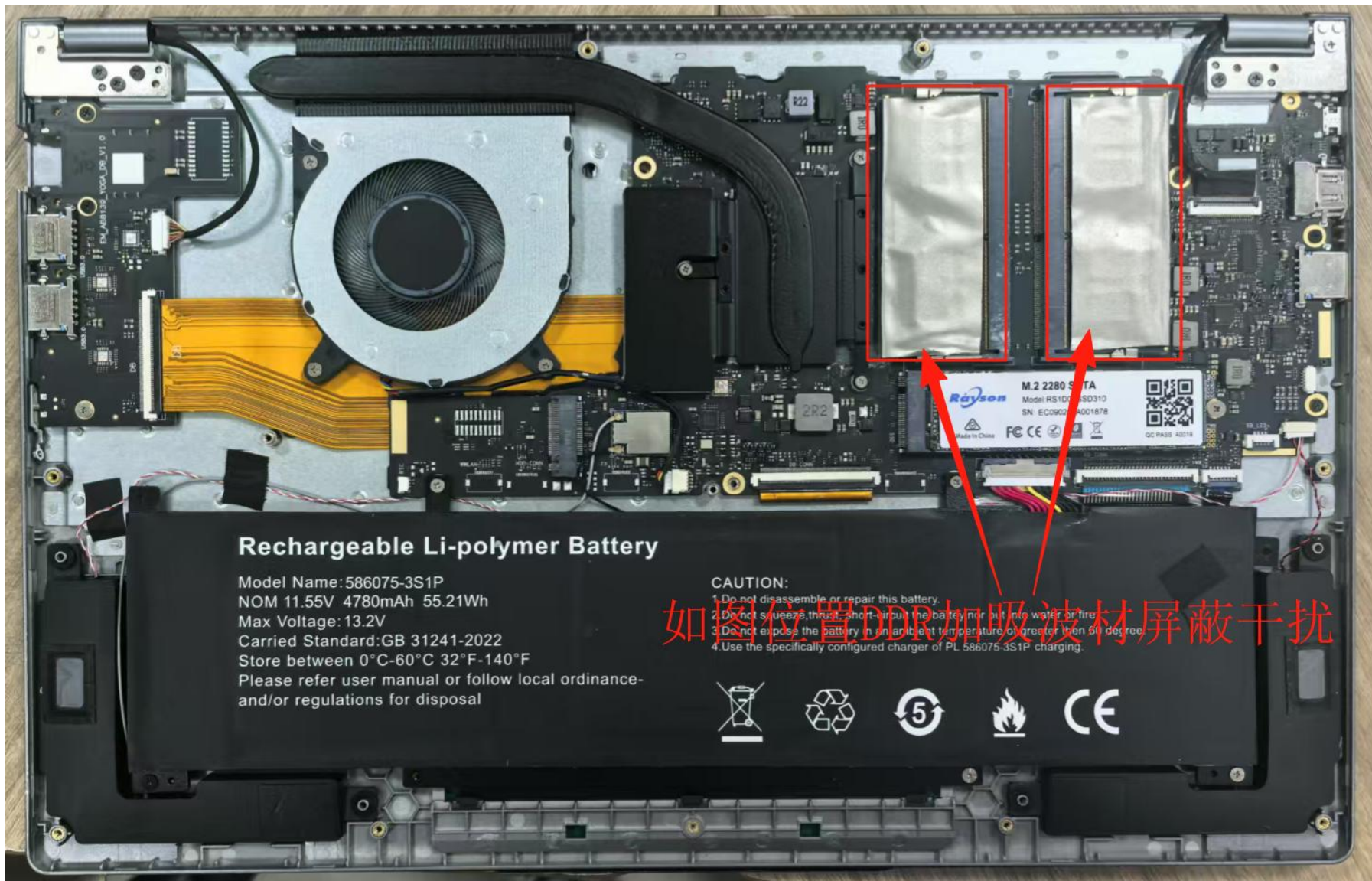
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

2.5 WIFI active test

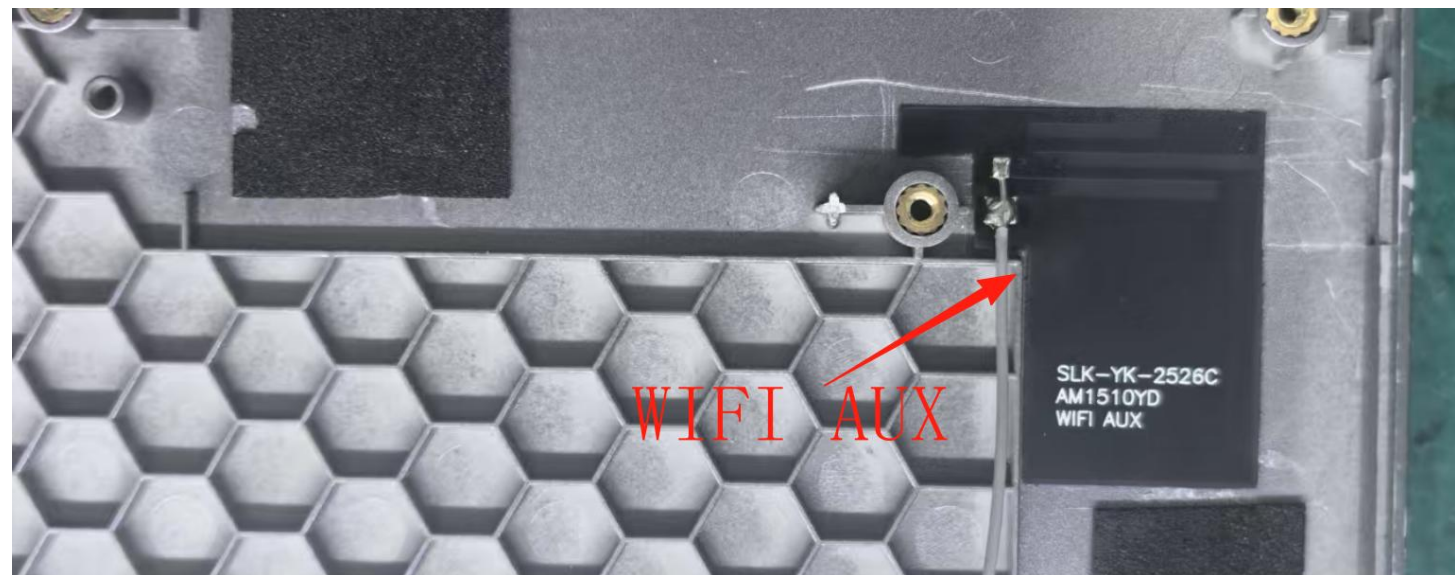
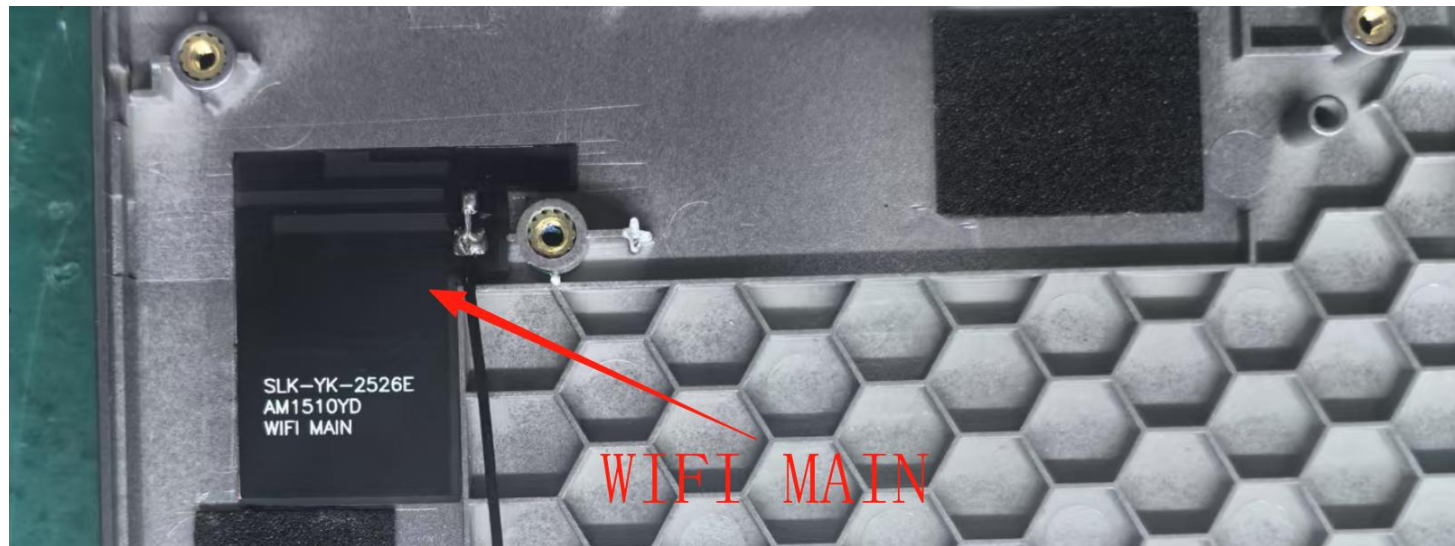
2.6 WIFI throughput test

3. Conclusions

1. Product Overview

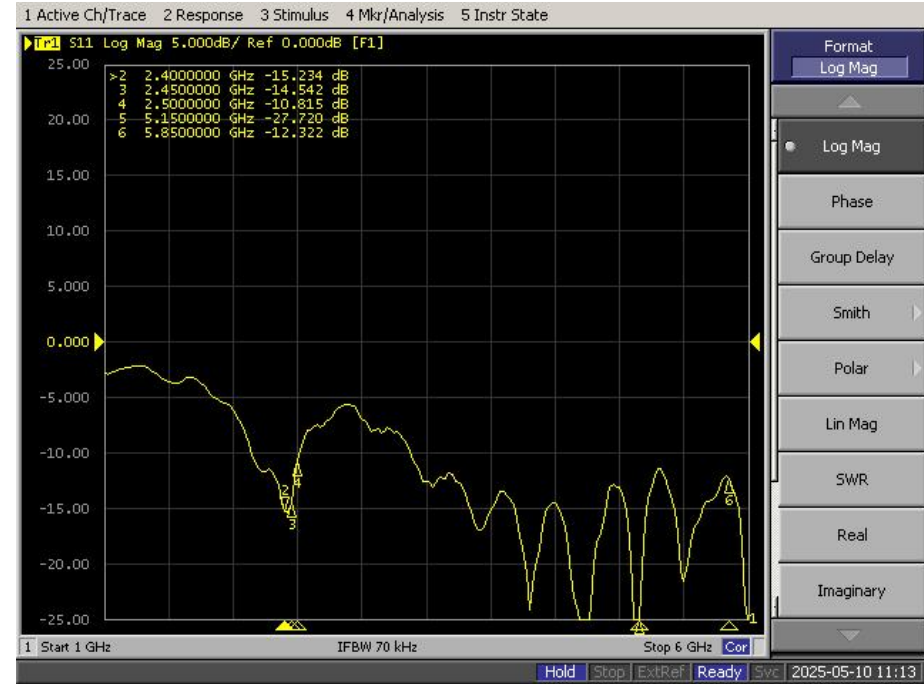
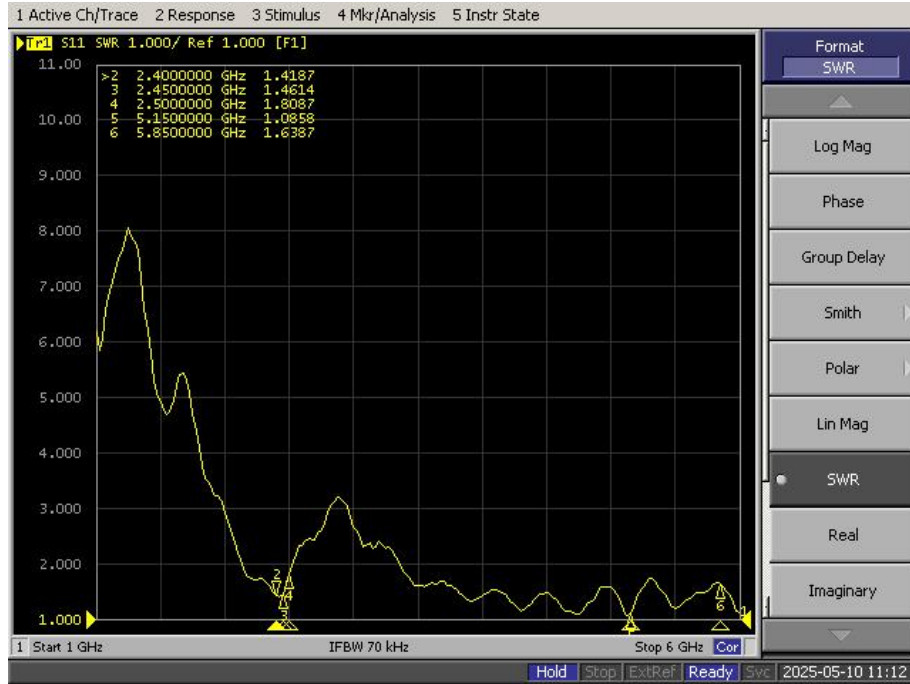


1. Product Overview



2. Test Result

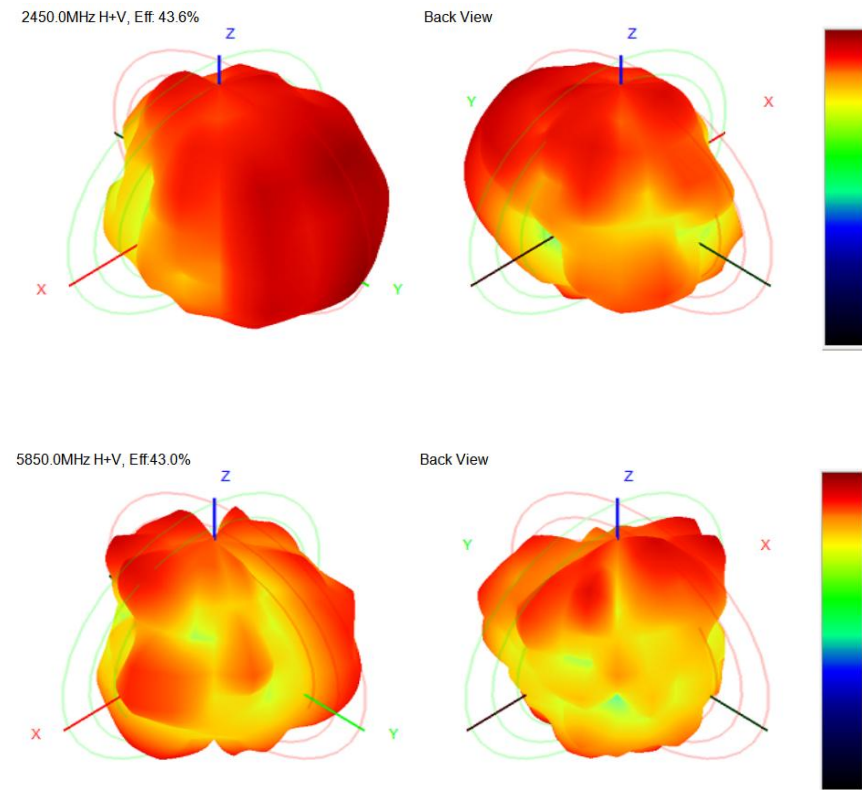
2.1 WIFI MAIN Antenna VSWR/S11



2. Test Result

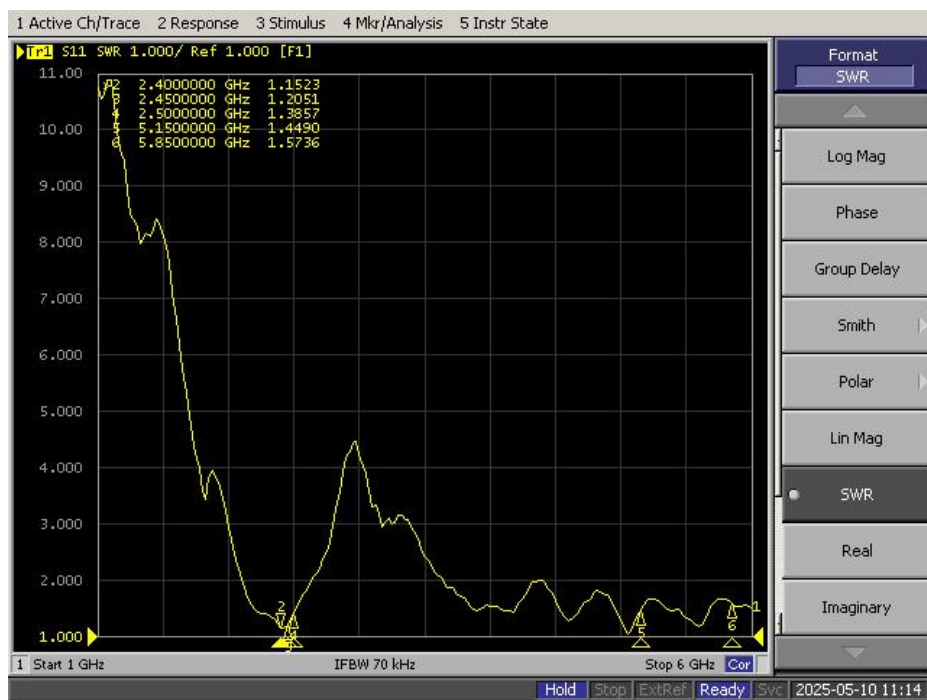
2.2 WIFI Main Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-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

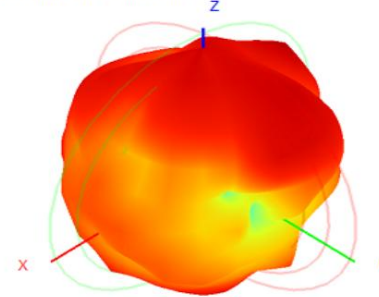


2. Test Result

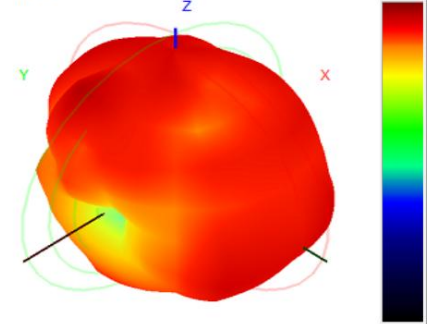
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

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

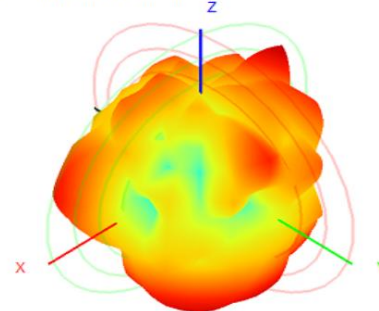
2450.0MHz H+V, Eff. 47.2%



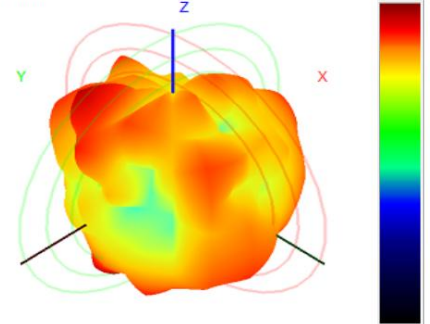
Back View



5850.0MHz H+V, Eff. 40.7%



Back View



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

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 上传**89.5M**

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

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 上传**262M**

5G吞吐量 下载**308M**



3. Conclusions

Thank you