



Shenzhen Yishengbang Technology Co., Ltd

Antenna Test Report

Project: K15SDA

Product: WIFI

Report date: 2025-5-23

Purpose

This report is to measure the performance of SLK for Master Antenna on迈迪杰. 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

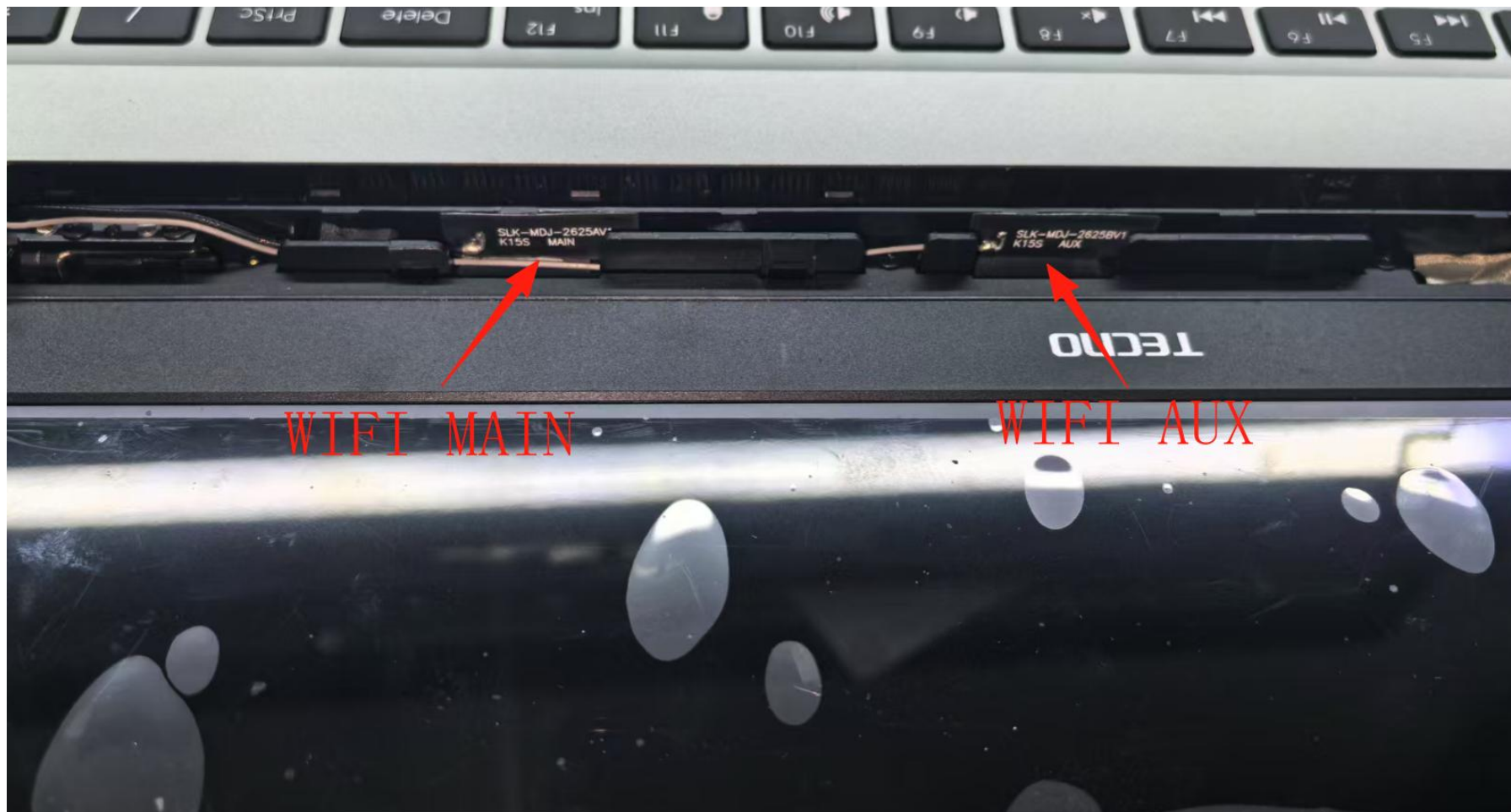
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

2.5 WIFI active test

2.6 WIFI throughput test

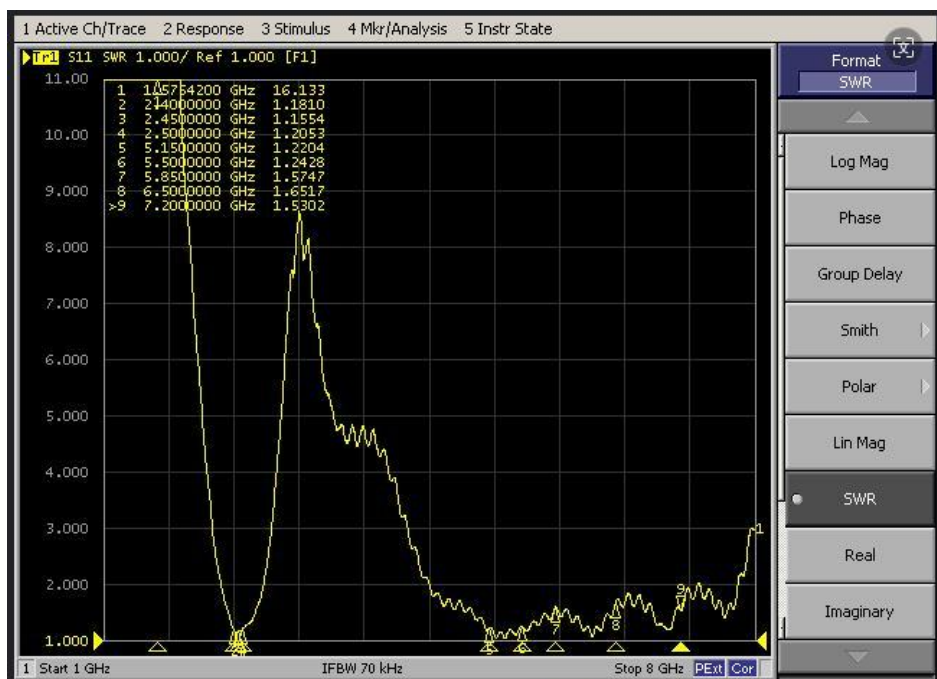
3. Conclusions

1. Product Overview



2. Test Result

2.1 WIFI MAIN Antenna VSWR/S11



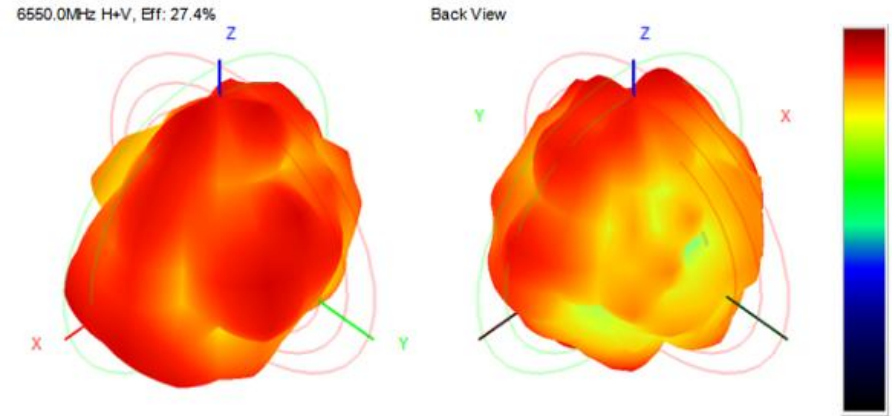
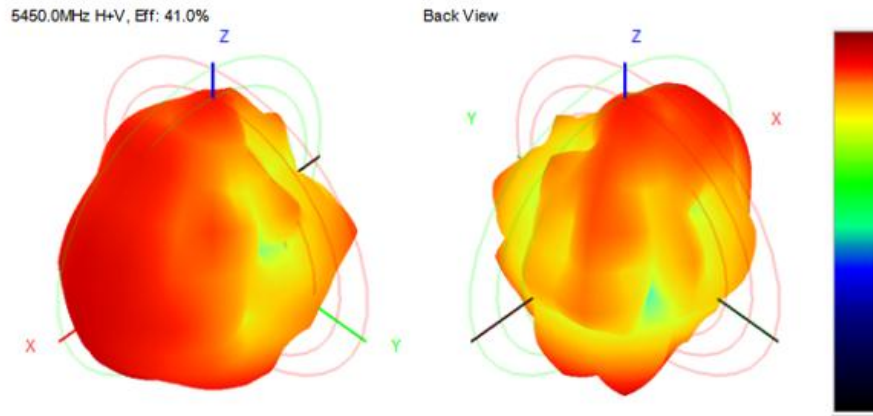
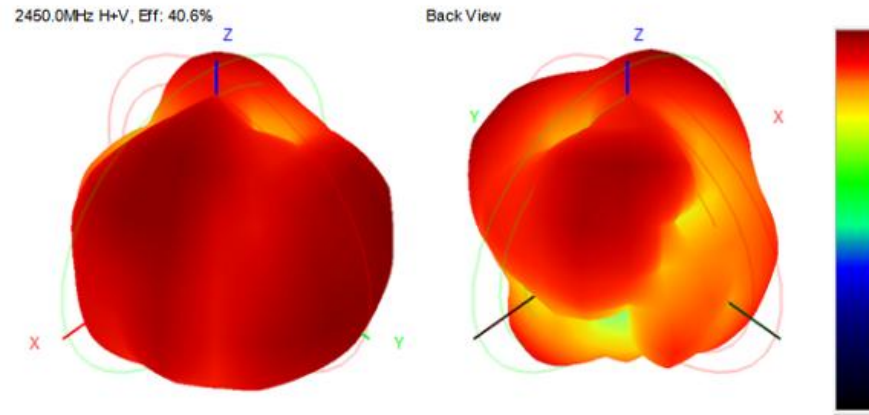
2. Test Result

2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-5.65	1.00	37.22	5650	-4.43	2.86	36.07
2410	-5.50	1.11	38.20	5750	-4.36	2.31	36.68
2420	-5.03	1.42	41.39	5850	-4.52	2.86	35.35
2430	-5.13	1.10	40.66	5950	-4.02	2.14	39.61
2440	-5.09	1.06	40.96	6050	-3.98	2.94	40.00
2450	-5.14	1.15	40.64	6150	-4.50	2.56	35.46
2460	-4.84	1.06	42.78	6250	-4.69	2.97	33.97
2470	-5.05	1.10	41.26	6350	-4.70	2.63	33.91
2480	-4.94	1.13	42.03	6450	-5.31	2.13	29.44
2490	-4.87	1.09	42.59	6550	-5.62	2.78	27.42
2500	-4.87	1.49	42.62	6650	-5.71	2.68	26.87
5150	-4.53	2.53	35.20	6750	-6.15	2.05	24.25
5250	-4.47	2.79	35.69	6850	-5.50	2.36	28.19
5350	-4.00	2.78	39.81	6950	-5.51	2.28	28.13
5450	-3.87	2.85	41.01	7050	-5.24	2.17	29.94
5550	-4.32	2.18	36.96	7150	-5.59	2.14	27.58

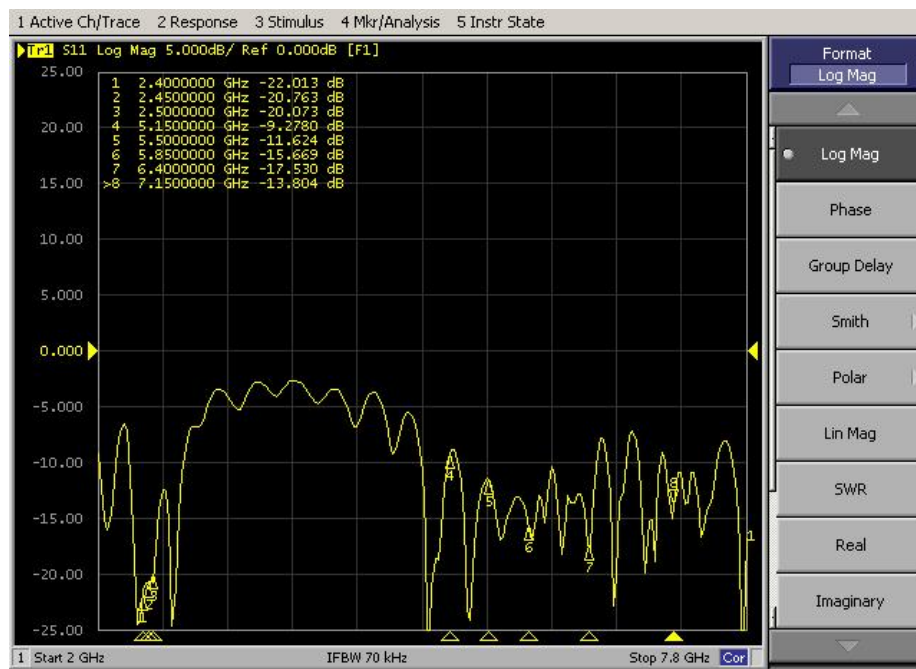
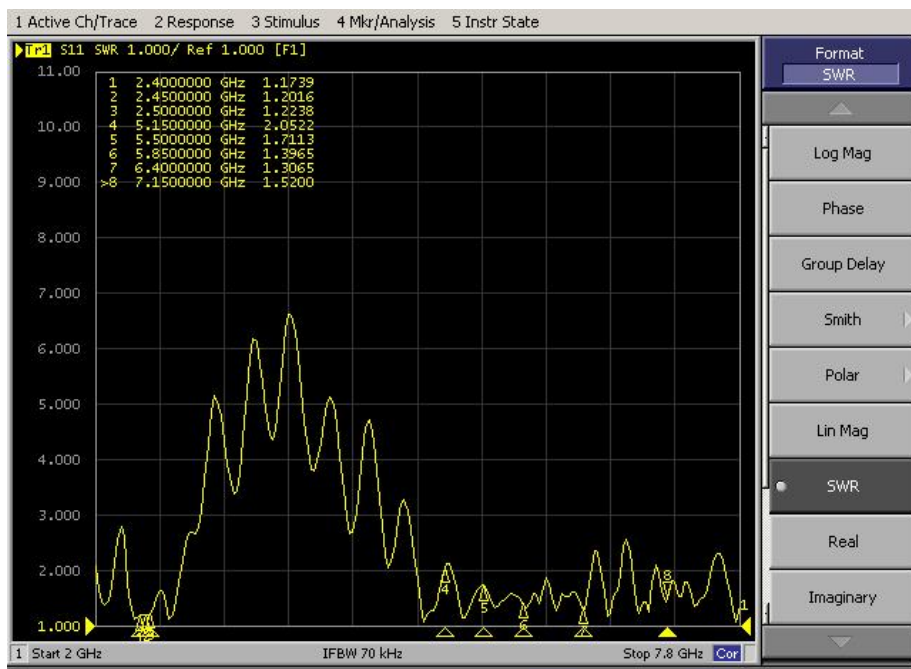
2. Test Result

2.2 WIFI MAIN Antenna Gain/Efficiency/3D DATA



2. Test Result

2.3 WIFI AUX Antenna VSWR/S11



2. Test Result

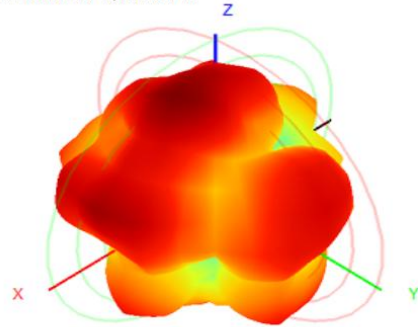
2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-3.96	1.88	40.14	5650	-3.62	1.41	43.36
2410	-3.87	1.96	40.94	5750	-3.64	1.39	43.18
2420	-3.82	1.38	41.40	5850	-3.72	2.28	42.44
2430	-3.81	1.62	41.52	5950	-3.76	2.67	42.10
2440	-3.85	1.69	41.17	6050	-3.51	2.13	44.59
2450	-3.59	1.81	43.70	6150	-4.40	2.31	36.33
2460	-3.59	1.15	43.75	6250	-4.68	2.73	34.02
2470	-3.75	1.71	42.14	6350	-4.95	2.13	32.01
2480	-3.51	1.89	44.55	6450	-5.34	2.31	29.21
2490	-3.42	1.91	45.46	6550	-5.55	2.00	27.87
2500	-3.49	1.55	44.75	6650	-5.54	2.22	27.93
5150	-3.86	1.22	41.05	6750	-5.28	2.39	29.66
5250	-3.89	1.62	40.75	6850	-4.79	2.58	33.16
5350	-3.84	1.98	41.27	6950	-5.20	2.23	30.19
5450	-3.70	1.99	42.56	7050	-5.30	2.04	29.52
5550	-3.79	1.36	41.74	7150	-5.86	2.28	25.96

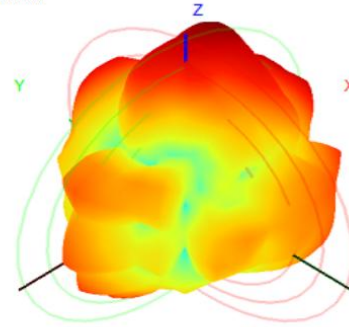
2. Test Result

2.4 WIFI AUX Antenna Gain/Efficiency/3D DATA

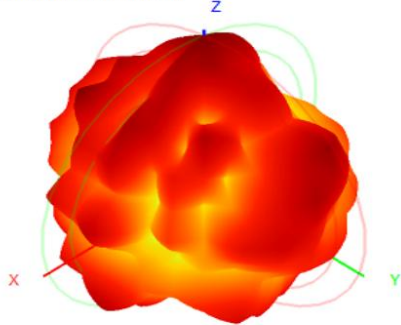
2450.0MHz H+V, Eff. 43.7%



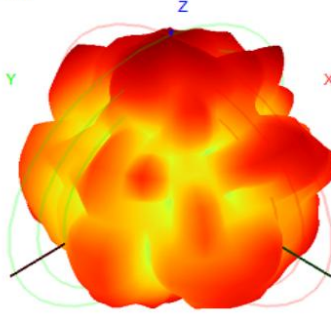
Back View



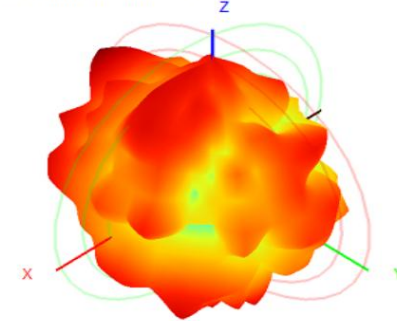
5450.0MHz H+V, Eff. 42.6%



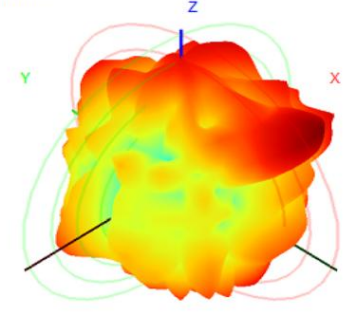
Back View



6550.0MHz H+V, Eff. 27.9%



Back View



2. Test Result

2.5 WIFI active test

WIFI active test			
frequency band	1	6	11
B-TRP-11Mbps	12.54	12.83	12.67
B-TIS-11Mbps	-74.67	-76.22	-75.18
G-TRP-54Mbps	11.28	12.06	11.85
G-TIS-54Mbps	-68.79	-69.33	-69.51
N-TRP-MCS7	10.69	12.00	11.73
N-TIS-MCS7	-63.88	-64.89	-64.91
frequency band	36	149	165
A-TRP-54Mbps	12.65	12.83	12.40
A-TIS-54Mbps	-70.69	-70.18	-71.22
AC-TRP-MCS7	11.52	12.09	12.44
AC-TIS-MCS7	-69.75	-68.87	-69.05
AX-TRP-MCS0	11.82	12.09	11.56
AX-TIS-MCS0	-70.15	-70.00	-69.83

2. Test Result

2.6 WIFI throughput test

6]	28.00-29.00	sec	10.4 MBytes	87.1 Mbits/sec
8]	28.00-29.00	sec	10.1 MBytes	85.0 Mbits/sec
10]	28.00-29.00	sec	9.25 MBytes	77.6 Mbits/sec
12]	28.00-29.00	sec	8.85 MBytes	74.3 Mbits/sec
[SUM]	28.00-29.00	sec	51.0 MBytes	428 Mbits/sec

[4]	29.00-30.00	sec	12.1 MBytes	102 Mbits/sec
[6]	29.00-30.00	sec	10.4 MBytes	87.0 Mbits/sec
[8]	29.00-30.00	sec	10.5 MBytes	88.1 Mbits/sec
[10]	29.00-30.00	sec	9.13 MBytes	76.6 Mbits/sec
[12]	29.00-30.00	sec	8.30 MBytes	69.6 Mbits/sec
[SUM]	29.00-30.00	sec	50.4 MBytes	423 Mbits/sec

[ID]	Interval		Transfer	Bandwidth
[4]	0.00-30.00	sec	361 MBytes	101 Mbits/sec
[4]	0.00-30.00	sec	361 MBytes	101 Mbits/sec
[6]	0.00-30.00	sec	320 MBytes	89.3 Mbits/sec
[6]	0.00-30.00	sec	319 MBytes	89.3 Mbits/sec
[8]	0.00-30.00	sec	294 MBytes	82.1 Mbits/sec
[8]	0.00-30.00	sec	294 MBytes	82.1 Mbits/sec
[10]	0.00-30.00	sec	280 MBytes	78.3 Mbits/sec
[10]	0.00-30.00	sec	280 MBytes	78.3 Mbits/sec
[12]	0.00-30.00	sec	262 MBytes	73.2 Mbits/sec
[12]	0.00-30.00	sec	262 MBytes	73.2 Mbits/sec
[SUM]	0.00-30.00	sec	1.48 GBytes	424 Mbits/sec
[SUM]	0.00-30.00	sec	1.48 GBytes	424 Mbits/sec

iperf Done.

6]	28.00-29.00	sec	10.9 MBytes	91.4 Mbits/sec
8]	28.00-29.00	sec	10.6 MBytes	89.3 Mbits/sec
10]	28.00-29.00	sec	10.6 MBytes	89.3 Mbits/sec
12]	28.00-29.00	sec	10.5 MBytes	88.2 Mbits/sec
UM]	28.00-29.00	sec	53.6 MBytes	451 Mbits/sec

4]	29.00-30.00	sec	11.1 MBytes	93.1 Mbits/sec
6]	29.00-30.00	sec	11.2 MBytes	94.2 Mbits/sec
8]	29.00-30.00	sec	11.1 MBytes	93.1 Mbits/sec
10]	29.00-30.00	sec	10.9 MBytes	91.0 Mbits/sec
12]	29.00-30.00	sec	10.5 MBytes	87.9 Mbits/sec
UM]	29.00-30.00	sec	54.9 MBytes	459 Mbits/sec

ID]	Interval		Transfer	Bandwidth
4]	0.00-30.00	sec	354 MBytes	98.9 Mbits/sec
4]	0.00-30.00	sec	354 MBytes	98.9 Mbits/sec
6]	0.00-30.00	sec	351 MBytes	98.1 Mbits/sec
6]	0.00-30.00	sec	351 MBytes	98.1 Mbits/sec
8]	0.00-30.00	sec	298 MBytes	83.4 Mbits/sec
8]	0.00-30.00	sec	298 MBytes	83.4 Mbits/sec
10]	0.00-30.00	sec	292 MBytes	81.7 Mbits/sec
10]	0.00-30.00	sec	292 MBytes	81.7 Mbits/sec
12]	0.00-30.00	sec	294 MBytes	82.1 Mbits/sec
12]	0.00-30.00	sec	294 MBytes	82.1 Mbits/sec
SUM]	0.00-30.00	sec	1.55 GBytes	444 Mbits/sec
SUM]	0.00-30.00	sec	1.55 GBytes	444 Mbits/sec

2.4G throughput

upload **424M**

2.4G throughput

download **444M**

2. Test Result

2.6 WIFI throughput test

```
10] 29.00-30.00 sec 14.0 MBytes 118 Mbits/sec
12] 29.00-30.00 sec 13.5 MBytes 113 Mbits/sec
14] 29.00-30.00 sec 13.0 MBytes 109 Mbits/sec
16] 29.00-30.00 sec 11.8 MBytes 99.1 Mbits/sec
18] 29.00-30.00 sec 10.8 MBytes 90.2 Mbits/sec
SUM] 29.00-30.00 sec 106 MBytes 889 Mbits/sec
```

```
-----
ID] Interval Transfer Bandwidth
4] 0.00-30.00 sec 448 MBytes 125 Mbits/sec
4] 0.00-30.00 sec 448 MBytes 125 Mbits/sec
6] 0.00-30.00 sec 433 MBytes 121 Mbits/sec
6] 0.00-30.00 sec 433 MBytes 121 Mbits/sec
8] 0.00-30.00 sec 431 MBytes 120 Mbits/sec
8] 0.00-30.00 sec 431 MBytes 120 Mbits/sec
10] 0.00-30.00 sec 420 MBytes 117 Mbits/sec
10] 0.00-30.00 sec 420 MBytes 117 Mbits/sec
12] 0.00-30.00 sec 403 MBytes 113 Mbits/sec
12] 0.00-30.00 sec 403 MBytes 113 Mbits/sec
14] 0.00-30.00 sec 383 MBytes 107 Mbits/sec
14] 0.00-30.00 sec 383 MBytes 107 Mbits/sec
16] 0.00-30.00 sec 357 MBytes 99.8 Mbits/sec
16] 0.00-30.00 sec 357 MBytes 99.8 Mbits/sec
18] 0.00-30.00 sec 335 MBytes 93.7 Mbits/sec
18] 0.00-30.00 sec 335 MBytes 93.7 Mbits/sec
SUM] 0.00-30.00 sec 3.14 GBytes 898 Mbits/sec
SUM] 0.00-30.00 sec 3.14 GBytes 898 Mbits/sec
```

```
0] 29.01-30.00 sec 13.8 MBytes 116 Mbits/sec
2] 29.01-30.00 sec 13.6 MBytes 115 Mbits/sec
4] 29.01-30.00 sec 13.6 MBytes 115 Mbits/sec
6] 29.01-30.00 sec 13.4 MBytes 113 Mbits/sec
8] 29.01-30.00 sec 13.2 MBytes 112 Mbits/sec
SUM] 29.01-30.00 sec 110 MBytes 933 Mbits/sec
```

```
-----
ID] Interval Transfer Bandwidth
4] 0.00-30.00 sec 456 MBytes 127 Mbits/sec
4] 0.00-30.00 sec 456 MBytes 127 Mbits/sec
6] 0.00-30.00 sec 445 MBytes 124 Mbits/sec
6] 0.00-30.00 sec 445 MBytes 124 Mbits/sec
8] 0.00-30.00 sec 443 MBytes 124 Mbits/sec
8] 0.00-30.00 sec 443 MBytes 124 Mbits/sec
10] 0.00-30.00 sec 442 MBytes 124 Mbits/sec
10] 0.00-30.00 sec 442 MBytes 124 Mbits/sec
12] 0.00-30.00 sec 438 MBytes 122 Mbits/sec
12] 0.00-30.00 sec 438 MBytes 122 Mbits/sec
14] 0.00-30.00 sec 429 MBytes 120 Mbits/sec
14] 0.00-30.00 sec 429 MBytes 120 Mbits/sec
16] 0.00-30.00 sec 335 MBytes 93.8 Mbits/sec
16] 0.00-30.00 sec 335 MBytes 93.8 Mbits/sec
18] 0.00-30.00 sec 323 MBytes 90.3 Mbits/sec
18] 0.00-30.00 sec 323 MBytes 90.3 Mbits/sec
SUM] 0.00-30.00 sec 3.23 GBytes 926 Mbits/sec
SUM] 0.00-30.00 sec 3.23 GBytes 926 Mbits/sec
```

5G throughput upload **824M**

5G throughput download **926M**

2. Test Result

2.6 BT throughput test

[380]	4.0- 5.0 sec	168 KBytes	1.38 Mbits/sec
[380]	5.0- 6.0 sec	168 KBytes	1.38 Mbits/sec
[380]	6.0- 7.0 sec	176 KBytes	1.44 Mbits/sec
[380]	7.0- 8.0 sec	168 KBytes	1.38 Mbits/sec
[380]	8.0- 9.0 sec	176 KBytes	1.44 Mbits/sec
[380]	9.0-10.0 sec	168 KBytes	1.38 Mbits/sec
[380]	10.0-11.0 sec	168 KBytes	1.38 Mbits/sec
[380]	11.0-12.0 sec	168 KBytes	1.38 Mbits/sec
[380]	12.0-13.0 sec	168 KBytes	1.38 Mbits/sec
[380]	13.0-14.0 sec	160 KBytes	1.31 Mbits/sec
[380]	14.0-15.0 sec	168 KBytes	1.38 Mbits/sec
[380]	15.0-16.0 sec	168 KBytes	1.38 Mbits/sec
[380]	16.0-17.0 sec	160 KBytes	1.31 Mbits/sec
[380]	17.0-18.0 sec	160 KBytes	1.31 Mbits/sec
[380]	18.0-19.0 sec	184 KBytes	1.51 Mbits/sec
[380]	19.0-20.0 sec	160 KBytes	1.31 Mbits/sec
[ID]	Interval	Transfer	Bandwidth
[380]	20.0-21.0 sec	168 KBytes	1.38 Mbits/sec
[380]	21.0-22.0 sec	168 KBytes	1.38 Mbits/sec
[380]	22.0-23.0 sec	168 KBytes	1.38 Mbits/sec
[380]	23.0-24.0 sec	160 KBytes	1.31 Mbits/sec
[380]	24.0-25.0 sec	168 KBytes	1.38 Mbits/sec
[380]	25.0-26.0 sec	168 KBytes	1.38 Mbits/sec
[380]	26.0-27.0 sec	168 KBytes	1.38 Mbits/sec
[380]	27.0-28.0 sec	168 KBytes	1.38 Mbits/sec
[380]	28.0-29.0 sec	160 KBytes	1.31 Mbits/sec
[380]	29.0-30.0 sec	168 KBytes	1.38 Mbits/sec
[380]	0.0-36.1 sec	5.86 MBytes	1.36 Mbits/sec

[276]	5.0- 6.0 sec	184 KBytes	1.51 Mbits/sec
[276]	6.0- 7.0 sec	200 KBytes	1.64 Mbits/sec
[276]	7.0- 8.0 sec	184 KBytes	1.51 Mbits/sec
[276]	8.0- 9.0 sec	184 KBytes	1.51 Mbits/sec
[276]	9.0-10.0 sec	200 KBytes	1.64 Mbits/sec
[276]	10.0-11.0 sec	184 KBytes	1.51 Mbits/sec
[276]	11.0-12.0 sec	192 KBytes	1.57 Mbits/sec
[276]	12.0-13.0 sec	192 KBytes	1.57 Mbits/sec
[276]	13.0-14.0 sec	176 KBytes	1.44 Mbits/sec
[276]	14.0-15.0 sec	184 KBytes	1.51 Mbits/sec
[276]	15.0-16.0 sec	184 KBytes	1.51 Mbits/sec
[276]	16.0-17.0 sec	192 KBytes	1.57 Mbits/sec
[276]	17.0-18.0 sec	184 KBytes	1.51 Mbits/sec
[276]	18.0-19.0 sec	184 KBytes	1.51 Mbits/sec
[276]	19.0-20.0 sec	200 KBytes	1.64 Mbits/sec
[ID]	Interval	Transfer	Bandwidth
[276]	20.0-21.0 sec	184 KBytes	1.51 Mbits/sec
[276]	21.0-22.0 sec	192 KBytes	1.57 Mbits/sec
[276]	22.0-23.0 sec	200 KBytes	1.64 Mbits/sec
[276]	23.0-24.0 sec	184 KBytes	1.51 Mbits/sec
[276]	24.0-25.0 sec	184 KBytes	1.51 Mbits/sec
[276]	25.0-26.0 sec	200 KBytes	1.64 Mbits/sec
[276]	26.0-27.0 sec	184 KBytes	1.51 Mbits/sec
[276]	27.0-28.0 sec	184 KBytes	1.51 Mbits/sec
[276]	28.0-29.0 sec	184 KBytes	1.51 Mbits/sec
[276]	29.0-30.0 sec	192 KBytes	1.57 Mbits/sec
[276]	0.0-35.7 sec	6.45 MBytes	1.51 Mbits/sec

BT throughput upload **1.36M**

BT throughput download **1.59M**



3. Conclusions

thanks