

深圳市亿圣邦科技有限公司

Shenzhen Yishengbang Technology Co., Ltd. Antenna Test Report

Customer: 迈达

Project: NX16A-MT7922-Intel

Product: WIFI/BT Antenna

Report date: 2025-07-02

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Checked by : Eason Huang

Approved by :

Purpose

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

Content

1. Product Overview

2. Test Result

2.1 WIFIMAIN/AUX Antenna VSWR/S11/Isolation

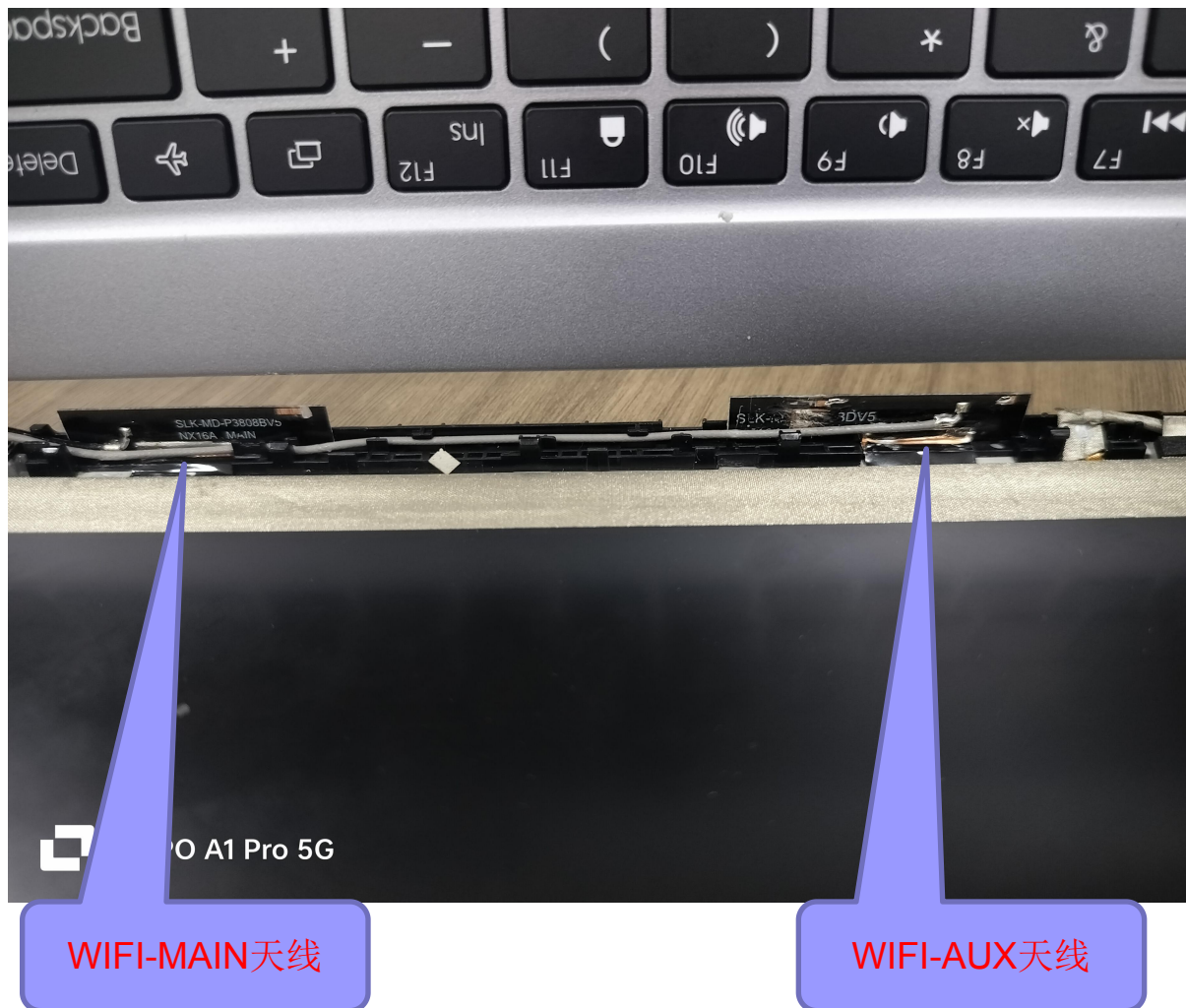
2.2 WIFI Antenna Gain/Efficiency/3D DATA

2.3 WIFI active test

2.4 WIFI/BT throughput test

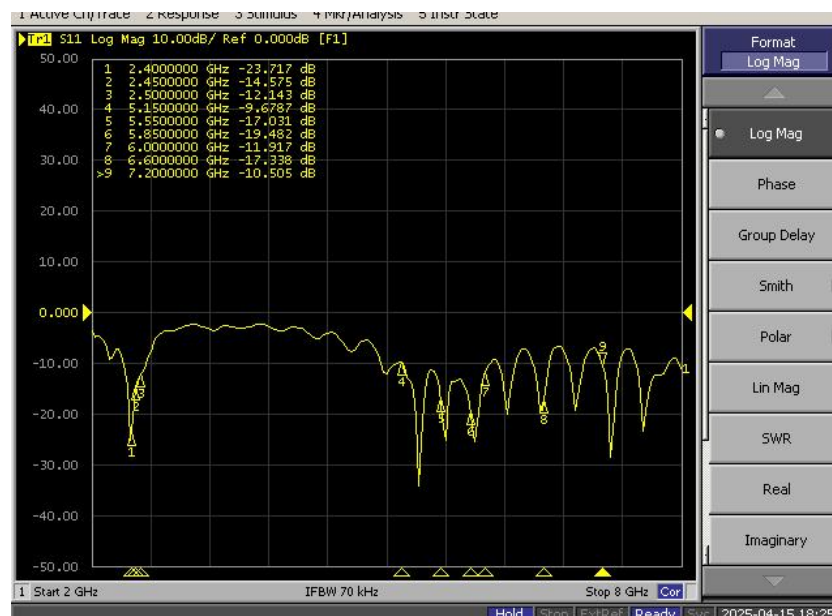
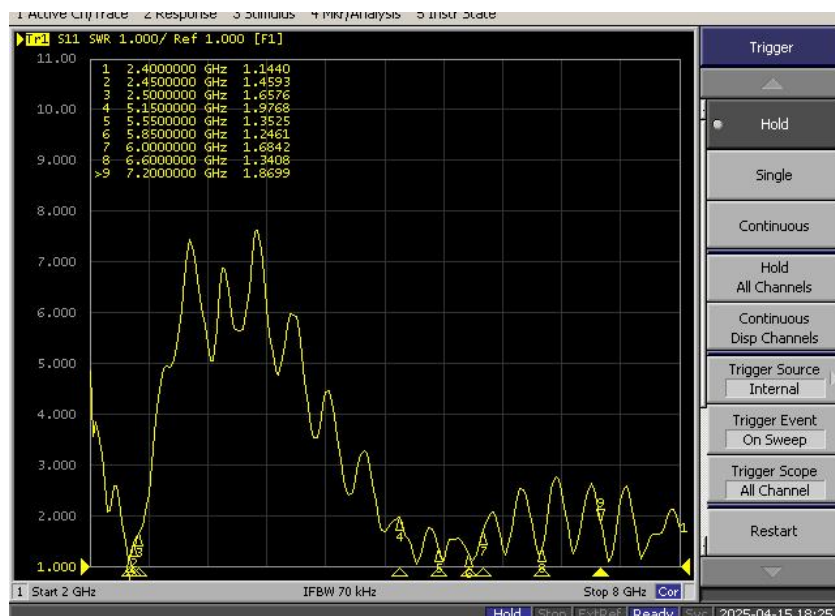
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1. Product Overview



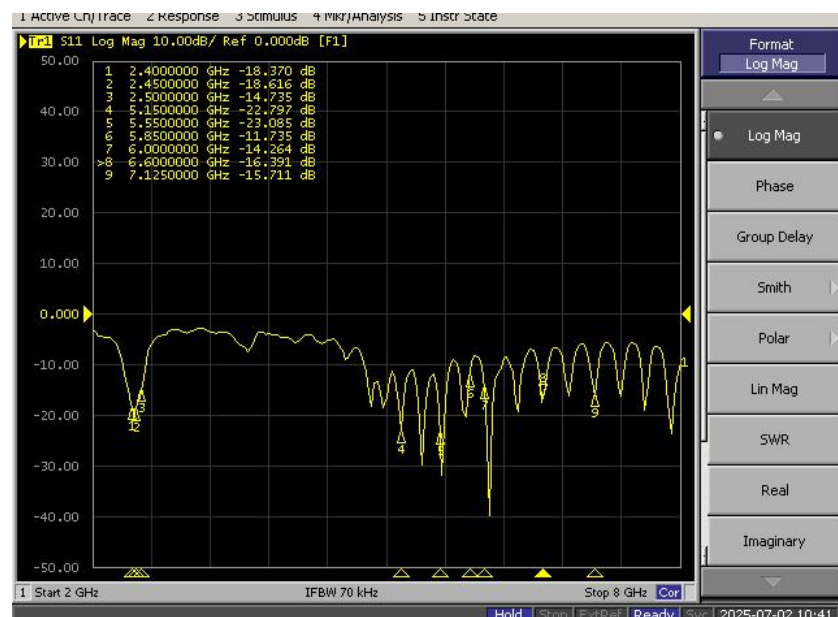
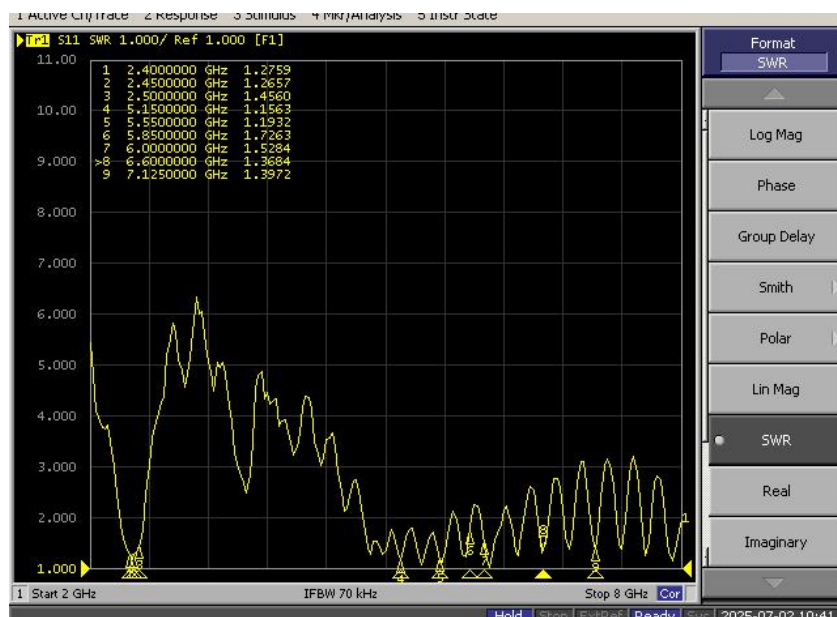
2. Test Result

2.1 WIFI MAIN Antenna VSWR/S11



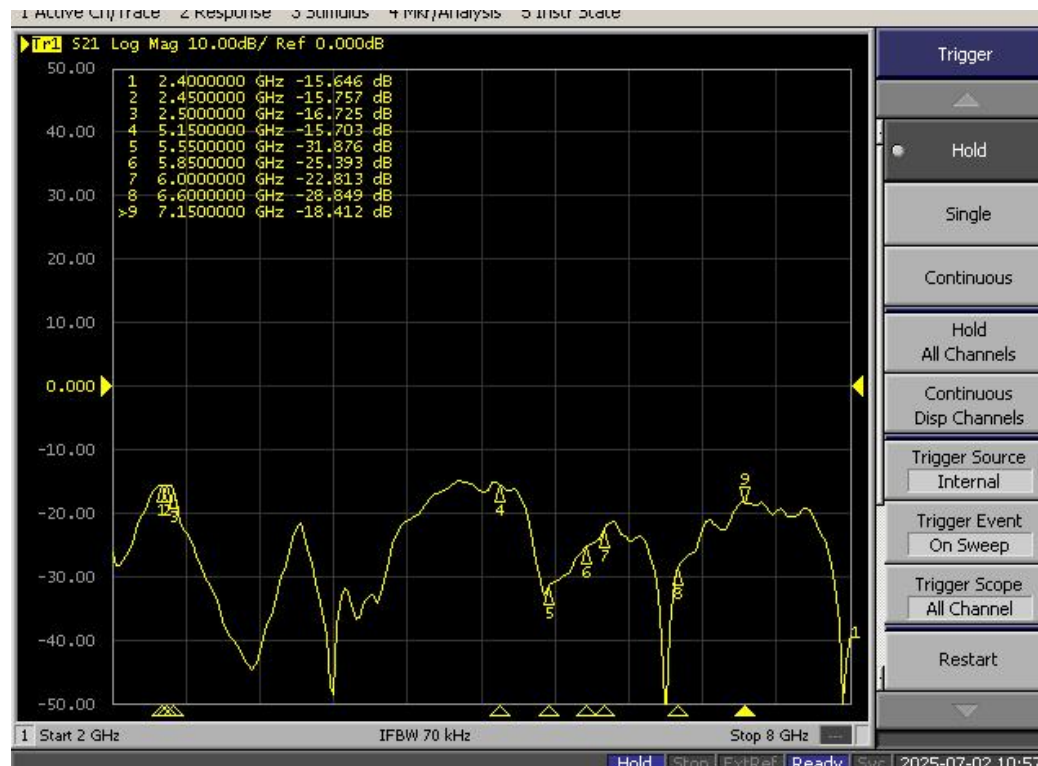
2. Test Result

2.1 WIFI AUX Antenna VSWR/S11



2. Test Result

2.1 WIFI Antenna Isolation



2. Test Result

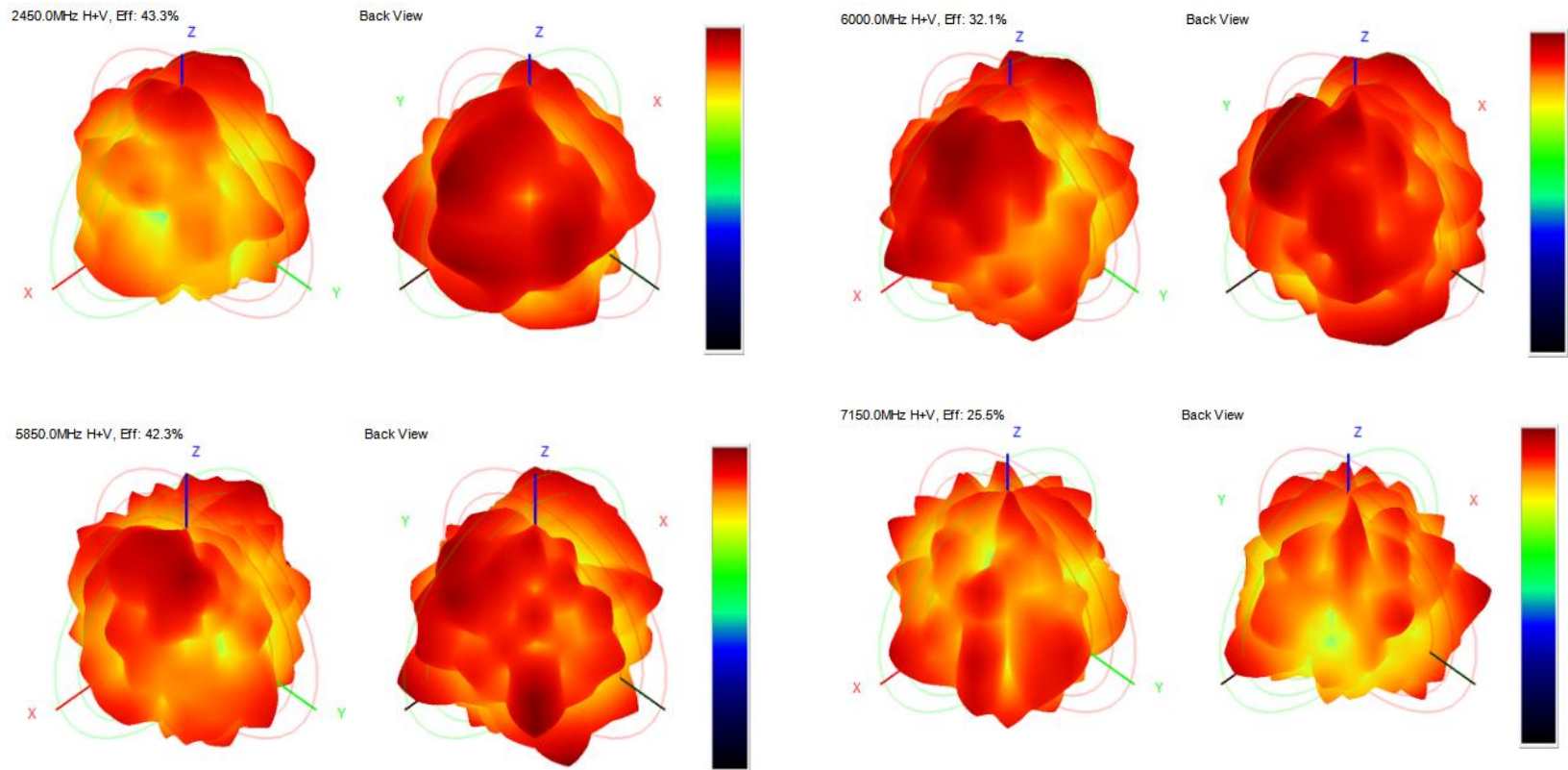
2.2 WIFI (MAIN)Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400.0	-3.40	1.51	45.67
2410.0	-3.30	1.62	46.73
2420.0	-3.40	1.50	45.75
2430.0	-3.50	1.63	44.62
2440.0	-3.49	1.53	44.72
2450.0	-3.63	1.55	43.34
2460.0	-3.65	1.35	43.18
2470.0	-3.61	2.07	43.54
2480.0	-3.72	1.77	42.46
2490.0	-3.92	1.97	40.53
2500.0	-3.86	1.92	41.14
5150.0	-3.98	2.10	40.02
5200.0	-3.83	2.24	41.38
5250.0	-3.73	2.71	42.36
5300.0	-3.93	2.54	40.48
5350.0	-3.82	2.28	41.49
5400.0	-3.60	2.33	43.69
5450.0	-3.64	2.30	43.22

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
5500.0	-3.65	1.97	43.11
5550.0	-3.73	2.09	42.40
5600.0	-3.69	2.28	42.71
5650.0	-3.68	2.24	42.83
5700.0	-3.64	2.71	43.28
5750.0	-3.74	2.47	42.27
5800.0	-3.77	2.63	41.98
5850.0	-3.74	2.52	42.28
6000.0	-4.93	1.70	32.10
6150.0	-4.77	1.77	33.31
6350.0	-5.48	1.61	28.30
6550.0	-5.59	1.51	27.63
6750.0	-5.89	1.31	25.78
6950.0	-5.86	1.14	25.97
7000.0	-6.00	1.24	25.10
7100.0	-5.98	1.37	25.22
7150.0	-5.94	1.17	25.47

2. Test Result

2.2 WIFI (MAIN)Antenna Gain/Efficiency/3D DATA



2. Test Result

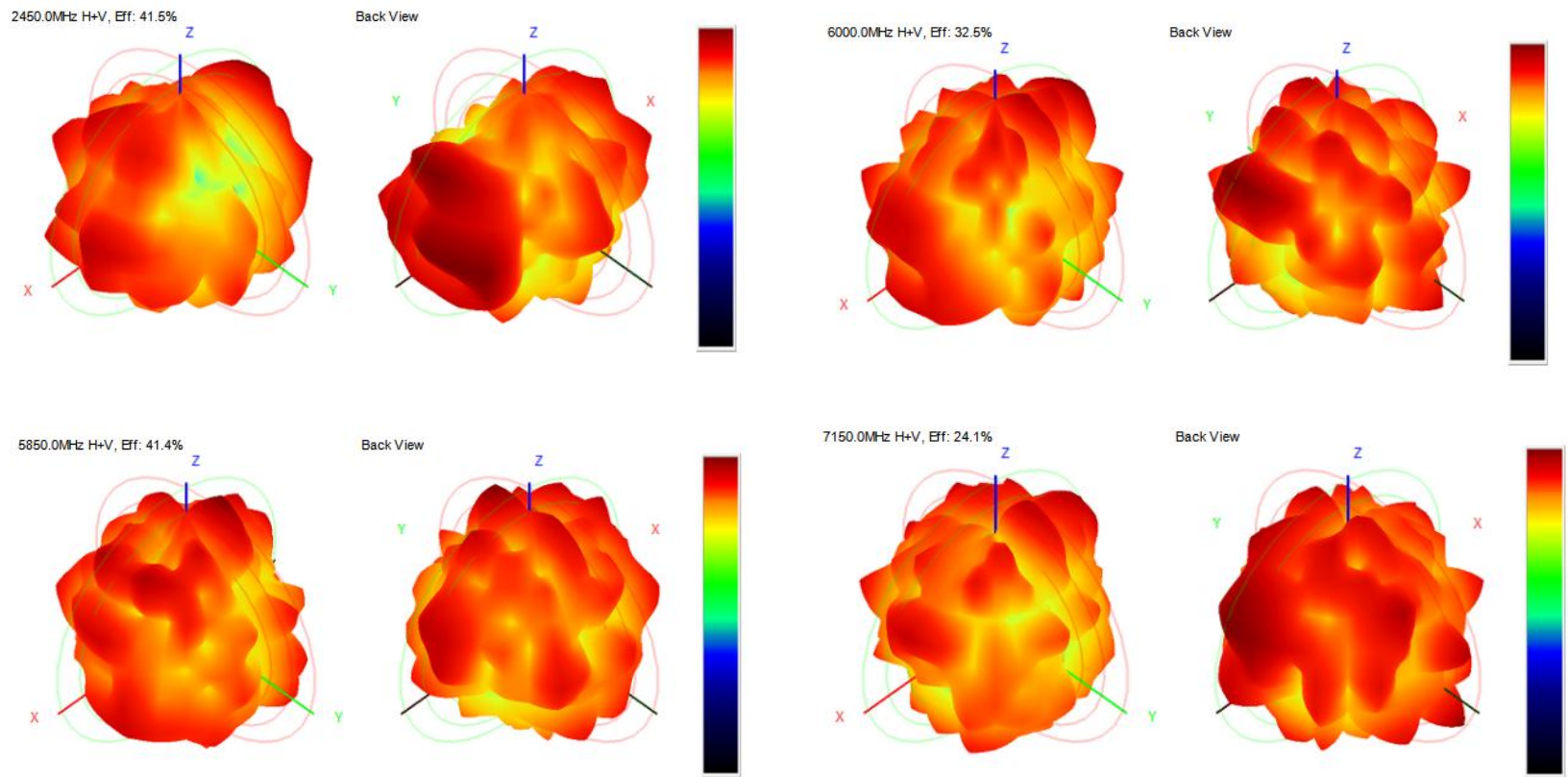
2.2 WIFI(AUX) Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400.0	-3.61	1.94	43.56
2410.0	-3.56	1.63	44.05
2420.0	-3.60	1.47	43.67
2430.0	-3.64	1.76	43.24
2440.0	-3.77	1.87	41.99
2450.0	-3.81	2.04	41.55
2460.0	-3.83	1.84	41.37
2470.0	-3.95	2.07	40.31
2480.0	-3.90	1.75	40.74
2490.0	-3.98	2.27	40.04
2500.0	-4.00	1.69	39.77
5150.0	-3.99	2.06	39.92
5200.0	-3.84	1.76	41.27
5250.0	-3.83	1.54	41.43
5300.0	-3.77	2.01	42.01
5350.0	-3.69	2.71	42.80
5400.0	-3.74	2.08	42.30
5450.0	-3.92	2.38	40.59

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
5500.0	-3.74	1.91	42.22
5550.0	-3.85	2.53	41.19
5600.0	-3.76	2.64	42.05
5650.0	-3.90	2.07	40.76
5700.0	-3.84	1.33	41.32
5750.0	-3.79	2.18	41.77
5800.0	-3.89	2.61	40.82
5850.0	-3.83	2.63	41.38
6000.0	-4.89	2.19	32.47
6150.0	-5.25	2.50	29.88
6350.0	-5.77	2.05	26.49
6550.0	-5.94	1.81	25.46
6750.0	-5.92	1.85	25.58
6950.0	-6.06	1.54	24.75
7000.0	-5.94	1.70	25.44
7050.0	-6.11	1.44	24.51
7100.0	-6.13	1.27	24.38
7150.0	-6.17	1.32	24.15

2. Test Result

2.2 WIFI(AUX) Antenna Gain/Efficiency/3D DATA



2. Test Result

2.3 WIFI active test

WIFI有源测试-MT7922			
频段	1	6	11
B-TRP-11MBps	8.55	8.49	9.15
B-TIS-11MBps	-83.96	-83.31	-83.33
G-TRP-54MBps	9.98	10.29	10.18
G-TIS-54MBps	-72.72	-73.86	-73.59
N-TRP-MCS7	8.19	8.36	8.15
N-TIS-MCS7	-68.32	-70.29	-69.54
频段	36	149	165
A-TRP-54MBps	9.15	13.09	13.06
A--TIS-54MBps	-73.89	-73.42	-73.16
AN-TIS-MCS7	8.12	10.74	9.62
AN-TIS-MCS7	-68.63	-70.25	-70.51

2. Test Result

2.3 WIFI active test

WIFI有源测试-intel			
频段	1	6	11
B-TRP-11MBps	11.16	10.68	10.16
B-TIS-11MBps	-84.24	-84.64	-83.71
G-TRP-54MBps	10.05	11.09	10.31
G-TIS-54MBps	-71.07	-72.25	-71.39
N-TRP-MCS7	9.54	10.02	10.53
N-TIS-MCS7	-67.64	-67.05	-68.7
频段	36	149	165
A-TRP-54MBps	9.21	10.11	10.46
A--TIS-54MBps	-68.56	-70.14	-70.28
AN-TIS-MCS7	8.87	10.16	10.22
AN-TIS-MCS7	-68.29	-68.84	-69.28

2. Test Result

2.5 BT throughput test

```
C:\Windows\System32\cmd.e X + v
[ 6] 28.01-29.01 sec 9.00 MBytes 75.5 Mbits/sec
[ 8] 28.01-29.01 sec 8.62 MBytes 72.4 Mbits/sec
[10] 28.01-29.01 sec 9.25 MBytes 77.6 Mbits/sec
[12] 28.01-29.01 sec 9.12 MBytes 76.6 Mbits/sec
[SUM] 28.01-29.01 sec 45.4 MBytes 381 Mbits/sec
-----
[ 4] 29.01-30.01 sec 10.0 MBytes 83.5 Mbits/sec
[ 6] 29.01-30.01 sec 9.25 MBytes 77.2 Mbits/sec
[ 8] 29.01-30.01 sec 9.25 MBytes 77.2 Mbits/sec
[10] 29.01-30.01 sec 9.62 MBytes 80.4 Mbits/sec
[12] 29.01-30.01 sec 9.25 MBytes 77.2 Mbits/sec
[SUM] 29.01-30.01 sec 47.4 MBytes 396 Mbits/sec
-----
[ ID] Interval      Transfer    Bandwidth
[ 4] 0.00-30.01 sec 270 MBytes 75.6 Mbits/sec
[ 4] 0.00-30.01 sec 270 MBytes 75.6 Mbits/sec
[ 6] 0.00-30.01 sec 270 MBytes 75.4 Mbits/sec
[ 6] 0.00-30.01 sec 270 MBytes 75.3 Mbits/sec
[ 8] 0.00-30.01 sec 268 MBytes 74.9 Mbits/sec
[ 8] 0.00-30.01 sec 268 MBytes 74.9 Mbits/sec
[10] 0.00-30.01 sec 276 MBytes 77.1 Mbits/sec
[10] 0.00-30.01 sec 276 MBytes 77.1 Mbits/sec
[12] 0.00-30.01 sec 272 MBytes 76.1 Mbits/sec
[12] 0.00-30.01 sec 272 MBytes 76.0 Mbits/sec
[SUM] 0.00-30.01 sec 1.32 GBytes 379 Mbits/sec
[SUM] 0.00-30.01 sec 1.32 GBytes 379 Mbits/sec

iperf Done.
C:\iperf-3.1.3-win64>
```

吞吐量测试-2.4G下载

```
C:\Windows\System32\cmd.e X + v
[ 6] 28.00-29.00 sec 9.00 MBytes 75.5 Mbits/sec
[ 8] 28.00-29.00 sec 8.00 MBytes 67.1 Mbits/sec
[10] 28.00-29.00 sec 7.94 MBytes 66.6 Mbits/sec
[12] 28.00-29.00 sec 7.88 MBytes 66.1 Mbits/sec
[SUM] 28.00-29.00 sec 42.4 MBytes 355 Mbits/sec
-----
[ 4] 29.00-30.00 sec 9.23 MBytes 77.2 Mbits/sec
[ 6] 29.00-30.00 sec 8.50 MBytes 71.1 Mbits/sec
[ 8] 29.00-30.00 sec 8.62 MBytes 72.1 Mbits/sec
[10] 29.00-30.00 sec 7.88 MBytes 65.9 Mbits/sec
[12] 29.00-30.00 sec 7.62 MBytes 63.8 Mbits/sec
[SUM] 29.00-30.00 sec 41.9 MBytes 350 Mbits/sec
-----
[ ID] Interval      Transfer    Bandwidth
[ 4] 0.00-30.00 sec 275 MBytes 76.8 Mbits/sec
[ 4] 0.00-30.00 sec 275 MBytes 76.8 Mbits/sec
[ 6] 0.00-30.00 sec 259 MBytes 72.4 Mbits/sec
[ 6] 0.00-30.00 sec 259 MBytes 72.4 Mbits/sec
[ 8] 0.00-30.00 sec 246 MBytes 68.8 Mbits/sec
[ 8] 0.00-30.00 sec 246 MBytes 68.8 Mbits/sec
[10] 0.00-30.00 sec 232 MBytes 65.0 Mbits/sec
[10] 0.00-30.00 sec 232 MBytes 64.9 Mbits/sec
[12] 0.00-30.00 sec 221 MBytes 61.7 Mbits/sec
[12] 0.00-30.00 sec 220 MBytes 61.6 Mbits/sec
[SUM] 0.00-30.00 sec 1.20 GBytes 345 Mbits/sec
[SUM] 0.00-30.00 sec 1.20 GBytes 345 Mbits/sec

iperf Done.
C:\iperf-3.1.3-win64>
```

吞吐量测试-2.4G上传

2. Test Result

2.5 WIFI throughput test

```
C:\Windows\System32\cmd.exe
[ 5] 27.00-28.00 sec 22.6 MBytes 189 Mbits/sec
[ 7] 27.00-28.00 sec 21.9 MBytes 183 Mbits/sec
[11] 27.00-28.00 sec 22.5 MBytes 188 Mbits/sec
[13] 27.00-28.00 sec 21.9 MBytes 183 Mbits/sec
[SUN] 27.00-28.00 sec 112 MBytes 933 Mbits/sec

[ 5] 28.00-29.01 sec 21.6 MBytes 180 Mbits/sec
[ 7] 28.00-29.01 sec 21.2 MBytes 177 Mbits/sec
[ 9] 28.00-29.01 sec 21.6 MBytes 180 Mbits/sec
[11] 28.00-29.01 sec 21.6 MBytes 180 Mbits/sec
[13] 28.00-29.01 sec 21.1 MBytes 176 Mbits/sec
[SUN] 28.00-29.01 sec 107 MBytes 895 Mbits/sec

[ 5] 29.01-30.01 sec 23.5 MBytes 197 Mbits/sec
[ 7] 29.01-30.01 sec 23.0 MBytes 193 Mbits/sec
[ 9] 29.01-30.01 sec 23.2 MBytes 195 Mbits/sec
[11] 29.01-30.01 sec 22.5 MBytes 189 Mbits/sec
[13] 29.01-30.01 sec 22.4 MBytes 188 Mbits/sec
[SUN] 29.01-30.01 sec 115 MBytes 961 Mbits/sec

[ ID] Interval      Transfer  Bitrate
[ 5] 0.00-30.01 sec 680 MBytes 190 Mbits/sec
[ 5] 0.00-30.01 sec 680 MBytes 190 Mbits/sec
[ 7] 0.00-30.01 sec 675 MBytes 189 Mbits/sec
[ 7] 0.00-30.01 sec 675 MBytes 189 Mbits/sec
[ 9] 0.00-30.01 sec 663 MBytes 185 Mbits/sec
[ 9] 0.00-30.01 sec 663 MBytes 185 Mbits/sec
[11] 0.00-30.01 sec 657 MBytes 184 Mbits/sec
[11] 0.00-30.01 sec 657 MBytes 184 Mbits/sec
[13] 0.00-30.01 sec 648 MBytes 181 Mbits/sec
[13] 0.00-30.01 sec 648 MBytes 181 Mbits/sec
[SUN] 0.00-30.01 sec 3.24 GBytes 929 Mbits/sec
[SUN] 0.00-30.01 sec 3.24 GBytes 929 Mbits/sec

iperf Done.
C:\Users\user\Desktop\iperf3.6_64bit\iperf3.6_64bit>
```

吞吐量测试-5G下载

```
C:\Windows\System32\cmd.exe
[ 5] 27.00-28.00 sec 19.2 MBytes 161 Mbits/sec
[ 7] 27.00-28.00 sec 18.4 MBytes 154 Mbits/sec
[11] 27.00-28.00 sec 18.0 MBytes 151 Mbits/sec
[13] 27.00-28.00 sec 17.0 MBytes 143 Mbits/sec
[SUN] 27.00-28.00 sec 92.2 MBytes 774 Mbits/sec

[ 5] 28.00-29.00 sec 21.9 MBytes 184 Mbits/sec
[ 7] 28.00-29.00 sec 21.3 MBytes 179 Mbits/sec
[ 9] 28.00-29.00 sec 20.2 MBytes 170 Mbits/sec
[11] 28.00-29.00 sec 19.5 MBytes 164 Mbits/sec
[13] 28.00-29.00 sec 19.0 MBytes 159 Mbits/sec
[SUN] 28.00-29.00 sec 102 MBytes 855 Mbits/sec

[ 5] 29.00-30.00 sec 18.4 MBytes 154 Mbits/sec
[ 7] 29.00-30.00 sec 18.0 MBytes 151 Mbits/sec
[ 9] 29.00-30.00 sec 17.4 MBytes 146 Mbits/sec
[11] 29.00-30.00 sec 16.4 MBytes 137 Mbits/sec
[13] 29.00-30.00 sec 15.5 MBytes 130 Mbits/sec
[SUN] 29.00-30.00 sec 85.6 MBytes 718 Mbits/sec

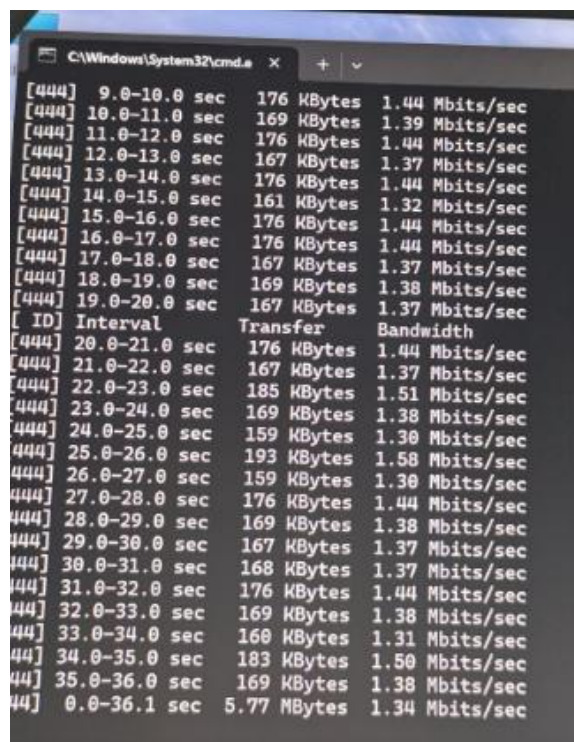
[ ID] Interval      Transfer  Bitrate
[ 5] 0.00-30.00 sec 664 MBytes 186 Mbits/sec
[ 5] 0.00-30.00 sec 664 MBytes 186 Mbits/sec
[ 7] 0.00-30.00 sec 639 MBytes 179 Mbits/sec
[ 7] 0.00-30.00 sec 638 MBytes 179 Mbits/sec
[ 9] 0.00-30.00 sec 608 MBytes 170 Mbits/sec
[ 9] 0.00-30.00 sec 608 MBytes 170 Mbits/sec
[11] 0.00-30.00 sec 582 MBytes 163 Mbits/sec
[11] 0.00-30.00 sec 582 MBytes 163 Mbits/sec
[13] 0.00-30.00 sec 557 MBytes 156 Mbits/sec
[13] 0.00-30.00 sec 557 MBytes 156 Mbits/sec
[SUN] 0.00-30.00 sec 2.98 GBytes 853 Mbits/sec
[SUN] 0.00-30.00 sec 2.98 GBytes 852 Mbits/sec

iperf Done.
C:\Users\user\Desktop\iperf3.6_64bit\iperf3.6_64bit>
```

吞吐量测试-5G上传

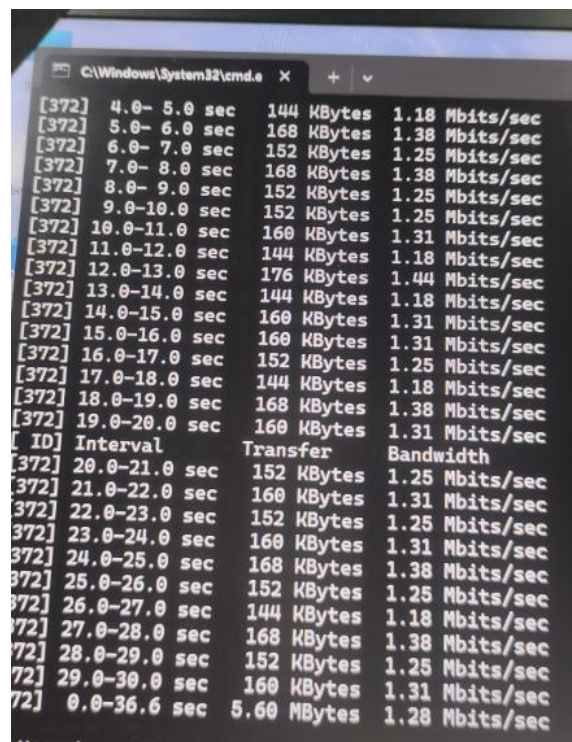
2. Test Result

2.5 WIFI throughput test



[444]	9.0-10.0 sec	176 KBytes	1.44 Mbits/sec
[444]	10.0-11.0 sec	169 KBytes	1.39 Mbits/sec
[444]	11.0-12.0 sec	176 KBytes	1.44 Mbits/sec
[444]	12.0-13.0 sec	167 KBytes	1.37 Mbits/sec
[444]	13.0-14.0 sec	176 KBytes	1.44 Mbits/sec
[444]	14.0-15.0 sec	161 KBytes	1.32 Mbits/sec
[444]	15.0-16.0 sec	176 KBytes	1.44 Mbits/sec
[444]	16.0-17.0 sec	176 KBytes	1.44 Mbits/sec
[444]	17.0-18.0 sec	167 KBytes	1.37 Mbits/sec
[444]	18.0-19.0 sec	169 KBytes	1.38 Mbits/sec
[444]	19.0-20.0 sec	167 KBytes	1.37 Mbits/sec
[ID]	Interval	Transfer	Bandwidth
[444]	20.0-21.0 sec	176 KBytes	1.44 Mbits/sec
[444]	21.0-22.0 sec	167 KBytes	1.37 Mbits/sec
[444]	22.0-23.0 sec	185 KBytes	1.51 Mbits/sec
[444]	23.0-24.0 sec	169 KBytes	1.38 Mbits/sec
[444]	24.0-25.0 sec	159 KBytes	1.30 Mbits/sec
[444]	25.0-26.0 sec	193 KBytes	1.58 Mbits/sec
[444]	26.0-27.0 sec	159 KBytes	1.30 Mbits/sec
[444]	27.0-28.0 sec	176 KBytes	1.44 Mbits/sec
[444]	28.0-29.0 sec	169 KBytes	1.38 Mbits/sec
[444]	29.0-30.0 sec	167 KBytes	1.37 Mbits/sec
[444]	30.0-31.0 sec	168 KBytes	1.37 Mbits/sec
[444]	31.0-32.0 sec	176 KBytes	1.44 Mbits/sec
[444]	32.0-33.0 sec	169 KBytes	1.38 Mbits/sec
[444]	33.0-34.0 sec	160 KBytes	1.31 Mbits/sec
[444]	34.0-35.0 sec	183 KBytes	1.50 Mbits/sec
[444]	35.0-36.0 sec	169 KBytes	1.38 Mbits/sec
[444]	0.0-36.1 sec	5.77 MBytes	1.34 Mbits/sec

吞吐量测试-BT下载



[372]	4.0- 5.0 sec	144 KBytes	1.18 Mbits/sec
[372]	5.0- 6.0 sec	168 KBytes	1.38 Mbits/sec
[372]	6.0- 7.0 sec	152 KBytes	1.25 Mbits/sec
[372]	7.0- 8.0 sec	168 KBytes	1.38 Mbits/sec
[372]	8.0- 9.0 sec	152 KBytes	1.25 Mbits/sec
[372]	9.0-10.0 sec	152 KBytes	1.25 Mbits/sec
[372]	10.0-11.0 sec	160 KBytes	1.31 Mbits/sec
[372]	11.0-12.0 sec	144 KBytes	1.18 Mbits/sec
[372]	12.0-13.0 sec	176 KBytes	1.44 Mbits/sec
[372]	13.0-14.0 sec	144 KBytes	1.18 Mbits/sec
[372]	14.0-15.0 sec	160 KBytes	1.31 Mbits/sec
[372]	15.0-16.0 sec	160 KBytes	1.31 Mbits/sec
[372]	16.0-17.0 sec	152 KBytes	1.25 Mbits/sec
[372]	17.0-18.0 sec	144 KBytes	1.18 Mbits/sec
[372]	18.0-19.0 sec	168 KBytes	1.38 Mbits/sec
[372]	19.0-20.0 sec	160 KBytes	1.31 Mbits/sec
[ID]	Interval	Transfer	Bandwidth
[372]	20.0-21.0 sec	152 KBytes	1.25 Mbits/sec
[372]	21.0-22.0 sec	160 KBytes	1.31 Mbits/sec
[372]	22.0-23.0 sec	152 KBytes	1.25 Mbits/sec
[372]	23.0-24.0 sec	160 KBytes	1.31 Mbits/sec
[372]	24.0-25.0 sec	168 KBytes	1.38 Mbits/sec
[372]	25.0-26.0 sec	152 KBytes	1.25 Mbits/sec
[372]	26.0-27.0 sec	144 KBytes	1.18 Mbits/sec
[372]	27.0-28.0 sec	168 KBytes	1.38 Mbits/sec
[372]	28.0-29.0 sec	152 KBytes	1.25 Mbits/sec
[372]	29.0-30.0 sec	160 KBytes	1.31 Mbits/sec
[372]	0.0-36.6 sec	5.60 MBytes	1.28 Mbits/sec

吞吐量测试-BT上传