



Shenzhen Yishengbang Technology Co., Ltd Antenna Test Report

Project: RF205E

Report date: 2024-07-31



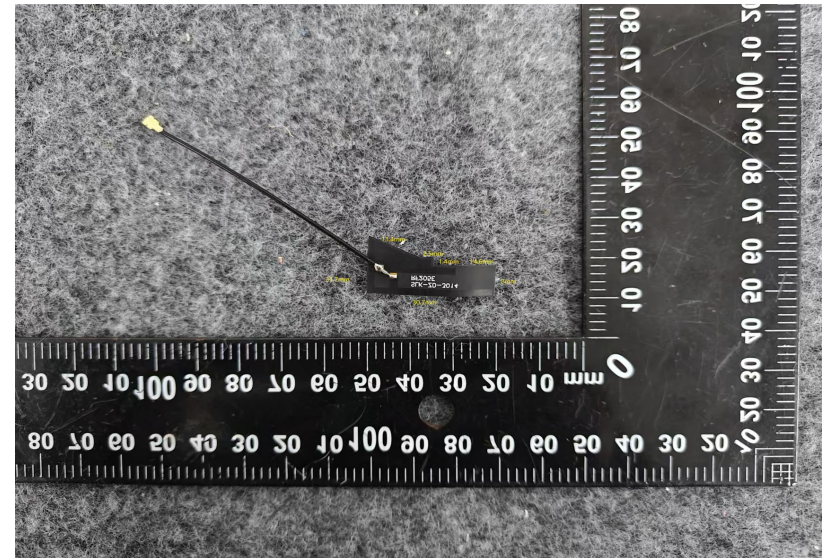
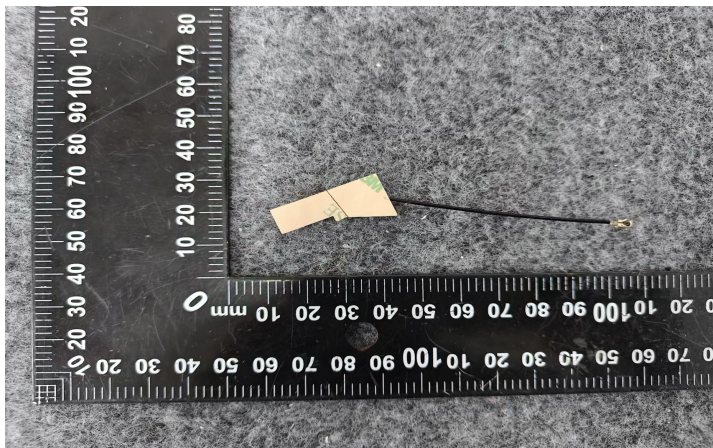
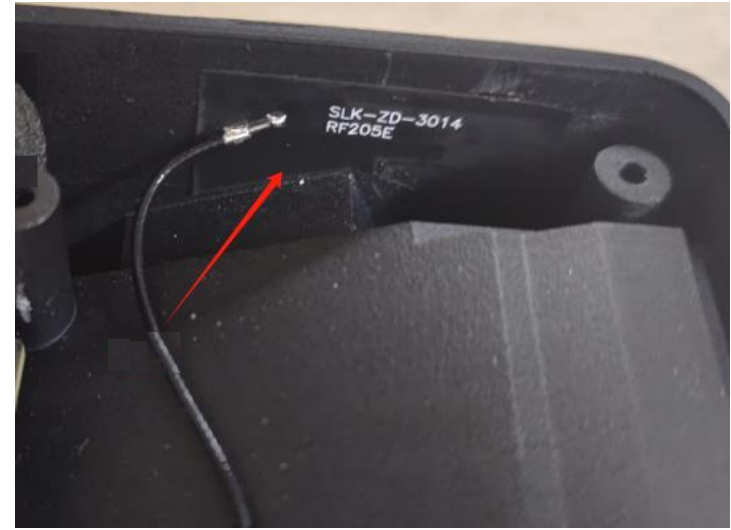
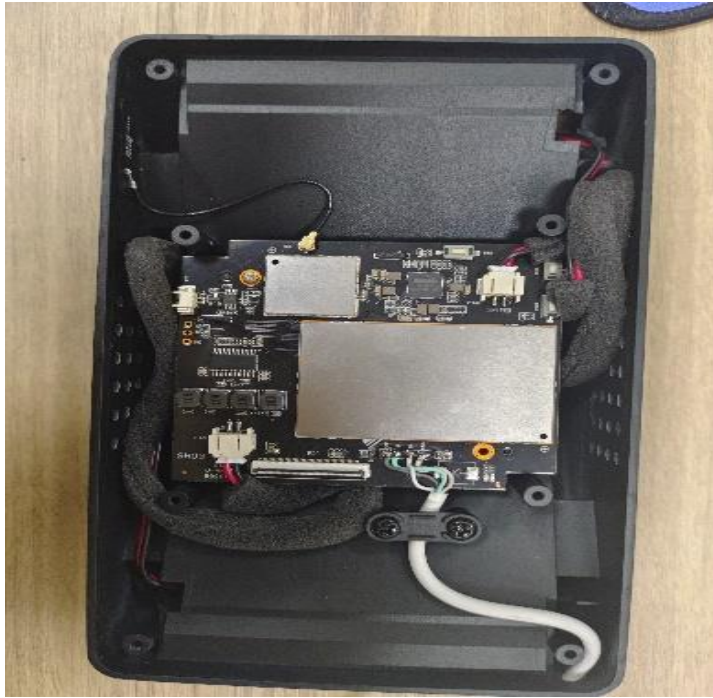
Purpose

ort is to measure the performance of SLK for Master
. All measure data are showed below.

Content

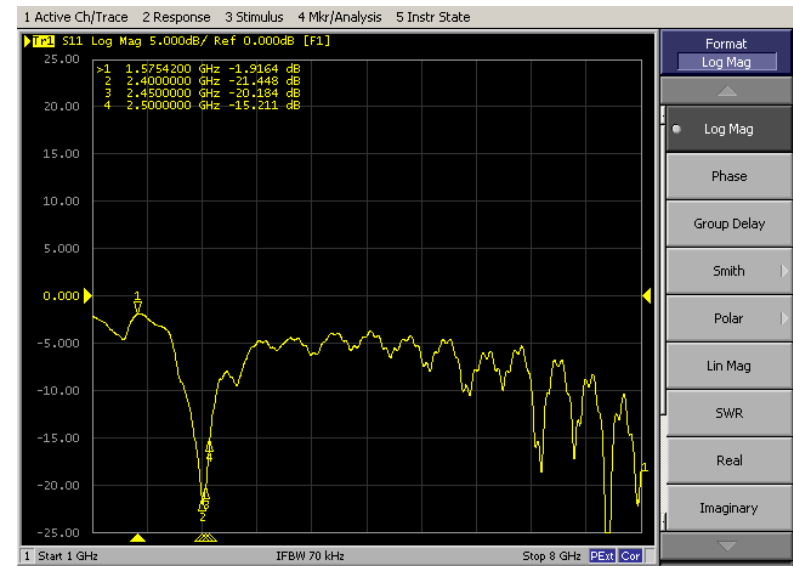
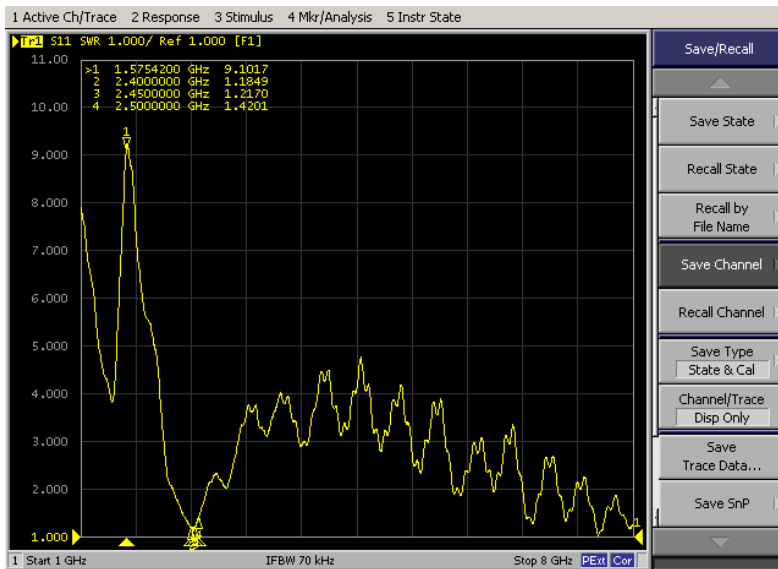
1. Product Overview
2. Test Result
 - 2.1 VSWR/S11
 - 2.2 Antenna TRP/TIS
 - 2.3 Antenna Gain/Efficiency/3D DATA
 - 2.4 throughput test
3. Conclusions

1. Product Overview



2. Test Result

2.1 VSWR/S11



2. Test Result

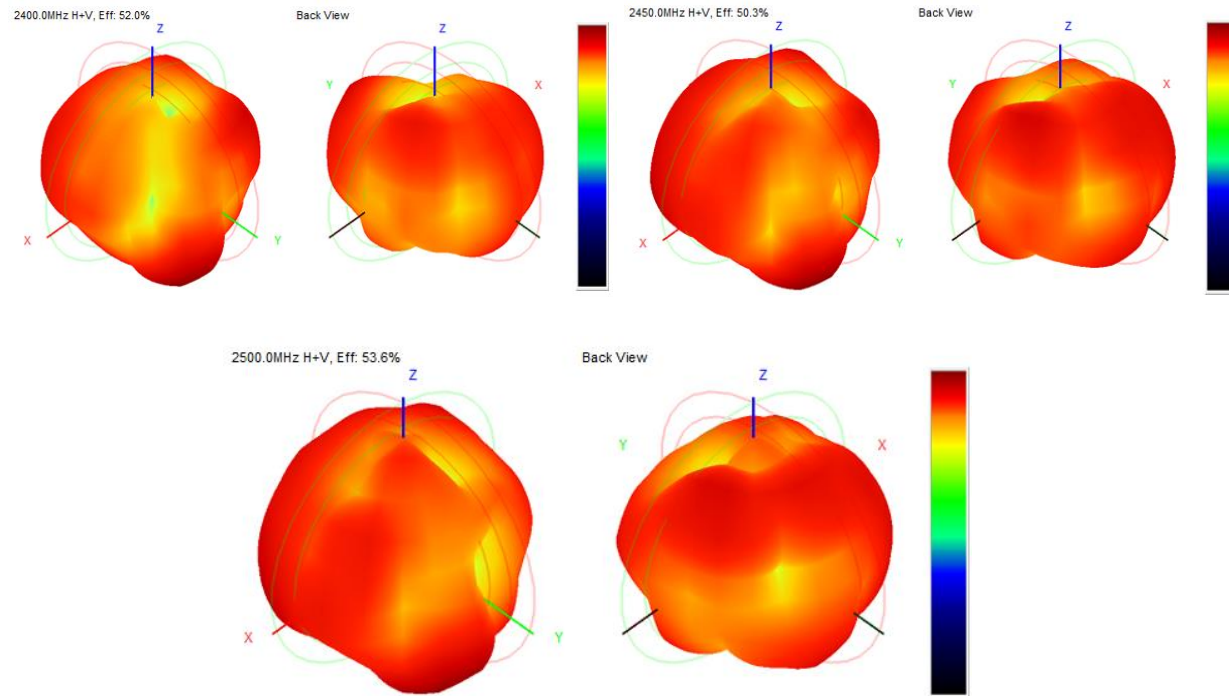
2.2 WIFI Antenna TRP/TIS

frequency	1	6	11
B-TRP-11Mbps	13.25	13.89	14.52
B-TIS-11Mbps	-80.1	-81.3	-81.97
G-TRP-54Mbps	12.56	12.61	13.22
G-TIS-54Mbps	-70.9	-71.77	-71.59
N-TRP-MCS7	12.49	12.75	13.17
N-TIS-MCS7	-66.39	-67.16	-66.1

2. Test Result

2.3 WIFI Antenna Gain/Efficiency/3D DATA

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-2.84	1.55	51.97
2410	-2.84	1.82	51.89
2420	-2.83	1.90	52.11
2430	-2.77	1.70	52.83
2440	-2.90	1.34	51.21
2450	-2.98	1.89	50.25
2460	-2.73	1.78	53.25
2470	-2.88	1.63	51.52
2480	-2.99	1.37	50.16
2490	-2.76	1.28	52.88
2500	-2.70	1.01	53.60



2. Test Result

2.4 WIFI throughput test

```
[ 4] 8.00-9.00 sec 3.88 MBytes 32.5 Mbits/sec
[ 4] 9.00-10.00 sec 2.88 MBytes 24.1 Mbits/sec
[ 4] 10.00-11.00 sec 3.75 MBytes 31.5 Mbits/sec
[ 4] 11.00-12.00 sec 3.50 MBytes 29.4 Mbits/sec
[ 4] 12.00-13.00 sec 4.00 MBytes 33.5 Mbits/sec
[ 4] 13.00-14.00 sec 3.75 MBytes 31.4 Mbits/sec
[ 4] 14.00-15.00 sec 3.38 MBytes 28.3 Mbits/sec
[ 4] 15.00-16.00 sec 3.75 MBytes 31.5 Mbits/sec
[ 4] 16.00-17.00 sec 3.50 MBytes 29.3 Mbits/sec
[ 4] 17.00-18.00 sec 3.62 MBytes 30.4 Mbits/sec
[ 4] 18.00-19.00 sec 3.75 MBytes 31.5 Mbits/sec
[ 4] 19.00-20.00 sec 3.62 MBytes 30.5 Mbits/sec
[ 4] 20.00-21.00 sec 3.50 MBytes 29.3 Mbits/sec
[ 4] 21.00-22.00 sec 4.12 MBytes 34.7 Mbits/sec
[ 4] 22.00-23.00 sec 3.75 MBytes 31.4 Mbits/sec
[ 4] 23.00-24.00 sec 4.00 MBytes 33.6 Mbits/sec
[ 4] 24.00-25.00 sec 2.62 MBytes 22.0 Mbits/sec
[ 4] 25.00-26.00 sec 3.62 MBytes 30.4 Mbits/sec
[ 4] 26.00-27.00 sec 3.62 MBytes 30.4 Mbits/sec
[ 4] 27.00-28.00 sec 3.75 MBytes 31.5 Mbits/sec
[ 4] 28.00-29.00 sec 3.75 MBytes 31.4 Mbits/sec
[ 4] 29.00-30.00 sec 3.88 MBytes 32.6 Mbits/sec
-----
[ ID] Interval      Transfer    Bandwidth
[ 4] 0.00-30.00 sec 109 MBytes 30.5 Mbits/sec
[ 4] 0.00-30.00 sec 109 MBytes 30.5 Mbits/sec

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

2.4G 10m
download

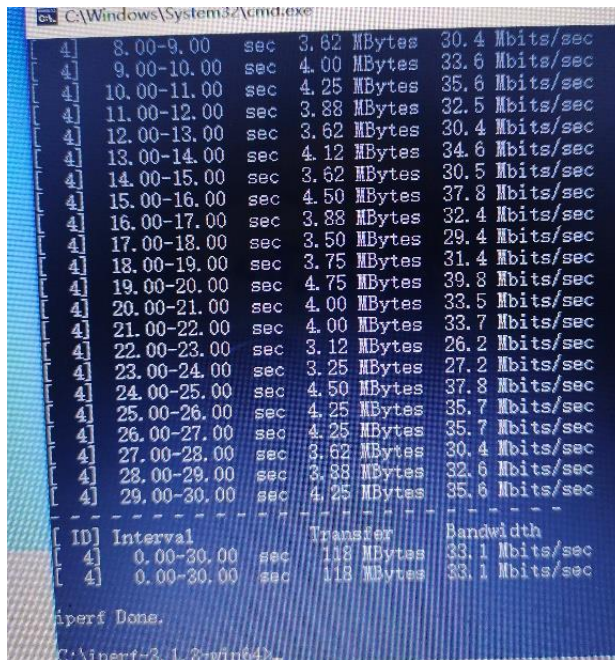
```
C:\Windows\System32\cmd.exe
[ 4] 8.00-9.00 sec 1.37 MBytes 11.5 Mbits/sec
[ 4] 9.00-10.00 sec 1.40 MBytes 11.7 Mbits/sec
[ 4] 10.00-11.00 sec 1.35 MBytes 11.4 Mbits/sec
[ 4] 11.00-12.00 sec 1.33 MBytes 11.1 Mbits/sec
[ 4] 12.00-13.00 sec 1.41 MBytes 11.9 Mbits/sec
[ 4] 13.00-14.00 sec 1.35 MBytes 11.4 Mbits/sec
[ 4] 14.00-15.00 sec 1.38 MBytes 11.6 Mbits/sec
[ 4] 15.00-16.00 sec 1.39 MBytes 11.7 Mbits/sec
[ 4] 16.00-17.00 sec 1.38 MBytes 11.6 Mbits/sec
[ 4] 17.00-18.00 sec 1.41 MBytes 11.8 Mbits/sec
[ 4] 18.00-19.00 sec 1.40 MBytes 11.7 Mbits/sec
[ 4] 19.00-20.00 sec 1.40 MBytes 11.8 Mbits/sec
[ 4] 20.00-21.00 sec 1.44 MBytes 12.0 Mbits/sec
[ 4] 21.00-22.00 sec 1.36 MBytes 11.4 Mbits/sec
[ 4] 22.00-23.00 sec 1.14 MBytes 9.58 Mbits/sec
[ 4] 23.00-24.00 sec 1.36 MBytes 11.4 Mbits/sec
[ 4] 24.00-25.00 sec 1.27 MBytes 10.6 Mbits/sec
[ 4] 25.00-26.00 sec 1.31 MBytes 11.0 Mbits/sec
[ 4] 26.00-27.00 sec 1.30 MBytes 10.9 Mbits/sec
[ 4] 27.00-28.00 sec 1.36 MBytes 11.4 Mbits/sec
[ 4] 28.00-29.00 sec 1.40 MBytes 11.7 Mbits/sec
[ 4] 29.00-30.00 sec 1.24 MBytes 10.4 Mbits/sec
-----
[ ID] Interval      Transfer    Bandwidth
[ 4] 0.00-30.00 sec 40.4 MBytes 11.3 Mbits/sec
[ 4] 0.00-30.00 sec 40.0 MBytes 11.2 Mbits/sec

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

2.4G 10m
upload

2. Test Result

2.4 WIFI throughput test



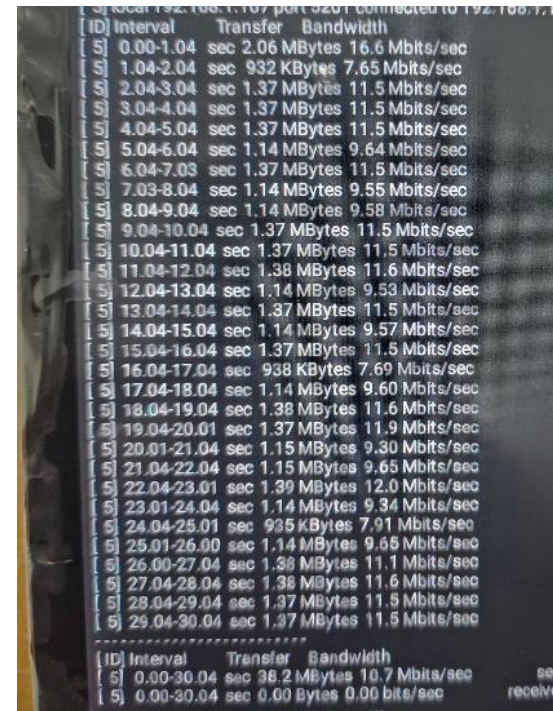
A screenshot of a Windows command prompt window titled "C:\Windows\System32\cmd.exe". It displays the output of an iperf download test. The output consists of two tables. The first table shows 20 individual test intervals, each with a 1-second duration, transfer size in MBytes, and bandwidth in Mbits/sec. The second table shows the overall summary for the 0.00-30.00 second interval, indicating a total transfer of 118 MBytes and a bandwidth of 33.1 Mbits/sec. The text "iperf Done." and the path "C:\iperf-3.1.2-win64\" are visible at the bottom.

ID	Interval	sec	Transfer	Bandwidth
4	8.00-9.00	sec	3.62 MBytes	30.4 Mbits/sec
4	9.00-10.00	sec	4.00 MBytes	33.6 Mbits/sec
4	10.00-11.00	sec	4.25 MBytes	35.6 Mbits/sec
4	11.00-12.00	sec	3.88 MBytes	32.5 Mbits/sec
4	12.00-13.00	sec	3.62 MBytes	30.4 Mbits/sec
4	13.00-14.00	sec	4.12 MBytes	34.6 Mbits/sec
4	14.00-15.00	sec	3.62 MBytes	30.5 Mbits/sec
4	15.00-16.00	sec	4.50 MBytes	37.8 Mbits/sec
4	16.00-17.00	sec	3.88 MBytes	32.4 Mbits/sec
4	17.00-18.00	sec	3.50 MBytes	29.4 Mbits/sec
4	18.00-19.00	sec	3.75 MBytes	31.4 Mbits/sec
4	19.00-20.00	sec	4.75 MBytes	39.8 Mbits/sec
4	20.00-21.00	sec	4.00 MBytes	33.5 Mbits/sec
4	21.00-22.00	sec	4.00 MBytes	33.7 Mbits/sec
4	22.00-23.00	sec	3.12 MBytes	26.2 Mbits/sec
4	23.00-24.00	sec	3.25 MBytes	27.2 Mbits/sec
4	24.00-25.00	sec	4.50 MBytes	37.8 Mbits/sec
4	25.00-26.00	sec	4.25 MBytes	35.7 Mbits/sec
4	26.00-27.00	sec	4.25 MBytes	35.7 Mbits/sec
4	27.00-28.00	sec	3.62 MBytes	30.4 Mbits/sec
4	28.00-29.00	sec	3.88 MBytes	32.6 Mbits/sec
4	29.00-30.00	sec	4.25 MBytes	35.6 Mbits/sec

[ID]	Interval		Transfer	Bandwidth
[4]	0.00-30.00	sec	118 MBytes	33.1 Mbits/sec
[4]	0.00-30.00	sec	118 MBytes	33.1 Mbits/sec

iperf Done.
C:\iperf-3.1.2-win64\

2.4G 10m
download



A screenshot of a Windows command prompt window showing the output of an iperf upload test. The output consists of two tables. The first table shows 20 individual test intervals, each with a 1-second duration, transfer size in MBytes, and bandwidth in Mbits/sec. The second table shows the overall summary for the 0.00-30.04 second interval, indicating a total transfer of 36.2 MBytes and a bandwidth of 10.7 Mbits/sec. The text "iperf Done." and the path "C:\iperf-3.1.2-win64\" are visible at the bottom.

ID	Interval	sec	Transfer	Bandwidth
5	0.00-1.04	sec	2.06 MBytes	16.6 Mbits/sec
5	1.04-2.04	sec	932 KBytes	7.65 Mbits/sec
5	2.04-3.04	sec	1.37 MBytes	11.5 Mbits/sec
5	3.04-4.04	sec	1.37 MBytes	11.5 Mbits/sec
5	4.04-5.04	sec	1.37 MBytes	11.5 Mbits/sec
5	5.04-6.04	sec	1.14 MBytes	9.64 Mbits/sec
5	6.04-7.03	sec	1.37 MBytes	11.5 Mbits/sec
5	7.03-8.04	sec	1.14 MBytes	9.55 Mbits/sec
5	8.04-9.04	sec	1.14 MBytes	9.58 Mbits/sec
5	9.04-10.04	sec	1.37 MBytes	11.5 Mbits/sec
5	10.04-11.04	sec	1.37 MBytes	11.5 Mbits/sec
5	11.04-12.04	sec	1.38 MBytes	11.6 Mbits/sec
5	12.04-13.04	sec	1.14 MBytes	9.53 Mbits/sec
5	13.04-14.04	sec	1.37 MBytes	11.5 Mbits/sec
5	14.04-15.04	sec	1.14 MBytes	9.57 Mbits/sec
5	15.04-16.04	sec	1.37 MBytes	11.5 Mbits/sec
5	16.04-17.04	sec	938 KBytes	7.69 Mbits/sec
5	17.04-18.04	sec	1.14 MBytes	9.60 Mbits/sec
5	18.04-19.04	sec	1.38 MBytes	11.6 Mbits/sec
5	19.04-20.01	sec	1.37 MBytes	11.9 Mbits/sec
5	20.01-21.04	sec	1.15 MBytes	9.30 Mbits/sec
5	21.04-22.04	sec	1.15 MBytes	9.65 Mbits/sec
5	22.04-23.01	sec	1.39 MBytes	12.0 Mbits/sec
5	23.01-24.04	sec	1.14 MBytes	9.34 Mbits/sec
5	24.04-25.01	sec	935 KBytes	7.91 Mbits/sec
5	25.01-26.00	sec	1.14 MBytes	9.65 Mbits/sec
5	26.00-27.04	sec	1.38 MBytes	11.1 Mbits/sec
5	27.04-28.04	sec	1.38 MBytes	11.6 Mbits/sec
5	28.04-29.04	sec	1.37 MBytes	11.5 Mbits/sec
5	29.04-30.04	sec	1.37 MBytes	11.5 Mbits/sec

[ID]	Interval		Transfer	Bandwidth
[5]	0.00-30.04	sec	36.2 MBytes	10.7 Mbits/sec
[5]	0.00-30.04	sec	0.00 Bytes	0.00 bits/sec

iperf Done.
C:\iperf-3.1.2-win64\

2.4G 10m
upload