



# Antenna Test Report

*MN: DT10*

*MP: 19918388579*

*Date: 2023. 2. 20*

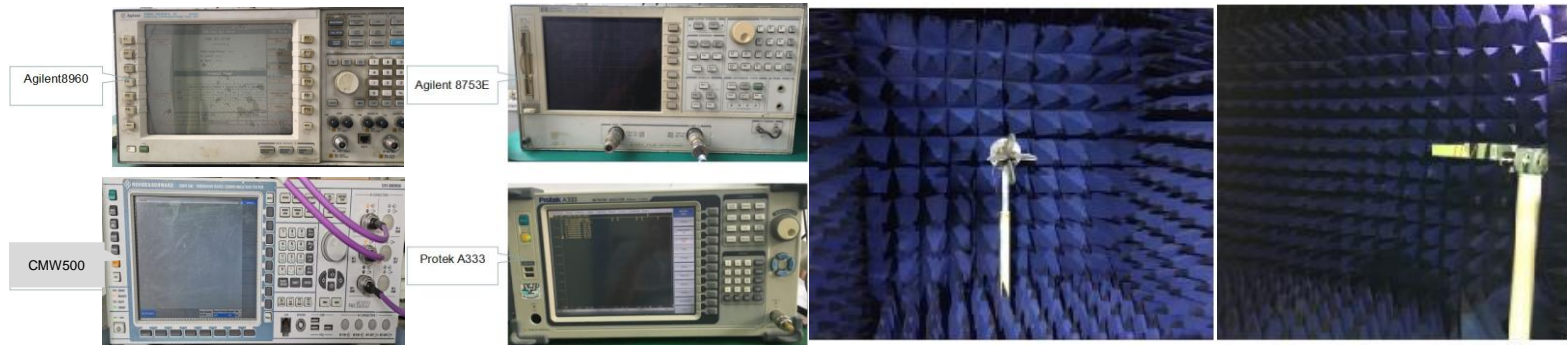
*REV :V1. 0*

Test information

	Antenna band	Antenna state	Antenna form	Match changes	Note
Main ANT	2G				
	3G			NO	
	4G				
AUX ANT	BT/WIFI	2.4G	FPC	PIFA	NO
	GPS		FPC	PIFA	NO
	DIV				NO

## Test environment

	测试项目	测试设备
(S-parameter)	1. (VSWR) 2. (Rrtun Loss)	Agilent8753ES
2. (Active)	1. (TRP) 2. (TIS)	1. 5*3*3m (3D) Chamber 2. Agilent8960 CMW500
3. (Passive)	1. (Gain) 2. 天线效率 (Efficiency)	1. 5*3*3m (3D) Chamber 2. Agilent 8753ES

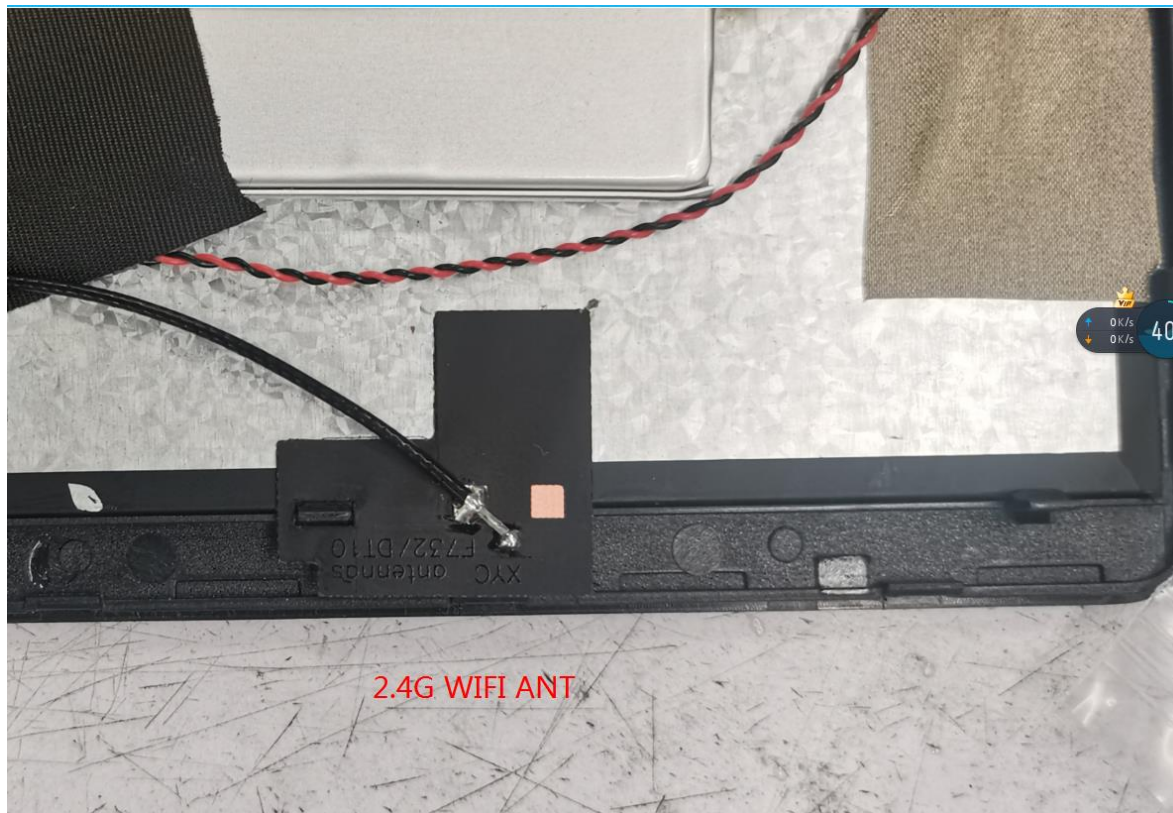




ANTENNA

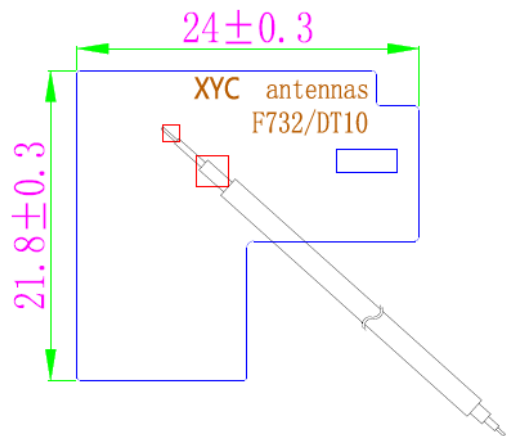
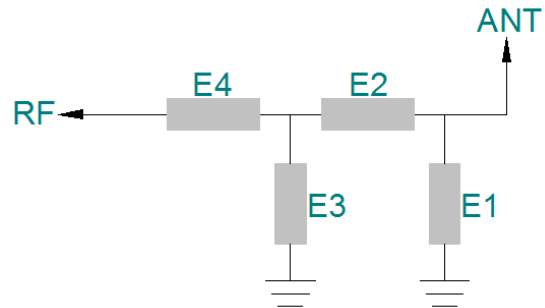
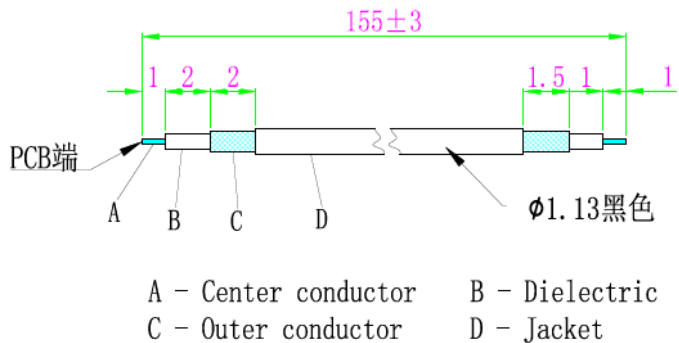
SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

## Antenna position





### Matching circuit


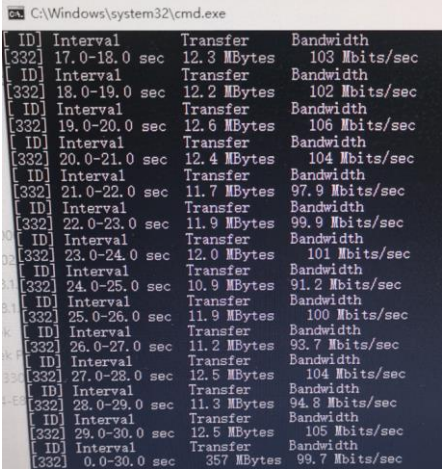


	(PF)	(NH)
E1(0402)		
E2(0402)		
E3(0402)		
E4(0402)		

Active test data

Frequency	TRP		TIS			
	802.11b	2412	CH1 11Mbps	17.88	CH1 11Mbps	-80.97
	2437	CH6 11Mbps	18.28	CH6 11Mbps	-82.63	
	2467	CH11 11Mbps	17.65	CH11 11Mbps	-83.77	
802.11a			TRP		TIS	
		5180	CH36 6Mbps		CH36 54Mbps	
		5300	CH60 6Mbps		CH60 54Mbps	
		5805	CH161 6Mbps		CH161 54Mbps	

# Throughput test

2.4G wifi			
UL	88M	DL	99.7M
	 <pre> [3] local 192.168.1.182 port 41214 connected with 192.168.1.182 [ID] Interval Transfer Bandwidth [3] 0.0-1.0 sec 9.75 MBytes 81.8 Mbits/sec [3] 1.0-2.0 sec 10.1 MBytes 84.9 Mbits/sec [3] 2.0-3.0 sec 11.5 MBytes 96.5 Mbits/sec [3] 3.0-4.0 sec 10.4 MBytes 87.0 Mbits/sec [3] 4.0-5.0 sec 10.5 MBytes 88.1 Mbits/sec [3] 5.0-6.0 sec 10.8 MBytes 90.2 Mbits/sec [3] 6.0-7.0 sec 11.2 MBytes 94.4 Mbits/sec [3] 7.0-8.0 sec 10.4 MBytes 87.0 Mbits/sec [3] 8.0-9.0 sec 11.0 MBytes 92.3 Mbits/sec [3] 9.0-10.0 sec 10.0 MBytes 83.9 Mbits/sec [3] 10.0-11.0 sec 10.9 MBytes 91.2 Mbits/sec [3] 11.0-12.0 sec 10.5 MBytes 88.1 Mbits/sec [3] 12.0-13.0 sec 8.62 MBytes 72.4 Mbits/sec [3] 13.0-14.0 sec 10.1 MBytes 84.9 Mbits/sec [3] 14.0-15.0 sec 9.88 MBytes 82.8 Mbits/sec [3] 15.0-16.0 sec 11.2 MBytes 94.4 Mbits/sec [3] 16.0-17.0 sec 10.1 MBytes 84.9 Mbits/sec [3] 17.0-18.0 sec 12.0 MBytes 101 Mbits/sec [3] 18.0-19.0 sec 9.62 MBytes 80.7 Mbits/sec [3] 19.0-20.0 sec 11.0 MBytes 92.3 Mbits/sec [3] 0.0-20.0 sec 210 MBytes 88.0 Mbits/sec           </pre>		 <pre> C:\Windows\system32\cmd.exe [ID] Interval Transfer Bandwidth [332] 17.0-18.0 sec 12.3 MBytes 103 Mbits/sec [ID] Interval Transfer Bandwidth [332] 18.0-19.0 sec 12.2 MBytes 102 Mbits/sec [ID] Interval Transfer Bandwidth [332] 19.0-20.0 sec 12.6 MBytes 106 Mbits/sec [ID] Interval Transfer Bandwidth [332] 20.0-21.0 sec 12.4 MBytes 104 Mbits/sec [ID] Interval Transfer Bandwidth [332] 21.0-22.0 sec 11.7 MBytes 97.9 Mbits/sec [ID] Interval Transfer Bandwidth [332] 22.0-23.0 sec 11.9 MBytes 99.9 Mbits/sec [ID] Interval Transfer Bandwidth [332] 23.0-24.0 sec 12.0 MBytes 101 Mbits/sec [ID] Interval Transfer Bandwidth [332] 24.0-25.0 sec 10.9 MBytes 91.2 Mbits/sec [ID] Interval Transfer Bandwidth [332] 25.0-26.0 sec 11.9 MBytes 100 Mbits/sec [ID] Interval Transfer Bandwidth [332] 26.0-27.0 sec 11.2 MBytes 93.7 Mbits/sec [ID] Interval Transfer Bandwidth [332] 27.0-28.0 sec 12.5 MBytes 104 Mbits/sec [ID] Interval Transfer Bandwidth [332] 28.0-29.0 sec 11.3 MBytes 94.8 Mbits/sec [ID] Interval Transfer Bandwidth [332] 29.0-30.0 sec 12.5 MBytes 105 Mbits/sec [ID] Interval Transfer Bandwidth [332] 0.0-30.0 sec 357 MBytes 99.7 Mbits/sec           </pre>
Note			

Wifi Antenna test

WIFI

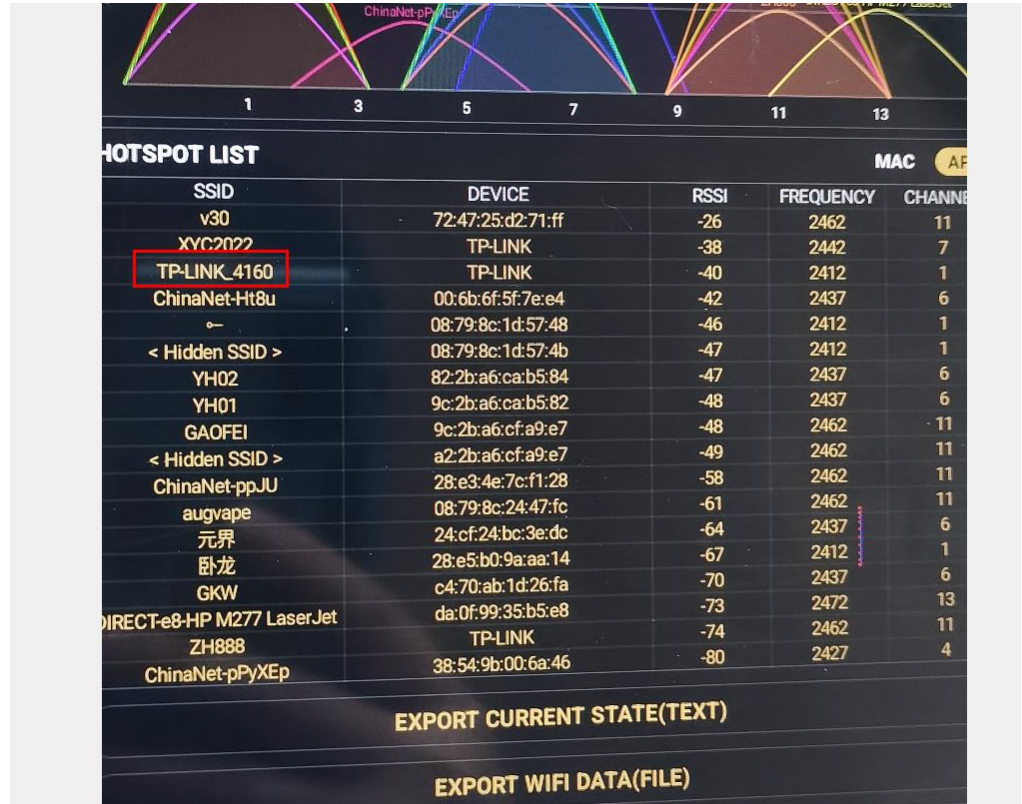
Wifi Analytical Assistant

10m

2.4G :-40dBm

BT

10m



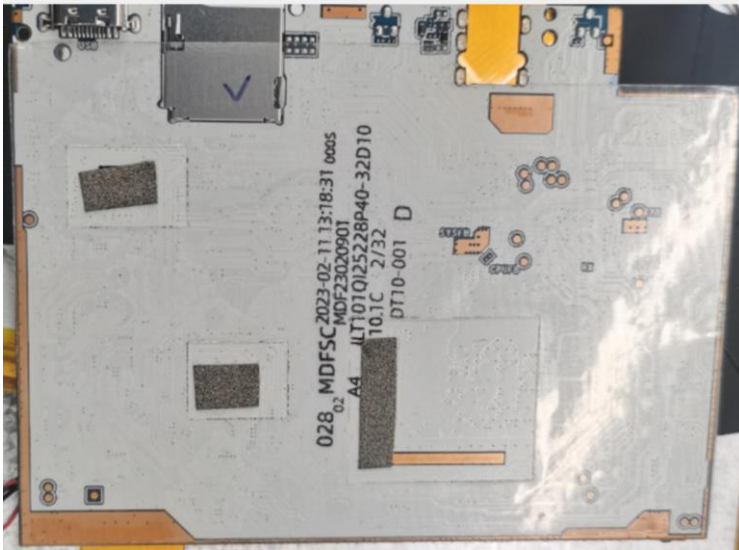
SSID	DEVICE	RSSI	FREQUENCY	CHANNEL
v30	72:47:25:d2:71:ff	-26	2462	11
XVC2022	TP-LINK	-38	2442	7
TP-LINK_4160	TP-LINK	-40	2412	1
ChinaNet-Ht8u	00:6b:6f:5f:7e:e4	-42	2437	6
—	08:79:8c:1d:57:48	-46	2412	1
< Hidden SSID >	08:79:8c:1d:57:4b	-47	2412	1
YH02	82:2b:a6:ca:b5:84	-47	2437	6
YH01	9c:2b:a6:ca:b5:82	-48	2437	6
GAOFEI	9c:2b:a6:cf:a9:e7	-48	2462	11
< Hidden SSID >	a2:2b:a6:cf:a9:e7	-49	2462	11
ChinaNet-ppJU	28:e3:4e:7c:f1:28	-58	2462	11
augvape	08:79:8c:24:47:fc	-61	2462	11
元界	24:cf:24:bc:3e:dc	-64	2437	6
卧龙	28:e5:b0:9a:aa:14	-67	2412	1
GKW	c4:70:ab:1d:26:fa	-70	2437	6
DIRECT-e8-HP M277 LaserJet	da:0f:99:35:b5:e8	-73	2472	13
ZH888	TP-LINK	-74	2462	11
ChinaNet-pPyXEp	38:54:9b:00:6a:46	-80	2427	4

EXPORT CURRENT STATE(TEXT)

EXPORT WIFI DATA(FILE)

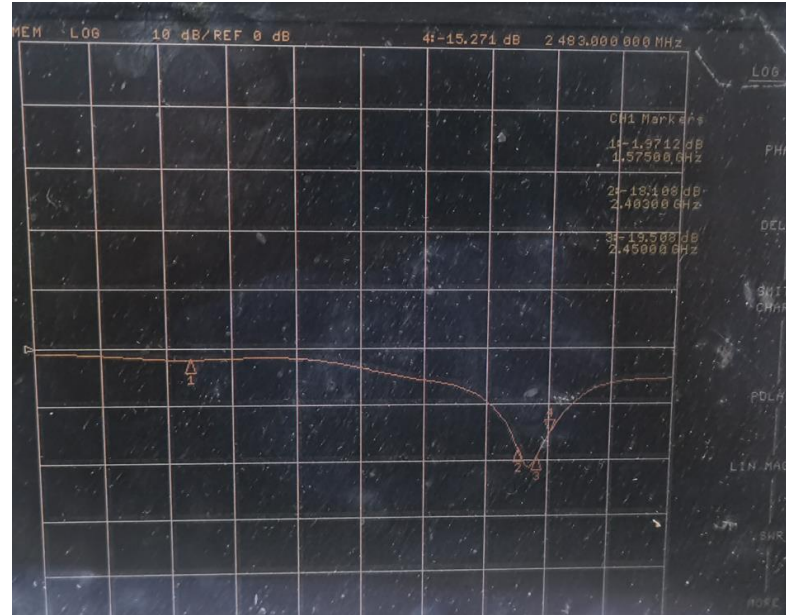
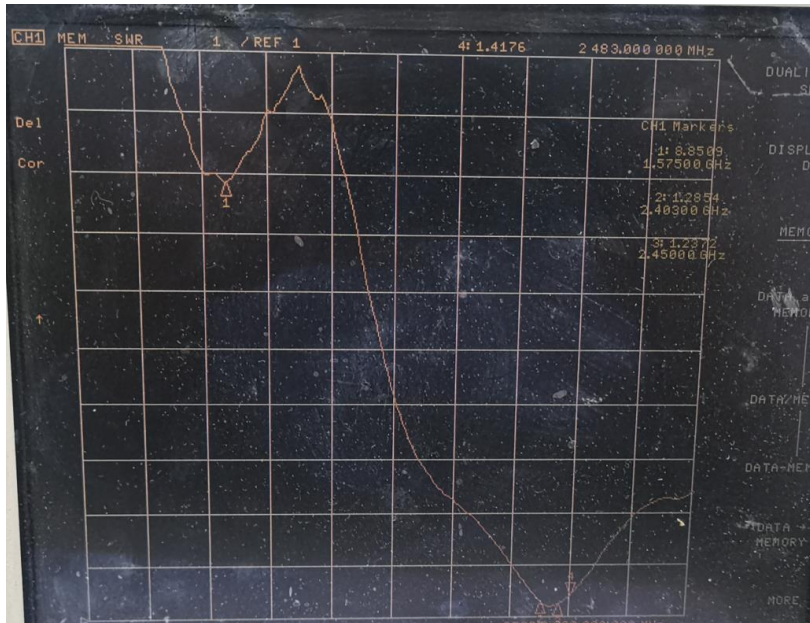


Environmental treatment



Passive test data

ANT1 S11-VSWR&Return Loss



Frequency (MHZ)	2400	2450	2483	1575		
VSWR	1.28	1.23	1.41			
Return Loss (DB)	-19.10	-19.51	-15.27			



## Passive test data

## ANT1 GAIN&amp;Efficiency-WIFI2.4G/BT

Passive Test For WIFI2.4						
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)
2400	48.62	-3.13	2.46	0.31	23.667	24.949
2410	46.16	-3.36	2.33	0.18	22.536	23.625
2420	47.52	-3.23	2.55	0.4	23.282	24.242
2430	47.65	-3.22	2.61	0.46	23.358	24.289
2440	48.22	-3.17	2.7	0.55	23.678	24.546
2450	47.32	-3.25	2.58	0.43	23.29	24.03
2460	46.39	-3.34	2.42	0.27	22.913	23.474
2470	48.83	-3.11	2.58	0.43	24.529	24.297
2480	50.28	-2.99	2.62	0.47	25.561	24.716
2490	48.44	-3.15	2.38	0.23	24.923	23.519
2500	43.77	-3.59	1.99	-0.16	23.01	20.76

Passive test data

ANT1 Direction of figure(2.4/BT)

