



Shenzhen Yishengbang Technology Co., Ltd

Antenna Test Report

Project: N140RBC01

Product: WIFI Antenna—FPC

Report date: 2023.08.22



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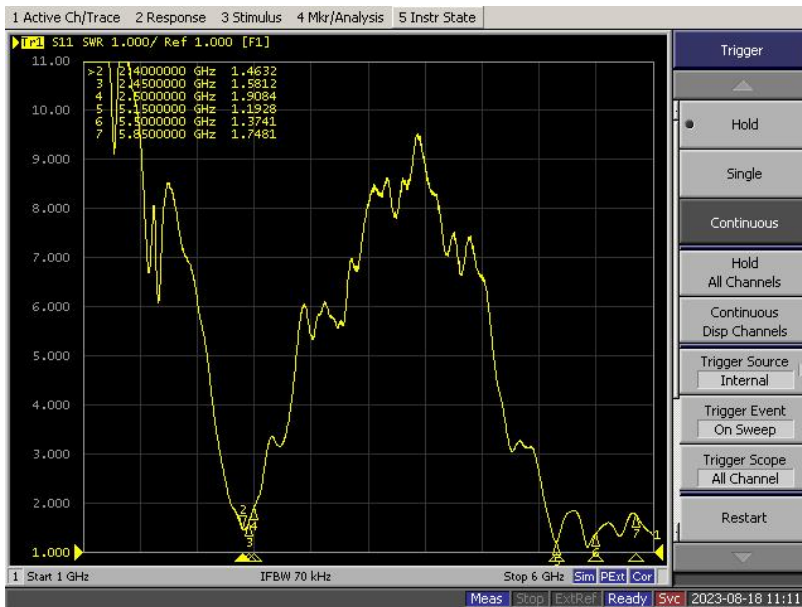
1. Product Overview



2. Test Result

2.1 VSWR

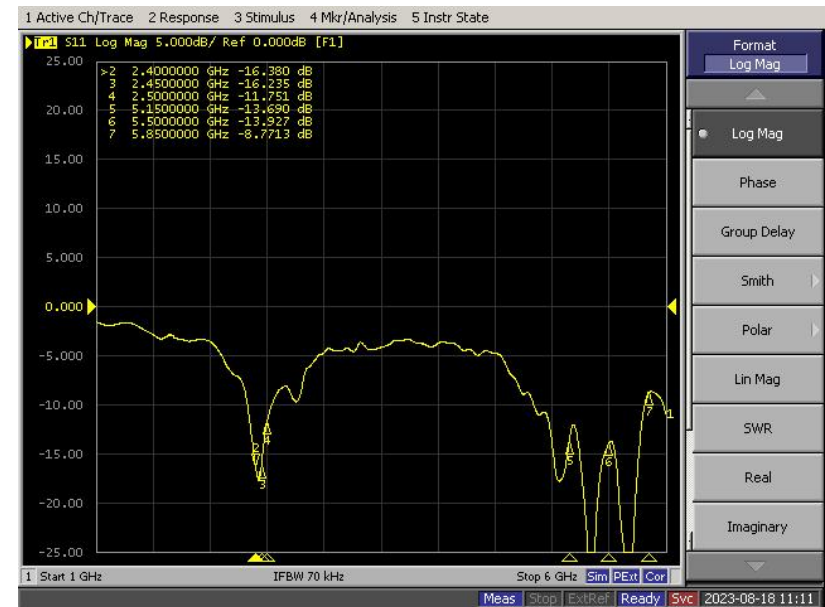
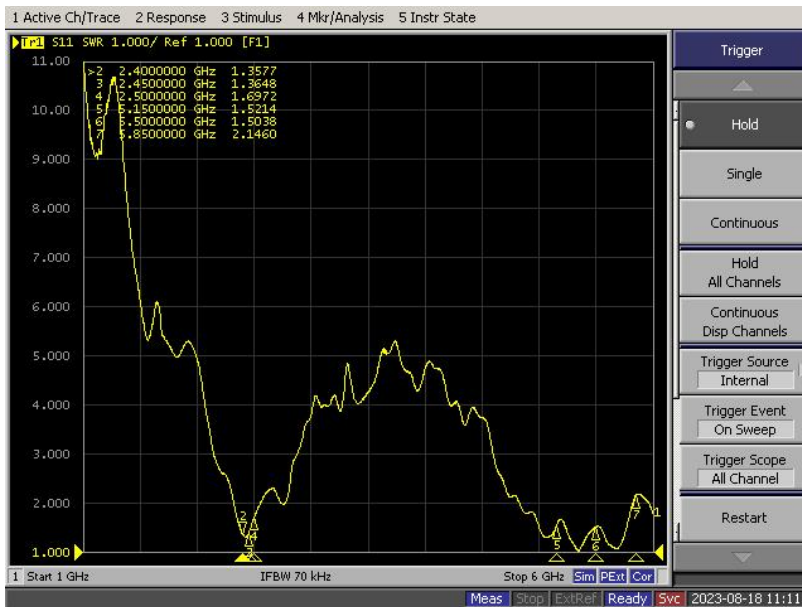
MAIN



2. Test Result

2.1 VSWR/S11

AUX



2. Test Result

2.2 Antenna Parameters



2. Test Result

2.3 WIFI Antenna TRP/TIS

WIFI	CH	power (54M)	sensitivity (54M)	WIFI	CH	power (MCS7)	sensitivity (MCS7)	WIFI	CH	power (11M)	sensitivity (11M)
802.11a	36	9.18	-70.89	802.11n	36	9.36	-70.18	802.11b	1	10.58	-83.31
	64	9.39	-67.99		64	10.27	-69.64		7	11.29	-83.18
	100	8.62	-68.88		100	9.63	-69.73		13	4.62	-83.5
	140	10.14	-70.96		140	9.57	-69.47				
	149	10.28	-70.07		149	10.55	-70.59				
	165	9.87	-70.55		165	10.37	-69.43				

2. Test Result

2.3 WIFI Antenna TRP/TIS

WIFI	CH	power (MCS7)	sensitivity (MCS7)
802.11ac	36	8.73	-69.15
	100	9.02	-68.73
	149	9.15	-69.01
WIFI	CH	power (MCS7)	sensitivity (MCS7)
802.11n	1	3.04	-68.74
	7	11.88	-69.02
	13	-0.2	-68.95

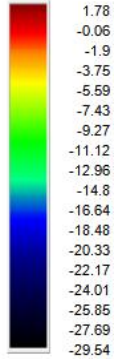
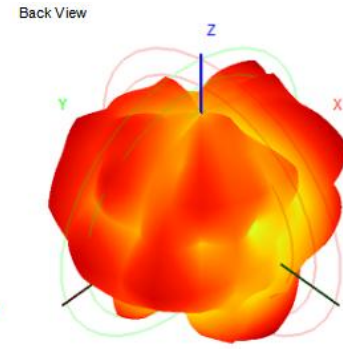
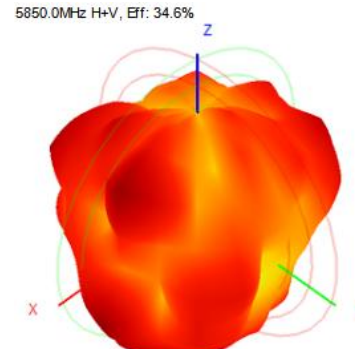
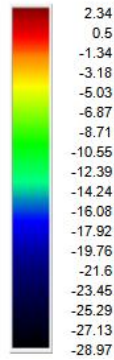
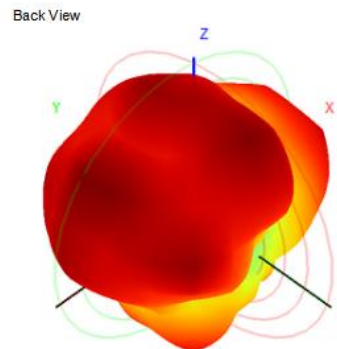
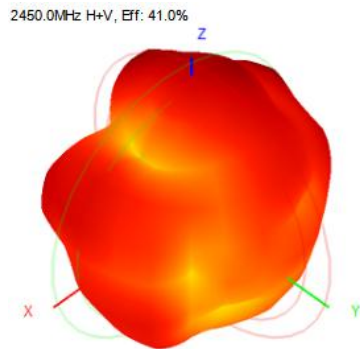
WIFI	CH	power (54M)	sensitivity (54M)
802.11g	1	2.23	-70.99
	7	11.05	-71.97
	13	0.06	-70.51

2. Test Result

2.4 WIFI/BT Antenna Gain/Efficiency/3D DATA

MAIN

Frequency (MHz)	2400.0	2450.0	2500.0	5150.0	5500.0	5850.0
Efficiency (dBi)	-3.80	-3.87	-3.98	-4.03	-3.91	-4.61
Gain (dBi)	2.86	2.34	2.46	1.81	4.60	1.78
Efficiency (%)	41.65	40.98	40.03	39.56	40.63	34.58



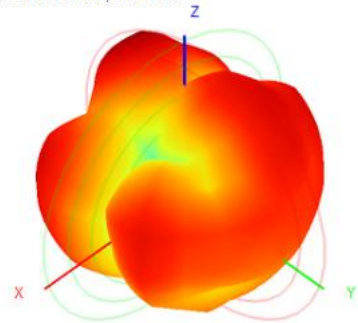
2. Test Result

2.4 WIFI Antenna Gain/Efficiency/3D DATA

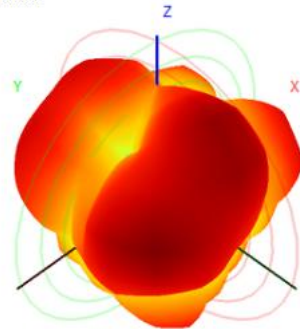
AUX

Frequency (MHz)	2400.0	2450.0	2500.0	5150.0	5500.0	5850.0
Efficiency (dBi)	-4.41	-4.26	-4.93	-4.92	-4.54	-4.85
Gain (dBi)	3.22	3.23	1.63	1.56	3.11	3.79
Efficiency (%)	36.22	37.51	32.10	32.19	35.15	32.75

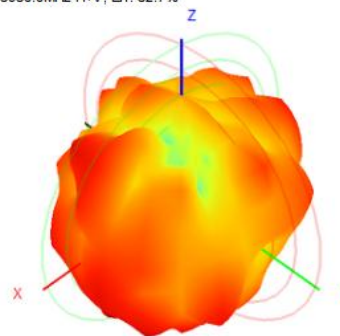
2450.0MHz H+V, Eff: 37.5%



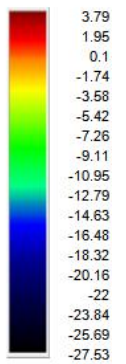
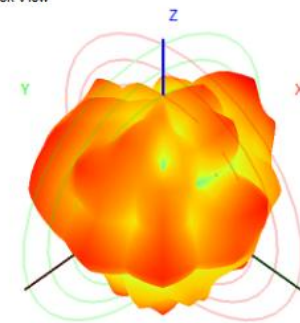
Back View



5850.0MHz H+V, Eff: 32.7%



Back View



2. Test Result

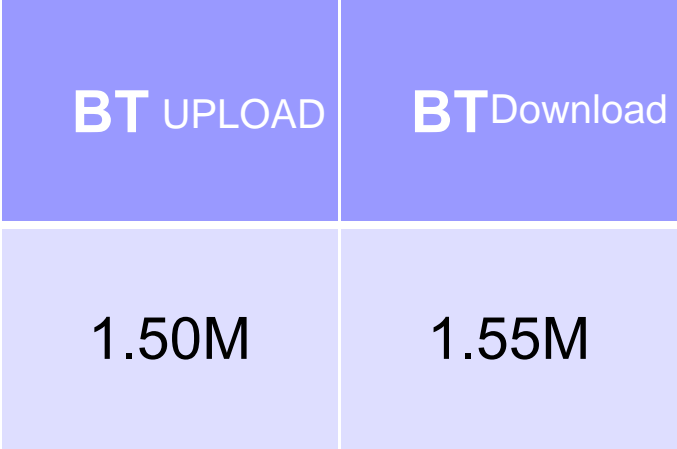
2.5 WIFI Antenna Throughput

2.4 UPLOAD	2.4 Download	5.8 UPLOAD	5.8 Download
165M	245M	571M	616M

2. Test Result

2.6 BT Throughput

ID	Interval	Transfer	Bandwidth
[344]	8.0-9.0 sec	192 KBytes	1.57 Mbits/sec
[344]	9.0-10.0 sec	176 KBytes	1.44 Mbits/sec
[344]	10.0-11.0 sec	176 KBytes	1.44 Mbits/sec
[344]	11.0-12.0 sec	192 KBytes	1.57 Mbits/sec
[344]	12.0-13.0 sec	192 KBytes	1.57 Mbits/sec
[344]	13.0-14.0 sec	176 KBytes	1.44 Mbits/sec
[344]	14.0-15.0 sec	185 KBytes	1.51 Mbits/sec
[344]	15.0-16.0 sec	183 KBytes	1.50 Mbits/sec
[344]	16.0-17.0 sec	192 KBytes	1.57 Mbits/sec
[344]	17.0-18.0 sec	176 KBytes	1.44 Mbits/sec
[344]	18.0-19.0 sec	192 KBytes	1.57 Mbits/sec
[344]	19.0-20.0 sec	193 KBytes	1.58 Mbits/sec
[344]	20.0-21.0 sec	175 KBytes	1.43 Mbits/sec
[344]	21.0-22.0 sec	169 KBytes	1.39 Mbits/sec
[344]	22.0-23.0 sec	168 KBytes	1.37 Mbits/sec
[344]	23.0-24.0 sec	185 KBytes	1.51 Mbits/sec
[344]	24.0-25.0 sec	192 KBytes	1.57 Mbits/sec
[344]	25.0-26.0 sec	176 KBytes	1.44 Mbits/sec
[344]	26.0-27.0 sec	183 KBytes	1.50 Mbits/sec
[344]	27.0-28.0 sec	176 KBytes	1.44 Mbits/sec
[344]	28.0-29.0 sec	176 KBytes	1.44 Mbits/sec
[344]	29.0-30.0 sec	185 KBytes	1.51 Mbits/sec
[344]	30.0-31.0 sec	183 KBytes	1.50 Mbits/sec
[344]	31.0-32.0 sec	185 KBytes	1.51 Mbits/sec
[344]	32.0-33.0 sec	183 KBytes	1.50 Mbits/sec
[344]	33.0-34.0 sec	185 KBytes	1.51 Mbits/sec
[344]	34.0-35.0 sec	183 KBytes	1.50 Mbits/sec
[344]	0.0-35.6 sec	6.35 MBytes	1.50 Mbits/sec



ID	Interval	Transfer	Bandwidth
[276]	8.0-9.0 sec	200 KBytes	1.64 Mbits/sec
[276]	9.0-10.0 sec	184 KBytes	1.51 Mbits/sec
[276]	10.0-11.0 sec	192 KBytes	1.57 Mbits/sec
[276]	11.0-12.0 sec	208 KBytes	1.70 Mbits/sec
[276]	12.0-13.0 sec	200 KBytes	1.64 Mbits/sec
[276]	13.0-14.0 sec	192 KBytes	1.57 Mbits/sec
[276]	14.0-15.0 sec	184 KBytes	1.51 Mbits/sec
[276]	15.0-16.0 sec	200 KBytes	1.64 Mbits/sec
[276]	16.0-17.0 sec	208 KBytes	1.70 Mbits/sec
[276]	17.0-18.0 sec	192 KBytes	1.57 Mbits/sec
[276]	18.0-19.0 sec	200 KBytes	1.64 Mbits/sec
[276]	19.0-20.0 sec	200 KBytes	1.64 Mbits/sec
[276]	20.0-21.0 sec	208 KBytes	1.70 Mbits/sec
[276]	21.0-22.0 sec	200 KBytes	1.64 Mbits/sec
[276]	22.0-23.0 sec	200 KBytes	1.64 Mbits/sec
[276]	23.0-24.0 sec	200 KBytes	1.64 Mbits/sec
[276]	24.0-25.0 sec	200 KBytes	1.64 Mbits/sec
[276]	25.0-26.0 sec	192 KBytes	1.57 Mbits/sec
[276]	26.0-27.0 sec	200 KBytes	1.64 Mbits/sec
[276]	27.0-28.0 sec	192 KBytes	1.57 Mbits/sec
[276]	28.0-29.0 sec	200 KBytes	1.64 Mbits/sec
[276]	29.0-30.0 sec	192 KBytes	1.57 Mbits/sec
[276]	0.0-35.3 sec	6.54 MBytes	1.55 Mbits/sec

测试环境：亿圣邦办公室1M。