



Shenzhen Yishengbang Technology Co., Ltd

Antenna Test Report

Project: N140RBC01

Product: WIFI Antenna—FPC

Report date: 2023.08.22



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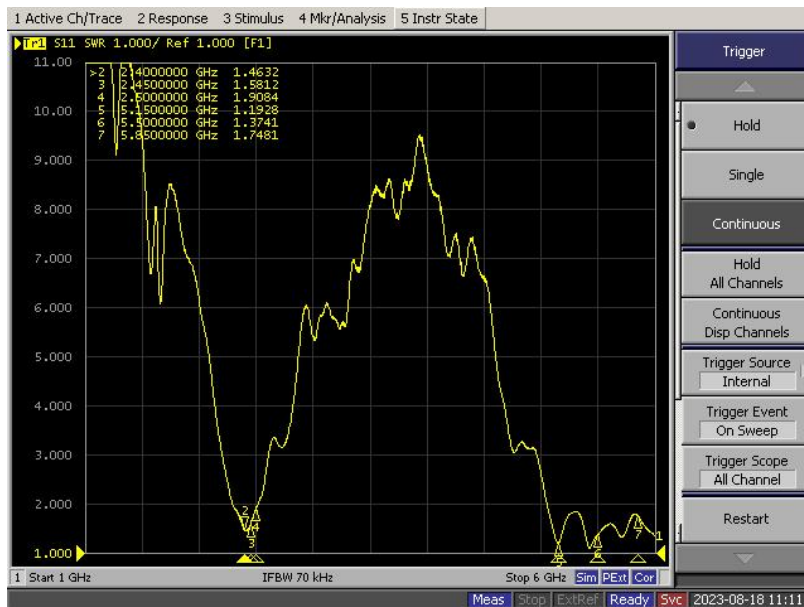
1. Product Overview



2. Test Result

2.1 VSWR

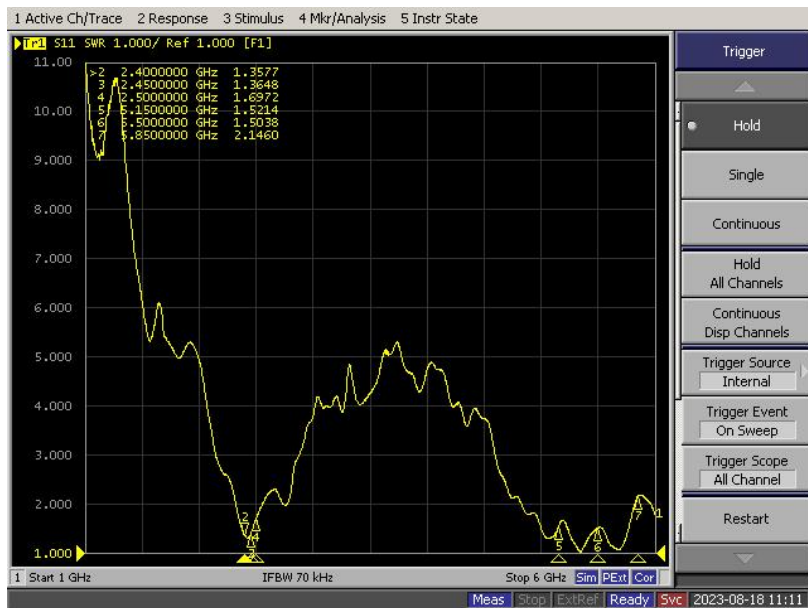
MAIN



2. Test Result

2.1 VSWR/S11

AUX



2. Test Result

2.2 Antenna Parameters

MAIN



AUX

2. Test Result

2.3 WIFI Antenna TRP/TIS

WIFI	CH	power (54M)	sensitivity (54M)
802.11a	36	9.18	-70.89
	64	9.39	-67.99
	100	8.62	-68.88
	140	10.14	-70.96
	149	10.28	-70.07
	165	9.87	-70.55

WIFI	CH	power (MCS7)	sensitivity (MCS7)
802.11n	36	9.36	-70.18
	64	10.27	-69.64
	100	9.63	-69.73
	140	9.57	-69.47
	149	10.55	-70.59
	165	10.37	-69.43

WIFI	CH	power (11M)	sensitivity (11M)
802.11b	1	10.58	-83.31
	7	11.29	-83.18
	13	4.62	-83.5

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

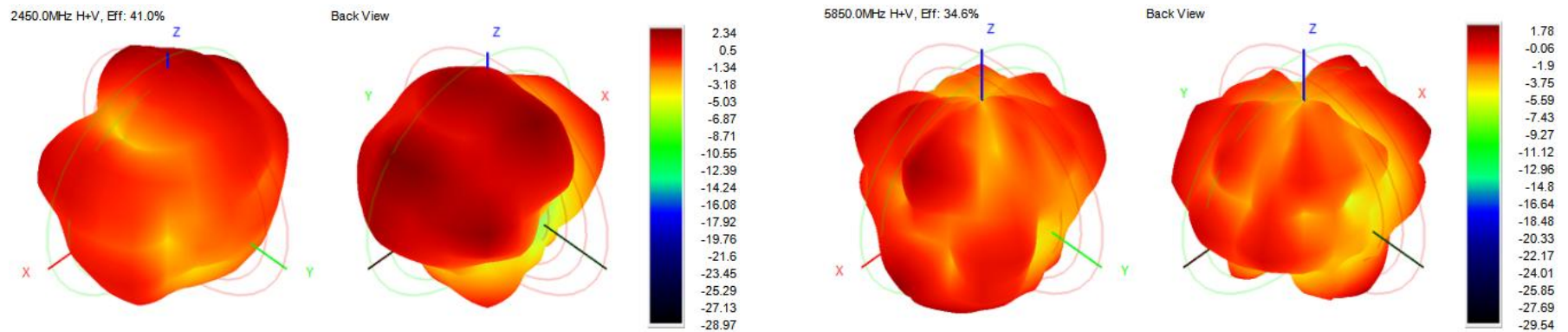
WIFI	CH	power (54M)	sensitivity (54M)
802.11g	1	2.23	-70.99
	7	11.05	-71.97
	13	0.06	-70.51

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



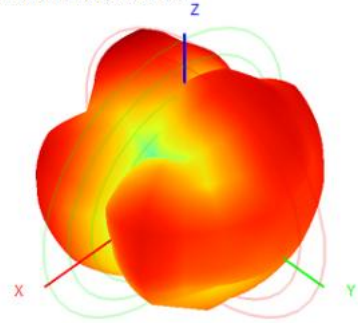
2. Test Result

2.4 WIFI Antenna Gain/Efficiency/3D DATA

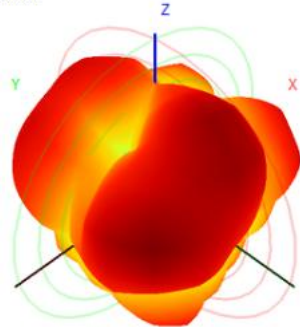
AUX

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

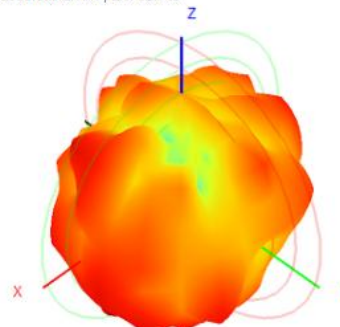
2450.0MHz H+V, Eff: 37.5%



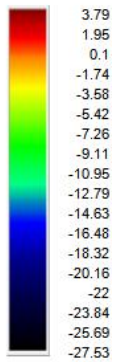
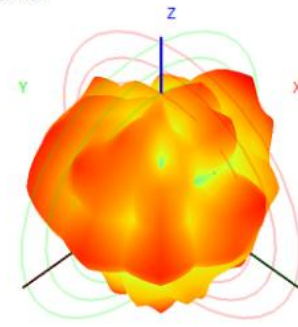
Back View



5850.0MHz H+V, Eff: 32.7%



Back View



2. Test Result

2.5 WIFI Antenna Throughput

2.4 UPLOAD	2.4 Download	5.8UPLOAD	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

BT UPLOAD

1.50M

BT Download

1.55M

ID	Interval	Transfer	Bandwidth
[276]	8.0-9.0 sec	200 KBytes	1.64 Mbits/sec
[276]	9.0-10.0 sec	168 KBytes	1.38 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	184 KBytes	1.51 Mbits/sec
[276]	13.0-14.0 sec	200 KBytes	1.64 Mbits/sec
[276]	14.0-15.0 sec	192 KBytes	1.57 Mbits/sec
[276]	15.0-16.0 sec	184 KBytes	1.51 Mbits/sec
[276]	16.0-17.0 sec	200 KBytes	1.64 Mbits/sec
[276]	17.0-18.0 sec	208 KBytes	1.70 Mbits/sec
[276]	18.0-19.0 sec	192 KBytes	1.57 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。