

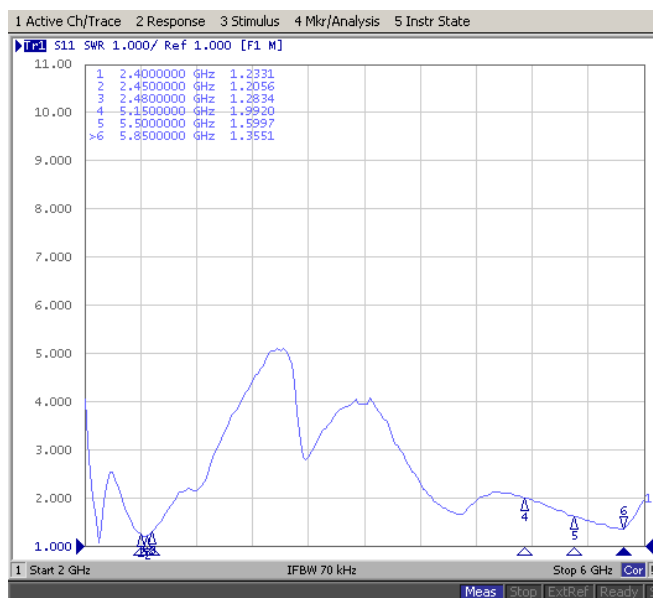
Test Report

1. Test items and Equipment

	Test items	Equipment
1.S1 (S-parameter)	1.Return Loss 2. VSWR	Agilent E5071B HP 8753D
2.Active	1. TRP 2. TIS	1. ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. Agilent 8960 E5515B ×2 StarPoint SP6011 Cmw500
3. Passive	1. Gain 2. Efficiency	1. ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. Agilent E5071B HP 8753D

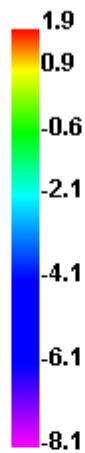
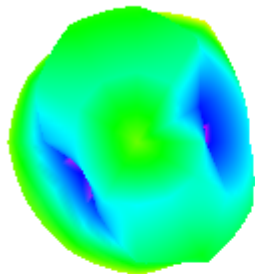
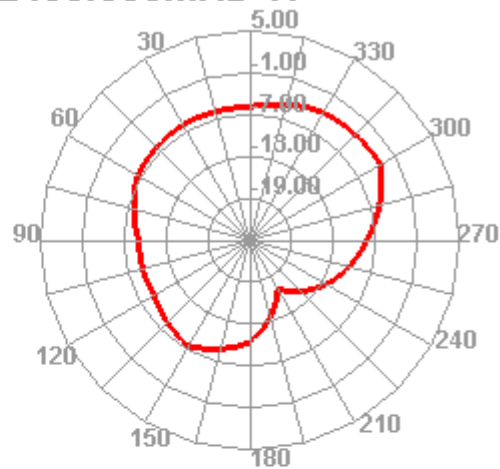
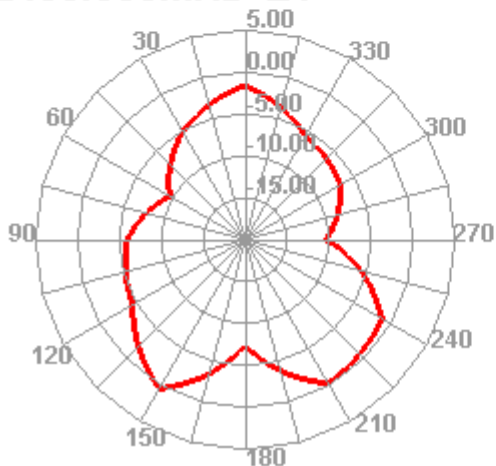
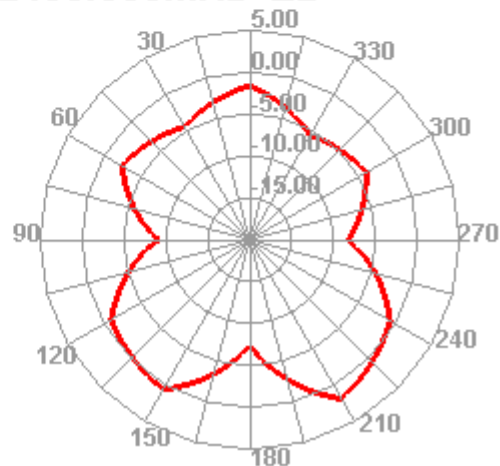


2. SWR



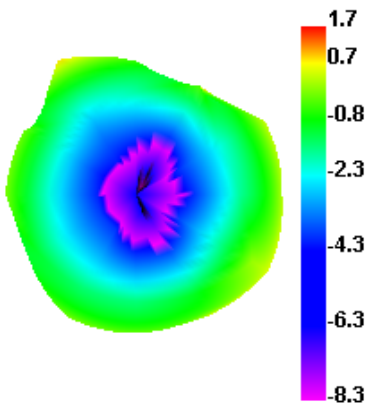
3. Effi and Gain

Passive Test For WIFI2.4		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	44.93	1.95
2410	44.09	1.79
2420	40.31	1.43
2430	40.26	1.36
2440	42.99	1.6
2450	46.49	1.89
2460	45.39	1.62
2470	48.07	1.77
2480	49.25	1.73
2490	52.8	1.81
2500	53.65	1.84

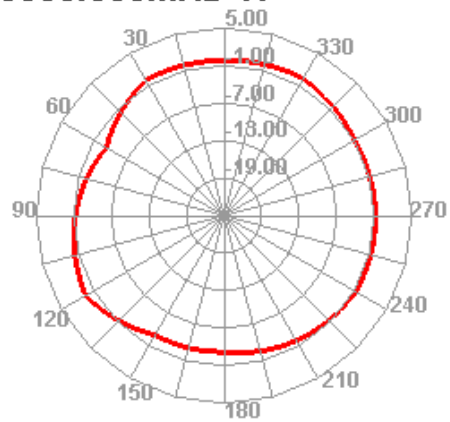
2450.000MHz**2450.000MHz H****2450.000MHz E1****2450.000MHz E2**

Passive Test For WIFI5.8		
Freq (MHz)	Effi (%)	Gain (dBi)
5150	57.65	1.29
5200	52.36	0.76
5250	46.79	0.16
5300	49.36	0.4
5350	58.05	1.13
5400	65.74	1.8
5450	58.96	1.53
5500	60.61	1.74
5550	63.45	2.28
5600	60.14	2.21
5650	56.98	2.02
5700	56.92	1.78
5750	59.28	2.02
5800	54.71	1.05
5850	47.4	0.66

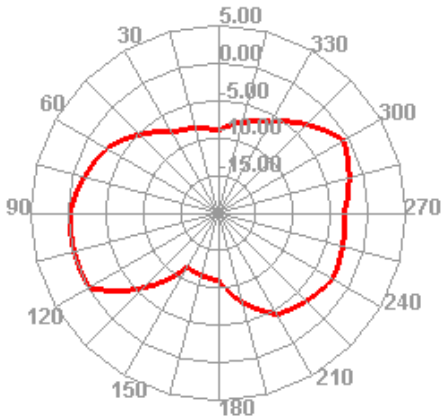
5500.000MHz



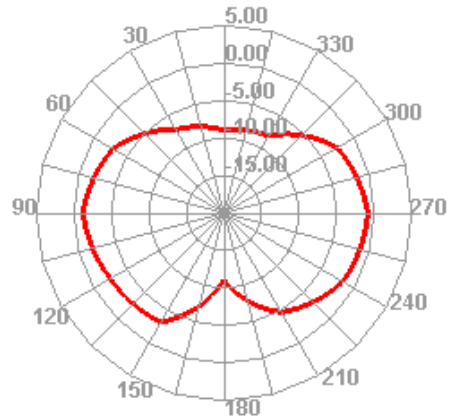
5500.000MHz H



5500.000MHz E1



5500.000MHz E2



4. TRP and TIS

802.11b : 11Mbps			
Test	Wifi 2G TRP		
Result	1	6	11
Frequency (MHz)	2412	2437	2462
Txp Ave (dBm)	15.39	15.01	16.62

Test	Wifi 2G TIS		
Result	1	6	11
Frequency (MHz)	2412	2437	2462
Sens Ave (dBm)	-79.56	-80.85	-80.95

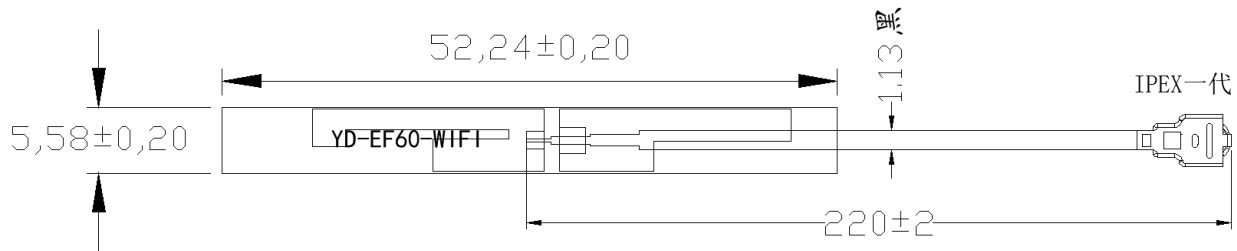
802.11a : 54Mbps			
Test	Wifi 5G TRP		
Result	36	64	161
Frequency (MHz)	5180	5320	5805
Txp Ave (dBm)	13.1	14.68	14.72

Test	Wifi 5G TIS		
Result	36	64	161
Frequency (MHz)	5180	5320	5805
Sens Ave (dBm)	-69.87	-69.74	-70.96

5. Antenna Location Diagram



6. Antenna Structure Diagram



Project	Test condition	Test results
Storage environment	Test temperature, humidity, pressure without stated condition as follwings:1.Temperature: $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$;2.Relative humidity: 45%-85%;3,Pressure: 86kpa-106kpa	Electrical and mechanical performance normal
High and low temperature test	Having 5 times cycle between -40°C to 70°C ,Then in common condition 1-2 hours test exterior quality.	Measurement satisfied with electrical and mechanical performance normal.
Resistance constant hot and humid test	Relative humidity: $95 \pm 3\%$,Test temperature: 40°C ,last 2 hours ,put it after 5 min test the electrical function .Test products during common condition 1-2 hours ,Then test exterior quality.	Measurement satisfied with electrical and mechanical performance normal.
Vibration test	Vibrate Frequency:10-55HZ; Distance :0.35mm;Acceleration :50.0m/s;Sweep frequency cycle:30 times	Electrical and mechanical performance normal
Fall test	From 1m height fall down 3 times freely (vertical direction)	Electrical and mechanical performance normal