

Manufacturer	Shenzhen Bilian Electronic Co.,Ltd
Antenna type	External antenna
Antenna Gain	3.00dBi for 2.4G, 3.00dBi for 5G

1.Test equipment and conditions:

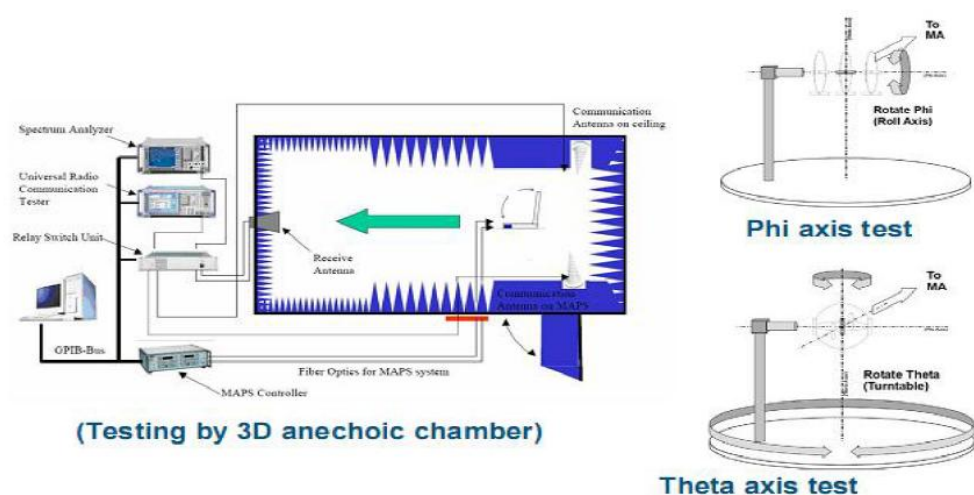
1.1.Network Analyzer

Agilent 8753D Agilent 5071B

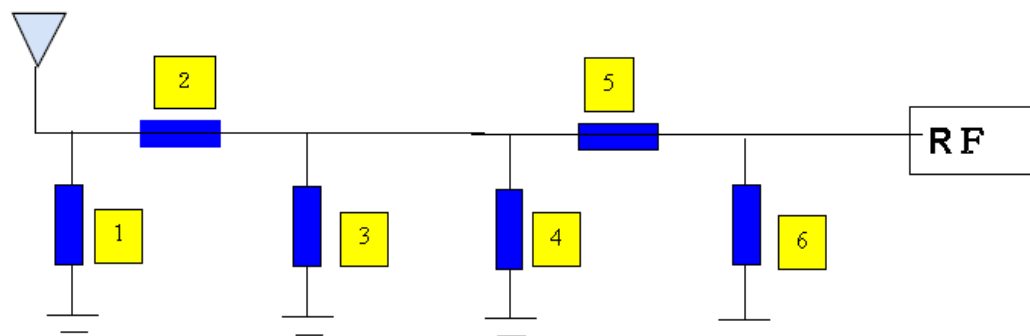
1.2.Communication test equipment

Agilent E5515C R&S CMW500

1.3.Test system

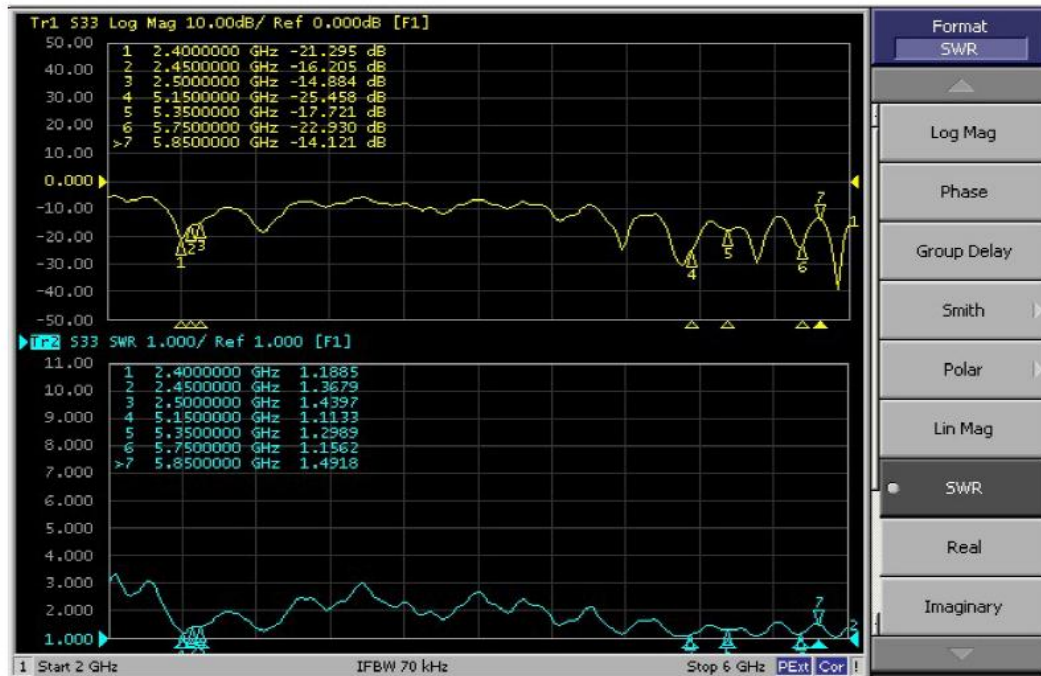


1.4.Matching circuit



2. Test Data:

2.1. Standing wave ratio



2.2.Efficiency

2.4G

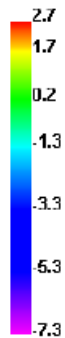
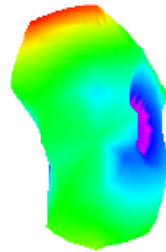
Fred (MHz)	Effi (%)	Effi (%)	Gain (dBi)
2400	44.38	-2.79	2.82
2410	44.63	-2.46	2.01
2420	44.94	-2.12	2.78
2430	44.27	-2.70	2.63
2440	44.75	-2.39	2.08
2450	44.82	-1.83	2.84
2460	44.28	-2.63	2.14
2470	44.49	-2.34	3.00
2480	45.08	-2.23	2.87
2490	44.21	-2.68	2.55
2500	44.46	-2.32	2.99

5G

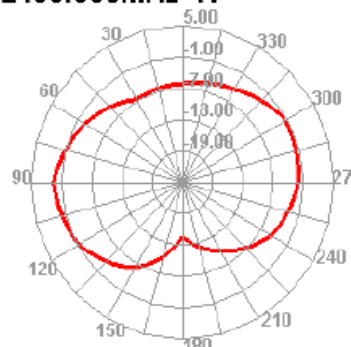
Fred (MHz)	Effi (%)	Effi (%)	Gain (dBi)
4900	60.30	-0.78	2.70
5000	60.53	-0.44	2.26
5100	60.61	-0.25	3.00
5200	60.27	-0.69	2.17
5300	60.49	-0.35	2.89
5400	60.96	-0.35	2.55
5500	60.30	-0.75	2.87
5600	60.73	-0.58	2.81
5700	60.76	0.16	2.11
5800	60.21	-0.63	2.00
5900	60.47	-0.28	2.59

2.3.Directivity diagram

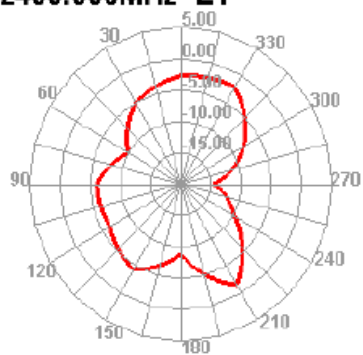
2400.000MHz



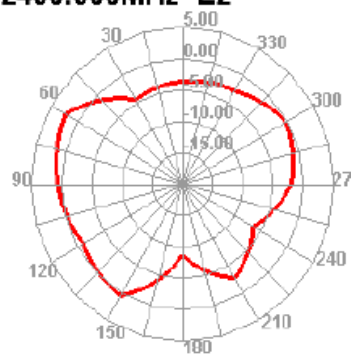
2400.000MHz H



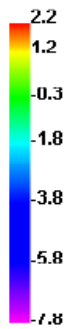
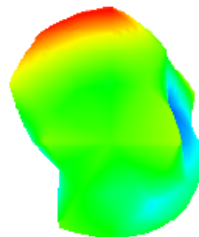
2400.000MHz E1



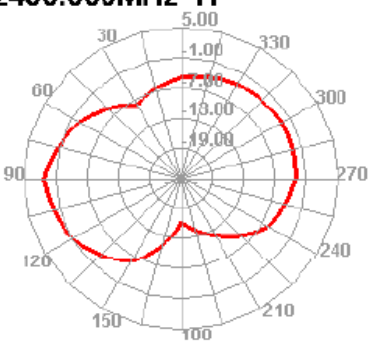
2400.000MHz E2



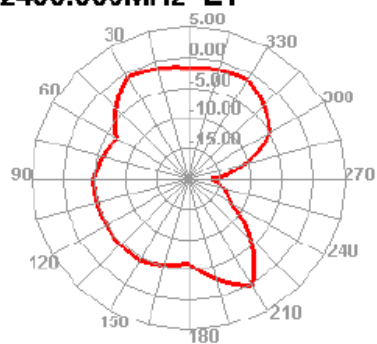
2450.000MHz



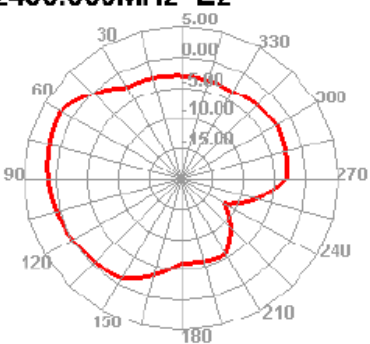
2450.000MHz H



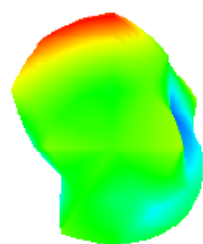
2450.000MHz E1



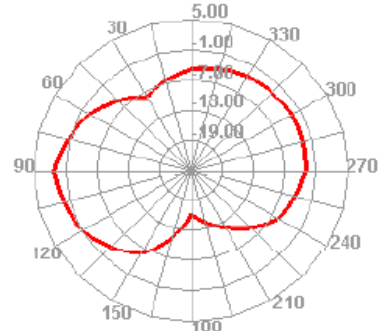
2450.000MHz E2



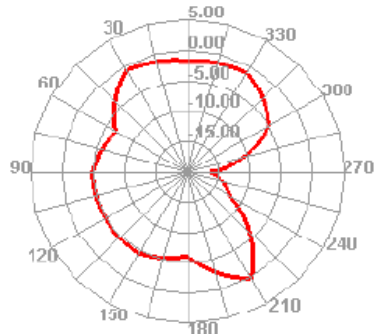
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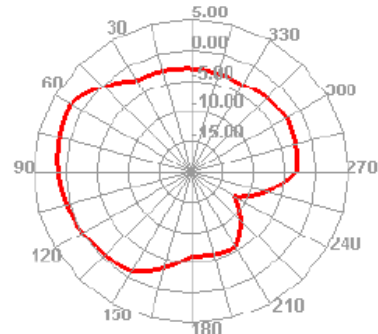
2450.000MHz H



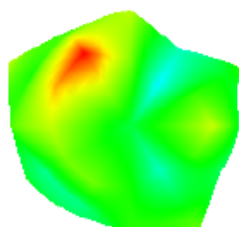
2450.000MHz E1



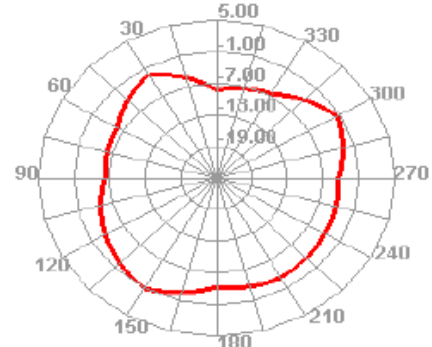
2450.000MHz E2



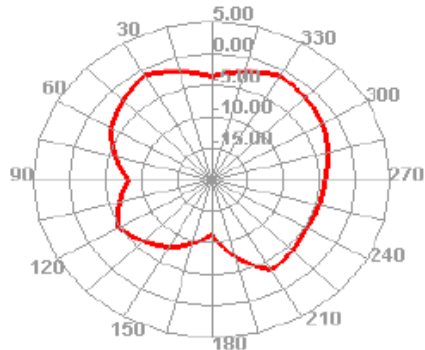
5150.000MHz



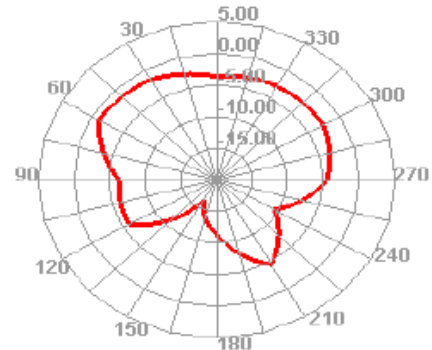
5150.000MHz H



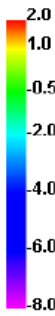
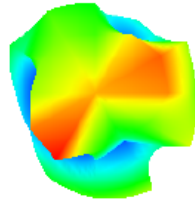
5150.000MHz E1



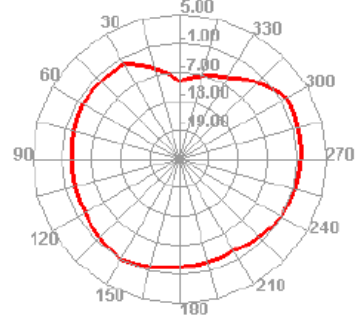
5150.000MHz E2



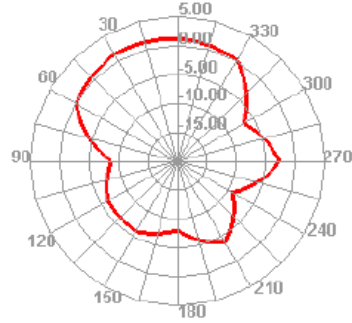
5500.000MHz



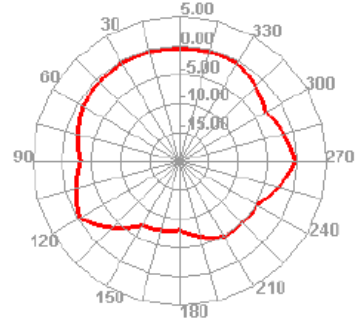
5500.000MHz H



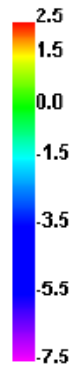
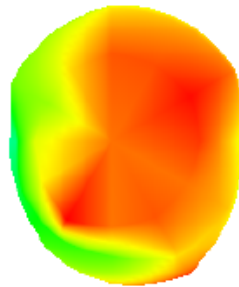
5500.000MHz E1



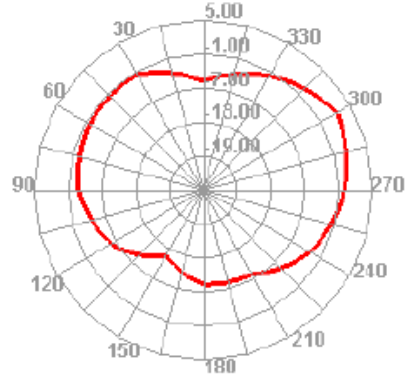
5500.000MHz E2



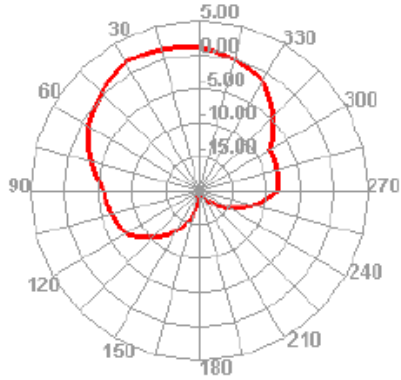
5850.000MHz



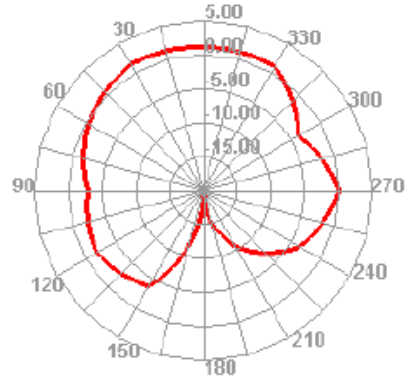
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



3. Antenna drawing:

