



Antenna Specification

Project Name:	B520NC
Antenna Name:	2.4GHz Antenna
Antenna Type:	PIFA
Antenna Manufacturer Name:	Shenzhen Sixun Communication Technology Co., Ltd
Antenna Manufacturer Address:	Room 505-506, Tower A, Donglian Building, Chuangye Er Road, Bao'an District, Shenzhen, China
Version:	V1.0
Date:	2025.11.17



History			
Edit/Change Date	Reason	Change Content Version	Version
2025.11.17	First edition release	First edition release	V1.0



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一: Passive Antenna Test Report



Angilent E5071C

Antenna S11 Parameters:



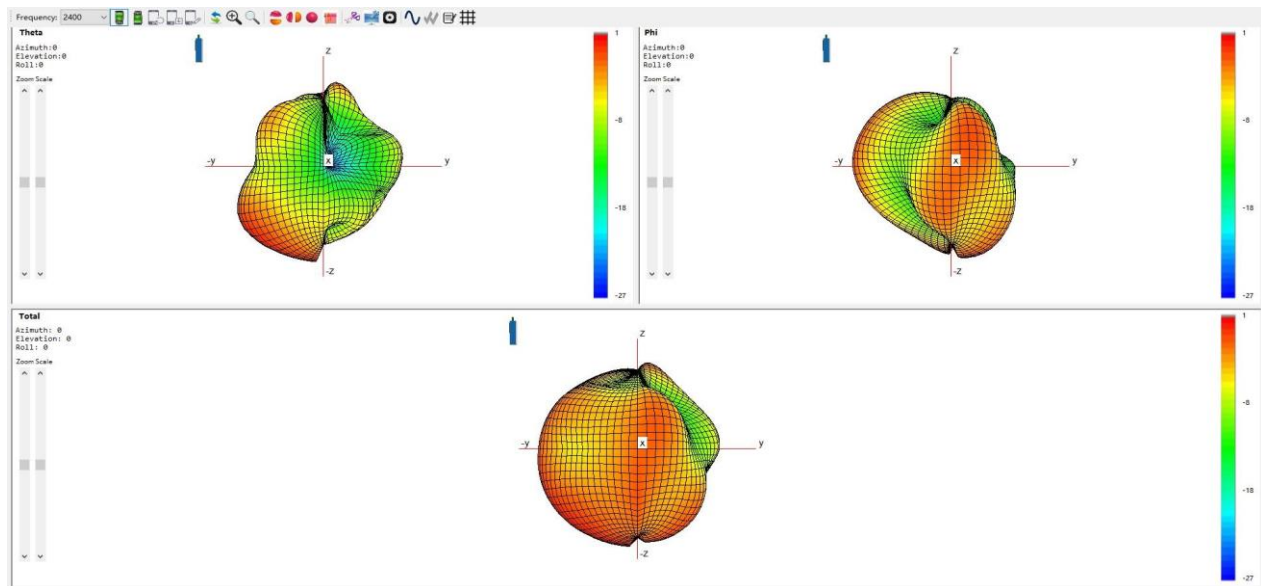
Antenna Efficiency and Gain:

2.4GHz			
Frequency MHz	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	0.1	-3.4	45.2
2410	0.3	-3.4	45.4
2420	0.4	-3.3	46.3
2430	0.3	-3.3	46.9
2440	0.3	-3.2	48.0



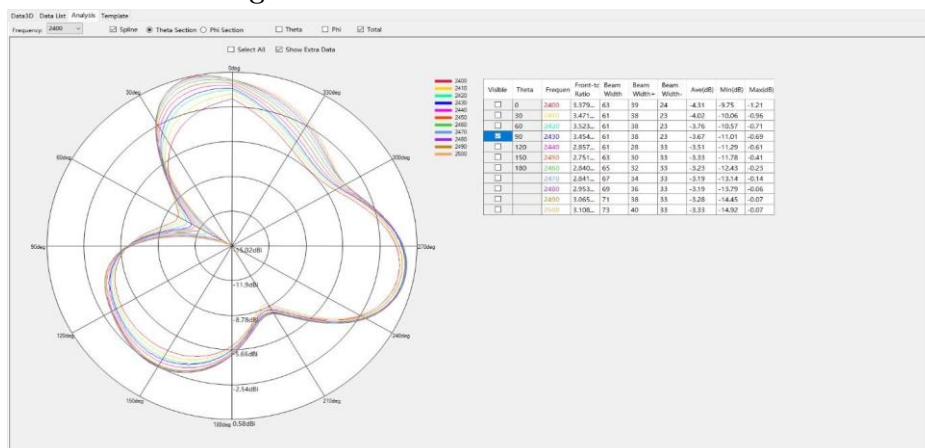
2450	0.3	-3.1	48.5
2460	0.2	-3.2	47.6
2470	0.4	-3.3	47.1
2480	0.5	-3.4	46.2
2490	0.5	-3.4	46.0
2500	0.6	-3.5	45.1
Average	0.3	-3.3	46.6

Antenna 3D Phantom:



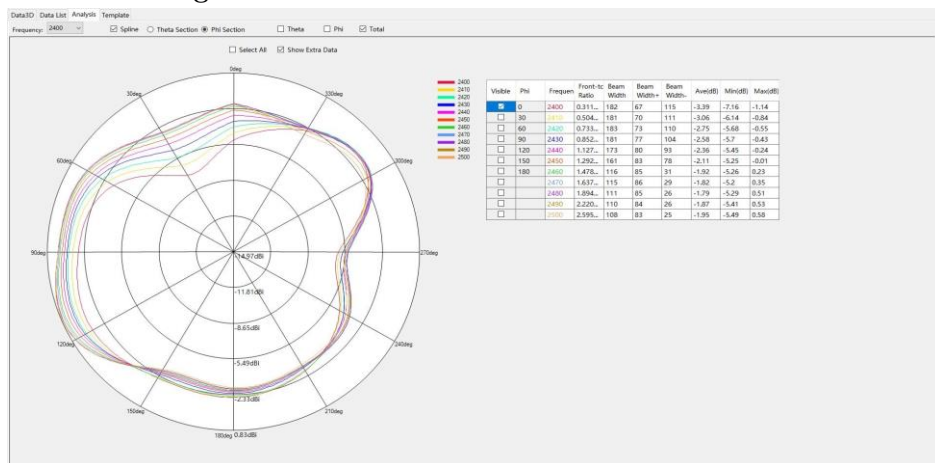
Antenna 2D Phantom:

Theta=90.00deg





Phi=0.00deg

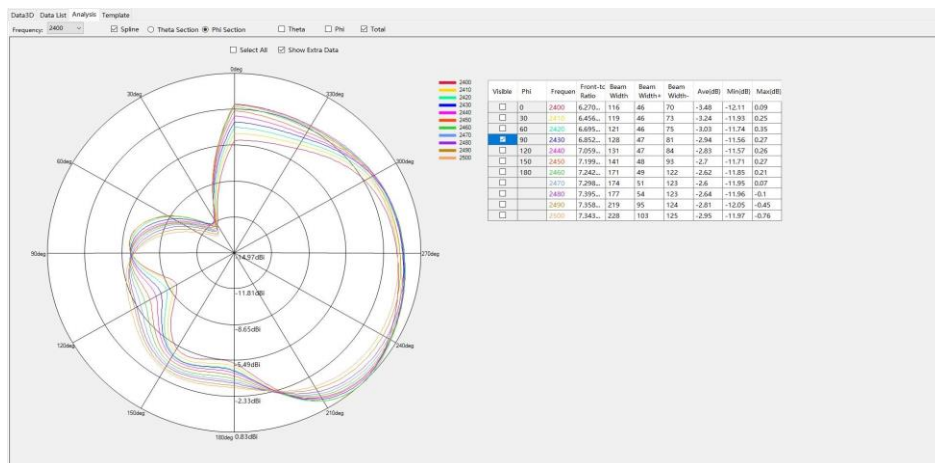


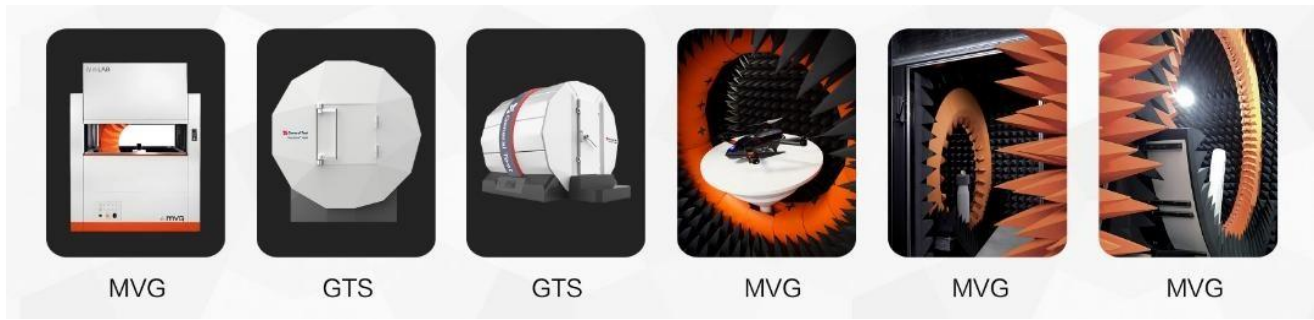
Phi=90.00deg

二：Antenna 3D Chamber data

		Free field		Head Model	
Without flash	Channel	TRP (dBm)	TIS (dBm)	TRP (dBm)	TIS (dBm)
BT	CH 0	5.1	-93.5	4.2	-92.7
	CH 39	5.8	-94.2	4.4	-93.1
	CH 78	5.5	-93.3	3.9	-92.1

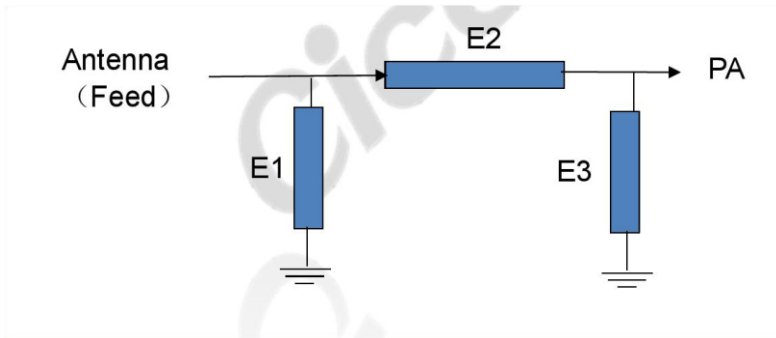
		Free field		Head Model	
With flash	Channel	TRP (dBm)	TIS (dBm)	TRP (dBm)	TIS (dBm)
BT	CH 0	6.0	-94.4	5.3	-93.4
	CH 39	6.9	-94.7	5.5	-93.9
	CH 78	6.6	-94.1	5.0	-93.2





OTA Standard Chamber

三: Antenna match circuit



Element	value
E1	N/C
E2	0Ω
E3	N/C