



Antenna Part Specification

Customer name:	Cosonic Intelligent Technologies Co., Ltd.
Project name:	Recorder Pen
Material category:	FPC
Antenna type:	Dipole
Version:	V2.0
Date:	2024.10.25
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer Address:	505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china



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Change record			
Compile / change date	Reason for change	Changed content	Version
2024.09.19	First edition	First edition	V1.0
2024.10.25	Mass production and production status	Mass production and production status	V2.0

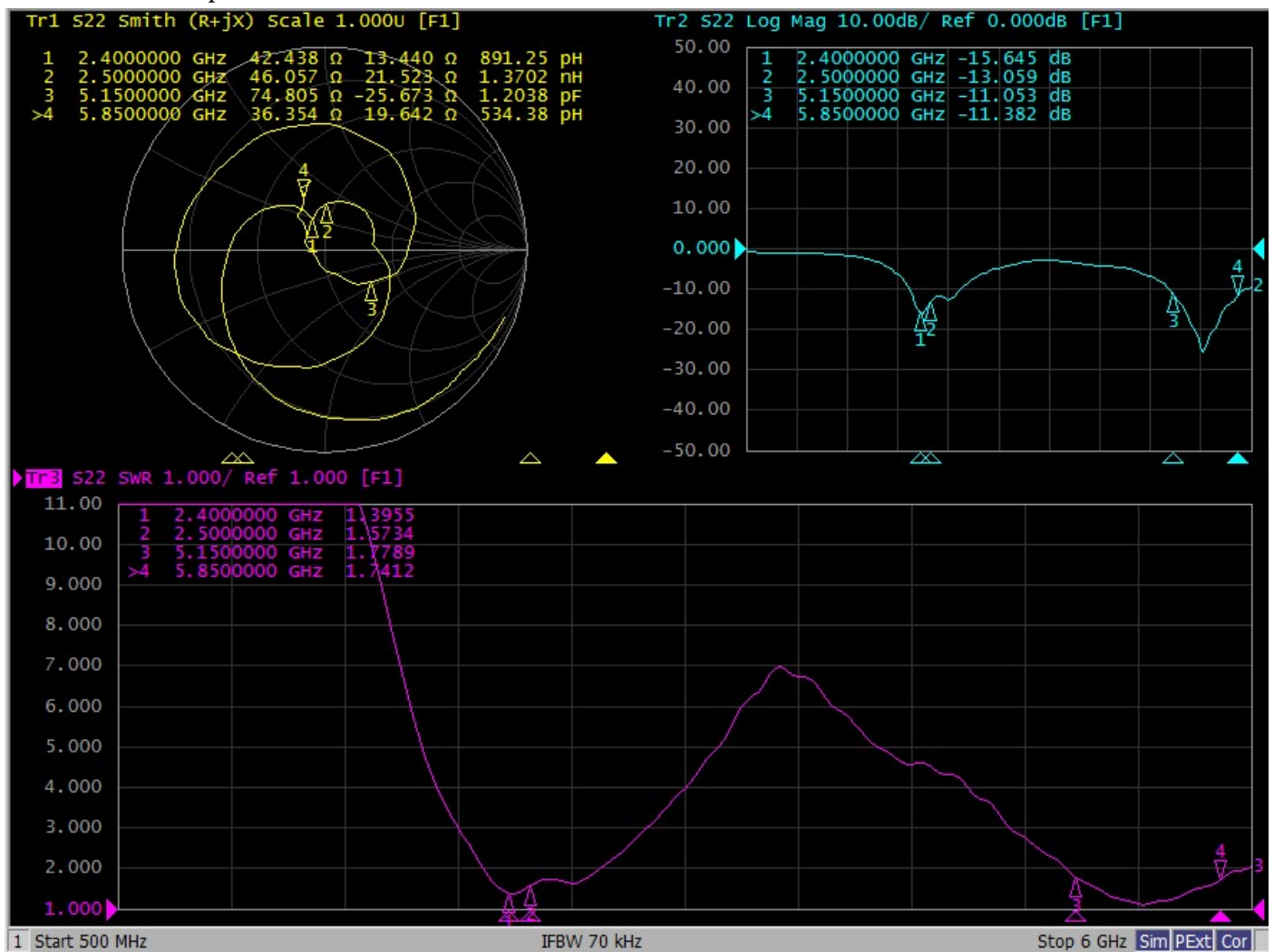


I: The report of passive data



Angilent E5071C

Antenna S11 parameters:





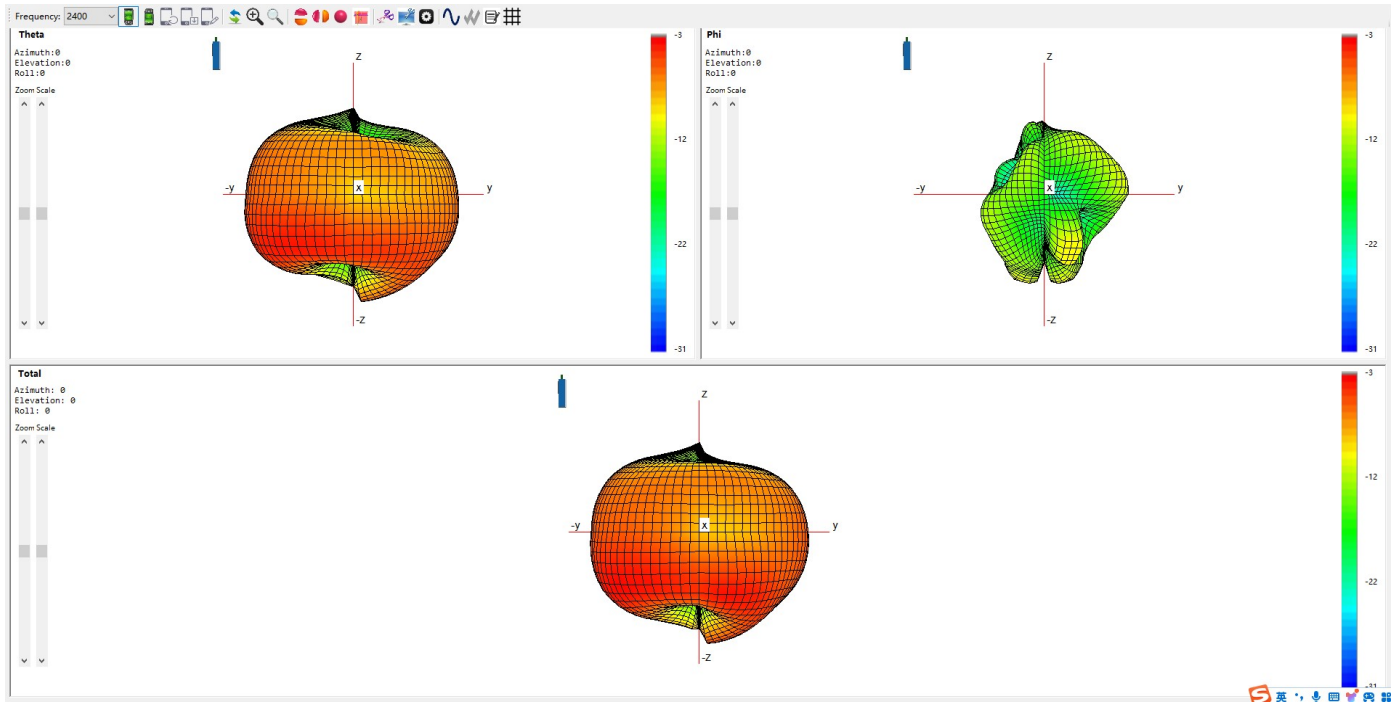
Antenna efficiency and gain:

2.4GHz			
Frequency MHz	Gain (dBi)	efficiency (dB)	efficiency %
2400	-3.4	-4.1	38.5
2410	-3.4	-4.1	38.6
2420	-3.5	-4.1	38.6
2430	-3.9	-4.3	37.0
2440	-4.3	-4.5	35.4
2450	-4.2	-4.5	35.5
2460	-4.4	-4.6	34.6
2470	-4.4	-4.6	34.9
2480	-4.4	-4.6	35.0
2490	-4.5	-4.7	33.7
2500	-4.6	-4.8	33.0
Average value	-4.1	-4.5	35.9

5.15GHz-5.85GHz			
Frequency MHz	Gain (dBi)	efficiency (dB)	efficiency %
5150	-7.1	-6.0	25.1
5200	-6.6	-5.9	25.6
5250	-5.4	-5.8	26.2
5300	-4.2	-5.5	28.5
5350	-3.6	-5.5	28.0
5400	-2.7	-5.3	29.7
5450	-3.1	-5.2	30.3
5500	-3.2	-5.1	31.1
5550	-3.0	-4.9	32.6
5600	-2.6	-4.6	34.8
5650	-2.7	-4.8	33.4
5700	-1.9	-4.3	36.8
5750	-0.3	-4.6	34.6
5800	0.4	-4.6	34.6
5850	0.3	-4.5	35.9
Average value	-3.0	-5.1	31.1

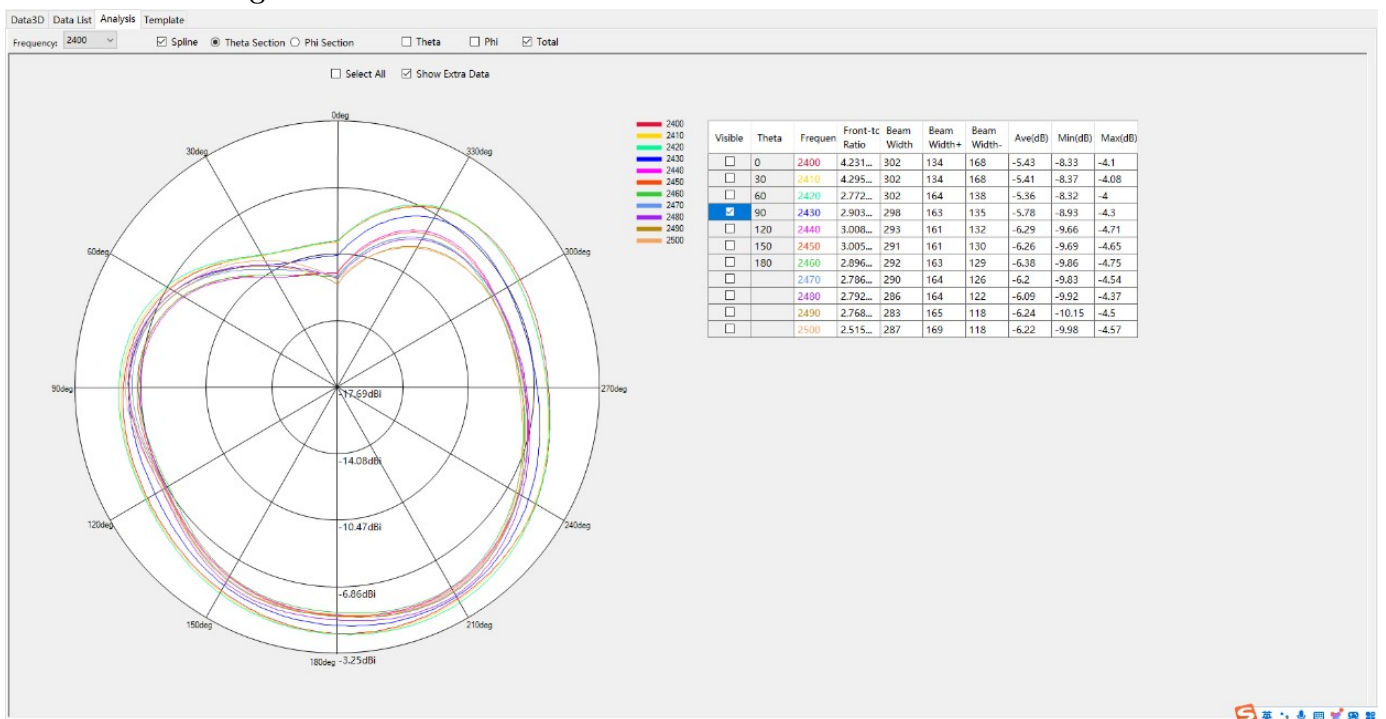


2.4G antenna 3D directional diagram:



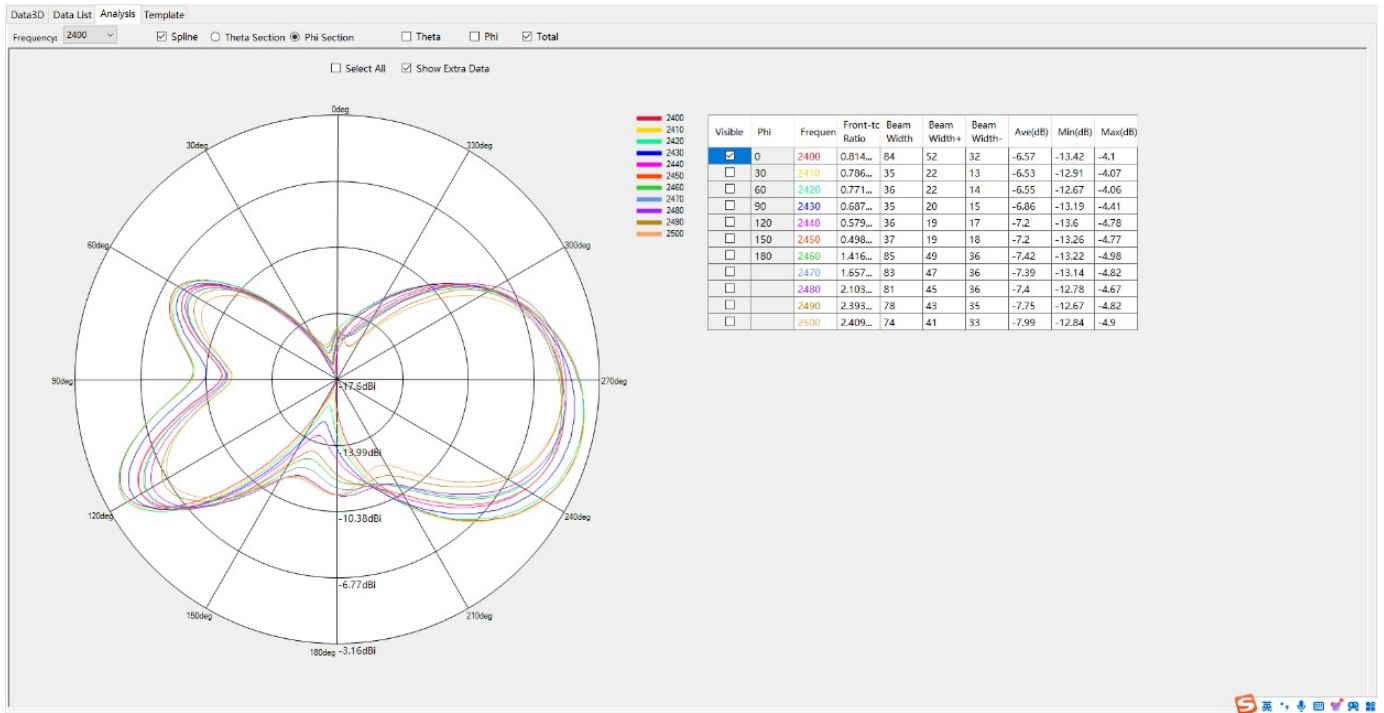
2.4G antenna 2D directional diagram:

Theta=90.00deg

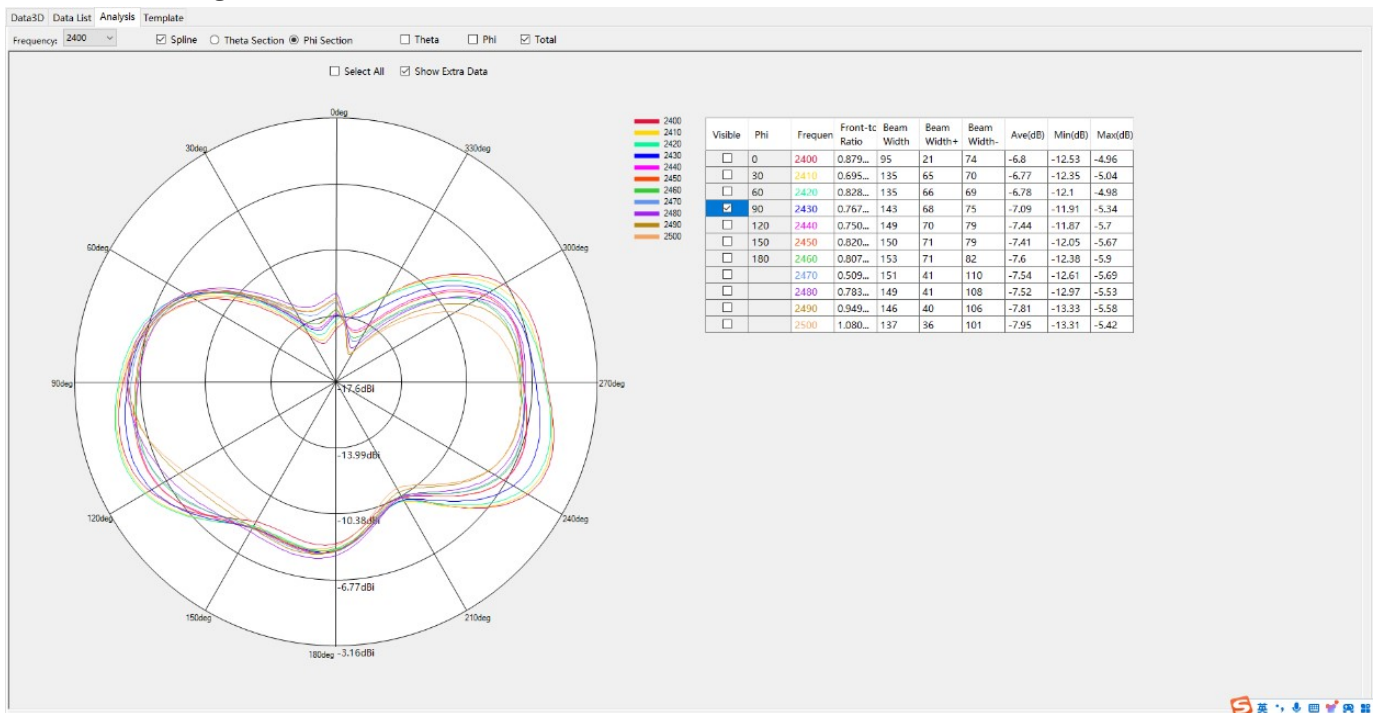




Phi=0.00deg

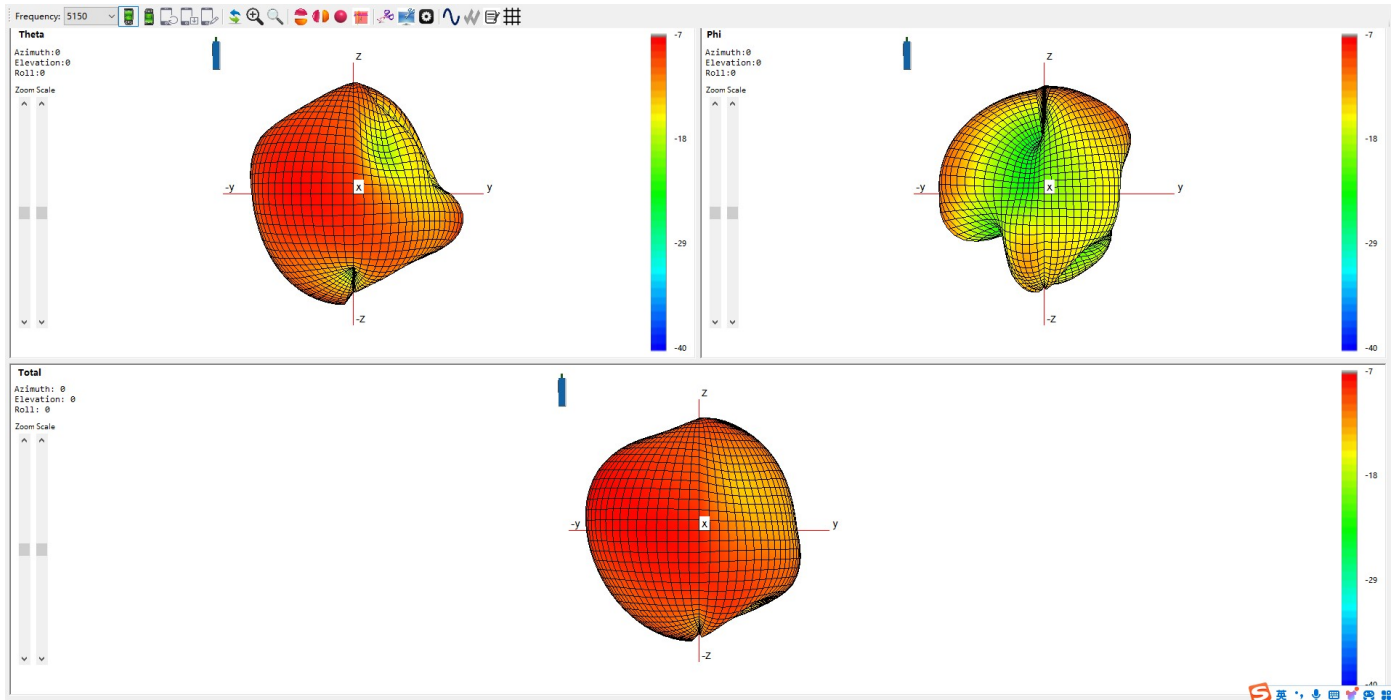


Phi=90.00deg



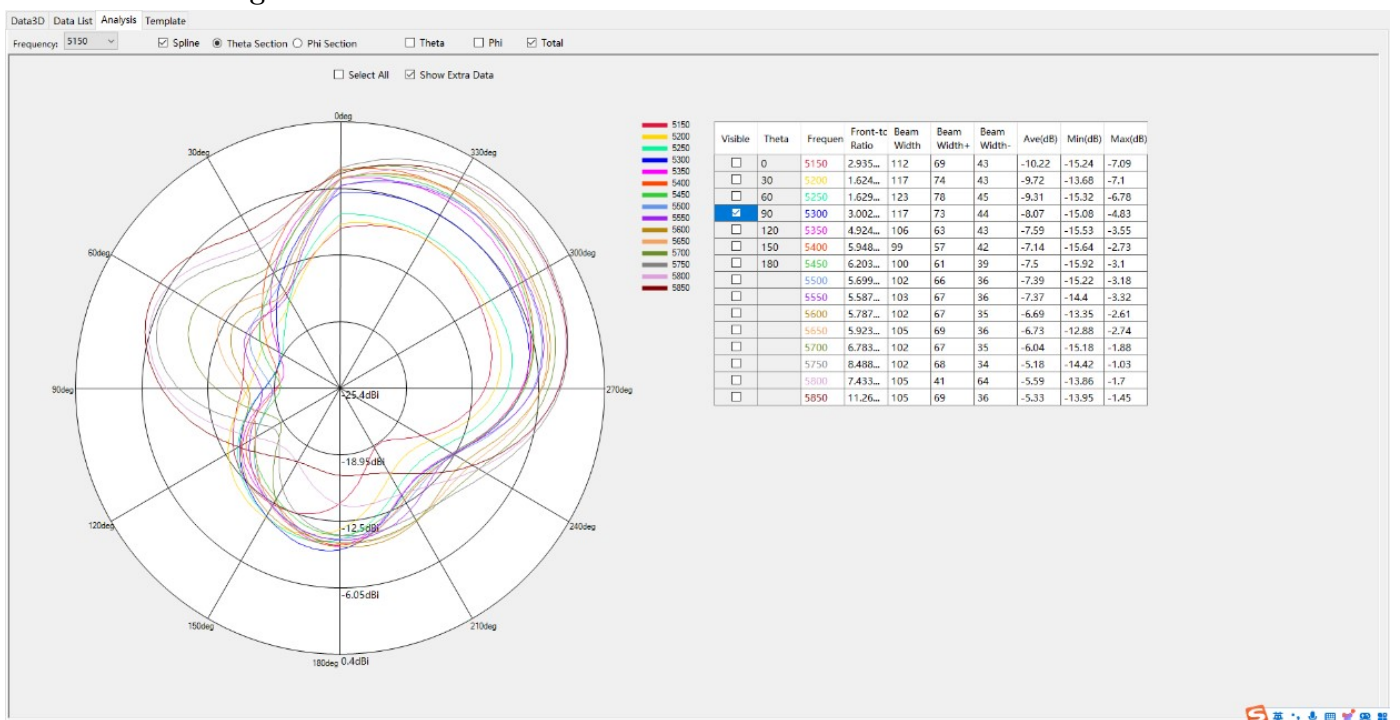


5G antenna 3D directional diagram:



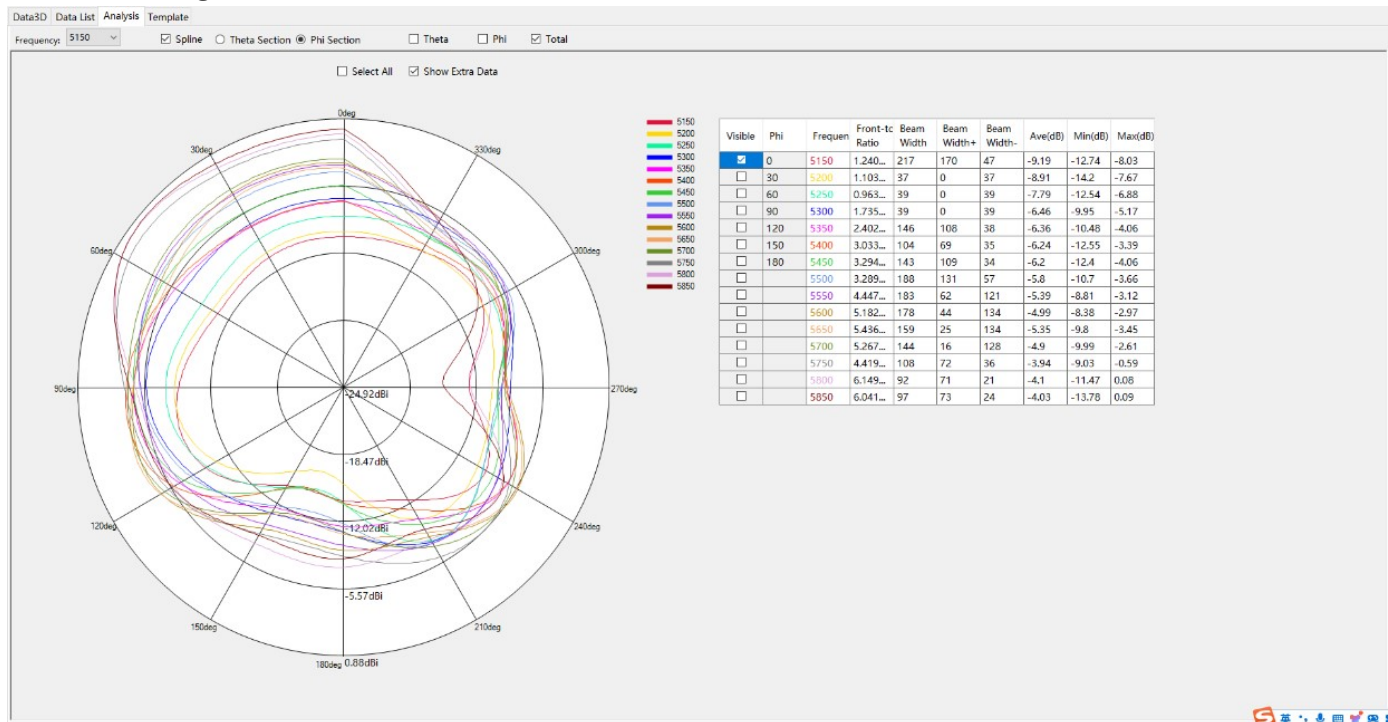
5G antenna 2D directional diagram:

Theta=90.00deg

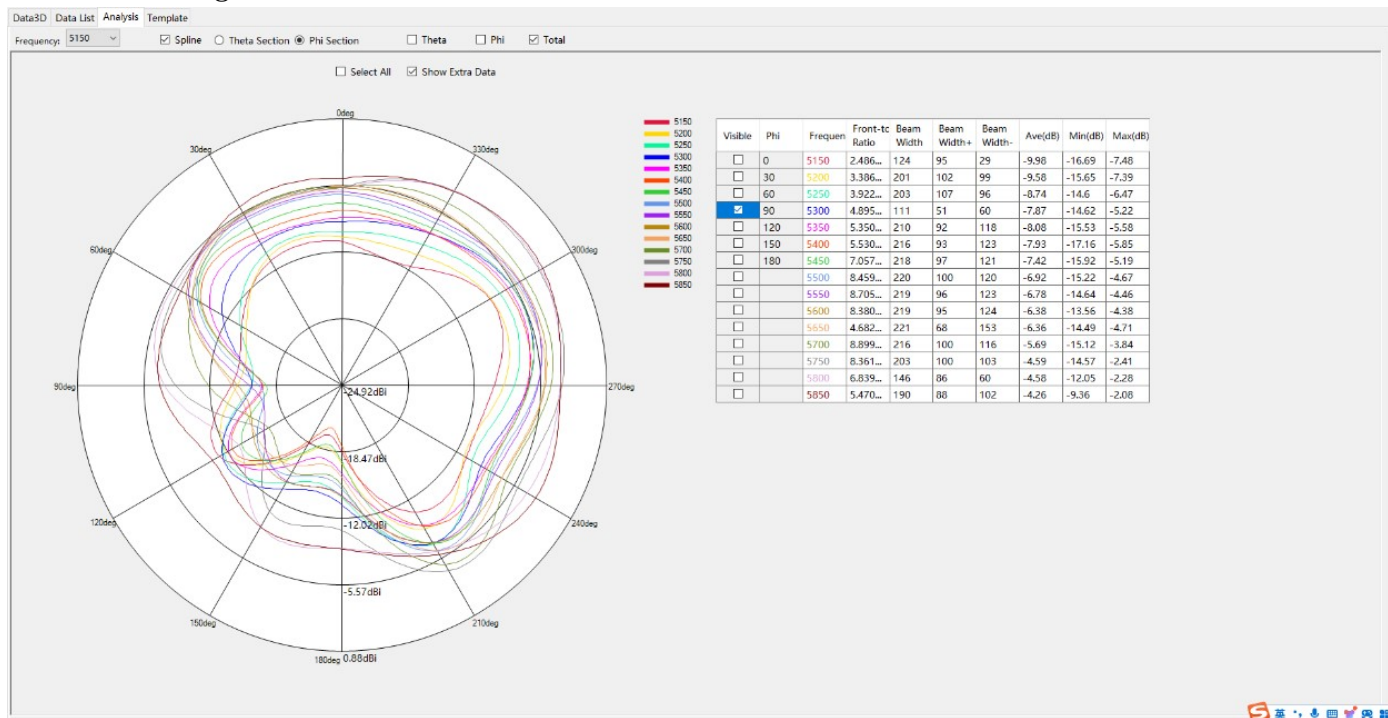




Phi=0.00deg



Phi=90.00deg





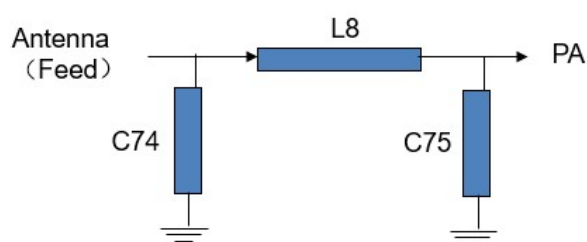
II: 3D Active test report of antenna

6M	Channel	TRP (dBm)	TIS (dBm)
WIFI A	CH 36	4.8	-82.8
	CH 40	4.7	-83.6
	CH 48	3.8	-83.7
11M	Channel	TRP (dBm)	TIS (dBm)
WIFI B	CH 1	14.7	-82.8
	CH 6	14.8	-80.7
	CH 11	15.2	-82.4

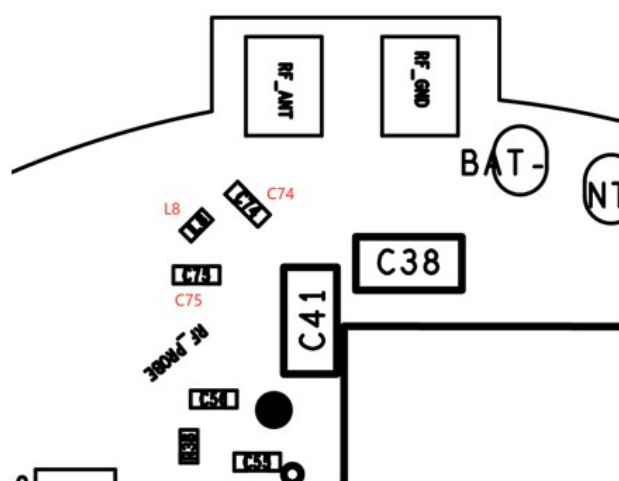


OTA Standard Chamber

III: Matching circuit



Element	Value
C74(01005)	N/C
L8(01005)	2.0pF
C75(01005)	N/C





IV: Structure file

