

Antenna_Performance_Description20240201_N16T

Antenna Performance Description

Applicant: Xiaomi Communications Co., Ltd

Product description: Mobile Phone

Model Name:24069PC21G

FCC ID: 2AFZZPC21G

Test date: 2024/01

Tester:

张家旺

软件版本: 工厂版

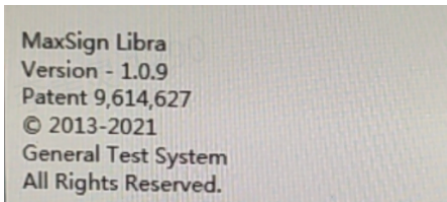
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Antenna Model Name		Antenna Pattern	Antenna Type	Manufacturer	Test party of Antenna gain
ANT8/11	N16T	Metal Frame	PIFA Antenna	Huizhou Winone Precision Technology Co.,Ltd. (Address: xinwanda Industrial Park, Dongpo Avenue, Yuanzhou Town, BOLUO County) TONGDA (Xiamen)TECHNOLOGY CO.,LTD. (No. 89 DingShan Middle Road, Dongfu Town, Haicang District, Xiamen City, Fujian Province, 361027, P.R.China)	Rui Xiang Xun Tong Communication Technology Co.Ltd.
ANT9/10	N16T	Metal Frame	PIFA Antenna	Huizhou Winone Precision Technology Co.,Ltd. (Address: xinwanda Industrial Park, Dongpo Avenue, Yuanzhou Town, BOLUO County) TONGDA (Xiamen)TECHNOLOGY CO.,LTD. (No. 89 DingShan Middle Road,	Rui Xiang Xun Tong Communication Technology Co.Ltd.

				Dongfu Town, Haicang District, Xiamen City, Fujian Province, 361027, P.R.China)	
NFC (36.4mm ×40.8mm ×0.2mm)	FPC antenna	N/A	Coil Antenna	Shanghai Deman Electronic Technology Co., Ltd. (Plant 3, No. 1259, Pingan Road, Zhuanqiao Town, Minhang District, Shanghai)	N/A

Test instrument:GTS2800

Software version



ANT8:

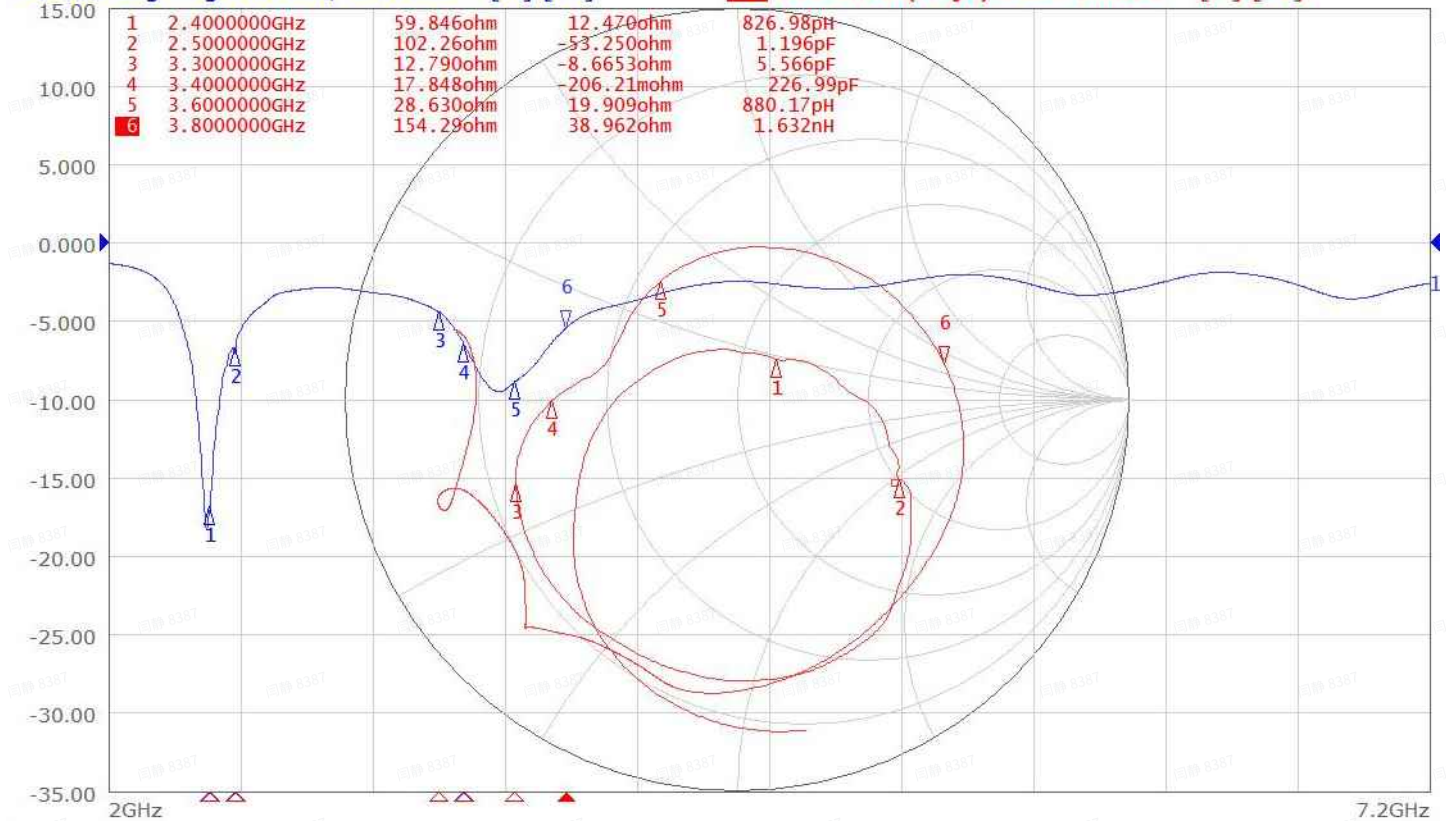
Band	ant 8	
	Effi.(dBi)	peak gain(dBi)
2.4G/BT	-6.3	-1.9

S11

ANT8:

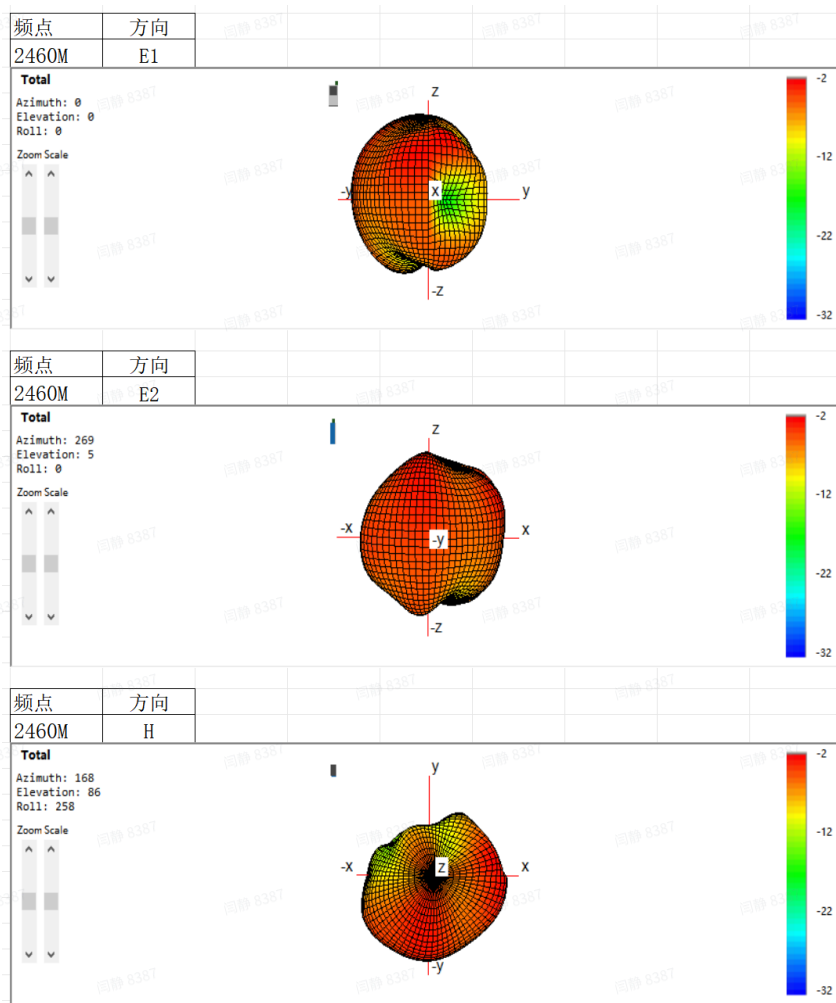
Tr1 S11 Log Mag 5.000dB/ 0.000dB [M] [F1]

Tr2 S11 Smith(R+jX) Scale 1.000U [M] [F1]



CH4 Cor Sim Start 2GHz 1601 BW 50k 0.00 dBm Stop 7.2GHz

2.4G



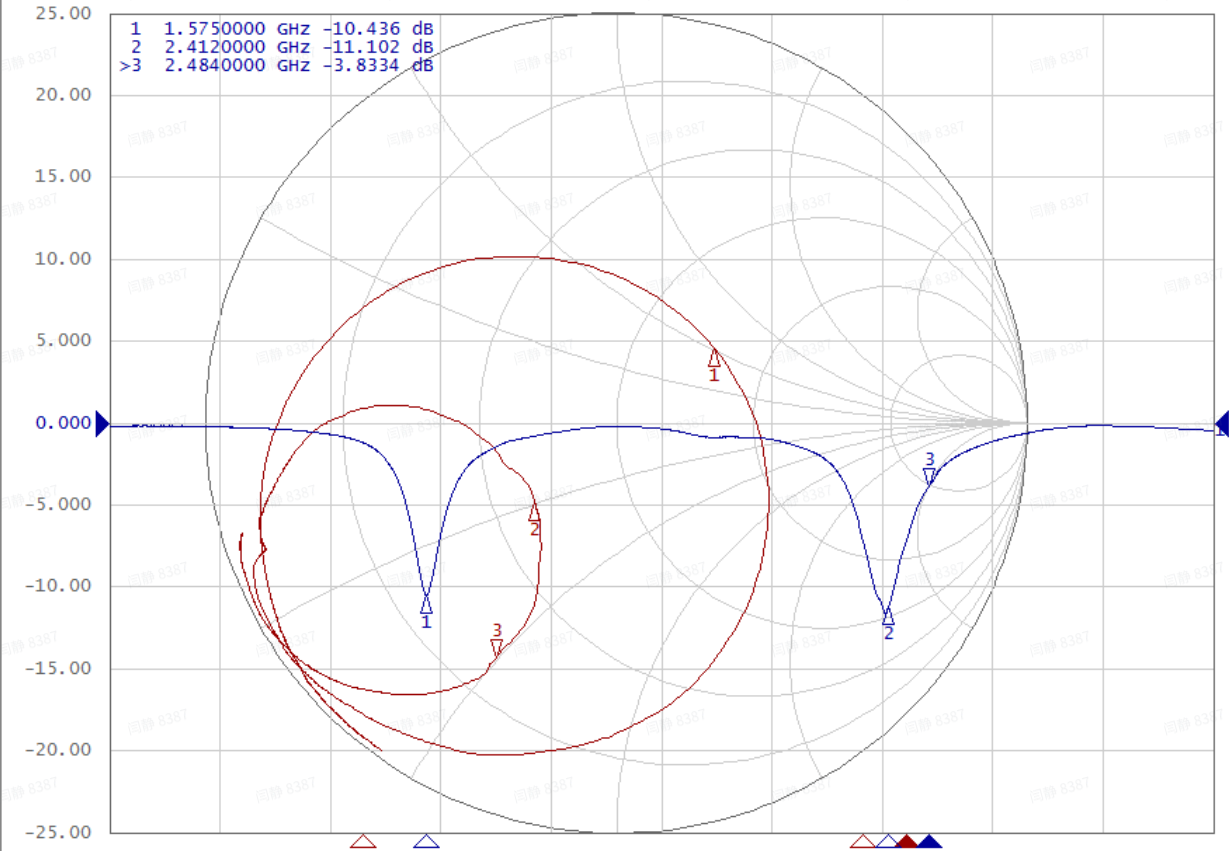
ANT9:

Band	ant9	
	Effi.(dBi)	peak gain(dBi)
2.4G/BT	-6.3	-2.1

S11:

ANT9:

Tr1 S11 Log Mag 5.000dB/ Ref 0.000dB [F1]
Tr2 S11 Smith (R+jX) scale 1.000u [F1]

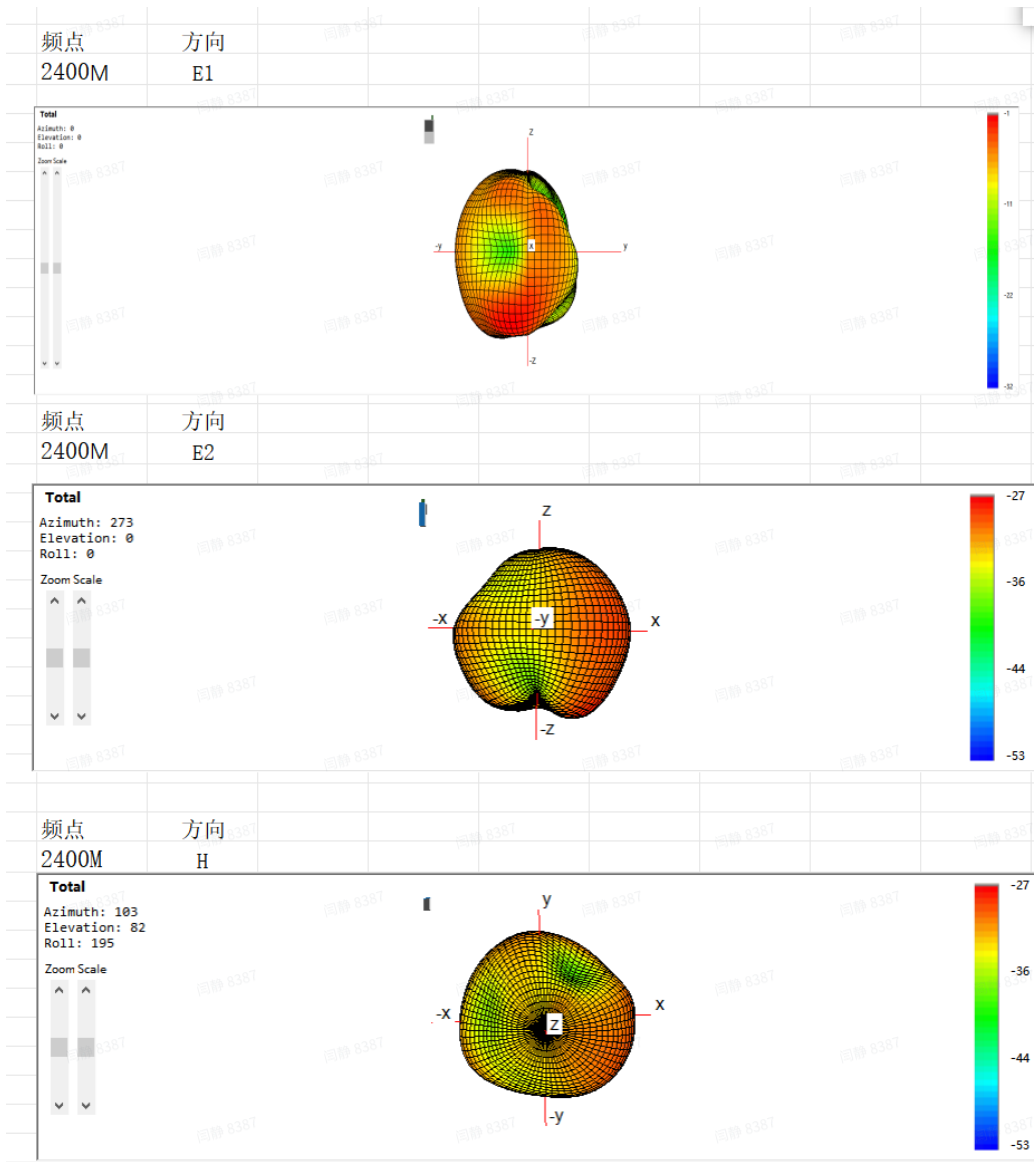


1 Start 1 GHz IFBW 70 kHz Stop 3 GHz Sim PExt Cor !

Meas Stop ExtRef Svc 2024-01-11 17:21

- Measure OPEN
- All
- Port 1
- Port 2
- Return

2.4G:



ANT10:

Band	ant10	
	Effi.(dBi)	peak gain(dBi)
5G (5.15-5.25GHZ)	-6.1	-2.2
5G (5.25-5.35GHZ)	-5.1	-2.1
5G (5.47-5.725GHZ)	-4.8	-2
5G (5.725-5.85GHZ)	-5.6	-1.9
6e(5.925-6.425GHz)	-6.4	-0.37
6e(6.425-6.525GHz)	-5.7	-0.35
6e(6.525-6.875GHz)	-6.1	-0.47

6e(6.875-7.125GHz)

-8

-1.75

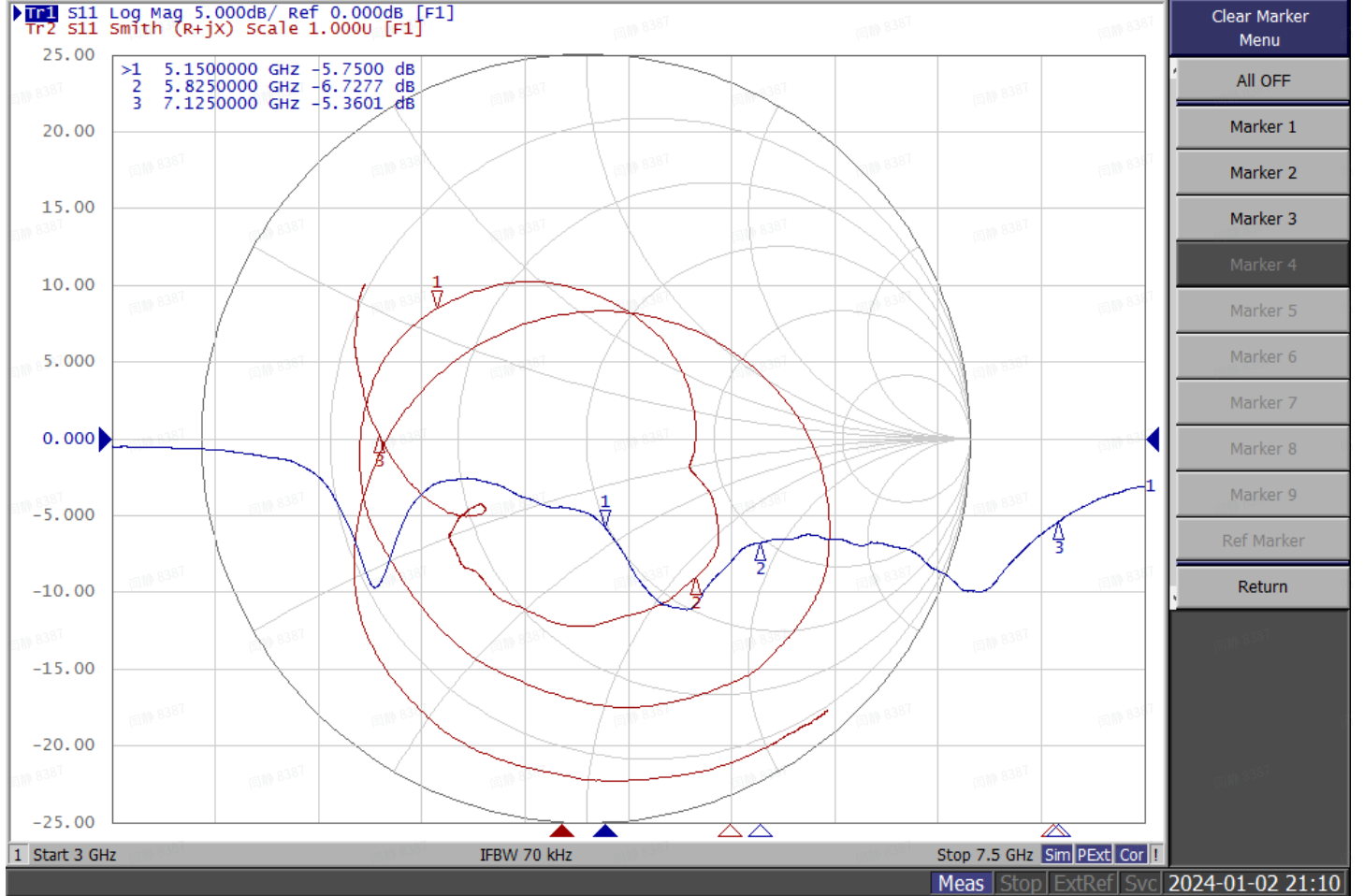
S11:

ANT10:

E5071C Network Analyzer

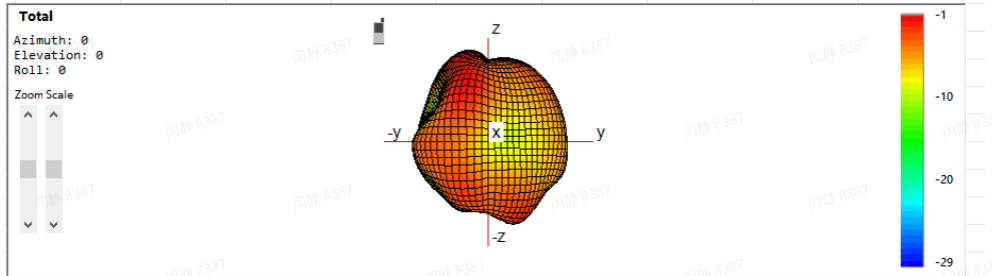
1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

Resize

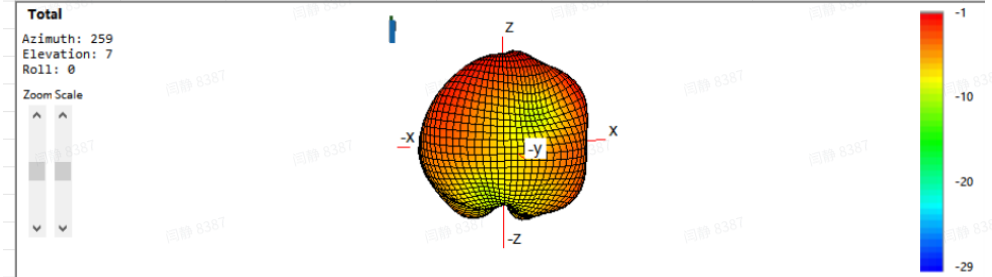


5G:

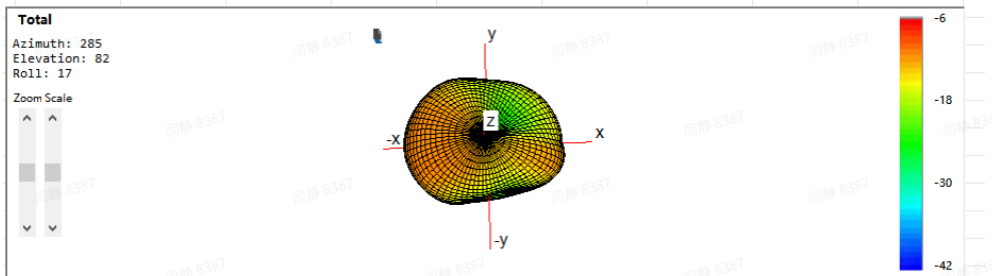
频点	方向
5750M	E1



5750M	E2
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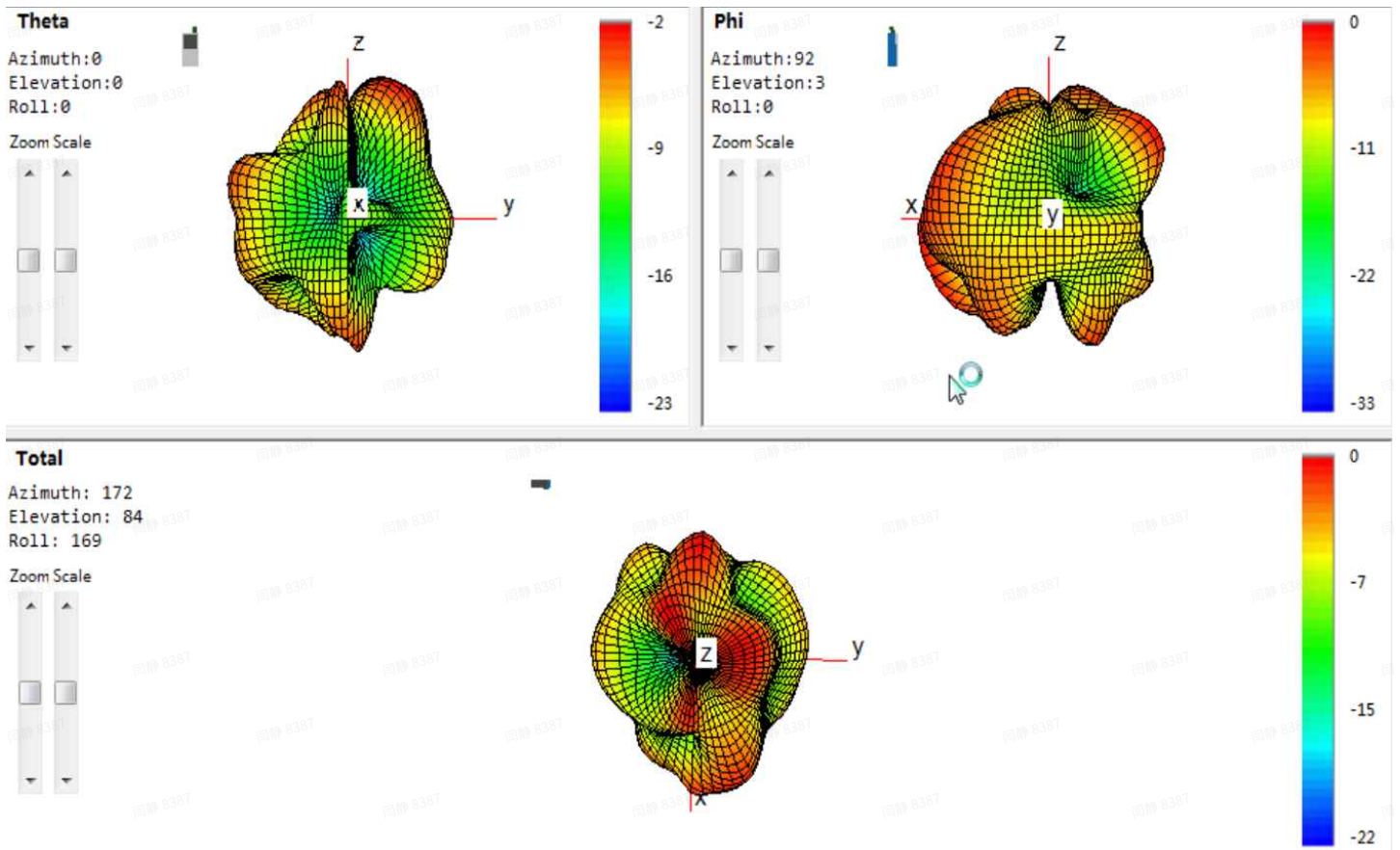


频点	方向
5750M	H



6E:

频点	方向
6500MHz	



ANT11:

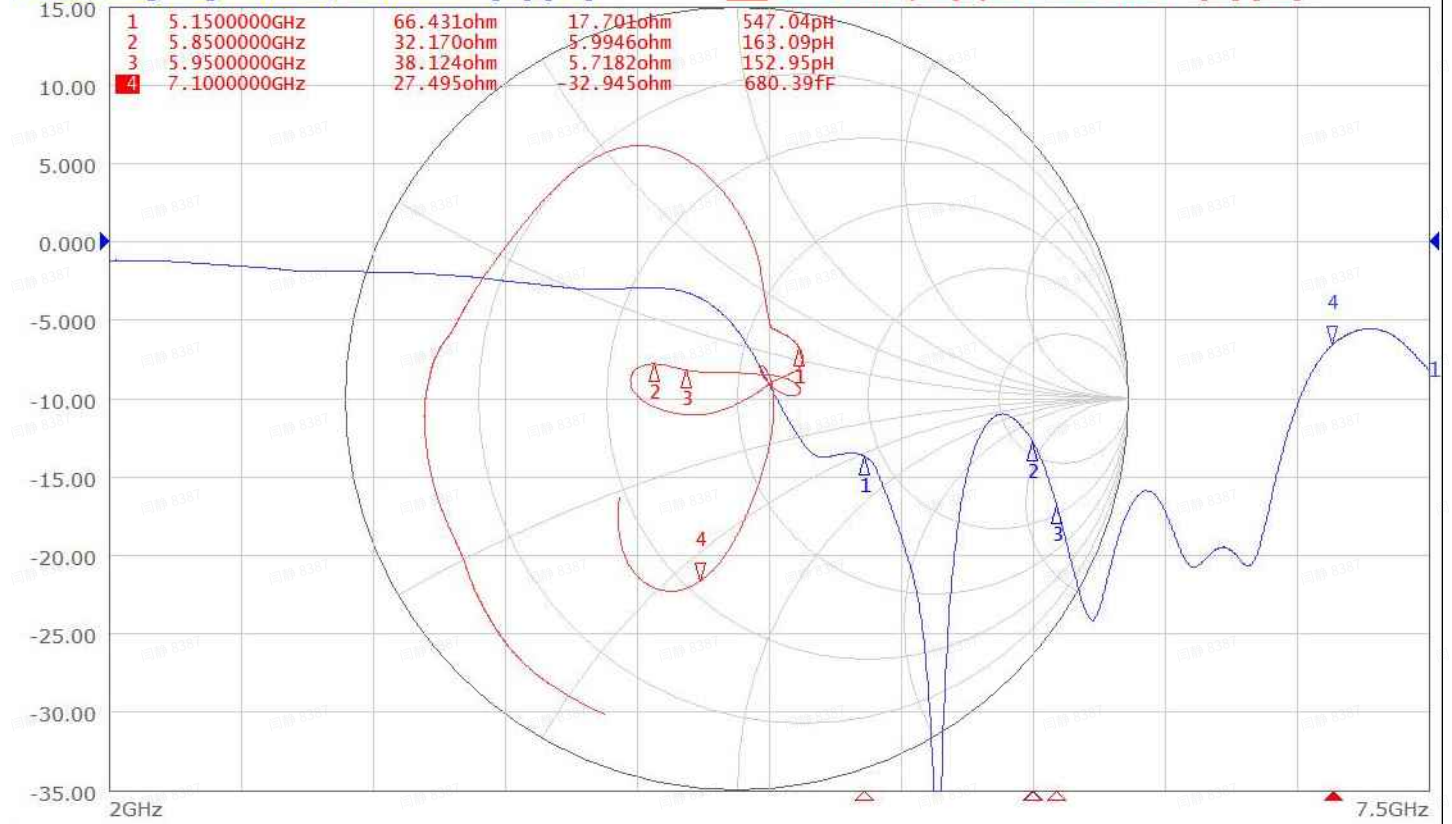
Band	ant 11	
	Effi.(dBi)	peak gain(dBi)
5G (5.15-5.25GHZ)	-7.7	-2.7
5G (5.25-5.35GHZ)	-7.3	-4.2
5G (5.47-5.725GHZ)	-6	-2
5G (5.725-5.85GHZ)	-5.8	-2
6e(5.925-6.425GHZ)	-7.2	-1.44
6e(6.425-6.525GHZ)	-7	-2.11
6e(6.525-6.875GHZ)	-7.5	-2.47
6e(6.875-7.125GHZ)	-8	-1.81

S11

ANT11:

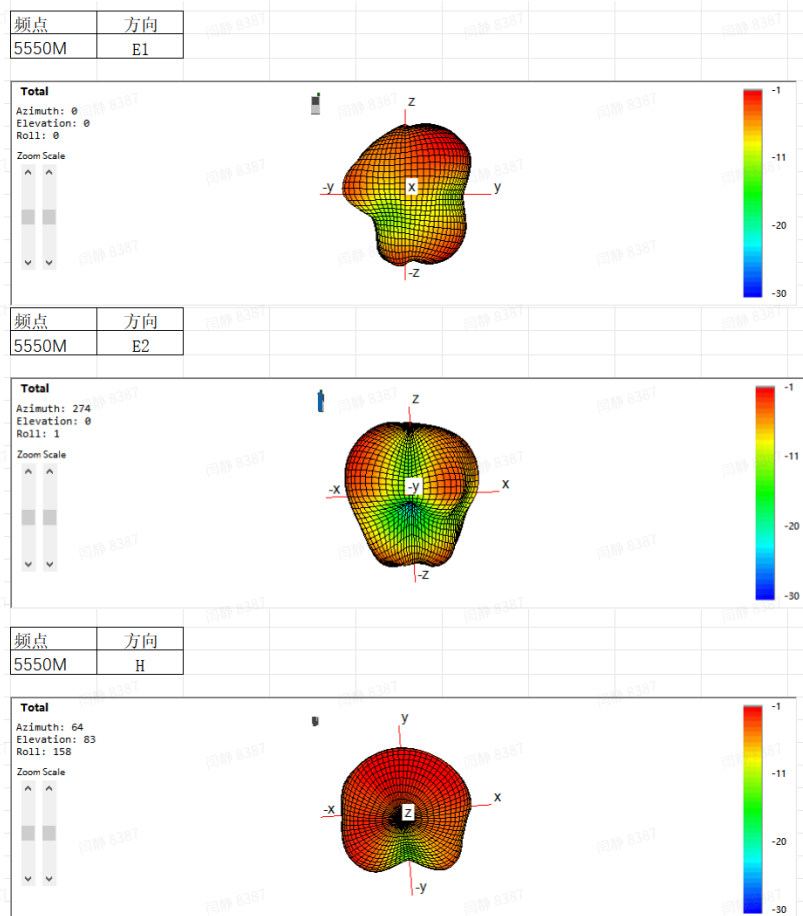
Tr1 S11 Log Mag 5.000dB/ 0.000dB [M] [F1]

Tr2 S11 Smith(R+jX) Scale 1.000U [M] [F1]



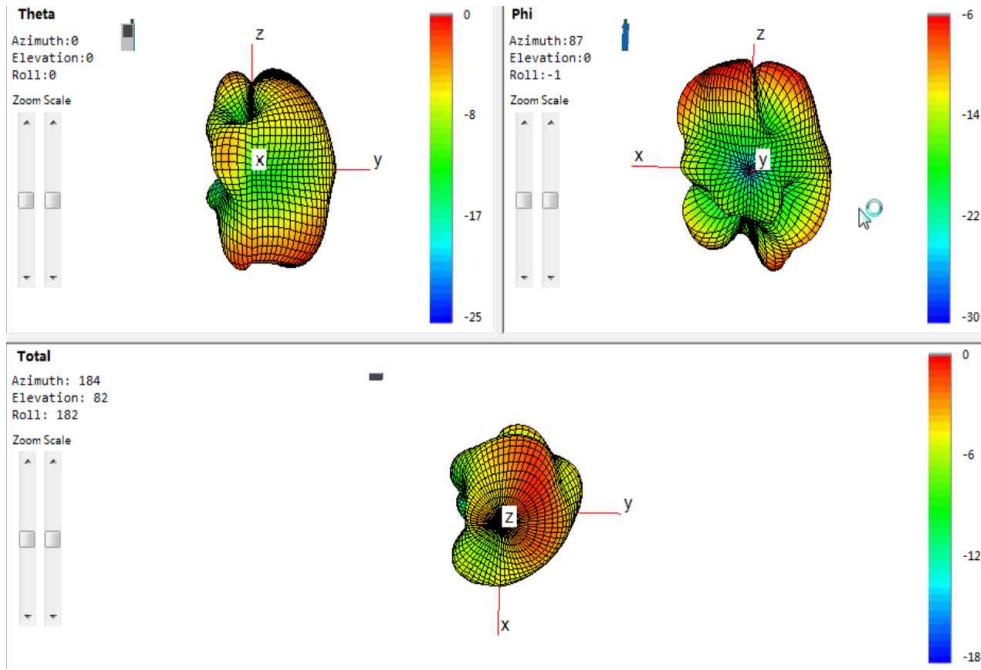
CH3 Cor Sim Start 2GHz 1601 BW 50k 0.00 dBm Stop 7.5GHz

5G



6e:

频点	方向
6250MHz	



Main Test Instruments:

Name	Manufacturer	Model name	Serial Number	Cal., Date	Exp., Date
2G/3G/4G Vector Network Analyzer	KEYSIGHT	E5071C	My46733920	2023/07/20	2024/07/20
OTA TEST SYSTEM	GENERAL TEST	RayZone 2800	CT10120480B5 054	2023/07/20	2024/07/20