

# Antenna\_Performance\_Description\_ 20230710\_N16U

## Antenna Performance Description

**Applicant:** Xiaomi Communications Co., Ltd

**Product description:** Mobile Phone

**Model Name:** 23090RA98G

**FCC ID:** 2AFZZRA98G

Test date: 2023/07/10

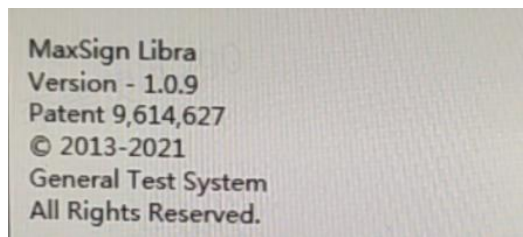
**Tester:**

赖敏

Antenna	Model Name	Antenna Pattern	Antenna Type	Manufacturer	Test party of Antenna gain
ANT9/10	N16U	Metal Frame	PIFA Antenna	<p>Huizhou Winone Precision Technology Co.,Ltd. (Address: xinwanda Industrial Park, Dongpo Avenue, Yuanzhou Town, BOLUO County)</p> <p>TONGDA (Xiamen)TECHNOLOGY CO.,LTD. (No. 89 DingShan Middle Road, Dongfu Town, Haicang District, Xiamen City, Fujian Province, 361027, P.R.China)</p>	<p>BeiJing Innowave Communication Technology Co.,Ltd</p> <p>Luxshare Precision Industry Co., Ltd</p>
ANT8/11	N16U	Metal Frame	PIFA Antenna	<p>Huizhou Winone Precision Technology Co.,Ltd. (Address: xinwanda Industrial Park, Dongpo Avenue, Yuanzhou Town, BOLUO County)</p> <p>TONGDA (Xiamen)TECHNOLOGY CO.,LTD. (No. 89 DingShan Middle Road, Dongfu Town, Haicang District, Xiamen City, Fujian Province, 361027, P.R.China)</p>	<p>BeiJing Innowave Communication Technology Co.,Ltd</p> <p>Luxshare Precision Industry Co., Ltd</p>
NFC (41.44mm×32.29mm×0.21mm)	N16U	N/A	Coil Antenna	Shenzhen Deman electronic co., Ltd. (Sunlord Industrial Park,Guanlan Da Fu Yuan,Guanguang Road,Long Hua,Shenzhen)	N/A

Test instrument:GTS2800

Software version

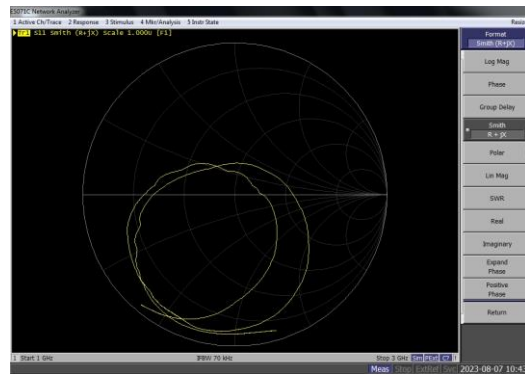
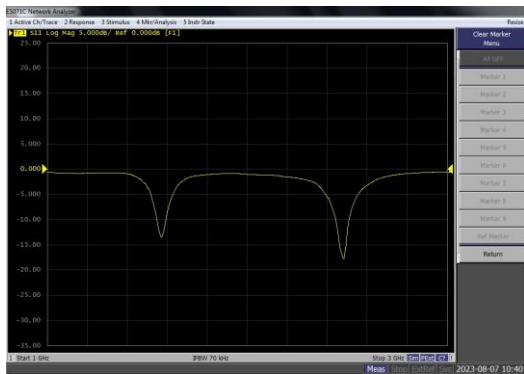


## ANT9/10:

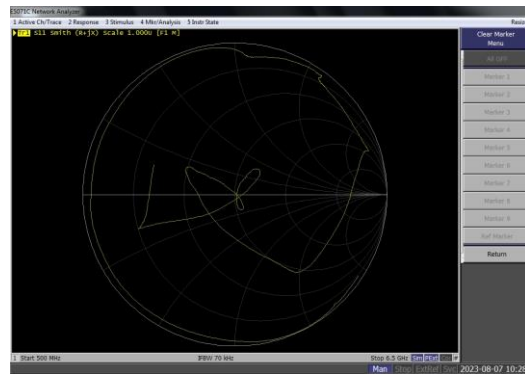
Band	ANT 9/10	
	Effi.(dBi)	peak gain(dBi)
2.4G	-7.8	-3.3
5G (5.15-5.25GHZ)	-8.2	-2.2
5G (5.25-5.35GHZ)	-7.6	-2.7
5G (5.47-5.725GHZ)	-6.2	-0.9
5G (5.725-5.85GHZ)	-6.3	-1

# S11:

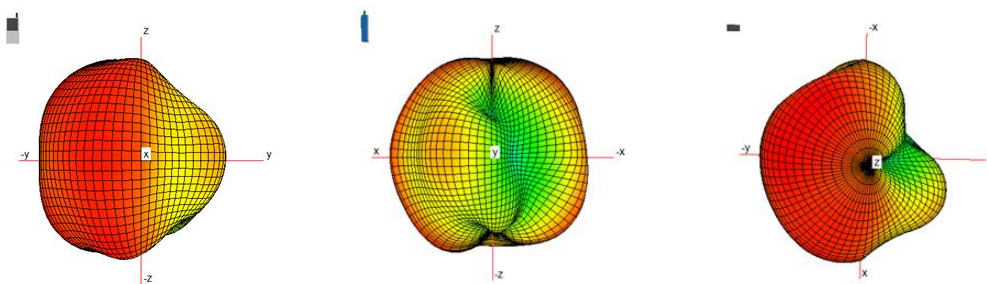
2.4G



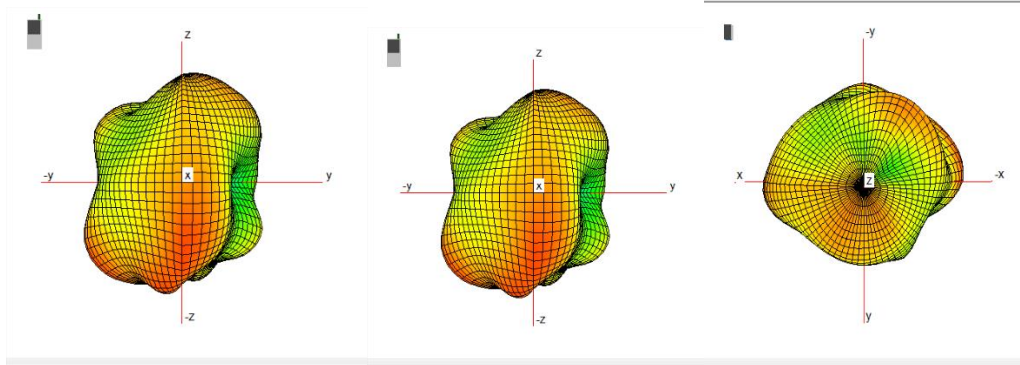
5G



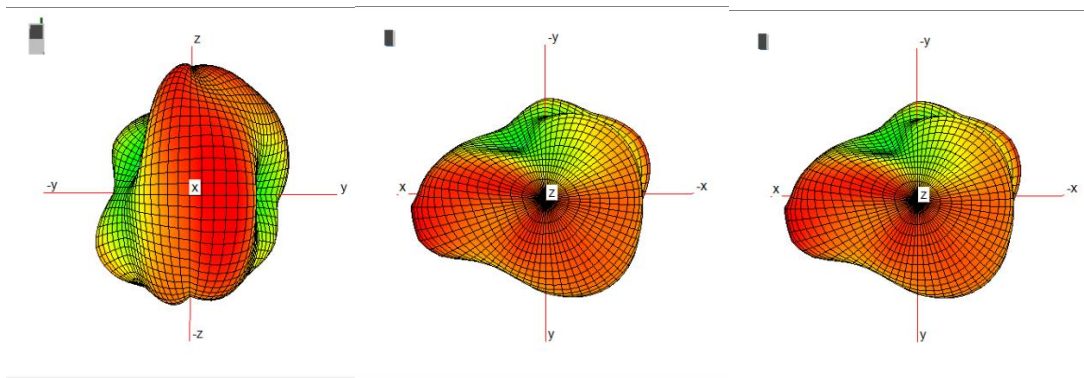
ANT9 2450:



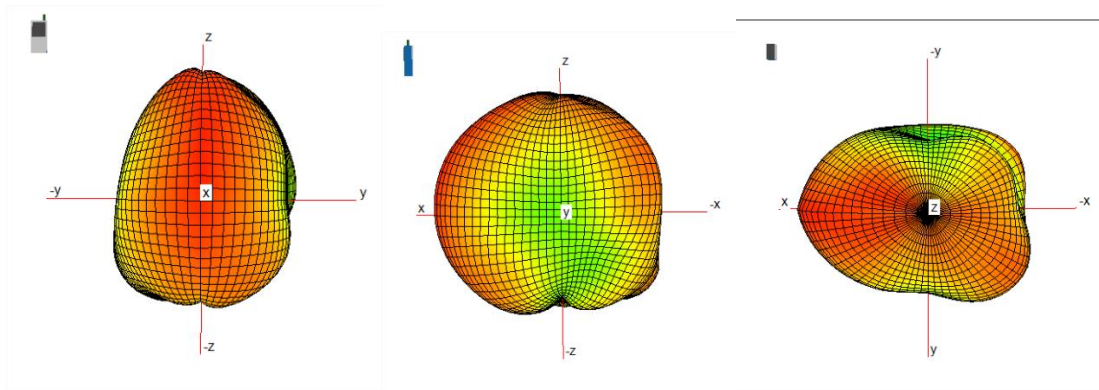
ANT10 5150:



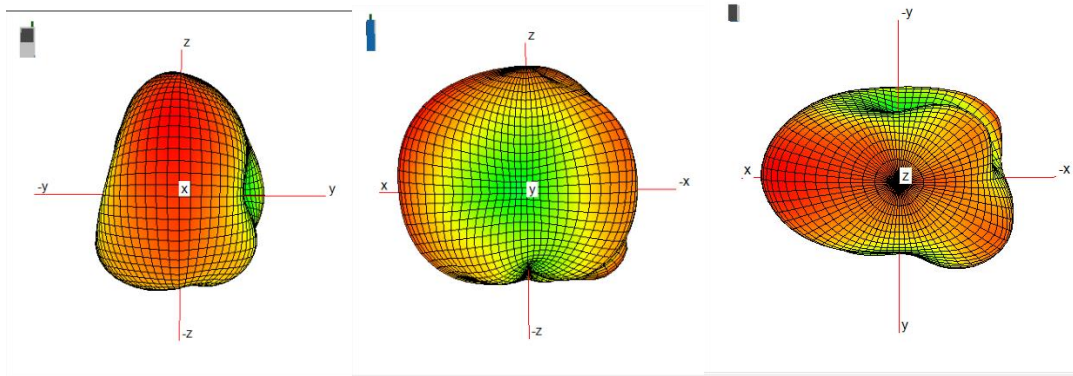
5350:



5600:



5725:

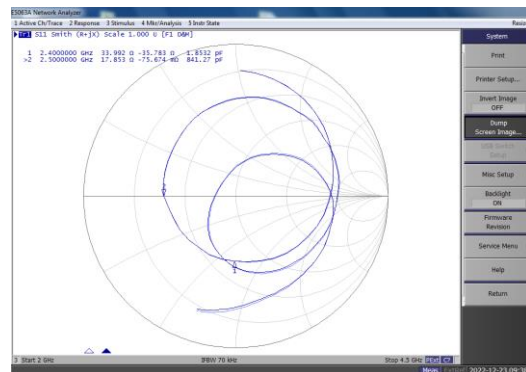
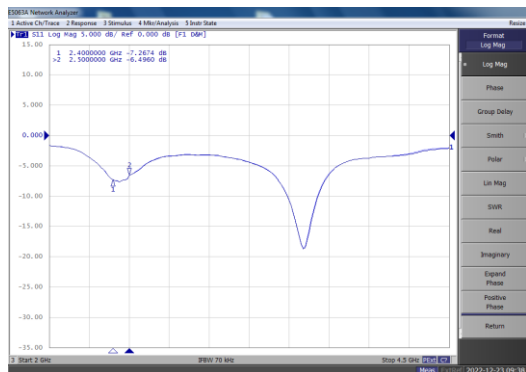


# ANT8/11:

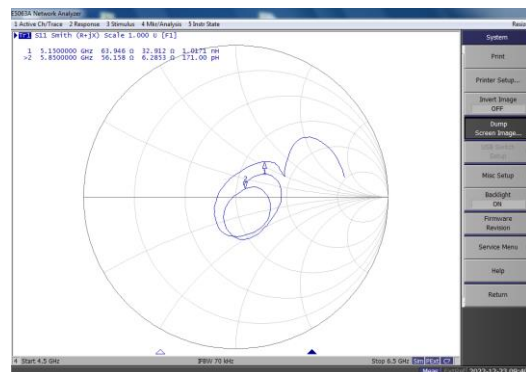
Band	ANT 8/11	
	Effi.(dBi)	peak gain(dBi)
2.4G	-5.3	0.1
5G (5.15-5.25GHZ)	-6.4	-1.9
5G (5.25-5.35GHZ)	-6.0	-2.1
5G (5.47-5.725GHZ)	-5.6	-0.9
5G (5.725-5.85GHZ)	-5.9	-1.2

S11

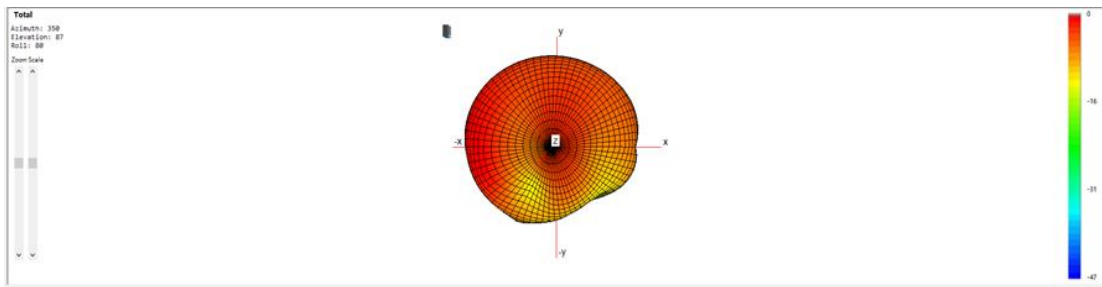
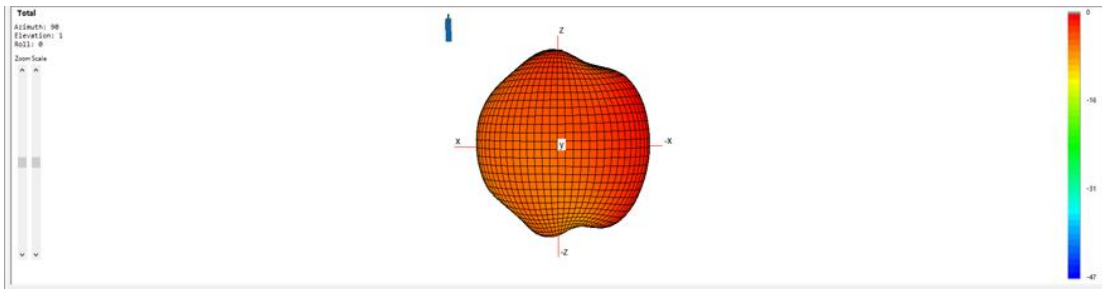
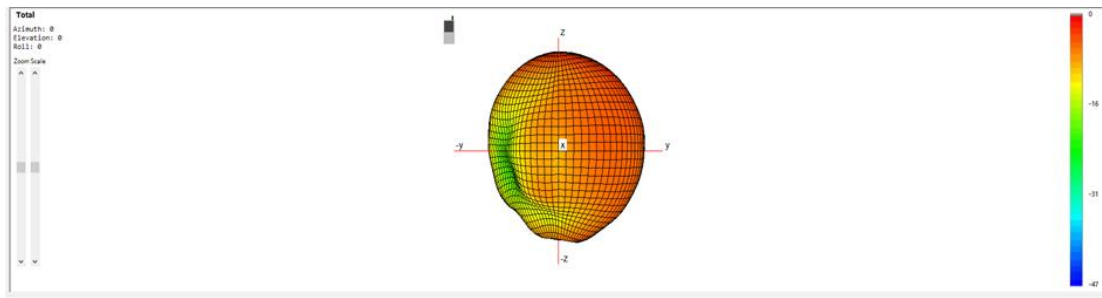
2.4G



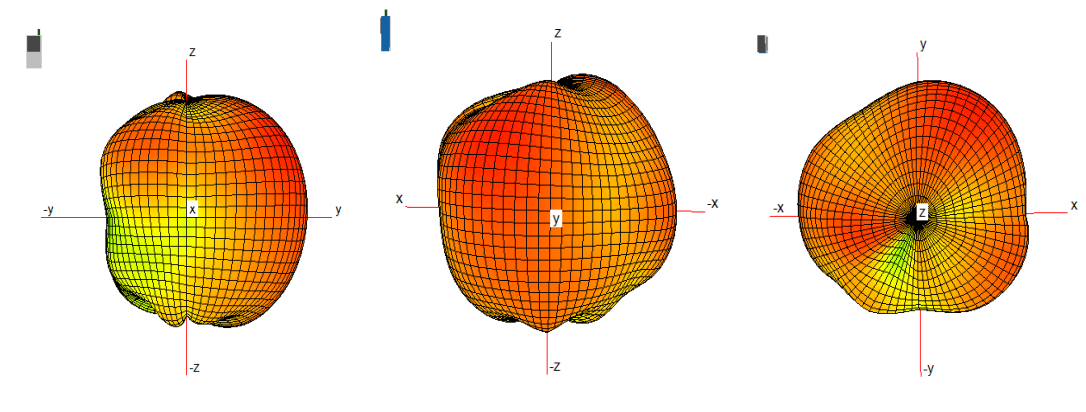
5G



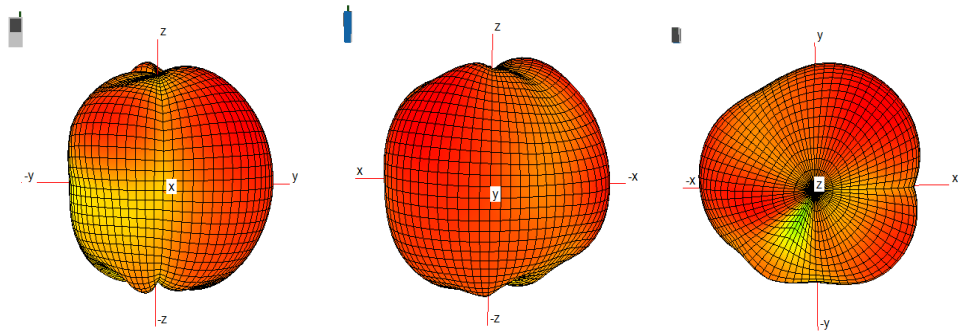
### ANT8 2450:



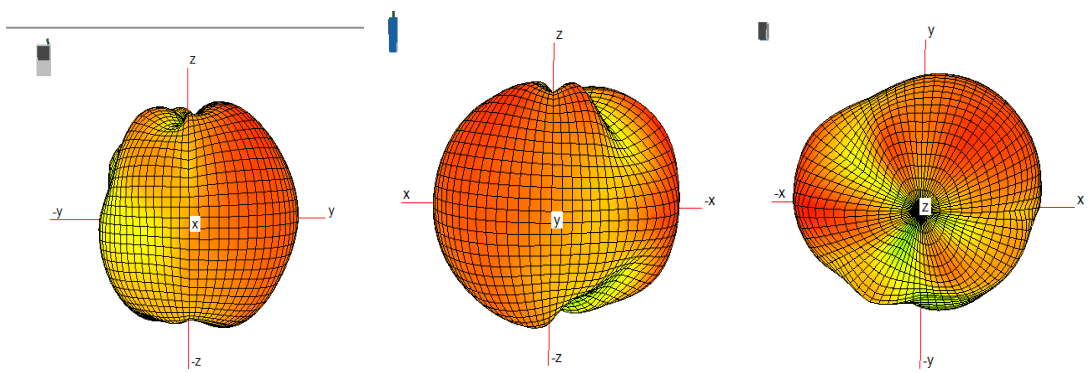
### ANT11 5220:



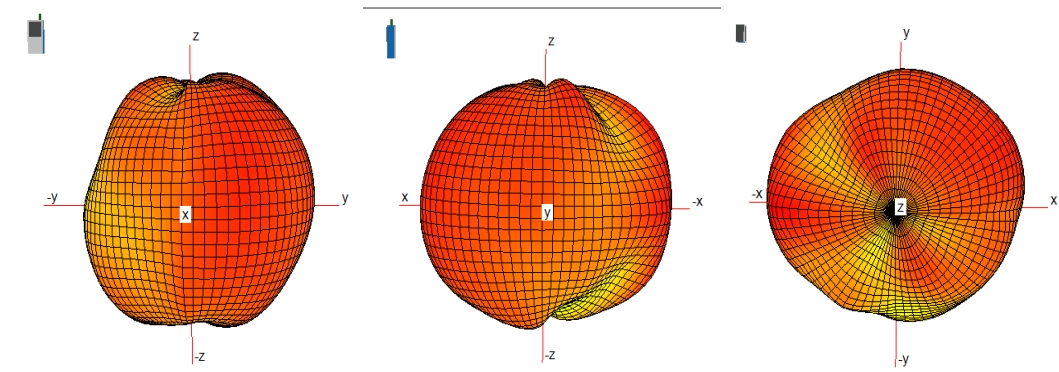
5320:



5680:



5780:





## Main Test Instruments:

Name	Manufacturer	Model name	Serial Number	Cal., Date	Exp., Date
2G/3G/4G Vector Network Analyzer	KEYSIGHT	E5071C	My46733920	2022/12/30	2023/12/30
OTA TEST SYSTEM	GENERAL TEST	RayZone 2800	CT10120480B5 054	2022/12/30	2023/12/30