

Antenna Performance Description

Applicant: Xiaomi Communications Co., Ltd

Product description: Mobile Phone

Model Name: 2510ERA8BG

FCC ID: 2AFZZRA8BG

Test date: 2024/08

Antenna	Model Name	Antenna Pattern	Antenna Type	Manufacturer	Manufacturer Address	Test party of antenna gain
ANT 11/13	2510E RA8B G	Metal Frame	PIFA Antenna	Guilin Lingyi Intelligent Manufacturing Co., Ltd Zhejiang Yingwang Precision Technology Co., Ltd.	(Building 8, Guilin Lingyi Intelligent Manufacturing Co., Ltd., B3-4, west of Yang 25th Road, Lingui District, Guilin City, Guangxi) (Yingwang Industrial Park, No. 666, Chuangxin Road, Huangzhai Town, Pujiang County, Jinhua City, Zhejiang Province)	Beijing Xiaomi Communications Co.,Ltd.
ANT 12	2510E RA8B G	Metal Frame	PIFA Antenna	Guilin Lingyi Intelligent Manufacturing Co., Ltd Zhejiang Yingwang Precision Technology Co., Ltd.	(Building 8, Guilin Lingyi Intelligent Manufacturing Co., Ltd., B3-4, west of Yang 25th Road, Lingui District, Guilin City, Guangxi)	Beijing Xiaomi Communications Co.,Ltd.

					(Yingwang Industrial Park, No. 666, Chuangxin Road, Huangzhai Town, Pujiang County, Jinhua City, Zhejiang Province)	
NFC (47.5mm×56.1mm×0.24mm)	2510E RA8BG	FPC antenna	LOOP Antenna	Kunshan Innowave Communication Technology Co.,Ltd;	(Building H, Jindu Intelligent Garden, Shengchuang Road, Yushan Town, Kunshan City, Suzhou City, Jiangsu Province)	Beijing Xiaomi Communications Co.,Ltd.

Test instrument:GTS2800

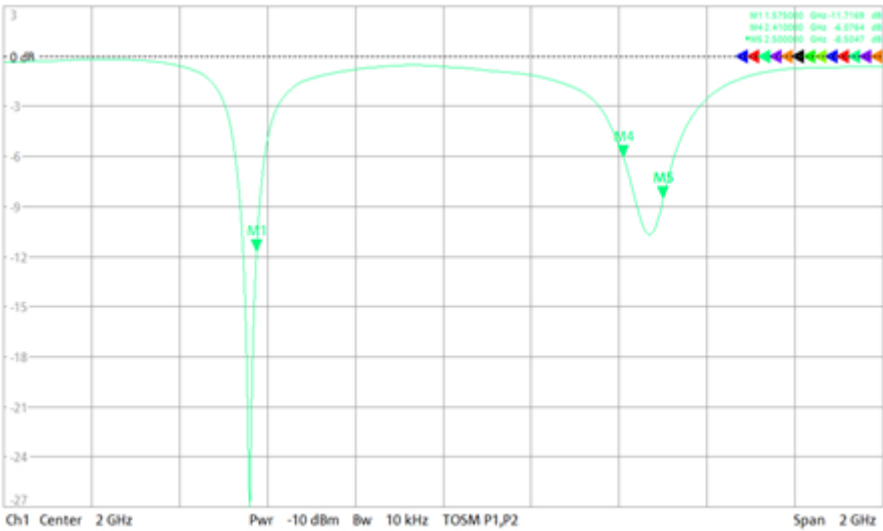
ANT13	WiFi2.4G0+BT0
ANT11	WiFi5G1+6E1
ANT12	WiFi2.4G1+BT1+WiFi5G0+6E0

ANT13:

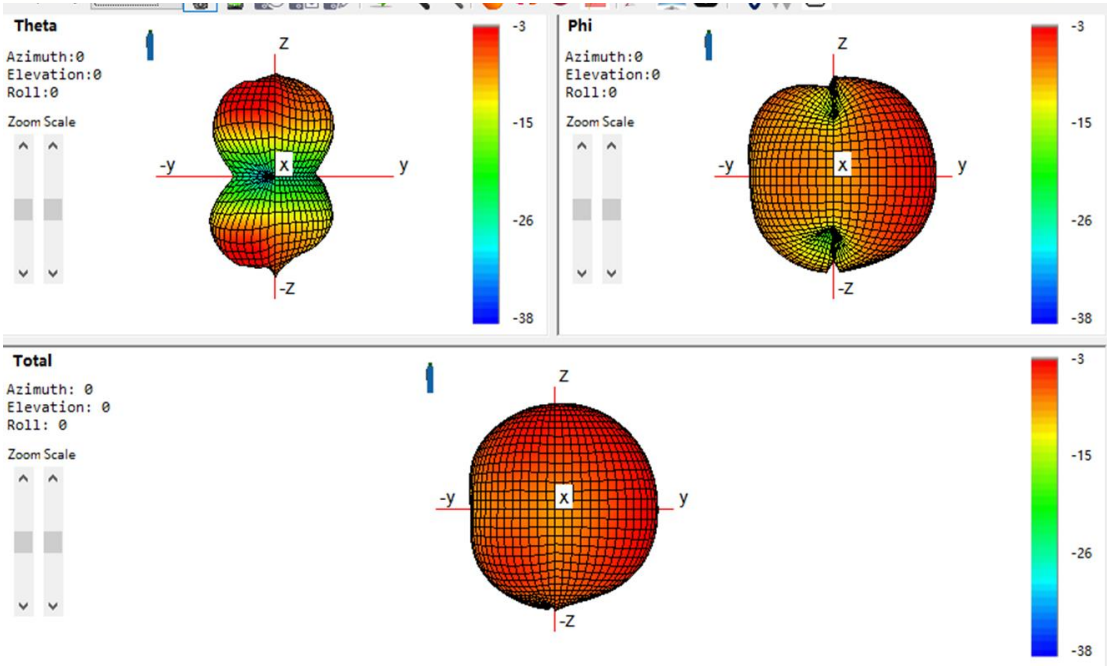
Band	ant 13	
	Effi.(dBi)	peak gain(dBi)
2.4G/BT	-5.6	-3.5

S11

ANT13:



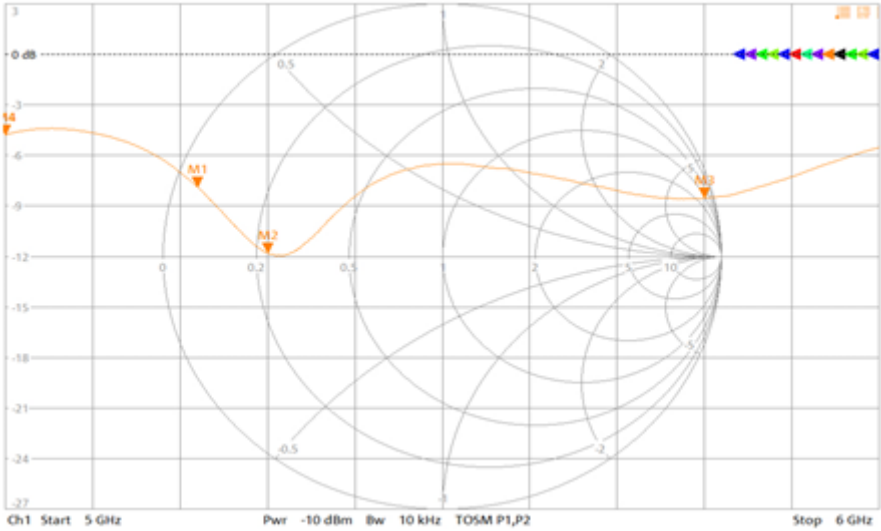
2.4G



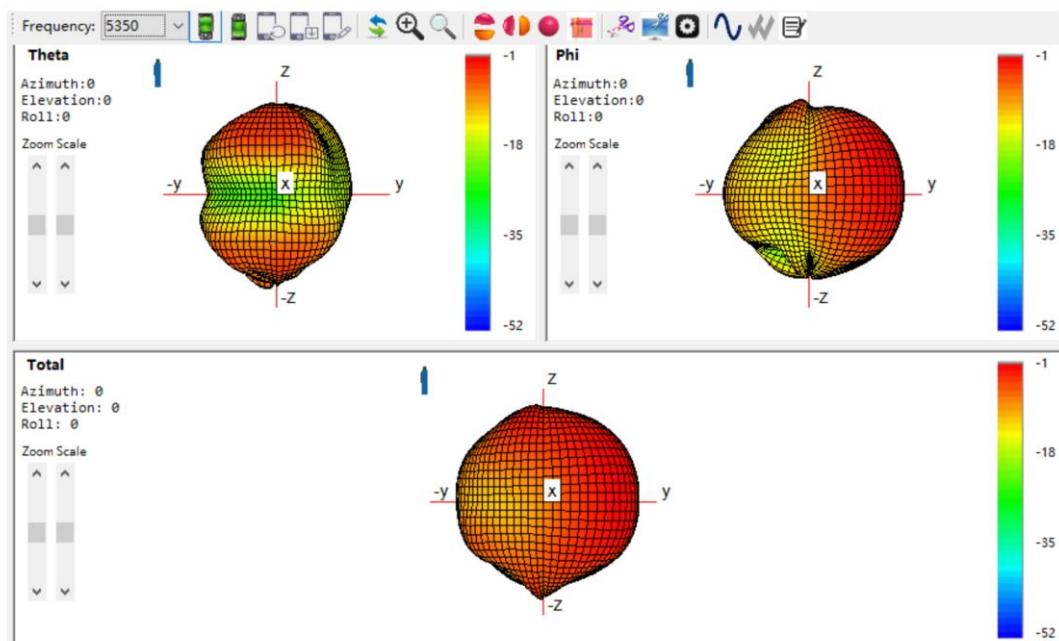
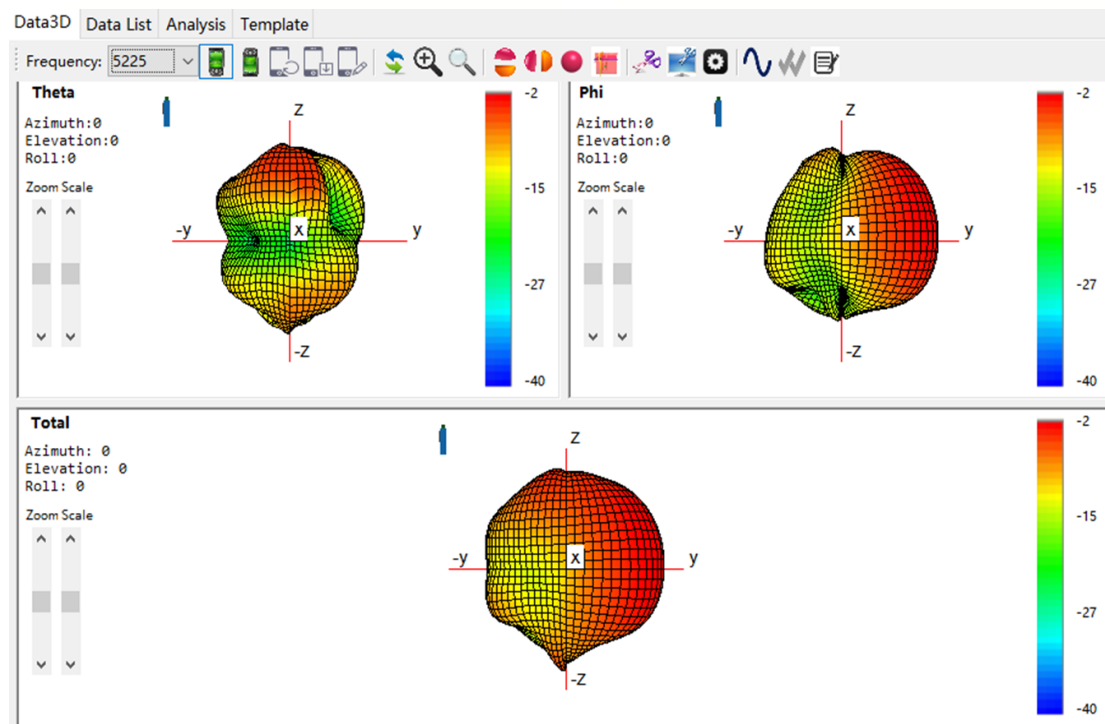
ANT11:

Band	ant11	
	Effi.(dBi)	peak gain(dBi)
5G (5.15-5.25GHZ)	-7.38	-2.19
5G (5.25-5.35GHZ)	-5.87	-1.5
5G (5.47-5.725GHZ)	-6.55	-2.14
5G (5.725-5.85GHZ)	-7.01	-3
6e(5.925-6.425GHZ)	-7.45	-4.23
6e(6.425-6.525GHZ)	-7.52	-3.9
6e(6.525-6.875GHZ)	-6.12	-1.37
6e(6.875-7.105GHZ)	-5.14	0.03

S11:

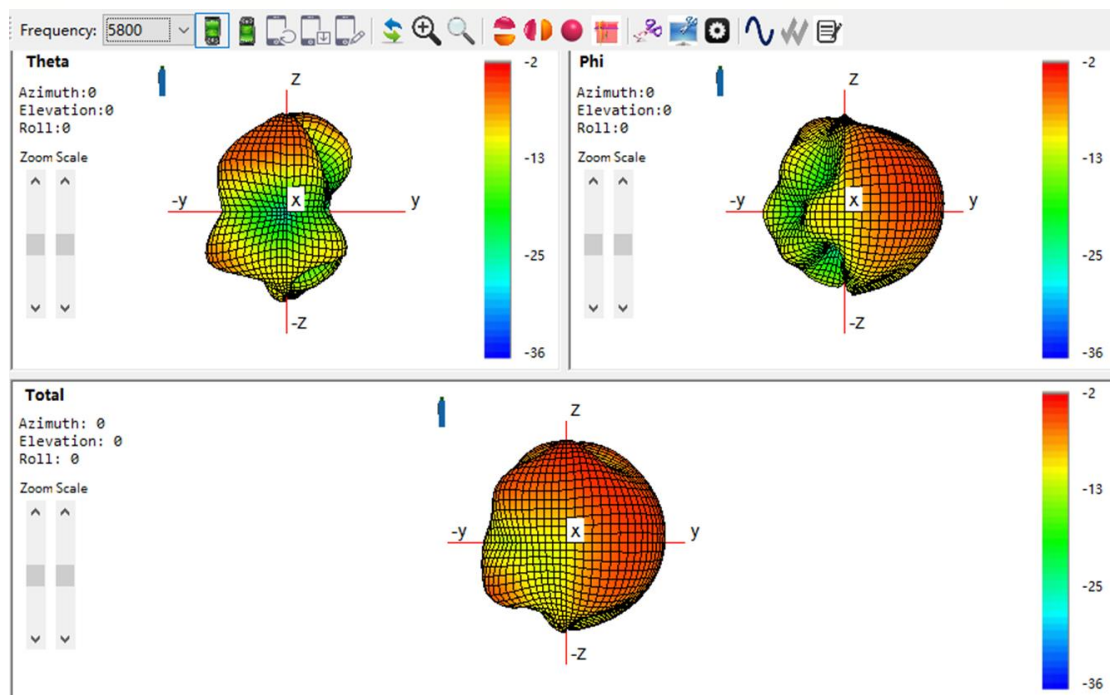
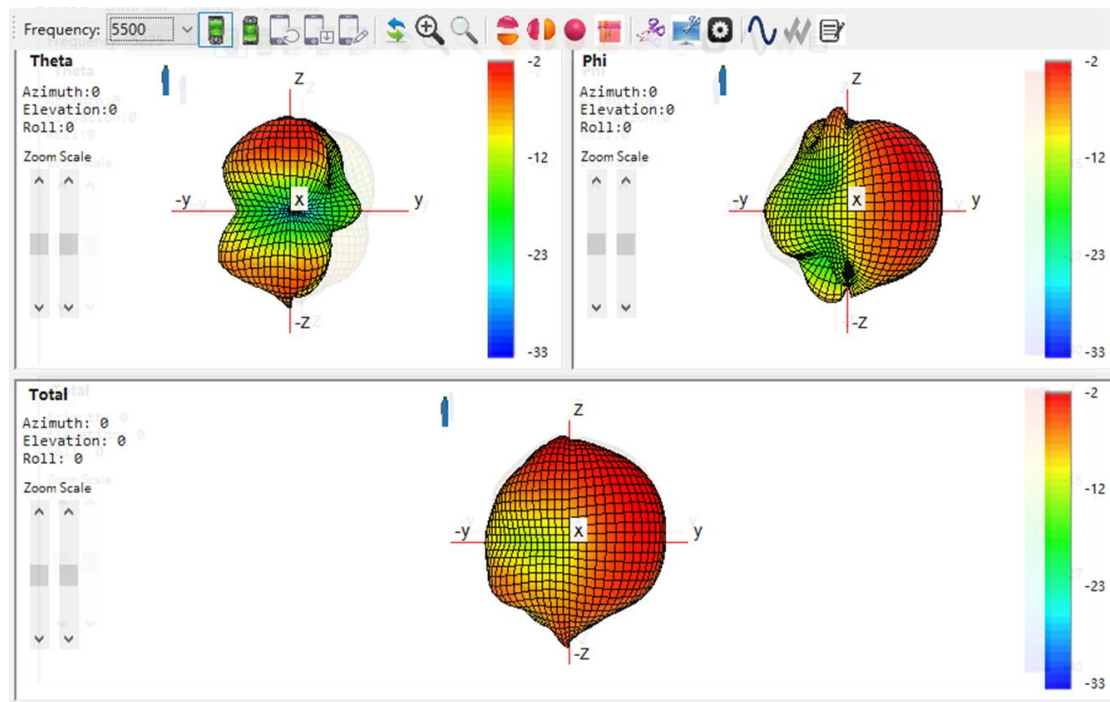


5G:



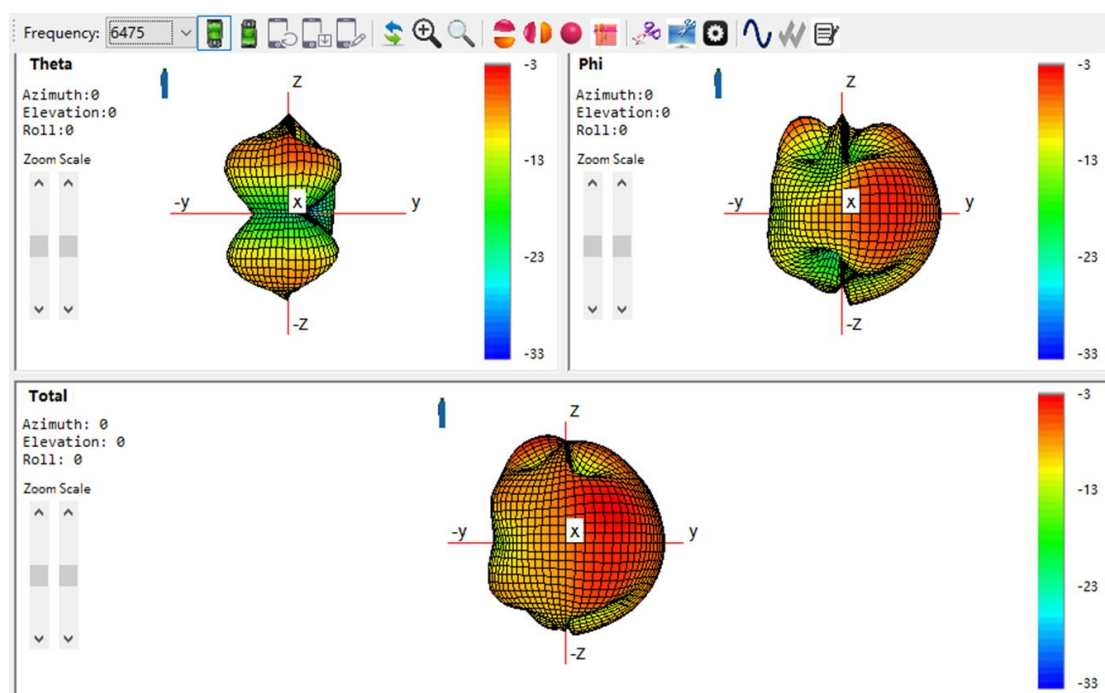
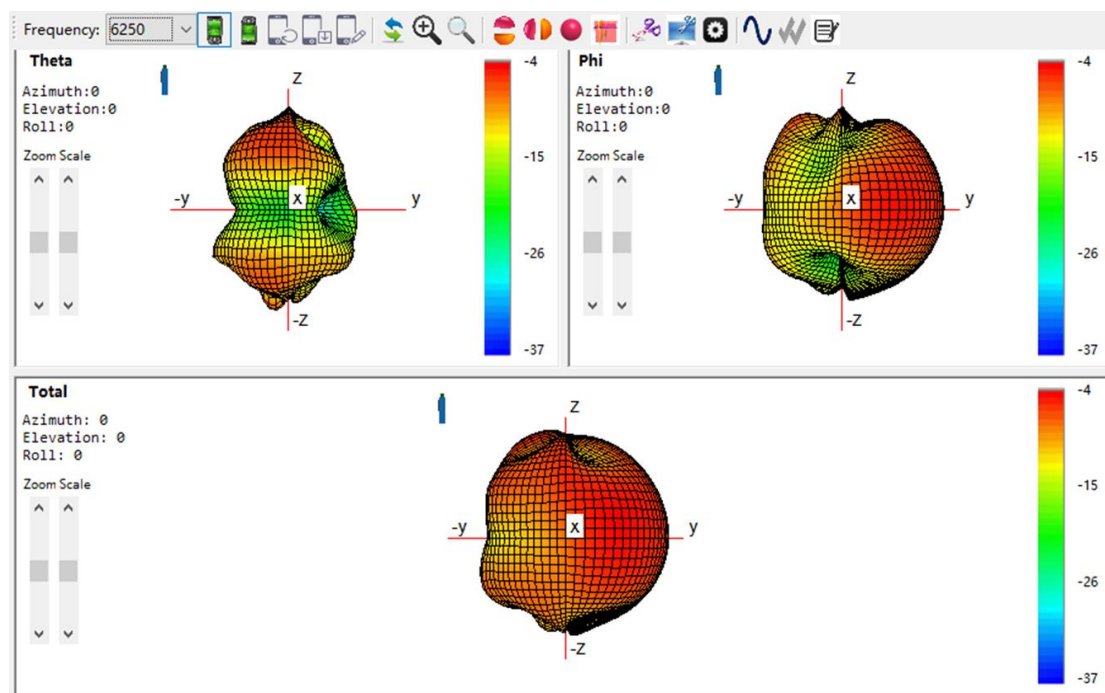
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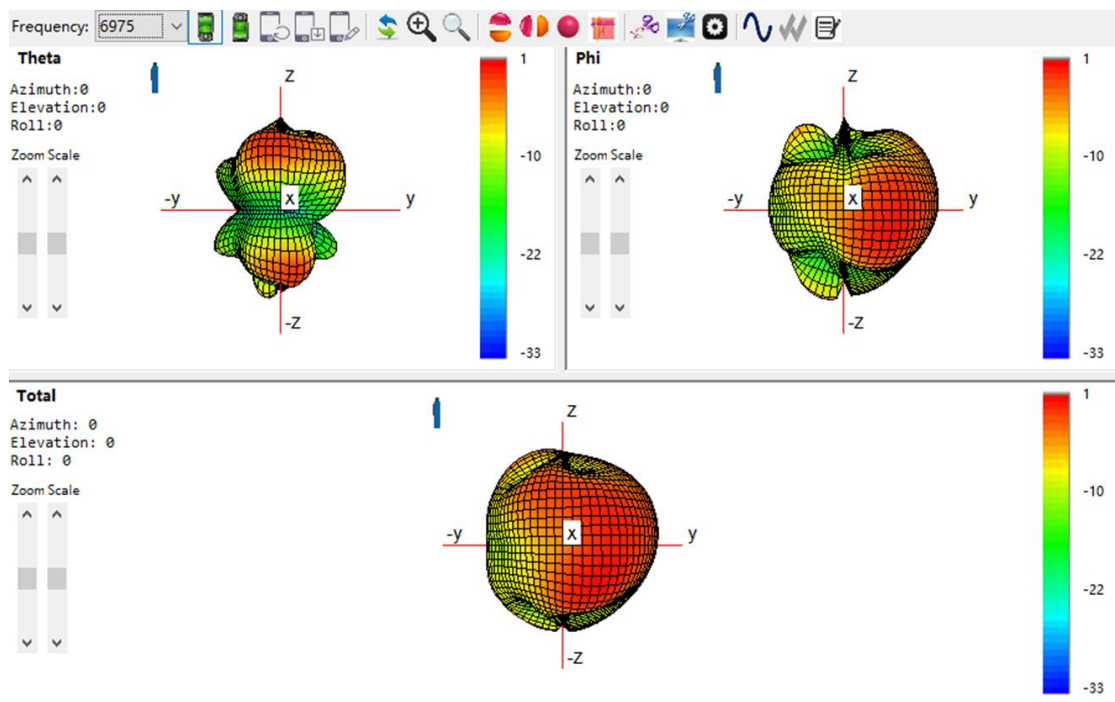
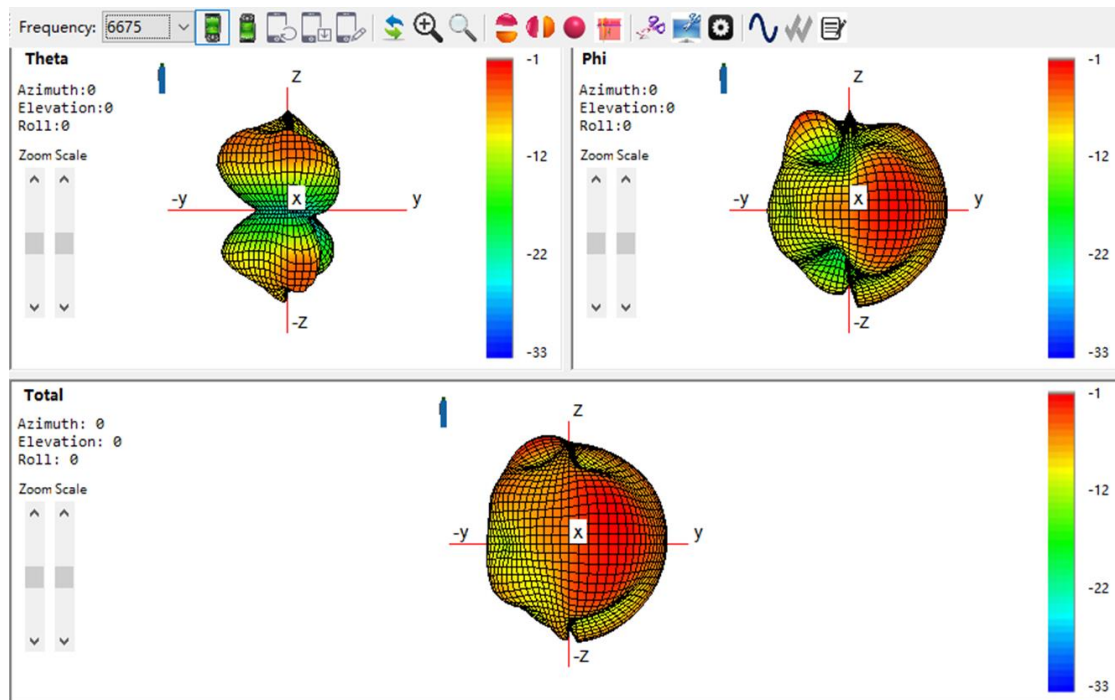
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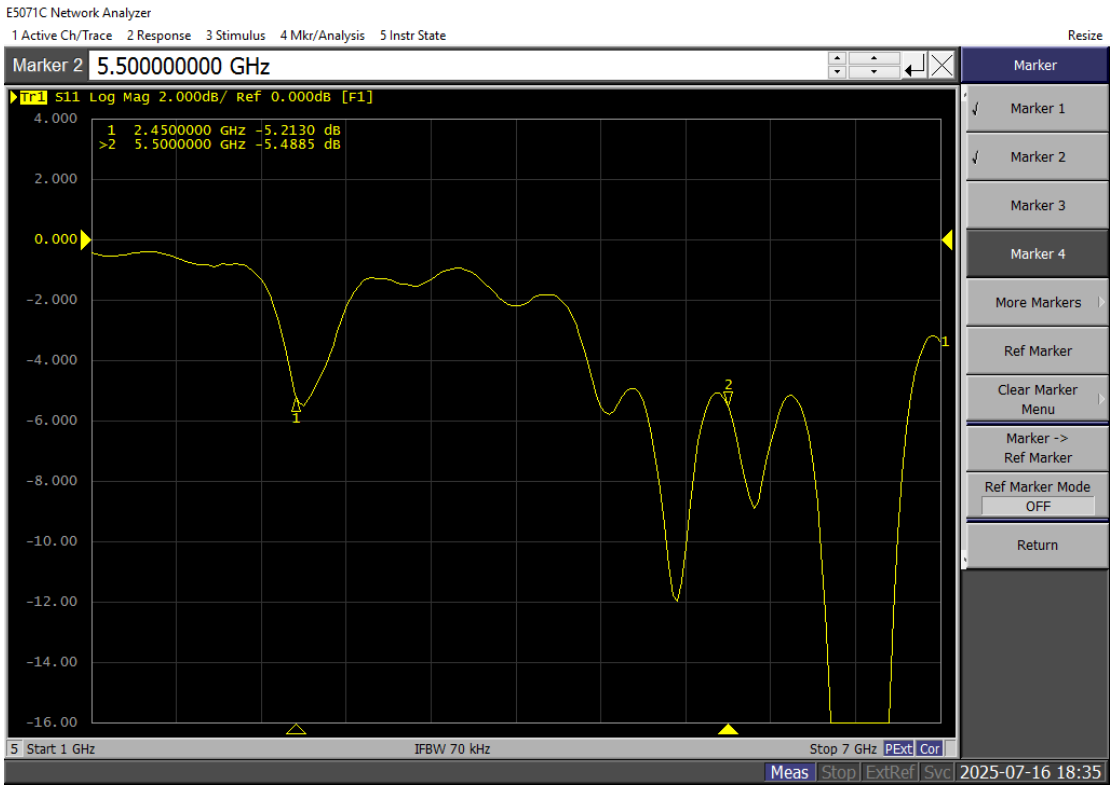
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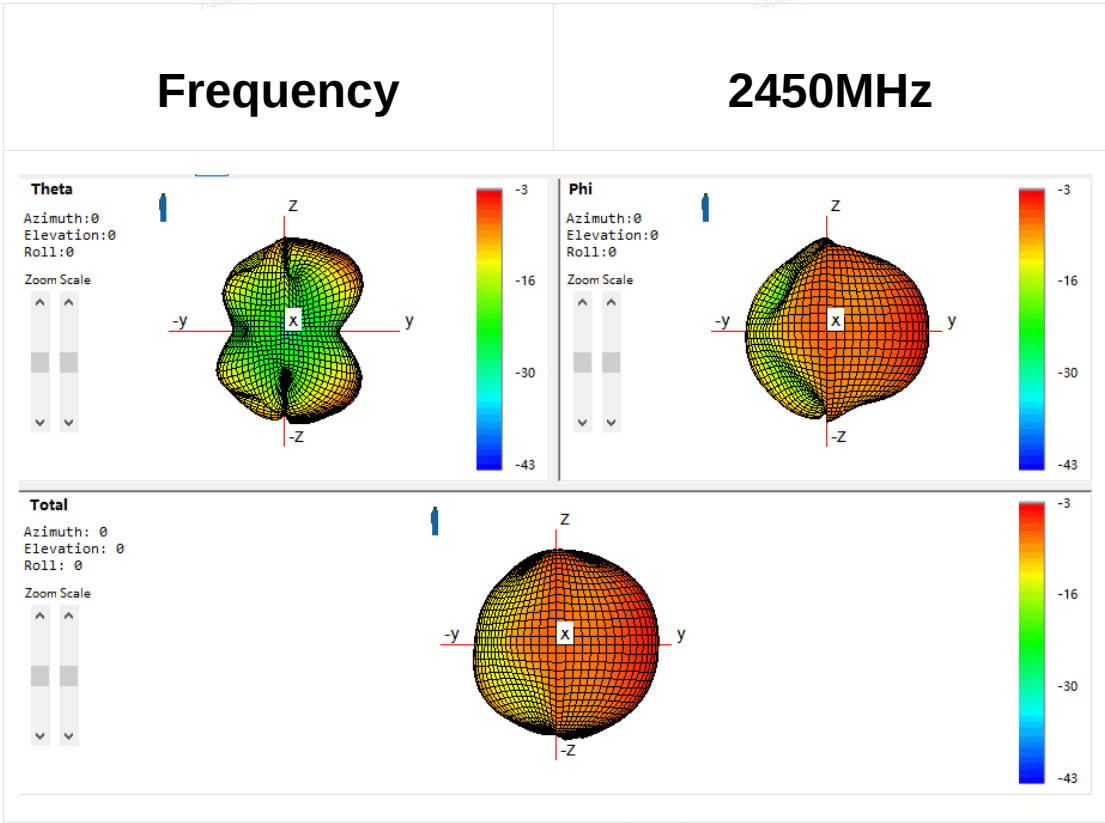
ANT12:

Band	ant12	
	Effi.(dBi)	peak gain(dBi)
2.4G/BT	-7.5	-3.3
5G (5.15-5.25GHZ)	-4.9	0.5
5G (5.25-5.35GHZ)	-5	0.4
5G (5.47-5.725GHZ)	-5.6	0.4
5G (5.725-5.85GHZ)	-5.8	0.3
6e(5.925-6.425GHz)	-6.6	-0.4
6e(6.425-6.525GHz)	-7	-2.2
6e(6.525-6.875GHz)	-7.9	-3.3
6e(6.875-7.105GHz)	-10.3	-5.2

S11:



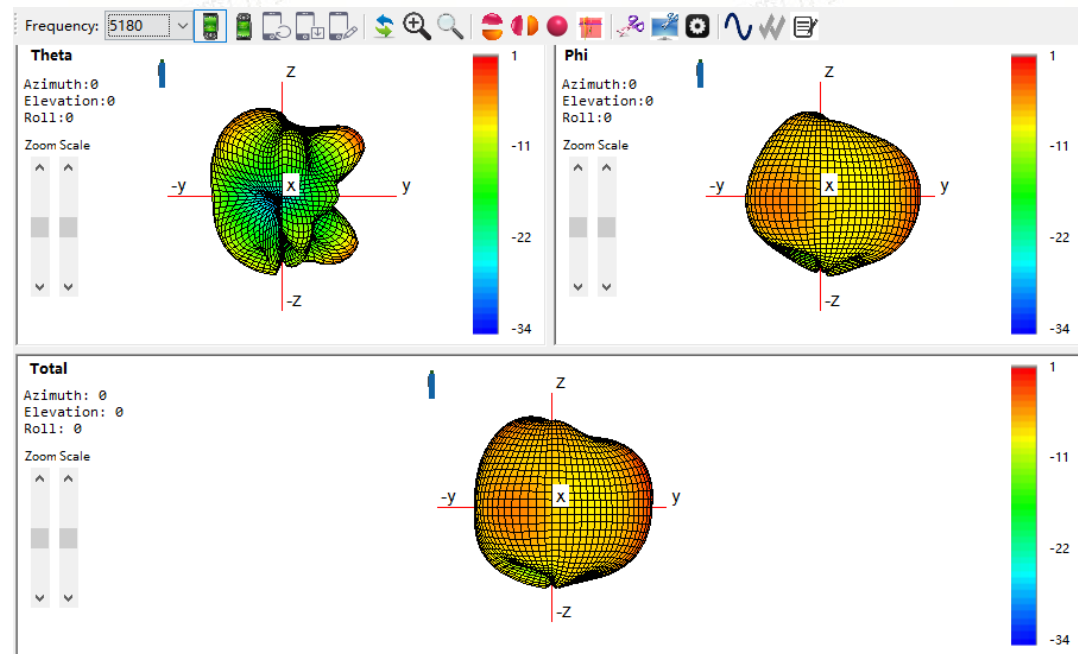
WiFi2.4G



5G:

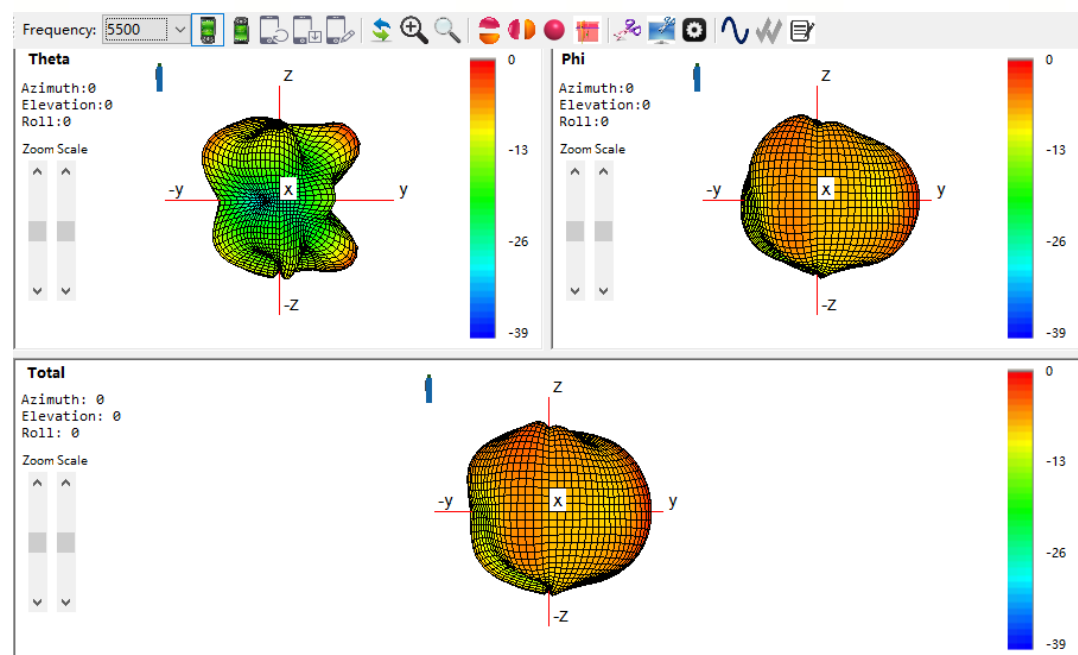
Frequency

5180MHz



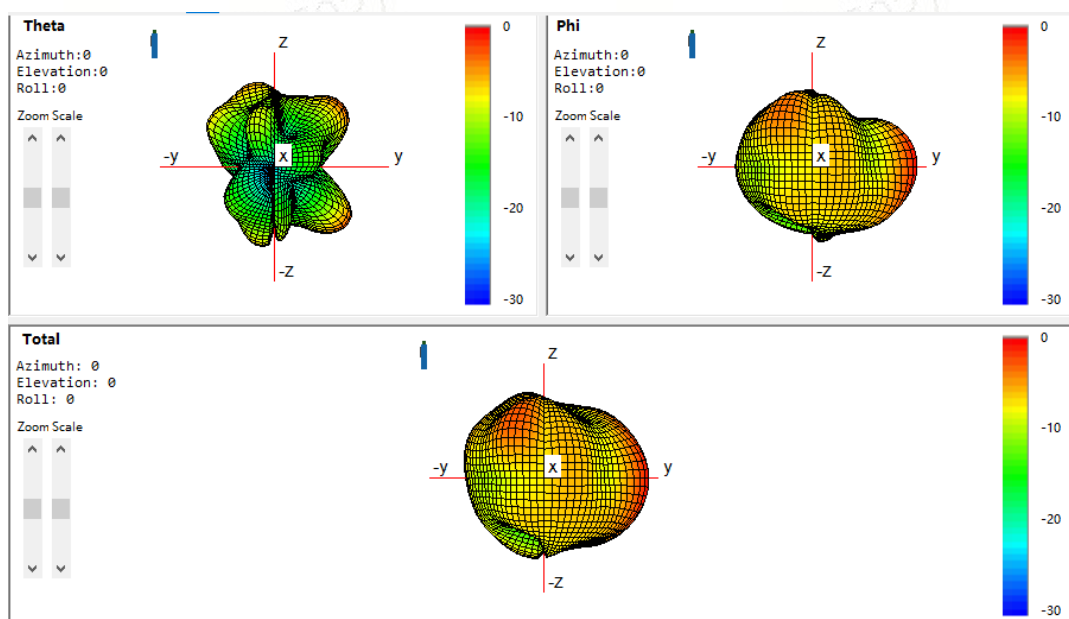
Frequency

5500MHz



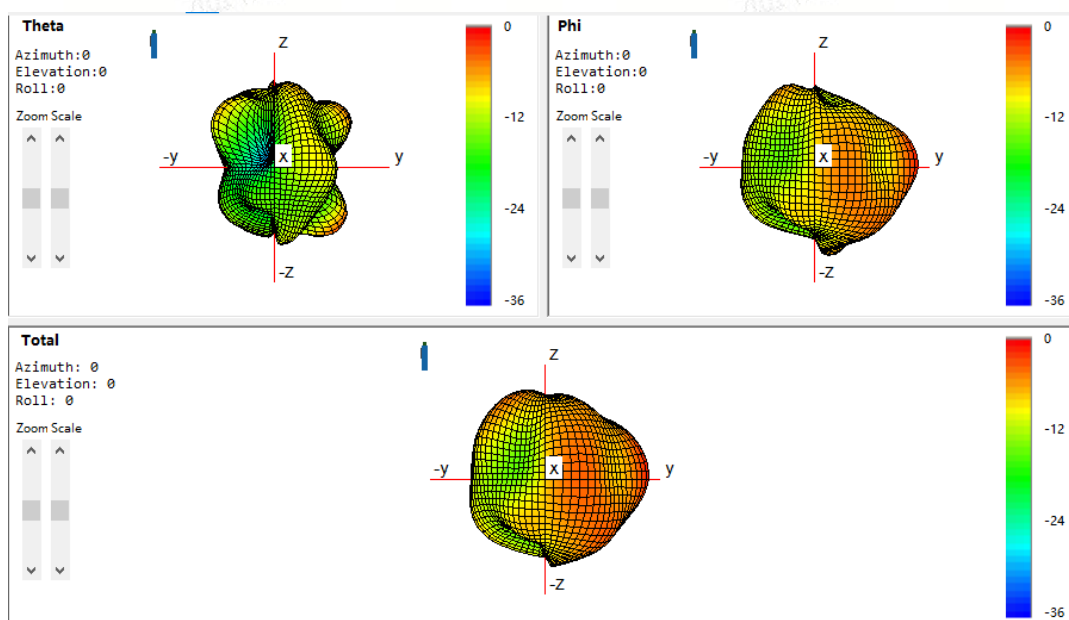
Frequency

5785MHz



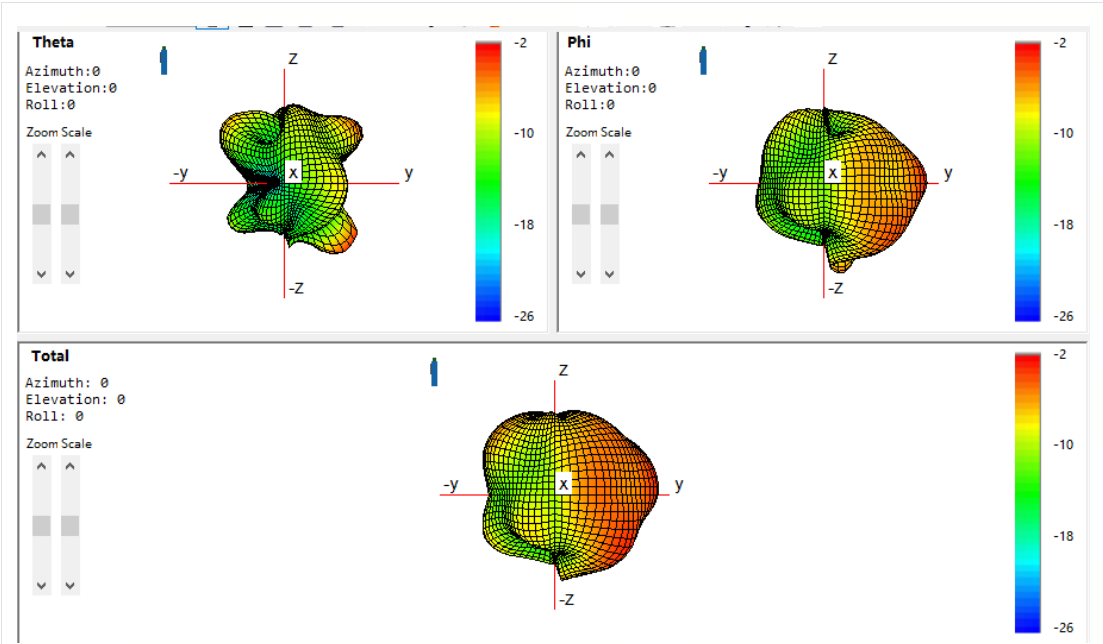
Frequency

6250MHz



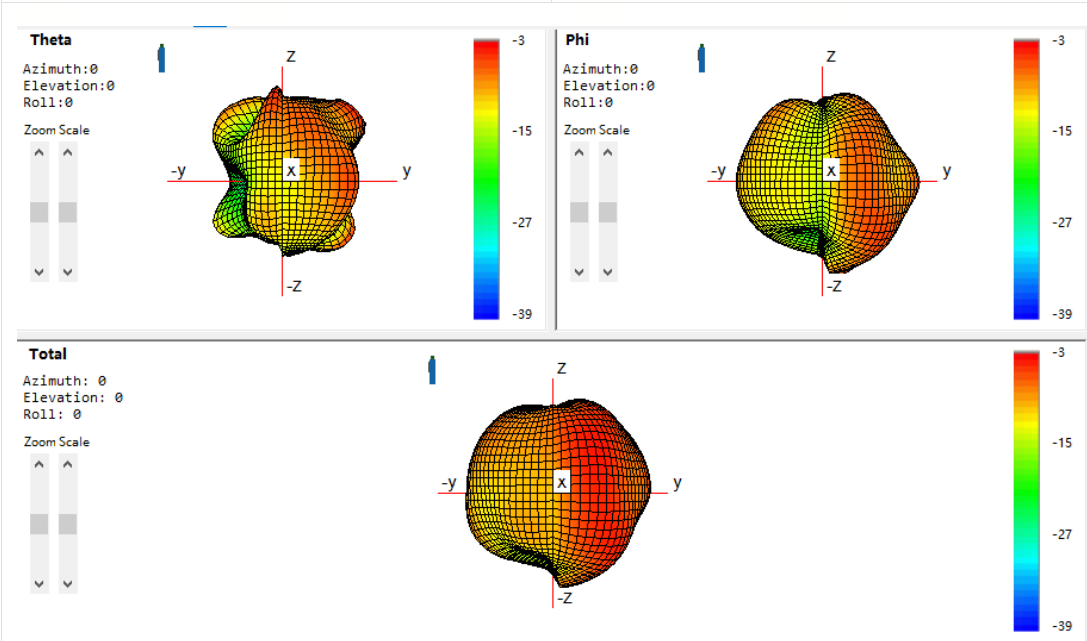
Frequency

6450MHz



Frequency

6700MHz

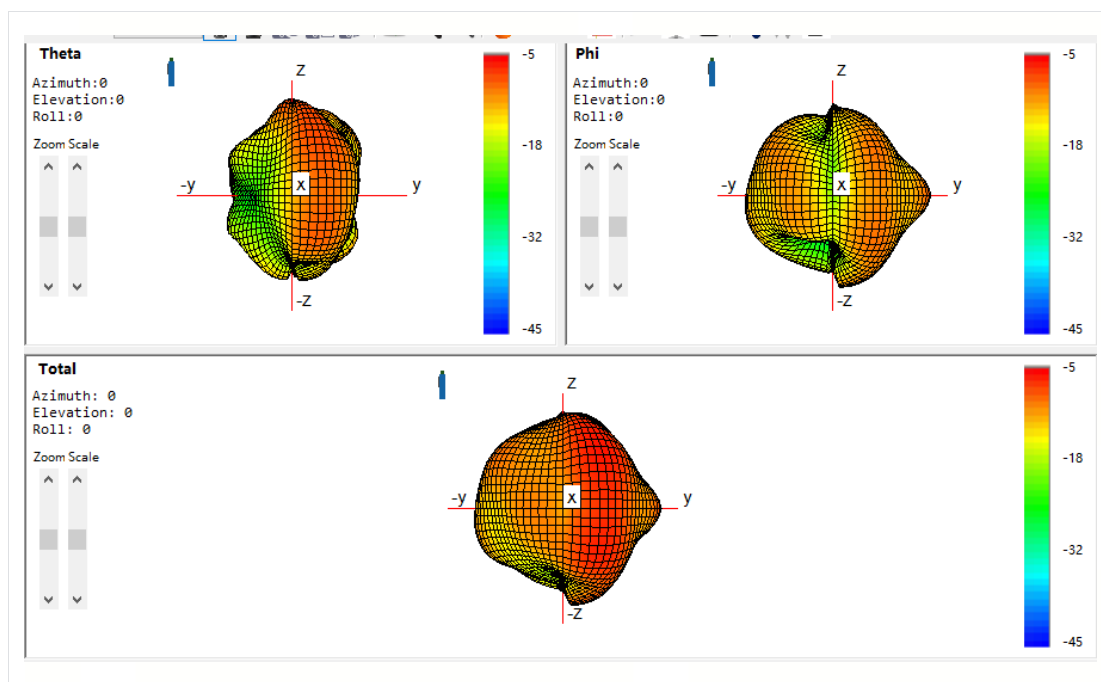


Frequency

7000MHz

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Main Test Instruments:

Name	Manufacturer	Model name	Serial Number	Cal., Date	Exp., Date
2G/3G/4G Vector Network Analyzer	KEYSIGHT	E5071C	My46733920	2024/07/20	2025/07/20
OTA TEST SYSTEM	GENERAL TEST	RayZone 2800	CT10120480B5054	2024/07/20	2025/07/20

Antenna test environment

