Antenna Performance Description

Applicant:	Xiaomi Communications Co., Ltd
Product description:	Mobile Phone
Model Name:	2406APNFAG
FCC ID:	2AFZZPNFAG
Test date:	2024/04/15

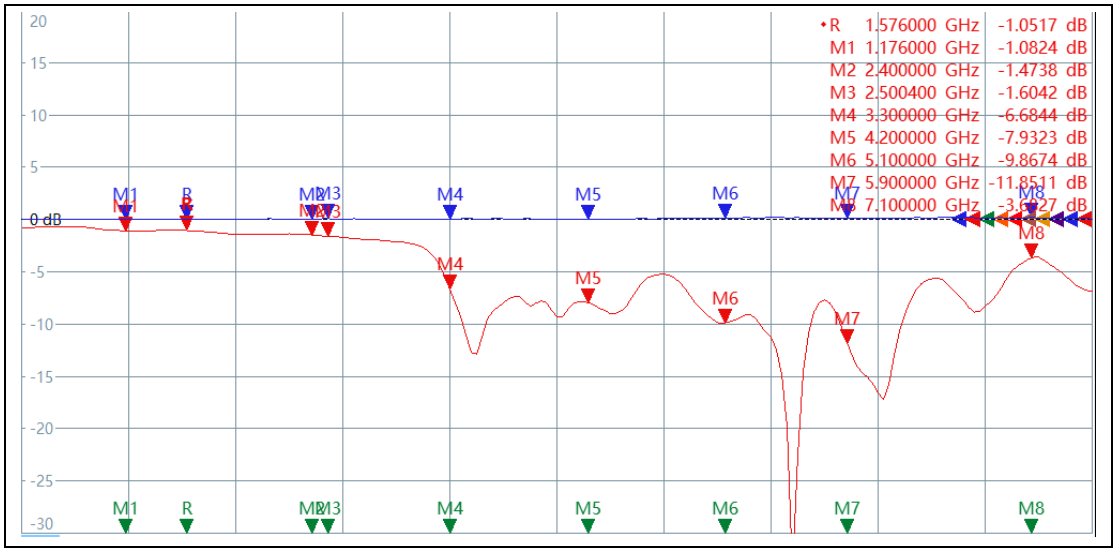
1. Antenna information

Antenna	Pattern	Antenna Type	Manufacturer	Manufacturer Address	Test party of Antenna gain
ANT6	Metal Frame	PIFA	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.
ANT16	Metal Frame	PIFA	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.
ANT7	Metal Frame	PIFA	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.
ANT17	Metal Frame	PIFA	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.
NFC		FPC	Kunshan Innowave Communicatio n Technology Co., Ltd.	Building 4, Zone A, Hong Xin Tai Industrial Park, No.28 Yinying Road, Gaoying Village, Dongguan City	Shenzhen Xiaomi Communications Co., Ltd.

2. Test data

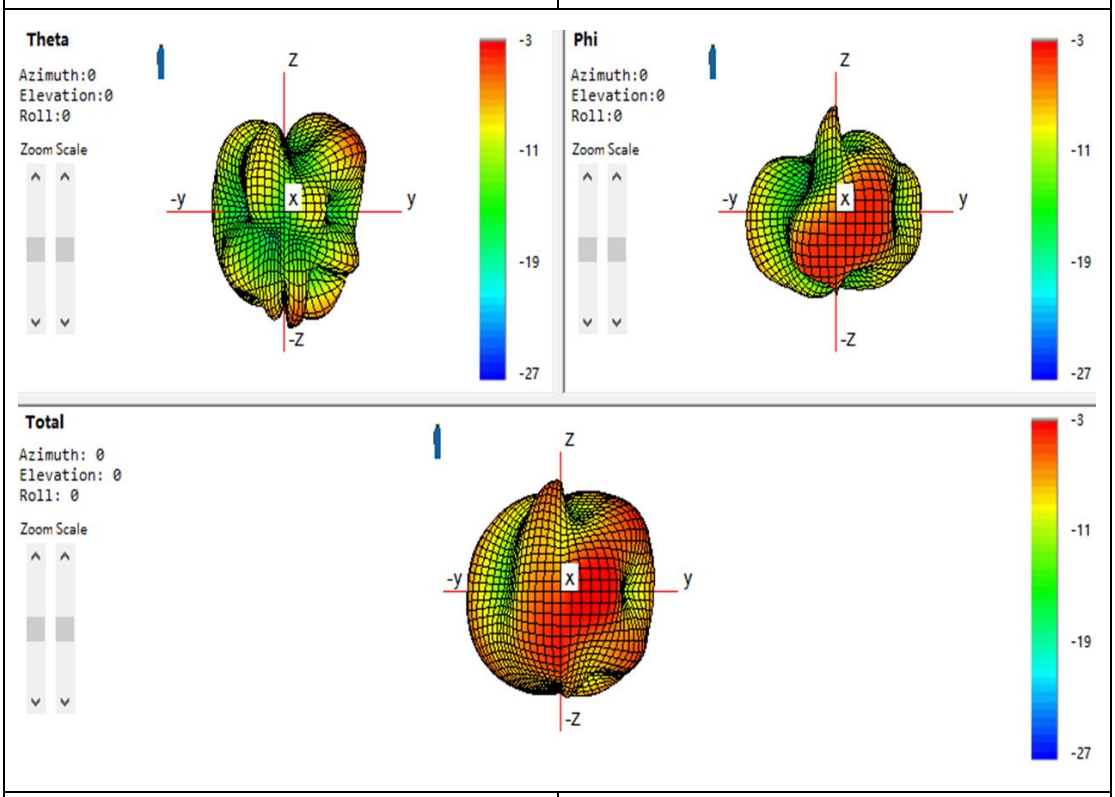
Bands for Antenna 6	Avg.Effi.(dB)	Peak gain(dBi)	EIRP	合路传导功率	Peak gain(dBi)
5G (5150~5250MHz)	-5.0dB	-2.3	/		
5G (5250~5350MHz)	-5.3dB	-2.5			
5G (5470~5725MHz)	-4.4dB	-2.2			
5G (5470~5850MHz)	-5.4dB	-2.2			
6G (5925-6425GHz)	-7.4dB	-0.1	/		
6G (6425-6525GHz)	-7.8dB	-2.5			
6G (6525-6875GHz)	-7.8dB	-3.6			
6G (6875-7125GHz)	-9.3dB	-6.6			

S 参数

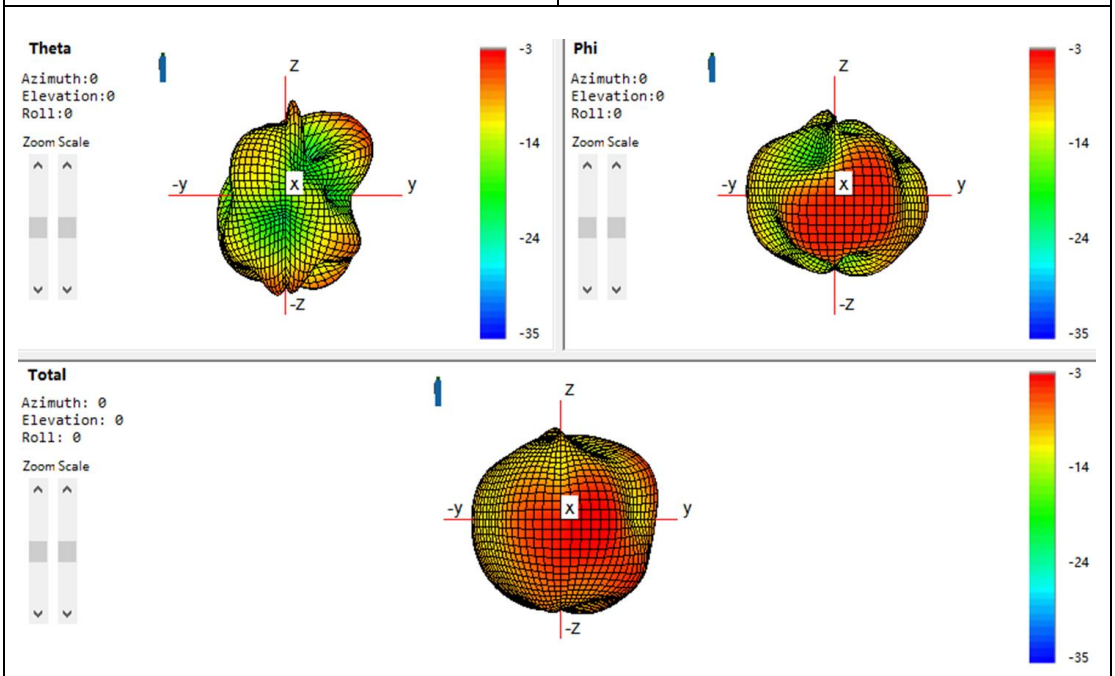

R 1.576000 GHz -1.0517 dB
M1 1.176000 GHz -1.0824 dB
M2 2.400000 GHz -1.4738 dB
M3 2.500400 GHz -1.6042 dB
M4 3.300000 GHz -6.6844 dB
M5 4.200000 GHz -7.9323 dB
M6 5.100000 GHz -9.8674 dB
M7 5.900000 GHz -11.8511 dB
M8 7.100000 GHz -3.6827 dB
20
15
10
5
0 dB
-5
-10
-15
-20
-25
-30
M1
R
M2
M3
M4
M5
M6
M7
M8

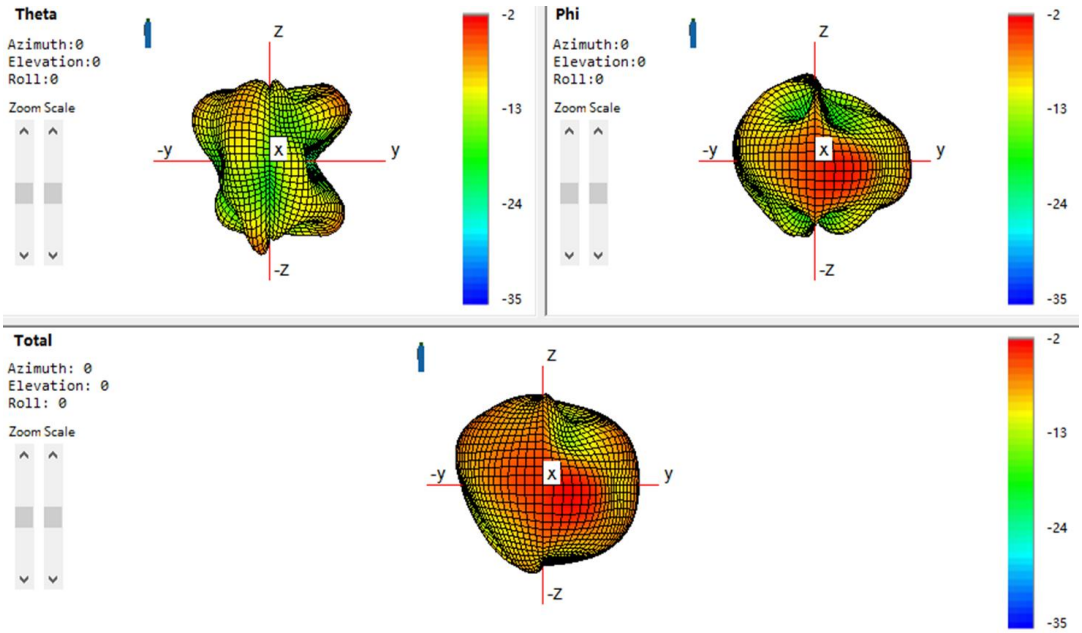
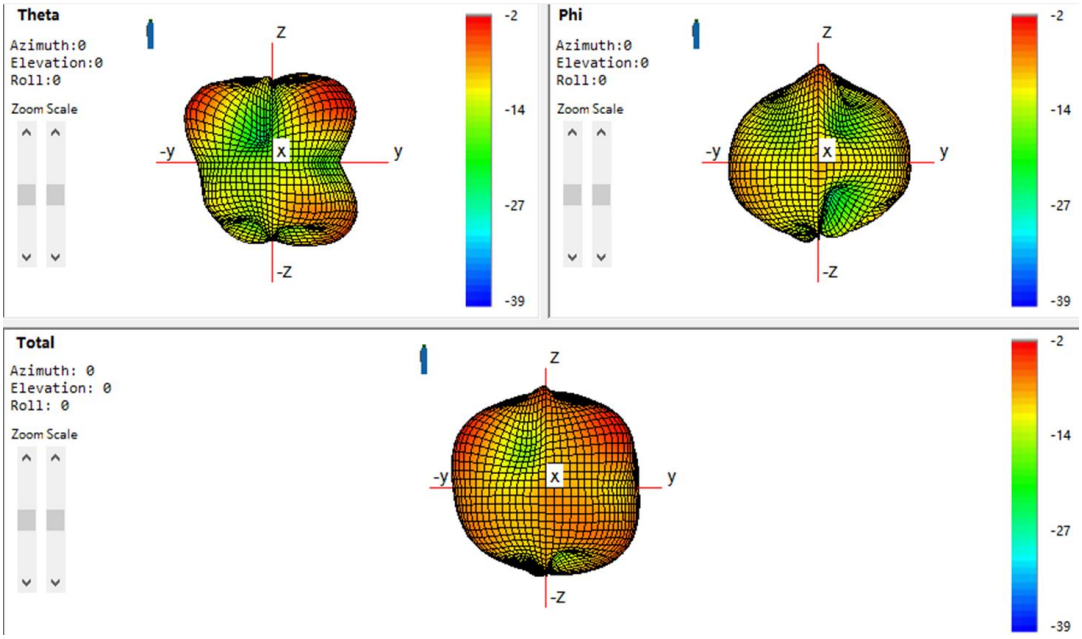
方向图

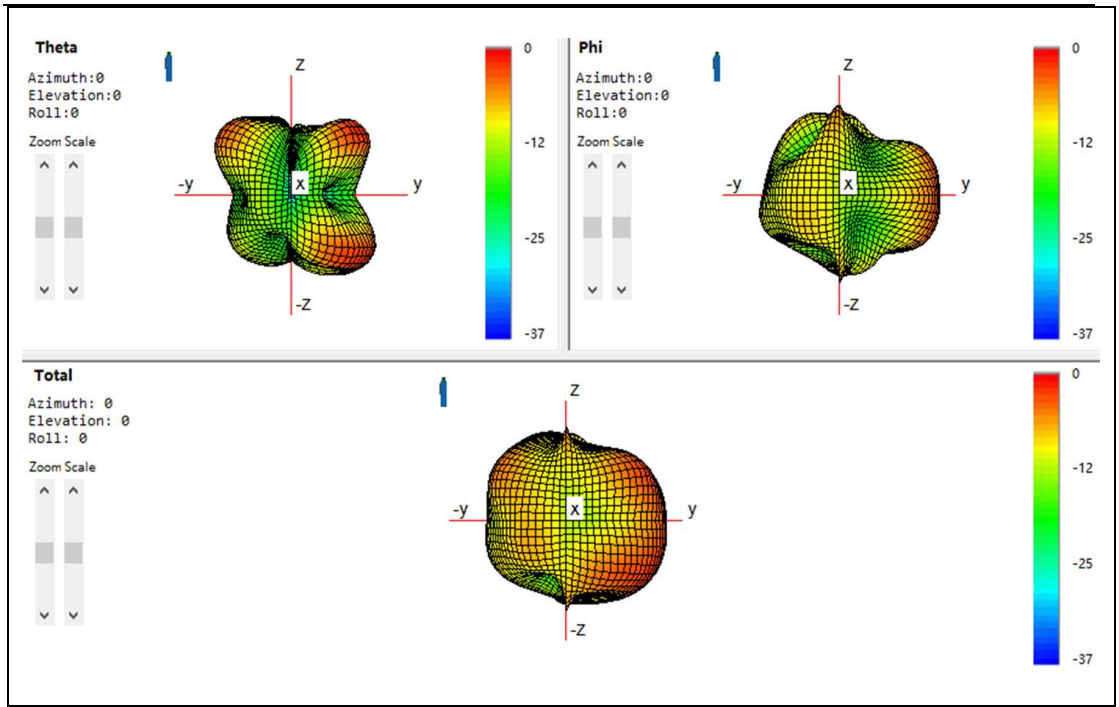
Frequency	5180MHz



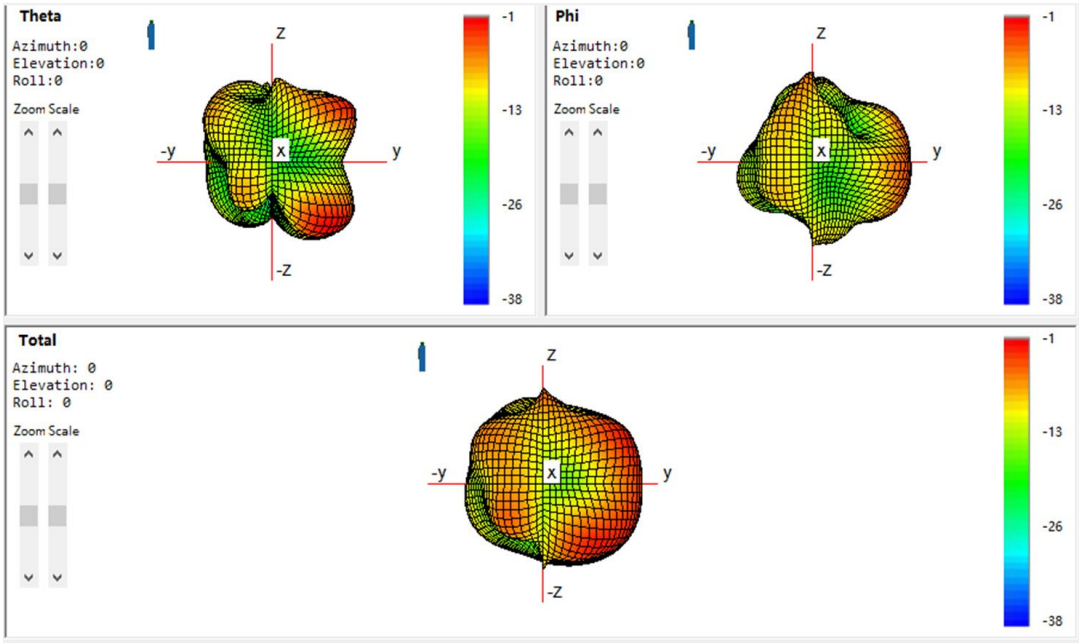
Frequency	5280MHz



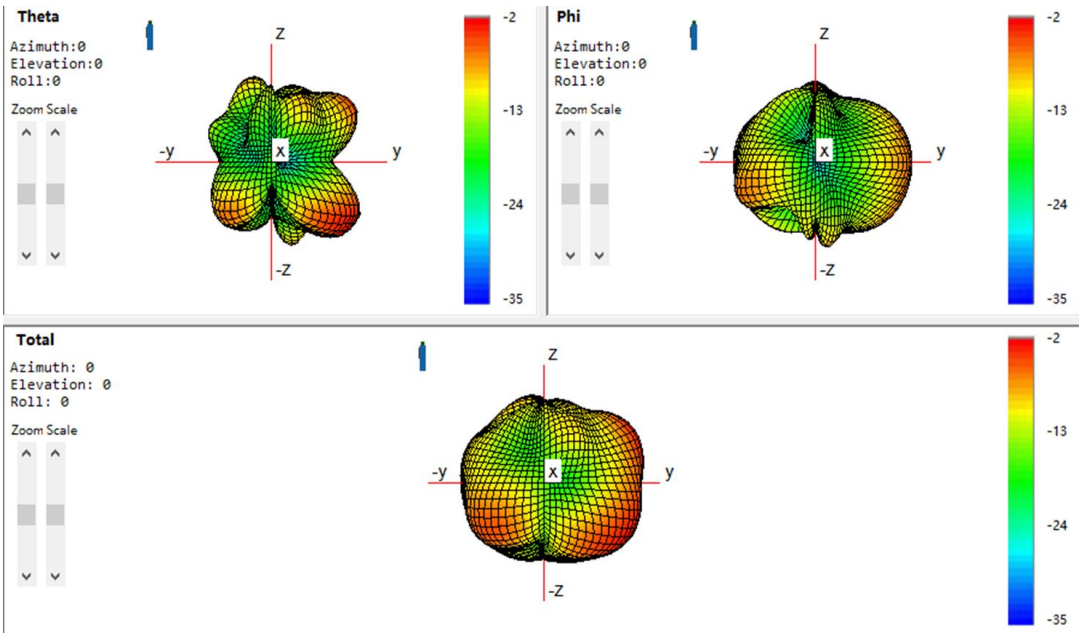
Frequency	5500MHz
	
Frequency	5785MHz
	
Frequency	6250MHz



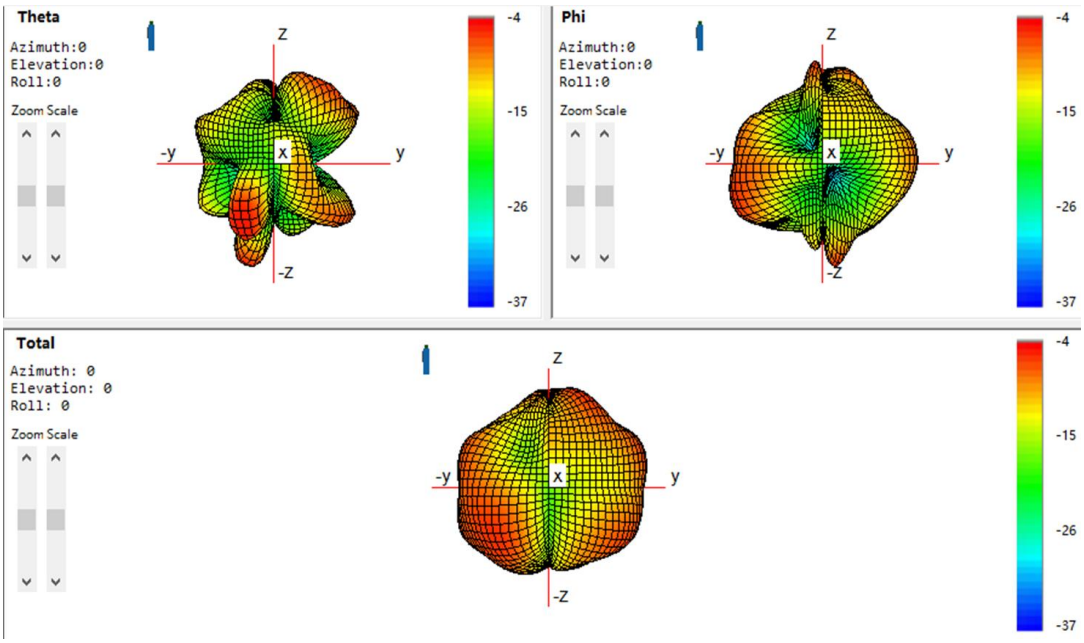
Frequency	6450MHz



Frequency	6700MHz

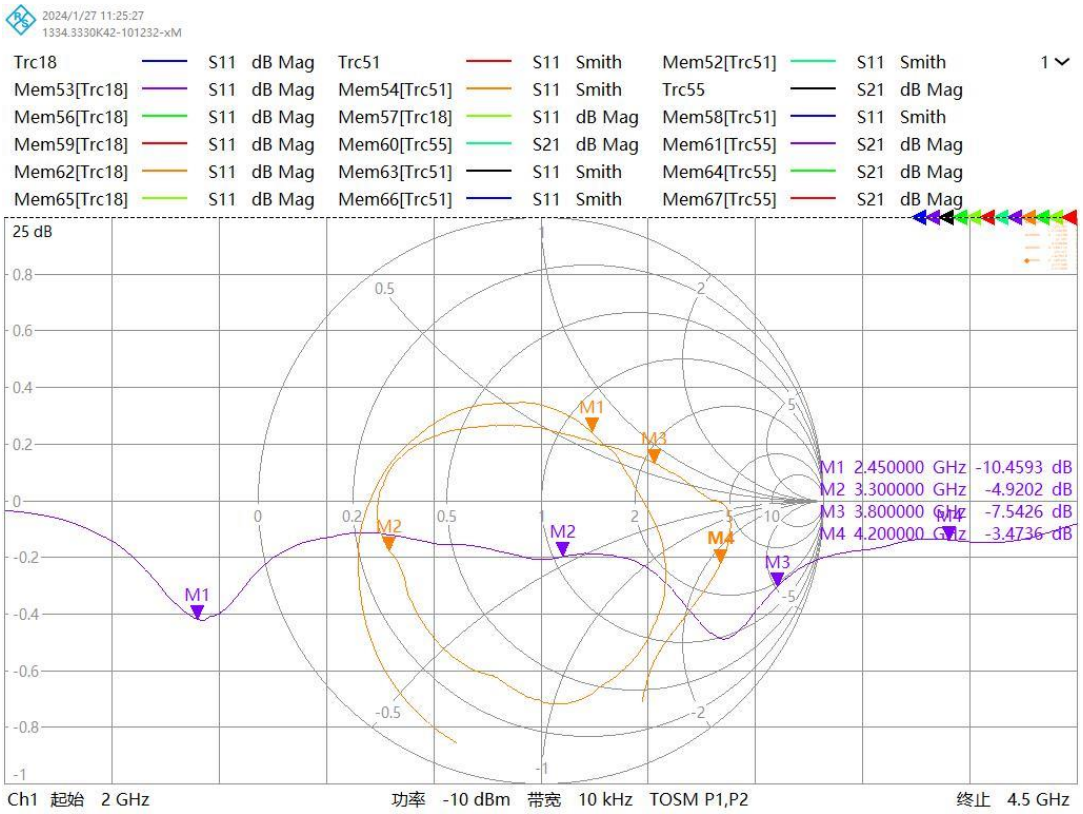


Frequency	7000MHz



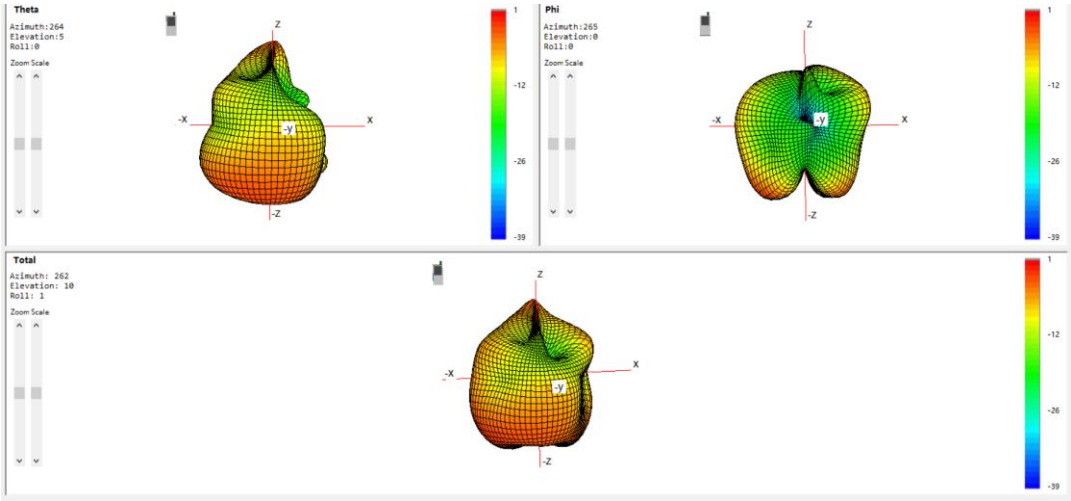
Bands for Antenna 7	WIFI 2.4G ANT				
	Avg.Effi. (dB)	Peak gain(dBi)	EIRP	合路传导功率	Peak gain(dBi)
2.4G(2400~2485MHz)	-5.6	-1	20	22.4	-2.4
Bluetooth	-5.6	-1	20	22.4	-2.4

S 参数



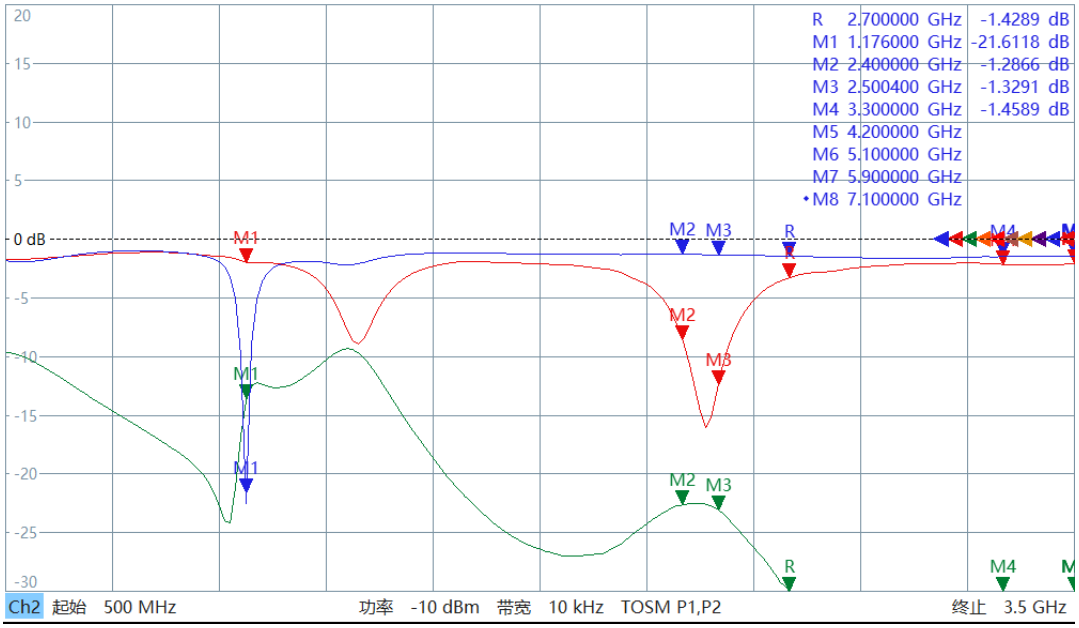
方向图

Frequency	2450MHz



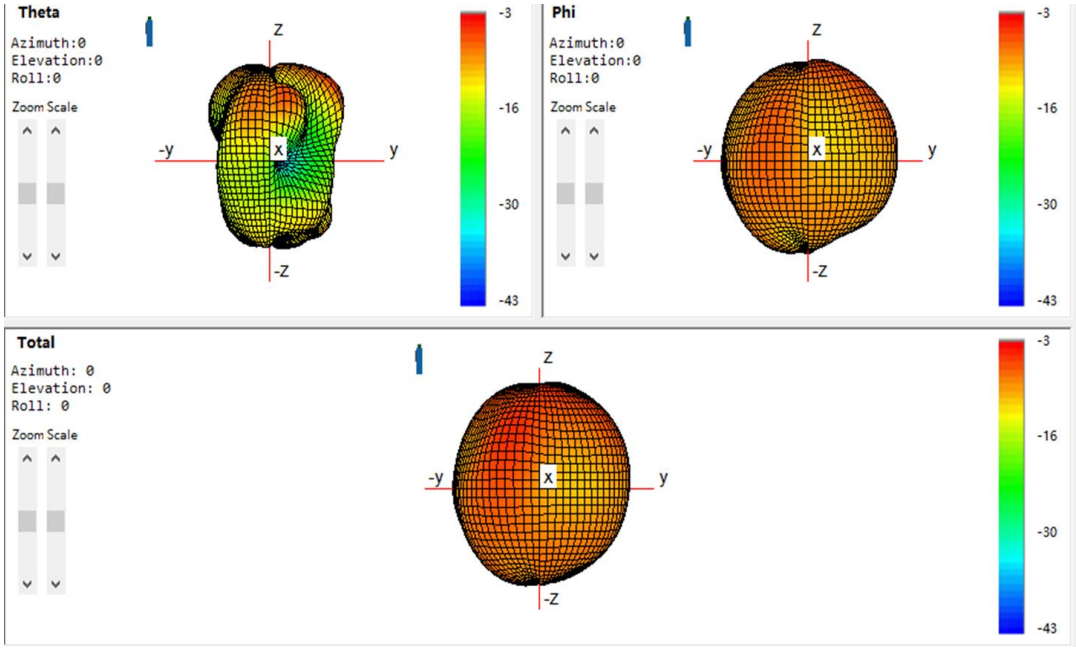
Band for Antenna 16	WIFI_2.4G ANT				
	Avg.Effi.(dB)	**Peak gain(dBi)**	**EIRP**	**合路传导功率**	**Peak gain(dBi)**
2.4G (2400~2485MHz)	-7dB	-2	20	22.4	-2.4
Bluetooth	-7dB	-2	20	22.4	-2.4

S 参数



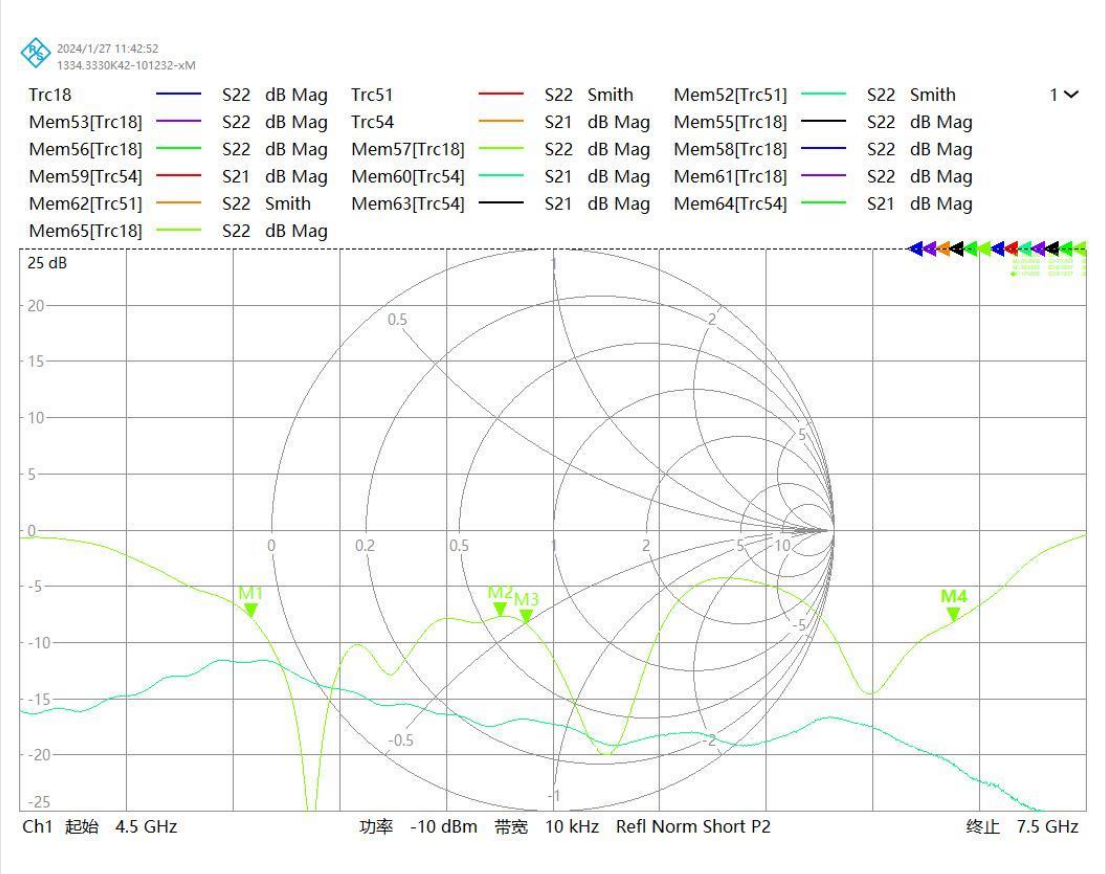
方向图

Frequency	2450MHz



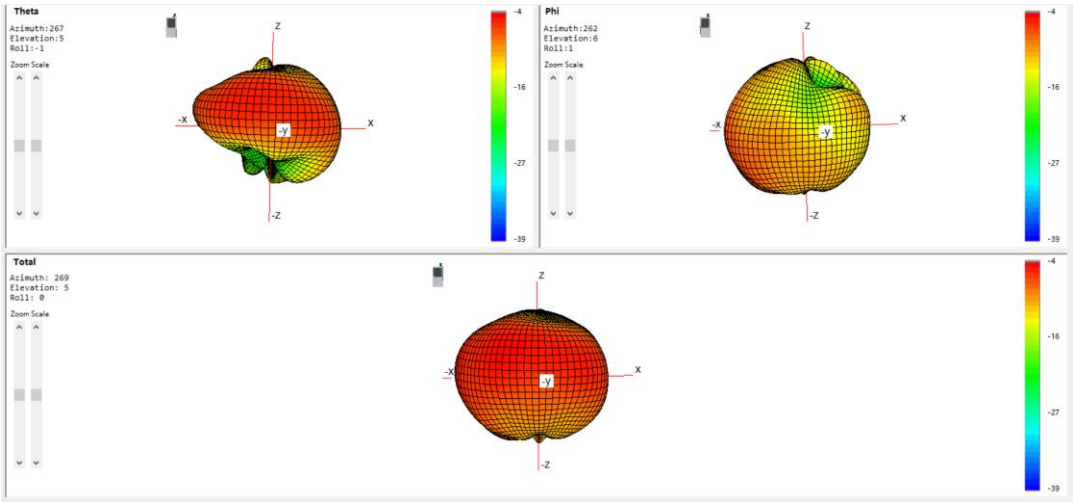
Band for Antenna 17	WIFI_5G ANT				
	Avg.Effi.(dB)	Peak gain(dBi)	EIRP	合路传导功率	Peak gain(dBi)
5G (5150~5250MHz)	-6.4	-2.8	/		
5G (5250~5350MHz)	-6	-1.6			
5G (5470~5725MHz)	-6.7	-1.7			
5G (5470~5850MHz)	-6.3	-1.7			
6G (5925-6425GHz)	-6	-1.9	/		
6G (6425-6525GHz)	-6.5	-3.5			
6G (6525-6875GHz)	-1.2	-6.2			
6G (6875-7125GHz)	-1.9	-7			

S 参数

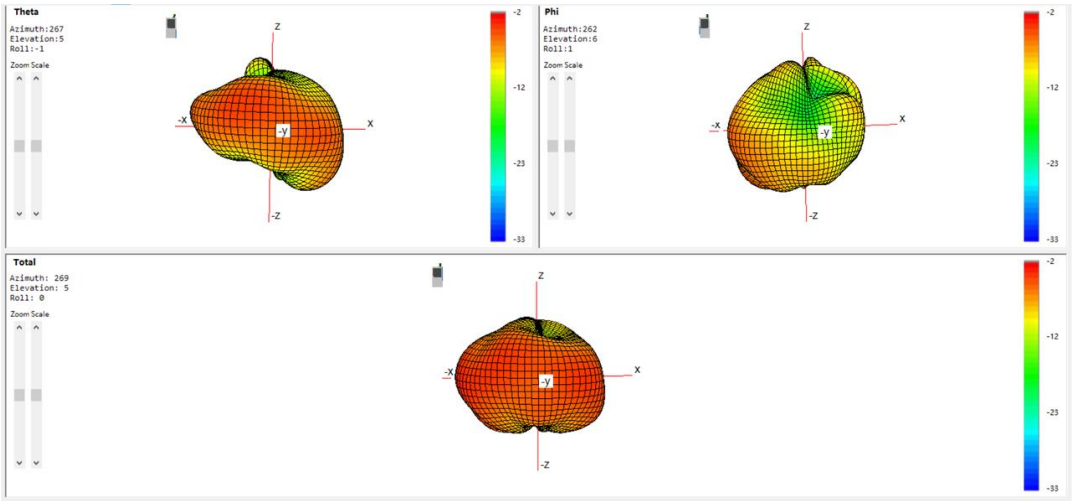

2024/1/27 11:42:52
1334.3330K42-101232-xM
Trc18 S22 dB Mag
Trc51 S22 Smith
Mem52[Trc51] S22 Smith
1
Mem53[Trc18] S22 dB Mag
Trc54 S21 dB Mag
Mem55[Trc18] S22 dB Mag
Mem56[Trc18] S22 dB Mag
Mem57[Trc18] S22 dB Mag
Mem58[Trc18] S22 dB Mag
Mem59[Trc54] S21 dB Mag
Mem60[Trc54] S21 dB Mag
Mem61[Trc18] S22 dB Mag
Mem62[Trc51] S22 Smith
Mem63[Trc54] S21 dB Mag
Mem64[Trc54] S21 dB Mag
Mem65[Trc18] S22 dB Mag
25 dB
20
15
10
5
0
-5
-10
-15
-20
-25
M1
M2
M3
M4
Ch1 起始 4.5 GHz
功率 -10 dBm 带宽 10 kHz Refl Norm Short P2
终止 7.5 GHz

方向图

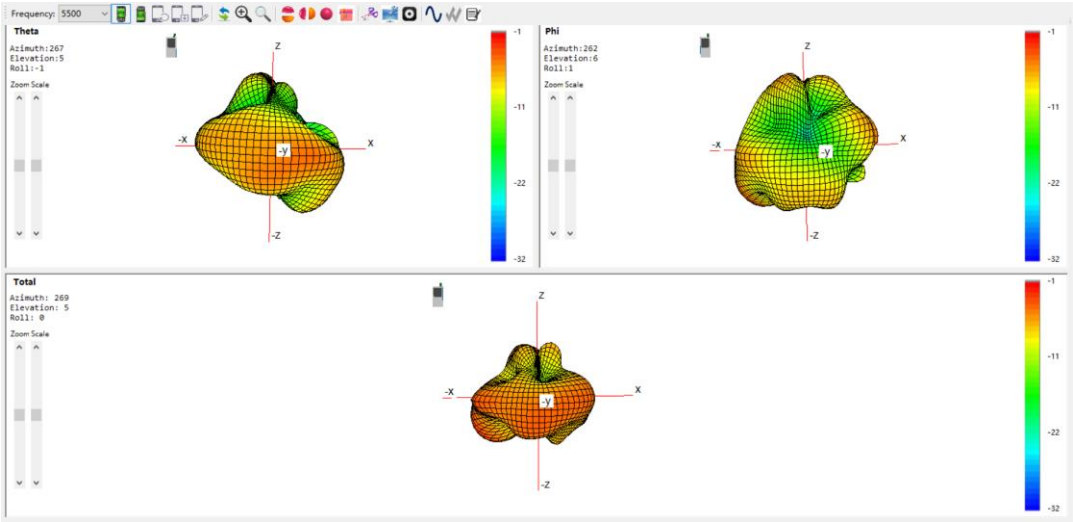
Frequency	5180MHz



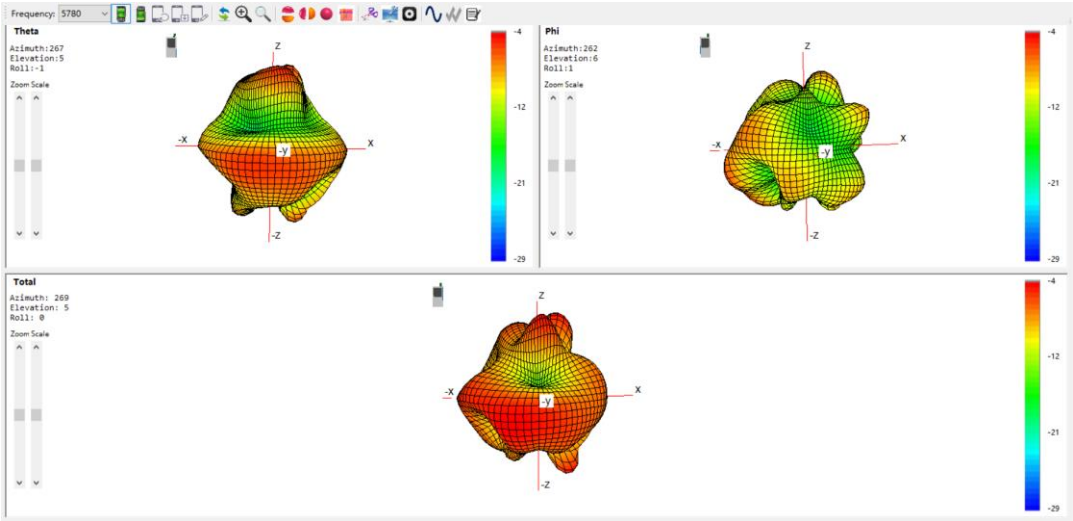
Frequency	5280MHz



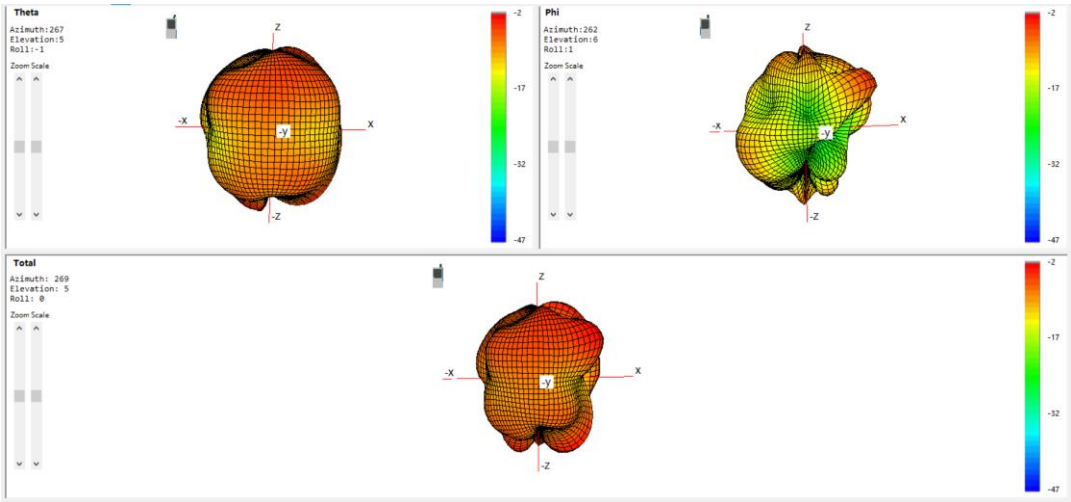
Frequency	5500MHz



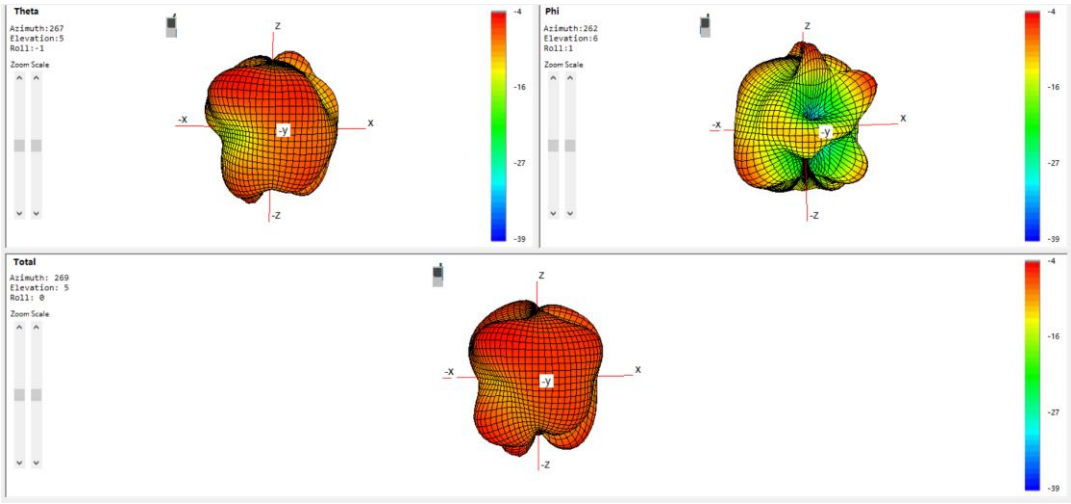
Frequency	5785MHz



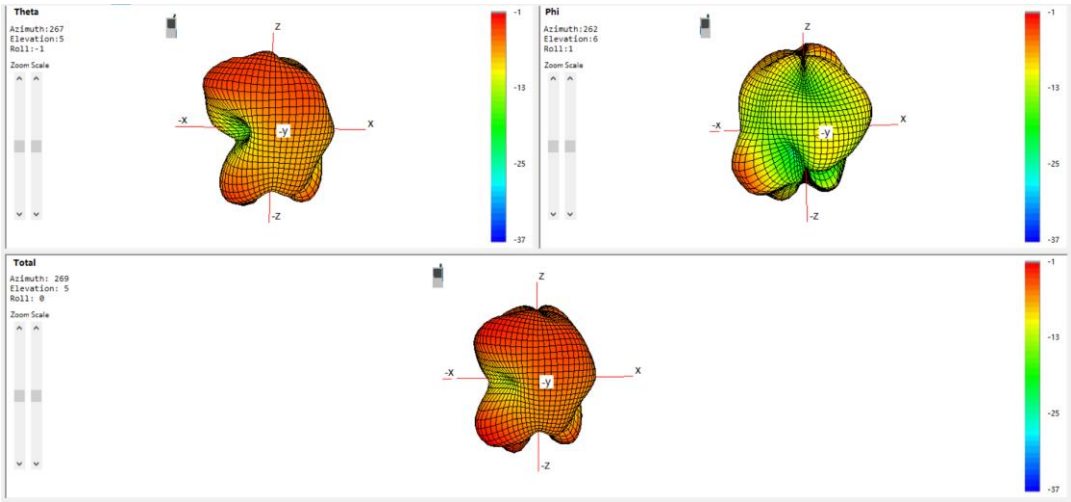
Frequency	6250MHz



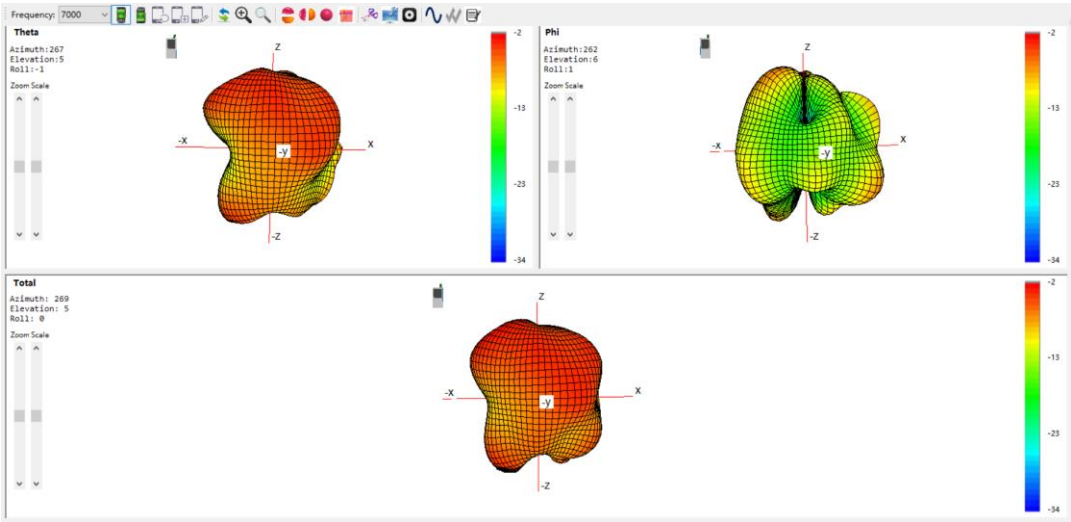
Frequency	6450MHz



Frequency	6700MHz



Frequency	7000MHz



3. Main Test Instruments

Name	Manufacturer	Model name	Serial Number	Cal., Date	Exp., Date
E5071C	KEYSIGHT	E5071C	EQ80224	2024-4-6	2025-4-6

4. Test sofot:

   GTS MaxSign- RayZone2800D_Z

End of Test Report