Antenna Performance Description

Applicant:	Xiaomi Communications Co., Ltd
Product description:	Mobile Phone
Model Name:	24307FPN8EG
FCC ID:	2AFZZPN8EG
Test date:	2024/04/15

1. Antenna information

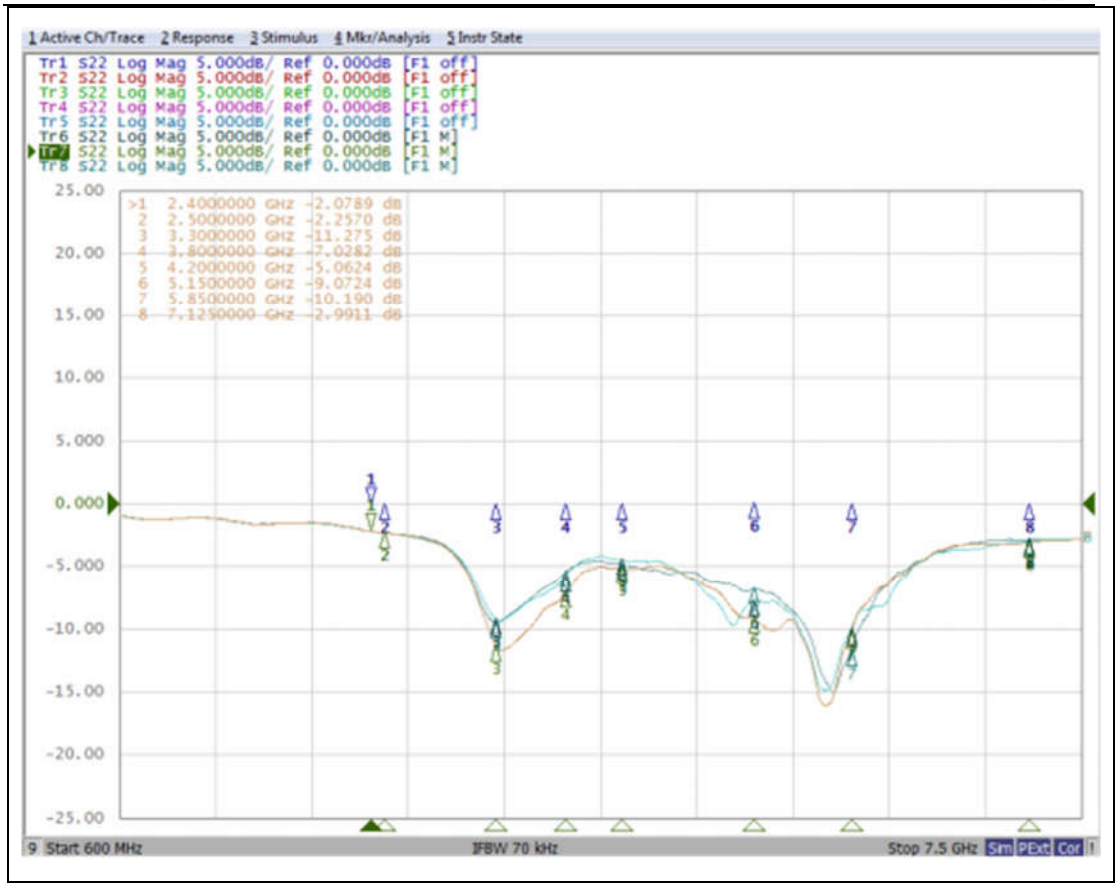
Antenna	Pattern	Antenna Type	Manufacturer	Manufacturer Address	Test party of Antenna gain
ANT6	Metal Frame	PIFA Antenna	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.
ANT16	Metal Frame	PIFA Antenna	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.
ANT7	Metal Frame	PIFA Antenna	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.
ANT17	Metal Frame	PIFA Antenna	XIAOMI	Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.

NFC	Metal Frame FPC	FPC Antenna	Kunshan Innowave Communicatio n Technology Co., Ltd. XIAOMI	Building 4, Zone A, Hong Xin Tai Industrial Park, No.28 Yinying Road, Gaoying Village, Dongguan City Floor 9th, Tower 1, Novel Park, No.4078 Dongbin Road, Nanshan District, Shenzhen.	Shenzhen Xiaomi Communications Co., Ltd.

2. Test data

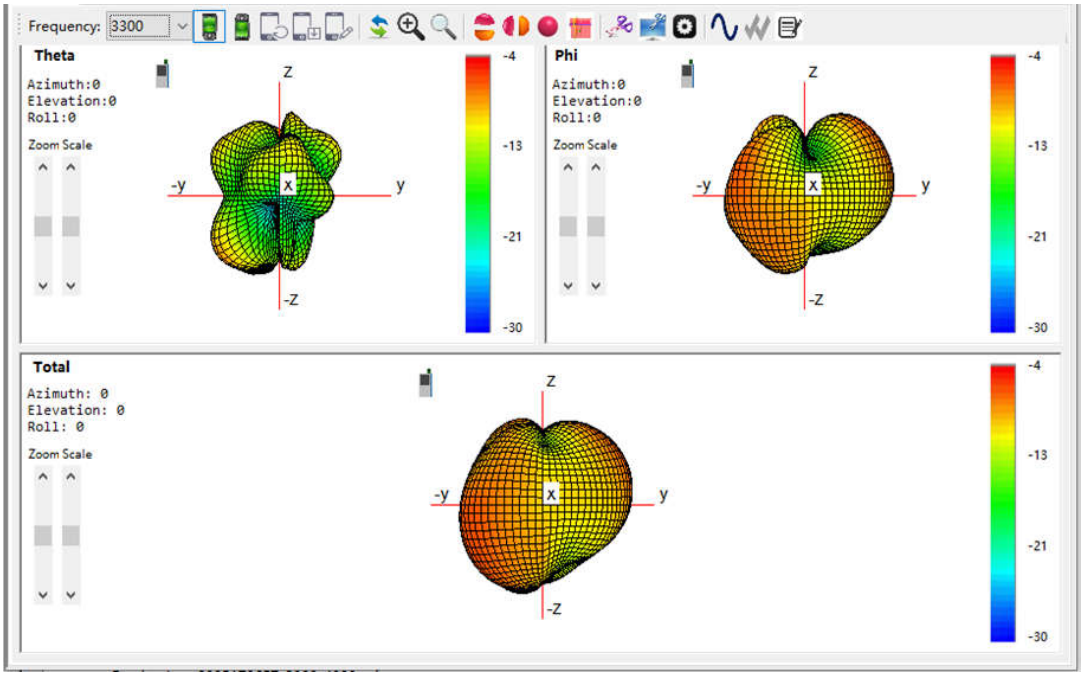
Bands for Antenna 6	Avg.Effi.(dB)	EIRP	合路传导功率	Peak gain(dBi)
5G (5150~5250MHz)	-6.6	17.39	21.45	-1.3
5G (5250~5350MHz)	-6.3	17.34	21.77	-1.7
5G (5470~5725MHz)	-5.1	17.51	21.7	-0.08
5G (5470~5850MHz)	-5	17.87	21.85	-0.08
6G (5925-6425GHz)	-6.4	16.5	20.61	-4.11
6G (6425-6525GHz)	-9.3	17.09	20.48	-5.37
6G (6525-6875GHz)	-10.4	14.86	20.23	-3.39
6G (6875-7125GHz)	-12.1	15.98	20.18	-4.2

S 参数

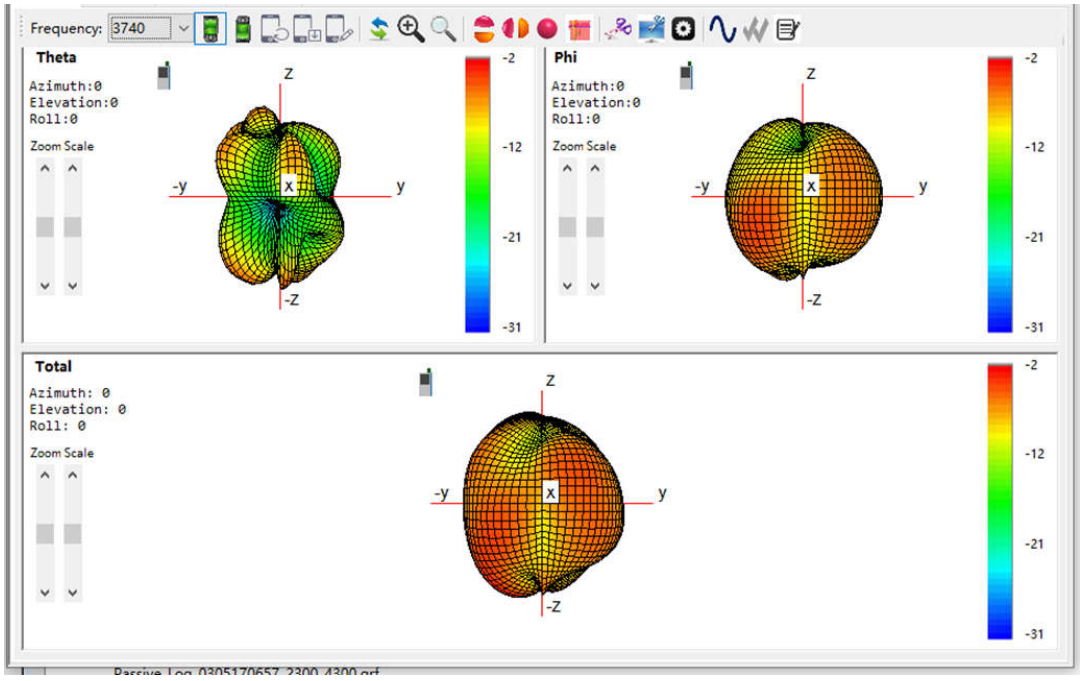

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State
Tr1 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 off]
Tr2 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 off]
Tr3 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 off]
Tr4 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 off]
Tr5 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 off]
Tr6 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 M]
Tr7 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 M]
Tr8 S22 Log Mag 5.000dB/ Ref 0.000dB [F1 M]
>1 2.4000000 GHz -2.0789 dB
2 2.5000000 GHz -2.2570 dB
3 3.3000000 GHz -11.275 dB
4 3.8000000 GHz -7.0282 dB
5 4.2000000 GHz -5.0624 dB
6 5.1500000 GHz -9.0724 dB
7 5.8500000 GHz -10.190 dB
8 7.1250000 GHz -2.9911 dB
25.00
20.00
15.00
10.00
5.000
0.000
-5.000
-10.00
-15.00
-20.00
-25.00
9 Start 600 MHz
IFBW 70 kHz
Stop 7.5 GHz
Sm PExt Cor

方向图

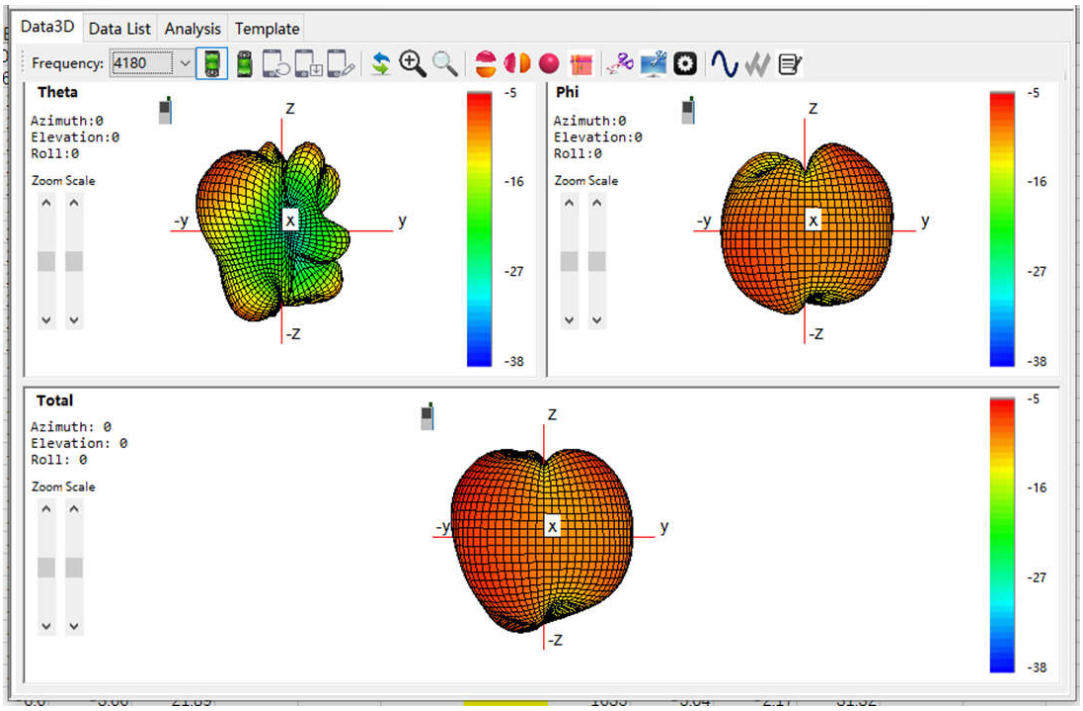
Frequency	3310MHz



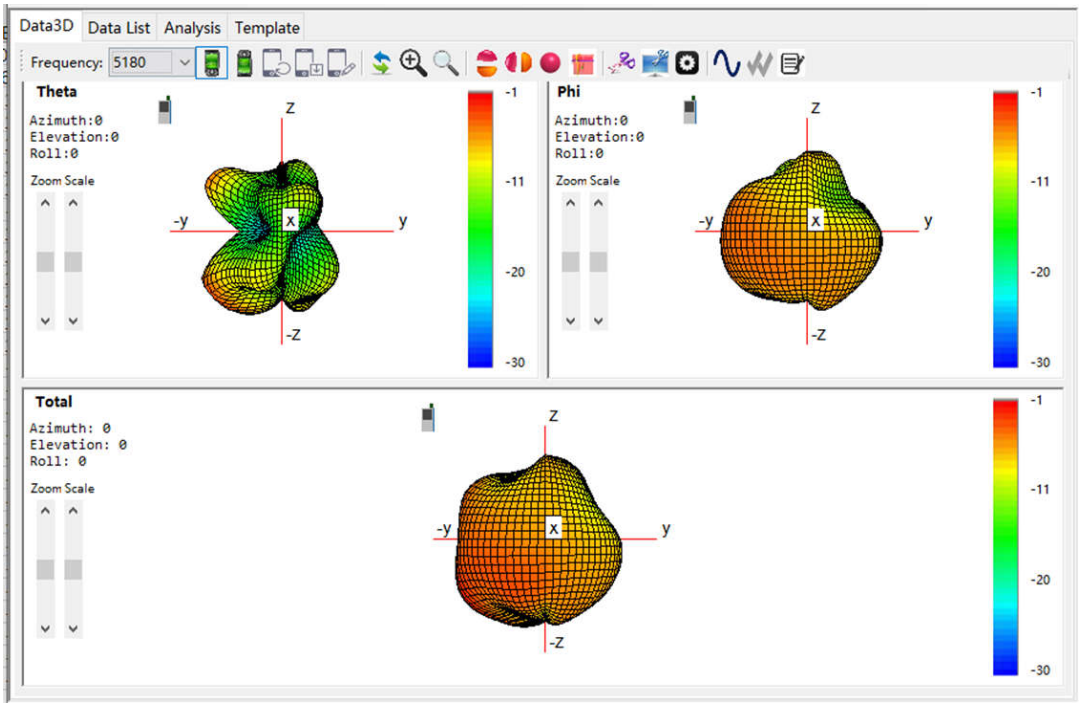
Frequency	3750MHz



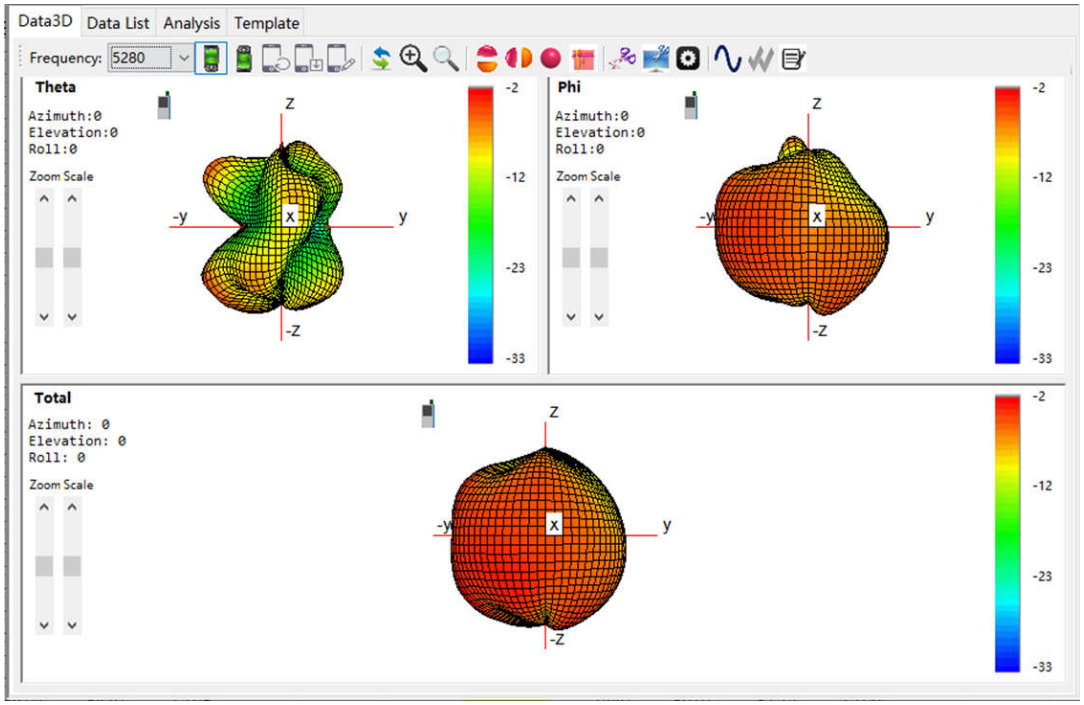
Frequency	4190MHz



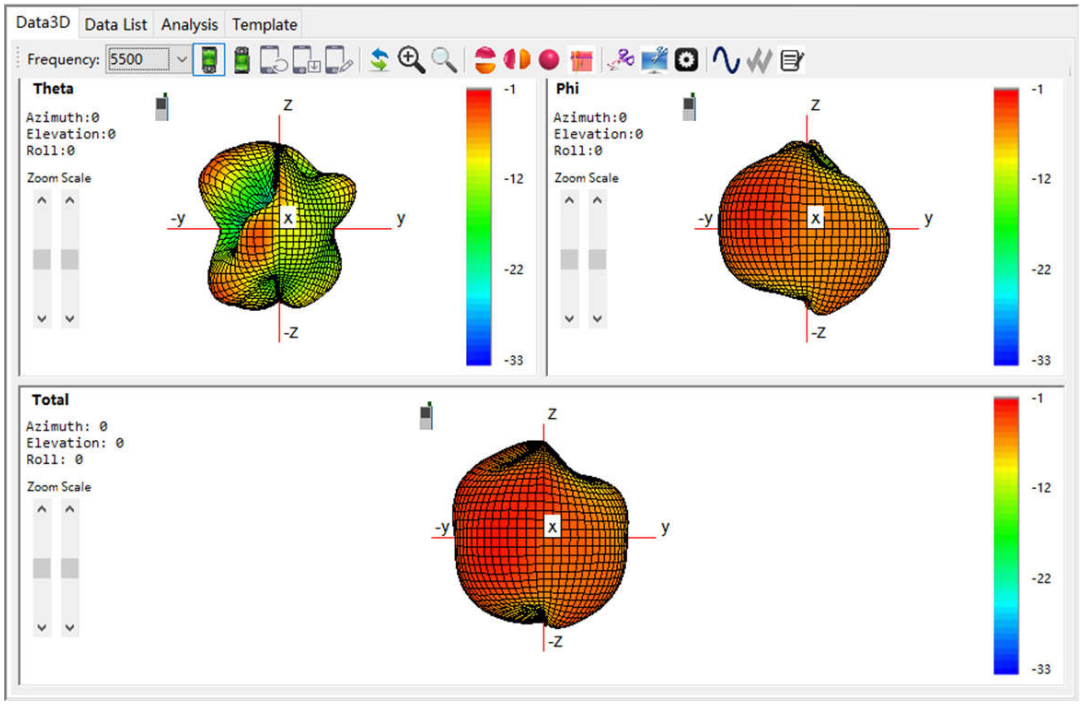
Frequency	5180MHz



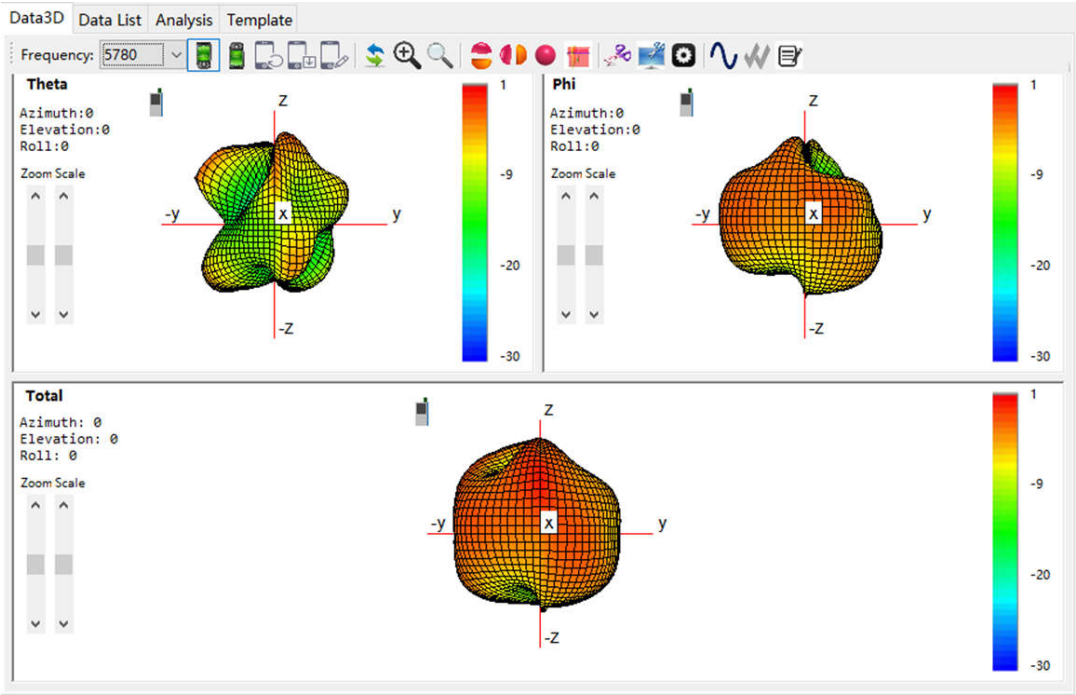
Frequency	5280MHz



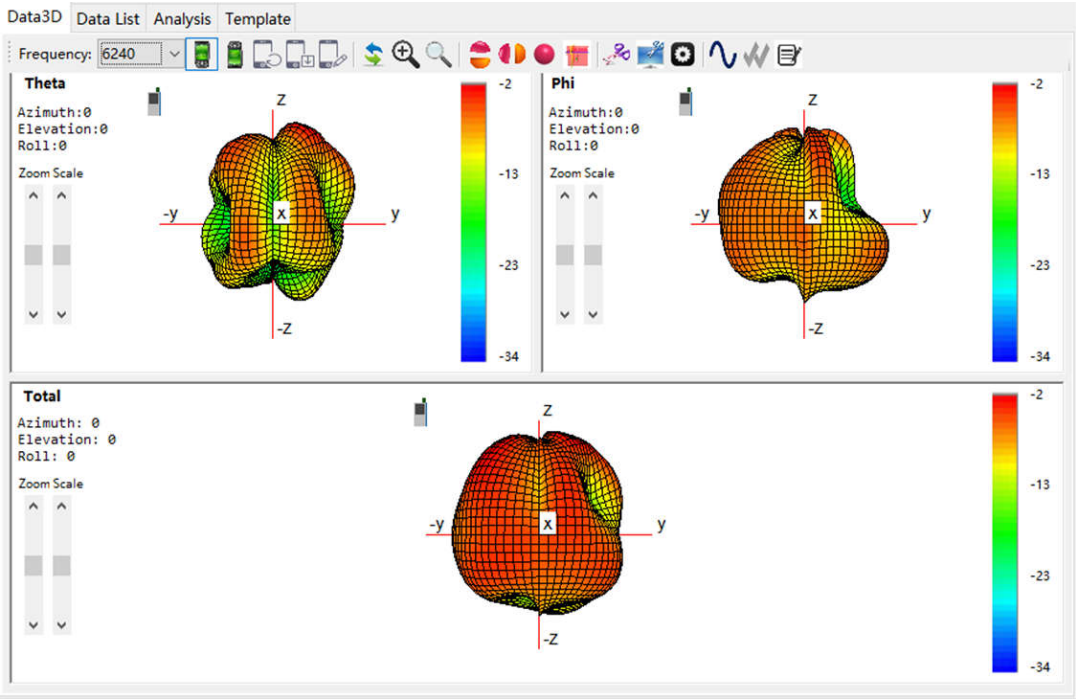
Frequency	5500MHz



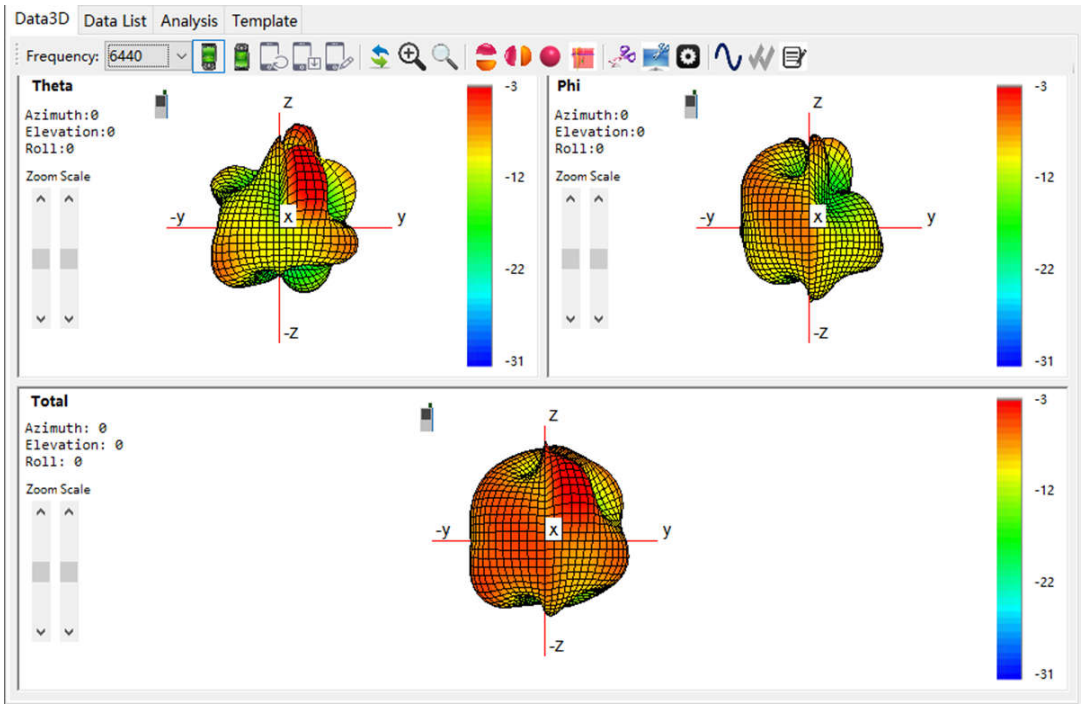
Frequency	5785MHz



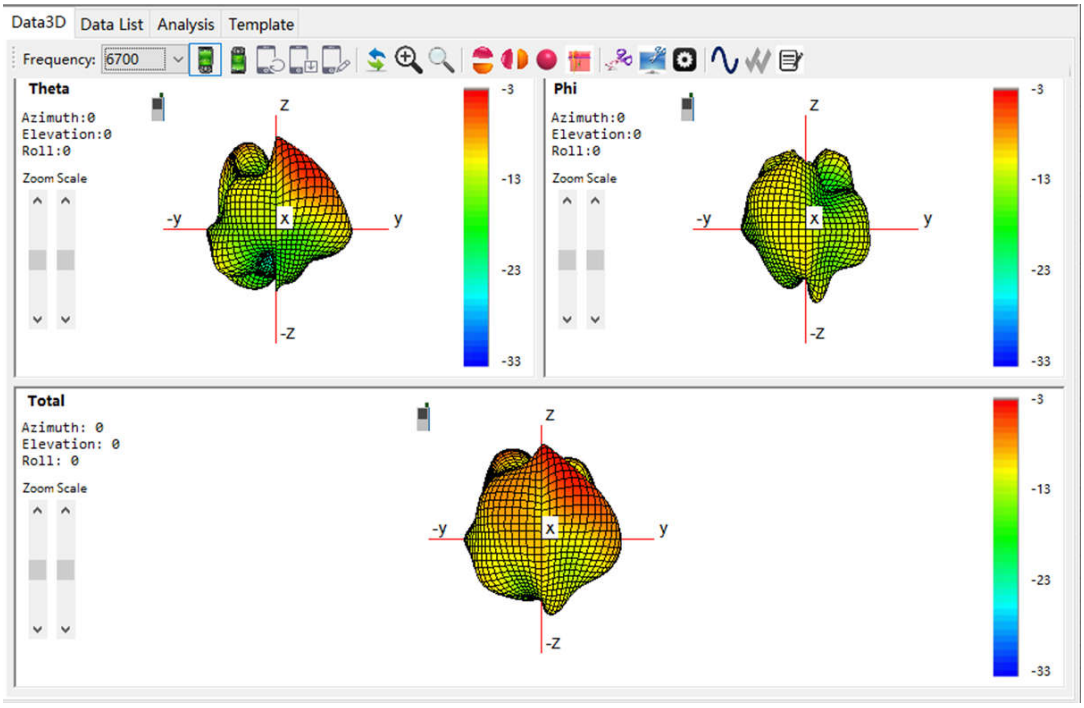
Frequency	6250MHz



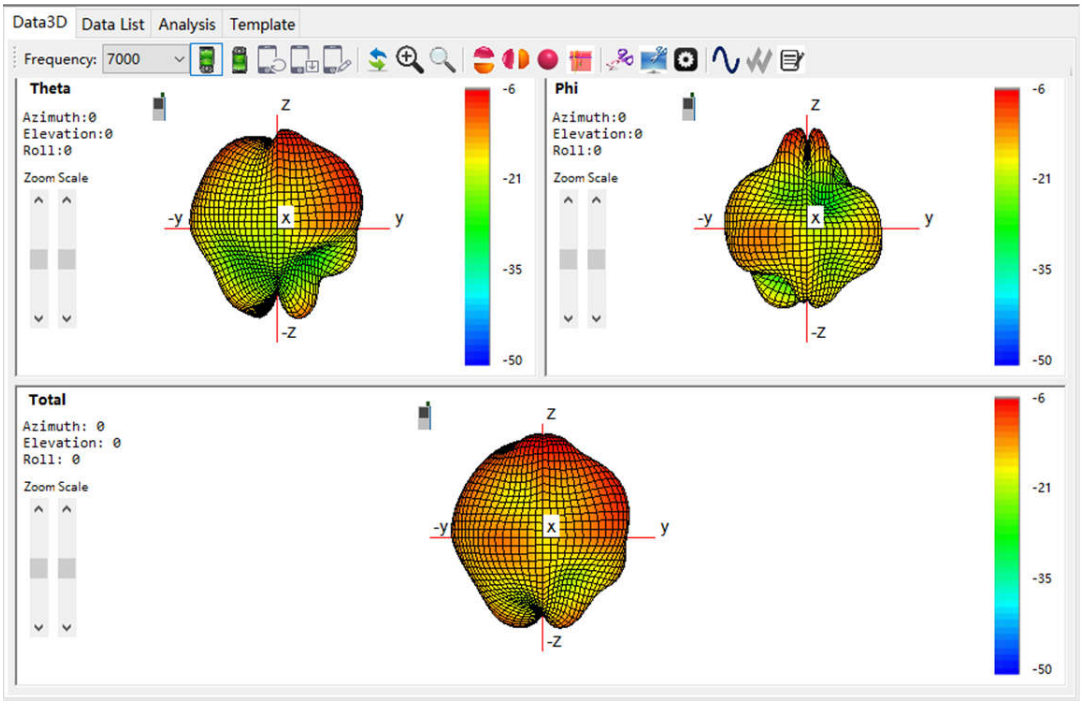
Frequency	6450MHz



Frequency	6700MHz



Frequency	7000MHz


Data3D
Data List
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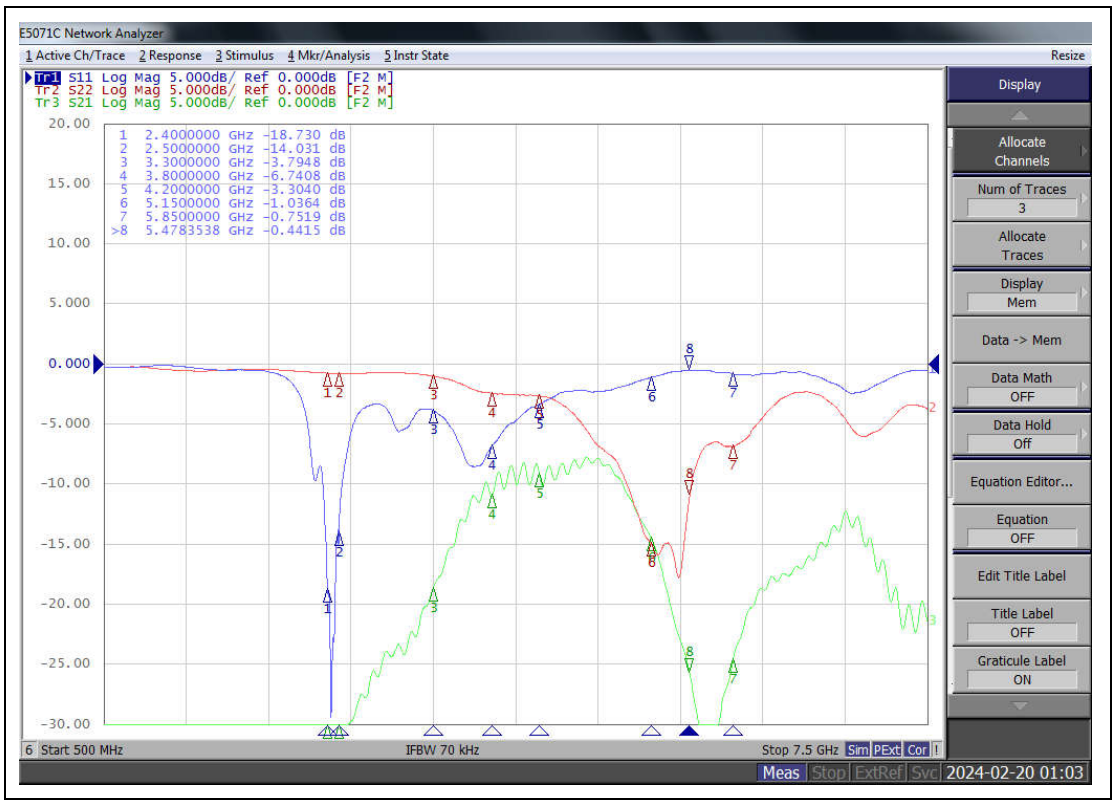
Elevation:0
Roll:0
Zoom Scale
Phi
Azimuth:0
Elevation:0
Roll:0
Zoom Scale
Total
Azimuth: 0
Elevation: 0
Roll: 0
Zoom Scale
z
-z
y
-y
x
-6
-21
-35
-50

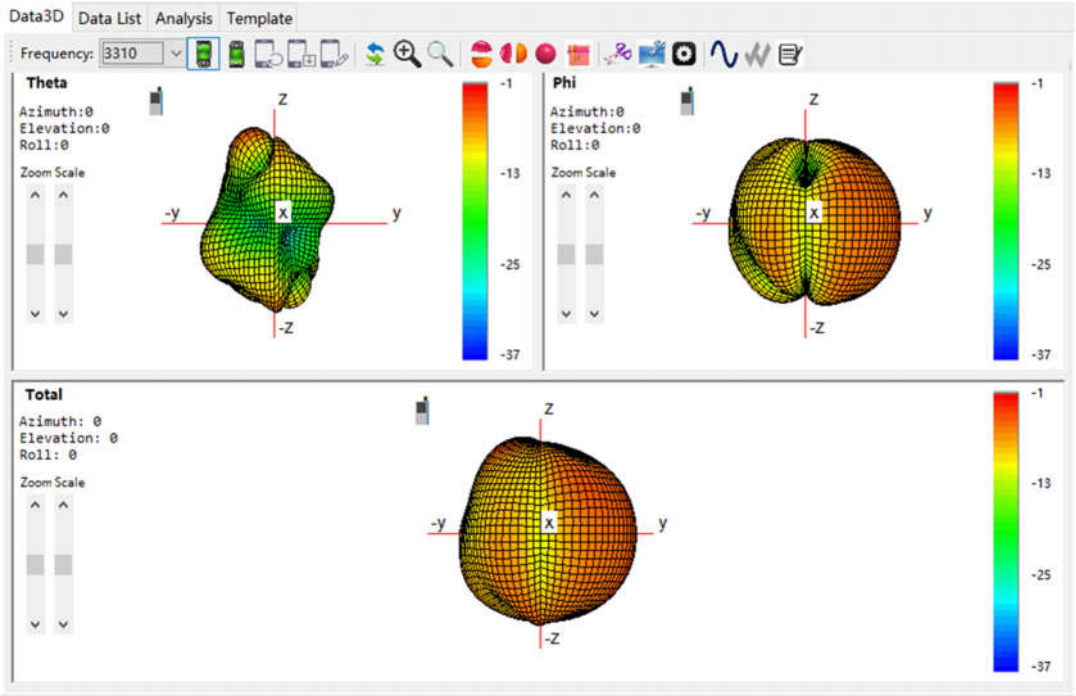
Bands for Antenna 7				
	Avg.Effi. (dB)	EIRP	合路传导功率	Peak gain(dBi)
2.4G(2400~2485MHz)	-3.8	18.7	22.36	0
Bluetooth	-3.8			0

S 参数

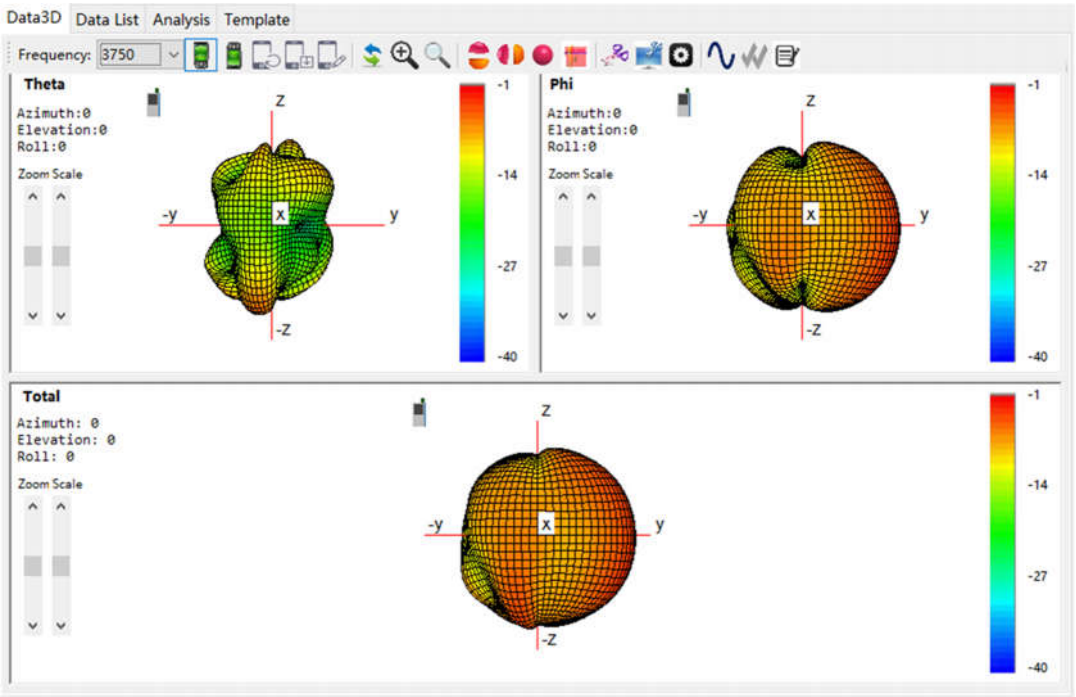


方向图

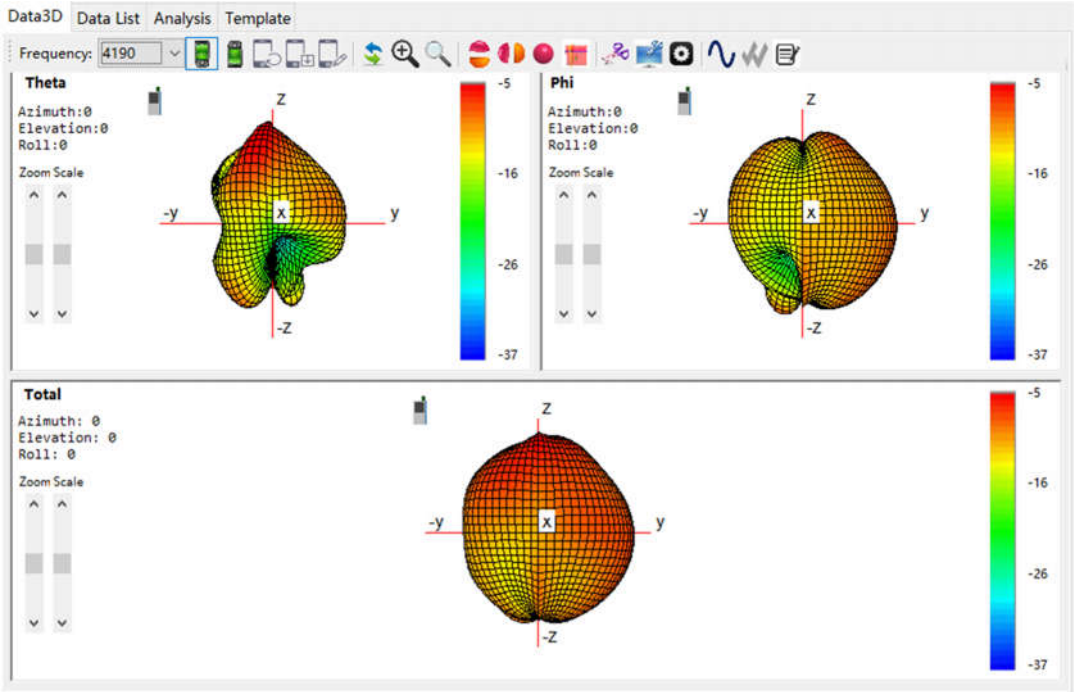
Frequency	3310MHz



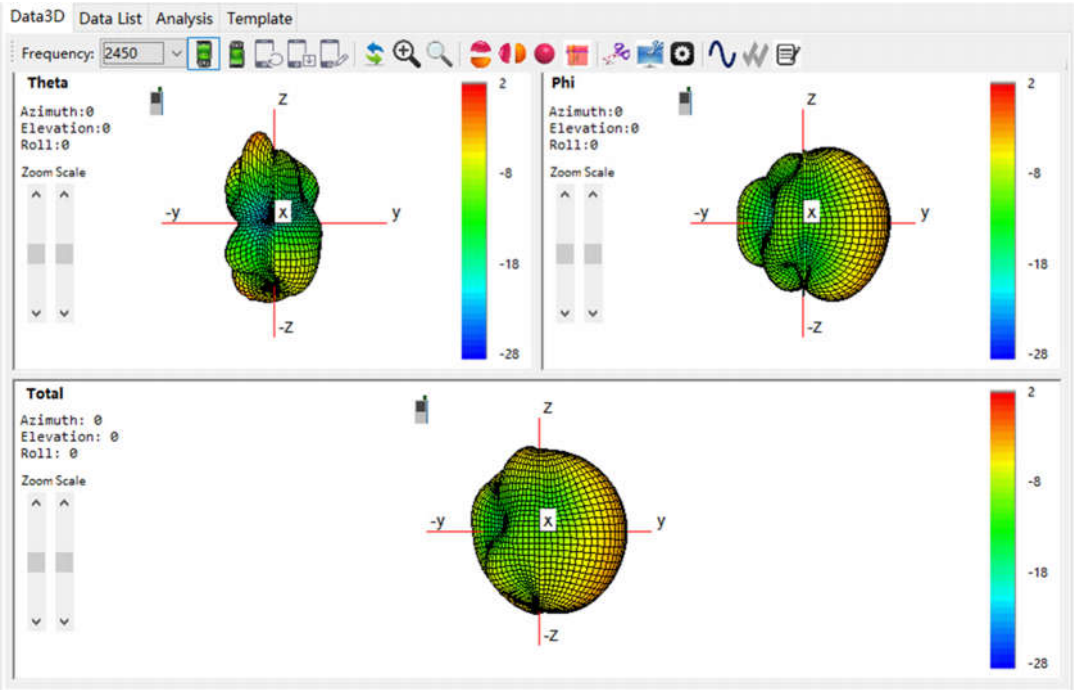
Frequency	3750MHz



Frequency	4190MHz

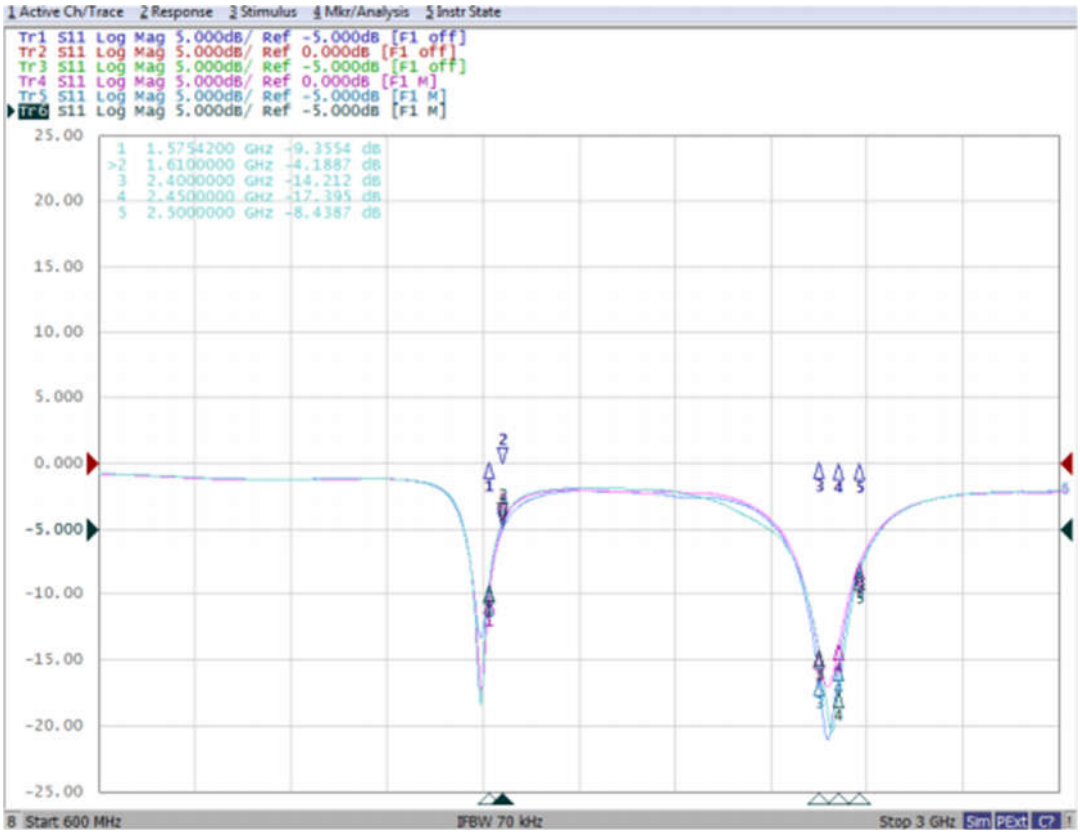


Frequency	2450MHz



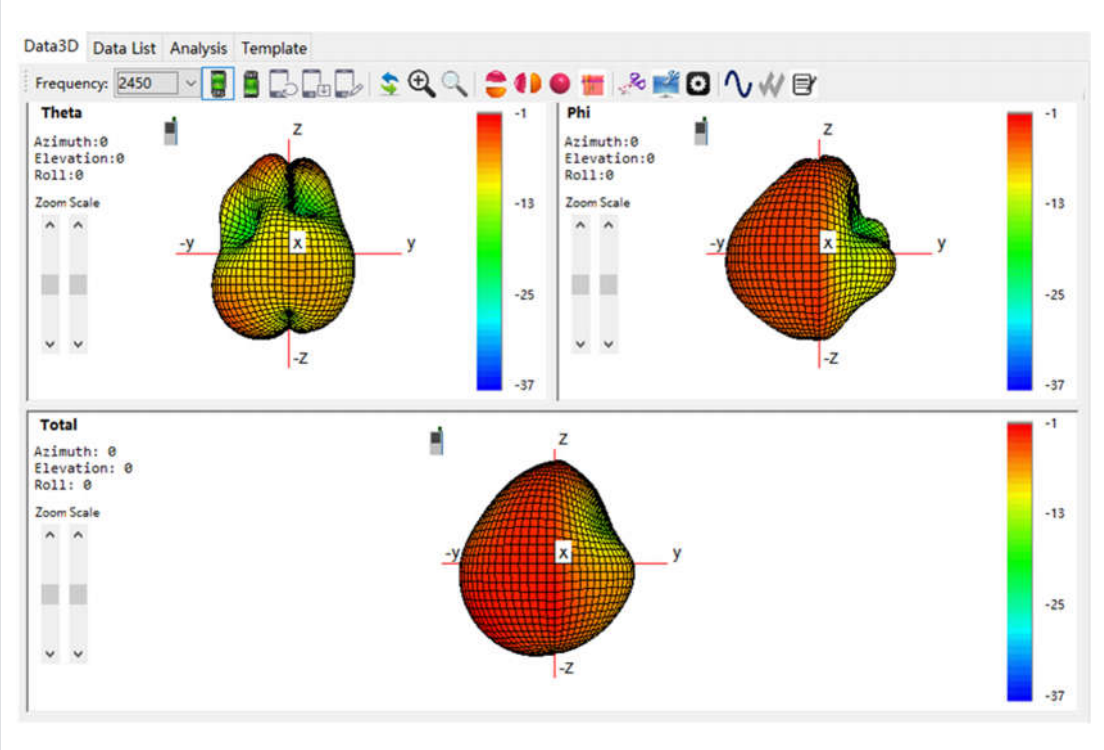
Band for Antenna 16	Avg.Effi .(dB)	EIRP	合路传导功率	Peak gain(dBi)
2.4G (2400~2485MHz)	-6	18.7	22.36	-1
Bluetooth	-6			-1

S 参数



方向图

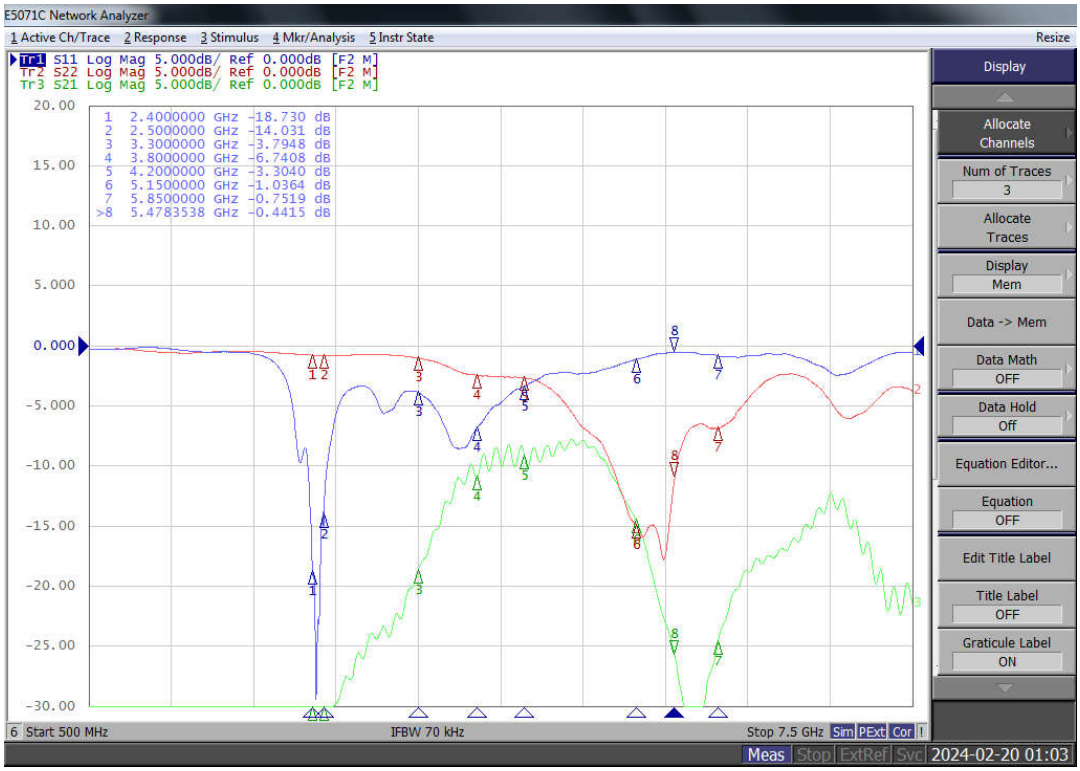
Frequency	2450MHz



Band for Antenna 17	Avg.Effi.(dB)	EIRP	合路传导功率	Peak gain(dBi)
5G (5150~5250MHz)	-6.3	17.39	21.45	-0.6
5G (5250~5350MHz)	-6.2	17.34	21.77	-0.0
5G (5470~5725MHz)	-5.3	17.51	21.7	-0.08
5G (5470~5850MHz)	-5.5	17.87	21.85	-0.08
6G (5925-6425GHz)	-6.6	16.5	20.61	-4.11

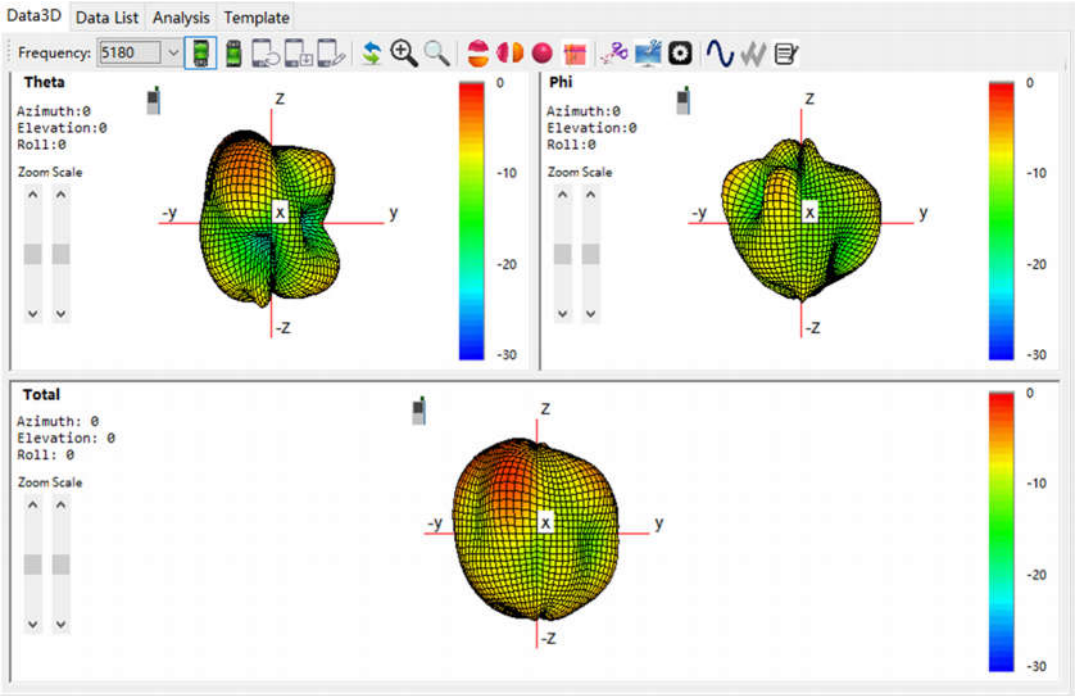
6G (6425-6525GHz)	-9	17.09	20.48	-5.37
6G (6525-6875GHz)	-9.6	14.86	20.23	-3.39
6G (6875-7125GHz)	-10.7	15.98	20.18	-4.2

S 参数

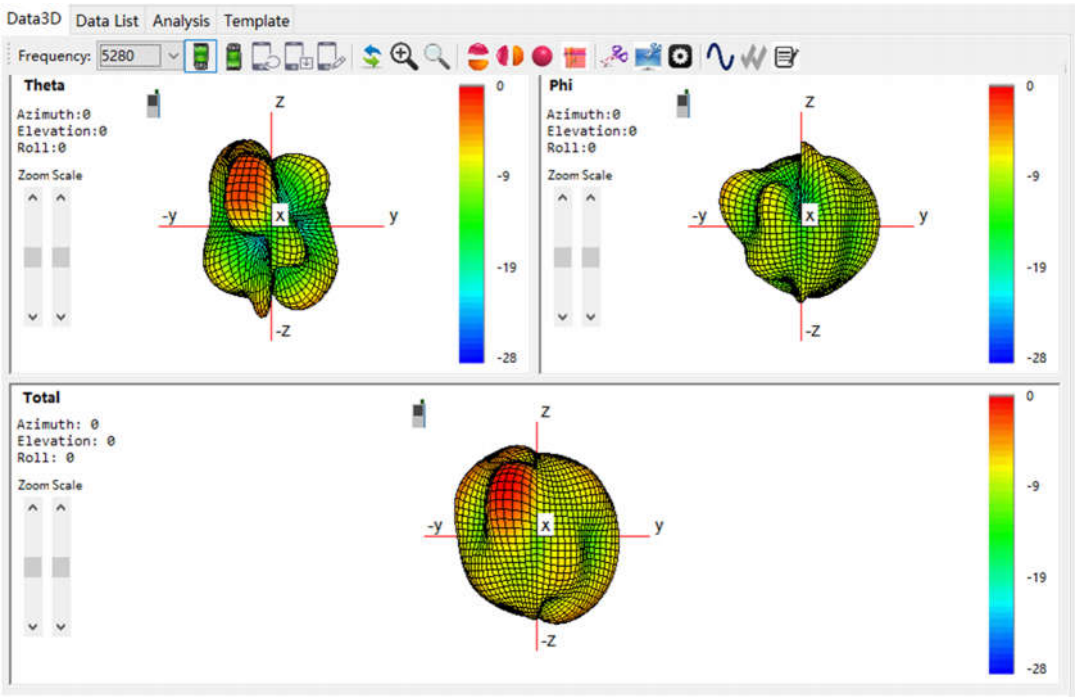


方向图

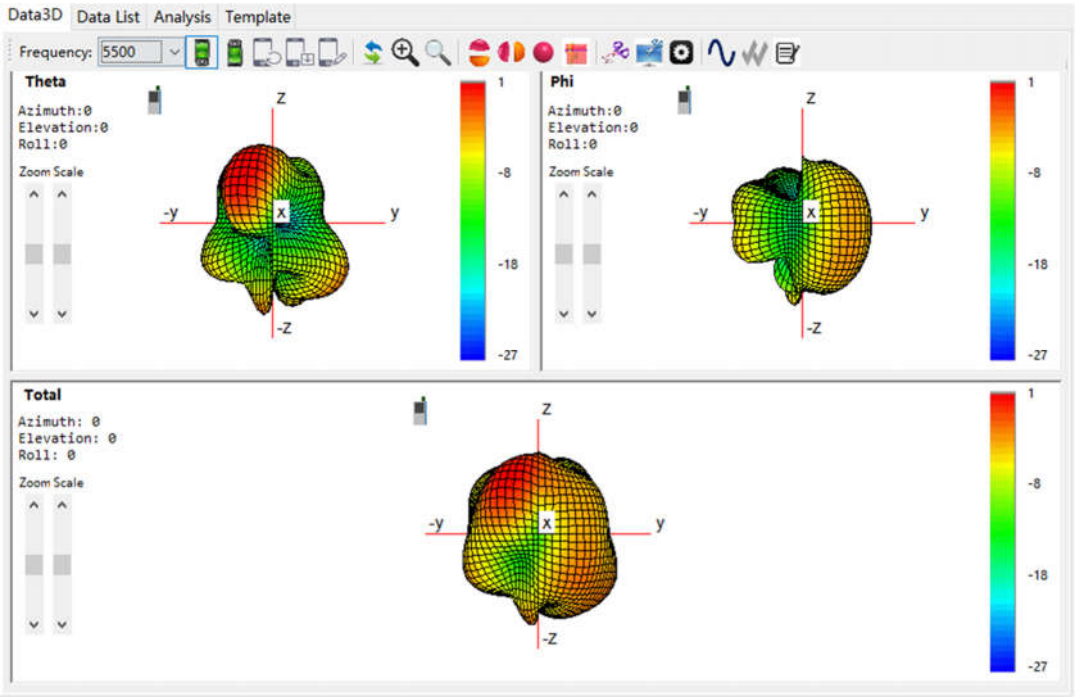
Frequency	5180MHz



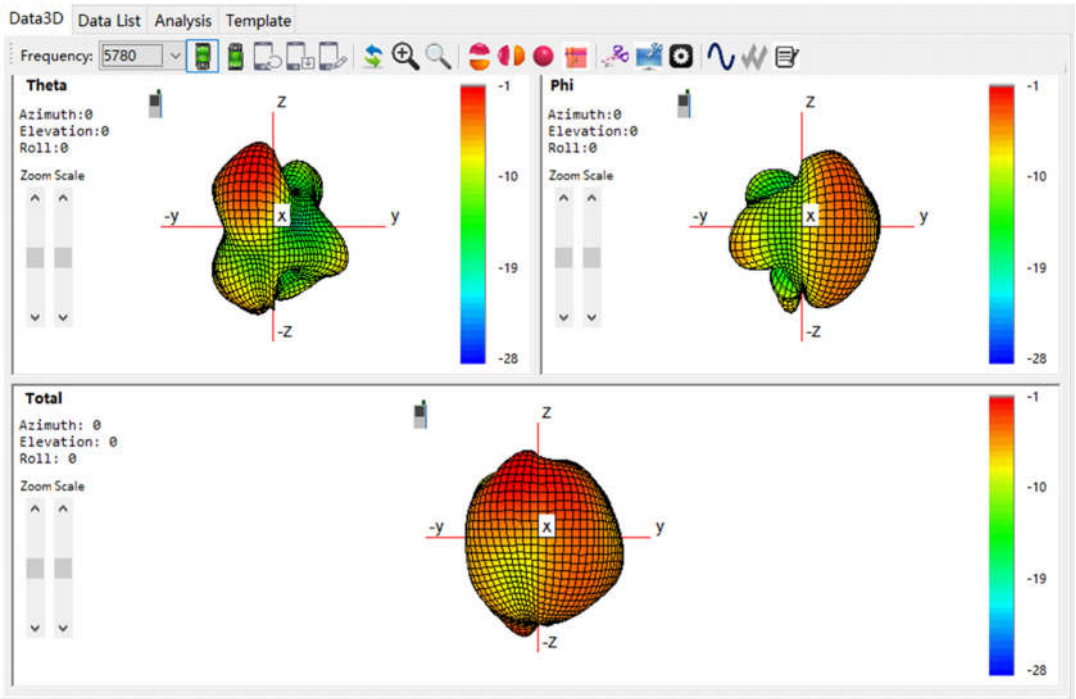
Frequency	5280MHz



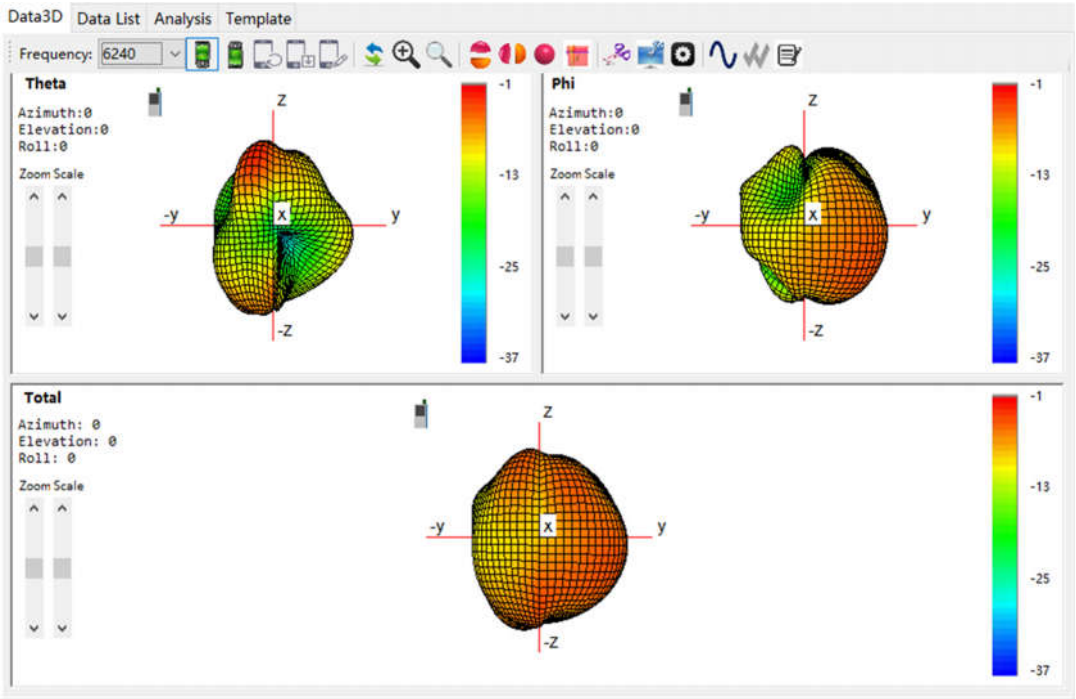
Frequency	5500MHz



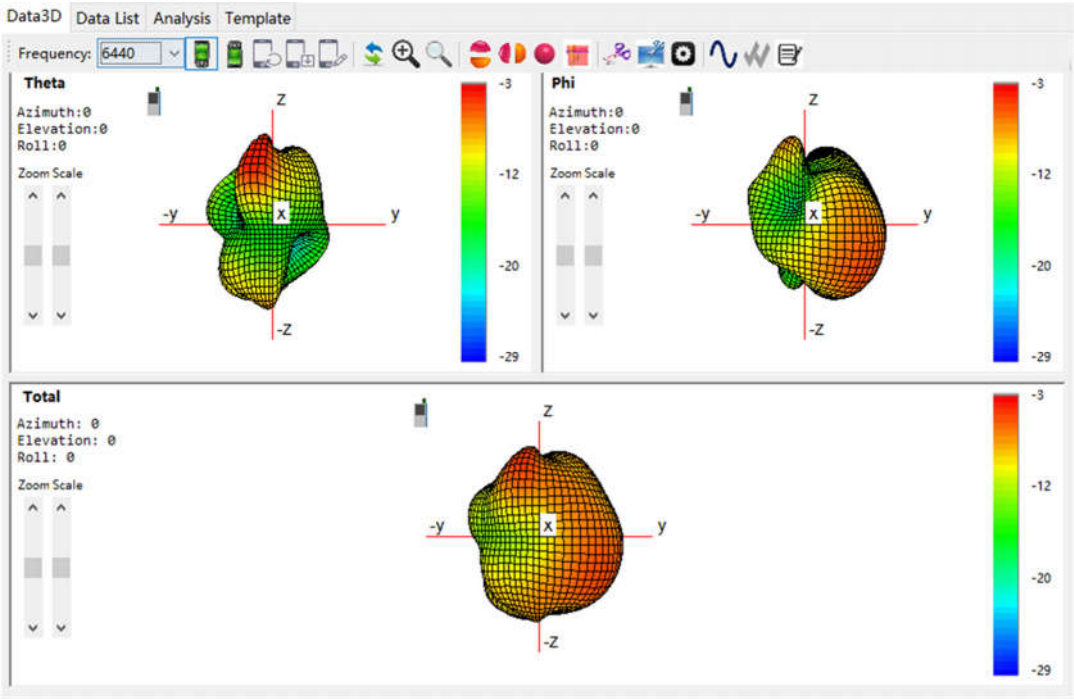
Frequency	5785MHz



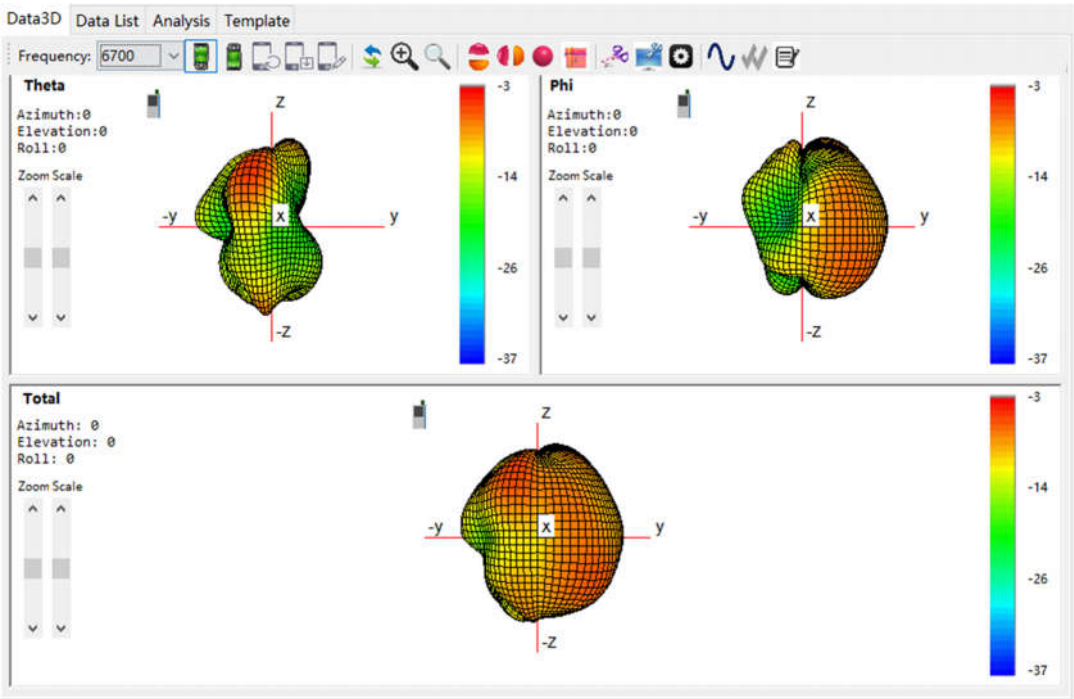
Frequency	6250MHz



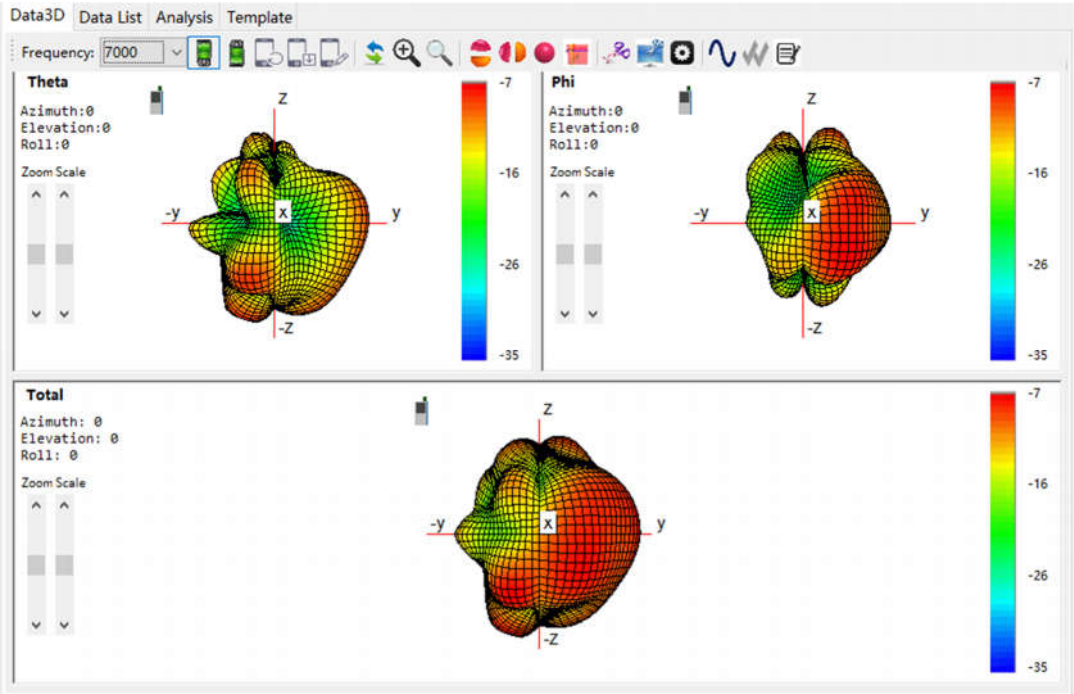
Frequency	6450MHz



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. The name of the test software

GTS MaxSign- RayZone2800D_Z

5. Signed by the test engineer

杜志敏

End of Test Report