



Shenzhen Feisheng Electronics Co., Ltd.

3rd Floor, No.70 Baotong South Road, Yungu Street, Xikeng Industrial Zone, Yuanshan Street, Shenzhen, China

WIFI6 Passive antenna report

client:	乐逍遥
item:	N100-SE
Antenna modification:	A0
Preparation engineering:	Guoxi (18970988655)
auditor:	Li Sheng (13683276589)
date:	2024.11.29

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This report is to debug the performance of N100-SE, antenna operating frequency of 主: 2400-2500MHz 5150-5850MHz
副: 2400-2500MHz 5150-5850MHz

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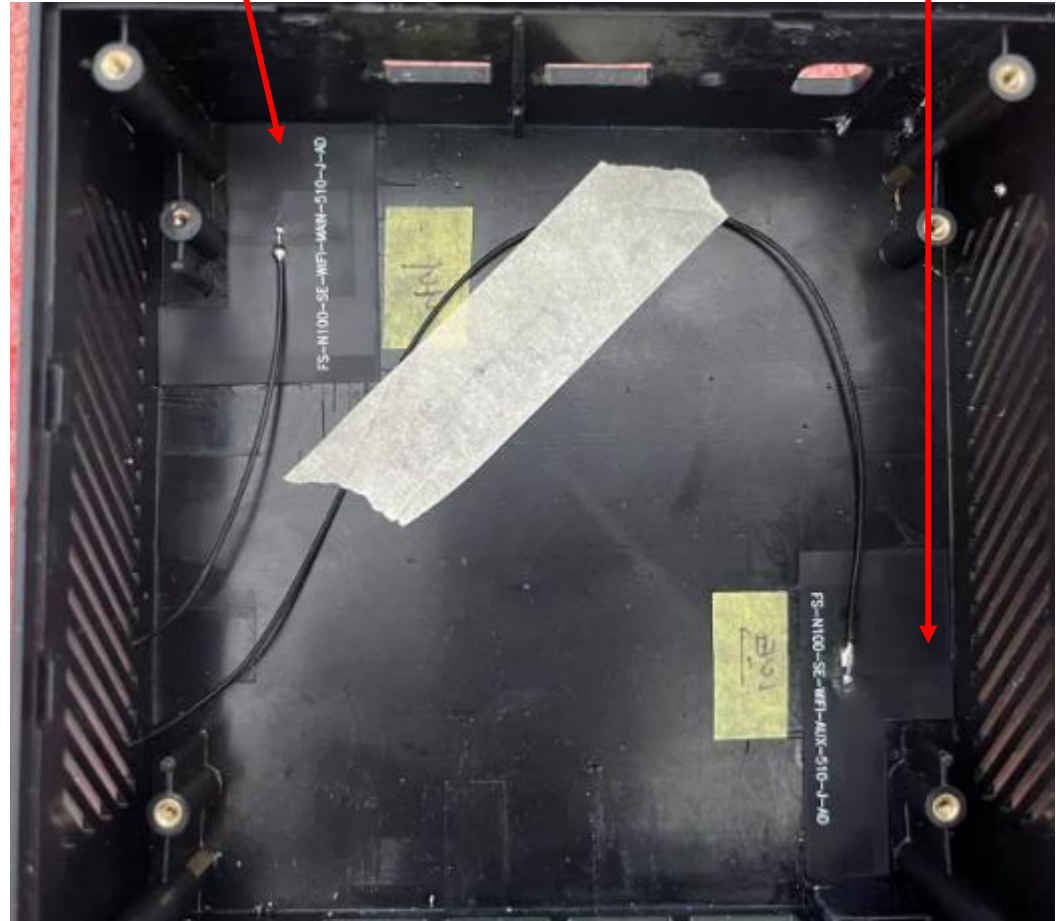
1、Product graphics

Product pictures



Main antenna

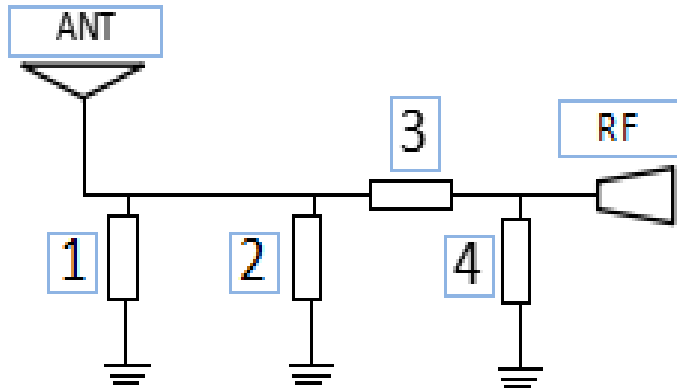
AUX antenna



2、Test system

Serial number	Testing instrument
S11 Parameters	Agilent 5071B
OTA testing	Agilent 5071B & CMW500 & Agilent 8960 & 飞图暗室
Gain and efficiency	Agilent 5071B & 飞图暗室

3、Antenna matching

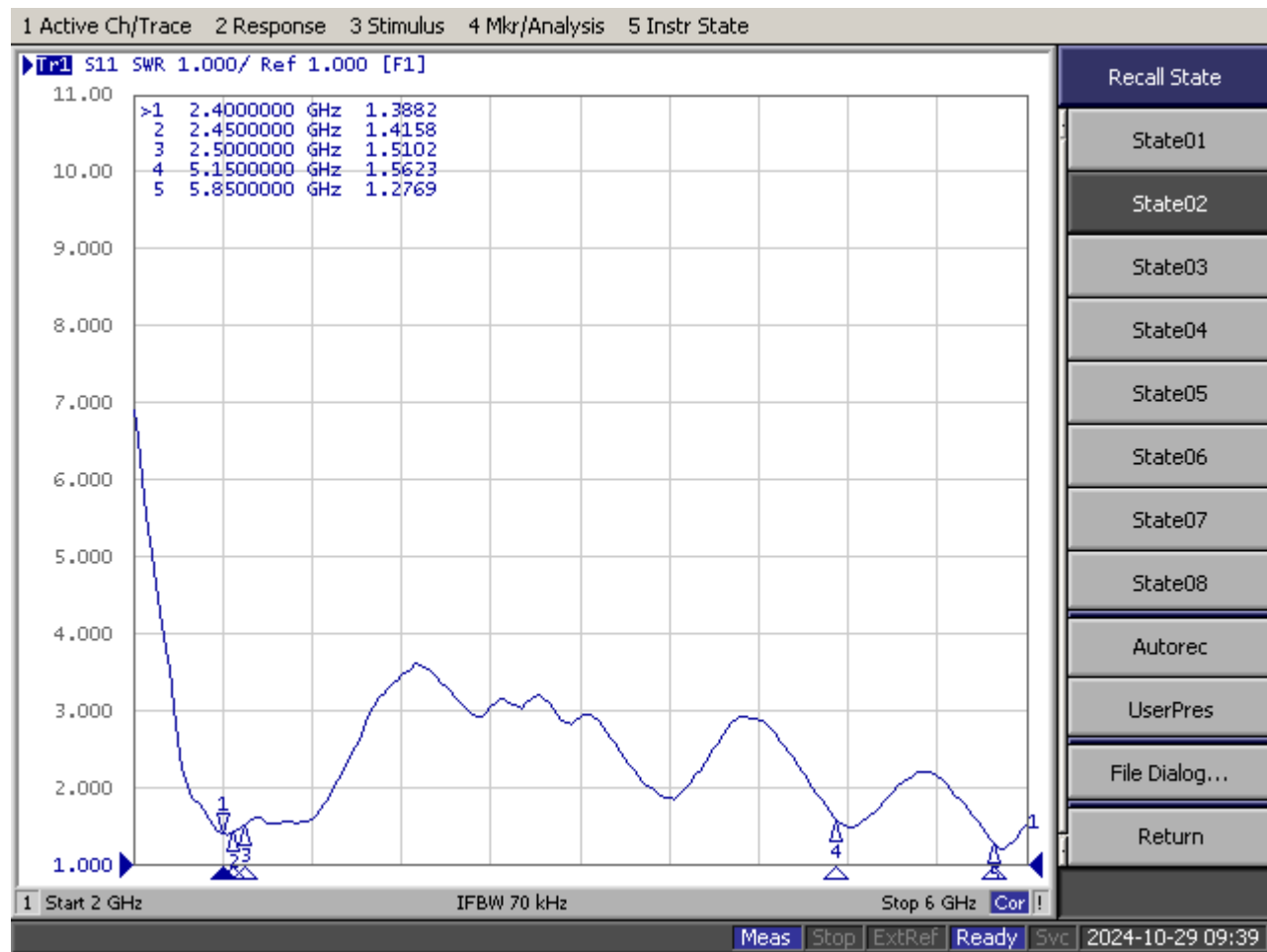


Serial number	capacitance	inductance
1	N/A	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A

PCB end matching circuit is unchanged

4、The antenna test results

4.1 S11 Parameters——Main



Frequency (工作频段)	2400	2450	2500	5150	5850
VSWR (驻波比)	1.38	1.41	1.51	1.56	1.27

4、Antenna test result

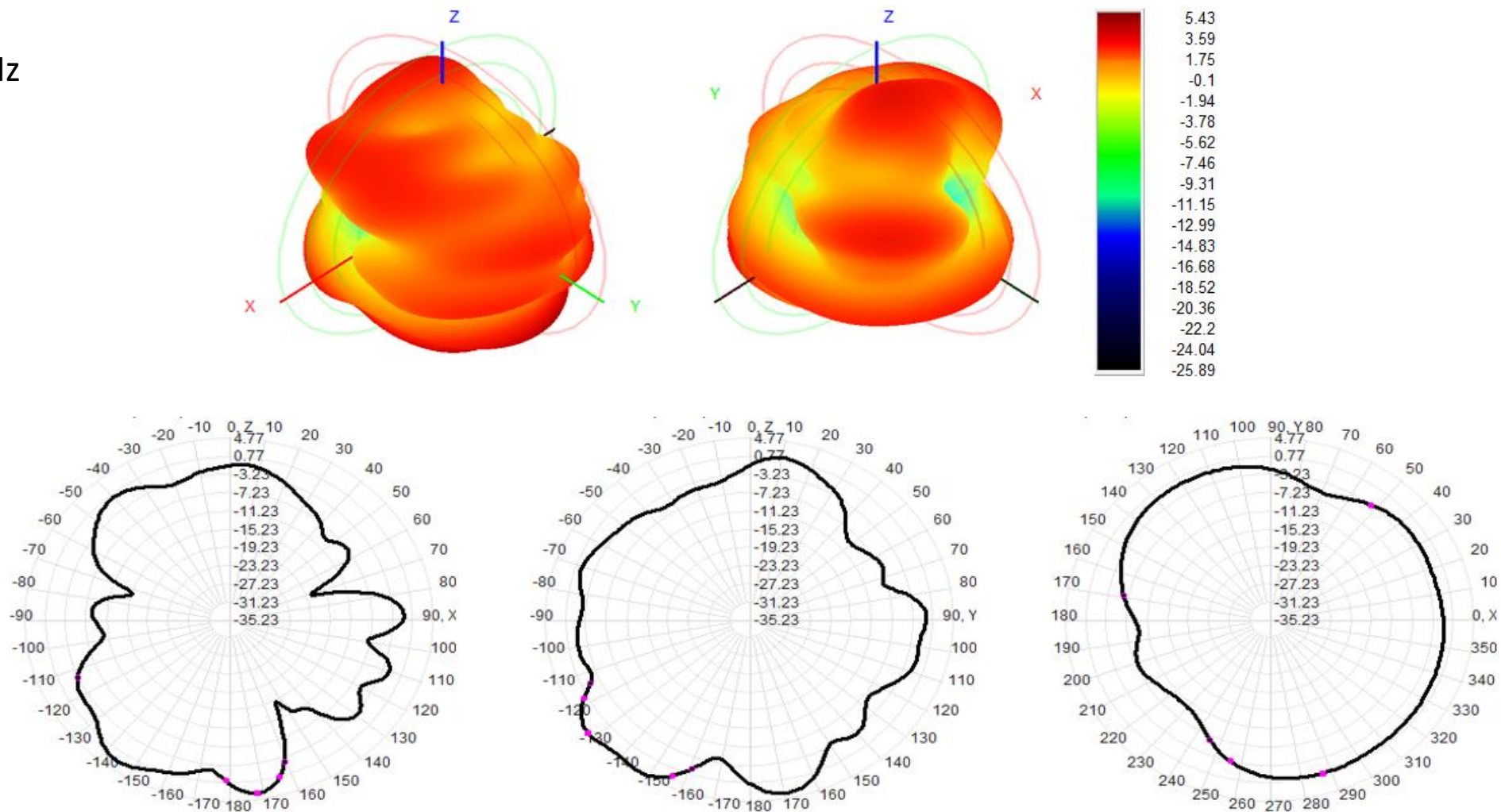
4.2 Efficiency gain ——Main

Frequency (MHz) (工作频段)	Efficiency (%) (效率)	Peak GAIN (dBi) (增益)
2400	63.68	2.43
2450	65.39	2.74
2500	66.32	2.31
5150	55.15	2.48
5850	55.40	3.45

4、Antenna test result

4.3 Two, three-dimensional graphics ——Main

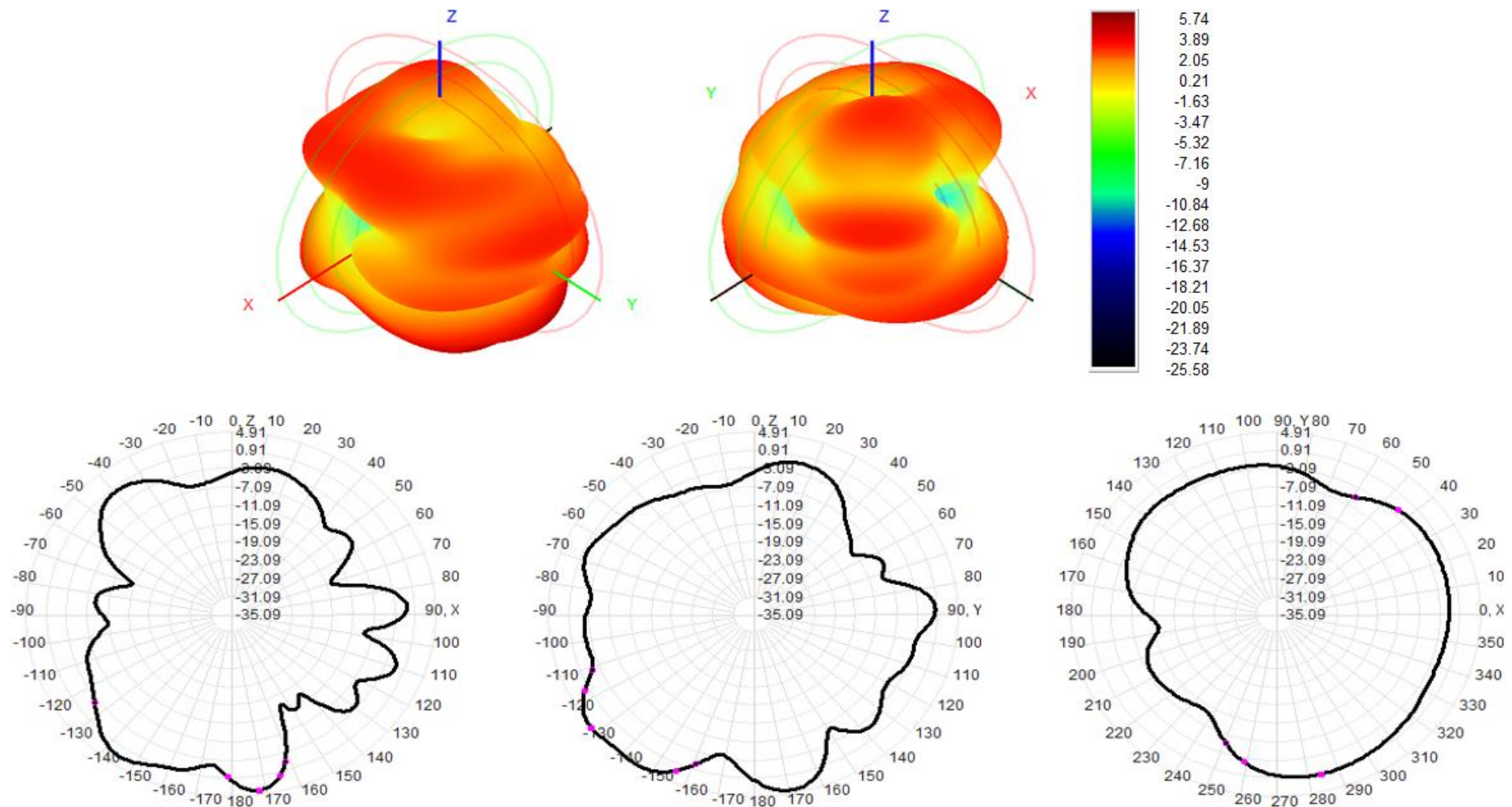
2400MHz



4、Antenna test result

4.3 Two, three-dimensional graphics ——Main

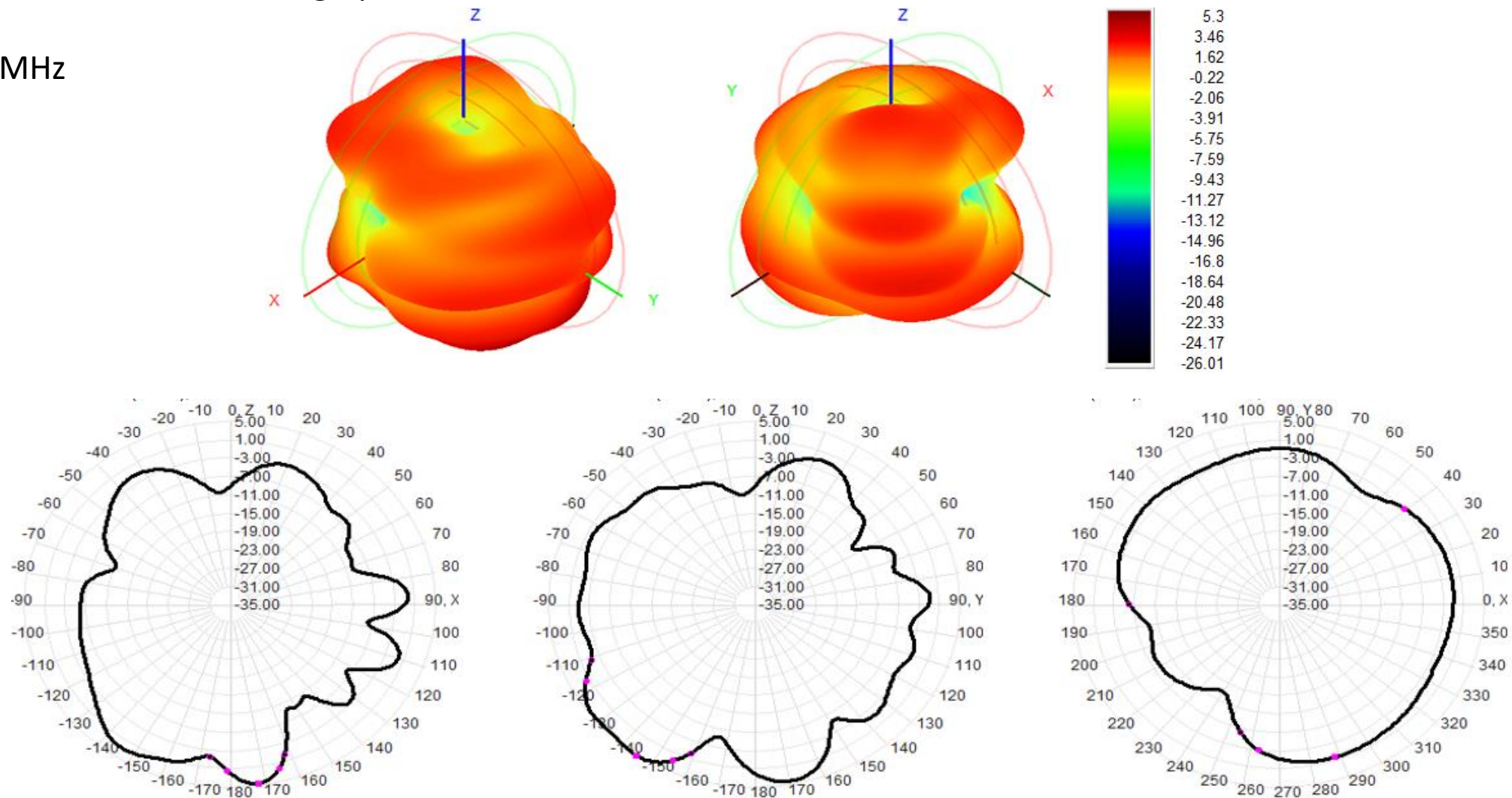
2450MHz



4、Antenna test result

4.3 Two, three-dimensional graphics ——Main

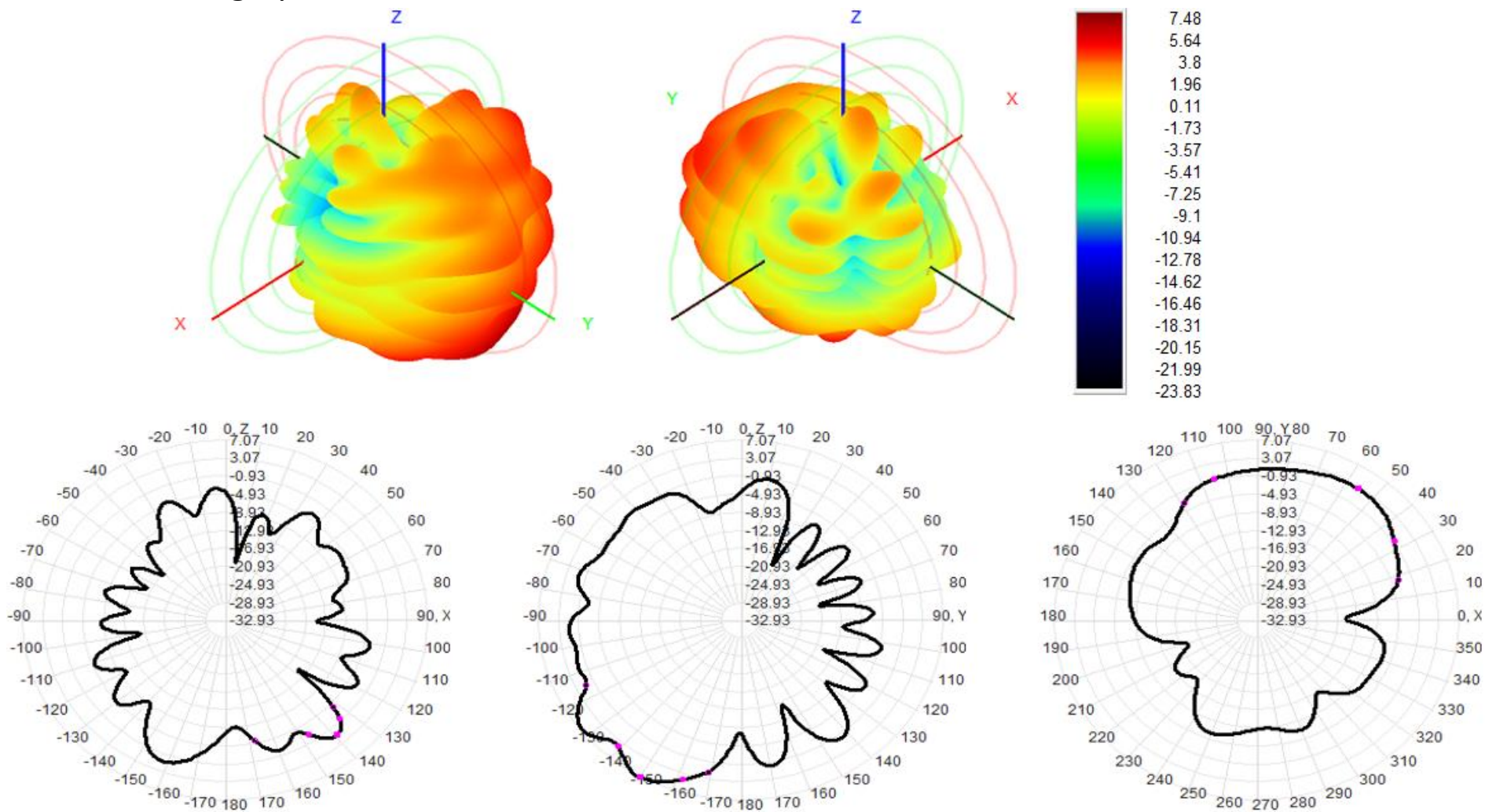
2500MHz



4、Antenna test result

4.3 Two, three-dimensional graphics ——Main

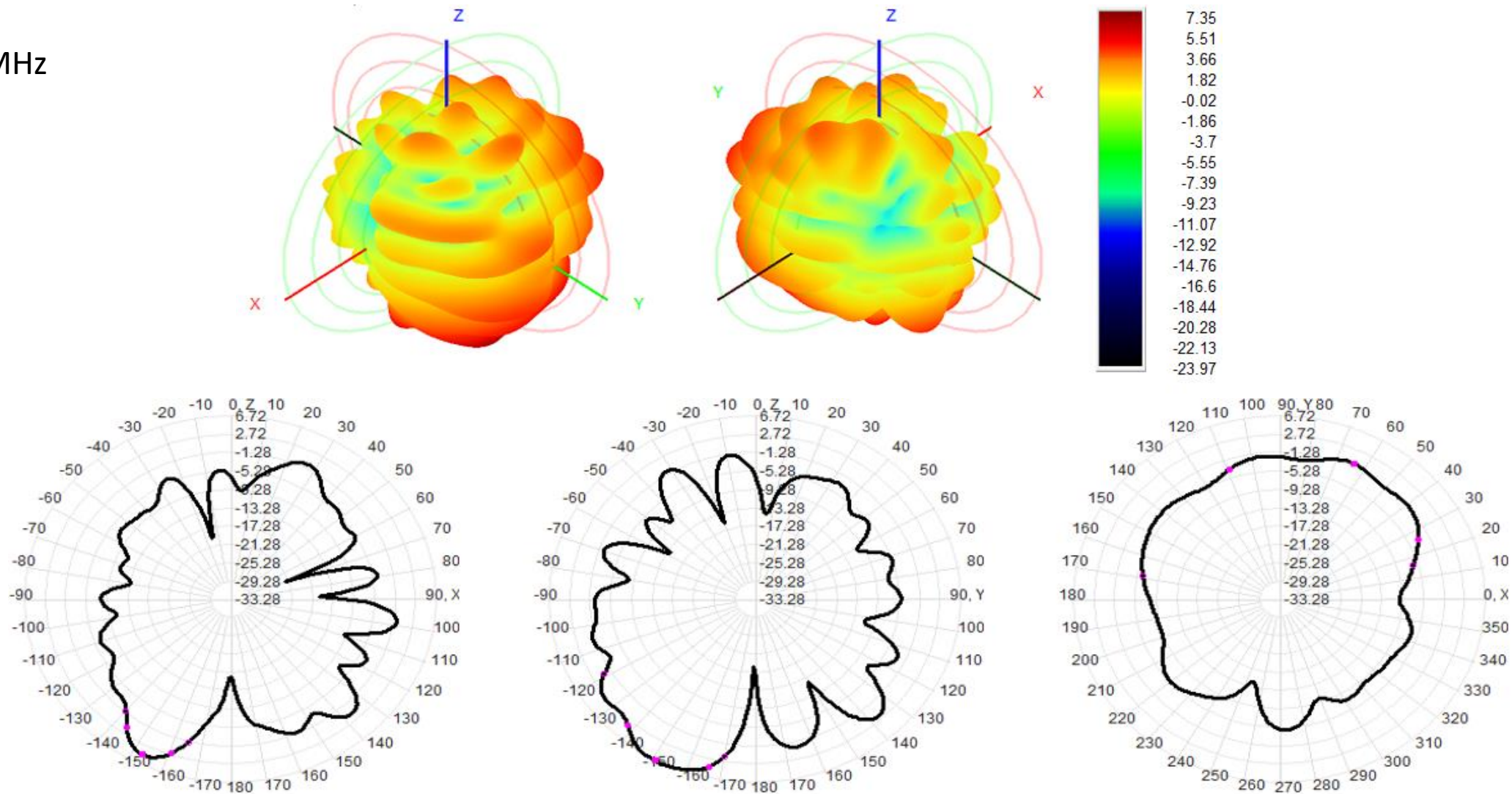
5150MHz



4、Antenna test result

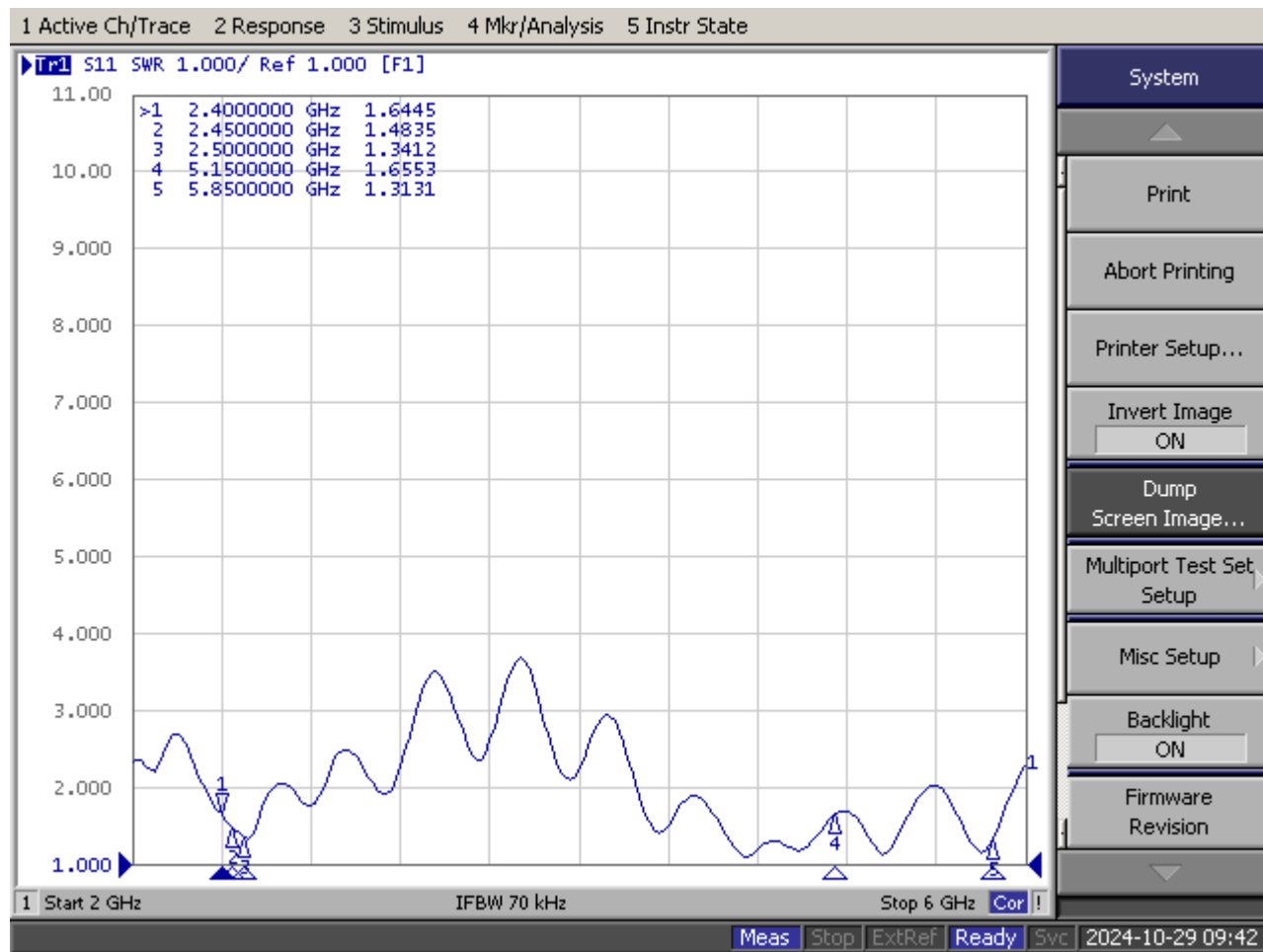
4.3 Two, three-dimensional graphics ——Main

5850MHz



5、The antenna test results

5.1 S11 Parameters——AUX



Frequency (工作频段)	2400	2450	2500	5150	5850
VSWR (驻波比)	1.64	1.48	1.36	1.65	1.31

5、Antenna test result

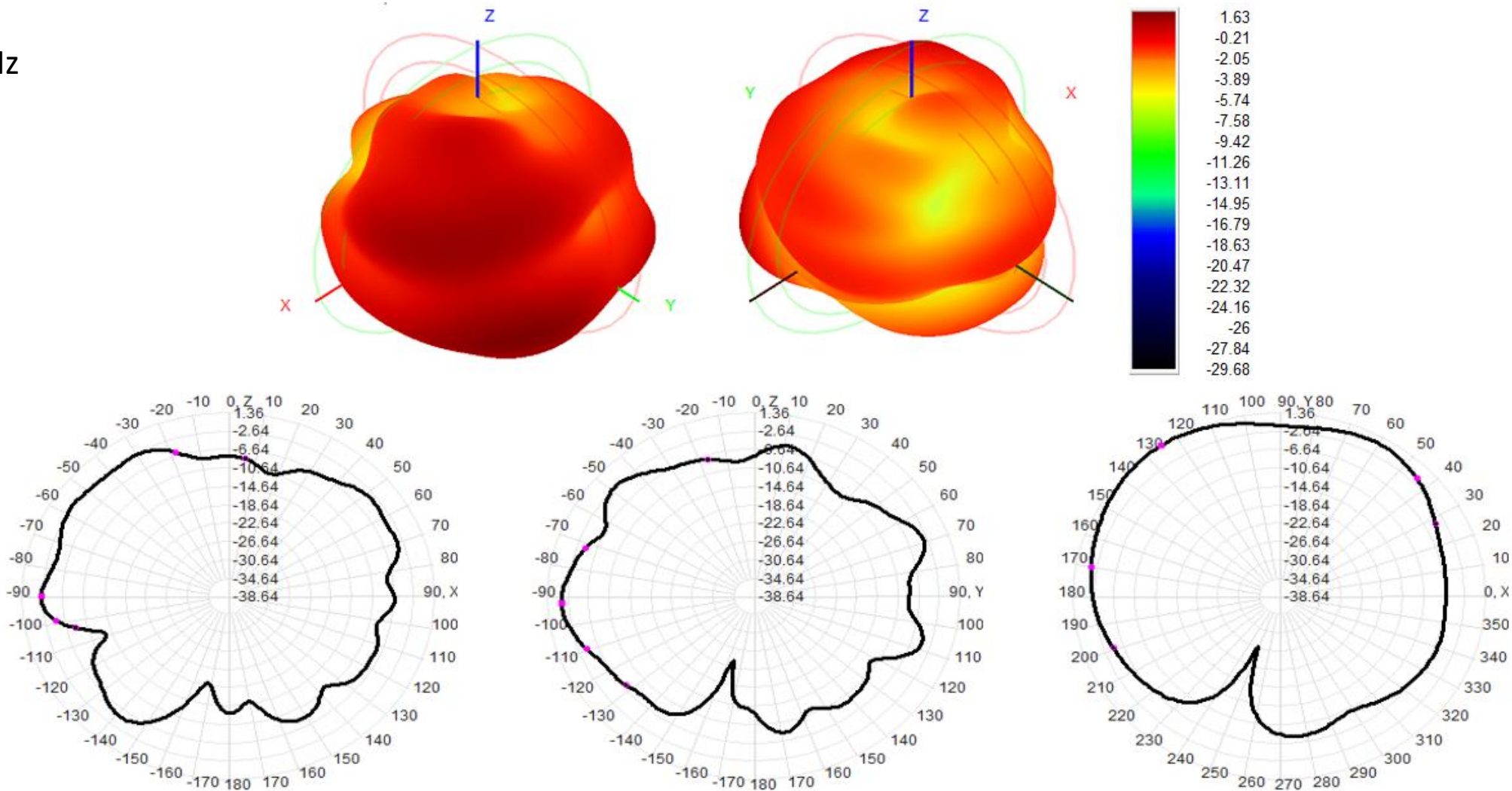
5.2 Efficiency gain ——AUX

Frequency (MHz) (工作频段)	Efficiency (%) (效率)	Peak GAIN (dBi) (增益)
2400	38.59	1.63
2450	42.99	2.20
2500	48.74	2.28
5150	49.28	2.92
5850	46.67	2.22

5、Antenna test result

5.3 Two, three-dimensional graphics ——AUX

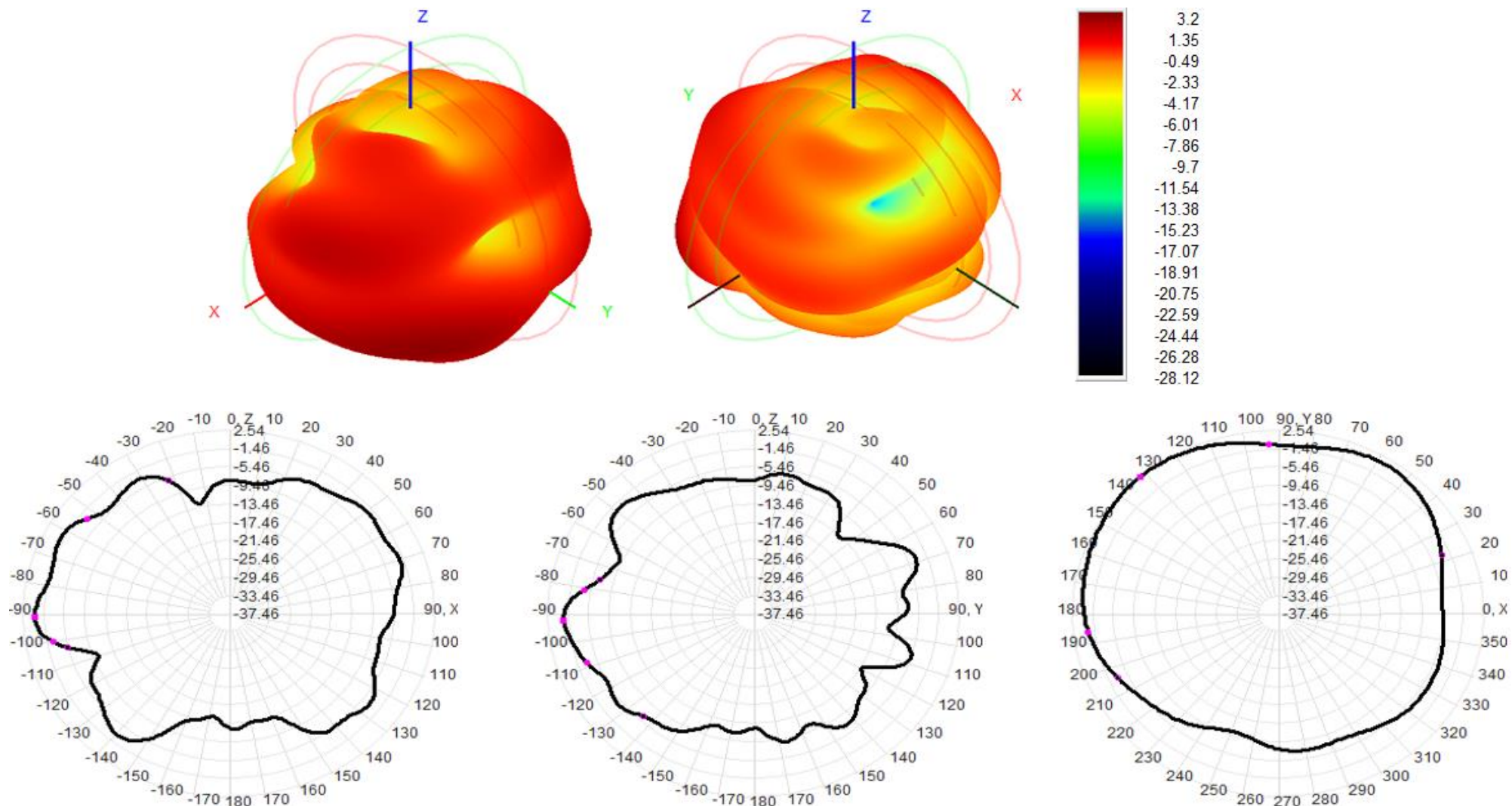
2400MHz



5、Antenna test result

5.3 Two, three-dimensional graphics ——AUX

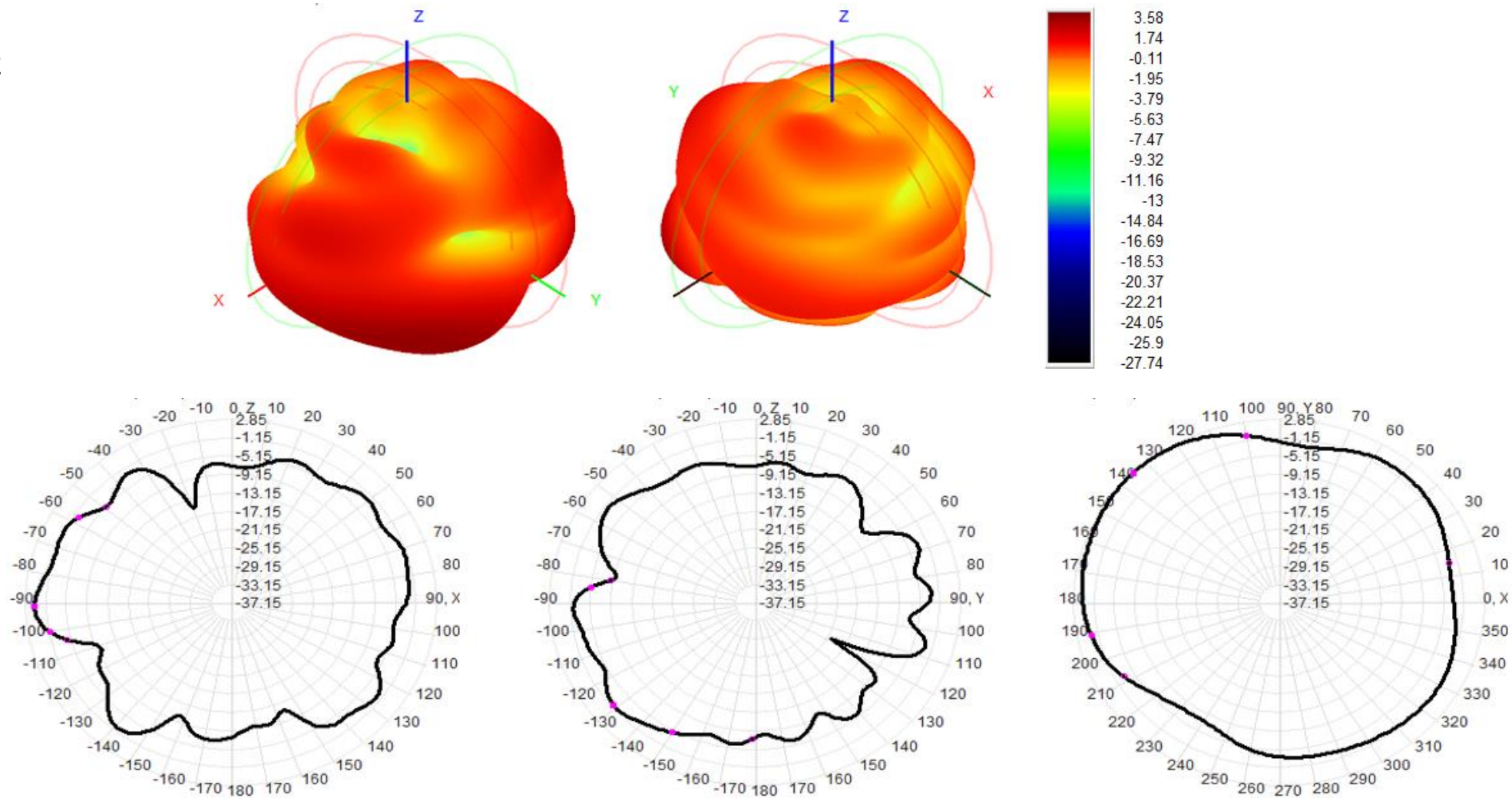
2450MHz



5、Antenna test result

5.3 Two, three-dimensional graphics ——AUX

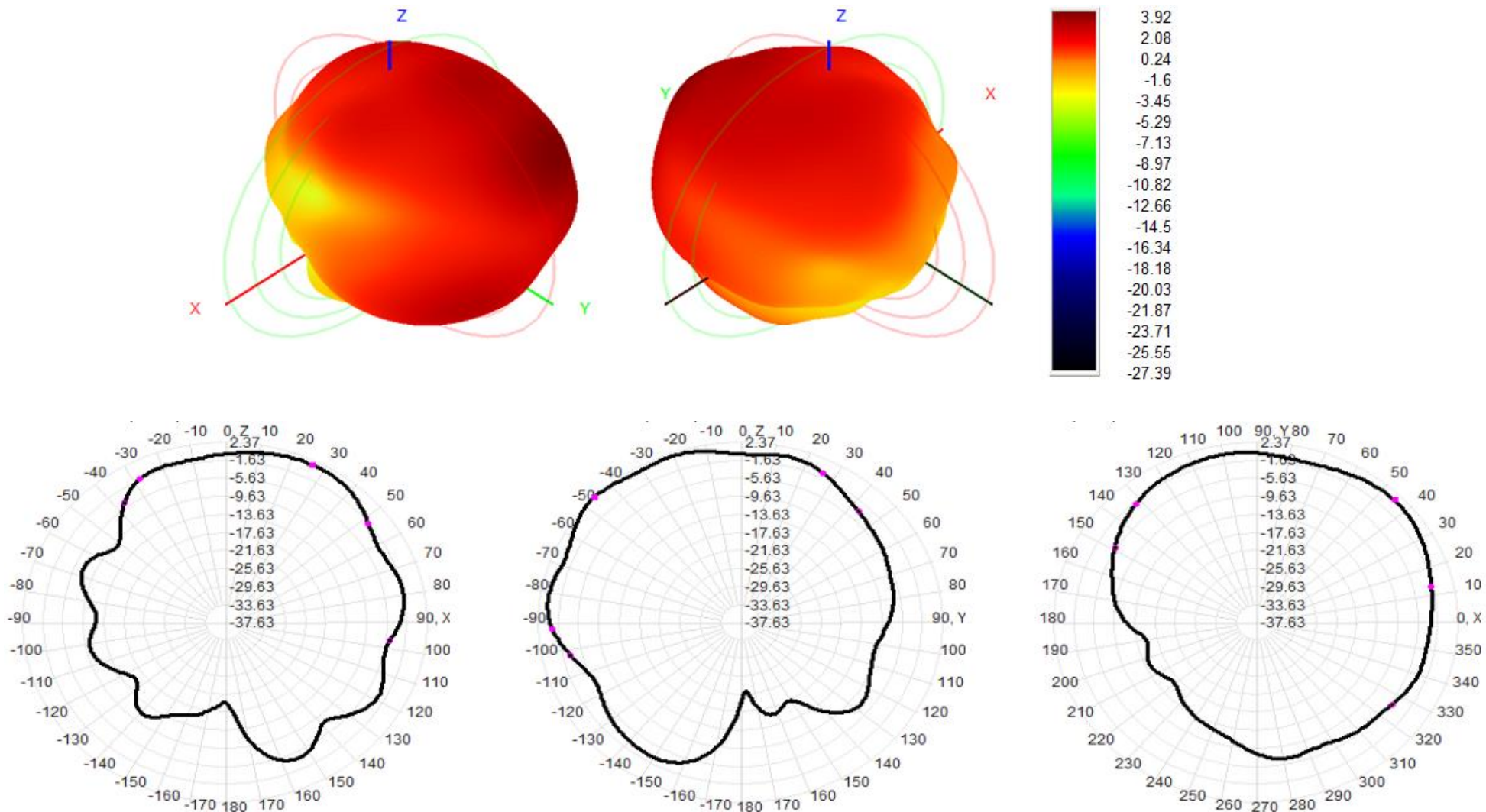
2500MHz



5、Antenna test result

5.3 Two, three-dimensional graphics ——AUX

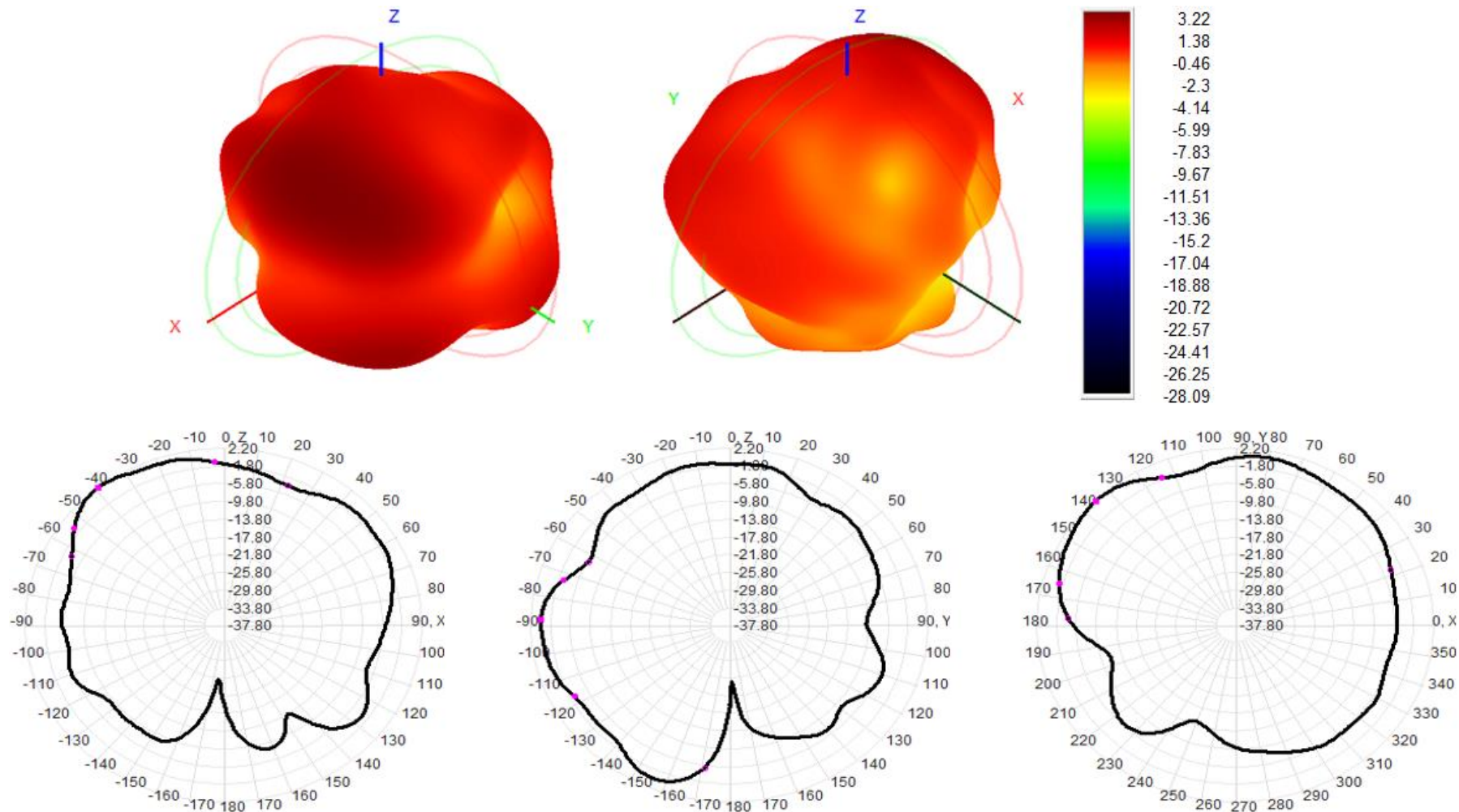
5150MHz



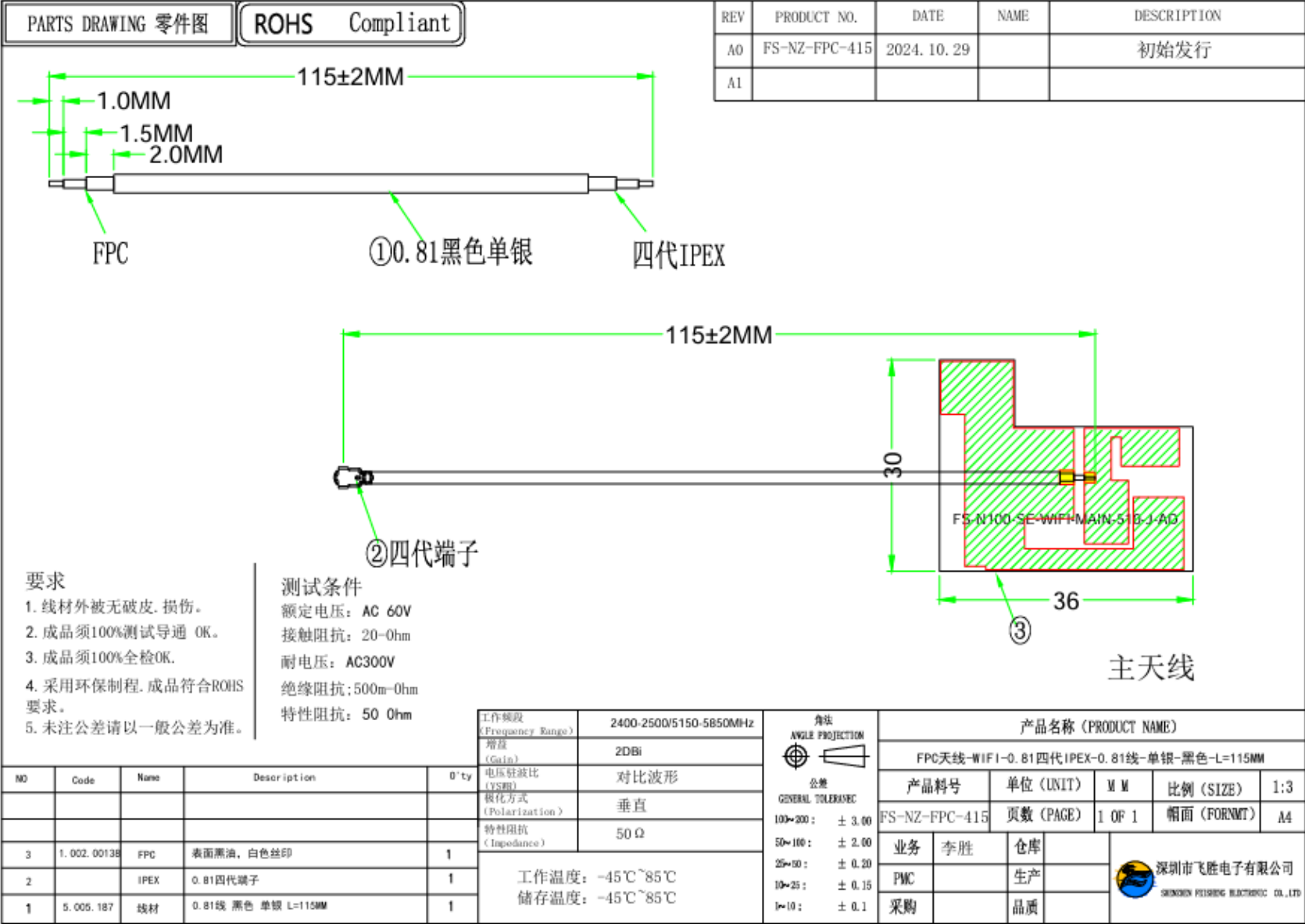
5、Antenna test result

5.3 Two, three-dimensional graphics ——AUX

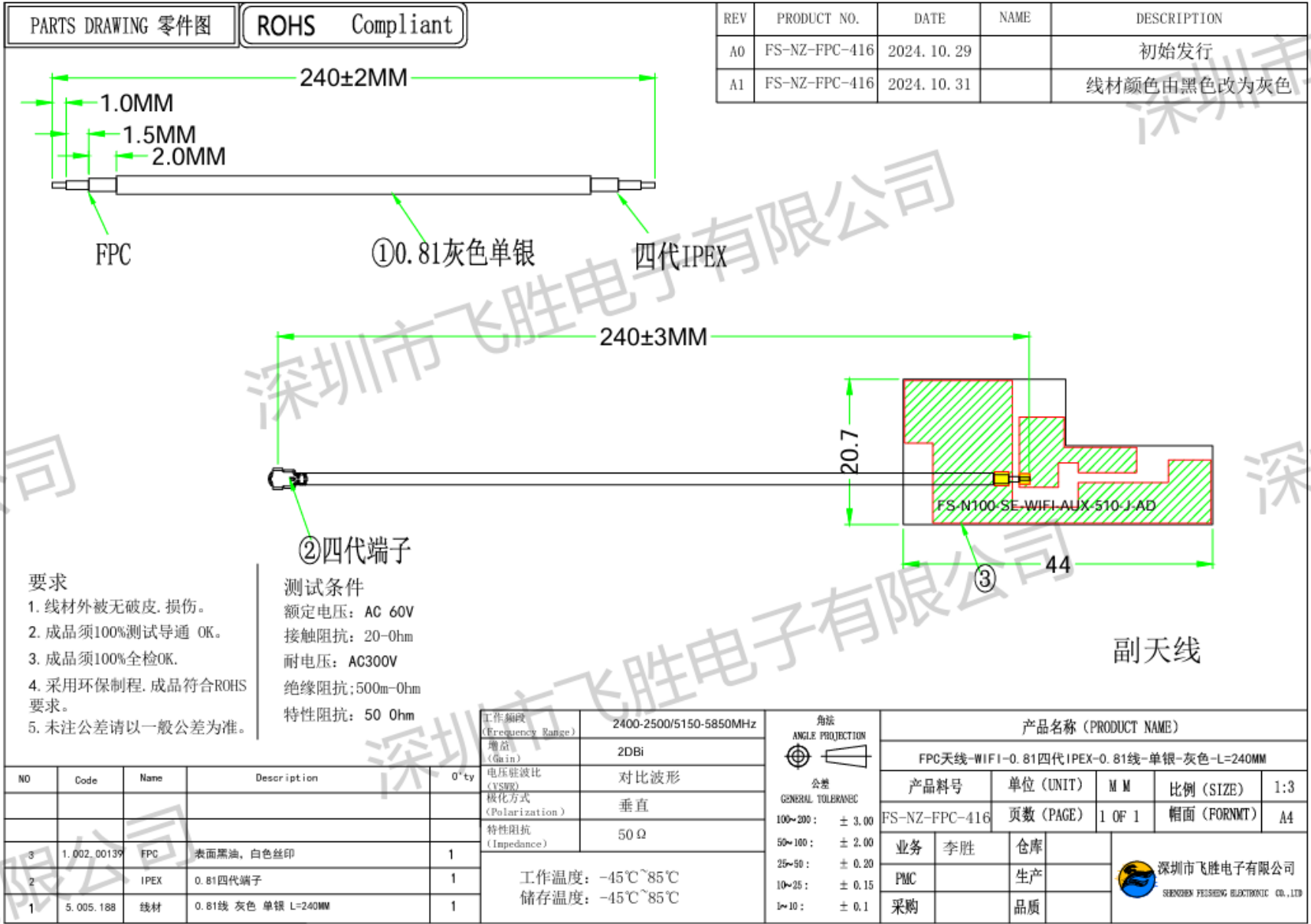
5850MHz



6、BOOM
6.1 Main——BOOM



6、BOOM
6.2 AUX——BOOM



7、 conclusion

The passive test shows that the antenna works well. If you have any other questions, please contact us. Thank you.