



Shenzhen Yimingyuan Technology Co., Ltd

One stop communication RF antenna solution manufacturer

Antenna test report

Shenzhen Yimingyuan Technology Co., Ltd

Address: 2nd Floor, Building 5, Yifenghua Innovation
Industrial Park, Dalang Street, Longhua District, Shenzhen

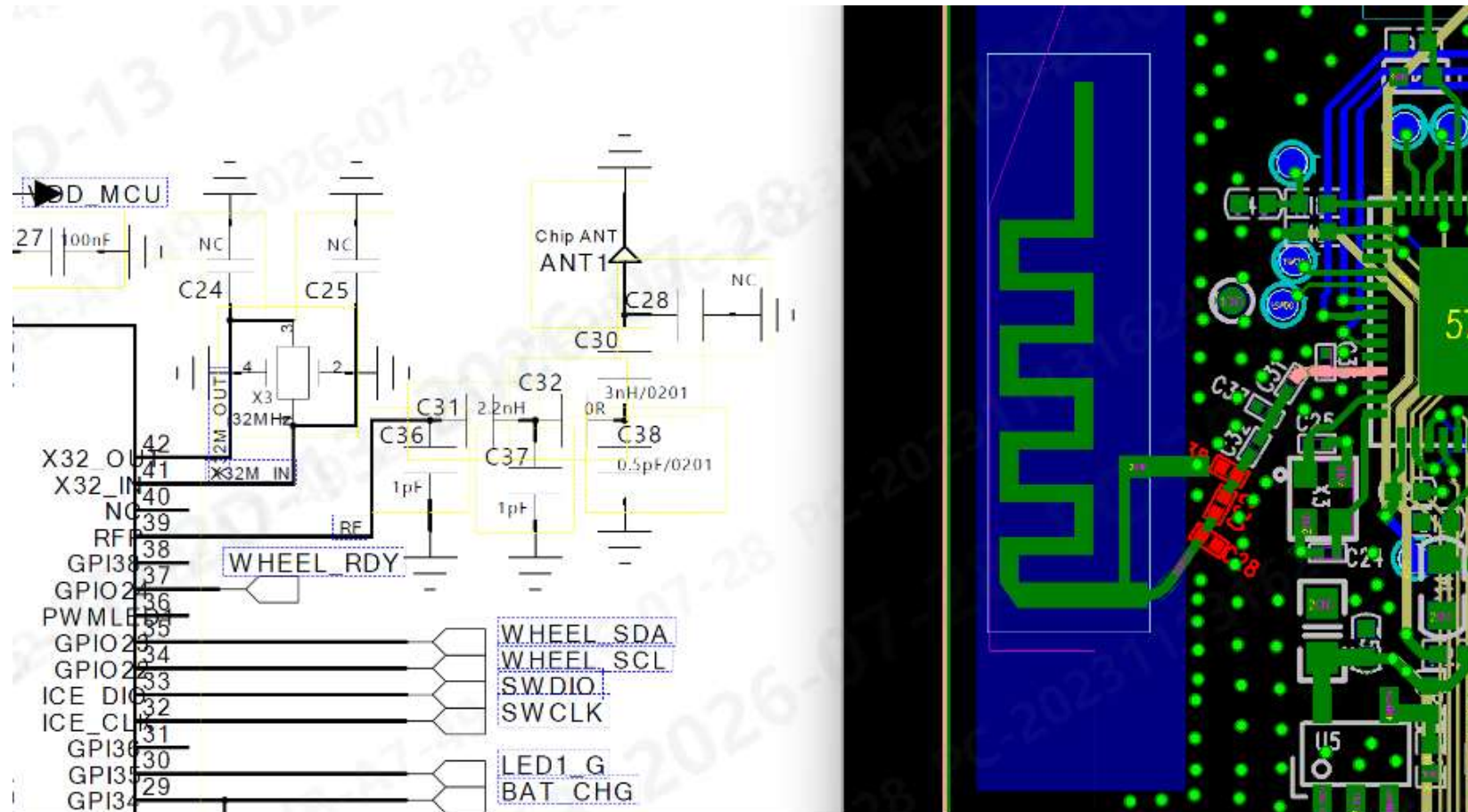
Operator: Song Bingwei

tester: Huang He

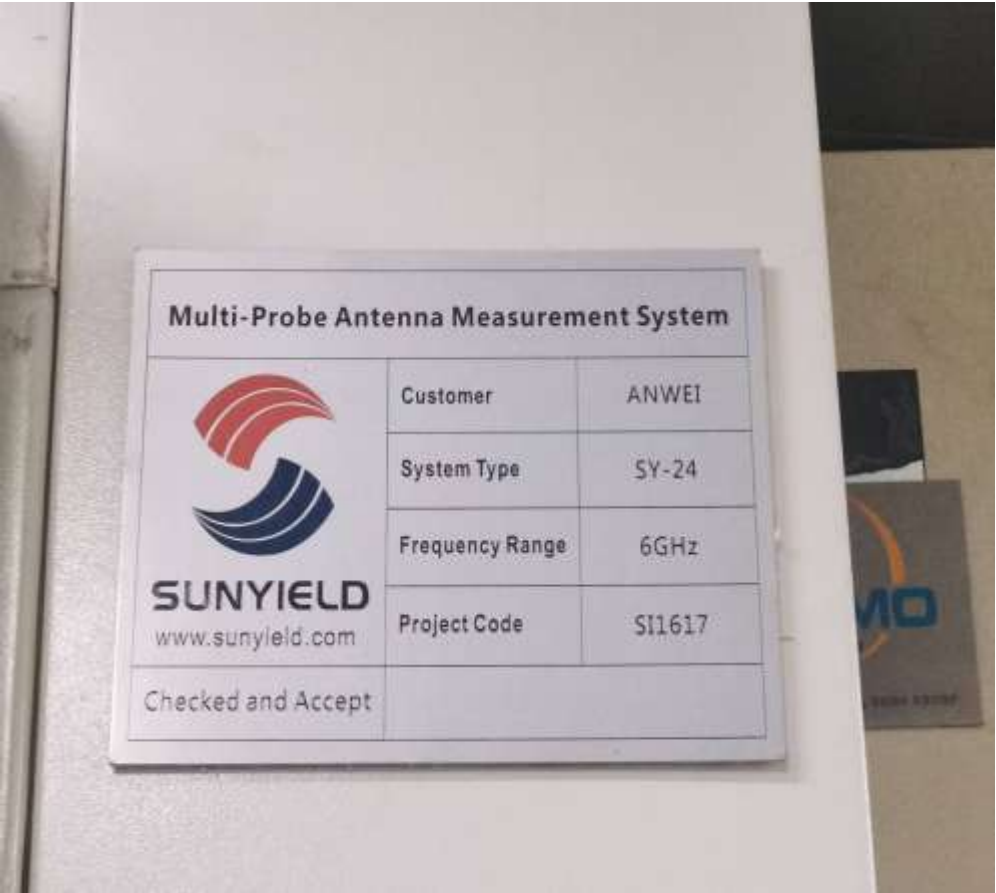
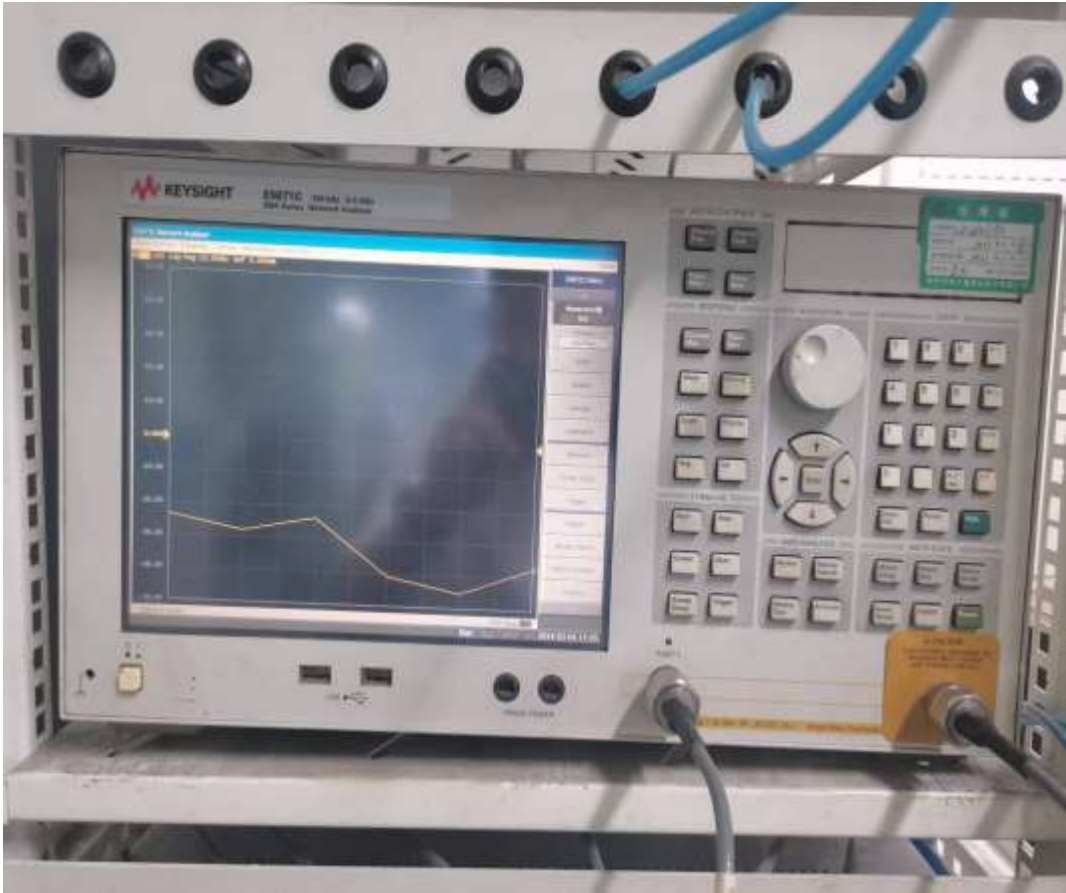
TEL: 134 2435 5302

Report edition: 2025.04.03

Main antenna matching circuit

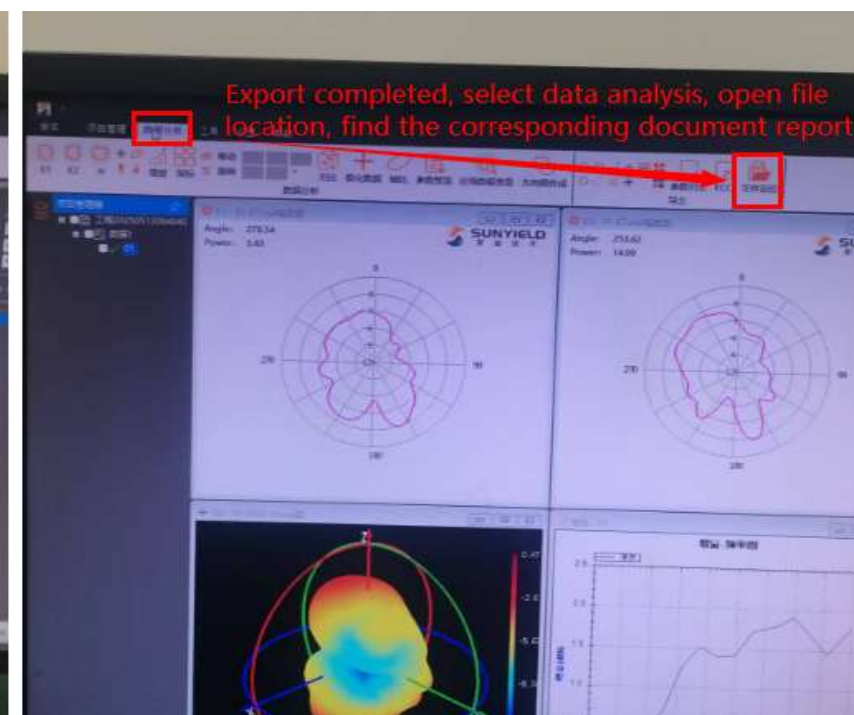
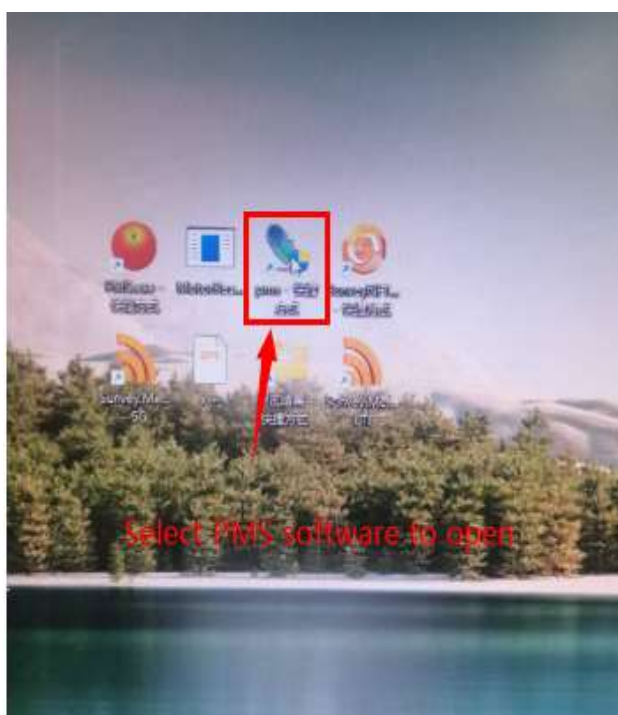
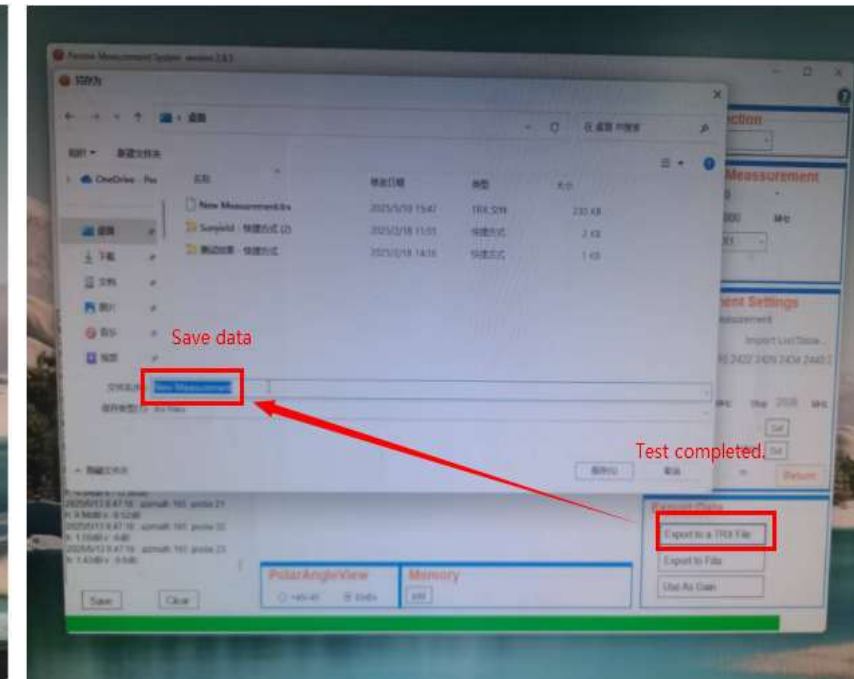
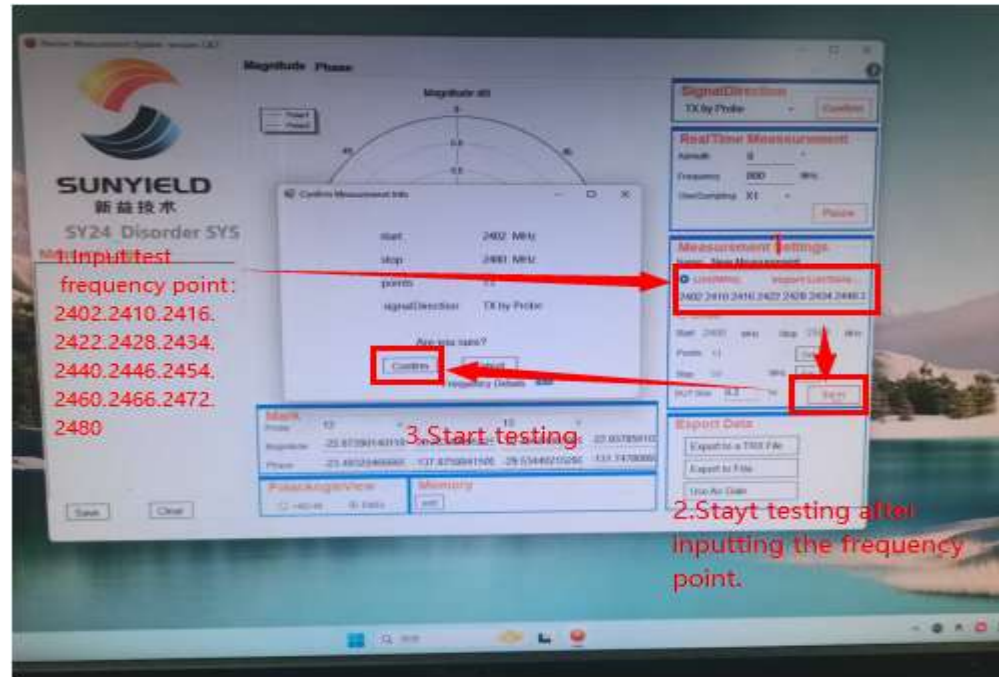


Testing instruments and software



name	network analyzer
brand	Agilent Technologies
model	E5071C
serial number	MY46104453
calibration time	2025/8/24
Next calibration time	2026/8/23

Test steps and data export



Information of Antenna

Customer Information:

Customer: Dongguan Thermal Electronic Technology Co., Ltd

Customer Address: No. 28 Jinyuling Road, Dongcheng Street,
Dongguan City, Guangdong Province, China

Project Name: BenQ ergo pro

Antenna manufacturing information:

Antenna manufacturing: Jianfu Technology Electronics Co., Ltd.

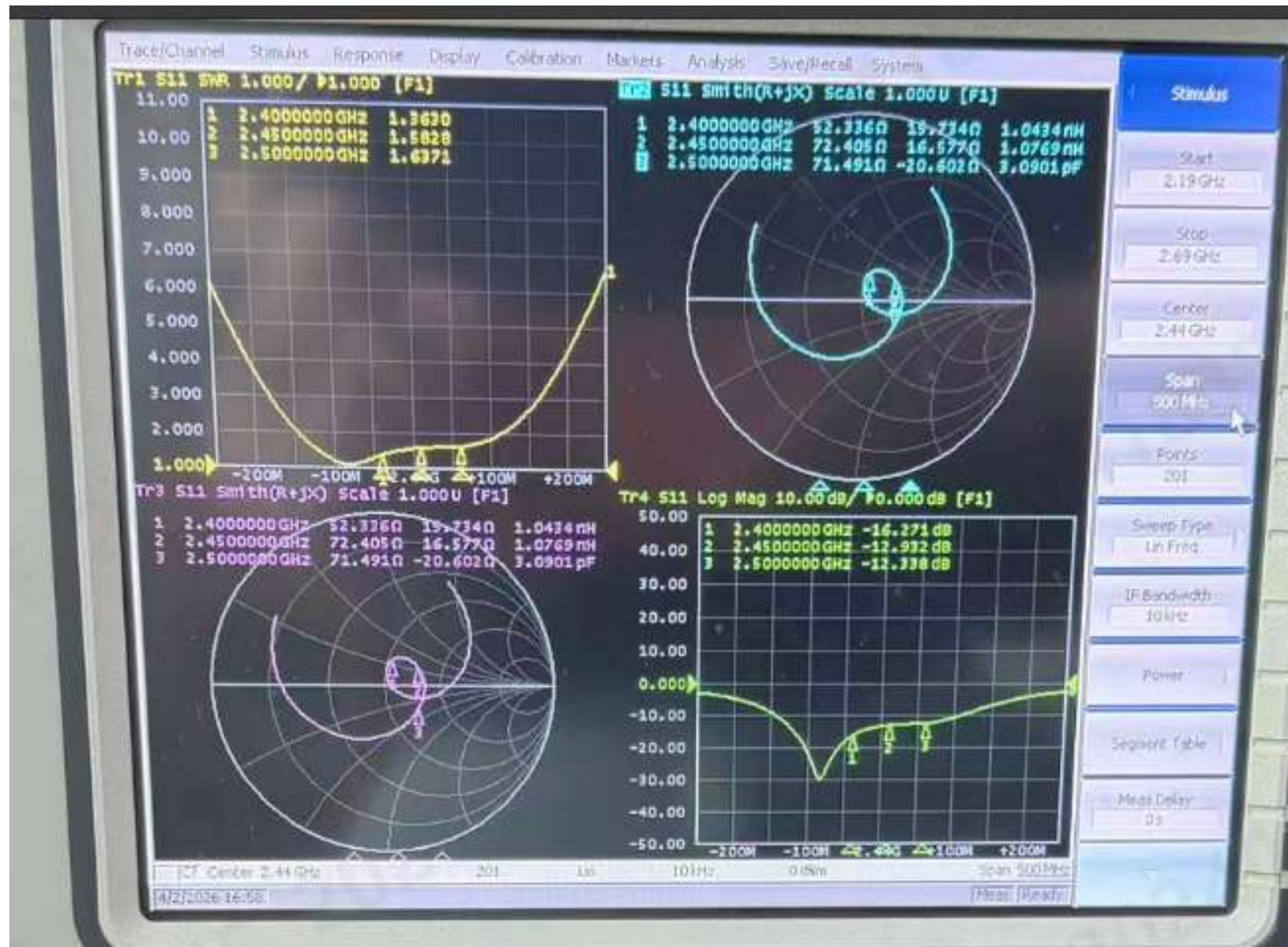
Antenna model: BenQ ergo pro mouse

Antenna type: PCB antenna

Antenna gain: 2.55 dBi

Antenna manufacturing address: Jianfu Technology Electronics Co.,
Ltd., Dong'ao Village, Shatian Town, Huiyang District, Huizhou
City

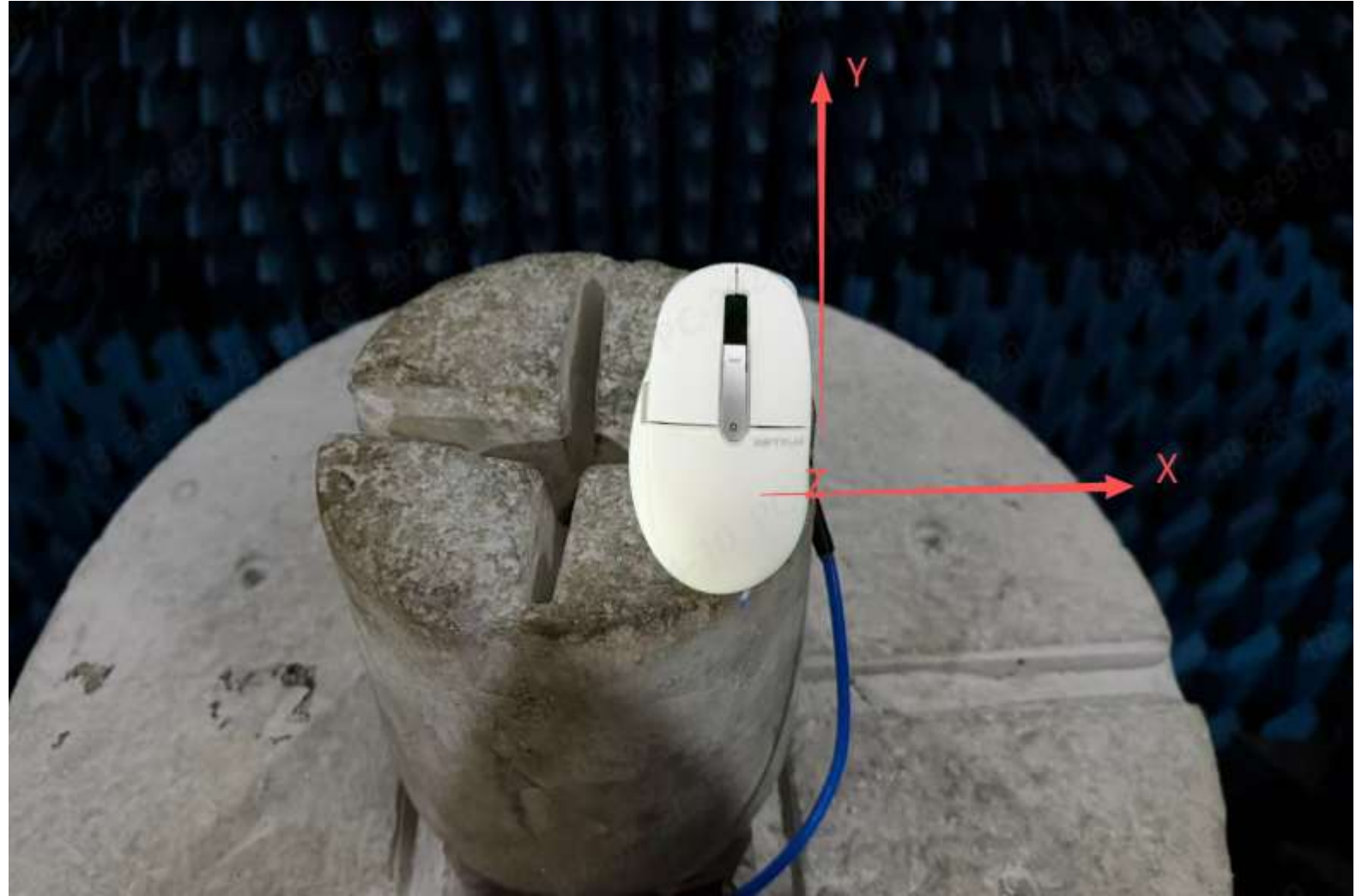
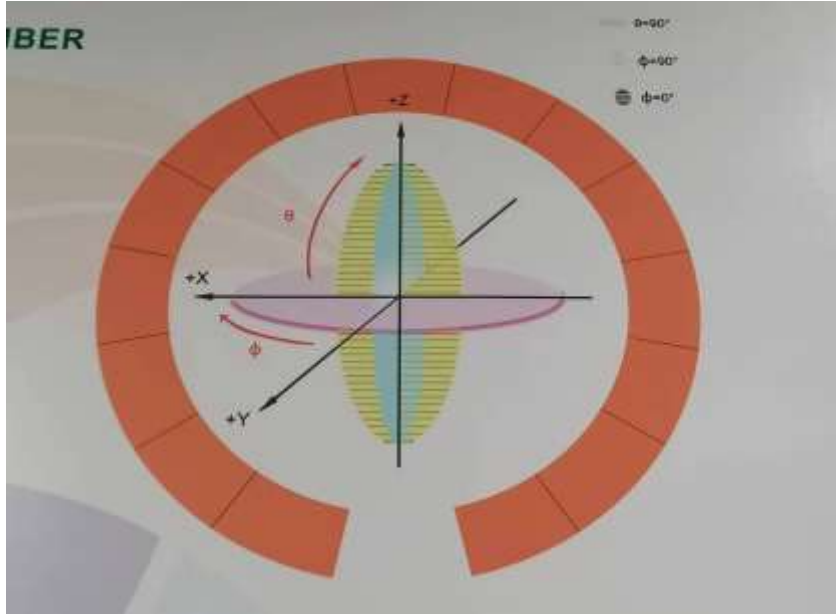
Antenna smith circle chart and S11 parameters



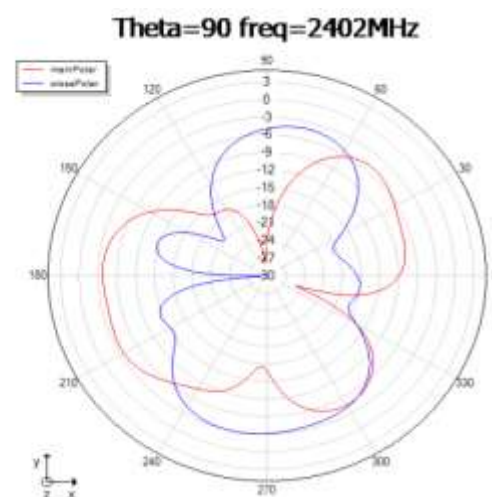
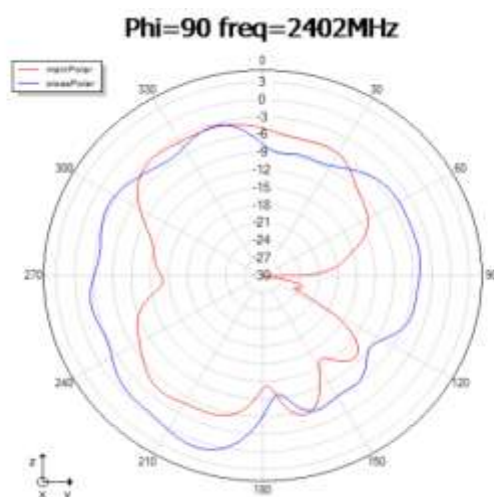
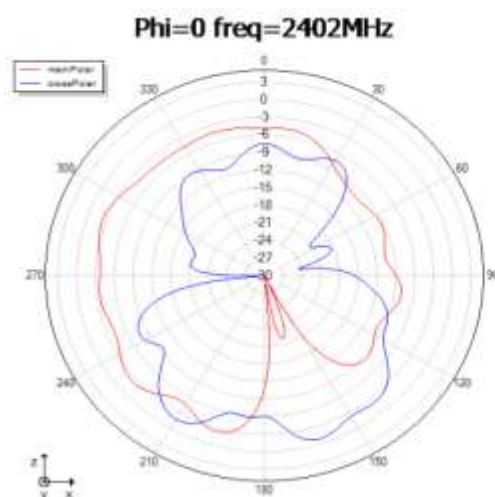
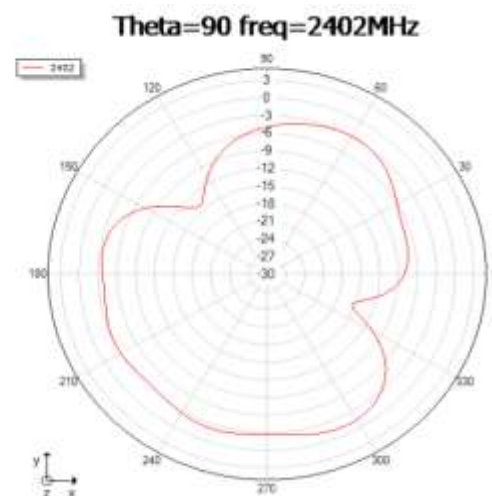
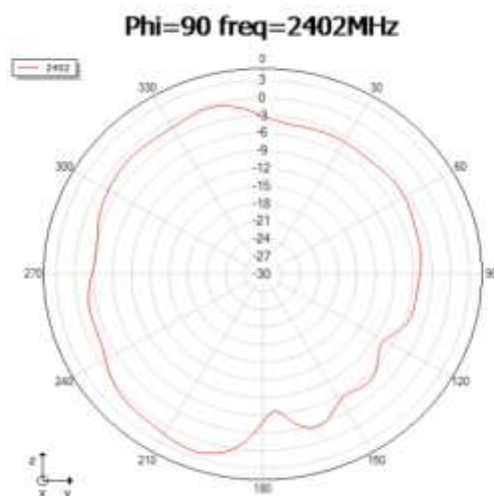
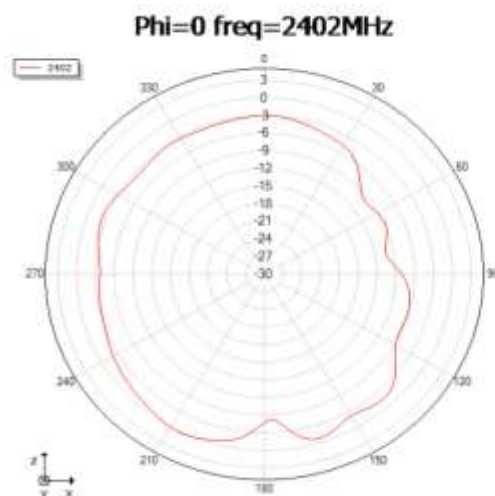
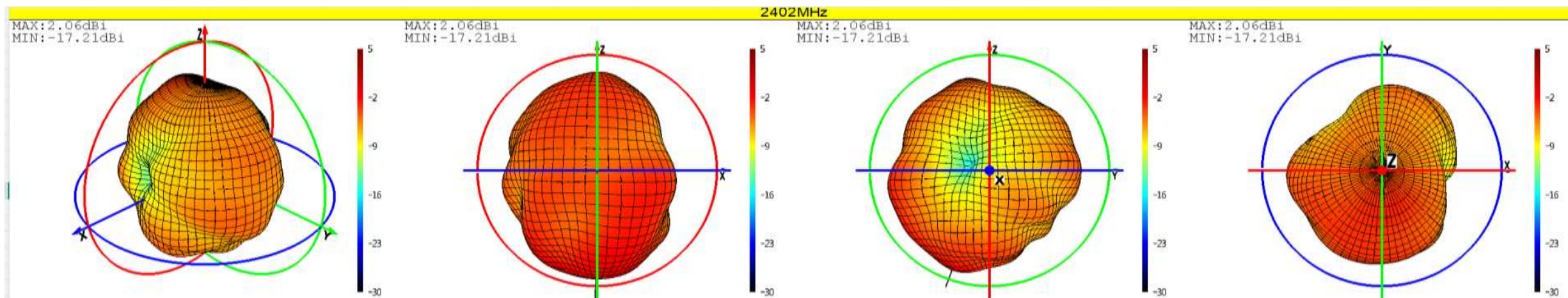
Antenna efficiency

Shenzhen Yimingyuan Technology Co., Ltd													
Test data		Address: 2nd Floor, Building 5, Yifenghua Innovation Industrial Park, Dalang Street, Longhua District, Shenzhen											
Soft ver. : SNF V2.4.3 test date: 2026/4/3 14:52:43													
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13
Frequency (MHz)	2402	2410	2416	2422	2428	2434	2440	2446	2454	2460	2466	2472	2480
Gain (dBi)	2.06	1.91	2.39	2.55	2.31	1.88	1.65	1.83	1.96	1.78	1.35	1.51	1.64
Efficiency (dB)	-3.28	-3.05	-2.92	-2.93	-3.10	-3.14	-3.14	-3.11	-3.18	-3.30	-3.42	-3.32	-3.49
Efficiency (%)	47.02	49.56	51.08	50.94	48.99	48.52	48.55	48.88	48.12	46.73	45.45	46.56	44.76
Plane: Phi=0	2402	2410	2416	2422	2428	2434	2440	2446	2454	2460	2466	2472	2480
Plane: Phi=90	2402	2410	2416	2422	2428	2434	2440	2446	2454	2460	2466	2472	2480
Plane: Theta=90	2402	2410	2416	2422	2428	2434	2440	2446	2454	2460	2466	2472	2480

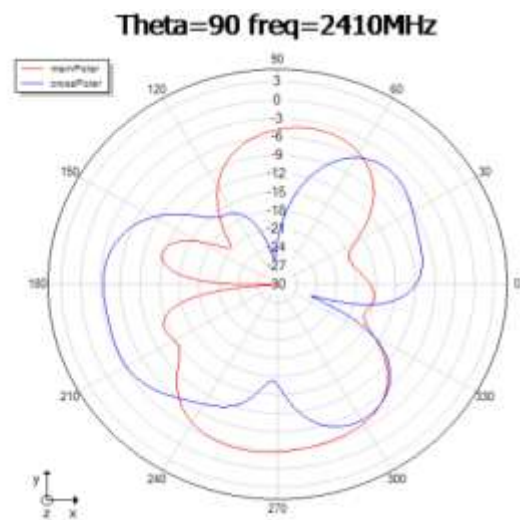
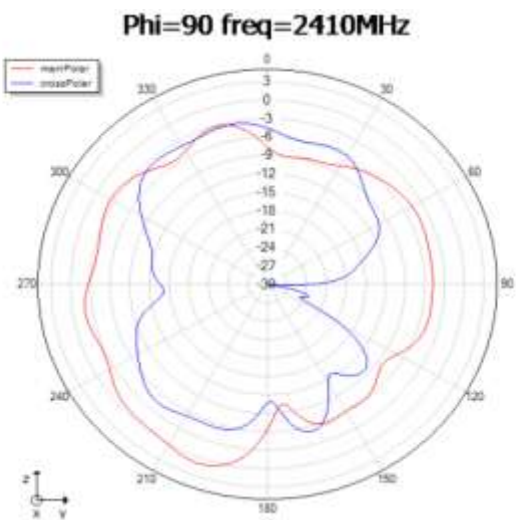
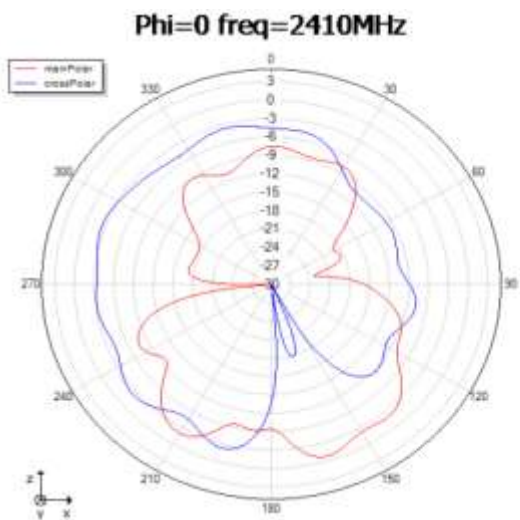
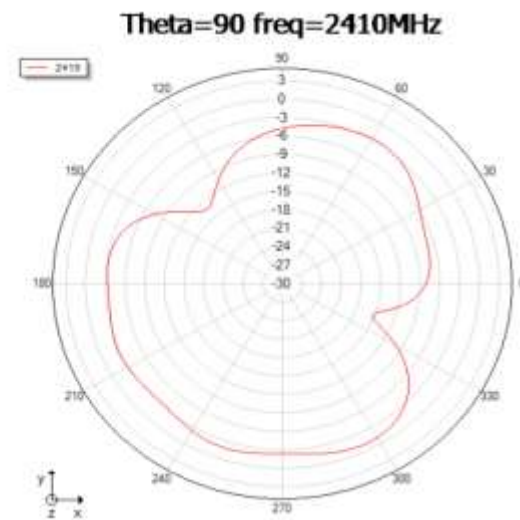
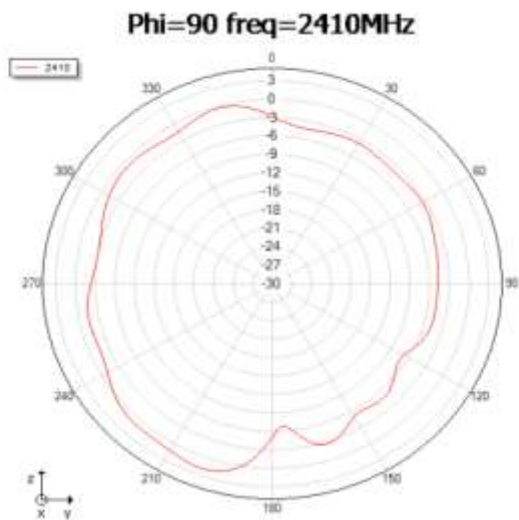
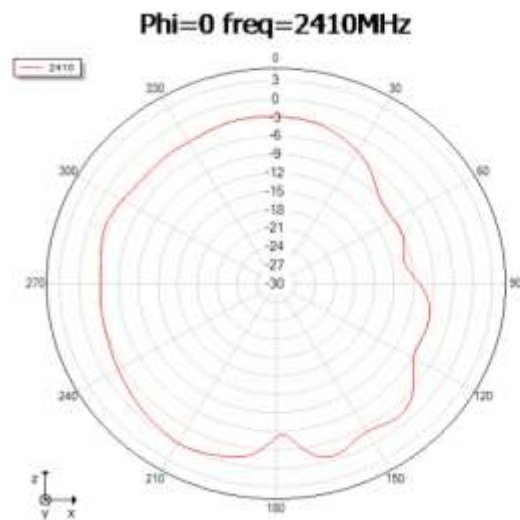
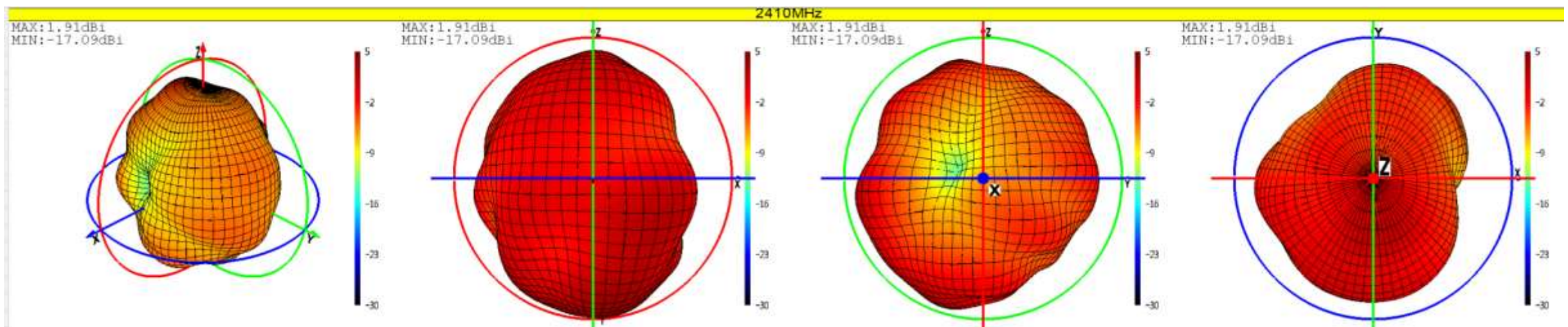
Z、X、Y Physical drawing



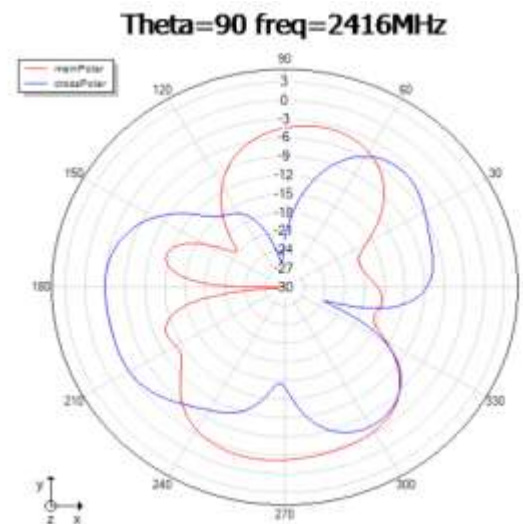
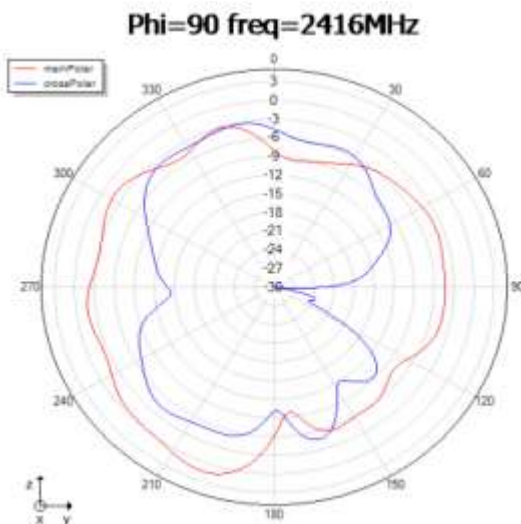
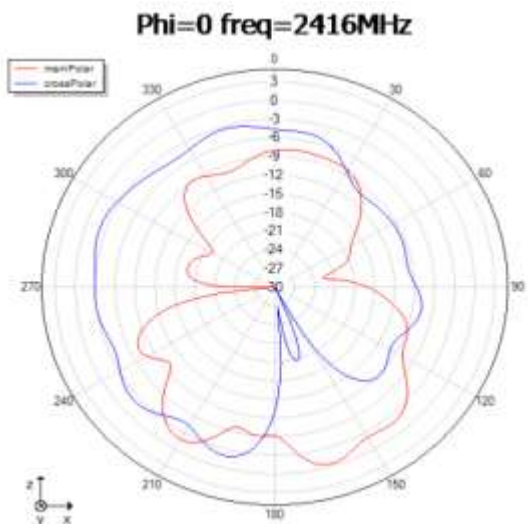
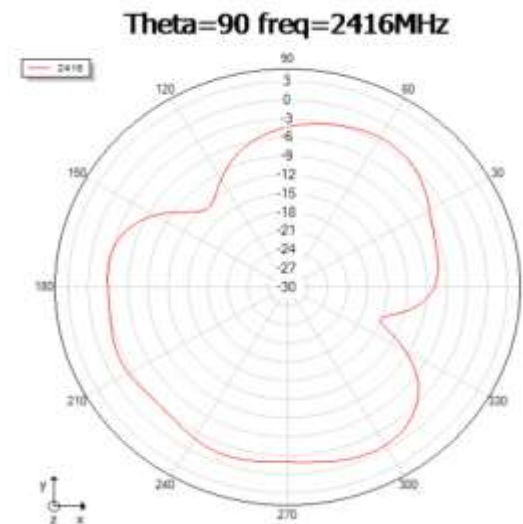
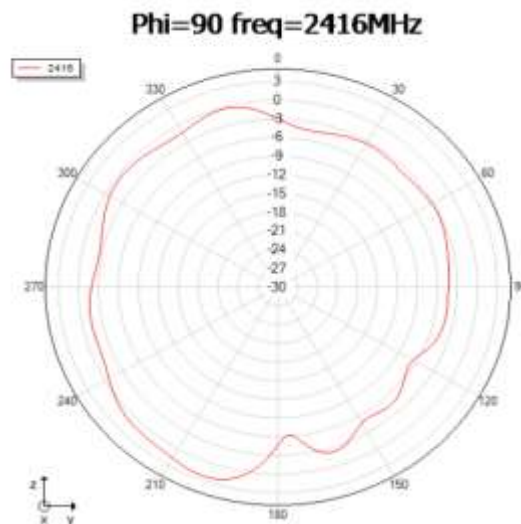
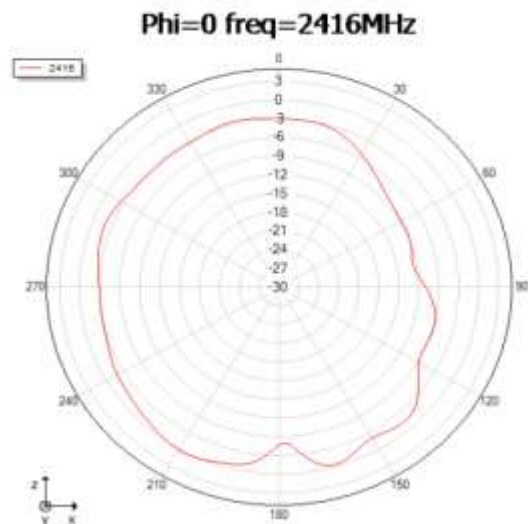
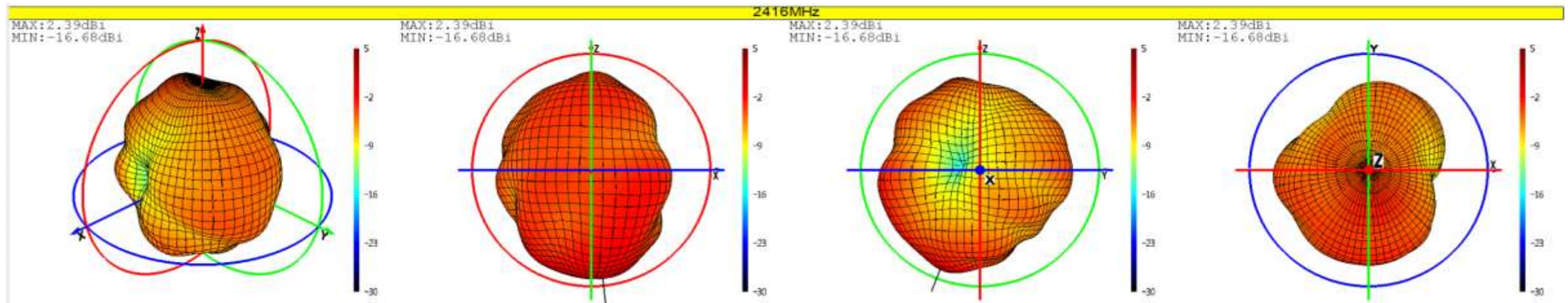
Antenna apple diagram and pattern



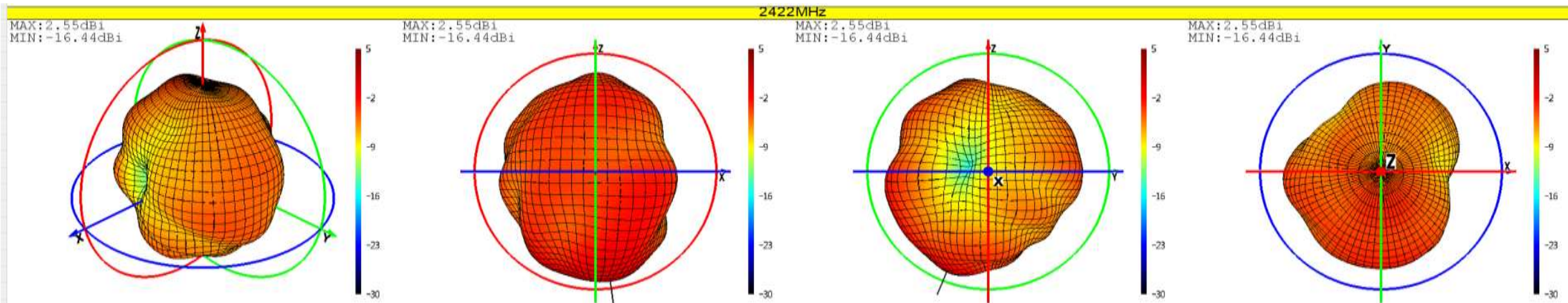
Antenna apple diagram and pattern



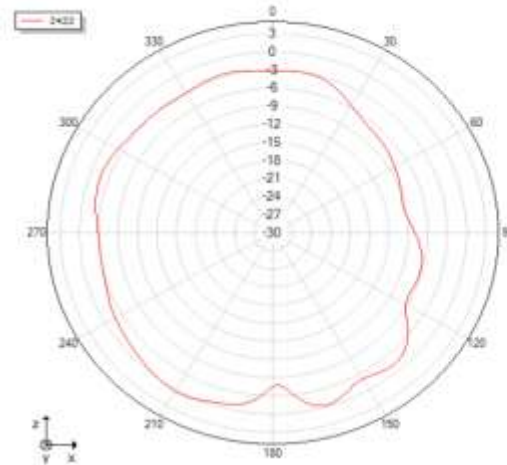
Antenna apple diagram and pattern



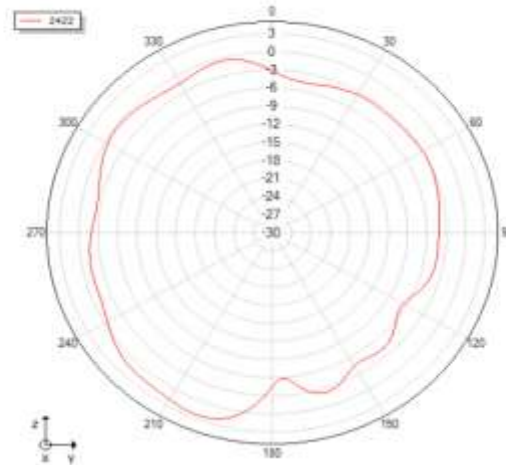
Antenna apple diagram and pattern



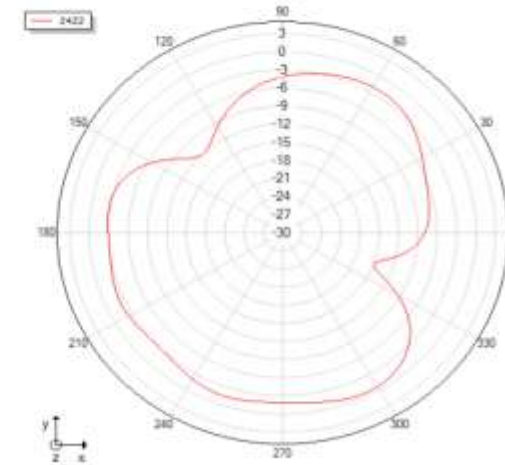
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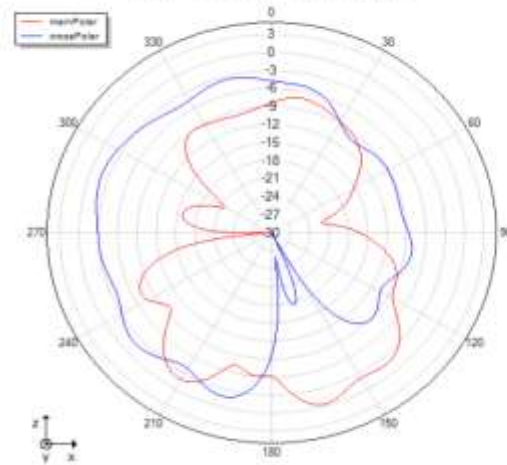
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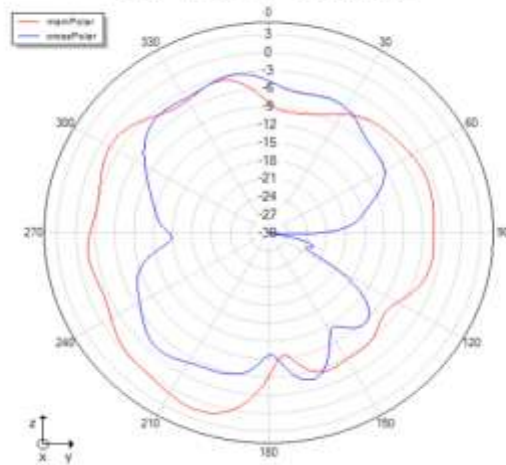
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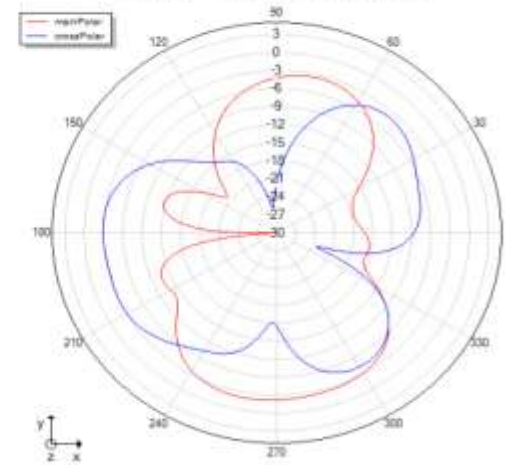
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Phi=90 freq=2422MHz

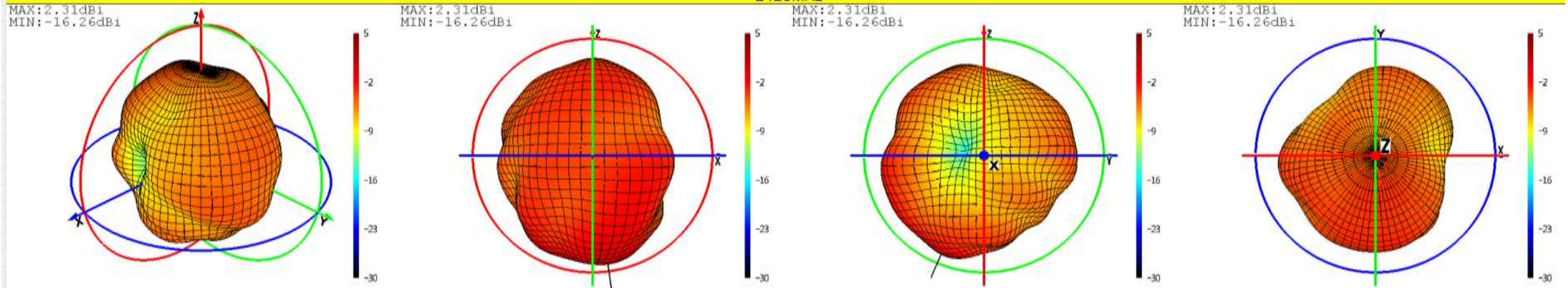


Theta=90 freq=2422MHz

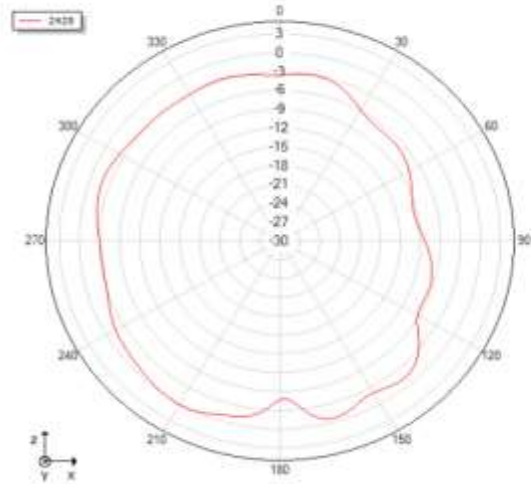


Antenna apple diagram and pattern

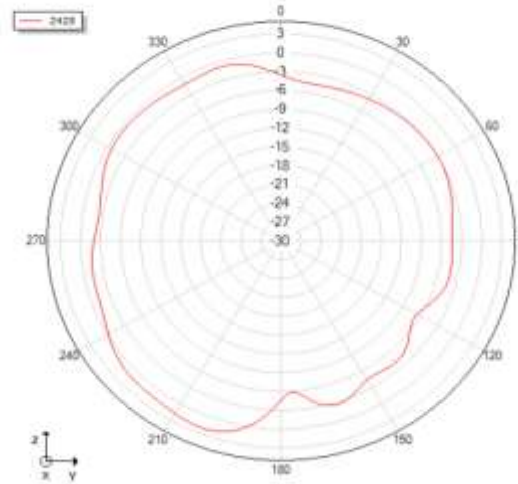
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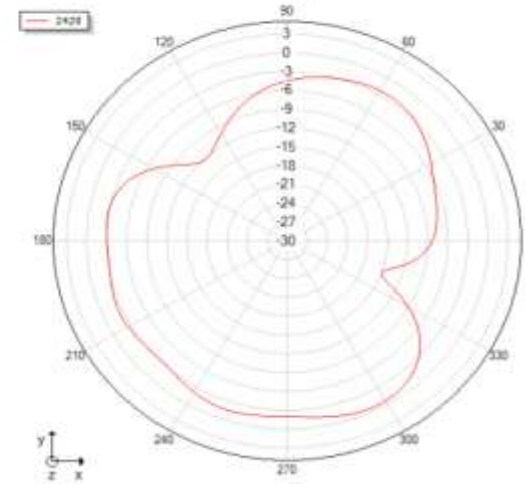
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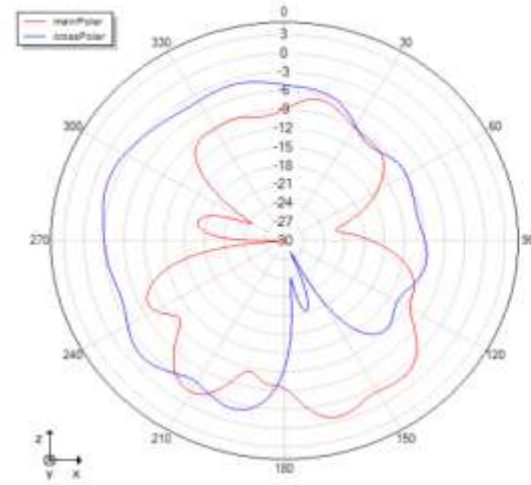
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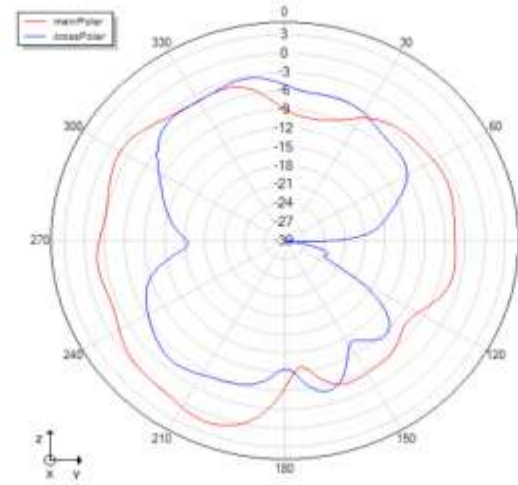
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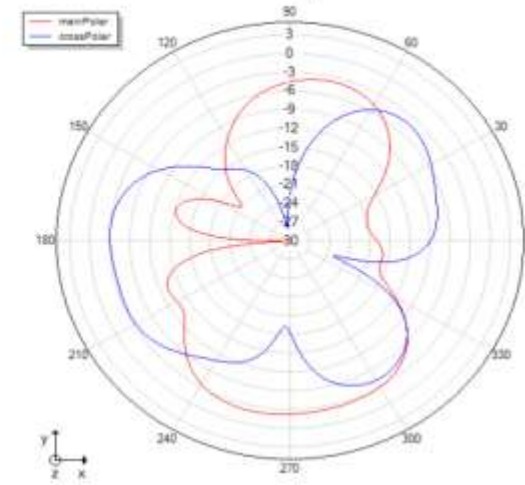
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Phi=90 freq=2428MHz

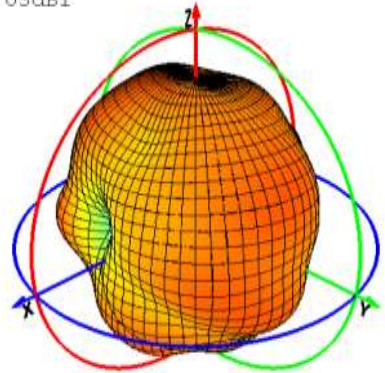


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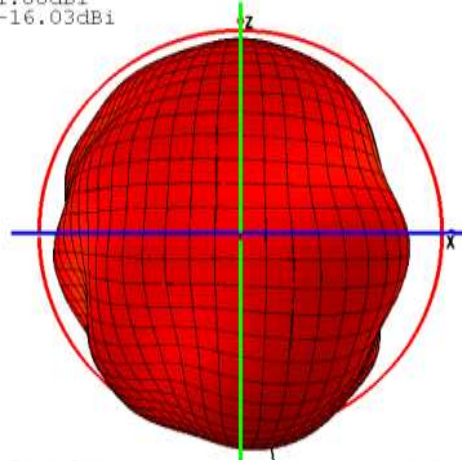


Antenna apple diagram and pattern

MAX:1.88dBi
MIN:-16.03dBi

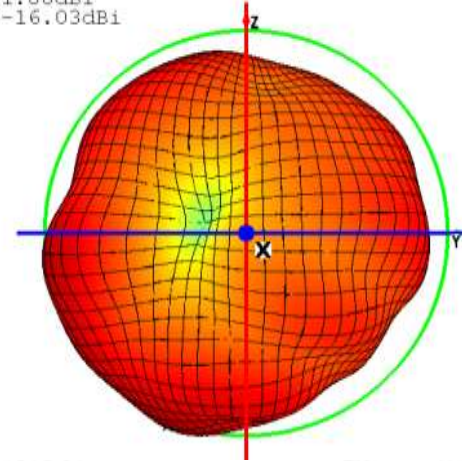


MAX:1.88dBi
MIN:-16.03dBi

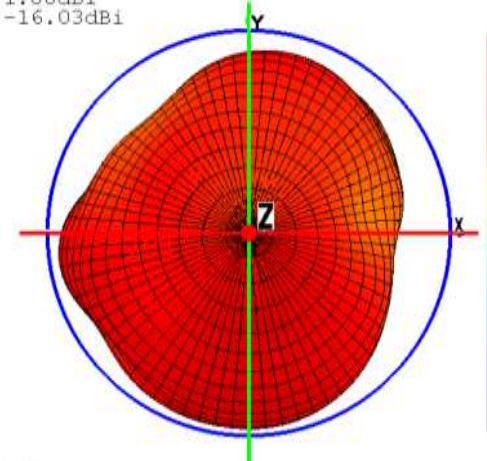


2434MHz

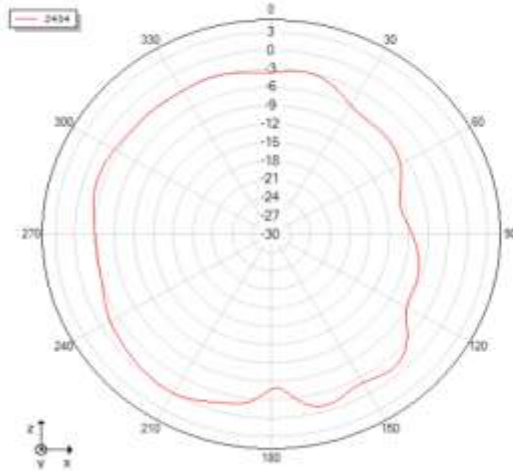
MAX:1.88dBi
MIN:-16.03dBi



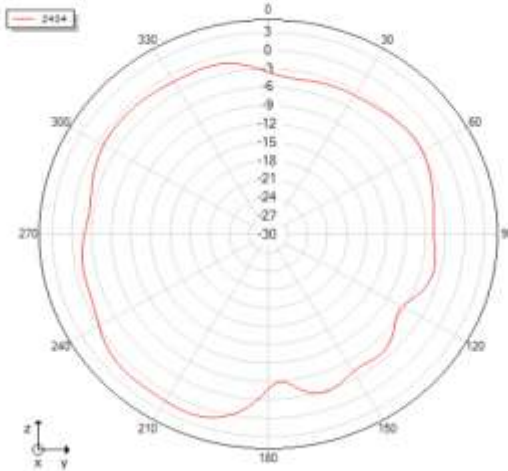
MAX:1.88dBi
MIN:-16.03dBi



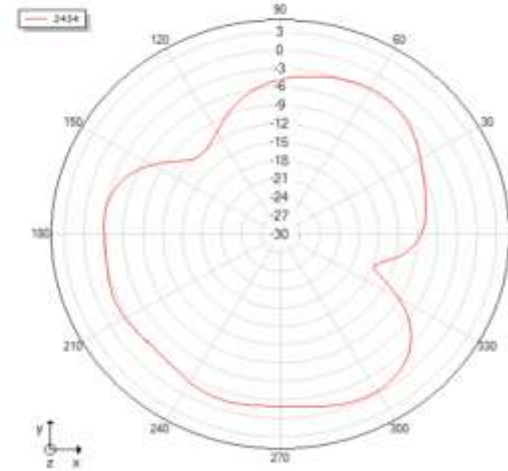
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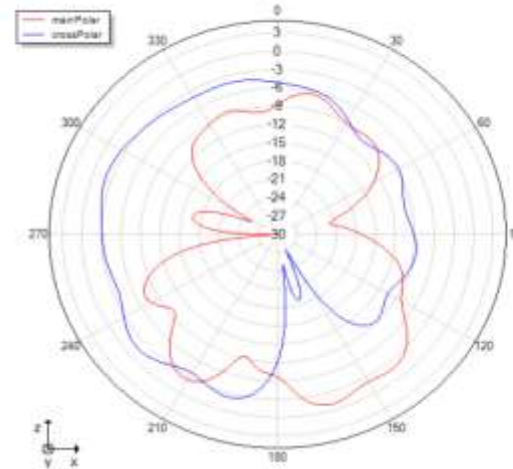
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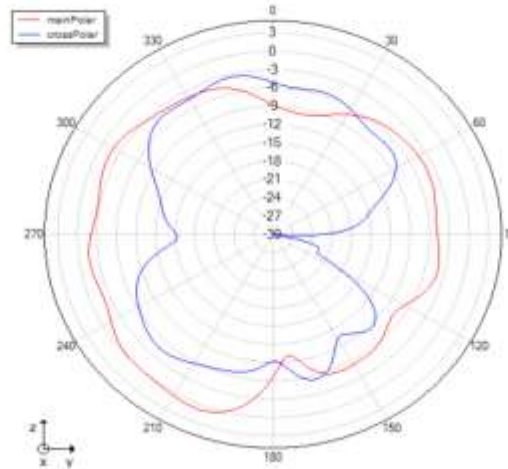
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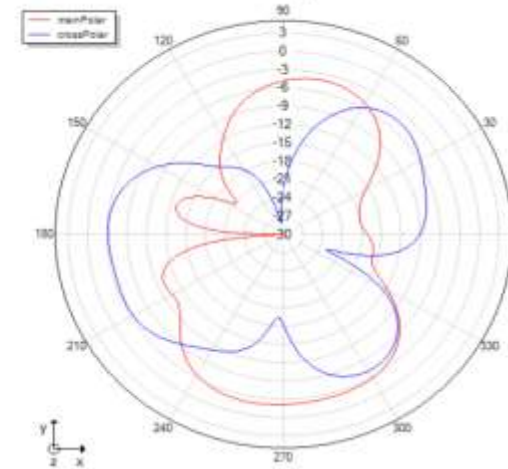
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Phi=90 freq=2434MHz

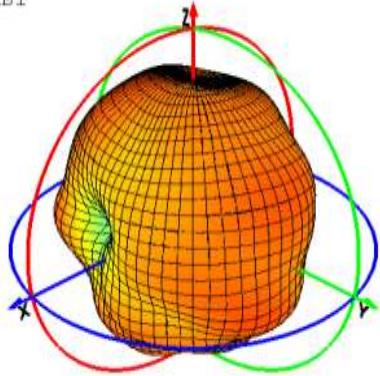


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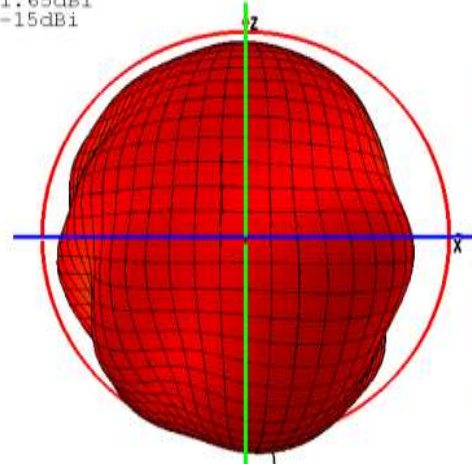


Antenna apple diagram and pattern

MAX:1.65dBi
MIN:-15dBi

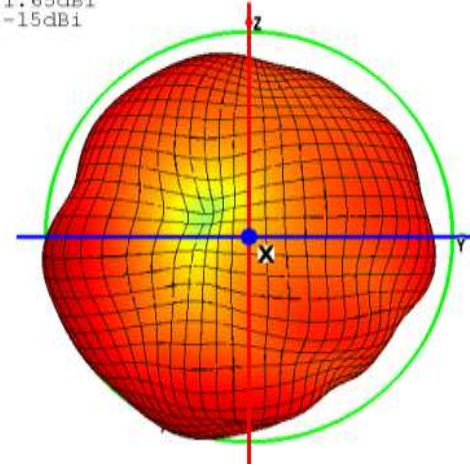


MAX:1.65dBi
MIN:-15dBi

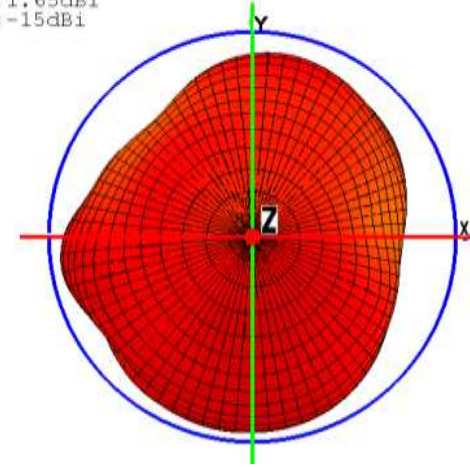


2440MHz

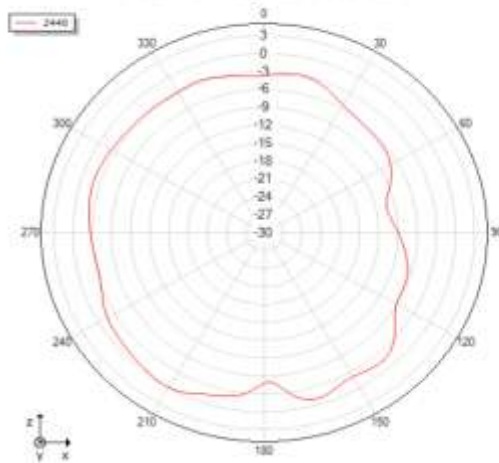
MAX:1.65dBi
MIN:-15dBi



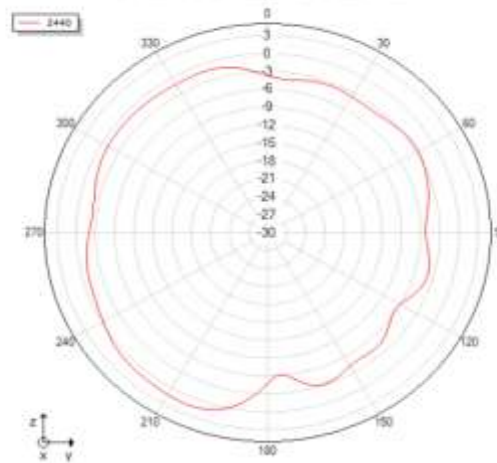
MAX:1.65dBi
MIN:-15dBi



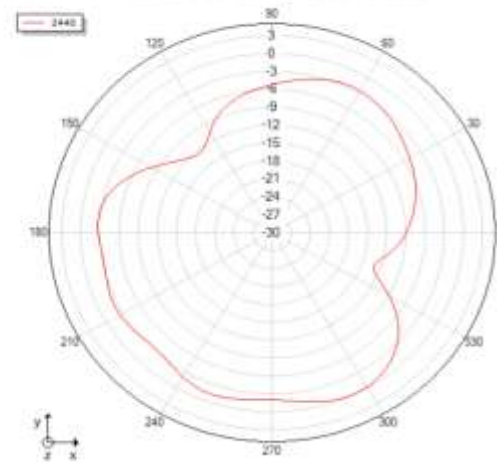
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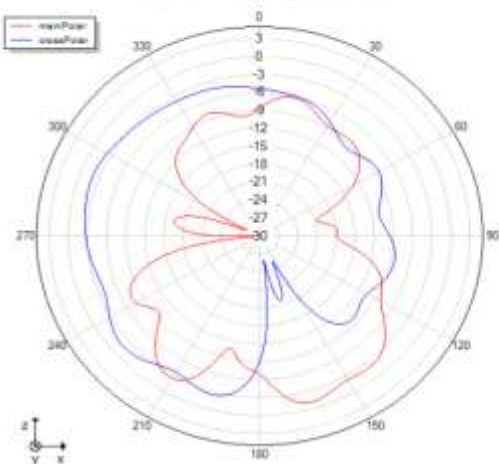
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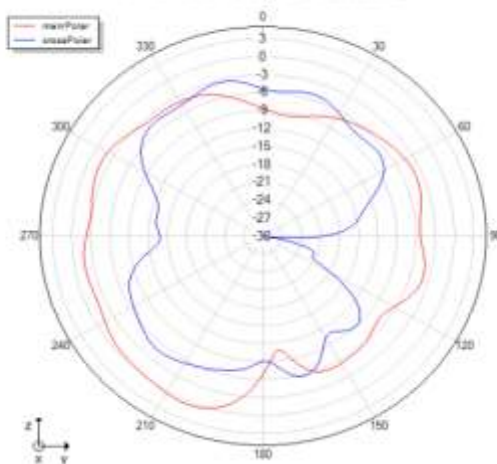
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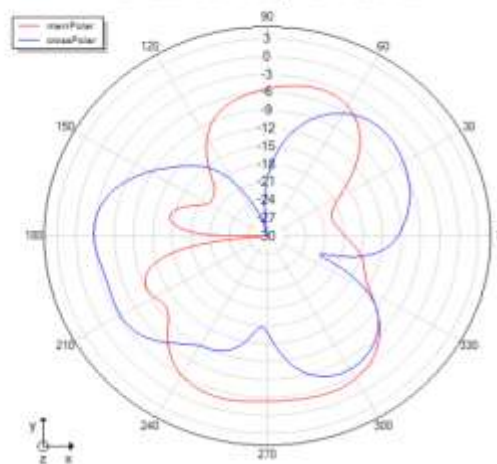
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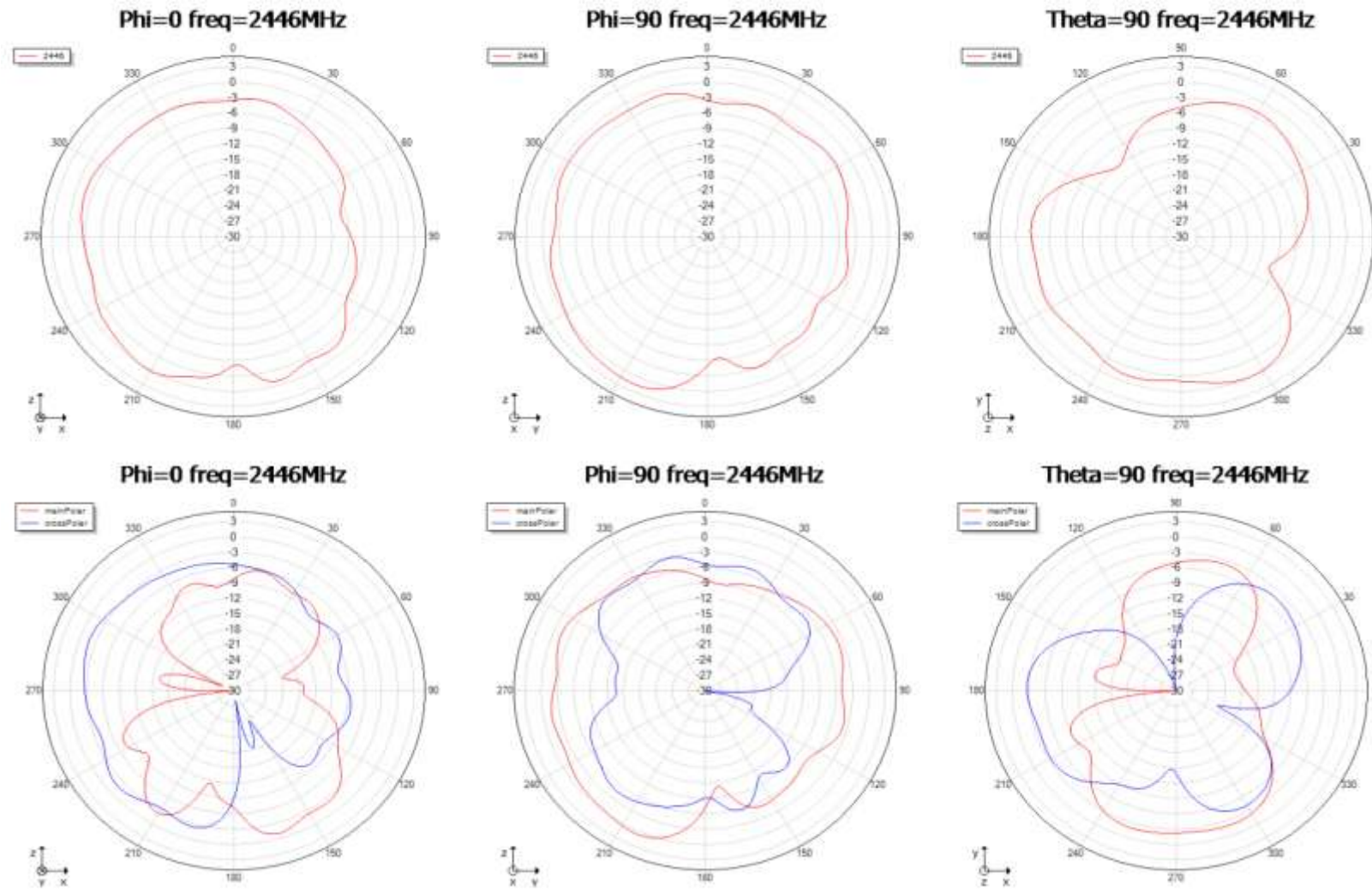
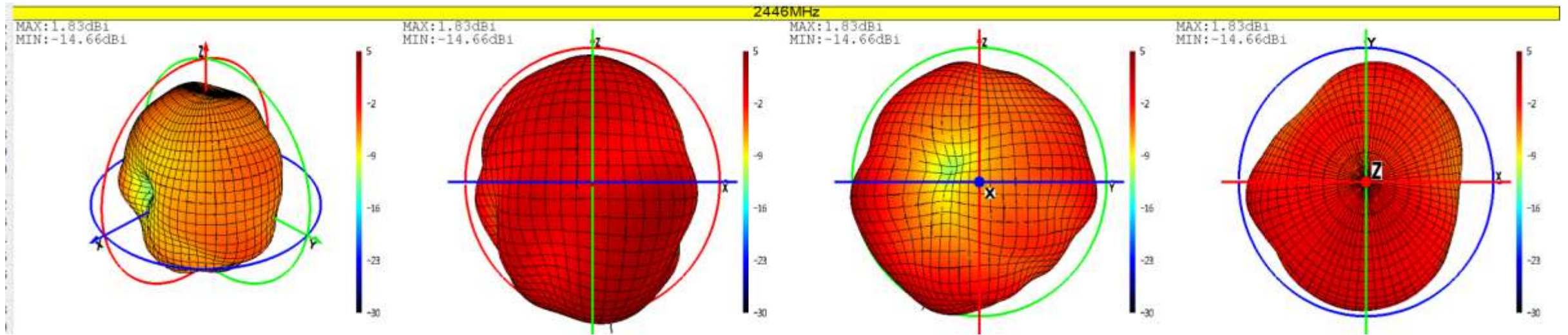
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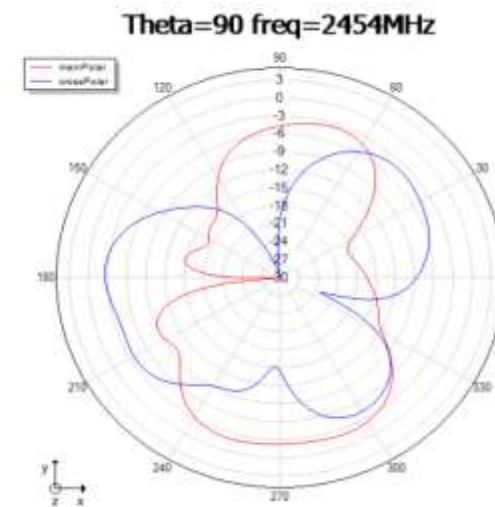
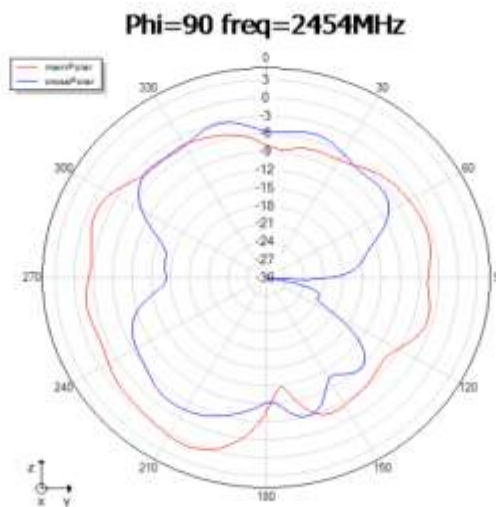
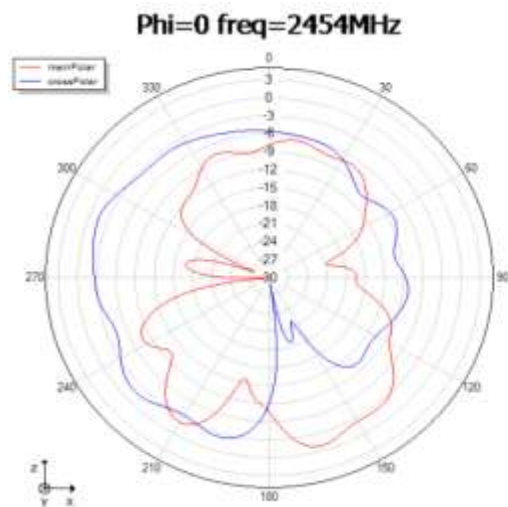
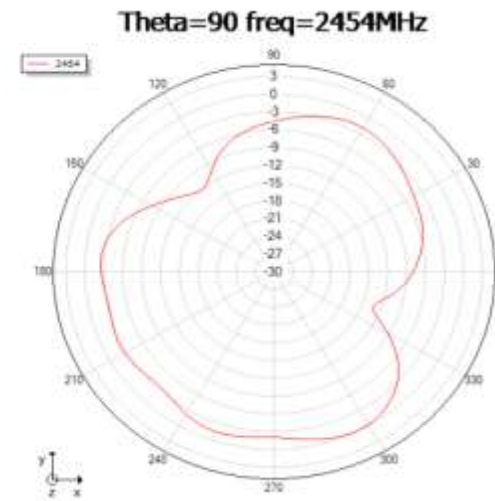
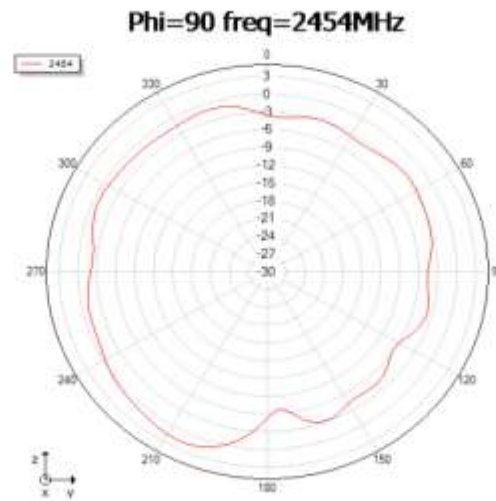
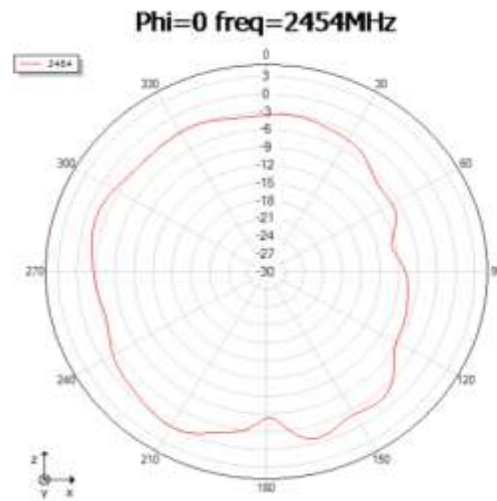
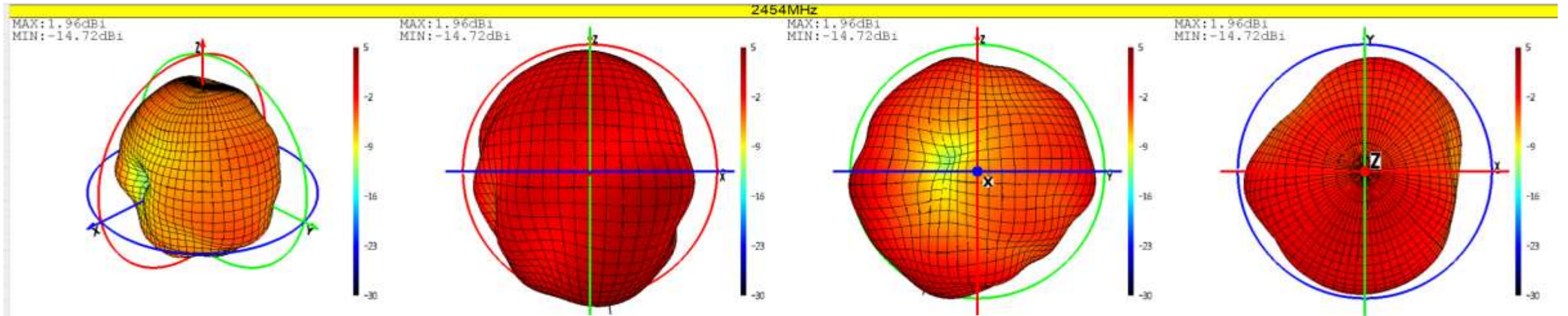
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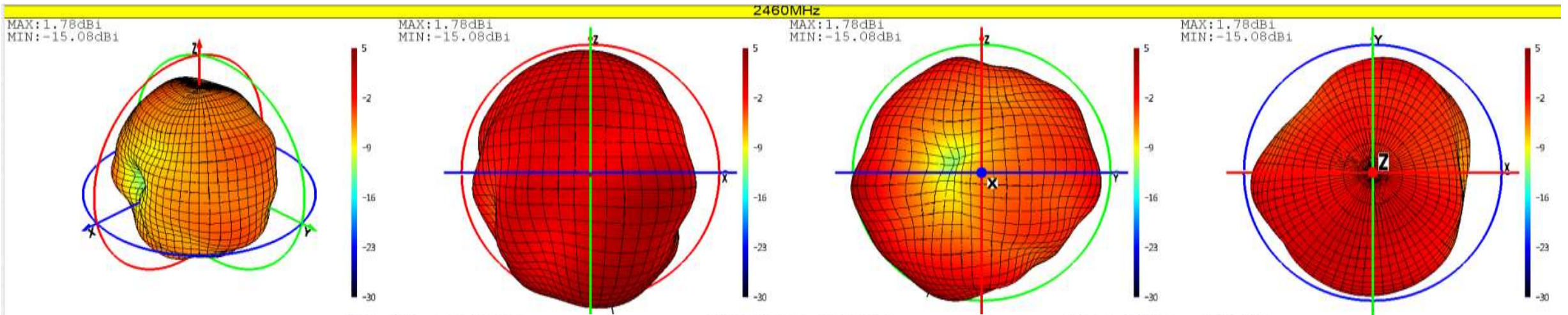
Antenna apple diagram and pattern



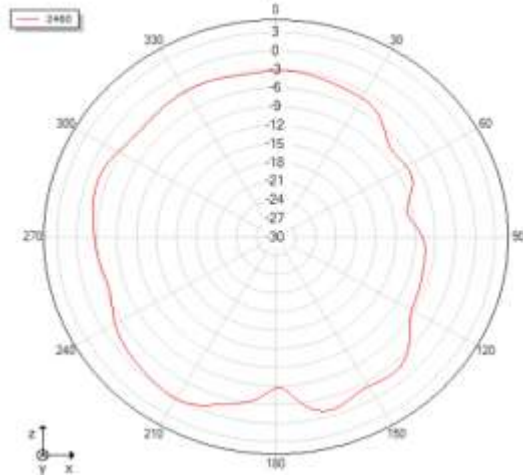
Antenna apple diagram and pattern



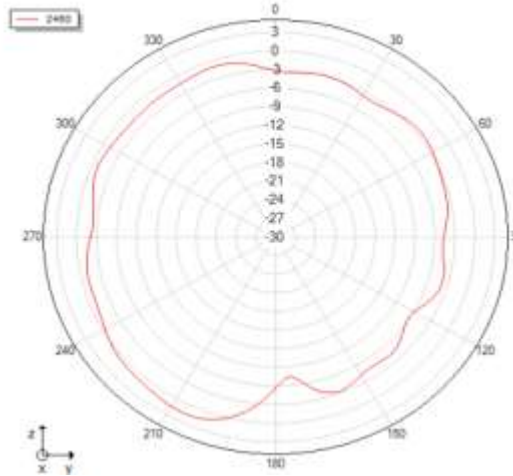
Antenna apple diagram and pattern



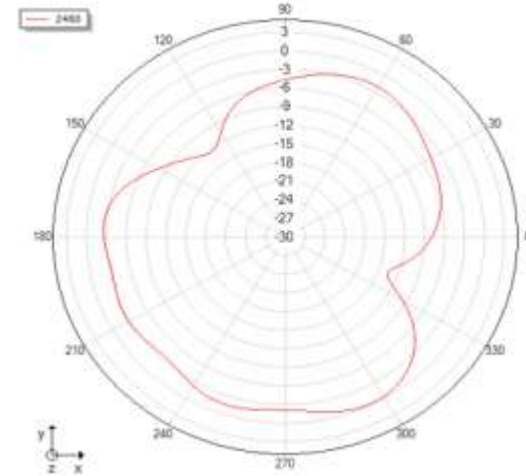
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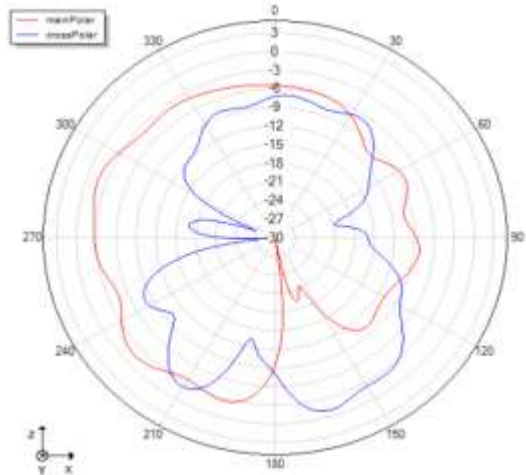
Phi=90 freq=2460MHz



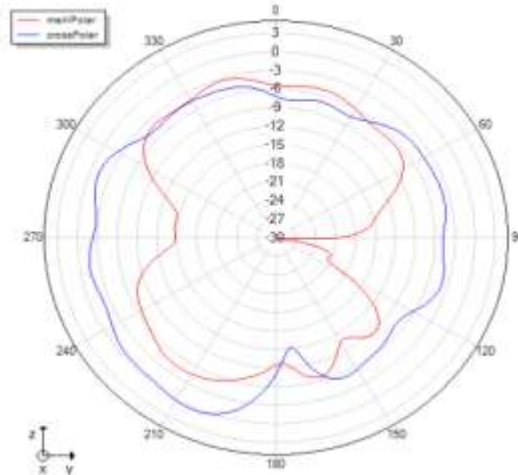
Theta=90 freq=2460MHz



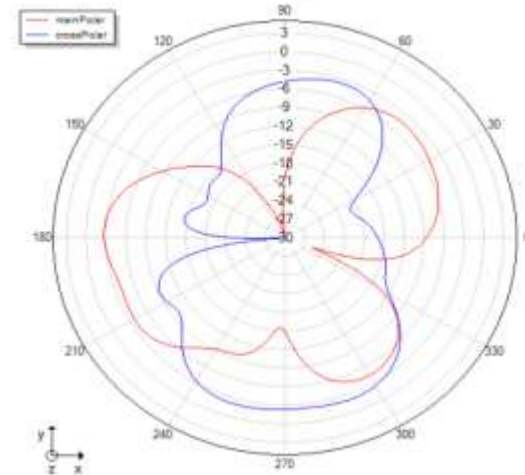
Phi=0 freq=2460MHz



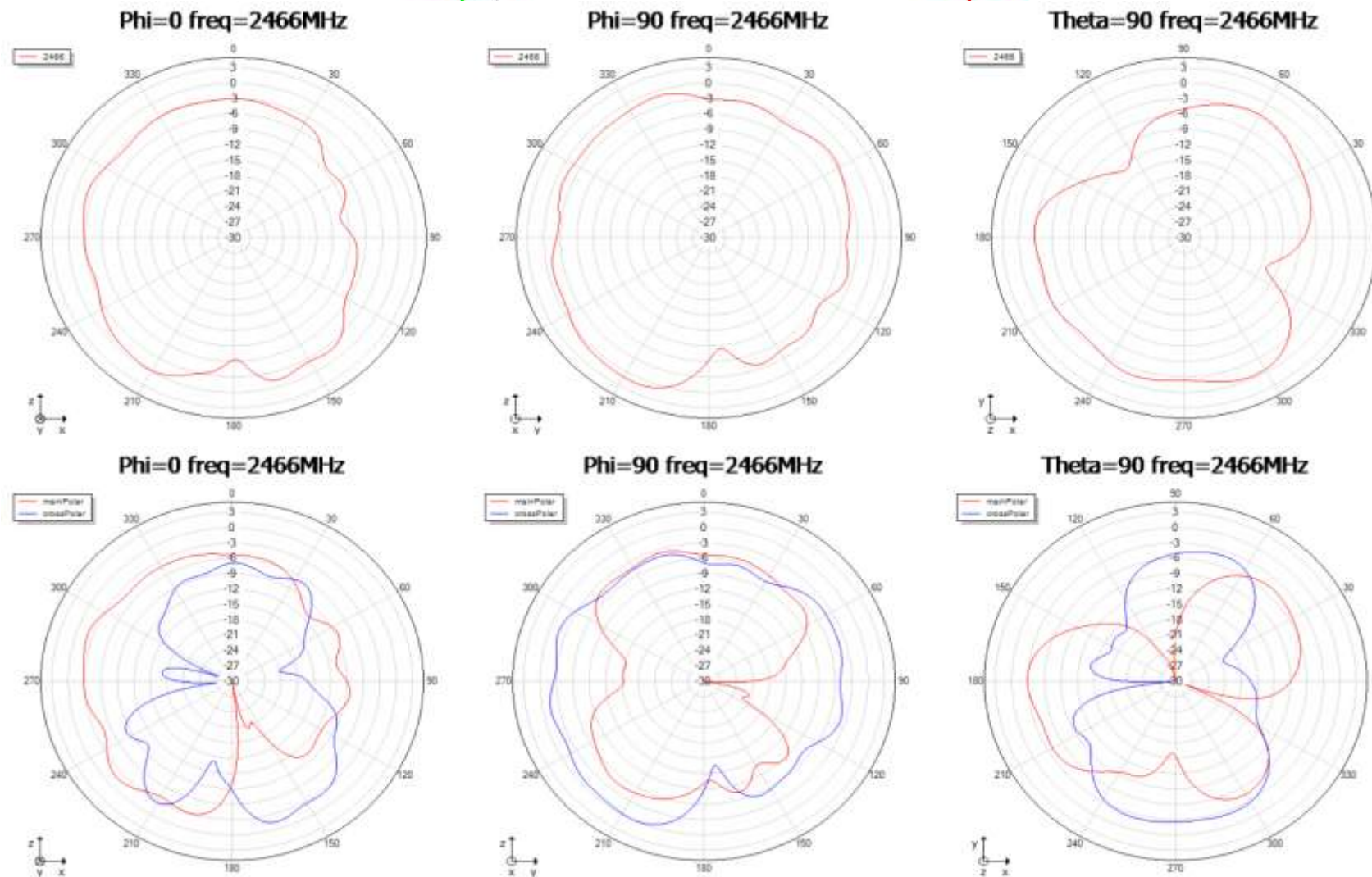
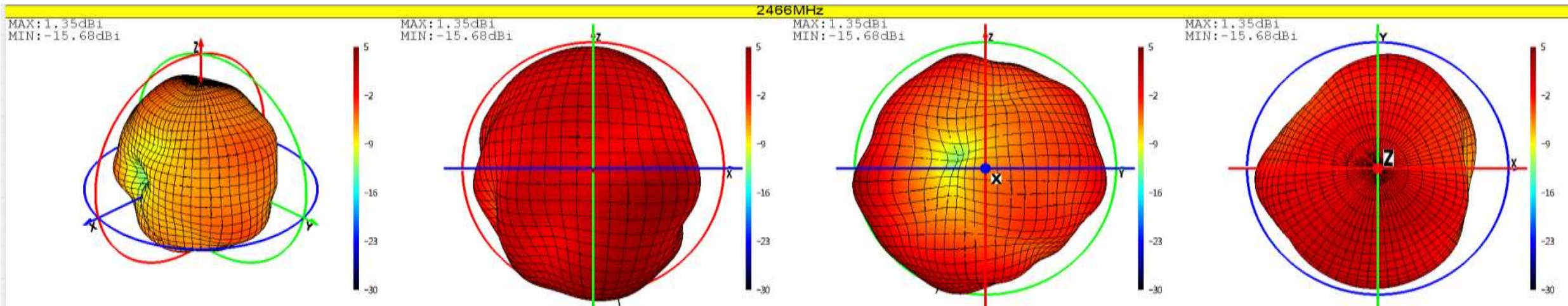
Phi=90 freq=2460MHz



Theta=90 freq=2460MHz

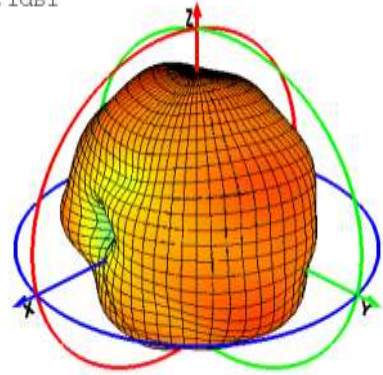


Antenna apple diagram and pattern

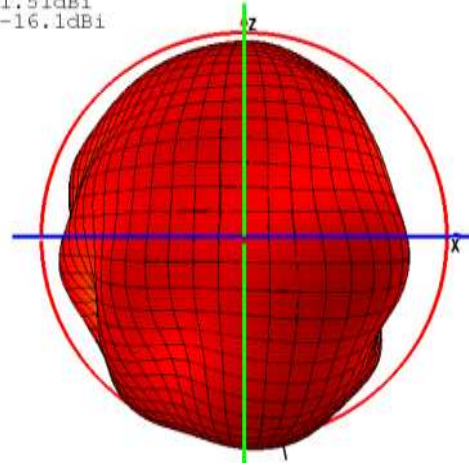


Antenna apple diagram and pattern

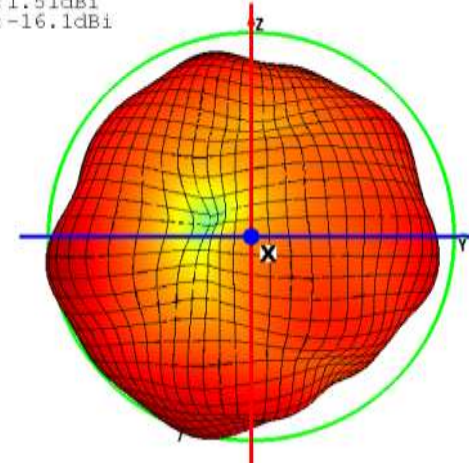
MAX:1.51dBi
MIN:-16.1dBi



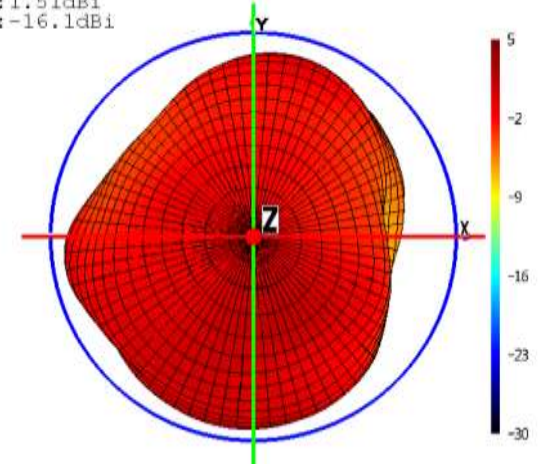
MAX:1.51dBi
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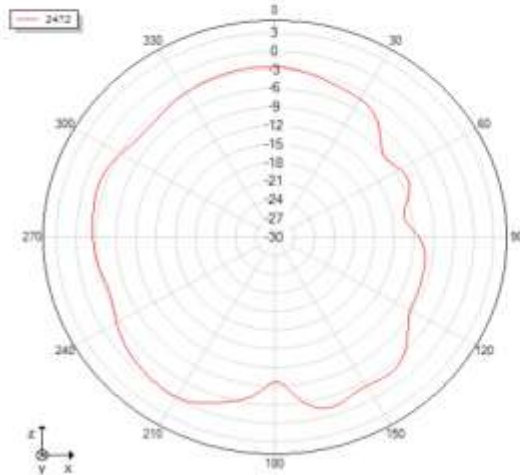
MAX:1.51dBi
MIN:-16.1dBi



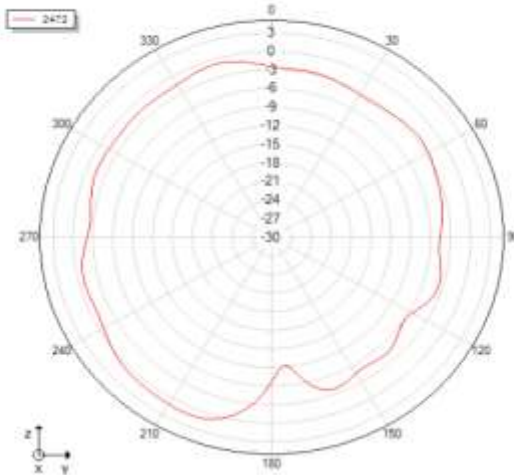
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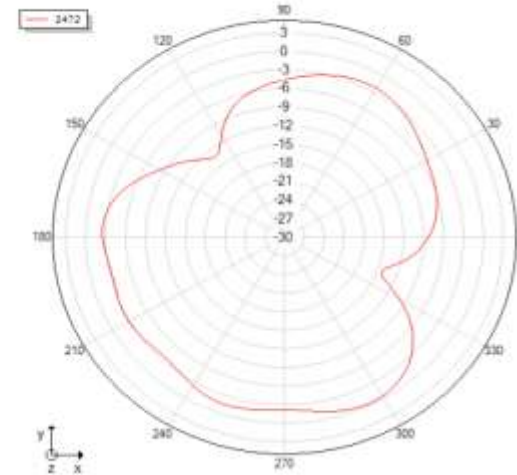
Phi=0 freq=2472MHz



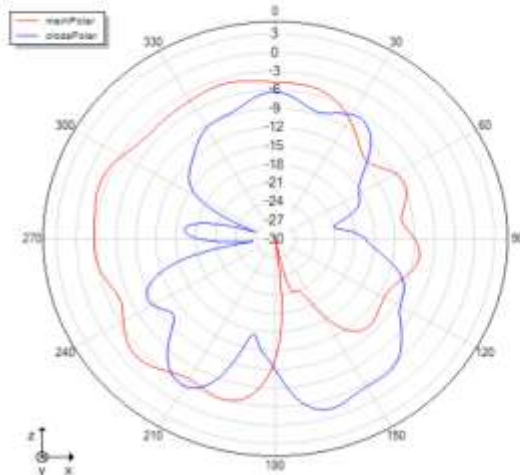
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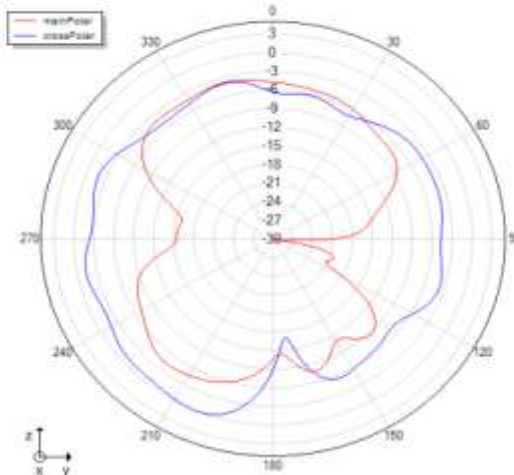
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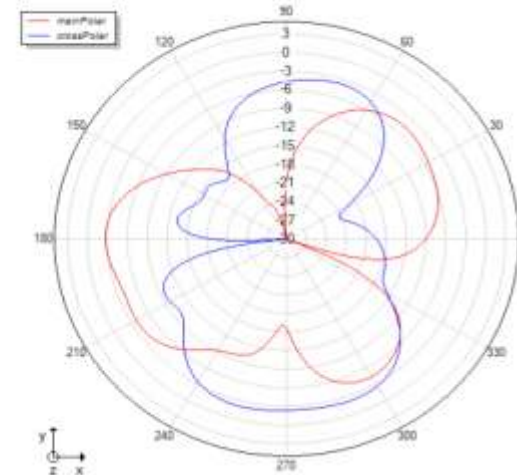
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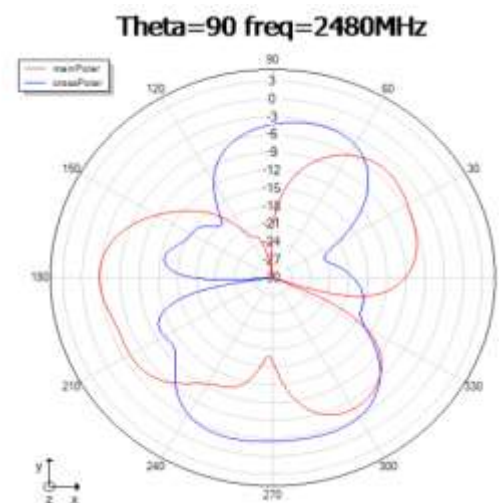
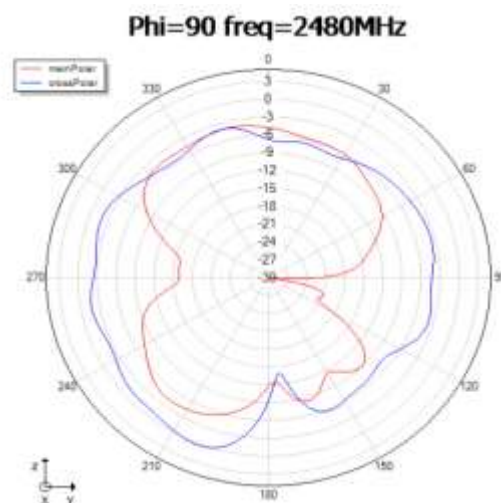
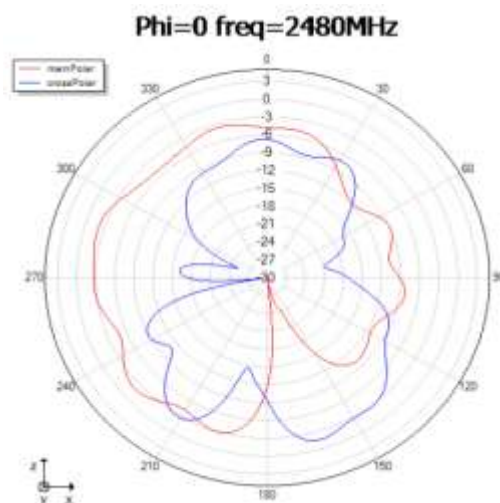
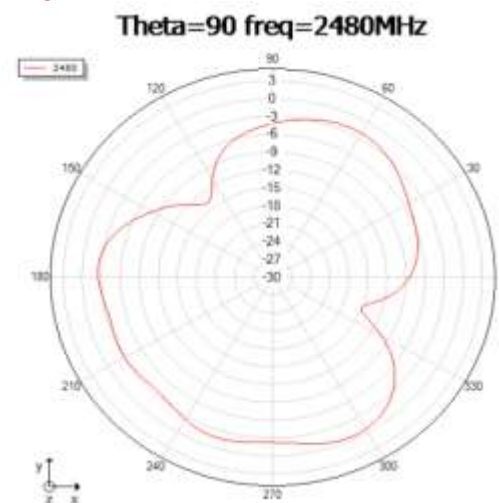
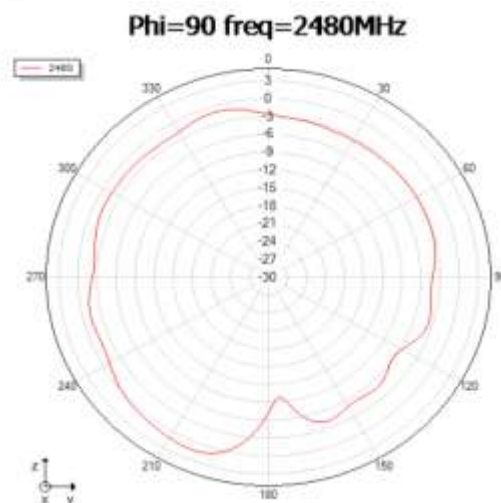
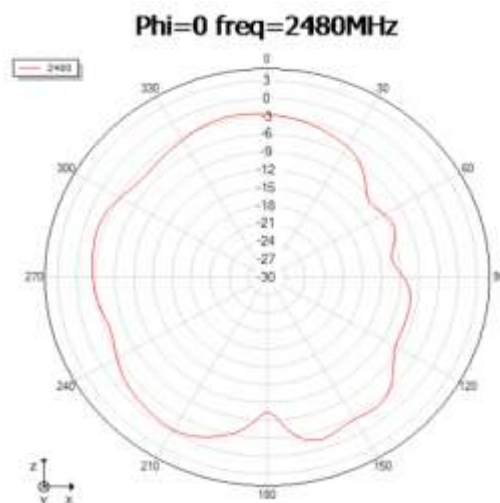
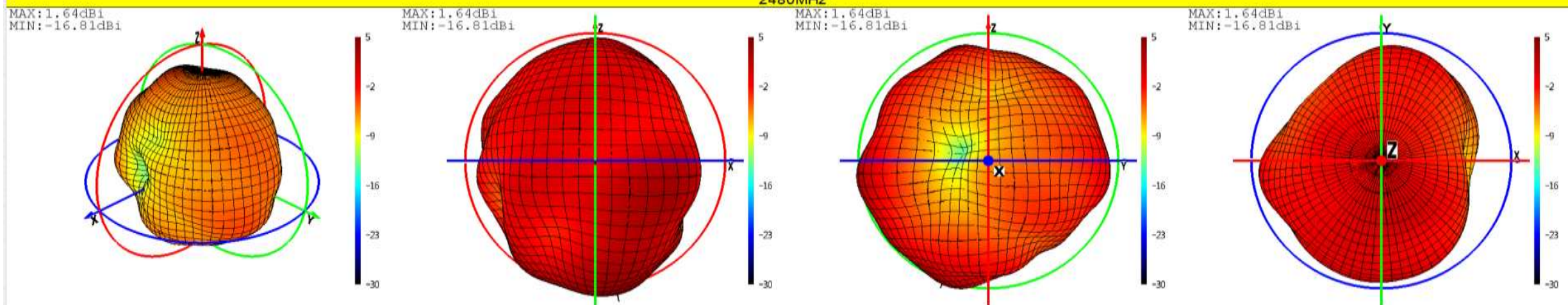
Phi=90 freq=2472MHz



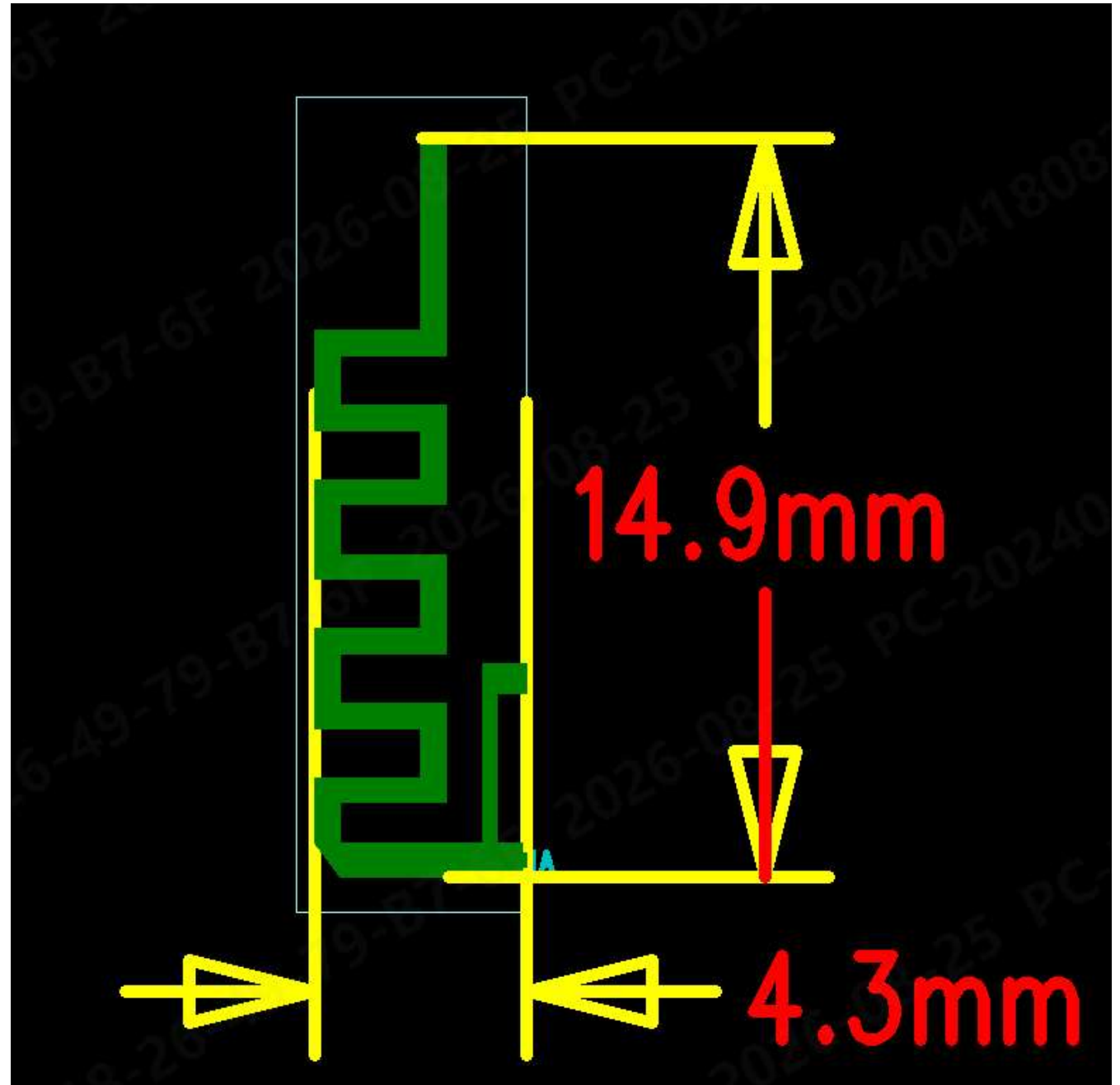
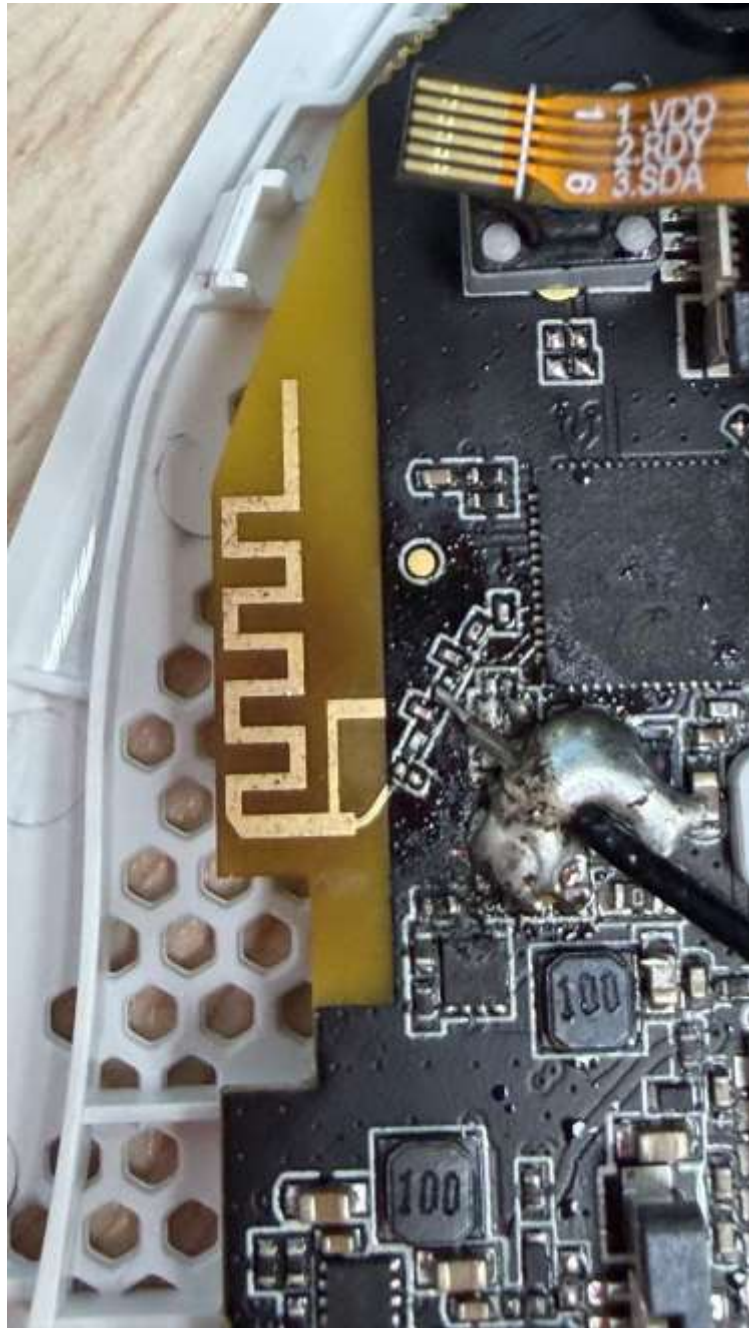
Theta=90 freq=2472MHz



Antenna apple diagram and pattern



Antenna sticking position and positioning



Additional notes

- 📶 Please double-check whether the matching circuitry mentioned in the report has been modified and whether environmental treatment has been introduced, which will directly affect the antenna performance.
- 📶 The parameters provided in this report are only the parameters given by the customer to our company's commissioning prototype, and do not represent the final mass production status of your company's final project.
- 📶 If your company has the latest trial production, or updated status (replacement of materials, update software, change of environmental treatment, etc.) of the prototype, please submit it to our company for verification as soon as possible to confirm whether the antenna performance is affected.
- 📶 If your company needs to send it to a third party for re-testing or to the customer for testing, please be sure to hand over the machine to our company for testing and confirmation, because the consistency of the motherboard, the consistency of the assembly, and the difference in antenna assembly and other factors may lead to the deviation of antenna parameters.