飞腾云
PHATEN

Smart Tag

Smart Tag

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Website: www.phaten.com

Customer Approval

Company Shenzhen Phaten Technology Co., Ltd.

Signature Li Shijian

Date 2024-3-29

CONTENT

1. Product Description

Product Name	Smart Tag
Antenna Type	PCB antenna
Maximum	Gain:1.95dBi
	Efficiency:44.48%

2. General Description

EUT Name	T201 Antenna
Wireless type	WIFI
Antenna Type	PCB antenna
Dimensions	Appendix A

3. Technical Information

Frequency Range	2402MHz~2480MHz
Test Frequency	2400,2410.....2500MHz

4. Test Standards

Identity	Document Title
IEEE 149-1979	IEEE Standard Test Procedures for Antennas

5. Test Item

Report Section	Description
Appendix B	S11A/SWR
Appendix C	Gain and Efficiency
Appendix D	Radiation Pattern (1D and 3D)

6. Test Photo

Report Section	Description
Appendix E	Test Setup Photo

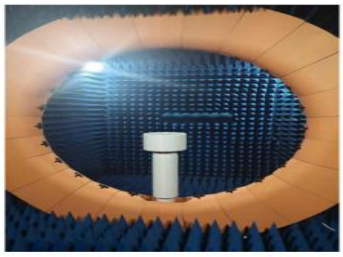
7. Darkroom test equipment and data

5.0 Test Equipment

Test system: shielded darkroom

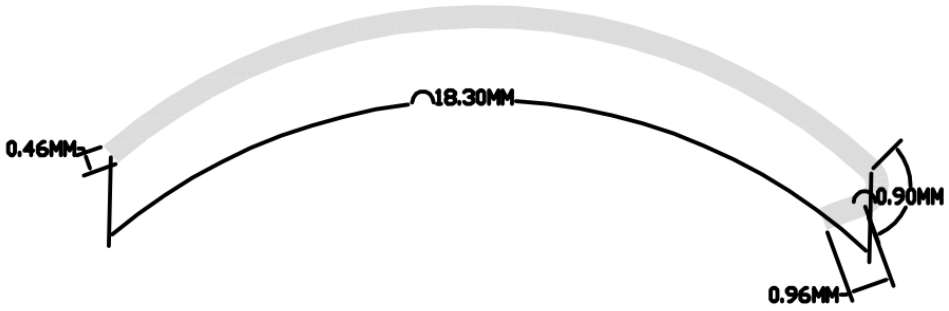
Test environment: temperature 22 ℃±3 ℃, humidity 50% ±15%

Test equipment: when testing passive data, use AgilentE5071C network analyzer； When testing the active data, use the comprehensive tester CMW500



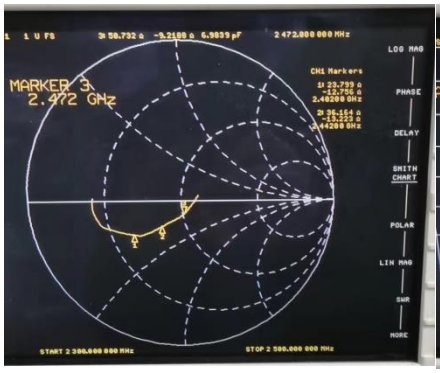
NO	Kind of Equipment/ 设备种类	Manufacturer /制造商	Type No. 型号/	Number/ 编号	Calibrated Until/校准到
1	network analyzer	Agilent	E5071C	US38433157	2024-12-10
2	comprehensive tester	R&S	CMW500	146927	2024-12-10

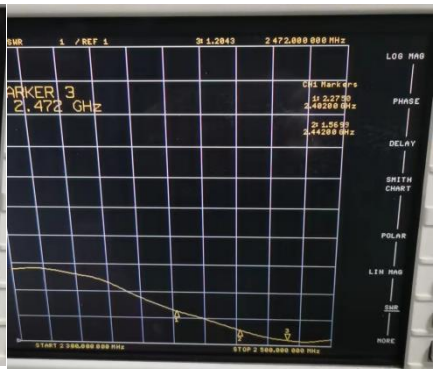
8. Appendix A Antenna Dimension



9. Appendix B SII/VSWR

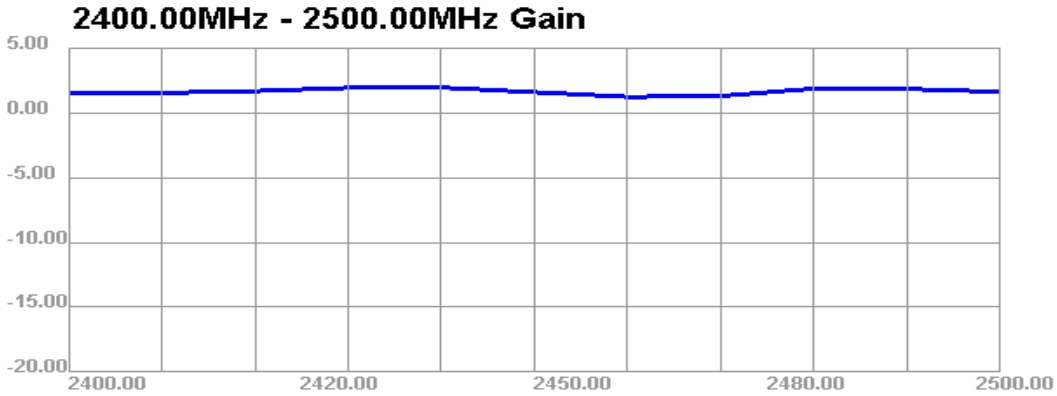
requency □MHz)	2412	2442	2472
SNITH CHART	-12.75	-13.22	-9.2
SWR	2.27	1.56	1.2

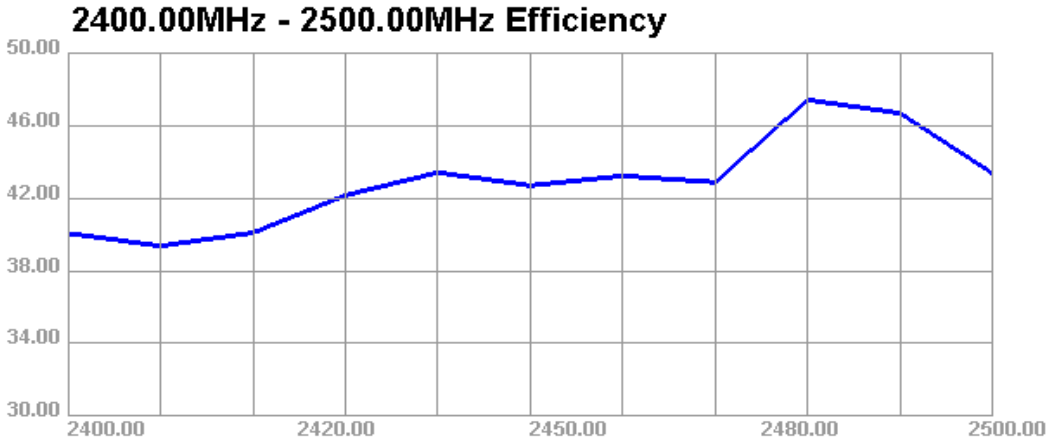




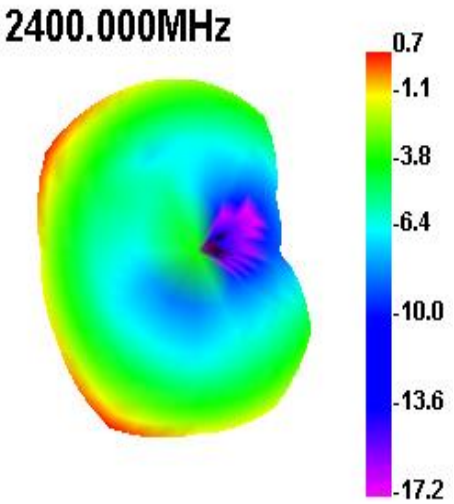
10. Appendix C Gain and Efficiency

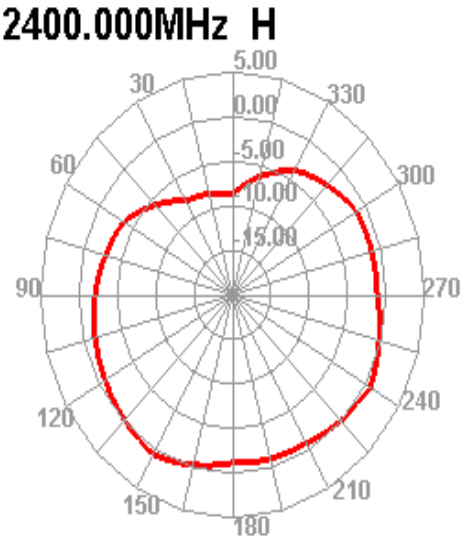
Passive Test For D44										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	40.06	-3.97	1.52	-0.63	13.944	26.121	1.52	-17.77	50.93	51.1
2410	39.38	-4.05	1.55	-0.6	13.96	25.416	1.55	-17.79	51.1	51.33
2420	40.1	-3.97	1.68	-0.47	14.275	25.821	1.68	-17.09	51	51.19
2430	42.16	-3.75	1.93	-0.22	14.872	27.288	1.93	-16.27	51.09	51.27
2440	43.41	-3.62	1.95	-0.2	15.065	28.346	1.95	-15.87	51.42	51.6
2450	42.7	-3.7	1.6	-0.55	14.611	28.089	1.6	-15.62	51.54	51.71
2460	43.23	-3.64	1.24	-0.91	14.715	28.513	1.24	-15.9	51.66	51.72
2470	42.88	-3.68	1.29	-0.86	14.724	28.159	1.29	-17.65	51.8	51.85
2480	47.41	-3.24	1.87	-0.28	16.591	30.822	1.87	-19.65	51.82	51.91
2490	46.68	-3.31	1.84	-0.31	16.796	29.88	1.84	-23.27	51.81	51.83
2500	43.36	-3.63	1.62	-0.53	16.115	27.248	1.62	-25.84	52.03	51.97

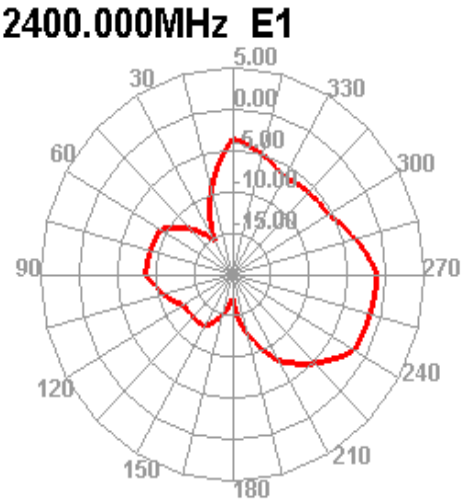


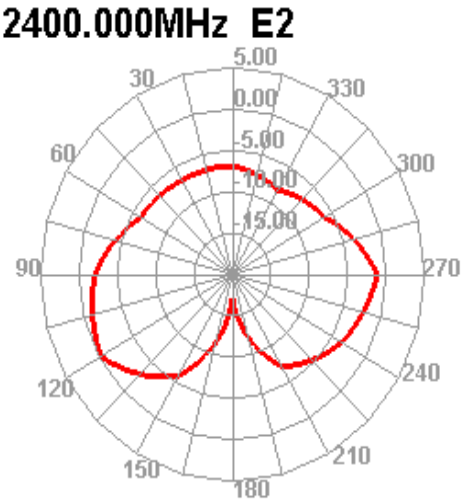


11. Appendix D Radiation Pattern(ID and 3D)

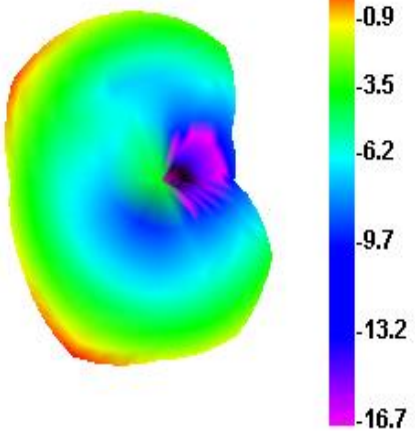




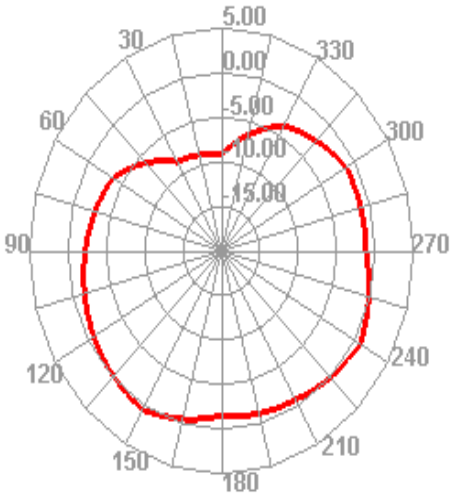




2410.000MHz



2410.000MHz H



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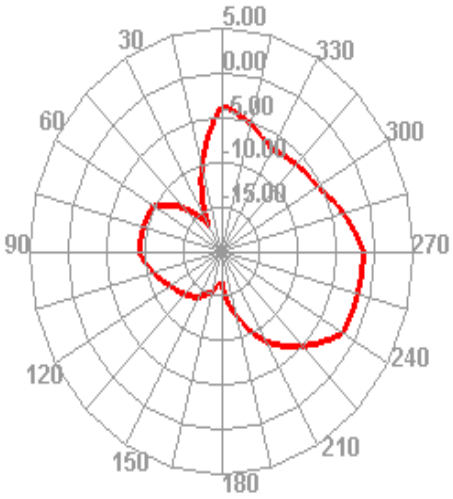
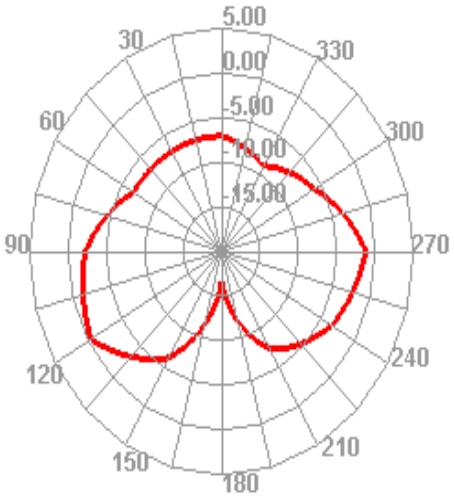


2410.000MHz E2



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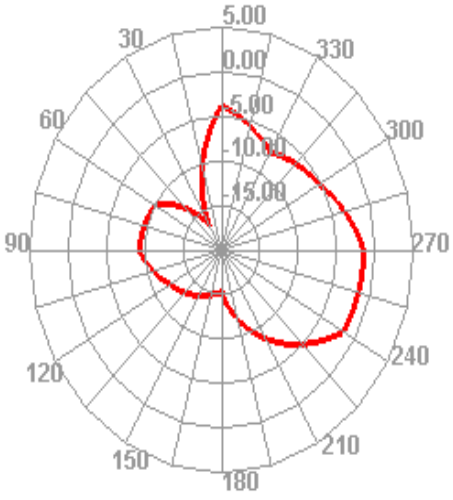

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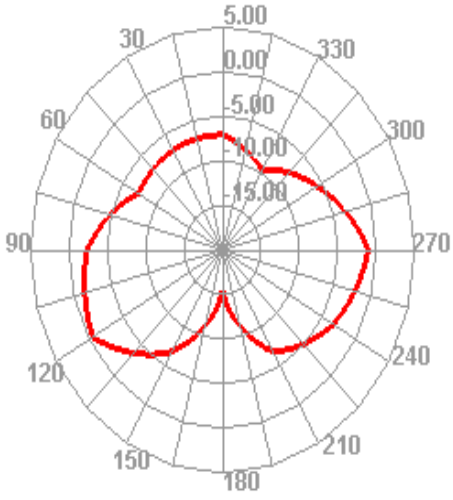

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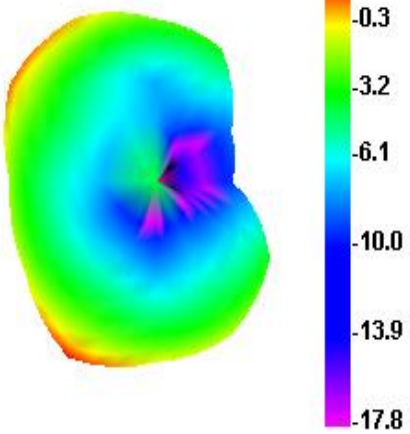

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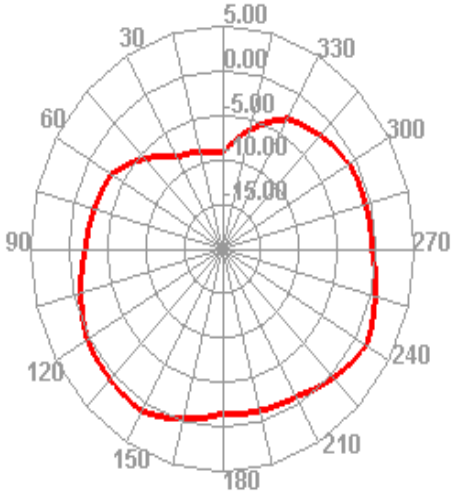

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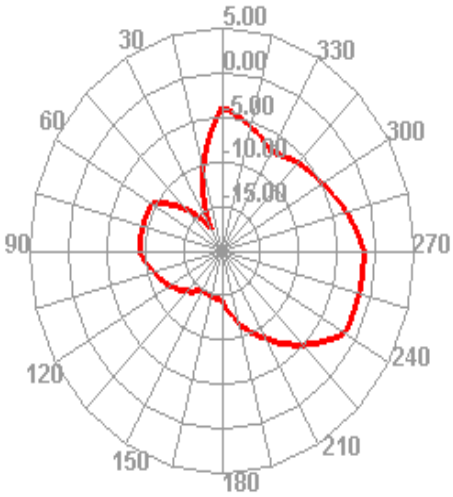

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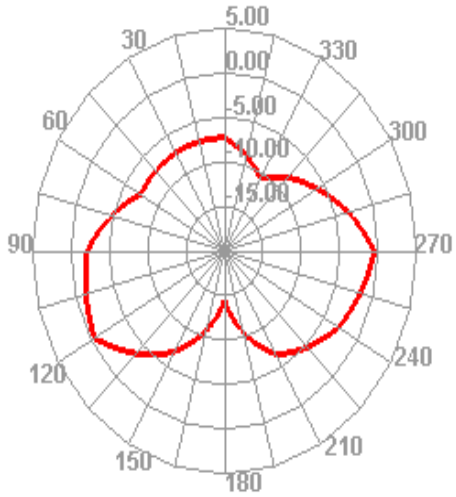

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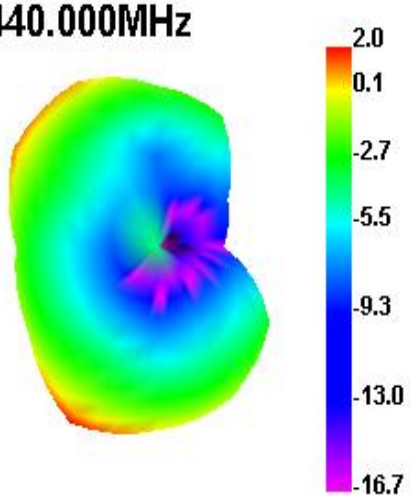

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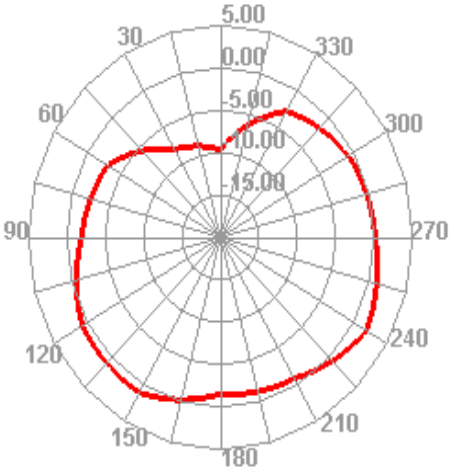

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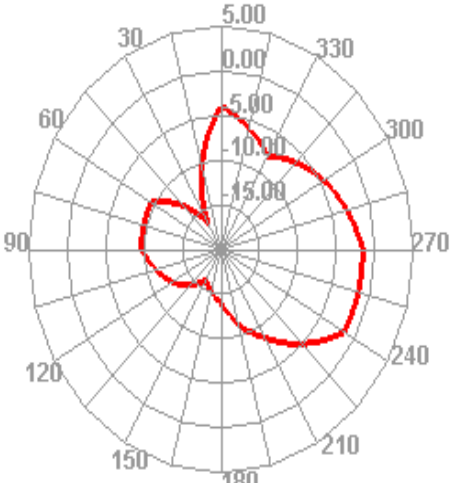

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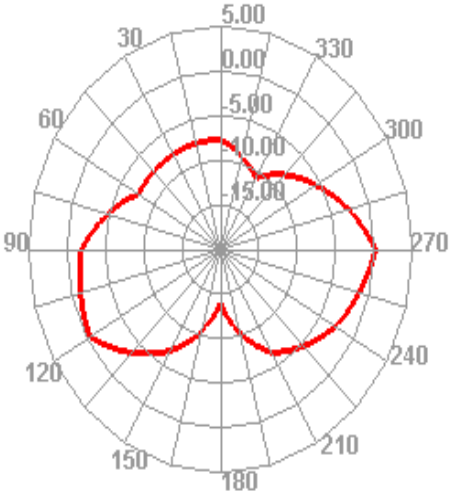

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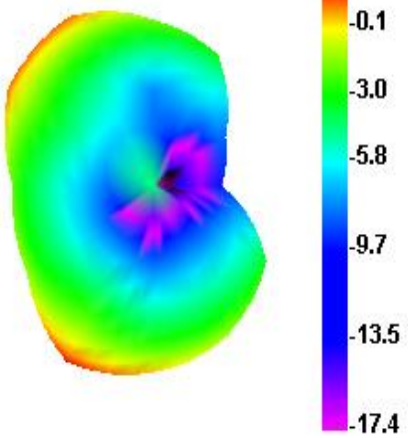

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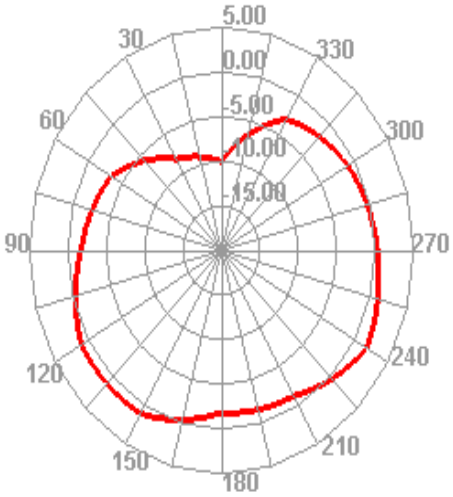

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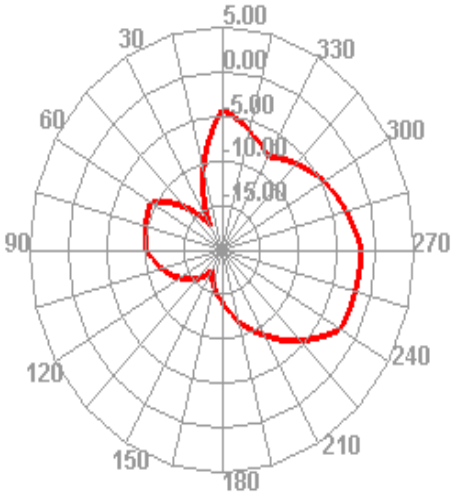

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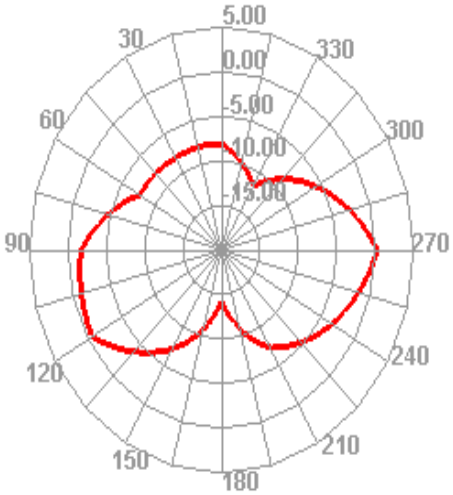

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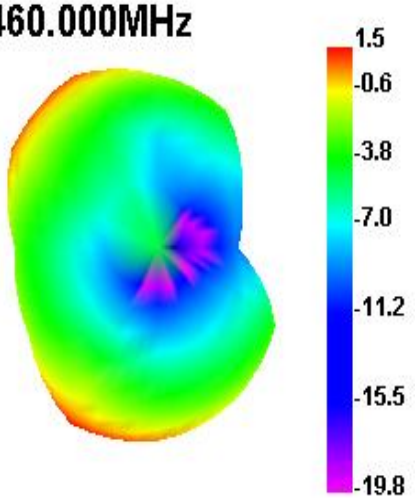

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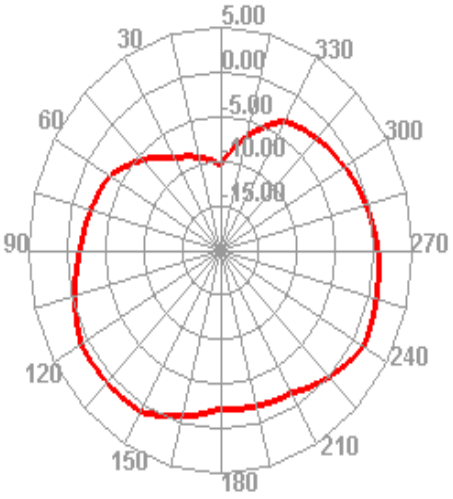

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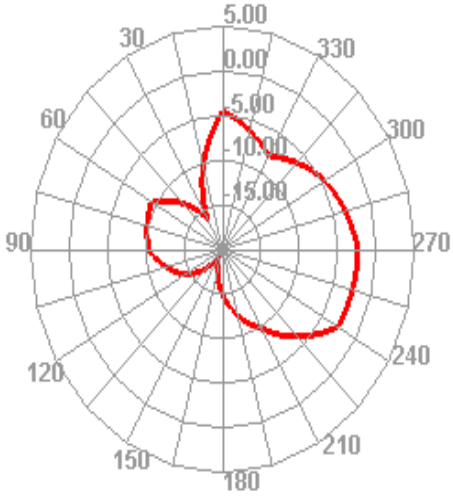

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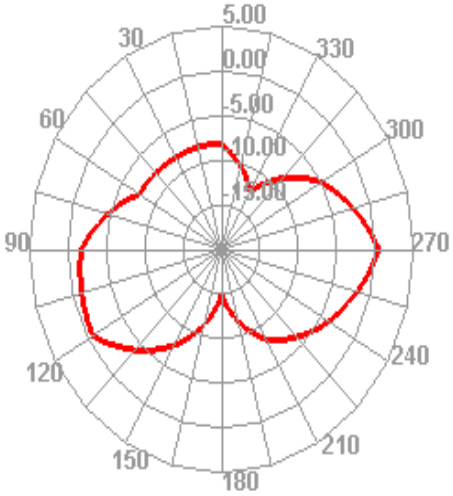

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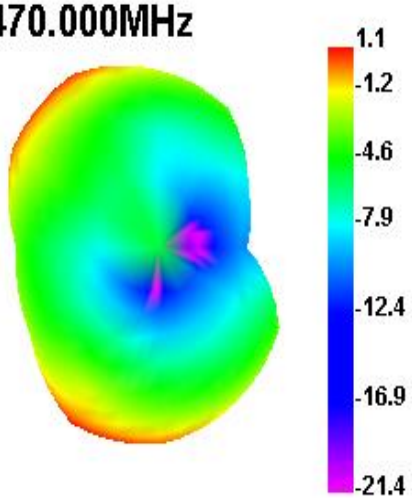

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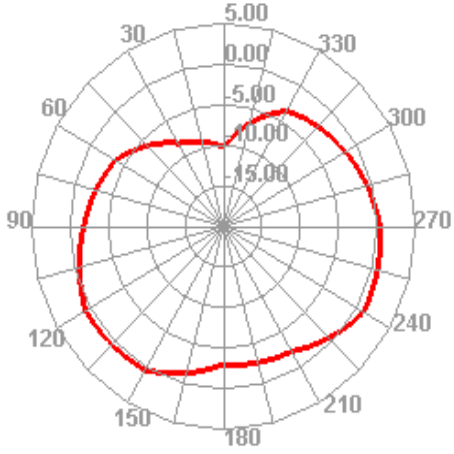

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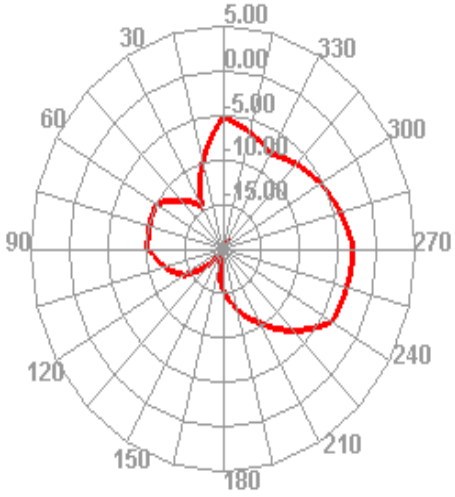

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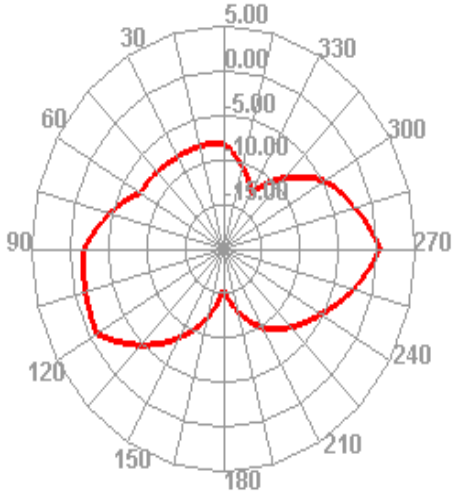

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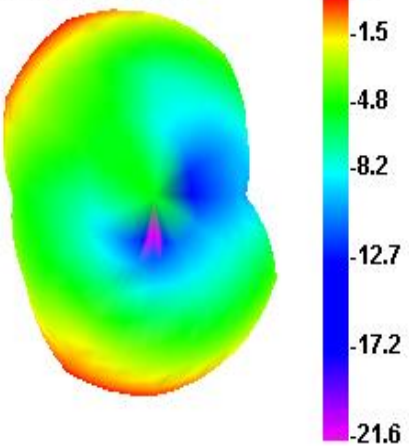

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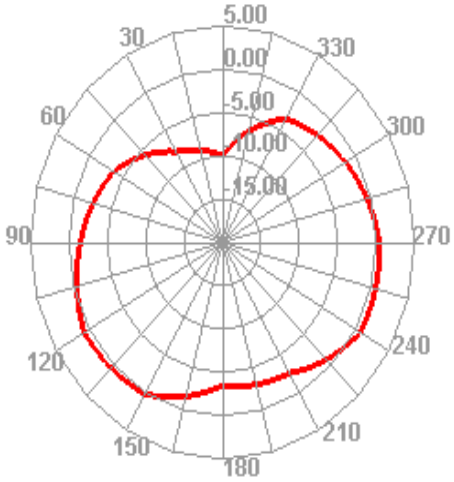

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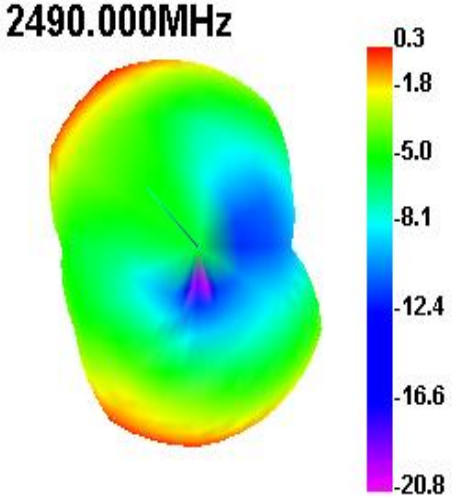

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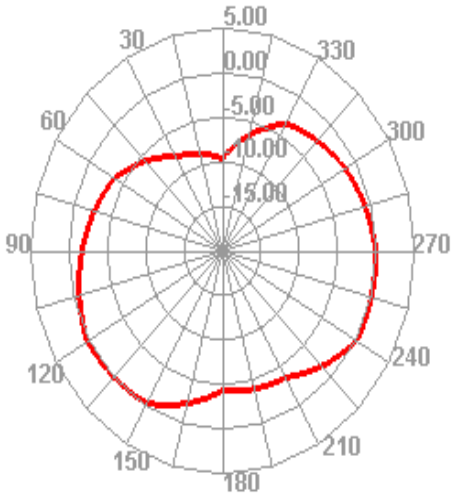

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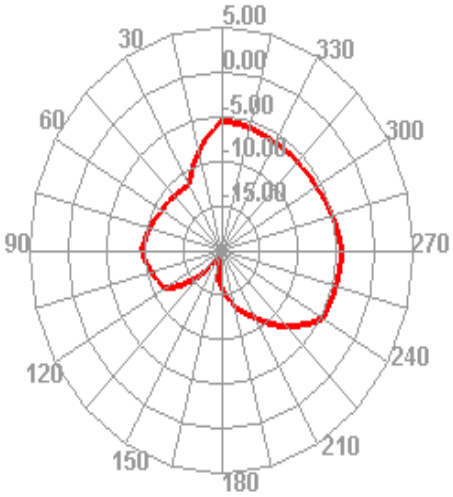

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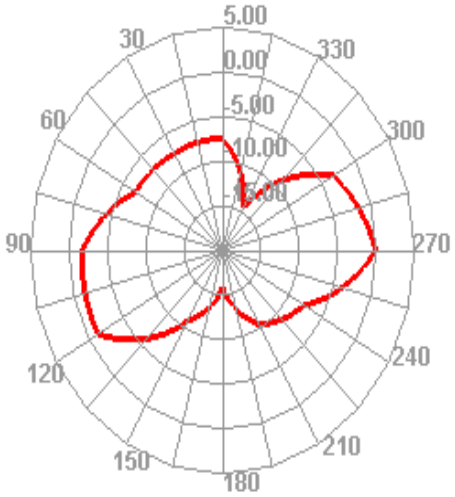

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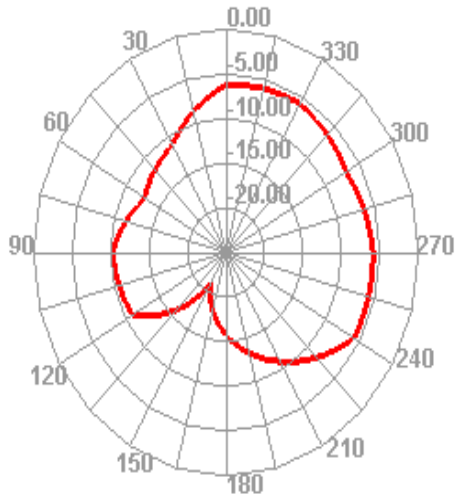

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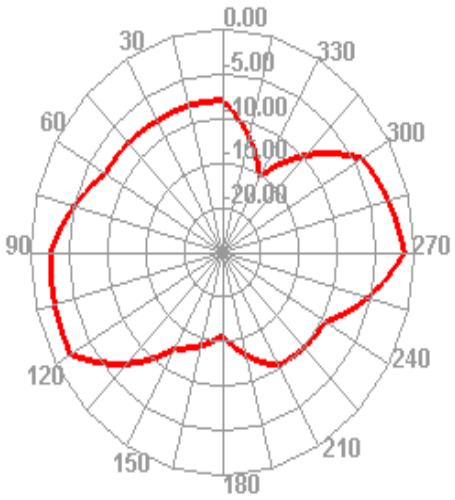

12. Appendix E Test Setup Photo