S169 Antenna Test Report

Date： 2025.08.15

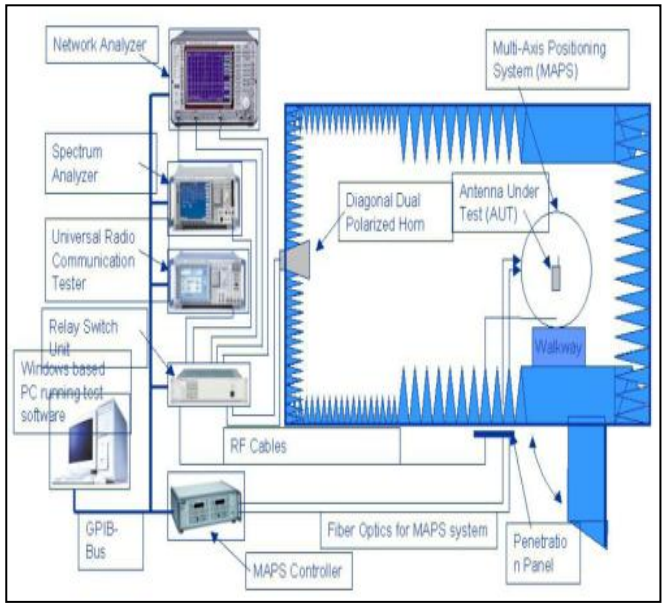
Project Overview

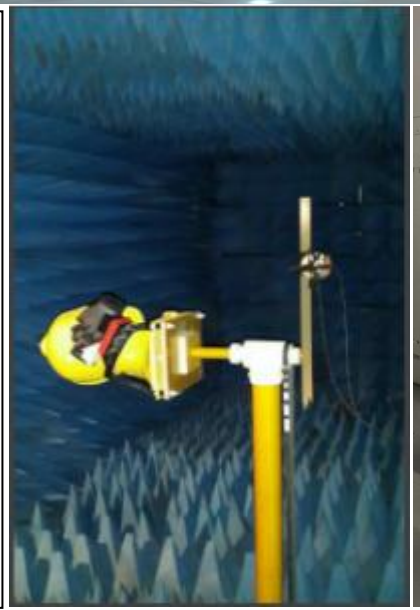
Main antenna design spectrum	5G global network
Type of antenna	PIFA
Deputy antenna design spectrum	WIFI/GPS/BT
Type of antenna	PIFA
Frequency diversity antenna	5G global network
Type of antenna	PIFA

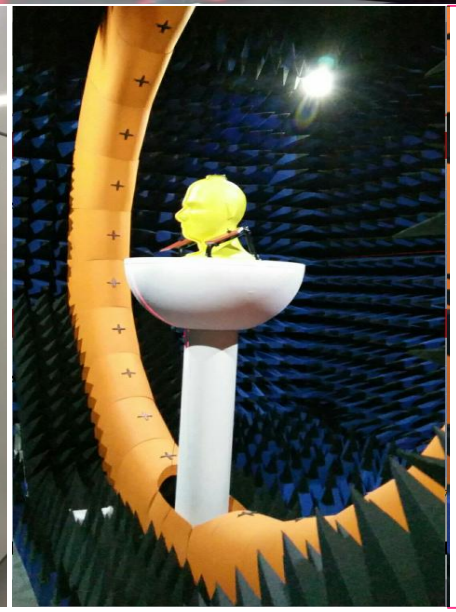
Report version	Date	Content
V5.0	2025.08.15	Antenna test report

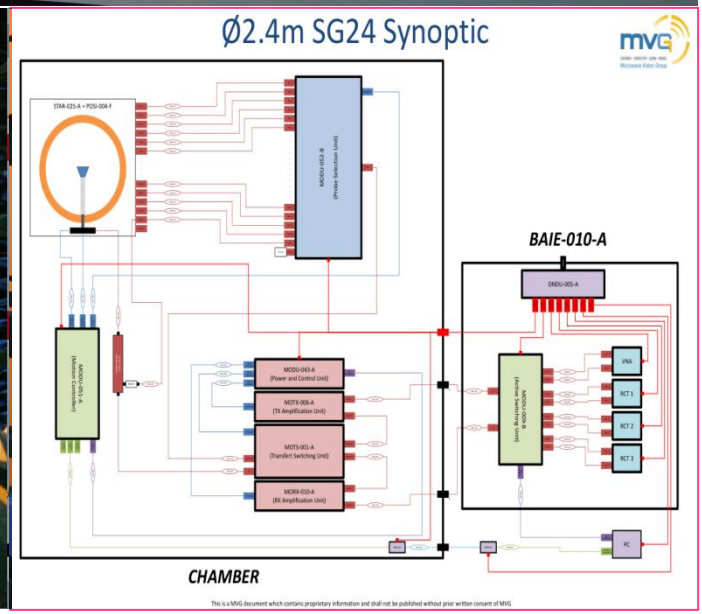
Test Environment

测试环境





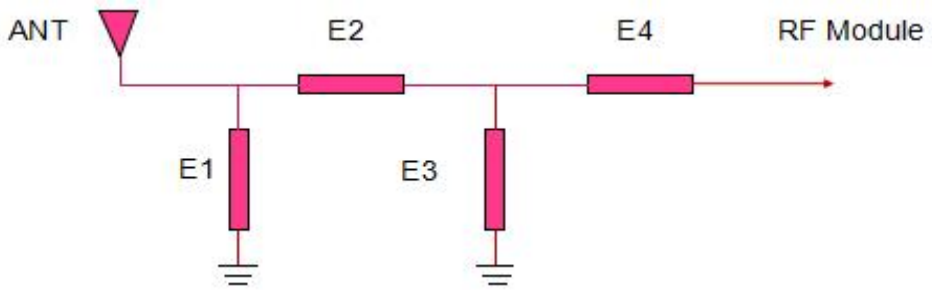




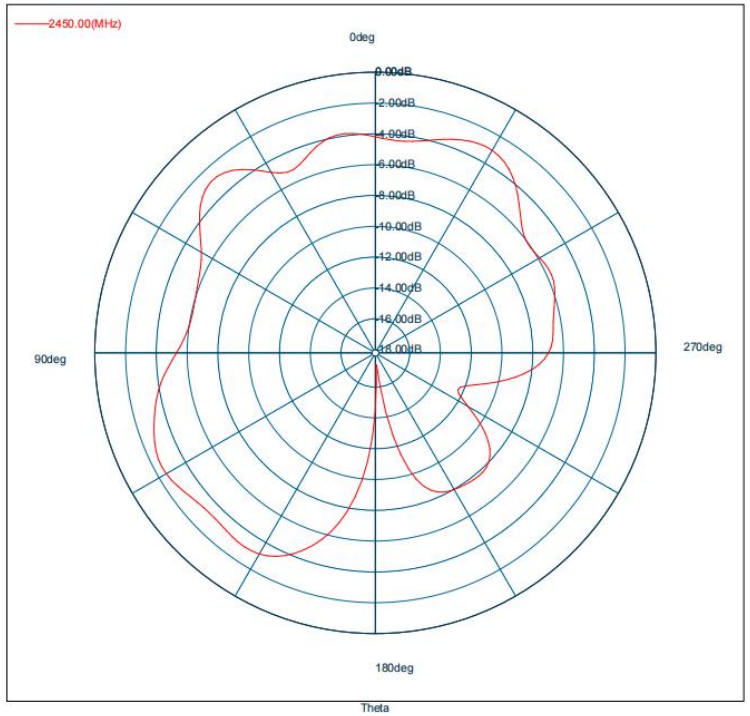
3座远场3D全电波微波暗室实验室系统，1座MVG SG24LT（Satmio）近场3D微波暗室实验室系统（与国家相关实验室同步）

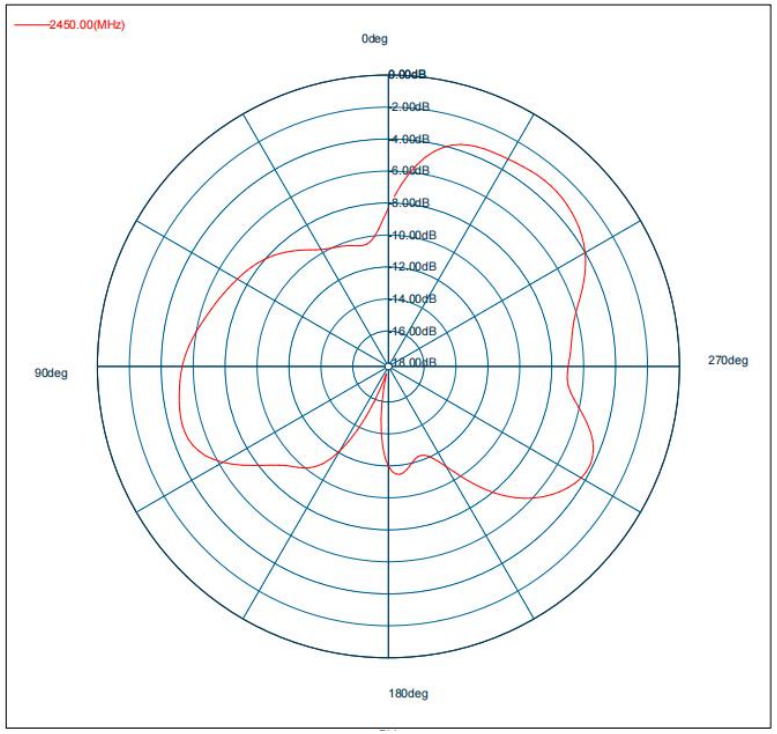
Matching Circuit

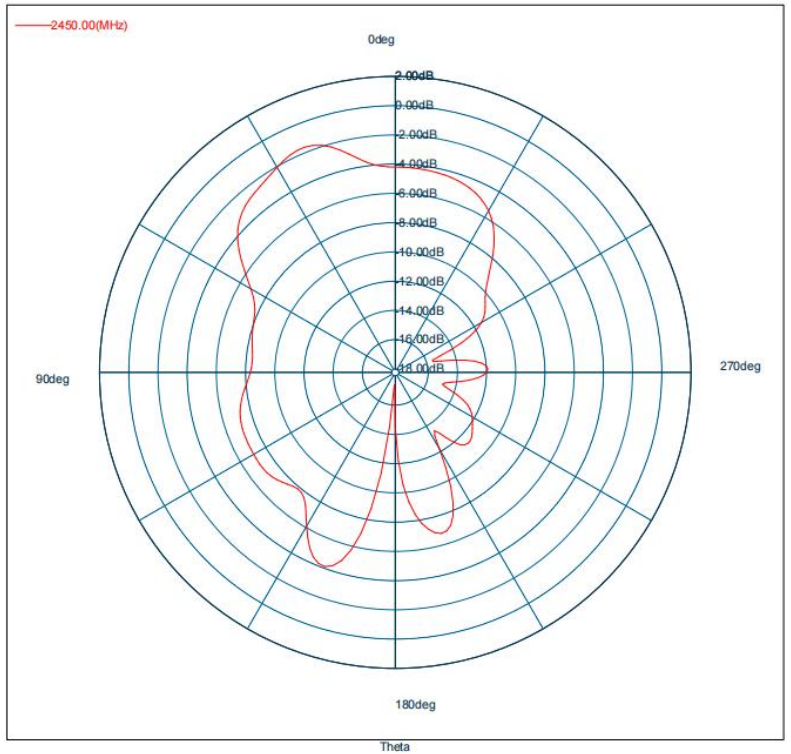
main antenna design	
Element	Value
E1(0201):	0.5pF
E2(0201):	4.3nh
E3(0201):	9.1nh
E4(0201):	N/A



2.4G Passive pattern　　Gain：-1.2 dbi

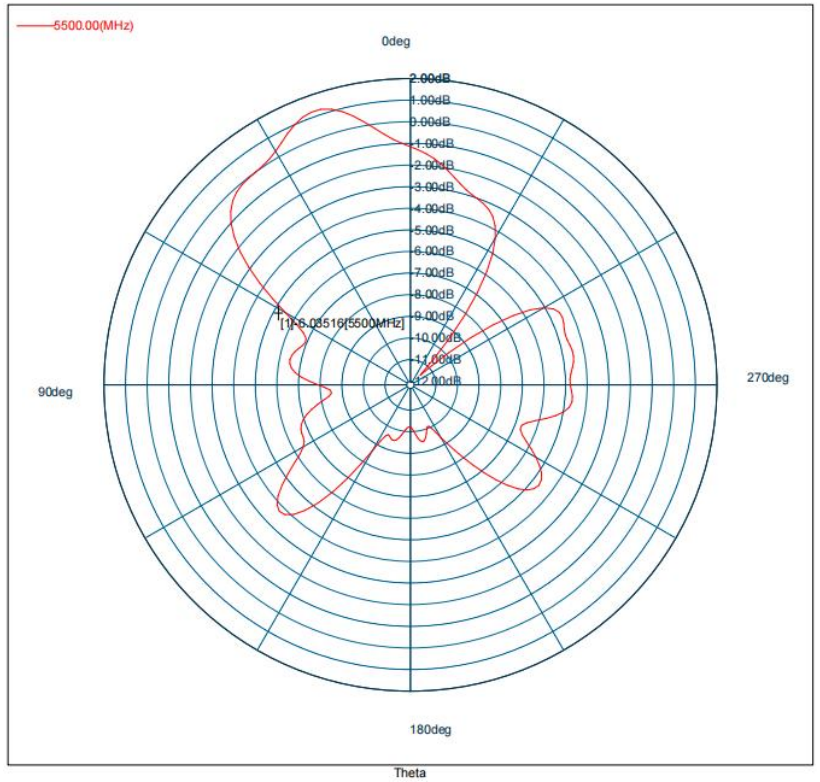


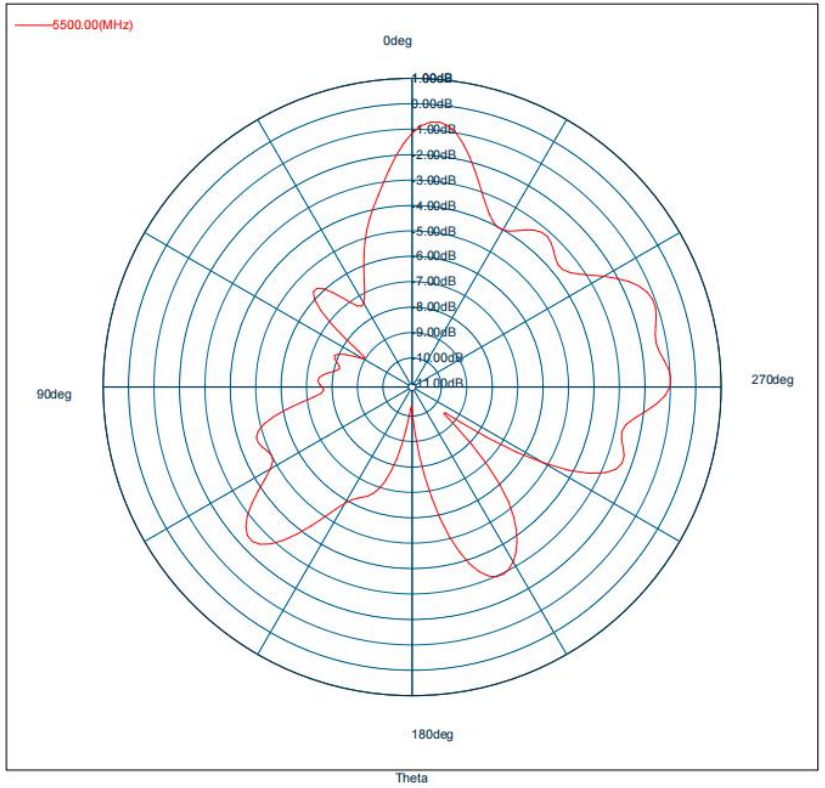


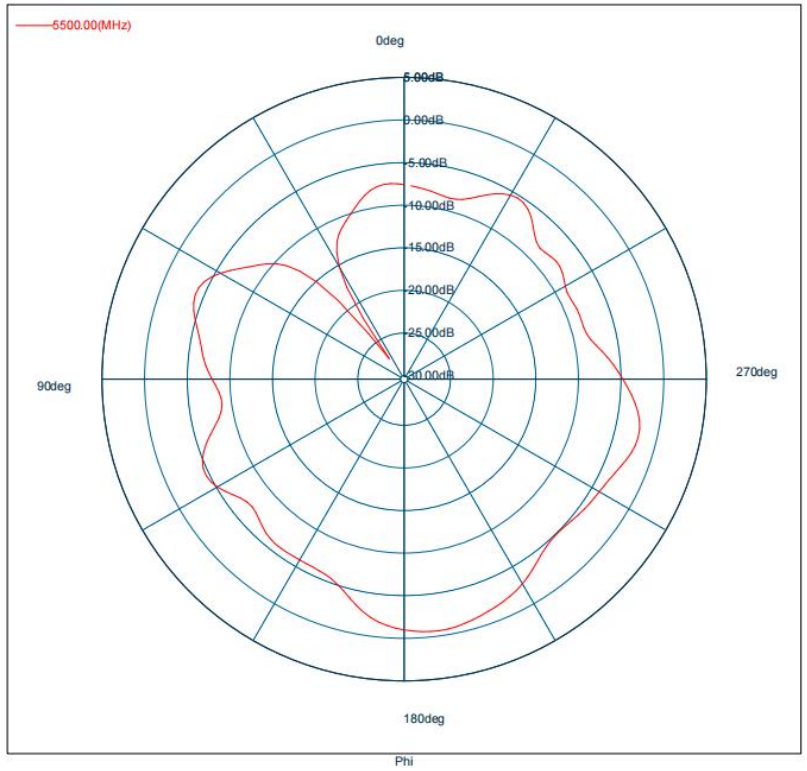


Measuring instrument：Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer　Darkroom system：MVG SG24LT（Satmio）

5.5G Passive pattern Gain：0.6 dbi

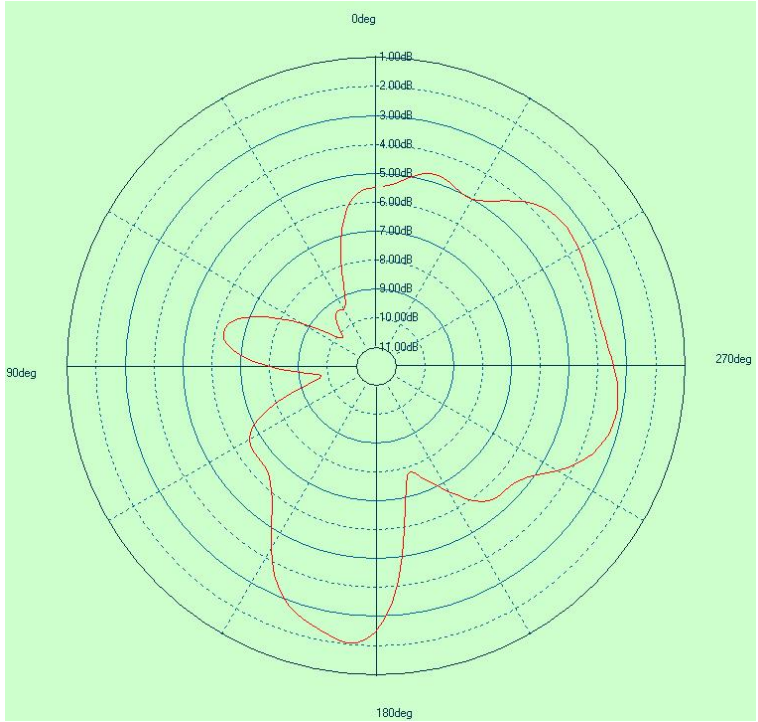


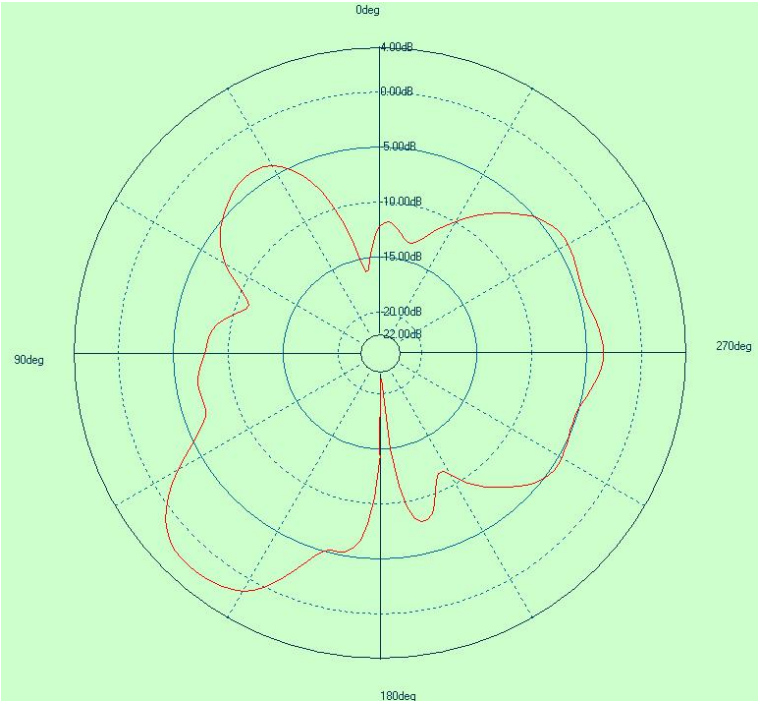


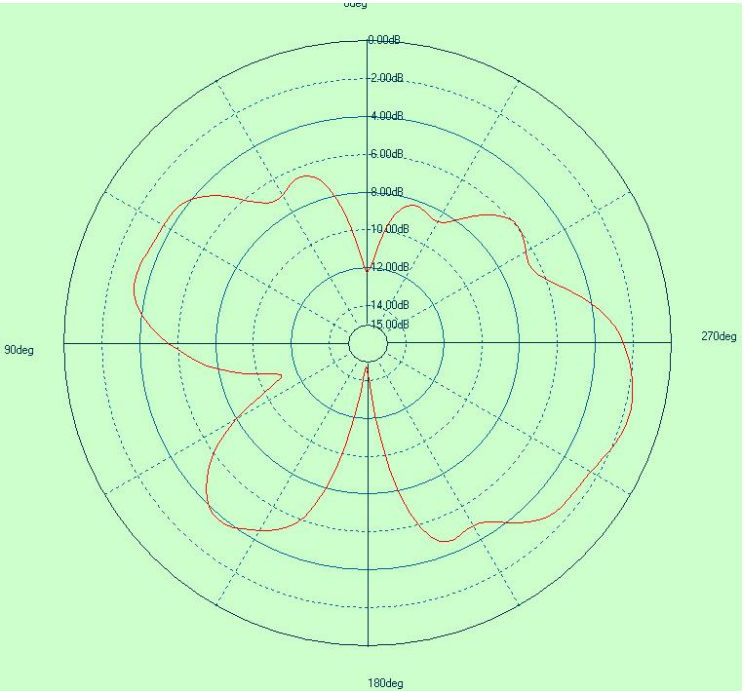


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

1575Mhz Passive pattern Gain：1.8 dbi

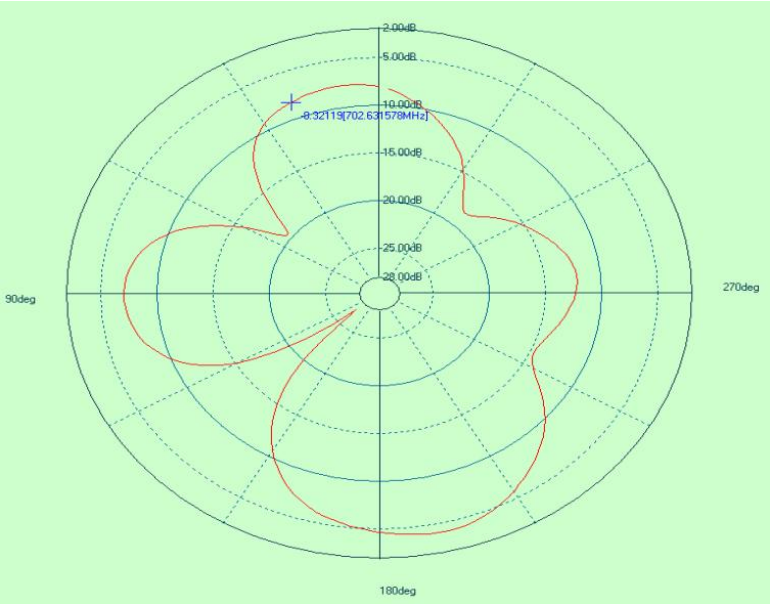


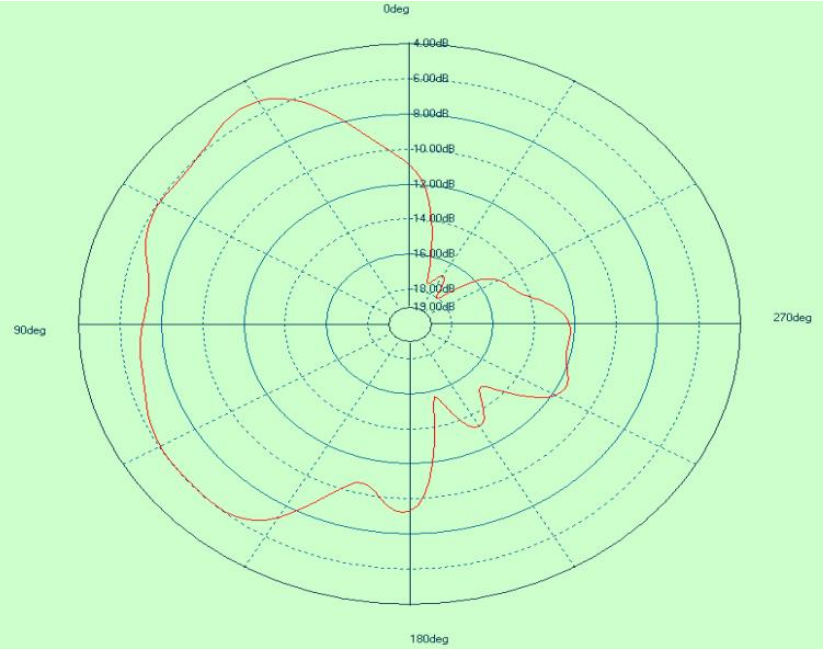


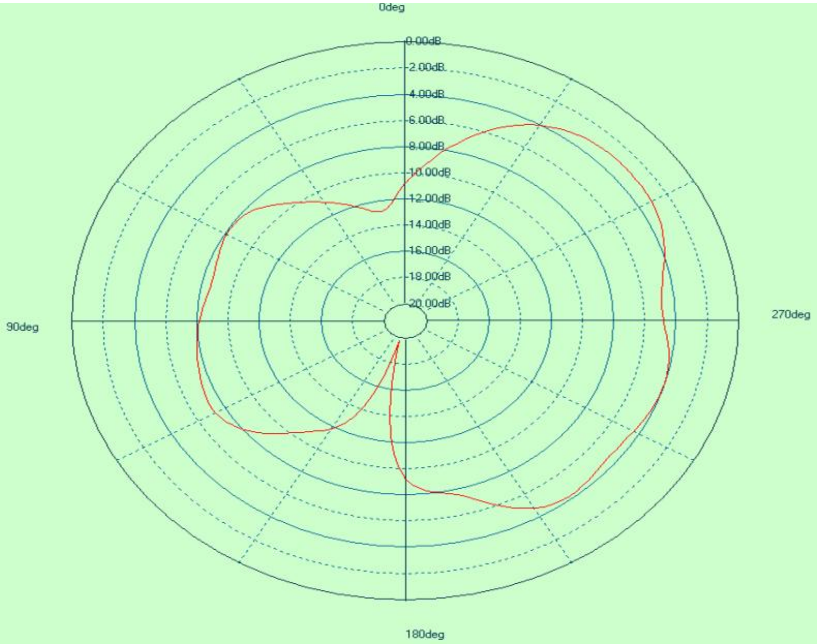


Measuring instrument：Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system：MVG SG24LT（Satmio）

702Mhz Passive pattern Gain: -1.8 dbi

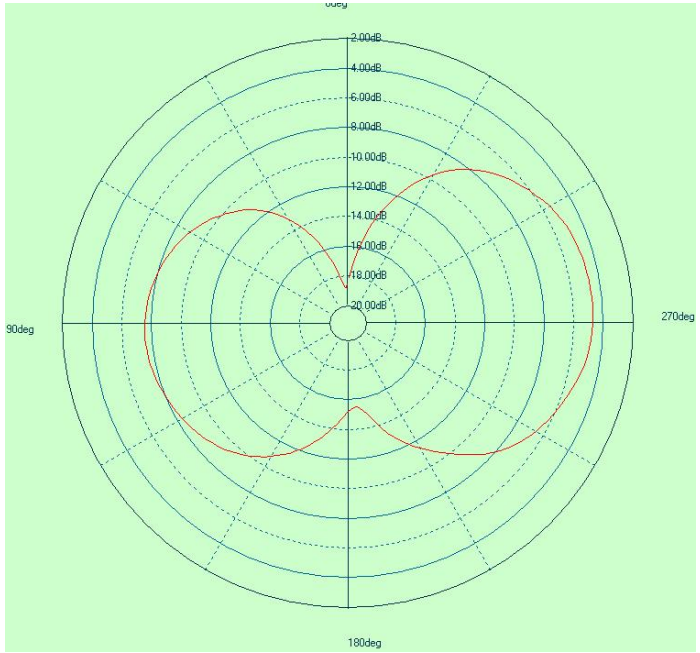


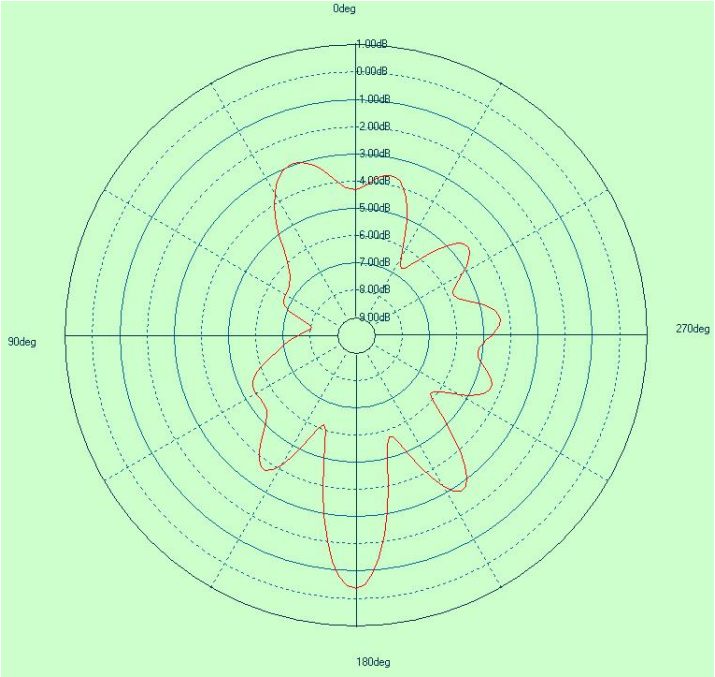


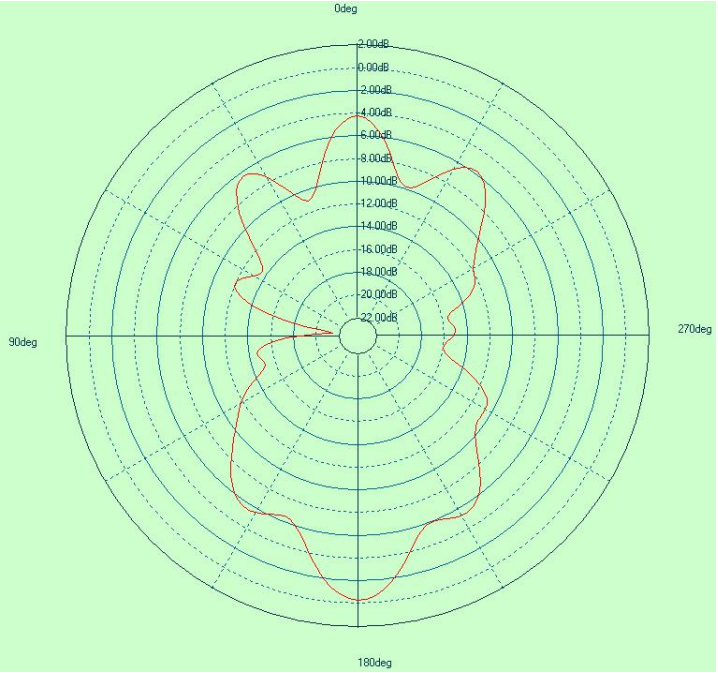


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT (Satmio)

800Mhz Passive pattern Gain: -1.3 dbi

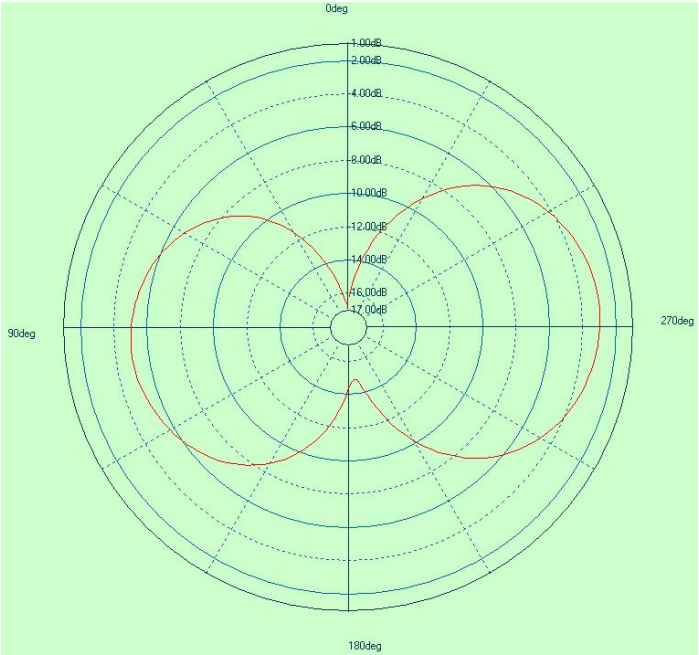


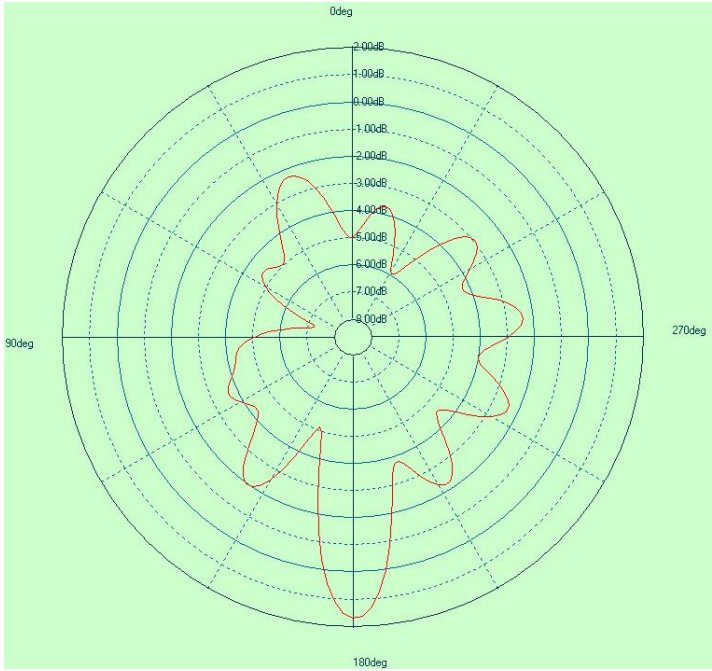


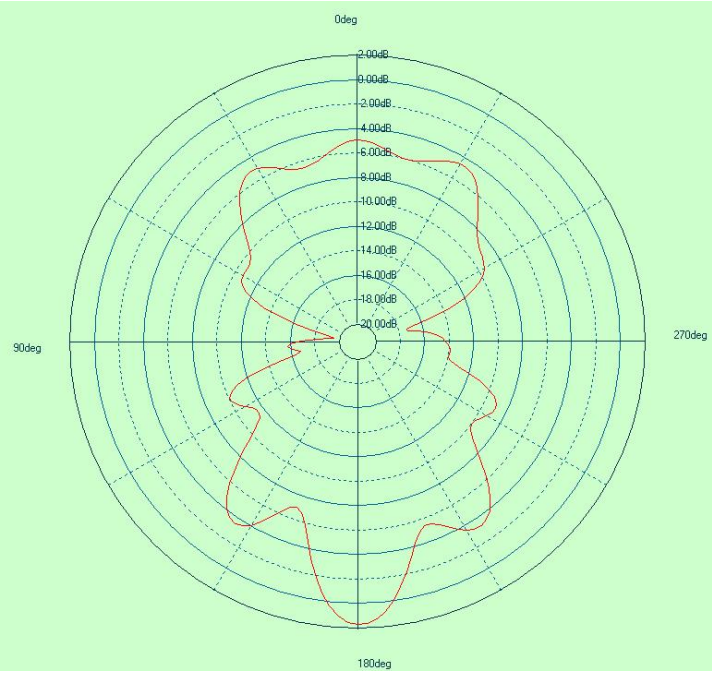


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

850Mhz Passive pattern Gain: -0.2 dbi

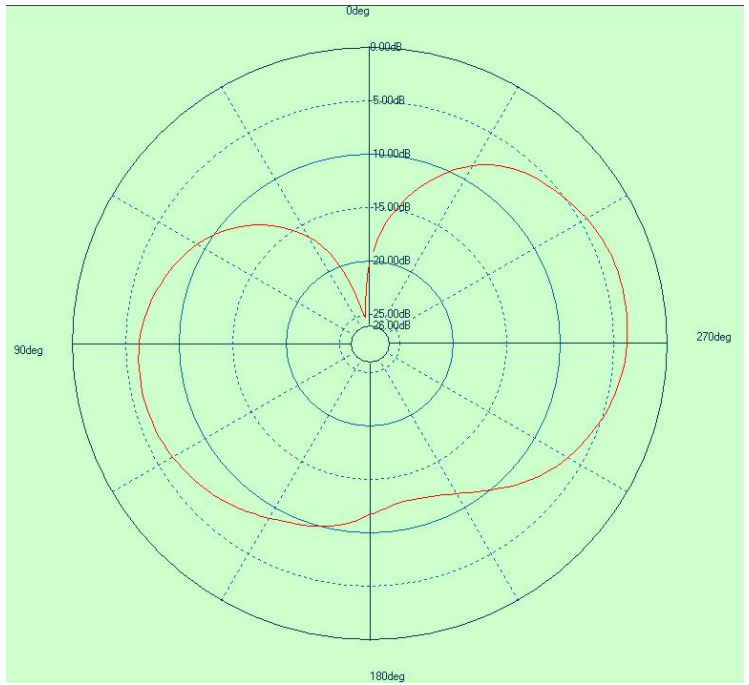


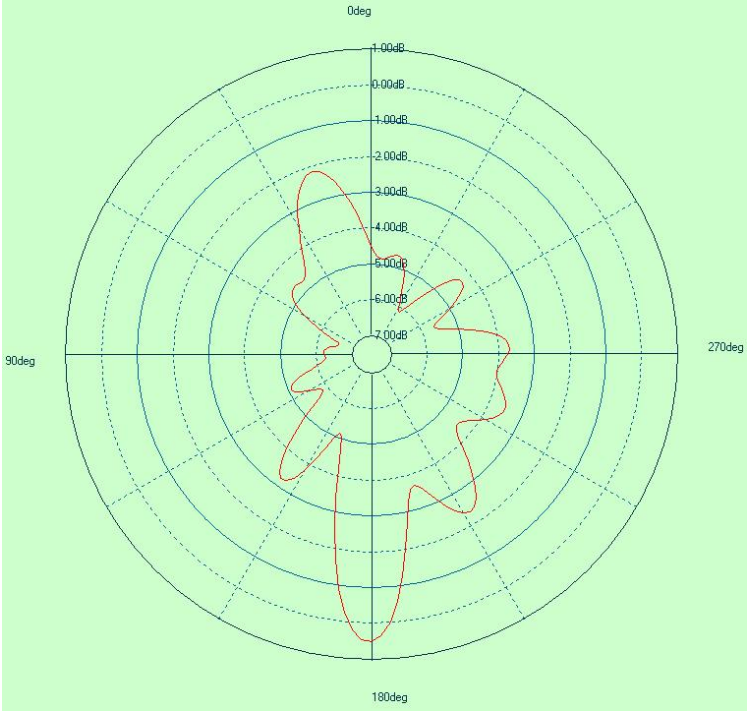


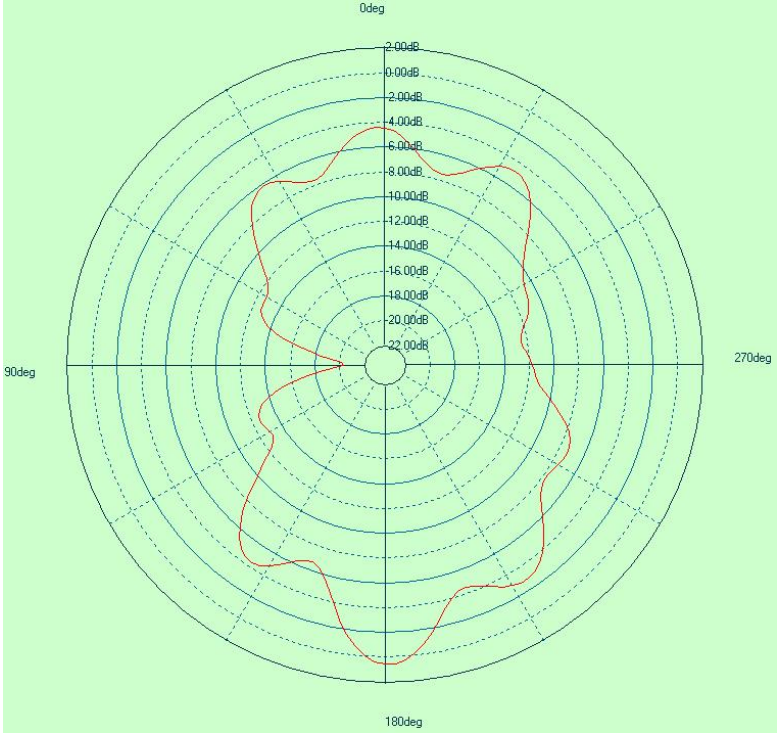


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

880Mhz Passive pattern Gain: 0.2 dbi

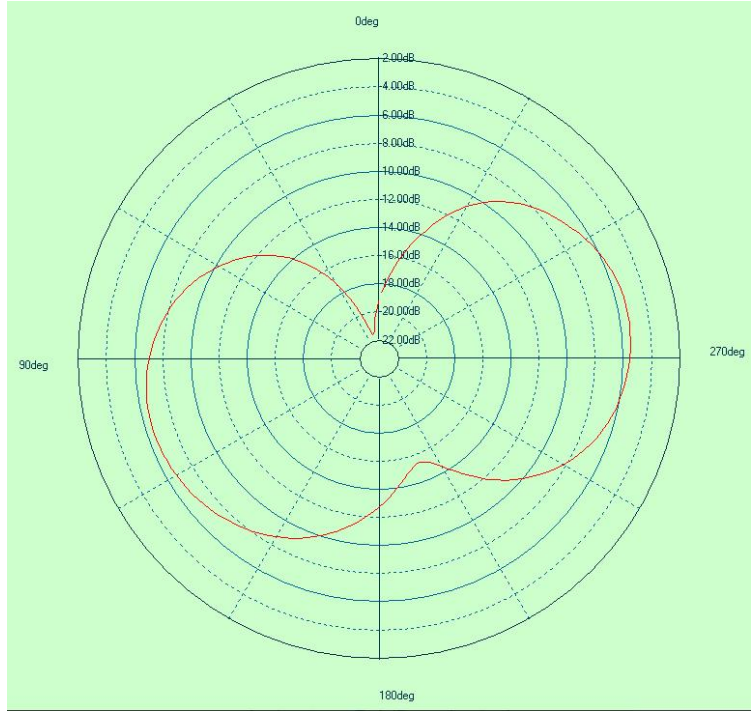


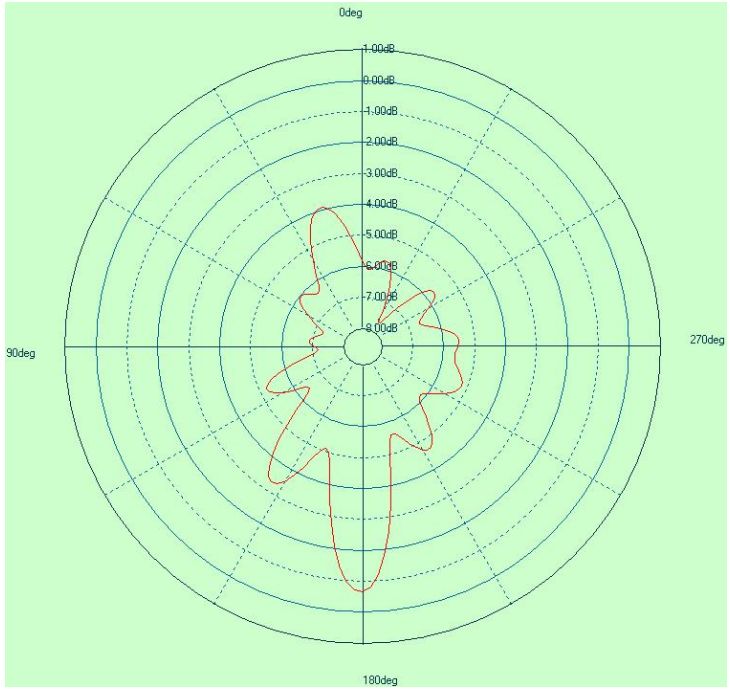


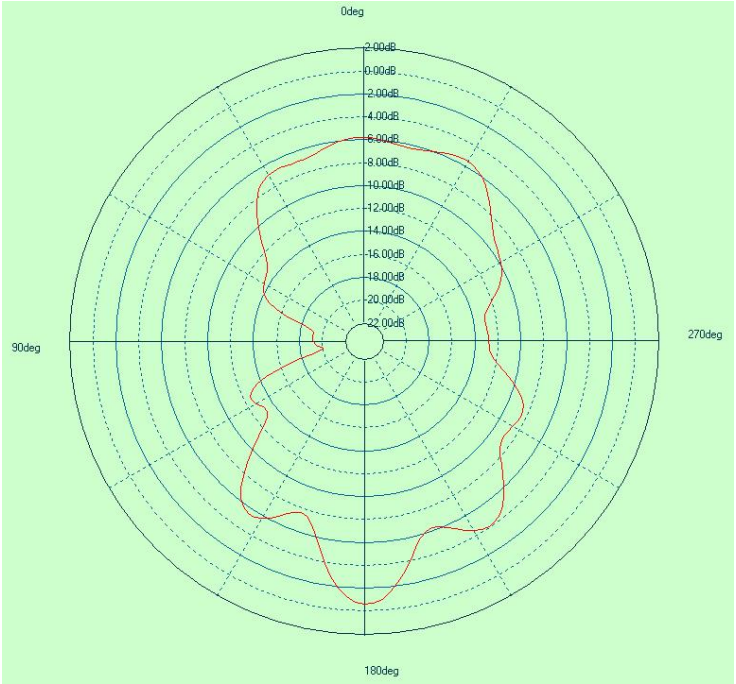


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT (Satmio)

960Mhz Passive pattern Gain：0.6 dbi

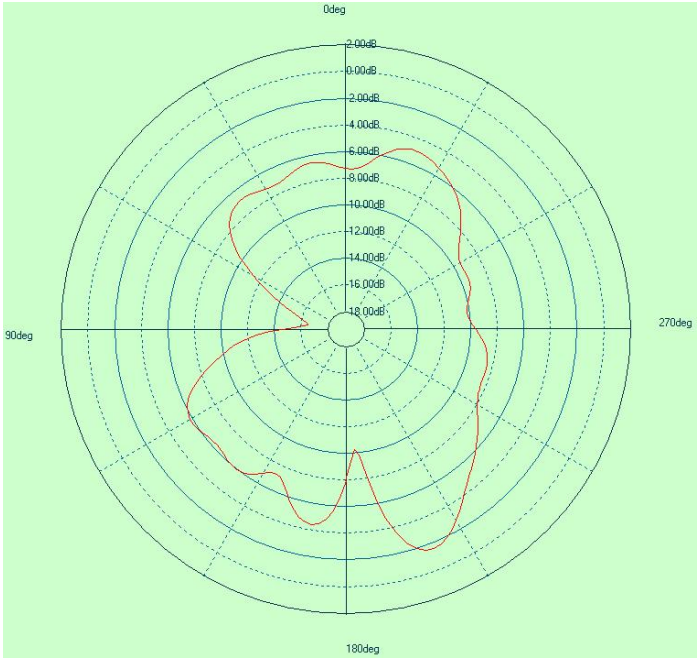


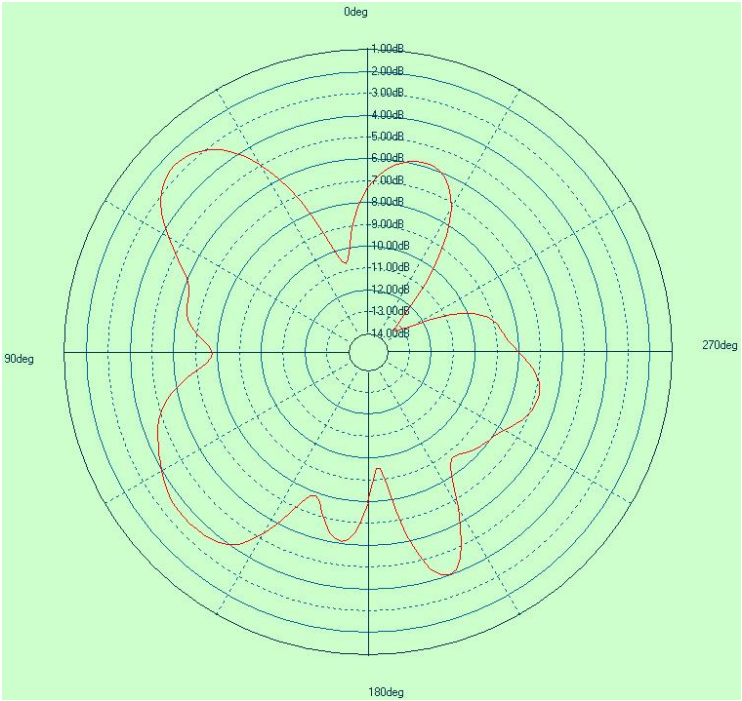


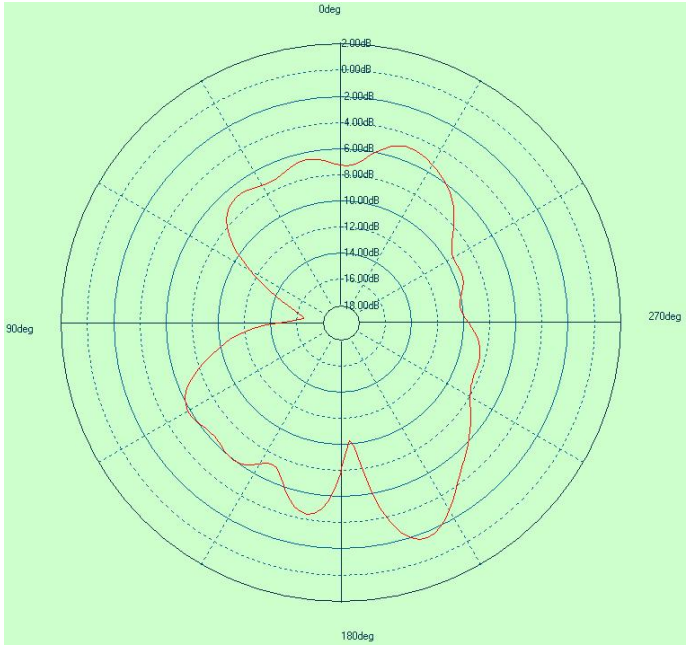


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

1800Mhz Passive pattern Gain：-0.8 dbi

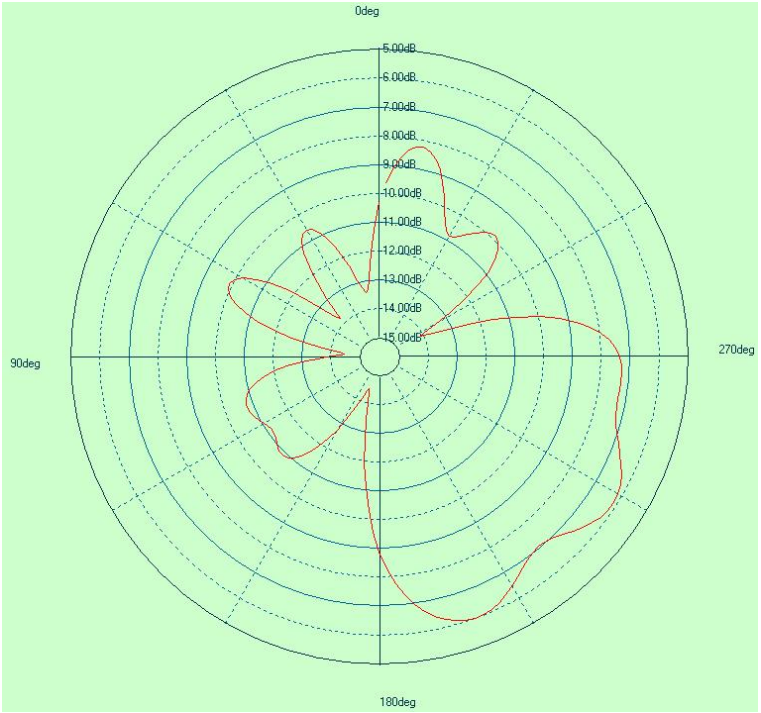


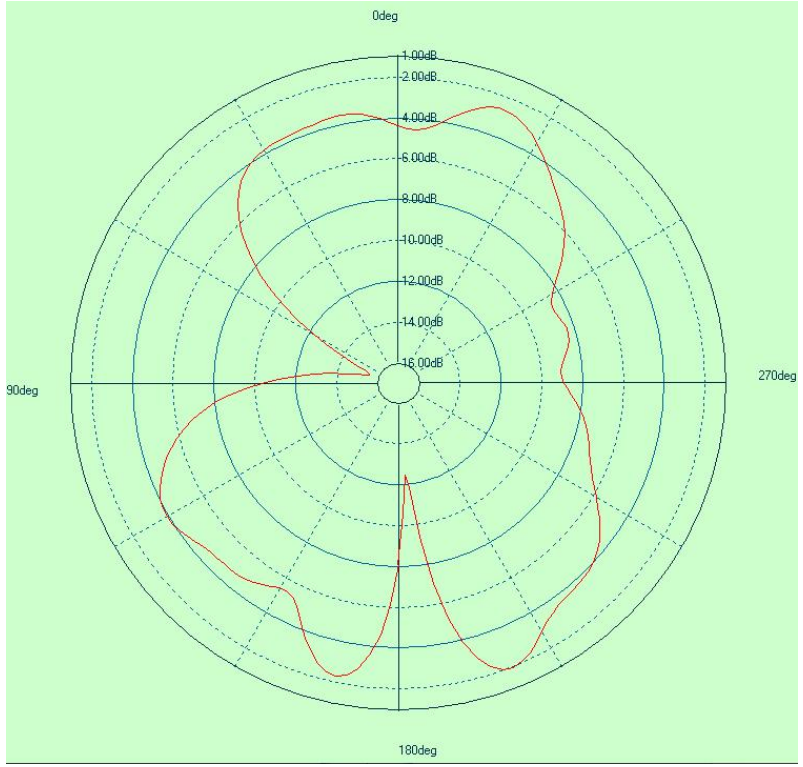




Measuring instrument：Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system：MVG SG24LT（Satmio）

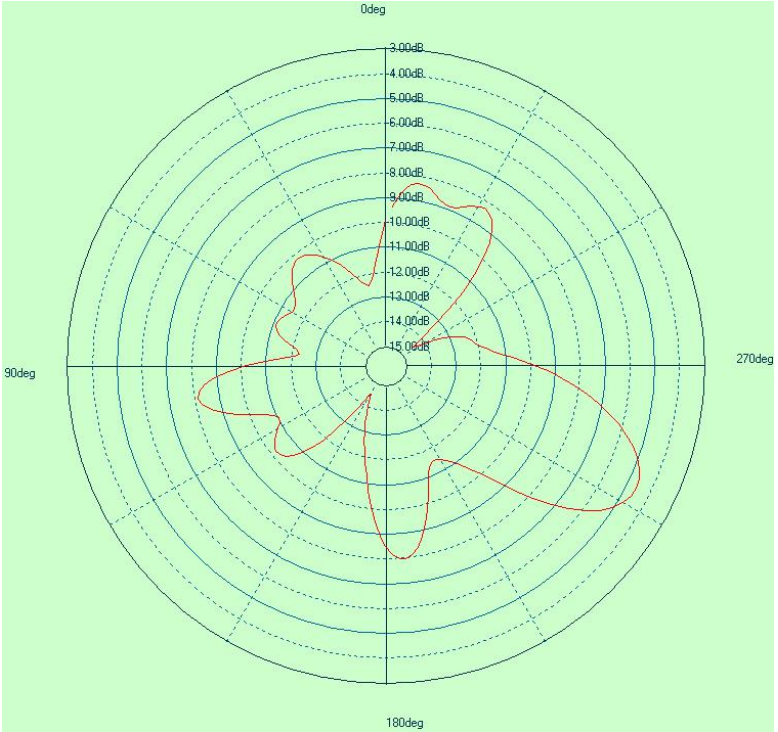
1900Mhz Passive pattern Gain: -0.7 dbi

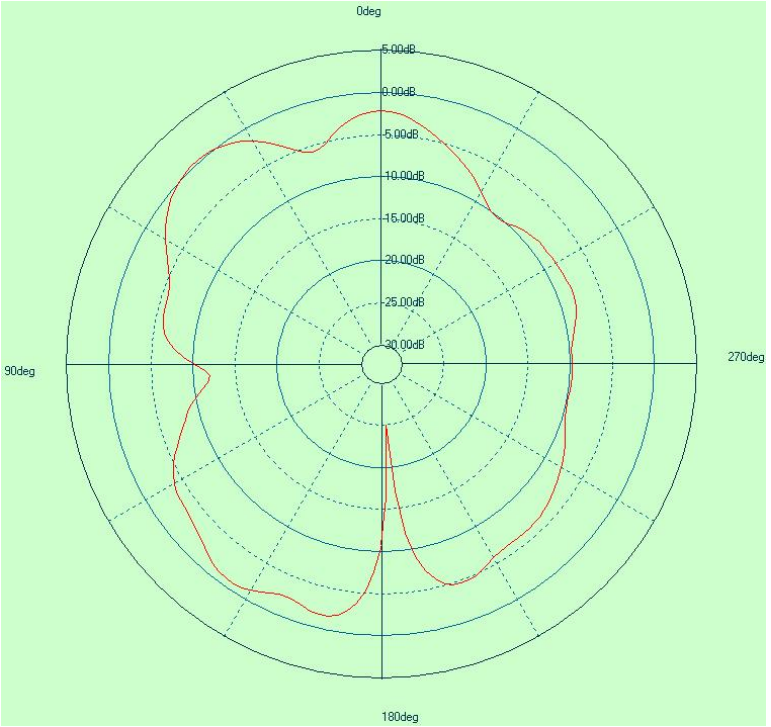


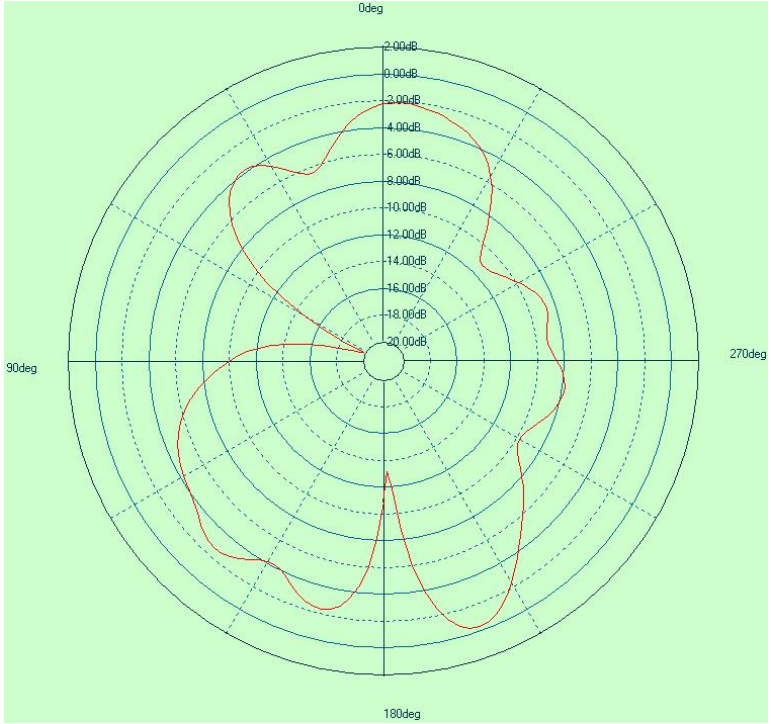


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT (Satmio)

2100Mhz Passive pattern Gain: 0.7 dbi

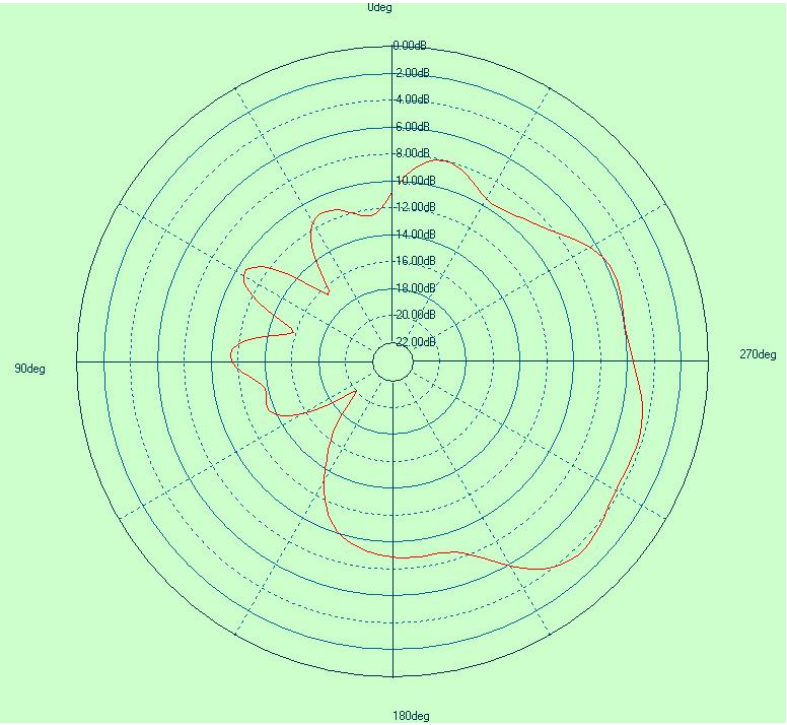


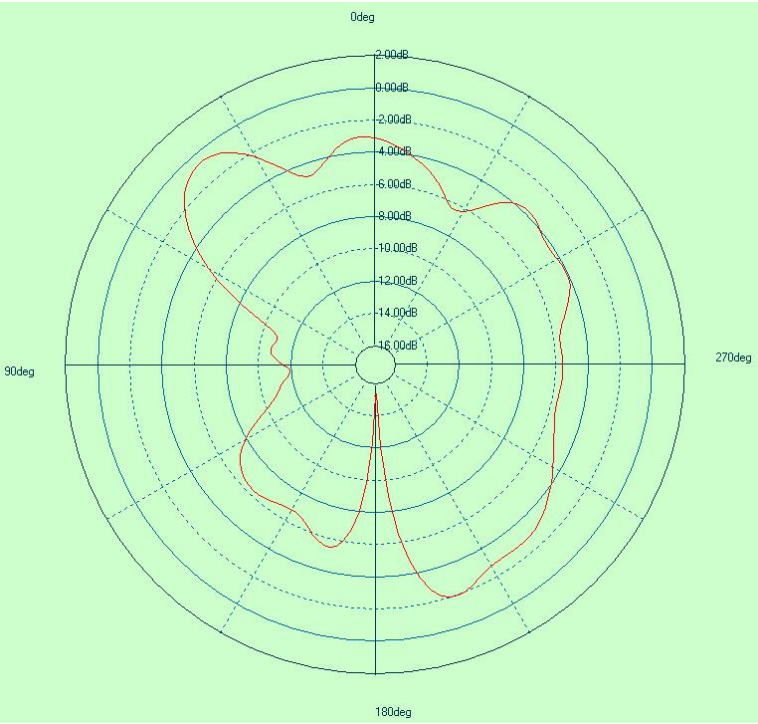


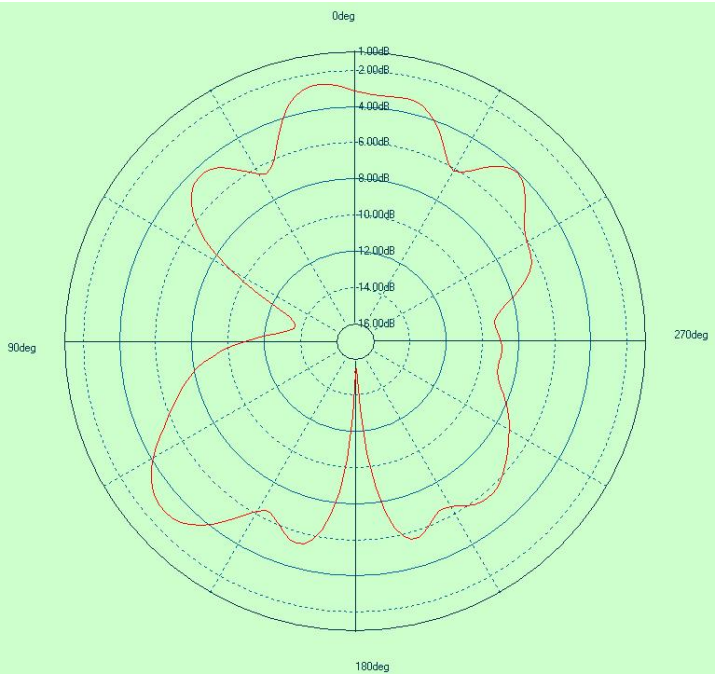


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

2300Mhz Passive pattern Gain：0.4 dbi

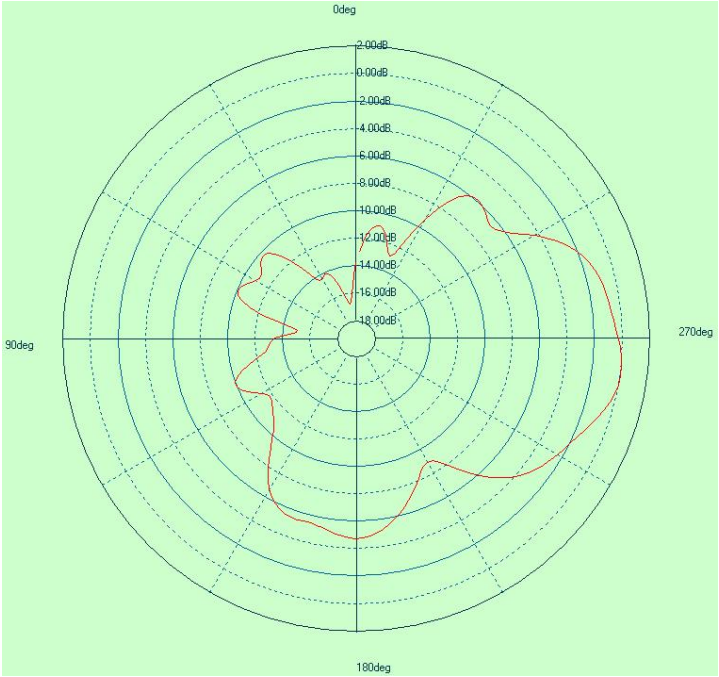


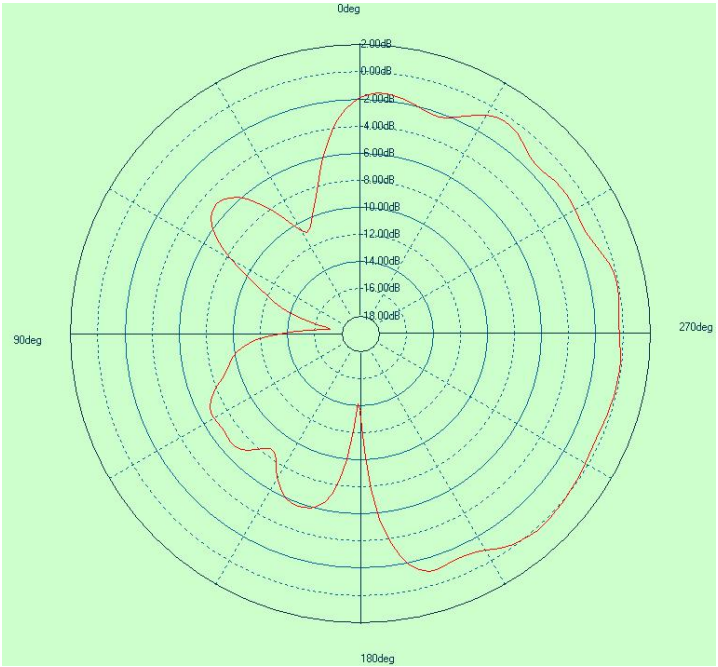


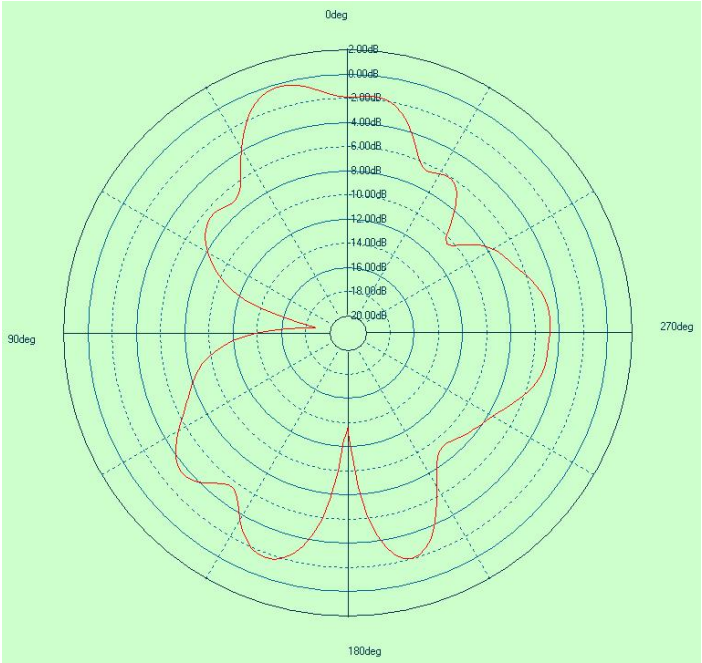


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

2650Mhz Passive pattern Gain：1 dbi

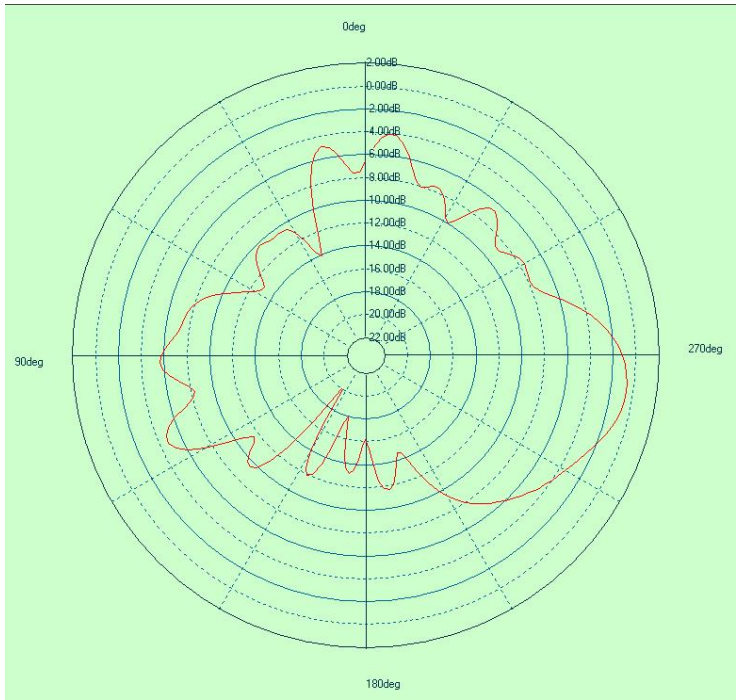


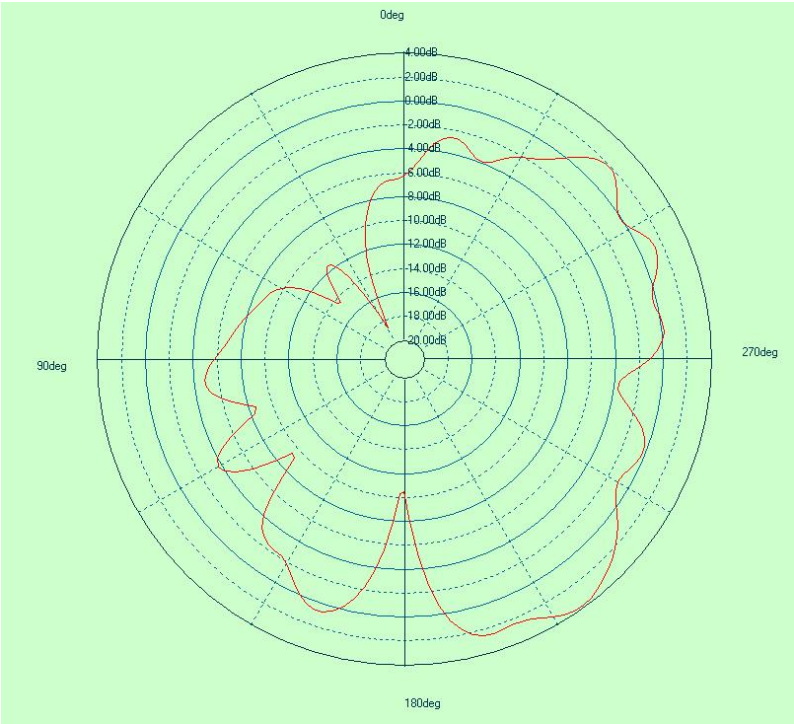


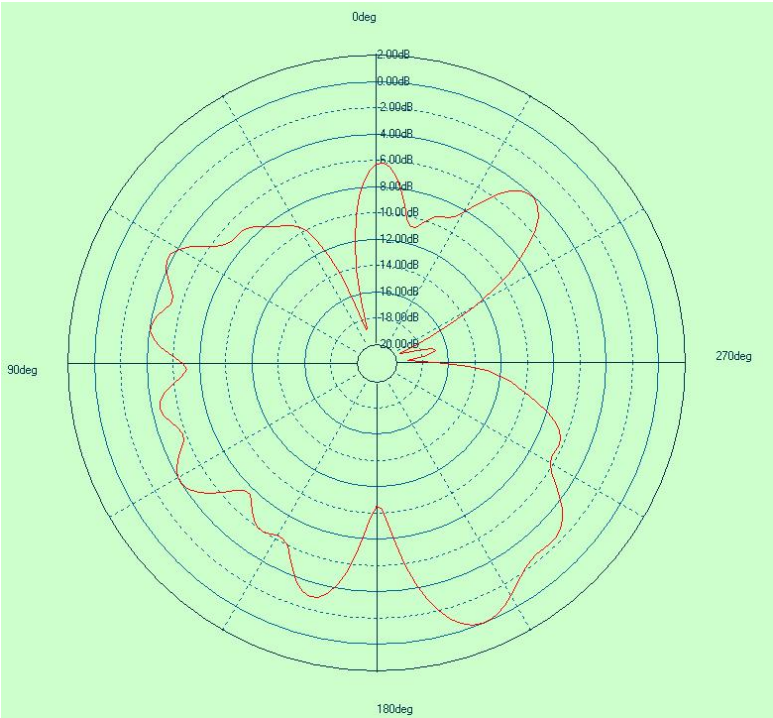


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

3300Mhz Passive pattern Gain：0.2 dbi

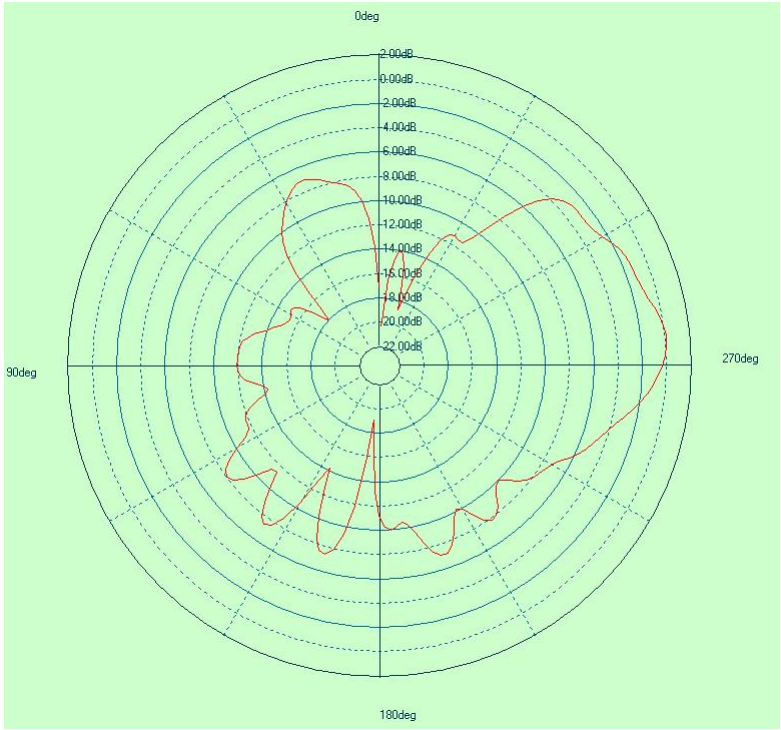


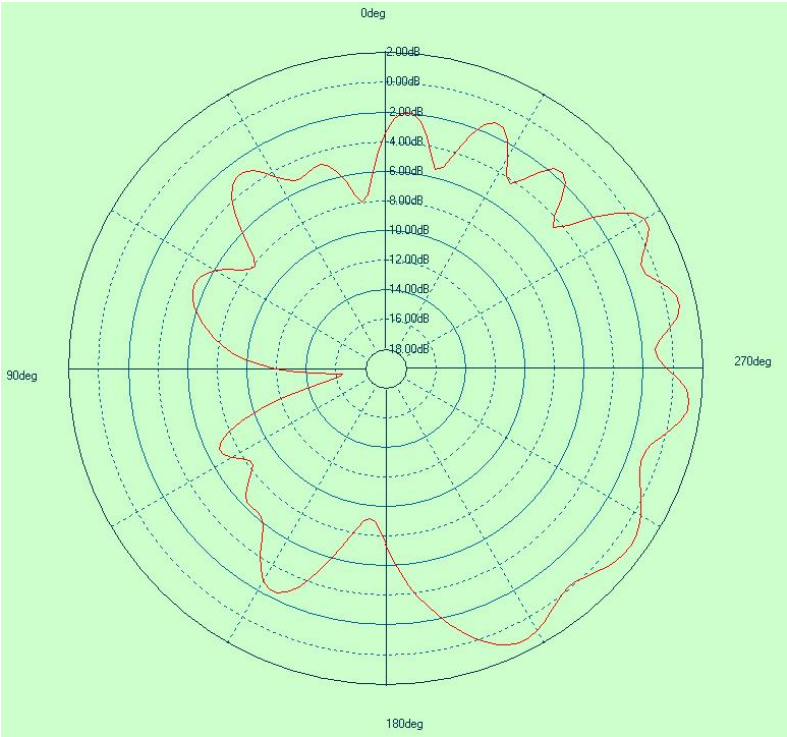


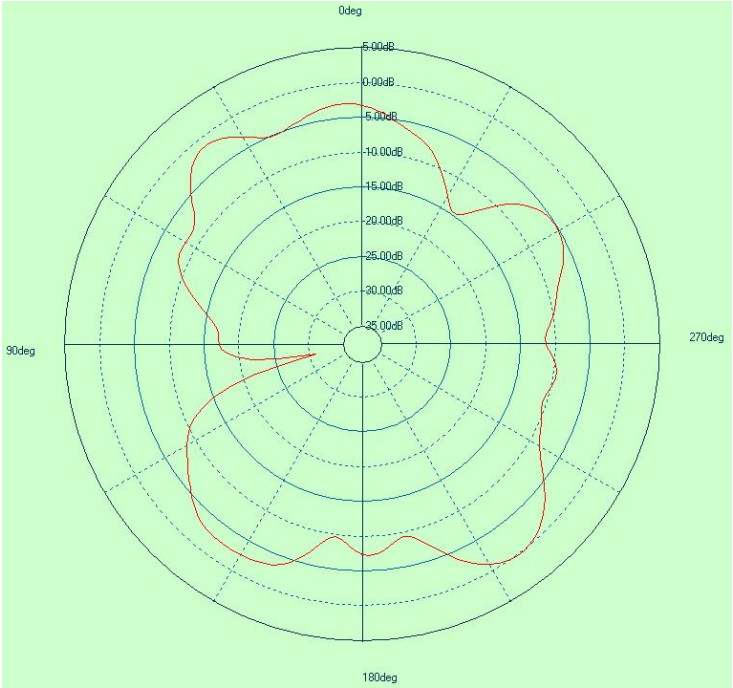


Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）

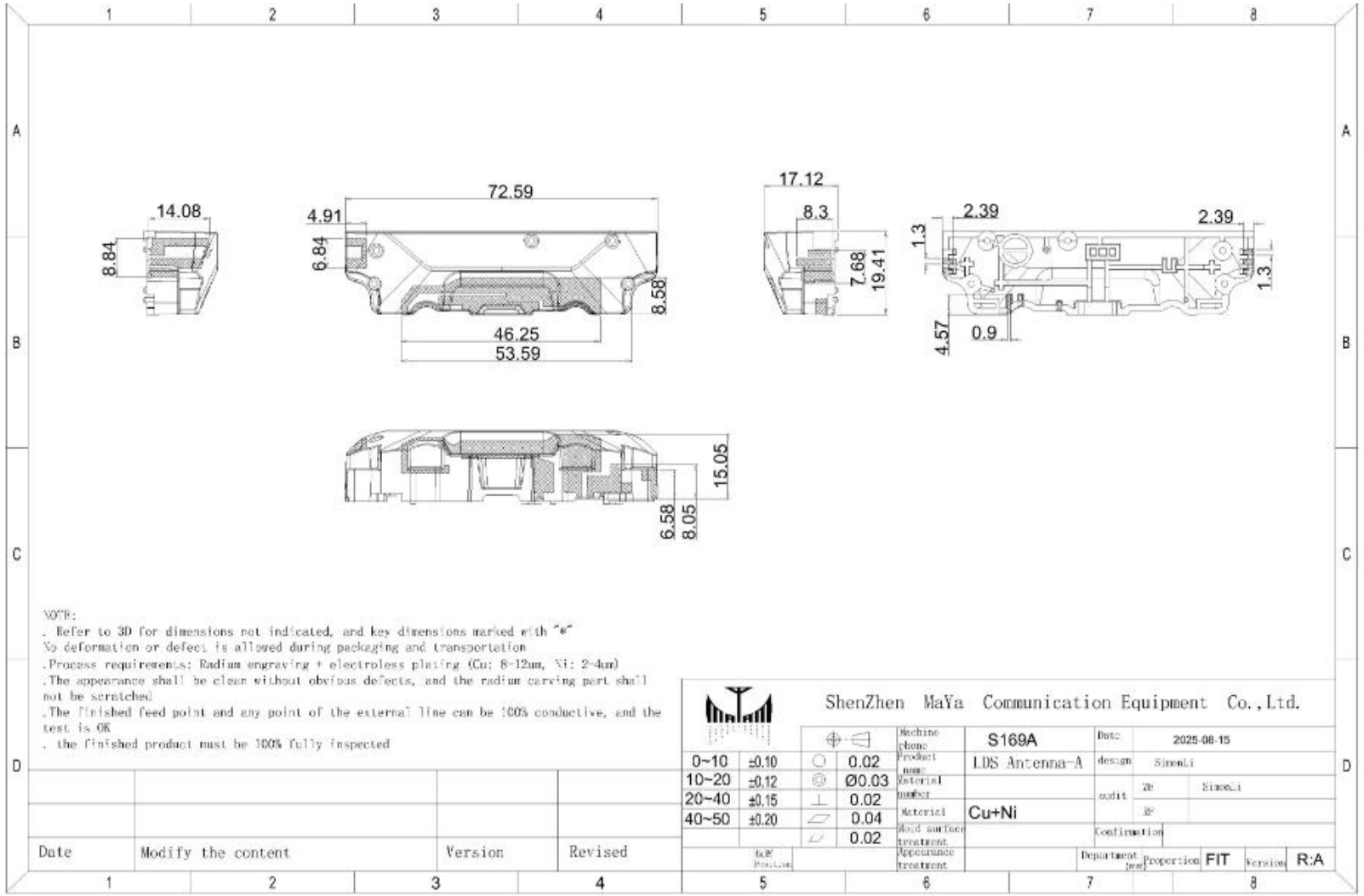
4800Mhz Passive pattern Gain：0.3 dbi

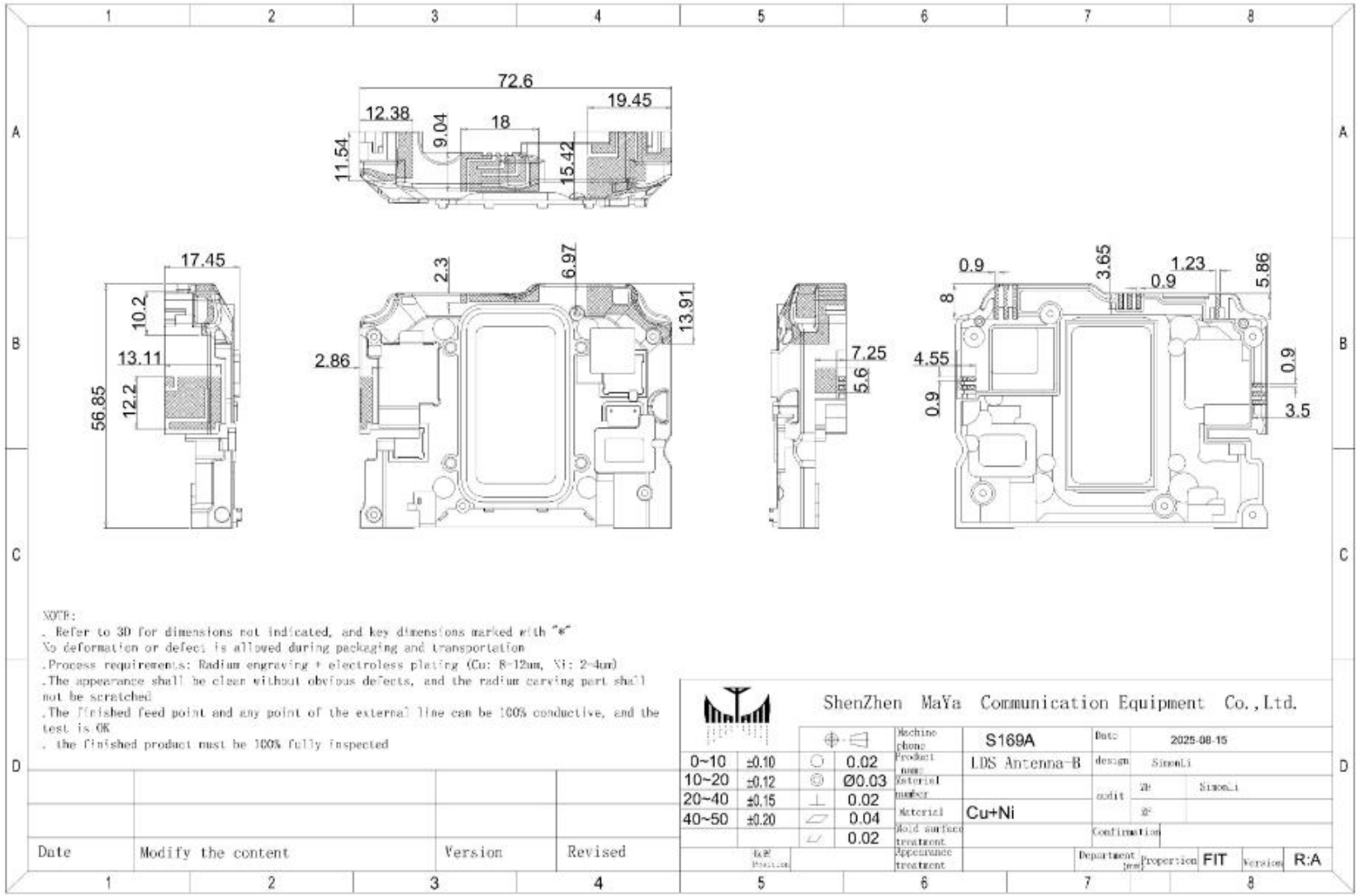






Measuring instrument： Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer Darkroom system： MVG SG24LT（Satmio）


14.08
8.84
72.59
4.91
6.84
8.58
46.25
53.59
17.12
8.3
7.68
19.41
2.39
2.39
1.3
1.3
4.57
0.9
15.05
6.58
8.05
NOTE:
. Refer to 3D for dimensions not indicated, and key dimensions marked with "*"
No deformation or defect is allowed during packaging and transportation
.Process requirements: Radium engraving + electroless plating (Cu: 8-12um, Ni: 2-4um)
.The appearance shall be clean without obvious defects, and the radium carving part shall not be scratched
.The finished feed point and any point of the external line can be 100% conductive, and the test is OK
. the finished product must be 100% fully inspected
Date
Modify the content
Version
Revised
ShenZhen MaYa Communication Equipment Co.,Ltd.
0~10 ±0.10 0.02
10~20 ±0.12 Ø0.03
20~40 ±0.15 0.02
40~50 ±0.20 0.04
0.02
Machine phone
S169A
Product name
LDS Antenna-A
Material number
Material
Cu+Ni
Mold surface treatment
Appearance treatment
Date
2025-08-15
design
Simon.Li
audit
Simon.Li
Confirmation
Department
Proportion
FIT
Version
R:A


72.6
12.38
9.04
18
19.45
11.54
15.42
17.45
10.2
13.11
12.2
56.85
2.3
6.97
13.91
2.86
7.25
5.6
0.9
3.65
1.23
0.9
5.86
8
4.55
0.9
0.9
3.5
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0~10 ±0.10
10~20 ±0.12
20~40 ±0.15
40~50 ±0.20
0.02
Ø0.03
0.02
0.04
0.02
Machine phone
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Cu+Ni
Mold surface treatment
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Date
2025-08-15
design
SimonLi
audit
SimonLi
Confirmation
Department item
Proportion
FIT
Version
R:A

THANK YOU

If you have any questions, please contact us
Daily service hours： Monday to Saturday 9:00-18:00
Switchboard Hotline： 0755-36615535 Fax： 0755-82916227
website： www.mayaant.com

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