

深圳市安威无线科技有限公司

ANWEI communication Equipment Co.,Ltd

规格书

APPROVAL SHEET

客户 Customer	Youmi	规格型号 Specs	MP33
安威料号 Part Number		频段 Frequency Band	GSM:2/3/5/8/W1/2/4/5/8/BC0/BC1/FDD:1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28A/28B/66/TDD:34/38/39/40/41
颜色 Color	黑油(Black Oil)	版本 Edition	REV:A
销售 Salesperson	Mr.Xie	设计 Design	XU LONG
结构 Structure	QIN YUN LIN	确认 Confirm	
日期 Date	2023/05/29	签字日期 Signing Date	

客户确认 Customer confirmation:

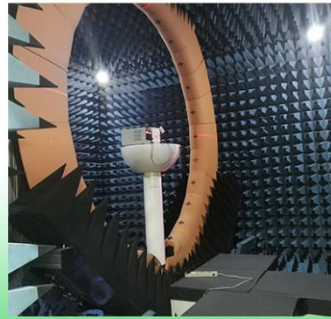
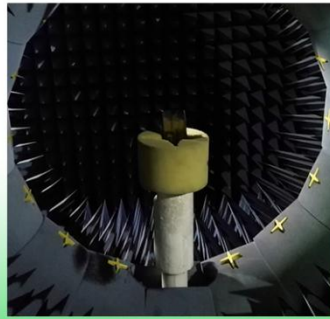
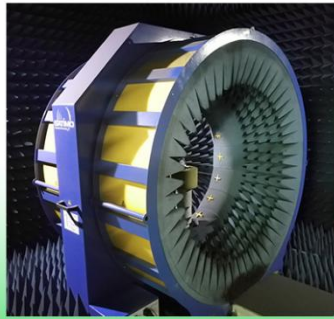
ANT Manufacturers: ANWEI communication Equipment Co.,Ltd
Address:2nd Floor, East Block, Building 5, Yifenghua Innovation Industrial Park,
Huaning Road, Dalang Street, Longhua District, Shenzhen City, Guangdong Province

携手共进 共创未来

Join hands to create the future

项目开发环境

Project development environment



安威无线一直都是您值得信赖且优秀的合作伙伴，我们为您提供全方位一站式的的产品以及技术服务！

“质量第一，服务至上”是安威一直以来的发展宗旨

主集天线 (MAIN Antenna)

工作频段(Working frequency band): 700MHZ~960MHZ GSM850/900 WCDMB5/8
FDD5/8/12/13/17/18/19/20/26/28AB CDMA BCO

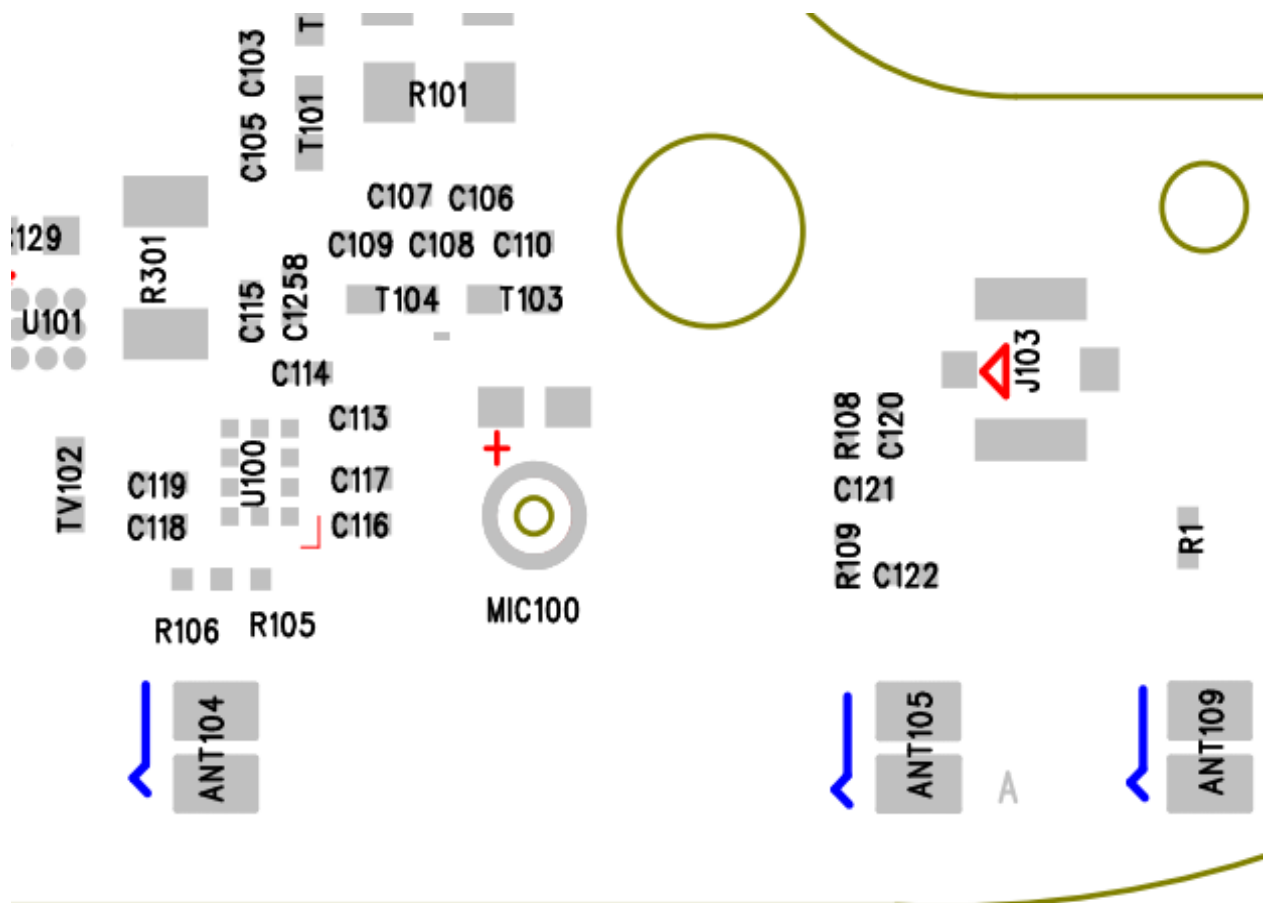
天线匹配(Matcheing network):

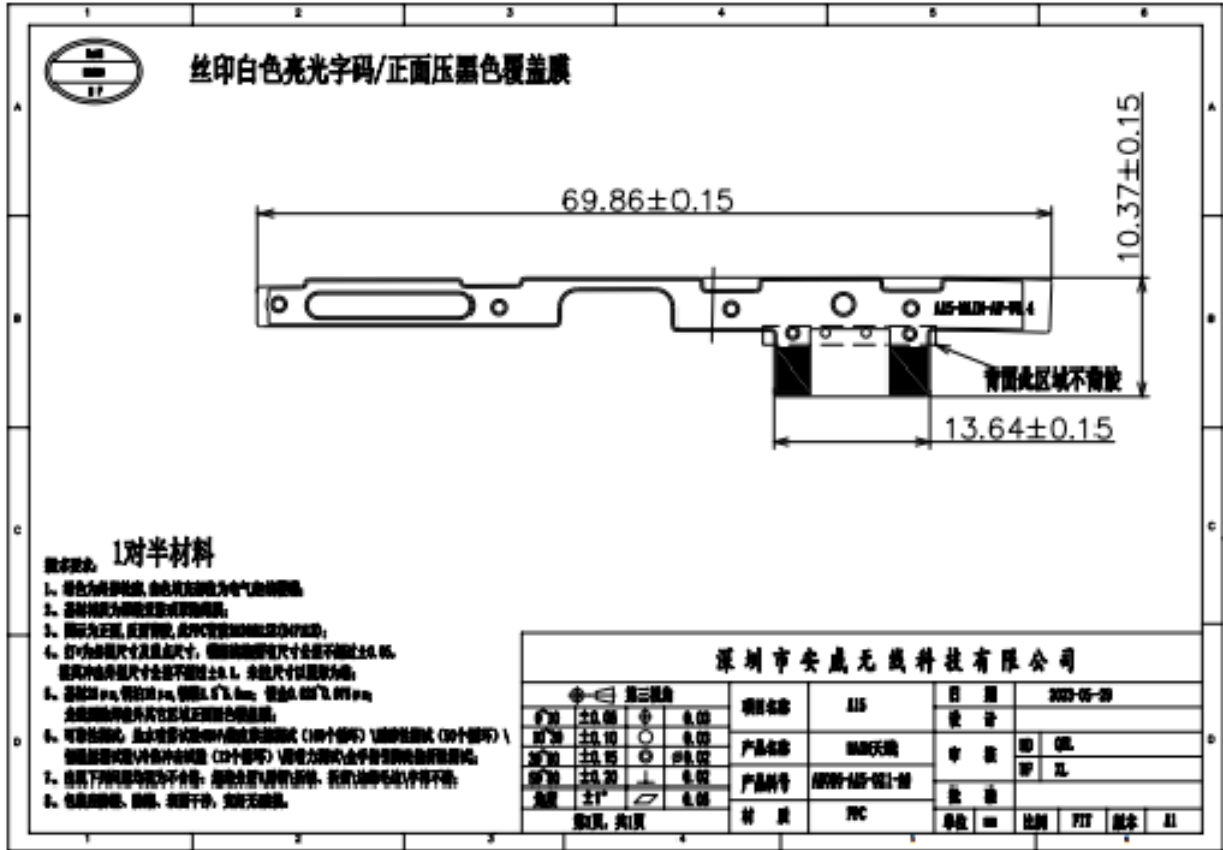
- C122 12NH
- R109 0Ω
- C121 1.0PF
- R108 0Ω
- C120 NC

开关端匹配(swith side matching)

- R106 NC
- R105 0Ω
- C116 0Ω
- C117 2.7NH
- C118 27NH
- C119 NC

其它保持原有不变(others remain unchanged)



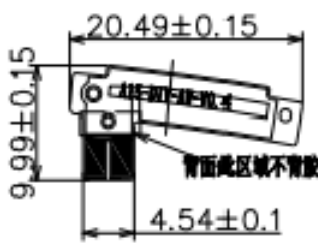


分集天线(Diversity antenna)

工作频段(Working frequency band):1710MHZ~2170MHZ

DCS1800/PCS1900/WCDMA1/2/4/BC1/FDD1/2/3/4/25/66/TDD34/39

丝印白色亮光字码/正面压黑色覆盖膜



背面此区域不需胶

1对半材料

1. 颜色为亮银丝印, 白色亮光字码及黑色正反面覆盖膜;
2. 基材材料为FR4;
3. 铜厚为18μm, 沉铜厚度为2.0μm~2.5μm(2.2μm±0.3μm);
4. 打*为最大尺寸及最小尺寸, 圆形的尺寸公差不能超过±0.05, 矩形冲床尺寸公差不能超过±0.1, 余数尺寸以图数为准;
5. 表面处理: 喷锡(20μm), 镀金(1.0~1.5μm), 镀银(0.1~0.2μm), 镀镍(0.1~0.2μm);
6. 可靠性测试: 盐雾(48h)或48h+100%湿度(100个循环)或盐雾(100个循环)或盐雾(100个循环)+48h+100%湿度(100个循环);
7. 外观下列缺陷均视为不合格: 焊锡不良(漏锡/短路), 划伤(划伤/毛刺/字符不清);
8. 包装防静电、防潮、防撞干砂, 完好无破损。

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第三层		项目名称	LIS	日期	2023-05-20
孔径	±0.05	设备		设计	
厚度	±0.10	产品名称	WiFi天线	审核	图 001
镀层	±0.05	产品型号	AW001-115-020-01	确认	图 001
公差	±0.20	材料	FR4	单位	mm
公差	±0.1	比例	1:1	版本	A1

GWB 天线 (GPS/WIFI/BT antenna)

GPS 天线工作频段 (Working frequency band of GPS antenna) : 1559MHZ~1616MHZ

2.4GWIFI 工作频段 (Working frequency band): 2410MHZ~2500MHZ

5GWIFI 工作频段 (Working frequency band of 5GWIFI antenna) : 5150MHZ~5850MHZ

丝印白色亮光字码、双面黑色油墨

正面

背面

半对半材料

技术要求:

- 绿色为外形轮廓, 白色填充部位为电气走线覆铜;
- 基材材质为聚酰亚胺或聚酰亚胺薄膜;
- 图示为正面, 反面背胶, 此PPC背胶3M300LSE(9471LL2);
- 打*为必测尺寸及重点尺寸, 铜能线路所有尺寸公差不得超过±0.05, 模具冲出外型尺寸公差不得超过±0.1, 未注尺寸以图形为准;
- 基材25 μm, 铜箔18 μm, 镍层1.5±0.0um; 镀金0.025±0.075 μm;

走线面除焊盘外其它区域表面黑色;

- 可靠性测试: 盐雾喷雾试验48H\橡皮摩擦测试(100个循环)\耐磨性测试(50个循环)\恒湿恒湿试验\冷热冲击试验(12个循环)\着力测试\金手指引脚处热折性测试;
- 出现下列问题均视为不合格: 起泡分层\露铜\折痕、折痕\边缘毛边\字符不清;
- 包装应防潮、防潮、表面干净, 完好无破损。

叠层示意↓

深圳市安威无线科技有限公司

第三视图		项目名称	A15	日期	2023-05-05
0~3	±0.05	设计			
3~30	±0.10	审核	MD QYL		
30~50	±0.15	批准	RF SSW		
50~80	±0.20	产品料号	AW006-A15-020-A0	批准	
80	±1	单位	mm	比例	FIT 版本 A1

主天线暗室数据(Main antenna darkroom data)

	Channel	TRP (dBm)	TIS (dBm)			Channel	TRP (dBm)	TIS (dBm)			Channel	TRP (dBm)	TIS (dBm)
FDD B1	18050	17.48		FDD B13	23230	15.68	-86.25	FDD B28B	27410	15.67	27510	16.43	-88.61
	18300	17.23											
	18550	16.41	-91.35										
FDD B2	18650	17.68		FDD B17	23790	16.13	FDD B66	132022	17.24	FDD B66	132322	17.36	-89.34
	18900	18.42											
	19150	17.69	-91.68										
FDD B3	19250	17.12		FDD B18	23900	15.62	TDD (B34)	36250	17.16	TDD (B34)	36275	17.64	-90.56
	19575	17.34											
	19900	17.56	-91.42										
FDD B4	20000	17.36		FDD B19	24050	16.25	TDD (B38)	37850	17.12	TDD (B38)	38000	16.31	-86.12
	20175	17.58											
	20350	17.85	-91.62										
FDD B5	20450	16.12		FDD B20	24200	16.15	TDD (B39)	38350	17.65	TDD (B39)	38450	17.48	-90.21
	20525	16.36											
	20600	16.43	-89.23										
FDD B7	20800	17.21		FDD B25	26090	17.23	TDD (B40)	38750	17.34	TDD (B40)	39150	17.68	-90.28
	21100	17.24											
	21400	16.14	-89.16										
FDD B8	21500	16.64		FDD B26	26740	15.24	TDD (B41)	40340	15.23	TDD (B41)	40620	15.23	-86.57
	21625	16.68											
	21750	16.73	-89.21										
FDD B12	23060	15.62		FDD B28A	27260	16.24	FDD B28A	27370	16.28	FDD B28A	27469	16.57	-88.42
	23095	15.84											
	23130	16.12	-88.12										

	Channel	TRP (dBm)	TIS (dBm)			Channel	TRP (dBm)	TIS (dBm)			Channel	TRP (dBm)	TIS (dBm)
WCDMA B1	10562	17.42		CDMA BC0	1013	15.23	GSM 850	128	25.31	GSM 850	190	25.42	-101.3
	10700	17.21											
	10838	16.41	-100.4										
WCDMA B2	9262	17.54		CDMA BC1	777	16.42	GSM 900	1	25.68	GSM 900	62	26.24	-100.7
	9400	17.56											
	9538	17.39	-102.2										
WCDMA B4	1312	17.23		CDMA BC10	777	17.68	DCS1800	512	23.76	DCS1800	698	24.12	-102.3
	1413	17.32											
	1513	17.42	-102.6										
WCDMA B5	4132	15.16		TD B34	0	720	PCS 1900	512	25.24	PCS 1900	661	25.13	-102.4
	4183	16.34											
	4233	16.45	-102.1										
WCDMA B6	4162			TD B39	919	10054	TD B39	9404	9500	TD B39	9596		
	4175												
	4188												
WCDMA B8	2712	17.23											
	2787	17.14											
	2863	16.68	-102.8										
WCDMA B19	312												
	412												
	437												

2. 4G WIFI and 5G WIFI Active data

Standard	Band	Channel	Frequency	TRP	TIS
WIFI_B	B_11M	1	2412	10.42	-80.24
WIFI_B	B_11M	6	2437	10.87	-80.71
WIFI_B	B_11M	11	2462	12.03	-80.56
WIFI_A	A_54M	36	5180	11.53	-71.46
WIFI_A	A_54M	64	5320	10.54	-72.42
WIFI_A	A_54M	165	5825	10.03	-71.51

GPS 测试(GPS Test)



GPS 效率(Efficiency of GPS antenna): 30%

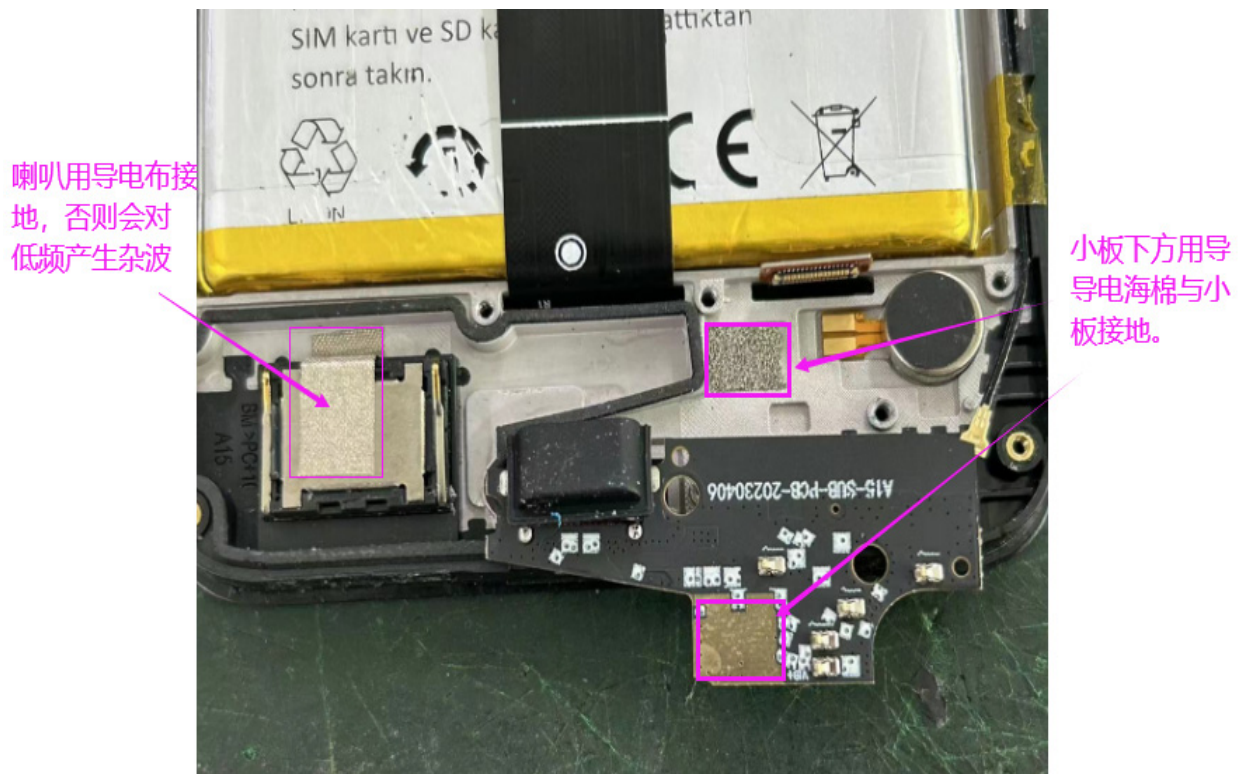
天线增益(Antenna gain)

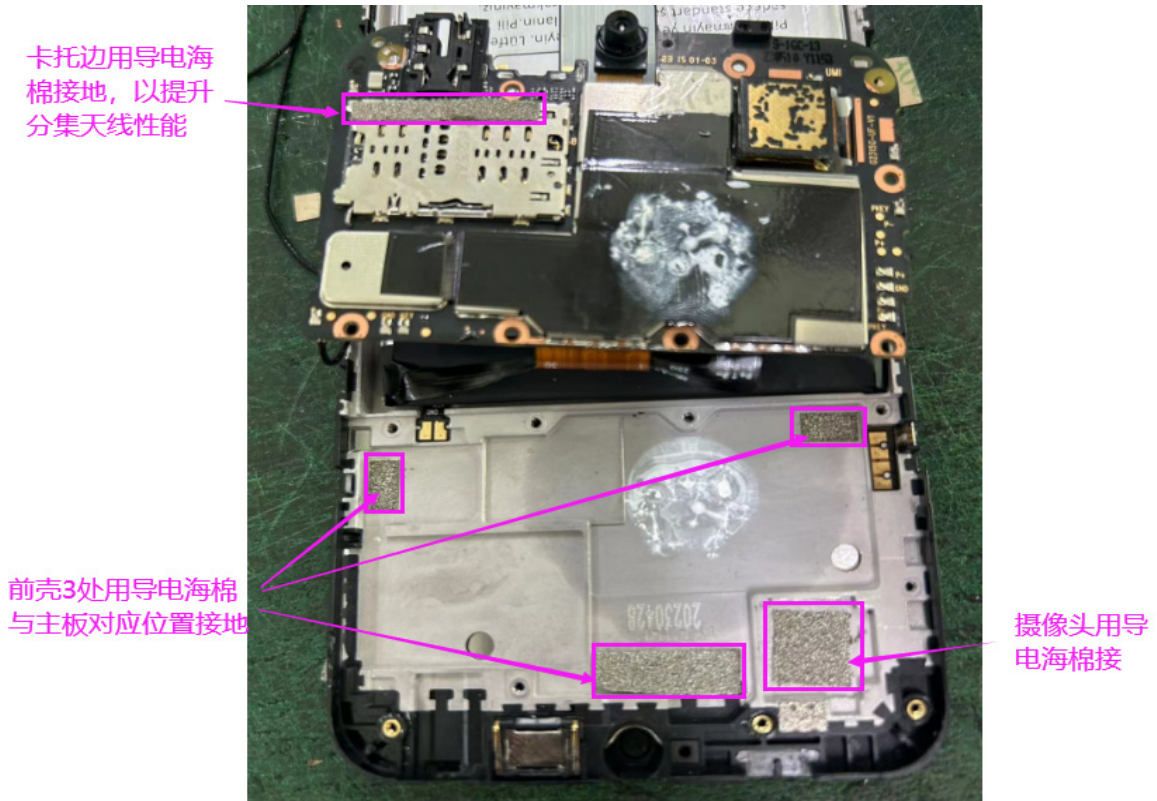
GSM850	-0.63
EGSM900	-0.61
DCS1800	-0.43
PCS1900	-0.42
W2100	-0.51
W900	-0.61
W850	-0.63
W1900	-0.42
W1700	-0.43
BC0	-0.62
BC1	-0.46
FDD	
B1	-0.51
B2	-0.42
B3	-0.43
B4	-0.43
B5	-0.63
B7	-0.39
B8	-0.61
B12	-0.65
B13	-0.71
B17	-0.69
B18	-0.68
B19	-0.59
B20	-0.61
B25	-0.41
B26	-0.61
B28	-0.69
B66	-0.45

TDD	
B34	-0.36
B38	-0.38
B39	-0.37
B40	-0.36
B41	-0.38
B66	-0.43
NFC	1.47
GPS	-0.41
WIFI	-0.58
BT	-0.58
5G WIFI	0.13

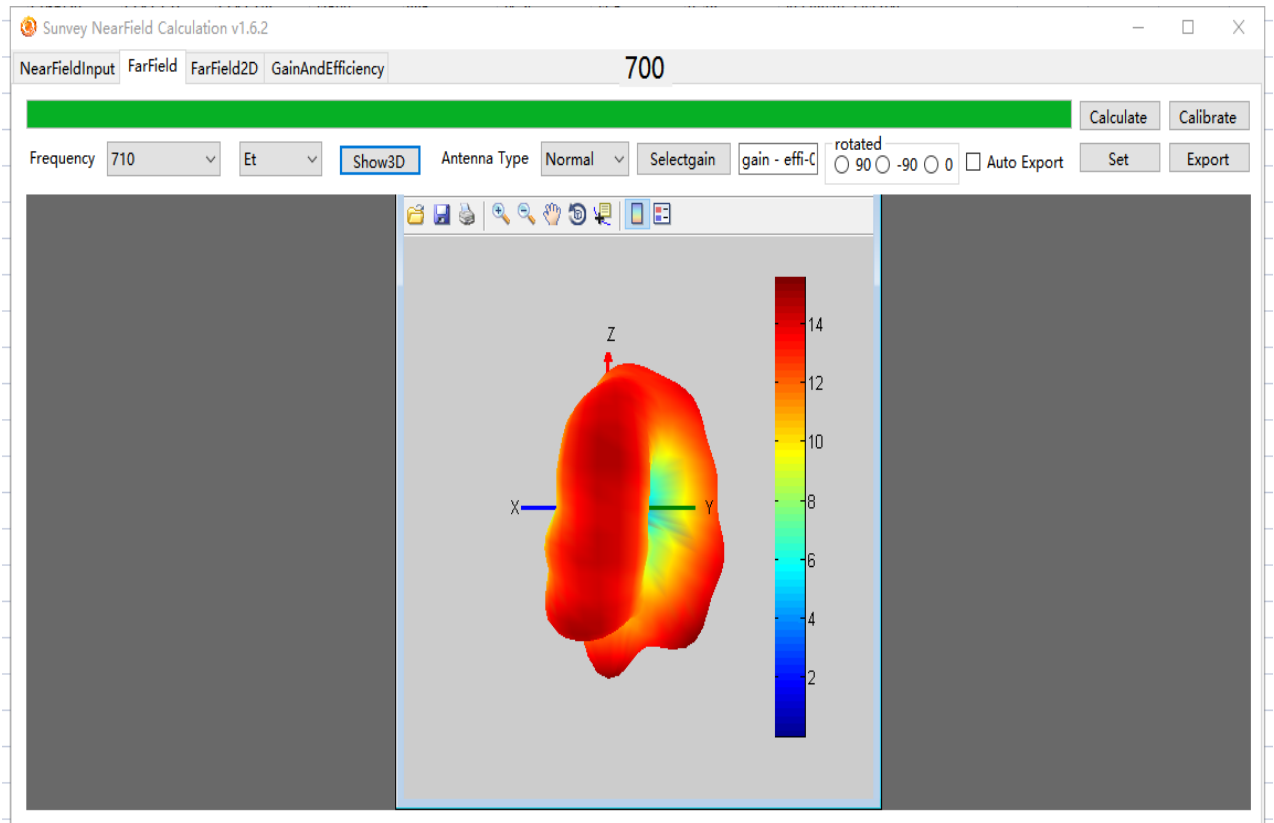
Unit: dBi

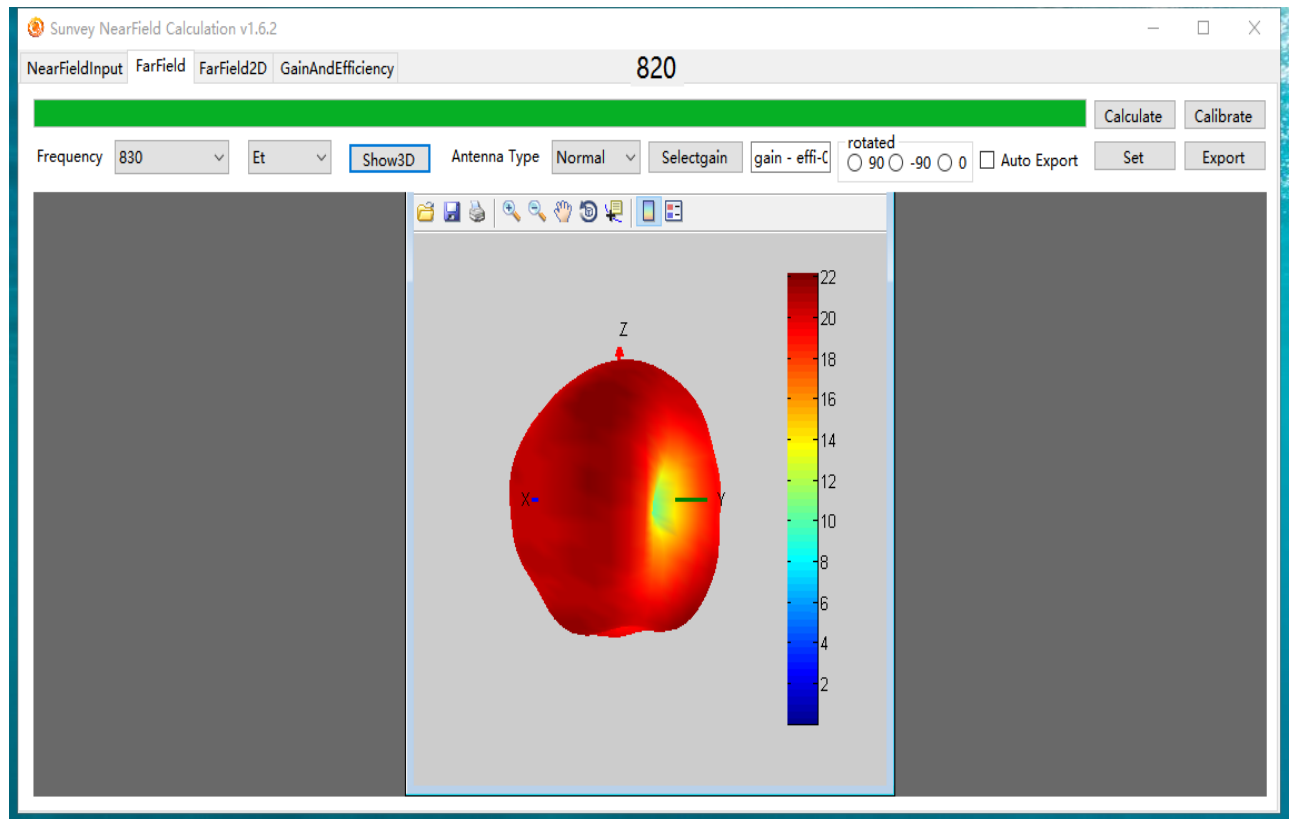
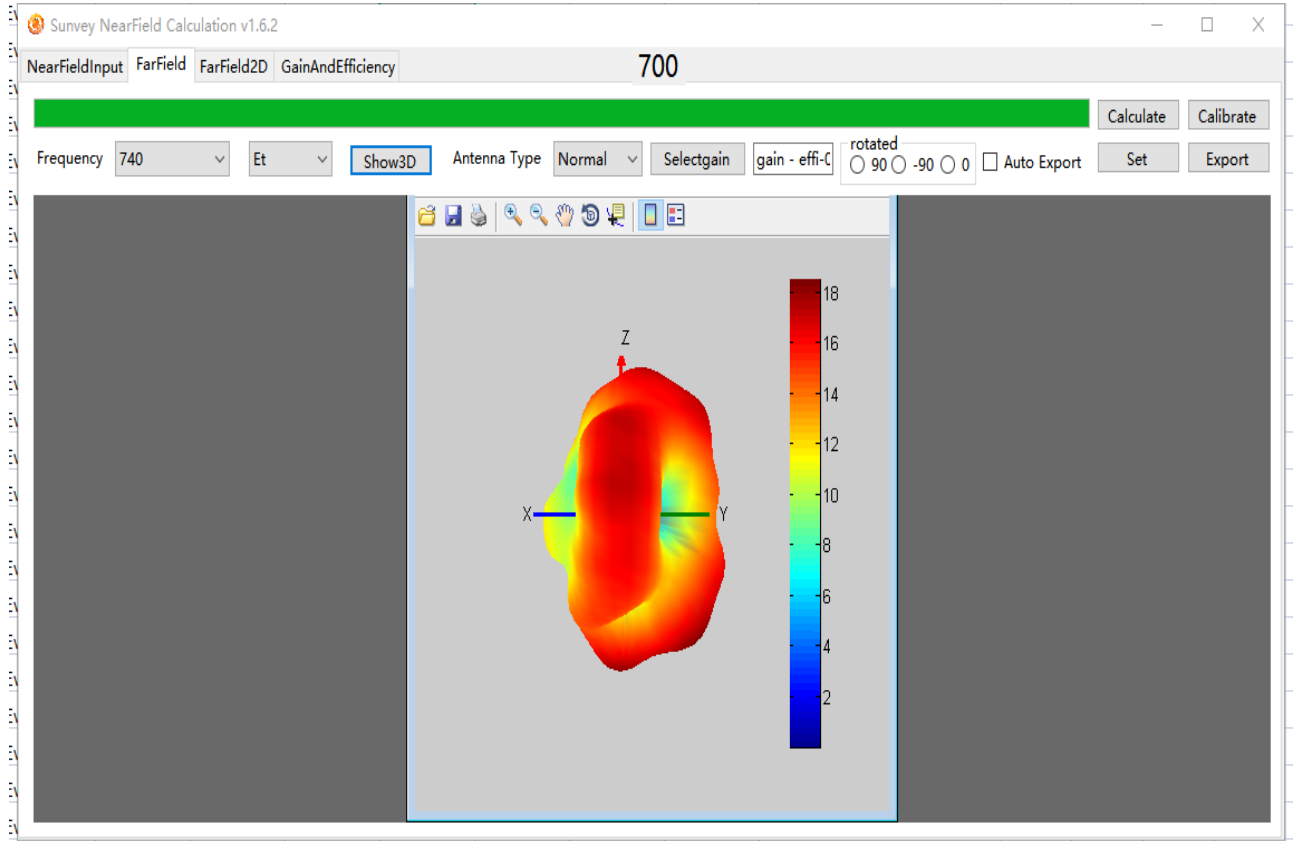
环境处理方式(Environmental treatment)

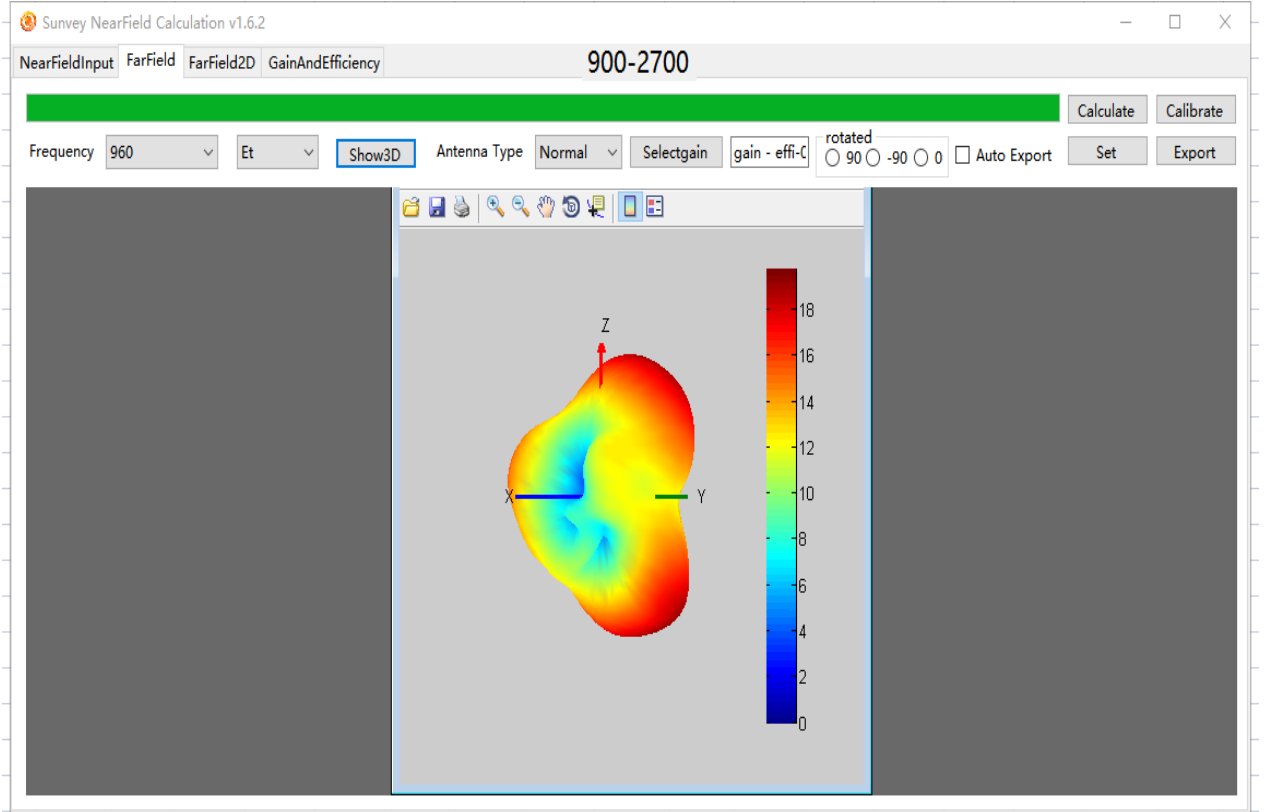
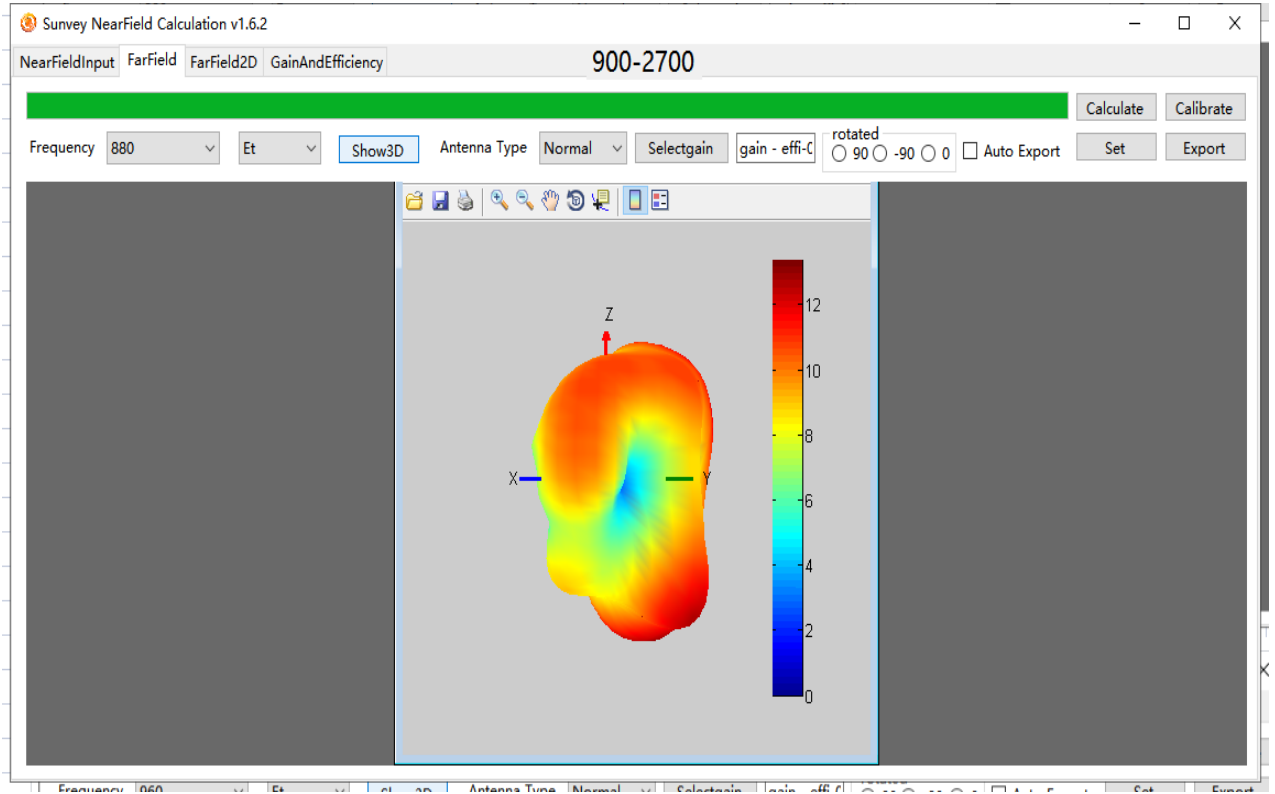


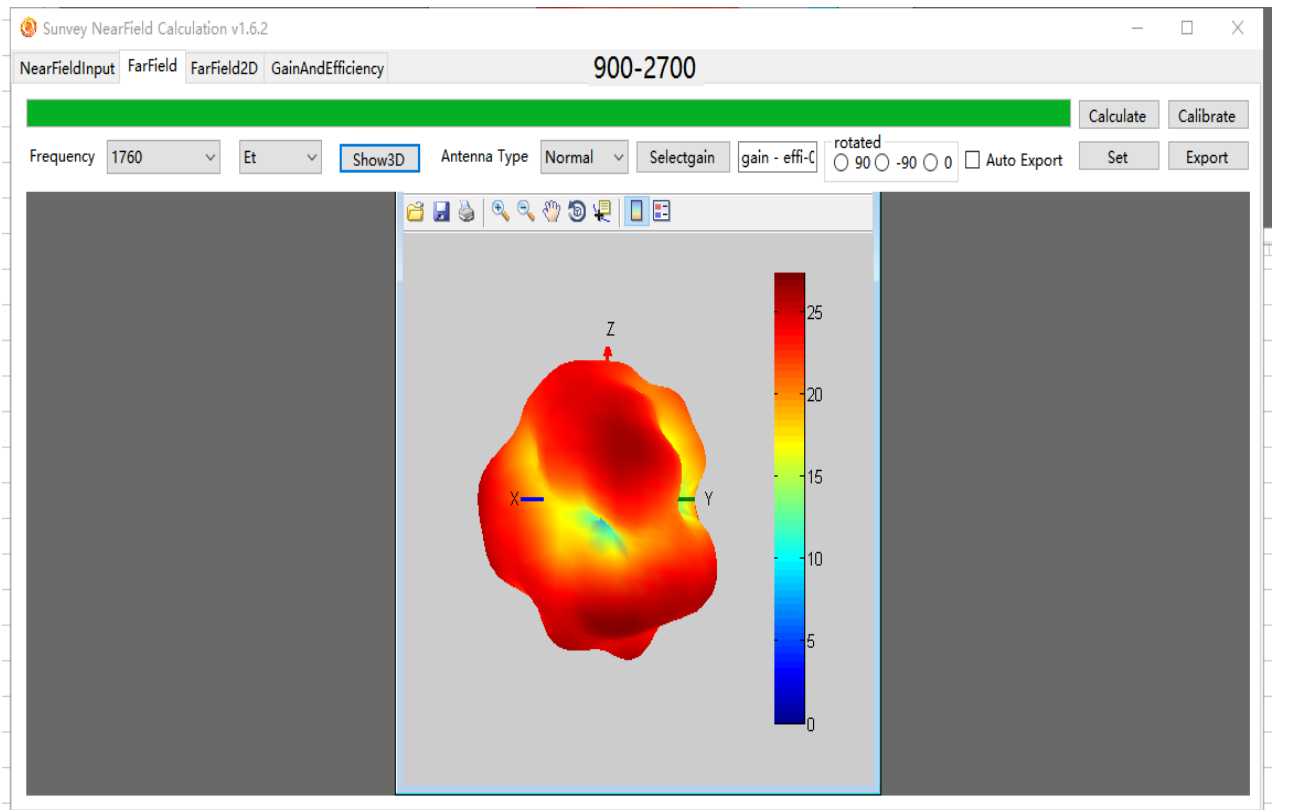
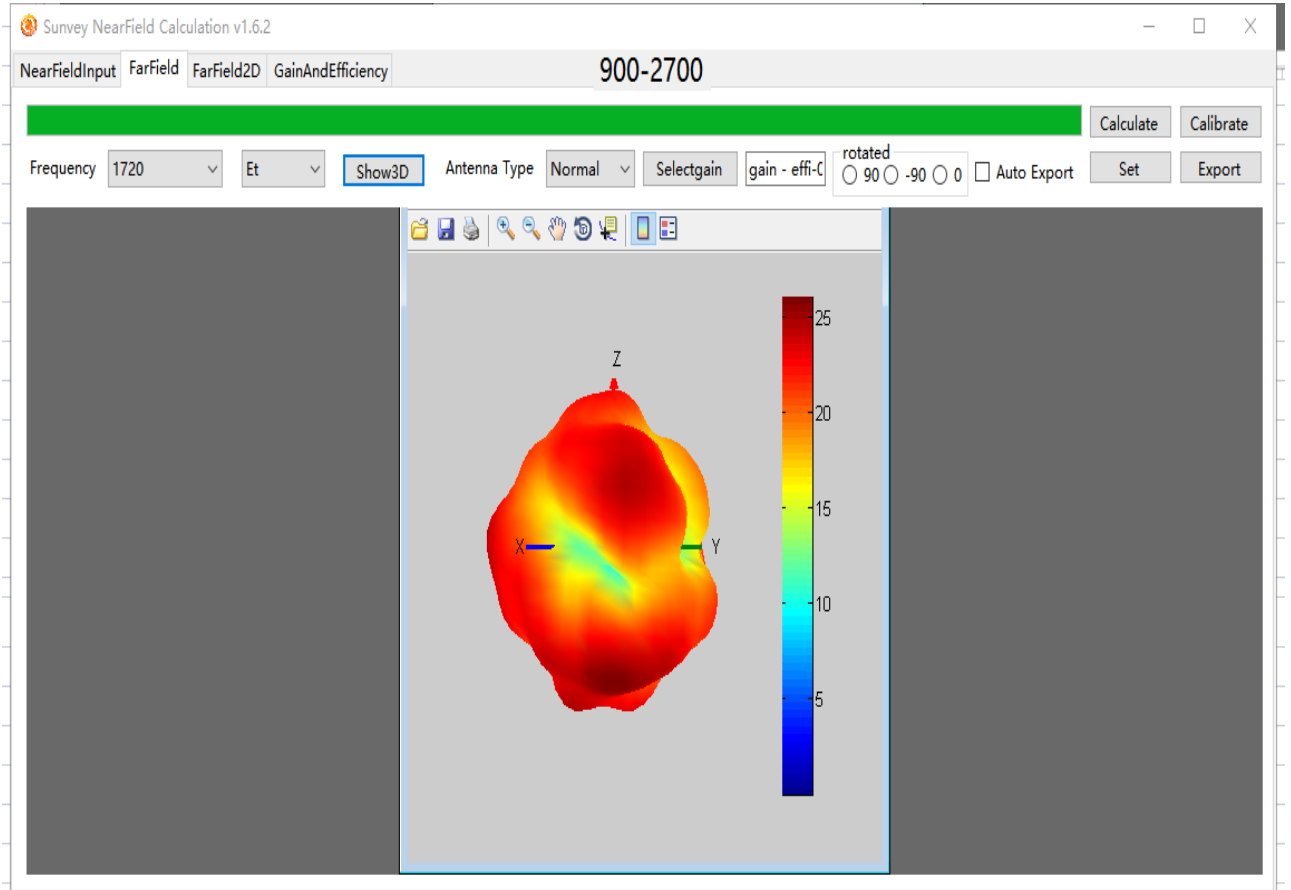


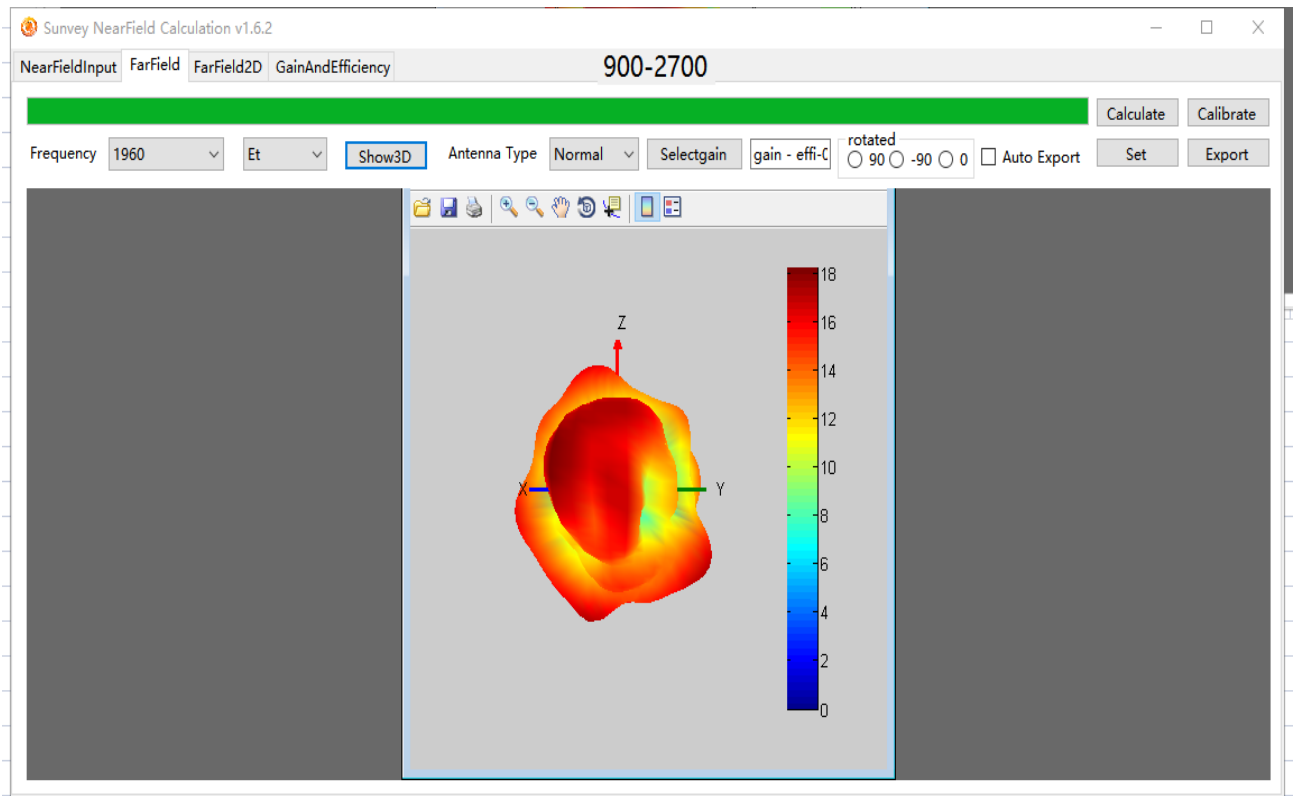
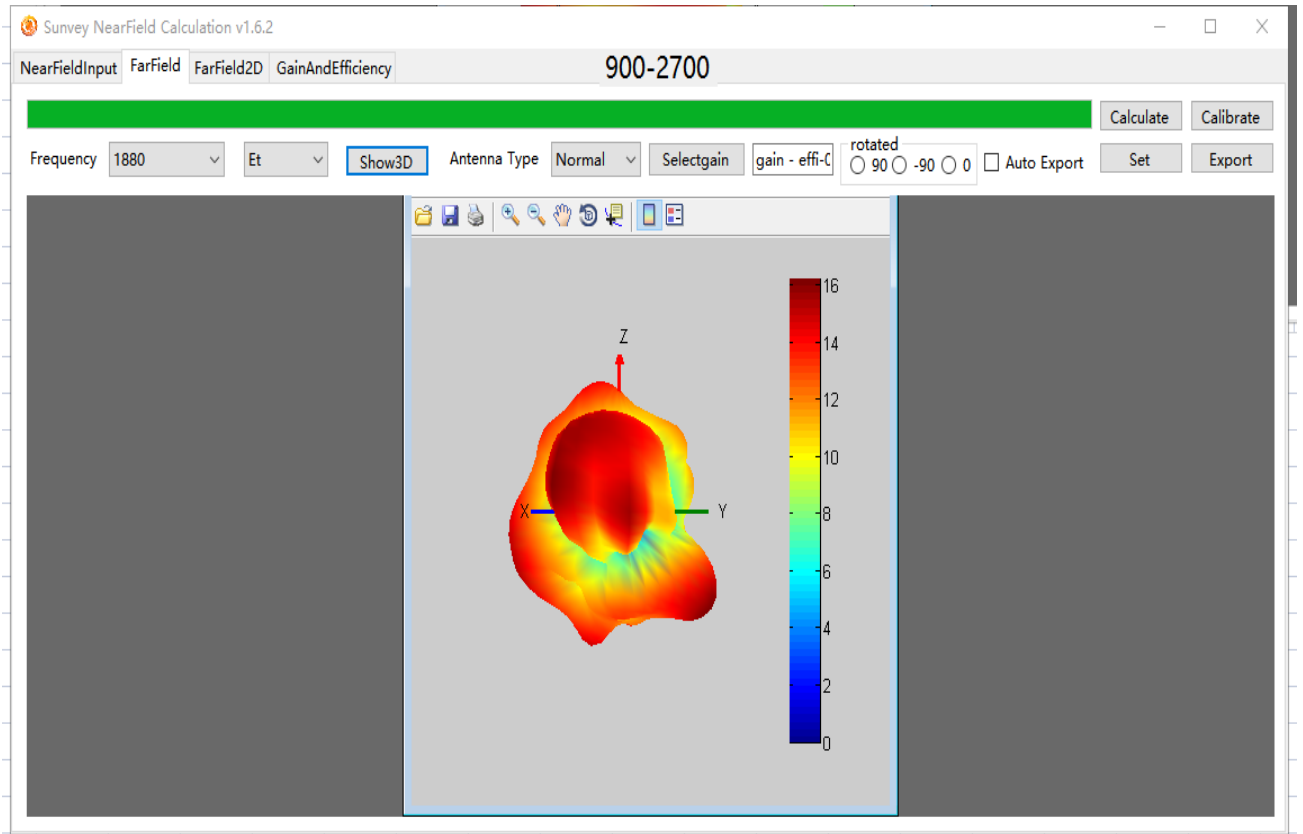
主天线苹果图 (Main antenna apple diagramApple chart)

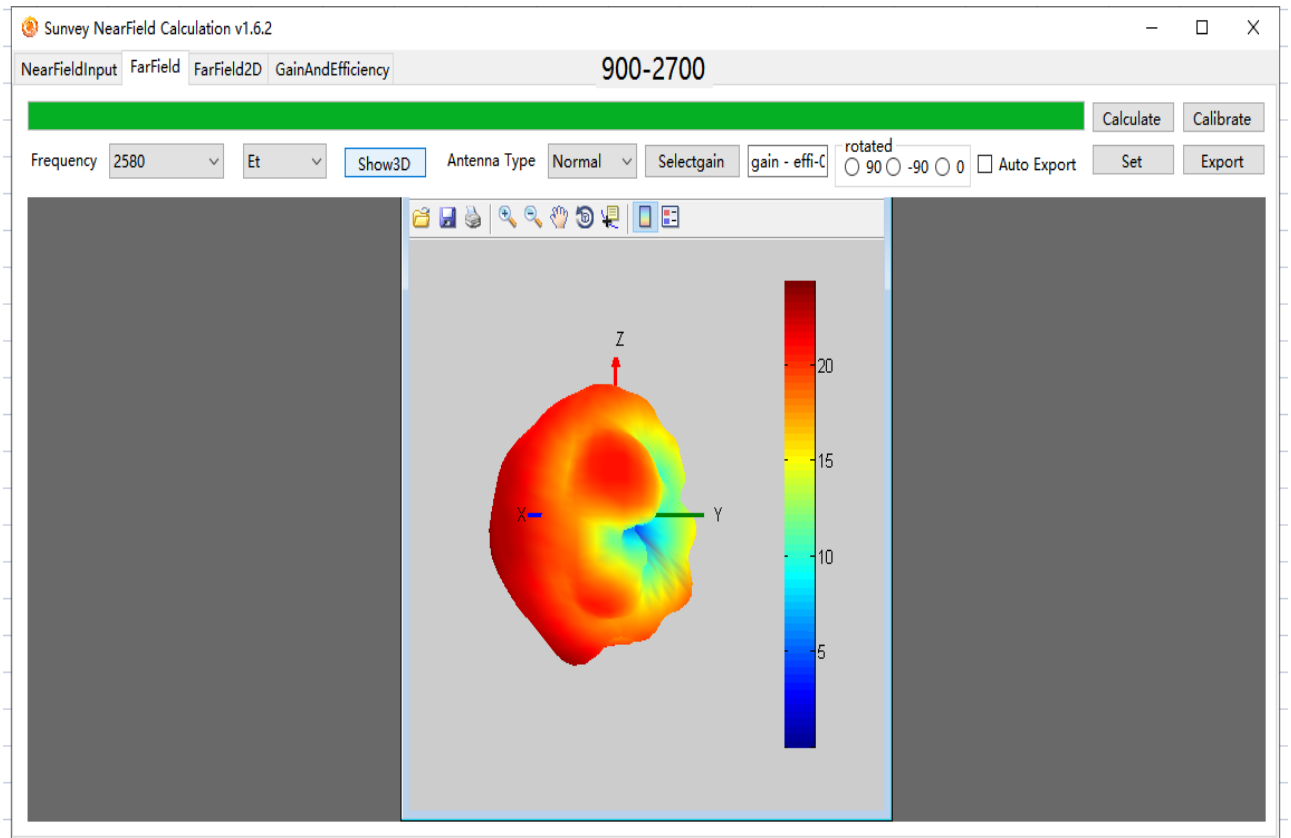
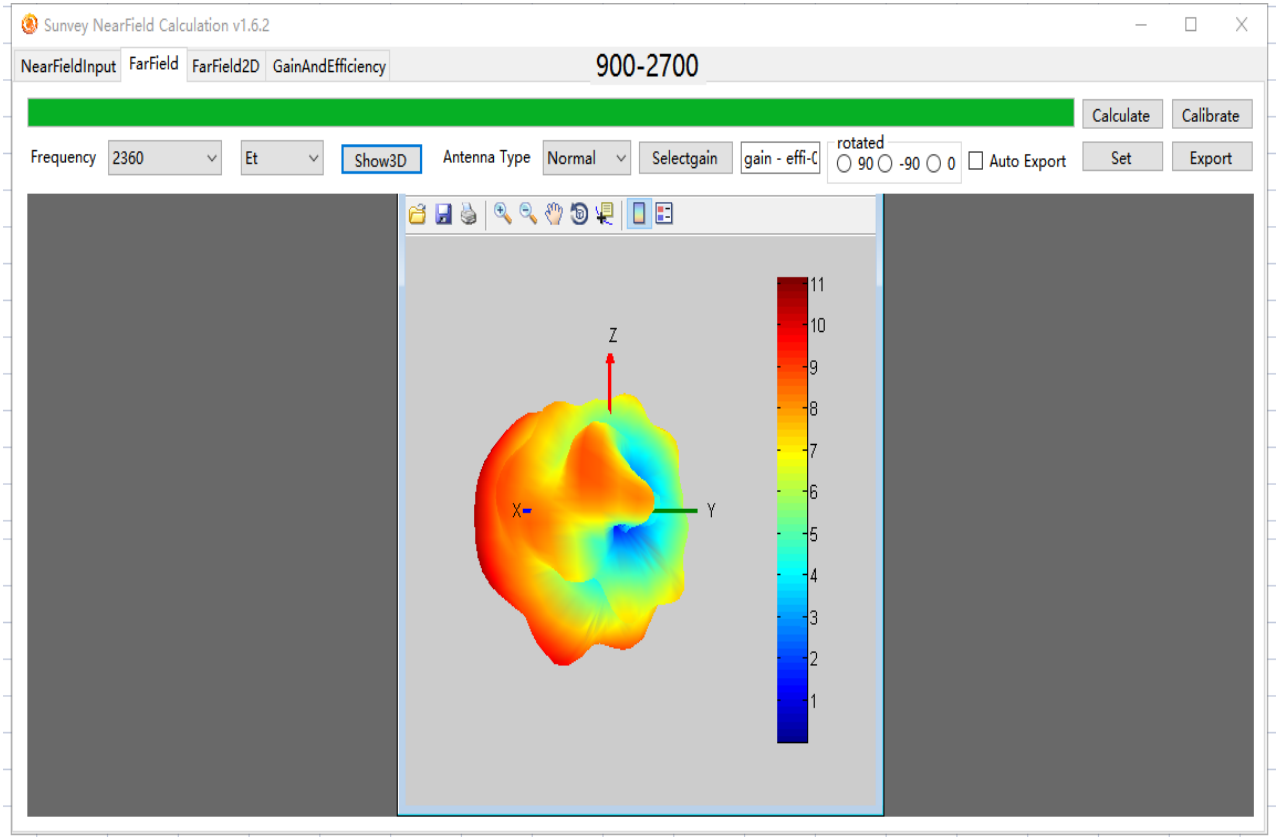


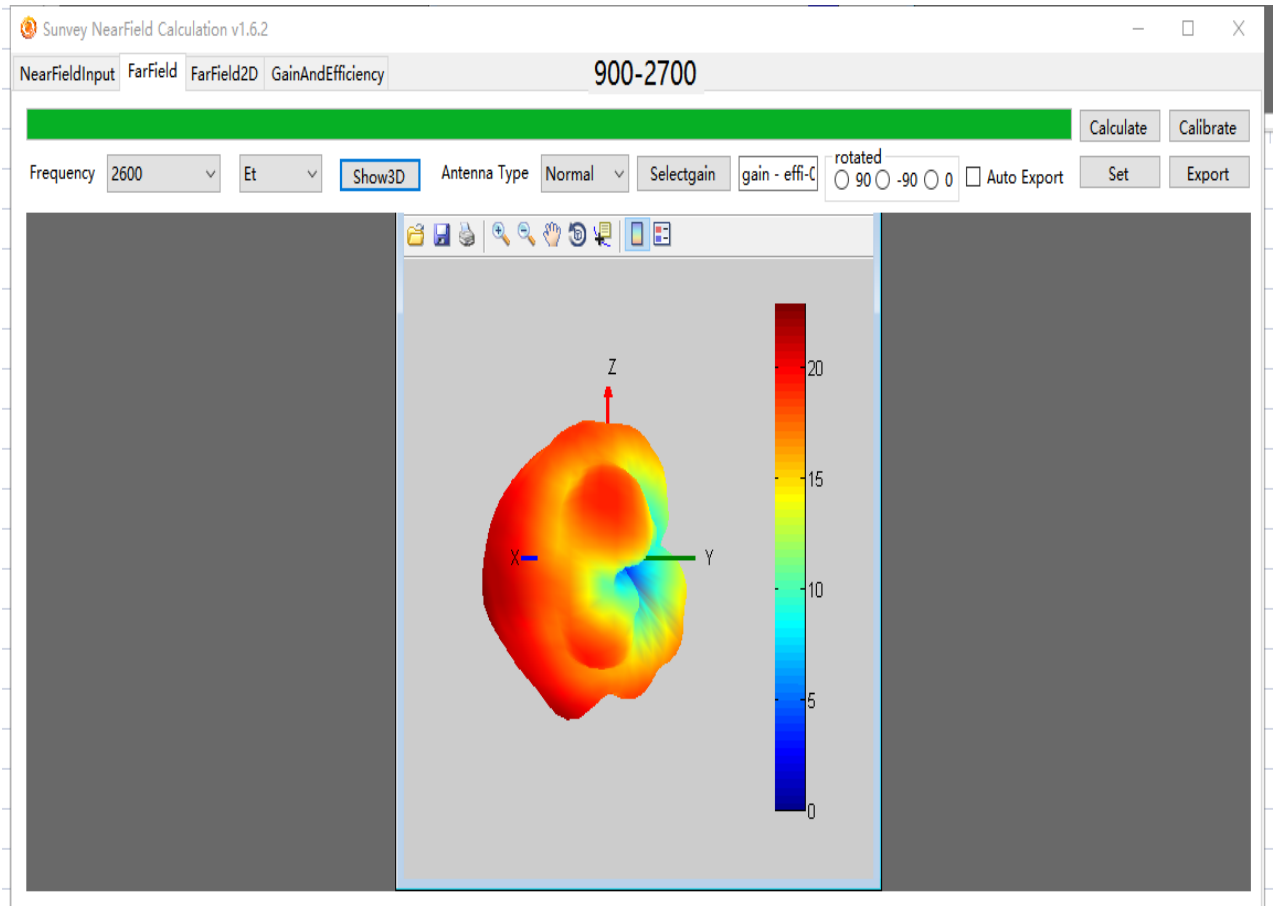
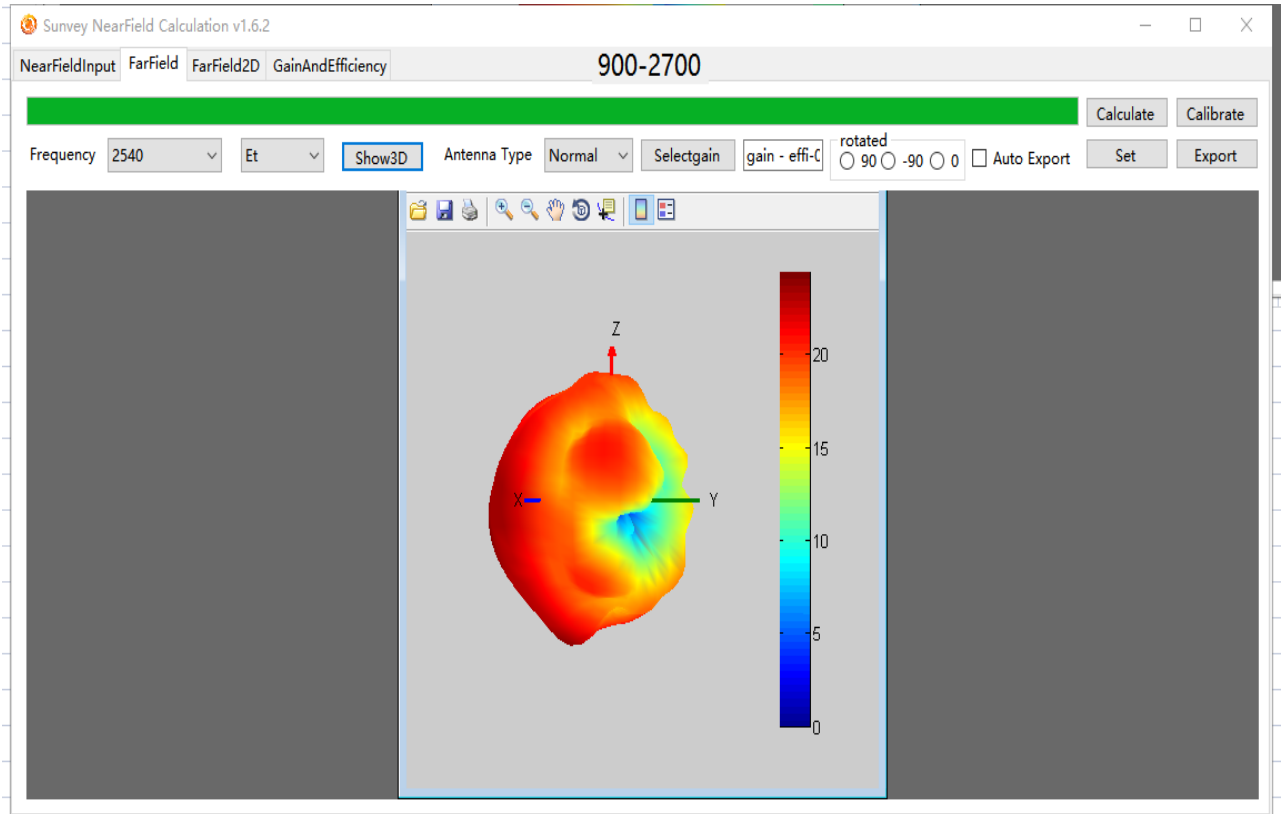




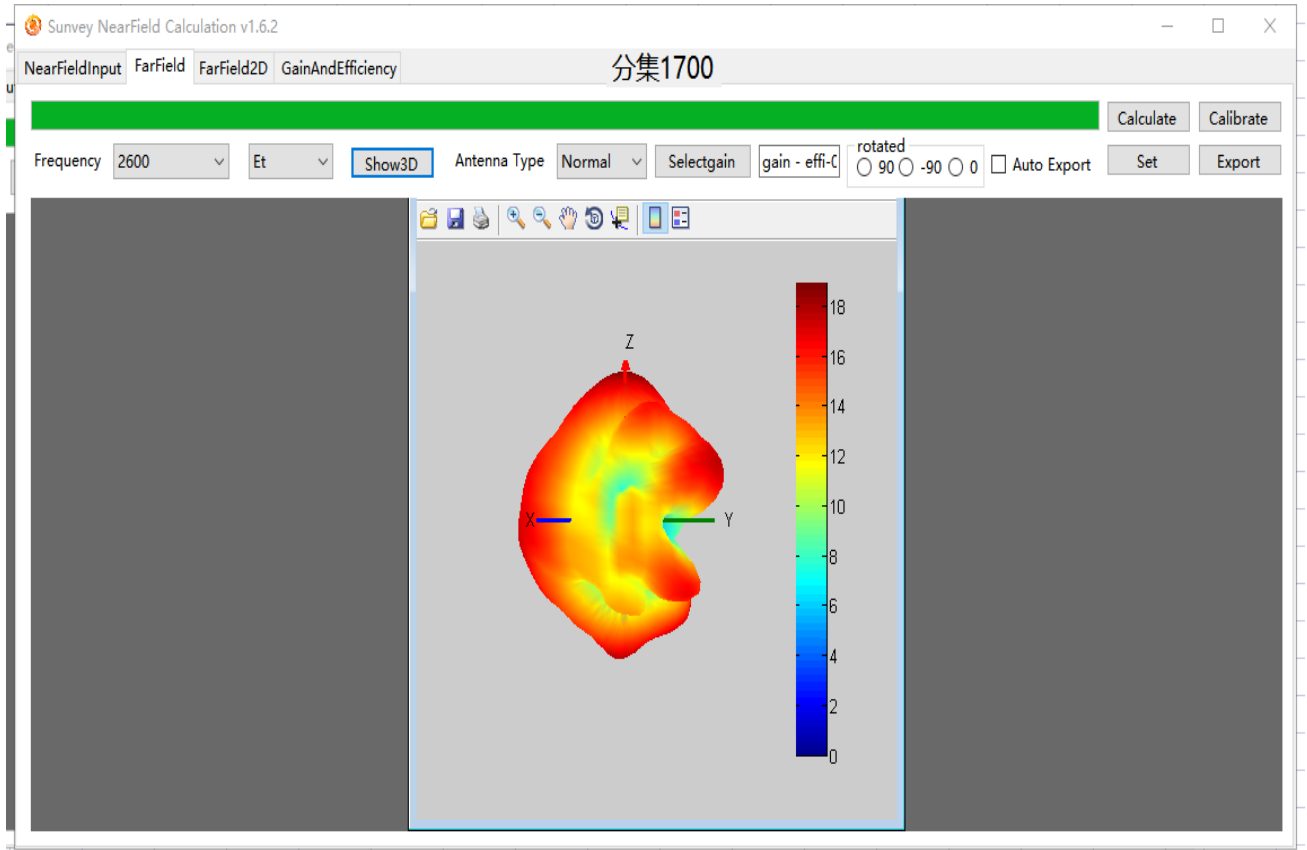








分集天线苹果图 (Diversity Antenna Apple diagram)



GWB 天线苹果图 (GWB antenna apple diagram)

