

Customers: MengBo

Project name: 5516C

RF engineer: XuLong

Telephone: 15915343126

Report edition: 2023.11.13

5516C project appearance



5516C project match

5516匹配

C9070 22NH

R9070 0欧姆

L9020 NC

R886 NC

R885 0欧姆

R883 NC

C884 NC

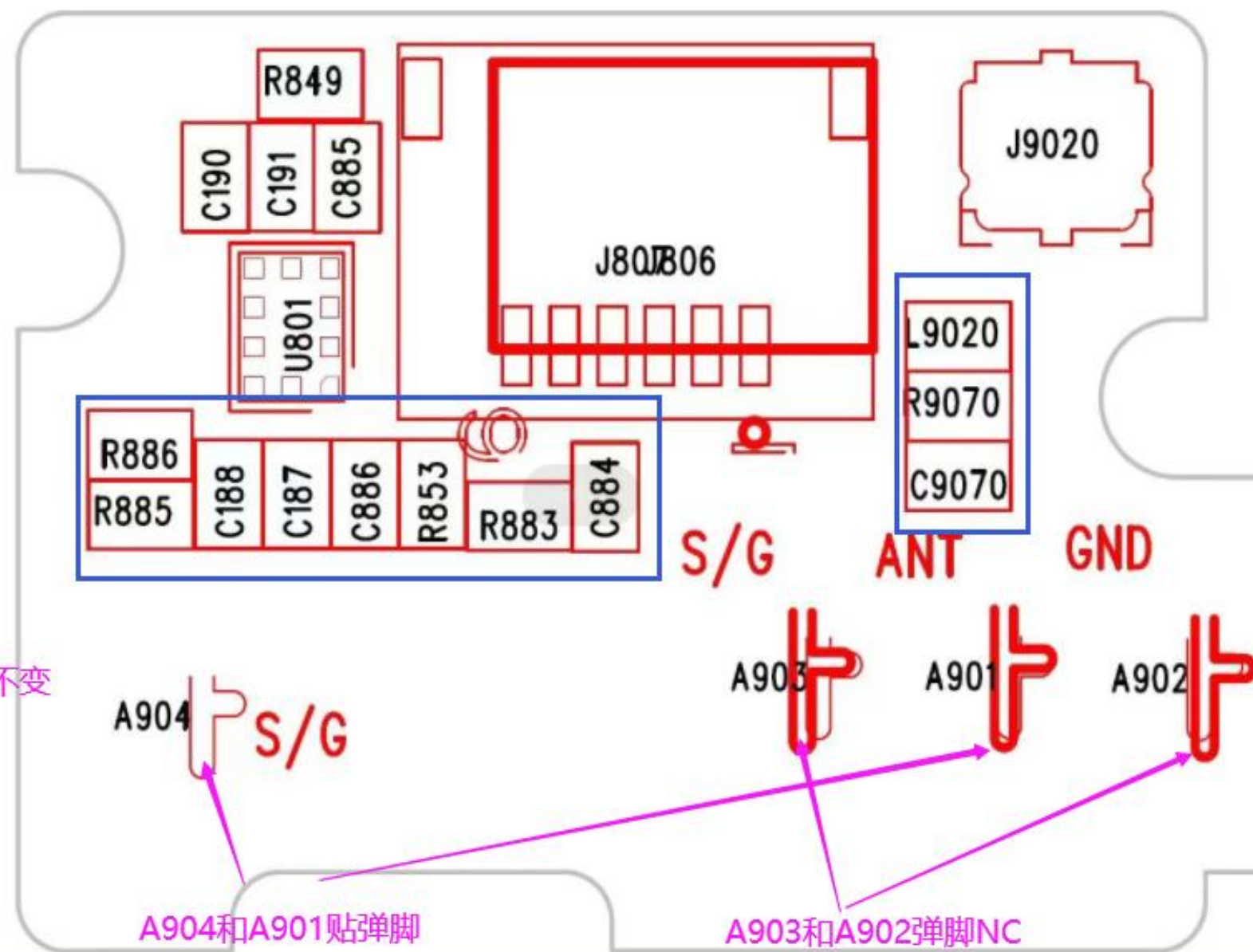
C886 0欧姆

R853 4.7NH

C187 22NH

C188 27NH

其它保持小板原有不变



● A Brief Introduction to debugging the project

Plate type	The whole machine						
Antenna Overview	The main antenna	Frequency band		Antenna status	Antenn a form	Design area	Match the changes
		2G	G2/3/5/8/W2/4/5/8	Gold-plated FPC	PIFA	The bottom of the phone	YES
		3G					
		4G	2/4/5/7/8/28AB/66/TD D38				
		5G	N/A				
	Other antennas	BT/WIFI	2. 4G	Gold-plated FPC	PIFA	Top of the phone	No
		GPS	1575. 42MHZ				No
		Diversity	N/A	Gold-plated FPC	PIFA	Top of the phone	No
Prototype status	5516C Debugging machine		Environmental treatment				

5516C Switching frequency division

5516C Switching frequency division RF switching frequency division is as follows:			
Frequency band	Switch channel	Match	Notes
GSM2/3/8/W2/4/8/FDD2/4/7 /8/66/TDD38	RF1 (C886)	0 Ω	
GSM5/W5/FDD5 (850MHZ)	RF2 (R853)	4. 7NH	
FDD28AB	RF3 (C187)	22NH	
	RF4 (C188)	27NH	
	R885	0 Ω	
	R883/R886	NC	

ANWEI ANT TRP&TIS parameter Summary of 5516C						
BAND	GSM900			DCS1800		
CHANNEL	1	62	124	512	698	885
TRP (dBm)	26. 74	26. 53	26. 45	24. 12	24. 52	25. 26
TIS (dBm)			-102. 3			-103. 2
BAND	GSM850			PCS1900		
CHANNEL	128	190	251	512	661	810
TRP (dBm)	25. 86	26. 38	26. 25	25. 24	25. 41	24. 38
TIS (dBm)			-102. 6			-102. 6
BAND	WCDMA850			WCDMA1700		
CHANNEL	4132	4183	4233	1312	1413	1513
TRP (dBm)	17. 35	17. 32	17. 45	17. 49	17. 43	17. 52
TIS (dBm)			-101. 6			-102. 7
BAND	WCDMA1900			WCDMA900		
CHANNEL	9262	9400	9538	2937	3013	3088
TRP (dBm)	17. 32	17. 48	17. 46	17. 58	17. 38	16. 24
TIS (dBm)			-102. 6			-102. 5

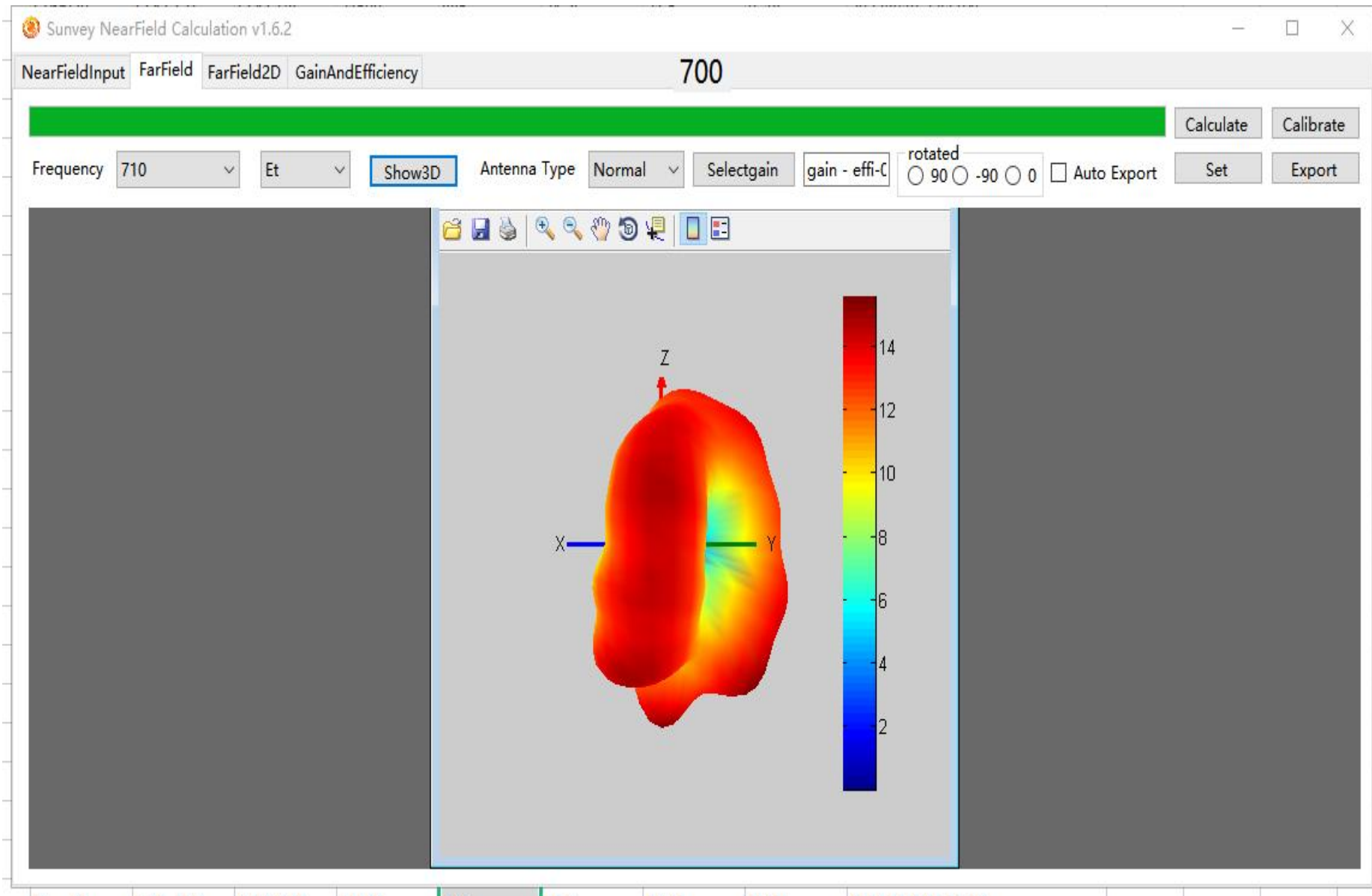
ANWEI ANT TRP&TIS parameter Summary of 5516C						
BAND	FDD-2			FDD-4		
CHANNEL	18650	18900	19150	20000	20175	20350
TRP (dBm)	17.36	17.49	17.56	17.36	17.45	17.52
TIS (dBm)			-91.23			-90.48
BAND	FDD-5			FDD-7		
CHANNEL	20450	20525	20600	20800	21100	21400
TRP (dBm)	17.35	17.38	17.47	17.48	17.42	17.39
TIS (dBm)			-91.36			-89.68
BAND	FDD-8			FDD-28A		
CHANNEL	21500	21625	21750	27260	27370	27469
TRP (dBm)	17.72	17.46	17.21	16.35	16.58	17.16
TIS (dBm)			-90.45			-90.24
BAND	FDD-28B			TDD-38		
CHANNEL	27410	27510	27600	37850	38000	38150
TRP (dBm)	16.46	16.73	17.25	17.25	17.31	17.42
TIS (dBm)			-90.51			-90.03

ANWEI ANT TRP&TIS parameter Summary of 5516C						
BAND	FDD-66					
CHANNEL	132022	132322	132622			
TRP (dBm)	17.31	17.39	17.41			
TIS (dBm)			-91.25			
BAND						
CHANNEL						
TRP (dBm)						
TIS (dBm)						
BAND						
CHANNEL						
TRP (dBm)						
TIS (dBm)						
BAND						
CHANNEL						
TRP (dBm)						
TIS (dBm)						

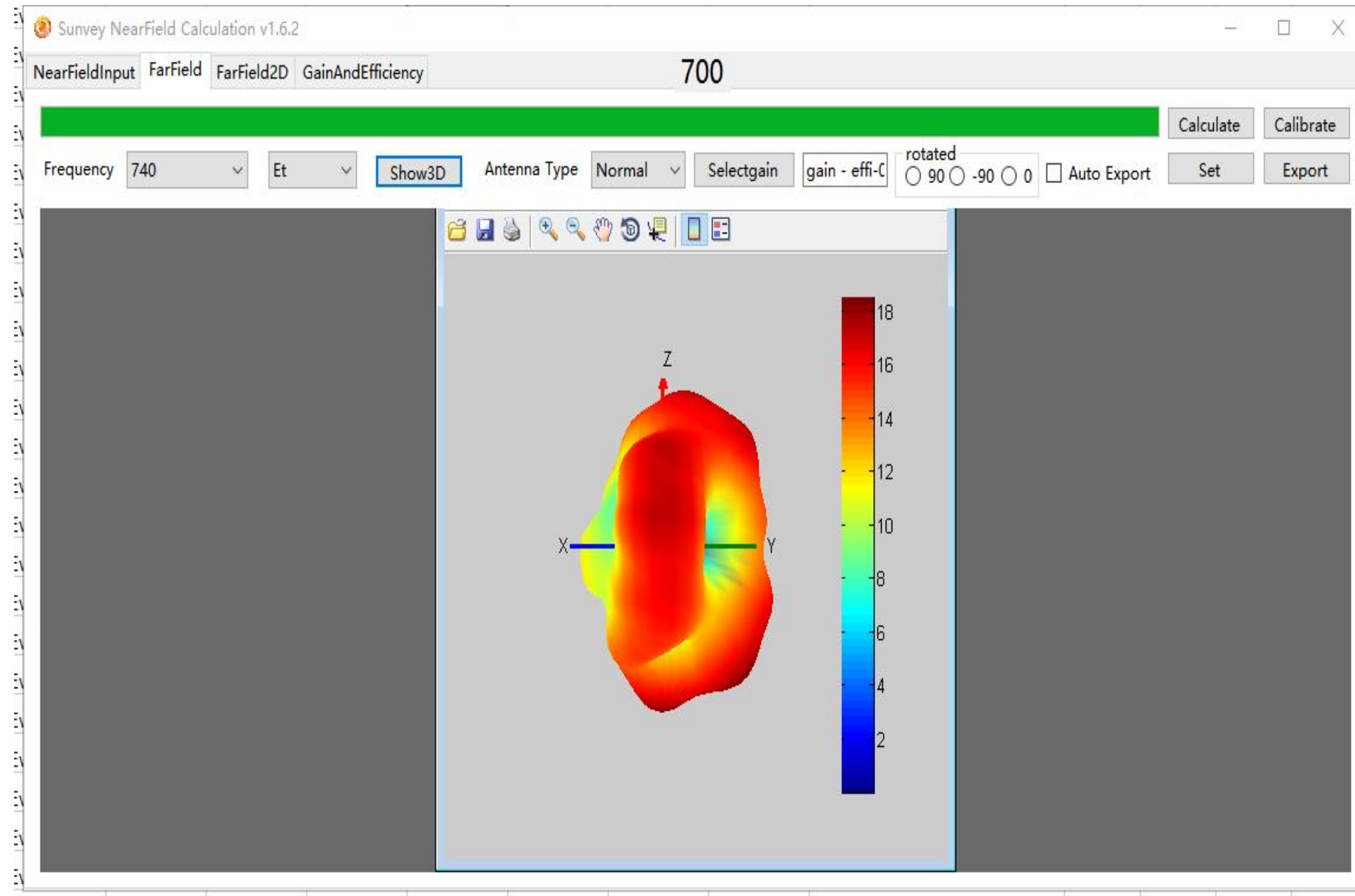
Antenna gain

5516C Antenna Gain	
频段Frequency	增益Gain(dB)
GSM850	-0.53
EGSM900	-0.48
DCS1800	-0.35
PCS1900	-0.33
W1700	-0.33
W850	-0.53
W1900	-0.33
W900	-0.46
FDD	
B2	-0.33
B4	-0.35
B5	-0.51
B7	-0.47
B8	-0.46
B28	-0.57
B66	-0.36
B38	-0.43
WIFI	-0.13
BT	-0.13
	以上单位为：dB

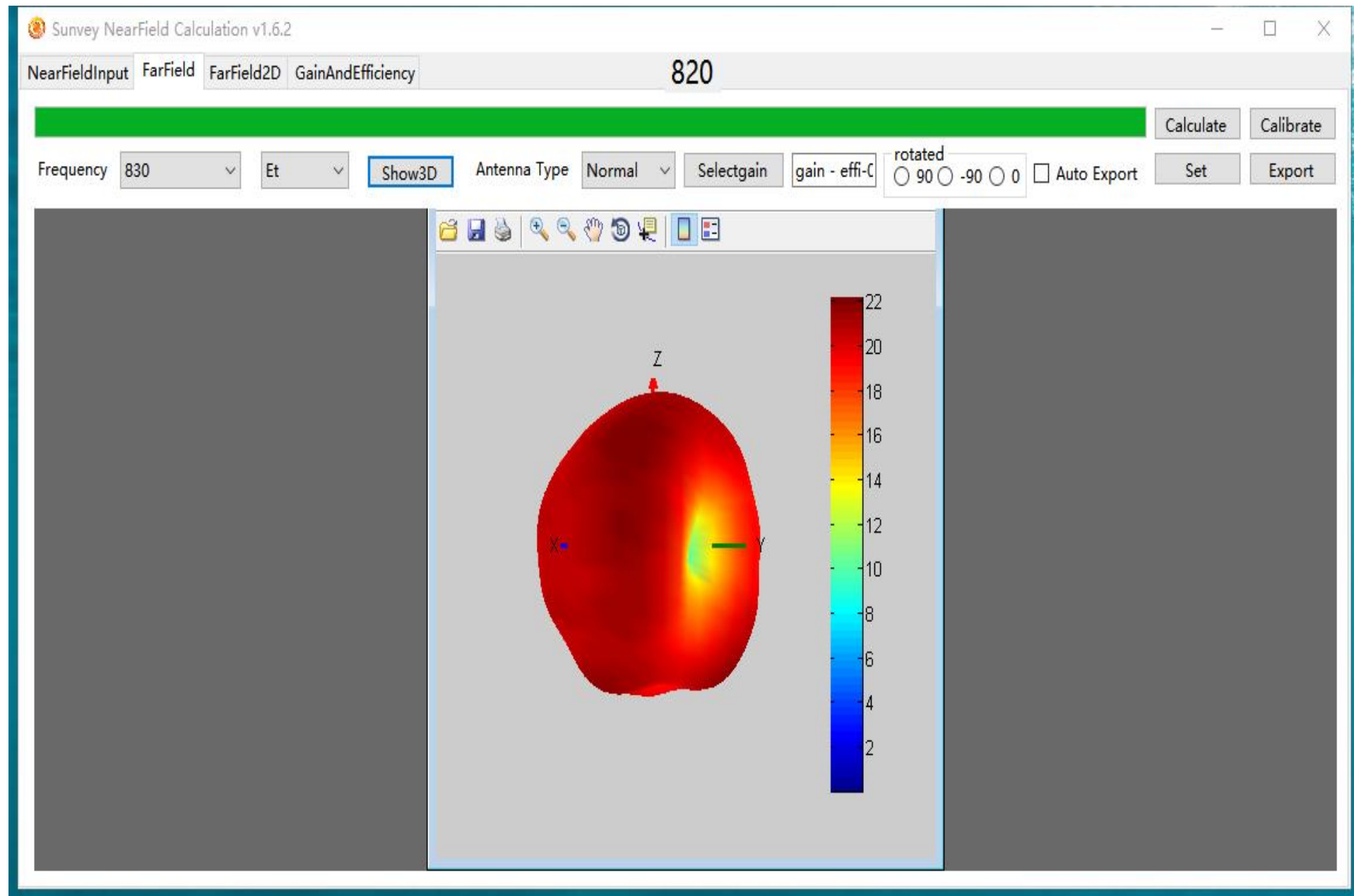
Main antenna apple diagramApple chart



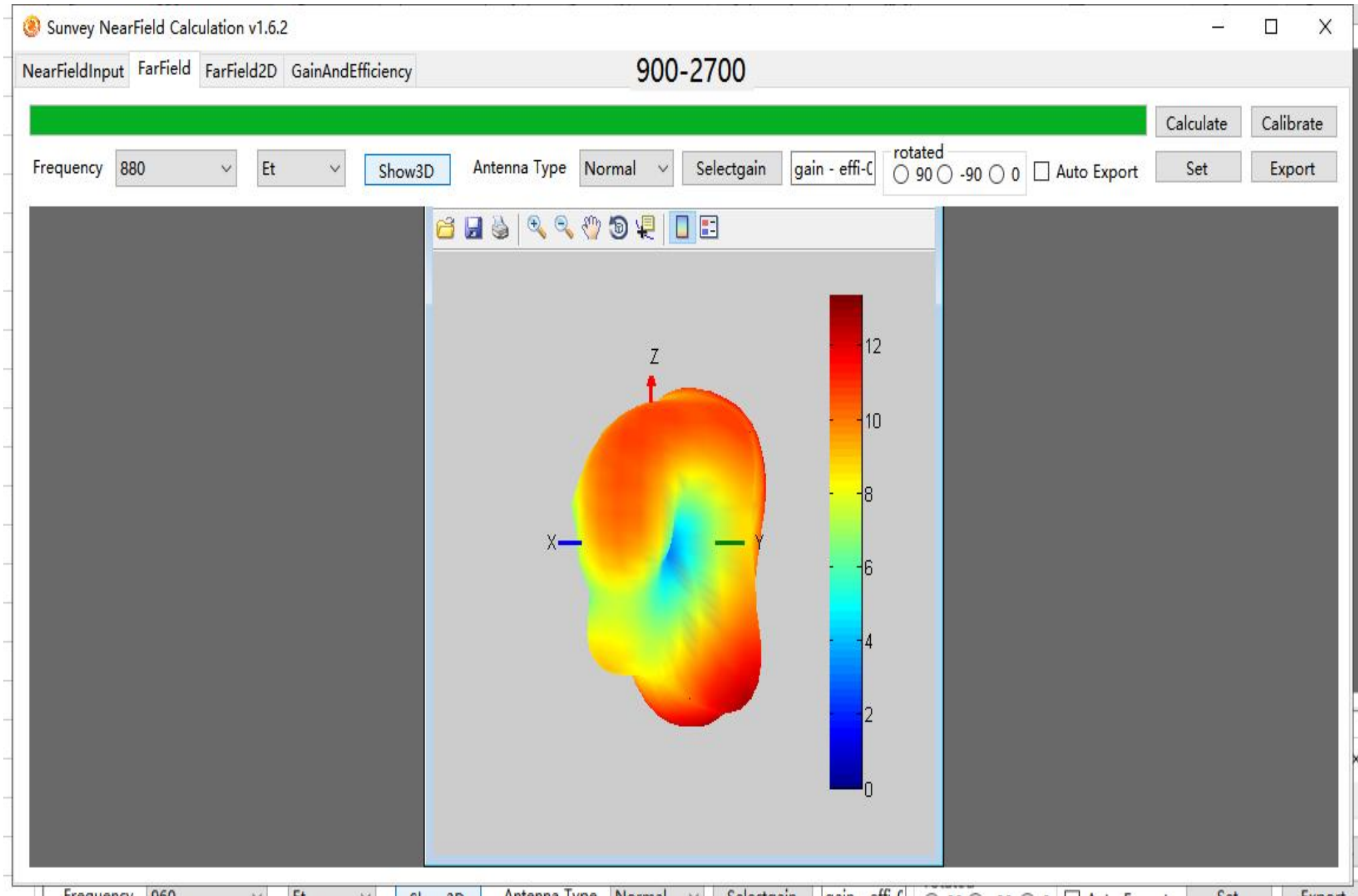
Main antenna apple diagramApple chart



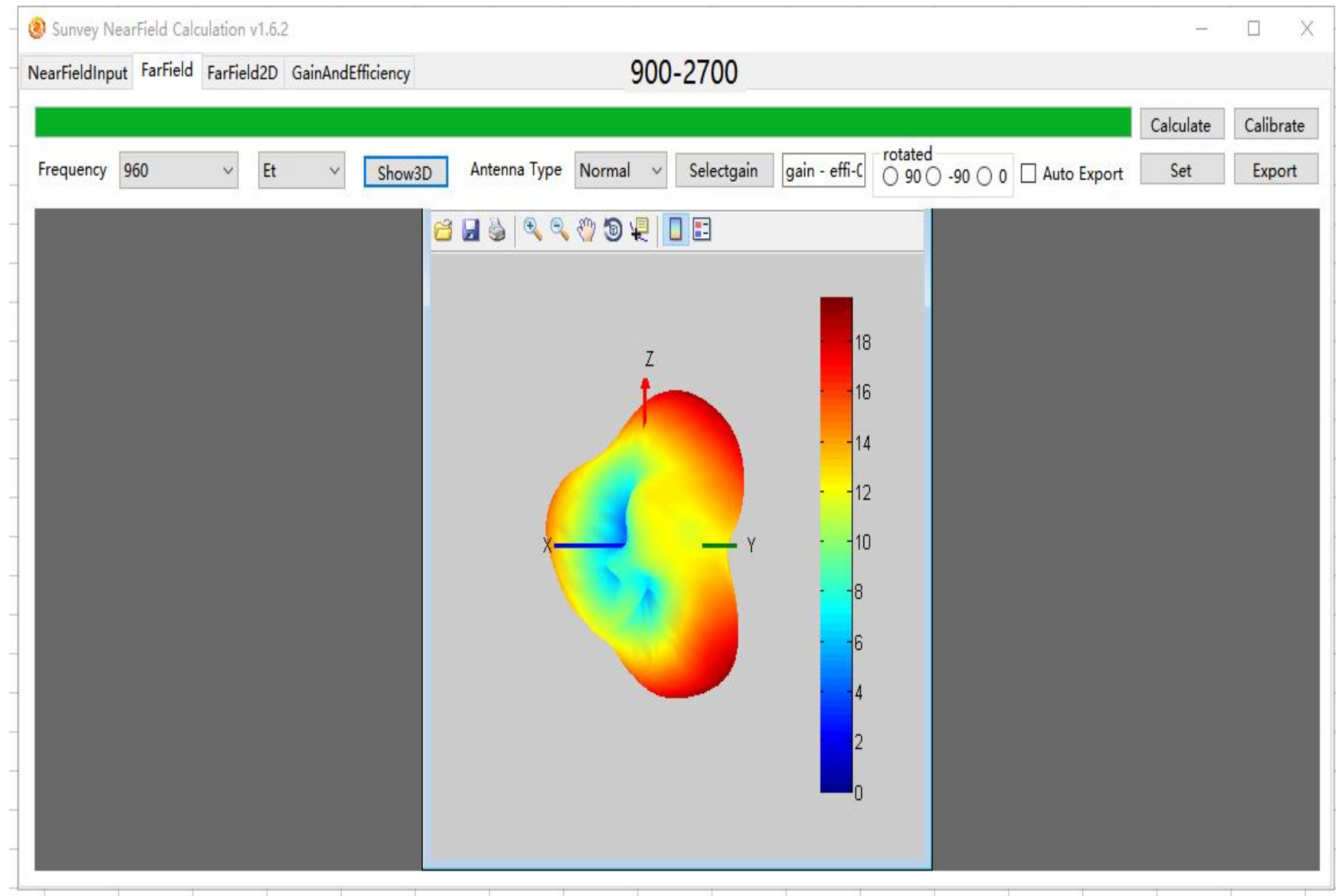
Main antenna apple diagramApple chart



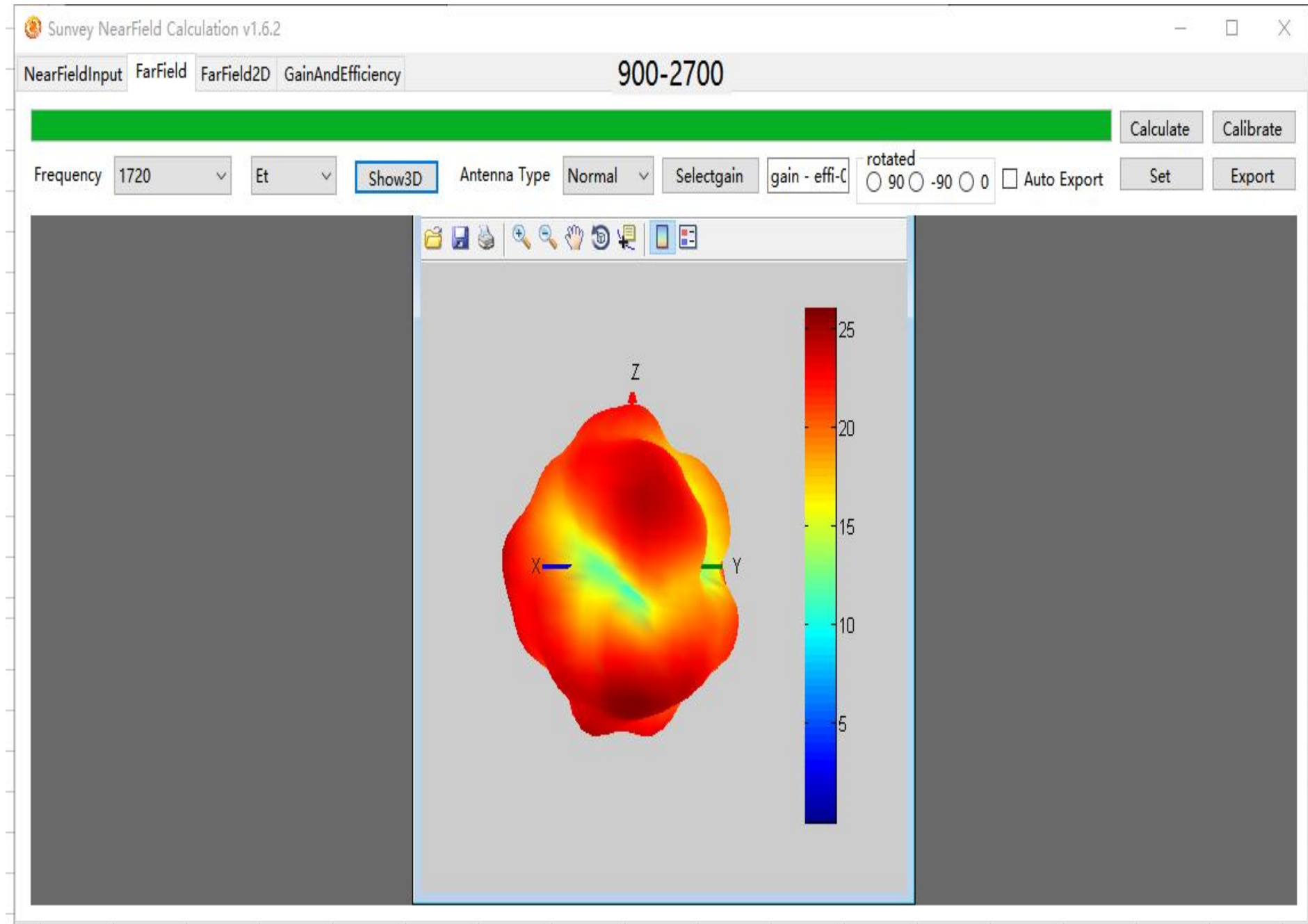
Main antenna apple diagramApple chart



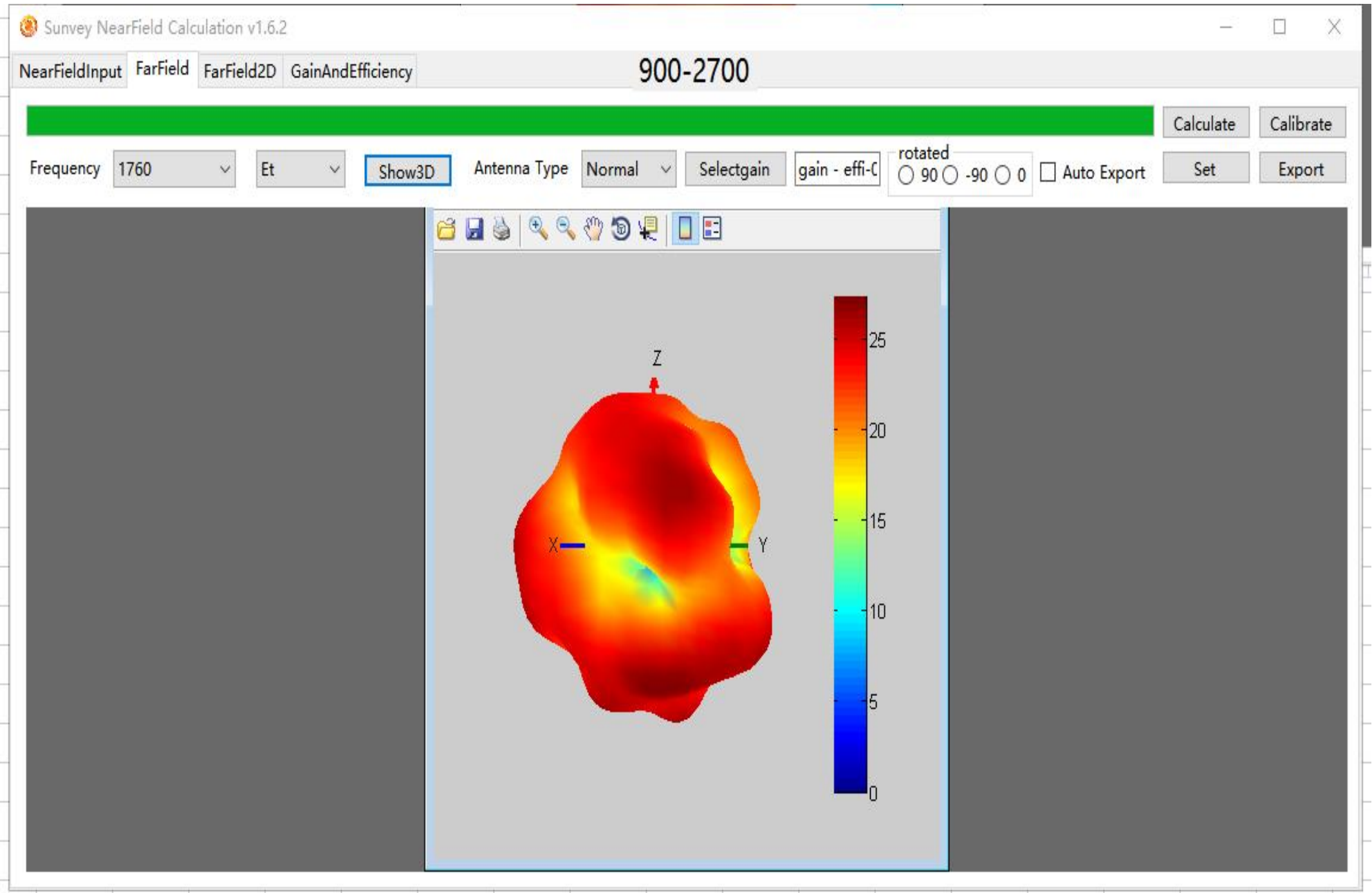
Main antenna apple diagramApple chart



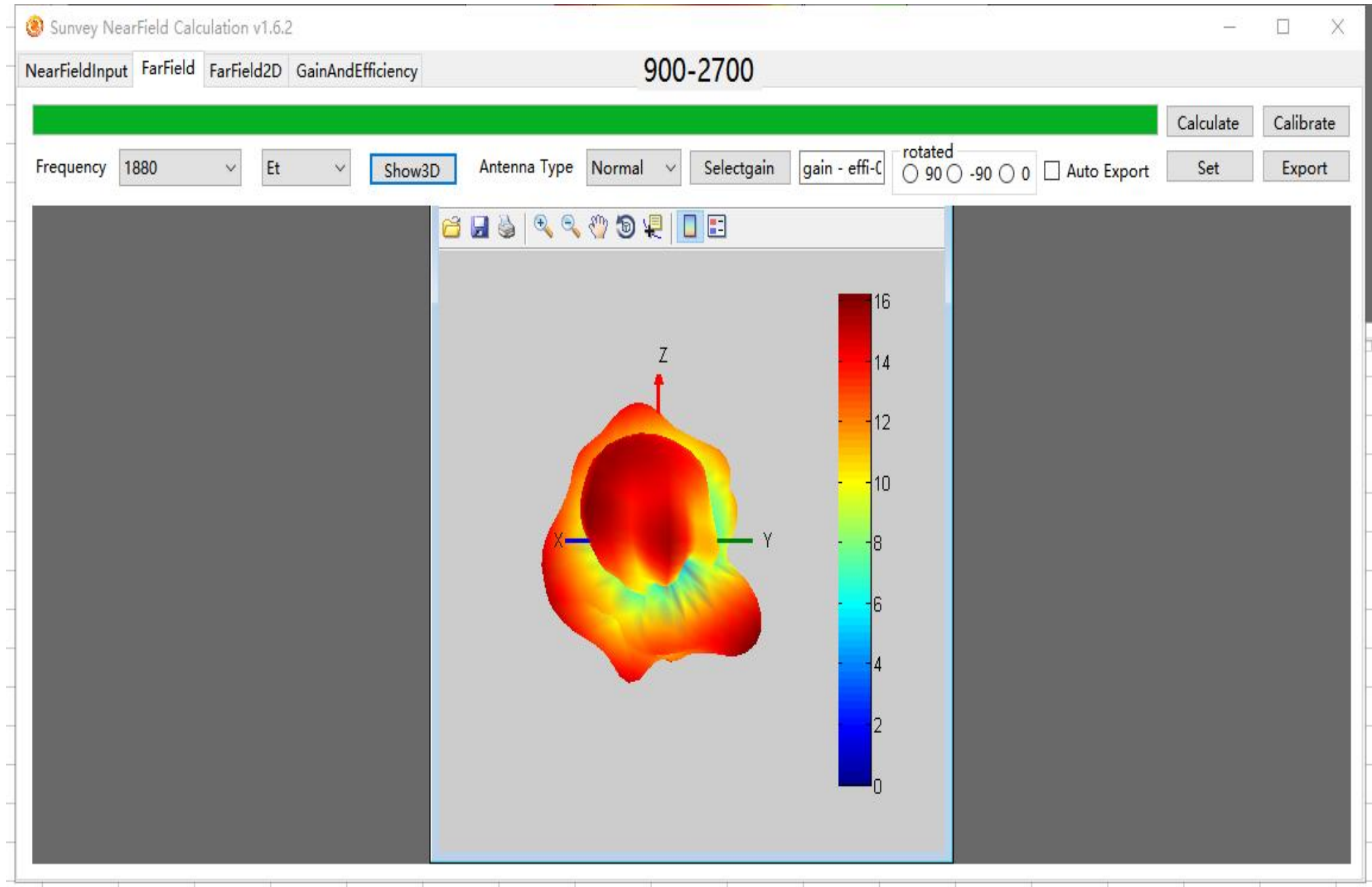
Main antenna apple diagramApple chart



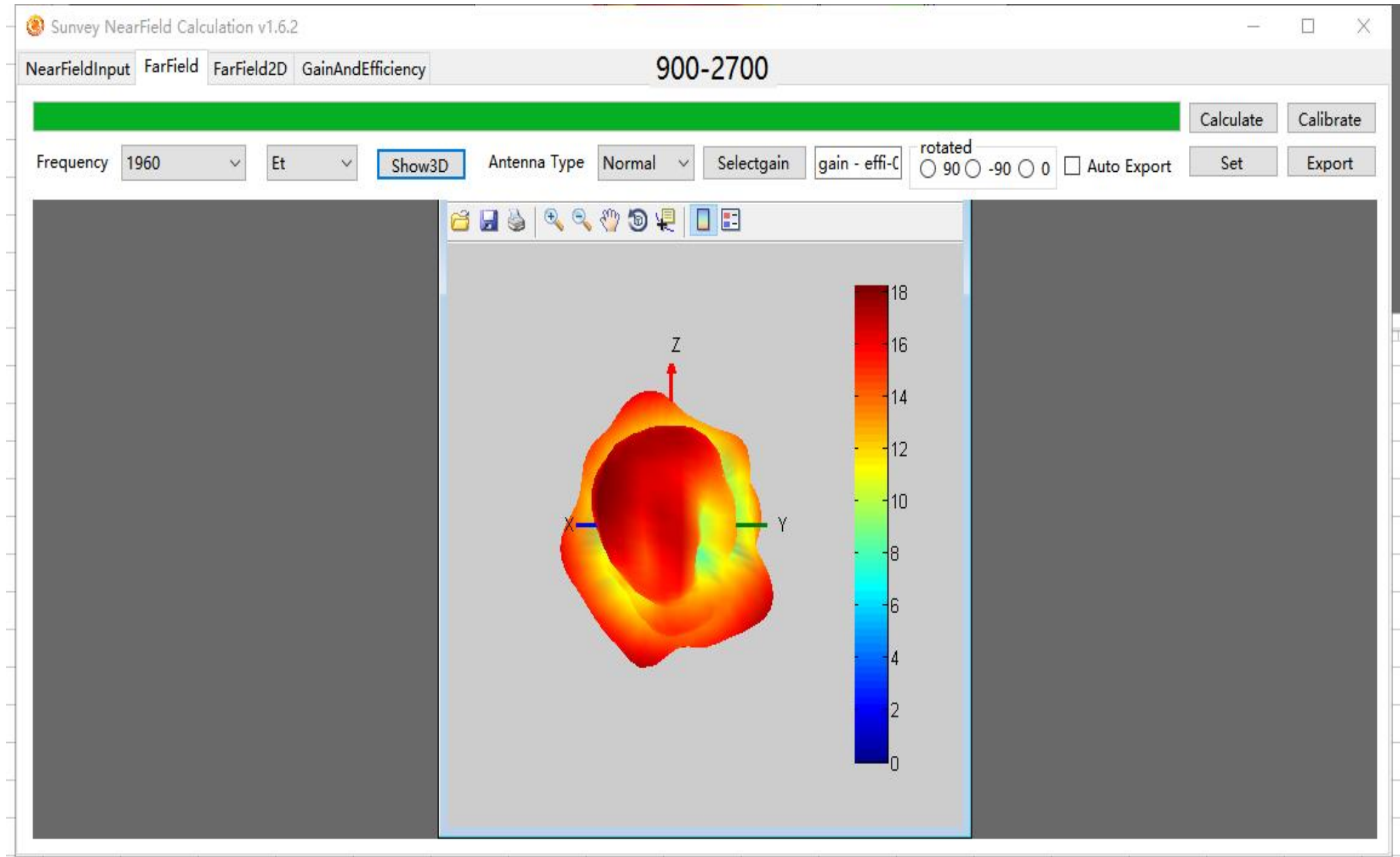
Main antenna apple diagramApple chart



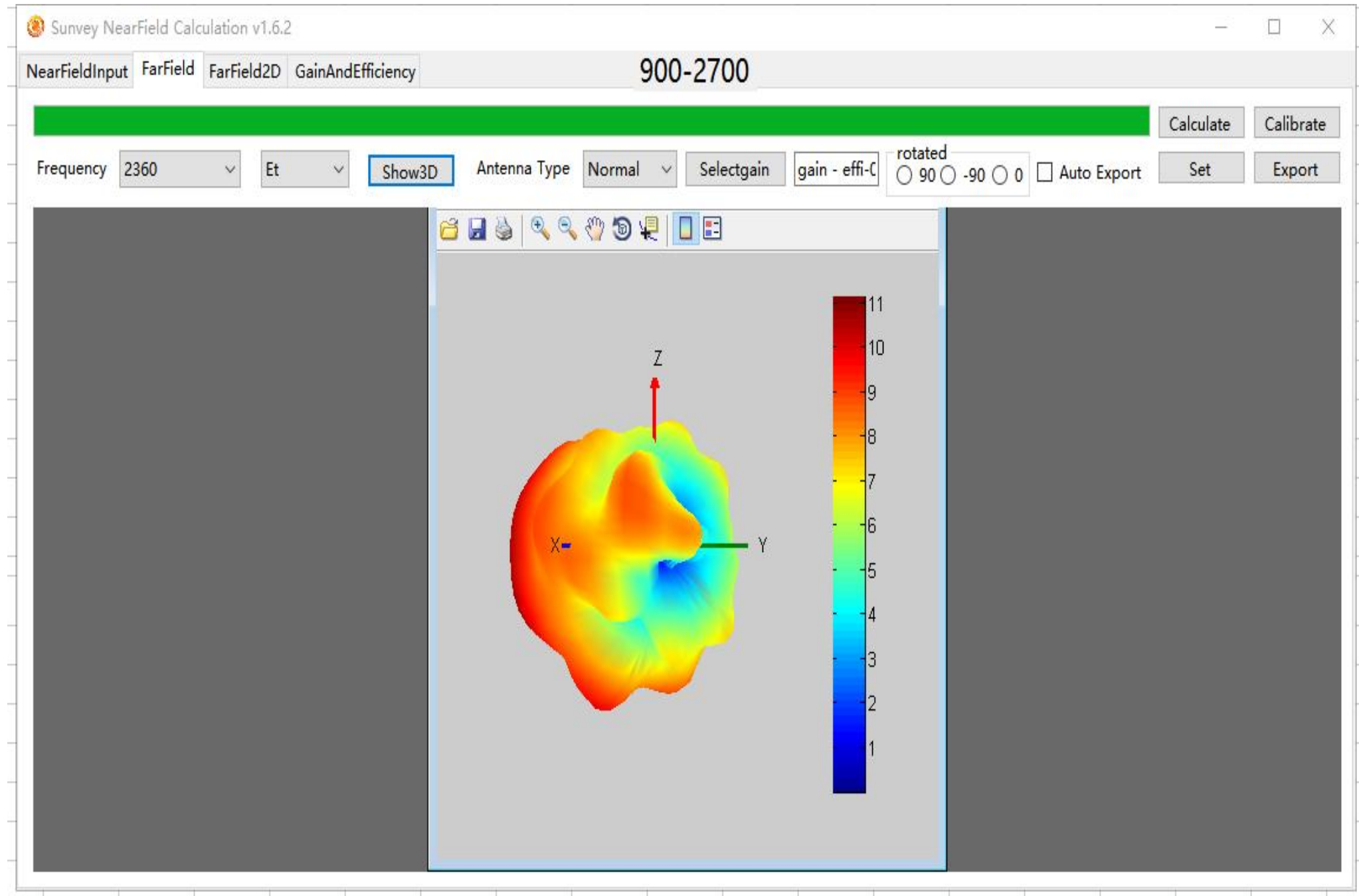
Main antenna apple diagramApple chart



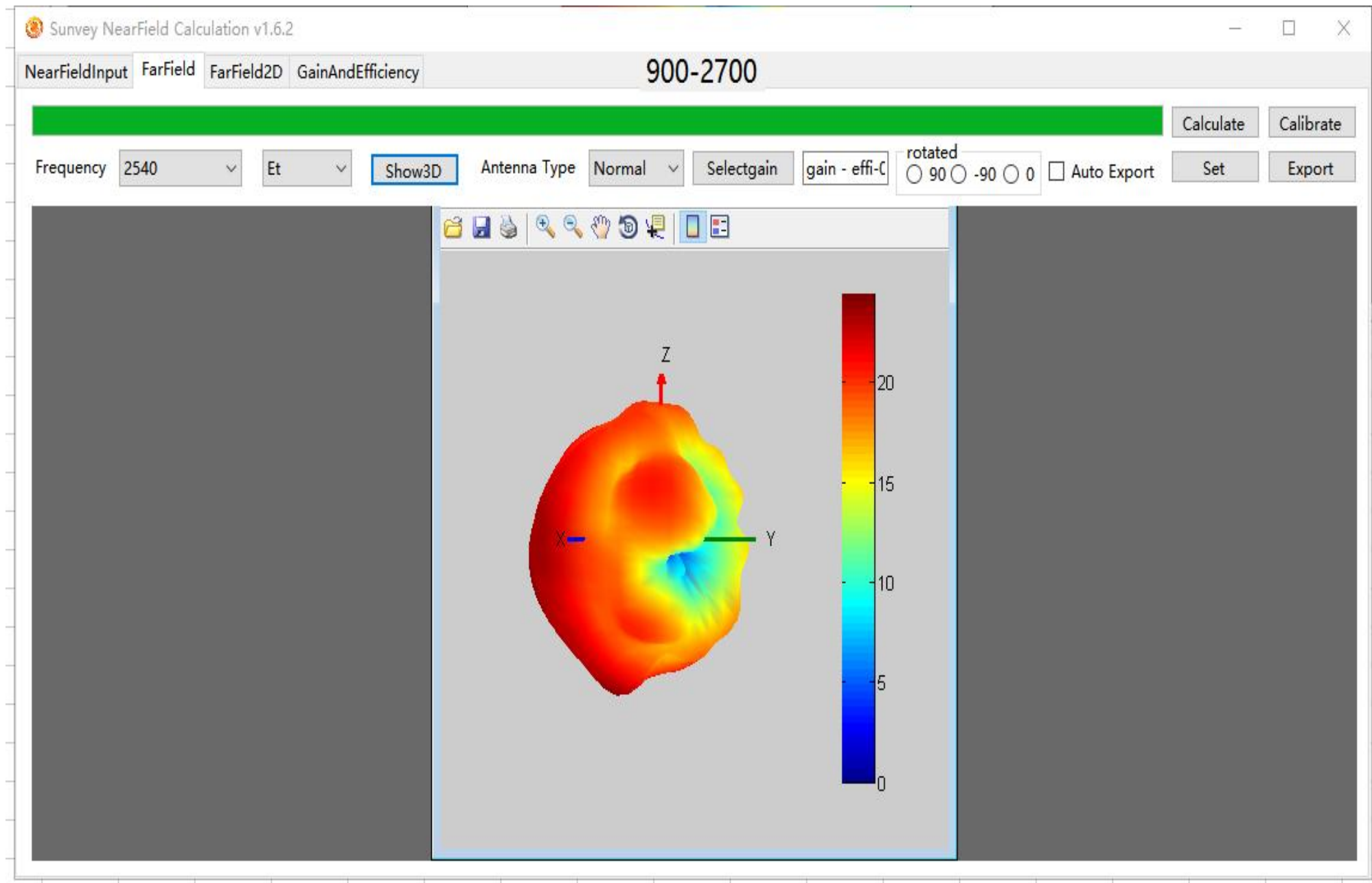
Main antenna apple diagramApple chart



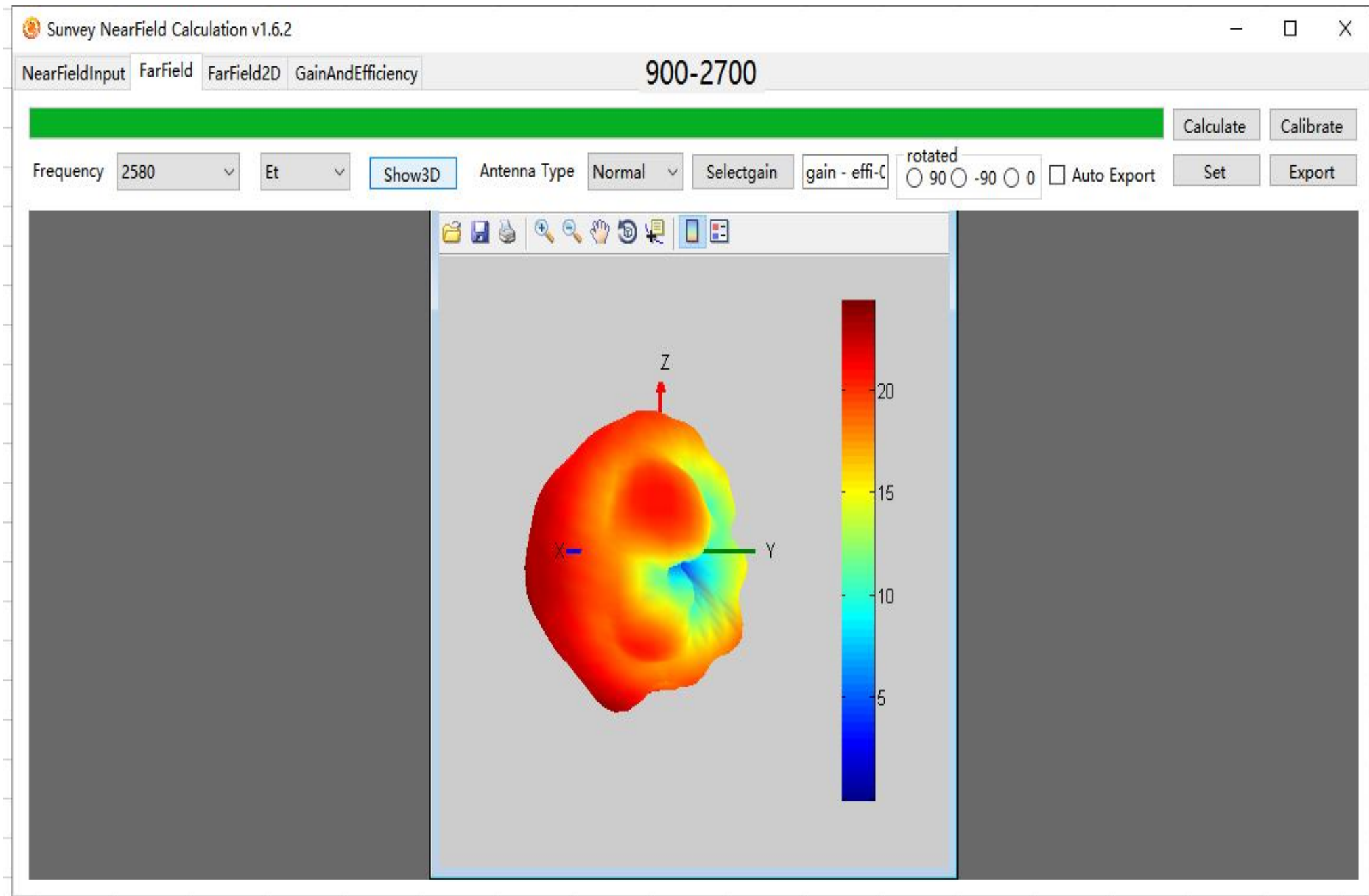
Main antenna apple diagramApple chart



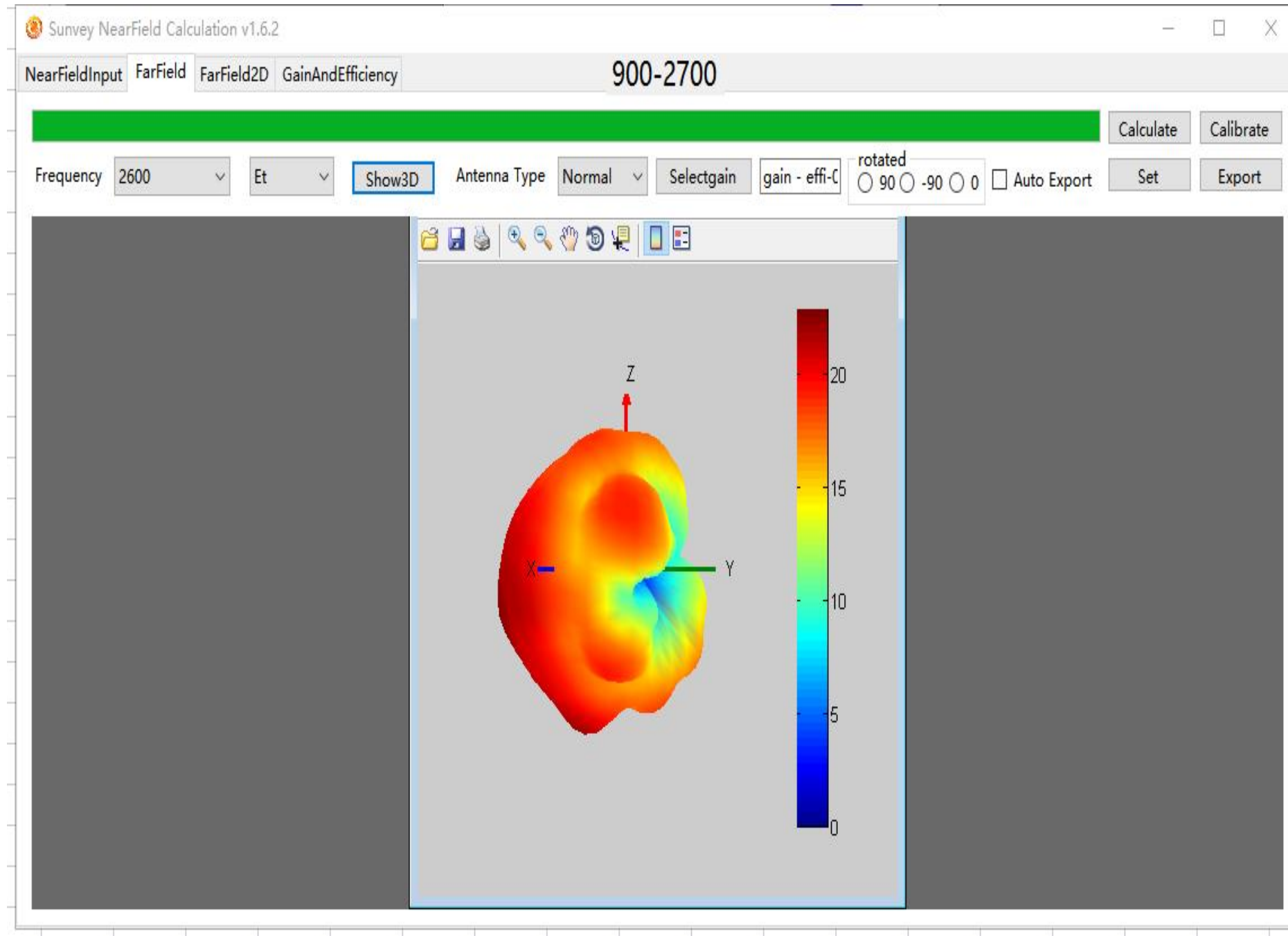
Main antenna apple diagramApple chart



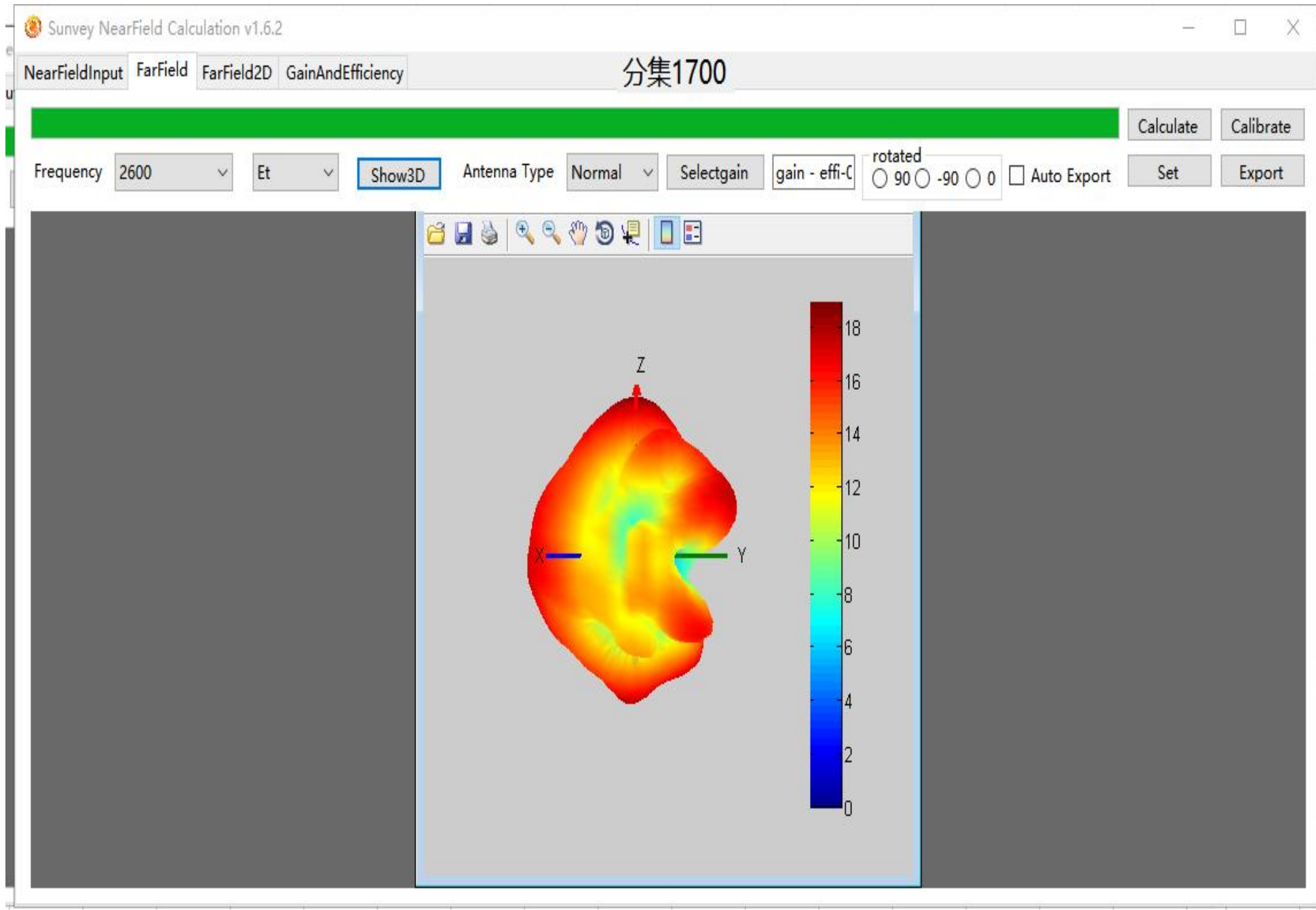
Main antenna apple diagramApple chart



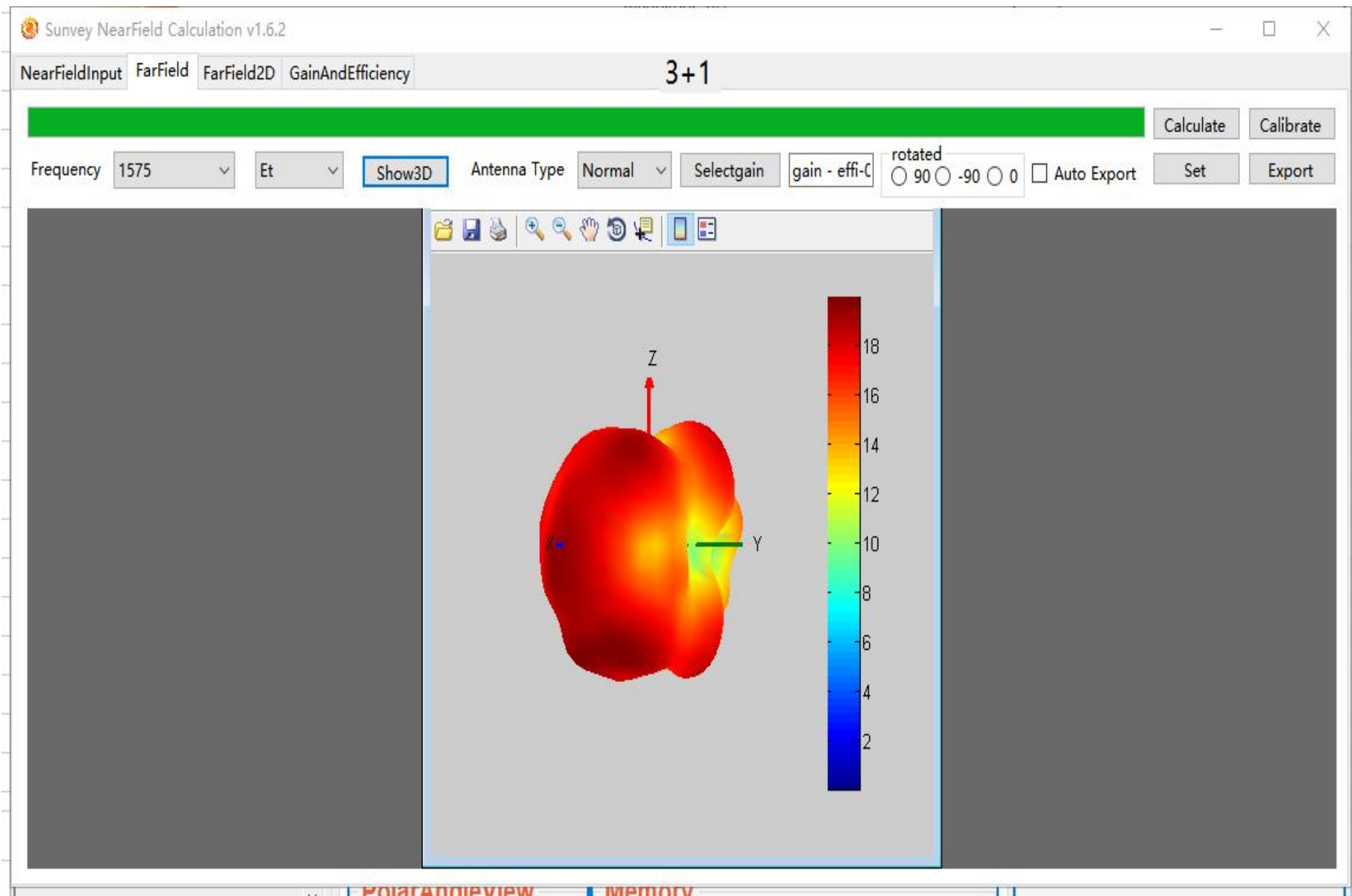
Main antenna apple diagramApple chart



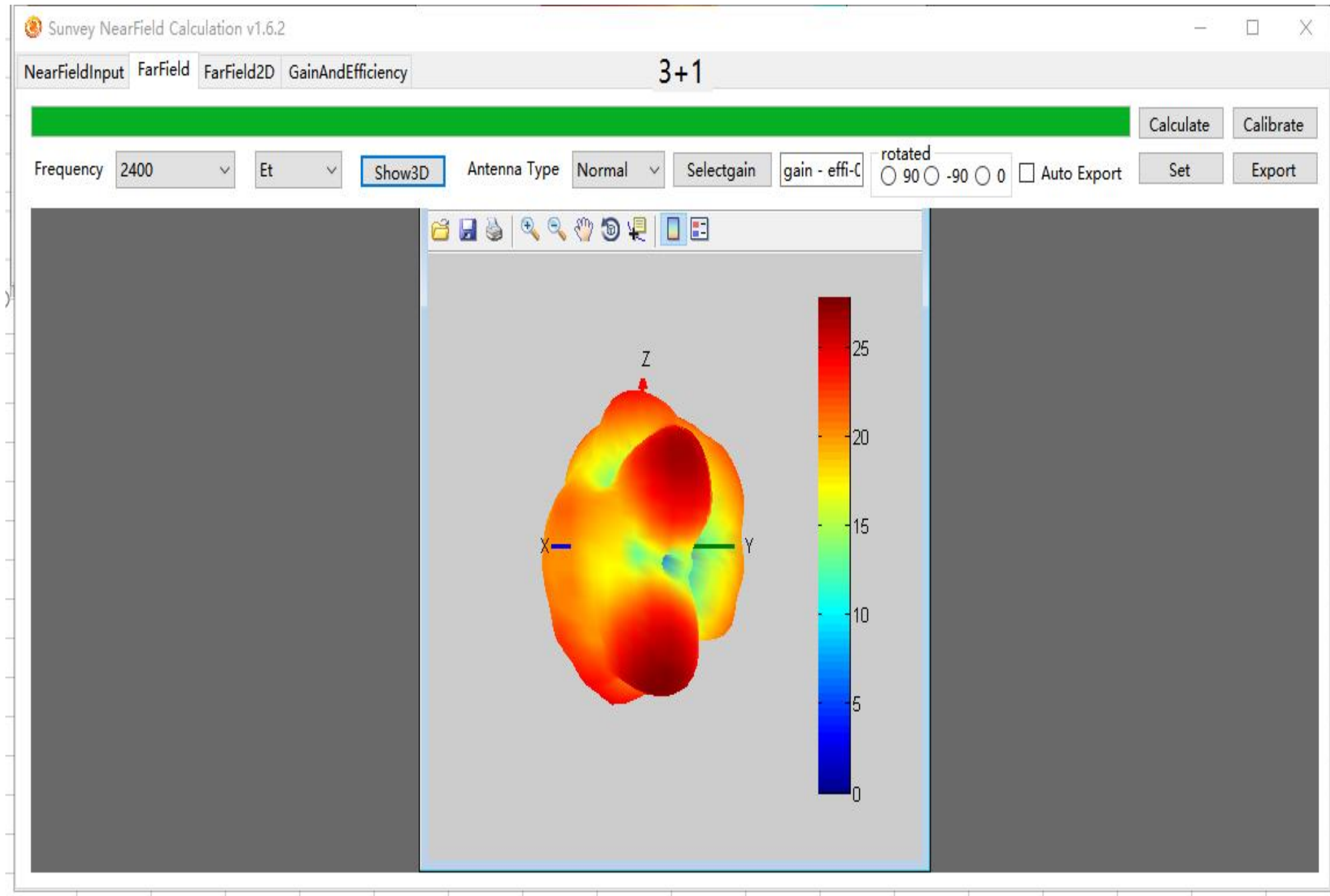
Diversity Antenna Apple diagram



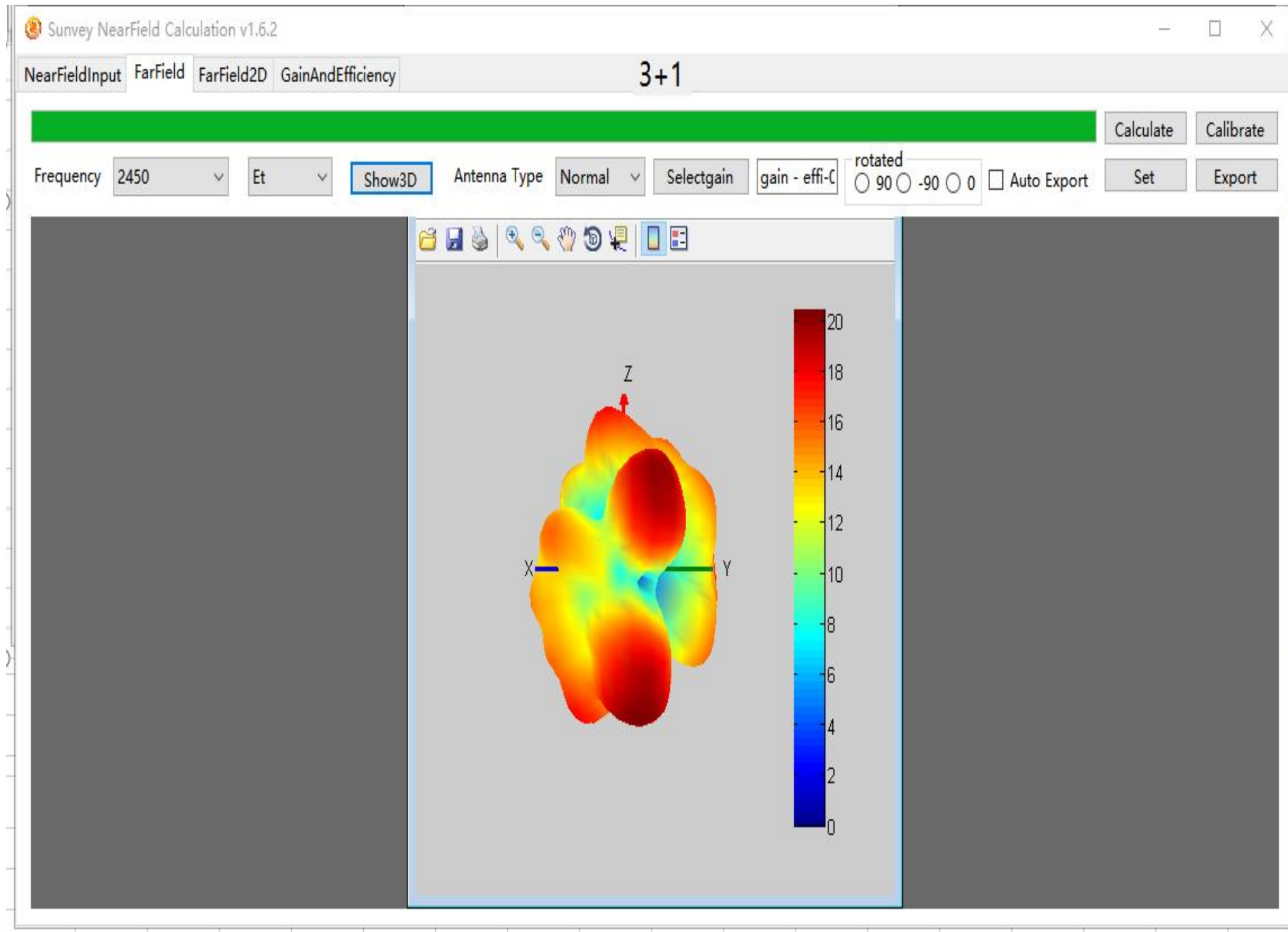
GWB antenna apple diagram



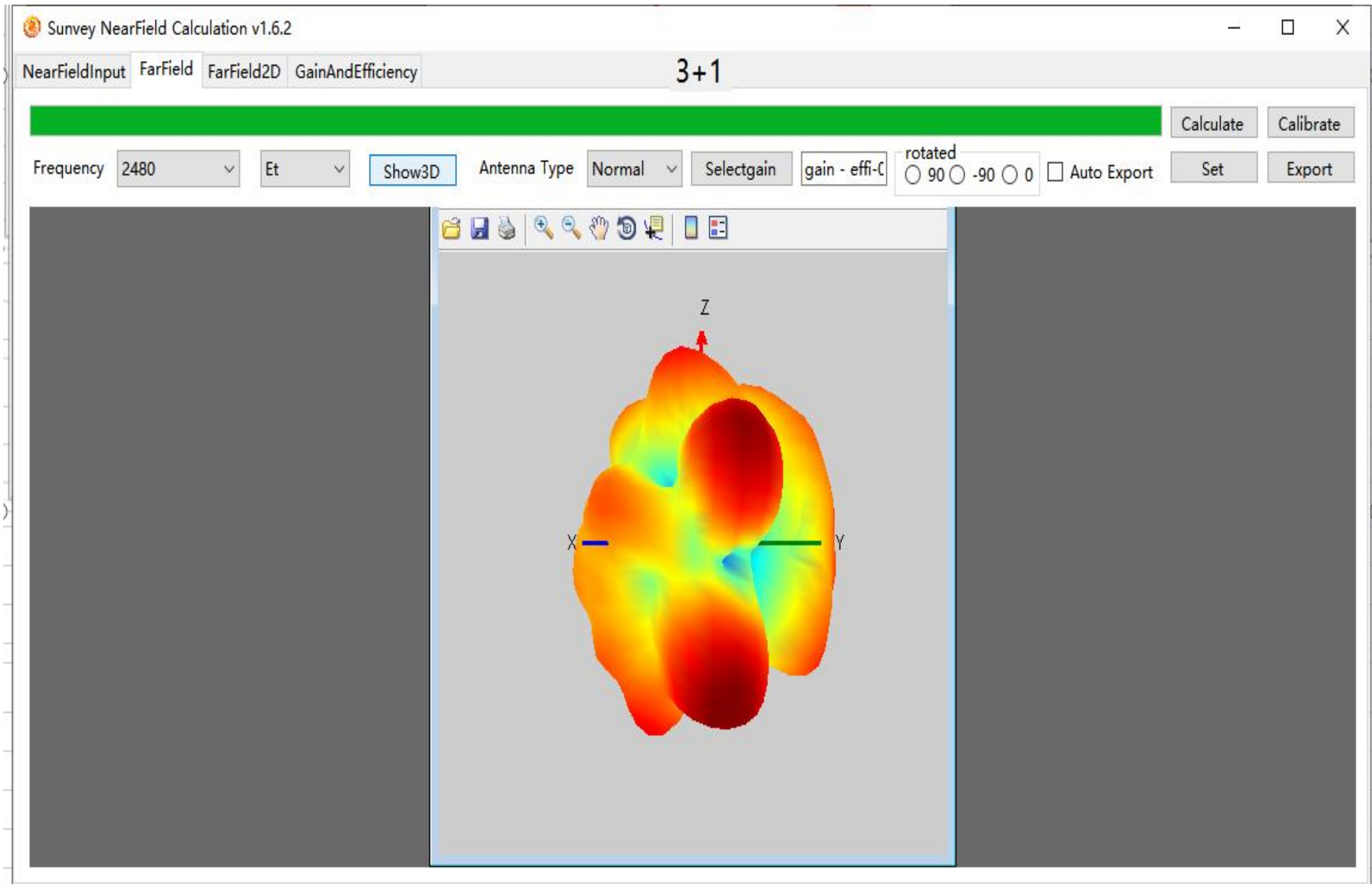
GWB antenna apple diagram



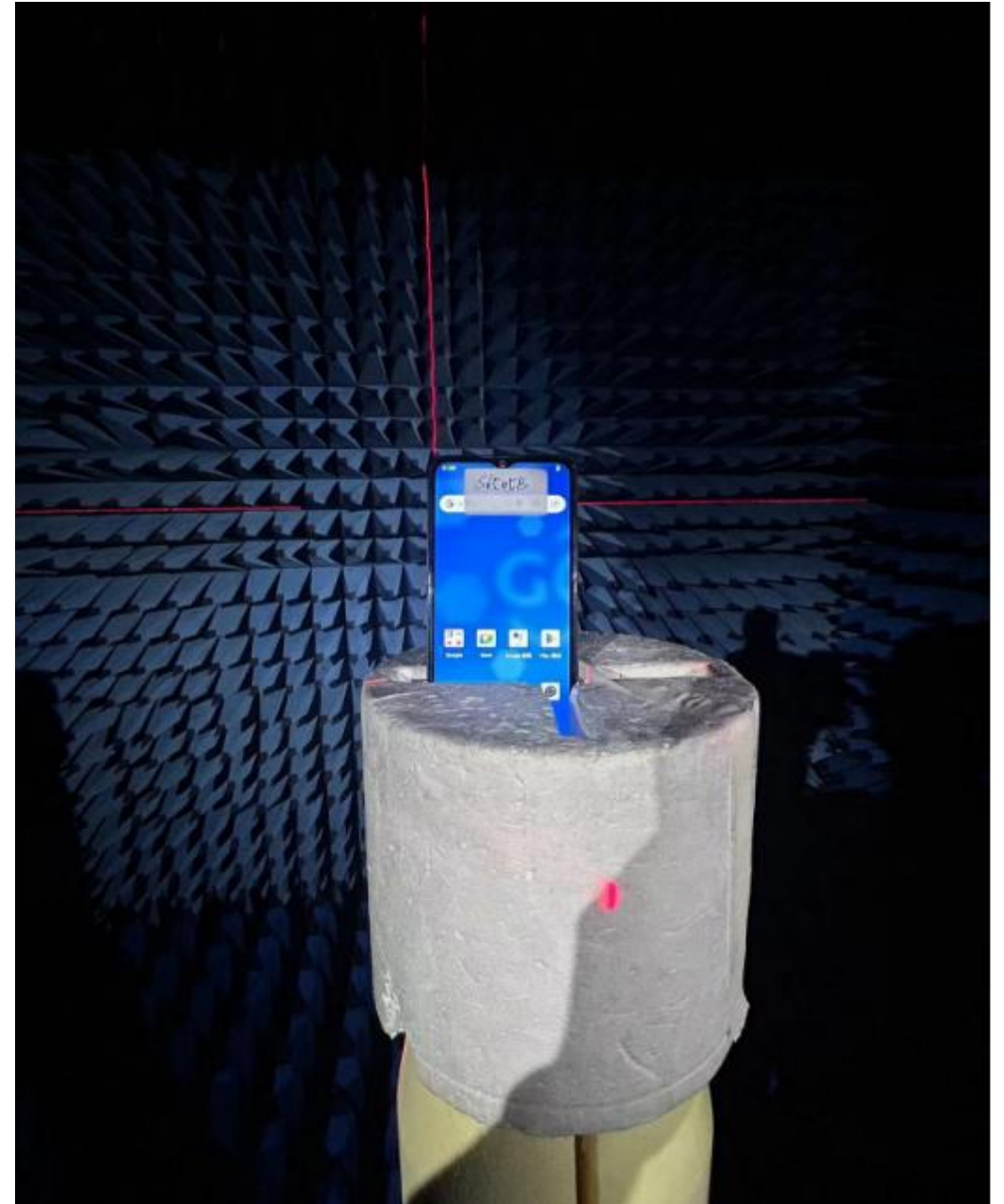
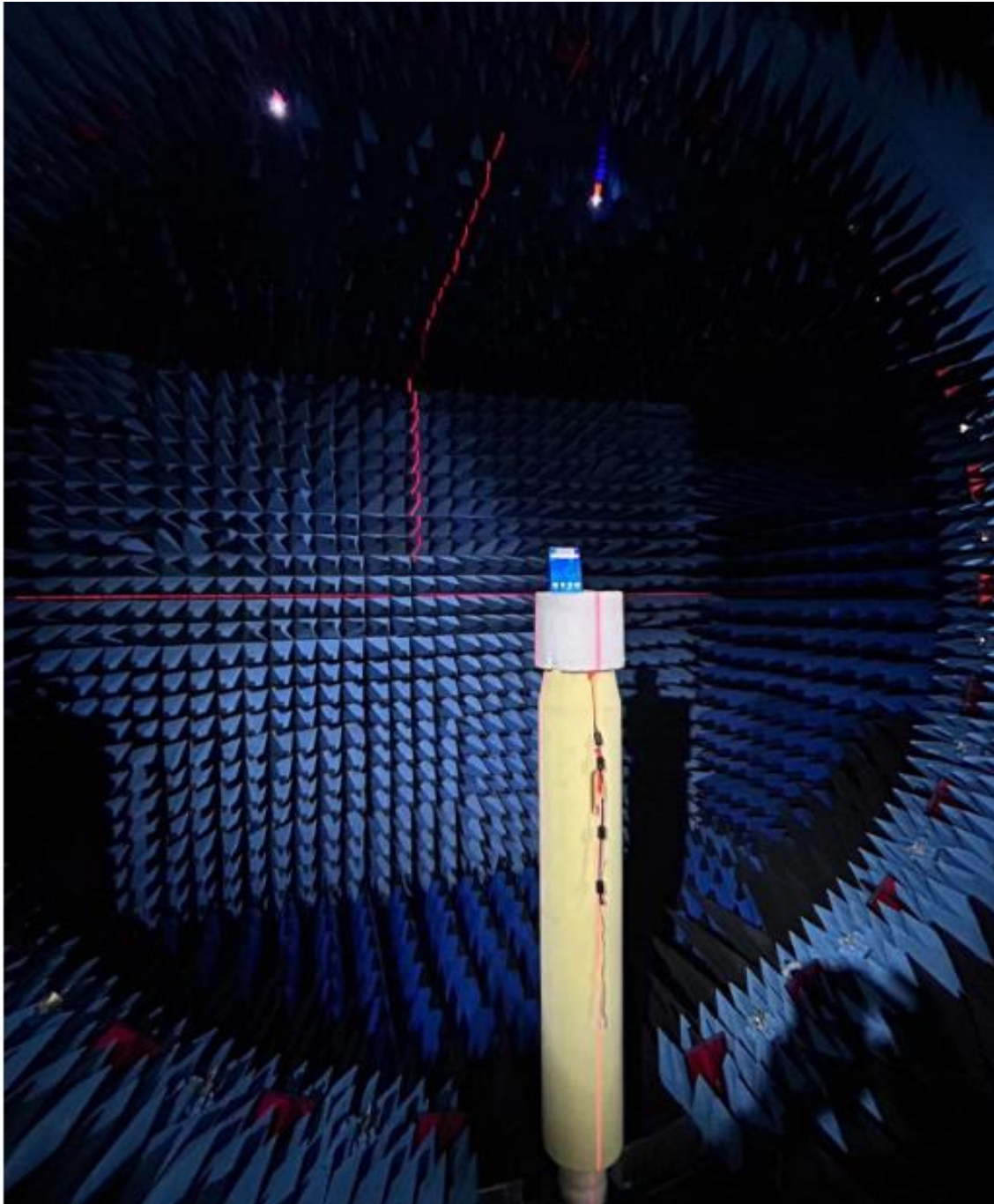
GWB antenna apple diagram



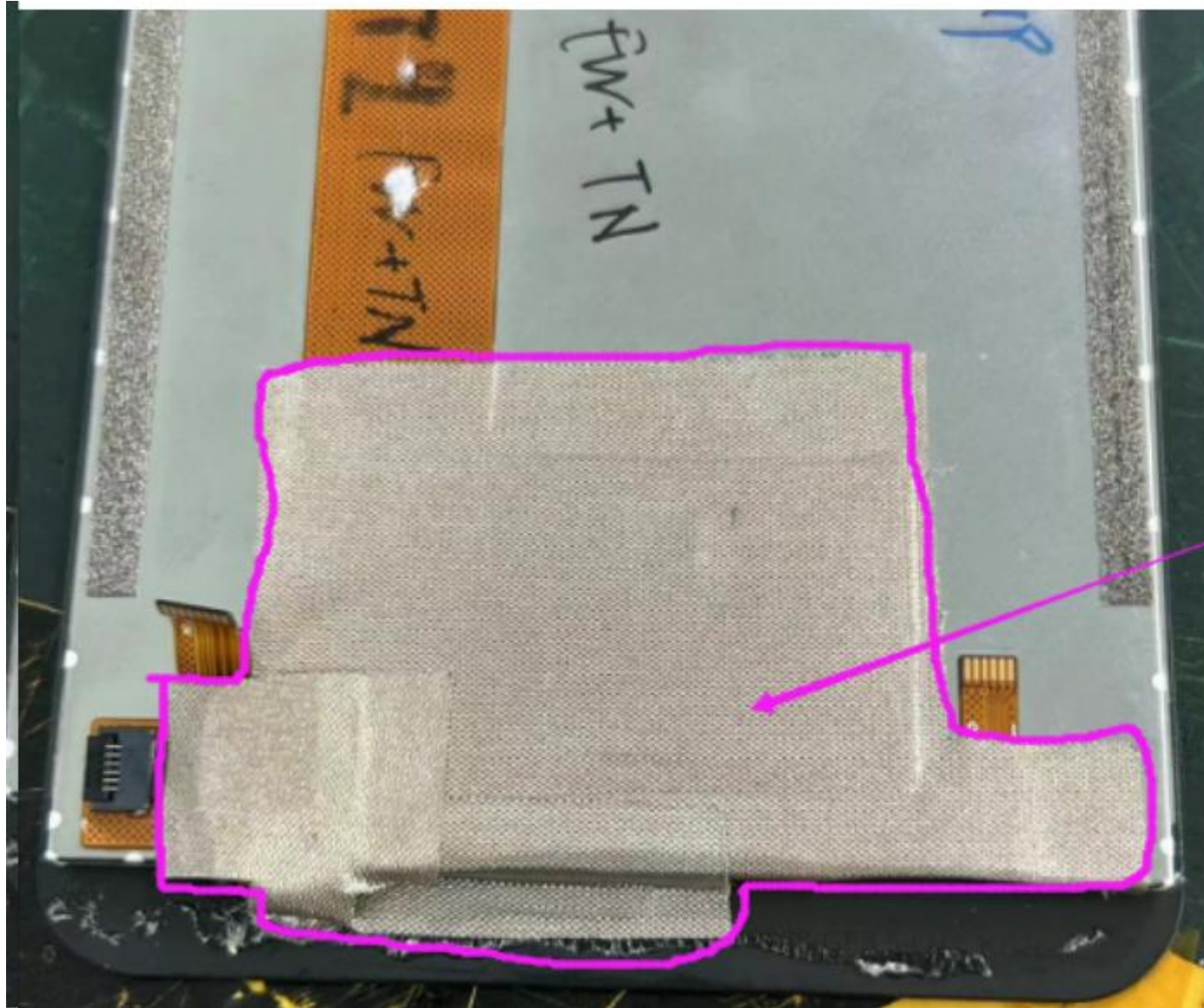
GWB antenna apple diagram



Device Test scenario

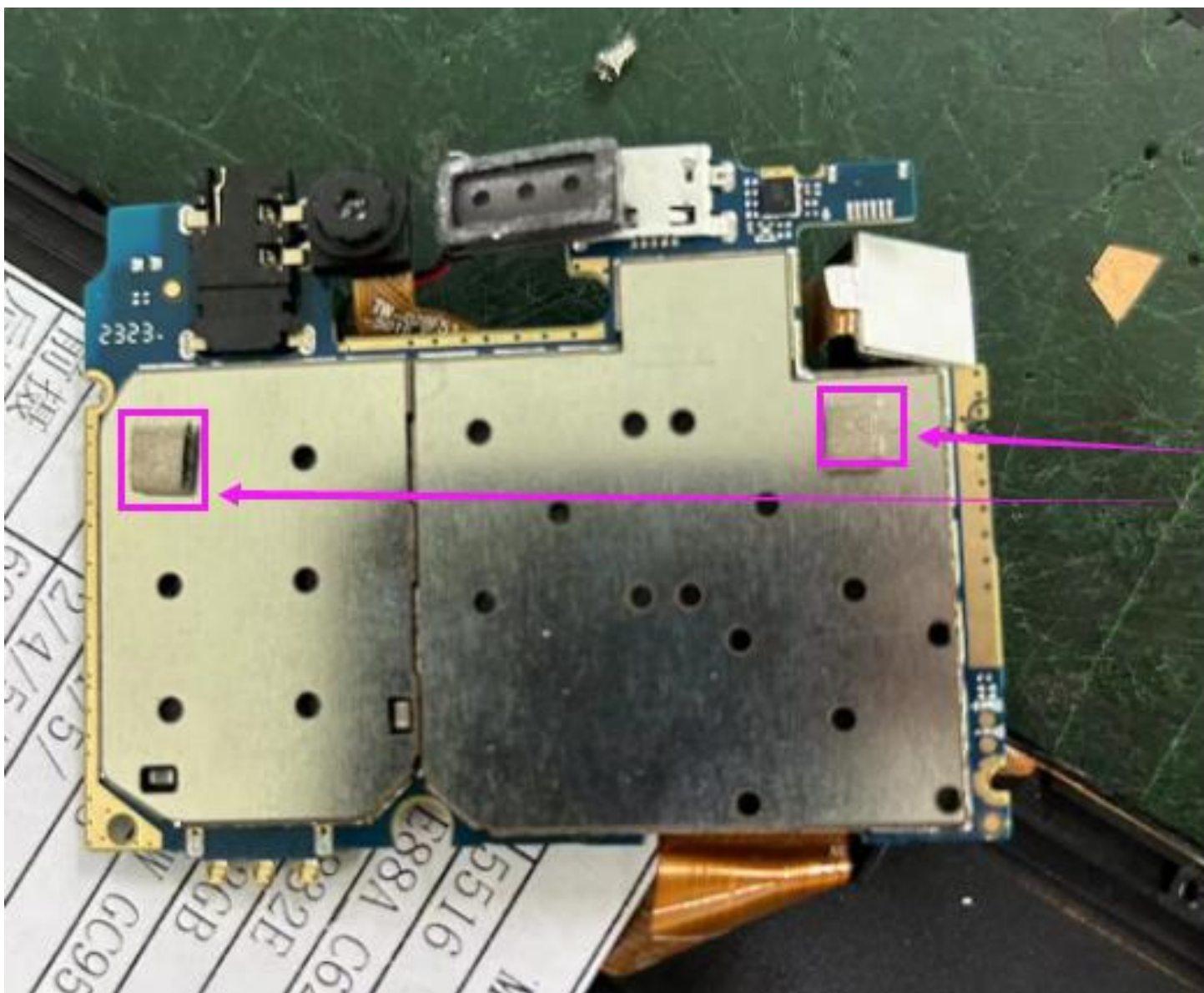


Environmental treatment



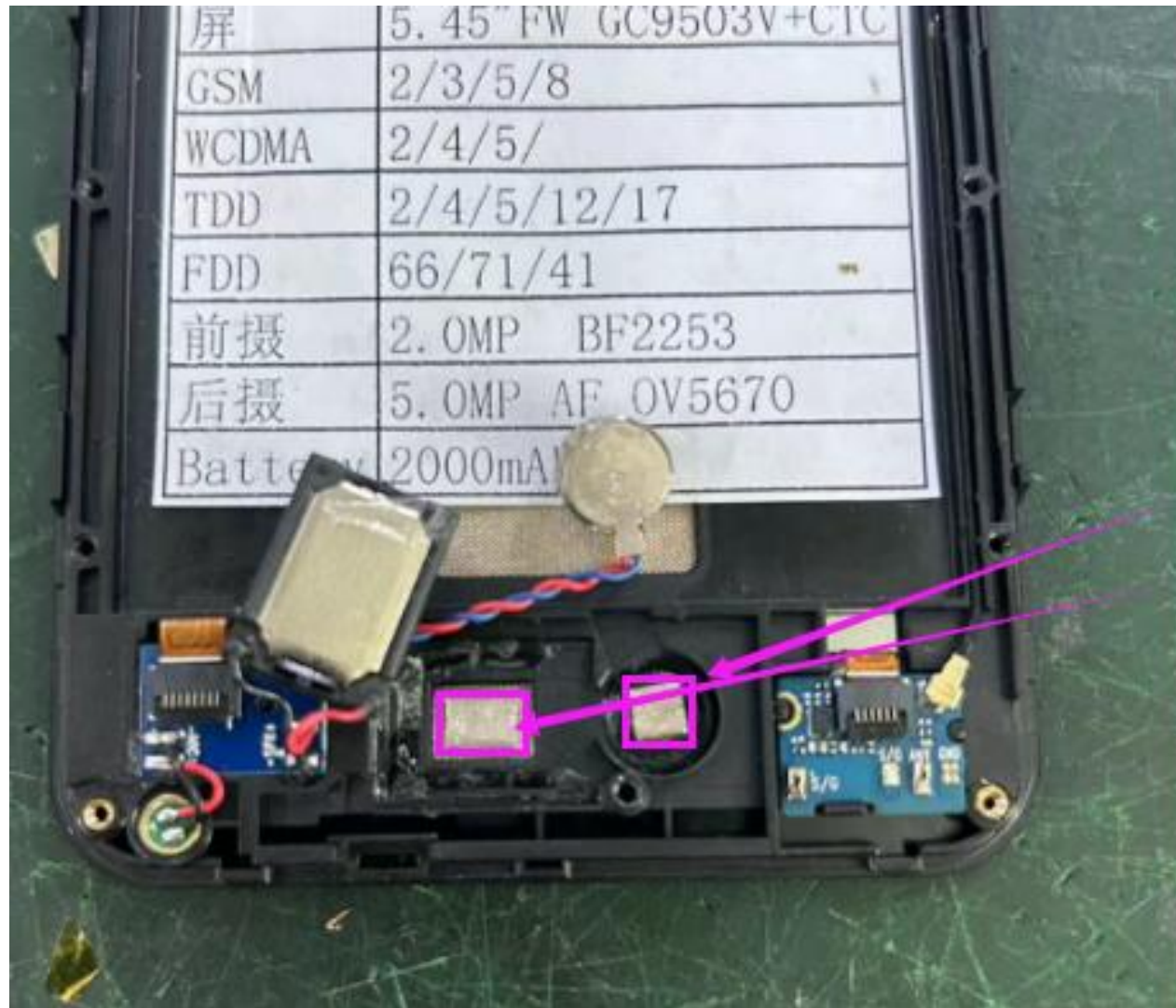
把屏FPC用导电布
按着图示方式盖
住，防止FPC对天
线的干扰。

Environmental treatment



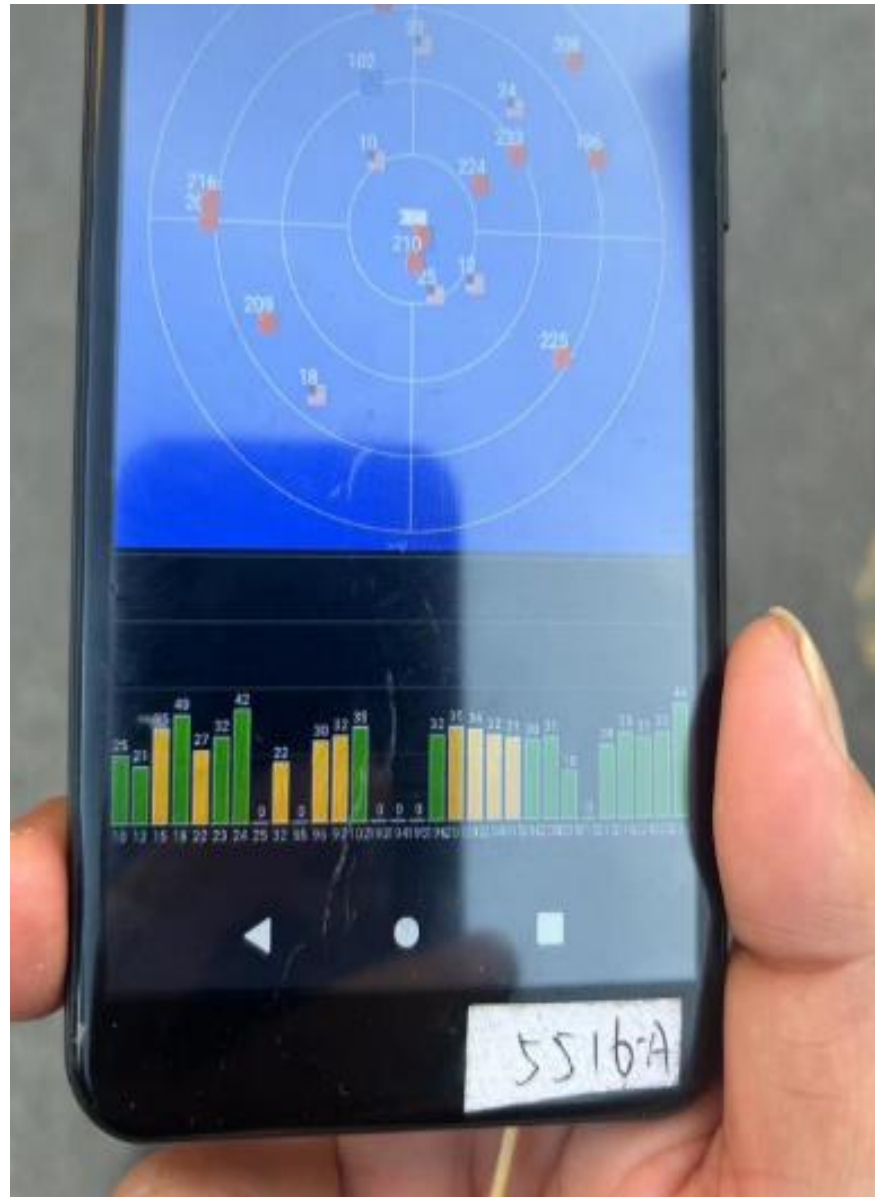
主板屏蔽罩一定要
用高导电海棉与屏
接地。

Environmental treatment



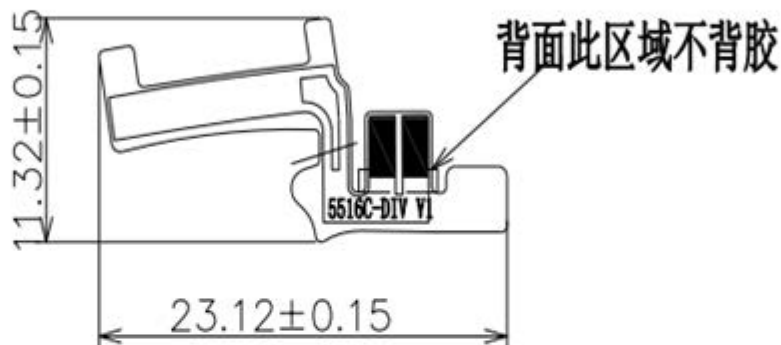
喇叭和马达用
导电海棉接地

WIFI/GPS





丝印黑色亮光字码



半对半材料

技术要求:

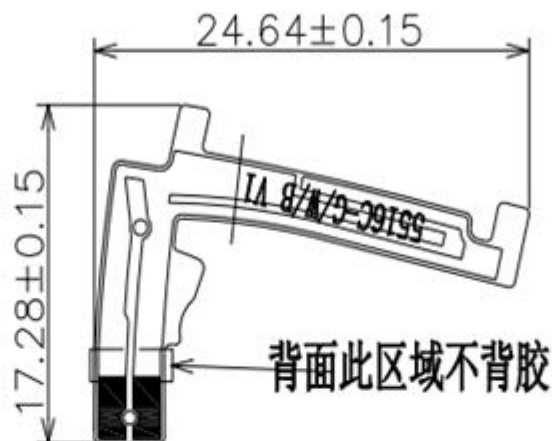
- 1、绿色为外形轮廓,白色填充部位为电气走线覆铜;
- 2、基材材质为聚酰亚胺或聚酯薄膜;
- 3、图示为正面,反面背胶,此FPC背胶3M300LSE(9471LE);
- 4、打*为必测尺寸及重点尺寸,铜箔线路所有尺寸公差不得超过 ± 0.05 ,
模具冲出外型尺寸公差不得超过 ± 0.1 ,未注尺寸以图形为准;
- 5、基材 $25\mu m$,铜箔 $18\mu m$,镀锡 $1.5\sim 5.0um$;镀金 $0.025\sim 0.075\mu m$;
走线面除焊盘外其它区域表面更光黑色;
- 6、可靠性测试:盐水喷雾试验48H\橡皮摩擦测试(100个循环)\耐磨性测试(50个循环)\
恒温恒湿试验\冷热冲击试验(12个循环)\附着力测试\金手指引脚处挠折性测试;
- 7、出现下列问题均视为不合格:起泡分层\露铜\褶皱、折痕\边缘毛边\字符不清;
- 8、包装应防潮、防潮、表面干净,完好无破损。

深圳云之上电子有限公司

第三视角				项目名称	5516C	日 期		2023-10-17			
0°~10°	±0.05		0.03			设 计					
10°~30°	±0.10		0.03	产品名称	DIY天线	审 核	MD	QYL			
30°~50°	±0.15		ø0.02				RF	XL			
50°~80°	±0.20		0.02	产品料号	YZS006-5516C-023-A0		批 准				
角度	±1°		0.05			材 质	FPC	单位	mm	比例	FIT
第1页,共1页											



丝印黑色亮光字码



半对半材料

技术要求:

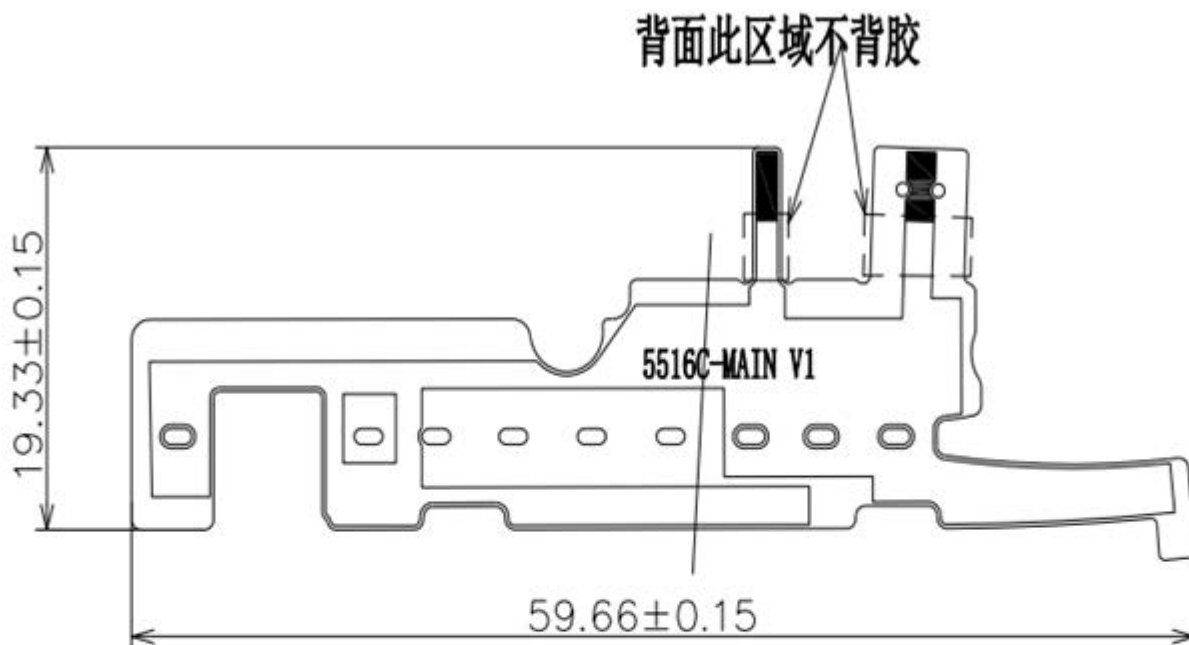
- 1、绿色为外形轮廓,白色填充部位为电气走线覆铜;
- 2、基材材质为聚酰亚胺或聚酰亚胺薄膜;
- 3、图示为正面,反面背胶,此FPC背胶3M300LSE(9471LE);
- 4、打*为必测尺寸及重点尺寸,铜箔线路所有尺寸公差不得超过 ± 0.05 ,
模具冲出外型尺寸公差不得超过 ± 0.1 ,未注尺寸以图形为准;
- 5、基材 $25\mu m$,铜箔 $18\mu m$,电镀 $1.5\sim 5.0\mu m$; 镀金 $0.025\sim 0.075\mu m$;
走线面除焊盘外其它区域表面亚光黑色;
- 6、可靠性测试:盐水喷雾试验48H\橡皮摩擦测试(100个循环)\耐磨性测试(50个循环)\
恒温恒湿试验\冷热冲击试验(12个循环)\附着力测试\金手指引脚处挠折性测试;
- 7、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;
- 8、包装应防湿、防潮、表面干净,完好无破损。

深圳云之上电子有限公司

第三视角				项目名称	5516C	日期	2023-10-17			
0°~10°	±0.05	⊕	0.03	产品名称	GWB天线	设计	审核	MD	QYL	
10°~30°	±0.10	○	0.03							
30°~50°	±0.15	◎	0.02	产品料号	YZS006-5516C-022-A0	批准	批	RF	XL	
50°~80°	±0.20	⊥	0.02							
角度	±1°	∠	0.05	材 质	FPC	单位	mm	比例	FIT	版本
第1页,共1页										A1



丝印黑色亮光字码



半对半材料

技术要求:

- 1、绿色为外形轮廓,白色填充部位为电气走线覆铜;
- 2、基材材质为聚酰亚胺或聚酰亚胺薄膜;
- 3、图示为正面,反面背胶,此FPC背胶3M300LSE(9471LE);
- 4、打*为必测尺寸及重点尺寸,铜箔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;
- 5、基材 $25\mu m$,铜箔 $18\mu m$,镀镍 $1.5\sim 5.0\mu m$;镀金 $0.025\sim 0.075\mu m$;走线面除焊盘外其它区域表面亚光黑色;
- 6、可靠性测试:盐水喷雾试验48H\橡皮摩擦测试(100个循环)\耐磨性测试(50个循环)\恒温恒湿试验\冷热冲击试验(12个循环)\附着力测试\金手指引脚处挠折性测试;
- 7、出现下列问题均视为不合格:起泡分层\露铜\折皱、折痕\边缘毛边\字符不清;
- 8、包装应防潮、防潮、表面干净,完好无破损。

深圳云之上电子有限公司

第三视角				项目名称	5516C	日期	2023-10-17			
0°~10°	± 0.05	$\oplus$	0.03	产品名称	MAIN天线	设计				
10°~30°	± 0.10	$\bigcirc$	0.03	产品料号	YZS006-5516C-021-A0	审核	MD	QYL		
30°~50°	± 0.15	$\odot$	$\phi 0.02$	材质	FPC	批准	RF	XL		
50°~80°	± 0.20	$\perp$	0.02			单位	mm	比例	FIT	版本
角度	$\pm 1^\circ$	$\angle$	0.05							A1

第1页,共1页