

1. Antenna Specification/天线标准

Antenna Specification/天线技术参数

Electrical Specification/电气特性

Item/目录	Specification/规格		Comment/备注
Freq. Range/频段范围	2400MHz-2500MHz/5150MHz-5850MHz		
Impedance/阻抗	50 (Ω)		
VSWR/驻波比	<10.0	<8.0	
Directional/辐射方向	Omni directional/全向辐射		
Polarization/极化形式	Vertical polarization/垂直极化		
Peak Gain/峰值增益	-2.21dBi	2.88dBi	
Test condition/测试条件	passive test (无源测试)		
Total Efficiency/无源效率	15%	15%	

Mechanical Specification/机械指标

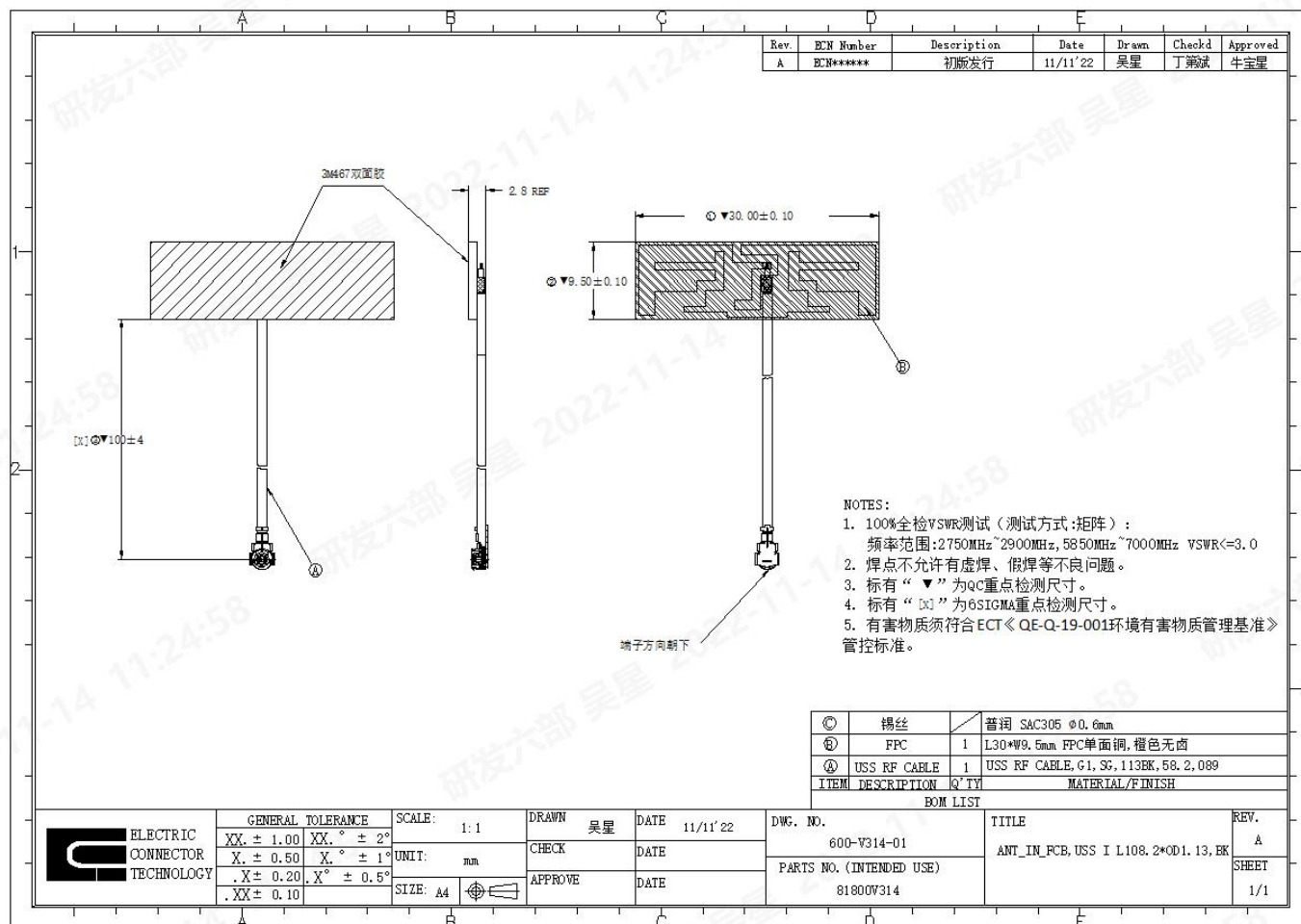
Antenna type/天线类型	FPC 天线		
Connector Type/连接器类型	USS RF PLUG 1 代端子		
RF Cable Type/射频线型号	USS RF Coaxial Cable,32AWG D=1.13(S+T)黑色		
Connector Torque Test/连接器扭力	N/A		
Connector Pull Test/连接器拉力	$\geq 1.0\text{Kg}$		
Salt Spray/盐雾测试	24 (H)		

Environmental Specification /环境指标

Operating temp/工作温度	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$		
Storage temp/存储温度	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$		

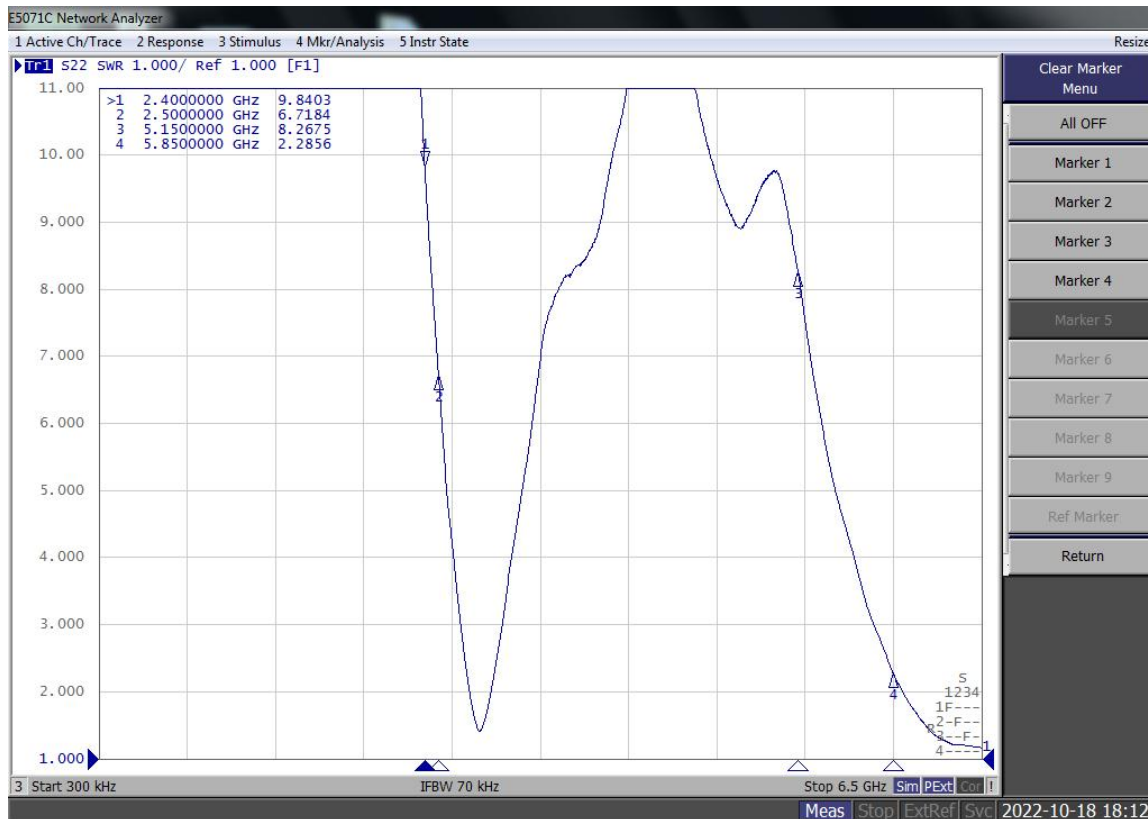
2. Antenna Picture/天线图片

3. DWG/工程图纸



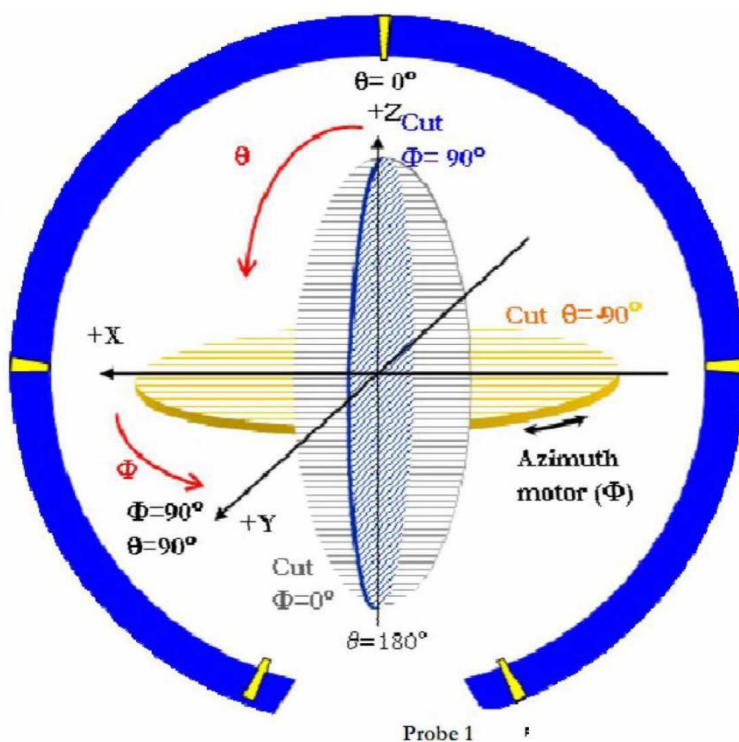
4. Antenna test result/测试结果

4.1 Return loss/Smith chart/VSWR/回波损耗/史密斯图/驻波比

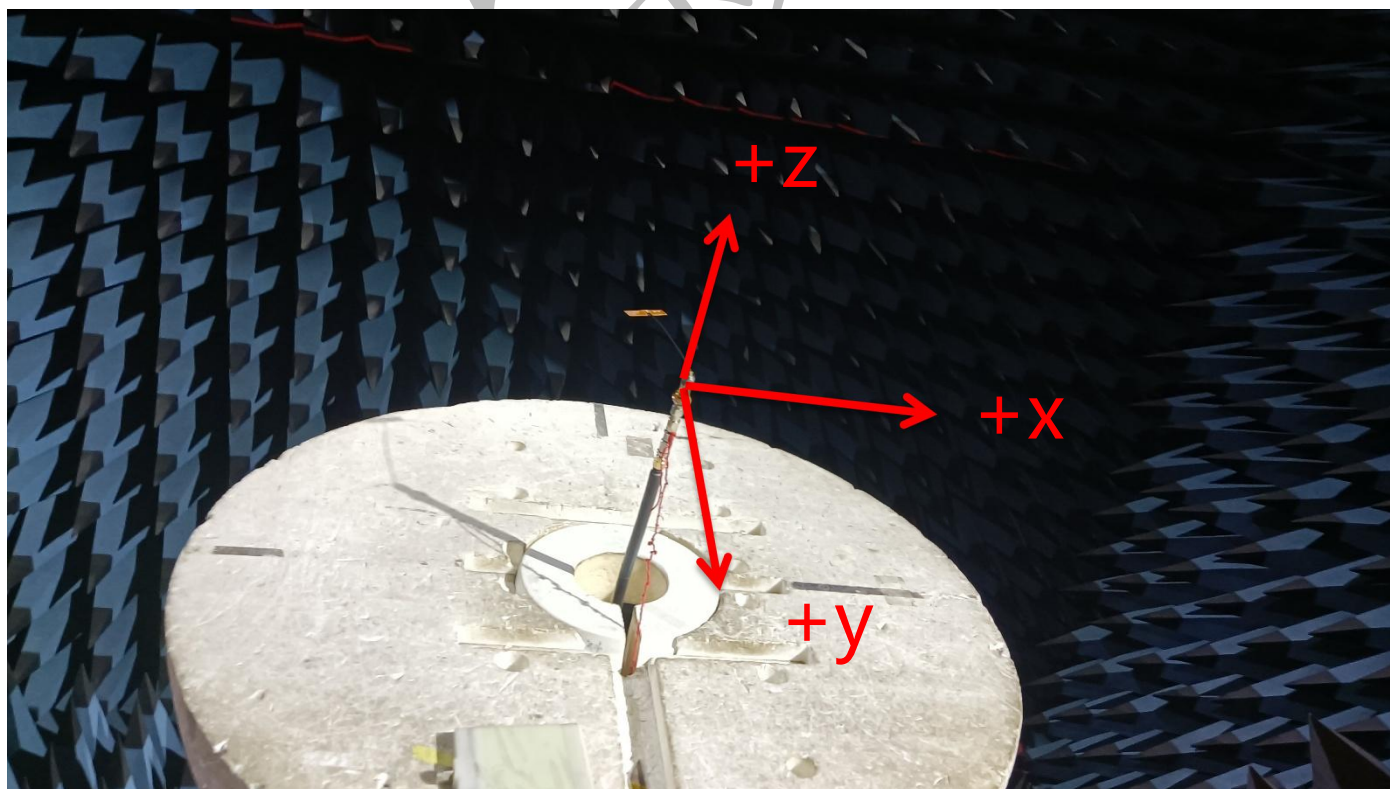


4.2 The gain and total efficiency test/增益和效率测试

4.2.1 The definition of coordinate system/坐标系定义-Satimo SG24



The coordinate system of Chamber/暗室坐标系



The production test position/天线测试放置位置

4.2.2 The test result of total efficiency and total gain/天线效率及增益测试结果

2400MHz-2500MHz

Frequency	Efficiency(%)	Gain (dBi)
2400MHz	16%	-3.43
2405MHz	18%	-3.10
2410MHz	19%	-2.79
2415MHz	20%	-2.72
2420MHz	20%	-2.90
2425MHz	19%	-3.09
2430MHz	19%	-3.22
2435MHz	19%	-3.21
2440MHz	20%	-3.22
2445MHz	20%	-3.15
2450MHz	22%	-2.91
2455MHz	23%	-2.64
2460MHz	25%	-2.27
2465MHz	26%	-2.21
2470MHz	26%	-2.30
2475MHz	26%	-2.45
2480MHz	26%	-2.61
2485MHz	26%	-2.69
2490MHz	26%	-2.80
2495MHz	26%	-2.84
2500MHz	27%	-2.63
AVG	22%	-2.82

5150MHz-5850MHz

Frequency	Efficiency(%)	Gain (dBi)
5150MHz	16%	-3.93
5200MHz	21%	-2.36
5250MHz	25%	-1.56
5300MHz	24%	-1.40
5350MHz	32%	-0.16
5400MHz	29%	-0.39
5450MHz	31%	-0.12
5500MHz	34%	0.10
5550MHz	34%	0.04



5600MHz

44%

0.49

5650MHz

45%

0.50

5700MHz

51%

1.29

5750MHz

54%

1.65

5800MHz

52%

1.73

5850MHz

67%

2.88

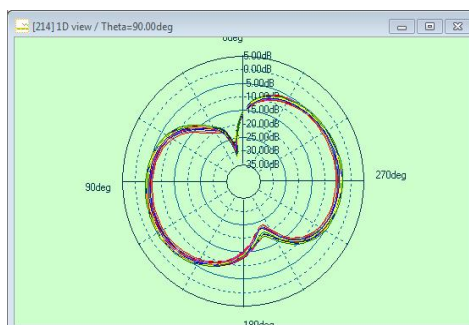
AVG

37%

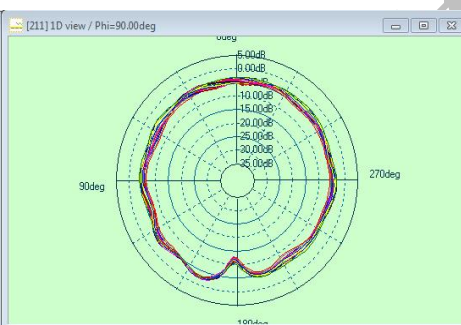
-0.08

4.2.3 The antenna radiation pattern(2D)/天线辐射方向图 (2D)

2400MHz -2500MHz



XOY

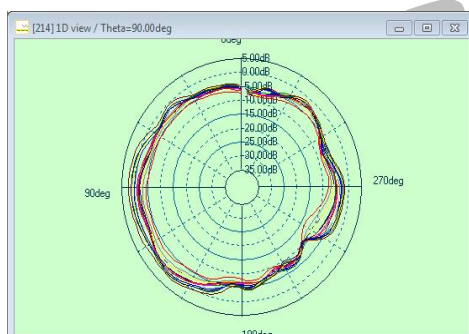


YOZ

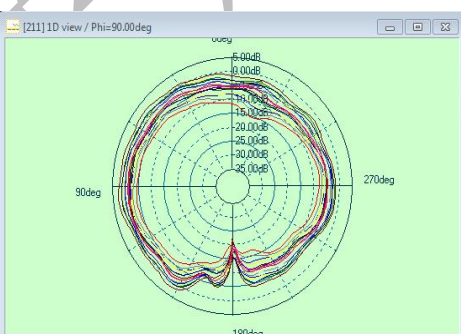


XOZ

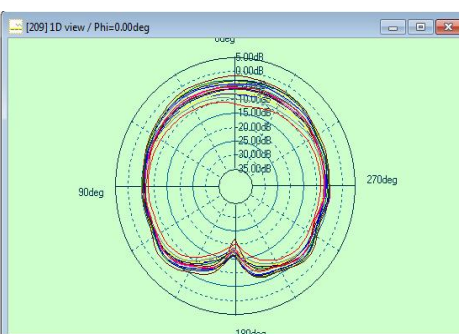
5150MHz -5850MHz



XOY



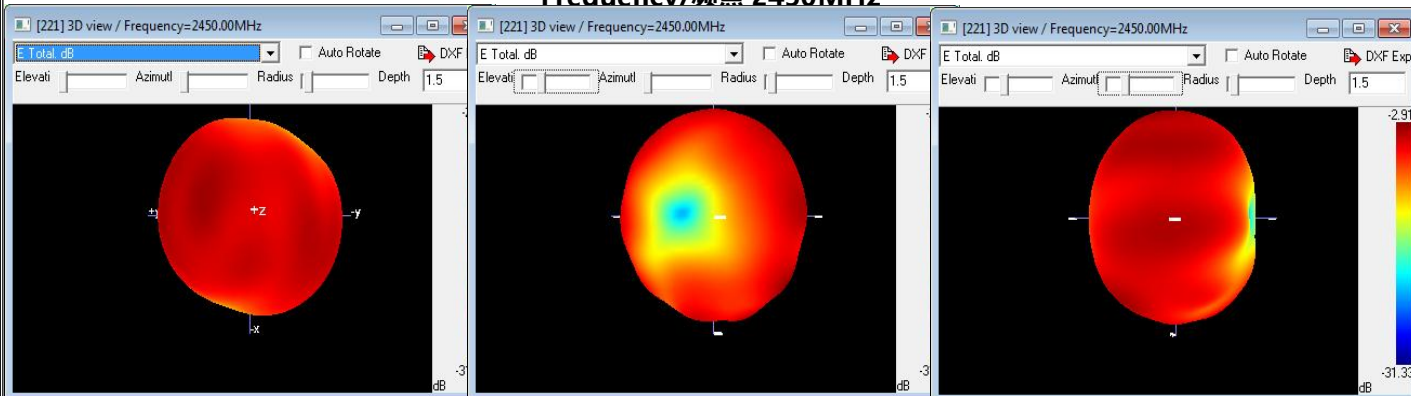
YOZ



XOZ

4.2.4 The antenna radiation pattern(3D)/天线辐射方向图 (3D)

Frequency/频点 2450MHz

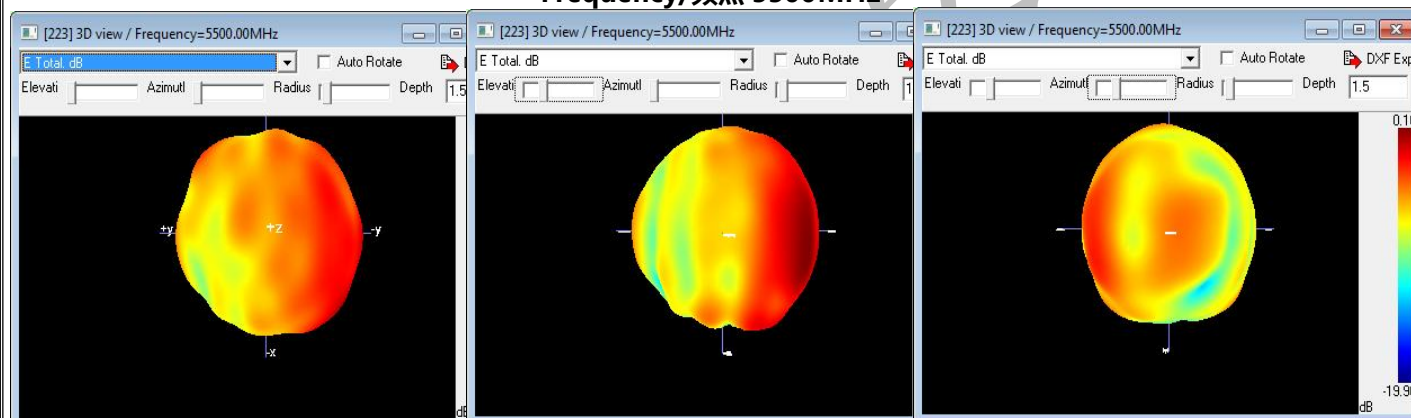


XOY

YOZ

XOZ

Frequency/频点 5500MHz



XOY

YOZ

XOZ