

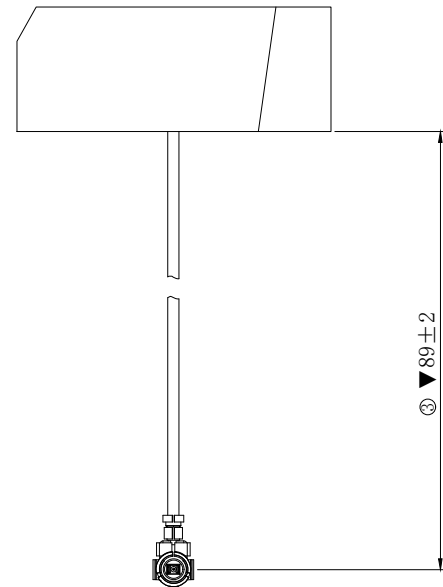
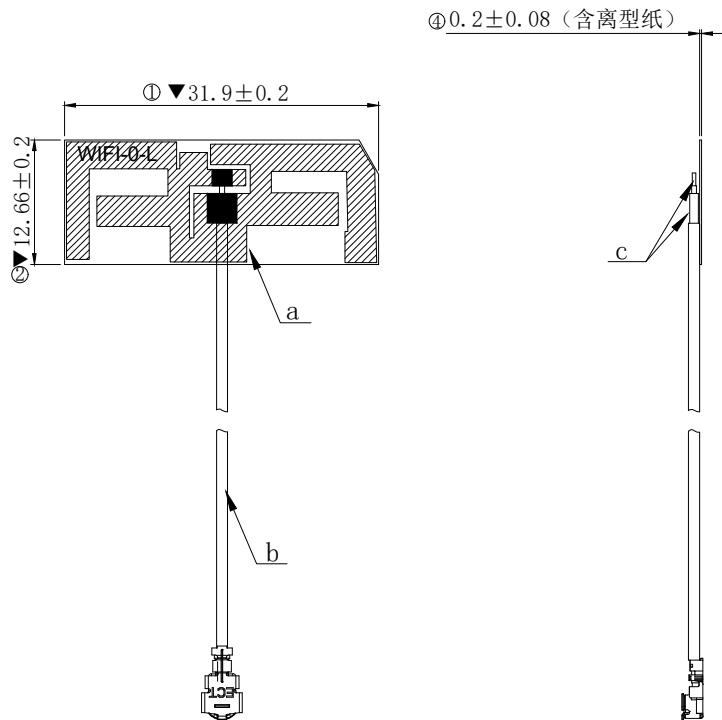
1. Antenna Specification/天线标准

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	≥1.0Kgf		
Salt Spray/盐雾测试	24 (H)		
Environmental Specification /环境指标			
Operating temp/工作温度	-40℃ ~ +75℃		
Storage temp/存储温度	-40℃ ~ +75℃		

2. Antenna Picture/天线图片



REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN251288	FIRST RELEASE	03/18' 25	丁第斌	胡鹏	黄颖



NOTES:

- 焊接不能虚焊、假焊，焊点须饱满。
WELDING CAN NOT BE FALSE WELDING,
WELDING SPOT MUST BE FULL.
- 标有“④”为FAI首件全检尺寸。
MARKED“④”WAS FAI DIMENSIONS.
- 标有“▼”为QC重点检测尺寸。
MARKED“▼”WAS CRITICAL DIMENSIONS.
- 所有材料需符合ROHS2.0、REACH和无卤。
ALL MATERIALS MUST CONFORM TO ROHS2.0,REACH AND HALOGEN-FREE.
无卤要求: Br≤900PPM, Cl≤900PPM, Br+Cl≤1500PPM。
HALOGEN-FREE REQUEST:Br≤900PPM, Cl≤900PPM, Br+Cl≤1500PPM.
- VSWR测试一致性 (VSWR CONSISTENCY TEST)
VSWR测试频率 (VSWR TEST FREQUENCY): xxxxxMHz.



Connector facing down



Connector facing up

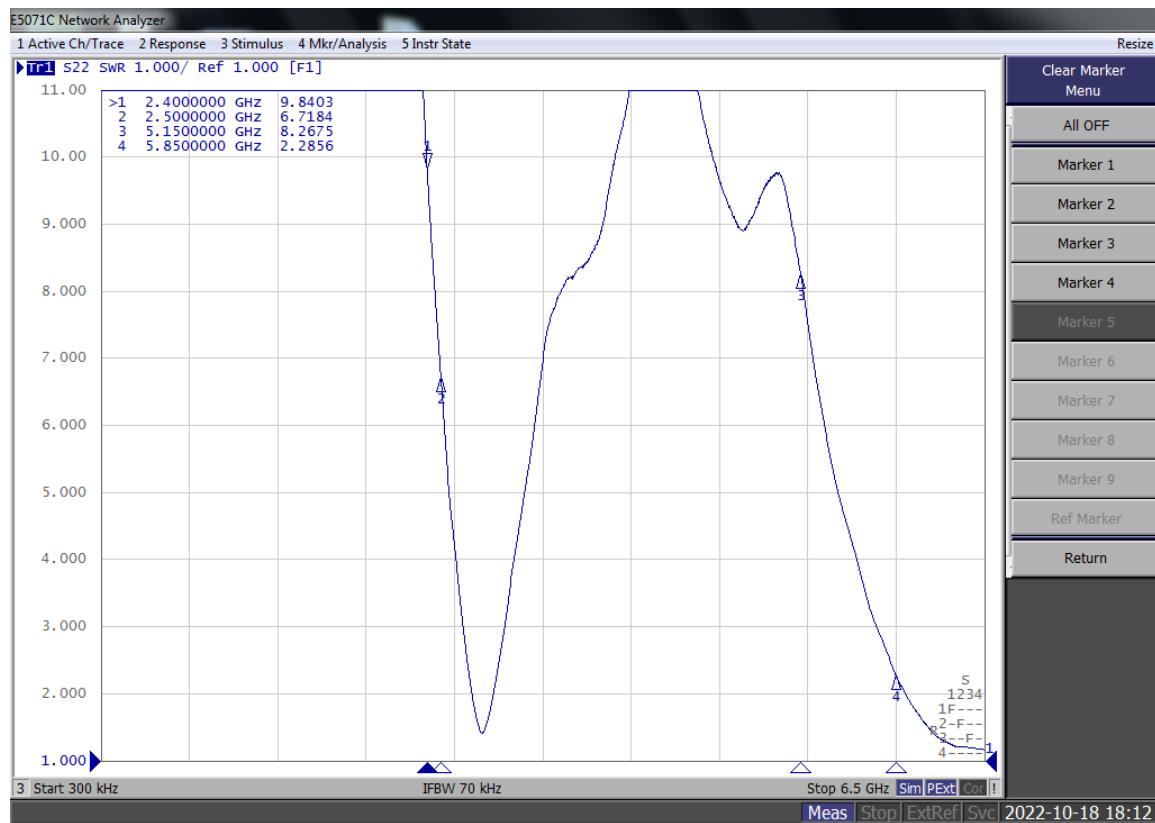
c	Sn	1	Purun, 0D0.6mm
b	Cable Assy	1	USS RF CABLE试,G1,SG,113BK,98,089
a	FPC	1	FPC, 31.9*12.66*T0.13mm
NO	ITEM	Q' TY	MATERIAL/FINISH



GENERAL TOLERANCE		SCALE:	DRAWN:	DATE:	DWG. NO:	TITLE:	REV.
XX. ± 1	XX. ° ± 2°	1:1	丁第斌	03/18' 25	600-1020092-01	A28-WIFI-0-L Customer drawings 客户料号: 115-00048-00 wifi0	X1
X. ± 0.5	X. ° ± 1.5°			UNIT:			CHECK:
. X ± 0.3	X. ° ± 1°	mm	APPROVE:	DATE:	PARTS NO. (INTENDED USE): 8181020092		
. XX ± 0.10	. X ° ± 0.5°			SIZE: A4			

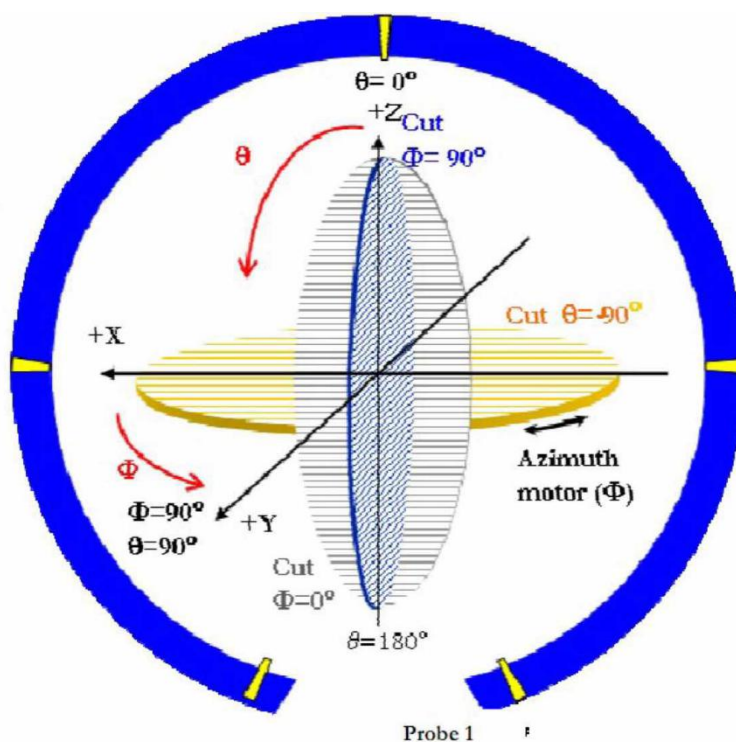
4. Antenna test result/测试结果

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

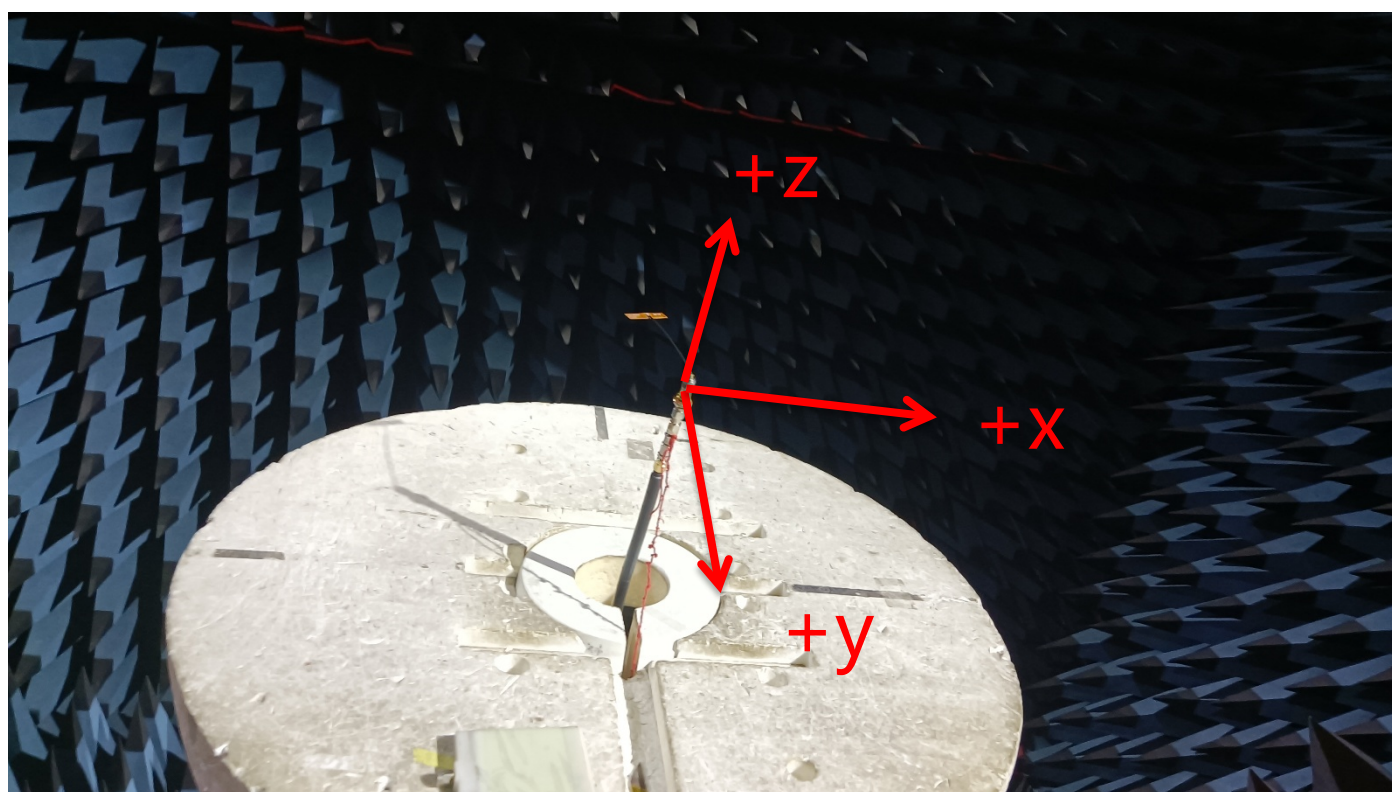


4.2 The gain and total efficiency test/增益和效率测试

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

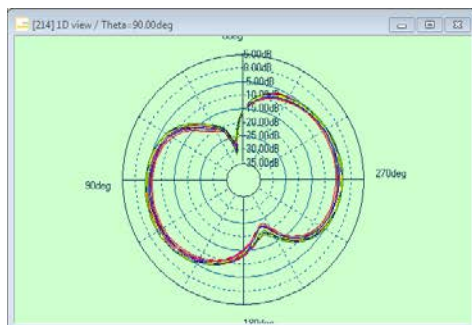
5150MHz-5850MHz

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

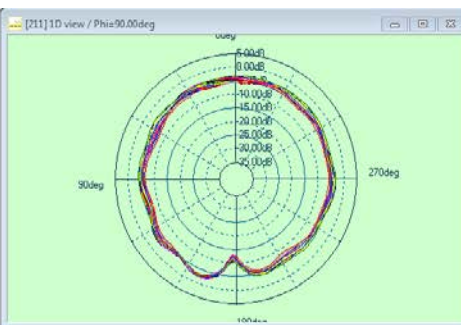
5600MHz	44%	0.49
5650MHz	45%	0.50
5700MHz	51%	1.29
5750MHz	54%	1.65
5800MHz	52%	1.73
5850MHz	67%	2.88
AVG	37%	-0.08

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

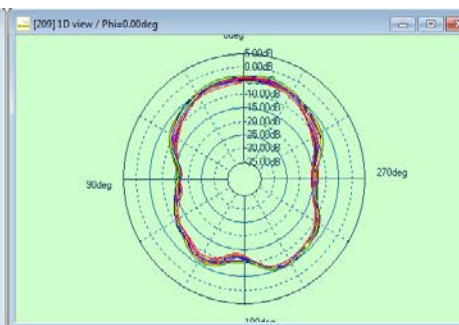
2400MHz -2500MHz



XOY

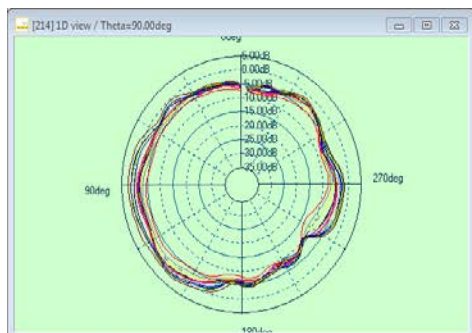


YOZ

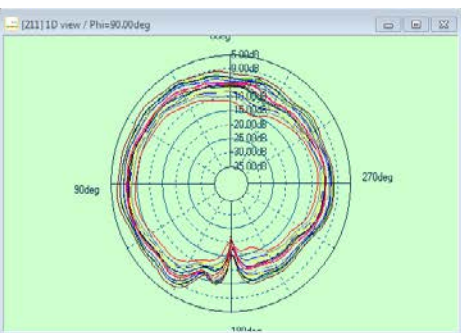


XOZ

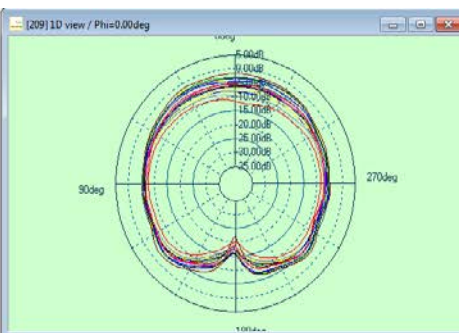
5150MHz -5850MHz



XOY



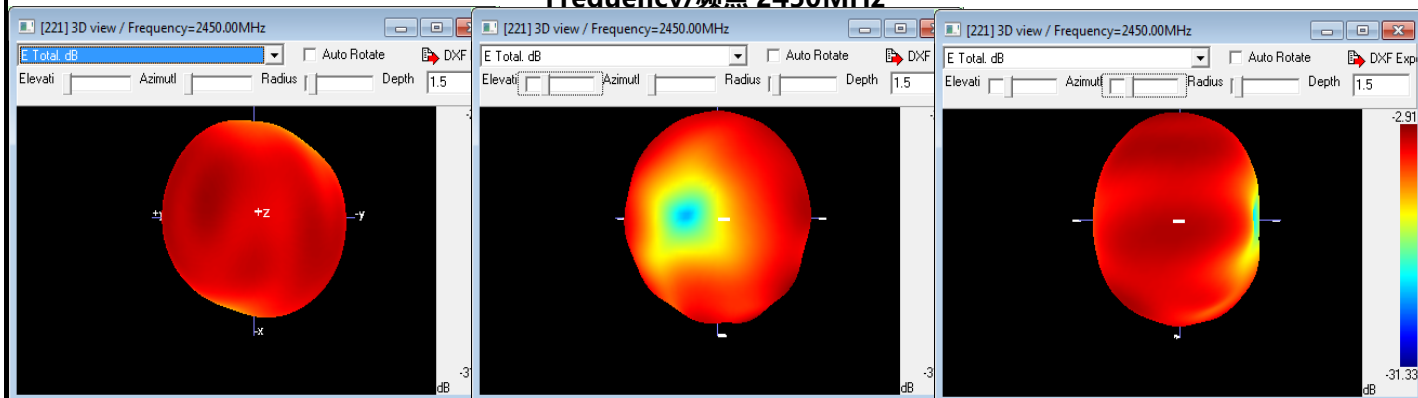
YOZ



XOZ

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

Frequency/频点 2450MHz

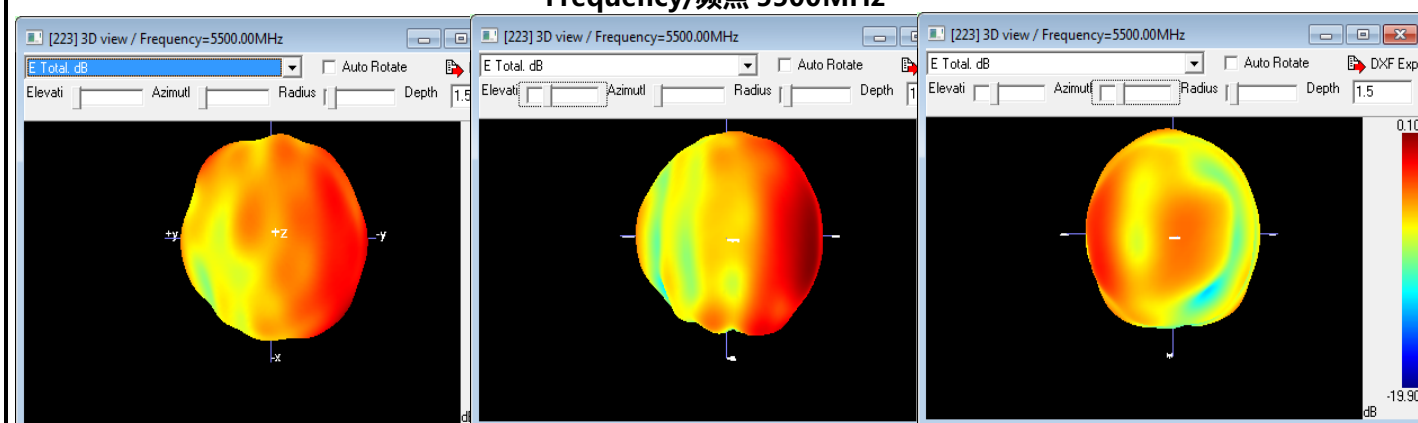


XOY

YOZ

XOZ

Frequency/频点 5500MHz



XOY

YOZ

XOZ