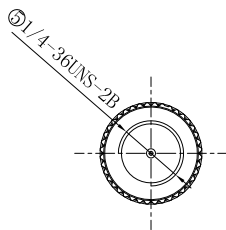
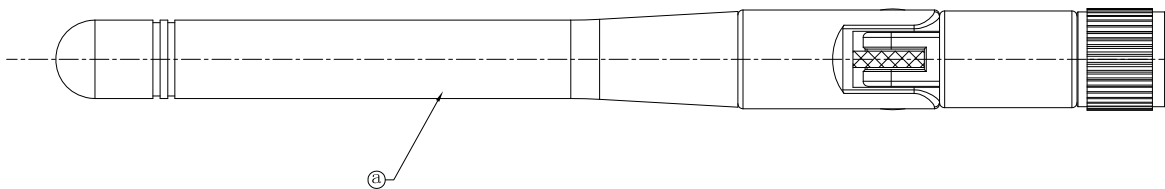
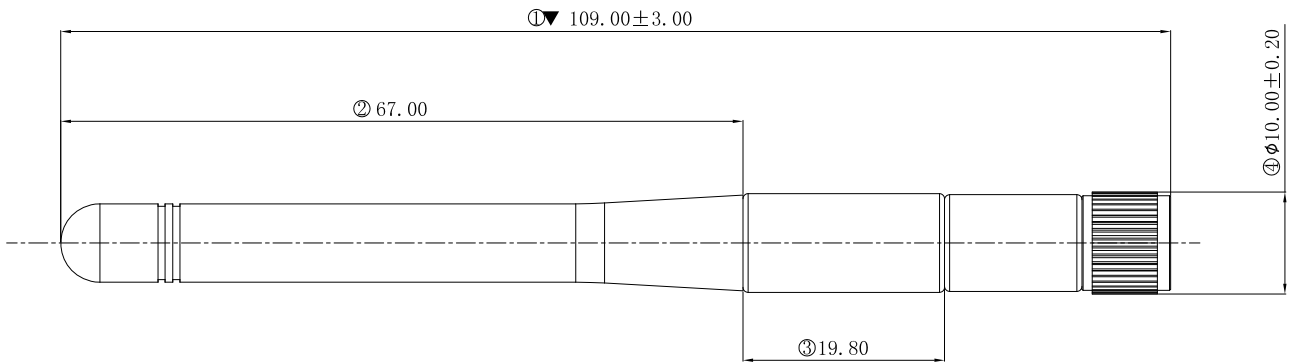


1. Antenna Specification/天线标准

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	2400-2500&5150-5850(MHz)	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	2400-2500&5150-5850(MHz) ≤ 2.0	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Vertical	
Peak Gain/峰值增益	2.74(dBi) /3.44(dBi)	
Test condition/测试条件	passive test (无源测试)	
Total Efficiency/无源效率	> 70% / > 65%	
Mechanical Specification/机械指标		
Antenna type/天线类型	Whip antenna	
Connector Type/连接器类型	SMA-J(公头公针)	
RF Cable Type/射频线型号	RG178	
Connector Torque Test/连接器扭力	N/A	
Connector Pull Test/连接器拉力	≥ 3.0 Kgf	
Salt Spray/盐雾测试	48 (H)	
Environmental Specification /环境指标		
Operating temp/工作温度	-40°C ~ +75°C	
Storage temp/存储温度	-40°C ~ +75°C	

2. Antenna Picture/天线图片

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
A	ECN200148	初版发行	07/17' 20	梁兑泉	丁第斌	张英杰



NOTES:

- 各部件装配完后不得有油污、划痕、变形等外观不良。
- 各部件装配完成后无明显色差。
- 本体与连接轴的装配后保持力：3KG MIN；
连接器扭力为：0.2~0.6 Kg-cm。
- 标有“▼”为QC重点检测尺寸。
- 频率：2400-2500&5150-5850 MHz, VSWR: ≤2.0,
测试要求：VSWR全检，矩阵测试。
- 有害物质须符合ECT《QE-Q-19-001环境有害物质管理基准》管控标准。

a	ANT	1	2.4-5.8G_110*10_SMA-J_黑色胶杆天线
ITEM	PART NAME	Q' TY	MATERIAL / FINISH



GENERAL TOLERANCE	
XX. ± 2.00	XX. ° ± 3°
X. ± 1.00	X. ° ± 2°
.X ± 0.50	.X ° ± 1°

SCALE:	1:1
UNIT:	mm
SIZE:	A4

DRAWN:	梁兑泉
CHECK:	
APPROVE:	

DATE:	07/17' 20
DATE:	
DATE:	

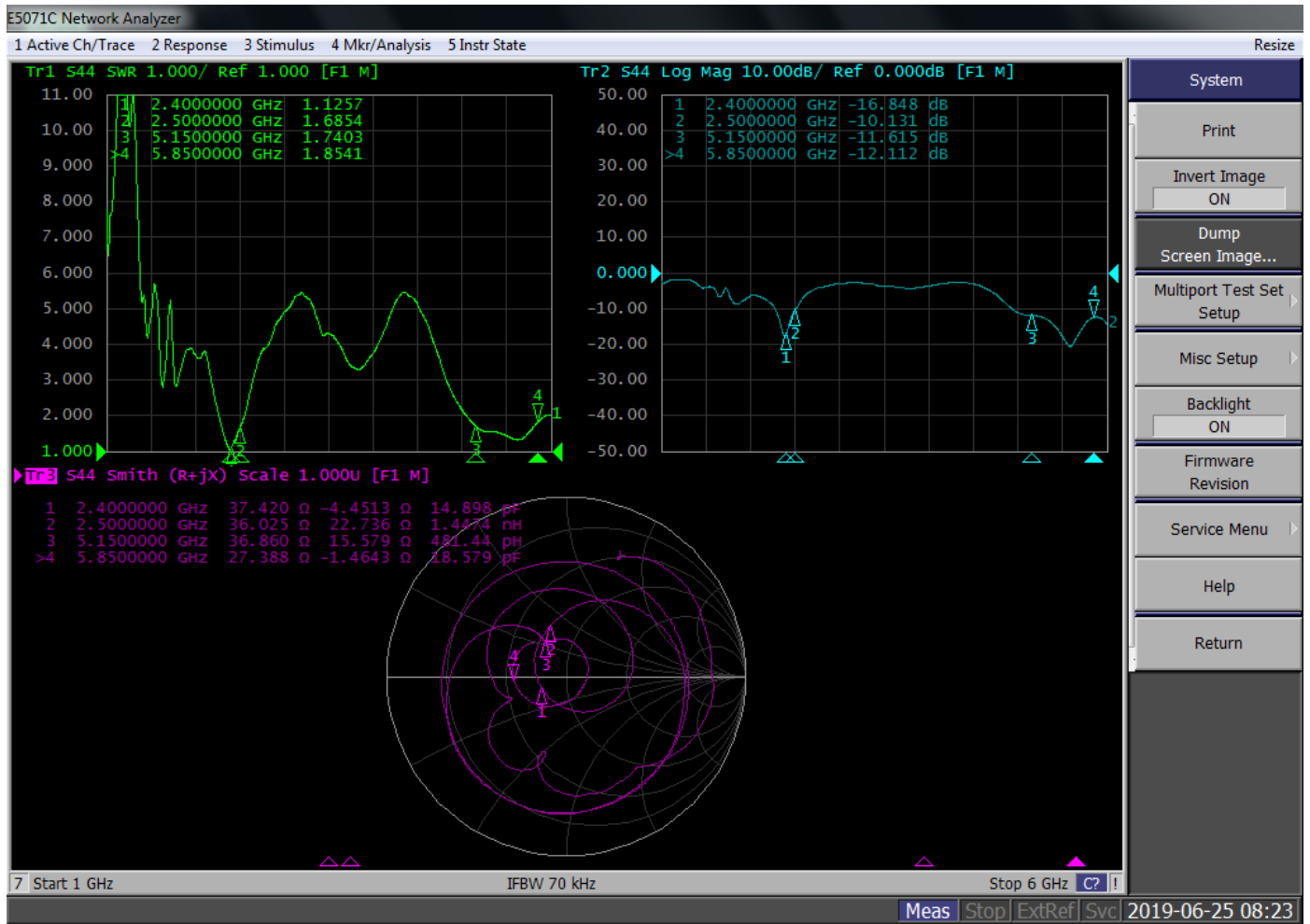
DWG. NO:	600-U252-01
PARTS NO. (INTENDED USE):	81800U252

TITLE:	2.4-5.8G_110*10_SMA-J_黑色胶杆天线
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REV.	A
SHEET:	1/1

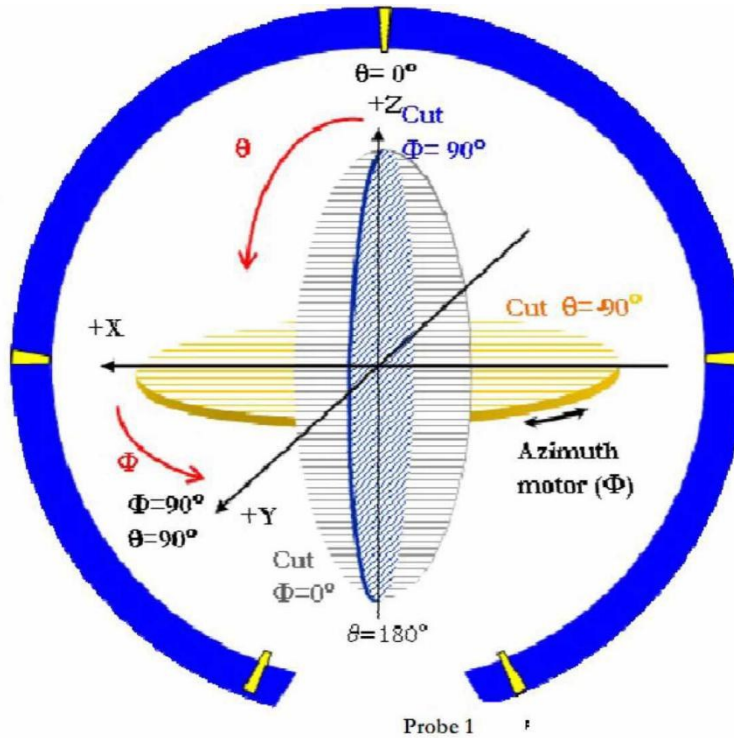
4. Antenna test result/测试结果

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

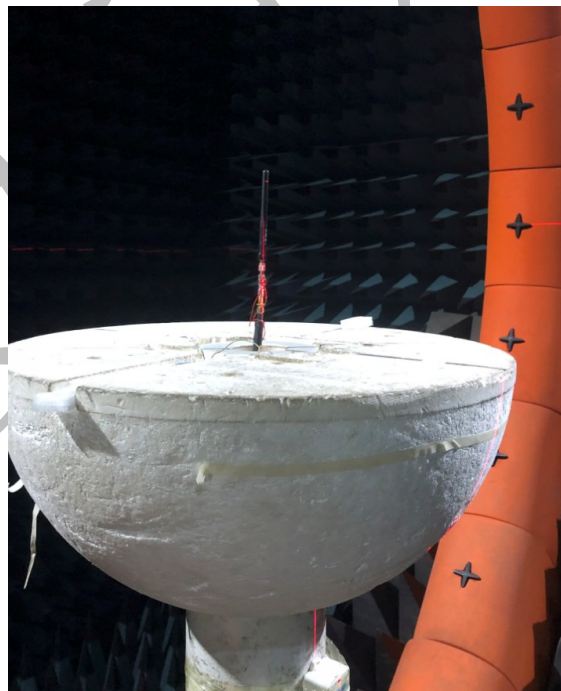


4.2 The gain and total efficiency test/增益和效率测试

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

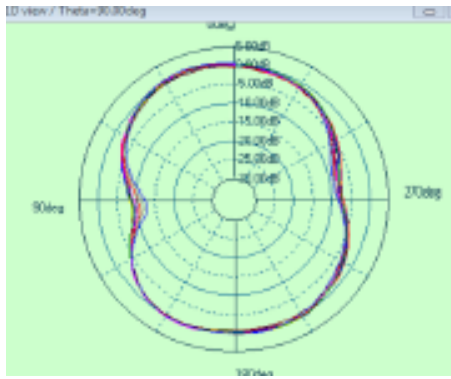
Frequency	Efficiency(%)	Gain (dBi)
2400MHz	72%	2.41
2410MHz	77%	2.66
2420MHz	76%	2.74
2430MHz	74%	2.52
2440MHz	75%	2.62
2450MHz	73%	2.39
2460MHz	72%	2.21
2470MHz	77%	2.75
2480MHz	72%	2.36
2490MHz	74%	2.56
2500MHz	71%	2.15
AVG	74%	2.47

5150MHz-5850MHz

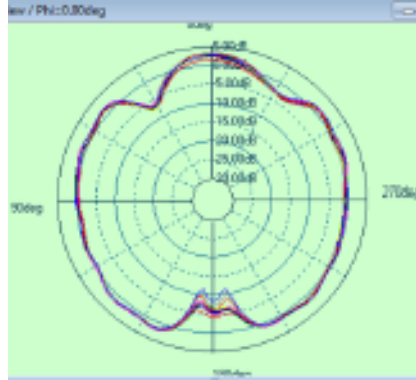
Frequency	Efficiency(%)	Gain (dBi)
5150MHz	72%	2.58
5200MHz	72%	2.60
5250MHz	71%	2.64
5300MHz	69%	2.53
5350MHz	73%	3.05
5400MHz	75%	3.26
5450MHz	73%	3.17
5500MHz	73%	3.31
5550MHz	74%	3.44
5600MHz	72%	3.00
5650MHz	67%	2.56
5700MHz	70%	2.90
5750MHz	71%	2.79
5800MHz	72%	2.61
5850MHz	75%	3.20
AVG	72%	2.91

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

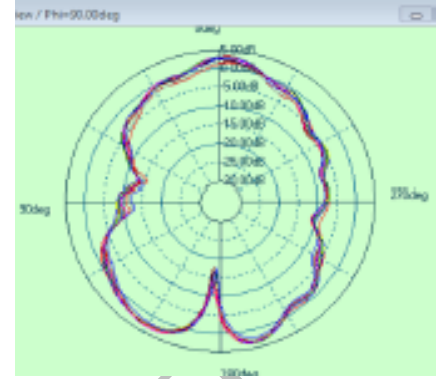
2400-2500MHz



XOY

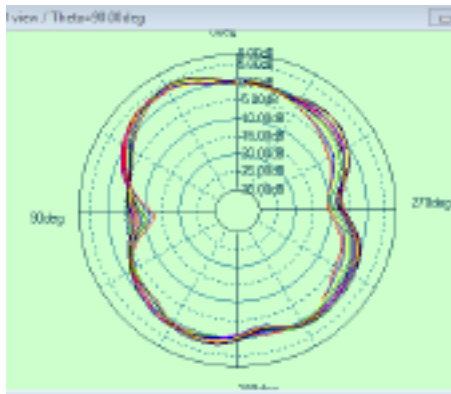


YOZ

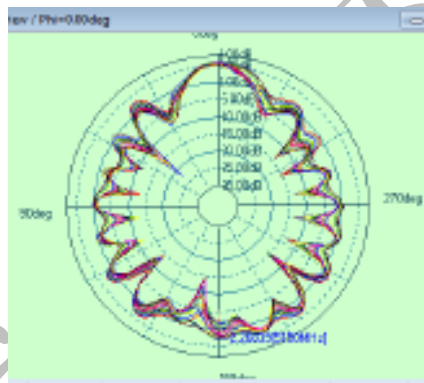


XOZ

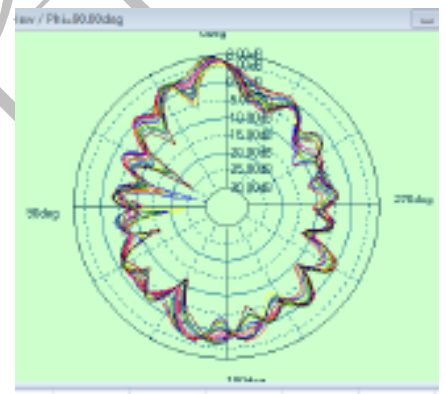
5150-5850MHz



XOY



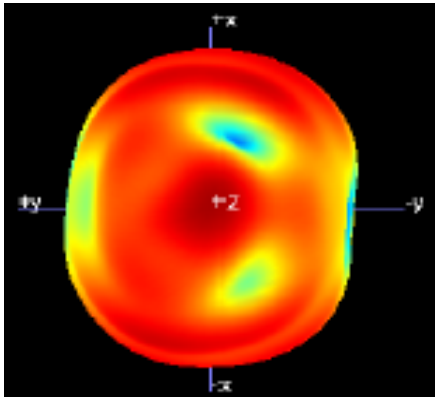
YOZ



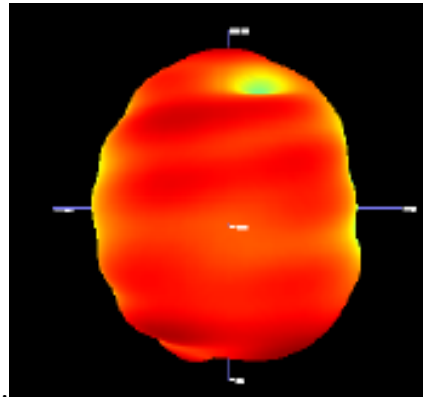
XOZ

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

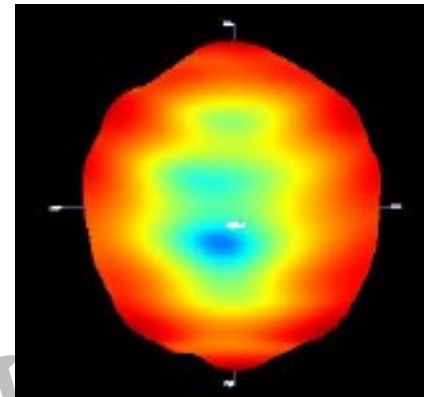
Frequency/频点 2450MHz



XOY

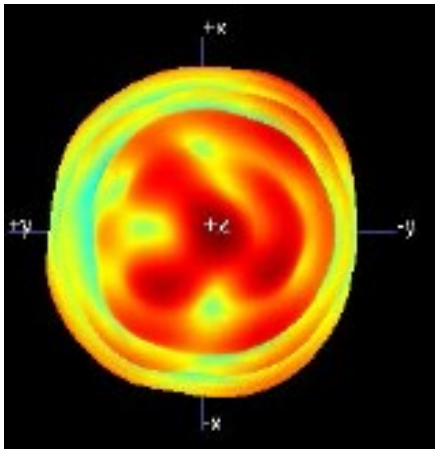


YOZ

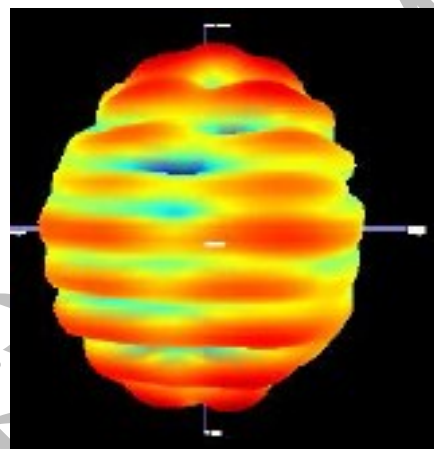


XOZ

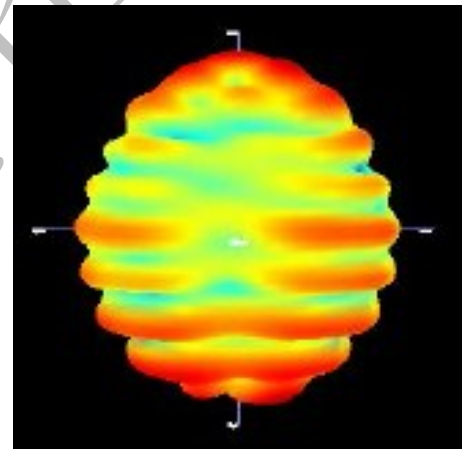
Frequency/频点 5500MHz



XOY



YOZ



XOZ