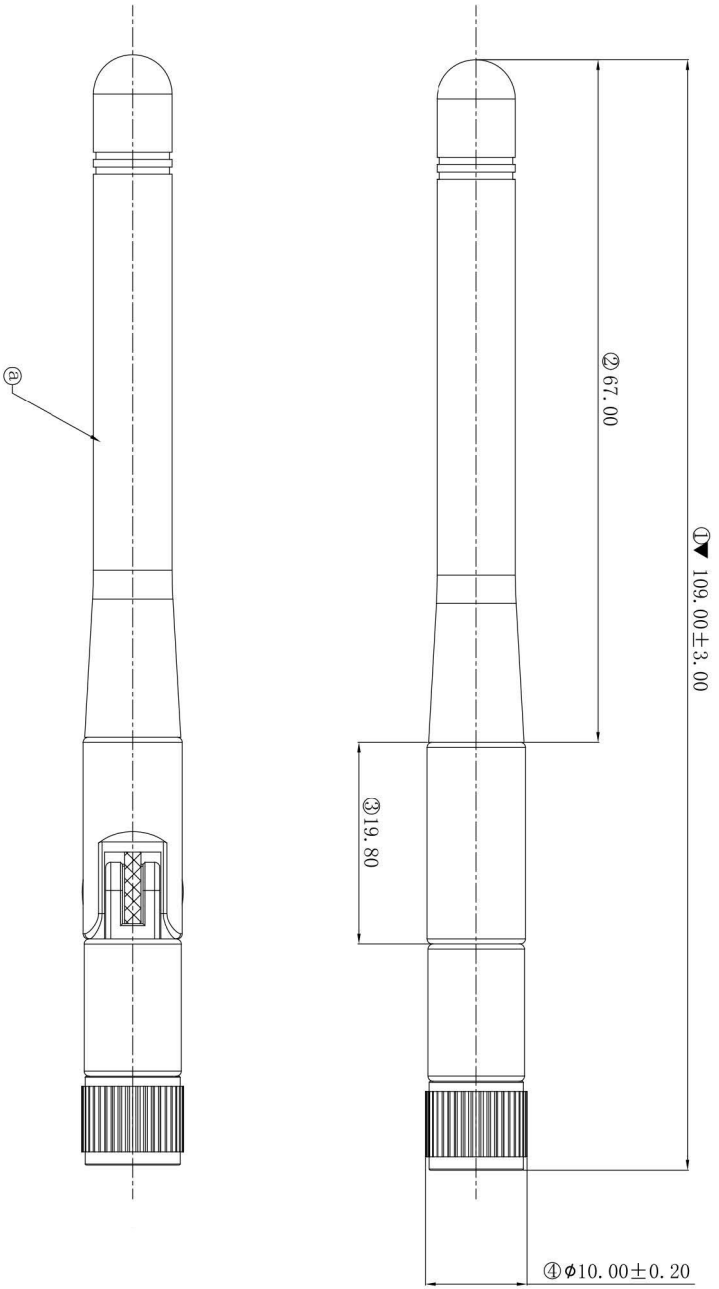


1. Antenna Specification

Antenna Specification		
Electrical Specification		
Item	Specification	Comment
Freq. Range	2400-2500&5150-5850(MHz)	
Impedance	50 (Ω)	
VSWR	2400-2500&5150-5850(MHz) ≤ 2.0	
Directional	Omni directional	
Polarization	Vertical	
Peak Gain	3.44 (dBi)	
Test condition	passive test	
Total Efficiency	2400-2500&5150-5850(MHz) > 60%	
Mechanical Specification		
Antenna type	SMA Plug Antenna	
Connector Type	SMA-J	
RF Cable Type	RG178	
Connector Torque Test	N/A	
Connector Pull Test	$\geq 3.0\text{Kgf}$	
Salt Spray	48 (H)	
Environmental Specification		
Operating temp	-40°C ~ +75°C	
Storage temp	-40°C ~ +75°C	

P/N:**81800U252****Rev.:****A****Page:****2 / 8****2. Antenna Picture**

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
A	ECN200148		07/17'20			



GENERAL TOLERANCE	SCALE:	DRAWN:	DATE:
XX. ± 2.00	1:1		07/17'20
X. ± 1.00	UNIT:	CHECK:	DATE:
.X ± 0.50	mm		
	SIZE: A4	APPROVE:	DATE:

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

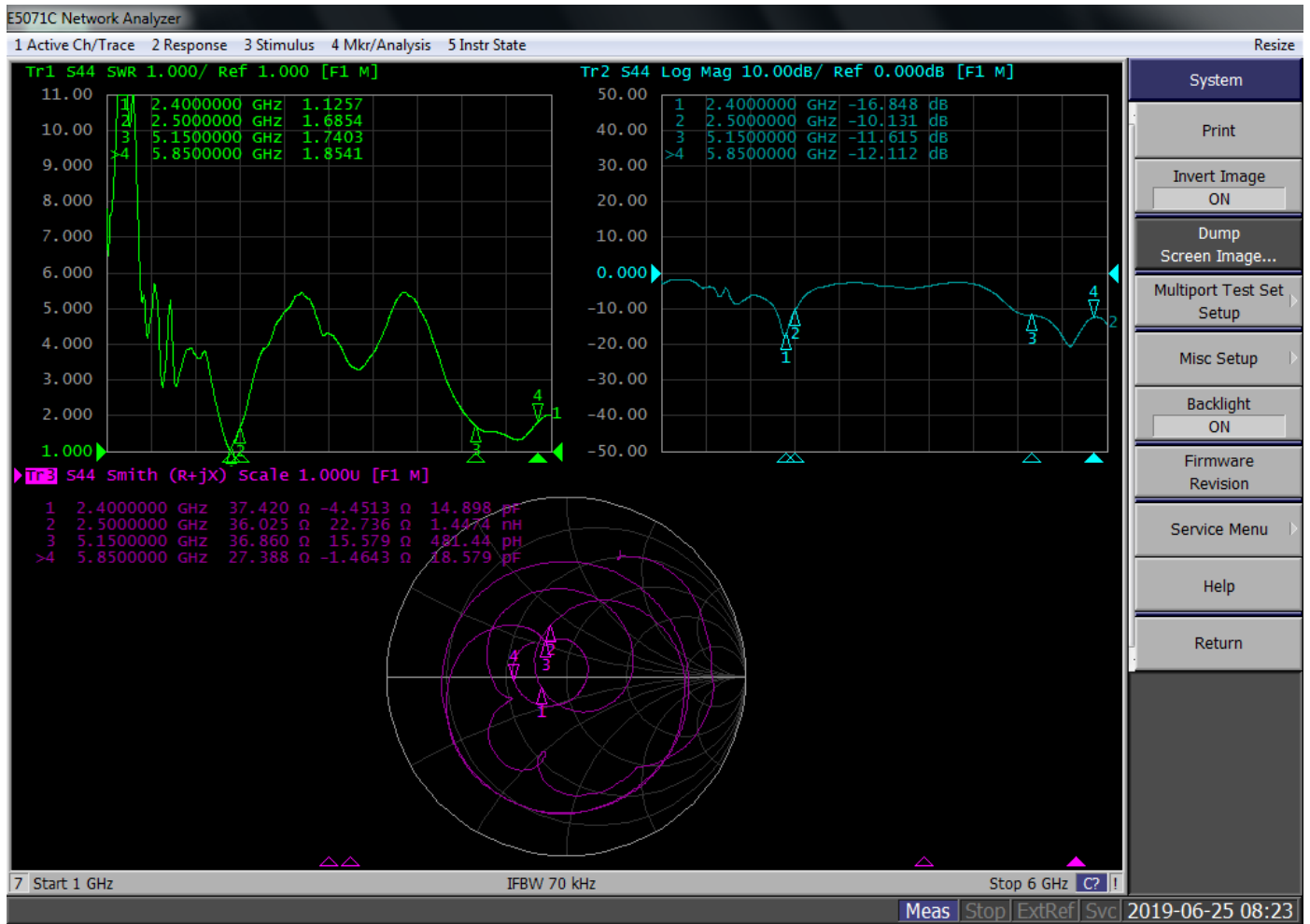
ITEM	PART NAME	QTY	MATERIAL / FINISH	REV.
a	ANT	1	2.4-5.8G_110*10_SMA-J	A
TITLE: 2.4-5.8G_110*10_SMA-J				SHEET: 1/1



ELECTRIC
CONNECTOR
TECHNOLOGY

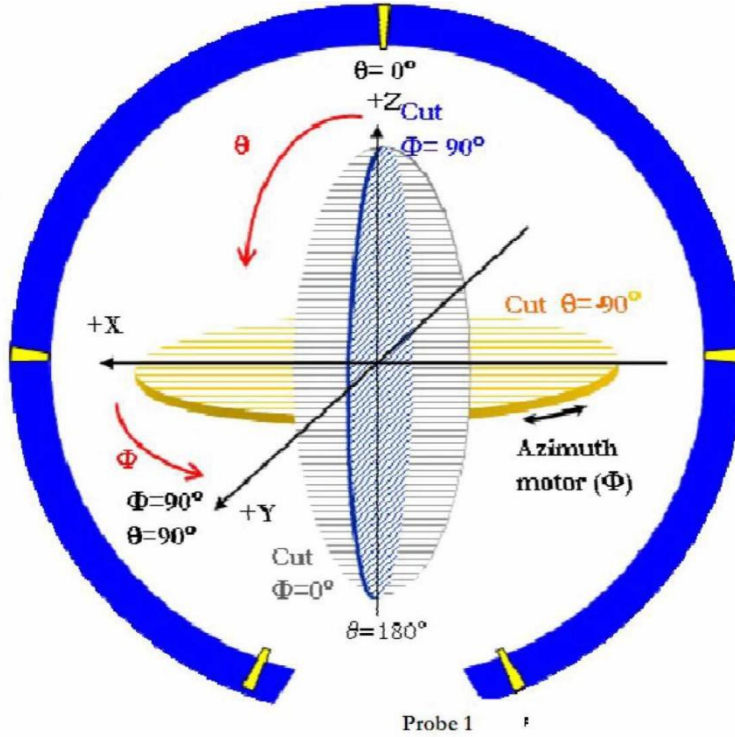
4. Antenna test result

4.1 Return loss/Smith chart/VSWR



4.2 The gain and total efficiency test

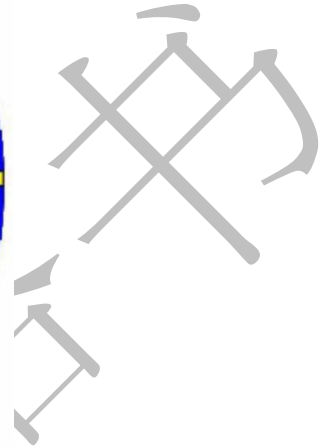
4.2.1 The definition of coordinate system-Satimo SG24



The coordinate system of Chamber



The production test position



4.2.2 The test result of total efficiency and total gain

2400MHz-2500MHz

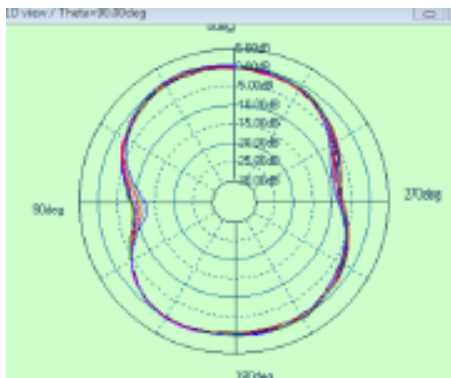
Frequency	Efficiency(%)	Gain (dBi)
2400MHz	72%	2.41
2410MHz	77%	2.66
2420MHz	76%	2.74
2430MHz	74%	2.52
2440MHz	75%	2.62
2450MHz	73%	2.39
2460MHz	72%	2.21
2470MHz	77%	3.44
2480MHz	72%	2.36
2490MHz	74%	2.56
2500MHz	71%	2.15
AVG	74%	2.47

5150MHz-5850MHz

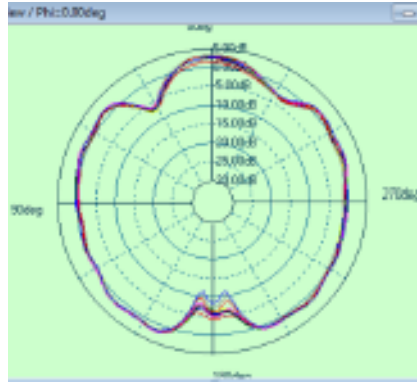
Frequency	Efficiency(%)	Gain (dBi)
5150MHz	72%	2.58
5200MHz	72%	2.60
5250MHz	71%	2.64
5300MHz	69%	2.53
5350MHz	73%	3.05
5400MHz	75%	3.26
5450MHz	73%	3.17
5500MHz	73%	3.31
5550MHz	74%	3.44
5600MHz	72%	3.00
5650MHz	67%	2.56
5700MHz	70%	2.90
5750MHz	71%	2.79
5800MHz	72%	2.61
5850MHz	75%	3.20
AVG	72%	2.91

4.2.3 The antenna radiation pattern(2D)

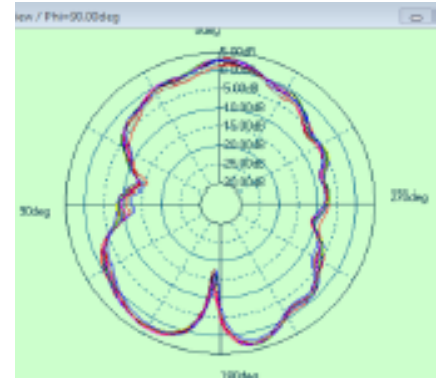
2400-2500MHz



XOY

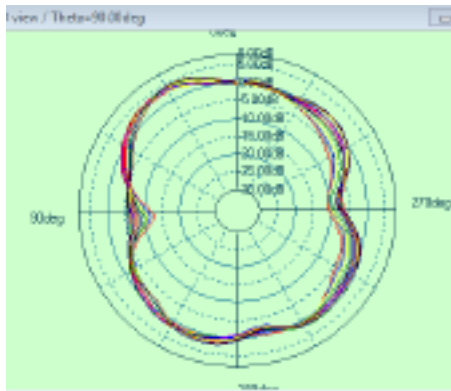


YOZ

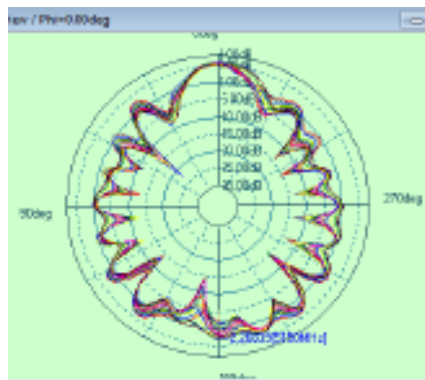


XOZ

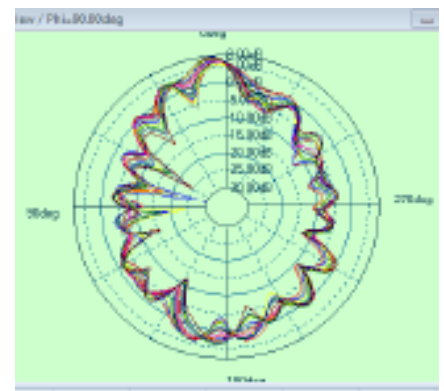
5150-5850MHz



XOY



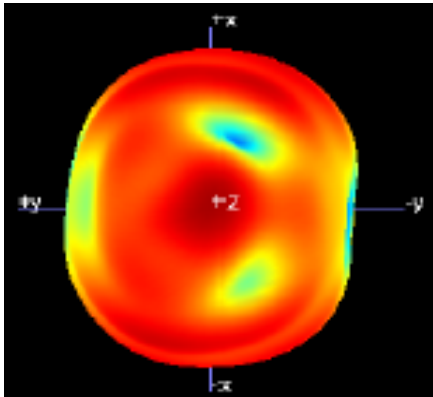
YOZ



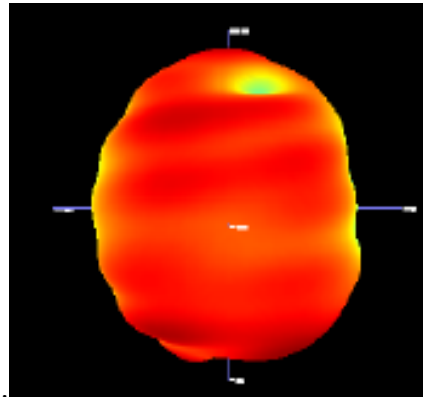
XOZ

4.2.4 The antenna radiation pattern(3D)

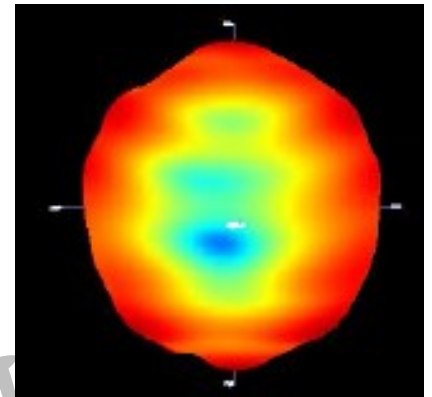
Frequency 2450MHz



XOY

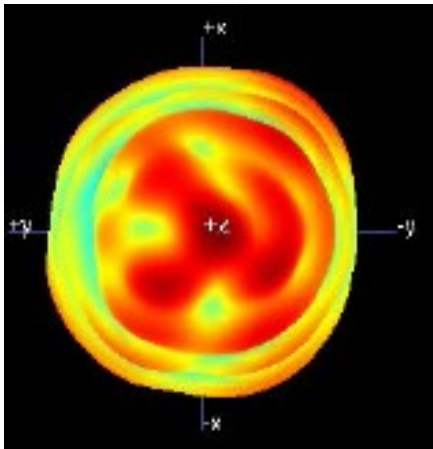


YOZ

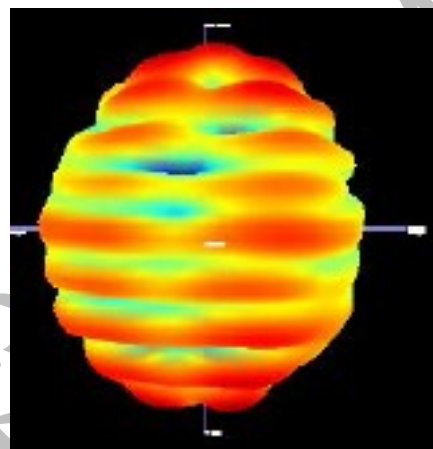


XOZ

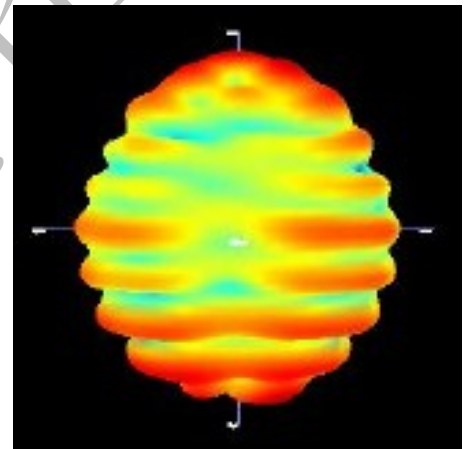
Frequency 5500MHz



XOY



YOZ



XOZ