

ELECTRIC CONNECTOR TECHNOLOGY CO., LTD.

SPECIFICATION

CUSTOMER NAME	FJ Dynamics Technology Co., Ltd
CUSTOMER P/N	1S0100374Q0070A
PART NAME	ANT_EX_2.4-5.8G_110*10_WIFI-BK- PR+SMA-J
ECT P/N	81800U252
APPROVAL REV.	A
PREPARED BY	Duiquan Liang
CHECKED BY	Dibin Ding
APPROVED BY	Baoxing Niu

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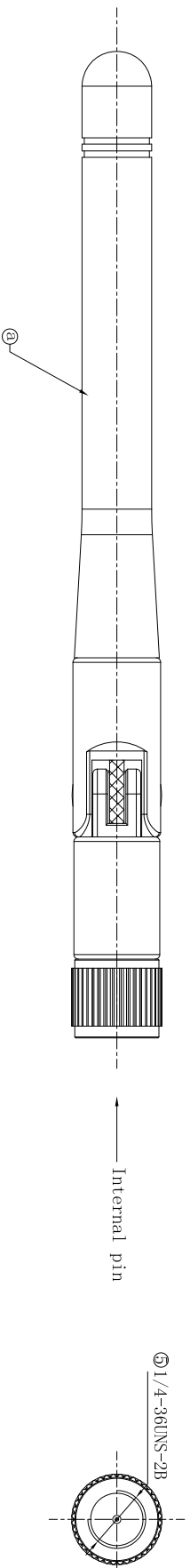
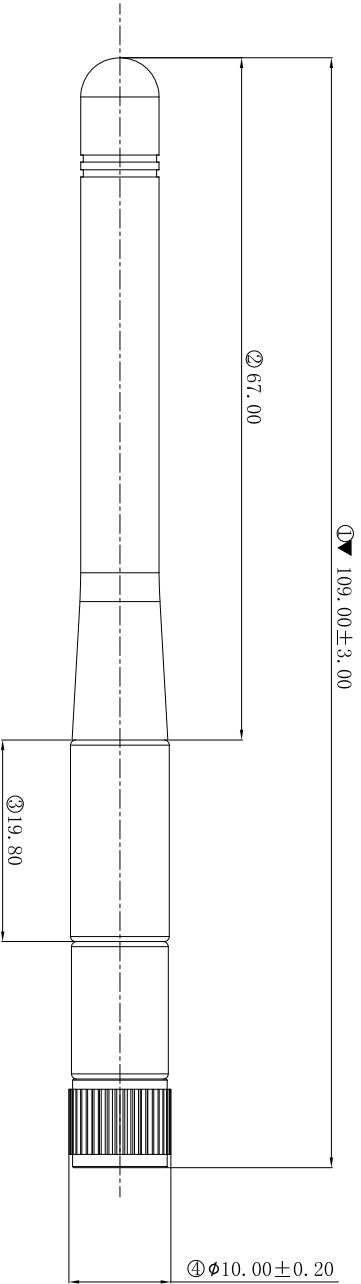
Record control number : FM-QE-E-02-14B

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	2.4G : 2.75dBi 5G: 3.44 dBi	
Test condition	passive test	
Total Efficiency	2400-2500&5150-5850(MHz) > 60%	
Mechanical Specification		
Antenna type	Glue stick 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	

2. Antenna Picture

C		D		E		
REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
A	ECN200148	Formally issue	07/17' 20	Dui Quan Liang	Di Bin Ding	Ying Jie Zhang



- NOTES:
1. After the assembly of different parts can not have bad appearance of greasy dirt, scratches, deformation, etc.
 2. The assembly after the completion of the various components without clear off color.
 3. The ontology and the connecting shaft assembly after retention: 3 kg MIN; Connector torque is: 0.2~0.6 kg · cm.
 4. Marked with “▼” key size detection for QC.
 5. Frequency: 2400-2500 & 5150-5850 MHz, VSWR: 2.0 or less,
 6. Test pattern test requirements: the VSWR full inspection, matrix.
 6. HSF shall conform to the standard QF-Q-19-001 Environmental Hazardous Substances Management.

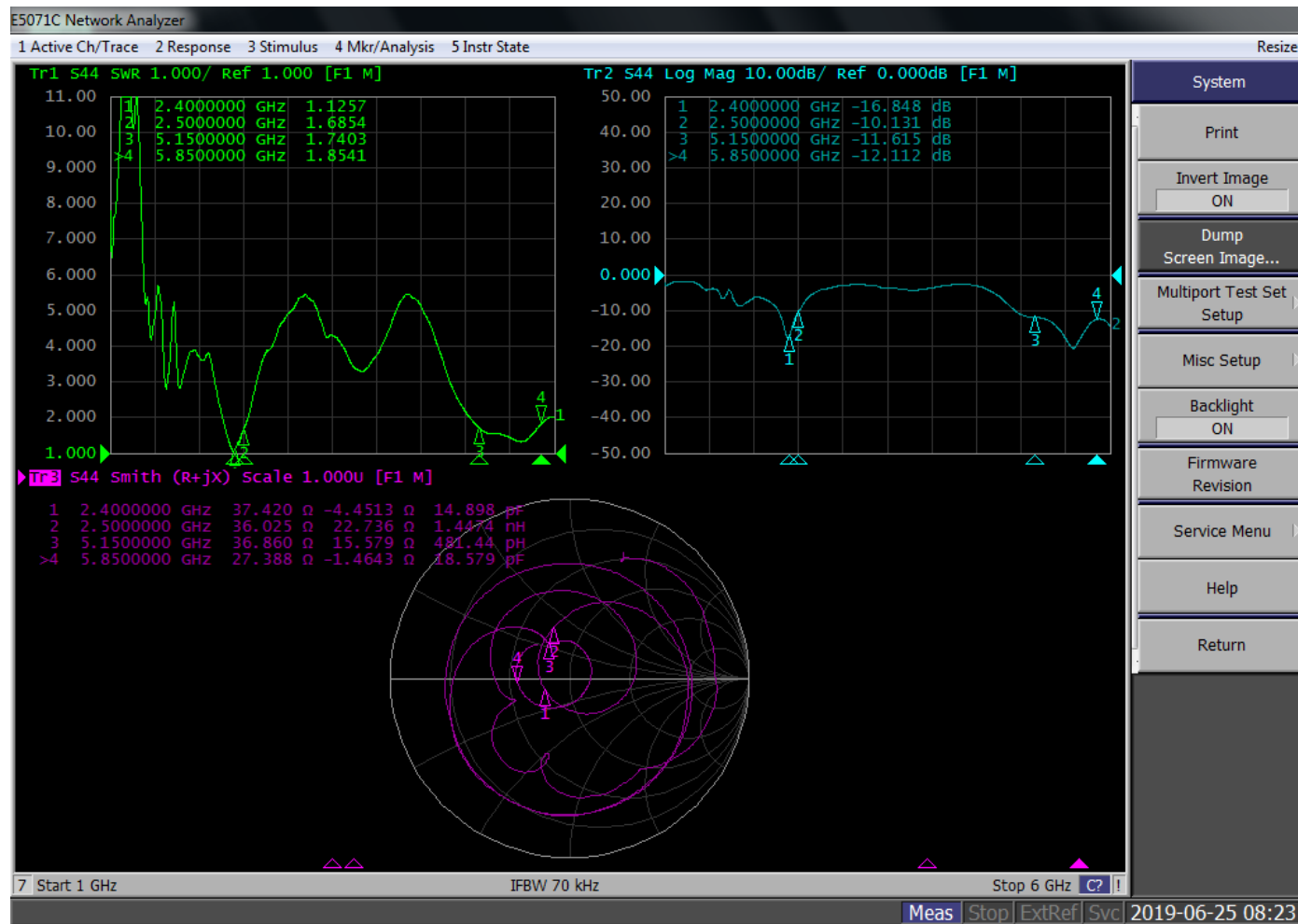
GENERAL TOLERANCE		SCALE:		DRAWN:		DATE:		DWG. NO:		TITLE:		REV.	
XX. ± 2.00	XY. ° ± 3°	1:1		Dui Quan Liang		07/17' 20		600-U252-01		ANT EX 2.4-5.8G, 110*10		A	
X. ± 1.00	X. ° ± 2°	UNIT: mm		CHECK:		DATE:		PARTS NO. (INTENDED USE):		ANT EX 2.4-5.8G, 110*10		SHEET:	
. X ± 0.50	. X° ± 1°	SIZE: A4		APPROVE:		DATE:		81800U252		_WIFI-BK-PR+SMA-J		1/1	



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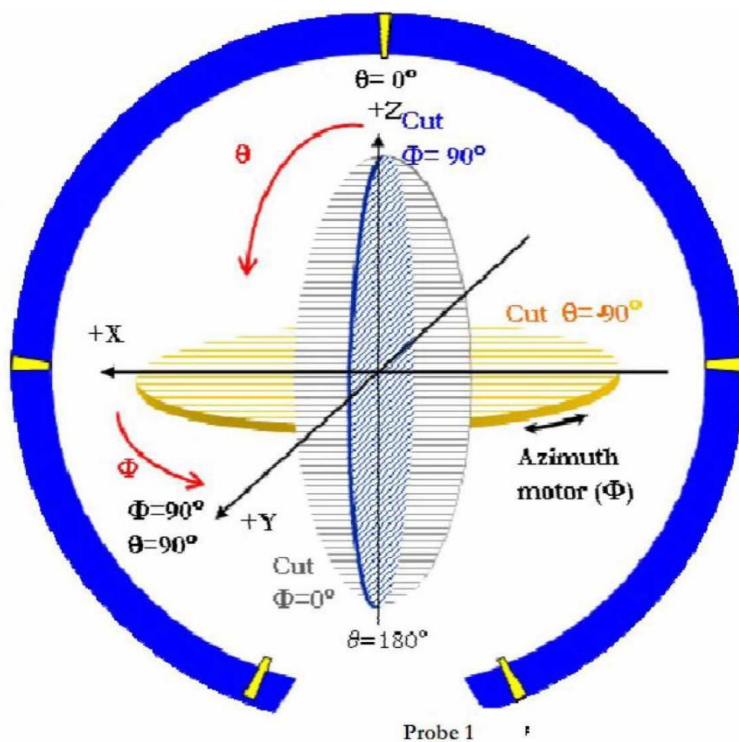
4. Antenna test result

4.1 Return loss/Smith chart/VSWR

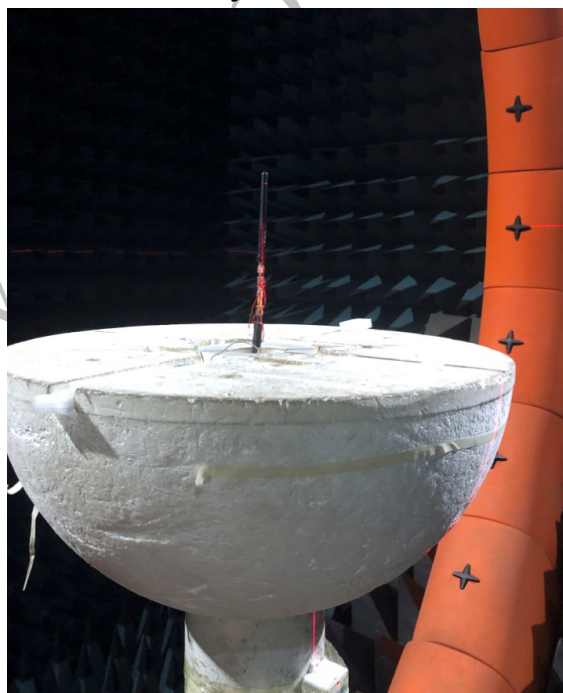


4.2 The gain and total efficiency test

4.2.1 The definition of coordinate system/-Satimo SG24



The coordinate system of Chamber/



The production test position

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4.2.2 The test result of total efficiency and total gain

2400MHz-2500MHz

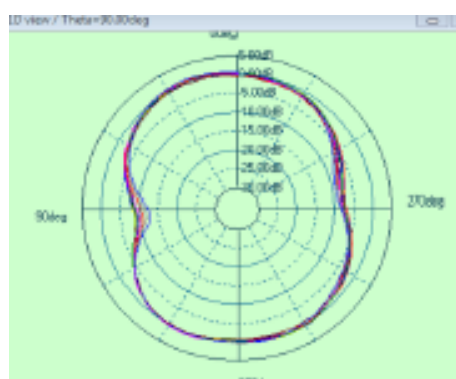
Frequency	Efficiency(%)	Gain (dBi)
2400MHz	72%	2.41
2410MHz	77%	2.66
2420MHz	76%	2.74
2430MHz	74%	2.52
2440MHz	75%	2.62
2450MHz	73%	2.39
2460MHz	72%	2.21
2470MHz	77%	2.75
2480MHz	72%	2.36
2490MHz	74%	2.56
2500MHz	71%	2.15
AVG	74%	2.47

5150MHz-5850MHz

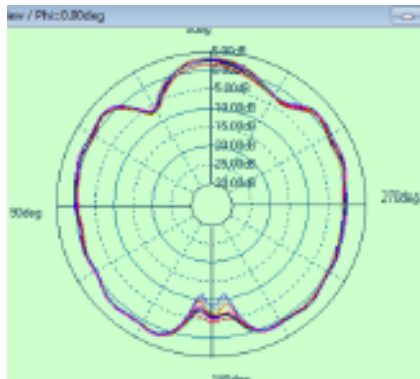
Frequency	Efficiency(%)	Gain (dBi)
5150MHz	72%	2.58
5200MHz	72%	2.60
5250MHz	71%	2.64
5300MHz	69%	2.53
5350MHz	73%	3.05
5400MHz	75%	3.26
5450MHz	73%	3.17
5500MHz	73%	3.31
5550MHz	74%	3.44
5600MHz	72%	3.00
5650MHz	67%	2.56
5700MHz	70%	2.90
5750MHz	71%	2.79
5800MHz	72%	2.61
5850MHz	75%	3.20
AVG	72%	2.91

4.2.3 The antenna radiation pattern(2D)

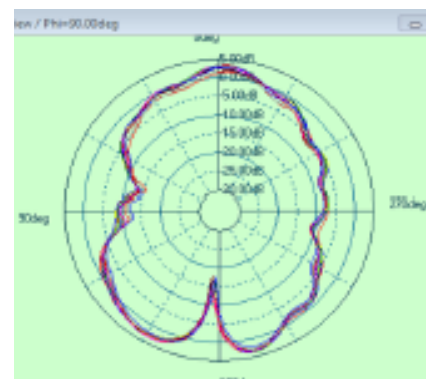
2400-2500MHz



XOY

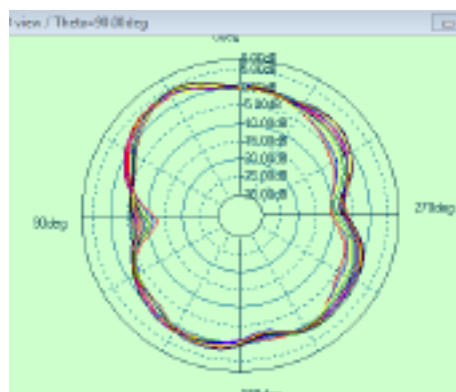


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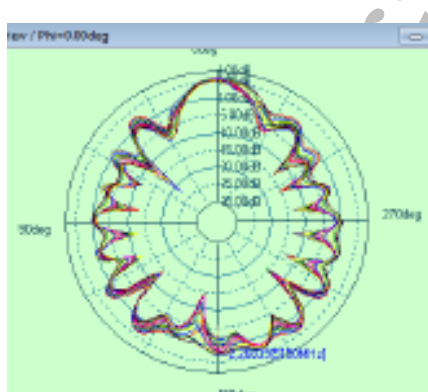


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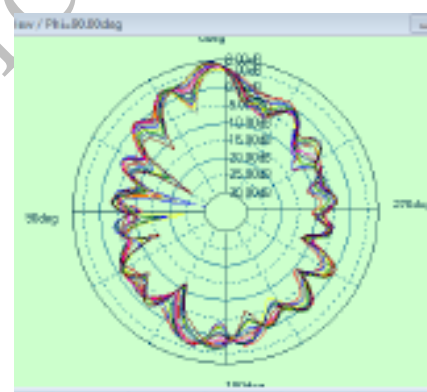
5150-5850MHz



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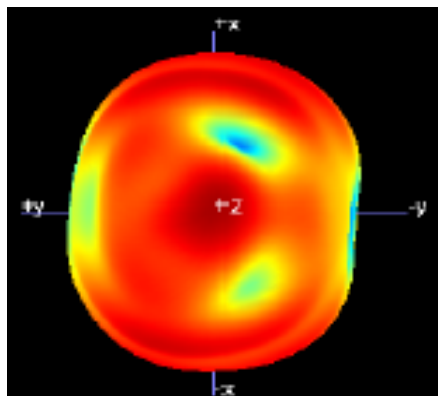
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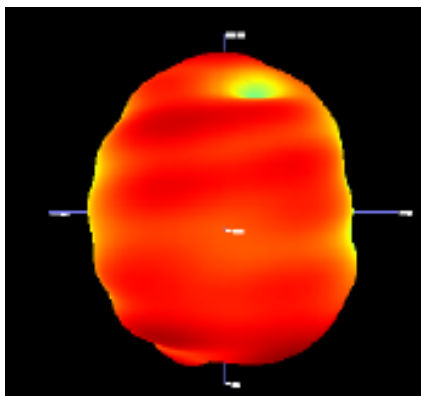
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4.2.4The antenna radiation pattern(3D)

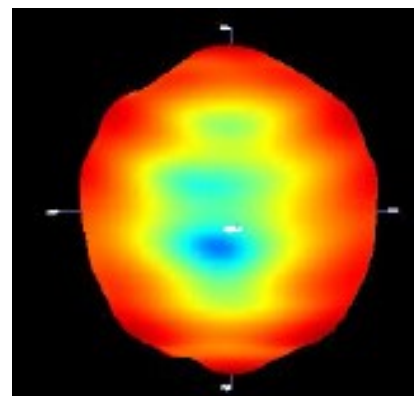
Frequency/ 2450MHz



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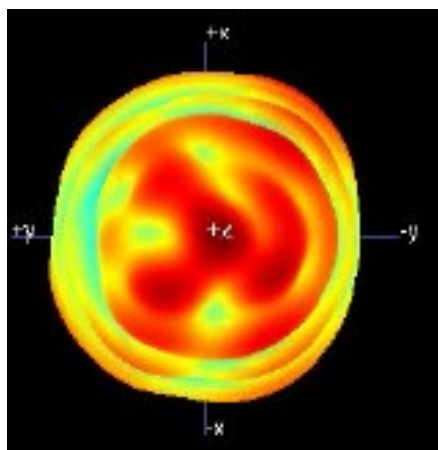


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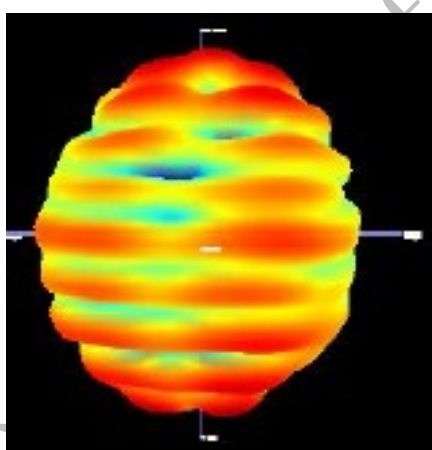


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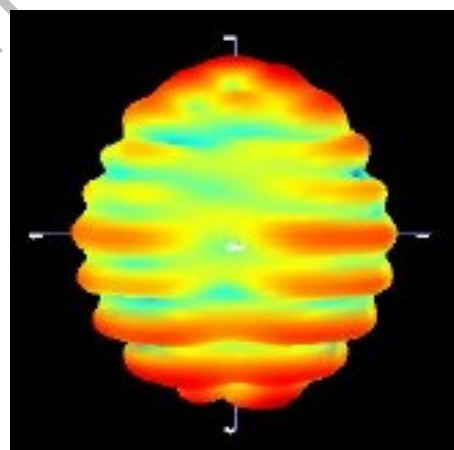
Frequency/ 5500MHz



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