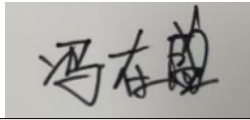
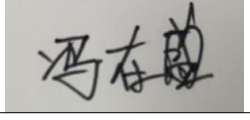


Antenna Report

PRODUCT NAME: 2.4G-3dBi FPC Antenna L=55mm+ terminal

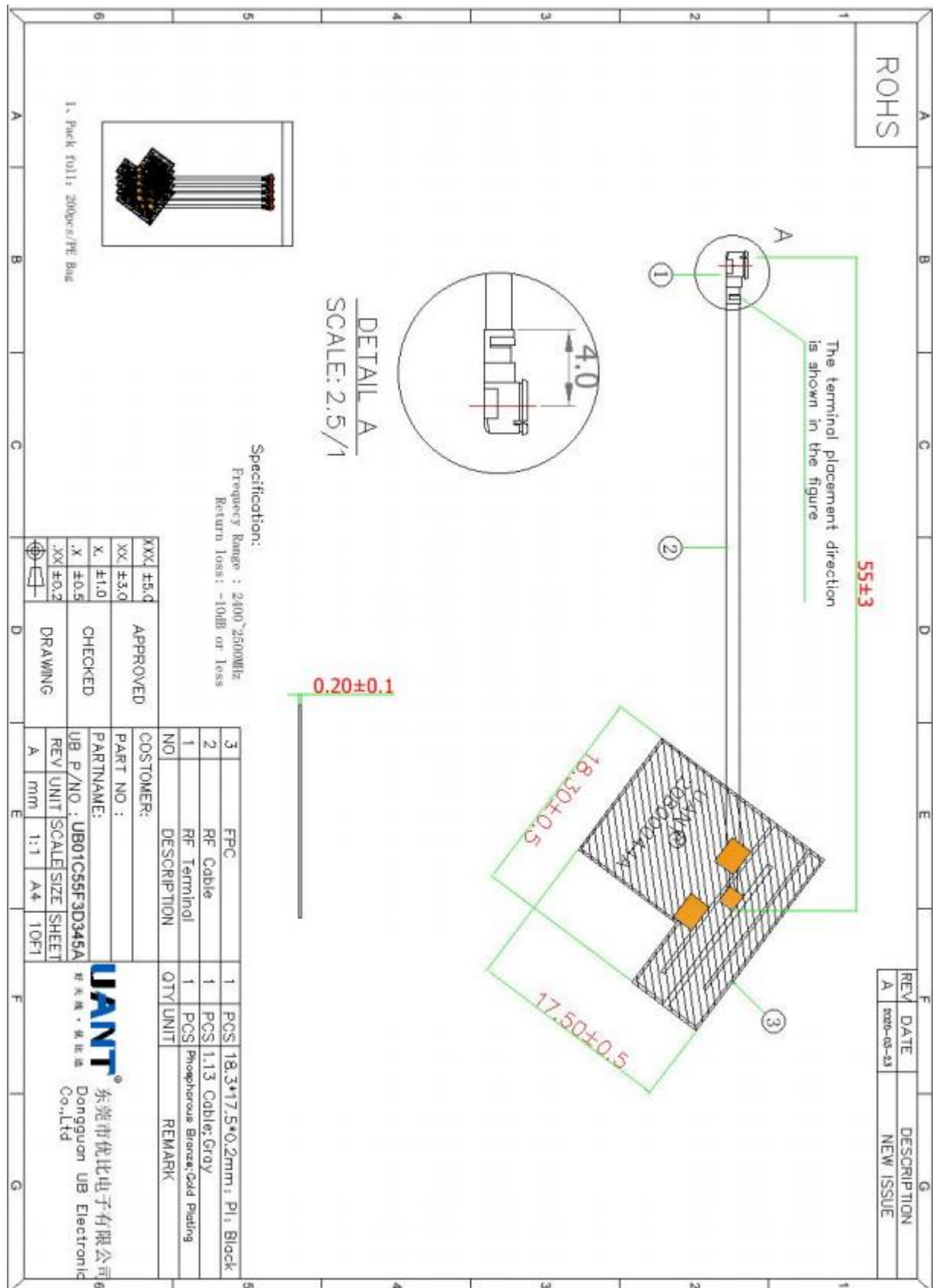
UB P/N: UB01C55F3D345A REV: A

Revision	Revisor	Date	Revision Record
V-A	Kangjun.Xu	2024/11/07	First Draft
		MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:			
APPROVED BY:			
DATE:	2024/11/07		2024-11-11

1 Specification

Specification	
P/N	
Frequency	2400MHz-2500MHz
Antenna Type	Feed coupling
Dimension	Φ18.3*17.5*0.2mm
Impedance	50Ω
Polarization	Linear
Gain	3.0±0.5dBi
VSWR	<1.92
Axial Ratio	not involved
Radiation Pattern	Omni-directional
Connection	IPEX 1
Line Type	RF1.13, 55mm, Grey
Line Loss	0.5dB·m ⁻¹ @1GHz, 1dB·m ⁻¹ @3GHz, 3dB·m ⁻¹ @6GHz
Power Handling	10W
Operating Temperature	-20~70℃
Storage Temp	-20~70℃

2 Antenna Dimension



3 Electrical Test

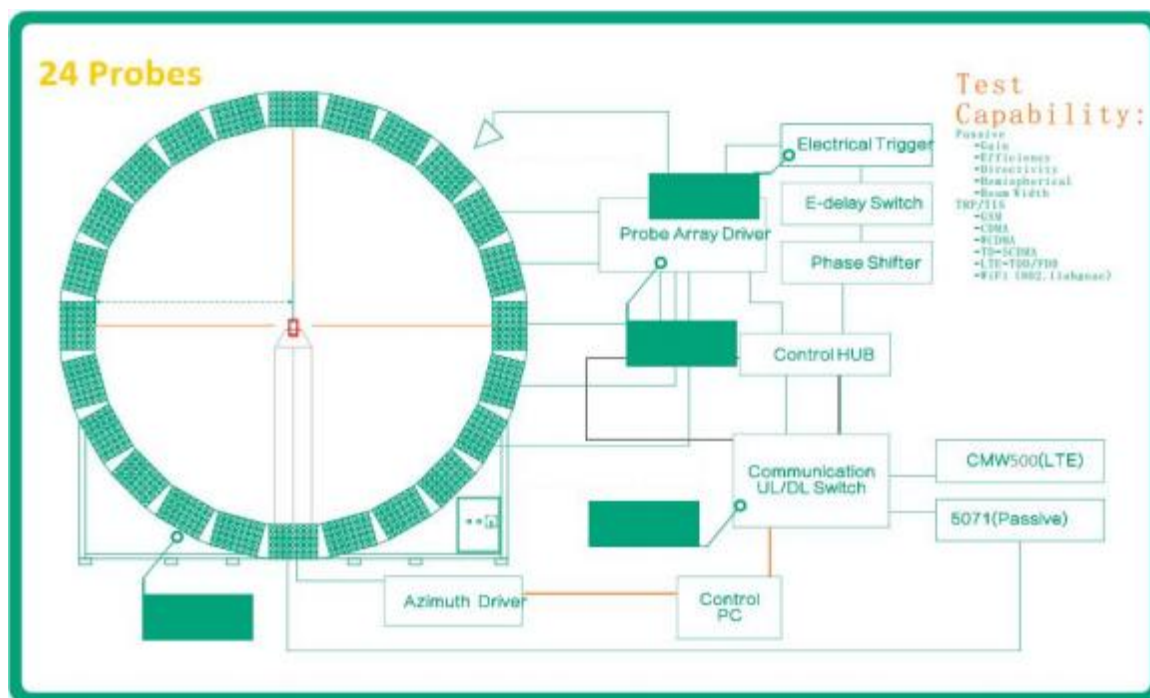
3.1 Method

Name	Parameter	Method	Standard no.
Mobile Communication antenna	VSWR	Generic specification for antennas used in the mobile communications	GB/T 9410-2008
	Antenna gain		
	Radiation pattern		
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-1979

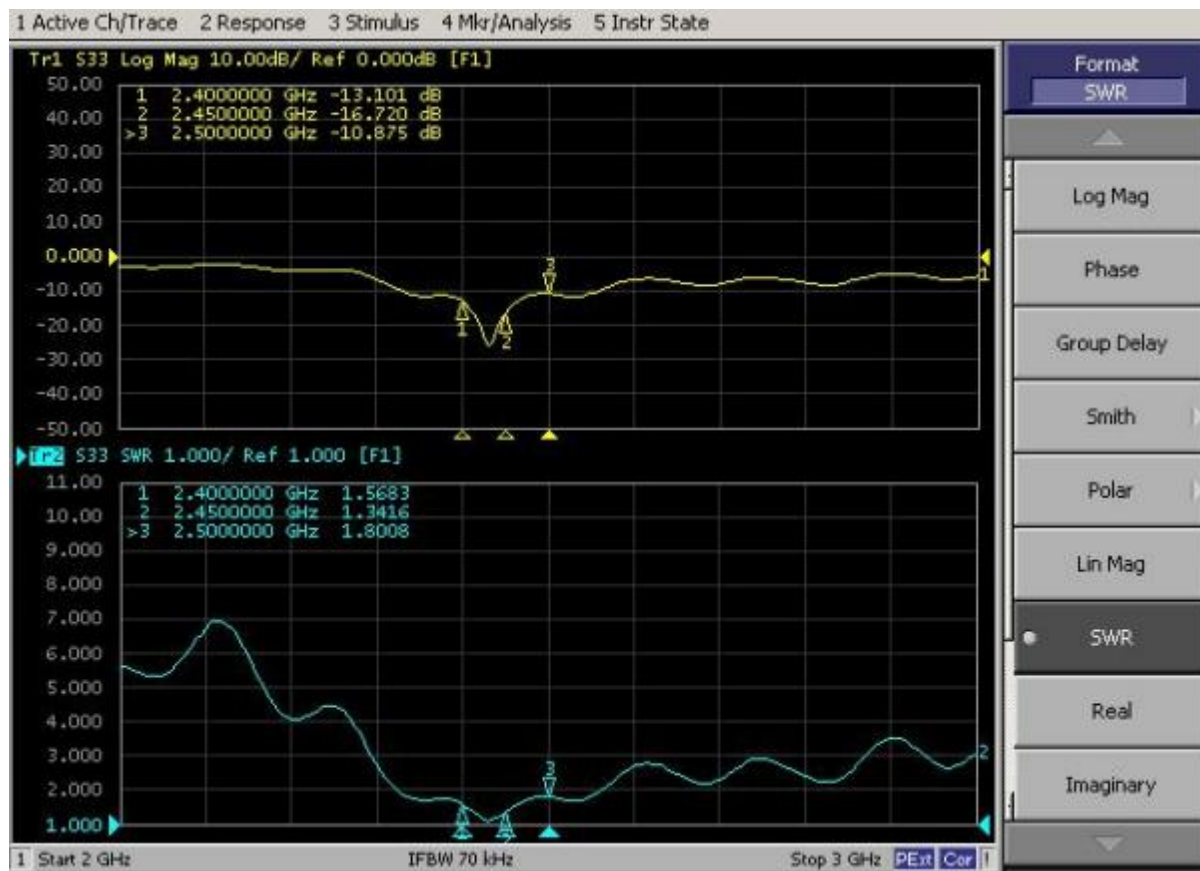
3.2 Device

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071C	MY46315996	2024.08.25	2025.08.24
Radio Communication Tester	ROHDE&SCHWARZ	CMW500	0002K50-100844	2024.08.25	2025.08.24

3.3 Test Configuration

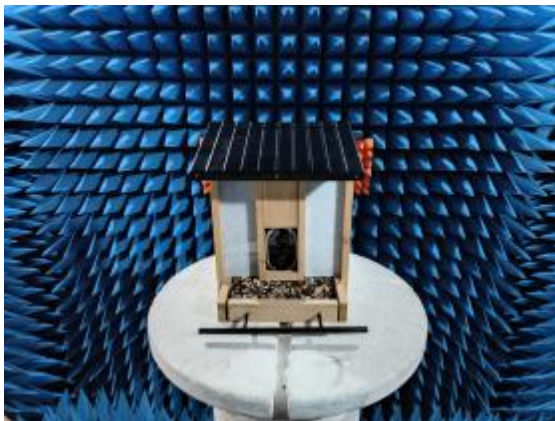
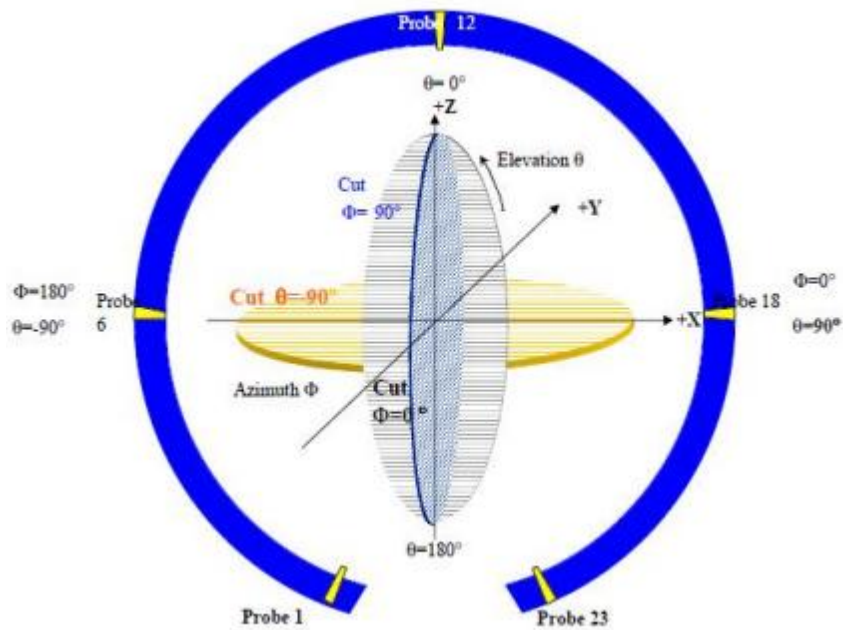


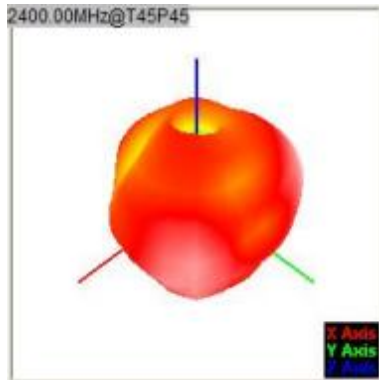
3.4 Return Loss



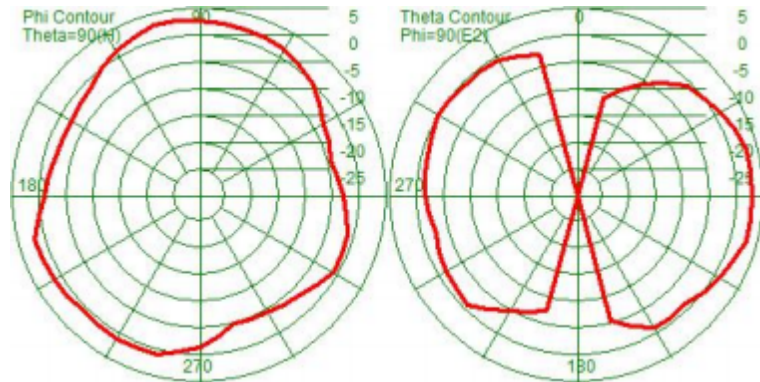
Frequency (MHz)	2400	2450	2500
Return loss (dB)	13.10	16.72	10.87

3.4.1 Darkroom 2D、3D Raditation Pattern



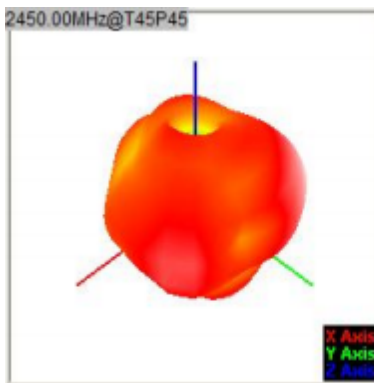


2.4GHz

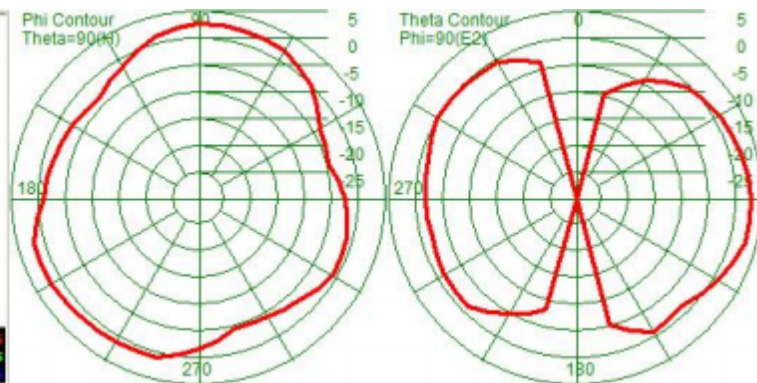


Peak Gain:3.35dBi

Efficiency:52.7%

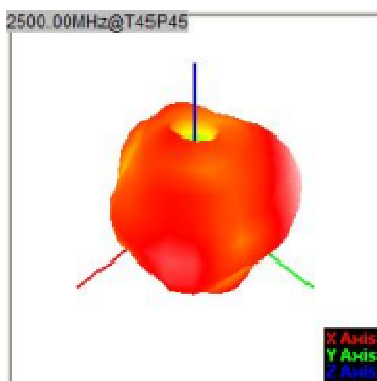


2.45GHz

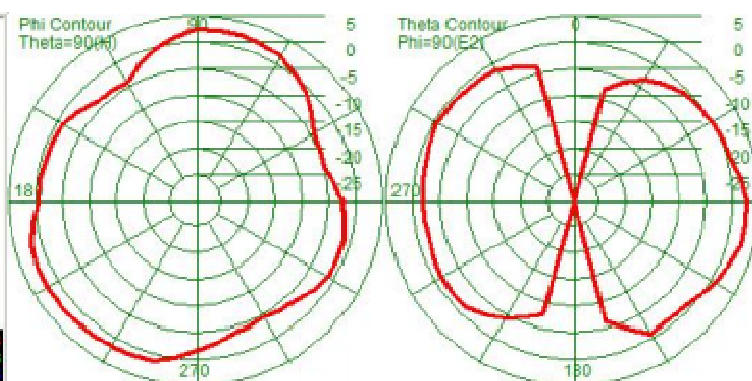


Peak Gain: 3.42dBi

Efficiency: 55.5%



2.5GHz



Peak Gain: 3.18dBi

Efficiency: 57.5%

3.4.2: Active data

SF254-WC2A							
Item	Measurement	Band	Channel	Frequency	Max	Min	Total
1	TRP	WIFI_B (11M)	1	2412	20.55	-0.98	16.38
2	TRP	WIFI_B (11M)	6	2437	20.85	2.26	16.66
3	TRP	WIFI_B (11M)	11	2462	19.81	1.84	16.02
4	TIS(EIRP)	WIFI_B (11M)	11	2462	-67.75	-85.44	-81.73

SF254-WD2A							
Item	Measurement	Band	Channel	Frequency	Max	Min	Total
1	TRP	WIFI_B (11M)	1	2412	21.74	5.73	17.22
2	TRP	WIFI_B (11M)	6	2437	22.03	5.4	17.45
3	TRP	WIFI_B (11M)	11	2462	21	5.61	16.29
4	TIS(EIRP)	WIFI_B (11M)	11	2462	-71.16	-86.53	-81.83

4:Antenna set up position

