

APPROVAL SHEET

CUSTOMER NAME: TUYA

PRODUCT NAME: 2.4G Inner Antenna L=60mm+terminal

CUSTOMER P/N: 1.17.01.00341

UB P/N: UB01C60F3D1777A REV: A

PRODUCER NAME: Youbi

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:		
DATE:	2024/09/23	

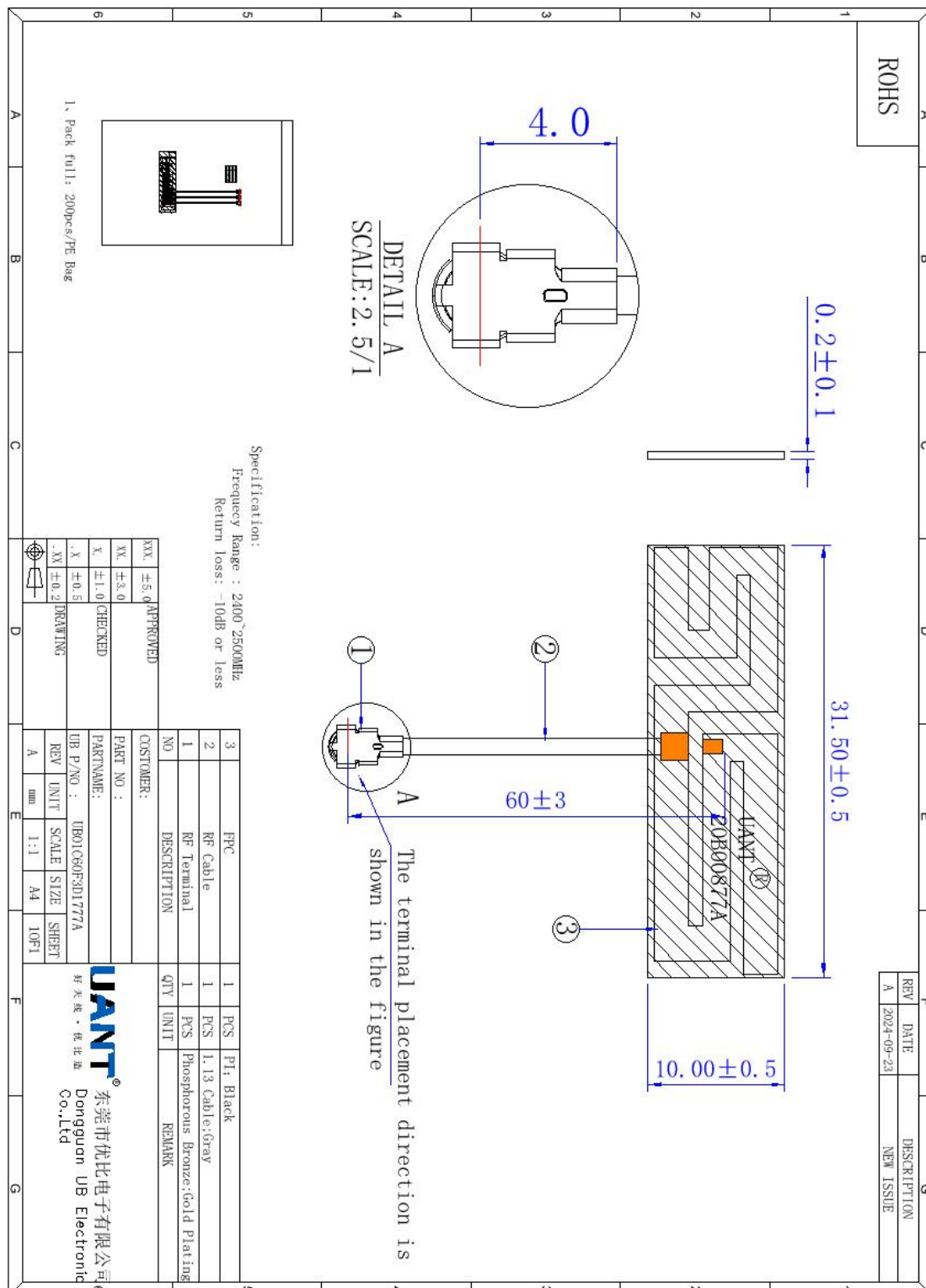
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1. Specification:

Electrical Specification	
Design Specifications	Types
Antenna Type	Inner antenna
Operating Frequency	2400-2500MHz
Peak Gain	4.24dBi
Average Efficiency	61.20%
Return Loss	<-10
Polarization	Linear
Axial Ratio	\
Radiation pattern	Omnidirectional
Impedance	50 ohm
Power handling	1W
Interface	Cable+terminal
Overall dimensions	31.5*10*0.2mm
Operating Temp.	-20℃~+70℃
Storage Temp.	-20℃~+70℃

2. Antenna Dimension



3 Electrical Test

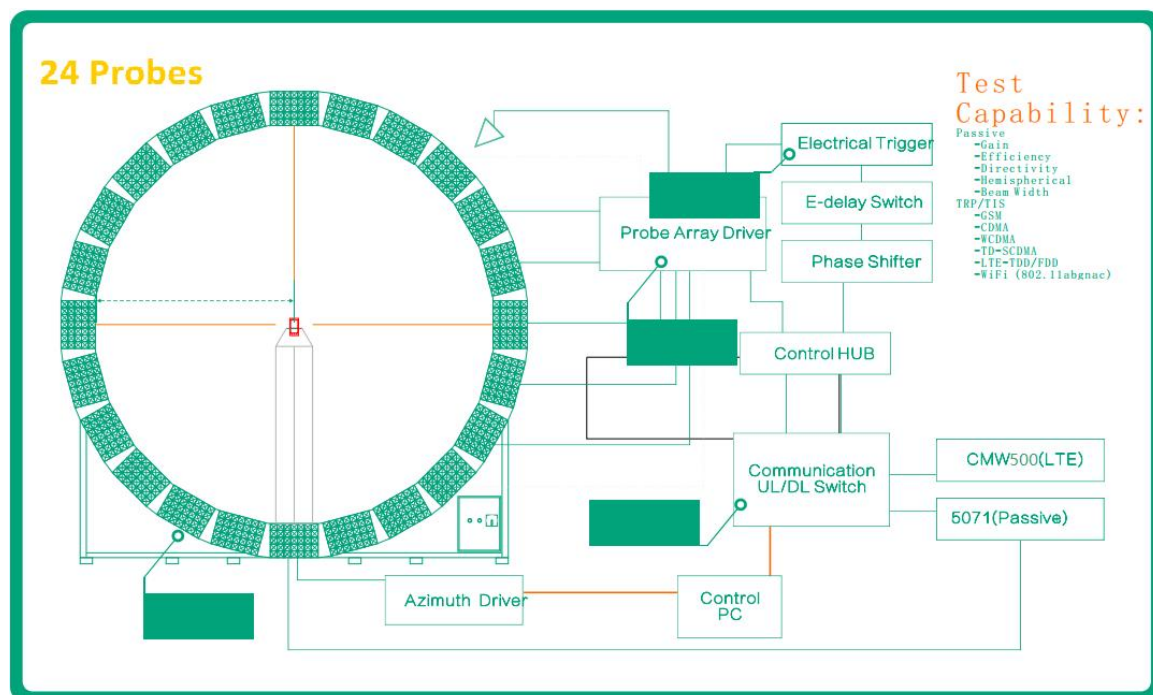
3.1 Method

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

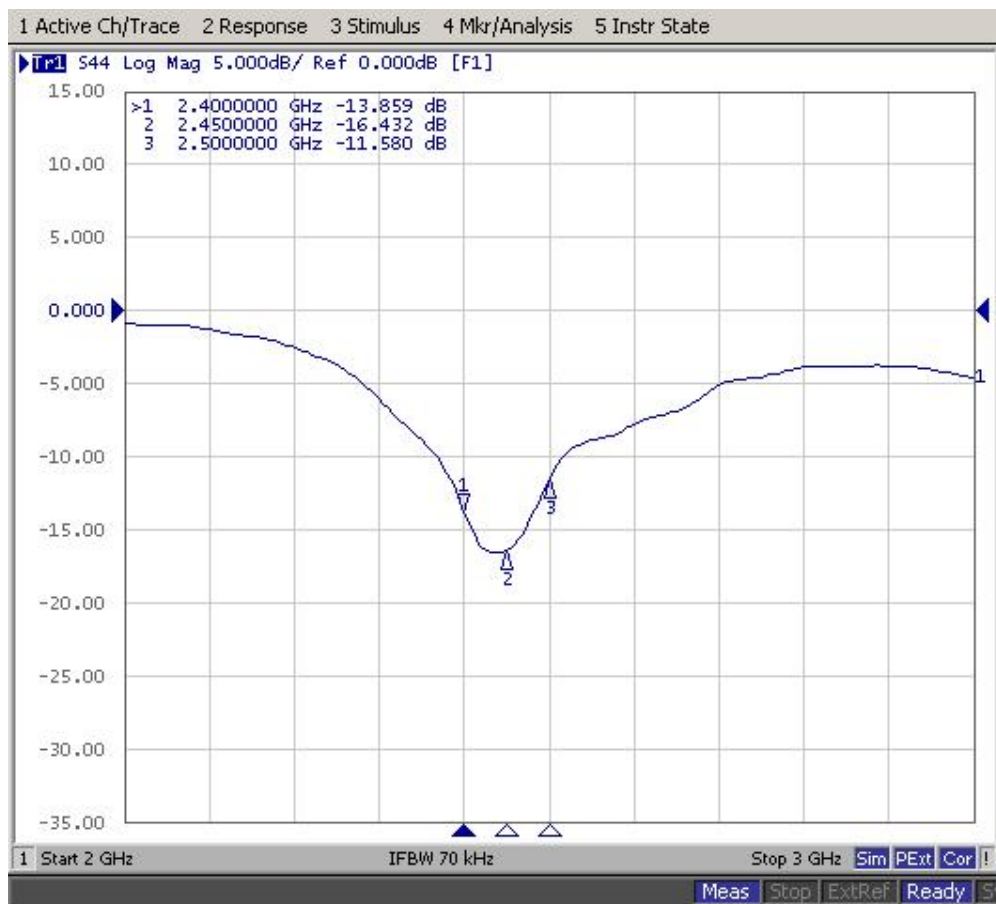
3.2 Device

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

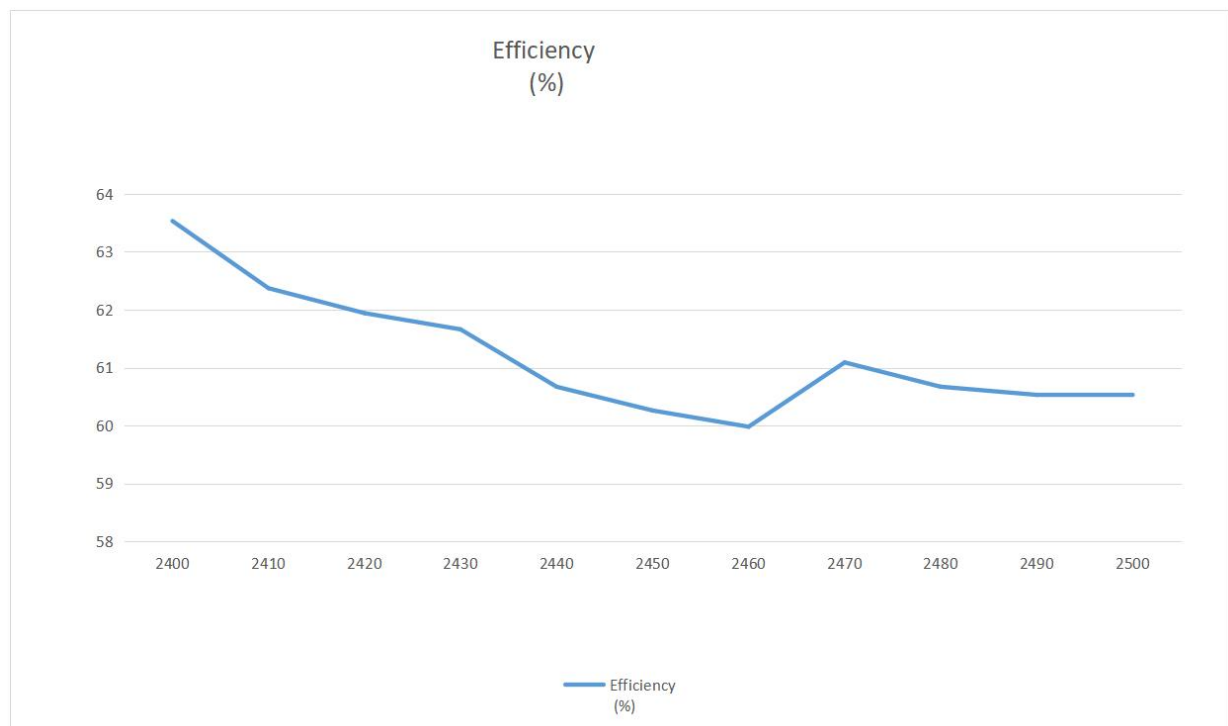


3.4: Darkroom 2D、3DRaditation Pattern

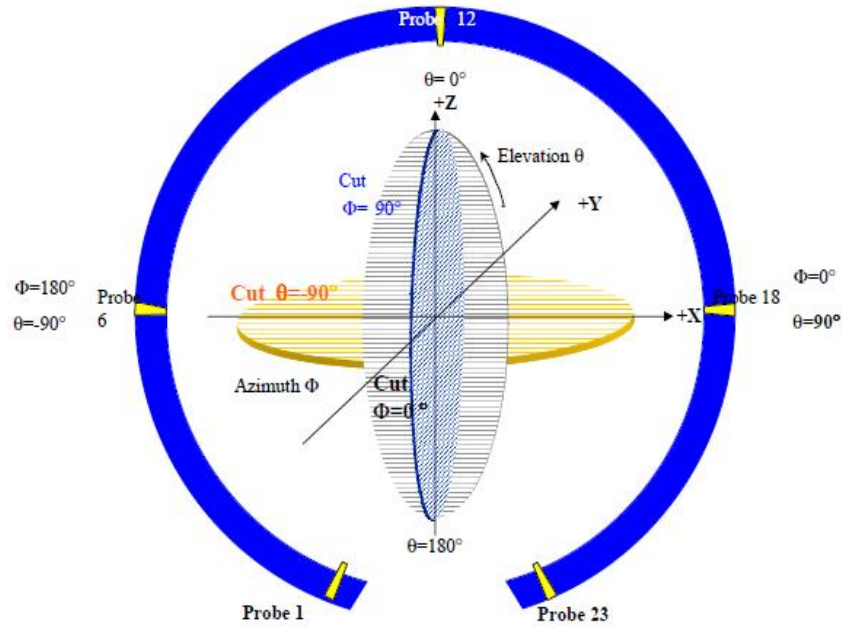


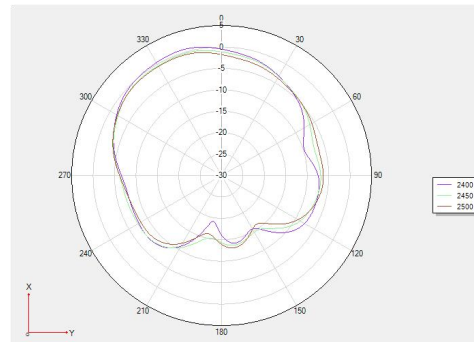
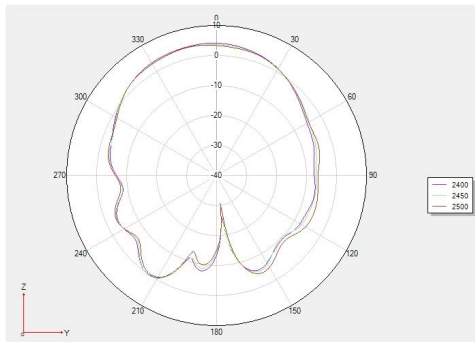
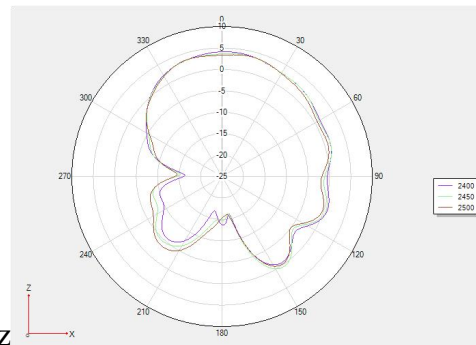
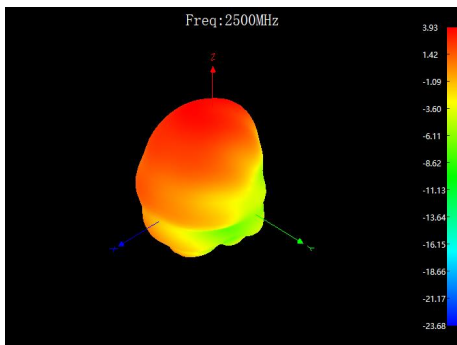
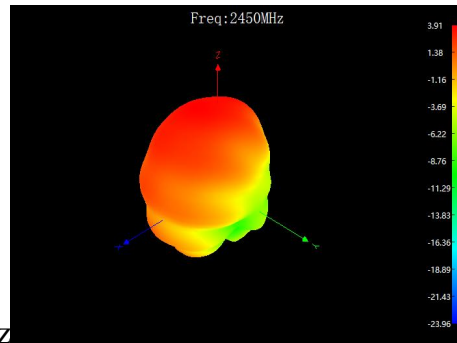
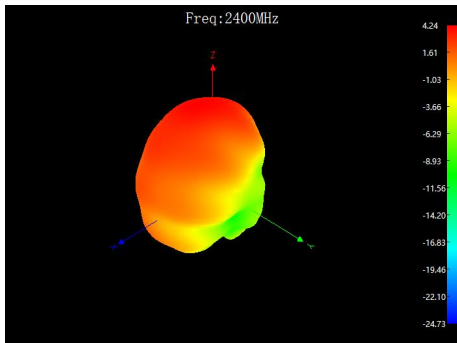
3.4.1 Efficiency and gain

Frequency / MHz	Efficiency / dB	Efficiency / %	Gain/ dBi
2400	-1.97	63.53	4.24
2410	-2.05	62.37	4.24
2420	-2.08	61.94	4.06
2430	-2.1	61.66	3.97
2440	-2.17	60.67	3.95
2450	-2.2	60.26	3.91
2460	-2.22	59.98	3.86
2470	-2.14	61.09	3.99
2480	-2.17	60.67	4.07
2490	-2.18	60.53	4
2500	-2.18	60.53	3.93



3.4.1.1 Darkroom 2D、3D Raditation Pattern





4:Antenna position

