

Specification

CUSTOMER NAME:

PRODUCT NAME: TPA08-M3 2.4G+5.8G-ANTENNA L=110mm

CUSTOMER P/N:

UB P/N: UB01C110P2D4684A REV: A

PRODUCER NAME: Youbi

Dongguan Youbi Electronics Co.,LTD, Room 101,Building 2,No.9,
PRODUCER ADDRESS: Xinfu Road,Lin Village,Tangxia Town, Guangdong province

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Wenqiang. Xiong	
APPROVED BY:	Kangjun. Xu	
DATE:	2024/11/13	

1. Specification table:

Electrical Specification	
Design Specifications	Types
Antenna Type	PIFA antenna
Operating Frequency	2400-2500MHz; 5150-5850MHz
Peak Gain	2400-250 (3.63dBi) 5150-5850 (4.92dBi)
Average Efficiency	2400-250 (48.69%) ;5150-5850 (61.6%)
Return Loss	< -8
Polarization	Linear
Radiation pattern	Omnidirectional
Impedance	50 ohm
Power handling	1W
Interface	Cable+terminal
Overall dimensions	34.4*17.7*0.35mm
Operating Temp.	-20℃~+70℃
Storage Temp.	-20℃~+70℃
Test Standard	ANSI/IEEE Std 149-1979
Test Location	Dongguan Youbi Electronics Co.,LTD Room 101,Building 2,No.9, Xinfu Road,Lin Village,Tangxia Town

2. Test Configurations

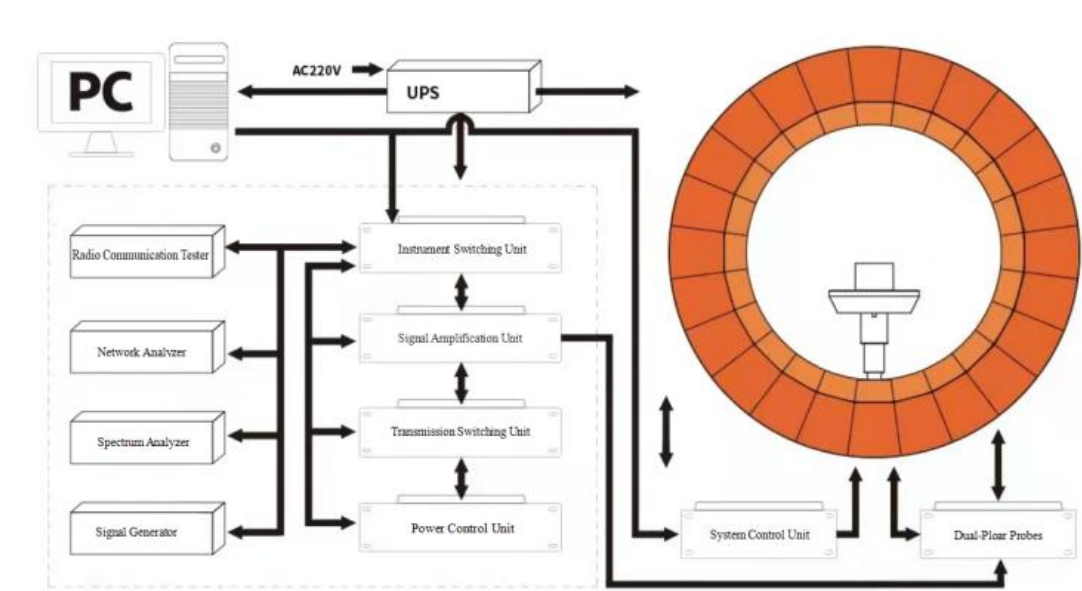
2.1 Test Environment

Temperature (°C)	25.4
Humidity (%RH)	54
Atmospheric Pressure (kPa)	100.3

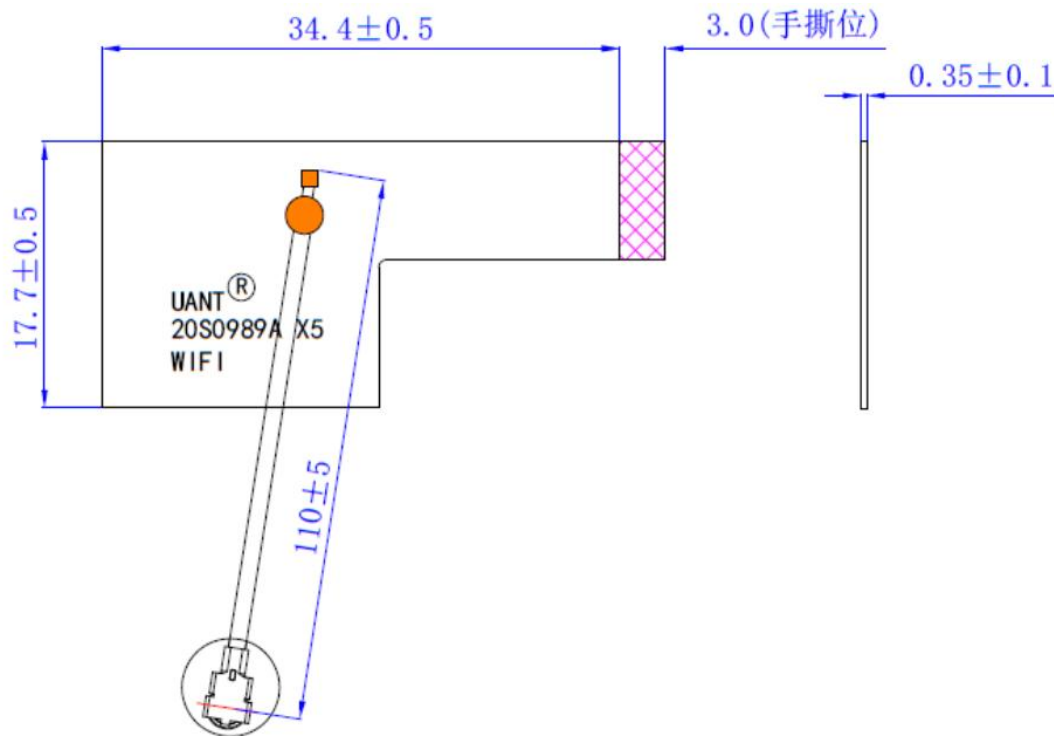
2.2 Test Equipment

Test System	TEM 24 Multi-probe Microwave Chamber
Test Instrument	Agilent E5071B
Calibration Validity	2025-08-19
Test Software	Passive Test 
Software Version	V2.7.0

2.3 Test Principle



3. Mechanical Specification



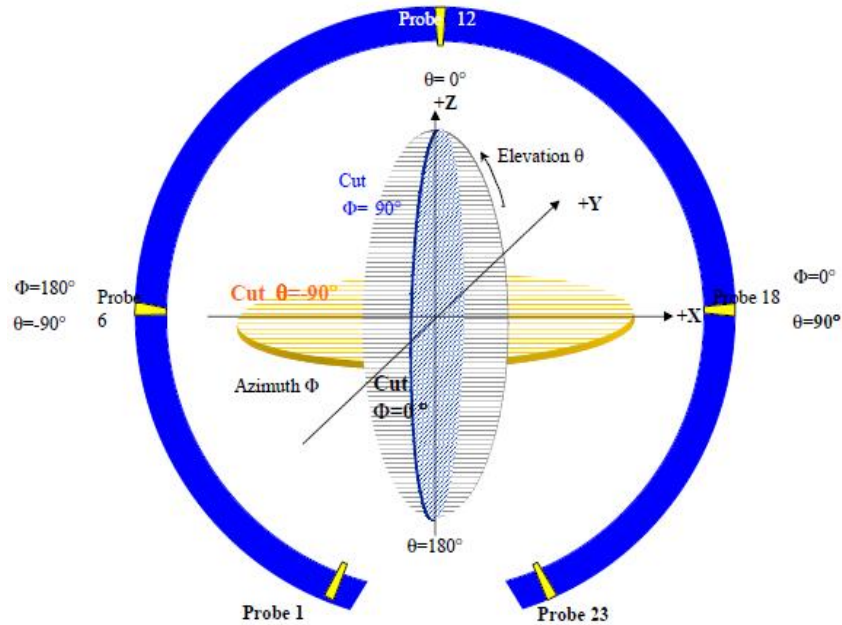
3.2: Darkroom 2D、3DRaditation Pattern

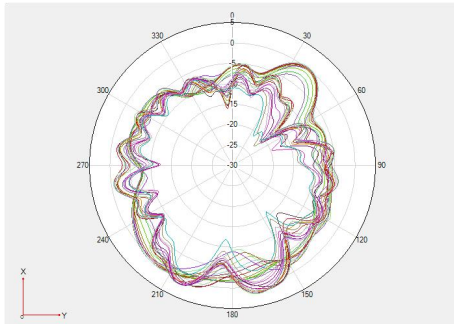
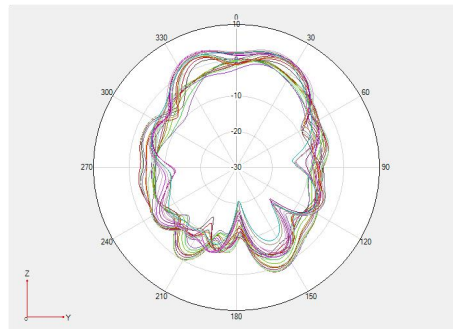
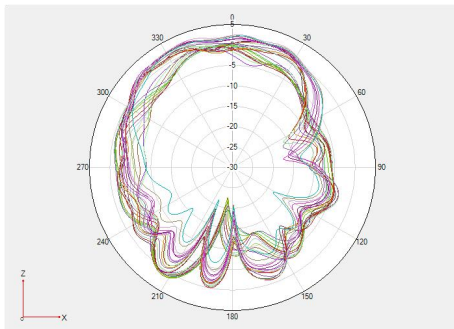
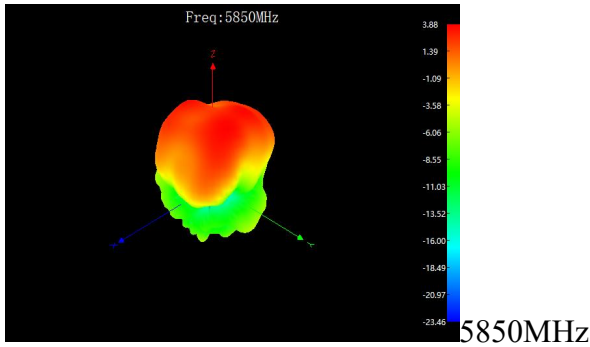
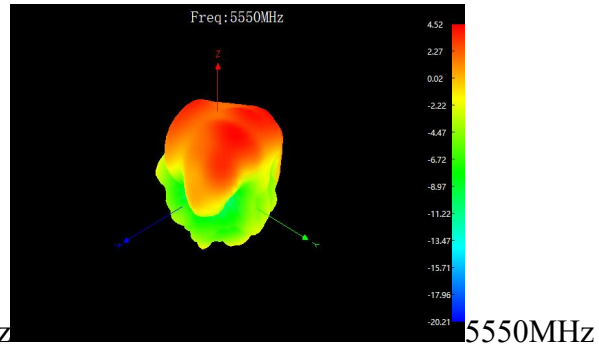
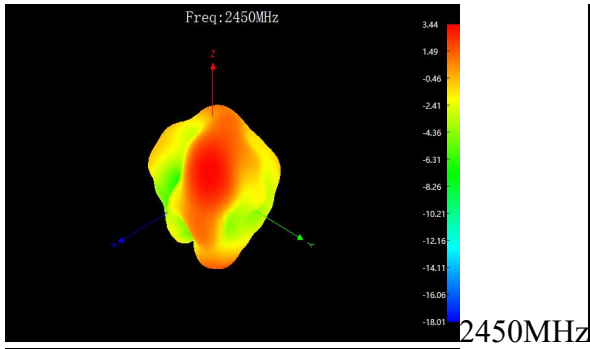


3.2.1 Efficiency and gain

Frequency / MHz	Efficiency / dB	Efficiency / %	Gain/ dBi
2400	-2.99	50.23	3.49
2410	-2.9	51.29	3.55
2420	-2.72	53.46	3.56
2430	-2.68	53.95	3.54
2440	-2.78	52.72	3.63
2450	-3.02	49.89	3.44
2460	-3.06	49.43	3.53
2470	-3.03	49.77	3.57
2480	-3.42	45.5	3.13
2490	-3.97	40.09	2.7
2500	-4.06	39.26	2.66
5150	-2.35	58.21	3.11
5200	-1.98	63.39	3.71
5250	-1.73	67.14	4.07
5300	-1.88	64.86	3.55
5350	-2.29	59.02	3.39
5400	-2.07	62.09	3.78
5450	-1.71	67.45	4.35
5500	-1.85	65.31	4.15
5550	-1.78	66.37	4.52
5600	-1.79	66.22	4.73
5650	-2.04	62.52	4.65
5700	-2.2	60.26	4.51
5750	-2.14	61.09	4.92
5800	-2.74	53.21	4.24
5850	-3.29	46.88	3.88

3.2.2.1 Darkroom 2D、3D Raditation Pattern





4:Antenna position

