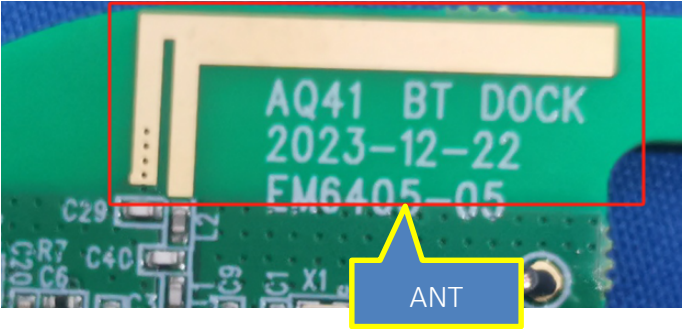


Antenna Specification

Antenna picture	
Antenna Type	PCB antenna
Antenna Peak Gain	2.53dBi
Operating Band	2400-2500MHz
Test laboratory name and Address	No.3 Zhen an Road, Wu Sha Community, Chang-An Town, Dongguan, Guangdong Province, China
Antenna Manufacturer	Dongguan Wise Ally Industrial Company Ltd
Model name	Smart Probe Thermometer - Dock
DUT photo	
Test Date	2023-6-27
Test Conductor	Fenghuijuan

OTA measurement

Test System

The SY-16 OTA system is an anechoic chamber, which can measure antenna passive data such as antenna efficiency, antenna gain, and 2D&3D pattern. The coordinates and topology are shown as follows:

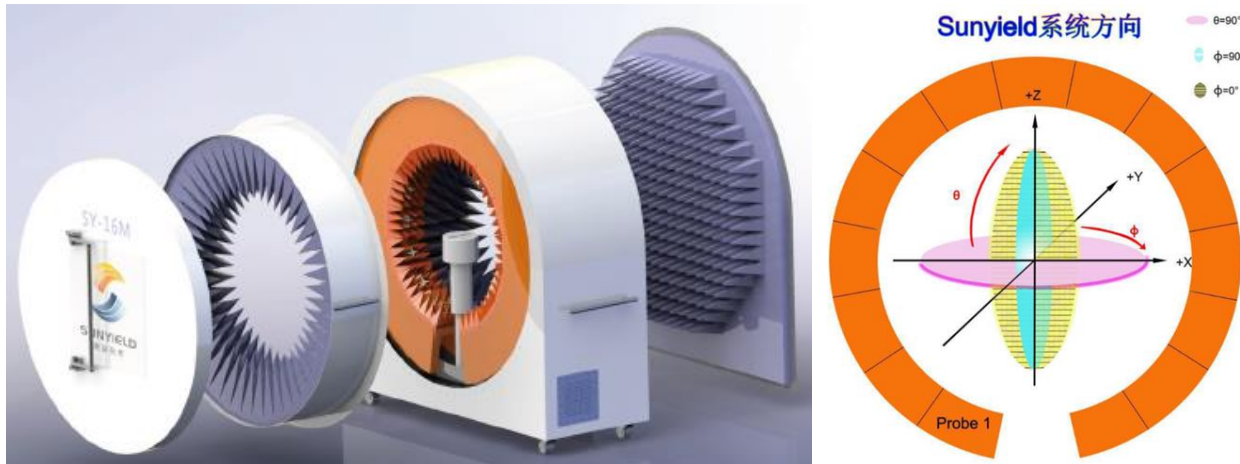


Figure 1 SY-16 OTA system

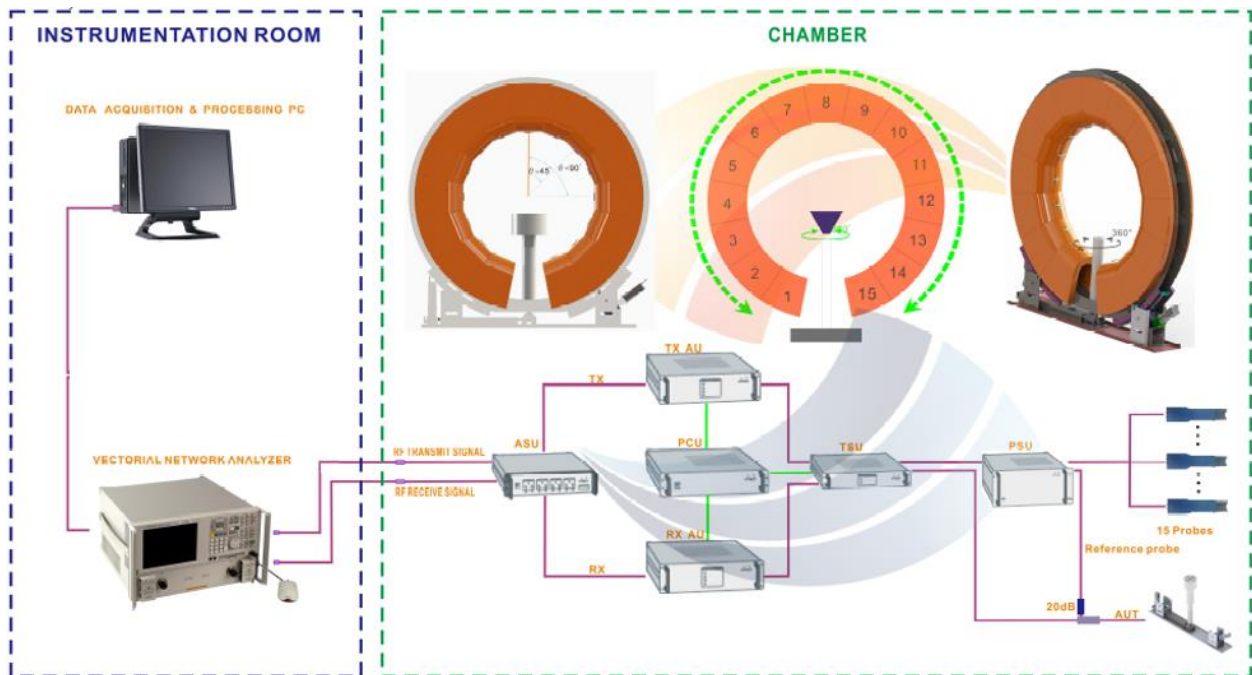


Figure 2 OTA measurement topology

Equipment List

Table 1 Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Network Analyzer	Keysight	E5071C	MY46527808	2023/1/9	2024/1/8
Anechoic Chamber	Sunyield	SY-16	SI1727	2023/5/10	2024/5/9

Test Method

Table 2 Test Method

Name	Antenna Performance
Parameter	Radiation Efficiency
Test Method	IEEE Standard Test Procedures for Antennas
Standard No.	ANSI/IEEE Std 149-2021
Test Software Being Used	PMS
Software Version	V2.8.5

Test Result

Efficiency and Gain

Table 3 Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dBi)
2400	2.33	49.00%
2410	2.53	49.20%
2420	2.52	50.10%
2430	2.35	50.30%
2440	2.12	50.40%
2450	1.85	50.40%
2460	1.41	49.30%
2470	0.84	48.20%
2480	0.2	47.80%
2490	0.48	46.60%
2500	0.71	45.80%

Radiation Pattern

Table 4 Product coordinates

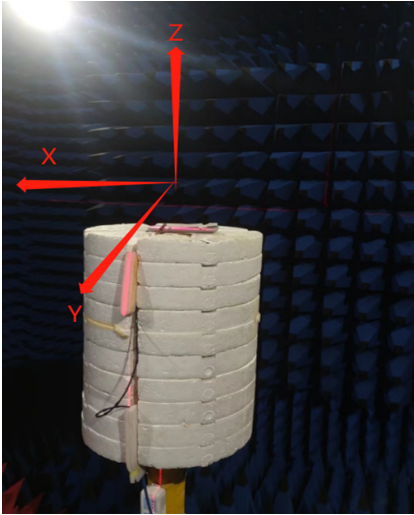
Product Coordinates	
	

Table 5 3D radiation pattern

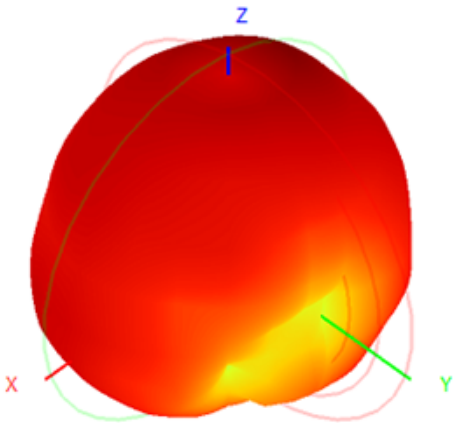
3D Radiation Pattern at 2450MHz


Table 6 Radiation pattern in XY Plane

2D Radiation Pattern ($\theta = 90^\circ$, XY Plane)

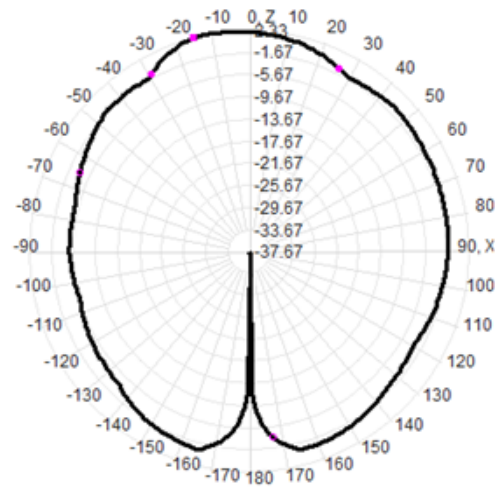


Table 7 Radiation pattern in XZ Plane

2D Radiation Pattern ($\phi = 0^\circ$, XZ Plane)

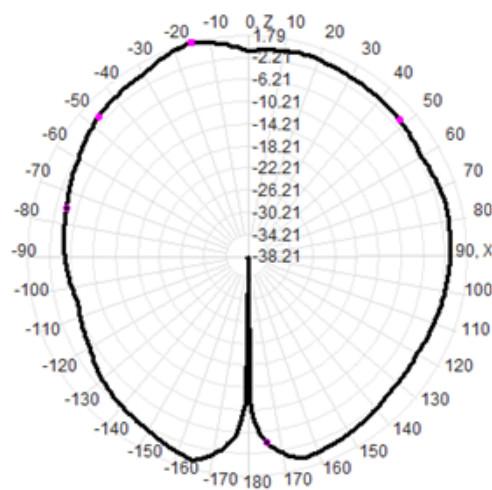


Table 8 Radiation pattern in YZ Plane

2D Radiation Pattern ($\phi = 90^\circ$, YZ Plane)

