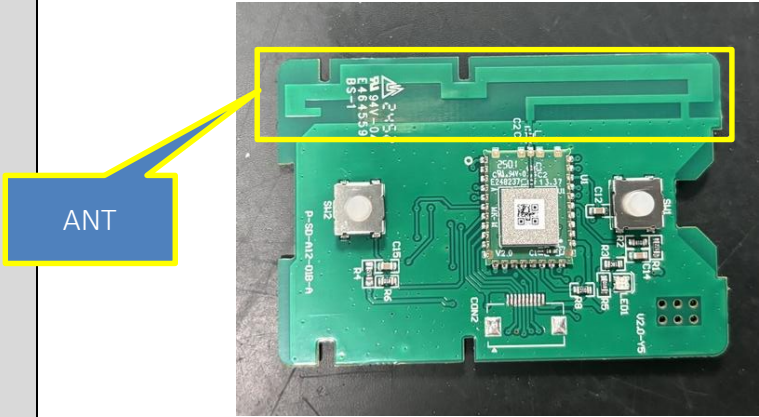


Antenna Specification

Antenna picture	
Antenna Type	PCB IFA Antenna
Antenna Peak Gain	-2.48dBi
Operating Band	902-928 MHz
Test laboratory name and Address	IoT Antenna Test Laboratory, 3 / A, LEEDARSON LIGHTING CO., LTD. Xingtai Industrial Park, Changtai Economic Development Zone, Zhangzhou, 363900, China
Antenna Manufacturer	LEEDARSON LIGHTING CO., LTD.
Model name	Dimmer
DUT photo	
Test Date	2024-10-28
Test Conductor	Feng Huijuan

OTA measurement

Test System

The SY-16 OTA system and RayZone2800 OTA system are anechoic chambers, which can measure antenna passive data such as antenna efficiency, antenna gain, and 2D&3D pattern. The systems are shown as follows:



Figure 1 SY-16 OTA system

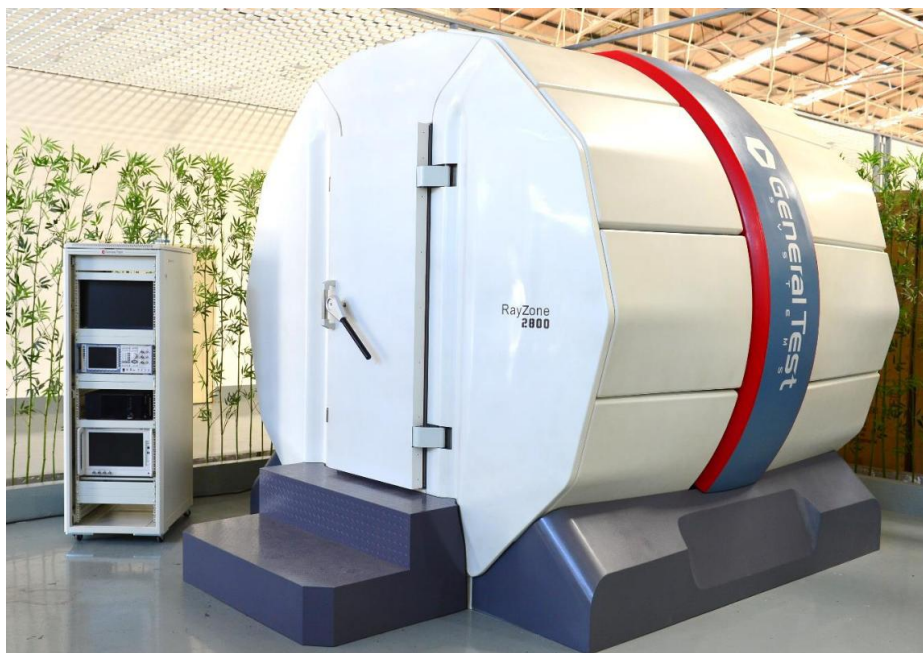


Figure 2 RayZone2800 OTA system

Equipment List

Table 1 Equipment List

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
☒	Network Analyzer	Keysight	E5071C	MY46527808	2025/1/9	2026/1/8
☐	Network Analyzer	Keysight	E5071C	MY46108051	2024/4/19	2025/4/18
☒	Anechoic Chamber	Sunyield	SY-16	SI1727	2024/4/28	2025/4/27
☐	Anechoic Chamber	General Test System	RayZone2800	CT10121244 B5079	2024/5/10	2025/5/9

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	PMS-V2.8.5	☒	MaxSign-V1.4.3	☐	

Test Result

Efficiency and Gain

Table 3 Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
902	-3.14	-7.50	17.77
904	-2.98	-7.30	18.64
906	-2.94	-7.24	18.88
908	-2.82	-7.14	19.31
910	-2.60	-6.94	20.22
912	-2.48	-6.81	20.87
914	-2.50	-6.79	20.94
916	-2.67	-6.92	20.32
918	-2.82	-7.06	19.66
920	-2.84	-7.09	19.56
922	-2.70	-6.96	20.12

924	-2.65	-6.88	20.51
926	-2.79	-6.94	20.21
928	-3.02	-7.14	19.31

Radiation Pattern

Table 4 Product coordinates

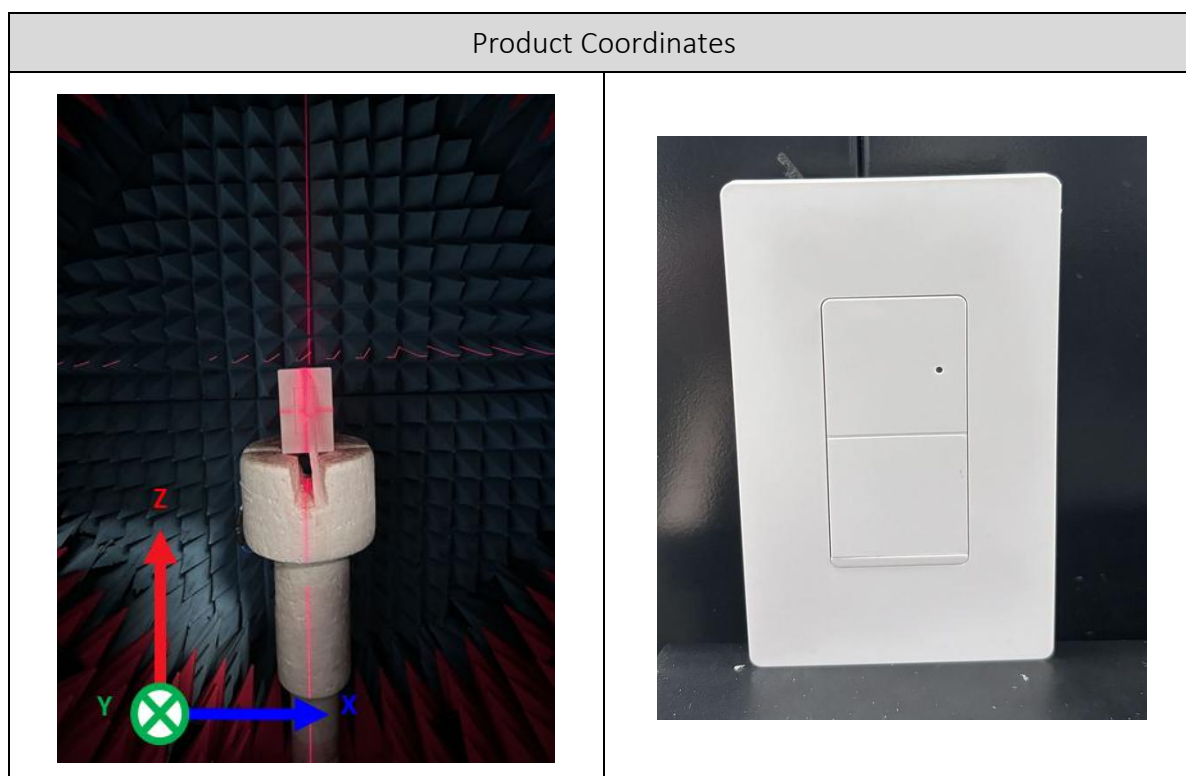


Table 5 3D radiation pattern

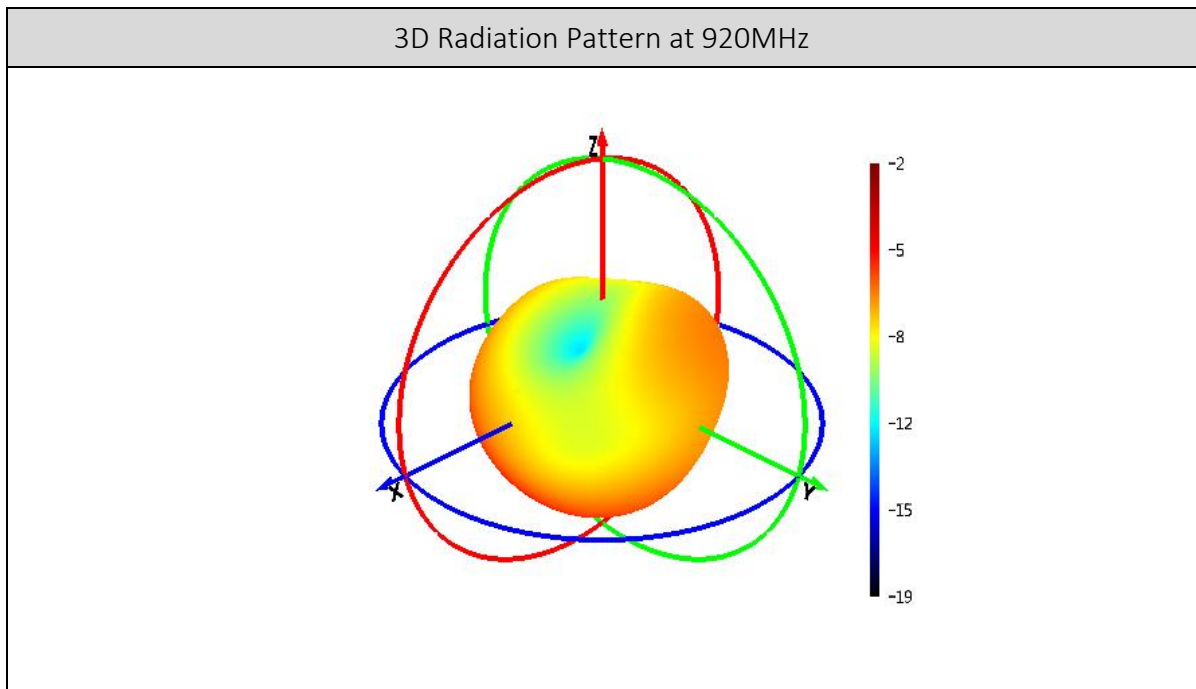


Table 6 Radiation pattern in XY Plane

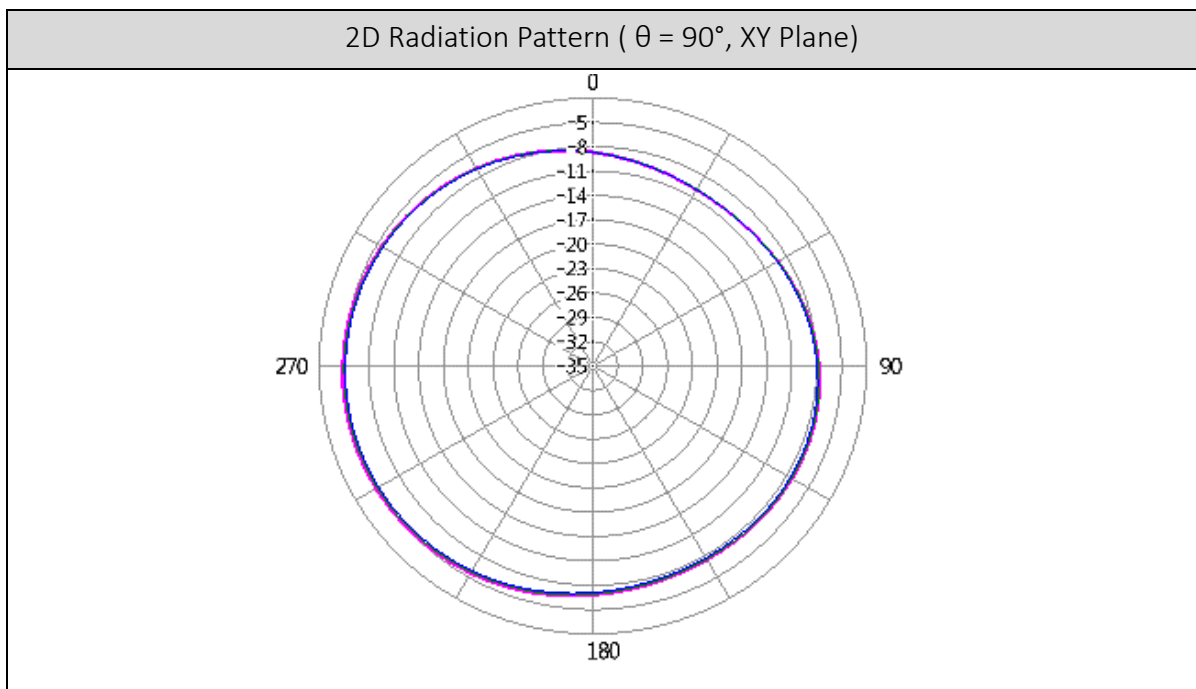


Table 7 Radiation pattern in XZ Plane

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

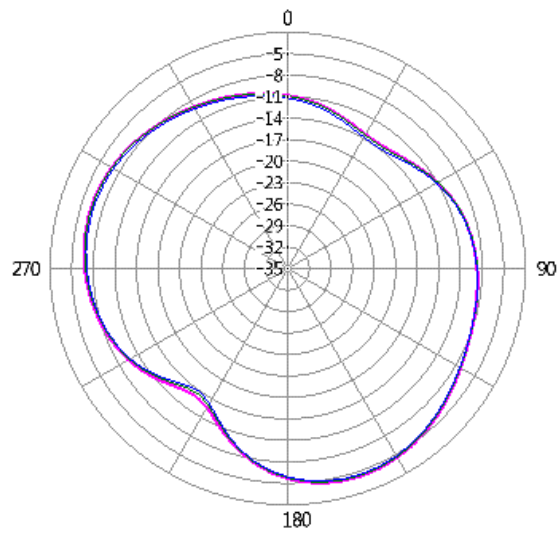


Table 8 Radiation pattern in YZ Plane

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

