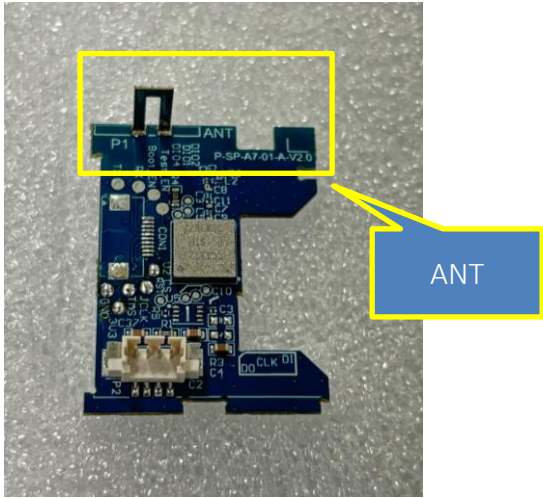


Antenna Specification

Antenna picture	
Antenna Type	Metal Monopole antenna
Antenna Peak Gain	-4.09 dBi
Operating Band	912 MHz ~ 920 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	Socket
DUT photo	
Test Date	2024-07-31
Test Conductor	Fenghuijuan

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

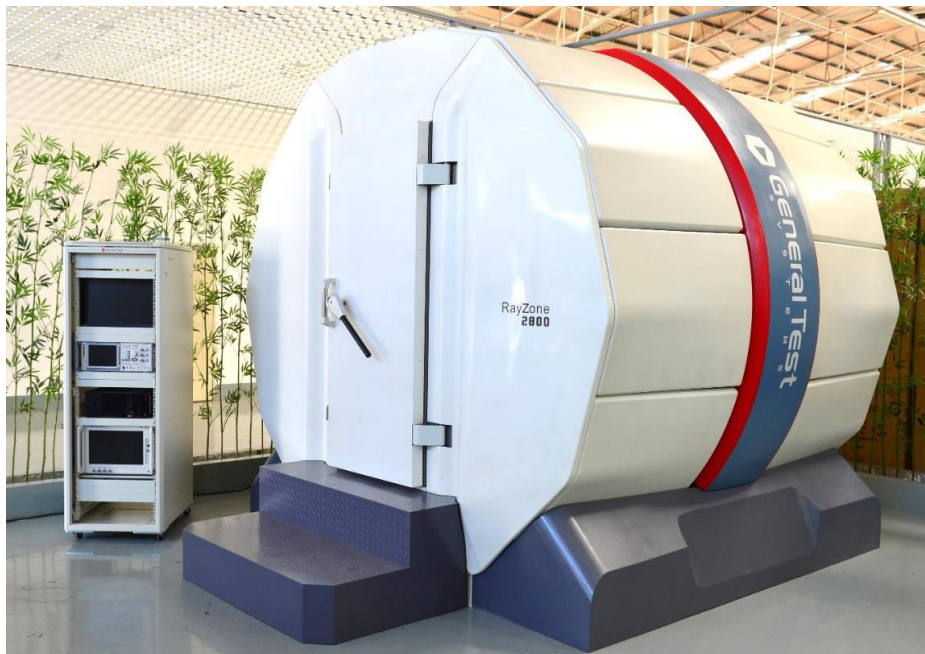


Figure 2 RayZone2800 OTA system

Equipment List

Table 1 Equipment List

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
☒	Network Analyzer	Keysight	E5071C	MY46527808	2024/1/9	2025/1/8
☐	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	-4.09	-7.41	18.16
904	-4.17	-7.42	18.12
906	-4.31	-7.55	17.57
908	-4.39	-7.64	17.20
910	-4.33	-7.58	17.47
912	-4.37	-7.53	17.65
914	-4.47	-7.55	17.56
916	-4.64	-7.70	16.97
918	-4.79	-7.87	16.35
920	-4.81	-7.88	16.28
922	-4.66	-7.76	16.74

924	-4.54	-7.59	17.41
926	-4.53	-7.54	17.63
928	-4.62	-7.62	17.28

Radiation Pattern

Table 4 Product coordinates

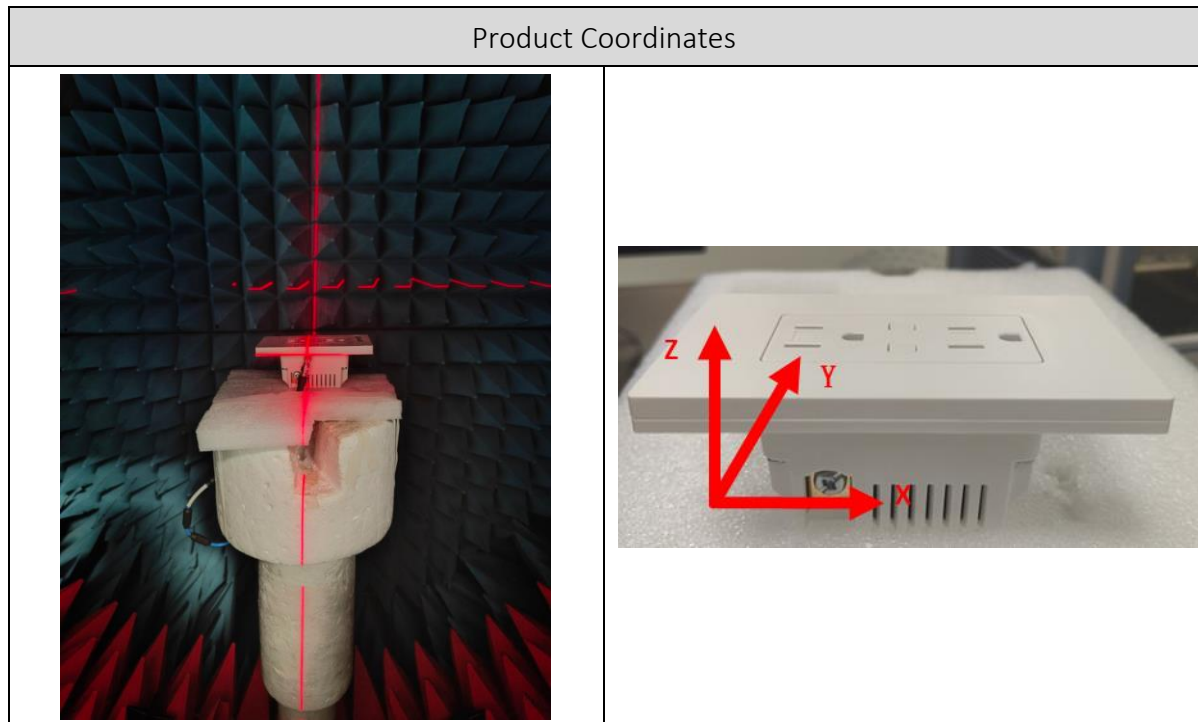


Table 5 3D radiation pattern

3D Radiation Pattern at 916MHz

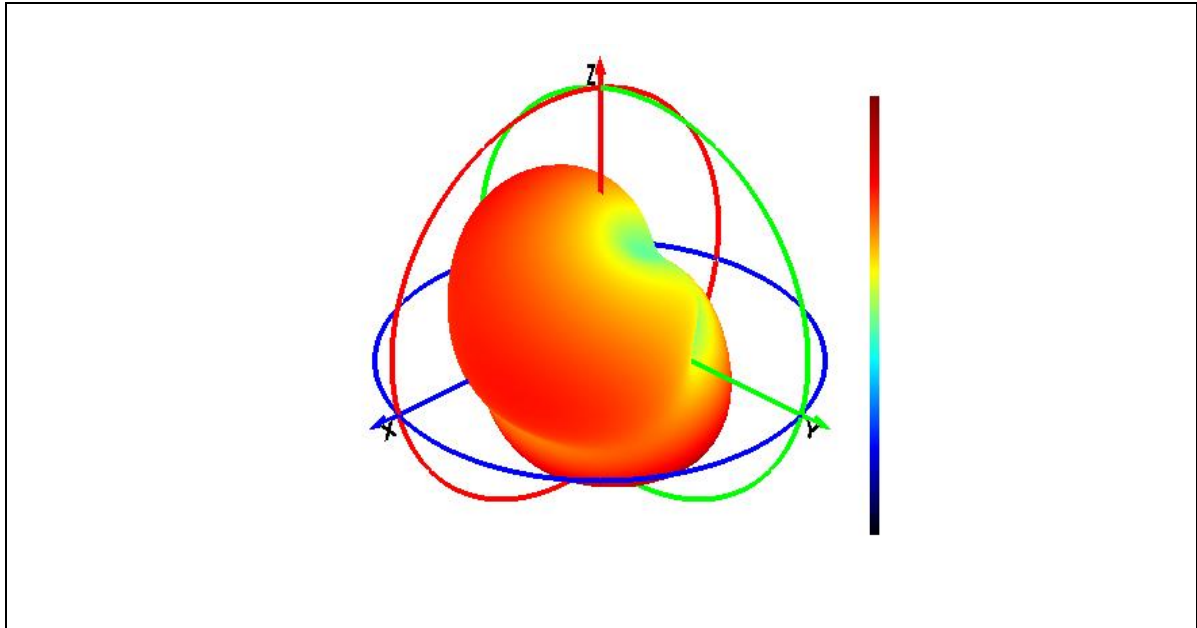


Table 6 Radiation pattern in XY Plane

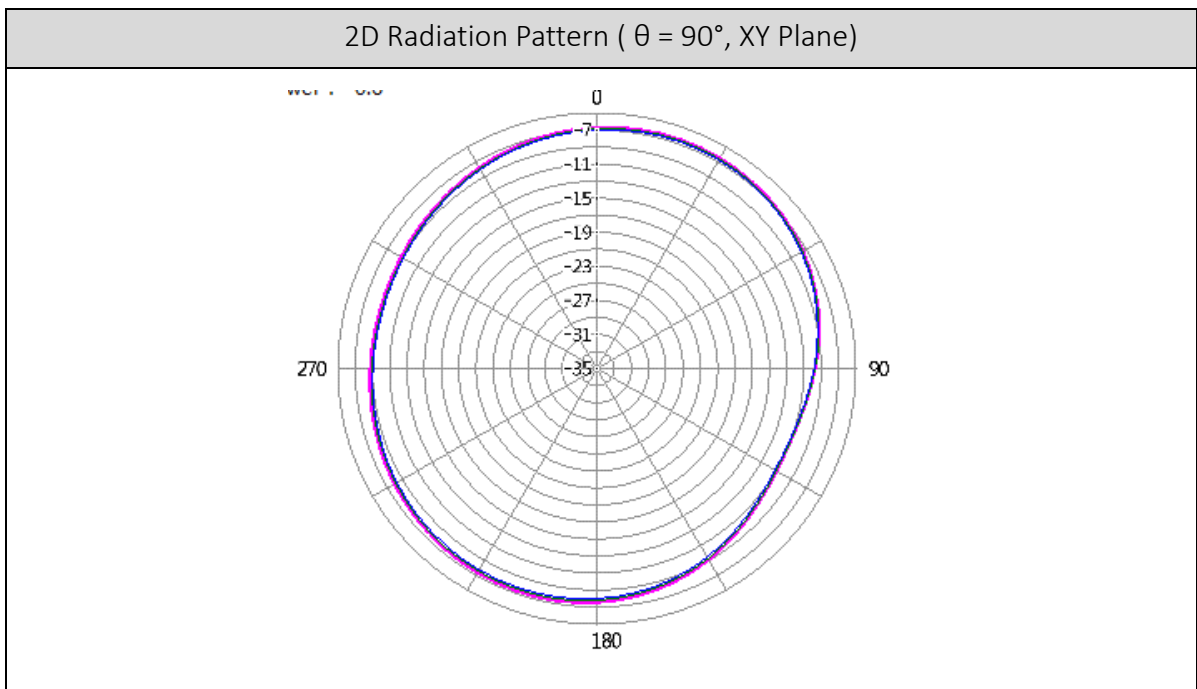
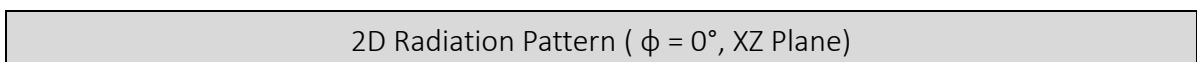


Table 7 Radiation pattern in XZ Plane



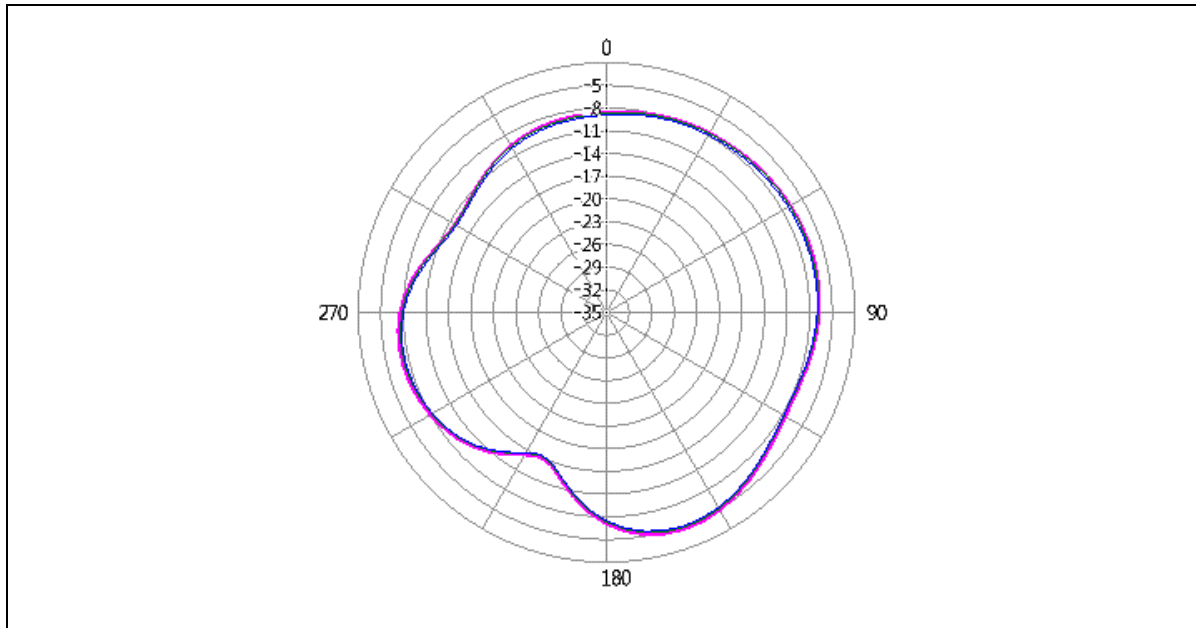


Table 8 Radiation pattern in YZ Plane

