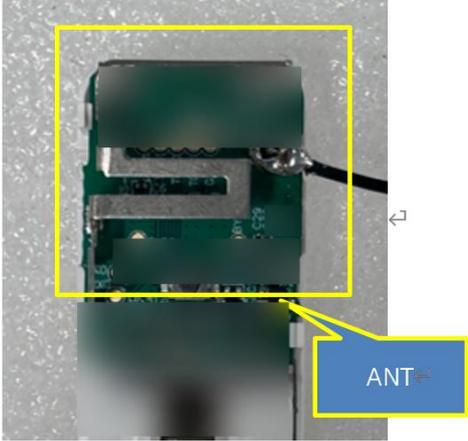


# Antenna Specification

Antenna picture	
Antenna Type	Metal Antenna
Antenna Peak Gain	-4.66dBi
Operating Band	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	Entry sensor
Test Date	2025-05-22
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
<input checked="" type="checkbox"/>	Network Analyzer	Keysight	E5071C	MY46527808	2025/1/9	2026/1/8
<input type="checkbox"/>	Network Analyzer	Keysight	E5071C	MY46108051	2025/4/19	2026/4/18
<input checked="" type="checkbox"/>	Anechoic Chamber	Sunyield	SY-16	SI1727	2025/4/28	2026/4/27
<input type="checkbox"/>	Anechoic Chamber	General Test System	RayZone2800	CT10121244 B5079	2025/5/10	2026/5/9

## 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	<input checked="" type="checkbox"/>	MaxSign-V1.4.3	<input type="checkbox"/>	

## Test Result

### Efficiency and Gain

Table 3 Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
860	-5.21	-7.05	19.71
862	-5.31	-7.15	19.25
864	-5.35	-7.18	19.13
866	-5.21	-7.04	19.75
868	-5.02	-6.87	20.56
870	-5.00	-6.85	20.67
914	-4.37	-6.28	23.55
916	-4.53	-6.43	22.77
918	-4.66	-6.55	22.13

920	-4.66	-6.55	22.15
922	-4.51	-6.42	22.81
924	-4.34	-6.27	23.58
926	-4.30	-6.26	23.68

### Radiation Pattern

Table 4 Product coordinates

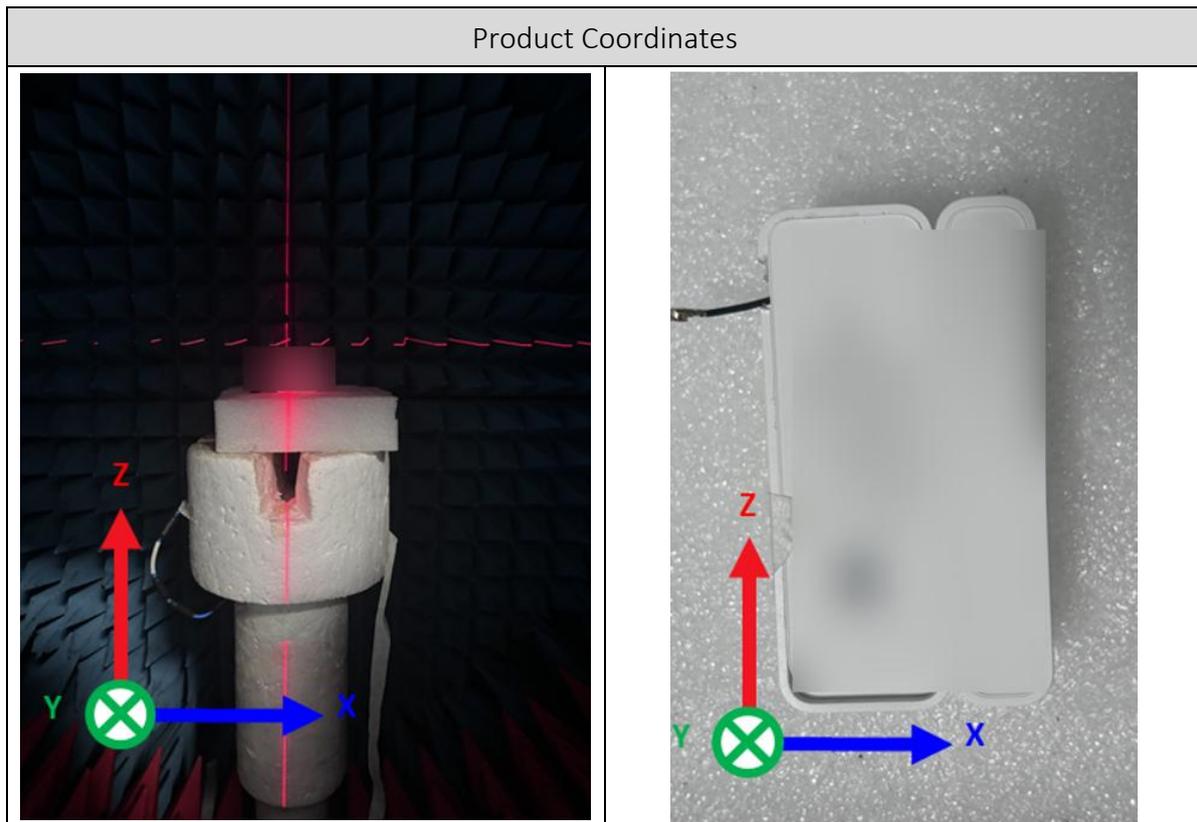


Table 5 3D radiation pattern

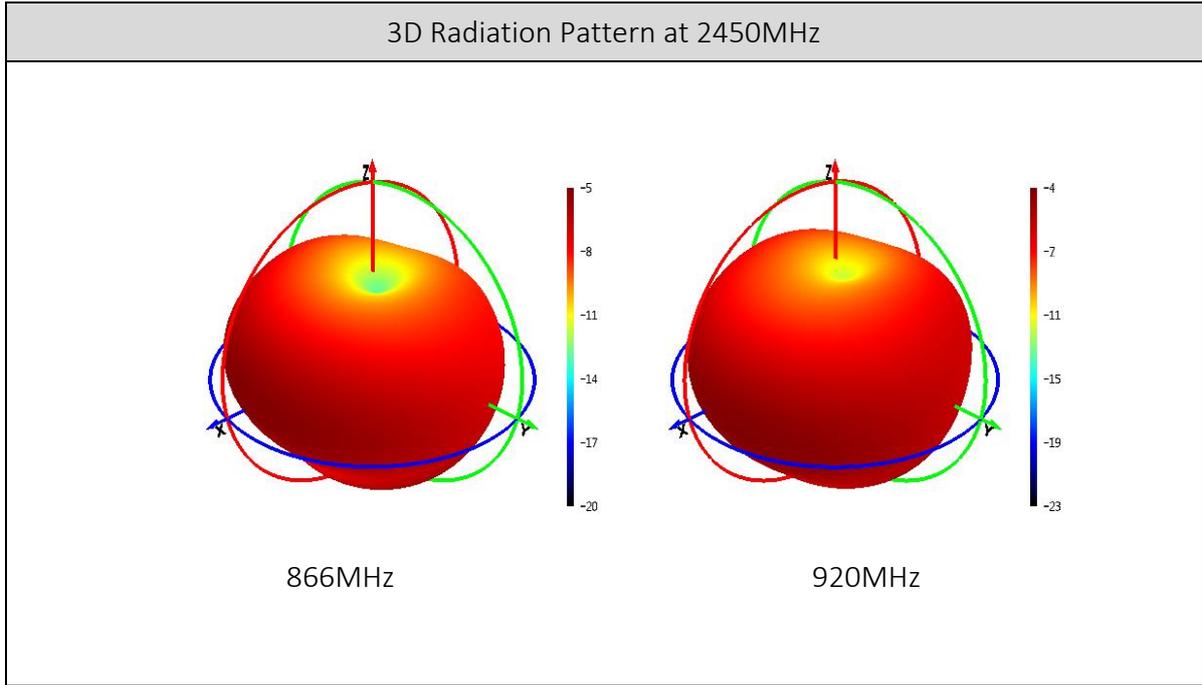


Table 6 Radiation pattern in XY Plane

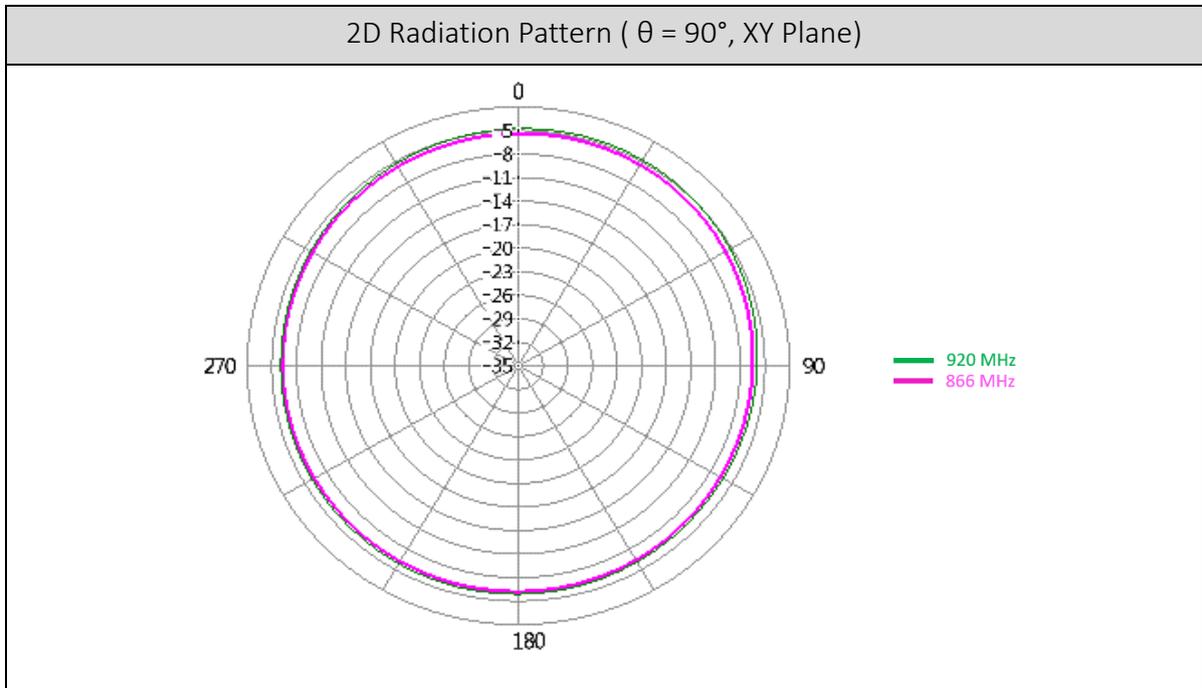


Table 7 Radiation pattern in XZ Plane

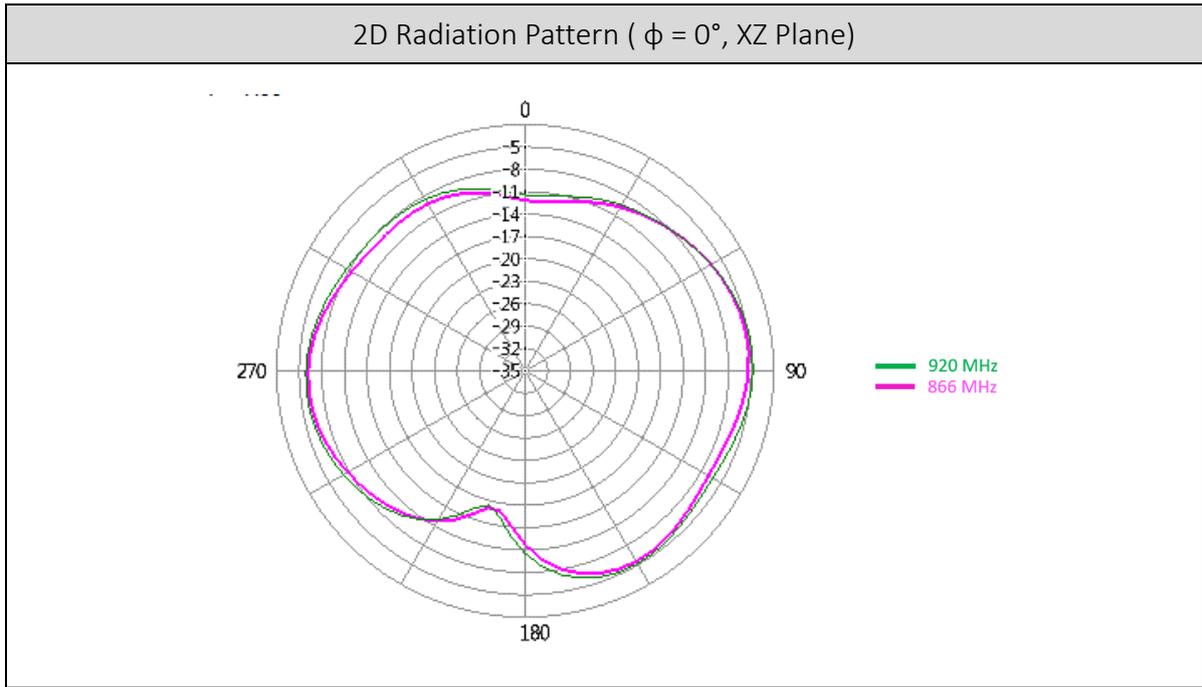


Table 8 Radiation pattern in YZ Plane

