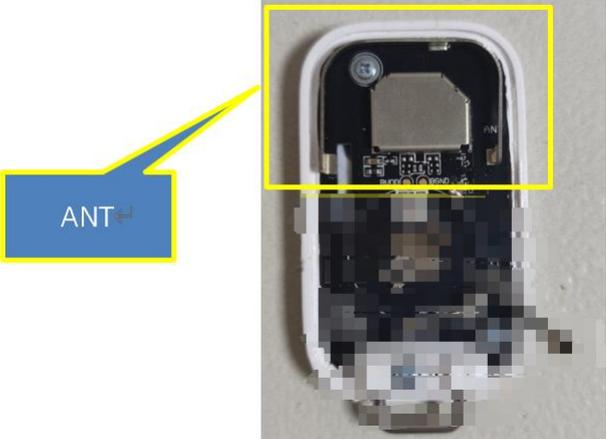


Antenna Specification

Antenna picture	
Antenna Type	Metal Antenna
Antenna Peak Gain	-1.66dBi
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	Keyfob
Test Date	2024-12-25
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:

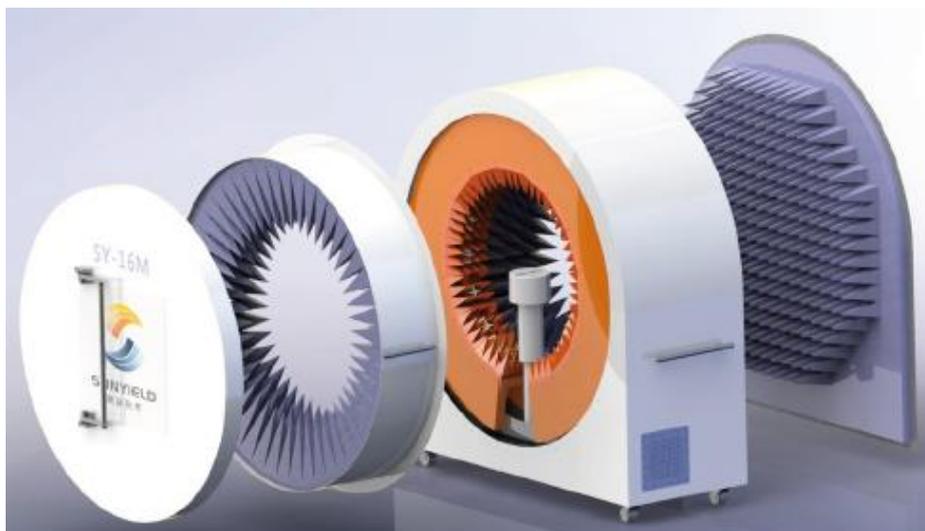


Figure 1 SY-16 OTA system



Figure 2 RayZone2800 OTA system

Equipment List

Table 1 Equipment List

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
<input checked="" type="checkbox"/>	Network Analyzer	Keysight	E5071C	MY46527808	2025/1/9	2026/1/8
<input type="checkbox"/>	Network Analyzer	Keysight	E5071C	MY46108051	2024/4/19	2025/4/18
<input checked="" type="checkbox"/>	Anechoic Chamber	Sunyield	SY-16	SI1727	2024/4/28	2025/4/27
<input type="checkbox"/>	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	<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 (%)
910	-1.52	-5.20	30.20
912	-1.43	-5.11	30.85
914	-1.42	-5.08	31.08
916	-1.53	-5.16	30.46
918	-1.65	-5.28	29.67
920	-1.66	-5.29	29.60
922	-1.51	-5.14	30.64
924	-1.35	-4.95	31.96
926	-1.34	-4.90	32.37
928	-1.45	-4.99	31.69
930	-1.54	-5.11	30.86

Radiation Pattern

Table 4 Product coordinates

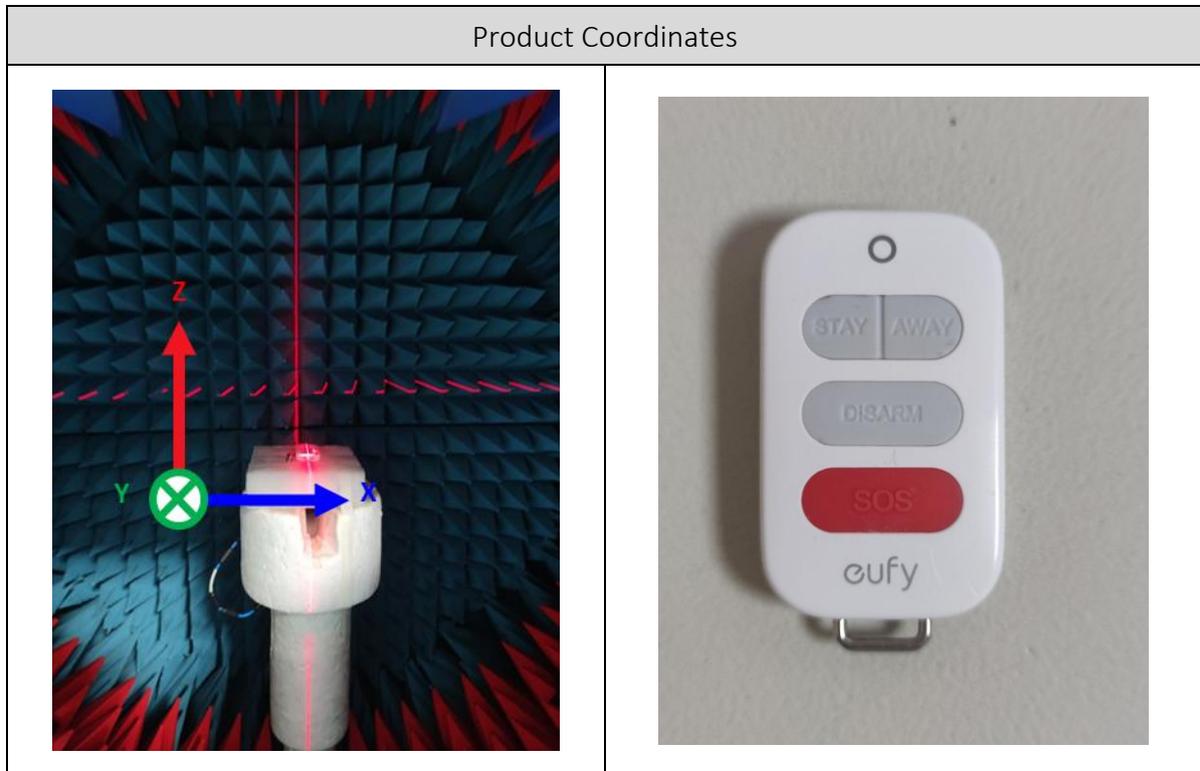


Table 5 3D radiation pattern

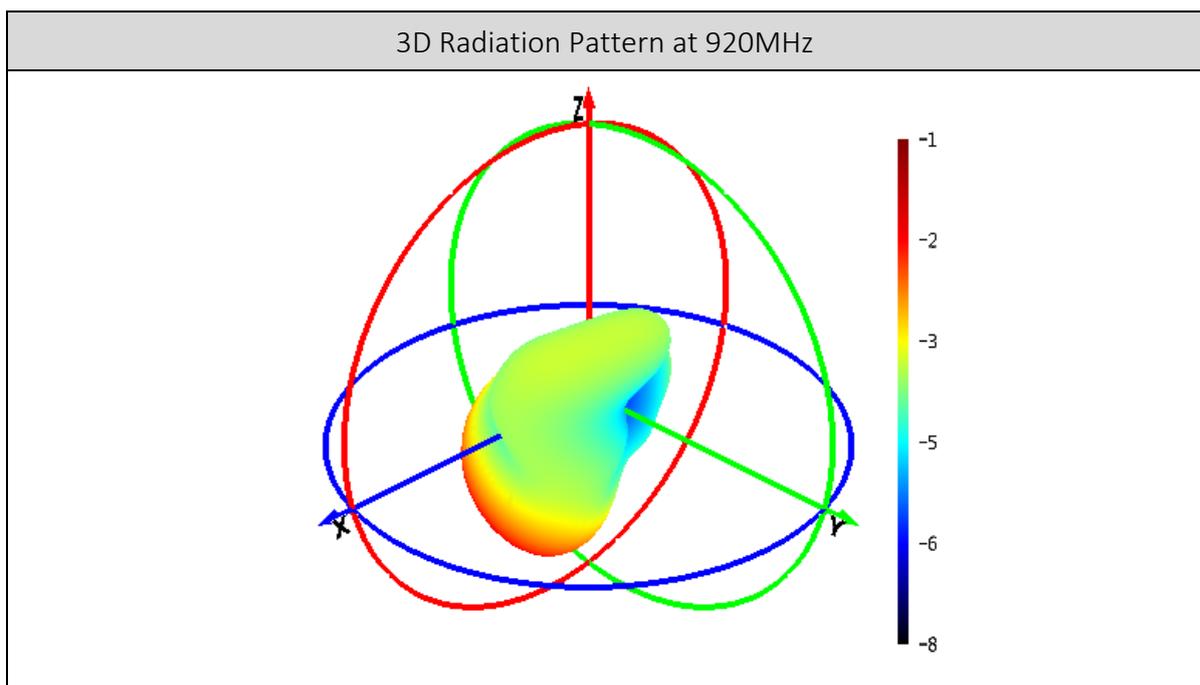


Table 6 Radiation pattern in XY Plane

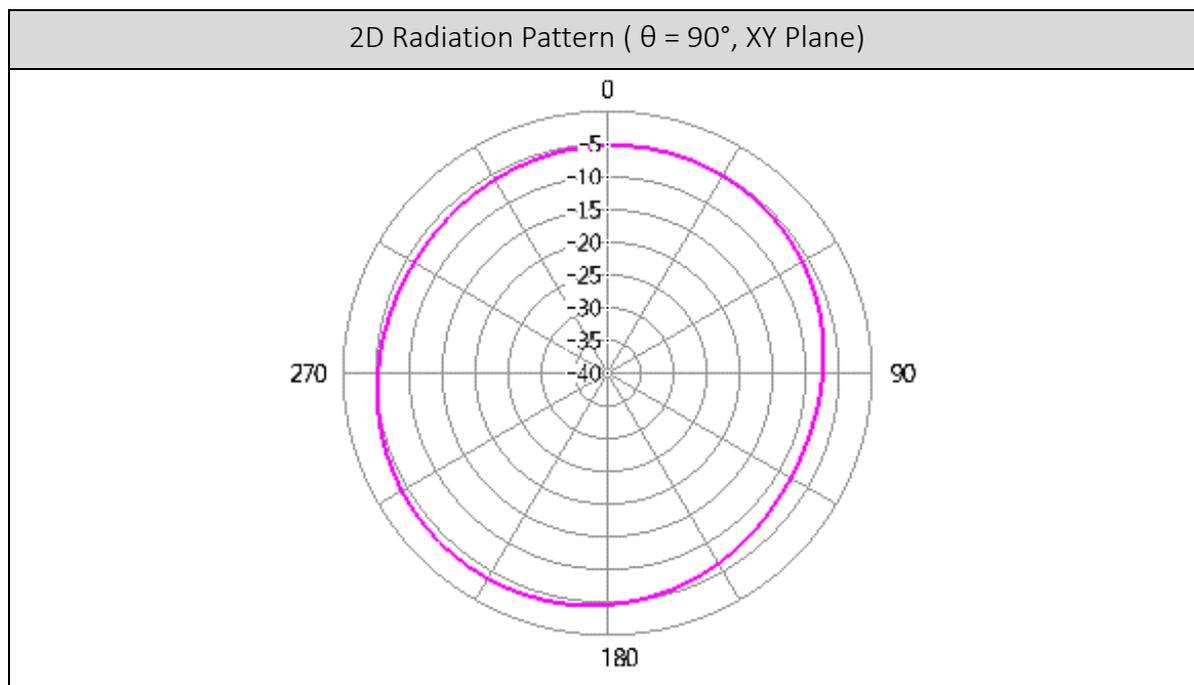


Table 7 Radiation pattern in XZ Plane

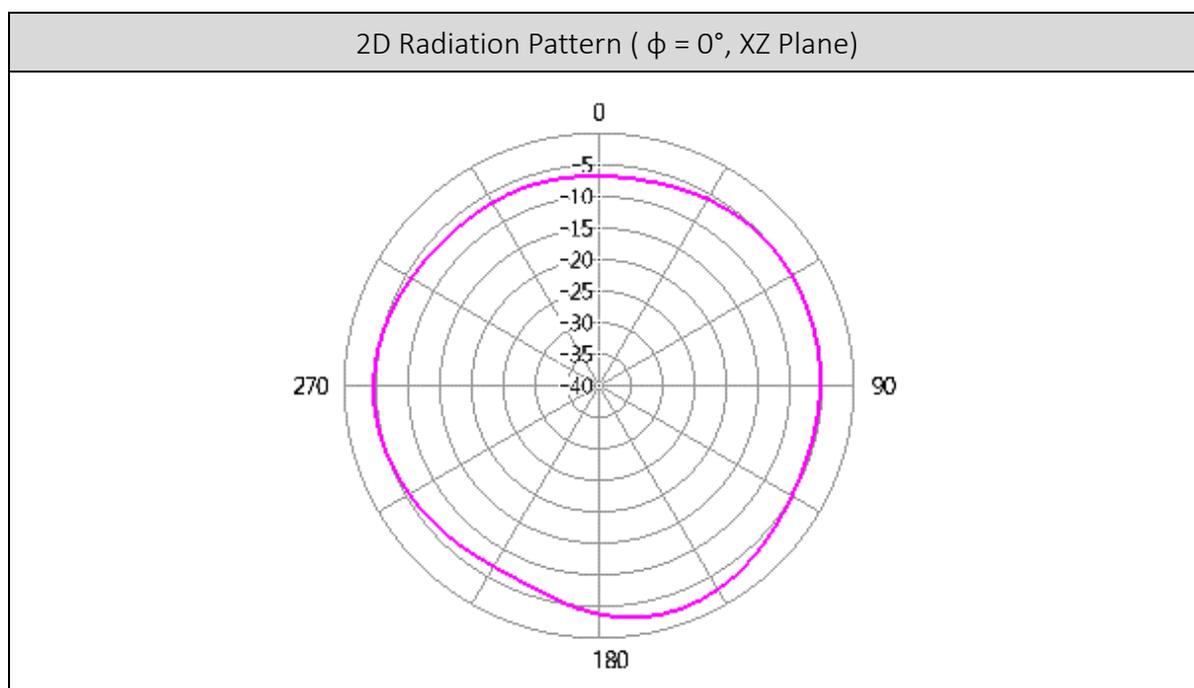


Table 8 Radiation pattern in YZ Plane

