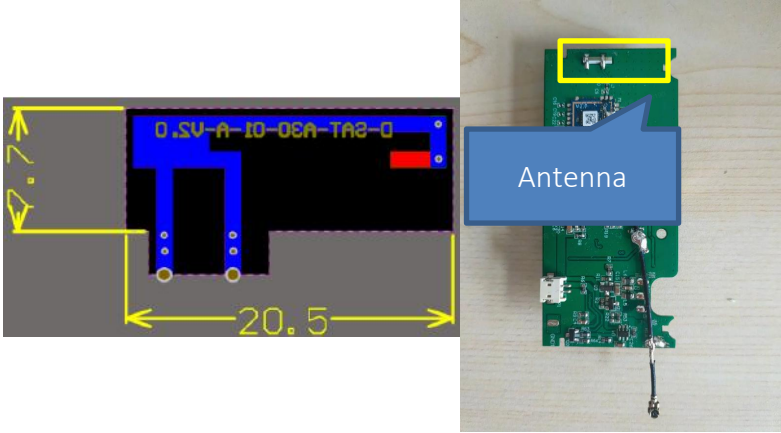


Antenna Specification

Antenna picture	 The image contains two parts. On the left is a technical diagram of a PCB antenna with dimensions: a width of 20.5 and a height of 2. On the right is a photograph of the physical green PCB antenna with a yellow box highlighting the antenna element and a blue callout bubble labeled 'Antenna'.
Antenna Type	Internal PCB Antenna
Antenna Peak Gain	1.2 dBi
Operating Band	2400 MHz ~ 2500 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	SL6H
DUT photo	 A photograph of the Device Under Test (DUT), a black, dome-shaped LED light fixture, mounted on a black base. It is connected to a power source via two black cables.
Test Date	2026-4-10
Test Conductor	Shangqing Wei

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

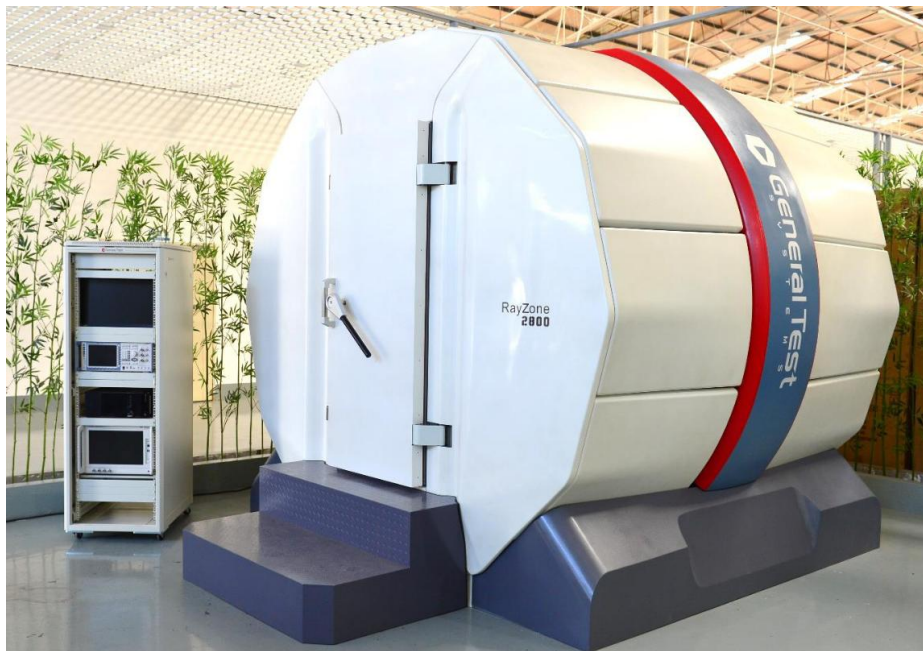


Figure 2 RayZone2800 OTA system

Equipment List

Table 1 Equipment List

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
☐	Network Analyzer	Keysight	E5071C	MY46527808	2026/1/9	2027/1/8
☒	Network Analyzer	Keysight	E5071C	MY46108051	2025/4/19	2026/4/18
☒	Anechoic Chamber	Sunyield	SY-16	SI1727	2025/4/28	2026/4/27
☐	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	☒	MaxSign-V1.4.3	☐

Test Result

Efficiency and Gain

Table 3 Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	1.14	-4.51	35.39
2410	1.20	-4.37	36.52
2420	1.05	-4.59	34.73
2430	0.97	-4.69	33.99
2440	1.18	-4.49	35.59
2450	0.9	-4.79	33.16
2460	0.42	-4.99	31.67
2470	-0.23	-5.05	31.28
2480	-0.35	-4.87	32.56
2490	-0.55	-4.73	33.69
2500	-0.02	-4.79	33.19

Radiation Pattern

Table 4 Product coordinates

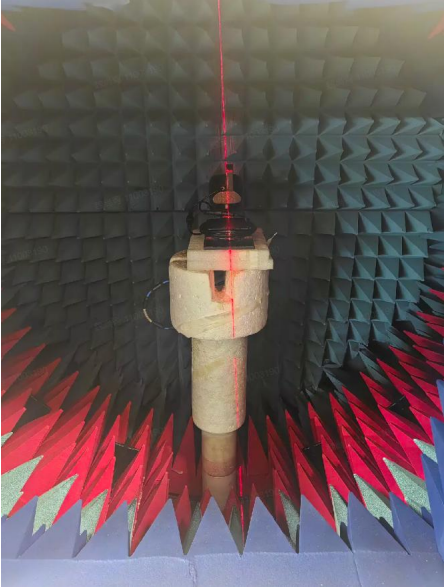
Product Coordinates	
	

Table 5 3D radiation pattern

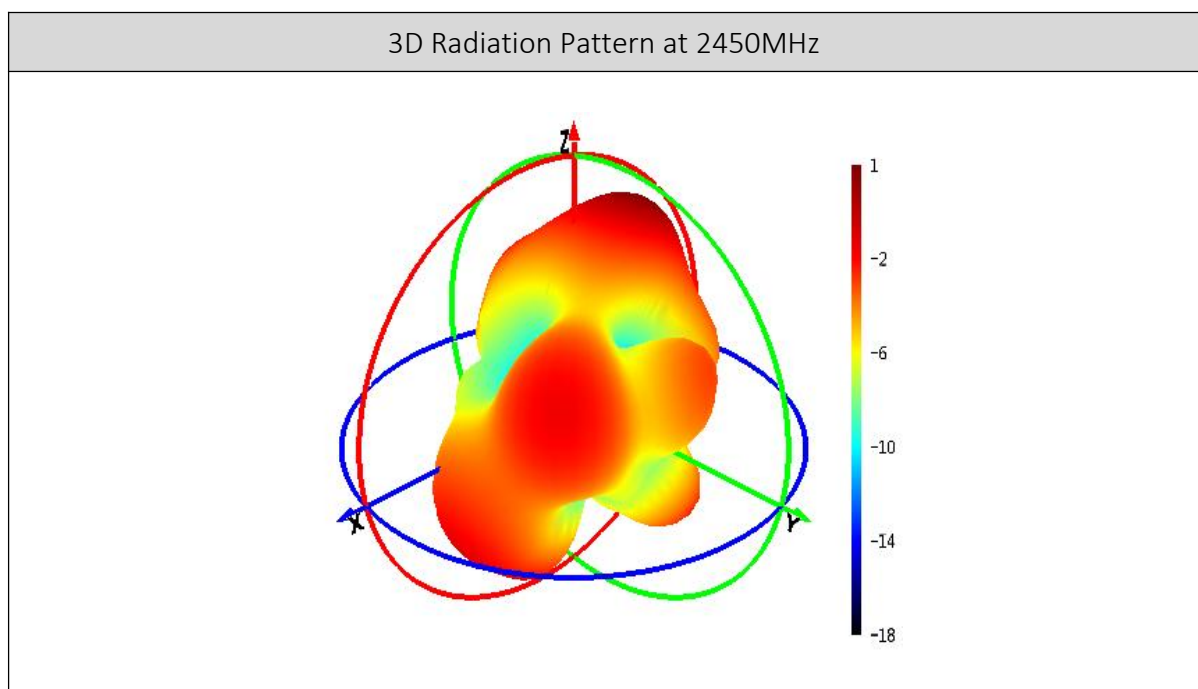


Table 6 Radiation pattern in XY Plane

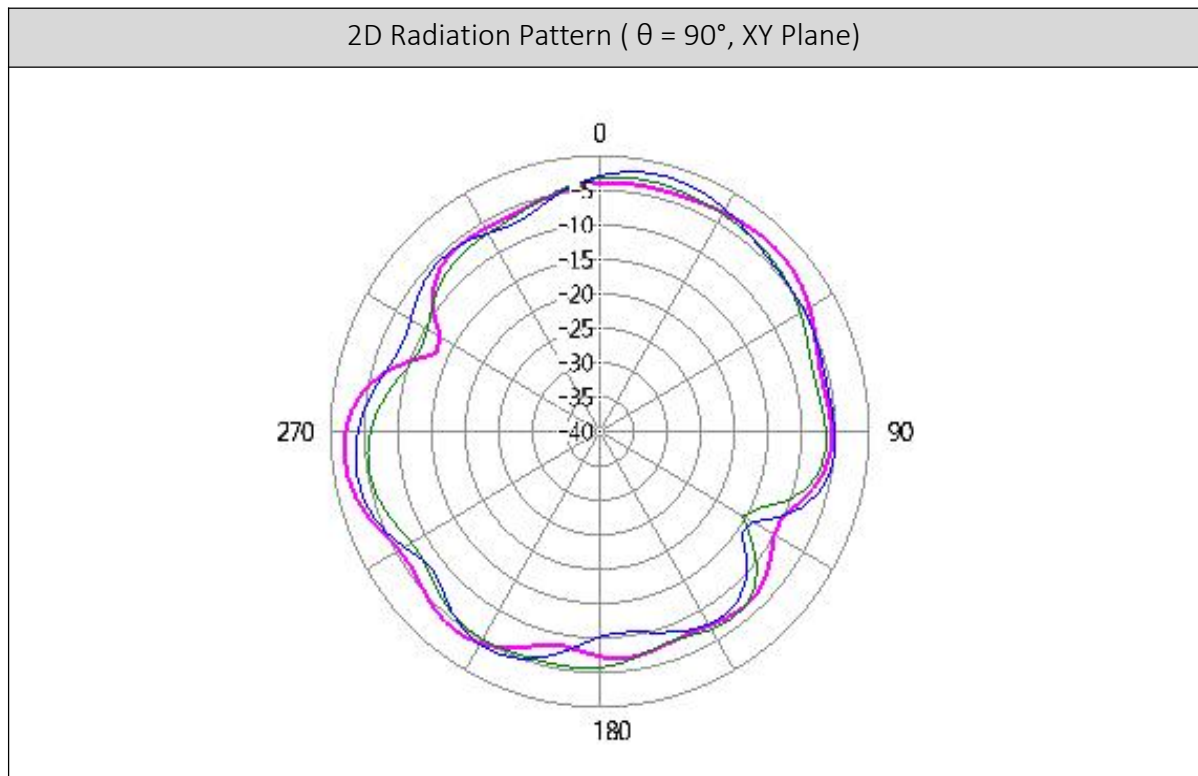


Table 7 Radiation pattern in XZ Plane

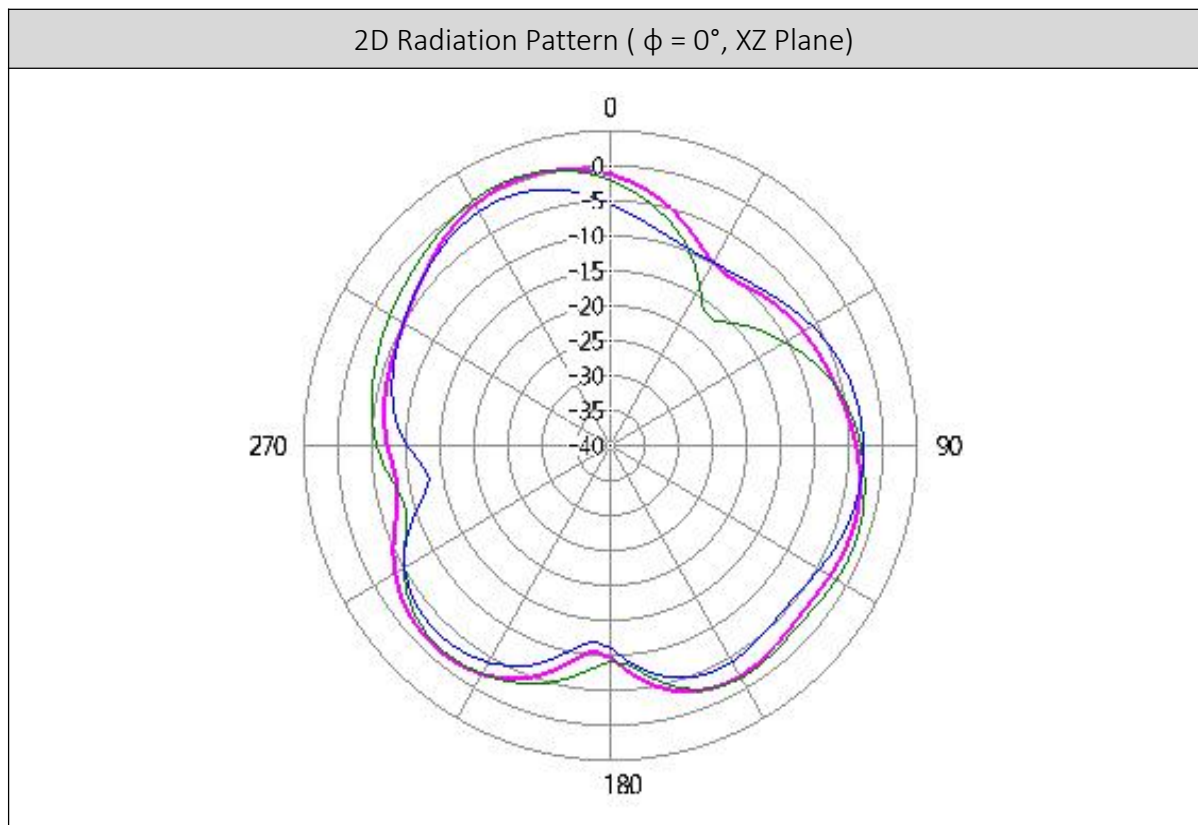


Table 8 Radiation pattern in YZ Plane

