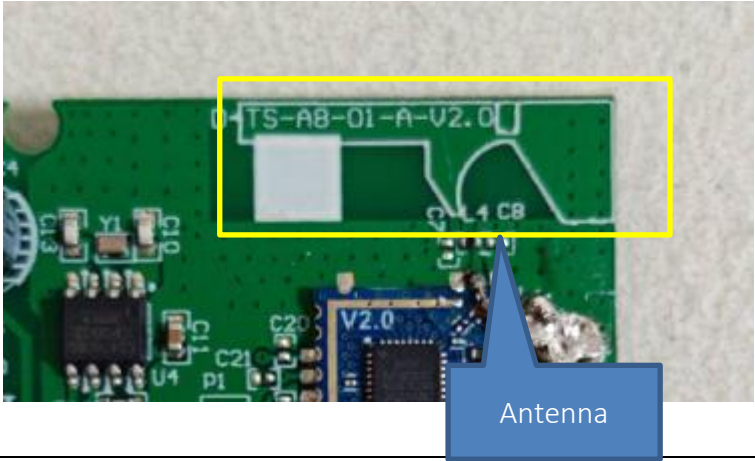


Antenna Specification

Antenna picture	
Antenna Type	Internal PCB IFA Antenna
Antenna Peak Gain	1.81 dBi
Operating Band	2400 MHz ~ 2483.5 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	M071-LC SP6LV 低压草坪灯
DUT photo	
Test Date	2025-12-26
Test Conductor	Xiu Weisong

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

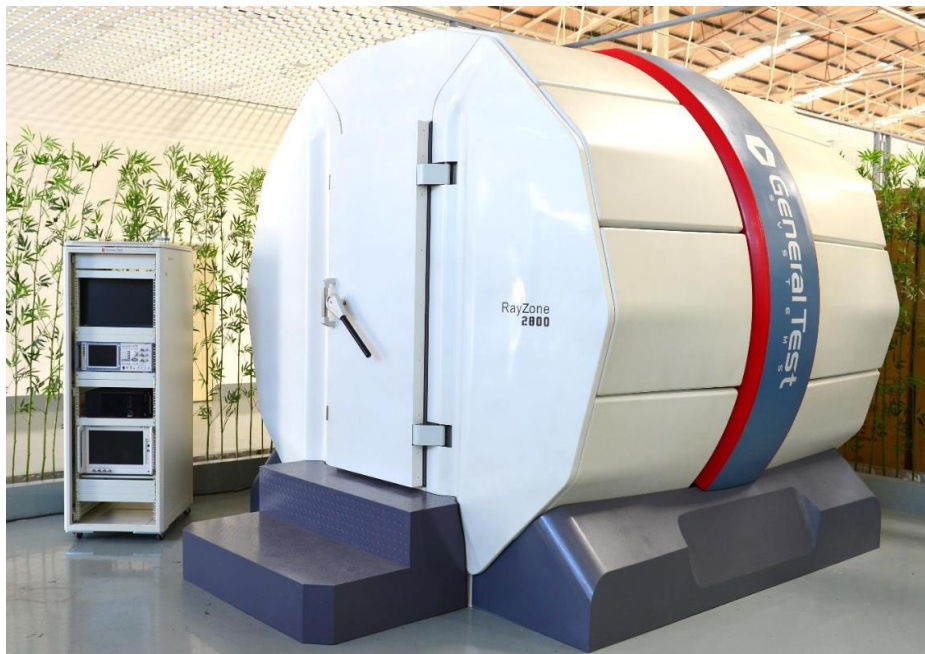


Figure 2 RayZone2800 OTA system

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	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	1.66	-4.00	39.83
2410	1.45	-4.00	39.80
2420	1.81	-3.96	40.18
2430	1.03	-3.95	40.29
2440	1.41	-3.83	41.39
2450	1.50	-3.72	42.50
2460	1.08	-3.72	42.50
2470	1.31	-3.73	42.34
2480	0.83	-3.73	42.35
2490	0.86	-3.76	42.10
2500	0.85	-3.75	42.15

Radiation Pattern

Table 4 Product coordinates

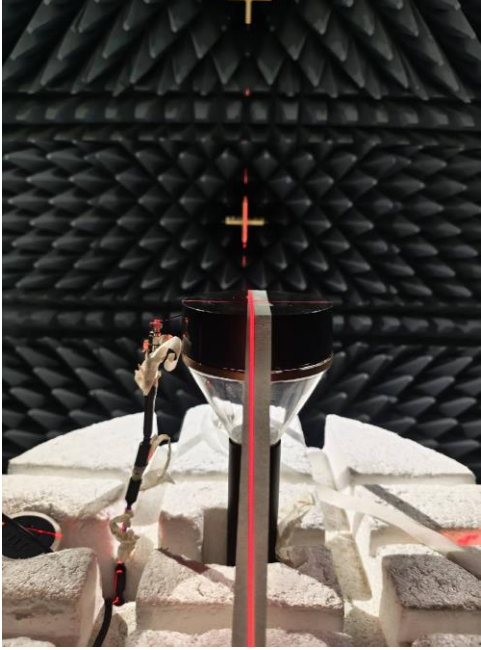
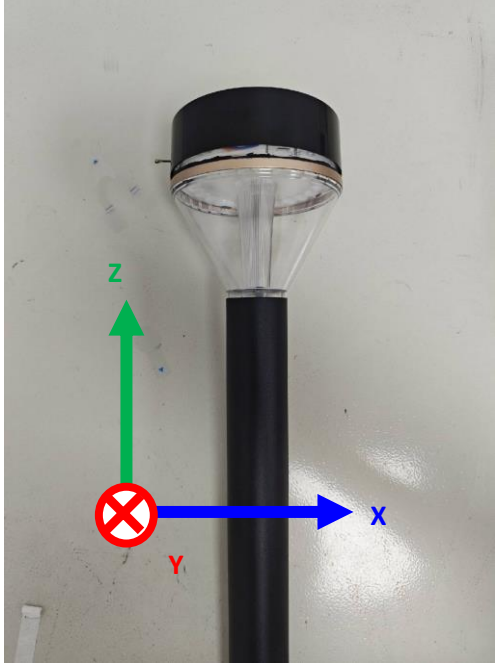
Product Coordinates	
	

Table 5 3D radiation pattern

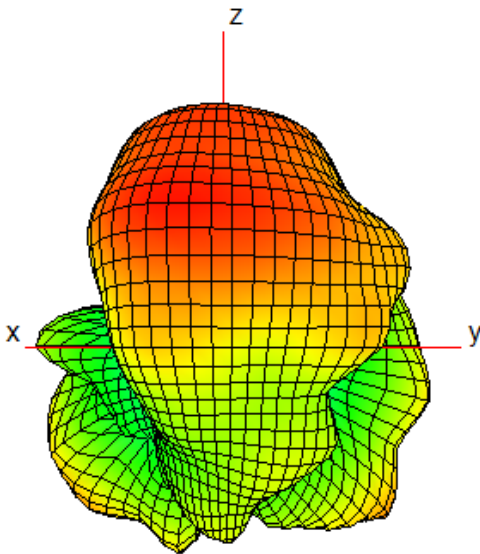
3D Radiation Pattern at 2450MHz


Table 6 Radiation pattern in XY Plane

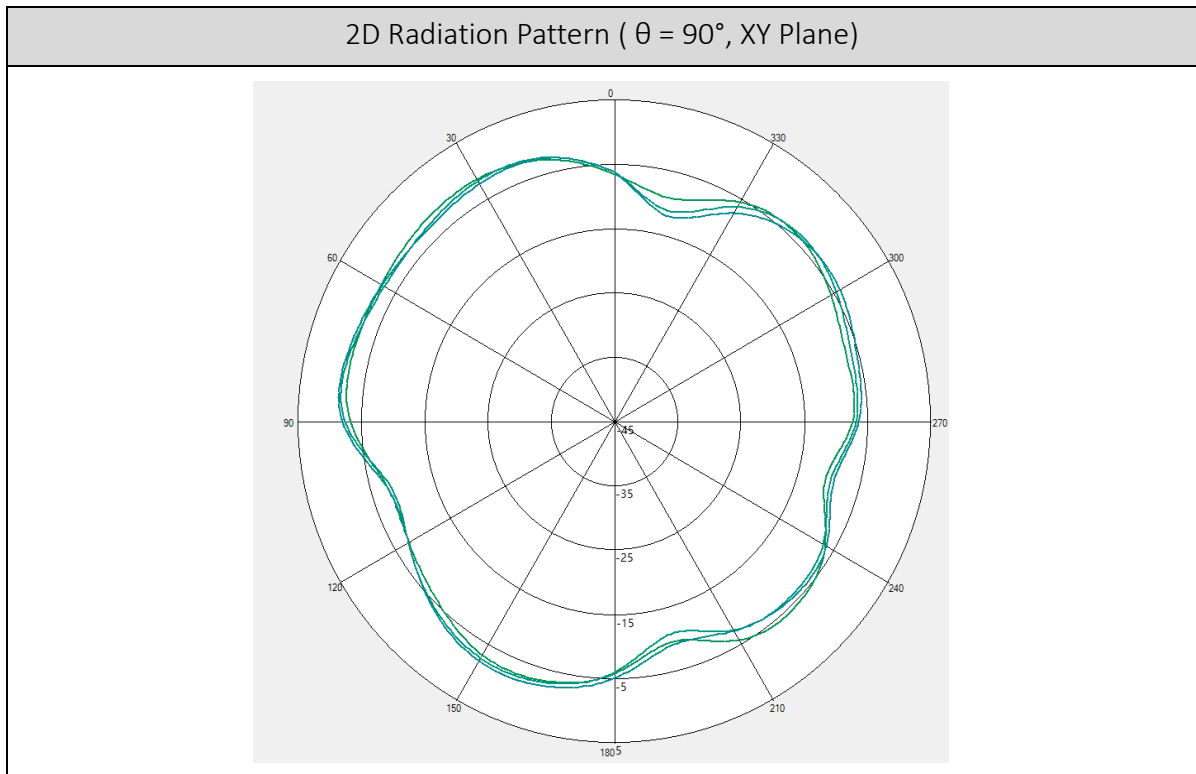


Table 7 Radiation pattern in XZ Plane

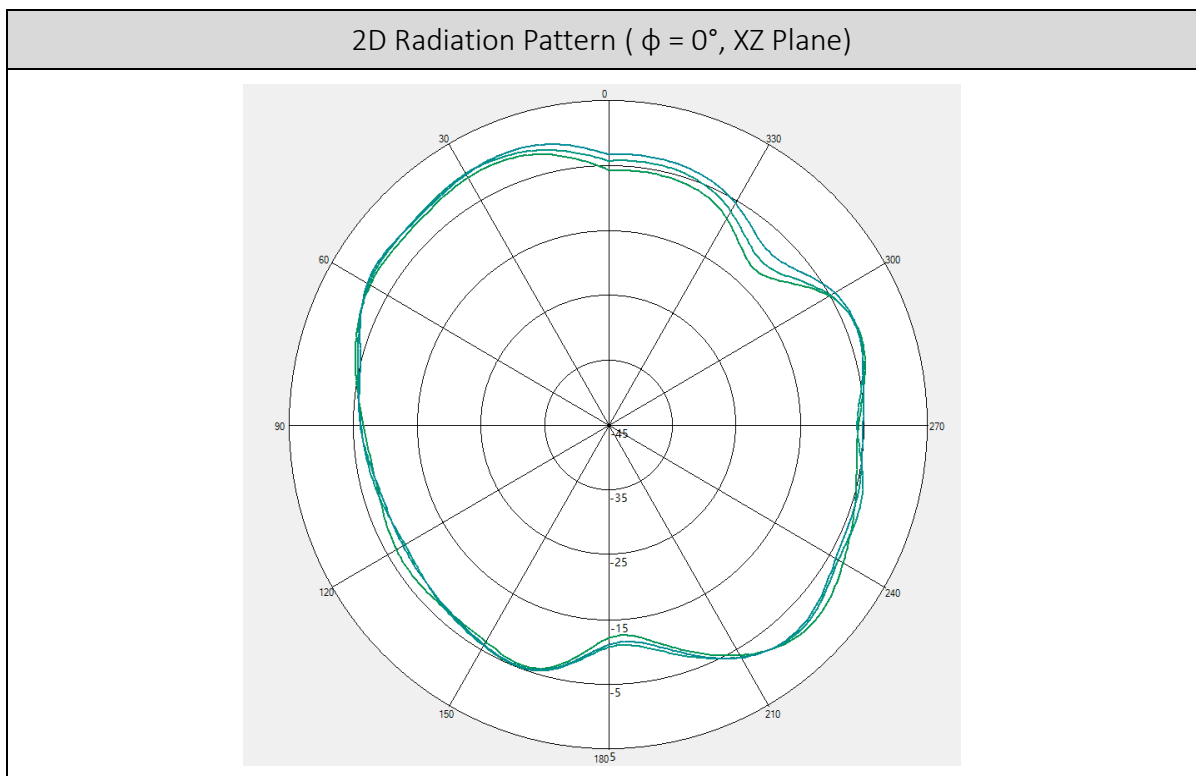


Table 8 Radiation pattern in YZ Plane

