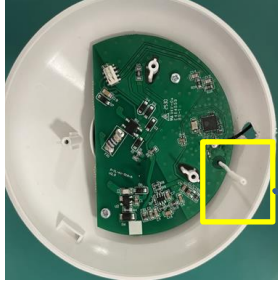
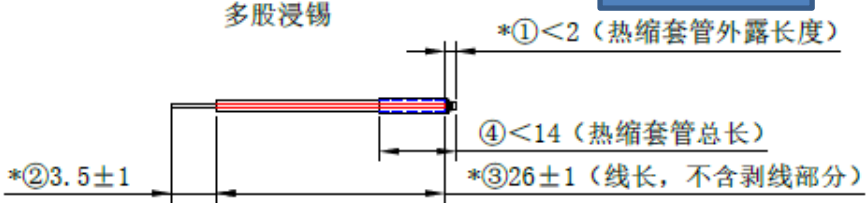


Antenna Specification

Antenna picture	  多股浸锡 *①<2 (热缩套管外露长度) *②3.5±1 ④<14 (热缩套管总长) *③26±1 (线长, 不含剥线部分)
Antenna Type	Internal Monopole Antenna
Antenna Peak Gain	0.47 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 BR30 伸缩灯
DUT photo	
Test Date	2025-8-19
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

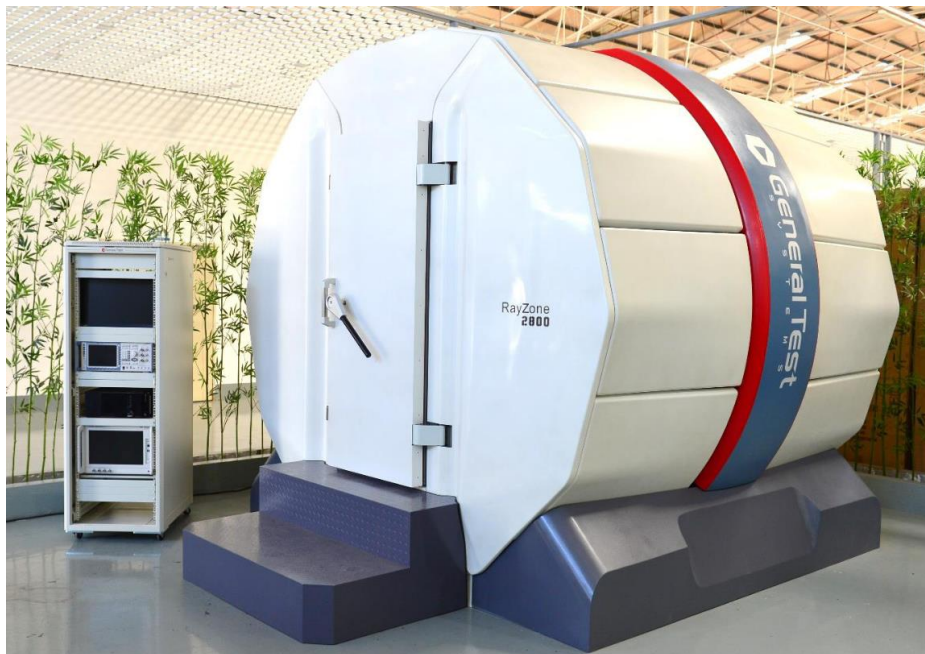


Figure 2 RayZone2800 OTA system

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	0.07	-3.38	45.89
2410	0.40	-3.05	49.57
2420	0.38	-2.96	50.60
2430	0.08	-3.13	48.70
2440	0.27	-2.83	52.15
2450	0.47	-2.72	53.43
2460	0.23	-2.92	51.03
2470	0.05	-3.01	49.98
2480	0.35	-2.78	52.66
2490	0.38	-2.82	52.28
2500	0.29	-2.92	51.04

Radiation Pattern

Table 4 Product coordinates

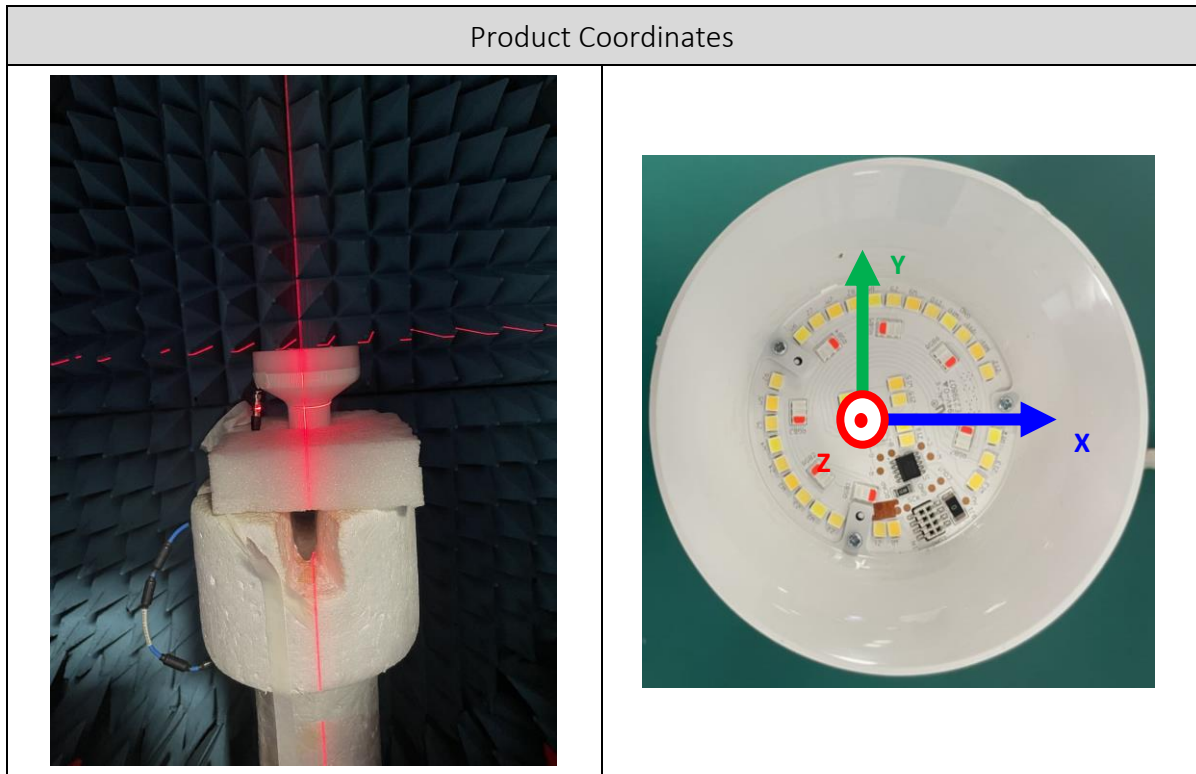


Table 5 3D radiation pattern

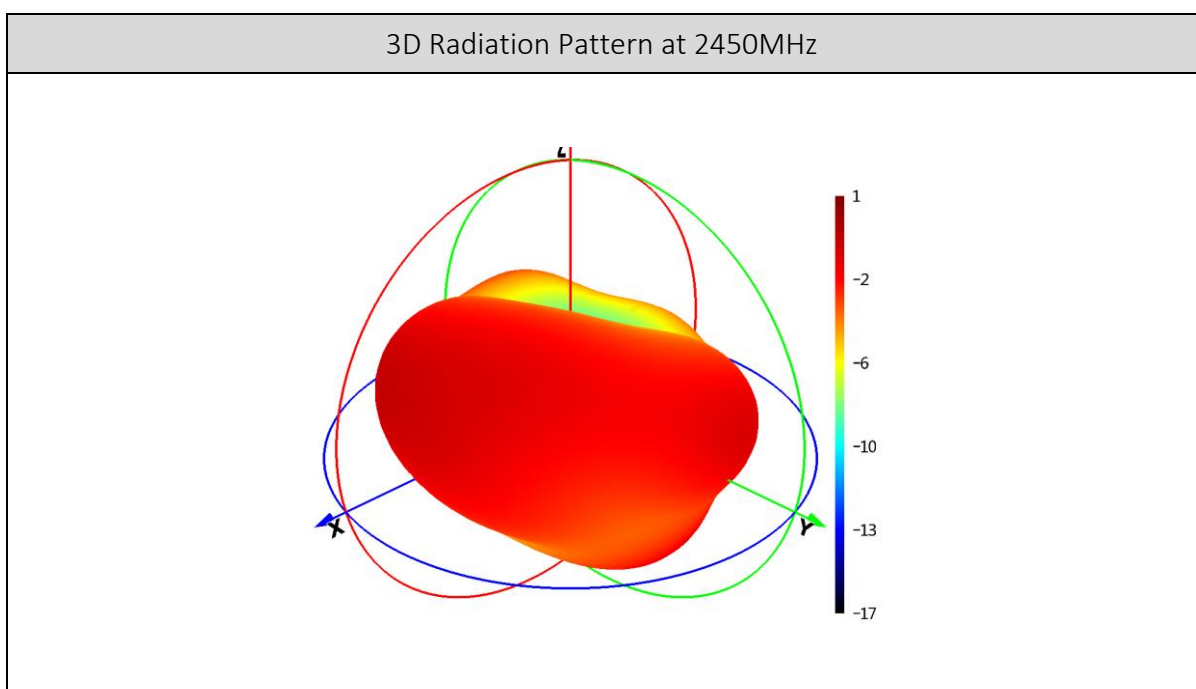


Table 6 Radiation pattern in XY Plane

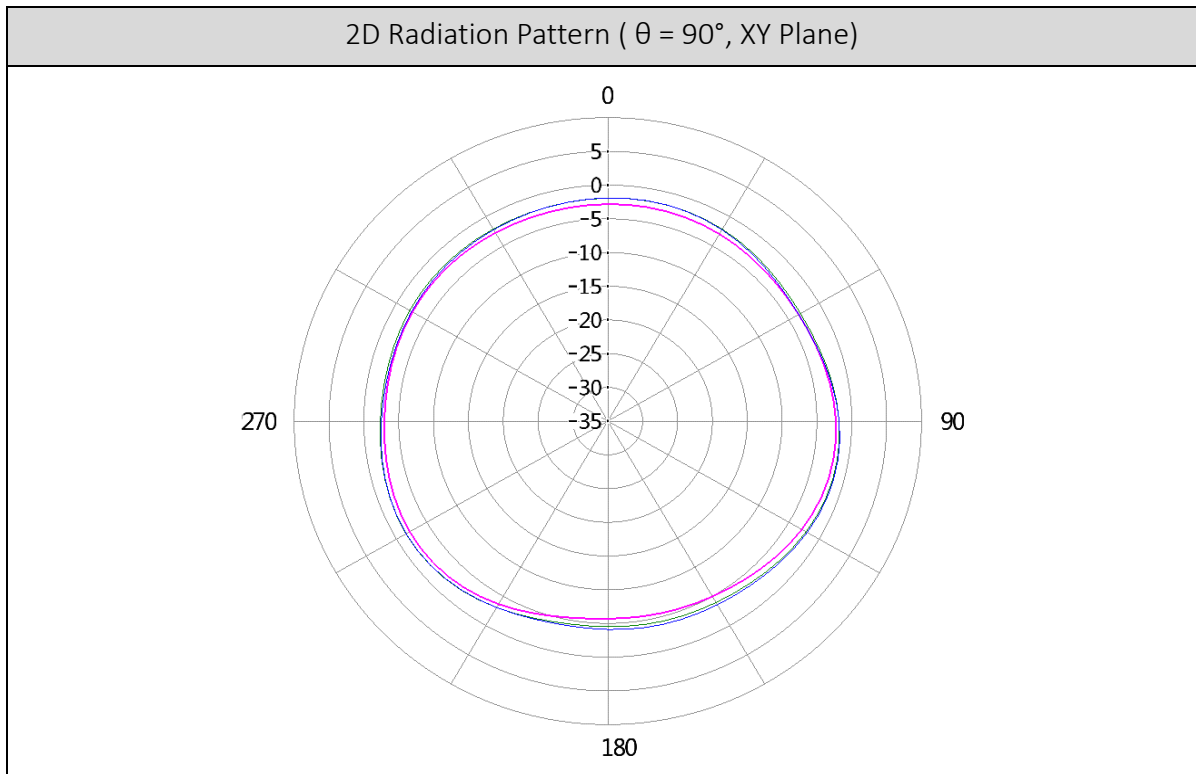


Table 7 Radiation pattern in XZ Plane

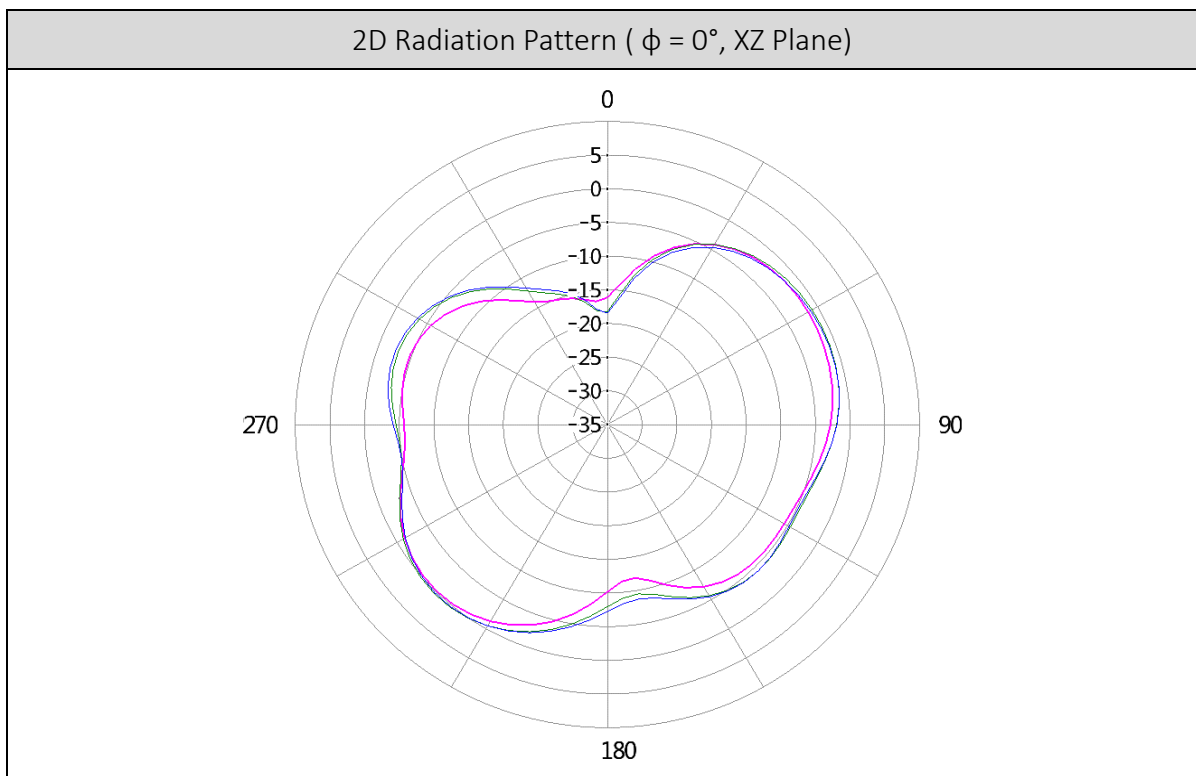


Table 8 Radiation pattern in YZ Plane

