

# Antenna Specification

Antenna Picture	
Antenna Type	Internal slot antenna
Antenna Peak Gain	-1.31 dBi
Operating Band	2400 MHz ~ 2480 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	GU10 575LM WS
DUT photo	
Test Date	2025-1-22
Test Conductor	Ou Min

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

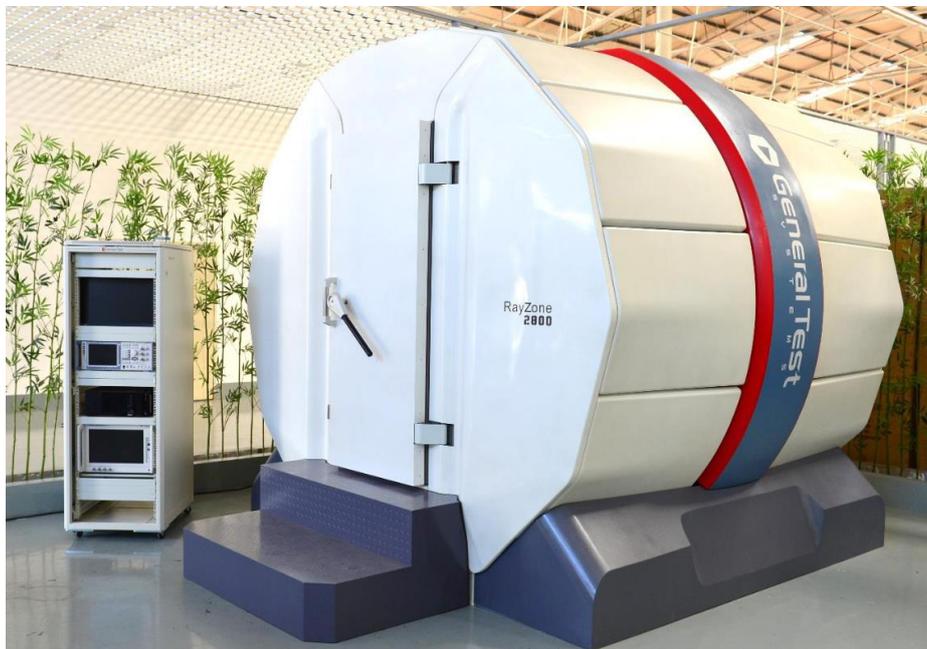


Figure 2 RayZone2800 OTA system

## 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 (%)
2400	-1.31	-6.59	21.93
2410	-1.64	-6.80	20.90
2420	-1.97	-7.08	19.57
2430	-1.94	-7.04	19.77
2440	-1.94	-6.99	20.01
2450	-2.50	-7.50	17.80
2460	-2.65	-7.61	17.33
2470	-2.50	-7.40	18.18
2480	-2.66	-7.49	17.81

## Radiation Pattern

Table 4 Product coordinates

Product Coordinates	

Table 5 3D radiation pattern

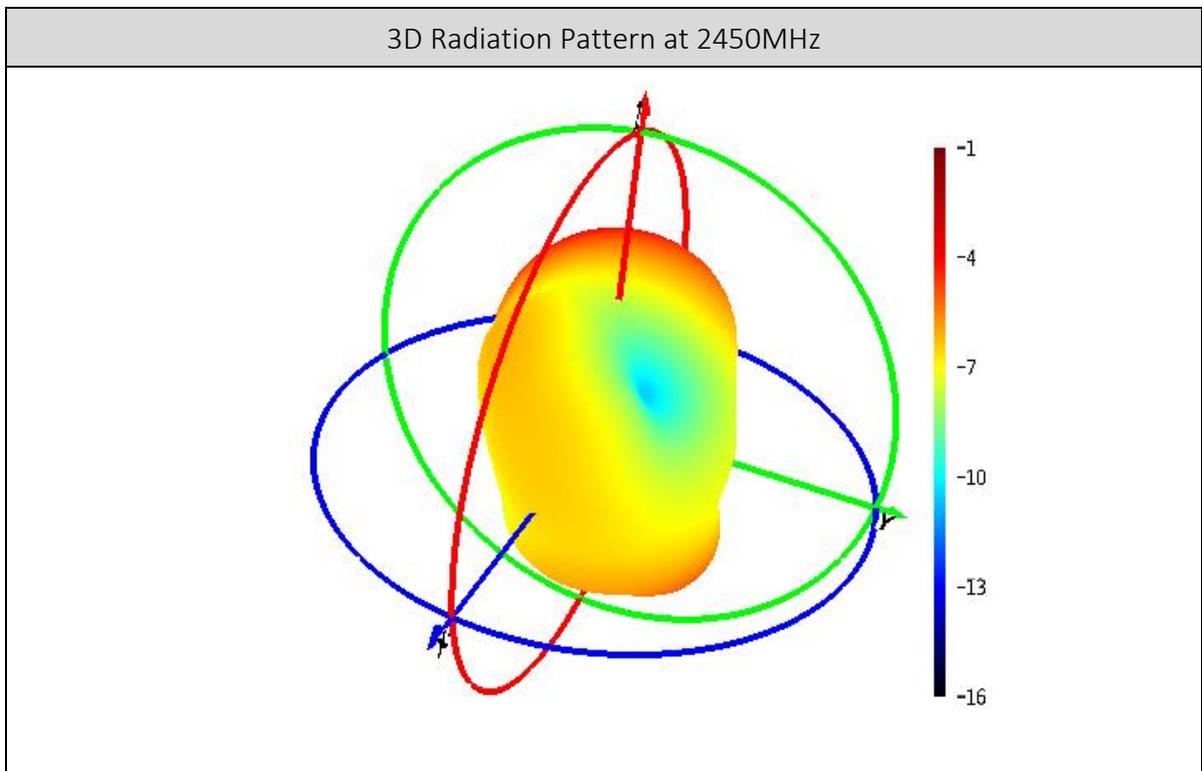


Table 6 Radiation pattern in XY Plane

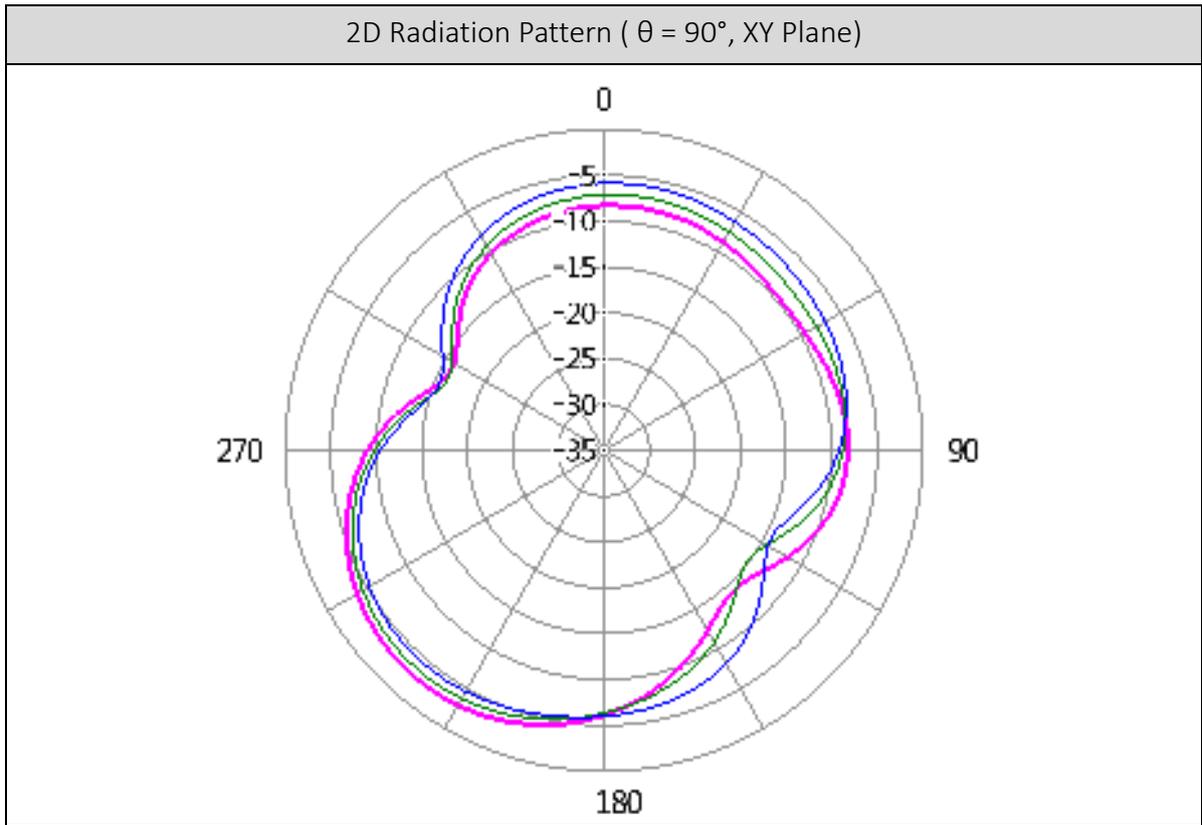


Table 7 Radiation pattern in XZ Plane

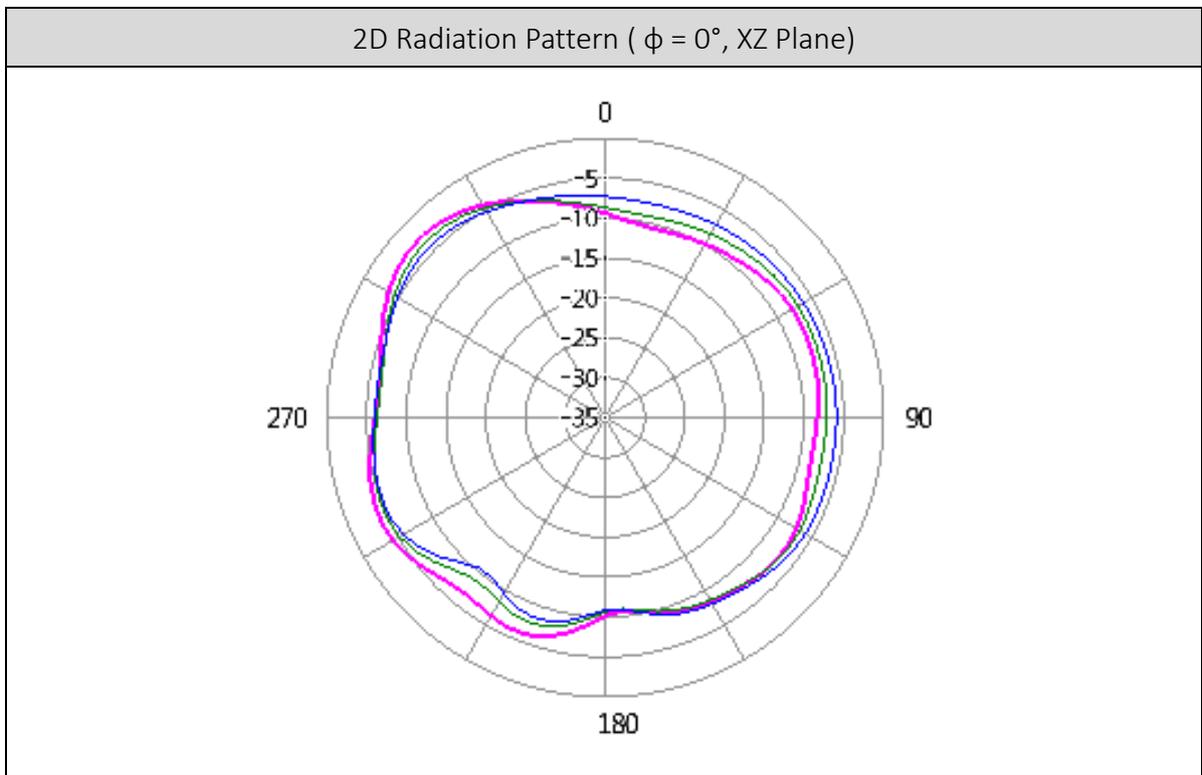


Table 8 Radiation pattern in YZ Plane

