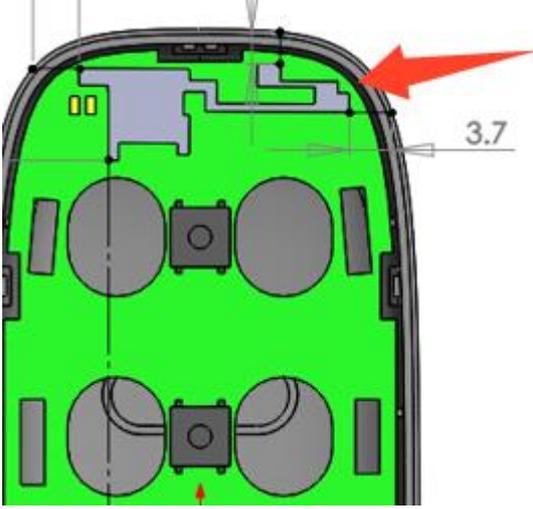
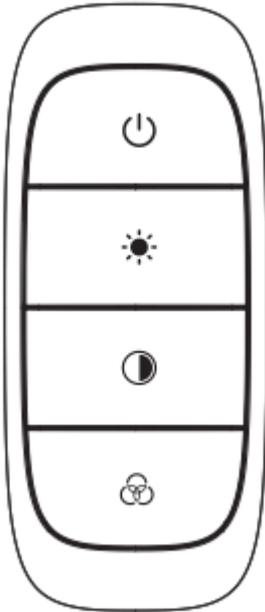


Antenna Information

Antenna picture	
Antenna Type	Internal inverted F PCB antenna
Antenna Peak Gain	4.42dBi
Operating Band	2402MHz~2480MHz
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	Remoter controller

DUT photo	
Test System	SY-16 OTA System
Test Engineer	Ouyanglongji
Test Date	2023-05-13

Test Standard

Antenna Performance	Radiation Efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-2021
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Equipment List:

Equipment	Manufacturer	Model No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071C	2022.10.8	2023.10.7

Test Software: EMQuest

Test System

The SY-16 OTA system is an anechoic chamber, which can measure antenna passive data such as antenna efficiency, antenna gain, and 2D&3D pattern. The coordinates and topology are shown as follows:

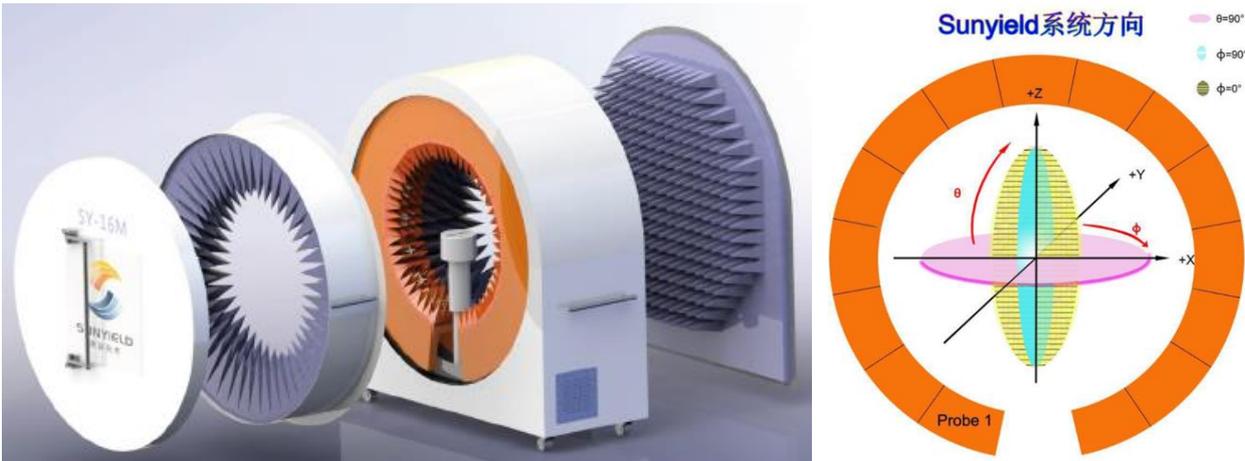


Figure 1 SY-16 OTA system

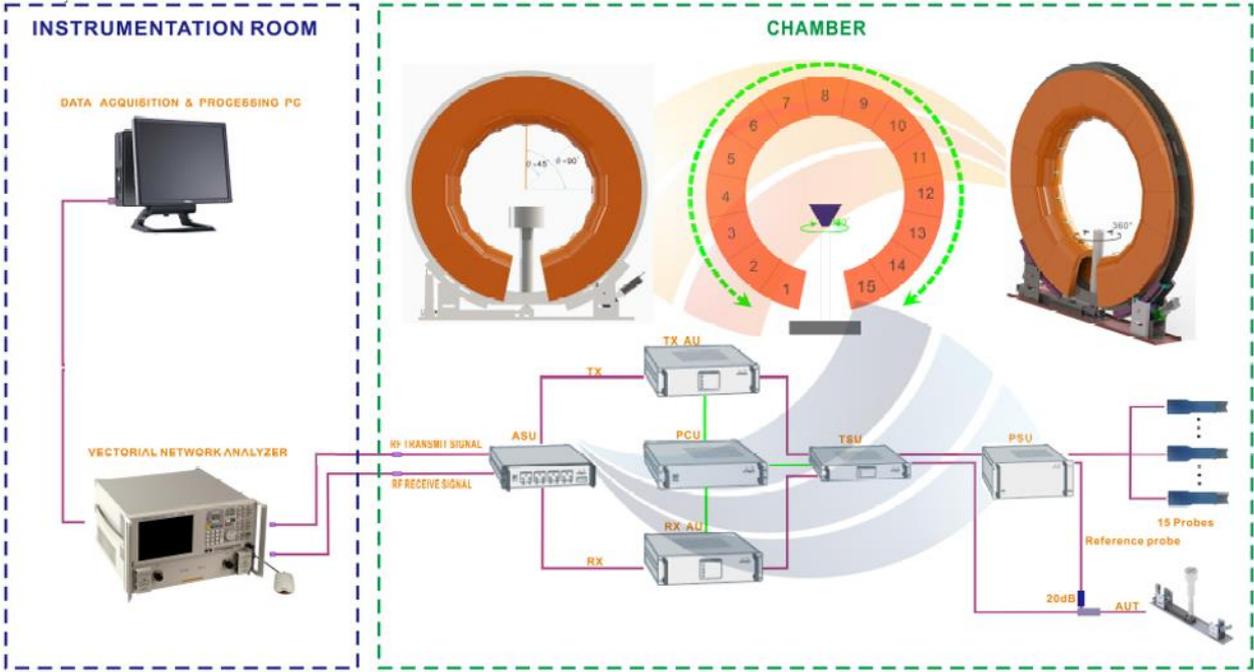


Figure 2 OTA measurement topology

Test Result
Efficiency and Gain

Table 1 Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)
2400	3.42	-2.79
2410	3.57	-2.73
2420	3.85	-2.42
2430	3.62	-2.55
2440	3.57	-2.55
2450	4.13	-2.22
2460	4.35	-2.07
2470	3.94	-2.45
2480	4.15	-2.39
2490	4.42	-2.13
2500	4.27	-2.53

Radiation Pattern

Table 2 Product coordinates

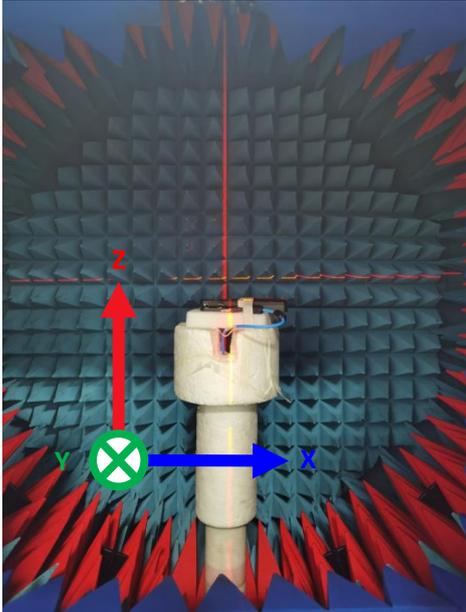
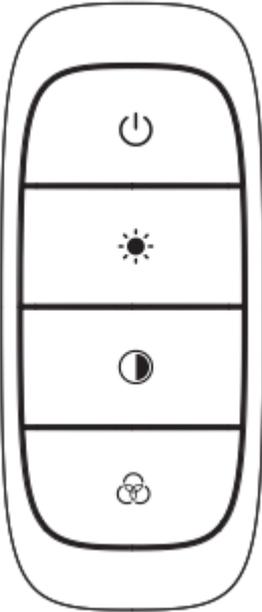
Product Coordinates	
	

Table 3 3D radiation pattern

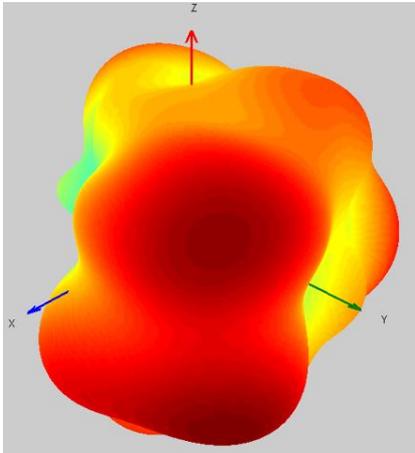
3D Radiation Pattern at 2450MHz


Table 4 Radiation pattern in XY Plane

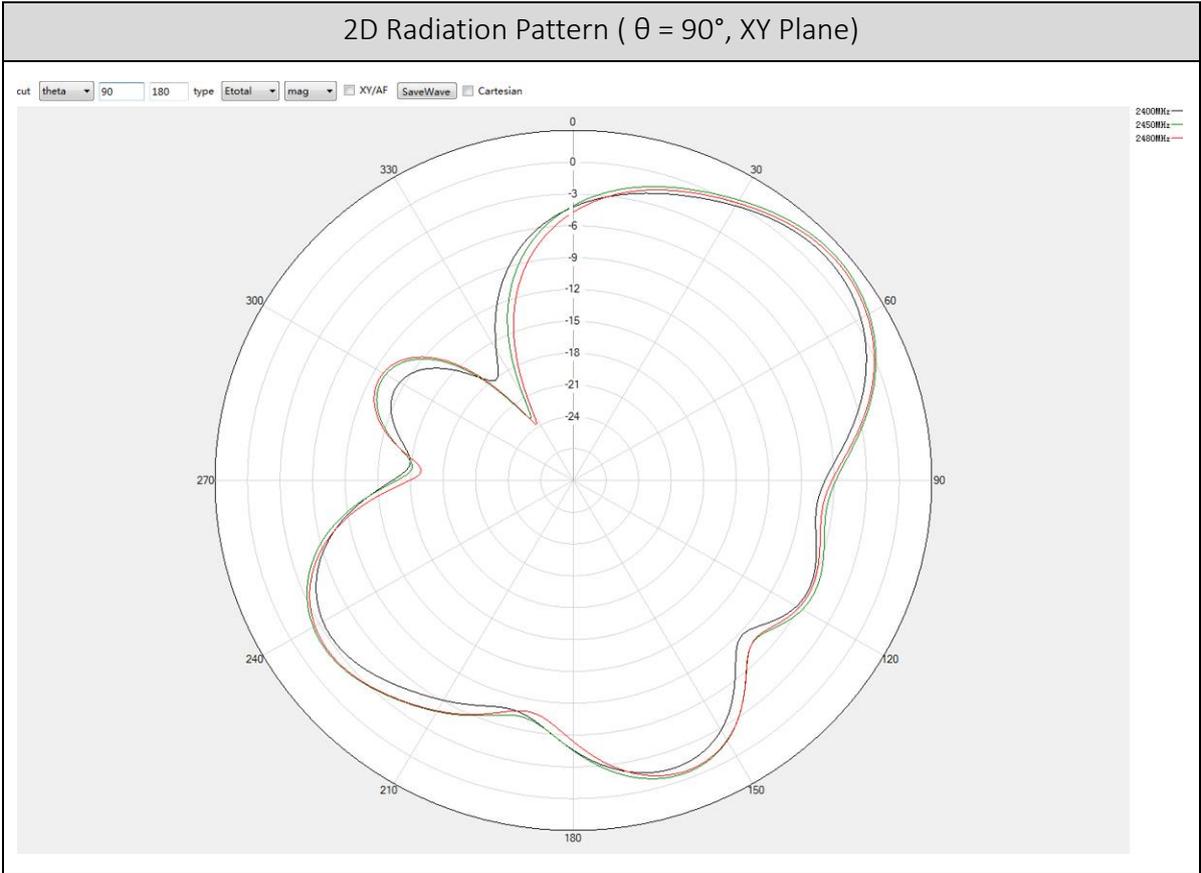


Table 5 Radiation pattern in XZ Plane



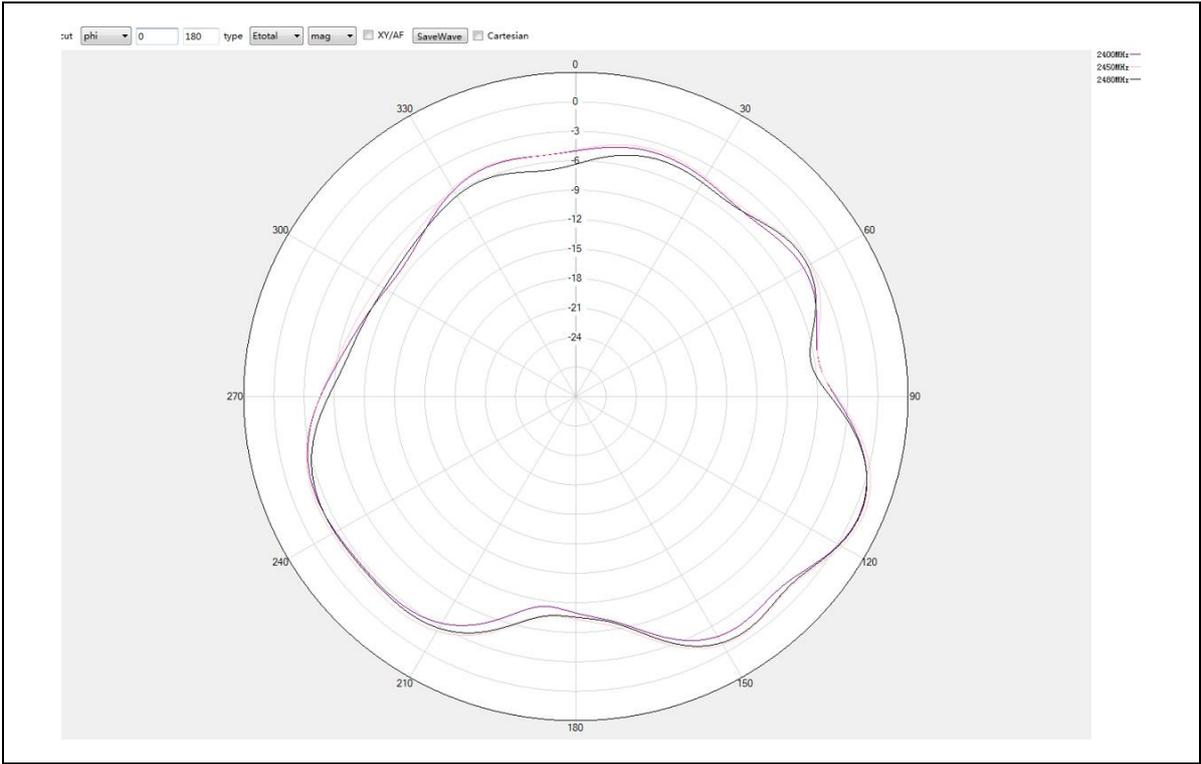


Table 6 Radiation pattern in YZ Plane

