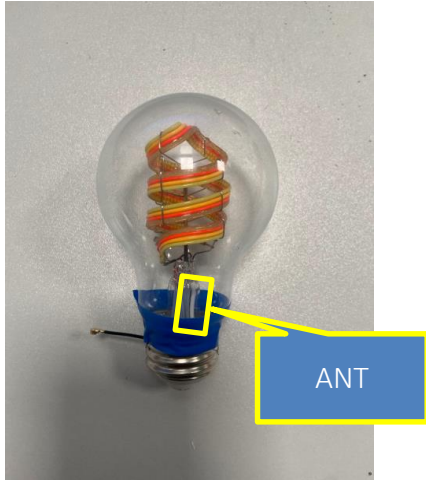
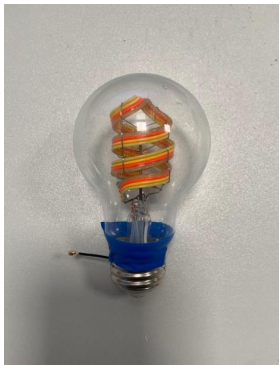


Antenna Information

Antenna picture	
Antenna Type	Internal monopole antenna
Antenna Peak Gain	-3.45 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	12CFA1960WRGB01
DUT photo	
Report Date	2023-06-13

OTA measurement

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:

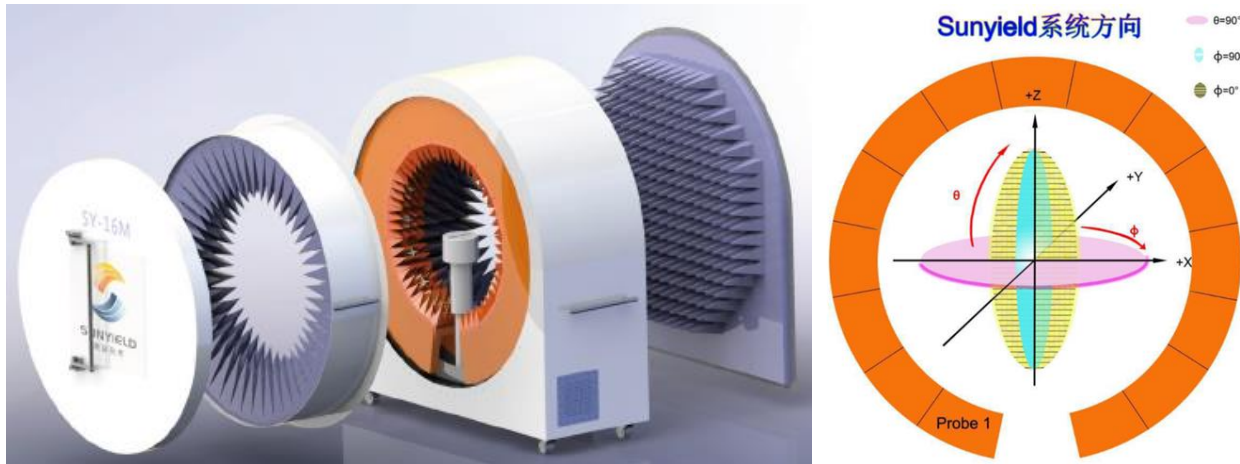


Figure 1 SY-16 OTA system

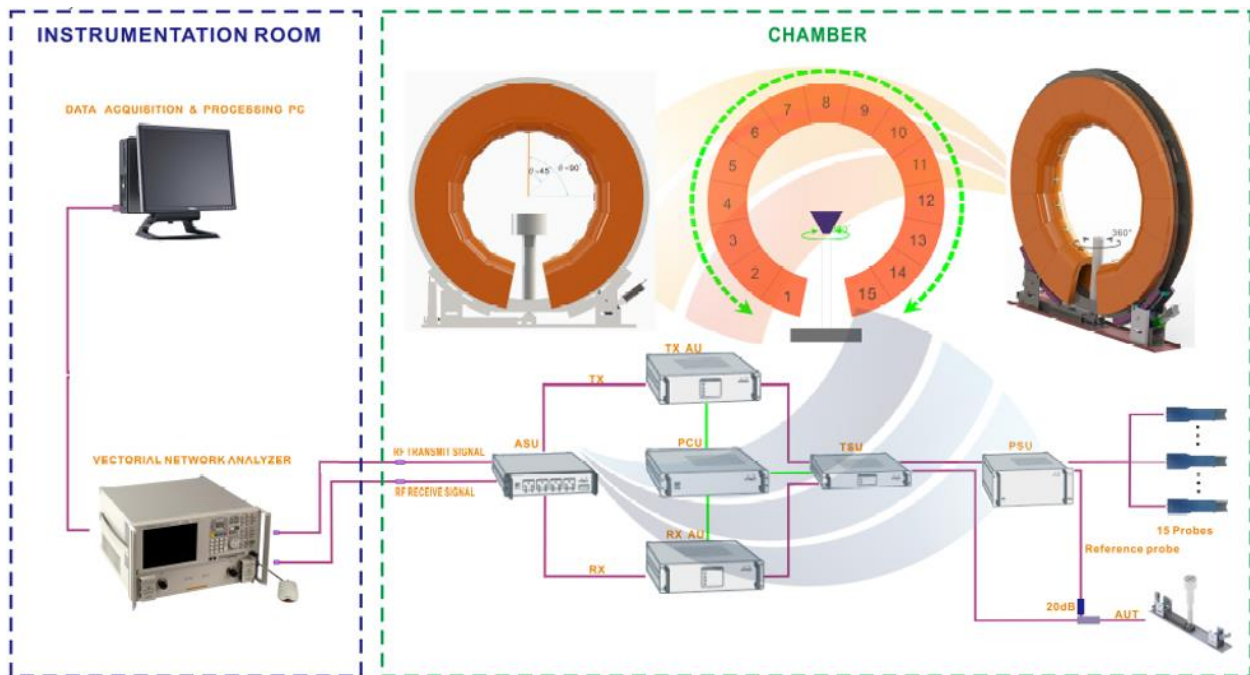


Figure 2 OTA measurement topology

Test Result

Efficiency and Gain

Table 1 Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	-4.09	-7.95	16.03
2410	-4.14	-7.96	16.00
2420	-4.14	-7.97	15.97
2430	-4.07	-7.94	16.08
2440	-3.93	-7.86	16.37
2450	-3.74	-7.72	16.89
2460	-3.56	-7.60	17.37
2470	-3.50	-7.53	17.66
2480	-3.45	-7.44	18.01
2490	-3.45	-7.40	18.19
2500	-3.48	-7.46	17.97

Radiation Pattern

Table 2 Product coordinates

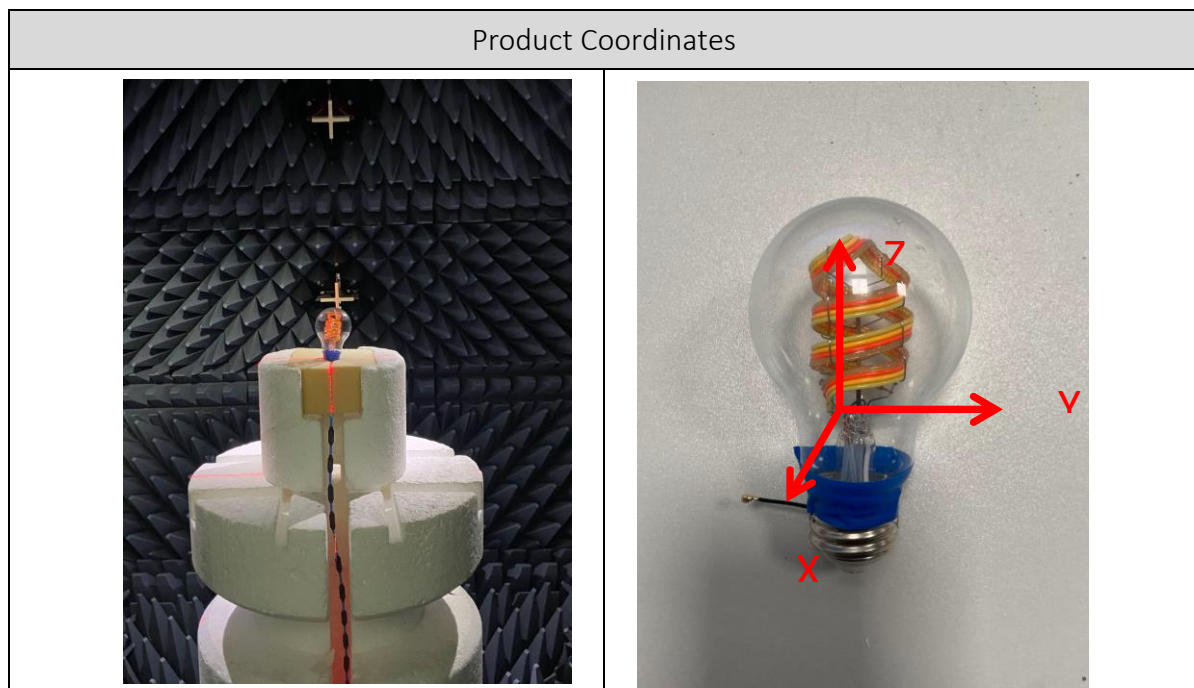


Table 3 3D radiation pattern

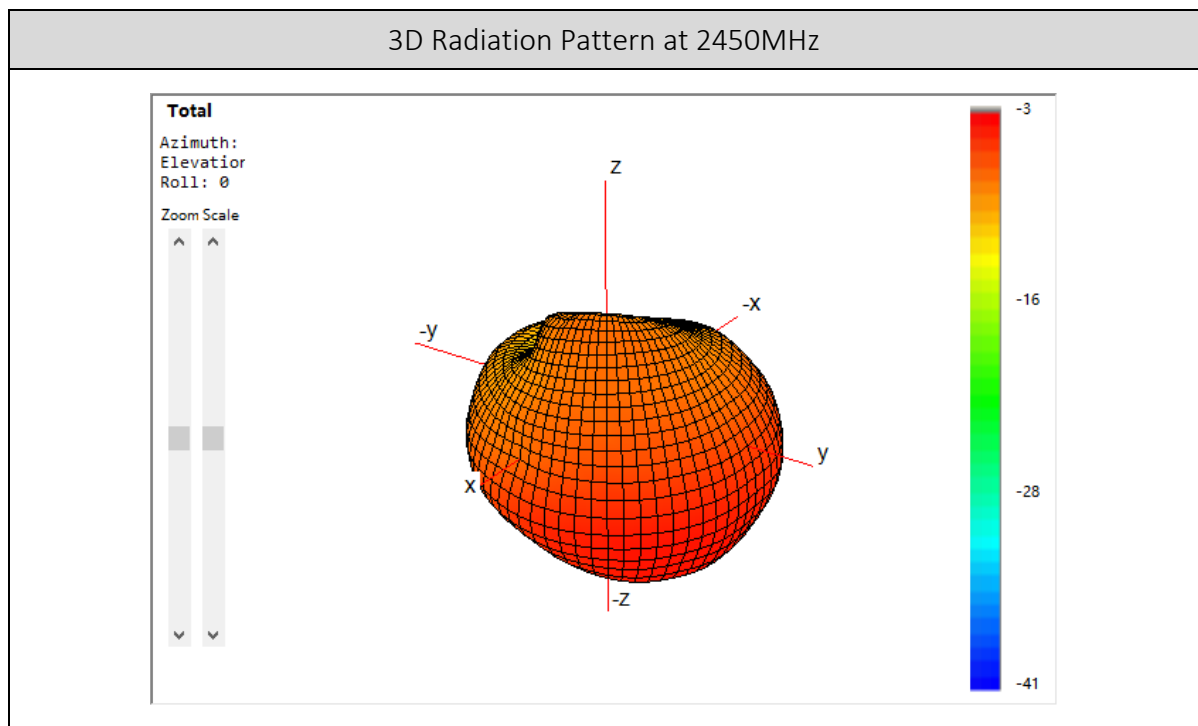


Table 4 Radiation pattern in XY Plane

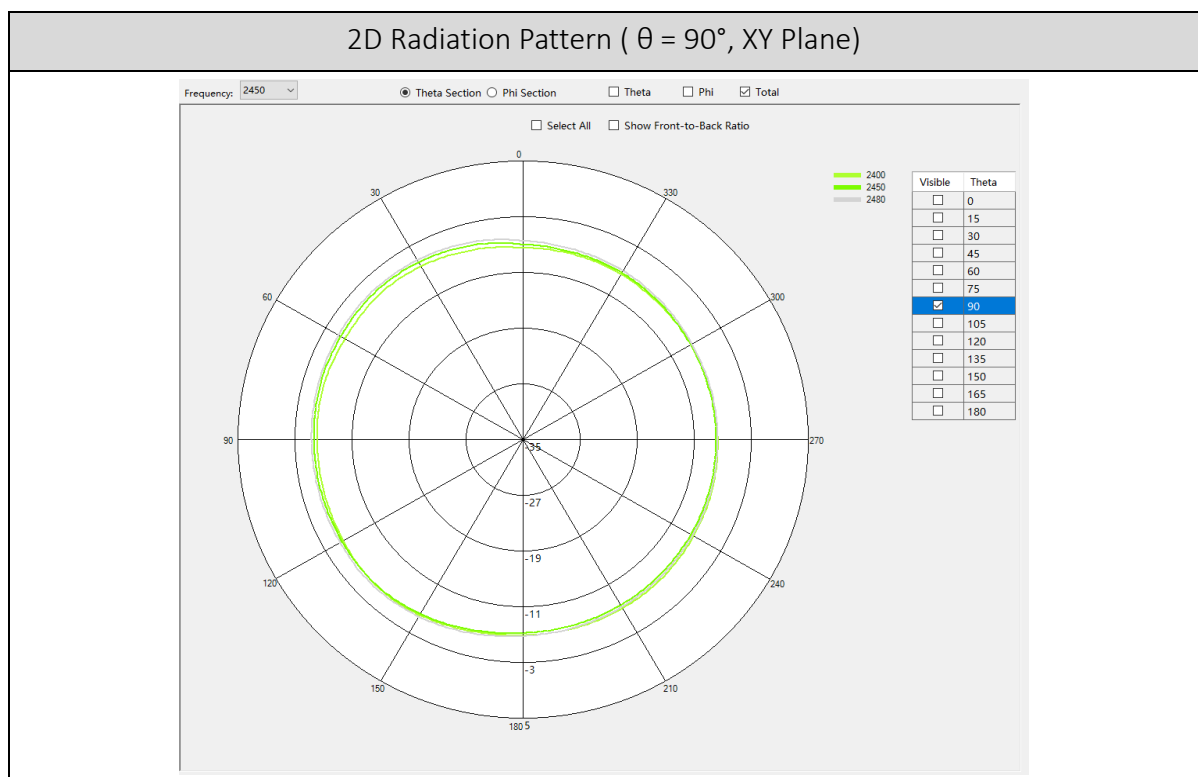


Table 5 Radiation pattern in XZ Plane

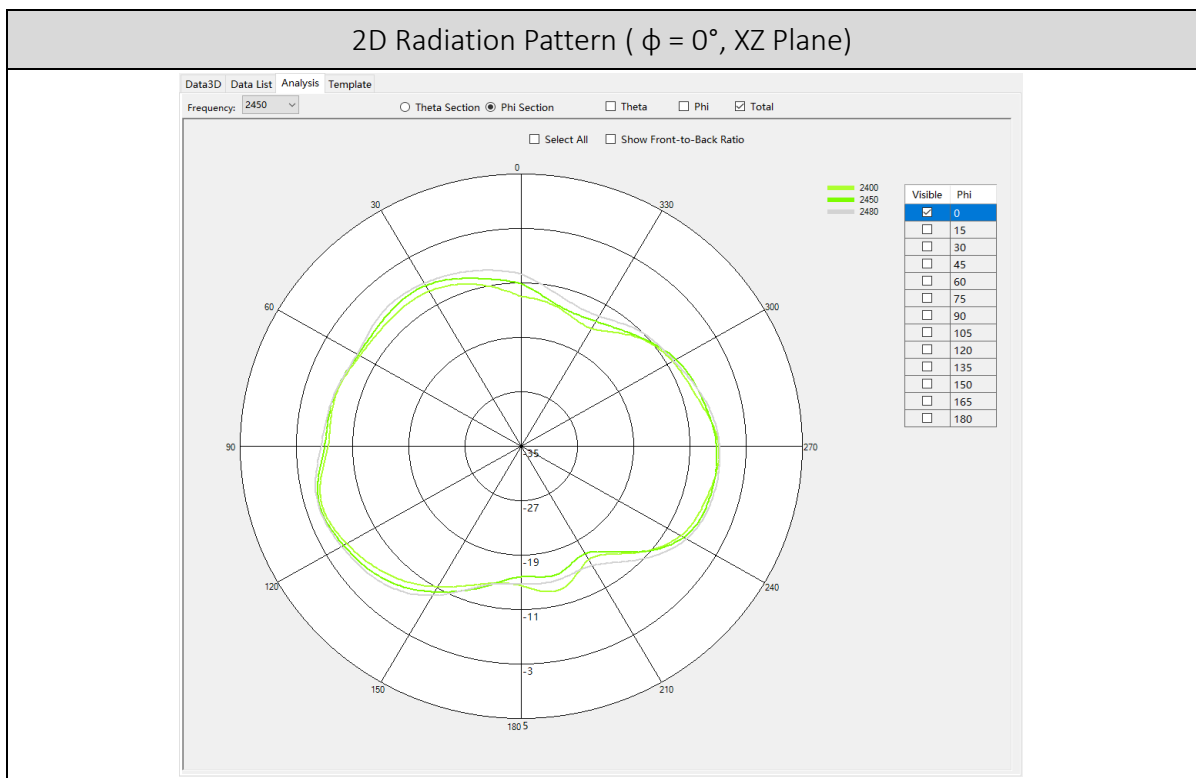


Table 6 Radiation pattern in YZ Plane

