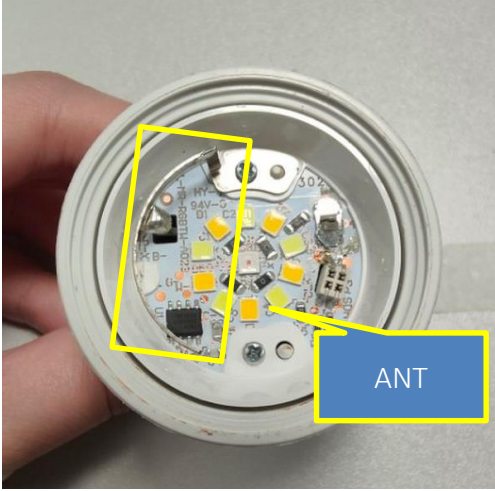



# Antenna Information

Antenna picture	
Antenna Type	Internal metal antenna
Antenna Peak Gain	-1.36 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	12MR161050RGB01
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:

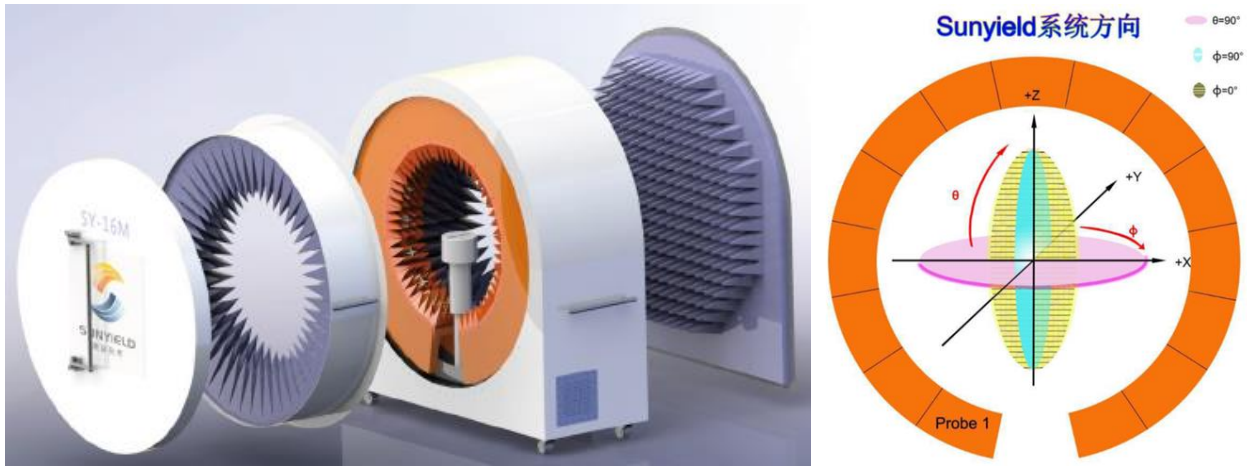


Figure 1 SY-16 OTA system

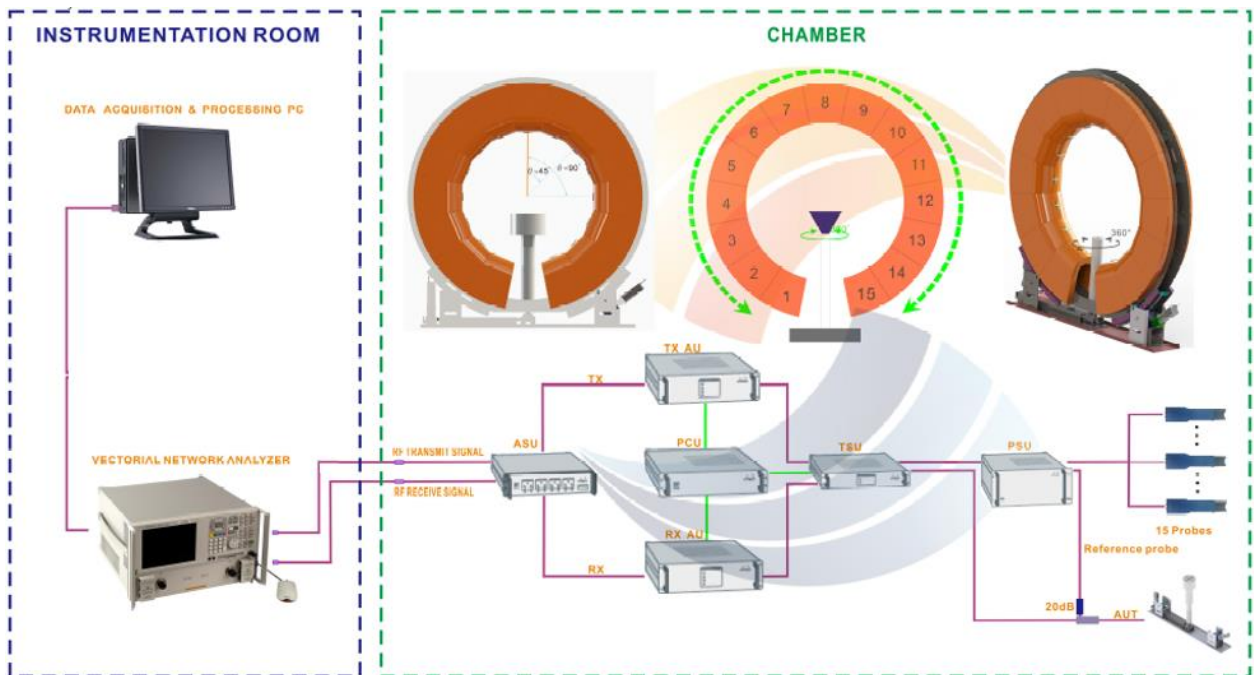


Figure 2 OTA measurement topology

Test Result

Efficiency and Gain

Table 1 Antenna Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	-2.21	-7.30	18.62
2410	-1.68	-6.94	20.23
2420	-1.55	-6.77	21.04
2430	-1.82	-6.99	20.00
2440	-1.65	-6.80	20.89
2450	-1.44	-6.56	22.08
2460	-1.36	-6.64	21.68
2470	-1.43	-6.87	20.56
2480	-1.47	-6.70	21.38
2490	-1.49	-6.56	22.08
2500	-1.40	-6.78	20.99

Radiation Pattern

Table 2 Product coordinates

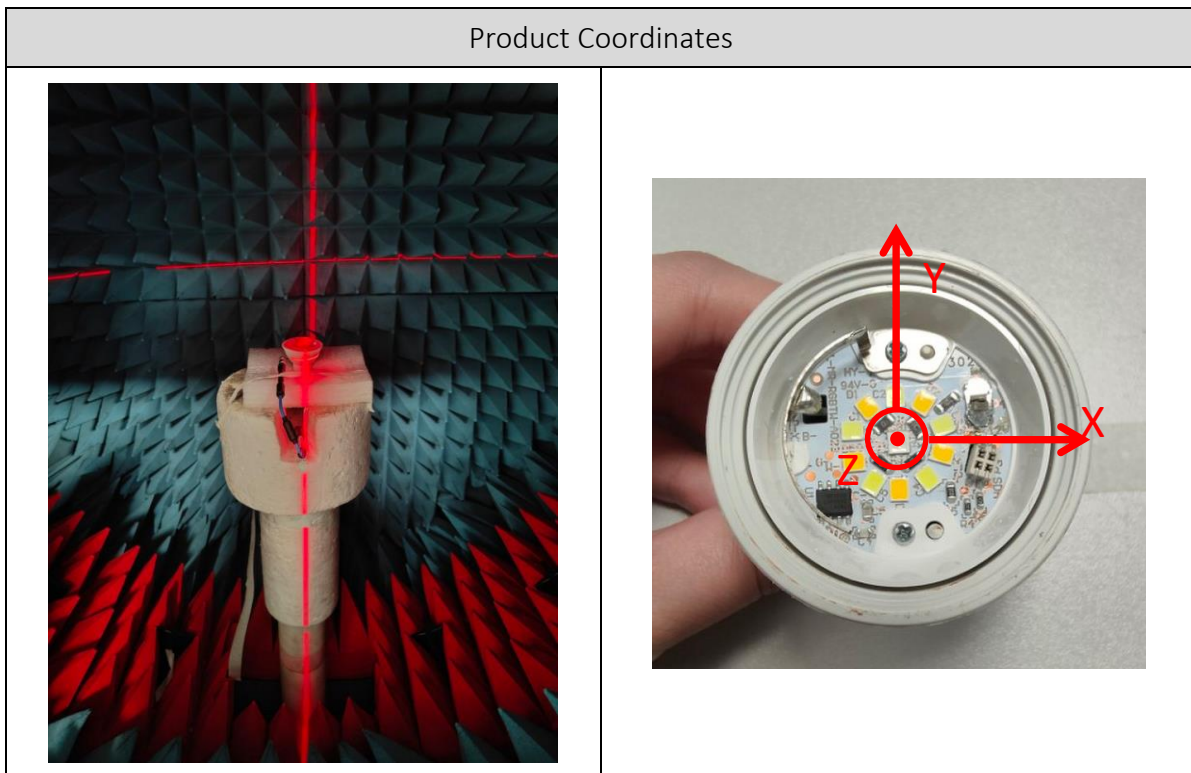


Table 3 3D radiation pattern

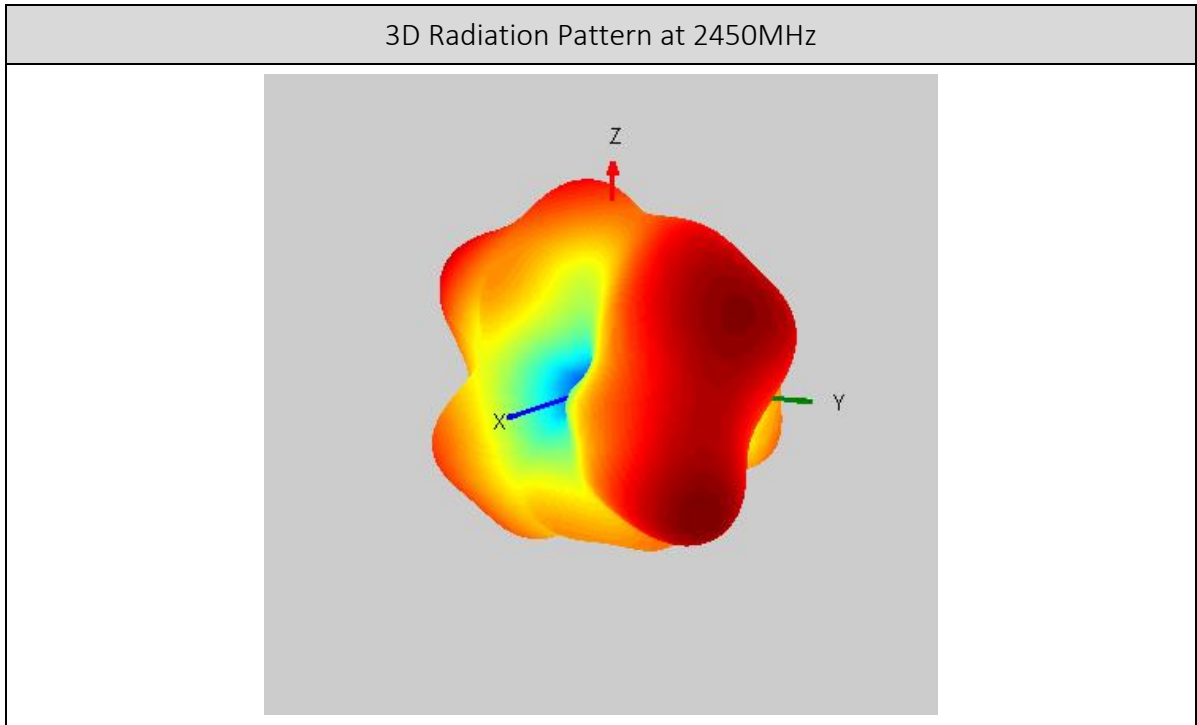


Table 4 Radiation pattern in XY Plane

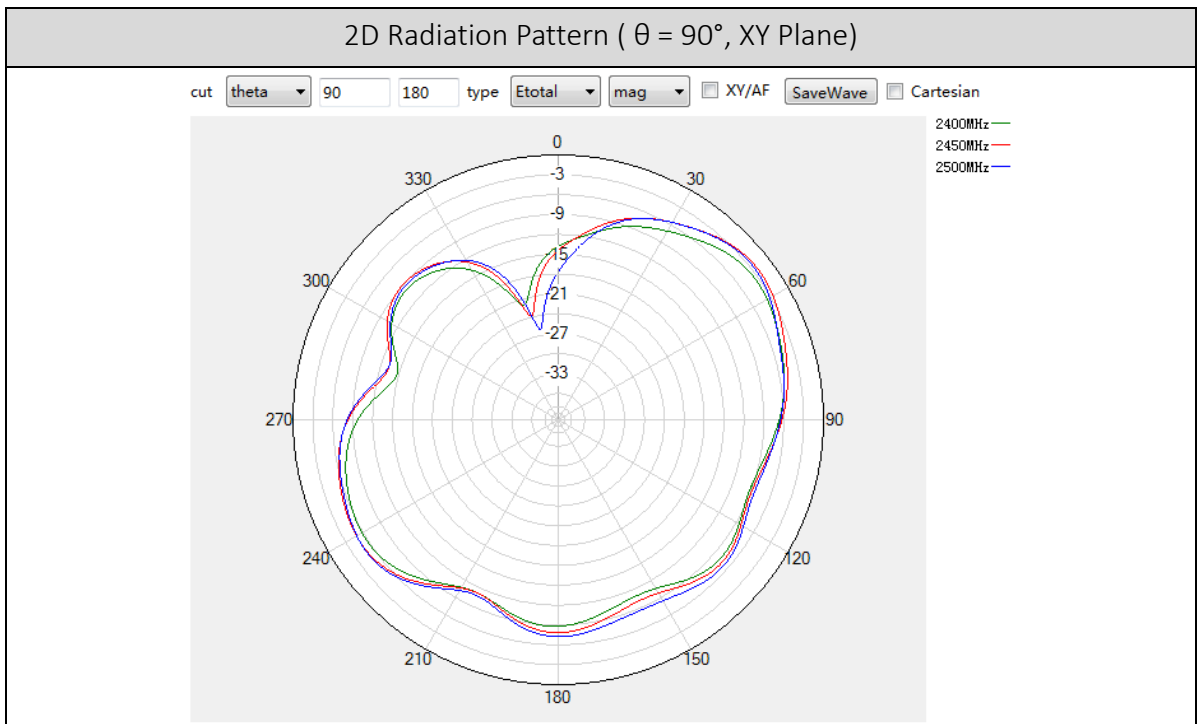


Table 5 Radiation pattern in XZ Plane

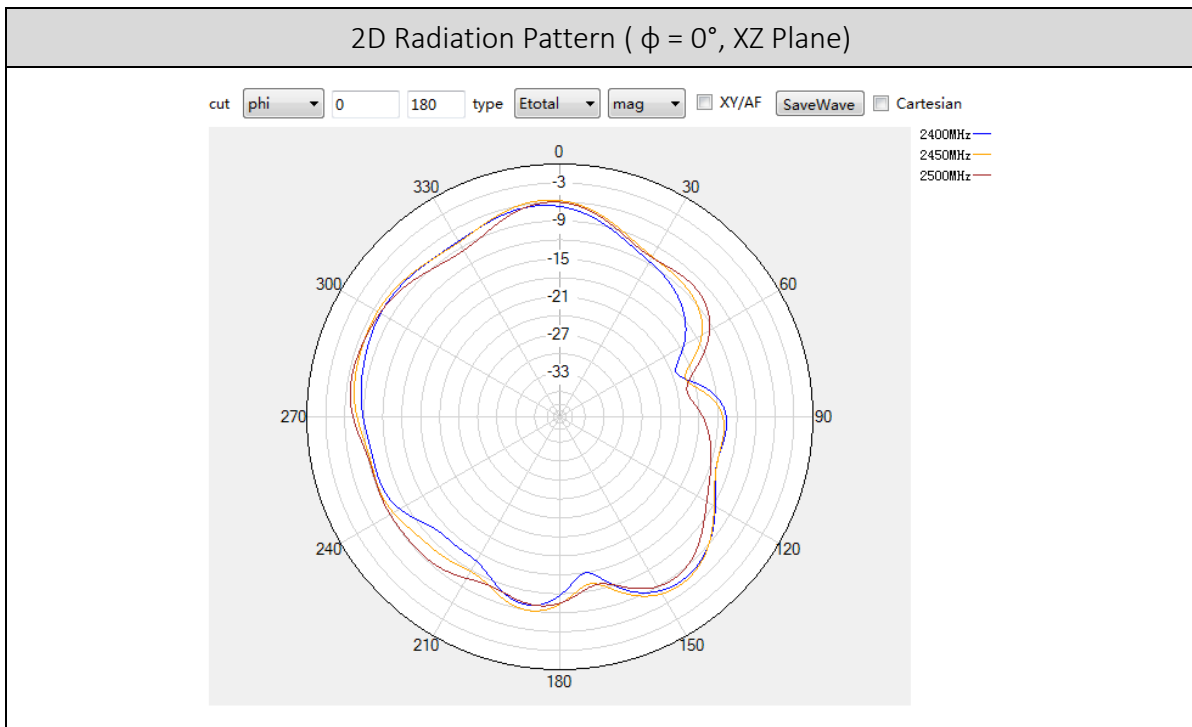


Table 6 Radiation pattern in YZ Plane

