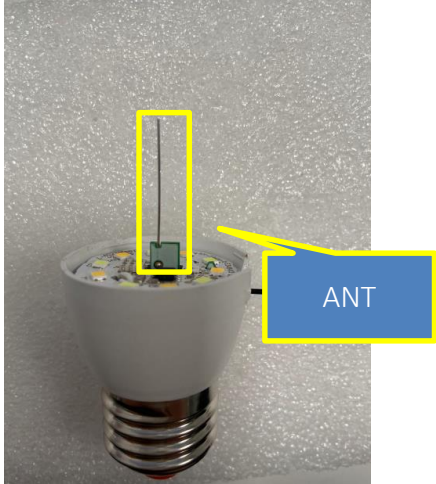



Antenna Information

| | |
|----------------------------------|--|
| Antenna picture |  |
| Antenna Type | Internal monopole antenna |
| Antenna Peak Gain | -0.35dBi |
| 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 | 13aSA-C806ST-A1G |
| 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:

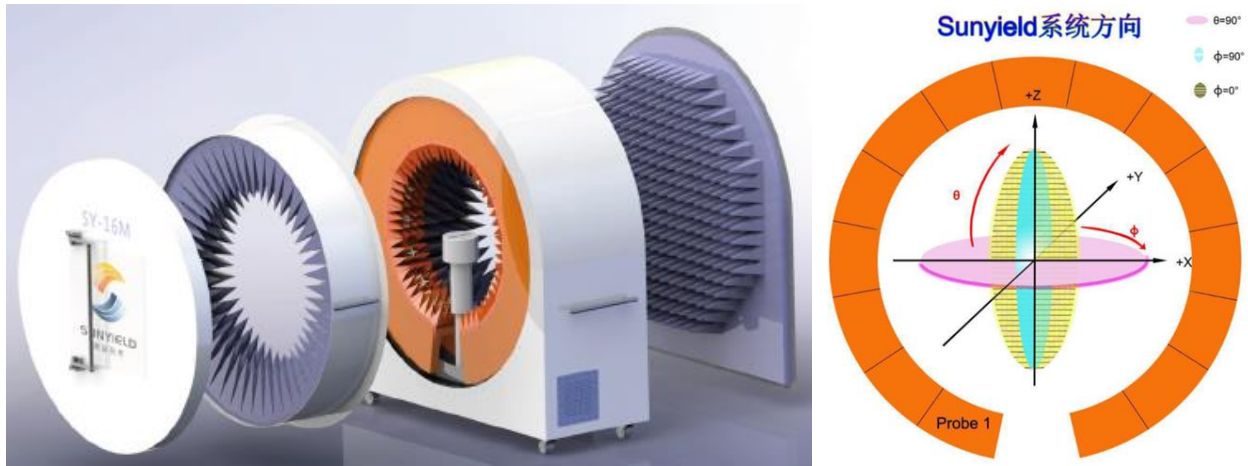


Figure 1 SY-16 OTA system

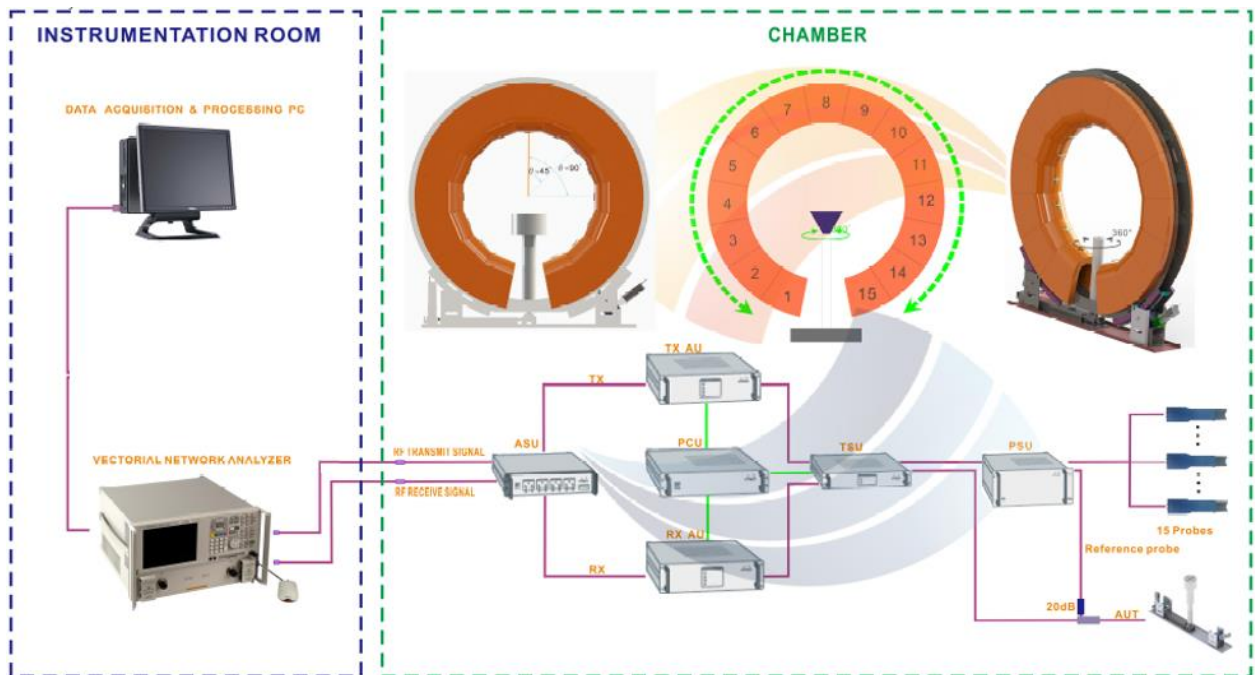


Figure 2 OTA measurement topology

Test Result

Efficiency and Gain

Table 1 Antenna Efficiency and Gain

| Frequency (MHz) | Gain (dBi) | Efficiency (dB) | Efficiency (%) |
|-----------------|------------|-----------------|----------------|
| 2400 | -0.96 | -5.30 | 29.54 |
| 2410 | -0.80 | -5.26 | 29.78 |
| 2420 | -0.79 | -5.31 | 29.44 |
| 2430 | -0.62 | -5.12 | 30.79 |
| 2440 | -0.35 | -4.82 | 32.94 |
| 2450 | -0.39 | -4.98 | 31.76 |
| 2460 | -0.35 | -4.95 | 32.01 |
| 2470 | -0.37 | -4.73 | 33.66 |
| 2480 | -0.36 | -4.58 | 34.85 |
| 2490 | -0.42 | -4.54 | 35.14 |
| 2500 | -0.38 | -4.41 | 36.23 |

Radiation Pattern

Table 2 Product coordinates

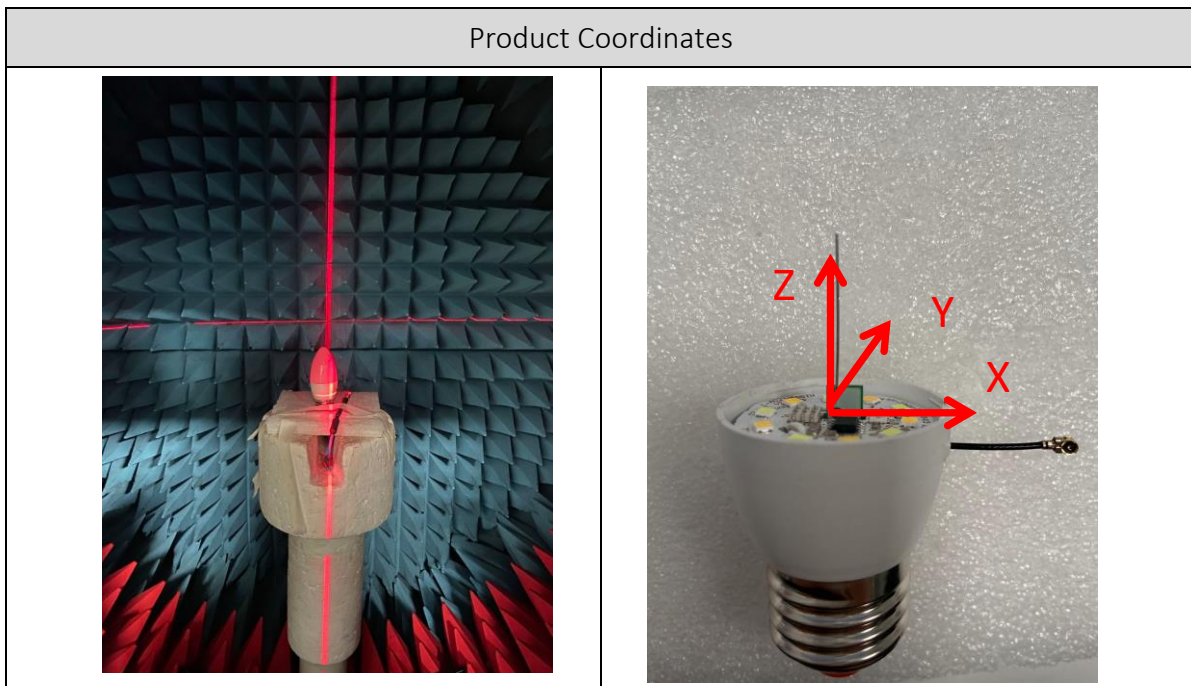


Table 3 3D radiation pattern

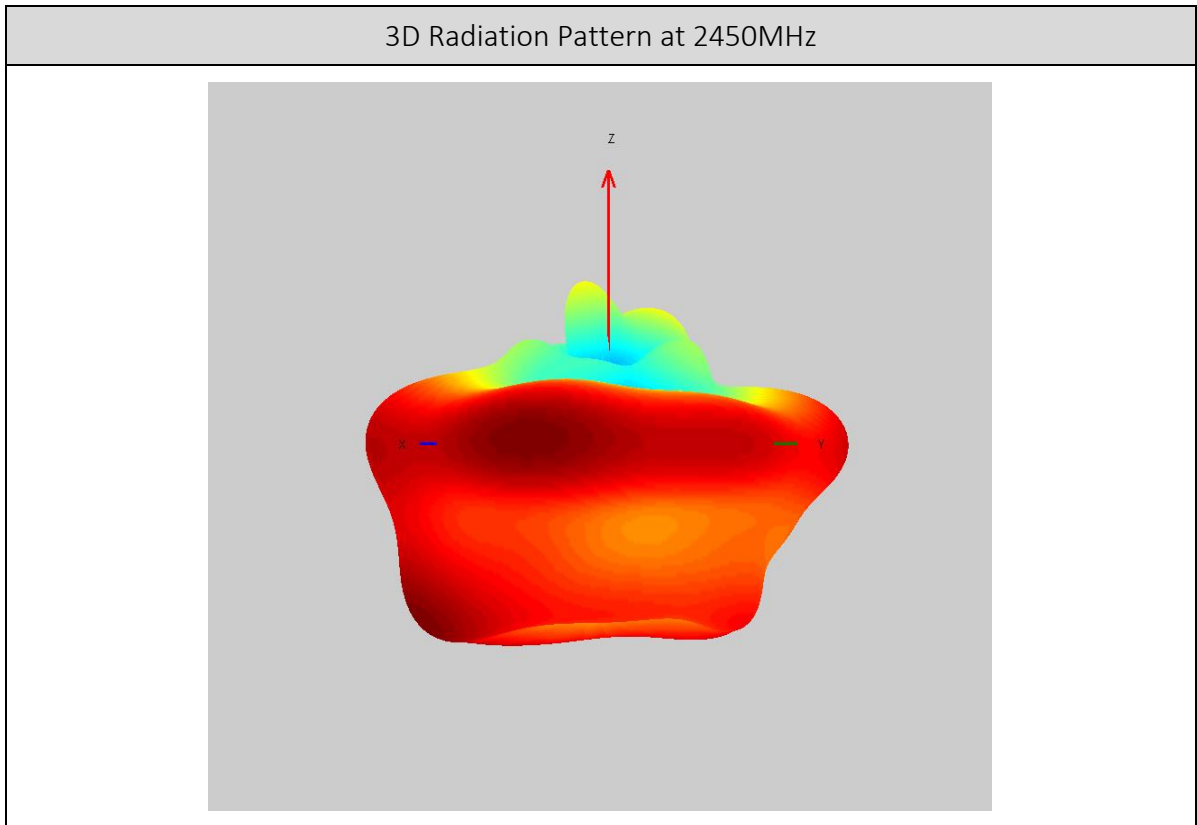


Table 4 Radiation pattern in XY Plane

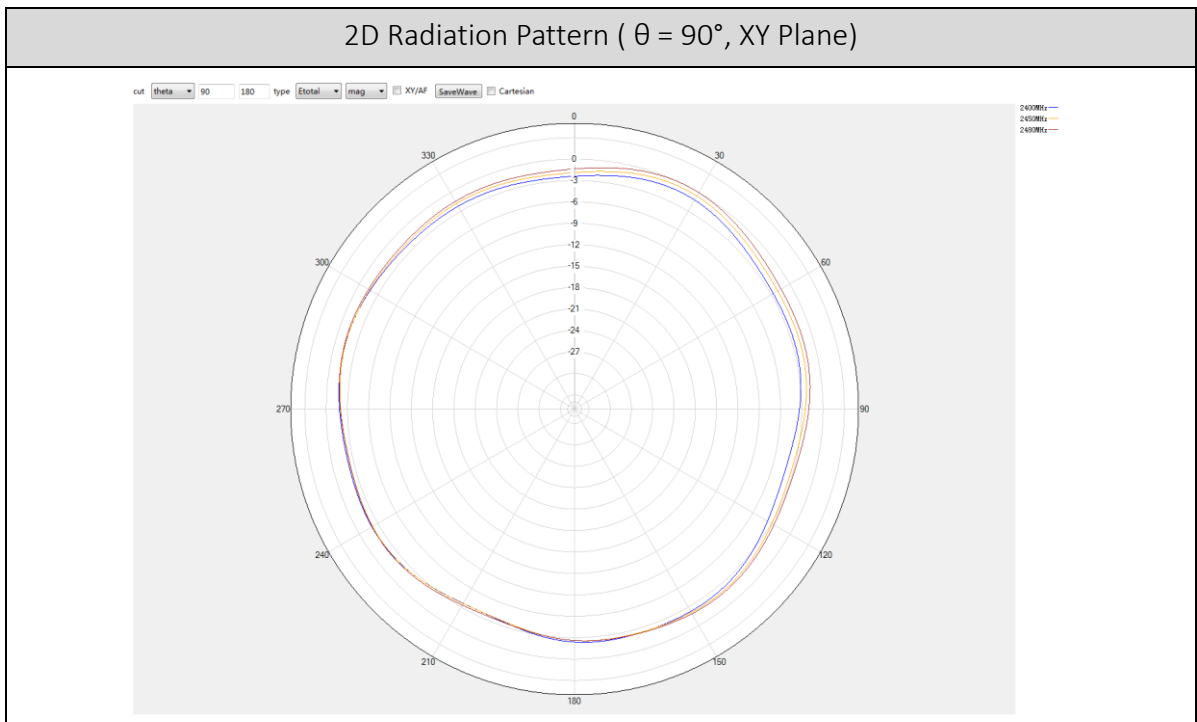


Table 5 Radiation pattern in XZ Plane

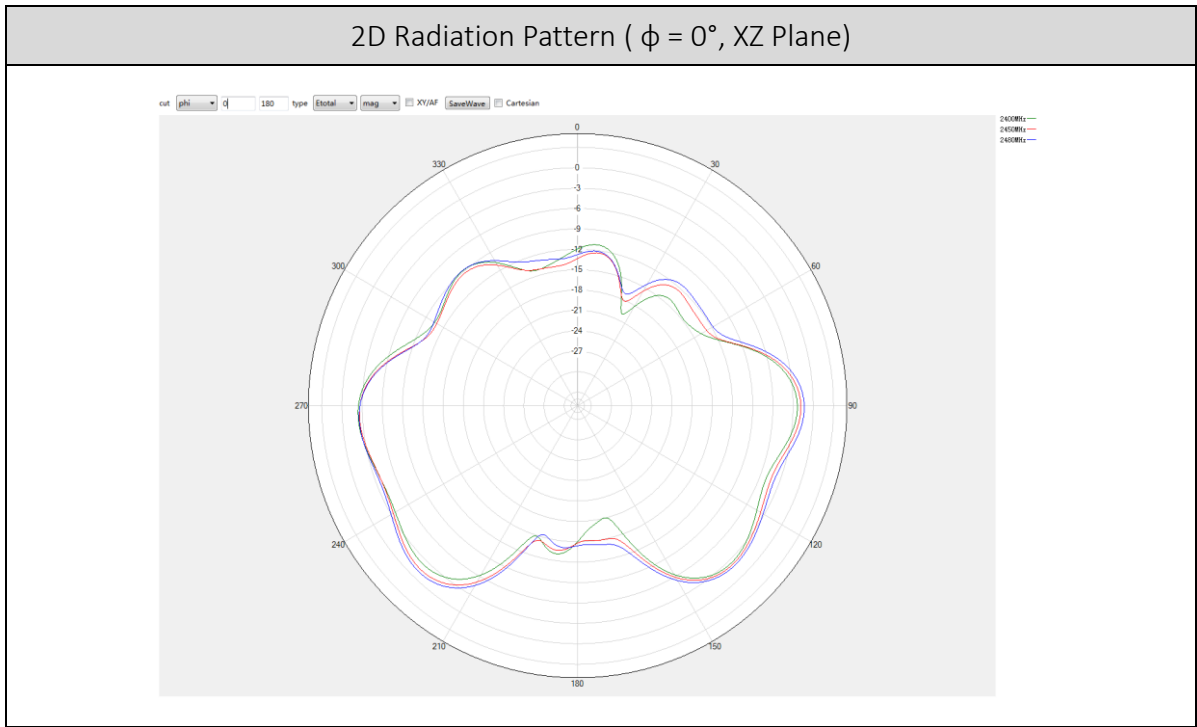


Table 6 Radiation pattern in YZ Plane

