### **Antenna Report**

## Frequency range:

BT Antenna:

• BLE: 2.4 to 2.48 GHz

**Antenna Types:** 

BLE antenna: PCB IFA antenna

#### **Antenna Gain:**

M hz	Peak Gain
2400	2.69
2410	3.18
2420	3.55
2430	3.27
2440	3.21
2450	3.45
2460	3.48
2470	3.54
2480	3.63

#### **Antenna Structure:**



# **BLE** antenna

### **Measurement Test Method:**

Solder pigtails on feeding point of antenna and measure passive antenna performance by VNA and OTA chamber system.

Test equipment: Agilent E5071C

Test chamber: GOERTEK

Address: No. 268 Dongfang Road, Kuiwen District, Weifang City, Shandong Province, China

Chamber info: ETS AMS8500

Calibration info: Agilent E5071C\_2023/01/05

Test engineer: Liuxing

#### **Software for Measurement:**

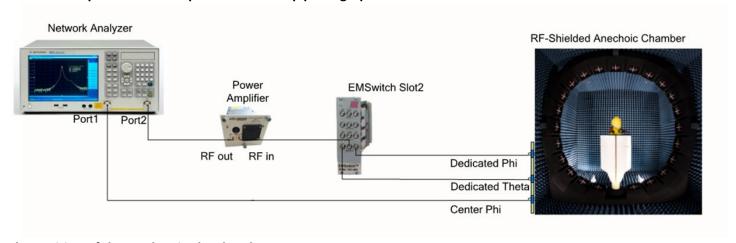
**EMQuest** 

### Test Set-up:

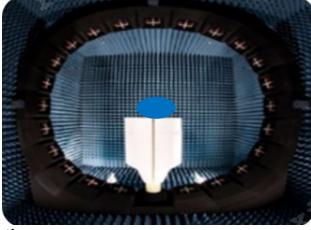
- 1. Set up the device on the turn table and connect the pigtails to the RF cable.
- 2. Measure the 3D passive performance according to the following coordinate axis.

Turntable – Phi: 0-165°, step size: 15°, clockwise rotation

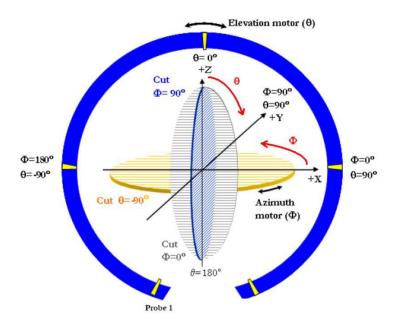
### Please see separate test set-up exhibit for setup photographs



The position of the product in the chamber

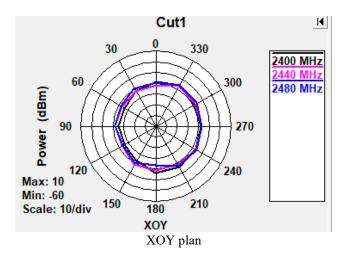


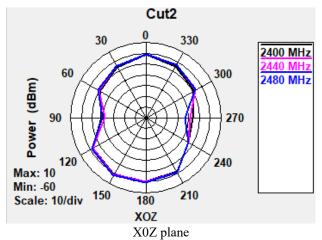
**Antenna Radiated Pattern Orientation:** 

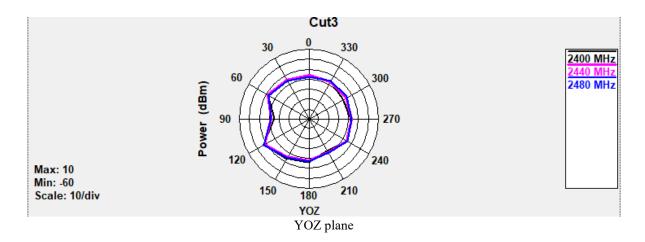


### **BLE Antenna**

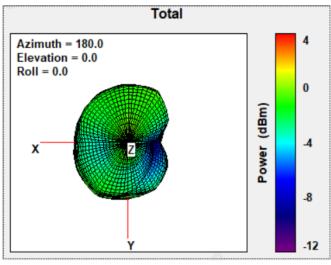
2D



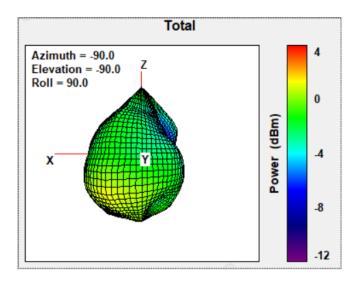




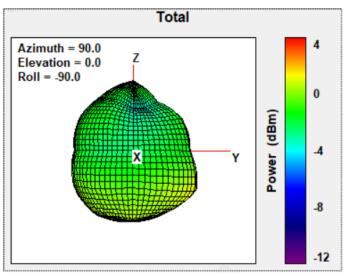
# **3D** (2440MHz)



XOY



XOZ



YOZ