

Antenna Report**Frequency range of operation:**

2.4G Proprietary Protocol Antenna1:

- ANT1: 2.4 to 2.48 GHz.

2.4G Proprietary Protocol Antenna2:

- ANT2: 2.4 to 2.48 GHz

Antenna Types:

ANT1: PCB IFA antenna, ANT2: PCB IFA antenna.

Antenna Brand Manufacturer:

Bomin Electronics Co., Ltd: Dongsheng Industrial Park, Economic Development Experimental Zone, Meizhou City, Guangdong Province.

Antenna Model:

2.4G Proprietary Protocol Antenna1: 309000163229R1-E1

2.4G Proprietary Protocol Antenna2: 309000163229R1-E2

Bluetooth Antenna: 309000161039R3-BT_AIR_ANT

Antenna Peak Gain:

Frequency	Peak Gain (dbi)	
	ANT1	ANT2
	IFA	IFA
2400-2480MHz	3.60	3.92

Antenna Gain:

Frequency	Peak Gain (dbi)	
	ANT1	ANT2
	IFA	IFA
2400MHz	1.73	2.34
2450MHz	3.31	3.92
2480MHz	3.60	2.34

Measurement Test Method:

Measure active antenna performance by OTA chamber system.

Test Equipment used:

VNA: Agilent E5071C

OTA chamber: ETS

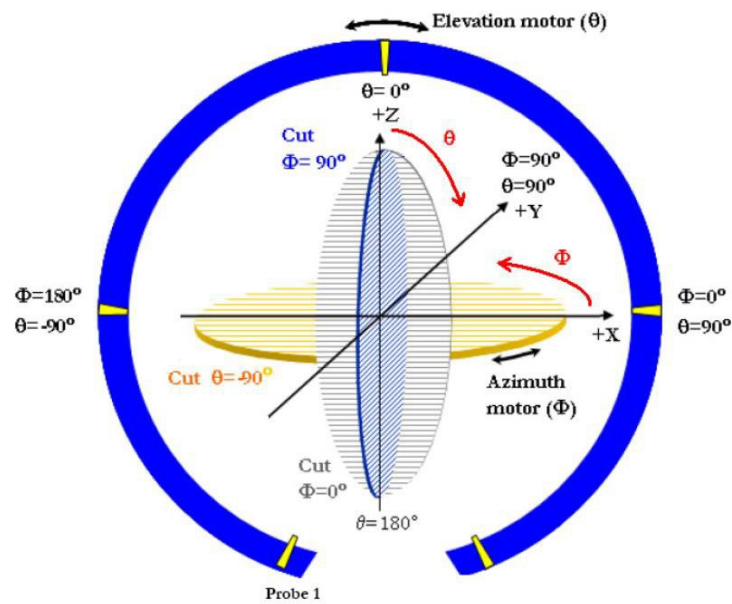
Software for Measurement:

EMQuest

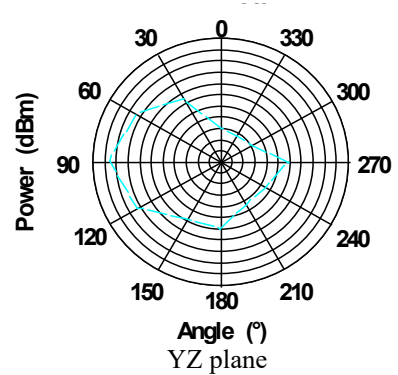
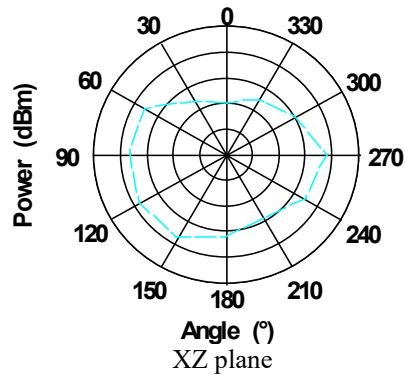
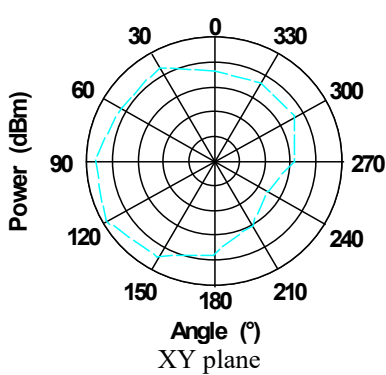
Test Set-up:

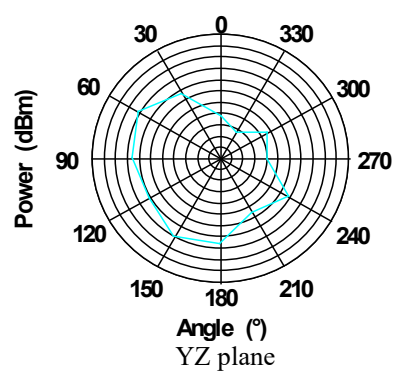
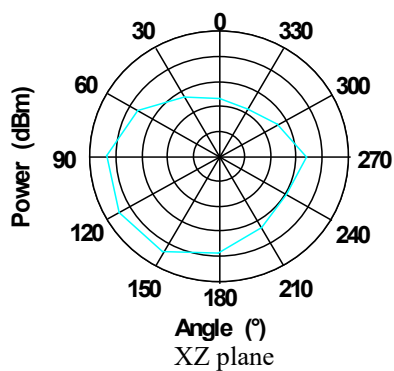
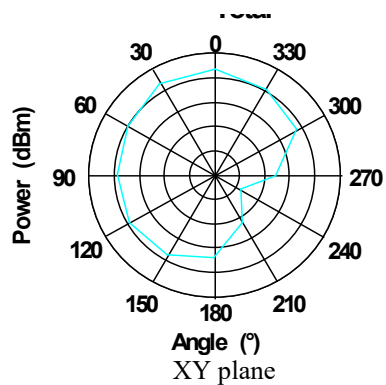
1. Set up the device on the turn table and input commands.
2. Measure the 3D active performance according to the following coordinate axis.

Turntable – Phi: 0-150°, step size: 30°, clockwise rotation

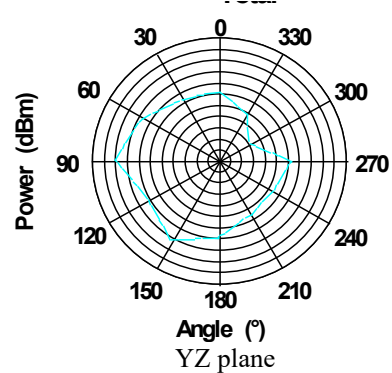
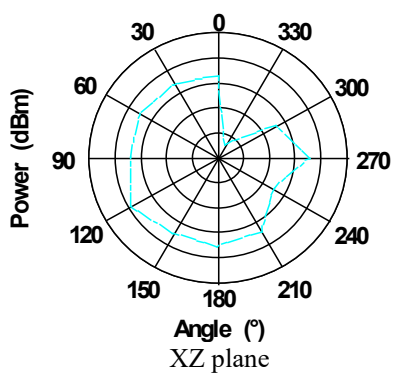
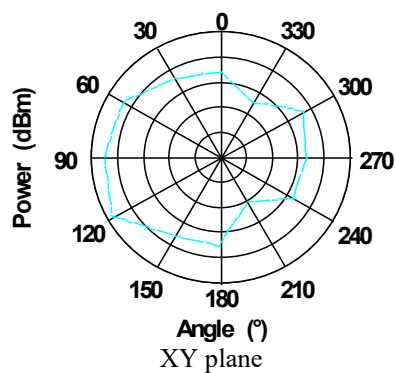
Antenna Radiated Pattern Orientation:

ANT-1

2400 MHz**2450 MHz**

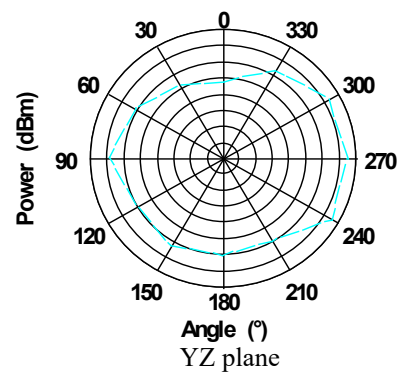
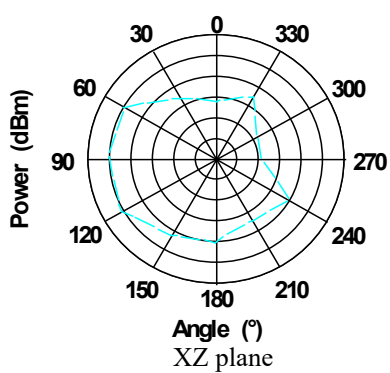
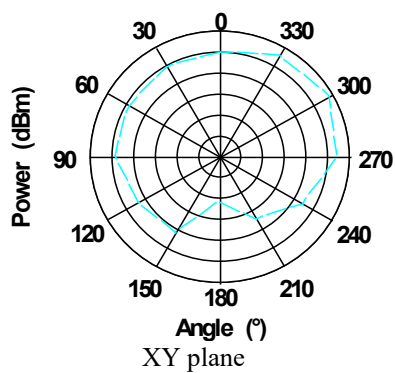


2480 MHz

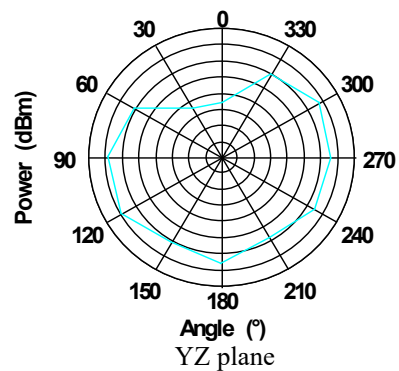
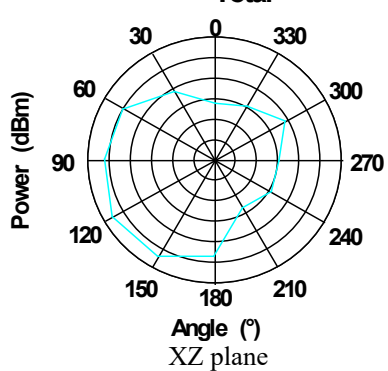
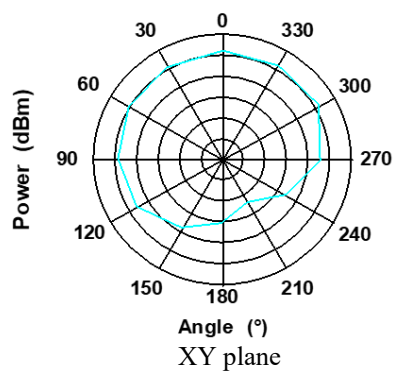


ANT-2

2400 MHz



2450 MHz



2480 MHz

