

XC46BE224T-F100-VR

Antenna Measurement Report

17th Oct, 2024

Version R01



- ***Antenna Definition and Distribution***

- ***Antenna Return Loss***

- *WIFI*
- *Cellular*
- *DFS*

- ***Antenna Isolation***

- *Antenna WIFI to WIFI Isolation*
- *Antenna Cellular to Cellular Isolation*
- *Antenna Cellular to WIFI Isolation*
- *Antenna DFS to WIFI & Cellular*

- ***Antenna Efficiency & Peak Gain***

- *WIFI*
- *Cellular*
- *DFS*

- ***Antenna Radiation of WiFi***

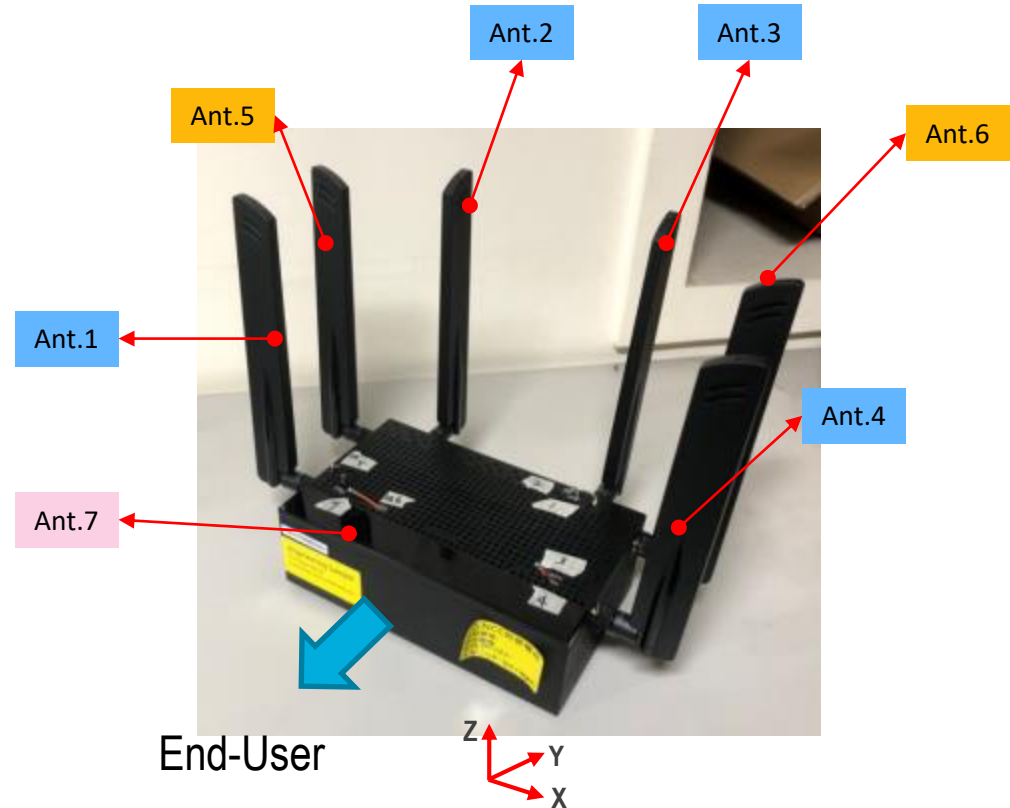
- ***Antenna Radiation of Cellular***

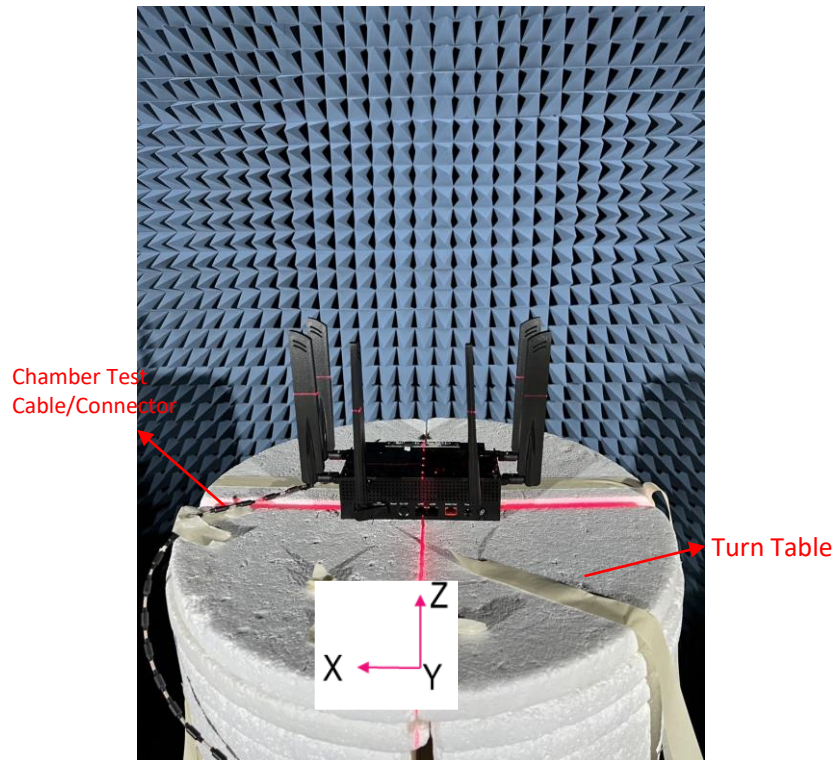
- **Return Loss :**
 - **WIFI**
 - **2G/5G Antennas** **<-10.5dB**
 - **Cellular**
 - **Full band LTE Antennas** **<-5.27dB**
 - **DFS** **<-13.02dB**
- **Isolation:**
 - **WIFI**
 - **2GHz isolation** **>25.55dB**
 - **5GHz isolation** **>33.21dB**
 - **Cellular**
 - **LB isolation** **>-10.80dB**
 - **MB isolation** **>19.71dB**
 - **CB** **>22.65dB**
- **Efficiency**
 - **WIFI**
 - **2G** **>71%**
 - **5G** **>71%**
 - **Cellular**
 - **LB** **>55.24%**
 - **MB** **>65.71%**
 - **CB** **>64.22%**
 - **DFS** **>60.98%**

● Antenna Definition and Distribution

□ Antenna Definition

	Antenna	Antenna Type	Frequency(MHz)
WiFi 2G/5G	Ant.5	Dipole	2400-2500 ; 5150-5850
	Ant.6	Dipole	2400-2500 ; 5150-5850
Cellular antenna	Ant.1	Dipole	746-4200
	Ant.2	Dipole	746-4200
	Ant.3	Dipole	746-4200
	Ant.4	Dipole	746-4200
DFS	Ant.7	PIFA	5150-5850





- Place the device at the center of the chamber.
- Connect the antenna cable to RF cable of the chamber
- Run IETS-Lindgren SW test measurement
- Get 3D data in 2.8125 degree step from phi 0° ~ 360° and theta -90° ~ $+90^{\circ}$, including efficiency, peak gain, 2D & 3D radiation pattern.