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General Information

This is the antenna report for device with model number G6A87E.

Frequency range of operation:

Wi-Fi Antenna:

- Wi-Fi: 2.4 to 2.482 GHz and 5.15 to 5.85 GHz BT

BT Antenna:

- Bluetooth: 2.4 to 2.48 GHz

Zigbee&LoRa Antenna:

- Zigbee: 2.4 to 2.48GHz
- Lora: 863Mhz ~930Mhz

Antenna Types:

Wi-Fi: PCB IFA antenna, BT antenna: PCB IFA antenna, Zigbee&LoRa antenna: FPC IFA antenna

Antenna Gain:

WIFI		BT		Lora		Zigbee	
2400~2483.5MHz	4dBi	2400~2480MHz	4dBi	863~930MHz	4dBi	2400~2480MHz	3.8dBi
5150~5850MHz	4dBi						

Measurement Test Method:

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

Test Equipment used:

VNA: Agilent E5071C
OTA chamber: Mini-chamber BST-Mini-M
Test engineer: Kevin Qin
Test date: July 11th 2023

Software for Measurement:

BST-passive

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.

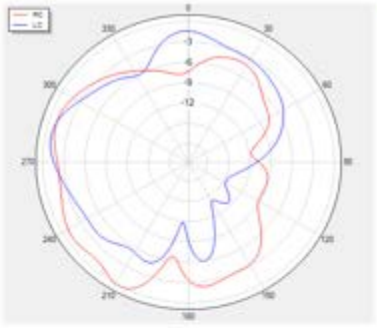
Turntable – Phi: 0-165°, step size: 15°, clockwise rotation

Please see separate test set-up exhibit for setup photographs

2D radiated pattern

WiFi_2.4G

Phi=90 freq=2440MHz



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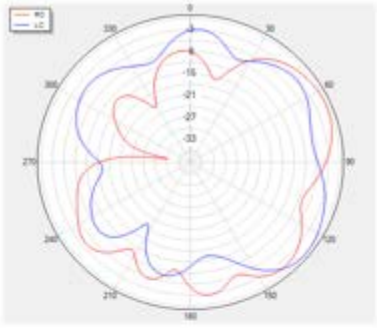

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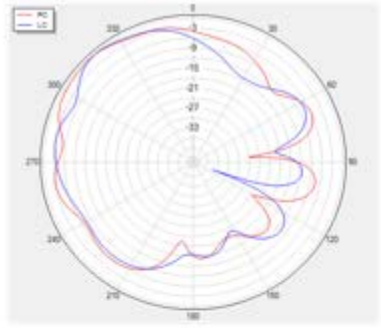

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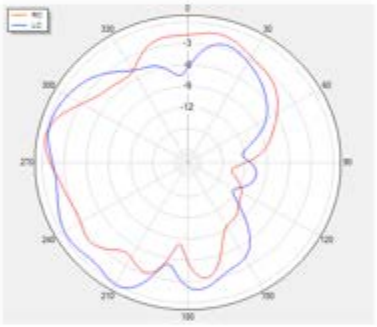

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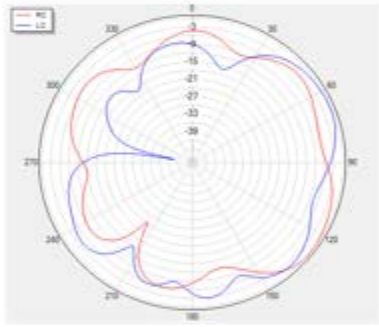

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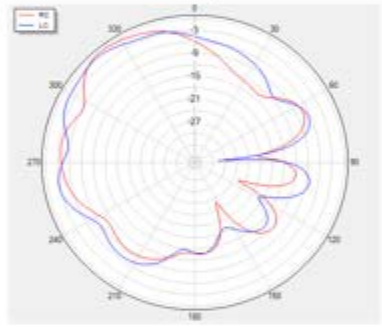

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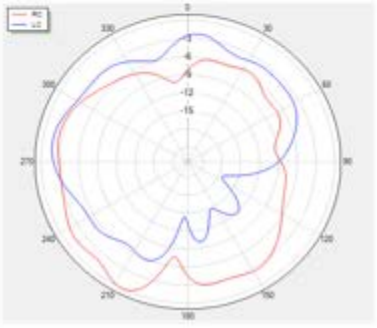

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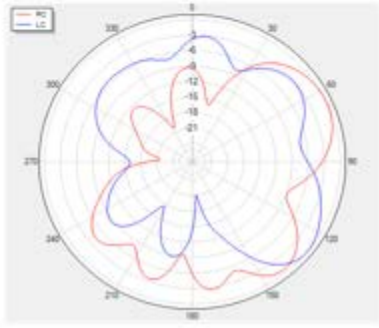

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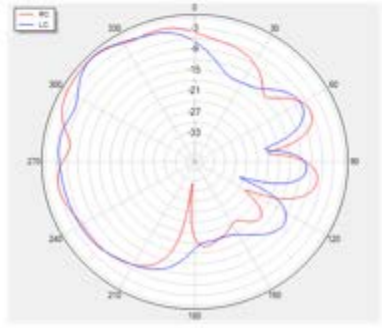

WiFi_5G

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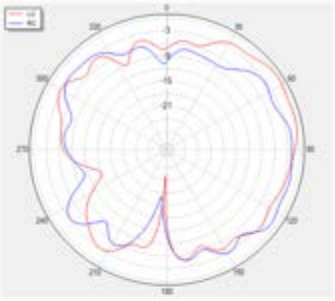

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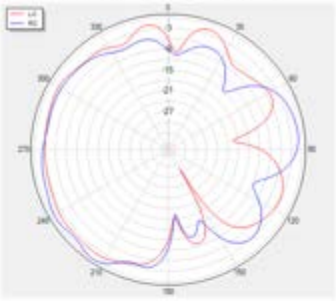

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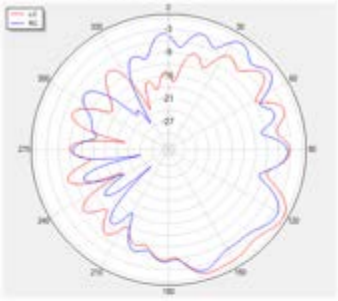

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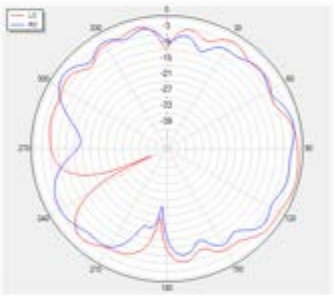

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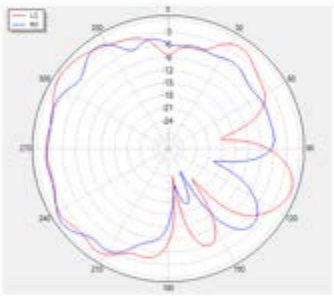

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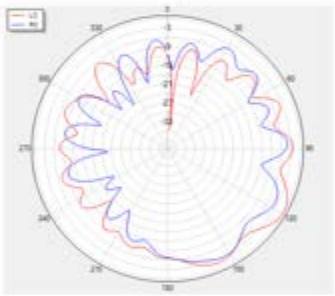

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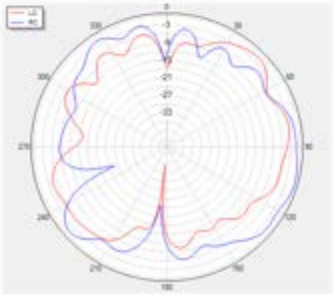

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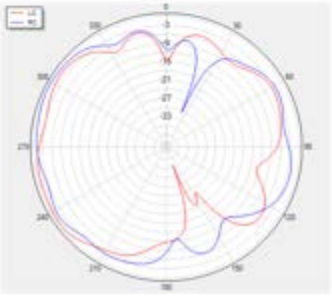

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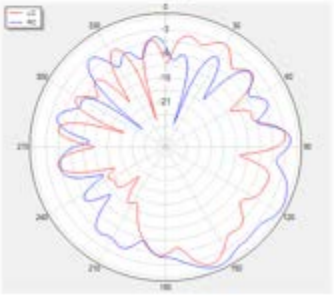

BT

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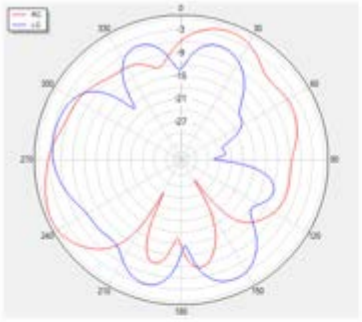

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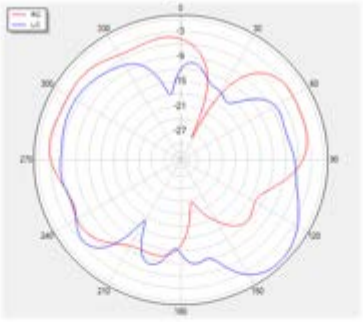

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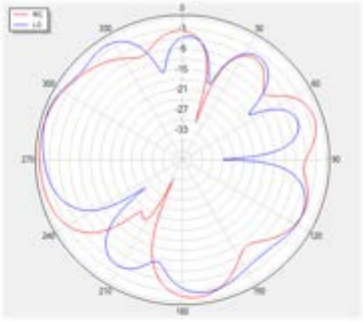

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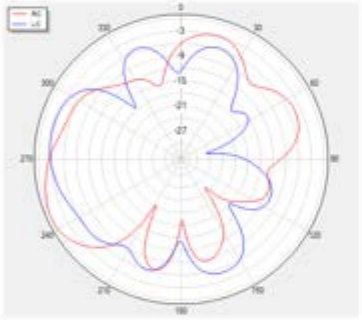

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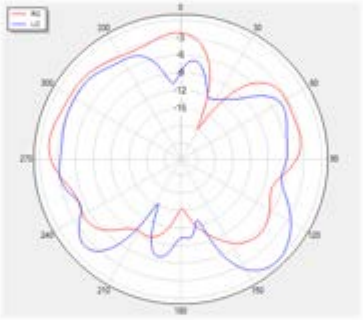

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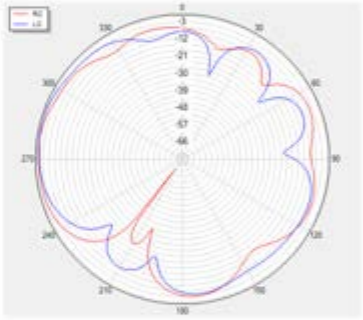

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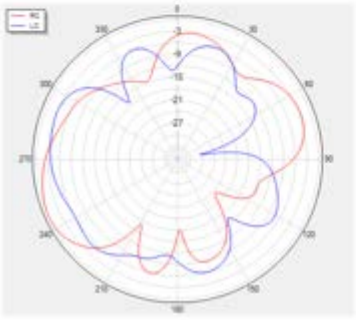

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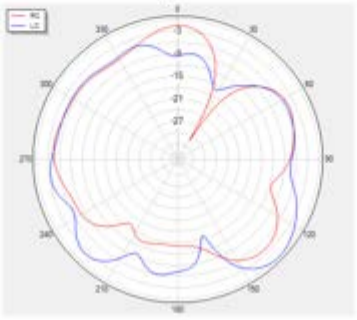

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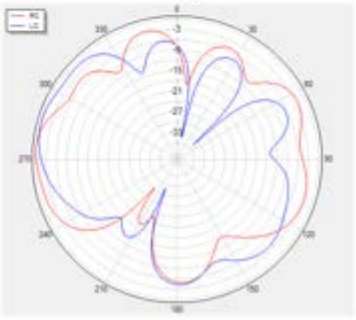
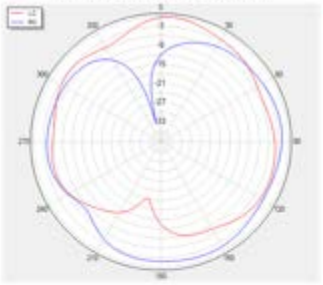
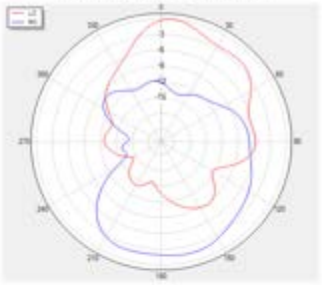


Lora

Phi=90 freq=860MHz



Phi=0 freq=860MHz



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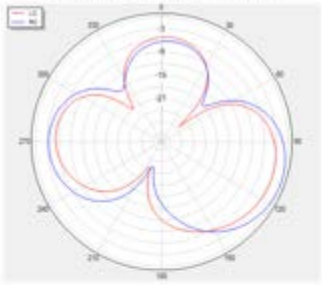
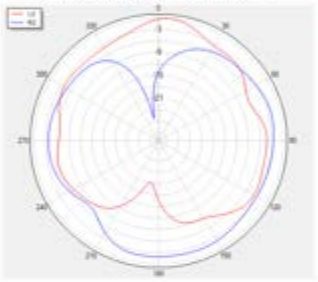


Phi=90 freq=900MHz



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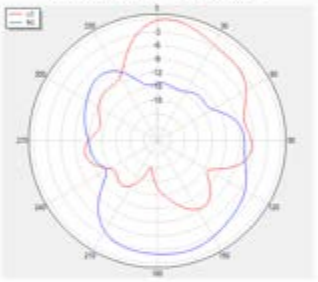

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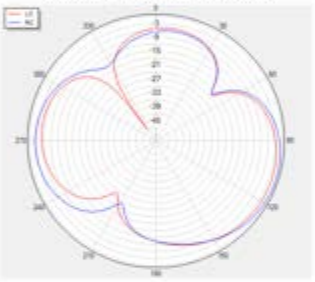

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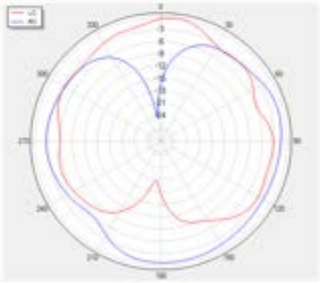

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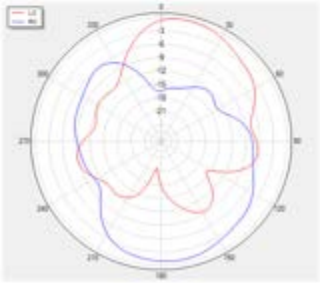

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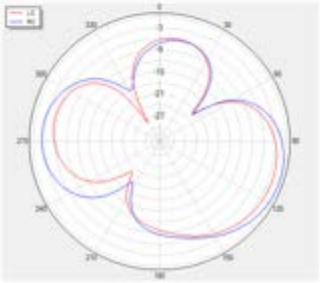

Zigbee

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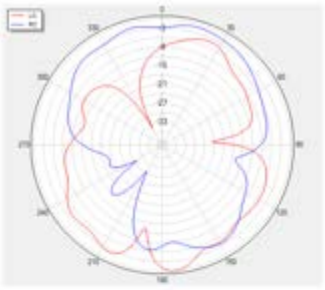

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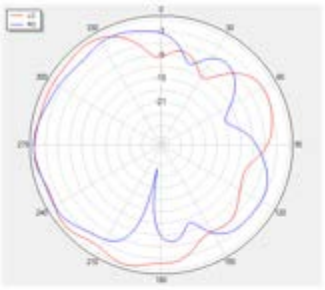

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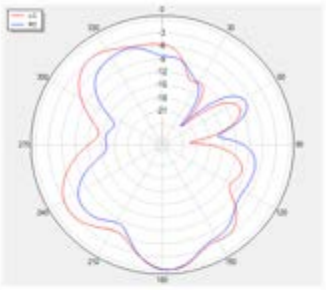

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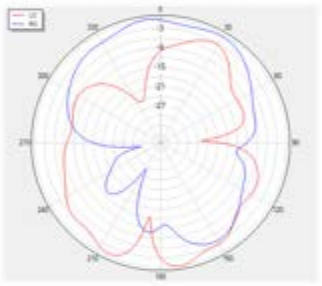

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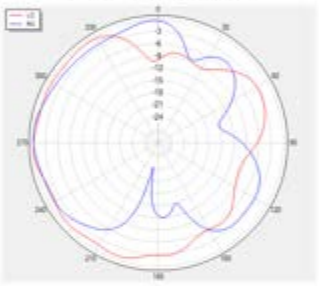

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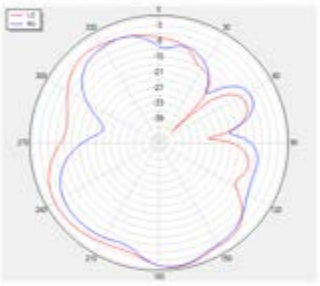

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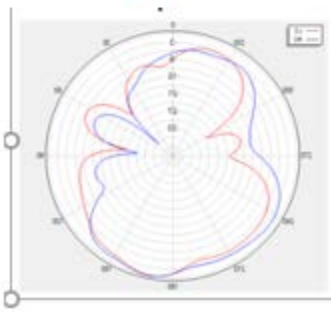

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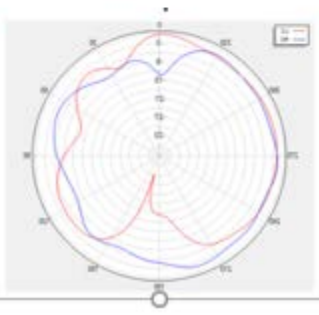

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