Antenna Reports

Company: Realme

Model name: RMX3999

Issue date: 2023/12/15

Documented by: ____Yandi____

Antenna Summary Table

| Check items | Information |
|-------------------------|--|
| Provided by lab | RayZone2800 (GTS) |
| Manufacturer/ Brand | Realme |
| name | |
| Product Model Name | RMX3999 |
| Antenna Model name | M718 |
| List of calibrated test | GTS2800 with calibrated date: 2023/10/18 |
| equipment | |
| Antenna detail info. | Show WLAN/BT/ |
| | IFA type antenna. |
| | |
| Antenna gain test data | Included antenna frequency, gain pattern |
| Antenna Manufaturer | Building H, No. 55, Shengchuang Road, Yushan Town, |
| Address | Kunshan City, Jiangsu Province |
| | |
| | Building 8, 1st-3rd Floor, Tongfu Village Industrial |
| | Zone, Xinshi Community, Dalang Street, Longhua |
| | District, Shenzhen City, Guangdong Province |

Note: Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document.

Antenna Test data:

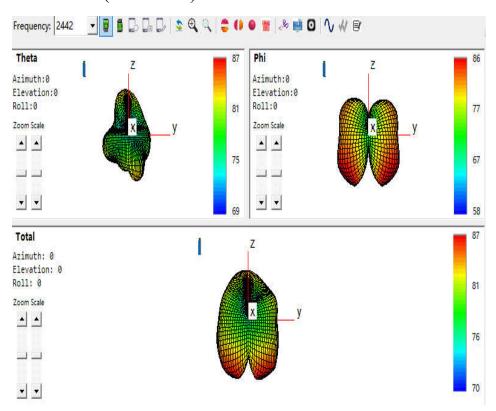
Antenna model name: M718

Antenna type: IFA

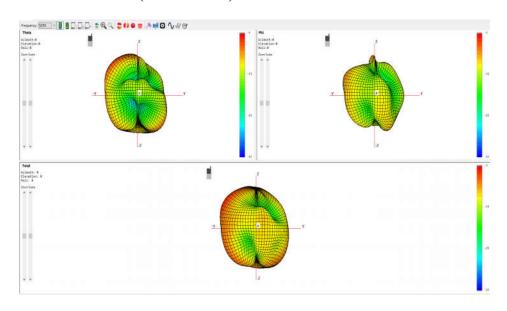
Antenna Gain and Antenna Type specification:

| Antenna Gain (dBi) | | Ant 8 | Antenna Type |
|--------------------|------------------|-------|----------------|
| 2.4G WiFi | 2400~2483.5MHz | -0.3 | IFA(Inverted F |
| 2.4G WII I | | | Antenna) |
| 5G Wifi | 5150~5250 MHz | -1.56 | IFA(Inverted F |
| | 3130~3230 WII IZ | -1.50 | Antenna) |
| | 5250~5350 MHz | -1.56 | IFA(Inverted F |
| | | | Antenna) |
| | 5470~5725 MHz | -0.1 | IFA(Inverted F |
| | | | Antenna) |
| | 5725~5850 MHz | 0.5 | IFA(Inverted F |
| | | | Antenna) |
| ВТ | 2400~2483.5MHz | -0.3 | IFA(Inverted F |
| | | | Antenna) |
| NFC | 13.56MHz | / | LOOP Antenna |

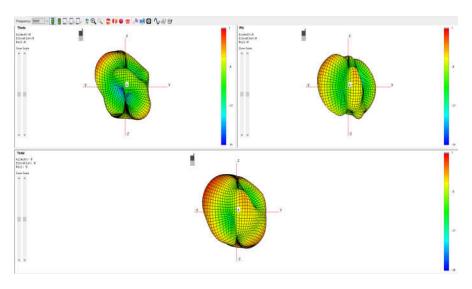
WIFI 2.4G (2442MHz)



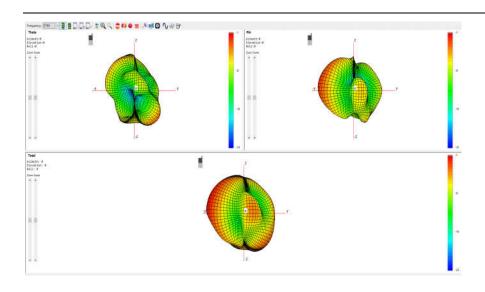
WIFI 5G B1/2 (5150~5350)



WIFI 5G B3 (5470~5725)



WIFI 5G B4 (5725~5850)



Tset equipment software

GTS MaxSign-Libra

Documented by:Yandi

List of Test and Measurement Instruments

| NO. | Equipment | Manufacturer | Model No. |
|-----|-------------|--------------|---------------|
| 1 | RayZone2800 | GTS | CT10121160B50 |
| | | | 66 |
| 2 | Network | Kesight | MY46736598 |
| | Analyzer | | |
| | E5071C | | |

I. Measurement Setup:

A. Reflection Coefficient Measurement:

Instrument: Network Analyzer (Kesight E5071C).

Setup:

- 1. Calibrate the Network Analyzer by one port calibration using Kesight 85093C Electronic calibration module .
- 2. Connect the antenna under test to the Network Analyzer.
- 3. Measure the S11(reflection coefficient), Return Loss....

B. Pattern Measurement:

A Fully Anechoic Chamber is used to simulate free-space conditions.

A Fully Anechoic Chamber is a shielded room lined with RF/microwave absorber on all walls, ceiling, and floor.

RF/microwave absorber reduces reflections from the inner walls of the shield. Absorber performance depends on the depth and design of the absorber and the angle of incidence of the field.

Normal incidence is best, shallower angles are worse.

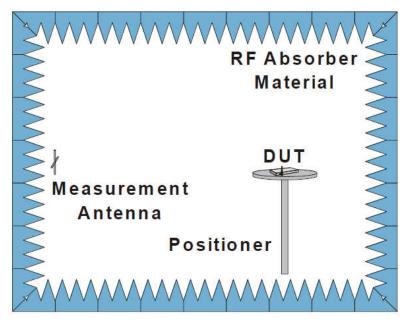


Fig. 4. The fully anechoic chamber