Antenna Spec

FCC ID: 2AUYFRMX3686

Equipment : Mobile Phone

Brand Name : relame

Model Name : RMX3686

Manufacturer :

Realme Chongqing Mobile Telecommunications Corp.,

Ltd.

No.178 Yulong Avenue, Yufengshan, Yubei District,

Chongqing.China



Antenna Location&dimension:

Antenna location&dimension Fig 1

Antenna Gain and Antenna Type specification:							
Antenna Gain (dBi)		Ant 2	Ant 7	Ant 8	Ant 9	Antenna Type	
2.4G WiFi	2400~2483.5M Hz	-2.4		-1.9		IFA(Inverted F	
						Antenna)	
5G Wifi	5150~5250 MHz		-1.5		-3.9	IFA(Inverted F	
						Antenna)	
	5250~5350 MHz		-1.7		-1.7	IFA(Inverted F	
						Antenna)	

	5470~5725 MHz		-0.7		-1.7	IFA(Inverted F Antenna)
	5725~5850 MHz		-0.4		-2.2	IFA(Inverted F
						Antenna)
вт	2400~2483.5M Hz			-1.9		IFA(Inverted F
						Antenna)

 Table1
 Antenna Gain and Antenna Type specification

Note: Antenna gain was measured in the anechoic chamber, 3D scan was exercised, and the highest numbers are reported in this document. Accoring toTest standard: IEEE Std 149-2021,we measure antenna gain .

Antenna pattern:

ANT2





ANT8





List of Test and Measurement Instruments

TEST EQUIPMENT

NO.	Equipment	Manufacturer	Model No.
1	AMS-8923	ETS-Lingen	SN1702
2	Network	Kesight	MY4690575
	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