

Testing Report

LTE/SRD Antenna(698~960/1710~2690MHz)

Customer Name: AJAX SYSTEMS

Product Name: LTE Antenna

Sample Model: JCG157L

Issue Date: 2025.05.11

 Engineer: B.Hermaniuk	Date: 2025.05.11
 Approver: O. Tymoshenko	Date: 2025.05.11

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1. General Information

1.1. General information of testing institutions

Name	«AJAX SYSTEMS MANUFACTURING» LLC
Address	5 Sklyarenka Str., Kyiv, 04073, Ukraine
Web-address	https://ajax.systems/
E-mail	kuraksa.s@ajax.systems

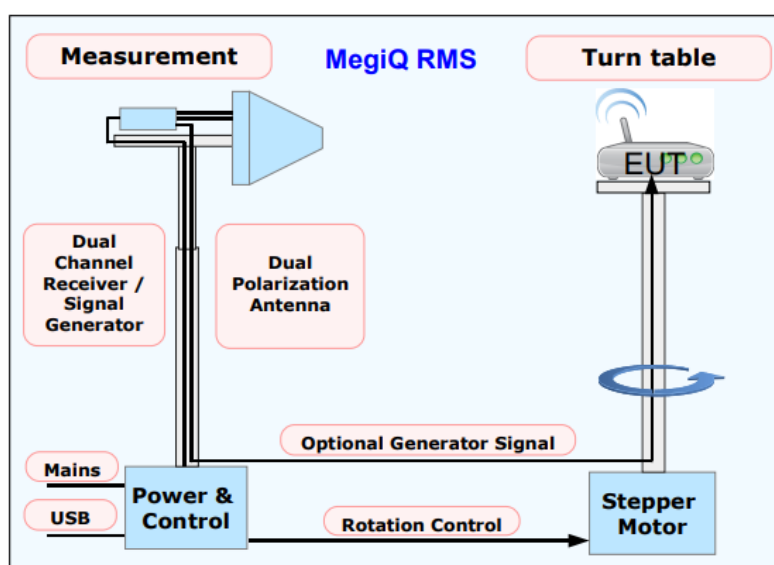
1.2. Testing principle

The MegiQ Radiation Measurement System (RMS) is a compact test system that performs 3-axis radiation pattern measurement in non-anechoic spaces.



RMS0440 – RMS0460
RMS0640 – RMS0660

Measurement System



1.3. Test equipment

Equipment	Manufacturer	Model	Identifier (serial number)	Calibration date
Vector network analyzer	MegiQ	RMS0460	00003028	10/2024 – 10/2025
Antenna	Narda Safety Test Solutions	LP-02	001ZX10321	8/2024 – 8/2025
Shielded room		—	—	—
Power&Control unit	MegiQ	---	—	—
Turn table	MegiQ	---	—	—
Personal computer	ASUS	Vivobook S M5606UA-MX026	380000281174	—

1.4. Test environment

Temperature	22.5°C
Humidity	58%RH
Pressure	100.20kPa

1.5. Statement

- (1) The test results in the report are only applicable to the tested samples and the tested samples work under the environment described in the report.
- (2) Only «AJAX SYSTEMS MANUFACTURING» LLC have the right to modify the report, and the modification information shall be annotated in the revision form.
- (3) Any objection to this report shall be raised within 30 days after formal confirmation of the report.
- (4) This report is invalid if there is any evidence that the sample information provided is falsified.
- (5) The report is invalid without the signature of the approver

2. Sample Information

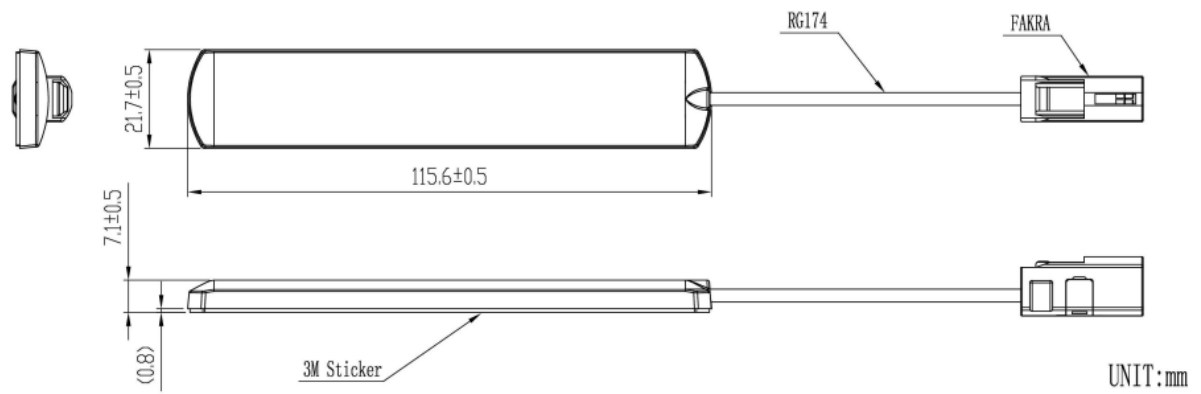
2.1. Client

Name	«AJAX SYSTEMS MANUFACTURING» LLC
Address	5 Sklyarenka Str., Kyiv, 04073, Ukraine
Manufacturer	«AJAX SYSTEMS MANUFACTURING» LLC

2.2. Description of EUT

Product Name	LTE Antenna JCG157L
Antenna Size	104.6 mm *15 mm *1mm
Serial No.	-
Antenna Type	PCB antenna
Test Item	VSWR; Radiation pattern
Frequency Range	698~960/1710~2690MHz

2.3. EUT appearance



3. Test Result

3.1. Test standard

Name	Parameter	Method	Standard no.
Mobile communication antenna	Antenna gain	Generic specification for antennas used in the mobile communications	GB/T 9410-2008
	Radiation pattern		
	VSWR		
Antenna		IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-1979
	Gain and directivity		

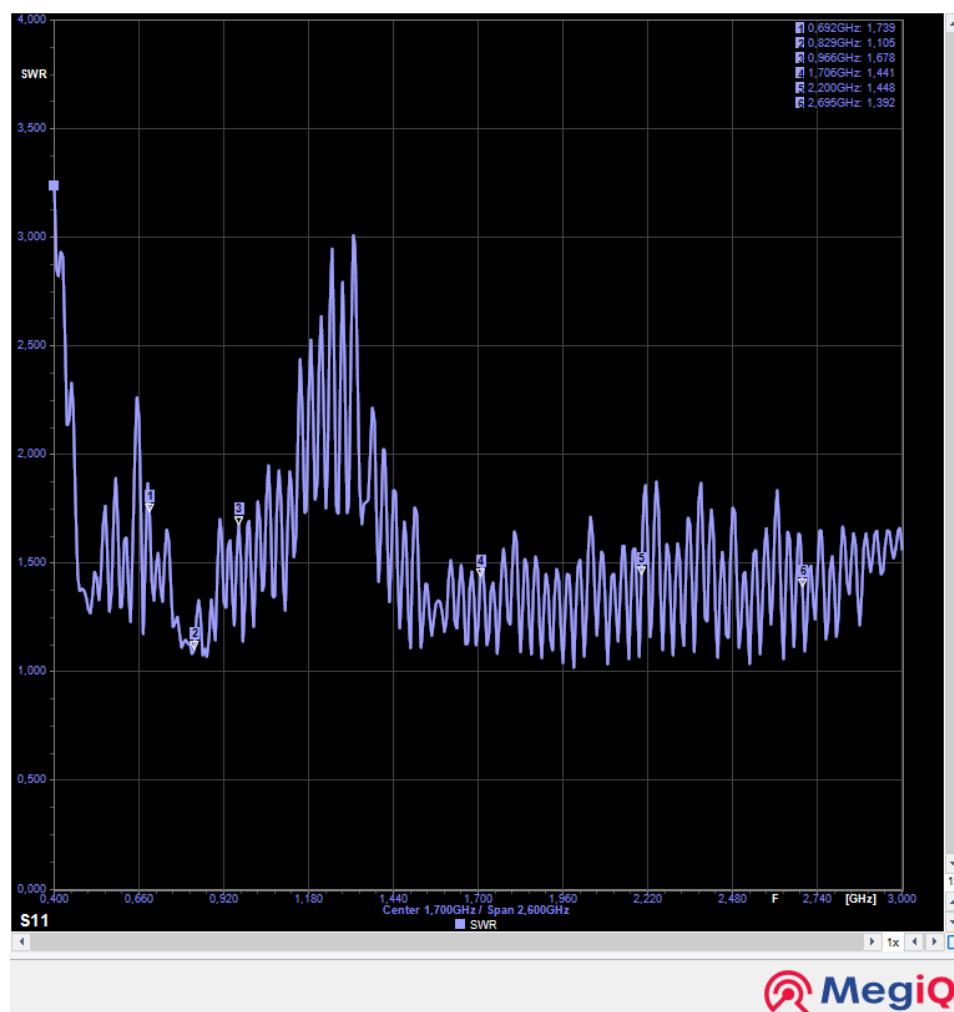
3.2. Test uncertainty

The uncertainty was calculated on the basis of the GUM published by ISO, using the inclusion factor of K=2 and the 95% confidence level to express the extended uncertainty.

Item	Uncertainty
VSWR	± 0.2
Antenna gain	± 0.6
Radiation efficiency	± 0.6

3.3. Test data

3.3.1. VSWR parameters



3.3.2. VSWR data

Frequency/MHz	692	829	915	966
VSWR	1.8	1.2	1.5	1.7
Frequency/MHz	1706	2200	2695	
VSWR	1.5	1.45	1.4	

3.3.3. Typical max gain

Frequency/MHz	829	915	1706	2695
Peak Gain/dBi	-4	-2	-1	0

3.3.4. Typical free space radiation pattern

