5G FR1

ST0449-21-201-A

Amphenol

Datasheet

0.7-0.96/1.71-2.7/3.3-5GHz
External

Features:

This is high performing 5G full-band antenna covers 698-960MHz, 1700-2700MHz, 3300-5000MHz.with N-Type Connector and IP67 certified.

Applications:

CPE - Router, Set-top boxes & Gateway
IoT devices
5G FR1 Mesh
Smart Metering
Robotics

Stick Antenna

RoHS

Electrical Specifications

Antenna Characteristics

Antenna Type	Radiation Pattern	Polarization	Max. Input Power	Impedance
Stick Antenna	Omni	Linear	1W	50Ω

Frequency (GHz)	0.698~0.96	1.71~2.17	2.3~2.69	3.3~5.0
Return Loss (dB) @Φ220mm GND	< -6			
Peak Gain (dBi)	1.3	3.3	4.2	8.6
Average Gain (dB)	-1.4	-2.3	-1.8	-1.0
Efficiency (%)	72	59	65	80

Mechanical Specifications

| Mechanical	
Dimension (mm)	Ø46.0 × 108.0
Connector Type	N-type (Jack)
Material	ABS
Weight (g)	92.4

Environmental	
Temperature Range (°C)	-40 to 80
IP Rating	IP67
RoHS Compliant	

Mechanical Drawing

Unit : mm
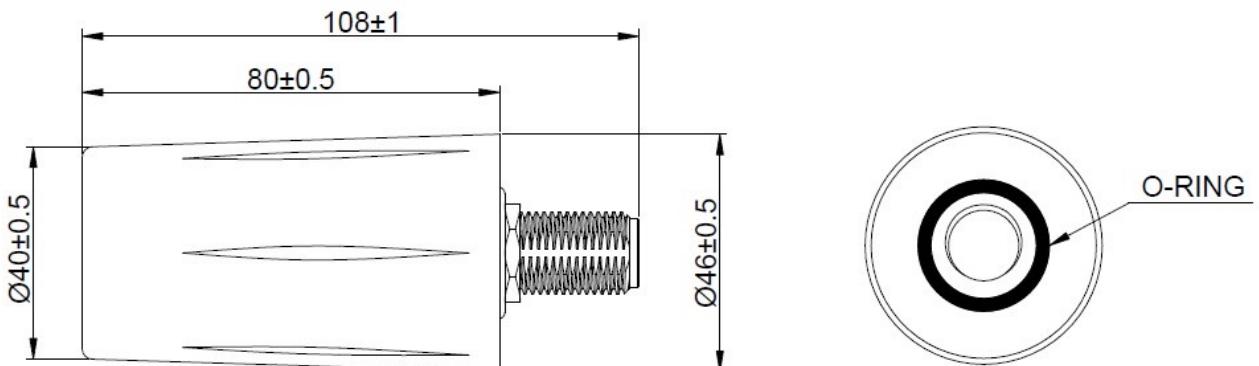
Charts In Free Space
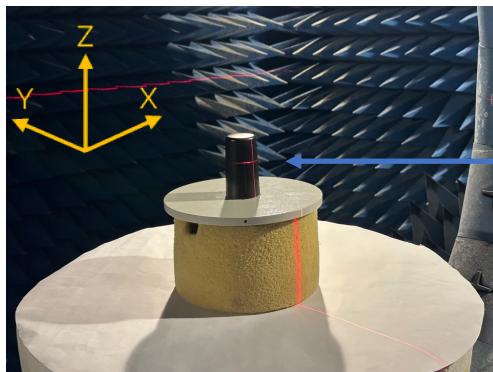
ST0449-21-201-A

Test setup, measurement performed in 3D anechoic chamber.

Return Loss [dB]
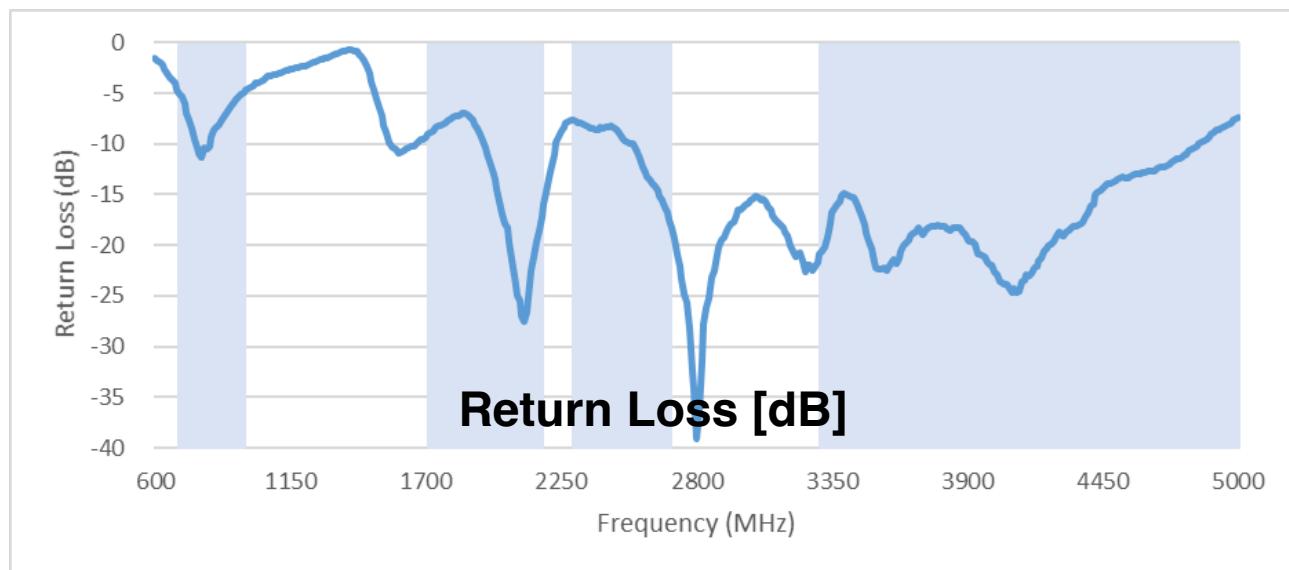
Blue background represents frequency response.

Efficiency [%]
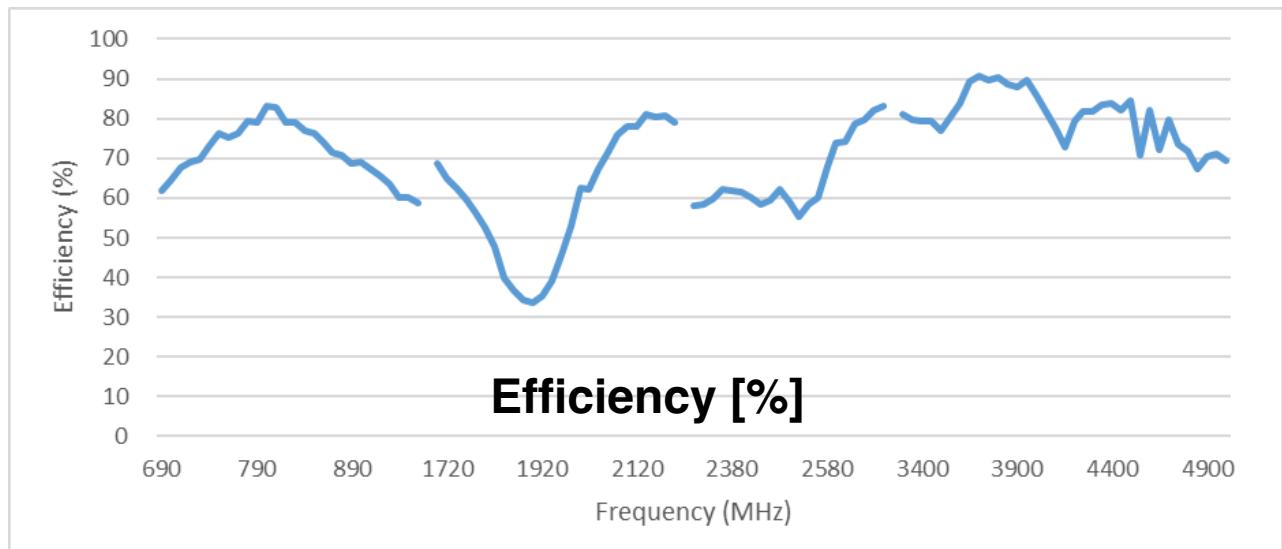
Radiation Pattern - Free Space

XY - Plane
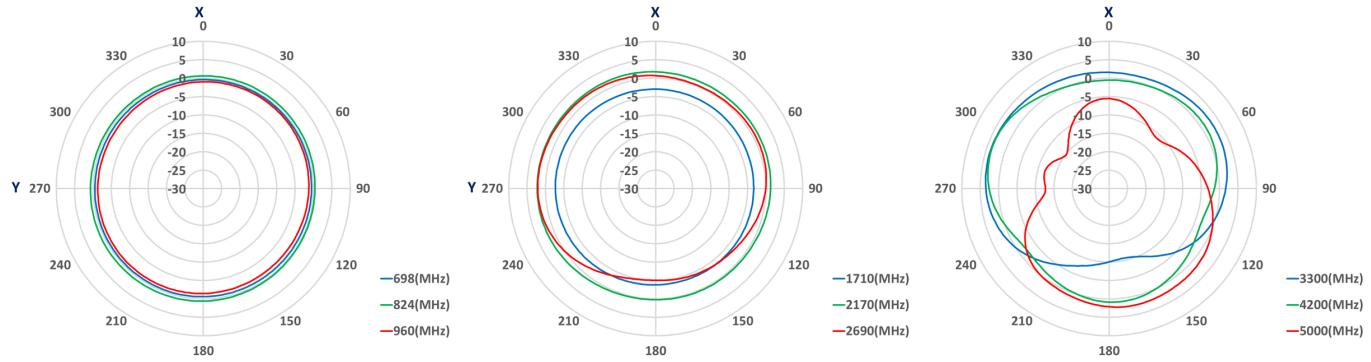
YZ - Plane
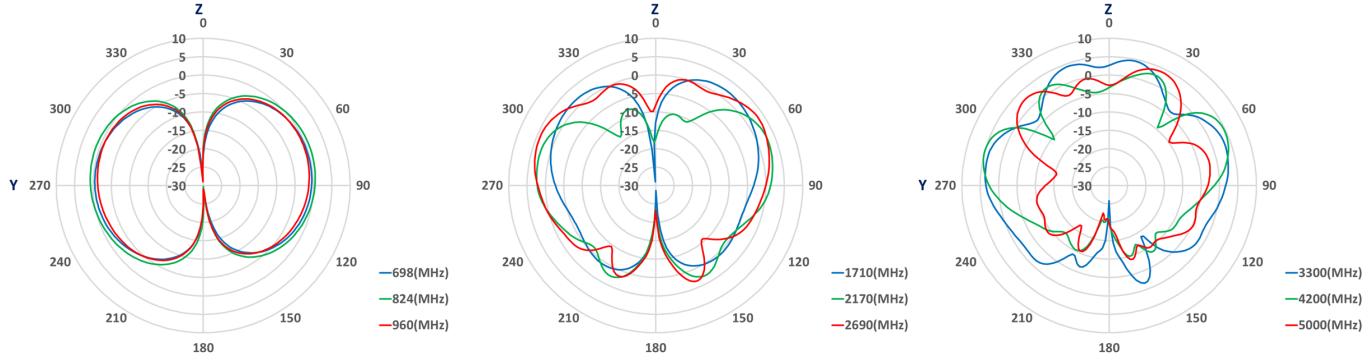
XZ - Plane
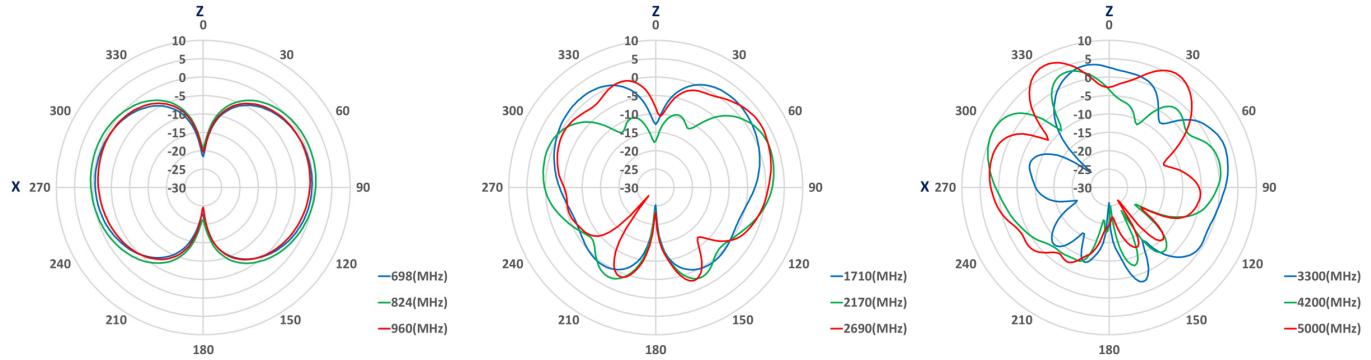
Revisions				
Rev.	Description	Date	ECN	Approval
A	Initial Release	2023-10-25	ST0449-21-201-A-RA00	ATC