

# Antenna

# YF0022AA Datasheet

## Antenna Services

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# About the Document

## Revision History

Version	Date	Author	Note
-	2020-12-08	Kenny YIN	Creation of the document
1.0	2020-12-08	Kenny YIN	First official release

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## 1 Product Description

The antenna is designed for superior performance, and can be widely used for wireless applications.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

## 2 Product Features

- LTE Full-Band Antenna\_PCB
- High efficiency
- Excellent performance



### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Ranges	700–960 MHz & 1710–2170 MHz & 2300–2690 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 3.0$
Gain	$\leq 5.34$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size (mm)	40 mm x15 mm x 1.6 mm
Casing	FR4
Connector Type	RF Generation 1
Working Temperature	-20°C to +85°C
Radome Color	Green

## 4 Overall Performance

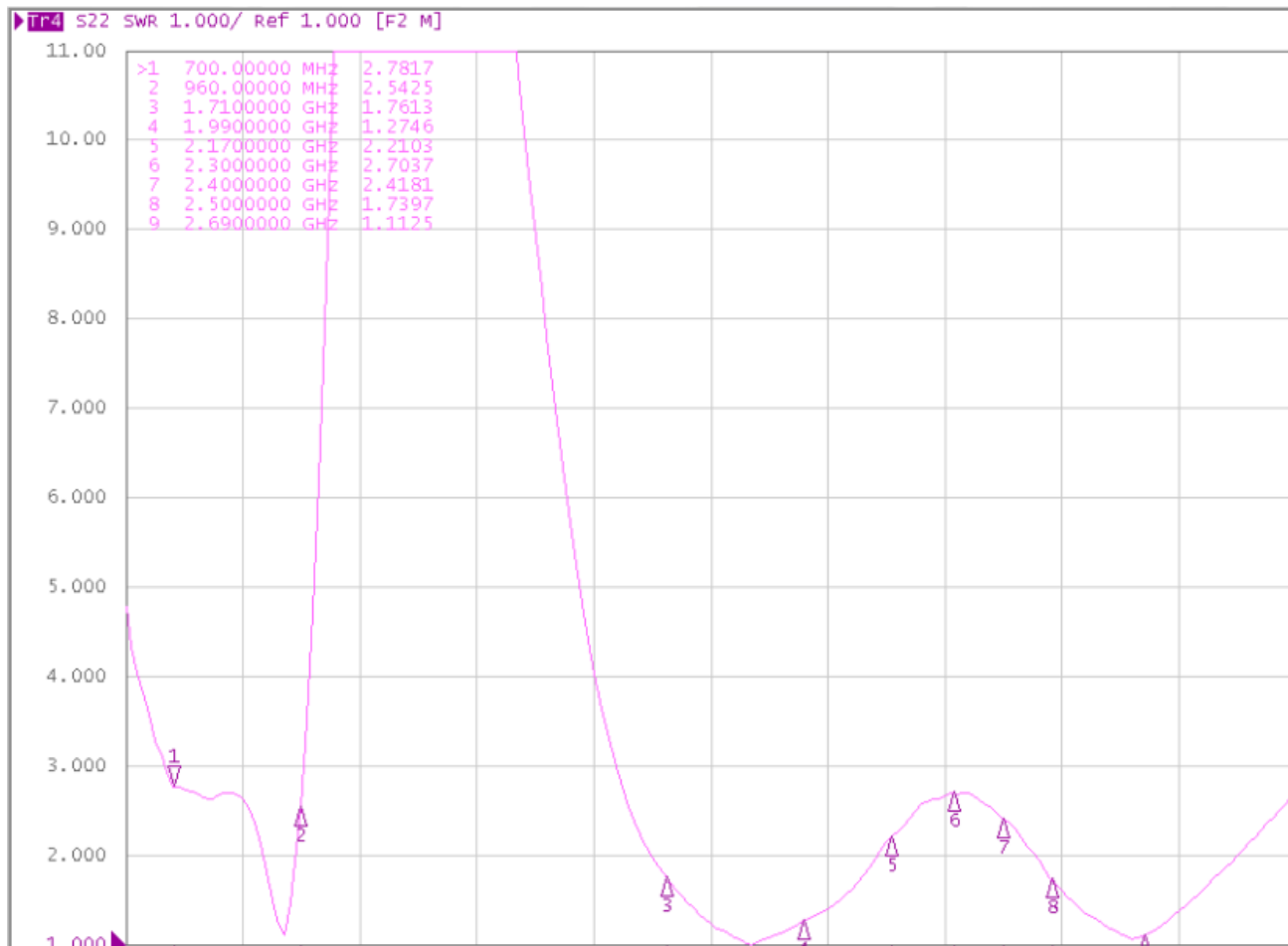
### 4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 6.5 GHz
- RayZone®2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 6.0 GHz



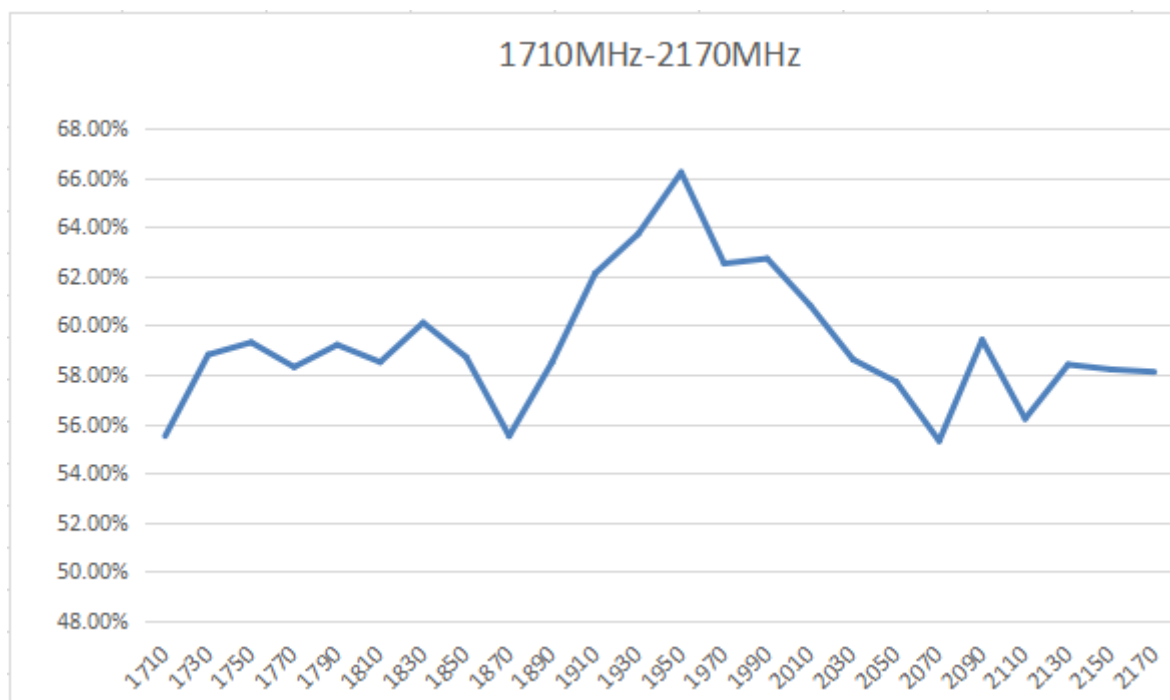
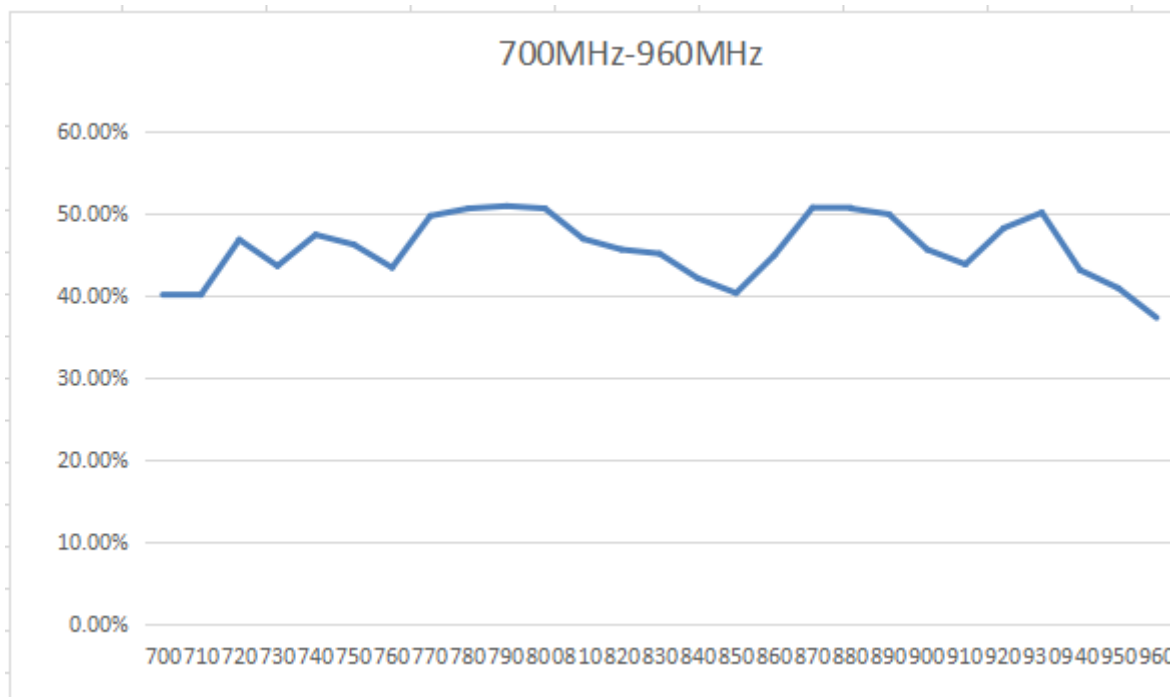


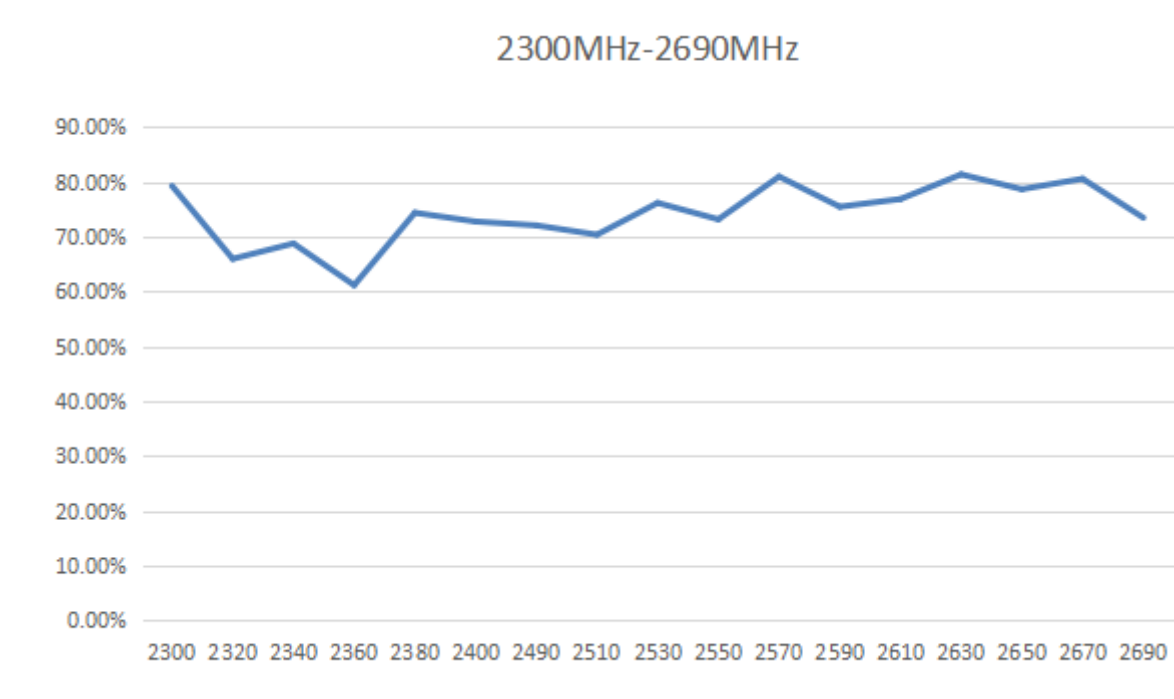
## 4.2. VSWR



Frequency (MHz)	700	960	1710	1990	2170	2300	2400	2500	2690
VSWR	2.78	2.54	1.76	1.27	2.21	2.71	2.41	1.74	1.12

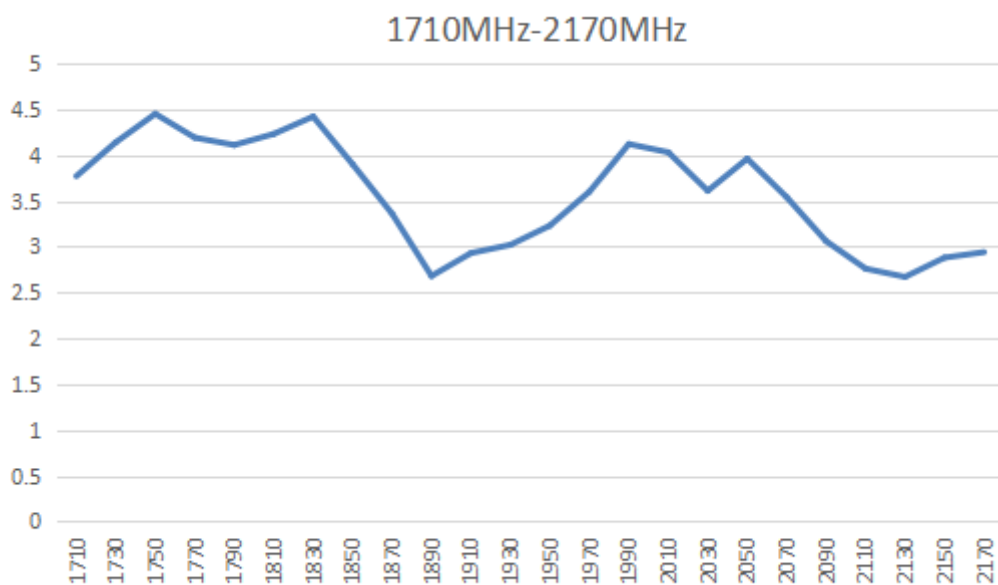
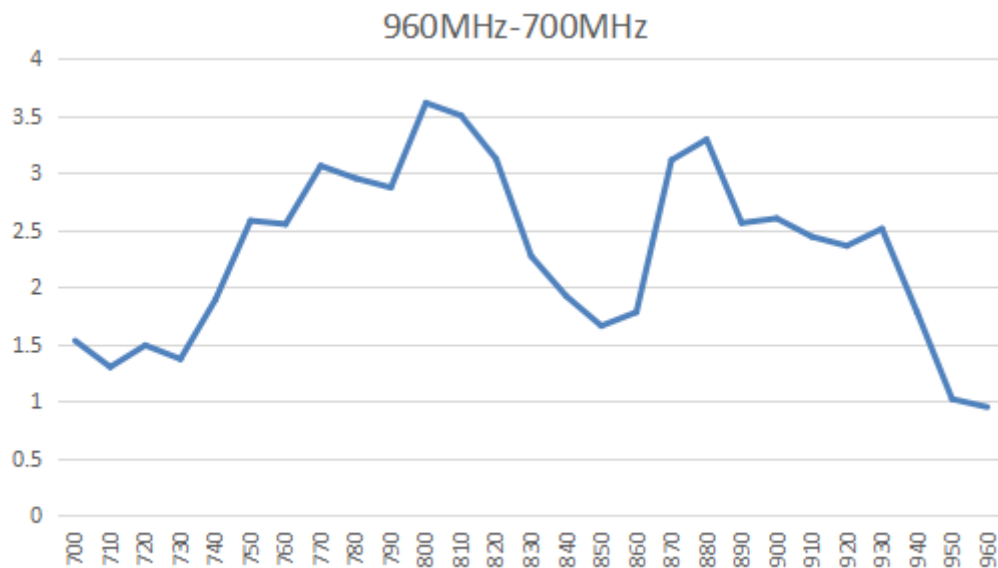
### 4.3. Efficiency

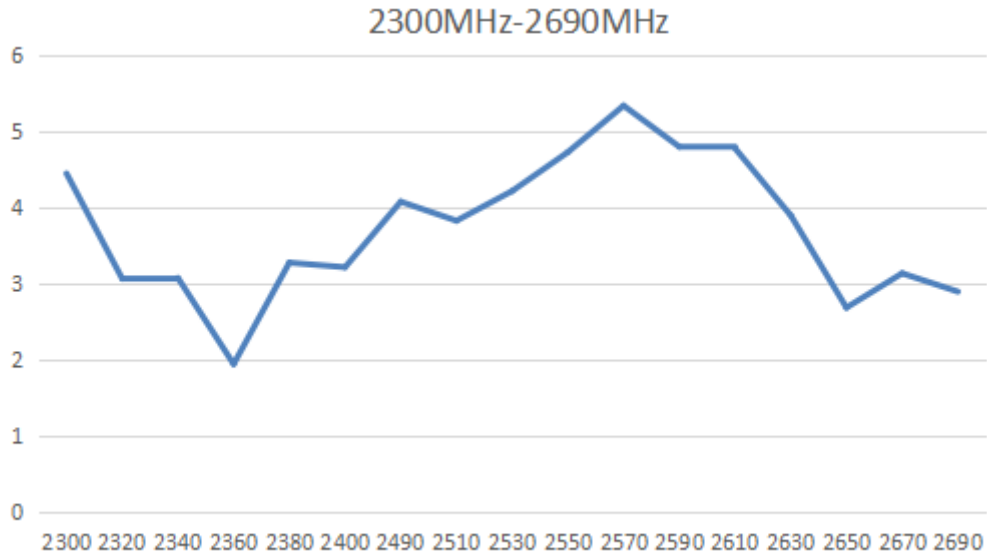




<b>Frequency (MHz)</b>	700	960	1710	1990	2170	2300	2400	2510	2690
<b>Efficiency (%)</b>	40.2	37.4	55.5	62.7	58.1	79.3	72.8	70.4	73.5

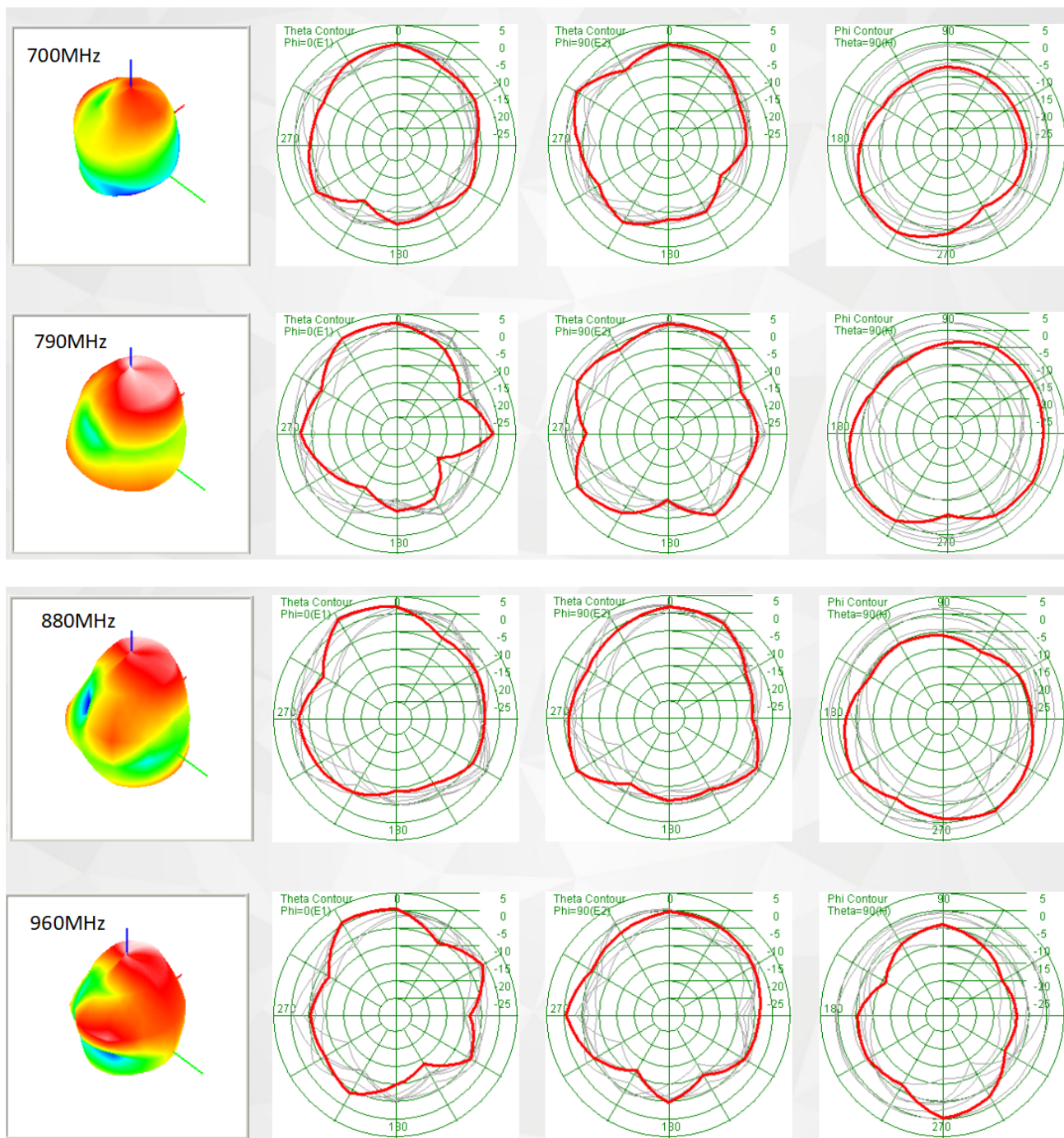
### 4.4. Gain

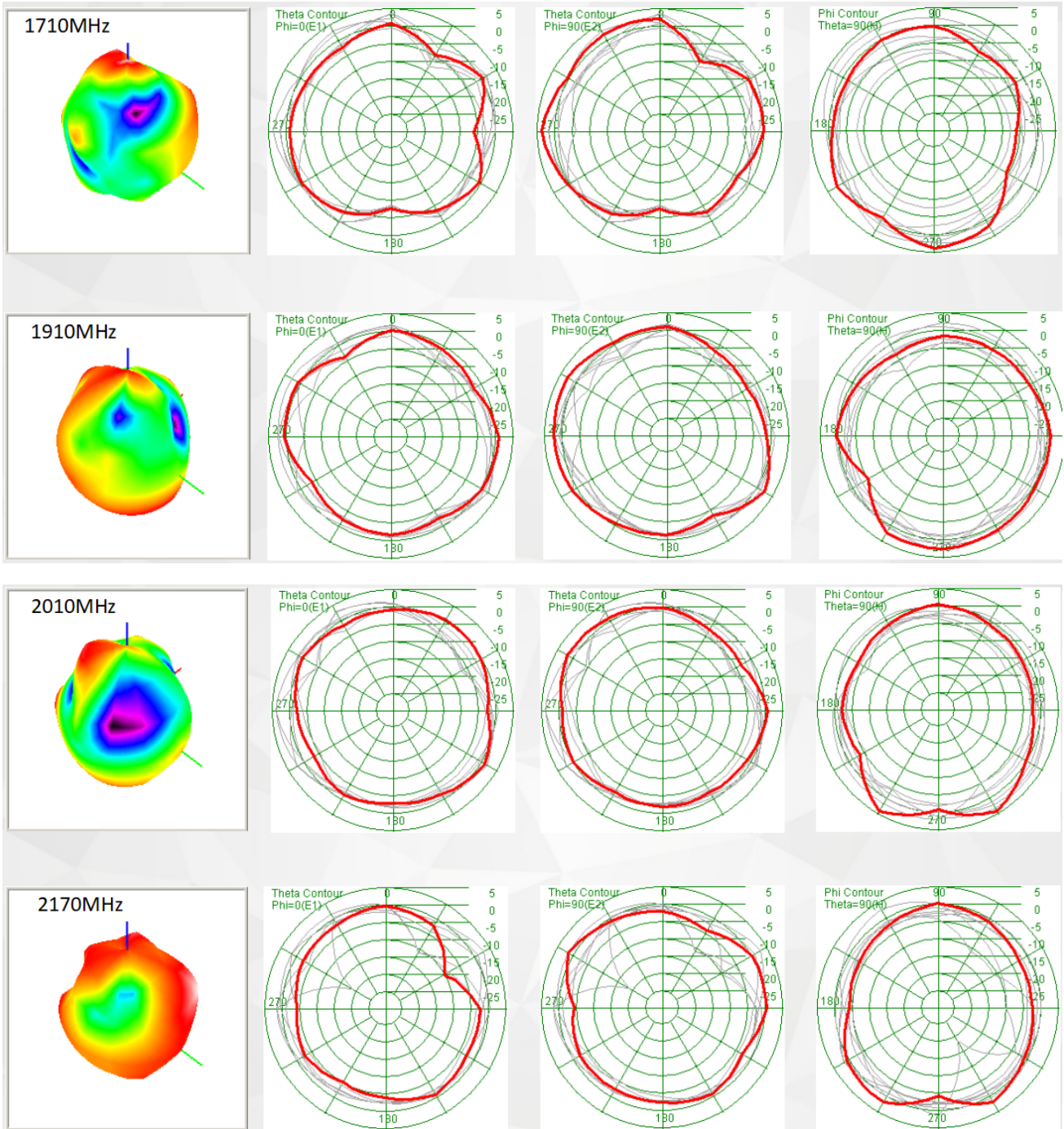


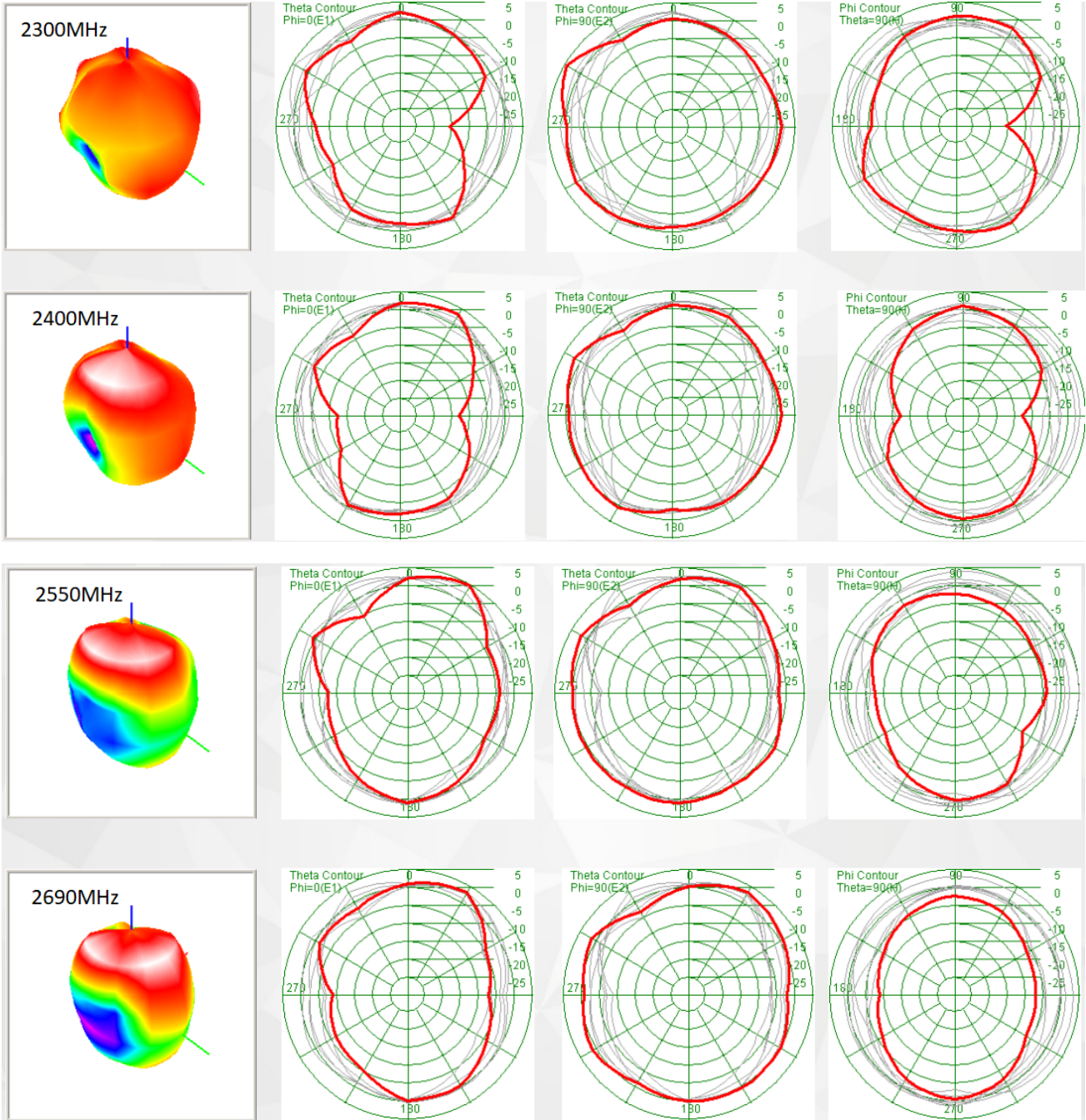


<b>Frequency (MHz)</b>	700	960	1710	1990	2170	2300	2400	2510	2690
<b>Gain (dBi)</b>	1.53	0.95	3.77	4.12	2.94	4.45	3.22	3.83	2.90

### 4.5. Radiation Patterns

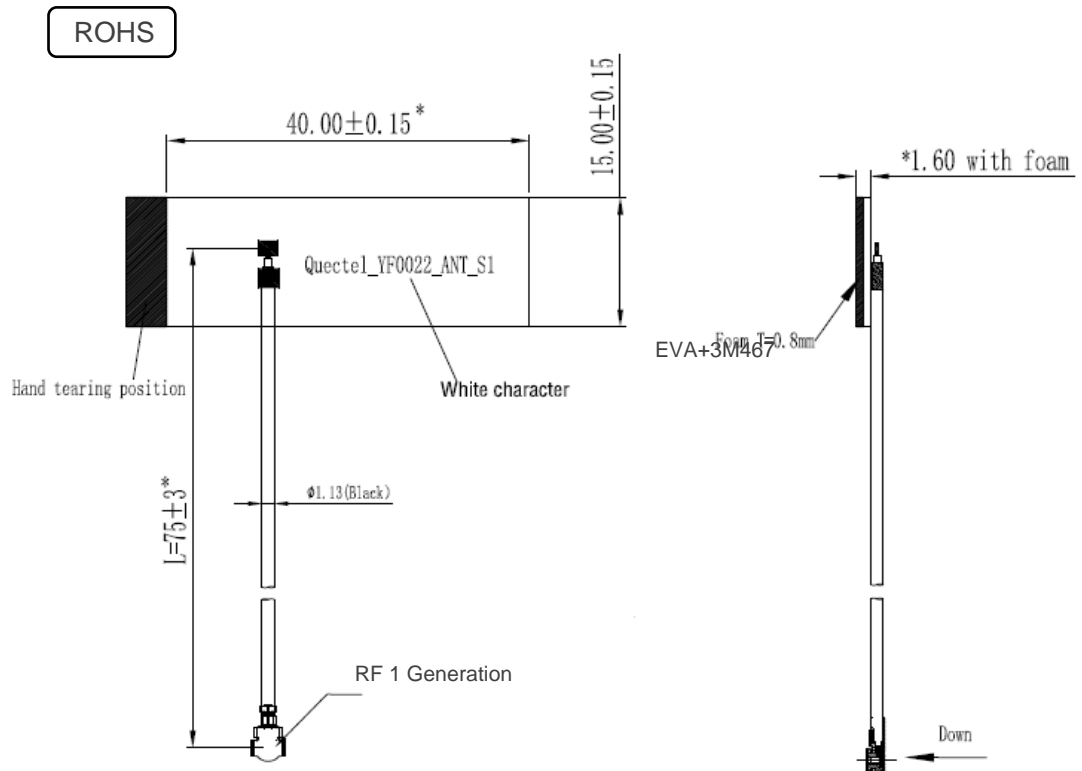








## 5 Product Size



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