

Antenna

YF0017AA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
1.0	2020-11-26	Toby WANG	Initial
1.1	2021-07-25	Toby WANG	Updated the working temperature and detailed passive electrical specifications (Chapter 3).

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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

- 1.5_6G_Antenna
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	1500–6000 MHz
Input Impedence	50 Ω
VSWR	≤ 3.0
Gain	≤ 4.5 dBi
Polarization Type	Linear

Detailed Passive Electrical Specifications

Frequency Range (MHz)	698–960	1176–1280	1400–1610	1710–2170	2170–2690	3300–4000	4000–5000	5000–6000
VSWR (Max.)	-	-	1.5	1.8	1.96	2.1	2.0	1.81
Average Efficiency (%)	-	-	50	51	52	55	56	48
Max. Peak Gain (dBi)	-	-	2.3	3.4	3.4	4.5	4.5	3.5

Mechanical Specifications

Antenna Size	49 mm × 13 mm
Casing	FPC
Connector Type	IPEX MHF 4
Working Temperature	-40 °C to +85 °C
Radome Color	Black

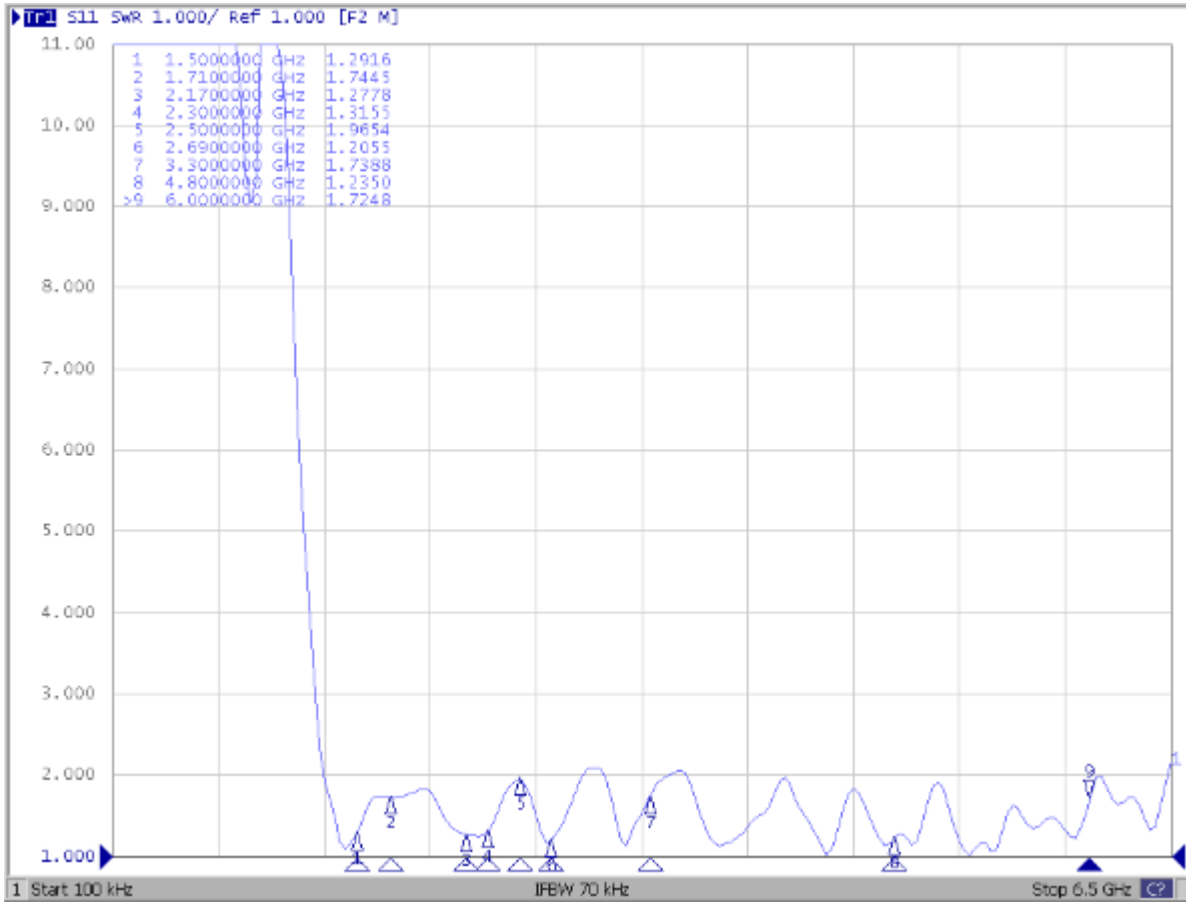
4 Overall Performance

4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 8.0 GHz

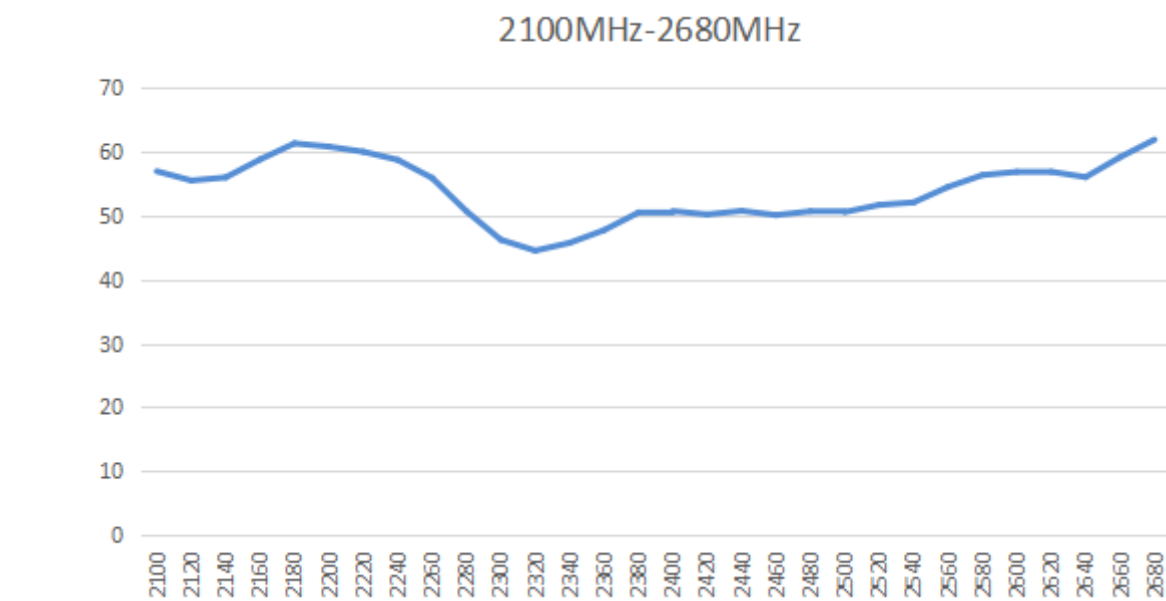
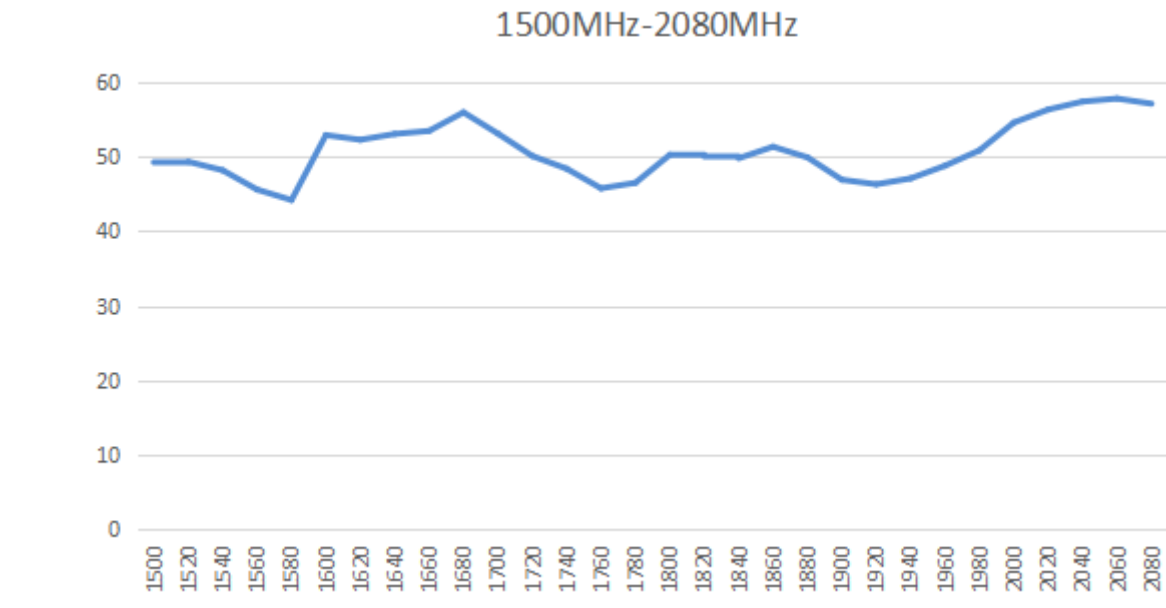


4.2. VSWR

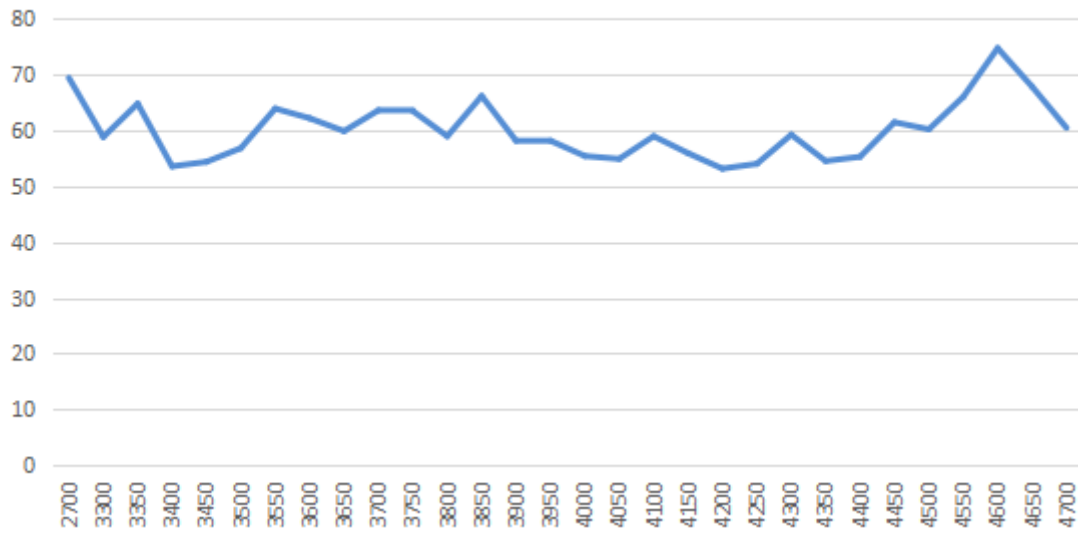


Frequency (MHz)	1500	1710	2170	2300	2500	2690	3300	4800	6000
VSWR	1.29	1.74	1.27	1.31	1.96	1.20	1.73	1.23	1.72

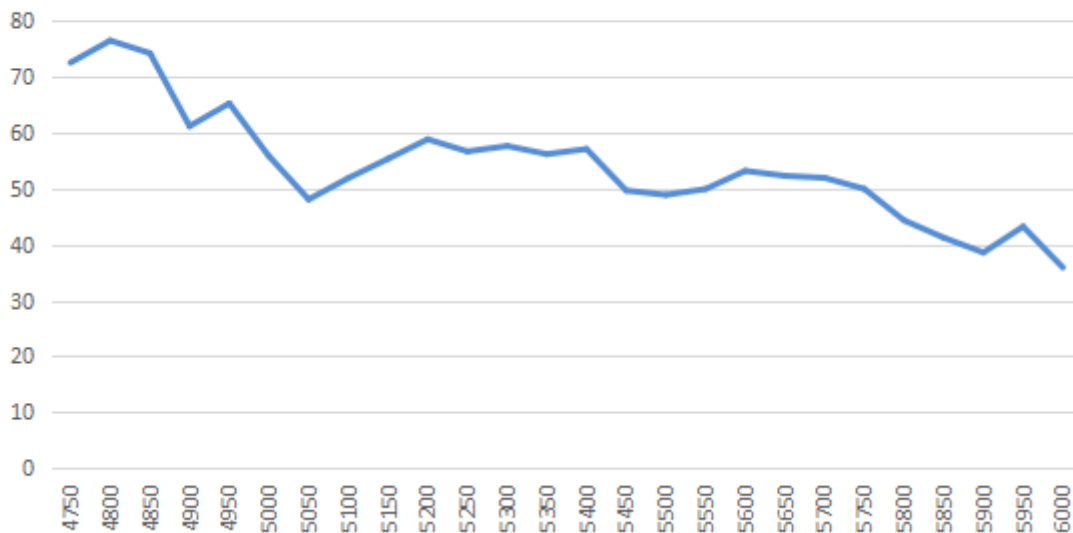
4.3. Efficiency



2700MHz-4700MHz

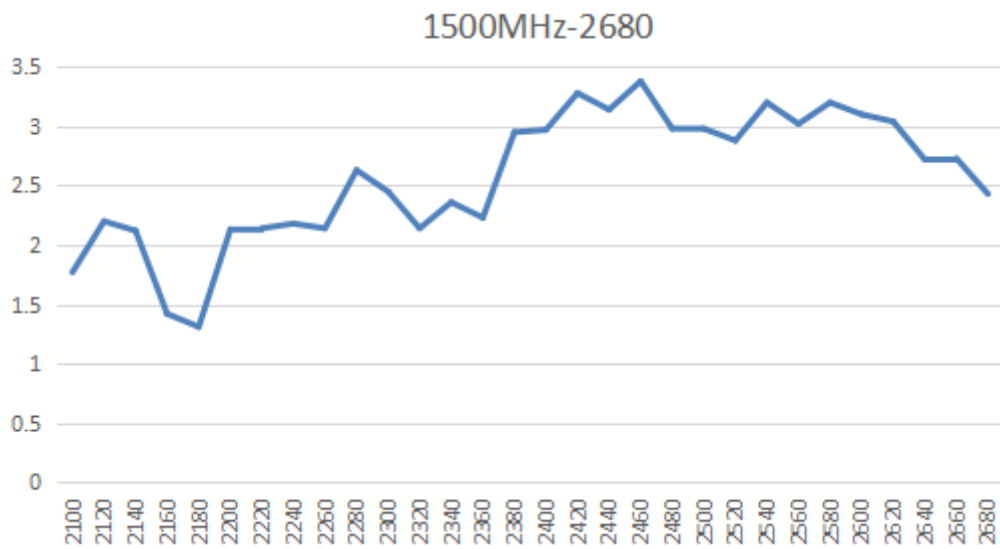
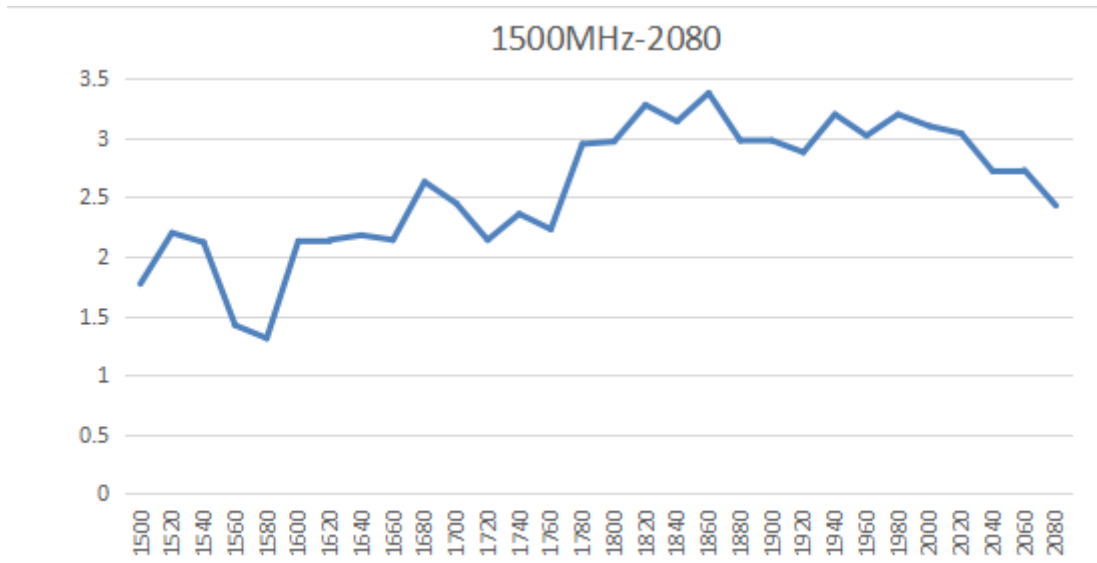


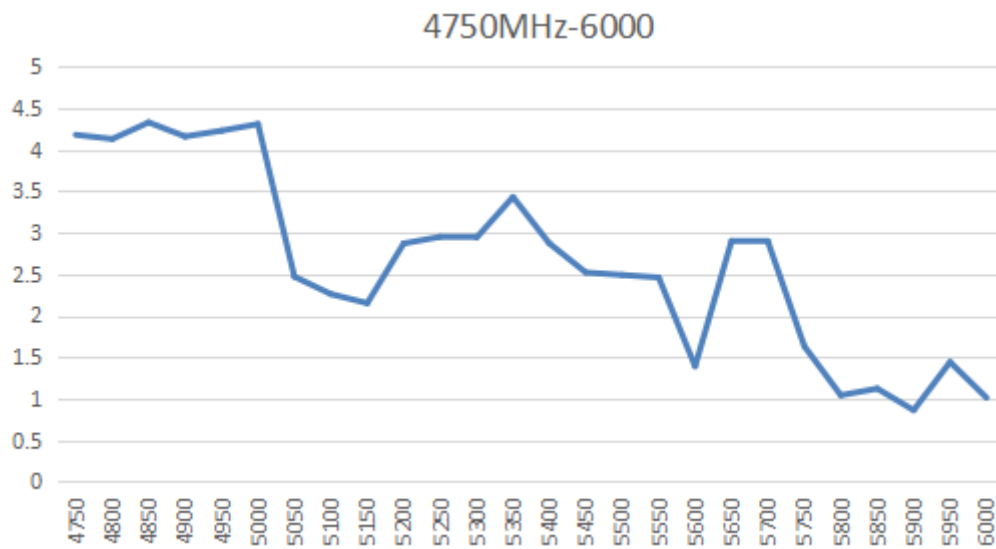
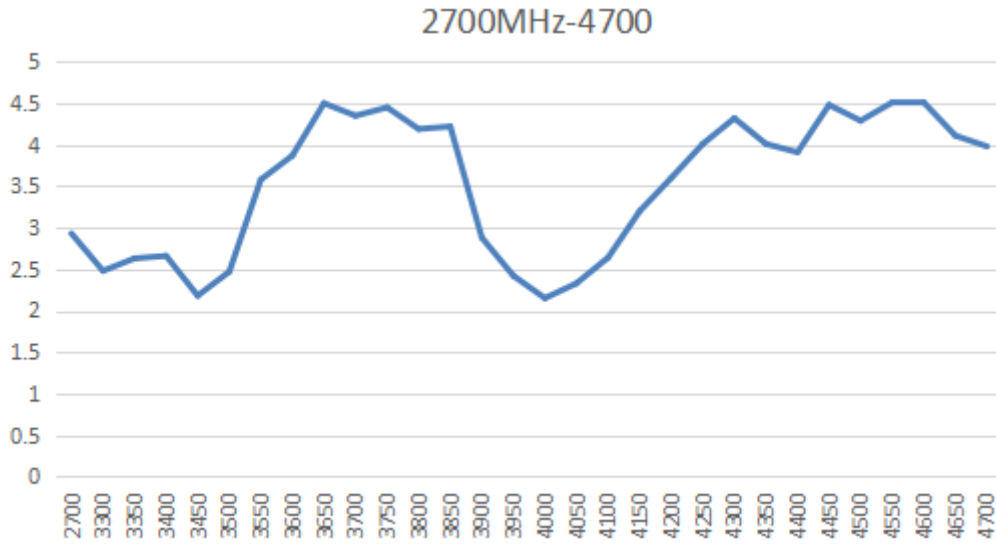
4750MHz-6000MHz



Frequency (MHz)	1500	1700	2160	2300	2500	2680	3300	4800	6000
Efficiency (%)	49.25	53.1	58.73	46.18	50.51	61.82	58.75	76.38	35.86

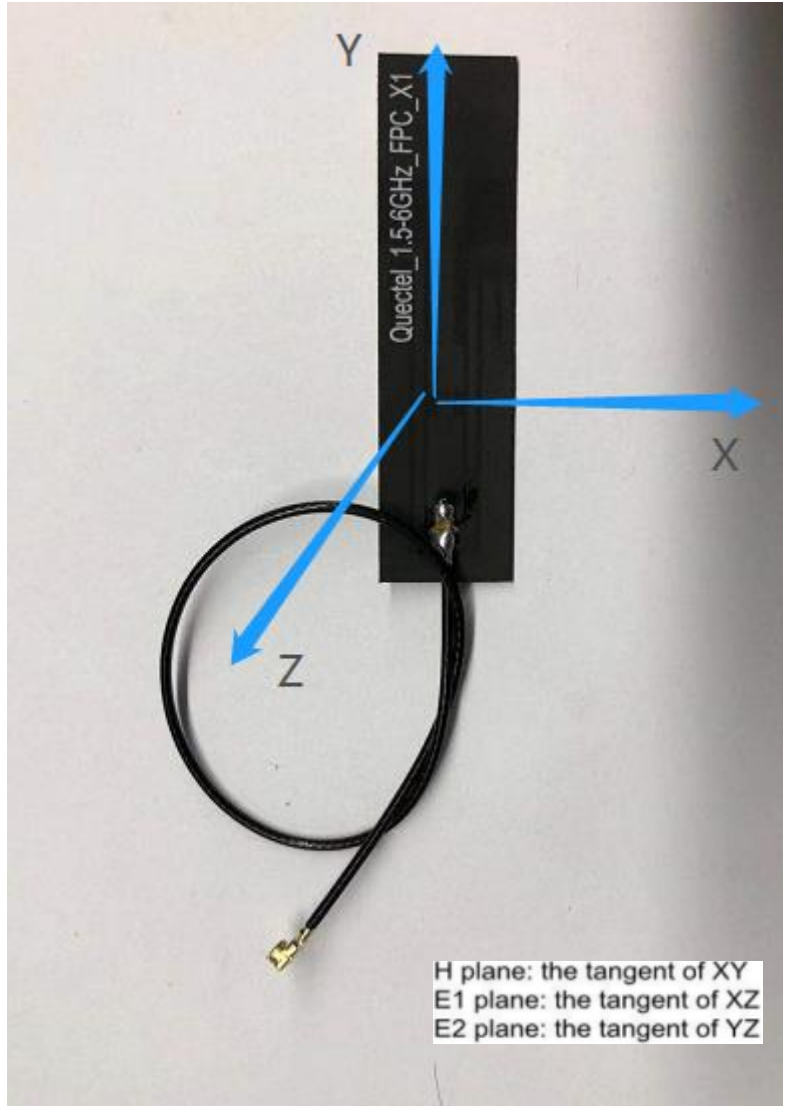
4.4. Gain

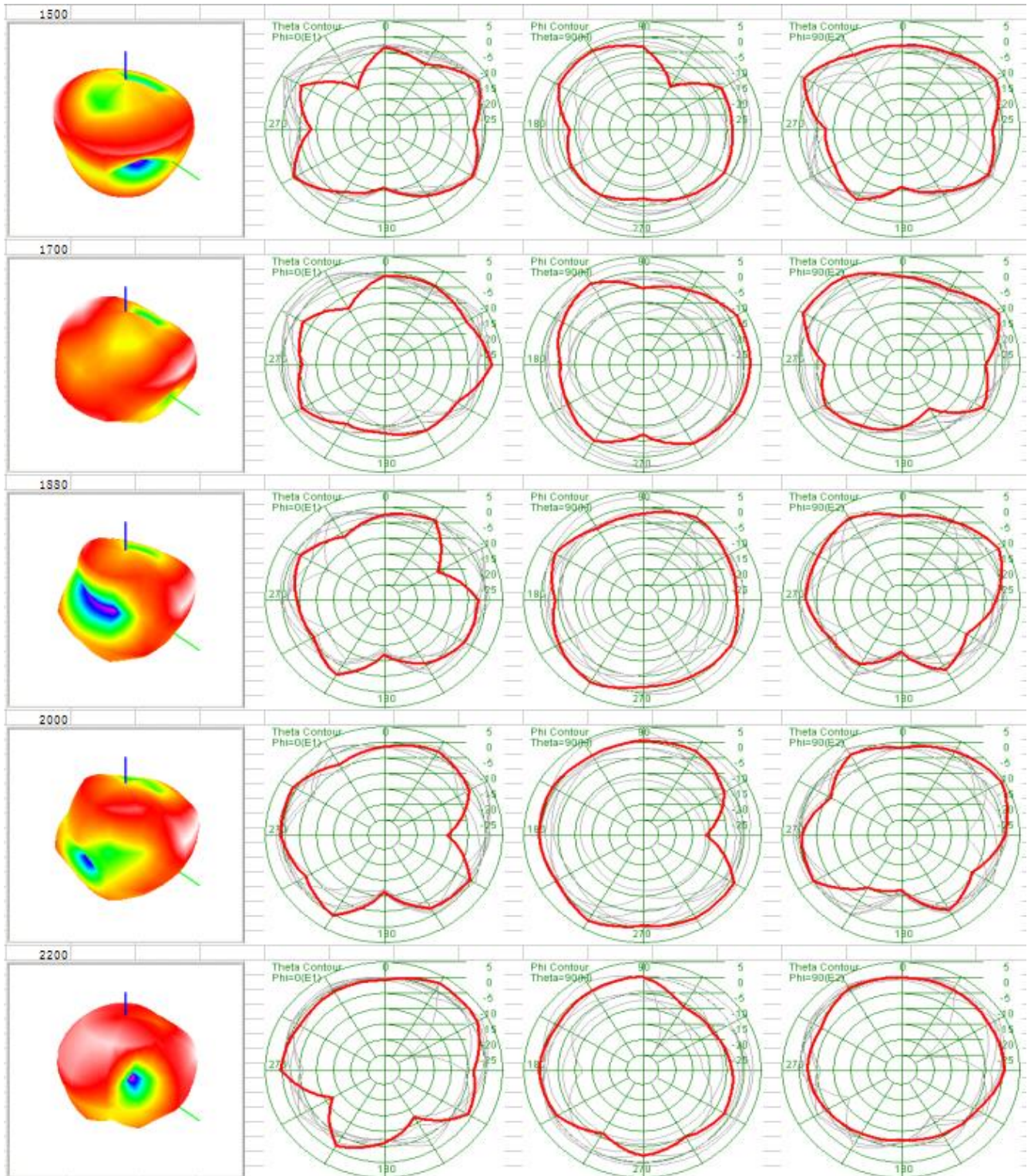


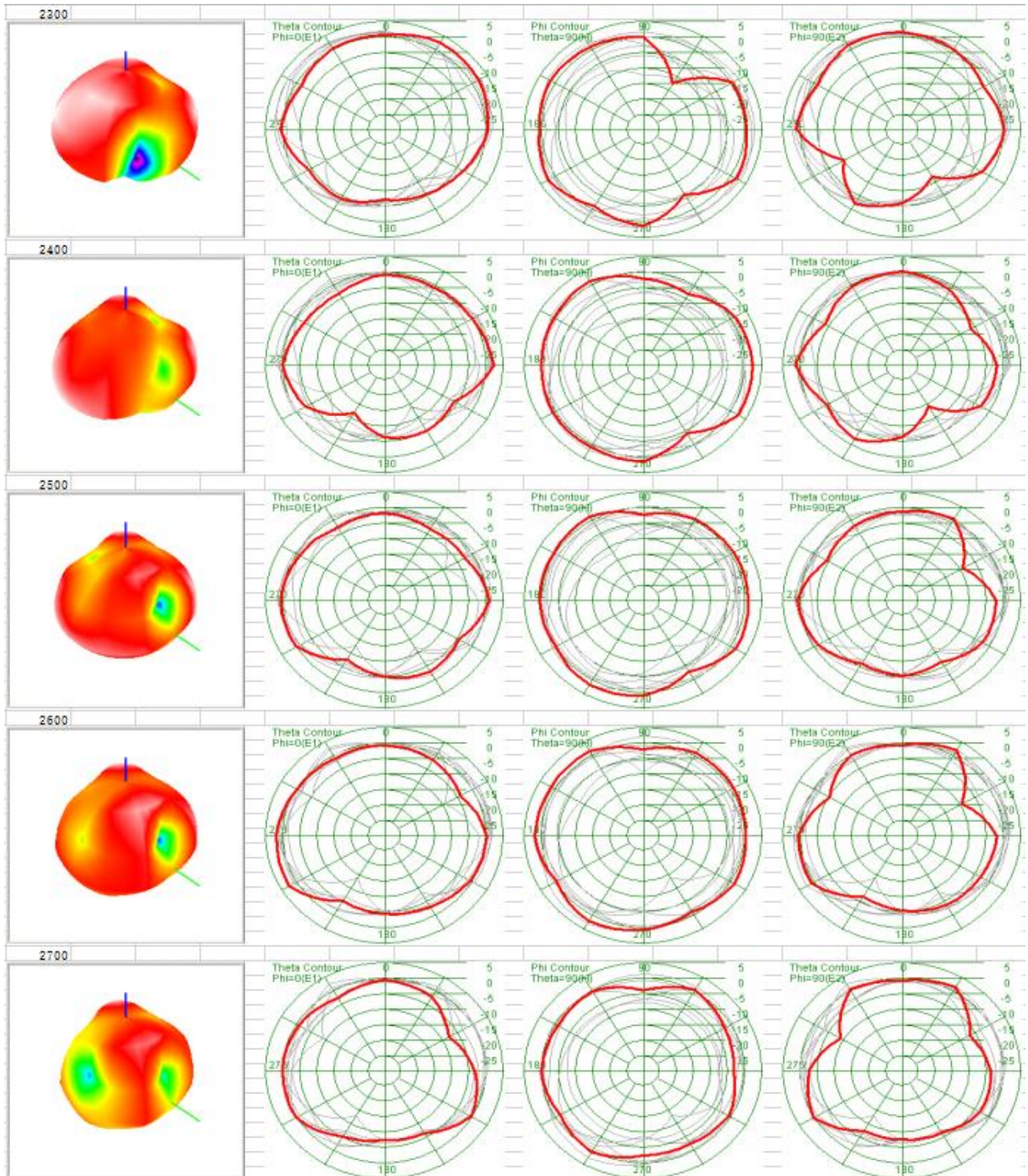


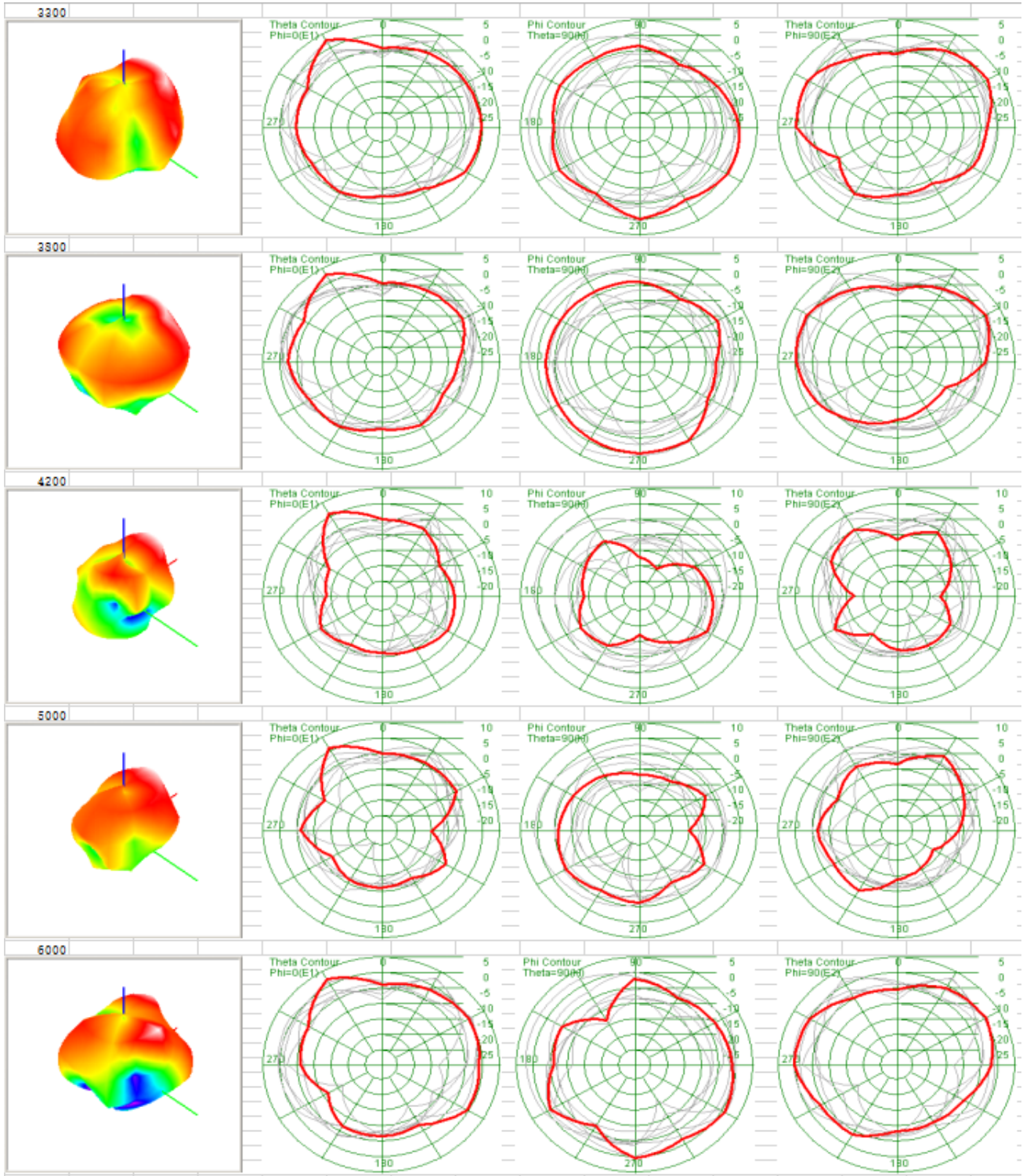
Frequency (MHz)	1500	1700	2160	2300	2500	2680	3300	4800	6000
Gain (dBi)	1.77	2.45	2.78	1.51	2.24	2.25	2.48	4.13	1.01

4.5. Radiation Pattern









5 Product Size

