

Antenna

YP0009CA 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	<ol style="list-style-type: none">1. Updated the working temperature and added detailed passive electrical specifications (Chapter 3).2. Updated the drawing (Chapter 5).

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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

- 0.6_6G_Antenna
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	600–6000 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.)	2.2	-	-	1.96	2.31	2.1	2.19	4.5
Average Efficiency (%)	33	-	-	48	44	55	51	41
Max. Peak Gain (dBi)	0.51	-	-	2.40	4.5	3.8	3.9	2.3

Mechanical Specifications

Antenna Size	78.5 mm × 14.2 mm × 0.95 mm
Casing	FR4
Connector Type	IPEX MHF_4
Working Temperature	-40 °C to +85 °C
Radome Color	Green
Mounting Type	Adhesive

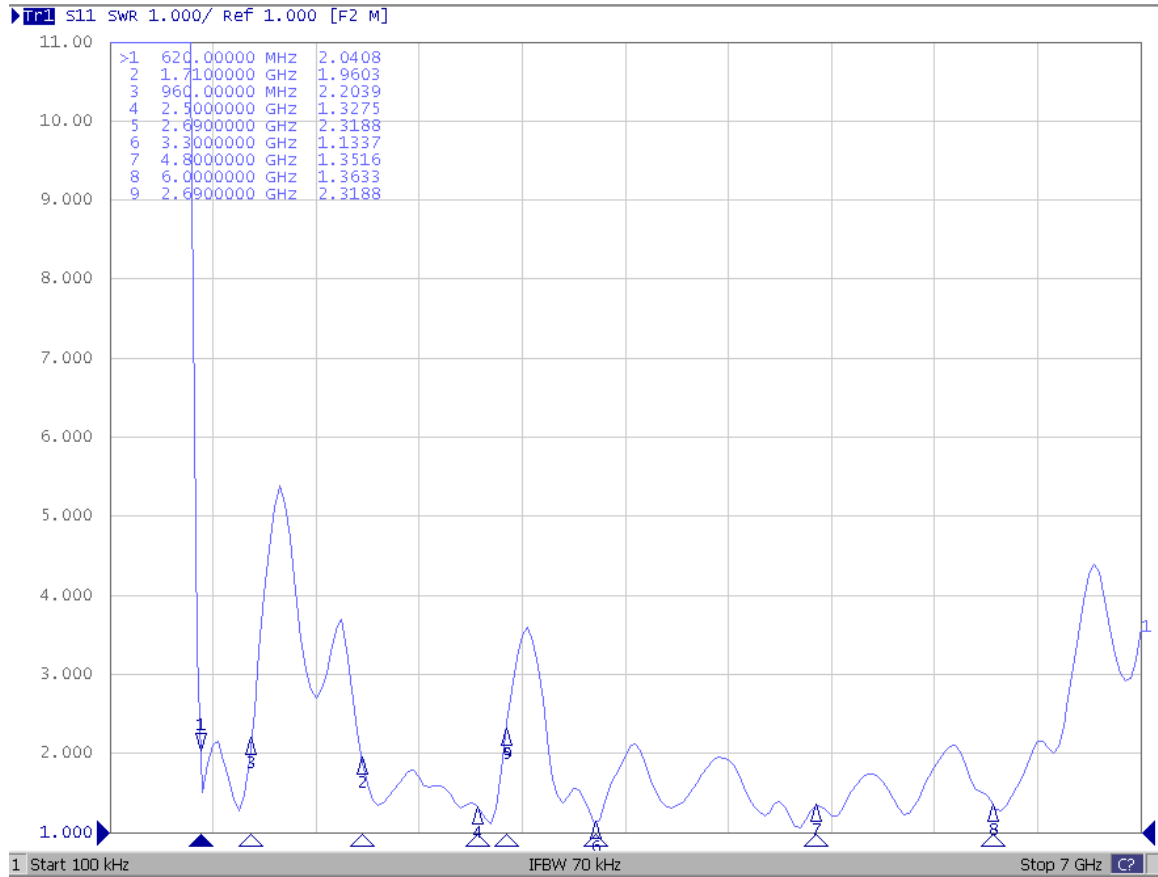
4 Overall Performance

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

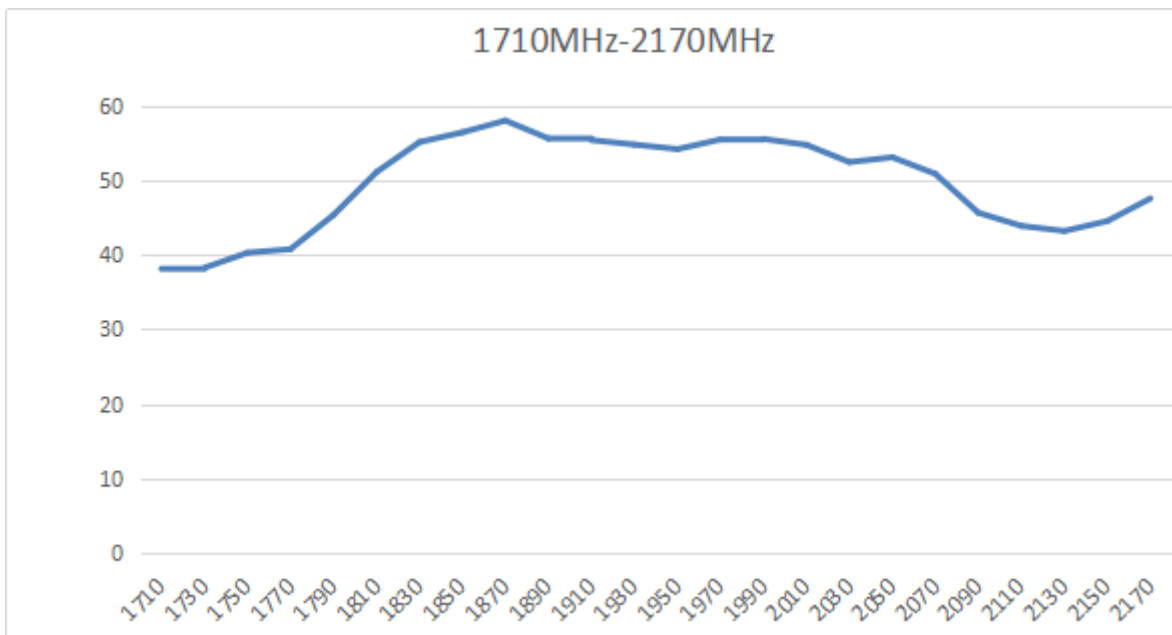
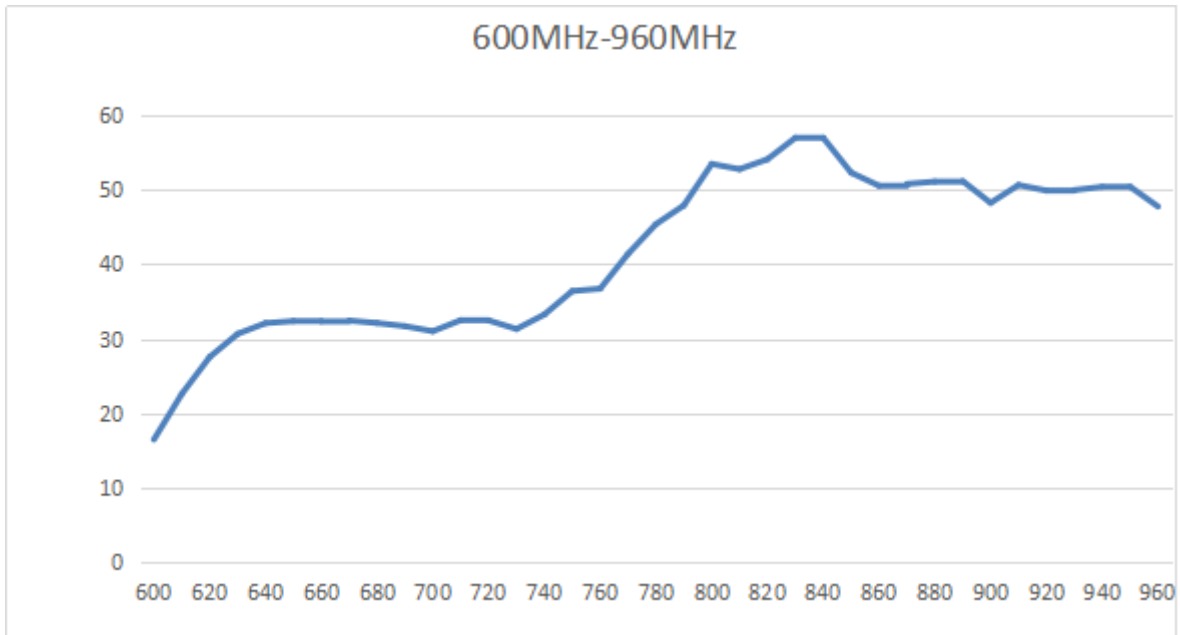


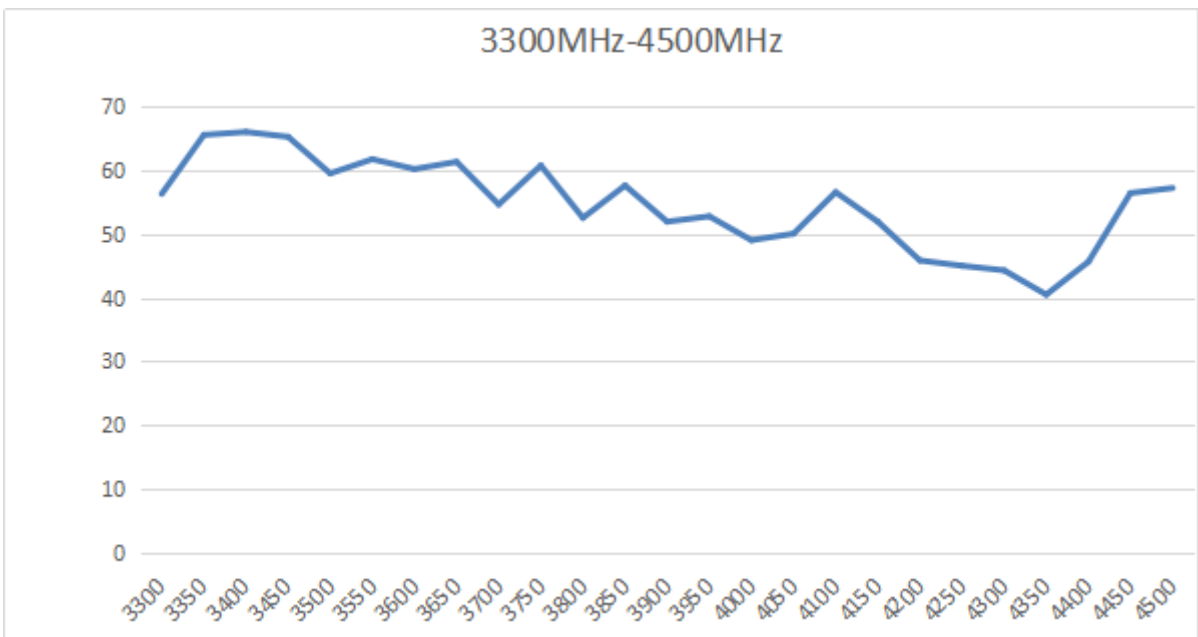
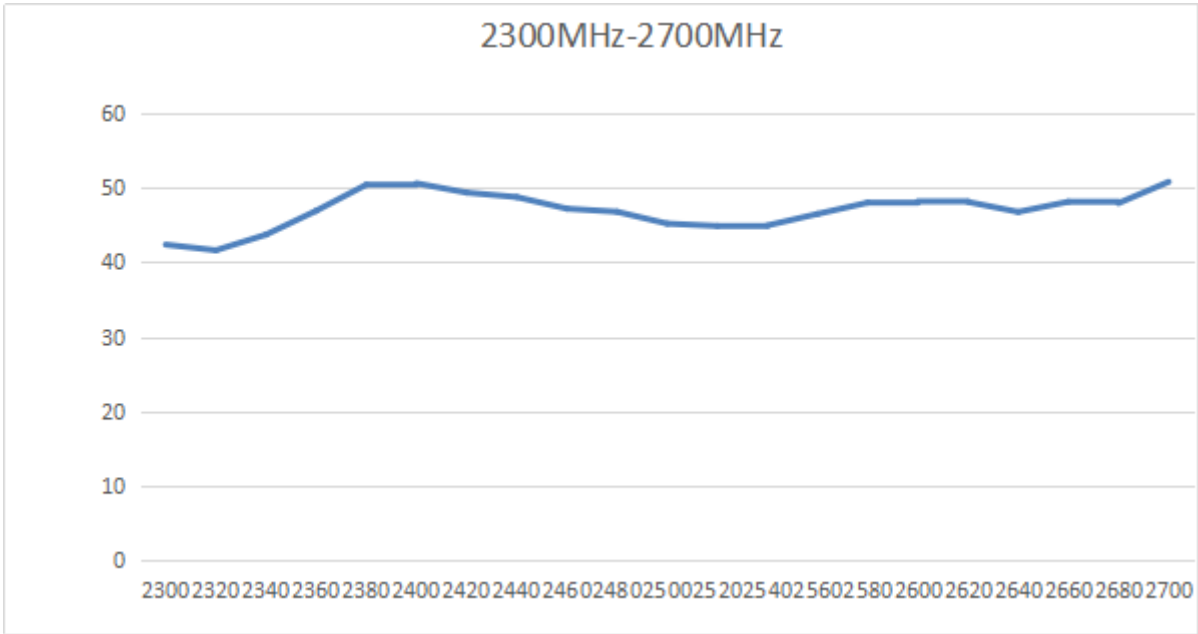
4.2. VSWR

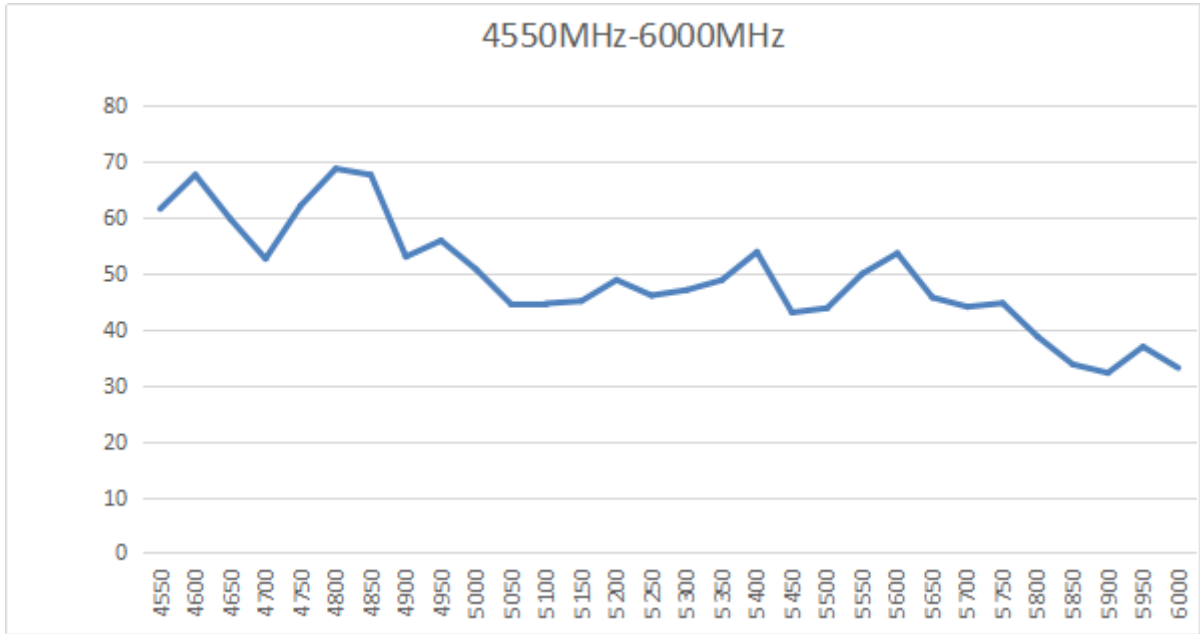


Frequency (MHz)	620	960	1710	2500	2690	3300	4800	6000
VSWR	2.04	2.20	1.96	1.33	2.32	1.13	1.35	1.36

4.3. Efficiency

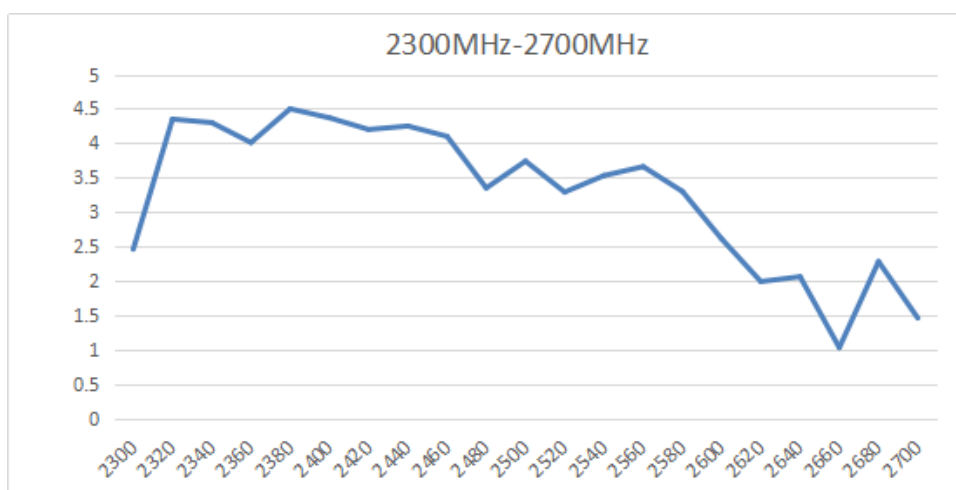
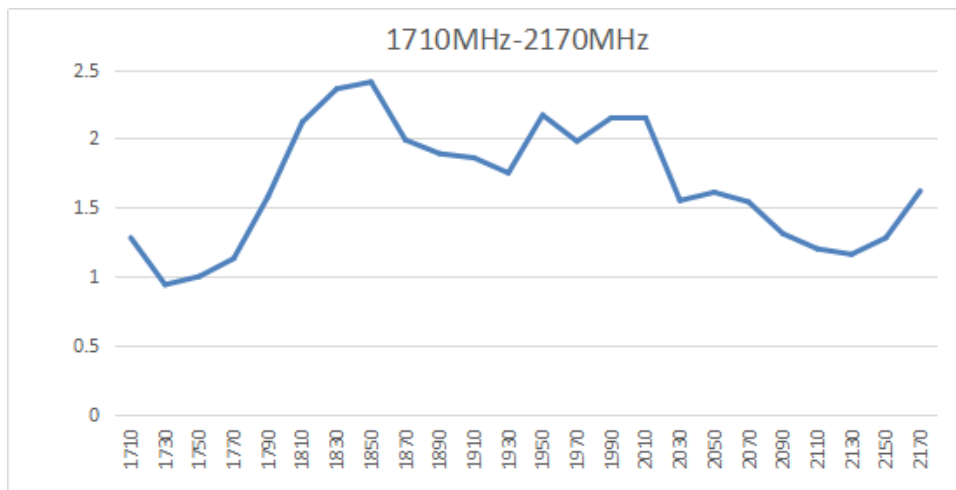
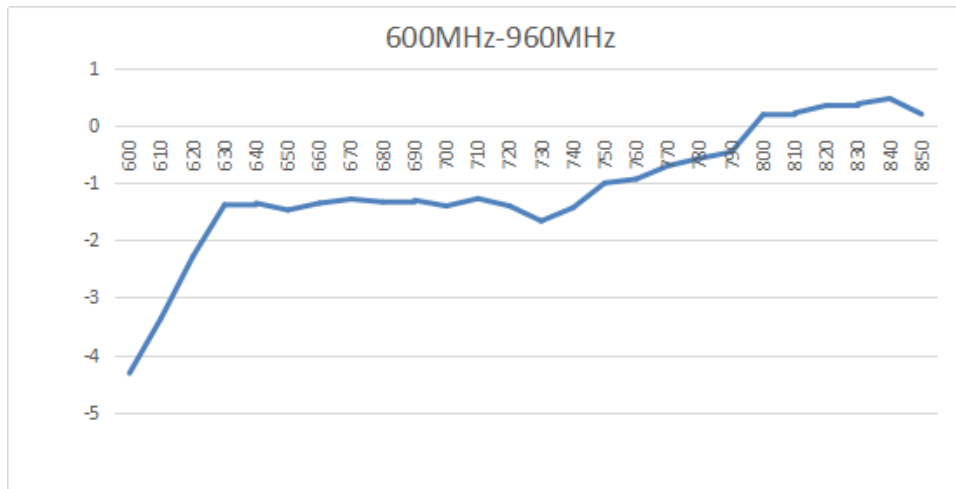


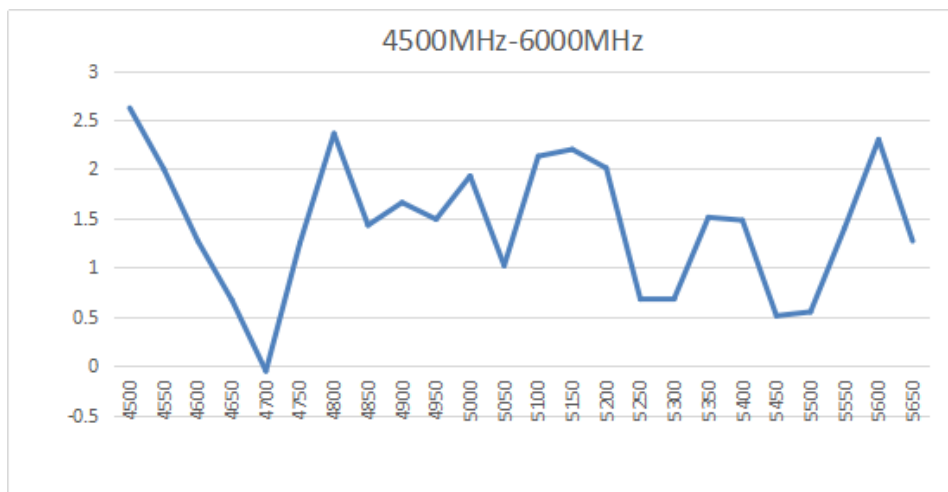
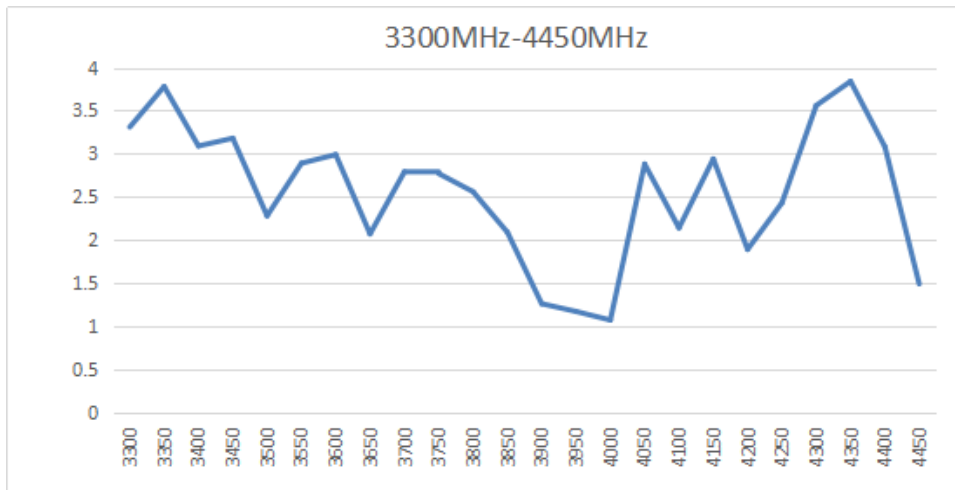




Frequency (MHz)	600	820	960	1710	1990	2300	2680	3300	5000	5950
Efficiency (%)	16.52	54.11	47.77	38.15	55.57	42.39	47.95	56.23	50.7	36.87

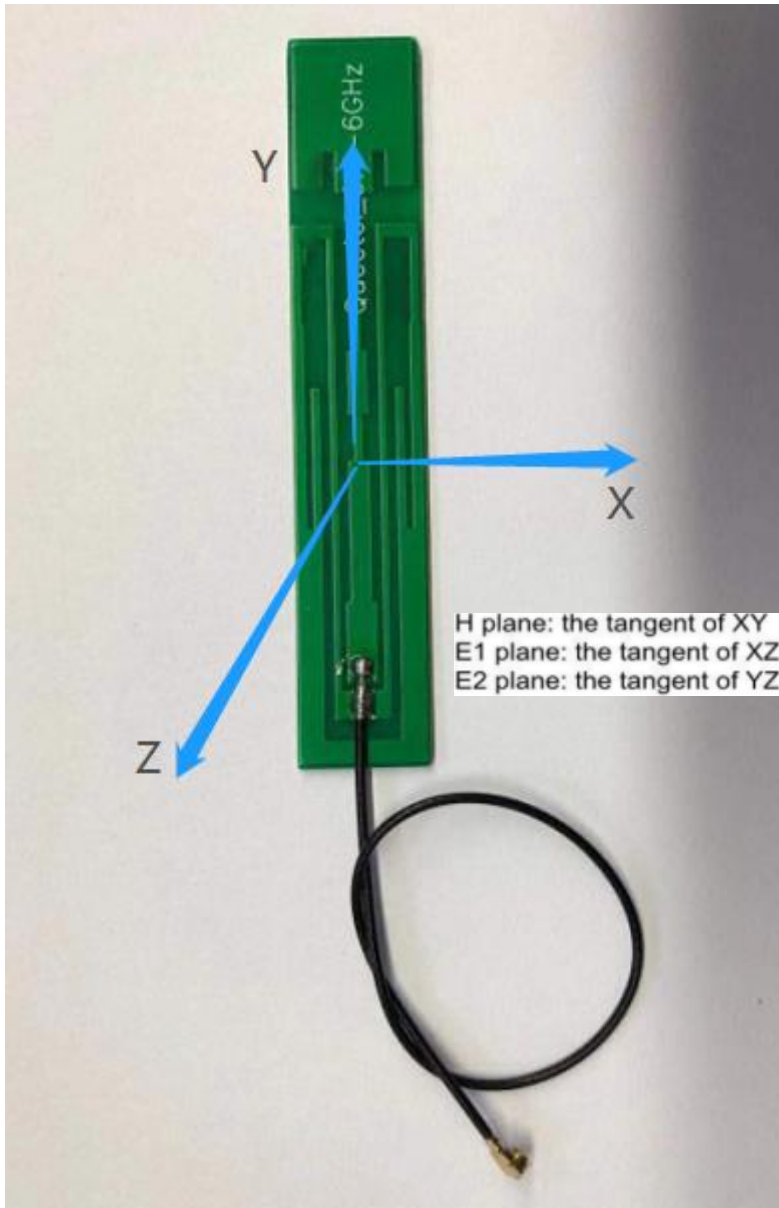
4.4. Gain

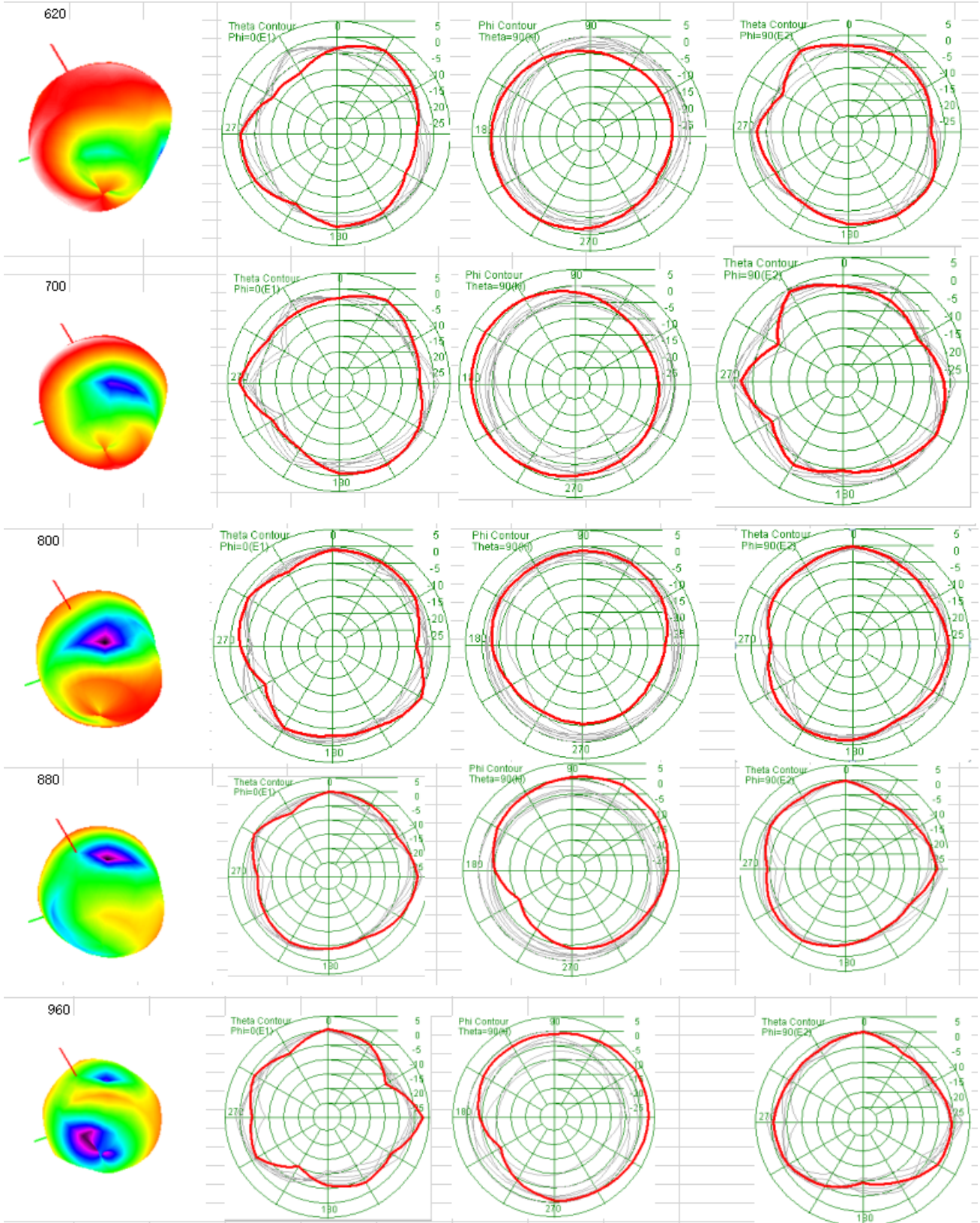


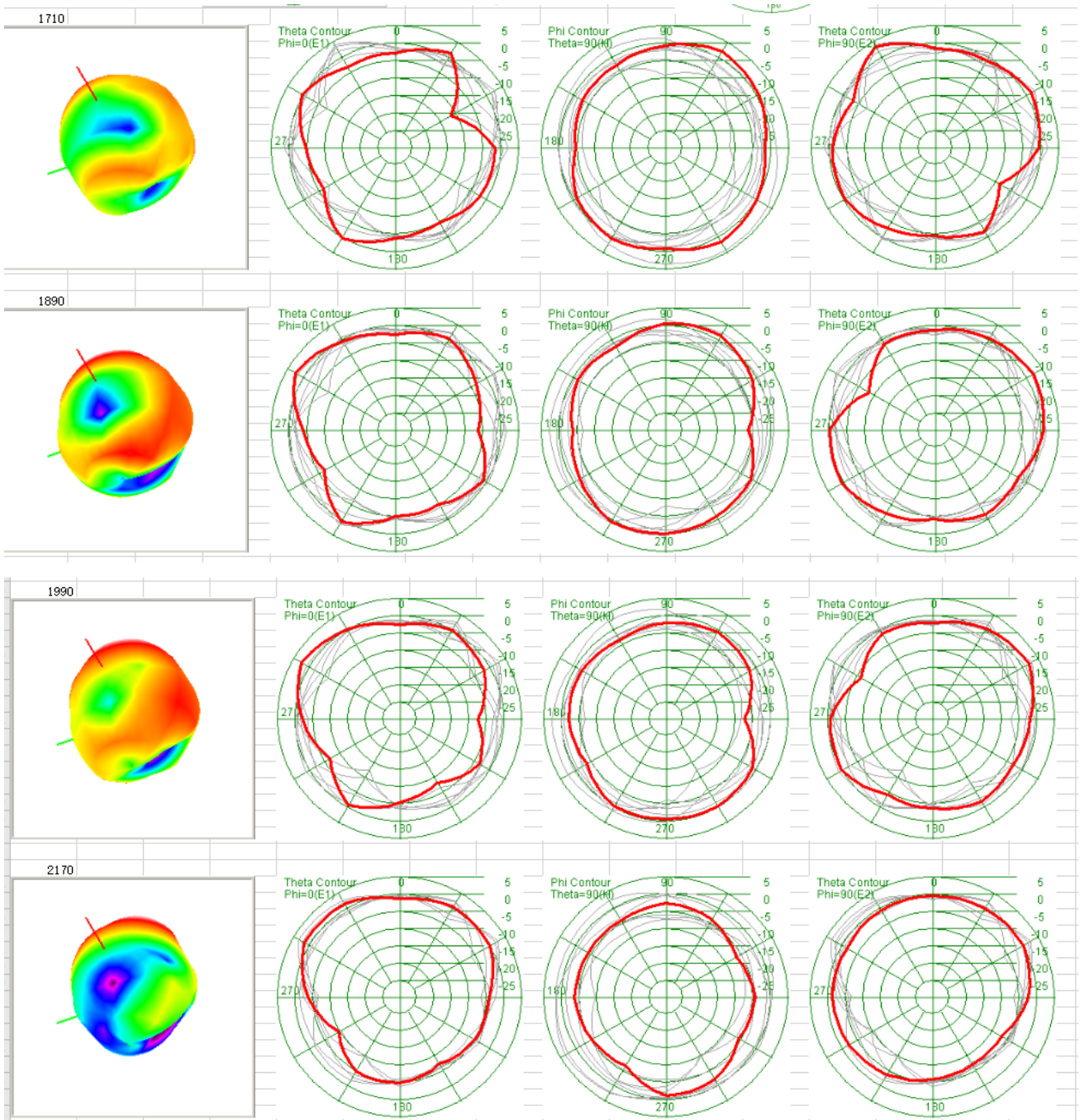


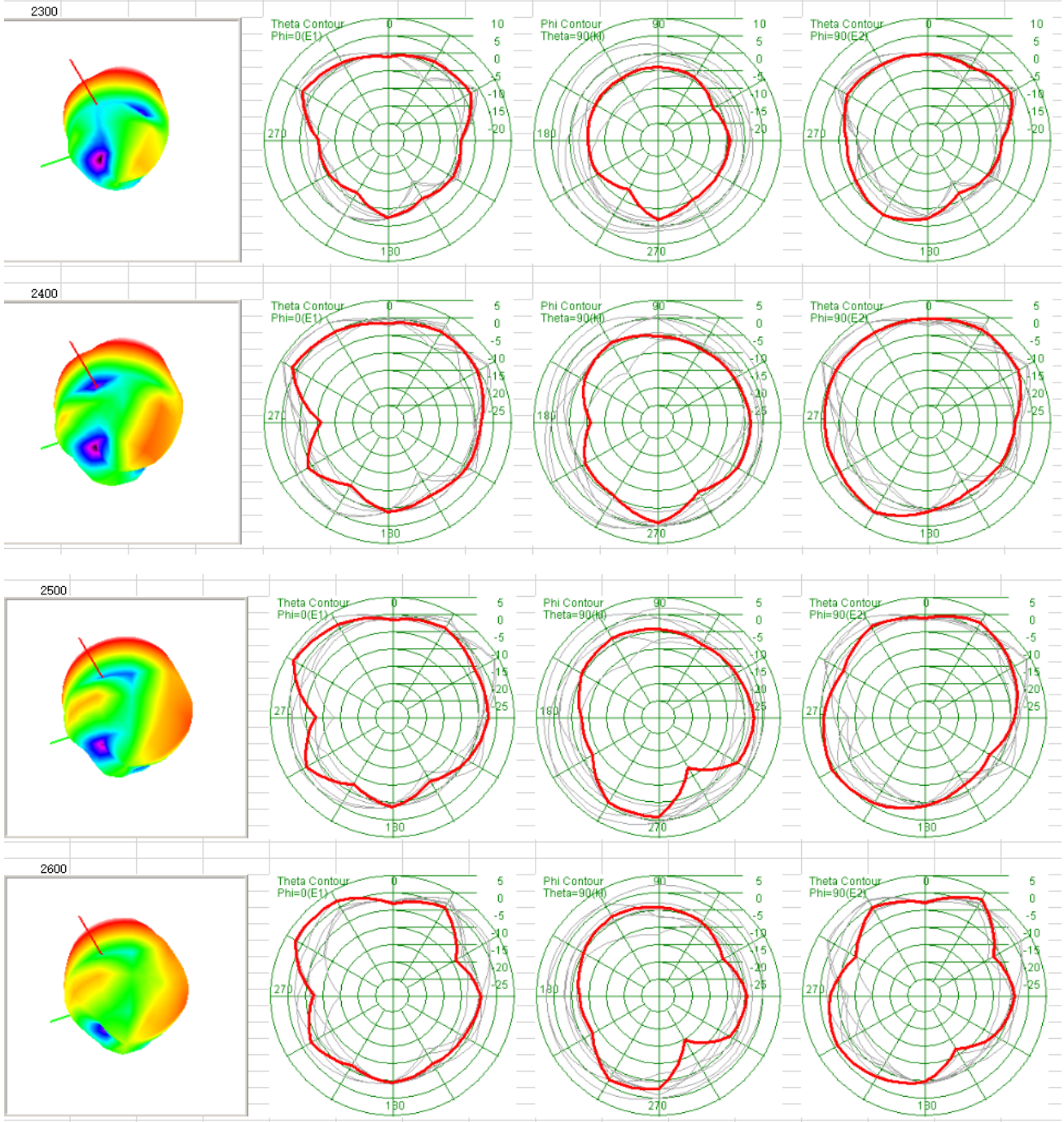
Frequency (MHz)	600	820	960	1710	1990	2300	2680	3300	5000	5950
Gain (dBi)	-4.32	0.34	0.51	1.28	2.15	2.46	2.28	3.31	1.93	-0.32

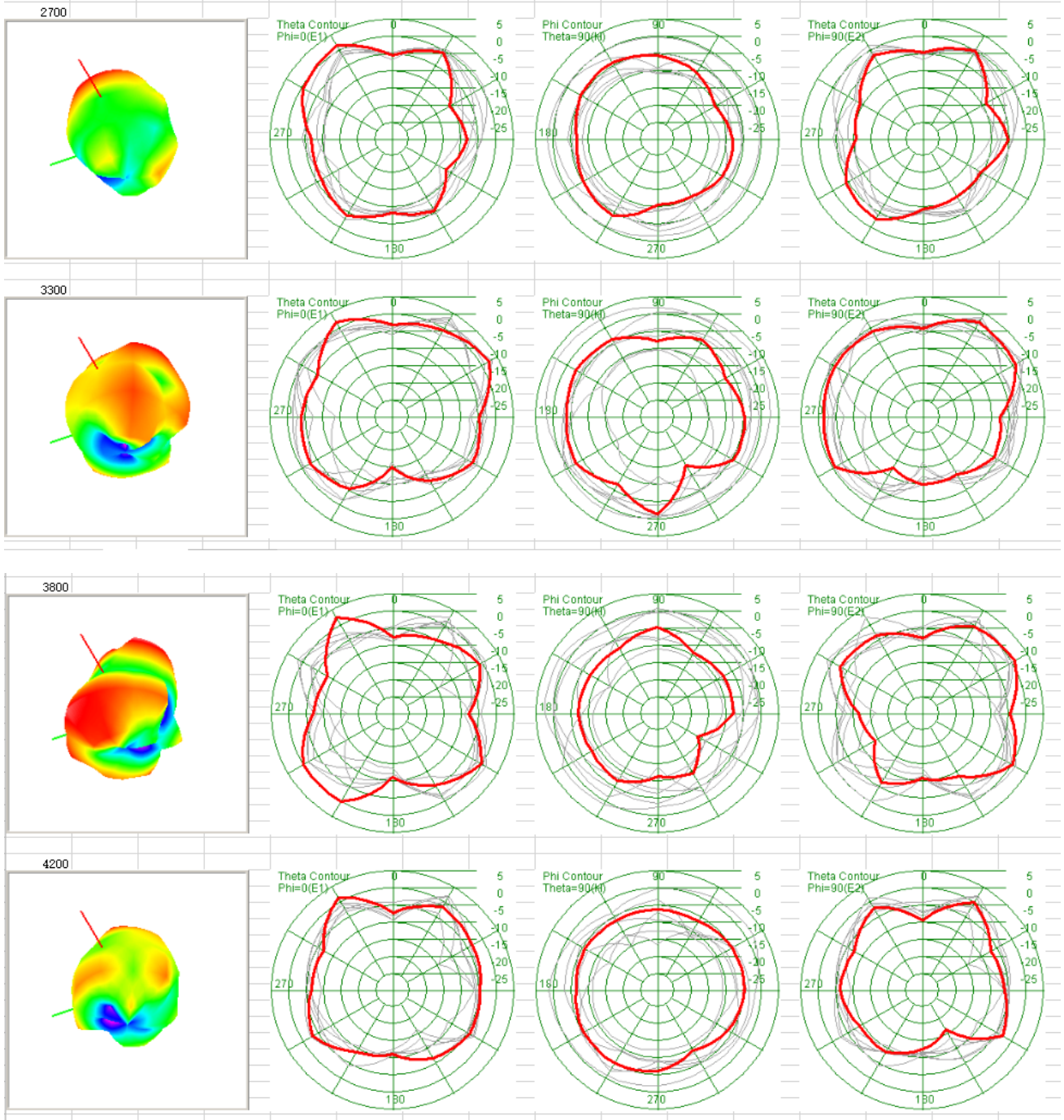
4.5. Radiation Pattern



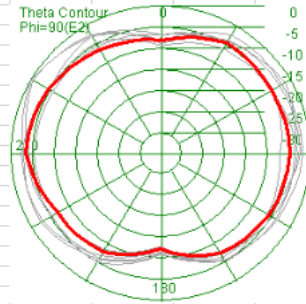
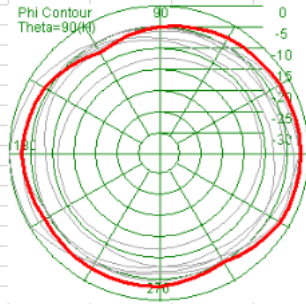
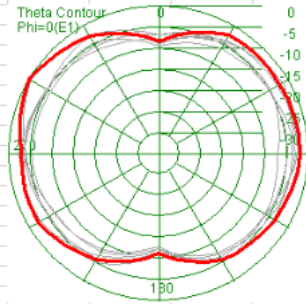
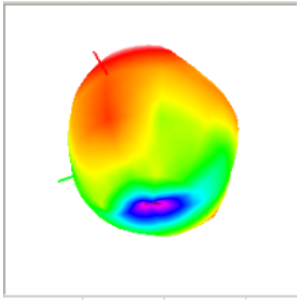




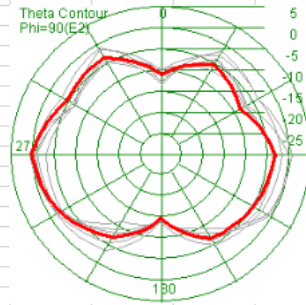
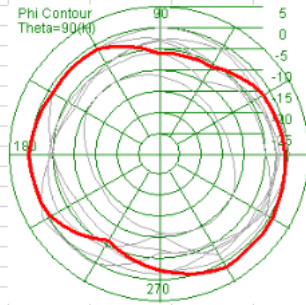
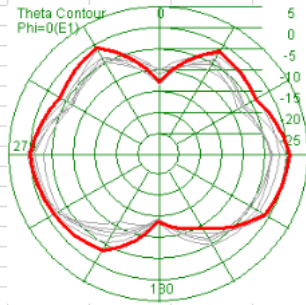
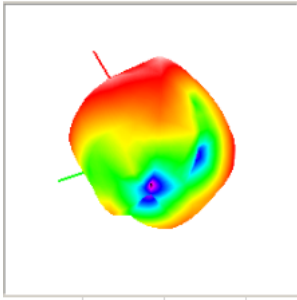




5G



6G



5 Product Size

