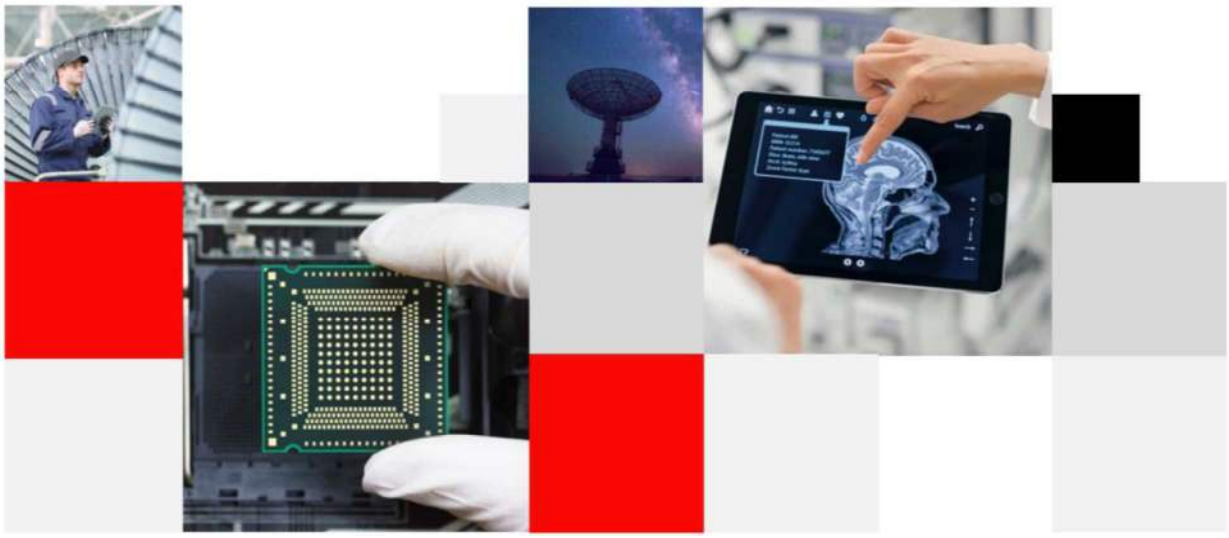
Antenna

YP0009BA Datasheet

OC: YP0009BA



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About the Document

Revision History

Version	Date	Author	Note
1.0	2020-11-26	Toby Wang	Initial

Contents

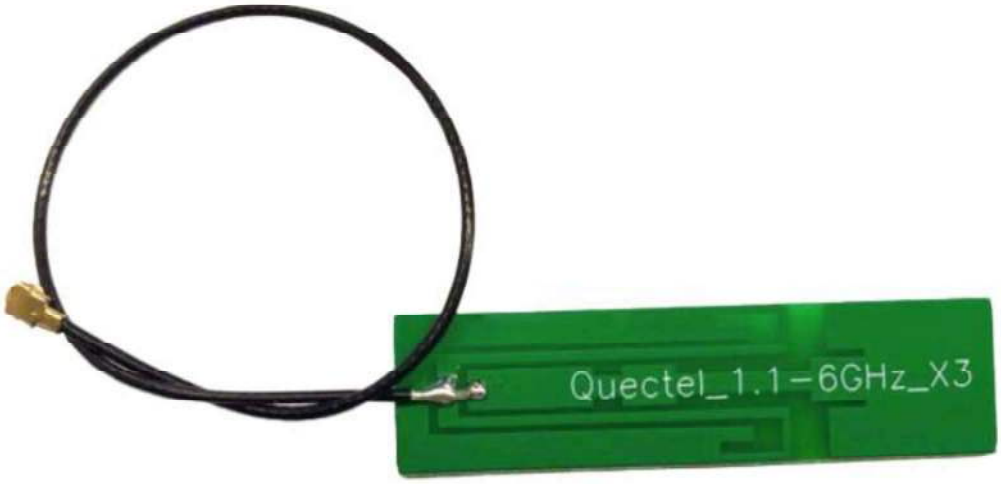
1 Product Description

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

- 1.1_6G_Antenna
- High efficiency
- Excellent performance



3 Product Specifications

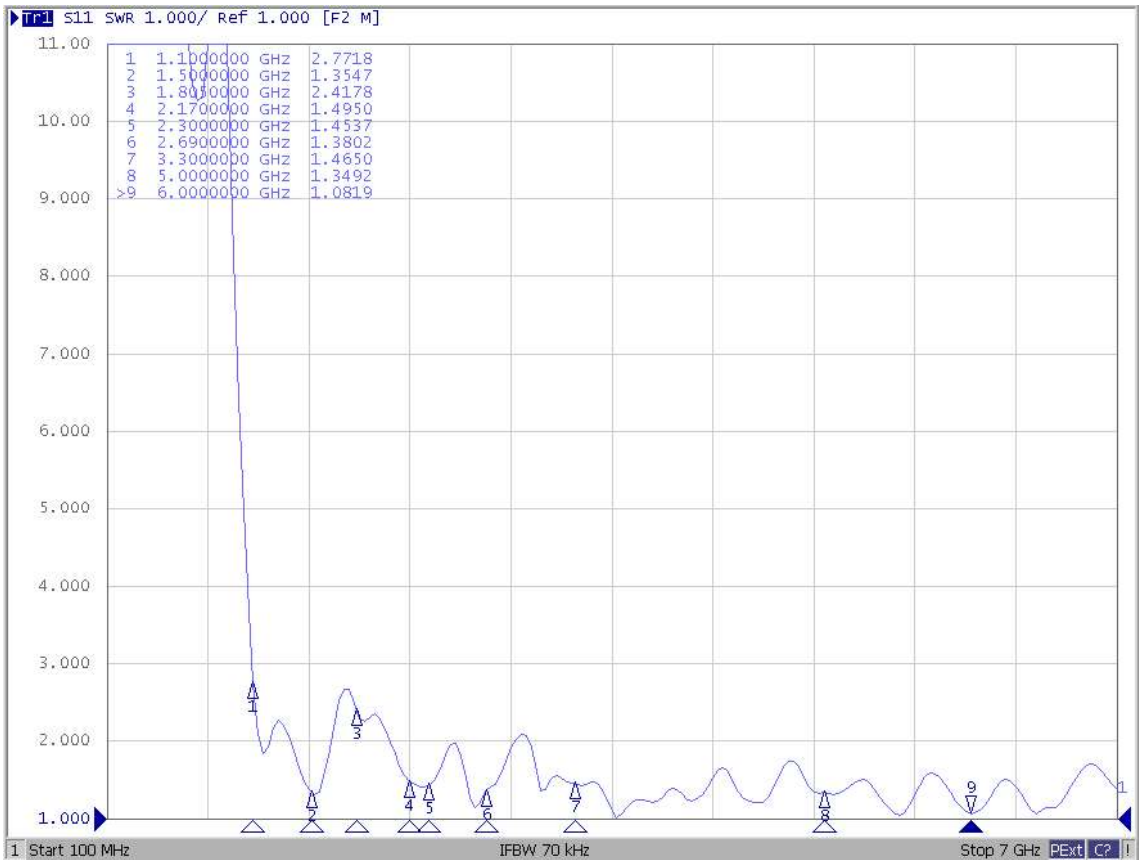
Passive Electrical Specifications	
Frequency Range	1100–6000 MHz
Input Impendence	50 Ω
VSWR	≤ 3.0
Gain	≤ 4.67 dBi
Polarization Type	Linear
Mechanical Specifications	
Antenna Size	49 mm × 13 mm × 0.85 mm
Casing	FR4
Radiator	Cu
Connector Type	MHF 4
Working Temperature	-20 °C to +85 °C
Radome Color	Green

4 Overall Performance

4.1. Test Environment

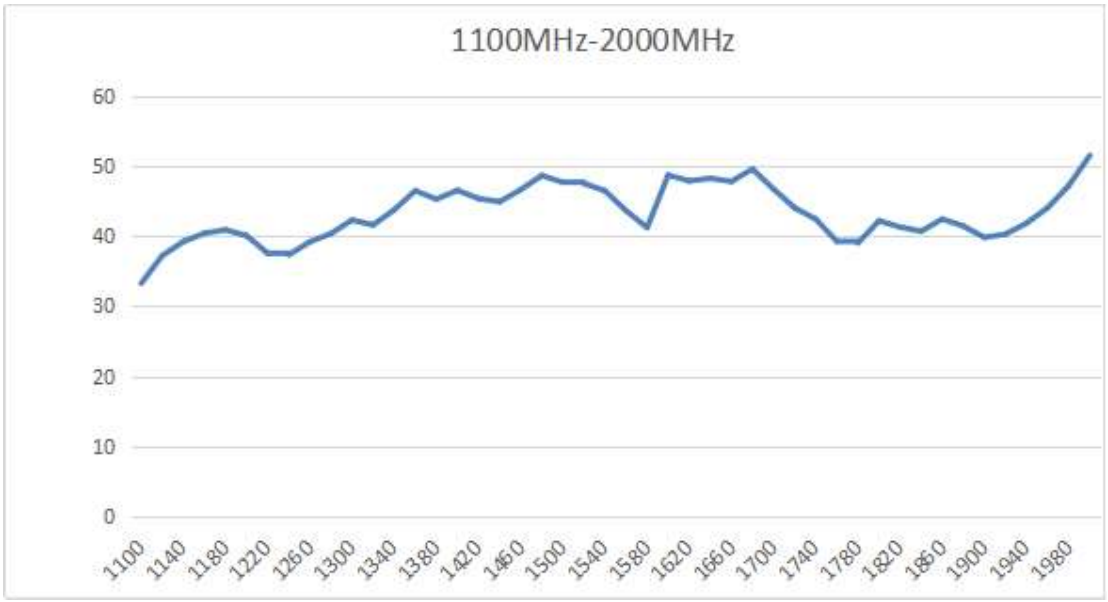
- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 6.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 6.0 GHz.

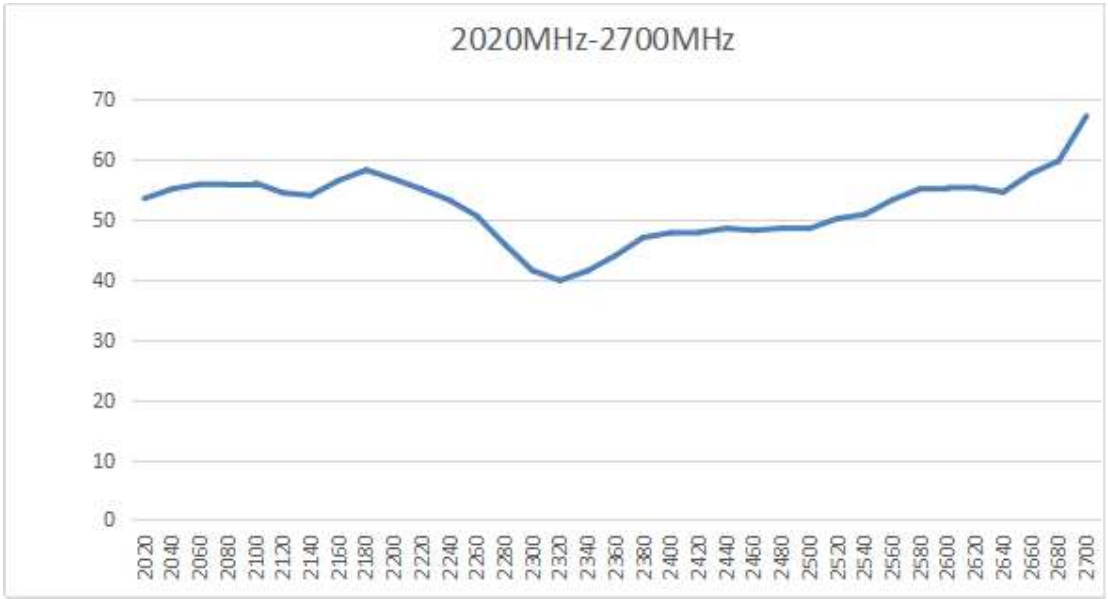
4.2. VSWR

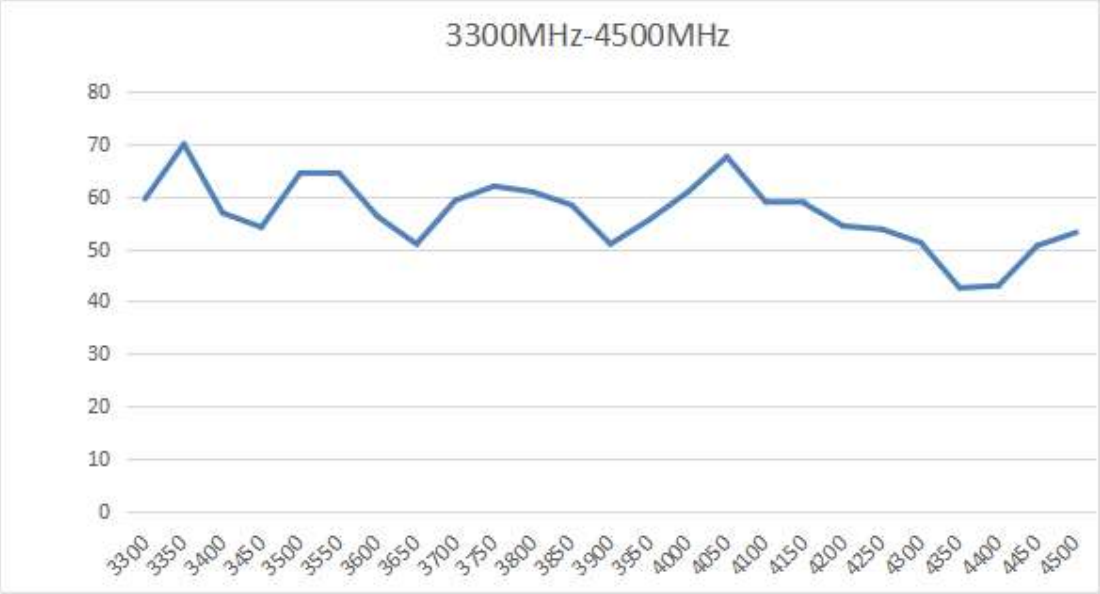


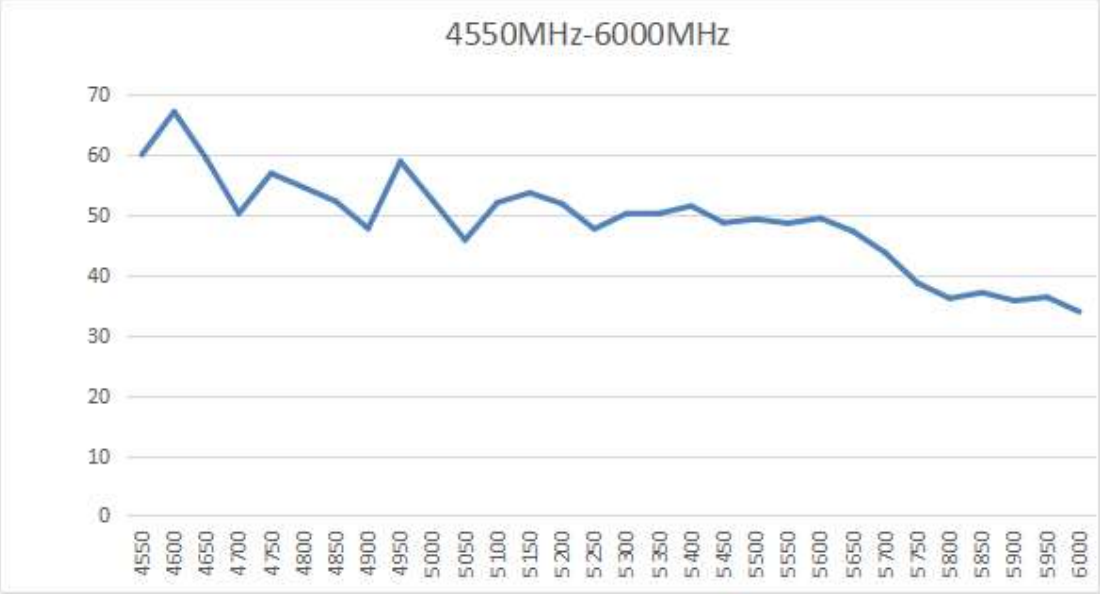
Frequency (MHz)	1100	1500	1805	2170	2300	2690	3300	5000	6000
VSWR	2.77	1.35	2.42	1.50	1.45	1.38	1.47	1.35	1.08

4.3. Efficiency





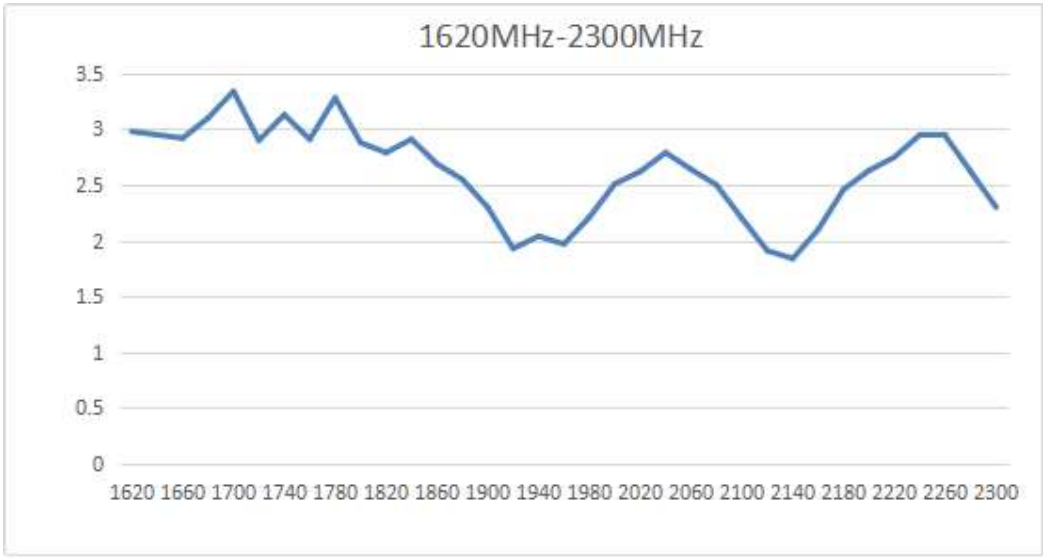


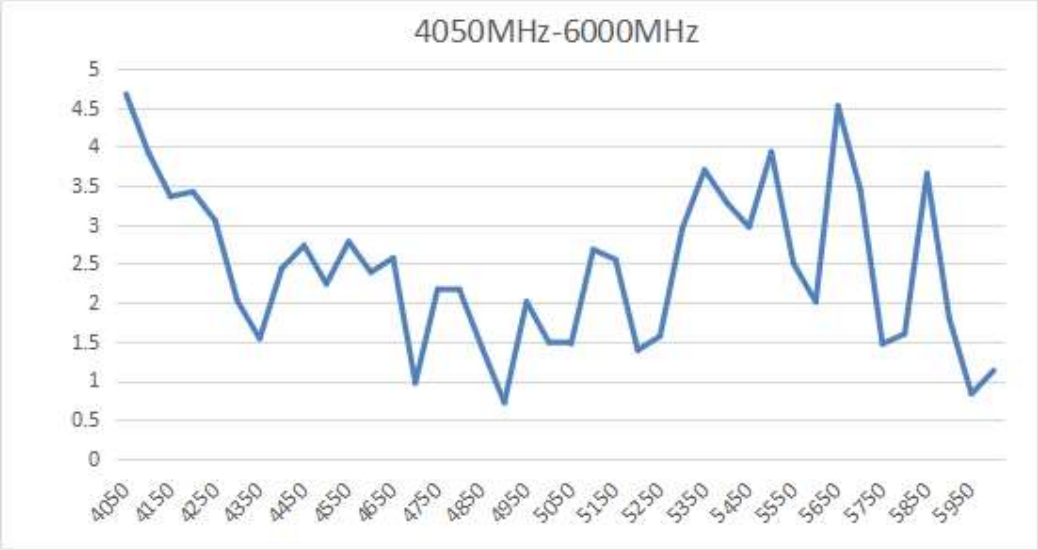


Frequency (MHz)	1100	1500	1800	2160	2300	2680	3300	5000	6000
Efficiency (%)	33.28	47.7	42.19	56.5	41.52	59.76	59.5	52.36	33.9

4.4. Gain

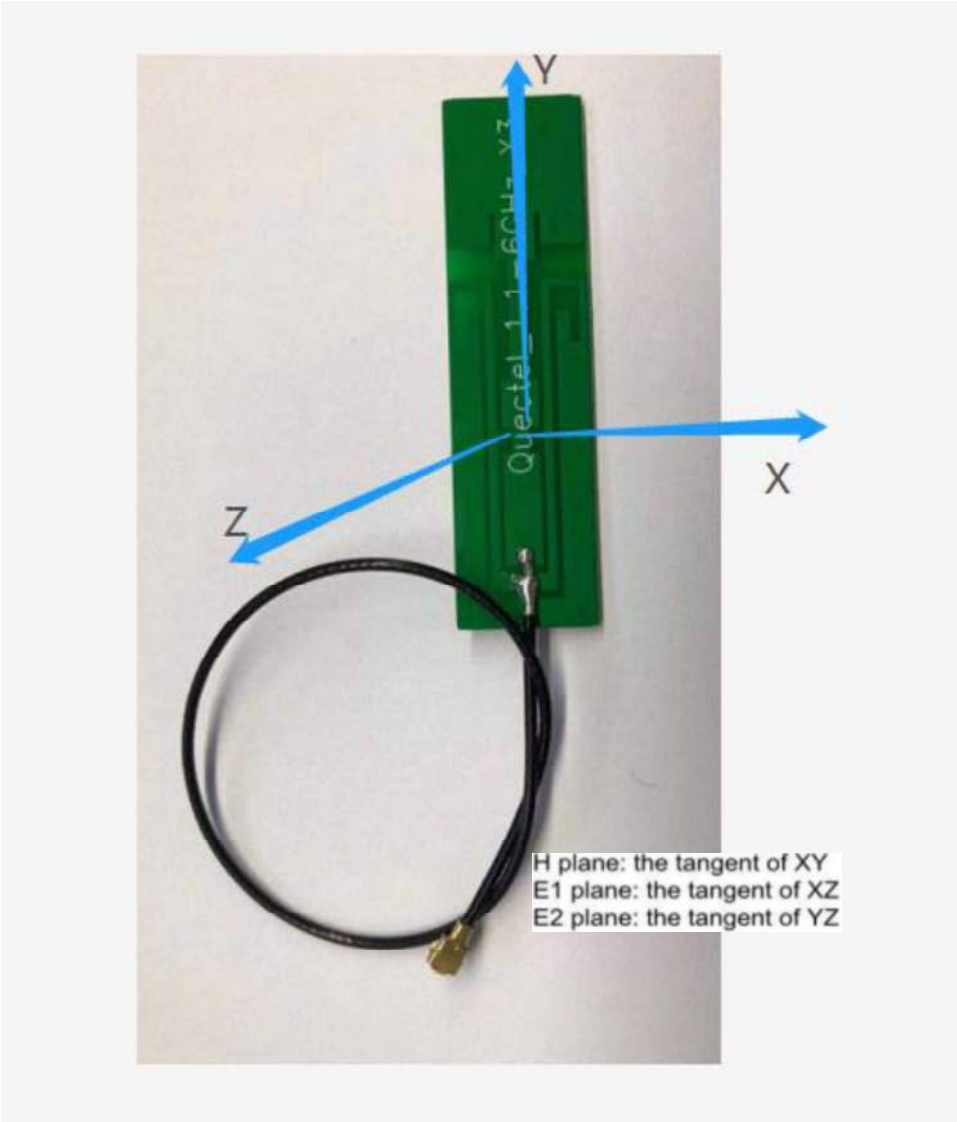

1100MHz-1600MHz
3.5
3
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
1100 1120 1140 1160 1180 1200 1220 1240 1260 1280 1300 1320 1340 1360 1380 1400 1420 1440 1460 1480 1500 1520 1540 1560 1580 1600

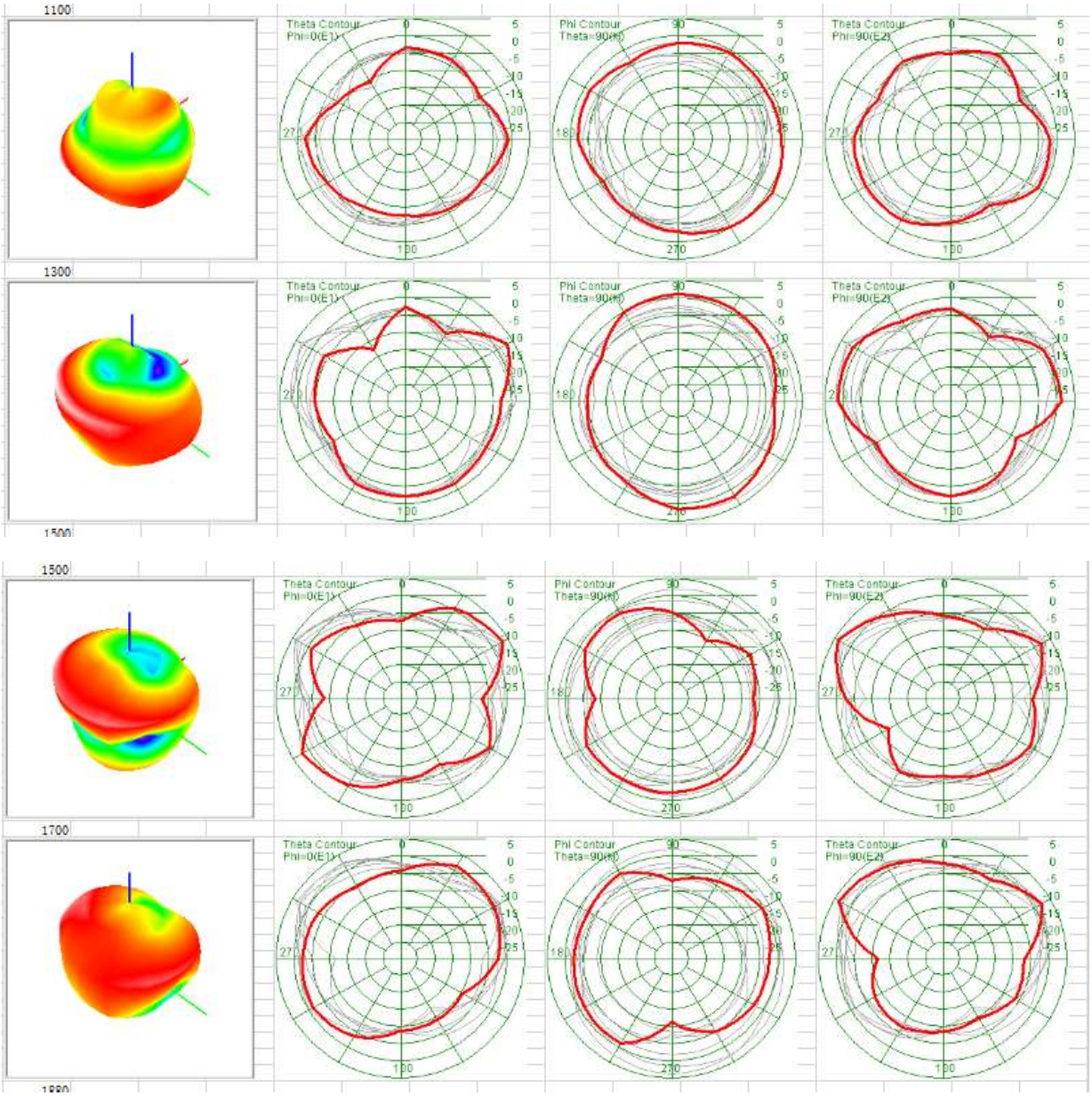

1620MHz-2300MHz
3.5
3
2.5
2
1.5
1
0.5
0
1620 1660 1700 1740 1780 1820 1860 1900 1940 1980 2020 2060 2100 2140 2180 2220 2260 2300

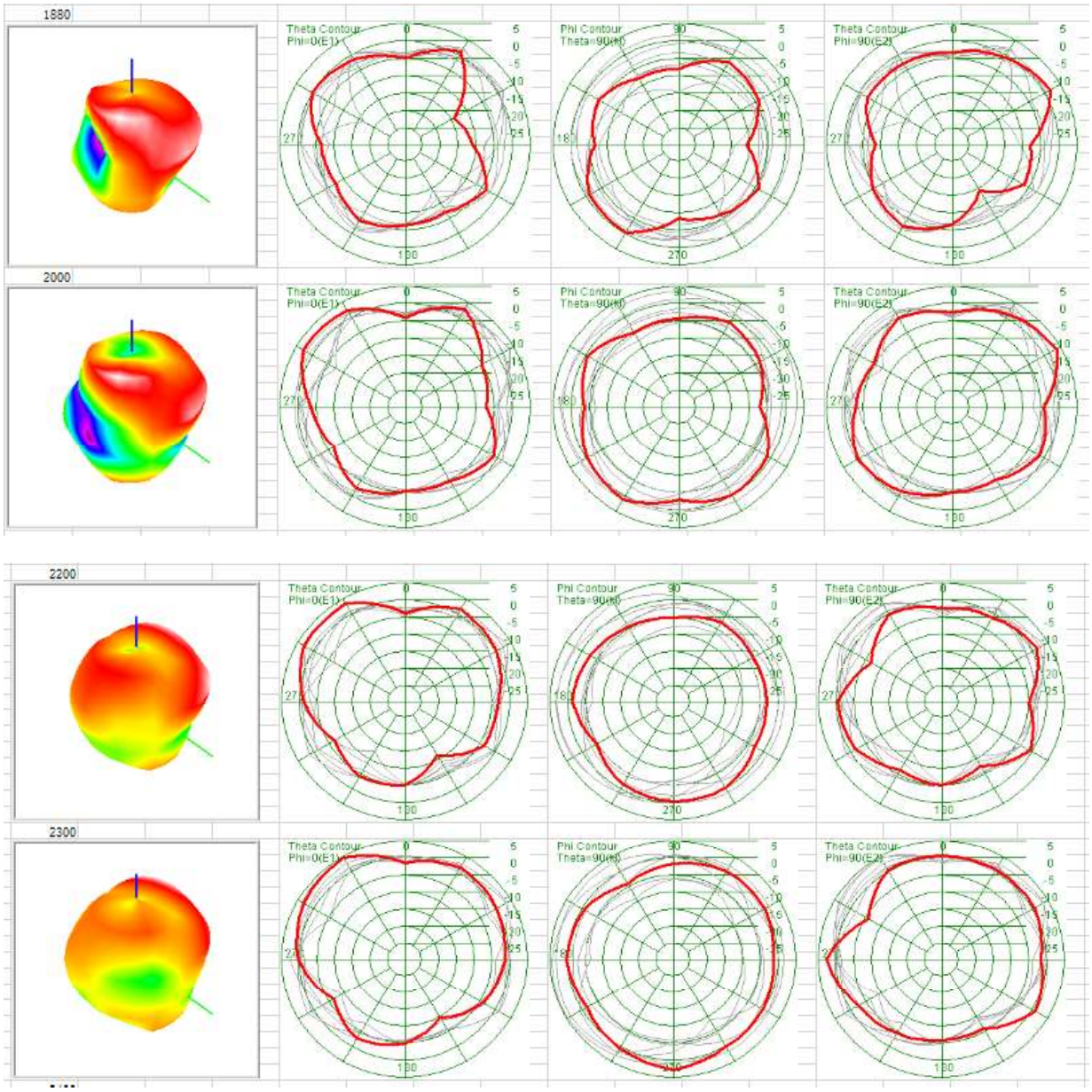


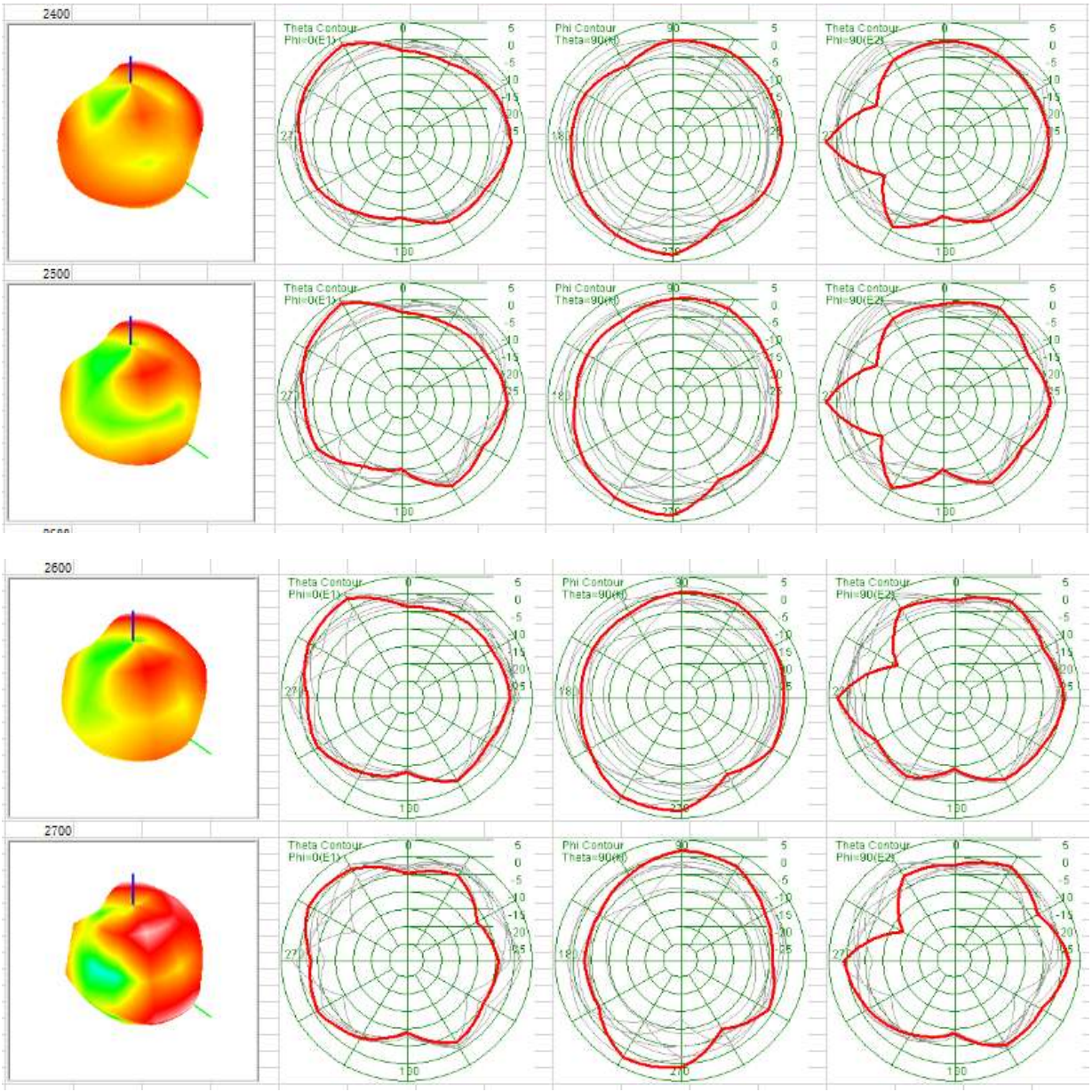
Frequency (MHz)	1100	1500	1800	2160	2300	2680	3300	5000	6000
Gain (dBi)	-0.83	2.8	2.88	2.1	2.3	3.22	1.36	1.49	1.13

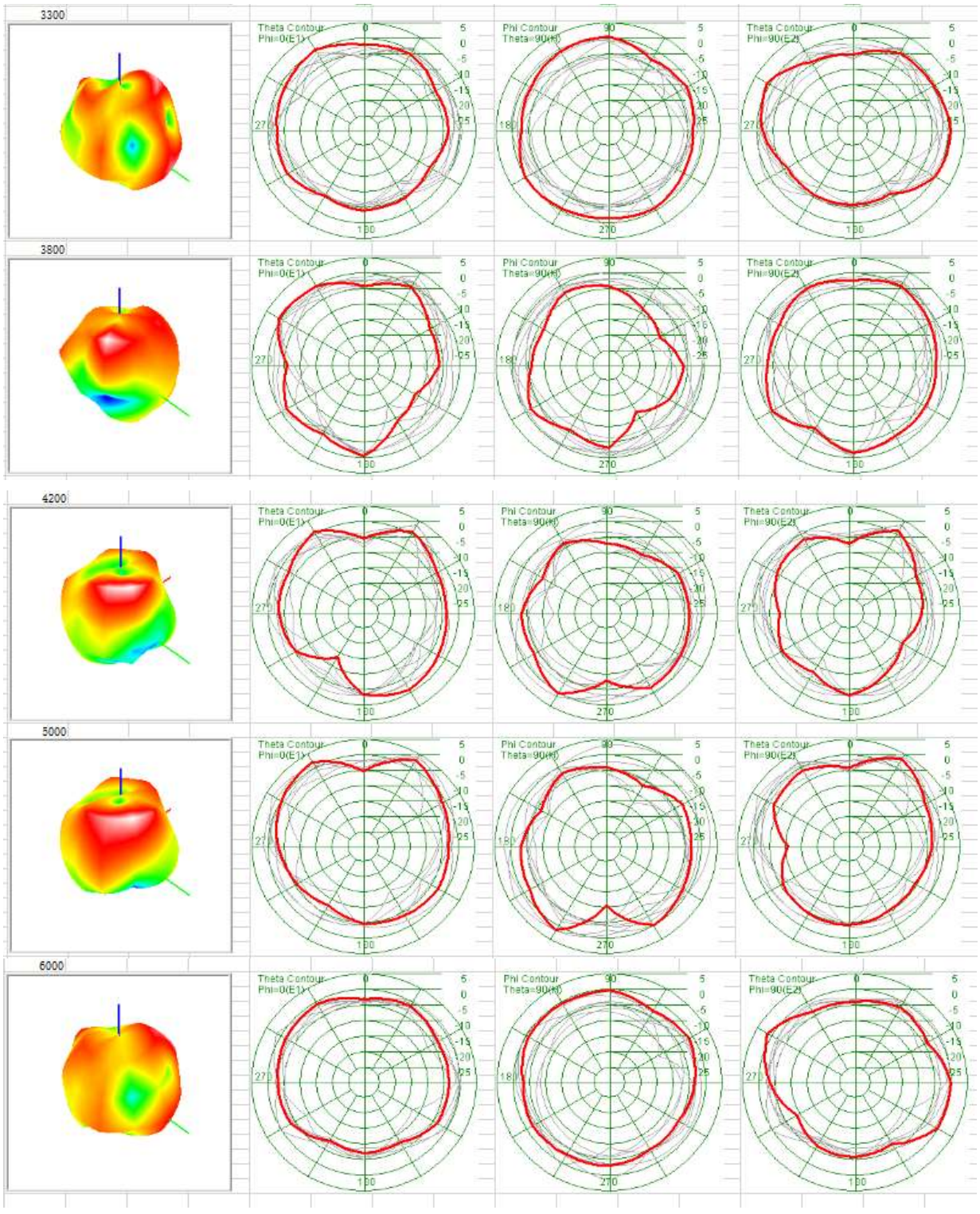
4.5. Radiation Patterns




1100
Theta Contour
Phi=0(E1)
Phi Contour
Theta=90(E)
Theta Contour
Phi=90(E2)
1300
1500
1500
1700
1880


1880
Theta Contour
Phi=0(E1)
Phi Contour
Theta=90(E)
Theta Contour
Phi=90(E2)
2000
Theta Contour
Phi=0(E1)
Phi Contour
Theta=90(E)
Theta Contour
Phi=90(E2)
2200
Theta Contour
Phi=0(E1)
Phi Contour
Theta=90(E)
Theta Contour
Phi=90(E2)
2300
Theta Contour
Phi=0(E1)
Phi Contour
Theta=90(E)
Theta Contour
Phi=90(E2)


2400
Theta Contour
Phi=0(E1)
Phi Contour
Theta=90(H)
Theta Contour
Phi=90(E2)
2500
2600
2700


3300
Theta Contour
Phi=0(E1)
Phi Contour
Theta=90(H)
Theta Contour
Phi=90(E2)
3800
4200
5000
6000

5 Product Size