


## 1. Specification

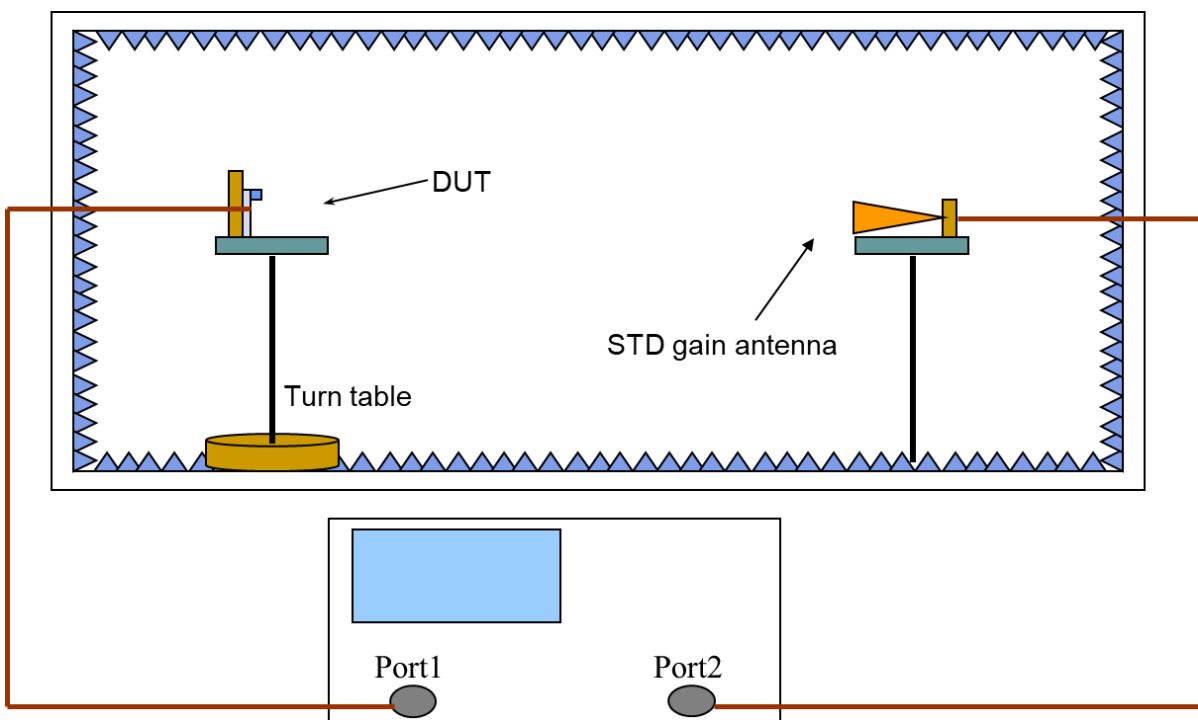
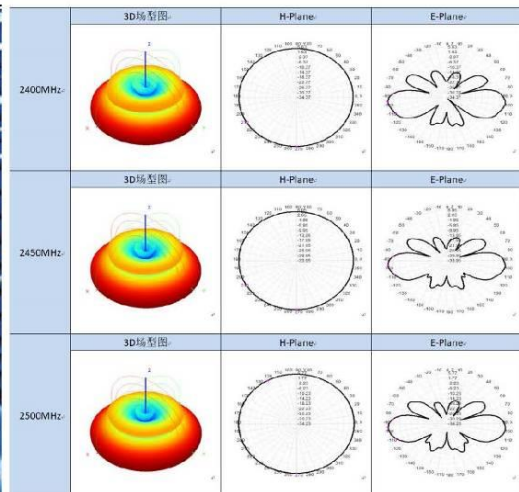
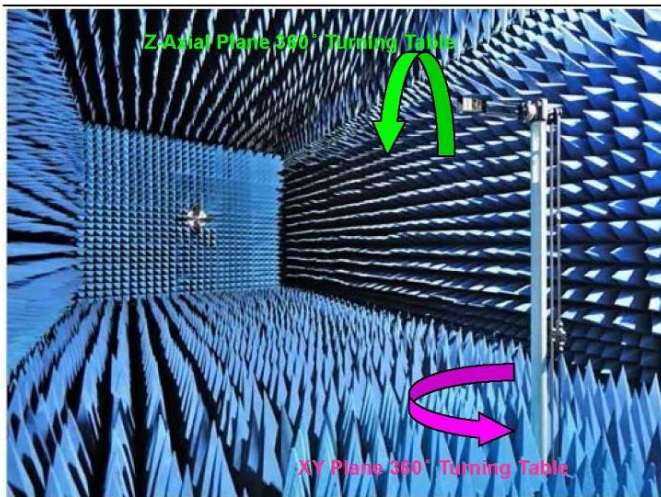
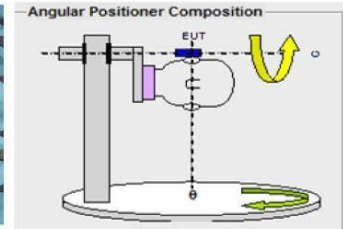
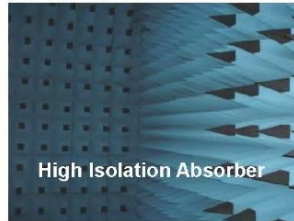
Sample Photo		
		
A. Electrical Characteristics		
Frequency	824-960MHz	1710-2170MHz
Impedance	50 Ohm	50 Ohm
S.W.R.	<2.0	<2.0
Gain	-2.5dBi	-3.2dBi
Efficiency	≈12%	≈13%
Polarization	Linear	Linear
Horizontal Beamwidth	360°	360°
Vertical Beamwidth	40-135°	32-80°
Max Power	50W	50W
B. Material & Mechanical Characteristics		
Connector Type	SMA connector	
Cable Type	RG174 Cable	
Dimension	Φ 30*200mm	
Weight	0.046Kg	
Antenna material	Carbon Steel	
C. Environmental		
Operation Temperature	- 40 °C ~ + 80 °C	
Storage Temperature	- 40 °C ~ + 80 °C	

## Test Equipment & Conditions

1. Network Analyzer: Keysight E5071C

2. 3D Chamber Test System

- .Chamber Size: 9 x 5 x 4 m<sup>3</sup>
- .Freq. Range: 0.4 ~ 18.0 GHz
- .Double Ridge Horn Antenna
- .VNA: Agilent E5071C
- .3D Turning Table and Positioner
- .ADT Solution 3D Testing Software



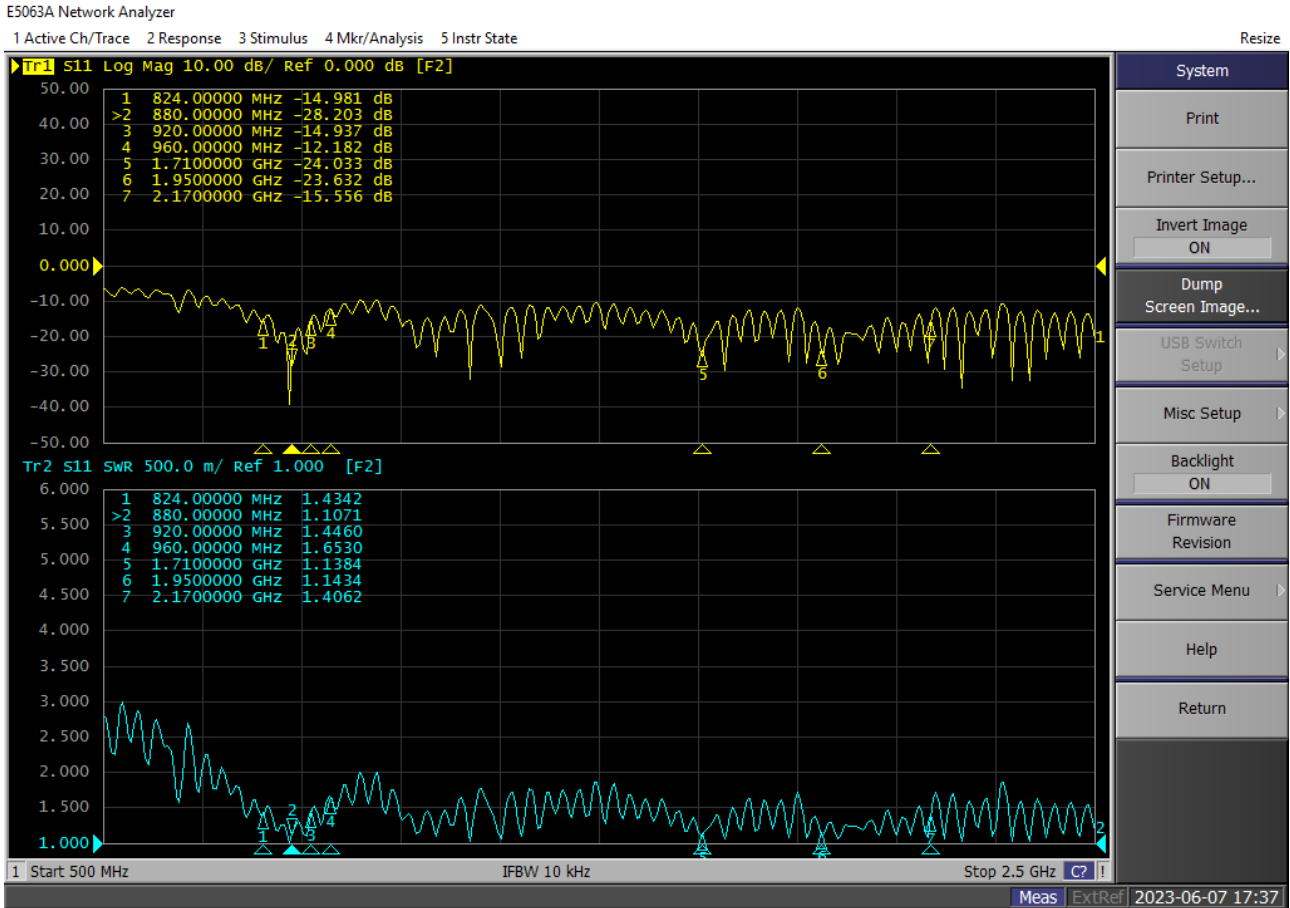


Product Number: BGS-AN3000-30200B

Product Name: Magnetic Antenna 3G

## 2. Antenna - S Parameter Test Data

### 2.1. VSWR





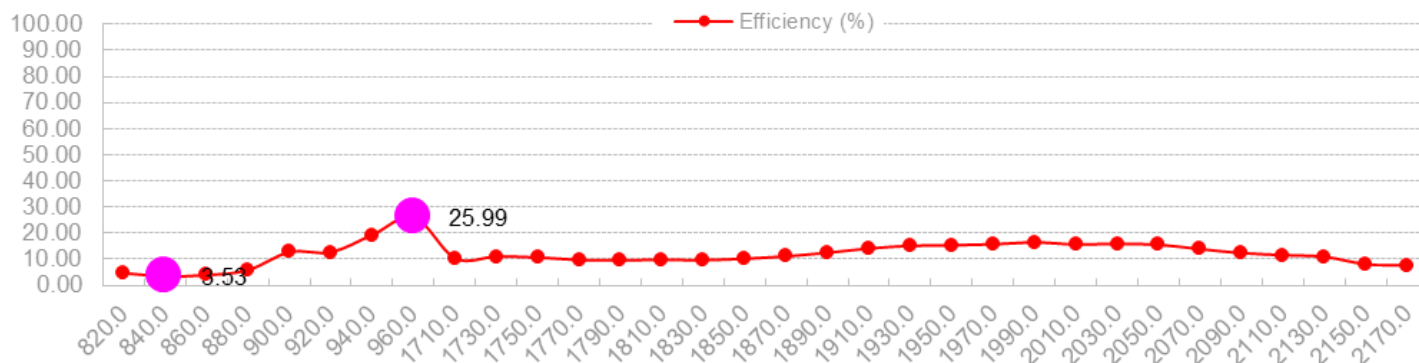
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## 2.2 Total Efficiency & Gain:

Frequency(MHz)	820.0	840.0	860.0	880.0	900.0	920.0	940.0	960.0
Gain (dBi)	-7.84	-8.63	-7.86	-7.04	-4.63	-4.82	-3.62	-2.58
Efficiency (%)	4.73	3.53	3.95	5.89	12.73	12.71	19.26	25.99

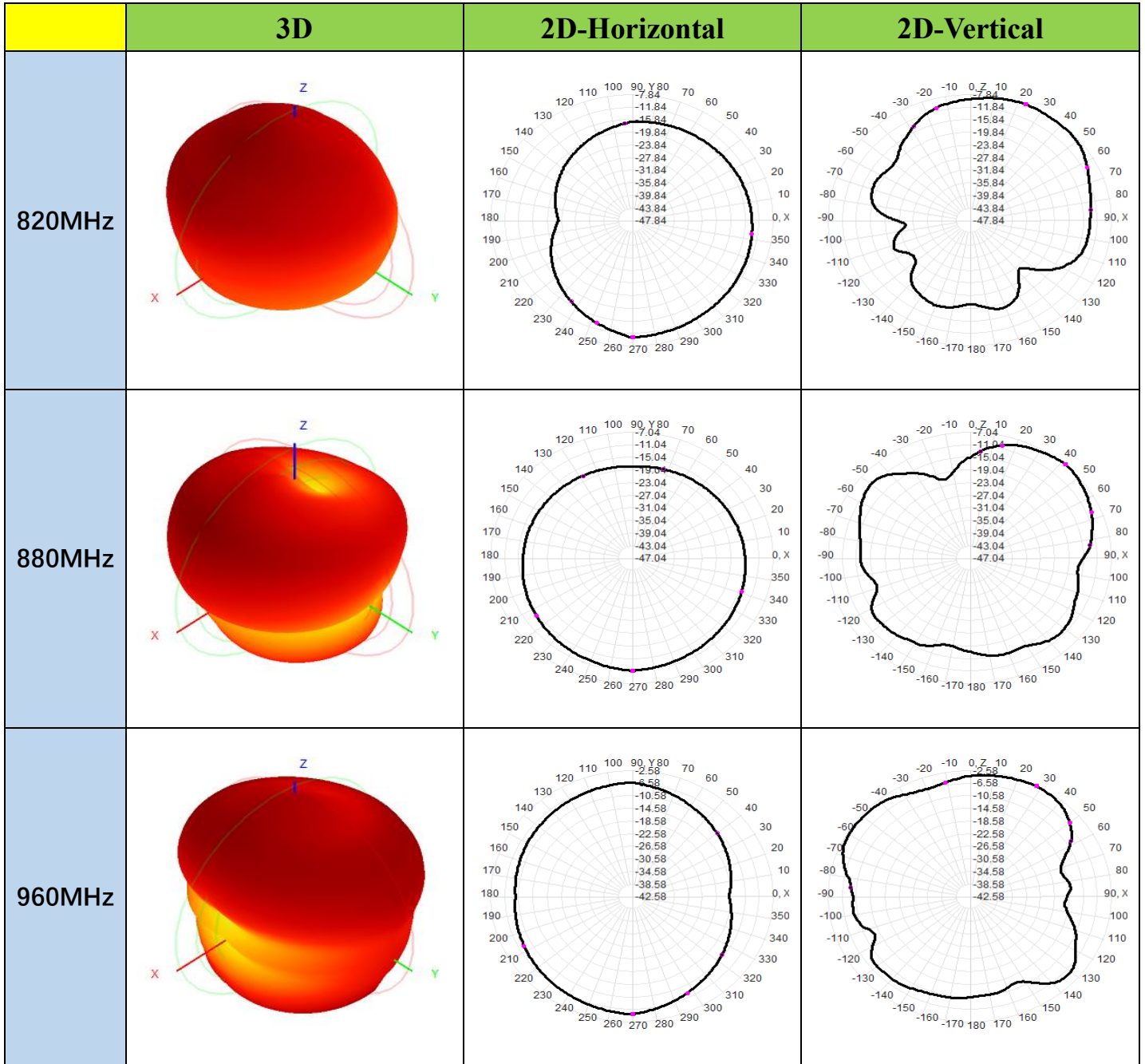
Frequency(MHz)	1710.0	1730.0	1750.0	1770.0	1790.0	1810.0	1830.0	1850.0	1870.0	1890.0	1910.0	1930.0
Gain (dBi)	-4.65	-4.88	-5.33	-5.39	-5.12	-4.96	-5.49	-5.15	-4.59	-3.87	-3.34	-3.20
Efficiency (%)	10.38	11.04	10.67	9.70	9.64	9.82	9.66	10.20	11.08	12.48	14.12	15.12

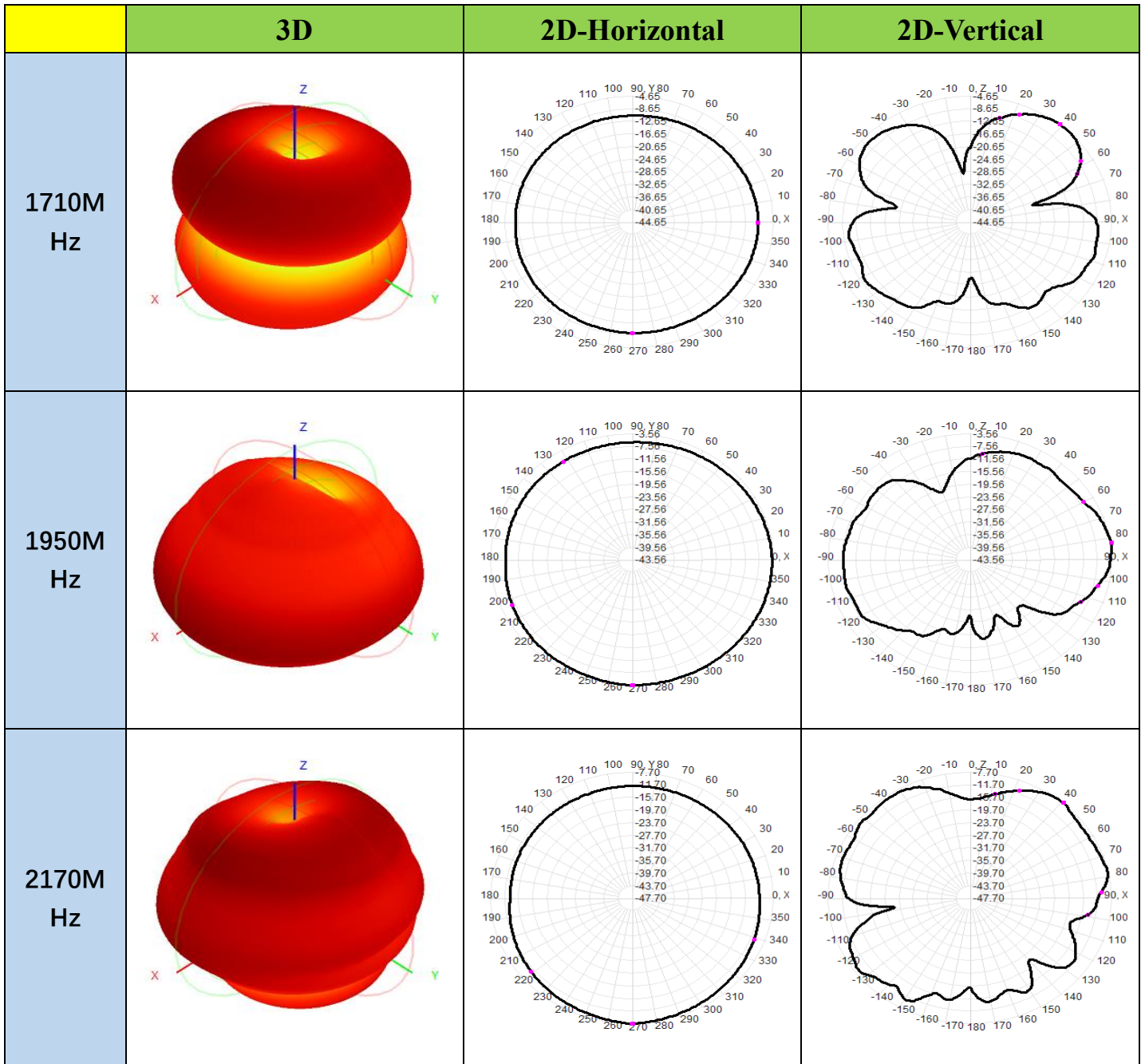
Frequency(MHz)	1950.0	1970.0	1990.0	2010.0	2030.0	2050.0	2070.0	2090.0	2110.0	2130.0	2150.0	2170.0
Gain (dBi)	-3.56	-3.42	-4.13	-4.62	-4.82	-3.61	-4.17	-4.61	-4.78	-4.89	-6.34	-7.70
Efficiency (%)	15.31	15.68	16.38	15.61	15.88	15.48	13.86	12.34	11.56	10.92	8.09	7.72





### 2.3 Radiation Pattern







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### 3. Mechanical Drawing

