




## 1. Specification

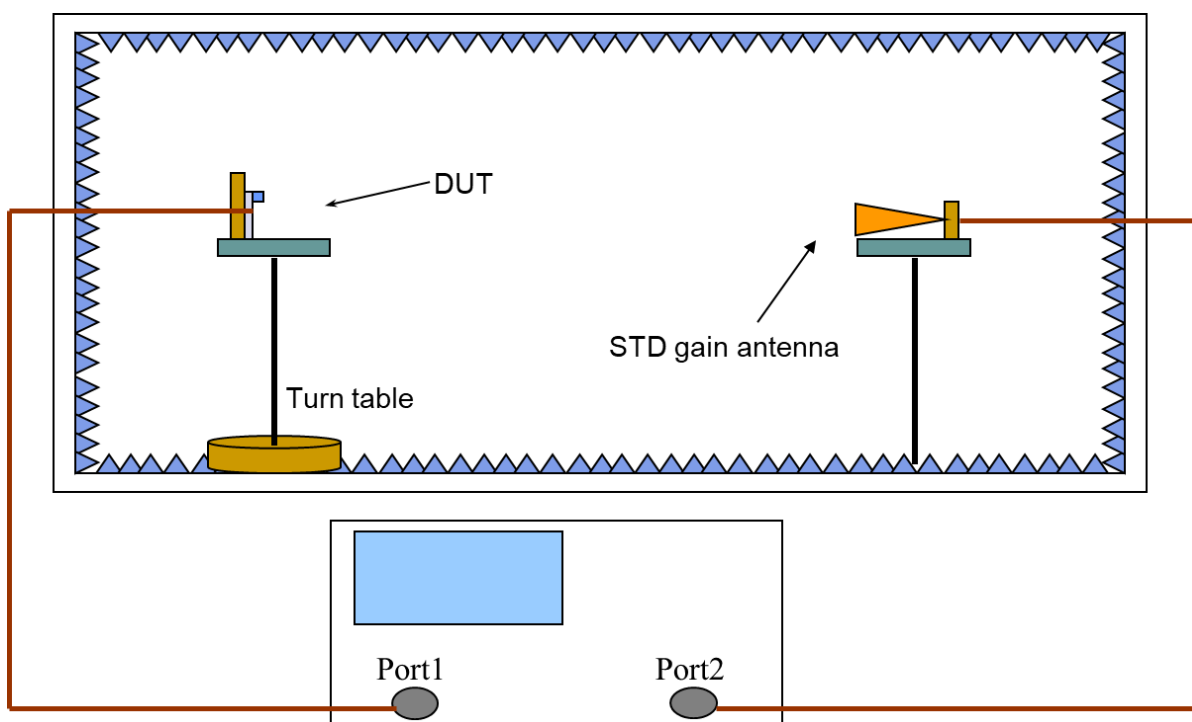
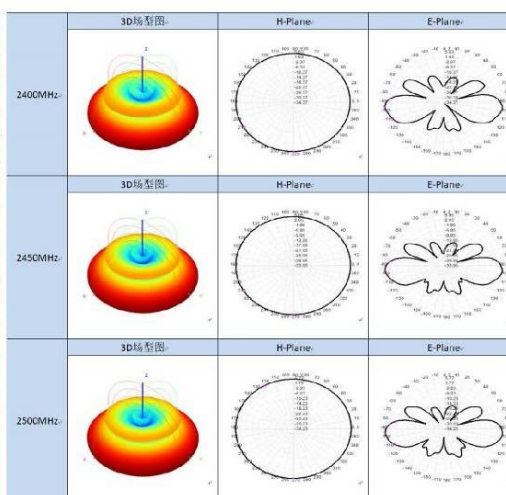
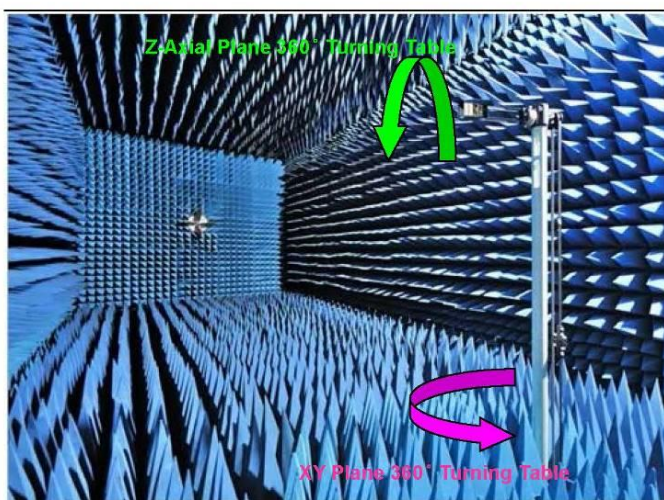
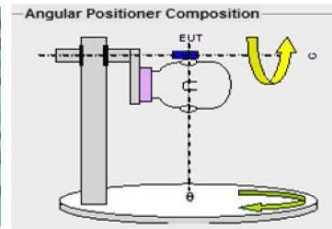
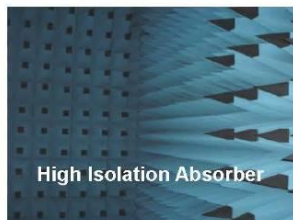
<b>Sample Photo</b>			
			
<b>A. Electrical Characteristics</b>			
<b>Frequency</b>	<b>617-960MHz</b>	<b>1427-1517MHz</b>	<b>1710-2700MHz</b>
<b>S.W.R.</b>	<b>&lt;3.2</b>	<b>&lt;3.2</b>	<b>&lt;3.2</b>
<b>Antenna Gain</b>	<b>2.5dBi</b>	<b>5dBi</b>	<b>8dBi</b>
<b>Efficiency</b>	<b>≈70%</b>	<b>≈54%</b>	<b>≈69%</b>
<b>Polarization</b>	<b>Linear</b>	<b>Linear</b>	<b>Linear</b>
<b>Horizontal Beamwidth</b>	<b>360°</b>	<b>360°</b>	<b>360°</b>
<b>Vertical Beamwidth</b>	<b>70°±30°</b>	<b>24°±2°</b>	<b>20°±10°</b>
<b>Impedance</b>	<b>50 Ohm</b>	<b>50 Ohm</b>	<b>50 Ohm</b>
<b>Max Power</b>	<b>50W</b>	<b>50W</b>	<b>50W</b>
<b>B. Material &amp; Mechanical Characteristics</b>			
<b>Connector Type</b>	<b>N connector</b>		
<b>Dimension</b>	<b>Φ 60*1000mm</b>		
<b>Weight</b>	<b>1.1Kg</b>		
<b>Radome material</b>	<b>Fiberglass</b>		
<b>C. Environmental</b>			
<b>Operation Temperature</b>	<b>- 40 °C ~ + 80 °C</b>		
<b>Storage Temperature</b>	<b>- 40 °C ~ + 80 °C</b>		
<b>Rated Wind Velocity</b>	<b>36.9m/s</b>		
<b>Lighting Protection</b>	<b>DC Ground</b>		

## 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

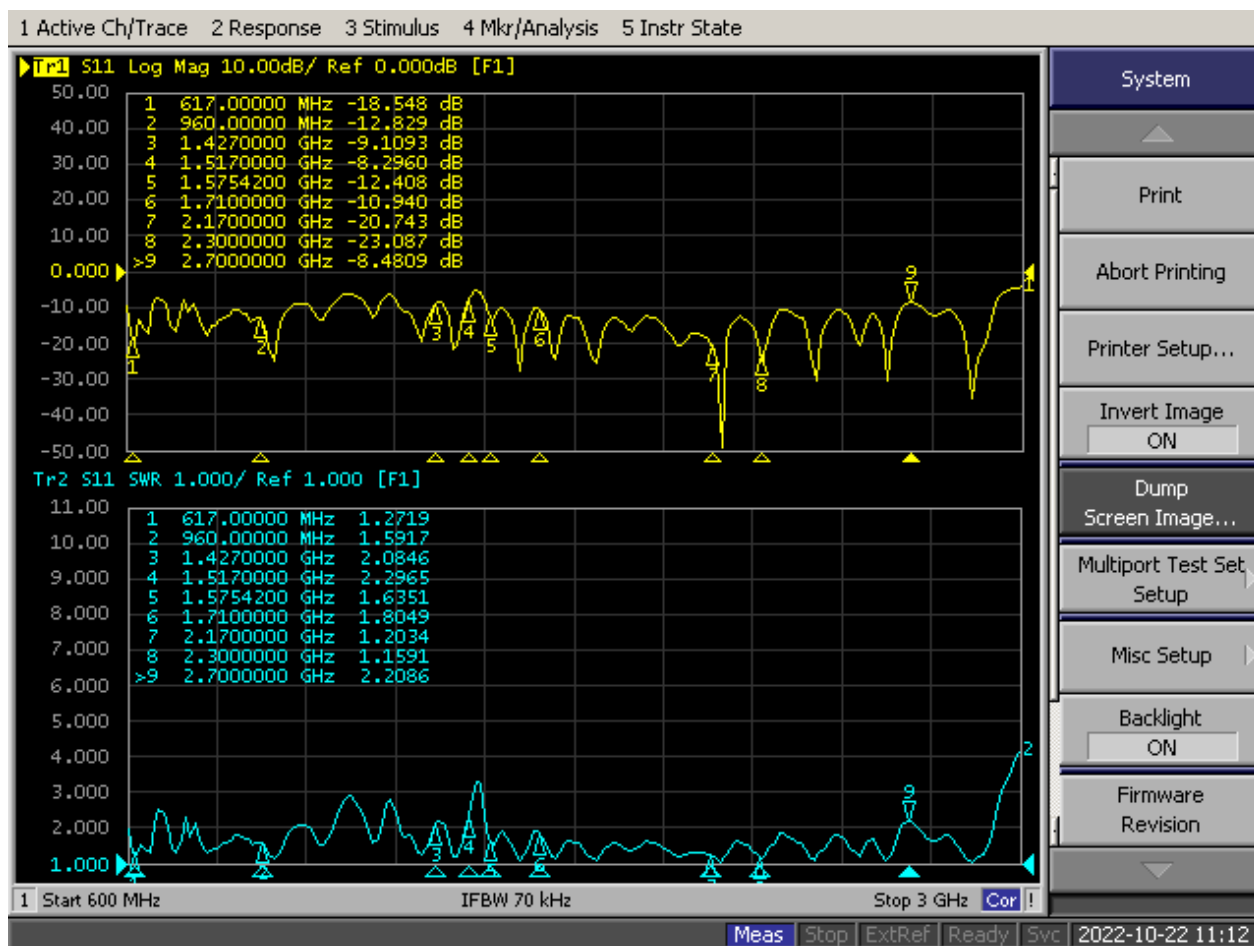




Product Number: BGS-AN4000-601000W  
Product Name: 4G LTE Fiberglass Antenna

## 2. Antenna - S Parameter Test Data

### 2.1. VSWR





Product Number: BGS-AN4000-601000W  
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## 2.2. Total Efficiency & Gain:

Frequency(MHz)	610.0	620.0	630.0	640.0	650.0	660.0	670.0	680.0	690.0	700.0	710.0	720.0	730.0	740.0	750.0	760.0
Gain (dBi)	-1.57	-0.13	1.11	2.79	3.15	2.03	2.02	2.30	2.28	2.74	2.50	0.65	0.31	0.72	1.28	1.94
Efficiency (%)	40.17	49.31	54.88	64.39	63.92	73.95	86.10	94.56	91.13	93.13	83.09	74.11	71.86	68.07	67.40	72.07

Frequency(MHz)	780.0	800.0	820.0	840.0	850.0	860.0	870.0	880.0	890.0	900.0	910.0	920.0	930.0	940.0	950.0	960.0
Gain (dBi)	1.68	1.79	1.46	1.13	1.31	1.52	1.61	1.44	1.76	2.23	2.61	2.66	2.18	1.72	1.59	1.76
Efficiency (%)	75.72	77.86	67.35	63.59	69.71	67.64	66.90	67.99	69.82	74.34	76.26	75.49	70.31	67.22	63.64	61.35

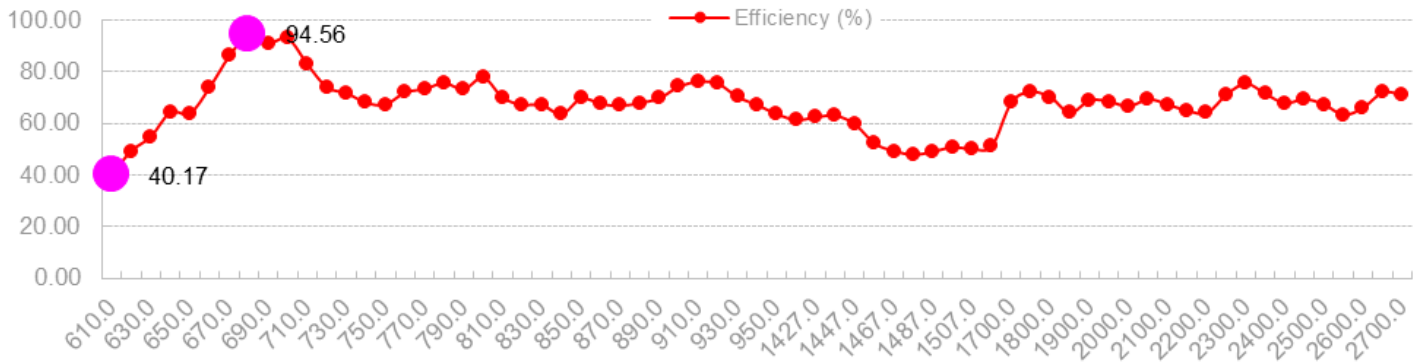
Frequency(MHz)	1427.0	1437.0	1447.0	1457.0	1467.0	1477.0	1487.0	1497.0	1507.0	1517.0
Gain (dBi)	4.44	4.73	4.84	4.48	4.26	3.93	3.85	3.95	3.85	3.87
Efficiency (%)	62.44	63.02	59.68	52.21	49.31	47.83	49.04	50.75	50.02	51.14

Frequency(MHz)	1700.0	1750.0	1800.0	1850.0	1900.0	1950.0	2000.0	2050.0	2100.0	2150.0	2200.0
Gain (dBi)	4.99	5.89	5.78	5.33	5.55	5.95	5.72	6.12	5.63	6.45	6.71
Efficiency (%)	68.18	72.33	70.17	64.21	68.99	68.55	66.65	69.46	67.34	65.00	64.10

Frequency(MHz)	2250.0	2300.0	2350.0	2400.0	2450.0	2500.0	2550.0	2600.0	2650.0	2700.0
Gain (dBi)	7.62	8.13	8.01	7.63	7.78	7.97	7.90	8.09	8.35	8.34
Efficiency (%)	71.29	75.53	71.47	67.92	69.52	67.32	63.37	66.22	72.11	71.09



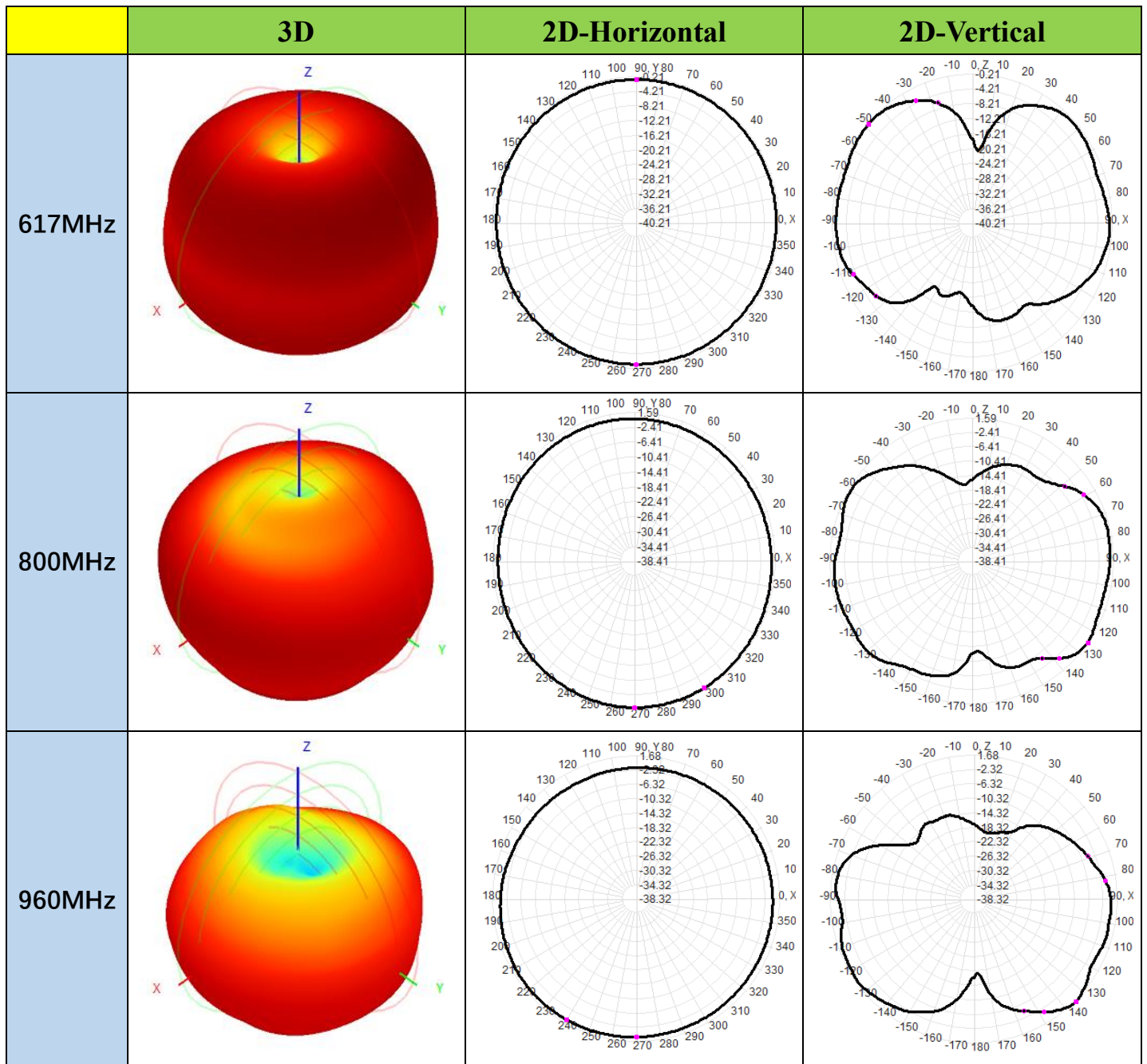
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Product Name: 4G LTE Fiberglass Antenna





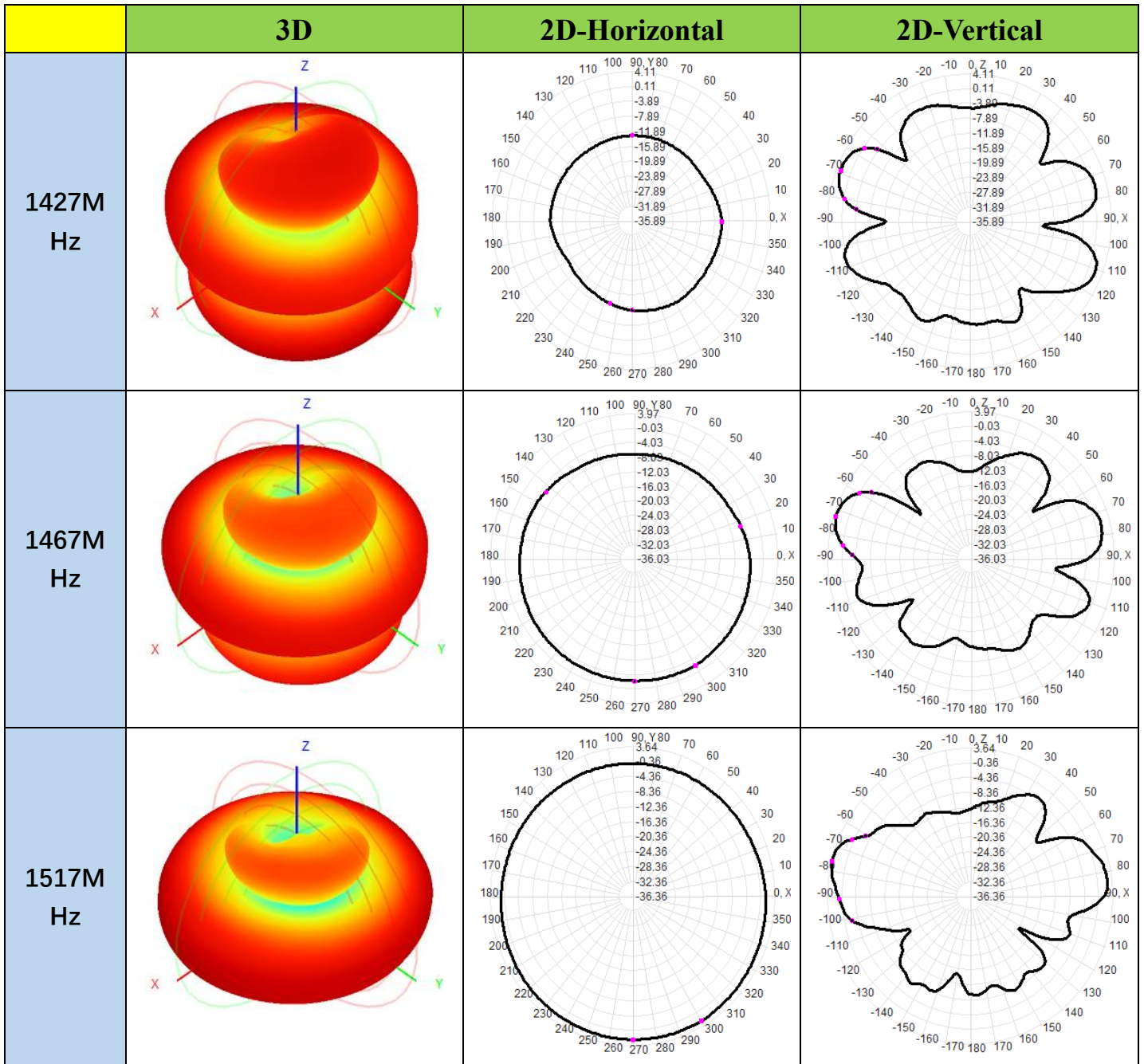
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### 2.3 Radiation Pattern



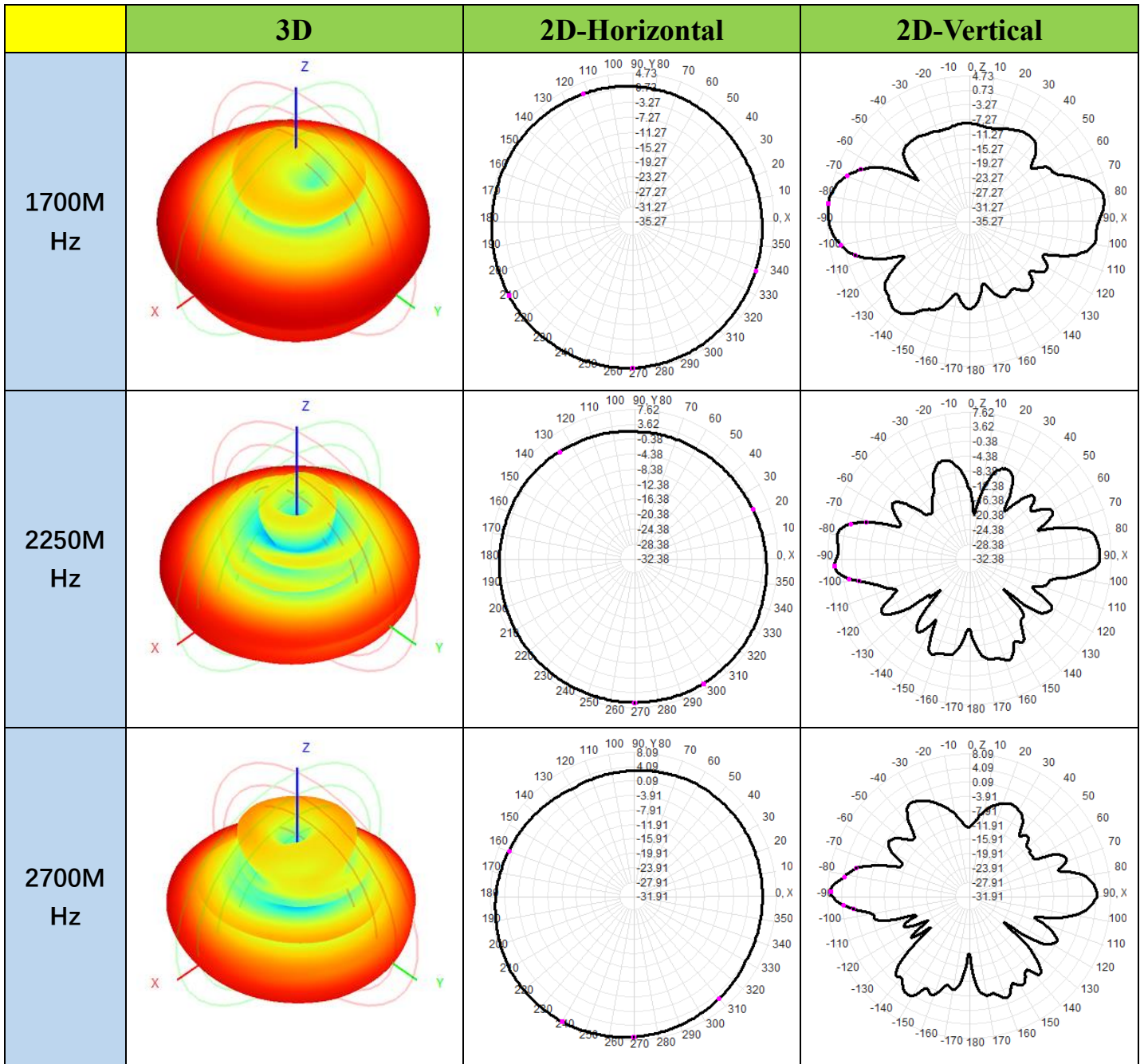


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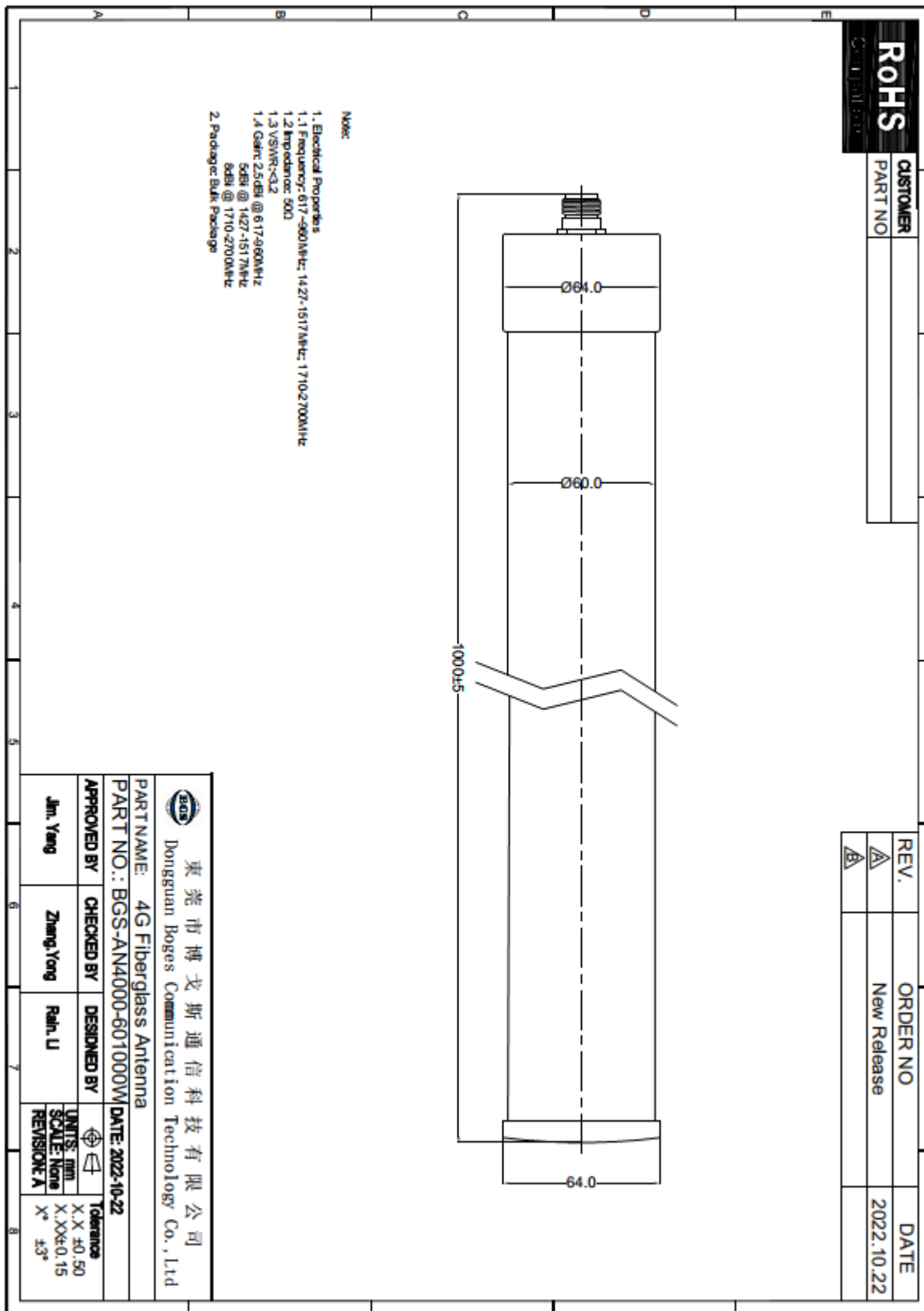






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### 3. Mechanical Drawing





Product Number: BGS-AN4000-601000W  
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<b>RoHS</b> <small>Compliant</small>	<b>CUSTOMER</b>						
	<b>PART NO</b>						
		<b>REV.</b>	<b>ORDER NO</b>	<b>DATE</b>			
		▲	New Release	2022.10.22			

**L Bracket**

**U Bolt**

Flat Washer  
Spring Washer  
Nut

<p>东莞市博戈斯通信科技有限公司          Dongguan Boges Communication Technology Co., Ltd</p>		<b>PARTNAME:</b> Antenna Accessories <b>PART NO.:</b> BGS-AN4000-601000W <b>DATE:</b> 2022-10-22	
<b>APPROVED BY</b>	<b>CHECKED BY</b>	<b>DESIGNED BY</b>	<b>TOLERANCE</b>
Jin, Yang	Zhang, Yong	Rahn, U	X.X ±0.50 X.XX ±0.15 X° ±3°
		<b>UNITS:</b> mm	
		<b>SCALE:</b> None	
		<b>REVISION:</b> A	