




Product Number: BGS-AN0420-321800W  
Product Name: 390-420MHz Fiberglass Antenna

## 1. Specification

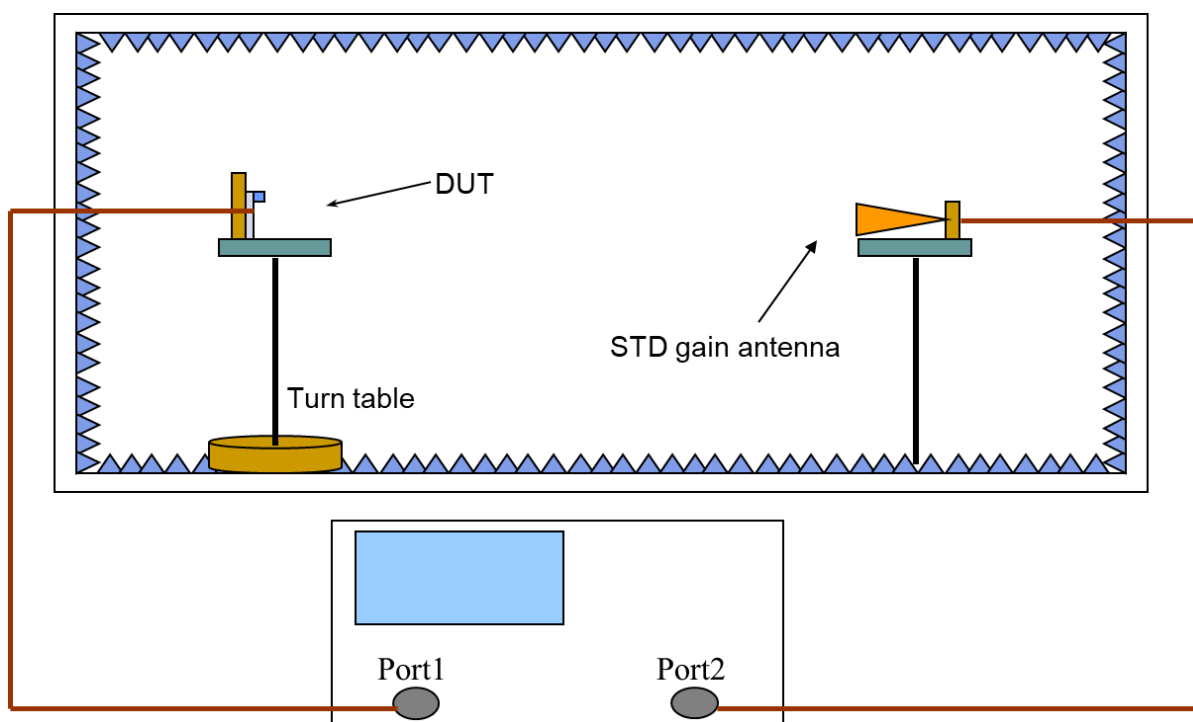
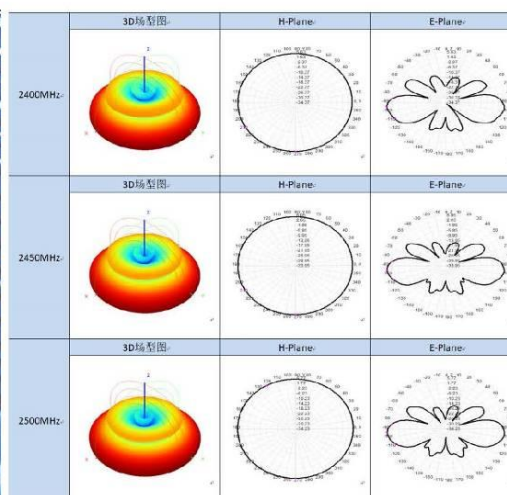
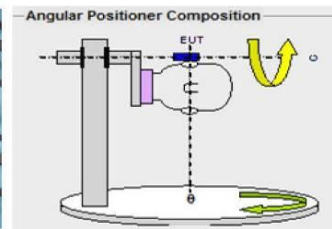
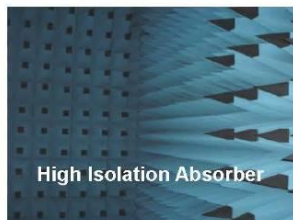
Sample Photo	
	
A. Electrical Characteristics	
Frequency	390-420MHz
S.W.R.	$\leq 2$
Antenna Gain	5dBi
Efficiency	$\approx 83\%$
Polarization	Linear
Horizontal Beamwidth	360°
Vertical Beamwidth	26-30°
Impedance	50 Ohm
Max Power	100W
B. Material & Mechanical Characteristics	
Connector Type	N connector
Dimension	$\Phi 32*1800\text{mm}$
Weight	1.55Kg
Radome material	Fiberglass
C. Environmental	
Operation Temperature	- 40 °C ~ + 80 °C
Storage Temperature	- 40 °C ~ + 80 °C
Rated Wind Velocity	36.9m/s
Lighting Protection	DC Ground

## 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

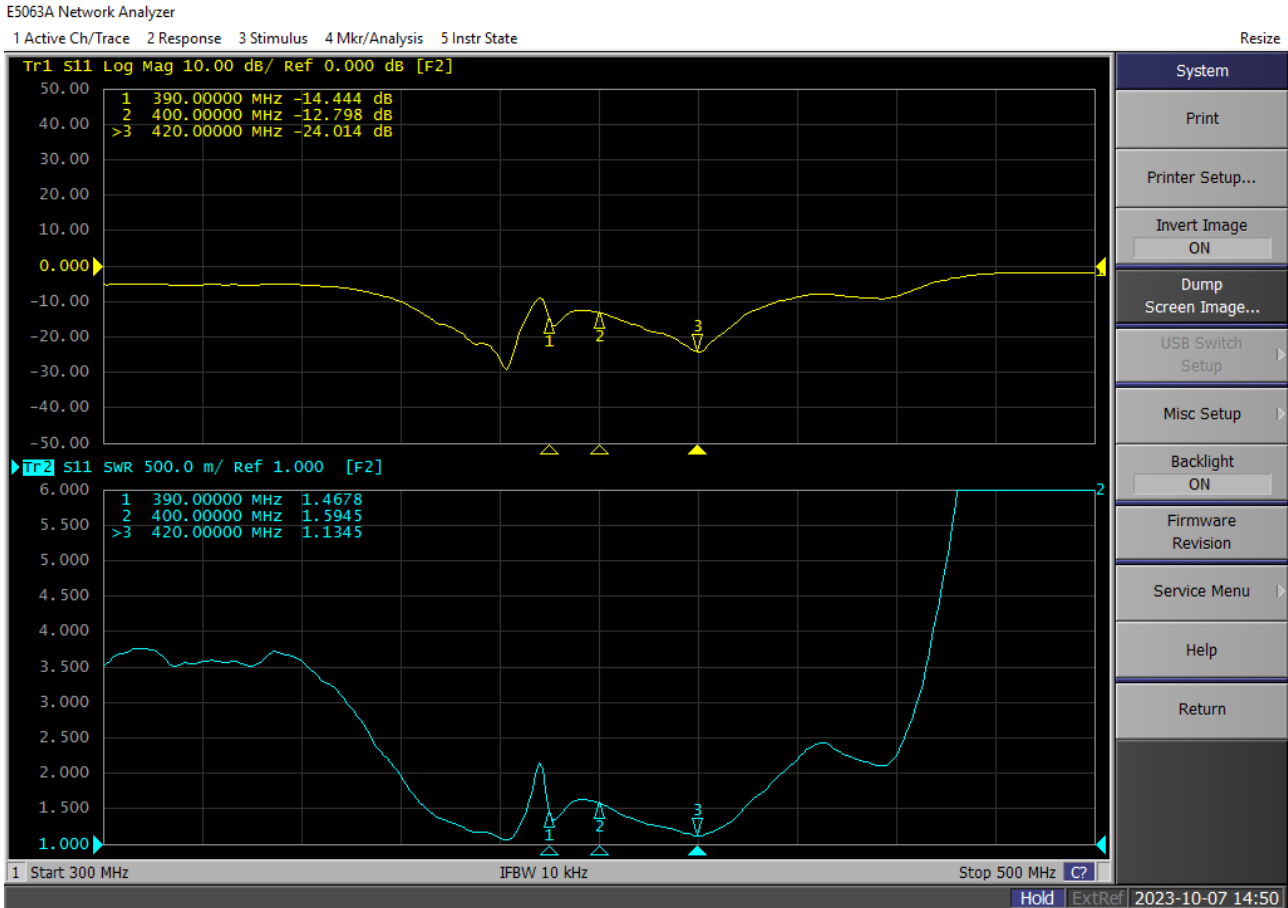




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## 2. Antenna - S Parameter Test Data

### 2.1. VSWR

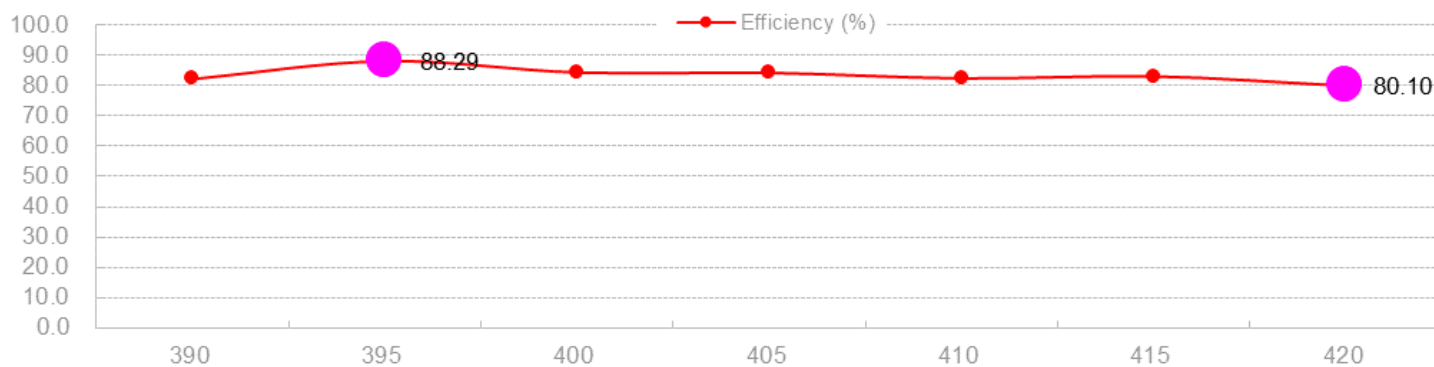




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## 2.2. Total Efficiency & Gain:

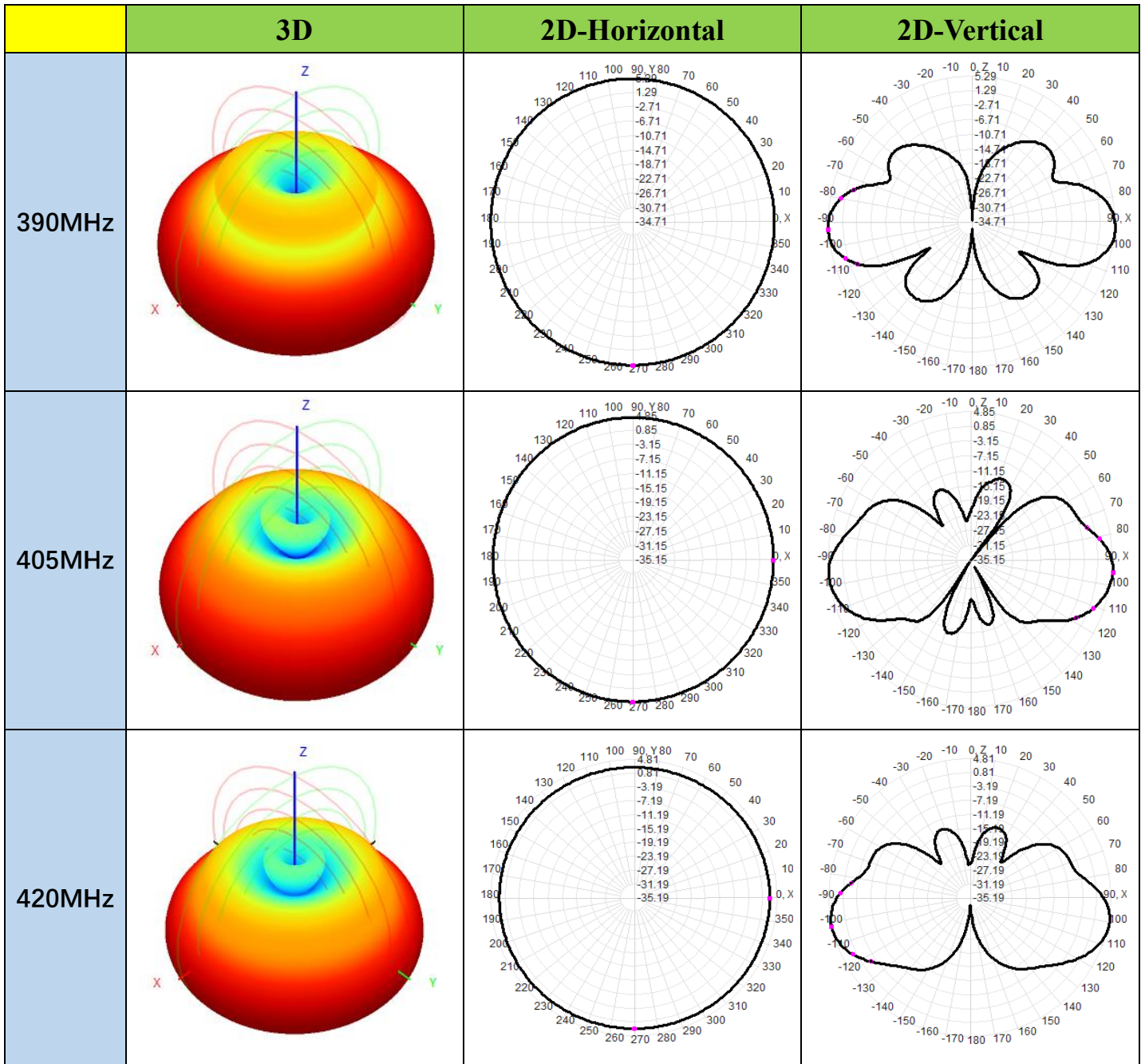
Frequency(MHz)	390	395	400	405	410	415	420
Gain (dBi)	5.3	5.5	4.9	4.8	5.0	5.0	4.8
Efficiency (%)	82.4	88.3	84.6	84.4	82.6	83.2	80.1





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### 2.3 Radiation Pattern



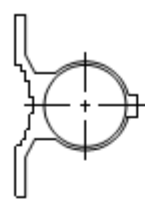




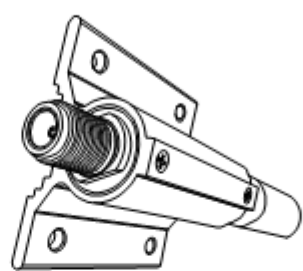
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<b>RoHS</b>		CUSTOMER PART NO	
REV.		ORDER NO	DATE
▲		New Release	2023.10.06
▲			




Bracket

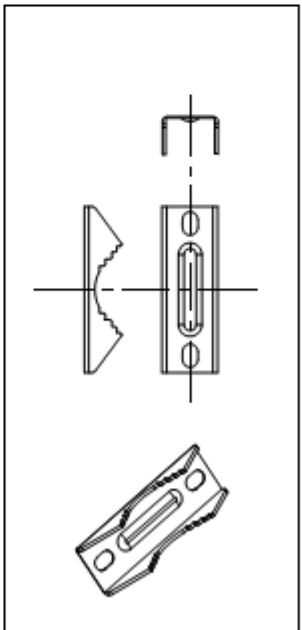


Bracket

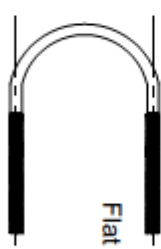


U Bolt

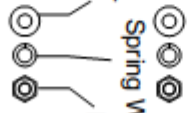


Pipe Bracket

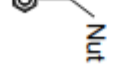
  



Flat Washer




Spring Washer



Nut

 <b>东莞市博戈斯通信科技有限公司</b> Dongguan Boges Communication Technology Co., Ltd			
PART NAME: Antenna Accessories			
PART NO.: BGS-AN0420-321800W			
APPROVED BY	CHECKED BY	DESIGNED BY	DATE: 2023-10-06
Jin Yang	Zhang Yang	Ruh. U	
UNITS: mm SCALE: None REVISION: A		Tolerances XX ±0.50 XXX±0.15 X° ±3°	