



Product Number: BGS-AN2458-20200W  
Product Name: 2.4/5.8GHz WIFI6 Fiberglass Antenna

## 1. Specification

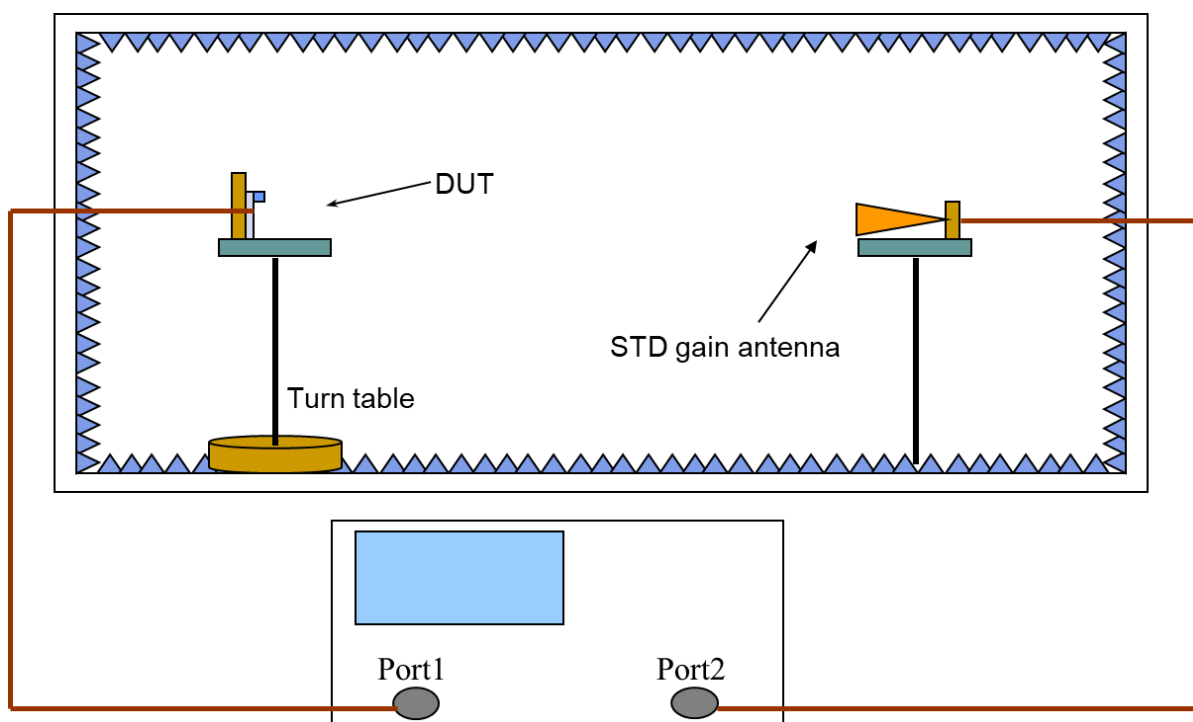
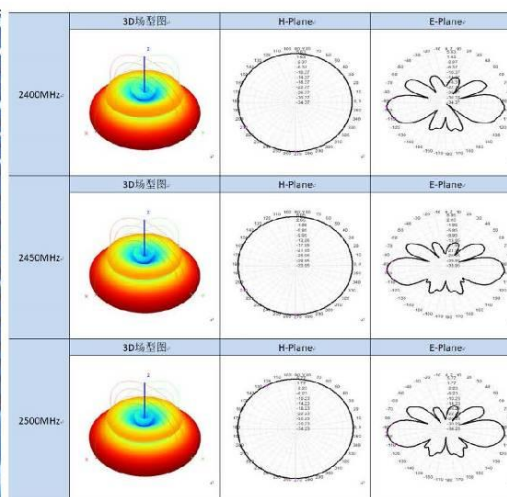
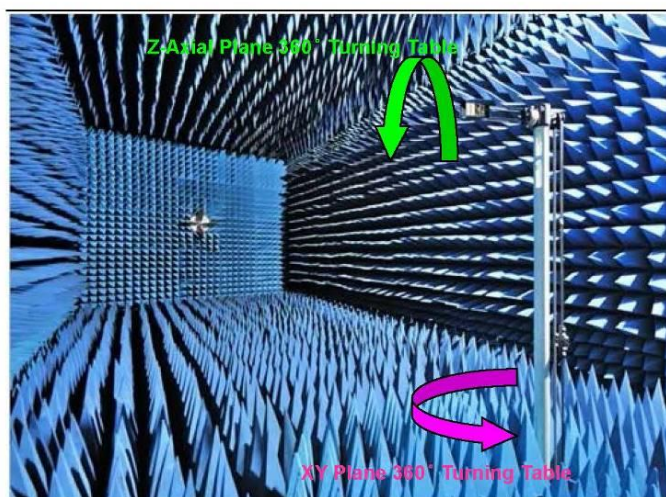
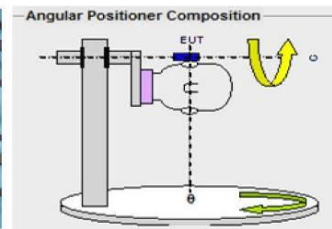
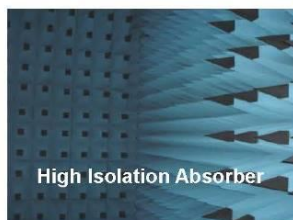
Sample Photo		
		
A. Electrical Characteristics		
Frequency	2400-2500MHz	5150-6000MHz
Impedance	50 Ohm	50 Ohm
S.W.R.	<1.6	<1.6
Gain	4.5dBi	6dBi
Efficiency	≈81%	≈84%
Horizontal Beamwidth	360°	360°
Vertical Beamwidth	38° ± 5°	28° ± 5°
Polarization	Linear	Linear
Max Power	50W	50W
B. Material & Mechanical Characteristics		
Connector Type	N connector	
Dimension	Φ 20*200mm	
Weight	0.09Kg	
Radome material	Fiberglass	
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

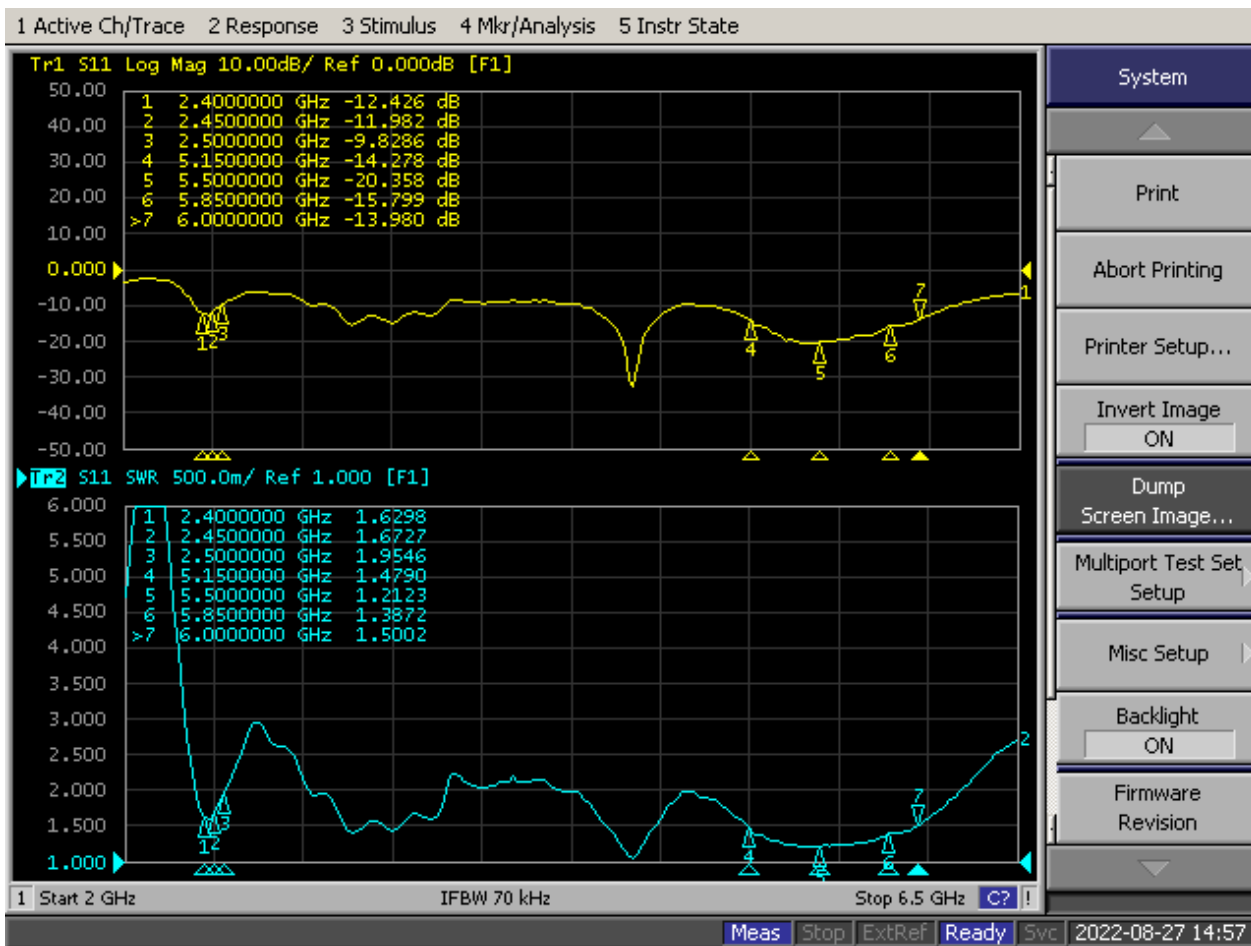




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## 2. Antenna - S Parameter Test Data

### 2.1. VSWR





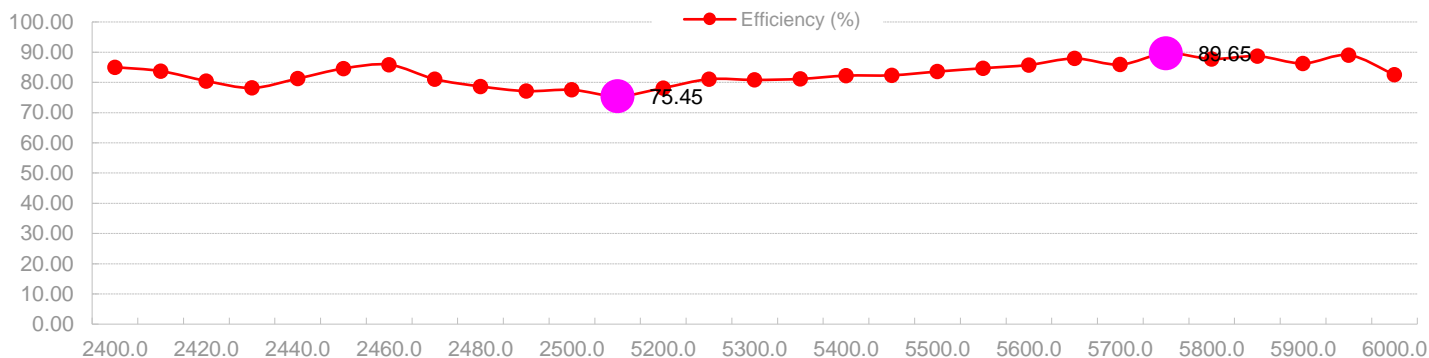
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## 2.2 Total Efficiency & Gain:

Frequency(MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	3.74	3.80	3.76	3.74	3.92	4.03	4.05	3.86	3.78	3.75	3.76
Efficiency (%)	85.04	83.75	80.47	78.18	81.27	84.60	85.85	81.07	78.67	77.11	77.54

Frequency(MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0
Gain (dBi)	3.41	3.22	3.32	3.34	3.50	3.39	3.16	3.47	3.80
Efficiency (%)	75.45	78.15	81.07	80.82	81.16	82.24	82.35	83.59	84.70

Frequency(MHz)	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0	5900.0	5950.0	6000.0
Gain (dBi)	4.21	4.63	4.74	5.13	5.13	5.36	5.65	6.00	5.76
Efficiency (%)	85.77	87.91	85.91	89.65	87.76	88.68	86.28	89.02	82.53





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### 2.3 Radiation Pattern

	3D	2D-Horizontal	2D-Vertical
2400M Hz			
2450M Hz			
2500M Hz			



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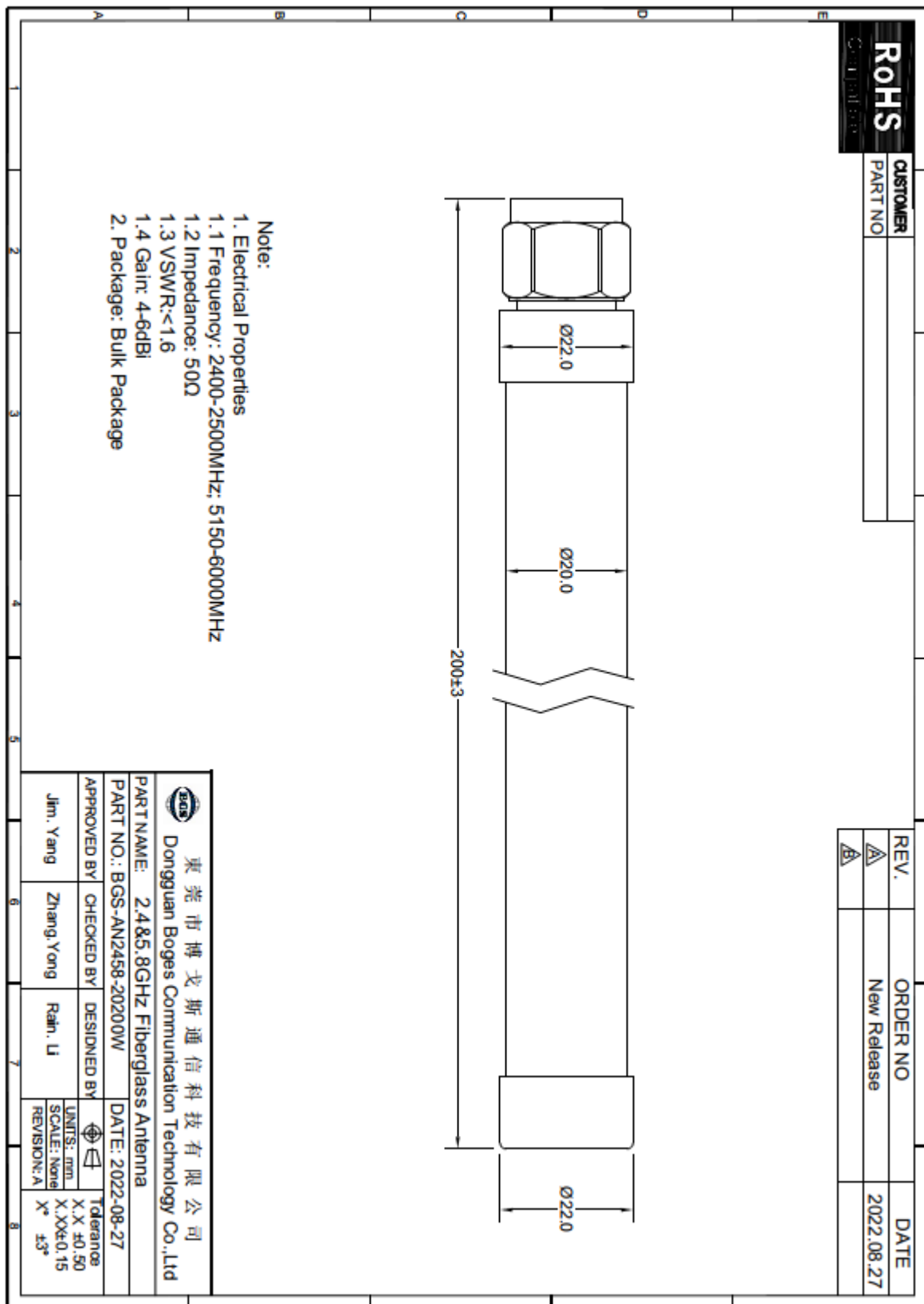
	3D	2D-Horizontal	2D-Vertical
5150M Hz			
5500M Hz			
5850M Hz			





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### 3. Mechanical Drawing



**RoHS**  
 Compliant

CUSTOMER	
PART NO	

REV.	ORDER NO	DATE
A	New Release	2022.08.27
B		

东莞市博戈斯通信科技有限公司 Dongguan Boges Communication Technology Co.,Ltd			
PART NAME: 2.4&5.8GHz Fiberglass Antenna			
PART NO.: BGS-AN2458-20200W			
APPROVED BY	CHECKED BY	DESIGNED BY	DATE: 2022-08-27
Jim. Yang	Zhang, Yong	Rain. Li	
LIMITS: mm			Tolerances
SCALE: None			
REVISION: A			X <sup>o</sup> ±3°