




Product Number: BGS-AN5000-22195G

Product Name: 5G External Antenna

1. Specification

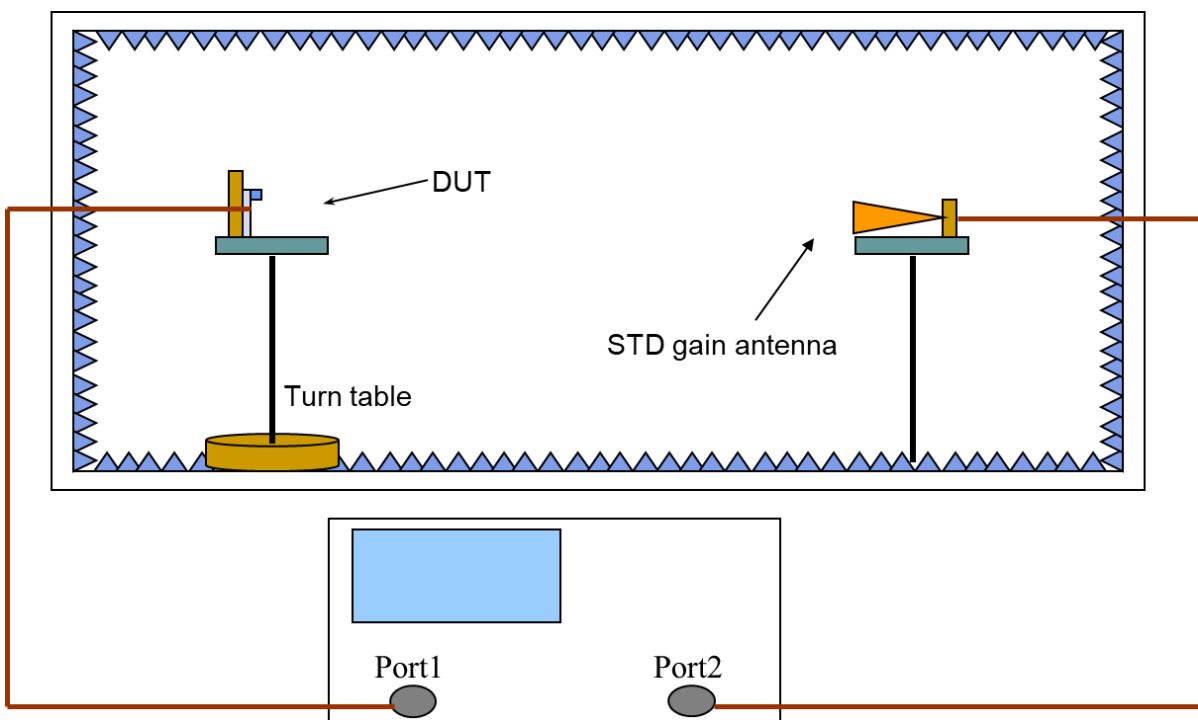
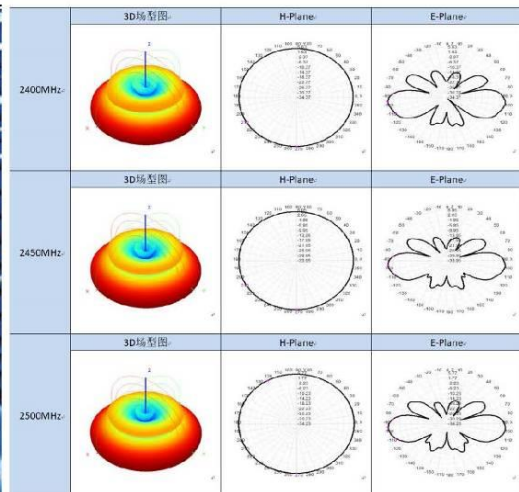
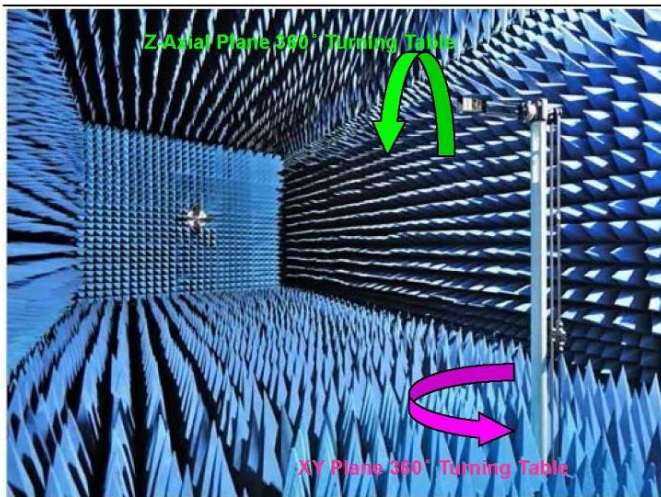
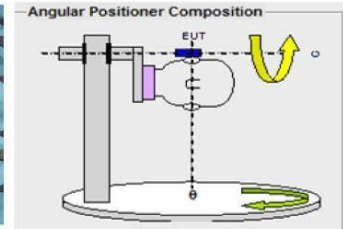
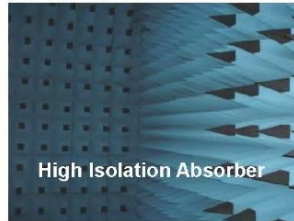
Sample Photo			
			
A. Electrical Characteristics			
Frequency	617-960MHz	1710-3300MHz	3300-6000MHz
Impedance	50 Ohm	50 Ohm	50 Ohm
S.W.R.	<2.5	<2.5	<5.5
Gain	3.5dBi	5dBi	3dBi
Efficiency	≈48%	≈58%	≈31%
Horizontal Beamwidth	360°	360°	360°
Vertical Beamwidth	47° @868MHz	20° @1980MHz	12° @4500MHz
Polarization	Linear		
Max Power	50W		
B. Material & Mechanical Characteristics			
Connector Type	N connector		
Dimension	Φ 22.5*195mm		
Weight	0.07Kg		
Radome material	ABS		
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 m³
- .Freq. Range: 0.4 ~ 18.0 GHz
- .Double Ridge Horn Antenna
- .VNA: Agilent E5071C
- .3D Turning Table and Positioner
- .ADT Solution 3D Testing Software



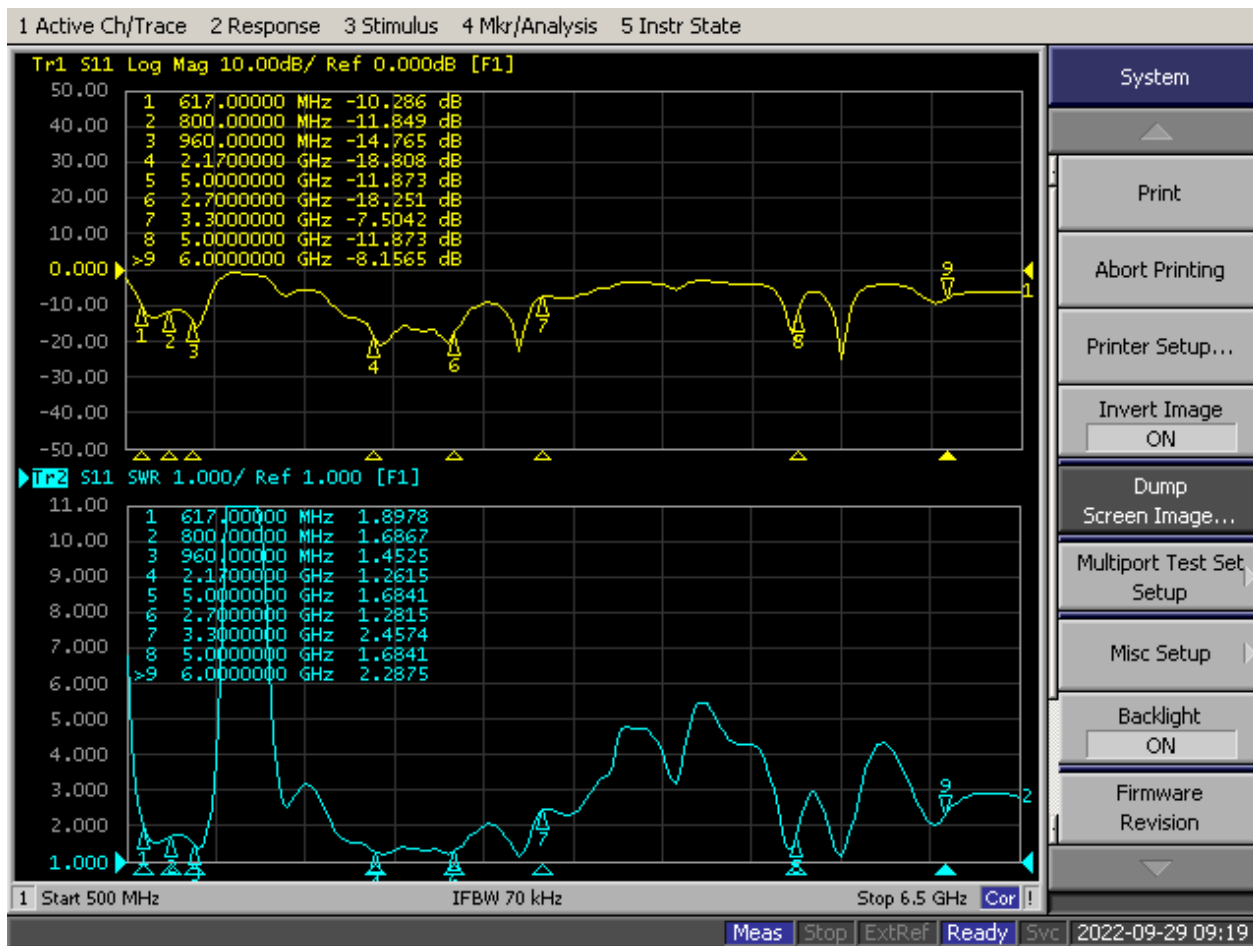


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2. Antenna - S Parameter Test Data

2.1. VSWR





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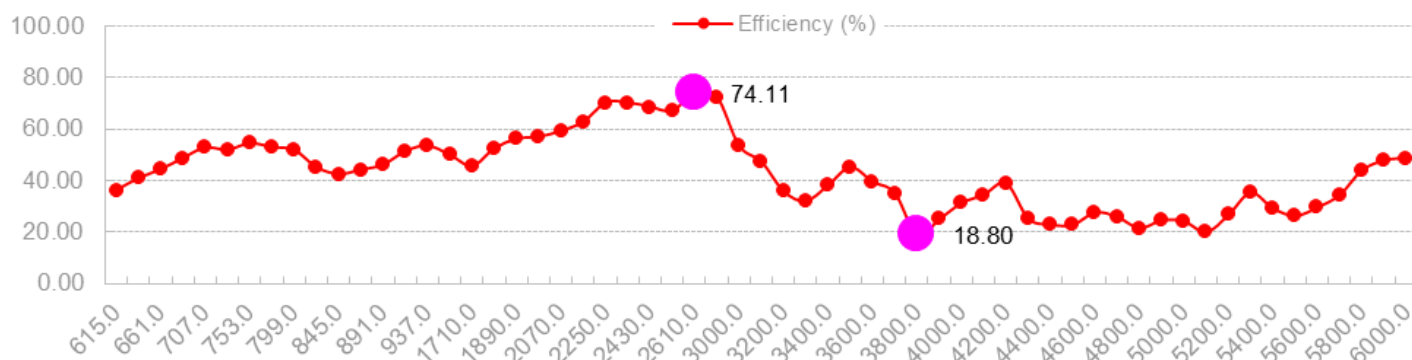
2.2 Total Efficiency & Gain:

Frequency (MHz)	615	638	661	684	707	730	753	776	799	822	845	868	891	914	937	960
Gain (dBi)	1.59	2.04	1.19	1.46	0.73	0.91	1.23	1.37	1.55	1.18	0.57	1.20	1.32	2.45	3.39	3.56
Efficiency (%)	36.28	40.93	44.39	48.72	52.77	51.87	54.43	52.96	51.81	45.17	42.51	44.19	46.12	51.38	53.45	49.92

Frequency (MHz)	1710	1800	1890	1980	2070	2160	2250	2340	2430	2520	2610	2700
Gain (dBi)	3.56	4.22	4.70	5.08	5.16	4.63	3.75	3.49	3.51	3.47	2.88	2.32
Efficiency (%)	45.67	52.46	56.16	56.95	59.20	62.75	70.06	70.15	68.53	66.97	74.11	72.29

Frequency (MHz)	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500
Gain (dBi)	0.65	1.34	1.03	1.13	0.87	0.68	-0.16	-0.80	-3.24	-1.05	0.27	0.85	1.63	1.02	1.08	0.98
Efficiency (%)	53.41	47.30	35.84	32.08	38.19	45.14	39.54	35.08	18.80	25.04	31.27	34.55	38.94	25.28	22.96	22.84

Frequency (MHz)	4600	4700	4800	4900	5000	5100	5200	5300	5400	5500	5600	5700	5800	5900	6000
Gain (dBi)	0.73	0.17	-1.11	-1.30	-1.23	-1.18	1.38	2.69	-0.34	-0.84	0.15	1.13	2.95	3.87	3.95
Efficiency (%)	27.65	25.92	21.57	24.64	24.21	20.05	26.76	35.27	29.21	26.32	29.59	34.47	43.94	47.77	48.69





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2.3 Radiation Pattern

	3D	2D-Horizontal	2D-Vertical
615MHz			
868MHz			
960MHz			



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	3D	2D-Horizontal	2D-Vertical
1710M Hz			
2250M Hz			
2700M Hz			



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	3D	2D-Horizontal	2D-Vertical
3000M Hz			
4500M Hz			
6000M Hz			



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3. Mechanical Drawing

