


1. Specification

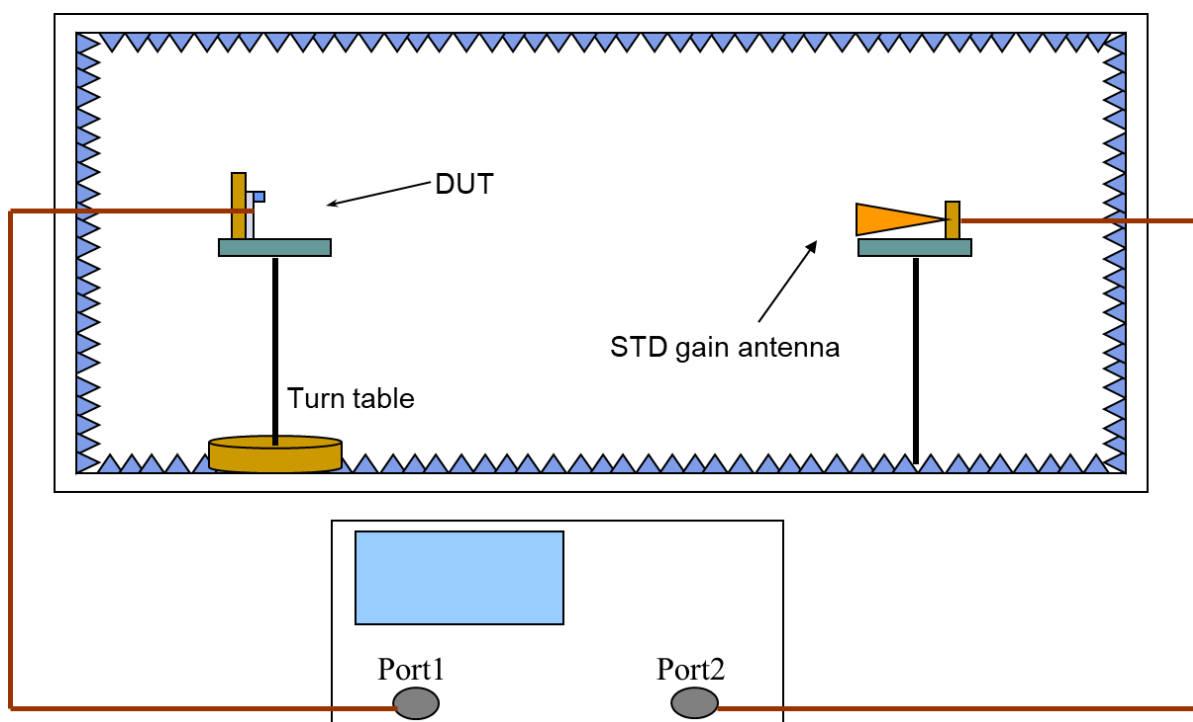
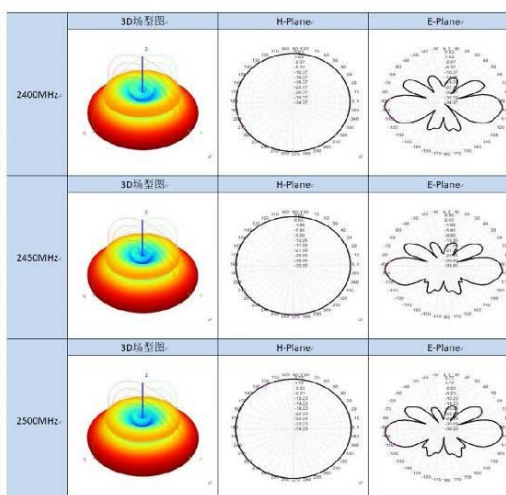
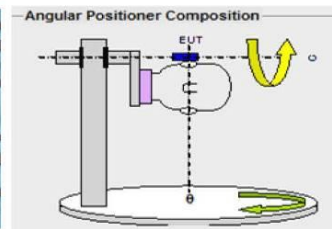
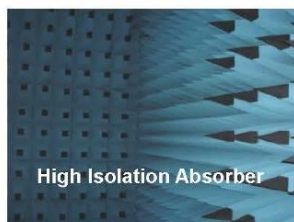
Sample Photo			
			
A. Electrical Characteristics			
Frequency	600-960MHz	1710-8500MHz	8500-10000MHz
S.W.R.	<4.0	<2.5	<3.0
Antenna Gain	1.6dBi	9dBi	7.6dBi
Polarization	Vertical	Vertical	Vertical
Horizontal Beamwidth	95° - 115°	20° - 360°	25° - 75°
Vertical Beamwidth	93° - 150°	50° - 180°	60° - 90°
Impedance	50Ohm	50Ohm	50Ohm
Max. Power	50W	50W	50W
B. Material & Mechanical Characteristics			
Connector Type	SMA connector		
Dimension	120*120*1.0mm		
Weight	0.035Kg		
C. Environmental			
Operation Temperature	- 40 °C ~ + 85 °C		
Storage Temperature	- 40 °C ~ + 85 °C		
Operation Humidity	< 95%		

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

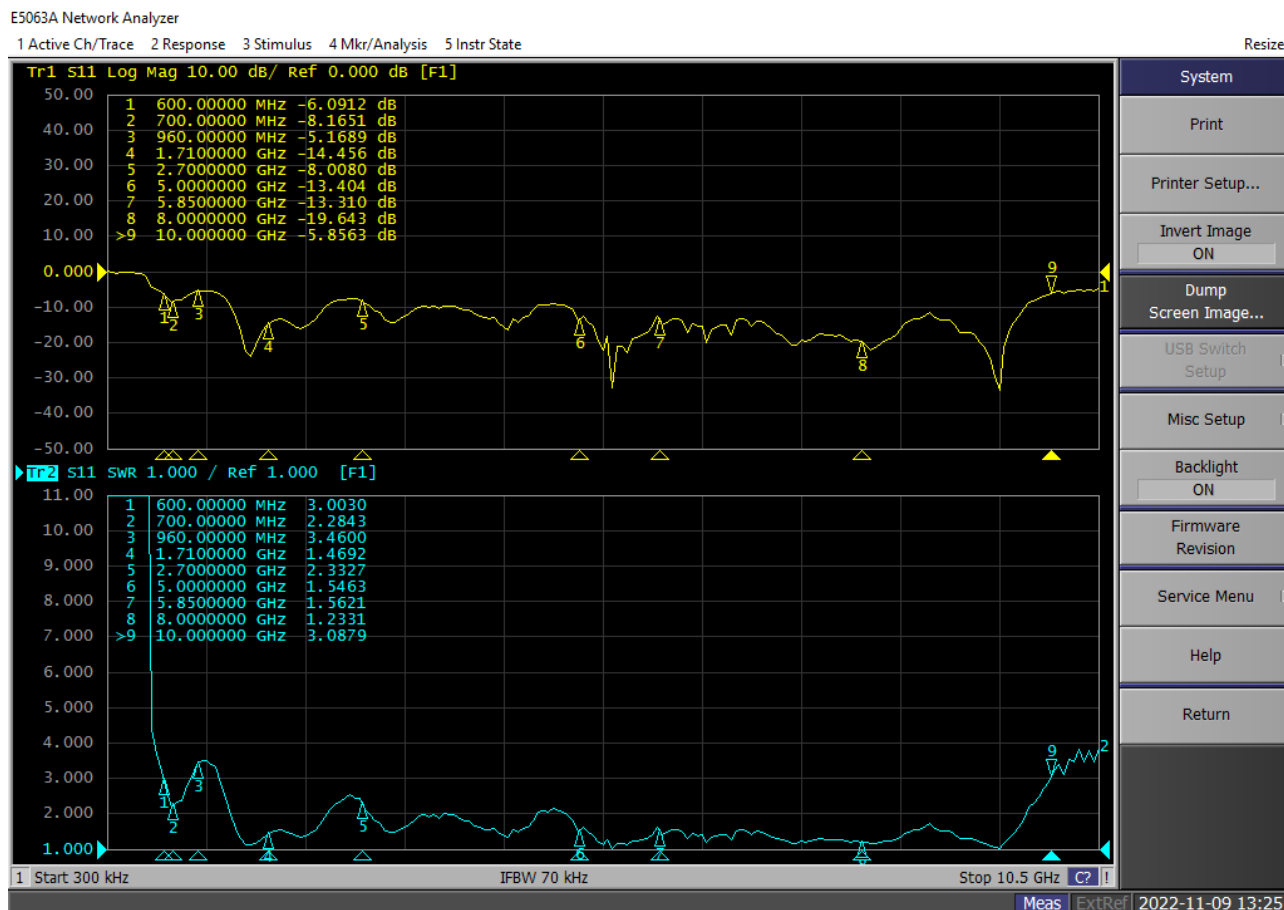




Product Number: BGS-AN10000-12012010G
Product Name: UWB PCB Antenna 0.6-10GHz 9dBi

2. Antenna - S Parameter Test Data

2.1 VSWR





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2.2 Efficiency & Gain:

600-7000MHz						
Frequency(MHz)	Gain(dBi)	Efficiency (%)		Frequency (MHz)	Gain (dBi)	Efficiency (%)
600.0	0.15	49.71		3400.0	7.40	78.16
630.0	0.18	44.32		3500.0	7.90	77.09
660.0	0.72	49.57		3600.0	7.63	80.42
690.0	0.79	54.08		3700.0	7.40	78.48
720.0	1.17	69.59		3800.0	7.84	83.95
750.0	1.58	78.87		3900.0	8.48	84.80
780.0	1.16	71.79		4000.0	8.02	87.32
810.0	0.92	60.78		4100.0	8.13	88.97
840.0	1.19	60.82		4200.0	8.01	88.79
870.0	0.50	57.04		4300.0	8.00	84.22
900.0	0.37	53.04		4400.0	7.78	82.22
930.0	0.03	57.47		4500.0	7.94	82.59
960.0	-0.48	51.24		4600.0	8.10	79.53
1000.0	0.55	60.06		4700.0	8.20	76.46
1100.0	-0.31	57.52		4800.0	8.21	77.22
1200.0	1.14	57.10		4900.0	8.58	83.48
1300.0	2.09	68.45		5000.0	8.53	82.04
1400.0	3.80	76.21		5100.0	8.77	85.42
1500.0	4.28	81.56		5200.0	8.28	84.01
1600.0	4.49	79.20		5300.0	8.69	87.05
1700.0	4.12	76.43		5400.0	9.07	86.73
1800.0	4.25	78.89		5500.0	8.65	84.92
1900.0	4.26	75.25		5600.0	8.32	82.68
2000.0	4.89	78.99		5700.0	7.99	81.88
2100.0	5.01	80.42		5800.0	7.93	78.43
2200.0	5.64	81.72		5900.0	7.58	76.62
2300.0	5.53	78.89		6000.0	7.07	75.29
2400.0	5.86	71.18		6100.0	6.49	71.49
2500.0	5.84	69.17		6200.0	6.70	73.13
2600.0	6.84	75.93		6300.0	6.76	73.18



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2700.0	7.12	80.92		6400.0	6.11	68.60
2800.0	7.40	84.96		6500.0	6.00	71.08
2900.0	7.40	87.84		6600.0	5.42	67.12
3000.0	7.48	86.40		6700.0	5.86	69.74
3100.0	7.50	84.21		6800.0	5.70	67.23
3200.0	7.43	80.46		6900.0	5.56	72.95
3300.0	6.93	74.90		7000.0	5.57	69.93

7100-10000MHz

Frequency(MHz)	Gain(dBi)	Efficiency (%)		Frequency (MHz)	Gain (dBi)	Efficiency (%)
7100.0	5.25	63.23				
7200.0	5.56	64.31				
7300.0	5.71	62.45				
7400.0	6.43	66.84				
7500.0	5.81	59.10				
7600.0	5.33	56.39				
7700.0	4.99	53.14				
7800.0	4.95	56.46				
7900.0	5.16	55.72				
8000.0	4.62	51.67				
8100.0	5.33	50.17				
8200.0	6.04	51.34				
8300.0	6.04	57.25				
8400.0	6.32	60.62				
8600.0	7.13	65.62				
8700.0	7.59	70.96				
8800.0	7.66	74.35				
8900.0	7.72	78.68				
9000.0	6.71	80.12				
9100.0	6.60	81.95				
9200.0	6.09	78.94				
9300.0	6.08	81.56				
9400.0	5.64	83.61				
9500.0	5.11	82.17				
9600.0	5.76	84.16				

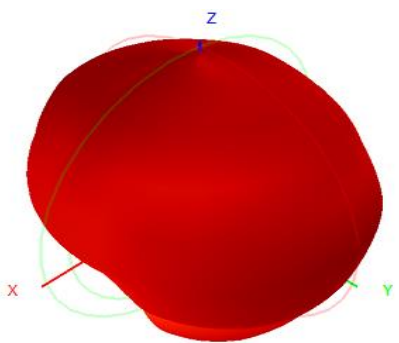
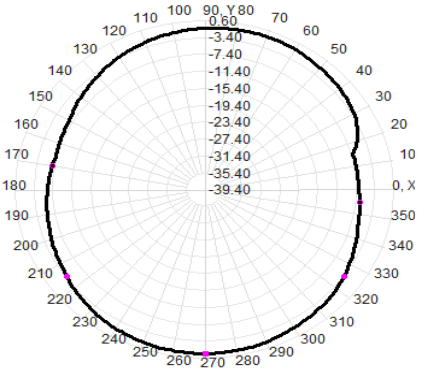
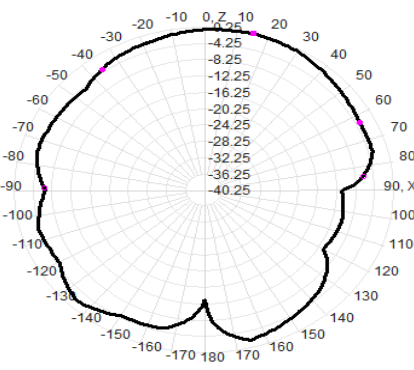
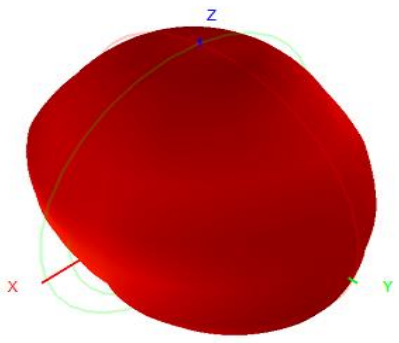
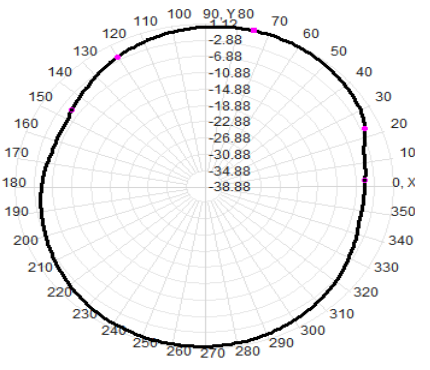
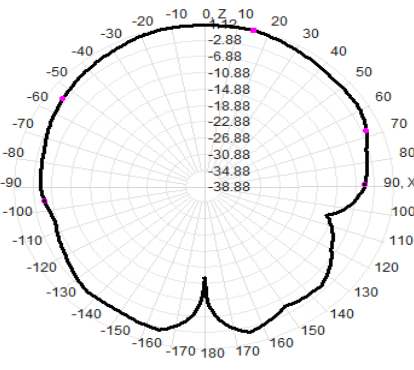
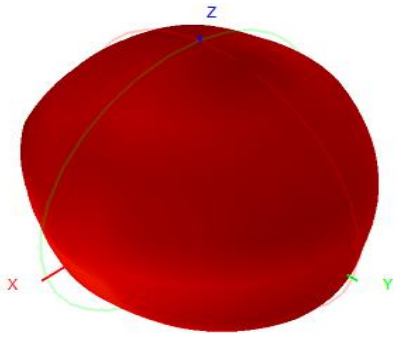
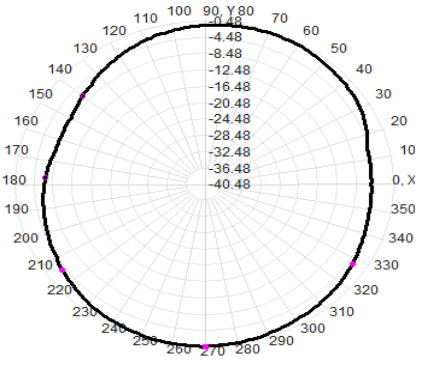
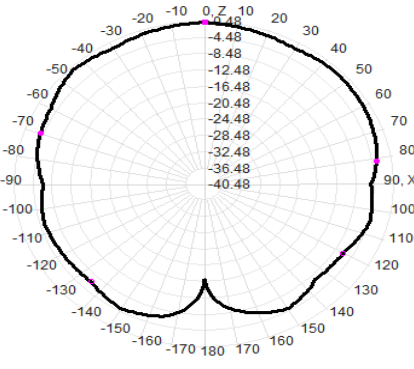


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9700.0	5.32	79.25			
9800.0	5.54	79.04			
9900.0	4.84	63.94			
10000.0	4.54	64.21			

2.3 Radiation Pattern

	3D	Horizontal	Vertical
600MHz			
780MHz			
960MHz			



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	3D	Horizontal	Vertical
1700MHz			
2700MHz			
5000MHz			



Product Number: BGS-AN10000-12012010G
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	3D	Horizontal	Vertical
6200MHz			
8500MHz			
10000MHz			



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3. Mechanical Drawing

