


1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	1575±5MHz
Peak Gain	15±2dBi@Fc
Impedance	50Ohm
Polarization	RHCP
Axial Ratio	≤5 dB
F/B	>13
Azimuth Coverage	360°
Phase-center accuracy	≤2.0mm
B. LNA and Filter Electrical Properties	
LNA Gain	32±2dBi(Typ.@25°C)
Group Delay variation	≤5ns
Noise Figure	≤2.7dB@25°C, Typ.(Pre-filtered)
In-Band Flatness (dB)	< 1 (1575.42MHz±1MHz)
Out-of-Band Suppression (dBc)	12(1575±30MHz)
Output VSWR	≤2.5 : 1Typ. 3.5 : 1 Max
Operation Voltage	3.3-6 V DC
Operation Current	≤45mA



Product Number: BGS-GPS1575-96257W

Product Name: GPS Timing Antenna

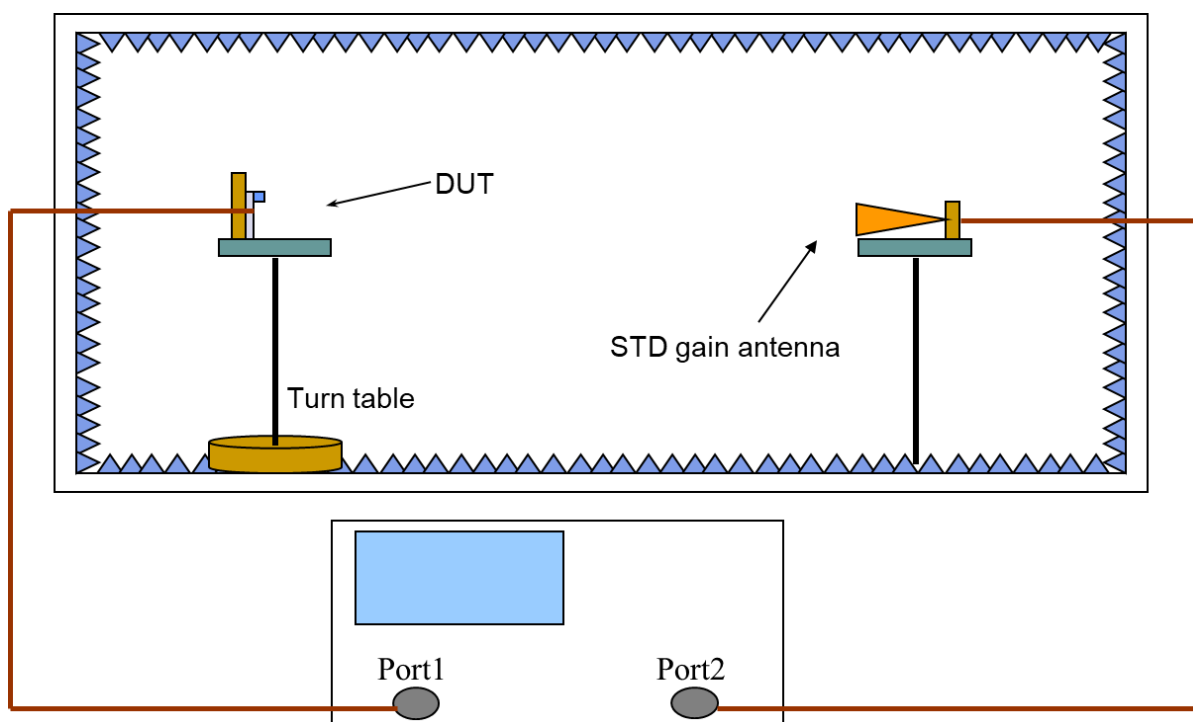
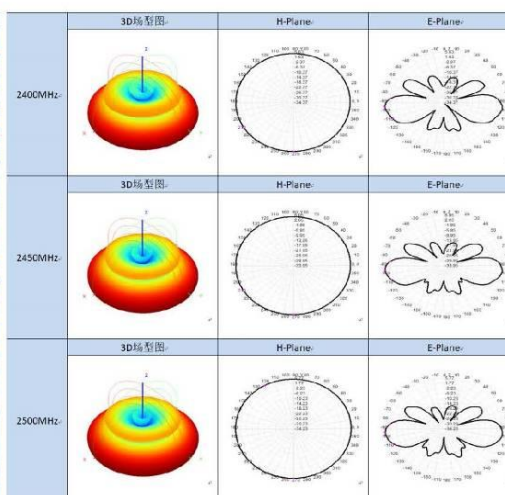
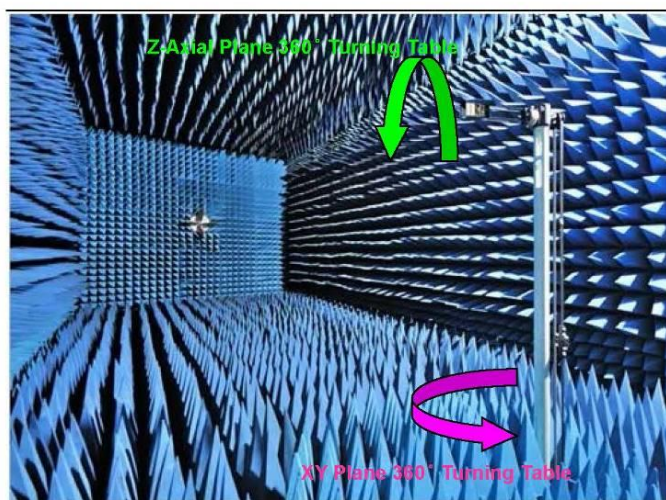
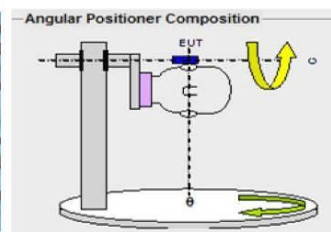
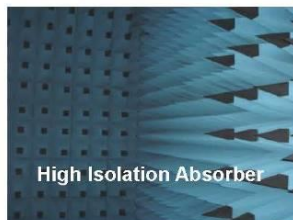
C. Material & Mechanical Characteristics	
Connector Type	N connector
Dimension	Φ 96x257 ± 3mm
Radome material	ABS
Waterproof	IP67
Weight	0.75Kg
C. Environmental	
Operation Temperature	- 40 °C ~ + 85 °C
Storage Temperature	- 40 °C ~ + 85 °C

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

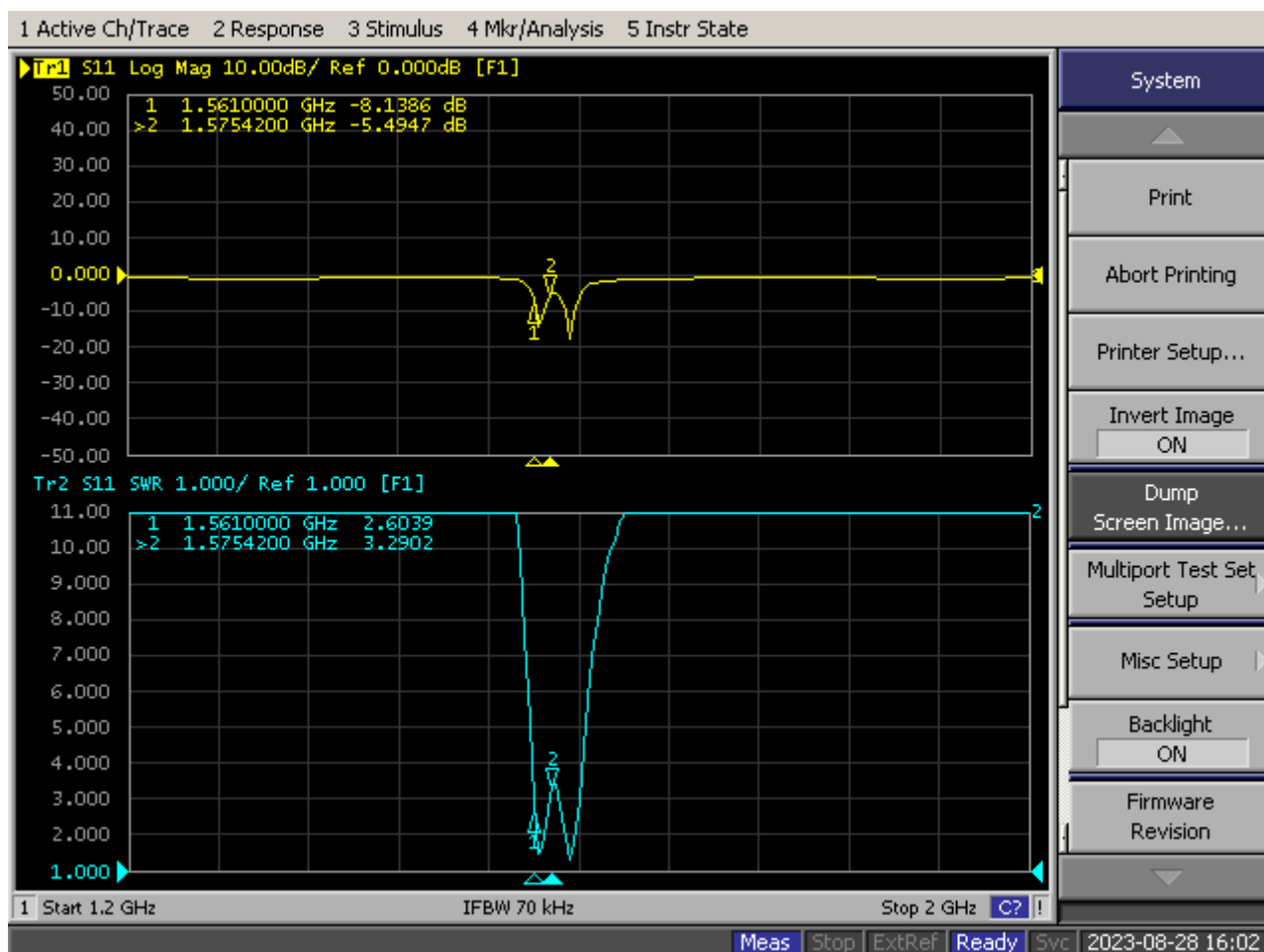




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2. Antenna - S Parameter Test Data

2.1 VSWR





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2.2 LNA Gain:

Frequency (MHz)	Gain (dBi)
1570	31.8
1571	31.3
1572	31.5
1573	31.7
1574	31.8
1575	31.9
1576	31.8
1577	31.5
1578	32.1
1579	32.3
1580	32.6



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2.3 Radiation Pattern

	3D	2D-Horizontal	2D-Vertical
1570M Hz			
1575M Hz			
1580M Hz			



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3. Mechanical Drawing

