



## Product Specification

### A. Electrical Characteristic

Frequency	6000-7000MHz
VSWR	< 1.6
Efficiency	≈85%
Peak Gain	3dBi
Impedance	50 Ohm
Polarization	Linear Linear
out-of-roundness	±1

### B. Material & Mechanical

Cable Type	RF 1.37
Connector Type	IP EX
Dimension	Total length of 12.4cm
Weight	0.005Kg

### C. Environmental

Operation Temperature	- 40°C ~ +75 °C
Storage Temperature	- 45°C~+80°C
Humidity	≤95%

### D. photo





Reliability test Reliability Test

project	Test condition	specifications
Storage environment	Test the temperature, humidity, and air pressure without specifying them as follows: 1. The temperature is -45 °C~+85 °C 2. Relative humidity is 45% -85% 3. The air pressure is between 86kpa and 106kpa	Normal electrical and mechanical performance
High and low temperature test	Perform 5 cycles between 80 °C and -40 °C, then return to normal Under conditions for 1-2 hours, inspect the appearance quality.	The size should meet the regulations and be full  Satisfied with mechanical and electrical performance
Resistant to constant humidity and heat experiment	Relative humidity of $95 \pm 3\%$ , test temperature: 40 °C. After continuous action for 2 hours, the electrical performance of the test piece shall be measured within 5 minutes after removal. The test piece shall be inspected for appearance quality under normal conditions for 1-2 hours	The size should meet the regulations and be full Satisfied with mechanical and electrical performance
vibration test	Vibration frequency range 10-55Hz, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/s, frequency sweep cycles: 30 times	Normal electrical and mechanical performance
Drop test	Falling from a height of 1m	Normal electrical and mechanical performance
Pulling force test	Use a push-pull force tester to test its load-bearing capacity: $\geq 10\text{N}$	Normal electrical and mechanical performance

Voltage withstand	1. Insulation spark voltage 1.5KV 2. Spark voltage of protective sheath 1.5KV 3. Insulation to sheath withstand voltage of 0.5KV		Normal electrical and mechanical performance
Attenuation value	2.0(nominal) 2.9(nominal) 3.2(nominal) 3.7(nominal) 4.3(nominal) 4.8(nominal) 5.3(nominal)	1GHz 2GHz 2.4GHz 3.0GHz 4.0GHz 5.0GHz 6.0GHz	3.3dB /m (at 20°C)

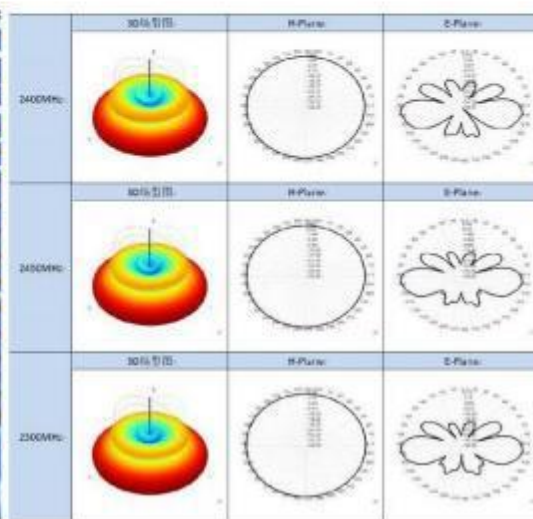
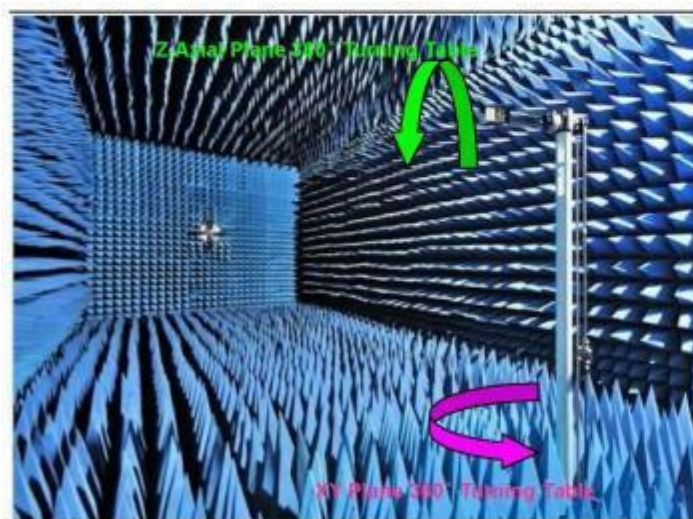
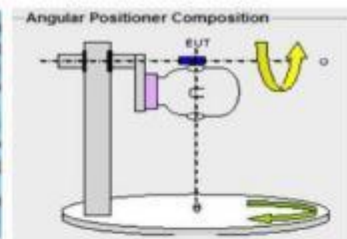
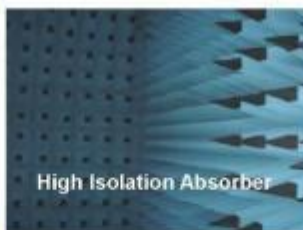


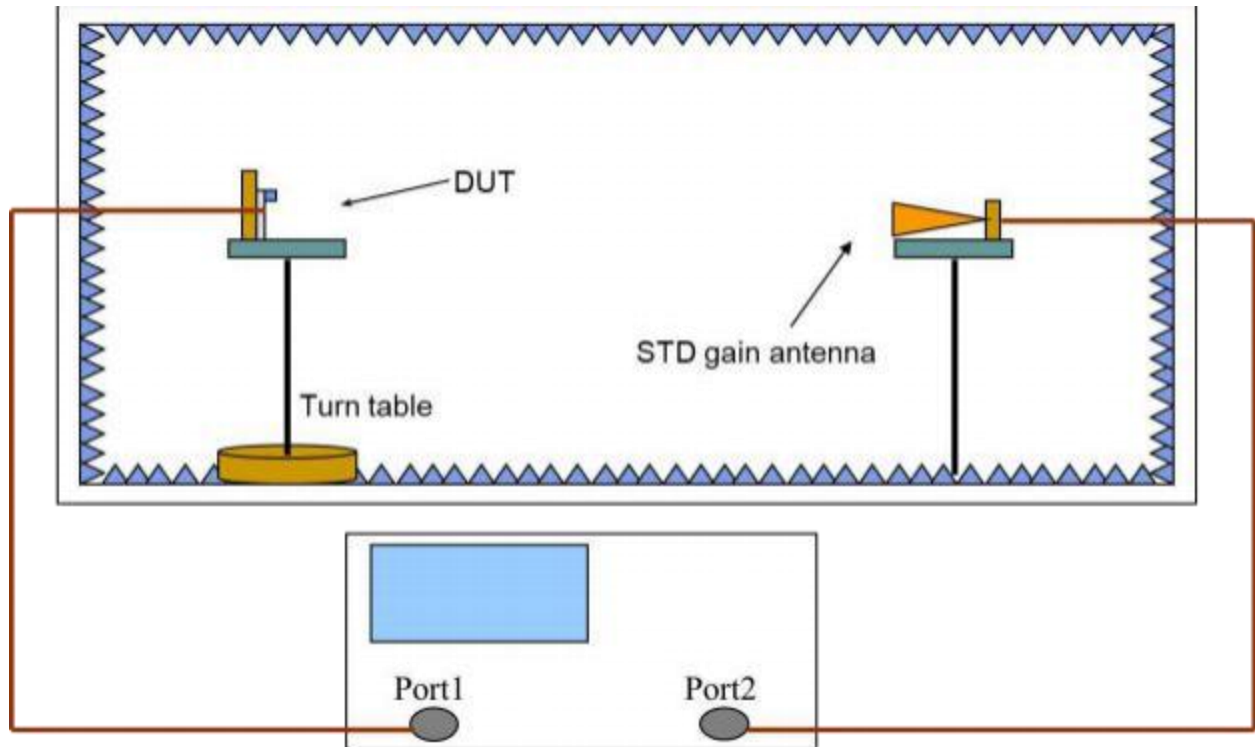
## Test Equipment & Conditions

### 1、Network Analyzers: Keysight E5071C

### 2、3D Chamber Test System

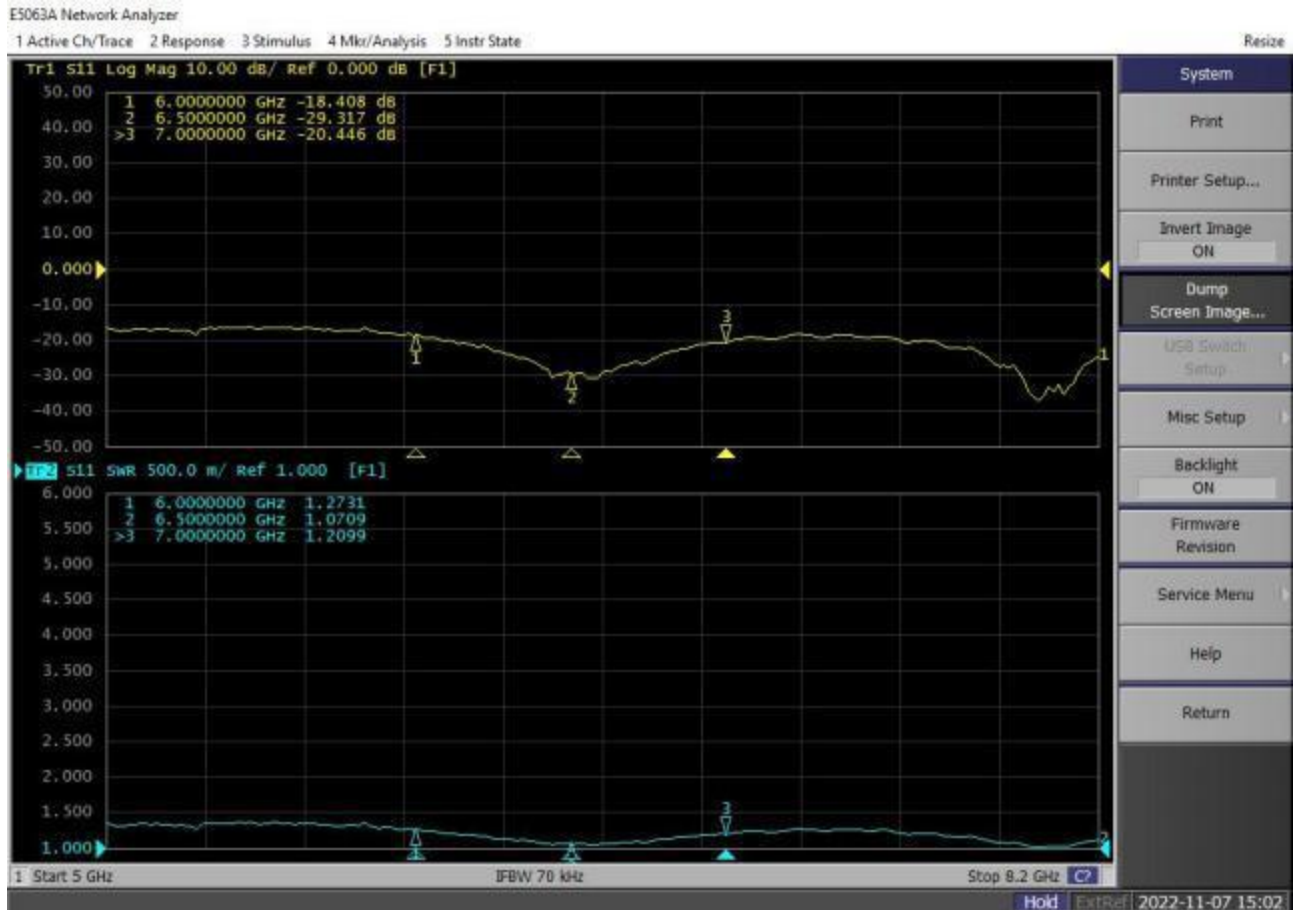
.Chamber Size: 9 x 5 x 4 m<sup>3</sup>  
.Freq. Range: 0.4 ~ 18.0 GHz  
.Double Ridge Horn Antenna  
.VNA: Agilent E5071C  
.3D Turning Table and Positioner  
.ADT Solution 3D Testing Software







## VSWR

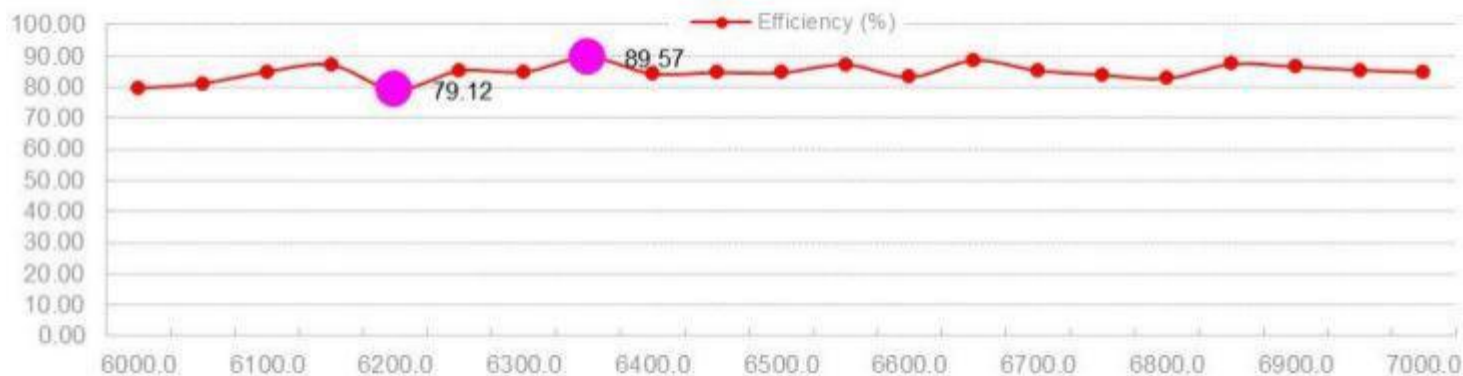




### Total Efficiency & Gain:

Frequency (MHz )	6000.0	6050.0	6100.0	6150.0	6200.0	6250.0	6300.0	6350.0	6400.0	6450.0	6500.0
Gain (dBi )	2.39	2.33	2.55	2.72	2.52	2.53	2.34	2.57	2.30	2.13	2.10
Efficiency (%)	79.62	81.17	84.94	87.18	79.12	85.24	84.86	89.57	84.31	84.70	84.59

Frequency (MHz )	6550.0	6600.0	6650.0	6700.0	6750.0	6800.0	6850.0	6900.0	6950.0	7000.0
Gain (dBi )	2.27	2.17	2.37	2.11	2.04	2.06	2.54	2.68	2.63	2.51
Efficiency (%)	87.26	83.20	88.59	85.31	83.90	82.78	87.40	86.52	85.42	84.65







## Field diagram

	3D	2D-Horizontal plane	2D-vertical face
6000MHZ			
6500MHZ			
7000MHZ			





## out-of-roundness

