

东莞市辉益电子有限公司

DongGuan HuiYi Electronics Co., LTD

客户/Customer: _____

客户料号/Customer P/N: _____

规格书

Specification

编制/ Signed by: _____

广东省东莞市长安镇新岗路 23 号

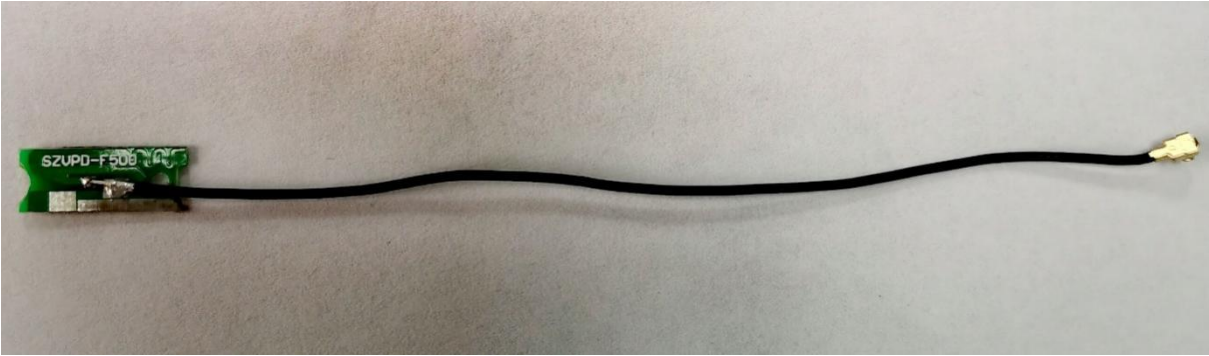
编制日期/ Date: _____

No. 23, XinGang Road, Chang An, Dongguan City, Guangdong Province

Index:

- 1. Specification / Page 3**
- 2. Characteristics and Reliability Test / Page 4**
- 3. Antenna - S Parameter Test Data / Page 5**
- 4. Antenna - Radiation Pattern Test Data / Page 6**
- 5. Antenna Test method / Page 7**

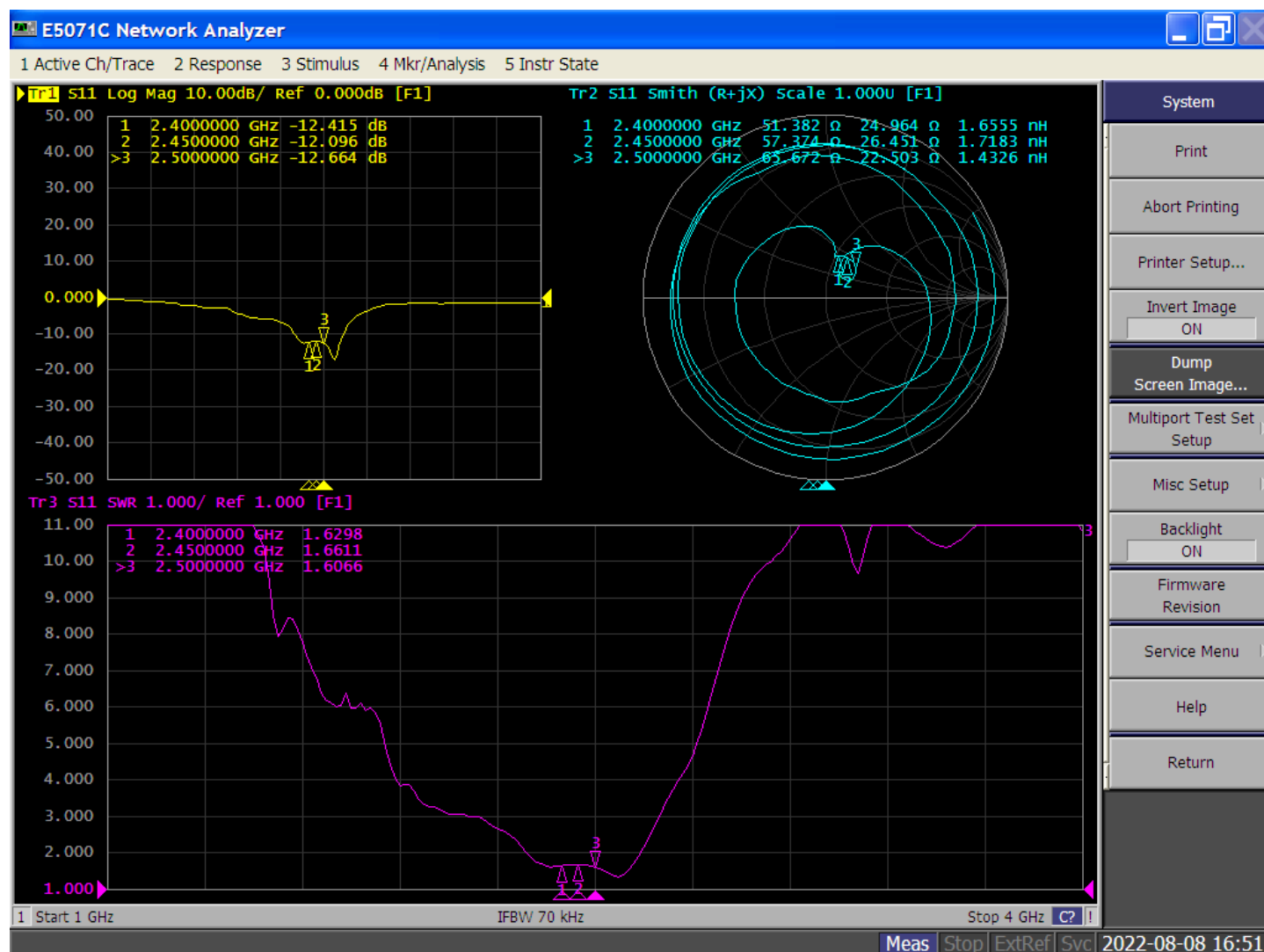
1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	<= 2.0
Efficiency	> 50%
Polarization	Linear
Impedance	50 Ohm
Antenna Type	PIFA
B. Material & Mechanical Characteristics	
Material of Radiator	PCB
Cable Type	O.D. 1.13 mm (Black) 95mm
Connector Type	Mini1 Connector for O.D. 1.13 mm Coaxial Cable
Pull Test	>= 1.0 Kg
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Model Number:	NB1807-113G-095BX
Product Name	BT Antenna

2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: 0.03 inch (0.76mm); Freq: 10 to 55 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	Height: 1.5 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	MIL-STD-202G, 210F, cond. A Solder iron: 350±10°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	MIL-STD-202G, 211A, cond. A Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	MIL-STD-202G, 101E, cond. B Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	MIL-STD-202G, 103B, cond. B Temp: 40°C; RH: >= 95%; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	MIL-STD-202G, 108A, cond. A Temp: 85°C; Time: 96 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%

3. Antenna - S Parameter Test Data



Remark:

Test data is based on casing matching test, it's different from the single product test data.

4. Antenna - Radiation Pattern Test Data

See attached files

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

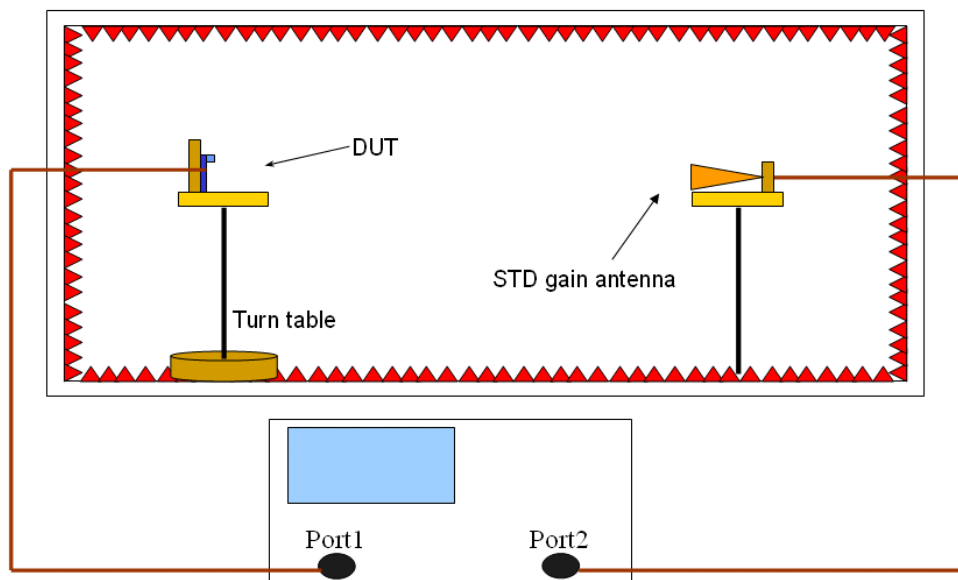
Quiet Zone: 600mm @1 GHz

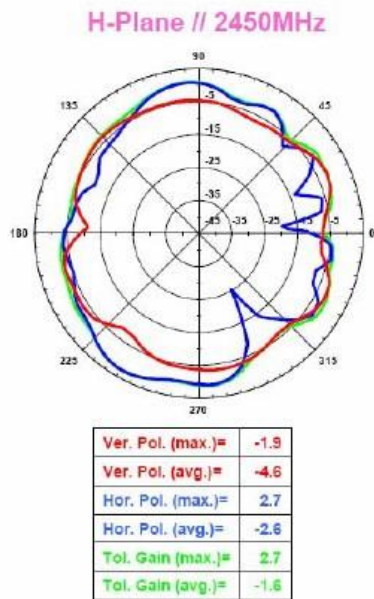
Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

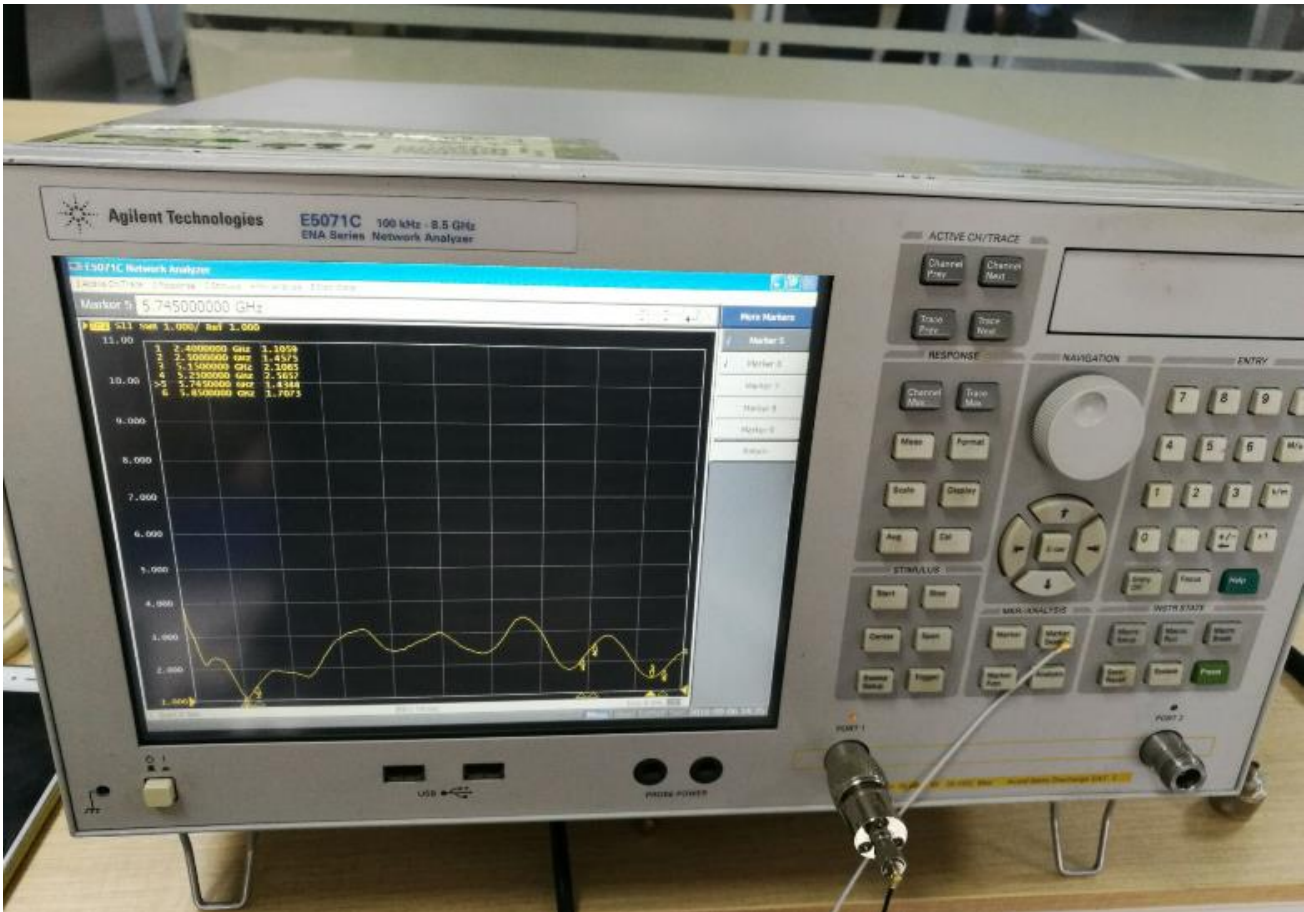
Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna





5. Antenna Test method



Technical parameters reference range:

Frequency	驻波比（V.S.W.R）范围
2.4GHz	<2.0
2.45GHz	<2.0
2.5GHz	<2.5