

供应商:

东莞市腾祥电子有限公司

Tengxiang Technology, Inc

地 址: 东莞市 长安镇 沙头沙涌路53号

承 認 書

SPECIFICATION FOR APPROVAL

腾祥料號 SOREDE P/N	AN2450-SNA235970
品 名 / 規 格 DESCRIPTION	5G金属片天线
腾祥送樣編號 SOREDE DWG#	
送样日期 SAMPLE DATE	2022. 04. 13



MANUFACTURER/制造商			
APPROVED BY 核 准	Q.C.DEPT. 品 管	CHECKED BY 核 准	TESTED BY 檢 測
韦佳	李群	胡超	路婷

客户:

深圳市视壮科技有限公司

视 壮 料 號 CUSTOMER P/N	
视 壮 名 稱 CUSTOMER	
品 名 / 規 格 DESCRIPTION	

CUSTOMER APPROVAL/客户审核			
APPROVED BY 核 准	Q.C.DEPT. 品 管	CHECKED BY 审核	TESTED BY 檢 測

Product Number: AN2450-SNA235970

Product Name: 5G Antenna

1. Specification

Sample Photo



A. Electrical Characteristics

Frequency	2400-2500MHz / 5150-5850 MHz
V.S.W.R.	≤ 2.0
Antenna Gain	1.96 dBi / 1.66 dBi
Polarization	Linear
Impedance	50 Ohm

B. Material & Mechanical Characteristics

Material of Radiator	CU
Material of Plastic	/
Cable Type	/
Connector Type	/

C. Environmental

Operation Temperature	- 40 °C ~ +80 °C
Storage Temperature	- 40 °C ~ + 80 °C

2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	V.S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna	Set DUT on Antenna Chamber; make individual	Directive DUT specification

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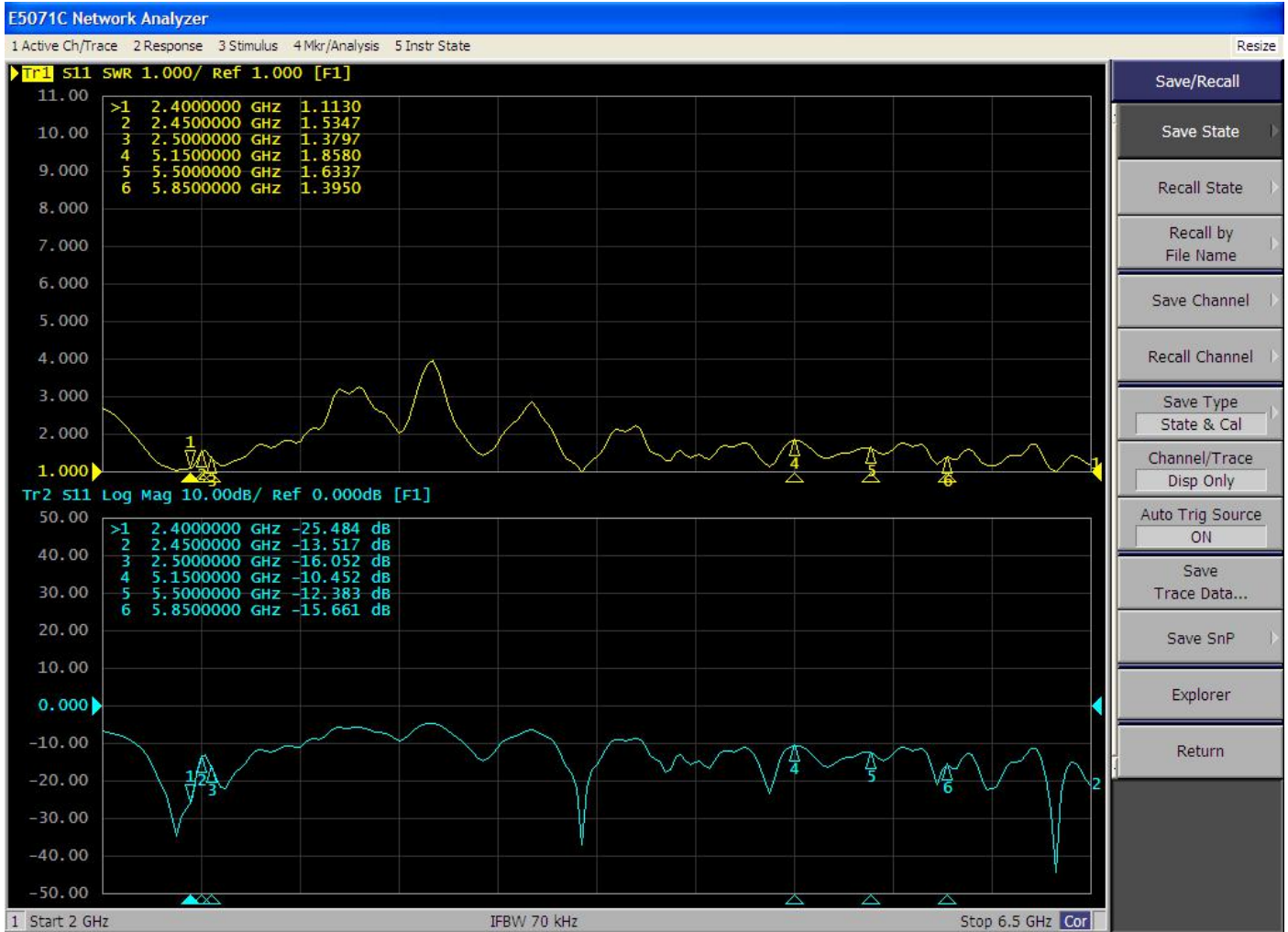
Product Name: 5G Antenna

	Gain	calibration to test	
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	Terminal- Torque Test	MIL-STD-202G, 211A, cond. E Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	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: 24 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: 24 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: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2015/863/EU

3. Antenna - S Parameter Test Data

Product Number: AN2450-SNA235970

Product Name: 5G Antenna

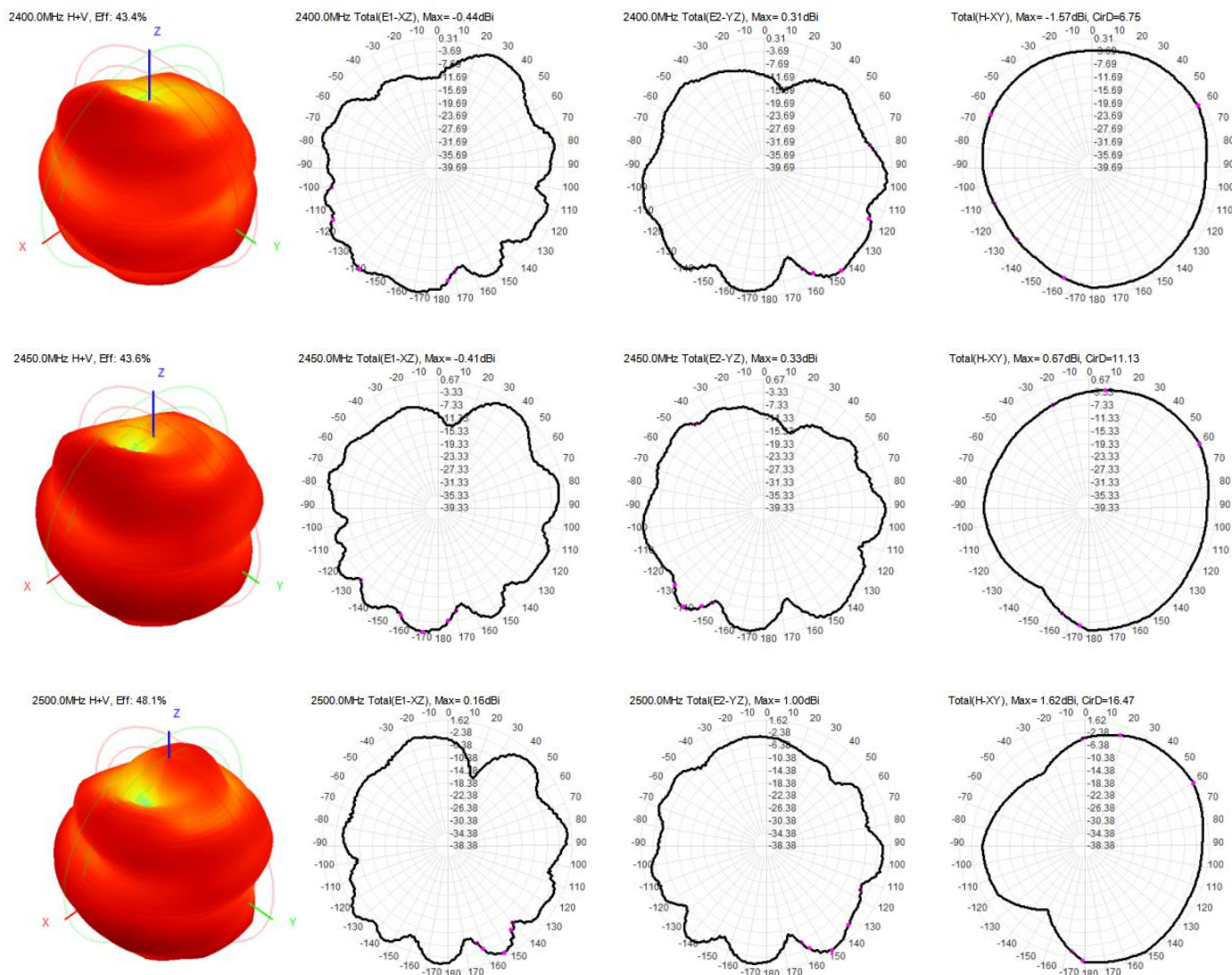


4. Antenna - Radiation Pattern Test Data

Frequency (MHz)	2400.0	2450.0	2500.0	5150.0	5500.0	5850.0
Efficiency (%)	1.32	1.89	1.96	1.66	1.48	1.49
Gain (dBi)	43.43	43.63	48.07	50.75	52.44	52.25

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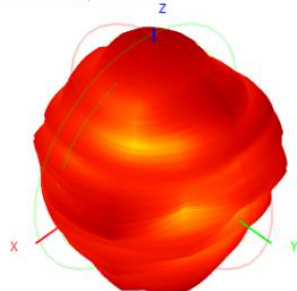
Product Name: 5G Antenna



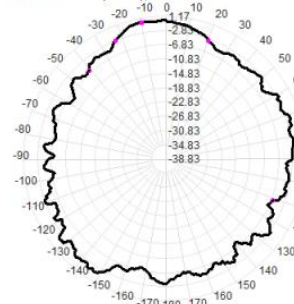
Product Number: AN2450-SNA235970

Product Name: 5G Antenna

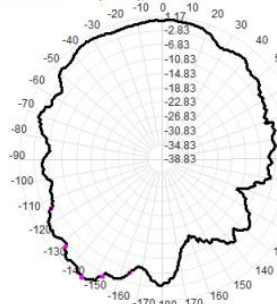
5150.0MHz H+V, Eff: 40.8%



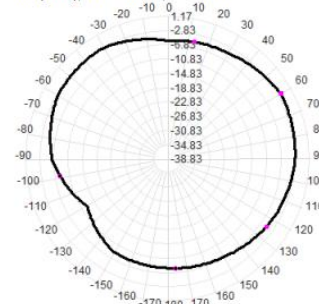
5150.0MHz Total(E1-XZ), Max= 0.04dBi



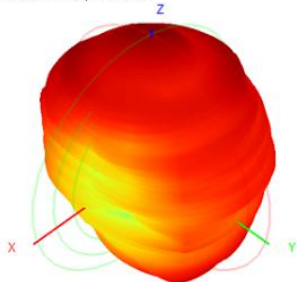
5150.0MHz Total(E2-YZ), Max= 1.17dBi



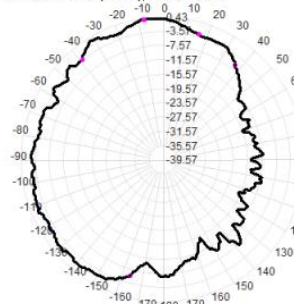
Total(H-XY), Max= -2.21dBi, CirD=10.47



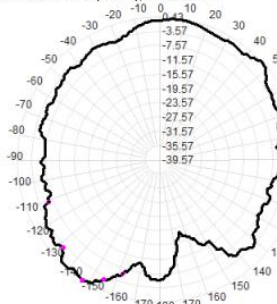
5500.0MHz H+V, Eff: 44.4%



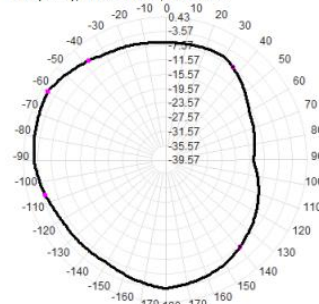
5500.0MHz Total(E1-XZ), Max= 0.09dBi



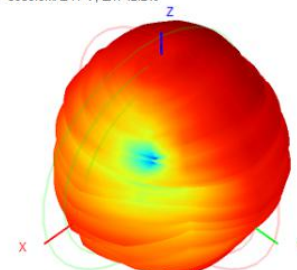
5500.0MHz Total(E2-YZ), Max= 0.43dBi



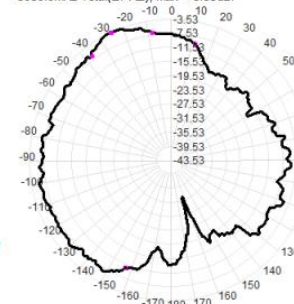
Total(H-XY), Max= -1.43dBi, CirD=13.48



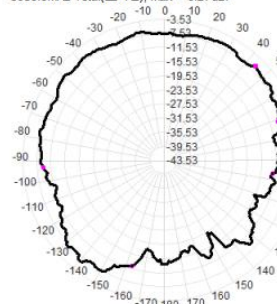
5850.0MHz H+V, Eff: 42.2%



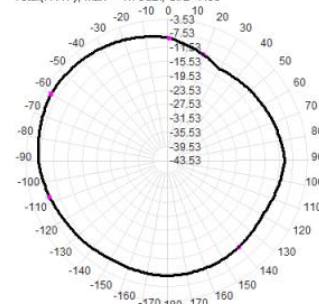
5850.0MHz Total(E1-XZ), Max= -3.53dBi



5850.0MHz Total(E2-YZ), Max= -6.27dBi



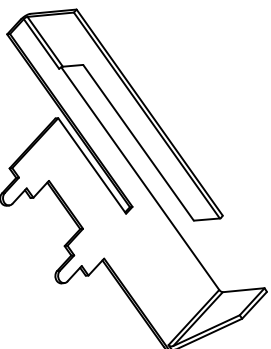
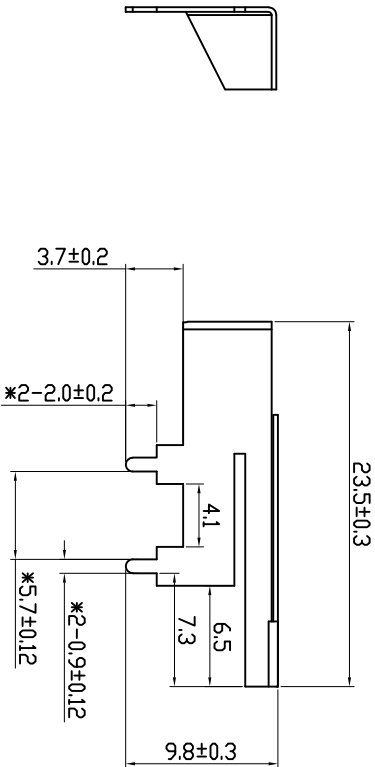
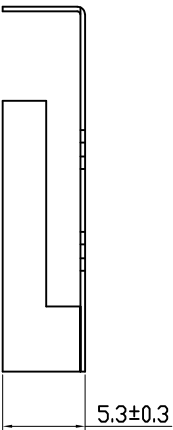
Total(H-XY), Max= -1.70dBi, CirD=7.99



5. Mechanical Drawing (See attached files)

1	2	3	4	5	6	7	8
HF	☐						
RoHS	☒						
REACH	☐						
CONFIDENTIAL							

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



- 备注:mm
- 1.材质: 洋白铜 T=0.3mm
 - 2.表面处理: /
 - 3.尺寸: 带*为重点尺寸;带Cpk尺寸需做制程能力管控(≥ 1.33)
 - 4.公差: 未标注公差请参照标准公差.
 - 5.毛边一致向内.

Tengxiang Electronics Co., Ltd.							
TITLE: 2.4/5.0G金属片天线							
PART NO.: AN2450-SNA235970				CUSTOMER P/N: /			
APP BY	CHK BY	RF BY	DES BY		Tolerance		
			LRK				
			2022.04.01	UNITS: mm	X.X	±0.3	
				SCALE: 1/1	X.XX	±0.1	
				REVISION: A	X ^o	±1	