



Tengxiang Technology.Inc

Product Number: TX-AN2400-9301RS-BN

Product Name: Antenna

Specification For Approval

Customer : MS _____

Customer P/N : / _____

Tengxiang P/N : TX-AN2400-9301RS-BN _____

Description : Antenna _____

Tengxiang Checked By:	Customer Approved By:



Tengxiang Technology.Inc

SHA QU NO. 8 Industrial Sha-Tou Administration Zone, Chang-An Town, Dong-Guan City, Guangdong Province, China

TEL:86-769-81873082 FAX:86-769-82663788

<http://www.tenxiang.cn>

Product Number: TX-AN2400-9301RS-BN

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Antenna Gain	5.0dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	CU
Material of Plastic	Body: TPE Hinge: ABS Holder: ABS
Cable Type	RG-178
Connector Type	SMA Male Reverse
Connector Pull Test	≥ 5 Kg
Connector Torque Test	300 ~ 1000 g.cm
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C



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2. Characteristics and Reliability Test

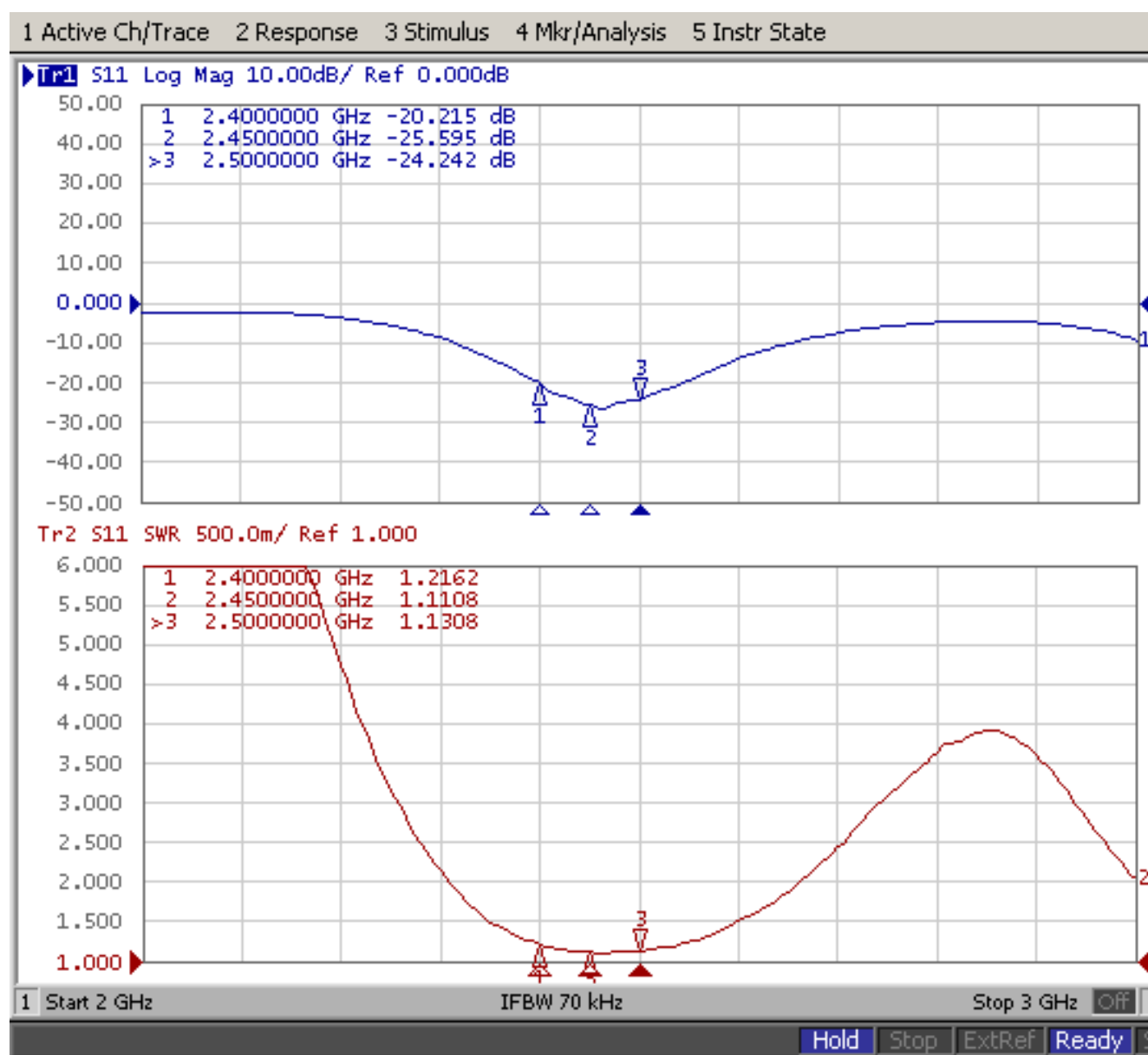
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: 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	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: 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

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			2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2002/95/EC
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

3. Antenna - S Parameter Test Data



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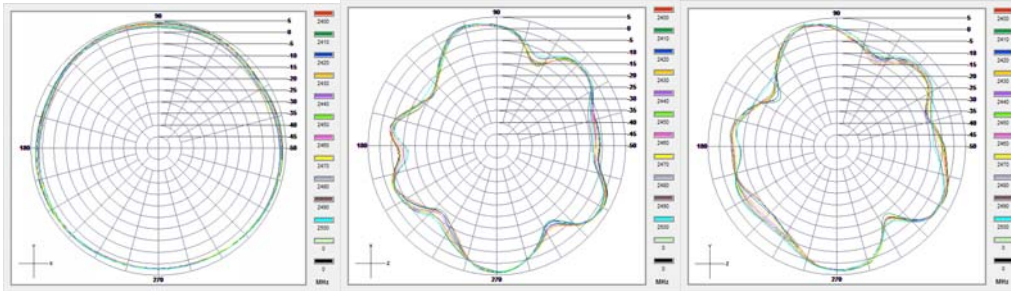
Product Name: Antenna

4. Antenna - Radiation Pattern Test Data

XY

XZ

YZ

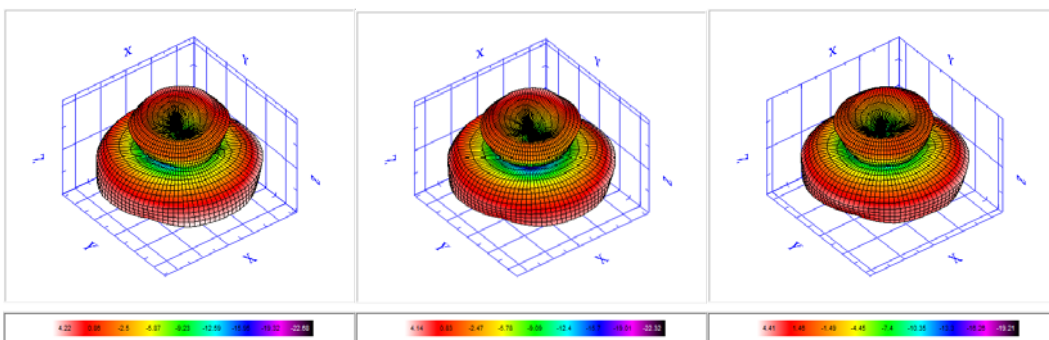


Frequency	2400	2450	2500
TRP (dBm)	-0.85	-1.03	-0.71
Peak EIRP (dBm)	4.22	4.14	4.41
NHPRP +/- 45 (degree)	-1.46	-1.69	-1.28
NHPRP +/- 30 (degree)	-2.02	-2.3	-1.99
E-Theta Peak Gain (dBi)	-10.67	-9.48	-11.57
E-Phi Peak Gain (dBi)	4.2	4.14	4.41
E-Total Peak Gain (dBi)	4.22	4.14	4.41
Directivity (dBi)	5.07	5.17	5.12
Efficiency (%)	82.22	78.85	84.93

2400MHZ

2450MHZ

2500MHZ



5. Mechanical Drawing

See attached files

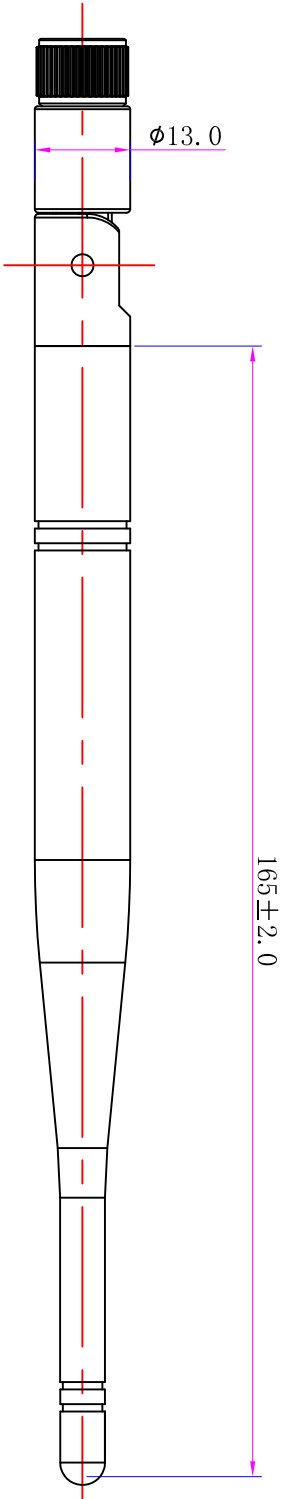
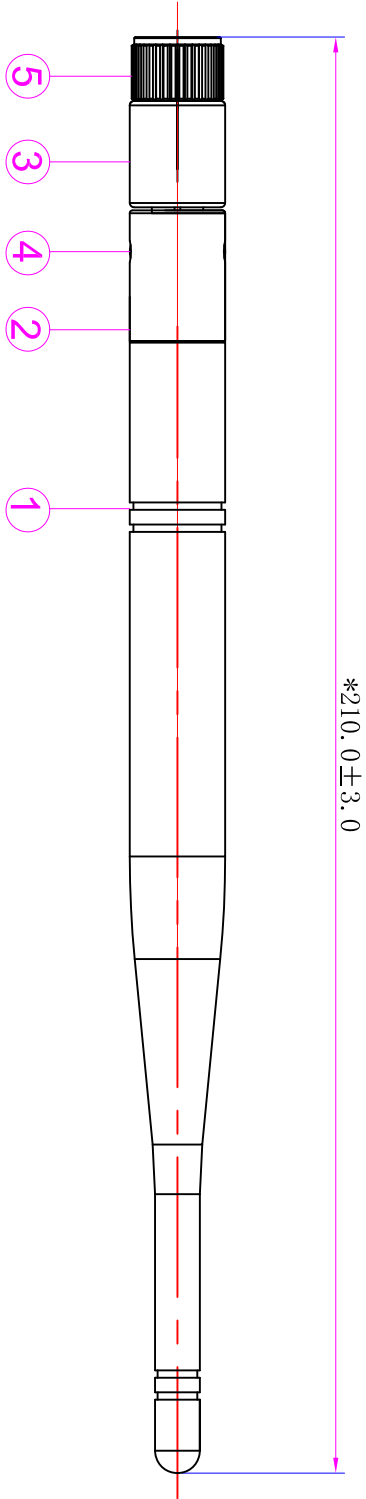
6. Material Description and RoHS Test Report

See attached files

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

RoHS

Compatible



5	SMA414-ZC8MRANT	SMA Male Reverse	Cu	Electrodeposition	1
4	R-AN03-514P	Pin	POM	Black	2
3	R-AN03-T01B	Body1	PA+ABS	Black	1
2	AN9201-02B	Body2	PA+ABS	Black	1
1	AN9201-04B	Body	TPE	Black	1
No.	Part Number	Description	Material	Finished	Qty

TX^R

dg tengxiang Technology Inc.

TITLE:2400~2500 MHz Antenna

PART NO.:TX-AN2400-9301RS-BN

DWG NAME:TX-AN2400-9301RS-BN.dwg

APPROVED BY

HOPE

2015.09.15

CHECKED BY

TONLY

2015.09.15

DESIGNED BY

HIUHIU

2015.09.15



UNIT: mm

SCALE: 1/1

REVISION: A

Tolerance

X.X ±0.3

XXX ±0.1

X° ±3°

產品包裝規範

PACKING CRITERION

Date: 2015.09.15

Page: 1 of 1

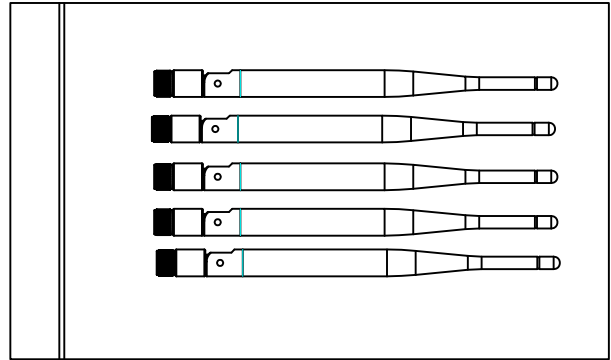
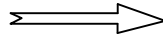
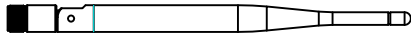
Part Number :TX- AN2400-9301RS-BN

Revision : A

Name: 2.4GHz 5dBi Antenna

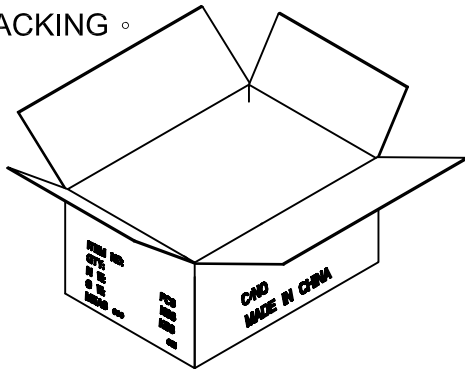
Customer : ALL

1.Enter the frame °



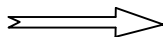
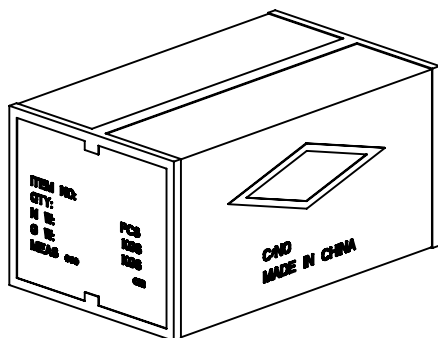
SIZE:150.0x250.0mm
20PCS/BAG

2.PACKING °



SIZE:44.0x30.0x28.0cm
400PCS/BOX

3. SEALING °

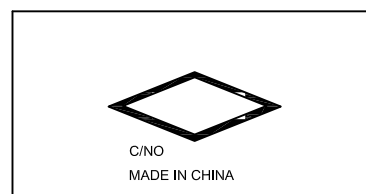


SIDE

FRONT

Lable

ITEM NO: ###
QTY: ### PCS
N W: ### KGS
G W: ### KGS
MEAS 44,0x30,0x28,0 cm



APPROVED BY : _____ CHECKED BY : _____ DESIGNED BY : _____ YD