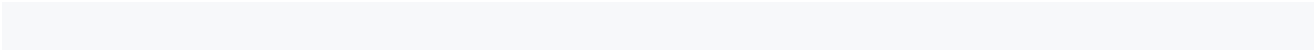


CHENGDU ASHINING TECHNOLOGY CO.,LTD

ZC P/N: TX2G4-JZD016

Description_: 2.4G Antenna



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1. Specification

A. Electrical Characteristics	
Frequency	2400-2500MHz
V.S.W.R.	<= 2.0
ReTurnLoss(dB)	-10 dB Max
Antenna Gain	3.5±0.5dBi
Polarization	Linear, Vertical
Impedance	50 ohm Nominal
Admitted Power	2 W
Radiation	Omni-directional
B. Material & Mechanical Characteristics	
Material of Plastic	POM / PC
Cable Type	RG178
Connector Type	SMA Male
C. Environmental	
Operation Temperature	- 40 °C ~ + 80 °C
Storage Temperature	- 40 °C ~ + 80 °C

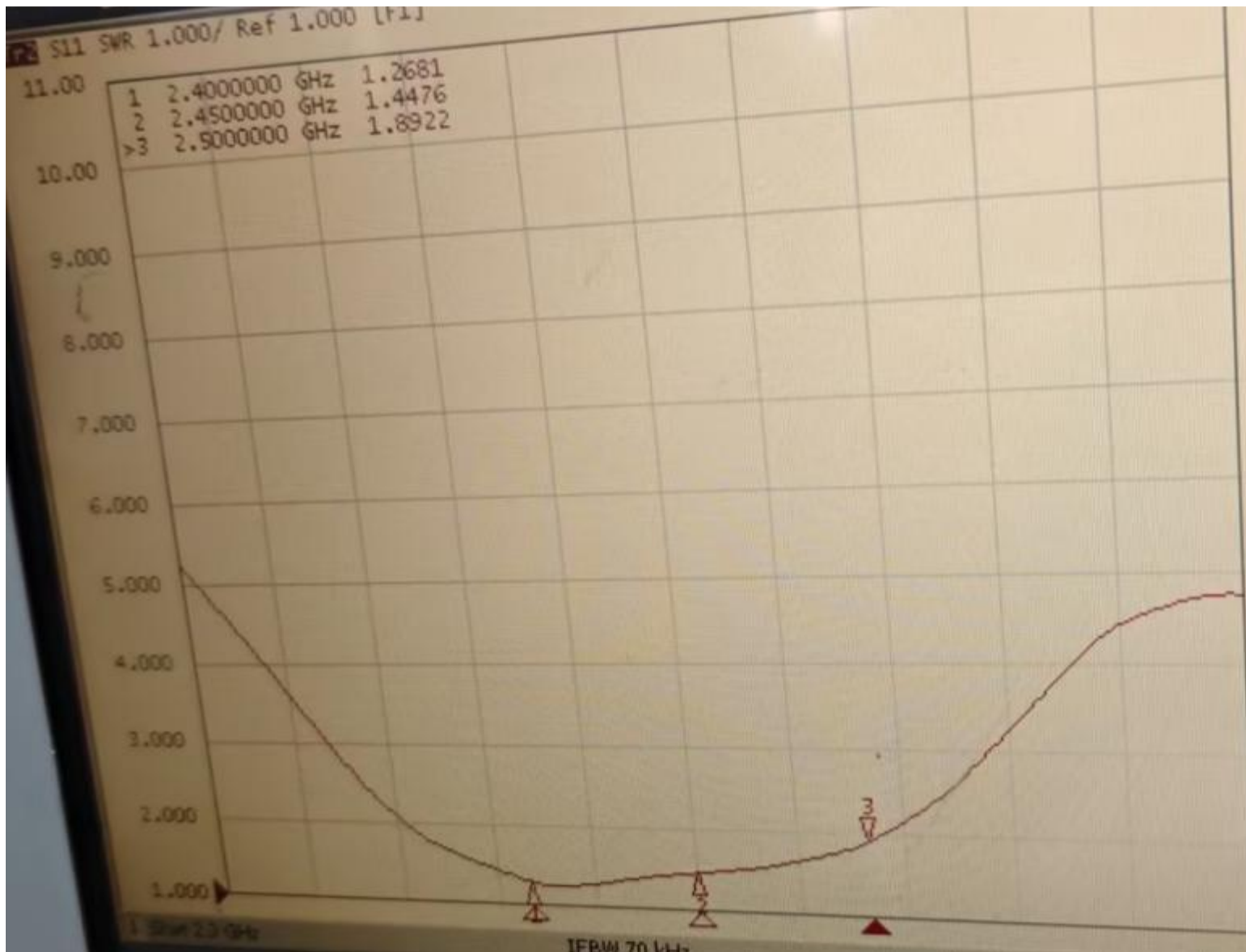
2. Characteristics and Reliability Test

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 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: 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: 48hours	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)

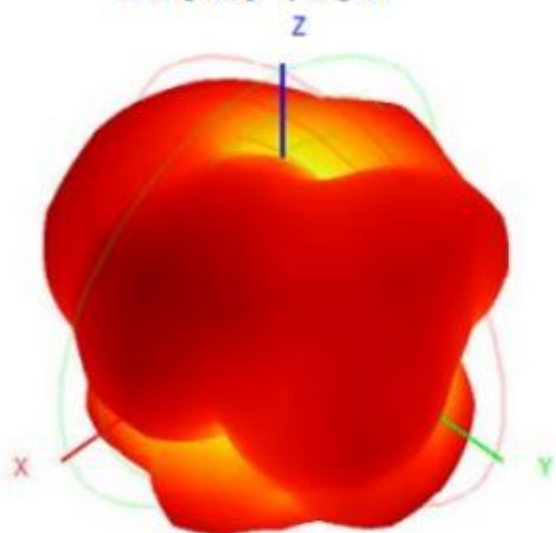
3. Antenna - S Parameter Test Data

2.4GHz

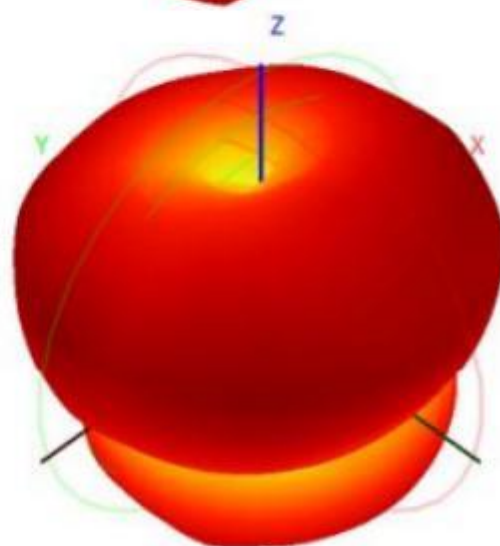
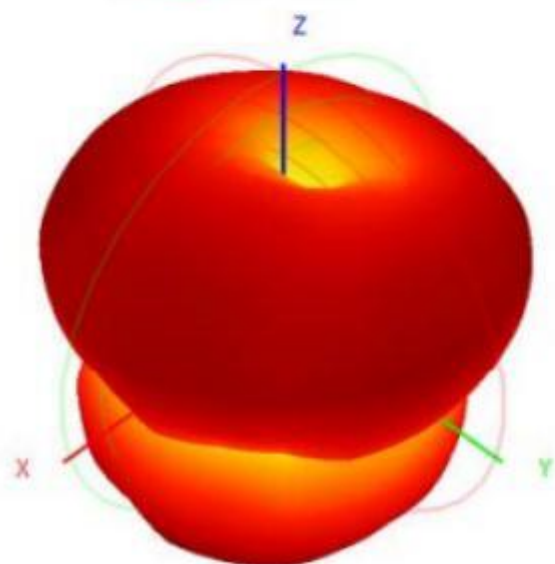
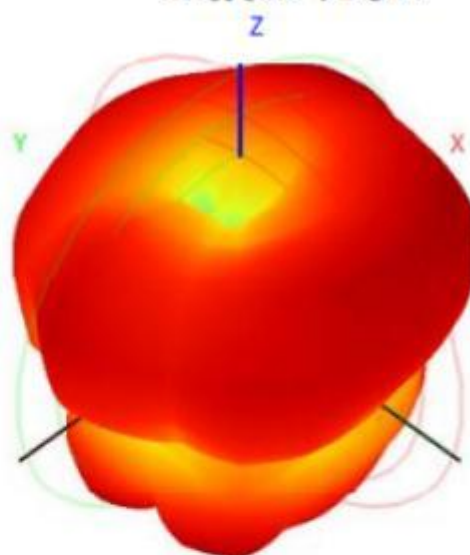


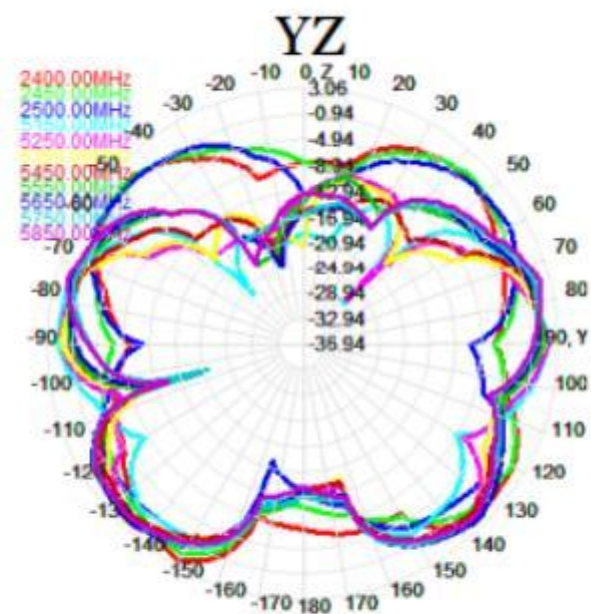
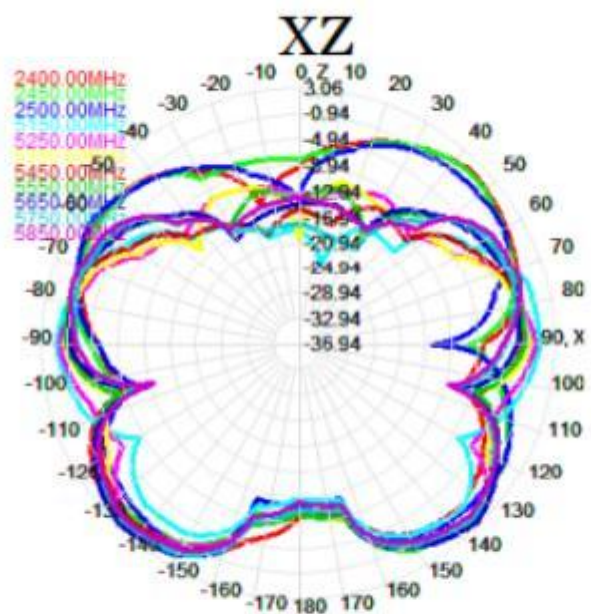
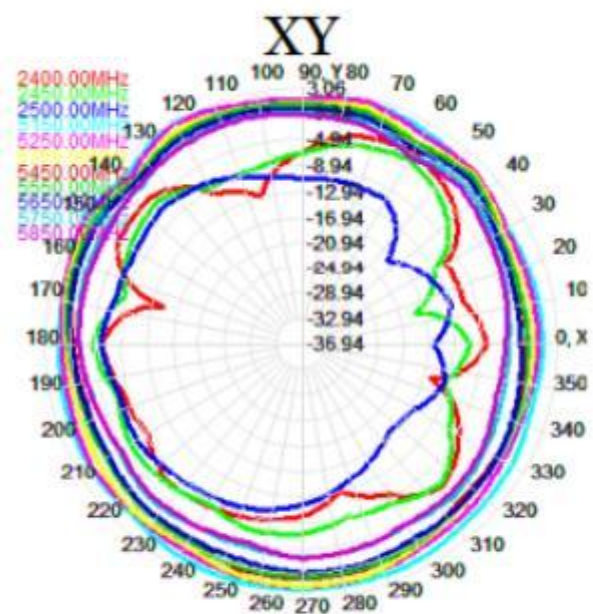
Freq (MHz)	Gain (dBi)	Efficiency (%)	
2400	3.095238787	52.4600012	
2410	3.084557485	52.61742648	
2420	3.931637415	51.97646356	
2430	3.904235781	52.59670133	
2440	3.950598879	54.16179853	
2450	3.677686351	53.11034894	
2460	3.390455499	52.34684682	
2470	3.170916759	53.70218429	
2480	3.216897627	55.08764731	
2490	3.261201945	54.99581435	
2500	3.221972365	52.65175887	

Front View



Back View





1	2	3	4	5	6	7	8
RoHS	CUSTOMER				REV.	DESCRIPTION	DATE
	PART NO					Initial release	2024-07-15

E

E

D

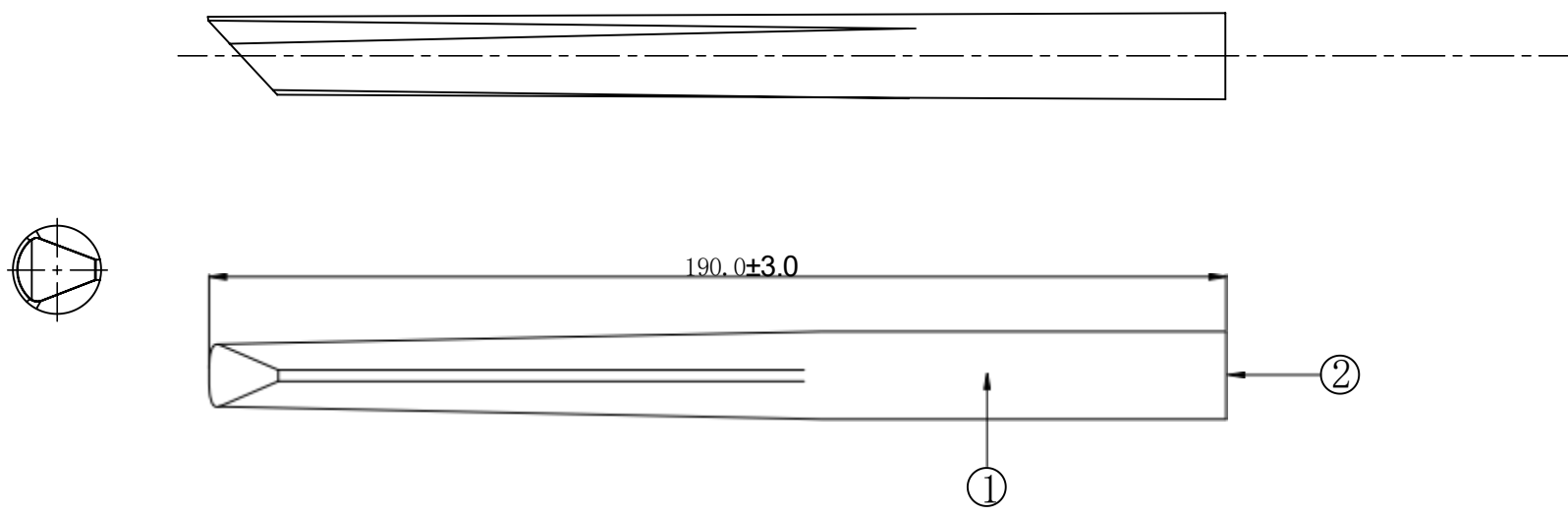
D

C

C

B

B



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PART NAME: 2.4G Antenna

PART NO. :	TX2G4-JZD016	DATE:	2024-07-15
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APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
		Huang	UNITS: mm	X.X ±0.50
			SCALE: 1/1	X.XX ±0.15
			REVISION: A	X° ±3°

2	SMA Male	Au Plated	1	
1	Antenna Cap	TPE, Color:Black	1	
NO	PART NAME	DESCRIPTION	Q. TY	