

承认书

Customer: _____

Customer P/N: _____

Zhongchi P/N: ZCA2400-3R70-00X

Description : 2.4G羊角天线

2.4GHz Horn Antenna

Version: 1.0

Address: Room 301, Building 2, No.1 Puxin Road, Shangjiao, Changan, Dongguan,
Guangdong, China

东莞市众驰电子有限公司

Product Number: ZCA2400-3R70-00X

Product Name: 2400-2500MHz Antenna

Index:

- 1. Revision History / Page 3**
- 2. Specification / Page 4**
- 3. Characteristics and Reliability Test / Page 5**
- 4. Antenna - S Parameter Test Data / Page 6-10**
- 5. Mechanical / Page 11**

1. Revision History

Revision	Date	Change Notification	Description
1.0	2026-07-10	初版	

Product Number: ZCA2400-3R70-00X
Product Name: 2400-2500MHz Antenna

2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400-2500MHz
S.W.R.	<= 2.0
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Brass
Material of Plastic	Body: ABS
Cable Type	1.13黑色线
Connector Type	1代IPEX
Connector Pull Test	>= 3 Kg
Connector Torque Test	None
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

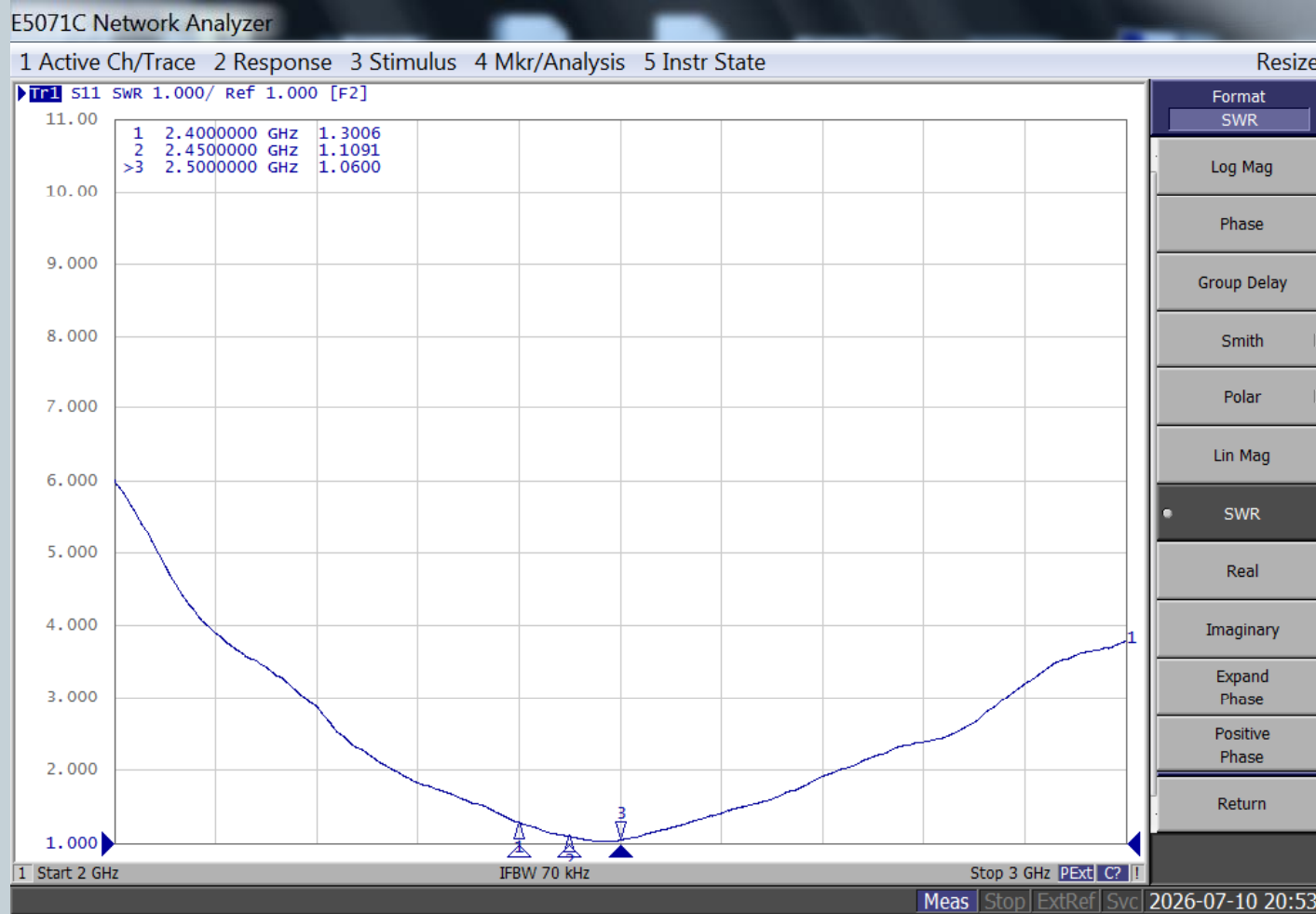
3. Characteristics and Reliability Test

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	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	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	GB / T 2423 . 17- 93 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	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 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.)	GB / T 2423 . 2 - 89 Temp: 80°C; Time: 48 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 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

VSWR Test

(2400-2500MHz)

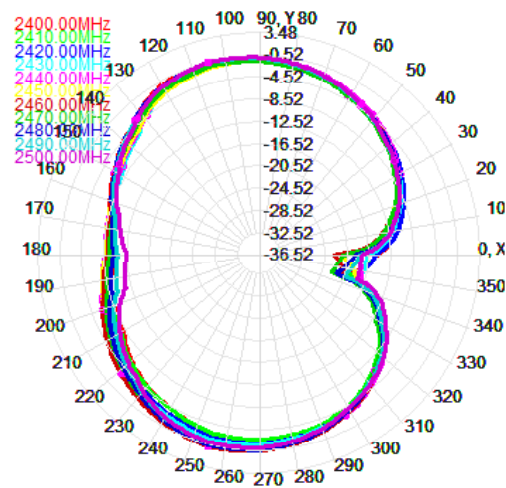
3



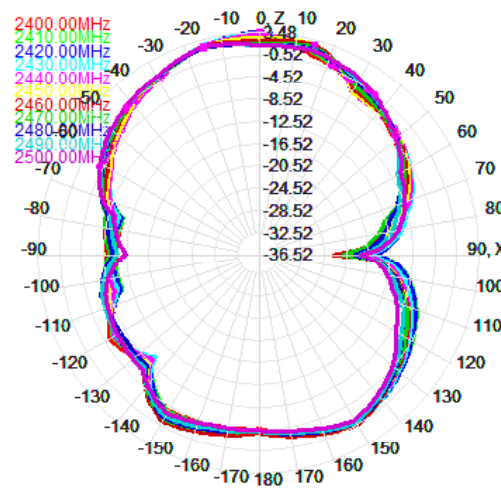
2D Radiation Pattern

(2400-2500MHz)

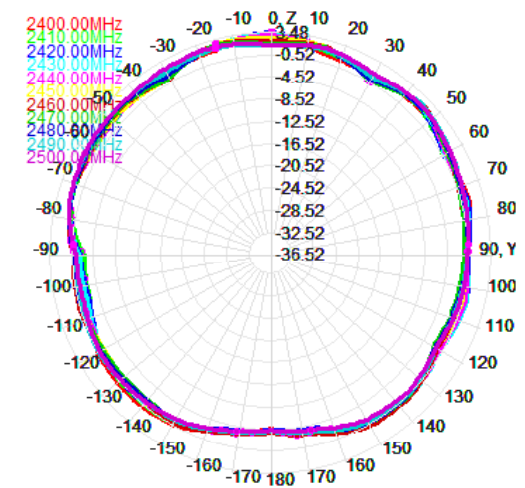
XY



XZ



YZ

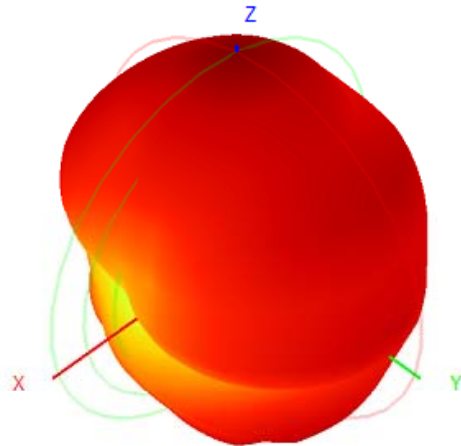


3D Radiation Pattern

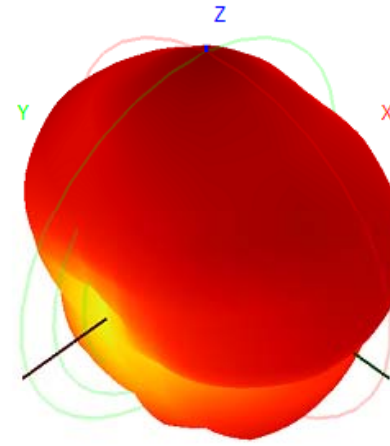
(2400-2500)

2400 MHz

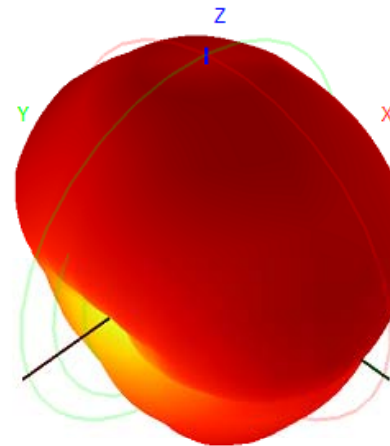
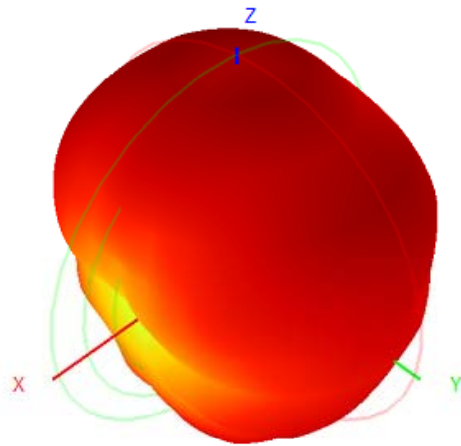
Front View



Back View



2500MHz



Results Summary

(2400-2500MHz) VSWR

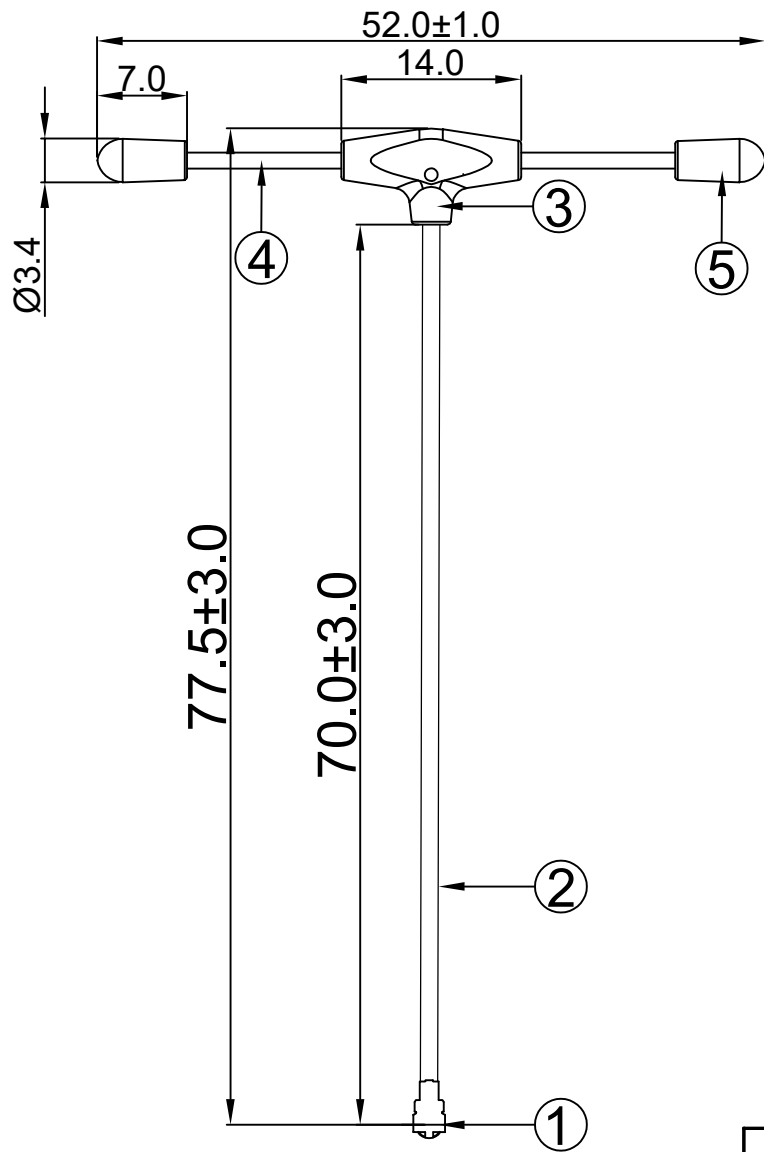
Frequency (MHz)	2400-2500MHz
2400	1.3
2500	1.0

Results Summary

Frequency (MHz)	2400-2500Hz	
	Peak gain(dBi)	Efficiency (%)
2400.0	3.04	66.58
2410.0	3.39	65.75
2420.0	3.48	66.60
2430.0	3.30	66.44
2440.0	2.90	65.76
2450.0	2.94	65.72
2460.0	2.92	67.02
2470.0	2.74	64.08
2480.0	2.37	66.01
2490.0	2.42	67.69
2500.0	2.45	67.21

RoHS
Compatible

REV.	DESCRIPTION	DATE
△	首次发行	2025-7-25



5	Cap	Ø3.4*7.0mm	2
4	Spring wire	Ø1.3mm	2
3	SR	14*7.5	1
2	Coaxial Cable	RG1.13 Black	1
1	Mini Connector	Au Plated 1代	1
NO	PART NAME	DESCRIPTION	Q.TY

 东莞市众驰电子有限公司 Dongguan Zhongchi Electronic Co.,Ltd				Tel 0769-81238620 Fax:0769-81238620	
PART NAME: 2.4G(2400-2500MHz)羊角天线					
PART NO.: ZCA2400-3R70-00X				DATE: 2025-7-25	
APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance	
		HYH	UNITS: mm	X.X ±0.20	
			SCALE: 1/1	X.XX±0.15	
			REVISION: B	X° ±3°	