

## Approval Sheet

**Customer :** \_\_\_\_\_

**ZC.P/N :** ZCD0860-06W608NM  
\_\_\_\_\_

**Description :** Lora Fiberglass Antenna  
\_\_\_\_\_  
\_\_\_\_\_

<b>Checked By</b>		
<b>Audit</b>	<b>Producer</b>	<b>Date</b>
KUI LIU	ZLB	2021.04.13

<b>Customer signature</b>		
<b>Quality</b>	<b>Engineer</b>	<b>Purchasing</b>

**Product Number: ZCD0860-06W608NM**

**Product Name: 860-930MHz Antenna**

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**Product Number: ZCD0860-06W608NM**

**Product Name: 860-930MHz Antenna**


## 1. Revision History

<b>Revision</b>	<b>Date</b>	<b>Change Notification</b>	<b>Description</b>
1.0	2020.12.30	First edition	

Product Number: **ZCD0860-06W608NM**

Product Name: **860-930MHz Antenna**

## 2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	860~930 MHz
V.S.W.R.	$\leq 2.0$ @ 900~930 MHz
Antenna Gain	5.0 +/- 0.8 dBi @ 860~930 MHz
Efficiency(%)	$\geq 60$ % @ 900~930MHz
Radiation Pattern	Omni-Directional
Polarization	Linear polarization/Vertical
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	CU
Material of Plastic	FRP (white light)
Cable Type	RG-141 50 $\Omega$
Connector Type	N-J Double tooth connector
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 65 °C
Antenna Color Storage life	< 2 year

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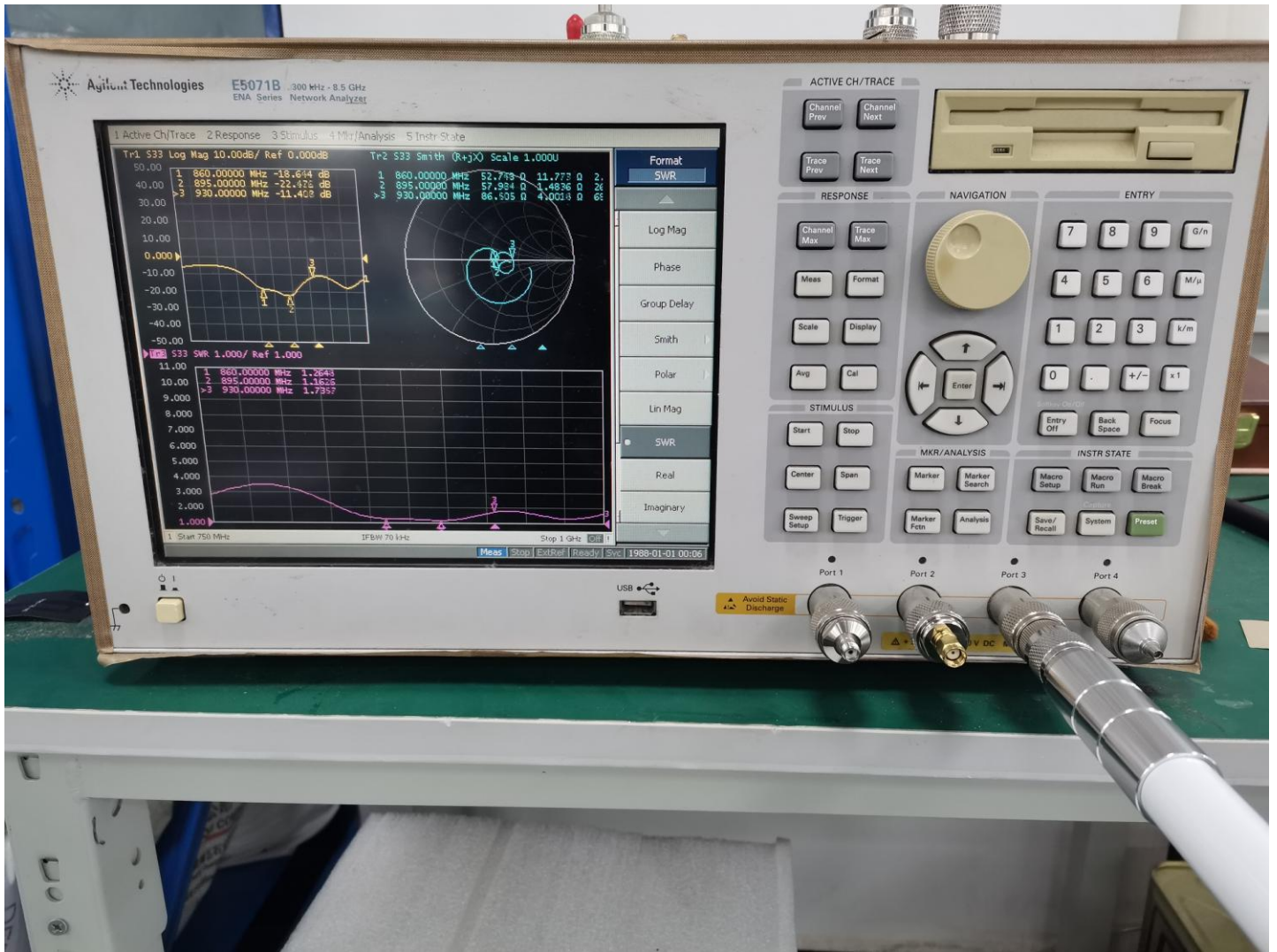
### 3. Characteristics and Reliability Test

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
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 72 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: 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 2011/65/EU
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

Product Number: ZCD0860-06W608NM

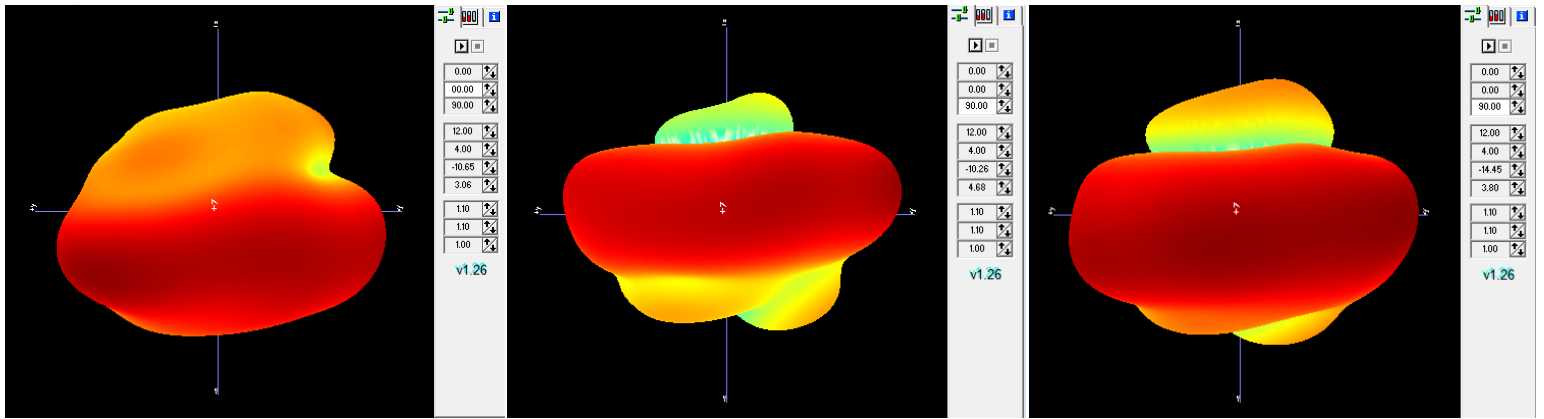
Product Name:860-930MHz Antenna

#### 4. Antenna - S Parameter Test Data



频率	增益 (dBi)	效率
860MHz	3.06	58.68%
870MHz	3.31	62.21%
880MHz	3.39	60.03%
890MHz	3.80	63.44%
900MHz	4.25	64.81%
910MHz	4.70	68.23%
920MHz	4.59	67.83%
930MHz	4.68	63.27%

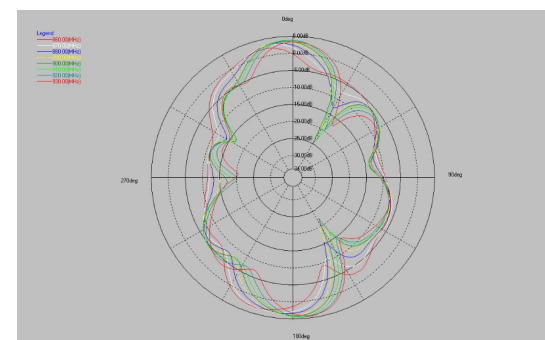
### 5. Antenna - Radiation Pattern Test Data



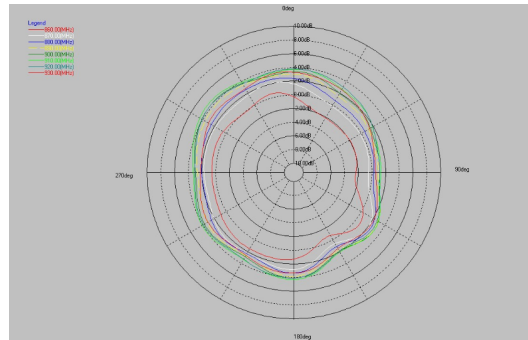
860Mhz

890Mhz

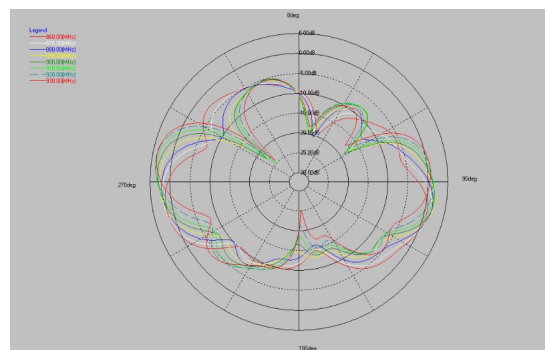
930Mhz



PIN=0



PIN=90

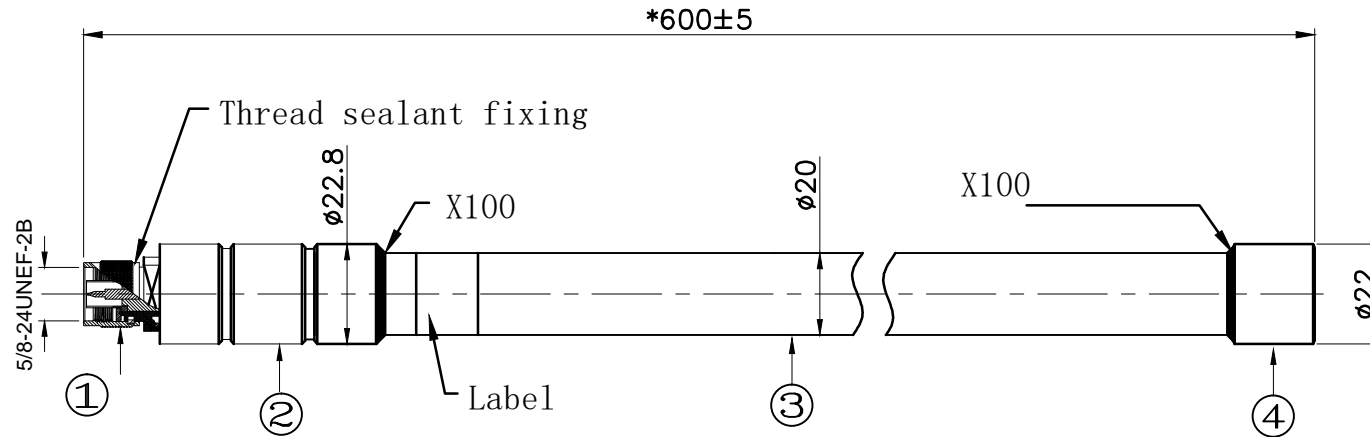


THETA=90

# RoHS

Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



Note:

1. Mark \* is important dimension; "CpK "Identify for process control (CpK  $\geq 1.33$ ).
2. Tolerance: Unmarked tolerance refer to the standard tolerance please.

label

Lora Fiberglass Antenna  
 model: ZCD0860-06W608NM  
 frequency: 860-930MHz  
 Gain: 5dBi

Dongguan Chi Electronics Co., Ltd

TITLE: 860-930MHz Antenna

PART NO.: ZCD0860-06W608NM

CUSTOMER P/N: /

APP BY	CHK BY	RF BY	DES BY	 UNITS: mm SCALE: 1/1 REVISION: A	Tolerance
			ZLB 2020/12/31		X.X ±0.5 X.XX ±0.2 X° ±1

No.	Part Number	Description	Material	Finish	Q'ty
4	R-HG02-02	Cover	Plastic	L=Ø22*12, ABS.	1
3	HG02-20560	Glass Fiber Tube	Glass Fiber	L=Ø20*560mm	1
2	HG02-01B	Al Sleeve	Al	Ø22.8*60mm	1
1	R-00N-MN8	NJ	Cu	Nickel Plated	1



產品包裝規範  
**PACKING CRITERION**

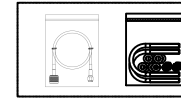
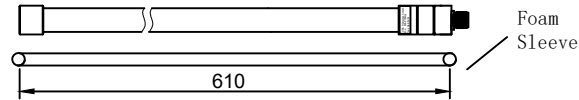
★★★★☆

Date: 2021.04.20

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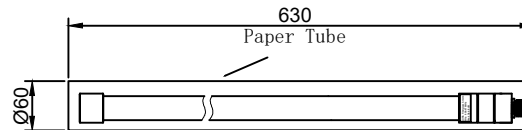
Part Number : ZCD0860-06W608NM	Revision : A
Name: 860-930MHz Antenna	Customer : ALL

1 . Assembly fitting

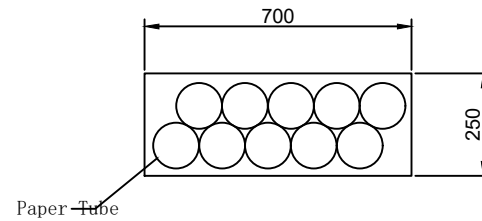


U-shaped holder, 1mr200 wire transfer, the bubble bag wrapped and then loaded into the carton

2 . Antenna feeding tube



3. Encasement

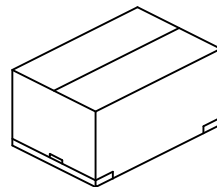


(This is the side wheat. CARTON Length of 700mm)

30PCS/CARTON

4. Seal the box

Glue Paper Seal for outer box



UNITS: mm

APPROVED BY: \_\_\_\_\_ CHECKED BY: \_\_\_\_\_ DESIGNED BY: HC