

## 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

**Product Number: ZCD0860-06W608NM**

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

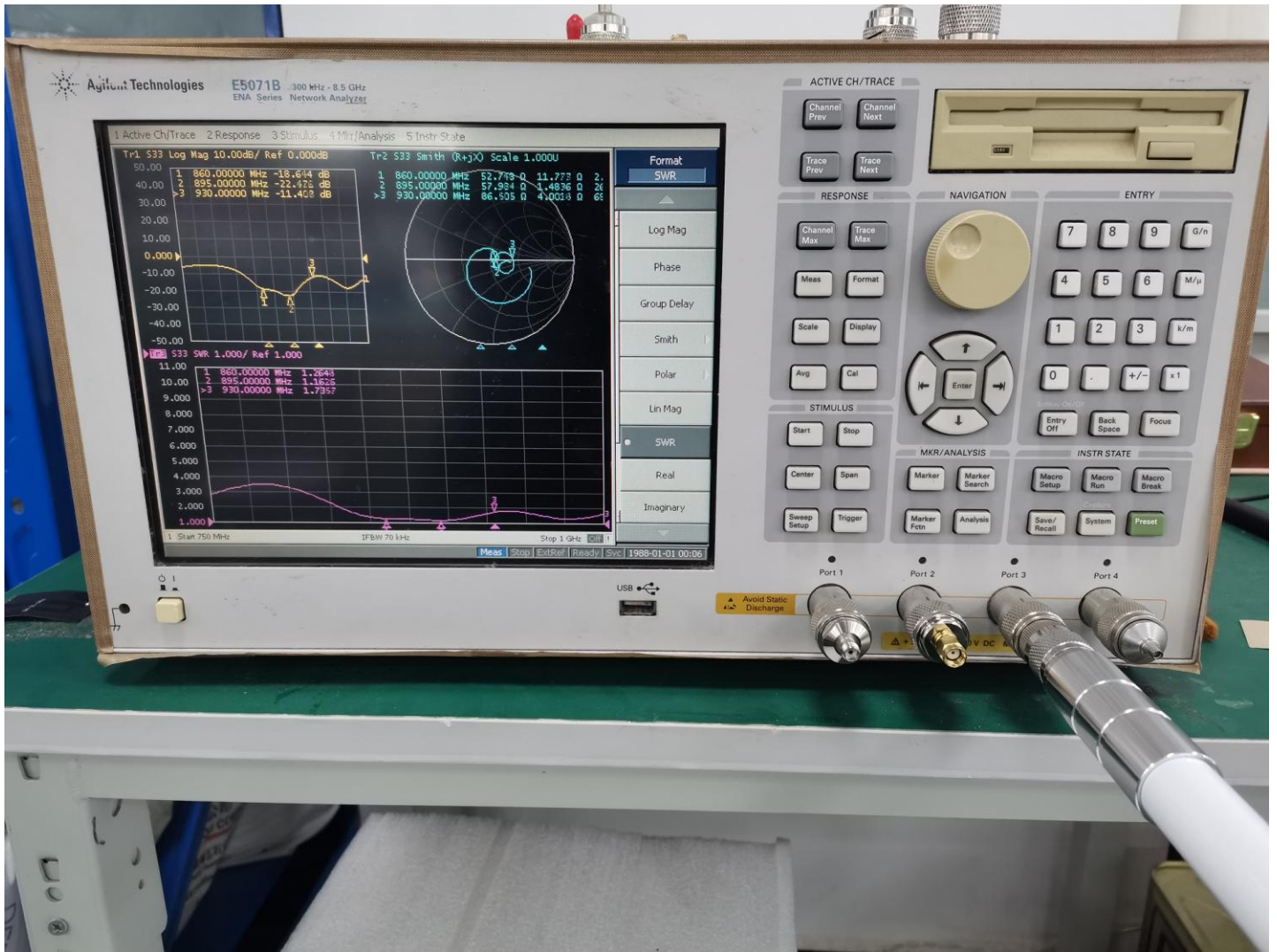
### **3. Characteristics and Reliability Test**

<b>Test Items</b>		<b>Test Condition and Procedure</b>	<b>Requirements</b>
<b>C1</b>	<b>V.S.W.R.</b>	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
<b>C2</b>	<b>Antenna Gain</b>	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
<b>E1</b>	<b>Salt Spray</b>	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%
<b>E2</b>	<b>Humidity</b>	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%
<b>E3</b>	<b>Thermal Shock</b>	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%
<b>E4</b>	<b>Life (High Temp.)</b>	GB /T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
<b>R1</b>	<b>RoHS</b>	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2011/65/EU
<b>R2</b>	<b>PFOS</b>	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
<b>R3</b>	<b>PFOA</b>	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

Product Number: ZCD0860-06W608NM

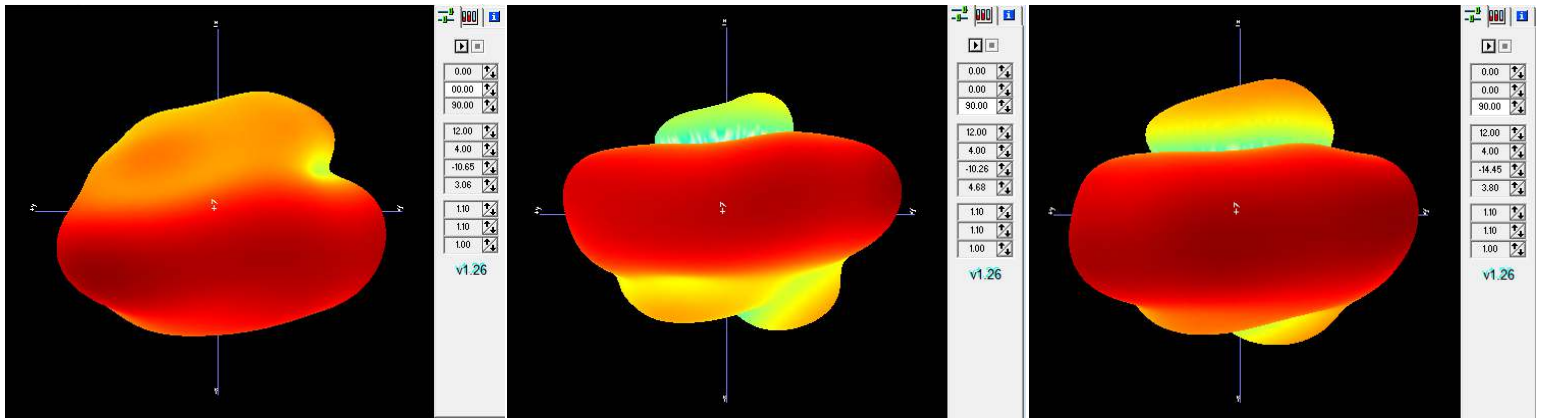
Product Name:860-930MHz Antenna

#### 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%

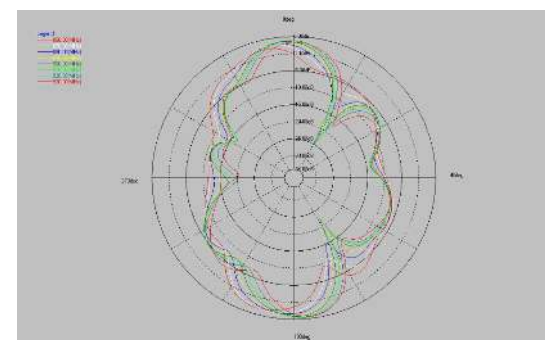
### 5. Antenna - Radiation Pattern Test Data



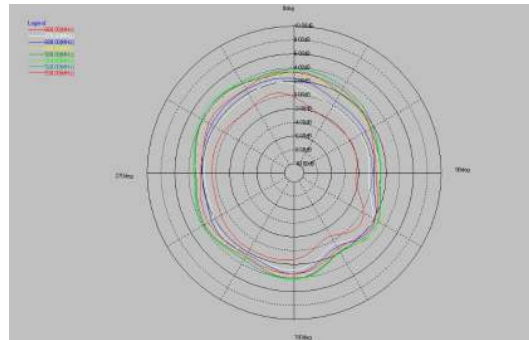
860Mhz

890Mhz

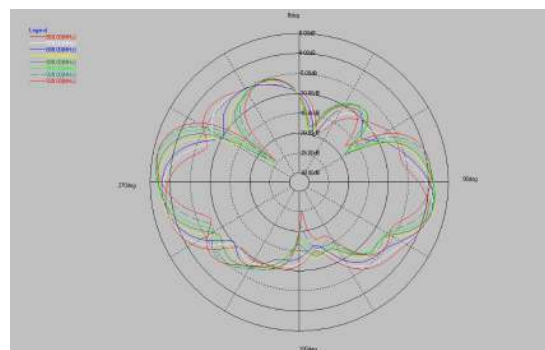
930Mhz



PIN=0



PIN=90

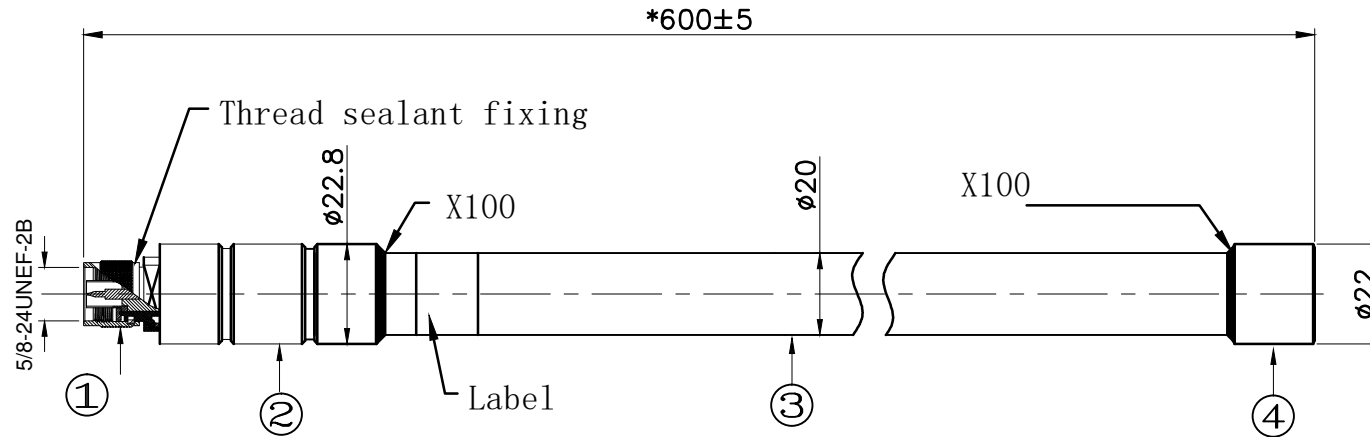


THETA=90

# 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.

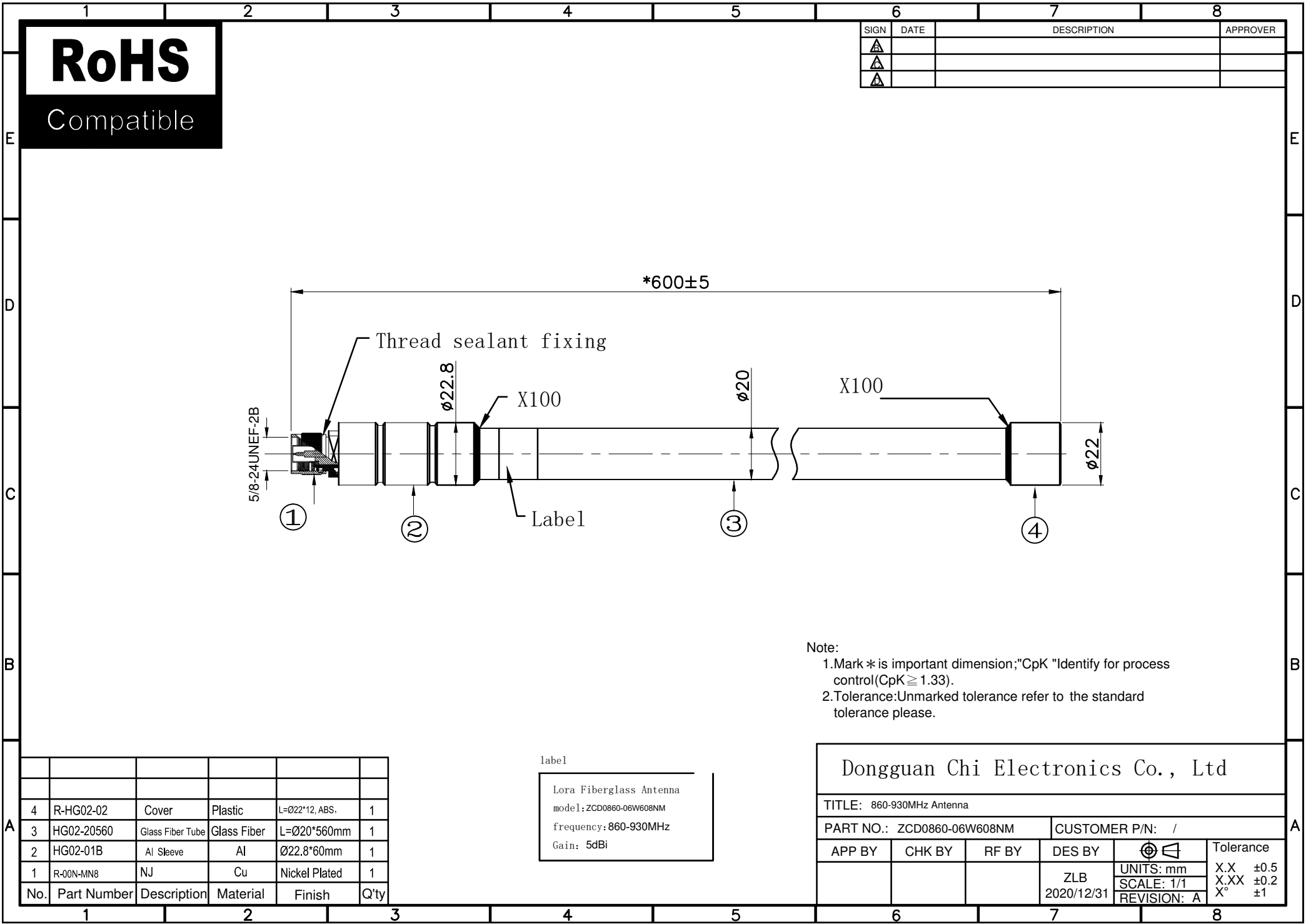
label

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

Dongguan Chi Electronics Co., Ltd

No.	Part Number	Description	Material	Finish	Q'ty
4	R-HG02-02	Cover	Plastic	L= $\phi 22 \times 12$ , ABS.	1
3	HG02-20560	Glass Fiber Tube	Glass Fiber	L= $\phi 20 \times 560$ mm	1
2	HG02-01B	Al Sleeve	Al	$\phi 22.8 \times 60$ mm	1
1	R-00N-MN8	NJ	Cu	Nickel Plated	1

TITLE: 860-930MHz Antenna						
PART NO.: ZCD0860-06W608NM			CUSTOMER P/N: /			
APP BY	CHK BY	RF BY	DES BY		Tolerance	
			ZLB		UNITS: mm	X.X ±0.5
			2020/12/31		SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1	





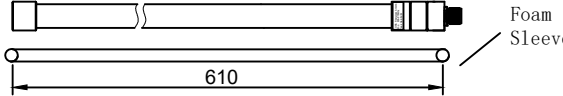
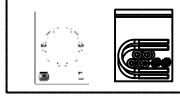
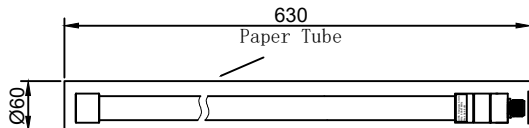
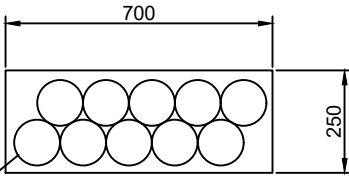
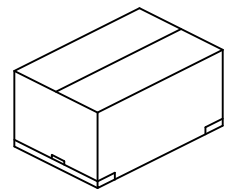
# 產品包裝規範

## PACKING CRITERION

★★★★☆

Date: 2021.04.20

Page: 1 of 1

Part Number : ZCD0860-06W608NM	Revision : A
Name: 860-930MHz Antenna	Customer : ALL
<p>1 . Assembly fitting</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Foam Sleeve</p> </div> <div style="text-align: center;">  <p>U-shaped holder, 1mr200 wire transfer, the bubble bag wrapped and then loaded into the carton</p> </div> </div> <p>2 . Antenna feeding tube</p> <div style="text-align: center;">  <p>Paper Tube</p> </div> <p>3.Encasement</p> <div style="text-align: center;">  <p>Paper Tube</p> <p><b>(This is the side wheat. CARTON Length of700mm)</b> 30PCS/CARTON</p> </div> <p>4.Seal the box</p> <p style="text-align: center;">Glue Paper Seal for outer box</p> <div style="text-align: center;">  </div> <p style="text-align: right;">UNITS: mm</p>	

APPROVED BY: \_\_\_\_\_ CHECKED BY: \_\_\_\_\_ DESIDNED BY: HC