



# SPECIFICATION FOR APPROVAL

CUSTOMER/PROJECT: LANDI C20SE

CUSTOMER P.N. : \_\_\_\_\_

PRODUCT NAME. : WIFI Antenna

MODEL NO. : 5U071A

SPECIFICATION : \_\_\_\_\_

VERSION	DATE	REVISION DESCRIPTION
T:A	2023-12-29	newly added
T:B	2024-01-02	Update drawings
T:C	2024-01-22	Update drawings

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## 1 DEFINITION

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access

## 2 Test equipment

*Can be increased or decreased according to actual situation*

vector network analyzer

Comprehensive test instrument

GTS darkroom

## 3 Applicable frequency band

*Mark the applicable frequency bands with other colors.*

	频段 Frequency
WIFI (2.4G)	2412MHz~2483MHz
WIFI (5G)	5150MHz~5850MHz

## 4 Basic testing items

4.1 Standing wave ratio diagram

4.2 Smith impedance diagram

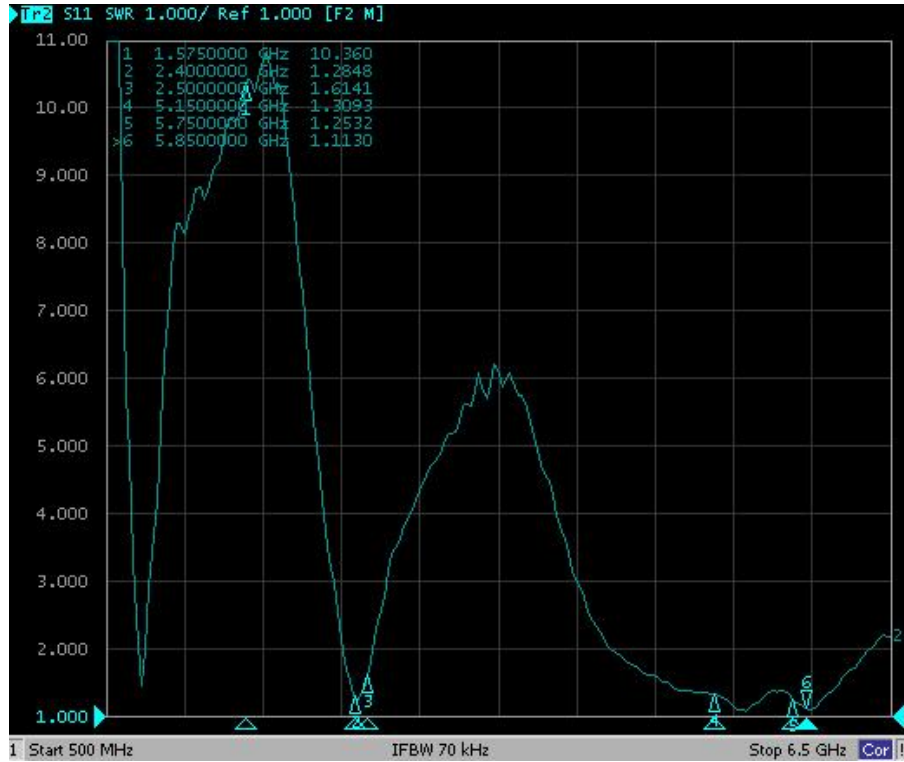
4.3 Radiation pattern

4.4 Gain and efficiency

## 5 Test indicators and data charts

### 5.1 standing-wave ratio

#### 5.1.1 Standing wave ratio diagram



#### 5.1.2 Standing wave ratio data

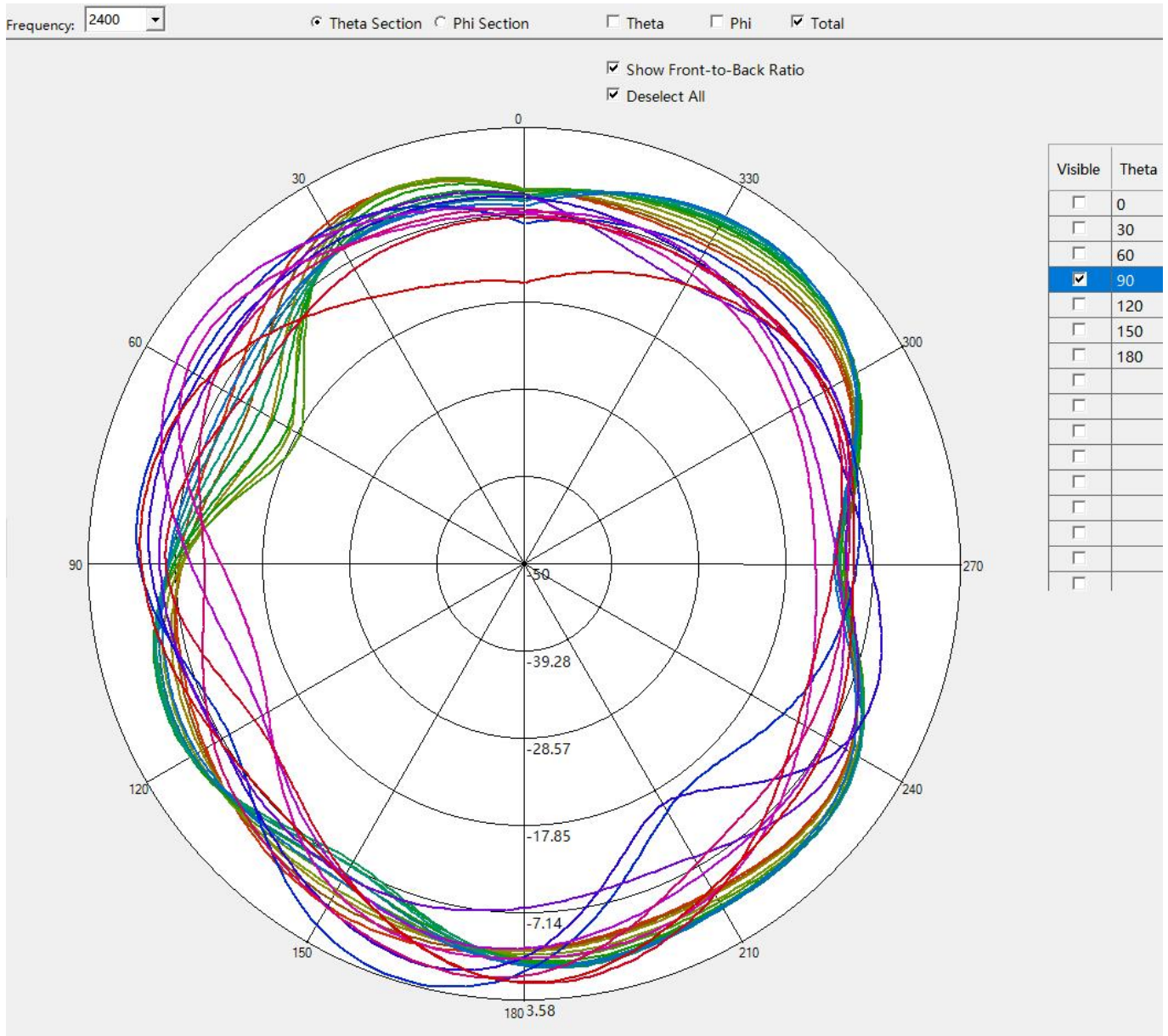
Freq/MHz	2400	2500	5150	5750	5850
VSWR	1.2	1.6	1.3	1.2	1.1

5.2 Smith impedance circle diagram



### 5.3 Radiation pattern

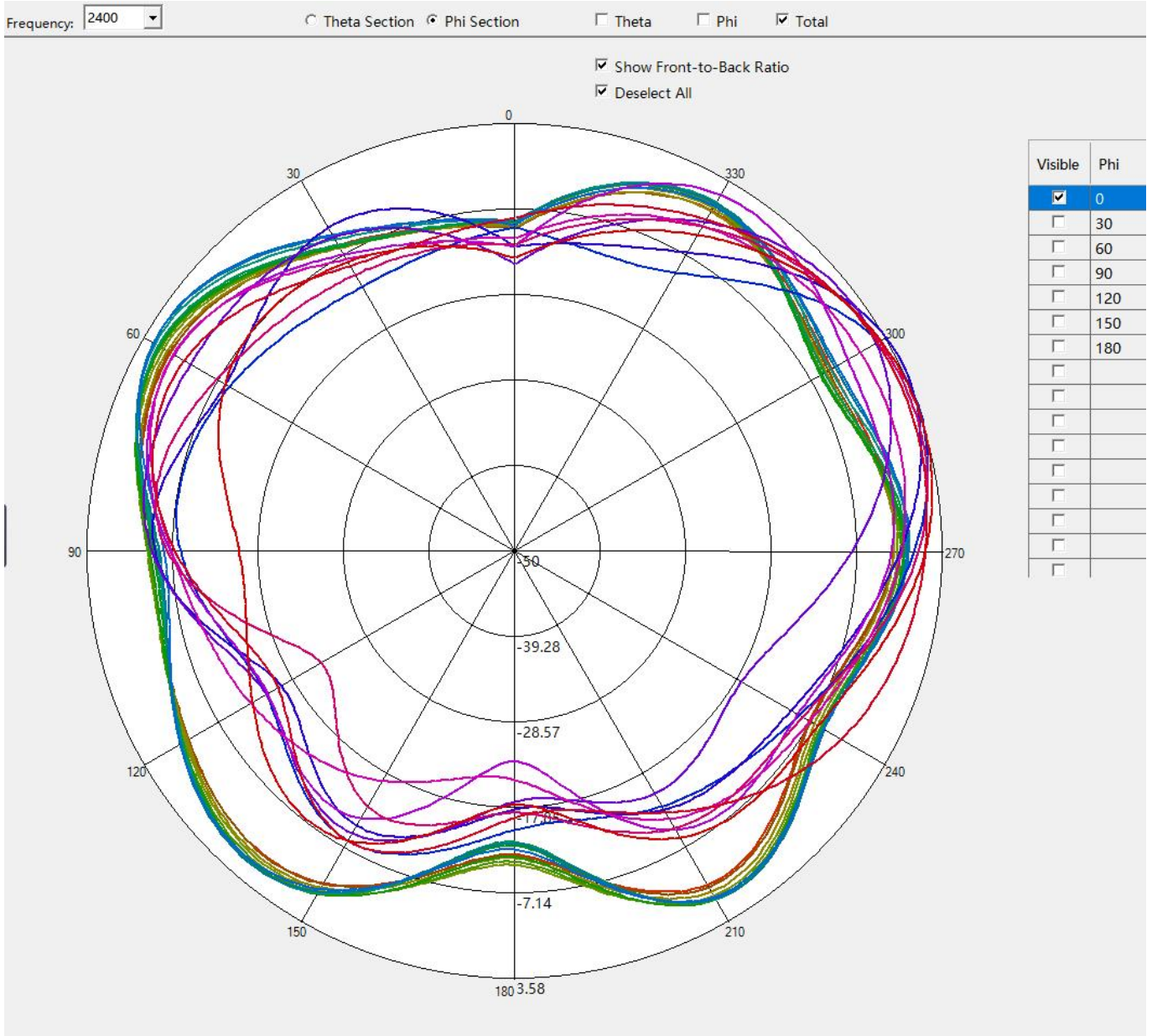
#### 5.3.1 H-plane





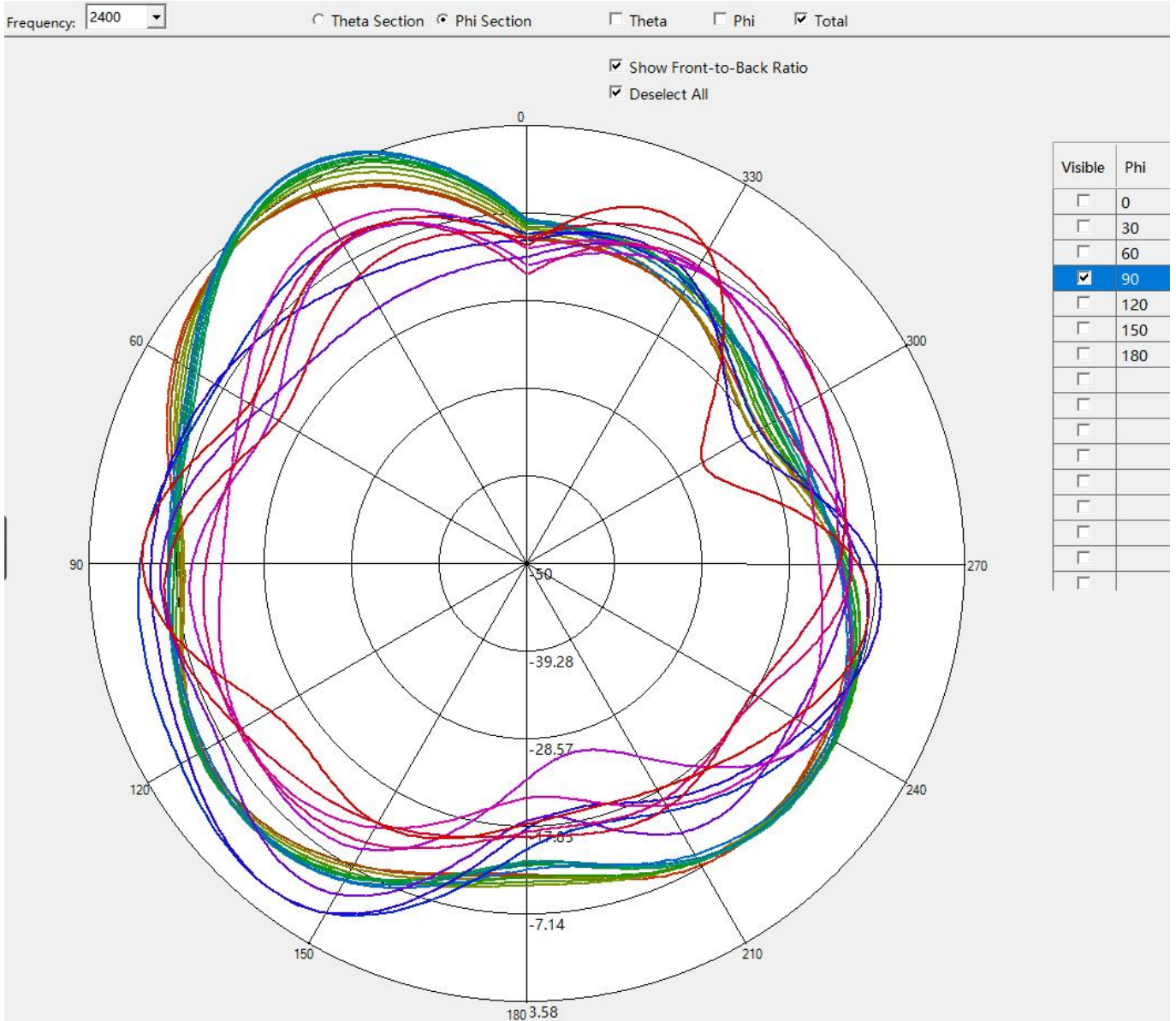
5.3.2E-plane

**E1**





**E2**



### 5.4 Gain and efficiency

<b>Freq</b> (MHZ)	<b>Eff (%)</b>	<b>GAIN (DBi)</b>		<b>Freq</b> (MHZ)	<b>Eff (%)</b>	<b>GAIN (DBi)</b>
2400	48.33	4.55		5150	42.97	3.24
2410	48.68	4.45		5250	42.50	4.21
2420	49.18	4.50		5350	34.65	3.402
2430	52.82	4.57		5450	36.10	5.86
2440	54.34	4.50		5550	35.86	6.45
2450	54.96	4.62		5650	38.13	5.46
2460	53.96	4.95		5750	40.46	4.79
2470	53.23	5.20		5850	35.51	5.65
2480	55.84	5.73				
2490	57.01	5.91				
2500	55.51	5.74				

Active data

	CH	TRP		TIS	
11B	1	14.81		-78.46	
	6	15.64		-78.14	
	11	14.75		-79.47	
11A	36	12.25		-69.19	
	64	13.49		-68.82	
	165	11.26		-70.28	

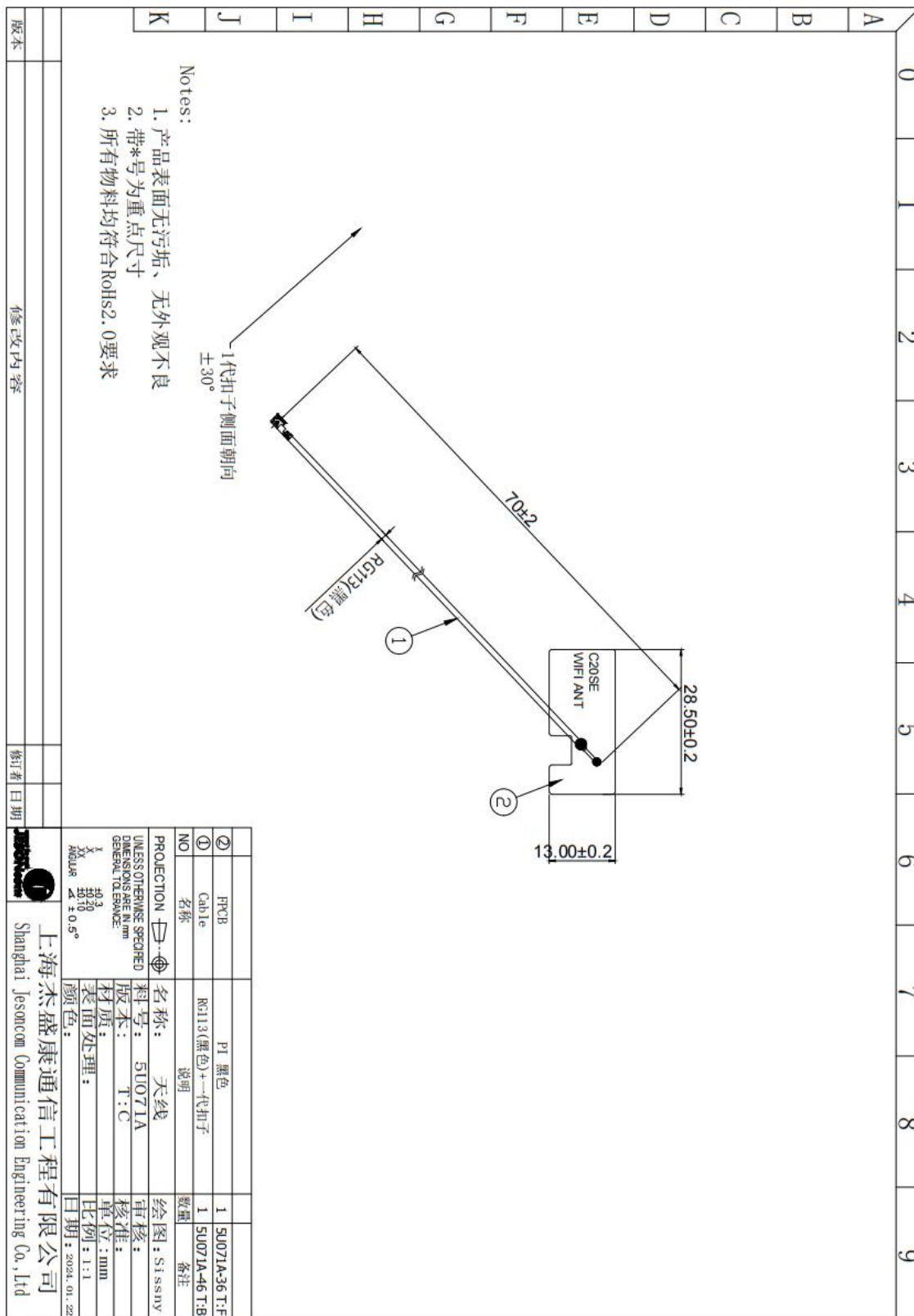
## 6 Environmental treatment suggestions

## 7 Impedance matching requirements



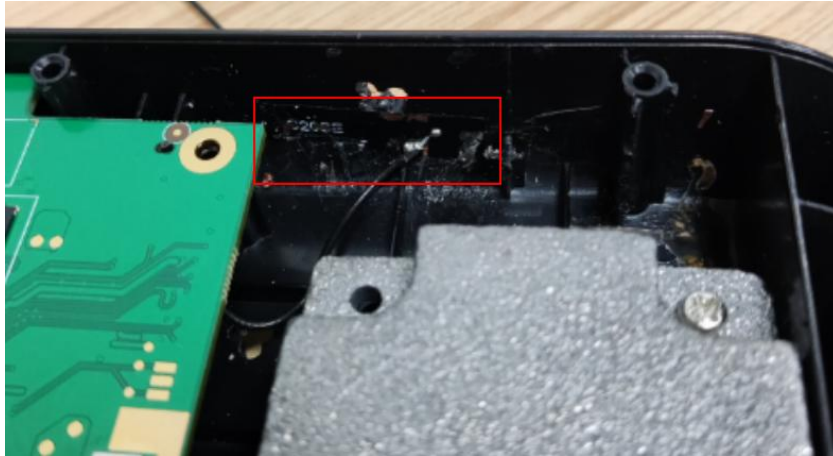
The matching circuit is only connected in series with 0 ohms, No other components.

## 8 Antenna Outline Drawing



## 9 Antenna Installation Guide

9.1 Antenna installation and feeder routing instructions



10 Other