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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.*

System	Frequency band
WIFI (2.4G)	2412MHz~2483MHz
5.8G	5725MHz~5850MHz

## 4 Basic testing items

4.1 Standing wave ratio diagram

4.2 Smith impedance diagram

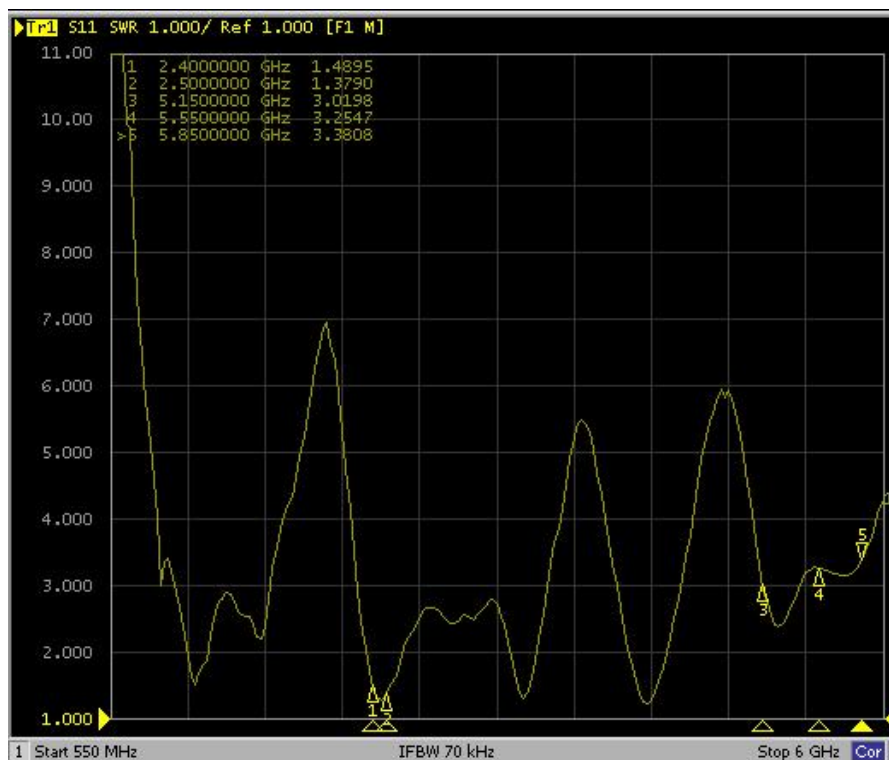
4.3 Radiation pattern

4.4 Gain and efficiency

## 5 Test indicators and data charts

5.1 standing-wave ratio

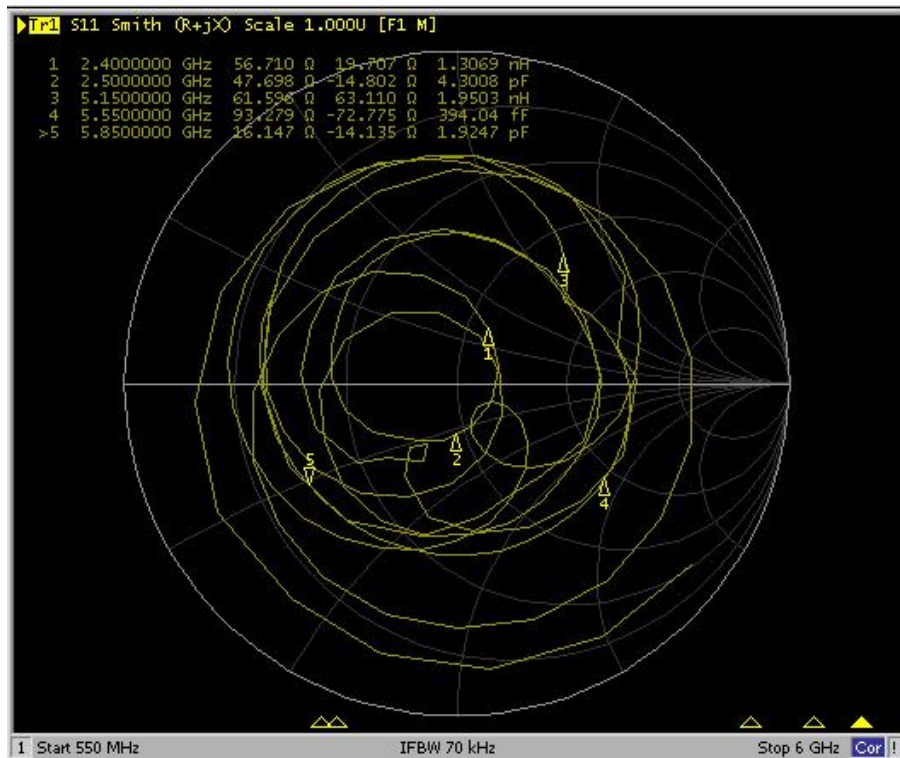
5.1.1 Standing wave ratio diagram



## 5.1.2 Standing wave ratio data

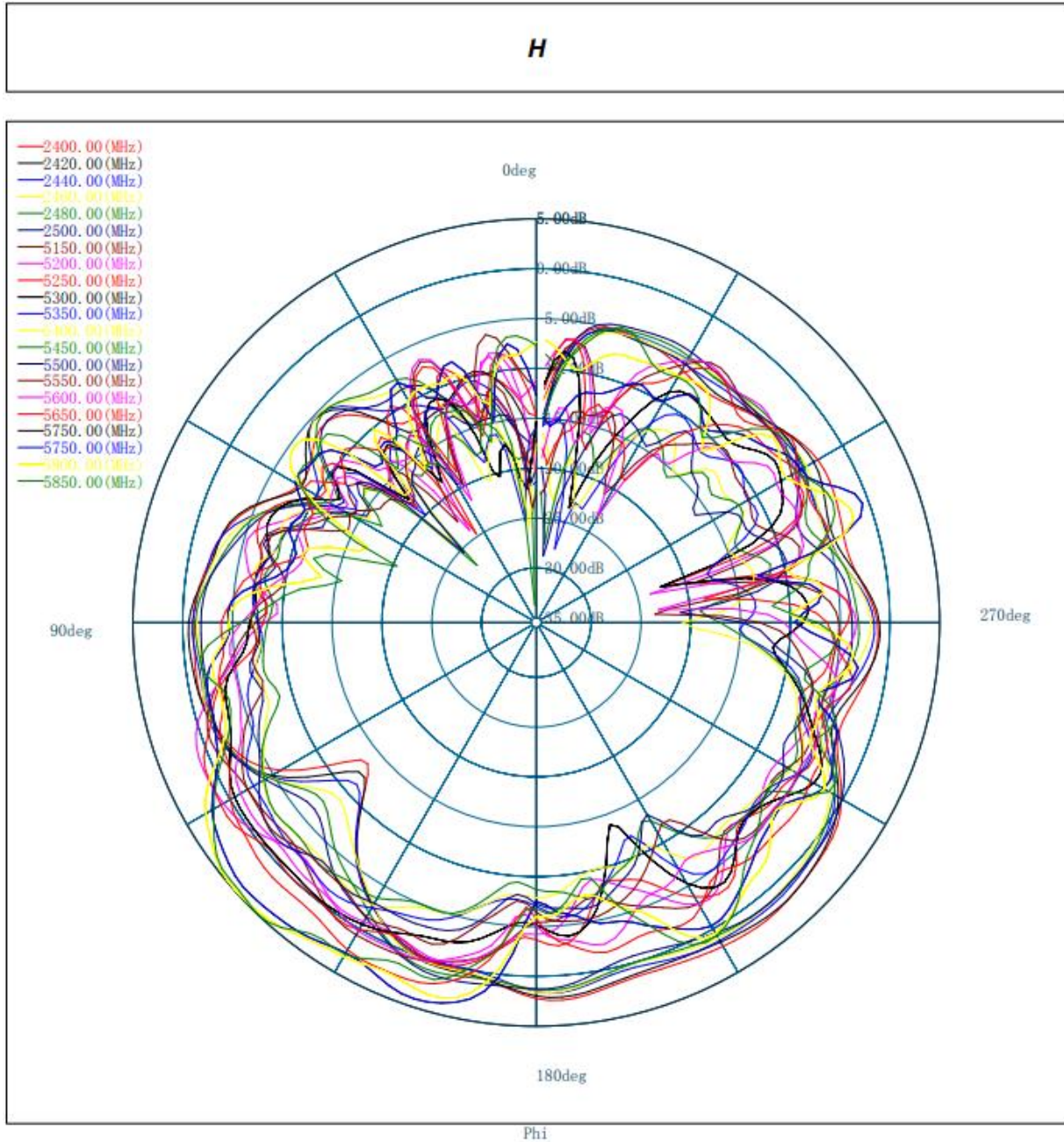
Freq/MHz	2400	2500	5150	5850
VSWR	1.4	1.3	3.0	3.3

## 5.2 Smith impedance circle diagram

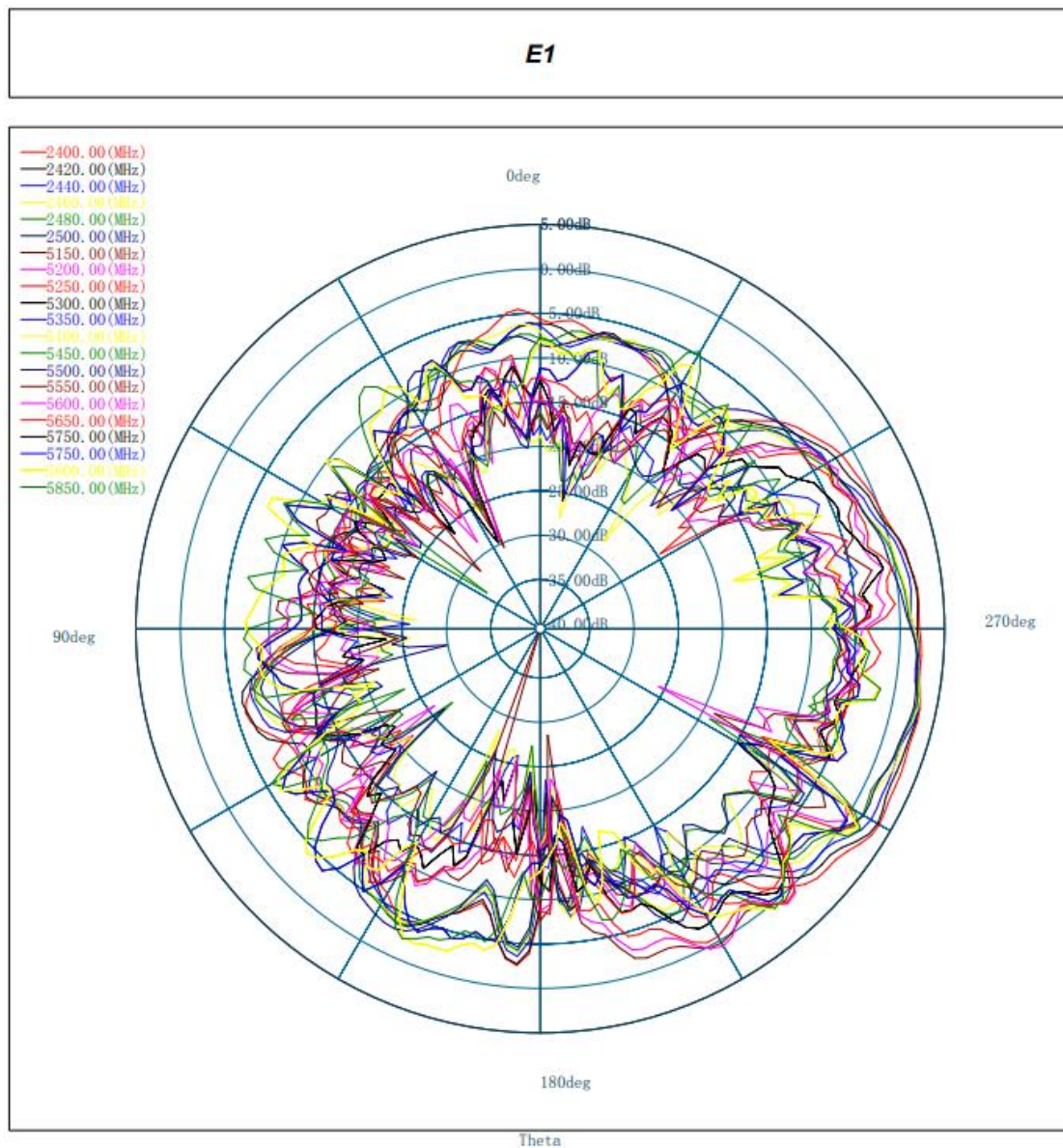


## 5.3 Radiation pattern

### 5.3.1 H-plane

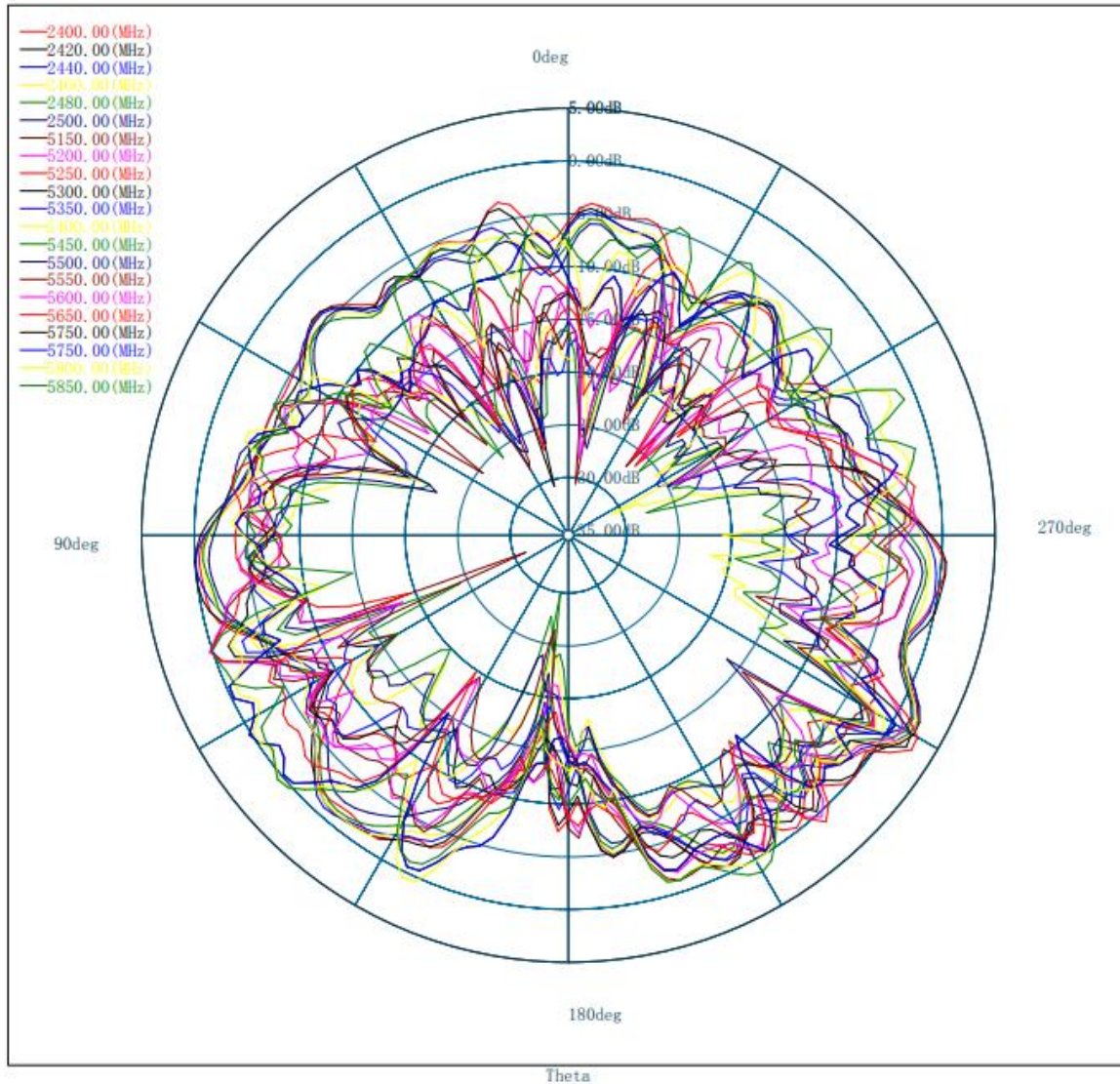


## 5.3.2E-plane





## E2



## 5.4 Gain and efficiency

Frequency [Hz]	Efficiency	Gain [dBi]
2400000000	59%	5.214927909
2440000000	52%	4.376118784
2480000000	50%	4.652451791
2500000000	50%	5.260630002
5150000000	24%	2.106633188
5250000000	26%	4.717025089
5350000000	22%	2.335483671
5450000000	28%	1.678916659
5500000000	29%	0.588286064
5550000000	22%	0.560482016
5600000000	23%	2.626336763
5650000000	28%	4.867821207
5750000000	41%	5.525934553
5800000000	46%	6.193981245
5850000000	46%	6.074352168

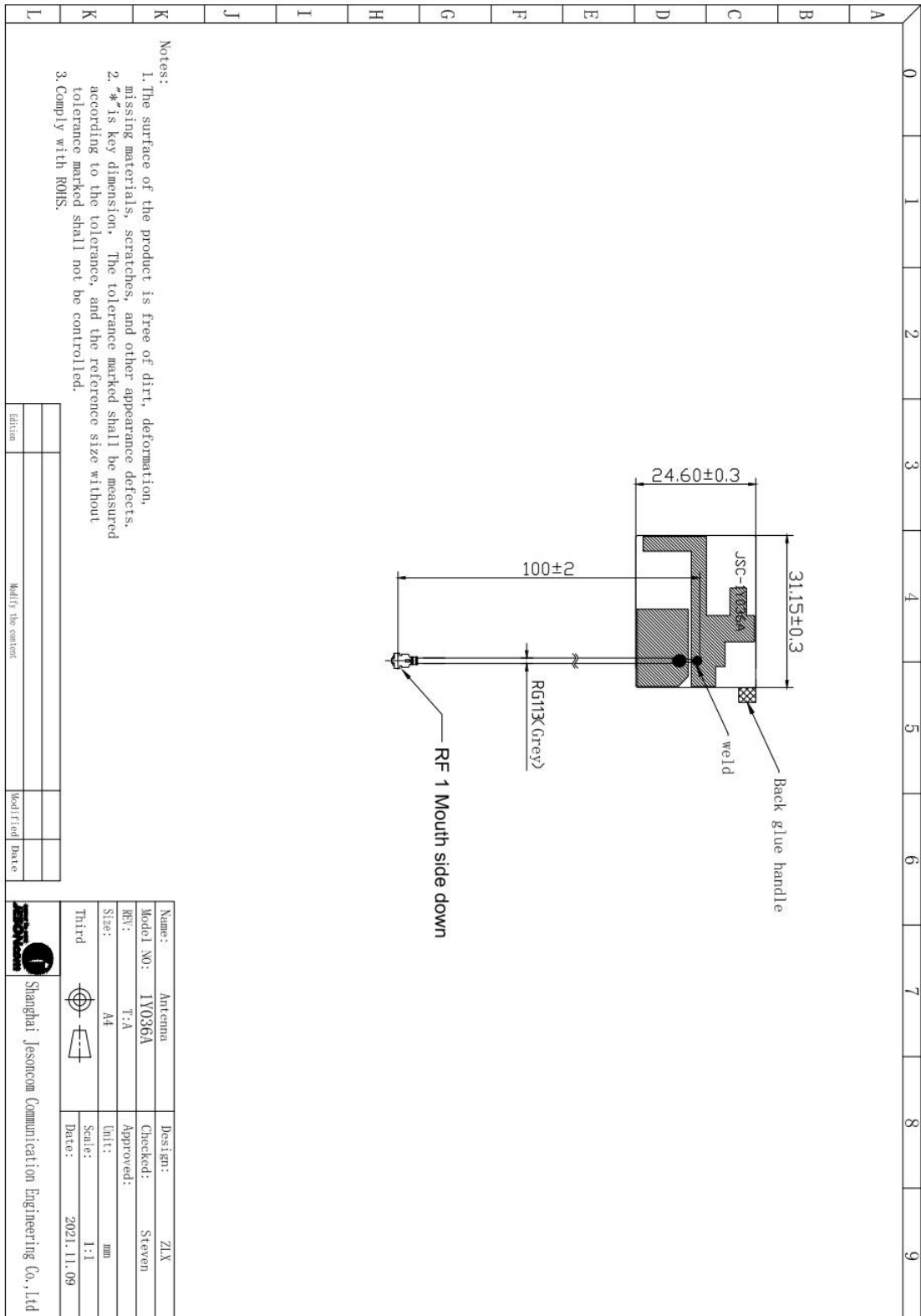
## 6 Environmental treatment suggestions

Environment does not need treatment

## 7 Impedance matching requirements

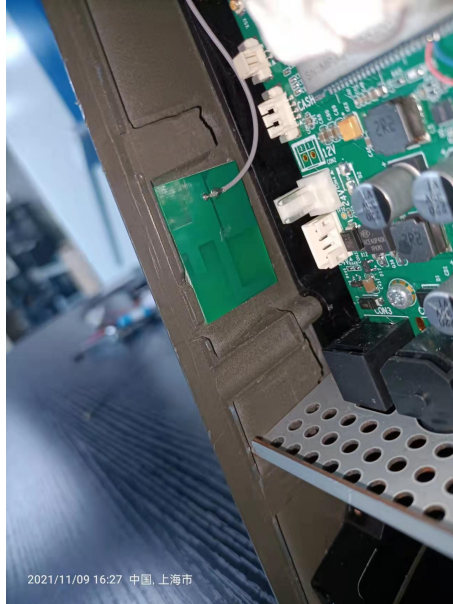
*The matching circuit has not been changed*

8 Antenna Outline Drawing



## 9 Antenna Installation Guide

### 9.1 Antenna installation and feeder routing instructions



## 10 Other