

# 深圳市金航标电子有限公司

## 433MHZ 胶棒天线

型号: KH-433-2-JB

### Antenna componentst

频率范围 Frequency range	WIFI:(433GHz)
驻波比系数 VSWR	<4.0
输入阻抗 Input Impedance	50 (Ω)
极化方式 Polarization	垂直极化 Vertical Polarization
半功率波束 (2dB) HPW	180° H-plane 120° E-plane

<b>RF by</b>		<b>Checked by</b>	
<b>ME by</b>		<b>Date</b>	
<b>Customer Confirm</b>			

#### Revision History

Date	Revision	Description of Changes
2020-3-25	RA	Measured with SUS301 sample.

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## 1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the **2DB-433 天线** program. We test the antenna with the latest version handset. And it seems to be acceptable.

## 2 General Description

### 2.1 Components/Part revisions

VSWR: Voltage Standing Wave Rate.

## 3 Mechanical Description

## 4 Electrical Performance

### 4.1 Set-up

#### 4.1.1 VSWR

VSWR measurements (S11) were performed using an Agilent 8753D Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

#### 4.1.2 Gain & Radiation Patterns

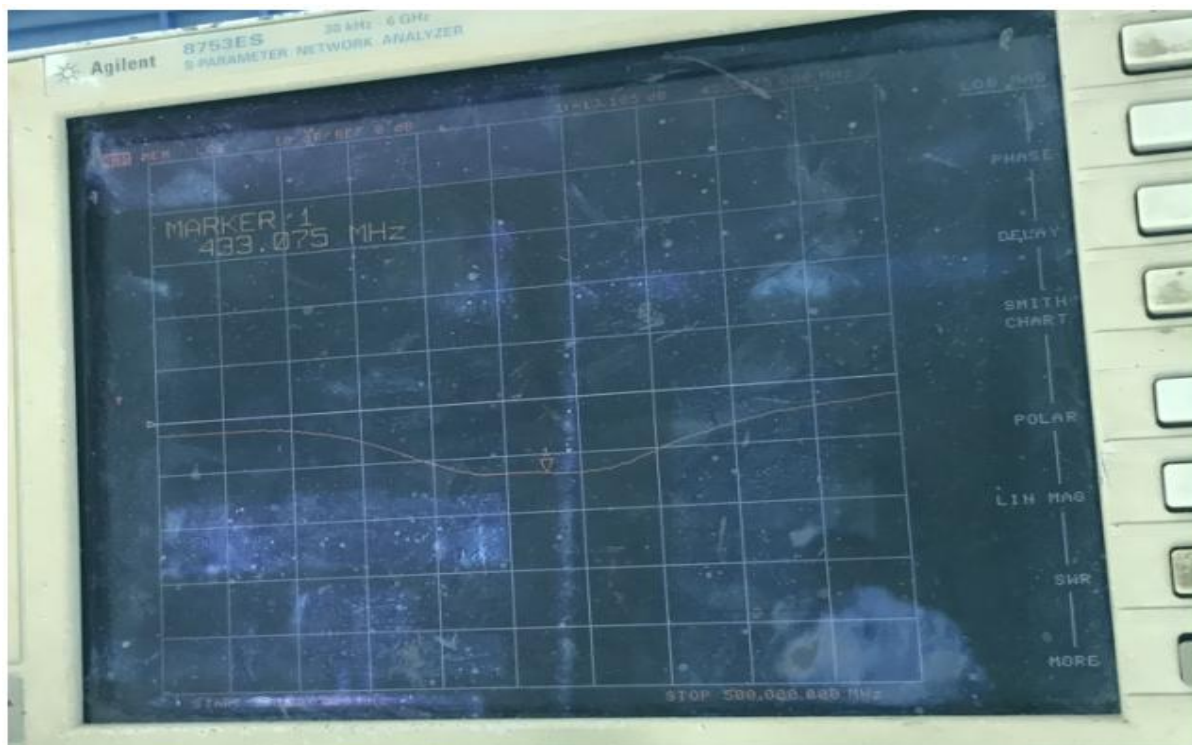
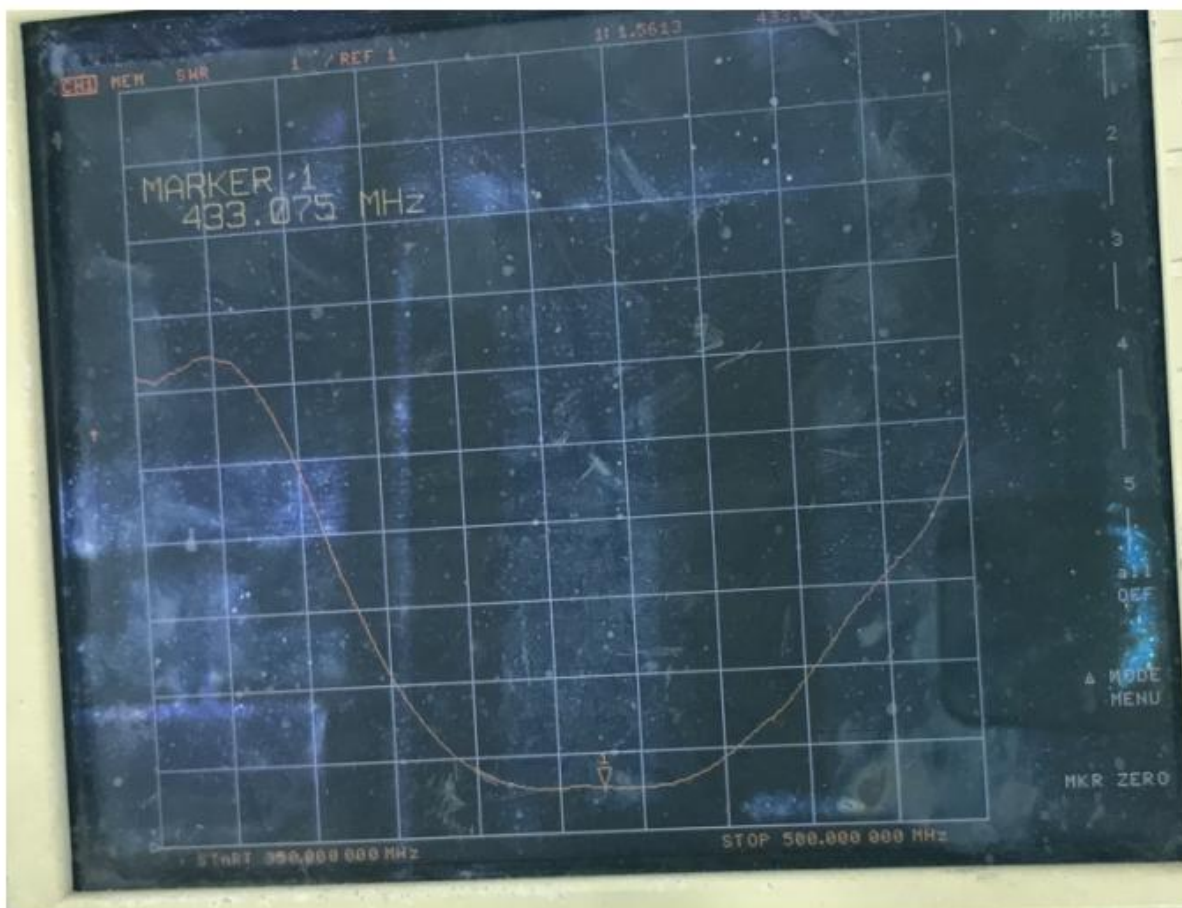
The gain of the antenna was measured in the Lxc's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than -30 dB reflectivity from 800 MHz through 3 GHz and an 18" diameter spherical quiet zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

#### 4.1.3 Matching Circuit Description

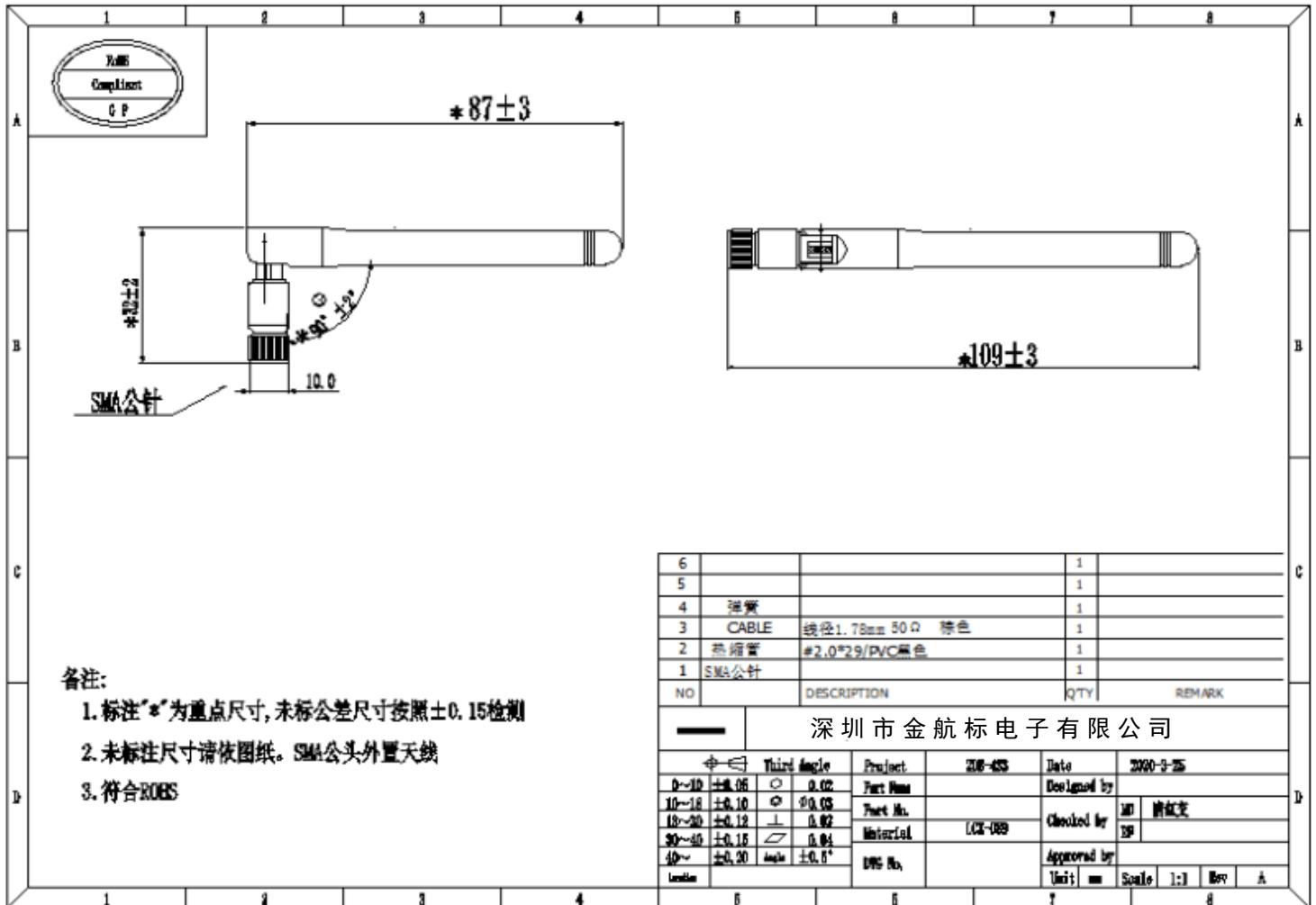
### 4.2 Measurement Data

#### 4.2.1 Active result (433WIFI)

Passive Test For 433		
Freq (MHz)	Effi (%)	Gain (dBi)
420	41.76	1.08
422	41.96	1.09
425	42.85	1.13
430	42.76	1.27
433	43.11	1.69
438	44.58	1.72



## 6 Mechanical drawing



## 7 Reliability tests

### 7.1 Test content

No	试验项目	试验方法	判定基准
1	盐水喷雾试验	把盐浓度 5%的溶液喷雾 48HR	不能有变色，歪（变形）脱落等的缺点 腐蚀面积不能过大

### 7.2 Test results

NO	样品数	试验期间	实验结果	备注
1	50	24 小时	<b>OK</b>	技术等级为 9 级 腐蚀<0.4mm
2	50	48 小时	<b>OK</b>	技术等级为 9 级 腐蚀<0.4mm

## 8 Conclusion

