BW433SND27-7W9-4

Product specifications acknowledgment

Product Type		
Model	**Description**	**Remarks**
BW433SND27-7W9-4	433mhz Spring Antenna	Customized

Manufacturer：Shenzhen Bat Wireless Technology Co.,Ltd.

Address：1409,Building A,Zhiyun Industrial Park, No.13 Huaxing Rd,Longhua Dist, Shenzhen,Guangdong,CN

1. Specifications

Antennas Type	BW433SND27-7W9-4
Frequenc Range(MHz)	433±5MHz
Input Impendence (Ω)	50Ω
V.S.W.R	<2
Gain (dBi)	2.67
Polarization Type	Vertical
Power Capacity (w)	50
Lingtning Protection	None
DC Voltage（V）	None
Dimension（mm）	27-7
Connector Type:	None
Cable type（mm）	None
Cable length(mm)	None
Radiator	Carbon steel
Color	Silver
Weight(g)	None
Operating Temperature（℃）	-40~80
Storage Temperature（℃）	-20~85

* Note: The above data is for reference only; Because the antenna function is more sensitive, please inform us of any changes in the surrounding institutions.

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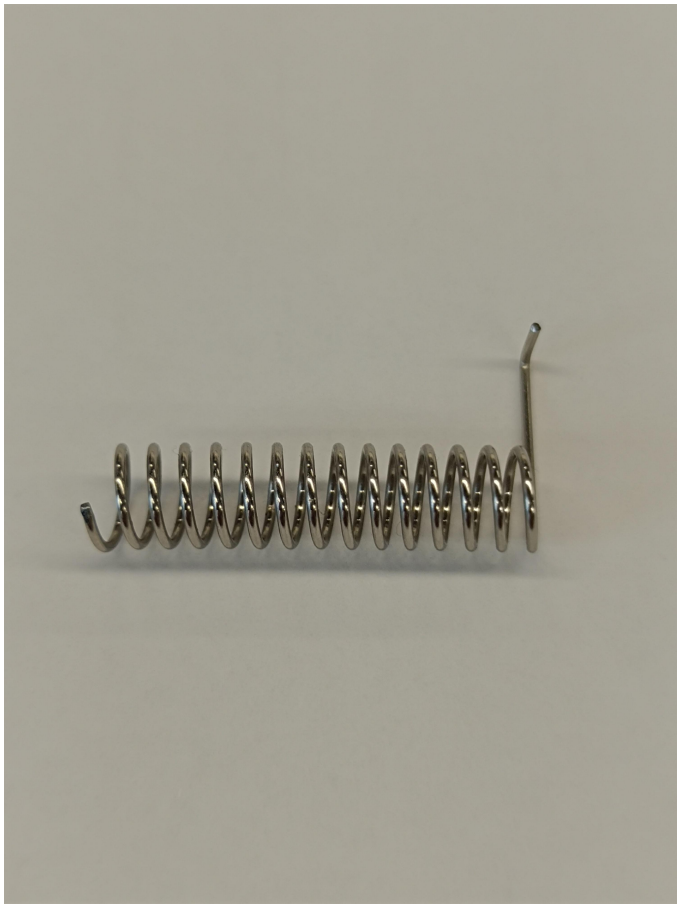
2. Antenna Picture



Above model: BW433SND27-7W9-4, (Debug customizable)

(Customized customer intermediate connection line length customization, antenna shape customization)

* Note: Due to the sensitive antenna function, please inform us for evaluation if there is any change in the peripheral institutions of the main body.

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3. Electrical Specification

3.1 Test Equipment

A. VSWR and input impedance: Agilent 8753/E5071 Network Analyzer

B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

3.2 Test Setup

3.2.1 Frequency Range

3.2.2 VSWR

Step 1: The antenna is arranged on the customer provided test fixture.

Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure.)

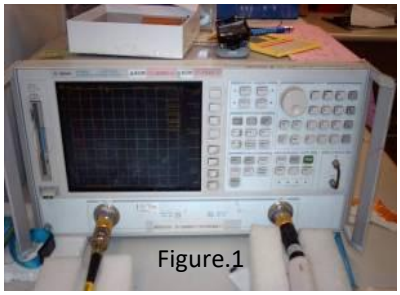


Figure.1

3.2.3 Radiation pattern and Gain

A. The 3D chamber provides less than -40dB reflectivity from 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).

B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).

C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).

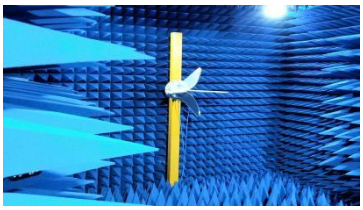


Figure.2

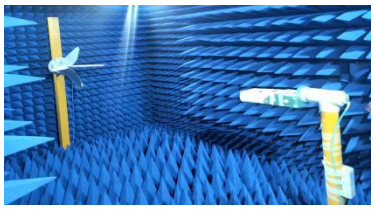


Figure.3

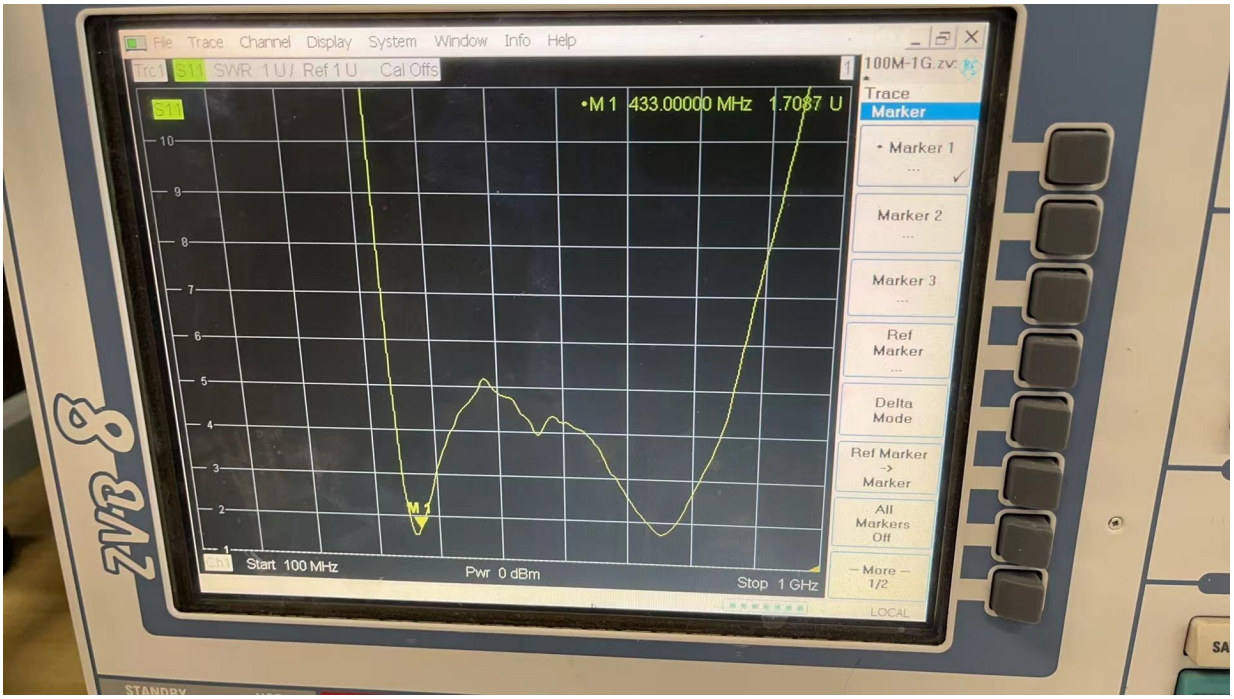
Figure.4

Figure.5

4. Performance Data

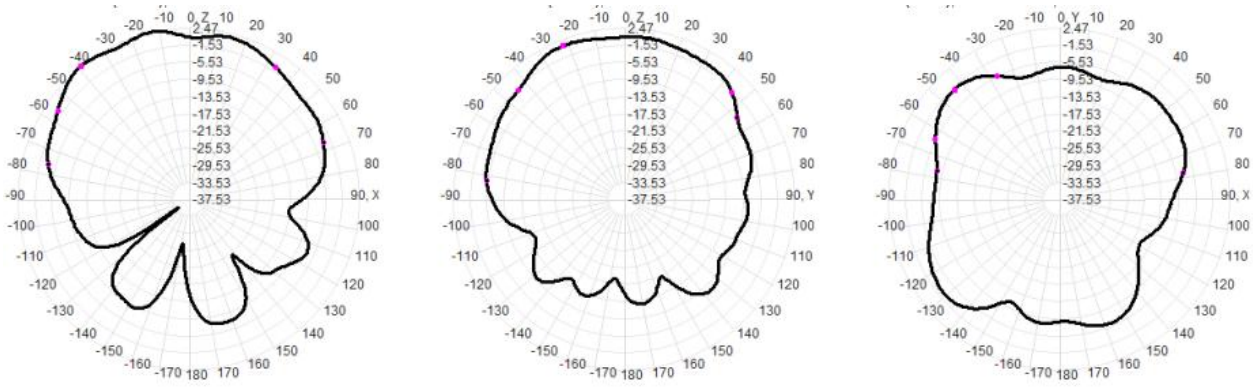
4.1. Passive data

VSWR/Return Loss/Smith Chart

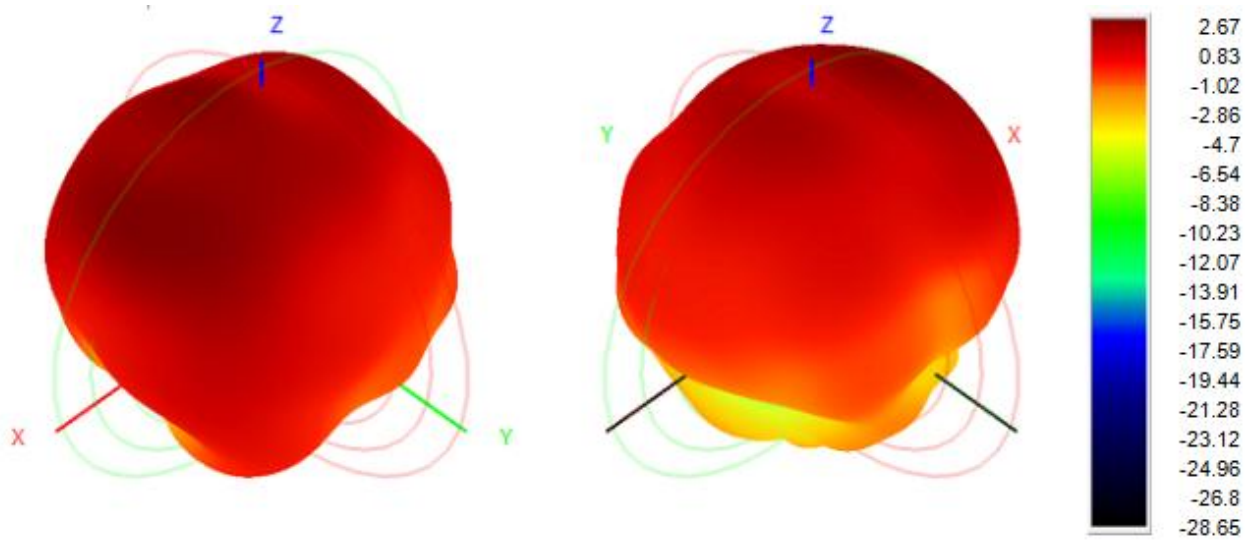


* Note: The above are measured data for reference only. Due to the sensitive antenna function, please inform us for evaluation if there is any change in the surrounding institutions of the main body.

2D

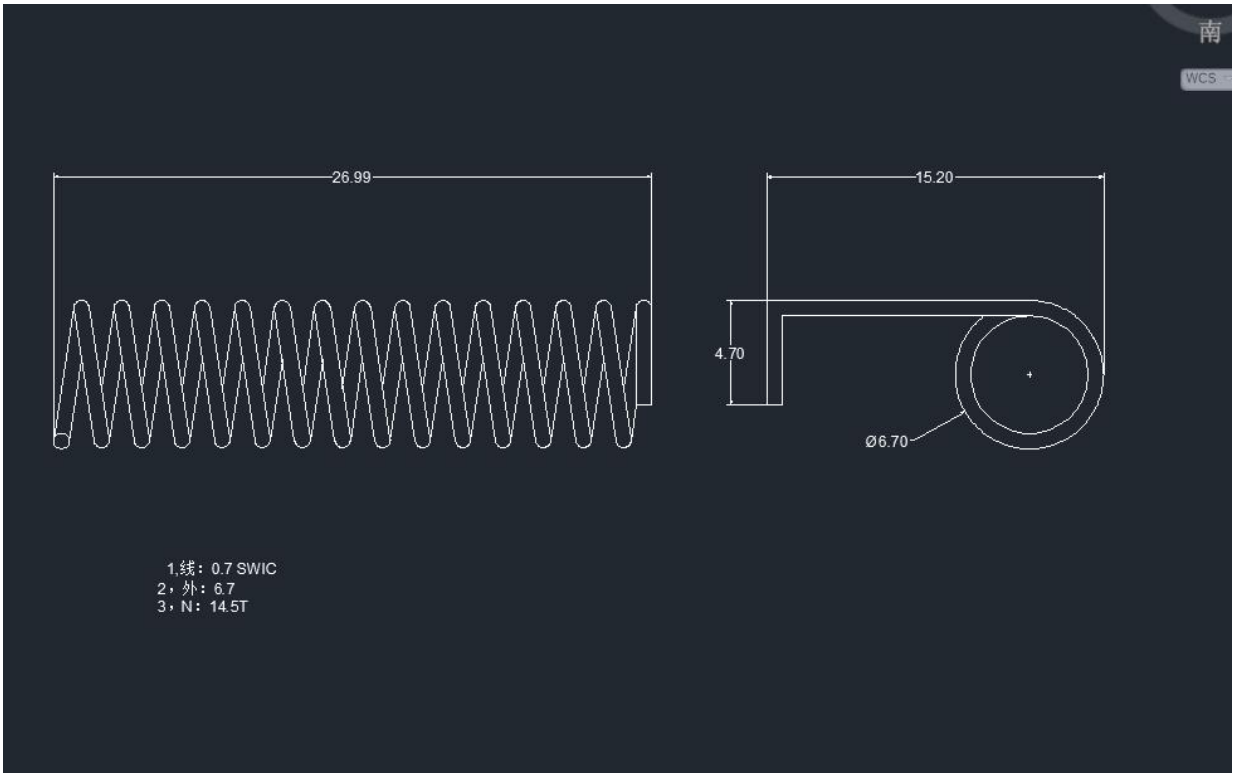


3D


Z
X
Y
Z
Y
X
2.67
0.83
-1.02
-2.86
-4.7
-6.54
-8.38
-10.23
-12.07
-13.91
-15.75
-17.59
-19.44
-21.28
-23.12
-24.96
-26.8
-28.65

5. Mechanical Specification

5.1. Assembly Drawing



6. Disclaimer

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