

## 1.1 Specifications

<b>Antennas Type</b>	BW258GBX46-15B1L150
<b>Frequenc Range (MHz)</b>	2400-2500
<b>Input Impedence (Ω)</b>	50 Ω
<b>V. S. W. R</b>	<2
<b>Gain (dBi)</b>	3.02dBi
<b>Polarization Type</b>	Vertical
<b>Power Capacity (w)</b>	50
<b>Lingtning Protection</b>	None
<b>DC Voltage (V)</b>	None
<b>Dimension (mm)</b>	46-15
<b>Connector Type:</b>	IPEX1
<b>Cable type (mm)</b>	Φ RG178
<b>Cable length(mm)</b>	150
<b>Radiator</b>	None
<b>Color</b>	Black
<b>Weight (g)</b>	None
<b>Operating Temperature (°C)</b>	-40~80
<b>Storage Temperature (°C)</b>	-20~85

## 1. 2 Antenna Picture



[BW258GBX46- 15B1L150](#)

## 2 . Electrical Specification

### 2.1 Test Equipment

- A. VSWR and input impedance: Agilent 8753/E5071 Network Analyzer
- B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

### 2.2 Test Setup

#### 2.2.1 Frequency Range

#### 2.2.2 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. 1).



Figure. 1

### 2.2.3 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).

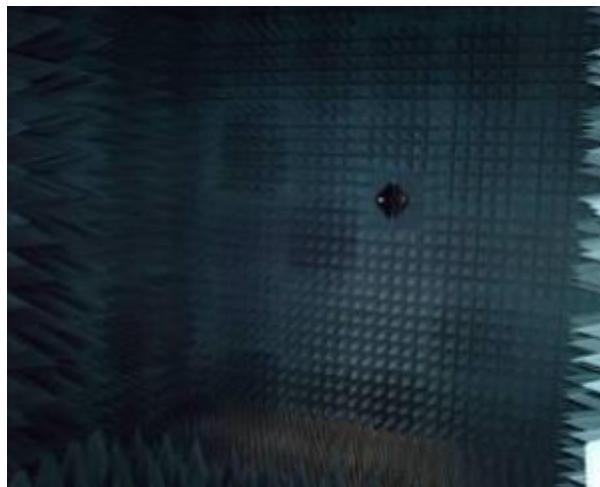


Figure.2

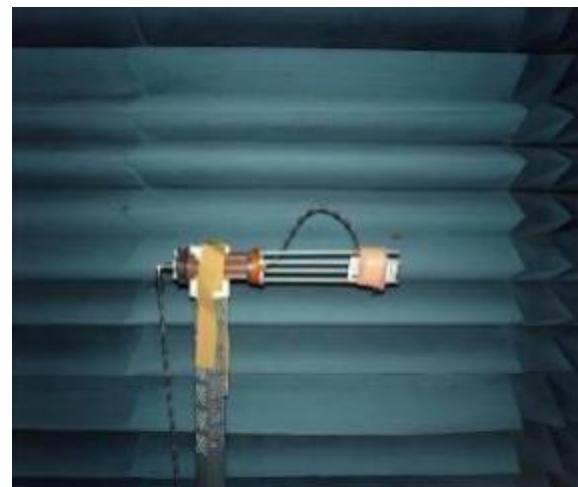


Figure.3



Figure.4

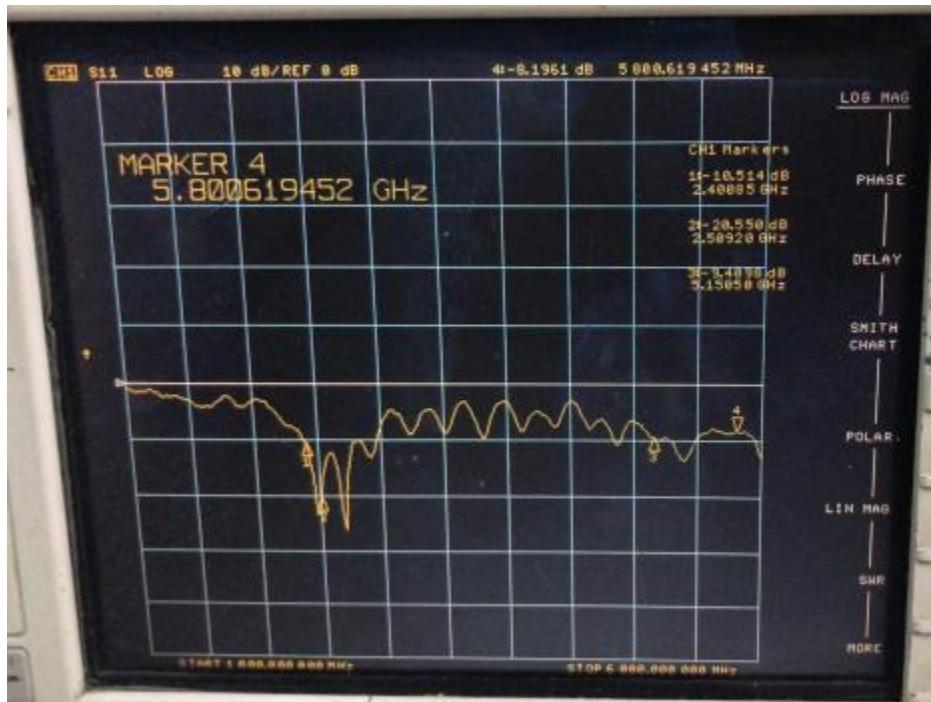


Figure.5

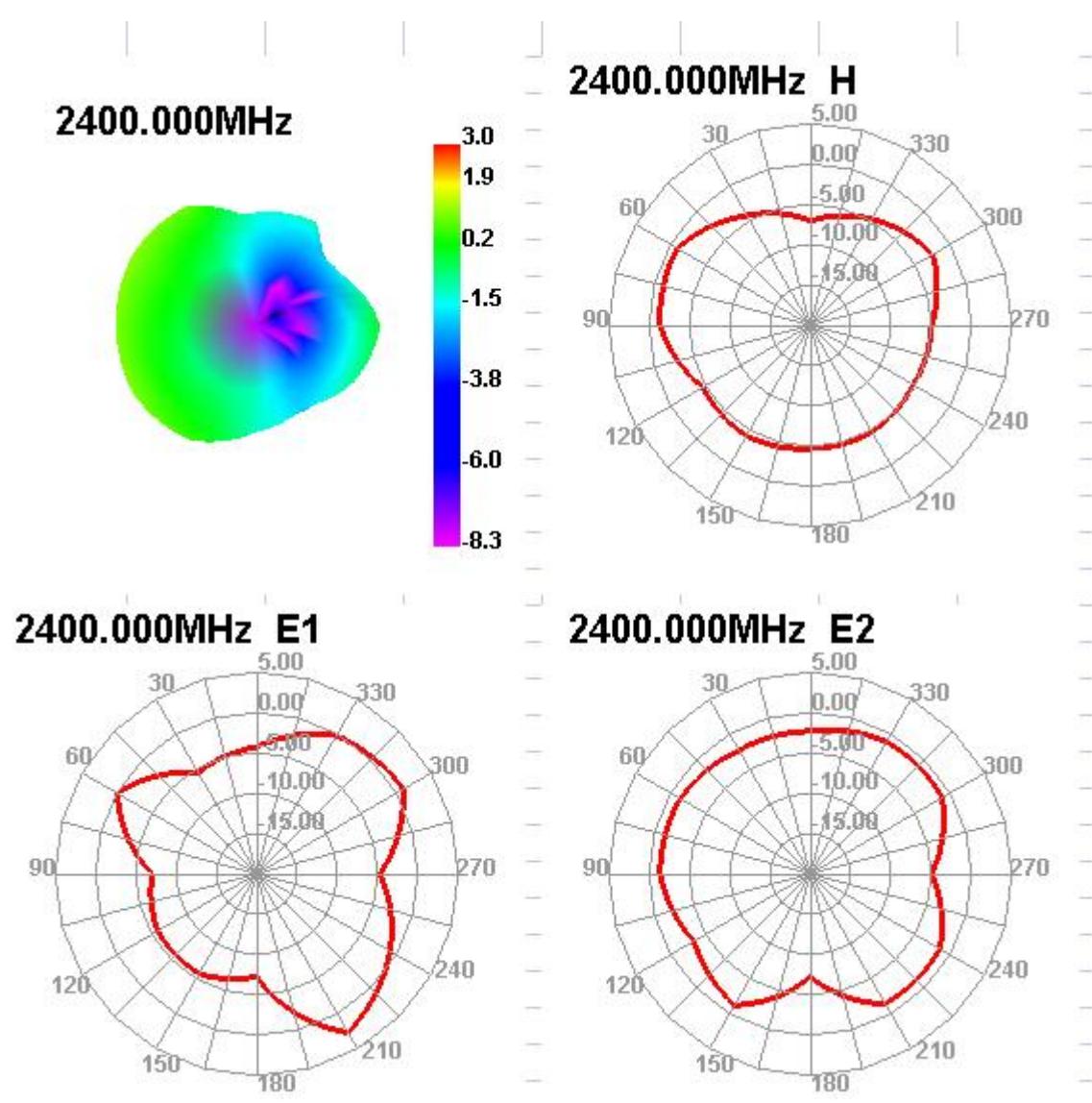
### 3. Performance Data

#### 3.1 Passive data

VSWR / Return Loss / Smith Chart

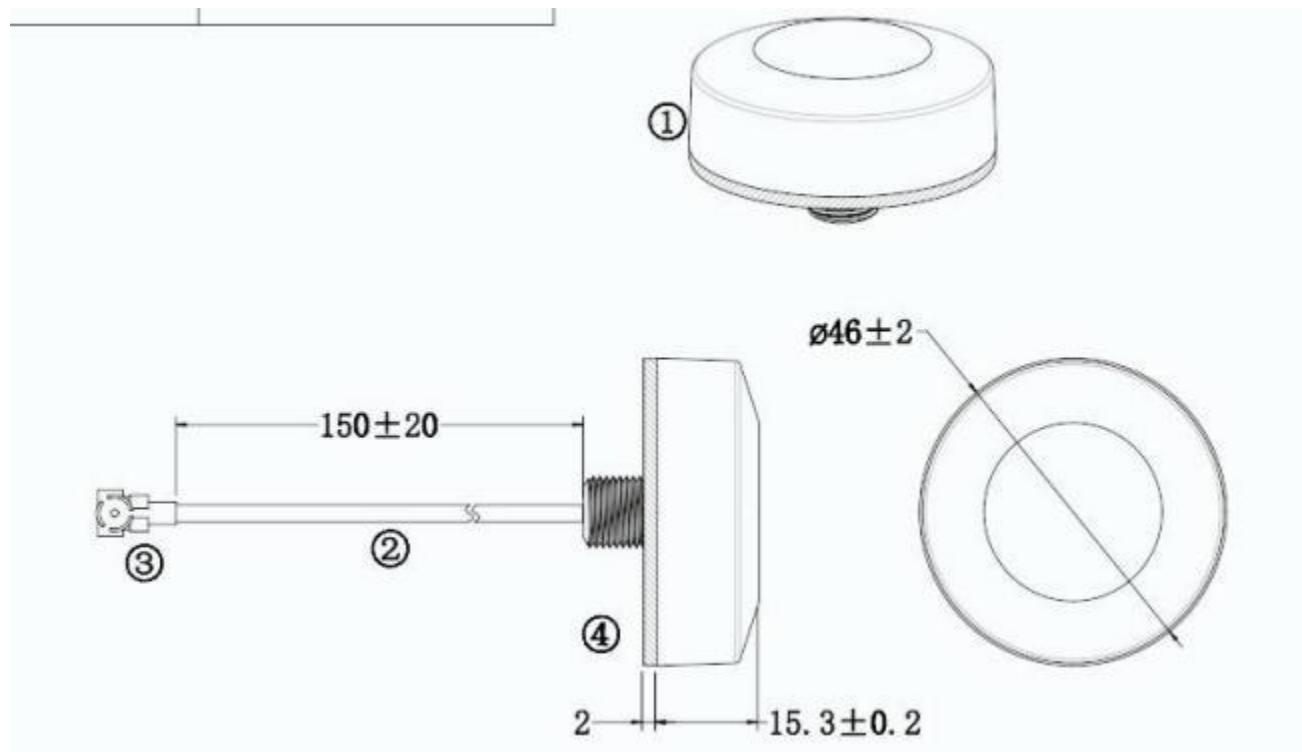


Passive Test For WIFI											
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBD)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver	
2400	65.99	-1.8	2.99	0.84	35.629	30.365	2.99	-8.28	48.09	47.94	
2410	61.32	-2.12	2.62	0.47	32.762	28.557	2.62	-8.32	48.07	47.87	
2420	60.58	-2.18	2.52	0.37	32.121	28.457	2.52	-8.49	48.18	48	
2430	61.75	-2.09	2.58	0.43	32.561	29.188	2.58	-9.08	48.17	47.99	
2440	64.63	-1.9	2.73	0.58	34.122	30.503	2.73	-9.66	48.33	48.11	
2450	66.86	-1.75	2.86	0.71	35.326	31.534	2.86	-9.93	48.44	48.14	
2460	67.45	-1.71	2.92	0.77	35.514	31.938	2.92	-9.82	48.41	48.06	
2470	68.53	-1.64	3.02	0.87	35.718	32.817	3.02	-9.44	48.49	48.11	
2480	67.12	-1.73	2.94	0.79	34.493	32.624	2.94	-11.1	48.63	48.18	
2490	64.57	-1.9	2.74	0.59	32.811	31.763	2.74	-12.94	48.76	48.29	
2500	63.95	-1.94	2.7	0.55	32.027	31.926	2.7	-14.21	48.69	48.16	



## 4. Mechanical Specification

### 4.1 Assembly Drawing



## **5. Disclaimer :**

In order to provide our users with better service, Shenzhen Bat Wireless Technology Co., Ltd (hereinafter referred to as Bat Wireless) will try to present as detailed and accurate product information as possible in this manual. However, due to the timeliness of the manual content, Bat Wireless shall not absolutely guarantee the unlimited timeliness and applicability of the file. Bat Wireless has the right to update the manual content without further notice. To get the latest edition information, pls visit the official website of Bat Wireless or contact our customer service staff. Thanks for your trust and support!