



**Shenzhen DEWEIMA Communication Equipment Co.,Ltd**

# SPECIFICATION SHEET FOR APPROVAL

<b>CUSTOMER NAME</b>	Vodofu
<b>CUSTOMER P/N</b>	NT27E
<b>PART NAME</b>	BT Antenna
<b>DWM NO.</b>	
<b>APPROVAL REV.</b>	DWM-V1.0

<b>CONTRACTOR</b>			<b>DATE : 2024-1-3</b>
<b>QA CHECKED</b>	<b>ME CHECKED</b>	<b>RF CHECKED</b>	<b>MANAGER CHECKED</b>

<b>CUSTOMER</b>		<b>DATE :</b>
<b>Approved By</b>	<b>Checked By</b>	<b>Prepared By</b>



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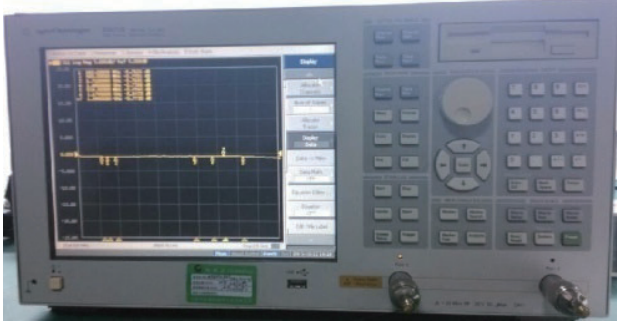
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## 1. Product Application

Terminal of the antenna products can only be used for BT antenna.

## 2. The test environment, equipment

Item	Description	Test Condition	Requirement
2.1	Passive testing	The VSWR measurement devices are connected in sequence: Agilent5071B Network Analyzer → measurement Cable → Customer-providing Devices.	VSWR: 2400-2500MHz ≤ 4.0
		Test equipment	
			
Item	Description	Test Condition	
2.2	Active test	The antenna is tested within the cell mainboard provided by clients. Follow picture shows the measurement condition of the antenna been put on the measurement device, which is used for all measurement of electric performances.	



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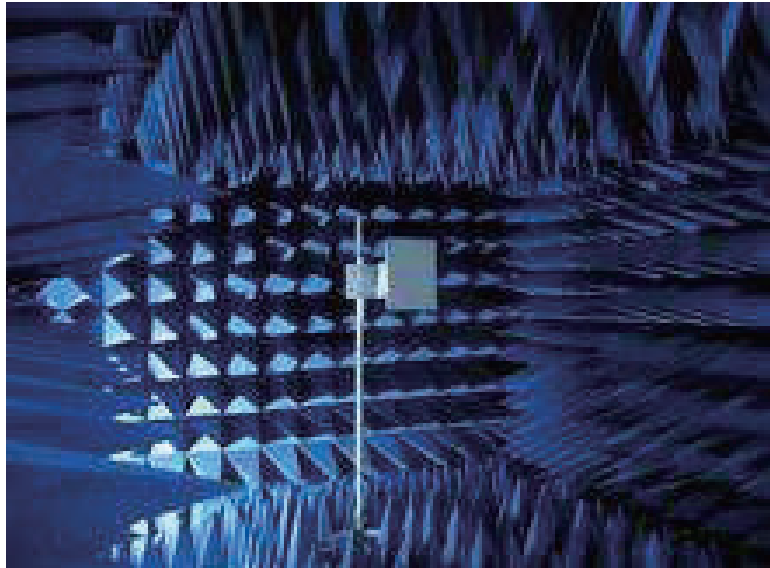
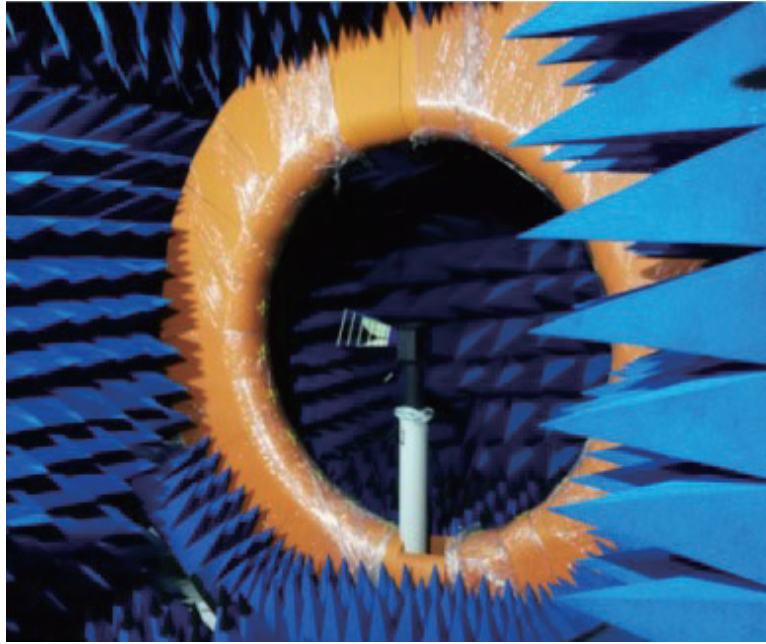
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Test equipment

2.3

Microwave  
Anechoic  
chamber  
(Satimo&ETS  
)





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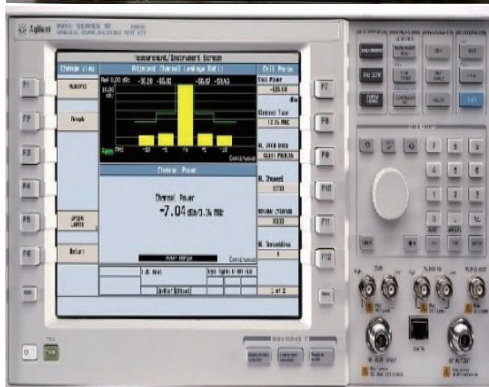
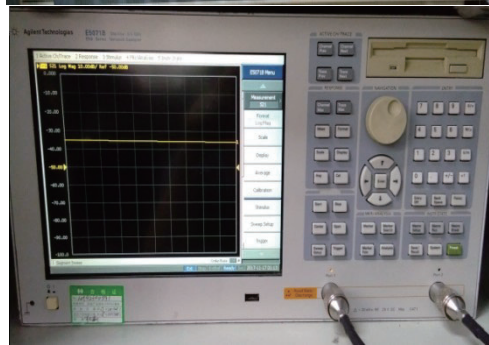
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2.4  
CMW500  
Agilent5071B  
AgilentE4405B  
Agilent8960





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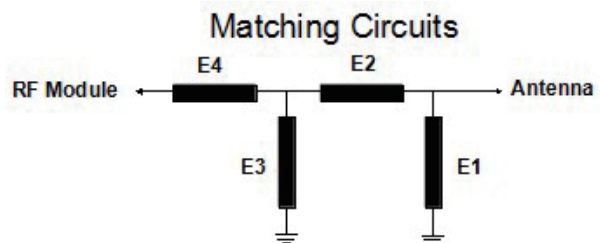
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## 3. Technology Parameters

Frequency Range: 2400MHz~2500MHz  
 Operating Humidity: 85% R.H.MAX  
 Temperature Rating: -40°C ~ +85°C

### 3.1 The matching test value

Element	Value
E1(0402)	
E2(0402)	
E3(0402)	
E4(0402)	



### 3.2 VSWR&Smith&Return Loss:





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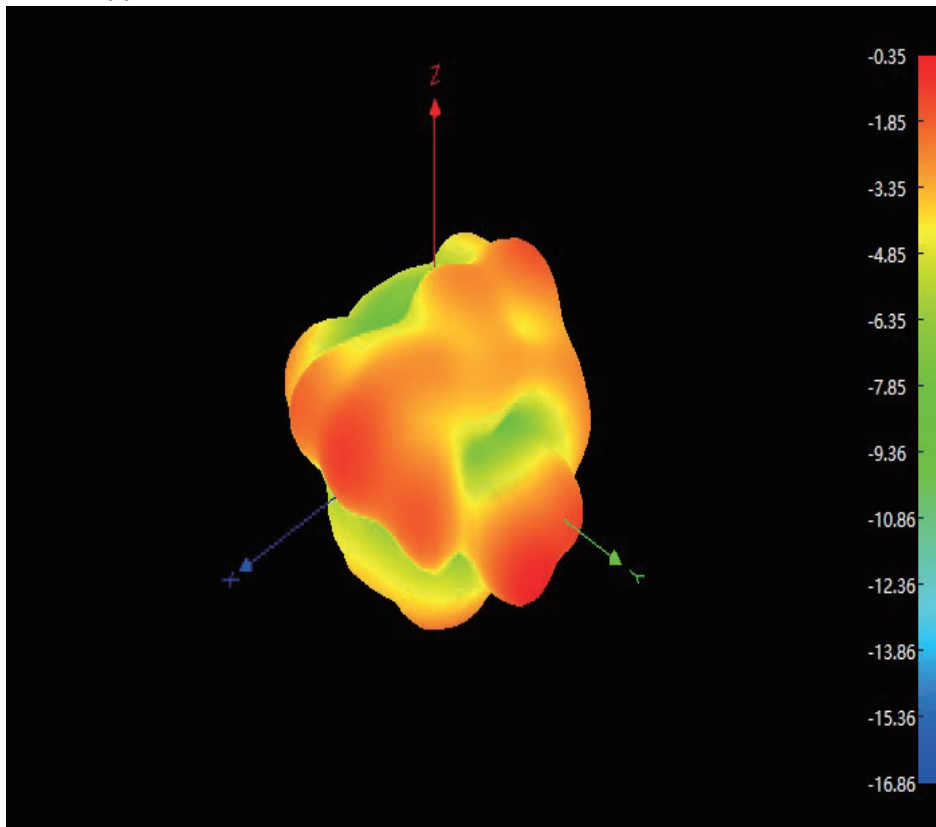
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### 3.3 Efficiency And Gain:

Frequency / MHz	Gain/ dBi
2400	-0.35
2410	-0.48
2420	-0.52
2430	-0.74
2440	-0.92
2450	-0.83
2460	-0.77
2470	-0.71
2480	-0.85
2490	-0.93
2500	-1.01

Frequency / MHz	Efficiency / dB	Efficiency / %
2400	-6.49	22.44
2410	-6.35	23.17
2420	-6.58	21.98
2430	-7.4	18.2
2440	-7.58	17.46
2450	-7.15	19.28
2460	-6.73	21.23
2470	-6.54	22.18
2480	-6.31	23.39
2490	-6.09	24.6
2500	-6.27	23.6

### 3.4. 3D Pattern 2400MHz





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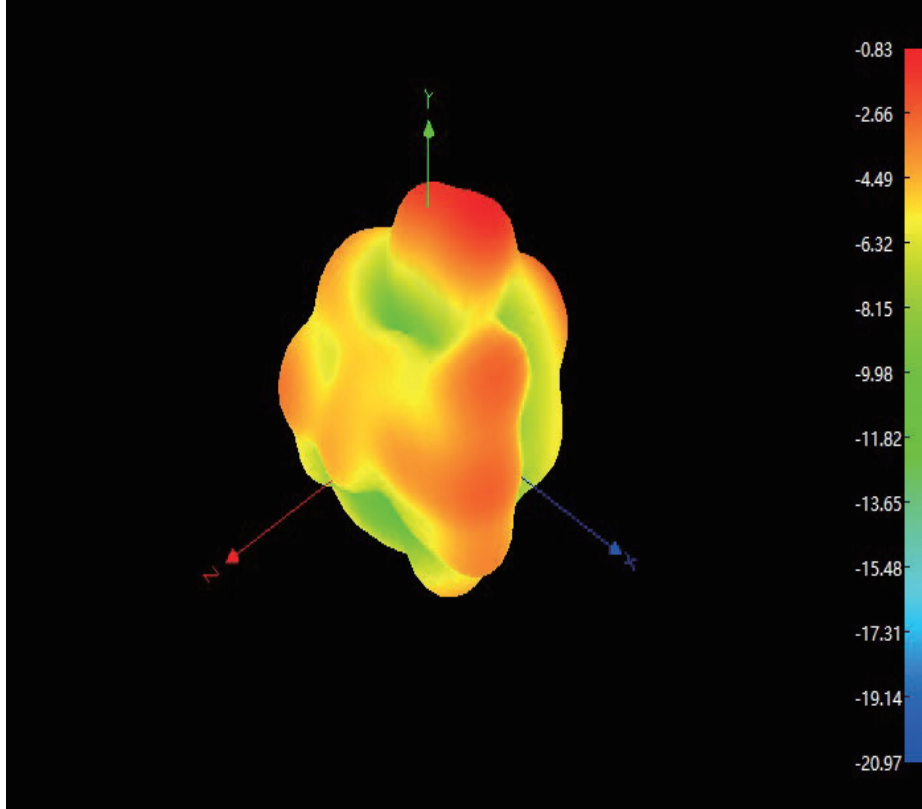
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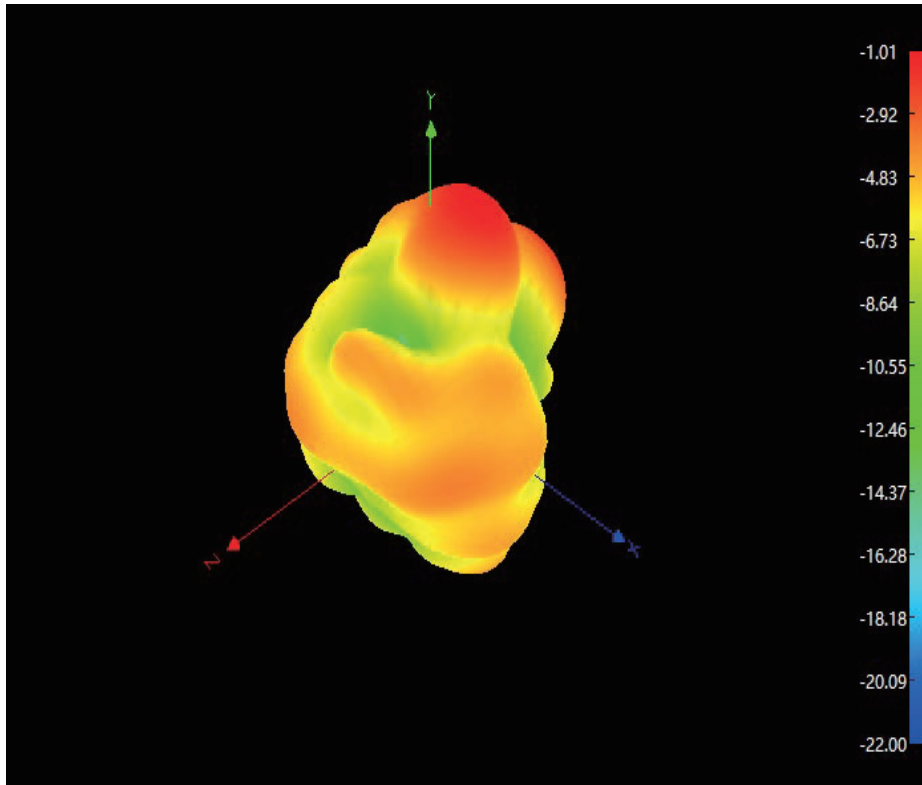
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2450MHz:



2500MHz:







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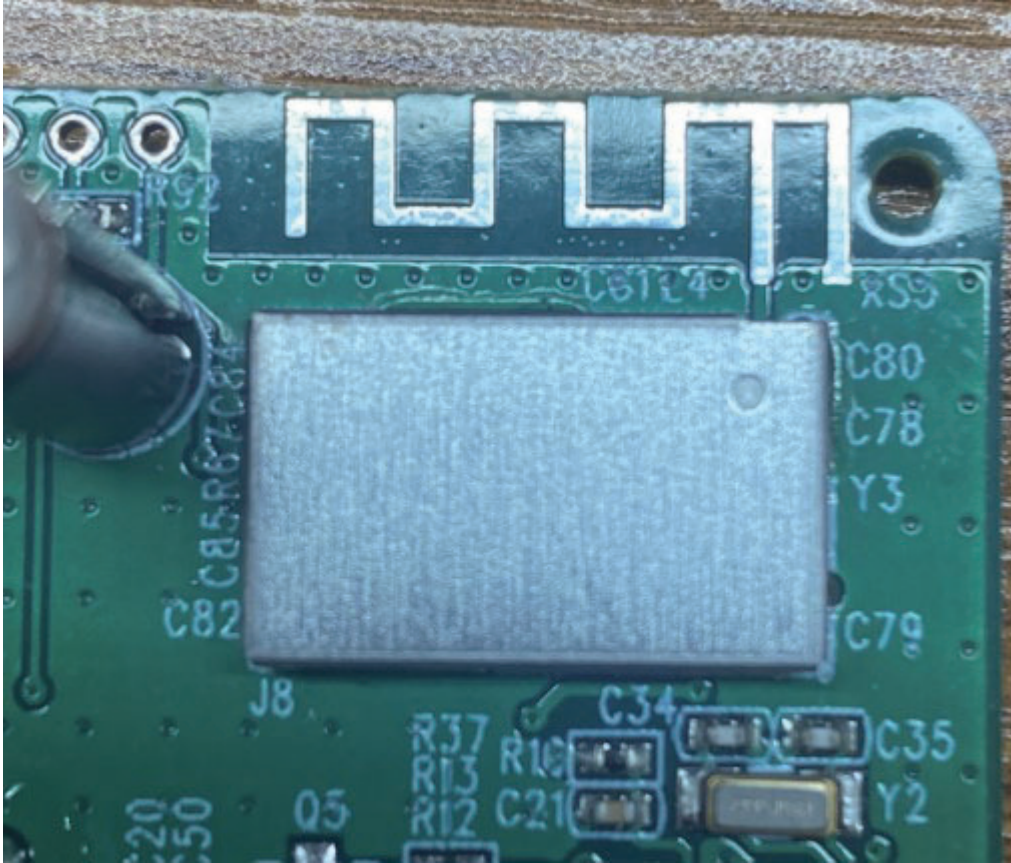
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## 4. Antenna Picture :



## 5.Environmental Performance

Item	Description	Test Condition	Requirement
5.1	High and low temperature test	Temp.: -40 °C Time: 48 hours  Temp.: 85°C Time: 48 hours	1. No visible damage.  2. The electric performances reach the standard.
Item	Description	Test Condition	Requirement



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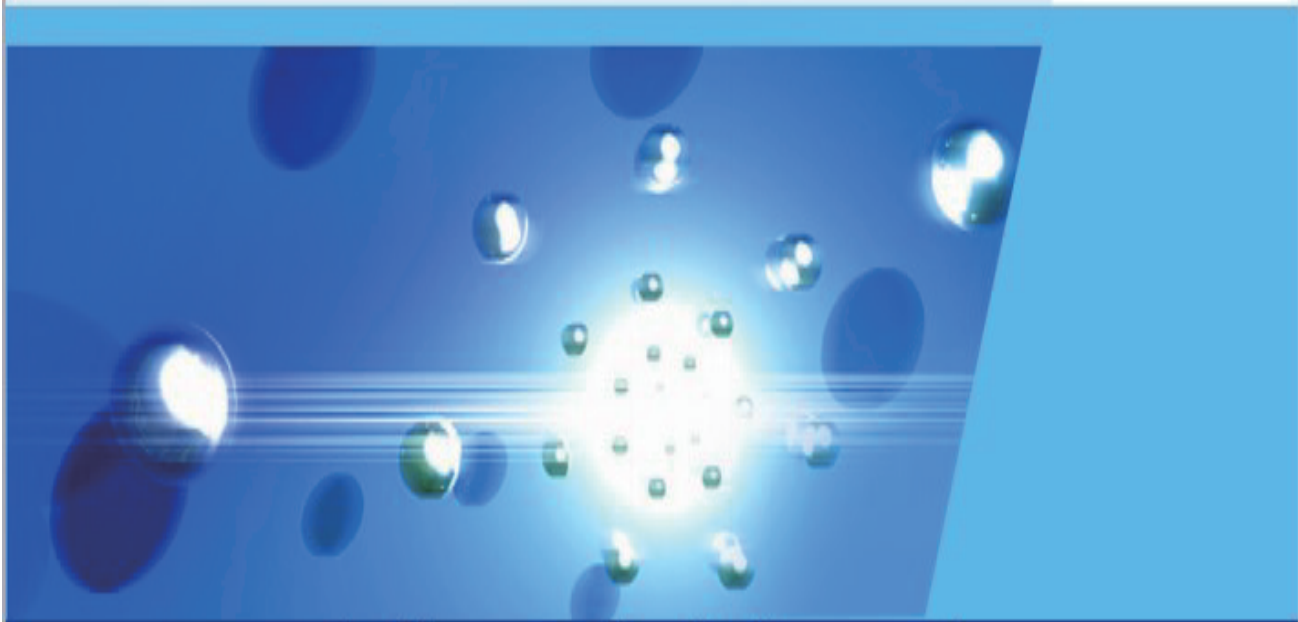
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5.2	Salt Spray	<p>5±0.1% Nad salt fog          PH Value: 6.5-7.2          Temp: 35±1 °C          Time:24 hours</p>	<p>1. No color change.          2. the appearance of the antenna does not flake off.</p>
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### 6.Usage Precaution

No	Items	Matter
6.1	Precautions	a)Please avoid the cleaning of this product
No	Items	Matter
6.2	Stockpile condition	<p>Use this product within 6 months after receipt          Condition : Temp: 5~30°C Humidity:≤70%</p>

专业的**RF**研发机构



**Thank You !**

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